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Number 664

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H α SOLAR FLARES

JUNE 1999

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
			01 0000		0007			No Flare Patrol										
			01 0011		0029			No Flare Patrol										
0001	URUM	01	0120	0132	0143	N22	W34	8552	05	29.5	23	SN		C		113	1.5	E
0002	URUM	01	0143E	0143	0147D	S16	E17	8562	06	2.4	4D	SN		P		32	0.4	D
0003	URUM	01	0211	0215	0217	N24	W40	8554	05	29.1	6	SB		C		113	1.7	D
0004	URUM	01	0242E	0246	0253	S13	E19	8562	06	2.5	11D	SF		P		161	1.8	E
0005	URUM	01	0253	0258	0306	S23	E25	8560	06	3.0	13	SN		C		113	1.4	E
0006		01	0409	0416	0446	N25	W40	8554	05	29.2	37	1N				90	2.4	E
	URUM	01	0409	0416	0432	N25	W40	8554	05	29.2	23	1N		C		161	2.4	E
	SVTO	01	0420E	0425U	0501	N25	W40	8554	05	29.2	41D	SF	2	E		20		
0007		01	0559*	06156	0632	N25	W41	8554	05	29.2	33	SN				97	3.7	E
	URUM	01	0559	0615	0638	N25	W42	8554	05	29.1	39	1B		C		241	3.7	E
	LEAR	01	0609	0620	0632	N25	W41	8554	05	29.2	23	SF	3	E		28		
	SVTO	01	0621	0621	0625	N25	W41	8554	05	29.2	4	SF	3	E		22		
0008		01	06242	0628*	0643	S15	E18	8562	06	2.6	19	SF				70	1.6	EF
	LEAR	01	0624	0629	0647	S15	E17	8562	06	2.5	23	SF	3	E		41		
	SVTO	01	0626	0628	0638	S15	E18	8562	06	2.6	12	SF	3	E		23		F
	URUM	01	0638E	0638	0643	S15	E18	8562	06	2.6	5D	SN		P		145	1.6	E
0009		01	06291	06301	0636	S22	E18	8560	06	2.6	7	1F				124		
	LEAR	01	0629	0630	0637	S21	E19	8560	06	2.7	8	1F	3	E		119		
	SVTO	01	0630	0631	0635	S22	E18	8560	06	2.6	5	1F	3	E		129		
0010	URUM	01	0714	0718	0730	N25	W39	8554	05	29.4	16	2N		C		354	5.2	E
0011	LEAR	01	0740	0741	0749	S23	E21	8557	06	2.9	9	SF	3	E		18		F
0012		01	0745*	07545	0818	N25	W40	8554	05	29.3	33	1F				150	6.0	E
	URUM	01	0745	0754	0830	N24	W40	8554	05	29.3	45	2N		C		402	6.0	E
	LEAR	01	0751	0759	0815	N25	W39	8554	05	29.4	24	SF	3	E		22		
	SVTO	01	0755	0759	0810	N25	W42	8554	05	29.2	15	SF	3	E		25		
0013	SVTO	01	0757	0759	0804	N18	W36	8552	05	29.7	7	SF	3	E		14		
0014		01	08592	09052	0924	N26	W42	8554	05	29.2	25	1N				103	2.5	E
	SVTO	01	0859	0907	0924	N25	W43	8554	05	29.1	25	SF	3	E		45		
	URUM	01	0901	0905	0909D	N27	W42	8554	05	29.2	8D	1N		P		161	2.5	E
0015	SVTO	01	0902	0912	0944	N18	W33	8552	05	30.0	42	SF	3	E		17		F
0016	SVTO	01	0925	0928	0943	S29	E61	8563	06	6.2	18	SF	3	E		21		
0017	SVTO	01	0928	0938	0944	N25	W43	8554	05	29.2	16	SF	3	E		11		
0018	SVTO	01	0928	0943	0946	S15	E16	8562	06	2.6	18	SF	3	E		20		
0019	RAMY	01	1114E	1114U	1137D	S14	E16	8562	06	2.7	23D	SF	3	E		33		
0020	RAMY	01	1233E	1233U	1248D	S28	E12	8557	06	2.5	15D	SF	3	E		29		
0021	RAMY	01	1508	1509	1516	N24	W45	8554	05	29.2	8	SF	3	E		17		
0022	SVTO	01	1640E	1644U	1648	S23	W54	8563	05	28.6	8D	SF	2	E		74		FH
0023	RAMY	01	1642	1644	1650	S27	E54	8563	06	5.9	8	1F	3	E		100		
0024	RAMY	01	1739	1742	1746	S14	E13	8562	06	2.7	7	SF	3	E		10		
0025	RAMY	01	1754	1756	1759	S14	E13	8562	06	2.7	5	1F	3	E		178		
0026	HOLL	01	2039	2039	2046	S22	E10	8557	06	2.6	7	SF	3	E		20		

H α SOLAR FLARES

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Jun 99

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Grp #	Sta	Start Day	Max (UT)	End (UT)	Lat	NOAA/ USAF CMD Region	CMP Mo Day	Dur (Min)	Imp Opt Xray	Obs See Type	Area Measurement			Remarks
											Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
		01 2106		2138		No Flare Patrol								
		01 2148		2152		No Flare Patrol								
		01 2212		2317		No Flare Patrol								
0027	LEAR	01 2334	2338	2346	N19 W43	8552	05 29.8	12	SF	3 E		14		
0028		02 05074	05126	0532	S14 E05	8562	06 2.6	25	1F			70		F
	LEAR	02 0507	0512	0533	S15 E05	8562	06 2.6	26	1F	3 E		111		F
	SVTO	02 0511	0518	0530	S14 E05	8562	06 2.6	19	SF	3 E		30		F
0029		02 0708	07091	0714	N32 W78	8551	05 27.2	6	SF			48		H
	SVTO	02 0708	0709	0714	N32 W82	8551	05 26.9	6	SF	3 E		41		H
	LEAR	02 0708	0710	0714	N32 W73	8551	05 27.6	6	SF	3 E		54		
0030	LEAR	02 0823	0826	0837	N25 W51	8554	05 29.5	14	SF	3 E		14		
0031	LEAR	02 0905	0906	0914D	S15 E01	8562	06 2.4	9D	SF	3 E		60		E
0032	RAMY	02 1056E	1056U	1101D	N32 W81	8551	05 27.1	5D	SF	3 E		34		
0033		02 1138	1152	1158	N18 W52	8552	05 29.6	20	SN			48		F
	SVTO	02 1138	1152	1158	N18 W50	8552	05 29.8	20	SF	3 E		17		
	RAMY	02 1141E	1148U	1214D	N19 W53	8552	05 29.5	33D	SN	3 E		79		F
0034		02 1151	1159	1213	S14 E01	8562	06 2.6	22	SF			32		F
	SVTO	02 1151	1159	1213	S14 E02	8562	06 2.6	22	SF	3 E		51		
	RAMY	02 1154E	1154U	1224D	S14 E00	8562	06 2.5	30D	SF	3 E		12		F
0035		02 14188	1421*	1436	S28 W02	8557	06 2.4	18	SF			23		F
	RAMY	02 1418	1421	1437	S28 W02	8557	06 2.4	19	SF	3 E		23		
	SVTO	02 1419	1423	1437	S29 W03	8557	06 2.4	18	SF	3 E		25		F
	HOLL	02 1426	1431	1434	S28 E00	8557	06 2.6	8	SF	3 E		21		
0036	RAMY	02 1507	1507	1513	N24 W56	8554	05 29.4	6	SF	3 E		20		
0037	RAMY	02 1618	1618	1623	N16 E09	8558	06 3.4	5	SF	3 E		11		
		02 1907		1915		No Flare Patrol								
		02 1924		2116		No Flare Patrol								
		02 2148		2150		No Flare Patrol								
		02 2214		2326		No Flare Patrol								
		02 2331		2400		No Flare Patrol								
		03 0000		0002		No Flare Patrol								
		03 0009		0022		No Flare Patrol								
		03 0026		0046		No Flare Patrol								
		03 0057		0100		No Flare Patrol								
0038	LEAR	03 0120	0132	0142D	N20 W62	8552	05 29.4	22D	SF	2 E		37		
		03 0142		0156		No Flare Patrol								
		03 0208		0218		No Flare Patrol								
0039	LEAR	03 0220	0221	0227	N19 W62	8552	05 29.5	7	SF	3 E		31		
0040	LEAR	03 0228	0257	0302	N19 W63	8552	05 29.4	34	1F	3 E		126		
0041	LEAR	03 0232	0232	0236	N24 W62	8554	05 29.4	4	SF	3 E		14		
0042	LEAR	03 0345	0346	0452	N19 W59	8552	05 29.7	67	SF	3 E		36		
0043		03 06041	06122	0618	N20 W65	8552	05 29.4	14	SN			62		D
	URUM	03 0604	0612	0616	N22 W65	8552	05 29.3	12	SB		C	48		D
	SVTO	03 0605	0614	0621	N18 W65	8552	05 29.4	16	SF	3 E		75		
0044	SVTO	03 0607	0608	0620	S17 W07	8562	06 2.7	13	SF	3 E		29		
0045	SVTO	03 0629	0631	0637	S28 W11	8557	06 2.4	8	SF	3 E		23		
0046	SVTO	03 0633	0634	0642	N18 W62	8552	05 29.6	9	SF	3 E		16		

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Jun 99

H α SOLAR FLARES

JUNE 1999

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks	
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0047		03	06382	06451	0701	S16	W08	8562	06	2.7	23	SF						54		
	LEAR	03	0638	0645	0703D	S17	W09	8562	06	2.6	25D	SF		3	E			61		
	SVTO	03	0640	0646	0701	S15	W08	8562	06	2.7	21	SF		3	E			47		
0048	SVTO	03	0650	0651	0657	N18	W62	8552	05	29.7	7	SF		3	E			30		
0049		03	0739	0745	0842	S25	W08	8560	06	2.7	63	2B						205	U	
	LEAR	03	0737E	0743U	0844	S27	W10	8560	06	2.5	67D	2B		3	E			305	U	
	SVTO	03	0739	0745	0839	S23	W07	8560	06	2.8	60	1N		3	E			105	U	
0050		03	07416	0741*	0754	S15	W10	8562	06	2.6	13	SF						16		
	LEAR	03	0741	0741	0753	S15	W10	8562	06	2.6	12	SF		3	E			21		
	SVTO	03	0747	0751	0756	S15	W09	8562	06	2.6	9	SF		3	E			11		
0051	SVTO	03	0800	0804	0810	S15	W09	8562	06	2.6	10	SF		3	E			12		
0052	SVTO	03	0834	0837	0848	S15	W10	8562	06	2.6	14	SF		3	E			22		
0053	SVTO	03	0947	0948	0953	S15	W10	8562	06	2.6	6	SF		3	E			17		
0054	SVTO	03	1010	1011	1017	S15	W10	8562	06	2.7	7	SF		3	E			17		
0055		03	1034	10481	1111	S16	W10	8562	06	2.7	37	SF						74	FV	
	SVTO	03	1034	1048	1126	S15	W11	8562	06	2.6	52	1F		3	E			116	F	
	RAMY	03	1047E	1048U	1052D	S16	W09	8562	06	2.8	5D	SF		3	E			31		
	KHAR	03	1048U	1049	1056	S17	W09	8562	06	2.8	8U	SN		2	V				V	
0056	KHAR	03	1048U		1053	N23	E13		06	4.4	5U	SF		1	V				E	
0057	RAMY	03	1100E	1100U	1109	N26	W66	8554	05	29.4	9D	SF		3	E			21		
0058	RAMY	03	1104	1105	1110	S17	W10	8562	06	2.7	6	SF		3	E			26	F	
0059		03	11301	11321	1158	S19	W12	8562	06	2.6	28	1F						84	F	
	SVTO	03	1130	1133	1205	S20	W11	8562	06	2.6	35	1F		3	E			105	F	
	RAMY	03	1131	1132	1151	S18	W12	8562	06	2.6	20	SF		3	E			63		
0060	RAMY	03	1154	1157	1204	S18	W11	8562	06	2.6	10	SF		3	E			31		
0061	RAMY	03	1234	1235	1247	N17	W66	8552	05	29.6	13	SF		3	E			30		
0062		03	1337	13371	1347	S17	W10	8562	06	2.8	10	SF						50		
	RAMY	03	1337	1337	1347	S17	W10	8562	06	2.8	10	SF		3	E			41		
	HOLL	03	1337	1338	1347	S17	W11	8562	06	2.7	10	SF		3	E			58		
0063	HOLL	03	1410	1413	1417	S17	W12	8562	06	2.7	7	SF		3	E			42		
		03	1731		1742	No Flare Patrol														
0064		03	17444	17454	1756	N25	W71	8554	05	29.3	12	SF						22		
	RAMY	03	1744	1745	1752	N25	W69	8554	05	29.5	8	SF		3	E			14		
	HOLL	03	1748	1749	1759	N25	W73	8554	05	29.2	11	SF		3	E			31		
0065	HOLL	03	1818	1819	1822	N24	W70	8554	05	29.4	4	SF		3	E			17		
0066	HOLL	03	1926	1930	1942	S15	W17	8562	06	2.5	16	SF		3	E			20		
0067	HOLL	03	1955	1956	2000	N27	W74	8554	05	29.2	5	SF		3	E			53		
0068	HOLL	03	2000	2004	2012	S16	W17	8562	06	2.5	12	SF		3	E			49		
0069	HOLL	03	2101	2104	2107	N19	W69	8552	05	29.7	6	SF		3	E			20		
0070	HOLL	03	2111	2111	2124	N24	W74	8554	05	29.3	13	SF		3	E			76		
0071	HOLL	03	2237	2237	2249	N24	W73	8554	05	29.4	12	SF		3	E			38		
0072	HOLL	03	2302	2305	2309	N24	W73	8554	05	29.4	7	SF		3	E			17		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/	CMP	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
								USAF Region							Mo	Day	Time (UT)	
0073	HOLL	03	2355	2359	2402	N24	W74	8554	05	29.4	7	SF	3	E		21		
0074	LEAR	04	0017	0022	0027	N19	W71	8552	05	29.7	10	SF	3	E		14		
0075	LEAR	04	0031	0035	0036	N25	W73	8554	05	29.5	5	SF	3	E		12		
0076		04	0246	02461	0252	N24	W73	8554	05	29.6	6	SN				40		DF
	URUM	04	0246E	0246	0254	N24	W72	8554	05	29.6	8D	SB		P		64		D
	LEAR	04	0246	0247	0251	N24	W74	8554	05	29.5	5	SF	3	E		17		F
0077	URUM	04	0344	0348	0400	N25	W73	8554	05	29.6	16	SB		C		48		D
0078		04	04353	04392	0444	N19	W70	8552	05	29.9	9	SN				42		D
	URUM	04	0435	0439	0443	N19	W70	8552	05	29.9	8	SB		C		48		D
	LEAR	04	0438	0441	0445	N19	W70	8552	05	29.9	7	SF	4	E		36		
0079	LEAR	04	0446	0453	0504	N19	W73	8552	05	29.7	18	SF	4	E		38		
0080	URUM	04	0530	0538	0550	N18	W75	8552	05	29.6	20	1N		C		113		D
0081	LEAR	04	0615	0616	0625	S28	W27	8557	06	2.1	10	SF	4	E		38		
0082	LEAR	04	0632	0636	0650	S27	W21	8557	06	2.6	18	SF	4	E		29		
0083	LEAR	04	0635	0636	0639	S16	W23	8562	06	2.5	4	SF	4	E		12		
0084		04	06552	0700	0716	N18	W72	8552	05	29.9	21	2N				229		F
	LEAR	04	0655	0700		N17	W69	8552	05	30.1		2B	4	E		322		
	SVTO	04	0657	0700	0716	N18	W75	8552	05	29.7	19	1F	3	E		136		F
0085	LEAR	04	0721	0722	0725	N19	W75	8552	05	29.7	4	SF	4	E		25		
0086	LEAR	04	0725	0731	0737	N19	W75	8552	05	29.7	12	SF	4	E		26		
0087	LEAR	04	0657	0659	0704	N20	W65	8559	05	30.4	7	SF	4	E		21		
0088		04	07524	07562	0807	N18	W75	8552	05	29.7	15	SF				55		
	LEAR	04	0752	0758	0813	N19	W75	8552	05	29.7	21	SF	4	E		95		
	SVTO	04	0756	0756	0801	N16	W75	8552	05	29.7	5	SF	3	E		15		
		04	0916		0922	No Flare Patrol												
0089	KHAR	04	0928		0948U	N21	W85	8554	05	29.0	20U	SF	2	V				T
0090	KHAR	04	0942		0951	N15	W80	8552	05	29.4	9	SF	2	V				HT
0091	KHAR	04	1041		1045	N21	E78	8569	06	10.4	4	SF	2	V				D
0092	KHAR	04	1114		1145U	N19	E75	8569	06	10.2	31U	1F	2	V				EHL
0093	KHAR	04	1123	1145	1200	N20	W87	8552	05	28.9	37	SN	2	V				EKT
0094	KHAR	04	1143		1205D	N13	W90	8554	05	28.8	22D	SF	2	V				ET
0095		04	11531	1156	1225	N10	W49	8555	05	31.8	32	SF				76		
	KHAR	04	1153		1205D	N08	W50	8555	05	31.7	12D	SF	2	V				
	RAMY	04	1154	1156	1225	N11	W48	8555	05	31.9	31	SF	3	E		76		
0096		04	1240	12401	1248	S24	W24	8560	06	2.7	8	SF				18		
	SVTO	04	1240	1240	1248	S24	W25	8560	06	2.6	8	SF	3	E		19		
	RAMY	04	1240	1241	1248	S24	W22	8560	06	2.8	8	SF	3	E		18		
0097		04	1426	1429	1433	N24	W85	8554	05	29.1	7	SF				47		
	RAMY	04	1426	1429	1433	N24	W86	8554	05	29.0	7	SF	3	E		56		
	SVTO	04	1426	1429U	1438D	N25	W84	8554	05	29.2	12D	SF	3	E		38		
0098	HOLL	04	1504	1505	1507	N12	W52	8555	05	31.7	3	SF	3	E		18		
		04	1652		1721	No Flare Patrol												
		04	1807		1849	No Flare Patrol												

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0099	HOLL	04	2000	2001	2008	S16	W28	8562	06	2.7	8	SF		2	E		19		
			04 2210		2230														No Flare Patrol
0100	LEAR	05	0139	0140	0143	N19	W85	8552	05	29.7	4	SF		4	E		11		
0101	LEAR	05	0652	0655	0658	S20	E71	8571	06	10.7	6	SF		4	E		12		
0102		05	0744	07514	0800	N26	W48	8572	06	1.6	16	SF					24		
	LEAR	05	0744	0751	0801	N26	W47	8572	06	1.7	17	SF		4	E		28		
	SVTO	05	0744	0755	0800	N27	W48	8572	06	1.6	16	SF		3	E		19		
0103		05	08141	0815	0820	S18	W39	8562	06	2.4	6	SF					26		
	SVTO	05	0814	0815	0821	S18	W39	8562	06	2.4	7	SF		3	E		35		
	LEAR	05	0815	0815	0818	S18	W39	8562	06	2.4	3	SF		4	E		17		
0104	KHAR	05	0925E		0935	N18	W82	8552	05	30.2	10D	SN		2	V				ET
0105	KHAR	05	1000		1017	N18	W82	8552	05	30.3	17	SN		2	V				ELT
0106	KHAR	05	1000		1009	S15	W27	8567	06	3.4	9	SF		2	V				DE
0107	KHAR	05	1037U		1101	N18	W82	8552	05	30.3	24U	SF		2	V				T
0108	KHAR	05	1110		1119	N23	W90	8554	05	29.6	9	SF		2	V				HT
0109	KHAR	05	1115		1152D	N18	W85	8552	05	30.1	37D	SN		2	V				T
0110	RAMY	05	1320	1321	1326	S20	E68	8571	06	10.7	6	SF		3	E		18		
0111	LEAR	06	0139	0142	0151	N15	W38	8558	06	3.2	12	SF		4	E		47		
0112		06	02043	02071	0216	N29	E40	8574	06	9.2	12	1N					118	3.1	E
	URUM	06	0204	0208	0216	N29	E38	8574	06	9.1	12	1N			C		209	3.1	E
	LEAR	06	0207	0207	0216	N29	E41	8574	06	9.3	9	SF		4	E		28		
0113	LEAR	06	0417	0417	0420	N26	W59	8572	06	1.6	3	SF		3	E		18		
0114	LEAR	06	0423	0428	0430	N26	W59	8572	06	1.6	7	SF		3	E		30		
0115		06	04573	05001	0510	N15	W40	8558	06	3.2	13	SN					50	1.1	EF
	URUM	06	0457	0501	0513	N15	W39	8558	06	3.2	16	SN			C		80	1.1	E
	LEAR	06	0500	0500	0506	N15	W41	8558	06	3.1	6	SF		4	E		19		F
0116		06	0557	0557	0602	N16	W39	8558	06	3.3	5	SF					24		
	SVTO	06	0557	0557	0601	N16	W39	8558	06	3.3	4	SF		3	E		12		
	LEAR	06	0557	0557	0604	N16	W39	8558	06	3.3	7	SF		4	E		36		
0117	LEAR	06	0658	0703	0706	S16	W49	8562	06	2.6	8	SF		4	E		30		
0118		06	08142	0816	0830	N29	E36	8574	06	9.2	16	SF					16		EF
	LEAR	06	0814	0816	0830	N29	E35	8574	06	9.1	16	SF		4	E		18		E
	SVTO	06	0816	0818U	0824D	N29	E38	8574	06	9.3	8D	SF		3	E		15		F
0119	LEAR	06	0854	0854	0857	N28	E36	8574	06	9.2	3	SF		4	E		11		
			06 1056		1119														No Flare Patrol
0120	HOLL	06	1338	1751	1916	N29	E30	8574	06	8.9	338	SF		3	E		54		T
0121		06	1417	1457	1506	N28	E32	8574	06	9.1	49	SF					21		
	RAMY	06	1417	1457	1507	N29	E32	8574	06	9.1	50	SF		3	E		31		
	SVTO	06	1456E	1456U	1505	N28	E32	8574	06	9.1	9D	SF		3	E		11		
0122	SVTO	06	1636E	1638U	1640D	N28	E32	8574	06	9.2	4D	SF		3	E		43		
0123	HOLL	06	1717	1724	1726	S14	W48	8562	06	3.1	9	SF		3	E		10		
0124	HOLL	06	1857	1858	1901	N21	E54	8569	06	10.9	4	SF		3	E		23		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt Xray	Obs See	Type	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0125	HOLL	06	2025	2026	2030	N30	E28	8574	06	9.0	5	SF	3	E		10		
0126	HOLL	06	2228	2232	2242	N29	E29	8574	06	9.2	14	SF	3	E		12		F
0127	LEAR	07	0358	0400	0406	N29	E27	8574	06	9.3	8	SF	3	E		44		
0128	LEAR	07	0524	0525	0529	N27	E23	8574	06	9.0	5	SF	4	E		13		
0129	LEAR	07	0620	0625	0627	S15	W61	8562	06	2.6	7	SF	3	E		20		
0130	LEAR	07	0635	0642	0654	S15	W64	8562	06	2.4	19	SF	3	E		51		
		07	1011		1012	No Flare Patrol												
0131	KHAR	07	1020		1030U	S16	W54	8567	06	3.3	10U	SN	2	V				
0132	RAMY	07	1317	1318	1328	S16	W65	8562	06	2.6	11	SF	3	E		17		
0133		07	1527	1528	1532	S16	W68	8562	06	2.5	5	SF				19		
	SVTO	07	1527	1528	1531	S15	W68	8562	06	2.5	4	SF	3	E		17		
	HOLL	07	1527	1528	1532	S17	W67	8562	06	2.5	5	SF	3	E		21		
0134		08	00225	00331	0042	S14	W58	8567	06	3.6	20	SN				30	1.0	D
	URUM	08	0022	0034	0045	S14	W58	8567	06	3.6	23	SN		C		48	1.0	D
	HOLL	08	0027	0033	0039	S15	W58	8567	06	3.6	12	SF	3	E		12		
0135	LEAR	08	0025	0030	0040	S13	W59	8567	06	3.6	15	SF	4	E		40		
0136	LEAR	08	0121	0125	0142	N29	E14	8574	06	9.1	21	SF	4	E		22		
0137	LEAR	08	0322	0323	0336	N30	E14	8574	06	9.2	14	SF	4	E		15		
0138	LEAR	08	0502	0504	0509	N19	W75	8573	06	2.5	7	SF	3	E		43		
0139		08	05221	05241	0538	N26	E29	8569	06	10.5	16	SN				57	1.3	E
	URUM	08	0522	0525	0545	N27	E28	8569	06	10.4	23	SB		C		96	1.3	E
	LEAR	08	0523	0524	0530	N24	E30	8569	06	10.5	7	SF	3	E		18		
0140	LEAR	08	0656	0659	0708	S16	E33	8571	06	10.8	12	SF	3	E		28		F
		08	0929		1057	No Flare Patrol												
0141	HOLL	08	1315E	1316U	1325	N29	E09	8574	06	9.2	10D	SF	3	E		67		
0142		08	13532	13561	1403	S16	E28	8570	06	10.7	10	SF				44		F
	HOLL	08	1353	1357	1405	S15	E28	8570	06	10.7	12	SF	3	E		49		F
	RAMY	08	1355	1356	1401	S16	E29	8570	06	10.8	6	SF	3	E		39		
0143		08	1527	1529	1534	N14	W74	8558	06	3.0	7	SF				18		F
	HOLL	08	1527	1529	1533	N16	W73	8558	06	3.1	6	SF	3	E		16		F
	RAMY	08	1527	1529	1534	N11	W74	8558	06	3.1	7	SF	3	E		21		
0144		08	17512	18041	1817	N30	E05	8574	06	9.1	26	SF				76		F
	HOLL	08	1751	1804	1817	N31	E06	8574	06	9.2	26	SF	3	E		68		F
	RAMY	08	1753	1805	1817	N29	E04	8574	06	9.0	24	SF	3	E		84		
0145	HOLL	08	1902	1906	1912	S20	E26	8571	06	10.8	10	SF	3	E		14		F
0146	HOLL	08	2101	2105	2107	N30	E03	8574	06	9.1	6	SF	3	E		12		
0147	HOLL	08	2106	2106	2109	N20	E25	8569	06	10.8	3	SF	3	E		10		
0148		09	00107	0021	0036	N20	E04	8578	06	9.3	26	SN				102	1.8	E
	HOLL	09	0010	0021	0036	N21	E05	8578	06	9.4	26	SF	3	E		43		
	URUM	09	0017	0021	0037	N19	E04	8578	06	9.3	20	SB		C		161	1.8	E
0149	KHAR	09	0912	0913	0916	N18	W02	8578	06	9.2	4	SF	2	V				D
0150	RAMY	09	1149E	1149U	1154	S16	W88	8562	06	2.8	5D	SF	3	E		23		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	
0151		09	13381	13407	1400	N30	W06	8574	06	9.1	22	SF						19	
	RAMY	09	1338	1340	1402	N30	W05	8574	06	9.2	24	SF			3	E		20	
	HOLL	09	1339	1347	1359	N30	W06	8574	06	9.1	20	SF			3	E		18	
0152		09	1407*	14231	1450	N27	W05	8574	06	9.2	43	SF						68	F
	HOLL	09	1407	1424	1510	N27	W05	8574	06	9.2	63	SF			3	E		97	F
	RAMY	09	1417	1423	1431	N27	W05	8574	06	9.2	14	SF			3	E		40	
0153	HOLL	09	1708	1710	1721	N29	W06	8574	06	9.2	13	SF			3	E		22	
0154	HOLL	09	1856	1858	1910	N30	W08	8574	06	9.1	14	SF			3	E		45	F
0155	HOLL	09	1922	1927	1942	N30	W07	8574	06	9.2	20	SF			3	E		16	F
0156	HOLL	10	0023	0023	0028	N21	W10	8578	06	9.2	5	SF			3	E		12	F
0157	LEAR	10	0117	0117	0125	N20	E08	8569	06	10.7	8	SF			3	E		24	F
0158	LEAR	10	0317	0318	0324	N31	W11	8574	06	9.3	7	SF			3	E		17	
0159	LEAR	10	0406	0411	0417	N21	E07	8569	06	10.7	11	SF			3	E		22	
			0542		0543	No Flare Patrol													
			0554		0608	No Flare Patrol													
			0645		0715	No Flare Patrol													
			0801		0813	No Flare Patrol													
0160	KHAR	10	0909	0909	0919	S19	E07	8571	06	10.9	10	SF			2	V			E
0161	RAMY	10	1105E	1107U	1111	N20	E04	8569	06	10.8	6D	SF			3	E		21	
0162	RAMY	10	1449	1451	1459	N19	W21	8578	06	9.0	10	SF			3	E		11	
0163		10	15031	15031	1511	N18	E00	8569	06	10.6	8	SF						14	
	HOLL	10	1503	1503	1509	N19	E00	8569	06	10.6	6	SF			3	E		16	
	RAMY	10	1504	1504	1513	N18	E00	8569	06	10.6	9	SF			3	E		13	
0164	HOLL	10	2056	2057	2120	N28	W25	8574	06	8.9	24	SF			3	E		59	
0165	HOLL	10	2107	2108	2115	N19	W21	8578	06	9.3	8	SF			3	E		33	
			11	0203		0409	No Flare Patrol												
0166	SVTO	11	0505	0508	0525	N25	E42	8582	06	14.5	20	SF			3	E		13	
0167	SVTO	11	0553	0554	0604	N18	W08	8569	06	10.6	11	SF			3	E		12	F
0168	SVTO	11	0736	0738	0757	N33	W26	8574	06	9.2	21	SF			3	E		20	
0169	KHAR	11	1050U		1056	N19	W12	8569	06	10.5	6U	SF			2	V			D
0170		11	1417	1418	1424	N28	W32	8574	06	9.1	7	SF						59	
	HOLL	11	1417	1418	1423	N28	W33	8574	06	9.0	6	SF			3	E		55	
	RAMY	11	1417	1418	1424	N27	W32	8574	06	9.1	7	SF			3	E		63	
0171		11	1810	1813	1854	N18	W16	8569	06	10.5	44	1N						97	F
	HOLL	11	1810	1813	1852	N18	W16	8569	06	10.5	42	1F			3	E		111	
	RAMY	11	1817E	1817U	1857	N18	W16	8569	06	10.5	40D	SN			2	E		83	F
0172	HOLL	11	1832	1833	1843	N26	E34	8582	06	14.4	11	SF			3	E		17	
0173	HOLL	11	1952	1953	1959	N20	W20	8569	06	10.3	7	SF			3	E		11	
0174	HOLL	11	2134	2136	2145	N18	W18	8569	06	10.5	11	SF			3	E		80	
0175	HOLL	11	2150	2151	2153	S19	W18	8571	06	10.5	3	SF			3	E		13	
0176	LEAR	12	0106	0107	0114	N20	W23	8569	06	10.3	8	SF			4	E		21	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0177	LEAR	12	0212	0214	0219	S15	E69	8583	06	17.3	7	SF		4	E		18		
0178	LEAR	12	0302	0302	0306	S12	E71	8583	06	17.5	4	SF		4	E		15		
0179	SVTO	12	0934	0936	0941	N25	E26	8582	06	14.4	7	SF		3	E		19		
		12	1029		1035	No Flare Patrol													
0180		12	12341	1244	1255	S14	E64	8583	06	17.4	21	SF					74		H
	RAMY	12	1234	1244	1253	S13	E63	8583	06	17.3	19	SF		3	E		65		
	SVTO	12	1235	1244	1257	S14	E64	8583	06	17.4	22	SF		3	E		82		H
0181		12	13176	13331	1359	S13	E64	8583	06	17.4	42	1N					196		H
	HOLL	12	1317	1334	1402	S13	E65	8583	06	17.4	45	1F		3	E		208		
	RAMY	12	1323	1333	1356	S13	E63	8583	06	17.3	33	1N		3	E		184		H
0182	SVTO	12	1324	1346	1354	S14	E65	8583	06	17.5	30	2N		3	E		261		
0183	HOLL	12	1714	1714	1720	S11	E65	8583	06	17.6	6	SF		3	E		21		
0184	HOLL	12	1854	1856	1902	N17	W32	8569	06	10.3	8	SF		3	E		17		
0185	HOLL	12	1919	1921	1930	S12	E59	8583	06	17.2	11	SF		3	E		24		
		12	2028		2050	No Flare Patrol													
		12	2113		2122	No Flare Patrol													
0186	HOLL	12	2122E	2122U	2145D	N23	W35	8569	06	10.2	23D	SF		3	E		48		
0187	HOLL	12	2122E	2122U	2146D	N27	W43	8574	06	9.5	24D	SF		3	E		19		
		12	2126		2144	No Flare Patrol													
		12	2154		2214	No Flare Patrol													
0188	HOLL	12	2215E	2215U	2228	S12	E58	8583	06	17.3	13D	SF		3	E		34		
		12	2232		2342	No Flare Patrol													
0189	LEAR	12	2355	2404	2414	N18	W33	8569	06	10.5	19	SF		3	E		44		
0190	LEAR	13	0023	0025	0027	S14	E56	8583	06	17.2	4	SF		3	E		12		
0191	LEAR	13	0057	0058	0109	N18	W34	8569	06	10.4	12	SF		4	E		31		E
0192	LEAR	13	0158	0158	0203	N18	W35	8569	06	10.4	5	SF		3	E		14		
0193	LEAR	13	0244	0244	0248	S13	E55	8583	06	17.3	4	SF		3	E		16		
0194	LEAR	13	0301	0304	0308	S13	E55	8583	06	17.3	7	SF		4	E		16		
0195	LEAR	13	0416	0416	0420	N25	E16	8582	06	14.4	4	SF		3	E		18		
0196	LEAR	13	0431	0431	0435	N18	W37	8569	06	10.4	4	SF		3	E		24		
0197	LEAR	13	0438	0441	0446	N18	W37	8569	06	10.4	8	SF		3	E		23		
0198		13	05522	05551	0605	N18	W38	8569	06	10.3	13	SF					30		
	SVTO	13	0552	0555	0612	N18	W38	8569	06	10.3	20	SF		3	E		39		
	LEAR	13	0554	0556	0558	N18	W37	8569	06	10.4	4	SF		3	E		21		
0199		13	06288	06421	0704	S28	W32	8576	06	10.8	36	1F					64		F
	LEAR	13	0628	0642	0711	S28	W30	8576	06	10.9	43	1F		3	E		105		F
	SVTO	13	0636	0643	0656	S28	W35	8576	06	10.5	20	SF		3	E		24		
0200	LEAR	13	0637	0644	0648	S13	E53	8583	06	17.3	11	SF		3	E		25		
0201		13	0740	0743	0755	N18	W40	8569	06	10.3	15	SF					54		
	LEAR	13	0740	0743	0755	N17	W39	8569	06	10.3	15	SF		3	E		51		
	SVTO	13	0740	0743	0755	N18	W40	8569	06	10.3	15	SF		3	E		56		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Xray	Obs See	Type	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0202	LEAR	13	0815	0816	0820	N25	E14	8582	06	14.4	5	SF	3	E		21		
0203	SVTO	13	0916	0916	0927	N25	E14	8582	06	14.5	11	SF	3	E		19		
0204		13	1118	1119	1122	N16	W42	8569	06	10.3	4	SF				26		
	RAMY	13	1117E	1118U	1128D	N17	W42	8569	06	10.3	11D	SF	2	E		35		
	SVTO	13	1118	1119	1122	N16	W43	8569	06	10.2	4	SF	3	E		16		
0205		13	1224	1225.4	1244	N25	E11	8582	06	14.4	20	1F				88		F
	RAMY	13	1224	1225	1244	N25	E11	8582	06	14.4	20	1F	3	E		102		F
	SVTO	13	1224	1229	1243	N25	E11	8582	06	14.4	19	SF	3	E		75		F
0206		13	1249.1	1252	1301	N18	W42	8569	06	10.3	12	SF				20		
	RAMY	13	1249	1252	1305	N17	W42	8569	06	10.3	16	SF	3	E		25		
	SVTO	13	1250	1252	1257	N18	W43	8569	06	10.3	7	SF	3	E		16		
0207		13	1307.1	1310.1	1331	N18	W42	8569	06	10.3	24	SF				66		
	RAMY	13	1307	1311	1333	N17	W42	8569	06	10.3	26	SF	3	E		68		
	SVTO	13	1308	1310	1329	N18	W43	8569	06	10.3	21	SF	3	E		63		
0208	RAMY	13	1445	1450	1515	N26	E09	8582	06	14.3	30	SF	3	E		26		
0209	RAMY	13	1529	1529	1533	S19	W40	8571	06	10.6	4	SF	3	E		11		
		13	1543*	1543*	1606	N25	E08	8582	06	14.3	23	SF				12		F
	RAMY	13	1543	1543	1610	N24	E07	8582	06	14.2	27	SF	3	E		10		
0210	SVTO	13	1553	1555	1601	N26	E09	8582	06	14.4	8	SF	3	E		15		F
		13	1619.4	1623.8	1639	N25	E10	8582	06	14.4	20	SF				17		
	RAMY	13	1619	1623	1636	N25	E09	8582	06	14.4	17	SF	3	E		16		
0211	SVTO	13	1623	1631	1642	N25	E10	8582	06	14.4	19	SF	3	E		18		
		13	1629	1629	1635	N16	W46	8569	06	10.2	6	SF	3	E		13		
	SVTO	13	1638	1638	1644	N16	W46	8569	06	10.2	6	SF	3	E		12		
0214		13	1646.1	1651	1702	N25	E10	8582	06	14.5	16	SF				18		
	SVTO	13	1646	1651	1700	N25	E10	8582	06	14.5	14	SF	3	E		18		
	RAMY	13	1647	1651	1703	N25	E09	8582	06	14.4	16	SF	3	E		19		
		13	1734		1904	No Flare Patrol												
0215	HOLL	13	1934	1937	1942	N26	E07	8582	06	14.3	8	SF	3	E		15		F
		13	2025		2238	No Flare Patrol												
0216	HOLL	13	2345	2345	2405	N19	W62	8578	06	9.2	20	SF	3	E		15		
		13	2350		2353	No Flare Patrol												
0217		14	0012.7	0028.1	0050	N26	E05	8582	06	14.4	38	SF				42		E
	HOLL	14	0012	0029	0054	N26	E05	8582	06	14.4	42	SF	3	E		44		
	LEAR	14	0019	0028	0046	N26	E05	8582	06	14.4	27	SF	3	E		40		E
0218	LEAR	14	0304	0307	0315	N22	W44	8569	06	10.7	11	SF	3	E		21		
0219		14	0404	0404	0407	S12	E43	8583	06	17.4	3	SF	3	E		11		
		14	0457.1	0459	0506	N26	E02	8582	06	14.4	9	SF				44		F
	LEAR	14	0457	0459	0506	N26	E01	8582	06	14.3	9	SF	3	E		44		F
0220	SVTO	14	0458	0459	0506	N26	E03	8582	06	14.4	8	SF	3	E		43		F
		14	0547.1	0548.1	0558	N26	E01	8582	06	14.3	11	SF				18		FH
	LEAR	14	0547	0549	0601	N26	E01	8582	06	14.3	14	SF	3	E		25		
0221	SVTO	14	0548	0548	0556	N27	E01	8582	06	14.3	8	SF	3	E		12		FH
		14	0636.1	0637	0646	N24	W00	8582	06	14.3	10	SF				19		FH
	LEAR	14	0636	0637	0647	N24	E00	8582	06	14.3	11	SF	3	E		21		F
0222	SVTO	14	0637	0637	0644	N25	W01	8582	06	14.2	7	SF	3	E		17		FH

