

# Space Activities in 2022

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Rev 1.0 - initial release  
Rev 1.1 - Fixed some typos, updated a few owner orgs in appendices  
Rev 1.2 - More typos  
Rev 1.3 - Corrected bug in tables 4 and 5; Vega-C is AE not ESA; added missing ISS TCMs  
Rev 1.4 - Table 8 now says RU, not USSR;  
various revisions to which objects considered payloads;  
some missing cubesats added.  
Rev 1.5 - Improved mass estimates for 2022 Starlink payloads; other minor corrections.  
Improved cross-table consistency of which objects counted in statistics.  
Rev 1.6 - Minor change: QUBIK sats are nonprofit, not commercial  
Rev 1.7 - Added list of tables; no changes to data  
Rev 1.8 - Added 3 sats Surya, OPTIMAL, HSKSAT (launched 2022, deployed 2023)  
Rev 1.9 - Corrected reentry year for one cubesat  
Rev 1.10 - Corrected country ID for SuryaSat, added missing ISS TCM  
Rev 2.0 - Added bibliography

## Preface

In this paper I present some statistics characterizing astronomical activity in calendar year 2022. In the 2014 edition of this review [1], I described my methodological approach and some issues of definitional ambiguity; that discussion is not repeated here, and it is assumed that the reader has consulted the earlier document, available at <https://planet4589.org/space/papers/space14.pdf> (The present work may be found as [space22.pdf](#) at the same location).

Most of the data in this paper is derived from my General Catalog of Artificial Space Objects [2]. Principal sources for orbital data are Space-Track [3], Celestrak [4], Mike McCants' hobbyist elements [5], and the United Nations [6].

## 1 Orbital Launch Attempts

### 1.1 Launch statistics by country

During 2022 there were 186 orbital launch attempts from Earth, with 180 reaching orbit. This does not include two missile flights from North Korea which was suborbital but reached orbital energy, to which I assigned launch designation 2022-U01 and 2022-U03.

Table 1(a) gives statistics for all orbital attempts; Table 1(b) includes only launches that reached orbit (this includes the ISRO SSLV launch where orbit was marginal).

Table 1: (a) Orbital Launch Attempts

	2015	2016	2017	2018	2019	2020	2021	2022
USA	20	22	29	31	21	37	45	78
Russia	26	17	19	17	22	12	16	21
China	19	22	18	39	34	39	56	64
Europe	12	11	11	11	9	10	15	6
<i>South Korea</i>	0	0	0	0	0	0	1	1
<i>North Korea</i>	0	1	0	0	0	0	0	0
<i>India</i>	5	7	5	7	6	2	2	5
<i>Japan</i>	4	4	7	6	2	4	3	1
<i>Iran</i>	1	0	0	0	2	2	2	1
<i>Israel</i>	0	1	0	0	0	1	0	0
<i>New Zealand</i>	0	0	1	3	6	7	6	9
Other	10	13	13	16	16	16	14	17
Total	87	85	90	114	102	114	146	186

The Arianespace-managed Soyuz launch from French Guiana in February was counted as European. Further such launches were cancelled following the invasion of Ukraine [7].

Electron is licensed in the USA but launched from New Zealand territory by the New Zealand subsidiary of the US-headquartered Rocket Lab. Electron rocket stages are registered with the UN by New Zealand. (see, e.g., [8].) I go back and forth on this, but for now I consider Electron to be a New Zealand launch of a US-manufactured rocket.

Table 1: (b) Launches Reaching Orbit

	2015	2016	2017	2018	2019	2020	2021	2022
USA	18	22	29	31	21	34	43	76
Russia	25	16	18	16	22	12	16	21
China	19	21	17	38	32	35	53	62
Europe	12	11	11	11	8	10	15	5
<i>South Korea</i>	0	0	0	0	0	0	0	1
<i>North Korea</i>	0	1	0	0	0	0	0	0
<i>India</i>	5	7	5	7	6	2	1	5
<i>Japan</i>	4	4	6	6	2	4	3	0
<i>Iran</i>	1	0	0	0	0	1	0	1
<i>Israel</i>	0	1	0	0	0	1	0	0
<i>New Zealand</i>	0	0	0	3	6	6	5	9
Other	10	13	11	16	14	14	9	16
Total	84	83	86	112	97	105	136	180

## 1.2 Launch failures and uncataloged orbital launches

During the year there were 7 orbital launch failures. In general I award partial success scores to launches which reach orbit but do not successfully deploy their payloads in the targeted orbit; there was one such case in 2022.

By a historical quirk, the ‘international designations’ for successful orbital launches are assigned by the US Space Force. I assign special designations for those launches not cataloged by the US. Launches that are marginally orbital or fall just short of orbital are given ‘U’ designations. Launches that completely fail to reach orbit are assigned ‘F’ designations; for details, see GCAT [9],[10]. Two North Korean suborbital missile launches [11],[12] had trajectories whose energy was comparable to orbital flights and they are assigned designation 2022-U01 and 2022-U03; they are not included in the count of orbital launches. India’s SSLV launch failure reached a 76 x 356 km orbit [13] and it is assigned 2022-U02 as a marginally orbital launch.

The Firefly flight in Oct 2022 reached a lower orbit than planned and its payloads reentered within a few days [14]. I have scored it 0.75 according to the rules at <https://planet4589.org/space/gcat/web/intro/success.html>

Table 2: F and U launches in 2022

Table 2 (a): 2022 orbital launch failures and partial failures						
Designation	Date	LV State	LV	Payload	Type of failure	Launch Score
2022-F01	Feb 10	US	Rocket 3.3	Elana 41	Fairing sep failed	0.00
2022-F02	May 13	China	SQ-1	Jilin-1 MF01A/R	Stage 2 failure	0.00
2022-F03	Jun 12	US	Rocket 3.3	TROPICS 1/2	Stage 2 failure	0.00
2022-U02	Aug 7	India	SSLV	EOS-02	Stage 4 failure	0.00
2022-122	Oct 1	US	Alpha	TES-15/Serenity	Stage 2 underburn?	0.75
2022-F04	Oct 12	Japan	Epsilon	RAISE-3	Stage 2 attitude failure	0.00
2022-F05	Dec 14	China	Zhuque-2	Zhixing-1B	Stage 2 vernier failure	0.00
2022-F06	Dec 21	France	Vega-C	PNEO5/6	Stage 2 failure	0.00
Table 2(b): 2022 other additional launch designations						
Designation	Date	LV State	LV	Payload	Type of launch	Launch Score
2022-U01	Mar 24	N Korea	Hwasong-17	RV	Orbital energy	1.00
2022-U03	Nov 18	N Korea	Hwasong-17	RV	Orbital energy	1.00

### 1.3 Commercial Launches

Of the 186 orbital launch attempts: 82 were carried out by governments; 21 by commercial companies under contract to their host governments, and 83 by commercial companies for commercial customers, including foreign governments.

I count US Commercial Cargo and Crew flights as ‘under contract to host government’; although the launch contract is through a commercial intermediary, the choice of vehicle is negotiated as part of a government contract.

*Here G = Government; CO = Commercial operation of government developed rocket; CG = commercial service provision to government; CX = Fully commercial service (but customers may include govt); C = Fully commercial (no govt involved); A = Amateur, academic, non-profit. See the 2014 document for full discussion; in 2022 the letter codes have been changed and are now used in the online GCAT launch database.*

Table 3: Commercial vs. government launches

Launch Provider	Launches	Type	Customers		
			Gov.	Comm.	Other gov
US Launch Providers					
Astra Rocket 3	3	CX	2	1	0
Firefly Alpha	1	C	0	1	0
NASA MSFC SLS	1	G	1	0	0
NG Antares	2	CX	0	2	0
SpaceX Falcon 9	60	CX	4	53	3
SpaceX Falcon Heavy	1	CX	1	0	0
ULA Atlas V	7	CG	5	2	0
ULA Delta 4	1	CG	1	0	0
VO Launcher One	2	CG	2	0	0
European Launch Providers					
Arianespace Ariane 5	3	CO	1	1	1
Arianespace Soyuz	1	CO	0	1	0
Arianespace Vega	1	G	1	0	0
ESA Vega	1	G	1	0	0
Russian Launch Providers					
Khrunichev Angara	2	G	2	0	0
Khrunichev Proton	1	G	0	0	1
Roskosmos Soyuz	6	G	5	0	1
VVKO Soyuz	12	G	12	0	0
Chinese Launch Providers					
CALT CZ-11	4	G	4	0	0
CALT CZ-2C	6	G	6	0	0
CALT CZ-2F	3	G	3	0	0
CALT CZ-3	3	G	3	0	0
CALT CZ-5	2	G	2	0	0
CALT CZ-7	3	G	3	0	0
CALT CZ-8	1	G	1	0	0
Changzheng H. JL-3	1	C	0	1	0
ExPace KZ-11	1	CO	0	1	0
ExPace KZ-1A	4	CO	1	3	0
Galactic E. Gushenxing-1	2	C	0	2	0
LandSpace Zhuque-2	1	C	0	1	0
SAST CZ-2D	15	G	15	0	0
SAST CZ-3	1	G	1	0	0
SAST CZ-4	11	G	11	0	0
SAST CZ-6	4	G	4	0	0
Zhongke TJ YG ZK-1	1	C	0	1	0
iSpace SQ-1	1	C	0	1	0
Other Launch Providers					
IRGC Qased	1	G	1	0	0
ISRO PSLV/GSLV	1	G	1	0	0
ISRO SSLV	1	G	1	0	0
JAXA Epsilon	1	G	1	0	0
KARI KSLV2	1	G	1	0	0
NSIL GSLV3	1	CO	0	1	0
NSIL PSLV/GSLV	2	CO	1	0	1
Rocket Lab Electron	9	C	3	5	1
Total	186		101	77	8



## 2 Satellite Launch Statistics

### 2.1 Satellites of the major space powers

Here I give total payloads (1) launched (Table 4) and (2) deployed (Table 5). Some satellites launched in 2020 (e.g. to the ISS) were not deployed until 2022.

The 8 ANDESITE Node satellites launched in 2019 attached to the ANDESITE satellite [15] have not been deployed.

Not included are satellites which did not reach orbit due to launch failures.

Also not included in the count, but listed at the end of Appendix 2c, are several objects which are marginal cases.

Note that the correlation of specific satellites from a multi-satellite launch with specific catalog numbers (and thus, tracked objects) is uncertain in some case. This is indicated in the appendices with a question mark following the piece (international) designation.

Table 4: Payloads launched per year

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Russia	22	29	34	27	15	24	23	31	22	20	50
USA	35	85	110	112	95	282	303	306	974	1240	1937
China	25	18	26	44	40	36	98	73	74	112	182
Europe	22	34	28	23	22	42	61	50	133	356	191
Other	28	41	63	31	50	60	84	64	60	101	127
Total	132	207	261	237	222	444	569	524	1263	1829	2487

The 2477 satellites listed here and in Appendix 2b as having been deployed during 2022 include some satellites launched in previous years and deployed in 2022.

Table 5: Payloads deployed per year

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Russia	22	29	33	27	14	25	23	29	21	19	50
USA	35	84	96	106	106	288	187	366	985	1231	1941
China	25	17	24	44	38	35	95	74	72	112	179
Europe	22	34	28	23	20	43	56	50	134	354	187
Other	28	41	57	31	43	65	81	60	59	94	120
Total	132	205	238	231	221	456	442	579	1271	1810	2477

## **2.2 Satellite ownership by country**

I now break this down by class for 2022 (first the launch powers, then other countries).

In 2022 the satellites deployed were owned by 48 countries.

In general I consider western Europe, loosely defined, as a single 'space power' because of the tight integration of its aerospace industry. Within this view, the four leading space powers are USA, China, Russia and (W) Europe. The second tier of space powers is comprised of Japan and India; all others are lumped as 'Other', further broken down regionally (and arbitrarily) for convenience. The 'Other' powers have limited or no launch capability of their own. (South Korea and Canada have space industries that make them candidates for the second tier in the near future). Countries which owned satellites covered in previous editions of the report are included in the table even if they had no new satellites this year.

Table 6: 2022 payloads launched by owner country and class

		A Academic/ NonProfit	B Business/ Commercial	C Civil	D Defense	SS Spaceship	Total Number
<b>USA</b>		20	1864	14	32	7	1937
<b>China</b>		3	100	28	45	6	182
<b>Russia</b>		24	2	4	15	5	50
CH	Switzerland	0	6	0	0	0	6
E	Spain	4	13	0	0	0	17
I	Italy	1	6	3	1	0	11
FI	Finland	0	5	1	0	0	6
L	Luxembourg	1	10	0	0	0	11
D	Germany	0	3	1	1	0	5
N	Norway	2	0	1	0	0	3
UK	UK	0	117	0	0	0	117
F	France	0	9	1	0	0	10
NL	Netherlands	1	0	0	0	0	1
GR	Greece	2	0	0	0	0	2
S	Sweden	0	0	1	0	0	1
I-EUM	EUMETSAT	0	0	1	0	0	1
<b>Europe (W)</b>		11	169	9	2	0	191
<b>Japan</b>		6	5	3	0	0	14
<b>India</b>		2	4	6	0	0	12
UA	Ukraine	0	0	1	0	0	1
CZ	Czech Republic	3	0	0	0	0	3
PL	Poland	0	5	0	0	0	5
LT	Lithuania	0	1	0	0	0	1
BGN	PR Bulgaria	0	1	0	0	0	1
SI	Slovenia	1	0	0	0	0	1
MD	Moldova	1	0	0	0	0	1
<b>Europe (E)</b>		5	7	1	0	0	13
BR	Brazil	2	1	0	0	0	3
AR	Argentina	0	1	0	0	0	1
UY	Uruguay	0	9	0	0	0	9
CL	Chile	5	0	0	0	0	5
<b>Latin America</b>		7	11	0	0	0	18
IL	Israel	10	0	1	0	0	11
TR	Turkey	1	1	0	0	0	2
UAE	UAE	0	0	2	0	0	2
IR	Iran	0	0	1	1	0	2
EG	Egypt	0	0	1	0	0	1
<b>Middle East</b>		11	1	5	1	0	18
NP	Nepal	0	1	0	0	0	1
TW	Taiwan	2	0	0	0	0	2
SG	Singapore	1	1	0	2	0	4
KR	South Korea	3	1	4	0	0	8
MY	Malaysia	0	1	0	0	0	1
BT	Bhutan	0	0	1	0	0	1
ID	Indonesia	1	0	0	0	0	1
<b>Asia (other)</b>		7	4	5	2	0	18

		A Academic/ NonProfit	B Business/ Commercial	C Civil	D Defense	SS Spaceship	Total Number
ZA	South Africa	3	0	0	0	0	3
AO	Angola	0	0	1	0	0	1
UG	Uganda	0	0	1	0	0	1
ZW	Zimbabwe	0	0	1	0	0	1
<b>Africa</b>		3	0	3	0	0	6
<b>Canada</b>		2	7	0	0	0	9
AU	Australia	0	5	0	0	0	5
NZ	New Zealand	0	14	0	0	0	14
<b>Australasia</b>		0	19	0	0	0	19
<b>Total</b>		101	2193	78	97	18	2487

Table 7: Mass (tonnes) of 2022 payloads launched by owner country and class

<b>USA</b>		0.1	548.6	19.8	44.1	85.2	697.8
<b>China</b>		2.0	25.5	28.2	33.9	88.3	178.0
<b>Russia</b>		0.1	0.0	1.0	29.4	36.6	67.2
I	Italy	0.0	0.7	0.3	2.2	0.0	3.2
L	Luxembourg	0.0	6.8	0.0	0.0	0.0	6.8
D	Germany	0.0	0.0	0.9	4.0	0.0	4.9
UK	UK	0.0	19.7	0.0	0.0	0.0	19.7
F	France	0.0	20.0	2.2	0.0	0.0	22.2
I-EUM	EUMETSAT	0.0	0.0	3.8	0.0	0.0	3.8
<b>Europe (W)</b>		0.0	47.6	7.3	6.2	0.0	61.0
<b>Japan</b>		0.0	1.4	0.0	0.0	0.0	1.4
<b>India</b>		0.0	0.0	7.1	0.0	0.0	7.1
<b>Europe (E)</b>		0.0	0.1	0.2	0.0	0.0	0.3
<b>Latin America</b>		0.0	0.4	0.0	0.0	0.0	0.4
EG	Egypt	0.0	0.0	3.9	0.0	0.0	3.9
<b>Middle East</b>		0.0	0.0	5.0	0.0	0.0	5.0
KR	South Korea	0.0	0.0	2.2	0.0	0.0	2.2
MY	Malaysia	0.0	5.6	0.0	0.0	0.0	5.6
<b>Asia (other)</b>		0.0	5.7	2.2	0.5	0.0	8.4
AO	Angola	0.0	0.0	2.1	0.0	0.0	2.1
<b>Africa</b>		0.0	0.0	2.2	0.0	0.0	2.2
<b>Australasia</b>		0.0	0.3	0.0	0.0	0.0	0.3
<b>Total</b>		2.4	629.6	72.9	114.2	210.2	1029.2

### 2.3 Satellite manufacture by country

Most countries build only very small (cubesat) satellites, purchasing their larger satellites from one of the main space powers. Here I tabulate the manufacturers of the 2036 satellites launched in 2022 with estimated launch masses of 100 kg or more.

HSF is 'Human spaceflight', including related robotic missions such as cargo ships to support ISS. 'Surv.' is surveillance, including early warning and space debris surveillance; visible and radar imaging recon satellites and weather sats are under 'Imaging'. Microgravity research, geodesy and planetary probes are included under Sci (Science). Satellites built in the UK, France, Germany, Italy, Spain and the Netherlands are lumped together as 'EUR' to reflect the integration of the western European aerospace industry.

Table 8: 2022 payloads by manufacturer country - 100 kg and up only

	HSF	Comms	Imaging	Nav	SIGINT	Surv.	Sci	Tech	Total
USA	9	1846	6	0	9	4	0	12	1886
RU	5	6	5	3	2	1	0	3	25
PRC	6	13	22	9	24	0	4	16	94
EUR	0	8	4	0	0	0	1	4	17
Israel	0	0	1	0	0	0	0	0	1
Ukraine	0	0	1	0	0	0	0	0	1
India	0	1	2	0	0	0	0	0	3
Japan	0	0	2	0	0	0	1	0	3
New Zealand	0	0	0	0	0	0	1	0	1
South Korea	0	0	2	0	0	0	1	2	5
Total	20	1874	45	12	35	5	8	37	2036

## **2.4 New geosynchronous satellites in 2022**

Table 9 lists geosynchronous satellites launched or reaching GEO for the first time during 2022(some from the immediately preceding December are also included, so there is a little overlap with last year's report). The locations given are their positions at the end of the year.

Table 9: Geostationary satellites launched in 2022, ordered by longitude

Piece	Name	Operator	Location	Mission
2022-170A	Galaxy 35	Intelsat SA (US)	150.09W	Communications
2022-170B	Galaxy 36	Intelsat SA (US)	149.98W	Communications
2022-153B	Galaxy 32	Intelsat SA (US)	149.08W	Communications
2022-092A	SBIRS GEO-6	USSF	145.07W	Early Warn
2022-021A	GOES 18	NOAA	136.93W	Weather
2022-071A	SES-22	SES	135.03W	Communications
2022-128A	Galaxy 33	Intelsat SA (US)	133.02W	Communications
2022-123B	SES-21	SES	131.03W	Communications
2022-128B	Galaxy 34	Intelsat SA (US)	128.95W	Communications
2021-118A	STPSAT-6	USAF STP	111.66W	Technology
2022-123A	SES-20	SES	103.11W	Communications
2021-095A	SES-17	SES	67.12W	Communications
2022-070A	CAPSTONE	Adv Space/ARC	-	Planetary
2022-078A	Tian Lian 2-03	CAST	10.68E	Communications
2022-131A	Angosat 2	GGPEN	23.00E	Communications
2021-126A	Turksat 5B	Turksat	42.06E	Communications
2021-095B	Syracuse 4A	DGA	45.51E	Communications
2022-112A	Zhongxing 1E	PLA GAD	81.36E	Communications
2022-067A	GSAT-24	New Space India	83.01E	Communications
2022-067B	Measat 3D	Measat	91.49E	Communications
2021-123B	Ekspress-AMU3	KosSvyaz	103.01E	Communications
2022-073A	WFOV Testbed	USSF SMC	119.28E	Early Warn
2022-038A	Zhongxing 6D	China Satcom	125.03E	Communications
2021-135A	Tongxin Jishu Shiyao 9	CASC	137.21E	Sigint?
2021-123A	Ekspress-AMU7	KosSvyaz	145.00E	Communications
2021-019A	Shiyao 9	CAST	146.10E	Technology?
2022-148A	Zhongxing 19	China Satcom	163.30E	Communications
2021-124A	Tian Lian 2-02	CAST	171.09E	Data relay
2021-118B	LDPE 1	AFRL/RV	Drift orbit	Technology
2021-129A	Shiyao 12-01	CAST	Drift orbit	Technology?
2021-129B	Shiyao 12-02	CAST	Drift orbit	Technology?
2021-128A	Inmarsat 6 F1	INMARSAT-Ltd	Drift orbit	Mobile comms
2022-006A	USA 324	USAF AFSPC	Drift orbit	Early Warn
2022-006B	USA 325	USAF AFSPC	Drift orbit	Early Warn
2021-118E	ASCENT	AFRL/RV	Drift orbit	Technology
2022-110A	Eutelsat Konnect VHTS	EutelsatSA	Orbit raising	Communications
2022-153A	Galaxy 31	Intelsat SA (US)	Drift orbit	Communications
2022-134A	EUTELSAT HOT BIRD 13F	EutelsatSA	Orbit raising	Communications
2022-146A	EUTELSAT HOT BIRD 13G	EutelsatSA	Orbit raising	Communications
2022-157A	EUTELSAT 10B	EutelsatSA	Orbit raising	Communications
2022-170C	Meteosat 12	EUMETSAT	Orbit raising	Weather

## **2.5 New sun-synchronous satellites in 2022**

Table 10 lists satellites launched to sun-synchronous orbit in 2022, ordered by the local time of their orbit's descending node (LTDN, format hhmm or hhmm:ss).



Table 10: SSO satellites launched in 2022, ordered by local time of descending node

No	Piece	Name	Operator	Mission	Orbit	LTDN
1	2022-054A	Kosmos-2556	-	IMG	500 x 508 x 97.6	00:05:30
2	2022-150A	NOAA-21	-/-	MET	826 x 827 x 98.7	01:25:05
3	2022-039A	Daqi Huanjing Jiance Weixing	-	SCI	698 x 702 x 98.2	01:27:40
4	2022-165A	Gao Fen 5-01A	-	IMG	699 x 701 x 98.1	01:33:42
5	2022-115A	Yunhai 1-03	-	MET	781 x 783 x 98.5	05:29:14
6	2022-127A	GAzelle	-	TECH	743 x 762 x 98.3	05:30:15
7	2022-026K	ORESATO	-	TECH	493 x 526 x 97.5	05:33:52
8	2022-026B	SpaceBEE-121	-	COM	488 x 518 x 97.5	05:35:08
9	2022-026X	SpaceBEE-124	-	COM	488 x 518 x 97.5	05:35:16
10	2022-026V	SpaceBEE-123	-	COM	487 x 518 x 97.5	05:35:22
11	2022-026H	SpaceBEE-119	-	COM	487 x 518 x 97.5	05:35:28
12	2022-026D	SpaceBEE-126	-	COM	487 x 517 x 97.5	05:35:30
13	2022-026N	SpaceBEE-127	-	COM	487 x 518 x 97.5	05:35:32
14	2022-026C	SpaceBEE-114	-	COM	487 x 517 x 97.5	05:35:47
15	2022-026F	SpaceBEE-120	-	COM	486 x 517 x 97.5	05:35:48
16	2022-026Q	SpaceBEE-117	-	COM	487 x 518 x 97.5	05:35:49
17	2022-026G	SpaceBEE-122	-	COM	486 x 516 x 97.5	05:35:54
18	2022-026J	SpaceBEE-115	-	COM	487 x 517 x 97.5	05:35:55
19	2022-026R	SpaceBEE-116	-	COM	487 x 517 x 97.5	05:36:01
20	2022-026S	SpaceBEE-113	-	COM	485 x 517 x 97.5	05:36:05
21	2022-026E	SpaceBEE-118	-	COM	486 x 515 x 97.5	05:36:17
22	2022-026P	SpaceBEE-125	-	COM	484 x 516 x 97.5	05:36:19
23	2022-026T	SpaceBEE-112	-	COM	484 x 514 x 97.5	05:36:37
24	2022-026W	SpaceBEE NZ-12	-	COM	482 x 511 x 97.5	05:37:12
25	2022-026L	SpaceBEE NZ-14	-	COM	481 x 510 x 97.5	05:37:20
26	2022-026U	SpaceBEE NZ-13	-	COM	481 x 510 x 97.5	05:37:25
27	2022-026M	SpaceBEE NZ-11	-	COM	480 x 508 x 97.5	05:37:38
28	2022-147A	MATS	-	SCI	578 x 599 x 97.7	05:46:09
29	2022-129A	Kuafu-1	-	AST	712 x 732 x 98.3	05:58:26
30	2022-151A	Yunhai-3	-	MET	847 x 849 x 98.8	05:59:45
31	2022-063A	SARah-1	-/-	IMG-R	745 x 747 x 98.4	05:59:50
32	2022-132A	Huanjing Jianzai 02-05	-	SCI	481 x 497 x 97.4	06:00:20
33	2022-018A	Ludi Tance 1-01B	-	IMG-R	601 x 603 x 97.8	06:00:25
34	2022-007A	Ludi Tance 1-01A	-	IMG-R	601 x 603 x 97.8	06:00:32
35	2022-106A	Yaogan Weixing 33-02	-	IMG-R?	695 x 696 x 98.2	06:00:36
36	2022-013A	EOS-04	-	IMG-R	526 x 529 x 97.5	06:00:47
37	2022-035A	Gao Fen 3-03	-	IMG-R	750 x 752 x 98.4	06:03:34
38	2022-082C	Siwei Gaojing 2-02	-	IMG-R?	483 x 498 x 97.4	06:04:55
39	2022-082A	Siwei Gaojing 2-01	-	IMG-R?	483 x 498 x 97.4	06:04:55
40	2022-013B	InspireSat-1	-	SCI	511 x 526 x 97.6	06:10:04
41	2022-118A	Shiyang 14	-	TECH	484 x 503 x 97.5	06:10:06
42	2022-118B	Shiyang 15	-	IMG	483 x 498 x 97.5	06:10:41
43	2022-013C	INS-2TD	-	TECH	506 x 520 x 97.6	06:11:37
44	2022-121B	Shiyang 16B	-	TECH	501 x 515 x 97.4	06:59:09
45	2022-121A	Shiyang 16A	-	TECH	499 x 515 x 97.4	06:59:14
46	2022-121C	Shiyang 17	CALT	TECH	499 x 515 x 97.4	06:59:27
47	2022-164A	Xingyun Jiaotong VDES	-	COM	736 x 750 x 98.4	07:30:04
48	2022-066A	Tianxing-1	-	SCI	272 x 296 x 96.8	08:43:27
49	2022-032A	Tianping-2A	CCMETA?	CAL	586 x 604 x 97.8	08:46:19

Table 10: SSO satellites launched in 2022, ordered by local time of descending node (cont.)

No	Piece	Name	Operator	Mission	Orbit	LTDN
50	2022-032D	Tianping-2B	-	CAL	576 x 600 x 97.8	08:48:53
51	2022-032C	Tianping-2C	-	CAL	577 x 602 x 97.8	08:50:23
52	2022-113A	StriX-1	-	IMG-R	558 x 570 x 97.6	08:58:47
53	2022-020A	StriX-Beta	-	IMG-R	550 x 568 x 97.7	09:16:18
54	2022-084T	Starlink 4408	-	COM	561 x 564 x 97.7	09:36:11
55	2022-084S	Starlink 4397	-	COM	562 x 563 x 97.7	09:36:11
56	2022-084W	Starlink 4423	-	COM	561 x 564 x 97.7	09:36:11
57	2022-084X	Starlink 4427	-	COM	561 x 563 x 97.7	09:36:11
58	2022-084R	Starlink 4410	-	COM	562 x 563 x 97.7	09:36:11
59	2022-084V	Starlink 4425	-	COM	562 x 563 x 97.7	09:36:11
60	2022-084Z	Starlink 4416	-	COM	562 x 563 x 97.7	09:36:11
61	2022-084L	Starlink 4395	-	COM	562 x 563 x 97.7	09:36:12
62	2022-084U	Starlink 4413	-	COM	562 x 564 x 97.7	09:36:12
63	2022-084N	Starlink 4405	-	COM	561 x 564 x 97.7	09:36:12
64	2022-084M	Starlink 4417	-	COM	561 x 564 x 97.7	09:36:12
65	2022-084J	Starlink 4403	-	COM	561 x 563 x 97.7	09:36:12
66	2022-084Q	Starlink 4409	-	COM	562 x 563 x 97.7	09:36:12
67	2022-084D	Starlink 4375	-	COM	562 x 563 x 97.7	09:36:12
68	2022-084H	Starlink 4407	-	COM	562 x 563 x 97.7	09:36:12
69	2022-084AB	Starlink 4353	-	COM	562 x 563 x 97.7	09:36:12
70	2022-084K	Starlink 4385	-	COM	561 x 563 x 97.7	09:36:13
71	2022-084F	Starlink 4382	-	COM	562 x 563 x 97.7	09:36:13
72	2022-084Y	Starlink 4419	-	COM	562 x 563 x 97.7	09:36:13
73	2022-084C	Starlink 4369	-	COM	562 x 563 x 97.7	09:36:13
74	2022-084AD	Starlink 4376	-	COM	561 x 564 x 97.7	09:36:13
75	2022-084E	Starlink 4351	-	COM	561 x 564 x 97.7	09:36:13
76	2022-084AW	Starlink 4372	-	COM	561 x 564 x 97.7	09:36:14
77	2022-084B	Starlink 4332	-	COM	562 x 563 x 97.7	09:36:14
78	2022-084AX	Starlink 4368	-	COM	561 x 564 x 97.7	09:36:14
79	2022-084AF	Starlink 4384	-	COM	561 x 564 x 97.7	09:36:15
80	2022-084AC	Starlink 4335	-	COM	561 x 564 x 97.7	09:36:16
81	2022-084AA	Starlink 4414	-	COM	561 x 563 x 97.7	09:36:16
82	2022-084A	Starlink 4391	-	COM	562 x 563 x 97.7	09:36:16
83	2022-084AK	Starlink 4381	-	COM	561 x 564 x 97.7	09:36:17
84	2022-084AH	Starlink 4363	-	COM	561 x 564 x 97.7	09:36:17
85	2022-084AV	Starlink 4371	-	COM	562 x 564 x 97.7	09:36:17
86	2022-084AS	Starlink 4367	-	COM	561 x 564 x 97.7	09:36:18
87	2022-084AQ	Starlink 4366	-	COM	561 x 564 x 97.7	09:36:18
88	2022-084AE	Starlink 4379	-	COM	561 x 564 x 97.7	09:36:18
89	2022-084AM	Starlink 4356	-	COM	561 x 564 x 97.7	09:36:18
90	2022-084AN	Starlink 4358	-	COM	561 x 564 x 97.7	09:36:18
91	2022-084AG	Starlink 4373	-	COM	561 x 564 x 97.7	09:36:18
92	2022-084AT	Starlink 4364	-	COM	561 x 565 x 97.7	09:36:19
93	2022-084AU	Starlink 4370	-	COM	561 x 564 x 97.7	09:36:19
94	2022-084G	Starlink 4404	-	COM	565 x 565 x 97.7	09:36:19
95	2022-084AJ	Starlink 4377	-	COM	561 x 564 x 97.7	09:36:19
96	2022-084AP	Starlink 4359	-	COM	561 x 564 x 97.7	09:36:19
97	2022-084AL	Starlink 4354	-	COM	561 x 564 x 97.7	09:36:20
98	2022-084AR	Starlink 4365	-	COM	561 x 564 x 97.7	09:36:20
99	2022-084P	Starlink 4411	-	COM	563 x 567 x 97.7	09:37:16

Table 10: SSO satellites launched in 2022, ordered by local time of descending node (cont.)

No	Piece	Name	Operator	Mission	Orbit	LTDN
100	2022-004A	Shiyan 13	-?	TECH	473 x 1296 x 98.6	09:44:06
101	2022-002K	ION SCV04	-	TECH	519 x 533 x 97.5	09:53:10
102	2022-002DF	VZLUSat-2	-	SCI	511 x 533 x 97.5	09:53:56
103	2022-002BX	HYPSON-1	-	IMG	514 x 527 x 97.5	09:53:58
104	2022-002CV	USA 320	-	SIG?*	525 x 530 x 97.5	09:54:19
105	2022-002CN	Gossamer Piccolomini	-	IMG-R	515 x 529 x 97.5	09:54:22
106	2022-002CZ	USA 323	-	SIG?*	526 x 529 x 97.5	09:54:24
107	2022-002CE	ETV-A1	-	IMG	516 x 531 x 97.5	09:54:29
108	2022-002BV	Kepler-19	-	COM	514 x 527 x 97.5	09:55:00
109	2022-002BN	IRIS-A	-	COM	511 x 525 x 97.5	09:55:19
110	2022-002CY	USA 322	-	SIG?*	525 x 530 x 97.5	09:55:31
111	2022-002CX	USA 321	-	SIG?*	525 x 529 x 97.5	09:55:33
112	2022-002CM	DEWASAT-1	-	COM	510 x 522 x 97.5	09:55:37
113	2022-002M	MDASat-1a	-	COM	510 x 525 x 97.5	09:55:42
114	2022-002CF	BRO-5	-	SIG	514 x 529 x 97.5	09:56:00
115	2022-002AY	Sich-2-1	-	IMG	511 x 526 x 97.5	09:56:12
116	2022-002DD	SATTLA-2A	-	TECH	508 x 522 x 97.5	09:56:20
117	2022-002BU	MDASat-1b	-	COM	511 x 525 x 97.5	09:56:44
118	2022-002CS	Capella 7	-	IMG-R	505 x 517 x 97.5	09:57:06
119	2022-002BG	MDASat-1c	-	COM	510 x 525 x 97.5	09:57:16
120	2022-002CB	Karina	-	COM	506 x 519 x 97.5	09:57:27
121	2022-002AF	Tevel-1	-	COM	504 x 517 x 97.5	09:57:31
122	2022-002CP	Tevel-2	-	COM	504 x 518 x 97.5	09:57:35
123	2022-002E	Tevel-3	-	COM	504 x 518 x 97.5	09:57:40
124	2022-002CH	Tevel-4	-	COM	504 x 518 x 97.5	09:57:44
125	2022-002CD	Astraeus	-	COM	508 x 521 x 97.5	09:57:44
126	2022-002CG	Tevel-7	-	COM	504 x 518 x 97.5	09:57:45
127	2022-002CC	Lemur-2 Djirang	-/-	COM	505 x 517 x 97.5	09:57:46
128	2022-002CR	Capella 8	-	IMG-R	504 x 516 x 97.5	09:57:49
129	2022-002F	Tevel-8	-	COM	504 x 518 x 97.5	09:57:50
130	2022-002AA	ICEYE-X16	-	IMG-R	505 x 520 x 97.5	09:58:04
131	2022-002BY	Lemur-2 Miriwari	-/-	COM	505 x 517 x 97.5	09:58:10
132	2022-002BE	Lemur-2 Rohovithsa	-/-	IMG	505 x 518 x 97.5	09:58:22
133	2022-002CQ	ICEYE-X14	-	IMG-R	504 x 521 x 97.5	09:58:33
134	2022-002DK	SWIFT	-	IMG	501 x 515 x 97.5	09:58:33
135	2022-002R	Tevel-6	-	COM	501 x 517 x 97.5	09:58:36
136	2022-002Q	Tevel-5	-	COM	501 x 517 x 97.5	09:58:36
137	2022-002U	Blip-A	-	COM	502 x 519 x 97.5	09:58:37
138	2022-002DG	LabSat	-	TECH	504 x 515 x 97.5	09:58:51
139	2022-002DH	STORK-1	-	IMG	501 x 519 x 97.5	09:58:54
140	2022-002DJ	STORK-2	-	IMG	500 x 513 x 97.5	09:59:15
141	2022-002BS	Flock 4x-35	-	IMG	498 x 512 x 97.5	09:59:36
142	2022-002BW	Flock 4x-40	-	IMG	499 x 511 x 97.5	09:59:39
143	2022-002BT	Flock 4x-11	-	IMG	498 x 512 x 97.5	09:59:41
144	2022-002BK	Flock 4x-31	-	IMG	498 x 511 x 97.5	09:59:45
145	2022-002CA	Flock 4x-24	-	IMG	499 x 511 x 97.5	09:59:45
146	2022-002X	Flock 4x-41	-	IMG	497 x 513 x 97.5	09:59:50
147	2022-002BZ	Flock 4x-33	-	IMG	500 x 512 x 97.5	09:59:51
148	2022-002S	Flock 4x-30	-	IMG	497 x 513 x 97.5	09:59:53
149	2022-002BP	Flock 4x-28	-	IMG	498 x 512 x 97.5	09:59:58

Table 10: SSO satellites launched in 2022, ordered by local time of descending node (cont.)

No	Piece	Name	Operator	Mission	Orbit	LTDN
150	2022-002CJ	Flock 4x-4	-	IMG	498 x 512 x 97.5	10:00:01
151	2022-002AL	Flock 4x-42	-	IMG	497 x 514 x 97.5	10:00:04
152	2022-002W	Flock 4x-5	-	IMG	496 x 513 x 97.5	10:00:09
153	2022-002AN	Flock 4x-16	-	IMG	496 x 513 x 97.5	10:00:11
154	2022-002AD	Flock 4x-29	-	IMG	496 x 513 x 97.5	10:00:11
155	2022-002Z	Flock 4x-18	-	IMG	496 x 514 x 97.5	10:00:14
156	2022-002AQ	Lemur-2 King-Julien	-/-	COM/MET-RO	497 x 509 x 97.5	10:00:17
157	2022-002AK	Flock 4x-1	-	IMG	496 x 514 x 97.5	10:00:23
158	2022-002AV	Flock 4x-43	-	IMG	496 x 515 x 97.5	10:00:23
159	2022-002AW	Flock 4x-13	-	IMG	496 x 513 x 97.5	10:00:24
160	2022-002BJ	Flock 4x-21	-	IMG	498 x 511 x 97.5	10:00:24
161	2022-002AX	Flock 4x-39	-	IMG	497 x 514 x 97.5	10:00:27
162	2022-002BM	Flock 4x-6	-	IMG	498 x 511 x 97.5	10:00:30
163	2022-002AU	Flock 4x-26	-	IMG	496 x 514 x 97.5	10:00:31
164	2022-002BD	Flock 4x-17	-	IMG	498 x 511 x 97.5	10:00:33
165	2022-002CK	Flock 4x-7	-	IMG	498 x 512 x 97.5	10:00:33
166	2022-002C	Umbra-02	-	IMG-R	510 x 519 x 97.5	10:00:40
167	2022-002V	Flock 4x-22	-	IMG	497 x 513 x 97.5	10:00:40
168	2022-002BQ	Flock 4x-19	-	IMG	499 x 512 x 97.5	10:00:42
169	2022-002AJ	Flock 4x-25	-	IMG	496 x 513 x 97.5	10:00:42
170	2022-002J	Flock 4x-8	-	IMG	497 x 513 x 97.5	10:00:45
171	2022-002BL	Flock 4x-34	-	IMG	498 x 512 x 97.5	10:00:51
172	2022-002BR	Flock 4x-9	-	IMG	498 x 512 x 97.5	10:00:52
173	2022-002N	Flock 4x-2	-	IMG	497 x 513 x 97.5	10:00:56
174	2022-002P	Flock 4x-20	-	IMG	497 x 513 x 97.5	10:00:56
175	2022-002AE	Flock 4x-27	-	IMG	496 x 514 x 97.5	10:00:57
176	2022-002AP	Lemur-2 Ramonamae	-/-	COM/MET-RO	496 x 508 x 97.5	10:00:57
177	2022-002BH	Flock 4x-36	-	IMG	498 x 512 x 97.5	10:00:59
178	2022-002Y	Flock 4x-3	-	IMG	496 x 513 x 97.5	10:00:59
179	2022-002AH	Flock 4x-12	-	IMG	496 x 514 x 97.5	10:01:02
180	2022-002BF	Flock 4x-10	-	IMG	497 x 513 x 97.5	10:01:03
181	2022-002DE	Dodona	-/-	TECH	501 x 511 x 97.5	10:01:07
182	2022-002L	Flock 4x-44	-	IMG	497 x 513 x 97.5	10:01:07
183	2022-002AR	Flock 4x-38	-	IMG	496 x 514 x 97.5	10:01:10
184	2022-002AB	Flock 4x-37	-	IMG	496 x 513 x 97.5	10:01:10
185	2022-002CL	Flock 4x-14	-	IMG	497 x 512 x 97.5	10:01:12
186	2022-002AS	Flock 4x-32	-	IMG	496 x 514 x 97.5	10:01:17
187	2022-002AC	Flock 4x-15	-	IMG	496 x 514 x 97.5	10:01:19
188	2022-002BC	Flock 4x-23	-	IMG	496 x 512 x 97.5	10:01:55
189	2022-002CW	NuX-1	-	COM	496 x 516 x 97.5	10:02:17
190	2022-048A	Jilin-1 Kuanfu-01C	Chang Guang	IMG	524 x 543 x 97.7	10:03:05
191	2022-002DC	Challenger	-	COM	484 x 499 x 97.5	10:03:10
192	2022-048C	Jilin-1 GaoFen 03D 28 xing	Chang Guang	IMG	521 x 541 x 97.7	10:03:18
193	2022-048B	Jilin-1 GaoFen 03D 27 xing	Chang Guang	IMG	521 x 541 x 97.7	10:03:26
194	2022-002AZ	SanoSat-1	-	TECH	492 x 510 x 97.5	10:03:41
195	2022-048D	Jilin-1 GaoFen 03D 29 xing	Chang Guang	IMG	521 x 541 x 97.7	10:03:46
196	2022-048E	Jilin-1 GaoFen 03D 30 xing	Chang Guang	IMG	520 x 542 x 97.7	10:03:53
197	2022-048F	Jilin-1 GaoFen 03D 31 xing	Chang Guang	IMG	522 x 540 x 97.7	10:03:59
198	2022-048G	Jilin-1 GaoFen 03D 32 xing	Chang Guang	IMG	518 x 538 x 97.7	10:04:36
199	2022-048H	Jilin-1 GaoFen 03D 33 xing	Chang Guang	IMG	516 x 539 x 97.7	10:04:43

Table 10: SSO satellites launched in 2022, ordered by local time of descending node (cont.)

No	Piece	Name	Operator	Mission	Orbit	LTDN
200	2022-002BB	Tartan-Artibeus 1	-	TECH	488 x 503 x 97.5	10:05:09
201	2022-002AG	SATTLA-2B	-	TECH	486 x 502 x 97.5	10:06:02
202	2022-002AT	Grizu-263A	-	TECH	483 x 499 x 97.5	10:07:14
203	2022-002DB	Spain-OSCAR 114	-	COM	493 x 512 x 97.5	10:07:32
204	2022-002DA	Spain-OSCAR 115	-	IMG	493 x 512 x 97.5	10:07:41
205	2022-002G	Pilot-1	-	COM	474 x 490 x 97.5	10:08:07
206	2022-002H	FossaSat-2E6	-	COM	471 x 486 x 97.5	10:09:30
207	2022-002CU	Delfi-PQ	-	COM	486 x 504 x 97.5	10:09:41
208	2022-002A	WiSeSAT-2	-	COM	467 x 481 x 97.5	10:10:40
209	2022-002T	FossaSat-2E5	-	COM	466 x 480 x 97.5	10:10:47
210	2022-002B	WiSeSAT-1	-	COM	465 x 480 x 97.5	10:10:54
211	2022-002D	LAIKA	-	TECH	463 x 478 x 97.5	10:12:18
212	2022-002AM	Pion-BR1	-	TECH	459 x 472 x 97.5	10:12:36
213	2022-002BA	Unicorn-2D	-	IMG	450 x 460 x 97.4	10:12:40
214	2022-103A	Beijing-3B	-	IMG	594 x 615 x 97.9	10:17:28
215	2022-002CT	General San Martin	-	COM	438 x 448 x 97.5	10:19:51
216	2022-019B	Hainan-1 01	-	IMG	520 x 543 x 97.5	10:24:12
217	2022-019A	Tianqi-19	-	COM	519 x 544 x 97.5	10:24:12
218	2022-019J	Xiamen Keji 1	-	IMG	527 x 540 x 97.5	10:24:13
219	2022-019D	Wenchang-1 01	-	IMG	521 x 541 x 97.5	10:24:56
220	2022-019C	Hainan-1 02	-	IMG	517 x 538 x 97.5	10:25:11
221	2022-019E	Wenchang-1 02	-	IMG	518 x 539 x 97.5	10:25:41
222	2022-019W	Chuangxing Leishen	SpaceTy/BUPT	SCI	513 x 542 x 97.5	10:25:55
223	2022-019Y	Qimingxing-1	-	IMG	518 x 537 x 97.5	10:26:09
224	2022-019H	Xidian-1	-	IMG	514 x 541 x 97.5	10:26:18
225	2022-019R	Jilin-1 GaoFen 03D 16 xing	Chang Guang	IMG	520 x 535 x 97.5	10:26:18
226	2022-019L	Jilin-1 GaoFen 03D 11 xing	Chang Guang	IMG	517 x 538 x 97.5	10:26:26
227	2022-019M	Jilin-1 GaoFen 03D 12 xing	Chang Guang	IMG	516 x 539 x 97.5	10:26:28
228	2022-019T	Jilin-1 GaoFen 03D 18 xing	Chang Guang	IMG	518 x 537 x 97.5	10:26:34
229	2022-019K	Jilin-1 GaoFen 03D 10 xing	Chang Guang	IMG	516 x 534 x 97.5	10:26:38
230	2022-019S	Jilin-1 GaoFen 03D 17 xing	Chang Guang	IMG	518 x 537 x 97.5	10:26:40
231	2022-019G	Taijing-4 01	MinoSpace	IMG-R	513 x 533 x 97.5	10:26:44
232	2022-019V	Chaohu-1	-	IMG-R	520 x 539 x 97.5	10:26:47
233	2022-019Q	Jilin-1 GaoFen 03D 15 xing	Chang Guang	IMG	518 x 536 x 97.5	10:26:50
234	2022-019X	Dayun	-	IMG	516 x 535 x 97.5	10:27:09
235	2022-019P	Jilin-1 GaoFen 03D 14 xing	Chang Guang	IMG	512 x 530 x 97.5	10:27:33
236	2022-019F	Taijing-3 01	MinoSpace	IMG	513 x 533 x 97.5	10:27:52
237	2022-019N	Jilin-1 GaoFen 03D 13 xing	Chang Guang	IMG	512 x 531 x 97.5	10:27:59
238	2022-090A	Goumang	-	IMG	499 x 507 x 97.5	10:28:39
239	2022-087A	SATech-01	-	TECH	484 x 504 x 97.4	10:29:37
240	2022-087C	Jinan-1	-	TECH	483 x 506 x 97.4	10:29:54
241	2022-087B	Guidao Daqi MTSW	-	TECH	483 x 506 x 97.4	10:29:55
242	2022-087E	Nanyue Kexue Xing	-	TECH	481 x 504 x 97.4	10:30:46
243	2022-087D	Dianci Zuzhuang shiyan 1	-	TECH	478 x 498 x 97.4	10:31:06
244	2022-095C	Donghai 1	-	IMG	433 x 535 x 97.4	10:32:23
245	2022-095A	Ping'an 3	MinoSpace	IMG	431 x 529 x 97.4	10:32:46
246	2022-090B	Minhang Shaonian Xing	-	TECH	472 x 490 x 97.5	10:32:54
247	2022-095B	Taijing-1 02	MinoSpace	IMG	431 x 529 x 97.4	10:32:56
248	2022-090C	Jiaotong-4	-	COM	468 x 483 x 97.5	10:33:34
249	2022-043A	Siwei Gaojing 1-01	-	IMG	482 x 497 x 97.5	10:41:32

Table 10: SSO satellites launched in 2022, ordered by local time of descending node (cont.)

No	Piece	Name	Operator	Mission	Orbit	LTDN
250	2022-043C	Siwei Gaojing 1-02	-	IMG	481 x 498 x 97.5	10:41:50
251	2022-033E	ARCSAT	-	COM	492 x 505 x 97.4	10:52:16
252	2022-033F	Lynk Tower 1	-	COM	488 x 502 x 97.4	10:53:06
253	2022-033AD	Mary Somerville	-	IMG	486 x 498 x 97.4	10:53:33
254	2022-033L	Hawk 4A	-	SIG	486 x 499 x 97.4	10:53:44
255	2022-033M	Annie Maunder	-	IMG	484 x 496 x 97.4	10:54:00
256	2022-033AM	SUCHAI-2	-	TECH	481 x 494 x 97.4	10:54:08
257	2022-033P	Hawk 4C	-	SIG	485 x 500 x 97.4	10:54:20
258	2022-033J	Hawk 4B	-	SIG	486 x 499 x 97.4	10:54:23
259	2022-033Q	Maria Telkes	-	IMG	478 x 492 x 97.3	10:54:26
260	2022-033R	Sally Ride	-	IMG	473 x 487 x 97.3	10:54:38
261	2022-033X	Kalpana Chawla	-	IMG	479 x 492 x 97.3	10:54:58
262	2022-033N	MP42	-	COM	481 x 496 x 97.4	10:55:06
263	2022-033D	Alfa Crux	-	TECH	479 x 492 x 97.4	10:55:14
264	2022-033B	GNOMES-3	-	COM	633 x 652 x 97.9	10:55:20
265	2022-033AL	SUCHAI-3	-	TECH	482 x 495 x 97.4	10:55:22
266	2022-033T	BRO-7	-	SIG	482 x 499 x 97.4	10:55:25
267	2022-033AJ	KSF2-C	-	SIG	473 x 485 x 97.4	10:55:56
268	2022-033Z	SpaceBEE-134	-	COM	471 x 481 x 97.4	10:56:25
269	2022-033AK	KSF2-D	-	SIG	468 x 480 x 97.4	10:56:47
270	2022-033Y	SpaceBEE-129	-	COM	469 x 480 x 97.4	10:56:55
271	2022-033AF	SpaceBEE-137	-	COM	469 x 480 x 97.4	10:57:04
272	2022-033AA	SpaceBEE-131	-	COM	469 x 480 x 97.4	10:57:08
273	2022-033AC	SpaceBEE-133	-	COM	469 x 480 x 97.4	10:57:12
274	2022-033AB	SpaceBEE-128	-	COM	469 x 480 x 97.4	10:57:15
275	2022-033W	SpaceBEE-139	-	COM	468 x 480 x 97.4	10:57:17
276	2022-033AH	PlantSat	-	TECH	476 x 484 x 97.4	10:57:36
277	2022-033AE	SpaceBEE-132	-	COM	467 x 478 x 97.4	10:57:45
278	2022-033H	SpaceBEE-136	-	COM	466 x 477 x 97.4	10:57:50
279	2022-033AG	SpaceBEE-135	-	COM	467 x 478 x 97.4	10:57:51
280	2022-033V	SpaceBEE-130	-	COM	467 x 476 x 97.4	10:57:59
281	2022-033K	SpaceBEE-138	-	COM	466 x 478 x 97.4	10:58:00
282	2022-033U	BDSAT	-	TECH	471 x 487 x 97.4	10:58:10
283	2022-137A	Kosmos-2561	-	TECH	400 x 410 x 97.1	10:58:18
284	2022-033AN	KSF2-B	-	SIG	475 x 489 x 97.4	10:59:02
285	2022-033S	Shakuntala	-	IMG	469 x 483 x 97.4	10:59:07
286	2022-033AP	KSF2-A	-	SIG	473 x 488 x 97.4	10:59:22
287	2022-033C	ENMAP	-	IMG	639 x 650 x 98.0	10:59:54
288	2022-033A	Spark-1	-	COM	619 x 639 x 97.9	11:00:44
289	2022-047AE	BRO-6	-	SIG	518 x 529 x 97.4	11:02:58
290	2022-047AF	E-Space 1	-	COM	513 x 523 x 97.4	11:03:26
291	2022-047AH	AuroraSat 1	-	TECH	511 x 521 x 97.4	11:03:52
292	2022-047AJ	E-Space 3	-	COM	513 x 525 x 97.4	11:04:05
293	2022-047AG	E-Space 2	-	COM	511 x 522 x 97.4	11:04:15
294	2022-047AB	MyRadar 1	-	IMG	509 x 521 x 97.4	11:04:28
295	2022-047Y	SpaceBEE-155	-	COM	507 x 520 x 97.4	11:04:37
296	2022-137B	Kosmos-2562	-	TECH	380 x 401 x 97.2	11:04:40
297	2022-047AC	TRSI-2	-/-	TECH	507 x 519 x 97.4	11:04:52
298	2022-047AA	TRSI-3	-/-	TECH	507 x 519 x 97.4	11:04:53
299	2022-047Z	SpaceBEE-154	-	COM	506 x 518 x 97.4	11:05:04

Table 10: SSO satellites launched in 2022, ordered by local time of descending node (cont.)

No	Piece	Name	Operator	Mission	Orbit	LTDN
300	2022-047W	SpaceBEE-152	-	COM	506 x 518 x 97.4	11:05:07
301	2022-033G	ION SCV005	-	TECH	388 x 401 x 97.4	11:05:10
302	2022-047U	SpaceBEE-146	-	COM	506 x 517 x 97.4	11:05:11
303	2022-047V	SpaceBEE-151	-	COM	506 x 518 x 97.4	11:05:18
304	2022-047X	SpaceBEE-147	-	COM	506 x 517 x 97.4	11:05:19
305	2022-047P	SpaceBEE-149	-	COM	505 x 517 x 97.4	11:05:22
306	2022-047R	SpaceBEE-150	-	COM	505 x 517 x 97.4	11:05:25
307	2022-047T	SpaceBEE-145	-	COM	506 x 517 x 97.4	11:05:26
308	2022-047H	SpaceBEE-142	-	COM	506 x 517 x 97.4	11:05:28
309	2022-047S	SpaceBEE-144	-	COM	506 x 517 x 97.4	11:05:31
310	2022-047A	SpaceBEE-143	-	COM	506 x 517 x 97.4	11:05:31
311	2022-047G	SpaceBEE-141	-	COM	505 x 517 x 97.4	11:05:42
312	2022-047N	SpaceBEE-148	-	COM	503 x 515 x 97.4	11:05:57
313	2022-047Q	SpaceBEE-153	-	COM	504 x 516 x 97.4	11:06:10
314	2022-047F	SpaceBEE-140	-	COM	503 x 514 x 97.4	11:06:10
315	2022-047K	SpaceBEE NZ-22	-	COM	501 x 513 x 97.4	11:06:23
316	2022-047M	SpaceBEE NZ-21	-	COM	500 x 512 x 97.4	11:06:31
317	2022-047J	SpaceBEE NZ-20	-	COM	500 x 512 x 97.4	11:06:33
318	2022-047L	SpaceBEE NZ-19	-	COM	500 x 512 x 97.4	11:06:36
319	2022-047E	SpaceBEE NZ-18	-	COM	500 x 511 x 97.4	11:06:44
320	2022-047D	SpaceBEE NZ-17	-	COM	500 x 511 x 97.4	11:06:45
321	2022-047C	SpaceBEE NZ-16	-	COM	500 x 511 x 97.4	11:06:48
322	2022-047B	SpaceBEE NZ-15	-	COM	500 x 511 x 97.4	11:06:49
323	2022-047AD	Unicorn-2	-	IMG	480 x 488 x 97.4	11:10:11
324	2022-046A	Anxi Tieguan Yin 2	Chang Guang	IMG	525 x 550 x 97.5	11:18:58
325	2022-046C	Tianwen	Chang Guang	IMG	517 x 537 x 97.5	11:20:06
326	2022-046B	Tianji	Chang Guang	IMG	518 x 537 x 97.5	11:20:40
327	2022-046E	Tiancho	Chang Guang	IMG	516 x 536 x 97.5	11:21:28
328	2022-046D	Tianyao	Chang Guang	IMG	517 x 536 x 97.5	11:22:05
329	2022-098D	Tianfu Dongpo 04	Chang Guang	IMG	526 x 542 x 97.5	11:56:59
330	2022-098A	Tianfu Dongpo 01	Chang Guang	IMG	526 x 543 x 97.5	11:57:14
331	2022-098F	Tianfu Dongpo 06	Chang Guang	IMG	527 x 542 x 97.5	11:57:15
332	2022-098J	Xi'an Hangtou 1	Chang Guang	IMG	529 x 540 x 97.5	11:57:32
333	2022-098E	Tianfu Dongpo 05	Chang Guang	IMG	526 x 543 x 97.5	11:57:39
334	2022-098C	Tianfu Dongpo 03	Chang Guang	IMG	526 x 543 x 97.5	11:57:39
335	2022-098B	Tianfu Dongpo 02	Chang Guang	IMG	528 x 541 x 97.5	11:57:46
336	2022-098G	Tianfu Dongpo 07	Chang Guang	IMG	529 x 540 x 97.5	11:57:49
337	2022-098K	Puyin-1	Chang Guang	IMG	529 x 540 x 97.5	11:57:59
338	2022-098H	Henan-1	Chang Guang	IMG	529 x 540 x 97.5	11:58:17
339	2022-098L	Tianjin Binhai 1	Chang Guang	IMG	514 x 533 x 97.5	11:58:55
340	2022-098N	Yunyao-1 05 xing	Chang Guang/-	IMG	515 x 532 x 97.5	11:59:00
341	2022-098M	Yunyao-1 04 xing	Chang Guang/-	IMG	514 x 533 x 97.5	11:59:11
342	2022-098P	Yunyao-1 06 xing	Chang Guang/-	IMG	516 x 532 x 97.5	11:59:15
343	2022-098Q	Yunyao-1 07 xing	Chang Guang/-	IMG	515 x 532 x 97.5	11:59:30
344	2022-158A	EOS-06	-	IMG	734 x 736 x 98.4	11:59:32
345	2022-098R	Yunyao-1 08 xing	Chang Guang/-	IMG	518 x 530 x 97.5	11:59:33
346	2022-158F	Anand	-	IMG	495 x 511 x 97.4	12:01:22
347	2022-158E	INS-2B	-/-	TECH	494 x 512 x 97.4	12:01:23
348	2022-158C	Thybolt 1	-	COM	495 x 512 x 97.4	12:01:28
349	2022-158D	Thybolt 2	-	COM	495 x 512 x 97.4	12:01:28

Table 10: SSO satellites launched in 2022, ordered by local time of descending node (cont.)

No	Piece	Name	Operator	Mission	Orbit	LTDN
350	2022-158G	Astrocast-0304	-	COM	496 x 510 x 97.4	12:01:35
351	2022-158H	Astrocast-0303	-	COM	496 x 510 x 97.4	12:01:40
352	2022-158J	Astrocast-0302	-	COM	495 x 509 x 97.4	12:01:45
353	2022-158K	Astrocast-0301	-	COM	495 x 509 x 97.4	12:01:48
354	2022-009A	USA 326	-	IMG*	486 x 507 x 97.4	12:05:17
355	2022-089A	Kosmos-2558	-	TECH	439 x 445 x 97.2	12:06:32
356	2022-155C	Jilin-1 GaoFen 03D-52	Chang Guang	IMG	526 x 547 x 97.5	12:38:14
357	2022-155E	Jilin-1 GaoFen 03D-54	Chang Guang	IMG	525 x 546 x 97.5	12:38:15
358	2022-155D	Jilin-1 GaoFen 03D-53	Chang Guang	IMG	525 x 547 x 97.5	12:38:18
359	2022-155A	Jilin-1 GaoFen 03D-08	Chang Guang	IMG	525 x 546 x 97.5	12:38:19
360	2022-155B	Jilin-1 GaoFen 03D-51	Chang Guang	IMG	525 x 546 x 97.5	12:38:25
361	2022-057X	Umbra-03	-	IMG-R	526 x 532 x 97.5	13:08:13
362	2022-057S	Margherita	-	IMG	478 x 491 x 97.4	13:08:51
363	2022-057Q	Penny	-	SCI	519 x 533 x 97.5	13:09:29
364	2022-057F	Luca	-	SCI	520 x 532 x 97.5	13:09:52
365	2022-057V	SPiN 1	-	TECH	518 x 532 x 97.5	13:10:06
366	2022-057AA	Hawk 5B	-	SIG	516 x 531 x 97.5	13:10:12
367	2022-057G	Planetum-1	-	TECH	515 x 526 x 97.5	13:10:20
368	2022-057AV	Guardian-1	-	COM	517 x 530 x 97.5	13:10:32
369	2022-057M	BRNCOSAT-1	-	TECH	514 x 526 x 97.5	13:10:38
370	2022-057H	Connecta T1.1	-	COM	518 x 531 x 97.5	13:10:40
371	2022-057N	Diako	-	SCI	519 x 533 x 97.5	13:10:52
372	2022-057AE	Vigoride VR-3	-	TECH	516 x 533 x 97.5	13:10:54
373	2022-057B	Lemur-2 VanDenDries	-/-	COM/MET-RO	511 x 521 x 97.5	13:10:56
374	2022-057D	CICERO-2 OP15 FLT2	-	MET-RO	512 x 524 x 97.5	13:10:59
375	2022-057T	ICEYE-X18	-	IMG-R	513 x 527 x 97.5	13:11:01
376	2022-057AB	Hawk 5A	-	SIG	515 x 531 x 97.5	13:11:14
377	2022-057E	Lemur-2 Karen B	-/-	COM/MET-RO	507 x 516 x 97.5	13:11:15
378	2022-057AF	ION SCV006	-	TECH	515 x 532 x 97.5	13:11:18
379	2022-057W	Ruby Payne-Scott	-	IMG	514 x 528 x 97.5	13:11:26
380	2022-057BA	SELFIESAT	-	TECH	512 x 526 x 97.5	13:11:31
381	2022-057AH	SHERPA-AC1	-	TECH	514 x 532 x 97.5	13:11:32
382	2022-057AC	ICEYE-X19	-	IMG-R	511 x 530 x 97.5	13:11:38
383	2022-057AR	Spark-2	-	COM	524 x 543 x 97.5	13:11:40
384	2022-057R	Alice Lee	-	IMG	497 x 512 x 97.5	13:11:47
385	2022-057L	Centauri 5	-	COM	509 x 520 x 97.5	13:11:48
386	2022-057K	CICERO-2 OP15 FLT1	-	MET-RO	511 x 524 x 97.5	13:12:09
387	2022-057AJ	Edith Clarke	-	IMG	496 x 513 x 97.5	13:12:14
388	2022-057Y	Hawk 5C	-	SIG	516 x 530 x 97.5	13:12:17
389	2022-057A	Lemur-2 TennysonLily	-/-	COM/MET-RO	508 x 519 x 97.5	13:12:18
390	2022-057Z	ICEYE-X24	-	IMG-R	509 x 522 x 97.5	13:12:25
391	2022-057AQ	SharedSat 2141	-	TECH	508 x 526 x 97.5	13:12:39
392	2022-057AD	ICEYE-X20	-/-?	IMG-R	507 x 522 x 97.5	13:12:46
393	2022-057AG	ICEYE-X17	-	IMG-R	507 x 522 x 97.5	13:12:53
394	2022-057AZ	FossaSat-2E 8	-	COM	500 x 516 x 97.5	13:12:58
395	2022-057J	Sejong-1	-	IMG	509 x 523 x 97.5	13:13:03
396	2022-057AL	Varisat-1C	-	COM	509 x 528 x 97.5	13:13:08
397	2022-057AK	Urdaneta-Armsat1	-	IMG	508 x 527 x 97.5	13:13:13
398	2022-057C	PTD-3	-	TECH	501 x 510 x 97.5	13:13:15
399	2022-057AS	CPOD 1	-/-	TECH	504 x 523 x 97.5	13:13:28



Table 10: SSO satellites launched in 2022, ordered by local time of descending node (cont.)

No	Piece	Name	Operator	Mission	Orbit	LTDN
400	2022-057AW	FossaSat-2E 13	-	COM	501 x 519 x 97.5	13:13:30
401	2022-057AY	FossaSat-2E 7	-	COM	496 x 511 x 97.5	13:13:31
402	2022-057BB	CPOD 2	-/-	TECH	504 x 521 x 97.5	13:13:33
403	2022-057AX	Veery FS-1	-	MET	501 x 520 x 97.5	13:13:36
404	2022-057AN	CNCE V5	-	COM	501 x 518 x 97.5	13:13:47
405	2022-057AM	CNCE V4	-	COM	501 x 518 x 97.5	13:13:47
406	2022-057BC	Foresail-1	-	TECH	477 x 489 x 97.5	13:14:12
407	2022-057AP	Lemur-2 Mimi1307	-/-	COM/MET-RO	502 x 523 x 97.5	13:14:22
408	2022-057AT	FossaSat-2E 12	-	COM	495 x 508 x 97.5	13:15:46
409	2022-057U	FossaSat-2E 11	-	COM	493 x 505 x 97.5	13:16:13
410	2022-057AU	SBUDNIC	-/-	TECH	491 x 497 x 97.5	13:16:48
411	2022-057P	AMS	-	TECH	472 x 505 x 97.5	13:18:06
412	2022-099F	Starlink 4393	-	COM	561 x 564 x 97.7	13:36:14
413	2022-099D	Starlink 4400	-	COM	562 x 563 x 97.7	13:36:15
414	2022-099G	Starlink 4316	-	COM	561 x 564 x 97.7	13:36:15
415	2022-099H	Starlink 4447	-	COM	562 x 563 x 97.7	13:36:15
416	2022-099E	Starlink 4399	-	COM	562 x 563 x 97.7	13:36:15
417	2022-099B	Starlink 4398	-	COM	561 x 563 x 97.7	13:36:16
418	2022-099M	Starlink 4378	-	COM	561 x 563 x 97.7	13:36:16
419	2022-099AX	Starlink 4441	-	COM	562 x 563 x 97.7	13:36:16
420	2022-099C	Starlink 4394	-	COM	562 x 563 x 97.7	13:36:16
421	2022-099A	Starlink 4415	-	COM	562 x 563 x 97.7	13:36:17
422	2022-099AW	Starlink 4402	-	COM	562 x 563 x 97.7	13:36:17
423	2022-099P	Starlink 4433	-	COM	562 x 563 x 97.7	13:36:17
424	2022-099J	Starlink 4383	-	COM	562 x 563 x 97.7	13:36:17
425	2022-099AT	Starlink 4437	-	COM	562 x 563 x 97.7	13:36:17
426	2022-099L	Starlink 4389	-	COM	561 x 563 x 97.7	13:36:18
427	2022-099AU	Starlink 4444	-	COM	562 x 563 x 97.7	13:36:18
428	2022-099AS	Starlink 4446	-	COM	562 x 563 x 97.6	13:36:18
429	2022-099AV	Starlink 4443	-	COM	562 x 563 x 97.7	13:36:19
430	2022-099R	Starlink 4442	-	COM	561 x 564 x 97.7	13:36:19
431	2022-099AQ	Starlink 4461	-	COM	562 x 563 x 97.7	13:36:19
432	2022-099AP	Starlink 4435	-	COM	562 x 563 x 97.7	13:36:19
433	2022-099N	Starlink 4412	-	COM	561 x 563 x 97.7	13:36:20
434	2022-099AR	Starlink 4448	-	COM	562 x 563 x 97.7	13:36:20
435	2022-099AL	Starlink 4454	-	COM	562 x 563 x 97.7	13:36:20
436	2022-099AN	Starlink 4434	-	COM	562 x 562 x 97.7	13:36:20
437	2022-099Q	Starlink 4436	-	COM	561 x 563 x 97.7	13:36:20
438	2022-099S	Starlink 4302	-	COM	561 x 564 x 97.7	13:36:20
439	2022-099AG	Starlink 4429	-	COM	561 x 563 x 97.7	13:36:21
440	2022-099K	Starlink 4445	-	COM	561 x 564 x 97.7	13:36:21
441	2022-099AF	Starlink 4340	-	COM	561 x 563 x 97.7	13:36:21
442	2022-099AE	Starlink 4361	-	COM	561 x 564 x 97.7	13:36:21
443	2022-099AM	Starlink 4455	-	COM	561 x 564 x 97.7	13:36:21
444	2022-099AK	Starlink 4439	-	COM	561 x 564 x 97.7	13:36:21
445	2022-099T	Starlink 4360	-	COM	561 x 563 x 97.7	13:36:21
446	2022-099U	Starlink 4401	-	COM	561 x 564 x 97.7	13:36:22
447	2022-099AJ	Starlink 4453	-	COM	561 x 564 x 97.7	13:36:22
448	2022-099AB	Starlink 4387	-	COM	561 x 564 x 97.7	13:36:22
449	2022-099AC	Starlink 4450	-	COM	561 x 564 x 97.7	13:36:22

Table 10: SSO satellites launched in 2022, ordered by local time of descending node (cont.)

No	Piece	Name	Operator	Mission	Orbit	LTDN
450	2022-099Z	Starlink 4421	-	COM	562 x 563 x 97.7	13:36:22
451	2022-099W	Starlink 4430	-	COM	561 x 563 x 97.7	13:36:22
452	2022-099X	Starlink 4431	-	COM	561 x 564 x 97.7	13:36:22
453	2022-099AD	Starlink 4451	-	COM	561 x 564 x 97.7	13:36:22
454	2022-099AH	Starlink 4465	-	COM	561 x 564 x 97.7	13:36:22
455	2022-099AA	Starlink 4392	-	COM	561 x 564 x 97.7	13:36:22
456	2022-099V	Starlink 4426	-	COM	561 x 564 x 97.7	13:36:23
457	2022-099Y	Starlink 4432	-	COM	561 x 564 x 97.7	13:36:23
458	2022-167A	Tianfu Dongpo 08	Chang Guang/-	IMG	527 x 548 x 97.5	14:40:36
459	2022-167C	Fengtai Shaonian 2	-	COM	527 x 548 x 97.5	14:40:40
460	2022-167M	Jiaotong-5	-	COM	527 x 547 x 97.5	14:40:45
461	2022-167J	Tianfu Dongpo 10	Chang Guang/-	IMG	525 x 546 x 97.5	14:40:46
462	2022-167G	Jilin-1 GaoFen 03D-50	Chang Guang	IMG	525 x 545 x 97.5	14:40:47
463	2022-167Q	Huoju-1	Rocket Pi	BIO	525 x 546 x 97.5	14:40:48
464	2022-167E	Jilin-1 GaoFen 03D-48	Chang Guang	IMG	526 x 546 x 97.5	14:40:48
465	2022-167F	Jilin-1 GaoFen 03D-49	Chang Guang	IMG	529 x 551 x 97.5	14:40:48
466	2022-167N	Tianfu Dongpo 09	Chang Guang/-	IMG	523 x 546 x 97.5	14:40:50
467	2022-167K	Jin Zijing 1-05	-	IMG	524 x 546 x 97.5	14:40:53
468	2022-167D	Jilin-1 GaoFen 03D-47	Chang Guang	IMG	526 x 546 x 97.5	14:40:54
469	2022-167P	Tianqi Xingzuo 07	-	COM	523 x 546 x 97.5	14:40:55
470	2022-167H	Jilin-1 Pingtai 01A01	Chang Guang	IMG	525 x 546 x 97.5	14:40:57
471	2022-167L	Jin Zijing 1-06	-	IMG	524 x 546 x 97.5	14:40:58
472	2022-176A	Gao Fen 11-04	-	IMG	241 x 650 x 97.3	14:46:50
473	2022-065A	PVSAT	-	TECH	694 x 707 x 98.0	15:19:32
474	2022-065H	Dummy Cubesat	-	TECH	693 x 704 x 98.0	15:20:10
475	2022-065G	MIMAN	-	TECH	693 x 703 x 98.0	15:20:26
476	2022-065B	Wiseongmosache	-	TECH	693 x 704 x 98.0	15:20:30
477	2022-065D	STEP Cube Lab II	Choson U	TECH	691 x 704 x 98.0	15:20:34
478	2022-065E	RANDEV	-	TECH	691 x 703 x 98.0	15:20:38
479	2022-065F	SNUGLITE-2	-	TECH	692 x 702 x 98.0	15:20:40
480	2022-031B	Pujiang-2	-	TECH	585 x 604 x 97.8	17:02:06
481	2022-031A	Tiankun-2	CCMETA	TECH	582 x 601 x 97.8	17:04:49
482	2022-077C	Starlink 4350	-	COM	561 x 564 x 97.7	17:36:13
483	2022-077X	Starlink 4313	-	COM	562 x 563 x 97.7	17:36:15
484	2022-077T	Starlink 4305	-	COM	562 x 563 x 97.7	17:36:15
485	2022-077P	Starlink 4314	-	COM	562 x 563 x 97.7	17:36:15
486	2022-077J	Starlink 4336	-	COM	562 x 563 x 97.7	17:36:16
487	2022-077M	Starlink 4339	-	COM	561 x 563 x 97.7	17:36:16
488	2022-077R	Starlink 4317	-	COM	562 x 563 x 97.7	17:36:16
489	2022-077G	Starlink 4345	-	COM	562 x 563 x 97.7	17:36:16
490	2022-077H	Starlink 4343	-	COM	562 x 563 x 97.7	17:36:16
491	2022-077Q	Starlink 4252	-	COM	562 x 563 x 97.7	17:36:16
492	2022-077U	Starlink 4308	-	COM	562 x 563 x 97.7	17:36:16
493	2022-077L	Starlink 4337	-	COM	562 x 563 x 97.7	17:36:16
494	2022-077N	Starlink 4338	-	COM	562 x 563 x 97.7	17:36:16
495	2022-077K	Starlink 4341	-	COM	562 x 563 x 97.7	17:36:16
496	2022-077S	Starlink 4320	-	COM	562 x 563 x 97.7	17:36:16
497	2022-077E	Starlink 4352	-	COM	562 x 563 x 97.7	17:36:17
498	2022-077B	Starlink 4349	-	COM	562 x 563 x 97.7	17:36:17
499	2022-077V	Starlink 4311	-	COM	562 x 563 x 97.7	17:36:17

Table 10: SSO satellites launched in 2022, ordered by local time of descending node (cont.)

No	Piece	Name	Operator	Mission	Orbit	LTDN
500	2022-077F	Starlink 4355	-	COM	562 x 563 x 97.7	17:36:17
501	2022-077Z	Starlink 4309	-	COM	561 x 564 x 97.7	17:36:17
502	2022-077D	Starlink 4331	-	COM	562 x 563 x 97.7	17:36:17
503	2022-077AS	Starlink 4251	-	COM	562 x 563 x 97.7	17:36:18
504	2022-077W	Starlink 4307	-	COM	562 x 564 x 97.7	17:36:18
505	2022-077A	Starlink 4362	-	COM	562 x 563 x 97.7	17:36:18
506	2022-077Y	Starlink 4312	-	COM	561 x 564 x 97.7	17:36:18
507	2022-077AW	Starlink 4329	-	COM	562 x 563 x 97.7	17:36:18
508	2022-077AB	Starlink 4325	-	COM	561 x 564 x 97.7	17:36:19
509	2022-077AD	Starlink 4342	-	COM	561 x 564 x 97.7	17:36:19
510	2022-077AA	Starlink 4306	-	COM	561 x 564 x 97.7	17:36:20
511	2022-077AV	Starlink 4318	-	COM	561 x 564 x 97.7	17:36:20
512	2022-077AX	Starlink 4333	-	COM	562 x 563 x 97.7	17:36:21
513	2022-077AF	Starlink 4344	-	COM	561 x 564 x 97.7	17:36:21
514	2022-077AQ	Starlink 4326	-	COM	561 x 564 x 97.7	17:36:21
515	2022-077AC	Starlink 4323	-	COM	561 x 564 x 97.7	17:36:21
516	2022-077AU	Starlink 4324	-	COM	561 x 564 x 97.7	17:36:22
517	2022-077AT	Starlink 4319	-	COM	561 x 564 x 97.7	17:36:22
518	2022-077AE	Starlink 4328	-	COM	560 x 565 x 97.7	17:36:22
519	2022-077AH	Starlink 4310	-	COM	561 x 564 x 97.7	17:36:22
520	2022-077AK	Starlink 4347	-	COM	560 x 565 x 97.7	17:36:22
521	2022-077AR	Starlink 4321	-	COM	560 x 565 x 97.7	17:36:22
522	2022-077AG	Starlink 4346	-	COM	560 x 565 x 97.7	17:36:22
523	2022-077AM	Starlink 4322	-	COM	560 x 564 x 97.7	17:36:22
524	2022-077AJ	Starlink 4348	-	COM	560 x 564 x 97.7	17:36:23
525	2022-077AP	Starlink 4330	-	COM	560 x 565 x 97.7	17:36:23
526	2022-077AL	Starlink 4315	-	COM	560 x 565 x 97.7	17:36:23
527	2022-077AN	Starlink 4327	-	COM	561 x 564 x 97.7	17:36:23
528	2022-008A	CSG FM2	-/-	IMG-R	621 x 623 x 97.9	17:45:52
529	2022-105AQ	Starlink 4467	-	COM	561 x 564 x 97.7	21:36:14
530	2022-105AP	Starlink 4626	-	COM	562 x 563 x 97.7	21:36:14
531	2022-105AK	Starlink 4424	-	COM	561 x 564 x 97.7	21:36:14
532	2022-105AT	Starlink 4562	-	COM	561 x 564 x 97.7	21:36:14
533	2022-105AR	Starlink 4569	-	COM	562 x 563 x 97.7	21:36:14
534	2022-105AD	Starlink 4617	-	COM	561 x 564 x 97.7	21:36:14
535	2022-105AJ	Starlink 4630	-	COM	561 x 564 x 97.7	21:36:14
536	2022-105AE	Starlink 4621	-	COM	561 x 564 x 97.7	21:36:14
537	2022-105AH	Starlink 4632	-	COM	562 x 563 x 97.7	21:36:15
538	2022-105AG	Starlink 4418	-	COM	561 x 564 x 97.7	21:36:15
539	2022-105AL	Starlink 4438	-	COM	562 x 563 x 97.7	21:36:15
540	2022-105AC	Starlink 4620	-	COM	561 x 564 x 97.7	21:36:15
541	2022-105AA	Starlink 4428	-	COM	562 x 563 x 97.7	21:36:15
542	2022-105Z	Starlink 4440	-	COM	561 x 563 x 97.7	21:36:15
543	2022-105AF	Starlink 4579	-	COM	561 x 564 x 97.7	21:36:15
544	2022-105Y	Starlink 4459	-	COM	561 x 564 x 97.7	21:36:15
545	2022-105AS	Starlink 4571	-	COM	561 x 563 x 97.7	21:36:15
546	2022-105AU	Starlink 4570	-	COM	561 x 564 x 97.7	21:36:15
547	2022-105U	Starlink 4449	-	COM	561 x 564 x 97.7	21:36:15
548	2022-105AW	Starlink 4572	-	COM	561 x 564 x 97.7	21:36:15
549	2022-105AM	Starlink 4625	-	COM	562 x 563 x 97.7	21:36:15

Table 10: SSO satellites launched in 2022, ordered by local time of descending node (cont.)

No	Piece	Name	Operator	Mission	Orbit	LTDN
550	2022-105W	Starlink 4458	-	COM	561 x 564 x 97.7	21:36:15
551	2022-105X	Starlink 4464	-	COM	561 x 564 x 97.7	21:36:16
552	2022-105AV	Starlink 4560	-	COM	561 x 564 x 97.7	21:36:16
553	2022-105AX	Starlink 4566	-	COM	561 x 564 x 97.7	21:36:16
554	2022-105A	Starlink 4622	-	COM	561 x 564 x 97.7	21:36:16
555	2022-105AN	Starlink 4624	-	COM	561 x 564 x 97.7	21:36:18
556	2022-105B	Starlink 4386	-	COM	561 x 564 x 97.7	21:36:19
557	2022-105C	Starlink 4380	-	COM	561 x 564 x 97.7	21:36:19
558	2022-105S	Starlink 4471	-	COM	561 x 564 x 97.7	21:36:19
559	2022-105D	Starlink 4388	-	COM	561 x 564 x 97.7	21:36:19
560	2022-105E	Starlink 4374	-	COM	561 x 564 x 97.7	21:36:20
561	2022-105F	Starlink 4390	-	COM	561 x 564 x 97.7	21:36:20
562	2022-105Q	Starlink 4357	-	COM	561 x 564 x 97.7	21:36:20
563	2022-105R	Starlink 4457	-	COM	561 x 564 x 97.7	21:36:21
564	2022-105H	Starlink 4470	-	COM	561 x 564 x 97.7	21:36:21
565	2022-105N	Starlink 4473	-	COM	561 x 564 x 97.7	21:36:21
566	2022-105G	Starlink 4420	-	COM	561 x 564 x 97.7	21:36:21
567	2022-105M	Starlink 4463	-	COM	561 x 564 x 97.7	21:36:21
568	2022-105V	Starlink 4406	-	COM	561 x 564 x 97.7	21:36:21
569	2022-105K	Starlink 4469	-	COM	561 x 564 x 97.7	21:36:22
570	2022-105T	Starlink 4334	-	COM	561 x 564 x 97.7	21:36:22
571	2022-105L	Starlink 4452	-	COM	561 x 564 x 97.7	21:36:22
572	2022-105J	Starlink 4466	-	COM	561 x 564 x 97.7	21:36:22
573	2022-105P	Starlink 4472	-	COM	561 x 564 x 97.7	21:36:22
574	2022-105AB	Starlink 4456	-	COM	563 x 567 x 97.7	21:38:39
575	2022-069A	Gao Fen 12-03	-	IMG-R	626 x 628 x 98.0	22:08:11
576	2022-096A	Khayyam	-/-	IMG	490 x 493 x 97.4	23:04:01
577	2022-096C	Polytech Universe-1	-	TECH	483 x 486 x 97.4	23:04:53
578	2022-096B	Polytech Universe-2	-	TECH	482 x 485 x 97.4	23:04:58
579	2022-096J	KAI-1	KNRTU-KAI	TECH	481 x 483 x 97.4	23:05:23
580	2022-096F	Kuzbass-300	-	IMG	479 x 482 x 97.4	23:05:28
581	2022-096H	MIET-AIS	-	COM	479 x 482 x 97.4	23:05:31
582	2022-096G	UTMN	-	IMG	479 x 482 x 97.4	23:05:32
583	2022-096K	Skoltech-B1	-	COM	481 x 483 x 97.4	23:05:35
584	2022-096L	Skoltech-B2	-	COM	480 x 483 x 97.4	23:05:36
585	2022-096D	CYCLOPS	-	TECH	477 x 480 x 97.4	23:05:39
586	2022-096E	Monitor-1	-	SCI	477 x 480 x 97.4	23:05:41
587	2022-096N	ReshUCube	-	TECH	479 x 481 x 97.4	23:05:51
588	2022-096Q	Siren	BelSU	BIO	478 x 481 x 97.4	23:05:57
589	2022-096M	ISOI	-	IMG	478 x 480 x 97.4	23:05:58
590	2022-096P	CubeSX-HSE-2	HSE	IMG/COM	478 x 480 x 97.4	23:06:02
591	2022-096R	Geoskan-Edel'veys	-	COM	473 x 477 x 97.4	23:06:33
592	2022-096S	VIZARD-SS1	-/-	COM	470 x 474 x 97.4	23:07:06

### 3 Scientific Space Programs

The only major scientific satellites launched this year were China's Kuafu-1 (ASO-S) solar observatory [16] and the JPL/CNES SWOT water altimetry satellite [17]. Sweden also launched the small MATS atmospheric research satellite [18]. In addition, JWST began observations from its operational orbit Sun-Earth L2 [19],[20].

In deep space:

- NASA's CAPSTONE was launched to demonstrate operations in a lunar near-rectilinear halo orbit (NRHO) [21].
- Korea's Danuri lunar orbiter was launched [22],[23].
- India's Mars Orbiter Mission ended its operations [24].
- ESA's Solar Orbiter and NASA's Parker Solar Probe continued gravity assists to adjust their orbits to fly closer to the Sun.
- A collection of cubesats were launched on lunar flybys as part of the Artemis I mission.
- The Hakuto-R M1 lunar lander for the commercial Japanese company iSpace was launched by SpaceX along with NASA's Lunar Flashlight mission [25].

### 4 Military Space Activities

Military satellites include navigation, communications, and technology development missions in addition to the intelligence gathering activities that I report here.

#### 4.1 Space Surveillance

The US Space Force launched GSSAP 5 and 6 (USA 324/325) to geostationary drift orbit on Jan 21 [26]. The sixth SBIRS-GEO early warning satellite went up on Aug 4 [27]. An experimental next-generation payload, the Wide Field of View Testbed (WFOV), was launched on Jul 1 [28].

Russia's Kosmos-2563, launched on Nov 2, is part of the EKS early warning satellite system [29].

Russia's Kosmos-2558, launched on Aug 1, appears to be an inspector satellite and was launched into an orbit loosely synchronized with that of USA 326, making repeated passes at a distance of around 60 km [30].

#### 4.2 Optical Imaging

The US National Reconnaissance office launched the large USA 326 and USA 338 satellites on Feb 2 and Sep 24. They are thought to be high resolution imaging satellites [31],[32],[33],[34]. A small MISR-B experimental imaging satellite was launched on Jul 2 for the US Special Operations Command [35].

Four Chinese imaging satellites were launched in 2022: Yaogan 34-02 and 34-03 on Mar 17 and Nov 15, Shiyang 15 on Sep 24, and Gao Fen 11-04 on Dec 27 [36],[37],[38],[39].

Russia launched a Bars topographic mapping satellite, Kosmos-2556, on May 19 [40]. Russia also launched two small non-maneuvering low-orbit satellites on Apr 29 and Oct 15 using Angara-1.2 rockets. Kosmos-2555 and Kosmos-2560 were initially thought to carry imaging payloads, but there is now some doubt about this [41],[42].

Iran launched the Noor-2 small imaging satellite on Mar 8 [43].

Singapore launched its first military imaging satellite, DS-EO, on Jun 30 [44].

Israel's ImageSat launched the EROS C3 satellite on Dec 30; the commercially-owned satellite is likely be used partly for Israeli military intelligence [45],[46]

### **4.3 Radar Imaging**

Russia launched the first Neutron radar satellite on Feb 5; it was codenamed Kosmos-2553 [47],[48]. Italy launched a COSMO Second Generation radar satellite on Jan 31, and Germany launched the SARah-1 radar satellite on Jun 18 [49],[50]. Singapore's NeuSAR experimental radar satellite went up with DS-EO on Jun 30 [44].

