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William M. Daley, Secretary

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

D. James Baker, Administrator

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Robert S. Winokur, Assistant Administrator

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Michael S. Loughridge, Director

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Number 653

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Editor: Helen E. Coffey

Chief: Herbert W. Kroehl
Solar-Terrestrial Physics Division

Staff: Edward H. Erwin

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H α SOLAR FLARES

JULY 1998

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)	
0001	HOLL	01	0004	0005	0028	N25	E39	8259	07	4.0	24	SF		3	E		45		
			01 0011		0102	No Flare Patrol													
			01 0120		0129	No Flare Patrol													
			01 0309		0318	No Flare Patrol													
			01 0327		0342	No Flare Patrol													
0002	SVTO	01	1054	1056	1104	N25	E32	8259	07	3.9	10	SF		3	E		10		
0003		01	14132	14144	1430	N23	E29	8259	07	3.8	17	SF					18		F
	HOLL	01	1413	1414	1424	N25	E31	8259	07	4.0	11	SF		3	E		22		F
	SVTO	01	1415	1418	1437	N21	E27	8259	07	3.7	22	SF		3	E		13		
0004	HOLL	01	1742	1742	1748	N16	W46	8253	06	28.3	6	SF		3	E		12		F
0005		01	17599	18104	1850	S23	W02	8256	07	1.6	51	1F					144		FS
	HOLL	01	1759	1814	1915	S23	W02	8256	07	1.6	76	1F		3	E		226		F
	RAMY	01	1808	1810	1825	S23	W02	8256	07	1.6	17	SF		3	E		62		S
0006		01	1837	1839	1848	N14	W45	8253	06	28.5	11	SF					44		H
	HOLL	01	1837	1839	1849	N15	W45	8253	06	28.5	12	SF		3	E		71		
	RAMY	01	1838E	1838U	1848	N14	W45	8253	06	28.5	10D	SF		3	E		16		H
			01 2034		2055	No Flare Patrol													
			01 2204		2235	No Flare Patrol													
0007		02	0110*	01221	0124	N18	W42	8253	06	28.9	14	1B					132	1.8	E
	URUM	02	0110	0122	0130D	N19	W41	8253	06	29.0	20D	1B			P		209	2.9	E
	MITK	02	0123	0123	0124	N17	W42	8253	06	29.0	1	SN			C	0123	56	0.8	
0008	URUM	02	0937E	0937	0937D	N15	W52	8253	06	28.6	1D	SN			P		32	0.5	D
0009	URUM	02	0948E	0948	0948D	N14	W53	8253	06	28.5	1D	SB			P		32	0.6	D
			02 1029		1058	No Flare Patrol													
0010	HOLL	02	1241E	1241U	1247	S26	W14	8256	07	1.4	6D	SF		2	E		36		
			02 2204		2400	No Flare Patrol													
			03 0000		0042	No Flare Patrol													
0011	MITK	03	0107	0112	0124	S23	W21	8256	07	1.4	17	1N			C	0112	180	2.2	E
0012	RAMY	03	1123E	1123U	1132	S25	W26	8256	07	1.5	9D	SF		2	E		28		F
0013	HOLL	03	1740	1741	1751	S25	W31	8256	07	1.3	11	SF		3	E		15		
0014	HOLL	03	1830	1830	1833	N15	W72	8253	06	28.4	3	SF		3	E		14		
0015	HOLL	03	2015	2015	2022	S25	W29	8256	07	1.6	7	SF		3	E		12		
			03 2025		2029	No Flare Patrol													
			03 2118		2151	No Flare Patrol													
			03 2208		2400	No Flare Patrol													
			04 0000		0015	No Flare Patrol													
0016	URUM	04	0018E	0018	0018D	S24	W34	8256	07	1.4	7D	SB			P		80	1.1	E
0017	URUM	04	0054	0058	0109	S23	W35	8256	07	1.3	15	SN			C		48	0.7	D
0018	URUM	04	0117	0125	0133	N16	W71	8253	06	28.8	16	SN			P		64		E
0019	SVTO	04	0511	0519	0532	S22	W38	8256	07	1.3	21	SF		3	E		15		
0020		04	0540	0543	0608	S24	W38	8256	07	1.3	28	SB					78	1.4	EF
	SVTO	04	0540	0543	0614	S24	W40	8256	07	1.1	34	SN		3	E		59		FE
	URUM	04	0543E	0543U	0603	S25	W37	8256	07	1.4	20D	SB			P		96	1.4	E
0021	SVTO	04	0729	0739	0800	S22	W04	8260	07	4.0	31	SF		3	E		20		F

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H α SOLAR FLARES

JULY 1998

Grp #	Sta	Start Day (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)
		09 0000		0021			No Flare Patrol										
0041	URUM	09 0344	0401	0404D	N14	W34	8264	07	6.6	20D	SB			P	64	0.8	D
		09 0909		1103			No Flare Patrol										
0042	KANZ	09 1104E	1104U	1129	S22	W37	8263	07	6.6	25D	SF	2		C			
		09 1112		1120			No Flare Patrol										
0043	KANZ	09 1121E	1121U	1137	S23	E63		07	14.3	16D	SF	2		C			
		09 1158		1204			No Flare Patrol										
		09 1206		1207			No Flare Patrol										
0044		09 1532	1536	1554	N15	W41	8264	07	6.5	22	SF				36		F
	SVTO	09 1532	1536	1554	N16	W40	8264	07	6.6	22	SF	3		E	49		F
	RAMY	09 1533E	1533U	1548D	N14	W42	8264	07	6.5	15D	SF	3		E	23		
		09 2110		2138			No Flare Patrol										
		09 2303		2400			No Flare Patrol										
		10 0000		0026			No Flare Patrol										
0045	URUM	10 0252	0256	0316	S23	W54	8263	07	5.9	24	SB			C	32	0.6	D
0046	URUM	10 0408	0412	0428	S15	E54		07	14.3	20	SN			C	96	1.8	E
0047	URUM	10 0408	0412	0420	S23	E80	8270	07	16.3	12	1N			C	177		DG
0048		10 0453	04487	0504	S21	W55	8263	07	6.0	11	SN				46	1.6	EF
	URUM	10 0448E	0448	0504	S21	W54	8263	07	6.0	16D	SN			P	80	1.6	E
	SVTO	10 0453	0455	0504	S21	W56	8263	07	5.9	11	SF	3		E	12		F
0049	SVTO	10 0632E	0635U	0646	S22	E78	8270	07	16.3	14D	SF	3		E	34		
0050	KANZ	10 0630	0630U	0646D	S20	E15		07	11.4	16D	SF	2		C			
0051	HOLL	10 1905	1905	1911	S21	E46		07	14.3	6	SF	3		E	15		
		10 2358		2400			No Flare Patrol										
		11 0000		0011			No Flare Patrol										
		11 0015		0059			No Flare Patrol										
		11 0120		0139			No Flare Patrol										
		11 0158		0414			No Flare Patrol										
0052	SVTO	11 0434	0450	0508	S21	W63	8263	07	6.4	34	SF	3		E	23		F
0053	SVTO	11 0438	0438	0446	N16	W60	8264	07	6.6	8	SF	3		E	24		
0054	SVTO	11 1057	1058	1106	S23	E62	8270	07	16.2	9	SF	3		E	25		H
0055		11 1249	1253	1257	N16	W67	8264	07	6.4	8	SF				23		FH
	RAMY	11 1247E	1247U	1311D	N16	W68	8264	07	6.4	24D	SF	3		E	24		F
	SVTO	11 1249	1253	1257	N17	W66	8264	07	6.5	8	SF	3		E	22		H
0056	HOLL	11 1838	1838	1844	S22	E55	8270	07	16.0	6	SF	3		E	10		
		11 2248		2255			No Flare Patrol										
		11 2322		2400			No Flare Patrol										
		12 0000		0359			No Flare Patrol										
		13 0013		0400			No Flare Patrol										
0057	SVTO	13 1651	1651	1704	S22	E33	8270	07	16.2	13	SF	3		E	16		
0058	HOLL	13 2029	2033	2040	N17	E32	8269	07	16.3	11	SF	3		E	22		
		13 2310		2400			No Flare Patrol										
		14 0000		0329			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)			
0059	SVTO	14	0814	0818	0825	S22	E24	8270	07	16.2	11	SF		3	E		11				
0060	SVTO	14	1037	1039	1043	S21	E22	8270	07	16.1	6	SF		4	E		12			F	
0061	SVTO	14	1053	1056	1128	N20	E26	8269	07	16.4	35	SF		3	E		48			FU	
0062	RAMY	14	1054E	1054U	1116	N20	W26	8269	07	12.5	22D	SF		3	E		16			F	
0063		14	12551	1259	1329	S21	E21	8270	07	16.1	34	1B					147			EF	
	SVTO	14	1255	1259	1340	S23	E20	8270	07	16.1	45	1B		3	E		198			E	
	RAMY	14	1256	1259	1314	S21	E21	8270	07	16.1	18	SN		3	E		88			F	
	HOLL	14	1259E	1302U	1332	S20	E23	8270	07	16.3	33D	1B		2	E		155				
0064	URUM	15	0138E	0138	0142	S22	E12	8270	07	16.0	4D	SN			P		48	0.6		D	
0065	URUM	15	0539	0543	0547	N26	E17	8271A	07	16.5	8	SN			C		80	0.9		D	
0066	SVTO	15	0727	0728	0738	S21	E10	8270	07	16.1	11	SF		3	E		14			F	
0067	SVTO	15	0741	0742	0751	S21	E09	8270	07	16.0	10	SF		3	E		13			F	
0068		15	10382	1042	1056	S30	E65	8272	07	20.5	18	SF					30			FH	
	KANZ	15	1038	1048U	1048D	S31	E67	8272	07	20.7	10D	SF		2	C						
	SVTO	15	1040	1042	1053	S31	E65	8272	07	20.6	13	SF		3	E		27			F	
	RAMY	15	1043E	1044U	1058	S29	E64	8272	07	20.5	15D	SN		3	E		32			H	
0069		15	1106	1106	1121	S22	E09	8270	07	16.1	15	SF					18			F	
	RAMY	15	1102E	1105U	1130	S21	E10	8270	07	16.2	28D	SF		3	E		11			F	
	SVTO	15	1106	1106	1112	S23	E08	8270	07	16.1	6	SF		2	E		24			F	
		15	1206		1259	No Flare Patrol															
0070	HOLL	15	1335	1337	1342	S27	E26	8272	07	17.6	7	SF		3	E		14				
0071		15	1515	15151	1532	S21	E04	8270	07	15.9	17	SF					30				
	RAMY	15	1515	1515	1530	S21	E06	8270	07	16.1	15	SF		3	E		24				
	HOLL	15	1515	1516	1534	S21	E03	8270	07	15.9	19	SF		3	E		36				
0072		15	1536*	1553	1638	S20	E06	8270	07	16.1	62	SF					44			F	
	HOLL	15	1536	1553	1647	S20	E07	8270	07	16.2	71	SF		3	E		63			F	
	RAMY	15	1551	1553	1630	S21	E06	8270	07	16.1	39	SF		3	E		26				
0073	HOLL	15	1602	1603	1607	S27	E25	8273	07	17.6	5	SF		3	E		21				
0074	HOLL	15	1951	2010	2052	S20	E03	8270	07	16.0	61	SF		3	E		75			F	
		15	2100		2237	No Flare Patrol															
0075	HOLL	15	2348	2348	2354	S20	E00	8270	07	16.0	6	SF		3	E		12				
0076	LEAR	16	0022	0022	0033	S20	W01	8270	07	15.9	11	SF		3	E		35				
0077	URUM	16	0313	0317	0325	S20	E02	8270	07	16.3	12	SN			C		48	0.5		E	
0078	URUM	16	0345E	0345	0349	S22	E01	8270	07	16.2	4D	SN			P		48	0.6		E	
0079		16	07551	07597	0815	S20	W04	8270	07	16.0	20	SF					27				
	LEAR	16	0755	0759	0815	S20	W05	8270	07	15.9	20	SF		3	E		27				
	KANZ	16	0756	0806	0810D	S21	W02	8270	07	16.2	14D	SF		2	C						
0080	KHAR	16	0925		0950	S20	W09	8270	07	15.7	25	1N		2	V						
0081		16	1023	1027	1037D	S30	E52	8272	07	20.5	14D	SF					34			F	
	SVTO	16	1023E	1025U	1037D	S31	E52	8272	07	20.5	14D	SF		2	E		34			F	
	KANZ	16	1023	1027	1036D	S30	E51	8272	07	20.4	13D	SF		2	C						
0082	URUM	16	1141	1145	1153	S21	W06	8270	07	16.0	12	SB			C		64	0.7		D	
0083	HOLL	16	1315	1319	1325	S22	W06	8270	07	16.1	10	SF		3	E		18			F	

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Jul 98

H α SOLAR FLARES

JULY 1998

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)	
0084	HOLL	16	1349	1351	1354	S28	E49	8272	07	20.4	5	SF		3	E		21		F
0085	HOLL	16	1559	1605	1614	S21	W09	8270	07	16.0	15	SF		3	E		28		
0086		16	16202	16232	1645	S22	W08	8270	07	16.1	25	SF					33		F
	HOLL	16	1620	1625	1653	S22	W08	8270	07	16.1	33	SF		3	E		50		F
	RAMY	16	1621	1624	1647	S22	W07	8270	07	16.1	26	SF		4	E		33		F
	SVTO	16	1622	1623	1635	S21	W09	8270	07	16.0	13	SF		3	E		17		F
0087	HOLL	16	1907	1909	1914	S29	E47	8272	07	20.5	7	SF		3	E		15		
0088	HOLL	16	1922	1922	1932	S20	W09	8270	07	16.1	10	SF		3	E		13		
		16	1947		1953	No Flare Patrol													
0089	HOLL	16	2024	2034	2101	S21	W10	8270	07	16.1	37	1F		3	E		110		
		16	2026		2032	No Flare Patrol													
		16	2048		2101	No Flare Patrol													
		16	2134		2335	No Flare Patrol													
0090	HOLL	17	0004	0004	0013	S21	W11	8270	07	16.1	9	SF		3	E		15		
0091		17	15118	1521	1530	S29	E37	8272	07	20.5	19	SF					56		F
	SVTO	17	1511	1521	1536	S30	E35	8272	07	20.4	25	1F		3	E		112		F
	HOLL	17	1514	1521	1527	S29	E37	8272	07	20.5	13	SF		3	E		43		
	RAMY	17	1519	1521	1526	S29	E39	8272	07	20.7	7	SF		3	E		13		
0092	SVTO	17	1532	1532	1544	S21	W21	8270	07	16.0	12	SF		3	E		24		F
0093	SVTO	17	1718	1720	1726	S19	W23	8270	07	16.0	8	SF		3	E		12		F
		17	1746		1849	No Flare Patrol													
		17	1857		2310	No Flare Patrol													
		18	1743		1753	No Flare Patrol													
		18	2154		2328	No Flare Patrol													
0094		19	11135	1151	1222	S20	W25	8274	07	17.5	69	SF					20		
	SVTO	19	1113	1151	1222	S19	W26	8274	07	17.5	69	SF		3	E		20		
	KANZ	19	1118	1122U	1122D	S20	W24	8274	07	17.6	4D	SF		2	C				
0095	SVTO	19	1124	1125	1130	S23	W44	8270	07	16.1	6	SF		3	E		18		
0096		19	1325	1325	1330	S24	W42	8270	07	16.3	5	SF					20		H
	HOLL	19	1325	1325	1331	S24	W42	8270	07	16.3	6	SF		3	E		27		
	RAMY	19	1325	1326	1328	S24	W43	8270	07	16.2	3	SF		4	E		14		H
0097		19	1325*	1339	1350	S23	W45	8270	07	16.1	25	SF					31		
	SVTO	19	1325	1339	1355	S23	W45	8270	07	16.1	30	SF		3	E		39		
	HOLL	19	1336	1339	1348	S23	W46	8270	07	16.0	12	SF		3	E		36		
	RAMY	19	1339	1340	1346	S24	W44	8270	07	16.2	7	SF		4	E		17		
0098		19	15103	15125	1526	S23	W45	8270	07	16.2	16	SF					27		
	SVTO	19	1510	1512	1525	S23	W46	8270	07	16.1	15	SF		3	E		23		
	HOLL	19	1510	1516	1523	S23	W45	8270	07	16.2	13	SF		3	E		31		
	KANZ	19	1513	1517	1529	S24	W45	8270	07	16.1	16	SF		2	C				
		19	2044		2105	No Flare Patrol													
		19	2213		2249	No Flare Patrol													
		19	2256		2327	No Flare Patrol													
0099		20	0741	0744	0748	S24	W53	8270	07	16.2	7	SF					11		
	KANZ	20	0741	0745	0749	S23	W52	8270	07	16.3	8	SF		2	C				
	SVTO	20	0742	0744	0747	S24	W54	8270	07	16.1	5	SF		3	E		11		
0100	KANZ	20	0833	0837	0841	S14	W53	8271	07	16.3	8	SF		2	C				
0101	KANZ	20	0853	0853	0857	S19	E60	8276	07	24.9	4	SF		2	C				