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0223	LEAR	14	0658	0701	0703	N24	E00	8582	06	14.3	5	SF		3	E		28		F	
0224	KHAR	14	0807E		0818	N27	W01	8582	06	14.3	11D	SF		2	V				H	
0225	KHAR	14	0820	0823	0829	N15	W55	8575	06	10.2	9	SF		2	V				EH	
0226	RAMY	14	1133E	1133U	1207D	N24	W04	8582	06	14.2	34D	SF		3	E		17		F	
0227	RAMY	14	1217E	1221U	1230D	N26	W01	8582	06	14.4	13D	SF		3	E		15			
0228	RAMY	14	1258	1258	1304	S27	W49	8576	06	10.7	6	SF		3	E		10			
0229	RAMY	14	1435	1436	1450	N26	W03	8582	06	14.4	15	SF		3	E		13			
0230	SVTO	14	1517	1522	1528	N26	W05	8582	06	14.2	11	SF		3	E		14			
0231	RAMY	14	1703	1704	1707	S29	W48	8576	06	10.9	4	SF		3	E		15			
0232		14	17131	17131	1722	N16	W58	8569	06	10.3	9	SF					18			
	RAMY	14	1713	1713	1721	N16	W57	8569	06	10.4	8	SF		3	E			21		
	HOLL	14	1714	1714	1722	N17	W59	8569	06	10.2	8	SF		3	E			16		
0233	HOLL	14	1813	1813	1837	N17	W71	8578	06	9.4	24	SF		3	E		45			
0234		14	1800*	18338	1851	N18	W72	8578	06	9.3	51	SF					22			
	RAMY	14	1800	1833	1851	N17	W70	8578	06	9.4	51	SF		3	E			29		
	HOLL	14	1841	1841	1854D	N19	W73	8578	06	9.2	13D	SF		3	E			16		
		14	1928		2002	No Flare Patrol														
		14	2009		2118	No Flare Patrol														
		14	2145		2154	No Flare Patrol														
		14	2258		2322	No Flare Patrol														
0235		15	00302	00311	0038	S11	E30	8583	06	17.3	8	SF					46			
	HOLL	15	0030	0031	0036	S11	E30	8583	06	17.3	6	SF		3	E			60		
	LEAR	15	0032	0032	0039	S11	E29	8583	06	17.2	7	SF		3	E			31		
0236	HOLL	15	0034	0037	0041	N26	W10	8582	06	14.2	7	SF		3	E		14			
0237		15	00546	0102*	0123	N25	W10	8582	06	14.3	29	SF					34		F	
	HOLL	15	0054	0102	0124	N25	W09	8582	06	14.3	30	SF		3	E			58	F	
	LEAR	15	0100	0115	0122	N25	W10	8582	06	14.3	22	SF		3	E			11		
0238	URUM	15	0229	0233	0249	N19	W59	8569	06	10.6	20	1N			C		113	2.4	D	
0239	LEAR	15	0440	0442	0445	N25	W13	8582	06	14.2	5	SF		3	E		16			
0240	RAMY	15	1310	1311	1319	S19	W04	8580	06	15.2	9	SF		3	E		10		F	
0241	RAMY	15	1637	1639	1644	N18	W69	8569	06	10.4	7	SF		3	E		13			
0242	RAMY	15	1647	1647	1650	S12	E22	8583	06	17.3	3	SF		3	E		10			
		15	2311		2334	No Flare Patrol														
0243	LEAR	16	0145	0145	0151	N39	E40	8585	06	19.3	6	SF		3	E		13			
0244	LEAR	16	0151	0159	0216	N39	E40	8585	06	19.3	25	SF		3	E		33			
0245		16	04555	05119	0545	N39	E38	8585	06	19.3	50	1N					141	4.3	EF	
	LEAR	16	0455	0515	0550	N39	E38	8585	06	19.3	55	1F					102			
	SVTO	16	0500	0520	0540	N40	E39	8585	06	19.4	40	SF		3	E			48	F	
	URUM	16	0511E	0511	0546	N37	E36	8585	06	19.1	35D	1B			P		273	4.3	E	
0246	URUM	16	0657	0701	0705	N24	W67	8569	06	11.1	8	SF			C		64		E	
		16	0929		0931	No Flare Patrol														
0247	KHAR	16	0944E		1002	S30	W72	8576	06	10.7	18D	SF		2	V				L	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0248	KHAR	16	1022	1024	1032	S24	W13	8580	06	15.4	10	SN	2	V				DL
			16 1201		1202	No Flare Patrol												
0249	RAMY	16	1358	1401	1405	S24	W16	8580	06	15.3	7	SF	4	E		11		FH
0250	HOLL	16	2036	2036	2045	N22	W87	8584	06	10.2	9	SF	3	E		21		
0251	HOLL	16	2046	2048	2052	N25	W34	8582	06	14.2	6	SF	3	E		16		
			16 2140		2206	No Flare Patrol												
			16 2215		2339	No Flare Patrol												
0252	LEAR	17	0257	0258	0308	N40	E28	8585	06	19.4	11	SF	4	E		22		
0253	LEAR	17	0622	0622	0625	N25	W37	8582	06	14.4	3	SF	4	E		10		
0254		17	0837	0840	0850	N40	E24	8585	06	19.3	13	SF				13		
	LEAR	17	0837	0840	0850	N40	E24	8585	06	19.3	13	SF	3	E		14		
	SVTO	17	0838E	0838U	0847D	N40	E24	8585	06	19.3	9D	SF	3	E		12		
			17 1018		1057	No Flare Patrol												
			17 1139		1226	No Flare Patrol												
			17 1305		1423	No Flare Patrol												
			17 1557		1648	No Flare Patrol												
			17 1709		1900	No Flare Patrol												
			17 1951		2009	No Flare Patrol												
			17 2205		2222	No Flare Patrol												
			17 2351		2400	No Flare Patrol												
			18 0000		0053	No Flare Patrol												
			18 0116		0322	No Flare Patrol												
			18 0331		0342	No Flare Patrol												
			18 0414		0445	No Flare Patrol												
			18 0546		0559	No Flare Patrol												
			18 0606		0642	No Flare Patrol												
0255		18	0636E	0645	0701	N37	E13	8585	06	19.3	25D	SF				50		
	LEAR	18	0636E	0649U	0720D	N39	E12	8585	06	19.2	44D	SF	2	E		45		
	SVTO	18	0644E	0645	0701	N35	E14	8585	06	19.4	17D	SF	3	E		55		
0256	SVTO	18	0905	0909U	0918D	S21	W11	8588	06	17.5	13D	SF	3	E		25		F
			18 1419		1426	No Flare Patrol												
0257		18	1444	1448I	1454	N27	W52	8582	06	14.6	10	SF				42		F
	SVTO	18	1442E	1448	1454	N28	W51	8582	06	14.6	12D	SF	3	E		25		F
	RAMY	18	1444	1449	1511D	N26	W53	8582	06	14.5	27D	SF	3	E		60		
			18 1558		1606	No Flare Patrol												
			18 1854		1904	No Flare Patrol												
			18 1912		1925	No Flare Patrol												
0258	HOLL	18	1941	1942	1948D	N27	W55	8582	06	14.5	7D	SF	3	E		36		
0259	HOLL	18	1957	2009	2040	N39	E05	8585	06	19.2	43	1N	3	E		219		FH
0260	HOLL	18	2257	2258	2318	N40	E04	8585	06	19.3	21	SF	3	E		58		F
			19 1642		1657	No Flare Patrol												
			19 1716		1726	No Flare Patrol												
			20 0932		1022	No Flare Patrol												
0261	RAMY	20	1454	1454	1500	N14	W23	8591	06	18.9	6	SF	3	E		10		
0262	RAMY	20	1529	1530	1614D	N22	E71	8592	06	26.1	45D	SB	3	E		96		S
			20 1615		1652	No Flare Patrol												
			20 1731		1911	No Flare Patrol												

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Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo Day	Dur (Min)	Imp Opt Xray	Obs See Type	Area Measurement			Remarks
												Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0263	HOLL	20	1912E	1915	1947	N27 E65	8592	06 25.9	35D	SF	3 E		38		FH
0264	HOLL	20	1957	2020	2030	N24 E67	8592	06 26.0	33	SF	3 E		34		F
0265	HOLL	20	2032	2036	2039	N23 E66	8592	06 25.9	7	SF	3 E		11		
0266	HOLL	20	2008	2014	2021	N23 E32	8607	06 23.3	13	SF	3 E		31		F
0267	HOLL	20	2312	2315	2322	S12 W49	8583	06 17.3	10	SF	3 E		20		
0268		21	0004	00052	0014	N12 E76	8594	06 26.7	10	SF			32		F
	LEAR	21	0004	0007	0011	N10 E76	8594	06 26.7	7	SF	3 E		35		
	HOLL	21	0005	0005	0018	N14 E75	8594	06 26.7	13	SF	3 E		29		F
0269		21	0058	0118	0152	S12 W50	8583	06 17.3	54	1F			198		FH
	HOLL	21	0058	0118	0152	S11 W50	8583	06 17.3	54	1F	3 E		241		H
	LEAR	21	0058	0118	0152	S12 W51	8583	06 17.2	54	1F	3 E		156		F
0270	LEAR	21	0140	0144	0149	N36 W24	8585	06 19.1	9	SF	3 E		22		
0271	LEAR	21	0913	0915	0918	N13 E69	8594	06 26.6	5	SF	3 E		10		
0272	KHAR	21	0950E		0957	N38 W34	8585	06 18.7	7D	SF	2 V				L
0273	KHAR	21	0959	1000	1015U	S12 E83	8599	06 27.7	16U	SF	2 V				
0274	KHAR	21	1100		1142	S12 E90	8599	06 28.2	42	SN	2 V				H
0275	HOLL	21	1815	1815	1819	N13 E66	8594	06 26.7	4	SF	3 E		25		
0276	HOLL	21	1824	1824	1828	N12 E65	8594	06 26.7	4	SF	3 E		12		
		21	2258		2338	No Flare Patrol									
0277	LEAR	22	0257	0257	0301	S20 E83	8599	06 28.5	4	SF	3 E		15		
0278	LEAR	22	0708	0713	0812	S19 E79	8599	06 28.3	64	SF	4 E		20		
		22	0927		1008	No Flare Patrol									
		22	1158		1232	No Flare Patrol									
0279	HOLL	22	1419	1419	1428	S18 E74	8599	06 28.2	9	SF	3 E		20		H
		22	1447		1505	No Flare Patrol									
0280	HOLL	22	1538	1544	1550	S18 E72	8599	06 28.1	12	SF	3 E		15		
0281	HOLL	22	1611	1618	1624	S18 E71	8599	06 28.1	13	SF	3 E		11		
		22	1701		1743	No Flare Patrol									
0282	HOLL	22	1746	1746	1806	N26 E55	8598	06 27.0	20	SF	3 E		14		
0283	HOLL	22	1818	1857	1858D	N22 E37	8592	06 25.6	40D	1N	3 E		225		
		22	1823		1855	No Flare Patrol									
0284	HOLL	22	1856	1901	1917	S18 E71	8599	06 28.2	21	SF	3 E		14		
		22	1859		2019	No Flare Patrol									
		22	2100		2118	No Flare Patrol									
		22	2146		2350	No Flare Patrol									
		22	2357		2400	No Flare Patrol									
0285	LEAR	23	0040	0045	0057	S12 W78	8583	06 17.1	17	1F	3 E		102		
0286		23	0653	0707	0818	N22 E42	8598	06 26.5	85	2N			359		FHU
	SVTO	23	0653	0656U	0817	N21 E43	8598	06 26.6	84	2N	3 E		334		UH
	LEAR	23	0659E	0707	0819	N23 E42	8598	06 26.5	80D	2N	4 E		384		UF

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0287	KHAR	23	1000E		1012	S16	W27	8601	06	21.4	12D	SF		2	V				E	
0288	KHAR	23	1050	1100U	1105D	N23	E90	8602	06	30.4	15D	SN		3	V				H	
0289	KHAR	23	1118E		1126	N21	E83	8602	06	29.8	8D	SN		2	V				H	
0290	KHAR	23	1210		1216	N26	E52	8616	06	27.5	6	SF		2	V				D	
0291		23	12283	1230*	1324	N24	E27	8592	06	25.6	56	SF					115	3.5	EF	
	KHAR	23	1228		1310D	N27	E28	8592	06	25.6	42D	1F		3	P	1301	280	3.5	E	
	HOLL	23	1228	1230	1323	N23	E28	8592	06	25.7	55	SF		2	E		40		F	
	SVTO	23	1231	1243	1325	N22	E26	8592	06	25.5	54	SF		3	E		26			
0292	SVTO	23	1231	1306	1438	N22	E28	8592	06	25.7	127	SF		3	E		67		F	
0293	KHAR	23	1300U	1304U	1310D	N27	E47	8616	06	27.2	10U	SN		3	P	1304	110	1.8	D	
0294		23	1718	1720	1725	N23	E47	8598	06	27.3	7	SF					16			
	SVTO	23	1718	1720	1725	N22	E48	8598	06	27.4	7	SF		3	E		14			
	HOLL	23	1718	1720	1725	N24	E46	8598	06	27.3	7	SF		3	E		17			
0295	SVTO	23	1736	1737	1745	N22	E46	8598	06	27.3	9	SF		3	E		10			
0296	HOLL	23	1753E	1801U	1814D	N23	E45	8598	06	27.2	21D	SF		3	E		41			
		23	1830		2055	No Flare Patrol														
0297	HOLL	23	2112	2122	2157	N23	E44	8598	06	27.3	45	SF		3	E		23			
		23	2255		2343	No Flare Patrol														
0298	LEAR	24	0446	0447	0451	N26	E36	8598	06	27.0	5	SF		4	E		16			
0299	LEAR	24	0500	0504	0520	N24	E38	8598	06	27.1	20	SF		4	E		12			
0300	LEAR	24	0606	0612	0645	N26	E28	8598	06	26.4	39	SF		4	E		28			
0301	URUM	24	0643	0646	0646D	N16	E46	8606	06	27.8	3D	SN			P		96	1.5	E	
0302	LEAR	24	0633	0649	0705	N23	E40	8597	06	27.3	32	SF		4	E		82			
0303	LEAR	24	0649	0649	0703	N26	E35	8598	06	27.0	14	SF		4	E		24			
0304	LEAR	24	0709	0711	0713	N26	E35	8598	06	27.0	4	SF		4	E		11			
0305	LEAR	24	0722	0722	0727	N24	E37	8598	06	27.2	5	SF		4	E		13			
0306	LEAR	24	0738	0745	0804	N22	E42	8597	06	27.5	26	SF		4	E		42			
0307	LEAR	24	0809	0812	0847	N23	E38	8597	06	27.3	38	1F		4	E		147			
0308	SVTO	24	0811	0811	0817	N26	E34	8598	06	27.0	6	SF		3	E		61			
0309	SVTO	24	0909	0914	0917	N22	E21	8596	06	26.0	8	SF		3	E		36			
0310	HOLL	24	1321E	1342	1444	N29	W13	8595	06	23.5	83D	1F		3	E		227		SU	
0311	HOLL	24	1534	1535	1551D	N24	E34	8598	06	27.3	17D	SF		3	E		14			
0312	HOLL	24	1539	1540	1551D	N19	E65	8602	06	29.6	12D	SF		3	E		18			
0313	HOLL	24	1737	1738	1809	N22	E08	8592	06	25.3	32	SF		3	E		33			
0314	HOLL	24	1832	1840	1917	N20	E26	8598	06	26.8	45	1F		3	E		112		FS	
0315	HOLL	24	1834	1840	1847	N15	E27	8594	06	26.8	13	SF		3	E		24			
0316	HOLL	24	1920	1924	1929	N22	E30	8598	06	27.1	9	SF		3	E		14			

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
																	Apparent (10-6 Disk)	Corr (Sq Deg)	
0317	HOLL	24	1930	1934	1944	N22	E30	8598	06	27.1	14	SF		3	E		70		F
0318	HOLL	24	1939	1941	1944	N17	E36	8606	06	27.5	5	SF		3	E		12		F
0319	HOLL	24	2002	2005	2012	N14	E24	8594	06	26.6	10	SF		3	E		28		
0320	HOLL	24	2002	2003	2011	S17	E56	8603	06	29.1	9	SF		3	E		25		
0321	HOLL	24	2103	2107	2116	N24	E29	8598	06	27.1	13	SF		3	E		23		
0322	HOLL	24	2239	2239	2242	S17	E39	8599	06	27.9	3	SF		3	E		12		
0323	HOLL	24	2256	2303	2314	S16	E65	8603	06	29.9	18	SF		3	E		15		
		24	2352		2357	No Flare Patrol													
0324	LEAR	25	0010	0011	0017	N22	E30	8598	06	27.3	7	SF		3	E		35		
0325	LEAR	25	0028	0032	0036	N22	E29	8598	06	27.2	8	SF		3	E		18		E
0326		25	01522	01567	0205	N22	E28	8598	06	27.2	13	SN					70	1.6	E
	URUM	25	0152	0156	0205	N22	E27	8598	06	27.1	13	SN			C		129	1.6	E
	LEAR	25	0154	0203	0205	N23	E28	8598	06	27.2	11	SF		4	E		10		E
0327	URUM	25	0256E	0256	0300	S15	W49	8601	06	21.4	40	SF			P		80	1.3	E
0328	URUM	25	0300	0308	0320	N22	E28	8598	06	27.3	20	SN			C		161	2.0	E
0329		25	03352	0340*	0406	N16	E20	8594	06	26.7	31	SN					68	1.3	E
	URUM	25	0335	0340	0400	N16	E19	8594	06	26.6	25	SN			C		113	1.3	E
	LEAR	25	0337	0401	0413	N15	E21	8594	06	26.7	36	SF		4	E		22		E
0330	SVTO	25	0606	0609	0621	N16	E31	8606	06	27.6	15	SF		3	E		10		
		25	1036		1213	No Flare Patrol													
0331	HOLL	25	1330	1332	1351	N22	E19	8598	06	27.0	21	SF		3	E		15		
0332	HOLL	25	1330	1348	1452	N11	W65	8604	06	20.7	82	SF		3	E		19		
0333		25	14002	1402	1410	N23	E21	8598	06	27.2	10	SF					31		
	HOLL	25	1400	1402	1413	N23	E21	8598	06	27.2	13	SF		3	E		47		
	SVTO	25	1402	1402	1408	N23	E21	8598	06	27.2	6	SF		3	E		15		
0334	SVTO	25	1405	1406	1418	N12	W61	8604	06	21.0	13	SF		3	E		16		
0335	SVTO	25	1429	1439	1444	N10	W63	8604	06	20.9	15	SF		3	E		14		
0336	HOLL	25	1526	1526	1529	N11	W65	8604	06	20.7	3	SF		3	E		36		
0337	HOLL	25	1534	1535	1545	N11	W65	8604	06	20.7	11	SF		3	E		23		
0338	HOLL	25	1713	1714	1718	N11	W65	8604	06	20.8	5	SF		3	E		11		
0339	SVTO	25	1726	1728	1730	N11	W64	8604	06	20.9	4	SF		3	E		10		
0340	HOLL	25	1731	1737	1742	N11	W66	8604	06	20.8	11	SF		3	E		14		
0341	HOLL	25	1850	1855	1858	N22	E20	8598	06	27.3	8	SF		3	E		10		F
0342	HOLL	25	1959	2000	2005	N25	E11	8598	06	26.7	6	SF		3	E		12		
		25	2131		2317	No Flare Patrol													
		25	2335		2340	No Flare Patrol													
0343	HOLL	25	2343	2347	2352	N11	W69	8604	06	20.8	9	SF		3	E		21		
0344	HOLL	26	0110	0118	0145D	N17	E51	8602	06	29.9	35D	SF		3	E		35		F

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Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement		Remarks
														Time (UT)	Apparent (10-6 Disk)	
0345	LEAR	26 0201	0203	0217	S18	E53	8603	06 30.1	16	SF		4	E	32		E
0346	URUM	26 0323	0335	0347	N37	W58		06 21.5	24	1B			C	96		E
0347	URUM	26 0423	0427	0446	N38	W56		06 21.6	23	2N			C	241	5.8	E
0348	SVTO	26 0431	0431	0436	N23	E13	8598	06 27.2	5	SF		3	E	10		F
0349		26 04405	04418	0455	N12	W71	8604	06 20.8	15	SF				34		D
	LEAR	26 0440	0441	0445	N12	W70	8604	06 20.9	5	SF		3	E	19		
	URUM	26 0445	0449	0505	N13	W72	8604	06 20.8	20	SF			C	48		D
0350	URUM	26 0454	0502	0530	S13	W05		06 25.8	36	SB			C	161	1.7	E
0351		26 05055	05121	0538	N24	E02	8596	06 26.4	33	2B				479	9.0	EF
	URUM	26 0505	0513	0527	N25	E02	8596	06 26.4	22	2B			C	804	9.0	E
	SVTO	26 0506E	0512	0600	N24	E02	8596	06 26.4	54D	2B		3	E	339		F
	LEAR	26 0510	0512	0528	N23	E03	8596	06 26.4	18	2N		3	E	294		E
0352	URUM	26 0537E	0543	0552	N23	E02	8598	06 26.4	15D	SN			P	129	1.4	E
0353		26 0650	0723	0824	N22	E00	8596	06 26.3	94	1F				126		F
	LEAR	26 0650	0723	0819	N25	E00	8596	06 26.3	89	1F		3	E	130		F
	SVTO	26 0650E	0724U	0828	N20	E01	8596	06 26.4	98D	1F		3	E	122		F
0354		26 0739	0740	0800	N23	E10	8598	06 27.1	21	SF				46		FU
	SVTO	26 0718E	0720U	0809D	N20	E09	8598	06 27.0	51D	SF		3	E	39		F
	LEAR	26 0739	0740	0800	N26	E11	8598	06 27.2	21	SF		3	E	53		U
0355	SVTO	26 1240E	1241U	1248	N21	W03	8596	06 26.3	8D	SF		3	E	18		F
0356		26 13302	13314	1346	N22	E09	8598	06 27.2	16	SF				62		F
	SVTO	26 1330	1331	1345	N22	E09	8598	06 27.2	15	SF		3	E	30		F
	HOLL	26 1332	1335	1347	N22	E09	8598	06 27.2	15	SF		3	E	93		
0357	SVTO	26 1333	1334	1343	N17	E14	8606	06 27.6	10	SF		3	E	13		
0358	HOLL	26 1330	1335	1342	S17	E47	8603	06 30.1	12	SF		3	E	22		
0359	HOLL	26 1603	1606	1612	N17	E39	8602	06 29.6	9	SF		3	E	18		
0360	HOLL	26 1604	1607	1624	N22	W04	8596	06 26.4	20	SF		3	E	22		
0361		26 1644	16492	1706	N23	W06	8596	06 26.2	22	1N				91		F
	SVTO	26 1644	1649	1706	N22	W05	8596	06 26.3	22	SF		3	E	68		F
	HOLL	26 1644	1651	1705	N24	W08	8596	06 26.1	21	1N		3	E	114		F
0362	HOLL	26 1717	1717	1723	N25	E08	8598	06 27.3	6	SF		3	E	18		
		26 1857		1933	No Flare Patrol											
0363	HOLL	26 1951	1951	1957	N22	E06	8598	06 27.3	6	SF		3	E	16		
0364	HOLL	26 2031	2036	2110	N20	E38	8602	06 29.8	39	SF		3	E	91		
0365	HOLL	26 2202	2202	2207	S18	E44	8603	06 30.3	5	SF		3	E	12		
0366	HOLL	26 2243	2245	2303	N11	E26	8610	06 28.9	20	SF		3	E	37		F
0367	HOLL	26 2324	2324	2333	N16	E35	8602	06 29.6	9	SF		3	E	18		
0368	HOLL	26 2324	2326	2329	S16	E43	8603	06 30.2	5	SF		3	E	24		
0369	HOLL	26 2350	2352	2355	S16	E43	8603	06 30.2	5	SF		3	E	24		
0370	LEAR	27 0225	0228	0254	N19	E35	8602	06 29.8	29	SF		3	E	21		F
0371	LEAR	27 0320	0330	0357	N18	E35	8602	06 29.8	37	SF		3	E	48		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0372	27	08374	08411	0942	N22	W26	8592	06	25.4	65	2B					426		U	
	SVTO	27	0837	0841	0942	N23	W25	8592	06	25.4	65	2H		3	E	328		U	
	LEAR	27	0841	0842	0935D	N22	W26	8592	06	25.4	54D	2B		3	E	523		U	
0373	HOLL	27	1438	1445	1453	S26	E67	8611	07	2.8	15	SF		3	E		18		
0374	HOLL	27	1441	1443	1502	N18	E28	8602	06	29.7	21	SF		3	E		14		
0375	HOLL	27	1507	1524	1538	S25	E65	8611	07	2.7	31	SF		3	E		46		
0376	HOLL	27	1835	1838	1903	N24	W12	8598	06	26.8	28	SF		3	E		73		
0377	HOLL	27	1914	1916	1928	N24	W13	8598	06	26.8	14	SF		3	E		26		F
0378	HOLL	27	2046	2049	2114	S25	E63	8611	07	2.7	28	SF		3	E		51		
		27	2152		2334	No Flare Patrol													
0379	LEAR	28	0032	0037	0058	S27	E61	8611	07	2.8	26	SF		3	E		14		
0380	LEAR	28	0301	0306	0319	S26	E57	8611	07	2.5	18	SF		3	E		97		F
0381	LEAR	28	0322	0322	0326	S26	E56	8611	07	2.5	4	SF		3	E		34		
0382	LEAR	28	0336	0341	0353	N16	W06	8606	06	27.7	17	SF		3	E		24		F
0383	LEAR	28	0533	0535	0538	S27	E55	8611	07	2.5	5	SF		3	E		28		
0384	LEAR	28	0548	0555	0617	N22	W37	8592	06	25.4	29	SF		3	E		37		
0385	SVTO	28	0704	0722	0730	S14	E20	8603	06	29.8	26	SF		3	E		21		
0386	SVTO	28	0715	0715	0722	N16	W12	8594	06	27.4	7	SF		3	E		12		
0387	LEAR	28	0715	0716	0726	N14	W19	8594	06	26.9	11	SF		3	E		17		
0388	SVTO	28	0748	0751	0758	N22	W17	8598	06	27.0	10	SF		3	E		15		
0389	28	08212	08233	0828	S16	E21	8603	06	29.9	7	SF					14			
	LEAR	28	0821	0823	0828	S16	E21	8603	06	29.9	7	SF		3	E		17		
	SVTO	28	0823	0826	0829	S16	E21	8603	06	29.9	6	SF		3	E		12		
0390	SVTO	28	0917	0920	0925	S16	E21	8603	06	30.0	8	SF		3	E		15		
0391	LEAR	28	0917	0917	0924	S16	E12	8612	06	29.3	7	SF		3	E		16		
0392	SVTO	28	1023	1031	1035	S27	E55	8611	07	2.7	12	SF		3	E		22		
0393	SVTO	28	1213	1218	1225	S27	E54	8611	07	2.7	12	SF		3	E		14		
0394	SVTO	28	1251	1253	1300	N23	W34	8596	06	25.9	9	SF		3	E		11		
0395	SVTO	28	1305	1305	1308	S16	E19	8603	06	30.0	3	SF		3	E		18		
0396	HOLL	28	1357	1400	1402	S25	E52	8611	07	2.6	5	SF		3	E		15		
0397	HOLL	28	1550	1550	1554	S25	E50	8611	07	2.5	4	SF		3	E		11		
0398	28	15553	15583	1606	S26	E52	8611	07	2.7	11	SF					26			
	HOLL	28	1555	1558	1604	S26	E52	8611	07	2.7	9	SF		3	E		36		
	SVTO	28	1558	1601	1608	S27	E52	8611	07	2.7	10	SF		3	E		15		
0399	28	16225	1627	1632	S26	E52	8611	07	2.7	10	SF					22			
	SVTO	28	1622	1627	1632	S27	E51	8611	07	2.6	10	SF		3	E		25		
	HOLL	28	1627	1627	1633	S26	E52	8611	07	2.7	6	SF		3	E		18		
0400	HOLL	28	1839	1903	2017	S25	E49	8611	07	2.6	98	1F		3	E		102		
0401	HOLL	28	2039	2042	2047	S25	E49	8611	07	2.6	8	SF		3	E		21		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks	
																	Apparent (10-6 Disk)	Corr (Sq Deg)		
0402	HOLL	28	2056	2058	2137	N26	W41	8596	06	25.7	41	1F		3	E			139		
0403	HOLL	28	2057	2058	2101	N22	W44	8592	06	25.5	4	1N		3	E			110		
		28	2149		2345	No Flare Patrol														
0404	LEAR	29	0447	0508	0533	S15	E08	8603	06	29.8	46	SF		4	E			84	E	
0405	LEAR	29	0511	0521	0554	N18	E07	8602	06	29.7	43	SF		4	E			40	E	
0406	SVTO	29	0551E	0600U	0618D	N19	E02	8602	06	29.4	27D	SF		3	E			15		
0407		29	0600	0600	0613	S26	E46	8611	07	2.8	13	SF						22		
	LEAR	29	0600	0600	0613	S26	E48	8611	07	3.0	13	SF		4	E			22		
	SVTO	29	0600E	0602U	0619D	S27	E44	8611	07	2.7	19D	SF		3	E			22		
0408		29	0624.1	0627.1	0729	N18	E04	8602	06	29.6	65	SF						39		
	LEAR	29	0624	0628	0729	N18	E06	8602	06	29.7	65	SF		4	E			36		
	SVTO	29	0625	0627	0741D	N19	E02	8602	06	29.4	76D	SF		3	E			42		
0409	LEAR	29	0653	0653	0658	S26	E44	8611	07	2.7	5	SF		4	E			20		
0410	LEAR	29	0705	0709	0739	S14	E12	8603	06	30.2	34	SF		4	E			43		
0411	LEAR	29	0805	0805	0828	N18	E05	8602	06	29.7	23	SF		4	E			11		
0412	LEAR	29	0805	0806	0812	S15	E15	8603	06	30.5	7	SF		4	E			12		
0413	LEAR	29	0815	0818	0849	S27	E41	8611	07	2.5	34	1N		4	E			156	FU	
		29	0928		0941	No Flare Patrol														
		29	1032		1138	No Flare Patrol														
0414	SVTO	29	1240E	1243U	1328D	N21	W45	8596	06	26.1	48D	1F		3	E			101		
		29	1254		1343	No Flare Patrol														
		29	1413		1444	No Flare Patrol														
0415	HOLL	29	1455E	1504U	1630	N15	E02	8602	06	29.8	95D	SN		3	E			80	F	
0416	HOLL	29	1755	1801	1823	S15	E01	8603	06	29.8	28	SF		3	E			66	U	
0417	HOLL	29	1833	1841	1850	S27	E36	8611	07	2.6	17	SF		3	E			17		
0418	HOLL	29	1851	1851	1856	S27	E36	8611	07	2.6	5	SF		3	E			23	F	
0419	HOLL	29	1909	1912	1940	S14	E01	8603	06	29.9	31	1N		3	E			136		
0420	HOLL	29	2006	2007	2010	N20	W02	8602	06	29.7	4	SF		3	E			14		
0421	HOLL	29	2013	2013	2022	N20	W02	8602	06	29.7	9	SF		3	E			23		
0422	HOLL	29	2149	2149	2202	N25	W47	8598	06	26.3	13	SF		3	E			12		
0423	HOLL	29	2205	2210	2238	S13	E03	8603	06	30.1	33	1N		3	E			145	F	
0424	HOLL	30	0009	0030	0059	S25	E34	8611	07	2.6	50	SF		3	E			20		
0425	HOLL	30	0014	0015	0020	S13	E01	8603	06	30.1	6	SF		3	E			12	F	
0426		30	0435*	0441*	0516	S26	E29	8611	07	2.4	41	1N						136	1.5	E
	LEAR	30	0435	0441	0526	S26	E28	8611	07	2.4	51	1N		3	E			193		
	SVTO	30	0439E	0446	0518	S27	E32	8611	07	2.7	39D	1N		3	E			103		
	URUM	30	0447	0451	0503	S26	E28	8611	07	2.4	16	SN			C			113	1.5	E
0427	SVTO	30	0524	0531	0559	S26	E31	8611	07	2.6	35	SF		3	E			15	F	
0428	URUM	30	0610E	0610	0618	S17	W01	8603	06	30.2	8D	SN			P			96	1.1	E

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/USAF		CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement		Remarks
								Region	Day							Time (UT)	Apparent (10-6 Disk)	
0429	URUM	30	0638	0646	0650	S15	E04	8603	06	30.6	12	1B			C	402	4.4	E
0430	LEAR	30	0641	0646	0727	S16	W13	8612	06	29.3	46	1F	3	E		163		F
0431	LEAR	30	0710	0710	0717	S26	E34	8611	07	2.9	7	SF	3	E		13		
0432	LEAR	30	0716	0716	0722	N23	W58	8596	06	25.8	6	SF	3	E		52		F
0433	LEAR	30	0843	0846	0853	S15	W03	8603	06	30.1	10	SF	2	E		23		F
		30	0931		1035	No Flare Patrol												
0434	SVTO	30	1123E	1133	1156	S15	E00	8603	06	30.5	33D	1B	3	E		193		F
0435	SVTO	30	1312	1312	1324	S26	E27	8611	07	2.6	12	SF	3	E		15		
0436	HOLL	30	1357	1406	1429	N18	W14	8602	06	29.5	32	SF	3	E		38		
0437	HOLL	30	1432	1432	1451	S14	W14	8603	06	29.5	19	SF	3	E		20		
0438		30	14512	14513	1500	S25	E26	8611	07	2.6	9	SF				18		
	SVTO	30	1451	1451	1454	S25	E26	8611	07	2.6	3	SF	3	E		19		
	HOLL	30	1453	1454	1507	S25	E26	8611	07	2.6	14	SF	3	E		18		
0439	HOLL	30	1452	1502	1510	S15	W10	8603	06	29.9	18	SF	3	E		65		
0440	HOLL	30	1514	1516	1521	S15	W11	8603	06	29.8	7	SF	3	E		30		
0441	SVTO	30	1459	1500	1508	S15	W02	8603	06	30.5	9	SF	3	E		25		
0442	SVTO	30	1519	1525	1527	S15	W03	8603	06	30.4	8	SF	3	E		13		
0443		30	1533	15341	1539	S24	E24	8611	07	2.5	6	SF				11		
	SVTO	30	1533	1534	1539	S27	E26	8611	07	2.7	6	SF	3	E		10		
	HOLL	30	1533	1535	1539	S21	E23	8611	07	2.4	6	SF	3	E		12		
0444	HOLL	30	1548	1557	1616	S15	W10	8603	06	29.9	28	SF	3	E		53		U
0445	SVTO	30	1557	1557	1604	S15	W03	8603	06	30.4	7	SF	3	E		11		
0446	SVTO	30	1618	1620	1623	S27	E26	8611	07	2.7	5	SF	3	E		10		
0447	SVTO	30	1630	1659	1709	S27	E25	8611	07	2.6	39	SF	3	E		21		
0448		30	16342	1641	1702	S15	W06	8603	06	30.2	28	SF				48		
	HOLL	30	1634	1641	1702	S15	W09	8603	06	30.0	28	SF	3	E		44		
	SVTO	30	1636	1641	1706D	S15	W03	8603	06	30.5	30D	SF	3	E		53		
0449		30	17175	1725*	1746	N19	W16	8602	06	29.5	29	SF				32		
	HOLL	30	1717	1739	1802	N19	W15	8602	06	29.6	45	SF	3	E		49		
	SVTO	30	1722	1725	1729	N19	W17	8602	06	29.4	7	SF	3	E		14		
0450	HOLL	30	1740	1741	1748	S16	W08	8603	06	30.1	8	SF	3	E		51		
0451	HOLL	30	1759	1800	1817	S11	W40	8599	06	27.7	18	SF	3	E		32		
0452	HOLL	30	1805	1808	1914	S13	W05	8603	06	30.4	69	2B	3	E		315		U
0453	HOLL	30	1911	1919	1946	S25	E23	8611	07	2.6	35	SF	3	E		33		
0454	HOLL	30	1931	1935	1945	S15	W12	8603	06	29.9	14	SF	3	E		18		F
0455	HOLL	30	2010	2011	2023	N20	W56	8598	06	26.5	13	SF	3	E		65		
0456	HOLL	30	2011	2011	2017	N17	W43	8606	06	27.6	6	SF	3	E		41		
0457	HOLL	30	2020	2021	2025	S15	W11	8603	06	30.0	5	SF	3	E		19		F
0458	HOLL	30	2107	2123	2147	S24	E22	8611	07	2.6	40	1F	3	E		108		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement		Remarks
																Time (UT)	Apparent (10 ⁻⁶ Disk)	
0459	HOLL	30	2148	2231	2249	S25	E23	8611	07	2.7	61	SF		3	E		84	
0460	HOLL	30	2149	2153	2211	S15	W13	8603	06	29.9	22	SF		3	E		10	
0461	HOLL	30	2220	2222	2229	S14	W14	8603	06	29.9	9	SF		3	E		13	
0462	HOLL	30	2250	2257	2307	S24	E21	8611	07	2.6	17	SF		3	E		37	
0463	HOLL	30	2303	2303	2320	N19	W19	8602	06	29.5	17	SF		3	E		16	F
0464	HOLL	30	2308	2314	2323	S24	E18	8611	07	2.3	15	SF		3	E		27	F
0465	HOLL	30	2326	2422	2528	S25	E22	8611	07	2.7	122	SF		3	E		67	
0466	HOLL	30	2334	2347	2357	N27	W51	8598	06	27.0	23	SF		3	E		44	F

"Remarks"

A = Eruptive prominence whose base is less than 90 degrees from central meridian.
 B = Probably the end of a more important flare.
 C = Invisible 10 minutes before.
 D = Brilliant point.
 E = Two or more brilliant points.
 F = Several eruptive centers.
 G = No visible spots in the neighborhood.
 H = Flare accompanied by high-speed dark filament.
 I = Active region very extended.
 J = Distinct variations of plage intensity before or after the flare.
 K = Several intensity maxima.
 L = Existing filaments show signs of sudden activity.
 M = White-light flare.
 N = Continuous spectrum shows effects of polarization.

