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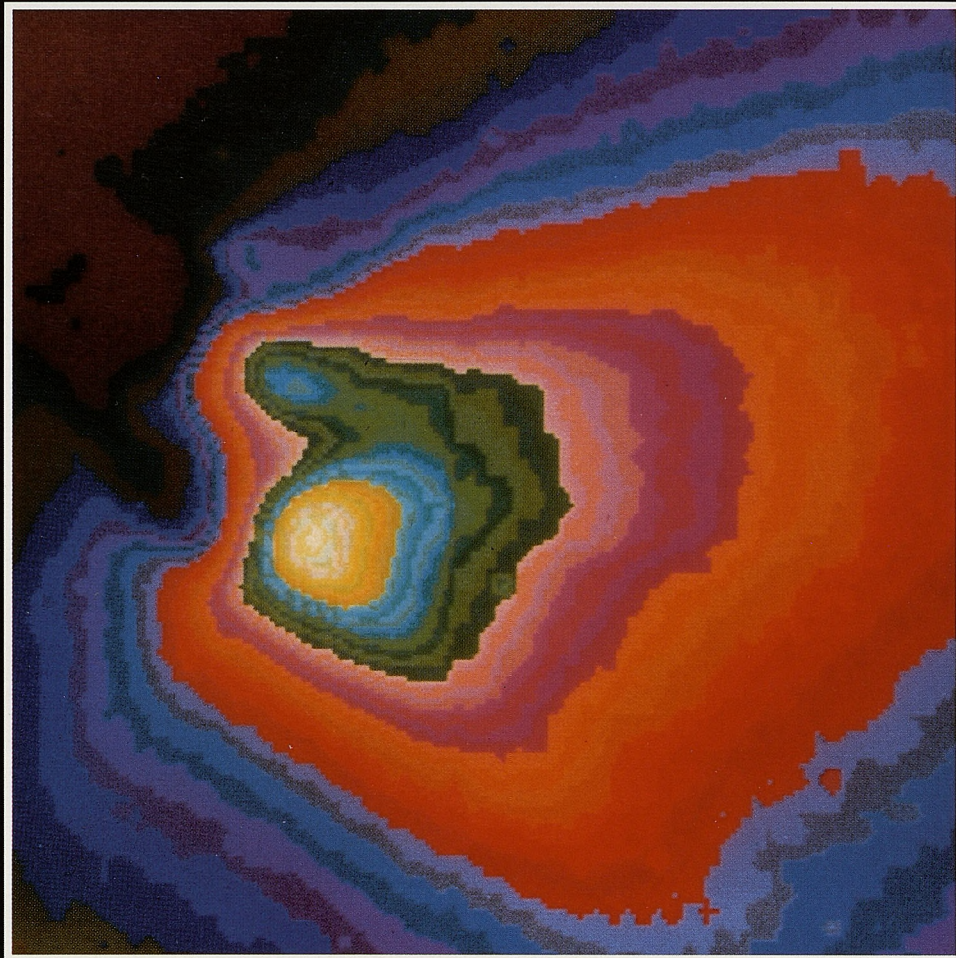
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(ITU) للاتصالات الدولي الاتحاد في والمحفوظات المكتبة قسم أجراه الضوئي بالمسح تصوير نتاج (PDF) الإلكترونية النسخة هذه والمحفوظات المكتبة قسم في المتوفرة الوثائق ضمن أصلية ورقية وثيقة من نقلًا.

此电子版（PDF版本）由国际电信联盟（ITU）图书馆和档案室利用存于该处的纸质文件扫描提供。

Настоящий электронный вариант (PDF) был подготовлен в библиотечно-архивной службе Международного союза электросвязи путем сканирования исходного документа в бумажной форме из библиотечно-архивной службы МСЭ.

Table of artificial satellites launched in 1985



Enlargement of the centre of a colour-coded picture of the nucleus of Halley's Comet taken by the Halley Multicolour Camera on board the European Space Agency's Giotto spacecraft during the night of 13 to 14 March 1986 from a distance of about 25 700 km.

Each colour corresponds to a different level of brightness in the field of view of the camera and does not reflect the real colours of the comet.

Image processing in co-operation with the *Deutsche Forschungs- und Versuchsanstalt für Luft- und Raumfahrt* eV, Oberpfaffenhofen, (Fed. Rep. of Germany).
(ESA)

This list includes all artificial satellites launched in 1985. It was prepared from information provided by telecommunication administrations of ITU Member countries, the Committee on Space Research (COSPAR), national space research organizations, the International Frequency Registration Board (IFRB) of the ITU, and from details published in the specialized press. The data concerning the orbit parameters are the initial orbital data. Fragments or stages of rockets left over from launching operations and placed in orbit with the various spacecraft have not been included.

TABLE OF GEOSTATIONARY SPACE STATIONS BY ORBITAL POSITIONS

The following table includes both satellites already in orbit and those planned for future launching into the geostationary satellite orbit.

This table is based on, and limited to, information supplied to the International Frequency Registration Board (IFRB) by ITU Member administrations under the provisions of the Radio Regulations paragraphs RR1042, RR1060 and RR1488 to RR1491. The designations of the satellites are those officially notified and may not always correspond to the name in general use. (Situation on 31 December 1985.)

Orbital position			Space station		Frequency bands																
					GHz																
			0	1	2	4	5	6	7	8	11	12	13	14	15	17	18	19	20	>20	
175.0 W A	PNG	PACSTAR-2				4		6				12		14							
171.0 W N	USA	TDRS WEST			C2									14	15						
170.0 W N	URS	GALS-4							7	8											
170.0 W C	URS	LOUTCH P4									11			14							
170.0 W N	URS	STATSIONAR-10				4	5	6													
170.0 W A	URS	STATSIONAR-D2				4		6													
170.0 W C	URS	VOLNA-7	0	1																	
168.0 W N	URS	POTOK-3				4															
160.0 W N	URS	ESDRN									11			14							
149.0 W N	USA	ATS-1	0			4		6													
145.0 W A	USA	FLTSATCOM-A PAC	0						7	8											
145.0 W A	MEX	MORELOS-4				4		6				12		14							
143.0 W A	USA	US SATCOM II-R				4		6													
143.0 W C	USA	US SATCOM V				4		6													
141.0 W A	MEX	MORELOS-3				4		6				12		14							
139.0 W C	USA	US SATCOM I-R				4		6													
136.0 W A	USA	USASAT 16D										12		14							
135.0 W N	USA	GOES WEST	0	1	2																
135.0 W N	USA	US SATCOM-I				4		6													
135.0 W N	USA	USGCSS PH2 E PAC							7	8											
135.0 W N	USA	USGCSS PH3 E PAC				C2			7	8											
134.0 W C	USA	USASAT 11D				4		6													
134.0 W A	USA	USASAT 16C										12		14							
132.0 W A	USA	USASAT 11C										12		14							
131.0 W C	USA	US SATCOM III-R				4		6													
130.0 W A	USA	USASAT 10D										12		14							
130.0 W A	USA	USRDSS WEST		1	2		5	6													
128.0 W A	USA	ASC-1				4		6				12		14							
128.0 W N	USA	COMSTAR D-1				4		6													
126.0 W A	USA	USASAT 10C										12		14							
124.0 W A	USA	USASAT 10B										12		14							
123.5 W N	USA	WESTAR-2				4		6													
123.0 W C	USA	WESTAR-5				4		6													
120.0 W C	USA	SPACENET 1				4		6				12		14							
120.0 W A	USA	USASAT 10A										12		14							
119.0 W N	USA	US SATCOM-2				4		6													
117.5 W N	CAN	ANIK C-3										12		14							

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Orbital position	Space station		Frequency bands GHz																		
			0	1	2	4	5	6	7	8	11	12	13	14	15	17	18	19	20	>20	
116.5 W N	MEX	MORELOS 2				4		6				12		14							
113.5 W N	MEX	MORELOS 1				4		6				12		14							
110.0 W C	CAN	ANIK C-2										12		14							
109.0 W N	CAN	ANIK B-1				4		6				12		14							
108.0 W C	CAN	ANIK D-2				4		6													
107.5 W C	CAN	ANIK C-1										12		14							
106.5 W A	CAN	MSAT	0		2						11	12	13	14							
106.0 W A	USA	GSTAR I										12		14							
105.0 W N	USA	ATS-5	0	1																	
104.5 W N	CAN	ANIK D-1				4		6													
103.0 W A	USA	GSTAR II										12		14							
101.0 W A	USA	USASAT 16B										12		14							
101.0 W A	USA	USASAT 17A				4															
100.0 W N	USA	FLTSATCOM E PAC	0						7	8											
100.0 W A	USA	FLTSATCOM-A E PAC	0						7	8									20	44	
100.0 W A	USA	USRDSS CENTRAL		1	2		5	6													
99.0 W N	USA	USASAT 6B										12		14							
99.0 W N	USA	WESTAR-1				4		6													
99.0 W C	USA	WESTAR-4				4		6													
97.0 W C	USA	USASAT 6A										12		14							
95.0 W N	USA	COMSTAR D-2				4		6													
95.0 W A	USA	TELSTAR 3A				4		6													
95.0 W C	USA	USASAT 6C										12		14							
93.5 W C	USA	USASAT 12B				4		6													
93.0 W A	USA	USASAT 16A										12		14							
91.0 W A	USA	ADV. WESTAR I				4		6				12		14							
91.0 W C	USA	USASAT 9A										12		14							
91.0 W N	USA	WESTAR-3				4		6													
89.0 W A	EQACR	CONDOR-B				4		6													
88.5 W C	USA	SPACENET III				4		6				12		14							
88.5 W A	USA	USASAT 12D				4		6													
87.0 W N	USA	COMSTAR D-3				4		6													
87.0 W A	USA	TELSTAR 3B				4		6													
87.0 W A	USA	USASAT 9B										12		14							
86.0 W N	USA	ATS-3	0																		
86.0 W C	USA	USASAT 3C				4		6													
85.0 W A	ARG	NAHUEL 2				4		6				12		14							
85.0 W A	USA	USASAT 9C										12		14							
83.0 W A	CUB	STSC-1				4		6													
83.0 W N	USA	USASAT 7B				4		6													
83.0 W A	USA	USASAT 9D										12		14							
81.0 W C	USA	USASAT 7D				4		6				12		14							
80.0 W A	ARG	NAHUEL 1				4		6				12		14							
79.0 W N	USA	TDRS CENTRAL			C2								14	15							

