

JANUARY 2002 NUMBER 689 - Part II

Solar-Geophysical Data comprehensive reports



Data for July 2001 and Miscellaneous

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NATIONAL ENVIRONMENTAL SATELLITE,
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Data for July 2001 and Late Data

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SOLAR-GEOPHYSICAL DATA

Number 689

(Issued in Two Parts)

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Jul 01

H α SOLAR FLARES

JULY 2001

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	NOAA/ USAF Region	CMP Mo	Dur Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks	
																Apparent (10-6 Disk)	Corr (Sq Deg)		
			01 2123		2147		No Flare Patrol												
			01 2218		2339		No Flare Patrol												
			02 1855		1904		No Flare Patrol												
			02 1922		1934		No Flare Patrol												
			02 2243		2339		No Flare Patrol												
0001	LEAR	03	0735	0741	0749	N19 E50	9525	07	7.1	14	SF		3	E		22			
			03 2213		2322		No Flare Patrol												
			03 2328		2341		No Flare Patrol												
			05 0043		0052		No Flare Patrol												
0002	LEAR	05	0054	0059	0101	N05 E34	9528	07	7.6	7	SF		3	E		24		H	
			05 2048		2100		No Flare Patrol												
			05 2223		2303		No Flare Patrol												
0003	URUM	06	1157E	1157	1157D	S18 W21	9530	07	4.9	7D	SF			P		32	0.4	E	
			06 2057		2323		No Flare Patrol												
			07 0031		0051		No Flare Patrol												
0004	URUM	07	0052E	0052	0052D	S19 W28	9530	07	4.9	7D	1F			P		354	4.5	E	
0005	LEAR	07	0326	0332	0345	S20 W28	9530	07	5.0	19	SF		3	E		86		F	
			07 0400		0452		No Flare Patrol												
			07 2243		2248		No Flare Patrol												
			07 2256		2316		No Flare Patrol												
			08 0924		0958		No Flare Patrol												
			08 1003		1009		No Flare Patrol												
			08 1011		1015		No Flare Patrol												
0006	KANZ	08	1110	1111	1113	S06 E25	9531	07	10.3	3	SF		2	E					
0007	KANZ	08	1133	1141	1156	S20 W42	9530	07	5.3	23	SF		2	E					
0008		08	13405	13482	1400	S06 E26	9531	07	10.5	20	SF					22		F	
	HOLL	08	1340	1350	1403	S06 E26	9531	07	10.5	23	SF		3	E		21			
	SVTO	08	1345	1348	1358	S06 E26	9531	07	10.5	13	SF		2	E		22		F	
0009	HOLL	08	1437	1438	1442	S06 E25	9531	07	10.5	5	SF		3	E		23			
0010		08	16101	16163	1634	S06 E23	9531	07	10.4	24	SF					26		F	
	HOLL	08	1610	1616	1635	S06 E23	9531	07	10.4	25	SF		3	E		29		F	
	RAMY	08	1611	1619	1634	S07 E23	9531	07	10.4	23	SF		3	E		22		F	
0011		08	1702	17021	1709	S06 E24	9531	07	10.5	7	SF					33		F	
	HOLL	08	1702	1702	1710	S06 E24	9531	07	10.5	8	SF		3	E		36			
	RAMY	08	1702	1703	1708	S07 E24	9531	07	10.5	6	SF		3	E		30		F	
			08 1947		2000		No Flare Patrol												
			08 2009		2018		No Flare Patrol												
			08 2124		2349		No Flare Patrol												
			09 0000		0015		No Flare Patrol												
0012	LEAR	09	0034	0043	0117	S08 E20	9531	07	10.5	43	SF		3	E		26		F	
0013		09	07372	07373	0747	S06 E16	9531	07	10.5	10	SF					15		F	
	LEAR	09	0737	0737	0745	S06 E16	9531	07	10.5	8	SF		3	E		13		F	
	SVTO	09	0739	0740	0749	S05 E16	9531	07	10.5	10	SF		3	E		17		F	
0014		09	0838	08405	0902	S06 E14	9531	07	10.4	24	SF					18		F	
	LEAR	09	0838	0840	0903	S06 E15	9531	07	10.5	25	SF		2	E		17		F	
	SVTO	09	0838	0845	0902	S05 E14	9531	07	10.4	24	SF		3	E		18		F	
0015	KHAR	09	0955U		1005	S05 E19	9531	07	10.8	10U	SF		2	P	1000	30		DH	

H α SOLAR FLARES

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Jul 01

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF			Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
						Region	Mo	Day							Apparent (10-6 Disk)	Corr (Sq Deg)	
0016	09	1025	1025	1031	S06 E18	9531	07	10.8	6	SF					31		DFHO
	SVTO	09	1025	1025	1030	S06 E16	9531	07	10.6	5	SF	3	E		17		F
	KHAR	09	1025	1027	1032	S05 E19	9531	07	10.9	7	SF	2	P	1025	45		HOD
0017	KHAR	09	1145		1200	S05 E13	9531	07	10.5	15	SF	2	P				D
0018	KHAR	09	1202		1215	N20 E90	9544	07	16.4	13	SF	2	V				D
0019	09	1245	1250	1304	S06 E12	9531	07	10.4	19	SF					26		F
	SVTO	09	1245	1251	1306	S06 E13	9531	07	10.5	21	SF	3	E		36		F
	RAMY	09	1246	1250	1302	S07 E12	9531	07	10.4	16	SF	3	E		16		F
	09	2148		2204	No Flare Patrol												
	09	2217		2225	No Flare Patrol												
	09	2259		2336	No Flare Patrol												
0020	10	0709	0709	0720	S07 E06	9531	07	10.7	11	SF					20		FH
	LEAR	10	0709	0709	0719	S07 E05	9531	07	10.7	10	SF	3	E		20		FH
	SVTO	10	0713	0713	0721	S07 E06	9531	07	10.7	8	SF	3	E		19		F
	10	2112		2334	No Flare Patrol												
0021	11	0046	0047	0050	S07 W10	9531	07	10.3	4	SF	3	E			17		F
	11	1844		1848	No Flare Patrol												
	11	2143		2154	No Flare Patrol												
	11	2202		2209	No Flare Patrol												
	11	2213		2334	No Flare Patrol												
	12	0017		0038	No Flare Patrol												
0022	HOLL	12	2248	2248	2251	S19 E27	9539	07	15.0	3	SF	3	E			13	F
0023	13	0750	0750	0756	S10 W16	9533	07	12.1	6	SF					18		F
	SVTO	13	0750	0750	0756	S08 W17	9533	07	12.0	6	SF	3	E		16		F
	LEAR	13	0750	0750	0757	S11 W15	9533	07	12.2	7	SF	3	E		20		F
0024	HOLL	13	2318	2319	2323	N16 E69	9541	07	19.2	5	SF	3	E			11	
0025	HOLL	13	2326	2328	2330	N16 E68	9541	07	19.1	4	SF	3	E			21	
0026	14	0425	0429	0440	S17 E06	9539	07	14.6	15	SF					41		F
	LEAR	14	0425	0429	0443	S17 E05	9539	07	14.6	18	SF	3	E		59		F
	SVTO	14	0427	0431	0438	S17 E06	9539	07	14.6	11	SF	3	E		23		F
0027	LEAR	14	0512	0513	0542	S17 E06	9539	07	14.7	30	SF	2	E			28	F
0028	KANZ	14	0822E		0822D	S12 W31	9533	07	12.0	30D	SF	2	E				
0029	KHAR	14	0930E		0937	S11 W30	9533	07	12.1	7D	SF	2	P	0935		35	EO
0030	KHAR	14	1012U	1013	1022	S14 W85		07	8.0	10U	SN	2	P	1014		40	H
0031	KHAR	14	1111	1112	1123	S17 E07	9539	07	15.0	12	SF	2	V				D
0032	KHAR	14	1158U	1201U	1206	S16 E12	9539	07	15.4	8U	SF	2	V				D
0033	KANZ	14	1251	1253	1255	N12 E35	9534	07	17.2	4	SF	2	E				
0034	KANZ	14	1306E	1306U	1315	N12 E05	9536	07	14.9	9D	SF	2	E				
0035	HOLL	14	1733	1758	1808	S19 E01	9539	07	14.8	35	SF	3	E			22	F
0036	HOLL	14	1848	1849	1853	N18 E59	9541	07	19.3	5	SF	3	E			19	
0037	HOLL	14	1901	1905	1923	S17 E04	9539	07	15.1	22	SF	3	E			18	F
0038	HOLL	14	1953	2001	2013	S19 E04	9539	07	15.1	20	SF	3	E			22	F
0039	HOLL	14	2126	2141	2152	S19 W02	9539	07	14.7	26	SF	3	E			77	F

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Jul 01

H α SOLAR FLARES

JULY 2001

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0040	HOLL	14	2208	2209	2215	N07	E80	9542	07	20.9	7	SF	3	E		14			
0041		15	00091	00237	0106	S19	W04	9539	07	14.7	57	1F				73		F	
	LEAR	15	0009	0023	0108	S19	W05	9539	07	14.6	59	1F	3	E		103		F	
	HOLL	15	0010	0030	0104	S19	W03	9539	07	14.8	54	SF	3	E		43		F	
0042		15	05051	05061	0510	S26	E88	9543	07	22.0	5	SF				53			
	LEAR	15	0505	0507	0512	S24	E88	9543	07	22.0	7	SF	3	E		67			
	SVTO	15	0506	0506	0509	S27	E88	9543	07	22.1	3	SF	3	E		39			
0043		15	06455	06521	0716	S19	W08	9539	07	14.7	31	SF				30	0.3	DF	
	SVTO	15	0645	0652	0718	S18	W09	9539	07	14.6	33	SF	3	E		38		F	
	LEAR	15	0645	0652	0721	S19	W08	9539	07	14.7	36	SF	3	E		24		F	
	KANZ	15	0645	0653U	0722	S19	W07	9539	07	14.7	37	SF	2	E					
	MITK	15	0650	0653	0701	S19	W07	9539	09	14.7	11	SN		C	0653	28	0.3	D	
0044	MITK	15	0714	0715	0717	S19	W07	9539	07	14.8	3	SN		C	0715	49	0.6	D	
0045	SVTO	15	0735	0736	0801	S18	W10	9539	07	14.5	26	SF	3	E		20		F	
0046	KHAR	15	0810E		0816	S18	W06	9539	07	14.9	6D	SF	2	P	0812	25		D	
0047	KHAR	15	0935U	0936	0940	S17	W03	9539	07	15.2	5U	SF	2	V				D	
0048	KHAR	15	1018		1040U	S18	W07	9539	07	14.9	22U	SF	2	V					
0049	KHAR	15	1039		1048D	S18	E79	9546	07	21.4	9D	SF	2	V				D	
0050	KANZ	15	1135	1139	1144D	N15	E22	9540	07	17.1	9D	SF	2	E					
0051		15	13526	14026	1430	S18	W11	9539	07	14.7	38	SF				64		F	
	HOLL	15	1352	1408	1435	S19	W10	9539	07	14.8	43	SF	3	E		92		F	
	KANZ	15	1354	1403	1428	S19	W10	9539	07	14.8	34	SF	2	E					
	SVTO	15	1358	1402	1431	S18	W12	9539	07	14.7	33	SF	3	E		51		F	
	RAMY	15	1358	1403	1425	S18	W11	9539	07	14.7	27	SF	3	E		48		F	
0052	HOLL	15	1435	1444	1448	S25	E79	9543	07	21.7	13	SF	3	E		21			
0053	HOLL	15	2038	2044	2051	S09	W50	9533	07	12.1	13	SF	3	E		15		F	
		15	2103		2240	No Flare Patrol													
		15	2318		2325	No Flare Patrol													
0054		16	0306*	0319	0340	S19	W19	9539	07	14.7	34	1B				254	3.4	EF	
	URUM	16	0306	0319	0335	S19	W19	9539	07	14.7	29	1B		C		241	2.9	E	
	LEAR	16	0316	0319	0349	S18	W20	9539	07	14.6	33	1N	3	E		205		FE	
	MITK	16	0317	0319	0337	S19	W18	9539	09	14.8	20	1B		C	0319	317	3.8	E	
0055		16	0624*	06307	0649	S19	W16	9539	07	15.0	25	SN				46	0.8	DEFH	
	URUM	16	0624	0630	0631D	S19	W15	9539	07	15.1	7D	SN		P		113	1.3	E	
	LEAR	16	0630	0636	0657	S19	W17	9539	07	15.0	27	SF	3	E		25		F	
	SVTO	16	0631	0637	0651	S19	W17	9539	07	15.0	20	SF	3	E		31		H	
	MITK	16	0635	0637	0639	S20	W16	9539	09	15.0	4	SN		C	0637	14	0.2	D	
0056	URUM	16	0704E	0704	0704D	N10	W21	9536	07	14.7	4D	1N		P		273	3.0	E	
0057	LEAR	16	0708	0708	0718	S09	W54	9533	07	12.2	10	SF	3	E		19			
0058	KHAR	16	0858	0858	0908	N19	E09	9540	07	17.1	10	SF	2	V				E	
0059		16	08435	08522	0904	S18	W22	9539	07	14.7	21	SF				38		EF	
	LEAR	16	0843	0852	0905	S18	W22	9539	07	14.7	22	SF	3	E		48		F	
	SVTO	16	0848	0854	0902	S18	W23	9539	07	14.6	14	SF	3	E		27		F	
	KHAR	16	0850E		0905	S19	W21	9539	07	14.8	15D	SF	2	V				E	
0060	URUM	16	0906	0912	0912D	S17	W23	9539	07	14.6	6D	2N		P		450	5.4	E	
0061		16	09182	09194	0932	N10	E30	9545	07	18.6	14	SF				18		FU	
	LEAR	16	0918	0919	0935	N10	E30	9545	07	18.6	17	SF	3	E		14		UF	
	SVTO	16	0920	0923	0929	N09	E30	9545	07	18.6	9	SF	3	E		21		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)	
0062	KHAR	16	0919		0935	N16	E32	9538	07 18.8	16	SN		2	V				E
0063	KHAR	16	0958		1015	N16	E31	9538	07 18.8	17	SF		2	V				E
		16	1031		1039	No Flare Patrol												
0064	KHAR	16	1040		1045	S12	W55	9533	07 12.3	5	SF		2	V				D
0065		16	1030	1041U	1052	S18	W21	9539	07 14.8	22	1F					13		EF
	KHAR	16	1030		1059	S18	W20	9539	07 14.9	29	1F		2	V				E
	SVTO	16	1041E	1041U	1046	S17	W22	9539	07 14.8	5D	SF		3	E		13		F
0066	RAMY	16	1343	1345	1429	S20	W26	9539	07 14.6	46	SF		3	E		40		F
0067	RAMY	16	1453	1459	1513	S18	W25	9539	07 14.7	20	SF		3	E		43		F
0068	RAMY	16	1606E	1606	1623	N09	E27	9545	07 18.7	17D	SF		3	E		16		F
0069	HOLL	16	1726	1732	1752	S18	W22	9539	07 15.0	26	SF		3	E		21		F
		16	1736		1821	No Flare Patrol												
		16	2059		2224	No Flare Patrol												
0070	HOLL	16	2206	2226U	2235	N09	E23	9545	07 18.6	29	SF		3	E		18		
0071	HOLL	16	2337	2338U	2354	S25	E59	9543	07 21.5	17	SF		3	E		14		
0072	LEAR	17	0005	0007	0012	S26	E58	9543	07 21.5	7	SF		3	E		19		
0073		17	0728	07301	0739	S26	E55	9543	07 21.6	11	SF					58		F
	LEAR	17	0728	0730	0742	S26	E56	9543	07 21.7	14	SF		3	E		72		F
	SVTO	17	0728	0731	0736	S25	E54	9543	07 21.5	8	SF		2	E		44		F
0074	KHAR	17	1002E	1004U	1014	N06	W16	9535	07 16.2	12D	SF		2	P	1006	45		DH
0075		17	10201	10218	1036	S18	W36	9539	07 14.7	16	SN					133	4.4	EHO
	KHAR	17	1020	1021	1036	S21	W35	9539	07 14.8	16	SN		2	P	1024	30		HO
	SVTO	17	1021	1024	1037	S18	W37	9539	07 14.6	16	SF		3	E		49		H
	URUM	17	1029E	1029	1029D	S15	W36	9539	07 14.7	16D	1B			P		321	4.4	E
0076		17	14111	14121	1422	S20	W36	9539	07 14.8	11	SF					17		FH
	RAMY	17	1411	1413	1422	S21	W35	9539	07 14.9	11	SF		3	E		23		FH
	SVTO	17	1412	1412	1421	S20	W36	9539	07 14.8	9	SF		3	E		11		H
0077	HOLL	17	1926	1926	1931	S18	W41	9539	07 14.7	5	SF		3	E		21		F
		17	2158		2205	No Flare Patrol												
		17	2229		2246	No Flare Patrol												
		17	2255		2302	No Flare Patrol												
		17	2307		2326	No Flare Patrol												
0078		18	00202	00236	0037	N09	E07	9545	07 18.5	17	SF					94	2.5	EF
	HOLL	18	0020	0029	0040D	N10	E07	9545	07 18.5	20D	SF		3	E		24		F
	LEAR	18	0022	0024	0037	N09	E07	9545	07 18.5	15	SF		3	E		18		F
	URUM	18	0023E	0023	0023D	N08	E06	9545	07 18.5	15D	1N			P		241	2.5	E
0079		18	0530	0532	0542	N10	E04	9545	07 18.5	12	SF					24		H
	LEAR	18	0530	0532	0541	N09	E04	9545	07 18.5	11	SF		3	E		24		H
	SVTO	18	0530	0532	0542	N10	E03	9545	07 18.4	12	SF		3	E		23		H
0080	RAMY	18	1213	1214	1218	N16	E57	9548	07 22.8	5	SF		3	E		15		
0081	HOLL	18	2003	2005	2012	S18	E33	9546	07 21.3	9	SF		3	E		12		
		18	2101		2118	No Flare Patrol												
0082		18	21358	21412	2154	S17	E34	9546	07 21.5	19	SF					23		EF
	HOLL	18	2135	2141	2154	S17	E32	9546	07 21.3	19	SF		3	E		26		FE
	RAMY	18	2143	2143	2153	S17	E35	9546	07 21.6	10	SF		3	E		20		

