

Comparison Table of Space Networks and Satellites as of the beginning of 2017

Just as in the past year, the main reason for setting up this table is the fact that space communications require space radio stations as software and satellites as hardware. There are lists of space radio stations and other lists of satellites but we failed to find a list of both.

Here we used the list of space radio stations established by the International Telecommunication Union on January 1, 2017. We used entries of class "notified" because these refer to notification in the Master International Frequency Register which provides international recognition and protection against harmful interference. The total number of Space Networks is 1110, only 9 more than in the year 2016.

For "satellites" we used only objects whose Two-Lines Orbital Positions were published. Positions of satellites providing governmental services usually become known later in the year in the Classification of Geosynchronous Orbits published yearly by the ESA Operation Center in Darmstadt, Germany. We decided not to include those satellites because almost all of them are situated at inclined orbits and thus cannot be received by fixed satellite antennas.

The left-hand side of the Table lists the Nominal Longitude, the abbreviation of the relevant administration and the name of the Space Network. The right-hand side of the Table contains the COSPAR International Designation, the name of the satellite and its longitude on or around January 16, 2017. There are more space networks than satellites. Data on a satellite have to be put into the compartment of nearest Nominal Longitude but in many cases it was impossible to find the correct line within the compartment.

A certain number of space networks at a Nominal Longitude has at - or near - its orbital position satellites of a different administration. Whether or not both administrations had an agreement of operating the relevant space networks is a fact which may be known to the administrations only. If such an agreement was absent, no operation of the network was possible. If there is no satellite in - or near - a nominal longitude, no operation of space networks at that position is possible. If an interested reader compares the situation at different years, he may find that some nominal longitudes were out of operation for longer times than the 3 years permitted by the ITU rules adopted at a conference held in 2012.

Comparison Table of Space Networks and Satellites

Version of 07 Feb 2017

SPACE NETWORKS - NOTIFIED			SATELLITES IN THE GEOSTATIONARY ORBIT		
Nom. Long.	Adm	Space Network Name Org	COSPAR Int. Designation	Satellite Name	Longitude Remark
0.00 E	F/ESA USA	MSG USCID-A1	2012-035B	MSG 3 (Meteosat 10)	0.4 E
1.00 E	RUS RUS RUS RUS	VOLNA-21 GALS-15 TOR-15M STATSIONAR-22			
2.00 E	HOL	NSS-20			
3.00 E	F F F F F	TELECOM-2C TELECOM 3C VIDEOSAT-8-KU-C F-SAT-B1-E-3E. B1 GEOSAT-3E	2010-037B 2014-030A	Rascom-QAF 1R Eutelsat 3B	3.0 E 3.0 E
3.50 E	D/EUM	MSG 3.5E			
4.00 E	USA USA	MILSTAR 13 USGAE-2			
4.80 E	S	SIRIUS-2	2007-057A	Sirius 4, Astra 4A	4.8 E
5.00 E	USA S S S/NOT S S LUX	USMB-5 SIRIUS-3B, SIRIUS-P TELE-X SIRIUS-5E SIRIUS-5E-2 LUX-G3-2	2012-036A	SES-5	4 90 E
5.50 E	CTI/RAS	RASCOM-C			
6.00 E	G G G	SKYNET-4B SKYNET-4K SKYNET-5C	1999-009B	Skynet 4E	6 09 E
7.00 E	F/EUT USA F/EUT F/EUT F/EUT F F/EUT F	EUTELSAT 2-7E USMB-6 EUTELSAT 3-7E EUTELSAT-KA-7E EUTELSAT-B1-7E F-SAT-KU2-E-7E EUTELSAT 1-3 F-SAT-KA-E-7E	2004-008A 2013-022A	Eutelsat 7A Eutelsat 7B	7 0 E 7 0 E
8.00 E	RUS RUS RUS RUS	VOLNA-15 STATSIONAR-18 GALS-7 TOR-8M			
8.50 E	USA	USGON-2			
9.00 E	F F	F-SAT-KA-E-9E EDRS-1	2016-005A 2010-069A	Eutelsat 9B Eutelsat KA-SAT 9A	9 0 E 8 9 E
9.50 E	D/EUM	MTG-D1 9.5E	2005-049B	Meteosat-9 (MSG-2)	9.2 E
10.00 E	F/EUT F/EUT F/ESA BEL F F F F	EUTELSAT 2-10E EUTELSAT 3-10E MSG-S1 SATCOM-4/10E 3GSAT-G17R F-SAT-C-E-10E F-SAT-KU2-E-10E F-SAT-S-E-10E	2009-016A 2014-058A	Eutelsat 10A Luch (Olymp)	10.0 E 9.8 E
11.80 E	I	SICRAL-3H	2012-040A	Tianlia 1-03	10.6 E
12.00 E	RUS RUS RUS RUS RUS	PROGNOZ-2 TOR-18M GALS-17 STATSIONAR-27 VOLNA-27			

13.00 E	F/EUT F/EUT F/EUT D D RUS F	EUTELSAT 2-13E EUTELSAT 3-13E EUTELSAT-B1-13E GENESIS-8 GENESIS-11 ENSAT-13E F-SAT-KU2-E-13E	2008-065A 2006-032A 2006-007B 2010-021B	Eutelsat Hot Bird 13C Eutelsat Hot Bird 13B Eutelsat Hot Bird 13E COMSAT Bw 2	13.0 E 12.9 E 13.0 E 13.1 E
14.00 E	RUS	TOR-12M			
14.50 E	RUS	ENSAT-14E	2000-019A	Eutelsat 16C	14.4 E
15.00 E	RUS RUS RUS	GALS-12 VOLNA-23 STATSIONAR-23			
16.00 E	F/EUT F/EUT F F/EUT F/EUT	EUTELSAT 2-16E EUTELSAT 3-16E F-SAT-KU2-E-16E EUTELSAT-KA-16E EUTELSAT-B1-16E	2011-057A	Eutelsat 16A	15.9 E
16.20 E	I I	SICRAL-2A SICRAL-3A			
16.80 E	CHN	CTDRS-2-16.8E			
17.00 E	RUS/IK RUS/IK	INTERSPUTNIK-17E INTERSPUTNIK-17E-CK			
18.00 E			2008-011A	AMC-14	17 90 E
19.00 E	LUX	LUX-KA-19E			
19.20 E	LUX LUX LUX LUX	GDL-7 GDL-6 LUX-G3-19.2E LUX-G6-5	2008-057A 2006-012A 2011-041A 2007-016A 2000-005A	Astra 1M Astra 1KR Astra 1N Astra 1L Astra 2B	19.2 E 19.2 E 19.2 E 19.2 E 19.3 E
20.00 E	ARS/ARB ARS/ARB	ARABSAT 2-C ARABSAT 5C-20E	2011-049B	Arabsat-5C	20.1 E
20.40 E	CHN	CTDRS-2-20.4E			
21.00 E	USA	AFRIBSS	1998-063A	Afristar	21.0 E
21.50 E	G F/EUT G F/EUT G F/EUT	ARTEMIS-21.5E-DR EUTELSAT 2-21.5E ARTEMIS-21.5E-LM EUTELSAT 3-21.5E ARTEMIS-21.5-NAV EUTELSAT 1-5	2012-062B	Eutelsat 21B	21.6 E
21.80 E	I	SICRAL-4-21.8E			
23.00 E	RUS RUS RUS RUS	VOLNA-17 GALS-8 STATSIONAR-19 ENSAT-23E			
23.50 E	D D LUX	DFS II-1 DFS-1 LUX-G3-24.2E	2010-021A	Astra 3B	23.4 E
24.00 E	RUS	TOR-7M			
24.20 E	LUX	LUX-24.2E			
25.00 E	G G G G	INMARSAT-3 IOR WEST INMARSAT-4 25E INMARSAT-4A 25E ESAT-1 INMARSAT-XL1	2007-056B 2013-038A	Skynet 5B Alphasat	25.1 E 24.8 E
25.50 E	F/EUT F/EUT F	EUTELSAT 1-8 EUTELSAT 3-25.5E F-SAT-KU3-E-25.5E	2013-044A	Eutelsat 25B	25.5 E
26.00 E	IRN ARS/ARB ARS/ARB ARS/ARB ARS/ARB ARS/ARB ARS/ARB	ZOHREH-2 ARABSAT 2-B ARABSAT 1-B ARABSAT-EXT-C2 ARABSAT-KA-26E ARABSAT 5B-26E ARABSAT-KU-26E	2010-025A 2006-051A 2008-034B 2015-065B	Badr 5 Badr 4 Badr 6 Badr 7 (Arabsat-6B)	26.0 E 25.9 E 25.9 E 26.0 E
28.20 E	LUX LUX	LUX-28.2E LUX-G3-28.2E	2012-051A 2014-089A	Astra 2F Astra 2G	28.2 E 28.2 E
28.5 E	D D	DFS II-2 DFS-2	2013-056A	Astra 2E	28.5 E
29.00 E	USA E	FLTSATCOM-C INDOC-1 SECOMSAT B29E	2005-005A	XTAR-EUR	29.0 E