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Orbital position	Space station		Frequency bands GHz																	
			0	1	2	4	5	6	7	8	11	12	13	14	15	17	18	19	20	>20
79.0 W A	USA	USASAT 11A										12		14						
79.0 W A	USA	USASAT 12A				4		6												
77.5 W A	EQACR	CONDOR-A				4		6												
77.0 W A	USA	USASAT 11B										12		14						
76.0 W A	USA	USASAT 12C				4		6												
75.4 W N	CLM	SATCOL-1A				4		6												
75.4 W N	CLM	SATCOL-1B				4		6												
75.0 W N	USA	GOES EAST	0	1	2															
75.0 W N	CLM	SATCOL-2				4		6												
74.0 W C	USA	USASAT 7A				4		6												
72.0 W A	EQACR	CONDOR-C				4		6												
72.0 W C	USA	USASAT 8B				4		6												
70.0 W A	USA	FLTSATCOM-B W ATL																	20	44
70.0 W N	B	SBTS A1				4		6												
70.0 W A	USA	USRDSS EAST		1	2		5	6												
69.0 W C	USA	USASAT 7C				4		6				12		14						
67.0 W C	USA	USASAT 8A				4		6												
66.0 W A	USA	USASAT 15D										12		14						
65.0 W N	B	SBTS A2				4		6												
64.0 W A	USA	USASAT 15C										12		14						
63.0 W A	USA	USASAT 14D				4		6												
62.0 W A	USA	USASAT 15B										12		14						
62.0 W A	USA	USASAT 8B				4		6												
61.0 W A	USA	USASAT 14C				4		6												
60.0 W C	USAIT	INTELSAT IBS 300E				4		6			11	12		14						
60.0 W C	USAIT	INTELSAT5A 300E				4		6			11			14						
60.0 W A	USA	USASAT 15A										12		14						
58.0 W C	USA	USASAT 13E									11	12		14						
58.0 W A	USA	USASAT 8C				4		6												
57.0 W A	USA	USASAT 13H				4		6			11									
56.0 W C	USAIT	INTELSAT IBS 304E				4		6			11	12		14						
56.0 W C	USAIT	INTELSAT5A 304E				4		6			11			14						
56.0 W C	USA	USASAT 13D									11	12		14						
55.0 W A	USA	USASAT 14B				4		6												
53.0 W C	USAIT	INTELSAT IBS 307E				4		6			11	12		14						
53.0 W N	USAIT	INTELSAT4A ATL3				4		6												
53.0 W C	USAIT	INTELSAT5 CONT1				4		6			11			14						
53.0 W C	USAIT	INTELSAT5A CONT1				4		6			11			14						
52.5 W A	USA	USGCSS PH3 W ATL			2				7	8										
50.0 W C	USAIT	INTELSAT IBS 310E				4		6			11	12		14						
50.0 W C	USAIT	INTELSAT4A ATL2				4		6												
50.0 W C	USAIT	INTELSAT5 CONT2				4		6			11			14						
50.0 W C	USAIT	INTELSAT5A CONT2				4		6			11			14						
50.0 W C	USA	USASAT 13C									11			14						

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Orbital position	Space station		Frequency bands GHz																	
			0	1	2	4	5	6	7	8	11	12	13	14	15	17	18	19	20	>20
47.0 W C	USA	USASAT 13B										11								
45.0 W C	USA	USASAT 13F										11	12		14					
45.0 W A	USA	USASAT 13I					4		6			11								
43.5 W C	F	VIDEOSAT-3			2							12		14						
43.0 W C	USA	USASAT 13G										11	12		14					
42.5 W A	USA	USGCSS P3 MID-ATL								7	8									
41.0 W N	USA	TDRS EAST			C2										14	15				
41.0 W A	USA	USASAT 14A				4		6												
40.5 W C	USAIT	INTELSAT IBS 319.5E				4		6				11	12		14					
40.5 W C	USAIT	INTELSAT5A 319.5E				4		6				11			14					
37.5 W C	USA	USASAT 13A											11		14					
37.5 W C	F	VIDEOSAT-2			2								12		14					
34.5 W N	USAIT	INTELSAT5 ATL4				4		6				11			14					
34.5 W C	USAIT	INTELSAT5A ATL3				4		6				11			14					
31.0 W A	IRL	EIRESAT-1										11		13						
31.0 W N	USAIT	INTELSAT4A ATL4				4		6												
31.0 W C	USAIT	INTELSAT5 ATL6				4		6				11			14					
31.0 W C	USAIT	INTELSAT5A ATL6				4		6				11			14					
31.0 W C	G	UNISAT 1											12		14			17		
31.0 W C	G	UNISAT 1 ATL											12		14					
27.5 W N	USAIT	INTELSAT5 ATL3				4		6				11			14					
27.5 W C	USAIT	INTELSAT5A ATL2				4		6				11			14					
27.5 W C	USAIT	INTELSAT6 332.5E				4	5	6				11			14					
26.5 W N	URS	GALS-1							7	8										
26.5 W A	URS	STATSIONAR-17				4	5	6												
26.5 W A	URS	STATSIONAR-D1				4		6												
26.0 W A	G INM	INMARSAT AOR-CENTRAL		1		4		6												
26.0 W N	F MRC	MARECS ATL1	0	1		4		6												
25.0 W C	URS	LOUTCH P1										11			14					
25.0 W N	URS	STATSIONAR-8				4	5													
25.0 W C	URS	VOLNA-1	0	1																
24.5 W N	USAIT	INTELSAT5 ATL1				4		6				11			14					
24.5 W C	USAIT	INTELSAT5A ATL1				4		6				11			14					
24.5 W C	USAIT	INTELSAT6 335.5E				4	5	6				11			14					
24.0 W N	URS	PROGNOZ-1			2															
23.0 W N	USA	FLTSATCOM ATL	0						7	8										
23.0 W A	USA	FLTSATCOM-A ATL	0						7	8										
23.0 W A	USA	FLTSATCOM-B E ATL																	20	44
23.0 W C	F MRS	MARECS ATL2	0	1		4		6												
21.5 W C	USAIT	INTELSAT MCS ATL C		1		4		6												
21.5 W N	USAIT	INTELSAT4A ATL1				4		6												
21.5 W C	USAIT	INTELSAT5 ATL5				4		6				11			14					
21.5 W C	USAIT	INTELSAT5A 338.5E				4		6				11			14					
20.0 W C	LUX	GDL-4						6				11	12		14					

