

NOVEMBER 2002 NUMBER 699 - Part II



Solar-Geophysical Data comprehensive reports

Data for May 2002 and Miscellaneous

Explanation of Data Reports Issued as Number 515 (Supplement) July 1987

NEW DATA:

**ACE Solar Wind, Interplanetary Magnetic Field and
Particles -- Monthly Plots**

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NATIONAL ENVIRONMENTAL SATELLITE,
DATA, AND INFORMATION SERVICE

NATIONAL GEOPHYSICAL
DATA CENTER

BOULDER,
COLORADO



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Number 699

(Issued in Two Parts)

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ACE SOLAR WIND, INTERPLANETARY MAGNETIC FIELD AND PARTICLES	
-- MONTHLY PLOTS	

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May 02

H α SOLAR FLARES

MAY 2002

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)	
0001	LEAR	01	0348	0351	0355	N14	W56	9921	04	27.0	7	SF	3	E	32		F
0002	LEAR	01	0407	0408	0411	S28	E67	9932	05	6.4	4	SF	3	E	10		
0003	01	0856	0856	0900	S27	E64	9932	05	6.3	4	SF			16			
	LEAR	01	0856	0856	0859	S26	E63	9932	05	6.3	3	SF	3	E	16		
	KANZ	01	0856	0857	0900	S28	E64	9932	05	6.4	4	SF	2	E			
0004	01	1001	1001	1009	S30	E65	9932	05	6.5	8	SF			13			
	SVTO	01	1001	1001	1009	S31	E65	9932	05	6.5	8	SF	3	E	13		
	KANZ	01	1003E	1013U	1013U	S29	E65	9932	05	6.5	10U	SF	2	E			
0005	KANZ	01	1227	1228	1232	S28	E63	9932	05	6.4	5	SF	2	E			
0006	01	13532	13551	1409	S29	E62	9932	05	6.4	16	SF			50		F	
	SVTO	01	1353	1356	1403	S30	E62	9932	05	6.4	10	SF	3	E	35		F
	HOLL	01	1355	1355	1411	S28	E64	9932	05	6.6	16	SF	3	E	65		
	KANZ	01	1355	1355	1414	S28	E61	9932	05	6.3	19	SF	2	E			
0007	HOLL	01	1412	1445	1508	S27	E64	9932	05	6.6	56	SF	3	E	44		
	01	1827		2235	No Flare Patrol												
0008	LEAR	02	0257	0300	0316	N14	W40	9919	04	29.2	19	SF	3	E	45		F
0009	KANZ	02	1124	1126	1130	N15	W36	9926	04	29.8	6	SF	2	E			
0010	KANZ	02	1144	1145	1206	N12	W86	9915	04	26.1	22	SF	2	E			
0011	KANZ	02	1258	1259	1301	S20	E85	9937	05	9.0	3	SF	2	E			
0012	KANZ	02	1306	1306	1314	S10	E83	9937	05	8.8	8	SF	2	E			
	02	1825		1939	No Flare Patrol												
	02	2041		2101	No Flare Patrol												
0013	HOLL	02	2111	2117	2303	N14	W37	9926	04	30.1	112	SF	3	E	75		FS
0014	HOLL	02	2317	2319	2324	S18	E62	9934	05	7.7	7	SF	3	E	19		
0015	LEAR	03	0336	0359	0428	S18	E60	9934	05	7.7	52	SF	3	E	68		F
0016	LEAR	03	0400	0401	0405	S30	E39	9932	05	6.2	5	SF	3	E	14		F
0017	03	06441	0647	0653	N16	W47	9926	04	29.8	9	SF			49		F	
	LEAR	03	0644	0647	0655	N16	W48	9926	04	29.7	11	SF	3	E	49		F
	KANZ	03	0645	0647	0651	N15	W46	9926	04	29.9	6	SF	2	E			
0018	KANZ	03	0711	0711	0715	S21	E55	9934	05	7.5	4	SF	2	E			
0019	SVTO	03	0927	0927	0932	S22	E53	9934	05	7.5	5	SF	3	E	13		
0020	HOLL	03	1353	1353	1358	S17	E54	9934	05	7.7	5	SF	3	E	12		
	03	1403	1404	1412	S17	E53	9934	05	7.6	9	SF	3	E	14			
	03	1451		1459	No Flare Patrol												
0022	HOLL	03	1713	1715	1723	S17	E49	9934	05	7.4	10	SF	4	E	16		
0023	HOLL	03	1803	1807	1840	S17	E50	9934	05	7.5	37	1F	3	E	108		F
	03	1846		2018	No Flare Patrol												
0024	HOLL	03	2045	2052	2100	S17	E48	9934	05	7.5	15	SF	3	E	28		
0025	HOLL	03	2147	2150	2154	S16	E48	9934	05	7.5	7	SF	3	E	12		
0026	HOLL	03	2203	2211	2218	S17	E49	9934	05	7.6	15	SF	3	E	22		