30.00 E	USA	USGAE-16R			
30.50 E	ARS/ARB	ARABSAT 2-A	2010-032B	Arabsat 5A	30.5 E
	ARS/ARB	ARABSAT 5A-30.5E			
	ARS/ARB	ARABSAT KA-30.5E			
31.00 E	TUR	TURKSAT-31E-A	2003-043A	Eutelsat 33A	30.8 E
	LUX	LUX-G3-4			
	TUR	TURKSAT-1B	2012-043B	Hylas 2	31.1 E
	TUR	TURKSAT-K1			
	TUR	TURKSAT-2B,			
	G	UKMMSAT-B1-TTC-C			
	G	UKJKSAT-1			
31.50 E	LUX	LUX-G6-9	2014-011B	Astra 5B	31.5 E
33.00 E	USA	USASAT-55I	2016-015A	IRNSS-1F	32.6 E
	USA	USASAT-60N			
	F/EUT	EUTELSAT 2-33E	2001-011A	Eutelsat 33C	33.2 E
	F/EUT	EUTELSAT 3-33E			33.0 E
	F/EUT	EUTELSAT-KA-33E	2009-B08B	Eutelsat 33E	33.0 E
	F	F-SAT-KU3-E-33E			
	USA	USMB-7			
	USA	INTELSAT5 33E	1990-079A	Skynet 4C	33.5 E
	USA	INTELSAT7 33E			
	USA	INTELSAT8 33E			
	USA	INTELSAT9 33E	2011-016A	Intelsat New Dawn	32.8 E
34.50 E	ARS/ARB	ARABSAT 6E-34.5E			
35.00 E	RUS	PROGNOZ-3			
	RUS	STATSIONAR-D3			
	RUS	TOR-2M			
	RUS	STATSIONAR-2			
	RUS	GALS-6			
	RUS	VOLNA-11			
36.00 E	RUS	RST-1	2015-082A	Express-AMU1	36.1 E
	F/EUT	EUTELSAT 2-36E	2009-065A	Eutelsat 36B	35.8 E
	F/EUT	EUTELSAT 3-36E			
	F	F-SAT-KU3-E-36E			
	F/EUT	EUTELSAT-KA-36E			
37.00 E	I	SICRAL-4-37E			
38.00 E	PAK	PAKSAT-1	2006-059A	Kiku-8 (ETS-VIII)	38.5 E
	PAK	PAKSAT-1R1	2011-042A	PakSat-1R	37.9 E
	PAK	PAKSAT-1R	2014-006B	Athena-Fidus	37.8 E
	F	HELLAS-SAT			
39.00 E	GRC	HELLASAT 2G	2003-020A	Hellas Sat 2	39.0 E
	CYP	KYPROS-SAT-C			
	CYP	KYPROS-SAT-L4			
39.50 E	G	DJCF-1A			
40.00 E	RUS	EXPRESS-4,	2015-012A	Express-AM7	40.0 E
	RUS	EXPRESS-4B,			
	RUS	VOLNA 4R,			
42.00 E	TUR	TURKSAT 1D	2008-030B	Turksat 3A	41.9 E
	TUR	TURKSAT-K2			
	TUR	TURKSAT-KX	2011-077A	NigComSat-1R	42.6 E
	TUR	TURKSAT-1A	2014- 007A	Turksat 4A	42.0 E
	TUR	TURKSAT-42E-A			
	TUR	TURKSAT-42E-B	2002-040B	Meteosat-8 (MSG-1)	41.3 E
44.00 E	USA	USGGR-4	1999-033A	Astra 1H	43.5 E
	USA	USCSID-A2			
	UAE	EMARSAT-1E	2003-026A	Thuraya 2	43.9 E
	UAE	EMARSAT-4F			
	UAE	EMARSAT-1F/M			
44.50 E	ARS/ARB	ARABSAT 7F-44.5E.	2009-021A	Astra 1F	44.3 E

45.00 E	RUS RUS D D RUS RUS RUS RUS	STATSIONAR-D4 VOLNA-3 EUROPE*STAR-1, EUROPESTAR-45E . STATSIONAR-9 STATSIONAR-9A GALS-2 TOR-3	2000-068A 1999-071A	Intelsat12 Galaxy 11	45.0 E 45.0 E
46.00 E	G MLA MLA	DJCF-1B MEASAT-46E-R MEASAT-46E.	2013-006B	Azerspace 1	46.0 E
47.00 E	F F F	SYRACUSE-3H SYRACUSE-31H SYRACUSE-4H	2005-041B 1994-055A	Syracuse 3A Optus B3	47.0 E 46.7 E
47.50 E	D D	EUROPE*STAR-3, EUROPESTAR-47.5 .	2001-019A	Intelsat 10,	47.5 E
48.00 E	IND IND IND IND IND	INSAT-2T(48) INSAT-2(48) INSAT-EK48 INSAT -2M(48) INSAT-EK48R	2012-016A 1996-067A 2008-065B	Yahsat 1B Eutelsat 48A Eutelsat 48D	47.6 E 48.1 E 48.1 E
49.00 E	USA RUS RUS RUS RUS RUS RUS	USMB-8 TOR-16M ROSCOM-4 YAMAL-49E GALS-13 VOLNA-25 STATSIONAR-24	2003-053A	Yamal 202	49.0 E
50.00 E	TUR TUR TUR TUR TUR	TURKSAT-1C TURKSAT-K3 . TURKSAT-C50E, TURKSAT-50E-B, TURKSAT-50E-A,	2015-060A	Turksat 4B	50.0 E
50.50 E	THA THA	THAICOM-C1 THAICOM-N1	1997-053A	NSS-5	50.5 E
51.50 E	CHN CHN	CHINASAT-51.5E CHINASAT-ROUTE-1	2016-001A	Belintersat 1	51.4 E
52.50 E	UAE UAE UAE	EMARSAT-1G EMARSAT-5G YAHSAT	2015-023A 2011-016B	Turkmenalem52E/Monacosat Yahsat 1A	52.0 E 52.5 E
53.00 E	RUS G G G RUS RUS RUS	VOLNA-4 SKYNET-4C SKYNET-4L SKYNET-5D EXPRESS-5B EXPRESS-5KA EXPRESS-5	2012-075A 2014-064A	Skynet 5D Express-AM6	52.7E 53.0 E
55.00 E	RUS IND IND USA RUS RUS IND IND IND IND RUS	KUPON-1 INSAT-2(55), INSAT-2T(55) MILSTAR 4 KUPON-1T KUPON-1S INSAT-EK55R INSAT-EK55, . INSAT-KU10(55)E INSAT-TTC(55)E INSAT-NAV(55) KUPON-1M	2012-070A 2014-078A 2011-022A	Yamal 402 GSAT 16 GSat-8	54.9 E 55.0 E 55.1 E
56.00 E	RUS	RST-2	2014-010A	Ekspress AT-1	56.0 E
57.00 E	HOL HOL HOL USA USA HOL HOL	INTELSAT5A INDOC2 INTELSAT8 57E INTELSAT7 57E USGCSS PH3 INDOC-2 USGCSS PH3B INDOC-2 NSS-8 NSS-36	2009-058A 2000-008A	NSS 12 Astra 2D	57.0 E 57.2 E
57.50 E	D/EUM	METEOSAT IODC 57.5E	1997-049B	Meteosat 7	57.8 E
58.00 E	RUS	TOR-13M			