China launched two probable radar satellites in 2022, GF12-03 (Jun 27) and Yaogan 33-02 (Sep 2) [51],[52].

### **4.4 Signals Intelligence**

The US NRO launched an INTRUDER low orbit signals intelligence payload on Apr 17, with the cover name USA 327 [53].

Russia launched two Lotos-S1 electronic intelligence satellites (Kosmos-2554 and Kosmos-2565) on Apr 7 and Nov 30. The second one also carried a small secondary satellite with an unknown mission [54],[55].

China continued launches of the low inclination YG-35 triplets during 2022. Each triplet consists of two satellites from SAST/Shanghai and one from CAST/Beijing; it seems likely that they are for signals intelligence of some kind. YG-35 groups 2, 3, 4 and 5 were followed by YG-36 groups 1 to 4. The YG-36 satellites seem to be essentially identical to the YG-35 ones [56],[57].

### **4.5 NRO satellites with unknown missions**

Several groups of small NRO satellites were launched during 2022. USA 320 to 323 went up on Jan 13, and USA 328 to 331 were launched on Jun 19. I suspect that these 8 satellites, launched on Falcon 9, may be SpaceX Starshield prototypes (the military version of the Starlink bus) [58] [59]. Two more small NRO satellites were launched on dedicated Electron launches on Jul 13 and Aug 4 [60],[61].

The missions of these satellites are unknown.

### **4.6 USA satellite designations in 2022**

The USA satellite designations were introduced in 1984 for US military satellites, to obscure the missions of the secret ones. Here is an index of USA names assigned in 2022.

The agency abbreviations are:

- AFRL Air Force Research Lab
- Del 4 Delta 4, US Space Force
- Del 8 Delta 8, US Space Force
- Del 9 Delta 9, US Space Force
- NRO US National Reconnaissance Office
- SSC Space Systems Command, LAAFB, US Space Force

Table 11: USA satellite designations 2022

Cover name	Other name	Piece name	Agency	Orbit	Notes
USA 320	[Unk Star 1]	2022-002CV	NRO?	525 x 535 x 97.5	Unknown
USA 321	[Unk Star 2]	2022-002CX	NRO?	525 x 535 x 97.5	Unknown
USA 322	[Unk Star 3]	2022-002CY	NRO?	525 x 535 x 97.5	Unknown
USA 323	[Unk Star 4]	2022-002CZ	NRO?	525 x 535 x 97.5	Unknown
USA 324	GSSAP 5	2022-006A	SSC/Del 9	35781 x 35871 x 0.1	GEO space surveillance
USA 325	GSSAP 6	2022-006B	SSC/Del 9	35781 x 35871 x 0.1	GEO space surveillance
USA 326	[CRYSTAL FO?]	2022-009A	NRO	487 x 515 x 97.4	Imaging?
USA 327	[INTRUDER?]	2022-040A	NRO	1026 x 1187 x 63.5	Sigint
USA 328	[Unk Star 5]	2022-064B	NRO?	520 x 531 x 53.0	Unknown
USA 329	[Unk Star 6]	2022-064C	NRO?	520 x 531 x 53.0	Unknown
USA 330	[Unk Star 7]	2022-064D	NRO?	520 x 531 x 53.0	Unknown
USA 331	[Unk Star 8]	2022-064E	NRO?	520 x 531 x 53.0	Unknown
USA 332	WFOV Testbed	2022-073A	SSC	35779 x 35794 x 0.3	Early Warning
USA 333	USSF 12 Ring	2022-073B	AFRL?	36167 x 36323 x 0.0	Technology
USA 334	[Unk Smallsat 12]	2022-079A	NRO	585 x 595 x 40.0	Unknown
USA 335	[Unk Smallsat 13]	2022-091A	NRO	621 x 648 x 70.0	Unknown
USA 336	SBIRS GEO 6	2022-092A	SSC/Del 4	35768 x 35800 x 6.5	Early Warning
USA 337	ESPASat?	2022-073E	AFRL	36100? x 36200? x 0.1?	Unknown
USA 338	[CRYSTAL FO?]	2022-117A	NRO	390 x 420 x 73.5	Imaging?
USA 339	Shepherd Demo?	2022-144B	SSC	36080? x 36100? x 2.8?	Tech

## 5 Space Stations in 2022

### 5.1 ISS traffic

Table 13 lists arrivals, departures, deployments and spacewalks at ISS during 2022 [62].

Table 12: ISS event log, 2022

Date	Time	Event
2022 Jan 12	1824	ISS TCM-314 PMS18 0.73 m/s 395s
2022 Jan 19	1150	MIM2: R EVA-51 depress Dubrov, Shkaplerov
2022 Jan 19	1729	MIM2 VKD-51 jettison 1998-067SY
2022 Jan 19	1810	MIM2 VKD-51 jettison 1998-067SZ
2022 Jan 19	1811	MIM2 VKD-51 jettison 1998-067TA
2022 Jan 19	1932	MIM2: R EVA-51 repress
2022 Jan 23	1540	PMA-3/IDA-3: Dragon CRS-24 undocked
2022 Jan 26	1200	JEM: Deploy FEES2, GASPACS 1998-067TB,TC
2022 Jan 26	1210	JEM: Deploy PATCOOL 1998-067TD?
2022 Jan 26	1330	JEM: Deploy DAILI 1998-067TF
2022 Jan 26	1340	JEM: Deploy TARGIT 1998-067TE?
2022 Feb 3	0855	JEM: Deploy LIGHT-1 1998-067TG
2022 Feb 3	1030	JEM: Deploy GT-1 1998-067TH
2022 Feb 8	0736	ISS TCM-315 PMS18 0.27 ms/
2022 Feb 17	0703	MIM2: Progress MS-20 docked Poisk
2022 Feb 19	0944	SSRMS: Cygnus NG-17 grappled
2022 Feb 21	1202	NOD1: Cygnus NG-17 berthed on Unity
2022 Feb 26	0122	ISS TCM-316 PMS18 541s 1.3 km 0.8m/s
2022 Mar 11	1935	ISS TCM-317 PMS18 320s 0.9 km 0.5m/s
2022 Mar 15	1205	AL: EVA-79 depress Barron, Chari
2022 Mar 15	1906	AL: EVA-79 repress Barron, Chari
2022 Mar 18	1912	Prichal: Soyuz MS-21 docked <b>+Artem'ev, Matveev, Korsakov</b>
2022 Mar 23	1225	AL: EVA-80 depress Chari, Maurer
2022 Mar 23?		Debris 1998-067TL
2022 Mar 23	1928	AL: EVA-80 repress Chari, Maurer
2022 Mar 24	0900	JEM: Deploy IHISAT 1998-067TJ
2022 Mar 24	1210	JEM: Deploy Kitsune 1998-067TK
2022 Mar 30	0721	MIM1: Soyuz MS-19 undock Rassvet <b>-Shkaplerov, Dubrov, VandeHei</b>
2022 Apr 9	1229	PMA-3/IDA-3: Axiom-1 dock IDA-3 <b>+Lopez-Alegria, Connor, Stibbe, Pathy</b>
2022 Apr 18	1433	Poisk: VKD-52 depress Artemev, Matveev
2022 Apr 18	2145	Poisk: VKD-52 repress Artemev, Matveev
2022 Apr 23	1324:33	ISS TCM-318 PMS18 657s
2022 Apr 25	0110	PMA-3/IDA-3: Axiom-1 undock <b>-Lopez-Alegria, Connor, Stibbe, Pathy</b>
2022 Apr 27	2337	PMA-3/IDA-3: Crew-4 docked <b>+Lindgren, Hines, Cristoforetti, Watkins</b>
2022 Apr 28	1436	Poisk: EVA VKD-53 Artemev, Matveev
2022 Apr 28	1645	Poisk: deploy MLI bundle 1998-067TM
2022 Apr 28	1645	Poisk: deploy debris 1998-067TN
2022 Apr 28	2247	Poisk: EVA VKD-53 repress
2022 May 5	0520	PMA-2/IDA-2: Crew-3 undock <b>-Chari, Marshburn, Maurer, Barron</b>
2022 May 14	1820:00	ISS TCM-319 PMS18 659s 0.91m/s 1.6km



2022 May 21	0029	PMA-2/IDA-2: Starliner OFT-2 dock
2022 May 25	1836	PMA-2/IDA-2: Starliner OFT-2 undock
2022 Jun 1	0802	Zvezda aft: Progress MS-18 undocked
2022 Jun 3	01302	Zvezda aft: Progress MS-20 docked
2022 Jun 16	1903	ISS TCM-320 PMS20 275s 0.5m/s COLA K1408
2022 Jun 20	1520	ISS TCM-321 CygNG17 5s aborted
2022 Jun 25	1742	ISS TCM-322 CygNG17 5:01 0.3m/s
2022 Jun 28	0700?	NOD1: Cygnus NG-17 unberthed
2022 Jun 28	1107	SSRMS: Cygnus NG-17 released
2022 Jul 3	0005	Bishop: Trash bag 1998-067TP
2022 Jul 15	1521	PMA-2/IDA-2: CRS-25 docked
2022 Jul 21	1424	Poisk: VKD-EKA depress Artemev, Cristoforetti
2022 Jul 21	1602	Yu5 jettison 1998-067TQ
2022 Jul 21	1604	Yu6 jettison 1998-067TR
2022 Jul 21	1608	Yu7 jettison 1998-067TS
2022 Jul 21	1613	Yu8 jettison 1998-067TT
2022 Jul 21	1618	Yu9 jettison 1998-067TU
2022 Jul 21	1623	Yu10 jettison 1998-067TV
2022 Jul 21	1626	Yu11 jettison 1998-067TW
2022 Jul 21	1634	Yu12 jettison 1998-067TX
2022 Jul 21	1636	TR1 jettison 1998-067TY
2022 Jul 21	1640	TR2 jettison 1998-067TZ
2022 Jul 21	1640	Debris jettison 1998-067UA
2022 Jul 21	2206	Poisk: VKD-EKA repress
2022 Aug 10	0746	ISS TCM-323 Progress MS-20 2:45 0.3m/s
2022 Aug 12	0945	JEM RMS: TUMnanosat,Futaba,Hsusat deploy 1998-067UB, UC, UD
2022 Aug 17	1334	Poisk: VKD-54 depress Artemev, Matveev
2022 Aug 17	1758	Poisk: VKD-54 repress Artemev, Matveev
2022 Aug 19	1505	PMA-2/IDA-2: CRS-25 undocked
2022 Aug 25	0220	ISS TCM-324 Progress MS-20 0.68m/s 5:33
2022 Sep 2	1305	Poisk: VKD-54a depress Artemev, Matveev
2022 Sep 2	2117	Poisk: VKD-54a repress Artemev, Matveev
2022 Sep 6	0910	JEM: Deploy D3,Capsat-1,Jagsat 1998-067UE, UH?,UJ?
2022 Sep 6	0920	JEM: Deploy CLICK-A, BeaverCube 1998-067UG,UD
2022 Sep 6	0920	JEM: Debris 1998-067UK released
2022 Sep 15	1810	ISS TCM-325 Progress MS-20 0.22 m/s 1:59
2022 Sep 21	1706	Rassvet: Soyuz MS-22 docked
		<b>+Prokop'ev, Petelin, Rubio</b>
2022 Sep 29	0734	Prichal: Soyuz MS-21 undocked
		<b>-Artem'ev, Matveev, Korsakov</b>
2022 Oct 1	1105	ISS TCM-326 Progress MS-20 1.4m/s 11:16
2022 Oct 6	2101	IDA-2: Crew-5 docked
		<b>+Mann, Cassada, Wakata, Kikina</b>
2022 Oct 14	1605	IDA-3: Crew-4 undocked
		<b>-Lindgren, Hines, Cristoforetti, Watkins</b>
2022 Oct 17	1926:34	ISS TCM-327 Progress MS-20 1m/s 10:30
2022 Oct 23	2245	Poisk: Progress MS-19 undocked
2022 Oct 25	0025	ISS TCM-328 PDAM Progress MS-20 0.5m/s 5:05
2022 Oct 28	0248:55	Poisk: Progress MS-21 docked
2022 Nov 9	1028	SSRMS: grapple NG-18
2022 Nov 9	1303	Unity: NG-18 berthed
2022 Nov 15	1411	Poisk: VKD-55 depress Prokop'ev, Petelin
2022 Nov 15	2117	Poisk: VKD-55 repress Prokop'ev, Petelin
2022 Nov 27	1239	PMA-3/IDA-3: Dragon CRS-26 docked
2022 Nov 30	1225	ISS TCM-329 Progress MS-20 11:52 1.20m/s 214 kg

2022 Dec 2	0750	JEM RMS: PEARLAFRICA, ZIMSAT, TAKA, Space Tuna deploy, 1998-67UL to UP
2022 Dec 3	1208	Quest: EVA-82 depress Cassada, Rubio
2022 Dec 3	1921	Quest: EVA-82 repress
2022 Dec 15	0154	Poisk VKD-56 first try depress: Prokop'ev, Petelin
2022 Dec 15	0250	Poisk repress after spacewalk cancelled
2022 Dec 22	1311	Quest: EVA-83 depress Rubio, Cassada
2022 Dec 22	2027	Quest: EVA-83 repress
2022 Dec 21	1342	ISS TCM-330 Progress MS-20 PDAM 1.0 m/s 10:20
2022 Dec 29	1205	JEM RMS: TJREVERB, DANESAT deploy 1998-067UQ,UR
2022 Dec 29	1215	JEM RMS: MARIO,NUTSAT deploy 1998-067US,UT
2022 Dec 29	1345	JEM RMS: LORIS, ORCASAT deploy 1998-067UU,UV
2022 Dec 29	1355	JEM RMS: SPORT,Petitsat deploy 1998-067UW,UX

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## 5.2 Chinese Space Station

Assembly of the long-awaited Chinese Space Station (CSS) began in 2021 and was completed in 2022 [63],[64],[65],[66].

The overall station is sometimes called the ‘Tiangong station’ (Tiangong Kongjianzhan), which is confusing following the now-completed missions of the simpler Tiangong-1 and Tiangong-2 stations. It is more often just called the ‘Chinese Space Station’ (Zhongguo Kongjianzhan, 中国空间站) and I will refer to it this way.

Expedition 2 (ZaiRen 2) landed in Shenzhou 13 in April. ZaiRen 3 began in June with the launch of Shenzhou 14 carrying Chen Dong, Liu Yang and Cai Xuzhe; they landed on Dec 4. ZaiRen 4 began on Nov 29 with the launch of Shenzhou 15 carrying Fei Junlong, Deng Qingming, and Zhang Lu.

The key events in 2022 included the docking of the Wentian lab module in Jul with the Tianhe core module, and Wentian’s rotation by 90 degrees to a side docking port at the end of Sep; and a similar operation with the Mengtian module in November.

Chinese Space Station orbital history

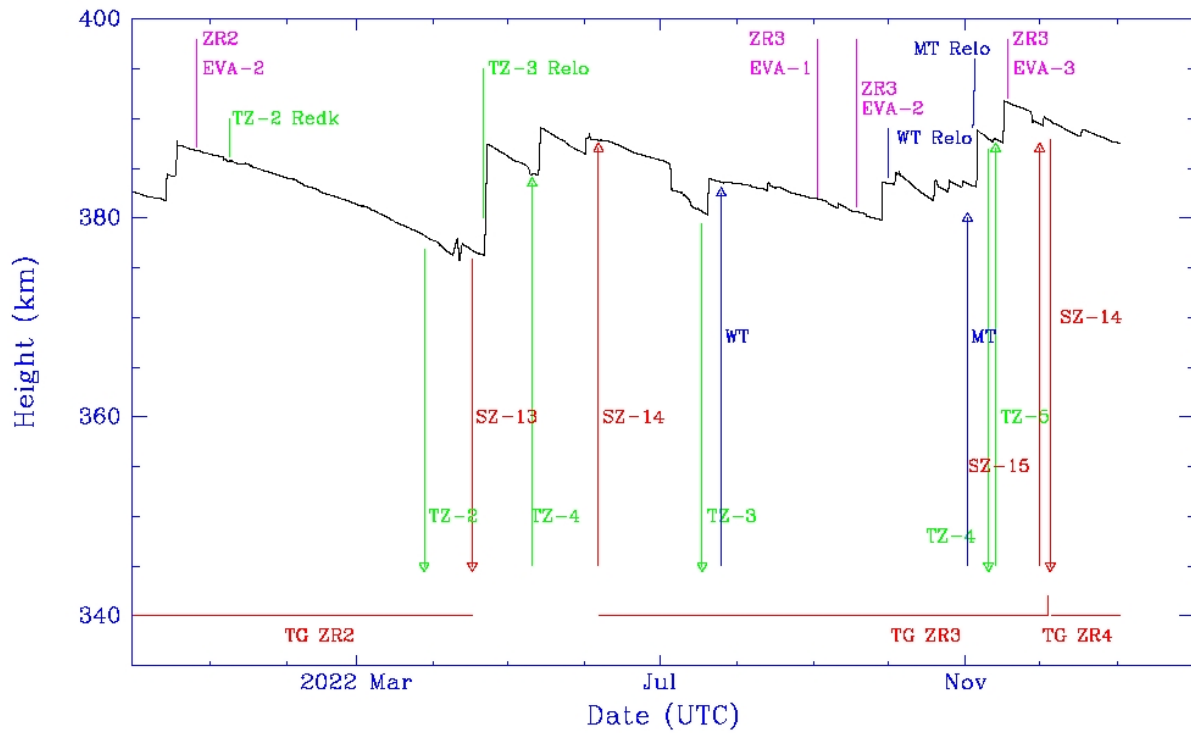


Figure 1: CSS orbital history, showing major events

Table 13: CSS event log, 2022

Date	Piece	Name	Event	Loc	Crew
2022 Jan 5 2212	2021-046A	Tianzhou-2	Undock	TH Fwd	
2022 Jan 5 2230?	2021-046A	Tianzhou-2	Grapple by CRMS		
2022 Jan 5 2345?	2021-046A	Tianzhou-2	Release by CRMS		
2022 Jan 5 2359	2021-046A	Tianzhou-2	Redock	TH Aft	
2022 Jan 7 2200	2021-046A	Tianzhou-2	Undock	TH Fwd	
2022 Jan 7 2355	2021-046A	Tianzhou-2	Redock	TH Fwd	
2022 Mar 27 0759	2021-046A	Tianzhou-2	Depart	TH Fwd	
2022 Apr 15 1644	2021-092A	Shenzhou-13	Depart	TH Nadir	Zhai, Wang, Ye
2022 Apr 19 2102	2021-085A	Tianzhou-3	Undock	TH Aft	
2022 Apr 20 0106	2021-085A	Tianzhou-3	Redock	TH Fwd	
2022 May 9 1806	2022-050A	Tianzhou-4	Arrive	TH Aft	
2022 Jul 5 0942	2022-060A	Shenzhou-14	Arrive	TH Nadir	Chen, Liu, Cai
2022 Jul 17 0259	2021-085A	Tianzhou-3	Depart	TH Fwd	
2022 Jul 24 1908	2022-085A	Wentian (WT)	Arrive	TH Fwd	
2022 Jul 30 1651	2022-085B	CZ-5B Y3 core stage	Reentry	Borneo	
2022 Sep 1 1026		ZR3 EVA-1 (Feitian B,C)	EVA	WT AL	Chen,Liu
2022 Sep 17 0535		ZR3 EVA-2 (Feitian B,C)	EVA	WT AL	Chen,Cai
2022 Sep 30 0340?	2022-085A	Wentian	Unberth	TH Fwd	
2022 Sep 30 0444	2022-085A	Wentian	Reberth	TH Stbd	
2022 Oct 31 2027	2022-143A	Mengtian	Arrive	TH Fwd	
2022 Nov 3 0048	2022-143A	Mengtian	Unberth	TH Fwd	
2022 Nov 3 0126	2022-143A	Mengtian	Reberth	TH Port	
2022 Nov 9 0655	2022-050A	Tianzhou-4	Depart	TH Aft	
2022 Nov 12 0410	2022-152A	Tianzhou-5	Arrive	TH Aft	
2022 Nov 17 0316		ZR3 EVA-3 (FeitianB,C)	EVA	WT AL	Chen, Cai
2022 Nov 29 1518	2022-162A	Shenzhou-15	Arrive	TH Fwd	
2022 Dec 4 0301?	2022-060A	Shenzhou-14	Depart	TH Nadir	

## 6 Orbital Traffic, Debris and Decay

At the end of 2022 there were 26281 cataloged objects in orbit or beyond and the total known mass in orbit increased to 10875 tonnes. The breakdown for number of objects is listed in table 14 and for the mass in orbit in table 15. Note that the sum of the individual mass figures falls short of the mass totals by a few tonnes due to complications with spurious catalog entries; but the uncertainties on those totals are probably in any case probably of the order of ten percent due to the uncertainty on masses of individual objects.

I include as active payloads any satellite thought to be still transmitting even occasionally, while other sources may only include those thought to be in full operational service. In either case, distinguishing active from dead payloads is often partly guesswork for those satellites which do not perform regular orbital maintenance maneuvers, and the uncertainty in the total number of active satellites is probably of order 10%.

Many of the active satellites are now members of large LEO constellations, especially Starlink. For details of large constellation activity see the pages at

<https://planet4589.org/space/con/conlist.html>

Estimates of total debris masses have been updated, and are somewhat lower than in previous editions of this report. A new category ‘Alt.Pay.’ (alternative payloads) has been added as a bookkeeping convenience to account for objects that are in a marginal category - could arguably be considered payloads but are not counted as such in most lists. They are mostly short lived and so make only a small contribution here.

Figure 2 shows the evolution of the debris population versus time; this year I mark Starlink satellites as a separate category. In Figure 3 to 6 I show subsets of this data for small and large objects (below/above 100 kg) and for the lower and upper parts of LEO (below/above 600 km), showing the dramatic difference in the population and its evolution for LLEO (Lower LEO, below 600 km) and ULEO (Upper LEO, 600-2000 km).

Table 14: Debris objects in orbit at end of year, 2014-2022

	Active Payloads	Dead Payloads	Alt Pay.	Rocket Bodies	Op. Debris	FY1C debris	Iridium/ Strela deb	Other debris	Spurious	Total
2014 Dec 31	1262	2560	10	1683	1432	3027	1667	6077	4	17723
2015 Dec 31	1364	2602	11	1721	1439	2955	1554	6683	4	18334
2016 Dec 31	1462	2655	10	1754	1451	2931	1508	6742	4	18518
2017 Dec 31	1778	2734	10	1785	1477	2915	1486	6709	4	18899
2018 Dec 31	2027	2805	10	1846	1533	2901	1464	6872	4	19463
2019 Dec 31	2272	2933	10	1874	1557	2889	1455	7162	5	20158
2020 Dec 31	3256	3102	11	1895	1574	2879	1442	7731	4	21895
2021 Dec 31	4800	3188	14	1926	1650	2857	1415	9550	2	25403
2022 Dec 31	6905	3139	15	1973	1614	2793	1320	8520	1	26281

Table 15: Mass of objects in orbit at end of year, 2014-2022(tonnes)

	Active Payloads	Dead Payloads	Alt Pay.	Rocket Bodies	Op. Debris	FY1C debris	Iridium/Strela deb	Other debris	Spurious	Total
2014 Dec 31	2544	1817	1	2919	151	0	0	1	0	7435
2015 Dec 31	2707	1845	1	3027	158	0	0	1	0	7741
2016 Dec 31	2839	1894	1	3113	163	0	0	1	0	8013
2017 Dec 31	2995	1935	1	3222	167	0	0	1	0	8323
2018 Dec 31	3178	1957	1	3396	167	0	0	1	0	8702
2019 Dec 31	3336	1996	1	3449	172	0	0	1	0	8958
2020 Dec 31	3660	2049	1	3502	178	0	0	1	0	9393
2021 Dec 31	4160	2077	1	3553	186	0	0	1	0	9981
2022 Dec 31	4935	2082	1	3676	178	0	0	1	0	10875

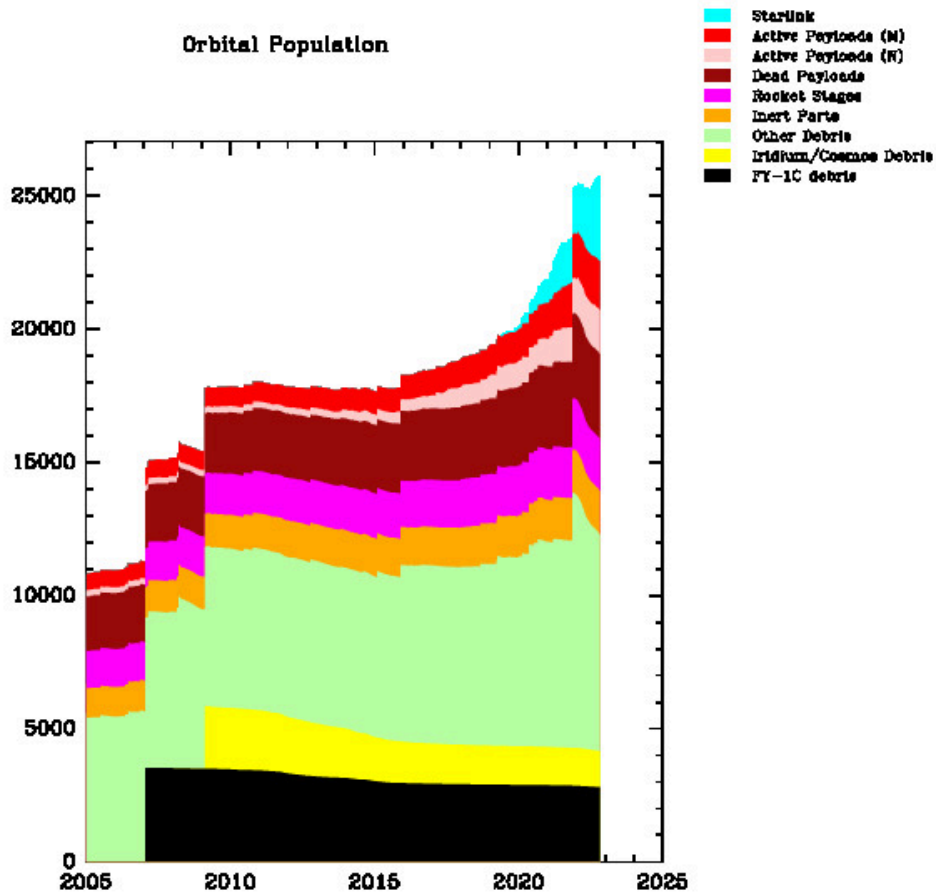


Figure 2: Orbital object population 1957-2022

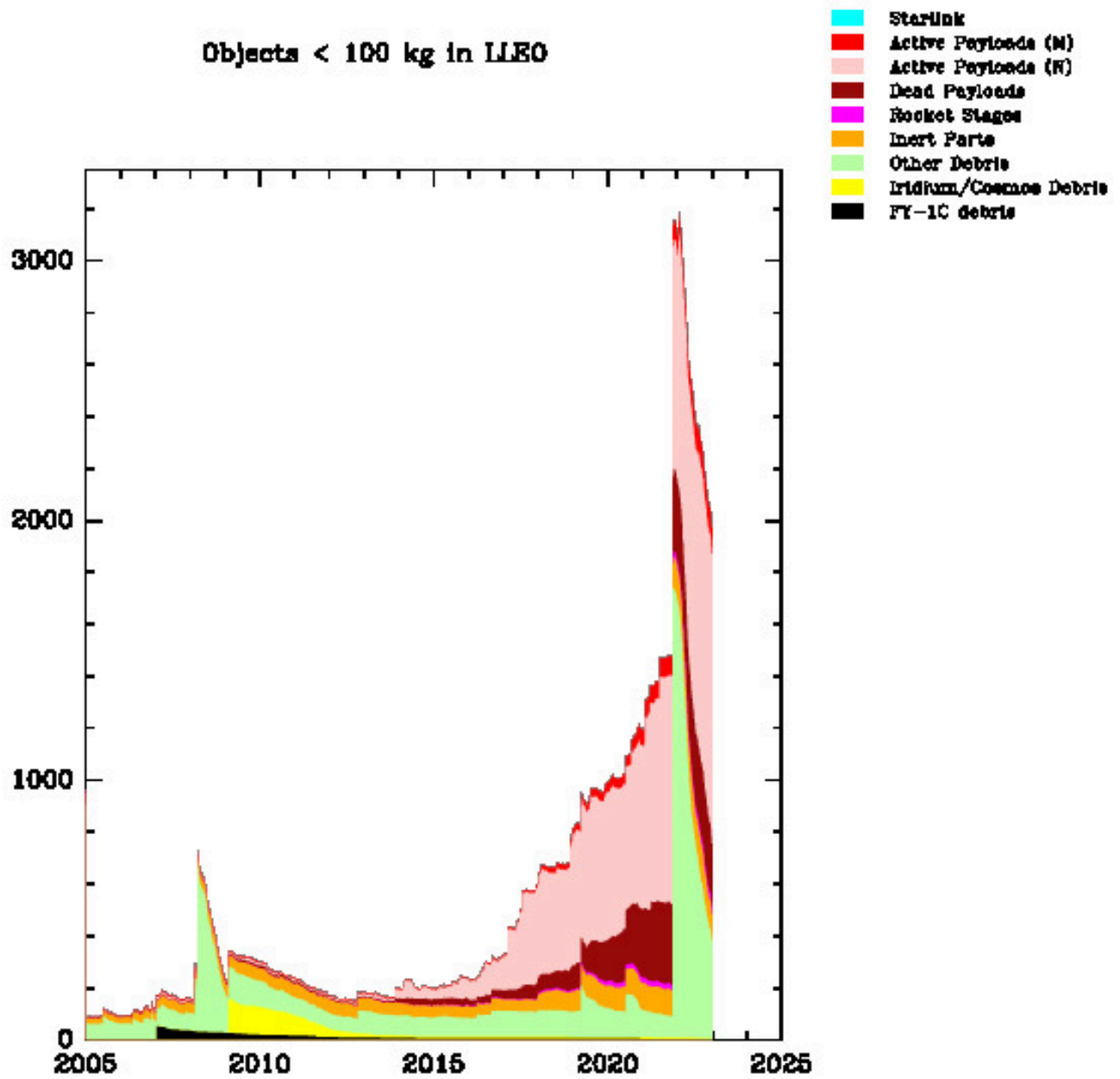


Figure 3: Time evolution of LEO debris and active satellite population (a): Small (<100 kg) objects in lower (< 600 km) LEO

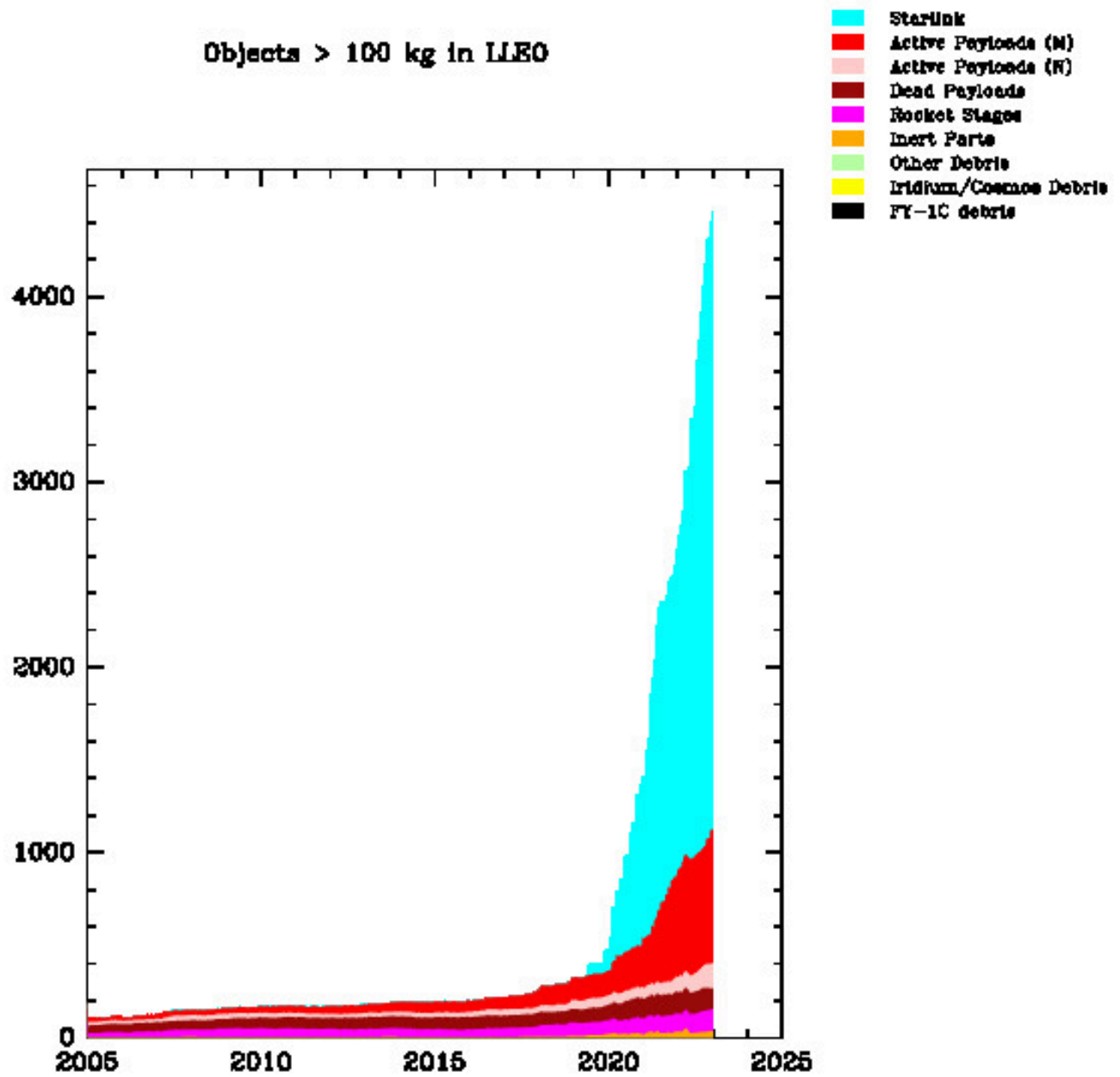


Figure 4: Time evolution of LEO debris and active satellite population (b): Big (>100 kg) objects in lower (< 600 km) LEO



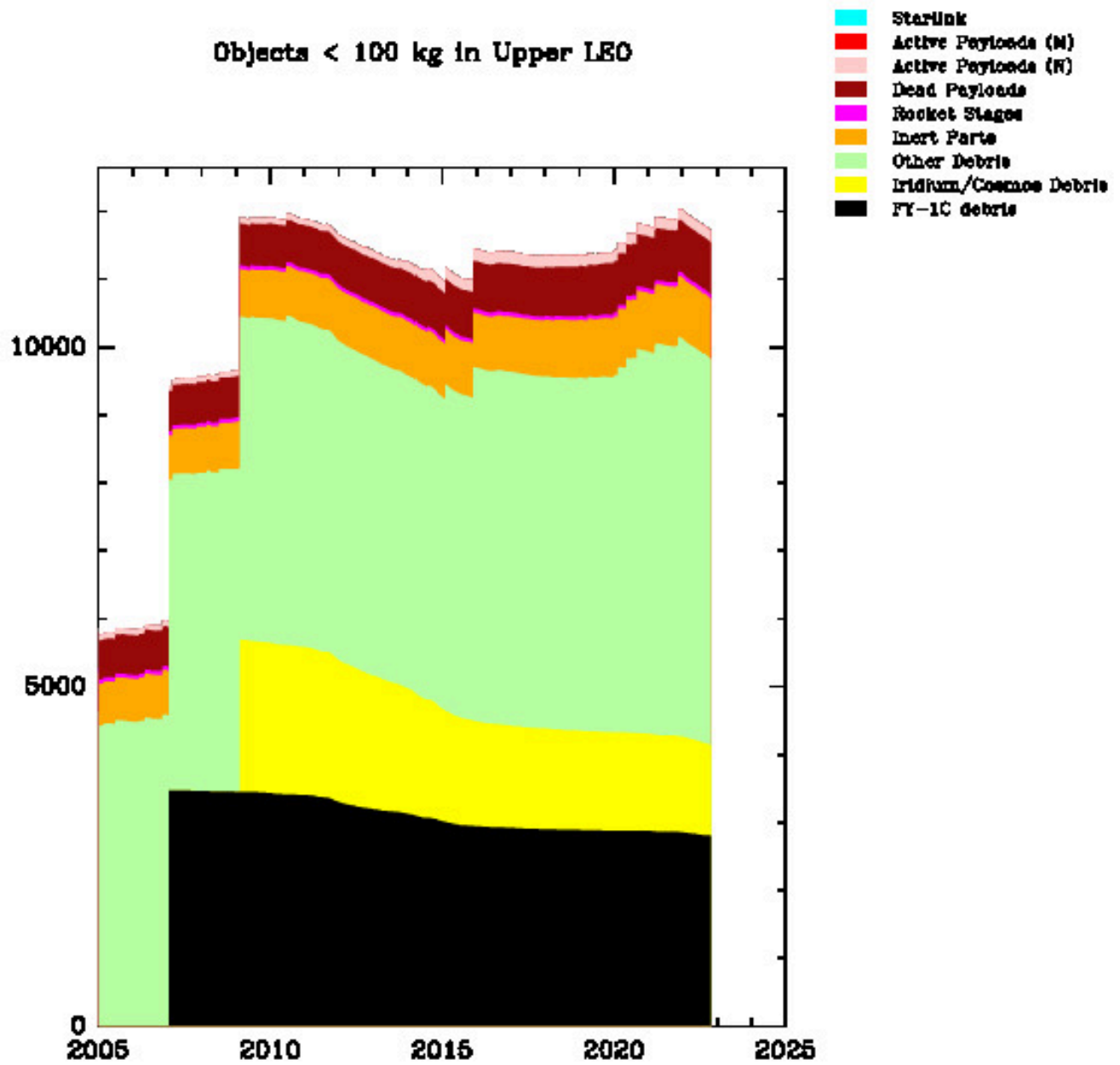


Figure 5: Time evolution of LEO debris and active satellite population (c): Small (<100 kg) objects in upper (> 600 km) LEO

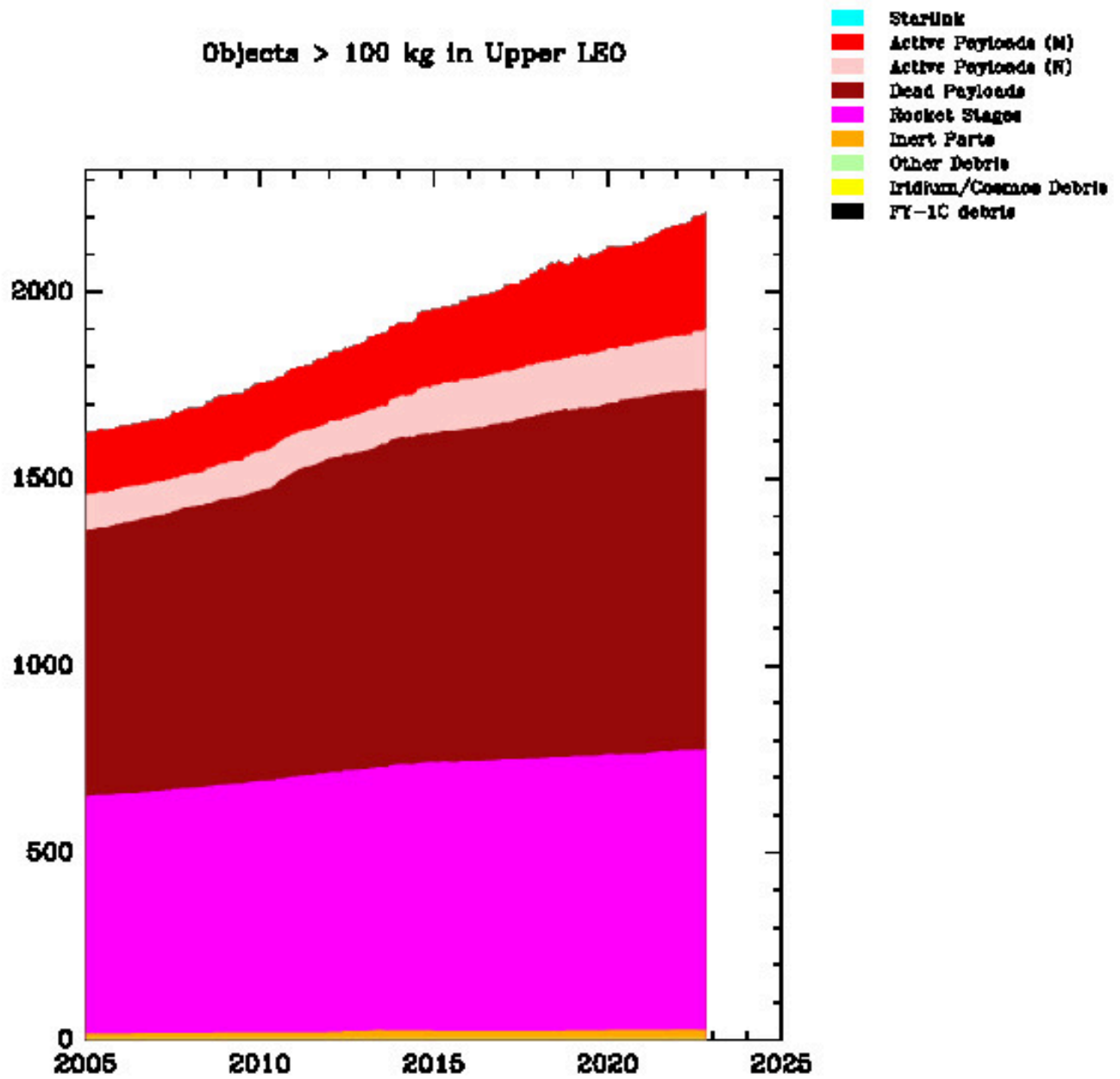


Figure 6: Time evolution of LEO debris and active satellite population (d): Big (>100 kg) objects in upper (> 600 km) LEO

## 6.1 Disposal of launch vehicle upper stages

For the 180 successful orbital launches I look at which launches went to which type of orbit, and whether rockets disposed of their upper stages in a controlled deorbit or whether they left one or more stages (and possibly associated debris) in orbit to decay naturally. Upper stages that achieve Earth escape are also counted as a controlled disposal.

The main orbit categories are SSO (Sun-synchronous low Earth orbit), ISS (International Space Station launches), LSS (Other low orbit space stations, currently only the Chinese one); Other LEO (Low Earth orbit except for SSO and ISS/LSS); GTO (Geotransfer orbit), Supersync transfer (geotransfer with initial apogee well above GEO); GEO direct (where launch vehicle upper stage deploys payload directly in geostationary orbit), 12-hour circular MEO orbits (as used by GPS), Molniya elliptical orbit, and deep space (beyond about 150,000 km and 'other high orbit').

I will note that some SSO/other LEO launches perform a perigee lowering disposal burn to ensure stage reentry within a few weeks. However, the reentry location is still uncontrolled in these cases. Cases where SSO/LEO perigee lowering is to below 180 km are noted with an asterisk in the table.

Table 16: Launches by orbit and launch-associated Earth orbit debris, 2022

Launch vehicle	Total launches	Launches with up- per stage disposal	Stages left in Earth orbit	Other LV debris
(a) SSO				
CALT CZ-11	2	0	2 (2*)	0
CALT CZ-2C	3	0	3	0
CALT CZ-2F	1	1	0	0
CALT CZ-8	1	0	1	0
Changzheng H. JL-3	1	0	1	0
ExPace KZ-11	1	0	1	0
ExPace KZ-1A	2	0	2 (1*)	0
Galactic E. Gushenxing-1	2	1	1	0
ISRO PSLV/GSLV	1	0	1	0
KARI KSLV2	1	0	1	0
Khrunichev Angara	2	2	0	0
NSIL PSLV/GSLV	1	0	1	0
Rocket Lab Electron	5	0	10	0
Roskosmos Soyuz	1	1	0	0
SAST CZ-2D	6	2	4	0
SAST CZ-4	7	0	7	0
SAST CZ-6	2	0	2	0
SpaceX Falcon 9	12	12	0	24
ULA Atlas V	1	1	0	0
ULA Delta 4	1	1	0	0
VVKO Soyuz	3	1	4	0
Zhongke TJ YG ZK-1	1	0	1	0
Total SSO	57	22	42 (3*)	24
(b) ISS				
NG Antares	2	0	2	0
Roskosmos Soyuz	5	0	5	0
SpaceX Falcon 9	5	5	0	0
ULA Atlas V	1	1	0	0
Total ISS	13	6	7	0

Table 16 (cont):				
Launch vehicle	Total launches	Launches with up- per stage disposal	Stages left in Earth orbit	Other LV debris
(c) LSS				
CALT CZ-2F	2	0	2	8
CALT CZ-5	2	0	2	0
CALT CZ-7	2	0	2	0
Total LSS	6	0	6	8
(d) Other LEO				
Arianespace Soyuz	1	1	0	0
Astra Rocket 3	1	0	1	0
CALT CZ-11	2	0	2 (1*)	0
CALT CZ-2C	3	0	3 (1*)	0
CALT CZ-3	1	0	1	0
ExPace KZ-1A	2	1	1	0
Firefly Alpha	1	0	1	0
IRGC Qased	1	0	1	0
ISRO SSLV	1	0	1	0
NSIL GSLV3	1	0	1	0
NSIL PSLV/GSLV	1	0	1	1
Rocket Lab Electron	3	0	6 (1*)	1
SAST CZ-2D	9	0	9	0
SAST CZ-4	4	0	4	0
SAST CZ-6	2	0	2	0
SpaceX Falcon 9	33	33	0	106
VO Launcher One	2	0	2	0
VVKO Soyuz	4	2	2	0
Total Other LEO	72	37	38 (3*)	108
(e) GTO Transfer				
Arianespace Ariane 5	2	0	2	2
CALT CZ-3	2	0	2	0
CALT CZ-7	1	0	1	0
SAST CZ-3	1	0	1	0
SpaceX Falcon 9	6	0	6	0
ULA Atlas V	2	0	2	0
Total GTO Transfer	14	0	14	2
(f) SuperSync Transfer				
Arianespace Ariane 5	1	0	1	0
SpaceX Falcon 9	1	0	1	0
Total SuperSync Transfer	2	0	2	0
(g) GEO Direct				
Khrunichev Proton	1	0	1	0
SpaceX Falcon Heavy	1	0	1	0
ULA Atlas V	3	0	3	1
Total GEO Direct	5	0	5	1

Table 16 (cont):				
Launch vehicle	Total launches	Launches with up- per stage disposal	Stages left in Earth orbit	Other LV debris
(h) MEO Transfer				
(i) 12-h MEO Direct				
ESA Vega	1	0	1	0
SpaceX Falcon 9	1	0	1	0
VVKO Soyuz	3	0	3	0
Total 12-h MEO Direct	5	0	5	0
(j) Molniya				
VVKO Soyuz	2	0	2	0
Total Molniya	2	0	2	0
(k) Deep Space				
NASA MSFC SLS	1	0	0	0
Rocket Lab Electron	1	0	2	0
SpaceX Falcon 9	2	0	0	0
Total Deep Space	4	0	2	0
Total Overall	180	65	123 (6*)	143

## 6.2 Orbituaries

Table 17 gives statistics on reentries in 2022, not including deliberate deorbit and landing.  
(Acknowledgements to Collin Krum for the revised section name).

Table 17: Uncontrolled Reentries 2022

	Number	Mass (t)
Active Payloads	253	34.4
Dead Payloads	133	13.4
Rocket Bodies	90	357.5
Operational debris	250	27.5
PRC ASAT/FY-1C debris	64	-
Strela/Iridium debris	96	-
Other fragment debris	1609	-

In this table, ‘active payloads’ represents payloads which were thought to be active at the beginning of the year.

## Controlled deorbits and landings

139 Starlink satellites reentered during 2022. The satellites orbits were lowered using thrusters but final reentry was uncontrolled.

The largest uncontrolled reentries were that of the CZ-5B Y3 and Y4 first stages. Debris from Y3 crashed in Borneo; Y4 reentered over the eastern Pacific [67],[68],[69], [70].

In addition to uncontrolled reentries, there were 13 controlled landings and 6 controlled deorbitings of spacecraft during 2022. 2 Russian Soyuz ships landed in Kazakhstan, one Crew Dragon and one Cargo Dragon ship splashed down in the Gulf of Mexico and two Crew Dragon and one Cargo Dragon off Florida’s Atlantic coast; two Shenzhou capsules landed near Jiuquan in Inner Mongolia. A Starliner capsule landed at White Sands; the Artemis I Orion splashed down off the coast of Baja California, the LOFTID spacecraft splashed down east of Hawaii and the X-37 OTV-6 landed at Kennedy Space Center.

Six space station cargo ships (one Cygnus, two Progress and three Tianzhou) were deorbited destructively, all over the southern Pacific Ocean.

Eight objects reentered and burned up on controlled trajectories associated with landings of spacecraft (Soyuz orbital and Soyuz/Shenhou propulsion modules and the Starliner and Orion service modules). Five Dragon trunks were discarded in orbit; four of these had made uncontrolled reentries by the end of the year. A Dragon trunk jettisoned in 2020 reentered over Australia on Jul 8, with significant debris discovered on the ground [71].

Table 18: Most massive uncontrolled reentries, 2022

COSPAR	Spacecraft	Date	Mass/kg	Location	Coords	Life (d)	Type
2021-133A	GMM PN/Persei 1L	2022 Jan 5 2108	4840.0	121W 14S		9.09	Reentry
2017-014B	Falcon 9-031 Stage 2	2022 Feb 6 0710?	4000.0?	Mexico		1788.05	Reentry
2021-128B	H-2A F45 Stage 2	2022 Feb 9 2320	4000.0	121E 29S		49.33	Reentry
2021-126B	Falcon 9-134 Stage 2	2022 Mar 8 0735?	4000.0?	56W 26S		79.15	Reentry
2019-097B	CZ-5 Y3 Stage 2	2022 May 2 0152?	5100.0	21E 12N?		856.55	Reentry
2017-025B	Falcon 9-034 Stage 2	2022 May 6 2305	4000.0?	126W 11S		1816.99	Reentry
2022-050D	CZ-7 Y5 Stage 2	2022 May 25 0928	6000.0	32E 10N		15.65	Reentry
2022-060B	CZ-2F Y14 Stage 2	2022 Jun 20 2228	5500.0	15W 31N		15.82	Reentry
2022-085B	CZ-5B Y3 Stage 1	2022 Jul 30 1651	21600.0	113E 3N		6.44	Reentry
2015-015B	H-2A F28 Stage 2	2022 Nov 2 0700?	4000.0	-		2778.24	Reentry
2022-143B	CZ-5B Y4 Stage 1	2022 Nov 4 1001	21600.0	114W 2S		4.10	Reentry
2022-152D	CZ-7 Y6 Stage 2	2022 Nov 15 0949	6000.0	40E 33S		3.32	Reentry
2015-004B	H-2A F27 Stage 2	2022 Dec 1 1115?	4000.0	-		2860.41	Reentry
2022-162B	CZ-2F Y15 Stage 2	2022 Dec 11 2002	5500.0	36E 21S		12.20	Reentry

For rocket upper stages deorbited soon after launch, the target impact zones are often many degrees in length along the orbit track, so the locations given below in Table 21 should not be taken too seriously.



Table 19: Landings and deorbits, 2022

COSPAR	Spacecraft	Date	Mass/kg	Location	Coords	Life (d)	Type
2021-127A	Dragon CRS-24	2022 Jan 24 2105	9000.0?	GM 86.2W 29.7N		34.46	Landing
2021-089A	Soyuz MS-19	2022 Mar 30 1128:36?	2903.0	47 20N 69 35E?		176.11	Landing
2021-092A	Shenzhou 13	2022 Apr 16 0156:37?	3240.0	41 39N 100 09E		182.40	Landing
2022-037A	Axiom Ax-1	2022 Apr 25 1706	9500.0?	80.25W 30.92N		17.08	Landing
2021-103A	Dragon Endurance (Crew-3)	2022 May 6 0443	9500.0?	83.9W 28.1N		176.11	Landing
2022-055A	Starliner OFT-2	2022 May 25 2249	8000.0	WSSH		6.00	Landing
2022-081A	Dragon CRS-25	2022 Aug 20 1853	9000.0?	80.2W 28.9N		36.76	Landing
2022-028A	S. P. Korolev	2022 Sep 29 1057	2903.0	47 20N 69 34E		194.79	Landing
2022-042A	Dragon Freedom (Crew-4)	2022 Oct 14 2055:03	9500.0?	80.1W 30.8N?		170.54	Landing
2022-150C	Bernard Kutter LOFTID	2022 Nov 10 1202:00?	1190.0	149.0W 19.5N		0.09	Landing
2020-029A	X-37B OTV-6	2022 Nov 12 1022	5000.0?	KSC SLF		908.88	Landing
2022-060A	Shenzhou 14	2022 Dec 4 1209	3240.0	100 03E 41 39N		182.39	Landing
2022-156A	Artemis I	2022 Dec 11 1740:30	9400.0	118.0W 27.5N?		25.45	Landing
2021-046A	Tianzhou-2	2022 Mar 31 1040	7000.0	S Pacific		305.91	Deorbit
2021-098A	Progress MS-18	2022 Jun 1 1151	4325.0	S POR		216.49	Deorbit
2022-015A	S.S. Piers Sellers	2022 Jun 29 0654:03	2326.0	160E 51S?		129.55	Deorbit
2021-085A	Tianzhou-3	2022 Jul 27 0331	7000.0	S POR		309.85	Deorbit
2022-014A	Progress MS-19	2022 Oct 24 0227?	4325.0	164W 30S		250.92	Deorbit
2022-050A	Tianzhou-4	2022 Nov 14 2335?	7000.0	170E 12S		189.23	Deorbit

Table 20: Vehicles deorbited soon after launch, 2022

COSPAR	Spacecraft	Date	Mass/kg	Location	Coords	Life (d)	Type
2022-001	Falcon 9-136 Stage 2	2022 Jan 6 2353?	3000.0?	3E 53S?		0.09	Deorbit
2022-002	Falcon 9-137 Stage 2	2022 Jan 13 1757?	3000.0?	62E 12S		0.11	Deorbit
2022-005	Falcon 9-138 Stage 2	2022 Jan 19 0409?	3000.0?	5E 51S?		0.09	Deorbit
2022-008B	Falcon 9-139 Stage 2	2022 Feb 1 0100?	4000.0?	113W 15S?		0.08	Deorbit
2022-009B	Falcon 9-140 Stage 2	2022 Feb 2 2155?	4000.0?	50N 141W?		0.06	Deorbit
2022-010	Falcon 9-141 Stage 2	2022 Feb 3 1846?	3000.0?	0W 52S?		0.02	Deorbit
2022-011	Fregat No. 111-401	2022 Feb 5 0912?	1000.0	124E 23N?		0.09	Deorbit
2022-012	Fregat No. 133-19	2022 Feb 10 2349:04	1000.0	45E 30S?		0.24	Deorbit
2022-016	Falcon 9-142 Stage 2	2022 Feb 21 1648?	3000.0?	0E 53S?		0.09	Deorbit
2022-017	Falcon 9-143 Stage 2	2022 Feb 25 1905?	3000.0?	105W 18S?		0.08	Deorbit
2022-022	Falcon 9-144 Stage 2	2022 Mar 3 1553?	3000.0?	2W 53S?		0.06	Deorbit
2022-025	Falcon 9-145 Stage 2	2022 Mar 9 1551?	3000.0?	3E 53S?		0.09	Deorbit
2022-029	Falcon 9-146 Stage 2	2022 Mar 19 0537?	3000.0?	100E 38S?		0.04	Deorbit
2022-033	Falcon 9-147 Stage 2	2022 Apr 1 1850?	3000.0?	70E 39S?		0.10	Deorbit
2022-037	Falcon 9-148 Stage 2	2022 Apr 8 1613?	3000.0?	102E 40S?		0.04	Deorbit
2022-040	Falcon 9-149 Stage 2	2022 Apr 17 1521?	3000.0?	116W 29S?		0.09	Deorbit
2022-041	Falcon 9-150 Stage 2	2022 Apr 21 2020?	3000.0?	92E 51S?		0.10	Deorbit
2022-042	Falcon 9-151 Stage 2	2022 Apr 27 0846?	3000.0?	98E 37S?		0.04	Deorbit
2022-044	Angara AM No. 1L	2022 Apr 29 2321?	400.0?	172W 37N		0.14	Deorbit
2022-045	Falcon 9-152 Stage 2	2022 Apr 29 2355?	3000.0?	98E 46S?		0.10	Deorbit
2022-048	CZ-2D Y79 Stage 2	2022 May 5 0332?	4006.0	80W 34S?		0.04	Deorbit
2022-049	Falcon 9-153 Stage 2	2022 May 6 1212?	3000.0?	98E 49S?		0.10	Deorbit
2022-051	Falcon 9-154 Stage 2	2022 May 14 0001?	3000.0?	102W 21S?		0.08	Deorbit
2022-052	Falcon 9-155 Stage 2	2022 May 14 2310?	3000.0?	95E 45S?		0.10	Deorbit
2022-053	Falcon 9-156 Stage 2	2022 May 18 1328?	3000.0?	94E 48S?		0.10	Deorbit
2022-055B	Centaur AV-082	2022 May 20 0009?	2130.0	S Ocean		0.05	Deorbit
2022-057	Falcon 9-157 Stage 2	2022 May 25 2034?	3000.0?	121W 52S		0.08	Deorbit
2022-062	Falcon 9-159 Stage 2	2022 Jun 17 1736?	3000.0?	124W 0N?		0.06	Deorbit
2022-063	Falcon 9-160 Stage 2	2022 Jun 18 1605?	3000.0?	150W 11N?		0.07	Deorbit
2022-064	Falcon 9-161 Stage 2	2022 Jun 19 0744?	3000.0?	150W 4N?		0.14	Deorbit
2022-076	Falcon 9-163 Stage 2	2022 Jul 7 1440?	3000.0?	120W 4N?		0.06	Deorbit
2022-077	Falcon 9-164 Stage 2	2022 Jul 11 0335?	3000.0?	160W 44S?		0.08	Deorbit
2022-081	Falcon 9-165 Stage 2	2022 Jul 15 0143?	3000.0?	125E 49S?		0.04	Deorbit
2022-083	Falcon 9-166 Stage 2	2022 Jul 17 1547?	3000.0?	123W 3N?		0.06	Deorbit
2022-084	Falcon 9-167 Stage 2	2022 Jul 22 1935?	3000.0?	161W 44S?		0.24	Deorbit
2022-086	Falcon 9-168 Stage 2	2022 Jul 24 1504?	3000.0?	126W 3S?		0.06	Deorbit
2022-089	Volga 14S46 No. 7?	2022 Aug 1 2245?	1120.0	166W 44S?		0.10	Deorbit
2022-096	Fregat No. 123-06	2022 Aug 9 0803?	1000.0	134W 11N?		0.09	Deorbit
2022-097	Falcon 9-170 Stage 2	2022 Aug 10 0342?	3000.0?	120W 5N?		0.06	Deorbit
2022-098	CZ-6 Y10 Stage 3	2022 Aug 10 0520?	1000.0?	90E 50S?		0.02	Deorbit
2022-099	Falcon 9-171 Stage 2	2022 Aug 12 2334?	3000.0?	161W 44S		0.08	Deorbit
2022-101	Falcon 9-172 Stage 2	2022 Aug 19 2048?	3000.0?	125W 0N?		0.06	Deorbit
2022-102B	KZ-1A Y15 Stage 4	2022 Aug 23 0330?	50.0?	120W 30S?		0.04	Deorbit
2022-103B	CZ-2D Y75 Stage 2	2022 Aug 24 0356?	4006.0	82W 30S?		0.04	Deorbit
2022-104	Falcon 9-173 Stage 2	2022 Aug 28 0508?	3000.0?	124W 0N?		0.06	Deorbit
2022-105	Falcon 9-174 Stage 2	2022 Aug 31 0735?	3000.0?	160W 42S?		0.08	Deorbit
2022-107	Falcon 9-175 Stage 2	2022 Sep 5 0438?	3000.0?	99E 49S?		0.10	Deorbit
2022-111	Falcon 9-176 Stage 2	2022 Sep 11 0415?	3000.0?	160W 17S?		0.12	Deorbit
2022-114	Falcon 9-177 Stage 2	2022 Sep 19 0145?	3000.0?	124W 0N?		0.06	Deorbit

Table 20: Vehicles deorbited soon after launch, 2022 (cont)

COSPAR	Spacecraft	Date	Mass/kg	Location	Coords	Life (d)	Type
2022-117	Delta 387	2022 Sep 25 0011?	3450.0	137W 12N?		0.07	Deorbit
2022-119	Falcon 9-178 Stage 2	2022 Sep 25 0058?	3000.0?	125W 0N?		0.06	Deorbit
2022-121	CZ-6 Y9 Stage 3	2022 Sep 27 0046?	1000.0?	82W 30S ??		0.04	Deorbit
2022-124	Falcon 9-179 Stage 2	2022 Oct 5 1654?	3000.0?	98E 37S?		0.04	Deorbit
2022-125	Falcon 9-180 Stage 2	2022 Oct 6 0105?	3000.0?	103W 20S		0.08	Deorbit
2022-135	Angara AM No. 2L	2022 Oct 15 2321?	400.0?	172W 37N		0.14	Deorbit
2022-136	Falcon 9-183 Stage 2	2022 Oct 20 1619?	3000.0?	120W 8N?		0.06	Deorbit
2022-137D	Volga 14S46 No. 8?	2022 Oct 22 1740?	1120.0	Pacific?		0.94	Deorbit
2022-141	Falcon 9-184 Stage 2	2022 Oct 28 0245?	3000.0?	165W 47N?		0.06	Deorbit
2022-150B	Centaur AV-098	2022 Nov 10 1140?	2020.0	142W 40N?		0.08	Deorbit
2022-155	Gushenxing-1 Stage 4	2022 Nov 16 0714?	150.0?	94W 30S?		0.04	Deorbit
2022-156	SLS Core Stage CS-1	2022 Nov 16 0833?	99300.0	130W 18N?		0.07	Targeted
2022-159	Falcon 9-188 Stage 2	2022 Nov 26 2020?	3000.0?	125E 49S?		0.04	Deorbit
2022-166	Falcon 9-189 Stage 2	2022 Dec 9 0101:08	3000.0?	65E 35S?		0.11	Deorbit
2022-172	CZ-11 Y12 Stage 4	2022 Dec 16 0700?	500.0	85W 29S?		0.03	Deorbit
2022-173	Falcon 9-191 Stage 2	2022 Dec 16 1340?	3000.0?	145W 4N		0.08	Deorbit
2022-175	Falcon 9-193 Stage 2	2022 Dec 17 2303?	3000.0?	128W 6N?		0.06	Deorbit
2022-177	Falcon 9-194 Stage 2	2022 Dec 28 1012?	3000.0?	33E 40S?		0.03	Deorbit
2022-179	Falcon 9-195 Stage 2	2022 Dec 30 0857?	3000.0?	46W 25N?		0.05	Deorbit

Table 21: Vehicles deorbited soon after separation, 2022

COSPAR	Spacecraft	Date	Mass/kg	Location	Coords	Sep Life (d)	Type
2021-089	Soyuz MS-19 BO	2022 Mar 30 1106?	1312.0	54E 40N?		0.00	Deorbit
2021-089	Soyuz MS-19 PAO	2022 Mar 30 1106?	2125.0	54E 40N?		0.00	Deorbit
2021-092	Shenzhou 13 Tuijin Cang	2022 Apr 16 0139?	2000.0?	98E 41N?		0.01	Deorbit
2022-055	Starliner SM	2022 May 25 2236?	4000.0	118W 21N?		0.02	Deorbit
2022-028	Soyuz MS-21 BO	2022 Sep 29 1035	1312.0	53E 39N?		0.00	Deorbit
2022-028	Soyuz MS-21 PAO	2022 Sep 29 1035	2125.0	53E 39N?		0.00	Deorbit
2022-060	Shenzhou 14 Tuijin Cang	2022 Dec 4 1152?	2000.0?	92E 41N?		0.00	Deorbit
2022-156	ESM-1 Bremen	2022 Dec 11 1725?	4900.0	119.0W 6.5N?		0.02	Deorbit

### 6.3 Retirements in the GEO belt

GEO and the GEO Graveyard

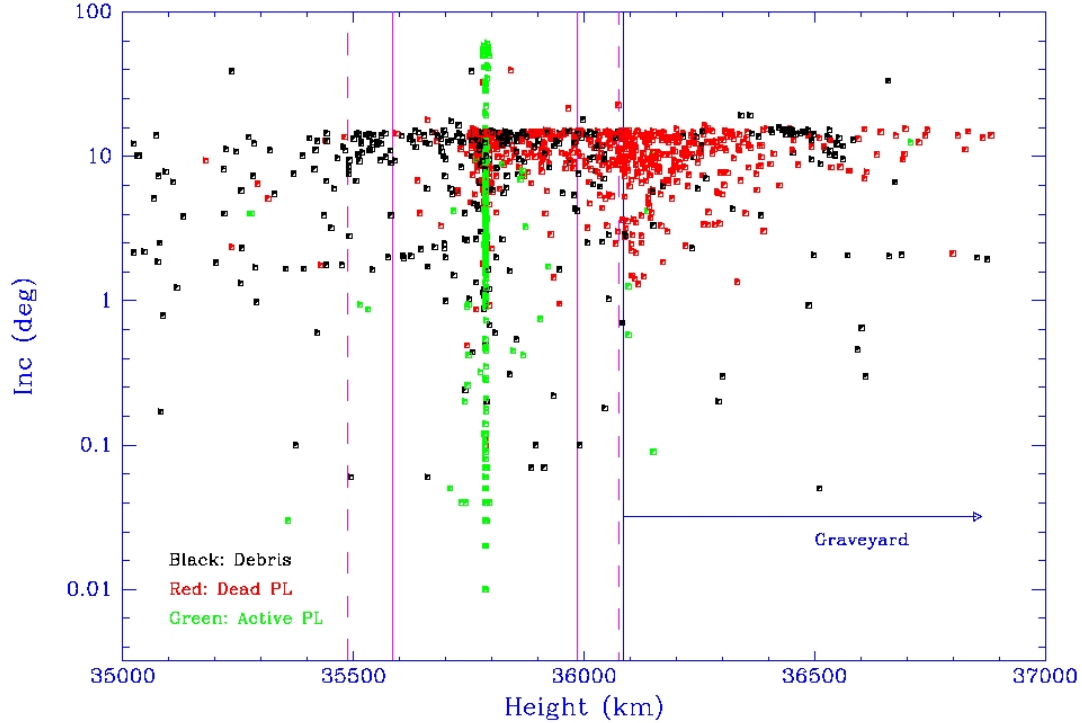


Figure 7: The figure shows log of orbital inclination vs orbital height for objects in the GEO region as of Jan 2021. Eccentricities are neglected. Active satellites (green), dead payloads (red) and debris (black) are indicated. The solid magenta lines are the GEO Protected Zone (GPZ = GEO+/-200 km). Dashed magenta lines are GPZ +/- 100 km (GEO +/- 300 km) used in the results table. Blue line (GEO+300 km) indicates start of the GEO graveyard.

The GEO graveyard is taken to be 300 km or more above GEO (GEO is at 35786 km height.) Counts of objects in various regimes are shown below. The category ‘Below GPZ’ is actually defined to be objects 300 km or more below GEO.

Table 22: GEO Population

	Active payloads	Dead payloads	Debris
Graveyard	4	17	79
GPZ+-100	583	367	260
Below GPZ	12	328	101
Total	599	712	440

The recommended GEO graveyard orbit begins at an altitude of 36086 km, 300 km above GEO. The table gives perigee and apogee altitude minus the GEO height of 35786 km, and is ordered by perigee.

During 2022, 10 satellites were retired from GEO; however 5 failed to reach the recommended 300 km

‘graveyard’ clearance above GEO.

Table 23: GEO retirements

ID	Satellite	Retired	Height above GEO in Jan 2023	Notes Notes
2010-042A	Zhongxing 6A	2022 Jan 25	151 x 170	
2002-044A	Hispasat 143W-1	2022 Jun 8	188 x 575	
2007-007A	Insat 4B	2022 Jan 28	281 x 397	
2007-056A	Star One C1	2022 Mar 14	292 x 394	
2000-081B	AMC 8	2022 Dec 2	297 x 340	
2002-015B	Astra 3A	2022 Nov 22	332 x 342	
2005-023A	Ekspress AM-3	2022 Mar 17	337 x 382	
1995-038A	DSCS III B-7	2022 Nov 10	447 x 466	
2002-040B	Meteosat 8	2022 Oct 18	604 x 751	
2008-019A	Tian Lian 1-01	2022 Feb 22	789 x 854	
Newly cataloged near-GEO debris				
2022-006C	Centaur AV-084	2022 Jan 22	389 x 2697	
2022-073C	Centaur AV-094	2022 Jul 2	407 x 4264	
2022-073D	USSF 12 Booster Adapter	2022 Jul 2	314 x 414	
1974-039D	deb Transtage 27	2022 Aug?	-268 x 15	
2022-123C	Centaur AV-099	2022 Oct 5	-3105 x -763	
2022-131B	Blok DM-03 No. 6L	2022 Oct 12	367 x 1079	
2022-144C	Falcon Heavy-004 Stage 2	2022 Nov 1	294 x 314	
2022-144D	USA 339 adapter?	2022 Nov 1	294 x 314	

## 6.4 Debris events

There were 4 significant breakups during 2022, the main one being the breakup of a Chang Zheng 6 upper stage [72]. The table indicates the number of objects cataloged so far from each, but note that often more objects are cataloged in later years following an event.

Table 24: Breakups and debris events 2022

2022 Apr 15	S32398	DM2-109L SOZ-1	3	387 x 19074 x 64.99	Residual prop
2022 Jul 3	S43674	H-2A F40 Adapter D	36	577 x 596 x 97.96	Unknown
2022 Nov 12 0525?	S54236	CZ-6A Y2	350	813 x 846 x 98.81	Residual prop
2022 Nov 17 2335	S38345	H-2A F21 Adapter F	1	604 x 611 x 98.21	Unknown

In addition, more fragments were cataloged from the earlier breakups. See the debris catalog [73] at

<https://planet4589.org/space/debris/debriscat/debris.html>

## 7 Special Topics

### 7.1 Artemis I

Eight years after the first test flight of an Orion capsule on a ULA Delta IV Heavy, the first launch of the SLS (Space Launch System) finally took place on Nov 16 [74]. Artemis I was the first test flight of the Block I SLS and of the full Orion spacecraft including the European Service Module. The Orion was sent to distant retrograde lunar orbit and back, splashing down in the Pacific on Dec 11.

The SLS Block I consists of:

- Two 5-segment Redesigned Solid Rocket Motors, RSRMV-1L and RSRMV-1R, with a launch mass of 726 tonnes and burnout mass of 99.0 tonnes each, developed by MSFC and Northrop Grumman/Utah.
- The SLS Core Stage, CS-1. CS-1, developed by Boeing, has a dry mass of 99.3 tonnes, 1102 tonnes fuelled, and is 64.6m long 8.4m diameter. CS-1 uses four refurbished RS-25 Space Shuttle Main Engines, 2045, 2056, 2058 and 2060.
- The Launch Vehicle Stage Adapter (LVSA), connecting the CS to the ICPS. It has a mass of 4.5 tonnes and is built by Teledyne Brown (Huntsville). The LVSA remains attached to CS-1.
- The Interim Cryogenic Propulsion Stage (ICPS), ICPS-1, with an RL10B-2 LOX/LH2 engine. ICPS is a modified 5-metre-diameter Delta Cryogenic Second Stage (DCSS) from the Delta IV rocket and is built by ULA. Dry mass of 3.8 tonnes; 32.7 tonnes fuelled.
- The Orion Stage Adapter (OSA), an 800 kg cylindrical section which remains attached to ICPS-1 and contains 10 cubesats that were deployed after launch.

The Orion Multi-Purpose Crew Vehicle (MPCV) spacecraft consists of:

- The Launch Abort System (LAS), consisting for this flight of a dummy Abort Motor, a dummy Attitude Motor, a live Jettison Motor and a nosecone covering the crew module. Mass of 7 tonnes.
- Orion Crew Module CM S/N 002, with three instrumented dummy astronauts to monitor radiation exposure, acceleration, temperature, etc. Built by JSC and Lockheed Martin with a mass of 10.4 tonnes.
- European Service Module ESM-001 "Bremen", with engine AJ10-190 OME S/N 111, which first flew in an OMS pod on Shuttle mission 41-G. Built by Airbus, dry mass around 4900 kg. 14 tonnes fuelled. Includes the Crew Module Adapter (CMA) (about 200 kg?) which connects it to the CM.
- Spacecraft Adapter Jettison (SAJ) panels 1 to 3, each with a mass of about 433 kg.
- Spacecraft Adapter Cone (SAC), connecting the ESM to the OSA, mass 450 kg. The SAC remains with the OSA/ICPS after Orion separates.

I have attempted to collate various NASA sources to determine a mass breakdown for Orion and for SLS. For the SLS, there is a 22 tonne discrepancy between the quoted total mass of Artemis I and the estimated mass of the pieces. (Note for American readers: 'tonne' = metric ton, 1000 kg).

For Orion:



	Launch mass (t)	Height (m)	Diameter (m)	Cumulative mass (t)	Cumulative height (m)
Orion LAS	7.6	11.3	-	7.6	11.3
Orion CM	9.4	4.6	5.0	17.0	15.9
Orion SM	14.0	4.8	5.0	31.0	20.0
Orion SAJ/SAC	1.7	-	-	32.7	20.0
Orion total	-	-	-	32.7	20.0

And for SLS:

	Launch mass (t)	Height (m)	Diameter (m)	Cumulative mass (t)	Cumulative height (m)
RSRMV-1L	726.0	54.7	3.7	726.0	-
RSRMV-1R	726.0	54.7	3.7	1452.0	-
CS-1	1102.0	64.6	8.4	2554.0	64.6
LVSA	4.5	8.4	8.4	2558.5	-
ICPS-1	32.7	12.2	5.1	2591.2	76.8
OSA	0.8	1.5	5.1	2592.0	78.3
SLS Blk1 total				2592.0	78.3
Orion	-	-	-	32.7	20.0
Artemis I (estimate)	-	-	-	2624.7	98.3
Artemis I (quoted)	-	-	-	2603.0	98.3

A comparison with previous moonships is instructive:

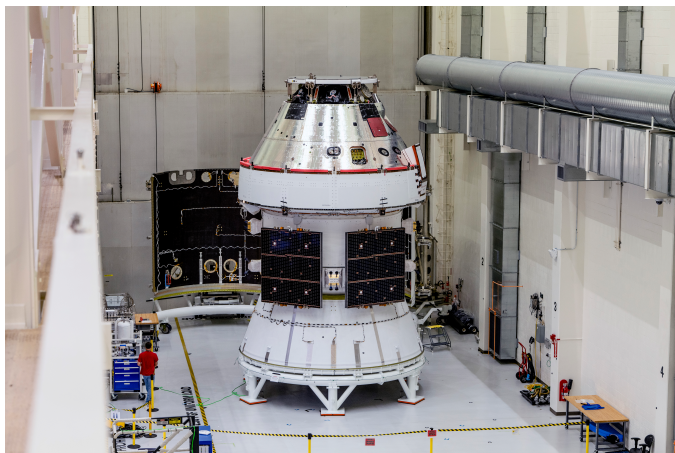
Rocket	Saturn V	N-1	SLS Block 1	SLS Rank
Spaceship	Apollo	L-3	Orion	
Rocket Length (m)	84.7	61.0	78.3	2
Rocket Dia (m)	10.1	16.8	8.4	3
Rocket Launch mass(t)	2850	2623	2592	3
Ship Length (m)	25.0	44.3	20.0	3
Ship Dia (m)	3.9	4.1	5.0	1
Ship Launch mass(t)	50	102	33	3
Combined L (m)	110.6	105.3	98.3	3
Combined D (m)	10.1	14.0	8.4	3
Combined M (t)	2900	2788	2585	3
Launch thrust (MN)	34.0	41.4	39.0	2
Max alt reached (km)	400,000	40	TBD	TBD

The cubesats deployed from ICPS had mixed results.

Mission	Post flyby target orbit	Actual result
Orion	DRO	DRO
ICPS	Solar orbit	0.99 x 1.01 AU x 0.1 deg
Lunar IceCube	Elliptical lunar orbit	No state vectors public, burn status unknown, claimed operational
OMOTENASHI	Lunar impact	Solar orbit, no contact
EQUULEUS	Lunar/EML orbits	No state vectors public, burn status unknown, claimed operational
BioSentinel	Solar orbit	No state vectors public, claimed operational
ArgoMoon	Deep Earth orbit?	No state vectors public, claimed operational
NEA Scout	Solar orbit	No state vectors public, no contact, mission lost
LunaH-Map	Lunar orbit	No state vectors public, burn failed, attempts to recover control continue
LunIR	Solar orbit	No state vectors public; weak signal claimed
Miles	Solar orbit	No state vectors public, claimed in contact
CuSP	Solar orbit	No state vectors public, claimed operational



Artemis I/SLS Credit: NASA



Artemis I Orion Credit: NASA



Artemis I Orion Credit: NASA



Artemis I Orion Credit: ESA

Mission log:

Date	Time	Event	Orbit (apo x peri x inc)
2022 Nov 16	0647:37	T-00:00:00:07 Ignition of RS-25 engines	
	0647:44	T+00:00:00:00 Launch from Mobile Launch Platform 1 at pad LC39B at Kennedy Space Center	
	0649:56	T+00:00:02:12 RSMRV-1L/1R shutdown and jettison at an altitude of 48 km; fall in Atlantic.	
	0650:55	T+00:00:03:11 SAJ panels 1 to 3 jettisoned at an altitude of 88 km; fall in Atlantic.	
	0651:00	T+00:00:03:16 LAS jettison at an altitude of 90? km and velocity 2.03 km/s; fall in Atlantic.	
	0653:08?	T+00:00:05:24 RSRMVs splash down in Atlantic	
	0655:47	T+00:00:08:03 CS-1 (RS-25 1 to 4) MECO (main engine cutoff), altitude 157 km	30 x 1808 km x 30.5 deg.
	0655:59	T+00:00:08:15 CS-1/LVSA separate from ICPS-1/OSA/Orion	30 x 1808 x 30.5
	0705:53	T+00:00:18:09 ESM-1 solar panels deployed, altitude 484 km	
	0739:46?	T+00:00:52:02 Apogee 1, 1810 km	
	0740:40	T+00:00:52:56 ICPS-1 22-second PRM perigee raise burn near apogee at 1791 km	181 x 1808 x 30.5
	0815?	T+00:01:27? ICPS-1 18m TLI translunar injection burn begins, altitude 388 km	

Date	Time	Event	Orbit (apo x peri x inc)
	0827?	T+00:01:40 Artemis/IPCS perigee at 247 km	
	0833?	T+00:01:46 CS-1/LVSA reentry over Pacific near 129W 15N	
	0835:10	T+00:01:47:26 ICPS-1 engine cutoff, translunar injection (TLI)	516 x 377200 x 30.52
	0845:20	T+00:01:57:36 ICPS-1/OSA/SAC separates from Artemis I Orion CM002/ESM-001 at 1.0m/s	
	0846:42	T+00:01:58:58 USS (Upper Stage Separation) burn: Service Module ESM-001 aux thrusters fire to increase separation rate of Orion from ICPS by 1.7m/s	
	1009:20	T+00:03:21:36 ICPS-1 disposal burn to escape trajectory	521 x 379650 x 30.3
	1030:02	OMOTENASHI deployed	
	1034	T+00:03:47 Cubesats Lunar IceCube, EQUULEUS, BioSentinel, Argo-Moon deployed from OSA (on ICPS-1)	521 x 379650 x 30.3
	1157	T+00:05:10 Cubesat NEA Scout deployed from OSA	532 x 377388 x 30.3
	1220	T+00:05:33 Cubesat LunaH-Map deployed from OSA	
	1250	T+00:06:03 Cubesat LunIR deployed from OSA	
	1350	T+00:07:03 Cubesat Team Miles deployed from OSA	
	1434	T+00:07:47 Artemis I ESM-1 OTC-1 trajectory correction burn 1 using aux thrusters	
	1450	T+00:08:03 Cubesat CuSP deployed from OSA	
	2330	T+00:16:43 OTC-2 burn	
	2337	IPCS pass EL1:4 per official traj	
	2337	T+00:16:50 Artemis I now 150,000 km altitude, I enter it in my Deep Space Catalog	
	2340	T+00:16:53 ICPS-1 and cubesats now 150,000 km altitude, I enter them in my Deep Space Catalog	
2022 Nov 20	1212	OTC-3 1.0 m/s	
	1909	Artemis-1 within lunar sphere	142 x -17815 x 173.54
	2148	ICPS within lunar sphere	
2022 Nov 21	0744	OTC-4	
2022 Nov 21	1244	Periapsis burn 2.5min 178.6 m/s	
	1257	Periapsis 130.6 km; 1700 kg of SM prop used to date	130 x 134752 x 173.5
	1259	AOS	
	1539	ICPS flyby	128 x -17944 x 157.1
	1551:11	OMO flyby 1880 km? LunaHMap flyby 1300 km, no insertion burn	
	1625	EQU flyby at 5000 km	
2022 Nov 22	0602	OTC-5 R-4D-11 burn 5.9s 1m/s	
	0913	ICPS exit lunar sphere, official traj	
	0916	ICPS exit lunar sphere, Gray traj	
2022 Nov 23	0354	T+06:21:06 Artemis I depart lunar Hill Sphere	
2022 Nov 24	2152	OTC-6 17s 3m/s	
2022 Nov 25	1339	T+09:06:52 Artemis I apolune 1 92712 km (orbit -1542 x 97213 km x 10.6)	
2022 Nov 25	2152:48	DRO insertion burn, OME-111 engine, 1:45	
2022 Nov 27	1930:18	OMO pass lunar orbit again?	
2022 Nov 28	2048	T+12:14:01 Artemis I perilune 2 69272 km	
2022 Nov 28	2106	T+12:14:19 Artemis I overall apogee 432193 km	
2022 Dec 1	2153	T+16:15:06 Artemis I DRO Departure burn with OME-111 engine	-1448 x 86488 x 34.0
2022 Dec 3	0600		-1588 x 94300 x 56.0
2022 Dec 3	2300		-1463 x 104620 x 136.2
2022 Dec 5	1630		129 x 105812 x 162.3
2022 Dec 5	1643:23	Powered flyby burn 3:27 293 m/s	
	1646:50	Flyby burn cutoff	135 x -12100 x 162.2
2022 Dec 6	0850?	OTC?	-55 x -12180 x 162.0

Date	Time	Event	Orbit (apo x peri x inc)
2022 Dec 6	0731	Artemis depart Lunar sphere	
2022 Dec 6	1200		1900 x 396130 x 96.9
2022 Dec 7	1200		594 x 396372 x 90.0
2022 Dec 10		RTC-5	
2022 Dec 11	1230s	RTC-6	52 x 392747 x 85.7
2022 Dec 11		ICPS exit Earth sphere, official traj	
	1700:11	CM/SM sep, alt 5150km	
	1703:41	CM raise burn 16s 2.5m/s	
2022 Dec 11	1720:14	EI 120W 27S	
	1720:16	Blackout 1 4:48	
	1725:04	End of blackout 1	
		Min pre-skip alt 60.9 km	
		Begin skip	
	1726?	SM entry 119.0W 6.5N?	
	1727	Skip apogee 89.6 km 120W 8N?	
		Descent	
	1729:03	Blackout 2	
	1731:00	End of blackout 2	
	1736	Fwd Bay cover chutes deploy with cover, 10.7 km	
	1736	Drogues stage 1 7 km	
		Drogues stage 2	
		Drogues full open	
		Drogues sep 2.1 km	
		Pilot chutes 1.7 km	
	1737	Mains st 1	
		Mains st 2	
		Mains full open 500m	
	1740:30	Splash 118.3W 27.6N?	

## 7.2 Shiyan satellites

The Shiyan (‘Test’) satellites are a cover name for various Chinese government satellites. A number of these were launched in 2022 with unknown missions.

- Shiyan 13, launched Jan 17 into elliptical LEO of 360 x 1290 km [75]. The satellite has made small maneuvers; on Sep 26 it lowered apogee by 30km and then on Nov 16 it was reboosted to 1290 km.
- Shiyan 14 is a SAST satellite launched to 500 km SSO with 0600 local time orbital plane on Sep 24. No orbit maneuvers to date.
- Shiyan 15 is a SAST imaging test satellite launched along with Shiyan 14 [37]. No orbit maneuvers.
- Shiyan 16A, 16B and 17 were launched together on Sep 26 to 510 km SSO with 0700 LTDN. No obvious orbit maneuvers and the satellites have drifted apart along their orbit [76].
- Three Shiyan 20 satellites were launched: 20C (CAS Microsat) on Oct 29, and 20A (CAST) and 20B (SAST) on a single rocket on Dec 12 [77]. SY20A and 20B are in the same orbital plane, but as of Dec 29 were synchronized 30 degrees apart. SY20C is in an orbital plane 60 degrees away from the other two satellites. All three satellites have made small orbit adjustments.
- Shiyan 21 was launched on Dec 16 to a 36 degree LEO and has not maneuvered as of Jan 1 [78].
- Shiyan 10-02 was launched on Dec 29 to a highly elliptical 51 degree orbit similar to that of Shiyan 10-01. It may be studying component exposure to the radiation belts.

### 7.3 SJ-21

The early part of the Shi Jian 21 (SJ-21) mission was discussed in the 2021 report. After completing proximity operations with its subsatellite on 2021 Dec 26, SJ-21 approached the failed Beidou 2-G2 navigation satellite drifting in GEO. After remaining close to it from Dec 26 to 2022 Jan 9, it retreated to a distance of 2000 km and then on Jan 20 to 21 reapproached Beidou, capturing it. Over the next few days the combined SJ-21/Beidou vehicle raised orbit to the GEO graveyard. By Jan 27, Beidou had been released into the graveyard orbit and SJ-21 had lowered its orbit back into GEO [79].

This is the first case of actual active debris removal from GEO. It was expected that SJ-21 might repeat the exercise with another satellite, but this has not yet happened. SJ-21 was kept in an orbit that crosses the GEO belt with a slow (0.4 deg/day) eastward drift until it reached 165E on Nov 2, when the direction of drift was reversed, probably to keep it within range of Chinese tracking stations.