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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)	
0083	HOLL	18 2154	2156	2202	S18	E31	9546	07 21.3	8	SF		3	E	12		F	
		18 2211		2213												No Flare Patrol	
		18 2256		2327												No Flare Patrol	
0084	URUM	19 0436E	0436	0501	N13	W72	9551	07 13.7	25D	1N			P	96		E	
0085	URUM	19 0436E	0436	0436D	N06	W21	9535	07 17.6	25D	1N			P	370	4.1	E	
0086	URUM	19 0501	0506	0530	N19	W29	9540	07 17.0	29	SN			C	113	1.4	E	
0087	SVTO	19 0625	0626	0631	N09	E21	9542	07 20.8	6	SF		3	E	10			
0088	URUM	19 0952	0956U	1016	S05	W48	9537	07 15.8	24	2B			C	450	7.1	E	
0089	SVTO	19 0956	0959	1053	S08	W62	9537	07 14.8	57	1B		3	E	189		U	
0090	KHAR	19 0956	0958	1015D	S22	W59	9539	07 14.9	19D	1N		2	P	1005	180	ELO	
0091	URUM	19 1051E	1051	1051D	S05	W48	9537	07 15.9	19D	2N			P	354	5.6	E	
0092	KHAR	19 1105E		1115	S12	W62	9537	07 14.8	10D	SF		2	P	1108	40	HO	
0093	KHAR	19 1121	1123	1127	N07	W70	9536	07 14.2	6	SF		2	V			D	
0094	HOLL	19 1435	1442	1455	S18	E23	9546	07 21.3	20	SF		3	E	34		F	
0095	HOLL	19 1858	1859	1918	S23	E27	9543	07 21.9	20	SF		4	E	25		F	
0096	HOLL	19 2343	2345	2349D	S18	E18	9546	07 21.3	6D	SF		3	E	37			
0097	LEAR	20 0024	0025	0035	N08	E11	9542	07 20.8	11	SF		3	E	17		F	
		20 1847		1918												No Flare Patrol	
		20 1949		2002												No Flare Patrol	
0098	HOLL	20 2101	2114	2132	S21	E11	9543	07 21.7	31	SF		3	E	79		F	
		20 2226		2400												No Flare Patrol	
		21 0000		0107												No Flare Patrol	
0099	URUM	21 0323E	0323	0323D	S23	W15		07 20.0	31D	SF			P	32	0.4	E	
0100	LEAR	21 0518	0519	0552	S22	E06	9543	07 21.7	34	SF		3	E	16		F	
0101	LEAR	21 0714	0717	0749	N21	W29	9541	07 19.1	35	SF		3	E	18		F	
0102	LEAR	21 0900	0905	0932D	S22	E03	9543	07 21.6	32D	SF		3	E	32		F	
		21 0933		1029												No Flare Patrol	
		21 1051		1059												No Flare Patrol	
0103	HOLL	21 1310	1310	1313	N10	W37	9538	07 18.8	3	SF		3	E	13			
		21 2228		2251												No Flare Patrol	
		21 2257		2400												No Flare Patrol	
		22 0000		0005												No Flare Patrol	
		22 0011		0027												No Flare Patrol	
		22 0033		0048												No Flare Patrol	
		22 0057		0122												No Flare Patrol	
0104	URUM	22 0144E	0144	0148	N09	W44	9545	07 18.8	4D	SN			P	32	0.5	D	
0105	KHAR	22 1046	1047	1125	S03	E85	9555	07 28.8	39	SF		2	V			D	
0106	KANZ	22 1058	1058	1059D	S24	W16	9543	07 21.2	1D	SF		2	E				
0107	KHAR	22 1139	1144	1200D	S03	E88	9555	07 29.1	21D	SF		2	V			D	

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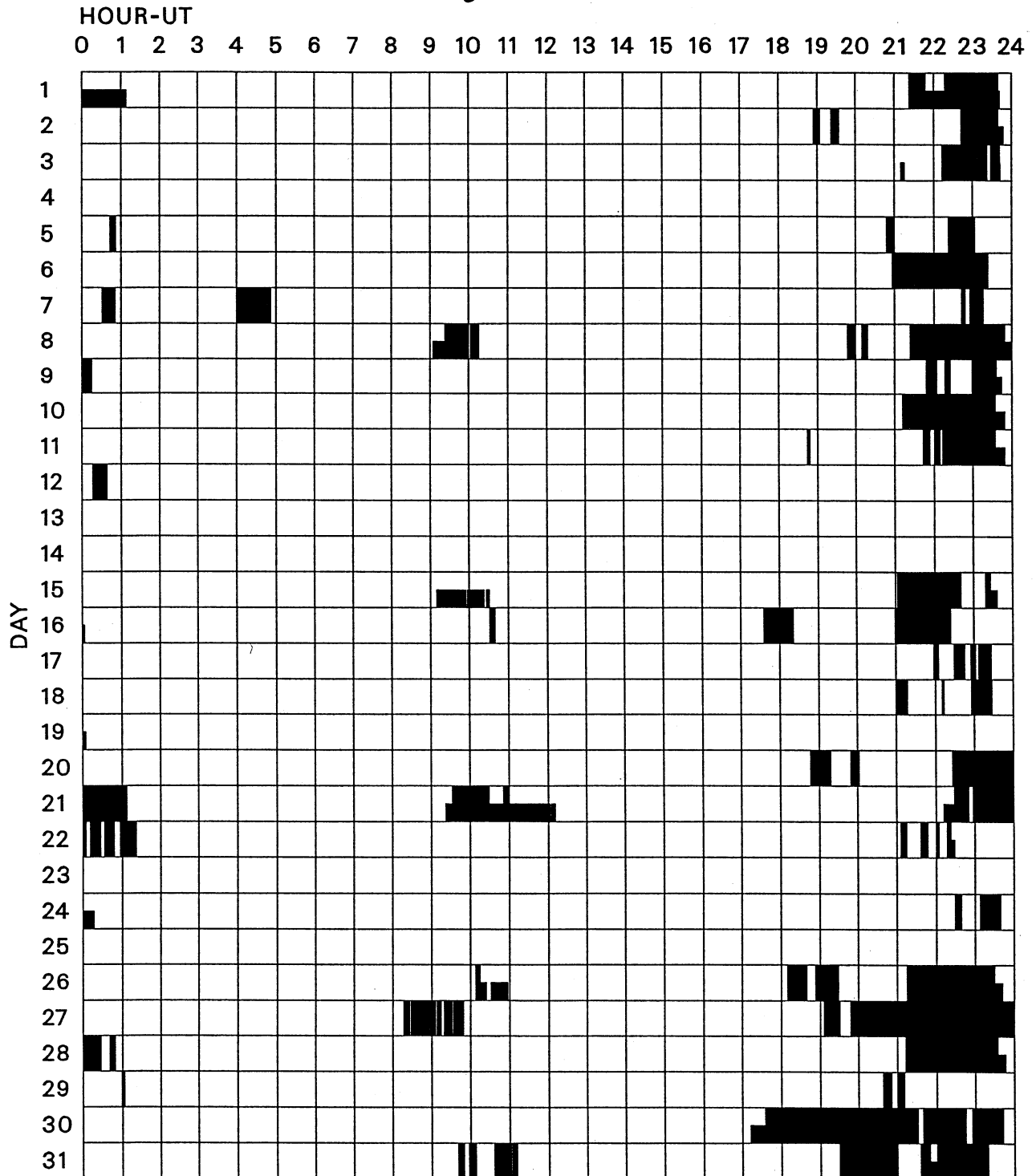
JULY 2001

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF		CMP Mo Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement		Remarks
						Region	Lat CMD							Time (UT)	Apparent (10-6 Disk)		Corr (Sq Deg)
0108	KANZ	22	1358	1359	1401	S24	W17 9543	07 21.3	3	SF		2	E			
0109		22	1425	1425*	1446	S20	W15 9543	07 21.4	21	SF				20		FHU
	RAMY	22	1425	1425	1444	S20	W15 9543	07 21.4	19	SF		3	E	10		F
	SVTO	22	1425	1436	1448	S19	W15 9543	07 21.4	23	SF		3	E	29		UH
		22	2106		2115		No Flare Patrol									
		22	2137		2147		No Flare Patrol									
		22	2201		2204		No Flare Patrol									
		22	2217		2223		No Flare Patrol									
0110	URUM	23	0151	0155	0210	S25	W27 9543	07 21.0	19	1N			C	193	2.6	E
0111	SVTO	23	0621	0623	0627	N10	W65 9545	07 18.4	6	SF		3	E	78		
0112	URUM	23	0705	0710	0714	N07	W33 9550	07 20.8	9	SN			C	113	1.4	D
0113	URUM	23	0801	0805	0809	S22	W29 9543	07 21.1	8	SN			C	129	1.7	E
0114		23	1312	1312	1315	N10	W70 9545	07 18.3	3	SF				20		H
	SVTO	23	1312	1312	1315	N11	W69 9545	07 18.3	3	SF		3	E	22		
	RAMY	23	1312	1312	1315	N09	W70 9545	07 18.3	3	SF		3	E	19		H
0115	HOLL	23	1829	1829	1832	S21	W28 9543	07 21.6	3	SF		3	E	14		F
0116		23	22354	22402	2252	S19	W32 9543	07 21.5	17	SN				72	0.2	F
	VORO	23	2235	2240	2256	S18	W33 9543	07 21.3	21	SN		3	C	2240	1.7	F
	HOLL	23	2239	2242	2248	S20	W31 9543	07 21.6	9	SF		3	E	19		F
0117	URUM	24	0041	0045	0049	S17	W13	07 23.0	8	SN			C	113	1.3	E
0118		24	0503*	05079	0520	S20	W35 9543	07 21.5	17	SF				34		F
	LEAR	24	0503	0507	0522	S19	W34 9543	07 21.6	19	SF		3	E	55		F
	SVTO	24	0516	0516	0519	S20	W36 9543	07 21.5	3	SF		3	E	12		F
0119	LEAR	24	0801	0802	0806	N07	W76 9545	07 18.6	5	SF		3	E	13		
0120		24	0924*	0927	0938	S19	W39 9543	07 21.4	14	SF				45		FHO
	LEAR	24	0924	0927	0935	S18	W40 9543	07 21.3	11	SF		3	E	56		F
	SVTO	24	0925	0927	0933	S18	W39 9543	07 21.4	8	SF		3	E	24		F
	KHAR	24	0937		0946	S20	W37 9543	07 21.6	9	SF		2	P	0937	55	HO
0121		24	19451	1946	1952	N12	E24 9553	07 26.6	7	SF				16		
	RAMY	24	1945	1946	2136D	N12	E24 9553	07 26.6	111D	SF		3	E	16		
	HOLL	24	1946	1946	1952	N13	E23 9553	07 26.5	6	SF		3	E	15		
		24	2229		2239		No Flare Patrol									
		24	2308		2339		No Flare Patrol									
0122	LEAR	25	0208	0211	0214	S21	W49 9543	07 21.3	6	SF		2	E	10		F
0123	KHAR	25	0900E	0900	0916	N05	W90 9545	07 18.6	16D	SF		2	P	0910	20	D
0124	LEAR	25	0927	0928	0932	S22	W50 9543	07 21.5	5	SF		3	E	43		
0125	KHAR	25	1007	1008	1023	N05	W90 9545	07 18.7	16	SN		2	V			DH
0126	KHAR	25	1110	1112	1117	N07	W90 9545	07 18.7	7	SF		2	V			DH
		26	1008		1014		No Flare Patrol									
		26	1810		1839		No Flare Patrol									
		26	1853		1928		No Flare Patrol									
		26	2115		2329		No Flare Patrol									
0127	URUM	27	0143	0151	0159	S23	W63 9543	07 22.2	16	1N			C	225		E
0128		27	0205	02064	0214	S23	W65 9543	07 22.1	9	1N				64		EF
	LEAR	27	0205	0206	0210	S23	W67 9543	07 21.9	5	SF		3	E	15		F
	URUM	27	0210E	0210	0218	S23	W63 9543	07 22.2	8D	1N			P	113		E