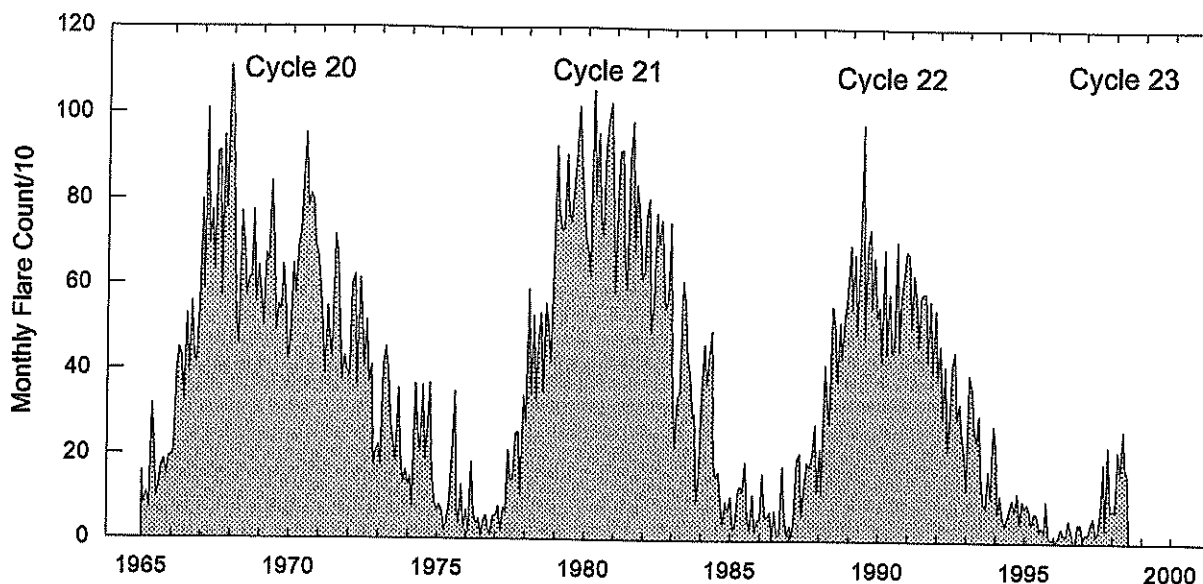
HO SOLAR FLARES

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Jul 98

JULY 1998

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)	
0102	SVTO	20	1010	1010	1016	N19	W55	8269	07	16.2	6	SF		3	E			17	
0103	KHAR	20	1032U	1033	1039	S27	E52	8278	07	24.5	7U	SF		2	V				D
0104		20	1029	10291	1034	S25	W56	8270	07	16.1	5	SF						13	
	KANZ	20	1029	1029	1037	S25	W55	8270	07	16.2	8	SF		2	C				
	SVTO	20	1029	1030	1032	S25	W56	8270	07	16.1	3	SF		3	E			13	
0105	SVTO	20	1034	1034	1037	S23	W57	8270	07	16.0	3	SF		3	E			21	
0106	KHAR	20	1040		1054	S14	W20	8277	07	18.9	14	SF		2	V				DH
0107		20	11254	11292	1136	S24	W54	8270	07	16.3	11	SF						59	
	KANZ	20	1125	1129	1137	S24	W54	8270	07	16.3	12	SF		2	C				
	SVTO	20	1129	1131	1134	S24	W55	8270	07	16.2	5	SF		3	E			59	
0108		20	14041	14051	1426	S24	W58	8270	07	16.1	22	SF						26	
	SVTO	20	1404	1406	1427	S24	W59	8270	07	16.0	23	SF		3	E			26	
	KANZ	20	1405	1405	1425	S24	W56	8270	07	16.3	20	SF		2	C				
0109		20	14531	14531	1458	N19	W56	8269	07	16.3	5	SF						11	
	KANZ	20	1453	1453	1457	N19	W56	8269	07	16.3	4	SF		2	C				
	SVTO	20	1454	1454	1458	N19	W57	8269	07	16.3	4	SF		3	E			11	
0110		20	1457	1457	1501	S24	W59	8270	07	16.1	4	SF						17	
	SVTO	20	1457	1457	1501	S23	W60	8270	07	16.0	4	SF		3	E			17	
	KANZ	20	1457	1457	1501	S24	W58	8270	07	16.1	4	SF		2	C				
0111	SVTO	20	1630	1631	1638	S24	W59	8270	07	16.1	8	SF		3	E			30	
0112	SVTO	20	1648	1649	1705	N19	W59	8269	07	16.2	17	SF		3	E			12	
0113	SVTO	20	1705	1707	1717	N19	W58	8269	07	16.3	12	SF		3	E			18	
0114	SVTO	20	1650	1658	1714	S24	W60	8270	07	16.1	24	SF		3	E			20	
		20	1755		2347	No Flare Patrol													
0115	URUM	21	0350	0354	0402	S13	W30	8277	07	18.9	12	SN			C			32	0.4 D
0116	URUM	21	0406	0410	0414	S19	W45	8274	07	17.7	8	SB			C			48	0.8 D
0117	SVTO	21	0548	0549	0600	N20	W66	8269	07	16.2	12	SF		3	E			23	
0118	KANZ	21	0838	0842	0850	S23	E81	8280	07	27.6	12	SF		2	C				
0119	KANZ	21	1442	1442	1506	N17	W50		07	17.8	24	SF		2	C				
0120	SVTO	21	1644	1644	1701	S13	W40	8277	07	18.7	17	SF		3	E			11	
		21	2205		2229	No Flare Patrol													
		21	2233		2330	No Flare Patrol													
		21	2338		2349	No Flare Patrol													
		22	0013		0038	No Flare Patrol													
		22	0044		0050	No Flare Patrol													
		22	0105		0258	No Flare Patrol													
0121	URUM	22	0318	0330	0349	N20	W76		07	16.3	31	SN			C			48	DG
0122	KANZ	22	0626	0626	0630	S20	W81	8270	07	16.1	4	SF		2	C				
0123	HOLL	22	1651	1652	1658	S22	E63	8280	07	27.5	7	SF		3	E			30	
0124	SVTO	22	1651	1652	1658	S21	E75	8280	07	28.4	7	SF		3	E			47	
		22	1738		1748	No Flare Patrol													
		22	2134		2152	No Flare Patrol													
		22	2217		2337	No Flare Patrol													
		23	0019		0212	No Flare Patrol													

Monthly Counts of Grouped Solar Flares Jan 1965 - Jul 1998



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						1136

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

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Jul 98

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

JULY 1998

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m	Mean 2 Hz)		
01	245	SVTO	43 NS	0432.0	0514.0	136.0	97.0			QL=4 ST=3 TYP=1
	245	LEAR	43 NS	0432.0	0601.0	163.0	250.0			QL=4 ST=2 TYP=1
	204	IZMI	44 NS	0600.0E		360.0D		20.0		
	245	SVTO	43 NS	0849.0	0924.0	107.0	160.0			QL=4 ST=2 TYP=1
	280	CUBA	44 NS	1300.0E		330.0D		16.0		
	235	CUBA	44 NS	1300.0E		330.0D		8.0		
	245	SVTO	8 S	0442.0	0443.0	1.0	330.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0601.0	0601.0	1.0	380.0			QL=2 ST=2 TYP=3
	410	SVTO	8 S	0601.0	0601.0	1.0	75.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	0601.3	0601.5	0.7	25.0U			
	245	LEAR	8 S	0841.0	0842.0	2.0	84.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0842.0	0842.0	U	90.0			QL=2 ST=2 TYP=3
	245	LEAR	8 S	0853.0	0855.0	2.0	94.0			QL=4 ST=2 TYP=3
	33	UPIC	46 C	1016.0	1016.5	5.3				
	2800	PENT	8 S	1806.0	1837.0	85.0	82.0			
	245	PALE	8 S	1837.0	1838.0	2.0	340.0			QL=2 ST=2 TYP=3
	1415	PALE	8 S	1837.0	1838.0	2.0	310.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1837.0	1838.0	2.0	350.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	1837.0	1838.0	1.0	300.0			QL=4 ST=2 TYP=3
	4995	PALE	8 S	1838.0	1839.0	1.0	58.0			QL=4 ST=2 TYP=3
	2695	PALE	8 S	1838.0	1838.0	1.0	110.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	1838.0	1838.0	1.0	400.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	1838.0	1838.0	1.0	170.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1838.0	1838.0	U	90.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	1838.0	1838.0	1.0	150.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	1838.0	1839.0	1.0	62.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1838.0	1838.0	1.0	360.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	1839.0	1839.0	U	30.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1839.0	1839.0	U	48.0			QL=4 ST=2 TYP=3
	245	PALE	4 S/F	2056.0	2059.0	4.0	56.0			QL=4 ST=2 TYP=3
245	SGMR	4 S/F	2056.0	2056.0	4.0	50.0			QL=4 ST=2 TYP=3	
02	204	IZMI	44 NS	0600.0E		360.0D		5.0		
	235	CUBA	44 NS	1300.0E		450.0D		7.0		
	280	CUBA	44 NS	1300.0E		450.0D		16.0		
	2840	BEIJ	1 S	0119.0	0120.1	4.0	3.0			
	204	IZMI	42 SER	0933.0	0938.8	5.8	52.0			
	200	HIRA	8 S	0933.5	0933.7	0.7	50.0			0
03	245	SVTO	43 NS	0552.0	0553.0	1.0	58.0			QL=4 ST=3 TYP=1
	127	TORN	44 NS	0620.0E		520.0D		10.0		V=2
	245	LEAR	43 NS	0723.0	0820.0	130.0	120.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	0845.0	0845.0U	140.0	110.0			QL=4 ST=2 TYP=1
	280	CUBA	44 NS	1300.0E		450.0D		19.0		
	235	CUBA	44 NS	1300.0E		450.0D		10.0		
	410	PALE	8 S	0019.0	0019.0	1.0	54.0			QL=4 ST=2 TYP=3
	2840	BEIJ	5 S	0025.0	0032.0	26.0	7.9			
	410	PALE	4 S/F	0029.0	0031.0	4.0	53.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	0031.0	0031.0	U	30.0			QL=4 ST=2 TYP=3
	200	HIRA	46 C	0100.0	0109.0	15.0	80.0		6.0	
	2800	HIRA	20 GRF	0100.0	0112.0	80.0	20.0		4.0	
	245	PALE	48 C	0102.0	0106.0	5.0	120.0			QL=4 ST=2 TYP=8
	410	PALE	8 S	0105.0	0105.0	1.0	22.0			QL=4 ST=2 TYP=3
	4995	PALE	20 GRF	0105.0	0115.0	23.0	38.0			QL=4 ST=2 TYP=2
	2695	PALE	8 S	0106.0	0108.0	2.0	23.0			QL=4 ST=2 TYP=3
	15400	PALE	8 S	0107.0	0109.0	2.0	30.0			QL=4 ST=2 TYP=3
	610	PALE	4 S/F	0108.0	0110.0	4.0	57.0			QL=4 ST=2 TYP=3
	8800	PALE	20 GRF	0108.0	0115.0	16.0	35.0			QL=4 ST=2 TYP=2
	4995	LEAR	8 S	0109.0	0111.0	2.0	25.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	0110.0	0111.0	1.0	23.0			QL=4 ST=2 TYP=3
	1415	PALE	8 S	0110.0	0111.0	1.0	28.0			QL=4 ST=2 TYP=3
	8800	LEAR	4 S/F	0111.0	0116.0	24.0	43.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0145.0	0146.0	1.0	140.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0504.0	0504.0	1.0	53.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0635.0	0635.0	U	41.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0657.0	0657.0	U	37.0			QL=4 ST=2 TYP=3
245	SVTO	48 C	1354.0	1357.0	4.0	52.0			QL=4 ST=2 TYP=8	
245	SGMR	4 S/F	1410.0	1416.0	8.0	54.0			QL=4 ST=2 TYP=3	
245	SVTO	8 S	1416.0	1416.0	1.0	50.0			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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Jul 98