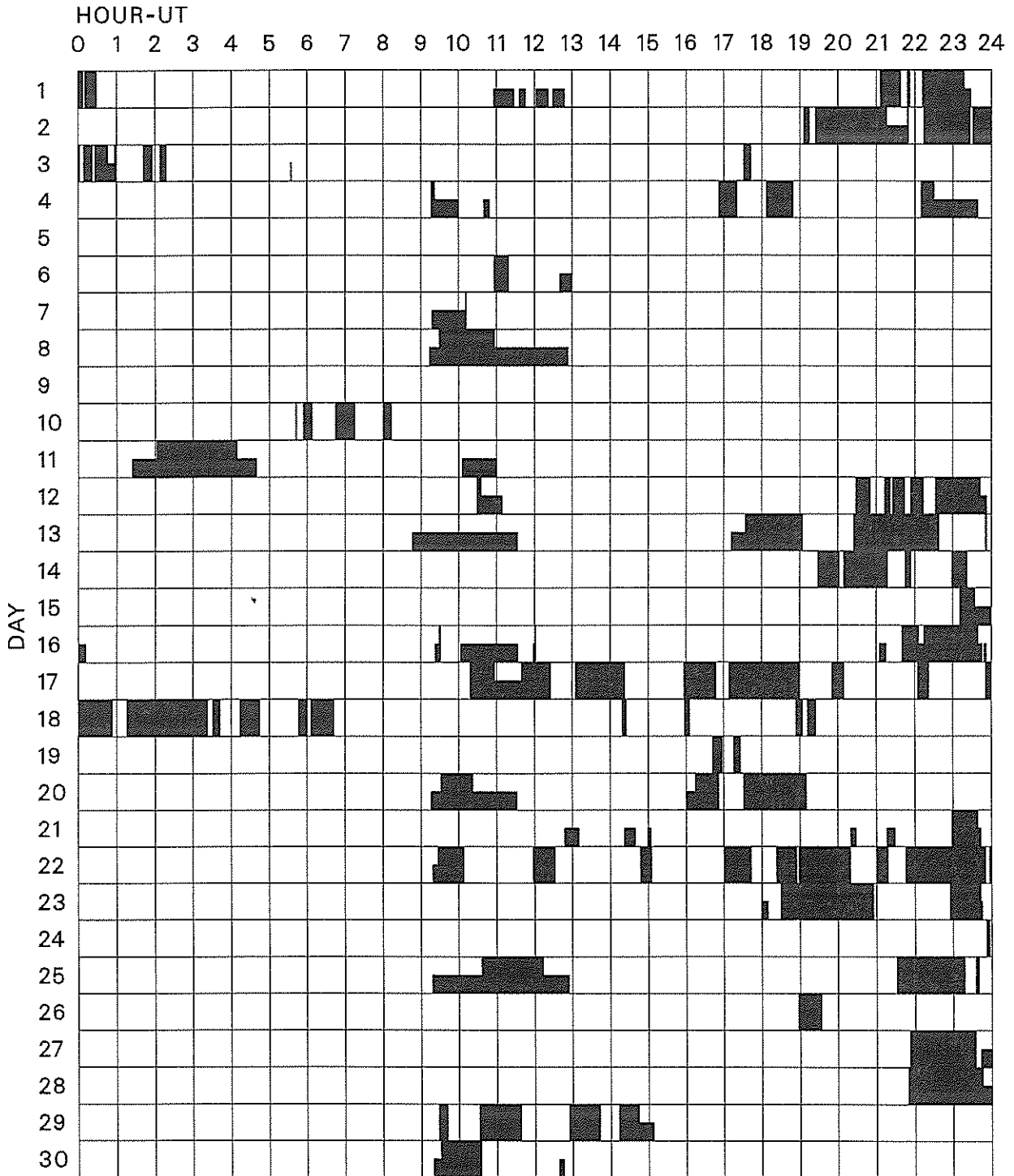
O = Observations have been made in the H and K lines of Ca II.
 P = Flare shows Helium D3 in emission.
 Q = Flare shows Balmer continuum in emission.
 R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.
 S = Brightness follows disappearance of filament in same position.
 T = Region active all day.
 U = Two bright branches, parallel or converging.
 V = Occurrence of an explosive phase; important, expansion within roughly 1 minute that often includes a significant intensity increase.
 W = Great increase in area after time of maximum intensity.
 X = Unusually wide H-alpha line.
 Y = System of loop-type prominences.
 Z = Major sunspot umbra covered by flare.

Observation Type: C=Cinematographic, E=Electronic, P=Photographic, V=Visual

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

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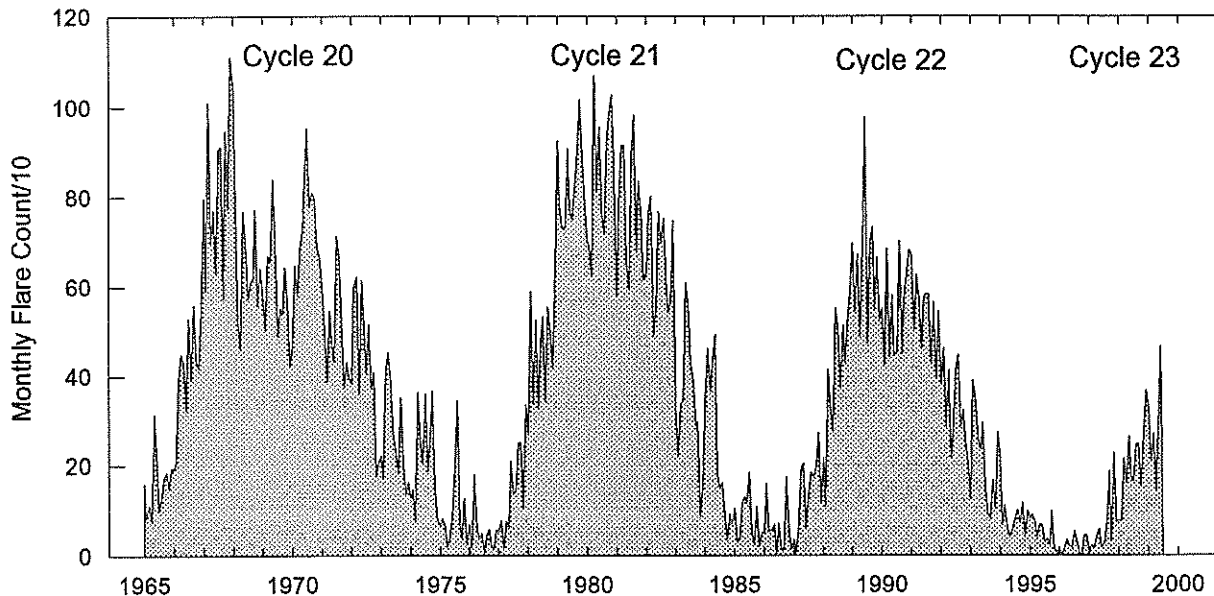
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Times of no flare patrol, shown here as shades areas, combine reports from the stations listed below. Portions of a panel completely shaded mark dates and times of no patrol of any kind (neither visual or cinematographic): portions of a panel with only the bottom half shaded mark times of only visual patrol.

Holloman Kharkov Learmonth Ramey San Vito
 Urumqi

Monthly Counts of Grouped Solar Flares Jan 1965 - Jun 1999



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1965	158	85	110	74	315	231	99	127	173	184	150	193	1899
1966	194	205	390	449	429	323	528	391	558	432	417	543	4859
1967	796	589	1009	694	771	629	907	911	573	946	775	1109	9709
1968	1037	773	519	460	768	697	573	611	616	772	556	640	8022
1969	581	504	669	655	839	694	489	551	540	643	566	422	7153
1970	466	646	578	688	722	836	954	780	811	797	687	667	8632
1971	598	505	387	546	461	430	713	673	518	375	431	394	6031
1972	384	599	621	361	614	541	404	515	371	408	175	210	5203
1973	221	171	410	453	388	270	232	182	353	201	136	163	3180
1974	127	148	79	364	255	204	360	187	270	366	153	81	2594
1975	68	82	69	19	42	85	196	346	68	38	127	25	1165
1976	69	18	180	60	38	48	6	47	57	23	13	55	614
1977	54	77	18	76	64	210	140	140	250	252	107	336	1724
1978	274	588	338	526	330	460	533	346	554	499	418	648	5514
1979	926	781	731	731	907	772	750	821	901	1018	888	786	10012
1980	703	689	621	1092	811	956	763	720	924	988	1027	838	10132
1981	578	782	914	915	658	592	893	982	680	836	773	615	9218
1982	631	766	803	490	553	769	696	753	615	544	564	748	7932
1983	332	220	337	346	609	561	427	389	289	298	88	152	4048
1984	353	461	366	440	492	185	151	161	95	36	92	69	2901
1985	104	29	38	119	129	116	185	53	25	108	19	50	975
1986	51	158	54	56	68	3	71	12	14	174	56	13	730
1987	36	7	52	192	205	61	132	185	172	198	273	114	1627
1988	217	109	413	328	274	551	502	375	513	429	518	587	4816
1989	695	544	672	488	691	977	474	699	733	547	665	526	7711
1990	550	424	684	442	580	445	454	703	449	574	623	682	6610
1991	672	503	625	570	458	574	582	581	425	565	396	544	6495
1992	380	462	287	412	214	271	413	447	287	325	248	206	3952
1993	123	392	357	262	237	296	154	92	82	167	104	275	2541
1994	217	67	111	60	40	56	81	101	72	117	45	99	1066
1995	82	95	77	42	69	66	29	37	23	99	14	6	639
1996	14	3	15	34	21	16	54	31	3	0	44	45	280
1997	8	22	18	43	59	18	26	75	188	31	228	74	790
1998	78	76	216	161	264	177	164	248	249	155	268	367	2423
1999	330	212	271	145	330	466							1754

The term 'grouped' means observations of the same event by different sites were lumped together and counted as one.

S O L A R R A D I O E M I S S I O N
Outstanding Occurrences

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak	Mean		
							(10 -22 W/m ² Hz)			
01	204	IZMI	44 NS	0600.0E		360.0D		20.0		
	245	SVTO	43 NS	0619.0	0712.0	257.0	220.0			QL=4 ST=2 TYP=1
	410	SVTO	43 NS	0625.0	0648.0	66.0	100.0			QL=4 ST=2 TYP=1
	410	SVTO	43 NS	0909.0	1000.0	52.0	94.0			QL=4 ST=2 TYP=1
	245	SGMR	43 NS	0950.0	1012.0U	27.0	140.0			QL=4 ST=2 TYP=1
	235	CUBA	44 NS	1300.0E		530.0D		12.0		
	280	CUBA	44 NS	1300.0E		530.0D		21.0		
	245	SGMR	43 NS		1558.0	16.0	110.0			QL=4 ST=2 TYP=1
	245	SGMR	43 NS		1742.0	7.0	180.0			QL=4 ST=2 TYP=1
	2840	PEKG	1 S		0613.0	0614.5	4.0	5.6		
	5730	IRKU	1 S		0613.5	0614.4	1.5	9.0	U	
	900	GORK	4 S/F		0613.6	0614.6	2.0	24.0		
	204	IZMI	45 C		0613.7	0614.3	1.4	2075.0		
	9100	GORK	2 S/F		0613.7	0614.5	1.7	29.0		
	2950	GORK	1 S		0613.9	0614.3	2.8	7.1		
	600	GORK	4 S/F		0613.9	0614.5	2.7	30.0		
	8800	SVTO	8 S		0614.0	0614.0	U	26.0		QL=4 ST=2 TYP=3
	245	SVTO	49 GB		0614.0	0614.0	U	1700.0		QL=4 ST=2 TYP=6
	410	SVTO	8 S		0614.0	0614.0	U	49.0		QL=4 ST=2 TYP=3
	200	HIRA	47 GB		0614.0	0614.5	1.2	700.0		0
	33	UPIC	45 C		0614.0	0614.5	2.0			
	500	HIRA	42 SER		0614.2	0614.4	0.5	40.0		0
	204	IZMI	25 R		0625.0		75.0		40.0	
	245	SVTO	8 S		0625.0	0625.0	U	350.0		QL=2 ST=2 TYP=3
	2840	PEKG	5 S		0625.0	0631.0	13.0	63.7		
	2950	GORK	21 GRF		0625.6	0627.8	12.8	4.6		
	900	GORK	41 F		0627.5	0628.1	4.2	3.7		
	900	GORK	41 F		0627.5	0631.2		6.0		
	2950	GORK	4 S/F		0629.1	0630.8	2.6	58.0		
	3000	IZMI	7 C		0629.8	0630.8	1.6	73.0		
	9100	GORK	1 S		0629.9	0630.8	2.5	11.0		
	600	GORK	41 F		0630.0	0631.1	1.7	7.5		
	600	GORK	41 F		0630.0	0631.5		23.0		
	410	SVTO	8 S		0634.0	0634.0	U	180.0		QL=2 ST=3 TYP=3
	245	SVTO	49 GB		0710.0	0710.0	1.0	500.0		QL=2 ST=3 TYP=6
	245	SVTO	48 C		0748.0	0750.0	4.0	900.0		QL=2 ST=2 TYP=8
	200	HIRA	8 S		0908.2	0908.3	0.2	180.0		0
	204	IZMI	7 C		0908.2	0908.3	0.4	335.0		
	204	IZMI	25 R		0911.0		76.0		27.0	
	33	UPIC	46 C		1000.0	1001.5	4.5			
	410	SGMR	8 S		1028.0	1029.0	1.0	69.0		QL=4 ST=2 TYP=3
	410	SGMR	8 S		1040.0	1041.0	1.0	50.0		QL=4 ST=2 TYP=3
	2695	SGMR	8 S		1103.0	1104.0	1.0	26.0		QL=4 ST=2 TYP=3
	4995	SGMR	8 S		1103.0	1103.0	1.0	34.0		QL=4 ST=2 TYP=3
	8800	SGMR	8 S		1103.0	1103.0	1.0	65.0		QL=4 ST=2 TYP=3
15400	SVTO	8 S		1103.0	1103.0	1.0	27.0		QL=4 ST=2 TYP=3	
2695	SVTO	8 S		1103.0	1104.0	1.0	23.0		QL=4 ST=2 TYP=3	
8800	SVTO	8 S		1103.0	1103.0	1.0	39.0		QL=4 ST=2 TYP=3	
4995	SVTO	8 S		1103.0	1104.0	1.0	32.0		QL=4 ST=2 TYP=3	
3000	IZMI	7 C		1103.1	1103.8	1.5	33.0			
245	SGMR	8 S		1437.0	1438.0	1.0	72.0		QL=4 ST=2 TYP=3	
245	SVTO	8 S		1437.0	1438.0	1.0	50.0		QL=4 ST=2 TYP=3	
410	SGMR	8 S		1455.0	1455.0	1.0	57.0		QL=4 ST=2 TYP=3	
245	SVTO	4 S/F		1557.0	1600.0	3.0	74.0		QL=4 ST=2 TYP=3	
245	SVTO	4 S/F		1611.0	1613.0	3.0	63.0		QL=4 ST=2 TYP=3	
245	PALE	8 S		1742.0	1742.0	U	130.0		QL=4 ST=2 TYP=3	
245	SVTO	8 S		1742.0	1742.0	U	76.0		QL=2 ST=2 TYP=3	
245	PALE	8 S		1749.0	1749.0	U	52.0		QL=4 ST=2 TYP=3	
2800	PENT	1 S		1852.0	1855.0	39.0	18.0			
4995	SGMR	8 S		1855.0	1855.0	1.0	56.0		QL=4 ST=2 TYP=3	
6700	CUBA	1 S		1954.5	1955.6	3.7	35.0	17.0	22L	
2800	PENT	1 S		2101.0	2103.0	3.0	21.0			
245	SGMR	8 S		2244.0	2245.0	1.0	240.0		QL=4 ST=2 TYP=3	
2800	PENT	1 S		2345.0	2347.0	4.0	7.0			
02	280	CUBA	44 NS	1300.0E		530.0D		19.0		
	235	CUBA	44 NS	1300.0E		530.0D		8.0		
	900	GORK	1 S	0317.3	0317.5	1.7	5.4			
	600	GORK	1 S	0318.2	0318.4	2.2	3.9			

S O L A R R A D I O E M I S S I O N
Outstanding Occurrences

JUNE 1999

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
02	245	SVTO	8 S	0444.0	0445.0	1.0	130.0			QL=4 ST=2 TYP=3
	245	SVTO	49 GB	0509.0	0510.0	5.0	1100.0			QL=2 ST=2 TYP=6
	5730	IRKU	4 S/F	0510.3	0511.3	2.7	26.0	U		
	2950	GORK	1 S	0510.4	0511.5	3.2	11.0			
	9100	GORK	1 S	0510.4	0510.9	2.6	22.0			
	245	SVTO	49 GB	0536.0	0536.0	1.0	530.0			QL=4 ST=2 TYP=6
	245	SVTO	8 S	0556.0	0556.0	1.0	290.0			QL=2 ST=2 TYP=3
	204	IZMI	7 C	0702.9	0703.0	0.2	9.0			
	900	GORK	1 S	0746.5	0746.8	0.6	4.0			
	600	GORK	2 S/F	0746.5	0746.9	1.3	14.0			
	600	GORK	4 S/F	0826.0	0829.3	5.1	18.0			
	2840	PEKG	1 S	0827.0	0830.0	6.0	8.4			
	900	GORK	41 F	0827.4	0829.0		13.0			
	900	GORK	41 F	0827.4	0828.3		24.0			
	900	GORK	41 F	0827.4	0827.9	2.6	24.0			
	5730	IRKU	1 S	0828.0	0829.2	3.0	10.0	U		
	2950	GORK	2 S/F	0828.2	0829.1	2.0	5.8			
	2840	PEKG	5 S	0903.0	0906.5	8.0	74.3			
	4995	LEAR	8 S	0905.0	0906.0	1.0	84.0			QL=2 ST=2 TYP=3
	4995	SVTO	8 S	0905.0	0906.0	1.0	87.0			QL=4 ST=2 TYP=3
	5730	IRKU	4 S/F	0905.7	0906.2	2.3	77.0	U		
	8800	LEAR	8 S	0906.0	0906.0	U	37.0			QL=2 ST=2 TYP=3
	2695	LEAR	8 S	0906.0	0906.0	U	52.0			QL=2 ST=2 TYP=3
	8800	SVTO	8 S	0906.0	0906.0	U	31.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	0906.0	0906.0	U	46.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	1113.6	1113.7	0.2	51.0			
	204	IZMI	42 SER	1116.8	1117.1	0.5	46.0			
	33	UPIC	46 C	1146.0	1146.5	2.0				
	245	SGMR	8 S	1429.0	1429.0	U	57.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1512.0	1513.0	1.0	75.0			QL=4 ST=2 TYP=3
	6700	CUBA	1 S	1816.0	1817.5	3.6	32.0	16.0		31L
	9500	CUBA	1 S	1816.8	1817.2	1.2	25.0	12.0		
	5730	IRKU	1 S	2353.6	2353.9	2.1	9.0	U		
03	235	CUBA	44 NS	1300.0E		530.0D		12.0		
	280	CUBA	44 NS	1300.0E		530.0D		23.0		
	245	SGMR	43 NS	1620.0	1655.0	69.0	110.0			QL=4 ST=2 TYP=1
	245	SGMR	43 NS	2000.0	2300.0	180.0	230.0			QL=4 ST=2 TYP=1
	245	SVTO	8 S	0601.0	0601.0	U	160.0			QL=2 ST=2 TYP=3
	600	GORK	40 F	0628.2	0629.3	2.0	6.7			
	2950	GORK	1 S	0628.9	0629.7	1.1	4.4			
	245	SVTO	8 S	0629.0	0629.0	1.0	140.0			QL=2 ST=2 TYP=3
	5730	IRKU	1 S	0643.3	0643.5	1.9	7.0	U		
	600	GORK	7 C	0737.8	0744.0		9.5			
	600	GORK	7 C	0737.8	0740.2	10.0	10.0			
	600	GORK	7 C	0737.8	0745.6		8.7			
	2840	PEKG	1 S	0739.0	0744.0	9.0	6.7			
	900	GORK	7 C	0740.1	0744.3		15.0			
	900	GORK	7 C	0740.1	0745.5		7.6			
	900	GORK	7 C	0740.1	0742.6	7.8	6.3			
	2950	GORK	7 C	0741.4	0744.3		5.6			
	2950	GORK	7 C	0741.4	0742.5	6.6	4.0			
	245	SVTO	8 S	0742.0	0742.0	U	270.0			QL=2 ST=2 TYP=3
	410	SVTO	8 S	0759.0	0759.0	U	350.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0801.0	0801.0	U	51.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0802.0	0802.0	1.0	120.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0818.2	0818.5	0.4	19.0			
	245	SVTO	8 S	0905.0	0905.0	U	59.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0946.0	0947.0	1.0	170.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1036.0	1036.0	U	52.0			QL=4 ST=2 TYP=3
	245	SVTO	48 C	1041.0	1041.0	3.0	110.0			QL=4 ST=2 TYP=8
	9100	GORK	1 S	1047.0	1047.7	1.6	16.0			
	2950	GORK	1 S	1047.2	1047.7	1.1	3.1			
	245	SVTO	8 S	1053.0	1053.0	U	63.0			QL=4 ST=2 TYP=3
	245	SVTO	48 C	1057.0	1057.0	5.0	1100.0			QL=4 ST=2 TYP=8
	245	SVTO	8 S	1109.0	1110.0	1.0	120.0			QL=4 ST=2 TYP=3
	33	UPIC	42 SER	1110.5		313.5				
245	SGMR	8 S	1221.0	1222.0	1.0	67.0			QL=4 ST=2 TYP=3	
245	SVTO	8 S	1221.0	1222.0	1.0	100.0			QL=4 ST=2 TYP=3	

S O L A R R A D I O E M I S S I O N
Outstanding Occurrences

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
03	245	SGMR	8 S	1500.0	1501.0	2.0	190.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1500.0	1501.0	2.0	140.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	1501.0	1501.0	1.0	43.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	1651.0	1651.0	3.0	110.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2029.0	2029.0	U	240.0			QL=4 ST=2 TYP=3
	410	SGMR	4 S/F	2059.0	2102.0	3.0	260.0			QL=4 ST=2 TYP=3
	245	SGMR	49 GB	2059.0	2101.0	2.0	1000.0			QL=4 ST=2 TYP=6
	200	HIRA	8 S	2101.2	2101.3	0.2	120.0			0
	245	SGMR	8 S	2245.0	2246.0	1.0	120.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2245.0	2246.0	1.0	120.0			QL=4 ST=2 TYP=3
04	204	IZMI	44 NS	0600.0E		360.0D		15.0		
	245	SVTO	43 NS	0821.0	1048.0	175.0	160.0			QL=2 ST=2 TYP=1
	280	CUBA	44 NS	1300.0E		530.0D		27.0		
	235	CUBA	44 NS	1300.0E		530.0D		12.0		
	245	SGMR	44 NS	1313.0E	1629.0	622.0D	130.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	1424.0	1527.0	156.0	110.0			QL=2 ST=2 TYP=1
	245	PALE	43 NS	2138.0	2324.0	176.0	170.0			QL=2 ST=3 TYP=1
	5730	IRKU	1 S	0132.0	0134.6	6.0	12.0		U	
	245	PALE	49 GB	0324.0	0324.0	U	530.0			QL=4 ST=2 TYP=6
	410	PALE	8 S	0324.0	0324.0	U	64.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	0324.0	0324.2	0.4	300.0			0
	5730	IRKU	1 S	0546.6	0547.2	1.7	7.0		U	
	204	IZMI	42 SER	0605.9	0607.8	2.8	278.0			
	245	SVTO	8 S	0606.0	0607.0	2.0	74.0			QL=2 ST=2 TYP=3
	410	SVTO	8 S	0607.0	0608.0	1.0	37.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	0607.5	0607.7	0.4	110.0			0
	2840	PEKG	45 C	0635.0	0702.0	45.0	406.0			
	900	GORK	3 S	0643.6	0643.7	0.2	2.6			
	600	GORK	8 S	0643.6	0643.7	0.2	6.6			
	2950	GORK	5 S	0645.7	0646.9	2.3	4.9			
	900	GORK	46 C	0649.5	0659.1	19.1	172.0			
	900	GORK	46 C	0649.5	0700.4		172.0			
	204	IZMI	45 C	0650.2	0703.0	41.1	136.0			
	3000	IZMI	45 C	0651.1	0700.7	49.0	357.0			
	600	GORK	2 S/F	0652.3	0653.3	1.7	12.0			
	2695	LEAR	4 S/F	0653.0	0701.0	14.0	360.0			QL=2 ST=2 TYP=3
	2695	SVTO	4 S/F	0653.0	0701.0	15.0	360.0			QL=4 ST=2 TYP=3
	245	SVTO	49 GB	0653.0	0655.0	23.0	660.0			QL=2 ST=2 TYP=6
	2800	HIRA	46 C	0653.0	0701.5	15.5	310.0			0
	5730	IRKU	48 C	0653.0	0700.5	29.0	1740.0		U	
	1415	LEAR	4 S/F	0654.0	0659.0	11.0	370.0			QL=2 ST=2 TYP=3
	410	SVTO	49 GB	0654.0	0702.0	13.0	620.0			QL=4 ST=2 TYP=6
	1415	SVTO	4 S/F	0654.0	0659.0	10.0	350.0			QL=4 ST=2 TYP=3
	4995	SVTO	49 GB	0654.0	0700.0	22.0	1400.0			QL=4 ST=2 TYP=6
	600	GORK	46 C	0655.0	0703.1		267.0			
	600	GORK	46 C	0655.0	0700.7	16.3	647.0			
	610	SVTO	4 S/F	0656.0	0700.0	8.0	420.0			QL=4 ST=2 TYP=3
	8800	LEAR	49 GB	0656.0	0700.0	17.0	2400.0			QL=2 ST=2 TYP=6
	4995	LEAR	49 GB	0656.0	0700.0	14.0	1500.0			QL=2 ST=2 TYP=6
	8800	SVTO	49 GB	0656.0	0700.0	14.0	1500.0			QL=4 ST=2 TYP=6
	15400	SVTO	49 GB	0656.0	0700.0	14.0	1300.0			QL=4 ST=2 TYP=6
	2950	GORK	7 C	0656.4	0657.2		9.8			
2950	GORK	46 C	0656.4	0706.5		298.0				
2950	GORK	46 C	0656.4	0703.8	18.6	374.0				
2950	GORK	7 C	0656.4	0656.9	1.4	6.5				
9100	GORK	4 S/F	0657.0	0659.0	12.0	1470.0				
500	HIRA	46 C	0657.0	0700.5	10.0	330.0			0	
200	HIRA	46 C	0658.0	0705.5	15.0	50.0			0	
2950	GORK	30 PB1	0715.0	0722.6	75.9	8.2				
900	GORK	22 GRF	0717.2	0733.4	25.8	16.0				
600	GORK	20 GRF	0719.5	0733.9	25.0	12.0				
2840	PEKG	5 S	0751.0	0755.0	29.0	16.2				
600	GORK	46 C	0753.5	0757.0		239.0				
900	GORK	4 S/F	0753.5	0756.1	11.4	67.0				
600	GORK	46 C	0753.5	0756.2	6.5	458.0				
600	GORK	46 C	0753.5	0756.7		342.0				
245	SVTO	48 C	0754.0	0757.0	4.0	130.0			QL=4 ST=2 TYP=8	
410	SVTO	49 GB	0754.0	0756.0	7.0	670.0			QL=4 ST=2 TYP=6	

S O L A R R A D I O E M I S S I O N
Outstanding Occurrences

JUNE 1999

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak	Mean		
							(10 -22 W/m ² Hz)			
04	2950	GORK	6 S	0754.0	0757.6	9.0	14.0			
	500	HIRA	46 C	0754.5	0756.0	4.5	380.0			WL
	5730	IRKU	1 S	0754.7	0756.9	14.3	11.0		U	
	610	SVTO	4 S/F	0755.0	0756.0	3.0	390.0			QL=4 ST=2 TYP=3
	3000	IZMI	20 GRF	0755.6	0757.4	18.5	14.0		7.0	
	1415	SVTO	8 S	0756.0	0757.0	2.0	40.0			QL=4 ST=2 TYP=3
	600	GORK	30 PBI	0800.0	0800.0	21.3	6.6			
	600	GORK	7 C	0800.5	0801.3		16.0			
	600	GORK	7 C	0800.5	0800.7	2.1	3.6			
	410	SVTO	8 S	0837.0	0837.0	1.0	69.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	0949.0	0949.0	U	63.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0949.0	0949.0	U	98.0			QL=2 ST=3 TYP=3
	245	SGMR	8 S	0954.0	0954.0	2.0	91.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1055.0	1056.0	1.0	45.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1131.0	1131.0	2.0	170.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1142.0	1142.0	U	300.0			QL=2 ST=3 TYP=3
	33	UPIC	46 C	1154.0	1154.5	1.8				
	245	SGMR	4 S/F	1232.0	1234.0	3.0	59.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1240.0	1240.0	U	83.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1240.0	1240.0	U	69.0			QL=2 ST=2 TYP=3
	33	UPIC	45 C	1257.0	1257.5	2.5				
	33	UPIC	2 S/F	1319.0	1320.0	2.5				
	245	PALE	8 S	1739.0	1741.0	2.0	210.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	1740.0	1741.0	1.0	97.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1740.0	1741.0	1.0	160.0			QL=4 ST=3 TYP=3
	410	SGMR	8 S	1740.0	1741.0	1.0	92.0			QL=4 ST=3 TYP=3
	245	SVTO	8 S	1740.0	1741.0	1.0	96.0			QL=2 ST=3 TYP=3
	410	SVTO	8 S	1741.0	1741.0	U	68.0			QL=2 ST=3 TYP=3
	245	PALE	49 GB	1744.0	1745.0	2.0	1100.0			QL=4 ST=2 TYP=6
	245	SVTO	49 GB	1744.0	1745.0	2.0	940.0			QL=2 ST=2 TYP=6
410	PALE	8 S	1745.0	1745.0	U	170.0			QL=4 ST=2 TYP=3	
245	SGMR	49 GB	1745.0	1745.0	1.0	1200.0			QL=4 ST=3 TYP=6	
410	SGMR	8 S	1745.0	1745.0	1.0	180.0			QL=4 ST=3 TYP=3	
410	SVTO	8 S	1745.0	1745.0	1.0	120.0			QL=2 ST=2 TYP=3	
6700	CUBA	20 GRF	1919.0	1930.0	84.0	7.0		3.0	00L	
410	SGMR	4 S/F	2021.0	2024.0	5.0	52.0			QL=4 ST=2 TYP=3	
05	245	PALE	43 NS	0156.0	0156.0	38.0	100.0			QL=2 ST=2 TYP=1
	204	IZMI	44 NS	0600.0E		360.0D		5.0		
	280	CUBA	44 NS	1300.0E		530.0D		23.0		
	235	CUBA	44 NS	1300.0E		530.0D		9.0		
	245	PALE	43 NS	2244.0	2329.0	370.0	130.0			QL=2 ST=2 TYP=1
	245	LEAR	43 NS	2315.0	0525.0U	45.0	180.0			QL=2 ST=1 TYP=1
	245	LEAR	43 NS	2315.0	2328.0U	45.0	57.0			QL=2 ST=1 TYP=1
	245	LEAR	43 NS	2315.0	0001.0U	45.0	150.0			QL=2 ST=1 TYP=1
	245	SVTO	8 S	0417.0	0417.0	U	260.0			QL=4 ST=2 TYP=3
	2840	PEKG	1 S	0501.0	0503.0	5.0	11.4			
	600	GORK	3 S	0502.6	0503.0	4.0	182.0			
	2950	GORK	3 S	0502.7	0503.2	1.7	12.5			
	900	GORK	2 S/F	0502.7	0503.5	2.0	5.1			
	900	GORK	40 F	0733.9	0737.2		12.1			
	900	GORK	40 F	0733.9	0735.5	4.3	6.5			
	600	GORK	3 S	0734.8	0735.1	0.7	31.0			
	900	GORK	41 F	0810.6	0814.7	7.3	65.0			
	900	GORK	41 F	0810.6	0814.9		61.0			
	2840	PEKG	1 S	0812.0	0814.0	5.0	16.6			
	600	GORK	41 F	0814.4	0814.7	0.7	95.0			
	2950	GORK	3 S	0814.4	0814.8	1.7	17.0			
	600	GORK	41 F	0814.4	0814.8		98.0			
	5730	IRKU	1 S	0814.6	0814.8	0.5	31.0			U
	3000	IZMI	5 S	0814.6	0814.8	0.5	221.0		10.0	
	245	SVTO	8 S	0844.0	0844.0	1.0	170.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2033.0	2035.0	2.0	220.0			QL=2 ST=2 TYP=3
	245	SGMR	8 S	2033.0	2034.0	2.0	64.0			QL=4 ST=2 TYP=3
	245	PALE	4 S/F	2037.0	2043.0	8.0	280.0			QL=2 ST=2 TYP=3
	245	SGMR	8 S	2038.0	2038.0	1.0	59.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2123.0	2124.0	1.0	63.0			QL=4 ST=2 TYP=3
245	SGMR	4 S/F	2155.0	2158.0	4.0	53.0			QL=4 ST=2 TYP=3	

