

<u>Satellite Name</u>	NORAD ID	Int'l Code	<u>Period</u> [minutes]	<u>Longitude</u>	BAND	LOWER DOWN LINK FREQ	LOCAL OSCIL FREQ (L.O.)
Thor 5 (Thor 2R)	32487	2008-006A		0.8°W	Ku lo Ku hi	10700 11700	9750/10600 10750
Thor 6	36033	2009-058B		0.8°W	Ku lo Ku hi	10700 11700	9750/10600 10750
<u>INTELSAT 1002</u>	28358	2004-022A	1436.1	1.0° W	C circular Ku lo Ku hi	3700 10700 11700	5150 circular 9750/10600 10750
<u>AMOS 2</u>	28132	2003-059A	1436.1	4.0° W	Ku lo	10700	9750/10600
Amos 3 (Amos 60)	32794	2008-022A	1436.1	4.0° W	Ku lo	10700	9750/10600
<b>THOR 3</b> <b>INCLINED 0.7°</b>	25358	1998-035A	1436.1	4.3° W	Ku hi	11700	10750
<u>ATLANTIC BIRD 3</u>	27460	2002-035A	1436.1	5.1° W	C circular Ku lo Ku hi	3700 10700 11700	5150 circular 9750/10600 10750
<u>NILESAT (101)</u>	25311	1998-024A	1436.1	7° W	Ku hi	11700	10750
<u>NILESAT 102</u>	26470	2000-046B	1436.1	7° W	Ku hi	11700	10750
<u>NILESAT 201</u>	36830	2010-037A	1436.1	7.1° W	Ku hi	11700	10750
<u>ATLBIRD 4A (HOT BIRD 10)</u>	33750	2009-008B	1436.1	7.3° W	Ku lo Ku hi	10700 11700	9750/10600 10750
<u>TELECOM 2D</u> <b>INCLINED 4.2°</b>	24209	1996-044B	1436.1	7.8° W	Ku lo	10700	9750/10600
<u>ATLANTIC BIRD 2</u>	26927	2001-042A	1436.1	8.1° W	Ku lo Ku hi	10700 11700	9750/10600 10750

EXPRESS A3 / AM44				11.0°W	C circular Ku lo	3700 10700	5150 circular 9750/10600
<u>ATLANTIC BIRD 1</u>	27508	2002-040A	1436.1	12.5° W	Ku lo Ku hi	10700 11700	9750/10600 10750
EXPRESS 4A INCLINED 1.3°	27441	2002-029A	1436.1	14° W	C circular Ku lo	3700 10700	5150 circular 9750/10600
<u>TELSTAR 12 (ORION 2)</u>	25949	1999-059A	1436.1	15° W	Ku lo Ku hi	10700 11700	9750/10600 10750
<u>INTELSAT 901</u>	26824	2001-024A	1436.1	18° W	C circular Ku lo	3700 10700	5150 circular 9750/10600
<u>NSS 5 (INTELSAT 803)</u>	24957	1997-053A	1436.1	20° W	C circular	3700	5150 circular
<u>NSS 7</u>	27414	2002-019A	1436.1	22° W	C circular Ku lo Ku hi	3700 10700 11700	5150 circular 9750/10600 10750
<u>GORIZONT 27</u>	22245	1992-082A	1437	22.3° W			
<u>THAICOM 2</u>	23314	1994-065B	1445.8	24.4° W			
<u>INTELSAT 905</u>	27438	2002-027A	1436.1	24.5° W	C circular Ku lo	3700 10700	5150 circular 9750/10600
<u>INTELSAT 907</u>	27683	2003-007A	1436.1	27.5° W	C circular Ku lo	3700 10700	5150 circular 9750/10600
INTELSAT 801 INCLINED 2.1°	24742	1997-009A	1436.1	29.6° W	C Ku	3700 11700	5150 10750
INTELSAT 705 INCLINED 1.0°	23528	1995-013A	1436.1	29.6° W	C Ku	3700 11700	5150 10750
<u>HISPASAT 1D</u>	27528	2002-044A	1436.1	30.0° W	Ku	11700	10750