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

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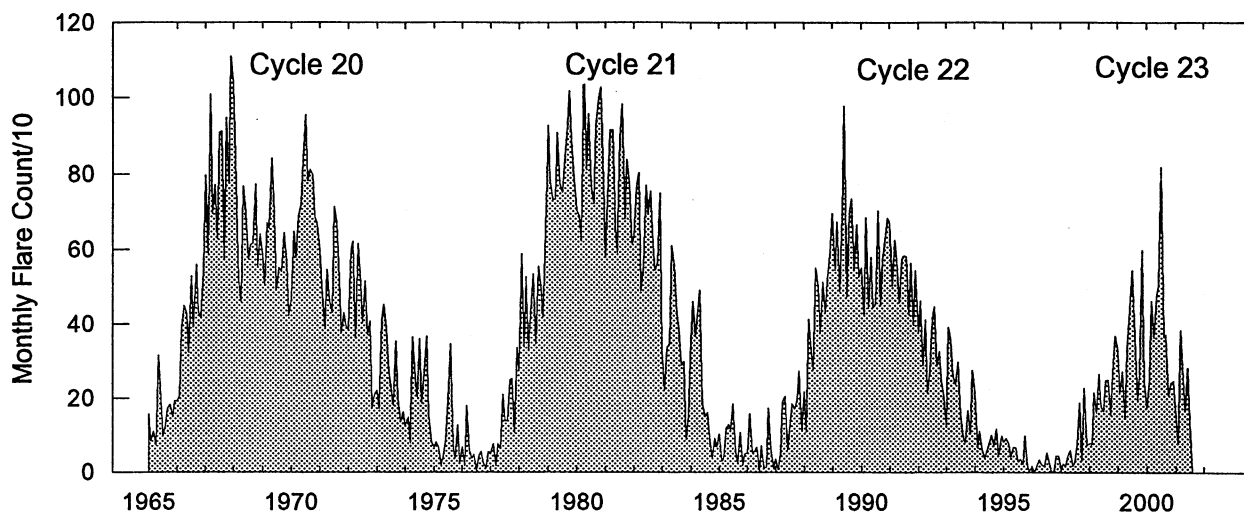
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Times of no flare patrol, shown here as shades areas, combine reports from the stations listed below. Portions of a panel completely shaded mark dates and times of no patrol of any kind (neither visual or cinematographic): portions of a panel with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

Holloman	Urumqi	Learmonth	Ramey	San Vito
Mitaka	Voroshilov	Kanzelhoehe	Kharkov	

Monthly Counts of Grouped Solar Flares Jan 1965 - Jul 2001



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	544	368	192	264	598	243	3963
2000	175	248	462	362	473	505	818	364	372	208	241	246	4474
2001	147	77	383	284	164	282	137						1474

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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Jul 01

J U L Y 2 0 0 1

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
01	[	235 CUBA	NS	1430.0E		390.0D		8.0		
		280 CUBA	NS	1430.0E		390.0D		14.0		
02	[	127 TORN	44 NS	0930.0E		200.0D		50.0		V=1
		235 CUBA	NS	1300.0E		420.0D		5.0		
		280 CUBA	NS	1300.0E		480.0D		14.0		
		2840 PEKG	1 S	0410.0	0412.1	4.0		3.9		
03	[	235 CUBA	NS	1330.0E		250.0D		4.0		
		280 CUBA	NS	1330.0E		250.0D		13.0		
		245 SVTO	8 S	0828.0	0828.0	1.0	160.0			QL=4 ST=2 TYP=3
04	[	127 TORN	44 NS	0820.0E		510.0D		6.0		V=0
		235 CUBA	NS	1325.0E		505.0D		6.0		
		280 CUBA	NS	1325.0E		505.0D		13.0		
05	[	280 CUBA	NS	1340.0E		130.0D		14.0		
		235 CUBA	NS	1340.0E		140.0D		6.0		
06	[	127 TORN	44 NS	0630.0E		510.0D		6.0		V=0, ATM STORM
		235 CUBA	NS	1315.0E		345.0D		6.0		
		280 CUBA	NS	1315.0E		345.0D		12.0		
07	[	127 TORN	44 NS	0630.0E		510.0D		6.0		V=0
		235 CUBA	NS	1305.0E		525.0D		6.0		
		280 CUBA	NS	1305.0E		525.0D		13.0		
		2840 PEKG	3 S	0323.0	0328.1	10.0	30.6			
		500 HIRA	4 S/F	0324.0	0327.0	8.0	15.0			0
		2800 HIRA	1 S	0325.0	0328.0	5.0	20.0			0
		200 HIRA	8 S	0326.0	0327.0	2.0	15.0			0
		245 LEAR	8 S	0326.0	0328.0	2.0	54.0			QL=2 ST=2 TYP=3
		2804 VORO	46 C	0326.0	0328.2	4.6	13.8			
		4995 LEAR	8 S	0327.0	0328.0	1.0	26.0			QL=2 ST=2 TYP=3
		200 HIRA	8 S	0751.0	0751.0	1.0	30.0			0
		245 LEAR	8 S	0751.0	0751.0	U	150.0			QL=2 ST=2 TYP=3
		245 SVTO	8 S	0751.0	0751.0	U	130.0			QL=4 ST=2 TYP=3
		204 IZMI	41 F	0751.2	0751.4	0.4	72.0			
200 HIRA	8 S	2240.0	2240.0	1.0	20.0			0		
08	[	127 TORN	43 NS	0820.0		300.0U		7.0		V=0?, ATM. STROM
		235 CUBA	NS	1320.0E		340.0D		5.0		
		280 CUBA	NS	1320.0E		340.0D		13.0		
		500 HIRA	8 S	0122.0	0122.0	1.0	15.0			0
		204 IZMI	42 SER	1138.4	1138.6	1.5	256.0			
		245 SGMR	8 S	1139.0	1139.0	U	140.0			QL=4 ST=2 TYP=3
		245 SVTO	8 S	1139.0	1139.0	U	110.0			QL=4 ST=2 TYP=3
		127 TORN	47 GB	1139.0	1139.9	1.1	1100.0	400.0		
		204 IZMI	41 F	1140.1	1140.5	0.6	73.0			
		6700 CUBA	21 GRF	1601.0	1620.0	46.0	10.0		5.0	2L
		2800 PENT	29 PBI	1602.0	1618.0	30.0U	10.0			
6700 CUBA	2 S/F	1617.0	1618.8	3.0	8.0		4.0	4L		
09	[	235 CUBA	NS	1330.0E		330.0D		6.0		
		280 CUBA	NS	1330.0E		330.0D		14.0		
		200 HIRA	8 S	0430.0	0430.0	1.0	5.0			0
		2840 PEKG	1 S	0736.0	0737.4	3.0	3.6			
		9100 GORK	3 S	0736.9	0737.2	1.7	37.0			
		2950 GORK	1 S	0736.9	0737.4	1.1	3.7			
		3000 IZMI	7 C	0736.9	0737.4	1.3	10.0		6.0	
		9500 CUBA	1 S	1208.0	1213.5	5.5	15.0		7.0	
6700 CUBA	1 S	1247.8	1248.9	3.4	24.0		12.0	8L		
10	[	235 CUBA	NS	1315.0E		465.0D		6.0		
		280 CUBA	NS	1315.0E		465.0D		14.0		
		200 HIRA	8 S	0121.0	0122.0	2.0	305.0			0
		3000 IZMI	20 GRF	0707.9	0708.4	1.8	8.0		4.0	
		500 HIRA	8 S	0708.0	0709.0	1.0	25.0			0
		200 HIRA	42 SER	2036.0	2036.0	4.0	40.0			0
200 HIRA	8 S	2148.0	2148.0	2.0	20.0			WL		

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S O L A R R A D I O E M I S S I O N
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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		
10	200	HIRA	8 S	2225.0	2225.0	1.0	10.0		0	
11	235	CUBA	NS	1315.0E		515.0D		5.0		
	280	CUBA	NS	1315.0E		515.0D		13.0		
	245	LEAR	8 S	0200.0	0201.0	2.0	52.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0628.7	0628.8	0.8	8.0			
12	235	CUBA	NS	1345.0E		440.0D		5.0		
	280	CUBA	NS	1345.0E		460.0D		9.0		
	2840	PEKG	1 S	0408.0	0409.8	3.0	14.0			
	2804	VORO	1 S	0409.3	0409.8	1.2	4.6			
13	204	IZMI	43 NS	0500.0		420.0D		15.0		
	235	CUBA	NS	1400.0E		240.0D		7.0		
	280	CUBA	NS	1400.0E		240.0D		16.0		
	9100	GORK	1 S	0503.6	0504.0	0.8	11.0			
	2950	GORK	1 S	0503.8	0504.0	0.6	4.3			
	2840	PEKG	1 S	0626.0	0629.3	4.0	3.8			
	204	IZMI	42 SER	0853.5	0854.1	1.4	34.0			
	204	IZMI	41 F	1030.0	1030.2	0.3	72.0			
14	235	CUBA	NS	1315.0E		325.0D		5.0		
	280	CUBA	NS	1315.0E		325.0D		13.0		
	33	UPIC	45 C	1636.5	1637.0	1.5				
	2800	PENT	1 S	1749.0	1752.0	7.0	3.0			
	2800	PENT	4 S/F	2124.0	2132.0	16.0	47.0			
	2800	HIRA	4 S/F	2128.0	2133.0	8.0	50.0			0
	500	HIRA	8 S	2129.0	2132.0	7.0	260.0			0
	4995	SGMR	4 S/F	2130.0	2132.0	3.0	98.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	2131.0	2131.0	2.0	180.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2131.0	2132.0	2.0	240.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	2131.0	2131.0	1.0	160.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	2132.0	2133.0	1.0	280.0			QL=4 ST=2 TYP=3
	15	235	CUBA	NS	1300.0E		300.0D		5.0	
280		CUBA	NS	1300.0E		300.0D		13.0		
2800		PENT	41 F	0014.0	0046.0	41.0	11.0			
2840		PEKG	5 S	0015.0	0021.1	16.0	12.4			
2804		VORO	40 F	0019.4	0021.1	10.7	8.5			
200		HIRA	42 SER	0048.0	0048.0	2.0	140.0			0
204		IZMI	42 SER	0547.6	0547.8	1.0	37.0			
2950		GORK	21 GRF	0641.8	0645.4	17.7	11.0			
3000		IZMI	45 C	0644.6	0651.7	14.8	90.0			20.0
600		GORK	46 C	0645.6	0651.6		180.0U			
600		GORK	46 C	0645.6	0650.6U	10.1	180.0U			
2840		PEKG	3 S	0647.0	0651.8	14.0	62.5			
2800		HIRA	7 C	0649.0	0652.0	11.0	60.0			0
500		HIRA	7 C	0649.0	0652.0	11.0	215.0			0
2950		GORK	4 S/F	0649.0	0651.7	5.0	57.0			
900		GORK	46 C	0649.3	0650.4	4.4	40.0			
900		GORK	46 C	0649.3	0651.5		16.0			
9100		GORK	4 S/F	0649.8	0651.6	4.0	70.0			
410		LEAR	49 GB	0650.0	0651.0	7.0	520.0			QL=2 ST=2 TYP=6
610		LEAR	8 S	0650.0	0650.0	2.0	100.0			QL=2 ST=2 TYP=3
8800		LEAR	8 S	0650.0	0651.0	2.0	71.0			QL=2 ST=2 TYP=3
4995		LEAR	4 S/F	0650.0	0651.0	3.0	110.0			QL=2 ST=2 TYP=3
15400		SVTO	48 C	0650.0	0651.0	3.0	56.0			QL=4 ST=2 TYP=8
610		SVTO	8 S	0650.0	0650.0	2.0	100.0			QL=4 ST=2 TYP=3
2695		SVTO	8 S	0650.0	0651.0	2.0	62.0			QL=4 ST=2 TYP=3
410		SVTO	4 S/F	0650.0	0651.0	7.0	400.0			QL=4 ST=2 TYP=3
4995		SVTO	4 S/F	0650.0	0651.0	3.0	140.0			QL=4 ST=2 TYP=3
8800	SVTO	4 S/F	0650.0	0651.0	3.0	98.0			QL=4 ST=2 TYP=3	
2695	LEAR	8 S	0651.0	0651.0	1.0	60.0			QL=2 ST=2 TYP=3	
15400	LEAR	8 S	0651.0	0651.0	U	39.0			QL=2 ST=2 TYP=3	
245	LEAR	4 S/F	0652.0	0655.0	6.0	210.0			QL=2 ST=2 TYP=3	
245	SVTO	4 S/F	0652.0	0657.0	6.0	190.0			QL=4 ST=2 TYP=3	
200	HIRA	7 C	0653.0	0657.0	7.0	40.0			0	
204	IZMI	7 C	0653.7	0655.6	3.5U	29.0				
2800	PENT	27 RF	1348.0	1415.0	100.0	16.0				

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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		
15	245	SGMR	8 S	1626.0	1626.0	1.0	67.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1626.0	1626.0	1.0	53.0			QL=4 ST=2 TYP=3
16	235	CUBA	NS	1400.0E		240.0D		7.0		
	280	CUBA	NS	1400.0E		240.0D		16.0		
	200	HIRA	8 S	0126.0	0127.0	1.0	15.0			0
	245	LEAR	8 S	0126.0	0126.0	U	200.0			QL=2 ST=2 TYP=3
	245	PALE	8 S	0126.0	0126.0	1.0	240.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	0127.0	0127.0	1.0	5.0			0
	2840	PEKG	3 S	0314.0	0317.7	10.0	33.1			
	2800	HIRA	3 S	0316.0	0318.0	7.0	55.0			0
	500	HIRA	8 S	0316.0	0317.0	1.0	15.0			WL
	4995	LEAR	4 S/F	0316.0	0317.0	3.0	80.0			QL=2 ST=2 TYP=3
	8800	LEAR	4 S/F	0316.0	0317.0	3.0	88.0			QL=2 ST=2 TYP=3
	2804	VORO	4 S/F	0316.1	0317.6	3.8	45.6			
	1415	LEAR	8 S	0317.0	0317.0	1.0	37.0			QL=2 ST=2 TYP=3
	2695	LEAR	8 S	0317.0	0317.0	1.0	47.0			QL=2 ST=2 TYP=3
	15400	LEAR	8 S	0317.0	0317.0	2.0	68.0			QL=2 ST=2 TYP=3
	2695	PALE	8 S	0317.0	0317.0	1.0	47.0			QL=4 ST=2 TYP=3
	4995	PALE	8 S	0317.0	0317.0	2.0	73.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	0317.0	0317.0	1.0	78.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0457.7	0457.9	0.3	34.0			
	200	HIRA	8 S	0550.0	0550.0	1.0	200.0			0
	245	LEAR	8 S	0550.0	0550.0	U	170.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0550.0	0550.0	U	140.0			QL=4 ST=2 TYP=3
	204	IZMI	46 C	0550.2	0550.3	0.5	289.0			
	200	HIRA	8 S	0756.0	0756.0	1.0	50.0			0
	204	IZMI	7 C	0756.1	0756.2	0.4	117.0			
	204	IZMI	7 C	0841.7	0841.7	0.1	21.0			
	204	IZMI	41 F	1114.1	1114.3	0.6	69.0			
204	IZMI	42 SER	1152.1	1152.3	0.5	36.0				
245	SGMR	48 C	1237.0	1237.0	U	55.0			QL=4 ST=2 TYP=8	
245	SGMR	8 S	1612.0	1612.0	U	67.0			QL=4 ST=2 TYP=3	
245	SVTO	8 S	1612.0	1612.0	1.0	79.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1920.0	1920.0	U	55.0			QL=4 ST=2 TYP=3	
2800	PENT	20 GRF	2144.0	2154.0	23.0	3.0				
17	235	CUBA	NS	1320.0E		205.0D		6.0		
	280	CUBA	NS	1320.0E		205.0D		14.0		
	204	IZMI	42 SER	0551.2	0554.2	3.3	29.0			
	245	LEAR	8 S	0554.0	0554.0	U	90.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0554.0	0554.0	U	93.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0630.3	0630.6	6.8	29.0			
	900	GORK	42 SER	0641.2	0730.3	91.0	9.0			
	900	GORK	42 SER	0641.2	0743.8		50.0			
	2840	PEKG	1 S	0726.0	0728.5	5.0	8.3			
	2950	GORK	1 S	0728.2	0728.6	0.8	8.0			
	3000	IZMI	7 C	0728.4	0728.5	0.8	12.0	4.0		
	900	GORK	42 SER	1014.6	1026.0		7.9			
	900	GORK	42 SER	1014.6	1014.8	15.0	9.0			
	2840	PEKG	1 S	1019.0	1020.6	5.0	8.4			
	2950	GORK	1 S	1020.0	1020.6	0.7	9.0			
	9100	GORK	20 GRF	1020.1	1021.0	24.9D	10.0			
	3000	IZMI	20 GRF	1020.2	1020.8	1.2	13.0	6.0		
600	GORK	2 S/F	1028.6	1028.8	2.0	9.0				
600	GORK	2 S/F	1028.6	1028.9		7.5				
2840	PEKG	5 S	2308.0	2310.2	7.0	11.3				
2804	VORO	2 S/F	2309.8	2310.4	1.8	7.7				
18	235	CUBA	NS	1325.0E		455.0D		6.0		
	280	CUBA	NS	1325.0E		455.0D		13.0		
	900	GORK	42 SER	0615.0	1005.0		41.0			
	900	GORK	42 SER	0615.0	0811.6		24.0			
	900	GORK	42 SER	0615.0	0620.6	261.7	24.0			
	33	UPIC	4 S/F	1752.5	1753.0	1.5				INCERTN
6700	CUBA	1 S	2056.8	2057.4	1.2	5.0	2.0		2L	
19	127	TORN	43 NS	0730.0		300.0		6.0		V=1
	235	CUBA	NS	1330.0E		435.0D		8.0		