58.50 E	KAZ KAZ	KAZSAT1 KAZSAT1M	2014-023 B	Kazsat 3	58.5 E
58.75 E	CHN	COMPASS-58.75E	2012-008A	Beidou G5	58.7 E
60.00 E	USA USA USA USA USA USA UAE	USGCSS PH3 INDOC USGCSS PH3B- INDOC USGOVSAT-10 INTELSAT6 60E INTELSAT8 60E INTELSAT9 60E YAHSAT-60E	2001-025A 2007-037A 2002-007A	Astra 2C Insat 4CR Intelsat 904	60.3 E 60.4 E 60.0 E
			2004-007A	ABS-4 (Mobisat-1)	61.0 E
62.00 E	USA USA USA USA	INTELSAT7 62E USMB-9 INTELSAT8 62E INTELSAT6 62E INTELSAT9 62E	2013-073A 2001-039A	Inmarsat 5 F1 Intelsat 902	62.6 E 62.0 E
63.00 E	D UAE	GENESIS-9 YAHSAT-63E	2009-054B 1997-076A	COMSATBw-1 Astra 1G	63.0 E 62.7 E
64.00 E	G G PNG USA USA USA	INMARSAT 3 IOR-1 INMARSAT GSO-2N NEW DAWN 23 INTELSAT9 64E INTELSAT8 64E INTELSAT7 64E	2005-044A 2002-041A 1997-007A	Inmarsat 4-F2 Intelsat 906 Intelsat 26	63.9 E 64.2 E 64.3 E
64.50 E			1996-020A	Inmarsat 3-F1,	64.4 E
65.00 E	ISR	AMS-4-65E	2013-045A	Amos-4	65.0 E
66.00 E	USA USA	INTELSAT9 66E INTELSAT7 66E	2010-065B	Intelsat 17	66.0 E
67.25 E	ISR	AMS-4-67.25E			
68.50 E	USA USA USA	USASAT-14I-3 USASAT-60C, USASAT-14I,	2012-043A 2016-053A	Intelsat 20 Intelsat 36	68.5 E 68.5 E
69.00 E	RUS RUS	TOR-14M GALS-14			
70.00 E	RUS USA USA RUS RUS RUS TON	VOLNA-19 USGON-1 USTRO-6 STATSIONAR-20 GALS-16 TOR-17M TONGASAT-H70	2013-062A	Raduga-1 M3	70.0 E
70.50 E	F/EUT F/EUT F	EUTELSAT-E-70.5E EUTELSAT 3-70.5E F-SAT-KU3-E-70.5E	2012-069A	Eutelsat 70B	70.5 E
72.00 E	USA USA USA USA AUS	FLTSATCOM-C INDOC-2 USASAT-14J-2 KASATCOM-3 USASAT-14J DEF-R-SAT-2A,			
72.10 E	AUS	ADFUFH-2	2012-011A	Intelsat 22	72.1 E
74.00 E	IND IND IND IND IND IND IND IND IND IND IND	INSAT-1B INSAT-2(74) INSAT-2K(74) INSAT-2T(74) INSAT-2M(74) INSAT-EK(74) INSAT-2E(74) INSAT-TTC(74)E INSAT-KAUHF (74) INSAT-EK74R	2016-054A 2002-043A 2014-001A 2013-044B 2007-037A 2016-060A	Insat-3DR Kalpana-1 (MetSat 1) GSAT 14 GSAT 7 Insat 4CR Gsat 18	73.9 E 73.0 E 74.1 E 74.0 E 74.0 E 74.0 E 74.0 E
75.00 E	RUS/IK USA USA USA PNG RUS/IK RUS/IK	INTERBELAR-2 FLTSATCOM-C INDOC-3 USMB-10 USCSID-A3 PACIFISAT-1 INTERSPUTNIK-75E-CK INTERSPUTNIK-75E-O	2002-002A 2014-006A	Insat-3C ABS-2	75.3 E 74.9 E
76.00 E	RUS	GOMS-M	2015-074A	Elektro-L2	75.9 E
76.50 E	CHN CHN	APSTAR-4 APSTAR-76E	2012-013A	Apstar 7	76.5 E
77.00 E	RUS CHN	CSSRD-2 CTDRS-1-77E			
78.50 E	THA THA THA THA THA	THAICOM-A2 THAICOM-AK2 THAICOM-G1K THAICOM-N2 THAICOM-A2B.	2006-020B 2014-002A 2016-031A	Thaicom 5 Thaicom 6 Thaicom 8	78.4 E 78.5 E 78.5 E

79.60 E	CHN	CHINASAT-34A			
80.00 E	RUS	STATSIONAR-1			
	RUS	PROGNOZ-4	2015-075A	Cosmos 2513	80.2 E
	RUS	POTOK-2	2003-060A	Ekspress AM-22 (SESAT 2)	80.1 E
	RUS	EXPRESS-6			
	RUS	EXPRESS-6KA			
	CHN	CHINASAT-31	2008-019A	Tian Lian 1-01	79.8 E
	RUS	EXPRESS-6B			
	RUS	FOTON-2			
	CHN	COMPASS-80E			
	CHN	CTDRS-1-80E			
	RUS	VOLNA-8R			
81.75 E	RUS	YAMAL-E3	2015-073A	Chinasat 1C (ZX 1C)	81.5 E
82.00 E	USA	USMB-11			
	USA	USGGR-8	2013-038B	Insat 3D	82.1 E
	USA	USCSID-A4			
	J	N-SAT-82E	1999-006A	JCsat-4A	81.9 E
	IND	INSAT-MET82E			
	AUS	DEF-R-SAT-1A			
83.00 E	IND	INSAT-2(83)	2005-049A	Insat 4A	83.0 E
	IND	INSAT-2K (83)	2014-061A	IRNSS-1C, i=4.8	83.0 E
	IND	INSAT-2E83	2011-034A	GSat-12	82.9 E
	IND	INSAT-2M(83)	2012-051B	GSat-10	83.0 E
	IND	INSAT-TTC(83)E	2015-041A	Gsat-6	83.0 E
	IND	INSAT-EK83			
	IND	INSAT-EK83R			
84.00 E	CHN	CHINASAT-8=34B	2012-059A	Beidou G6	84.1 E
85.00 E	RUS	VOLNA-5			
	RUS	STATSIONAR-3	2010-002A	Raduga-1M2	84.9 E
	RUS	TOR-4M			
	USA	USTRO-9			
	RUS	GALS-3			
	RUS	TOR-4			
	USA	INTELSAT6 85E	2009-067A	Intelsat IS-15	85.1 E
	USA	INTELSAT KFOS 85E			
	USA	INTELSAT7 85E	2007-063B	Horizons-2	84.9 E
	USA	INTELSAT8 85E			
	USA	TDRS 85E	1995-035B	TDRS 7	84.6 E
85.40 E	RUS	STATSIONAR-D5	1997-042A	ABS-3	85.3 E
	RUS	SADKO-1			
86.50 E	CHN	FY-2B	2008-066A	FengYun 2E	86.9 E
	CHN	FY-2BS			
	KAZ	KAZSAT2	2011-035B	KazSat-2	86.5 E
	KAZ	KAZSAT2M			
	RUS	KUPOON-4M			
87.50 E	CHN	DFH-3-OC			
	CHN	DFH-3-OCM	2012-067A	Chinasat 12 (ZX 12)	87.5 E
	CHN	CHINASAT-1			
88.00 E	SNG	ST-1A			
	SNG	ST-1A-CK	2011-022B	ST-2	88.0 E
	AUS	ADF WEST-2			
	AUS	DDSP-2	2000-028A	Eutelsat 36A	88.5 E
89.00 E	USA	TDRS 89E	2000-034A	TDRS 8	89.2 E
90.00 E	RUS	VOLNA-8	2014-082A	Yamal 401	89.9 E
	RUS	STATSIONAR-6			
	RUS	EXPRESS-7C			
	USA	MILSTAR 5			
	USA	USTRO-7			
	RUS	LOUTCH-3			
	RUS	EXPRESS-7B			
	RUS	EXPRESS-7			
90.75 E	J	DRTS-90.75E	2002-042B	Kodama (DRTS)	90.7 E
	J	N-SAT-90.75E			
91.50 E	MLA	MEASAT-91.5E	2009-032A	Measat-3A	91.5 E
	MLA	MEASAT-1	2006-056A	Measat-3	91.5 E
	MLA	APSTAR-92E			
	MLA	MEASAT-1C 91.5E	2014-054B	Measat -3B	91.5 E
	MLA	MEASAT-1R	2002-062A	Nimiq 2	91.5 E
	MLA	MEASAT-AK 91.5			