H α SOLAR FLARES

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May 02

MAY 2002

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)		
			03 2254		2400			No Flare Patrol												
0027			04 0250	0251	0302	S14	E45	9934	05	7.5	12	SN						75	1.3	,BEF
	MITK		04 0250	0251	0255	S13	E44	9934	05	7.4	5	SN				C	0251	88	1.3	B,E
	LEAR		04 0250	0251	0308	S16	E46	9934	05	7.6	18	SN		3	E			62		F
0028	LEAR		04 0341	0342	0353	S17	E44	9934	05	7.5	12	SF		3	E			19		F
0029			04 13175	13254	1348	S10	E62	9937	05	9.2	31	SF						52		F
	HOLL		04 1317	1329	1351	S09	E62	9937	05	9.2	34	SF		3	E			58		
	SVTO		04 1322	1325	1345	S12	E63	9937	05	9.3	23	SF		3	E			47		F
0030	HOLL		04 1322	1324	1330	N21	W37	9929	05	1.7	8	SF		3	E			19		
			04 1549		1616	No Flare Patrol														
			04 1630		1815	No Flare Patrol														
			04 1838		1925	No Flare Patrol														
0031	HOLL		04 1859E	1900U	1908D	S10	E63	9937	05	9.5	9D	SF		3	E			51		
			04 2034		2101	No Flare Patrol														
			04 2110		2140	No Flare Patrol														
			04 2218		2222	No Flare Patrol														
0032			05 07221	07221	0732	N18	E08	9928	05	5.9	10	SF						14		F
	KANZ		05 0722	0722	0731	N18	E08	9928	05	5.9	9	SF		2	E					
	LEAR		05 0723	0723	0732	N19	E09	9928	05	6.0	9	SF		3	E			14		F
0033			05 08017	0808	0816	S20	E28	9934	05	7.5	15	SF						19		FH
	KANZ		05 0801	0808	0819	S20	E29	9934	05	7.5	18	SF		2	E					
	LEAR		05 0808	0808	0813	S20	E28	9934	05	7.5	5	SF		3	E			19		FH
0034	KANZ		05 0837	0837	0843	S16	E26	9934	05	7.3	6	SF		2	E					
0035	SVTO		05 1226	1227	1236	S17	E28	9934	05	7.6	10	SF		3	E			19		F
0036			05 14411	14451	1500	S10	E51	9937	05	9.4	19	SF						41		F
	HOLL		05 1441	1445	1501	S10	E51	9937	05	9.4	20	SF		3	E			53		F
	SVTO		05 1442	1446	1458	S10	E51	9937	05	9.4	16	SF		3	E			29		F
0037	HOLL		05 1657	1657	1704	N22	W51	9929	05	1.8	7	SF		3	E			13		
0038	HOLL		05 1809	1810	1816	S17	E22	9934	05	7.4	7	SF		3	E			51		
0039	HOLL		05 1912E	1914U	1922D	S12	E66	9943	05	10.8	10D	1F		2	E			121		
			05 1928		2325	No Flare Patrol														
			06 0307		0312	No Flare Patrol														
0040	KHAR		06 0832	0835	0843	N18	W59	9929	05	1.9	11	SF		2	P	0832		35		D
0041	KHAR		06 0912U		0916	S15	E16	9934	05	7.6	4U	SF		2	P	0915		45		D
0042			06 0950	0952	0956	N18	W07	9928	05	5.9	6	SF						21		F
	KANZ		06 0950	0952	0956	N17	W08	9928	05	5.8	6	SF		2	E					
	SVTO		06 0951E	0951U	0956D	N18	W06	9928	05	5.9	5D	SF		2	E			21		F
0043			06 14011	1404	1412	S20	W18	9935	05	5.2	11	SF						17		FU
	KANZ		06 1401	1404	1413	S20	W18	9935	05	5.2	12	SF		2	E					
	HOLL		06 1402	1404	1412	S20	W18	9935	05	5.2	10	SF		3	E			17		UF
0044	HOLL		06 1412	1413	1438	S19	W18	9935	05	5.2	26	SF		3	E			16		U
0045	HOLL		06 2024	2025	2027	S17	E10	9934	05	7.6	3	SF		3	E			40		
			06 2130		2326	No Flare Patrol														
0046	VORO		06 2342	2345	2358	S17	E03		05	7.2	16	SF		3	C	2345		45	0.5	

