

M9 WWTV	M5/7	M3	Satellite	Frequency	Symbol Rate	Code Rate	Network ID	Polarization	Band
ASA105E	N/A	N/A	AsiaSat 3S	12352	30000	4-Mar 0X0002		Vertical	H
			AsiaSat 3S	0	20000	2-Jan 0XFFFE		Vertical	L
			AsiaSat 3S	12471	20000	3-Feb 0XFFFE		Horizontal	H
			AsiaSat 3S	0	20000	2-Jan 0XFFFE		Horizontal	L
NSS108E	N/A	N/A	NSS 11	12411	11110	6-May 0X0002		Vertical	H
			NSS 11	0	20000	2-Jan 0XFFFE		Vertical	L
			NSS 11	12551	28100	6-May 0X00AE		Horizontal	H
			NSS 11	0	20000	2-Jan 0XFFFE		Horizontal	L
ASA122E	(59) ASIASAT 122E		AsiaSat 4	11727	25000	3-Feb 0XFFFE		Circular Right	H
			AsiaSat 4	11727	25000	3-Feb 0XFFFE		Circular Right	H
			AsiaSat 4	0	20000	2-Jan 0XFFFE		Circular Left	H
			AsiaSat 4	0	20000	2-Jan 0XFFFE		Circular Left	H
JCSAT 4A			JCSAT 4A	12508	21096	4-Mar 0XFFFE		Vertical	H
			JCSAT 4A	0	20000	2-Jan 0XFFFE		Vertical	L
			JCSAT 4A	12523	21096	4-Mar 0XFFFE		Horizontal	H
			JCSAT 4A	0	20000	2-Jan 0XFFFE		Horizontal	L
JCSAT 3A			JCSAT 3A	12508	21096	4-Mar 0XFFFE		Vertical	H
			JCSAT 3A	0	20000	2-Jan 0XFFFE		Vertical	L
			JCSAT 3A	12408	21096	4-Mar 0XFFFE		Horizontal	H
			JCSAT 3A	0	20000	2-Jan 0XFFFE		Horizontal	L
NA			Vinasat 1	12551	19100	4-Mar 0XFFFE		Vertical	H
			Vinasat 1	11088	28100	4-Mar 0X0001		Vertical	L
			Vinasat 1	11669	30000	3-Feb 0X0001		Horizontal	H
			Vinasat 1	11048	28800	6-May 0X0001		Horizontal	L
APS134E	N/A	N/A	Apstar 6	12515	27500	4-Mar 0X0041		Vertical	H
			Apstar 6	12515	27500	4-Mar 0X0041		Vertical	L
			Apstar 6	0	20000	2-Jan 0XFFFE		Horizontal	H
			Apstar 6	0	20000	2-Jan 0XFFFE		Horizontal	L
TEL138E	N/A	N/A	Telstar 18	12354	43000	4-Mar 0X000A		Vertical	H
			Telstar 18	12354	43000	4-Mar 0X000A		Vertical	L
			Telstar 18	12689	43200	4-Mar 0X01FF		Horizontal	H
			Telstar 18	12689	43200	4-Mar 0X01FF		Horizontal	L
M9 WWTV	M5/7	M3	Satellite	Frequency	Symbol Rate	Code Rate	Network ID	Polarization	Band

ASA105E	N/A	N/A	AsiaSat 3S	12352	30000	4-Mar 0X0002	Vertical	H
			AsiaSat 3S	0	20000	2-Jan 0XFFFE	Vertical	L
			AsiaSat 3S	12471	20000	3-Feb 0XFFFE	Horizontal	H
			AsiaSat 3S	0	20000	2-Jan 0XFFFE	Horizontal	L
NSS108E	N/A	N/A	NSS 11	12411	11110	6-May 0X0002	Vertical	H
			NSS 11	0	20000	2-Jan 0XFFFE	Vertical	L
			NSS 11	12551	28100	6-May 0X00AE	Horizontal	H
			NSS 11	0	20000	2-Jan 0XFFFE	Horizontal	L
ASA122E	(59) ASIASAT	122E	AsiaSat 4	11727	25000	3-Feb 0XFFFE	Circular Right	H
			AsiaSat 4	11727	25000	3-Feb 0XFFFE	Circular Right	H
			AsiaSat 4	0	20000	2-Jan 0XFFFE	Circular Left	H
			AsiaSat 4	0	20000	2-Jan 0XFFFE	Circular Left	H
JCSAT 4A			JCSAT 4A	12508	21096	4-Mar 0XFFFE	Vertical	H
			JCSAT 4A	0	20000	2-Jan 0XFFFE	Vertical	L
			JCSAT 4A	12523	21096	4-Mar 0XFFFE	Horizontal	H
			JCSAT 4A	0	20000	2-Jan 0XFFFE	Horizontal	L
JCSAT 3A			JCSAT 3A	12508	21096	4-Mar 0XFFFE	Vertical	H
			JCSAT 3A	0	20000	2-Jan 0XFFFE	Vertical	L
			JCSAT 3A	12408	21096	4-Mar 0XFFFE	Horizontal	H
			JCSAT 3A	0	20000	2-Jan 0XFFFE	Horizontal	L
NA			Vinasat 1	12551	19100	4-Mar 0XFFFE	Vertical	H
			Vinasat 1	11088	28100	4-Mar 0x0001	Vertical	L
			Vinasat 1	11669	30000	3-Feb 0x0001	Horizontal	H
			Vinasat 1	11048	28800	6-May 0x0001	Horizontal	L
APS134E	N/A	N/A	Apstar 6	12515	27500	4-Mar 0X0041	Vertical	H
			Apstar 6	12515	27500	4-Mar 0X0041	Vertical	L
			Apstar 6	0	20000	2-Jan 0XFFFE	Horizontal	H
			Apstar 6	0	20000	2-Jan 0XFFFE	Horizontal	L
TEL138E	N/A	N/A	Telstar 18	12354	43000	4-Mar 0X000A	Vertical	H
			Telstar 18	12354	43000	4-Mar 0X000A	Vertical	L
			Telstar 18	12689	43200	4-Mar 0X01FF	Horizontal	H
			Telstar 18	12689	43200	4-Mar 0X01FF	Horizontal	L
HBD13E	(2) HOTBIRD	13E	Hot Bird	12594	27500	4-Mar 0X013E	Vertical	H
			Hot Bird	11766	27500	3-Feb 0X013E	Vertical	L
			Hot Bird	11747	27500	4-Mar 0X013E	Horizontal	H
			Hot Bird	11137	27500	4-Mar 0X013E	Horizontal	L
AM140E	N/A	N/A	Express AM3	0	20000	2-Jan 0XFFFE	Vertical	H
			Express AM3	11665	39500	6-May 0XFFFE	Vertical	L