92.00 E	USA USA USA USA	USMB-12 P92-8 P-197-7 USCSID-A5			
92.20 E	CHN CHN CHN CHN	CHNSAT-92.2E APSTAR-92E SINOSAT-92.2E CHINASAT-92.2E	2008-028A	Chinasat 9 (ZX 9)	92.2 E
93.00 E	AUS J J	DEF-R-SAT-3A JMCS-93E N-SAT-90.75E			
93.50 E	IND IND IND IND IND IND IND	INSAT-2(93.5) INSAT-2K(93.5) INSAT-2M(93.5) INSAT-2T(93.5) INSAT-EK93.5 INSAT-EK93.5R INSAT-TTC(93.5)E INSAT-2E93.5	2007-007A 2015-065A	Insat 4B GSAT-15	93.5 E 93.5 E
95.00 E	HOL HOL HOL HOL HOL HOL HOL RUS RUS	INTELSAT KA 95E INTELSAT8 95E INTELSAT7 95E INTELSAT5A 95E NSS-9 CSDRN-M NSS-KA41 NSS-G2-18 CSDRN	2013-071A 2007-007B 2002-057A 2014-023A	SES-8 Skynet 5A NSS 6 Luch 5V	95.0 E 95.1 E 95.0 E 94.7 E
96.50 E	RUS RUS RUS	EXPRESS-8B VOLNA-5R EXPRESS-8	2008-003A	Ekspress AM-33	96.5 E
98.00 E	RUS CHN CHN CHN CHN CHN	PROGNOZ-8 CHINASAT-22 CHINASAT-3 DFH-3A-OC CHINASAT-44 CHINASAT-64	2012-028A 2013-020A	Chinasat 2A (ZX 2A) Chinasat 11 (ZX 11)	98.2 E 97.9 E
98.20 E	CHN	CHNSAT-98E			
98.50 E	UAE	EMARSAT-4S	2008-001A	Thuraya 3	98.5 E
99.00 E	RUS RUS	STATSIONAR-T STATSIONAR-T2			
99.50 E	CHN	FYGEOSAT-99.5E			
100.00 E	USA USA	FLTSATCOM-A INDOC-4 USNN-4			
100.50 E	CHN CHN CHN CHN CHN	ASIASAT-EKZ ASIASAT-E ASIASAT-EK1 ASIASAT-EKS ASIASAT-EKX	2009-042A	Asiasat 5	100.4 E
101.50 E	CHN	CHINASAT-45	2006-038A 2016-048A	Zhongxing-22A Tiantong-1 1	101.8 E 101.4 E
103.00 E	RUS USA CHN RUS USA RUS CHN CHN CHN	STATSIONAR-21 USGON-3 STW-2 EXPRESS-9 USTRO-8 EXPRESS-9B CHINASAT-65 DFH-4-OB DFH-3-OB	2005-023A 2003-052A 2015-063A	Express-AM3 Zhongxing-20 Chinasat 2C (ZX 2C)	103.0 E 103.3 E 103.4 E
104.00 E	AUS AUS	DDSP-104E ADF WEST 5			
105.00 E	AUS CHN CHN CHN	ASIABSS FY-2A FY-2AS CHINASAT-46	2000-016A 2014-090A	AsiaStar FengYun 2G	105.0 E 104.5 E
105.50 E	CHN CHN CHN CHN CHN CHN	ASIASAT-CK-1 ASIASAT-1 ASIASAT-CKS ASIASAT-CK ASIASAT-CKX ASIASAT-CKZ, .	2011-069A 2014-046 A 2015-083A	Asiasat 7 Asiasat 8 Gaofen 4	105.5 E 105.4 E 105.7 E
106.50 E	USA	USMB-13			
108.00 E	INS INS INS	PALAPA-B1 PALAPA-B1-EC PALAPA-C2	2009-027A 1999-042A	SES-7 (Protostar 2) Telkom 1	108.2 E 108.0 E
108.20 E	G G HOL INS	AM-SAT A4 AM SAT-108.2E-G NSS-BSS 108.2E TTC INDOSTAR-110R	2000-059A	NSS-11 (AAP-1)	108.2 E
	LUX	LUX-G5-25			

109.00 E	G	INMARSAT-3 POR WEST			
109.65 E	J	TAIKI-109.65			
109.85 E	J	BSAT-109.85	2007-036B 2010-056B	BSAT-3A BSAT-3B	109.8 E 109.8 E
110.00 E	USA USA J J J J J	USGGR-11 USCSID-A6 N-SAT-110 BSAT-110 N-SAT-110E JMCS-D2-X JMCS-2	2000-060A 2011-041B	N-SAT-110 (JCSAT-110) BSat-3C (JCSAT-110R)	110.0 E 110.0 E
110.50 E	CHN CHN CHN CHN CHN	CHINASAT-6 SINOSAT-5 CHINASAT-2 DFH-3A-OB CHINASAT-33 COMPASS-110.5E	2011-026A 2010-024A	Chinasat 10 (ZX 10) Beidou G3	110.5 E 110.3 E
111.00 E	USA	USGAE-12M			
111.50 E	IND	INSAT-KU10(111.5)E	2012-002A	Fengyun 2F	111.9 E
113.00 E	INS KOR KOR KOR INS KOR INS	PALAPA-B2 KOREASAT-113E KOREASAT-2 KOREASAT-113X PALAPA-C1-K INFOSAT-B PALAPA-C1	2009-046A 2006-034A 1998-050A	Palapa D Koreasat 6 (Mugungwha 5) Astra 2 A	113.0 E 113.0 E 113.4 E
115.50 E	CHN CHN CHN CHN	DFH-4-OD CHINASAT-MSB4 DFH-3-OD CHINASAT-115.5E DFH-5-OD	2007-031A	Zhongxing 6B	115.5 E
116.00 E	KOR KOR	INFOSAT-C, KOREASAT-1	2010-070B	Koreasat 6	116.0 E
116.10 E	PNG	PACIFISAT-9	1999-046A	ABS-7	116.1 E
116.20 E	KOR	COMS-116.2E			
118.00 E	INS INS INS INS INS	PALAPA-B3EC PALAPA-B3 PALAPA-C3-K PALAPA-C3 PALAPA-B3 TT&C	2005-046A	Telkom 2	118.0 E
119.50 E	THA	THAICOM-1P1	2005-028A	Thaicom 4	119.4 E
120.00 E	THA THA THA THA CHN	THAICOM-N3., THAICOM-A3, THAICOM-A3B THAICOM-G2K ASIASAT-120V	2014-052A	Asiasat 6	119.9 E
121.00 E	CHN AUS	DFH-3-OE DEF-R-SAT-4B 121.0E			
122.00 E	CHN CHN CHN CHN CHN	ASIASAT-A ASIASAT-AK ASIASAT-AK1 ASIASAT-AKS ASIASAT-AKX	2003-014A	AsiaSat 4	122.1 E
122.20 E	CHN	ASIASAT-AKZ			
123.00 E	INS	GARUDA-2	2010-029A	Artemis	123.0 E