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May 02

H α SOLAR FLARES

MAY 2002

Grp #	Sta	Start Day	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
																Apparent (10-6 Disk)	Corr (Sq Deg)	
0047	VORO	07	0002	0005	0027	S13	E33	05	9.5	25	SN		3	C	0005	81	1.0	
		07	0031		0108													No Flare Patrol
		07	0300		0605													No Flare Patrol
		07	0607		0624													No Flare Patrol
0048	KANZ	07	0708	0713	0716	S15	W02	9934	05	7.1	8	SF	2	E				
0049	KANZ	07	0726	0729	0735	S15	W02	9934	05	7.1	9	SF	2	E				
0050	KANZ	07	0802	0803	0807	S20	E01	9934	05	7.4	5	SF	2	E				
0051		07	0848	0850	0901	S20	E02	9934	05	7.5	13	SN					180	O
	KHAR	07	0845E		0905	S19	E04	9934	05	7.7	20D	SN	2	P	0859		180	O
	KANZ	07	0848	0850	0857	S20	E01	9934	05	7.4	9	SF	2	E				
0052	KHAR	07	0923U		0935	N22	E04	9947	05	7.7	12U	SF	2	V				DO
0053	KHAR	07	0923U		0937	S22	W25	9941	05	5.5	14U	SN	2	P				O
0054	KANZ	07	1137	1138	1143	S20	E01	9934	05	7.6	6	SF	2	E				
0055		07	18383	1843	1900	S10	E42	9943	05	10.9	22	SF					20	F
	RAMY	07	1838	1843	1914	S09	E42	9943	05	10.9	36	SF	3	E			27	
	HOLL	07	1841	1843	1847	S12	E42	9943	05	10.9	6	SF	3	E			14	F
0056	HOLL	07	2241	2241	2252	S21	W35	9935	05	5.3	11	SF	3	E			17	
0057	LEAR	08	0437E	0437U	0455D	S11	E16	9937	05	9.4	18D	SF	2	E			13	
		08	0506		0525													No Flare Patrol
		08	0608		0624													No Flare Patrol
0058	LEAR	08	0627	0628U	0635	N16	E25	9940	05	10.2	8	SF	1	E			21	F
		08	0719		0751													No Flare Patrol
		08	0808		0832													No Flare Patrol
0059	KANZ	08	0844	0844	0845	N16	E22	9940	05	10.0	1	SF	2	E				
		08	0915		0925													No Flare Patrol
		08	0928		0937													No Flare Patrol
0060	KHAR	08	0948	0948	1015	S21	W12	9934	05	7.5	27	1N	2	P	1001		254	H
0061	KANZ	08	1021	1021	1024	S19	W15	9934	05	7.3	3	SF	2	E				
0062	KHAR	08	1034U	1035	1145	N16	W85	9931	05	2.0	71U	SF	2	P	1038		60	O
0063	KHAR	08	1055U	1056	1101	N19	E22	9939	05	10.1	6U	SF	2	V				D
0064	RAMY	08	1056	1107	1112	S16	W14	9934	05	7.4	16	SF	3	E			11	
0065	RAMY	08	1131	1132	1143	S16	W14	9934	05	7.4	12	SF	3	E			12	
0066	RAMY	08	1149	1149	1208	S17	W11	9934	05	7.6	19	SF	3	E			10	
0067	HOLL	08	1258E	1320U	1456	S12	W07	9934	05	8.0	118D	SF	3	E			72	F
0068	HOLL	08	1705	1707	1712	S19	W17	9934	05	7.4	7	SF	3	E			17	
0069		08	1845	18451	1902	S07	E02	9937	05	8.9	17	SF					20	F
	RAMY	08	1845	1845	1904	S05	E02	9937	05	8.9	19	SF	3	E			25	F
	HOLL	08	1845	1846	1900	S09	E01	9937	05	8.8	15	SF	3	E			16	F
0070	LEAR	09	0713	0716	0735	S09	W01	9937	05	9.2	22	SF	3	E			23	F
0071	LEAR	09	0758	0759	0809	S08	W03	9937	05	9.1	11	SF	3	E			41	F
		09	0925		0929													No Flare Patrol

