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Committee on the Peaceful Uses of Outer Space

Information furnished in conformity with the Convention on Registration of Objects Launched into Outer Space

Note verbale dated 13 December 2018 from the Permanent Mission of Japan to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of Japan to the United Nations (Vienna), in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space (General Assembly resolution 3235 (XXIX), annex), has the honour to transmit information on space objects launched by Japan (annex I) and additional information on a previously registered space object (annex II).[1]

[1] The data on space objects referenced in the annexes were entered into the Register of Objects Launched into Outer Space on 31 December 2018.

Annex I

Registration data on space objects launched by Japan*

Kirameki-1gou

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2018-033A
Name of space object	Kirameki-1gou
National designator	2018-033A
State of registry	Japan
Other launching State	France
Date and territory or location of launch	5 April 2018 at 2134 hours UTC; Guiana Space Centre, Kourou, French Guiana
Basic orbital parameters	
Nodal period	1,440 minutes
Inclination	0.016 degrees
Apogee	35,802 kilometres
Perigee	35,787 kilometres
General function of space object	Communication

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Geostationary position	162 degrees East
Space object owner or operator	Ministry of Defence of Japan
Launch vehicle	Ariane 5 ECA
Other information	Launching organization is Arianespace

H-II Transfer Vehicle “Kounotori7” (HTV7)

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2018-073A
Name of space object	H-II Transfer Vehicle “Kounotori7” (HTV7)
National designator	2018-073A
State of registry	Japan
Date and territory or location of launch	22 September 2018 at 1752 hours, 27 seconds UTC; Tanegashima Space Centre, Kagoshima, Japan

* The information was submitted using the form prepared pursuant to General Assembly resolution 62/101 and has been reformatted by the Secretariat.

Basic orbital parameters	
Nodal period	92.7 minutes
Inclination	51.6 degrees
Apogee	410.4 kilometres
Perigee	399.8 kilometres
General function of space object	HTV7 is an unmanned resupply vehicle used to transport various cargoes, including research materials, replacement equipment and daily commodities, to the International Space Station (ISS)

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Japan Aerospace Exploration Agency (JAXA)
Launch vehicle	H-IIB Launch Vehicle Flight No. 7 (H-IIB-F7)
Other information	Basic orbital parameters are as at 23 October 2018
	After delivering cargo to ISS, HTV7 will be unberthed from ISS and will make a controlled re-entry into the Earth's atmosphere. A small re-entry capsule will separate from HTV7 when it re-enters the atmosphere

Greenhouse Gases Observing Satellite 2 "Ibuki-2" (GOSAT-2)

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2018-084B
Name of space object	Greenhouse Gases Observing Satellite 2 "Ibuki-2" (GOSAT-2)
National designator	2018-084B
State of registry	Japan
Date and territory or location of launch	29 October 2018 at 0408 hours, 0 seconds UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	97.0 minutes
Inclination	97.8 degrees
Apogee	614.8 kilometres
Perigee	611.7 kilometres

General function of space object	As the successor to the Ibuki mission, Ibuki-2 (GOSAT-2) aims to gather observations of greenhouse gases at higher levels of accuracy by means of higher-performance on-board observation sensors. The Paris Agreement, adopted at the twenty-first session of the Conference of the Parties to the United Nations Framework Convention on Climate Change, requires the parties to the Convention to submit data on their annual greenhouse gas emissions. GOSAT-2 will provide data to facilitate the creation and publication of reliable inventories of carbon dioxide emissions resulting from human activities.

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	JAXA/Ministry of the Environment of Japan
Launch vehicle	H-IIA Launch Vehicle Flight No. 40 (H-IIA-F40)
Other information	Basic orbital parameters are as at 29 October 2018 Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

M-4S Launch Vehicle Flight No. 2 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1971-011B
Name of space object	M-4S Launch Vehicle Flight No. 2 rocket body
State of registry	Japan
Date and territory or location of launch	16 February 1971 UTC; Kagoshima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	106 minutes
Inclination	29.7 degrees
Apogee	1,110 kilometres
Perigee	990 kilometres
General function of space object	Space object is the spent rocket body of M-4S Launch Vehicle Flight No. 2

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	M-4S Launch Vehicle Flight No. 2
Other information	Launching organization is the Institute of Space and Astronautical Science (ISAS) of the University of Tokyo

M-4S Launch Vehicle Flight No. 3 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1971-080B
Name of space object	M-4S Launch Vehicle Flight No. 3 rocket body
State of registry	Japan
Date and territory or location of launch	28 September 1971 UTC; Kagoshima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	113 minutes
Inclination	32.1 degrees
Apogee	1,870 kilometres
Perigee	865 kilometres
General function of space object	Space object is the spent rocket body of M-4S Launch Vehicle Flight No. 3

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	M-4S Launch Vehicle Flight No. 3
Other information	Launching organization is ISAS