SJ-21/Beidou 2G2 separation

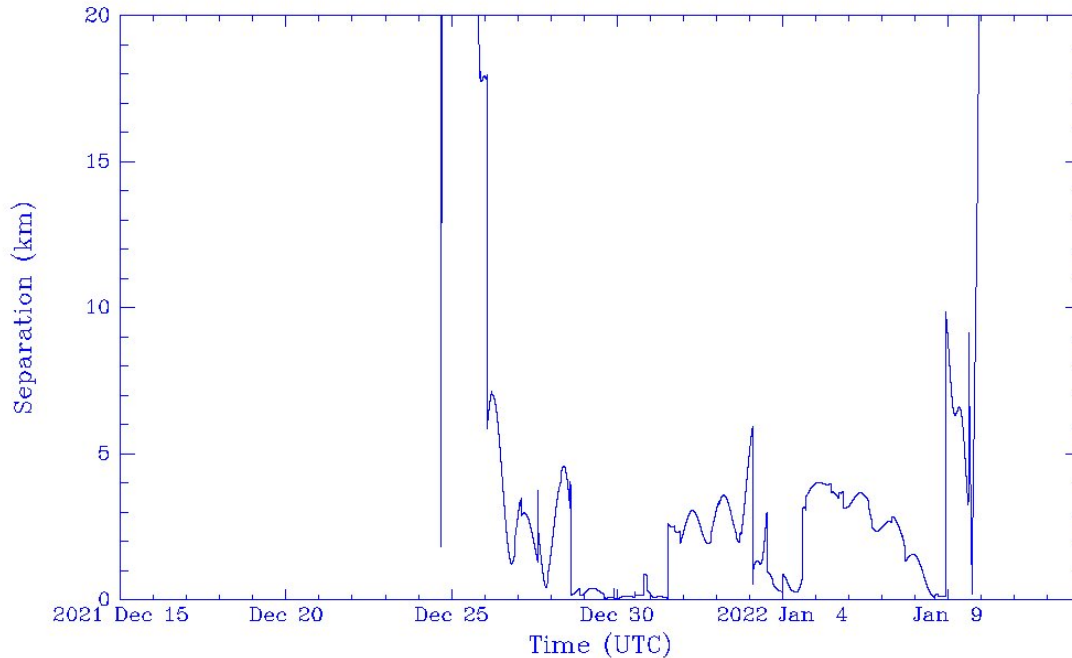


Figure 8: SJ-21 and Beidou 2-G2 separation vs time

### 7.4 New Chinese launch vehicles

Several new small Chinese orbital vehicles have flown in the past few years, some of them quite similar. I summarize them here:

- Changzheng Houjian (Long March Rocket Co.) is a commercial subsidiary of the government CASC agency. Its Jielong-3 ('Smart Dragon 3') rocket is a 4-stage vehicle with three solid stages and a bipropellant fourth stage. Main diameter is 2.65m and LEO capacity is around 1500 kg. The first launch, on Dec 9 from a barge in the Yellow Sea, was successful and placed a cluster of satellites in SSO.

- Zhongke Xingrui Keji (Zhongke Aerospace Exploration Co.) is a commercial provider using the Lijian-1 (also called ZK-1 or Zhongke-1) 4-stage solid launch vehicle. The ZK-1 is very similar to the Jielong-3 except possibly for the fourth stage. The first Lijian-1/KZ-1 launch on Jul 27 from Jiuquan was also a successful flight to SSO.
- EXPACE is a well-established commercial arm of the government CASIC agency and has been flying the Kuaizhou-1A since 2017. Its larger Kuaizhou-11 vehicle had a launch failure in 2020 but flew successfully on Dec 7. KZ-11 is a three stage solid vehicle with a diameter of 2.2m. KZ-11 is not to be confused with the government CASC/CALT agency's very similar 4-stage CZ-11 (Chang Zheng 11), flying since 2015.
- Xinghe Dongli Kongjian Keji YG (Galactic Energy Space Tech Co.) has a rocket called Gushenxing-1 (Ceres-1 in English). The rocket has three solid stages and a liquid propellant insertion stage, and is 1.4m in diameter. All four launches of Gushenxing-1 from Jiuquan, in 2020-2022, have successfully placed satellites in SSO.
- Xingji Rongyao Kongjian Keji YG (Beijing Interstellar Glory Space Technology Co.) does business in English as iSpace (do not confuse this iSpace, however, with the Japanese company of the same name which owns the Hakuto-R moon probe). Xingji Rongyao's Shuang Quxian 1 rocket (Hyperbola-1 in English marketing) reached orbit on its first attempt in 2019 but has had three successive failures since then. The SQ-1 is 1.4m in diameter, like Gushenxing-1.

The rockets described above are solid propellant launch vehicles thought to be based on demilitarized Chinese ballistic missile motors. The final entry I will describe is quite different:

- Lanjian Kongjian Keji YG (Lanjian Hangtian for short, marketed as LandSpace in English) developed the Zhuque-2 two-stage methalox rocket. The rocket is comparable to the CZ-2/4 in size, with the same 3.35m diameter. Its first launch on Dec 14 from Jiuquan failed to reach orbit, but did get into space with an apogee of 400 km, making it the world's first methane-fuelled rocket to reach space - a significant achievement [80].

## **8 Acknowledgements**

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## Appendix 1: 2022 Orbital Launch Attempts

LAUNCH ID	Launch date UTC	Launch vehicle	LV Flight ID	Site	Agency
2022-001	2022 Jan 6 2149	Falcon 9	136/B1062.4	KSC LC39A	SPX
2022-002	2022 Jan 13 1525	Falcon 9	137/B1058.10	CC LC40	SPX
2022-003	2022 Jan 13 2252	LauncherOne	R05	B747-744 MHV RW12/30	VORB
2022-004	2022 Jan 17 0235	Chang Zheng 2D	Y70	TYSC LC9	SAST
2022-005	2022 Jan 19 0202:40	Falcon 9	138/B1060.10	KSC LC39A	SPX
2022-006	2022 Jan 21 1900:00	Atlas V 511	AV-084	CC SLC41	ULAL
2022-007	2022 Jan 25 2344	Chang Zheng 4C	Y29	JQ LC43/94	SAST
2022-008	2022 Jan 31 2311	Falcon 9	139/B1052.3	CC LC40	SPX
2022-009	2022 Feb 2 2027:26	Falcon 9	140/B1071.1	VSFBS SLC4E	SPX
2022-010	2022 Feb 3 1813:20	Falcon 9	141/B1061.6	KSC LC39A	SPX
2022-011	2022 Feb 5 0700:00	Soyuz-2-1A	780-72-195/ 111-401	GIK-1 LC43/4	VVKO
2022-012	2022 Feb 10 1809:37	Soyuz-ST-B	Ya15000-018/133-19	CSG ELS	AE
2022-F01	2022 Feb 10 2000	Astra Rocket 3.3	LV0008	SPFLA SLC46	ASTRV
2022-013	2022 Feb 14 0029	PSLV-XL	PSLV-C52	SHAR FLP	ISRO
2022-014	2022 Feb 15 0425:40	Soyuz-2-1A	S 15000-056	GIK-5 LC31	FKA
2022-015	2022 Feb 19 1740:03	Antares 230+	2TRS2S1.16? (16)	MARS Pad 0A	NGIS
2022-016	2022 Feb 21 1444:20	Falcon 9	142/B1058.11	CC LC40	SPX
2022-017	2022 Feb 25 1712:10	Falcon 9	143/B1063.4	VSFBS SLC4E	SPX
2022-018	2022 Feb 26 2344	Chang Zheng 4C	Y30	JQ LC43/94	SAST
2022-019	2022 Feb 27 0306:28	Chang Zheng 8	Y2	WEN LC201	CALT
2022-020	2022 Feb 28 2037:25	Electron	24	MAHIA LC1B	RLABN
2022-021	2022 Mar 1 1438:00	Atlas V 541	AV-095	CC SLC41	ULAL
2022-022	2022 Mar 3 1425:00	Falcon 9	144/B1060.11	KSC LC39A	SPX
2022-023	2022 Mar 5 0601	Chang Zheng 2C	Y62	XSC LC2	CALT
2022-024	2022 Mar 8 0506?	Qased	OM-C2	SHAHR LP1	IRGC
2022-025	2022 Mar 9 1345:00	Falcon 9	145/B1052.4	CC LC40	SPX
2022-026	2022 Mar 15 1622	Astra Rocket 3.3	LV0009	PSCA LP3B	ASTRV
2022-027	2022 Mar 17 0709	Chang Zheng 4C	Y47	JQ LC43/94	SAST
2022-028	2022 Mar 18 1555:18	Soyuz-2-1A	S 15000-050	GIK-5 LC31	FKA
2022-029	2022 Mar 19 0442:30	Falcon 9	146/B1051.12	CC LC40	SPX
2022-030	2022 Mar 22 1248:22	Soyuz-2-1A	760-97-216/ 111-30x	GIK-1 LC43/4	VVKO
2022-031	2022 Mar 29 0950	Chang Zheng 6A	Y1	TYSC LC9A	SAST
2022-032	2022 Mar 30 0229	Chang Zheng 11	Y10	JQ LC43/95	CALT
2022-033	2022 Apr 1 1624:16	Falcon 9	147/B1061.7	CC LC40	SPX
2022-034	2022 Apr 2 1241:38	Electron	25	MAHIA LC1A	RLABN
2022-035	2022 Apr 6 2347	Chang Zheng 4C	Y38	JQ LC43/94	SAST
2022-036	2022 Apr 7 1120:18	Soyuz-2-1B	-	GIK-1 LC43/3	VVKO
2022-037	2022 Apr 8 1517:11	Falcon 9	148/B1062.5	KSC LC39A	SPX
2022-038	2022 Apr 15 1200	Chang Zheng 3B	Y89	XSC LC2	CALT
2022-039	2022 Apr 15 1816	Chang Zheng 4C	Y28	TYSC LC9	SAST
2022-040	2022 Apr 17 1313	Falcon 9	149/B1071.2	VSFBS SLC4E	SPX
2022-041	2022 Apr 21 1751:40	Falcon 9	150/B1060.12	CC LC40	SPX
2022-042	2022 Apr 27 0752:55	Falcon 9	151/B1067.4	KSC LC39A	SPX
2022-043	2022 Apr 29 0411:33	Chang Zheng 2C	Y70	JQ LC43/94	CALT
2022-044	2022 Apr 29 1955:22	Angara-1.2	71602?/1L	GIK-1 LC35/1	KHRU
2022-045	2022 Apr 29 2127:10	Falcon 9	152/B1062.6	CC LC40	SPX
2022-046	2022 Apr 30 0330	Chang Zheng 11	Y3	CCOC HHAI LP3	CALT
2022-047	2022 May 2 2249:52	Electron	26	MAHIA LC1A	RLABN
2022-048	2022 May 5 0238	Chang Zheng 2D	Y79	TYSC LC9	SAST
2022-049	2022 May 6 0942:00	Falcon 9	153/B1058.12	KSC LC39A	SPX
2022-050	2022 May 9 1756:37	Chang Zheng 7	Y5	WEN LC201	CALT
2022-F02	2022 May 13 0709	Shuang Quxian 1	Y4	JQ LC43/95B	XJRY
2022-051	2022 May 13 2207:50	Falcon 9	154/B1063.5	VSFBS SLC4E	SPX
2022-052	2022 May 14 2040:50	Falcon 9	155/B1073.1	CC LC40	SPX
2022-053	2022 May 18 1059:40	Falcon 9	156/B1052.5	KSC LC39A	SPX
2022-054	2022 May 19 0803:32	Soyuz-2-1A	780-21-118?	GIK-1 LC43/4	VVKO

2022-055	2022 May 19 2254:47	Atlas V N22	AV-082	CC SLC41	ULAL
2022-056	2022 May 20 1030	Chang Zheng 2C/YZ-1S	Y53	JQ LC43/94	CALT
2022-057	2022 May 25 1835:00	Falcon 9	157/B1061.8	CC LC40	SPX
2022-058	2022 Jun 2 0400	Chang Zheng 2C	Y65	XSC LC3	CALT
2022-059	2022 Jun 3 0932:54	Soyuz-2-1A	Ya15000-128	GIK-5 LC31	FKA
2022-060	2022 Jun 5 0244:10	Chang Zheng 2F	Y14	JQ LC43/91	CALT
2022-061	2022 Jun 8 2104	Falcon 9	158/B1062.7	CC LC40	SPX
2022-F03	2022 Jun 12 1743:00	Astra Rocket 3.3	LV0010	SPFLA SLC46	ASTRV
2022-062	2022 Jun 17 1608:50	Falcon 9	159/B1060.13	KSC LC39A	SPX
2022-063	2022 Jun 18 1419:52	Falcon 9	160/B1071.3	VSFBS SLC4E	SPX
2022-064	2022 Jun 19 0427:36	Falcon 9	161/B1061.9	CC LC40	SPX
2022-065	2022 Jun 21 0700:00	Nuri	2	NARO LC2	KARI
2022-066	2022 Jun 22 0208	Kuaizhou-1A	Y23	JQ LC43/95	EXPACE
2022-067	2022 Jun 22 2150:07	Ariane 5ECA+	VA257 (5116)	CSG ELA3	AE
2022-068	2022 Jun 23 0222	Chang Zheng 2D	Y64	XSC LC3	SAST
2022-069	2022 Jun 27 1546	Chang Zheng 4C	Y41	JQ LC43/94	SAST
2022-070	2022 Jun 28 0955	Electron	27	MAHIA LC1B	RLABN
2022-071	2022 Jun 29 2104	Falcon 9	162/B1073.2	CC LC40	SPX
2022-072	2022 Jun 30 1232	PSLV	PLSV-C53	SHAR SLP	NSIL
2022-073	2022 Jul 1 2315:00	Atlas V 541	AV-094	CC SLC41	ULAL
2022-074	2022 Jul 2 0653:00	LauncherOne	R06	B747-744 MHV RW12/30	VORB
2022-075	2022 Jul 7 0918:06	Soyuz-2-1B	Ya15000-056/ 112-13	GIK-1 LC43/4	VVKO
2022-076	2022 Jul 7 1311:00	Falcon 9	163/B1058.13	CC LC40	SPX
2022-077	2022 Jul 11 0139:40	Falcon 9	164/B1063.6	VSFBS SLC4E	SPX
2022-078	2022 Jul 12 1630	Chang Zheng 3B	Y85	XSC LC2	CALT
2022-079	2022 Jul 13 0630	Electron	28	MAHIA LC1A	RLABN
2022-080	2022 Jul 13 1313:17	Vega C	VV21	CSG ZLV	ESA
2022-081	2022 Jul 15 0044:22	Falcon 9	165/B1067.5	KSC LC39A	SPX
2022-082	2022 Jul 15 2257:16	Chang Zheng 2C	Y71	TYSC LC9	CALT
2022-083	2022 Jul 17 1420:00	Falcon 9	166/B1051.13	CC LC40	SPX
2022-084	2022 Jul 22 1349:40	Falcon 9	167/B1071.4	VSFBS SLC4E	SPX
2022-085	2022 Jul 24 0622:30	Chang Zheng 5B	Y3	WEN LC101	CALT
2022-086	2022 Jul 24 1338:20	Falcon 9	168/B1062.8	KSC LC39A	SPX
2022-087	2022 Jul 27 0412	Lijian-1	Y1	JQ LC130	ZKYT
2022-088	2022 Jul 29 1328	Chang Zheng 2D	Y65	XSC LC3	SAST
2022-089	2022 Aug 1 2025	Soyuz-2-1V	-	GIK-1 LC43/4?	VVKO
2022-090	2022 Aug 4 0308	Chang Zheng 4B	Y40	TYSC LC9	SAST
2022-091	2022 Aug 4 0500	Electron	29	MAHIA LC1B	RLABN
2022-092	2022 Aug 4 1029:00	Atlas V 421	AV-097	CC SLC41	ULAL
2022-093	2022 Aug 4 1600?	Chang Zheng 2F	Y13	JQ LC43/91	CALT
2022-094	2022 Aug 4 2308:48	Falcon 9	169/B1052.6	CC LC40	SPX
2022-U02	2022 Aug 7 0348:00	SSLV	SSLV-D1	SHAR FLP	ISRO
2022-095	2022 Aug 9 0411	Gushenxing 1	Y3	JQ LC43/95?	XIDO
2022-096	2022 Aug 9 0552:38	Soyuz-2-1B	Ya15000-055/ 123-06	GIK-5 LC31	FKA
2022-097	2022 Aug 10 0214:40	Falcon 9	170/B1073.3	KSC LC39A	SPX
2022-098	2022 Aug 10 0450	Chang Zheng 6	Y10	TYSC LC9	SAST
2022-099	2022 Aug 12 2140:20	Falcon 9	171/B1061.10	VSFBS SLC4E	SPX
2022-100	2022 Aug 19 1736	Chang Zheng 2D	Y66	XSC LC3	SAST
2022-101	2022 Aug 19 1921:20	Falcon 9	172/B1062.9	CC LC40	SPX
2022-102	2022 Aug 23 0236	Kuaizhou-1A	Y15	XSC	EXPACE
2022-103	2022 Aug 24 0301	Chang Zheng 2D	Y75	TYSC LC9	SAST
2022-104	2022 Aug 28 0341:30	Falcon 9	173/B1069.2	CC LC40	SPX
2022-105	2022 Aug 31 0540:10	Falcon 9	174/B1063.7	VSFBS SLC4E	SPX
2022-106	2022 Sep 2 2344	Chang Zheng 4C	Y52	JQ LC43/94	SAST
2022-107	2022 Sep 5 0209:40	Falcon 9	175/B1052.7	CC LC40	SPX
2022-108	2022 Sep 6 0224	Kuaizhou-1A	Y16	JQ	EXPACE
2022-109	2022 Sep 6 0419	Chang Zheng 2D	Y67	XSC LC3	SAST
2022-110	2022 Sep 7 2145:07	Ariane 5ECA+	VA258 (5117?)	CSG ELA3	AE
2022-111	2022 Sep 11 0120:00	Falcon 9	176/B1058.14	KSC LC39A	SPX
2022-112	2022 Sep 13 1318:47	Chang Zheng 7A	Y5	WEN LC201	CALT

2022-113	2022 Sep 15 2038	Electron	30	MAHIA LC1B	RLABN
2022-114	2022 Sep 19 0018:40	Falcon 9	177/B1067.6	CC LC40	SPX
2022-115	2022 Sep 20 2315	Chang Zheng 2D	Y76	JQ LC43/94	SAST
2022-116	2022 Sep 21 1354:49	Soyuz-2-1A	S 15000-051	GIK-5 LC31	FKA
2022-117	2022 Sep 24 2225:30	Delta 4H	D4-43/D387	VS SLC6	ULAB
2022-118	2022 Sep 24 2255	Kuaizhou-1A	Y14	TYSC	EXPACE
2022-119	2022 Sep 24 2332:10	Falcon 9	178/B1073.4	CC LC40	SPX
2022-120	2022 Sep 26 1338	Chang Zheng 2D	Y68	XSC LC3	SAST
2022-121	2022 Sep 26 2350	Chang Zheng 6	Y9	TYSC LC16	SAST
2022-122	2022 Oct 1 0701:00	Firefly Alpha	FLTA002	V SLC2W	FFLY
2022-123	2022 Oct 4 2136:00	Atlas V 531	AV-099	CC SLC41	ULAL
2022-124	2022 Oct 5 1600:57	Falcon 9	179/B1077.1	KSC LC39A	SPX
2022-125	2022 Oct 5 2310:30	Falcon 9	180/B1071.5	VSFBS SLC4E	SPX
2022-126	2022 Oct 7 1310:29	Chang Zheng 11	Y4?	DEFU2 HHAI LP4	CALT
2022-127	2022 Oct 7 1709:21	Electron	31	MAHIA LC1B	RLABN
2022-128	2022 Oct 8 2305	Falcon 9	181/B1060.14	CC LC40	SPX
2022-129	2022 Oct 8 2343	Chang Zheng 2D	Y55	JQ LC43/94	SAST
2022-130	2022 Oct 10 0252:32	Soyuz-2-1B	Ya15000-056/ 112-16	GIK-1 LC43/4	VVKO
2022-F04	2022 Oct 12 0050:43	Epsilon	E-6	USC EP	JAXA
2022-131	2022 Oct 12 1500	Proton-M/DM-3	935-71/6L	GIK-5 LC81/24	KHRU
2022-132	2022 Oct 12 2253	Chang Zheng 2C	Y66	TYSC LC9	CALT
2022-133	2022 Oct 14 1912	Chang Zheng 2D	Y69	XSC LC3	SAST
2022-134	2022 Oct 15 0522	Falcon 9	182/B1069.3	CC LC40	SPX
2022-135	2022 Oct 15 1955:15	Angara-1.2	71603?/2L	GIK-1 LC35/1	KHRU
2022-136	2022 Oct 20 1450:40	Falcon 9	183/B1062.10	CC LC40	SPX
2022-137	2022 Oct 21 1900	Soyuz-2-1V	-	GIK-1 LC43/4	VVKO
2022-138	2022 Oct 22 1837:40	GSLV Mk III	LVM3-M2	SHAR SLP	NSIL
2022-139	2022 Oct 22 1957:09	Soyuz-2-1B	Kh15000-011/ 142-503	VOST PU1S	VVKO
2022-140	2022 Oct 26 0020:09	Soyuz-2-1A	S 15000-057	GIK-5 LC31	FKA
2022-141	2022 Oct 28 0114:10	Falcon 9	184/B1063.8	VSFBS SLC4E	SPX
2022-142	2022 Oct 29 0101	Chang Zheng 2D	Y72	JQ LC43/94	SAST
2022-143	2022 Oct 31 0737:23	Chang Zheng 5B	Y4	WEN LC101	CALT
2022-144	2022 Nov 1 1341	Falcon Heavy	004	KSC LC39A	SPX
2022-145	2022 Nov 2 0647:48	Soyuz-2-1B	- 111-306	GIK-1 LC43/4	VVKO
2022-146	2022 Nov 3 0522	Falcon 9	185/B1067.7	CC LC40	SPX
2022-147	2022 Nov 4 1727:14	Electron	32	MAHIA LC1B	RLABN
2022-148	2022 Nov 5 1150	Chang Zheng 3B	Y91	XSC LC2	CALT
2022-149	2022 Nov 7 1032:42	Antares 230+	2TRS2S1.17? (17)	MARS Pad 0A	NGIS
2022-150	2022 Nov 10 0949:00	Atlas V 401	AV-098	VSFBS SLC3E	ULAL
2022-151	2022 Nov 11 2252	Chang Zheng 6A	Y2	TYSC LC9A	SAST
2022-152	2022 Nov 12 0203:12	Chang Zheng 7	Y6	WEN LC201	CALT
2022-153	2022 Nov 12 1606	Falcon 9	186/B1051.14	CC LC40	SPX
2022-154	2022 Nov 15 0138	Chang Zheng 4C	Y48	JQ LC43/94	SAST
2022-155	2022 Nov 16 0620	Gushenxing 1	Y4	JQ LC43/95?	XIDO
2022-156	2022 Nov 16 0647:44	SLS Block 1	1	KSC LC39B	MSFC
2022-157	2022 Nov 23 0257	Falcon 9	187/B1049.11	CC LC40	SPX
2022-158	2022 Nov 26 0626	PSLV-XL	PSLV-C54	SHAR FLP	NSIL
2022-159	2022 Nov 26 1920:43	Falcon 9	188/B1076.1	KSC LC39A	SPX
2022-160	2022 Nov 27 1223	Chang Zheng 2D	Y89	XSC LC3	SAST
2022-161	2022 Nov 28 1513:50	Soyuz-2-1B	N 15000-047/ 112-?	GIK-1 LC43/4	VVKO
2022-162	2022 Nov 29 1508:17	Chang Zheng 2F	Y15	JQ LC43/91	CALT
2022-163	2022 Nov 30 2110?	Soyuz-2-1B	760-93-148	GIK-1 LC43/4	VVKO
2022-164	2022 Dec 7 0115	Kuaizhou-11	Y2	JQ LC43/95?	EXPACE
2022-165	2022 Dec 8 1831	Chang Zheng 2D	Y45	TYSC LC9	SAST
2022-166	2022 Dec 8 2227:48	Falcon 9	189/B1069.4	KSC LC39A	SPX
2022-167	2022 Dec 9 0635	Jielong-3	1	CCOC HHAI LP5	CZHJ
2022-168	2022 Dec 11 0738:13	Falcon 9	190/B1073.5	CC LC40	SPX
2022-169	2022 Dec 12 0822	Chang Zheng 4C	Y57	JQ LC43/94	SAST
2022-170	2022 Dec 13 2030:07	Ariane 5ECA+	VA259 (5118?)	CSG ELA3	AE
2022-F05	2022 Dec 14 0830:25	Zhuque-2	1	JQ LC43/96	LANDSP

2022-171	2022 Dec 14 1825	Chang Zheng 2D	Y80	XSC LC3	SAST
2022-172	2022 Dec 16 0617	Chang Zheng 11	Y12	XSC LC4	CALT
2022-173	2022 Dec 16 1146:47	Falcon 9	191/B1071.6	VSFBS SLC4E	SPX
2022-174	2022 Dec 16 2248:00?	Falcon 9	192/B1067.8	CC LC40	SPX
2022-175	2022 Dec 17 2132:30	Falcon 9	193/B1058.15	KSC LC39A	SPX
2022-F06	2022 Dec 21 0147:31	Vega C	VV22	CSG ZLV	AE
2022-176	2022 Dec 27 0737	Chang Zheng 4B	Y55	TYSC LC9	SAST
2022-177	2022 Dec 28 0934:00	Falcon 9	194/B1062.11	CC LC40	SPX
2022-178	2022 Dec 29 0443	Chang Zheng 3B	Y88	XSC LC2	SAST
2022-179	2022 Dec 30 0738	Falcon 9	195/B1061.11	VSFBS SLC4E	SPX

Note: Owner, Agency and Country codes in the tables are defined in <http://planet4589.org/space/lvdb/sdb/Orgs>.  
Launch Sites are defined in <http://planet4589.org/space/lvdb/sdb/Sites>.



## Appendix 2a: Satellite payloads launched in 2022

CATID	LAUNCHID	Name	Deploy date UTC	Owner	Country	Perigee	Apogee	Inc	Status
S50803	2022-001A	Starlink 3321	2022 Jan 6 21:49:00	SPXS	US	209	337	53.22	In Earth orbit
S50804	2022-001B	Starlink 3323	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50805	2022-001C	Starlink 3333	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50806	2022-001D	Starlink 3335	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50807	2022-001E	Starlink 3353	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50808	2022-001F	Starlink 3355	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50809	2022-001G	Starlink 3232	2022 Jan 6 21:49:00	SPXS	US	210	337	53.21	In Earth orbit
S50810	2022-001H	Starlink 3348	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50811	2022-001J	Starlink 3347	2022 Jan 6 21:49:00	SPXS	US	210	337	53.21	In Earth orbit
S50812	2022-001K	Starlink 3338	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50813	2022-001L	Starlink 3349	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50814	2022-001M	Starlink 3324	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50815	2022-001N	Starlink 3234	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50816	2022-001P	Starlink 3342	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50817	2022-001Q	Starlink 3341	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50818	2022-001R	Starlink 3336	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50819	2022-001S	Starlink 3327	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50820	2022-001T	Starlink 3339	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50821	2022-001U	Starlink 3346	2022 Jan 6 21:49:00	SPXS	US	209	336	53.21	In Earth orbit
S50822	2022-001V	Starlink 3343	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50823	2022-001W	Starlink 3334	2022 Jan 6 21:49:00	SPXS	US	210	337	53.21	In Earth orbit
S50824	2022-001X	Starlink 3340	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50825	2022-001Y	Starlink 3332	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50826	2022-001Z	Starlink 3337	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50827	2022-001AA	Starlink 3329	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50828	2022-001AB	Starlink 3290	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50829	2022-001AC	Starlink 3294	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50830	2022-001AD	Starlink 3278	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50831	2022-001AE	Starlink 3299	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50832	2022-001AF	Starlink 3328	2022 Jan 6 21:49:00	SPXS	US	209	336	53.21	In Earth orbit
S50833	2022-001AG	Starlink 3316	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50834	2022-001AH	Starlink 3331	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50835	2022-001AJ	Starlink 3310	2022 Jan 6 21:49:00	SPXS	US	209	336	53.21	In Earth orbit
S50836	2022-001AK	Starlink 3330	2022 Jan 6 21:49:00	SPXS	US	209	336	53.21	In Earth orbit
S50837	2022-001AL	Starlink 3318	2022 Jan 6 21:49:00	SPXS	US	209	336	53.21	In Earth orbit
S50838	2022-001AM	Starlink 3322	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50839	2022-001AN	Starlink 3320	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50840	2022-001AP	Starlink 3295	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50841	2022-001AQ	Starlink 3300	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50842	2022-001AR	Starlink 3302	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50843	2022-001AS	Starlink 3325	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50844	2022-001AT	Starlink 3326	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50845	2022-001AU	Starlink 3230	2022 Jan 6 21:49:00	SPXS	US	209	336	53.21	In Earth orbit
S50846	2022-001AV	Starlink 3308	2022 Jan 6 21:49:00	SPXS	US	209	336	53.21	In Earth orbit
S50847	2022-001AW	Starlink 3319	2022 Jan 6 21:49:00	SPXS	US	209	336	53.21	In Earth orbit
S50848	2022-001AX	Starlink 3315	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50849	2022-001AY	Starlink 3311	2022 Jan 6 21:49:00	SPXS	US	209	336	53.21	In Earth orbit
S50850	2022-001AZ	Starlink 3312	2022 Jan 6 21:49:00	SPXS	US	209	337	53.21	In Earth orbit
S50851	2022-001BA	Starlink 3314	2022 Jan 6 21:49:00	SPXS	US	209	336	53.21	In Earth orbit
S50984	2022-002A	WISSSAT-2	2022 Jan 13 15:25:00	WISEK	CH	517	535	97.51	In Earth orbit
S50985	2022-002B	WISSSAT-1	2022 Jan 13 15:25:00	WISEK	CH	517	535	97.51	In Earth orbit
S50986	2022-002C	UmbrA-02	2022 Jan 13 15:25:00	UMBRA	US	522	535	97.51	In Earth orbit
S50987	2022-002D	LAIKA	2022 Jan 13 15:25:00	FOSSA	E	518	535	97.51	In Earth orbit
S50988	2022-002E	Tevel-3	2022 Jan 13 15:25:00	HSCIL	IL	522	535	97.50	In Earth orbit
S50989	2022-002F	Tevel-8	2022 Jan 13 15:25:00	HSCIL	IL	513	532	97.51	In Earth orbit
S50990	2022-002G	Pilot-1	2022 Jan 13 15:25:00	CSHARRK	I	521	535	97.51	In Earth orbit
S50991	2022-002H	FossaSat-2E6	2022 Jan 13 15:25:00	FOSSA	E	519	535	97.51	In Earth orbit
S50992	2022-002I	Flock 4x-8	2022 Jan 13 15:25:00	PLAN	US	520	535	97.51	In Earth orbit
S50993	2022-002K	ION SCV04	2022 Jan 13 15:25:00	DORBIT	I	521	535	97.51	In Earth orbit
S50994	2022-002L	Flock 4x-44	2022 Jan 13 15:25:00	PLAN	US	520	535	97.51	In Earth orbit
S50995	2022-002M	MDASat-1a	2022 Jan 13 15:25:00	CPUT	ZA	522	535	97.50	In Earth orbit

S50996	2022-002N	Flock 4x-2	2022 Jan 13 15:25:00	PLAN	US	520	535	97.51	In Earth orbit
S50997	2022-002P	Flock 4x-20	2022 Jan 13 15:25:00	PLAN	US	520	535	97.51	In Earth orbit
S50998	2022-002Q	Level-5	2022 Jan 13 15:25:00	HSCIL	IL	519	535	97.50	In Earth orbit
S50999	2022-002R	Level-6	2022 Jan 13 15:25:00	HSCIL	IL	523	535	97.50	In Earth orbit
S51000	2022-002S	Flock 4x-30	2022 Jan 13 15:25:00	PLAN	US	519	535	97.51	In Earth orbit
S51001	2022-002T	FossaSat-2E5	2022 Jan 13 15:25:00	FOSSA	E	517	535	97.51	In Earth orbit
S51002	2022-002U	Blip-A	2022 Jan 13 15:25:00	KEPLER	CA	524	535	97.51	In Earth orbit
S51003	2022-002V	Flock 4x-22	2022 Jan 13 15:25:00	PLAN	US	519	535	97.51	In Earth orbit
S51004	2022-002W	Flock 4x-5	2022 Jan 13 15:25:00	PLAN	US	518	535	97.51	In Earth orbit
S51005	2022-002X	Flock 4x-41	2022 Jan 13 15:25:00	PLAN	US	519	535	97.50	In Earth orbit
S51006	2022-002Y	Flock 4x-3	2022 Jan 13 15:25:00	PLAN	US	518	535	97.51	In Earth orbit
S51007	2022-002Z	Flock 4x-18	2022 Jan 13 15:25:00	PLAN	US	518	535	97.51	In Earth orbit
S51008	2022-002AA	ICEYE-X16	2022 Jan 13 15:25:00	ICEYE	FI	521	535	97.51	In Earth orbit
S51009	2022-002AB	Flock 4x-37	2022 Jan 13 15:25:00	PLAN	US	519	535	97.51	In Earth orbit
S51010	2022-002AC	Flock 4x-15	2022 Jan 13 15:25:00	PLAN	US	518	535	97.51	In Earth orbit
S51011	2022-002AD	Flock 4x-29	2022 Jan 13 15:25:00	PLAN	US	518	535	97.51	In Earth orbit
S51012	2022-002AE	Flock 4x-27	2022 Jan 13 15:25:00	PLAN	US	518	535	97.51	In Earth orbit
S51013	2022-002AF	Level-1	2022 Jan 13 15:25:00	HSCIL	IL	522	535	97.50	In Earth orbit
S51014	2022-002AG	SATTILA-2B	2022 Jan 13 15:25:00	ARIU	IL	522	535	97.50	In Earth orbit
S51015	2022-002AH	Flock 4x-12	2022 Jan 13 15:25:00	PLAN	US	518	535	97.51	In Earth orbit
S51016	2022-002AJ	Flock 4x-25	2022 Jan 13 15:25:00	PLAN	US	518	535	97.51	In Earth orbit
S51017	2022-002AK	Flock 4x-1	2022 Jan 13 15:25:00	PLAN	US	518	535	97.51	In Earth orbit
S51018	2022-002AL	Flock 4x-42	2022 Jan 13 15:25:00	PLAN	US	518	535	97.51	In Earth orbit
S51019	2022-002AM ?	Pion-BRI	2022 Jan 13 15:25:00	PION	BR	526	534	97.49	In Earth orbit
S51020	2022-002AN	Flock 4x-16	2022 Jan 13 15:25:00	PLAN	US	518	535	97.51	In Earth orbit
S51021	2022-002AP	Lemur-2 Ramonname	2022 Jan 13 15:25:00	SPIREL/SPIRE	L	524	535	97.51	In Earth orbit
S51022	2022-002AQ	Lemur-2 King-Julien	2022 Jan 13 15:25:00	SPIREL/SPIRE	L	524	535	97.51	In Earth orbit
S51023	2022-002AR	Flock 4x-38	2022 Jan 13 15:25:00	PLAN	US	518	535	97.51	In Earth orbit
S51024	2022-002AS	Flock 4x-32	2022 Jan 13 15:25:00	PLAN	US	518	535	97.51	In Earth orbit
S51025	2022-002AT	Grizu-263A	2022 Jan 13 15:25:00	ZHEU	TR	515	535	97.51	In Earth orbit
S51026	2022-002AU	Flock 4x-26	2022 Jan 13 15:25:00	PLAN	US	518	535	97.51	In Earth orbit
S51027	2022-002AV	Flock 4x-43	2022 Jan 13 15:25:00	PLAN	US	518	535	97.51	In Earth orbit
S51028	2022-002AW	Flock 4x-13	2022 Jan 13 15:25:00	PLAN	US	517	535	97.51	In Earth orbit
S51029	2022-002AX	Flock 4x-39	2022 Jan 13 15:25:00	PLAN	US	518	535	97.51	In Earth orbit
S51030	2022-002AY	Sieb-2-1	2022 Jan 13 15:25:00	DKAU	UA	522	535	97.51	In Earth orbit
S51031	2022-002AZ	SamoSat-1	2022 Jan 13 15:25:00	ORISP	NP	519	535	97.51	In Earth orbit
S51032	2022-002BA	Unitcom-2D	2022 Jan 13 15:25:00	ALBAD	D	516	536	97.53	In Earth orbit
S51033	2022-002BB ?	Tarian-Artheus 1	2022 Jan 13 15:25:00	CMU	US	519	535	97.51	In Earth orbit
S51034	2022-002BC	Flock 4x-23	2022 Jan 13 15:25:00	PLAN	US	518	535	97.51	In Earth orbit
S51035	2022-002BD	Flock 4x-17	2022 Jan 13 15:25:00	PLAN	US	524	535	97.51	In Earth orbit
S51036	2022-002BE	Lemur-2 Kohovithsa	2022 Jan 13 15:25:00	SPIREL/ORORA	L	524	535	97.51	In Earth orbit
S51037	2022-002BF	Flock 4x-10	2022 Jan 13 15:25:00	PLAN	US	520	535	97.51	In Earth orbit
S51038	2022-002BG	MDASat-1c	2022 Jan 13 15:25:00	CPUT	ZA	523	535	97.51	In Earth orbit
S51039	2022-002BH	Flock 4x-36	2022 Jan 13 15:25:00	PLAN	US	522	535	97.51	In Earth orbit
S51040	2022-002BJ	Flock 4x-21	2022 Jan 13 15:25:00	PLAN	US	523	535	97.51	In Earth orbit
S51041	2022-002BK	Flock 4x-31	2022 Jan 13 15:25:00	PLAN	US	524	535	97.51	In Earth orbit
S51042	2022-002BL	Flock 4x-34	2022 Jan 13 15:25:00	PLAN	US	523	535	97.51	In Earth orbit
S51043	2022-002BM	Flock 4x-6	2022 Jan 13 15:25:00	PLAN	US	524	535	97.51	In Earth orbit
S51044	2022-002BN	IRIS-A	2022 Jan 13 15:25:00	NGKU	TW	523	535	97.50	In Earth orbit
S51045	2022-002BP	Flock 4x-28	2022 Jan 13 15:25:00	PLAN	US	523	535	97.51	In Earth orbit
S51046	2022-002BQ	Flock 4x-19	2022 Jan 13 15:25:00	PLAN	US	523	535	97.51	In Earth orbit
S51047	2022-002BR	Flock 4x-9	2022 Jan 13 15:25:00	PLAN	US	523	535	97.51	In Earth orbit
S51048	2022-002BS	Flock 4x-35	2022 Jan 13 15:25:00	PLAN	US	523	535	97.50	In Earth orbit
S51049	2022-002BT	Flock 4x-11	2022 Jan 13 15:25:00	PLAN	US	524	535	97.51	In Earth orbit
S51050	2022-002BU	MDASat-1b	2022 Jan 13 15:25:00	CPUT	ZA	524	535	97.51	In Earth orbit
S51051	2022-002BV	Kepler-19	2022 Jan 13 15:25:00	KEPLER	CA	519	535	97.50	In Earth orbit
S51052	2022-002BW	Flock 4x-40	2022 Jan 13 15:25:00	PLAN	US	524	535	97.51	In Earth orbit
S51053	2022-002BX	HYPPO-1	2022 Jan 13 15:25:00	NTNU	N	525	535	97.50	In Earth orbit
S51054	2022-002BY	Lemur-2 Miriwari	2022 Jan 13 15:25:00	MYRUSPIREL	AU	525	535	97.51	In Earth orbit
S51055	2022-002BZ	Flock 4x-33	2022 Jan 13 15:25:00	PLAN	US	524	535	97.51	In Earth orbit
S51056	2022-002CA	Flock 4x-24	2022 Jan 13 15:25:00	PLAN	US	524	535	97.51	In Earth orbit
S51057	2022-002CB	Karina	2022 Jan 13 15:25:00	KEPLER	CA	525	535	97.51	In Earth orbit
S51058	2022-002CC	Lemur-2 Djirang	2022 Jan 13 15:25:00	MYRUSPIREL	AU	524	535	97.51	In Earth orbit
S51059	2022-002CD	Astraeus	2022 Jan 13 15:25:00	KEPLER	CA	524	535	97.51	In Earth orbit
S51060	2022-002CE	ETV-A1	2022 Jan 13 15:25:00	SEN	UK	524	536	97.51	In Earth orbit
S51061	2022-002CF	BRO-5	2022 Jan 13 15:25:00	UNSEEN	F	524	536	97.51	In Earth orbit

S51062	2022-002CG	Tevel-7	2022 Jan 13 15:25:00	HSCIL	IL	513	532	97.53	In Earth orbit
S51063	2022-002CH	Tevel-4	2022 Jan 13 15:25:00	HSCIL	IL	524	536	97.51	In Earth orbit
S51064	2022-002CJ	Flock 4x-4	2022 Jan 13 15:25:00	PLAN	US	523	535	97.51	In Earth orbit
S51065	2022-002CK	Flock 4x-7	2022 Jan 13 15:25:00	PLAN	US	523	535	97.51	In Earth orbit
S51066	2022-002CL	Flock 4x-14	2022 Jan 13 15:25:00	PLAN	US	522	535	97.51	In Earth orbit
S51067	2022-002CM	DEFWASAT-1	2022 Jan 13 15:25:00	DEWA	UAE	525	535	97.51	In Earth orbit
S51068	2022-002CN?	Cossamer Piccolomini	2022 Jan 13 15:25:00	LUNASD	US	525	535	97.50	In Earth orbit
S51069	2022-002CP	Tevel-2	2022 Jan 13 15:25:00	HSCIL	IL	522	535	97.51	In Earth orbit
S51070	2022-002CQ	ICEYE-X14	2022 Jan 13 15:25:00	ICEUS	US	520	535	97.51	In Earth orbit
S51071	2022-002CR	Capella 8	2022 Jan 13 15:25:00	CAPSP	US	521	535	97.51	In Earth orbit
S51072	2022-002CS	Capella 7	2022 Jan 13 15:25:00	CAPSP	US	520	535	97.51	In Earth orbit
S51073	2022-002CT?	General San Martin	2022 Jan 13 15:25:00	INNO	AR	520	535	97.51	In Earth orbit
S51074	2022-002CU	Delifs-PQ	2022 Jan 13 15:25:00	DELFT	NL	523	538	97.52	In Earth orbit
S51075	2022-002CV	USA 320	2022 Jan 13 15:25:00	NROC	US	525	535	97.51	In Earth orbit
S51076	2022-002CW?	NuX-1	2022 Jan 13 15:25:00	NUSP	SG	525	536	97.51	In Earth orbit
S51077	2022-002CX	USA 321	2022 Jan 13 15:25:00	NROC	US	525	535	97.51	In Earth orbit
S51078	2022-002CY	USA 322	2022 Jan 13 15:25:00	NROC	US	525	535	97.51	In Earth orbit
S51079	2022-002CZ	USA 323	2022 Jan 13 15:25:00	NROC	US	525	535	97.51	In Earth orbit
S51080	2022-002DA	Spain-OSCAR 115	2022 Jan 13 15:25:00	AMEA	E	515	535	97.51	In Earth orbit
S51081	2022-002DB	Spain-OSCAR 114	2022 Jan 13 15:25:00	AMEA	E	522	535	97.51	In Earth orbit
S51082	2022-002DC?	Challenger	2022 Jan 13 15:25:00	INTUDX	US	517	535	97.51	In Earth orbit
S51083	2022-002DD?	SATTLA-2A	2022 Jan 13 15:25:00	ARU	IL	522	535	97.50	In Earth orbit
S51084	2022-002DE	Dodona	2022 Jan 13 15:25:00	USCLA/LMBSSD	US	520	531	97.50	In Earth orbit
S51085	2022-002DF	VZLUSat-2	2022 Jan 13 15:25:00	VZLU	CZ	521	540	97.51	In Earth orbit
S51086	2022-002DG	LabSat	2022 Jan 13 15:25:00	SATRV	PL	520	531	97.50	In Earth orbit
S51087	2022-002DH	STORK-1	2022 Jan 13 15:25:00	SATRV	PL	521	540	97.51	In Earth orbit
S51088	2022-002DJ	STORK-2	2022 Jan 13 15:25:00	SATRV	PL	519	534	97.50	In Earth orbit
S51089	2022-002DK	SW JFT	2022 Jan 13 15:25:00	SATRV	PL	521	536	97.50	In Earth orbit
A10426	2022-002	Unicom-2A	2022 Jan 13 15:25:00	ALBAD	D	520	535	97.51	Reentered Att to Alba Orbital dis-penser
A10427	2022-002	Unicom-1	2022 Jan 13 15:25:00	ALBA	UK	517	534	97.49	Reentered Att to Alba Orbital dis-penser
A10428	2022-002	Unicom-2E	2022 Jan 13 15:25:00	ALBA	UK	524	538	97.52	Reentered Att to Alba Orbital dis-penser
S51094	2022-003A	PAN A	2022 Jan 13 22:52:00	CORN/LARCN	US	495	501	44.98	In Earth orbit
S51095	2022-003B	TechedSat-13	2022 Jan 13 22:52:00	ARC/SISU	US	493	498	44.98	In Earth orbit
S51096	2022-003C	PAN B	2022 Jan 13 22:52:00	CORN/LARCN	US	494	499	44.98	In Earth orbit
S51097	2022-003D	GEARRS-3	2022 Jan 13 22:52:00	APRL/NSL	US	496	505	44.98	In Earth orbit
S51098	2022-003E	STORK 3	2022 Jan 13 22:52:00	SATRV	PL	502	508	44.97	In Earth orbit
S51099	2022-003F	SteamSat-2	2022 Jan 13 22:52:00	STEAM/SATRV	UK	495	501	44.98	In Earth orbit
S51100	2022-003G	ADLER-1	2022 Jan 13 22:52:00	SPIREL/OEWF	L	493	499	44.98	In Earth orbit
S51102	2022-004A	Shiyao 13	2022 Jan 17 02:35:00	CAS?	CN	356	1298	98.68	In Earth orbit
S51104	2022-005A	Starlink 3366	2022 Jan 19 02:02:40	SPXS	US	209	339	53.23	In Earth orbit
S51105	2022-005B	Starlink 3350	2022 Jan 19 02:02:40	SPXS	US	209	339	53.23	In Earth orbit
S51106	2022-005C	Starlink 3176	2022 Jan 19 02:02:40	SPXS	US	209	341	53.23	In Earth orbit
S51107	2022-005D	Starlink 3368	2022 Jan 19 02:02:40	SPXS	US	209	339	53.23	In Earth orbit
S51108	2022-005E	Starlink 3362	2022 Jan 19 02:02:40	SPXS	US	209	339	53.23	In Earth orbit
S51109	2022-005F	Starlink 3358	2022 Jan 19 02:02:40	SPXS	US	209	341	53.23	In Earth orbit
S51110	2022-005G	Starlink 3344	2022 Jan 19 02:02:40	SPXS	US	209	341	53.23	In Earth orbit
S51111	2022-005H	Starlink 3173	2022 Jan 19 02:02:40	SPXS	US	209	341	53.23	In Earth orbit
S51112	2022-005I	Starlink 3374	2022 Jan 19 02:02:40	SPXS	US	209	341	53.23	In Earth orbit
S51113	2022-005K	Starlink 3372	2022 Jan 19 02:02:40	SPXS	US	209	341	53.23	In Earth orbit
S51114	2022-005L	Starlink 3375	2022 Jan 19 02:02:40	SPXS	US	209	340	53.23	In Earth orbit
S51115	2022-005M	Starlink 3397	2022 Jan 19 02:02:40	SPXS	US	209	341	53.23	In Earth orbit
S51116	2022-005N	Starlink 3243	2022 Jan 19 02:02:40	SPXS	US	209	341	53.23	In Earth orbit
S51117	2022-005P	Starlink 3391	2022 Jan 19 02:02:40	SPXS	US	209	339	53.23	In Earth orbit
S51118	2022-005Q	Starlink 3394	2022 Jan 19 02:02:40	SPXS	US	209	341	53.23	In Earth orbit
S51119	2022-005R	Starlink 3390	2022 Jan 19 02:02:40	SPXS	US	209	339	53.23	In Earth orbit
S51120	2022-005S	Starlink 3398	2022 Jan 19 02:02:40	SPXS	US	209	340	53.23	In Earth orbit
S51121	2022-005T	Starlink 3399	2022 Jan 19 02:02:40	SPXS	US	209	339	53.23	In Earth orbit
S51122	2022-005U	Starlink 3373	2022 Jan 19 02:02:40	SPXS	US	209	340	53.23	In Earth orbit
S51123	2022-005V	Starlink 3392	2022 Jan 19 02:02:40	SPXS	US	209	339	53.23	In Earth orbit
S51124	2022-005W	Starlink 3389	2022 Jan 19 02:02:40	SPXS	US	209	340	53.23	In Earth orbit
S51125	2022-005X	Starlink 3387	2022 Jan 19 02:02:40	SPXS	US	209	340	53.23	In Earth orbit
S51126	2022-005Y	Starlink 3386	2022 Jan 19 02:02:40	SPXS	US	209	340	53.23	In Earth orbit
S51127	2022-005Z	Starlink 3370	2022 Jan 19 02:02:40	SPXS	US	209	340	53.23	In Earth orbit

S51128	2022-005AA	Starlink 3400	SPXS	US	209	339	53.23	In Earth orbit
S51129	2022-005AB	Starlink 3396	SPXS	US	209	340	53.23	In Earth orbit
S51130	2022-005AC	Starlink 3395	SPXS	US	209	340	53.23	In Earth orbit
S51131	2022-005AD	Starlink 3388	SPXS	US	209	338	53.23	In Earth orbit
S51132	2022-005AE	Starlink 3393	SPXS	US	209	340	53.23	In Earth orbit
S51133	2022-005AF	Starlink 3356	SPXS	US	209	340	53.23	In Earth orbit
S51134	2022-005AG	Starlink 3183	SPXS	US	209	340	53.23	In Earth orbit
S51135	2022-005AH	Starlink 3363	SPXS	US	209	340	53.23	In Earth orbit
S51136	2022-005AJ	Starlink 3253	SPXS	US	209	338	53.23	In Earth orbit
S51137	2022-005AK	Starlink 3180	SPXS	US	209	339	53.23	In Earth orbit
S51138	2022-005AL	Starlink 3177	SPXS	US	209	340	53.23	In Earth orbit
S51139	2022-005AM	Starlink 3172	SPXS	US	209	340	53.23	In Earth orbit
S51140	2022-005AN	Starlink 3175	SPXS	US	209	339	53.23	In Earth orbit
S51141	2022-005AP	Starlink 3179	SPXS	US	209	340	53.23	In Earth orbit
S51142	2022-005AQ	Starlink 3369	SPXS	US	209	340	53.23	In Earth orbit
S51143	2022-005AR	Starlink 3184	SPXS	US	209	340	53.23	In Earth orbit
S51144	2022-005AS	Starlink 3185	SPXS	US	209	340	53.23	In Earth orbit
S51145	2022-005AT	Starlink 3365	SPXS	US	209	339	53.22	In Earth orbit
S51146	2022-005AU	Starlink 3354	SPXS	US	209	340	53.23	In Earth orbit
S51147	2022-005AV	Starlink 3352	SPXS	US	209	340	53.23	In Earth orbit
S51148	2022-005AW	Starlink 3359	SPXS	US	209	340	53.23	In Earth orbit
S51149	2022-005AX	Starlink 3360	SPXS	US	209	338	53.22	In Earth orbit
S51150	2022-005AY	Starlink 3357	SPXS	US	209	339	53.23	In Earth orbit
S51151	2022-005AZ	Starlink 3361	SPXS	US	209	340	53.23	In Earth orbit
S51152	2022-005BA	Starlink 3364	SPXS	US	209	340	53.23	In Earth orbit
S51280	2022-006A c	USA 324	USSF	US	35781	35787	0.11	In Earth orbit
S51281	2022-006B c	USA 325	USSF	US	35703	35734	0.10	In Earth orbit
S51282	2022-007A	Ludi Tance 1-01A	SAST	US	601	601	97.80	In Earth orbit
S51444	2022-008A	CSG FM2	ASI/MDDDI	CN	648	648	97.89	In Earth orbit
S51445	2022-009A C	USA 326	NROC	I	621	491	97.90	In Earth orbit
S51456	2022-010A ?	Starlink 3152	SPXS	US	209	524	97.90	In Earth orbit
S51457	2022-010B ?	Starlink 3163	SPXS	US	209	335	53.22	Reentered
S51458	2022-010C ?	Starlink 3164	SPXS	US	209	334	53.22	Reentered
S51459	2022-010D ?	Starlink 3170	SPXS	US	210	336	53.22	Reentered
S51460	2022-010E	Starlink 3167	SPXS	US	209	334	53.22	Reentered
S51461	2022-010F	Starlink 3181	SPXS	US	209	335	53.22	In Earth orbit
S51462	2022-010G	Starlink 3166	SPXS	US	209	335	53.22	In Earth orbit
S51463	2022-010H	Starlink 3419	SPXS	US	209	334	53.22	In Earth orbit
S51464	2022-010I	Starlink 3189	SPXS	US	209	334	53.22	In Earth orbit
S51465	2022-010K	Starlink 3401	SPXS	US	209	334	53.22	In Earth orbit
S51466	2022-010L +	Starlink 3418	SPXS	US	209	334	53.22	In Earth orbit
S51467	2022-010M	Starlink 3178	SPXS	US	209	336	53.22	Reentered
S51468	2022-010N	Starlink 3174	SPXS	US	209	336	53.22	In Earth orbit
S51469	2022-010P	Starlink 3182	SPXS	US	209	336	53.22	In Earth orbit
S51470	2022-010Q +	Starlink 3420	SPXS	US	209	335	53.22	Reentered
S51471	2022-010R -	Starlink 3165	SPXS	US	209	334	53.22	Reentered
S51472	2022-010S	Starlink 3415	SPXS	US	209	335	53.22	In Earth orbit
S51477	2022-010X +	Starlink 3223	SPXS	US	209	333	53.22	In Earth orbit
S51478	2022-010Y +	Starlink 3222	SPXS	US	209	334	53.22	Reentered
S51479	2022-010Z	Starlink 3224	SPXS	US	209	335	53.22	Reentered
S51480	2022-010AA +	Starlink 3402	SPXS	US	209	335	53.22	Reentered
S51481	2022-010AB +	Starlink 3412	SPXS	US	209	334	53.22	Reentered
S51482	2022-010AC +	Starlink 3410	SPXS	US	209	336	53.22	Reentered
S51483	2022-010AD +	Starlink 3405	SPXS	US	209	334	53.22	Reentered
S51484	2022-010AE +	Starlink 3408	SPXS	US	210	336	53.22	Reentered
S51485	2022-010AF +	Starlink 3406	SPXS	US	209	334	53.22	Reentered
S51486	2022-010AG +	Starlink 3403	SPXS	US	209	336	53.22	Reentered
S51487	2022-010AH +	Starlink 3411	SPXS	US	209	335	53.22	Reentered
S51488	2022-010AJ +	Starlink 3413	SPXS	US	209	334	53.22	Reentered
S51489	2022-010AK +	Starlink 3407	SPXS	US	209	336	53.22	Reentered
S51490	2022-010AL +	Starlink 3414	SPXS	US	209	334	53.22	Reentered
S51491	2022-010AM +	Starlink 3409	SPXS	US	209	334	53.22	Reentered
S51492	2022-010AN +	Starlink 3416	SPXS	US	209	333	53.22	Reentered
S51493	2022-010AP +	Starlink 3367	SPXS	US	209	336	53.22	Reentered
S51494	2022-010AQ +	Starlink 3417	SPXS	US	209	336	53.22	Reentered
S51495	2022-010AR	Starlink 3221	SPXS	US	209	336	53.22	Reentered

S51496	2022-010AS	Starlink 3169	SPXS	US	209	336	53.22	Reentered
S51497	2022-010AT +	Starlink 3426	SPXS	US	209	333	53.22	Reentered
S51498	2022-010AU	Starlink 3423	SPXS	US	209	334	53.22	Reentered
S51499	2022-010AV +	Starlink 3376	SPXS	US	209	336	53.22	Reentered
S51500	2022-010AW +	Starlink 3377	SPXS	US	209	334	53.22	Reentered
S51501	2022-010AX +	Starlink 3427	SPXS	US	209	333	53.22	Reentered
S51502	2022-010AY	Starlink 3188	SPXS	US	209	336	53.22	Reentered
S51503	2022-010AZ	Starlink 3220	SPXS	US	209	334	53.22	Reentered
S51504	2022-010BA	Starlink 3186	SPXS	US	209	335	53.22	Reentered
S51505	2022-010BB	Starlink 3187	SPXS	US	209	335	53.22	Reentered
S51506	2022-010BC +	Starlink 3384	SPXS	US	209	334	53.22	Reentered
S51507	2022-010BD +	Starlink 3422	SPXS	US	209	335	53.22	Reentered
S51508	2022-010BE +	Starlink 3404	SPXS	US	209	335	53.22	Reentered
S51511	2022-011A	Kosmos-2553	VVKOV	RU	1992	1999	67.09	In Earth orbit
S51622	2022-012A	OneWeb SL0410	ONEWEBN	UK	462	477	87.40	In Earth orbit
S51623	2022-012B	OneWeb SL0411	ONEWEBN	UK	462	478	87.40	In Earth orbit
S51624	2022-012C	OneWeb SL0415	ONEWEBN	UK	462	482	87.40	In Earth orbit
S51625	2022-012D	OneWeb SL0416	ONEWEBN	UK	462	479	87.40	In Earth orbit
S51626	2022-012E	OneWeb SL0422	ONEWEBN	UK	462	481	87.40	In Earth orbit
S51627	2022-012F	OneWeb SL0423	ONEWEBN	UK	462	482	87.40	In Earth orbit
S51628	2022-012G	OneWeb SL0425	ONEWEBN	UK	463	483	87.40	In Earth orbit
S51629	2022-012H	OneWeb SL0428	ONEWEBN	UK	464	484	87.40	In Earth orbit
S51630	2022-012I	OneWeb SL0431	ONEWEBN	UK	463	484	87.40	In Earth orbit
S51631	2022-012K	OneWeb SL0434	ONEWEBN	UK	462	483	87.40	In Earth orbit
S51632	2022-012L	OneWeb SL0435	ONEWEBN	UK	465	484	87.40	In Earth orbit
S51633	2022-012M	OneWeb SL0436	ONEWEBN	UK	465	484	87.40	In Earth orbit
S51634	2022-012N	OneWeb SL0438	ONEWEBN	UK	467	484	87.40	In Earth orbit
S51635	2022-012P	OneWeb SL0439	ONEWEBN	UK	466	484	87.40	In Earth orbit
S51636	2022-012Q	OneWeb SL0442	ONEWEBN	UK	468	485	87.40	In Earth orbit
S51637	2022-012R	OneWeb SL0443	ONEWEBN	UK	468	484	87.40	In Earth orbit
S51638	2022-012S	OneWeb SL0444	ONEWEBN	UK	467	484	87.40	In Earth orbit
S51639	2022-012T	OneWeb SL0445	ONEWEBN	UK	467	484	87.40	In Earth orbit
S51640	2022-012U	OneWeb SL0446	ONEWEBN	UK	468	486	87.40	In Earth orbit
S51641	2022-012V	OneWeb SL0448	ONEWEBN	UK	468	487	87.40	In Earth orbit
S51642	2022-012W	OneWeb SL0449	ONEWEBN	UK	468	487	87.40	In Earth orbit
S51643	2022-012X	OneWeb SL0451	ONEWEBN	UK	468	485	87.40	In Earth orbit
S51644	2022-012Y	OneWeb SL0452	ONEWEBN	UK	468	489	87.40	In Earth orbit
S51645	2022-013Z	OneWeb SL0455	ONEWEBN	UK	468	488	87.40	In Earth orbit
S51646	2022-012AA	OneWeb SL0456	ONEWEBN	UK	468	489	87.40	In Earth orbit
S51647	2022-012AB	OneWeb SL0457	ONEWEBN	UK	468	490	87.40	In Earth orbit
S51648	2022-012AC	OneWeb SL0458	ONEWEBN	UK	470	491	87.40	In Earth orbit
S51649	2022-012AD	OneWeb SL0461	ONEWEBN	UK	470	491	87.40	In Earth orbit
S51650	2022-012AE	OneWeb SL0463	ONEWEBN	UK	469	490	87.40	In Earth orbit
S51651	2022-012AF	OneWeb SL0464	ONEWEBN	UK	469	490	87.40	In Earth orbit
S51652	2022-012AG	OneWeb SL0468	ONEWEBN	UK	471	490	87.40	In Earth orbit
S51653	2022-012AH	OneWeb SL0473	ONEWEBN	UK	472	490	87.40	In Earth orbit
S51654	2022-012AJ	OneWeb SL0474	ONEWEBN	UK	473	490	87.40	In Earth orbit
S51655	2022-012AK	OneWeb SL0475	ONEWEBN	UK	473	490	87.40	In Earth orbit
S51656	2022-013A	EOS-04	ISRO	IN	521	535	97.55	In Earth orbit
S51657	2022-013B	InspireSat-1	ISIT	IN	520	533	97.56	In Earth orbit
S51658	2022-013C	INS-21D	IRRO	IN	520	533	97.56	In Earth orbit
S51660	2022-014A	Progress MS-19	RSKE	RU	277	314	51.64	Deorbited
S53306	1998-067TR	YuZGU-55 No. 8	YUZGU	RU	412	419	51.64	In Earth orbit
S53309	1998-067TU	YuZGU-55 No. 5	SARPT/YUZGU	RU	411	421	51.64	In Earth orbit
S53310	1998-067TV	YuZGU-55 No. 9	YUZGU	RU	412	419	51.64	In Earth orbit
S53312	1998-067TX	YuZGU-55 No. 6	YUZGU	RU	412	418	51.64	In Earth orbit
S53321	1998-067TZ	YuZGU-55 No. 10	YUZGU	RU	412	419	51.64	In Earth orbit
S53322	1998-067UA	YuZGU-55 No. 7	YUZGU	RU	412	418	51.64	In Earth orbit
S51712	2022-015A	S.S. Piers Sellers	NGIS	US	409	417	51.64	Deorbited
S52147	1998-067TJ	IHL-SAT	IHIC	J	412	417	51.64	Reentered
S52148	1998-067TK	KITSUNE	KYUT	J	414	418	51.64	In Earth orbit
S52917	2022-015D	NACHOS-1	LANL	US	399	409	51.64	In Earth orbit
S51714	2022-016A	Starlink 3528	SPXS	US	324	335	53.22	In Earth orbit
S51715	2022-016B	Starlink 3533	SPXS	US	324	335	53.22	In Earth orbit
S51716	2022-016C	Starlink 3543	SPXS	US	324	335	53.22	In Earth orbit
S51717	2022-016D	Starlink 3445	SPXS	US	324	335	53.22	In Earth orbit



S51792	2022-017AA	Starlink 3626	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51793	2022-017AB	Starlink 3653	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51794	2022-017AC	Starlink 3573	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51795	2022-017AD	Starlink 3586	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51796	2022-017AE	Starlink 3630	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51797	2022-017AF	Starlink 3627	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51798	2022-017AG	Starlink 3634	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51799	2022-017AH	Starlink 3657	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51800	2022-017AJ	Starlink 3600	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51801	2022-017AK	Starlink 3592	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51802	2022-017AL	Starlink 3557	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51803	2022-017AM	Starlink 3544	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51804	2022-017AN	Starlink 3601	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51805	2022-017AP	Starlink 3605	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51806	2022-017AQ	Starlink 3581	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51807	2022-017AR	Starlink 3606	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51808	2022-017AS	Starlink 3609	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51809	2022-017AT	Starlink 3607	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51810	2022-017AU	Starlink 3613	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51811	2022-017AV	Starlink 3569	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51812	2022-017AW	Starlink 3610	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51813	2022-017AX	Starlink 3552	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51814	2022-017AY	Starlink 3559	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51815	2022-017AZ	Starlink 3604	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51816	2022-017BA	Starlink 3603	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51817	2022-017BB	Starlink 3596	2022 Feb 25 17:12:10	SPXS	US	303	313	53.22	In Earth orbit
S51822	2022-018A	Ludi Tancee 1-01B	2022 Feb 26 23:40:28	SAST	CN	596	600	97.81	In Earth orbit
S51824	2022-019A ?	Tianqi-19	2022 Feb 27 03:06:28	GUOG	CN	527	554	97.52	In Earth orbit
S51825	2022-019B ?	Hainan-1 01	2022 Feb 27 03:06:28	SANYZ	CN	527	551	97.52	In Earth orbit
S51826	2022-019C ?	Hainan-1 02	2022 Feb 27 03:06:28	SANYZ	CN	527	550	97.52	In Earth orbit
S51827	2022-019D ?	Wenchang-1 01	2022 Feb 27 03:06:28	SANYZ	CN	528	549	97.52	In Earth orbit
S51828	2022-019E ?	Wenchang-1 02	2022 Feb 27 03:06:28	SANYZ	CN	527	550	97.52	In Earth orbit
S51829	2022-019F ?	Taijing-3 01	2022 Feb 27 03:06:28	WEINA	CN	527	550	97.52	In Earth orbit
S51830	2022-019G ?	Taijing-4 01	2022 Feb 27 03:06:28	WEINA	CN	528	549	97.52	In Earth orbit
S51831	2022-019H ?	Xidian-1	2022 Feb 27 03:06:28	SILUTT	CN	525	550	97.52	In Earth orbit
S51832	2022-019I ?	Xiamen Keji 1	2022 Feb 27 03:06:28	XIAMT	CN	526	550	97.52	In Earth orbit
S51833	2022-019K ?	Jilin-1 Gaofen 03D 10 xing	2022 Feb 27 03:06:28	CGSTL	CN	524	549	97.52	In Earth orbit
S51834	2022-019L ?	Jilin-1 Gaofen 03D 11 xing	2022 Feb 27 03:06:28	CGSTL	CN	526	548	97.52	In Earth orbit
S51835	2022-019M ?	Jilin-1 Gaofen 03D 12 xing	2022 Feb 27 03:06:28	CGSTL	CN	526	548	97.52	In Earth orbit
S51836	2022-019N ?	Jilin-1 Gaofen 03D 13 xing	2022 Feb 27 03:06:28	CGSTL	CN	526	548	97.52	In Earth orbit
S51837	2022-019P ?	Jilin-1 Gaofen 03D 14 xing	2022 Feb 27 03:06:28	CGSTL	CN	521	547	97.51	In Earth orbit
S51838	2022-019Q ?	Jilin-1 Gaofen 03D 15 xing	2022 Feb 27 03:06:28	CGSTL	CN	526	547	97.53	In Earth orbit
S51839	2022-019R ?	Jilin-1 Gaofen 03D 16 xing	2022 Feb 27 03:06:28	CGSTL	CN	527	547	97.51	In Earth orbit
S51840	2022-019S ?	Jilin-1 Gaofen 03D 17 xing	2022 Feb 27 03:06:28	CGSTL	CN	526	546	97.52	In Earth orbit
S51841	2022-019T ?	Jilin-1 Gaofen 03D 18 xing	2022 Feb 27 03:06:28	CGSTL	CN	527	546	97.52	In Earth orbit
S51843	2022-019Y ?	Chaohe-1	2022 Feb 27 03:06:28	TIANDI	CN	523	549	97.53	In Earth orbit
S51844	2022-019W ?	Chuangxing Leishen	2022 Feb 27 03:06:28	CTYK/YOUD	CN	527	551	97.52	In Earth orbit
S51845	2022-019X ?	Dayun	2022 Feb 27 03:06:28	GUOX	CN	526	547	97.52	In Earth orbit
S51846	2022-019Y ?	Qinmingsheng-1	2022 Feb 27 03:06:28	WUHAN	CN	526	547	97.52	In Earth orbit
S51847	2022-020A	Strix-Beta	2022 Feb 28 20:37:25	SYNSP	J	555	572	97.78	In Earth orbit
S51850	2022-021A	GOES 18	2022 Mar 1 14:38:00	NOAA	US	35784	35787	0.04	In Earth orbit
S51852	2022-022A	Starlink 3542	2022 Mar 3 14:25:00	SPXS	US	304	315	53.22	In Earth orbit
S51853	2022-022B	Starlink 3539	2022 Mar 3 14:25:00	SPXS	US	304	315	53.22	In Earth orbit
S51854	2022-022C	Starlink 3541	2022 Mar 3 14:25:00	SPXS	US	304	315	53.22	In Earth orbit
S51855	2022-022D	Starlink 3545	2022 Mar 3 14:25:00	SPXS	US	304	315	53.22	In Earth orbit
S51856	2022-022E	Starlink 3568	2022 Mar 3 14:25:00	SPXS	US	304	315	53.22	In Earth orbit
S51857	2022-022F	Starlink 3571	2022 Mar 3 14:25:00	SPXS	US	304	315	53.22	In Earth orbit
S51858	2022-022G	Starlink 3563	2022 Mar 3 14:25:00	SPXS	US	304	315	53.22	In Earth orbit
S51859	2022-022H	Starlink 3560	2022 Mar 3 14:25:00	SPXS	US	304	314	53.22	In Earth orbit
S51860	2022-022I	Starlink 3559	2022 Mar 3 14:25:00	SPXS	US	304	314	53.22	In Earth orbit
S51861	2022-022K	Starlink 3562	2022 Mar 3 14:25:00	SPXS	US	304	314	53.22	In Earth orbit
S51862	2022-022L	Starlink 3508	2022 Mar 3 14:25:00	SPXS	US	304	314	53.22	In Earth orbit
S51863	2022-022M	Starlink 3555	2022 Mar 3 14:25:00	SPXS	US	304	314	53.22	In Earth orbit
S51864	2022-022N	Starlink 3548	2022 Mar 3 14:25:00	SPXS	US	304	314	53.22	In Earth orbit
S51865	2022-022P	Starlink 3503	2022 Mar 3 14:25:00	SPXS	US	304	314	53.22	In Earth orbit
S51866	2022-022Q	Starlink 3553	2022 Mar 3 14:25:00	SPXS	US	304	314	53.22	In Earth orbit

S51867	2022-022R	Starlink 3590	2022 Mar 3 1425:00	SPXS	US	304	314	53.22	In Earth orbit
S51868	2022-022S	Starlink 3578	2022 Mar 3 1425:00	SPXS	US	304	314	53.22	In Earth orbit
S51869	2022-022T	Starlink 3588	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51870	2022-022U	Starlink 3591	2022 Mar 3 1425:00	SPXS	US	304	314	53.22	In Earth orbit
S51871	2022-022V	Starlink 3567	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51872	2022-022W	Starlink 3554	2022 Mar 3 1425:00	SPXS	US	304	314	53.22	In Earth orbit
S51873	2022-022X	Starlink 3582	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51874	2022-022Y	Starlink 3574	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51875	2022-022Z	Starlink 3585	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51876	2022-022AA	Starlink 3583	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51877	2022-022AB	Starlink 3556	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51878	2022-022AC	Starlink 3575	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51879	2022-022AD	Starlink 3572	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51880	2022-022AE	Starlink 3566	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51881	2022-022AF	Starlink 3550	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51882	2022-022AG	Starlink 3570	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51883	2022-022AH	Starlink 3576	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51884	2022-022AJ	Starlink 3577	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51885	2022-022AK	Starlink 3584	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51886	2022-022AL	Starlink 3565	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51887	2022-022AM	Starlink 3551	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51888	2022-022AN	Starlink 3536	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51889	2022-022AP	Starlink 3547	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51890	2022-022AQ	Starlink 3519	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51891	2022-022AR	Starlink 3549	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51892	2022-022AS	Starlink 3587	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51893	2022-022AT	Starlink 3579	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51894	2022-022AU	Starlink 3595	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51895	2022-022AV	Starlink 3594	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51896	2022-022AW	Starlink 3593	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51897	2022-022AX	Starlink 3598	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51898	2022-022AY	Starlink 3597	2022 Mar 3 1425:00	SPXS	US	303	314	53.22	In Earth orbit
S51946	2022-023A ?	Yinhe 2-01	2022 Mar 5 0601:00	YINHE	CN	476	500	63.46	In Earth orbit
S51947	2022-023B ?	Yinhe 2-02	2022 Mar 5 0601:00	YINHE	CN	476	500	63.45	In Earth orbit
S51948	2022-023C ?	Yinhe 2-03	2022 Mar 5 0601:00	YINHE	CN	477	501	63.45	In Earth orbit
S51949	2022-023D ?	Yinhe 2-04	2022 Mar 5 0601:00	YINHE	CN	479	500	63.45	In Earth orbit
S51950	2022-023E ?	Yinhe 2-05	2022 Mar 5 0601:00	YINHE	CN	480	500	63.45	In Earth orbit
S51951	2022-023F ?	Yinhe 2-06	2022 Mar 5 0601:00	YINHE	CN	480	501	63.44	In Earth orbit
S51952	2022-023G	Xuanming Xingyuan	2022 Mar 8 0906:00	X YHT	CN	480	502	63.44	In Earth orbit
S51954	2022-024A	Noor 2	2022 Mar 8 0906:00	IRGC	IR	495	512	58.30	In Earth orbit
S51956	2022-025A	Starlink 3700	2022 Mar 9 1345:00	SPXS	US	301	311	53.22	In Earth orbit
S51957	2022-025B	Starlink 3694	2022 Mar 9 1345:00	SPXS	US	300	311	53.22	In Earth orbit
S51958	2022-025C	Starlink 3692	2022 Mar 9 1345:00	SPXS	US	301	312	53.22	In Earth orbit
S51959	2022-025D	Starlink 3704	2022 Mar 9 1345:00	SPXS	US	301	311	53.22	In Earth orbit
S51960	2022-025E	Starlink 3691	2022 Mar 9 1345:00	SPXS	US	300	311	53.22	In Earth orbit
S51961	2022-025F	Starlink 3689	2022 Mar 9 1345:00	SPXS	US	301	311	53.22	In Earth orbit
S51962	2022-025G	Starlink 3697	2022 Mar 9 1345:00	SPXS	US	300	311	53.22	In Earth orbit
S51963	2022-025H	Starlink 3675	2022 Mar 9 1345:00	SPXS	US	301	311	53.22	In Earth orbit
S51964	2022-025I	Starlink 3690	2022 Mar 9 1345:00	SPXS	US	300	311	53.22	In Earth orbit
S51965	2022-025K	Starlink 3696	2022 Mar 9 1345:00	SPXS	US	300	311	53.22	In Earth orbit
S51966	2022-025L	Starlink 3699	2022 Mar 9 1345:00	SPXS	US	300	311	53.22	In Earth orbit
S51967	2022-025M	Starlink 3695	2022 Mar 9 1345:00	SPXS	US	300	311	53.22	In Earth orbit
S51968	2022-025N	Starlink 3681	2022 Mar 9 1345:00	SPXS	US	300	311	53.22	In Earth orbit
S51969	2022-025P	Starlink 3680	2022 Mar 9 1345:00	SPXS	US	300	311	53.22	In Earth orbit
S51970	2022-025Q	Starlink 3677	2022 Mar 9 1345:00	SPXS	US	300	311	53.22	In Earth orbit
S51971	2022-025R	Starlink 3669	2022 Mar 9 1345:00	SPXS	US	300	311	53.22	In Earth orbit
S51972	2022-025S	Starlink 3671	2022 Mar 9 1345:00	SPXS	US	300	311	53.22	In Earth orbit
S51973	2022-025T	Starlink 3679	2022 Mar 9 1345:00	SPXS	US	300	311	53.22	In Earth orbit
S51974	2022-025U	Starlink 3672	2022 Mar 9 1345:00	SPXS	US	299	311	53.22	In Earth orbit
S51975	2022-025V	Starlink 3674	2022 Mar 9 1345:00	SPXS	US	300	310	53.22	In Earth orbit
S51976	2022-025W	Starlink 3663	2022 Mar 9 1345:00	SPXS	US	299	310	53.22	In Earth orbit
S51977	2022-025X	Starlink 3660	2022 Mar 9 1345:00	SPXS	US	300	311	53.22	In Earth orbit
S51978	2022-025Y	Starlink 3666	2022 Mar 9 1345:00	SPXS	US	299	311	53.22	In Earth orbit
S51979	2022-025Z	Starlink 3656	2022 Mar 9 1345:00	SPXS	US	300	311	53.22	In Earth orbit
S51980	2022-025AA	Starlink 3649	2022 Mar 9 1345:00	SPXS	US	299	311	53.22	In Earth orbit
S51981	2022-025AB	Starlink 3635	2022 Mar 9 1345:00	SPXS	US	299	311	53.22	In Earth orbit



S51982	2022-025AC	Starlink 3650	2022 Mar 9 13:45:00	SPXS	US	299	311	53.22	In Earth orbit
S51983	2022-025AD	Starlink 3655	2022 Mar 9 13:45:00	SPXS	US	299	311	53.22	In Earth orbit
S51984	2022-025AE	Starlink 3664	2022 Mar 9 13:45:00	SPXS	US	299	311	53.22	In Earth orbit
S51985	2022-025AF	Starlink 3651	2022 Mar 9 13:45:00	SPXS	US	299	311	53.22	In Earth orbit
S51986	2022-025AG	Starlink 3645	2022 Mar 9 13:45:00	SPXS	US	299	310	53.22	In Earth orbit
S51987	2022-025AH	Starlink 3644	2022 Mar 9 13:45:00	SPXS	US	299	311	53.22	In Earth orbit
S51988	2022-025AJ	Starlink 3640	2022 Mar 9 13:45:00	SPXS	US	299	311	53.22	In Earth orbit
S51989	2022-025AK	Starlink 3642	2022 Mar 9 13:45:00	SPXS	US	299	311	53.22	In Earth orbit
S51990	2022-025AL	Starlink 3657	2022 Mar 9 13:45:00	SPXS	US	299	311	53.22	In Earth orbit
S51991	2022-025AM	Starlink 3652	2022 Mar 9 13:45:00	SPXS	US	299	311	53.22	In Earth orbit
S51992	2022-025AN	Starlink 3643	2022 Mar 9 13:45:00	SPXS	US	299	310	53.22	In Earth orbit
S51993	2022-025AP	Starlink 3648	2022 Mar 9 13:45:00	SPXS	US	299	311	53.22	In Earth orbit
S51994	2022-025AQ	Starlink 3647	2022 Mar 9 13:45:00	SPXS	US	299	310	53.22	In Earth orbit
S51995	2022-025AR	Starlink 3656	2022 Mar 9 13:45:00	SPXS	US	299	310	53.22	In Earth orbit
S51996	2022-025AS	Starlink 3538	2022 Mar 9 13:45:00	SPXS	US	299	310	53.22	In Earth orbit
S51997	2022-025AT	Starlink 3589	2022 Mar 9 13:45:00	SPXS	US	299	310	53.22	In Earth orbit
S51998	2022-025AU	Starlink 3618	2022 Mar 9 13:45:00	SPXS	US	299	310	53.22	In Earth orbit
S51999	2022-025AV	Starlink 3667	2022 Mar 9 13:45:00	SPXS	US	299	310	53.22	In Earth orbit
S52000	2022-025AW	Starlink 3653	2022 Mar 9 13:45:00	SPXS	US	299	310	53.22	In Earth orbit
S52001	2022-025AX	Starlink 3659	2022 Mar 9 13:45:00	SPXS	US	299	310	53.22	In Earth orbit
S52002	2022-025AY	Starlink 3668	2022 Mar 9 13:45:00	SPXS	US	299	310	53.22	In Earth orbit
S52003	2022-025AZ	Starlink 3654	2022 Mar 9 13:45:00	SPXS	US	298	310	53.22	In Earth orbit
S52008	2022-026A	S4 CROSSOVER	2022 Mar 15 16:22:00	NSL	US	470	536	97.49	Attached to Astra LV0009 Stage 2
S52009	2022-026B	SpaceBEE-121	2022 Mar 15 16:22:00	SWARMX	US	506	543	97.50	In Earth orbit
S52010	2022-026C	SpaceBEE-114	2022 Mar 15 16:22:00	SWARMX	US	507	543	97.50	In Earth orbit
S52011	2022-026D	SpaceBEE-126	2022 Mar 15 16:22:00	SWARMX	US	507	543	97.50	In Earth orbit
S52012	2022-026E	SpaceBEE-118	2022 Mar 15 16:22:00	SWARMX	US	507	542	97.50	In Earth orbit
S52013	2022-026F	SpaceBEE-120	2022 Mar 15 16:22:00	SWARMX	US	506	543	97.50	In Earth orbit
S52014	2022-026G	SpaceBEE-122	2022 Mar 15 16:22:00	SWARMX	US	506	543	97.50	In Earth orbit
S52015	2022-026H	SpaceBEE-119	2022 Mar 15 16:22:00	SWARMX	US	506	543	97.50	In Earth orbit
S52016	2022-026I	SpaceBEE-115	2022 Mar 15 16:22:00	SWARMX	US	506	543	97.50	In Earth orbit
S52017	2022-026K	OKESATIO	2022 Mar 15 16:22:00	PSAS	US	506	543	97.50	In Earth orbit
S52018	2022-026L	SpaceBEE NZ-14	2022 Mar 15 16:22:00	SWARNZ	NZ	507	543	97.50	In Earth orbit
S52019	2022-026M	SpaceBEE NZ-11	2022 Mar 15 16:22:00	SWARNZ	NZ	506	543	97.50	In Earth orbit
S52020	2022-026N	SpaceBEE-127	2022 Mar 15 16:22:00	SWARMX	US	507	543	97.50	In Earth orbit
S52021	2022-026P	SpaceBEE-125	2022 Mar 15 16:22:00	SWARMX	US	507	543	97.51	In Earth orbit
S52022	2022-026Q	SpaceBEE-117	2022 Mar 15 16:22:00	SWARMX	US	507	542	97.51	In Earth orbit
S52023	2022-026R	SpaceBEE-116	2022 Mar 15 16:22:00	SWARMX	US	506	543	97.51	In Earth orbit
S52024	2022-026S	SpaceBEE-113	2022 Mar 15 16:22:00	SWARMX	US	507	543	97.51	In Earth orbit
S52025	2022-026T	SpaceBEE-112	2022 Mar 15 16:22:00	SWARMX	US	506	543	97.50	In Earth orbit
S52026	2022-026U	SpaceBEE NZ-13	2022 Mar 15 16:22:00	SWARNZ	NZ	506	543	97.50	In Earth orbit
S52027	2022-026V	SpaceBEE-123	2022 Mar 15 16:22:00	SWARMX	US	507	543	97.50	In Earth orbit
S52028	2022-026W	SpaceBEE NZ-12	2022 Mar 15 16:22:00	SWARNZ	NZ	502	543	97.50	In Earth orbit
S52029	2022-026X	SpaceBEE-124	2022 Mar 15 16:22:00	SWARMX	US	503	544	97.50	In Earth orbit
S52084	2022-027A	Yaogan 34-02	2022 Mar 17 07:09:00	ZLZB	CN	1082	1095	63.40	In Earth orbit
S52086	2022-028A	S. P. Korolev	2022 Mar 18 15:55:18	RKKE	RU	200	224	51.68	Landed
S52088	2022-029A	Starlink 3537	2022 Mar 19 04:42:30	SPXS	US	301	315	53.22	In Earth orbit
S52089	2022-029B	Starlink 3722	2022 Mar 19 04:42:30	SPXS	US	316	319	53.22	In Earth orbit
S52090	2022-029C	Starlink 3712	2022 Mar 19 04:42:30	SPXS	US	315	319	53.22	In Earth orbit
S52091	2022-029D	Starlink 3713	2022 Mar 19 04:42:30	SPXS	US	316	319	53.22	In Earth orbit
S52092	2022-029E	Starlink 3716	2022 Mar 19 04:42:30	SPXS	US	316	318	53.22	In Earth orbit
S52093	2022-029F	Starlink 3673	2022 Mar 19 04:42:30	SPXS	US	316	318	53.22	In Earth orbit
S52094	2022-029G	Starlink 3714	2022 Mar 19 04:42:30	SPXS	US	315	320	53.22	In Earth orbit
S52095	2022-029H	Starlink 3701	2022 Mar 19 04:42:30	SPXS	US	315	319	53.22	In Earth orbit
S52096	2022-029I	Starlink 3717	2022 Mar 19 04:42:30	SPXS	US	302	315	53.22	In Earth orbit
S52097	2022-029K +	Starlink 3676	2022 Mar 19 04:42:30	SPXS	US	302	315	53.22	Reentered
S52098	2022-029L	Starlink 3665	2022 Mar 19 04:42:30	SPXS	US	316	319	53.22	In Earth orbit
S52099	2022-029M +	Starlink 3662	2022 Mar 19 04:42:30	SPXS	US	302	315	53.22	Reentered
S52100	2022-029N	Starlink 3702	2022 Mar 19 04:42:30	SPXS	US	315	318	53.22	In Earth orbit
S52101	2022-029P	Starlink 3703	2022 Mar 19 04:42:30	SPXS	US	314	319	53.22	In Earth orbit
S52102	2022-029Q	Starlink 3709	2022 Mar 19 04:42:30	SPXS	US	315	318	53.22	In Earth orbit
S52103	2022-029R	Starlink 3705	2022 Mar 19 04:42:30	SPXS	US	314	318	53.22	In Earth orbit
S52104	2022-029S +	Starlink 3693	2022 Mar 19 04:42:30	SPXS	US	305	316	53.22	Reentered
S52105	2022-029T	Starlink 3706	2022 Mar 19 04:42:30	SPXS	US	316	317	53.22	In Earth orbit
S52106	2022-029U	Starlink 3670	2022 Mar 19 04:42:30	SPXS	US	315	318	53.22	In Earth orbit
S52107	2022-029V	Starlink 3658	2022 Mar 19 04:42:30	SPXS	US	314	318	53.22	In Earth orbit