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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	CMP Mo	Day							Apparent (10-6 Disk)	Corr (Sq Deg)	
0072		09	1050	1050	1101	S08 E18	9943	05	10.8	11	SF			1056	38		DF
	KHAR	09	1050	1050	1103	S08 E20	9943	05	10.9	13	SF	2	P		45		D
	RAMY	09	1050	1052	1059	S09 E16	9943	05	10.6	9	SF	3	E		30		F
		09	1422		1439	No Flare Patrol											
0073	RAMY	09	1820	1820	1826	S19 W39	9934	05	6.8	6	SF				33		F
		09	2119		2155	No Flare Patrol											
		09	2203		2211	No Flare Patrol											
		09	2226		2254	No Flare Patrol											
0074	LEAR	10	0027	0038	0102	S07 E52	9946	05	13.9	35	SF				41		F
0075	LEAR	10	0105	0126	0202	S03 E50	9946	05	13.8	57	SF				27		F
		10	0309		0317	No Flare Patrol											
0076		10	0836	0826*	0850	S08 W16	9937	05	9.1	14	SN				46		O
	KHAR	10	0822E	0826	0852	S09 W16	9937	05	9.1	30D	SN	2	P	0829	65		O
	SVTO	10	0836	0837	0847	S06 W17	9937	05	9.1	11	SF	3	E		28		
0077	KHAR	10	0850	0851	0855	S18 W33	9934	05	7.8	5	SF						D
0078	SVTO	10	0917	0918	0926	S09 W17	9937	05	9.1	9	SF				10		
0079	KHAR	10	0928	0930	0936	S07 W17	9937	05	9.1	8	SF			0934	30		DO
0080	SVTO	10	0939	0940	0956	S06 W18	9937	05	9.0	17	SF				43		F
0081	KHAR	10	0946	0950	0958	S05 W15	9938	05	9.3	12	SN			0946	25		D
0082		10	10264	10284	1035	S07 W19	9937	05	9.0	9	SF				22		D
	KANZ	10	1026	1028	1034	S07 W19	9937	05	9.0	8	SF	2	E				
	SVTO	10	1028E	1029U	1032	S07 W19	9937	05	9.0	4D	SF	3	E		22		
	KHAR	10	1030	1032	1038	S08 W18	9937	05	9.1	8	SF	2	V				D
0083	RAMY	10	1234	1252	1308	S06 E44	9946	05	13.8	34	SF				13		
0084		10	14314	1442	1448	S06 W20	9937	05	9.1	17	SF				36		F
	SVTO	10	1431	1432U	1437D	S06 W20	9937	05	9.1	6D	SF	3	E		44		F
	HOLL	10	1435	1442	1448	S07 W20	9937	05	9.1	13	SF	3	E		28		F
0085	RAMY	10	1647	1649	1700	S16 W45	9934	05	7.3	13	SF				16		
0086	HOLL	10	1710	1710	1740	S18 W43	9934	05	7.4	30	SF				33		F
0087	HOLL	10	2125	2126	2139	S13 W39	9934	05	7.9	14	SF				34		F
		10	2143		2150	No Flare Patrol											
0088	HOLL	10	2152	2153	2158	S20 W43	9934	05	7.6	6	SF				14		
		10	2205		2217	No Flare Patrol											
		10	2246		2255	No Flare Patrol											
		10	2348		2400	No Flare Patrol											
		11	0000		0001	No Flare Patrol											
0089	HOLL	11	0002	0002	0007	S20 W44	9934	05	7.6	5	SF				48		
0090	HOLL	11	0012	0013	0015	S16 W43	9934	05	7.7	3	SF				28		
		11	0020		0254	No Flare Patrol											
		11	0308		0649	No Flare Patrol											
0091	KANZ	11	0654	0655	0708	S09 W27	9937	05	9.3	14	SF						
		11	0847		0856	No Flare Patrol											
		11	0858		0907	No Flare Patrol											
		11	0909		0914	No Flare Patrol											