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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
19	280	CUBA	NS	1330.0E		435.0D		14.0		
	245	LEAR	8 S	0322.0	0323.0	1.0	430.0			QL=2 ST=2 TYP=3
	245	PALE	49 GB	0323.0	0323.0	U	510.0			QL=4 ST=2 TYP=6
	245	LEAR	8 S	0539.0	0540.0	1.0	68.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0539.0	0540.0	1.0	60.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	0539.1	0539.8	1.7	65.0			
	204	IZMI	46 C	0754.4	0755.5	3.2	159.0			
	245	LEAR	8 S	0755.0	0755.0	1.0	140.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0755.0	0755.0	1.0	130.0			QL=4 ST=2 TYP=3
	127	TORN	4 S/F	0755.0	0755.9	2.8	440.0	80.0		
	2840	PEKG	45 C	0952.0	1031.7	60.0	352.5			
	600	GORK	48 C	0952.4	1001.3	62.1	3100.0			
	600	GORK	48 C	0952.4	1034.4		15000.0			
	600	GORK	48 C	0952.4	1037.5		12500.0			
	610	SVTO	49 GB	0954.0	1001.0	10.0	1600.0			QL=4 ST=2 TYP=6
	900	GORK	48 C	0954.1	1031.4		17500.0			
	900	GORK	48 C	0954.1	1000.4	51.4	1000.0			
	900	GORK	48 C	0954.1	1033.5		1430.0			
	9100	GORK	21 GRF	0954.4	1006.5	65.6D	29.0			
	2950	GORK	46 C	0954.6	1021.4		195.0			
	2950	GORK	46 C	0954.6	1035.5		225.0			
	2950	GORK	46 C	0954.6	0958.7	62.4	170.0			
	2950	GORK	46 C	0954.6	1031.9		225.0			
	3000	IZMI	45 C	0954.9	0958.6	9.8	139.0	50.0		
	2695	SVTO	4 S/F	0955.0	0958.0	7.0	150.0			QL=4 ST=2 TYP=3
	1415	SVTO	48 C	0955.0	1004.0	11.0	240.0			QL=4 ST=2 TYP=8
	4995	SVTO	4 S/F	0955.0	0957.0	13.0	290.0			QL=4 ST=2 TYP=3
	9100	GORK	4 S/F	0955.6	0957.9	5.6	110.0			
	8800	SVTO	4 S/F	0956.0	0957.0	4.0	130.0			QL=4 ST=2 TYP=3
	410	SVTO	48 C	0957.0	1002.0	7.0	130.0			QL=4 ST=2 TYP=8
	15400	SVTO	8 S	0957.0	0957.0	2.0	76.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	0957.0	0958.0	3.0	200.0			QL=4 ST=2 TYP=3
	204	IZMI	46 C	0957.7	0958.5	4.0	3844.0			
	610	SGMR	4 S/F	1000.0	1001.0U	8.0	550.0			QL=2 ST=2 TYP=3
	33	UPIC	32 ABS	1000.5	1007.0	33.5				
	410	SGMR	48 C	1001.0	1001.0U	7.0	75.0			QL=2 ST=2 TYP=8
	245	SGMR	46 C	1002.0	1004.0U	6.0	11.0			QL=2 ST=2 TYP=8
	2695	SGMR	46 C	1002.0	1004.0U	6.0	46.0			QL=2 ST=2 TYP=8
	1415	SGMR	4 S/F	1002.0	1004.0U	7.0	190.0			QL=2 ST=2 TYP=3
	127	TORN	49 GB	1004.5	1004.7	12.2	970.0	60.0		
	3000	IZMI	46 C	1011.5	1031.9	42.4	234.0	56.0		
	15400	SVTO	46 C	1012.0	1016.0	11.0	40.0			QL=4 ST=2 TYP=8
	8800	SVTO	20 GRF	1012.0	1018.0	14.0	65.0			QL=4 ST=2 TYP=2
	1415	SVTO	48 C	1012.0	1034.0	29.0	7000.0			QL=4 ST=2 TYP=8
	2695	SVTO	48 C	1012.0	1032.0	28.0	380.0			QL=4 ST=2 TYP=8
	2695	SGMR	48 C	1012.0	1032.0	34.0	370.0			QL=4 ST=2 TYP=8
	4995	SGMR	48 C	1012.0	1018.0	34.0	100.0			QL=4 ST=2 TYP=8
	4995	SVTO	20 GRF	1012.0	1018.0	34.0	160.0			QL=4 ST=2 TYP=2
	33	UPIC	46 C	1012.0	1019.5	13.0				
	9100	GORK	45 C	1012.6	1018.2		33.0			
	9100	GORK	45 C	1012.6	1015.5	12.8	29.0			
	1415	SGMR	48 C	1013.0	1034.0	32.0	7100.0			QL=4 ST=2 TYP=8
	610	SVTO	48 C	1014.0	1034.0	29.0	9300.0			QL=4 ST=2 TYP=8
	610	SGMR	48 C	1017.0	1034.0	27.0	8600.0			QL=4 ST=2 TYP=8
	8800	SGMR	46 C	1018.0	1022.0	28.0	29.0			QL=4 ST=2 TYP=8
	410	SGMR	49 GB	1021.0	1034.0	24.0	740.0			QL=4 ST=2 TYP=6
	410	SVTO	48 C	1021.0	1034.0	22.0	700.0			QL=4 ST=2 TYP=8
	245	SVTO	8 S	1022.0	1022.0	U	34.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	1022.9	1032.9	21.5	9.0			
	245	SGMR	46 C	1030.0	1033.0	15.0	49.0			QL=4 ST=2 TYP=8
	33	UPIC	45 C	1225.0	1226.5	5.0				
	245	SVTO	8 S	1229.0	1230.0	1.0	64.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1230.0	1230.0	U	74.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1300.0	1300.0	U	60.0			QL=4 ST=3 TYP=3
	245	SVTO	8 S	1300.0	1300.0	U	65.0			QL=4 ST=2 TYP=3
	2800	PENT	1 S	1432.0	1435.0	6.0	6.0			
	2800	PENT	24 R	1538.0	1613.0	54.0U	10.0			
	2800	PENT	29 PBI	1849.0	1858.0	30.0	6.0			

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

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JULY 2001

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	204	IZMI	43 NS	0835.0		118.0U		10.0		
	235	CUBA	NS	1325.0E		335.0D		5.0		
	280	CUBA	NS	1325.0E		335.0D		13.0		
	204	IZMI	42 SER	0452.5	0452.6	0.3	70.0			
	2840	PEKG	20 GRF	1039.0	1104.1	28.0	13.4			
	2800	PENT	20 GRF	2333.0	2344.0	26.0	4.0			
21	235	CUBA	NS	1310.0E		470.0D		6.0		
	280	CUBA	NS	1310.0E		470.0D		11.0		
	3000	IZMI	22 GRF	0506.2	0518.2	53.2	10.0	4.0		
	3000	IZMI	1 S	0610.2	0610.2	0.1	26.0	8.0		
22	235	CUBA	NS	1340.0E		440.0D		7.0		
	280	CUBA	NS	1340.0E		440.0D		13.0		
	204	IZMI	42 SER	0851.8	0855.6	4.1	8.0			
	204	IZMI	42 SER	1149.6	1150.8	1.6	12.0			
	2800	PENT	1 S	1500.0	1503.0	7.0	4.0			
23	127	TORN	43 NS	0915.0		285.0		6.0		V=1
	235	CUBA	NS	1305.0E		475.0D		6.0		
	280	CUBA	NS	1305.0E		475.0D		11.0		
	410	LEAR	8 S	0507.0	0507.0	U	150.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0621.0	0621.0	U	64.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0621.0	0622.0	1.0	250.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0621.0	0621.0	1.0	66.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0621.0	0622.0	2.0	310.0			QL=4 ST=2 TYP=3
	204	IZMI	45 C	0621.3	0621.5	0.8	132.0			
	500	HIRA	8 S	0622.0	0623.0	3.0	315.0			
	204	IZMI	7 C	0623.3	0623.4	0.3	34.0			
	245	SGMR	49 GB	1423.0	1423.0	1.0	650.0			QL=4 ST=2 TYP=6
	410	SGMR	8 S	1423.0	1423.0	U	190.0			QL=4 ST=2 TYP=3
	245	SVTO	49 GB	1423.0	1423.0	1.0	640.0			QL=4 ST=2 TYP=6
	410	SVTO	8 S	1423.0	1423.0	1.0	210.0			QL=4 ST=2 TYP=3
24	204	IZMI	43 NS	0450.0		31.0		45.0		
	235	CUBA	NS	1300.0E		480.0D		6.0		
	280	CUBA	NS	1300.0E		530.0D		14.0		
	245	LEAR	4 S/F	0435.0	0438.0	3.0	85.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0441.0	0441.0	1.0	58.0			QL=4 ST=2 TYP=3
	2840	PEKG	1 S	0504.0	0506.6	4.0	6.3			
	3000	IZMI	20 GRF	0506.1	0506.4	1.0	10.0	6.0		
	204	IZMI	42 SER	0609.6	0614.2	8.2	29.0			
	2950	GORK	2 S/F	0905.7	0906.5	2.5	9.8			
	245	PALE	8 S	1938.0	1938.0	U	52.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	2332.0	2333.0	1.0	100.0			QL=4 ST=2 TYP=3
245	PALE	8 S	2332.0	2332.0	1.0	130.0			QL=4 ST=2 TYP=3	
25	204	IZMI	43 NS	0702.0		88.0		15.0		
	127	TORN	43 NS	0842.0		378.0U		4.0		V=1?, ATM. STROM
	204	IZMI	43 NS	1117.0		43.0D		15.0		
	245	SGMR	43 NS	1207.0	1317.0	598.0	210.0			QL=4 ST=2 TYP=1
	235	CUBA	NS	1320.0E		302.0D		11.0		
	280	CUBA	NS	1320.0E		302.0D		24.0		
	245	LEAR	8 S	0402.0	0403.0	2.0	66.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0403.0	0403.0	1.0	78.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0927.0	0927.0	U	80.0			QL=4 ST=2 TYP=3
	127	TORN	4 S/F	0927.0	0927.9	1.5	30.0	10.0		
	204	IZMI	41 F	0927.6	0927.9	0.6	64.0			
	8800	SVTO	49 GB	0942.0	0942.0	U	6500.0			QL=4 ST=2 TYP=6
	245	SVTO	8 S	1233.0	1233.0	1.0	61.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1317.0	1317.0	1.0	100.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1525.0	1527.0	2.0	76.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1600.0	1600.0	U	66.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1608.0	1610.0	2.0	52.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1614.0	1614.0	1.0	60.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1645.0	1645.0	1.0	55.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	1721.0	1722.0	4.0	59.0			QL=4 ST=2 TYP=3
245	PALE	4 S/F	1723.0	1724.0	3.0	70.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	2123.0	2124.0	1.0	53.0			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 2001

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	204	IZMI	43 NS	1024.0		61.0		25.0		
			43 NS	1102.0	1102.0	73.0	61.0		QL=4 ST=2 TYP=1	
	235	CUBA	NS	1310.0E		470.0D		7.0		
			NS	1310.0E		470.0D		16.0		
	204	IZMI	41 F	1007.5	1007.8	0.5	11.0			
	204	IZMI	7 C	1018.1	1018.2	0.1	16.0			
	2840	PEKG	5 S	1027.0	1029.5	6.0	14.7			
	127	TORN	46 C	1356.2	1357.5	1.6	6400.0	2300.0		UN CTN,ATM.STOR
	245	PALE	4 S/F	1638.0	1641.0	7.0	65.0			QL=4 ST=2 TYP=3
	245	SGMR	48 C	1638.0	1639.0	3.0	90.0			QL=4 ST=2 TYP=8
	245	PALE	4 S/F	1652.0	1652.0	4.0	82.0			QL=4 ST=2 TYP=3
245	SGMR	8 S	1652.0	1652.0	U	100.0			QL=4 ST=2 TYP=3	
245	SVTO	8 S	1652.0	1652.0	U	89.0			QL=4 ST=2 TYP=3	
27	204	IZMI	43 NS	0506.0		21.0		35.0		
	127	TORN	43 NS	0813.0		467.0		7.0		V=0
	235	CUBA	NS	1305.0E		475.0D		7.0		
	280	CUBA	NS	1305.0E		475.0D		15.0		
28	204	IZMI	43 NS	0500.0		420.0D		15.0		
	127	TORN	44 NS	0630.0E		300.0D		10.0		V=1
	235	CUBA	NS	1305.0E		355.0D		6.0		
	280	CUBA	NS	1305.0E		355.0D		14.0		
	127	TORN	7 C	0820.2	0820.4	0.7	120.0	40.0		
	127	TORN	42 SER	0829.1	0830.1	6.0	150.0	50.0		
	33	UPIC	46 C	1103.5	1104.0	1.5				
	204	IZMI	41 F	1113.2	1113.4	0.3	36.0			
	33	UPIC	42 SER	1359.0	1447.0	49.0				
	2800	PENT	1 S	1443.0	1446.0	7.0	4.0			
	245	SVTO	4 S/F	1445.0	1446.0	3.0	76.0			QL=4 ST=2 TYP=3
245	SGMR	8 S	1446.0	1446.0	U	61.0			QL=4 ST=2 TYP=3	
500	HIRA	8 S	2152.0	2153.0	1.0	430.0			0	
29	127	TORN	44 NS	0900.0E		240.0D		8.0		V=1,DISTURBED
	235	CUBA	NS	1300.0E		480.0D		6.0		
	280	CUBA	NS	1300.0E		480.0D		13.0		
	2840	PEKG	1 S	0831.0	0833.8	6.0	4.4			
	410	SVTO	8 S	0833.0	0833.0	1.0	75.0			QL=4 ST=2 TYP=3
	3000	IZMI	20 GRF	0833.7	0833.9	1.0	3.0	2.0		
	410	LEAR	20 GRF	0843.0	0851.0	13.0	71.0			QL=4 ST=2 TYP=2
	410	SVTO	20 GRF	0843.0	0851.0	15.0	100.0			QL=4 ST=2 TYP=2
	500	HIRA	7 C	0844.0	0845.0	12.0	55.0			0
30	127	TORN	44 NS	1030.0E		120.0D		7.0		V=0
	235	CUBA	NS	1305.0E		525.0D		5.0		
	280	CUBA	NS	2040.0E		70.0D		13.0		
	204	IZMI	41 F	0623.4	0623.9	1.0	24.0			
	204	IZMI	7 C	0641.8	0641.9	0.2	22.0			
	2950	GORK	41 F	0822.5	0822.6	0.8	5.3			
	900	GORK	28 PRE	0823.8	0827.0	5.4	3.4			
	4995	LEAR	4 S/F	0829.0	0831.0	3.0	78.0			QL=4 ST=2 TYP=3
	8800	LEAR	4 S/F	0829.0	0830.0	3.0	100.0			QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	0829.0	0831.0	3.0	88.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	0829.0	0830.0	4.0	130.0			QL=4 ST=2 TYP=3
	15400	SVTO	4 S/F	0829.0	0830.0	4.0	83.0			QL=4 ST=2 TYP=3
	2840	PEKG	5 S	0829.0	0831.1	8.0	29.7			
	900	GORK	4 S/F	0829.1	0830.2	4.5	15.0			
	9100	GORK	4 S/F	0829.2	0830.8	6.0	115.0			
	2950	GORK	4 S/F	0829.3	0831.0	5.6	16.0			
	3000	IZMI	22 GRF	0829.6	0830.9	4.2	23.0	6.0		
	410	LEAR	8 S	0830.0	0830.0	1.0	30.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	0830.0	0831.0	1.0	22.0			QL=4 ST=2 TYP=3
	15400	LEAR	8 S	0830.0	0831.0	2.0	64.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0830.0	0830.0	1.0	33.0			QL=4 ST=2 TYP=3
204	IZMI	7 C	0836.9	0841.8	9.2	21.0				
2800	PENT	29 PBI	2035.0	2040.0	45.0	43.0				
6700	CUBA	4 S/F	2039.6	2041.5	6.0	232.0	116.0		50L	
2800	HIRA	3 S	2040.0	2041.0	5.0	45.0			0	
500	HIRA	8 S	2040.0	2041.0	3.0	55.0			0	