N-I Launch Vehicle Flight No. 1 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1975-082B
Name of space object	N-I Launch Vehicle Flight No. 1 rocket body
State of registry	Japan
Date and territory or location of launch	9 September 1975 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	106 minutes
Inclination	47 degrees
Apogee	1,104 kilometres

Perigee	977 kilometres
General function of space object	Space object is the spent rocket body of N-I Launch Vehicle Flight No. 1

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	N-I Launch Vehicle Flight No. 1
Other information	Launching organization is the National Space Development Agency of Japan (NASDA)

N-I Launch Vehicle Flight No. 2 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1976-019B
Name of space object	N-I Launch Vehicle Flight No. 2 rocket body
State of registry	Japan
Date and territory or location of launch	29 February 1976 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	105.1 minutes
Inclination	69.7 degrees
Apogee	1,012 kilometres
Perigee	990 kilometres
General function of space object	Space object is the spent rocket body of N-I Launch Vehicle Flight No. 2

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	N-I Launch Vehicle Flight No. 2
Other information	Launching organization is NASDA

N-I Launch Vehicle Flight No. 4 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1978-018B
Name of space object	N-I Launch Vehicle Flight No. 4 rocket body
State of registry	Japan
Date and territory or location of launch	16 February 1978 UTC; Tanegashima Space Centre, Kagoshima, Japan

Basic orbital parameters	
Nodal period	107 minutes
Inclination	69.4 degrees
Apogee	1,222 kilometres
Perigee	977 kilometres
General function of space object	Space object is the spent rocket body of N-I Launch Vehicle Flight No. 4

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	N-I Launch Vehicle Flight No. 4
Other information	Launching organization is NASDA

N-I Launch Vehicle Flight No. 4 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1978-018C
Name of space object	N-I Launch Vehicle Flight No. 4 debris
State of registry	Japan
Date and territory or location of launch	16 February 1978 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	107 minutes
Inclination	69.4 degrees
Apogee	1,222 kilometres
Perigee	977 kilometres
General function of space object	Space object is debris from the N-I Launch Vehicle Flight No. 4

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	N-I Launch Vehicle Flight No. 4
Other information	Launching organization is NASDA

M-3H Launch Vehicle Flight No. 3 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1978-087B
Name of space object	M-3H Launch Vehicle Flight No. 3 rocket body
State of registry	Japan

Date and territory or location of launch	16 September 1978 UTC; Kagoshima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	524 minutes
Inclination	31.1 degrees
Apogee	30,051 kilometres
Perigee	227 kilometres
General function of space object	Space object is the spent rocket body of M-3H Launch Vehicle Flight No. 3

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	M-3H Launch Vehicle Flight No. 3
Other information	Launching organization is ISAS

M-3H Launch Vehicle Flight No. 3 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1978-087C
Name of space object	M-3H Launch Vehicle Flight No. 3 debris
State of registry	Japan
Date and territory or location of launch	16 September 1978 UTC; Kagoshima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	524 minutes
Inclination	31.1 degrees
Apogee	30,051 kilometres
Perigee	227 kilometres
General function of space object	Space object is debris from the M-3H Launch Vehicle Flight No. 3

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	M-3H Launch Vehicle Flight No. 3
Other information	Launching organization is ISAS

N-II Launch Vehicle Flight No. 1 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1981-012C
Name of space object	N-II Launch Vehicle Flight No. 1 rocket body

State of registry	Japan
Date and territory or location of launch	11 February 1981 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	636 minutes
Inclination	28.6 degrees
Apogee	35,824 kilometres
Perigee	223 kilometres
General function of space object	Space object is the spent rocket body of N-II Launch Vehicle Flight No. 1

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	N-II Launch Vehicle Flight No. 1
Other information	Launching organization is NASDA

N-I Launch Vehicle Flight No. 7 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1982-087B
Name of space object	N-I Launch Vehicle Flight No. 7 rocket body
State of registry	Japan
Date and territory or location of launch	3 September 1982 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	107 minutes
Inclination	44.6 degrees
Apogee	1,221 kilometres
Perigee	967 kilometres
General function of space object	Space object is the spent rocket body of N-I Launch Vehicle Flight No. 7

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	N-I Launch Vehicle Flight No. 7
Other information	Launching organization is NASDA

N-I Launch Vehicle Flight No. 7 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1982-087C
Name of space object	N-I Launch Vehicle Flight No. 7 debris
State of registry	Japan
Date and territory or location of launch	3 September 1982 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	107 minutes
Inclination	44.6 degrees
Apogee	1,221 kilometres
Perigee	967 kilometres
General function of space object	Space object is debris from the N-I Launch Vehicle Flight No. 7

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	N-I Launch Vehicle Flight No. 7
Other information	Launching organization is NASDA

N-I Launch Vehicle Flight No. 7 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1982-087D
Name of space object	N-I Launch Vehicle Flight No. 7 debris
State of registry	Japan
Date and territory or location of launch	3 September 1982 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	107 minutes
Inclination	44.6 degrees
Apogee	1,221 kilometres
Perigee	967 kilometres
General function of space object	Space object is debris from the N-I Launch Vehicle Flight No. 7