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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	Time (UT)	Area Measurement		Remarks	
																	Apparent (10-6 Disk)	Corr (Sq Deg)		
0113	KHAR	13	0940	0941	0946	S06	W08	9946	05	12.8	6	SF		2	P	0941	25		D	
0114	KHAR	13	0941	0943	0950	S16	E40	9948	05	16.4	9	SF		2	P	0941	40		DH	
0115	KHAR	13	1123	1125	1131	S22	E85	9954	05	20.0	8	SF		2	V					
0116	KHAR	13	1130		1135	S20	E44	9948	05	16.8	5	SF		2	V				D	
0117	KANZ	13	1405	1405	1413	S23	E39	9948	05	16.6	8	SF		2	E					
0118		13	16381	1639	1652	S06	W01	9946	05	13.6	14	SF					35		FH	
	HOLL	13	1638	1639	1649	S05	W01	9946	05	13.6	11	SF		3	E		29		FH	
	RAMY	13	1638	1639	1700	S06	W01	9946	05	13.6	22	SF		3	E		46			
	SVTO	13	1639	1639	1646	S06	W01	9946	05	13.6	7	SF		3	E		30		FH	
0119	RAMY	13	1724	1727	1737	N21	W75	9933	05	8.0	13	SF		3	E		16			
0120	RAMY	13	1855	1855	1859	N22	W77	9933	05	7.9	4	SF		3	E		21			
0121	RAMY	13	1902	1902	1906	N20	W77	9933	05	7.9	4	SF		3	E		15			
			1922		1943	No Flare Patrol														
			1949		1954	No Flare Patrol														
			2053		2100	No Flare Patrol														
			2111		2123	No Flare Patrol														
0122	KHAR	14	0850E	0855	0920	S19	E37	9948	05	17.2	30D	SF		2	P	0905	70		DO	
0123	KHAR	14	0905	0908	0915	S03	W10	9945	05	13.6	10	SF		2	P	0905	30		DO	
0124	14	0934	0939	1007	S23	E34	9948	05	17.0	33	1F					89		FH		
	SVTO	14	0934	0939	1002	S24	E35	9948	05	17.1	28	SF		3	E		89		FH	
	KANZ	14	0934	0946U	1012	S22	E34	9948	05	17.0	38	1F		2	E					
0125	14	1546	15481	1554	S23	E31	9948	05	17.0	8	SF					20		FH		
	SVTO	14	1546	1548	1554	S24	E31	9948	05	17.0	8	SF		3	E		26		F	
	RAMY	14	1546	1549	1553	S22	E31	9948	05	17.0	7	SF		3	E		14		H	
0126	HOLL	14	1842	1843	1853	S25	E26	9948	05	16.8	11	SF		3	E		29		F	
0127	RAMY	14	1846	1851	1856	S25	E27	9948	05	16.9	10	SF		3	E		16			
			0103		0321	No Flare Patrol														
			0340		0407	No Flare Patrol														
0128	SVTO	15	0817	0831	0848	S23	E23	9948	05	17.1	31	SF		3	E		56		F	
0129	SVTO	15	0909	0909	0915	S03	W32	9945	05	13.0	6	SF		3	E		10		F	
0130	HOLL	15	1447	1448	1450	S05	W27	9946	05	13.6	3	SF		3	E		23			
0131	HOLL	15	1447	1448	1449	S22	E07	9948	05	16.1	2	SF		3	E		18			
0132	15	15341	15351	1551	S06	W32	9945	05	13.2	17	SF					14		F		
	HOLL	15	1534	1536	1551	S06	W31	9945	05	13.3	17	SF		3	E		16		F	
	RAMY	15	1535	1535	1551	S06	W32	9945	05	13.2	16	SF		3	E		12		F	
		16	0046		0407	No Flare Patrol														
0133	16	0624	0627	0654	S04	W14	9950	05	15.2	30	SF					31		FH		
	SVTO	16	0624	0627	0655	S03	W15	9950	05	15.1	31	SF		3	E		31		FH	
	KANZ	16	0640E		0652	S05	W13	9950	05	15.3	12D	SF		2	E					
0134	KANZ	16	0640E		0653	S25	E05	9948	05	16.7	13D	SF		2	E					
0135	KANZ	16	0702	0702	0707	S24	E04	9948	05	16.6	5	SF		2	E					
0136	16	0941	09432	0954	S02	W46	9945	05	13.0	13	SF					25		F		
	KANZ	16	0941	0943	0954	S02	W46	9945	05	13.0	13	SF		2	E					
	SVTO	16	0941	0945	0954	S01	W47	9945	05	12.9	13	SF		3	E		25		F	