JULY 1998

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	PALE	8 S	1828.0	1828.0	1.0	73.0			QL=4 ST=2 TYP=3
		SGMR	8 S	1828.0	1828.0	1.0	75.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2119.0	2120.0	1.0	210.0			QL=4 ST=2 TYP=3
		SGMR	8 S	2119.0	2120.0	1.0	190.0			QL=4 ST=2 TYP=3
		SGMR	8 S	2200.0	2200.0	1.0	170.0			QL=4 ST=2 TYP=3
04	204	IZMI	43 NS	0600.0		360.0D		10.0		
	245	SVTO	43 NS	0755.0	0811.0	62.0	100.0			QL=4 ST=2 TYP=1
	245	LEAR	43 NS	0811.0	0835.0	82.0	130.0			QL=4 ST=2 TYP=1
	245	SGMR	43 NS	1028.0	1442.0	260.0	220.0			QL=4 ST=2 TYP=1
	280	CUBA	44 NS	1300.0E		530.0D		16.0		
	235	CUBA	44 NS	1300.0E		530.0D		7.0		
	2840	BEIJ	1 S	0405.0	0407.0	3.0	1.8			
	2840	BEIJ	5 S	0534.0	0542.0	11.0	9.9			
	245	LEAR	8 S	0758.0	0758.0	2.0	220.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0758.0	0758.0	1.0	270.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0804.0	0804.0	1.0	97.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0835.0	0835.0	2.0	190.0			QL=4 ST=2 TYP=3
	2695	SVTO	4 S/F	1203.0	1204.0	3.0	38.0			QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	1203.0	1204.0	3.0	59.0			QL=4 ST=2 TYP=3
	8800	SVTO	8 S	1204.0	1204.0	U	26.0			QL=2 ST=2 TYP=3
	6700	CUBA	20 GRF	1336.0E	1342.0	20.1D	14.0			OL SUNRISE
	245	SGMR	8 S	1442.0	1443.0	1.0	370.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1442.0	1443.0	1.0	32.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1442.0	1443.0	1.0	320.0			QL=4 ST=2 TYP=3
	6700	CUBA	21 GRF	1633.0	1648.0	49.0	13.0	6.0		OOL
	4995	SVTO	8 S	1637.0	1638.0	1.0	25.0			QL=4 ST=2 TYP=3
	6700	CUBA	20 GRF	2009.0	2010.0	16.0	3.0	1.0		OOL
6700	CUBA	1 S	2229.6	2230.0	2.4	9.0	4.0		OOL	
05	204	IZMI	44 NS	0600.0E		360.0D		5.0		
	245	SVTO	43 NS	1208.0	1216.0	49.0	75.0			QL=4 ST=2 TYP=1
	245	SGMR	43 NS	1209.0	1216.0	48.0	90.0			QL=4 ST=3 TYP=1
	245	SGMR	43 NS	1209.0	1216.0	711.0	90.0			QL=4 ST=3 TYP=1
	245	SGMR	43 NS	2242.0	2242.0	43.0	54.0			QL=4 ST=2 TYP=1
	2840	BEIJ	1 S	0134.0	0139.0	7.0	7.5			
	5730	IRKU	1 S	0345.6	0346.2	12.4	4.0		U	
	200	HIRA	8 S	0451.0	0451.2	0.4	50.0			O
	204	IZMI	41 F	0649.0	0650.5	1.8	102.0			
	245	LEAR	8 S	0821.0	0822.0	2.0	70.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0821.0	0822.0	1.0	89.0			QL=4 ST=3 TYP=3
	200	HIRA	8 S	0822.2	0822.4	0.4	90.0			O
	204	IZMI	7 C	0822.2	0822.8	1.1	25.0U			
	204	IZMI	25 R	1006.5		113.5		25.0		
	33	UPIC	46 C	1026.5	1027.8	3.5				
	245	SGMR	8 S	1153.0	1153.0	U	88.0			QL=4 ST=3 TYP=3
	245	SVTO	8 S	1153.0	1153.0	U	55.0			QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	1215.0	1216.0	705.0	90.0			QL=4 ST=3 TYP=3
2840	BEIJ	1 S	2333.0	2335.0	2.0	16.2				
06	204	IZMI	44 NS	0600.0E		360.0D		10.0		
	245	SGMR	43 NS	1114.0	1629.0	751.0	440.0			QL=4 ST=2 TYP=1
	280	CUBA	44 NS	1300.0E		450.0D		26.0		
	235	CUBA	44 NS	1300.0E		450.0D		12.0		
	245	LEAR	8 S	0114.0	0114.0	1.0	110.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0114.0	0114.0	1.0	110.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0117.0	0117.0	1.0	53.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	0556.5	0557.0	1.0	60.0			
	204	IZMI	7 C	0619.3	0620.2	1.5	60.0			
	245	SVTO	8 S	0919.0	0920.0	1.0	110.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0920.0	0920.0	U	95.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1117.0	1118.0	1.0	66.0			QL=2 ST=2 TYP=3
	410	SGMR	8 S	1151.0	1151.0	U	65.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1301.0	1301.0	1.0	110.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	1437.0	1437.0	U	190.0			QL=2 ST=2 TYP=3
	245	PALE	8 S	1919.0	1919.0	U	220.0			QL=4 ST=2 TYP=3
	200	HIRA	42 SER	2311.5	2320.2	10.0	320.0			O
	245	PALE	49 GB	2319.0	2319.0	1.0	560.0			QL=4 ST=2 TYP=6
	245	SGMR	49 GB	2319.0	2319.0	1.0	560.0			QL=2 ST=2 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		
06	5730	IRKU	4 S/F	2319.4	2319.8	8.7	6.0		U	
	2800	PENT	8 S	2333.0	2334.0	3.0	14.0			
	5730	IRKU	1 S	2334.0	2334.4	0.7	2.0		U	
07	245	LEAR	43 NS	0103.0	0103.0	71.0	75.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	0439.0	1247.0	621.0	360.0			QL=4 ST=2 TYP=1
	245	LEAR	43 NS	0515.0	0745.0	259.0	150.0			QL=4 ST=2 TYP=1
	204	IZMI	44 NS	0600.0E		360.0D		110.0		
	127	TORN	44 NS	0620.0E	1416.2	520.0D	150.0	100.0		V=2
	245	SGMR	43 NS	0958.0	1650.0	822.0	380.0			QL=4 ST=2 TYP=1
	280	CUBA	44 NS	1300.0E		450.0D		29.0		
	235	CUBA	44 NS	1300.0E		450.0D		21.0		
	245	PALE	43 NS	1637.0	1714.0	38.0	720.0			QL=2 ST=3 TYP=1
	245	PALE	43 NS	1637.0	1714.0	443.0	720.0			QL=2 ST=3 TYP=1
	245	PALE	43 NS	2103.0	2217.0	382.0	92.0			QL=2 ST=2 TYP=1
	245	SVTO	4 S/F	0421.0	0422.0	4.0	230.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0422.0	0422.0		180.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0439.0	0439.0		93.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	0530.0	0531.0	3.0	80.0			QL=4 ST=3 TYP=3
	410	SVTO	8 S	0531.0	0531.0		180.0			QL=4 ST=3 TYP=3
	33	UPIC	42 SER	0711.0		64.0				
	245	LEAR	49 GB	0759.0	0759.0	1.0	1900.0			QL=4 ST=2 TYP=6
	245	SVTO	49 GB	0759.0	0759.0		2700.0			QL=4 ST=3 TYP=6
	204	IZMI	45 C	0759.1	0759.5	0.8	3750.0			
	5730	IRKU	4 S/F	0759.4	0759.6	0.6	16.0		U	
	200	HIRA	8 S	0759.7	0759.9	0.4	1500.0			MR
	245	LEAR	8 S	0813.0	0814.0	2.0	460.0			QL=4 ST=2 TYP=3
	245	SVTO	48 C	0813.0	0814.0	2.0	650.0			QL=4 ST=2 TYP=8
	410	LEAR	8 S	0814.0	0814.0	1.0	31.0			QL=4 ST=2 TYP=3
	610	LEAR	8 S	0814.0	0814.0	1.0	15.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0814.0	0814.0		180.0		U	QL=4 ST=2 TYP=3
	204	IZMI	45 C	0814.0	0814.5	1.0	600.0			
	200	HIRA	8 S	0814.6	0814.8	0.4	170.0			MR
	33	UPIC	41 F	1039.5	1143.5	114.0				
	33	UPIC	46 C	1446.5	1449.5	7.3				
	280	CUBA	48 C	1447.0	1448.0U		690.0D			
	235	CUBA	48 C	1447.0	1448.1	8.8	55520.0			
	245	SGMR	49 GB	1448.0	1449.0	2.0	710.0			QL=2 ST=2 TYP=6
	245	SVTO	49 GB	1448.0	1449.0	4.0	760.0			QL=4 ST=2 TYP=6
	245	SGMR	8 S	1452.0	1452.0		210.0		U	QL=2 ST=2 TYP=3
	410	SGMR	8 S	1453.0	1453.0		120.0		U	QL=4 ST=2 TYP=3
	410	SVTO	8 S	1453.0	1453.0		75.0		U	QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	1643.0	1644.0	3.0	390.0			QL=2 ST=2 TYP=3
	245	SVTO	4 S/F	1643.0	1645.0	3.0	400.0			QL=4 ST=2 TYP=3
	33	UPIC	42 SER	1644.0	1715.0	32.0				
	245	SVTO	8 S	1649.0	1650.0	2.0	330.0			QL=4 ST=2 TYP=3
245	SVTO	49 GB	1713.0	1714.0	5.0	780.0			QL=4 ST=2 TYP=6	
245	SGMR	49 GB	1714.0	1714.0	2.0	770.0			QL=2 ST=2 TYP=6	
410	SGMR	8 S	1714.0	1714.0	2.0	58.0			QL=4 ST=2 TYP=3	
410	SVTO	8 S	1714.0	1714.0	2.0	63.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	1807.0	1808.0	1.0	57.0			QL=2 ST=2 TYP=3	
245	PALE	8 S	1833.0	1834.0	2.0	240.0			QL=2 ST=2 TYP=3	
245	PALE	8 S	1857.0	1857.0		78.0		U	QL=2 ST=2 TYP=3	
245	PALE	8 S	1902.0	1902.0		59.0		U	QL=2 ST=2 TYP=3	
245	PALE	8 S	1919.0	1919.0	1.0	84.0			QL=2 ST=2 TYP=3	
245	PALE	8 S	1936.0	1936.0		380.0		U	QL=2 ST=2 TYP=3	
245	SGMR	8 S	1936.0	1936.0	1.0	410.0			QL=2 ST=2 TYP=3	
410	PALE	8 S	1950.0	1951.0	1.0	49.0			QL=2 ST=2 TYP=3	
245	PALE	4 S/F	1950.0	1951.0	4.0	260.0			QL=2 ST=2 TYP=3	
410	SGMR	8 S	1950.0	1951.0	1.0	59.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1951.0	1951.0	2.0	300.0			QL=2 ST=2 TYP=3	
410	PALE	8 S	1956.0	1957.0	1.0	65.0			QL=2 ST=2 TYP=3	
245	PALE	8 S	1956.0	1957.0	1.0	320.0			QL=2 ST=2 TYP=3	
245	SGMR	8 S	1956.0	1957.0	2.0	300.0			QL=2 ST=2 TYP=3	
410	SGMR	8 S	1956.0	1957.0	2.0	70.0			QL=4 ST=2 TYP=3	
200	HIRA	8 S	1957.0	1957.2	0.4	50.0			0	
245	PALE	8 S	2019.0	2021.0	2.0	57.0			QL=2 ST=2 TYP=3	
245	PALE	4 S/F	2022.0	2024.0	3.0	90.0			QL=2 ST=2 TYP=3	
245	PALE	8 S	2028.0	2028.0		61.0		U	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		
07	245 PALE	8 S	2059.0	2059.0	1.0	60.0			QL=2 ST=2 TYP=3
08	204 IZMI	44 NS	0600.0E		360.0D		60.0		
	127 TORN	44 NS	0620.0E	0746.0	520.0D	300.0	50.0		V=2
	245 SVTO	43 NS	0629.0	0944.0	306.0	180.0			QL=4 ST=3 TYP=1
	245 SGMR	43 NS	1049.0	1049.0	132.0	76.0			QL=4 ST=2 TYP=1
	245 SVTO	43 NS	1227.0	1233.0	12.0	61.0			QL=4 ST=2 TYP=1
	235 CUBA	44 NS	1300.0E		530.0D		8.0		
	280 CUBA	44 NS	1300.0E		530.0D		17.0		
	200 HIRA	42 SER	0020.7	0021.2	2.5	90.0			0
	245 LEAR	8 S	0158.0	0158.0	U	120.0			QL=4 ST=2 TYP=3
	245 LEAR	8 S	0233.0	0233.0	U	280.0			QL=4 ST=2 TYP=3
	245 PALE	8 S	0233.0	0233.0	U	310.0			QL=2 ST=2 TYP=3
	200 HIRA	8 S	0233.2	0233.5	0.6	70.0			0
	245 SVTO	8 S	0440.0	0440.0	1.0	67.0			QL=4 ST=2 TYP=3
	245 LEAR	8 S	0724.0	0725.0	2.0	45.0			QL=4 ST=2 TYP=3
	410 LEAR	8 S	0725.0	0725.0	U	22.0			QL=4 ST=2 TYP=3
	204 IZMI	7 C	0906.5	0906.5	0.2	49.0			
	245 SGMR	8 S	0944.0	0944.0	1.0	110.0			QL=2 ST=2 TYP=3
	245 SVTO	4 S/F	1220.0	1223.0	3.0	63.0			QL=4 ST=2 TYP=3
	6700 CUBA	20 GRF	1231.0E	1306.0	169.0D	8.0			OOL SUNRISE
	245 SGMR	4 S/F	1617.0	1622.0	6.0	53.0			QL=4 ST=2 TYP=3
245 SGMR	8 S	1939.0	1940.0	1.0	52.0			QL=4 ST=2 TYP=3	
410 SGMR	8 S	2043.0	2043.0	U	17.0			QL=4 ST=2 TYP=3	
245 SGMR	8 S	2043.0	2043.0	U	170.0			QL=4 ST=2 TYP=3	
09	33 UPIC	45 C	0908.0	0908.5	3.5				
	127 TORN	27 RF	1022.0	1027.8	20.0	60.0	10.0		
	280 CUBA	41 F	1530.0	1536.9	7.3D	104.0			
	235 CUBA	41 F	1530.0	1536.9	7.3	2070.0			
10	235 CUBA	44 NS	1320.0E		510.0D		7.0		
	280 CUBA	44 NS	1320.0E		510.0D		15.0		
	2840 BEIJ	1 S	0406.0	0409.0	4.0	6.3			
	410 LEAR	8 S	0420.0	0421.0	1.0	16.0			QL=4 ST=2 TYP=3
	245 LEAR	8 S	0421.0	0421.0	U	21.0			QL=4 ST=2 TYP=3
	610 LEAR	8 S	0421.0	0421.0	1.0	370.0			QL=4 ST=2 TYP=3
	610 PALE	8 S	0421.0	0421.0	U	300.0			QL=4 ST=2 TYP=3
	410 SVTO	8 S	0421.0	0421.0	U	22.0			QL=4 ST=2 TYP=3
	610 SVTO	8 S	0421.0	0421.0	1.0	230.0			QL=2 ST=3 TYP=3
	245 SVTO	8 S	0421.0	0421.0	U	29.0			QL=4 ST=3 TYP=3
	410 LEAR	8 S	0446.0	0448.0	2.0	8.0			QL=4 ST=2 TYP=3
	5730 IRKU	45 C	0446.0	0448.3	3.3	12.0		U	
	610 LEAR	8 S	0447.0	0448.0	1.0	170.0			QL=4 ST=2 TYP=3
	245 LEAR	8 S	0447.0	0448.0	2.0	24.0			QL=4 ST=2 TYP=3
	610 SVTO	8 S	0447.0	0448.0	1.0	130.0			QL=2 ST=2 TYP=3
	245 SVTO	8 S	0447.0	0448.0	2.0	31.0			QL=4 ST=2 TYP=3
410 SVTO	8 S	0447.0	0448.0	1.0	26.0			QL=4 ST=2 TYP=3	
6700 CUBA	23 GRF	1447.0	1452.0	52.0	7.0	3.0		OOL	
11	2840 BEIJ	1 S	0144.0	0145.0	2.0	5.6			
	245 LEAR	4 S/F	0232.0	0234.0	3.0	170.0			QL=4 ST=2 TYP=3
	2840 BEIJ	1 S	0431.0	0434.6	5.0	5.4			
	5730 IRKU	1 S	0432.2	0434.5	5.8	8.0		U	
	245 LEAR	8 S	0438.0	0438.0	1.0	65.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	0438.0	0438.0	1.0	81.0			QL=4 ST=2 TYP=3
	3000 IZMI	7 C	0828.5	0828.6	4.0	2.8			
	2800 PENT	1 S	2338.0	2340.0	5.0	6.0			
12	280 CUBA	44 NS	1300.0E		530.0D		15.0		
	235 CUBA	44 NS	1300.0E		530.0D		7.0		
	245 PALE	8 S	0345.0	0345.0	U	210.0			QL=4 ST=2 TYP=3
	15400 PALE	8 S	0408.0	0409.0	1.0	66.0			QL=4 ST=2 TYP=3
	4995 PALE	8 S	0408.0	0409.0	1.0	23.0			QL=4 ST=2 TYP=3
	8800 PALE	8 S	0408.0	0409.0	1.0	33.0			QL=4 ST=2 TYP=3
13	33 UPIC	45 C	0934.7	0935.8	6.3				
14	3000 IZMI	7 C	0618.2	0618.5	1.5	3.0			

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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
14	6700	CUBA	45 C	1252.8	1258.2		433.0			10L
	6700	CUBA	45 C	1252.8	1254.6	13.1	223.0D			12L
	410	SGMR	8 S	1255.0	1255.0	1.0	310.0			QL=4 ST=3 TYP=3
	2695	SGMR	4 S/F	1255.0	1256.0	6.0	250.0			QL=4 ST=3 TYP=3
	1415	SGMR	4 S/F	1255.0	1256.0	5.0	130.0			QL=4 ST=3 TYP=3
	15400	SGMR	4 S/F	1255.0	1256.0	8.0	420.0			QL=4 ST=3 TYP=3
	8800	SGMR	4 S/F	1255.0	1257.0	6.0	420.0			QL=4 ST=3 TYP=3
	4995	SGMR	4 S/F	1255.0	1257.0	6.0	240.0			QL=4 ST=3 TYP=3
	2695	SVTO	4 S/F	1255.0	1256.0	6.0	250.0			QL=4 ST=2 TYP=3
	15400	SVTO	4 S/F	1255.0	1256.0	8.0	360.0			QL=4 ST=2 TYP=3
	15400	SVTO	4 S/F	1255.0	1256.0	9.0	360.0			QL=4 ST=2 TYP=3
	1415	SVTO	4 S/F	1255.0	1256.0	6.0	160.0			QL=4 ST=2 TYP=3
	8800	SVTO	49 GB	1255.0	1257.0	6.0	560.0			QL=2 ST=2 TYP=6
	4995	SVTO	4 S/F	1255.0	1257.0	6.0	300.0			QL=4 ST=2 TYP=3
	410	SVTO	4 S/F	1257.0	1258.0	3.0	53.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	1258.0	1258.0	2.0	59.0			QL=4 ST=3 TYP=3
	610	SVTO	8 S	1258.0	1259.0	2.0	84.0			QL=2 ST=2 TYP=3
	33	UPIC	48 C	1300.0	1304.0	11.2				
	127	TORN	47 GB	1300.6	1301.3	5.8	570.0	180.0		
	245	SGMR	8 S	1301.0	1302.0	2.0	70.0			QL=4 ST=3 TYP=3
	245	SVTO	4 S/F	1301.0	1301.0	3.0	58.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1303.0	1303.0	U	46.0			QL=4 ST=3 TYP=3
	15400	SGMR	8 S	1303.0	1303.0	1.0	35.0			QL=4 ST=3 TYP=3
6700	CUBA	29 PBI	1305.9		25.2	14.0	7.0		OOL	
410	SGMR	8 S	1315.0	1315.0	U	66.0			QL=4 ST=3 TYP=3	
2800	PENT	40 F	1856.0	1857.0	10.0	8.0				
15	3000	I2MI	7 C	1040.5	1042.0	7.0	3.1			
	2695	PALE	4 S/F	1950.0	1951.0	3.0	42.0			QL=4 ST=2 TYP=3
	4995	PALE	4 S/F	1950.0	1951.0	3.0	16.0			QL=4 ST=2 TYP=3
	8800	PALE	4 S/F	1950.0	1951.0	3.0	37.0			QL=4 ST=2 TYP=3
	15400	PALE	4 S/F	1950.0	1951.0	3.0	35.0			QL=4 ST=2 TYP=3
	8800	SGMR	4 S/F	1950.0	1951.0	3.0	55.0			QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	1950.0	1951.0	3.0	20.0			QL=4 ST=2 TYP=3
	15400	SGMR	4 S/F	1950.0	1951.0	3.0	36.0			QL=4 ST=2 TYP=3
16	280	CUBA	44 NS	1300.0E		450.0D		14.0		
	235	CUBA	44 NS	1300.0E		450.0D		6.0		
	2800	PENT	1 S	0020.0	0021.0	2.0	6.0			
	5730	IRKU	4 S/F	0020.0	0021.6	3.0	16.0			U
	5730	IRKU	1 S	0648.7	0648.9	2.3	4.0			U
	6700	CUBA	22 GRF	1620.0	1622.0	30.0	11.0	5.0		7L
	6700	CUBA	21 GRF	2013.0	2034.0U	21.0D	17.0			3L 2035 OFF
	6700	CUBA	8 S	2015.1	2015.2	0.3	27.0	13.0		2L
245	PALE	8 S	2029.0	2029.0	U	60.0			QL=4 ST=2 TYP=3	
17	235	CUBA	44 NS	1315.0E		325.0D		8.0		
	280	CUBA	44 NS	1315.0E		325.0D		14.0		
	8800	PALE	8 S	0004.0	0004.0	U	65.0			QL=4 ST=2 TYP=3
	3000	I2MI	7 C	0910.7	0911.4	1.3	2.0			
18	280	CUBA	44 NS	1300.0E		530.0D		13.0		
	235	CUBA	44 NS	1300.0E		530.0D		5.0		
19	2800	PENT	1 S	1546.0	1547.0	2.0	6.0			
20	235	CUBA	44 NS	1300.0E		480.0D		5.0		
	280	CUBA	44 NS	1300.0E		480.0D		14.0		
	245	LEAR	8 S	0720.0	0720.0	1.0	80.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0720.0	0720.0	1.0	110.0			QL=4 ST=2 TYP=3
	33	UPIC	45 C	1301.0	1301.5	1.5				
6700	CUBA	23 GRF	1920.0	1956.0	83.0D	15.0	7.0		OOL 2043 OFF	
21	280	CUBA	44 NS	1300.0E		376.0D		14.0		
	235	CUBA	44 NS	1300.0E		376.0D		8.0		
	15400	SGMR	4 S/F	0957.0	0957.0	843.0	86.0			QL=4 ST=3 TYP=3
	245	SVTO	8 S	1406.0	1407.0	2.0	78.0			QL=4 ST=2 TYP=3
22	280	CUBA	44 NS	1300.0E		440.0D		15.0		