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Orbital position	Space station		Frequency bands GHz																		
			0	1	2	4	5	6	7	8	11	12	13	14	15	17	18	19	20	>20	
19.0 W A	SUI	HELVESAT-1									12					17					
19.0 W N	F LST	L-SAT			2						12	13	C14			17		19	20	30	
19.0 W A	LUX	LUX-SAT									12					17					
19.0 W A	I	SARIT								11						17					
19.0 W N	F	TDF-1			C2											17					
19.0 W A	F	TDF-2			2					11	12					17					
19.0 W N	D	TV-SAT			2						C12					C17					
18.5 W C	USAIT	INTELSAT IBS 341.5E				4		6			11	12		14							
18.5 W N	USAIT	INTELSAT MCS ATL A		1		4		6													
18.5 W N	USAIT	INTELSAT5 ATL2				4		6		11				14							
18.5 W C	USAIT	INTELSAT5A ATL4				4		6			11			14							
18.0 W N	BEL	SATCOM PHASE-3							7	8											
18.0 W N	BEL	SATCOM-2							7	8											
16.5 W C	USAIT	INTELSAT IBS 343.5E				4		6			11	12		14							
16.5 W C	USAIT	INTELSAT4A 343.5E				4		6													
16.5 W C	USAIT	INTELSAT5 343.5E				4		6			11			14							
16.5 W C	USAIT	INTELSAT5A 343.5E				4		6			11			14							
16.0 W N	URS	WSDRN									11			14							
16.0 W A	URS	ZSSRD-2									11			14							
15.0 W A	G INM	INMARSAT AOR-EAST					1	4		6											
15.0 W N	USA	MARISAT-ATL		0	1		4		6												
14.0 W A	URS	GOMS-1		0	1	2				7	8								20	28	
14.0 W N	URS	LOUTCH-1									11			14							
14.0 W A	URS	MORE-14			1		4		6												
14.0 W N	URSIK	STATSIONAR-4					4		C6												
14.0 W N	URS	VOLNA-2			1																
13.5 W N	URS	POTOK-1					4														
12.5 W A	F	MAROTS-B		0	1																
12.0 W A	F	HIPPARCOS				2															
12.0 W N	USA	USGCSS PH2 ATL								7	8										
12.0 W N	USA	USGCSS PH3 ATL				C2				7	8										
11.0 W C	F	F-SAT 2				2						12		14					20	30	
11.0 W N	URS	STATSIONAR-11					4		6												
8.0 W N	F	TELECOM-1A				2	4		6	7	8		12		14						
5.0 W N	F	TELECOM-1B				2	4		6	7	8		12		14						
4.0 W C	USAIT	INTELSAT4A ATL1					4		6												
4.0 W C	USAIT	INTELSAT5 CONT3					4		6			11			14						
4.0 W C	USAIT	INTELSAT5A CONT3					4		6			11			14						
1.0 W C	USAIT	INTELSAT4A ATL2					4		6												
1.0 W C	USAIT	INTELSAT5 CONT4					4		6			11			14						
1.0 W C	USAIT	INTELSAT5A CONT4					4		6			11			14						
1.0 W C	G	SKYNET 4A		0						7	8									44	
0.0 W N	F GEO	GEOS-2		0																	
0.0 W N	F MET	METEOSAT		0	1	2															

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Orbital position	Space station		Frequency bands GHz																		
			0	1	2	4	5	6	7	8	11	12	13	14	15	17	18	19	20	>20	
0.0 E A	G	SKYNET A	0						7	8										44	
1.0 E C	LUX	GDL-5					6			11	12		14								
3.0 E C	F	TELECOM-1C			2	4		6	7	8		12		14							
5.0 E N	F OTS	OTS	0							11			14								
5.0 E C	S NOT	TELE-X			2						12		14		17						
6.0 E C	G	SKYNET 4B	0					7	8											44	
7.0 E N	F EUT	EUTELSAT I-3								11	12		14								
7.0 E C	F	F-SAT 1			2	4		6										20	30		
8.0 E A	URS	GALS-7						7	8												
8.0 E A	URS	STATSIONAR-18					4	5	6												
8.0 E A	URS	VOLNA-15	0	1																	
10.0 E C	F	APEX			2	4		6										20	90		
10.0 E N	F EUT	EUTELSAT-I	0							C11	C12		C14								
12.0 E N	URS	PROGNOZ-2			2																
13.0 E N	F EUT	EUTELSAT I-2	0							C11	C12		C14								
13.0 E C	I	ITALSAT			2												18	19	20	40	
14.0 E A	NIG	NIGERIA-1					4	5													
15.0 E C	ISR	AMS-1				4		6		11			14								
15.0 E C	ISR	AMS-2				4		6		11			14								
16.0 E A	F	EUTELSAT I-4	0							11	12		14								
16.0 E A	I	SICRAL 1A	0					7	8		12		14					20	44		
17.0 E N	ARS	SABS 1								11			14								
17.0 E A	ARS	SABS 1-2								11			14								
19.0 E N	ARSARB	ARABSAT-1			2	4		6													
19.0 E C	LUX	GDL-6						6		11	12		14								
20.0 E A	NIG	NIGERIA-2				4		6													
22.0 E A	I	SICRAL 1B	0						7	8		12		14				20	44		
23.0 E A	URS	GALS-8							7	8											
23.0 E A	URS	STATSIONAR-19				4	5	6													
23.0 E A	URS	VOLNA-17	0	1																	
23.5 E C	D	DFS-1			2					11	12		14					20	30		
26.0 E N	ARSARB	ARABSAT-2			2	4		6													
26.0 E C	IRN	ZOHREH-2								11			14								
28.5 E C	D	DFS-2			2					11	12		14					20	30		
29.0 E N	F GEO	GEOS-2	0		2																
32.0 E C	F	VIDEOSAT-1			2							12	14								
34.0 E C	IRN	ZOHREH-1								11			14								
35.0 E N	URS	GALS-6							7	8											
35.0 E N	URS	PROGNOZ-3			2	4															
35.0 E N	URS	STATSIONAR-2				4	5	6													
35.0 E A	URS	STATSIONAR-D3				4		6													
35.0 E A	URS	VOLNA-11	0	1																	
38.0 E A	PAK	PAKSAT 1										12	14								
40.0 E N	URS	STATSIONAR-12				4	5	6													

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Orbital position	Space station		Frequency bands GHz																		
			0	1	2	4	5	6	7	8	11	12	13	14	15	17	18	19	20	>20	
41.0 E A	PAK	PAKSAT II										12		14							
41.0 E A	IRN	ZOHREH-4									11			14							
45.0 E N	URS	GALS-2							7	8											
45.0 E C	URS	LOUTCH P2									11			14							
45.0 E A	URS	STATSIONAR D-4				4		6													
45.0 E N	URS	STATSIONAR-9				4	5	6													
45.0 E C	URS	VOLNA-3	0	1																	
45.0 E A	URS	VOLNA-3M		1																	
47.0 E C	IRN	ZOHREH-3									11			14							
53.0 E N	URS	LOUTCH-2									11			14							
53.0 E A	URS	MORE-53		1		4		6													
53.0 E A	G	SKYNET 4C	0						7	8										44	
53.0 E N	URSIK	STATSIONAR-5				4		6													
53.0 E N	URS	VOLNA-4		1																	
57.0 E N	USAIT	INTELSAT5 INDOC3				4		6			11			14							
57.0 E C	USAIT	INTELSAT5A INDOC2				4		6			11			14							
57.0 E C	USAIT	INTELSAT6 57E				4	5	6			11			14							
60.0 E N	USAIT	INTELSAT MCS INDOC B		1		4		6													
60.0 E N	USAIT	INTELSAT5 INDOC2				4		6			11			14							
60.0 E C	USAIT	INTELSAT5A INDOC1				4		6			11			14							
60.0 E C	USAIT	INTELSAT6 60E				4	5	6			11			14							
60.0 E N	USA	USGCSS PH2 INDOC							7	8											
60.0 E N	USA	USGCSS PH3 INDOC			C2				7	8											
63.0 E N	USAIT	INTELSAT MCS INDOC A		1		4		6													
63.0 E N	USAIT	INTELSAT5 INDOC1				4		6			11			14							
63.0 E C	USAIT	INTELSAT5A INDOC3				4		6			11			14							
64.5 E A	G INM	INMARSAT IOR		1		4		6													
64.5 E C	F MRS	MARECS IND1	0	1		4		6													
65.0 E C	I	SIRIO	0								11	12									
66.0 E C	USAIT	INTELSAT MCS IND D		1		4		6													
66.0 E C	USAIT	INTELSAT5 IND4				4		6			11			14							
66.0 E C	USAIT	INTELSAT5A 66E				4		6			11			14							
70.0 E A	CHN	STW-2				4		6													
72.5 E N	USA	MARISAT-INDOC	0		C2	C4		C6													
73.0 E C	F MRS	MARECS IND2	0	1		4		6													
74.0 E N	IND	INSAT-1B	0			4	5	6													
75.0 E N	USA	FLTSATCOM INDOC	0						7	8											
75.0 E A	USA	FLTSATCOM-A IND	0						7	8											
75.0 E A	USA	FLTSATCOM-B IND																	20	44	
76.0 E A	URS	GOMS	0						7	8									20	28	
76.0 E C	URS	GOMSS	0	1	2																
77.0 E A	URS	CSSRD-2									11	12		14							
77.0 E N	INS	PALAPA-A2				4		6													
80.0 E N	URS	POTOK-2				4															