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	N-I Launch Vehicle Flight No. 7
Other information	Launching organization is NASDA

M-3SII Launch Vehicle Flight No. 1 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1985-001B
Name of space object	M-3SII Launch Vehicle Flight No. 1 rocket body
State of registry	Japan
Date and territory or location of launch	7 January 1985 UTC; Kagoshima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	-
Inclination	-
Apogee	-
Perigee	-
General function of space object	Space object is the spent rocket body of M-3SII Launch Vehicle Flight No. 1

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	M-3SII Launch Vehicle Flight No. 1
Other information	Launching organization is ISAS
	Basic orbital parameters are not available because the rocket body was injected into an orbit far from Earth

M-3SII Launch Vehicle Flight No. 2 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1985-073C
Name of space object	M-3SII Launch Vehicle Flight No. 2 rocket body
State of registry	Japan
Date and territory or location of launch	18 August 1985 UTC; Kagoshima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	-
Inclination	-
Apogee	-
Perigee	-
General function of space object	Space object is the spent rocket body of M-3SII Launch Vehicle Flight No. 2

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	M-3SII Launch Vehicle Flight No. 2
Other information	Launching organization is ISAS
	Basic orbital parameters are not available because the rocket body was injected into an orbit far from Earth

N-II Launch Vehicle Flight No. 7 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1987-018B
Name of space object	N-II Launch Vehicle Flight No. 7 rocket body
State of registry	Japan
Date and territory or location of launch	19 February 1987 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	103 minutes
Inclination	99.1 degrees
Apogee	918 kilometres
Perigee	904 kilometres
General function of space object	Space object is the spent rocket body of N-II Launch Vehicle Flight No. 7

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	N-II Launch Vehicle Flight No. 7
Other information	Launching organization is NASDA

H-I Launch Vehicle Flight No. 5 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1989-070B
Name of space object	H-I Launch Vehicle Flight No. 5 rocket body
State of registry	Japan
Date and territory or location of launch	5 September 1989 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	111.24 minutes

Inclination	28.17 degrees
Apogee	2,392 kilometres
Perigee	176 kilometres
General function of space object	Space object is the spent rocket body of H-I Launch Vehicle Flight No. 5

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	H-I Launch Vehicle Flight No. 5
Other information	Launching organization is NASDA

M-3SII Launch Vehicle Flight No. 5 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1990-007D
Name of space object	M-3SII Launch Vehicle Flight No. 5 rocket body
State of registry	Japan
Date and territory or location of launch	24 January 1990 UTC; Kagoshima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	-
Inclination	-
Apogee	-
Perigee	-
General function of space object	Space object is the spent rocket body of M-3SII Launch Vehicle Flight No. 5

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	M-3SII Launch Vehicle Flight No. 5
Other information	Launching organization is ISAS
	Basic orbital parameters are not available because the rocket body was injected into an orbit far from Earth

H-I Launch Vehicle Flight No. 6 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1990-013D
Name of space object	H-I Launch Vehicle Flight No. 6 rocket body
State of registry	Japan

Date and territory or location of launch	7 February 1990 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	112.1 minutes
Inclination	99.0 degrees
Apogee	1,736.2 kilometres
Perigee	907.1 kilometres
General function of space object	Space object is the spent rocket body of H-I Launch Vehicle Flight No. 6

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	H-I Launch Vehicle Flight No. 6
Other information	Launching organization is NASDA

H-II Launch Vehicle Flight No. 1 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1994-007C
Name of space object	H-II Launch Vehicle Flight No. 1 rocket body
State of registry	Japan
Date and territory or location of launch	2 March 1994 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	645 minutes
Inclination	28.6 degrees
Apogee	36,261 kilometres
Perigee	449 kilometres
General function of space object	Space object is the spent rocket body of H-II Launch Vehicle Flight No. 1

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	H-II Launch Vehicle Flight No. 1
Other information	Launching organization is NASDA

H-II Launch Vehicle Flight No. 3 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1995-011C

Name of space object	H-II Launch Vehicle Flight No. 3 rocket body
State of registry	Japan
Date and territory or location of launch	18 March 1995 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	460.43 minutes
Inclination	25.21 degrees
Apogee	26,467 kilometres
Perigee	280 kilometres
General function of space object	Space object is the spent rocket body of H-II Launch Vehicle Flight No. 3

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	H-II Launch Vehicle Flight No. 3
Other information	Launching organization is NASDA

H-II Launch Vehicle Flight No. 4 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1996-046C
Name of space object	H-II Launch Vehicle Flight No. 4 rocket body
State of registry	Japan
Date and territory or location of launch	17 August 1996 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	106 minutes
Inclination	99 degrees
Apogee	1,321 kilometres
Perigee	799 kilometres
General function of space object	Space object is the spent rocket body of H-II Launch Vehicle Flight No. 4

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	H-II Launch Vehicle Flight No. 4
Other information	Launching organization is NASDA