S52108	2022-029W	Starlink 3698	2022 Mar 19 0442:30	SPXS	US	314	319	53.22	In Earth orbit
S52109	2022-029X +	Starlink 3731	2022 Mar 19 0442:30	SPXS	US	315	317	53.22	Reentered
S52110	2022-029Y	Starlink 3687	2022 Mar 19 0442:30	SPXS	US	313	318	53.22	In Earth orbit
S52111	2022-029Z	Starlink 3708	2022 Mar 19 0442:30	SPXS	US	314	318	53.22	In Earth orbit
S52112	2022-029AA	Starlink 3756	2022 Mar 19 0442:30	SPXS	US	314	318	53.22	In Earth orbit
S52113	2022-029AB	Starlink 3734	2022 Mar 19 0442:30	SPXS	US	314	318	53.22	In Earth orbit
S52114	2022-029AC	Starlink 3737	2022 Mar 19 0442:30	SPXS	US	314	318	53.22	In Earth orbit
S52115	2022-029AD	Starlink 3685	2022 Mar 19 0442:30	SPXS	US	313	318	53.22	In Earth orbit
S52116	2022-029AE	Starlink 3735	2022 Mar 19 0442:30	SPXS	US	311	318	53.22	In Earth orbit
S52117	2022-029AF	Starlink 3738	2022 Mar 19 0442:30	SPXS	US	312	319	53.22	In Earth orbit
S52118	2022-029AG	Starlink 3743	2022 Mar 19 0442:30	SPXS	US	314	318	53.22	In Earth orbit
S52119	2022-029AH	Starlink 3558	2022 Mar 19 0442:30	SPXS	US	310	317	53.22	In Earth orbit
S52120	2022-029AJ	Starlink 3534	2022 Mar 19 0442:30	SPXS	US	313	318	53.22	In Earth orbit
S52121	2022-029AK	Starlink 3678	2022 Mar 19 0442:30	SPXS	US	314	317	53.22	In Earth orbit
S52122	2022-029AL	Starlink 3726	2022 Mar 19 0442:30	SPXS	US	313	318	53.22	In Earth orbit
S52123	2022-029AM	Starlink 3725	2022 Mar 19 0442:30	SPXS	US	312	317	53.22	In Earth orbit
S52124	2022-029AN	Starlink 3684	2022 Mar 19 0442:30	SPXS	US	310	316	53.22	In Earth orbit
S52125	2022-029AP	Starlink 3727	2022 Mar 19 0442:30	SPXS	US	313	317	53.22	In Earth orbit
S52126	2022-029AQ	Starlink 3732	2022 Mar 19 0442:30	SPXS	US	314	316	53.22	In Earth orbit
S52127	2022-029AR	Starlink 3715	2022 Mar 19 0442:30	SPXS	US	312	317	53.22	In Earth orbit
S52128	2022-029AS +	Starlink 3719	2022 Mar 19 0442:30	SPXS	US	301	314	53.22	Reentered
S52129	2022-029AT	Starlink 3661	2022 Mar 19 0442:30	SPXS	US	313	317	53.22	In Earth orbit
S52130	2022-029AU +	Starlink 3710	2022 Mar 19 0442:30	SPXS	US	301	315	53.22	Reentered
S52131	2022-029AV	Starlink 3711	2022 Mar 19 0442:30	SPXS	US	312	317	53.22	In Earth orbit
S52132	2022-029AW	Starlink 3718	2022 Mar 19 0442:30	SPXS	US	313	317	53.22	In Earth orbit
S52133	2022-029AX	Starlink 3707	2022 Mar 19 0442:30	SPXS	US	309	316	53.22	In Earth orbit
S52134	2022-029AY	Starlink 3721	2022 Mar 19 0442:30	SPXS	US	312	317	53.22	In Earth orbit
S52135	2022-029AZ	Starlink 3729	2022 Mar 19 0442:30	SPXS	US	313	316	53.22	In Earth orbit
S52136	2022-029BA	Starlink 3720	2022 Mar 19 0442:30	SPXS	US	311	318	53.22	In Earth orbit
S52137	2022-029BB	Starlink 3733	2022 Mar 19 0442:30	SPXS	US	313	316	53.22	In Earth orbit
S52138	2022-029BC	Starlink 3723	2022 Mar 19 0442:30	SPXS	US	312	316	53.22	In Earth orbit
S52139	2022-029BD	Starlink 3730	2022 Mar 19 0442:30	SPXS	US	302	314	53.22	In Earth orbit
S52140	2022-029BE	Starlink 3682	2022 Mar 19 0442:30	SPXS	US	313	316	53.22	In Earth orbit
S52145	2022-030A	Meridian-M No. 20L	2022 Mar 22 1248:22	VVKOV	RU	1026	39327	62.78	In Earth orbit
S52150	2022-030A	Tiankum-2	2022 Mar 29 0950:00	CHFEN	CN	587	605	97.79	In Earth orbit
S52151	2022-030B	Pujiang-2	2022 Mar 29 0950:00	SAST	CN	588	603	97.78	In Earth orbit
S52152	2022-030A	Tianping-2A	2022 Mar 30 0229:00	CHFEN?	CN	584	603	97.80	In Earth orbit
S52153	2022-032C	Tianping-2C	2022 Mar 30 0229:00	ZIUNI	CN	581	603	97.80	In Earth orbit
S52156	2022-032D	Tianping-2B	2022 Mar 30 0229:00	ZIUNI	CN	581	603	97.79	In Earth orbit
S52157	2022-033A	Spark-1	2022 Apr 1 1624:16	OMNISP	US	638	656	97.95	In Earth orbit
S52158	2022-033B	GNOMES-3	2022 Apr 1 1624:16	PLANQ	US	637	653	97.95	In Earth orbit
S52159	2022-033C	ENMAP	2022 Apr 1 1624:16	DLR2	US	638	651	97.95	In Earth orbit
S52160	2022-033D	Alfa Cruz	2022 Apr 1 1624:16	UNB	BR	499	511	97.39	In Earth orbit
S52161	2022-033E	ARCSAT	2022 Apr 1 1624:16	NDRÉ	N	499	510	97.39	In Earth orbit
S52162	2022-033F	Lynk Tower 1	2022 Apr 1 1624:16	LYNK	US	497	509	97.39	In Earth orbit
S52163	2022-033G	ION SCV005	2022 Apr 1 1624:16	DORBIT	I	491	509	97.39	In Earth orbit
S52164	2022-033H	SpaceBEE-136	2022 Apr 1 1624:16	SWARMX	US	497	508	97.38	In Earth orbit
S52165	2022-033I	Hawk 4B	2022 Apr 1 1624:16	HE360	US	497	509	97.39	In Earth orbit
S52166	2022-033K	SpaceBEE-138	2022 Apr 1 1624:16	SWARMX	US	496	510	97.38	In Earth orbit
S52167	2022-033L	Hawk 4A	2022 Apr 1 1624:16	HE360	US	497	509	97.39	In Earth orbit
S52168	2022-033M	Annie Maunder	2022 Apr 1 1624:16	URUGUS	UY	498	509	97.39	In Earth orbit
S52169	2022-033N	MP42	2022 Apr 1 1624:16	URUGUS	UY	492	508	97.39	In Earth orbit
S52170	2022-033P	Hawk 4C	2022 Apr 1 1624:16	HE360	US	494	509	97.39	In Earth orbit
S52171	2022-033Q	Marina Telles	2022 Apr 1 1624:16	URUGUS	UY	494	509	97.39	In Earth orbit
S52172	2022-033R	Sally Ride	2022 Apr 1 1624:16	URUGUS	UY	493	509	97.39	In Earth orbit
S52173	2022-033S	Shakuntala	2022 Apr 1 1624:16	PIXX	IN	492	509	97.39	In Earth orbit
S52174	2022-033T	BRO-7	2022 Apr 1 1624:16	UNSEEN	F	497	509	97.39	In Earth orbit
S52175	2022-033U	BDSAT	2022 Apr 1 1624:16	CHTEC	CZ	497	509	97.39	In Earth orbit
S52176	2022-033V	SpaceBEE-130	2022 Apr 1 1624:16	SWARMX	US	498	508	97.38	In Earth orbit
S52177	2022-033W	SpaceBEE-139	2022 Apr 1 1624:16	SWARMX	US	497	510	97.38	In Earth orbit
S52178	2022-033X	Kalpna Chawla	2022 Apr 1 1624:16	URUGUS	UY	497	510	97.39	In Earth orbit
S52179	2022-033Y	SpaceBEE-129	2022 Apr 1 1624:16	SWARMX	US	498	509	97.38	In Earth orbit
S52180	2022-033AA	SpaceBEE-134	2022 Apr 1 1624:16	SWARMX	US	497	509	97.38	In Earth orbit
S52181	2022-033AB	SpaceBEE-131	2022 Apr 1 1624:16	SWARMX	US	498	509	97.38	In Earth orbit
S52182	2022-033AB	SpaceBEE-128	2022 Apr 1 1624:16	SWARMX	US	498	509	97.38	In Earth orbit
S52183	2022-033AC	SpaceBEE-133	2022 Apr 1 1624:16	SWARMX	US	498	509	97.38	In Earth orbit

S52184	2022-033AD	Mary Somerville	2022 Apr 1 1624:16	URUGJUS	UY	494	509	97.39	In Earth orbit
S52185	2022-033AE	SpaceBEE-132	2022 Apr 1 1624:16	SWARMX	US	498	508	97.38	In Earth orbit
S52186	2022-033AF	SpaceBEE-137	2022 Apr 1 1624:16	SWARMX	US	497	509	97.38	In Earth orbit
S52187	2022-033AG	SpaceBEE-135	2022 Apr 1 1624:16	SWARMX	US	497	509	97.38	In Earth orbit
S52188	2022-033AH	PlantSat	2022 Apr 1 1624:16	UCH	CL	496	502	97.39	In Earth orbit
S52189	2022-033AJ	KSF2-C	2022 Apr 1 1624:16	KLEOS	L	496	509	97.38	In Earth orbit
S52190	2022-033AK	KSF2-D	2022 Apr 1 1624:16	KLEOS	L	496	509	97.38	In Earth orbit
S52191	2022-033AL	SUCHAI-1	2022 Apr 1 1624:16	UCH	CL	497	513	97.40	In Earth orbit
S52192	2022-033AM	SUCHAI-2	2022 Apr 1 1624:16	UCH	CL	493	507	97.38	In Earth orbit
S52193	2022-033AN	SUCHAI-3	2022 Apr 1 1624:16	KLEOS	L	492	511	97.40	In Earth orbit
S52194	2022-033AP	KSF2-B	2022 Apr 1 1624:16	KLEOS	L	492	511	97.40	In Earth orbit
T00045	2022-033	SUCHAI-3 subsatellite 1	2022 Apr 1 1624:16	UCH	CL	497	513	97.40	Attached to SUCHAI-3
T00046	2022-033	SUCHAI-3 subsatellite 2	2022 Apr 1 1624:16	UCH	CL	497	513	97.40	Attached to SUCHAI-3
S52196	2022-034B	Global-18	2022 Apr 2 1241:38	BSKG	US	428	440	53.01	In Earth orbit
S52197	2022-034C	Global-20	2022 Apr 2 1241:38	BSKG	US	426	439	53.00	In Earth orbit
S52200	2022-035A	Gao Fen 3-03	2022 Apr 6 2347:00	GWHYZ	CN	739	746	98.42	In Earth orbit
S52202	2022-036A	Kosmos-2554	2022 Apr 7 1120:18	VVKOV	RU	896	908	67.15	In Earth orbit
S52204	2022-037A	Axiom Ax-1	2022 Apr 8 1517:11	SPX	US	414	420	51.64	Landed
S52255	2022-038A	Zhongxing 6D	2022 Apr 15 1200:00	CHISAE	CN	35781	35793	0.05	In Earth orbit
S52257	2022-039A	Daqi Huanjing Jiance Weixing	2022 Apr 15 1816:00	ZZAWYZ	CN	680	690	98.13	In Earth orbit
S52259	2022-040A C	USA 327	2022 Apr 17 1313:00	NROC/USN	CN	1007	1207	63.44	In Earth orbit
S52261	2022-041A	Starlink 3810	2022 Apr 21 1751:40	SPXS	US	322	324	53.22	In Earth orbit
S52262	2022-041B	Starlink 3761	2022 Apr 21 1751:40	SPXS	US	322	324	53.22	In Earth orbit
S52263	2022-041C	Starlink 3786	2022 Apr 21 1751:40	SPXS	US	322	324	53.22	In Earth orbit
S52264	2022-041D	Starlink 3795	2022 Apr 21 1751:40	SPXS	US	322	324	53.22	In Earth orbit
S52265	2022-041E	Starlink 3740	2022 Apr 21 1751:40	SPXS	US	322	324	53.22	In Earth orbit
S52266	2022-041F	Starlink 3739	2022 Apr 21 1751:40	SPXS	US	322	323	53.22	In Earth orbit
S52267	2022-041G	Starlink 3748	2022 Apr 21 1751:40	SPXS	US	322	323	53.22	In Earth orbit
S52268	2022-041H	Starlink 3746	2022 Apr 21 1751:40	SPXS	US	322	323	53.22	In Earth orbit
S52269	2022-041J	Starlink 3791	2022 Apr 21 1751:40	SPXS	US	322	323	53.22	In Earth orbit
S52270	2022-041K	Starlink 3804	2022 Apr 21 1751:40	SPXS	US	322	323	53.22	In Earth orbit
S52271	2022-041L	Starlink 3788	2022 Apr 21 1751:40	SPXS	US	322	323	53.22	In Earth orbit
S52272	2022-041M	Starlink 3781	2022 Apr 21 1751:40	SPXS	US	322	323	53.22	In Earth orbit
S52273	2022-041N	Starlink 3782	2022 Apr 21 1751:40	SPXS	US	322	323	53.22	In Earth orbit
S52274	2022-041P	Starlink 3790	2022 Apr 21 1751:40	SPXS	US	321	323	53.22	In Earth orbit
S52275	2022-041Q	Starlink 3784	2022 Apr 21 1751:40	SPXS	US	322	323	53.22	In Earth orbit
S52276	2022-041R	Starlink 3778	2022 Apr 21 1751:40	SPXS	US	321	323	53.22	In Earth orbit
S52277	2022-041S	Starlink 3787	2022 Apr 21 1751:40	SPXS	US	321	323	53.22	In Earth orbit
S52278	2022-041T	Starlink 3780	2022 Apr 21 1751:40	SPXS	US	321	323	53.22	In Earth orbit
S52279	2022-041U	Starlink 3686	2022 Apr 21 1751:40	SPXS	US	321	323	53.22	In Earth orbit
S52280	2022-041V	Starlink 3764	2022 Apr 21 1751:40	SPXS	US	321	322	53.22	In Earth orbit
S52281	2022-041W	Starlink 3779	2022 Apr 21 1751:40	SPXS	US	321	323	53.22	In Earth orbit
S52282	2022-041X	Starlink 3783	2022 Apr 21 1751:40	SPXS	US	321	322	53.22	In Earth orbit
S52283	2022-041Y	Starlink 3789	2022 Apr 21 1751:40	SPXS	US	321	323	53.22	In Earth orbit
S52284	2022-041Z	Starlink 3561	2022 Apr 21 1751:40	SPXS	US	321	322	53.22	In Earth orbit
S52285	2022-041AA	Starlink 3775	2022 Apr 21 1751:40	SPXS	US	321	323	53.22	In Earth orbit
S52286	2022-041AB	Starlink 3802	2022 Apr 21 1751:40	SPXS	US	321	322	53.22	In Earth orbit
S52287	2022-041AC	Starlink 3822	2022 Apr 21 1751:40	SPXS	US	321	322	53.22	In Earth orbit
S52288	2022-041AD	Starlink 3776	2022 Apr 21 1751:40	SPXS	US	321	322	53.22	In Earth orbit
S52289	2022-041AE	Starlink 3751	2022 Apr 21 1751:40	SPXS	US	321	322	53.22	In Earth orbit
S52290	2022-041AF	Starlink 3772	2022 Apr 21 1751:40	SPXS	US	320	322	53.22	In Earth orbit
S52291	2022-041AG	Starlink 3773	2022 Apr 21 1751:40	SPXS	US	321	322	53.22	In Earth orbit
S52292	2022-041AH	Starlink 3753	2022 Apr 21 1751:40	SPXS	US	321	322	53.22	In Earth orbit
S52293	2022-041AJ	Starlink 3771	2022 Apr 21 1751:40	SPXS	US	321	322	53.22	In Earth orbit
S52294	2022-041AK	Starlink 3777	2022 Apr 21 1751:40	SPXS	US	320	322	53.22	In Earth orbit
S52295	2022-041AL	Starlink 3765	2022 Apr 21 1751:40	SPXS	US	320	322	53.22	In Earth orbit
S52296	2022-041AM	Starlink 3766	2022 Apr 21 1751:40	SPXS	US	320	322	53.22	In Earth orbit
S52297	2022-041AN	Starlink 3758	2022 Apr 21 1751:40	SPXS	US	320	322	53.22	In Earth orbit
S52298	2022-041AP	Starlink 3760	2022 Apr 21 1751:40	SPXS	US	320	321	53.22	In Earth orbit
S52299	2022-041AQ	Starlink 3759	2022 Apr 21 1751:40	SPXS	US	320	322	53.22	In Earth orbit
S52300	2022-041AR	Starlink 3769	2022 Apr 21 1751:40	SPXS	US	320	321	53.22	In Earth orbit
S52301	2022-041AS	Starlink 3768	2022 Apr 21 1751:40	SPXS	US	320	322	53.22	In Earth orbit
S52302	2022-041AT	Starlink 3564	2022 Apr 21 1751:40	SPXS	US	320	321	53.22	In Earth orbit
S52303	2022-041AU	Starlink 3742	2022 Apr 21 1751:40	SPXS	US	320	321	53.22	In Earth orbit
S52304	2022-041AV	Starlink 3744	2022 Apr 21 1751:40	SPXS	US	320	321	53.22	In Earth orbit
S52305	2022-041AW	Starlink 3724	2022 Apr 21 1751:40	SPXS	US	320	321	53.22	In Earth orbit

S52306	2022-041AX	Starlink 3747	2022 Apr 21 17:51:40	SPXS	US	319	321	53.22	In Earth orbit
S52307	2022-041AY	Starlink 3755	2022 Apr 21 17:51:40	SPXS	US	320	321	53.22	In Earth orbit
S52308	2022-041AZ	Starlink 3745	2022 Apr 21 17:51:40	SPXS	US	320	320	53.22	In Earth orbit
S52309	2022-041BA	Starlink 3756	2022 Apr 21 17:51:40	SPXS	US	319	322	53.22	In Earth orbit
S52310	2022-041BB	Starlink 3688	2022 Apr 21 17:51:40	SPXS	US	321	321	53.22	In Earth orbit
S52311	2022-041BC	Starlink 3750	2022 Apr 21 17:51:40	SPXS	US	319	321	53.22	In Earth orbit
S52312	2022-041BD	Starlink 3752	2022 Apr 21 17:51:40	SPXS	US	319	321	53.22	In Earth orbit
S52313	2022-041BE	Starlink 3749	2022 Apr 21 17:51:40	SPXS	US	320	320	53.22	In Earth orbit
S52318	2022-042A	Dragon Freedom (Crew-4)	2022 Apr 27 07:52:55	SPX	US	191	211	51.65	Landed
S52320	2022-043A	Siwei Gaojing 1-01	2022 Apr 29 04:11:33	SIWEI	CN	486	502	97.47	In Earth orbit
S52322	2022-043C	Siwei Gaojing 1-02	2022 Apr 29 04:11:33	SIWEI	CN	485	503	97.47	In Earth orbit
S52330	2022-044A	Kosmos-2555	2022 Apr 29 19:55:22	MORF	RU	278	293	96.45	Reentered
S52331	2022-045A	Starlink 3889	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52332	2022-045B	Starlink 3831	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52333	2022-045C	Starlink 3847	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52334	2022-045D	Starlink 3880	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52335	2022-045E	Starlink 3814	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52336	2022-045F	Starlink 3823	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52337	2022-045G	Starlink 3797	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52338	2022-045H	Starlink 3815	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52339	2022-045J	Starlink 3792	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52340	2022-045K	Starlink 3818	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52341	2022-045L	Starlink 3843	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52342	2022-045M	Starlink 3850	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52343	2022-045N	Starlink 3849	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52344	2022-045P	Starlink 3851	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52345	2022-045Q	Starlink 3852	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52346	2022-045R	Starlink 3812	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52347	2022-045S	Starlink 3826	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52348	2022-045T	Starlink 3829	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52349	2022-045U	Starlink 3819	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52350	2022-045V	Starlink 3754	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52351	2022-045W	Starlink 3816	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	Reentered
S52352	2022-045X	Starlink 3838	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52353	2022-045Y	Starlink 3807	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52354	2022-045Z	Starlink 3876	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52355	2022-045AA	Starlink 3877	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52356	2022-045AB	Starlink 3801	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52357	2022-045AC	Starlink 3821	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52358	2022-045AD	Starlink 3837	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52359	2022-045AE	Starlink 3853	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52360	2022-045AF	Starlink 3824	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52361	2022-045AG	Starlink 3728	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52362	2022-045AH	Starlink 3848	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52363	2022-045AJ	Starlink 3830	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52364	2022-045AK	Starlink 3820	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52365	2022-045AL	Starlink 3874	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52366	2022-045AM	Starlink 3808	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52367	2022-045AN	Starlink 3817	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52368	2022-045AP	Starlink 3834	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52369	2022-045AQ	Starlink 3841	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52370	2022-045AR	Starlink 3827	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52371	2022-045AS	Starlink 3798	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52372	2022-045AT	Starlink 3796	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52373	2022-045AU	Starlink 3550	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52374	2022-045AV	Starlink 3762	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52375	2022-045AW	Starlink 3785	2022 Apr 29 21:27:10	SPXS	US	303	316	53.21	In Earth orbit
S52376	2022-045AX	Starlink 3767	2022 Apr 29 21:27:10	SPXS	US	303	315	53.21	In Earth orbit
S52377	2022-045AY	Starlink 3805	2022 Apr 29 21:27:10	SPXS	US	303	315	53.21	In Earth orbit
S52378	2022-045AZ	Starlink 3806	2022 Apr 29 21:27:10	SPXS	US	303	315	53.21	In Earth orbit
S52379	2022-045BA	Starlink 3800	2022 Apr 29 21:27:10	SPXS	US	303	315	53.21	In Earth orbit
S52380	2022-045BB	Starlink 3793	2022 Apr 29 21:27:10	SPXS	US	303	315	53.21	In Earth orbit
S52381	2022-045BC	Starlink 3803	2022 Apr 29 21:27:10	SPXS	US	303	315	53.21	In Earth orbit
S52382	2022-045BD	Starlink 3799	2022 Apr 29 21:27:10	SPXS	US	303	315	53.21	In Earth orbit
S52383	2022-045BE	Starlink 3811	2022 Apr 29 21:27:10	SPXS	US	303	315	53.21	In Earth orbit
S52388	2022-046A	Anxi Tieguanyin.2	2022 Apr 30 03:30:00	CGSTL	CN	525	548	97.52	In Earth orbit

S52389	2022-046B	Tianji	2022 Apr 30 03:30:00	CGSTL	CN	530	546	97.54	In Earth orbit
S52390	2022-046C	Tianwen	2022 Apr 30 03:30:00	CGSTL	CN	531	543	97.53	In Earth orbit
S52391	2022-046D	Tianyao	2022 Apr 30 03:30:00	CGSTL	CN	526	548	97.53	In Earth orbit
S52392	2022-046E	Tiancho	2022 Apr 30 03:30:00	CGSTL	CN	523	550	97.54	In Earth orbit
S52394	2022-047A	SpaceBEE-143	2022 May 2 22:49:52	SWARMX	US	522	532	97.45	In Earth orbit
S52395	2022-047B	SpaceBEE-NZ-15	2022 May 2 22:49:52	SWARNZ	NZ	522	533	97.45	In Earth orbit
S52396	2022-047C	SpaceBEE-NZ-16	2022 May 2 22:49:52	SWARNZ	NZ	522	533	97.45	In Earth orbit
S52397	2022-047D	SpaceBEE-NZ-17	2022 May 2 22:49:52	SWARNZ	NZ	522	532	97.45	In Earth orbit
S52398	2022-047E	SpaceBEE-NZ-18	2022 May 2 22:49:52	SWARNZ	NZ	522	532	97.45	In Earth orbit
S52399	2022-047F	SpaceBEE-140	2022 May 2 22:49:52	SWARMX	US	522	533	97.45	In Earth orbit
S52400	2022-047G	SpaceBEE-141	2022 May 2 22:49:52	SWARMX	US	522	532	97.45	In Earth orbit
S52401	2022-047H	SpaceBEE-142	2022 May 2 22:49:52	SWARMX	US	522	532	97.45	In Earth orbit
S52402	2022-047I	SpaceBEE-NZ-20	2022 May 2 22:49:52	SWARNZ	NZ	522	532	97.45	In Earth orbit
S52403	2022-047K	SpaceBEE-NZ-22	2022 May 2 22:49:52	SWARNZ	NZ	521	533	97.45	In Earth orbit
S52404	2022-047L	SpaceBEE-NZ-19	2022 May 2 22:49:52	SWARNZ	NZ	522	532	97.45	In Earth orbit
S52405	2022-047M	SpaceBEE-NZ-21	2022 May 2 22:49:52	SWARNZ	NZ	521	533	97.45	In Earth orbit
S52406	2022-047N	SpaceBEE-148	2022 May 2 22:49:52	SWARMX	US	521	533	97.45	In Earth orbit
S52407	2022-047P	SpaceBEE-149	2022 May 2 22:49:52	SWARMX	US	522	533	97.45	In Earth orbit
S52408	2022-047Q	SpaceBEE-153	2022 May 2 22:49:52	SWARMX	US	522	533	97.45	In Earth orbit
S52409	2022-047R	SpaceBEE-150	2022 May 2 22:49:52	SWARMX	US	522	533	97.45	In Earth orbit
S52410	2022-047S	SpaceBEE-144	2022 May 2 22:49:52	SWARMX	US	521	533	97.45	In Earth orbit
S52411	2022-047T	SpaceBEE-145	2022 May 2 22:49:52	SWARMX	US	521	533	97.45	In Earth orbit
S52412	2022-047U	SpaceBEE-146	2022 May 2 22:49:52	SWARMX	US	521	533	97.45	In Earth orbit
S52413	2022-047V	SpaceBEE-151	2022 May 2 22:49:52	SWARMX	US	522	533	97.45	In Earth orbit
S52414	2022-047W	SpaceBEE-152	2022 May 2 22:49:52	SWARMX	US	522	533	97.45	In Earth orbit
S52415	2022-047X	SpaceBEE-147	2022 May 2 22:49:52	SWARMX	US	522	533	97.45	In Earth orbit
S52416	2022-047Y	SpaceBEE-155	2022 May 2 22:49:52	SWARMX	US	522	534	97.45	In Earth orbit
S52417	2022-047Z	SpaceBEE-154	2022 May 2 22:49:52	SWARMX	US	522	533	97.45	In Earth orbit
S52418	2022-047AA	TRSI-3	2022 May 2 22:49:52	SWARMX	US	525	535	97.45	In Earth orbit
S52419	2022-047AB	MyRadar 1	2022 May 2 22:49:52	ACMEO/TRSI	US	524	535	97.45	In Earth orbit
S52420	2022-047AC	TRSI-2	2022 May 2 22:49:52	ACMEO/TRSI	US	524	535	97.45	In Earth orbit
S52421	2022-047AD ?	Unicom-2	2022 May 2 22:49:52	ALBA	UK	525	534	97.45	In Earth orbit
S52422	2022-047AE	BRO-6	2022 May 2 22:49:52	UNSEEN	F	524	534	97.45	In Earth orbit
S52423	2022-047AF ?	E-Space 1	2022 May 2 22:49:52	ESPACE	US	522	534	97.45	In Earth orbit
S52424	2022-047AG ?	E-Space 2	2022 May 2 22:49:52	ESPACE	US	522	533	97.45	In Earth orbit
S52425	2022-047AH ?	AuroraSat 1	2022 May 2 22:49:52	AURPT	FI	522	533	97.45	In Earth orbit
S52426	2022-047AJ ?	E-Space 3	2022 May 2 22:49:52	ESPACE	US	522	533	97.45	In Earth orbit
S52427	2022-047AK ?	Copia	2022 May 2 22:49:52	ASTRIX	NZ	525	536	97.45	Attached to Electron 26 Kick Stage
S52443	2022-048A	Jilin-1 Kuanfufu-01C	2022 May 5 02:38:00	CGSTL	CN	529	545	97.68	In Earth orbit
S52444	2022-048B	Jilin-1 GaoFen 03D 27 xing	2022 May 5 02:38:00	CGSTL	CN	529	546	97.68	In Earth orbit
S52445	2022-048C	Jilin-1 GaoFen 03D 28 xing	2022 May 5 02:38:00	CGSTL	CN	528	546	97.68	In Earth orbit
S52446	2022-048D	Jilin-1 GaoFen 03D 29 xing	2022 May 5 02:38:00	CGSTL	CN	528	546	97.68	In Earth orbit
S52447	2022-048E	Jilin-1 GaoFen 03D 30 xing	2022 May 5 02:38:00	CGSTL	CN	528	546	97.68	In Earth orbit
S52448	2022-048F	Jilin-1 GaoFen 03D 31 xing	2022 May 5 02:38:00	CGSTL	CN	528	545	97.68	In Earth orbit
S52449	2022-048G	Jilin-1 GaoFen 03D 32 xing	2022 May 5 02:38:00	CGSTL	CN	528	545	97.68	In Earth orbit
S52450	2022-048H	Jilin-1 GaoFen 03D 33 xing	2022 May 5 02:38:00	CGSTL	CN	528	545	97.68	In Earth orbit
S52451	2022-049A	Starlink 3870	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52452	2022-049B	Starlink 3909	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52453	2022-049C	Starlink 3872	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52454	2022-049D	Starlink 3888	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52455	2022-049E	Starlink 3890	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52456	2022-049F	Starlink 3896	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52457	2022-049G	Starlink 3899	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52458	2022-049H	Starlink 3898	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52459	2022-049I	Starlink 3856	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52460	2022-049K	Starlink 3865	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52461	2022-049L	Starlink 3900	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52462	2022-049M	Starlink 3903	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52463	2022-049N	Starlink 3885	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52464	2022-049P	Starlink 3904	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52465	2022-049Q	Starlink 3863	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52466	2022-049R	Starlink 3840	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52467	2022-049S	Starlink 3873	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52468	2022-049T	Starlink 3864	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52469	2022-049U	Starlink 3828	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit
S52470	2022-049V	Starlink 3859	2022 May 6 09:42:00	SPXS	US	302	317	53.21	In Earth orbit

S52471	2022-049W	Starlink 3862	SPXS	US	302	317	53.21	In Earth orbit
S52472	2022-049X	Starlink 3881	SPXS	US	302	317	53.21	In Earth orbit
S52473	2022-049Y	Starlink 3879	SPXS	US	302	317	53.21	In Earth orbit
S52474	2022-049Z	Starlink 3855	SPXS	US	302	317	53.21	In Earth orbit
S52475	2022-049AA	Starlink 3882	SPXS	US	302	317	53.21	In Earth orbit
S52476	2022-049AB	Starlink 3835	SPXS	US	302	317	53.21	In Earth orbit
S52477	2022-049AC	Starlink 3860	SPXS	US	302	317	53.21	In Earth orbit
S52478	2022-049AD	Starlink 3825	SPXS	US	302	317	53.21	In Earth orbit
S52479	2022-049AE	Starlink 3878	SPXS	US	302	317	53.21	In Earth orbit
S52480	2022-049AF	Starlink 3839	SPXS	US	302	316	53.21	In Earth orbit
S52481	2022-049AG	Starlink 3842	SPXS	US	302	316	53.21	In Earth orbit
S52482	2022-049AH	Starlink 3813	SPXS	US	302	316	53.21	In Earth orbit
S52483	2022-049AJ	Starlink 3875	SPXS	US	302	317	53.21	In Earth orbit
S52484	2022-049AK	Starlink 3887	SPXS	US	302	316	53.21	In Earth orbit
S52485	2022-049AL	Starlink 3913	SPXS	US	302	316	53.21	In Earth orbit
S52486	2022-049AM	Starlink 3918	SPXS	US	302	316	53.21	In Earth orbit
S52487	2022-049AN	Starlink 3902	SPXS	US	302	316	53.21	In Earth orbit
S52488	2022-049AP	Starlink 3892	SPXS	US	302	316	53.21	In Earth orbit
S52489	2022-049AQ	Starlink 3923	SPXS	US	302	316	53.21	In Earth orbit
S52490	2022-049AR	Starlink 3914	SPXS	US	302	316	53.21	In Earth orbit
S52491	2022-049AS	Starlink 3908	SPXS	US	302	316	53.21	In Earth orbit
S52492	2022-049AT	Starlink 3916	SPXS	US	302	316	53.21	In Earth orbit
S52493	2022-049AU	Starlink 3883	SPXS	US	302	316	53.21	In Earth orbit
S52494	2022-049AV	Starlink 3857	SPXS	US	302	316	53.21	In Earth orbit
S52495	2022-049AW	Starlink 3905	SPXS	US	302	316	53.21	In Earth orbit
S52496	2022-049AX	Starlink 3871	SPXS	US	302	316	53.21	In Earth orbit
S52497	2022-049AY	Starlink 3884	SPXS	US	302	316	53.21	In Earth orbit
S52498	2022-049AZ	Starlink 3884	SPXS	US	302	316	53.21	In Earth orbit
S52499	2022-049BA	Starlink 3894	SPXS	US	302	316	53.21	In Earth orbit
S52500	2022-049BB	Starlink 3866	SPXS	US	302	316	53.21	In Earth orbit
S52501	2022-049BC	Starlink 3907	SPXS	US	302	316	53.21	In Earth orbit
S52502	2022-049BD	Starlink 3912	SPXS	US	302	316	53.21	In Earth orbit
S52503	2022-049BE	Starlink 3861	SPXS	US	302	316	53.21	In Earth orbit
S52509	2022-050A	Tianzhou-4	CMSE0	US	363	376	41.46	Deorbited
S54245	2022-050E	Zhixing 3A	ZHIX	CN	375	396	41.48	In Earth orbit
S52533	2022-051A	Starlink 3951	SPXS	US	304	314	53.22	In Earth orbit
S52534	2022-051B	Starlink 3952	SPXS	US	304	314	53.22	In Earth orbit
S52535	2022-051C	Starlink 3958	SPXS	US	304	314	53.22	In Earth orbit
S52536	2022-051D	Starlink 3964	SPXS	US	304	314	53.22	In Earth orbit
S52537	2022-051E	Starlink 3897	SPXS	US	304	314	53.22	In Earth orbit
S52538	2022-051F	Starlink 3933	SPXS	US	304	314	53.22	In Earth orbit
S52539	2022-051G	Starlink 3757	SPXS	US	304	314	53.22	In Earth orbit
S52540	2022-051H	Starlink 3940	SPXS	US	304	314	53.22	In Earth orbit
S52541	2022-051I	Starlink 3845	SPXS	US	304	314	53.22	In Earth orbit
S52542	2022-051K	Starlink 3937	SPXS	US	304	314	53.22	In Earth orbit
S52543	2022-051L	Starlink 3926	SPXS	US	304	314	53.22	In Earth orbit
S52544	2022-051M	Starlink 3944	SPXS	US	304	314	53.22	In Earth orbit
S52545	2022-051N	Starlink 3939	SPXS	US	304	314	53.22	In Earth orbit
S52546	2022-051P	Starlink 3948	SPXS	US	304	314	53.22	In Earth orbit
S52547	2022-051Q	Starlink 3869	SPXS	US	304	314	53.22	In Earth orbit
S52548	2022-051R	Starlink 3931	SPXS	US	304	314	53.22	In Earth orbit
S52549	2022-051S	Starlink 3935	SPXS	US	304	314	53.22	In Earth orbit
S52550	2022-051T	Starlink 3965	SPXS	US	304	314	53.22	In Earth orbit
S52551	2022-051U	Starlink 3969	SPXS	US	304	314	53.22	In Earth orbit
S52552	2022-051V	Starlink 3966	SPXS	US	304	314	53.22	In Earth orbit
S52553	2022-051W	Starlink 3858	SPXS	US	304	314	53.22	In Earth orbit
S52554	2022-051X	Starlink 3770	SPXS	US	304	314	53.22	In Earth orbit
S52555	2022-051Y	Starlink 3949	SPXS	US	304	314	53.22	In Earth orbit
S52556	2022-051Z	Starlink 3763	SPXS	US	304	314	53.22	In Earth orbit
S52557	2022-051AA	Starlink 3943	SPXS	US	304	314	53.22	In Earth orbit
S52558	2022-051AB	Starlink 3954	SPXS	US	304	314	53.22	In Earth orbit
S52559	2022-051AC	Starlink 3953	SPXS	US	304	314	53.22	In Earth orbit
S52560	2022-051AD	Starlink 3956	SPXS	US	304	314	53.22	In Earth orbit
S52561	2022-051AE	Starlink 3955	SPXS	US	304	314	53.22	In Earth orbit
S52562	2022-051AF	Starlink 3957	SPXS	US	304	314	53.22	In Earth orbit
S52563	2022-051AG	Starlink 3942	SPXS	US	304	314	53.22	In Earth orbit

S52564	2022-051AH	Stairlink 3959	SPXS	US	304	314	53.22	In Earth orbit
S52565	2022-051AJ	Stairlink 3911	SPXS	US	304	314	53.22	In Earth orbit
S52566	2022-051AK	Stairlink 3938	SPXS	US	304	314	53.22	In Earth orbit
S52567	2022-051AL	Stairlink 3929	SPXS	US	304	314	53.22	In Earth orbit
S52568	2022-051AM	Stairlink 3930	SPXS	US	304	314	53.22	In Earth orbit
S52569	2022-051AN	Stairlink 3927	SPXS	US	304	314	53.22	In Earth orbit
S52570	2022-051AP	Stairlink 3924	SPXS	US	304	314	53.22	In Earth orbit
S52574	2022-051AQ	Stairlink 3901	SPXS	US	304	314	53.22	In Earth orbit
S52575	2022-051AR	Stairlink 3920	SPXS	US	304	314	53.22	In Earth orbit
S52576	2022-051AS	Stairlink 3932	SPXS	US	304	314	53.22	In Earth orbit
S52577	2022-051AT	Stairlink 3836	SPXS	US	304	314	53.22	In Earth orbit
S52578	2022-051AU	Stairlink 3833	SPXS	US	304	314	53.22	In Earth orbit
S52579	2022-051AV	Stairlink 3893	SPXS	US	304	314	53.22	In Earth orbit
S52580	2022-051AW	Stairlink 3919	SPXS	US	304	314	53.22	In Earth orbit
S52581	2022-051AX	Stairlink 3915	SPXS	US	304	314	53.22	In Earth orbit
S52582	2022-051AY	Stairlink 3886	SPXS	US	304	314	53.22	In Earth orbit
S52583	2022-051AZ	Stairlink 3895	SPXS	US	304	314	53.22	In Earth orbit
S52584	2022-051BA	Stairlink 3922	SPXS	US	304	314	53.22	In Earth orbit
S52585	2022-051BB	Stairlink 3906	SPXS	US	304	314	53.22	In Earth orbit
S52586	2022-051BC	Stairlink 3910	SPXS	US	304	314	53.22	In Earth orbit
S52587	2022-051BD	Stairlink 3867	SPXS	US	304	314	53.22	In Earth orbit
S52588	2022-051BE	Stairlink 3917	SPXS	US	304	314	53.22	In Earth orbit
S52589	2022-052A	Stairlink 4019	SPXS	US	303	317	53.22	In Earth orbit
S52599	2022-052B	Stairlink 4024	SPXS	US	303	317	53.21	In Earth orbit
S52600	2022-052C	Stairlink 4026	SPXS	US	303	317	53.21	In Earth orbit
S52601	2022-052D	Stairlink 4027	SPXS	US	303	317	53.21	In Earth orbit
S52602	2022-052E	Stairlink 4012	SPXS	US	303	317	53.21	In Earth orbit
S52603	2022-052F	Stairlink 4016	SPXS	US	303	317	53.21	In Earth orbit
S52604	2022-052G	Stairlink 4013	SPXS	US	303	317	53.21	In Earth orbit
S52605	2022-052H	Stairlink 4000	SPXS	US	303	317	53.21	In Earth orbit
S52606	2022-052I	Stairlink 3928	SPXS	US	303	317	53.21	In Earth orbit
S52607	2022-052K	Stairlink 3947	SPXS	US	303	317	53.21	In Earth orbit
S52608	2022-052L	Stairlink 3979	SPXS	US	303	317	53.21	In Earth orbit
S52609	2022-052M	Stairlink 3997	SPXS	US	303	317	53.21	In Earth orbit
S52610	2022-052N	Stairlink 3998	SPXS	US	303	317	53.21	In Earth orbit
S52611	2022-052P	Stairlink 3980	SPXS	US	303	317	53.21	In Earth orbit
S52612	2022-052Q	Stairlink 4002	SPXS	US	303	317	53.21	In Earth orbit
S52613	2022-052R	Stairlink 3921	SPXS	US	303	317	53.21	In Earth orbit
S52614	2022-052S	Stairlink 3982	SPXS	US	303	317	53.21	In Earth orbit
S52615	2022-052T	Stairlink 4011	SPXS	US	303	317	53.21	In Earth orbit
S52616	2022-052U	Stairlink 4015	SPXS	US	303	317	53.21	In Earth orbit
S52617	2022-052V	Stairlink 3996	SPXS	US	303	317	53.21	In Earth orbit
S52618	2022-052W	Stairlink 3983	SPXS	US	303	317	53.21	In Earth orbit
S52619	2022-052X	Stairlink 3741	SPXS	US	303	316	53.21	In Earth orbit
S52620	2022-052Y	Stairlink 3975	SPXS	US	303	317	53.21	In Earth orbit
S52621	2022-052Z	Stairlink 3984	SPXS	US	303	316	53.21	In Earth orbit
S52622	2022-052AA	Stairlink 4008	SPXS	US	303	317	53.21	In Earth orbit
S52623	2022-052AB	Stairlink 3986	SPXS	US	303	316	53.21	In Earth orbit
S52624	2022-052AC	Stairlink 4009	SPXS	US	303	316	53.21	In Earth orbit
S52625	2022-052AD	Stairlink 3988	SPXS	US	303	316	53.21	In Earth orbit
S52626	2022-052AE	Stairlink 3990	SPXS	US	303	316	53.21	In Earth orbit
S52627	2022-052AF	Stairlink 3992	SPXS	US	303	316	53.21	In Earth orbit
S52628	2022-052AG	Stairlink 4001	SPXS	US	303	316	53.21	In Earth orbit
S52629	2022-052AH	Stairlink 4022	SPXS	US	303	316	53.21	In Earth orbit
S52630	2022-052AJ	Stairlink 3989	SPXS	US	303	316	53.21	In Earth orbit
S52631	2022-052AK	Stairlink 3794	SPXS	US	303	316	53.21	In Earth orbit
S52632	2022-052AL	Stairlink 3995	SPXS	US	303	316	53.21	In Earth orbit
S52633	2022-052AM	Stairlink 3994	SPXS	US	303	316	53.21	In Earth orbit
S52634	2022-052AN	Stairlink 3974	SPXS	US	303	316	53.21	In Earth orbit
S52635	2022-052AP	Stairlink 3978	SPXS	US	303	316	53.21	In Earth orbit
S52636	2022-052AQ	Stairlink 3967	SPXS	US	303	316	53.21	In Earth orbit
S52637	2022-052AR	Stairlink 3961	SPXS	US	303	316	53.21	In Earth orbit
S52638	2022-052AS	Stairlink 3941	SPXS	US	303	316	53.21	In Earth orbit
S52639	2022-052AT	Stairlink 3968	SPXS	US	303	316	53.21	In Earth orbit
S52640	2022-052AU	Stairlink 3977	SPXS	US	303	316	53.21	In Earth orbit
S52641	2022-052AV	Stairlink 3991	SPXS	US	303	316	53.21	In Earth orbit

S52642	2022-052AW	Starlink 3971	2022 May 14 20:40:50	SPXS	US	303	316	53.21	In Earth orbit
S52643	2022-052AX	Starlink 3963	2022 May 14 20:40:50	SPXS	US	303	316	53.21	In Earth orbit
S52644	2022-052AY	Starlink 3985	2022 May 14 20:40:50	SPXS	US	303	316	53.21	In Earth orbit
S52645	2022-052AZ	Starlink 3973	2022 May 14 20:40:50	SPXS	US	303	316	53.21	In Earth orbit
S52646	2022-052BA	Starlink 3832	2022 May 14 20:40:50	SPXS	US	303	316	53.21	In Earth orbit
S52647	2022-052BB	Starlink 3846	2022 May 14 20:40:50	SPXS	US	303	316	53.21	In Earth orbit
S52648	2022-052BC	Starlink 3854	2022 May 14 20:40:50	SPXS	US	303	316	53.21	In Earth orbit
S52649	2022-052BD	Starlink 3868	2022 May 14 20:40:50	SPXS	US	303	316	53.21	In Earth orbit
S52650	2022-052BE	Starlink 3891	2022 May 14 20:40:50	SPXS	US	303	316	53.21	In Earth orbit
S52656	2022-053A	Starlink 4004	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52657	2022-053B	Starlink 4084	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52658	2022-053C	Starlink 4082	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52659	2022-053D	Starlink 3960	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52660	2022-053E	Starlink 4081	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52661	2022-053F	Starlink 4042	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52662	2022-053G	Starlink 4044	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52663	2022-053H	Starlink 4037	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52664	2022-053I	Starlink 4070	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52665	2022-053K	Starlink 4064	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52666	2022-053L	Starlink 4079	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52667	2022-053M	Starlink 4076	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52668	2022-053N	Starlink 4067	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52669	2022-053P	Starlink 3972	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52670	2022-053Q	Starlink 4075	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52671	2022-053R	Starlink 4071	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52672	2022-053S	Starlink 4073	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52673	2022-053T	Starlink 3976	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52674	2022-053U	Starlink 3936	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52675	2022-053V	Starlink 3934	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52676	2022-053W	Starlink 4006	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52677	2022-053X	Starlink 4028	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52678	2022-053Y	Starlink 4074	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52679	2022-053Z	Starlink 4031	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52680	2022-053AA	Starlink 3774	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52681	2022-053AB	Starlink 4068	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52682	2022-053AC	Starlink 4017	2022 May 18 10:59:40	SPXS	US	302	316	53.21	In Earth orbit
S52683	2022-053AD	Starlink 4039	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52684	2022-053AE	Starlink 4014	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52685	2022-053AF	Starlink 4029	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52686	2022-053AG	Starlink 4005	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52687	2022-053AH	Starlink 3981	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52688	2022-053AJ	Starlink 4032	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52689	2022-053AK	Starlink 4078	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52690	2022-053AL	Starlink 4035	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52691	2022-053AM	Starlink 3945	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52692	2022-053AN	Starlink 3993	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52693	2022-053AP	Starlink 3946	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52694	2022-053AQ	Starlink 4072	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52695	2022-053AR	Starlink 4041	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52696	2022-053AS	Starlink 4025	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52697	2022-053AT	Starlink 4018	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52698	2022-053AU	Starlink 4030	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52699	2022-053AV	Starlink 3987	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52700	2022-053AW	Starlink 4034	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52701	2022-053AX	Starlink 4003	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52702	2022-053AY	Starlink 4033	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52703	2022-053AZ	Starlink 4020	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52704	2022-053BA	Starlink 3999	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52705	2022-053BB	Starlink 3844	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52706	2022-053BC	Starlink 3970	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52707	2022-053BD	Starlink 4007	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52708	2022-053BE	Starlink 3962	2022 May 18 10:59:40	SPXS	US	302	315	53.21	In Earth orbit
S52713	2022-054A	Kosmos-2556	2022 May 19 08:03:32	VVKOV	RU	337	567	97.70	In Earth orbit
S52715	2022-055A	Starliner OFT-2	2022 May 19 22:54:47	BOKSC	US	187	566	51.60	Landed
S52716	2022-056A	Digu Tongxin Shiyuan Wei.	2022 May 20 10:30:00	CGSTL	US	870	895	86.00	In Earth orbit
S52717	2022-056B	Digu Tongxin Shiyuan Wei.	2022 May 20 10:30:00	CASIT	CN	870	889	86.00	In Earth orbit



S32718	2022-056C	Digui Tongxin Shiyuan Wei	2022 May 20 1030:00	CN	870	888	86.00	In Earth orbit
S32732	2022-057A	Lemur-2 TennysonLi	2022 May 25 1835:00	AU	527	536	97.50	In Earth orbit
S32733	2022-057B	Lemur-2 VanDenDries	2022 May 25 1835:00	AU	527	536	97.50	In Earth orbit
S32734	2022-057C	PTD-3	2022 May 25 1835:00	US	525	537	97.51	In Earth orbit
S32735	2022-057D	CICERO-2 OP15 FLT2	2022 May 25 1835:00	US	525	536	97.51	In Earth orbit
S32736	2022-057E	Lemur-2 Karen B	2022 May 25 1835:00	US	527	536	97.50	In Earth orbit
S32737	2022-057F	Luca	2022 May 25 1835:00	CA	526	536	97.51	In Earth orbit
S32738	2022-057G	Planetum-1	2022 May 25 1835:00	CZ	525	535	97.51	In Earth orbit
S32739	2022-057H	Connectia T1.1	2022 May 25 1835:00	TR	525	536	97.52	In Earth orbit
S32740	2022-057I	Sejong-1	2022 May 25 1835:00	KR	524	538	97.53	In Earth orbit
S32741	2022-057K	CICERO-2 OP15 FLT1	2022 May 25 1835:00	US	524	537	97.52	In Earth orbit
S32742	2022-057L	Centauri 5	2022 May 25 1835:00	AU	525	535	97.51	In Earth orbit
S32743	2022-057M ?	BRONCOSAT-1	2022 May 25 1835:00	US	524	535	97.51	In Earth orbit
S32744	2022-057N	Diako	2022 May 25 1835:00	CA	524	536	97.52	In Earth orbit
S32745	2022-057P	AMS	2022 May 25 1835:00	US	524	536	97.52	In Earth orbit
S32746	2022-057Q	Penny	2022 May 25 1835:00	CA	525	535	97.51	In Earth orbit
S32747	2022-057R	Alice Lee	2022 May 25 1835:00	URUGU	523	536	97.52	In Earth orbit
S32748	2022-057S	Margherita	2022 May 25 1835:00	UY	523	535	97.51	In Earth orbit
S32749	2022-057T	ICEYE-X18	2022 May 25 1835:00	URUGU	523	535	97.51	In Earth orbit
S32750	2022-057U	FossSat-2E 11	2022 May 25 1835:00	FI	520	535	97.52	In Earth orbit
S32751	2022-057V ?	SPIN 1	2022 May 25 1835:00	E	518	535	97.52	In Earth orbit
S32752	2022-057W	Ruby Payne-Scott	2022 May 25 1835:00	D	523	535	97.51	In Earth orbit
S32753	2022-057X	UmbrA-03	2022 May 25 1835:00	UY	523	535	97.52	In Earth orbit
S32754	2022-057Y	Hawk 5C	2022 May 25 1835:00	US	522	535	97.51	In Earth orbit
S32755	2022-057Z	ICEYE-X24	2022 May 25 1835:00	US	522	535	97.52	In Earth orbit
S32756	2022-057AA	Hawk 5B	2022 May 25 1835:00	US	521	535	97.52	In Earth orbit
S32757	2022-057AB	Hawk 5A	2022 May 25 1835:00	US	521	535	97.52	In Earth orbit
S32758	2022-057AC	ICEYE-X19	2022 May 25 1835:00	FI	522	535	97.52	In Earth orbit
S32759	2022-057AD	ICEYE-X20	2022 May 25 1835:00	FI	523	535	97.51	In Earth orbit
S32760	2022-057AE	Vigortide VR-3	2022 May 25 1835:00	MOMENT	520	535	97.51	In Earth orbit
S32761	2022-057AF	ION SCV006	2022 May 25 1835:00	US	520	535	97.51	In Earth orbit
S32762	2022-057AG	ICEYE-X17	2022 May 25 1835:00	US	520	535	97.51	In Earth orbit
S32763	2022-057AH	SHERPA-AC1	2022 May 25 1835:00	US	520	535	97.52	In Earth orbit
S32764	2022-057AJ	Edith Clarke	2022 May 25 1835:00	UY	519	535	97.52	In Earth orbit
S32765	2022-057AK	Urdaneta-Armasat1	2022 May 25 1835:00	E	518	535	97.52	In Earth orbit
S32766	2022-057AL	Varisat-1C	2022 May 25 1835:00	US	523	535	97.51	In Earth orbit
S32767	2022-057AM	CNCE V4	2022 May 25 1835:00	MDA	519	535	97.51	In Earth orbit
S32768	2022-057AN	CNCE V5	2022 May 25 1835:00	MDA	519	535	97.52	In Earth orbit
S32769	2022-057AP	Lemur-2 Mimi1307	2022 May 25 1835:00	US	516	536	97.52	In Earth orbit
S32770	2022-057AQ	SharedSat 2141	2022 May 25 1835:00	ENDUR	517	534	97.51	In Earth orbit
S32771	2022-057AR	Spark-2	2022 May 25 1835:00	US	517	535	97.52	In Earth orbit
S32772	2022-057AS	CPOD 1	2022 May 25 1835:00	OMNISP	515	535	97.52	In Earth orbit
S32773	2022-057AT	FossSat-2E 12	2022 May 25 1835:00	US	515	535	97.51	In Earth orbit
S32774	2022-057AU	SBUDNIC	2022 May 25 1835:00	FOSSA	518	535	97.52	In Earth orbit
S32775	2022-057AV	Guardian-1	2022 May 25 1835:00	AISTS	517	530	97.52	In Earth orbit
S32776	2022-057AW	FossSat-2E 13	2022 May 25 1835:00	E	522	538	97.52	In Earth orbit
S32777	2022-057AX	Veery FS-1	2022 May 25 1835:00	US	520	535	97.51	In Earth orbit
S32778	2022-057AY	FossSat-2E 7	2022 May 25 1835:00	FOSSA	519	536	97.52	In Earth orbit
S32779	2022-057AZ	FossSat-2E 8	2022 May 25 1835:00	FOSSA	518	536	97.52	In Earth orbit
S32780	2022-057BB	CPOD 2	2022 May 25 1835:00	US	511	531	97.53	In Earth orbit
S32781	2022-057BC ?	Foresat-1	2022 May 25 1835:00	FI	486	501	97.52	In Earth orbit
S33951	2022-057BA	SELFIESAT	2022 May 25 1835:00	ONTNU	519	534	97.53	In Earth orbit
A10439	2022-057	OMD-1	2022 May 25 1835:00	US	521	535	97.52	In Earth orbit
A10460	2022-057BC ?	FossSat-2E 9	2022 May 25 1835:00	FOSSA	511	531	97.53	Reentered Alt to Transporter-5
A10461	2022-057AZ ?	FossSat-2E 10	2022 May 25 1835:00	FOSSA	511	531	97.53	Attached to Vigortide VR-3
S32785	2022-058A	Geely Xingou01 zu 01 xing	2022 Jun 2 0400:00	E	520	535	97.51	In Earth orbit
S32786	2022-058B	Geely Xingou01 zu 02 xing	2022 Jun 2 0400:00	CN	601	617	50.00	In Earth orbit
S32787	2022-058C	Geely Xingou01 zu 03 xing	2022 Jun 2 0400:00	CN	600	617	50.00	In Earth orbit
S32788	2022-058D	Geely Xingou01 zu 04 xing	2022 Jun 2 0400:00	CN	599	617	49.99	In Earth orbit
S32789	2022-058E	Geely Xingou01 zu 05 xing	2022 Jun 2 0400:00	CN	599	617	50.01	In Earth orbit
S32790	2022-058F	Geely Xingou01 zu 06 xing	2022 Jun 2 0400:00	CN	598	617	49.99	In Earth orbit
S32791	2022-058G	Geely Xingou01 zu 07 xing	2022 Jun 2 0400:00	CN	596	617	49.99	In Earth orbit
S32792	2022-058H	Geely Xingou01 zu 08 xing	2022 Jun 2 0400:00	CN	596	617	49.99	In Earth orbit
S32793	2022-058I	Geely Xingou01 zu 09 xing	2022 Jun 2 0400:00	CN	594	616	50.00	In Earth orbit
S32795	2022-059A	Progress MS-20	2022 Jun 3 0932:54	RU	189	220	51.66	In Earth orbit
S33307	1998-067TS	Tsolkolkovskiy-Ryazan 2	2022 Jun 3 0932:54	RU	412	418	51.64	Attached to Zvezda In Earth orbit

S53308	1998-067TT	YuzGUGU-55 No. 12	YuzGUGU	RU	412	418	51.64	In Earth orbit
S53311	1998-067TW	Tskolkovskiy-Ryazan 1	RGTU/RKKE	RU	411	419	51.64	In Earth orbit
S53313	1998-067TY	YUZGUGU-55 No. 11	YUZGUGU	RU	412	419	51.64	In Earth orbit
S52797	2022-0600A	Shenzhou 14	CMISEO	CN	385	391	41.47	Landed
S52817	2022-061A	Nilesat 301	NILE	EG	35777	35795	0.05	In Earth orbit
S52830	2022-062A	Starlink 4091	SPXS	US	254	328	53.22	In Earth orbit
S52831	2022-062B	Starlink 4089	SPXS	US	254	328	53.22	In Earth orbit
S52832	2022-062C	Starlink 4083	SPXS	US	254	328	53.22	In Earth orbit
S52833	2022-062D	Starlink 4086	SPXS	US	254	328	53.22	In Earth orbit
S52834	2022-062E	Starlink 4108	SPXS	US	254	328	53.22	In Earth orbit
S52835	2022-062F	Starlink 4080	SPXS	US	254	328	53.22	In Earth orbit
S52836	2022-062G	Starlink 4043	SPXS	US	254	328	53.22	In Earth orbit
S52837	2022-062H	Starlink 4036	SPXS	US	254	328	53.22	In Earth orbit
S52838	2022-062I	Starlink 4092	SPXS	US	254	328	53.22	In Earth orbit
S52839	2022-062K	Starlink 4048	SPXS	US	254	328	53.22	In Earth orbit
S52840	2022-062L	Starlink 4049	SPXS	US	254	328	53.22	In Earth orbit
S52841	2022-062M	Starlink 4065	SPXS	US	253	328	53.22	In Earth orbit
S52842	2022-062N	Starlink 4046	SPXS	US	254	328	53.22	In Earth orbit
S52845	2022-062P	Starlink 4188	SPXS	US	253	328	53.22	In Earth orbit
S52844	2022-062Q	Starlink 4208	SPXS	US	253	328	53.22	In Earth orbit
S52845	2022-062R	Starlink 4168	SPXS	US	253	328	53.22	In Earth orbit
S52846	2022-062S	Starlink 4212	SPXS	US	254	328	53.22	In Earth orbit
S52847	2022-062T	Starlink 4206	SPXS	US	253	328	53.22	In Earth orbit
S52848	2022-062U	Starlink 4202	SPXS	US	254	328	53.22	In Earth orbit
S52849	2022-062V	Starlink 4197	SPXS	US	253	328	53.22	In Earth orbit
S52850	2022-062W	Starlink 4187	SPXS	US	253	328	53.22	In Earth orbit
S52851	2022-062X	Starlink 3809	SPXS	US	253	328	53.22	In Earth orbit
S52852	2022-062Y	Starlink 4199	SPXS	US	253	328	53.22	In Earth orbit
S52853	2022-062Z	Starlink 4184	SPXS	US	253	328	53.22	In Earth orbit
S52854	2022-062AA	Starlink 4189	SPXS	US	253	328	53.22	In Earth orbit
S52855	2022-062AB	Starlink 4204	SPXS	US	253	328	53.22	In Earth orbit
S52856	2022-062AC	Starlink 4209	SPXS	US	253	328	53.22	In Earth orbit
S52857	2022-062AD	Starlink 4201	SPXS	US	253	328	53.22	In Earth orbit
S52858	2022-062AE	Starlink 4199	SPXS	US	253	328	53.22	In Earth orbit
S52859	2022-062AF	Starlink 4196	SPXS	US	253	328	53.22	In Earth orbit
S52860	2022-062AG	Starlink 4191	SPXS	US	253	328	53.22	In Earth orbit
S52861	2022-062AH	Starlink 4112	SPXS	US	253	327	53.22	In Earth orbit
S52862	2022-062AJ	Starlink 4010	SPXS	US	253	328	53.22	In Earth orbit
S52863	2022-062AK	Starlink 4270	SPXS	US	253	327	53.22	In Earth orbit
S52864	2022-062AL	Starlink 4267	SPXS	US	253	328	53.22	In Earth orbit
S52865	2022-062AM	Starlink 4274	SPXS	US	253	327	53.22	In Earth orbit
S52866	2022-062AN	Starlink 4272	SPXS	US	253	328	53.22	In Earth orbit
S52867	2022-062AP	Starlink 4126	SPXS	US	253	327	53.22	In Earth orbit
S52868	2022-062AQ	Starlink 4261	SPXS	US	253	327	53.22	In Earth orbit
S52869	2022-062AR	Starlink 4266	SPXS	US	253	327	53.22	In Earth orbit
S52870	2022-062AS	Starlink 4195	SPXS	US	253	327	53.22	In Earth orbit
S52871	2022-062AT	Starlink 4207	SPXS	US	253	327	53.22	In Earth orbit
S52872	2022-062AU	Starlink 4213	SPXS	US	253	327	53.22	In Earth orbit
S52873	2022-062AV	Starlink 4211	SPXS	US	253	327	53.22	In Earth orbit
S52874	2022-062AW	Starlink 4210	SPXS	US	253	327	53.22	In Earth orbit
S52875	2022-062AX	Starlink 4193	SPXS	US	253	327	53.22	In Earth orbit
S52876	2022-062AY	Starlink 4200	SPXS	US	253	327	53.22	In Earth orbit
S52877	2022-062AZ	Starlink 4214	SPXS	US	252	327	53.22	In Earth orbit
S52878	2022-062BA	Starlink 4171	SPXS	US	252	327	53.22	In Earth orbit
S52879	2022-062BB	Starlink 4139	SPXS	US	252	327	53.22	In Earth orbit
S52880	2022-062BC	Starlink 4186	SPXS	US	252	327	53.22	In Earth orbit
S52881	2022-062BD	Starlink 4192	SPXS	US	252	327	53.22	In Earth orbit
S52882	2022-062BE	Starlink 4181	SPXS	US	252	327	53.22	In Earth orbit
S52883	2022-062A	Starlink 4181	ADSD/BEWEHR	D	743	751	98.40	In Earth orbit
S52888	2022-064A	Globalstar FMI 5	GLOBL	US	1111	1125	51.98	In Earth orbit
S52889	2022-064B	USA 328	NROC	US	520	531	53.01	In Earth orbit
S52890	2022-064C	USA 329	NROC	US	519	531	53.01	In Earth orbit
S52891	2022-064D	USA 330	NROC	US	520	531	53.00	In Earth orbit
S52892	2022-064E	USA 331	NROC	US	520	531	53.00	In Earth orbit
S52894	2022-065A	PVSAT	KR	695	704	98.01	In Earth orbit	
S52895	2022-065B	Wiscomgomsache	KARI	694	708	98.01	In Earth orbit	

S52897	2022-065D	STER Cube Lab II	2022 Jun 21 07:00:00	CHOSU	KR	693	704	98.02	In Earth orbit
S52898	2022-065E	RANDEV	2022 Jun 21 07:00:00	KAMST	KR	692	703	98.01	In Earth orbit
S52899	2022-065F	SNUGLITE-2	2022 Jun 21 07:00:00	SNU	KR	692	703	98.01	In Earth orbit
S52900	2022-065G	MIMAN	2022 Jun 21 07:00:00	YONS	KR	693	704	98.03	In Earth orbit
S52901	2022-066A	Tamxing-1	2022 Jun 22 02:08:00	CASIOM	CN	275	290	96.75	In Earth orbit
S52902	2022-067A	GSAT-24	2022 Jun 22 21:50:07	NSIL	IN	35758	35813	0.10	In Earth orbit
S52904	2022-067B	Metsat 3D	2022 Jun 22 21:50:07	MEAS	MY	35783	35789	0.05	In Earth orbit
S52907	2022-068A	Yaogan 35 02 zu 01 xing	2022 Jun 23 02:22:00	CASC	CN	486	499	35.00	In Earth orbit
S52908	2022-068B	Yaogan 35 02 zu 02 xing	2022 Jun 23 02:22:00	CASC	CN	484	497	34.99	In Earth orbit
S52909	2022-068C	Yaogan 35 02 zu 03 xing	2022 Jun 23 02:22:00	CASC	CN	487	499	34.99	In Earth orbit
S52912	2022-069A	Gao Fen 12-03	2022 Jun 27 15:46:00	ZLZB	CN	594	599	97.98	In Earth orbit
S52914	2022-070A	CAPSTONE	2022 Jun 28 09:55:00	ADVSP/ARC	US	169	1044	39.12	Deep Space
S52916	2022-070C	Lunar Photon	2022 Jun 28 09:55:00	RLABN	NZ	260	1167300	38.96	Deep Space
S52933	2022-071A	SES-22	2022 Jun 29 21:04:00	SESSA	L	35776	35796	0.06	In Earth orbit
S52935	2022-072A	DS-EO	2022 Jun 30 12:32:00	DSTA/STELC	SG	562	573	9.99	In Earth orbit
S52937	2022-072C	NeuSAR	2022 Jun 30 12:32:00	DSTA/STELC	SG	561	572	9.99	In Earth orbit
S52938	2022-072D	SCOOB-1	2022 Jun 30 12:32:00	NTU	SG	559	572	9.99	In Earth orbit
S52939	2022-072E ?	POEM	2022 Jun 30 12:32:00	ISRO	IN	532	582	9.95	Attached to PSLV-C53 PS4
S52940	2022-073A	WFOV Testbed	2022 Jul 1 23:15:00	SFSSC	US	35992	36000	0.14	In Earth orbit
S52941	2022-073B	USSF 12 Ring	2022 Jul 1 23:15:00	AFRL	US	36167	36233	0.00	In Earth orbit
S53521	2022-073E C	USA 337	2022 Jul 1 23:15:00	AFRL	US	36160	36200	0.09	In Earth orbit
S52944	2022-074A	Recurve	2022 Jul 2 06:53:00	LANL	US	489	498	44.99	In Earth orbit
S52945	2022-074B	NAACHOS-2	2022 Jul 2 06:53:00	LANL	US	491	497	44.98	In Earth orbit
S52947	2022-074D	Slingshot 1	2022 Jul 2 06:53:00	AERO	US	488	497	44.98	In Earth orbit
S52948	2022-074E ?	GPIX-2	2022 Jul 2 06:53:00	LARCN	US	493	498	44.99	In Earth orbit
S52949	2022-074F	MISR-B-1	2022 Jul 2 06:53:00	SOCOM	US	493	499	44.99	In Earth orbit
S52950	2022-074G	CTIM-FD	2022 Jul 2 06:53:00	CLASP	US	494	498	45.00	In Earth orbit
S52951	2022-074H	GunsMoke-L	2022 Jul 2 06:53:00	SMDC	US	493	499	45.00	In Earth orbit
S52986	2022-075A	Kosmos-2557	2022 Jul 7 09:18:06	VV/KOV/IACG	RU	19101	19157	64.82	In Earth orbit
S52987	2022-076A	Starlink 4260	2022 Jul 7 13:11:00	SPXS	US	269	327	53.22	In Earth orbit
S52987	2022-076B	Starlink 4259	2022 Jul 7 13:11:00	SPXS	US	269	328	53.22	In Earth orbit
S52988	2022-076C	Starlink 4291	2022 Jul 7 13:11:00	SPXS	US	269	327	53.22	In Earth orbit
S52989	2022-076D	Starlink 4293	2022 Jul 7 13:11:00	SPXS	US	269	327	53.22	In Earth orbit
S52990	2022-076E	Starlink 4286	2022 Jul 7 13:11:00	SPXS	US	270	327	53.22	In Earth orbit
S52991	2022-076F	Starlink 4285	2022 Jul 7 13:11:00	SPXS	US	269	327	53.22	In Earth orbit
S52992	2022-076G	Starlink 4269	2022 Jul 7 13:11:00	SPXS	US	269	327	53.22	In Earth orbit
S52993	2022-076H	Starlink 4264	2022 Jul 7 13:11:00	SPXS	US	269	327	53.22	In Earth orbit
S52994	2022-076I	Starlink 4256	2022 Jul 7 13:11:00	SPXS	US	269	328	53.22	In Earth orbit
S52995	2022-076K	Starlink 4296	2022 Jul 7 13:11:00	SPXS	US	268	328	53.22	In Earth orbit
S52996	2022-076L	Starlink 4295	2022 Jul 7 13:11:00	SPXS	US	269	328	53.22	In Earth orbit
S52997	2022-076M	Starlink 4301	2022 Jul 7 13:11:00	SPXS	US	268	328	53.22	In Earth orbit
S52998	2022-076N	Starlink 4254	2022 Jul 7 13:11:00	SPXS	US	269	328	53.22	In Earth orbit
S52999	2022-076P	Starlink 4217	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53000	2022-076Q	Starlink 4194	2022 Jul 7 13:11:00	SPXS	US	269	328	53.22	In Earth orbit
S53001	2022-076R	Starlink 4190	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53002	2022-076S	Starlink 4121	2022 Jul 7 13:11:00	SPXS	US	268	328	53.22	In Earth orbit
S53003	2022-076T	Starlink 4255	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53004	2022-076U	Starlink 4253	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53005	2022-076V	Starlink 4288	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53006	2022-076W	Starlink 4290	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53007	2022-076X	Starlink 4215	2022 Jul 7 13:11:00	SPXS	US	268	328	53.22	In Earth orbit
S53008	2022-076Y	Starlink 4275	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53009	2022-076Z	Starlink 4277	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53010	2022-076AA	Starlink 4263	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53011	2022-076AB	Starlink 4265	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53012	2022-076AC	Starlink 4271	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53013	2022-076AD	Starlink 4177	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53014	2022-076AE	Starlink 4183	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53015	2022-076AF	Starlink 4262	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53016	2022-076AG	Starlink 4283	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53017	2022-076AH	Starlink 4281	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53018	2022-076AJ	Starlink 4279	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53019	2022-076AK	Starlink 4282	2022 Jul 7 13:11:00	SPXS	US	267	327	53.22	In Earth orbit
S53020	2022-076AL	Starlink 4287	2022 Jul 7 13:11:00	SPXS	US	268	327	53.22	In Earth orbit
S53021	2022-076AM	Starlink 4203	2022 Jul 7 13:11:00	SPXS	US	267	327	53.22	In Earth orbit
S53022	2022-076AN	Starlink 4216	2022 Jul 7 13:11:00	SPXS	US	268	326	53.22	In Earth orbit

S53023	2022-076AP	Stairlink 4284	SPXS	US	267	327	53.22	In Earth orbit
S53024	2022-076AQ	Stairlink 4289	SPXS	US	267	327	53.22	In Earth orbit
S53025	2022-076AR	Stairlink 4218	SPXS	US	267	327	53.22	In Earth orbit
S53026	2022-076AS	Stairlink 4119	SPXS	US	267	327	53.22	In Earth orbit
S53027	2022-076AT	Stairlink 4158	SPXS	US	266	327	53.22	In Earth orbit
S53028	2022-076AU	Stairlink 4161	SPXS	US	267	327	53.22	Reentered
S53029	2022-076AV	Stairlink 4143	SPXS	US	267	327	53.22	In Earth orbit
S53030	2022-076AW	Stairlink 4160	SPXS	US	267	327	53.22	In Earth orbit
S53031	2022-076AX	Stairlink 4137	SPXS	US	267	326	53.22	In Earth orbit
S53032	2022-076AY	Stairlink 4115	SPXS	US	267	327	53.22	In Earth orbit
S53033	2022-076AZ	Stairlink 4167	SPXS	US	267	326	53.22	In Earth orbit
S53034	2022-076BA	Stairlink 4151	SPXS	US	267	326	53.22	In Earth orbit
S53035	2022-076BB	Stairlink 4157	SPXS	US	267	326	53.22	In Earth orbit
S53036	2022-076BC	Stairlink 4155	SPXS	US	267	326	53.22	In Earth orbit
S53037	2022-076BD	Stairlink 4153	SPXS	US	267	326	53.22	In Earth orbit
S53038	2022-076BE	Stairlink 4156	SPXS	US	267	326	53.22	In Earth orbit
S53043	2022-077A	Stairlink 4362	SPXS	US	306	319	97.67	In Earth orbit
S53044	2022-077B	Stairlink 4349	SPXS	US	306	319	97.67	In Earth orbit
S53045	2022-077C	Stairlink 4350	SPXS	US	306	319	97.67	In Earth orbit
S53046	2022-077D	Stairlink 4331	SPXS	US	306	319	97.67	In Earth orbit
S53047	2022-077E	Stairlink 4352	SPXS	US	306	319	97.67	In Earth orbit
S53048	2022-077F	Stairlink 4355	SPXS	US	306	319	97.67	In Earth orbit
S53049	2022-077G	Stairlink 4345	SPXS	US	306	319	97.67	In Earth orbit
S53050	2022-077H	Stairlink 4343	SPXS	US	306	319	97.67	In Earth orbit
S53051	2022-077I	Stairlink 4336	SPXS	US	306	319	97.67	In Earth orbit
S53052	2022-077K	Stairlink 4341	SPXS	US	306	319	97.67	In Earth orbit
S53053	2022-077L	Stairlink 4337	SPXS	US	306	319	97.67	In Earth orbit
S53054	2022-077M	Stairlink 4339	SPXS	US	306	319	97.67	In Earth orbit
S53055	2022-077N	Stairlink 4338	SPXS	US	306	319	97.67	In Earth orbit
S53056	2022-077P	Stairlink 4314	SPXS	US	306	319	97.67	In Earth orbit
S53057	2022-077Q	Stairlink 4252	SPXS	US	306	319	97.67	In Earth orbit
S53058	2022-077R	Stairlink 4317	SPXS	US	306	319	97.67	In Earth orbit
S53059	2022-077S	Stairlink 4320	SPXS	US	306	319	97.67	In Earth orbit
S53060	2022-077T	Stairlink 4305	SPXS	US	306	319	97.67	In Earth orbit
S53061	2022-077U	Stairlink 4308	SPXS	US	306	319	97.67	In Earth orbit
S53062	2022-077V	Stairlink 4311	SPXS	US	306	319	97.67	In Earth orbit
S53063	2022-077W	Stairlink 4307	SPXS	US	306	319	97.67	In Earth orbit
S53064	2022-077X	Stairlink 4313	SPXS	US	306	319	97.67	In Earth orbit
S53065	2022-077Y	Stairlink 4312	SPXS	US	306	319	97.67	In Earth orbit
S53066	2022-077Z	Stairlink 4309	SPXS	US	306	319	97.67	In Earth orbit
S53067	2022-077AA	Stairlink 4306	SPXS	US	306	319	97.67	In Earth orbit
S53068	2022-077AB	Stairlink 4325	SPXS	US	306	319	97.67	In Earth orbit
S53069	2022-077AC	Stairlink 4323	SPXS	US	306	319	97.67	In Earth orbit
S53070	2022-077AD	Stairlink 4342	SPXS	US	306	319	97.67	In Earth orbit
S53071	2022-077AE	Stairlink 4328	SPXS	US	306	319	97.67	In Earth orbit
S53072	2022-077AF	Stairlink 4344	SPXS	US	306	319	97.67	In Earth orbit
S53073	2022-077AG	Stairlink 4346	SPXS	US	305	319	97.67	In Earth orbit
S53074	2022-077AH	Stairlink 4310	SPXS	US	306	319	97.67	In Earth orbit
S53075	2022-077AJ	Stairlink 4348	SPXS	US	305	319	97.67	In Earth orbit
S53076	2022-077AK	Stairlink 4347	SPXS	US	305	319	97.67	In Earth orbit
S53077	2022-077AL	Stairlink 4315	SPXS	US	305	319	97.67	In Earth orbit
S53078	2022-077AM	Stairlink 4322	SPXS	US	305	319	97.67	In Earth orbit
S53079	2022-077AN	Stairlink 4327	SPXS	US	305	319	97.67	In Earth orbit
S53080	2022-077AP	Stairlink 4330	SPXS	US	305	319	97.67	In Earth orbit
S53081	2022-077AQ	Stairlink 4326	SPXS	US	305	319	97.67	In Earth orbit
S53082	2022-077AR	Stairlink 4321	SPXS	US	305	319	97.67	In Earth orbit
S53083	2022-077AS	Stairlink 4251	SPXS	US	305	319	97.67	In Earth orbit
S53084	2022-077AT	Stairlink 4319	SPXS	US	305	319	97.67	In Earth orbit
S53085	2022-077AU	Stairlink 4324	SPXS	US	305	319	97.67	In Earth orbit
S53086	2022-077AV	Stairlink 4318	SPXS	US	305	319	97.67	In Earth orbit
S53087	2022-077AW	Stairlink 4329	SPXS	US	305	319	97.67	In Earth orbit
S53088	2022-077AX	Stairlink 4333	SPXS	US	305	319	97.67	In Earth orbit
S53100	2022-078A	Plan Lian 2-03	CNST	CN	35779	35779	2.88	In Earth orbit
S53102	2022-079A C	USA 334	NROC	US	585	595	39.80	In Earth orbit
S53105	2022-080A	LARES 2	ASI	I	5882	5885	70.16	In Earth orbit
S53106	2022-080B	Italy-OSCAR 117	ENEAC/UNF2	I	5832	5853	70.16	In Earth orbit

S53107	2022-080C	AstroBio Cubesat	2022 Jul 13 13:13:17	ROSAP	I	5832	5865	70.15	In Earth orbit
S53108	2022-080D	Trisat-R	2022 Jul 13 13:13:17	UMARB	SI	5832	5864	70.15	In Earth orbit
S53110	2022-080F	Alpha	2022 Jul 13 13:13:17	ARCAD	I	5801	5886	70.16	In Earth orbit
S53111	2022-080G ?	MTCube-2	2022 Jul 13 13:13:17	MONTP	F	5832	5854	70.11	In Earth orbit
S53112	2022-080H ?	Celestia	2022 Jul 13 13:13:17	MONTP/CERN	F	5832	5853	70.11	Lost
S53113	2022-081A	Dragon CRS-25	2022 Jul 15 00:44:22	SPX	F	207	267	51.66	Landed
S53462	1998-067UB	HSU-SAXI-1	2022 Jul 15 00:44:22	FSU/HSU	US	408	418	51.64	In Earth orbit
S53463	1998-067UC	FUTABA	2022 Jul 15 00:44:22	KYUT	J	408	418	51.65	In Earth orbit
S53464	1998-067UD	TU/Miamosat	2022 Jul 15 00:44:22	TUMD	J	408	418	51.64	In Earth orbit
S53767	1998-067UE	D3	2022 Jul 15 00:44:22	ERAU	MD	409	415	51.64	In Earth orbit
S53768	1998-067UF	BeaverCube	2022 Jul 15 00:44:22	MIT	US	411	415	51.64	In Earth orbit
S53769	1998-067UG	CLICK-A	2022 Jul 15 00:44:22	ARC	US	410	415	51.64	In Earth orbit
S53770	1998-067UH	Capsat-1	2022 Jul 15 00:44:22	WEISS	US	412	414	51.64	In Earth orbit
S53771	1998-067UJ	Jagsat	2022 Jul 15 00:44:22	USALA	US	412	414	51.64	In Earth orbit
S53128	2022-082A	Shwei Gaojing 2-01	2022 Jul 15 22:57:16	SIWEI	CN	484	500	97.38	In Earth orbit
S53130	2022-082C	Shwei Gaojing 2-02	2022 Jul 15 22:57:16	SIWEI	CN	483	499	97.38	In Earth orbit
S53132	2022-083A	Starlink 4063	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53133	2022-083B	Starlink 4154	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53134	2022-083C	Starlink 4150	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53135	2022-083D	Starlink 4023	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53136	2022-083E	Starlink 4152	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53137	2022-083F	Starlink 4145	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53138	2022-083G	Starlink 4141	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53139	2022-083H	Starlink 4185	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53140	2022-083I	Starlink 4170	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53141	2022-083K	Starlink 4103	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53142	2022-083L	Starlink 4101	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53143	2022-083M	Starlink 4102	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53144	2022-083N	Starlink 4100	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53145	2022-083P	Starlink 4106	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53146	2022-083Q	Starlink 4099	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53147	2022-083R	Starlink 4094	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53148	2022-083S	Starlink 4066	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53149	2022-083T	Starlink 4021	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53150	2022-083U	Starlink 4038	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53151	2022-083V	Starlink 4040	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53152	2022-083W	Starlink 4045	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53153	2022-083X	Starlink 4098	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53154	2022-083Y	Starlink 4077	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53155	2022-083Z	Starlink 4088	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53156	2022-083AA	Starlink 4087	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53157	2022-083AB	Starlink 4093	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53158	2022-083AC	Starlink 4054	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53159	2022-083AD	Starlink 4111	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53160	2022-083AE	Starlink 4096	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53161	2022-083AF	Starlink 4055	2022 Jul 17 14:20:00	SPXS	US	231	336	53.22	In Earth orbit
S53162	2022-083AG	Starlink 4114	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53163	2022-083AH	Starlink 4104	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53164	2022-083AJ	Starlink 4116	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53165	2022-083AK	Starlink 4090	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53166	2022-083AL	Starlink 4110	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53167	2022-083AM	Starlink 3683	2022 Jul 17 14:20:00	SPXS	US	231	336	53.22	In Earth orbit
S53168	2022-083AN	Starlink 4105	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53169	2022-083AP	Starlink 4117	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53170	2022-083AQ	Starlink 4095	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53171	2022-083AR	Starlink 4052	2022 Jul 17 14:20:00	SPXS	US	231	336	53.22	In Earth orbit
S53172	2022-083AS	Starlink 4299	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53173	2022-083AT	Starlink 4300	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53174	2022-083AU	Starlink 4205	2022 Jul 17 14:20:00	SPXS	US	231	337	53.22	In Earth orbit
S53175	2022-083AV	Starlink 4292	2022 Jul 17 14:20:00	SPXS	US	231	336	53.22	In Earth orbit
S53176	2022-083AW	Starlink 4294	2022 Jul 17 14:20:00	SPXS	US	231	336	53.22	In Earth orbit
S53177	2022-083AX	Starlink 4298	2022 Jul 17 14:20:00	SPXS	US	231	336	53.22	In Earth orbit
S53178	2022-083AY	Starlink 4280	2022 Jul 17 14:20:00	SPXS	US	231	336	53.22	In Earth orbit
S53179	2022-083AZ	Starlink 4276	2022 Jul 17 14:20:00	SPXS	US	231	336	53.22	In Earth orbit
S53180	2022-083BA	Starlink 4258	2022 Jul 17 14:20:00	SPXS	US	231	336	53.22	In Earth orbit
S53181	2022-083BB	Starlink 4273	2022 Jul 17 14:20:00	SPXS	US	231	336	53.22	In Earth orbit

S53182	2022-083BC	Starlink 4278	SPXS	US	231	336	53.22	In Earth orbit
S53183	2022-083BD	Starlink 4268	SPXS	US	231	336	53.22	In Earth orbit
S53184	2022-083BE	Starlink 4257	SPXS	US	231	336	53.22	In Earth orbit
S53189	2022-083BA	Starlink 4391	SPXS	US	307	319	97.67	In Earth orbit
S53190	2022-084B	Starlink 4332	SPXS	US	307	319	97.67	In Earth orbit
S53191	2022-084C	Starlink 4369	SPXS	US	307	319	97.67	In Earth orbit
S53192	2022-084D	Starlink 4375	SPXS	US	307	319	97.67	In Earth orbit
S53193	2022-084E	Starlink 4351	SPXS	US	307	319	97.67	In Earth orbit
S53194	2022-084F	Starlink 4382	SPXS	US	307	319	97.67	In Earth orbit
S53195	2022-084G	Starlink 4404	SPXS	US	307	319	97.67	In Earth orbit
S53196	2022-084H	Starlink 4407	SPXS	US	307	319	97.67	In Earth orbit
S53197	2022-084I	Starlink 4403	SPXS	US	307	319	97.67	In Earth orbit
S53198	2022-084K	Starlink 4385	SPXS	US	307	319	97.67	In Earth orbit
S53199	2022-084L	Starlink 4395	SPXS	US	307	319	97.67	In Earth orbit
S53200	2022-084M	Starlink 4417	SPXS	US	307	319	97.67	In Earth orbit
S53201	2022-084N	Starlink 4405	SPXS	US	307	319	97.67	In Earth orbit
S53202	2022-084P	Starlink 4411	SPXS	US	307	319	97.67	In Earth orbit
S53203	2022-084Q	Starlink 4409	SPXS	US	307	319	97.67	In Earth orbit
S53204	2022-084R	Starlink 4410	SPXS	US	307	319	97.67	In Earth orbit
S53205	2022-084S	Starlink 4397	SPXS	US	307	319	97.67	In Earth orbit
S53206	2022-084T	Starlink 4408	SPXS	US	307	319	97.67	In Earth orbit
S53207	2022-084U	Starlink 4413	SPXS	US	307	319	97.67	In Earth orbit
S53208	2022-084V	Starlink 4425	SPXS	US	307	319	97.67	In Earth orbit
S53209	2022-084W	Starlink 4423	SPXS	US	307	319	97.67	In Earth orbit
S53210	2022-084X	Starlink 4427	SPXS	US	307	319	97.67	In Earth orbit
S53211	2022-084Y	Starlink 4419	SPXS	US	307	319	97.67	In Earth orbit
S53212	2022-084Z	Starlink 4416	SPXS	US	307	319	97.67	In Earth orbit
S53213	2022-084AA	Starlink 4414	SPXS	US	306	319	97.67	In Earth orbit
S53214	2022-084AB	Starlink 4353	SPXS	US	306	319	97.67	In Earth orbit
S53215	2022-084AC	Starlink 4335	SPXS	US	306	319	97.67	In Earth orbit
S53216	2022-084AD	Starlink 4376	SPXS	US	307	319	97.67	In Earth orbit
S53217	2022-084AE	Starlink 4379	SPXS	US	306	319	97.67	In Earth orbit
S53218	2022-084AF	Starlink 4384	SPXS	US	306	319	97.67	In Earth orbit
S53219	2022-084AG	Starlink 4373	SPXS	US	306	319	97.67	In Earth orbit
S53220	2022-084AH	Starlink 4363	SPXS	US	306	319	97.67	In Earth orbit
S53221	2022-084AJ	Starlink 4377	SPXS	US	306	319	97.67	In Earth orbit
S53222	2022-084AK	Starlink 4381	SPXS	US	306	319	97.67	In Earth orbit
S53223	2022-084AL	Starlink 4354	SPXS	US	306	319	97.67	In Earth orbit
S53224	2022-084AM	Starlink 4356	SPXS	US	306	319	97.67	In Earth orbit
S53225	2022-084AN	Starlink 4358	SPXS	US	306	319	97.67	In Earth orbit
S53226	2022-084AP	Starlink 4359	SPXS	US	306	319	97.67	In Earth orbit
S53227	2022-084AQ	Starlink 4366	SPXS	US	306	319	97.67	In Earth orbit
S53228	2022-084AR	Starlink 4365	SPXS	US	306	319	97.67	In Earth orbit
S53229	2022-084AS	Starlink 4367	SPXS	US	306	319	97.67	In Earth orbit
S53230	2022-084AT	Starlink 4364	SPXS	US	306	319	97.67	In Earth orbit
S53231	2022-084AU	Starlink 4370	SPXS	US	306	319	97.67	In Earth orbit
S53232	2022-084AV	Starlink 4371	SPXS	US	306	319	97.67	In Earth orbit
S53233	2022-084AW	Starlink 4372	SPXS	US	306	319	97.67	In Earth orbit
S53234	2022-084AX	Starlink 4368	SPXS	US	306	319	97.67	In Earth orbit
S53239	2022-085A	Wentian	CMSE0	CN	166	318	41.37	Attached to Tianhe
S53242	2022-086A	Starlink 4056	SPXS	US	231	335	53.22	In Earth orbit
S53243	2022-086B	Starlink 4047	SPXS	US	231	335	53.22	In Earth orbit
S53244	2022-086C	Starlink 4125	SPXS	US	231	334	53.22	In Earth orbit
S53245	2022-086D	Starlink 4124	SPXS	US	231	334	53.22	In Earth orbit
S53246	2022-086E	Starlink 4131	SPXS	US	231	336	53.22	In Earth orbit
S53247	2022-086F	Starlink 4061	SPXS	US	231	336	53.22	In Earth orbit
S53248	2022-086G	Starlink 4135	SPXS	US	231	334	53.22	In Earth orbit
S53249	2022-086H	Starlink 4128	SPXS	US	231	335	53.22	In Earth orbit
S53250	2022-086I	Starlink 4059	SPXS	US	231	335	53.22	In Earth orbit
S53251	2022-086K	Starlink 4129	SPXS	US	231	335	53.22	In Earth orbit
S53252	2022-086L	Starlink 4132	SPXS	US	231	335	53.22	In Earth orbit
S53253	2022-086M	Starlink 4133	SPXS	US	231	335	53.22	In Earth orbit
S53254	2022-086N	Starlink 4134	SPXS	US	231	335	53.22	In Earth orbit
S53255	2022-086P	Starlink 4142	SPXS	US	231	335	53.22	In Earth orbit
S53256	2022-086Q	Starlink 4147	SPXS	US	231	335	53.22	In Earth orbit
S53257	2022-086R	Starlink 4144	SPXS	US	231	335	53.22	In Earth orbit