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Outstanding Occurrences

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Jun 99

JUNE 1999

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
06	245	SVTO	43 NS	0433.0	0552.0	452.0	220.0			QL=4 ST=2 TYP=1
	204	IZMI	44 NS	0600.0E		136.0D		20.0		
	245	SGMR	43 NS	1144.0	1206.0	22.0	330.0			QL=4 ST=2 TYP=1
	235	CUBA	44 NS	1300.0E		530.0D		11.0		
	280	CUBA	44 NS	1300.0E		530.0D		21.0		
	245	SGMR	43 NS	1946.0	2120.0	94.0	130.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	1950.0	2120.0	90.0	160.0			QL=2 ST=2 TYP=1
	245	SGMR	8 S	0945.0	0946.0	1.0	71.0			QL=2 ST=2 TYP=3
	245	SGMR	8 S	1051.0	1053.0	2.0	58.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1109.0	1109.0	1.0	120.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1117.0	1117.0	1.0	74.0			QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	1358.0	1403.0	7.0	95.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1403.0	1404.0	1.0	62.0			QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	1502.0	1506.0	4.0	73.0			QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	1521.0	1522.0	3.0	50.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1535.0	1535.0	U	120.0			QL=4 ST=2 TYP=3
	245	PALE	4 S/F	1925.0	1925.0	3.0	77.0			QL=2 ST=2 TYP=3
	245	SGMR	4 S/F	1925.0	1927.0	3.0	61.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1927.0	1927.0	U	62.0			QL=2 ST=2 TYP=3
07	245	LEAR	43 NS	0212.0	0320.0	84.0	280.0			QL=4 ST=2 TYP=1
	204	IZMI	44 NS	0600.0E		360.0D		10.0		
	245	LEAR	43 NS	0849.0	0927.0	39.0	180.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	0907.0	0922.0	20.0	100.0			QL=4 ST=2 TYP=1
	245	SGMR	43 NS	1010.0	1010.0	830.0	64.0			QL=4 ST=1 TYP=1
	245	SVTO	44 NS	1019.0E	1348.0	261.0D	110.0			QL=4 ST=2 TYP=1
	280	CUBA	44 NS	1300.0E		530.0D		20.0		
	235	CUBA	44 NS	1300.0E		530.0D		12.0		
	245	SVTO	43 NS	1620.0	1626.0	43.0	84.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	1626.0	1630.0	223.0	130.0			QL=2 ST=2 TYP=1
	245	LEAR	8 S	0046.0	0047.0	1.0	82.0			QL=2 ST=2 TYP=3
	245	LEAR	8 S	0430.0	0431.0	2.0	70.0			QL=2 ST=2 TYP=3
	245	LEAR	8 S	0849.0	0849.0	U	85.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0849.0	0849.0	U	69.0			QL=4 ST=2 TYP=3
	204	IZMI	25 R	0918.0U		168.0D		25.0		
245	SVTO	8 S	1148.0	1148.0	U	90.0			QL=2 ST=2 TYP=3	
245	SGMR	8 S	2144.0	2145.0	2.0	140.0			QL=4 ST=2 TYP=3	
08	204	IZMI	44 NS	0600.0E		360.0D		5.0		
	280	CUBA	44 NS	1300.0E		530.0D		18.0		
	235	CUBA	44 NS	1300.0E		530.0D		8.0		
	2950	GORK	5 S	0544.5	0546.0	5.0	4.6			
	245	SVTO	8 S	0711.0	0711.0	1.0	51.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	0711.7	0711.9	0.4	114.0			
	410	LEAR	8 S	0721.0	0721.0	1.0	71.0			QL=2 ST=2 TYP=3
	410	SVTO	8 S	0721.0	0721.0	1.0	83.0			QL=4 ST=2 TYP=3
	33	UPIC	4 S/F	0854.0	0854.5	1.0				
	204	IZMI	42 SER	0854.4	0854.5	0.5	94.0			
	245	SGMR	4 S/F	1019.0	1020.0	8.0	190.0			QL=4 ST=2 TYP=3
	600	GORK	41 F	1019.9	1020.5	3.0	4.9			
	600	GORK	41 F	1019.9	1021.5		28.1			
	33	UPIC	46 C	1020.0	1022.2	2.5				
	204	IZMI	45 C	1020.1	1020.2	0.5	330.0			
	900	GORK	41 F	1020.3	1022.3		5.1			
	900	GORK	41 F	1020.3	1020.4	2.6	4.5			
	245	SGMR	8 S	1507.0	1507.0	1.0	88.0			QL=4 ST=2 TYP=3
245	SGMR	8 S	1615.0	1615.0	U	84.0			QL=4 ST=2 TYP=3	
2800	PENT	20 GRF	1734.0	1826.0	59.0	10.0				
09	280	CUBA	44 NS	1300.0E		530.0D		18.0		
	235	CUBA	44 NS	1300.0E		530.0D		8.0		
	245	SGMR	43 NS	1414.0	1414.0	6.0	140.0			QL=4 ST=3 TYP=1
	245	LEAR	8 S	0017.0	0018.0	1.0	160.0			QL=2 ST=2 TYP=3
	2840	PEKG	1 S	0339.0	0341.0	4.0	4.0			
	2950	GORK	3 S	0340.5	0340.6	0.4	5.5			
	245	SVTO	4 S/F	0654.0	0654.0	3.0	100.0			QL=2 ST=2 TYP=3
	410	SVTO	8 S	0654.0	0656.0	2.0	36.0			QL=2 ST=2 TYP=3
	5730	IRKU	1 S	0917.6	0917.7	0.7	8.0		U	
	245	SVTO	4 S/F	1414.0	1414.0	6.0	140.0			QL=4 ST=2 TYP=3

S O L A R R A D I O E M I S S I O N
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JUNE 1999

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
09	9500	CUBA	20 GRF	1825.0	1907.0	144.0	14.0	7.0		
	6700	CUBA	20 GRF	1846.0	1902.0	127.0	13.0	6.0		11L
	245	SGMR	8 S	2029.0	2030.0	2.0	120.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2032.0	2032.0	U	140.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2037.0	2038.0	1.0	120.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2044.0	2044.0	U	97.0			QL=4 ST=2 TYP=3
10	280	CUBA	44 NS	1300.0E		530.0D		17.0		
	235	CUBA	44 NS	1300.0E		530.0D		7.0		
	5730	IRKU	1 S	0315.8	0316.8	8.8	11.0		U	
	204	IZMI	7 C	0654.0	0654.1	0.4	24.0			
	3000	IZMI	42 SER	0730.3	0732.6	3.2	32.0			
	3000	IZMI	41 F	0747.4	0751.8	10.7	144.0			
	3000	IZMI	7 C	0810.4	0810.6	0.5	60.0			
	33	UPIC	42 SER	0954.0	1013.5	173.0				
	204	IZMI	41 F	1013.1	1013.2	0.5	106.0			
	204	IZMI	7 C	1059.1	1059.3	0.7	41.0			
	204	IZMI	7 C	1124.6	1124.7	0.2	58.0			
	204	IZMI	41 F	1145.6	1145.7	0.4	101.0			
	2800	PENT	45 C	2052.0	2056.0	50.0	12.0			
	11	235	CUBA	44 NS	1300.0E		530.0D		8.0	
280		CUBA	44 NS	1300.0E		530.0D		17.0		
1415		PALE	8 S	0038.0	0038.0	1.0	41.0			QL=4 ST=2 TYP=3
245		PALE	8 S	0039.0	0039.0	U	55.0			QL=4 ST=2 TYP=3
245		LEAR	8 S	0109.0	0109.0	1.0	170.0			QL=2 ST=2 TYP=3
410		LEAR	8 S	0109.0	0109.0	1.0	220.0			QL=2 ST=2 TYP=3
245		LEAR	8 S	0112.0	0112.0	1.0	79.0			QL=2 ST=2 TYP=3
410		LEAR	8 S	0112.0	0112.0	1.0	110.0			QL=2 ST=2 TYP=3
245		SGMR	8 S	1002.0	1002.0	1.0	66.0			QL=4 ST=2 TYP=3
245		SVTO	8 S	1002.0	1002.0	U	59.0			QL=4 ST=2 TYP=3
245		SGMR	8 S	1020.0	1020.0	1.0	53.0			QL=4 ST=2 TYP=3
2950		GORK	1 S	1051.8	1052.2	0.9	7.1			
204		IZMI	42 SER	1102.6	1126.1	27.7	114.0			
245		SGMR	8 S	1105.0	1105.0	1.0	130.0			QL=4 ST=3 TYP=3
245		SVTO	8 S	1105.0	1105.0	1.0	75.0			QL=4 ST=2 TYP=3
33		UPIC	47 GB	1106.0	1119.0	23.5				
245		SGMR	8 S	1108.0	1108.0	U	180.0			QL=4 ST=2 TYP=3
245		SVTO	8 S	1108.0	1108.0	U	120.0			QL=4 ST=2 TYP=3
410		SGMR	4 S/F	1109.0	1114.0	5.0	22.0			QL=4 ST=2 TYP=3
610		SGMR	4 S/F	1109.0	1110.0	5.0	56.0			QL=4 ST=2 TYP=3
245		SGMR	4 S/F	1110.0	1114.0	4.0	70.0			QL=4 ST=2 TYP=3
1415		SGMR	4 S/F	1110.0	1113.0	5.0	50.0			QL=4 ST=2 TYP=3
410		SVTO	4 S/F	1116.0	1119.0	4.0	42.0			QL=4 ST=2 TYP=3
245		SGMR	48 C	1117.0	1120.0	5.0	63.0			QL=4 ST=2 TYP=8
245		SVTO	8 S	1117.0	1117.0	U	34.0			QL=2 ST=2 TYP=3
410		SGMR	4 S/F	1118.0	1119.0	4.0	39.0			QL=4 ST=2 TYP=3
610		SGMR	4 S/F	1119.0	1119.0	3.0	75.0			QL=4 ST=2 TYP=3
610		SVTO	8 S	1119.0	1119.0	1.0	53.0			QL=4 ST=2 TYP=3
33	UPIC	29 PBI	1129.5	1146.0	40.5					
2800	PENT	1 S	1805.0	1812.0	54.0	13.0				
245	PALE	8 S	2217.0	2218.0	1.0	110.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	2218.0	2218.0	U	62.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	2229.0	2230.0	2.0	95.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	2230.0	2230.0	1.0	120.0			QL=4 ST=2 TYP=3	
12	235	CUBA	44 NS	1300.0E		530.0D		10.0		
	280	CUBA	44 NS	1300.0E		530.0D		18.0		
	245	SGMR	8 S	1308.0	1308.0	U	47.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1308.0	1308.0	U	68.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1317.0	1318.0	1.0	55.0			QL=4 ST=2 TYP=3
	6700	CUBA	21 GRF	1329.0	1335.0	28.0	8.0	4.0		00L
	9500	CUBA	20 GRF	1330.0	1333.0	21.0	18.0	9.0		
	6700	CUBA	2 S/F	1330.9	1333.3	4.1	11.0	5.0		11L
	2695	SGMR	20 GRF	1332.0	1334.0	20.0	18.0			QL=4 ST=2 TYP=2
	1415	SGMR	20 GRF	1332.0	1333.0	20.0	11.0			QL=4 ST=2 TYP=2
	410	SGMR	8 S	1335.0	1335.0	1.0	56.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1335.0	1335.0	1.0	72.0			QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	1347.0	1351.0	5.0	70.0			QL=4 ST=2 TYP=3

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
12	245	SVTO	4 S/F	1348.0	1351.0	4.0	58.0			QL=4 ST=2 TYP=3
		SGMR	8 S	1837.0	1837.0	U	79.0			QL=4 ST=2 TYP=3
13	204	IZMI	43 NS	0600.0		360.0D		5.0		
	280	CUBA	44 NS	1300.0E		345.0D		18.0		
	235	CUBA	44 NS	1300.0E		345.0D		11.0		
	2840	PEKG	1 S	0634.0	0636.0	9.0	7.3			
	5730	IRKU	1 S	0634.0	0636.2	3.4	15.0	U		
	245	SGMR	8 S	1638.0	1639.0	2.0	59.0			QL=4 ST=2 TYP=3
	9500	CUBA	1 S	1726.3	1726.5	0.7	11.0	5.0		
6700	CUBA	1 S	1726.3	1726.8	2.1	12.0	6.0		9L	
14	204	IZMI	44 NS	0600.0E		360.0D		5.0		
	235	CUBA	44 NS	1320.0E		510.0D		10.0		
	280	CUBA	44 NS	1320.0E		510.0D		19.0		
	245	LEAR	8 S	0323.0	0323.0	U	53.0			QL=2 ST=2 TYP=3
	5730	IRKU	1 S	0457.2	0457.7	1.8	7.0	U		
	245	LEAR	8 S	0839.0	0839.0	1.0	70.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0839.0	0840.0	1.0	65.0			QL=4 ST=2 TYP=3
	2840	PEKG	1 S	0844.0	0848.0	11.0	5.9			
	2840	PEKG	3 S	0947.0	0950.5	7.0	27.3			
	245	SGMR	4 S/F	1155.0	1156.0	4.0	61.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1156.0	1156.0	1.0	75.0			QL=4 ST=2 TYP=3
15	204	IZMI	43 NS	1011.0		109.0D		5.0		
	280	CUBA	44 NS	1300.0E		465.0D		18.0		
	235	CUBA	44 NS	1300.0E		465.0D		11.0		
	2800	PENT	8 S	0027.0	0029.0	5.0	22.0			
	2840	PEKG	3 S	0028.0	0030.0	6.0	34.3			
	2840	PEKG	3 S	0044.0	0047.5	6.0	10.5			
	410	LEAR	8 S	0155.0	0155.0	1.0	59.0			QL=2 ST=2 TYP=3
	204	IZMI	7 C	0931.0	0931.1	0.2	30.0			
	410	SGMR	8 S	1655.0	1655.0	U	360.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1711.0	1712.0	1.0	96.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1718.0	1719.0	1.0	140.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1733.0	1734.0	1.0	190.0			QL=4 ST=2 TYP=3
	410	PALE	4 S/F	2104.0	2105.0	5.0	160.0			QL=4 ST=2 TYP=3
16	204	IZMI	44 NS	0600.0E		360.0D		5.0		
	235	CUBA	44 NS	1300.0E		465.0D		10.0		
	280	CUBA	44 NS	1300.0E		510.0D		17.0		
	245	PALE	8 S	0105.0	0105.0	U	63.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0108.0	0108.0	1.0	60.0			QL=4 ST=2 TYP=3
	2950	GORK	20 GRF	0437.7	0503.0	121.3	7.5			
	204	IZMI	7 C	0613.1	0613.1	0.2	348.0			
	245	SGMR	8 S	1023.0	1023.0	U	51.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	1023.1	1023.2	0.2	185.0			
	245	SGMR	8 S	1402.0	1403.0	1.0	51.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	2231.0	2232.0	1.0	51.0			QL=4 ST=2 TYP=3
17	235	CUBA	44 NS	1300.0E		313.0D		8.0		
	280	CUBA	44 NS	1300.0E		313.0D		18.0		
	5730	IRKU	45 C	0256.5	0257.1	2.0	18.0	U		
	410	SGMR	8 S	1109.0	1109.0	1.0	100.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1547.0	1548.0	2.0	60.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1548.0	1548.0	1.0	45.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1556.0	1557.0	1.0	53.0			QL=4 ST=2 TYP=3
	6700	CUBA	28 PRE	1718.0	1721.7	3.7	16.0	8.0		27R
	8800	PALE	4 S/F	1721.0	1724.0	8.0	140.0			QL=4 ST=2 TYP=3
	4995	PALE	4 S/F	1721.0	1724.0	9.0	130.0			QL=4 ST=2 TYP=3
	8800	SGMR	4 S/F	1721.0	1724.0	10.0	180.0			QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	1721.0	1724.0	10.0	120.0			QL=4 ST=2 TYP=3
	6700	CUBA	46 C	1721.7	1725.5	10.5	147.0	70.0		7R
	15400	PALE	4 S/F	1722.0	1725.0	5.0	92.0			QL=4 ST=2 TYP=3
	2695	PALE	4 S/F	1722.0	1725.0	4.0	58.0			QL=4 ST=2 TYP=3
	15400	SGMR	4 S/F	1722.0	1725.0	8.0	91.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	1722.0	1725.0	5.0	97.0			QL=2 ST=2 TYP=3
4995	SVTO	4 S/F	1722.0	1725.0	5.0	83.0			QL=2 ST=2 TYP=3	
2695	SVTO	4 S/F	1722.0	1725.0	4.0	69.0			QL=2 ST=2 TYP=3	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
17	2695	SGMR	4 S/F	1723.0	1725.0	3.0	62.0			QL=4 ST=2 TYP=3
	15400	SVTO	4 S/F	1723.0	1725.0	3.0	63.0			QL=2 ST=2 TYP=3
	1415	PALE	8 S	1725.0	1725.0	U	24.0			QL=4 ST=2 TYP=3
	6700	CUBA	29 PBI	1732.2		22.8	10.0	5.0		28R
18	204	IZMI	43 NS	0600.0		360.0D		5.0		
	235	CUBA	44 NS	1300.0E		393.0D		9.0		
	280	CUBA	44 NS	1300.0E		393.0D		17.0		
	245	SVTO	8 S	0529.0	0529.0	1.0	150.0			QL=2 ST=2 TYP=3
	2840	PEKG	45 C	0627.0	0639.0	22.0	7.2			
	2950	GORK	5 S	0636.2	0638.7	6.6	8.8			
	3000	IZMI	20 GRF	0636.4	0638.6	6.8	11.0			
	5730	IRKU	1 S	0637.5	0638.6	2.5	17.0		U	
	2840	PEKG	5 S	0705.0	0715.0	24.0	5.5			
	245	LEAR	4 S/F	0709.0	0711.0	3.0	64.0			QL=2 ST=3 TYP=3
	610	LEAR	8 S	0710.0	0711.0	2.0	51.0			QL=2 ST=3 TYP=3
	410	LEAR	8 S	0710.0	0711.0	2.0	20.0			QL=2 ST=3 TYP=3
	204	IZMI	42 SER	0710.0	0710.3	2.3	126.0			
	5730	IRKU	8 S	0712.0	0712.0	0.1	6.0		U	
	245	LEAR	4 S/F	0723.0	0724.0	3.0	65.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0723.0	0724.0	1.0	54.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	0724.0	0724.2	5.0	93.0			
	33	UPIC	48 C	1128.5	1129.5	4.0				
	204	IZMI	42 SER	1129.0	1130.5	2.5	120.0			
	245	SGMR	8 S	1130.0	1130.0	1.0	88.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1130.0	1130.0	1.0	80.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1137.0	1137.0	U	59.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1137.0	1137.0	U	51.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	1137.4	1137.6	0.6	41.0			
	33	UPIC	42 SER	1357.5	1358.0	32.0				
	2800	PENT	1 S	1418.0	1423.0	11.0	5.0			
	245	SGMR	8 S	1510.0	1510.0	U	54.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1510.0	1510.0	U	52.0			QL=4 ST=2 TYP=3
	33	UPIC	46 C	1640.0	1641.3	4.0				
2800	PENT	1 S	1818.0	1822.0	9.0	5.0				
2800	PENT	1 S	1955.0	1957.0	8.0	18.0				
2800	PENT	1 S	2256.0	2257.0	4.0	6.0				
610	PALE	8 S	2306.0	2306.0	2.0	60.0			QL=4 ST=2 TYP=3	
19	280	CUBA	44 NS	1300.0E		420.0D		16.0		
	235	CUBA	44 NS	1300.0E		420.0D		8.0		
	245	SGMR	4 S/F	1001.0	1003.0	3.0	57.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1003.0	1003.0	U	59.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	1003.2	1003.2	0.2	48.0			
	127	TORN	42 SER	1100.0	1102.0	15.0	180.0		10.0	
	245	SGMR	8 S	1133.0	1133.0	U	54.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1133.0	1133.0	U	43.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	1133.2	1133.4	0.5	61.0			
	20	235	CUBA	44 NS	1300.0E		530.0D		10.0	
280		CUBA	44 NS	1300.0E		530.0D		16.0		
4995		LEAR	8 S	0836.0	0836.0	1.0	46.0			QL=4 ST=2 TYP=3
8800		LEAR	8 S	0836.0	0836.0	1.0	120.0			QL=4 ST=2 TYP=3
15400		LEAR	8 S	0836.0	0836.0	U	27.0			QL=4 ST=2 TYP=3
8800		SVTO	8 S	0836.0	0836.0	1.0	100.0			QL=4 ST=2 TYP=3
15400		SVTO	8 S	0836.0	0836.0	U	30.0			QL=4 ST=2 TYP=3
4995		SVTO	8 S	0836.0	0836.0	1.0	63.0			QL=4 ST=2 TYP=3
5730		IRKU	4 S/F	0836.0	0837.5	2.7	74.0		U	
9100		GORK	3 S	0836.1	0836.6	1.5	106.0			
2950		GORK	1 S	0836.3	0836.6	1.1	3.0			
33		UPIC	46 C	1354.5	1359.0	6.5				
410		SGMR	8 S	1358.0	1359.0	1.0	99.0			QL=4 ST=2 TYP=3
245		SGMR	8 S	1358.0	1359.0	1.0	91.0			QL=4 ST=2 TYP=3
610		SGMR	8 S	1358.0	1359.0	1.0	55.0			QL=4 ST=2 TYP=3
610		SVTO	8 S	1358.0	1359.0	1.0	30.0			QL=4 ST=2 TYP=3
245		SVTO	8 S	1358.0	1359.0	1.0	69.0			QL=4 ST=2 TYP=3
410	SVTO	8 S	1358.0	1359.0	1.0	110.0			QL=4 ST=2 TYP=3	
127	TORN	4 S/F	1437.5	1438.0	3.0	4800.0D	700.0D			UNCERTAIN
2800	PENT	40 F	1524.0	1532.0	17.0	61.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
20	33	UPIC	32 ABS	1528.0	1534.5U	27.0				
	6700	CUBA	45 C	1528.4	1532.0	8.4	86.0	37.0		12L
	2695	SGMR	4 S/F	1529.0	1532.0	8.0	60.0			QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	1529.0	1532.0	6.0	60.0			QL=2 ST=3 TYP=3
	2695	SVTO	4 S/F	1529.0	1532.0	6.0	57.0			QL=4 ST=2 TYP=3
	8800	SGMR	4 S/F	1529.0	1532.0	11.0	93.0			QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	1529.0	1532.0	11.0	91.0			QL=4 ST=2 TYP=3
	9500	CUBA	2 S/F	1529.0	1532.2	6.8	76.0	38.0		
	410	SVTO	8 S	1530.0	1530.0		40.0			QL=4 ST=2 TYP=3
	1415	SGMR	4 S/F	1530.0	1532.0	10.0	39.0			QL=4 ST=2 TYP=3
	15400	SGMR	4 S/F	1531.0	1532.0	9.0	48.0			QL=4 ST=2 TYP=3
	15400	SVTO	4 S/F	1531.0	1532.0	4.0	15.0			QL=2 ST=3 TYP=3
	8800	SVTO	8 S	1531.0	1532.0	2.0	53.0			QL=2 ST=3 TYP=3
	33	UPIC	46 C	1531.0	1532.5	3.0				
	1415	SVTO	8 S	1532.0	1532.0		29.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	1534.0	1534.0	1.0	140.0			QL=4 ST=2 TYP=3
	610	SVTO	8 S	1534.0	1534.0	1.0	110.0			QL=4 ST=2 TYP=3
	9500	CUBA	29 PBI	1535.8		25.2	25.0	12.0		
	6700	CUBA	29 PBI	1536.8		34.2	21.0	10.0		OOL
	1415	SGMR	8 S	1713.0	1713.0	1.0	56.0			QL=4 ST=2 TYP=3
1415	SVTO	8 S	1713.0	1714.0	1.0	49.0			QL=4 ST=2 TYP=3	
2800	PENT	20 GRF	1901.0	1911.0	23.0	5.0				
9500	CUBA	20 GRF	1940.0	2018.0	101.0	38.0	17.0			
6700	CUBA	20 GRF	1943.0	2025.0	100.0	12.0	6.0		OOL	
21	245	SGMR	43 NS	2049.0	2052.0	174.0	120.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	2357.0	0005.0	44.0	120.0			QL=4 ST=2 TYP=1
	245	LEAR	43 NS	2358.0	0005.0	43.0	120.0			QL=4 ST=2 TYP=1
	2840	PEKG	3 S	0119.0	0122.5	6.0	21.2			
	900	GORK	5 S	0610.6	0612.1	3.5	4.4			
	204	IZMI	7 C	0630.5	0630.7	0.4	28.0			
	204	IZMI	42 SER	0724.7	0726.5	2.8	84.0			
	204	IZMI	41 F	1023.7	1024.0	0.7	30.0			
	245	PALE	8 S	2042.0	2042.0	1.0	59.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2042.0	2042.0	1.0	55.0			QL=4 ST=2 TYP=3
	245	PALE	4 S/F	2048.0	2052.0	8.0	110.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2111.0	2111.0	1.0	110.0			QL=4 ST=2 TYP=3
	245	SGMR	49 GB	2111.0	2111.0	1.0	560.0			QL=4 ST=2 TYP=6
	500	HIRA	46 C	2111.6	2112.0	0.8	40.0			ML
245	PALE	8 S	2254.0	2255.0	2.0	110.0			QL=4 ST=2 TYP=3	
245	LEAR	8 S	2358.0	2358.0	1.0	54.0			QL=4 ST=2 TYP=3	
22	2840	PEKG	1 S	0147.0	0149.5	8.0	5.4			
	245	LEAR	8 S	0518.0	0518.0		190.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0518.0	0518.0		120.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0710.0	0710.0		92.0			QL=4 ST=2 TYP=3
	245	SVTO	48 C	0744.0	0747.0	3.0	90.0			QL=4 ST=2 TYP=8
	245	LEAR	8 S	0747.0	0747.0		91.0			QL=2 ST=3 TYP=3
	245	LEAR	8 S	0757.0	0757.0	1.0	380.0			QL=2 ST=3 TYP=3
	245	SVTO	48 C	0757.0	0757.0	3.0	230.0			QL=4 ST=3 TYP=8
	245	LEAR	8 S	0800.0	0800.0		120.0			QL=2 ST=3 TYP=3
	33	UPIC	46 C	0915.0	0916.5	3.5				
	204	IZMI	42 SER	0915.1	0916.3	3.1	87.0			
	200	HIRA	46 C	0915.8	0916.2	2.5	70.0			0
	204	IZMI	7 C	1107.4	1107.7	0.4	100.0			
	204	IZMI	7 C	1138.1	1138.2	0.3	56.0			
	127	TORN	47 GB	1450.0	1451.1	10.0U	2800.0D	100.0		
	245	PALE	8 S	1718.0	1718.0	1.0	180.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1718.0	1718.0	1.0	150.0			QL=4 ST=2 TYP=3
	2800	PENT	40 F	1816.0	1827.0	17.0	641.0			
	9500	CUBA	23 GRF	1817.0	1829.0	37.0U	29.0	12.0		RAIN
	245	PALE	48 C	1820.0	1823.0	11.0	150.0			QL=4 ST=2 TYP=8
2695	PALE	48 C	1820.0	1827.0	11.0	680.0			QL=4 ST=2 TYP=8	
410	PALE	20 GRF	1820.0	1826.0	10.0	160.0			QL=4 ST=2 TYP=2	
1415	PALE	49 GB	1820.0	1827.0	11.0	550.0			QL=4 ST=2 TYP=6	
410	SGMR	20 GRF	1820.0	1826.0	12.0	150.0			QL=4 ST=3 TYP=2	
2695	SGMR	48 C	1820.0	1827.0	16.0	760.0			QL=4 ST=2 TYP=8	
1415	SGMR	49 GB	1820.0	1827.0	16.0	550.0			QL=4 ST=3 TYP=6	
2695	SGMR	49 GB	1820.0	1827.0	16.0	760.0			QL=4 ST=3 TYP=6	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
22	6700	CUBA	21 GRF	1820.0	1826.0	40.0U	43.0			14L RAIN
	33	UPIC	48 C	1820.0	1828.0U	15.5				
	610	PALE	4 S/F	1821.0	1825.0	10.0	270.0			QL=4 ST=2 TYP=3
	4995	PALE	4 S/F	1821.0	1822.0	17.0	68.0			QL=4 ST=2 TYP=3
	610	SGMR	4 S/F	1821.0	1825.0	12.0	290.0			QL=4 ST=3 TYP=3
	4995	SGMR	4 S/F	1821.0	1822.0	15.0	67.0			QL=4 ST=3 TYP=3
	245	SGMR	48 C	1821.0	1823.0	14.0	150.0			QL=4 ST=3 TYP=8
	8800	SGMR	4 S/F	1822.0	1822.0	14.0	35.0			QL=4 ST=3 TYP=3
	6700	CUBA	1 S	1822.0	1823.1	1.6	13.0	6.0		OOL
	15400	SGMR	20 GRF	1823.0	1835.0	13.0	19.0			QL=4 ST=3 TYP=2
	245	SGMR	8 S	2323.0	2323.0	U	90.0			QL=4 ST=2 TYP=3
23	204	IZMI	43 NS	0600.0	1200.0D	360.0D		5.0		
	280	CUBA	44 NS	1440.0E		430.0D		17.0		
	235	CUBA	44 NS	1440.0E		430.0D		7.0		
	2800	PENT	3 S	0038.0	0042.0	6.0	13.0			
	245	PALE	4 S/F	0052.0	0053.0	3.0	350.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0053.0	0053.0	1.0	410.0			QL=2 ST=2 TYP=3
	245	SVTO	49 GB	0542.0	0543.0	2.0	2400.0			QL=4 ST=2 TYP=6
	245	SVTO	8 S	0619.0	0619.0	U	160.0			QL=4 ST=2 TYP=3
	2840	PEKG	5 S	0640.0	0701.0	48.0	58.7			
	600	GORK	41 F	0643.2	0645.0	28.8	143.0			
	600	GORK	41 F	0643.2	0700.2		100.0			
	2950	GORK	46 C	0645.3	0710.5		12.0			
	2950	GORK	46 C	0645.3	0700.5	27.4	48.0			
	900	GORK	4 S/F	0646.4	0700.0	28.9	97.0			
	3000	IZMI	22 GRF	0649.4	0658.1	23.0	25.0			
	204	IZMI	22 GRF	0649.4	0658.4	27.4	27.0			
	1415	SVTO	48 C	0651.0	0700.0	14.0	250.0			QL=4 ST=2 TYP=8
	500	HIRA	46 C	0652.0	0700.5	14.5	130.0			ML
	1415	LEAR	48 C	0653.0	0700.0	10.0	220.0			QL=2 ST=2 TYP=8
	610	LEAR	49 GB	0653.0	0700.0	11.0	610.0			QL=2 ST=2 TYP=6
	410	LEAR	4 S/F	0653.0	0658.0	10.0	200.0			QL=2 ST=2 TYP=3
	410	SVTO	4 S/F	0653.0	0700.0	10.0	190.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	0655.0	0656.0	5.0	220.0			QL=4 ST=2 TYP=3
	610	SVTO	49 GB	0655.0	0700.0	11.0	500.0			QL=4 ST=3 TYP=6
	245	LEAR	8 S	0656.0	0658.0	2.0	56.0			QL=2 ST=2 TYP=3
	2695	SVTO	4 S/F	0656.0	0700.0	5.0	83.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	0657.0	0657.0	1.0	26.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	0659.0	0659.0	1.0	88.0			QL=4 ST=2 TYP=3
	2800	HIRA	3 S	0659.5	0700.5	1.5	50.0			MR
	3000	IZMI	7 C	0659.7	0700.5	1.1	21.0			
	245	SVTO	8 S	0715.0	0715.0	1.0	100.0			QL=4 ST=2 TYP=3
	204	IZMI	22 GRF	0735.4	0746.9	64.6	19.0			
	3000	IZMI	7 C	0812.5	0812.5	0.1	112.0			
204	IZMI	41 F	1014.7	1015.0	1.0	34.0				
204	IZMI	41 F	1112.3	1112.5	0.8	33.0				
204	IZMI	7 C	1141.6	1142.3	1.1	17.0				
33	UPIC	4 S/F	1143.5	1144.0	1.0					
245	SVTO	8 S	1225.0	1225.0	2.0	230.0			QL=2 ST=2 TYP=3	
410	SVTO	8 S	1225.0	1225.0	1.0	480.0			QL=2 ST=2 TYP=3	
6700	CUBA	1 S	1607.3	1607.9	1.5	10.0	5.0		17L	
6700	CUBA	21 GRF	1812.0	1831.0	102.0	6.0	3.0		OOL	
6700	CUBA	1 S	1815.8	1816.1	1.1	8.0	4.0		OOL	
2800	PENT	3 S	1822.0	1827.0	22.0	6.0				
24	204	IZMI	44 NS	0600.0E		360.0D		5.0		
	280	CUBA	44 NS	1300.0E		530.0D		21.0		
	235	CUBA	44 NS	1300.0E		530.0D		9.0		
	900	GORK	2 S/F	0611.4	0611.6	2.1	8.0			
	600	GORK	2 S/F	0611.5	0612.6	2.0	4.0			
	600	GORK	41 F	0722.6	0722.7	2.4	5.0			
	600	GORK	41 F	0722.6	0724.7		8.0			
	900	GORK	8 S	0722.6	0722.7	0.3	6.0			
	600	GORK	2 S/F	0752.4	0753.8	1.8	7.0			
	900	GORK	2 S/F	0752.9	0753.1	0.8	3.0			
	2950	GORK	42 SER	0806.7	0807.3	16.7	4.5			
	2950	GORK	42 SER	0806.7	0821.4		7.2			
2840	PEKG	1 S	0819.0	0821.0	6.0	7.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
24	900	GORK	4 S/F	0820.2	0821.4	3.5	10.0			
	9100	GORK	7 C	0820.4	0821.0	1.8	18.0			
	9100	GORK	7 C	0820.4	0821.3		22.3			
	33	UPIC	46 C	0820.5	0822.0	2.5				
	600	GORK	45 C	0820.6	0821.1	2.5	16.0			
	600	GORK	45 C	0820.6	0821.5		16.0			
	204	IZMI	42 SER	0820.7	0821.4	1.2	23.0			
	204	IZMI	7 C	0921.0	0921.1	0.2	20.0			
	33	UPIC	46 C	1028.0	1029.0	2.0				
	600	GORK	1 S	1040.4	1041.0	1.3	11.0			
	900	GORK	1 S	1040.8	1041.2	0.8	6.0			
	6700	CUBA	23 GRF	1330.0	1420.0	103.0	11.0	5.0		00L
	33	UPIC	42 SER	1421.0	1428.0	9.0				
	410	SGMR	8 S	1555.0	1555.0	1.0	16.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1555.0	1555.0	1.0	130.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1714.0	1714.0	U	62.0			QL=4 ST=2 TYP=3
	6700	CUBA	20 GRF	1726.0	1744.0	112.0	8.0	4.0		00L
	2800	PENT	3 S	1755.0	1801.0	18.0	19.0			
	245	SGMR	8 S	1801.0	1801.0	1.0	59.0			QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	1832.0	1834.0	4.0	52.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	1838.0	1838.0	1.0	45.0			QL=4 ST=2 TYP=3
	610	PALE	4 S/F	1838.0	1838.0	322.0	56.0			QL=4 ST=1 TYP=3
	2800	PENT	8 S	2001.0	2002.0	3.0	69.0			
	2800	PENT	1 S	2354.0	2356.0	5.0	6.0			
25	245	LEAR	43 NS	0335.0	0336.0	125.0	420.0			QL=2 ST=2 TYP=1
	204	IZMI	44 NS	0600.0E		360.0D		25.0		
	127	TORN	44 NS	0620.0E		520.0D		20.0		V=2
	245	SGMR	43 NS	1055.0	1545.0	293.0	84.0			QL=4 ST=3 TYP=1
	245	SGMR	43 NS	1155.0	1545.0	233.0	84.0			QL=4 ST=3 TYP=1
	280	CUBA	44 NS	1300.0E		335.0D		33.0		
	235	CUBA	44 NS	1300.0E		335.0D		17.0		
	245	SGMR	43 NS	2149.0	2149.0	36.0	87.0			QL=4 ST=2 TYP=1
	245	LEAR	43 NS	2341.0	2341.0U	45.0	63.0			QL=2 ST=3 TYP=1
	245	PALE	48 C	0335.0	0338.0	4.0	180.0			QL=4 ST=2 TYP=8
	2840	PEKG	20 GRF	0447.0	0501.0	18.0	7.9			
	245	SVTO	8 S	0637.0	0637.0	U	260.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0725.0	0725.0	U	55.0			QL=2 ST=2 TYP=3
	33	UPIC	46 C	0851.0	0852.0	2.2				
	204	IZMI	7 C	0851.3	0851.5	0.6	298.0			
	245	SVTO	4 S/F	0938.0	0940.0	3.0	210.0			QL=2 ST=2 TYP=3
	245	SGMR	4 S/F	0947.0	0949.0	7.0	72.0			QL=2 ST=2 TYP=3
	600	GORK	4 S/F	1027.0	1027.9	1.9	31.0			
	900	GORK	4 S/F	1027.1	1028.1	1.0	29.0			
	245	SGMR	8 S	1824.0	1825.0	1.0	54.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1955.0	1955.0	U	75.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2037.0	2037.0	U	76.0			QL=4 ST=2 TYP=3
	2800	PENT	1 S	2152.0	2155.0	10.0	5.0			
	26	245	SVTO	44 NS	0415.0E	0606.0	769.0D	190.0		
245		LEAR	43 NS	0421.0	0426.0	310.0	95.0			QL=4 ST=2 TYP=1
204		IZMI	44 NS	0600.0E		360.0D		35.0		
127		TORN	44 NS	0620.0E		520.0D		30.0		V=1
245		SGMR	43 NS	0942.0	0942.0U	433.0	160.0			QL=2 ST=2 TYP=1
280		CUBA	44 NS	1300.0E		530.0D		28.0		
235		CUBA	44 NS	1300.0E		530.0D		21.0		
2840		PEKG	S		0740.0	50.0				
2840		PEKG	5 S	0008.0	0011.0	6.0	14.4			
245		LEAR	8 S	0101.0	0102.0	1.0	64.0			QL=2 ST=2 TYP=3
5730		IRKU	4 S/F	0434.3	0434.5	0.3	8.0		U	
245		SVTO	8 S	0444.0	0444.0	U	190.0			QL=2 ST=3 TYP=3
2840		PEKG	5 S	0503.0	0512.0	11.0	71.0			
5730		IRKU	46 C	0510.4	0511.9	10.6	129.0		U	
1415		LEAR	8 S	0511.0	0512.0	1.0	67.0			QL=2 ST=2 TYP=3
2695		LEAR	8 S	0511.0	0511.0	1.0	63.0			QL=4 ST=3 TYP=3
15400		LEAR	8 S	0511.0	0511.0	U	260.0			QL=2 ST=2 TYP=3
8800		LEAR	8 S	0511.0	0511.0	1.0	200.0			QL=2 ST=2 TYP=3
4995		LEAR	8 S	0511.0	0511.0	1.0	76.0			QL=2 ST=2 TYP=3
1415		SVTO	8 S	0511.0	0512.0	1.0	68.0			QL=4 ST=3 TYP=3