123.50 E	CHN CHN	FY-2C FY-2CS	2006-053A	Fengyun 2D	123.5 E
124.00 E	J J J J	JCSAT-FO-124E JCSAT-3B N-SAT-124E SJC-1	2012-023A	JCSAT-13	124.0 E
125.00 E	CHN CHN CHN CHN CHN	STW-1 DFH-3-OA DFH-4-OA CHINASAT-49 CHINASAT-MSB5 CHINAST-ROUTE8	2010-042A	Chinasat 6A (ZX 6A)	125.1 E
127.50 E	J	JCSAT-T-127.5E			
128.00 E	RUS RUS J RUS RUS J RUS RUS J	STATIONAR-D6 GALS-10 N-SAT-128 TOR-6M STATIONAR-15 JCSAT-FO-128E VOLNA -9 TOR-6 JCSAT-3A	2006-033A 2009-044A	JCSAT 3A JCSAT-RA (JCSAT-12)	128.0 E 127.9 E
128.20 E	KOR	COMS-128.2E	2010-032A 2015-067A	Coms 1 Laosat 1	128.2 E 128.5 E
130.00 E	RUS CHN RUS RUS CHN CHN CHN CHN	GALS-5 SINOSAT-3C TOR-10M PROGNOZ-5 DFH-3A-OD CHNSAT-130E CHNSAT-2-130E CHINASAT-4	2016-027A 2011-047A	IRNSS-1G Chinasat 1A (ZX 1A)	129.4 E 129.8 E
131.00 E	CHN	APSTAR-1	2010-064A	Zhongxing 20A	130.1 E
132.00 E	J J VTN J VTN J J VTN	JCSAT-FO-132E D-STAR-1 VINASAT-4A2 N-STAR-F VINASAT-TTC N-STAR-A N-STAR-A2 VINASAT-4A3	2008-010A 2008-018A 2012-023B	JCSAT- 5A Vinasat -1 Vinasat-2	132.0 E 131.9 E 131.8 E
134.00 E	TON TON TON CHN CHN	TONGASAT AP-2 TONGASAT-2/134E TONGASAT-C/KU-2 APSTAR-2 CHINASAT-134E	2005-010A	Apstar 6	133.9 E
136.00 E	J J J J J	D-STAR-2 N-STAR-B N-STAR-B2 N-STAR-E JCSAT-FO-136E	2002-015A 2002-035B	JCSAT-2A N-Star C	136.0 E 136.0 E
138.00 E	CHN CHN TON TON TON	APSTAR 5-KU CHINASAT-138E TONGASAT C/KU-3 TONGASAT 2/138E TONGASAT-AP3	2004-024A	Apstar 5 (Telstar 18)	138.0 E
140.00 E	RUS CHN CHN RUS RUS J RUS	EXPRESS-10KA CHINASAT-32 COMPASS-140E VOLNA 6 EXPRESS-10B GMS-140E EXPRESS-10	2015-054A 2010-001A 2014-010B 2013-077A	Sky Muster (NBN1A) Beidou G1 Express AT-2 Express-AM5	140.3 E 140.1 E 139.8 E 140.0 E
140.40 E	CHN	CHINASAT-33B			

140.70 E	J	HIMAWARI-8-140E	2014-060A	Himawari-8	140.7 E
142.00 E	CHN THA	APSTAR-142E THAICOM-G3K	2015-059A	Apstar 9	142.0 E
143.00 E	J	WINDS-A	2008-007A	Kizuna (Winds)	143.0 E
143.50 E	G	INMARSAT-4 143.5E	2005-009A	Inmarsat 4 F1	143.4 E
	G	INMARSAT-4A 143.5E			
	G	INMARSAT-3-POR-3	1998-065A	Intelsat 8	143.7 E
143.72 E	J	N-SAT-143.72E			
144.00 E	J	JMCS-1			
	J	N-SAT-146			
	J	JMCS-C2-X			
	J	SUPERBIRD-C2	2008-038A	Superbird C2	144.0 E
	J	JMCS-1R			
	J	SUPERBIRD-C			
144.50 E	CHN	CHINASAT-35C	2016-037A	Beidou G7	144.4 E
145.00 E	RUS	EXPRESS-11	2002-029A	Express-A4	145.4 E
	RUS	VOLNA 6R	2016-060B	Sky Muster 2	144.8 E
	USA	USGON 6			
	J	MTSAT-C-145E	2006-004A	Himawari-7 (MTSAT-2)	145.0 E
	J	MTSAT-B-145E			
146.00 E	INS	PALAPA PAC-KU 146E	1999-013A	Asiasat 3S	146.0 E
	INS	PALAPA PAC-C 146E	1998-033A	Chinasat 5A	147.1 E
	J	ETS-8			
148.00 E	MLA	MEASAT-2	1996-063B	Africasat-2 (Measat-2)	147.9 E
	MLA	MEASAT-148E			
	MLA	MEASAT-2R			
150.00 E	USA	USGCSS PH3B W PAC-3			
	J	JCSAT-1R			
	J	JCSAT-FO-150E			
	J	JCSAT-1	1997-075A	JCSAT-1B	149.9 E
150.50 E	INS	PALAPA-C4	2016-039A	Brisat	150.5 E
	INS	PALAPA-C4-A			
152.00 E	AUS	AUSSAT B 152E MOB	2007-044A	Optus D2	152.0 E
	AUS	AUSSAT B 152E MXL			
	AUS	AUSSAT B 152E			
	USA	USGAE 9R			
154.00 E	J	JCSAT-2			
	J	JCSAT-2R	2016-028A	JCSAT 2B	154.0 E
	J	N-SAT-154E			
	J	JCSA-FO-154E	2015-046A	TJS-1	154.8 E
156.00 E	AUS	AUSSAT C 156E FSS			
	AUS	AUSSAT B 156E MXL			
	AUS	AUSSAT C 156E GOV			
	AUS	ADF 156E GOV			
	AUS	AUSSAT B 156E S	2009-044B	Optus D3	156.0 E
	AUS	AUSSAT D 156E GOV	2003-028B	Optus C1	156.0 E
	AUS	AUSSAT C 156E GOVR			
157.00 E	USA	INTELSAT5A 157E	1997-046A	Intelsat 5	156.9 E
	USA	INTELSAT6 157E			
	USA	INTELSAT7 157E			
	USA	INTELSAT8 157E			
158.00 E	J	SUPERBIRD-A2,	1999-053A	ABS 6	159.0 E
	J	JMCS-3A			
	J	SUPERBIRD-A			
	J	SUPERBIRD-A2-R			
160.00 E	AUS	AUSSAT B 160E MXL	2006-043B	Optus D1	160.0 E
	AUS	AUSSAT B 160E S			
	AUS	AUSSAT D 160E FSS			
	AUS	AUSSAT B 160E			
	AUS	AUSSAT B 160E NZ			
	CHN	COMPASS-160E	2010-057A	Beidou G4	160.1 E
162.00 E	J	SUPERBIRD-B2-KA			
	J	N-SAT-162E	2016-050A	JCSAT-16	162.1 E
	J	SUPERBIRD-B			
	J	SUPERBIRD-B2	2000-001A	Superbird-B2	162.0 E
	J	SUPERBIRD-B2R			
	J	JMCS-B4-X			
	J	JMCS-3B			
163.00 E	CHN	COMPASS-163E	2016-065A	Shijian-17 (SJ-17)	163.1 E
	CHN	CHINASAT-ROUTE 15			
164.00 E	AUS	AUSSAT B 164E MOB	2014-054A	Optus 10	164.0 E
	AUS	AUSSAT B 164E MXL			
	AUS	AUSSAT B 164E			