S53258	2022-0865	Starlink 4127	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53259	2022-0861T	Starlink 4140	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53260	2022-0860	Starlink 4136	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53261	2022-086V	Starlink 4062	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53262	2022-086W	Starlink 4085	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53263	2022-086X	Starlink 4130	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53264	2022-086Y	Starlink 3950	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53265	2022-086Z	Starlink 4097	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53266	2022-086AA	Starlink 4058	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53267	2022-086AB	Starlink 4060	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53268	2022-086AC	Starlink 4109	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53269	2022-086AD	Starlink 4057	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53270	2022-086AE	Starlink 4113	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	Reentered
S53271	2022-086AF	Starlink 4069	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53272	2022-086AG	Starlink 4122	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53273	2022-086AH	Starlink 4051	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53274	2022-086AJ	Starlink 4050	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53275	2022-086AK	Starlink 4179	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53276	2022-086AL	Starlink 4174	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53277	2022-086AM	Starlink 4178	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53278	2022-086AN	Starlink 4180	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53279	2022-086AP	Starlink 4163	2022 Jul 24 13:38:20	SPXS	US	230	329	53.22	Reentered
S53280	2022-086AQ	Starlink 4169	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53281	2022-086AR	Starlink 4182	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53282	2022-086AS	Starlink 4164	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53283	2022-086AT	Starlink 4175	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53284	2022-086AU	Starlink 4172	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53285	2022-086AV	Starlink 4173	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53286	2022-086AW	Starlink 4165	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53287	2022-086AX	Starlink 4107	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53288	2022-086AY	Starlink 4162	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53289	2022-086AZ	Starlink 4176	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53290	2022-086BA	Starlink 4149	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53291	2022-086BB	Starlink 4166	2022 Jul 24 13:38:20	SPXS	US	231	334	53.22	In Earth orbit
S53292	2022-086BC	Starlink 4159	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53293	2022-086BD	Starlink 4148	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53294	2022-086BE	Starlink 4146	2022 Jul 24 13:38:20	SPXS	US	231	335	53.22	In Earth orbit
S53299	2022-087A ?	SAiTech-01	2022 Jul 27 04:12:00	CAS	CN	493	511	97.41	In Earth orbit
S53300	2022-087B ?	Guiduo Daqi MTSW	2022 Jul 27 04:12:00	CAS	CN	492	510	97.41	In Earth orbit
S53301	2022-087C ?	Jinan-1	2022 Jul 27 04:12:00	CAS	CN	491	511	97.41	In Earth orbit
S53302	2022-087D ?	Dianci Zuzhuang shiyuan 1	2022 Jul 27 04:12:00	CAS	CN	491	509	97.41	In Earth orbit
S53303	2022-087E ?	Nanyue Kexue Xing	2022 Jul 27 04:12:00	CAS	CN	490	510	97.41	In Earth orbit
T00007	2022-087F ?	Dianci Zuzhuang shiyuan 2	2022 Jul 27 04:12:00	CAS	CN	0	0	0.00	Attached to Nanyue Kexue Xing
S53316	2022-088A	Yaogan 35 03 zu 01 xing	2022 Jul 29 13:28:00	CASC	CN	488	500	35.00	In Earth orbit
S53318	2022-088C	Yaogan 35 03 zu 02 xing	2022 Jul 29 13:28:00	CASC	CN	488	499	34.98	In Earth orbit
S53320	2022-088E	Yaogan 35 03 zu 03 xing	2022 Jul 29 13:28:00	CASC	CN	485	498	34.99	In Earth orbit
S53323	2022-089A	Kosmos-2558	2022 Aug 1 20:25:00	TSVS	RU	435	452	97.26	In Earth orbit
S53346	2022-090A	Gouwang	2022 Aug 4 03:08:00	CAST	CN	490	504	97.47	In Earth orbit
S53347	2022-090B ?	Minhang Shaonian Xing	2022 Aug 4 03:08:00	SAST	CN	487	503	97.47	In Earth orbit
S53348	2022-090C ?	Jiaotong-4	2022 Aug 4 03:08:00	HEAD	CN	487	503	97.47	In Earth orbit
S53352	2022-091A C	USA 335	2022 Aug 4 05:00:00	NROCC	US	628	643	70.02	In Earth orbit
S53355	2022-092A	SBIRS GEO-6	2022 Aug 4 10:29:00	USSF	US	35773	35773	6.49	In Earth orbit
S53357	2022-093A	Chonfu Shiyong Shiyuan HQ 2	2022 Aug 4 16:00:00	ZLZB	US	345	593	49.99	In Earth orbit
S53365	2022-094A	Danuri	2022 Aug 4 23:08:48	KARI	KR	246	246	29.59	Deep Space
A10490	2022-L02	EOS-02	2022 Aug 7 03:48:00	ISRO	IN	76	356	41.60	Reentered
A10491	2022-L02	AzaadiSAT	2022 Aug 7 03:48:00	SKI	IN	76	356	41.60	Reentered
S53367	2022-095A ?	Ping an 3	2022 Aug 9 04:11:00	WEINA	CN	437	548	97.41	In Earth orbit
S53368	2022-095B ?	Taijing-1 02	2022 Aug 9 04:11:00	WEINA	CN	436	548	97.41	In Earth orbit
S53369	2022-095C ?	Donghai 1	2022 Aug 9 04:11:00	ASES	CN	436	547	97.41	In Earth orbit
S53370	2022-096A	Khayyam	2022 Aug 9 05:52:38	IRSA/BDS	IR	491	494	97.44	In Earth orbit
S53371	2022-096B	Polytech Universe-2	2022 Aug 9 05:52:38	SPBPU	RU	486	494	97.44	In Earth orbit
S53372	2022-096C	Polytech Universe-1	2022 Aug 9 05:52:38	SPBPU	RU	486	495	97.44	In Earth orbit
S53373	2022-096D	CYCLOPS	2022 Aug 9 05:52:38	BGTU	RU	490	494	97.44	In Earth orbit
S53374	2022-096E	Monitor-1	2022 Aug 9 05:52:38	MGU	RU	490	494	97.44	In Earth orbit
S53375	2022-096F	Kuzbass-300	2022 Aug 9 05:52:38	KUZGTU	RU	489	493	97.44	In Earth orbit
S53376	2022-096G	UTMN	2022 Aug 9 05:52:38	UTMN	RU	490	494	97.44	In Earth orbit

S53377	2022-0966H	MIET-AIS	MIET	RU	486	494	97.44	In Earth orbit
S53378	2022-0966I	KAI-1	KNITU	RU	490	493	97.44	In Earth orbit
S53379	2022-0966K	Skoltech-B1	SKOLT	RU	489	493	97.44	In Earth orbit
S53380	2022-0966L	Skoltech-B2	SKOLT	RU	486	495	97.44	In Earth orbit
S53381	2022-0966M	ISOI	ISOI	RU	485	494	97.44	In Earth orbit
S53382	2022-0966N	ReshUcube	SIRGAU	RU	484	494	97.44	In Earth orbit
S53383	2022-0966P	CubeSX-HSE-2	VSHE	RU	491	494	97.44	In Earth orbit
S53384	2022-0966Q	Stren	BELGU	RU	490	493	97.44	In Earth orbit
S53385	2022-0966R	Geoskan-Edel'veys	GFOSK	RU	485	495	97.44	In Earth orbit
S53386	2022-0966S ?	VIZARD-8S1	VIZ/NISYS	RU	486	495	97.44	In Earth orbit
S53388	2022-097A	Starlink 4522	SPXS	US	231	334	53.22	In Earth orbit
S53389	2022-097B	Starlink 4523	SPXS	US	231	334	53.22	In Earth orbit
S53390	2022-097C	Starlink 4517	SPXS	US	231	334	53.22	In Earth orbit
S53391	2022-097D	Starlink 4521	SPXS	US	231	334	53.22	In Earth orbit
S53392	2022-097E	Starlink 4535	SPXS	US	231	334	53.22	In Earth orbit
S53393	2022-097F	Starlink 4530	SPXS	US	231	334	53.22	In Earth orbit
S53394	2022-097G	Starlink 4544	SPXS	US	231	334	53.22	In Earth orbit
S53395	2022-097H	Starlink 4534	SPXS	US	231	334	53.22	In Earth orbit
S53396	2022-097I	Starlink 4524	SPXS	US	231	333	53.22	In Earth orbit
S53397	2022-097K	Starlink 4515	SPXS	US	231	334	53.22	In Earth orbit
S53398	2022-097L	Starlink 4512	SPXS	US	231	333	53.22	In Earth orbit
S53399	2022-097M	Starlink 4528	SPXS	US	231	334	53.22	In Earth orbit
S53400	2022-097N	Starlink 4520	SPXS	US	231	334	53.22	In Earth orbit
S53401	2022-097P	Starlink 4525	SPXS	US	231	334	53.22	In Earth orbit
S53402	2022-097Q	Starlink 4499	SPXS	US	231	334	53.22	In Earth orbit
S53403	2022-097R	Starlink 4507	SPXS	US	231	334	53.22	In Earth orbit
S53404	2022-097S	Starlink 4509	SPXS	US	231	334	53.22	In Earth orbit
S53405	2022-097T	Starlink 4510	SPXS	US	231	334	53.22	In Earth orbit
S53406	2022-097U	Starlink 4533	SPXS	US	231	333	53.22	In Earth orbit
S53407	2022-097V	Starlink 4537	SPXS	US	231	334	53.22	In Earth orbit
S53408	2022-097W	Starlink 4491	SPXS	US	231	333	53.22	In Earth orbit
S53409	2022-097X	Starlink 4490	SPXS	US	231	333	53.22	In Earth orbit
S53410	2022-097Y	Starlink 4492	SPXS	US	231	333	53.22	In Earth orbit
S53411	2022-097Z	Starlink 4497	SPXS	US	231	334	53.22	In Earth orbit
S53412	2022-097AA	Starlink 4496	SPXS	US	231	333	53.22	In Earth orbit
S53413	2022-097AB	Starlink 4500	SPXS	US	231	333	53.22	In Earth orbit
S53414	2022-097AC	Starlink 4304	SPXS	US	231	333	53.22	In Earth orbit
S53415	2022-097AD	Starlink 4479	SPXS	US	231	333	53.22	In Earth orbit
S53416	2022-097AE	Starlink 4480	SPXS	US	231	333	53.22	In Earth orbit
S53417	2022-097AF	Starlink 4484	SPXS	US	231	333	53.22	In Earth orbit
S53418	2022-097AG	Starlink 4481	SPXS	US	231	333	53.22	In Earth orbit
S53419	2022-097AH	Starlink 4476	SPXS	US	231	333	53.22	In Earth orbit
S53420	2022-097AJ	Starlink 4552	SPXS	US	231	333	53.22	In Earth orbit
S53421	2022-097AK	Starlink 4545	SPXS	US	231	333	53.22	In Earth orbit
S53422	2022-097AL	Starlink 4546	SPXS	US	231	333	53.22	In Earth orbit
S53423	2022-097AM	Starlink 4539	SPXS	US	231	333	53.22	In Earth orbit
S53424	2022-097AN	Starlink 4532	SPXS	US	231	333	53.22	In Earth orbit
S53425	2022-097AP	Starlink 4531	SPXS	US	231	333	53.22	In Earth orbit
S53426	2022-097AQ	Starlink 4558	SPXS	US	231	332	53.22	In Earth orbit
S53427	2022-097AR	Starlink 4541	SPXS	US	231	333	53.22	In Earth orbit
S53428	2022-097AS	Starlink 4540	SPXS	US	231	333	53.22	In Earth orbit
S53429	2022-097AT	Starlink 4543	SPXS	US	231	333	53.22	In Earth orbit
S53430	2022-097AU	Starlink 4538	SPXS	US	231	333	53.22	In Earth orbit
S53431	2022-097AV	Starlink 4548	SPXS	US	231	333	53.22	In Earth orbit
S53432	2022-097AW	Starlink 4557	SPXS	US	231	332	53.22	In Earth orbit
S53433	2022-097AX	Starlink 4549	SPXS	US	231	333	53.22	In Earth orbit
S53434	2022-097AY	Starlink 4498	SPXS	US	231	333	53.22	In Earth orbit
S53435	2022-097AZ	Starlink 4542	SPXS	US	231	333	53.22	In Earth orbit
S53436	2022-097BA	Starlink 4527	SPXS	US	231	333	53.22	In Earth orbit
S53437	2022-097BB	Starlink 4529	SPXS	US	231	333	53.22	In Earth orbit
S53438	2022-097BC	Starlink 4526	SPXS	US	231	332	53.22	In Earth orbit
S53439	2022-097BD	Starlink 4519	SPXS	US	231	333	53.22	In Earth orbit
S53444	2022-098A ?	Tianfu Dongpo 01	CGSTL	CN	533	546	97.53	In Earth orbit
S53445	2022-098B ?	Tianfu Dongpo 02	CGSTL	CN	533	546	97.53	In Earth orbit
S53446	2022-098C ?	Tianfu Dongpo 03	CGSTL	CN	534	546	97.53	In Earth orbit
S53447	2022-098D ?	Tianfu Dongpo 04	CGSTL	CN	535	545	97.53	In Earth orbit



S53448	2022-098E ?	Tianfu Dongpo 05	2022 Aug 10 04:50:00	CGSTL	CN	536	97.52	In Earth orbit
S53449	2022-098F ?	Tianfu Dongpo 06	2022 Aug 10 04:50:00	CGSTL	CN	544	97.53	In Earth orbit
S53450	2022-098G ?	Tianfu Dongpo 07	2022 Aug 10 04:50:00	CGSTL	CN	529	97.55	In Earth orbit
S53451	2022-098H ?	Henan-1	2022 Aug 10 04:50:00	CGSTL	CN	542	97.54	In Earth orbit
S53452	2022-098I ?	Xi'an Hangtong 1	2022 Aug 10 04:50:00	CGSTL	CN	532	97.53	In Earth orbit
S53453	2022-098K ?	Puqin-1	2022 Aug 10 04:50:00	CGSTL	CN	542	97.53	In Earth orbit
S53454	2022-098L ?	Tianjin Binhai 1	2022 Aug 10 04:50:00	CGSTL	CN	529	97.52	In Earth orbit
S53455	2022-098M ?	Yunyao-1 04 xing	2022 Aug 10 04:50:00	CGSTL/YAYAO	CN	529	97.52	In Earth orbit
S53456	2022-098N ?	Yunyao-1 05 xing	2022 Aug 10 04:50:00	CGSTL/YAYAO	CN	530	97.52	In Earth orbit
S53457	2022-098P ?	Yunyao-1 06 xing	2022 Aug 10 04:50:00	CGSTL/YAYAO	CN	529	97.52	In Earth orbit
S53458	2022-098Q ?	Yunyao-1 07 xing	2022 Aug 10 04:50:00	CGSTL/YAYAO	CN	528	97.53	In Earth orbit
S53459	2022-098R ?	Yunyao-1 08 xing	2022 Aug 10 04:50:00	CGSTL/YAYAO	CN	529	97.52	In Earth orbit
S53465	2022-099A	Starlink 4415	2022 Aug 12 21:40:20	SPXS	US	307	97.67	In Earth orbit
S53466	2022-099B	Starlink 4398	2022 Aug 12 21:40:20	SPXS	US	319	97.67	In Earth orbit
S53467	2022-099C	Starlink 4394	2022 Aug 12 21:40:20	SPXS	US	307	97.67	In Earth orbit
S53468	2022-099D	Starlink 4400	2022 Aug 12 21:40:20	SPXS	US	319	97.67	In Earth orbit
S53469	2022-099E	Starlink 4399	2022 Aug 12 21:40:20	SPXS	US	307	97.67	In Earth orbit
S53470	2022-099F	Starlink 4393	2022 Aug 12 21:40:20	SPXS	US	319	97.67	In Earth orbit
S53471	2022-099G	Starlink 4316	2022 Aug 12 21:40:20	SPXS	US	307	97.67	In Earth orbit
S53472	2022-099H	Starlink 4447	2022 Aug 12 21:40:20	SPXS	US	319	97.67	In Earth orbit
S53473	2022-099I	Starlink 4383	2022 Aug 12 21:40:20	SPXS	US	307	97.67	In Earth orbit
S53474	2022-099K	Starlink 4445	2022 Aug 12 21:40:20	SPXS	US	307	97.67	In Earth orbit
S53475	2022-099L	Starlink 4389	2022 Aug 12 21:40:20	SPXS	US	307	97.67	In Earth orbit
S53476	2022-099M	Starlink 4378	2022 Aug 12 21:40:20	SPXS	US	307	97.67	In Earth orbit
S53477	2022-099N	Starlink 4412	2022 Aug 12 21:40:20	SPXS	US	319	97.67	In Earth orbit
S53478	2022-099P	Starlink 4433	2022 Aug 12 21:40:20	SPXS	US	307	97.67	In Earth orbit
S53479	2022-099Q	Starlink 4436	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53480	2022-099R	Starlink 4442	2022 Aug 12 21:40:20	SPXS	US	307	97.67	In Earth orbit
S53481	2022-099S	Starlink 4302	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53482	2022-099T	Starlink 4360	2022 Aug 12 21:40:20	SPXS	US	307	97.67	In Earth orbit
S53483	2022-099U	Starlink 4401	2022 Aug 12 21:40:20	SPXS	US	319	97.67	In Earth orbit
S53484	2022-099V	Starlink 4426	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53485	2022-099W	Starlink 4430	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53486	2022-099X	Starlink 4431	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53487	2022-099Y	Starlink 4432	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53488	2022-099Z	Starlink 4421	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53489	2022-099AA	Starlink 4392	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53490	2022-099AB	Starlink 4387	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53491	2022-099AC	Starlink 4450	2022 Aug 12 21:40:20	SPXS	US	319	97.67	In Earth orbit
S53492	2022-099AD	Starlink 4451	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53493	2022-099AE	Starlink 4361	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53494	2022-099AF	Starlink 4340	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53495	2022-099AG	Starlink 4429	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53496	2022-099AH	Starlink 4465	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53497	2022-099AJ	Starlink 4453	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53498	2022-099AK	Starlink 4439	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53499	2022-099AL	Starlink 4454	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53500	2022-099AM	Starlink 4455	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53501	2022-099AN	Starlink 4434	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53502	2022-099AP	Starlink 4435	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53503	2022-099AQ	Starlink 4461	2022 Aug 12 21:40:20	SPXS	US	319	97.67	In Earth orbit
S53504	2022-099AR	Starlink 4448	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53505	2022-099AS	Starlink 4446	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53506	2022-099AT	Starlink 4437	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53507	2022-099AU	Starlink 4444	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53508	2022-099AV	Starlink 4443	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53509	2022-099AW	Starlink 4402	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53510	2022-099AX	Starlink 4441	2022 Aug 12 21:40:20	SPXS	US	306	97.67	In Earth orbit
S53512	2022-100A	Yaogan 35 04 zu 01 xing	2022 Aug 19 17:36:00	CASC	CN	490	35.00	In Earth orbit
S53524	2022-100C	Yaogan 35 04 zu 02 xing	2022 Aug 19 17:36:00	CASC	CN	489	35.00	In Earth orbit
S53526	2022-100E	Yaogan 35 04 zu 03 xing	2022 Aug 19 17:36:00	CASC	CN	488	34.99	In Earth orbit
S53527	2022-101A	Starlink 4511	2022 Aug 19 19:21:20	SPXS	US	231	53.22	In Earth orbit
S53528	2022-101B	Starlink 4503	2022 Aug 19 19:21:20	SPXS	US	231	53.22	In Earth orbit
S53529	2022-101C	Starlink 4478	2022 Aug 19 19:21:20	SPXS	US	231	53.22	In Earth orbit
S53530	2022-101D	Starlink 4482	2022 Aug 19 19:21:20	SPXS	US	231	53.22	In Earth orbit
S53531	2022-101E	Starlink 4487	2022 Aug 19 19:21:20	SPXS	US	231	53.22	In Earth orbit

S53532	2022-101F	Starlink 4483	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53533	2022-101G	Starlink 4493	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53534	2022-101H	Starlink 4488	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53535	2022-101J	Starlink 4138	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53536	2022-101K	Starlink 4053	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53537	2022-101L	Starlink 4120	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53538	2022-101M	Starlink 4118	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53539	2022-101N	Starlink 4123	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53540	2022-101P	Starlink 4486	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53541	2022-101Q	Starlink 4489	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53542	2022-101R	Starlink 4485	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53543	2022-101S	Starlink 4297	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53544	2022-101T	Starlink 4303	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53545	2022-101U	Starlink 4475	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53546	2022-101V	Starlink 4477	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53547	2022-101W	Starlink 4474	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53548	2022-101X	Starlink 4513	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53549	2022-101Y	Starlink 4516	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53550	2022-101Z	Starlink 4518	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53551	2022-101AA	Starlink 4514	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53552	2022-101AB	Starlink 4495	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53553	2022-101AC	Starlink 4501	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53554	2022-101AD	Starlink 4506	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53555	2022-101AE	Starlink 4504	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53556	2022-101AF	Starlink 4505	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53557	2022-101AG	Starlink 4502	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53558	2022-101AH	Starlink 4494	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53559	2022-101AJ	Starlink 4508	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53560	2022-101AK	Starlink 4564	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53561	2022-101AL	Starlink 4563	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53562	2022-101AM	Starlink 4565	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53563	2022-101AN	Starlink 4561	2022 Aug 19 19:21:20	SPXS	US	231	337	53.22	In Earth orbit
S53564	2022-101AP	Starlink 4577	2022 Aug 19 19:21:20	SPXS	US	231	336	53.22	In Earth orbit
S53565	2022-101AQ	Starlink 4576	2022 Aug 19 19:21:20	SPXS	US	231	336	53.22	In Earth orbit
S53566	2022-101AR	Starlink 4575	2022 Aug 19 19:21:20	SPXS	US	231	336	53.22	In Earth orbit
S53567	2022-101AS	Starlink 4585	2022 Aug 19 19:21:20	SPXS	US	231	336	53.22	In Earth orbit
S53568	2022-101AT	Starlink 4583	2022 Aug 19 19:21:20	SPXS	US	231	336	53.22	In Earth orbit
S53569	2022-101AU	Starlink 4582	2022 Aug 19 19:21:20	SPXS	US	231	336	53.22	In Earth orbit
S53570	2022-101AV	Starlink 4550	2022 Aug 19 19:21:20	SPXS	US	231	336	53.22	In Earth orbit
S53571	2022-101AW	Starlink 4584	2022 Aug 19 19:21:20	SPXS	US	231	336	53.22	In Earth orbit
S53572	2022-101AX	Starlink 4555	2022 Aug 19 19:21:20	SPXS	US	231	336	53.22	In Earth orbit
S53573	2022-101AY	Starlink 4547	2022 Aug 19 19:21:20	SPXS	US	231	336	53.22	In Earth orbit
S53574	2022-101AZ	Starlink 4559	2022 Aug 19 19:21:20	SPXS	US	231	336	53.22	In Earth orbit
S53575	2022-101BA	Starlink 4551	2022 Aug 19 19:21:20	SPXS	US	231	336	53.22	In Earth orbit
S53576	2022-101BB	Starlink 4581	2022 Aug 19 19:21:20	SPXS	US	231	336	53.22	In Earth orbit
S53577	2022-101BC	Starlink 4553	2022 Aug 19 19:21:20	SPXS	US	231	336	53.22	In Earth orbit
S53578	2022-101BD	Starlink 4556	2022 Aug 19 19:21:20	SPXS	US	231	336	53.22	In Earth orbit
S53579	2022-101BE	Starlink 4580	2022 Aug 19 19:21:20	SPXS	US	231	336	53.22	In Earth orbit
S53586	2022-102A	Chuangxin-16A	2022 Aug 23 02:36:00	IMICAS	CN	589	596	29.00	In Earth orbit
S53876	2022-102B	Chuangxin-16B	2022 Aug 23 02:36:00	IMICAS	CN	588	596	29.00	In Earth orbit
S53587	2022-103A	Beijing-3B	2022 Aug 24 03:01:00	21AT	CN	596	615	97.94	In Earth orbit
S53588	2022-104A	Starlink 4691	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53589	2022-104B	Starlink 4673	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53590	2022-104C	Starlink 4689	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53591	2022-104D	Starlink 4674	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53592	2022-104E	Starlink 4672	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53593	2022-104F	Starlink 4671	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53594	2022-104G	Starlink 4681	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53595	2022-104H	Starlink 4684	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53596	2022-104I	Starlink 4668	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53597	2022-104K	Starlink 4682	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53598	2022-104L	Starlink 4676	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53599	2022-104M	Starlink 4665	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	Reentered
S53600	2022-104N	Starlink 4677	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53601	2022-104P	Starlink 4675	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53602	2022-104Q	Starlink 4648	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit

S53603	2022-104R	Starlink 4692	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53604	2022-104S	Starlink 4690	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53605	2022-104T	Starlink 4693	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53606	2022-104U	Starlink 4590	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53607	2022-104V	Starlink 4591	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53608	2022-104W	Starlink 4647	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53609	2022-104X	Starlink 4660	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53610	2022-104Y	Starlink 4610	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53611	2022-104Z	Starlink 4650	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53612	2022-104AA	Starlink 4658	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53613	2022-104AB	Starlink 4655	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53614	2022-104AC	Starlink 4654	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53615	2022-104AD	Starlink 4653	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	Reentered
S53616	2022-104AE	Starlink 4605	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	Reentered
S53617	2022-104AF	Starlink 4601	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53618	2022-104AG	Starlink 4604	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53619	2022-104AH	Starlink 4609	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53620	2022-104AJ	Starlink 4615	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53621	2022-104AK	Starlink 4608	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53622	2022-104AL	Starlink 4568	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53623	2022-104AM	Starlink 4573	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53624	2022-104AN	Starlink 4596	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53625	2022-104AP	Starlink 4603	2022 Aug 28 03:41:30	SPXS	US	231	335	53.22	In Earth orbit
S53626	2022-104AQ	Starlink 4554	2022 Aug 28 03:41:30	SPXS	US	231	334	53.22	In Earth orbit
S53627	2022-104AR	Starlink 4595	2022 Aug 28 03:41:30	SPXS	US	231	334	53.22	In Earth orbit
S53628	2022-104AS	Starlink 4600	2022 Aug 28 03:41:30	SPXS	US	231	334	53.22	In Earth orbit
S53629	2022-104AT	Starlink 4602	2022 Aug 28 03:41:30	SPXS	US	231	334	53.22	In Earth orbit
S53630	2022-104AU	Starlink 4598	2022 Aug 28 03:41:30	SPXS	US	231	334	53.22	In Earth orbit
S53631	2022-104AV	Starlink 4599	2022 Aug 28 03:41:30	SPXS	US	231	334	53.22	In Earth orbit
S53632	2022-104AW	Starlink 4606	2022 Aug 28 03:41:30	SPXS	US	231	334	53.22	In Earth orbit
S53633	2022-104AX	Starlink 4593	2022 Aug 28 03:41:30	SPXS	US	231	334	53.22	In Earth orbit
S53634	2022-104AY	Starlink 4592	2022 Aug 28 03:41:30	SPXS	US	231	334	53.22	In Earth orbit
S53635	2022-104AZ	Starlink 4587	2022 Aug 28 03:41:30	SPXS	US	231	334	53.22	In Earth orbit
S53636	2022-104BA	Starlink 4586	2022 Aug 28 03:41:30	SPXS	US	231	334	53.22	In Earth orbit
S53637	2022-104BB	Starlink 4396	2022 Aug 28 03:41:30	SPXS	US	231	334	53.22	In Earth orbit
S53638	2022-104BC	Starlink 4594	2022 Aug 28 03:41:30	SPXS	US	231	334	53.22	In Earth orbit
S53639	2022-104BD	Starlink 4422	2022 Aug 28 03:41:30	SPXS	US	231	334	53.22	In Earth orbit
S53640	2022-104BE	Starlink 4597	2022 Aug 28 03:41:30	SPXS	US	231	334	53.22	In Earth orbit
S53641	2022-104BF	Starlink 4588	2022 Aug 28 03:41:30	SPXS	US	231	334	53.22	In Earth orbit
S53648	2022-105A	Starlink 4622	2022 Aug 31 05:40:10	SPXS	US	312	319	97.66	In Earth orbit
S53649	2022-105B	Starlink 4386	2022 Aug 31 05:40:10	SPXS	US	312	320	97.66	In Earth orbit
S53650	2022-105C	Starlink 4380	2022 Aug 31 05:40:10	SPXS	US	312	320	97.66	In Earth orbit
S53651	2022-105D	Starlink 4388	2022 Aug 31 05:40:10	SPXS	US	312	320	97.66	In Earth orbit
S53652	2022-105E	Starlink 4374	2022 Aug 31 05:40:10	SPXS	US	311	320	97.66	In Earth orbit
S53653	2022-105F	Starlink 4390	2022 Aug 31 05:40:10	SPXS	US	312	319	97.66	In Earth orbit
S53654	2022-105G	Starlink 4420	2022 Aug 31 05:40:10	SPXS	US	310	320	97.66	In Earth orbit
S53655	2022-105H	Starlink 4470	2022 Aug 31 05:40:10	SPXS	US	311	319	97.66	In Earth orbit
S53656	2022-105I	Starlink 4466	2022 Aug 31 05:40:10	SPXS	US	310	320	97.66	In Earth orbit
S53657	2022-105K	Starlink 4469	2022 Aug 31 05:40:10	SPXS	US	311	320	97.66	In Earth orbit
S53658	2022-105L	Starlink 4452	2022 Aug 31 05:40:10	SPXS	US	310	320	97.66	In Earth orbit
S53659	2022-105M	Starlink 4463	2022 Aug 31 05:40:10	SPXS	US	310	320	97.66	In Earth orbit
S53660	2022-105N	Starlink 4473	2022 Aug 31 05:40:10	SPXS	US	309	320	97.66	In Earth orbit
S53661	2022-105P	Starlink 4472	2022 Aug 31 05:40:10	SPXS	US	308	320	97.66	In Earth orbit
S53662	2022-105Q	Starlink 4357	2022 Aug 31 05:40:10	SPXS	US	308	320	97.66	In Earth orbit
S53663	2022-105R	Starlink 4457	2022 Aug 31 05:40:10	SPXS	US	308	320	97.66	In Earth orbit
S53664	2022-105S	Starlink 4471	2022 Aug 31 05:40:10	SPXS	US	309	320	97.66	In Earth orbit
S53665	2022-105T	Starlink 4334	2022 Aug 31 05:40:10	SPXS	US	310	320	97.66	In Earth orbit
S53666	2022-105U	Starlink 4449	2022 Aug 31 05:40:10	SPXS	US	308	320	97.66	In Earth orbit
S53667	2022-105V	Starlink 4406	2022 Aug 31 05:40:10	SPXS	US	309	320	97.66	In Earth orbit
S53668	2022-105W	Starlink 4458	2022 Aug 31 05:40:10	SPXS	US	308	320	97.66	In Earth orbit
S53669	2022-105X	Starlink 4464	2022 Aug 31 05:40:10	SPXS	US	307	320	97.66	In Earth orbit
S53670	2022-105Y	Starlink 4459	2022 Aug 31 05:40:10	SPXS	US	308	320	97.66	In Earth orbit
S53671	2022-105Z	Starlink 4440	2022 Aug 31 05:40:10	SPXS	US	308	320	97.66	In Earth orbit
S53672	2022-105AA	Starlink 4428	2022 Aug 31 05:40:10	SPXS	US	307	320	97.66	In Earth orbit
S53673	2022-105AB	Starlink 4456	2022 Aug 31 05:40:10	SPXS	US	307	320	97.66	In Earth orbit
S53674	2022-105AC	Starlink 4620	2022 Aug 31 05:40:10	SPXS	US	306	319	97.66	In Earth orbit

S53675	2022-105AD	Starlink 4617	SPXS	US	307	320	97.66	In Earth orbit
S53676	2022-105AE	Starlink 4621	SPXS	US	307	320	97.66	In Earth orbit
S53677	2022-105AF	Starlink 4579	SPXS	US	307	320	97.66	In Earth orbit
S53678	2022-105AG	Starlink 4418	SPXS	US	307	320	97.66	In Earth orbit
S53679	2022-105AH	Starlink 4632	SPXS	US	307	320	97.66	In Earth orbit
S53680	2022-105AJ	Starlink 4630	SPXS	US	307	319	97.66	In Earth orbit
S53681	2022-105AK	Starlink 4424	SPXS	US	307	320	97.66	In Earth orbit
S53682	2022-105AL	Starlink 4438	SPXS	US	306	319	97.66	In Earth orbit
S53683	2022-105AM	Starlink 4625	SPXS	US	307	320	97.66	In Earth orbit
S53684	2022-105AN	Starlink 4624	SPXS	US	306	319	97.67	In Earth orbit
S53685	2022-105AP	Starlink 4626	SPXS	US	306	319	97.66	In Earth orbit
S53686	2022-105AQ	Starlink 4467	SPXS	US	307	319	97.66	In Earth orbit
S53687	2022-105AR	Starlink 4569	SPXS	US	307	319	97.66	In Earth orbit
S53688	2022-105AS	Starlink 4571	SPXS	US	306	319	97.66	In Earth orbit
S53689	2022-105AT	Starlink 4562	SPXS	US	306	319	97.66	In Earth orbit
S53690	2022-105AU	Starlink 4570	SPXS	US	306	319	97.66	In Earth orbit
S53691	2022-105AV	Starlink 4560	SPXS	US	306	319	97.66	In Earth orbit
S53692	2022-105AW	Starlink 4572	SPXS	US	305	318	97.66	In Earth orbit
S53693	2022-105AX	Starlink 4566	SPXS	US	305	319	97.66	In Earth orbit
S53698	2022-106A	Yaogan Weixing 33-02	ZLZB	CN	679	687	98.19	In Earth orbit
S53700	2022-107A	Starlink 4725	SPXS	US	301	314	53.21	In Earth orbit
S53701	2022-107B	Starlink 4711	SPXS	US	301	314	53.21	In Earth orbit
S53702	2022-107C	Starlink 4724	SPXS	US	301	314	53.21	In Earth orbit
S53703	2022-107D	Starlink 4731	SPXS	US	301	314	53.21	In Earth orbit
S53704	2022-107E	Starlink 4714	SPXS	US	301	314	53.21	In Earth orbit
S53705	2022-107F	Starlink 4717	SPXS	US	301	314	53.21	In Earth orbit
S53706	2022-107G	Starlink 4716	SPXS	US	301	314	53.21	In Earth orbit
S53707	2022-107H	Starlink 4667	SPXS	US	301	314	53.21	In Earth orbit
S53708	2022-107I	Starlink 4694	SPXS	US	301	314	53.21	In Earth orbit
S53709	2022-107K	Starlink 4685	SPXS	US	301	314	53.21	In Earth orbit
S53710	2022-107L	Starlink 4696	SPXS	US	301	314	53.21	In Earth orbit
S53711	2022-107M	Starlink 4627	SPXS	US	301	314	53.21	Reentered
S53712	2022-107N	Starlink 4683	SPXS	US	301	314	53.21	In Earth orbit
S53713	2022-107P	Starlink 4698	SPXS	US	301	314	53.21	In Earth orbit
S53714	2022-107Q	Starlink 4688	SPXS	US	301	314	53.21	In Earth orbit
S53715	2022-107R	Starlink 4686	SPXS	US	301	314	53.21	In Earth orbit
S53716	2022-107S	Starlink 4699	SPXS	US	301	314	53.21	In Earth orbit
S53717	2022-107T	Starlink 4702	SPXS	US	301	314	53.21	Reentered
S53718	2022-107U	Starlink 4695	SPXS	US	301	314	53.21	In Earth orbit
S53719	2022-107V	Starlink 4644	SPXS	US	301	314	53.21	In Earth orbit
S53720	2022-107W	Starlink 4642	SPXS	US	301	314	53.21	In Earth orbit
S53721	2022-107X	Starlink 4707	SPXS	US	301	314	53.21	In Earth orbit
S53722	2022-107Y	Starlink 4700	SPXS	US	301	314	53.21	In Earth orbit
S53723	2022-107Z	Starlink 4705	SPXS	US	301	314	53.21	In Earth orbit
S53724	2022-107AA	Starlink 4663	SPXS	US	301	314	53.21	In Earth orbit
S53725	2022-107AB	Starlink 4704	SPXS	US	301	314	53.21	In Earth orbit
S53726	2022-107AC	Starlink 4697	SPXS	US	301	314	53.21	Reentered
S53727	2022-107AD	Starlink 4701	SPXS	US	301	314	53.21	In Earth orbit
S53728	2022-107AE	Starlink 4640	SPXS	US	301	314	53.21	In Earth orbit
S53729	2022-107AF	Starlink 4651	SPXS	US	301	314	53.21	In Earth orbit
S53730	2022-107AG	Starlink 4641	SPXS	US	301	314	53.21	In Earth orbit
S53731	2022-107AH	Starlink 4636	SPXS	US	301	314	53.21	In Earth orbit
S53732	2022-107AJ	Starlink 4661	SPXS	US	301	314	53.21	In Earth orbit
S53733	2022-107AK	Starlink 4574	SPXS	US	301	314	53.21	In Earth orbit
S53734	2022-107AL	Starlink 4616	SPXS	US	301	314	53.21	In Earth orbit
S53735	2022-107AM	Starlink 4618	SPXS	US	301	314	53.21	In Earth orbit
S53736	2022-107AN	Starlink 4652	SPXS	US	301	314	53.21	In Earth orbit
S53737	2022-107AP	Starlink 4646	SPXS	US	301	314	53.21	In Earth orbit
S53738	2022-107AQ	Starlink 4662	SPXS	US	301	314	53.21	In Earth orbit
S53739	2022-107AR	Starlink 4613	SPXS	US	302	315	53.21	Reentered
S53740	2022-107AS	Starlink 4607	SPXS	US	301	314	53.21	In Earth orbit
S53741	2022-107AT	Starlink 4614	SPXS	US	301	315	53.21	In Earth orbit
S53742	2022-107AU	Starlink 4637	SPXS	US	301	315	53.21	In Earth orbit
S53743	2022-107AV	Starlink 4645	SPXS	US	301	315	53.21	In Earth orbit
S53744	2022-107AW	Starlink 4670	SPXS	US	301	315	53.21	In Earth orbit
S53745	2022-107AX	Starlink 4656	SPXS	US	301	315	53.21	In Earth orbit

S53746	2022-107AY	Stairlink 4589	2022 Sep 5 0209:40	SPXS	US	301	315	53.21	In Earth orbit
S53747	2022-107AZ	Stairlink 4657	2022 Sep 5 0209:40	SPXS	US	301	314	53.21	Reentered
S53748	2022-107BA	Stairlink 4669	2022 Sep 5 0209:40	SPXS	US	301	315	53.21	In Earth orbit
S53749	2022-107BB	Stairlink 4680	2022 Sep 5 0209:40	SPXS	US	301	315	53.21	In Earth orbit
S53750	2022-107BC	Stairlink 4612	2022 Sep 5 0209:40	SPXS	US	301	315	53.21	In Earth orbit
S53751	2022-107BG	Varuna TDM	2022 Sep 5 0209:40	BOHB/SFLIN	US	295	306	53.21	In Earth orbit
S53757	2022-108A	Weili Kongjian 1-S3	2022 Sep 6 0224:00	CENTI	CN	692	705	53.53	In Earth orbit
S53758	2022-108B	Weili Kongjian 1-S4	2022 Sep 6 0224:00	CENTI	CN	694	706	53.53	In Earth orbit
S53760	2022-109A	Yaogan 35 05 zu 01 xing	2022 Sep 6 0419:00	CASC	CN	491	502	35.00	In Earth orbit
S53761	2022-109B	Yaogan 35 05 zu 02 xing	2022 Sep 6 0419:00	CASC	CN	488	500	35.00	In Earth orbit
S53763	2022-109D ?	Yaogan 35 05 zu 03 xing	2022 Sep 6 0419:00	CASC	CN	489	501	35.00	In Earth orbit
S53765	2022-110A	Fuentsat Komnect VHTS	2022 Sep 7 2145:07	EUTSA	F	356	60742	3.40	In Earth orbit
S53773	2022-111A	Stairlink 4718	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53774	2022-111B	Stairlink 4719	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53775	2022-111C	Stairlink 4722	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53776	2022-111D	Stairlink 4708	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53777	2022-111E	Stairlink 4664	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53778	2022-111F	Stairlink 4709	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53779	2022-111G	Stairlink 4706	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53780	2022-111H	Stairlink 4678	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53781	2022-111J	Stairlink 4462	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53782	2022-111K	Stairlink 4679	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53783	2022-111L	Stairlink 4536	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53784	2022-111M	Stairlink 4687	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53785	2022-111N	Stairlink 4638	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	Reentered
S53786	2022-111P	Stairlink 4631	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53787	2022-111Q	Stairlink 4743	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53788	2022-111R	Stairlink 4744	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	Reentered
S53789	2022-111S	Stairlink 4666	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53790	2022-111T	Stairlink 4734	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53791	2022-111U	Stairlink 4736	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	Reentered
S53792	2022-111V	Stairlink 4739	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53793	2022-111W	Stairlink 4728	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53794	2022-111X	Stairlink 4730	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53795	2022-111Y	Stairlink 4742	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53796	2022-111Z	Stairlink 4721	2022 Sep 11 0120:00	SPXS	US	322	332	53.21	In Earth orbit
S53797	2022-111AA	Stairlink 4723	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53798	2022-111AB	Stairlink 4712	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53799	2022-111AC	Stairlink 4720	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53800	2022-111AD	Stairlink 4710	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53801	2022-111AE	Stairlink 4715	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53802	2022-111AF	Stairlink 4726	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53803	2022-111AG	Stairlink 4727	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53804	2022-111AH	Stairlink 4729	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53805	2022-111AJ	Stairlink 4763	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53806	2022-111AK	Stairlink 4768	2022 Sep 11 0120:00	SPXS	US	324	334	53.20	In Earth orbit
S53807	2022-111AL	BlueWalker 3	2022 Sep 11 0120:00	ASTS	US	502	518	53.20	In Earth orbit
S53813	2022-112A	Zhongxing 1E	2022 Sep 13 1318:47	ZLZB	CN	35775	35797	1.37	In Earth orbit
S53815	2022-113A	Sri X-1	2022 Sep 15 2038:00	SYNSP	J	557	575	97.66	In Earth orbit
S53818	2022-114A	Stairlink 4749	2022 Sep 19 0018:40	SPXS	US	231	336	53.22	In Earth orbit
S53819	2022-114B	Stairlink 4738	2022 Sep 19 0018:40	SPXS	US	231	336	53.22	In Earth orbit
S53820	2022-114C	Stairlink 4758	2022 Sep 19 0018:40	SPXS	US	231	336	53.22	In Earth orbit
S53821	2022-114D	Stairlink 4752	2022 Sep 19 0018:40	SPXS	US	231	336	53.22	In Earth orbit
S53822	2022-114E	Stairlink 4713	2022 Sep 19 0018:40	SPXS	US	231	336	53.22	Reentered
S53823	2022-114F	Stairlink 4748	2022 Sep 19 0018:40	SPXS	US	231	336	53.22	In Earth orbit
S53824	2022-114G	Stairlink 4757	2022 Sep 19 0018:40	SPXS	US	231	336	53.22	In Earth orbit
S53825	2022-114H	Stairlink 4751	2022 Sep 19 0018:40	SPXS	US	231	336	53.22	In Earth orbit
S53826	2022-114I	Stairlink 4756	2022 Sep 19 0018:40	SPXS	US	231	336	53.22	In Earth orbit
S53827	2022-114K	Stairlink 4764	2022 Sep 19 0018:40	SPXS	US	231	336	53.22	In Earth orbit
S53828	2022-114L	Stairlink 4760	2022 Sep 19 0018:40	SPXS	US	231	336	53.22	In Earth orbit
S53829	2022-114M	Stairlink 4759	2022 Sep 19 0018:40	SPXS	US	231	336	53.22	In Earth orbit
S53830	2022-114N	Stairlink 4761	2022 Sep 19 0018:40	SPXS	US	231	336	53.22	In Earth orbit
S53831	2022-114P	Stairlink 4649	2022 Sep 19 0018:40	SPXS	US	231	336	53.22	In Earth orbit
S53832	2022-114Q	Stairlink 4747	2022 Sep 19 0018:40	SPXS	US	231	336	53.22	In Earth orbit
S53833	2022-114R	Stairlink 4771	2022 Sep 19 0018:40	SPXS	US	236	328	53.22	In Earth orbit
S53834	2022-114S	Stairlink 4737	2022 Sep 19 0018:40	SPXS	US	231	336	53.22	In Earth orbit

S53835	2022-114T	Starlink 4783	SPXS	US	231	336	53.22	In Earth orbit
S53836	2022-114U	Starlink 4778	SPXS	US	231	336	53.22	In Earth orbit
S53837	2022-114V	Starlink 4776	SPXS	US	231	336	53.22	In Earth orbit
S53838	2022-114W	Starlink 4773	SPXS	US	231	336	53.22	In Earth orbit
S53839	2022-114X	Starlink 4784	SPXS	US	231	336	53.22	In Earth orbit
S53840	2022-114Y	Starlink 4766	SPXS	US	231	336	53.22	In Earth orbit
S53841	2022-114Z	Starlink 4750	SPXS	US	231	336	53.22	In Earth orbit
S53842	2022-114AA	Starlink 4754	SPXS	US	231	336	53.22	In Earth orbit
S53843	2022-114AB	Starlink 4754	SPXS	US	231	336	53.22	In Earth orbit
S53844	2022-114AC	Starlink 4769	SPXS	US	231	336	53.22	In Earth orbit
S53845	2022-114AD	Starlink 4745	SPXS	US	231	336	53.22	In Earth orbit
S53846	2022-114AE	Starlink 4746	SPXS	US	231	336	53.22	In Earth orbit
S53847	2022-114AF	Starlink 4777	SPXS	US	231	336	53.22	In Earth orbit
S53848	2022-114AG	Starlink 4780	SPXS	US	231	335	53.22	In Earth orbit
S53849	2022-114AH	Starlink 4770	SPXS	US	231	336	53.22	In Earth orbit
S53850	2022-114AJ	Starlink 4767	SPXS	US	231	335	53.22	In Earth orbit
S53851	2022-114AK	Starlink 4755	SPXS	US	231	335	53.22	In Earth orbit
S53852	2022-114AL	Starlink 4797	SPXS	US	231	335	53.22	In Earth orbit
S53853	2022-114AM	Starlink 4794	SPXS	US	231	335	53.22	In Earth orbit
S53854	2022-114AN	Starlink 4800	SPXS	US	231	335	53.22	In Earth orbit
S53855	2022-114AP	Starlink 4703	SPXS	US	231	335	53.22	In Earth orbit
S53856	2022-114AQ	Starlink 4795	SPXS	US	231	335	53.22	In Earth orbit
S53857	2022-114AR	Starlink 4809	SPXS	US	231	335	53.22	In Earth orbit
S53858	2022-114AS	Starlink 4798	SPXS	US	231	335	53.22	In Earth orbit
S53859	2022-114AT	Starlink 4790	SPXS	US	231	335	53.22	In Earth orbit
S53860	2022-114AU	Starlink 4799	SPXS	US	231	335	53.22	In Earth orbit
S53861	2022-114AV	Starlink 4781	SPXS	US	231	335	53.22	In Earth orbit
S53862	2022-114AW	Starlink 4792	SPXS	US	231	335	53.22	In Earth orbit
S53863	2022-114AX	Starlink 4788	SPXS	US	231	335	53.22	In Earth orbit
S53864	2022-114AY	Starlink 4779	SPXS	US	234	327	53.22	In Earth orbit
S53865	2022-114AZ	Starlink 4785	SPXS	US	231	335	53.22	In Earth orbit
S53866	2022-114BA	Starlink 4762	SPXS	US	231	335	53.22	In Earth orbit
S53867	2022-114BB	Starlink 4793	SPXS	US	231	335	53.22	In Earth orbit
S53868	2022-114BC	Starlink 4789	SPXS	US	231	335	53.22	In Earth orbit
S53869	2022-114BD	Starlink 4810	SPXS	US	231	335	53.22	In Earth orbit
S53870	2022-114BE	Starlink 4732	SPXS	US	231	335	53.22	In Earth orbit
S53871	2022-114BF	Starlink 4740	SPXS	US	231	335	53.22	In Earth orbit
S53872	2022-114C	Yunhai 1-03	SAST	CN	754	775	98.50	In Earth orbit
S53873	2022-116A	Iskolkovskiy	RKOC	RU	204	220	51.63	Attached to Kassvet
S53874	2022-117A	USA 338	NKOC	US	366	416	73.58	In Earth orbit
S53875	2022-118A	Shiyao 15	SAST	CN	488	506	97.52	In Earth orbit
S53876	2022-118B	Shiyao 15	SAST	CN	488	502	97.52	In Earth orbit
S53877	2022-119A	Starlink 5028	SPXS	US	232	337	53.23	In Earth orbit
S53878	2022-119B	Starlink 5029	SPXS	US	232	337	53.23	In Earth orbit
S53879	2022-119C	Starlink 5034	SPXS	US	232	337	53.23	In Earth orbit
S53880	2022-119D	Starlink 5031	SPXS	US	232	337	53.23	In Earth orbit
S53881	2022-119E	Starlink 5050	SPXS	US	232	337	53.23	In Earth orbit
S53882	2022-119F	Starlink 5041	SPXS	US	232	337	53.23	In Earth orbit
S53883	2022-119G	Starlink 5046	SPXS	US	232	337	53.23	In Earth orbit
S53884	2022-119H	Starlink 5052	SPXS	US	232	337	53.23	In Earth orbit
S53885	2022-119I	Starlink 5043	SPXS	US	232	337	53.23	In Earth orbit
S53886	2022-119K	Starlink 5032	SPXS	US	232	337	53.23	In Earth orbit
S53887	2022-119L	Starlink 5037	SPXS	US	232	337	53.23	In Earth orbit
S53888	2022-119M	Starlink 5035	SPXS	US	232	337	53.23	In Earth orbit
S53889	2022-119N	Starlink 5044	SPXS	US	232	337	53.23	In Earth orbit
S53890	2022-119P	Starlink 5042	SPXS	US	232	337	53.23	In Earth orbit
S53891	2022-119Q	Starlink 5045	SPXS	US	232	337	53.23	In Earth orbit
S53892	2022-119R	Starlink 5024	SPXS	US	232	337	53.23	In Earth orbit
S53893	2022-119S	Starlink 5021	SPXS	US	232	337	53.23	In Earth orbit
S53894	2022-119T	Starlink 5022	SPXS	US	232	337	53.23	In Earth orbit
S53895	2022-119U	Starlink 4787	SPXS	US	232	337	53.23	In Earth orbit
S53896	2022-119V	Starlink 5003	SPXS	US	232	337	53.23	In Earth orbit
S53897	2022-119W	Starlink 5054	SPXS	US	232	337	53.23	In Earth orbit
S53898	2022-119X	Starlink 5063	SPXS	US	232	337	53.23	In Earth orbit
S53899	2022-119Y	Starlink 5057	SPXS	US	232	337	53.23	In Earth orbit
S53900	2022-119Z	Starlink 4796	SPXS	US	232	337	53.23	In Earth orbit

S53910	2022-119AA	Starlink 5056	SPXS	US	232	337	53.23	In Earth orbit
S53911	2022-119AB	Starlink 5048	SPXS	US	232	337	53.23	In Earth orbit
S53912	2022-119AC	Starlink 5059	SPXS	US	232	337	53.23	In Earth orbit
S53913	2022-119AD	Starlink 5053	SPXS	US	232	337	53.23	In Earth orbit
S53914	2022-119AE	Starlink 5040	SPXS	US	232	337	53.23	In Earth orbit
S53915	2022-119AF	Starlink 5017	SPXS	US	232	337	53.23	In Earth orbit
S53916	2022-119AG	Starlink 5051	SPXS	US	232	337	53.23	In Earth orbit
S53917	2022-119AH	Starlink 5036	SPXS	US	232	337	53.23	In Earth orbit
S53918	2022-119AJ	Starlink 5012	SPXS	US	232	336	53.23	In Earth orbit
S53919	2022-119AK	Starlink 5023	SPXS	US	232	337	53.23	In Earth orbit
S53920	2022-119AL	Starlink 5025	SPXS	US	232	336	53.23	In Earth orbit
S53921	2022-119AM	Starlink 5005	SPXS	US	232	336	53.23	Reentered
S53922	2022-119AN	Starlink 5002	SPXS	US	232	336	53.23	In Earth orbit
S53923	2022-119AP	Starlink 5004	SPXS	US	232	336	53.23	In Earth orbit
S53924	2022-119AQ	Starlink 5004	SPXS	US	232	336	53.23	In Earth orbit
S53925	2022-119AR	Starlink 5011	SPXS	US	232	336	53.23	In Earth orbit
S53926	2022-119AS	Starlink 5014	SPXS	US	232	336	53.23	In Earth orbit
S53927	2022-119AT	Starlink 5008	SPXS	US	232	336	53.23	In Earth orbit
S53928	2022-119AU	Starlink 5009	SPXS	US	232	336	53.23	In Earth orbit
S53929	2022-119AV	Starlink 5018	SPXS	US	232	336	53.23	In Earth orbit
S53930	2022-119AW	Starlink 5010	SPXS	US	232	336	53.23	In Earth orbit
S53931	2022-119AX	Starlink 5015	SPXS	US	232	336	53.23	In Earth orbit
S53932	2022-119AY	Starlink 4772	SPXS	US	232	336	53.23	In Earth orbit
S53933	2022-119AZ	Starlink 4782	SPXS	US	232	336	53.23	In Earth orbit
S53934	2022-119BA	Starlink 4775	SPXS	US	232	336	53.23	In Earth orbit
S53935	2022-119BB	Starlink 5000	SPXS	US	232	336	53.23	In Earth orbit
S53936	2022-119BC	Starlink 4791	SPXS	US	232	336	53.23	In Earth orbit
S53937	2022-119BD	Starlink 4765	SPXS	US	232	336	53.23	In Earth orbit
S53946	2022-1200A	Yaogan 36 01 zu 01 xing	CASC	CN	488	498	35.00	In Earth orbit
S53947	2022-1200B	Yaogan 36 01 zu 02 xing	CASC	CN	487	498	35.00	In Earth orbit
S53948	2022-1200E	Yaogan 36 01 zu 03 xing	CASC	CN	484	497	35.00	In Earth orbit
S53949	2022-121A	Shiyan 16A	SAST	CN	504	520	97.45	In Earth orbit
S53949	2022-121B	Shiyan 16B	SAST	CN	505	519	97.45	In Earth orbit
S53950	2022-121C	Shiyan 17	CALIT	CN	503	519	97.46	In Earth orbit
S53955	2022-122A ?	Serenity	TIS	US	221	268	136.89	Reentered
S53956	2022-122B ?	ASTROLAND-1	AMEA	E	165	186	136.88	Reentered
S53957	2022-122C ?	ToshfSat-15	ARC/SISU	E	170	185	136.86	Reentered
S53958	2022-122D ?	ASTROLAND-2	AMEA	E	183	212	136.89	Reentered
A10752	2022-122F ?	Qubik 3	LIBRE	GR	202	268	136.88	Reentered
A10753	2022-122G ?	Qubik 4	LIBRE	GR	202	268	136.88	Reentered
A10754	2022-122H ?	FossSat 1B	FOSSA	E	202	268	136.88	Reentered
S53960	2022-123A	SES-20	SESSA	L	35774	35774	0.04	In Earth orbit
S53961	2022-123B	SES-21	SESSA	L	35784	35786	0.04	In Earth orbit
S53965	2022-124A	Dragon Endurance (Crew-5)	SPXS	US	191	210	51.65	Attached to IDA-2
S53964	2022-125A	Starlink 4633	SPXS	US	302	310	53.22	In Earth orbit
S53965	2022-125B	Starlink 4578	SPXS	US	302	309	53.22	In Earth orbit
S53966	2022-125C	Starlink 4635	SPXS	US	302	309	53.22	In Earth orbit
S53967	2022-125D	Starlink 4634	SPXS	US	302	309	53.22	In Earth orbit
S53968	2022-125E	Starlink 4629	SPXS	US	302	309	53.22	In Earth orbit
S53969	2022-125F	Starlink 4468	SPXS	US	302	309	53.22	In Earth orbit
S53970	2022-125G	Starlink 4567	SPXS	US	302	310	53.22	In Earth orbit
S53971	2022-125H	Starlink 4639	SPXS	US	302	309	53.22	In Earth orbit
S53972	2022-125I	Starlink 5157	SPXS	US	302	309	53.22	In Earth orbit
S53973	2022-125K	Starlink 5156	SPXS	US	302	309	53.22	In Earth orbit
S53974	2022-125L	Starlink 5159	SPXS	US	298	306	53.22	In Earth orbit
S53975	2022-125M	Starlink 5137	SPXS	US	302	310	53.22	In Earth orbit
S53976	2022-125N	Starlink 5134	SPXS	US	301	311	53.22	In Earth orbit
S53977	2022-125P	Starlink 5094	SPXS	US	301	310	53.22	In Earth orbit
S53978	2022-125Q	Starlink 5148	SPXS	US	302	310	53.22	In Earth orbit
S53979	2022-125R	Starlink 5123	SPXS	US	301	310	53.22	In Earth orbit
S53980	2022-125S	Starlink 5133	SPXS	US	301	311	53.22	In Earth orbit
S53981	2022-125T	Starlink 5149	SPXS	US	302	310	53.22	In Earth orbit
S53982	2022-125U	Starlink 5120	SPXS	US	301	310	53.22	In Earth orbit
S53983	2022-125V	Starlink 5103	SPXS	US	302	311	53.22	In Earth orbit
S53984	2022-125W	Starlink 5142	SPXS	US	302	310	53.22	In Earth orbit
S53985	2022-125X	Starlink 5147	SPXS	US	302	310	53.22	In Earth orbit

S53986	2022-125Y	Stairlink 5119	SPXS	US	301	311	53.22	In Earth orbit
S53987	2022-125Z	Stairlink 5112	SPXS	US	302	310	53.22	In Earth orbit
S53988	2022-125AA	Stairlink 5113	SPXS	US	302	310	53.22	In Earth orbit
S53989	2022-125AB	Stairlink 5115	SPXS	US	302	311	53.22	In Earth orbit
S53990	2022-125AC	Stairlink 5075	SPXS	US	301	311	53.22	In Earth orbit
S53991	2022-125AD	Stairlink 5118	SPXS	US	302	310	53.22	In Earth orbit
S53992	2022-125AE	Stairlink 5108	SPXS	US	301	310	53.22	In Earth orbit
S53993	2022-125AF	Stairlink 5121	SPXS	US	301	310	53.22	In Earth orbit
S53994	2022-125AG	Stairlink 5125	SPXS	US	301	310	53.22	In Earth orbit
S53995	2022-125AH	Stairlink 5097	SPXS	US	302	310	53.22	In Earth orbit
S53996	2022-125AJ	Stairlink 5131	SPXS	US	301	311	53.22	In Earth orbit
S53997	2022-125AK	Stairlink 5130	SPXS	US	301	311	53.22	In Earth orbit
S53998	2022-125AL	Stairlink 5128	SPXS	US	301	311	53.22	In Earth orbit
S53999	2022-125AM	Stairlink 5079	SPXS	US	301	311	53.22	In Earth orbit
S54000	2022-125AN	Stairlink 5088	SPXS	US	301	311	53.22	In Earth orbit
S54001	2022-125AP	Stairlink 5105	SPXS	US	301	311	53.22	In Earth orbit
S54002	2022-125AQ	Stairlink 5109	SPXS	US	301	311	53.22	In Earth orbit
S54003	2022-125AR	Stairlink 5114	SPXS	US	301	311	53.22	In Earth orbit
S54004	2022-125AS	Stairlink 5129	SPXS	US	301	311	53.22	In Earth orbit
S54005	2022-125AT	Stairlink 5135	SPXS	US	301	311	53.22	In Earth orbit
S54006	2022-125AU	Stairlink 5096	SPXS	US	301	311	53.22	In Earth orbit
S54007	2022-125AV	Stairlink 5132	SPXS	US	301	311	53.22	In Earth orbit
S54008	2022-125AW	Stairlink 5145	SPXS	US	301	311	53.22	In Earth orbit
S54009	2022-125AX	Stairlink 5099	SPXS	US	301	311	53.22	In Earth orbit
S54010	2022-125AY	Stairlink 5127	SPXS	US	301	312	53.22	In Earth orbit
S54011	2022-125AZ	Stairlink 5124	SPXS	US	301	311	53.22	In Earth orbit
S54012	2022-125BA	Stairlink 5126	SPXS	US	301	312	53.22	In Earth orbit
S54013	2022-125BB	Stairlink 5098	SPXS	US	301	311	53.22	In Earth orbit
S54014	2022-125BC	Stairlink 5116	SPXS	US	301	312	53.22	In Earth orbit
S54015	2022-125BD	Stairlink 5055	SPXS	US	301	311	53.22	In Earth orbit
S54020	2022-126A	WeiLi Kongjian 1-S5	CENTI	CN	691	709	55.00	In Earth orbit
S54021	2022-126B	WeiLi Kongjian 1-S6	CENTI	CN	689	709	55.00	In Earth orbit
S54023	2022-127A	GÄZelle	GACO	US	744	761	98.32	In Earth orbit
S54026	2022-128A	Galaxy 33	INTELU	US	35774	35797	0.01	In Earth orbit
S54027	2022-128B	Galaxy 34	INTELU	US	35780	35792	0.01	In Earth orbit
S54029	2022-129A	Kuath-1	CAS	RU	713	732	98.27	In Earth orbit
S54031	2022-130A	Kosmos-2559	VV/KOV/IACG	CN	19110	19149	64.78	In Earth orbit
S54033	2022-131A	Angost 2	GGPEN	AO	35785	35787	0.01	In Earth orbit
S54035	2022-132A	Huanjing Jianzai 02-05	ZZWYZ	CN	496	762	97.65	In Earth orbit
S54042	2022-133A	Yaogun 36 02 zu 01 xing	CASC	CN	486	498	35.00	In Earth orbit
S54043	2022-133B	Yaogun 36 02 zu 02 xing	CASC	CN	484	497	34.99	In Earth orbit
S54044	2022-133D	Yaogun 36 02 zu 03 xing	CASC	CN	487	498	35.00	In Earth orbit
S54048	2022-134A	EUTELSAT HOT BIRD 13F	EUTSA	F	3363	63252	17.35	In Earth orbit
S54050	2022-135A	Kosmos-2560	MORF	RU	328	343	96.35	Reentered
S54051	2022-136A	Stairlink 5195	SPXS	US	232	334	53.22	In Earth orbit
S54052	2022-136B	Stairlink 5189	SPXS	US	232	334	53.22	In Earth orbit
S54053	2022-136C	Stairlink 5176	SPXS	US	232	334	53.22	In Earth orbit
S54054	2022-136D	Stairlink 5163	SPXS	US	232	334	53.22	In Earth orbit
S54055	2022-136E	Stairlink 5158	SPXS	US	232	334	53.22	In Earth orbit
S54056	2022-136F	Stairlink 5226	SPXS	US	232	334	53.22	In Earth orbit
S54057	2022-136G	Stairlink 5216	SPXS	US	232	334	53.22	In Earth orbit
S54058	2022-136H	Stairlink 5167	SPXS	US	232	334	53.22	In Earth orbit
S54059	2022-136I	Stairlink 5173	SPXS	US	232	334	53.22	In Earth orbit
S54060	2022-136K	Stairlink 5169	SPXS	US	232	334	53.22	In Earth orbit
S54061	2022-136L	Stairlink 5209	SPXS	US	232	334	53.22	In Earth orbit
S54062	2022-136M	Stairlink 5170	SPXS	US	232	334	53.22	In Earth orbit
S54063	2022-136N	Stairlink 5225	SPXS	US	232	334	53.22	In Earth orbit
S54064	2022-136P	Stairlink 5172	SPXS	US	232	334	53.22	In Earth orbit
S54065	2022-136Q	Stairlink 5187	SPXS	US	232	334	53.22	In Earth orbit
S54066	2022-136R	Stairlink 5151	SPXS	US	232	334	53.22	In Earth orbit
S54067	2022-136S	Stairlink 5174	SPXS	US	232	334	53.22	In Earth orbit
S54068	2022-136T	Stairlink 5222	SPXS	US	232	334	53.22	In Earth orbit
S54069	2022-136U	Stairlink 5223	SPXS	US	232	333	53.22	In Earth orbit
S54070	2022-136V	Stairlink 5181	SPXS	US	232	334	53.22	In Earth orbit
S54071	2022-136W	Stairlink 5168	SPXS	US	232	334	53.22	In Earth orbit
S54072	2022-136X	Stairlink 5144	SPXS	US	232	334	53.22	In Earth orbit



S54073	2022-136Y	Starlink 5146	SPXS	US	232	333	53.22	In Earth orbit
S54074	2022-136Z	Starlink 5192	SPXS	US	232	333	53.22	In Earth orbit
S54075	2022-136AA	Starlink 5212	SPXS	US	232	333	53.22	In Earth orbit
S54076	2022-136AB	Starlink 5201	SPXS	US	232	333	53.22	In Earth orbit
S54077	2022-136AC	Starlink 5171	SPXS	US	231	334	53.22	In Earth orbit
S54078	2022-136AD	Starlink 5138	SPXS	US	232	333	53.22	In Earth orbit
S54079	2022-136AE	Starlink 5175	SPXS	US	232	333	53.22	In Earth orbit
S54080	2022-136AF	Starlink 5160	SPXS	US	232	333	53.22	In Earth orbit
S54081	2022-136AG	Starlink 5165	SPXS	US	232	333	53.22	In Earth orbit
S54082	2022-136AH	Starlink 5210	SPXS	US	232	333	53.22	In Earth orbit
S54083	2022-136AJ	Starlink 5178	SPXS	US	232	333	53.22	In Earth orbit
S54084	2022-136AK	Starlink 5183	SPXS	US	232	333	53.22	In Earth orbit
S54085	2022-136AL	Starlink 5166	SPXS	US	232	333	53.22	In Earth orbit
S54086	2022-136AM	Starlink 5211	SPXS	US	231	334	53.22	In Earth orbit
S54087	2022-136AN	Starlink 5184	SPXS	US	231	334	53.22	In Earth orbit
S54088	2022-136AP	Starlink 5153	SPXS	US	232	333	53.22	In Earth orbit
S54089	2022-136AQ	Starlink 5143	SPXS	US	232	333	53.22	In Earth orbit
S54090	2022-136AR	Starlink 5177	SPXS	US	232	333	53.22	In Earth orbit
S54091	2022-136AS	Starlink 5221	SPXS	US	232	333	53.22	In Earth orbit
S54092	2022-136AT	Starlink 5190	SPXS	US	232	333	53.22	In Earth orbit
S54093	2022-136AU	Starlink 5213	SPXS	US	231	333	53.22	In Earth orbit
S54094	2022-136AV	Starlink 5219	SPXS	US	232	333	53.22	In Earth orbit
S54095	2022-136AW	Starlink 5193	SPXS	US	231	333	53.22	In Earth orbit
S54096	2022-136AX	Starlink 5188	SPXS	US	232	333	53.22	In Earth orbit
S54097	2022-136AY	Starlink 5197	SPXS	US	232	333	53.22	In Earth orbit
S54098	2022-136AZ	Starlink 5217	SPXS	US	231	333	53.22	In Earth orbit
S54099	2022-136BA	Starlink 5198	SPXS	US	232	333	53.22	In Earth orbit
S54100	2022-136BB	Starlink 5185	SPXS	US	232	333	53.22	In Earth orbit
S54101	2022-136BC	Starlink 5204	SPXS	US	232	333	53.22	In Earth orbit
S54102	2022-136BD	Starlink 5179	SPXS	US	232	333	53.22	In Earth orbit
S54103	2022-136BE	Starlink 5200	SPXS	US	232	333	53.22	In Earth orbit
S54104	2022-136BF	Starlink 5203	SPXS	US	232	333	53.22	In Earth orbit
S54109	2022-137A	Kosmos-2561	MORF	RU	407	419	97.08	In Earth orbit
S54110	2022-137B	Kosmos-2562	MORF	RU	406	419	97.08	In Earth orbit
S54113	2022-138A	OneWeb SL0490	ONEWEBN	UK	588	604	87.43	In Earth orbit
S54114	2022-138B	OneWeb SL0492	ONEWEBN	UK	588	606	87.43	In Earth orbit
S54115	2022-138C	OneWeb SL0495	ONEWEBN	UK	590	610	87.43	In Earth orbit
S54116	2022-138D	OneWeb SL0497	ONEWEBN	UK	588	607	87.43	In Earth orbit
S54117	2022-138E	OneWeb SL0499	ONEWEBN	UK	588	606	87.43	In Earth orbit
S54118	2022-138F	OneWeb SL0500	ONEWEBN	UK	588	601	87.43	In Earth orbit
S54119	2022-138G	OneWeb SL0501	ONEWEBN	UK	588	608	87.43	In Earth orbit
S54120	2022-138H	OneWeb SL0502	ONEWEBN	UK	588	602	87.43	In Earth orbit
S54121	2022-138I	OneWeb SL0503	ONEWEBN	UK	588	605	87.43	In Earth orbit
S54122	2022-138K	OneWeb SL0504	ONEWEBN	UK	588	601	87.43	In Earth orbit
S54123	2022-138L	OneWeb SL0505	ONEWEBN	UK	590	609	87.43	In Earth orbit
S54124	2022-138M	OneWeb SL0506	ONEWEBN	UK	589	609	87.43	In Earth orbit
S54125	2022-138N	OneWeb SL0507	ONEWEBN	UK	587	599	87.43	In Earth orbit
S54126	2022-138P	OneWeb SL0508	ONEWEBN	UK	588	604	87.43	In Earth orbit
S54127	2022-138Q	OneWeb SL0509	ONEWEBN	UK	588	608	87.43	In Earth orbit
S54128	2022-138R	OneWeb SL0510	ONEWEBN	UK	586	598	87.43	In Earth orbit
S54129	2022-138S	OneWeb SL0511	ONEWEBN	UK	588	602	87.43	In Earth orbit
S54130	2022-138T	OneWeb SL0512	ONEWEBN	UK	588	608	87.43	In Earth orbit
S54131	2022-138U	OneWeb SL0513	ONEWEBN	UK	587	599	87.43	In Earth orbit
S54132	2022-138V	OneWeb SL0514	ONEWEBN	UK	588	602	87.43	In Earth orbit
S54133	2022-138W	OneWeb SL0515	ONEWEBN	UK	587	599	87.43	In Earth orbit
S54134	2022-138X	OneWeb SL0516	ONEWEBN	UK	588	602	87.43	In Earth orbit
S54135	2022-138Y	OneWeb SL0517	ONEWEBN	UK	588	605	87.43	In Earth orbit
S54136	2022-138Z	OneWeb SL0518	ONEWEBN	UK	588	607	87.43	In Earth orbit
S54137	2022-138AA	OneWeb SL0519	ONEWEBN	UK	588	601	87.43	In Earth orbit
S54138	2022-138AB	OneWeb SL0520	ONEWEBN	UK	588	604	87.43	In Earth orbit
S54139	2022-138AC	OneWeb SL0521	ONEWEBN	UK	591	610	87.43	In Earth orbit
S54140	2022-138AD	OneWeb SL0522	ONEWEBN	UK	589	608	87.43	In Earth orbit
S54141	2022-138AE	OneWeb SL0523	ONEWEBN	UK	586	598	87.43	In Earth orbit
S54142	2022-138AF	OneWeb SL0524	ONEWEBN	UK	586	598	87.43	In Earth orbit
S54143	2022-138AG	OneWeb SL0525	ONEWEBN	UK	588	605	87.43	In Earth orbit
S54144	2022-138AH	OneWeb SL0526	ONEWEBN	UK	589	609	87.43	In Earth orbit

S54145	2022-138AJ	OneWeb SLO529	2022 Oct 22 1837:40	ONEWEBN	UK	588	607	87.43	In Earth orbit
S54146	2022-138AK	OneWeb SLO531	2022 Oct 22 1837:40	ONEWEBN	UK	587	599	87.43	In Earth orbit
S54147	2022-138AL	OneWeb SLO535	2022 Oct 22 1837:40	ONEWEBN	UK	588	600	87.43	In Earth orbit
S54148	2022-138AM	OneWeb SLO536	2022 Oct 22 1837:40	ONEWEBN	UK	587	599	87.43	In Earth orbit
S54150	2022-139A	Comets-M No. 33L	2022 Oct 22 1957:09	VVKOV	RU	1482	1501	82.50	In Earth orbit
S54151	2022-139B	Comets-M No. 34L	2022 Oct 22 1957:09	VVKOV	RU	1482	1500	82.49	In Earth orbit
S54152	2022-139C	Comets-M No. 35L	2022 Oct 22 1957:09	VVKOV	RU	1479	1500	82.50	In Earth orbit
A10811	2022-139D	SkiF-D	2022 Oct 22 1957:09	RAKA	RU	8000	8000	90.00	Lost
S54155	2022-140A	Progress MS-21	2022 Oct 26 0020:09	RKKE	RU	256	283	51.64	Attached to Poisk
S54157	2022-141A	Starlink 5290	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54158	2022-141B	Starlink 5297	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54159	2022-141C	Starlink 5294	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54160	2022-141D	Starlink 5233	2022 Oct 28 01:14:10	SPXS	US	229	336	53.22	In Earth orbit
S54161	2022-141E	Starlink 5269	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54162	2022-141F	Starlink 5273	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54163	2022-141G	Starlink 5161	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54164	2022-141H	Starlink 5278	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54165	2022-141J	Starlink 5279	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54166	2022-141K	Starlink 5280	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54167	2022-141L	Starlink 5243	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54168	2022-141M	Starlink 5245	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54169	2022-141N	Starlink 5282	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54170	2022-141P	Starlink 5155	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54171	2022-141Q	Starlink 5229	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54172	2022-141R	Starlink 5117	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54173	2022-141S	Starlink 5242	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54174	2022-141T	Starlink 5248	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54175	2022-141U	Starlink 5256	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54176	2022-141V	Starlink 5154	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54177	2022-141W	Starlink 5186	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54178	2022-141X	Starlink 5164	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54179	2022-141Y	Starlink 5122	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54180	2022-141Z	Starlink 5228	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54181	2022-141AA	Starlink 5227	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54182	2022-141AB	Starlink 5231	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54183	2022-141AC	Starlink 5239	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54184	2022-141AD	Starlink 5162	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54185	2022-141AE	Starlink 5235	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54186	2022-141AF	Starlink 5194	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54187	2022-141AG	Starlink 5240	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54188	2022-141AH	Starlink 5238	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54189	2022-141AJ	Starlink 5182	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54190	2022-141AK	Starlink 5281	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54191	2022-141AL	Starlink 4619	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54192	2022-141AM	Starlink 5268	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54193	2022-141AN	Starlink 5263	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54194	2022-141AP	Starlink 5271	2022 Oct 28 01:14:10	SPXS	US	230	337	53.22	In Earth orbit
S54195	2022-141AQ	Starlink 5258	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54196	2022-141AR	Starlink 5237	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54197	2022-141AS	Starlink 5234	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54198	2022-141AT	Starlink 5246	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54199	2022-141AU	Starlink 5244	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54200	2022-141AV	Starlink 5150	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54201	2022-141AW	Starlink 5199	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54202	2022-141AX	Starlink 5205	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54203	2022-141AY	Starlink 5247	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54204	2022-141AZ	Starlink 5241	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54205	2022-141BA	Starlink 5249	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54206	2022-141BB	Starlink 5264	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54207	2022-141BC	Starlink 5262	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54208	2022-141BD	Starlink 5255	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54209	2022-141BE	Starlink 5259	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54210	2022-141BF	Starlink 5257	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54211	2022-141BG	Starlink 5256	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54212	2022-141BH	Starlink 5254	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54213	2022-141BI	Starlink 5253	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54214	2022-141BJ	Starlink 5252	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54215	2022-141BK	Starlink 5251	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54216	2022-141BL	Starlink 5250	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54217	2022-141BM	Starlink 5249	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54218	2022-141BN	Starlink 5248	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54219	2022-141BO	Starlink 5247	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54220	2022-141BP	Starlink 5246	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54221	2022-141BQ	Starlink 5245	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54222	2022-141BR	Starlink 5244	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54223	2022-141BS	Starlink 5243	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54224	2022-141BT	Starlink 5242	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54225	2022-141BU	Starlink 5241	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54226	2022-141BV	Starlink 5240	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54227	2022-141BW	Starlink 5239	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54228	2022-141BX	Starlink 5238	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54229	2022-141BY	Starlink 5237	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54230	2022-141BZ	Starlink 5236	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54231	2022-141CA	Starlink 5235	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54232	2022-141CB	Starlink 5234	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54233	2022-141CC	Starlink 5233	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54234	2022-141CD	Starlink 5232	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54235	2022-141CE	Starlink 5231	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54236	2022-141CF	Starlink 5230	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54237	2022-141CG	Starlink 5229	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54238	2022-141CH	Starlink 5228	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54239	2022-141CI	Starlink 5227	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54240	2022-141CJ	Starlink 5226	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54241	2022-141CK	Starlink 5225	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54242	2022-141CL	Starlink 5224	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54243	2022-141CM	Starlink 5223	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54244	2022-141CN	Starlink 5222	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54245	2022-141CO	Starlink 5221	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54246	2022-141CP	Starlink 5220	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54247	2022-141CQ	Starlink 5219	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54248	2022-141CR	Starlink 5218	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54249	2022-141CS	Starlink 5217	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54250	2022-141CT	Starlink 5216	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54251	2022-141CU	Starlink 5215	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54252	2022-141CV	Starlink 5214	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54253	2022-141CW	Starlink 5213	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54254	2022-141CX	Starlink 5212	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54255	2022-141CY	Starlink 5211	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54256	2022-141CZ	Starlink 5210	2022 Oct 28 01:14:10	SPXS	US	230	336	53.22	In Earth orbit
S54257	2022-142A	Shiyan 20C	2022 Oct 29 01:01:00	CMSEO	CN	749	796	60.00	In Earth orbit
S54258	2022-142B	Mengtuan	2022 Oct 31 07:37:23	AFRL	US	178	320	41.46	Attached to Tianhe
S54259	2022-142C	LDPE 2	2022 Nov 1 13:41:00	US	36080	36100	2.80	In Earth orbit	
S54260	2022-142D	USA 339	2022 Nov 1 13:41:00	SFSSC	US	36080	36100	2.80	In Earth orbit

S55138	2022-144E C	USA 340	AFRL	US	36080	36100	2.80	In Earth orbit
S55139	2022-144F C	USA 341	AFRL	US	36080	36100	2.80	In Earth orbit
S55246	2022-144G C	LINUSSI	LMSSD	US	0	0	0.00	In Earth orbit
S55247	2022-144H C	LINUSSI	LMSSD	US	0	0	0.00	In Earth orbit
T00047	2022-144C	TETRA 1	MILLES	US	0	0	0.00	In Earth orbit
S54223	2022-145A	Kosmos-2563	VVKOV	RU	1582	38765	63.83	In Earth orbit
S54225	2022-146A	EUTELSAT HOT BIRD 13G	EUTSA	F	4191	65654	16.98	In Earth orbit
S54227	2022-147A	MAIS	SNSB	S	580	597	97.65	In Earth orbit
S54230	2022-148A	Zhongxing 19	CHISAE	CN	35758	35815	0.00	In Earth orbit
S54232	2022-149A	S.S. Sally Ride	NGIS	US	227	332	51.67	Attached to Unity
S54234	1998-067UL ?	PEARLAFRICASAT-1	MSTIU	UG	409	419	51.64	In Earth orbit
S54535	1998-067UM ?	ZIMSAT-1	ZINGSA	ZW	409	419	51.64	In Earth orbit
S54536	1998-067UN ?	TAKA	KYUT	J	409	419	51.64	In Earth orbit
S54537	1998-067UP ?	SpaceTuna1	KINDAI	J	409	419	51.64	In Earth orbit
S54234	2022-150A	NOAA-21	GSFC/NOAA	US	791	827	98.70	In Earth orbit
A10777	2022-150C	Bernard Kutler LOFTID	LARCN	US	-29	652	98.01	Landed
S54235	2022-151A	Yunhai-3	SAST	CN	840	856	98.82	In Earth orbit
S54237	2022-152A	Tianzhou-5	CMSO	CN	200	421	41.85	Attached to Tianhe
S54816	2021-035C	XW-4	CAMSAT	CN	380	390	41.48	In Earth orbit
S54243	2022-153A	Galaxy 31	INTELU	US	35776	35796	0.06	In Earth orbit
S54244	2022-153B	Galaxy 32	INTELU	US	35775	35797	0.02	In Earth orbit
S54249	2022-154A	Yaogan 34-03	ZLZB	CN	1092	1097	63.41	In Earth orbit
S54251	2022-155A ?	Jilin-1 Gaofen 03D-08	CGSTL	CN	529	547	97.54	In Earth orbit
S54252	2022-155B ?	Jilin-1 Gaofen 03D-51	CGSTL	CN	529	547	97.54	In Earth orbit
S54253	2022-155C ?	Jilin-1 Gaofen 03D-52	CGSTL	CN	530	547	97.54	In Earth orbit
S54254	2022-155D ?	Jilin-1 Gaofen 03D-53	CGSTL	CN	529	547	97.54	In Earth orbit
S54255	2022-155E ?	Jilin-1 Gaofen 03D-54	CGSTL	CN	529	547	97.54	In Earth orbit
S54257	2022-156A	Artemis 1	JSC	US	517	376793	30.53	Deep Space
A10789	2022-156C	Lunar IceCube	MSUKV/GSFC	US	532	377388	30.26	Deep Space
A10790	2022-156D	OMOTENASHI	JAXA/TOK	J	532	377388	30.26	Deep Space
A10791	2022-156E	EQUULEUS	JAXA/TOK	J	532	377388	30.26	Deep Space
A10792	2022-156F	BioSentinel 1	ARC	US	532	377388	30.26	Deep Space
A10793	2022-156G	ArgoMoon	ASI	I	532	377388	30.26	Deep Space
A10794	2022-156H	NEA Scout	JPL/MSFC	US	532	377388	30.26	Deep Space
A10795	2022-156I	LumathMap	ASU	US	532	377388	30.26	Deep Space
A10796	2022-156K	LumIR	LMATC	US	532	377388	30.26	Deep Space
A10797	2022-156L	Miles	TMLLES	US	532	377388	30.26	Deep Space
A10798	2022-156M	CuSP	SWRI	US	532	377388	30.26	Deep Space
S54259	2022-157A	EUTELSAT 10B	EUTSA	F	245	59784	22.62	In Earth orbit
S54361	2022-158A	EOS-06	ISRO	IN	729	748	98.34	In Earth orbit
S54363	2022-158C	Thybolt 1	DHRUVA	IN	496	520	97.44	In Earth orbit
S54364	2022-158D	Thybolt 2	DHRUVA	IN	500	510	97.45	In Earth orbit
S54365	2022-158E	INS-2B	BT/DIT/ISRO	BT	501	530	97.46	In Earth orbit
S54366	2022-158F	Anand	PAXX	IN	499	521	97.42	In Earth orbit
S54367	2022-158G	Astrocast-0304	ACAST	CH	493	518	97.39	In Earth orbit
S54368	2022-158H	Astrocast-0303	ACAST	CH	498	514	97.46	In Earth orbit
S54369	2022-158I	Astrocast-0302	ACAST	CH	502	515	97.44	In Earth orbit
S54370	2022-158K	Astrocast-0301	ACAST	CH	495	523	97.43	In Earth orbit
S54371	2022-159A	Dragon CRS-26	SPX	US	208	240	51.65	Landed
S55123	1998-067UQ	MARIO	UMI	US	411	416	51.64	In Earth orbit
S55124	1998-067UR	NUTSAT	NFU/NSPO	TW	411	416	51.64	In Earth orbit
S55125	1998-067US	LORIS	DALU	CA	403	405	51.64	In Earth orbit
S55126	1998-067UT	ORCASat	UVIC	CA	411	418	51.64	In Earth orbit
S55127	1998-067UU	DANTEsat	SPMIND	I	411	415	51.65	In Earth orbit
S55128	1998-067UV	TJREVERB	TJHS	US	411	415	51.64	In Earth orbit
S55129	1998-067UW	SPORT	ITA/GSFC	BR	413	417	51.64	In Earth orbit
S55130	1998-067UX	PeutSat	GSFC	US	412	417	51.65	In Earth orbit
S55181	1998-067UY ?	SuryaSat	SURVA	ID	411	415	51.64	In Earth orbit
S55182	1998-067UZ ?	HKSAT-1	HARSEI	J	409	417	51.64	In Earth orbit
S55183	1998-067VA ?	OPTIMAL-1	ARKE/FUKUIU	J	411	415	51.64	In Earth orbit
S54372	2022-160A	Yaogan 36 03 zu 01 xing	CASC	CN	488	500	35.00	In Earth orbit
S54373	2022-160B	Yaogan 36 03 zu 02 xing	CASC	CN	489	502	35.00	In Earth orbit
S54375	2022-160D	Yaogan 36 03 zu 03 xing	CASC	CN	488	501	35.00	In Earth orbit
S54377	2022-161A	Kosmos-2564	VVKOV/IACC	RU	19010	19149	64.78	In Earth orbit
S54379	2022-162A	Shenzhou 15	CMSO	CN	386	393	41.48	Attached to Tianhe
S54381	2022-163A	Kosmos-2565	VVKOV	RU	240	240	67.14	In Earth orbit