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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		
22	235 CUBA	44 NS	1300.0E		440.0D		7.0		
	410 LEAR	8 S	0005.0	0005.0	U	99.0		QL=4 ST=2 TYP=3	
	410 PALE	8 S	0005.0	0005.0	U	50.0		QL=4 ST=2 TYP=3	
	410 LEAR	8 S	0039.0	0039.0	U	140.0		QL=4 ST=2 TYP=3	
	410 PALE	8 S	0039.0	0039.0	U	130.0		QL=4 ST=2 TYP=3	
	2840 BEIJ	3 S	0448.0	0453.0	10.0	10.3			
	5730 IRKU	3 S	0452.0	0454.2	7.5	19.0	U		
	5730 IRKU	1 S	0613.8	0615.8	3.7	3.0	U		
3000 IZMI	7 C	1103.7	1104.2	36.0	7.0				
6700 CUBA	1 S	1650.2	1650.5	1.3	11.0		5.0	6R	
23	280 CUBA	44 NS	1330.0E		244.0D		13.0		
	235 CUBA	44 NS	1330.0E		244.0D		7.0		
	245 SVTO	8 S	0406.0	0406.0	U	220.0		QL=4 ST=2 TYP=3	
	410 SVTO	8 S	0406.0	0406.0	U	47.0		QL=4 ST=2 TYP=3	
	245 SVTO	8 S	0452.0	0453.0	1.0	450.0		QL=4 ST=2 TYP=3	
	410 SVTO	8 S	0453.0	0453.0	U	85.0		QL=4 ST=2 TYP=3	
	610 SVTO	8 S	0527.0	0527.0	U	27.0		QL=4 ST=2 TYP=3	
	245 SVTO	8 S	0527.0	0527.0	U	64.0		QL=4 ST=2 TYP=3	
	1415 SVTO	8 S	0527.0	0527.0	U	10.0		QL=4 ST=2 TYP=3	
	410 SVTO	8 S	0527.0	0527.0	U	10.0		QL=4 ST=2 TYP=3	
	610 SVTO	8 S	0540.0	0541.0	1.0	24.0		QL=4 ST=2 TYP=3	
	1415 SVTO	8 S	0540.0	0541.0	1.0	10.0		QL=4 ST=2 TYP=3	
	245 SVTO	8 S	0540.0	0541.0	1.0	130.0		QL=4 ST=2 TYP=3	
	410 SVTO	8 S	0540.0	0541.0	1.0	20.0		QL=4 ST=2 TYP=3	
	410 SVTO	8 S	0754.0	0754.0	U	360.0		QL=2 ST=2 TYP=3	
	245 SVTO	8 S	0754.0	0754.0	U	75.0		QL=2 ST=2 TYP=3	
	410 SVTO	8 S	0759.0	0759.0	U	420.0		QL=2 ST=2 TYP=3	
	610 SVTO	8 S	0759.0	0759.0	U	18.0		QL=2 ST=2 TYP=3	
	245 SVTO	8 S	0759.0	0759.0	U	67.0		QL=2 ST=2 TYP=3	
	245 SVTO	8 S	0818.0	0818.0	U	180.0		QL=2 ST=2 TYP=3	
410 SVTO	8 S	0818.0	0818.0	U	150.0		QL=2 ST=2 TYP=3		
245 SVTO	8 S	0852.0	0853.0	1.0	450.0		QL=4 ST=3 TYP=3		
410 SVTO	8 S	0853.0	0853.0	U	85.0		QL=4 ST=3 TYP=3		
24	127 TORN	44 NS	0620.0E		520.0D		6.0		V=3
	204 IZMI	44 NS	0900.0E		180.0D		10.0		
	280 CUBA	44 NS	1400.0E		470.0D		18.0		
	235 CUBA	44 NS	1400.0E		470.0D		11.0		
	2840 BEIJ	45 C	0311.0	0332.0	58.0	43.3			
	1415 LEAR	8 S	0314.0	0315.0	2.0	11.0		QL=4 ST=2 TYP=3	
	2695 LEAR	4 S/F	0314.0	0315.0	3.0	11.0		QL=4 ST=2 TYP=3	
	8800 LEAR	4 S/F	0314.0	0315.0	3.0	19.0		QL=4 ST=2 TYP=3	
	15400 LEAR	4 S/F	0314.0	0315.0	3.0	17.0		QL=2 ST=2 TYP=3	
	4995 LEAR	4 S/F	0314.0	0315.0	3.0	13.0		QL=4 ST=2 TYP=3	
	2695 PALE	8 S	0314.0	0315.0	2.0	22.0		QL=4 ST=2 TYP=3	
	15400 PALE	8 S	0314.0	0315.0	2.0	29.0		QL=4 ST=2 TYP=3	
	1415 PALE	8 S	0314.0	0315.0	2.0	12.0		QL=4 ST=2 TYP=3	
	4995 PALE	8 S	0314.0	0315.0	2.0	16.0		QL=4 ST=2 TYP=3	
	8800 PALE	8 S	0314.0	0315.0	2.0	19.0		QL=4 ST=2 TYP=3	
	410 LEAR	4 S/F	0325.0	0329.0	10.0	32.0		QL=4 ST=2 TYP=3	
	245 LEAR	4 S/F	0325.0	0330.0	10.0	90.0		QL=4 ST=2 TYP=3	
	2695 LEAR	4 S/F	0325.0	0332.0	27.0	65.0		QL=4 ST=2 TYP=3	
	4995 LEAR	4 S/F	0325.0	0332.0	23.0	69.0		QL=4 ST=2 TYP=3	
	4995 PALE	4 S/F	0325.0	0332.0	27.0	100.0		QL=4 ST=2 TYP=3	
	610 LEAR	4 S/F	0326.0	0328.0	7.0	20.0		QL=4 ST=2 TYP=3	
	410 PALE	4 S/F	0326.0	0329.0	7.0	40.0		QL=4 ST=2 TYP=3	
	1415 LEAR	4 S/F	0326.0	0332.0	14.0	15.0		QL=4 ST=2 TYP=3	
	8800 LEAR	4 S/F	0326.0	0332.0	27.0	39.0		QL=4 ST=2 TYP=3	
	2800 HIRA	46 C	0326.2	0332.0	38.0	50.0		15.0	0
	245 PALE	4 S/F	0327.0	0330.0	24.0	110.0		QL=4 ST=2 TYP=3	
	2695 PALE	4 S/F	0328.0	0332.0	11.0	64.0		QL=4 ST=2 TYP=3	
	15400 LEAR	4 S/F	0331.0	0332.0	5.0	14.0		QL=4 ST=2 TYP=3	
8800 PALE	8 S	0331.0	0332.0	2.0	40.0		QL=4 ST=2 TYP=3		
15400 PALE	8 S	0332.0	0334.0	2.0	44.0		QL=4 ST=2 TYP=3		
1415 PALE	8 S	0332.0	0333.0	1.0	22.0		QL=4 ST=2 TYP=3		
15400 PALE	8 S	0402.0	0402.0	2.0	100.0		QL=4 ST=2 TYP=3		
4995 PALE	8 S	0402.0	0402.0	2.0	39.0		QL=4 ST=2 TYP=3		
8800 PALE	8 S	0402.0	0402.0	1.0	52.0		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		
24	2695	PALE	8 S	0402.0	0402.0	2.0	26.0			
	204	IZMI	7 C	0943.8	0944.8	3.5	180.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1757.0	1757.0		57.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1757.0	1757.0		56.0			QL=4 ST=2 TYP=3
	6700	CUBA	21 GRF	1845.0	2015.0	233.0	11.0	5.0		4R
	6700	CUBA	2 S/F	1940.0	1940.5	2.0	16.0	8.0		OOL
	2800	PENT	29 PBI	2144.0	2145.0	36.0	6.0			
	245	LEAR	8 S	2343.0	2344.0	1.0	60.0			QL=4 ST=2 TYP=3
25	204	IZMI	44 NS	0600.0E		360.0D		20.0		
	127	TORN	44 NS	0620.0E		520.0D		20.0		V=2
	245	SVTO	43 NS	0808.0	0923.0U	128.0	190.0			QL=4 ST=3 TYP=1
	245	SVTO	44 NS	0808.0E	0818.0U	128.0D	100.0			QL=4 ST=3 TYP=1
	245	SVTO	43 NS	0816.0	0923.0U	120.0	190.0			QL=4 ST=2 TYP=1
	245	SGMR	43 NS	1146.0	1146.0	1.0	110.0			QL=4 ST=2 TYP=1
	280	CUBA	44 NS	1300.0E		450.0D		18.0		
	235	CUBA	44 NS	1300.0E		450.0D		11.0		
	245	LEAR	8 S	0107.0	0107.0	1.0	410.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0107.0	0107.0		500.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0729.0	0729.0	1.0	40.0			QL=4 ST=2 TYP=3
	204	IZMI	25 R	0755.0		180.0	40.0			
	245	LEAR	8 S	0759.0	0800.0	1.0	51.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0808.0	0809.0	1.0	82.0			QL=4 ST=2 TYP=3
	3000	IZMI	7 C	0911.0	0912.0	4.0	4.1			
	410	LEAR	4 S/F	0915.0	0916.0	5.0	66.0			QL=4 ST=2 TYP=3
	245	LEAR	48 C	0917.0	0923.0	7.0	130.0			QL=4 ST=2 TYP=8
	33	UPIC	42 SER	0917.8	1143.5	199.2				
	245	SVTO	4 S/F	0921.0	0923.0	3.0	140.0			QL=2 ST=2 TYP=3
	3000	IZMI	7 C	0921.5	0922.0	2.0	3.1			
	245	SVTO	8 S	1145.0	1146.0	2.0	86.0			QL=4 ST=2 TYP=3
	127	TORN	4 S/F	1252.6	1253.9	3.0	800.0	90.0		
127	TORN	4 S/F	1407.5	1409.0	2.8	490.0	290.0			
6700	CUBA	1 S	1938.2	1940.0	3.3	4.0	2.0		OOL	
6700	CUBA	21 GRF	1939.0	2015.0	53.0D	9.0			OOL 2032 OFF	
26	204	IZMI	44 NS	0600.0E		360.0D		10.0		
	127	TORN	44 NS	0620.0E		520.0D		3.0		V=1
	280	CUBA	44 NS	1300.0E		265.0D		19.0		
	235	CUBA	44 NS	1300.0E		265.0D		10.0		
	245	LEAR	8 S	0652.0	0652.0	1.0	90.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0652.0	0652.0	2.0	120.0			QL=4 ST=2 TYP=3
	33	UPIC	45 C	1142.0	1142.8	1.5				
	245	SGMR	8 S	1153.0	1153.0	1.0	78.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1153.0	1153.0	1.0	72.0			QL=4 ST=2 TYP=3
	33	UPIC	46 C	1240.3	1241.0	4.2				
	245	SGMR	8 S	1345.0	1345.0	1.0	60.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1345.0	1345.0		76.0			QL=2 ST=2 TYP=3
	410	PALE	8 S	2222.0	2222.0	1.0	84.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2222.0	2222.0	1.0	23.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2222.0	2222.0	1.0	24.0			QL=4 ST=2 TYP=3
	2695	PALE	8 S	2229.0	2229.0		76.0			QL=4 ST=2 TYP=3
2695	PALE	8 S	2311.0	2311.0		84.0			QL=4 ST=2 TYP=3	
27	245	LEAR	43 NS	0320.0	0658.0	384.0	130.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	0448.0	0520.0	63.0	130.0			QL=4 ST=2 TYP=1
	204	IZMI	44 NS	0600.0E		360.0D		10.0		
	127	TORN	44 NS	0620.0E		520.0D		15.0		V=1
	245	SVTO	43 NS	0723.0	0733.0	33.0	84.0			QL=4 ST=2 TYP=1
	245	LEAR	8 S	0227.0	0227.0		75.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0227.0	0227.0		81.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0253.0	0253.0		57.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0257.0	0257.0		99.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0315.0	0315.0		120.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0315.0	0315.0		110.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0644.0	0644.0		71.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0657.0	0658.0	2.0	190.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0701.0	0701.0	1.0	57.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0743.0	0743.0		85.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0744.0	0744.0		120.0			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		
27	410 SVTO	8 S	0805.0	0805.0	U	85.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	0805.0	0805.0	U	50.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	0958.0	0958.0	U	68.0			QL=2 ST=2 TYP=3
	410 SGMR	4 S/F	1056.0	1058.0	3.0	180.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	1058.0	1058.0	U	30.0			QL=4 ST=2 TYP=3
	8800 SGMR	4 S/F	1318.0	1319.0	3.0	35.0			QL=4 ST=2 TYP=3
	8800 SVTO	8 S	1319.0	1319.0	1.0	51.0			QL=2 ST=2 TYP=3
	15400 SVTO	8 S	1319.0	1319.0	1.0	39.0			QL=4 ST=2 TYP=3
245 SGMR	8 S	2257.0	2258.0	1.0	59.0			QL=4 ST=2 TYP=3	
28	245 SVTO	43 NS	0425.0	0431.0	530.0	180.0			QL=4 ST=2 TYP=1
	245 LEAR	43 NS	0430.0	0435.0	139.0	110.0			QL=4 ST=2 TYP=1
	204 IZMI	44 NS	0600.0E		360.0D		60.0		
	245 SGMR	43 NS	1057.0	1315.0	193.0	58.0			QL=4 ST=2 TYP=1
	235 CUBA	44 NS	1300.0E		530.0D		13.0		
	280 CUBA	44 NS	1300.0E		530.0D		20.0		
	410 PALE	8 S	0051.0	0051.0	1.0	96.0			QL=4 ST=2 TYP=3
	245 PALE	8 S	0053.0	0053.0	1.0	35.0			QL=4 ST=2 TYP=3
	410 PALE	8 S	0250.0	0250.0	U	65.0			QL=4 ST=2 TYP=3
	15400 SVTO	4 S/F	0418.0	0418.0	4.0	67.0			QL=4 ST=2 TYP=3
	2695 SVTO	8 S	0418.0	0419.0	2.0	16.0			QL=4 ST=2 TYP=3
	8800 SVTO	8 S	0419.0	0420.0	1.0	30.0			QL=2 ST=2 TYP=3
	4995 SVTO	4 S/F	0419.0	0419.0	3.0	25.0			QL=2 ST=2 TYP=3
	204 IZMI	42 SER	0616.8	0617.2	4.5	300.0			
	245 SVTO	8 S	1459.0	1500.0	1.0	67.0			QL=4 ST=2 TYP=3
	6700 CUBA	20 GRF	2130.0	2156.0	49.0D	7.0			16L
29	204 IZMI	44 NS	0600.0E		360.0D		40.0		
	127 TORN	44 NS	0710.0E		180.0D		30.0		
	245 SVTO	43 NS	0735.0	0737.0	31.0	110.0			V=2
	245 SVTO	43 NS	1004.0	1025.0	50.0	150.0			QL=4 ST=2 TYP=1
	245 SGMR	43 NS	1020.0	1029.0	79.0	140.0			QL=4 ST=2 TYP=1
	280 CUBA	44 NS	1300.0E		455.0D		17.0		
	235 CUBA	44 NS	1300.0E		455.0D		10.0		
	245 SVTO	43 NS	1309.0	1309.0	81.0	75.0			QL=4 ST=2 TYP=1
	245 SGMR	43 NS	1318.0	1318.0	17.0	66.0			QL=4 ST=2 TYP=1
	3000 IZMI	5 S	0612.6	0613.0	0.8	2.0			
	245 SVTO	48 C	0649.0	0653.0	5.0	140.0			QL=2 ST=2 TYP=8
	245 LEAR	4 S/F	0650.0	0653.0	5.0	92.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	0727.0	0727.0	U	56.0			QL=2 ST=2 TYP=3
	245 SVTO	8 S	0736.0	0737.0	1.0	81.0			QL=2 ST=2 TYP=3
	245 LEAR	8 S	0737.0	0737.0	U	76.0			QL=4 ST=2 TYP=3
	33 UPIC	46 C	0924.2	0925.8	2.8				
	245 SVTO	8 S	1026.0	1026.0	U	180.0			QL=2 ST=3 TYP=3
	245 SGMR	8 S	1304.0	1304.0	1.0	50.0			QL=4 ST=2 TYP=3
245 SVTO	8 S	1304.0	1304.0	1.0	73.0			QL=2 ST=3 TYP=3	
5730 IRKU	4 S/F	2310.2	2311.0	1.3	13.0		U		
30	204 IZMI	44 NS	0600.0E		360.0D		10.0		
	280 CUBA	44 NS	1310.0E		437.0D		14.0		
	235 CUBA	44 NS	1310.0E		437.0D		7.0		
	204 IZMI	7 C	0623.3	0623.5	0.8	220.0			
	5730 IRKU	1 S	0718.2	0718.6	1.4	7.0		U	
	2840 BEIJ	46 C	0802.0	0806.0	8.0	32.7			
	5730 IRKU	4 S/F	0804.0	0805.0	5.5	25.0		U	
	3000 IZMI	7 C	0804.2	0804.9	2.7	28.0			
	245 SGMR	8 S	1054.0	1055.0	2.0	59.0			QL=4 ST=2 TYP=3
	245 SVTO	48 C	1207.0	1211.0	11.0	120.0			QL=2 ST=3 TYP=8
	245 SVTO	48 C	1208.0	1211.0	3.0	120.0			QL=2 ST=2 TYP=8
	245 SGMR	8 S	1210.0	1211.0	2.0	120.0			QL=4 ST=2 TYP=3
	245 SGMR	4 S/F	1443.0	1444.0	4.0	58.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	1444.0	1444.0	1.0	73.0			QL=2 ST=2 TYP=3
245 SVTO	4 S/F	1453.0	1456.0	9.0	67.0			QL=2 ST=2 TYP=3	
245 SGMR	4 S/F	1453.0	1456.0	11.0	54.0			QL=4 ST=2 TYP=3	
31	204 IZMI	44 NS	0600.0E		270.0D		10.0		
	280 CUBA	44 NS	1305.0E		445.0D		15.0		
	235 CUBA	44 NS	1305.0E		445.0D		7.0		
	245 LEAR	8 S	0333.0	0334.0	1.0	57.0			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