S O L A R R A D I O E M I S S I O N
Outstanding Occurrences

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m 2 Hz)	Mean			
26	2695	SVTO	8 S	0511.0	0511.0	1.0	67.0			QL=4 ST=3 TYP=3	
	4995	SVTO	8 S	0511.0	0511.0	1.0	78.0			QL=2 ST=3 TYP=3	
	8800	SVTO	8 S	0511.0	0511.0	1.0	210.0			QL=4 ST=3 TYP=3	
	15400	SVTO	8 S	0511.0	0511.0	1.0	300.0			QL=4 ST=3 TYP=3	
	2950	GORK	40 F	0511.2	0511.6	1.4	310.0				
	600	GORK	40 F	0511.3	0512.3	1.6	15.0				
	900	GORK	40 F	0511.5	0512.3	1.2	53.0				
	5730	IRKU	8 S	0538.9	0538.9	0.1	10.0		U		
	2950	GORK	5 S	0613.4	0614.1	1.4	3.0				
	2840	PEKG	5 S	0711.0	0717.5		102.4				
	204	IZMI	45 C	0714.7	0717.3	8.2	195.0				
	2950	GORK	4 S/F	0714.7	0717.9	12.9	42.0				
	600	GORK	4 S/F	0714.9	0721.5	16.2	16.0				
	200	HIRA	46 C	0715.0	0717.5	7.5	90.0				WR
	900	GORK	4 S/F	0715.7	0719.5	13.1	47.0				
	3000	IZMI	20 GRF	0715.7	0717.6	13.1	63.0				
	5730	IRKU	49 GB	0715.8	0739.6	41.7U	1898.0		U		
	2800	HIRA	29 PBI	0716.0	0718.0	8.5	60.0				WR
	2695	LEAR	4 S/F	0716.0	0717.0	8.0	80.0				QL=4 ST=2 TYP=3
	245	LEAR	49 GB	0716.0	0717.0	8.0	1000.0				QL=2 ST=2 TYP=6
	2695	SVTO	8 S	0716.0	0717.0	2.0	51.0				QL=4 ST=2 TYP=3
	245	SVTO	49 GB	0716.0	0717.0	6.0	900.0				QL=2 ST=2 TYP=6
	1415	LEAR	4 S/F	0717.0	0717.0	7.0	51.0				QL=2 ST=2 TYP=3
	4995	LEAR	4 S/F	0717.0	0717.0	7.0	28.0				QL=2 ST=2 TYP=3
	410	SVTO	4 S/F	0717.0	0721.0	6.0	82.0				QL=4 ST=2 TYP=3
	1415	SVTO	8 S	0717.0	0717.0	U	25.0				QL=4 ST=2 TYP=3
	4995	SVTO	46 C	0717.0	0717.0	U	29.0				QL=2 ST=2 TYP=8
	410	LEAR	4 S/F	0719.0	0721.0	3.0	80.0				QL=2 ST=2 TYP=3
	4995	LEAR	4 S/F	0738.0	0739.0	7.0	140.0				QL=2 ST=2 TYP=3
	4995	SVTO	4 S/F	0738.0	0739.0	7.0	140.0				QL=2 ST=2 TYP=3
	3000	IZMI	20 GRF	0738.6	0740.2	22.0U	42.0				QL=2 ST=2 TYP=3
	2950	GORK	4 S/F	0738.7	0740.1	8.6	32.0				
	8800	LEAR	8 S	0739.0	0739.0	2.0	64.0				QL=2 ST=2 TYP=3
	2695	LEAR	8 S	0739.0	0739.0	2.0	38.0				QL=4 ST=2 TYP=3
	15400	LEAR	8 S	0739.0	0739.0	1.0	26.0				QL=2 ST=2 TYP=3
	8800	SVTO	8 S	0739.0	0739.0	2.0	67.0				QL=4 ST=2 TYP=3
	15400	SVTO	8 S	0739.0	0740.0	1.0	30.0				QL=4 ST=2 TYP=3
	2695	SVTO	8 S	0740.0	0740.0	U	28.0				QL=4 ST=2 TYP=3
	33	UPIC	4 S/F	0745.5	0746.0	1.0					
	33	UPIC	45 C	0835.0	0835.5	1.5					
	204	IZMI	41 F	0942.3	0942.6	1.2	209.0				
	33	UPIC	46 C	0942.5	0943.0	1.5					
	6700	CUBA	20 GRF	1328.0	1332.0	32.0	11.0	5.0		20L	
	33	UPIC	46 C	1405.5	1406.0	1.5					
	6700	CUBA	1 S	1643.8	1644.3	1.2	14.0	7.0		28L	
2800	PENT	40 F	2029.0	2030.0	8.0	23.0					
6700	CUBA	21 GRF	2029.0	2036.0	47.0	12.0	6.0		00L		
9500	CUBA	20 GRF	2030.0	2032.0	13.0	24.0	12.0				
6700	CUBA	1 S	2030.3	2031.8	2.9	16.0	8.0			6L	
410	PALE	8 S	2244.0	2245.0	1.0	75.0				QL=4 ST=2 TYP=3	
410	SGMR	8 S	2244.0	2245.0	1.0	64.0				QL=4 ST=2 TYP=3	
610	PALE	8 S	2245.0	2245.0	U	26.0				QL=4 ST=2 TYP=3	
2840	PEKG	5 S	2259.0	2311.0	22.0	36.7					
27	204	IZMI	44 NS	0600.0E		360.0D		20.0			
	127	TORN	44 NS	0620.0E		520.0D		20.0		V=2	
	280	CUBA	44 NS	1300.0E		530.0D		20.0			
	235	CUBA	44 NS	1300.0E		530.0D		11.0			
	2840	PEKG	1 S	0639.0	0641.0	6.0	21.2				
	2840	PEKG	1 S	0817.0	0823.0	12.0	11.5				
	2840	PEKG	3 S	0831.0	0840.0	33.0	181.0				
	600	GORK	46 C	0835.2	0841.2		43.0				
	600	GORK	46 C	0835.2	0838.5	8.8	57.0				
	1415	LEAR	4 S/F	0836.0	0839.0	6.0	170.0				QL=2 ST=2 TYP=3
	2695	LEAR	4 S/F	0836.0	0839.0	6.0	250.0				QL=4 ST=2 TYP=3
	2695	SVTO	4 S/F	0836.0	0839.0	6.0	240.0				QL=4 ST=2 TYP=3
	1415	SVTO	4 S/F	0836.0	0839.0	6.0	200.0				QL=4 ST=2 TYP=3
33	UPIC	48 C	0836.0	0838.0	25.5						
204	IZMI	45 C	0836.0	0838.1	6.4	103.0					

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean (2 Hz)		
27	127	TORN	49 GB	0836.0	0848.9	15.3	680.0	80.0		
	900	GORK	46 C	0836.3	0840.1	8.9	144.0			
	900	GORK	46 C	0836.3	0841.2		100.0			
	2950	GORK	4 S/F	0836.5	0839.0U	8.5	46.0U			
	500	HIRA	46 C	0836.5	0841.5	7.0	40.0			WL
	2800	HIRA	46 C	0836.5	0839.5	6.0	220.0			WR
	3000	IZMI	45 C	0836.5	0839.7	14.0	259.0			
	410	LEAR	4 S/F	0837.0	0841.0	5.0	65.0			QL=2 ST=2 TYP=3
	245	LEAR	4 S/F	0837.0	0838.0	4.0	260.0			QL=2 ST=2 TYP=3
	4995	LEAR	4 S/F	0837.0	0839.0	5.0	230.0			QL=2 ST=2 TYP=3
	610	LEAR	4 S/F	0837.0	0838.0	4.0	46.0			QL=2 ST=2 TYP=3
	8800	SVTO	4 S/F	0837.0	0840.0	5.0	140.0			QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	0837.0	0839.0	5.0	360.0			QL=2 ST=2 TYP=3
	245	SVTO	4 S/F	0837.0	0839.0	4.0	230.0			QL=4 ST=2 TYP=3
	410	SVTO	4 S/F	0837.0	0839.0	5.0	61.0			QL=4 ST=2 TYP=3
	9100	GORK	46 C	0837.0	0841.1		135.0			
	9100	GORK	46 C	0837.0	0839.7	7.2	124.0			
	500	HIRA	8 S	0837.7	0837.8	0.2	230.0			0
	8800	LEAR	4 S/F	0838.0	0841.0	4.0	130.0			QL=2 ST=2 TYP=3
	610	SVTO	4 S/F	0838.0	0838.0	922.0	38.0			QL=4 ST=1 TYP=3
	15400	LEAR	8 S	0839.0	0841.0	2.0	35.0			QL=2 ST=2 TYP=3
	15400	SVTO	4 S/F	0839.0	0841.0	3.0	46.0			QL=4 ST=2 TYP=3
	9100	GORK	29 PBI	0844.2	0846.4	18.8	34.0			
	2950	GORK	29 PBI	0845.0	0846.0	13.0	12.0			
	245	SGMR	8 S	1029.0	1030.0	1.0	75.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1029.0	1030.0	1.0	87.0			QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	2222.0	2229.0	7.0	54.0			QL=4 ST=2 TYP=3
	245	PALE	4 S/F	2246.0	2247.0	6.0	55.0			QL=4 ST=2 TYP=3
	15400	SGMR	8 S	2247.0	2248.0	1.0	57.0			QL=4 ST=2 TYP=3
	28	204	IZMI	44 NS	0600.0E		360.0D		5.0	
245		LEAR	8 S	0114.0	0114.0	1.0	180.0			QL=2 ST=2 TYP=3
245		LEAR	8 S	0216.0	0216.0	U	150.0			QL=2 ST=2 TYP=3
410		LEAR	8 S	0431.0	0431.0	1.0	110.0			QL=2 ST=2 TYP=3
610		LEAR	8 S	0431.0	0431.0	1.0	38.0			QL=2 ST=2 TYP=3
245		LEAR	49 GB	0431.0	0432.0	1.0	890.0			QL=2 ST=2 TYP=6
410		SVTO	8 S	0431.0	0431.0	2.0	100.0			QL=4 ST=2 TYP=3
610		SVTO	8 S	0431.0	0431.0	1.0	23.0			QL=4 ST=2 TYP=3
245		SVTO	8 S	0431.0	0432.0	1.0	720.0			QL=4 ST=2 TYP=3
600		GORK	40 F	0431.4	0431.7	1.4	63.0			
900		GORK	46 C	0431.5	0431.6	0.9	18.0			
900		GORK	46 C	0431.5	0431.8		43.0			
200		HIRA	42 SER	0431.7	0432.0	1.0	500.0			0
500		HIRA	42 SER	0431.7	0431.8	0.7	40.0			0
204		IZMI	7 C	0610.4	0610.5	0.3	179.0			
900		GORK	4 S/F	0703.3	0703.9	3.1	36.0			
600		GORK	40 F	0703.6	0706.1	3.0	58.0			
410		LEAR	8 S	0719.0	0720.0	1.0	82.0			QL=2 ST=2 TYP=3
245		LEAR	8 S	0719.0	0720.0	1.0	81.0			QL=2 ST=2 TYP=3
245		SVTO	8 S	0719.0	0720.0	1.0	62.0			QL=4 ST=2 TYP=3
204		IZMI	42 SER	0719.4	0720.5	1.2	189.0			
200		HIRA	8 S	0719.7	0720.0	0.6	50.0			0
410		SVTO	8 S	0720.0	0720.0	U	75.0			QL=4 ST=2 TYP=3
500		HIRA	8 S	0720.0	0720.1	0.2	30.0			0
33		UPIC	42 SER	0902.5		78.0				
204		IZMI	41 F	0906.3	0906.7	1.0	156.0			
610		LEAR	8 S	0916.0	0916.0	2.0	38.0			QL=2 ST=2 TYP=3
410		LEAR	49 GB	0916.0	0916.0	2.0	3000.0			QL=2 ST=2 TYP=6
245		LEAR	49 GB	0916.0	0916.0	2.0	720.0			QL=2 ST=2 TYP=6
1415		LEAR	8 S	0916.0	0916.0	1.0	89.0			QL=2 ST=2 TYP=3
610		SVTO	8 S	0916.0	0916.0	1.0	43.0			QL=4 ST=2 TYP=3
245		SVTO	49 GB	0916.0	0916.0	1.0	530.0			QL=4 ST=2 TYP=6
1415		SVTO	8 S	0916.0	0916.0	1.0	92.0			QL=4 ST=2 TYP=3
410		SVTO	49 GB	0916.0	0916.0	U	2700.0			QL=4 ST=2 TYP=6
500		HIRA	42 SER	0916.2	0916.4	1.2	230.0			WR
204		IZMI	45 C	0916.2	0916.5	1.4	2658.0			
900	GORK	41 F	0916.2	0916.6	5.8	161.0				
900	GORK	41 F	0916.2	0920.7		271.0				
2950	GORK	3 S	0916.3	0916.5	0.9	13.0				

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JUNE 1999

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
28	600	GORK	40 F	0916.3	0916.5	5.2	9300.0			
	200	HIRA	8 S	0916.4	0916.6	0.4	360.0		0	
	204	IZMI	42 SER	0918.7	0919.4	1.3	31.0			
	204	IZMI	42 SER	1018.2	1018.3	0.2	29.0			
	2800	PENT	1 S	1900.0	1903.0	6.0	6.0			
	2800	PENT	1 S	2051.0	2057.0	16.0	24.0			
	245	PALE	8 S	2055.0	2056.0	2.0	51.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	2057.0	2057.0	1.0	53.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	2057.0	2057.0	2.0	30.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	2057.0	2057.0	2.0	39.0			QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	2057.0	2057.0	5.0	19.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2057.0	2057.0	1.0	11.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2057.0	2057.0	1.0	8.0			QL=4 ST=2 TYP=3
	2695	SGMR	4 S/F	2057.0	2057.0	5.0	28.0			QL=4 ST=2 TYP=3
	8800	PALE	4 S/F	2058.0	2059.0	3.0	31.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	2100.0	2100.0	U	6.0			QL=2 ST=2 TYP=3
15400	SGMR	8 S	2100.0	2100.0	U	9.0			QL=4 ST=2 TYP=3	
2800	PENT	41 F	2205.0	2208.0	24.0	3.0				
29	204	IZMI	44 NS	0600.0E		360.0D		15.0		
	127	TORN	44 NS	0620.0E		520.0D		3.0		V=1
	280	CUBA	44 NS	1300.0E		530.0D		31.0		
	235	CUBA	44 NS	1300.0E		530.0D		23.0		
	9500	CUBA			1911.5		114.0			
	6700	CUBA			1912.5		149.0			8R
	410	LEAR	49 GB	0047.0	0047.0	U	670.0			QL=2 ST=2 TYP=6
	900	GORK	21 GRF	0412.0	0845.0	360.0	11.0			
	2950	GORK	41 F	0446.1	0459.1	27.0	17.0			
	2950	GORK	41 F	0446.1	0505.6		34.0			
	900	GORK	42 SER	0448.0	0504.3		38.0			
	900	GORK	42 SER	0448.0	0558.6		30.0			
	900	GORK	42 SER	0448.0	0458.8	72.4	137.0			
	2840	PEKG	5 S	0456.0	0459.0	14.0	30.2			
	600	GORK	42 SER	0456.4	0559.1	65.6	8950.0			
	245	LEAR	8 S	0457.0	0458.0	2.0	460.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0457.0	0458.0	2.0	350.0			QL=4 ST=2 TYP=3
	200	HIRA	4 S/F	0457.5	0458.5	2.2	140.0			WR
	500	HIRA	8 S	0457.5	0457.7	1.2	280.0			MR
	610	LEAR	8 S	0458.0	0458.0	U	330.0			QL=2 ST=2 TYP=3
	410	LEAR	8 S	0458.0	0458.0	U	40.0			QL=2 ST=2 TYP=3
	1415	LEAR	8 S	0458.0	0458.0	U	26.0			QL=2 ST=2 TYP=3
	610	SVTO	8 S	0458.0	0458.0	U	230.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0458.0	0458.0	U	41.0			QL=4 ST=2 TYP=3
	1415	SVTO	46 C	0458.0	0458.0	U	29.0			QL=4 ST=2 TYP=8
	33	UPIC	42 SER	0458.0	0506.0	13.0				
	245	LEAR	8 S	0501.0	0501.0	1.0	67.0			QL=2 ST=2 TYP=3
	200	HIRA	47 GB	0503.5	0506.0	5.2	750.0			0
	500	HIRA	46 C	0503.5	0505.5	4.5	40.0			WR
	410	LEAR	4 S/F	0504.0	0505.0	3.0	47.0			QL=2 ST=2 TYP=3
	610	LEAR	8 S	0504.0	0505.0	2.0	36.0			QL=2 ST=2 TYP=3
	245	LEAR	49 GB	0504.0	0506.0	6.0	610.0			QL=2 ST=2 TYP=6
	410	SVTO	4 S/F	0504.0	0505.0	5.0	70.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	0504.0	0506.0	3.0	470.0			QL=4 ST=2 TYP=3
	9100	GORK	21 GRF	0504.4	0512.0	20.2	18.0			
	2695	LEAR	8 S	0505.0	0505.0	U	28.0			QL=4 ST=2 TYP=3
4995	LEAR	8 S	0505.0	0505.0	2.0	63.0			QL=2 ST=2 TYP=3	
8800	LEAR	8 S	0505.0	0505.0	U	35.0			QL=2 ST=2 TYP=3	
8800	SVTO	8 S	0505.0	0505.0	U	25.0			QL=4 ST=2 TYP=3	
4995	SVTO	8 S	0505.0	0505.0	U	48.0			QL=2 ST=2 TYP=3	
2695	SVTO	8 S	0505.0	0507.0	2.0	32.0			QL=4 ST=2 TYP=3	
9100	GORK	2 S/F	0505.4	0505.6	1.5	30.0				
15400	SVTO	8 S	0508.0	0509.0	2.0	27.0			QL=4 ST=2 TYP=3	
2950	GORK	6 S	0625.1	0628.0	7.5	5.0				
2840	PEKG	45 C	0813.0	0817.0	23.0	134.0				
2950	GORK	46 C	0813.3	0817.0U	14.1	38.0U				
2950	GORK	46 C	0813.3	0818.8		116.0				
4995	SVTO	4 S/F	0814.0	0816.0	15.0	180.0			QL=2 ST=2 TYP=3	
8800	LEAR	4 S/F	0815.0	0816.0	7.0	260.0			QL=2 ST=2 TYP=3	
4995	LEAR	4 S/F	0815.0	0816.0	7.0	190.0			QL=2 ST=2 TYP=3	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean (2 Hz)		
29	2695	LEAR	4 S/F	0815.0	0817.0	7.0	130.0			QL=4 ST=2 TYP=3
	2695	SVTO	4 S/F	0815.0	0817.0	10.0	140.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	0815.0	0816.0	14.0	240.0			QL=4 ST=2 TYP=3
	1415	SVTO	4 S/F	0815.0	0818.0	10.0	100.0			QL=4 ST=2 TYP=3
	9100	GORK	4 S/F	0815.2	0817.1	6.8	250.0			
	2800	HIRA	46 C	0815.5	0817.0	7.0	100.0			0
	3000	IZMI	22 GRF	0815.5	0817.2	7.6	113.0			
	15400	LEAR	4 S/F	0816.0	0816.0	4.0	140.0			QL=2 ST=2 TYP=3
	15400	SVTO	4 S/F	0816.0	0816.0	4.0	150.0			QL=4 ST=2 TYP=3
	900	GORK	42 SER	0816.6	0819.0	50.4	101.0			
	900	GORK	42 SER	0816.6	0820.7		110.0			
	1415	LEAR	4 S/F	0817.0	0818.0	3.0	77.0			QL=2 ST=2 TYP=3
	500	HIRA	4 S/F	0818.0	0820.0	4.5	120.0			0
	610	LEAR	8 S	0819.0	0820.0	1.0	140.0			QL=2 ST=2 TYP=3
	410	SVTO	4 S/F	0819.0	0820.0	6.0	55.0			QL=4 ST=2 TYP=3
	610	SVTO	4 S/F	0819.0	0820.0	6.0	140.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0820.0	0820.0		65.0			QL=2 ST=2 TYP=3
	245	SVTO	4 S/F	0820.0	0820.0	5.0	28.0			QL=4 ST=2 TYP=3
	9100	GORK	29 PBI	0822.0	0822.0	23.9	45.0			
	500	HIRA	6 S	0823.4	0823.6	1.5	70.0			0
	2950	GORK	29 PBI	0827.4	0827.4	32.6	18.5			
	245	SGMR	8 S	1005.0	1005.0		45.0			QL=4 ST=2 TYP=3
	2950	GORK	41 F	1025.8	1030.0		7.0			
	2950	GORK	41 F	1025.8	1027.0	5.0	12.0			
	245	SGMR	8 S	1027.0	1028.0	2.0	54.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1125.0	1125.0	1.0	92.0			QL=4 ST=2 TYP=3
	245	SVTO	48 C	1125.0	1128.0	4.0	94.0			QL=4 ST=2 TYP=8
	204	IZMI	42 SER	1125.4	1128.4	4.3	189.0			
	245	SGMR	8 S	1128.0	1128.0	1.0	110.0			QL=4 ST=3 TYP=3
	610	SVTO	48 C	1232.0	1240.0	8.0	220.0			QL=4 ST=2 TYP=8
	245	SVTO	49 GB	1237.0	1237.0	1.0	2800.0			QL=2 ST=2 TYP=6
	410	SGMR	4 S/F	1240.0	1240.0	4.0	140.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	1240.0	1240.0		220.0			QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	1240.0	1241.0	4.0	77.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1240.0	1240.0	1.0	120.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	1241.0	1242.0	2.0	14.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1241.0	1242.0	1.0	8.0			QL=2 ST=2 TYP=3
	2695	SGMR	4 S/F	1241.0	1242.0	3.0	27.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	1242.0	1242.0	2.0	6.0			QL=4 ST=2 TYP=3
	6700	CUBA	1 S	1323.0	1323.2	0.8	14.0	7.0		23L
	6700	CUBA	1 S	1410.6	1411.6	1.9	9.0	4.0		16L
	9500	CUBA	1 S	1411.2	1411.8	1.0	5.0	2.0		
	245	SVTO	8 S	1421.0	1422.0	1.0	80.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1425.0	1426.0	2.0	80.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1426.0	1426.0	2.0	120.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1430.0	1430.0	1.0	82.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1430.0	1431.0	1.0	190.0			QL=4 ST=2 TYP=3
	6700	CUBA	20 GRF	1452.0	1519.0	93.0	10.0	5.0		23L
	245	SGMR	8 S	1457.0	1458.0	1.0	86.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1500.0	1500.0	1.0	140.0			QL=4 ST=2 TYP=3
245	SGMR	8 S	1605.0	1607.0	2.0	82.0			QL=4 ST=2 TYP=3	
410	SVTO	4 S/F	1750.0E	1800.0	10.0D	130.0			QL=2 ST=3 TYP=3	
2800	PENT	41 F	1751.0	1800.0	17.0	21.0				
235	CUBA	48 C	1752.0	1759.8	11.3	70.0				
280	CUBA	48 C	1752.0	1759.8	11.3	68.0				
245	SVTO	4 S/F	1753.0E	1756.0	7.0D	140.0			QL=2 ST=2 TYP=3	
410	PALE	8 S	1754.0	1755.0	2.0	46.0			QL=4 ST=2 TYP=3	
410	SGMR	4 S/F	1754.0	1755.0	7.0	50.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	1755.0	1756.0	2.0	230.0			QL=4 ST=2 TYP=3	
245	SGMR	4 S/F	1755.0	1756.0	16.0	270.0			QL=4 ST=3 TYP=3	
2800	PENT	40 F	1906.0	1911.0	26.0D	140.0				
9500	CUBA	31 ABS	1908.2	1909.0	1.3	25.0	12.0			
6700	CUBA	31 ABS	1908.8	1909.6	1.6	0.6	0.3		00L	
8800	PALE	4 S/F	1909.0	1910.0	3.0	84.0			QL=4 ST=2 TYP=3	
245	PALE	4 S/F	1909.0	1909.0	8.0	450.0			QL=4 ST=2 TYP=3	
2695	PALE	4 S/F	1909.0	1911.0	3.0	110.0			QL=4 ST=2 TYP=3	
410	PALE	49 GB	1909.0	1909.0	4.0	960.0			QL=4 ST=2 TYP=6	
1415	PALE	4 S/F	1909.0	1910.0	3.0	58.0			QL=4 ST=2 TYP=3	
610	PALE	49 GB	1909.0	1909.0	4.0	1000.0			QL=4 ST=2 TYP=6	

S O L A R R A D I O E M I S S I O N
Outstanding Occurrences

JUNE 1999

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
29	4995	PALE	4 S/F	1909.0	1910.0	4.0	160.0			QL=4 ST=2 TYP=3
	245	SGMR	48 C	1909.0	1913.0	8.0	530.0			QL=4 ST=2 TYP=8
	410	SGMR	49 GB	1909.0	1909.0	5.0	870.0			QL=4 ST=2 TYP=6
	610	SGMR	49 GB	1909.0	1909.0	4.0	830.0			QL=4 ST=2 TYP=6
	1415	SGMR	4 S/F	1909.0	1910.0	4.0	61.0			QL=4 ST=2 TYP=3
	2695	SGMR	4 S/F	1909.0	1911.0	5.0	140.0			QL=4 ST=2 TYP=3
	8800	SGMR	4 S/F	1909.0	1910.0	8.0	120.0			QL=2 ST=2 TYP=3
	4995	SGMR	4 S/F	1909.0	1910.0	8.0	190.0			QL=4 ST=2 TYP=3
	235	CUBA	48 C	1909.0	1911.6	9.5	1048.0			
	280	CUBA	48 C	1909.0	1909.8	9.5	955.0			
	9500	CUBA	46 C	1909.5	1910.4	3.5	116.0	23.0		
	15400	PALE	8 S	1910.0	1911.0	1.0	30.0			QL=4 ST=2 TYP=3
	15400	SGMR	4 S/F	1910.0	1910.0	3.0	34.0			QL=4 ST=2 TYP=3
	6700	CUBA	46 C	1910.4	1911.2	5.4	161.0	63.0		16R
	9500	CUBA	29 PBI	1913.0		14.6	31.0	15.0		
	6700	CUBA	29 PBI	1915.8		18.0	12.0	6.0		00L
	245	SGMR	8 S	2133.0	2135.0	2.0	52.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2202.0	2202.0		65.0			QL=4 ST=2 TYP=3
	2800	PENT	41 F	2204.0	2208.0	14.0	12.0			
	6700	CUBA	2 S/F	2206.0	2208.5	5.9	23.0	11.0		25R
245	SGMR	8 S	2315.0	2315.0	1.0	53.0			QL=4 ST=2 TYP=3	
30	204	IZMI	44 NS	0600.0E		360.0D		30.0		
	127	TORN	44 NS	0620.0E		520.0D		14.0		V=1
	235	CUBA	44 NS	1300.0E		420.0D		16.0		
	280	CUBA	44 NS	1300.0E		420.0D		26.0		
	245	SGMR	43 NS	1411.0	1459.0	296.0	310.0			QL=4 ST=2 TYP=1
	245	LEAR	49 GB	0037.0	0038.0	4.0	5200.0			QL=2 ST=2 TYP=6
	245	PALE	49 GB	0037.0	0038.0	5.0	4500.0			QL=4 ST=2 TYP=6
	410	LEAR	8 S	0038.0	0039.0	1.0	130.0			QL=2 ST=2 TYP=3
	410	PALE	4 S/F	0038.0	0039.0	6.0	120.0			QL=4 ST=2 TYP=3
	200	HIRA	4 S/F	0038.2	0038.5	2.2	250.0			ML
	245	PALE	4 S/F	0210.0	0211.0	4.0	1.0			QL=4 ST=2 TYP=3
	410	PALE	49 GB	0210.0	0211.0	2.0	1.0			QL=4 ST=2 TYP=6
	610	PALE	4 S/F	0210.0	0211.0	4.0	1.0			QL=4 ST=2 TYP=3
	245	PALE	4 S/F	0216.0	0217.0	4.0	120.0			QL=4 ST=2 TYP=3
	245	LEAR	4 S/F	0217.0	0217.0	3.0	140.0			QL=2 ST=2 TYP=3
	2950	GORK	41 F	0303.0E	0320.2		5.9			
	2950	GORK	41 F	0303.0E	0308.8	21.8D	32.0			
	900	GORK	41 F	0306.0E	0315.8	12.0D	7.4			
	4995	LEAR	8 S	0308.0	0308.0		56.0			
	600	GORK	3 S	0308.1	0308.5	0.9	21.0			QL=2 ST=2 TYP=3
	900	GORK	21 GRF	0340.7	0628.2	390.0	9.3			
	2840	PEKG	5 S	0428.0	0440.0	35.0	110.7			
	2950	GORK	21 GRF	0433.0	0641.5	289.8	10.0			
	2950	GORK	46 C	0436.0	0440.3	17.3	42.0			
	2950	GORK	46 C	0436.0	0444.8		92.0			
	2800	HIRA	46 C	0437.5	0444.5	11.0	100.0			ML
	4995	LEAR	4 S/F	0438.0	0439.0	3.0	65.0			QL=2 ST=2 TYP=3
	2695	LEAR	4 S/F	0438.0	0442.0	5.0	33.0			QL=4 ST=2 TYP=3
	8800	LEAR	4 S/F	0438.0	0439.0	3.0	58.0			QL=2 ST=2 TYP=3
	2695	SVTO	48 C	0438.0	0444.0	8.0	120.0			QL=4 ST=2 TYP=8
	33	UPIC	46 C	0438.0	0440.5	6.0				
	600	GORK	40 F	0438.2	0438.7	11.2	52.0			
	900	GORK	40 F	0438.3	0450.9	12.8	23.0			
	4995	PALE	4 S/F	0439.0	0442.0	5.0	78.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	0439.0	0440.0	7.0	48.0			QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	0439.0	0440.0	6.0	60.0			QL=2 ST=2 TYP=3
	15400	SVTO	4 S/F	0440.0	0440.0	12.0	43.0			QL=4 ST=2 TYP=3
1415	PALE	4 S/F	0441.0	0442.0	4.0	61.0			QL=4 ST=2 TYP=3	
8800	PALE	8 S	0442.0	0442.0		38.0			QL=4 ST=2 TYP=3	
8800	LEAR	4 S/F	0443.0	0444.0	5.0	8.0			QL=2 ST=2 TYP=3	
2695	LEAR	4 S/F	0443.0	0444.0	5.0	96.0			QL=4 ST=2 TYP=3	
245	SVTO	8 S	0443.0	0443.0	1.0	36.0			QL=4 ST=2 TYP=3	
4995	LEAR	4 S/F	0444.0	0444.0	4.0	12.0			QL=2 ST=2 TYP=3	
1415	SVTO	8 S	0444.0	0444.0		33.0			QL=4 ST=2 TYP=3	
2840	PEKG	1 S	0609.0	0611.0	5.0	9.5				
600	GORK	40 F	0610.3	0610.7	1.7	12.0				
3000	IZMI	5 S	0610.4	0610.7	0.6	13.0	6.0			

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Outstanding Occurrences

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
30	2950	GORK	1 S	0610.5	0611.0	1.2	9.4			
	900	GORK	2 S/F	0610.6	0610.8	1.1	14.0			
	600	GORK	40 F	0633.6	0645.6	23.1	46.0			
	410	LEAR	4 S/F	0634.0	0636.0	5.0	86.0			QL=2 ST=2 TYP=3
	245	LEAR	4 S/F	0634.0	0636.0	5.0	64.0			QL=2 ST=2 TYP=3
	245	SVTO	4 S/F	0634.0	0636.0	14.0	68.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	0640.0	0642.0	2.0	23.0			QL=2 ST=2 TYP=3
	204	IZMI	42 SER	0640.3	0654.3	27.1	131.0			
	410	SVTO	4 S/F	0642.0	0645.0	3.0	49.0			QL=4 ST=2 TYP=3
	500	HIRA	42 SER	0644.5	0645.0	0.7	30.0			WR
	245	LEAR	4 S/F	0652.0	0653.0	6.0	160.0			QL=2 ST=2 TYP=3
	245	SVTO	4 S/F	0652.0	0653.0	7.0	130.0			QL=4 ST=2 TYP=3
	900	GORK	41 F	0703.4	0703.7	3.0	12.0			
	245	LEAR	8 S	0705.0	0705.0	1.0	150.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0705.0	0705.0	1.0	98.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0705.0	0705.0	U	58.0			QL=4 ST=2 TYP=3
	600	GORK	2 S/F	0705.2	0705.6	2.5	14.0			
	2950	GORK	6 S	0705.3	0705.9	3.3	7.8			
	245	SGMR	8 S	1010.0	1010.0	1.0	130.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1010.0	1010.0	1.0	54.0			QL=4 ST=2 TYP=3
	33	UPIC	49 GB	1123.0	1127.0U	16.5				
	204	IZMI	45 C	1123.7	1125.9	6.6	1531.0			
	127	TORN	47 GB	1124.8	1126.7	5.0	900.0B	480.0		
	15400	SVTO	4 S/F	1125.0	1126.0	4.0	320.0			QL=4 ST=2 TYP=3
	1415	SVTO	4 S/F	1125.0	1126.0	5.0	150.0			QL=4 ST=2 TYP=3
	2695	SVTO	4 S/F	1125.0	1127.0	8.0	190.0			QL=4 ST=2 TYP=3
	8800	SVTO	49 GB	1125.0	1126.0	4.0	550.0			QL=4 ST=2 TYP=6
	1415	SGMR	4 S/F	1125.0	1126.0	11.0	140.0			QL=4 ST=2 TYP=3
	245	SGMR	48 C	1125.0	1135.0	13.0	2600.0			QL=4 ST=2 TYP=8
	2695	SGMR	4 S/F	1125.0	1127.0	13.0	220.0			QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	1125.0	1127.0	13.0	340.0			QL=4 ST=2 TYP=3
	15400	SGMR	4 S/F	1125.0	1126.0	13.0	360.0			QL=4 ST=2 TYP=3
	8800	SGMR	49 GB	1125.0	1126.0	13.0	510.0			QL=4 ST=2 TYP=6
	610	SGMR	49 GB	1125.0	1128.0	13.0	2700.0			QL=4 ST=2 TYP=6
	410	SGMR	48 C	1125.0	1135.0	13.0	1100.0			QL=4 ST=2 TYP=8
	610	SVTO	49 GB	1125.0	1128.0	10.0	2100.0			QL=4 ST=2 TYP=6
	4995	SVTO	4 S/F	1125.0	1127.0	11.0	410.0			QL=2 ST=2 TYP=3
	410	SVTO	48 C	1125.0	1135.0	12.0	1500.0			QL=4 ST=2 TYP=8
	245	SVTO	48 C	1125.0	1135.0	12.0	2200.0			QL=4 ST=2 TYP=8
	3000	IZMI	45 C	1125.4	1127.6	18.1	256.0			
	204	IZMI	45 C	1131.1	1135.5	10.4	725.0			
	245	SGMR	8 S	1313.0	1313.0	1.0	43.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1345.0	1345.0	2.0	47.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1356.0	1357.0	2.0	130.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1356.0	1357.0	1.0	120.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	1414.0	1416.0	4.0	75.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1430.0	1431.0	1.0	390.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1430.0	1431.0	1.0	280.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1436.0	1436.0	U	140.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1459.0	1459.0	U	19.0			QL=4 ST=2 TYP=3
610	SGMR	4 S/F	1459.0	1500.0	3.0	15.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1500.0	1500.0	1.0	390.0			QL=4 ST=2 TYP=3	
245	SVTO	8 S	1500.0	1500.0	1.0	310.0			QL=2 ST=3 TYP=3	
245	SVTO	4 S/F	1510.0	1511.0	3.0	110.0			QL=2 ST=3 TYP=3	
2800	PENT	1 S	1551.0	1556.0	13.0	33.0				
245	SVTO	49 GB	1555.0	1557.0	4.0	1500.0			QL=4 ST=2 TYP=6	
410	SGMR	4 S/F	1556.0	1556.0	3.0	91.0			QL=4 ST=2 TYP=3	
4995	SGMR	4 S/F	1556.0	1557.0	3.0	18.0			QL=4 ST=2 TYP=3	
1415	SGMR	4 S/F	1556.0	1557.0	4.0	40.0			QL=4 ST=2 TYP=3	
2695	SGMR	4 S/F	1556.0	1556.0	3.0	34.0			QL=4 ST=2 TYP=3	
245	SGMR	49 GB	1556.0	1557.0	4.0	1800.0			QL=4 ST=2 TYP=6	
610	SGMR	8 S	1556.0	1556.0	2.0	93.0			QL=4 ST=2 TYP=3	
610	SVTO	8 S	1556.0	1556.0	1.0	72.0			QL=4 ST=2 TYP=3	
2695	SVTO	8 S	1556.0	1556.0	1.0	27.0			QL=4 ST=2 TYP=3	
410	SVTO	8 S	1556.0	1556.0	2.0	110.0			QL=4 ST=2 TYP=3	
1415	SVTO	8 S	1556.0	1556.0	1.0	22.0			QL=4 ST=2 TYP=3	
8800	SVTO	8 S	1556.0	1556.0	1.0	26.0			QL=4 ST=2 TYP=3	
15400	SGMR	4 S/F	1557.0	1558.0	3.0	12.0			QL=4 ST=2 TYP=3	
4995	SVTO	8 S	1557.0	1557.0	U	23.0			QL=2 ST=2 TYP=3	