M-V Launch Vehicle Flight No. 1 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1997-005B
Name of space object	M-V Launch Vehicle Flight No. 1 rocket body
State of registry	Japan
Date and territory or location of launch	12 February 1997 UTC; Kagoshima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	133.33 minutes
Inclination	31.14 degrees
Apogee	4,288 kilometres
Perigee	246 kilometres
General function of space object	Space object is the spent rocket body of M-V Launch Vehicle Flight No. 1

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	M-V Launch Vehicle Flight No. 1
Other information	Launching organization is ISAS

M-V Launch Vehicle Flight No. 1 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1997-005G
Name of space object	M-V Launch Vehicle Flight No. 1 debris
State of registry	Japan
Date and territory or location of launch	12 February 1997 UTC; Kagoshima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	246.92 minutes
Inclination	31.45 degrees
Apogee	13,060 kilometres
Perigee	259 kilometres
General function of space object	Space object is debris from the M-V Launch Vehicle Flight No. 1

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	M-V Launch Vehicle Flight No. 1
Other information	Launching organization is ISAS

M-V Launch Vehicle Flight No. 3 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	1998-041C
Name of space object	M-V Launch Vehicle Flight No. 3 rocket body
State of registry	Japan
Date and territory or location of launch	3 July 1998 UTC; Kagoshima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	27,724.05 minutes
Inclination	23.88 degrees
Apogee	592,196 kilometres
Perigee	1,917 kilometres
General function of space object	Space object is the spent rocket body of M-V Launch Vehicle Flight No. 3

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	M-V Launch Vehicle Flight No. 3
Other information	Launching organization is ISAS

H-IIA Launch Vehicle Flight No. 1 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2001-038B
Name of space object	H-IIA Launch Vehicle Flight No. 1 rocket body
State of registry	Japan
Date and territory or location of launch	29 August 2001 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	10 hours, 40 minutes
Inclination	28.5 degrees
Apogee	36,205.3 kilometres
Perigee	253.0 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 1

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	H-IIA Launch Vehicle Flight No. 1
Other information	Launching organization is NASDA

H-IIA Launch Vehicle Flight No. 2 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2002-003C
Name of space object	H-IIA Launch Vehicle Flight No. 2 rocket body
State of registry	Japan
Date and territory or location of launch	4 February 2002 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	10 hours, 35 minutes
Inclination	28.5 degrees
Apogee	35,696 kilometres
Perigee	500 kilometres
General function of space object	Space object is debris from the H-IIA Launch Vehicle Flight No. 2

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	H-IIA Launch Vehicle Flight No. 2
Other information	Launching organization is NASDA

H-IIA Launch Vehicle Flight No. 2 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2002-003D
Name of space object	H-IIA Launch Vehicle Flight No. 2 debris
State of registry	Japan
Date and territory or location of launch	4 February 2002 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	10 hours, 35 minutes
Inclination	28.5 degrees
Apogee	35,696 kilometres

Perigee	500 kilometres
General function of space object	Space object is debris from the H-IIA Launch Vehicle Flight No. 2

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	H-IIA Launch Vehicle Flight No. 2
Other information	Launching organization is NASDA

H-IIA Launch Vehicle Flight No. 2 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2002-003E
Name of space object	H-IIA Launch Vehicle Flight No. 2 debris
State of registry	Japan
Date and territory or location of launch	4 February 2002 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	10 hours, 35 minutes
Inclination	28.5 degrees
Apogee	35,696 kilometres
Perigee	500 kilometres
General function of space object	Space object is debris from the H-IIA Launch Vehicle Flight No. 2

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	H-IIA Launch Vehicle Flight No. 2
Other information	Launching organization is NASDA

H-IIA Launch Vehicle Flight No. 2 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2002-003F
Name of space object	H-IIA Launch Vehicle Flight No. 2 debris
State of registry	Japan
Date and territory or location of launch	4 February 2002 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	10 hours, 35 minutes

Inclination	28.5 degrees
Apogee	35,696 kilometres
Perigee	500 kilometres
General function of space object	Space object is debris from the H-IIA Launch Vehicle Flight No. 2

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	H-IIA Launch Vehicle Flight No. 2
Other information	Launching organization is NASDA

H-IIA Launch Vehicle Flight No. 3 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2002-042D
Name of space object	H-IIA Launch Vehicle Flight No. 3 rocket body
State of registry	Japan
Date and territory or location of launch	10 September 2002 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	609.14 minutes
Inclination	28.29 degrees
Apogee	34,405 kilometres
Perigee	446 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 3

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	H-IIA Launch Vehicle Flight No. 3
Other information	Launching organization is NASDA

H-IIA Launch Vehicle Flight No. 4 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2002-056E
Name of space object	H-IIA Launch Vehicle Flight No. 4 rocket body
State of registry	Japan

Date and territory or location of launch	14 December 2002 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	101 minutes
Inclination	98.7 degrees
Apogee	820 kilometres
Perigee	803 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 4

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	H-IIA Launch Vehicle Flight No. 4
Other information	Launching organization is NASDA