JULY 1998

Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
						Peak (10 -22 W/m 2 Hz)	Mean			
31	245 PALE	4 S/F	0335.0	0338.0	4.0	210.0			QL=4 ST=2 TYP=3	
	410 PALE	8 S	0336.0	0338.0	2.0	170.0			QL=4 ST=2 TYP=3	
	245 LEAR	8 S	0337.0	0338.0	1.0	200.0			QL=4 ST=2 TYP=3	
	410 LEAR	8 S	0337.0	0338.0	1.0	120.0			QL=4 ST=2 TYP=3	
	2840 BEIJ	20 GRF	0507.0	0536.0	127.0	12.9				
	610 SVTO	8 S	0526.0	0527.0	1.0	35.0				QL=4 ST=2 TYP=3
	410 SVTO	8 S	0526.0	0527.0	2.0	32.0				QL=4 ST=2 TYP=3
	245 SVTO	8 S	0527.0	0527.0	1.0	59.0				QL=4 ST=2 TYP=3
	245 SVTO	4 S/F	0530.0	0535.0	6.0	68.0				QL=4 ST=2 TYP=3
	410 SVTO	4 S/F	0532.0	0533.0	3.0	73.0				QL=4 ST=2 TYP=3
	245 SVTO	4 S/F	0532.0	0535.0	4.0	68.0				QL=4 ST=3 TYP=3
	610 SVTO	8 S	0532.0	0533.0	1.0	40.0				QL=4 ST=2 TYP=3
	33 UPIC	46 C	0536.0	0536.1	4.0					
	245 SVTO	48 C	0540.0	0543.0	7.0	88.0				QL=4 ST=2 TYP=8
	410 SVTO	48 C	0540.0	0547.0	8.0	82.0				QL=4 ST=2 TYP=8
	610 SVTO	48 C	0542.0	0546.0	6.0	85.0				QL=4 ST=2 TYP=8
	245 SVTO	48 C	0629.0	0632.0	5.0	170.0				QL=4 ST=2 TYP=8
	410 SVTO	48 C	0630.0	0632.0	4.0	160.0				QL=4 ST=2 TYP=8
	610 SVTO	48 C	0631.0	0632.0	3.0	150.0				QL=4 ST=2 TYP=8
	410 SVTO	48 C	0641.0	0641.0	9.0	250.0				QL=4 ST=2 TYP=8
	610 SVTO	48 C	0641.0	0642.0	7.0	55.0				QL=4 ST=2 TYP=8
	245 SVTO	48 C	0641.0	0641.0	8.0	250.0				QL=4 ST=2 TYP=8
	410 SVTO	46 C	0824.0	0824.0	5.0	35.0				QL=4 ST=2 TYP=8
	245 SVTO	48 C	0825.0	0829.0	4.0	61.0				QL=4 ST=2 TYP=8
	610 SVTO	8 S	0827.0	0827.0	U	28.0				QL=4 ST=2 TYP=3
	245 SVTO	48 C	0834.0	0838.0	6.0	140.0				QL=4 ST=3 TYP=8
	410 SVTO	48 C	0834.0	0839.0	6.0	83.0				QL=4 ST=3 TYP=8
	610 SVTO	8 S	0838.0	0839.0	2.0	65.0				QL=4 ST=2 TYP=3
245 SGMR	8 S	2222.0	2222.0	U	50.0				QL=4 ST=2 TYP=3	

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	

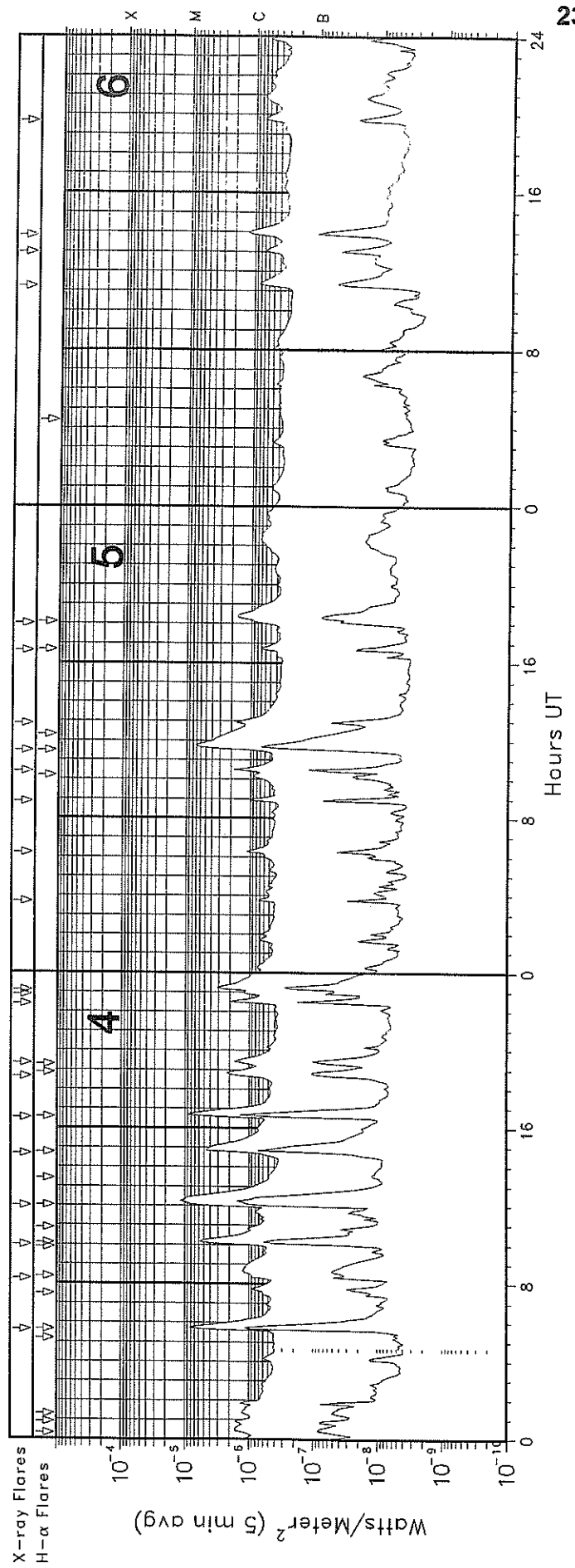
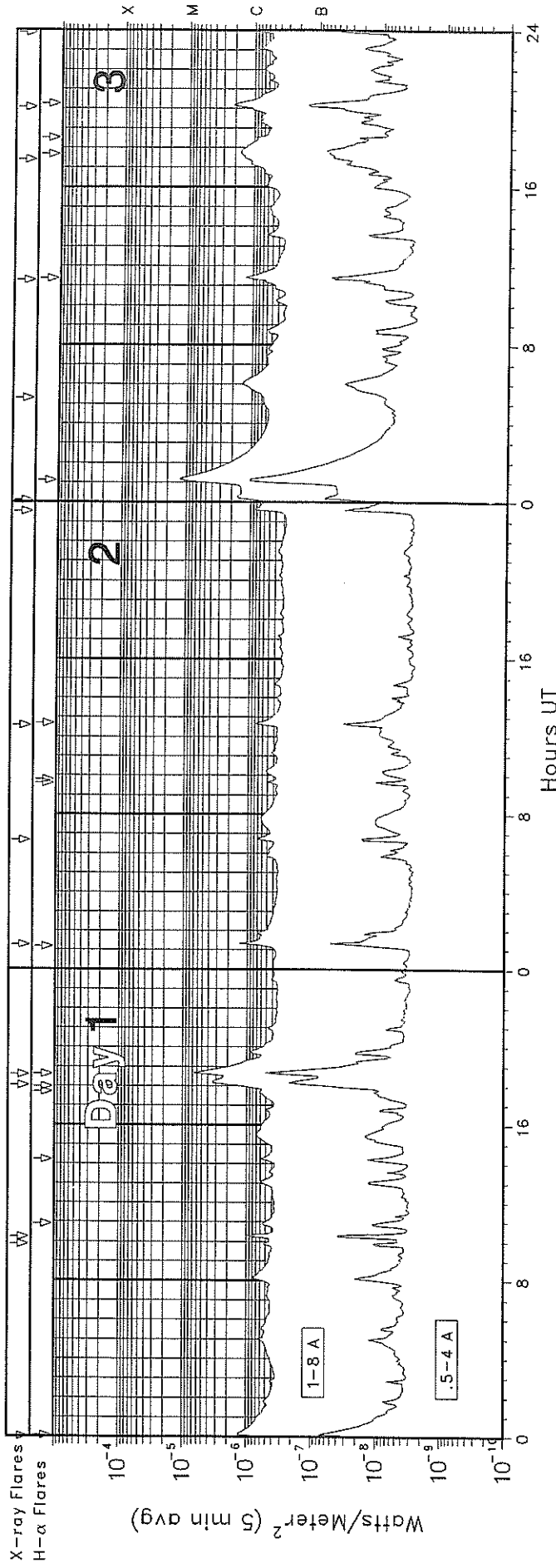
Explanation of Type Code:

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.

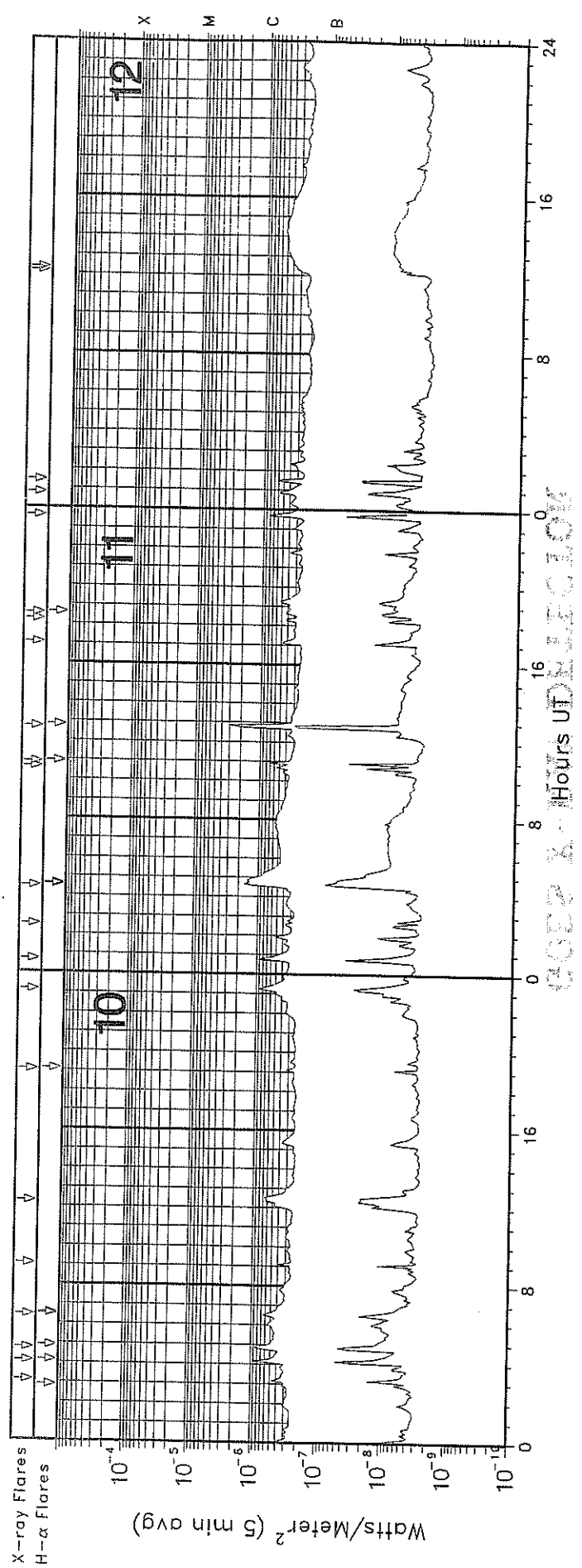
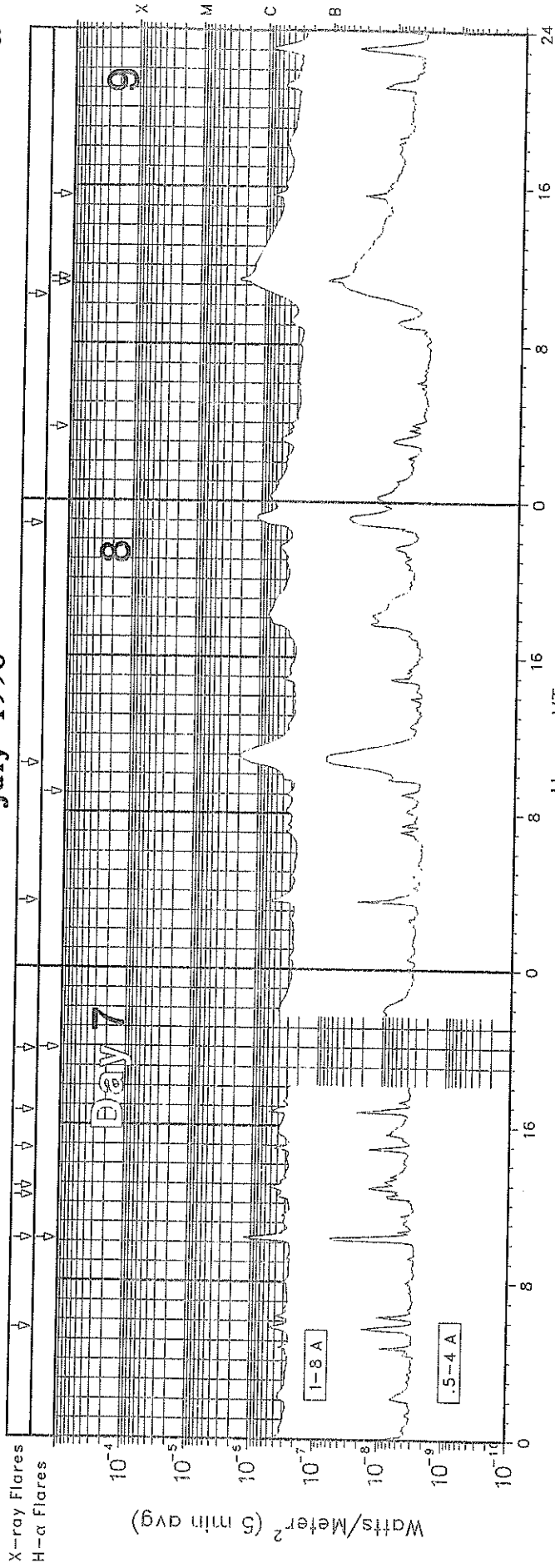
GOES X-RAY DETECTOR