S O L A R R A D I O E M I S S I O N
Outstanding Occurrences

JUNE 1999

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean	Int	Remarks	
30	245	SGMR	4 S/F	1600.0	1603.0	3.0	140.0			QL=4 ST=2 TYP=3	
	245	SVTO	4 S/F	1600.0	1603.0	3.0	120.0			QL=4 ST=2 TYP=3	
	610	SVTO	4 S/F	1633.0	1636.0	6.0	63.0			QL=4 ST=2 TYP=3	
	245	PALE	49 GB	1634.0	1636.0	5.0	960.0			QL=4 ST=2 TYP=6	
	245	SGMR	49 GB	1634.0	1636.0	7.0	1200.0			QL=4 ST=3 TYP=6	
	410	SVTO	4 S/F	1634.0	1636.0	5.0	100.0			QL=4 ST=2 TYP=3	
	245	SVTO	49 GB	1634.0	1636.0	5.0	700.0			QL=4 ST=2 TYP=6	
	410	PALE	4 S/F	1635.0	1636.0	3.0	75.0			QL=4 ST=2 TYP=3	
	410	SGMR	4 S/F	1635.0	1636.0	5.0	82.0			QL=4 ST=2 TYP=3	
	610	SGMR	4 S/F	1635.0	1636.0	3.0	74.0			QL=4 ST=2 TYP=3	
	610	PALE	8 S	1636.0	1636.0		29.0			QL=4 ST=2 TYP=3	
	4995	SGMR	4 S/F	1636.0	1636.0	5.0	28.0			QL=4 ST=2 TYP=3	
	410	SGMR	8 S	1652.0	1652.0		53.0			QL=4 ST=2 TYP=3	
	410	SVTO	8 S	1652.0	1652.0		60.0			QL=4 ST=2 TYP=3	
	2800	PENT	29 PBI	1802.0	1806.0	87.0	82.0				
	245	PALE	8 S	1803.0	1803.0	1.0	70.0				QL=4 ST=2 TYP=3
	6700	CUBA	21 GRF	1805.0E	1816.0	26.00	18.0				00L
	6700	CUBA	46 C	1805.5	1806.1	2.7	124.0	54.0			19R
	9500	CUBA	46 C	1805.6	1807.2	4.0	126.0	49.0			
	15400	PALE	4 S/F	1806.0	1808.0	8.0	47.0				QL=4 ST=2 TYP=3
	8800	SGMR	4 S/F	1806.0	1807.0	7.0	110.0				QL=4 ST=2 TYP=3
	15400	SGMR	4 S/F	1806.0	1807.0	7.0	61.0				QL=4 ST=2 TYP=3
	1415	SGMR	4 S/F	1806.0	1807.0	6.0	32.0				QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	1806.0	1807.0	7.0	120.0				QL=4 ST=2 TYP=3
	2695	SGMR	4 S/F	1806.0	1806.0	4.0	86.0				QL=4 ST=2 TYP=3
	8800	PALE	4 S/F	1806.0	1807.0	10.0	80.0				QL=4 ST=2 TYP=3
	4995	PALE	4 S/F	1806.0	1807.0	10.0	100.0				QL=4 ST=2 TYP=3
	1415	PALE	4 S/F	1806.0	1807.0	10.0	34.0				QL=4 ST=2 TYP=3
	2695	PALE	4 S/F	1806.0	1806.0	10.0	88.0				QL=4 ST=2 TYP=3
	9500	CUBA	29 PBI	1809.6		37.4	30.0	15.0			
	6700	CUBA	21 GRF	1920.0	1933.0	26.0	21.0	10.0			00L
	6700	CUBA	1 S	1931.1	1931.3	1.1	13.0	6.0			00L
	1415	PALE	8 S	1932.0	1932.0		46.0				QL=4 ST=2 TYP=3
	410	PALE	8 S	1932.0	1932.0		29.0				QL=4 ST=2 TYP=3
	245	PALE	8 S	1932.0	1933.0	2.0	100.0				QL=4 ST=2 TYP=3
	2695	PALE	8 S	1932.0	1933.0	1.0	71.0				QL=4 ST=2 TYP=3
	610	PALE	8 S	1932.0	1932.0	2.0	44.0				QL=4 ST=2 TYP=3
	4995	PALE	8 S	1932.0	1932.0		32.0				QL=4 ST=2 TYP=3
	15400	PALE	8 S	1932.0	1932.0		37.0				QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	1932.0	1932.0	4.0	55.0				QL=4 ST=2 TYP=3
	410	SGMR	8 S	1932.0	1932.0	2.0	33.0				QL=4 ST=2 TYP=3
	1415	SGMR	8 S	1932.0	1932.0	2.0	42.0				QL=4 ST=2 TYP=3
	610	SGMR	8 S	1932.0	1932.0	2.0	36.0				QL=4 ST=2 TYP=3
	15400	SGMR	4 S/F	1932.0	1932.0	4.0	40.0				QL=4 ST=2 TYP=3
	2695	SGMR	4 S/F	1932.0	1932.0	3.0	28.0				QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	1933.0	1933.0	3.0	100.0				QL=4 ST=2 TYP=3
	9500	CUBA	2 S/F	1934.8	1935.2	4.2	38.0	19.0			
	245	PALE	8 S	2008.0	2008.0	1.0	93.0				QL=4 ST=2 TYP=3
	410	PALE	49 GB	2009.0	2010.0	5.0	760.0				QL=4 ST=3 TYP=6
	4995	SGMR	4 S/F	2009.0	2010.0	5.0	180.0				QL=4 ST=2 TYP=3
15400	SGMR	4 S/F	2009.0	2010.0	5.0	340.0				QL=4 ST=2 TYP=3	
8800	SGMR	4 S/F	2009.0	2010.0	5.0	220.0				QL=4 ST=2 TYP=3	
2695	SGMR	4 S/F	2009.0	2010.0	5.0	260.0				QL=4 ST=2 TYP=3	
410	SGMR	49 GB	2009.0	2010.0	5.0	710.0				QL=4 ST=2 TYP=6	
6700	CUBA	21 GRF	2009.0	2015.0	14.00	11.0				00L 2023 OFF	
500	HIRA	42 SER	2009.7	2010.0	9.5	350.0				WR	
4995	PALE	8 S	2010.0	2010.0	1.0	170.0				QL=4 ST=2 TYP=3	
15400	PALE	8 S	2010.0	2010.0	1.0	280.0				QL=4 ST=2 TYP=3	
610	PALE	4 S/F	2010.0	2011.0	4.0	150.0				QL=4 ST=2 TYP=3	
8800	PALE	8 S	2010.0	2010.0	1.0	170.0				QL=4 ST=2 TYP=3	
2695	PALE	4 S/F	2010.0	2010.0	5.0	270.0				QL=4 ST=2 TYP=3	
610	SGMR	4 S/F	2010.0	2011.0	4.0	140.0				QL=4 ST=2 TYP=3	
1415	SGMR	4 S/F	2010.0	2010.0	4.0	170.0				QL=4 ST=2 TYP=3	
1415	PALE	4 S/F	2010.0	2010.0	11.0	190.0				QL=4 ST=2 TYP=3	
9500	CUBA	21 GRF	2010.0E	2015.0	150.00	12.0				2025 OFF	
6700	CUBA	45 C	2010.0	2010.3	4.8	156.0	34.0			7L	
2800	HIRA	46 C	2010.0	2010.5	7.5	110.0				WL	
9500	CUBA	45 C	2010.3	2010.4	4.5	117.0	20.0				
410	SGMR	8 S	2018.0	2018.0		150.0				QL=4 ST=3 TYP=3	

S O L A R R A D I O E M I S S I O N
Outstanding Occurrences

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Jun 99

JUNE 1999

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
30	2800	PENT	1 S	2047.0	2053.0	17.0	6.0			
	245	SGMR	4 S/F	2053.0	2054.0	5.0	300.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2054.0	2054.0	1.0	290.0			QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	2155.0	2159.0	4.0	330.0			QL=4 ST=2 TYP=3
	9500	CUBA	2 S/F	2207.0	2208.4	4.0	22.0	11.0		
	245	SGMR	8 S	2208.0	2208.0	U	53.0			QL=4 ST=2 TYP=3
	2840	PEKG	1 S	2301.0	2303.5	5.0	8.8			
	2800	PENT	29 PBI	2347.0	0010.0	38.0	12.0			
	2840	PEKG	1 S	2349.0	2352.0	6.0	7.4			

Reports are received routinely from the following observatories:

BERN = Berne	HUMN = Humain	ONDR = Ondrejov	SVTO = San Vito
CRIM = Crimea	IZMI = IZMIRAN	PEKG = Peking	TORN = Torun
CUBA = Havana	KISV = Kislovodsk	PALE = Palehua	TRST = Trieste
GORK = Gorky	KRAK = Krakow	PENT = Penticton	TYKW = Toyokawa
HIRA = Hiraiso	LEAR = Learmonth	POTS = Potsdam	UPIC = Upice
HUAN = Huancayo	NOBE = Nobeyama	SGMR = Sagamore Hill	

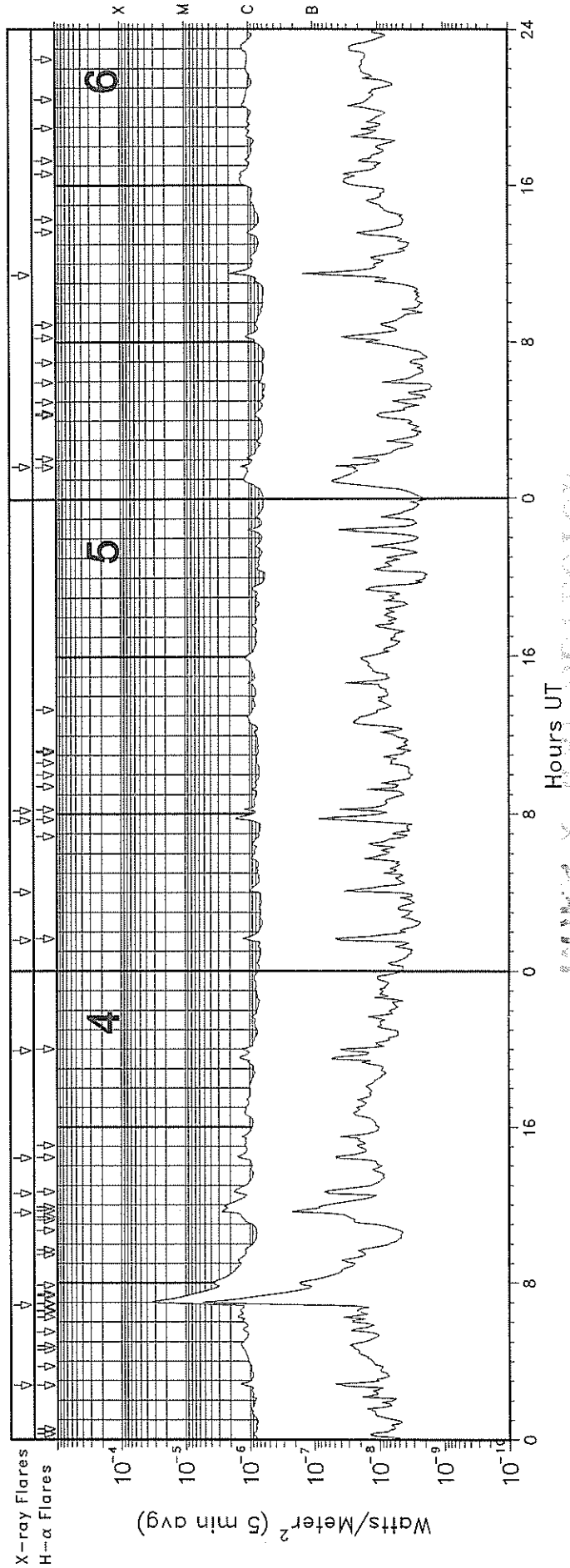
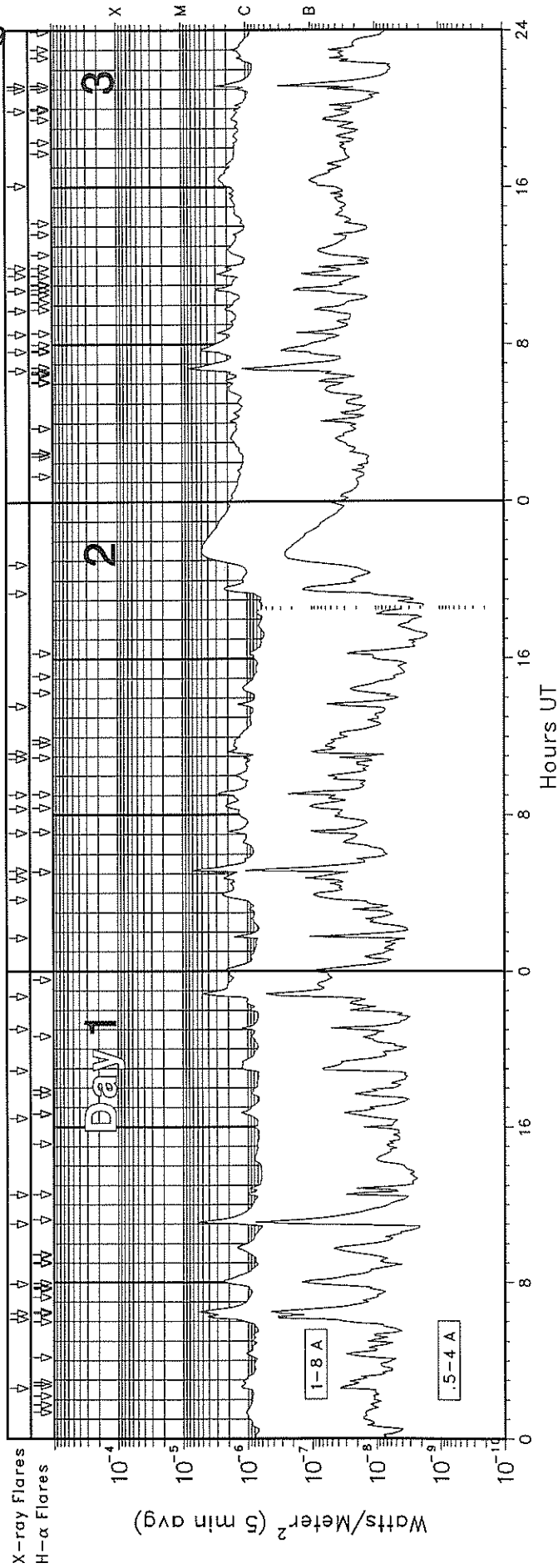
Explanation of Type Code:

1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple 3F	28 Precursor	41 Group of Bursts	47 Great Burst
6 Minor	23 Simple 3AF	29 Post Burst Increase	42 Series of Bursts	48 Major
1A Simple 1A	4A Simple 2AF	24PF Post Rise F	27F Rise and Fall F	
3A Simple 2A	40 Rise Only	16A Fall A	27AF Rise and Fall AF	
21A Simple 3A GRF	40F Rise Only F	260 Fall Only	31A Post Burst Decrease A	
2A Simple 1AF	4P Post Rise	26F Fall F	32A Absorption A	

RSTN Site Information: Beginning in April 1986, the RSTN sites LEAR, PALE, SGMR, and SVTO fixed frequency solar radio data are periodically adjusted to several world standard stations. These world standard stations include: Kislovodsk, USSR 15,500 MHz; Penticton, Canada 2800 MHz; and Hiraiso, Japan 500 and 200 MHz.

GOES X-RAY DETECTOR

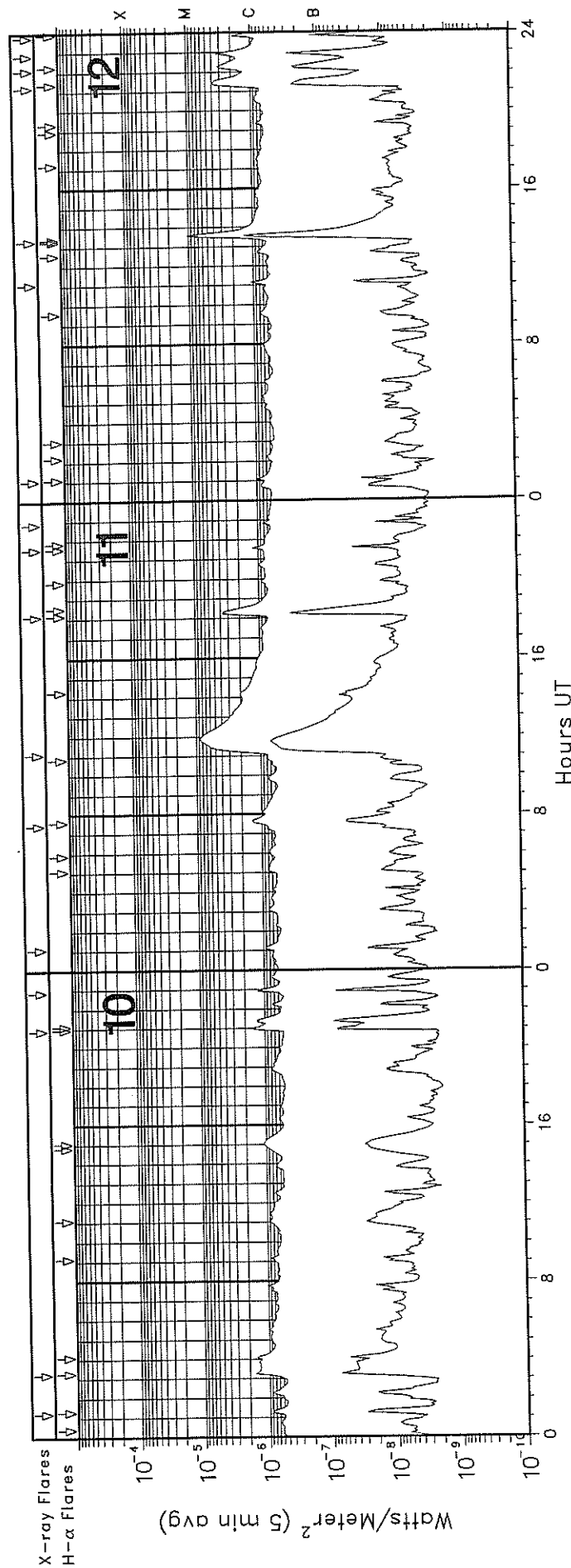
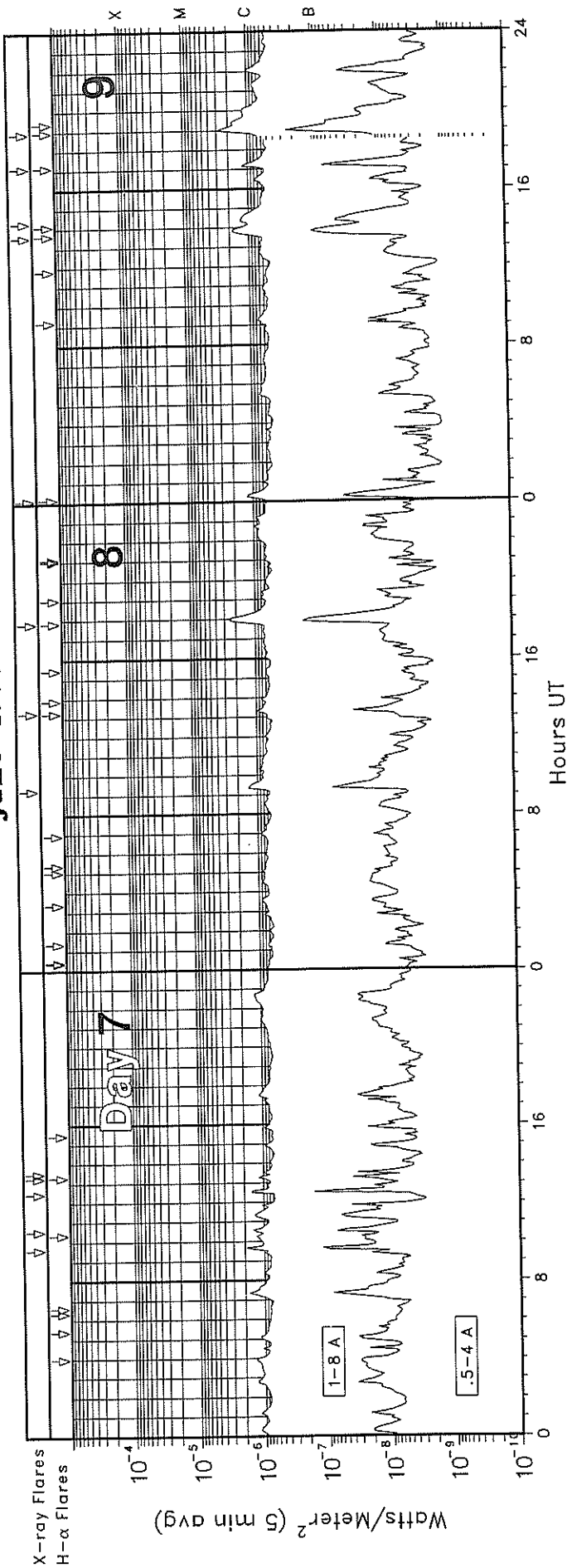
June 1999



GOES X-RAY DETECTOR

GOES X-RAY DETECTOR

June 1999

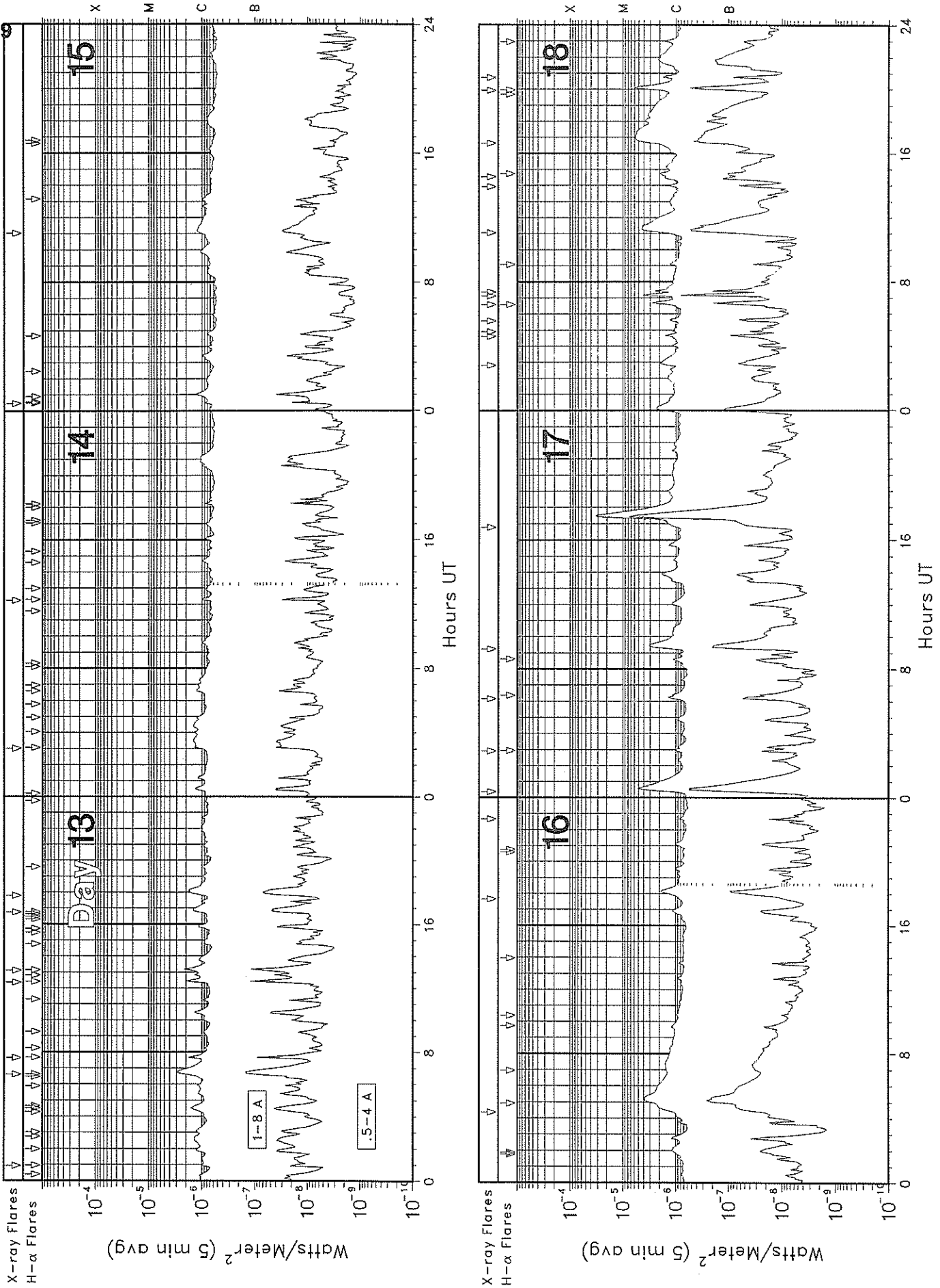


GOES X-RAY DETECTOR

June 1999

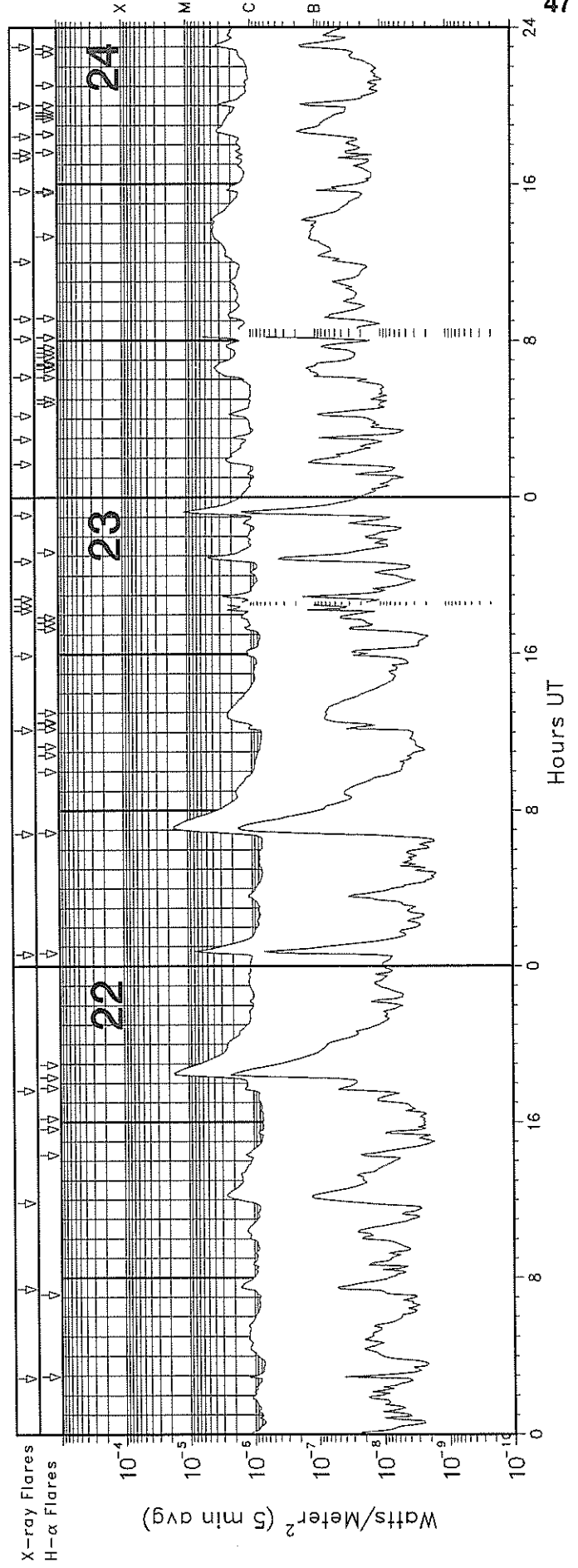
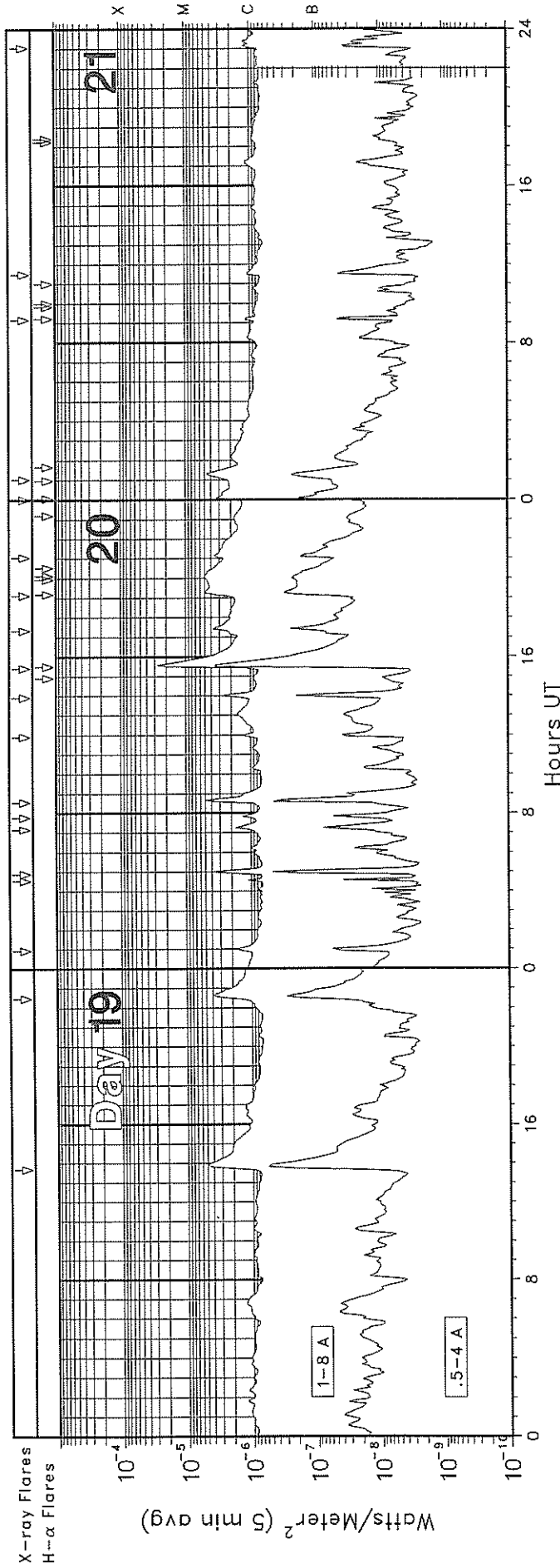
46

Jun 99



GOES X-RAY DETECTOR

June 1999

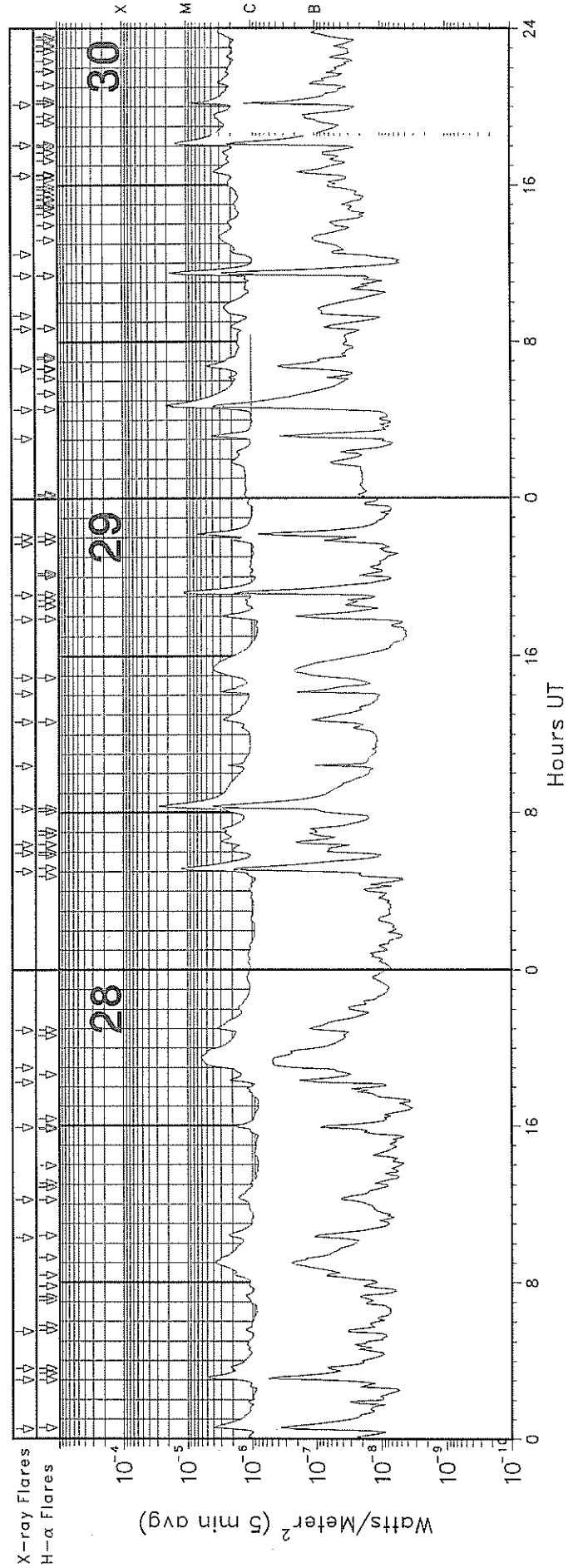
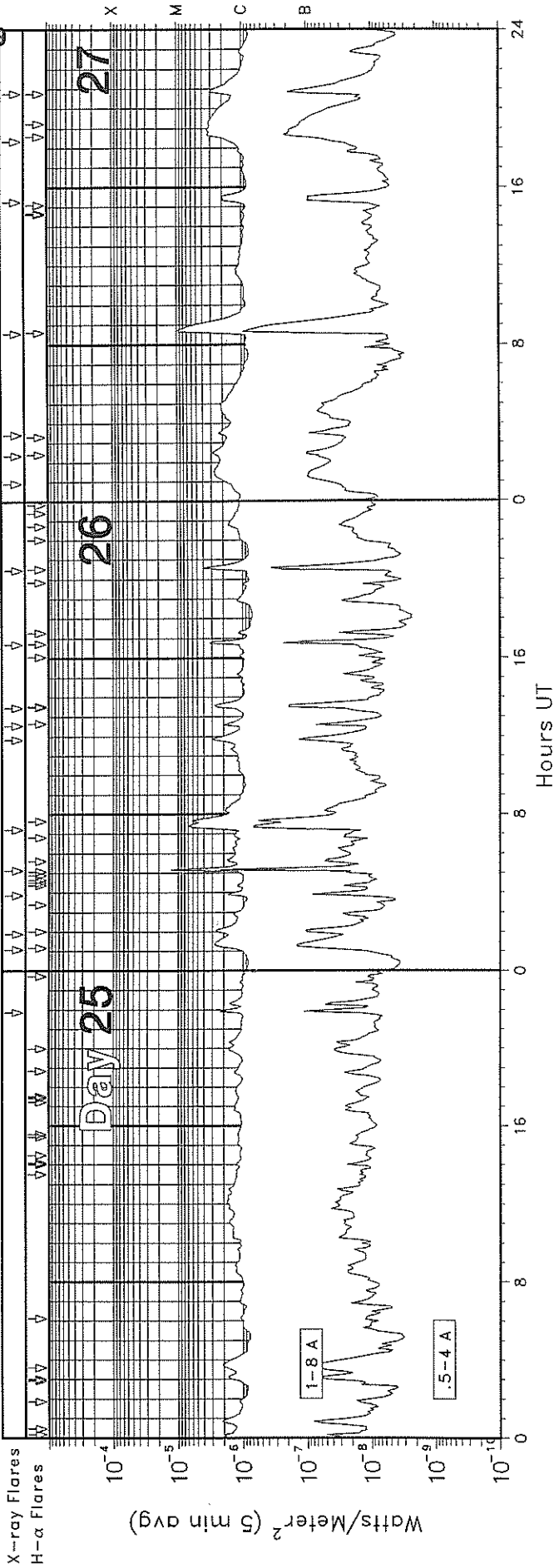