			Express AM3	0	20000	2-Jan 0XFFFE	Horizontal	H
			Express AM3	11471	24800	2-Jan 0XFFFE	Horizontal	L
SB144E	N/A	N/A	SuperBird C2	12508	21096	4-Mar 0X0005	Vertical	H
			SuperBird C2	0	20000	2-Jan 0XFFFE	Vertical	L
			SuperBird C2	12523	21096	4-Mar 0XF001	Horizontal	H
			SuperBird C2	0	20000	2-Jan 0XFFFE	Horizontal	L
OPT156E	(13) OPTUS C1	156E	Optus C1	12177	27800	4-Mar 0X1000	Vertical	H
			Optus C1	12177	27800	4-Mar 0X1000	Vertical	L
			Optus C1	12177	27800	4-Mar 0X1000	Horizontal	H
			Optus C1	12177	27800	4-Mar 0X1000	Horizontal	L
OPT160E	(12) OPTUS D1	160E	Optus D1	0	22500	4-Mar 0X00A9	Vertical	H
			Optus D1	0	22500	4-Mar 0X00A9	Vertical	L
			Optus D1	12519	22500	4-Mar 0X00A9	Horizontal	H
			Optus D1	0	22500	4-Mar 0X00A9	Horizontal	L
IT166E	N/A	N/A	Intelsat 8	0	20000	2-Jan 0XFFFE	Vertical	H
			Intelsat 8	0	20000	2-Jan 0XFFFE	Vertical	L
			Intelsat 8	12646	28066	4-Mar 0XFFFE	Horizontal	H
			Intelsat 8	0	20000	2-Jan 0XFFFE	Horizontal	L
Intelsat8NZ	N/A	N/A	Intelsat 19 NZ	12491	4400	4-Mar 0XFFFE	Vertical	H
			Intelsat 19 NZ	0	20000	2-Jan 0XFFFE	Vertical	L
			Intelsat 19 NZ	0	20000	2-Jan 0XFFFE	Horizontal	H
			Intelsat 19 NZ	0	20000	2-Jan 0XFFFE	Horizontal	L
ETLS16E	N/A	N/A	Eutelsat	0	20000	2-Jan 0XFFFE	Vertical	H
			Eutelsat	11178	27500	4-Mar 0X0001	Vertical	L
			Eutelsat	12525	30000	4-Mar 0X016E	Horizontal	H
			Eutelsat	10976	27225	3-Feb 0X016E	Horizontal	L
ITP180E	N/A	N/A	Intelsat 18SP	0	20000	2-Jan 0XFFFE	Vertical	H
			Intelsat 18SP	0	20000	2-Jan 0XFFFE	Vertical	L
			Intelsat 18SP	12648	28066	4-Mar 0XFFFE	Horizontal	H
			Intelsat 18SP	11155	28588	4-Mar 0XFFFE	Horizontal	L
ITP180E	N/A	N/A	Intelsat 18FP	0	20000	2-Jan 0XFFFE	Vertical	H
			Intelsat 18FP	11155	28588	4-Mar 0XFFFE	Vertical	L
			Intelsat 18FP	0	20000	2-Jan 0XFFFE	Horizontal	H
			Intelsat 18FP	0	20000	2-Jan 0XFFFE	Horizontal	L
NA			Astra 1	11739	27500	4-Mar 0X0001	Vertical	H
			Holland Astra 1	11156	22000	6-May 0X0001	Vertical	L
			Holland Astra 1	12692	22000	6-May 0X0001	Horizontal	H
			Holland					

