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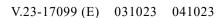
Information furnished in conformity with the Convention on Registration of Objects Launched into Outer Space

Note verbale dated 3 August 2023 from the Permanent Mission of New Zealand to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of New Zealand 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 herewith information concerning objects launched into outer space from New Zealand during the period from January to April 2023 (see annex I) and May to July 2023 (see annex II). ¹

¹ The data on the space objects referenced in the annex were entered into the Register of Objects Launched into Outer Space on 17 August 2023.







Annex I

Information on space objects launched by New Zealand, including from New Zealand territory, as well as from outside New Zealand territory on the basis of overseas payload permits authorized by New Zealand, during the period from 1 January to 30 April 2023*,**

I. Objects registered by New Zealand

A. Objects launched by New Zealand during the period from 1 January to 30 April 2023

					В	asic orbital p	oarameter	S		Additi	onal volunta	ry information
International designator	National designator	Name	Date and time of the launch (New Zealand time)	Other launching States	Nodal period (minutes)		Apogee (km)	Perigee (km)	General function of the space object	Payload owner or operator	Launch vehicle	Website
2023-041D	NZ-2023-04	Electron Rocket Body	24 March 2023, 2114 hours	United States of America	88.19	41.96	205	164	Rocket body	Rocket Lab USA	Electron	www.rocketlabusa.com
2023-041E	NZ-2023-05	Electron Kick Stag Rocket Body	e 24 March 2023, 2114 hours	United States	88.31	42.01	239	143	Rocket body	Rocket Lab USA	Electron	www.rocketlabusa.com

B. Objects launched outside New Zealand territory, on the basis of overseas payload permits authorized by New Zealand, during the period from 1 January to 30 April 2023

			D			Bas	ic orbital par	ameters		Additiona	ıl voluntary ir	formation
International designator	National designator	Name	Date and time of the launch (UTC)	State of registry	Other launching States	Nodal period (minutes)	Inclination (degrees)	Apogee (km)	General function of the space object	Payload owner or operator	Launch vehicle	Website

^{*} The data are reproduced in the form in which they were received.

^{**} As identified on www.space-track.org.

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C. Objects no longer in orbit

International designator	National designator	Name	Date and time of the launch (New Zealand time)	General function of the space object	Date of re-entry (UTC)
2020-085AG	NZ-2020-33	SpaceBEENZ-1	20 November 2020, 1520 hours	Technology demonstration/ communications	7 March 2023
2020-085AE	NZ-2020-34	SpaceBEENZ-2	20 November 2020, 1520 hours	Technology demonstration/ communications	15 March 2023
2020-085K	NZ-2020-35	SpaceBEENZ-3	20 November 2020, 1520 hours	Technology demonstration/ communications	22 March 2023
2020-085L	NZ-2020-36	SpaceBEENZ-4	20 November 2020, 1520 hours	Technology demonstration/ communications	28 March 2023
2020-085N	NZ-2020-37	SpaceBEENZ-5	20 November 2020, 1520 hours	Technology demonstration /communications	5 April 2023
2020-085P	NZ-2020-38	SpaceBEENZ-6	20 November 2020, 1520 hours	Technology demonstration/ communications	12 April 2023
2022-127C	NZ-2022-68	Electron Rocket Body	8 October 2022, 0609 hours	Rocket body	27 February 2023
2023-041D	NZ-2023-04	Electron Rocket Body	24 March 2023, 2114 hours	Rocket body	8 April 2023
2023-041E	NZ-2023-05	Electron Kick Stage Rocket Body	24 March 2023, 2114 hours	Rocket body	1 April 2023

D. Objects identified in a previous report that remain in orbit but are no longer operational

International designator	National designator	Name	Date of the launch (UTC)	General function of the space object	Date when space object was no longer functional (UTC)