166.00 E	USA RUS USA	USASAT-14H PROGNOZ-6 USASAT-60B	2012-030A	Intelsat 19 (IS 19)	166.0 E
167.00 E	RUS RUS CHN	VSSRD-2M VSSRD-2 CTDRS-2-167E	2011-074B	Luch-5A	166.9 E
169.00 E	USA USA	USASAT-14G USASAT-60J	1998-037A	In8telsat 805 (IS-805)	169.0 E
171.00 E	CHN	CTDRS-2-171E			
172.00 E	USA USA USA USA USA	FLTSATCOM- W PAC FLTSATCOM-C W PAC-1 KASATCOM-5 USASAT-14K USASAT-60A	2005-052A	Eutelsat 172A (GE-23)	171.9 E
175.00 E	USA USA USA	USGCSS PH3 W PAC USGCSS PH3B W PAC USGOVSAT-12			
176.80 E	CHN	CTDRS-2-176.8E	2011-032A	Tianlian 1-02	176.7 E
177.00 E	USA	INTELSAT7 177E			
177.50 E	USA USA	USGAE 4 MILSTAR 14			
178.00 E	G	INMARSAT-3 POR-2	1996-070A	Inmarsat 3-F3	178.0 E
180.00 E	USA USA USA USA	USGCSS PH3B W PAC-2 USGCSS PH3 W PAC-2 INTELSAT7 180E INTELSAT5 PAC3	2015-042A	Inmarsat 5-F3	179.6 E
177.00 W	HOL HOL USA HOL USA HOL HOL HOL HOL	INTELSAT5A 183E INTELSAT IBS 183E FLTSATCOM-C W PAC-2 INTELSAT8 183E IRIS-8A INTELSAT5 183E INTELSAT7 183E NSS-G-21 NSS-19	2011-056A 2012-061B	Intelsat 18 (IS-18) Yamal 300K	179.9 E 177.1 W
174.00 W	USA	TDRS 174 W	2009-008A	NSS 9	177.0 W
171.00 W	USA	TDRS WEST	2002-055A	TDRS 10	174.5 W
171.00 W	USA	TDRS WEST	2013-044A	TDRS 11	171.1 W
170.00 W	RUS RUS RUS RUS RUS	TOR-5M STATSIONAR-10A VOLNA-7 STATSIONAR-10 GALS-4 TOR-5			
168.00 W	RUS RUS	POTOK-3, FOTON-3			
167.50 W	USA	TDRS 167.5W	1991-054B	TDRS 5,	167.7 W
165.00 W	USA	USGON-4			
164.20 W	USA	TDRS 164.2W			
160.00 W	RUS	ESDRN			
159.00 W	RUS	PROGNOZ-7			
150.00 W	USA	USGAE-10R			
145.00 W	USA USA	FLTSATCOM-C W PAC-3 USGON-7			
144.00 W	USA USA USA USA USA	USTRO-2 USLL-PAC P92-6 P-197-2 USCSID-W2			
142.00 W	G G	INMARSAT-2 POR EAST INMARSAT-2 POR EAST			
141.00 W	USA USA USA USA USA	P 92.5 P-197-3 USLL-PAC2 USTRO-3 USCID-W1			
139.00 W	USA	USASAT-22I	2000-081B	AMC-8 (GE-8)	139.0 W
137.00 W	USA USA	USASAT-22J USASAT-22G			

135.00 W	USA USA USA USA USA USA	GOES WEST USGCSS PH3B E PAC USASAT-21A GOES-WEST-2 GOES-WEST-1 USASAT-22K USGOVSAT-3R	2004-003A 2000-054A 2010-008A	AMC-10 (GE-10) AMC 7 (GE-7) GOES 15	135.0 W 134.9 W 135.0 W
133.00 W	USA USA USA USA	USASAT-50B LM RPS-133W USASAT-22A USASAT-35Y	2005-041A	Galaxy 15 (G-15)	133.0 W
131.00 W	USA USA	USASAT-22H USASAT-35A	2004-017A	AMC-11 (GE-11)	131.0 W
130.00 W	USA USA	USGCSS PH3 E PAC-2 USGCSS PH3B E PAC-2			
129.00 W	USA CAN	USASAT-24N CAN-BSS7 TTC	1996-054A 2003-013B 2008-063A	AMC-1 (GE-1) Galaxy 12 (G-12) Ciel- 2	129.2 W 129.1 W 128.9 W
128.00 W	USA	ASC-1			
127.00 W	USA USA J USA USA	USASAT-50A USNN-3 N-SAT-127W USASAT-35C USASAT-24O	2003-044A	Galaxy 13 (Horizons-1)	127.0 W
125.00 W	USA USA G USA	USASAT-22B USASAT-35D AM-SAT 125W USASAT-50C	2005-030A 2008-038B	Galaxy 14 (G-14) AMC-21	125.0 W 124.9 W
123.00 W	USA USA USA	USASAT-24P USASAT-35E USASAT-60H	2008-024A	Galaxy 18 (G-18)	122.9 W
121.00 W	USA USA PNG	USASAT-31G USASAT-23G PACSTAR-L4	2003-034A	Galaxy 23 (G-23)	121.0 W
120.00 W	USA USA	MILSTAR 6 USGAE-6M			
119.00 W	USA USA	USABSS-10 USABSS-7	2004-016A	DirectV-7S	119.1 W
118.70 W	CAN CAN CAN CAN	ANIK E-D CANSAT KA-SX CANSAT KA-5 CANSAT-18	2007-009A 2010-010A 2002-006A	Anik F3 EchoStar 14 EchoStar 7	118.8 W 118.9 W 118.8 W
116.80 W	MEX MEX MEX	SATMEX 8 MEXSAT 116.8 KU EXT MEXSAT 116.8 L-CEXT-X	2013-012A	Eutelsat 117 West A	116.8 W
116.15 W	USA	USASAT-28N	2013-058A	Sirius FM-6	116.1 W
115.00 W	USA G	USASAT-28G IOMSAT-11A	2006-049A 2011-059A	XM-4 (Blues) ViaSat-1	115.3 W 115.2 W
114.90 W	CAN MEX MEX	CANSAT-17 MEXSAT 114.9L-CEXT-X MEXSAT 114.9 KU EXT	2015-010B 2012-075B	Eutelsat 115 West B Mexsat 3	114.9 W 114.8 W
	MEX	MEXSAT-114.9C-KU			
113.00 W	MEX MEX MEX MEX MEX	SATMEX-7 SOLIDARIDAD 2 MEXSAT 113 KU EXT MEXSAT 113L-CEXT-X SOLIDARIDAD 2MA SOLIDARIDAD 2M	2015-056A 2006-020A	Morelos 3 Eutelsat 113 West A	113.1 W 113.0 W
111.10 W	CAN CAN CAN CAN	CANSAT KA-4 ANIK E-B CANSAT-24 ANIK F-2	2006-054A 2004-027A	Wildblue-1 Anik F2	111.2 W 111.1 W
110.20 W	USA	USABSS-6			
110.00W	USA	USABSS-5	2009-035A 2006-034A 2002-023A 2008-035A 1999-059A	Terrestar-1 EchoStar 10 Directv 5 (Tempo 1) EchoStar 11 Telstar 12 (Orion 2)	110.0 W 110.2 W 110.1 W 109.9 W 109.2 W
107.30 W	USA CAN CAN CAN CAN	LM-RPS-107.3W ANIK E-A ANIK F1 CANSAT-50 CANSAT-34	1996-022A 2000-076A 2013-014A 2005-036A	MSAT M1 Anik F1 Anik G1 Anik F1R	107.6 W 107.3 W 107.4 W 107.4 W