			Astra 1 Holland	11244	22000	6-May 0X0001	Horizontal	L
AST19E	(1) ASTRA1	19E	Astra 1	12051	27500	4-Mar 0X0001	Vertical	H
			Astra 1	11156	22000	6-May 0X0001	Vertical	L
			Astra 1	11836	27500	4-Mar 0X0001	Horizontal	H
			Astra 1	10744	22000	6-May 0X0001	Horizontal	L
NA			Astra 3 Holland	12129	29900	3-Feb 0X0003	Vertical	H
			Astra 3 Holland	11739	29900	3-Feb 0X0003	Vertical	L
			Astra 3 Holland	12070	27500	4-Mar 0X0003	Horizontal	H
			Astra 3 Holland	11836	27500	6-May 0X0003	Horizontal	L
AST23E	N/A	N/A	Astra 3A	12168	27500	4-Mar 0X0003	Vertical	H
			Astra 3A	11739	29900	3-Feb 0X0003	Vertical	L
			Astra 3A	11836	27500	6-May 0X0003	Horizontal	H
			Astra 3A	11836	27500	6-May 0X0003	Horizontal	L
ARAB26E	(10) ARABSAT	26E	Badr 6	11747	27500	4-Mar 0X02BE	Vertical	H
			Badr 6	11747	27500	4-Mar 0X02BE	Vertical	L
			Badr 6	11843	27500	4-Mar 0X02BE	Horizontal	H
			Badr 6	10810	27500	4-Mar 0XFFFE	Horizontal	L
ASTN28E	(3) ASTRA2N	28NE	Astra 2 UK	12207	27500	6-May 0X0020	Vertical	H
			Astra 2 UK	10788	22000	6-May 0X0020	Vertical	L
			Astra 2 UK	12110	27500	6-May 0X0020	Horizontal	H
			Astra 2 UK	10803	22000	6-May 0X0020	Horizontal	L
ASTS28E	(4) ASTRA2S	28SE	Astra 2 EU	11895	27500	3-Feb 0X0020	Vertical	H
			Astra 2 EU	11568	22000	6-May 0X0020	Vertical	L
			Astra 2 EU	11836	27500	6-May 0X0020	Horizontal	H
			Astra 2 EU	11582	22000	6-May 0X0020	Horizontal	L
ETLN36E	N/A	N/A	Eutelsat W4 A	11843	27500	4-Mar 0X036E	Vertical	H
			Eutelsat W4 A	0	20000	2-Jan 0XFFFE	Vertical	L
			Eutelsat W4 A	11747	27500	4-Mar 0X036E	Horizontal	H
			Eutelsat W4 A	0	20000	2-Jan 0XFFFE	Horizontal	L
NA			Eutelsat W7	11670	27500	6-May 0X0000	Vertical	H
			Eutelsat W7	11766	27500	4-Mar 0XFFFE	Vertical	L
			Eutelsat W7	12558	30000	6-May 0XC329	Horizontal	H
			Eutelsat W7	11747	27500	4-Mar 0X036E	Horizontal	L
TRK42E	(8) TURKSAT1C	42E	Turksat	12379	27500	4-Mar 0X002A	Vertical	H
			Turksat	11012	30000	6-May 0X0042	Vertical	L
			Turksat	12054	27500	6-May 0X042E	Horizontal	H

			Turksat	10963	16700	4-Mar 0X042E	Horizontal	L
AME53E	N/A	N/A	Express AM22 W	12664	27500	6-May 0XFFFE	Vertical	H
			Express AM22 W	11044	44950	4-Mar 0X1111	Vertical	L
			Express AM22 W	0	20000	2-Jan 0XFFFE	Horizontal	H
			Express AM22 W	10974	10000	4-Mar 0XFFFE	Horizontal	L
AMM53E	N/A	N/A	Exp AM22 S2	12664	27500	6-May 0XFFFE	Vertical	H
			Exp AM22 S2	11044	44950	4-Mar 0X1111	Vertical	L
			Exp AM22 S2	0	20000	2-Jan 0XFFFE	Horizontal	H
			Exp AM22 S2	10974	10000	4-Mar 0XFFFE	Horizontal	L
BON56E	N/A	N/A	Bonum 1	12245	27500	4-Mar 0XFFFE	Circular Right	H
			Bonum 1	12399	27500	4-Mar 0XFFFE	Circular Right	H
			Bonum 1	12226	27500	4-Mar 0XFFFE	Circular Left	H
			Bonum 1	12380	27500	4-Mar 0XFFFE	Circular Left	H
SIRI5E	(6) SIRIUS	5E	Astra 4A	11823	27500	6-May 0X0056	Vertical	H
			Astra 4A	11823	27500	6-May 0X0056	Vertical	L
			Astra 4A	11804	27500	6-May 0X0056	Horizontal	H
			Astra 4A	11804	27500	6-May 0X0056	Horizontal	L
ITE68E	N/A	N/A	Intelsat 20 Euro/Africa	12722	26657	2-Jan 0X0049	Vertical	H
			Intelsat 20 Euro/Africa	0	20000	6-May 0XFFFE	Vertical	L
			Intelsat 20 Euro/Africa	12722	26657	2-Jan 0X0001	Horizontal	H
			Intelsat 20 Euro/Africa	0	20000	6-May 0XFFFE	Horizontal	L
ITA68E	N/A	N/A	Intelsat 20 S Africa	0	20000	2-Jan 0XFFFE	Vertical	H
			Intelsat 20 S Africa	11010	30000	6-May 0X1800	Vertical	L
			Intelsat 20 S Africa	0	20000	2-Jan 0XFFFE	Horizontal	H
			Intelsat 20 S Africa	11010	30000	6-May 0X1800	Horizontal	L
ETL70E	N/A	N/A	Eutelsat 70B	0	20000	2-Jan 0XFFFE	Vertical	H
			Eutelsat 70B	0	20000	2-Jan 0XFFFE	Vertical	L
			Eutelsat 70B	0	20000	2-Jan 0XFFFE	Horizontal	H
			Eutelsat 70B	11210	10000	4-Mar 0X013E	Horizontal	L
ABSN75E	N/A	N/A	ABS 1 North	12640	22000	4-Mar 0X0064	Vertical	H
			ABS 1 North	0	20000	2-Jan 0XFFFE	Vertical	L
			ABS 1 North	0	20000	2-Jan 0XFFFE	Horizontal	H
			ABS 1 North	0	20000	2-Jan 0XFFFE	Horizontal	L
ABSS75E	N/A	N/A	ABS 1 South	0	20000	2-Jan 0XFFFE	Vertical	H
			ABS 1 South	0	20000	2-Jan 0XFFFE	Vertical	L
			ABS 1 South	12579	22000	4-Mar 0X0064	Horizontal	H