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

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JULY 2001

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	410 PALE	8 S	2040.0	2041.0	2.0	68.0			QL=4 ST=2 TYP=3
	610 PALE	8 S	2040.0	2041.0	2.0	110.0			QL=4 ST=2 TYP=3
	4995 PALE	8 S	2040.0	2041.0	2.0	83.0			QL=4 ST=2 TYP=3
	245 PALE	4 S/F	2040.0	2041.0	5.0	340.0			QL=4 ST=2 TYP=3
	2695 SGMR	46 C	2040.0	2040.0	3.0	35.0			QL=4 ST=2 TYP=8
	245 SGMR	4 S/F	2040.0	2041.0	3.0	260.0			QL=4 ST=2 TYP=3
	410 SGMR	4 S/F	2040.0	2041.0	3.0	61.0			QL=4 ST=2 TYP=3
	610 SGMR	4 S/F	2040.0	2041.0	3.0	100.0			QL=4 ST=2 TYP=3
	1415 SGMR	4 S/F	2040.0	2040.0	3.0	35.0			QL=4 ST=2 TYP=3
	4995 SGMR	4 S/F	2040.0	2041.0	3.0	140.0			QL=4 ST=2 TYP=3
	8800 SGMR	4 S/F	2040.0	2041.0	3.0	290.0			QL=4 ST=2 TYP=3
	15400 SGMR	4 S/F	2040.0	2041.0	3.0	260.0			QL=4 ST=2 TYP=3
	9500 CUBA	4 S/F	2040.0	2041.3	4.0	212.0	106.0		
	280 CUBA	C	2040.1	2041.2	7.2	116.0			
	235 CUBA	C	2040.1	2046.3	7.2	461.0			
	8800 PALE	8 S	2041.0	2041.0	U	75.0			QL=4 ST=2 TYP=3
	15400 PALE	8 S	2041.0	2041.0	1.0	150.0			QL=4 ST=2 TYP=3
	245 SGMR	49 GB	2044.0	2045.0	2.0	520.0			QL=4 ST=2 TYP=6
	245 PALE	49 GB	2045.0	2045.0	3.0	610.0			QL=4 ST=2 TYP=6
	31	127 TORN	44 NS	0630.0E		510.0D		50.0		V=0
235 CUBA		NS	1400.0E		360.0D		6.0		
280 CUBA		NS	1400.0E		360.0D		14.0		
2840 PEKG		45 C	0358.0	0402.7	9.0	13.1			
245 PALE		48 C	0400.0	0401.0	3.0	620.0			QL=4 ST=2 TYP=8
2804 VORO		28 PRE	0400.3	0401.2	1.5	4.8			
2804 VORO		2 S/F	0401.9	0402.7	1.9	13.2			
6700 CUBA		20 GRF	1714.0	1719.0	192.0	8.0	4.0		OOL
245 SGMR		8 S	2038.0	2038.0	1.0	430.0			QL=4 ST=2 TYP=3
245 PALE		49 GB	2039.0	2039.0	U	610.0			QL=4 ST=2 TYP=6

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	

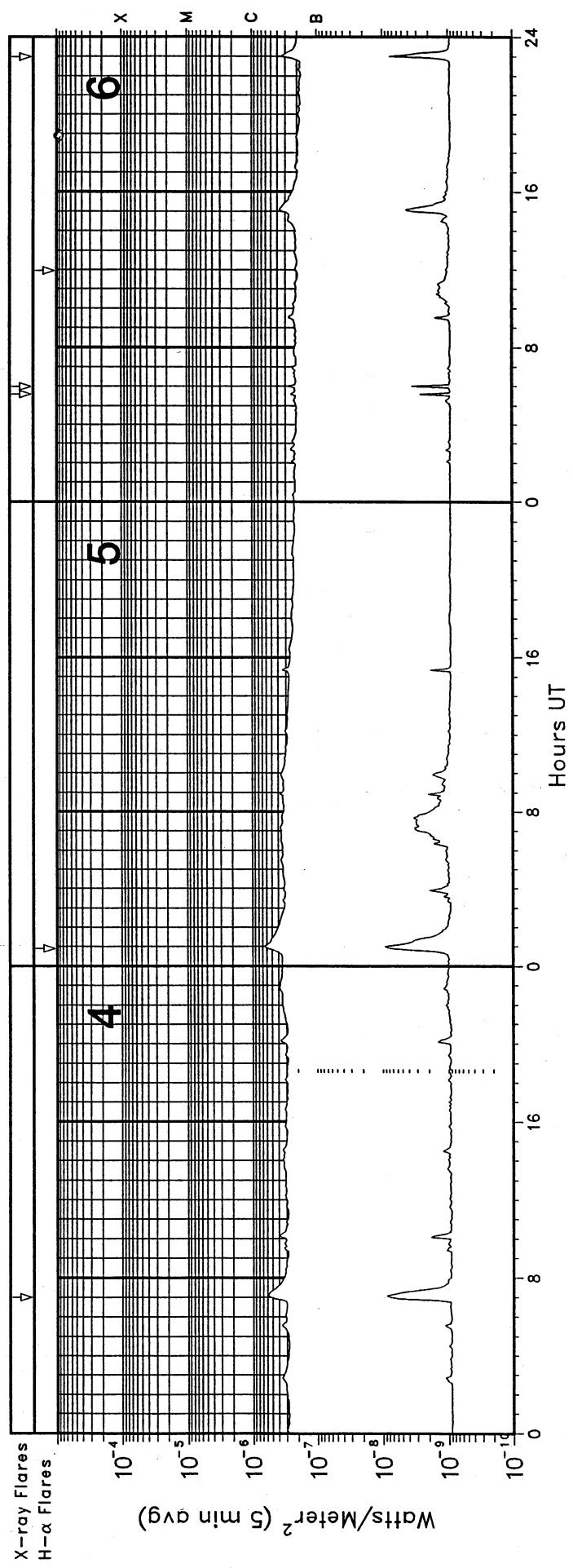
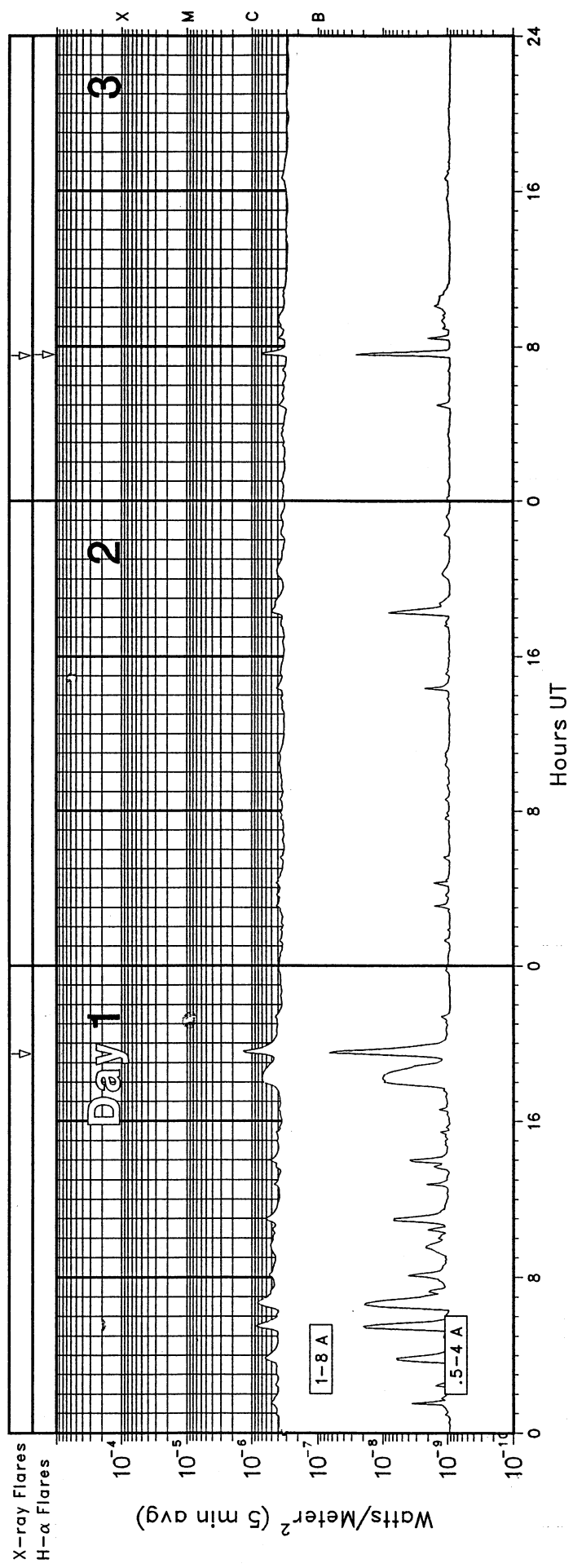
Explanation of Type Code:

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	4O Rise Only	16A Fall A	27AF Rise and Fall AF	
21A Simple 3A GRF	4OF Rise Only F	26O 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.

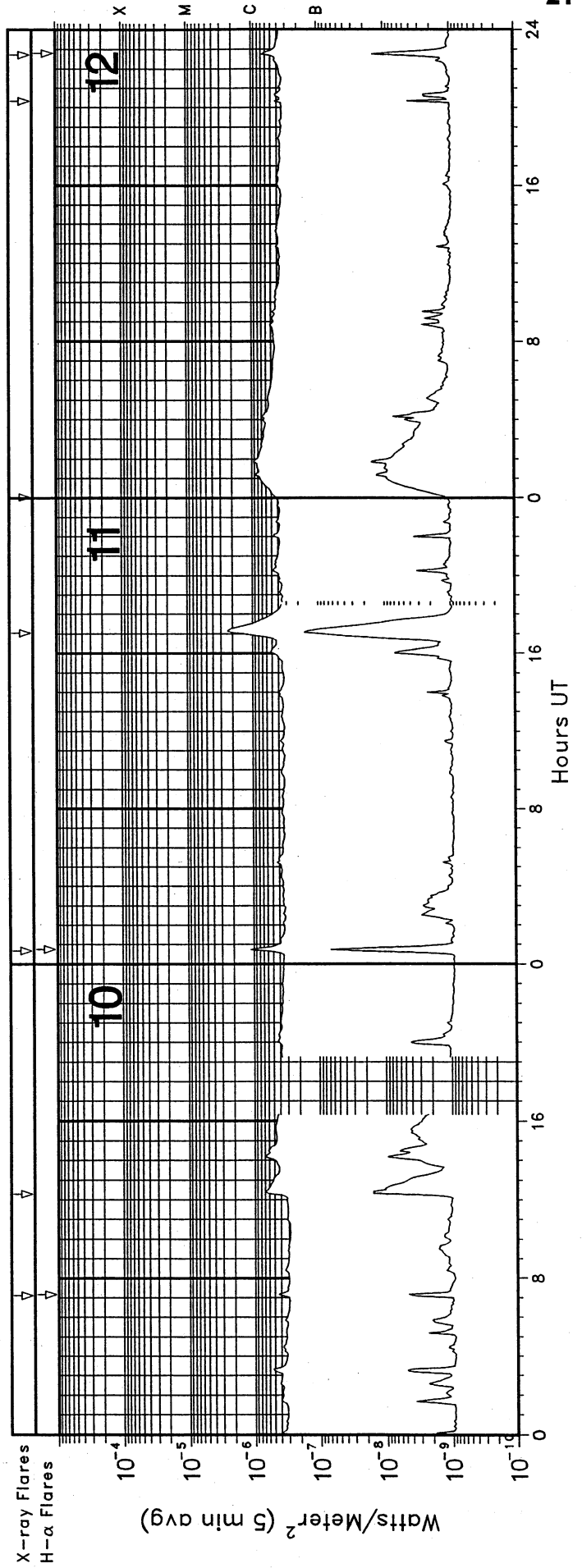
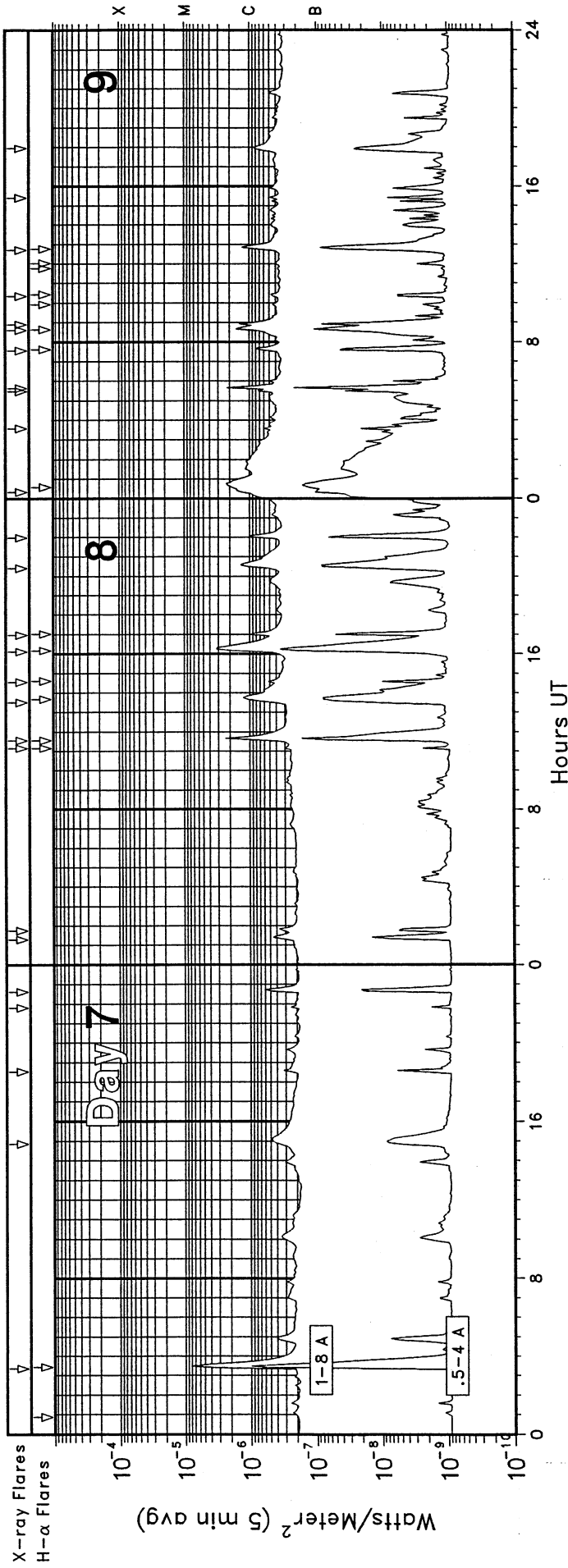
GOES X-RAY DETECTOR