July 1998



GOES X-RAY DETECTOR

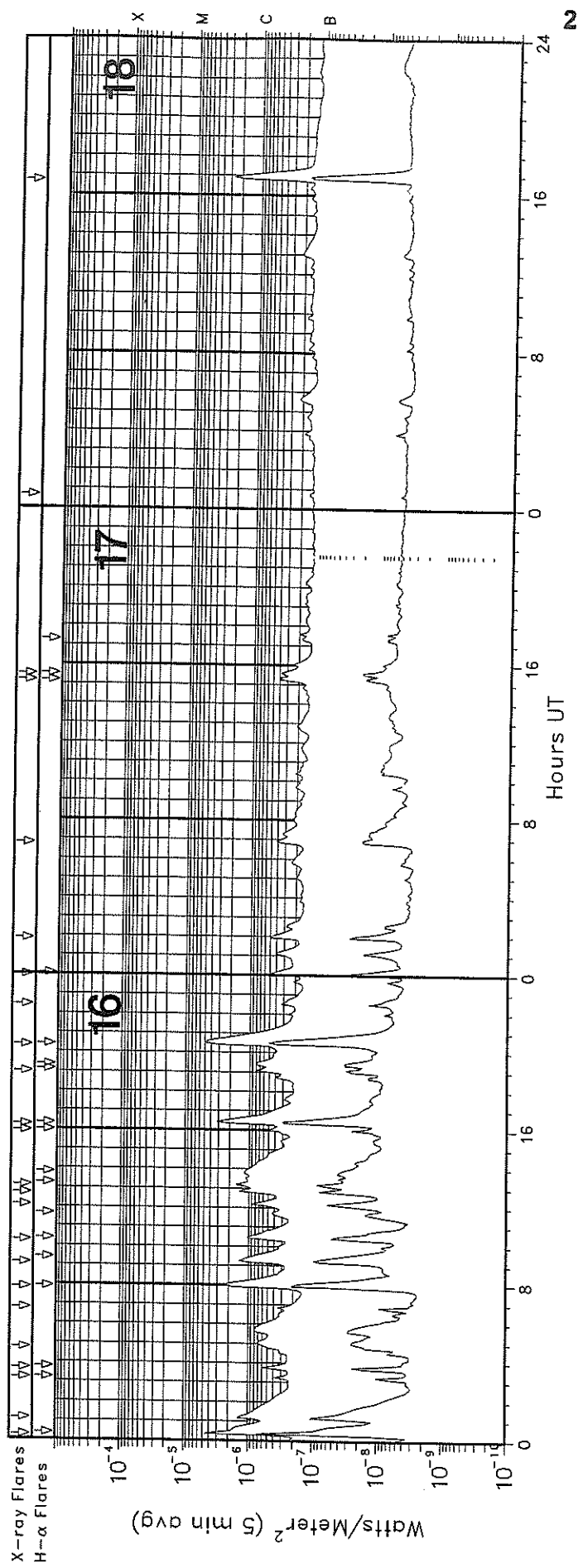
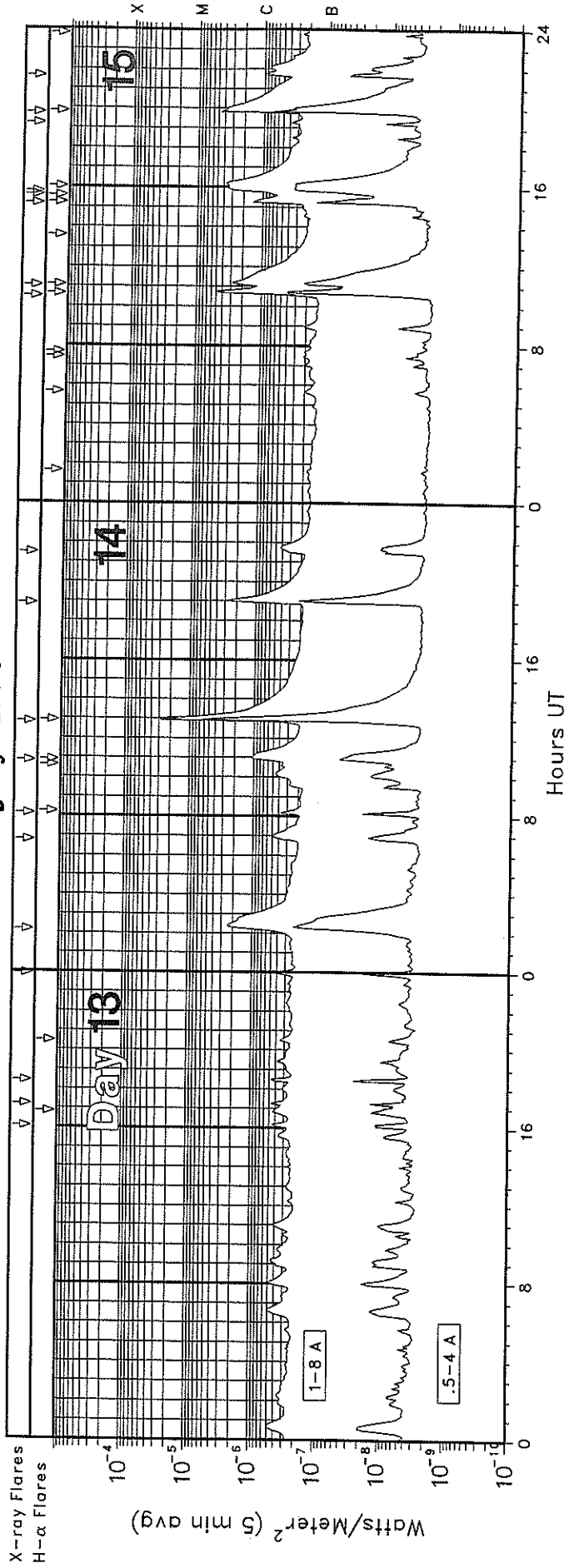
July 1998



GOES X-RAY DETECTOR

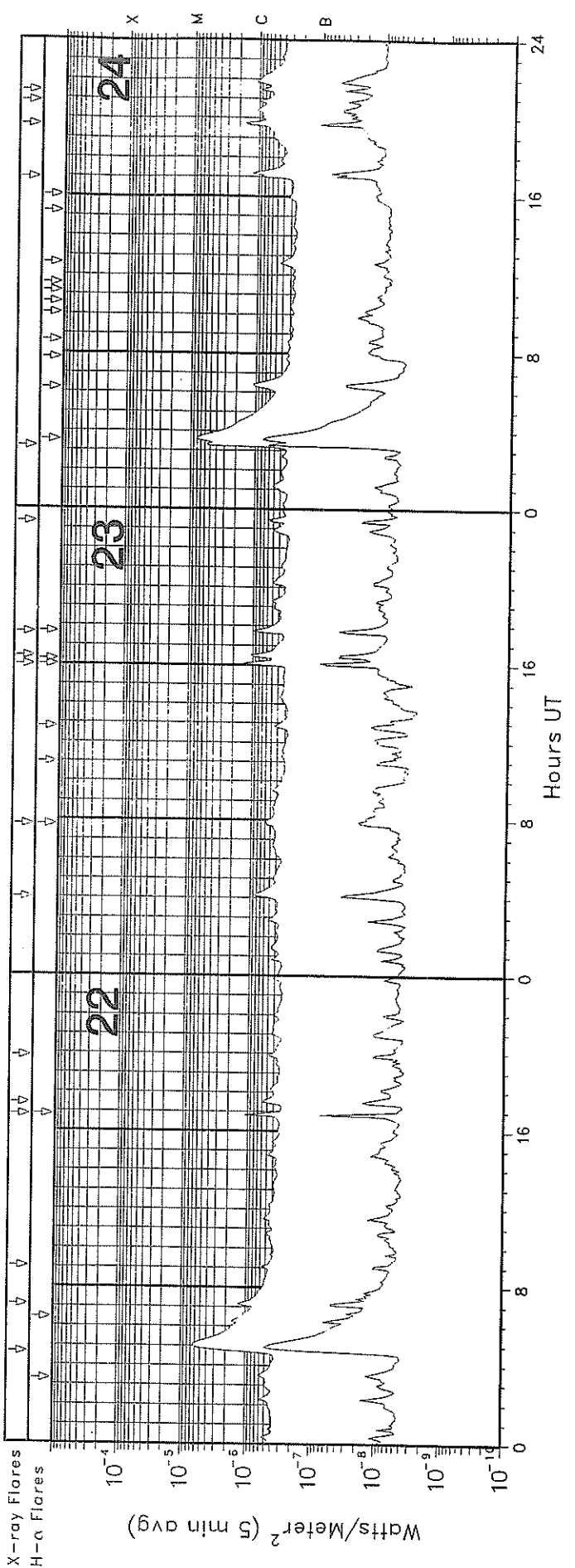
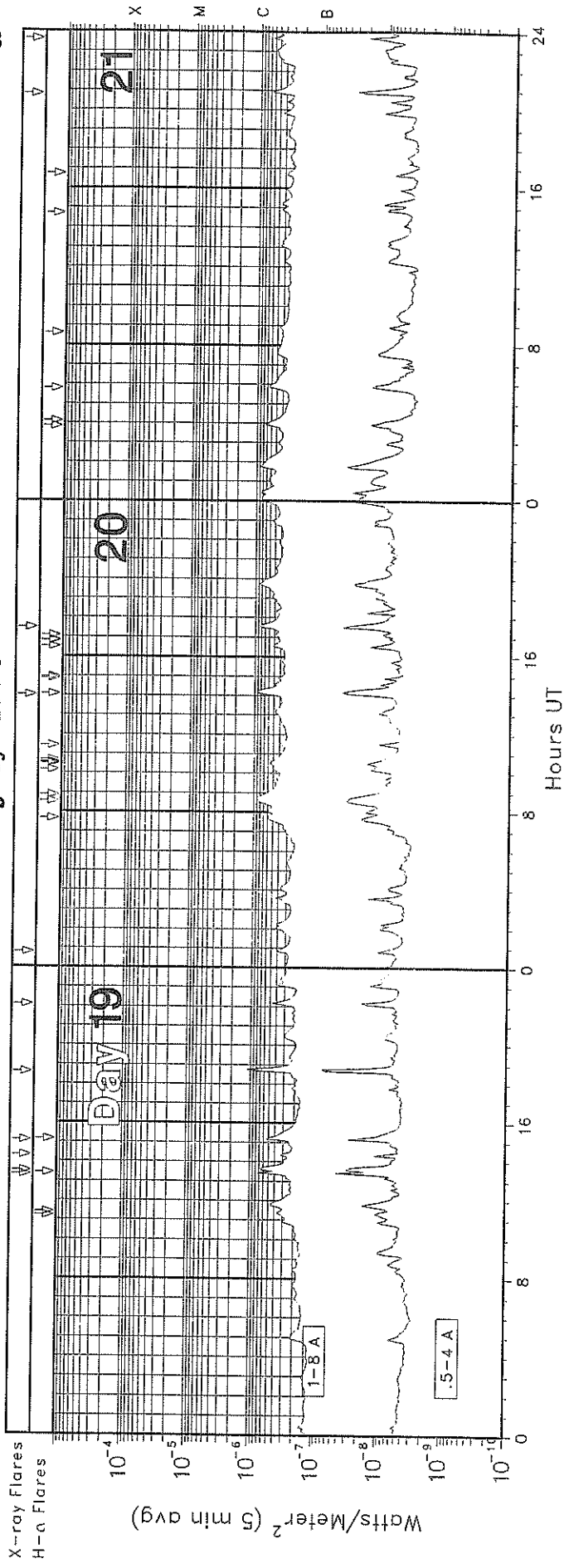
GOES X-RAY DETECTOR

July 1998



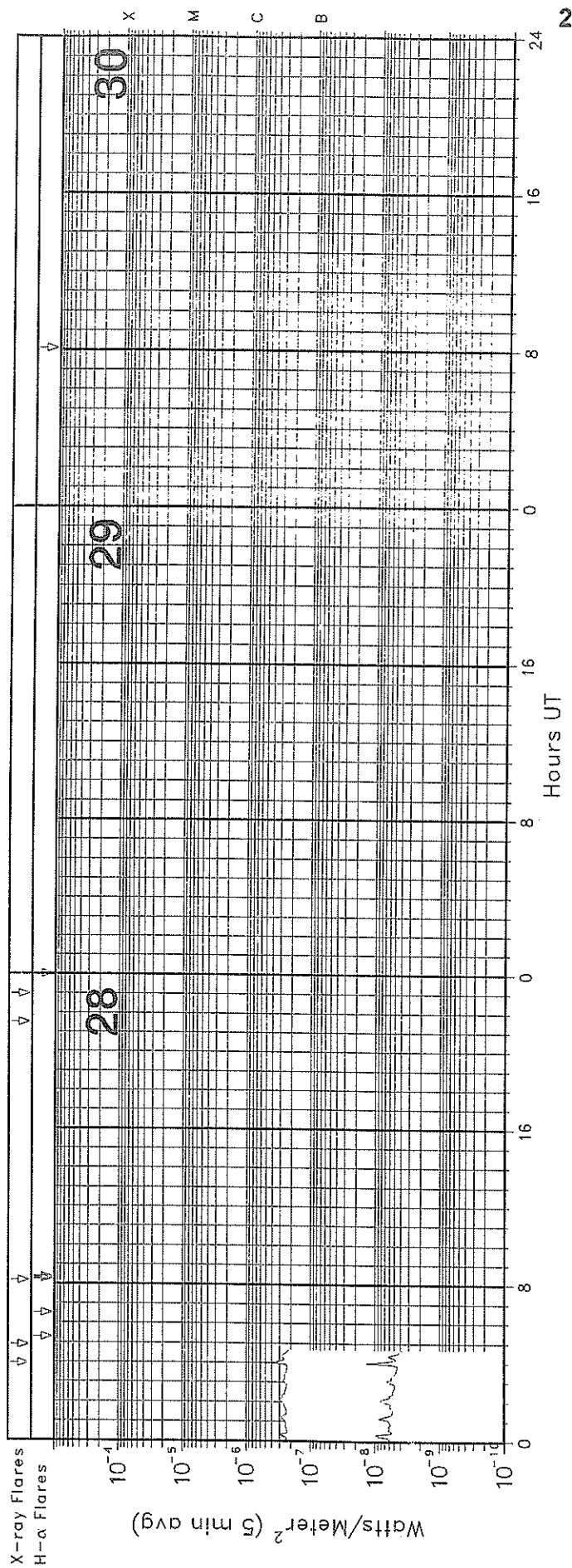
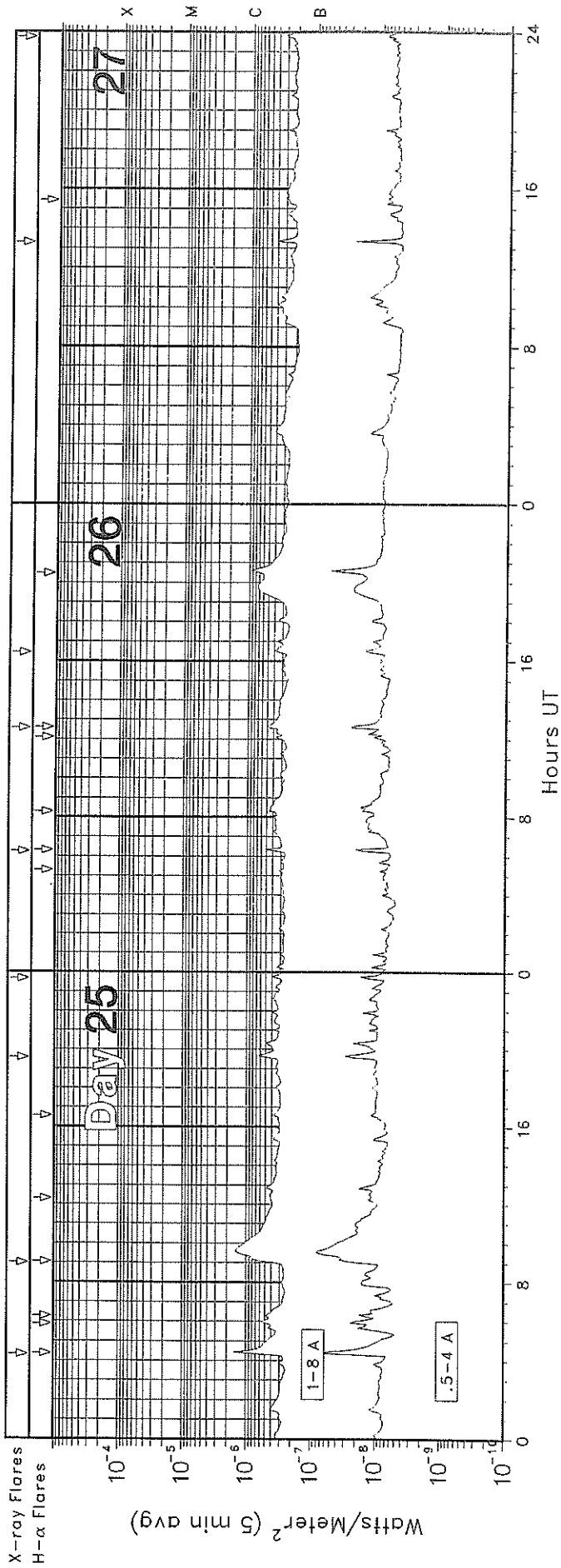
GOES X-RAY DETECTOR