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Orbital position	Space station		Frequency bands GHz																		
			0	1	2	4	5	6	7	8	11	12	13	14	15	17	18	19	20	>20	
80.0 E N	URS	PROGNOZ-4				C2	C4														
80.0 E N	URS	STATSIONAR-1						4	5	6											
80.0 E C	URS	STATSIONAR-13						4		6											
81.5 E A	URS	FOTON-2						4		6											
82.5 E A	IND	INSAT-1D	0					4	5	6											
83.0 E N	INS	PALAPA-A1						4		6											
85.0 E N	URS	GALS-3									7	8									
85.0 E C	URS	LOUTCH P3											11			14					
85.0 E A	URS	STATSIONAR D-5						4		6											
85.0 E N	URS	STATSIONAR-3						4	5	6											
85.0 E C	URS	VOLNA-5	0	1																	
85.0 E A	URS	VOLNA-5M			1																
90.0 E N	URS	LOUTCH-3											11			14					
90.0 E A	URS	MORE-90			1			4		6											
90.0 E N	URS	STATSIONAR-6						4		6											
90.0 E C	URS	VOLNA-8			1																
93.5 E N	IND	INSAT-1C	0					4	5	6											
95.0 E N	URS	CSDRN											11			14					
95.0 E C	URS	STATSIONAR-14						4		6											
99.0 E N	URS	STATSIONAR-T	0							6											
99.0 E N	URS	STATSIONAR-T2	0							6											
103.0 E A	URS	LOUTCH-5											11			14					
103.0 E A	URS	STATSIONAR-21						4	5	6											
103.0 E A	CHN	STW-2						4		6											
108.0 E N	INS	PALAPA-B1						4		6											
110.0 E N	J	BS-2			2								12			14					
110.0 E N	J	BSE			2											14					
113.0 E N	INS	PALAPA-B2						4		6											
118.0 E C	INS	PALAPA-B3						4		6											
125.0 E N	CHN	STW-1						4		6											
128.0 E A	URS	GALS-10									7	8									
128.0 E A	URS	STATSIONAR D-6						4		6											
128.0 E N	URS	STATSIONAR-15						4	5	6											
128.0 E A	URS	VOLNA-9	0	1																	
128.0 E A	URS	VOLNA-9M			1																
130.0 E N	J	ETS-2	0	1	2								11							34	
130.0 E N	URS	GALS-5									7	8									
132.0 E N	J	CS-2A			2	4		6									17	18	19	28	
132.0 E A	J	CS-3A				4		6									17	18	19	40	
135.0 E N	J	SCE			2	4		6									17	18	19	20 30	
136.0 E N	J	CS-2B			2	4		6									17	18	19	28	
136.0 E A	J	CS-3B				4		6									17	18	19	40	
140.0 E N	J	GMS	0	1	2																
140.0 E N	J	GMS-2	0	1	2																

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Orbital position	Space station		Frequency bands GHz																	
			0	1	2	4	5	6	7	8	11	12	13	14	15	17	18	19	20	>20
140.0 E N	J	GMS-3	0	1	2															
140.0 E N	URS	LOUTCH-4									11			14						
140.0 E A	URS	MORE-140		1		4		6												
140.0 E N	URS	STATIONAR-7				4		6												
140.0 E N	URS	VOLNA-6		1																
145.0 E A	URS	STATIONAR-16				4		6												
150.0 E C	J	CSE				4		6												
150.0 E A	J	ETS-V		1	2		5	6												
150.0 E A	J	JCSAT-1										12		14						
154.0 E A	J	JCSAT-2										12		14						
156.0 E N	AUS	AUSSAT-1										12	13	14						
160.0 E N	AUS	AUSSAT-2										12	13	14						
160.0 E N	J	GMS	0	1	2															
164.0 E A	AUS	AUSSAT PACIFIC III										12		14						
164.0 E N	AUS	AUSSAT-3										12	13	14						
166.0 E A	URS	GOMS-2	0	1	2				7	8									20	28
167.0 E A	PNG	PACSTAR-1				4		6				12		14						
167.0 E A	URS	VSSRD-2									11	12		14						
172.0 E N	USA	FLTSATCOM W PAC	0						7	8										
172.0 E A	USA	FLTSATCOM-A W PAC	0						7	8									20	44
173.0 E C	USAIT	INTELSAT4A PAC1				4		6												
173.0 E C	USAIT	INTELSAT5 PAC1				4		6			11			14						
173.0 E C	USAIT	INTELSAT5A PAC1				4		6			11			14						
174.0 E N	USAIT	INTELSAT4A PAC1				4		6												
174.0 E C	USAIT	INTELSAT5 PAC1				4		6			11			14						
174.0 E C	USAIT	INTELSAT5A PAC1				4		6			11			14						
175.0 E N	USA	USGCSS PH2 W PAC							7	8										
175.0 E N	USA	USGCSS PH3 W PAC			C2				7	8										
176.0 E C	USAIT	INTELSAT4A PAC2				4		6												
176.0 E C	USAIT	INTELSAT5 PAC2				4		6			11			14						
176.0 E C	USAIT	INTELSAT5A PAC2				4		6			11			14						
176.5 E N	USA	MARISAT-PAC	0	1		4		6												
177.0 E C	USAIT	INTELSAT4A PAC2				4		6												
177.0 E C	USAIT	INTELSAT5 PAC2				4		6			11			14						
177.0 E C	USAIT	INTELSAT5A PAC2				4		6			11			14						
177.5 E N	F MRC	MARECS PAC1	0	1		4		6												
179.0 E C	USAIT	INTELSAT MCS PAC A		1		4		6												
179.0 E N	USAIT	INTELSAT4A PAC2				4		6												
179.0 E C	USAIT	INTELSAT5 PAC3				4		6			11			14						
180.0 E C	USAIT	INTELSAT MCS PAC A		1		4		6												
180.0 E C	USAIT	INTELSAT5 PAC3				4		6			11			14						
180.0 E C	USAIT	INTELSAT5A PAC3				4		6			11			14						

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A			COSMOS-1653	1985	38A	COSMOS-1704	1985	110A	O		
			COSMOS-1654	1985	39A	COSMOS-1705	1985	111A			
ANIK-C1	1985	28B	COSMOS-1655	1985	41A	COSMOS-1706	1985	112A			
ARABSAT-1	1985	15A	COSMOS-1656	1985	42A	COSMOS-1707	1985	113A	OEX TARGET	1985	109E
ARABSAT-1B	1985	48C	COSMOS-1657	1985	44A	COSMOS-1708	1985	115A	OSCAR-24	1985	66A
ASC-1	1985	76C	COSMOS-1658	1985	45A	COSMOS-1709	1985	116A	OSCAR-30	1985	66B
AUSSAT-1	1985	76B	COSMOS-1659	1985	46A	COSMOS-1710	1985	118A	P		
AUSSAT-2	1985	109C	COSMOS-1660	1985	47A	COSMOS-1711	1985	118B			
C			COSMOS-1661	1985	49A	COSMOS-1712	1985	118C	PLANET-A	1985	73A
			COSMOS-1662	1985	50A	COSMOS-1713	1985	120A	PLASMA DIAGNOSTIC PACKAGE	1985	63B
CHINA-17	1985	96A	COSMOS-1663	1985	52A	COSMOS-1714	1985	121A	PROGNOZ-10	1985	33A
COSMOS-1616	1985	2A	COSMOS-1664	1985	54A	E			PROGRESS-24	1985	51A
COSMOS-1617	1985	3A	COSMOS-1665	1985	57A						
COSMOS-1618	1985	3B	COSMOS-1666	1985	58A	EKRAN-14	1985	24A	R		
COSMOS-1619	1985	3C	COSMOS-1667	1985	59A	G					
COSMOS-1620	1985	3D	COSMOS-1668	1985	60A				RADUGA-16	1985	70A
COSMOS-1621	1985	3E	COSMOS-1669	1985	62A	GEOSAT	1985	21A	RADUGA-17	1985	107A
COSMOS-1622	1985	3F	COSMOS-1670	1985	64A	GIOTTO	1985	56A	S		
COSMOS-1623	1985	5A	COSMOS-1671	1985	65A	GLORS	1985	104B			
COSMOS-1624	1985	6A	COSMOS-1672	1985	67A	GORIZONT-11	1985	7A	SAKIGAKE	1985	1A
COSMOS-1625	1985	8A	COSMOS-1673	1985	68A	GSTAR-1A	1985	35A	SATCOM KU-2	1985	109D
COSMOS-1626	1985	9A	COSMOS-1674	1985	69A	I			SBTS-1	1985	15B
COSMOS-1627	1985	11A	COSMOS-1675	1985	71A				SOYUZ-T13	1985	43A
COSMOS-1628	1985	12A	COSMOS-1676	1985	72A	INTELSAT-5 F10	1985	25A	SOYUZ-T14	1985	81A
COSMOS-1629	1985	16A	COSMOS-1677	1985	75A	INTELSAT-5A F11	1985	55A	SPARTAN-1	1985	48E
COSMOS-1630	1985	17A	COSMOS-1678	1985	77A	INTELSAT-5A F12	1985	87A	STS-51B	1985	34A
COSMOS-1631	1985	18A	COSMOS-1679	1985	78A	L			STS-51C	1985	10A
COSMOS-1632	1985	19A	COSMOS-1680	1985	79A				STS-51D	1985	28A
COSMOS-1633	1985	20A	COSMOS-1681	1985	80A	LEASAT-4	1985	76D	STS-51F	1985	63A
COSMOS-1634	1985	22A	COSMOS-1682	1985	82A	M			STS-51G	1985	48A
COSMOS-1635	1985	23A	COSMOS-1683	1985	83A				STS-51I	1985	76A
COSMOS-1636	1985	23B	COSMOS-1684	1985	84A				STS-51J	1985	92A
COSMOS-1637	1985	23C	COSMOS-1685	1985	85A	METEOR-2 (12)	1985	13A	STS-61A	1985	104A
COSMOS-1637	1985	23C	COSMOS-1686	1985	86A	METEOR-2 (13)	1985	119A	STS-61B	1985	109A
COSMOS-1638	1985	23D	COSMOS-1687	1985	88A	METEOR-3 (1)	1985	100A	SUISEI	1985	73A
COSMOS-1639	1985	23E	COSMOS-1688	1985	89A	MOLNYA-1 (64)	1985	74A	SYNCOM-4 3	1985	28C
COSMOS-1640	1985	23F	COSMOS-1689	1985	90A	MOLNYA-1 (65)	1985	99A	SYNCOM-4 4	1985	76D
COSMOS-1642	1985	23H	COSMOS-1690	1985	94A	MOLNYA-1 (66)	1985	103A	T		
COSMOS-1643	1985	26A	COSMOS-1691	1985	94B	MOLNYA-3 (23)	1985	4A			
COSMOS-1644	1985	27A	COSMOS-1692	1985	94C	MOLNYA-3 (24)	1985	40A	TELECOM-1 B	1985	35B
COSMOS-1645	1985	29A	COSMOS-1693	1985	94D	MOLNYA-3 (25)	1985	61A	TELESAT	1985	28B
COSMOS-1646	1985	30A	COSMOS-1694	1985	94E	MOLNYA-3 (26)	1985	91A	TELSTAR-3D	1985	48D
COSMOS-1647	1985	31A	COSMOS-1695	1985	94F	MOLNYA-3 (27)	1985	117A	U		
COSMOS-1648	1985	32A	COSMOS-1696	1985	95A	MORELOS-1	1985	48B			
COSMOS-1649	1985	36A	COSMOS-1697	1985	97A	MORELOS-2	1985	109B	USA- 9	1985	14A
COSMOS-1641	1985	23G	COSMOS-1698	1985	98A	MS-T5	1985	1A	USA-11	1985	92B
COSMOS-1650	1985	37A	COSMOS-1699	1985	101A	N			USA-12	1985	92C
COSMOS-1651	1985	37B	COSMOS-1700	1985	102A				USA-13	1985	114A
COSMOS-1652	1985	37C	COSMOS-1701	1985	105A	NAVSTAR-10	1985	93A	USA-14	1985	114B
			COSMOS-1702	1985	106A	NUSAT-1	1985	34B			
			COSMOS-1703	1985	108A						