			ABS 1 South	0	20000	2-Jan 0XFFFE	Horizontal	L
TEL76E	N/A	N/A	Telstar 10	12528	30000	4-Mar 0X0001	Vertical	H
			Telstar 10	0	20000	2-Jan 0XFFFE	Vertical	L
			Telstar 10	0	20000	2-Jan 0XFFFE	Horizontal	H
			Telstar 10	0	20000	2-Jan 0XFFFE	Vertical	L
THAI78E	N/A	N/A	Thaicom	12313	30000	4-Mar 0XFFFE	Vertical	H
			Thaicom	0	20000	2-Jan 0XFFFE	Vertical	L
			Thaicom	12272	30000	3-Feb 0XFFFE	Horizontal	H
			Thaicom	0	20000	2-Jan 0XFFFE	Horizontal	L
ETL7E	(14) EUTELSAT_W 3A	7E	Eutelsat W3A	0	20000	2-Jan 0XFFFE	Vertical	H
			Eutelsat W3A	11617	30000	4-Mar 0X007E	Vertical	L
			Eutelsat W3A	0	20000	2-Jan 0XFFFE	Horizontal	H
			Eutelsat W3A	11596	30000	4-Mar 0X007E	Horizontal	L
AM80E	N/A	N/A	Express AM2	11606	30000	6-May 0XFFFE	Vertical	H
			Express AM2	11101	30000	4-Mar 0XFFFE	Vertical	L
			Express AM2	0	20000	2-Jan 0XFFFE	Horizontal	H
			Express AM2	11044	30000	6-May 0XFFFE	Horizontal	L
ST88E	N/A	N/A	ST 2	0	20000	2-Jan 0XFFFE	Vertical	H
			ST 2	11483	43978	5-Mar 0XFFFE	Vertical	L
			ST 2	12702	20000	4-Mar 0X000E	Horizontal	H
			ST 2	11609	43978	5-Mar 0XFFFE	Horizontal	L
YAM90E	N/A	N/A	Yamal 201	0	20000	2-Jan 0XFFFE	Vertical	H
			Yamal 201	11057	26470	4-Mar 0X0064	Vertical	L
			Yamal 201	0	20000	2-Jan 0XFFFE	Horizontal	H
			Yamal 201	0	20000	2-Jan 0XFFFE	Horizontal	L
MEAM91E	N/A	N/A	Measat 3	11682	30000	6-May 0X03E7	Vertical	H
			Measat 3	11062	30000	8-Jul 0XFFFE	Vertical	L
			Measat 3	12683	27500	6-May 0X03E7	Horizontal	H
			Measat 3	0	20000	2-Jan 0XFFFE	Horizontal	L
MEAI91E	N/A	N/A	Measat 3 SA	12523	27500	6-May 0XFFFE	Vertical	H
			Measat 3 SA	0	20000	2-Jan 0XFFFE	Vertical	L
			Measat 3 SA	12683	22700	4-Mar 0XFFFE	Horizontal	H
			Measat 3 SA	0	20000	2-Jan 0XFFFE	Horizontal	L
ISAT93E	N/A	N/A	Intelsat 3A 4B	0	20000	2-Jan 0XFFFE	Vertical	H
			Intelsat 3A 4B	10990	27500	4-Mar 0X0001	Vertical	L
			Intelsat 3A 4B	0	20000	2-Jan 0XFFFE	Horizontal	H
			Intelsat 3A 4B	0	20000	2-Jan 0XFFFE	Horizontal	L

NSSS95E	N/A	N/A	NSS6 SE Asia	0	20000	2-Jan 0XFFFE	Vertical	H
			NSS6 SE Asia	11131	27500	6-May 0X1111	Vertical	L
			NSS6 SE Asia	0	20000	2-Jan 0XFFFE	Horizontal	H
			NSS6 SE Asia	11635	27500	4-Mar 0X2000	Horizontal	L
NSSI95E	N/A	N/A	NSS6, India	12688	27500	4-Mar 0XFFFE	Vertical	H
			NSS6, India	0	20000	2-Jan 0XFFFE	Vertical	L
			NSS6, India	12688	27500	4-Mar 0XFFFE	Horizontal	H
			NSS6, India	11090	29500	8-Jul 0XFFFE	Horizontal	L
NSSN95E	N/A	N/A	NSS6 NE Asia	0	20000	2-Jan 0XFFFE	Vertical	H
			NSS6 NE Asia	11494	20000	4-Mar 0XFFFE	Vertical	L
			NSS6 NE Asia	12688	28000	4-Mar 0X0009	Horizontal	H
			NSS6 NE Asia	0	20000	2-Jan 0XFFFE	Horizontal	L
Eusat9A	Eusat9A	9E	Eutelsat 9A	12418	27500	3-Feb 0X00AA	Vertical	H
			Eutelsat 9A	0	20000	2-Jan 0XFFFE	Vertical	L
			Eutelsat 9A	11976	27500	4-Mar 0X009E	Horizontal	H
			Eutelsat 9A	0	20000	2-Jan 0XFFFE	Horizontal	L
DTV101W	(55) DSS_101	101W	DIRECTV	12428	20000	7-Jun 0X0000	Circular Right	H
			DIRECTV	12428	20000	7-Jun 0X0000	Circular Right	H
			DIRECTV	12443	20000	7-Jun 0X0000	Circular Left	H
			DIRECTV	12239	20000	7-Jun 0X0000	Circular Left	H
SES1			SES 1	0	20000	2-Jan 0XFFFE	Vertical	H
			SES 1	0	20000	2-Jan 0XFFFE	Vertical	L
			SES 1	11820	20000	4-Mar 0X0002	Horizontal	H
			SES 1	0	20000	2-Jan 0XFFFE	Horizontal	L
NA			Anik F1R	11745	19510	4-Mar 0XFFFE	Vertical	H
			Anik F1R	0	20000	2-Jan 0XFFFE	Vertical	L
			Anik F1R	11728	19510	4-Mar 0XFFFE	Horizontal	H
			Anik F1R	0	20000	2-Jan 0XFFFE	Horizontal	L
DTV110W	(56) DSS_110	110W	DIRECTV 5	12516	20000	9-Sep 0X1006	Circular Right	H
			DIRECTV 5	12428	20000	9-Sep 0X1006	Circular Right	H
			DIRECTV 5	12414	20000	9-Sep 0X1006	Circular Left	H
			DIRECTV 5	12443	20000	9-Sep 0X1006	Circular Left	H
DSH110W	(52) ECHO 110	110W	EchoStar 11	12516	21500	3-Feb 0X1006	Circular Right	H
			EchoStar 11	12428	20000	9-Sep 0X1006	Circular Right	H
			EchoStar 11	12414	21500	3-Feb 0X1006	Circular Left	H
			EchoStar 11	12443	20000	9-Sep 0X1006	Circular Left	H