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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)	
0179	SVTO	21	1024E	1026U	1026	N12	E29	9960	05	23.6	20	SF		3	E		11	
0180		21	17201	1722	1730	N09	E66	9963	05	26.7	10	SF					32	F
	HOLL	21	1720	1722	1730	N09	E66	9963	05	26.7	10	SF		3	E		20	F
	RAMY	21	1720	1722	1731	N11	E69	9963	05	26.9	11	SF		3	E		55	F
	SVTO	21	1721	1722	1732D	N08	E64	9963	05	26.5	11D	SF		2	E		21	F
0181	HOLL	21	2327	2418	2517	S25	W64	9948	05	17.0	110	1F		3	E		126	FT
		22	0000		0041			No Flare Patrol										
		22	0216		0343			No Flare Patrol										
		22	0353		0359			No Flare Patrol										
0182	SVTO	22	0400E	0400U	0437	S22	W53		05	18.1	37D	SF		2	E		26	U
0183	KANZ	22	0824	0828	0836	S22	E41	9961	05	25.5	12	SF		2	E			
0184		22	15422	15455	1600	S23	E43	9961	05	26.0	18	SF					29	F
	RAMY	22	1542	1548	1606	S23	E44	9961	05	26.0	24	SF		3	E		34	
	SVTO	22	1542	1550	1558	S23	E42	9961	05	25.9	16	SF		3	E		36	F
	HOLL	22	1544	1545	1557	S23	E42	9961	05	25.9	13	SF		3	E		18	F
0185	HOLL	22	1839	1842	1850	S12	E67	9965	05	27.8	11	SF		3	E		13	F
0186		22	2052	2052	2057	S23	E39	9961	05	25.9	5	SF					45	F
	HOLL	22	2052	2052	2057	S23	E40	9961	05	25.9	5	SF		3	E		10	F
	RAMY	22	2054E	2056U	2140D	S23	E38	9961	05	25.8	46D	SF		3	E		80	F
		23	0025		0038			No Flare Patrol										
		23	0155		0451			No Flare Patrol										
		23	0539		0622			No Flare Patrol										
		23	0635		0642			No Flare Patrol										
		23	0644		0648			No Flare Patrol										
0187		23	1659	17001	1702	S24	E30	9961	05	26.0	3	SF					16	
	HOLL	23	1659	1700	1702	S24	E30	9961	05	26.0	3	SF		3	E		18	
	RAMY	23	1659	1701	1702	S24	E30	9961	05	26.0	3	SF		3	E		15	
0188	HOLL	23	2051	2054	2058	N11	E38	9963	05	26.7	7	SF		3	E		11	F
		24	0633		0654			No Flare Patrol										
0189	LEAR	24	0655	0702	0709	N13	E30	9963	05	26.5	14	SF		3	E		61	F
		24	0718		0812			No Flare Patrol										
		24	0817		0859			No Flare Patrol										
0190	SVTO	24	0823E	0830U	0845D	N18	E35	9963	05	27.0	22D	SF		2	E		15	FH
		24	0946		1029			No Flare Patrol										
0191	KHAR	24	1052	1053	1105	N17	E31	9963	05	26.8	13	SN		2	P	1101	65	E
		24	1111		1134			No Flare Patrol										
		24	1205		1210			No Flare Patrol										
0192	RAMY	24	1756	1758	1803	N14	E27	9963	05	26.8	7	SF		3	E		12	
0193	RAMY	24	1805	1812	1819	N14	E27	9963	05	26.8	14	SF		3	E		13	
0194		24	19081	1910	1919	N13	E25	9963	05	26.7	11	SF					27	F
	RAMY	24	1908	1910	1920	N13	E25	9963	05	26.7	12	SF		3	E		34	F
	HOLL	24	1909	1910	1918	N13	E25	9963	05	26.7	9	SF		3	E		20	F
0195	RAMY	24	1908	1910	1917	N10	W29	9957	05	22.6	9	SF		3	E		21	FH
0196	RAMY	24	2040	2040	2050	N16	E11	9962	05	25.7	10	SF		3	E		10	F
0197	HOLL	25	0114	0114	0117	N16	W25	9957	05	23.1	3	SF		3	E		11	