S54383	2022-163C	Kosmos-2566?	2022 Nov 30 21:10:00	VVKOV	RU	896	910	67.15	In Earth orbit
S54388	2022-164A	Xingyun Jiaotong VDES	2022 Dec 7 01:15:00	XYUN	CN	737	749	98.36	In Earth orbit
S54640	2022-165A	Gao Fen 5-01A	2022 Dec 8 18:31:00	GWHYZ	CN	667	683	98.12	In Earth orbit
S54642	2022-166A	OneWeb SL0527	2022 Dec 8 22:27:48	ONEWEBN	UK	589	599	86.52	In Earth orbit
S54643	2022-166B	OneWeb SL0528	2022 Dec 8 22:27:48	ONEWEBN	UK	589	599	86.51	In Earth orbit
S54644	2022-166C	OneWeb SL0539	2022 Dec 8 22:27:48	ONEWEBN	UK	588	599	86.52	In Earth orbit
S54645	2022-166D	OneWeb SL0540	2022 Dec 8 22:27:48	ONEWEBN	UK	590	599	86.52	In Earth orbit
S54646	2022-166E	OneWeb SL0542	2022 Dec 8 22:27:48	ONEWEBN	UK	582	598	86.52	In Earth orbit
S54647	2022-166F	OneWeb SL0545	2022 Dec 8 22:27:48	ONEWEBN	UK	591	599	86.52	In Earth orbit
S54648	2022-166G	OneWeb SL0580	2022 Dec 8 22:27:48	ONEWEBN	UK	583	598	86.52	In Earth orbit
S54649	2022-166H	OneWeb SL0582	2022 Dec 8 22:27:48	ONEWEBN	UK	587	599	86.52	In Earth orbit
S54650	2022-166I	OneWeb SL0583	2022 Dec 8 22:27:48	ONEWEBN	UK	586	599	86.52	In Earth orbit
S54651	2022-166K	OneWeb SL0584	2022 Dec 8 22:27:48	ONEWEBN	UK	587	599	86.52	In Earth orbit
S54652	2022-166L	OneWeb SL0585	2022 Dec 8 22:27:48	ONEWEBN	UK	588	599	86.52	In Earth orbit
S54653	2022-166M	OneWeb SL0586	2022 Dec 8 22:27:48	ONEWEBN	UK	590	599	86.51	In Earth orbit
S54654	2022-166N	OneWeb SL0587	2022 Dec 8 22:27:48	ONEWEBN	UK	587	599	86.52	In Earth orbit
S54655	2022-166P	OneWeb SL0589	2022 Dec 8 22:27:48	ONEWEBN	UK	583	598	86.52	In Earth orbit
S54656	2022-166Q	OneWeb SL0590	2022 Dec 8 22:27:48	ONEWEBN	UK	583	598	86.51	In Earth orbit
S54657	2022-166R	OneWeb SL0591	2022 Dec 8 22:27:48	ONEWEBN	UK	583	598	86.52	In Earth orbit
S54658	2022-166S	OneWeb SL0592	2022 Dec 8 22:27:48	ONEWEBN	UK	590	599	86.52	In Earth orbit
S54659	2022-166T	OneWeb SL0593	2022 Dec 8 22:27:48	ONEWEBN	UK	586	599	86.52	In Earth orbit
S54660	2022-166U	OneWeb SL0594	2022 Dec 8 22:27:48	ONEWEBN	UK	584	599	86.52	In Earth orbit
S54661	2022-166V	OneWeb SL0595	2022 Dec 8 22:27:48	ONEWEBN	UK	586	599	86.52	In Earth orbit
S54662	2022-166W	OneWeb SL0596	2022 Dec 8 22:27:48	ONEWEBN	UK	587	599	86.52	In Earth orbit
S54663	2022-166X	OneWeb SL0597	2022 Dec 8 22:27:48	ONEWEBN	UK	583	598	86.51	In Earth orbit
S54664	2022-166Y	OneWeb SL0600	2022 Dec 8 22:27:48	ONEWEBN	UK	584	599	86.52	In Earth orbit
S54665	2022-166Z	OneWeb SL0601	2022 Dec 8 22:27:48	ONEWEBN	UK	583	598	86.52	In Earth orbit
S54666	2022-166AA	OneWeb SL0602	2022 Dec 8 22:27:48	ONEWEBN	UK	584	599	86.52	In Earth orbit
S54667	2022-166AB	OneWeb SL0603	2022 Dec 8 22:27:48	ONEWEBN	UK	589	599	86.52	In Earth orbit
S54668	2022-166AC	OneWeb SL0604	2022 Dec 8 22:27:48	ONEWEBN	UK	590	599	86.52	In Earth orbit
S54669	2022-166AD	OneWeb SL0605	2022 Dec 8 22:27:48	ONEWEBN	UK	591	599	86.52	In Earth orbit
S54670	2022-166AE	OneWeb SL0606	2022 Dec 8 22:27:48	ONEWEBN	UK	590	599	86.52	In Earth orbit
S54671	2022-166AF	OneWeb SL0607	2022 Dec 8 22:27:48	ONEWEBN	UK	590	599	86.51	In Earth orbit
S54672	2022-166AG	OneWeb SL0608	2022 Dec 8 22:27:48	ONEWEBN	UK	584	599	86.52	In Earth orbit
S54673	2022-166AH	OneWeb SL0610	2022 Dec 8 22:27:48	ONEWEBN	UK	590	599	86.51	In Earth orbit
S54674	2022-166AJ	OneWeb SL0611	2022 Dec 8 22:27:48	ONEWEBN	UK	586	599	86.52	In Earth orbit
S54675	2022-166AK	OneWeb SL0612	2022 Dec 8 22:27:48	ONEWEBN	UK	590	599	86.51	In Earth orbit
S54676	2022-166AL	OneWeb SL0615	2022 Dec 8 22:27:48	ONEWEBN	UK	587	599	86.52	In Earth orbit
S54677	2022-166AM	OneWeb SL0655	2022 Dec 8 22:27:48	ONEWEBN	UK	586	599	86.52	In Earth orbit
S54678	2022-166AN	OneWeb SL0659	2022 Dec 8 22:27:48	ONEWEBN	UK	587	599	86.52	In Earth orbit
S54679	2022-166AP	OneWeb SL0685	2022 Dec 8 22:27:48	ONEWEBN	UK	591	599	86.52	In Earth orbit
S54680	2022-166AQ	OneWeb SL0712	2022 Dec 8 22:27:48	ONEWEBN	UK	584	599	86.52	In Earth orbit
S54681	2022-166AR	OneWeb SL0714	2022 Dec 8 22:27:48	ONEWEBN	UK	583	598	86.51	In Earth orbit
S54682	2022-167A ?	TianTu Dongpo 08	2022 Dec 9 06:35:00	CGSTL/MEIHUA	CN	531	549	97.54	In Earth orbit
S54684	2022-167C	Fengtai Shaonian 2	2022 Dec 9 06:35:00	CAMSAT	CN	527	547	97.53	In Earth orbit
S54685	2022-167D ?	Jilin-1 GaoFen 03D-47	2022 Dec 9 06:35:00	CGSTL	CN	529	546	97.54	In Earth orbit
S54686	2022-167E ?	Jilin-1 GaoFen 03D-48	2022 Dec 9 06:35:00	CGSTL	CN	529	546	97.54	In Earth orbit
S54687	2022-167F ?	Jilin-1 GaoFen 03D-49	2022 Dec 9 06:35:00	CGSTL	CN	529	546	97.54	In Earth orbit
S54688	2022-167G ?	Jilin-1 GaoFen 03D-50	2022 Dec 9 06:35:00	CGSTL	CN	527	547	97.53	In Earth orbit
S54689	2022-167H ?	Jilin-1 Pingtai 01A01	2022 Dec 9 06:35:00	CGSTL	CN	528	547	97.54	In Earth orbit
S54690	2022-167J ?	TianTu Dongpo 10	2022 Dec 9 06:35:00	CGSTL/MEIHUA	CN	529	550	97.54	In Earth orbit
S54691	2022-167K ?	Jun Zijing 1-05	2022 Dec 9 06:35:00	HKATG	CN	528	546	97.54	In Earth orbit
S54692	2022-167L ?	Jun Zijing 1-06	2022 Dec 9 06:35:00	HKATG	CN	527	547	97.54	In Earth orbit
S54693	2022-167M ?	Jiaotong-5	2022 Dec 9 06:35:00	HEAD	CN	531	549	97.54	In Earth orbit
S54694	2022-167N ?	TianTu Dongpo 09	2022 Dec 9 06:35:00	CGSTL/MEIHUA	CN	304	584	97.58	In Earth orbit
S54695	2022-167P ?	TianTu Xingzao 07	2022 Dec 9 06:35:00	GLUG	CN	526	547	97.54	In Earth orbit
S54701	2022-167Q ?	Huotai-1	2022 Dec 9 06:35:00	HUOPI	CN	528	546	97.54	In Earth orbit
T00004	2022-167	CAS-5B	2022 Dec 9 06:35:00	CAMSAT	CN	527	547	97.53	In Earth orbit
S54696	2022-168A	Hakuto-R M1	2022 Dec 11 07:38:13	ISPACF	J	293	1134167	29.10	Deep Space
S54697	2022-168B	Lunar Flashlight	2022 Dec 11 07:38:13	JPL	US	293	1134167	29.10	Deep Space
A10815	2022-168	Rashid	2022 Dec 11 07:38:13	MBRSC	UAE	293	1134167	29.10	Deep Space Att to Hakuto-R M1
A10818	2022-168	SORA-Q	2022 Dec 11 07:38:13	ISASJ	J	293	1134167	29.10	Deep Space Att to Hakuto-R M1
S54699	2022-169A	Shiyun 20A	2022 Dec 12 08:22:00	CASJ	CN	789	799	59.99	In Earth orbit
S54700	2022-169B	Shiyun 20B	2022 Dec 12 08:22:00	CASJ	CN	788	798	59.99	In Earth orbit
S54741	2022-170A	Galaxy 35	2022 Dec 13 20:03:07	INTELU	US	35705	35798	0.05	In Earth orbit
S54742	2022-170B	Galaxy 36	2022 Dec 13 20:03:07	INTELU	US	35719	35788	0.02	In Earth orbit

S54743	2022-170C	Meteosat 12	2022 Dec 13 2030:07	EUMETSAT	HEUM	35785	35787	0.95	In Earth orbit
S54746	2022-171A ?	Yaogan 36 04 zu 01 xing	2022 Dec 14 1825:00	CASC	CN	491	501	34.99	In Earth orbit
S54748	2022-171C ?	Yaogan 36 04 zu 03 xing	2022 Dec 14 1825:00	CASC	CN	488	501	34.99	In Earth orbit
S54750	2022-171E ?	Yaogan 36 04 zu 02 xing	2022 Dec 14 1825:00	CASC	CN	490	502	35.00	In Earth orbit
S54752	2022-172A	Shiyan 21	2022 Dec 16 0617:00	CAST	CN	492	492	67.60	In Earth orbit
S54754	2022-173A	SWOT	2022 Dec 16 1146:47	CNES/JPL	F	855	861	77.60	In Earth orbit
S54755	2022-174A	O3b mPOWER F1	2022 Dec 16 2248:00	O3BS	UK	3422	7276	8.05	In Earth orbit
S54756	2022-174B	O3b mPOWER F2	2022 Dec 16 2248:00	O3BS	UK	2778	6991	9.62	In Earth orbit
S54758	2022-175A	Starlink 5464	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54759	2022-175B	Starlink 5215	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54760	2022-175C	Starlink 5220	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54761	2022-175D	Starlink 5202	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54762	2022-175E	Starlink 5214	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54763	2022-175F	Starlink 5191	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54764	2022-175G	Starlink 5458	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54765	2022-175H	Starlink 5466	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54766	2022-175I	Starlink 5471	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54767	2022-175K	Starlink 5472	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54768	2022-175L	Starlink 5444	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54769	2022-175M	Starlink 5404	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54770	2022-175N	Starlink 5488	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54771	2022-175P	Starlink 5451	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54772	2022-175Q	Starlink 5452	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54773	2022-175R	Starlink 5453	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54774	2022-175S	Starlink 5454	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54775	2022-175T	Starlink 5465	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54776	2022-175U	Starlink 5470	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54777	2022-175V	Starlink 5468	2022 Dec 17 2132:30	SPXS	US	231	336	53.22	In Earth orbit
S54778	2022-175W	Starlink 5450	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54779	2022-175X	Starlink 5447	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54780	2022-175Y	Starlink 5449	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54781	2022-175Z	Starlink 5443	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54782	2022-175AA	Starlink 5437	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54783	2022-175AB	Starlink 5439	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54784	2022-175AC	Starlink 5442	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54785	2022-175AD	Starlink 5440	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54786	2022-175AE	Starlink 5438	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54787	2022-175AF	Starlink 5441	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54788	2022-175AG	Starlink 5399	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54789	2022-175AH	Starlink 5446	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54790	2022-175AJ	Starlink 5445	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54791	2022-175AK	Starlink 5425	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54792	2022-175AL	Starlink 5431	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54793	2022-175AM	Starlink 5433	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54794	2022-175AN	Starlink 5392	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54795	2022-175AO	Starlink 5436	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54796	2022-175AQ	Starlink 5415	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54797	2022-175AR	Starlink 5435	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54798	2022-175AS	Starlink 5420	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54799	2022-175AT	Starlink 5421	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54800	2022-175AU	Starlink 5428	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54801	2022-175AV	Starlink 5429	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54802	2022-175AW	Starlink 5426	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54803	2022-175AX	Starlink 5430	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54804	2022-175AY	Starlink 5422	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54805	2022-175AZ	Starlink 5417	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54806	2022-175BA	Starlink 5412	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54807	2022-175BB	Starlink 5410	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54808	2022-175BC	Starlink 5413	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54809	2022-175BD	Starlink 5414	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54810	2022-175BE	Starlink 5408	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54811	2022-175BF	Starlink 5424	2022 Dec 17 2132:30	SPXS	US	231	335	53.22	In Earth orbit
S54818	2022-176A	Gao Fen 11-04	2022 Dec 27 0737:00	Y WZB	CN	245	695	97.27	In Earth orbit
S54820	2022-177A	Starlink 5382	2022 Dec 28 0934:00	SPXS	US	212	336	43.00	In Earth orbit
S54821	2022-177B	Starlink 5385	2022 Dec 28 0934:00	SPXS	US	212	334	43.00	In Earth orbit
S54822	2022-177C	Starlink 5101	2022 Dec 28 0934:00	SPXS	US	212	334	43.00	In Earth orbit

S54823	2022-177D	Starlink 5106	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54824	2022-177E	Starlink 4643	2022 Dec 28 0934:00	SPXS	US	212	336	43.00	In Earth orbit
S54825	2022-177F	Starlink 4801	2022 Dec 28 0934:00	SPXS	US	212	334	43.00	In Earth orbit
S54826	2022-177G	Starlink 5107	2022 Dec 28 0934:00	SPXS	US	212	334	43.00	In Earth orbit
S54827	2022-177H	Starlink 5383	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54828	2022-177I	Starlink 5381	2022 Dec 28 0934:00	SPXS	US	212	336	43.00	In Earth orbit
S54829	2022-177K	Starlink 5380	2022 Dec 28 0934:00	SPXS	US	212	334	43.00	In Earth orbit
S54830	2022-177L	Starlink 5394	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54831	2022-177M	Starlink 5395	2022 Dec 28 0934:00	SPXS	US	212	334	43.00	In Earth orbit
S54832	2022-177N	Starlink 5393	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54833	2022-177P	Starlink 5391	2022 Dec 28 0934:00	SPXS	US	212	334	43.00	In Earth orbit
S54834	2022-177Q	Starlink 5386	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54835	2022-177R	Starlink 5389	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54836	2022-177S	Starlink 5384	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54837	2022-177T	Starlink 5369	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54838	2022-177U	Starlink 5372	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54839	2022-177V	Starlink 5110	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54840	2022-177W	Starlink 5368	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54841	2022-177X	Starlink 4659	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54842	2022-177Y	Starlink 5387	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54843	2022-177Z	Starlink 5304	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54844	2022-177AA	Starlink 5388	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54845	2022-177AB	Starlink 5082	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54846	2022-177AC	Starlink 5360	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54847	2022-177AD	Starlink 5061	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54848	2022-177AE	Starlink 5432	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54849	2022-177AF	Starlink 5434	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54850	2022-177AG	Starlink 5087	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54851	2022-177AH	Starlink 5084	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54852	2022-177AJ	Starlink 5418	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54853	2022-177AK	Starlink 5427	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54854	2022-177AL	Starlink 5419	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54855	2022-177AM	Starlink 5416	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54856	2022-177AN	Starlink 5086	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54857	2022-177AP	Starlink 5078	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54858	2022-177AQ	Starlink 5407	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54859	2022-177AR	Starlink 5409	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54860	2022-177AS	Starlink 5406	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54861	2022-177AT	Starlink 5400	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54862	2022-177AU	Starlink 5403	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54863	2022-177AV	Starlink 5405	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54864	2022-177AW	Starlink 5359	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54865	2022-177AX	Starlink 5411	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54866	2022-177AY	Starlink 5398	2022 Dec 28 0934:00	SPXS	US	211	334	43.00	In Earth orbit
S54867	2022-177AZ	Starlink 5396	2022 Dec 28 0934:00	SPXS	US	212	334	43.00	In Earth orbit
S54868	2022-177BA	Starlink 5379	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54869	2022-177BB	Starlink 5402	2022 Dec 28 0934:00	SPXS	US	212	334	43.00	In Earth orbit
S54870	2022-177BC	Starlink 5401	2022 Dec 28 0934:00	SPXS	US	211	333	43.00	In Earth orbit
S54871	2022-177BD	Starlink 5397	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54872	2022-177BE	Starlink 5390	2022 Dec 28 0934:00	SPXS	US	212	335	43.00	In Earth orbit
S54873	2022-177BF	Starlink 5091	2022 Dec 28 0934:00	SPXS	US	211	333	43.00	In Earth orbit
S54878	2022-178A	Shiyan 10-02	2022 Dec 29 0443:00	SAST	CN	184	40096	50.99	In Earth orbit
S54880	2022-179A	EROS C3	2022 Dec 30 0738:00	IMAGT	IL	484	502	139.36	In Earth orbit
Payloads not included in annual statistics									
A09938	2022-002	Transporter-3	2022 Jun 13 1525:00	SPX	US	524	535	97.51	Reentered Alt to Falcon 9-137 Stage
A10408	2022-033	Transporter-4	2022 Apr 1 1624:16	SPX	US	636	651	98.00	Reentered Alt to Falcon 9-147 Stage
A10438	2022-057	Transporter-5	2022 May 25 1835:00	SPX	US	521	535	97.52	Reentered Alt to Falcon 9-157 Stage
S52983	2022-065H	Dummy Cubesat	2022 Jun 21 0700:00	KARI	KR	694	704	98.00	In Earth orbit

## Appendix 2b: Satellite payloads deployed in 2022

CATID	LAUNCHID	Name	Deploy date UTC	Owner	Country	Perigee	Apogee	Incl	Status
S51288	2021-022AQ	ELSA-Q Client	2022 Jan 25 15:00:00	ASTSC/SSITLA	J	533	560	97.55	In Earth orbit
S51287	2021-1118E	ASCENT	2022 Jan 25 00:00:00	AFRL	US	35507	35529	0.13	In Earth orbit
S51439	1998-067TB	GASPACS	2022 Jan 26 12:00:00	USP	US	409	421	51.64	Reentered
S51440	1998-067TC?	FEES-2	2022 Jan 26 12:00:00	GPAP	I	409	421	51.64	Reentered
S51441	1998-067TD?	TARGET	2022 Jan 26 13:40:00	GIT	US	407	421	51.64	Reentered
S51442	1998-067TE	PATCOOL	2022 Jan 26 12:10:00	KSC/UFL	US	409	421	51.64	Reentered
S51509	1998-067TF	DAILI	2022 Jan 26 13:30:00	AERO	US	409	421	51.64	Reentered
S51510	1998-067TG	Light-1	2022 Feb 3 08:55:00	NYUAD	UAE	407	421	51.65	Reentered
S51510	1998-067TH	GTE-1	2022 Feb 3 10:30:00	GIT	UAE	409	421	51.64	Reentered
S50803	2022-001A	Starlink 3321	2022 Jan 6 22:04:00	SPXS	US	209	337	53.22	In Earth orbit
S50804	2022-001B	Starlink 3323	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50805	2022-001C	Starlink 3333	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50806	2022-001D	Starlink 3335	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50807	2022-001E	Starlink 3353	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50808	2022-001F	Starlink 3355	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50809	2022-001G	Starlink 3232	2022 Jan 6 22:04:00	SPXS	US	210	337	53.21	In Earth orbit
S50810	2022-001H	Starlink 3348	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50811	2022-001J	Starlink 3347	2022 Jan 6 22:04:00	SPXS	US	210	337	53.21	In Earth orbit
S50812	2022-001K	Starlink 3338	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50813	2022-001L	Starlink 3349	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50814	2022-001M	Starlink 3324	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50815	2022-001N	Starlink 3234	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50816	2022-001P	Starlink 3342	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50817	2022-001Q	Starlink 3341	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50818	2022-001R	Starlink 3336	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50819	2022-001S	Starlink 3327	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50820	2022-001T	Starlink 3339	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50821	2022-001U	Starlink 3346	2022 Jan 6 22:04:00	SPXS	US	209	336	53.21	In Earth orbit
S50822	2022-001V	Starlink 3343	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50823	2022-001W	Starlink 3334	2022 Jan 6 22:04:00	SPXS	US	210	337	53.21	In Earth orbit
S50824	2022-001X	Starlink 3340	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50825	2022-001Y	Starlink 3332	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50826	2022-001Z	Starlink 3337	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50827	2022-001AA	Starlink 3329	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50828	2022-001AB	Starlink 3290	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50829	2022-001AC	Starlink 3294	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50830	2022-001AD	Starlink 3278	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50831	2022-001AE	Starlink 3299	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50832	2022-001AF	Starlink 3328	2022 Jan 6 22:04:00	SPXS	US	209	336	53.21	In Earth orbit
S50833	2022-001AG	Starlink 3316	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50834	2022-001AH	Starlink 3331	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50835	2022-001AJ	Starlink 3310	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50836	2022-001AK	Starlink 3330	2022 Jan 6 22:04:00	SPXS	US	209	336	53.21	In Earth orbit
S50837	2022-001AL	Starlink 3318	2022 Jan 6 22:04:00	SPXS	US	209	336	53.21	In Earth orbit
S50838	2022-001AM	Starlink 3322	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50839	2022-001AN	Starlink 3320	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50840	2022-001AP	Starlink 3295	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50841	2022-001AQ	Starlink 3300	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50842	2022-001AR	Starlink 3302	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50843	2022-001AS	Starlink 3325	2022 Jan 6 22:04:00	SPXS	US	209	336	53.21	In Earth orbit
S50844	2022-001AT	Starlink 3326	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50845	2022-001AU	Starlink 3230	2022 Jan 6 22:04:00	SPXS	US	209	336	53.21	In Earth orbit
S50846	2022-001AV	Starlink 3308	2022 Jan 6 22:04:00	SPXS	US	209	336	53.21	In Earth orbit
S50847	2022-001AW	Starlink 3319	2022 Jan 6 22:04:00	SPXS	US	209	336	53.21	In Earth orbit
S50848	2022-001AX	Starlink 3315	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50849	2022-001AY	Starlink 3311	2022 Jan 6 22:04:00	SPXS	US	209	336	53.21	In Earth orbit
S50850	2022-001AZ	Starlink 3312	2022 Jan 6 22:04:00	SPXS	US	209	337	53.21	In Earth orbit
S50851	2022-001BA	Starlink 3314	2022 Jan 6 22:04:00	SPXS	US	209	336	53.21	In Earth orbit
S50984	2022-002A	WISesAT-2	2022 Jan 13 16:31:00	WISEK	CH	517	535	97.51	In Earth orbit
S50985	2022-002B	WISesAT-1	2022 Jan 13 16:31:00	WISEK	CH	517	535	97.51	In Earth orbit
S50986	2022-002C	Umbral-02	2022 Jan 13 16:47:00	UMBRA	US	522	535	97.51	In Earth orbit

S50987	2022-002D	LAIKA	2022 Jan 13 1631:00	FOSSA	E	518	535	97.51	In Earth orbit
S50988	2022-002E	Level-3	2022 Jan 13 1633:00	HSCIL	IL	522	535	97.50	In Earth orbit
S50989	2022-002F	Level-8	2022 Jan 13 1638:00	HSCIL	IL	513	532	97.51	In Earth orbit
S50990	2022-002G	Pilot-1	2022 Jan 13 1631:00	CSHARK	I	521	535	97.51	In Earth orbit
S50991	2022-002H	FossaSat-2E6	2022 Jan 13 1630:00	FOSSA	E	519	535	97.51	In Earth orbit
S50992	2022-002I	Flock 4x-8	2022 Jan 13 1631:00	PLAN	US	520	535	97.51	In Earth orbit
S50993	2022-002K	ION SCV04	2022 Jan 13 1648:00	DORBIT	I	521	535	97.51	In Earth orbit
S50994	2022-002L	Flock 4x-44	2022 Jan 13 1646:00	PLAN	US	520	535	97.51	In Earth orbit
S50995	2022-002M	MDASat-1a	2022 Jan 13 1636:00	CPUT	ZA	522	535	97.50	In Earth orbit
S50996	2022-002N	Flock 4x-2	2022 Jan 13 1631:00	PLAN	US	520	535	97.51	In Earth orbit
S50997	2022-002P	Flock 4x-20	2022 Jan 13 1637:00	PLAN	US	520	535	97.51	In Earth orbit
S50998	2022-002Q	Level-5	2022 Jan 13 1633:00	HSCIL	IL	519	535	97.50	In Earth orbit
S50999	2022-002R	Level-6	2022 Jan 13 1638:00	HSCIL	IL	523	535	97.50	In Earth orbit
S51000	2022-002S	Flock 4x-30	2022 Jan 13 1640:00	PLAN	US	519	535	97.51	In Earth orbit
S51001	2022-002T	FossaSat-2E5	2022 Jan 13 1636:00	FOSSA	E	517	535	97.51	In Earth orbit
S51002	2022-002U	Bflp-A	2022 Jan 13 1636:00	KEPLER	CA	524	535	97.51	In Earth orbit
S51003	2022-002V	Flock 4x-22	2022 Jan 13 1637:00	PLAN	US	519	535	97.51	In Earth orbit
S51004	2022-002W	Flock 4x-5	2022 Jan 13 1631:00	PLAN	US	518	535	97.51	In Earth orbit
S51005	2022-002X	Flock 4x-41	2022 Jan 13 1646:00	PLAN	US	519	535	97.50	In Earth orbit
S51006	2022-002Y	Flock 4x-3	2022 Jan 13 1631:00	PLAN	US	518	535	97.51	In Earth orbit
S51007	2022-002Z	Flock 4x-18	2022 Jan 13 1637:00	PLAN	US	518	535	97.51	In Earth orbit
S51008	2022-002AA	ICEYE-X16	2022 Jan 13 1647:00	ICEYE	FI	521	535	97.51	In Earth orbit
S51009	2022-002AB	Flock 4x-37	2022 Jan 13 1644:00	PLAN	US	519	535	97.51	In Earth orbit
S51010	2022-002AC	Flock 4x-15	2022 Jan 13 1634:00	PLAN	US	518	535	97.51	In Earth orbit
S51011	2022-002AD	Flock 4x-29	2022 Jan 13 1640:00	PLAN	US	518	535	97.51	In Earth orbit
S51012	2022-002AE	Flock 4x-27	2022 Jan 13 1640:00	PLAN	US	518	535	97.51	In Earth orbit
S51013	2022-002AF	Level-1	2022 Jan 13 1633:00	HSCIL	IL	522	535	97.50	In Earth orbit
S51014	2022-002AG	SATTLA-2B	2022 Jan 13 1627:00	ARU	IL	522	535	97.50	In Earth orbit
S51015	2022-002AH	Flock 4x-12	2022 Jan 13 1634:00	PLAN	US	518	535	97.51	In Earth orbit
S51016	2022-002AJ	Flock 4x-25	2022 Jan 13 1640:00	PLAN	US	518	535	97.51	In Earth orbit
S51017	2022-002AK	Flock 4x-1	2022 Jan 13 1631:00	PLAN	US	518	535	97.51	In Earth orbit
S51018	2022-002AL	Flock 4x-42	2022 Jan 13 1646:00	PLAN	US	518	535	97.51	In Earth orbit
S51019	2022-002AM?	Pron-BRI	2022 Jan 13 1627:00	PION	BR	526	534	97.49	In Earth orbit
S51020	2022-002AN	Flock 4x-16	2022 Jan 13 1634:00	PLAN	US	518	535	97.51	In Earth orbit
S51021	2022-002AP	Lemur-2 Ramonamae	2022 Jan 13 1631:00	SPIREL/SPIRE	L	524	535	97.51	In Earth orbit
S51022	2022-002AQ	Lemur-2 King-Julien	2022 Jan 13 1632:00	SPIREL/SPIRE	L	524	535	97.51	In Earth orbit
S51023	2022-002AR	Flock 4x-38	2022 Jan 13 1644:00	PLAN	US	518	535	97.51	In Earth orbit
S51024	2022-002AS	Flock 4x-32	2022 Jan 13 1640:00	PLAN	US	518	535	97.51	In Earth orbit
S51025	2022-002AT	Grizu-263A	2022 Jan 13 1625:00	ZBEU	TR	515	535	97.51	In Earth orbit
S51026	2022-002AU	Flock 4x-26	2022 Jan 13 1640:00	PLAN	US	518	535	97.51	In Earth orbit
S51027	2022-002AV	Flock 4x-43	2022 Jan 13 1646:00	PLAN	US	518	535	97.51	In Earth orbit
S51028	2022-002AW	Flock 4x-13	2022 Jan 13 1634:00	PLAN	US	517	535	97.51	In Earth orbit
S51029	2022-002AX	Flock 4x-39	2022 Jan 13 1644:00	PLAN	US	518	535	97.51	In Earth orbit
S51030	2022-002AY	Sich-2-1	2022 Jan 13 1648:00	DKAU	UA	522	535	97.51	In Earth orbit
S51031	2022-002AZ	SamoSat-1	2022 Jan 13 1630:00	ORISP	NP	519	535	97.51	In Earth orbit
S51032	2022-002BA	Unicom-2D	2022 Jan 13 1625:00	ALBAD	D	516	536	97.53	In Earth orbit
S51033	2022-002BB?	Tartan-Artibeus 1	2022 Jan 13 1627:00	CMU	US	519	535	97.51	In Earth orbit
S51034	2022-002BC	Flock 4x-23	2022 Jan 13 1637:00	PLAN	US	518	535	97.51	In Earth orbit
S51035	2022-002BD	Flock 4x-17	2022 Jan 13 1637:00	PLAN	US	524	535	97.51	In Earth orbit
S51036	2022-002BE	Lemur-2 Rohovithsa	2022 Jan 13 1632:00	SPIREL/ORORA	L	524	535	97.51	In Earth orbit
S51037	2022-002BF	Flock 4x-10	2022 Jan 13 1634:00	PLAN	US	520	535	97.51	In Earth orbit
S51038	2022-002BG	MDASat-1c	2022 Jan 13 1636:00	CPUT	ZA	523	535	97.51	In Earth orbit
S51039	2022-002BH	Flock 4x-36	2022 Jan 13 1644:00	PLAN	US	522	535	97.51	In Earth orbit
S51040	2022-002BJ	Flock 4x-21	2022 Jan 13 1637:00	PLAN	US	523	535	97.51	In Earth orbit
S51041	2022-002BK	Flock 4x-31	2022 Jan 13 1640:00	PLAN	US	524	535	97.51	In Earth orbit
S51042	2022-002BL	Flock 4x-34	2022 Jan 13 1644:00	PLAN	US	523	535	97.51	In Earth orbit
S51043	2022-002BM	Flock 4x-6	2022 Jan 13 1631:00	PLAN	US	524	535	97.51	In Earth orbit
S51044	2022-002BN	IRIS-A	2022 Jan 13 1636:00	NGKU	US	523	535	97.51	In Earth orbit
S51045	2022-002BP	Flock 4x-28	2022 Jan 13 1640:00	PLAN	TW	523	535	97.50	In Earth orbit
S51046	2022-002BQ	Flock 4x-19	2022 Jan 13 1637:00	PLAN	US	523	535	97.51	In Earth orbit
S51047	2022-002BR	Flock 4x-9	2022 Jan 13 1634:00	PLAN	US	523	535	97.51	In Earth orbit
S51048	2022-002BS	Flock 4x-35	2022 Jan 13 1644:00	PLAN	US	523	535	97.50	In Earth orbit
S51049	2022-002BT	Flock 4x-11	2022 Jan 13 1634:00	PLAN	US	524	535	97.51	In Earth orbit
S51050	2022-002BU	MDASat-1b	2022 Jan 13 1636:00	CPUT	ZA	524	535	97.51	In Earth orbit
S51051	2022-002BV	Kepler-19	2022 Jan 13 1635:00	KEPLER	CA	519	535	97.50	In Earth orbit
S51052	2022-002BW	Flock 4x-40	2022 Jan 13 1644:00	PLAN	US	524	535	97.51	In Earth orbit



S51053	2022-002BX	HYPSO-1	2022 Jan 13 16:28:00	NTNU	N	525	535	97.50	In Earth orbit
S51054	2022-002BY	Lemur-2 Miriwari	2022 Jan 13 16:32:00	MYRUSPIREL	AU	525	535	97.51	In Earth orbit
S51055	2022-002BZ	Flock 48-33	2022 Jan 13 16:44:00	PLAN	US	524	535	97.51	In Earth orbit
S51056	2022-002CA	Flock 48-24	2022 Jan 13 16:37:00	PLAN	US	524	535	97.51	In Earth orbit
S51057	2022-002CB	Karina	2022 Jan 13 16:32:00	KEPLER	CA	525	535	97.51	In Earth orbit
S51058	2022-002CC	Lemur-2 Djirang	2022 Jan 13 16:32:00	MYRUSPIREL	CA	525	535	97.51	In Earth orbit
S51059	2022-002CD	Astraeus	2022 Jan 13 16:36:00	KEPLER	CA	524	535	97.51	In Earth orbit
S51060	2022-002CE	ETV-A1	2022 Jan 13 16:27:00	SEN	UK	524	536	97.51	In Earth orbit
S51061	2022-002CF	BRO-5	2022 Jan 13 16:29:00	UNSEEN	F	524	536	97.51	In Earth orbit
S51062	2022-002CG	Level-7	2022 Jan 13 16:38:00	HSCIL	IL	513	532	97.53	In Earth orbit
S51063	2022-002CH	Level-4	2022 Jan 13 16:33:00	HSCIL	IL	524	536	97.51	In Earth orbit
S51064	2022-002CI	Flock 48-4	2022 Jan 13 16:31:00	PLAN	US	523	535	97.51	In Earth orbit
S51065	2022-002CK	Flock 48-7	2022 Jan 13 16:31:00	PLAN	US	523	535	97.51	In Earth orbit
S51066	2022-002CL	Flock 48-14	2022 Jan 13 16:34:00	PLAN	US	522	535	97.51	In Earth orbit
S51067	2022-002CM	DEWASAT-1	2022 Jan 13 16:28:00	DEWA	UAE	525	535	97.51	In Earth orbit
S51068	2022-002CN ?	Gossamer Piccolomini	2022 Jan 13 16:28:00	LUNASD	USA	525	535	97.50	In Earth orbit
S51069	2022-002CP	Level-2	2022 Jan 13 16:33:00	HSCIL	IL	522	535	97.51	In Earth orbit
S51070	2022-002CQ	ICEYE-X14	2022 Jan 13 16:46:00	ICEUS	US	520	535	97.51	In Earth orbit
S51071	2022-002CR	Capella 8	2022 Jan 13 16:48:00	CAPSP	US	521	535	97.51	In Earth orbit
S51072	2022-002CS	Capella 7	2022 Jan 13 16:48:00	CAPSP	US	520	535	97.51	In Earth orbit
S51073	2022-002CT ?	General San Martin	2022 Jan 13 16:27:00	INNO	AR	520	535	97.51	In Earth orbit
S51074	2022-002CU	DeJif-PQ	2022 Jan 13 16:24:00	DELFT	NL	523	538	97.52	In Earth orbit
S51075	2022-002CV	USA 320	2022 Jan 13 16:24:00	NROC	US	525	535	97.51	In Earth orbit
S51076	2022-002CW ?	NuX-1	2022 Jan 13 16:28:00	NUSP	SG	525	536	97.51	In Earth orbit
S51077	2022-002CX	USA 321	2022 Jan 13 16:24:00	NROC	US	525	535	97.51	In Earth orbit
S51078	2022-002CY	USA 322	2022 Jan 13 16:24:00	NROC	US	525	535	97.51	In Earth orbit
S51079	2022-002CZ	USA 323	2022 Jan 13 16:24:00	NROC	US	525	535	97.51	In Earth orbit
S51080	2022-002DA	Spain-OSCAR 115	2022 Jan 13 16:24:00	AMEA	E	515	535	97.51	In Earth orbit
S51081	2022-002DB	Spain-OSCAR 114	2022 Jan 13 16:24:00	AMEA	E	515	535	97.51	In Earth orbit
S51082	2022-002DC ?	Challenger	2022 Jan 13 16:30:00	AMTDX	E	522	535	97.51	In Earth orbit
S51083	2022-002DD ?	SAATLA-2A	2022 Jan 13 16:25:00	ARIU	US	517	535	97.51	In Earth orbit
S51084	2022-002DE	Duoma	2022 Jan 24 00:00:00	USCLA/M6SD	IL	522	535	97.50	In Earth orbit
S51085	2022-002DF	VZLUSat-2	2022 Jan 26 15:02:31	VZLU	CZ	520	540	97.51	In Earth orbit
S51086	2022-002DG	LabSat	2022 Jan 28 08:30:00	SATRV	PL	520	531	97.50	In Earth orbit
S51087	2022-002DH	STORK-1	2022 Jan 31 00:00:00	SATRV	PL	521	540	97.51	In Earth orbit
S51088	2022-002DI	STORK-2	2022 Feb 3 00:00:00	SATRV	PL	519	534	97.50	In Earth orbit
S51089	2022-002DK	SWIFT	2022 Feb 4 00:00:00	SATRV	PL	521	536	97.50	In Earth orbit
S51094	2022-003A	PAN A	2022 Jan 13 23:46:59	CORN/LARC	US	495	501	44.98	In Earth orbit
S51095	2022-003B	TechEdSat-13	2022 Jan 13 23:46:59	ARC/SISU	US	493	498	44.98	In Earth orbit
S51096	2022-003C	PAN B	2022 Jan 13 23:46:59	CORN/LARC	US	494	499	44.98	In Earth orbit
S51097	2022-003D	GEARRS-3	2022 Jan 13 23:46:59	AFRL/NSL	US	496	505	44.98	In Earth orbit
S51098	2022-003E	STORK 3	2022 Jan 13 23:46:59	SATRV	PL	502	508	44.97	In Earth orbit
S51099	2022-003F	Stampsat-2	2022 Jan 13 23:46:59	STEAM/SATRV	UK	495	501	44.98	In Earth orbit
S51100	2022-003G	ADLER-1	2022 Jan 13 23:46:59	SPIREL/OEWF	L	493	499	44.98	In Earth orbit
S51102	2022-004A	Shiyun 13	2022 Jan 17 02:50:00	CAS?	CN	356	1298	98.68	In Earth orbit
S51104	2022-005A	Starlink 3366	2022 Jan 19 02:18:12	SPXS	US	209	339	53.23	In Earth orbit
S51105	2022-005B	Starlink 3350	2022 Jan 19 02:18:12	SPXS	US	209	339	53.23	In Earth orbit
S51106	2022-005C	Starlink 3176	2022 Jan 19 02:18:12	SPXS	US	209	341	53.23	In Earth orbit
S51107	2022-005D	Starlink 3368	2022 Jan 19 02:18:12	SPXS	US	209	339	53.23	In Earth orbit
S51108	2022-005E	Starlink 3362	2022 Jan 19 02:18:12	SPXS	US	209	339	53.23	In Earth orbit
S51109	2022-005F	Starlink 3358	2022 Jan 19 02:18:12	SPXS	US	209	341	53.23	In Earth orbit
S51110	2022-005G	Starlink 3344	2022 Jan 19 02:18:12	SPXS	US	209	341	53.23	In Earth orbit
S51111	2022-005H	Starlink 3173	2022 Jan 19 02:18:12	SPXS	US	209	341	53.23	In Earth orbit
S51112	2022-005I	Starlink 3374	2022 Jan 19 02:18:12	SPXS	US	209	341	53.23	In Earth orbit
S51113	2022-005K	Starlink 3372	2022 Jan 19 02:18:12	SPXS	US	209	341	53.23	In Earth orbit
S51114	2022-005L	Starlink 3375	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51115	2022-005M	Starlink 3397	2022 Jan 19 02:18:12	SPXS	US	209	341	53.23	In Earth orbit
S51116	2022-005N	Starlink 3243	2022 Jan 19 02:18:12	SPXS	US	209	341	53.23	In Earth orbit
S51117	2022-005P	Starlink 3391	2022 Jan 19 02:18:12	SPXS	US	209	339	53.23	In Earth orbit
S51118	2022-005Q	Starlink 3394	2022 Jan 19 02:18:12	SPXS	US	209	341	53.23	In Earth orbit
S51119	2022-005R	Starlink 3370	2022 Jan 19 02:18:12	SPXS	US	209	339	53.23	In Earth orbit
S51120	2022-005S	Starlink 3398	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51121	2022-005T	Starlink 3399	2022 Jan 19 02:18:12	SPXS	US	209	339	53.23	In Earth orbit
S51122	2022-005U	Starlink 3373	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51123	2022-005V	Starlink 3392	2022 Jan 19 02:18:12	SPXS	US	209	339	53.23	In Earth orbit
S51124	2022-005W	Starlink 3389	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit

S51125	2022-005X	Starlink 3387	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51126	2022-005Y	Starlink 3386	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51127	2022-005Z	Starlink 3370	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51128	2022-005AA	Starlink 3400	2022 Jan 19 02:18:12	SPXS	US	209	339	53.23	In Earth orbit
S51129	2022-005AB	Starlink 3396	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51130	2022-005AC	Starlink 3395	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51131	2022-005AD	Starlink 3388	2022 Jan 19 02:18:12	SPXS	US	209	338	53.23	In Earth orbit
S51132	2022-005AE	Starlink 3393	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51133	2022-005AF	Starlink 3356	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51134	2022-005AG	Starlink 3183	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51135	2022-005AH	Starlink 3363	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51136	2022-005AJ	Starlink 3253	2022 Jan 19 02:18:12	SPXS	US	209	338	53.23	In Earth orbit
S51137	2022-005AK	Starlink 3180	2022 Jan 19 02:18:12	SPXS	US	209	339	53.23	In Earth orbit
S51138	2022-005AL	Starlink 3177	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51139	2022-005AM	Starlink 3172	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51140	2022-005AN	Starlink 3175	2022 Jan 19 02:18:12	SPXS	US	209	339	53.23	In Earth orbit
S51141	2022-005AP	Starlink 3179	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51142	2022-005AQ	Starlink 3369	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51143	2022-005AR	Starlink 3184	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51144	2022-005AS	Starlink 3185	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51145	2022-005AT	Starlink 3365	2022 Jan 19 02:18:12	SPXS	US	209	339	53.22	In Earth orbit
S51146	2022-005AU	Starlink 3354	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51147	2022-005AV	Starlink 3352	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51148	2022-005AW	Starlink 3359	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51149	2022-005AX	Starlink 3360	2022 Jan 19 02:18:12	SPXS	US	209	338	53.22	In Earth orbit
S51150	2022-005AY	Starlink 3357	2022 Jan 19 02:18:12	SPXS	US	209	339	53.23	In Earth orbit
S51151	2022-005AZ	Starlink 3361	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51152	2022-005BA	Starlink 3364	2022 Jan 19 02:18:12	SPXS	US	209	340	53.23	In Earth orbit
S51280	2022-006BA c	USA 324	2022 Jan 22 01:35:00	USSF	US	35787	0.11	35787	In Earth orbit
S51281	2022-006BB c	USA 325	2022 Jan 22 01:45:00	USSF	US	35788	0.10	35788	In Earth orbit
S51284	2022-007A	Ludi Taurus I-01A	2022 Jan 26 00:01:00	SAST	CN	35774	601	97.80	In Earth orbit
S51444	2022-008A	CSG FM2	2022 Feb 1 00:11:00	ASIM/DDDI	I	621	648	97.89	In Earth orbit
S51445	2022-009A C	USA 326	2022 Feb 2 20:45:00	NROC	US	491	524	97.90	In Earth orbit
S51456	2022-010A ?	Starlink 3152	2022 Feb 3 18:21:51	SPXS	US	209	335	53.22	In Earth orbit
S51457	2022-010B ?	Starlink 3163	2022 Feb 3 18:21:51	SPXS	US	209	334	53.22	Reentered
S51458	2022-010C ?	Starlink 3164	2022 Feb 3 18:21:51	SPXS	US	210	336	53.22	Reentered
S51459	2022-010D ?	Starlink 3170	2022 Feb 3 18:21:51	SPXS	US	209	334	53.22	Reentered
S51460	2022-010E	Starlink 3167	2022 Feb 3 18:21:51	SPXS	US	209	335	53.22	Reentered
S51461	2022-010F	Starlink 3181	2022 Feb 3 18:21:51	SPXS	US	210	335	53.22	In Earth orbit
S51462	2022-010G	Starlink 3166	2022 Feb 3 18:21:51	SPXS	US	209	335	53.22	In Earth orbit
S51463	2022-010H	Starlink 3419	2022 Feb 3 18:21:51	SPXS	US	209	334	53.22	In Earth orbit
S51464	2022-010I	Starlink 3189	2022 Feb 3 18:21:51	SPXS	US	209	334	53.22	In Earth orbit
S51465	2022-010K	Starlink 3401	2022 Feb 3 18:21:51	SPXS	US	209	334	53.22	In Earth orbit
S51466	2022-010L +	Starlink 3418	2022 Feb 3 18:21:51	SPXS	US	209	334	53.22	Reentered
S51467	2022-010M	Starlink 3178	2022 Feb 3 18:21:51	SPXS	US	209	336	53.22	In Earth orbit
S51468	2022-010N	Starlink 3174	2022 Feb 3 18:21:51	SPXS	US	209	336	53.22	In Earth orbit
S51469	2022-010P	Starlink 3182	2022 Feb 3 18:21:51	SPXS	US	209	336	53.22	In Earth orbit
S51470	2022-010Q +	Starlink 3420	2022 Feb 3 18:21:51	SPXS	US	209	335	53.22	Reentered
S51471	2022-010R -	Starlink 3165	2022 Feb 3 18:21:51	SPXS	US	209	334	53.22	Reentered
S51472	2022-010S	Starlink 3415	2022 Feb 3 18:21:51	SPXS	US	209	335	53.22	In Earth orbit
S51477	2022-010X +	Starlink 3223	2022 Feb 3 18:21:51	SPXS	US	209	333	53.22	Reentered
S51478	2022-010Y +	Starlink 3222	2022 Feb 3 18:21:51	SPXS	US	209	334	53.22	Reentered
S51479	2022-010Z	Starlink 3224	2022 Feb 3 18:21:51	SPXS	US	209	335	53.22	Reentered
S51480	2022-010AA +	Starlink 3402	2022 Feb 3 18:21:51	SPXS	US	209	335	53.22	Reentered
S51481	2022-010AB +	Starlink 3412	2022 Feb 3 18:21:51	SPXS	US	209	334	53.22	Reentered
S51482	2022-010AC +	Starlink 3410	2022 Feb 3 18:21:51	SPXS	US	209	336	53.22	Reentered
S51483	2022-010AD +	Starlink 3405	2022 Feb 3 18:21:51	SPXS	US	209	334	53.22	Reentered
S51484	2022-010AE +	Starlink 3408	2022 Feb 3 18:21:51	SPXS	US	210	336	53.22	Reentered
S51485	2022-010AF +	Starlink 3406	2022 Feb 3 18:21:51	SPXS	US	209	334	53.22	Reentered
S51486	2022-010AG +	Starlink 3403	2022 Feb 3 18:21:51	SPXS	US	209	336	53.22	Reentered
S51487	2022-010AH +	Starlink 3411	2022 Feb 3 18:21:51	SPXS	US	209	335	53.22	Reentered
S51488	2022-010AJ +	Starlink 3413	2022 Feb 3 18:21:51	SPXS	US	209	334	53.22	Reentered
S51489	2022-010AK +	Starlink 3407	2022 Feb 3 18:21:51	SPXS	US	209	336	53.22	Reentered
S51490	2022-010AL +	Starlink 3414	2022 Feb 3 18:21:51	SPXS	US	209	334	53.22	Reentered
S51491	2022-010AM +	Starlink 3409	2022 Feb 3 18:21:51	SPXS	US	209	334	53.22	Reentered
S51492	2022-010AN +	Starlink 3416	2022 Feb 3 18:21:51	SPXS	US	209	333	53.22	Reentered

S51493	2022-010AP+	Starlink 3367	2022 Feb 3 1821:51	SPXS	US	209	336	53.22	Reentered
S51494	2022-010AQ+	Starlink 3417	2022 Feb 3 1821:51	SPXS	US	209	336	53.22	Reentered
S51495	2022-010AR	Starlink 3221	2022 Feb 3 1821:51	SPXS	US	209	336	53.22	Reentered
S51496	2022-010AS	Starlink 3169	2022 Feb 3 1821:51	SPXS	US	209	336	53.22	Reentered
S51497	2022-010AT+	Starlink 3426	2022 Feb 3 1821:51	SPXS	US	209	333	53.22	Reentered
S51498	2022-010AU	Starlink 3423	2022 Feb 3 1821:51	SPXS	US	209	334	53.22	Reentered
S51499	2022-010AV+	Starlink 3376	2022 Feb 3 1821:51	SPXS	US	209	336	53.22	Reentered
S51500	2022-010AW+	Starlink 3377	2022 Feb 3 1821:51	SPXS	US	209	334	53.22	Reentered
S51501	2022-010AX+	Starlink 3427	2022 Feb 3 1821:51	SPXS	US	209	333	53.22	Reentered
S51502	2022-010AY	Starlink 3188	2022 Feb 3 1821:51	SPXS	US	209	336	53.22	Reentered
S51503	2022-010AZ	Starlink 3220	2022 Feb 3 1821:51	SPXS	US	209	334	53.22	Reentered
S51504	2022-010BA	Starlink 3186	2022 Feb 3 1821:51	SPXS	US	209	335	53.22	Reentered
S51505	2022-010BB	Starlink 3187	2022 Feb 3 1821:51	SPXS	US	209	335	53.22	Reentered
S51506	2022-010BC+	Starlink 3384	2022 Feb 3 1821:51	SPXS	US	209	334	53.22	Reentered
S51507	2022-010BD+	Starlink 3422	2022 Feb 3 1821:51	SPXS	US	209	335	53.22	Reentered
S51508	2022-010BE+	Starlink 3404	2022 Feb 3 1821:51	SPXS	US	209	335	53.22	Reentered
S51511	2022-01HA	Kosmos-2553	2022 Feb 5 08:10:00	VVKOV	RU	1992	1999	67.09	In Earth orbit
S51622	2022-012A	OneWeb SL0410	2022 Feb 10 19:47:57	ONEWEBN	UK	462	477	87.40	In Earth orbit
S51623	2022-012B	OneWeb SL0411	2022 Feb 10 21:42:57	ONEWEBN	UK	462	478	87.40	In Earth orbit
S51624	2022-012C	OneWeb SL0415	2022 Feb 10 21:23:47	ONEWEBN	UK	462	482	87.40	In Earth orbit
S51625	2022-012D	OneWeb SL0416	2022 Feb 10 20:07:07	ONEWEBN	UK	462	479	87.40	In Earth orbit
S51626	2022-012E	OneWeb SL0422	2022 Feb 10 19:47:57	ONEWEBN	UK	462	481	87.40	In Earth orbit
S51627	2022-012F	OneWeb SL0423	2022 Feb 10 19:47:57	ONEWEBN	UK	462	482	87.40	In Earth orbit
S51628	2022-012G	OneWeb SL0425	2022 Feb 10 21:04:37	ONEWEBN	UK	463	483	87.40	In Earth orbit
S51629	2022-012H	OneWeb SL0428	2022 Feb 10 21:42:57	ONEWEBN	UK	464	484	87.40	In Earth orbit
S51630	2022-012J	OneWeb SL0431	2022 Feb 10 21:04:37	ONEWEBN	UK	463	484	87.40	In Earth orbit
S51631	2022-012K	OneWeb SL0434	2022 Feb 10 20:45:27	ONEWEBN	UK	462	483	87.40	In Earth orbit
S51632	2022-012L	OneWeb SL0435	2022 Feb 10 21:23:47	ONEWEBN	UK	465	484	87.40	In Earth orbit
S51633	2022-012M	OneWeb SL0438	2022 Feb 10 19:28:47	ONEWEBN	UK	467	484	87.40	In Earth orbit
S51634	2022-012N	OneWeb SL0438	2022 Feb 10 20:26:17	ONEWEBN	UK	465	484	87.40	In Earth orbit
S51635	2022-012P	OneWeb SL0439	2022 Feb 10 20:45:27	ONEWEBN	UK	466	484	87.40	In Earth orbit
S51636	2022-012Q	OneWeb SL0442	2022 Feb 10 19:09:37	ONEWEBN	UK	468	485	87.40	In Earth orbit
S51637	2022-012R	OneWeb SL0443	2022 Feb 10 19:28:47	ONEWEBN	UK	468	484	87.40	In Earth orbit
S51638	2022-012S	OneWeb SL0444	2022 Feb 10 20:07:07	ONEWEBN	UK	467	484	87.40	In Earth orbit
S51639	2022-012T	OneWeb SL0445	2022 Feb 10 20:45:27	ONEWEBN	UK	467	484	87.40	In Earth orbit
S51640	2022-012V	OneWeb SL0446	2022 Feb 10 20:26:17	ONEWEBN	UK	468	486	87.40	In Earth orbit
S51641	2022-012V	OneWeb SL0448	2022 Feb 10 21:23:47	ONEWEBN	UK	468	487	87.40	In Earth orbit
S51642	2022-012W	OneWeb SL0449	2022 Feb 10 21:04:37	ONEWEBN	UK	468	487	87.40	In Earth orbit
S51643	2022-012X	OneWeb SL0451	2022 Feb 10 19:28:47	ONEWEBN	UK	468	485	87.40	In Earth orbit
S51644	2022-012Y	OneWeb SL0452	2022 Feb 10 19:09:37	ONEWEBN	UK	468	489	87.40	In Earth orbit
S51645	2022-012Z	OneWeb SL0455	2022 Feb 10 21:42:57	ONEWEBN	UK	468	488	87.40	In Earth orbit
S51646	2022-012AA	OneWeb SL0456	2022 Feb 10 20:07:07	ONEWEBN	UK	468	489	87.40	In Earth orbit
S51647	2022-012AB	OneWeb SL0457	2022 Feb 10 20:26:17	ONEWEBN	UK	468	490	87.40	In Earth orbit
S51648	2022-012AC	OneWeb SL0458	2022 Feb 10 21:04:37	ONEWEBN	UK	470	491	87.40	In Earth orbit
S51649	2022-012AD	OneWeb SL0461	2022 Feb 10 20:07:07	ONEWEBN	UK	470	491	87.40	In Earth orbit
S51650	2022-012AE	OneWeb SL0463	2022 Feb 10 19:28:47	ONEWEBN	UK	469	490	87.40	In Earth orbit
S51651	2022-012AF	OneWeb SL0464	2022 Feb 10 20:26:17	ONEWEBN	UK	469	490	87.40	In Earth orbit
S51652	2022-012AG	OneWeb SL0468	2022 Feb 10 21:23:47	ONEWEBN	UK	471	490	87.40	In Earth orbit
S51653	2022-012AH	OneWeb SL0473	2022 Feb 10 20:45:27	ONEWEBN	UK	472	490	87.40	In Earth orbit
S51654	2022-012AJ	OneWeb SL0474	2022 Feb 10 21:42:57	ONEWEBN	UK	473	490	87.40	In Earth orbit
S51655	2022-012AK	OneWeb SL0475	2022 Feb 10 19:47:57	ONEWEBN	UK	473	490	87.40	In Earth orbit
S51656	2022-013A	EOS-04	2022 Feb 14 00:46:37	ISRO	IN	521	535	97.55	In Earth orbit
S51657	2022-013B	InspireSat-1	2022 Feb 14 00:47:32	ISIT	IN	520	533	97.56	In Earth orbit
S51658	2022-013C	INS-2TD	2022 Feb 14 00:47:47	ISRO	IN	520	533	97.56	In Earth orbit
S51660	2022-014A	Progress MS-19	2022 Feb 15 04:34:09	RKKE	RU	277	314	51.64	Deorbited
S53306	1998-067TR	YuZGU-55 No. 8	2022 Jul 21 16:23:37	YUZZGU	RU	412	419	51.64	In Earth orbit
S53309	1998-067TU	YuZGU-55 No. 5	2022 Jul 21 16:04:43	SARPLYUZGU	RU	421	421	51.64	In Earth orbit
S53310	1998-067TV	YuZGU-55 No. 9	2022 Jul 21 16:26:13	YUZZGU	RU	412	419	51.64	In Earth orbit
S53312	1998-067TX	YuZGU-55 No. 6	2022 Jul 21 16:13:22	YUZZGU	RU	412	418	51.64	In Earth orbit
S53321	1998-067TZ	YuZGU-55 No. 10	2022 Jul 21 16:33:52	YUZZGU	RU	412	419	51.64	In Earth orbit
S53322	1998-067UA	YuZGU-55 No. 7	2022 Jul 21 16:18:19	YUZZGU	RU	412	418	51.64	In Earth orbit
S51712	2022-015A	S.S. Piers Sellers	2022 Feb 19 17:48:53	NGIS	US	409	417	51.64	Deorbited
S52147	1998-067TJ	IHI-SAT	2022 Mar 24 09:00:00	IHC	J	412	417	51.64	Reentered
S52148	1998-067TK	KITSUNE	2022 Mar 24 12:10:00	KYUT	J	414	418	51.64	In Earth orbit
S52917	2022-015D	NACHOS-1	2022 Jun 28 20:20:00	LANL	US	399	409	51.64	In Earth orbit
S51714	2022-016A	Starlink 3528	2022 Feb 21 15:50:05	SPXS	US	324	335	53.22	In Earth orbit



S51789	2022-017X	Stairlink 3639	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51790	2022-017Y	Stairlink 3631	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51791	2022-017Z	Stairlink 3602	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51792	2022-017AA	Stairlink 3626	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51793	2022-017AB	Stairlink 3633	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51794	2022-017AC	Stairlink 3573	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51795	2022-017AD	Stairlink 3586	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51796	2022-017AE	Stairlink 3650	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51797	2022-017AF	Stairlink 3627	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51798	2022-017AG	Stairlink 3634	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51799	2022-017AH	Stairlink 3637	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51800	2022-017AJ	Stairlink 3600	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51801	2022-017AK	Stairlink 3592	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51802	2022-017AL	Stairlink 3557	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51803	2022-017AM	Stairlink 3544	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51804	2022-017AN	Stairlink 3601	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51805	2022-017AP	Stairlink 3605	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51806	2022-017AQ	Stairlink 3581	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51807	2022-017AR	Stairlink 3606	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51808	2022-017AS	Stairlink 3609	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51809	2022-017AT	Stairlink 3607	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51810	2022-017AU	Stairlink 3613	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51811	2022-017AV	Stairlink 3569	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51812	2022-017AW	Stairlink 3610	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51813	2022-017AX	Stairlink 3552	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51814	2022-017AY	Stairlink 3599	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51815	2022-017AZ	Stairlink 3604	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51816	2022-017BA	Stairlink 3603	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51817	2022-017BB	Stairlink 3596	2022 Feb 25 18:14:56	SPXS	US	303	313	53.22	In Earth orbit
S51818	2022-018A	Ludi Tance 1+01B	2022 Feb 27 00:01:00	SAST	CN	596	600	97.81	In Earth orbit
S51824	2022-019A ?	Tianqi-19	2022 Feb 27 03:29:00	GUOG	CN	527	554	97.52	In Earth orbit
S51825	2022-019B ?	Hainan-1 01	2022 Feb 27 03:29:00	SANYZ	CN	527	551	97.52	In Earth orbit
S51826	2022-019C ?	Hainan-1 02	2022 Feb 27 03:29:00	SANYZ	CN	527	550	97.52	In Earth orbit
S51827	2022-019D ?	Wenchang-1 01	2022 Feb 27 03:29:00	SANYZ	CN	528	549	97.52	In Earth orbit
S51828	2022-019E ?	Wenchang-1 02	2022 Feb 27 03:29:00	SANYZ	CN	527	550	97.52	In Earth orbit
S51829	2022-019F ?	Taijing-3 01	2022 Feb 27 03:29:00	WEINA	CN	527	550	97.52	In Earth orbit
S51830	2022-019G ?	Taijing-4 01	2022 Feb 27 03:29:00	WEINA	CN	528	549	97.52	In Earth orbit
S51831	2022-019H ?	Xidian-1	2022 Feb 27 03:29:00	SILUTT	CN	525	550	97.52	In Earth orbit
S51832	2022-019I ?	Xiamen Keji 1	2022 Feb 27 03:29:00	XIAMT	CN	526	550	97.52	In Earth orbit
S51833	2022-019K ?	Jilin-1 Gaofen 03D 10 xing	2022 Feb 27 03:29:00	CGSTL	CN	524	549	97.52	In Earth orbit
S51834	2022-019L ?	Jilin-1 Gaofen 03D 11 xing	2022 Feb 27 03:29:00	CGSTL	CN	526	548	97.52	In Earth orbit
S51835	2022-019M ?	Jilin-1 Gaofen 03D 12 xing	2022 Feb 27 03:29:00	CGSTL	CN	526	548	97.52	In Earth orbit
S51836	2022-019N ?	Jilin-1 Gaofen 03D 13 xing	2022 Feb 27 03:29:00	CGSTL	CN	526	548	97.52	In Earth orbit
S51837	2022-019P ?	Jilin-1 Gaofen 03D 14 xing	2022 Feb 27 03:29:00	CGSTL	CN	521	547	97.51	In Earth orbit
S51838	2022-019Q ?	Jilin-1 Gaofen 03D 15 xing	2022 Feb 27 03:29:00	CGSTL	CN	527	547	97.53	In Earth orbit
S51839	2022-019R ?	Jilin-1 Gaofen 03D 16 xing	2022 Feb 27 03:29:00	CGSTL	CN	527	547	97.51	In Earth orbit
S51840	2022-019S ?	Jilin-1 Gaofen 03D 17 xing	2022 Feb 27 03:29:00	CGSTL	CN	526	546	97.52	In Earth orbit
S51841	2022-019T ?	Jilin-1 Gaofen 03D 18 xing	2022 Feb 27 03:29:00	CGSTL	CN	527	546	97.52	In Earth orbit
S51843	2022-019V ?	Chaohe-1	2022 Feb 27 03:29:00	TIANDI	CN	523	549	97.53	In Earth orbit
S51844	2022-019W ?	Chuangxing Leishen	2022 Feb 27 03:29:00	CITYK/YOU D	CN	527	551	97.52	In Earth orbit
S51845	2022-019X ?	Dayun	2022 Feb 27 03:29:00	GUOX	CN	526	547	97.52	In Earth orbit
S51846	2022-019Y ?	Qinmingxing-1	2022 Feb 27 03:29:00	WUHAN	CN	526	547	97.52	In Earth orbit
S51847	2022-020A	SriX-Beta	2022 Feb 28 21:30:27	SYNSP	J	555	572	97.78	In Earth orbit
S51850	2022-021A	GOES 18	2022 Mar 2 01:10:56	NOAA	US	35784	35787	0.04	In Earth orbit
S51852	2022-022A	Stairlink 3542	2022 Mar 3 15:30:57	SPXS	US	304	315	53.22	In Earth orbit
S51853	2022-022B	Stairlink 3539	2022 Mar 3 15:30:57	SPXS	US	304	315	53.22	In Earth orbit
S51854	2022-022C	Stairlink 3541	2022 Mar 3 15:30:57	SPXS	US	304	315	53.22	In Earth orbit
S51855	2022-022D	Stairlink 3545	2022 Mar 3 15:30:57	SPXS	US	304	315	53.22	In Earth orbit
S51856	2022-022E	Stairlink 3568	2022 Mar 3 15:30:57	SPXS	US	304	315	53.22	In Earth orbit
S51857	2022-022F	Stairlink 3571	2022 Mar 3 15:30:57	SPXS	US	304	315	53.22	In Earth orbit
S51858	2022-022G	Stairlink 3563	2022 Mar 3 15:30:57	SPXS	US	304	315	53.22	In Earth orbit
S51859	2022-022H	Stairlink 3560	2022 Mar 3 15:30:57	SPXS	US	304	314	53.22	In Earth orbit
S51860	2022-022J	Stairlink 3559	2022 Mar 3 15:30:57	SPXS	US	304	314	53.22	In Earth orbit
S51861	2022-022K	Stairlink 3562	2022 Mar 3 15:30:57	SPXS	US	304	314	53.22	In Earth orbit
S51862	2022-022L	Stairlink 3508	2022 Mar 3 15:30:57	SPXS	US	304	314	53.22	In Earth orbit
S51863	2022-022M	Stairlink 3555	2022 Mar 3 15:30:57	SPXS	US	304	314	53.22	In Earth orbit

S51864	2022-022N	Starlink 3548	2022 Mar 3 1530:57	SPXS	US	304	314	53.22	In Earth orbit
S51865	2022-022P	Starlink 3503	2022 Mar 3 1530:57	SPXS	US	304	314	53.22	In Earth orbit
S51866	2022-022Q	Starlink 3553	2022 Mar 3 1530:57	SPXS	US	304	314	53.22	In Earth orbit
S51867	2022-022R	Starlink 3590	2022 Mar 3 1530:57	SPXS	US	304	314	53.22	In Earth orbit
S51868	2022-022S	Starlink 3578	2022 Mar 3 1530:57	SPXS	US	304	314	53.22	In Earth orbit
S51869	2022-022T	Starlink 3588	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51870	2022-022U	Starlink 3591	2022 Mar 3 1530:57	SPXS	US	304	314	53.22	In Earth orbit
S51871	2022-022V	Starlink 3567	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51872	2022-022W	Starlink 3554	2022 Mar 3 1530:57	SPXS	US	304	314	53.22	In Earth orbit
S51873	2022-022X	Starlink 3582	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51874	2022-022Y	Starlink 3574	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51875	2022-022Z	Starlink 3585	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51876	2022-022AA	Starlink 3583	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51877	2022-022AB	Starlink 3556	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51878	2022-022AC	Starlink 3575	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51879	2022-022AD	Starlink 3572	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51880	2022-022AE	Starlink 3566	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51881	2022-022AF	Starlink 3504	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51882	2022-022AG	Starlink 3570	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51883	2022-022AH	Starlink 3576	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51884	2022-022AJ	Starlink 3577	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51885	2022-022AK	Starlink 3584	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51886	2022-022AL	Starlink 3565	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51887	2022-022AM	Starlink 3551	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51888	2022-022AN	Starlink 3536	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51889	2022-022AP	Starlink 3547	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51890	2022-022AQ	Starlink 3519	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51891	2022-022AR	Starlink 3549	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51892	2022-022AS	Starlink 3587	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51893	2022-022AT	Starlink 3579	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51894	2022-022AU	Starlink 3595	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51895	2022-022AV	Starlink 3594	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51896	2022-022AW	Starlink 3593	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51897	2022-022AX	Starlink 3598	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51898	2022-022AY	Starlink 3597	2022 Mar 3 1530:57	SPXS	US	303	314	53.22	In Earth orbit
S51946	2022-023A ?	Yinhe 2-01	2022 Mar 5 0615:00	YINHE	CN	476	500	63.46	In Earth orbit
S51947	2022-023B ?	Yinhe 2-02	2022 Mar 5 0615:00	YINHE	CN	476	500	63.45	In Earth orbit
S51948	2022-023C ?	Yinhe 2-03	2022 Mar 5 0615:00	YINHE	CN	477	501	63.45	In Earth orbit
S51949	2022-023D ?	Yinhe 2-04	2022 Mar 5 0615:00	YINHE	CN	479	500	63.45	In Earth orbit
S51950	2022-023E ?	Yinhe 2-05	2022 Mar 5 0615:00	YINHE	CN	480	500	63.45	In Earth orbit
S51951	2022-023F ?	Yinhe 2-06	2022 Mar 5 0615:00	YINHE	CN	480	501	63.44	In Earth orbit
S51952	2022-023G	Xuanming Xingyuan	2022 Mar 5 0615:00	XYHT	CN	480	502	63.44	In Earth orbit
S51954	2022-024A	Noor 2	2022 Mar 8 0514:00	IRGC	IR	495	512	58.30	In Earth orbit
S51956	2022-025A	Starlink 3700	2022 Mar 9 1450:58	SPXS	US	301	311	53.22	In Earth orbit
S51957	2022-025B	Starlink 3694	2022 Mar 9 1450:58	SPXS	US	300	311	53.22	In Earth orbit
S51958	2022-025C	Starlink 3692	2022 Mar 9 1450:58	SPXS	US	301	312	53.22	In Earth orbit
S51959	2022-025D	Starlink 3704	2022 Mar 9 1450:58	SPXS	US	301	311	53.22	In Earth orbit
S51960	2022-025E	Starlink 3691	2022 Mar 9 1450:58	SPXS	US	300	311	53.22	In Earth orbit
S51961	2022-025F	Starlink 3689	2022 Mar 9 1450:58	SPXS	US	301	311	53.22	In Earth orbit
S51962	2022-025G	Starlink 3697	2022 Mar 9 1450:58	SPXS	US	300	311	53.22	In Earth orbit
S51963	2022-025H	Starlink 3675	2022 Mar 9 1450:58	SPXS	US	301	311	53.22	In Earth orbit
S51964	2022-025I	Starlink 3690	2022 Mar 9 1450:58	SPXS	US	300	311	53.22	In Earth orbit
S51965	2022-025K	Starlink 3696	2022 Mar 9 1450:58	SPXS	US	300	311	53.22	In Earth orbit
S51966	2022-025L	Starlink 3699	2022 Mar 9 1450:58	SPXS	US	300	311	53.22	In Earth orbit
S51967	2022-025M	Starlink 3695	2022 Mar 9 1450:58	SPXS	US	300	311	53.22	In Earth orbit
S51968	2022-025N	Starlink 3681	2022 Mar 9 1450:58	SPXS	US	300	311	53.22	In Earth orbit
S51969	2022-025P	Starlink 3680	2022 Mar 9 1450:58	SPXS	US	300	311	53.22	In Earth orbit
S51970	2022-025Q	Starlink 3677	2022 Mar 9 1450:58	SPXS	US	300	311	53.22	In Earth orbit
S51971	2022-025R	Starlink 3669	2022 Mar 9 1450:58	SPXS	US	300	311	53.22	In Earth orbit
S51972	2022-025S	Starlink 3671	2022 Mar 9 1450:58	SPXS	US	300	311	53.22	In Earth orbit
S51973	2022-025T	Starlink 3679	2022 Mar 9 1450:58	SPXS	US	300	311	53.22	In Earth orbit
S51974	2022-025U	Starlink 3672	2022 Mar 9 1450:58	SPXS	US	299	311	53.22	In Earth orbit
S51975	2022-025V	Starlink 3674	2022 Mar 9 1450:58	SPXS	US	300	310	53.22	In Earth orbit
S51976	2022-025W	Starlink 3663	2022 Mar 9 1450:58	SPXS	US	299	310	53.22	In Earth orbit
S51977	2022-025X	Starlink 3660	2022 Mar 9 1450:58	SPXS	US	300	311	53.22	In Earth orbit
S51978	2022-025Y	Starlink 3666	2022 Mar 9 1450:58	SPXS	US	299	311	53.22	In Earth orbit

S51979	2022-025Z	Starlink 3656	SPXS	US	300	311	53.22	In Earth orbit
S51980	2022-025AA	Starlink 3649	SPXS	US	299	311	53.22	In Earth orbit
S51981	2022-025AB	Starlink 3653	SPXS	US	299	311	53.22	In Earth orbit
S51982	2022-025AC	Starlink 3650	SPXS	US	299	311	53.22	In Earth orbit
S51983	2022-025AD	Starlink 3655	SPXS	US	299	311	53.22	In Earth orbit
S51984	2022-025AE	Starlink 3664	SPXS	US	299	311	53.22	In Earth orbit
S51985	2022-025AF	Starlink 3651	SPXS	US	299	311	53.22	In Earth orbit
S51986	2022-025AG	Starlink 3645	SPXS	US	299	311	53.22	In Earth orbit
S51987	2022-025AH	Starlink 3644	SPXS	US	299	310	53.22	In Earth orbit
S51988	2022-025AJ	Starlink 3640	SPXS	US	299	311	53.22	In Earth orbit
S51989	2022-025AK	Starlink 3642	SPXS	US	299	311	53.22	In Earth orbit
S51990	2022-025AL	Starlink 3657	SPXS	US	299	311	53.22	In Earth orbit
S51991	2022-025AM	Starlink 3652	SPXS	US	299	311	53.22	In Earth orbit
S51992	2022-025AN	Starlink 3643	SPXS	US	299	310	53.22	In Earth orbit
S51993	2022-025AP	Starlink 3648	SPXS	US	299	311	53.22	In Earth orbit
S51994	2022-025AQ	Starlink 3647	SPXS	US	299	310	53.22	In Earth orbit
S51995	2022-025AR	Starlink 3636	SPXS	US	299	310	53.22	In Earth orbit
S51996	2022-025AS	Starlink 3538	SPXS	US	299	310	53.22	In Earth orbit
S51997	2022-025AT	Starlink 3589	SPXS	US	299	310	53.22	In Earth orbit
S51998	2022-025AU	Starlink 3618	SPXS	US	299	310	53.22	In Earth orbit
S51999	2022-025AV	Starlink 3667	SPXS	US	299	310	53.22	In Earth orbit
S52000	2022-025AW	Starlink 3653	SPXS	US	299	310	53.22	In Earth orbit
S52001	2022-025AX	Starlink 3659	SPXS	US	299	310	53.22	In Earth orbit
S52002	2022-025AY	Starlink 3668	SPXS	US	299	310	53.22	In Earth orbit
S52003	2022-025AZ	Starlink 3654	SPXS	US	298	310	53.22	In Earth orbit
S52009	2022-026B	SpaceBEE-121	SWARMX	US	506	543	97.50	In Earth orbit
S52010	2022-026C	SpaceBEE-114	SWARMX	US	507	543	97.50	In Earth orbit
S52011	2022-026D	SpaceBEE-126	SWARMX	US	507	543	97.50	In Earth orbit
S52012	2022-026E	SpaceBEE-118	SWARMX	US	507	542	97.50	In Earth orbit
S52013	2022-026F	SpaceBEE-120	SWARMX	US	506	543	97.50	In Earth orbit
S52014	2022-026G	SpaceBEE-122	SWARMX	US	506	543	97.50	In Earth orbit
S52015	2022-026H	SpaceBEE-119	SWARMX	US	506	543	97.50	In Earth orbit
S52016	2022-026I	SpaceBEE-115	SWARMX	US	506	543	97.50	In Earth orbit
S52017	2022-026K	OROSATO	PSAS	US	506	543	97.50	In Earth orbit
S52018	2022-026L	SpaceBEE NZ-14	SWARNZ	NZ	507	543	97.50	In Earth orbit
S52019	2022-026M	SpaceBEE NZ-11	SWARNZ	NZ	507	543	97.50	In Earth orbit
S52020	2022-026N	SpaceBEE-127	SWARNZ	NZ	506	543	97.50	In Earth orbit
S52021	2022-026P	SpaceBEE-125	SWARMX	US	507	543	97.50	In Earth orbit
S52022	2022-026Q	SpaceBEE-117	SWARMX	US	507	542	97.51	In Earth orbit
S52023	2022-026R	SpaceBEE-116	SWARMX	US	506	543	97.51	In Earth orbit
S52024	2022-026S	SpaceBEE-113	SWARMX	US	507	543	97.51	In Earth orbit
S52025	2022-026T	SpaceBEE-112	SWARMX	US	506	543	97.50	In Earth orbit
S52026	2022-026U	SpaceBEE NZ-13	SWARNZ	NZ	506	543	97.50	In Earth orbit
S52027	2022-026V	SpaceBEE-123	SWARMX	US	507	543	97.50	In Earth orbit
S52028	2022-026W	SpaceBEE NZ-12	SWARNZ	NZ	502	543	97.50	In Earth orbit
S52029	2022-026X	SpaceBEE-124	SWARMX	US	503	544	97.50	In Earth orbit
S52086	2022-028A	S. P. Korolev	RKKE	RU	200	224	51.68	Landed
S52088	2022-029A	Starlink 3537	SPXS	US	301	315	53.22	In Earth orbit
S52089	2022-029B	Starlink 3722	SPXS	US	316	319	53.22	In Earth orbit
S52090	2022-029C	Starlink 3712	SPXS	US	315	319	53.22	In Earth orbit
S52091	2022-029D	Starlink 3713	SPXS	US	316	319	53.22	In Earth orbit
S52092	2022-029E	Starlink 3716	SPXS	US	316	318	53.22	In Earth orbit
S52093	2022-029F	Starlink 3673	SPXS	US	316	318	53.22	In Earth orbit
S52094	2022-029G	Starlink 3714	SPXS	US	315	320	53.22	In Earth orbit
S52095	2022-029H	Starlink 3701	SPXS	US	315	319	53.22	In Earth orbit
S52096	2022-029I	Starlink 3717	SPXS	US	302	315	53.22	In Earth orbit
S52097	2022-029K +	Starlink 3676	SPXS	US	302	315	53.22	Reentered
S52098	2022-029L	Starlink 3665	SPXS	US	316	319	53.22	In Earth orbit
S52099	2022-029M +	Starlink 3662	SPXS	US	302	315	53.22	Reentered
S52100	2022-029N	Starlink 3702	SPXS	US	315	318	53.22	In Earth orbit
S52101	2022-029P	Starlink 3703	SPXS	US	314	319	53.22	In Earth orbit
S52102	2022-029Q	Starlink 3709	SPXS	US	315	318	53.22	In Earth orbit
S52103	2022-029R	Starlink 3705	SPXS	US	314	318	53.22	In Earth orbit
S52104	2022-029S +	Starlink 3693	SPXS	US	305	316	53.22	Reentered
S52105	2022-029T	Starlink 3706	SPXS	US	316	317	53.22	In Earth orbit
S52106	2022-029U	Starlink 3670	SPXS	US	315	318	53.22	In Earth orbit

S52107	2022-029YV	Starlink 3658	SPXS	US	314	318	53.22	In Earth orbit
S52108	2022-029W	Starlink 3698	SPXS	US	314	319	53.22	In Earth orbit
S52109	2022-029X +	Starlink 3731	SPXS	US	315	317	53.22	Reentered
S52110	2022-029Y	Starlink 3687	SPXS	US	313	318	53.22	In Earth orbit
S52111	2022-029Z	Starlink 3708	SPXS	US	314	318	53.22	In Earth orbit
S52112	2022-029AA	Starlink 3734	SPXS	US	314	318	53.22	In Earth orbit
S52113	2022-029AB	Starlink 3736	SPXS	US	314	318	53.22	In Earth orbit
S52114	2022-029AC	Starlink 3737	SPXS	US	314	318	53.22	In Earth orbit
S52115	2022-029AD	Starlink 3685	SPXS	US	313	318	53.22	In Earth orbit
S52116	2022-029AE	Starlink 3735	SPXS	US	311	318	53.22	In Earth orbit
S52117	2022-029AF	Starlink 3738	SPXS	US	312	319	53.22	In Earth orbit
S52118	2022-029AG	Starlink 3743	SPXS	US	314	318	53.22	In Earth orbit
S52119	2022-029AH	Starlink 3558	SPXS	US	310	317	53.22	In Earth orbit
S52120	2022-029AJ	Starlink 3554	SPXS	US	313	318	53.22	In Earth orbit
S52121	2022-029AK	Starlink 3678	SPXS	US	314	317	53.22	In Earth orbit
S52122	2022-029AL	Starlink 3726	SPXS	US	313	318	53.22	In Earth orbit
S52123	2022-029AM	Starlink 3725	SPXS	US	312	317	53.22	In Earth orbit
S52124	2022-029AN	Starlink 3684	SPXS	US	310	316	53.22	In Earth orbit
S52125	2022-029AP	Starlink 3727	SPXS	US	313	317	53.22	In Earth orbit
S52126	2022-029AQ	Starlink 3752	SPXS	US	314	316	53.22	In Earth orbit
S52127	2022-029AR	Starlink 3715	SPXS	US	312	317	53.22	In Earth orbit
S52128	2022-029AS +	Starlink 3719	SPXS	US	301	314	53.22	Reentered
S52129	2022-029AT	Starlink 3661	SPXS	US	313	317	53.22	In Earth orbit
S52130	2022-029AU +	Starlink 3710	SPXS	US	301	315	53.22	Reentered
S52131	2022-029AV	Starlink 3711	SPXS	US	312	317	53.22	In Earth orbit
S52132	2022-029AW	Starlink 3718	SPXS	US	313	317	53.22	In Earth orbit
S52133	2022-029AX	Starlink 3707	SPXS	US	309	316	53.22	In Earth orbit
S52134	2022-029AY	Starlink 3721	SPXS	US	312	317	53.22	In Earth orbit
S52135	2022-029AZ	Starlink 3729	SPXS	US	313	316	53.22	In Earth orbit
S52136	2022-029BA	Starlink 3720	SPXS	US	311	318	53.22	In Earth orbit
S52137	2022-029BB	Starlink 3733	SPXS	US	313	316	53.22	In Earth orbit
S52138	2022-029BC	Starlink 3723	SPXS	US	312	316	53.22	In Earth orbit
S52139	2022-029BD	Starlink 3730	SPXS	US	302	314	53.22	In Earth orbit
S52140	2022-029BE	Starlink 3682	SPXS	US	313	316	53.22	In Earth orbit
S52145	2022-030A	Meridian-M No. 20L	VVKOV	RU	1026	39337	62.78	In Earth orbit
S52150	2022-031A	Tiansun-2	CHFN	CN	587	605	97.79	In Earth orbit
S52151	2022-031B	Pujiang-2	SAST	CN	588	603	97.78	In Earth orbit
S52152	2022-032A	Tianping-2A	CHFN?	CN	584	603	97.80	In Earth orbit
S52153	2022-032C	Tianping-2C	ZIUNI	CN	581	603	97.80	In Earth orbit
S52154	2022-032D	Tianping-2B	ZIUNI	CN	581	603	97.79	In Earth orbit
S52157	2022-033A	Spark-1	OMNISP	US	638	656	97.95	In Earth orbit
S52158	2022-033B	GNOMES-3	PLANQ	US	637	653	97.95	In Earth orbit
S52159	2022-033C	ENMAP	DLR2	D	638	651	97.95	In Earth orbit
S52160	2022-033D	Alfa Cruz	UNB	BR	499	511	97.39	In Earth orbit
S52161	2022-033E	ARCSAT	NDRE	N	499	510	97.39	In Earth orbit
S52162	2022-033F	Lynk Tower 1	LYNK	US	497	509	97.39	In Earth orbit
S52163	2022-033G	ION SCV005	DORBIT	I	491	509	97.39	In Earth orbit
S52164	2022-033H	SpaceBEE-136	SWARMX	US	497	508	97.38	In Earth orbit
S52165	2022-033I	Hawk 4B	HE360	US	497	509	97.39	In Earth orbit
S52166	2022-033K	SpaceBEE-138	SWARMX	US	496	510	97.38	In Earth orbit
S52167	2022-033L	Hawk 4A	HE360	US	497	509	97.39	In Earth orbit
S52168	2022-033M	Annie Maunder	URUGUS	UY	498	509	97.39	In Earth orbit
S52169	2022-033N	MP42	NANAV	LT	492	508	97.39	In Earth orbit
S52170	2022-033P	Hawk 4C	HE360	US	494	509	97.39	In Earth orbit
S52171	2022-033Q	Maria Telkes	URUGUS	UY	494	509	97.39	In Earth orbit
S52172	2022-033R	Sally Ride	URUGUS	UY	493	509	97.39	In Earth orbit
S52173	2022-033S	Shakuntala	PIXX	IN	492	509	97.39	In Earth orbit
S52174	2022-033T	BRO-7	UNSEEN	F	497	509	97.39	In Earth orbit
S52175	2022-033U	BDSAT	CHEEC	CZ	497	509	97.39	In Earth orbit
S52176	2022-033V	SpaceBEE-139	SWARMX	US	498	508	97.38	In Earth orbit
S52177	2022-033W	SpaceBEE-130	SWARMX	US	497	510	97.38	In Earth orbit
S52178	2022-033X	Kalpana Chawla	URUGUS	UY	497	510	97.39	In Earth orbit
S52179	2022-033Y	SpaceBEE-129	SWARMX	US	498	509	97.38	In Earth orbit
S52180	2022-033Z	SpaceBEE-129	SWARMX	US	497	509	97.38	In Earth orbit
S52181	2022-033AA	SpaceBEE-131	SWARMX	US	498	509	97.38	In Earth orbit
S52182	2022-033AB	SpaceBEE-128	SWARMX	US	498	509	97.38	In Earth orbit