NA			Anik F2	11941	19510	4-Mar 0XFFFE	Vertical	H
			Anik F2	0	20000	2-Jan 0XFFFE	Vertical	L
			Anik F2	11941	19510	4-Mar 0XFFFE	Horizontal	H
			Anik F2	0	20000	2-Jan 0XFFFE	Horizontal	L
NA	(60) SINOSAT	110E	Anik F3	11715	20000	9-Sep 0X1001	Circular Right	H
			Anik F3	11745	20000	9-Sep 0X1001	Circular Right	H
			Anik F3	11728	20000	9-Sep 0X1001	Circular Left	H
			Anik F3	11758	20000	9-Sep 0X1001	Circular Left	H
DTV119W	(57) DSS_119	119W	DIRECTV 7S	12603	20000	7-Jun 0X0003	Circular Right	H
			DIRECTV 7S	12545	20000	7-Jun 0X0003	Circular Right	H
			DIRECTV 7S	12676	20000	7-Jun 0X0003	Circular Left	H
			DIRECTV 7S	12530	20000	7-Jun 0X0003	Circular Left	H
DSH119W	(53) ECHO	119W 119	EchoStar 7	12486	21500	3-Feb 0X1004	Circular Right	H
			EchoStar 7	12341	20000	9-Sep 0X1004	Circular Right	H
			EchoStar 7	12326	21500	3-Feb 0X1004	Circular Left	H
			EchoStar 7	12355	20000	9-Sep 0X1004	Circular Left	H
GLX123W	N/A	N/A	Galaxy 18	0	20000	2-Jan 0XFFFE	Vertical	H
			Galaxy 18	0	20000	2-Jan 0XFFFE	Vertical	L
			Galaxy 18	11732	13240	4-Mar 0XFFFE	Horizontal	H
			Galaxy 18	0	20000	2-Jan 0XFFFE	Horizontal	L
AMC21			AMC 21	11980	30000	5-Mar 0X0001	Vertical	H
			AMC 21	0	20000	2-Jan 0XFFFE	Vertical	L
			AMC 21	0	20000	2-Jan 0XFFFE	Horizontal	H
			AMC 21	0	20000	2-Jan 0XFFFE	Horizontal	L
DSH129W	(54) ECHO	129W 129	Ceil 2	12516	21500	3-Feb 0X1008	Circular Right	H
			Ceil 2	12545	21500	9-Sep 0X1008	Circular Right	H
			Ceil 2	12501	21500	3-Feb 0X1008	Circular Left	H
			Ceil 2	12530	21500	9-Sep 0X1008	Circular Left	H
TELE15W	N/A	N/A	Telstar 12, ESA	12524	26470	4-Mar 0X0001	Vertical	H
			Telstar 12, ESA	11150	19279	4-Mar 0XFFFE	Vertical	L
			Telstar 12, ESA	12608	19279	3-Feb 0X0002	Horizontal	H
			Telstar 12, ESA	11124	18386	4-Mar 0X0601	Horizontal	L
TELA15W	N/A	N/A	Telstar 12 A	11842	20000	9-Sep 0XFFFE	Vertical	H
			Telstar 12 A	0	20000	2-Jan 0XFFFE	Vertical	L
			Telstar 12 A	11964	14700	3-Feb 0X345E	Horizontal	H
			Telstar 12 A	0	20000	2-Jan 0XFFFE	Horizontal	L