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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)	
0198	LEAR	25	0536	0539	0542	N07	E79	9970	05 31.1	6	SF	3 E		14		
0199	LEAR	25	0545	0547	0550	N12	W09	9960	05 24.6	5	SF	3 E		16		F
0200	SVTO	25	0710	0711U	0715	N07	E82	9969	05 31.4	5	SF	2 E		20		
0201	SVTO	25	1619	1624	1628	N07	E73	9969	05 31.1	9	SF	3 E		41		
0202		25	16507	1657	1711	S18	W12	9961	05 24.8	21	SF			11		F
	RAMY	25	1650	1659U	1818D	S18	W13	9961	05 24.7	88D	SF	3 E		12		F
	HOLL	25	1657	1657	1711	S18	W12	9961	05 24.8	14	SF	3 E		10		
0203	HOLL	25	1840	1841	1846	N04	E70	9969	05 31.0	6	SF	3 E		11		
0204	HOLL	25	1937	1937	1957	N04	E70	9969	05 31.0	20	SF	3 E		11		
0205	HOLL	25	2105		2117	No Flare Patrol										
			2300		2325	No Flare Patrol										
0206	LEAR	26	0241	0241	0252	N15	E07	9963	05 26.6	11	SF	3 E		13		
0207	LEAR	26	0314	0322	0337	N07	E65	9969	05 31.0	23	SF	3 E		25		
0208	LEAR	26	0448	0448	0501	N16	W44	9957	05 22.9	13	SF	3 E		13		
0209	LEAR	26	0618	0619	0621	N06	E64	9969	05 31.0	3	SF	3 E		18		F
0210	KHAR	26	0948	0950	0959	S22	W08	9961	05 25.8	11	SF	2 P	0952	20		D
0211	KHAR	26	1002	1003	1007	N17	W03	9963	05 26.2	5	SF	2 V				D
0212	K HAR	26	1040		1045D	N10	E62	9969	05 31.1	5D	SN	2 P	1042	50		
			1046		1111	No Flare Patrol										
0213		26	13272	13313	1356	S22	W12	9961	05 25.6	29	SF			30		F
	RAMY	26	1327	1331	1400	S23	W11	9961	05 25.7	33	SF	3 E		35		F
	HOLL	26	1329	1334	1352	S22	W13	9961	05 25.6	23	SF	3 E		25		F
0214		26	13497	13562	1408	N04	E58	9969	05 30.9	19	SF			60		
	RAMY	26	1349	1358	1410	N03	E58	9969	05 30.9	21	SF	3 E		92		
	HOLL	26	1356	1356	1405	N04	E57	9969	05 30.8	9	SF	3 E		29		
0215	RAMY	26	1419	1419	1423	N03	E57	9969	05 30.8	4	SF	3 E		11		
0216		26	15083	15092	1515	N03	E57	9969	05 30.9	7	SF			43		
	HOLL	26	1508	1509	1515	N04	E56	9969	05 30.8	7	SF	3 E		40		
	RAMY	26	1508	1510	1516	N03	E57	9969	05 30.9	8	SF	3 E		63		
	SVTO	26	1511	1511	1514	N03	E58	9969	05 31.0	3	SF	3 E		25		
0217	SVTO	26	1511	1511	1523	N11	W54	9957	05 22.6	12	SF	3 E		14		
			1916		2223	No Flare Patrol										
			2234		2246	No Flare Patrol										
			2316		2325	No Flare Patrol										
0218	LEAR	27	0423	0423	0429	S20	W23	9961	05 25.4	6	SF	4 E		13		
0219		27	0505	05071	0516	S18	W26	9961	05 25.2	11	SF			28		FH
	SVTO	27	0505	0507	0516	S19	W26	9961	05 25.2	11	SF	3 E		37		FH
	LEAR	27	0505	0508	0515	S18	W26	9961	05 25.2	10	SF	3 E		18		FH
0220		27	06022	06051	0618	N08	W65	9957	05 22.4	16	SF			27		F
	LEAR	27	0602	0605	0619	N09	W65	9957	05 22.4	17	SF	3 E		32		F
	SVTO	27	0604	0606	0616	N08	W65	9957	05 22.4	12	SF	3 E		22		F
0221	KHAR	27	1154		1205D	S14	E86	9973	06 3.0	11D	SF	2 V				DH