Code name Spacecraft description	International number	Country Organization Site of launching	Date	Initial orbital data		Frequencies Transmitter power	Observations
				Perigee (km) Apogee (km)	Period (min) Inclination (degree)		
MS-T5 (Sakigake) 670 kg	1985-1-A	Japan ISAS (KSC)	8 Jan.	heliocentric orbit			Japan's first interplanetary spacecraft. Objective: to test new <i>Nissan MU-3S-2</i> launch vehicle and to gather solar wind data in the vicinity of Halley's comet
Cosmos-1616	1985-2-A	USSR	9 Jan.	180 387	89.8 64.9		Recovered on 4 March 1985
Cosmos-1617 to Cosmos-1622 40 kg each	1985-3-A to 1985-3-F	USSR	15 Jan.	1400 1438	114 82.6		Government telecommunication
Molnya-3 (23) 3-axis stabilized; 1500 kg	1985-4-A	USSR (PLE)	16 Jan.	646 40 653	736 62.9	5.9-6.2 GHz (reception) 3.6-3.9 GHz (emission)	Television and multichannels radiocommunications
Cosmos-1623	1985-5-A	USSR	16 Jan.	216 405	90.4 70		Recovered on 30 January 1985
Cosmos-1624	1985-6-A	USSR	17 Jan.	787 825	100.8 74		Earth observation
Gorizont-11 3-axis stabilized	1985-7-A	USSR (BAI)	18 Jan.	35 096 in geostationary-satellite orbit	1401 1.05	3.4-3.9 GHz (emission) 5.7-6.2 GHz (reception)	Television and multichannels radiocommunications
Cosmos-1625	1985-8-A	USSR	23 Jan.	114 411	89.7 65		Decayed on 25 January 1985
Cosmos-1626	1985-9-A	USSR	24 Jan.	643 677	97.7 82.5		
STS-51C space shuttle <i>Discovery</i>	1985-10-A	United States NASA (ETR)	24 Jan.	335	28.5		Crew: T. Mattingley, G. Payton, L. J. Schriver, E. S. Omizuka and J. F. Buchli. Landed at Cape Canaveral on 27 January 1985

Code name Spacecraft description	International number	Country Organization Site of launching	Date	Initial orbital data		Frequencies Transmitter power	Observations
				Perigee (km) Apogee (km)	Period (min) Inclination (degree)		
No name	1985-10-B	United States launched from STS-51C	24 Jan.	in geostationary-satellite orbit			Electronic intelligence (ELINT)
Cosmos-1627	1985-11-A	USSR	1 Feb.	977 1031	104.9 82.9		Navigation
Cosmos-1628	1985-12-A	USSR	6 Feb.	206 407	90.3 72.8		Recovered on 20 February 1985
Meteor-2 (12)	1985-13-A	USSR (PLE)	6 Feb.	936 958	104 82.5		Meteorology
USA-9	1985-14-A	United States USAF (WTR)	8 Feb.				High-resolution photographic reconnaissance
Arabsat-1 3-axis stabilized; 2.26 × 1.64 × 1.49 m; 1000 kg (in orbit); 2 solar arrays (1.3 kW)	1985-15-A	International ARABSAT (CSG)	8 Feb.	33 911 35 849	1390.1 0.2	6/4 GHz band 2.5-2.69 MHz (community television) 3703.1; 4199.9 MHz (telemetry)	Regional telecommunication for the Arab States
SBTS-1	1985-15-B	Brazil (CSG)	8 Feb.	35 779 35 840	1437.3 0.1	6/4 GHz band	Brazilian national telecommunication
Cosmos-1629	1985-16-A	USSR	21 Feb.	36 157	1453 1.16		
				in geostationary-satellite orbit			

Cosmos-1630	1985-17-A	USSR	27 Feb.	182 357	89.6 64.9		Recovered on 23 April 1985
Cosmos-1631	1985-18-A	USSR	27 Feb.	474 517	94.5 65.9		
Cosmos-1632	1985-19-A	USSR	1 March	203 261	88.8 72.9		Recovered on 15 March 1985
Cosmos-1633	1985-20-A	USSR	5 March	641 671	97.7 82.5		
Geosat 636 kg	1985-21-A	United States USN (WTR)	13 March	757 814	100.6 108.1		Objective: to make accurate measurements of Earth's surface and wave heights
Cosmos-1634	1985-22-A	USSR	14 March	976 1024	104.7 82.9		Navigation
Cosmos-1635 to Cosmos-1642 40 kg each	1985-23-A to 1985-23-H	USSR (PLE)	21 March	1482 1526	116 74		Government telecommunication
Ekran-14 3-axis stabilized; 5 tonnes; solar cells	1985-24-A	USSR (BAI)	22 March	35 600 in geostationary-satellite orbit	1426 0.4	5.7-6.2 GHz (reception) 3.4-3.9 GHz (emission)	Television relay
Intelsat-5 F10 3-axis stabilized; height: 6.6 m; 1950 kg at launch; 2 solar arrays (1.2 kW)	1985-25-A	International INTELSAT (CSG)	22 March	35 767 35 812 in geostationary-satellite orbit	1436.2 0.0	6/4 GHz band (communications)	INTELSAT commercial communication satellite; 12 000 telephone channels and two television channels
Cosmos-1643	1985-26-A	USSR	25 March	190 300	89.1 64.8		Decayed on 18 October 1985
Cosmos-1644	1985-27-A	USSR	3 April	217 398	90.4 70.4		Recovered on 17 April 1985

Code name Spacecraft description	International number	Country Organization Site of launching	Date	Initial orbital data		Frequencies Transmitter power	Observations
				Perigee (km) Apogee (km)	Period (min) Inclination (degree)		
STS-51D space shuttle <i>Discovery</i>	1985-28-A	United States NASA (ETR)	12 April	319 464	92.4 28.5	14/11 GHz band	Re-usable spacecraft. Crew: K. Bobko, J. Garn, M. Seddon, J. Hoffmann, D. Williams, S. Griggs and C. Walker. Landed at Edwards Air Force Base on 19 April 1985
Anik-C1 (Telesat)	1985-28-B	Canada Telesat launched from <i>STS-51D</i>	13 April	35 653 35 770 in geostationary-satellite orbit at 107.5° W	1432.3 2.9		National telecommunication
Syncom-4 (3)	1985-28-C	United States launched from <i>STS-51D</i>	12 April	319 464	92.4 28.5		Failed to attain its planned orbit owing to a launch mishap
Cosmos-1645	1985-29-A	USSR	16 April	223 411	90.5 62.8		Recovered on 29 April 1985
Cosmos-1646	1985-30-A	USSR	18 April	432 455	93.3 65		
Cosmos-1647	1985-31-A	USSR	19 April	180 348	89.4 67.1		Recovered on 11 June 1985
Cosmos-1648	1985-32-A	USSR	25 April	196 265	88.8 82.3		Recovered on 6 May 1985
Prognoz-10 pressurized central body; 4 solar panels	1985-33-A	USSR (BAI)	26 April	400 200 000	5785 65		Study of the interaction of the solar wind with the magnetosphere