July 1998

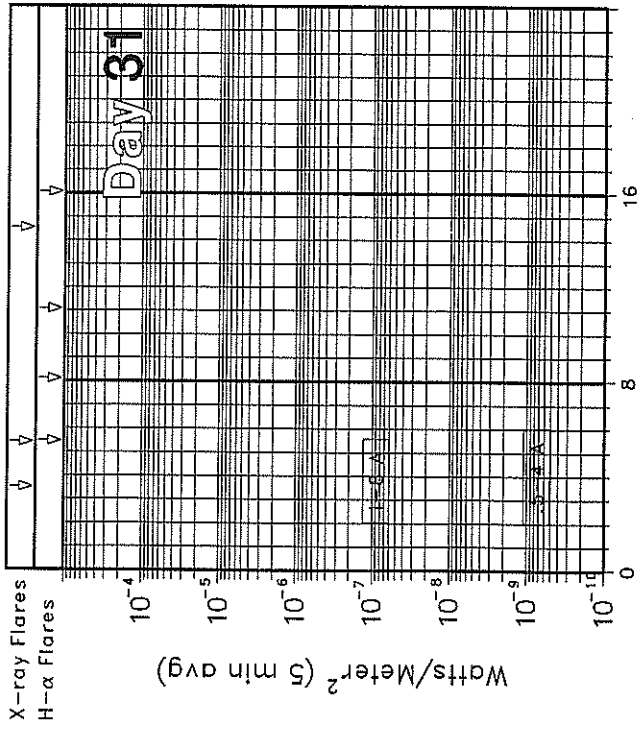


GOES X-RAY DETECTOR

July 1998



GOES X-RAY DETECTOR July 1998



GOES SOLAR X-RAY FLARES
Preliminary Listing

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July 1998

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/USAF	
								Region	Flux
01	0001	0009	0028	N25	E39	SF	C1.4	8259	1.8E-03
01	0951	0954	0957				B6.3		2.0E-04
01	1014	1020	1022				C1.6		4.7E-04
01	1801	1814	1826	S23	W02		C3.6	8256	4.0E-03
01	1835	1840	1847	N15	W45	SF	C6.8	8253	3.9E-03
02	0116	0122	0125				C1.4		5.9E-04
02	0639	0647	0654				B7.3		5.8E-04
02	1234	1241	1249	S26	W14	SF	B8.1	8256	6.0E-04
02	2332	2338	2359				B9.1		1.2E-03
03	0006	0112	0127				M1.2		2.1E-02
03	0518	0602	0620				C1.4		3.8E-03
03	1119	1125	1133	S25	W26	SF	C1.3	8256	9.5E-04
03	1725	1744	1758	S25	W31	SF	C1.6	8256	2.9E-03
03	2004	2014	2021	S25	W29	SF	C2.1	8256	1.9E-03
03	2354	0055	0103				C1.7		5.3E-03
04	0537	0545	0553	S24	W40	SN	C9.4		5.6E-03
04	0815	0840	0915	S23	W42	SF	C1.2	8256	3.6E-03
04	1000	1010	1023	S23	W43	SF	C5.8	8256	5.3E-03
04	1200	1216	1233	S23	W44	SN	M1.2		1.7E-02
04	1440	1453	1510	S23	W45	SF	C5.5	8256	5.7E-03
04	1632	1643	1653	S23	W46	1N	C9.7	8256	7.5E-03
04	1838	1852	1900	S23	W44	SF	C2.3	8256	2.3E-03
04	1920	1925	1935	S24	W47		C1.7	8256	1.3E-03
04	2224	2232	2238				C2.2		1.2E-03
04	2253	2259	2306				C1.3		8.8E-04
04	2307	2318	2324				C3.4		2.7E-03
05	0342	0346	0354				B7.8		4.7E-04
05	0613	0618	0623				C1.2		6.2E-04
05	0852	0858	0904				C1.1		6.4E-04
05	1025	1031	1036				C1.9		9.5E-04
05	1129	1144	1202	N16	E24	2F	C7.3		9.6E-03
05	1252	1256	1302	N17	E25		C1.7	8264	9.4E-04
05	1638	1644	1652	S24	W59	SF	B7.4	8256	5.4E-04
05	1800	1824	1839	S22	W56	SF	C1.6	8256	2.9E-03
06	1113	1123	1140				B8.8		1.1E-03
06	1258	1304	1314				B6.2		5.5E-04
06	1350	1400	1411				C1.2		1.3E-03
06	1938	1948	2001				B6.4		7.8E-04
07	0535	0543	0548				B5.2		3.5E-04
07	1007	1015	1021	N26	W45	1F	C1.4	8259	8.2E-04
07	1220	1224	1231				B4.4		2.6E-04
07	1249	1252	1255				B5.8		1.9E-04
07	1447	1453	1457				B5.0		2.5E-04
07	1642	1646	1650				B6.5		2.4E-04
07	1949	1955	1959	N16	W16	SF	B7.0	8264	3.4E-04
08	0326	0331	0335				B8.4		3.1E-04
08	1027	1055	1120				C1.9		4.9E-03
08	2246	2313	2329				C1.1		2.5E-03
09	1025	1117	1141				C2.5		6.5E-03
10	0307	0311	0315				B5.0		2.1E-04
10	0405	0410	0413				C1.2		3.8E-04
10	0444	0455	0459	S21	W56	SF	B9.6	8263	6.9E-04
10	0626	0630	0636	S22	E78	SF	B7.2		3.6E-04
10	0903	0906	0909				B4.6		1.4E-04
10	1216	1231	1237				B6.7		7.6E-04
10	1902	1906	1908	S21	E46	SF	B3.6		1.1E-04
10	2308	2316	2324				B8.8		7.1E-04

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/USAF	
								Region	Flux
11	0041	0047	0054				B9.8		5.8E-04
11	0231	0234	0236				B4.9		1.2E-04
11	0430	0441	0503	S21	W63	SF	C1.7	8264	2.5E-03
11	1039	1043	1045				B7.1		2.0E-04
11	1053	1057	1059	S23	E62	SF	B9.9	8270	2.3E-04
11	1243	1250	1253	N17	W66	SF	C4.3	8264	1.4E-03
11	1703	1708	1714				B5.5		2.9E-04
11	1815	1819	1822				B5.3		1.9E-04
11	1835	1840	1850	S22	E55	SF	B4.4	8270	3.6E-04
11	2336	2343	2348				B9.5		4.8E-04
12	0047	0051	0100				B5.9		4.0E-04
12	0125	0128	0133				B9.0		3.0E-04
12	1210	1214	1218				B3.4		1.5E-04
12	1220	1223	1225				B4.3		1.1E-04
13	1605	1610	1613				B5.5		2.1E-04
13	1714	1718	1721				B4.9		1.9E-04
13	1825	1829	1832				B7.5		2.2E-04
13	2357	0001	0004				B6.3		2.1E-04
14	0212	0225	0253				C2.4		4.4E-03
14	0648	0700	0715				B5.0		6.9E-04
14	0808	0812	0816	S22	E24	SF	B4.5	8270	1.7E-04
14	1050	1100	1119	N20	E26	SF	C1.0	8269	1.6E-03
14	1251	1259	1303	S23	E20	1B	M4.6		1.6E-02
14	1853	1903	1911				C2.9		2.0E-03
14	2129	2144	2159				B4.3		6.7E-04
15	1031	1046	1052	S31	E65	SF	C5.7		3.3E-03
15	1103	1111	1122	S23	E08	SF	C2.8	8270	2.6E-03
15	1511	1517	1528	S21	E03	SF	C1.6	8270	1.1E-03
15	1537	1540	1543				B8.1		2.6E-04
15	1546	1613	1624	S21	E06	SF	C3.7	8270	6.9E-03
15	1914	1918	1921				B4.3		1.6E-04
15	1946	1953	1957	S20	E03	SF	C6.8		2.1E-03
15	2138	2145	2155				C1.0		8.3E-04
16	0015	0023	0027	S20	W01	SF	C6.5	8270	2.1E-03
16	0106	0112	0121				C1.5		1.1E-03
16	0312	0315	0318				B4.3		1.3E-04
16	0340	0345	0349				B7.2		2.8E-04
16	0444	0504	0516				B7.2		1.2E-03
16	0647	0650	0653				B4.0		1.2E-04
16	0751	0800	0813	S20	W05	SF	C2.3	8270	2.2E-03
16	0906	0916	0932				C1.4		1.6E-03
16	1018	1029	1041	S31	E52	SF	C1.1	8272	1.1E-03
16	1206	1212	1220				B9.2		6.4E-04
16	1244	1252	1301				C1.4		1.1E-03
16	1307	1311	1317	S22	W06	SF	C1.6	8270	8.6E-04
16	1557	1604	1607	S21	W09	SF	B5.6	8270	2.8E-04
16	1616	1625	1636	S22	W07	SF	C3.5	8270	2.6E-03
16	1859	1906	1915	S29	E47	SF	B7.9	8272	6.2E-04
16	2021	2033	2045	S21	W10	1F	C5.0	8270	5.2E-03
16	2227	2230	2239				B3.4		2.1E-04
17	0000	0007	0016	S21	W11	SF	B5.0	8270	3.7E-04
17	0152	0158	0207				B5.9		3.9E-04
17	0647	0655	0706				B4.4		4.0E-04
17	1510	1517	1526	S29	E37	SF	B3.7	8272	3.2E-04
17	1530	1534	1540	S21	W21	SF	B4.0	8270	2.2E-04
18	0041	0044	0046				B2.0		4.9E-05
18	1644	1656	1705				C2.7		2.1E-03
19	1321	1326	1329	S24	W43	SF	B9.5	8270	2.9E-04
19	1332	1340	1348	S24	W44	SF	B7.2	8270	5.9E-04

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GOES SOLAR X-RAY FLARES
Preliminary Listing

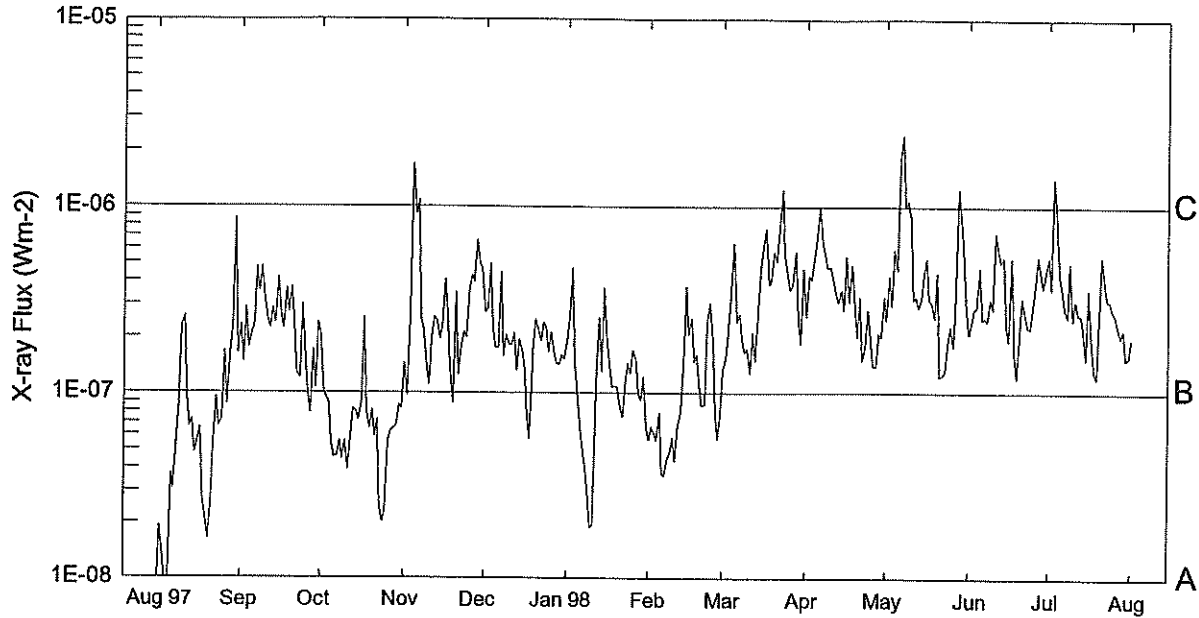
July 1998

Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
19	1420	1424	1427			B3.9		1.4E-04
19	1507	1512	1519	S23	W46	SF B5.9	8270	3.4E-04
19	1837	1845	1849			C1.4		5.9E-04
19	2205	2214	2217			B4.6		2.9E-04
20	0048	0052	0059			B4.1		2.5E-04
20	1402	1413	1423	S24	W59	SF B9.6	8270	1.0E-03
20	1728	1733	1743			B8.9		7.1E-04
21	2049	2056	2106			B6.8		5.8E-04
21	2337	2341	2344			B6.9		2.6E-04
22	0439	0503	0526			C6.5		1.2E-02
22	0704	0711	0716			C1.4		8.7E-04
22	0902	0905	0907			B7.3		1.8E-04
22	1649	1652	1655	S22	E63	SF C1.5	8280	3.8E-04
22	1724	1734	1743			B5.8		5.9E-04
22	1951	1954	1957			B5.8		1.8E-04
23	0401	0410	0422			B8.8		9.4E-04
23	0745	0748	0750			B7.1		1.8E-04
23	1558	1605	1612	S24	E54	SF C1.4	8280	8.5E-04
23	1624	1630	1634	N17	E48	SF C1.1	8281	5.9E-04
23	1738	1745	1753	N29	E53	SF C1.0		7.4E-04
23	2319	2324	2329			B6.9		3.4E-04
24	0311	0338	0358	S26	E57	SF C8.2	8280	1.6E-02
24	1656	1712	1721			C1.3		1.4E-03

Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
24	1938	1944	1948			C2.1		9.2E-04
24	2050	2053	2055			C1.1		3.1E-04
24	2122	2127	2135			B9.6		6.6E-04
25	0419	0426	0432			C1.6		8.6E-04
25	0900	0936	1015	S23	E39	SF C1.4		4.6E-03
25	1935	1940	1949			B6.9		4.8E-04
25	2341	2345	2351			B4.3		2.2E-04
26	0616	0620	0622	S24	E21	SF B7.1	8280	1.8E-04
26	1234	1239	1246	S22	E19	SF B5.5	8280	3.5E-04
26	1626	1630	1638			B4.4		2.7E-04
27	1317	1321	1326			B4.1		1.7E-04
27	2345	2349	2353			B3.2		1.3E-04
28	0357	0401	0405			B3.9		1.5E-04
28	0453	0456	0458			B3.0		7.7E-05
28	0811	0823	0835	S25	E03	SF B9.0	8279	9.6E-04
28	2131	2137	2141			B7.9		3.3E-04
28	2259	2303	2306			B6.3		2.2E-04
31	0331	0345	0413			C1.2		2.4E-03
31	0525	0538	0615	N28	E31	2F C2.9		5.7E-03
31	1433	1540	1610			B7.1		2.3E-03