	107.00 W	G	USASAT-14	2012-035A	Echostar 17	107.1 W
	106.50 W	CAN	MSAT			
	105.00 W	USA	FLTSATCOM-C E PAC-1	2006-054B	AMC-18	105.0 W
		USA	USASAT-35G			
		USA	USASAT-23H	2004-041A	AMC-15	105.1 W
		USA	USASAT-31K	2009-033A	GOES 14	104.4 W
		G	GIBSAT A1			
		USA	ATS-5			
	103.00 W	USA	USASAT-24F	1995-019A	AMSC-1	103.3 W
		USA	USASAT-31L	2005-015A	Spaceway 1	102.9 W
		USA	USASAT-35H	2011-035A	SES-3	103.0 W
		USA	USABSN-12A			
		CAN	CAN-BSS19			
	102.80 W	USA	USASAT-70W	2009-075A	DirectV 12	102.8 W
				2015-026A	DirectV 15	102.8 W
				2007-032A	DirectV 10	102.8 W
	101.20 W	USA	USABSS-1	2010-061A	SkyTerra 1	101.4 W
	101.00 W	USA	MCS-1	2010-016A	SES-1	101.0 W
		USA	USASAT-31M	2001-052A	DirectV-4S	101.2 W
		USA	USASAT-35I	2006-043A	DirectV9S	101.1 W
		USA	MSV-1A			
		USA	USABSS-21			
		USA	ACS-1			
		USA	USASAT-7D			
	100.80 W	USA	USABSS-2	2005-019A	DirectV-8	100.8 W
	100.00 W	USA	FLTSATCOM E PAC	2005-010A	Express-AM2	99.7 W
		USA	FLTSATCOM-C E PAC-2			
		USA	IRIS-2A			
	99.20 W	USA	USASAT-70V	2014-078B	DirectV14	99.2 W
				2008-013A	DirectV 11	99.2 W
99.0	99.00 W	USA	USASAT-24J	2005-046B	Spaceway 2	99.1 W
		USA	USASAT-31N			
		USA	USASAT-35J			
		USA	USABSN-13A			
		USA	USASAT-60G	2006-023A	Galaxy 16	99.1 W
	98.00 W	G	INMARSAT-3 AOR WEST3	2008-039A	Inmarsat 4 F3	98.0 W
		G	INMARSAT-4 98W			
		G	INMARSAT-4A 98W			
	97.00 W	USA	USASAT-24D	2008-045A	Galaxy 19 (G-19)	97.0 W
		USA	USASAT-35K			
	96.80 W	USA	USOBO-2			
	96.00 W	USA	USASAT-28L	2000-038A	Echostar 6	96.3 W
	95.00 W	USA	USASAT-24L	2016-035A	Intelsat 31 (IS-31)	95.0 W
		USA	USASAT-35L	2002-030A	Galaxy 3C (G-3C)	95.1 W
		G	UKSAT-10	2014-062A	Intelsat 30 (IS-30)	95.1 W
		USA	USASAT-70O	2007-036A	Spaceway 3	95.0 W
		USA	USASAT-60F			
		USA	USASAT-23F			
		USA	COMSTAR D-2			
	93.00 W	USA	USASAT-24S	1997-026A	Galaxy 25 (G-25)	93.1 W
		USA	USASAT-35M			
		G	ICO-G	2008-016A	ICO G1	92.8 W
	92.00 W	B	SBTS B4	2000-048A	Brasilsat B4	92.0 W
	91.10 W	CAN	CAN-BSS2 TTAC	2012-026A	Nimiq 6	91.1 W
	91.00 W	USA	USASAT-24K	2007-016B	Galaxy 17 (G-17)	91.1 W
		USA	USASAT-60E			
		USA	USASAT-9A			
		USA	USASAT-35N			
		CAN	CAN-BSS-31			
	90.00 W	USA	MILSTAR 1			
		USA	USGAE-1			
	89.00 W	USA	USASAT-24E	2005-022A	Galaxy 28(G-28)	89.0 W
		USA	USASAT-31S			
		USA	USASAT-35O			
	87.00 W	USA	USASAT-24T	2013-075A	TKSAT-1 (Tupac Katari)	87.2 W
		USA	USASAT-35P	2011-049A	SES-2	87.0 W
	86.50 W	CAN	CAN-BSS9	1999-027A	Nimiq 1	86.6 W
				2009-034A	Sirius FM-5	86.2 W
	85.20 W	USA	USASAT-28K	2010-053A	XM-5	85.2 W
	85.10 W	USA	USASAT-28F	2005-008A	XM-3 (Rhythm)	85.1 W

85.00 W	USA USA USA USA	USASAT-35Q USASAT-24U USASAT-31U USASAT-9C	2004-048A 1997-002A	AMC 16 AMC-2 (GE-1)	85.0 W 84.9 W
84.00 W	B	B-SAT P	2000-007A	Hispasat 1C	83.7 W
83.00 W	USA USA	USASAT-24V USASAT-35R	2003-024A	AMC-9 (GE-12)	83.0 W
82.00W	CAN CAN CAN	CANSAT KA-3 CANSAT 31 CAN-BSS1 TTAC	2008-044A	Nimiq 4	82.0 W
81.00 W	ARG	P-P-SAT-1	2015-054A	Arsat 2	81.0 W
79.00 W	USA USA USA USA	TDRS CENTRAL TDRS-C2 USASAT-24W USASAT-35T	2015-026B	Sky Mexico-1	78.8 W
78.00 W	URG	VENESAT-1	2008-055A	Venesat-1	78.0 W
77.00 W	USA	USASAT-24Q	1995-073A 2002-039A 2011-054A	EchoStar 1 EchoStar 8 QuetzSat-1	77.2 W 76.9 W 77.0 W
76.00 W	G	UKSAT-KU-4			
75.00 W	B B USA USA B USA	B-SAT-S SISCOMIS-4 GOES EAST-2 GOES-EAST-1 B-SAT-1S GOES-EAST	2012-062A 2006-018A	Star One C3 Goes 13	75.0 W 75.3 W
72.00 W	ARG USA	NAHUEL-C USASAT-35W	2009-050A 2014-062B 1997-050A	Nimiq 5 ARSAT 1 AMC-3 (GE-3)	72.7 W 71.8 W 72.0 W
70.00 W	B B B B	SBTS C1 B-SAT-1C SISCOMIS-3 SBTS B1	2008-018B 2015-034B	Star One C2 Star One C4	70.0 W 70.0 W
68.00 W	USA B USA	MILSTAR 8 B-SAT-1J USGAE-7M	1995-016A	Brasilsat B2	68.0 W
67.50 W	HOL	NSS-83A			
67.00 W	CLM/ASA	SIMON BOLIVAR 2	2000-067A 1999-060A	AMC-6 (GE-6) AMC-4 (GE-4)	67.0 W 67.0 W
65.00 W	B B B B	SISCOMIS-2 B-SAT-R SBTS B2 B/SAT/1R	2016-014A 2007-056A	Eutelsat 65 West A Star One C1	65.2 W 65.0 W
63.00 W	B G B	B-SAT E IOMSAT-KA-63W B-SAT I	2002-015B 1998-006A 2011-021A	Astra 3A Brasilsat B3 Telstar 14R	63.7 W 63.2 W 63.0 W
62.00 W	USA	TDRS 62W	1988-091B 1997-059A	TDRS 3 Echostar 3	62.7 W 61.8 W
61.50 W	USA USA	USABSS-8 USABSS-17	2012-065A 2010-034A	Echostar 16 Echostar 15	61.5 W 61.7 W
61.00 W	B B USA B	B-SAT-Q SBTS-B3 USMB-1 B-SAT-1Q	2016-039B 2003-033 A 2009-054A 2013-006A 2014-011A	Echostar 18 Echostar 12 (Rainbow1) Amazonas 2 Amazonas 3 Amazonas 4A	61.4 W 61.2 W 61.0 W 61.0 W 60.9 W
60.00 W	USA	GOES 60W			
58.00 W	USA USA USA	USASAT-25G USASAT-26G USASAT-26G-3	2010-006A 2012-045A 2000-072A	Intelsat 16 Intelsat 21 Intelsat 1R	58.1 W 58.0 W 57.8 W
55.50 W	USA USA USA	INTELSAT7 304.5E INTELSAT8 304.5E INTELSAT9-304.5E	2015-039A	Intelsat 34	55.5 W
54.00 W	G G	INMARSAT-GSO-2J INMARSAT-AOR WEST2	2015-005A 1998-006B	Inmarsat 5-F2 Inmarsat 3-F5	55.0 W 54.1 W