STS-51B space shuttle <i>Challenger</i>	1985-34-A	United States NASA (ETR)	29 April	345 358	91.6 57.0		Re-usable spacecraft. Crew: R. F. Overmeyer (Commander), N. E. Thagard, W. E. Thornton, F. D. Gregory, D. L. Lind, L. Vandenberg and T. G. Wang. Carried <i>Spacelab-3</i> — materials science experiments. Landed at Edwards Air Force Base on 6 May 1985
NUSAT-1 52 kg	1985-34-B	United States launched from <i>STS-51B</i>	29 April	345 354	91.5 57.0		Northern Utah SATellite
GSTAR-1A	1985-35-A	United States GTE Spacenet (CSG)	8 May	35 786 35 789 in geostationary-satellite orbit	1436.2 0.1		National telecommunication
Telecom-1 B 1142 kg at launch; 2 solar panels	1985-35-B	France Direction générale des télécommunications (CSG)	8 May	35 782 35 793 in geostationary-satellite orbit at 5° W	1436.2 0.1	14/12 GHz (6 transponders) 6/4 GHz (4 transponders) 8/7 GHz (government communication)	National telecommunication
Cosmos-1649	1985-36-A	USSR	15 May	208 396	90.2 72.9		Recovered on 29 May 1985
Cosmos-1650 to Cosmos-1652	1985-37-A to 1985-37-C	USSR	17 May	19 121 19 137	676 64.8	1240-1260; 1597-1610; 1610-1617 MHz (in accordance with RR 732)	GLOBAL NAVIGATION Satellite System (GLONASS). Series of satellites for merchant marine and civil aviation navigation
Cosmos-1653	1985-38-A	USSR	22 May	222 322	89.6 82.3		Remote sensing. Recovered on 5 June 1985
Cosmos-1654	1985-39-A	USSR	23 May	180 365	89.7 64		Decayed on 7 August 1985

Code name Spacecraft description	International number	Country Organization Site of launching	Date	Initial orbital data		Frequencies Transmitter power	Observations
				Perigee (km) Apogee (km)	Period (min) Inclination (degree)		
Molnya-3 (24) 3-axis stabilized; 1500 kg	1985-40-A	USSR	29 May	465 40 850	736 62.8	5.9-6.2 GHz (reception) 3.6-3.9 GHz (emission)	Television and multichannel radiocommunications
Cosmos-1655	1985-41-A	USSR	30 May	992 1019	104.9 82.9		Navigation
Cosmos-1656	1985-42-A	USSR	30 May	811 864	101.6 71.1		Extensive manoeuvring was carried out before the satellite reached its final orbit. Similar to <i>Cosmos-1603</i>
Soyuz-T13 6.85 tonnes; 2 solar panels	1985-43-A	USSR (BA1)	6 June	304 338	90.8 51.6		Two-man spacecraft: V. A. Dzhanibekov (Commander) and V. P. Savinikh (Flight Engineer). Docked with <i>Salyut-7</i> on 8 June. Returned to Earth on 26 September 1985
Cosmos-1657	1985-44-A	USSR	7 June	195 313	89.2 82.3		Earth resources. Recovered on 21 June 1985
Cosmos-1658	1985-45-A	USSR	11 June	613 39 342	709 62.8		
Cosmos-1659	1985-46-A	USSR	13 June	210 379	90.1 72.9		Recovered on 27 June 1985
Cosmos-1660	1985-47-A	USSR	14 June	1499 1538	116 73.6		Government telecommunication

STS-51G space shuttle <i>Discovery</i>	1985-48-A	United States NASA (ETR)	17 June	359 395	92.1 28.5		Re-usable spacecraft. Crew: D. C. Brandenstein (Commander), J. O. Creighton, S. W. Lucid, J. M. Fabian, S. R. Nagel, P. Baudry (France) and S. Abdelaziz Al-Saud (Saudi Arabia). Landed at Edwards Air Force Base on 24 June 1985
Morelos-1 Hughes-type HS 376; spin stabilized	1985-48-B	Mexico launched from <i>STS-51G</i>	17 June	35 780 35 793 in geostationary-satellite orbit at 113.5° W	1436.1 0.1	6/4 GHz band 14/11-12 GHz band	National telecommunication
Arabsat-1B 3-axis stabilized; 2.26 × 1.64 × 1.49 m; 1000 kg in orbit; 2 solar arrays (1.3 kW)	1985-48-C	International ARABSAT launched from <i>STS-51G</i>	18 June	35 269 35 839 in geostationary-satellite orbit at 26° E	1424.3 0.1	6/4 GHz band 2.5-2.69 MHz (community television) 3703.1; 4199.9 MHz (telemetry)	Regional telecommunication for the Arab States
Telstar-3D Hughes-type HS 376; spin stabilized	1985-48-D	United States AT&T launched from <i>STS-51G</i>	19 June	35 123 36 445 in geostationary-satellite orbit at 62° W	1436.0 0.3	6/4 GHz band	National communication providing television, sound radio, voice and high-speed data transmission services. Thirty C-band repeaters
Spartan-1 1007 kg	1985-48-E	United States Naval Research Laboratory launched from <i>STS-51G</i>	20 June				Recovered on 24 June 1985
Cosmos-1661	1985-49-A	USSR	18 June	613 40 164	726 62.8		
Cosmos-1662	1985-50-A	USSR	19 June	478 521	94.5 65.9		Space technology development
Progress-24 modified <i>Soyuz</i> spacecraft without the descent section; 7 tonnes at launch	1985-51-A	USSR (BAI)	21 June	193 270	88.8 51.6		Expendable supply craft. Docked with <i>Salyut-7/Soyuz-T13</i> complex on 23 June. Disintegrated on re-entry on 15 July 1985

Code name Spacecraft description	International number	Country Organization Site of launching	Date	Initial orbital data		Frequencies Transmitter power	Observations
				Perigee (km) Apogee (km)	Period (min) Inclination (degree)		
Cosmos-1663	1985-52-A	USSR (PLE)	21 June	227 298	89.4 82.3		Earth resources. Recovered on 5 July 1985
No name	1985-53-A	unknown	21 June	197 340	88.2 64.6		Decayed on 28 June 1985
Cosmos-1664	1985-54-A	USSR	26 June	207 405	90.3 72.9		Recovered on 5 July 1985
Intelsat-5A F11 3-axis stabilized; height: 6.6 m; 2 solar arrays	1985-55-A	International INTELSAT (CSG)	30 June	34 401 35 774	1400.6 0.1	6/4 and 14/11 GHz bands (communications)	INTELSAT commercial telecommunication
Giotto cylinder; diameter: 1.84 m; height: 1.60 m; 960 kg at launch; 512 kg at encounter	1985-56-A	Europe ESA (CSG)	2 July	heliocentric orbit			Objectives: to study Halley's comet and notably to photograph the nucleus of the comet; to determine the chemical and isotopic composition of ions and dust particles and the physical and chemical processes going on in the atmosphere of the comet
Cosmos-1665	1985-57-A	USSR	3 July	208 316	89.4 72.9		Recovered on 17 July 1985
Cosmos-1666	1985-58-A	USSR	9 July	646 679	97.8 82.5		Oceanography
Cosmos-1667	1985-59-A	USSR (PLE)	10 July	222 297	89 82.3		Biological experiment. Carried two monkeys, one of which had implanted sensors supplied by the United States National Aeronautics and Space Administration (NASA). Recovered on 17 July 1985
Cosmos-1668	1985-60-A	USSR	15 July	216 297	89.3 70.4		Recovered on 19 July 1985
Molnya-3 (25) 3-axis stabilized; 1500 kg	1985-61-A	USSR (PLE)	17 July	462 40 850	736 62.8	5.9-6.2 GHz (reception) 3.6-3.9 GHz (emission)	Television and multichannel radiocommunications

Cosmos-1669 modified <i>Progress</i> spacecraft	1985-62-A	USSR	19 July				Docked with the <i>Salyut-7/Soyuz-T13</i> complex on 21 July. Decayed on 30 August 1985
STS-51F space shuttle <i>Challenger</i>	1985-63-A	United States NASA (ETR)	29 July	312 321	90.9 49.5		Re-usable spacecraft. Crew: C. Fullerton, R. Bridges, S. Musgrave, A. England, K. Henize, L. Acton and J. D. Bartoe. Landed at Edwards Air Force Base on 6 August 1985
Plasma Diagnostic Package	1985-63-B	United States launched from <i>STS-51F</i>	29 July				A free-flying package for plasma physics investigation deployed and retrieved using the remote manipulator system of <i>Challenger</i>
Cosmos-1670 nuclear reactor power supply	1985-64-A	USSR (BAI)	1 Aug.	253 278	89.6 65		
Cosmos-1671	1985-65-A	USSR	2 Aug.	210 310	89.3 72.8		Recovered on 16 August 1985
Oscar-24	1985-66-A	United States	3 Aug.	1002 1259	107.9 89.8		
Oscar-30	1985-66-B	United States	3 Aug.	1001 1259	107.9 89.8		
Cosmos-1672	1985-67-A	USSR	7 Aug.	199 290	89.0 82.3		Earth resources imaging. Recovered on 21 August 1985
Cosmos-1673	1985-68-A	USSR	8 Aug.	204 294	89.2 64.8		Recovered on 19 September 1985
Cosmos-1674	1985-69-A	USSR	8 Aug.	648 677	97.8 82.5		Recovered on 19 September 1985
Raduga-16 3-axis stabilized; 5 tonnes; solar panels	1985-70-A	USSR	9 Aug.	36 560 in geostationary-satellite orbit	1476 1.3	5.7-6.2 GHz (reception) 3.4-3.9 GHz (emission)	Television and multichannel radiocommunications