<u>HISPASAT 1C</u>	26071	2000-007A	1436.1	30.0° W	Ku	11700	10750
Hispasat 1E (PLANNED)				30.0°W	Ku	11700	10750
Intelsat 25 (Protostar 1, Protostar I, Chinasat 8, Zhongxing 8)	33153	2008-034A		34.0°W	C Ku	3700 11700	5150 10750
<u>INTELSAT 903</u>	27403	2002-016A	1436.1	34.5° W	C circular	3700	5150 circular
NSS 10	28526	2005-003A	1436.11	37.5°W	C	3700	5150
TELSTAR 11N	34111	2009-009A	1436.11	37.6°W	Ku	11700	10750
SES 6 (PLANNED)				40°W	C Ku	3700 11700	5150 10750
<u>NSS 806 (INTELSAT 806)</u>	25239	1998-014A	1436.1	40.5° W	C	3700 circular	5150 circular
<u>INTELSAT 11 (PAS 11)</u>	32253	2007-044B	1436.1	43° W	C Ku	3700 11700	5150 10750
<u>INTELSAT 14</u>	36097	2009-064A	1436.1	45° W	C Ku	3700 11700	5150 10750
<u>INTELSAT 1R (PAS 1R)</u>	26608	2000-072A	1436.1	50° W	C Ku	3700 11700	5150 10750
<u>INTELSAT 707</u>	23816	1996-015A	1436.1	53° W	C Ku	3700 11700	5150 10750
Intelsat 23 (IS-23) (PLANNED)				53° W	C Ku	3700 11700	5150 10750
INTELSAT 27 (PLANNED)				55°W	C Ku	3700 11700	5150 10750

<u>INTELSAT 805</u>	25371	1998-037A	1436.1	55.5° W	C Ku	3700 11700	5150 10750
<u>INTELSAT 9 (PAS 9)</u>	26451	2000-043A	1436.1	58° W	C Ku	3700 11700	5150 10750
INTELSAT 21 (PLANNED)				58°W	C Ku	3700 11700	5150 10750
<u>INTELSAT 16</u>	36397	2010-006A	1436.1	58.1° W	Ku	11700	10750
Amazonas 1 (Amazonas)	28393	2004-031A	1436.1	61° W	C Ku	3700 11700	5150 10750
Amazonas 2	35942	2009-054A	1436.09	61.1°W	C Ku	3700 10700	5150 10750
Amazonas 3 (PLANNED)				61.0°W	C Ku	3700 10700	5150 10750
<u>ECHOSTAR 12</u> <u>(RAINBOW 1)</u>	27852	2003-033A	1436.1	61.3° W	Ku circular	12200	11250 circular
<u>ECHOSTAR 3</u>	25004	1997-059A	1436.1	61.4° W	Ku circular	12200	11250 circular
<u>ECHOSTAR 15</u>	36792	2010-034A	1436.1	61.6° W	Ku circular	12200	11250 circular
<u>ECHOSTAR 6</u>	26402	2000-038A	1436.1	61.6° W	Ku circular	12200	11250 circular
Telstar 14R (Estrela do Sul 2) (PLANNED)				63.0°W	Ku	11700	10750
<u>ESTRELA DU SOL-</u> <u>TELSTAR14</u>	28137	2004-001A	1436	63.1° W	Ku	11700	10750
STAR ONE C1	32293	2007-056A	1436.13	65.0°W	C Ku	3700 11700	5150 10750

<u>AMC-4 (GE-4)</u> MOVED FROM 101W	25954	1999-060A	1436.1	67° W	C Ku	3700 11700	5150 10750
Brasilsat B1	23199	1994-049A		68.0°W	C	3700	5150
Star One C5 (PLANNED)				68.0°W	C Ku	3700 11700	5150 10750
STAR ONE C2	32768	2008-018B	1436.11	70.0°W	C Ku	3700 11700	5150 10750
<u>AMC-6 (GE-6)</u>	26580	2000-067A	1436.1	72° W	C Ku	3700 11700	5150 10750
Nahuel 1	24714	1997-002B		72° W	Ku	11700	10750
Directv 1R	25937	1999-056A		72° W	Ku	11700	10750
<u>NIMIQ 5</u>	35873	2009-050A	1436.1	72.7° W	Ku circular	12200	11250 circular
Echostar 6 (Sky 1B, MCI 2)	26402	2000-038A		73.0°W	Ku circular	12200	11250 circular
DirecTV 1R	26402	2000-038A	1436.10	73.0°W	Ku circular	12200	11250 circular
<u>HORIZONS 2</u>	32388	2007-063B	1436.1	74° W	Ku	12200	10750
Star One C3 (PLANNED)				75.0°W	C Ku	3700 11700	5150 10750
<u>ECHOSTAR 4</u>	25331	1998-028A	1436.1	76.8° W	Ku circular	12200	11250 circular
QUETZSAT 1 (PLANNED)				77.0° W	Ku circular	12200	11250 circular