THOR1W	(5) THOR	1W	Thor 5/6	12188	28000	8-Jul 0X0600	Vertical	H
			Thor 5/6	11309	24500	8-Jul 0X0046	Vertical	L
			Thor 5/6	11938	28000	8-Jul 0X0600	Horizontal	H
			Thor 5/6	11325	24500	8-Jul 0X0046	Horizontal	L
HSPE30W	(7) HISPASAT	30W	Hispasat 1C	12379	27500	4-Mar 0X0031	Vertical	H
			Hispasat 1C	11771	27500	4-Mar 0X0031	Vertical	L
			Hispasat 1C	12322	27500	4-Mar 0X0036	Horizontal	H
			Hispasat 1C	11811	27500	4-Mar 0X0036	Horizontal	L
HSPA30W	N/A	N/A	Hispasat 1C A	12052	27500	4-Mar 0X0033	Vertical	H
			Hispasat 1C A	0	20000	2-Jan 0XFFFE	Vertical	L
			Hispasat 1C A	12132	27500	4-Mar 0XFFFE	Horizontal	H
			Hispasat 1C A	0	20000	2-Jan 0XFFFE	Horizontal	L
IT34W	N/A	N/A	Intelsat 903	0	20000	2-Jan 0XFFFE	Vertical	H
			Intelsat 903	11675	30000	3-Feb 0X0001	Vertical	L
			Intelsat 903	0	20000	2-Jan 0XFFFE	Horizontal	H
			Intelsat 903	11675	30000	3-Feb 0X0001	Horizontal	L
IT43W	N/A	N/A	Intelsat 11	0	20000	3-Feb 0XFFFE	Vertical	H
			Intelsat 11	10722	30000	4-Mar 0XFFFE	Vertical	L
			Intelsat 11	0	20000	3-Feb 0XFFFE	Horizontal	H
			Intelsat 11	10882	30000	4-Mar 0XFFFE	Horizontal	L
AMOSE4W	N/A	N/A	Amos 2	0	20000	2-Jan 0XFFFE	Vertical	H
			Amos 2	10806	27500	4-Mar 0X00AB	Vertical	L
			Amos 2	0	20000	2-Jan 0XFFFE	Horizontal	H
			Amos 2	10806	27500	4-Mar 0X0001	Horizontal	L
AMOSM4W	N/A	N/A	Amos 2 ME	0	20000	2-Jan 0XFFFE	Vertical	H
			Amos 2 ME	10722	27500	6-May 0X00AB	Vertical	L
			Amos 2 ME	0	20000	2-Jan 0XFFFE	Horizontal	H
			Amos 2 ME	0	20000	2-Jan 0XFFFE	Horizontal	L
INT58W	(63) PAS_9	58W	Sky Mexico	12180	30000	4-Mar 0XFFFE	Vertical	H
			Sky Mexico	0	20000	2-Jan 0XFFFE	Vertical	L
			Sky Mexico	11960	30000	4-Mar 0XFFFE	Horizontal	H
			Sky Mexico	0	20000	2-Jan 0XFFFE	Horizontal	L
NA			Eutelsat W5	12564	29950	8-Jul 0X055F	Vertical	H
			Eutelsat W5	11555	29950	8-Jul 0X055F	Vertical	L
			Eutelsat W5	12543	27500	4-Mar 0X0801	Horizontal	H
			Eutelsat W5	11634	29950	4-Mar 0X055F	Horizontal	L

DSH61W	(51) ECHO_61 61W		EchoStar 3	12457	21500	3-Feb 0X1002	Circular Right	H
			EchoStar 3	12457	21500	3-Feb 0X1002	Circular Right	H
			EchoStar 3	12414	20000	8-Jul 0X1002	Circular Left	H
			EchoStar 3	12414	20000	8-Jul 0X1002	Circular Left	H
TELB63W	N/A	N/A	Telstar 14R	11720	31300	4-Mar 0XFFFE	Vertical	H
			Telstar 14R	0	20000	2-Jan 0XFFFE	Vertical	L
			Telstar 14R	12055	26666	6-May 0XFFFE	Horizontal	H
			Telstar 14R	0	20000	2-Jan 0XFFFE	Horizontal	L
TELM63W	N/A	N/A	Telstar 14 EB	0	20000	2-Jan 0XFFFE	Vertical	H
			Telstar 14 EB	11640	18100	8-Jul 0XFFFE	Vertical	L
			Telstar 14 EB	11979	13021	4-Mar 0XFFFE	Horizontal	H
			Telstar 14 EB	0	20000	2-Jan 0XFFFE	Horizontal	L
NA			Star One C2	0	20000	2-Jan 0XFFFE	Vertical	H
			Star One C2	11130	29890	4-Mar 0X1325	Vertical	L
			Star One C2	11880	29890	4-Mar 0X1325	Horizontal	H
			Star One C2	10974	29890	4-Mar 0X1325	Horizontal	L
AM40E	N/A	N/A	Nimiq 5	12224	21500	9-Sep 0X1005	Circular Right	H
			Nimiq 5	12253	21500	9-Sep 0X1005	Circular Right	H
			Nimiq 5	12297	21500	9-Sep 0X1005	Circular Left	H
			Nimiq 5	12384	21500	9-Sep 0X1005	Circular Left	H
DSH77W	N/A	N/A	EchoStar 8	12224	22500	9-Sep 0X1003	Circular Right	H
			EchoStar 8	12282	22500	9-Sep 0X1003	Circular Right	H
			EchoStar 8	12239	22500	9-Sep 0X1713	Circular Left	H
			EchoStar 8	12268	22500	9-Sep 0X1003	Circular Left	H
77W			EchoStar 1	12253	22500	9-Sep 0X1713	Circular Right	H
			EchoStar 1	12253	22500	9-Sep 0X1713	Circular Right	H
			EchoStar 1	0	20000	2-Jan 0XFFFE	Circular Left	H
			EchoStar 1	0	20000	2-Jan 0XFFFE	Circular Left	H
NILE7W	(11) NILESAT 7W		Nilesat 101	11938	27500	4-Mar 0X0800	Vertical	H
			Nilesat 101	11747	27500	4-Mar 0X0800	Vertical	L
			Nilesat 101	12226	27500	4-Mar 0X0800	Horizontal	H
			Nilesat 101	11727	27500	4-Mar 0X0800	Horizontal	L
EXVU82W	(50) EXPRESSVU	82W	Bell TV HD	12428	20000	9-Sep 0X0101	Circular Right	H
			Bell TV HD	12224	20000	9-Sep 0X0101	Circular Right	H
			Bell TV HD	12443	20000	9-Sep 0X0101	Circular Left	H
			Bell TV HD	12268	20000	9-Sep 0X0101	Circular Left	H