Code name Spacecraft description	International number	Country Organization Site of launching	Date	Initial orbital data		Frequencies Transmitter power	Observations
				Perigee (km) Apogee (km)	Period (min) Inclination (degree)		
Cosmos-1675	1985-71-A	USSR	12 Aug.	613 39 342	1149 62.8		
Cosmos-1676	1985-72-A	USSR	16 Aug.	178 371	89.7 67.2		Recovered on 14 October 1985
Planet-A (Suisai) cylinder; diameter: 1.4 m; height: 0.7 m; 139.7 kg	1985-73-A	Japan ISAS (KSC)	18 Aug.	100.480 × 10 ⁶ 151.467 × 10 ⁶ heliocentric orbit	282.2 days 0.888	2293.89 MHz 0.07/5 W	Ultra-violet imaging camera to observe the hydrogen corona around the coma of Halley's comet, and an energy analyser of ions and electrons to measure solar wind and cometary charged particles
Molnya-1 (64) hermetically sealed cylinder with conical ends; 1000 kg; 6 solar panels	1985-74-A	USSR	22 Aug.	656 40 638	736 62.8	800 MHz band 40 W (emission) 1000 MHz band (reception) 3400-4100 MHz (retransmission of television)	Television and multichannel radiocommunications
Cosmos-1677	1985-75-A	USSR	24 Aug.	255 280	89.6 65		
STS-511 space shuttle <i>Discovery</i>	1985-76-A	United States NASA (ETR)	24 Aug.	355 385	92.0 28.5		Re-usable spacecraft. Crew: J. H. Engle, R. O. Covey, J. D. van Hoften, W. F. Fisher and J. M. Lounge. Landed on 3 September 1985
Aussat-1 Hughes-type HS 376	1985-76-B	Australia AUSSAT launched from <i>STS-511</i>	27 Aug.	35 779 35 795 in geostationary-satellite orbit at 156° E	1436.2 0.0	12/14 GHz band	Australian national satellite

ASC-1	1985-76-C	United States AT&T launched from <i>STS-511</i>	27 Aug.	35 782 35 791	1436.1 0.1 in geostationary-satellite orbit at 81° W	6/4 and 14/12 GHz bands	User encrypted command links
Syncom-4 (4) (Leasat-4)	1985-76-D	United States USN launched from <i>STS-511</i>	29 Aug.	35 787 35 791	1436.2 3.2 in geostationary-satellite orbit		Government telecommunication. Leasat network not fully operational owing to greatly reduced signal from the antenna
Cosmos-1678	1985-77-A	USSR	29 Aug.	196 311	89.2 82.3		Earth sensing of the <i>Priroda</i> network. Decayed on 12 September 1985
Cosmos-1679	1985-78-A	USSR	29 Aug.	182 364	89.7 64.9		Recovered on 18 October 1985
Cosmos-1680	1985-79-A	USSR	4 Sept.	787 822	100.8 74.1		Government telecommunication
Cosmos-1681	1985-80-A	USSR	6 Sept.	216 261	89 82.4		Earth sensing of the <i>Priroda</i> network. Recovered on 19 September 1985
Soyuz-T14 6850 kg; length: 7.94 m; 2 solar panels	1985-81-A	USSR (BAI)	17 Sept.				Crew: V. V. Vasyutin, G. M. Grechko and A. A. Volkov. Docked with <i>Salyut-7/Soyuz-T13</i> complex on 18 Sep- tember. Grechko and Dzhanibekov (from Soyuz-T13 crew) returned to Earth in Soyuz-T13 on 26 September. <i>Soyuz-T14</i> returned to Earth on 21 November 1985
Cosmos-1682	1985-82-A	USSR	19 Sept.	435 454	93.3 65		
Cosmos-1683	1985-83-A	USSR	19 Sept.	208 399	90.2 72.9		Recovered on 4 October 1985
Cosmos-1684	1985-84-A	USSR	24 Sept.	613 39 342	709 62.8		

Code name Spacecraft description	International number	Country Organization Site of launching	Date	Initial orbital data		Frequencies Transmitter power	Observations
				Perigee (km) Apogee (km)	Period (min) Inclination (degree)		
Cosmos-1685	1985-85-A	USSR	27 Sept.	209 379	90.0 72.9		Recovered on 10 October 1985
Cosmos-1686	1985-86-A	USSR	27 Sept.	178 320	89.2 51.6		Similar to <i>Cosmos-1267</i> and <i>Cosmos-1443</i> . Docked with <i>Salyut-7</i> on 2 October 1985
Intelsat-5A F12 3-axis stabilized; height: 6.6 m; 2 solar arrays	1985-87-A	International INTELSAT (ETR)	28 Sept.	35 756 35 817 in geostationary-satellite orbit at 57° E	1436.1 0.0	6/4 and 14/11 GHz bands (communications)	INTELSAT commercial telecommunication; 15 000 tele- phone channels and two television channels
Cosmos-1687	1985-88-A	USSR	30 Sept.	613 39 342	709 62.8		
Cosmos-1688	1985-89-A	USSR (AKY)	2 Oct.	347 555	93.4 50.7		
Cosmos-1689	1985-90-A	USSR	3 Oct.	574 663	97 98		Earth sensing
Molnya-3 (26) 3-axis stabilized; 1500 kg	1985-91-A	USSR (PLE)	3 Oct.	644 40 605	735 62.9	5.9-6.2 GHz (reception) 3.6-3.9 GHz (emission)	Television and multichannel radiocommunications
STS-51J space shuttle <i>Atlantis</i>	1985-92-A	United States NASA (ETR)	3 Oct.				Re-usable spacecraft. Crew: K. J. Bobko, R. J. Grabe, D. C. Hilmers, R. L. Stewart and W. A. Pailles. Landed at Edwards Air Force Base on 7 October 1985
USA-11 DSCS-III type	1985-92-B	United States launched from <i>STS-51J</i>	3 Oct.				Defense Satellite Communication System

USA-12 DSCS-III type	1985-92-C	United States launched from <i>STS-51/J</i>	3 Oct.				Defense Satellite Communication System
Navstar-10	1985-93-A	United States USAF (WTR)	9 Oct.	19 829 20 532	717.9 63.4		Global positioning system navigation satellite
Cosmos-1690 to Cosmos-1695	1985-94-A to 1985-94-F	USSR	9 Oct.	1400 1439	114 82.6		Government telecommunication
Cosmos-1696	1985-95-A	USSR	16 Oct.	216 298	89.3 70.4		Recovered on 30 October 1985
China-17	1985-96-A	China (Jiuquan)	21 Oct.				Decayed on 7 November 1985
Cosmos-1697	1985-97-A	USSR	22 Oct.	852 880	102 71		
Cosmos-1698	1985-98-A	USSR	22 Oct.	613 39 342	709 62.8		
Molnya-1 (65) hermetically-sealed cylinder with conical ends; 1000 kg; 6 solar panels	1985-99-A	USSR (PLE)	23 Oct.	658 38 845	700 63.0	800 MHz band 40 W (emission) 1000 MHz band (reception) 3400-4100 MHz (retransmission of television)	Television and multichannel radiocommunications
Meteor-3 (1)	1985-100-A	USSR	24 Oct.	1235 1263	110.3 82.5		Meteorology
Cosmos-1699	1985-101-A	USSR	25 Oct.	177 364	89.6 67.3		Decayed on 23 December 1985

Code name Spacecraft description	International number	Country Organization Site of launching	Date	Initial orbital data		Frequencies Transmitter power	Observations
				Perigee (km) Apogee (km)	Period (min) Inclination (degree)		
Cosmos-1700	1985-102-A	USSR	25 Oct.	35 760 in geostationary-satellite orbit	1431 1.4		
Molnya-1 (66) hermetically-sealed cylinder with conical ends; 1000 kg; 6 solar panels	1985-103-A	USSR (PLE)	28 Oct.	480 39 145	702 62.8	800 MHz band 40 W (emission) 1000 MHz band (reception) 3400-4100 MHz (retransmission of television)	Television and multichannel radiocommunications
STS-61A space shuttle <i>Challenger</i>	1985-104-A	United States NASA (ETR)	30 Oct.	324 324	90 57		Re-usable spacecraft. Crew: H. W. Hartsfield, S. R. Nagel, B. J. Dunbar, J. F. Buchli, G. S. Bluford, E. Messerschmid, R. Furrer and W. Ockeld. Carried <i>Spacelab D-1</i> . Landed at Edwards Air Force Base on 6 November 1985
GLORS	1985-104-B	United States USDOD launched from <i>STS-61A</i>	30 Oct.	304 332	90.9 57.0		Global Low-Orbiting Relay Satellite
Cosmos-1701	1985-105-A	USSR	9 Nov.	613 39 342	709 62.8		
Cosmos-1702	1985-106-A	USSR	13 Nov.	207 399	90.2 72.8		Recovered on 27 November 1985
Raduga-17 3-axis stabilized; 5 tonnes; 3 solar panels	1985-107-A	USSR (BAI)	15 Nov.	36 655 in geostationary-satellite orbit	1461 1.3	5.7-6.2 GHz (reception) 3.4-3.9 GHz (emission)	Television and multichannel radiocommunications