July 2001

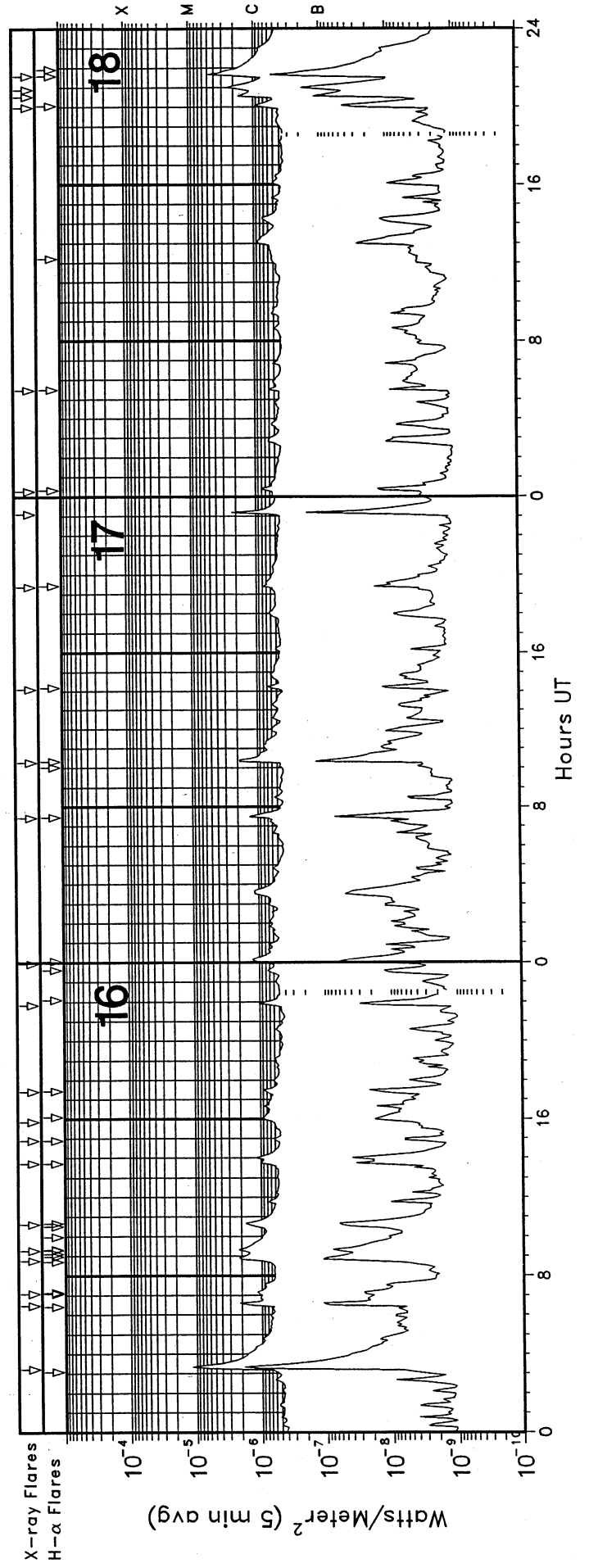
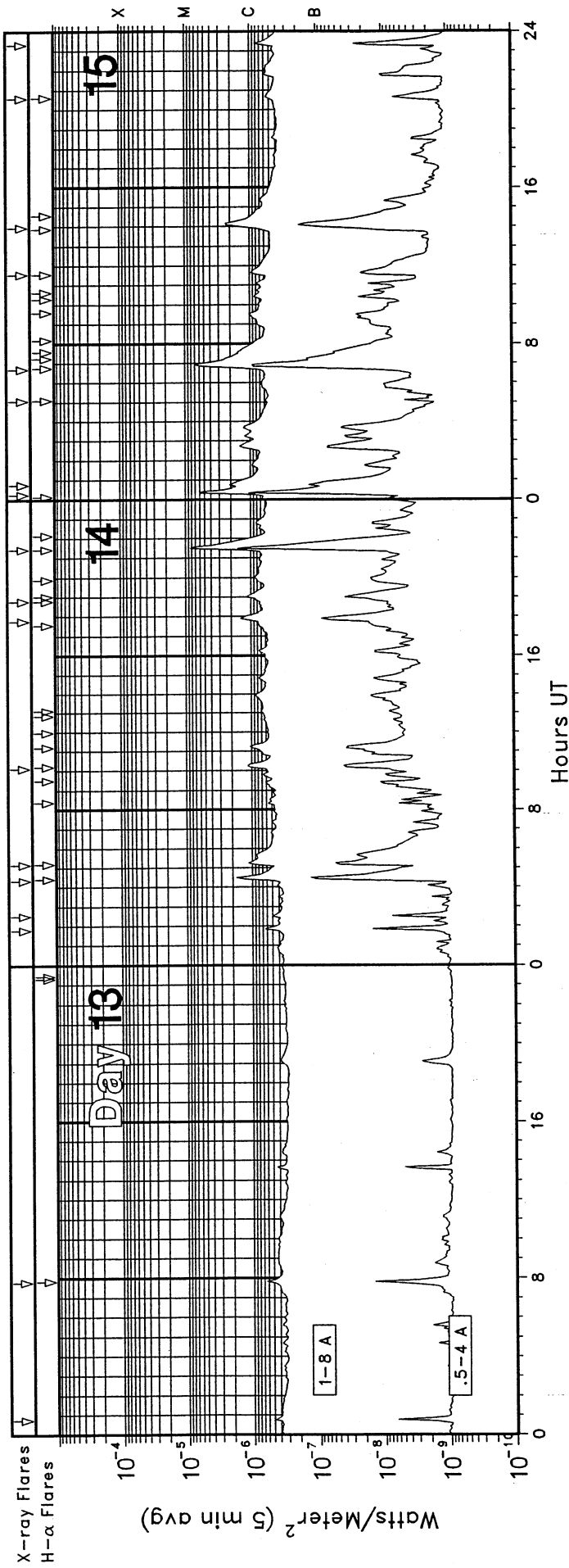


GOES X-RAY DETECTOR

July 2001

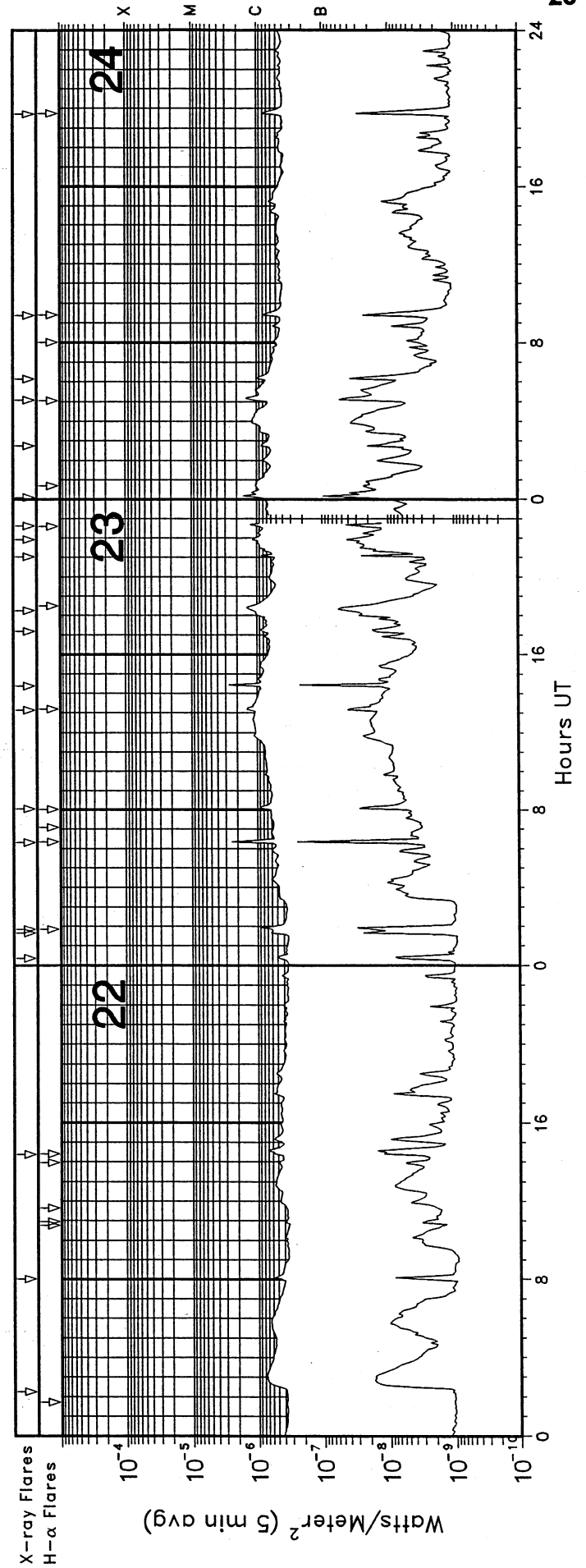
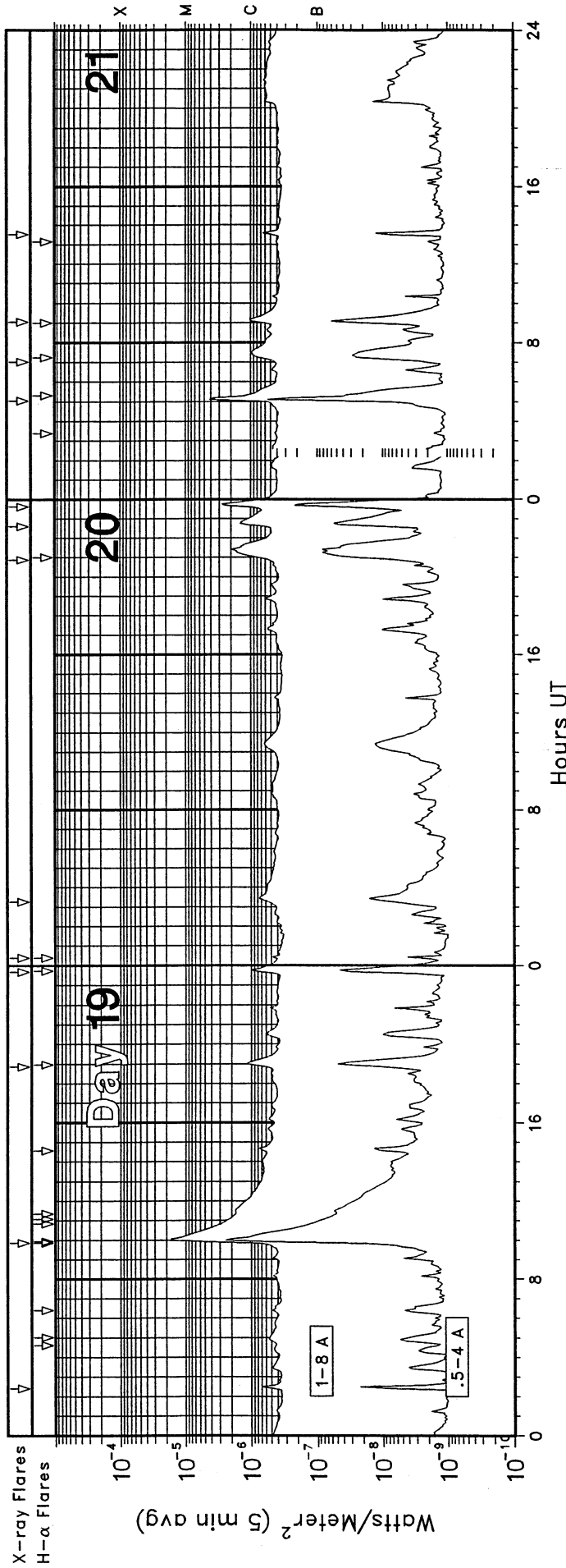


GOES X-RAY DETECTOR July 2001



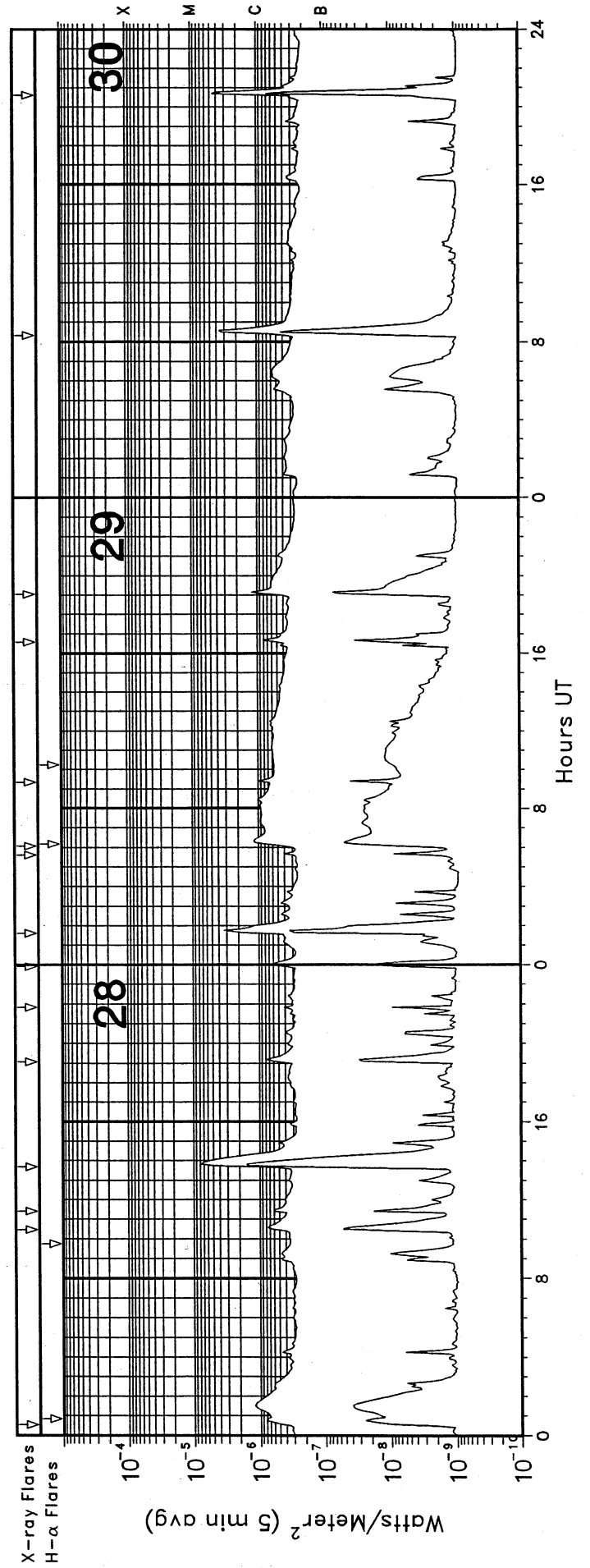
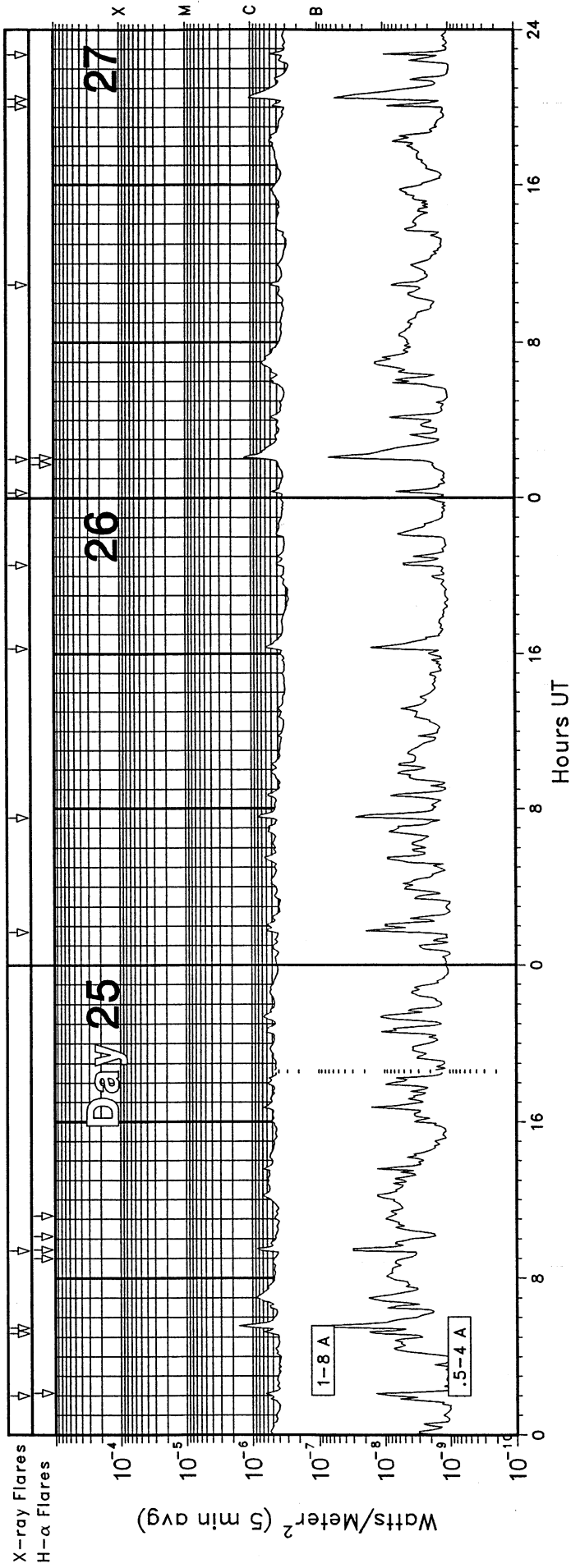
GOES X-RAY DETECTOR