<a href="#">ECHOSTAR 8</a>	27501	2002-039A	1436.1	77.0° W	Ku circular	12200	11250 circular
<a href="#">ECHOSTAR 1</a>	23754	1995-073A	1436.1	77.1° W	Ku circular	12200	11250 circular
Venesat 1 (Simon Bolivar 1)	33414	2008-055A		78.0°W	C Ku	3700 11700	5150 10750
<a href="#">AMC-2 (GE-2)</a>	24713	1997-002A	1436.1	78.9° W	C Ku	3700 11700	5150 10750
<a href="#">AMC-5 (GE-5)</a>	25516	1998-063B	1436.1	79° W	Ku	11700	10750
SatCom C3	22117	1992-060B		79.0°W	C	3700	5150
<a href="#">INTELSAT 3R (PAS 3R)</a> <b>MOVING TO 81°W</b>	23764	1996-002A	1436.9	<b>81°W</b>	C Ku	3700 11700	5150 10750
Nimiq 3 (DirecTV-3, DBS-3, Nimiq 2i)	23598	1995-029A		82.0°W	Ku	11700	10750
Nimiq 4	33373	2008-044A		82.0°W	Ku	11700	10750
<a href="#">AMC-9 (GE-12)</a>	27820	2003-024A	1436.1	83° W	Ku	C Ku	3700 11700
Brasilsat B4	26469	2000-046A		84.0°W	C	3700	5150
<a href="#">AMC-16</a>	28472	2004-048A	1436.1	85° W	Ku +Ka	11700	10750
SES 2 (PLANNED)				87°W	C Ku	3700 11700	5150 10750
<a href="#">AMC-3 (GE-3)</a>	24936	1997-050A	1436.1	87° W	C Ku	3700 11700	5150 10750

<u>GALAXY 28 (IA 8)</u>	28702	2005-022A	1436.1	89° W	C Ku	3700 11700	5150 10750
<u>GALAXY 17</u>	31307	2007-016B	1436.1	91° W	C Ku	3700 11700	5150 10750
<u>NIMIQ 1</u>	25740	1999-027A	1436.1	91.1° W	Ku circular	11700	10750 circular
<u>NIMIQ 2</u>	27632	2002-062A	1436.1	91.1° W	Ku circular	11700	10750 circular
NIMIQ 4i	23192	1994-047A	1436.1	91.0°W	Ku circular	11700	10750 circular
Brasilsat B2	23536	1995-016A		92.0°W	C	3700	5150
<u>GALAXY 25 (TELSTAR 5)</u>	24812	1997-026A	1436.1	93.1° W	C Ku	3700 11700	5150 10750
<u>GALAXY 3C</u>	27445	2002-030A	1436.1	95.1° W	C Ku	3700 11700	5150 10750
<u>GALAXY 19</u>	33376	2008-045A	1436.1	97.1° W	C Ku	3700 11700	5150 10750
GALAXY 16	29236	2006-023A	1436.1	99.0°W	C Ku	3700 11700	5150 10750
DIRECTV 11	32729	2008-013A		99.2°W	Ka		
SPACEWAY 2	28903	2005-046B		99.2°W	Ka		
DIRECTV 8	28659	2005-019A		101.0°W	Ku circular	12200	11250 circular
DIRECTV 9S	29494	2006-043A		101.0°W	Ku circular	12200	11250 circular