AMC87W	N/A	N/A	SES 2	11900	30000	3-Feb 0XFFFE	Vertical	H
			SES 2	0	20000	2-Jan 0XFFFE	Vertical	L
			SES 2	11960	29270	4-Mar 0XFFFE	Horizontal	H
			SES 2	0	20000	2-Jan 0XFFFE	Horizontal	L
EXVU91W	(61) EXPRESSTV	91W	Bell TV	12428	20000	9-Sep 0X0100	Circular Right	H
			Bell TV	12224	20000	9-Sep 0X0100	Circular Right	H
			Bell TV	12239	20000	9-Sep 0X0100	Circular Left	H
			Bell TV	12268	20000	9-Sep 0X0100	Circular Left	H
GLX93W	N/A	N/A	Galaxy 25	11780	30000	6-May 0XFFFE	Vertical	H
			Galaxy 25	0	20000	2-Jan 0XFFFE	Vertical	L
			Galaxy 25	11874	19510	4-Mar 0XFFFE	Horizontal	H
			Galaxy 25	0	20000	2-Jan 0XFFFE	Horizontal	L
GLX95W	(58) GALAXY3CN	N/A	DIRECTV LA	11570	20000	3-Feb 0XFFFE	Circular Right	H
			DIRECTV LA	11480	20000	3-Feb 0XFFFE	Circular Right	H
			DIRECTV LA	11597	22500	3-Feb 0XFFFE	Circular Left	H
			DIRECTV LA	11480	20000	3-Feb 0XFFFE	Circular Left	H
NA	N/A	N/A	DIRECTV	0	20000	2-Jan 0XFFFE	Vertical	H
			INTL					
			DIRECTV	0	20000	2-Jan 0XFFFE	Vertical	L
			INTL					
GLX97W	N/A	N/A	DIRECTV	11720	20000	3-Feb 0X0001	Horizontal	H
			INTL					
			DIRECTV	0	20000	2-Jan 0XFFFE	Horizontal	L
			INTL					
GLX97W	N/A	N/A	Galaxy 19	11929	22000	4-Mar 0X0001	Vertical	H
			Galaxy 19	0	20000	2-Jan 0XFFFE	Vertical	L
			Galaxy 19	11937	28100	3-Feb 0X4048	Horizontal	H
			Galaxy 19	0	20000	2-Jan 0XFFFE	Horizontal	L

Decoder Type	Orbital Position
DVB QPSK	105E
DVB QPSK	105E
DVB QPSK	105E
DVB QPSK	105E

DVB QPSK	108E
DVB QPSK	108E
LDPC 8PSK STD DVB-S2	108E
DVB QPSK	108E

DVB QPSK	122E
DVB QPSK	122E
DVB QPSK	122E
DVB QPSK	122E

DVB QPSK	124E
DVB QPSK	124E
DVB QPSK	124E
DVB QPSK	124E

DVB QPSK	128E
DVB QPSK	128E
DVB QPSK	128E
DVB QPSK	128E

DVB QPSK	132E
DVB QPSK	132E
LDPC 8PSK STD DVB-S2	132E
DVB QPSK	132E

DVB QPSK	134E
DVB QPSK	134E
DVB QPSK	134E
DVB QPSK	134E

DVB QPSK	138E
DVB QPSK	138E
DVB QPSK	138E
DVB QPSK	138E

Decoder Type	Orbital Position
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DVB QPSK 105E
DVB QPSK 105E
DVB QPSK 105E
DVB QPSK 105E