Cosmos-1703	1985-108-A	USSR	22 Nov.	647 678	97.8 82.5		
STS-61B space shuttle <i>Atlantis</i>	1985-109-A	United States NASA (ETR)	27 Nov.	361 370	91.9 28.5		Re-usable spacecraft. Crew: H. S. Brewster, B. D. O'Connor, R. Neri (Mexico), S. C. Spring, J. L. Ross and M. L. Cleave. Tower and pyramid structures were constructed and taken apart in space. Landed on 3 December 1985
Morelos-2 Hughes-type HS 376; spin-stabilized	1985-109-B	Mexico launched from <i>STS-61B</i>	27 Nov.	35 773 35 801 in geostationary-satellite orbit at 116.5° W	1436.1 2.9	6/4 and 14/11-12 GHz bands	National telecommunication
Aussat-2 Hughes-type HS 376; spin-stabilized	1985-109-C	Australia AUSSAT launched from <i>STS-61B</i>	27 Nov.	35 765 36 571 in geostationary-satellite orbit at 160° E	1455.6 0.3	14/12 GHz band	National telecommunication
Satcom-KU-2	1985-109-D	United States RCA American Communica- tions, Inc. launched from <i>STS-61B</i>	28 Nov.	35 774 35 801 in geostationary-satellite orbit	1436.2 0.1		Commercial telecommunication
Oex Target	1985-109-E	United States launched from <i>STS-61B</i>	30 Nov.	372 386	92.1 28.5		
Cosmos-1704	1985-110-A	USSR	28 Nov.	986 1023	105 82.9		
Cosmos-1705	1985-111-A	USSR	3 Dec.	208 387	90.1 72.8		Recovered on 17 December 1985
Cosmos-1706	1985-112-A	USSR	11 Dec.	178 360	89.5 67.2		

Code name Spacecraft description	International number	Country Organization Site of launching	Date	Initial orbital data		Frequencies Transmitter power	Observations
				Perigee (km) Apogee (km)	Period (min) Inclination (degree)		
Cosmos-1707	1985-113-A	USSR	12 Dec.	650 678	97.8 82.5		
USA-13	1985-114-A	United States USDOD	13 Dec.	314 776	95.6 37.1		
USA-14	1985-114-B	United States USDOD	13 Dec.	314 772	95.5 37.1		
Cosmos-1708	1985-115-A	USSR	13 Dec.	197 313	89.2 82.3		Recovered on 27 December 1985
Cosmos-1709	1985-116-A	USSR	19 Dec.	982 1026	104.9 82.9		
Molnya-3 (27) 3-axis stabilized; 1500 kg	1985-117-A	USSR (PLE)	24 Dec.	477 40 793	736 62.8	5.9-6.2 GHz (reception) 3.6-3.9 GHz (emission)	Television and multichannel radiocommunications
Cosmos-1710 to Cosmos-1712	1985-118-A to 1985-118-C	USSR (BAI)	24 Dec.	19 160	677 65	1240-1260; 1597-1610; 1610-1617 MHz (in accordance with RR 732)	GLObal NAVigation Satellite System (GLONASS). Series of satellites for civil aviation and merchant marine navigation. (See also 1982-100-A, D and F, 1983-84-A to C and 1983-127-A to C)
Meteor-2 (13)	1985-119-A	USSR (PLE)	26 Dec.	952 975	104 82.5		Meteorology
Cosmos-1713	1985-120-A	USSR	27 Dec.	224 419	90.7 62.8		
Cosmos-1714	1985-121-A	USSR	28 Dec.	190 863	94.8 71.0		Electronic intelligence monitoring (ELINT). Failed to reach final orbit

AKY = Aktubinsk-Kapustin Yar (USSR)
 ARABSAT = Arab Satellite Communications Organization
 AT&T = American Telephone and Telegraph Company
 BAI = Baikonur (USSR)
 CSG = Centre spatial guyanais, Kourou (French Guiana)
 ESA = European Space Agency
 ETR = Eastern Test Range (United States)

INTELSAT = International Telecommunications Satellite Organization
 ISAS = Institute of Space and Aeronautical Science (Japan)
 KSC = Kagoshima Space Centre (Japan)
 NASA = National Aeronautics and Space Administration (United States)

PLE = Plesetsk (USSR)
 USAF = United States Air Force
 USDOD = United States Department of Defense
 USN = United States Navy
 WTR = Western Test Range (United States)

*The following satellites have decayed since the preparation of the
 "Table of artificial satellites launched between 1977 and 1984" published in July 1985*

<i>satellite</i>	<i>international number</i>	<i>decay</i>
Explorer-32	1966-44-A	22 February 1985
Molnya-1 (26)	1973-97-A	9 June 1985
Molnya-2 (8)	1973-106-A	24 November 1984
Molnya-1 (34)	1976-26-A	14 May 1985
Corsa-B	1979-14-A	15 April 1985
OPS-3984	1981-85-A	23 November 1984
OPS-9627	1982-111-A	13 August 1985
Cosmos-1465	1983-49-A	23 January 1985

<i>satellite</i>	<i>international number</i>	<i>decay</i>
Cosmos-1494	1983-91-A	26 September 1985
Cosmos-1502	1983-102-A	29 August 1985
Cosmos-1611	1984-119-A	11 January 1985
Cosmos-1612	1984-120-A	31 January 1985
Vega-1 (lander)	1984-125-E	10 June 1985
Vega-1 (balloon)	1984-125-F	10 June 1985
Vega-2 (lander)	1984-128-E	14 June 1985
Vega-2 (balloon)	1984-128-F	14 June 1985

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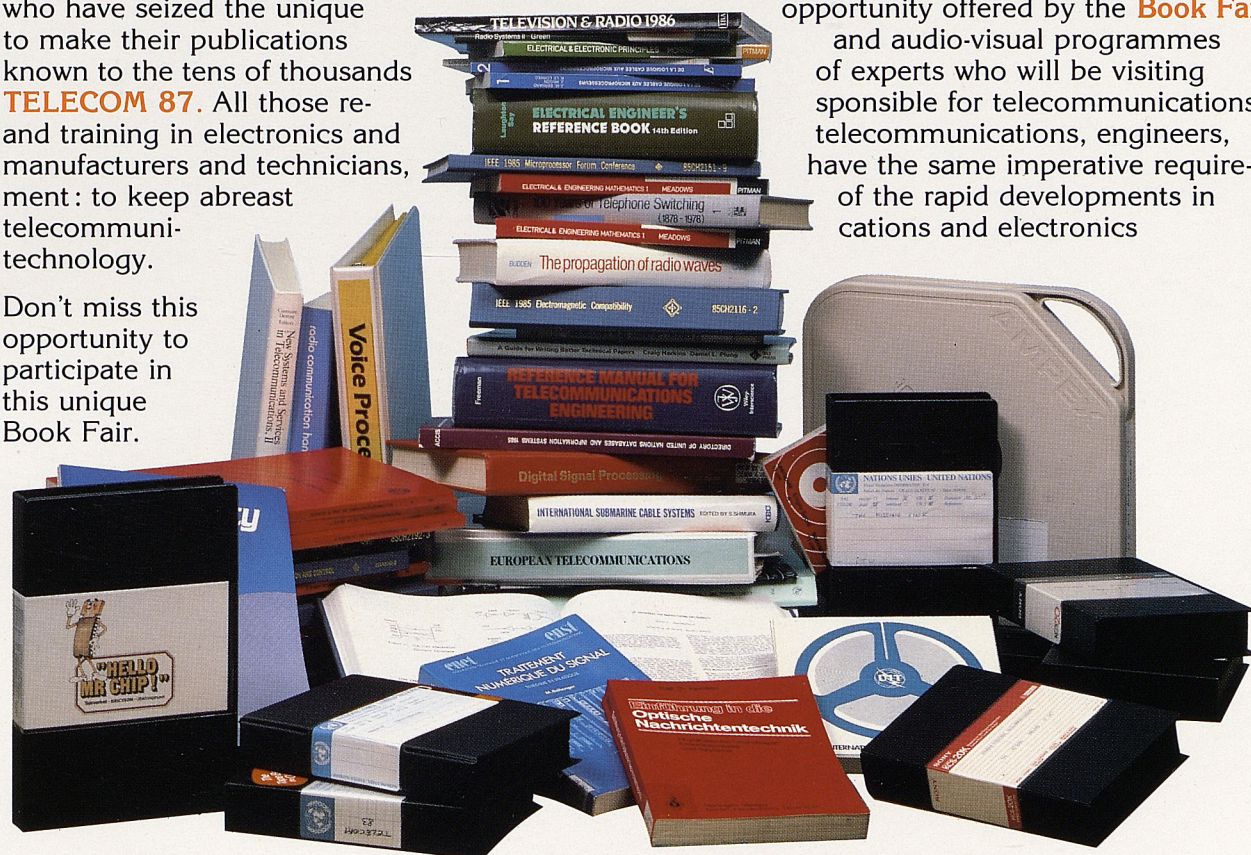
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