M-V Launch Vehicle Flight No. 5 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2003-019B
Name of space object	M-V Launch Vehicle Flight No. 5 rocket body
State of registry	Japan
Date and territory or location of launch	9 May 2003 UTC; Uchinoura Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	-
Inclination	-
Apogee	-
Perigee	-
General function of space object	Space object is the spent rocket body of M-V Launch Vehicle Flight No. 5

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	M-V Launch Vehicle Flight No. 5
Other information	Launching organization is JAXA Basic orbital parameters are not available because the rocket body was injected into an orbit far from Earth

H-IIA Launch Vehicle Flight No. 8 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2006-002B
Name of space object	H-IIA Launch Vehicle Flight No. 8 rocket body
State of registry	Japan
Date and territory or location of launch	24 January 2006 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	99 minutes
Inclination	98.1 degrees
Apogee	712.1 kilometres
Perigee	690.3 kilometres
General function of space object	Space object is the spent rocket body of the H-IIA Launch Vehicle Flight No. 8

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	H-IIA Launch Vehicle Flight No. 8
Other information	Launching organization is JAXA

H-IIA Launch Vehicle Flight No. 9 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2006-004B
Name of space object	H-IIA Launch Vehicle Flight No. 9 rocket body
State of registry	Japan
Date and territory or location of launch	18 February 2006 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	514.09 minutes
Inclination	28.18 degrees
Apogee	29,510 kilometres
Perigee	249 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 9

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	H-IIA Launch Vehicle Flight No. 9
Other information	Launching organization is JAXA

H-IIA Launch Vehicle Flight No. 11 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2006-059B
Name of space object	H-IIA Launch Vehicle Flight No. 11 rocket body
State of registry	Japan
Date and territory or location of launch	18 December 2006 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	285.38 minutes
Inclination	28.61 degrees
Apogee	15,730 kilometres
Perigee	230 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 11

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Launch vehicle	H-IIA Launch Vehicle Flight No. 11
Other information	Launching organization is JAXA

H-IIA Launch Vehicle Flight No. 13 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2007-039D
Name of space object	H-IIA Launch Vehicle Flight No. 13 rocket body
State of registry	Japan
Date and territory or location of launch	14 September 2007 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	-
Inclination	29.9 degrees
Apogee	232,805 kilometres

Perigee	281 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 13

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 13
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 14 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2008-007B
Name of space object	H-IIA Launch Vehicle Flight No. 14 rocket body
State of registry	Japan
Date and territory or location of launch	23 February 2008 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	538.18 minutes
Inclination	27.94 degrees
Apogee	30,837 kilometres
Perigee	240 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 14

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 14
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 15 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2009-002J
Name of space object	H-IIA Launch Vehicle Flight No. 15 rocket body
State of registry	Japan

Date and territory or location of launch	23 January 2009 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	98.1 minutes
Inclination	98.1 degrees
Apogee	676.8 kilometres
Perigee	655.7 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 15

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 15
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 16 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2009-066B
Name of space object	H-IIA Launch Vehicle Flight No. 16 rocket body
State of registry	Japan
Date and territory or location of launch	28 November 2009 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	96 minutes
Inclination	97.7 degrees
Apogee	601 kilometres
Perigee	597 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle No. 16

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 16 (H-IIA-F16)
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 17 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2010-020G
Name of space object	H-IIA Launch Vehicle Flight No. 17 rocket body
State of registry	Japan
Date and territory or location of launch	20 May 2010 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	-
Inclination	-
Apogee	-
Perigee	-
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 17

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 17
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA Basic orbital parameters are not available because the rocket body was injected into an orbit far from Earth

H-IIA Launch Vehicle Flight No. 17 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2010-020H
Name of space object	H-IIA Launch Vehicle Flight No. 17 debris
State of registry	Japan
Date and territory or location of launch	20 May 2010 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	-
Inclination	-
Apogee	-
Perigee	-
General function of space object	Space object is debris from the H-IIA Launch Vehicle Flight No. 17

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 17
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA
	Basic orbital parameters are not available because the object was injected into an orbit far from Earth

H-IIA Launch Vehicle Flight No. 18 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2010-045B
Name of space object	H-IIA Launch Vehicle Flight No. 18 rocket body
State of registry	Japan
Date and territory or location of launch	11 September 2010 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	320.14 minutes
Inclination	31.94 degrees
Apogee	18,034 kilometres
Perigee	213 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 18

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 18
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 19 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2011-050B
Name of space object	H-IIA Launch Vehicle Flight No. 19 rocket body
State of registry	Japan

Date and territory or location of launch	23 September 2011 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	97 minutes
Inclination	97.7 degrees
Apogee	603 kilometres
Perigee	588 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle No. 19

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 19 (H-IIA-F19)
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 21 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2012-025E
Name of space object	H-IIA Launch Vehicle Flight No. 21 rocket body
State of registry	Japan
Date and territory or location of launch	17 May 2012 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	98.0 minutes
Inclination	98.2 degrees
Apogee	671.6 kilometres
Perigee	651.0 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 21