53.00 W	USA USA USA USA	INTELSAT8 307E, INTELSAT9 307E, INTELSAT7-307E INTELSAT IBS 307E.	2012-057A	Intelsat 23	53.0 W
52.50 W	USA USA	USGCCS PH3B W ATL USGOVSAT-6R			
50.00 W	USA USA USA USA	INTELSAT7 310E INTELSAT9 310E INTELSAT10 310E USASAT-55O	2016-004A	Intelsat 29E	50.0 W
49.40 W	USA	USOBO 3			
49.00 W	USA	TDRS 49W			
48.00 W	B	B-SAT-1W	1998-014A	NSS 806	47.5 W
47.00 W	G	GIBSAT-8B	1994-070A	Astra 1D	47.3 W
46.00 W	USA	TDRS 46W	1993-003B	TDRS 6	45.7 W
45.00 W	USA USA USA	USASAT-13I USASAT-25D USASAT-60I	2009-064A	Intelsat 14	45.0 W
43.00 W	USA USA USA USA	USASAT-25C USASAT-26C USASAT-55F USASAT-50D	2007-044B 2000-043A	Intelsat 11 Intelsat 9	43.1 W 43.2 W
42.50 W	USA USA	USGCCS PH3B MID-ATL USGCCS PH3 MID-ATL			
41.00 W	USA USA	TDRS-EAST-ISS TDRS-EAST	2014-004A	TDRS 12	40.9 W
40.50 W	HOL HOL HOL HOL HOL HOL HOL	INTELSAT K 319.5E INTELSAT5A 319.5E INTELSAT8 319.5E INTELSAT7 319.5E INTELSAT IBS 319.5E NSS-18 NSS-35 NSS-57	2013-026A	SES-6	40.5 W
39.00 W	G USA	DJCF-2A USGAE-17R			
38.00 W	USA	USGON-5			
37.50 W	USA USA USA	USASAT-26A USASAT-25A1 USASAT-25A	2009-009A 2005-003A	Telstar 11N NSS-10 (AMC-12)	37.6 W 37.5 W
36.00 W	E	HISPASAT 2A 36W	2004-031A 2002-040A	Amazonas 1 Eutelsat 12 West A	36.3 W 36.0 W
34.50 W	USA USA USA USA	INTELSAT6 325.5E INTELSAT7 325.5E INTELSAT8 325.5E INTELSAT9 325.5E	2002-016A	Intelsat 903	34.6 W
34.00 W	G G G	SKYNET-4D SKYNET-4M SKYNET-5A	2001-005B	Skynet 4F	34.0 W
33.50 W	G G G	UKDIGISAT-3 UKDSAT-A2 UKDIGISAT-4A TT&C	2010-065A	HYLAS-1	33.5 W
31.50 W	USA USA	INTELSAT9 328.5E INTELSAT8 328.5E	2008-034A	Intelsat 25	31.5 W
30.40 W	USA USA	USDKH2 P92-7			
30.00 W	E E E E USA E E E USA USA E E E	HISPASAT-2A KU HISPASAT-2D KU HISPASAT-2C3 KU HISPASAT-1DKU USGGR-3 HISPASAT-1 HISPASAT-2B KU HISPASAT-2AKA USMB-2 USCID-E4 HISPASAT-2AX HISPASAT-1	2002-044A 2006-007A 2010-070A	Hispasat 1D Spainsat Hispasat 1E	30.0 W 30.0 W 30.0 W

29.50 W	USA USA USA	INTELSAT8 330.5E- INTELSAT9 330.5E INTELSAT6 330.5E	1993-066A	Intelsat 701	29.5 W
27.50 W	USA USA USA USA	INTELSAT7 332.5E INTELSAT6-332.5E INTELSAT8-332.5E INTELSAT9-332.5E,	2003-007A	Intelsat 907	27.5 W
26.50 W	RUS RUS RUS RUS	TOR-1M GALS-1 STATIONAQR-17 VOLNA-13			
26.00 W	G	DJCF-2B			
25.00 W	RUS RUS RUS RUS	GALS-9 VOLNA-1A TOR-9M STATIONAR-8			
24.50 W	USA USA USA USA	INTELSAT7-335.5E INTELSAT6-335.5E INTELSAT8-335.5E INTELSAT9-335.5E	2002-027A	Intelsat 905	24.6 W
24.00 W	RUS USA	PROGNOZ-1 USCSID-E3			
23.00 W	USA	FLTSATCOM ATL			
22.50 W	USA USA	FLTSATCOM-C E ATL-1 KASATCOM-2	2011-001A	Elektro-L 1 (GOMS 2)	22.6 W
22.00 W	HOL	NSS-16	2012-007A	SES 4	22.0 W
21.50 W	HOL HOL HOL HOL	INTELSAT K 338.5E INTELSAT5A 338.5E INTELSAT8 338.5E INTELSAT7 338.5E			
20.20 W	BEL	SATCOM-4/20.2W			
20.00 W	USA USA USA USA USA USA HOL	INTELSAT7 340E INTELSAT6 340E INTELSAT8 340E INTELSAT9 340E YAHSAT-N-20W NSS-31	2002-019A	NSS-7	20.0 W
19.00 W	USA	USMB-3			
18.00 W	USA USA USA	INTELSAT7 342E INTELSAT8 342E INTELSAT9 342E	2001-024A 2003-013A	Intelsat 901 Insat 3A	18.0 W 18.2 W
17.80 W	G	SKYNET-5E	2008-030A	Skynet 5C	17.8 W
16.00 W	RUS RUS RUS	WSRDN ZSSRD-2 WSDRN-M	2012-061A	Luch 5B,	16.3 W
15.50 W	USA USA G G	FLTSATCOM-C E ATL-2 IRIS-4A INMARSAT-3 AOR EAST INMARSAT-2 AOR EAST	1996-053A	Inmarsat 3-F2,	15.6 W
15.00 W	USA	USASAT-14L	2015-068A	Telstar 12V	15.0 W
14.50 W	RUS RUS	GOMS-1M GOMS 14.5W	2015-048A	Express-AM8	14.0 W
14.00 W	RUS RUS RUS	VOLNA-2 EXPRESS-2B EXPRESS-2			
13.50 W	RUS RUS	POTOK-1 FOTON-1	2011-048A	Cosmos 2473	13.5 W
13.00 W	USA USA USA USA	P92-4 P-197-4 USCSID-E2 USTRO-4			
12.50 W	USA F/EUT F	USLL-ATL2 EUTELSAT 3-12.5W F-SAT-KU2-E-12.5W	2001-042A	Eutelsat 8 West A	12.6 W
12.00 W	USA USA USA USA	USGCCS PH3B ATL USGOVSAT-8 TDRS 12WR TDRS 12W	2002-011A	TDRS 9	12.2 W

11.00 W	RUS RUS	EXPRESS-3 VOLNA-3R	2009-007A	Express-AM44	11.0 W
10.00 W	USA USA USA USA USA F/ESA	USLL-ATL P92-3 P-197-5 USMB-4 USCSID-E1 USTRO-5 MSG-S2			
8.00 W	F F F F F F	TELECOM-2A TELECOM-3A TELECOM-4A VIDEOSAT-6-KA VIDEOSAT-6 F-SAT-N-E-8W F-SAT-KU-E-8W	2015-039B	Eutelsat 8 West B	8.0 W
7.00 W	F EGY EGY	F-SAT-KU-E-7W NILESAT-103 NILESAT-301-7W	2000-046B 2010-037A 2011-051A	Nilesat 102 Nilesat 201 Eutelsat 7 West A	7.0 W 7.1 W 7.3 W
5.00 W	F F F F F F F F	TELECOM-2B TELECOM-3B SYRACUSE-3E VIDEOSAT-7-KA TELECOM-4B SYRACUSE-31E SYRACUSE-4E F-SAT-KU-E5W VIDEOSAT-7	2002-035A 2006-033B	Eutelsat 5 West A Syracuse 3B	5.1 W 5.3 W
4.00 W	ISR ISR ISR	AMOS 1-B AMOS 2-B AMOS 3-A	2003-059A 2008-022A 1998-035A	Amos 2 Amos 3 Thor III,	4.1 W 4.0 W 4.3 W
3.40 W	D/EUM	MTG-D1 3.4W	2015-034A	Meteosat-11 (MSG-4)	3.8 W
3.00 W	RUS RUS RUS/IK RUS RUS/IIK RUS/IK	GALS-11 STATSIONAR-M2 INTERSPUTNIK-3W TOR-11M INTERSPUTNIK-3W-CK INTERSPUTNIK-3W-Q	2015-010A	ABS-3A	3.0 W
1.00 W	G G USA G USA USA USA USA	SKYNET-4A SKYNET-4J INTELSAT8 359E SKYNET-5B INTELSAT9 359E INTELSAT10 359E INTELSAT7 359E USASAT-35J	2015-022A 2004-022A 2009-058B 2008-006A	Thor 7 Intelsat 10-02 Thor 6 Thor 5	0.7 W 1.0 W 0.9 W 0.8 W