S52183	2022-033AC	SpaceBEE-133	2022 Apr 1 1739:23	SWARMX	US	498	509	97.38	In Earth orbit
S52184	2022-033AD	Mary Somerville	2022 Apr 1 1747:04	URUGUS	UY	494	509	97.39	In Earth orbit
S52185	2022-033AE	SpaceBEE-132	2022 Apr 1 1739:23	SWARMX	US	498	508	97.38	In Earth orbit
S52186	2022-033AF	SpaceBEE-137	2022 Apr 1 1739:23	SWARMX	US	497	509	97.38	In Earth orbit
S52187	2022-033AG	SpaceBEE-135	2022 Apr 1 1739:23	SWARMX	US	497	509	97.38	In Earth orbit
S52188	2022-033AH	PlanetSat	2022 Apr 9 1422:31	UCH	CL	496	502	97.39	In Earth orbit
S52189	2022-033AJ	KSP2-C	2022 Apr 11 0713:12	KLEOS	L	496	509	97.38	In Earth orbit
S52190	2022-033AK	KSF2-D	2022 Apr 11 1816:26	KLEOS	L	496	509	97.38	In Earth orbit
S52191	2022-033AL	SUCHAI-3	2022 Apr 13 0803:04	UCH	CL	497	513	97.40	In Earth orbit
S52192	2022-033AM	SUCHAI-2	2022 Apr 14 0745:00	UCH	CL	493	507	97.38	In Earth orbit
S52193	2022-033AN	KSF2-B	2022 May 9 1858:48	KLEOS	L	492	511	97.40	In Earth orbit
S52194	2022-033AP	KSF2-A	2022 May 9 1549:19	KLEOS	L	492	511	97.40	In Earth orbit
S52196	2022-034B	Global-18	2022 Apr 2 1335:00	BSKG	US	428	440	53.01	In Earth orbit
S52197	2022-034C	Global-20	2022 Apr 2 1336:00	BSKG	US	426	439	53.00	In Earth orbit
S52200	2022-035A	Gao Fen 3-03	2022 Apr 7 0009:00	GWHYZ	CN	739	746	98.42	In Earth orbit
S52202	2022-036A	Kosmos-2554	2022 Apr 7 1130:00	VVKOV	RU	896	908	67.15	In Earth orbit
S52204	2022-037A	Axiom Ax-1	2022 Apr 8 1529:18	SPX	US	414	420	51.64	Landed
S52255	2022-038A	Zhongxing 6D	2022 Apr 15 1225:00	CHISAE	CN	35781	35793	0.05	In Earth orbit
S52257	2022-039A	Duqi Huanjing Jiance Weixing	2022 Apr 15 1830:00	ZZWYZ	CN	680	690	98.13	In Earth orbit
S52259	2022-040A C	USA 327	2022 Apr 17 1455:00	NROC/USN	US	1007	1207	63.44	In Earth orbit
S52261	2022-041A	Starlink 3810	2022 Apr 21 1851:17	SPXS	US	322	324	53.22	In Earth orbit
S52262	2022-041B	Starlink 3761	2022 Apr 21 1851:17	SPXS	US	322	324	53.22	In Earth orbit
S52263	2022-041C	Starlink 3786	2022 Apr 21 1851:17	SPXS	US	322	324	53.22	In Earth orbit
S52264	2022-041D	Starlink 3795	2022 Apr 21 1851:17	SPXS	US	322	324	53.22	In Earth orbit
S52265	2022-041E	Starlink 3740	2022 Apr 21 1851:17	SPXS	US	322	324	53.22	In Earth orbit
S52266	2022-041F	Starlink 3739	2022 Apr 21 1851:17	SPXS	US	322	323	53.22	In Earth orbit
S52267	2022-041G	Starlink 3748	2022 Apr 21 1851:17	SPXS	US	322	323	53.22	In Earth orbit
S52268	2022-041H	Starlink 3746	2022 Apr 21 1851:17	SPXS	US	322	323	53.22	In Earth orbit
S52269	2022-041I	Starlink 3791	2022 Apr 21 1851:17	SPXS	US	322	323	53.22	In Earth orbit
S52270	2022-041K	Starlink 3804	2022 Apr 21 1851:17	SPXS	US	322	323	53.22	In Earth orbit
S52271	2022-041L	Starlink 3788	2022 Apr 21 1851:17	SPXS	US	322	323	53.22	In Earth orbit
S52272	2022-041M	Starlink 3781	2022 Apr 21 1851:17	SPXS	US	322	323	53.22	In Earth orbit
S52273	2022-041N	Starlink 3782	2022 Apr 21 1851:17	SPXS	US	322	323	53.22	In Earth orbit
S52274	2022-041P	Starlink 3790	2022 Apr 21 1851:17	SPXS	US	321	323	53.22	In Earth orbit
S52275	2022-041Q	Starlink 3784	2022 Apr 21 1851:17	SPXS	US	322	323	53.22	In Earth orbit
S52276	2022-041R	Starlink 3778	2022 Apr 21 1851:17	SPXS	US	321	323	53.22	In Earth orbit
S52277	2022-041S	Starlink 3787	2022 Apr 21 1851:17	SPXS	US	321	323	53.22	In Earth orbit
S52278	2022-041T	Starlink 3780	2022 Apr 21 1851:17	SPXS	US	321	323	53.22	In Earth orbit
S52279	2022-041U	Starlink 3686	2022 Apr 21 1851:17	SPXS	US	321	323	53.22	In Earth orbit
S52280	2022-041V	Starlink 3764	2022 Apr 21 1851:17	SPXS	US	321	322	53.22	In Earth orbit
S52281	2022-041W	Starlink 3779	2022 Apr 21 1851:17	SPXS	US	321	323	53.22	In Earth orbit
S52282	2022-041X	Starlink 3783	2022 Apr 21 1851:17	SPXS	US	321	322	53.22	In Earth orbit
S52283	2022-041Y	Starlink 3789	2022 Apr 21 1851:17	SPXS	US	321	323	53.22	In Earth orbit
S52284	2022-041Z	Starlink 3561	2022 Apr 21 1851:17	SPXS	US	321	322	53.22	In Earth orbit
S52285	2022-041AA	Starlink 3775	2022 Apr 21 1851:17	SPXS	US	321	323	53.22	In Earth orbit
S52286	2022-041AB	Starlink 3802	2022 Apr 21 1851:17	SPXS	US	321	322	53.22	In Earth orbit
S52287	2022-041AC	Starlink 3822	2022 Apr 21 1851:17	SPXS	US	321	322	53.22	In Earth orbit
S52288	2022-041AD	Starlink 3776	2022 Apr 21 1851:17	SPXS	US	321	322	53.22	In Earth orbit
S52289	2022-041AE	Starlink 3751	2022 Apr 21 1851:17	SPXS	US	321	322	53.22	In Earth orbit
S52290	2022-041AF	Starlink 3772	2022 Apr 21 1851:17	SPXS	US	320	322	53.22	In Earth orbit
S52291	2022-041AG	Starlink 3773	2022 Apr 21 1851:17	SPXS	US	321	322	53.22	In Earth orbit
S52292	2022-041AH	Starlink 3753	2022 Apr 21 1851:17	SPXS	US	320	322	53.22	In Earth orbit
S52293	2022-041AJ	Starlink 3771	2022 Apr 21 1851:17	SPXS	US	321	322	53.22	In Earth orbit
S52294	2022-041AK	Starlink 3777	2022 Apr 21 1851:17	SPXS	US	320	322	53.22	In Earth orbit
S52295	2022-041AL	Starlink 3765	2022 Apr 21 1851:17	SPXS	US	320	322	53.22	In Earth orbit
S52296	2022-041AM	Starlink 3766	2022 Apr 21 1851:17	SPXS	US	320	322	53.22	In Earth orbit
S52297	2022-041AN	Starlink 3758	2022 Apr 21 1851:17	SPXS	US	320	322	53.22	In Earth orbit
S52298	2022-041AP	Starlink 3760	2022 Apr 21 1851:17	SPXS	US	320	321	53.22	In Earth orbit
S52299	2022-041AQ	Starlink 3759	2022 Apr 21 1851:17	SPXS	US	322	321	53.22	In Earth orbit
S52300	2022-041AR	Starlink 3769	2022 Apr 21 1851:17	SPXS	US	320	321	53.22	In Earth orbit
S52301	2022-041AS	Starlink 3768	2022 Apr 21 1851:17	SPXS	US	320	322	53.22	In Earth orbit
S52302	2022-041AT	Starlink 3564	2022 Apr 21 1851:17	SPXS	US	320	321	53.22	In Earth orbit
S52303	2022-041AU	Starlink 3742	2022 Apr 21 1851:17	SPXS	US	320	321	53.22	In Earth orbit
S52304	2022-041AV	Starlink 3744	2022 Apr 21 1851:17	SPXS	US	320	321	53.22	In Earth orbit
S52305	2022-041AW	Starlink 3724	2022 Apr 21 1851:17	SPXS	US	320	321	53.22	In Earth orbit
S52306	2022-041AX	Starlink 3747	2022 Apr 21 1851:17	SPXS	US	319	321	53.22	In Earth orbit

S52307	2022-041AY	Starlink 3755	2022 Apr 21 1851:17	SPXS	US	320	321	53.22	In Earth orbit
S52308	2022-041AZ	Starlink 3745	2022 Apr 21 1851:17	SPXS	US	320	320	53.22	In Earth orbit
S52309	2022-041BA	Starlink 3756	2022 Apr 21 1851:17	SPXS	US	319	322	53.22	In Earth orbit
S52310	2022-041BB	Starlink 3688	2022 Apr 21 1851:17	SPXS	US	319	321	53.22	In Earth orbit
S52311	2022-041BC	Starlink 3750	2022 Apr 21 1851:17	SPXS	US	319	321	53.22	In Earth orbit
S52312	2022-041BD	Starlink 3752	2022 Apr 21 1851:17	SPXS	US	319	321	53.22	In Earth orbit
S52313	2022-041BE	Starlink 3749	2022 Apr 21 1851:17	SPXS	US	320	320	53.22	In Earth orbit
S52318	2022-042A	Dragon Freedom (Crew-4)	2022 Apr 27 0804:54	SPX	US	191	211	51.65	Landed
S52320	2022-043A	Sweet Georgia 1-01	2022 Apr 29 0423:00	SIWEI	CN	486	503	97.47	In Earth orbit
S52322	2022-043C	Sweet Georgia 1-02	2022 Apr 29 0423:00	SIWEI	CN	485	502	97.47	In Earth orbit
S52330	2022-044A	Kosmos-2555	2022 Apr 29 2018:00	MORF	RU	278	293	96.45	Reentered
S52331	2022-045A	Starlink 3889	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52332	2022-045B	Starlink 3831	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52333	2022-045C	Starlink 3847	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52334	2022-045D	Starlink 3880	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52335	2022-045E	Starlink 3814	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52336	2022-045F	Starlink 3823	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52337	2022-045G	Starlink 3797	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52338	2022-045H	Starlink 3815	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52339	2022-045J	Starlink 3792	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52340	2022-045K	Starlink 3818	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52341	2022-045L	Starlink 3843	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52342	2022-045M	Starlink 3850	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52343	2022-045N	Starlink 3849	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52344	2022-045P	Starlink 3851	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52345	2022-045Q	Starlink 3852	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52346	2022-045R	Starlink 3812	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52347	2022-045S	Starlink 3826	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52348	2022-045T	Starlink 3829	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52349	2022-045U	Starlink 3819	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52350	2022-045V	Starlink 3754	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52351	2022-045W	Starlink 3816	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52352	2022-045X	Starlink 3838	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	Reentered
S52353	2022-045Y	Starlink 3807	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52354	2022-045Z	Starlink 3876	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52355	2022-045AA	Starlink 3877	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52356	2022-045AB	Starlink 3801	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52357	2022-045AC	Starlink 3821	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52358	2022-045AD	Starlink 3837	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52359	2022-045AE	Starlink 3853	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52360	2022-045AF	Starlink 3824	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52361	2022-045AG	Starlink 3728	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52362	2022-045AH	Starlink 3848	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52363	2022-045AJ	Starlink 3830	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52364	2022-045AK	Starlink 3820	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52365	2022-045AL	Starlink 3874	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52366	2022-045AM	Starlink 3808	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52367	2022-045AN	Starlink 3817	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52368	2022-045AP	Starlink 3834	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52369	2022-045AQ	Starlink 3841	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52370	2022-045AR	Starlink 3827	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52371	2022-045AS	Starlink 3798	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52372	2022-045AT	Starlink 3796	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52373	2022-045AU	Starlink 3550	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52374	2022-045AV	Starlink 3762	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52375	2022-045AW	Starlink 3785	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52376	2022-045AX	Starlink 3767	2022 Apr 29 2226:47	SPXS	US	303	316	53.21	In Earth orbit
S52377	2022-045AY	Starlink 3805	2022 Apr 29 2226:47	SPXS	US	303	315	53.21	In Earth orbit
S52378	2022-045AZ	Starlink 3806	2022 Apr 29 2226:47	SPXS	US	303	315	53.21	In Earth orbit
S52379	2022-045BA	Starlink 3800	2022 Apr 29 2226:47	SPXS	US	303	315	53.21	In Earth orbit
S52380	2022-045BB	Starlink 3793	2022 Apr 29 2226:47	SPXS	US	303	315	53.21	In Earth orbit
S52381	2022-045BC	Starlink 3803	2022 Apr 29 2226:47	SPXS	US	303	315	53.21	In Earth orbit
S52382	2022-045BD	Starlink 3799	2022 Apr 29 2226:47	SPXS	US	303	315	53.21	In Earth orbit
S52383	2022-045BE	Starlink 3811	2022 Apr 29 2226:47	SPXS	US	303	315	53.21	In Earth orbit
S52388	2022-046A	Anxi Tieguaoyin 2	2022 Apr 30 0340:00	CGSTL	CN	525	548	97.52	In Earth orbit
S52389	2022-046B	Tianji	2022 Apr 30 0340:00	CGSTL	CN	530	546	97.54	In Earth orbit

S52390	2022-046C	Tianwen	2022 Apr 30 03:40:00	CGSTL	CN	531	543	97.53	In Earth orbit
S52391	2022-046D	Tianyao	2022 Apr 30 03:40:00	CGSTL	CN	526	548	97.53	In Earth orbit
S52392	2022-046E	Tiancho	2022 Apr 30 03:40:00	CGSTL	CN	523	550	97.54	In Earth orbit
S52393	2022-047A	SpaceBEE-143	2022 May 2 23:50:36	SWARMX	US	522	532	97.45	In Earth orbit
S52395	2022-047B	SpaceBEE-NZ-15	2022 May 2 23:52:53	SWARNZ	NZ	522	533	97.45	In Earth orbit
S52396	2022-047C	SpaceBEE-NZ-16	2022 May 2 23:52:53	SWARNZ	NZ	522	533	97.45	In Earth orbit
S52397	2022-047D	SpaceBEE-NZ-17	2022 May 2 23:52:53	SWARNZ	NZ	522	532	97.45	In Earth orbit
S52398	2022-047E	SpaceBEE-NZ-18	2022 May 2 23:52:53	SWARNZ	NZ	522	532	97.45	In Earth orbit
S52399	2022-047F	SpaceBEE-NZ-19	2022 May 2 23:50:36	SWARMX	US	522	533	97.45	In Earth orbit
S52400	2022-047G	SpaceBEE-141	2022 May 2 23:50:36	SWARMX	US	522	532	97.45	In Earth orbit
S52401	2022-047H	SpaceBEE-142	2022 May 2 23:50:36	SWARMX	US	522	532	97.45	In Earth orbit
S52402	2022-047I	SpaceBEE-NZ-20	2022 May 2 23:52:53	SWARNZ	NZ	522	532	97.45	In Earth orbit
S52403	2022-047K	SpaceBEE-NZ-22	2022 May 2 23:52:53	SWARNZ	NZ	521	533	97.45	In Earth orbit
S52404	2022-047L	SpaceBEE-NZ-19	2022 May 2 23:52:53	SWARNZ	NZ	522	532	97.45	In Earth orbit
S52405	2022-047M	SpaceBEE-NZ-21	2022 May 2 23:52:53	SWARNZ	NZ	521	533	97.45	In Earth orbit
S52406	2022-047N	SpaceBEE-148	2022 May 2 23:50:36	SWARMX	US	521	533	97.45	In Earth orbit
S52407	2022-047P	SpaceBEE-149	2022 May 2 23:50:36	SWARMX	US	522	533	97.45	In Earth orbit
S52408	2022-047Q	SpaceBEE-153	2022 May 2 23:52:53	SWARMX	US	522	533	97.45	In Earth orbit
S52409	2022-047R	SpaceBEE-150	2022 May 2 23:52:53	SWARMX	US	522	533	97.45	In Earth orbit
S52410	2022-047S	SpaceBEE-144	2022 May 2 23:50:36	SWARMX	US	521	533	97.45	In Earth orbit
S52411	2022-047T	SpaceBEE-145	2022 May 2 23:50:36	SWARMX	US	521	533	97.45	In Earth orbit
S52412	2022-047U	SpaceBEE-146	2022 May 2 23:50:36	SWARMX	US	522	533	97.45	In Earth orbit
S52413	2022-047V	SpaceBEE-151	2022 May 2 23:52:53	SWARMX	US	522	533	97.45	In Earth orbit
S52414	2022-047W	SpaceBEE-152	2022 May 2 23:52:53	SWARMX	US	522	533	97.45	In Earth orbit
S52415	2022-047X	SpaceBEE-147	2022 May 2 23:50:36	SWARMX	US	522	533	97.45	In Earth orbit
S52416	2022-047Y	SpaceBEE-155	2022 May 2 23:50:36	SWARMX	US	522	534	97.45	In Earth orbit
S52417	2022-047Z	SpaceBEE-154	2022 May 2 23:50:36	SWARMX	US	522	533	97.45	In Earth orbit
S52418	2022-047AA	TRSI-3	2022 May 2 23:53:33	ACMEO/TRSI	US	525	535	97.45	In Earth orbit
S52419	2022-047AB	MyRadar 1	2022 May 2 23:53:33	ACMEO/TRSI	US	524	535	97.45	In Earth orbit
S52420	2022-047AC	TRSI-2	2022 May 2 23:53:33	ACMEO/TRSI	US	524	535	97.45	In Earth orbit
S52421	2022-047AD?	Unicom-2	2022 May 2 23:53:33	ALBA	UK	525	534	97.45	In Earth orbit
S52422	2022-047AE	BRO-6	2022 May 2 23:51:20	UNSEEN	F	524	534	97.45	In Earth orbit
S52423	2022-047AF?	E-Space 1	2022 May 2 23:50:36	ESPACE	US	522	534	97.45	In Earth orbit
S52424	2022-047AG?	E-Space 2	2022 May 2 23:50:00	ESPACE	US	522	533	97.45	In Earth orbit
S52425	2022-047AH?	AuroraSat 1	2022 May 2 23:52:06	AURPT	FI	522	533	97.45	In Earth orbit
S52426	2022-047AJ?	E-Space 3	2022 May 2 23:50:00	ESPACE	US	522	533	97.45	In Earth orbit
S52443	2022-048A	Jilin-1 Kuanfu-01C	2022 May 5 00:00:00	CGSTL	CN	530	545	97.68	In Earth orbit
S52444	2022-048B	Jilin-1 GaoFen 03D 27 xing	2022 May 5 00:00:00	CGSTL	CN	529	546	97.68	In Earth orbit
S52445	2022-048C	Jilin-1 GaoFen 03D 28 xing	2022 May 5 00:00:00	CGSTL	CN	528	546	97.68	In Earth orbit
S52446	2022-048D	Jilin-1 GaoFen 03D 29 xing	2022 May 5 00:00:00	CGSTL	CN	528	546	97.68	In Earth orbit
S52447	2022-048E	Jilin-1 GaoFen 03D 30 xing	2022 May 5 00:00:00	CGSTL	CN	528	545	97.68	In Earth orbit
S52448	2022-048F	Jilin-1 GaoFen 03D 31 xing	2022 May 5 00:00:00	CGSTL	CN	528	545	97.68	In Earth orbit
S52449	2022-048G	Jilin-1 GaoFen 03D 32 xing	2022 May 5 00:00:00	CGSTL	CN	528	545	97.68	In Earth orbit
S52450	2022-048H	Jilin-1 GaoFen 03D 33 xing	2022 May 5 00:00:00	CGSTL	CN	528	545	97.68	In Earth orbit
S52451	2022-049A	Starlink 3870	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52452	2022-049B	Starlink 3909	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52453	2022-049C	Starlink 3872	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52454	2022-049D	Starlink 3888	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52455	2022-049E	Starlink 3890	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52456	2022-049F	Starlink 3896	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52457	2022-049G	Starlink 3899	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52458	2022-049H	Starlink 3898	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52459	2022-049I	Starlink 3856	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52460	2022-049K	Starlink 3865	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52461	2022-049L	Starlink 3900	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52462	2022-049M	Starlink 3903	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52463	2022-049N	Starlink 3885	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52464	2022-049P	Starlink 3904	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52465	2022-049Q	Starlink 3863	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52466	2022-049R	Starlink 3840	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52467	2022-049S	Starlink 3873	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52468	2022-049T	Starlink 3864	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52469	2022-049U	Starlink 3828	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52470	2022-049V	Starlink 3859	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52471	2022-049W	Starlink 3862	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit
S52472	2022-049X	Starlink 3881	2022 May 6 10:36:36	SPXS	US	302	317	53.21	In Earth orbit

S52473	2022-049Y	Starlink 3879	SPXS	US	302	317	53.21	In Earth orbit
S52474	2022-049Z	Starlink 3855	SPXS	US	302	317	53.21	In Earth orbit
S52475	2022-049AA	Starlink 3882	SPXS	US	302	317	53.21	In Earth orbit
S52476	2022-049AB	Starlink 3835	SPXS	US	302	317	53.21	In Earth orbit
S52477	2022-049AC	Starlink 3860	SPXS	US	302	317	53.21	In Earth orbit
S52478	2022-049AD	Starlink 3825	SPXS	US	302	317	53.21	In Earth orbit
S52479	2022-049AE	Starlink 3878	SPXS	US	302	317	53.21	In Earth orbit
S52480	2022-049AF	Starlink 3839	SPXS	US	302	316	53.21	In Earth orbit
S52481	2022-049AG	Starlink 3842	SPXS	US	302	317	53.21	In Earth orbit
S52482	2022-049AH	Starlink 3813	SPXS	US	302	316	53.21	In Earth orbit
S52483	2022-049AJ	Starlink 3875	SPXS	US	302	317	53.21	In Earth orbit
S52484	2022-049AK	Starlink 3887	SPXS	US	302	316	53.21	In Earth orbit
S52485	2022-049AL	Starlink 3913	SPXS	US	302	316	53.21	In Earth orbit
S52486	2022-049AM	Starlink 3918	SPXS	US	302	316	53.21	In Earth orbit
S52487	2022-049AN	Starlink 3902	SPXS	US	302	316	53.21	In Earth orbit
S52488	2022-049AP	Starlink 3892	SPXS	US	302	316	53.21	In Earth orbit
S52489	2022-049AQ	Starlink 3923	SPXS	US	302	316	53.21	In Earth orbit
S52490	2022-049AR	Starlink 3914	SPXS	US	302	316	53.21	In Earth orbit
S52491	2022-049AS	Starlink 3908	SPXS	US	302	316	53.21	In Earth orbit
S52492	2022-049AT	Starlink 3916	SPXS	US	302	316	53.21	In Earth orbit
S52493	2022-049AU	Starlink 3883	SPXS	US	302	316	53.21	In Earth orbit
S52494	2022-049AV	Starlink 3857	SPXS	US	302	316	53.21	In Earth orbit
S52495	2022-049AW	Starlink 3905	SPXS	US	302	316	53.21	In Earth orbit
S52496	2022-049AX	Starlink 3871	SPXS	US	302	316	53.21	In Earth orbit
S52497	2022-049AY	Starlink 3884	SPXS	US	302	316	53.21	In Earth orbit
S52498	2022-049AZ	Starlink 3925	SPXS	US	302	316	53.21	In Earth orbit
S52499	2022-049BA	Starlink 3894	SPXS	US	302	316	53.21	In Earth orbit
S52500	2022-049BB	Starlink 3866	SPXS	US	302	316	53.21	In Earth orbit
S52501	2022-049BC	Starlink 3907	SPXS	US	302	316	53.21	In Earth orbit
S52502	2022-049BD	Starlink 3912	SPXS	US	302	316	53.21	In Earth orbit
S52503	2022-049BE	Starlink 3861	SPXS	US	302	316	53.21	In Earth orbit
S52509	2022-050A	Tianzhou-4	CMSE0	CN	363	376	41.46	Deorbited
S52425	2022-050E	Zhixun 3A	ZHXH	CN	375	396	41.48	In Earth orbit
S52533	2022-051A	Starlink 3951	SPXS	US	304	314	53.22	In Earth orbit
S52534	2022-051B	Starlink 3952	SPXS	US	304	314	53.22	In Earth orbit
S52535	2022-051C	Starlink 3958	SPXS	US	304	314	53.22	In Earth orbit
S52536	2022-051D	Starlink 3964	SPXS	US	304	315	53.22	In Earth orbit
S52537	2022-051E	Starlink 3897	SPXS	US	304	314	53.22	In Earth orbit
S52538	2022-051F	Starlink 3933	SPXS	US	304	314	53.22	In Earth orbit
S52539	2022-051G	Starlink 3757	SPXS	US	304	314	53.22	In Earth orbit
S52540	2022-051H	Starlink 3940	SPXS	US	304	314	53.22	In Earth orbit
S52541	2022-051I	Starlink 3845	SPXS	US	304	314	53.22	In Earth orbit
S52542	2022-051J	Starlink 3937	SPXS	US	304	314	53.22	In Earth orbit
S52543	2022-051K	Starlink 3926	SPXS	US	304	314	53.22	In Earth orbit
S52544	2022-051L	Starlink 3944	SPXS	US	304	314	53.22	In Earth orbit
S52545	2022-051M	Starlink 3944	SPXS	US	304	314	53.22	In Earth orbit
S52545	2022-051N	Starlink 3939	SPXS	US	304	314	53.22	In Earth orbit
S52546	2022-051P	Starlink 3948	SPXS	US	304	314	53.22	In Earth orbit
S52547	2022-051Q	Starlink 3869	SPXS	US	304	314	53.22	In Earth orbit
S52548	2022-051R	Starlink 3931	SPXS	US	304	314	53.22	In Earth orbit
S52549	2022-051S	Starlink 3935	SPXS	US	304	314	53.22	In Earth orbit
S52550	2022-051T	Starlink 3965	SPXS	US	304	314	53.22	In Earth orbit
S52551	2022-051U	Starlink 3969	SPXS	US	304	314	53.22	In Earth orbit
S52552	2022-051V	Starlink 3966	SPXS	US	304	314	53.22	In Earth orbit
S52553	2022-051W	Starlink 3858	SPXS	US	304	314	53.22	In Earth orbit
S52554	2022-051X	Starlink 3770	SPXS	US	304	314	53.22	In Earth orbit
S52555	2022-051Y	Starlink 3949	SPXS	US	304	314	53.22	In Earth orbit
S52556	2022-051Z	Starlink 3763	SPXS	US	304	314	53.22	In Earth orbit
S52557	2022-051AA	Starlink 3943	SPXS	US	304	314	53.22	In Earth orbit
S52558	2022-051AB	Starlink 3954	SPXS	US	304	314	53.22	In Earth orbit
S52559	2022-051AC	Starlink 3953	SPXS	US	304	314	53.22	In Earth orbit
S52560	2022-051AD	Starlink 3956	SPXS	US	304	314	53.22	In Earth orbit
S52561	2022-051AE	Starlink 3955	SPXS	US	304	314	53.22	In Earth orbit
S52562	2022-051AF	Starlink 3957	SPXS	US	304	314	53.22	In Earth orbit
S52563	2022-051AG	Starlink 3942	SPXS	US	304	314	53.22	In Earth orbit
S52564	2022-051AH	Starlink 3959	SPXS	US	304	314	53.22	In Earth orbit
S52565	2022-051AJ	Starlink 3911	SPXS	US	304	314	53.22	In Earth orbit



S52644	2022-052AY	Starlink 3985	2022 May 14 21:35:25	SPXS	US	303	316	53.21	In Earth orbit
S52645	2022-052AZ	Starlink 3973	2022 May 14 21:35:25	SPXS	US	303	316	53.21	In Earth orbit
S52646	2022-052BA	Starlink 3832	2022 May 14 21:35:25	SPXS	US	303	316	53.21	In Earth orbit
S52647	2022-052BB	Starlink 3846	2022 May 14 21:35:25	SPXS	US	303	316	53.21	In Earth orbit
S52648	2022-052BC	Starlink 3854	2022 May 14 21:35:25	SPXS	US	303	316	53.21	In Earth orbit
S52649	2022-052BD	Starlink 3868	2022 May 14 21:35:25	SPXS	US	303	316	53.21	In Earth orbit
S52650	2022-052BE	Starlink 3891	2022 May 14 21:35:25	SPXS	US	303	316	53.21	In Earth orbit
S52656	2022-053A	Starlink 4004	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52657	2022-053B	Starlink 4084	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52658	2022-053C	Starlink 4082	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52659	2022-053D	Starlink 3960	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52660	2022-053E	Starlink 4081	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52661	2022-053F	Starlink 4042	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52662	2022-053G	Starlink 4044	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52663	2022-053H	Starlink 4084	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52664	2022-053I	Starlink 4070	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52665	2022-053K	Starlink 4064	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52666	2022-053L	Starlink 4079	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52667	2022-053M	Starlink 4076	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52668	2022-053N	Starlink 4067	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52669	2022-053P	Starlink 3972	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52670	2022-053Q	Starlink 4075	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52671	2022-053R	Starlink 4071	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52672	2022-053S	Starlink 4073	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52673	2022-053T	Starlink 3976	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52674	2022-053U	Starlink 3956	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52675	2022-053V	Starlink 3934	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52676	2022-053W	Starlink 4006	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52677	2022-053X	Starlink 4028	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52678	2022-053Y	Starlink 4074	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52679	2022-053Z	Starlink 4031	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52680	2022-053AA	Starlink 3774	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52681	2022-053AB	Starlink 4068	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52682	2022-053AC	Starlink 4017	2022 May 18 11:54:07	SPXS	US	302	316	53.21	In Earth orbit
S52683	2022-053AD	Starlink 4039	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52684	2022-053AE	Starlink 4014	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52685	2022-053AF	Starlink 4029	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52686	2022-053AG	Starlink 4005	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52687	2022-053AH	Starlink 3981	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52688	2022-053AJ	Starlink 4032	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52689	2022-053AK	Starlink 4078	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52690	2022-053AL	Starlink 4035	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52691	2022-053AM	Starlink 3945	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52692	2022-053AN	Starlink 3993	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52693	2022-053AP	Starlink 3946	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52694	2022-053AQ	Starlink 4072	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52695	2022-053AR	Starlink 4041	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52696	2022-053AS	Starlink 4025	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52697	2022-053AT	Starlink 4018	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52698	2022-053AU	Starlink 4030	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52699	2022-053AV	Starlink 3987	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52700	2022-053AW	Starlink 4034	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52701	2022-053AX	Starlink 4003	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52702	2022-053AY	Starlink 4033	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52703	2022-053AZ	Starlink 4020	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52704	2022-053BA	Starlink 3999	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52705	2022-053BB	Starlink 3844	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52706	2022-053BC	Starlink 3970	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52707	2022-053BD	Starlink 4007	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52708	2022-053BE	Starlink 3962	2022 May 18 11:54:07	SPXS	US	302	315	53.21	In Earth orbit
S52713	2022-054A	Kosmos-2556	2022 May 19 08:13:00	VV/KOV	RU	337	556	97.70	In Earth orbit
S52715	2022-055A	Starliner OFT-2	2022 May 19 23:09:45	BO/KSC	US	187	367	51.60	Landed
S52716	2022-056A	Digu Tongxin Shiyuan Wei.	2022 May 20 10:45:00	CGSTL	CN	870	895	86.00	In Earth orbit
S52718	2022-056B	Digu Tongxin Shiyuan Wei.	2022 May 20 10:45:00	CGSTL	CN	870	888	86.00	In Earth orbit
S52732	2022-057A	Lemur-2 TemmysonLily	2022 May 25 19:35:24	MV/RU/SPiRE	AU	527	536	97.50	In Earth orbit

S32733	2022-057B	Lemur-2 VanDenDries	2022 May 25 1934:56	MYR/SPiRE	AU	527	536	97.50	In Earth orbit
S32734	2022-057C	PTD-3	2022 May 25 1934:19	TYVAK	US	525	537	97.51	In Earth orbit
S32735	2022-057D	CICERO-2 OP15 FLT2	2022 May 25 1934:00	GFOOPT	US	525	536	97.50	In Earth orbit
S32736	2022-057E	Lemur-2 Karen B	2022 May 25 1934:28	SPiRE/DASAIK	US	527	536	97.50	In Earth orbit
S32737	2022-057F	Luca	2022 May 25 1936:21	GHG	CA	526	536	97.51	In Earth orbit
S32738	2022-057G	Planetum-1	2022 May 25 1936:00	PLNTM	CZ	525	535	97.51	In Earth orbit
S32739	2022-057H	Connecta T1.1	2022 May 25 1936:50	PLNST	TR	525	536	97.52	In Earth orbit
S32740	2022-057I	Scjong-1	2022 May 25 1936:09	HANCOM	KR	524	538	97.53	In Earth orbit
S32741	2022-057K	CICERO-2 OP15 FLT1	2022 May 25 1934:46	GFOOPT	US	524	537	97.52	In Earth orbit
S32742	2022-057L	Centauri 5	2022 May 25 1938:49	FLEET	AU	525	535	97.51	In Earth orbit
S32743	2022-057M ?	BRONCOSAT-1	2022 May 25 1941:07	BRONC	US	524	535	97.51	In Earth orbit
S32744	2022-057N	Diako	2022 May 25 1927:13	GHG	CA	524	536	97.52	In Earth orbit
S32745	2022-057P	AMS	2022 May 25 1940:44	MITLL	US	524	535	97.51	In Earth orbit
S32746	2022-057Q	Penny	2022 May 25 1935:47	GHG	CA	525	535	97.51	In Earth orbit
S32747	2022-057R	Alice Lee	2022 May 25 1939:20	URUGUS	UY	523	536	97.52	In Earth orbit
S32748	2022-057S	Margherita	2022 May 25 1943:19	URUGUS	UY	523	535	97.51	In Earth orbit
S32749	2022-057T	ICEYE-X18	2022 May 25 1947:30	ICEYE	FI	520	535	97.52	In Earth orbit
S32750	2022-057U	FossaSat-2E 11	2022 May 28 1454:00	FOSSA	E	518	535	97.52	In Earth orbit
S32751	2022-057V ?	SPIN 1	2022 May 25 1936:00	SPIND	D	523	535	97.51	In Earth orbit
S32752	2022-057W	Ruby Payne-Scott	2022 May 25 1944:00	URUGUS	UY	523	535	97.52	In Earth orbit
S32753	2022-057X	Umbra-03	2022 May 25 1944:44	UMBRA	US	522	535	97.51	In Earth orbit
S32754	2022-057Y	Hawk 5C	2022 May 25 1945:26	HE360	US	522	535	97.52	In Earth orbit
S32755	2022-057Z	ICEYE-X24	2022 May 25 1943:41	ICEUS	US	521	535	97.52	In Earth orbit
S32756	2022-057AA	Hawk 5B	2022 May 25 1945:05	HE360	US	522	535	97.51	In Earth orbit
S32757	2022-057AB	Hawk 5A	2022 May 25 1945:48	HE360	US	521	535	97.52	In Earth orbit
S32758	2022-057AC	ICEYE-X19	2022 May 25 1950:22	ICEYE	FI	522	535	97.52	In Earth orbit
S32759	2022-057AD	ICEYE-X20	2022 May 25 1946:56	ICEYE/ICEUS?	FI	523	535	97.51	In Earth orbit
S32760	2022-057AE	Vigoride VR-3	2022 May 25 1946:17	MOMENT	US	520	535	97.51	In Earth orbit
S32761	2022-057AF	ION SCV006	2022 May 25 1944:22	DORBIT	I	520	535	97.51	In Earth orbit
S32762	2022-057AG	ICEYE-X17	2022 May 25 1947:51	ICEUS	US	520	535	97.52	In Earth orbit
S32763	2022-057AH	SHERPA-AC1	2022 May 25 1939:42	SFLIN	US	519	535	97.52	In Earth orbit
S32764	2022-057AJ	Edith Clarke	2022 May 25 1941:35	URUGUS	UY	519	535	97.51	In Earth orbit
S32765	2022-057AK	Urdaneta-Arnsart	2022 May 25 1934:37	SATLAN	E	518	535	97.52	In Earth orbit
S32766	2022-057AL	Varisat-1C	2022 May 25 1940:28	VARI	US	523	535	97.51	In Earth orbit
S32767	2022-057AM	CNCE V4	2022 May 25 1939:04	MDA	US	519	535	97.51	In Earth orbit
S32768	2022-057AN	CNCE V5	2022 May 25 1939:04	MDA	US	521	535	97.52	In Earth orbit
S32769	2022-057AP	Lemur-2 Mimiil307	2022 May 25 1936:59	SPiRE/DASAIK	US	516	536	97.52	In Earth orbit
S32770	2022-057AQ	Sharesat 2141	2022 May 25 1934:09	ENDUR	BGN	517	534	97.51	In Earth orbit
S32771	2022-057AR	Spark-2	2022 May 25 1935:05	OMNISP	US	517	535	97.52	In Earth orbit
S32772	2022-057AS	CP0D 1	2022 May 25 1936:38	TYVAK/ARC	US	515	535	97.51	In Earth orbit
S32773	2022-057AT	FossaSat-2E 12	2022 May 28 1454:00	FOSSA	E	518	535	97.52	In Earth orbit
S32774	2022-057AU	SBUDDIC	2022 Jun 9 0931:27	BROWN/CNR	US	517	530	97.52	In Earth orbit
S32775	2022-057AV	Guardian-1	2022 Jul 5 1254:00	AISTS	E	522	538	97.52	In Earth orbit
S32776	2022-057AW	FossaSat-2E 13	2022 Jul 18 0800:00	FOSSA	E	520	535	97.51	In Earth orbit
S32777	2022-057AX	Veery FS-1	2022 Jul 18 0800:00	CAREWX	US	520	535	97.51	In Earth orbit
S32778	2022-057AY	FossaSat-2E 7	2022 Jul 30 1200:00	FOSSA	E	519	536	97.52	In Earth orbit
S32779	2022-057AZ	FossaSat-2E 8	2022 Jul 30 1200:00	FOSSA	E	518	536	97.52	In Earth orbit
S32780	2022-057BB	CP0D 2	2022 Oct 17 1800:00	TYVAK/ARC	US	511	531	97.53	In Earth orbit
S32781	2022-057BC ?	Foresail-1	2022 May 25 1938:19	AALTO	FI	486	501	97.52	In Earth orbit
S33951	2022-057BA	SELFIESAT	2022 Aug 29 0000:00	ONTNU	N	519	534	97.53	In Earth orbit
S32785	2022-058A	Geely Xingouou 01 zu 01 xing	2022 Jun 2 0412:00	GHEEP	CN	601	617	50.00	In Earth orbit
S32786	2022-058B	Geely Xingouou 01 zu 02 xing	2022 Jun 2 0412:00	GHEEP	CN	600	617	50.00	In Earth orbit
S32787	2022-058C	Geely Xingouou 01 zu 03 xing	2022 Jun 2 0412:00	GHEEP	CN	599	617	49.99	In Earth orbit
S32788	2022-058D	Geely Xingouou 01 zu 04 xing	2022 Jun 2 0412:00	GHEEP	CN	599	617	50.01	In Earth orbit
S32789	2022-058E	Geely Xingouou 01 zu 05 xing	2022 Jun 2 0412:00	GHEEP	CN	598	617	49.99	In Earth orbit
S32790	2022-058F	Geely Xingouou 01 zu 06 xing	2022 Jun 2 0412:00	GHEEP	CN	596	617	50.01	In Earth orbit
S32791	2022-058G	Geely Xingouou 01 zu 07 xing	2022 Jun 2 0412:00	GHEEP	CN	596	617	49.99	In Earth orbit
S32792	2022-058H	Geely Xingouou 01 zu 08 xing	2022 Jun 2 0412:00	GHEEP	CN	595	616	49.99	In Earth orbit
S32793	2022-058I	Geely Xingouou 01 zu 09 xing	2022 Jun 2 0412:00	GHEEP	CN	594	616	50.00	In Earth orbit
S32795	2022-059A	Progress MS-20	2022 Jun 3 0941:09	RKKE	RU	189	220	51.66	Attached to Zvezda
S33307	1998-0671S	Tsolkovskiy-Ryazan 2	2022 Jul 21 1608:20	RGRU/RKKE	RU	412	418	51.64	In Earth orbit
S33308	1998-0671T	YuzGU-55 No. 12	2022 Jul 21 1639:50	YUZGU	RU	412	418	51.64	In Earth orbit
S33311	1998-0671U	Tsolkovskiy-Ryazan 1	2022 Jul 21 1602:03	RGRU/RKKE	RU	411	419	51.64	In Earth orbit
S33313	1998-0671V	YuzGU-55 No. 11	2022 Jul 21 1636:35	YUZGU	RU	412	419	51.64	In Earth orbit
S32797	2022-060A	Shenzhou 14	2022 Jun 5 0253:51	CMSEO	CN	385	391	41.47	Landed
S32817	2022-061A	Nilesat 301	2022 Jun 8 2137:13	NILE	EG	35777	35795	0.05	In Earth orbit

S52830	2022-062A	Starlink 4091	SPXS	US	254	328	53.22	In Earth orbit
S52831	2022-062B	Starlink 4089	SPXS	US	254	328	53.22	In Earth orbit
S52832	2022-062C	Starlink 4083	SPXS	US	254	328	53.22	In Earth orbit
S52833	2022-062D	Starlink 4086	SPXS	US	254	328	53.22	In Earth orbit
S52834	2022-062E	Starlink 4108	SPXS	US	254	328	53.22	In Earth orbit
S52835	2022-062F	Starlink 4080	SPXS	US	254	328	53.22	In Earth orbit
S52836	2022-062G	Starlink 4043	SPXS	US	254	328	53.22	In Earth orbit
S52837	2022-062H	Starlink 4036	SPXS	US	254	328	53.22	In Earth orbit
S52838	2022-062J	Starlink 4092	SPXS	US	254	328	53.22	In Earth orbit
S52839	2022-062K	Starlink 4048	SPXS	US	254	328	53.22	In Earth orbit
S52840	2022-062L	Starlink 4049	SPXS	US	254	328	53.22	In Earth orbit
S52841	2022-062M	Starlink 4065	SPXS	US	253	328	53.22	In Earth orbit
S52842	2022-062N	Starlink 4046	SPXS	US	254	328	53.22	In Earth orbit
S52843	2022-062P	Starlink 4188	SPXS	US	253	328	53.22	In Earth orbit
S52844	2022-062Q	Starlink 4208	SPXS	US	253	328	53.22	In Earth orbit
S52845	2022-062R	Starlink 4168	SPXS	US	253	328	53.22	In Earth orbit
S52846	2022-062S	Starlink 4212	SPXS	US	254	328	53.22	In Earth orbit
S52847	2022-062T	Starlink 4206	SPXS	US	253	328	53.22	In Earth orbit
S52848	2022-062U	Starlink 4202	SPXS	US	254	328	53.22	In Earth orbit
S52849	2022-062V	Starlink 4197	SPXS	US	253	328	53.22	In Earth orbit
S52850	2022-062W	Starlink 4187	SPXS	US	253	328	53.22	In Earth orbit
S52851	2022-062X	Starlink 3809	SPXS	US	253	328	53.22	In Earth orbit
S52852	2022-062Y	Starlink 4184	SPXS	US	253	328	53.22	In Earth orbit
S52853	2022-062Z	Starlink 4189	SPXS	US	253	328	53.22	In Earth orbit
S52854	2022-062AA	Starlink 4204	SPXS	US	253	328	53.22	In Earth orbit
S52855	2022-062AB	Starlink 4209	SPXS	US	253	328	53.22	In Earth orbit
S52856	2022-062AC	Starlink 4201	SPXS	US	253	328	53.22	In Earth orbit
S52857	2022-062AD	Starlink 4199	SPXS	US	253	328	53.22	In Earth orbit
S52858	2022-062AE	Starlink 4198	SPXS	US	253	328	53.22	In Earth orbit
S52859	2022-062AF	Starlink 4196	SPXS	US	253	328	53.22	In Earth orbit
S52860	2022-062AG	Starlink 4191	SPXS	US	253	327	53.22	In Earth orbit
S52861	2022-062AH	Starlink 4112	SPXS	US	253	327	53.22	In Earth orbit
S52862	2022-062AJ	Starlink 4010	SPXS	US	253	328	53.22	In Earth orbit
S52863	2022-062AK	Starlink 4270	SPXS	US	253	327	53.22	In Earth orbit
S52864	2022-062AL	Starlink 4267	SPXS	US	253	328	53.22	In Earth orbit
S52865	2022-062AM	Starlink 4274	SPXS	US	253	327	53.22	In Earth orbit
S52866	2022-062AN	Starlink 4272	SPXS	US	253	328	53.22	In Earth orbit
S52867	2022-062AP	Starlink 4126	SPXS	US	253	327	53.22	In Earth orbit
S52868	2022-062AQ	Starlink 4261	SPXS	US	253	327	53.22	In Earth orbit
S52869	2022-062AR	Starlink 4266	SPXS	US	253	327	53.22	In Earth orbit
S52870	2022-062AS	Starlink 4195	SPXS	US	253	327	53.22	In Earth orbit
S52871	2022-062AT	Starlink 4207	SPXS	US	253	327	53.22	In Earth orbit
S52872	2022-062AU	Starlink 4213	SPXS	US	253	327	53.22	In Earth orbit
S52873	2022-062AV	Starlink 4211	SPXS	US	253	327	53.22	In Earth orbit
S52874	2022-062AW	Starlink 4210	SPXS	US	253	327	53.22	In Earth orbit
S52875	2022-062AX	Starlink 4193	SPXS	US	253	327	53.22	In Earth orbit
S52876	2022-062AY	Starlink 4200	SPXS	US	253	327	53.22	In Earth orbit
S52877	2022-062AZ	Starlink 4214	SPXS	US	252	327	53.22	In Earth orbit
S52878	2022-062BA	Starlink 4171	SPXS	US	252	327	53.22	In Earth orbit
S52879	2022-062BB	Starlink 4139	SPXS	US	252	327	53.22	In Earth orbit
S52880	2022-062BC	Starlink 4186	SPXS	US	252	327	53.22	In Earth orbit
S52881	2022-062BD	Starlink 4192	SPXS	US	252	327	53.22	In Earth orbit
S52882	2022-062BE	Starlink 4181	SPXS	US	252	327	53.22	In Earth orbit
S52883	2022-062BA	Starlink 4181	SPXS	US	252	327	53.22	In Earth orbit
S52884	2022-062AA	Globalstar FM15	ADSPDF/BWEHR	D	743	751	98.40	In Earth orbit
S52885	2022-064A	USA 328	GLOBL	US	1111	1125	51.98	In Earth orbit
S52886	2022-064B	USA 329	NROCC	US	520	531	53.01	In Earth orbit
S52887	2022-064C	USA 329	NROCC	US	519	531	53.01	In Earth orbit
S52888	2022-064D	USA 330	NROCC	US	520	531	53.00	In Earth orbit
S52889	2022-064E	USA 331	NROCC	US	520	531	53.00	In Earth orbit
S52890	2022-065A	PVSAT	KARI	KR	695	704	98.01	In Earth orbit
S52891	2022-065B	Wisconsinische	KARI	KR	694	708	98.01	In Earth orbit
S52892	2022-065C	STEP Cube Lab II	KARI	KR	693	704	98.02	In Earth orbit
S52893	2022-065D	STARLINK	CHOSU	KR	692	703	98.01	In Earth orbit
S52894	2022-065E	RANDEV	KAIIST	KR	692	703	98.01	In Earth orbit
S52895	2022-065F	STARLINK	SNU	KR	692	703	98.01	In Earth orbit
S52896	2022-065G	MIMAN	YONS	KR	693	704	98.03	In Earth orbit
S52897	2022-065H	Tanxing-1	CASIM	CN	275	290	96.75	In Earth orbit



S52903	2022-067A	GSAT-24	2022 Jun 22 22:30:04	NSIL	IN	35758	35813	0.10	In Earth orbit
S52904	2022-067B	Measat 3D	2022 Jun 22 22:18:46	MEAS	MY	35783	35789	0.05	In Earth orbit
S52907	2022-068A	Yaogan 35 02 zu 01 xing	2022 Jun 23 02:32:00	CASC	CN	486	497	35.00	In Earth orbit
S52908	2022-068B	Yaogan 35 02 zu 02 xing	2022 Jun 23 02:32:00	CASC	CN	484	499	34.99	In Earth orbit
S52909	2022-068C	Yaogan 35 02 zu 03 xing	2022 Jun 23 02:32:00	CASC	CN	487	499	34.99	In Earth orbit
S52912	2022-069A	Guo Fen 12-403	2022 Jun 27 16:08:00	ZLZB	CN	594	599	97.98	In Earth orbit
S52914	2022-070A	CAPSTONE	2022 Jul 4 07:18:00	ADVSP/ARC	US	169	1044	39.12	Deep Space
S52916	2022-070C	Lunar Photon	2022 Jun 28 10:04:00	RLABN	NZ	260	1167300	38.96	Deep Space
S52933	2022-071A	SES-22	2022 Jun 29 21:37:26	SESSA	L	35776	35796	0.06	In Earth orbit
S52935	2022-072A	DS-EO	2022 Jun 30 12:49:58	DSTA/STELC	SG	562	573	9.99	In Earth orbit
S52937	2022-072C	NeaSAR	2022 Jun 30 12:51:18	DSTA/STELC	SG	561	572	9.99	In Earth orbit
S52938	2022-072D	SCOOB-1	2022 Jun 30 12:51:22	NTU	SG	559	572	9.99	In Earth orbit
S52940	2022-073A	WFOV Testbed	2022 Jul 2 05:04:36	SFSSC	US	35992	36000	0.14	In Earth orbit
S52941	2022-073B	USSF 12 Ring	2022 Jul 2 05:20:21	AFRL	US	36167	36323	0.00	In Earth orbit
S53521	2022-073E C	USA 337	2022 Aug 16 00:00:00	AFRL	US	36100	36200	0.09	In Earth orbit
S52944	2022-074A	Recurve	2022 Jul 2 07:48:00	AFRL	US	489	498	44.99	In Earth orbit
S52945	2022-074B	NACHOS-2	2022 Jul 2 07:48:00	LANL	US	491	497	44.98	In Earth orbit
S52947	2022-074D	Slingshot 1	2022 Jul 2 07:48:00	AERO	US	488	497	44.98	In Earth orbit
S52948	2022-074E ?	GPIX-2	2022 Jul 2 07:48:00	LARCN	US	493	498	44.99	In Earth orbit
S52949	2022-074F	MISR-B-1	2022 Jul 2 07:48:00	SOCOM	US	493	499	44.99	In Earth orbit
S52950	2022-074G	CTIM-FD	2022 Jul 2 07:48:00	CLASP	US	494	498	45.00	In Earth orbit
S52951	2022-074H	GunsSmoke-L	2022 Jul 2 07:48:00	SMDC	US	493	499	45.00	In Earth orbit
S52984	2022-075A	Kosmos-2557	2022 Jul 7 12:48:00	VVKOV/IACG	RU	19101	19157	64.82	In Earth orbit
S52986	2022-076A	Starlink 4260	2022 Jul 7 13:26:32	SPXS	US	269	327	53.22	In Earth orbit
S52987	2022-076B	Starlink 4259	2022 Jul 7 13:26:32	SPXS	US	269	328	53.22	In Earth orbit
S52988	2022-076C	Starlink 4291	2022 Jul 7 13:26:32	SPXS	US	269	327	53.22	In Earth orbit
S52989	2022-076D	Starlink 4293	2022 Jul 7 13:26:32	SPXS	US	269	327	53.22	In Earth orbit
S52990	2022-076E	Starlink 4286	2022 Jul 7 13:26:32	SPXS	US	270	327	53.22	In Earth orbit
S52991	2022-076F	Starlink 4285	2022 Jul 7 13:26:32	SPXS	US	269	327	53.22	In Earth orbit
S52992	2022-076G	Starlink 4269	2022 Jul 7 13:26:32	SPXS	US	269	327	53.22	In Earth orbit
S52993	2022-076H	Starlink 4264	2022 Jul 7 13:26:32	SPXS	US	269	327	53.22	In Earth orbit
S52994	2022-076I	Starlink 4256	2022 Jul 7 13:26:32	SPXS	US	269	328	53.22	In Earth orbit
S52995	2022-076K	Starlink 4296	2022 Jul 7 13:26:32	SPXS	US	268	328	53.22	In Earth orbit
S52996	2022-076L	Starlink 4295	2022 Jul 7 13:26:32	SPXS	US	269	328	53.22	In Earth orbit
S52997	2022-076M	Starlink 4301	2022 Jul 7 13:26:32	SPXS	US	268	328	53.22	In Earth orbit
S52998	2022-076N	Starlink 4254	2022 Jul 7 13:26:32	SPXS	US	269	328	53.22	In Earth orbit
S52999	2022-076P	Starlink 4217	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53000	2022-076Q	Starlink 4194	2022 Jul 7 13:26:32	SPXS	US	269	328	53.22	In Earth orbit
S53001	2022-076R	Starlink 4190	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53002	2022-076S	Starlink 4121	2022 Jul 7 13:26:32	SPXS	US	268	328	53.22	In Earth orbit
S53003	2022-076T	Starlink 4255	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53004	2022-076U	Starlink 4253	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53005	2022-076V	Starlink 4288	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53006	2022-076W	Starlink 4290	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53007	2022-076X	Starlink 4215	2022 Jul 7 13:26:32	SPXS	US	268	328	53.22	In Earth orbit
S53008	2022-076Y	Starlink 4275	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53009	2022-076Z	Starlink 4277	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53010	2022-076AA	Starlink 4265	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53011	2022-076AB	Starlink 4263	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53012	2022-076AC	Starlink 4271	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53013	2022-076AD	Starlink 4177	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53014	2022-076AE	Starlink 4183	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53015	2022-076AF	Starlink 4262	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53016	2022-076AG	Starlink 4283	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53017	2022-076AH	Starlink 4281	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53018	2022-076AJ	Starlink 4279	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53019	2022-076AK	Starlink 4282	2022 Jul 7 13:26:32	SPXS	US	267	327	53.22	In Earth orbit
S53020	2022-076AL	Starlink 4287	2022 Jul 7 13:26:32	SPXS	US	268	327	53.22	In Earth orbit
S53021	2022-076AM	Starlink 4203	2022 Jul 7 13:26:32	SPXS	US	267	327	53.22	In Earth orbit
S53022	2022-076AN	Starlink 4216	2022 Jul 7 13:26:32	SPXS	US	268	326	53.22	In Earth orbit
S53023	2022-076AP	Starlink 4284	2022 Jul 7 13:26:32	SPXS	US	267	327	53.22	In Earth orbit
S53024	2022-076AQ	Starlink 4289	2022 Jul 7 13:26:32	SPXS	US	267	327	53.22	In Earth orbit
S53025	2022-076AR	Starlink 4218	2022 Jul 7 13:26:32	SPXS	US	267	327	53.22	In Earth orbit
S53026	2022-076AS	Starlink 4119	2022 Jul 7 13:26:32	SPXS	US	267	327	53.22	In Earth orbit
S53027	2022-076AT	Starlink 4158	2022 Jul 7 13:26:32	SPXS	US	266	327	53.22	In Earth orbit
S53028	2022-076AU	Starlink 4161	2022 Jul 7 13:26:32	SPXS	US	267	327	53.22	Reentered

S53029	2022-076AV	Sturlink 4143	SPXS	US	267	327	53.22	In Earth orbit
S53030	2022-076AW	Sturlink 4160	SPXS	US	267	327	53.22	In Earth orbit
S53031	2022-076AX	Sturlink 4137	SPXS	US	267	326	53.22	In Earth orbit
S53032	2022-076AY	Sturlink 4115	SPXS	US	267	327	53.22	In Earth orbit
S53033	2022-076AZ	Sturlink 4167	SPXS	US	267	326	53.22	In Earth orbit
S53034	2022-076BA	Sturlink 4151	SPXS	US	267	326	53.22	In Earth orbit
S53035	2022-076BB	Sturlink 4157	SPXS	US	267	326	53.22	In Earth orbit
S53036	2022-076BC	Sturlink 4155	SPXS	US	267	326	53.22	In Earth orbit
S53037	2022-076BD	Sturlink 4153	SPXS	US	267	326	53.22	In Earth orbit
S53038	2022-076BE	Sturlink 4156	SPXS	US	267	326	53.22	In Earth orbit
S53043	2022-077A	Sturlink 4362	SPXS	US	306	319	97.67	In Earth orbit
S53044	2022-077B	Sturlink 4349	SPXS	US	306	319	97.67	In Earth orbit
S53045	2022-077C	Sturlink 4350	SPXS	US	306	319	97.67	In Earth orbit
S53046	2022-077D	Sturlink 4331	SPXS	US	306	319	97.67	In Earth orbit
S53047	2022-077E	Sturlink 4352	SPXS	US	306	319	97.67	In Earth orbit
S53048	2022-077F	Sturlink 4355	SPXS	US	306	319	97.67	In Earth orbit
S53049	2022-077G	Sturlink 4345	SPXS	US	306	319	97.67	In Earth orbit
S53050	2022-077H	Sturlink 4343	SPXS	US	306	319	97.67	In Earth orbit
S53051	2022-077I	Sturlink 4336	SPXS	US	306	319	97.67	In Earth orbit
S53052	2022-077K	Sturlink 4341	SPXS	US	306	319	97.67	In Earth orbit
S53053	2022-077L	Sturlink 4337	SPXS	US	306	319	97.67	In Earth orbit
S53054	2022-077M	Sturlink 4339	SPXS	US	306	319	97.67	In Earth orbit
S53055	2022-077N	Sturlink 4338	SPXS	US	306	319	97.67	In Earth orbit
S53056	2022-077P	Sturlink 4314	SPXS	US	306	319	97.67	In Earth orbit
S53057	2022-077Q	Sturlink 4252	SPXS	US	306	319	97.67	In Earth orbit
S53058	2022-077R	Sturlink 4317	SPXS	US	306	319	97.67	In Earth orbit
S53059	2022-077S	Sturlink 4320	SPXS	US	306	319	97.67	In Earth orbit
S53060	2022-077T	Sturlink 4305	SPXS	US	306	319	97.67	In Earth orbit
S53061	2022-077U	Sturlink 4308	SPXS	US	306	319	97.67	In Earth orbit
S53062	2022-077V	Sturlink 4311	SPXS	US	306	319	97.67	In Earth orbit
S53063	2022-077W	Sturlink 4307	SPXS	US	306	319	97.67	In Earth orbit
S53064	2022-077X	Sturlink 4313	SPXS	US	306	319	97.67	In Earth orbit
S53065	2022-077Y	Sturlink 4312	SPXS	US	306	319	97.67	In Earth orbit
S53066	2022-077Z	Sturlink 4309	SPXS	US	306	319	97.67	In Earth orbit
S53067	2022-077AA	Sturlink 4306	SPXS	US	306	319	97.67	In Earth orbit
S53068	2022-077AB	Sturlink 4325	SPXS	US	306	319	97.67	In Earth orbit
S53069	2022-077AC	Sturlink 4323	SPXS	US	306	319	97.67	In Earth orbit
S53070	2022-077AD	Sturlink 4342	SPXS	US	306	319	97.67	In Earth orbit
S53071	2022-077AE	Sturlink 4328	SPXS	US	306	319	97.67	In Earth orbit
S53072	2022-077AF	Sturlink 4344	SPXS	US	306	319	97.67	In Earth orbit
S53073	2022-077AG	Sturlink 4346	SPXS	US	305	319	97.67	In Earth orbit
S53074	2022-077AH	Sturlink 4310	SPXS	US	306	319	97.67	In Earth orbit
S53075	2022-077AJ	Sturlink 4348	SPXS	US	305	319	97.67	In Earth orbit
S53076	2022-077AK	Sturlink 4347	SPXS	US	305	319	97.67	In Earth orbit
S53077	2022-077AL	Sturlink 4315	SPXS	US	305	319	97.67	In Earth orbit
S53078	2022-077AM	Sturlink 4322	SPXS	US	305	319	97.67	In Earth orbit
S53079	2022-077AN	Sturlink 4327	SPXS	US	305	319	97.67	In Earth orbit
S53080	2022-077AP	Sturlink 4330	SPXS	US	305	319	97.67	In Earth orbit
S53081	2022-077AQ	Sturlink 4326	SPXS	US	305	319	97.67	In Earth orbit
S53082	2022-077AR	Sturlink 4321	SPXS	US	305	319	97.67	In Earth orbit
S53083	2022-077AS	Sturlink 4251	SPXS	US	305	319	97.67	In Earth orbit
S53084	2022-077AT	Sturlink 4319	SPXS	US	305	319	97.67	In Earth orbit
S53085	2022-077AU	Sturlink 4324	SPXS	US	305	319	97.67	In Earth orbit
S53086	2022-077AV	Sturlink 4318	SPXS	US	305	319	97.67	In Earth orbit
S53087	2022-077AW	Sturlink 4329	SPXS	US	305	319	97.67	In Earth orbit
S53088	2022-077AX	Sturlink 4333	SPXS	US	305	319	97.67	In Earth orbit
S53100	2022-078A	Tian Lian 2-03	CAST	CN	35779	35795	2.88	In Earth orbit
S53102	2022-079A C	USA 334	NROC	US	585	595	39.80	In Earth orbit
S53105	2022-080A	LARES 2	ASI	I	5882	5895	70.16	In Earth orbit
S53106	2022-080B	Italy-OSCAR 117	ENEAE/UNF2	I	5832	5853	70.16	In Earth orbit
S53107	2022-080C	AstroBio Cubesat	ROSAP	I	5832	5865	70.15	In Earth orbit
S53108	2022-080D	Trisat-R	UMARB	SI	5832	5864	70.15	In Earth orbit
S53110	2022-080F	Alpha	ARCAD	I	5801	5886	70.16	In Earth orbit
S53111	2022-080G ?	MTCube-2	MONTP	F	5832	5854	70.11	In Earth orbit
S53112	2022-080H ?	Celesta	MONTP/CERN	F	5832	5853	70.11	Lost
S53113	2022-081A	Dragon CRS-25	SPX	US	207	267	51.66	Landed

S53462	1998-0670B	HSU-SAT-1	FSU/HSU	J	408	418	51.64	In Earth orbit
S53463	1998-0670C	FUTABA	KYUT	J	408	418	51.65	In Earth orbit
S53464	1998-0670D	TU/Mhaosat	ERAU	MD	409	415	51.64	In Earth orbit
S53767	1998-0670E	D3	TUMAD	US	411	415	51.64	In Earth orbit
S53768	1998-0670F	BeaverCube	MIT	US	411	415	51.64	In Earth orbit
S53769	1998-0670G	CLICK-A	ARC	US	410	415	51.64	In Earth orbit
S53770	1998-0670H	Capsat-1	WEISS	US	412	414	51.64	In Earth orbit
S53771	1998-0670J	Jagsat	USALA	US	412	414	51.64	In Earth orbit
S53128	2022-082A	Sweet Gaojing 2-01	SIWEI	CN	484	500	97.38	In Earth orbit
S53130	2022-082C	Sweet Gaojing 2-02	SIWEI	CN	483	499	97.38	In Earth orbit
S53132	2022-083A	Starlink 4063	SPXS	US	231	337	53.22	In Earth orbit
S53133	2022-083B	Starlink 4154	SPXS	US	231	337	53.22	In Earth orbit
S53134	2022-083C	Starlink 4150	SPXS	US	231	337	53.22	In Earth orbit
S53135	2022-083D	Starlink 4023	SPXS	US	231	337	53.22	In Earth orbit
S53136	2022-083E	Starlink 4152	SPXS	US	231	337	53.22	In Earth orbit
S53137	2022-083F	Starlink 4145	SPXS	US	231	337	53.22	In Earth orbit
S53138	2022-083G	Starlink 4141	SPXS	US	231	337	53.22	In Earth orbit
S53139	2022-083H	Starlink 4185	SPXS	US	231	337	53.22	In Earth orbit
S53140	2022-083I	Starlink 4170	SPXS	US	231	337	53.22	In Earth orbit
S53141	2022-083K	Starlink 4103	SPXS	US	231	337	53.22	In Earth orbit
S53142	2022-083L	Starlink 4101	SPXS	US	231	337	53.22	In Earth orbit
S53143	2022-083M	Starlink 4102	SPXS	US	231	337	53.22	In Earth orbit
S53144	2022-083N	Starlink 4100	SPXS	US	231	337	53.22	In Earth orbit
S53145	2022-083P	Starlink 4106	SPXS	US	231	337	53.22	In Earth orbit
S53146	2022-083Q	Starlink 4099	SPXS	US	231	337	53.22	In Earth orbit
S53147	2022-083R	Starlink 4094	SPXS	US	231	337	53.22	In Earth orbit
S53148	2022-083S	Starlink 4066	SPXS	US	231	337	53.22	In Earth orbit
S53149	2022-083T	Starlink 4021	SPXS	US	231	337	53.22	In Earth orbit
S53150	2022-083U	Starlink 4038	SPXS	US	231	337	53.22	In Earth orbit
S53151	2022-083V	Starlink 4040	SPXS	US	231	337	53.22	In Earth orbit
S53152	2022-083W	Starlink 4045	SPXS	US	231	337	53.22	In Earth orbit
S53153	2022-083X	Starlink 4098	SPXS	US	231	337	53.22	In Earth orbit
S53154	2022-083Y	Starlink 4077	SPXS	US	231	337	53.22	In Earth orbit
S53155	2022-083Z	Starlink 4088	SPXS	US	231	337	53.22	In Earth orbit
S53156	2022-083AA	Starlink 4087	SPXS	US	231	337	53.22	In Earth orbit
S53157	2022-083AB	Starlink 4093	SPXS	US	231	337	53.22	In Earth orbit
S53158	2022-083AC	Starlink 4054	SPXS	US	231	337	53.22	In Earth orbit
S53159	2022-083AD	Starlink 4111	SPXS	US	231	337	53.22	In Earth orbit
S53160	2022-083AE	Starlink 4096	SPXS	US	231	337	53.22	In Earth orbit
S53161	2022-083AF	Starlink 4055	SPXS	US	231	337	53.22	In Earth orbit
S53162	2022-083AG	Starlink 4114	SPXS	US	231	337	53.22	In Earth orbit
S53163	2022-083AH	Starlink 4104	SPXS	US	231	337	53.22	In Earth orbit
S53164	2022-083AJ	Starlink 4116	SPXS	US	231	337	53.22	In Earth orbit
S53165	2022-083AK	Starlink 4090	SPXS	US	231	337	53.22	In Earth orbit
S53166	2022-083AL	Starlink 4110	SPXS	US	231	337	53.22	In Earth orbit
S53167	2022-083AM	Starlink 3683	SPXS	US	231	336	53.22	In Earth orbit
S53168	2022-083AN	Starlink 4105	SPXS	US	231	337	53.22	In Earth orbit
S53169	2022-083AP	Starlink 4117	SPXS	US	231	337	53.22	In Earth orbit
S53170	2022-083AQ	Starlink 4095	SPXS	US	231	337	53.22	In Earth orbit
S53171	2022-083AR	Starlink 4052	SPXS	US	231	336	53.22	In Earth orbit
S53172	2022-083AS	Starlink 4299	SPXS	US	231	337	53.22	In Earth orbit
S53173	2022-083AT	Starlink 4300	SPXS	US	231	337	53.22	In Earth orbit
S53174	2022-083AU	Starlink 4205	SPXS	US	231	337	53.22	In Earth orbit
S53175	2022-083AV	Starlink 4292	SPXS	US	231	336	53.22	In Earth orbit
S53176	2022-083AW	Starlink 4294	SPXS	US	231	336	53.22	In Earth orbit
S53177	2022-083AX	Starlink 4298	SPXS	US	231	336	53.22	In Earth orbit
S53178	2022-083AY	Starlink 4280	SPXS	US	231	336	53.22	In Earth orbit
S53179	2022-083AZ	Starlink 4276	SPXS	US	231	336	53.22	In Earth orbit
S53180	2022-083BA	Starlink 4258	SPXS	US	231	336	53.22	In Earth orbit
S53181	2022-083BB	Starlink 4273	SPXS	US	231	336	53.22	In Earth orbit
S53182	2022-083BC	Starlink 4278	SPXS	US	231	336	53.22	In Earth orbit
S53183	2022-083BD	Starlink 4268	SPXS	US	231	336	53.22	In Earth orbit
S53184	2022-083BE	Starlink 4257	SPXS	US	231	336	53.22	In Earth orbit
S53189	2022-084A	Starlink 4391	SPXS	US	307	319	97.67	In Earth orbit
S53190	2022-084B	Starlink 4332	SPXS	US	307	319	97.67	In Earth orbit
S53191	2022-084C	Starlink 4369	SPXS	US	307	319	97.67	In Earth orbit

S53192	2022-084D	Starlink 4375	SPXS	US	307	319	97.67	In Earth orbit
S53193	2022-084E	Starlink 4351	SPXS	US	307	319	97.67	In Earth orbit
S53194	2022-084F	Starlink 4382	SPXS	US	307	319	97.67	In Earth orbit
S53195	2022-084G	Starlink 4404	SPXS	US	307	319	97.67	In Earth orbit
S53196	2022-084H	Starlink 4407	SPXS	US	307	319	97.67	In Earth orbit
S53197	2022-084I	Starlink 4403	SPXS	US	307	319	97.67	In Earth orbit
S53198	2022-084K	Starlink 4385	SPXS	US	307	319	97.67	In Earth orbit
S53199	2022-084L	Starlink 4395	SPXS	US	307	319	97.67	In Earth orbit
S53200	2022-084M	Starlink 4417	SPXS	US	307	319	97.67	In Earth orbit
S53201	2022-084N	Starlink 4405	SPXS	US	307	319	97.67	In Earth orbit
S53202	2022-084P	Starlink 4411	SPXS	US	307	319	97.67	In Earth orbit
S53203	2022-084Q	Starlink 4409	SPXS	US	307	319	97.67	In Earth orbit
S53204	2022-084R	Starlink 4410	SPXS	US	307	319	97.67	In Earth orbit
S53205	2022-084S	Starlink 4397	SPXS	US	307	319	97.67	In Earth orbit
S53206	2022-084T	Starlink 4408	SPXS	US	307	319	97.67	In Earth orbit
S53207	2022-084U	Starlink 4413	SPXS	US	307	319	97.67	In Earth orbit
S53208	2022-084V	Starlink 4425	SPXS	US	307	319	97.67	In Earth orbit
S53209	2022-084W	Starlink 4423	SPXS	US	307	319	97.67	In Earth orbit
S53210	2022-084X	Starlink 4427	SPXS	US	307	319	97.67	In Earth orbit
S53211	2022-084Y	Starlink 4419	SPXS	US	307	319	97.67	In Earth orbit
S53212	2022-084Z	Starlink 4416	SPXS	US	307	319	97.67	In Earth orbit
S53213	2022-084AA	Starlink 4414	SPXS	US	306	319	97.67	In Earth orbit
S53214	2022-084AB	Starlink 4353	SPXS	US	307	319	97.67	In Earth orbit
S53215	2022-084AC	Starlink 4335	SPXS	US	306	319	97.67	In Earth orbit
S53216	2022-084AD	Starlink 4376	SPXS	US	307	319	97.67	In Earth orbit
S53217	2022-084AE	Starlink 4379	SPXS	US	306	319	97.67	In Earth orbit
S53218	2022-084AF	Starlink 4384	SPXS	US	306	319	97.67	In Earth orbit
S53219	2022-084AG	Starlink 4373	SPXS	US	306	319	97.67	In Earth orbit
S53220	2022-084AH	Starlink 4366	SPXS	US	306	319	97.67	In Earth orbit
S53221	2022-084AJ	Starlink 4377	SPXS	US	306	319	97.67	In Earth orbit
S53222	2022-084AK	Starlink 4381	SPXS	US	306	319	97.67	In Earth orbit
S53223	2022-084AL	Starlink 4354	SPXS	US	306	319	97.67	In Earth orbit
S53224	2022-084AM	Starlink 4356	SPXS	US	306	319	97.67	In Earth orbit
S53225	2022-084AN	Starlink 4358	SPXS	US	306	319	97.67	In Earth orbit
S53226	2022-084AP	Starlink 4359	SPXS	US	306	319	97.67	In Earth orbit
S53227	2022-084AQ	Starlink 4366	SPXS	US	306	319	97.67	In Earth orbit
S53228	2022-084AR	Starlink 4365	SPXS	US	306	319	97.67	In Earth orbit
S53229	2022-084AS	Starlink 4367	SPXS	US	306	319	97.67	In Earth orbit
S53230	2022-084AT	Starlink 4364	SPXS	US	306	319	97.67	In Earth orbit
S53231	2022-084AU	Starlink 4370	SPXS	US	306	319	97.67	In Earth orbit
S53232	2022-084AV	Starlink 4371	SPXS	US	306	319	97.67	In Earth orbit
S53233	2022-084AW	Starlink 4372	SPXS	US	306	319	97.67	In Earth orbit
S53234	2022-084AX	Starlink 4368	SPXS	US	306	319	97.67	In Earth orbit
S53239	2022-085A	Wentian	CMSE0	CN	166	318	41.37	Attached to Tianhe
S53242	2022-086A	Starlink 4056	SPXS	US	231	335	53.22	In Earth orbit
S53243	2022-086B	Starlink 4047	SPXS	US	231	335	53.22	In Earth orbit
S53244	2022-086C	Starlink 4125	SPXS	US	231	334	53.22	In Earth orbit
S53245	2022-086D	Starlink 4124	SPXS	US	231	334	53.22	In Earth orbit
S53246	2022-086E	Starlink 4131	SPXS	US	231	336	53.22	In Earth orbit
S53247	2022-086F	Starlink 4061	SPXS	US	231	336	53.22	In Earth orbit
S53248	2022-086G	Starlink 4135	SPXS	US	231	334	53.22	In Earth orbit
S53249	2022-086H	Starlink 4128	SPXS	US	231	335	53.22	In Earth orbit
S53250	2022-086I	Starlink 4059	SPXS	US	231	335	53.22	In Earth orbit
S53251	2022-086K	Starlink 4129	SPXS	US	231	335	53.22	In Earth orbit
S53252	2022-086L	Starlink 4132	SPXS	US	231	335	53.22	In Earth orbit
S53253	2022-086M	Starlink 4133	SPXS	US	231	335	53.22	In Earth orbit
S53254	2022-086N	Starlink 4134	SPXS	US	231	335	53.22	In Earth orbit
S53255	2022-086P	Starlink 4142	SPXS	US	231	335	53.22	In Earth orbit
S53256	2022-086Q	Starlink 4147	SPXS	US	231	335	53.22	In Earth orbit
S53257	2022-086R	Starlink 4144	SPXS	US	231	335	53.22	In Earth orbit
S53258	2022-086S	Starlink 4127	SPXS	US	231	335	53.22	In Earth orbit
S53259	2022-086T	Starlink 4140	SPXS	US	231	335	53.22	In Earth orbit
S53260	2022-086U	Starlink 4136	SPXS	US	231	335	53.22	In Earth orbit
S53261	2022-086V	Starlink 4062	SPXS	US	231	335	53.22	In Earth orbit
S53262	2022-086W	Starlink 4085	SPXS	US	231	335	53.22	In Earth orbit
S53263	2022-086X	Starlink 4130	SPXS	US	231	335	53.22	In Earth orbit

S53264	2022-086Y	Starlink 3950	SPXS	US	231	335	53.22	In Earth orbit
S53265	2022-086Z	Starlink 4097	SPXS	US	231	335	53.22	In Earth orbit
S53266	2022-086AA	Starlink 4058	SPXS	US	231	335	53.22	In Earth orbit
S53267	2022-086AB	Starlink 4060	SPXS	US	231	335	53.22	In Earth orbit
S53268	2022-086AC	Starlink 4109	SPXS	US	231	335	53.22	In Earth orbit
S53269	2022-086AD	Starlink 4057	SPXS	US	231	335	53.22	In Earth orbit
S53270	2022-086AE	Starlink 4113	SPXS	US	231	335	53.22	Reentered
S53271	2022-086AF	Starlink 4069	SPXS	US	231	335	53.22	In Earth orbit
S53272	2022-086AG	Starlink 4122	SPXS	US	231	335	53.22	In Earth orbit
S53273	2022-086AH	Starlink 4051	SPXS	US	231	335	53.22	In Earth orbit
S53274	2022-086AJ	Starlink 4050	SPXS	US	231	335	53.22	In Earth orbit
S53275	2022-086AK	Starlink 4179	SPXS	US	231	335	53.22	In Earth orbit
S53276	2022-086AL	Starlink 4174	SPXS	US	231	335	53.22	In Earth orbit
S53277	2022-086AM	Starlink 4178	SPXS	US	231	335	53.22	In Earth orbit
S53278	2022-086AN	Starlink 4180	SPXS	US	231	335	53.22	In Earth orbit
S53279	2022-086AP	Starlink 4163	SPXS	US	230	329	53.22	In Earth orbit
S53280	2022-086AQ	Starlink 4169	SPXS	US	231	335	53.22	Reentered
S53281	2022-086AR	Starlink 4182	SPXS	US	231	335	53.22	In Earth orbit
S53282	2022-086AS	Starlink 4164	SPXS	US	231	335	53.22	In Earth orbit
S53283	2022-086AT	Starlink 4175	SPXS	US	231	335	53.22	In Earth orbit
S53284	2022-086AU	Starlink 4172	SPXS	US	231	335	53.22	In Earth orbit
S53285	2022-086AV	Starlink 4173	SPXS	US	231	335	53.22	In Earth orbit
S53286	2022-086AW	Starlink 4165	SPXS	US	231	335	53.22	In Earth orbit
S53287	2022-086AX	Starlink 4107	SPXS	US	231	335	53.22	In Earth orbit
S53288	2022-086AY	Starlink 4162	SPXS	US	231	335	53.22	In Earth orbit
S53289	2022-086AZ	Starlink 4176	SPXS	US	231	335	53.22	In Earth orbit
S53290	2022-086BA	Starlink 4149	SPXS	US	231	335	53.22	In Earth orbit
S53291	2022-086BB	Starlink 4166	SPXS	US	231	334	53.22	In Earth orbit
S53292	2022-086BC	Starlink 4159	SPXS	US	231	335	53.22	In Earth orbit
S53293	2022-086BD	Starlink 4148	SPXS	US	231	335	53.22	In Earth orbit
S53294	2022-086BE	Starlink 4146	SPXS	US	231	335	53.22	In Earth orbit
S53299	2022-087A ?	SAI Tech-01	CAS	CN	493	511	97.41	In Earth orbit
S53300	2022-087B ?	Guidao Daqi MITSW	CAS	CN	492	510	97.41	In Earth orbit
S53301	2022-087C ?	Jinan-1	CAS	CN	491	511	97.41	In Earth orbit
S53302	2022-087D ?	Dianci Zuzhuang shiyuan 1	CAS	CN	491	509	97.41	In Earth orbit
S53303	2022-087E ?	Nanyue Kexue Xing	CAS	CN	490	510	97.41	In Earth orbit
S53316	2022-088A	Yaogan 35 03 zu 01 Xing	CASC	CN	488	500	35.00	In Earth orbit
S53318	2022-088C	Yaogan 35 03 zu 02 Xing	CASC	CN	488	499	34.98	In Earth orbit
S53320	2022-088E	Yaogan 35 03 zu 03 Xing	CASC	CN	485	498	34.99	In Earth orbit
S53323	2022-088A	Kosmos-2558	TSVS	RU	452	452	97.26	In Earth orbit
S53346	2022-090A	Goumaang	CASAT	CN	490	504	97.47	In Earth orbit
S53347	2022-090B ?	Minhang Shaonian Xing	SAST	CN	487	503	97.47	In Earth orbit
S53348	2022-090C ?	Jiaotong-4	HEAD	CN	487	503	97.47	In Earth orbit
S53352	2022-091A C	USA 335	NROPC	CN	628	643	70.02	In Earth orbit
S53355	2022-092A	SHIRS GEO-6	USSF	US	35773	35797	6.49	In Earth orbit
S53357	2022-093A	Chonfu Shiyong Shiyuan HQ 2	ZLZB	CN	345	593	49.99	In Earth orbit
S53365	2022-094A	Danuri	KARI	KR	246	1155274	29.59	Deep Space
A10490	2022-LU02	FOS-02	ISRO	IN	76	356	41.60	Reentered
A10491	2022-LU02	AzadiSAT	SKI	IN	76	356	41.60	Reentered
S53367	2022-095A ?	Prng an 3	WEINA	CN	437	548	97.41	In Earth orbit
S53368	2022-095B ?	Taijing-1 02	WEINA	CN	436	548	97.41	In Earth orbit
S53369	2022-095C ?	Donghai 1	ASES	CN	436	547	97.41	In Earth orbit
S53370	2022-096A	Khayyam	IRSA/IBDS	IR	491	494	97.44	In Earth orbit
S53371	2022-096B	Polytech Universe-2	SPBPBU	RU	486	494	97.44	In Earth orbit
S53372	2022-096C	Polytech Universe-1	SPBPBU	RU	486	495	97.44	In Earth orbit
S53373	2022-096D	CYCLOPS	BGTU	RU	490	494	97.44	In Earth orbit
S53374	2022-096E	Monitor-1	MGU	RU	490	494	97.44	In Earth orbit
S53375	2022-096F	Kuzbass-300	KUZGTU	RU	489	493	97.44	In Earth orbit
S53376	2022-096G	UTMN	UTMN	RU	490	494	97.44	In Earth orbit
S53377	2022-096H	MHET-AIS	MHET	RU	486	494	97.44	In Earth orbit
S53378	2022-096I	KAI-1	KNITU	RU	490	493	97.44	In Earth orbit
S53379	2022-096K	Skoltech-B1	SKOLIT	RU	489	493	97.44	In Earth orbit
S53380	2022-096L	Skoltech-B2	SKOLIT	RU	486	495	97.44	In Earth orbit
S53381	2022-096M	ISOI	ISOI	RU	485	494	97.44	In Earth orbit
S53382	2022-096N	ReshUCube	SIBGAU	RU	484	494	97.44	In Earth orbit
S53383	2022-096P	CubeSX-HSE-2	VSHE	RU	491	494	97.44	In Earth orbit

S53384	2022-0966Q	Geoskam-Edel`veys	RU	490	493	97.44	In Earth orbit
S53385	2022-0966R	VIZARD-SS1	RU	485	495	97.44	In Earth orbit
S53386	2022-0966S ?	VIZARD-SS1	RU	486	495	97.44	In Earth orbit
S53388	2022-097A	Starlink 4522	US	231	334	53.22	In Earth orbit
S53389	2022-097B	Starlink 4523	US	231	334	53.22	In Earth orbit
S53390	2022-097C	Starlink 4517	US	231	334	53.22	In Earth orbit
S53391	2022-097D	Starlink 4521	US	231	334	53.22	In Earth orbit
S53392	2022-097E	Starlink 4535	US	231	334	53.22	In Earth orbit
S53393	2022-097F	Starlink 4530	US	231	334	53.22	In Earth orbit
S53394	2022-097G	Starlink 4544	US	231	334	53.22	In Earth orbit
S53395	2022-097H	Starlink 4534	US	231	334	53.22	In Earth orbit
S53396	2022-097I	Starlink 4524	US	231	333	53.22	In Earth orbit
S53397	2022-097K	Starlink 4515	US	231	334	53.22	In Earth orbit
S53398	2022-097L	Starlink 4512	US	231	333	53.22	In Earth orbit
S53399	2022-097M	Starlink 4528	US	231	334	53.22	In Earth orbit
S53400	2022-097N	Starlink 4520	US	231	334	53.22	In Earth orbit
S53401	2022-097P	Starlink 4525	US	231	334	53.22	In Earth orbit
S53402	2022-097Q	Starlink 4499	US	231	334	53.22	In Earth orbit
S53403	2022-097R	Starlink 4507	US	231	334	53.22	In Earth orbit
S53404	2022-097S	Starlink 4509	US	231	334	53.22	In Earth orbit
S53405	2022-097T	Starlink 4510	US	231	334	53.22	In Earth orbit
S53406	2022-097U	Starlink 4533	US	231	333	53.22	In Earth orbit
S53407	2022-097V	Starlink 4537	US	231	333	53.22	In Earth orbit
S53408	2022-097W	Starlink 4491	US	231	333	53.22	In Earth orbit
S53409	2022-097X	Starlink 4490	US	231	333	53.22	In Earth orbit
S53410	2022-097Y	Starlink 4492	US	231	333	53.22	In Earth orbit
S53411	2022-097Z	Starlink 4497	US	231	334	53.22	In Earth orbit
S53412	2022-097AA	Starlink 4496	US	231	333	53.22	In Earth orbit
S53413	2022-097AB	Starlink 4500	US	231	333	53.22	In Earth orbit
S53414	2022-097AC	Starlink 4304	US	231	333	53.22	In Earth orbit
S53415	2022-097AD	Starlink 4479	US	231	333	53.22	In Earth orbit
S53416	2022-097AE	Starlink 4480	US	231	333	53.22	In Earth orbit
S53417	2022-097AF	Starlink 4484	US	231	333	53.22	In Earth orbit
S53418	2022-097AG	Starlink 4481	US	231	333	53.22	In Earth orbit
S53419	2022-097AH	Starlink 4476	US	231	333	53.22	In Earth orbit
S53420	2022-097AJ	Starlink 4552	US	231	333	53.22	In Earth orbit
S53421	2022-097AK	Starlink 4545	US	231	333	53.22	In Earth orbit
S53422	2022-097AL	Starlink 4546	US	231	333	53.22	In Earth orbit
S53423	2022-097AM	Starlink 4539	US	231	333	53.22	In Earth orbit
S53424	2022-097AN	Starlink 4532	US	231	333	53.22	In Earth orbit
S53425	2022-097AP	Starlink 4531	US	231	333	53.22	In Earth orbit
S53426	2022-097AQ	Starlink 4558	US	231	332	53.22	In Earth orbit
S53427	2022-097AR	Starlink 4541	US	231	333	53.22	In Earth orbit
S53428	2022-097AS	Starlink 4540	US	231	333	53.22	In Earth orbit
S53429	2022-097AT	Starlink 4543	US	231	333	53.22	In Earth orbit
S53430	2022-097AU	Starlink 4538	US	231	333	53.22	In Earth orbit
S53431	2022-097AV	Starlink 4548	US	231	333	53.22	In Earth orbit
S53432	2022-097AW	Starlink 4557	US	231	332	53.22	In Earth orbit
S53433	2022-097AX	Starlink 4549	US	231	333	53.22	In Earth orbit
S53434	2022-097AY	Starlink 4498	US	231	333	53.22	In Earth orbit
S53435	2022-097AZ	Starlink 4542	US	231	333	53.22	In Earth orbit
S53436	2022-097BA	Starlink 4527	US	231	333	53.22	In Earth orbit
S53437	2022-097BB	Starlink 4529	US	231	332	53.22	In Earth orbit
S53438	2022-097BC	Starlink 4526	US	231	333	53.22	In Earth orbit
S53439	2022-097BD	Starlink 4519	US	231	333	53.22	In Earth orbit
S53444	2022-098A ?	Tianfu Dongpo 01	US	231	333	53.22	In Earth orbit
S53445	2022-098B ?	Tianfu Dongpo 02	CN	533	546	97.53	In Earth orbit
S53446	2022-098C ?	Tianfu Dongpo 03	CN	534	546	97.53	In Earth orbit
S53447	2022-098D ?	Tianfu Dongpo 04	CN	535	545	97.53	In Earth orbit
S53448	2022-098E ?	Tianfu Dongpo 05	CN	536	560	97.52	In Earth orbit
S53449	2022-098F ?	Tianfu Dongpo 06	CN	535	544	97.52	In Earth orbit
S53450	2022-098G ?	Tianfu Dongpo 07	CN	529	544	97.55	In Earth orbit
S53451	2022-098H ?	Henan-1	CN	532	542	97.54	In Earth orbit
S53452	2022-098I ?	Xi'an Hangtou 1	CN	532	542	97.53	In Earth orbit
S53453	2022-098K ?	Puyin-1	CN	532	542	97.53	In Earth orbit
S53454	2022-098L ?	Tianjin Binhai 1	CN	529	543	97.52	In Earth orbit