E. Objects identified in a previous report that have been moved to a disposal orbit

International National		Date of the	General function	Geostationary position	Date when space object was moved	Physical conditions when space object was moved to a disposal orbit (change in orbit,
designator designator	Name	launch (UTC)	of the space object	(degrees East)	to a disposal orbit	passivation and other measures recommended in space debris mitigation guidelines)

None

None

F. Objects the registration or ownership of which has been transferred from New Zealand to another country

G. Objects the registration or ownership of which has been transferred to New Zealand

International designator	National designator	Name	Date of change in supervision (UTC)	Identity of the new owner or operator	Identity of the previous owner or operator	Previous orbital position	New orbital position	Change of function of the space object
None								

H. Objects the registration or ownership of which has been transferred from one country to another, excluding New Zealand

International National Date of change in Identity of the new Identity of the previous Previous orbital designator Name supervision (UTC) owner or operator owner or operator position Ne	New orbital position	Change of function of the space object
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None

II. Revisions to previously reported information

No revisions.

III. Notification of space objects launched from New Zealand during the period from 1 January to 30 April 2023

The following space objects are not registered by New Zealand.

Objects launched by New Zealand

					Bas	ic orbital para	ameters			Additio	onal voluntary inf	ormation
International designator	National designator	Name	Date and time of the launch (New Zealand time)	Other launching States	Nodal period (minutes)	Inclination (degrees)	Apogee (km)	_	General function of the space object	Payload owner or operator	Launch vehicle	Website
2023-041B	NZ-2023-02	GLOBAL-19	24 March 2023	United States of America	93.52	42.02	452	442	Satellite imaging	BlackSky Global LLC	Electron	www.blacksky.com
2023-041C	NZ-2023-03	GLOBAL-5	24 March 2023	United States	93.49	42.02	451	439	Satellite imaging	BlackSky Global LLC	Electron	www.blacksky.com

Note: Orbital parameters identified as at 2 May 2023 (source: www.space-track.org).

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IV. Objects launched by New Zealand that are no longer in orbit

The following space objects are not registered by New Zealand.

International designator	National designator	Name	Date and time of the launch (New Zealand time)	Other launching States	General function of the space object	Date of re-entry (UTC)
2018-088D	NZ-2018-010	Irivne-01	11 November 2018, 1650 hours	United States of America	Education	3 February 2023
2018-104J	NZ-2018-019	DaVinci	16 December 2018, 1933 hours	United States	Education	9 February 2023
2019-037A	NZ-2019-017	PAINANI-1	29 June 2019, 1630 hours	United States	Education	14 January 2023
2020-060B	NZ-2020-13	CAPELLA-2	31 August 2020, 1605 hours	United States	Remote sensing	28 February 2023
2021-023H	NZ-2021-10	PHOTON-02	23 March 2021, 1030 hours	United States	Technology demonstration and commercial satellite operations	14 March 2023

Note: Orbital parameters identified as at 2 May 2023 (source: www.space-track.org).

Information on space objects launched by New Zealand, including from New Zealand territory, as well as from outside New Zealand territory on the basis of overseas payload permits authorized by New Zealand, during the period from 1 May to 31 July 2023*,***

I. Objects registered by New Zealand

A. Objects launched by New Zealand during the period from 1 May to 31 July 2023

					Ва	isic orbital p	parameter	·s		Additio	onal voluntar	y information
International designator	National designator	Name	Date and time of the launch (New Zealand time)	Other launching States	Nodal period (minutes)	Inclination (degrees)	Apogee (km)	Perigee (km)	General function of the space object	Payload owner or operator	Launch vehicle	Website
2023-062B	NZ-2023-07	Electron Rocket Body	8 May 2023, 1300 hours	United States of America	95.43	32.73	548	531	Rocket body	Rocket Lab USA	Electron	www.rocketlabusa.com
2023-062D	NZ-2023-09	Electron Rocket Body	8 May 2023, 1300 hours	United States	95.57	35.48	554	538	Rocket body	Rocket Lab USA	Electron	www.rocketlabusa.com
2023-073A	NZ-2023-10	Electron Kick Stage Rocket Body	26 May 2023, y1546 hours	United States	95.51	32.73	551	535	Rocket body	Rocket Lab USA	Electron	www.rocketlabusa.com
2023-073D	NZ-2023-13	Electron Booster	26 May 2023, 1546 hours	United States	95.42	35.46	555	523	Rocket body	Rocket Lab USA	Electron	www.rocketlabusa.com
2023-100J	NZ-2023-14	Electron Booster Rocket Body	18 July 2023, 1327 hours	United States	91.5	99.44	500	195	Rocket body	Rocket Lab USA	Electron	www.rocketlabusa.com
2023-100Н	NZ-2023-15	Electron Kick Stage Rocket Body	18 July 2023, y1327 hours	United States	99.55	99.34	1 012	462	Rocket body	Rocket Lab USA	Electron	www.rocketlabusa.com