DVB QPSK 108E
DVB QPSK 108E
LDPC 8PSK 108E
STD DVB-S2
DVB QPSK 108E

DVB QPSK 122E
DVB QPSK 122E
DVB QPSK 122E
DVB QPSK 122E

DVB QPSK 124E
DVB QPSK 124E
DVB QPSK 124E
DVB QPSK 124E

DVB QPSK 128E
DVB QPSK 128E
DVB QPSK 128E
DVB QPSK 128E

DVB QPSK 132E
DVB QPSK 132E
LDPC 8PSK 132E
STD DVB-S2
DVB QPSK 132E

DVB QPSK 134E
DVB QPSK 134E
DVB QPSK 134E
DVB QPSK 134E

DVB QPSK 138E
DVB QPSK 138E
DVB QPSK 138E
DVB QPSK 138E

DVB QPSK 13E
DVB QPSK 13E
DVB QPSK 13E
DVB QPSK 13E

DVB QPSK 140E
DVB QPSK 140E

DVB QPSK 140E
DVB QPSK 140E

DVB QPSK 144E
DVB QPSK 144E
DVB QPSK 144E
DVB QPSK 144E

DVB QPSK 156E
DVB QPSK 156E
DVB QPSK 156E
DVB QPSK 156E

DVB QPSK 160E
DVB QPSK 160E
DVB QPSK 160E
DVB QPSK 160E

DVB QPSK 166E
DVB QPSK 166E
DVB QPSK 166E
DVB QPSK 166E

DVB QPSK 166E
DVB QPSK 166E
DVB QPSK 166E
DVB QPSK 166E

DVB QPSK 16E
DVB QPSK 16E
DVB QPSK 16E
LDPC QPSK 16E
STD DVB-S2

DVB QPSK 180E
DVB QPSK 180E
DVB QPSK 180E
LDPC 8PSK 180E
STD DVB-S2

DVB QPSK 180E
LDPC 8PSK 180E
STD DVB-S2
DVB QPSK 180E
DVB QPSK 180E

DVB QPSK 19E
DVB QPSK 19E
DVB QPSK 19E

DVB QPSK 19E

DVB QPSK 19E

DVB QPSK 19E

DVB QPSK 19E

DVB QPSK 19E

LDPC 8PSK 23E

STD DVB-S2

LDPC 8PSK 23E

STD DVB-S2

DVB QPSK 23E

DVB QPSK 23E

DVB QPSK 23E

LDPC 8PSK 23E

STD DVB-S2

DVB QPSK 23E

DVB QPSK 23E

DVB QPSK 26E

DVB QPSK 26E

DVB QPSK 26E

DVB QPSK 26E

DVB QPSK 28E

DVB QPSK 28E

DVB QPSK 28E

DVB QPSK 28E

DVB QPSK 28E

DVB QPSK 28E

DVB QPSK 28E

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DVB QPSK 36E

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DVB QPSK 53E

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DVB QPSK 7E

DVB QPSK 7E

DVB QPSK 7E

DVB QPSK 7E

DVB QPSK 80E

DVB QPSK 80E

DVB QPSK 80E

DVB QPSK 80E

DVB QPSK 88E

LDPC 8PSK 88E

STD DVB-S2 88E

DVB QPSK 88E

DVB QPSK 90E

DVB QPSK 90E

DVB QPSK 90E

DVB QPSK 90E

DVB QPSK 91E

DVB QPSK 91E

DVB QPSK 91E

DVB QPSK 91E

DVB QPSK 91E

DVB QPSK 91E

DVB QPSK 91E

DVB QPSK 91E

DVB QPSK 93E

DVB QPSK 93E

DVB QPSK 93E

DVB QPSK 93E

DVB QPSK	95E
DVB QPSK	95E
DVB QPSK	95E
DVB QPSK	95E

DVB QPSK	95E
DVB QPSK	95E
DVB QPSK	95E
DVB QPSK	95E

DVB QPSK	95E
DVB QPSK	95E
DVB QPSK	95E
DVB QPSK	95E

LDPC 8PSK	9E
STD DVB-S2	
DVB QPSK	9E
DVB QPSK	9E
DVB QPSK	9E

DSS DTV	101W
DSS DTV	101W
DSS DTV	101W
DSS DTV	101W

DVB QPSK	101W
DVB QPSK	101W
DVB QPSK	101W
DVB QPSK	101W

DCII QPSK	107W
DiaCipher 2	
DVB QPSK	107W
DCII QPSK	107W
DiaCipher 2	
DVB QPSK	107W

DVB QPSK	110W
DVB QPSK	110W
DVB QPSK	110W
DVB QPSK	110W

Turbo 8PSK	110W
Dish	
DVB QPSK	110W
Turbo 8PSK	110W
Dish	
DVB QPSK	110W

DCII QPSK	111W
DiaCipher 2	
DVB QPSK	111W
DCII QPSK	111W
DiaCipher 2	
DVB QPSK	111W

DVB QPSK	118W
DVB QPSK	118W
DVB QPSK	118W
DVB QPSK	118W

DSS DTV	119W
DSS DTV	119W
DSS DTV	119W
DSS DTV	119W

Turbo 8PSK	119W
Dish	
DVB QPSK	119W
Turbo 8PSK	119W
Dish	
DVB QPSK	119W

DVB QPSK	123W
DVB QPSK	123W
DVB QPSK	123W
DVB QPSK	123W

LDPC QPSK	125W
STD DVB-S2	
DVB QPSK	125W
DVB QPSK	125W
DVB QPSK	125W

Turbo 8PSK	129W
Dish	
Turbo 8PSK	129W
Dish	
Turbo 8PSK	129W
Dish	
Turbo 8PSK	129W
Dish	

DVB QPSK	15W
DVB QPSK	15W
DVB QPSK	15W
DVB QPSK	15W

LDPC 8PSK	15W
STD DVB-S2	
DVB QPSK	15W
DVB QPSK	15W
DVB QPSK	15W

DVB QPSK	1W
DVB QPSK	1W
DVB QPSK	1W
DVB QPSK	1W

DVB QPSK	30W
DVB QPSK	30W
DVB QPSK	30W
DVB QPSK	30W

DVB QPSK	30W
DVB QPSK	30W
DVB QPSK	30W
DVB QPSK	30W

DVB QPSK	34W
LDPC 8PSK	34W
STD DVB-S2	
DVB QPSK	34W
LDPC 8PSK	34W
STD DVB-S2	

DVB QPSK	43W
DVB QPSK	43W
DVB QPSK	43W
DVB QPSK	43W

DVB QPSK	4W
DVB QPSK	4W
DVB QPSK	4W
DVB QPSK	4W

DVB QPSK	4W
DVB QPSK	4W
DVB QPSK	4W
DVB QPSK	4W

DVB QPSK	58W
DVB QPSK	58W
DVB QPSK	58W
DVB QPSK	58W

DVB QPSK	5W
DVB QPSK	5W
DVB QPSK	5W
LDPC 8PSK	5W
STD DVB-S2	

Turbo 8PSK 61W
Dish
Turbo 8PSK 61W
Dish
DVB QPSK 61W
DVB QPSK 61W

DVB QPSK 63W
DVB QPSK 63W
DVB QPSK 63W
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DVB QPSK 63W
DVB QPSK 63W
DVB QPSK 63W
DVB QPSK 63W

DVB QPSK 70W
DVB QPSK 70W
DVB QPSK 70W
DVB QPSK 70W

Turbo QPSK 72W
Dish
Turbo QPSK 72W
Dish
Turbo QPSK 72W
Dish
Turbo QPSK 72W
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Turbo 8PSK 77W
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Turbo 8PSK 77W
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Turbo 8PSK 77W
Dish

DVB QPSK 7W
DVB QPSK 7W
DVB QPSK 7W
DVB QPSK 7W

DVB QPSK 82W
Turbo 8PSK 82W
Dish
DVB QPSK 82W
Turbo 8PSK 82W
Dish

DVB QPSK	87W
DVB QPSK	87W
DVB QPSK	87W
DVB QPSK	87W

DVB QPSK	91W
DVB QPSK	91W
DVB QPSK	91W
DVB QPSK	91W

DVB QPSK	93W
DVB QPSK	93W
DVB QPSK	93W
DVB QPSK	93W

DSS DTV	95W
DSS DTV	95W
DSS DTV	95W
DSS DTV	95W

DVB QPSK	95W
DVB QPSK	95W
DSS DTV	95W
DVB QPSK	95W

DVB QPSK	97W
DVB QPSK	97W
DVB QPSK	97W
DVB QPSK	97W