GOES X-RAY DETECTOR

June 1999

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Jun 99



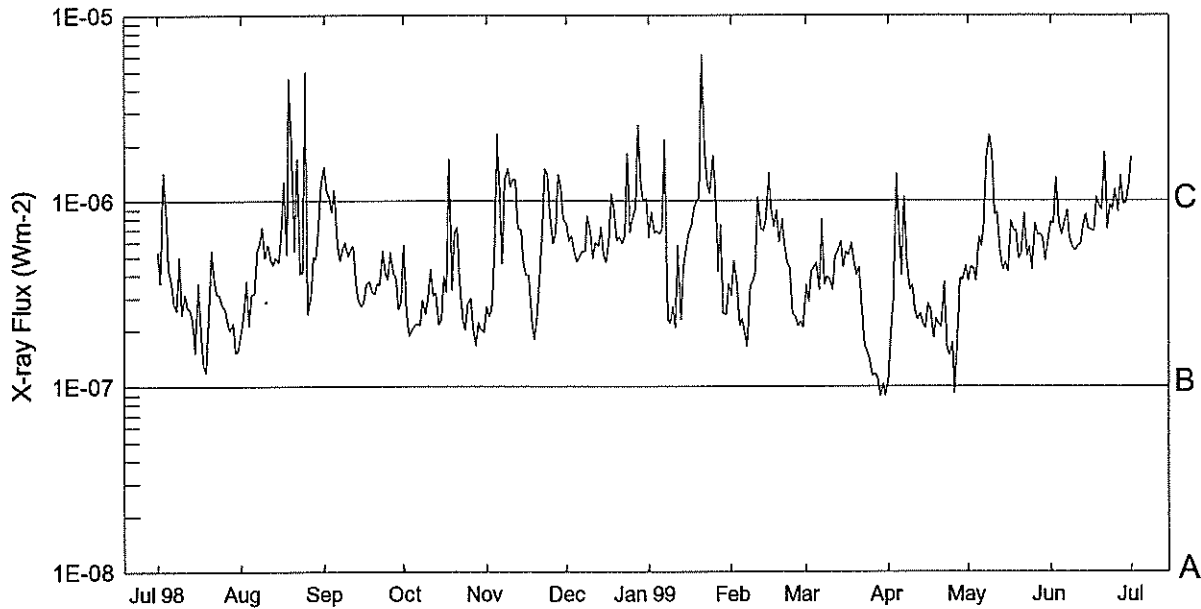
GOES SOLAR X-RAY FLARES
Preliminary Listing

June 1999

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
20	0833	0840	0847				C5.5		3.1E-03
20	1155	1159	1203				C1.5		6.2E-04
20	1355	1403	1407				C2.8		1.6E-03
20	1525	1535	1545	N22	E71	SB	M2.9		2.0E-02
20	1720	1727	1737				C3.8		3.3E-03
20	1908	2007	2035	N24	E67	SF	C5.1	8592	2.3E-02
20	2104	2109	2115				C3.8		2.3E-03
21	0000	0007	0028	N14	E75	SF	C3.4	8594	4.6E-03
21	0102	0120	0127	S12	W51	1F	C4.9	8583	5.5E-03
21	0910	0915	0917	N13	E69	SF	C1.6	8594	5.3E-04
21	1129	1132	1142				C1.2		8.3E-04
21	2304	2309	2318				C1.2		9.4E-04
22	0253	0257	0300	S20	E83	SF	C1.4	8599	4.9E-04
22	0725	0731	0746	S19	E79	SF	C1.6	8599	1.9E-03
22	1150	1215	1237				C2.6		5.7E-03
22	1737	1829	1854				M1.7		3.0E-02
23	0037	0047	0055	S12	W78	1F	C7.9	8583	5.7E-03
23	0649	0709	0735	N23	E42	2N	M1.7	8598	3.2E-02
23	1208	1252	1341	N23	E28	SF	C2.3	8592	9.8E-03
23	1555	1559	1601				C1.3		4.1E-04
23	1814	1817	1820	N23	E45	SF	C2.8	8598	8.0E-04
23	1829	1834	1842				C2.5		1.8E-03
23	1851	1857	1902				C2.8		1.4E-03
23	2044	2055	2102				C5.1		3.6E-03
23	2306	2316	2325				M1.1		8.5E-03
24	0141	0155	0217				C2.4		4.5E-03
24	0258	0303	0307				C2.0		9.5E-04
24	0410	0415	0422				C2.1		1.4E-03
24	0608	0638	0656	N26	E28	SF	C3.7	8598	8.8E-03
24	0806	0811	0815	N23	E38	1F	C6.5	8598	2.2E-03
24	0907	0922	0932	N22	E21	SF	C2.2	8596	3.0E-03
24	1204	1412	1510	N29	W13	1F	C4.1	8595	3.3E-02
24	1538	1543	1548	N24	E34	SF	C2.3	8598	1.3E-03
24	1720	1723	1727				C1.8		6.7E-04
24	1736	1739	1744	N22	E08	SF	C1.8	8592	7.8E-04
24	1826	1844	1905	N20	E26	1F	C3.3	8598	6.4E-03
24	2000	2004	2011				C3.3	8594	1.9E-03
24	2300	2305	2313	S16	E65	SF	C3.4	8603	2.4E-03
25	2152	2157	2203				C2.4		1.3E-03
26	0106	0125	0153	N17	E51	SF	C2.7	8602	6.1E-03
26	0154	0205	0214	S18	E53	SF	C2.7	8603	2.7E-03
26	0353	0356	0402				C1.7		8.3E-04
26	0508	0512	0514	N23	E03	2N	M2.3		3.9E-03

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
26	0714	0725	0749	N25	E00	1F	C7.0	8598	1.1E-02
26	1149	1152	1158				C3.1		1.6E-03
26	1233	1237	1243	N21	W03	SF	C2.2	8598	1.1E-03
26	1328	1334	1342				C3.0	8598	2.0E-03
26	1642	1650	1653	N24	W08	1N	C4.1	8596	1.9E-03
26	2028	2036	2043	N20	E38	SF	C4.2	8602	2.7E-03
27	0055	0137	0212				C2.7		1.1E-02
27	0222	0231	0239	N19	E35	SF	C2.5	8602	2.7E-03
27	0326	0332	0342	N18	E35	SF	C2.3	8602	2.0E-03
27	0834	0844	0902	N23	W25	2N	M1.0	8592	1.2E-02
27	1516	1533	1540	S25	E65	SF	C2.0	8611	2.6E-03
27	1821	1844	1952	N24	W12	SF	C3.4	8598	1.5E-02
27	2045	2054	2107	S25	E63	SF	C3.2		3.5E-03
28	0029	0037	0047	S27	E61	SF	C4.0	8611	3.2E-03
28	0301	0309	0316	S26	E57	SF	C5.6	8611	3.5E-03
28	0336	0340	0343	N16	W06	SF	C2.2	8606	9.0E-04
28	0529	0535	0544	S27	E55	SF	C1.3	8611	1.1E-03
28	1018	1024	1033	S27	E55	SF	C2.3	8611	1.9E-03
28	1213	1217	1225	S27	E54	SF	C1.6	8611	1.1E-03
28	1554	1600	1605	S26	E52	SF	C1.9	8611	1.1E-03
28	1815	1822	1832				C2.2		1.8E-03
28	1859	1934	1959	S25	E49	1F	C6.2	8611	1.9E-02
28	2055	2101	2117				C3.5	8592	4.0E-03
29	0501	0510	0517	N18	E07	SF	M1.4		8.8E-03
29	0558	0603	0621	S26	E48	SF	C1.9	8611	2.5E-03
29	0624	0632	0643	N19	E02	SF	C3.0	8602	2.9E-03
29	0813	0821	0827	S27	E41	1N	M3.1	8611	1.6E-02
29	1024	1027	1030				C2.9		8.0E-04
29	1240	1247	1255	N21	W45	1F	C2.8	8596	2.3E-03
29	1407	1413	1417				C3.7		1.5E-03
29	1455	1519	1543	N15	E02	SN	C3.9	8602	9.3E-03
29	1753	1803	1809	S15	E01	SF	C3.0	8603	2.1E-03
29	1907	1913	1920	S14	E01	1N	M1.6		7.3E-03
29	2143	2152	2159	N25	W47	SF	C1.9	8598	1.5E-03
29	2204	2211	2217	S13	E03	1N	C7.9	8603	3.9E-03
30	0305	0312	0318				C4.5		2.5E-03
30	0433	0446	0455	S26	E28	1N	M2.1	8611	1.7E-02
30	0640	0646	0651	S16	W13	1F	C5.2	8612	3.0E-03
30	0841	0845	0852	S15	W03	SF	C2.1	8603	1.3E-03
30	0921	0945	1004				C2.6		5.9E-03
30	1124	1130	1138	S15	E00	1B	M1.9	8603	1.1E-02
30	1229	1235	1244				C2.0		1.7E-03
30	1630	1642	1654	S27	E25	SF	C3.8	8611	4.4E-03
30	1803	1808	1816	S13	W05	2B	M2.0		9.8E-03
30	2007	2012	2015				M1.1	8606	3.3E-03

Preliminary GOES Satellite Daily X-Ray Background Jul 98 - Jun 99



Day	Jul 98	Aug	Sep	Oct	Nov	Dec	Jan 99	Feb	Mar	Apr	May	Jun
1	B5.3	B1.9	C1.5	B5.8	B2.7	B7.5	B6.3	B3.0	B3.5	B1.1	B3.7	B7.6
2	B3.6	B2.4	C1.1	B2.4	B2.4	B6.0	B8.7	B4.7	B2.8	B1.9	B4.3	B7.5
3	C1.4	B3.7	C1.0	B1.8	B2.6	B6.5	B6.7	B3.5	B4.1	B2.9	B4.3	C1.3
4	B9.2	B2.1	B8.7	B2.0	B4.8	B5.4	B6.8	B2.1	B4.3	C1.3	B3.7	B7.5
5	B4.2	B3.1	C1.1	B2.1	C2.3	B4.7	B6.6	B2.3	B4.6	B6.8	B6.3	B6.5
6	B3.5	B3.1	B5.8	B2.1	C1.1	B5.0	B7.0	B1.9	B3.3	B3.9	B5.6	B7.4
7	B2.8	B5.4	B4.7	B2.1	B4.6	B5.3	C2.1	B1.6	B8.0	C1.0	B7.6	B8.9
8	B2.5	B5.8	B5.4	B2.9	C1.3	B5.3	B2.3	B3.4	B3.5	B4.8	C1.6	B6.3
9	B5.0	B7.2	B6.0	B2.4	C1.5	B8.3	B2.2	B3.6	B3.9	B3.3	C2.2	B5.6
10	B2.4	B4.9	B5.0	B3.0	C1.2	B6.8	B2.7	B4.1	B3.7	B3.5	C1.8	B5.3
11	B3.1	B5.8	B5.4	B4.2	C1.3	B4.9	B2.0	C1.0	B3.3	B2.6	B8.4	B5.7
12	B2.6	B4.8	B5.7	B3.0	C1.3	B6.0	B5.7	B7.1	B5.0	B2.3	B8.7	B5.8
13	B2.6	B4.5	B3.4	B3.2	B7.1	B5.6	B2.2	B6.8	B5.2	B2.4	B5.4	B7.0
14	B2.2	B4.9	B2.9	B2.1	B7.0	B7.2	B4.4	B7.8	B6.0	B2.1	B4.2	B8.5
15	B1.5	B4.6	B2.7	B2.3	B4.5	B5.1	B5.5	C1.4	B4.3	B2.0	B4.6	B7.0
16	B3.6	B6.5	B2.8	B3.9	B4.0	B4.6	B6.6	B9.2	B5.3	B2.8	B4.1	B6.9
17	B2.0	C1.2	B3.6	B3.2	B4.0	B5.8	B7.4	B7.2	B5.0	B2.6	B7.7	B6.8
18	B1.2	B5.1	B3.7	C1.6	B2.3	C1.0	B9.2	B8.9	B5.9	B1.8	B6.9	C1.0
19	B1.2	C4.5	B3.2	B3.3	B1.8	B8.7	C1.0	B6.0	B4.6	B2.3	B6.8	B9.3
20	B2.5	C1.6	B3.1	B6.7	B2.3	B6.1	C1.0	B7.9	B3.9	B2.1	B4.8	B9.0
21	B5.4	B5.3	B3.5	B7.2	B4.2	B6.3	C6.1	B5.9	B4.4	B2.0	B5.1	C1.8
22	B3.8	C1.6	B3.5	B3.7	B7.2	B5.9	C1.8	B4.6	B2.8	B3.6	B8.5	B7.0
23	B3.1	B4.0	B5.3	B2.3	C1.5	B6.5	C1.2	B4.4	B1.6	B1.6	B5.0	B9.4
24	B3.1	B4.1	B4.1	B2.0	C1.4	C1.8	C1.0	B2.4	B1.5	B1.4	B5.6	B8.9
25	B2.7	B4.9	B3.7	B2.8	B8.4	B6.7	C1.7	B2.3	B1.4	B1.7	B4.2	C1.1
26	B2.6	B2.4	B5.3	B3.0	B5.9	B8.0	C1.1	B2.1	B1.1	A9.1	B7.5	B8.7
27	B2.2	B3.0	B4.0	B2.1	B6.8	B9.2	B4.2	B2.2	B1.1	B1.8	B6.5	C1.3
28	B2.0	B5.0	B3.8	B1.6	C1.4	C2.5	B7.4	B2.0	B1.1	B3.8	B6.6	B9.6
29	B2.2	B4.8	B2.6	B2.2	C1.2	C1.2	B2.4		A8.9	B3.7	B6.3	B9.6
30	B1.5	B7.3	B2.8	B2.0	B8.0	B9.9	B2.4		B1.0	B4.4	B4.7	C1.2
31	B1.5	C1.2		B1.9		C1.0	B3.6		A8.9		B6.3	

ACTIVE PROMINENCES AND FILAMENTS

JUNE 1999

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
04	EPL	0753	0801	N18	W90	05	28.6	3		9	9	E	LEAR	8552	Flare Associated
04	BSL	0947	1000	N16	W90	05	28.6	1	03		9	V	KHAR		
04	DSD	1117U	1137	N17	E77	06	10.3	1	04	9		V	KHAR		
04	ADF	1135	1157	N24	E75	06	10.2	1	05	9		V	KHAR		
05	DSD	1000E	1035	S13	W25	06	3.5	1	05	9	9	V	KHAR		
05	APR	1010	1045	N19	W90	05	29.6	1	03	9	9	V	KHAR		
05	BSL	1110	1137	N23	W90	05	29.6	1	02	9	9	V	KHAR		
07	ADF	1205	1225D	S15	W69	06	2.3	1	04	9	9	V	KHAR		
07	DSF	1511U	1226U	S34	E28	06	9.9		11	0	0	E	RAMY		
08	DSF	0110U	1226U	S35	E21	06	9.7	3	13	0	0	E	HOLL		
08	DSF	0906U	2335U	S41	E20	06	10.0		07	0	0	E	LEAR		
09	ADF	0900E	0920U	S24	E32	06	11.8	1	05	9	6	V	KHAR		
09	ASR	1000E	1120	S19	W90	06	2.5	1	5			P	WROC		
10	ASR	0825E	0946	S23	E90	06	17.3	0	2			P	WROC		
10	DSD	0950	0958	S15	E70	06	15.7	1	02	9	9	V	KHAR		
11	ADF	0940	1019	S11	E49	06	15.1	1	05	9	9	V	KHAR		
11	BSL	0958	1005	S20	E90	06	18.2	1	02	9	9	V	KHAR		
11	EPL	1110E	1116D	N38	E90	06	18.7	3		9	9	E	RAMY		
11	APR	1114	1135	N55	E90	06	18.3	1	05	9		V	KHAR		
11	SPY	1114	1145	N40	E90	06	18.3	2	15	9	9	V	KHAR		
11	APR	1148	1200D	N58	E90	06	18.3	1	05	9	6	V	KHAR		
11	LPS	1202E	1551	N42	E90	06	18.9			9	9	E	RAMY		
11	LPS	1310E	1610D	N41	E90	06	18.9			9	9	E	SVTO		
12	SPY	1327	1401	S13	E63	06	17.3			9	9	E	RAMY	8583	Flare Associated
12	BSL	1341	1357	S13	E66	06	17.6			7	5	E	HOLL	8583	Flare Associated
12	EPL	1359E	1415	S23	E90	06	19.5	3		9	9	E	SVTO		
13	DSF	1711U	1221U	S67	E63	06	19.4		48	0	0	E	RAMY		
14	DSD	0807E	0826	N25	E01	06	14.4	1	02	9	9	V	KHAR		
14	DSD	0820	0830	N13	W52	06	10.4	1	02		9	V	KHAR		
15	ADF	0939U	1015	N24	E20	06	16.9	1	03	9	9	V	KHAR		
15	DSF	1300U	1435	S23	W44	06	12.1	2	08	7	7	E	RAMY		
16	APR	0944E	1200D	S29	W90	06	9.6	1	05	9	9	V	KHAR		
16	DSD	1009U	1020	N45	E34	06	19.0	1	03	9		V	KHAR		
16	ADF	1020	1028	S16	W15	06	15.3	1	04	9	9	V	KHAR		
16	ADF	1120	1134	S24	W11	06	15.6	1	03	9	9	V	KHAR		
16	EPL	1527	1655	S27	W90	06	9.6	3		7	8	E	RAMY		
17	EPL	0024	0043	N18	W90	06	10.2	3		9	9	E	LEAR	8569	Flare Associated
18	DSF	1634U	1207U	S30	W41	06	15.5		15	0	0	E	RAMY		
18	DSF	2352	0134	S45	W51	06	14.7	1	20	0	0	E	LEAR		
19	DSF	0021U	1834U	S43	W52	06	14.7	3	12	0	0	E	HOLL		
19	DSF	0909U	2355U	N05	W46	06	15.9		17	0	0	E	LEAR		
19	LPS	1413E	1541D	N18	E90	06	26.4			4	5	E	RAMY	8592	
20	DSF	1529U	1532	N22	E75	06	26.4	3	06	9	9	E	RAMY	8592	Flare Associated
21	DSD	0950E	1000	N38	W32	06	19.0	1	03	9	9	V	KHAR		
21	BSL	1100	1142	S11	E90	06	28.3	1	04	9	9	V	KHAR		
23	BSL	1050	1118U	N23	E90	06	30.3	1	05	9	9	V	KHAR		
23	BSL	1118E	1126	N21	E90	06	30.3	1	03	9	9	V	KHAR		
23	ADF	1218	1310D	N18	E62	06	28.2	1	06		9	V	KHAR		
24	DSF	0121U	1255U	N34	W01	06	24.0		11	0	0	E	HOLL	8595	
24	DSF	0914U	2357U	N38	W02	06	24.2		18	0	0	E	LEAR		
24	DSF	1051	1418	N33	E09	06	25.2	3	15	0	0	E	SVTO	8595	
24	DSF	1813	1831	N18	E27	06	26.8	3	07	9	9	E	HOLL	8598	

ACTIVE PROMINENCES AND FILAMENTS

53
Jun 99

JUNE 1999

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
25	DSF	0914U	2357U	N38	W02	06	25.2		18	0	0	E	LEAR		
28	BSL	0719E	0736	N37	W90	06	21.0	0	4			P	WROC		
28	BSL	0741E	0744D	N34	W90	06	21.1	0	1			P	WROC		
30	BSL	1255	1307	N14	E90	07	7.3			9	9	E	SVTO		
30	DSF	1722U	0630U	S29	W22	06	29.0	2	19	0	0	E	SVTO		

ADF = Active Dark Filament	BSL = Bright Surge on Limb	EPL = Eruptive Prominence on Limb
AFS = Arch Filament System	CAP = CAP Prominence (Tandberg-Hanssen)	LPS = Loops
APR = Active Prominence	CRN = Coronal Rain	MDP = Mound Prominence
ASR = Active Surge Region	DSD = Dark Surge on Disk	SDF/DSF = Sudden Disappearing Filament
BSD = Bright Surge on Disk	DSF = Disappearing Solar Filament	SPY = Spray
		SSB = Solar Sector Boundary

For SOLAR SECTOR BOUNDARY REPORTS, the latitude field contains the Carrington longitude of the point where a neutral line crosses the solar equator. The comments field may contain the Carrington longitude and central meridian distance of two more intersection points.

The EXTENT field for limb events is the radial extent above the limb in hundredths of solar radius. For disk events this field contains the heliographic extent in whole degrees.

The remark "Bright Emission 1/3" indicates that bright emission was observed 1/3 of time. The remark "Normal Emission 1/3" indicates that normal emission was observed 1/3 of time.

Observation Type: C= Cinematographic, E= Electronic, P= Photographic, V= Visual.

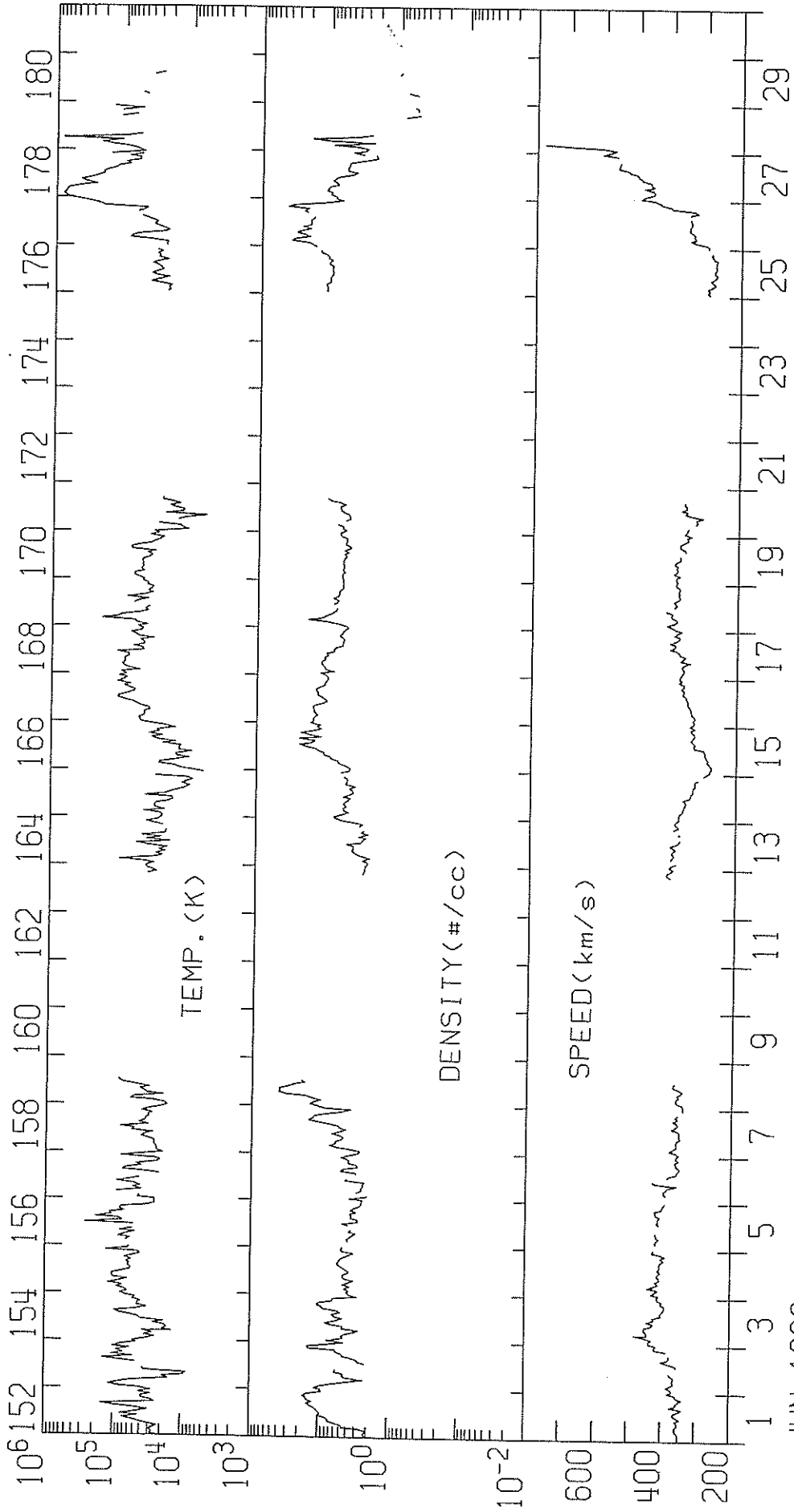
ABST = Abastumani	HOLL = Holloman	RAMY = Ramey
ATHN = Athens	KHAR = Kharkov	SVTO = San Vito
BUCA = Bucharest	LEAR = Learmonth	VORO = Voroshilov
CATA = Catania	PALE = Palehua	VALA = Valasske Mezirici
		WROC = Wroclaw

NOTE: The U.S. Air Force solar observing sites (HOLL, LEAR, RAMY, AND SVTO) have changed operational requirements and will only report the following: BSL, EPL, LPS, SPY, and DSF's.

IMP 8 SOLAR WIND PLASMA
JUNE 1999

MIT/CSR

IMP 8 PLASMA PARAMETERS



JUN 1999

JUN 1999

IMP 8

MIT

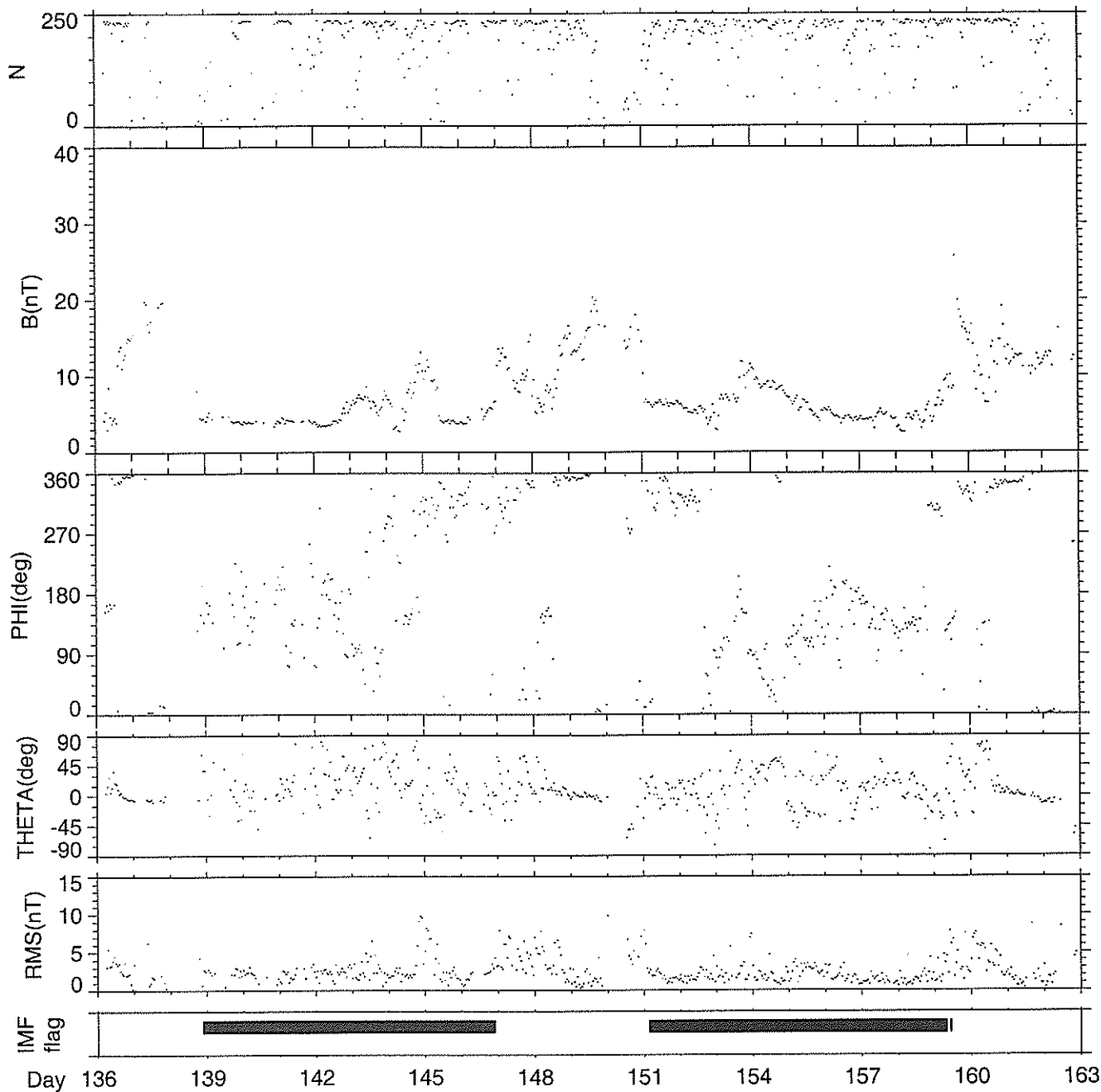
ONE-HOUR AVERAGES

IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages

(c) DOY 136 - 163

May 16 1999 - June 12 1999



Generation Date : Tue Aug 3 12:30:27 1999

NOTE: The IMF "flag" (black boxes at the bottom of the plots) indicates where the interplanetary magnetic field regions are according to a dynamic model of the location of the bow shock. At all other times IMP-8 is in the magnetosphere.

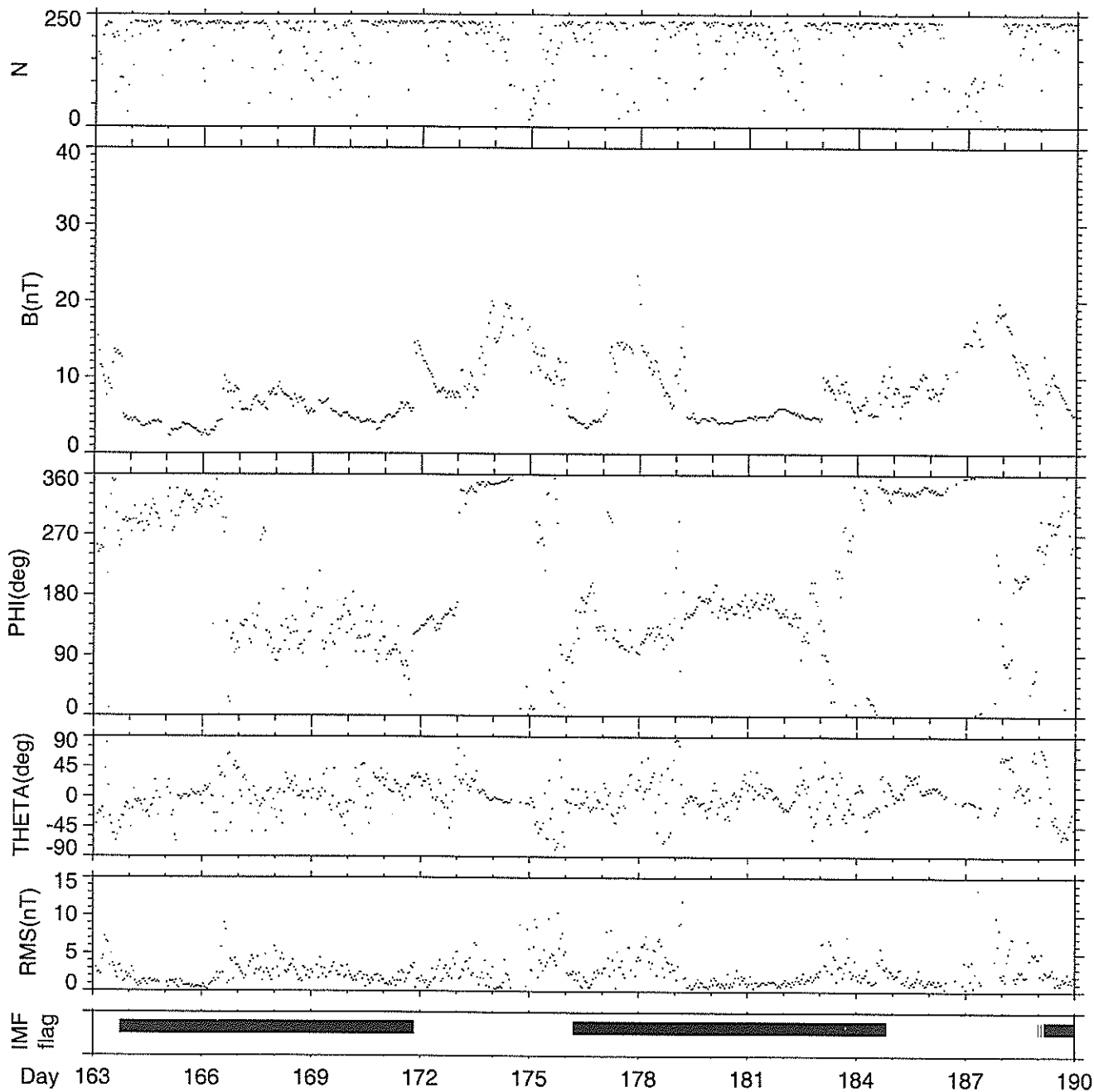
IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages

(c) DOY 163 - 190

June 12 1999 -

July 9 1999



Generation Date : Thu Aug 26 10:02:27 1999

NOTE: The IMF "flag" (black boxes at the bottom of the plots) indicates where the interplanetary magnetic field regions are according to a dynamic model of the location of the bow shock. At all other times IMP-8 is in the magnetosphere.