^{*} The data are reproduced in the form in which they were received.

^{**} As identified on www.space-track.org.

B. Objects launched outside New Zealand territory, on the basis of overseas payload permits authorized by New Zealand, during the period from 1 May to 31 July 2023

			Date and time			Bas	sic orbital par	ameters			Add	itional volur	itary information
International designator	National designato	r Name	of the launch (UTC)	State of registry	Other launching States	Nodal period (minutes)	Inclination (degrees)	Apogee (km)		General function of the space object	Payload owner or operator	Launch vehicle	Website
None													
C.	Obje	ects no lon	ger in orbi	it									
International de	signator	National design	utor Name		Date and	time of the laun	ch (UTC)		Ge	neral function of the spac	ce object	Date of re-e	ntry (UTC)
2023-041A		NZ-2023-01	Electron	Debris	24 Marc	ch 2023, 0914	hours		Ro	ocket body debris		31 May 20)23
		National desig		ume	Date of the launch		General functi			onger operation	ace object was no	longer func	tional (UTC)
International de	signator	National desig	nator No	ıme	Date of the launch	h (UTC)	General functi	on of the sp	pace obje	ct Date when sp		longer func	tional (UTC)
None E.	signator Obj€	National designments	nator No	revious	Date of the launch report that	h (UTC)	General functi en movee	on of the sp	pace obje dispo	ct Date when sp	ace object was no	sal orbit (ch	
None E.	Obje	National designments	nator No	revious	Date of the launch report that	th (UTC)	General functi en movee	on of the sp	pace obje dispo	ct Date when sp sal orbit ns when space object wa.	ace object was no	sal orbit (ch	
None E. International Notesignator de	Objectional signator	National designments Ccts identi Date of Name launch (nator No	revious nction Ge	Date of the launch report that costationary position grees East)	th (UTC) thave been a Date when spen moved to a dist	en movee ace object was	d to a	dispo	ct Date when sp sal orbit ns when space object wa.	ace object was no s moved to a dispo e debris mitigation	sal orbit (ch guidelines)	ange in orbit, passiva
nternational des	Objectional signator	National designment of the sects identified to the sects and the sects are sects as a section of the sects are section of the sects are section of the se	nator No	revious nction Ge e object (de	report that ostationary position egrees East) ership of whe	th (UTC) thave been a Date when spen moved to a dist	en moved ace object was sposal orbit	d to a Physical and other	dispo l conditioner measur	sal orbit ns when space object was recommended in space	ace object was no s moved to a dispo e debris mitigation	isal orbit (ch guidelines)	nange in orbit, passiva

G. Objects the registration or ownership of which has been transferred to New Zealand

International designator			, ,		Identity of the previous owner or operator	Previous orbital position	New orbital position	Change of function of the space object
None								

H. Objects the registration or ownership of which has been transferred from one country to another, excluding New Zealand

International designator	National designator	Name	Date of change in supervision (UTC)	Identity of the new owner or operator	Identity of the previous owner or operator	Previous orbital position	New orbital position	Change of function of the space object	
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None