S53455	2022-098M ?	Yunyao-1 04 xing	2022 Aug 10 0505:00	CGSTL/YAYAO	CN	529	543	97.52	In Earth orbit
S53456	2022-098N ?	Yunyao-1 05 xing	2022 Aug 10 0505:00	CGSTL/YAYAO	CN	530	542	97.52	In Earth orbit
S53457	2022-098P ?	Yunyao-1 06 xing	2022 Aug 10 0505:00	CGSTL/YAYAO	CN	529	543	97.52	In Earth orbit
S53458	2022-098Q ?	Yunyao-1 07 xing	2022 Aug 10 0505:00	CGSTL/YAYAO	CN	528	543	97.53	In Earth orbit
S53459	2022-098R ?	Yunyao-1 08 xing	2022 Aug 10 0505:00	CGSTL/YAYAO	CN	529	542	97.52	In Earth orbit
S53465	2022-099A	Starlink 4415	2022 Aug 12 2243:26	SPXS	US	307	319	97.67	In Earth orbit
S53466	2022-099B	Starlink 4398	2022 Aug 12 2243:26	SPXS	US	307	319	97.67	In Earth orbit
S53467	2022-099C	Starlink 4394	2022 Aug 12 2243:26	SPXS	US	307	319	97.67	In Earth orbit
S53468	2022-099D	Starlink 4400	2022 Aug 12 2243:26	SPXS	US	307	319	97.67	In Earth orbit
S53469	2022-099E	Starlink 4399	2022 Aug 12 2243:26	SPXS	US	307	319	97.67	In Earth orbit
S53470	2022-099F	Starlink 4393	2022 Aug 12 2243:26	SPXS	US	307	319	97.67	In Earth orbit
S53471	2022-099G	Starlink 4316	2022 Aug 12 2243:26	SPXS	US	307	319	97.67	In Earth orbit
S53472	2022-099H	Starlink 4447	2022 Aug 12 2243:26	SPXS	US	307	319	97.67	In Earth orbit
S53473	2022-099I	Starlink 4383	2022 Aug 12 2243:26	SPXS	US	307	319	97.67	In Earth orbit
S53474	2022-099K	Starlink 4445	2022 Aug 12 2243:26	SPXS	US	307	319	97.67	In Earth orbit
S53475	2022-099L	Starlink 4389	2022 Aug 12 2243:26	SPXS	US	307	319	97.67	In Earth orbit
S53476	2022-099M	Starlink 4378	2022 Aug 12 2243:26	SPXS	US	307	319	97.67	In Earth orbit
S53477	2022-099N	Starlink 4412	2022 Aug 12 2243:26	SPXS	US	307	319	97.67	In Earth orbit
S53478	2022-099P	Starlink 4433	2022 Aug 12 2243:26	SPXS	US	307	319	97.67	In Earth orbit
S53479	2022-099Q	Starlink 4436	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53480	2022-099R	Starlink 4442	2022 Aug 12 2243:26	SPXS	US	307	319	97.67	In Earth orbit
S53481	2022-099S	Starlink 4442	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53482	2022-099T	Starlink 4360	2022 Aug 12 2243:26	SPXS	US	307	319	97.67	In Earth orbit
S53483	2022-099U	Starlink 4401	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53484	2022-099V	Starlink 4426	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53485	2022-099W	Starlink 4430	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53486	2022-099X	Starlink 4431	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53487	2022-099Y	Starlink 4432	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53488	2022-099Z	Starlink 4421	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53489	2022-099AA	Starlink 4392	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53490	2022-099AB	Starlink 4387	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53491	2022-099AC	Starlink 4450	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53492	2022-099AD	Starlink 4451	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53493	2022-099AE	Starlink 4361	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53494	2022-099AF	Starlink 4340	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53495	2022-099AG	Starlink 4429	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53496	2022-099AH	Starlink 4465	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53497	2022-099AJ	Starlink 4455	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53498	2022-099AK	Starlink 4439	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53499	2022-099AL	Starlink 4454	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53500	2022-099AM	Starlink 4455	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53501	2022-099AN	Starlink 4434	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53502	2022-099AP	Starlink 4435	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53503	2022-099AQ	Starlink 4461	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53504	2022-099AR	Starlink 4448	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53505	2022-099AS	Starlink 4446	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53506	2022-099AT	Starlink 4437	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53507	2022-099AU	Starlink 4444	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53508	2022-099AV	Starlink 4443	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53509	2022-099AW	Starlink 4402	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53510	2022-099AX	Starlink 4441	2022 Aug 12 2243:26	SPXS	US	306	319	97.67	In Earth orbit
S53524	2022-100A	Yaogan 35 04 zu 01 xing	2022 Aug 19 1345:00	CASC	CN	490	501	35.00	In Earth orbit
S53526	2022-100C	Yaogan 35 04 zu 02 xing	2022 Aug 19 1345:00	CASC	CN	489	502	35.00	In Earth orbit
S53527	2022-101A	Yaogan 35 04 zu 03 xing	2022 Aug 19 1345:00	CASC	CN	488	500	34.99	In Earth orbit
S53528	2022-101B	Starlink 4511	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53529	2022-101C	Starlink 4503	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53530	2022-101D	Starlink 4478	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53531	2022-101E	Starlink 4482	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53532	2022-101F	Starlink 4487	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53533	2022-101G	Starlink 4483	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53534	2022-101H	Starlink 4493	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53535	2022-101I	Starlink 4488	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53536	2022-101J	Starlink 4138	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53537	2022-101K	Starlink 4053	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53538	2022-101M	Starlink 4120	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53537	2022-101L	Starlink 4118	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit

S53539	2022-101N	Starlink 4123	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53540	2022-101P	Starlink 4486	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53541	2022-101Q	Starlink 4485	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53542	2022-101R	Starlink 4489	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53543	2022-101S	Starlink 4297	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53544	2022-101T	Starlink 4303	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53545	2022-101U	Starlink 4475	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53546	2022-101V	Starlink 4477	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53547	2022-101W	Starlink 4474	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53548	2022-101X	Starlink 4513	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53549	2022-101Y	Starlink 4516	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53550	2022-101Z	Starlink 4518	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53551	2022-101AA	Starlink 4514	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53552	2022-101AB	Starlink 4495	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53553	2022-101AC	Starlink 4501	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53554	2022-101AD	Starlink 4506	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53555	2022-101AE	Starlink 4504	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53556	2022-101AF	Starlink 4505	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53557	2022-101AG	Starlink 4502	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53558	2022-101AH	Starlink 4494	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53559	2022-101AJ	Starlink 4508	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53560	2022-101AK	Starlink 4564	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53561	2022-101AL	Starlink 4563	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53562	2022-101AM	Starlink 4565	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53563	2022-101AN	Starlink 4561	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53564	2022-101AP	Starlink 4577	2022 Aug 19 1936:40	SPXS	US	231	336	53.22	In Earth orbit
S53565	2022-101AQ	Starlink 4575	2022 Aug 19 1936:40	SPXS	US	231	337	53.22	In Earth orbit
S53566	2022-101AR	Starlink 4576	2022 Aug 19 1936:40	SPXS	US	231	336	53.22	In Earth orbit
S53567	2022-101AS	Starlink 4585	2022 Aug 19 1936:40	SPXS	US	231	336	53.22	In Earth orbit
S53568	2022-101AT	Starlink 4583	2022 Aug 19 1936:40	SPXS	US	231	336	53.22	In Earth orbit
S53569	2022-101AU	Starlink 4582	2022 Aug 19 1936:40	SPXS	US	231	336	53.22	In Earth orbit
S53570	2022-101AV	Starlink 4550	2022 Aug 19 1936:40	SPXS	US	231	336	53.22	In Earth orbit
S53571	2022-101AW	Starlink 4584	2022 Aug 19 1936:40	SPXS	US	231	336	53.22	In Earth orbit
S53572	2022-101AX	Starlink 4555	2022 Aug 19 1936:40	SPXS	US	231	336	53.22	In Earth orbit
S53573	2022-101AY	Starlink 4547	2022 Aug 19 1936:40	SPXS	US	231	336	53.22	In Earth orbit
S53574	2022-101AZ	Starlink 4559	2022 Aug 19 1936:40	SPXS	US	231	336	53.22	In Earth orbit
S53575	2022-101BA	Starlink 4551	2022 Aug 19 1936:40	SPXS	US	231	336	53.22	In Earth orbit
S53576	2022-101BB	Starlink 4581	2022 Aug 19 1936:40	SPXS	US	231	336	53.22	In Earth orbit
S53577	2022-101BC	Starlink 4553	2022 Aug 19 1936:40	SPXS	US	231	336	53.22	In Earth orbit
S53578	2022-101BD	Starlink 4556	2022 Aug 19 1936:40	SPXS	US	231	336	53.22	In Earth orbit
S53579	2022-101BE	Starlink 4580	2022 Aug 19 1936:40	SPXS	US	231	336	53.22	In Earth orbit
S53586	2022-102A	Chuangxin-16A	2022 Aug 23 0251:00	IMICAS	CN	589	596	29.00	In Earth orbit
S53876	2022-102B	Chuangxin-16B	2022 Sep 19 2200:00	IMICAS	CN	588	596	29.00	In Earth orbit
S53587	2022-103A	Beijing-3B	2022 Aug 24 0312:00	21AT	CN	596	615	97.94	In Earth orbit
S53588	2022-104A	Starlink 4691	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53589	2022-104B	Starlink 4673	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53590	2022-104C	Starlink 4689	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53591	2022-104D	Starlink 4674	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53592	2022-104E	Starlink 4672	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53593	2022-104F	Starlink 4671	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53594	2022-104G	Starlink 4681	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53595	2022-104H	Starlink 4684	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53596	2022-104J	Starlink 4668	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53597	2022-104K	Starlink 4682	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53598	2022-104L	Starlink 4676	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53599	2022-104M	Starlink 4665	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53600	2022-104N	Starlink 4677	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53601	2022-104P	Starlink 4675	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53602	2022-104Q	Starlink 4648	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53603	2022-104R	Starlink 4692	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53604	2022-104S	Starlink 4690	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53605	2022-104T	Starlink 4693	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53606	2022-104U	Starlink 4590	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53607	2022-104V	Starlink 4591	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53608	2022-104W	Starlink 4647	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit
S53609	2022-104X	Starlink 4660	2022 Aug 28 0356:46	SPXS	US	231	335	53.22	In Earth orbit





S53682	2022-105AL	Starlink 4438	SPXS	US	306	319	97.66	In Earth orbit
S53683	2022-105AM	Starlink 4625	SPXS	US	307	320	97.66	In Earth orbit
S53684	2022-105AN	Starlink 4624	SPXS	US	306	319	97.67	In Earth orbit
S53685	2022-105AP	Starlink 4626	SPXS	US	306	319	97.66	In Earth orbit
S53686	2022-105AQ	Starlink 4467	SPXS	US	307	319	97.66	In Earth orbit
S53687	2022-105AR	Starlink 4569	SPXS	US	307	319	97.66	In Earth orbit
S53688	2022-105AS	Starlink 4571	SPXS	US	306	319	97.66	In Earth orbit
S53689	2022-105AT	Starlink 4562	SPXS	US	306	319	97.66	In Earth orbit
S53690	2022-105AU	Starlink 4570	SPXS	US	306	319	97.66	In Earth orbit
S53691	2022-105AV	Starlink 4560	SPXS	US	306	319	97.66	In Earth orbit
S53692	2022-105AW	Starlink 4572	SPXS	US	305	318	97.66	In Earth orbit
S53693	2022-105AX	Starlink 4566	SPXS	US	305	319	97.66	In Earth orbit
S53698	2022-106A	Yaogan Weixing 33-02	ZLZB	CN	679	687	98.19	In Earth orbit
S53700	2022-107A	Starlink 4725	SPXS	US	301	314	53.21	In Earth orbit
S53701	2022-107B	Starlink 4711	SPXS	US	301	314	53.21	In Earth orbit
S53702	2022-107C	Starlink 4724	SPXS	US	301	314	53.21	In Earth orbit
S53703	2022-107D	Starlink 4731	SPXS	US	301	314	53.21	In Earth orbit
S53704	2022-107E	Starlink 4714	SPXS	US	301	314	53.21	In Earth orbit
S53705	2022-107F	Starlink 4717	SPXS	US	301	314	53.21	In Earth orbit
S53706	2022-107G	Starlink 4716	SPXS	US	301	314	53.21	In Earth orbit
S53707	2022-107H	Starlink 4667	SPXS	US	301	314	53.21	In Earth orbit
S53708	2022-107I	Starlink 4694	SPXS	US	301	314	53.21	In Earth orbit
S53709	2022-107K	Starlink 4685	SPXS	US	301	314	53.21	In Earth orbit
S53710	2022-107L	Starlink 4696	SPXS	US	301	314	53.21	In Earth orbit
S53711	2022-107M	Starlink 4627	SPXS	US	301	314	53.21	Reentered
S53712	2022-107N	Starlink 4683	SPXS	US	301	314	53.21	In Earth orbit
S53713	2022-107P	Starlink 4698	SPXS	US	301	314	53.21	In Earth orbit
S53714	2022-107Q	Starlink 4688	SPXS	US	301	314	53.21	In Earth orbit
S53715	2022-107R	Starlink 4686	SPXS	US	301	314	53.21	In Earth orbit
S53716	2022-107S	Starlink 4699	SPXS	US	301	314	53.21	In Earth orbit
S53717	2022-107T	Starlink 4702	SPXS	US	301	314	53.21	In Earth orbit
S53718	2022-107U	Starlink 4695	SPXS	US	301	314	53.21	Reentered
S53719	2022-107V	Starlink 4644	SPXS	US	301	314	53.21	In Earth orbit
S53720	2022-107W	Starlink 4642	SPXS	US	301	314	53.21	In Earth orbit
S53721	2022-107X	Starlink 4707	SPXS	US	301	314	53.21	In Earth orbit
S53722	2022-107Y	Starlink 4700	SPXS	US	301	314	53.21	In Earth orbit
S53723	2022-107Z	Starlink 4705	SPXS	US	301	314	53.21	In Earth orbit
S53724	2022-107AA	Starlink 4663	SPXS	US	301	314	53.21	In Earth orbit
S53725	2022-107AB	Starlink 4704	SPXS	US	301	314	53.21	In Earth orbit
S53726	2022-107AC	Starlink 4697	SPXS	US	301	314	53.21	Reentered
S53727	2022-107AD	Starlink 4701	SPXS	US	301	314	53.21	In Earth orbit
S53728	2022-107AE	Starlink 4640	SPXS	US	301	314	53.21	In Earth orbit
S53729	2022-107AF	Starlink 4651	SPXS	US	301	314	53.21	In Earth orbit
S53730	2022-107AG	Starlink 4641	SPXS	US	301	314	53.21	In Earth orbit
S53731	2022-107AH	Starlink 4656	SPXS	US	301	314	53.21	In Earth orbit
S53732	2022-107AJ	Starlink 4661	SPXS	US	301	314	53.21	In Earth orbit
S53733	2022-107AK	Starlink 4574	SPXS	US	301	314	53.21	In Earth orbit
S53734	2022-107AL	Starlink 4616	SPXS	US	301	314	53.21	In Earth orbit
S53735	2022-107AM	Starlink 4618	SPXS	US	301	314	53.21	In Earth orbit
S53736	2022-107AN	Starlink 4652	SPXS	US	301	314	53.21	In Earth orbit
S53737	2022-107AP	Starlink 4646	SPXS	US	301	314	53.21	In Earth orbit
S53738	2022-107AQ	Starlink 4662	SPXS	US	301	314	53.21	In Earth orbit
S53739	2022-107AR	Starlink 4613	SPXS	US	302	315	53.21	In Earth orbit
S53740	2022-107AS	Starlink 4607	SPXS	US	301	314	53.21	Reentered
S53741	2022-107AT	Starlink 4614	SPXS	US	301	315	53.21	In Earth orbit
S53742	2022-107AU	Starlink 4637	SPXS	US	301	315	53.21	In Earth orbit
S53743	2022-107AV	Starlink 4645	SPXS	US	301	315	53.21	In Earth orbit
S53744	2022-107AW	Starlink 4670	SPXS	US	301	315	53.21	In Earth orbit
S53745	2022-107AX	Starlink 4656	SPXS	US	301	315	53.21	In Earth orbit
S53746	2022-107AY	Starlink 4589	SPXS	US	301	315	53.21	In Earth orbit
S53747	2022-107AZ	Starlink 4657	SPXS	US	301	314	53.21	Reentered
S53748	2022-107BA	Starlink 4669	SPXS	US	301	315	53.21	In Earth orbit
S53749	2022-107BB	Starlink 4680	SPXS	US	301	315	53.21	In Earth orbit
S53750	2022-107BC	Starlink 4612	SPXS	US	301	315	53.21	In Earth orbit
S53754	2022-107BG	Varuna TDM	BOHB/SFLIN	US	295	306	53.21	In Earth orbit
S53757	2022-108A	Weihai Kongjian 1-S3	CENT1	CN	692	705	53.53	In Earth orbit

S53758	2022-1088B	Weili Kongjian 1-S4	2022 Sep 6 02:41:00	CENT1	CN	694	706	53.53	In Earth orbit
S53760	2022-109A	Yaogan 35 05 zu 01 xing	2022 Sep 6 04:36:00	CASC	CN	491	502	35.00	In Earth orbit
S53761	2022-109B	Yaogan 35 05 zu 02 xing	2022 Sep 6 04:36:00	CASC	CN	488	500	35.00	In Earth orbit
S53763	2022-109D ?	Yaogan 35 05 zu 03 xing	2022 Sep 6 04:36:00	CASC	CN	489	501	35.00	In Earth orbit
S53765	2022-110A	Eutelsat Komnect VHTS	2022 Sep 7 22:13:00	EUTSA	F	60742	60742	3.40	In Earth orbit
S53773	2022-111A	Starlink 4718	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53774	2022-111B	Starlink 4719	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53775	2022-111C	Starlink 4722	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53776	2022-111D	Starlink 4722	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53777	2022-111E	Starlink 4708	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53778	2022-111F	Starlink 4664	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53779	2022-111G	Starlink 4709	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53780	2022-111H	Starlink 4706	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53781	2022-111J	Starlink 4678	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53782	2022-111K	Starlink 4662	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53783	2022-111L	Starlink 4679	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53784	2022-111M	Starlink 4536	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53785	2022-111N	Starlink 4687	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53786	2022-111P	Starlink 4638	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	Reentered
S53787	2022-111Q	Starlink 4631	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53788	2022-111R	Starlink 4743	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53789	2022-111S	Starlink 4744	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53790	2022-111T	Starlink 4666	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	Reentered
S53791	2022-111U	Starlink 4734	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53792	2022-111V	Starlink 4736	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53793	2022-111W	Starlink 4739	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	Reentered
S53794	2022-111X	Starlink 4728	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53795	2022-111Y	Starlink 4730	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53796	2022-111Z	Starlink 4742	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53797	2022-111AA	Starlink 4721	2022 Sep 11 03:23:49	SPXS	US	322	332	53.21	In Earth orbit
S53798	2022-111AB	Starlink 4723	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53799	2022-111AC	Starlink 4712	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53800	2022-111AD	Starlink 4710	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53801	2022-111AE	Starlink 4720	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53802	2022-111AF	Starlink 4715	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53803	2022-111AG	Starlink 4726	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53804	2022-111AH	Starlink 4727	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53805	2022-111AJ	Starlink 4729	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53806	2022-111AK	Starlink 4763	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53813	2022-111AL	Starlink 4768	2022 Sep 11 03:23:49	SPXS	US	324	334	53.20	In Earth orbit
S53814	2022-111A	BlueWalker 3	2022 Sep 13 13:49:00	ASTS	US	502	518	53.20	In Earth orbit
S53815	2022-111A	Zhongxing 1E	2022 Sep 15 21:32:18	ZLZB	CN	35775	35775	1.37	In Earth orbit
S53816	2022-111A	SriX-1	2022 Sep 19 00:34:01	SVNSP	J	557	575	97.66	In Earth orbit
S53817	2022-111A	Starlink 4749	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53818	2022-111A	Starlink 4738	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53819	2022-111B	Starlink 4758	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53820	2022-111C	Starlink 4752	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53821	2022-111D	Starlink 4713	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53822	2022-111E	Starlink 4748	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	Reentered
S53823	2022-111F	Starlink 4757	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53824	2022-111G	Starlink 4751	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53825	2022-111H	Starlink 4756	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53826	2022-111I	Starlink 4756	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53827	2022-111K	Starlink 4764	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53828	2022-111L	Starlink 4760	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53829	2022-111M	Starlink 4759	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53830	2022-111N	Starlink 4761	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53831	2022-111P	Starlink 4649	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53832	2022-111Q	Starlink 4747	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53833	2022-111R	Starlink 4771	2022 Sep 19 00:34:01	SPXS	US	236	328	53.22	In Earth orbit
S53834	2022-111S	Starlink 4737	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53835	2022-111T	Starlink 4783	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53836	2022-111U	Starlink 4778	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53837	2022-111V	Starlink 4776	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53838	2022-111W	Starlink 4773	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53839	2022-111X	Starlink 4784	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53840	2022-111Y	Starlink 4766	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit
S53841	2022-111Z	Starlink 4750	2022 Sep 19 00:34:01	SPXS	US	231	336	53.22	In Earth orbit

S53842	2022-114AA	Sturlink 4754	SPXS	2022 Sep 19 0034:01	US	231	336	53.22	In Earth orbit
S53843	2022-114AB	Sturlink 4769	SPXS	2022 Sep 19 0034:01	US	231	336	53.22	In Earth orbit
S53844	2022-114AC	Sturlink 4745	SPXS	2022 Sep 19 0034:01	US	231	336	53.22	In Earth orbit
S53845	2022-114AD	Sturlink 4753	SPXS	2022 Sep 19 0034:01	US	231	336	53.22	In Earth orbit
S53846	2022-114AE	Sturlink 4746	SPXS	2022 Sep 19 0034:01	US	231	336	53.22	In Earth orbit
S53847	2022-114AF	Sturlink 4777	SPXS	2022 Sep 19 0034:01	US	231	336	53.22	In Earth orbit
S53848	2022-114AG	Sturlink 4780	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53849	2022-114AH	Sturlink 4770	SPXS	2022 Sep 19 0034:01	US	231	336	53.22	In Earth orbit
S53850	2022-114AJ	Sturlink 4767	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53851	2022-114AK	Sturlink 4755	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53852	2022-114AL	Sturlink 4797	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53853	2022-114AM	Sturlink 4794	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53854	2022-114AN	Sturlink 4800	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53855	2022-114AP	Sturlink 4703	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53856	2022-114AQ	Sturlink 4795	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53857	2022-114AR	Sturlink 4809	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53858	2022-114AS	Sturlink 4798	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53859	2022-114AT	Sturlink 4790	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53860	2022-114AU	Sturlink 4799	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53861	2022-114AV	Sturlink 4781	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53862	2022-114AW	Sturlink 4792	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53863	2022-114AX	Sturlink 4788	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53864	2022-114AY	Sturlink 4779	SPXS	2022 Sep 19 0034:01	US	234	327	53.22	In Earth orbit
S53865	2022-114AZ	Sturlink 4785	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53866	2022-114BA	Sturlink 4762	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53867	2022-114BB	Sturlink 4793	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53868	2022-114BC	Sturlink 4789	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53869	2022-114BD	Sturlink 4810	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53870	2022-114BE	Sturlink 4732	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53871	2022-114BF	Sturlink 4740	SPXS	2022 Sep 19 0034:01	US	231	335	53.22	In Earth orbit
S53877	2022-115A	Yunhai 1-03	SAAT	2022 Sep 20 2325:00	CN	754	775	98.50	In Earth orbit
S53879	2022-116A	Tsolkovskiy	RKKE	2022 Sep 21 1425:38	RU	204	220	51.63	Attached to Rassvet
S53883	2022-117A C	USA 338	NROC	2022 Sep 24 2240:50	US	366	416	73.58	In Earth orbit
S53884	2022-118A	Shiyen 14	SAAT	2022 Sep 24 2312:00	CN	488	506	97.52	In Earth orbit
S53885	2022-118B	Shiyen 15	SAAT	2022 Sep 24 2312:00	CN	488	502	97.52	In Earth orbit
S53886	2022-119A	Sturlink 5028	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53887	2022-119B	Sturlink 5029	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53888	2022-119C	Sturlink 5034	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53889	2022-119D	Sturlink 5031	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53890	2022-119E	Sturlink 5050	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53891	2022-119F	Sturlink 5041	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53892	2022-119G	Sturlink 5046	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53893	2022-119H	Sturlink 5052	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53894	2022-119I	Sturlink 5043	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53895	2022-119K	Sturlink 5052	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53896	2022-119L	Sturlink 5037	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53897	2022-119M	Sturlink 5035	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53898	2022-119N	Sturlink 5044	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53899	2022-119P	Sturlink 5042	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53900	2022-119Q	Sturlink 5045	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53901	2022-119R	Sturlink 5024	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53902	2022-119S	Sturlink 5021	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53903	2022-119T	Sturlink 5022	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53904	2022-119U	Sturlink 4787	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53905	2022-119V	Sturlink 5003	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53906	2022-119W	Sturlink 5054	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53907	2022-119X	Sturlink 5063	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53908	2022-119Y	Sturlink 5057	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53909	2022-119Z	Sturlink 4796	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53910	2022-119AA	Sturlink 5056	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53911	2022-119AB	Sturlink 5048	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53912	2022-119AC	Sturlink 5059	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53913	2022-119AD	Sturlink 5053	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53914	2022-119AE	Sturlink 5040	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53915	2022-119AF	Sturlink 5017	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit
S53916	2022-119AG	Sturlink 5051	SPXS	2022 Sep 24 2347:38	US	232	337	53.23	In Earth orbit

S53917	2022-119AH	Starlink 5036	SPXS	US	232	337	53.23	In Earth orbit
S53918	2022-119AJ	Starlink 5012	SPXS	US	232	336	53.23	In Earth orbit
S53919	2022-119AK	Starlink 5023	SPXS	US	232	337	53.23	In Earth orbit
S53920	2022-119AL	Starlink 5025	SPXS	US	232	336	53.23	In Earth orbit
S53921	2022-119AM	Starlink 5005	SPXS	US	232	336	53.23	Reentered
S53922	2022-119AN	Starlink 5002	SPXS	US	232	336	53.23	In Earth orbit
S53923	2022-119AP	Starlink 5004	SPXS	US	232	336	53.23	In Earth orbit
S53924	2022-119AQ	Starlink 5001	SPXS	US	232	336	53.23	In Earth orbit
S53925	2022-119AR	Starlink 5011	SPXS	US	232	336	53.23	In Earth orbit
S53926	2022-119AS	Starlink 5014	SPXS	US	232	336	53.23	In Earth orbit
S53927	2022-119AT	Starlink 5008	SPXS	US	232	336	53.23	In Earth orbit
S53928	2022-119AU	Starlink 5009	SPXS	US	232	336	53.23	In Earth orbit
S53929	2022-119AV	Starlink 5018	SPXS	US	232	336	53.23	In Earth orbit
S53930	2022-119AW	Starlink 5010	SPXS	US	232	336	53.23	In Earth orbit
S53931	2022-119AX	Starlink 5015	SPXS	US	232	336	53.23	In Earth orbit
S53932	2022-119AY	Starlink 4772	SPXS	US	232	336	53.23	In Earth orbit
S53933	2022-119AZ	Starlink 4782	SPXS	US	232	336	53.23	In Earth orbit
S53934	2022-119BA	Starlink 4775	SPXS	US	232	336	53.23	In Earth orbit
S53935	2022-119BB	Starlink 5000	SPXS	US	232	336	53.23	In Earth orbit
S53936	2022-119BC	Starlink 4791	SPXS	US	232	336	53.23	In Earth orbit
S53937	2022-119BD	Starlink 4765	SPXS	US	232	336	53.23	In Earth orbit
S53943	2022-120A	Yaogang 36 01 zu 01 xing	CASC	CN	485	498	35.00	In Earth orbit
S53946	2022-120D	Yaogang 36 01 zu 02 xing	CASC	CN	487	498	35.00	In Earth orbit
S53947	2022-120E	Yaogang 36 01 zu 03 xing	CASC	CN	484	497	35.00	In Earth orbit
S53948	2022-121A	Shiyuan 16A	SAST	CN	504	520	97.45	In Earth orbit
S53949	2022-121B	Shiyuan 16B	SAST	CN	505	519	97.45	In Earth orbit
S53950	2022-121C	Shiyuan 17	CALT	CN	503	519	97.46	In Earth orbit
S53958	2022-122A ?	Serenity	TIS	US	221	268	136.89	Reentered
S53957	2022-122B ?	ASTROLAND-1	AMEA	E	165	186	136.88	Reentered
S53956	2022-122C ?	TechedSat-15	ARCS/SISU	US	170	185	136.86	Reentered
S53958	2022-122D ?	ASTROLAND-2	AMEA	E	183	212	136.89	Reentered
A10752	2022-122F ?	Qubik 3	LIBRE	GR	202	268	136.88	Reentered
A10753	2022-122G ?	Qubik 4	LIBRE	GR	202	268	136.88	Reentered
A10754	2022-122H ?	FossSat 1B	FOSSA	E	202	268	136.88	Reentered
S53960	2022-123A	SES-20	SESSA	L	35774	35798	0.04	In Earth orbit
S53961	2022-123B	SES-21	SESSA	L	35784	35786	0.04	In Earth orbit
S53963	2022-124A	Dragon Endurance (Crew-5)	SPX	US	191	210	51.65	Attached to IDA-2
S53964	2022-125A	Starlink 4633	SPXS	US	302	310	53.22	In Earth orbit
S53965	2022-125B	Starlink 4578	SPXS	US	302	309	53.22	In Earth orbit
S53966	2022-125C	Starlink 4635	SPXS	US	302	309	53.22	In Earth orbit
S53967	2022-125D	Starlink 4634	SPXS	US	302	309	53.22	In Earth orbit
S53968	2022-125E	Starlink 4629	SPXS	US	302	309	53.22	In Earth orbit
S53969	2022-125F	Starlink 4468	SPXS	US	302	309	53.22	In Earth orbit
S53970	2022-125G	Starlink 4567	SPXS	US	302	310	53.22	In Earth orbit
S53971	2022-125H	Starlink 4639	SPXS	US	302	309	53.22	In Earth orbit
S53972	2022-125I	Starlink 5157	SPXS	US	302	309	53.22	In Earth orbit
S53973	2022-125K	Starlink 5156	SPXS	US	302	309	53.22	In Earth orbit
S53974	2022-125L	Starlink 5159	SPXS	US	298	306	53.22	In Earth orbit
S53975	2022-125M	Starlink 5137	SPXS	US	302	310	53.22	In Earth orbit
S53976	2022-125N	Starlink 5134	SPXS	US	301	311	53.22	In Earth orbit
S53977	2022-125P	Starlink 5094	SPXS	US	301	310	53.22	In Earth orbit
S53978	2022-125Q	Starlink 5148	SPXS	US	302	310	53.22	In Earth orbit
S53979	2022-125R	Starlink 5123	SPXS	US	301	310	53.22	In Earth orbit
S53980	2022-125S	Starlink 5133	SPXS	US	301	311	53.22	In Earth orbit
S53981	2022-125T	Starlink 5149	SPXS	US	302	310	53.22	In Earth orbit
S53982	2022-125U	Starlink 5120	SPXS	US	301	310	53.22	In Earth orbit
S53983	2022-125V	Starlink 5103	SPXS	US	302	311	53.22	In Earth orbit
S53984	2022-125W	Starlink 5142	SPXS	US	302	310	53.22	In Earth orbit
S53985	2022-125X	Starlink 5147	SPXS	US	302	310	53.22	In Earth orbit
S53986	2022-125Y	Starlink 5119	SPXS	US	301	311	53.22	In Earth orbit
S53987	2022-125Z	Starlink 5112	SPXS	US	302	310	53.22	In Earth orbit
S53988	2022-125AA	Starlink 5113	SPXS	US	302	310	53.22	In Earth orbit
S53989	2022-125AB	Starlink 5115	SPXS	US	301	311	53.22	In Earth orbit
S53990	2022-125AC	Starlink 5075	SPXS	US	301	311	53.22	In Earth orbit
S53991	2022-125AD	Starlink 5118	SPXS	US	302	310	53.22	In Earth orbit
S53992	2022-125AE	Starlink 5108	SPXS	US	301	311	53.22	In Earth orbit

S53993	2022-125AF	Starlink 5121	SPXS	US	301	310	53.22	In Earth orbit
S53994	2022-125AG	Starlink 5125	SPXS	US	301	310	53.22	In Earth orbit
S53995	2022-125AH	Starlink 5097	SPXS	US	302	311	53.22	In Earth orbit
S53996	2022-125AJ	Starlink 5131	SPXS	US	301	311	53.22	In Earth orbit
S53997	2022-125AK	Starlink 5128	SPXS	US	301	311	53.22	In Earth orbit
S53998	2022-125AL	Starlink 5130	SPXS	US	301	311	53.22	In Earth orbit
S53999	2022-125AM	Starlink 5079	SPXS	US	301	311	53.22	In Earth orbit
S54000	2022-125AN	Starlink 5088	SPXS	US	301	311	53.22	In Earth orbit
S54001	2022-125AP	Starlink 5105	SPXS	US	301	311	53.22	In Earth orbit
S54002	2022-125AQ	Starlink 5109	SPXS	US	301	311	53.22	In Earth orbit
S54003	2022-125AR	Starlink 5114	SPXS	US	301	311	53.22	In Earth orbit
S54004	2022-125AS	Starlink 5129	SPXS	US	301	311	53.22	In Earth orbit
S54005	2022-125AT	Starlink 5135	SPXS	US	301	311	53.22	In Earth orbit
S54006	2022-125AU	Starlink 5096	SPXS	US	301	311	53.22	In Earth orbit
S54007	2022-125AV	Starlink 5132	SPXS	US	301	311	53.22	In Earth orbit
S54008	2022-125AW	Starlink 5145	SPXS	US	301	311	53.22	In Earth orbit
S54009	2022-125AX	Starlink 5099	SPXS	US	301	311	53.22	In Earth orbit
S54010	2022-125AY	Starlink 5127	SPXS	US	301	312	53.22	In Earth orbit
S54011	2022-125AZ	Starlink 5124	SPXS	US	301	311	53.22	In Earth orbit
S54012	2022-125BA	Starlink 5126	SPXS	US	301	312	53.22	In Earth orbit
S54013	2022-125BB	Starlink 5098	SPXS	US	301	311	53.22	In Earth orbit
S54014	2022-125BC	Starlink 5116	SPXS	US	301	312	53.22	In Earth orbit
S54015	2022-125BD	Starlink 5055	SPXS	US	301	311	53.22	In Earth orbit
S54020	2022-126A	Weili Kongjian 1-S5	CHNTI	CN	691	709	55.00	In Earth orbit
S54021	2022-126B	Weili Kongjian 1-S6	CHNTI	CN	689	709	55.00	In Earth orbit
S54023	2022-127A	Gazelle	GACO	CN	744	761	98.32	In Earth orbit
S54026	2022-128A	Galaxy 33	INTELU	US	35774	35797	0.01	In Earth orbit
S54027	2022-128B	Galaxy 34	INTELU	US	35780	35792	0.01	In Earth orbit
S54029	2022-129A	Kuath-1	CAS	CN	713	732	98.27	In Earth orbit
S54031	2022-130A	Kosmos-2559	VVKOV/IACG	RU	19110	19149	64.78	In Earth orbit
S54033	2022-131A	Angosat 2	GGPEN	AO	35785	35787	0.01	In Earth orbit
S54035	2022-132A	Huanjiang Jianzai 02-05	ZWYZ	CN	496	762	97.65	In Earth orbit
S54042	2022-133A	Yaogan 36 02 zu 01 xing	CASC	CN	486	498	35.00	In Earth orbit
S54043	2022-133B	Yaogan 36 02 zu 02 xing	CASC	CN	484	497	34.99	In Earth orbit
S54045	2022-133D	Yaogan 36 02 zu 03 xing	CASC	CN	487	498	35.00	In Earth orbit
S54048	2022-134A	EUTELSAT HOT BIRD 13F	EUTSA	F	3363	63252	17.35	In Earth orbit
S54050	2022-135A	Kosmos-2560	MORF	RU	328	343	96.35	Reentered
S54051	2022-136A	Starlink 5195	SPXS	US	232	334	53.22	In Earth orbit
S54052	2022-136B	Starlink 5189	SPXS	US	232	334	53.22	In Earth orbit
S54053	2022-136C	Starlink 5176	SPXS	US	232	334	53.22	In Earth orbit
S54054	2022-136D	Starlink 5163	SPXS	US	232	334	53.22	In Earth orbit
S54055	2022-136E	Starlink 5158	SPXS	US	232	334	53.22	In Earth orbit
S54056	2022-136F	Starlink 5226	SPXS	US	232	334	53.22	In Earth orbit
S54057	2022-136G	Starlink 5216	SPXS	US	232	334	53.22	In Earth orbit
S54058	2022-136H	Starlink 5167	SPXS	US	232	334	53.22	In Earth orbit
S54059	2022-136I	Starlink 5173	SPXS	US	232	334	53.22	In Earth orbit
S54060	2022-136K	Starlink 5169	SPXS	US	232	334	53.22	In Earth orbit
S54061	2022-136L	Starlink 5209	SPXS	US	232	334	53.22	In Earth orbit
S54062	2022-136M	Starlink 5170	SPXS	US	232	334	53.22	In Earth orbit
S54063	2022-136N	Starlink 5225	SPXS	US	232	334	53.22	In Earth orbit
S54064	2022-136P	Starlink 5172	SPXS	US	232	334	53.22	In Earth orbit
S54065	2022-136Q	Starlink 5187	SPXS	US	232	334	53.22	In Earth orbit
S54066	2022-136R	Starlink 5151	SPXS	US	232	334	53.22	In Earth orbit
S54067	2022-136S	Starlink 5174	SPXS	US	232	334	53.22	In Earth orbit
S54068	2022-136T	Starlink 5222	SPXS	US	232	334	53.22	In Earth orbit
S54069	2022-136U	Starlink 5223	SPXS	US	232	334	53.22	In Earth orbit
S54070	2022-136V	Starlink 5181	SPXS	US	232	334	53.22	In Earth orbit
S54071	2022-136W	Starlink 5168	SPXS	US	232	334	53.22	In Earth orbit
S54072	2022-136X	Starlink 5144	SPXS	US	232	334	53.22	In Earth orbit
S54073	2022-136Y	Starlink 5146	SPXS	US	232	333	53.22	In Earth orbit
S54074	2022-136Z	Starlink 5192	SPXS	US	232	333	53.22	In Earth orbit
S54075	2022-136AA	Starlink 5212	SPXS	US	232	333	53.22	In Earth orbit
S54076	2022-136AB	Starlink 5201	SPXS	US	232	333	53.22	In Earth orbit
S54077	2022-136AC	Starlink 5171	SPXS	US	231	334	53.22	In Earth orbit
S54078	2022-136AD	Starlink 5138	SPXS	US	232	333	53.22	In Earth orbit
S54079	2022-136AE	Starlink 5175	SPXS	US	232	333	53.22	In Earth orbit

S54080	2022-136AF	Starlink 5160	SPXS	US	232	333	53.22	In Earth orbit
S54081	2022-136AG	Starlink 5165	SPXS	US	232	333	53.22	In Earth orbit
S54082	2022-136AH	Starlink 5210	SPXS	US	232	333	53.22	In Earth orbit
S54083	2022-136AJ	Starlink 5178	SPXS	US	232	333	53.22	In Earth orbit
S54084	2022-136AK	Starlink 5183	SPXS	US	232	333	53.22	In Earth orbit
S54085	2022-136AL	Starlink 5166	SPXS	US	232	333	53.22	In Earth orbit
S54086	2022-136AM	Starlink 5211	SPXS	US	231	334	53.22	In Earth orbit
S54087	2022-136AN	Starlink 5184	SPXS	US	231	334	53.22	In Earth orbit
S54088	2022-136AP	Starlink 5184	SPXS	US	231	334	53.22	In Earth orbit
S54089	2022-136AQ	Starlink 5153	SPXS	US	232	333	53.22	In Earth orbit
S54090	2022-136AR	Starlink 5143	SPXS	US	232	333	53.22	In Earth orbit
S54091	2022-136AS	Starlink 5177	SPXS	US	232	333	53.22	In Earth orbit
S54092	2022-136AT	Starlink 5221	SPXS	US	232	333	53.22	In Earth orbit
S54093	2022-136AU	Starlink 5190	SPXS	US	232	333	53.22	In Earth orbit
S54094	2022-136AV	Starlink 5213	SPXS	US	231	333	53.22	In Earth orbit
S54095	2022-136AW	Starlink 5219	SPXS	US	232	333	53.22	In Earth orbit
S54096	2022-136AX	Starlink 5193	SPXS	US	231	333	53.22	In Earth orbit
S54097	2022-136AX	Starlink 5188	SPXS	US	232	333	53.22	In Earth orbit
S54098	2022-136AY	Starlink 5197	SPXS	US	232	333	53.22	In Earth orbit
S54099	2022-136AZ	Starlink 5217	SPXS	US	231	333	53.22	In Earth orbit
S54100	2022-136BA	Starlink 5198	SPXS	US	232	333	53.22	In Earth orbit
S54101	2022-136BB	Starlink 5185	SPXS	US	232	333	53.22	In Earth orbit
S54102	2022-136BC	Starlink 5204	SPXS	US	232	333	53.22	In Earth orbit
S54103	2022-136BD	Starlink 5179	SPXS	US	232	333	53.22	In Earth orbit
S54104	2022-136BE	Starlink 5200	SPXS	US	232	333	53.22	In Earth orbit
S54105	2022-136BF	Starlink 5203	SPXS	US	232	333	53.22	In Earth orbit
S54106	2022-137A	Kosmos-2561	MORF	RU	407	419	97.08	In Earth orbit
S54107	2022-137B	Kosmos-2562	MORF	RU	406	419	97.08	In Earth orbit
S54108	2022-137B	OneWeb SL0490	ONEWEB	UK	588	604	87.43	In Earth orbit
S54109	2022-138A	OneWeb SL0492	ONEWEB	UK	588	604	87.43	In Earth orbit
S54110	2022-138B	OneWeb SL0495	ONEWEB	UK	590	610	87.43	In Earth orbit
S54111	2022-138C	OneWeb SL0497	ONEWEB	UK	588	607	87.43	In Earth orbit
S54112	2022-138D	OneWeb SL0499	ONEWEB	UK	588	606	87.43	In Earth orbit
S54113	2022-138E	OneWeb SL0500	ONEWEB	UK	588	601	87.43	In Earth orbit
S54114	2022-138F	OneWeb SL0501	ONEWEB	UK	588	602	87.43	In Earth orbit
S54115	2022-138G	OneWeb SL0502	ONEWEB	UK	588	602	87.43	In Earth orbit
S54116	2022-138H	OneWeb SL0503	ONEWEB	UK	588	605	87.43	In Earth orbit
S54117	2022-138I	OneWeb SL0504	ONEWEB	UK	588	601	87.43	In Earth orbit
S54118	2022-138J	OneWeb SL0505	ONEWEB	UK	590	609	87.43	In Earth orbit
S54119	2022-138K	OneWeb SL0506	ONEWEB	UK	589	609	87.43	In Earth orbit
S54120	2022-138L	OneWeb SL0507	ONEWEB	UK	587	599	87.43	In Earth orbit
S54121	2022-138M	OneWeb SL0508	ONEWEB	UK	588	604	87.43	In Earth orbit
S54122	2022-138N	OneWeb SL0509	ONEWEB	UK	588	608	87.43	In Earth orbit
S54123	2022-138Q	OneWeb SL0510	ONEWEB	UK	586	598	87.43	In Earth orbit
S54124	2022-138R	OneWeb SL0511	ONEWEB	UK	588	602	87.43	In Earth orbit
S54125	2022-138S	OneWeb SL0512	ONEWEB	UK	588	608	87.43	In Earth orbit
S54126	2022-138T	OneWeb SL0513	ONEWEB	UK	588	602	87.43	In Earth orbit
S54127	2022-138U	OneWeb SL0514	ONEWEB	UK	587	599	87.43	In Earth orbit
S54128	2022-138V	OneWeb SL0515	ONEWEB	UK	588	602	87.43	In Earth orbit
S54129	2022-138W	OneWeb SL0516	ONEWEB	UK	587	599	87.43	In Earth orbit
S54130	2022-138X	OneWeb SL0517	ONEWEB	UK	588	605	87.43	In Earth orbit
S54131	2022-138Y	OneWeb SL0518	ONEWEB	UK	588	607	87.43	In Earth orbit
S54132	2022-138Z	OneWeb SL0519	ONEWEB	UK	588	601	87.43	In Earth orbit
S54133	2022-138AA	OneWeb SL0520	ONEWEB	UK	588	604	87.43	In Earth orbit
S54134	2022-138AB	OneWeb SL0521	ONEWEB	UK	588	604	87.43	In Earth orbit
S54135	2022-138AC	OneWeb SL0522	ONEWEB	UK	591	610	87.43	In Earth orbit
S54136	2022-138AD	OneWeb SL0523	ONEWEB	UK	589	608	87.43	In Earth orbit
S54137	2022-138AE	OneWeb SL0524	ONEWEB	UK	586	598	87.43	In Earth orbit
S54138	2022-138AF	OneWeb SL0525	ONEWEB	UK	586	598	87.43	In Earth orbit
S54139	2022-138AG	OneWeb SL0526	ONEWEB	UK	588	609	87.43	In Earth orbit
S54140	2022-138AH	OneWeb SL0527	ONEWEB	UK	589	609	87.43	In Earth orbit
S54141	2022-138AI	OneWeb SL0528	ONEWEB	UK	588	607	87.43	In Earth orbit
S54142	2022-138AJ	OneWeb SL0529	ONEWEB	UK	588	607	87.43	In Earth orbit
S54143	2022-138AK	OneWeb SL0530	ONEWEB	UK	587	599	87.43	In Earth orbit
S54144	2022-138AL	OneWeb SL0531	ONEWEB	UK	588	600	87.43	In Earth orbit
S54145	2022-138AM	OneWeb SL0532	ONEWEB	UK	588	600	87.43	In Earth orbit
S54146	2022-138AN	Gonets-M No. 33L	VVKOV	RU	1482	1501	82.50	In Earth orbit
S54147	2022-138AO	Gonets-M No. 34L	VVKOV	RU	1482	1500	82.49	In Earth orbit
S54148	2022-138AP	Gonets-M No. 35L	VVKOV	RU	1479	1500	82.50	In Earth orbit
S54149	2022-138AQ							
S54150	2022-138AR							
S54151	2022-138AS							
S54152	2022-138AT							

Al0811	2022-139D	SkiF-D	Progress MS-21	RAKA	RU	8000	8000	90.00	Lost
S54155	2022-140A	Starlink 5290	Starlink 5290	RKKE	RU	256	283	51.64	Attached to Poisk
S54157	2022-141A	Starlink 5297	Starlink 5297	SPXS	US	230	337	53.22	In Earth orbit
S54158	2022-141B	Starlink 5298	Starlink 5298	SPXS	US	230	337	53.22	In Earth orbit
S54159	2022-141C	Starlink 5299	Starlink 5299	SPXS	US	230	337	53.22	In Earth orbit
S54160	2022-141D	Starlink 5303	Starlink 5303	SPXS	US	229	336	53.22	In Earth orbit
S54161	2022-141E	Starlink 5269	Starlink 5269	SPXS	US	230	337	53.22	In Earth orbit
S54162	2022-141F	Starlink 5273	Starlink 5273	SPXS	US	230	337	53.22	In Earth orbit
S54163	2022-141G	Starlink 5161	Starlink 5161	SPXS	US	230	337	53.22	In Earth orbit
S54164	2022-141H	Starlink 5278	Starlink 5278	SPXS	US	230	337	53.22	In Earth orbit
S54165	2022-141I	Starlink 5279	Starlink 5279	SPXS	US	230	337	53.22	In Earth orbit
S54166	2022-141K	Starlink 5280	Starlink 5280	SPXS	US	230	337	53.22	In Earth orbit
S54167	2022-141L	Starlink 5243	Starlink 5243	SPXS	US	230	337	53.22	In Earth orbit
S54168	2022-141M	Starlink 5245	Starlink 5245	SPXS	US	230	337	53.22	In Earth orbit
S54169	2022-141N	Starlink 5282	Starlink 5282	SPXS	US	230	337	53.22	In Earth orbit
S54170	2022-141P	Starlink 5155	Starlink 5155	SPXS	US	230	337	53.22	In Earth orbit
S54171	2022-141Q	Starlink 5229	Starlink 5229	SPXS	US	230	337	53.22	In Earth orbit
S54172	2022-141R	Starlink 5117	Starlink 5117	SPXS	US	230	337	53.22	In Earth orbit
S54173	2022-141S	Starlink 5242	Starlink 5242	SPXS	US	230	337	53.22	In Earth orbit
S54174	2022-141T	Starlink 5248	Starlink 5248	SPXS	US	230	337	53.22	In Earth orbit
S54175	2022-141U	Starlink 5256	Starlink 5256	SPXS	US	230	337	53.22	In Earth orbit
S54176	2022-141V	Starlink 5154	Starlink 5154	SPXS	US	230	337	53.22	In Earth orbit
S54177	2022-141W	Starlink 5186	Starlink 5186	SPXS	US	230	337	53.22	In Earth orbit
S54178	2022-141X	Starlink 5164	Starlink 5164	SPXS	US	230	336	53.22	In Earth orbit
S54179	2022-141Y	Starlink 5122	Starlink 5122	SPXS	US	230	337	53.22	In Earth orbit
S54180	2022-141Z	Starlink 5228	Starlink 5228	SPXS	US	230	336	53.22	In Earth orbit
S54181	2022-141AA	Starlink 5227	Starlink 5227	SPXS	US	230	337	53.22	In Earth orbit
S54182	2022-141AB	Starlink 5231	Starlink 5231	SPXS	US	230	336	53.22	In Earth orbit
S54183	2022-141AC	Starlink 5239	Starlink 5239	SPXS	US	230	336	53.22	In Earth orbit
S54184	2022-141AD	Starlink 5162	Starlink 5162	SPXS	US	230	336	53.22	In Earth orbit
S54185	2022-141AE	Starlink 5235	Starlink 5235	SPXS	US	230	336	53.22	In Earth orbit
S54186	2022-141AF	Starlink 5194	Starlink 5194	SPXS	US	230	336	53.22	In Earth orbit
S54187	2022-141AG	Starlink 5240	Starlink 5240	SPXS	US	230	337	53.22	In Earth orbit
S54188	2022-141AH	Starlink 5238	Starlink 5238	SPXS	US	230	336	53.22	In Earth orbit
S54189	2022-141AJ	Starlink 5182	Starlink 5182	SPXS	US	230	336	53.22	In Earth orbit
S54190	2022-141AK	Starlink 5281	Starlink 5281	SPXS	US	230	336	53.22	In Earth orbit
S54191	2022-141AL	Starlink 4619	Starlink 4619	SPXS	US	230	336	53.22	In Earth orbit
S54192	2022-141AM	Starlink 5268	Starlink 5268	SPXS	US	230	336	53.22	In Earth orbit
S54193	2022-141AN	Starlink 5263	Starlink 5263	SPXS	US	230	336	53.22	In Earth orbit
S54194	2022-141AP	Starlink 5271	Starlink 5271	SPXS	US	230	337	53.22	In Earth orbit
S54195	2022-141AQ	Starlink 5258	Starlink 5258	SPXS	US	230	336	53.22	In Earth orbit
S54196	2022-141AR	Starlink 5237	Starlink 5237	SPXS	US	230	336	53.22	In Earth orbit
S54197	2022-141AS	Starlink 5234	Starlink 5234	SPXS	US	230	336	53.22	In Earth orbit
S54198	2022-141AT	Starlink 5246	Starlink 5246	SPXS	US	230	336	53.22	In Earth orbit
S54199	2022-141AU	Starlink 5244	Starlink 5244	SPXS	US	230	336	53.22	In Earth orbit
S54200	2022-141AV	Starlink 5250	Starlink 5250	SPXS	US	230	336	53.22	In Earth orbit
S54201	2022-141AW	Starlink 5199	Starlink 5199	SPXS	US	230	336	53.22	In Earth orbit
S54202	2022-141AX	Starlink 5205	Starlink 5205	SPXS	US	230	336	53.22	In Earth orbit
S54203	2022-141AY	Starlink 5247	Starlink 5247	SPXS	US	230	336	53.22	In Earth orbit
S54204	2022-141AZ	Starlink 5241	Starlink 5241	SPXS	US	230	336	53.22	In Earth orbit
S54205	2022-141BA	Starlink 5249	Starlink 5249	SPXS	US	230	336	53.22	In Earth orbit
S54206	2022-141BB	Starlink 5264	Starlink 5264	SPXS	US	230	336	53.22	In Earth orbit
S54207	2022-141BC	Starlink 5262	Starlink 5262	SPXS	US	230	336	53.22	In Earth orbit
S54208	2022-141BD	Starlink 5255	Starlink 5255	SPXS	US	230	336	53.22	In Earth orbit
S54209	2022-141BE	Starlink 5259	Starlink 5259	SPXS	US	230	336	53.22	In Earth orbit
S54214	2022-142A	Shiyun 20C	2022 Oct 29 01:15:00	CASC	CN	749	796	60.00	In Earth orbit
S54216	2022-143A	Mengtian	2022 Oct 31 07:45:36	CMISEO	CN	178	320	41.46	Attached to Tianhe
S54219	2022-144A C	LDPE 2	2022 Nov 1 20:10:00	AFRL	US	36080	36100	2.80	In Earth orbit
S54220	2022-144B C	USA 339	2022 Nov 1 20:10:00	SFSSC	US	36080	36100	2.80	In Earth orbit
S55138	2022-144E C	USA 340	2022 Dec 31 00:00:00	AFRL	US	36080	36100	2.80	In Earth orbit
S55139	2022-144F C	USA 341	2022 Dec 31 00:00:00	AFRL	US	36080	36100	2.80	In Earth orbit
S55246	2022-144G C	LINUSSI	2022 Dec 31 00:00:00	LMSSD	US	0	0	0.00	In Earth orbit
S55247	2022-144H C	LINUSS2	2022 Dec 31 00:00:00	LMSSD	US	0	0	0.00	In Earth orbit
T00047	2022-144C	TETRA 1	2022 Nov 2 11:07:00	MILLES	US	0	0	0.00	In Earth orbit
S54223	2022-145A	Kosmos-2563	2022 Nov 2 11:07:00	VVKOV	RU	1582	38765	63.83	In Earth orbit
S54225	2022-146A	EUTELSAT HOT BIRD 13G	2022 Nov 3 05:58:00	EUTSA	F	4191	65654	16.98	In Earth orbit



S54227	2022-147A	MATS	2022 Nov 4 18:21:08	SNSB	S	580	597	97.65	In Earth orbit
S54230	2022-148A	Zhongxing 19	2022 Nov 5 12:15:00	CHISAE	CN	35758	35815	0.00	In Earth orbit
S54232	2022-149A	S.S. Sally Ride	2022 Nov 7 10:41:32	NGIS	US	227	332	51.67	Attached to Unity
S54534	1998-067UL ?	PEARLAFRICASAT-1	2022 Dec 2 07:50:00	MSIU	UG	409	419	51.64	In Earth orbit
S54535	1998-067UM ?	ZIMSAT-1	2022 Dec 2 07:50:00	KINGSA	ZW	409	419	51.64	In Earth orbit
S54536	1998-067UN ?	TAKA	2022 Dec 2 07:50:00	KYUT	J	409	419	51.64	In Earth orbit
S54537	1998-067UP ?	SpaceTuna1	2022 Dec 2 07:50:00	KINDAI	J	409	419	51.64	In Earth orbit
S54234	2022-150A	NOAA-21	2022 Nov 10 10:17:09	GSFC/NOAA	US	791	827	98.70	In Earth orbit
A10777	2022-150C	Bernard Kutler LOFTID	2022 Nov 10 11:04:12	LARCN	US	-29	652	98.01	Landed
S54235	2022-151A	Yunhai-3	2022 Nov 11 23:07:00	SAST	CN	840	856	98.82	In Earth orbit
S54237	2022-152A	Tianzhong-5	2022 Nov 12 02:13:13	CMSEO	CN	200	421	41.85	Attached to Tianhe
S54816	2021-035C	XW-4	2022 Dec 18 01:30:00	CAMISAT	CN	380	390	41.48	In Earth orbit
S54243	2022-153A	Galaxy 31	2022 Nov 12 16:44:00	INTELU	US	35776	35796	0.06	In Earth orbit
S54244	2022-153B	Galaxy 32	2022 Nov 12 16:59:00	INTELU	US	35775	35797	0.02	In Earth orbit
S54249	2022-154A	Yaogan 34-03	2022 Nov 15 01:51:00	ZLZB	CN	1092	1097	63.41	In Earth orbit
S54251	2022-155A ?	Jilin-1 Gaofen 03D-08	2022 Nov 16 06:35:00	CGSTL	CN	529	547	97.54	In Earth orbit
S54252	2022-155B ?	Jilin-1 Gaofen 03D-51	2022 Nov 16 06:35:00	CGSTL	CN	529	547	97.54	In Earth orbit
S54253	2022-155C ?	Jilin-1 Gaofen 03D-52	2022 Nov 16 06:35:00	CGSTL	CN	530	547	97.54	In Earth orbit
S54254	2022-155D ?	Jilin-1 Gaofen 03D-53	2022 Nov 16 06:35:00	CGSTL	CN	529	547	97.54	In Earth orbit
S54255	2022-155E ?	Jilin-1 Gaofen 03D-54	2022 Nov 16 06:35:00	CGSTL	CN	529	547	97.54	In Earth orbit
S54257	2022-156A	Artemis 1	2022 Nov 16 08:45:20	JSC	US	517	376793	30.53	Deep Space
A10789	2022-156C	Lunar IceCube	2022 Nov 16 10:27:00	MSUKY/GSFC	US	532	377388	30.26	Deep Space
A10790	2022-156D	OMOTENASHI	2022 Nov 16 10:27:00	JAXA/TOK	J	532	377388	30.26	Deep Space
A10791	2022-156E	EQUULEUS	2022 Nov 16 10:27:00	JAXA/TOK	J	532	377388	30.26	Deep Space
A10792	2022-156F	Biosentinel 1	2022 Nov 16 10:27:00	ARC	US	532	377388	30.26	Deep Space
A10793	2022-156G	ArgoMoon	2022 Nov 16 10:27:00	ASI	I	532	377388	30.26	Deep Space
A10794	2022-156H	NEA Scout	2022 Nov 16 11:20:00	JPL/MSFC	US	532	377388	30.26	Deep Space
A10795	2022-156I	LuminaMap	2022 Nov 16 12:50:00	ASU	US	532	377388	30.26	Deep Space
A10796	2022-156K	LumIR	2022 Nov 16 12:50:00	LMATC	US	532	377388	30.26	Deep Space
A10797	2022-156L	Miles	2022 Nov 16 13:50:00	TMLIES	US	532	377388	30.26	Deep Space
A10798	2022-156M	CuSP	2022 Nov 16 14:50:00	SWRI	US	532	377388	30.26	Deep Space
S54259	2022-157A	EUTELSAT 10B	2022 Nov 23 03:32:00	EUTSA	F	245	59784	22.62	In Earth orbit
S54361	2022-158A	EOS-06	2022 Nov 26 06:43:12	ISRO	IN	729	748	98.34	In Earth orbit
S54363	2022-158C	Thybolt 1	2022 Nov 26 08:20:12	DHRUVA	IN	496	520	97.44	In Earth orbit
S54364	2022-158D	Thybolt 2	2022 Nov 26 08:20:03	DHRUVA	IN	500	510	97.45	In Earth orbit
S54365	2022-158E	INS-2B	2022 Nov 26 08:31:04	BT/DIT/ISRO	BT	530	97.46	97.46	In Earth orbit
S54366	2022-158F	Anand	2022 Nov 26 08:30:04	PIXX	IN	499	521	97.42	In Earth orbit
S54367	2022-158G	Astrocast-0304	2022 Nov 26 08:29:55	ACAST	CH	493	518	97.39	In Earth orbit
S54368	2022-158H	Astrocast-0302	2022 Nov 26 08:21:34	ACAST	CH	498	514	97.46	In Earth orbit
S54369	2022-158I	Astrocast-0303	2022 Nov 26 08:20:12	ACAST	CH	502	515	97.44	In Earth orbit
S54370	2022-158K	Astrocast-0301	2022 Nov 26 08:21:07	ACAST	CH	495	523	97.43	In Earth orbit
S54371	2022-159A	Dragon CRS-26	2022 Nov 26 19:32:42	SPX	US	208	240	51.65	Landed
S55123	1998-067UQ	MARIO	2022 Dec 29 12:15:00	UMI	US	411	416	51.64	In Earth orbit
S55124	1998-067UR	NUTSAT	2022 Dec 29 12:15:00	NFU/NSPO	TW	411	416	51.64	In Earth orbit
S55125	1998-067US	LORIS	2022 Dec 29 13:45:00	DALU	CA	403	405	51.64	In Earth orbit
S55126	1998-067UT	ORCASat	2022 Dec 29 13:45:00	UVIC	CA	411	418	51.64	In Earth orbit
S55127	1998-067UU	DANTEsat	2022 Dec 29 12:05:00	SPMIND	I	411	415	51.65	In Earth orbit
S55128	1998-067UV	TJREVERB	2022 Dec 29 12:05:00	TJHS	US	411	415	51.64	In Earth orbit
S55129	1998-067UW	SPORT	2022 Dec 29 13:55:00	ITA/GSFC	BR	413	417	51.64	In Earth orbit
S55130	1998-067UX	PeitSat	2022 Dec 29 13:55:00	GSFC	US	412	417	51.65	In Earth orbit
S54372	2022-160A	Yaogan 36 03 zu 01 xing	2022 Nov 27 12:38:00	CASC	CN	488	500	35.00	In Earth orbit
S54373	2022-160B	Yaogan 36 03 zu 02 xing	2022 Nov 27 12:38:00	CASC	CN	489	502	35.00	In Earth orbit
S54375	2022-160D	Yaogan 36 03 zu 03 xing	2022 Nov 27 12:37:00	CASC	CN	488	501	35.00	In Earth orbit
S54377	2022-161A	Kosmos-2564	2022 Nov 28 18:49:00	VVKOV/IACG	RU	19010	19149	64.78	In Earth orbit
S54379	2022-162A	Shenzhou 15	2022 Nov 29 15:17:59	CMSEO	CN	386	393	41.48	Attached to Tianhe
S54381	2022-163A	Kosmos-2565	2022 Nov 30 21:19:00	VVKOV	RU	240	900	67.14	In Earth orbit
S54383	2022-163C	Kosmos-2566?	2022 Dec 2 23:00:00	VVKOV	RU	896	910	67.15	In Earth orbit
S54388	2022-164A	Xingyun Jiaotong VDES	2022 Dec 7 01:30:00	XYUN	CN	737	749	98.36	In Earth orbit
S54640	2022-165A	Gao Fen 5-01A	2022 Dec 8 18:41:00	GWHYZ	CN	667	683	98.12	In Earth orbit
S54642	2022-166A	OneWeb SL0528	2022 Dec 8 23:26:36	ONEWEBN	UK	589	599	86.52	In Earth orbit
S54643	2022-166B	OneWeb SL0528	2022 Dec 8 23:26:36	ONEWEBN	UK	589	599	86.51	In Earth orbit
S54644	2022-166C	OneWeb SL0539	2022 Dec 8 23:42:25	ONEWEBN	UK	588	599	86.52	In Earth orbit
S54645	2022-166D	OneWeb SL0540	2022 Dec 8 23:30:28	ONEWEBN	UK	590	599	86.52	In Earth orbit
S54646	2022-166E	OneWeb SL0542	2022 Dec 8 23:57:26	ONEWEBN	UK	582	598	86.52	In Earth orbit
S54647	2022-166F	OneWeb SL0545	2022 Dec 8 23:28:21	ONEWEBN	UK	591	599	86.52	In Earth orbit
S54648	2022-166G	OneWeb SL0580	2022 Dec 9 00:01:00	ONEWEBN	UK	583	598	86.52	In Earth orbit

S54649	2022-166H	OneWeb SL0582	2022 Dec 8 23:47:39	ONEWEBN	UK	587	599	86.52	In Earth orbit
S54650	2022-166J	OneWeb SL0583	2022 Dec 8 23:42:08	ONEWEBN	UK	586	599	86.52	In Earth orbit
S54651	2022-166K	OneWeb SL0584	2022 Dec 8 23:45:16	ONEWEBN	UK	587	599	86.52	In Earth orbit
S54652	2022-166L	OneWeb SL0585	2022 Dec 8 23:42:08	ONEWEBN	UK	588	599	86.52	In Earth orbit
S54653	2022-166M	OneWeb SL0586	2022 Dec 8 23:42:21	ONEWEBN	UK	590	599	86.51	In Earth orbit
S54654	2022-166N	OneWeb SL0587	2022 Dec 8 23:47:39	ONEWEBN	UK	587	599	86.52	In Earth orbit
S54655	2022-166P	OneWeb SL0589	2022 Dec 8 23:58:53	ONEWEBN	UK	583	598	86.52	In Earth orbit
S54656	2022-166Q	OneWeb SL0590	2022 Dec 9 00:02:25	ONEWEBN	UK	583	598	86.51	In Earth orbit
S54657	2022-166R	OneWeb SL0591	2022 Dec 9 00:03:04	ONEWEBN	UK	583	598	86.52	In Earth orbit
S54658	2022-166S	OneWeb SL0592	2022 Dec 8 23:28:53	ONEWEBN	UK	590	599	86.52	In Earth orbit
S54659	2022-166T	OneWeb SL0593	2022 Dec 8 23:47:00	ONEWEBN	UK	586	599	86.52	In Earth orbit
S54660	2022-166U	OneWeb SL0594	2022 Dec 8 23:57:26	ONEWEBN	UK	584	599	86.52	In Earth orbit
S54661	2022-166V	OneWeb SL0595	2022 Dec 8 23:45:48	ONEWEBN	UK	584	599	86.52	In Earth orbit
S54662	2022-166W	OneWeb SL0596	2022 Dec 8 23:45:48	ONEWEBN	UK	587	599	86.52	In Earth orbit
S54663	2022-166X	OneWeb SL0597	2022 Dec 9 00:03:04	ONEWEBN	UK	583	598	86.52	In Earth orbit
S54664	2022-166Y	OneWeb SL0600	2022 Dec 9 00:00:06	ONEWEBN	UK	584	599	86.52	In Earth orbit
S54665	2022-166Z	OneWeb SL0601	2022 Dec 9 00:02:25	ONEWEBN	UK	583	598	86.52	In Earth orbit
S54666	2022-166AA	OneWeb SL0602	2022 Dec 9 00:00:06	ONEWEBN	UK	584	599	86.52	In Earth orbit
S54667	2022-166AB	OneWeb SL0603	2022 Dec 8 23:27:00	ONEWEBN	UK	589	599	86.52	In Earth orbit
S54668	2022-166AC	OneWeb SL0604	2022 Dec 8 23:32:14	ONEWEBN	UK	590	599	86.52	In Earth orbit
S54669	2022-166AD	OneWeb SL0605	2022 Dec 8 23:26:36	ONEWEBN	UK	591	599	86.52	In Earth orbit
S54670	2022-166AE	OneWeb SL0606	2022 Dec 8 23:28:53	ONEWEBN	UK	590	599	86.52	In Earth orbit
S54671	2022-166AF	OneWeb SL0607	2022 Dec 8 23:32:14	ONEWEBN	UK	590	599	86.51	In Earth orbit
S54672	2022-166AG	OneWeb SL0608	2022 Dec 8 23:58:28	ONEWEBN	UK	584	599	86.52	In Earth orbit
S54673	2022-166AH	OneWeb SL0610	2022 Dec 8 23:28:00	ONEWEBN	UK	590	599	86.51	In Earth orbit
S54674	2022-166AJ	OneWeb SL0611	2022 Dec 8 23:43:28	ONEWEBN	UK	586	599	86.52	In Earth orbit
S54675	2022-166AK	OneWeb SL0612	2022 Dec 8 23:30:28	ONEWEBN	UK	590	599	86.51	In Earth orbit
S54676	2022-166AL	OneWeb SL0615	2022 Dec 8 23:45:16	ONEWEBN	UK	587	599	86.52	In Earth orbit
S54677	2022-166AM	OneWeb SL0655	2022 Dec 8 23:43:28	ONEWEBN	UK	586	599	86.52	In Earth orbit
S54678	2022-166AN	OneWeb SL0659	2022 Dec 8 23:47:00	ONEWEBN	UK	587	599	86.52	In Earth orbit
S54679	2022-166AP	OneWeb SL0685	2022 Dec 8 23:28:00	ONEWEBN	UK	591	599	86.52	In Earth orbit
S54680	2022-166AQ	OneWeb SL0712	2022 Dec 8 23:58:53	ONEWEBN	UK	584	599	86.52	In Earth orbit
S54681	2022-166AR	OneWeb SL0714	2022 Dec 9 00:01:00	ONEWEBN	UK	583	598	86.51	In Earth orbit
S54682	2022-167A ?	TianTu Dongpo 08	2022 Dec 9 06:50:00	CGS/AT/MEIHUA	UK	531	549	97.54	In Earth orbit
S54683	2022-167B ?	Fengtai Shaonian 2	2022 Dec 9 06:50:00	CAMISAT	CN	527	547	97.53	In Earth orbit
S54684	2022-167C ?	Jilin-1 Gaofen 03D-47	2022 Dec 9 06:50:00	CGSTL	CN	529	546	97.54	In Earth orbit
S54685	2022-167D ?	Jilin-1 Gaofen 03D-48	2022 Dec 9 06:50:00	CGSTL	CN	529	546	97.54	In Earth orbit
S54686	2022-167E ?	Jilin-1 Gaofen 03D-48	2022 Dec 9 06:50:00	CGSTL	CN	529	546	97.54	In Earth orbit
S54687	2022-167F ?	Jilin-1 Gaofen 03D-49	2022 Dec 9 06:50:00	CGSTL	CN	529	546	97.54	In Earth orbit
S54688	2022-167G ?	Jilin-1 Gaofen 03D-50	2022 Dec 9 06:50:00	CGSTL	CN	527	547	97.53	In Earth orbit
S54689	2022-167H ?	Jilin-1 Pingtai 01A01	2022 Dec 9 06:50:00	CGSTL/MEIHUA	CN	528	547	97.54	In Earth orbit
S54690	2022-167I ?	TianTu Dongpo 10	2022 Dec 9 06:50:00	HKATG	CN	528	546	97.54	In Earth orbit
S54691	2022-167K ?	Jun Zijing 1-05	2022 Dec 9 06:50:00	HKATG	CN	527	547	97.54	In Earth orbit
S54692	2022-167L ?	Jun Zijing 1-06	2022 Dec 9 06:50:00	HKATG	CN	527	547	97.54	In Earth orbit
S54693	2022-167M ?	Jiaotong-5	2022 Dec 9 06:50:00	HEAD	CN	531	549	97.54	In Earth orbit
S54694	2022-167N ?	TianTu Dongpo 09	2022 Dec 9 06:50:00	CGSTL/MEIHUA	CN	304	584	97.58	In Earth orbit
S54695	2022-167P ?	Tianqi Xingzao 07	2022 Dec 9 06:50:00	GUOG	CN	526	547	97.54	In Earth orbit
S54751	2022-167Q ?	Huoju-1	2022 Dec 9 06:50:00	HUOPI	CN	528	546	97.54	In Earth orbit
S54696	2022-168A	Hakuto-R M1	2022 Dec 11 08:24:52	ISPACE	J	293	1134167	29.10	Deep Space
S54697	2022-168B	Lunar Flashlight	2022 Dec 11 08:31:22	JPL	US	293	1134167	29.10	Deep Space
S54699	2022-169A	Shiyan 20A	2022 Dec 12 08:38:00	CAST	CN	789	799	59.99	In Earth orbit
S54700	2022-169B	Shiyan 20B	2022 Dec 12 08:38:00	SAST	CN	788	798	59.99	In Earth orbit
S54741	2022-170A	Galaxy 35	2022 Dec 13 20:57:00	INTELU	US	35705	35798	0.05	In Earth orbit
S54742	2022-170B	Galaxy 36	2022 Dec 13 21:00:00	INTELU	US	35719	35788	0.02	In Earth orbit
S54743	2022-170C	Meteosat 12	2022 Dec 13 21:04:00	EUMET	EU	35785	35787	0.95	In Earth orbit
S54746	2022-171A ?	Yaogan 36 04 zu 01 xing	2022 Dec 14 18:40:00	CASC	CN	491	501	34.99	In Earth orbit
S54748	2022-171C ?	Yaogan 36 04 zu 03 xing	2022 Dec 14 18:40:00	CASC	CN	488	501	34.99	In Earth orbit
S54750	2022-171E ?	Yaogan 36 04 zu 02 xing	2022 Dec 14 18:40:00	CASC	CN	490	502	35.00	In Earth orbit
S54752	2022-172A	Shiyan 21	2022 Dec 16 06:32:00	CNES/JPL	CN	473	492	36.00	In Earth orbit
S54754	2022-173A	SWOT	2022 Dec 16 12:39:15	NASA	F	855	861	77.60	In Earth orbit
S54755	2022-174A	O3b mpPOWER F1	2022 Dec 17 00:41:19	O3BS	UK	3422	7276	8.05	In Earth orbit
S54756	2022-174B	O3b mpPOWER F2	2022 Dec 17 00:48:19	O3BS	UK	6991	9.62	In Earth orbit	
S54758	2022-175A	Starlink-5464	2022 Dec 17 21:47:57	SPXS	US	231	336	53.22	In Earth orbit
S54759	2022-175B	Starlink-5215	2022 Dec 17 21:47:57	SPXS	US	231	336	53.22	In Earth orbit
S54760	2022-175C	Starlink-5220	2022 Dec 17 21:47:57	SPXS	US	231	336	53.22	In Earth orbit
S54761	2022-175D	Starlink-5202	2022 Dec 17 21:47:57	SPXS	US	231	336	53.22	In Earth orbit
S54762	2022-175E	Starlink-5214	2022 Dec 17 21:47:57	SPXS	US	231	336	53.22	In Earth orbit

S54763	2022-175F	Stairlink 5191	SPXS	US	231	336	53.22	In Earth orbit
S54764	2022-175G	Stairlink 5458	SPXS	US	231	336	53.22	In Earth orbit
S54765	2022-175H	Stairlink 5466	SPXS	US	231	336	53.22	In Earth orbit
S54766	2022-175I	Stairlink 5471	SPXS	US	231	336	53.22	In Earth orbit
S54767	2022-175K	Stairlink 5472	SPXS	US	231	336	53.22	In Earth orbit
S54768	2022-175L	Stairlink 5444	SPXS	US	231	336	53.22	In Earth orbit
S54769	2022-175M	Stairlink 5404	SPXS	US	231	336	53.22	In Earth orbit
S54770	2022-175N	Stairlink 5448	SPXS	US	231	336	53.22	In Earth orbit
S54771	2022-175P	Stairlink 5451	SPXS	US	231	336	53.22	In Earth orbit
S54772	2022-175Q	Stairlink 5452	SPXS	US	231	336	53.22	In Earth orbit
S54773	2022-175R	Stairlink 5453	SPXS	US	231	336	53.22	In Earth orbit
S54774	2022-175S	Stairlink 5454	SPXS	US	231	336	53.22	In Earth orbit
S54775	2022-175T	Stairlink 5465	SPXS	US	231	336	53.22	In Earth orbit
S54776	2022-175U	Stairlink 5470	SPXS	US	231	336	53.22	In Earth orbit
S54777	2022-175V	Stairlink 5468	SPXS	US	231	336	53.22	In Earth orbit
S54778	2022-175W	Stairlink 5450	SPXS	US	231	335	53.22	In Earth orbit
S54779	2022-175X	Stairlink 5447	SPXS	US	231	335	53.22	In Earth orbit
S54780	2022-175Y	Stairlink 5449	SPXS	US	231	335	53.22	In Earth orbit
S54781	2022-175Z	Stairlink 5443	SPXS	US	231	335	53.22	In Earth orbit
S54782	2022-175AA	Stairlink 5437	SPXS	US	231	335	53.22	In Earth orbit
S54783	2022-175AB	Stairlink 5439	SPXS	US	231	335	53.22	In Earth orbit
S54784	2022-175AC	Stairlink 5442	SPXS	US	231	335	53.22	In Earth orbit
S54785	2022-175AD	Stairlink 5440	SPXS	US	231	335	53.22	In Earth orbit
S54786	2022-175AE	Stairlink 5438	SPXS	US	231	335	53.22	In Earth orbit
S54787	2022-175AF	Stairlink 5441	SPXS	US	231	335	53.22	In Earth orbit
S54788	2022-175AG	Stairlink 5399	SPXS	US	231	335	53.22	In Earth orbit
S54789	2022-175AH	Stairlink 5446	SPXS	US	231	335	53.22	In Earth orbit
S54790	2022-175AJ	Stairlink 5445	SPXS	US	231	335	53.22	In Earth orbit
S54791	2022-175AK	Stairlink 5425	SPXS	US	231	335	53.22	In Earth orbit
S54792	2022-175AL	Stairlink 5431	SPXS	US	231	335	53.22	In Earth orbit
S54793	2022-175AM	Stairlink 5433	SPXS	US	231	335	53.22	In Earth orbit
S54794	2022-175AN	Stairlink 5392	SPXS	US	231	335	53.22	In Earth orbit
S54795	2022-175AP	Stairlink 5436	SPXS	US	231	335	53.22	In Earth orbit
S54796	2022-175AQ	Stairlink 5415	SPXS	US	231	335	53.22	In Earth orbit
S54797	2022-175AR	Stairlink 5435	SPXS	US	231	335	53.22	In Earth orbit
S54798	2022-175AS	Stairlink 5420	SPXS	US	231	335	53.22	In Earth orbit
S54799	2022-175AT	Stairlink 5421	SPXS	US	231	335	53.22	In Earth orbit
S54800	2022-175AU	Stairlink 5428	SPXS	US	231	335	53.22	In Earth orbit
S54801	2022-175AV	Stairlink 5429	SPXS	US	231	335	53.22	In Earth orbit
S54802	2022-175AW	Stairlink 5426	SPXS	US	231	335	53.22	In Earth orbit
S54803	2022-175AX	Stairlink 5430	SPXS	US	231	335	53.22	In Earth orbit
S54804	2022-175AY	Stairlink 5422	SPXS	US	231	335	53.22	In Earth orbit
S54805	2022-175AZ	Stairlink 5417	SPXS	US	231	335	53.22	In Earth orbit
S54806	2022-175BA	Stairlink 5412	SPXS	US	231	335	53.22	In Earth orbit
S54807	2022-175BB	Stairlink 5410	SPXS	US	231	335	53.22	In Earth orbit
S54808	2022-175BC	Stairlink 5413	SPXS	US	231	335	53.22	In Earth orbit
S54809	2022-175BD	Stairlink 5414	SPXS	US	231	335	53.22	In Earth orbit
S54810	2022-175BE	Stairlink 5408	SPXS	US	231	335	53.22	In Earth orbit
S54811	2022-175BF	Stairlink 5424	SPXS	US	231	335	53.22	In Earth orbit
S54818	2022-176A	Gao Fen 11-04	YVZB	CN	245	695	97.77	In Earth orbit
S54820	2022-177A	Stairlink 5382	SPXS	US	212	336	43.00	In Earth orbit
S54821	2022-177B	Stairlink 5385	SPXS	US	212	334	43.00	In Earth orbit
S54822	2022-177C	Stairlink 5101	SPXS	US	212	334	43.00	In Earth orbit
S54823	2022-177D	Stairlink 5106	SPXS	US	211	334	43.00	In Earth orbit
S54824	2022-177E	Stairlink 4643	SPXS	US	212	336	43.00	In Earth orbit
S54825	2022-177F	Stairlink 4801	SPXS	US	212	334	43.00	In Earth orbit
S54826	2022-177G	Stairlink 5107	SPXS	US	212	334	43.00	In Earth orbit
S54827	2022-177H	Stairlink 5383	SPXS	US	211	334	43.00	In Earth orbit
S54828	2022-177I	Stairlink 5381	SPXS	US	212	336	43.00	In Earth orbit
S54829	2022-177K	Stairlink 5380	SPXS	US	212	334	43.00	In Earth orbit
S54830	2022-177L	Stairlink 5394	SPXS	US	211	334	43.00	In Earth orbit
S54831	2022-177M	Stairlink 5395	SPXS	US	212	334	43.00	In Earth orbit
S54832	2022-177N	Stairlink 5393	SPXS	US	211	334	43.00	In Earth orbit
S54833	2022-177P	Stairlink 5391	SPXS	US	212	334	43.00	In Earth orbit
S54834	2022-177Q	Stairlink 5386	SPXS	US	211	334	43.00	In Earth orbit
S54835	2022-177R	Stairlink 5389	SPXS	US	211	334	43.00	In Earth orbit

S54836	2022-177S	Starlink 5384	SPXS	US	211	334	43.00	In Earth orbit
S54837	2022-177I	Starlink 5369	SPXS	US	211	334	43.00	In Earth orbit
S54838	2022-177U	Starlink 5372	SPXS	US	212	335	43.00	In Earth orbit
S54839	2022-177V	Starlink 5110	SPXS	US	212	335	43.00	In Earth orbit
S54840	2022-177W	Starlink 5368	SPXS	US	211	334	43.00	In Earth orbit
S54841	2022-177X	Starlink 4659	SPXS	US	212	335	43.00	In Earth orbit
S54842	2022-177Y	Starlink 5387	SPXS	US	211	334	43.00	In Earth orbit
S54843	2022-177Z	Starlink 5304	SPXS	US	212	335	43.00	In Earth orbit
S54844	2022-177AA	Starlink 5388	SPXS	US	212	335	43.00	In Earth orbit
S54845	2022-177AB	Starlink 5082	SPXS	US	211	334	43.00	In Earth orbit
S54846	2022-177AC	Starlink 5360	SPXS	US	212	335	43.00	In Earth orbit
S54847	2022-177AD	Starlink 5061	SPXS	US	212	335	43.00	In Earth orbit
S54848	2022-177AE	Starlink 5432	SPXS	US	212	335	43.00	In Earth orbit
S54849	2022-177AF	Starlink 5434	SPXS	US	211	334	43.00	In Earth orbit
S54850	2022-177AG	Starlink 5087	SPXS	US	212	335	43.00	In Earth orbit
S54851	2022-177AH	Starlink 5084	SPXS	US	212	335	43.00	In Earth orbit
S54852	2022-177AJ	Starlink 5418	SPXS	US	211	334	43.00	In Earth orbit
S54853	2022-177AK	Starlink 5427	SPXS	US	212	335	43.00	In Earth orbit
S54854	2022-177AL	Starlink 5419	SPXS	US	211	334	43.00	In Earth orbit
S54855	2022-177AM	Starlink 5416	SPXS	US	212	335	43.00	In Earth orbit
S54856	2022-177AN	Starlink 5086	SPXS	US	211	334	43.00	In Earth orbit
S54857	2022-177AP	Starlink 5078	SPXS	US	211	334	43.00	In Earth orbit
S54858	2022-177AQ	Starlink 5407	SPXS	US	212	335	43.00	In Earth orbit
S54859	2022-177AR	Starlink 5409	SPXS	US	212	335	43.00	In Earth orbit
S54860	2022-177AS	Starlink 5406	SPXS	US	211	334	43.00	In Earth orbit
S54861	2022-177AT	Starlink 5400	SPXS	US	212	335	43.00	In Earth orbit
S54862	2022-177AU	Starlink 5403	SPXS	US	212	335	43.00	In Earth orbit
S54863	2022-177AV	Starlink 5405	SPXS	US	211	334	43.00	In Earth orbit
S54864	2022-177AW	Starlink 5359	SPXS	US	212	335	43.00	In Earth orbit
S54865	2022-177AX	Starlink 5411	SPXS	US	211	334	43.00	In Earth orbit
S54866	2022-177AY	Starlink 5398	SPXS	US	211	334	43.00	In Earth orbit
S54867	2022-177AZ	Starlink 5396	SPXS	US	212	335	43.00	In Earth orbit
S54868	2022-177BA	Starlink 5379	SPXS	US	212	335	43.00	In Earth orbit
S54869	2022-177BB	Starlink 5402	SPXS	US	212	335	43.00	In Earth orbit
S54870	2022-177BC	Starlink 5401	SPXS	US	211	333	43.00	In Earth orbit
S54871	2022-177BD	Starlink 5397	SPXS	US	212	335	43.00	In Earth orbit
S54872	2022-177BE	Starlink 5390	SPXS	US	212	335	43.00	In Earth orbit
S54873	2022-177BF	Starlink 5091	SPXS	US	211	333	43.00	In Earth orbit
S54878	2022-178A	Shiyan 10-02	SAST	CN	184	40096	50.99	In Earth orbit
S54880	2022-179A	EROS C3	IMAGT	IL	484	502	139.36	In Earth orbit
S52983	2022-065H	Dummy Cubesat	KARI	KR	694	704	98.00	In Earth orbit

Payloads not included in annual statistics