July 2001

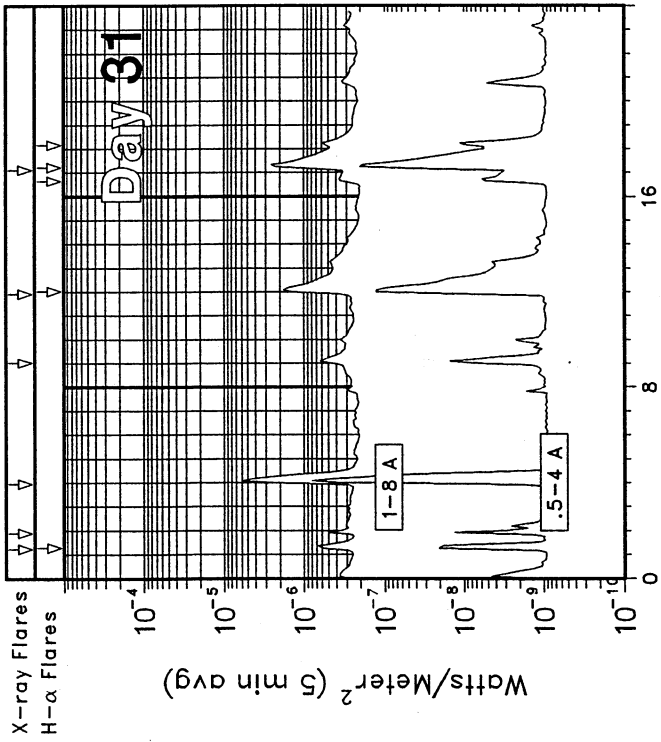


GOES X-RAY DETECTOR

July 2001



GOES X-RAY DETECTOR July 2001



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Jul 01

GOES SOLAR X-RAY FLARES
Preliminary Listing

July 2001

Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/USAF Region	Flux
01	1927	1935				C1.4		9.8E-04
03	0732	0739	0746	N19	E50	SF	B7.6 9525	5.2E-04
04	0659	0709	0712			B5.9		4.4E-04
06	0534	0537	0539			B3.0		7.5E-05
06	0558	0601	0603			B3.3		8.0E-05
06	2258	2302	2313			B3.6		2.9E-04
07	0322	0331	0337	S20	W28	SF	C9.0 9530	4.4E-03
07	1452	1506	1514			B4.8		6.0E-04
07	1832	1837	1841			B3.3		1.6E-04
07	2148	2151	2155			B2.6		9.9E-05
07	2238	2245	2249			B7.3		3.3E-04
08	0119	0127	0134			B4.6		3.5E-04
08	0145	0150	0154			B4.0		1.9E-04
08	1110	1113	1115			B3.4		8.9E-05
08	1134	1141	1146			C2.5		1.1E-03
08	1331	1349	1358	S06	E26	SF	C1.2	1.5E-03
08	1434	1437	1439	S06	E25	SF	B6.7 9531	1.6E-04
08	1606	1619	1629	S07	E23	SF	C3.4 9531	3.1E-03
08	1658	1702	1708	S07	E24	SF	C1.1 9531	5.3E-04
08	2026	2037	2048			C1.3		1.4E-03
08	2159	2204	2208			C1.3		5.1E-04
09	0020	0046	0059	S08	E20	SF	C2.3 9531	4.2E-03
09	0334	0337	0339			B7.0		1.8E-04
09	0529	0533	0536			B9.2		3.1E-04
09	0538	0542	0544			C3.1		6.8E-04
09	0734	0739	0744	S05	E16	SF	B9.6 9531	4.4E-04
09	0836	0840	0850	S06	E15	SF	C1.5 9531	1.1E-03
09	0854	0857	0900			C1.8		4.8E-04
09	1020	1025	1029	S06	E16	SF	B5.0 9531	2.5E-04
09	1242	1251	1300	S06	E13	SF	C1.3 9531	1.0E-03
09	1524	1527	1530			B5.3		1.7E-04
09	1756	1800	1805			B8.5		4.5E-04
10	0706	0710	0715	S07	E05	SF	B4.7 9531	2.3E-04
10	1218	1225	1253			B7.1		1.3E-03
11	0041	0047	0052	S07	W10	SF	C1.2 9531	6.0E-04
11	1703	1711	1721			C2.4		2.3E-03
12	0002	0155	0201			B9.7		5.0E-03
12	2019	2022	2024			B4.9		1.3E-04
12	2243	2247	2252	S19	E27	SF	B6.9 9539	3.3E-04
13	0044	0046	0051			B5.0		2.0E-04
13	0747	0750	0753	S08	W17	SF	B7.3 9533	2.2E-04
14	0148	0153	0157			B7.1		3.3E-04
14	0230	0233	0236			B5.6		1.8E-04
14	0420	0430	0437	S17	E05	SF	C2.0 9539	1.3E-03
14	0509	0513	0527	S17	E06	SF	C1.2 9539	1.1E-03
14	1007	1019	1025			C1.2		1.1E-03
14	1747	1756	1804	S19	E01	SF	C1.4 9539	1.2E-03
14	1847	1902	1913			C1.1 9539		1.5E-03
14	2126	2133	2140	S19	W02	SF	M1.0 9539	5.3E-03
15	0015	0023	0029	S19	W05	1F	C7.7 9539	3.6E-03
15	0046	0048	0052			C2.0 9539		7.2E-04
15	0504	0508	0510	S24	E88	SF	B6.1 9543	2.1E-04

Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/USAF Region	Flux
15	0642	0656	0707	S19	W08	SF	C6.9 9539	6.5E-03
15	1135	1140	1152			B9.9		9.1E-04
15	1357	1409	1419	S19	W10	SF	C2.4 9539	2.4E-03
15	2036	2043	2054	S09	W50	SF	B5.7 9533	5.8E-04
15	2320	2325	2332			B8.6		5.3E-04
16	0313	0320	0329	S18	W20	1N	M1.2 9539	7.6E-03
16	0628	0636	0639	S19	W17	SF	C2.5 9539	1.1E-03
16	0705	0709	0715	S09	W54	SF	C1.1 9533	6.7E-04
16	0846	0855	0910	S18	W23	SF	C2.2 9539	2.6E-03
16	0916	0921	0925	N10	E30	SF	C2.3 9545	1.1E-03
16	1037	1041	1044	S17	W22	SF	C1.8 9539	7.1E-04
16	1343	1348	1354	S20	W26	SF	C1.0 9539	6.2E-04
16	1453	1459	1503	S18	W25	SF	B6.4 9539	3.6E-04
16	1552	1604	1621	N09	E27	SF	B9.2 9545	1.4E-03
16	1724	1732	1734	S18	W22	SF	B9.7 9539	5.1E-04
16	2150	2156	2204			C1.0		7.2E-04
16	2357	0011	0019	S26	E58	SF	C1.3 9543	1.3E-03
17	0726	0732	0739	S26	E56	SF	C1.3 9543	8.7E-04
17	1017	1024	1030	S18	W37	SF	C2.4 9539	1.3E-03
17	1407	1415	1421	S21	W35	SF	B6.9 9539	4.9E-04
17	1923	1926	1928	S18	W41	SF	B8.8 9539	2.3E-04
17	2306	2311	2314			C3.0		7.8E-04
18	0017	0026	0032	N09	E07	SF	B8.0 9545	6.4E-04
18	0528	0532	0538	N09	E04	SF	B6.4 9545	3.4E-04
18	1959	2006	2015	S18	E33	SF	B9.4 9546	7.5E-04
18	2032	2037	2044			C2.0		9.7E-04
18	2054	2102	2109			C2.4		1.8E-03
18	2135	2141	2146	S17	E32	SF	C5.4 9546	2.3E-03
19	0225	0231	0235			B7.6		3.6E-04
19	0952	1004	1017	S08	W62	1B	M1.8 9537	1.7E-02
19	1852	1902	1912	S23	E27	SF	C1.2 9543	1.1E-03
19	2340	2345	2349	S18	E18	SF	C1.2 9546	5.0E-04
20	0024	0026	0029	N08	E11	SF	B4.9 9542	1.4E-04
20	0315	0328	0339			B7.6		9.6E-04
20	2052	2125	2142	S21	E11	SF	C2.1 9543	3.8E-03
20	2236	2247	2307			C1.4		2.2E-03
20	2336	2345	2351			C3.0		2.0E-03
21	0502	0508	0512	S22	E06	SF	C6.6 9543	2.2E-03
21	0701	0730	0752	N21	W29	SF	B9.6 9541	2.3E-03
21	0903	0909	0918	S22	E03	SF	C1.0 9543	8.6E-04
21	1331	1335	1341			B6.9		3.6E-04
22	0215	0308	0427			B7.6		5.0E-03
22	0801	0806	0812			B5.9		3.5E-04
22	1423	1426	1430	S20	W15	SF	B6.0 9543	2.3E-04
23	0022	0024	0025			B5.2		8.6E-05
23	0139	0144	0147			B8.1		3.0E-04
23	0151	0155	0159			B9.8		3.8E-04
23	0619	0623	0625	N10	W65	SF	C5.0 9545	8.7E-04
23	0803	0810	0815			B9.5		6.1E-04
23	1309	1312	1319	N09	W70	SF	C1.6 9545	8.4E-04
23	1422	1426	1428			C3.9		8.2E-04
23	1711	1715	1718			C1.0		3.7E-04
23	1815	1828	1832	S21	W28	SF	C1.4 9543	1.3E-03
23	2103	2107	2109			C1.0		2.9E-04
23	2155	2157	2203			C1.2		5.3E-04
23	2237	2241	2244	S20	W31	SF	C1.3 9543	5.0E-04

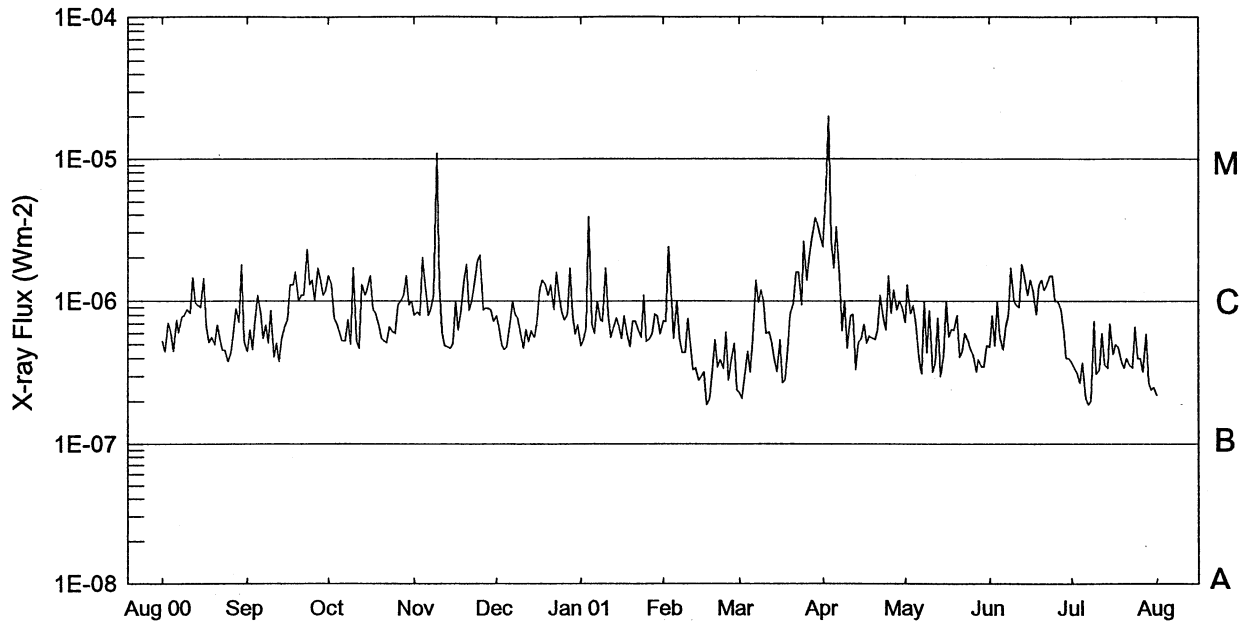
GOES SOLAR X-RAY FLARES
 Preliminary Listing
 July 2001

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 Jul 01

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
24	0006	0011	0014				C1.8	6.4E-04	
24	0244	0248	0254				B9.2	5.0E-04	
24	0504	0509	0516	S19	W34	SF	C1.6	9543	9.4E-04
24	0609	0614	0617				C1.0		4.5E-04
24	0922	0927	0932	S18	W40	SF	B8.4	9543	4.2E-04
24	1942	1949	1953	N13	E23	SF	B9.0	9553	4.7E-04
25	0200	0206	0211	S21	W49	SF	B6.1	9543	3.8E-04
25	0510	0515	0521				B7.3		4.1E-04
25	0528	0535	0541				C1.7		9.8E-04
25	0924	0929	0933	S22	W50	SF	C1.0	9543	4.4E-04
26	0143	0148	0156				B6.4		4.4E-04
26	0732	0737	0746				B8.1		5.9E-04
26	1616	1623	1631				B6.2		4.9E-04
26	2035	2038	2044				B4.6		2.3E-04
27	0017	0020	0025				B5.1		2.2E-04
27	0200	0207	0215	S23	W67	SF	C1.3	9543	9.0E-04
27	1056	1059	1101				B5.9		1.6E-04
27	2003	2009	2013				B5.1		2.6E-04
27	2026	2033	2046				C1.0		1.0E-03
27	2243	2246	2249				B5.9		1.7E-04