II. Revisions to previously reported information

A. Revision to previous notification of space objects launched from New Zealand during the period from 1 May 2022 to 30 December 2022 (ST/SG/SER.E/1089, annex, table A)

The following space object is now registered by New Zealand:

						Basic orbital parameters			S	_
International designator	National designator	Name	Date and time of the launch (New Zealand time)	State of registry	Other launching States		Inclination (degrees)	Apogee (km)		General function of the space object
2022-091C	NZ-2022-72	Electron Kick Stage Rocket Bod	4 August 2022, y1700 hours	New Zealand	United States of America	97.45	70.01	640	634	Rocket body

III. Notification of space objects launched from New Zealand during the period from 1 May to 31 July 2023

The following space objects are not registered by New Zealand.

Objects launched by New Zealand

			Data and diama of		Basic orbital parameters					Additional voluntary information		
International designator	National designator	Name	Date and time of the launch (New Zealand time)	Other launching States	Nodal period (minutes)	Inclination (degrees)	Apogee (km)	Perigee (km)	General function of the space object	Payload owner or operator	Launch vehicle	Website
2023-062A	NZ-2023-06	Tropics-5	8 May 2023, 1300 hours	United States of America	95.56	32.74	550	536	Scientific purposes	National Aeronautics and Space Administration (NASA)	Electron	-
2023-062C	NZ-2023-08	Tropics-6	8 May 2023, 1300 hours	United States	95.43	32.74	550	529	Scientific purposes	NASA	Electron	-
2023-073B	NZ-2023-11	Tropics-03	26 May 2023, 1546 hours	United States	95.53	32.73	551	537	Scientific purposes	NASA	Electron	-
2023-073C	NZ-2023-12	Tropics-07	26 May 2023, 1546 hours	United States	95.46	32.74	551	551	Scientific purposes	NASA	Electron	-
2023-100C	NZ-2023-16	Starling 1	18 July 2023, 1327 hours	United States	96.15	99.46	578	571	Technology demonstration	NASA	Electron	-
2023-100B	NZ-2023-17	Starling 2	18 July 2023, 1327 hours	United States	96.17	99.46	584	566	Technology demonstration	NASA	Electron	-
2023-100D	NZ-2023-18	Starling 3	18 July 2023, 1327 hours	United States	96.16	99.46	584	566	Technology demonstration	NASA	Electron	-
2023-100A	NZ-2023-19	Starling 4	18 July 2023, 1327 hours	United States	96.16	99.46	583	565	Technology demonstration	NASA	Electron	-
2023-100F	NZ-2023-20	LEMUR2 DEVERILL-MT	18 July 2023, 1327 hours	United States	96.1	99.46	582	562	Communications/ Internet-of- Things (IoT)	Spire Global Inc	Electron	-
2023-100E	NZ-2023-21	LEMUR2 MANO	18 July 2023, 1327 hours	United States	96.13	99.46	583	564	Communications/	Spire Global Inc	Electron	-
2023-100G	NZ-2023-22	LEO3	18 July 2023, 1327 hours	Canada	105.27	99.44	1 019	995	Technology demonstration	Telesat	Electron	-

Note: Orbital parameters identified as at 26 July 2023 (source: www.space-track.org).

IV. Objects launched by New Zealand that are no longer in orbit

The following space objects are not registered by New Zealand.

	National designator	Name	Date and time of the launch (New Zealand time)	Other launching States	General function of the space object	Date of re-entry (UTC)
2019-026B	NZ-2019-008	SPARC-1	5 May 2019, 1800 hours	United States of America	Technology demonstration	26 June 2023
2019-037C	NZ-2019-011	Global-3	29 June 2019, 1630 hours	United States	Remote sensing	16 May 2023
2019-084Aª	NZ-2019-28	ALE-2	6 December 2019, 2118 hours	Japan	Educational, entertainment and scientific purposes	19 April 2023

^a Object launched by New Zealand that is no longer in orbit that was not registered last quarter.

Note: Orbital parameters identified as at 26 July 2023 (source: www.space-track.org).