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 21
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 21 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2012-025F
Name of space object	H-IIA Launch Vehicle Flight No. 21 debris
State of registry	Japan
Date and territory or location of launch	17 May 2012 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	98.0 minutes
Inclination	98.2 degrees
Apogee	671.6 kilometres
Perigee	651.0 kilometres
General function of space object	Space object is debris from the H-IIA Launch Vehicle Flight No. 21

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 21
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 21 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2012-025G
Name of space object	H-IIA Launch Vehicle Flight No. 21 debris
State of registry	Japan
Date and territory or location of launch	17 May 2012 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	98.0 minutes
Inclination	98.2 degrees
Apogee	671.6 kilometres
Perigee	651.0 kilometres
General function of space object	Space object is debris from the H-IIA Launch Vehicle Flight No. 21

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 21
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 21 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2012-025H
Name of space object	H-IIA Launch Vehicle Flight No. 21 debris
State of registry	Japan
Date and territory or location of launch	17 May 2012 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	98.0 minutes
Inclination	98.2 degrees
Apogee	671.6 kilometres
Perigee	651.0 kilometres
General function of space object	Space object is debris from the H-IIA Launch Vehicle Flight No. 21

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 21
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 21 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2012-025Q
Name of space object	H-IIA Launch Vehicle Flight No. 21 debris
State of registry	Japan
Date and territory or location of launch	17 May 2012 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	98.0 minutes

Inclination	98.2 degrees
Apogee	671.6 kilometres
Perigee	651.0 kilometres
General function of space object	Space object is debris from the H-IIA Launch Vehicle Flight No. 21

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 21
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 21 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2012-025R
Name of space object	H-IIA Launch Vehicle Flight No. 21 debris
State of registry	Japan
Date and territory or location of launch	17 May 2012 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	98.0 minutes
Inclination	98.2 degrees
Apogee	671.6 kilometres
Perigee	651.0 kilometres
General function of space object	Space object is debris from the H-IIA Launch Vehicle Flight No. 21

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 21
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 21 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2012-025S
Name of space object	H-IIA Launch Vehicle Flight No. 21 debris

State of registry	Japan
Date and territory or location of launch	17 May 2012 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	98.0 minutes
Inclination	98.2 degrees
Apogee	671.6 kilometres
Perigee	651.0 kilometres
General function of space object	Space object is debris from the H-IIA Launch Vehicle Flight No. 21

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 21
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

Epsilon Launch Vehicle Flight No. 1 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2013-049B
Name of space object	Epsilon Launch Vehicle Flight No. 1 rocket body
State of registry	Japan
Date and territory or location of launch	14 September 2013 UTC; Uchinoura Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	106.2 minutes
Inclination	29.7 degrees
Apogee	1,156.8 kilometres
Perigee	946.8 kilometres
General function of space object	Space object is the spent rocket body of the Epsilon Launch Vehicle Flight No. 1

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	JAXA
Launch vehicle	Epsilon Launch Vehicle Flight No. 1
Other information	Launching organization is JAXA

Epsilon Launch Vehicle Flight No. 1 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2013-049C
Name of space object	Epsilon Launch Vehicle Flight No. 1 debris
State of registry	Japan
Date and territory or location of launch	14 September 2013 UTC; Uchinoura Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	106.2 minutes
Inclination	29.7 degrees
Apogee	1,156.8 kilometres
Perigee	946.8 kilometres
General function of space object	Space object is debris from the Epsilon Launch Vehicle Flight No. 1

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	JAXA
Launch vehicle	Epsilon Launch Vehicle Flight No. 1
Other information	Launching organization is JAXA

H-IIA Launch Vehicle Flight No. 24 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2014-029F
Name of space object	H-IIA Launch Vehicle Flight No. 24 rocket body
State of registry	Japan
Date and territory or location of launch	24 May 2014 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	97.1 minutes
Inclination	97.9 degrees
Apogee	639 kilometres
Perigee	602 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 24

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 24
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 25 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2014-060B
Name of space object	H-IIA Launch Vehicle Flight No. 25 rocket body
State of registry	Japan
Date and territory or location of launch	10 July 2014 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	567.54 minutes
Inclination	22.45 degrees
Apogee	32,400 kilometres
Perigee	258 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 25

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 25
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 26 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2014-076E
Name of space object	H-IIA Launch Vehicle Flight No. 26 rocket body
State of registry	Japan
Date and territory or location of launch	3 December 2014 UTC; Tanegashima Space Centre, Kagoshima, Japan

Basic orbital parameters	
Nodal period	-
Inclination	-
Apogee	-
Perigee	-
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 26

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 26
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA. Basic orbital parameters are not available since this rocket body was injected into an orbit far from Earth.