Preliminary GOES Satellite Daily X-Ray Background Aug 97 - Jul 98

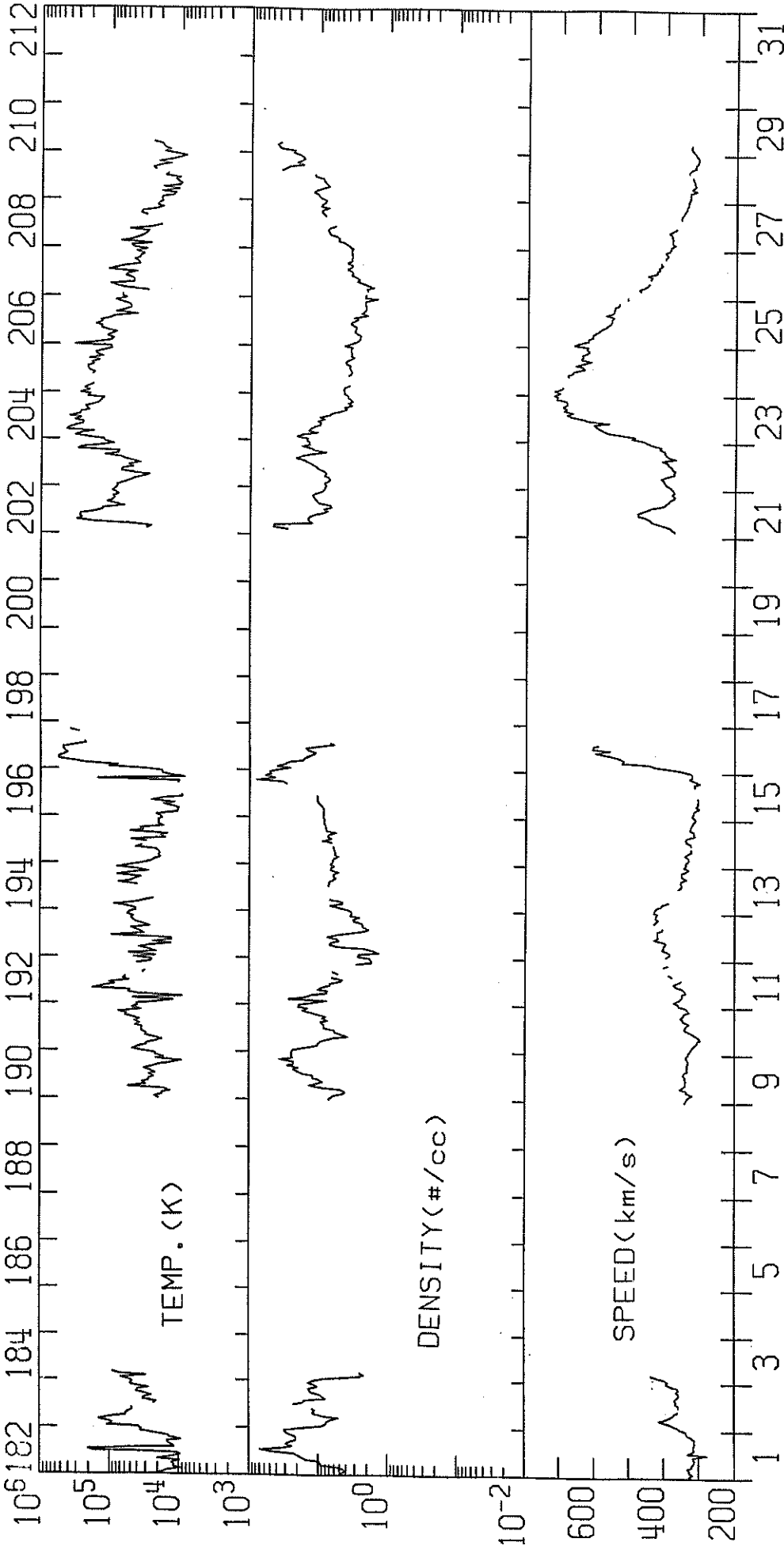
31
Jul 98



Day	Aug 97	Sep	Oct	Nov	Dec	Jan 98	Feb	Mar	Apr	May	Jun	Jul
1	<A1.0	B2.3	B2.0	B1.4	B2.7	B1.9	A5.6	B1.3	B2.6	B2.4	B2.0	B5.3
2	A1.9	B1.4	B1.0	A9.7	B2.8	B2.6	A6.6	B1.5	B4.3	B4.2	B2.4	B3.6
3	A1.3	B2.8	A9.4	B2.6	B4.9	B4.7	A6.1	B2.2	B4.1	B2.9	B2.8	C1.4
4	<A1.0	B1.7	A8.9	C1.6	B2.2	B1.4	A5.5	B3.6	B5.2	B5.8	B2.8	B9.2
5	<A1.0	B2.0	A5.3	B9.1	B1.7	A9.4	A7.9	B6.3	B6.6	B4.6	B4.7	B4.2
6	A3.6	B2.3	A4.5	C1.0	B1.7	A6.5	A3.6	B2.4	C1.0	C1.8	B2.4	B3.5
7	A3.0	B4.7	A4.6	B2.4	B4.4	A5.0	A3.5	B2.6	B6.6	C2.4	B2.5	B2.8
8	A5.2	B3.5	A5.5	B2.2	B1.5	A3.8	A4.5	B1.9	B5.6	B9.9	B2.4	B2.5
9	A8.8	B4.8	A4.4	B1.4	B2.0	A2.9	A4.7	B1.6	B4.7	C1.0	B3.2	B5.0
10	B2.3	B3.3	A5.5	B1.1	B1.8	A1.8	A5.7	B1.7	B4.8	B8.7	B2.8	B2.4
11	B2.5	B2.4	A3.9	B2.0	B1.8	A1.9	A4.3	B1.2	B4.1	B3.1	B7.2	B3.1
12	A9.5	B2.2	A5.8	B2.5	B2.1	B1.1	A6.6	B2.1	B3.5	B3.3	B6.0	B2.6
13	A6.6	B2.8	A8.2	B2.4	B1.3	B2.5	A7.9	B1.4	B3.1	B2.8	B5.0	B2.6
14	A7.2	B2.4	A7.9	B1.9	B1.9	B1.3	B1.4	B2.5	B3.6	B3.2	B5.3	B2.2
15	A4.7	B4.1	A7.1	B2.3	B1.6	B3.6	B3.7	B4.8	B2.8	B4.4	B2.3	B1.5
16	A5.7	B2.6	A8.6	B4.1	B1.3	B2.0	B2.0	B6.1	B5.4	B5.3	B1.9	B3.6
17	A6.5	B2.2	B2.5	B2.6	A7.5	B1.5	B2.5	B7.6	B3.1	B3.1	B5.3	B2.0
18	A2.7	B3.6	A8.0	B1.3	A5.7	B1.0	B1.4	B3.8	B4.9	B3.0	B1.5	B1.2
19	A2.1	B2.7	A6.5	A8.9	B1.7	B1.0	B1.6	B4.0	B3.0	B2.5	B1.2	B1.2
20	A1.6	B3.7	A8.1	B3.5	B2.4	B1.0	B1.1	B5.7	B2.0	B4.4	B1.9	B2.5
21	A2.4	B2.3	A5.8	B1.2	B2.2	A8.6	A8.6	B5.1	B3.3	B1.2	B3.2	B5.4
22	A5.5	B1.2	A7.2	B1.7	B1.9	A7.4	A8.6	B7.5	B1.5	B1.2	B2.6	B3.8
23	A9.5	B1.2	A2.4	B2.1	B2.4	B1.1	B2.4	C1.2	B1.8	B1.3	B2.2	B3.1
24	A6.6	B2.9	A2.0	B2.0	B2.2	B1.4	B3.0	B5.6	B2.8	B1.8	B2.2	B3.1
25	A7.2	B1.7	A2.3	B3.6	B1.6	B1.2	B1.8	B4.3	B2.0	B2.2	B2.7	B2.7
26	B1.6	B1.0	A5.5	B4.3	B2.1	B1.7	A8.0	B3.6	B1.4	B1.7	B3.8	B2.6
27	A8.7	A7.8	A6.3	B3.9	B1.6	B1.5	A5.6	B3.8	B1.4	B2.7	B5.3	B2.2
28	B1.4	B1.7	A6.5	B6.6	B1.4	A9.9	A7.5	B5.6	B2.1	C1.2	B4.4	B2.0
29	B2.3	B1.0	A6.7	B5.0	B1.4	A9.1		B2.5	B2.0	B8.8	B3.7	B2.2
30	B8.6	B2.4	A8.6	B4.6	B1.6	B1.2		B1.8	B3.3	B5.9	B4.4	B1.5
31	B1.6		A8.2		B1.5	A6.6		B4.6		B2.7		B1.5

IMP 8 SOLAR WIND PLASMA
JULY 1998

MIT/CSR IMP 8 PLASMA PARAMETERS



JUL 1998

JUL 1998

IMP 8

ONE-HOUR AVERAGES

MIT

33
Jul 98

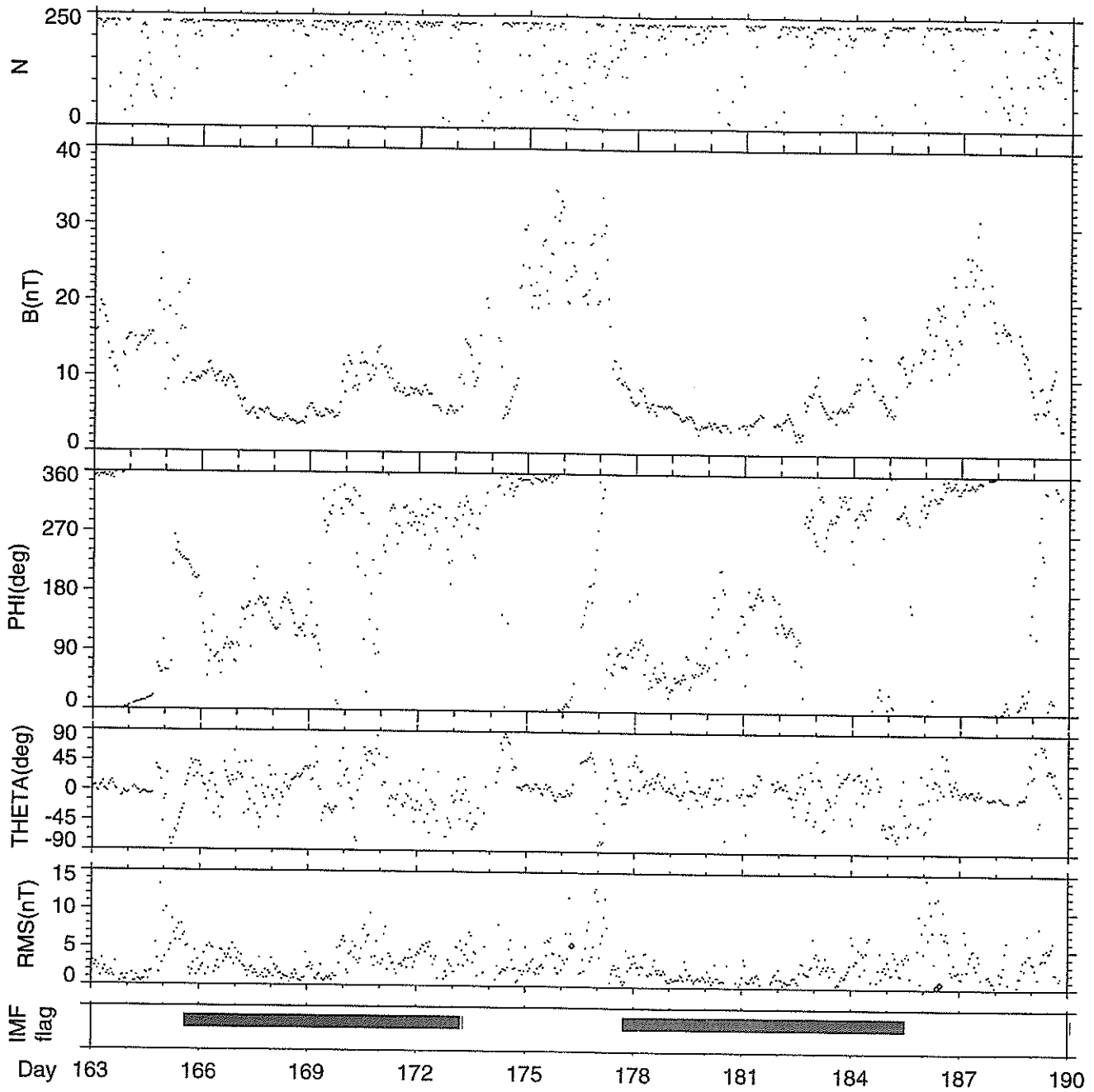
IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages

(c) DOY 163 - 190

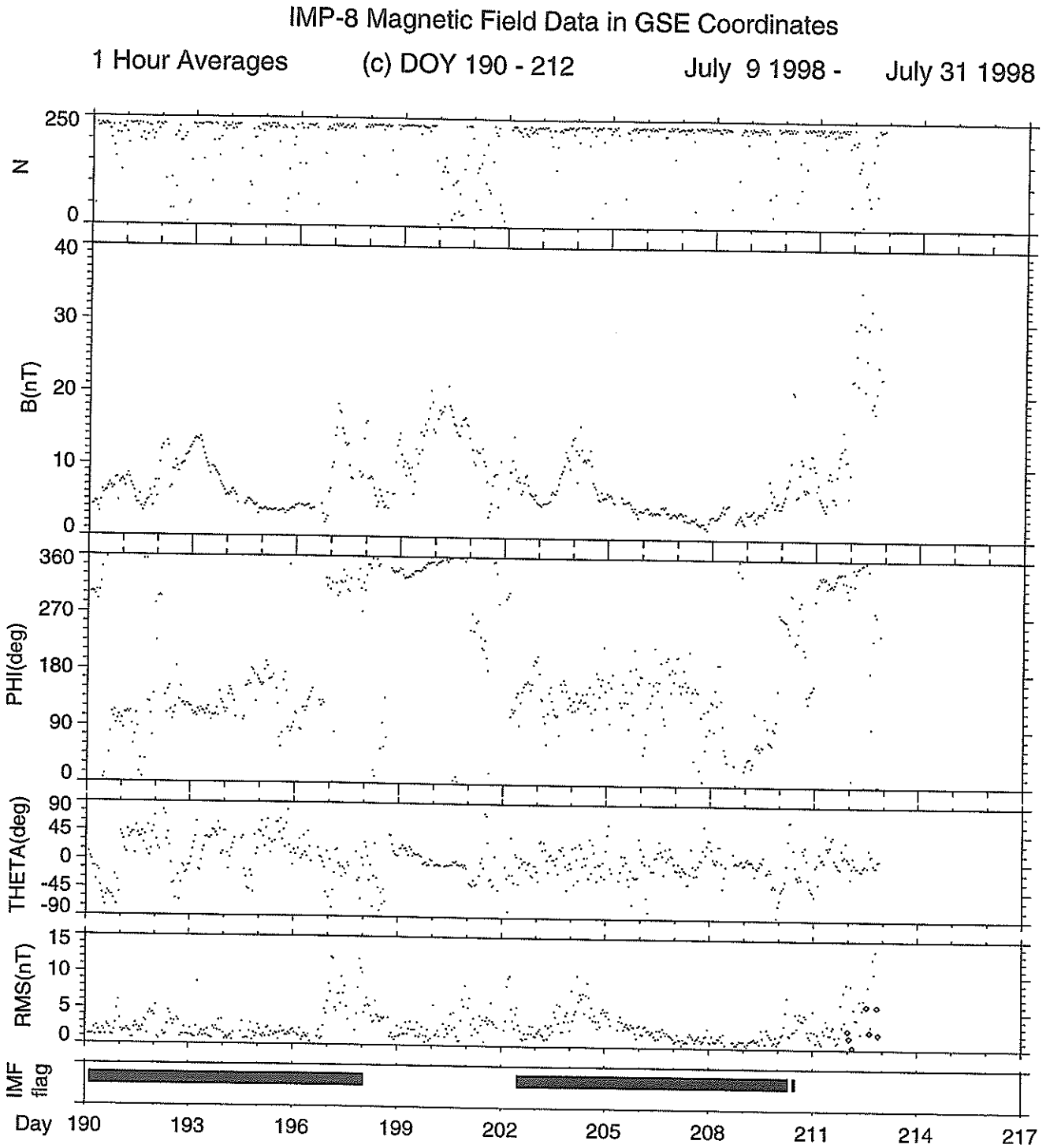
June 12 1998 -

July 9 1998



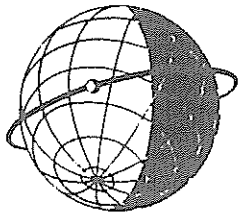
Generation Date : Thu Nov 5 10:27:41 1998

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.

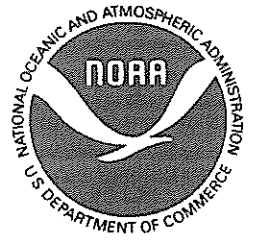


Generation Date : Thu Nov 5 10:27:43 1998

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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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."