SES 1	36516	2010-016A	1436.10	101.1°W	C Ku	3700 11700	5150 10750
DIRECTV 4S	26985	2001-052A		101.2°W	Ku circular	12200	11250 circular
DIRECTV 10	31862	2007-032A		102.8°W	Ka		
DIRECTV 12	36131	2009-075A		102.8°W	Ka		
SPACEWAY 1	28644	2005-015A		102.8°W	Ka		
SES 3 (PLANNED)				103° W	C Ku	3700 11700	5150 10750
<a href="#">AMC-1 (GE-1)</a>	24315	1996-054A	1436.1	103° W	C Ku	3700 11700	5150 10750
<a href="#">AMC-18</a>	29644	2006-054B	1436.1	104.9° W	C	3700	5150
<a href="#">AMC-15</a>	28446	2004-041A	1436.1	105° W	Ku +Ka	11700	10750
<a href="#">GALAXY 15</a>	28884	2005-041A	1435.3	105.1° W	C	3700	5150
<a href="#">ANIK F1</a>	26624	2000-076A	1436.1	107.3° W	C Ku	3700 11700	5150 10750
<a href="#">ANIK F1-R</a>	28868	2005-036A	1436.1	107.3° W	C Ku	3700 11700	5150 10750
DIRECTV 5	27426	2002-023A		110.0°W	Ku circular	12200	11250 circular
DIRECTV 6	24748	1997-011A		110.0°W	Ku circular	12200	11250 circular



<a href="#"><u>ECHOSTAR 10</u></a>	28935	2006-003A	1436.1	110.2° W	Ku circular	12200	11250 circular
ECHOSTAR 11	33207	2008-035A		110.2°W	Ku circular	12200	11250 circular
<a href="#"><u>ANIK F2</u></a>	28378	2004-027A	1436.1	111.1° W	C Ku	3700 11700	5150 10750
<a href="#"><u>SATMEX 6</u></a>	29162	2006-020A	1436.1	113.0° W	C Ku	3700 11700	5150 10750
MEXSAT 3 (PLANNED)				115.0°W	C Ku	3700 11700	5150 10750
SATMEX 4 / SOLIDARIDAD 2 (INCLINED 2.6°)	23313	1994-065A	1436.1	115.0° W	C Ku	3700 11700	5150 10750
<a href="#"><u>SATMEX 5</u></a>	25558	1998-070A	1436.1	116.8° W	C Ku	3700 11700	5150 10750
<a href="#"><u>ANIK F3</u></a>	31102	2007-009A	1436.1	118.7° W	C Ku circular	3700 11700	5150 10750
<a href="#"><u>ECHOSTAR 7</u></a>	27378	2002-006A	1436	118.8° W	Ku circular	12200	11250 circular
<a href="#"><u>ECHOSTAR 14</u></a>	36499	2010-010A	1436.1	118.9° W	Ku circular	12200	11250
DirecTV 7S	28238	2004-016A	1436	119.0° W	Ku circular	12200	11250 circular
DirecTV 7S	28238	2004-016A	1436	119.0° W	Ka		
<a href="#"><u>GALAXY 23 (TELSTAR 13)</u></a>	27854	2003-034A	1436.1	120.9° W	C Ku	3700 11700	5150 10750
GALAXY 18	32951	2008-024A	1436.09	123.0°W	C Ku	3700 10700	5150 10750

<u>AMC-21</u>	33275	2008-038B	1436.1	124.9° W	C Ku	3700 11700	5150 10750
<u>GALAXY 14</u>	28790	2005-030A	1436.1	125.0° W	C	3700	5150
<u>HORIZONS 1</u> <u>(GALAXY 13)</u>	27954	2003-044A	1436.1	127.0° W	C Ku	3700 11700	5150 10750
<u>CIEL-2</u>	33453	2008-063A	1436.1	128.8° W	Ku circular	12200	11250 circular
<u>ECHOSTAR 2</u>	24313	1996-055A	1437	128.9° W	Ku	12200 circular	11250 circular
<u>AMC-11 (GE-11)</u>	28252	2004-017A	1436.1	131° W	C	3700	5150
<u>GALAXY 12</u>	27715	2003-013B	1436.1	133° W	C	3700	5150
<u>AMC-10 (GE-10)</u>	28154	2004-003A	1436.1	135° W	C	3700	5150
<u>AMC-7 (GE-7)</u>	26495	2000-054B	1436.1	137° W	C	3700	5150
<u>AMC-8 (GE-8)</u>	26639	2000-081B	1436.1	138.9° W	C	3700	5150