H-IIA Launch Vehicle Flight No. 27 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2015-004B
Name of space object	H-IIA Launch Vehicle Flight No. 27 rocket body
State of registry	Japan
Date and territory or location of launch	1 February 2015 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	94 minutes
Inclination	97.5 degrees
Apogee	514 kilometres
Perigee	494 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle No. 27

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 27 (H-IIA-F27)
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 28 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2015-015B
Name of space object	H-IIA Launch Vehicle Flight No. 28 rocket body
State of registry	Japan
Date and territory or location of launch	26 March 2015 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	94 minutes
Inclination	97.3 degrees
Apogee	498 kilometres
Perigee	483 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle No. 28

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 28 (H-IIA-F28)
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 29 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2015-068B
Name of space object	H-IIA Launch Vehicle Flight No. 29 rocket body
State of registry	Japan
Date and territory or location of launch	24 November 2015 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	677.42 minutes
Inclination	19.83 degrees
Apogee	35,694 kilometres
Perigee	2,651 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 29

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 29
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 30 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2016-012E
Name of space object	H-IIA Launch Vehicle Flight No. 30 rocket body
State of registry	Japan
Date and territory or location of launch	17 February 2016 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	96.2 minutes
Inclination	31.0 degrees
Apogee	576.5 kilometres
Perigee	574.4 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 30.

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 30
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 31 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2016-064B
Name of space object	H-IIA Launch Vehicle Flight No. 31 rocket body
State of registry	Japan
Date and territory or location of launch	2 November 2016 UTC; Tanegashima Space Centre, Kagoshima, Japan

Basic orbital parameters	
Nodal period	586.82 minutes
Inclination	22.52 degrees
Apogee	33,435 kilometres
Perigee	245 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 31

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 31
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

Epsilon Launch Vehicle Flight No. 2 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2016-080B
Name of space object	Epsilon Launch Vehicle Flight No. 2 rocket body
State of registry	Japan
Date and territory or location of launch	20 December 2016 UTC; Uchinoura Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	568.08 minutes
Inclination	31.65 degrees
Apogee	35,250.75 kilometres
Perigee	435.67 kilometres
General function of space object	Space object is the spent rocket body of Epsilon Launch Vehicle Flight No. 2

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	JAXA
Launch vehicle	Epsilon Launch Vehicle Flight No. 2
Other information	Launching organization is JAXA

H-IIA Launch Vehicle Flight No. 33 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2017-015B

Name of space object	H-IIA Launch Vehicle Flight No. 33 rocket body
State of registry	Japan
Date and territory or location of launch	17 March 2017 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	95 minutes
Inclination	97.4 degrees
Apogee	514 kilometres
Perigee	496 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 33

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 33 (H-IIA-F33)
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 34 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2017-028B
Name of space object	H-IIA Launch Vehicle Flight No. 34 rocket body
State of registry	Japan
Date and territory or location of launch	1 June 2017 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	623.69 minutes
Inclination	31.45 degrees
Apogee	35,295 kilometres
Perigee	311 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 34

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 34
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 35 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2017-048B
Name of space object	H-IIA Launch Vehicle Flight No. 35 rocket body
State of registry	Japan
Date and territory or location of launch	19 August 2017 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	623.20 minutes
Inclination	19.95 degrees
Apogee	35,257 kilometres
Perigee	324 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 35

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 35
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 36 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2017-062B
Name of space object	H-IIA Launch Vehicle Flight No. 36 rocket body
State of registry	Japan
Date and territory or location of launch	9 October 2017 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	623.14 minutes
Inclination	31.52 degrees
Apogee	35,272 kilometres
Perigee	305 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 36

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 36
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 37 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2017-082C
Name of space object	H-IIA Launch Vehicle Flight No. 37 rocket body
State of registry	Japan
Date and territory or location of launch	23 December 2017 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	101.0 minutes
Inclination	98.7 degrees
Apogee	806.3 kilometres
Perigee	789.9 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 37

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 37
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 37 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2017-082D
Name of space object	H-IIA Launch Vehicle Flight No. 37 debris
State of registry	Japan
Date and territory or location of launch	23 December 2017 UTC; Tanegashima Space Centre, Kagoshima, Japan

Basic orbital parameters	
Nodal period	101.0 minutes
Inclination	98.7 degrees
Apogee	806.3 kilometres
Perigee	789.9 kilometres
General function of space object	Space object is debris from the H-IIA Launch Vehicle Flight No. 37

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 37
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 37 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2017-082E
Name of space object	H-IIA Launch Vehicle Flight No. 37 debris
State of registry	Japan
Date and territory or location of launch	23 December 2017 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	101.0 minutes
Inclination	98.7 degrees
Apogee	806.3 kilometres
Perigee	789.9 kilometres
General function of space object	Space object is debris from the H-IIA Launch Vehicle Flight No. 37

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 37
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

Epsilon Launch Vehicle Flight No. 3 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2018-007B
Name of space object	Epsilon Launch Vehicle Flight No. 3 rocket body
State of registry	Japan
Date and territory or location of launch	17 January 2018 UTC; Uchinoura Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	94.7 minutes
Inclination	97.4 degrees
Apogee	516 kilometres
Perigee	506 kilometres
General function of space object	Space object is the spent rocket body of Epsilon Launch Vehicle Flight No. 3