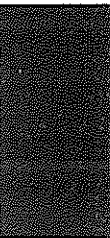
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Number 664 Part II

MISCELLANEOUS and LATE DATA

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SOLAR RADIO NOISE STORM AT 164 MHZ

**FROM NANCAY RADIOHELIOGRAPH
SEPTEMBER 1999**

DAY	HELIOGRAPHICS POSITIONS MEAN VALUES ¹		IMP ²	OBSERVING TIME ³	
	E-W	S-N		START(UT)	END(UT)
05/09/99	+0.43	+0.02	I	12H15	15H20 D
06/09/99	-1.19	-0.45	I	10H08 E	15H19 D
07/09/99	-1.15	+0.22	II	10H48	15H19 D
07/09/99	-1.10	-0.48	I	8H19 E	11H34
08/09/99	-0.87	+0.03	IV	8H24 E	15H19 D
09/09/99	-0.71	+0.05	I	8H18 E	15H18 D
10/09/99	-0.36	-0.03	I	8H18 E	15H18 D
10/09/99	-0.79	+0.08	I	13H02	15H18 D
11/09/99	-0.51	+0.11	I	8H17 E	10H33 D
11/09/99	-0.29	-0.85	I	8H17 E	10H33 D
11/09/99	-0.11	-0.12	I	8H17 E	10H33 D
13/09/99	-0.06	+0.36	I	8H17 E	15H17 D
14/09/99	+0.51	+0.29	I	9H04 E	12H48 D
14/09/99	+0.64	-0.09	I	10H43	12H48 D
14/09/99	+0.42	-0.68	I	9H04 E	12H48 D
15/09/99	+0.40	-0.64	I	8H16 E	15H16 D
15/09/99	+0.67	+0.37	I	8H16 E	15H16 D
15/09/99	+0.76	-0.71	I	12H39	15H16 D
15/09/99	-1.21	+0.22	I	13H19	15H16 D
18/09/99	+0.26	-0.54	I	8H15 E	13H40
18/09/99	+1.22	+0.56	I	8H15 E	15H15 D
19/09/99	-0.09	-0.05	I	12H20	15H15 D
21/09/99	+1.43	-0.65	I	10H07	12H10
24/09/99	-0.22	+0.22	I	9H07	12H50
25/09/99	+0.05	+0.11	I	8H13 E	15H13 D
26/09/99	+0.37	+0.09	I	8H12 E	15H12 D
27/09/99	+0.65	+0.16	I	8H12 E	12H15

¹ POSITIVE E-W AND S-N COORDINATES CORRESPOND TO THE N-W QUADRANT

² IMP1: FLUX < 5 SFU IMP2: 5 < FLUX < 20 SFU IMP3: 20 < FLUX < 100 SFU
IMP4: 100 < FLUX < 300 SFU IMP5 > 300 SFU

³ E NOISE STORM IN PROGRESS AT THE BEGINNING OF THE NANCAY OBSERVATIONS
D NOISE STORM IN PROGRESS AT THE END OF THE NANCAY OBSERVATIONS

SOLAR RADIO NOISE STORM AT 327 MHZ

**FROM NANCAY RADIOHELIOGRAPH
SEPTEMBER 1999**

DAY	HELIOGRAPHICS POSITIONS MEAN VALUES ¹		IMP ²	OBSERVING TIME ³	
	E-W	S-N		START(UT)	END(UT)
05/09/99	+0.43	+0.19	I	10H23	15H09 D
06/09/99	-1.07	-0.40	I	10H08 E	15H19 D
06/09/99	+1.22	+0.59	I	10H08 E	15H19 D
07/09/99	-1.04	+0.16	I	8H19 E	15H19 D
07/09/99	-1.02	-0.43	I	8H19 E	15H19 D
08/09/99	-0.91	-0.47	III	8H24 E	15H19 D
08/09/99	-0.79	+0.02	II	8H24 E	15H19 D
09/09/99	-0.79	-0.45	I	8H18 E	15H18 D
09/09/99	-0.62	+0.08	I	8H18 E	15H18 D
10/09/99	-0.57	-0.56	I	8H18 E	15H18 D
10/09/99	-0.37	-0.03	I	8H18 E	15H18 D
10/09/99	-0.71	+0.09	I	13H55	15H18 D
11/09/99	-0.60	-0.70	I	8H17 E	10H33 D
11/09/99	-0.47	+0.16	I	8H17 E	10H33 D
11/09/99	-0.37	-0.56	I	8H17 E	10H33 D
13/09/99	+0.19	-0.54	I	8H17 E	15H17 D
13/09/99	-0.11	+0.40	I	10H30	15H17 D
13/09/99	+0.33	+0.20	I	13H30	15H17 D
14/09/99	+0.33	-0.59	I	9H04 E	12H48 D
14/09/99	+0.57	+0.12	I	9H04 E	12H48 D
15/09/99	+0.53	-0.59	I	8H16 E	15H16 D
15/09/99	+0.78	.008	I	8H16 E	15H16 D
16/09/99	+0.84	+0.37	I	8H20 E	13H16 D
16/09/99	+0.93	+0.06	I	8H20 E	13H16 D
16/09/99	+0.71	-0.57	I	8H20 E	13H16 D
18/09/99	+1.15	+0.31	I	8H15 E	15H15 D
18/09/99	+1.12	-0.43	I	8H15 E	15H15 D
20/09/99	+1.29	-0.39	I	10H30	13H20
21/09/99	+1.32	-0.60	I	10H00	11H40
24/09/99	-0.19	+0.17	I	8H03 E	15H13 D
25/09/99	+0.12	+0.17	I	8H13 E	15H13 D
26/09/99	+0.47	+0.09	I	8H12 E	13H50

12, 23 September 1999: NO DATA

OTHERS DAYS: NO DETECTABLE NOISE STORM

Total Solar Irradiance (TSI) Results from VIRGO (Variability of solar IRradiance and Gravity Oscillations) Onboard SOHO (Solar and Heliospheric Observatory)

NOTE: Version 1.2 shows also new VIRGO irradiance data after the vacation of SOHO in summer 1998. Note that in Version 1.2 the values after June 25 1998 are preliminary. More detailed information about the individual measurements of the VIRGO radiometers can be found on the VIRGO homepage: <http://virgo.so.estec.esa.nl/>

Total Solar Irradiance results from VIRGO (Variability of solar IRradiance and Gravity Oscillations) onboard SOHO (SOLar and Heliospheric Observatory). The solar irradiance data and the evaluation of level 2 data are briefly described in the two papers below:

IN-FLIGHT PERFORMANCE OF THE VIRGO SOLAR IRRADIANCE INSTRUMENTS ON SOHO

(in Solar Phys. 175, pp.267-286, 1997)

Claus Fröhlich(1), Dominique A. Crommelynck(2), Christoph Wehrli(1), Martin Anklin(1), Steven Dewitte(2), Alain Fichot(2), Wolfgang Finsterle(1), Antonio Jiménez(3), André Chevalier(2), Hansjörg Roth(1)

(1) Physikalisches-Meteorologisches Observatorium Davos, World
Radiation Center, CH-7260 Davos Dorf

(2) Institut Royal Météorologique de Belgique, B-1180 Bruxelles

(3) Instituto de Astrofísica de Canarias, Universidad de La Laguna,
E-38071 La Laguna, Tenerife

ABSTRACT

The inflight performance of the total and spectral irradiance instruments within VIRGO (Variability of solar IRradiance and Gravity Oscillations) on the ESA/NASA Mission SOHO (SOLar and Heliospheric Observatory) is in most aspects better than expected. The behaviour during the first year of operation of the two type of radiometers and the sunphotometers together with a description of their data evaluation procedures is presented.

ASSESSMENT OF DEGRADATION OF VIRGO RADIOMETERS ONBOARD SOHO

(in Metrologia, 35, p.685-688, 1999)

M. Anklin, C. Fröhlich, W. Finsterle
Physikalisch-Meteorologisches Observatorium Davos, CH-7260 Davos Dorf

D. A. Crommelynck, S. Dewitte
Institut Royale Météorologique de Belgique, B-1180 Bruxelles

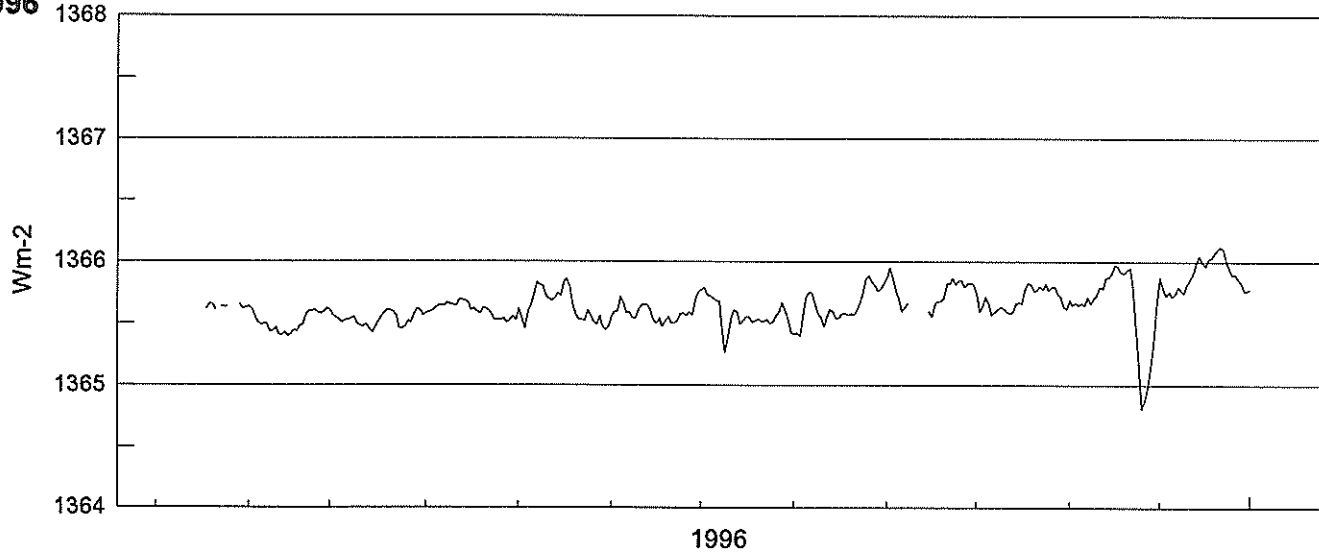
ABSTRACT

The determination of the total solar irradiance (TSI) from the SOHO/VIRGO experiment is made by first correcting the time series for all a priori known influences and, second, to correct the data for instrumental degradation, using the back-up instruments PMO6-VB and DIARAD-R. The long term behaviour of PMO6-VA shows an exponential decrease in its sensitivity with a time constant of $t=390$ days and a $1/e$ amplitude of 528 ppm, whereas DIARAD-L exhibits a general increase in its sensitivity of about 0.25 ppm/day combined with an early exponential decrease of $t=405$ days and an $1/e$ amplitude of 65 ppm. After correcting PMO6-VA and DIARAD-L for their degradation, the VIRGO TSI shows a minimum around July 1996 and has been increasing since then by about 0.4 Wm^{-2} .

Editor's Note: These data can also be accessed from the NGDC web site <http://www.ngdc.noaa.gov/stp>. Click on the Solar and Upper Atmosphere icon, then on the Get Data icon and scroll down to Solar_Irradiance.

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Misc
1996

SOHO/VIRGO Total Solar Irradiance 1996-Updated

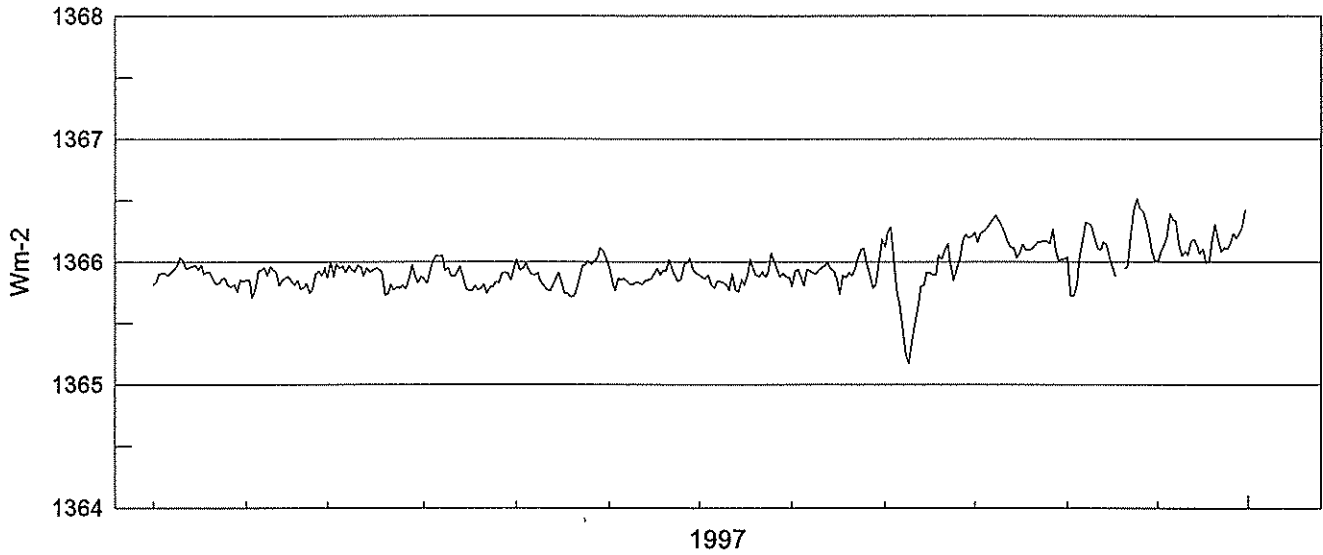


Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	---	1365.636	1365.547	1365.593	1365.613	1365.559	1365.772	1365.413	1365.871	1365.744	1365.689	1365.871
2	---	1365.617	1365.532	1365.604	1365.536	1365.591	1365.789	1365.426	1365.950	1365.595	1365.646	1365.787
3	---	1365.568	1365.508	1365.624	1365.461	1365.595	1365.724	1365.400	1365.865	1365.642	1365.667	1365.724
4	---	1365.511	1365.528	1365.644	1365.597	1365.715	1365.725	1365.569	1365.760	1365.714	1365.647	1365.755
5	---	1365.489	1365.526	1365.644	1365.644	1365.658	1365.705	1365.710	1365.693	1365.664	1365.665	1365.718
6	---	1365.495	1365.536	1365.643	1365.722	1365.589	1365.685	1365.753	1365.595	1365.566	1365.644	1365.735
7	---	1365.501	1365.551	1365.671	1365.831	1365.589	1365.678	1365.743	1365.631	1365.593	1365.715	1365.795
8	---	1365.437	1365.497	1365.653	1365.806	1365.546	1365.455	1365.653	1365.661	1365.615	1365.657	1365.760
9	---	1365.442	1365.478	1365.646	1365.808	1365.542	1365.268	1365.580	---	1365.632	1365.703	1365.745
10	---	1365.469	1365.477	1365.643	1365.727	1365.608	1365.401	1365.549	---	1365.624	1365.722	1365.821
11	---	1365.417	1365.497	1365.689	1365.695	1365.647	1365.548	1365.477	---	1365.594	1365.795	1365.861
12	---	1365.404	1365.461	1365.688	1365.683	1365.653	1365.606	1365.558	---	1365.584	1365.778	1365.907
13	---	1365.430	1365.431	1365.681	1365.699	1365.650	1365.599	1365.613	---	1365.588	1365.869	1365.991
14	---	1365.401	1365.463	1365.666	1365.740	1365.610	1365.496	1365.596	---	1365.658	1365.874	1366.045
15	---	1365.417	1365.512	1365.609	1365.724	1365.533	1365.528	1365.536	1365.597	1365.670	1365.904	1365.999
16	---	1365.446	1365.551	1365.623	1365.840	1365.503	1365.553	1365.545	1365.550	1365.665	1365.974	1365.966
17	---	1365.440	1365.587	1365.590	1365.859	1365.540	1365.549	1365.575	1365.665	1365.766	1365.960	1366.019
18	1365.617	1365.484	1365.608	1365.584	1365.798	1365.476	1365.511	1365.583	1365.678	1365.828	1365.918	1366.030
19	1365.660	1365.487	1365.605	1365.625	1365.645	1365.518	1365.523	1365.569	1365.677	1365.817	1365.904	1366.068
20	1365.654	1365.565	1365.591	1365.621	1365.569	1365.549	1365.534	1365.575	1365.705	1365.761	1365.930	1366.101
21	1365.608	1365.603	1365.564	1365.601	1365.530	1365.506	1365.516	1365.568	1365.829	1365.767	1365.947	1366.114
22		1365.597	1365.466	1365.560	1365.532	1365.500	1365.522	1365.608	1365.820	1365.800	1365.816	1366.100
23	1365.640	1365.607	1365.460	1365.529	1365.523	1365.520	1365.531	1365.667	1365.869	1365.775	1365.502	1365.993
24	1365.635	1365.587	1365.477	1365.524	1365.606	1365.576	1365.503	1365.757	1365.816	1365.820	1365.185	1365.938
25	1365.639	1365.577	1365.523	1365.531	1365.566	1365.585	1365.511	1365.855	1365.849	1365.763	1364.809	1365.891
26	---	1365.595	1365.508	1365.536	1365.517	1365.562	1365.568	1365.886	1365.846	1365.796	1364.867	1365.896
27	---	1365.624	1365.579	1365.506	1365.489	1365.592	1365.597	1365.834	1365.797	1365.795	1364.966	1365.857
28	---	1365.605	1365.616	1365.526	1365.556	1365.565	1365.668	1365.804	1365.827	1365.735	1365.134	1365.828
29	1365.653	1365.561	1365.606	1365.556	1365.481	1365.693	1365.609	1365.759	1365.826	1365.718	1365.346	1365.765
30	1365.625		1365.562	1365.527	1365.449	1365.749	1365.533	1365.782	1365.814	1365.641	1365.626	1365.765
31	1365.626		1365.581		1365.475		1365.430	1365.826		1365.618		1365.782

NOTE: '---' indicates data not available.

SOHO/VIRGO Total Solar Irradiance 1997-UPDATED

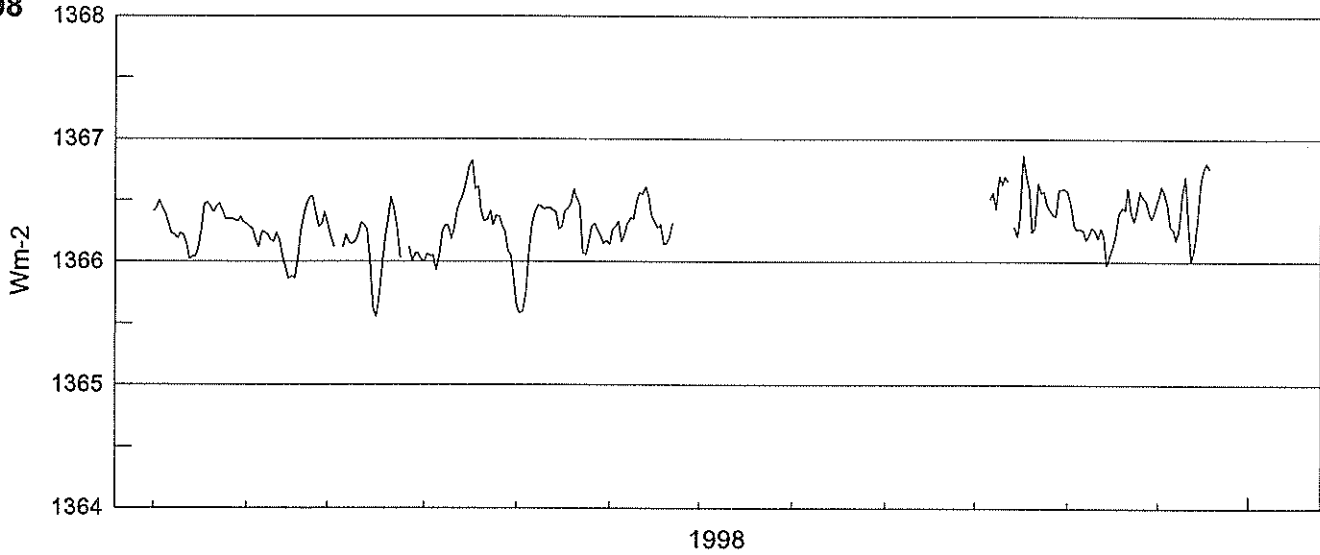
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Misc
1997



Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1365.815	1365.854	1366.007	1365.860	1365.955	1366.023	1365.908	1365.874	1366.185	1366.210	1366.023	1366.010
2	1365.830	1365.853	1365.880	1365.826	1366.019	1365.953	1365.891	1365.801	1366.124	1366.241	1366.041	1366.000
3	1365.902	1365.712	1365.983	1365.920	1365.932	1365.856	1365.873	1365.921	1366.243	1366.157	1365.718	1366.089
4	1365.906	1365.769	1365.948	1366.002	1365.943	1365.768	1365.865	1365.941	1366.283	1366.233	1365.719	1366.132
5	1365.906	1365.926	1365.964	1366.055	1365.997	1365.866	1365.894	1365.865	1366.009	1366.249	1365.813	1366.205
6	1365.888	1365.933	1365.914	1366.044	1365.934	1365.849	1365.813	1365.806	1365.744	1366.275	1366.036	1366.390
7	1365.912	1365.954	1365.971	1366.057	1365.898	1365.868	1365.788	1365.939	1365.658	1366.308	1366.172	1366.334
8	1365.938	1365.889	1365.941	1365.929	1365.892	1365.842	1365.841	1365.927	1365.449	1366.339	1366.319	1366.329
9	1365.974	1365.965	1365.918	1365.956	1365.906	1365.818	1365.843	1365.910	1365.239	1366.375	1366.312	1366.135
10	1366.035	1365.930	1365.973	1365.889	1365.840	1365.814	1365.833	1365.901	1365.177	1366.331	1366.288	1366.048
11	1366.010	1365.919	1365.955	1365.881	1365.810	1365.834	1365.812	1365.935	1365.322	1366.283	1366.192	1366.084
12	1365.942	1365.807	1365.888	1365.908	1365.777	1365.831	1365.772	1365.955	1365.481	1366.239	1366.105	1366.055
13	1365.952	1365.857	1365.949	1365.961	1365.759	1365.812	1365.903	1365.975	1365.606	1366.160	1366.099	1366.166
14	1365.961	1365.873	1365.916	1365.875	1365.803	1365.849	1365.769	1365.995	1365.794	1366.118	1366.164	1366.182
15	1365.975	1365.882	1365.935	1365.778	1365.856	1365.854	1365.757	1365.944	1365.811	1366.111	1366.137	1366.128
16	1365.939	1365.846	1365.950	1365.768	1365.914	1365.864	1365.856	1365.921	1365.914	1366.033	1366.025	1366.066
17	1365.976	1365.811	1365.938	1365.767	1365.831	1365.903	1365.813	1365.852	1365.914	1366.071	1365.951	1366.109
18	1365.904	1365.850	1365.916	1365.806	1365.744	1365.948	1365.889	1365.734	1365.893	1366.141	1365.884	1365.989
19	1365.918	1365.783	1365.728	1365.770	1365.744	1365.893	1366.018	1365.892	1365.895	1366.097	---	1366.007
20	1365.912	1365.784	1365.741	1365.782	1365.714	1365.927	1365.932	1365.871	1366.054	1366.102	---	1366.199
21	1365.849	1365.825	1365.817	1365.814	1365.721	1365.928	1365.895	1365.911	1366.023	1366.102	1365.951	1366.302
22	1365.820	1365.747	1365.771	1365.742	1365.762	1366.022	1365.885	1365.889	1366.090	1366.132	1365.957	1366.171
23	1365.828	1365.770	1365.796	1365.794	1365.869	1365.933	1365.916	1365.940	1366.149	1366.163	1366.216	1366.083
24	1365.866	1365.900	1365.787	1365.797	1365.962	1365.878	1365.878	1366.034	1365.984	1366.163	1366.432	1366.114
25	1365.869	1365.925	1365.812	1365.836	1365.977	1365.844	1365.910	1366.100	1365.854	1366.168	1366.512	1366.103
26	1365.805	1365.888	1365.779	1365.830	1366.012	1365.861	1366.076	1366.107	1365.939	1366.166	1366.437	1366.142
27	1365.795	1365.937	1365.861	1365.909	1365.979	1365.982	1365.998	1365.984	1366.023	1366.150	1366.411	1366.231
28	1365.818	1365.872	1365.976	1365.914	1366.007	1365.997	1365.932	1365.890	1366.170	1366.269	1366.330	1366.188
29	1365.757		1365.879	1365.908	1366.036	1366.030	1365.877	1365.785	1366.225	1366.113	1366.221	1366.231
30	1365.849		1365.832	1365.852	1366.119	1365.934	1365.905	1365.813	1366.194	1366.011	1366.098	1366.282
31	1365.846		1365.882		1366.090		1365.876	1365.991		1366.017		1366.426

NOTE: '---' indicates data not available.

SOHO/VIRGO Total Solar Irradiance 1998 - Updated

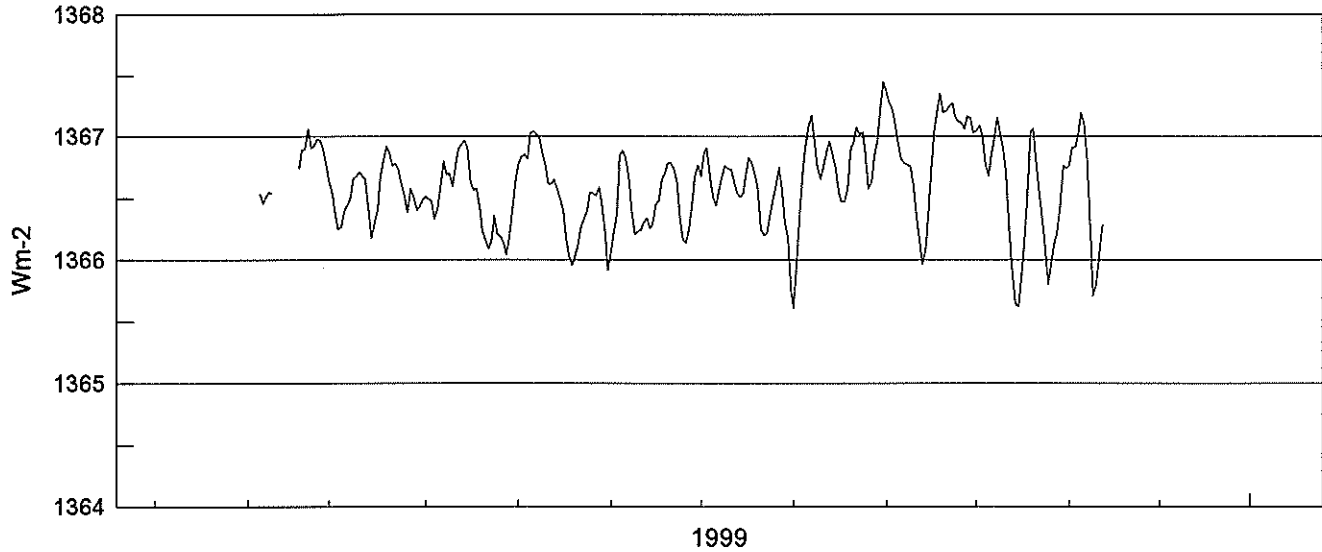


Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1366.410	1366.303	1366.206	1365.999	1365.821	1366.173	---	---	---	---	1366.591	1366.429
2	1366.431	1366.278	1366.115	1366.066	1365.645	1366.138	---	---	---	---	1366.571	1366.511
3	1366.497	1366.267	---	1366.045	1365.582	1366.262	---	---	---	---	1366.467	1366.616
4	1366.439	1366.179	---	1366.051	1365.595	1366.286	---	---	---	---	1366.298	1366.571
5	1366.387	1366.115	1366.119	1365.928	1365.760	1366.325	---	---	---	---	1366.261	1366.477
6	1366.317	1366.244	1366.221	1366.056	1366.067	1366.161	---	---	---	---	1366.268	1366.284
7	1366.226	1366.240	1366.158	1366.256	1366.299	1366.211	---	---	---	1366.515	1366.257	1366.266
8	1366.221	1366.216	1366.140	1366.293	1366.413	1366.307	---	---	---	1366.564	1366.175	1366.178
9	1366.190	1366.172	1366.157	1366.292	1366.460	1366.354	---	---	---	1366.427	1366.219	1366.264
10	1366.228	1366.165	1366.221	1366.185	1366.451	1366.343	---	---	---	1366.696	1366.281	1366.559
11	1366.220	1366.233	1366.316	1366.278	1366.425	1366.491	---	---	---	1366.631	1366.256	1366.697
12	1366.147	1366.166	1366.295	1366.420	1366.437	1366.562	---	---	---	1366.690	1366.189	1366.349
13	1366.020	1366.038	1366.263	1366.493	1366.442	1366.550	---	---	---	1366.651	1366.273	1366.006
14	1366.041	1365.942	1366.011	1366.552	1366.417	1366.609	---	---	---	---	1366.210	1366.100
15	1366.039	1365.863	1365.617	1366.668	1366.408	1366.522	---	---	---	1366.281	1365.973	1366.322
16	1366.111	1365.883	1365.551	1366.778	1366.264	1366.379	---	---	---	1366.206	1366.054	1366.643
17	1366.276	1365.866	1365.691	1366.823	1366.285	1366.328	---	---	---	1366.361	1366.133	1366.742
18	1366.461	1366.021	1365.947	1366.592	1366.407	1366.276	---	---	---	1366.877	1366.220	1366.809
19	1366.483	1366.236	1366.195	1366.617	1366.433	1366.301	---	---	---	1366.697	1366.398	1366.756
20	1366.449	1366.371	1366.358	1366.413	1366.471	1366.142	---	---	---	1366.587	1366.445	---
21	1366.404	1366.478	1366.529	1366.328	1366.596	1366.143	---	---	---	1366.240	1366.421	---
22	1366.446	1366.531	1366.422	1366.337	1366.516	1366.196	---	---	---	1366.277	1366.605	---
23	1366.471	1366.527	1366.264	1366.410	1366.466	1366.313	---	---	---	1366.642	1366.409	---
24	1366.412	1366.398	1366.026	1366.296	1366.075	---	---	---	---	1366.561	1366.324	---
25	1366.344	1366.281	---	1366.369	1366.054	---	---	---	---	1366.571	1366.439	---
26	1366.348	1366.303	---	1366.365	1366.141	---	---	---	---	1366.467	1366.573	---
27	1366.353	1366.403	1366.116	1366.283	1366.282	---	---	---	---	1366.417	1366.523	---
28	1366.338	1366.303	1366.004	1366.248	1366.311	---	---	---	---	1366.381	1366.493	---
29	1366.326	---	1366.065	1366.085	1366.256	---	---	---	---	1366.367	1366.394	---
30	1366.368	---	1366.069	1366.048	1366.219	---	---	---	---	1366.587	1366.351	---
31	1366.319	---	1366.021	---	1366.146	---	---	---	---	1366.590	---	---

NOTE: '---' indicates data not available.

SOHO/VIRGO Total Solar Irradiance 1999

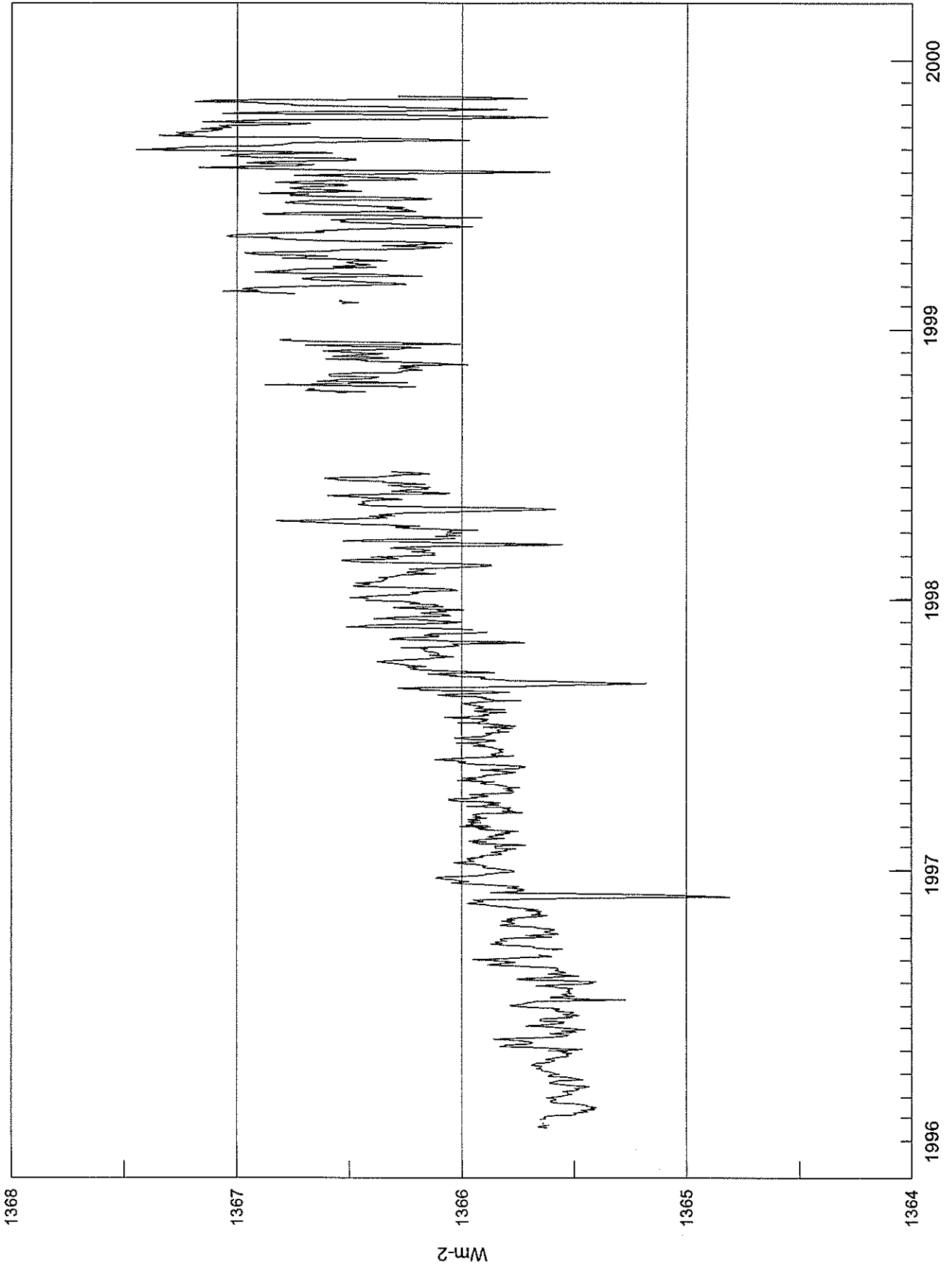
65
Misc
1999



Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	---	---	1366.544	1366.513	1366.639	1365.912	1366.767	1365.760	1367.448	1367.029	1366.741	---
2	---	---	1366.359	1366.490	1366.767	1366.058	1366.682	1365.609	1367.358	1367.049	1366.761	---
3	---	---	1366.247	1366.478	1366.833	1366.213	1366.871	1365.975	1367.279	1367.083	1366.910	---
4	---	---	1366.263	1366.332	1366.853	1366.355	1366.903	1366.394	1367.219	1367.017	1366.909	---
5	---	1366.534	1366.398	1366.419	1366.820	1366.855	1366.682	1366.731	1367.082	1366.786	1367.020	---
6	---	1366.459	1366.443	1366.611	1367.022	1366.887	1366.507	1366.919	1366.915	1366.677	1367.189	---
7	---	1366.510	1366.504	1366.797	1367.044	1366.830	1366.445	1367.087	1366.815	1366.860	1367.110	---
8	---	1366.547	1366.655	1366.690	1367.021	1366.678	1366.554	1367.171	1366.781	1366.979	1366.797	---
9	---	1366.532	1366.676	1366.697	1366.988	1366.381	1366.669	1366.932	1366.767	1367.154	1366.223	---
10	---	---	1366.712	1366.596	1366.885	1366.205	1366.764	1366.747	1366.751	1367.012	1365.710	---
11	---	---	1366.677	1366.773	1366.786	1366.233	1366.737	1366.657	1366.585	1366.875	1365.801	---
12	---	---	1366.657	1366.893	1366.613	1366.241	1366.733	1366.765	1366.380	1366.693	1366.053	---
13	---	---	1366.415	1366.934	1366.617	1366.303	1366.648	1366.886	1366.162	1366.248	1366.287	---
14	---	---	1366.174	1366.966	1366.651	1366.334	1366.542	1366.956	1365.965	1365.899	---	---
15	---	---	1366.300	1366.897	1366.573	1366.254	1366.507	1366.861	1366.083	1365.638	---	---
16	---	---	1366.406	1366.637	1366.493	1366.289	1366.534	1366.736	1366.344	1365.618	---	---
17	---	---	1366.667	1366.564	1366.396	1366.453	1366.689	1366.543	1366.726	1365.837	---	---
18	---	1366.743	1366.804	1366.575	1366.188	1366.477	1366.830	1366.471	1367.059	1366.142	---	---
19	---	1366.891	1366.920	1366.420	1366.031	1366.654	1366.784	1366.471	1367.220	1366.533	---	---
20	---	1366.896	1366.858	1366.234	1365.952	1366.707	1366.682	1366.577	1367.347	1367.042	---	---
21	---	1367.063	1366.765	1366.155	1366.038	1366.784	1366.580	1366.904	1367.194	1367.066	---	---
22	---	1366.905	1366.776	1366.089	1366.108	1366.785	1366.256	1366.948	1367.206	1366.778	---	---
23	---	1366.922	1366.730	1366.157	1366.264	1366.739	1366.200	1367.074	1367.246	1366.534	---	---
24	---	1366.976	1366.601	1366.354	1366.329	1366.636	1366.220	1367.018	1367.272	1366.302	---	---
25	---	1366.964	1366.525	1366.204	1366.402	1366.363	1366.344	1367.033	1367.156	1366.101	---	---
26	---	1366.891	1366.381	1366.186	1366.537	1366.169	1366.483	1366.866	1367.119	1365.803	---	---
27	---	1366.783	1366.573	1366.139	1366.540	1366.135	1366.599	1366.575	1367.107	1365.974	---	---
28	---	1366.635	1366.509	1366.042	1366.518	1366.250	1366.747	1366.632	1367.064	1366.140	---	---
29	---	---	1366.404	1366.182	1366.583	1366.459	1366.596	1366.867	1367.160	1366.213	---	---
30	---	---	1366.426	1366.420	1366.468	1366.669	1366.310	1366.950	1367.149	1366.435	---	---
31	---	---	1366.481	---	1366.256	---	1366.182	1367.229	---	1366.761	---	---

NOTE: '---' indicates data not available.

SOHO/VIRGO Total Solar Irradiance 1996-1999





WORLD DATA CENTER A
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The ICSU Panel on WDCs has recommended that it would be appropriate courtesy to acknowledge in publications that data were obtained from the originating station or investigator through the intermediary of the WDCs. The following statement is suggested:

"Data used in this study were provided by WDC-A for Solar-Terrestrial Physics, NOAA E/GC2, 325 Broadway, Boulder Colorado 80303, USA."