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
28	0033	0132	0206				C1.2		4.9E-03
28	1028	1037	1049				B7.5		8.3E-04
28	1124	1128	1133				B7.2		3.3E-04
28	1341	1353	1408				C7.8		8.7E-03
28	1904	1909	1919				B8.0		6.0E-04
28	2150	2153	2155				B5.2		1.2E-04
28	2355	0001	0012				B6.8		5.7E-04
29	0138	0146	0152				C3.6		2.0E-03
29	0537	0541	0544				B4.2		1.5E-04
29	0605	0621	0647	S20	E43	SF	C1.1	9557	2.3E-03
29	0922	0926	0930				C1.0		4.4E-04
29	1635	1643	1646				B8.9		4.6E-04
29	1903	1910	1917				C1.2		8.1E-04
30	0820	0834	0840				C4.5		2.5E-03
30	2036	2043	2049				C6.0		2.6E-03
31	0113	0120	0126	S22	E26	SF	B7.3	9557	4.5E-04
31	0153	0157	0201				B5.6		2.1E-04
31	0357	0407	0416				C6.0		4.3E-03
31	0901	0907	0915				B6.5		4.8E-04
31	1155	1206	1221	S12	E58	SF	C1.8	9561	2.1E-03
31	1707	1720	1729	S12	E53	SF	C2.6	9561	2.2E-03

Preliminary GOES Satellite Daily X-Ray Background Aug 2000 - Jul 2001



Day	Aug 00	Sep	Oct	Nov	Dec	Jan 01	Feb	Mar	Apr	May	Jun	Jul
1	B5.2	B4.5	C1.5	B8.0	B7.9	B4.9	B7.3	B2.3	C2.4	B7.1	B4.8	B3.8
2	B4.4	B6.3	C1.3	B8.4	B6.5	B5.4	B7.2	B2.1	C6.5	C1.3	B7.9	B3.4
3	B7.0	B4.6	B7.7	B8.0	B5.0	B6.5	C2.4	B3.2	M2.0	B8.2	B4.9	B3.1
4	B6.0	B7.5	B7.0	C2.0	B4.6	C3.9	B9.8	B4.5	C2.6	B9.3	C1.0	B2.7
5	B4.4	C1.1	B6.1	C1.2	B4.8	B6.9	B5.5	B3.2	C1.7	B7.1	B5.6	B3.7
6	B7.4	B8.2	B5.3	B8.0	B6.9	B6.0	C1.0	B5.5	C3.3	B4.0	B4.6	B2.1
7	B6.0	B5.5	B5.3	B8.9	C1.0	C1.0	B5.5	C1.4	C1.5	B3.1	B6.6	B1.9
8	B7.7	B6.8	B7.4	C1.1	B8.1	B7.4	B4.4	B9.8	B6.2	C1.0	B7.9	B2.0
9	B7.9	B5.1	B5.0	M1.1	B7.7	B7.3	B4.4	C1.2	C1.0	B4.4	C1.7	B7.3
10	B8.7	B8.6	C1.7	C1.3	B5.8	C1.7	B7.6	C1.0	B4.7	B8.6	C1.0	B3.1
11	B8.2	B4.1	B5.3	B6.1	B4.7	B8.0	B5.0	B6.0	B7.9	B3.2	B9.3	B3.3
12	C1.4	B5.1	B4.7	B4.9	B6.4	B5.6	B3.3	B6.1	B8.1	B3.7	B9.0	B6.0
13	B9.7	B3.8	C1.3	B4.8	B5.2	B6.7	B3.4	B5.1	B3.3	B7.7	C1.8	B3.6
14	B9.3	B5.5	C1.1	B4.7	B6.2	B7.7	B2.8	B3.9	B5.1	B3.0	C1.5	B3.4
15	B9.0	B6.7	C1.2	B5.1	B5.6	B6.7	B3.0	B3.2	B5.5	B4.2	C1.1	B7.0
16	C1.4	B7.4	C1.5	B9.9	B7.2	B5.5	B3.2	B5.4	B6.9	C1.0	C1.4	B4.3
17	B6.7	C1.3	B8.8	B6.3	C1.2	B7.9	B1.9	B2.7	B5.1	B5.7	C1.2	B5.0
18	B5.1	C1.3	B8.2	B8.3	C1.4	B5.8	B2.1	B2.8	B5.7	B6.4	B8.1	B4.8
19	B5.5	C1.6	B6.8	C1.4	C1.3	B4.8	B3.3	B5.2	B5.5	B6.3	C1.3	B3.8
20	B5.0	C1.0	B5.5	C1.8	C1.1	B7.3	B5.4	B8.2	B5.4	B8.0	C1.4	B3.4
21	B6.8	C1.1	B5.3	B8.7	C1.3	B7.3	B3.5	B9.6	B6.4	B4.1	C1.2	B4.0
22	B5.5	C1.1	B5.1	C1.0	B8.8	B6.2	B3.9	C1.6	C1.1	B4.5	C1.3	B3.6
23	B4.5	C2.3	B6.6	C1.4	C1.6	B5.6	B3.4	C1.6	B8.1	B6.0	C1.5	B3.4
24	B4.5	C1.3	B6.1	C1.9	C1.1	C1.1	B6.1	B9.4	B6.3	B5.3	C1.5	B6.6
25	B3.8	C1.4	B6.0	C2.1	B8.4	B5.2	B2.8	C2.6	C1.5	B4.6	C1.0	B4.0
26	B4.3	C1.0	B9.4	B8.7	B7.4	B5.4	B4.1	C1.4	B8.2	B4.2	C1.0	B4.0
27	B5.8	C1.7	C1.0	B8.9	B8.1	B5.9	B5.1	C2.1	C1.2	B3.2	B8.8	B3.2
28	B8.8	C1.4	C1.1	B8.9	C1.7	B8.1	B2.4	C2.8	B8.8	B3.9	B6.5	B5.9
29	B7.1	C1.1	C1.5	B8.7	B8.1	B7.8		C3.8	C1.0	B3.5	B4.0	B2.7
30	C1.7	C1.2	B9.4	B7.3	B5.9	B5.9		C3.4	B9.0	B3.5	B4.0	B2.4
31	B5.2		C1.0		B6.8	B7.4		C2.8		B4.9		B2.5

ACTIVE PROMINENCES AND FILAMENTS

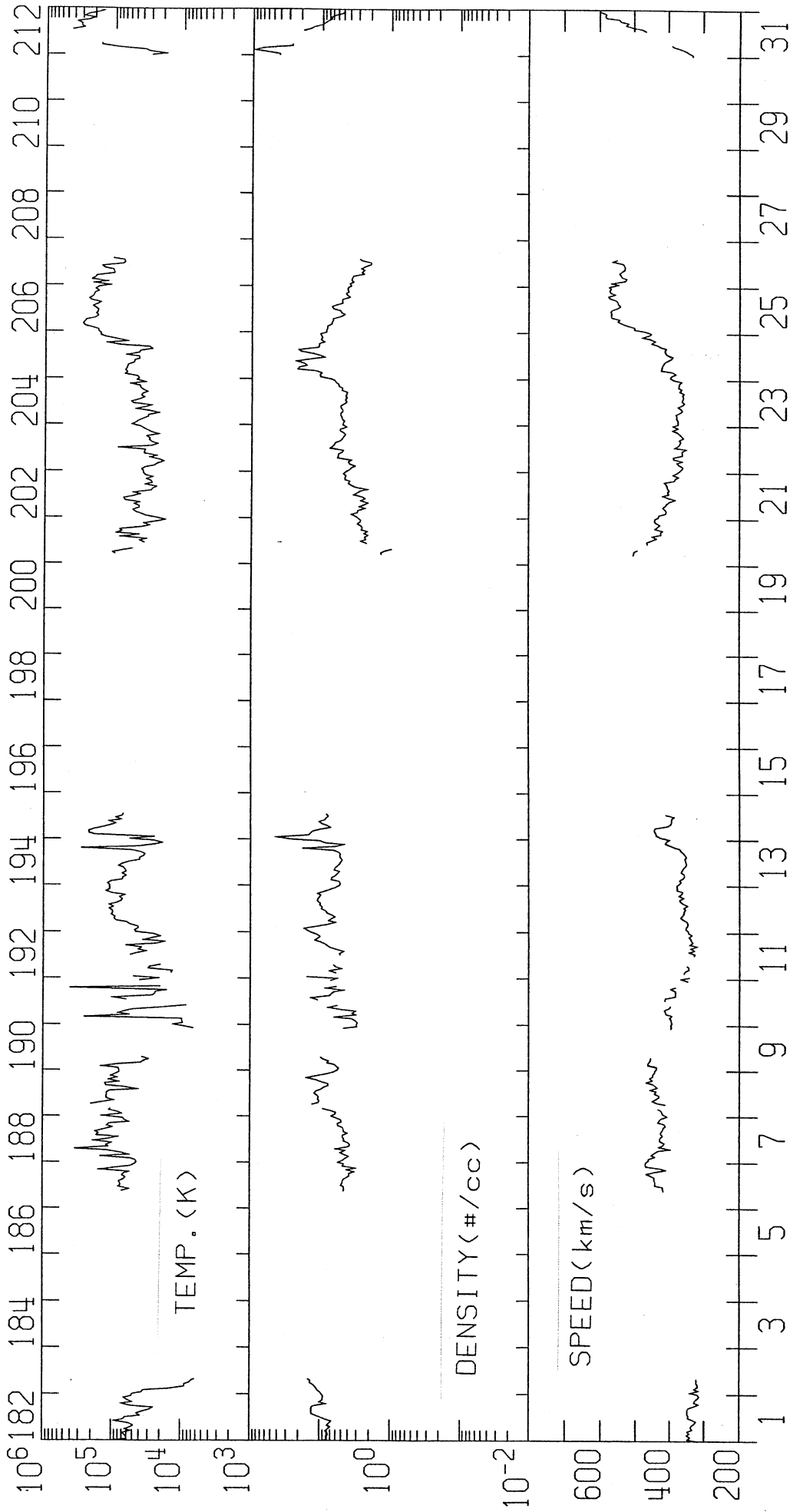
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Jul 01

JULY 2001

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
03	DSF	0003U	1320U	N26	W09	07	2.3	2	16	0	0	E	HOLL		
03	DSF	0458	1230	N22	W15	07	2.0	2	16	0	0	E	SVTO		
04	DSF	1949U	1057U	S53	E20	07	6.5		14	0	0	E	RAMY		
05	APR	0730E	0820	N41	W90	06	28.5	1	25	9	9	V	KHAR		
05	DSF	1800U	1120U	N34	W01	07	5.7		09	0	0	E	RAMY		
06	BSL	0806E	0832	S17	W90	06	29.5	1	02	9	9	V	KHAR		
06	APR	0806E	0925	N28	W90	06	29.5	2	20	9	9	V	KHAR		
06	BSL	0930	0944	S17	W90	06	29.6	1	02	9	9	V	KHAR		
06	BSL	1001U	1025	S17	W90	06	29.6	1	03	9	9	V	KHAR		
06	BSL	1033	1037	S17	W90	06	29.6	1	02	9	9	V	KHAR		
09	DSD	0945U	1105	S03	E17	07	10.7	1	02	9	9	V	KHAR		
09	DSD	1020U	1150	S06	E39	07	12.4	1	04	6	9	V	KHAR		
09	APR	1150U	1215D	N13	W90	07	2.7	1	03	9	9	V	KHAR		
10	ADF	1035E	1055	S04	W04	07	10.1	1	04	9	9	V	KHAR		
14	APR	1019	1040	S10	W90	07	7.6	1	04	9	6	V	KHAR		
15	BSL	0940U	1006	S08	E90	07	22.2	1	03	9	9	V	KHAR		
15	DSF	1810U	1405U	N42	E46	07	19.5		16	0	0	E	RAMY		
16	DSF	1300	1545	N26	E07	07	17.1	2	07	0	0	E	SVTO		
17	DSD	1002E	1017	N06	W18	07	16.1	1	04	9	9	V	KHAR		
17	ADF	1025U	1042	S18	W37	07	14.6	1	05	9	9	V	KHAR		
18	ADF	1155	1235D	S02	E67	07	23.6	1	03	9	9	V	KHAR		
18	DSF	1727U	0418U	S37	E09	07	19.4	1	12	0	0	E	SVTO		
18	DSF	1943U	1130U	S23	E08	07	19.4		07	0	0	E	RAMY		
19	ADF	0940U	1015D	S20	W59	07	14.9	2	07	9	9	V	KHAR		
19	ADF	1105E	1118	S09	W60	07	14.9	1	04	9	9	V	KHAR		
19	DSF	1705U	0530U	N24	W42	07	16.5		17	0	0	E	SVTO		
19	DSF	1937U	1120U	N21	E31	07	22.2		13	0	0	E	RAMY	9548	
19	DSF	1937U	1120U	N36	W16	07	18.5		24	0	0	E	RAMY		
20	DSF	0703	1043	N18	E23	07	22.0	3	11	0	0	E	SVTO	9548	
20	EPL	1248	1312	N24	E90	07	27.5	3		9	9	E	SVTO		
20	EPL	1249	1258	N27	E90	07	27.5	3		9	9	E	RAMY		
20	EPL	1250	1312	N24	E90	07	27.5	3		9	9	E	SVTO		
20	DSF	2348U	1545U	N29	E39	07	24.0		15	0	0	E	HOLL	9548	
21	APR	1100E	1115	N25	W90	07	14.6	1	03	9	9	V	KHAR		
22	BSL	0906E	0930D	S03	E90	07	29.2	1	02	9	9	V	KHAR		
22	BSL	1012	1018	S03	E90	07	29.2	1	03	9	9	V	KHAR		
23	APR	0955E	1105	S07	W90	07	16.6	1	12	9	9	V	KHAR		
24	BSL	0622	0652	S19	E90	07	31.1			9	9	E	SVTO		
24	DSD	0940	0954	S19	W38	07	21.5	1	03	9	9	V	KHAR		
25	ADF	0916	1120	N15	E16	07	26.6	1	08	9	9	V	KHAR		
25	BSL	1005E	1025	N05	W90	07	18.6	1	02	9	9	V	KHAR		
25	BSL	1110	1129	N07	W90	07	18.6	1	03	6	9	V	KHAR		
25	BSL	1115U	1130	N28	W90	07	18.6	1	04	9	9	V	KHAR		
25	APR	1133	1152D	N30	W90	07	18.7	2	05	9	9	V	KHAR		
25	APR	1140U	1152D	N32	W90	07	18.7	2	07	6	9	V	KHAR		
26	APR	1220U	1240D	S17	E90	08	2.3	1	04	9	9	V	KHAR		
28	BSL	0955	1030	S20	W90	07	21.6	1	07	9	9	V	KHAR		
28	BSL	1208	1220D	S18	W90	07	21.7	1	05	9	9	V	KHAR		
29	DSF	0925U	2350U	N15	W17	07	28.1		15	0	0	E	LEAR		

IMP 8 SOLAR WIND PLASMA
JULY 2001

MIT/CSR IMP 8 PLASMA PARAMETERS



JUL 2001

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IMP 8

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ONE-HOUR AVERAGES

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