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	JAXA
Launch vehicle	Epsilon Launch Vehicle Flight No. 3
Other information	Launching organization is JAXA

H-IIA Launch Vehicle Flight No. 38 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2018-021B
Name of space object	H-IIA Launch Vehicle Flight No. 38 rocket body
State of registry	Japan
Date and territory or location of launch	27 February 2018 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	95 minutes
Inclination	97.4 degrees
Apogee	513 kilometres
Perigee	498 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle Flight No. 38

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 38 (H-IIA-F38)
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 38 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2018-021D
Name of space object	H-IIA Launch Vehicle Flight No. 38 debris
State of registry	Japan
Date and territory or location of launch	27 February 2018 UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	95 minutes
Inclination	97.4 degrees
Apogee	513 kilometres
Perigee	498 kilometres
General function of space object	Space object is debris from the H-IIA Launch Vehicle Flight No. 38

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 38 (H-IIA-F38)
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIB Launch Vehicle Flight No. 7 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2018-073B
Name of space object	H-IIB Launch Vehicle Flight No. 7 rocket body
State of registry	Japan
Date and territory or location of launch	22 September 2018 at 1752 hours, 27 seconds UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	89.30 minutes

Inclination	51.66 degrees
Apogee	299.5 kilometres
Perigee	199.7 kilometres
General function of space object	Space object is the spent rocket body of H-IIB Launch Vehicle Flight No. 7
Date of decay/re-entry/deorbit	23 September 2018

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIB Launch Vehicle Flight No. 7 (H-IIB-F7)
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 40 rocket body

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2018-084L
Name of space object	H-IIA Launch Vehicle Flight No. 40 rocket body
State of registry	Japan
Date and territory or location of launch	29 October 2018 at 0408 hours, 0 seconds UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	96.97 minutes
Inclination	97.85 degrees
Apogee	613.6 kilometres
Perigee	612.8 kilometres
General function of space object	Space object is the spent rocket body of H-IIA Launch Vehicle No. 40

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 40 (H-IIA-F40)
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 40 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2018-084C
Name of space object	H-IIA Launch Vehicle Flight No. 40 debris
State of registry	Japan
Date and territory or location of launch	29 October 2018 at 0408 hours, 0 seconds UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	96.97 minutes
Inclination	97.85 degrees
Apogee	613.6 kilometres
Perigee	612.8 kilometres
General function of space object	Space object is debris from the H-IIA Launch Vehicle No. 40

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 40 (H-IIA-F40)
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 40 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2018-084D
Name of space object	H-IIA Launch Vehicle Flight No. 40 debris
State of registry	Japan
Date and territory or location of launch	29 October 2018 at 0408 hours, 0 seconds UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	96.97 minutes
Inclination	97.85 degrees
Apogee	613.6 kilometres
Perigee	612.8 kilometres
General function of space object	Space object is debris from the H-IIA Launch Vehicle No. 40

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 40 (H-IIA-F40)
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

H-IIA Launch Vehicle Flight No. 40 debris

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2018-084E
Name of space object	H-IIA Launch Vehicle Flight No. 40 debris
State of registry	Japan
Date and territory or location of launch	29 October 2018 at 0408 hours, 0 seconds UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	96.97 minutes
Inclination	97.85 degrees
Apogee	613.6 kilometres
Perigee	612.8 kilometres
General function of space object	Space object is debris from the H-IIA Launch Vehicle No. 40

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	Mitsubishi Heavy Industries, Ltd.
Launch vehicle	H-IIA Launch Vehicle Flight No. 40 (H-IIA-F40)
Other information	Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

Annex II

Additional information on a space object launched by Japan*

First Quasi-Zenith Satellite “Michibiki”

Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Committee on Space Research international designator	2010-045A
Name of space object	First Quasi-Zenith Satellite “Michibiki”
National designator	2010-045A
Registration document	ST/SG/SER.E/620
State of registry	Japan
Date and territory or location of launch	11 September 2010 at 1117 hours UTC; Tanegashima Space Centre, Kagoshima, Japan
Basic orbital parameters	
Nodal period	1,436 minutes
Inclination	41 degrees
Apogee	38,900 kilometres
Perigee	32,600 kilometres
General function of space object	Michibiki’s missions are to develop, experiment with and verify satellite-based pointing, navigation and timing technologies in quasi-zenith orbit

Additional voluntary information for use in the Register of Objects Launched into Outer Space

Space object owner or operator	JAXA
Date of change in supervision	28 February 2017 UTC
Identity of the new owner or operator	National Space Policy Secretariat, Cabinet Office
Launch vehicle	H-IIA Launch Vehicle Flight No. 18 (H-IIA-F18)
Other information	Basic orbital parameters are as at 13 December 2010 Launching organizations are Mitsubishi Heavy Industries, Ltd. and JAXA

* The information was submitted using the form prepared pursuant to General Assembly resolution 62/101 and has been reformatted by the Secretariat.