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
																	Apparent (10-6 Disk)	Corr (Sq Deg)	
0222	SVTO	27	1308E	1314U	1405	N22	E15		05	28.7	57D	SF		3	E		50		SU
0223	HOLL	27	1507	1508	1512	N06	W68	9957	05	22.5	5	SF		3	E		31		
0224	HOLL	27	1518	1520	1524	S17	E90	9973	06	3.5	6	SF		3	E		45		
0225		27	17031	1706	1714	S18	E88	9973	06	3.4	11	1N					138		
	HOLL	27	1703	1706	1714	S17	E90	9973	06	3.5	11	1F		3	E		147		
	SVTO	27	1704	1706	1709D	S19	E87	9973	06	3.3	5D	1N		3	E		129		
0226	HOLL	27	1709	1710	1712	S21	E77	9972	06	2.6	3	SF		3	E		17		
0227	HOLL	27	1715	1717	1733	N06	W69	9957	05	22.5	18	SF		3	E		26		
0228	HOLL	27	1803	1811	1839	N11	W69	9957	05	22.6	36	2F		3	E		258		FH
0229	HOLL	27	1902	1904	1909	S17	E90	9973	06	3.6	7	SF		3	E		99		
0230	HOLL	27	2125	2125	2129	S17	E90	9973	06	3.7	4	SF		3	E		93		
0231	HOLL	27	2154	2158	2203	N11	W75	9957	05	22.3	9	SF		3	E		30		
0232	HOLL	28	0043	0047	0053	S17	E90	9973	06	3.9	10	SF		3	E		71		
		28	0632		0644	No Flare Patrol													
		28	0707		0802	No Flare Patrol													
		28	0822		0914	No Flare Patrol													
0233	KHAR	28	0943	0945	0948	S14	E79	9973	06	3.4	5	SF		2	P	0943	45		HO
0234	HOLL	28	1630	1632	1645	N06	W82	9957	05	22.6	15	SF		3	E		47		FH
0235		28	1720	1721	1724	N12	W80	9957	05	22.7	4	SF					31		
	RAMY	28	1720	1721	1724	N13	W82	9957	05	22.5	4	SF		3	E		32		
	HOLL	28	1720	1721	1724	N12	W78	9957	05	22.8	4	SF		3	E		30		
0236	HOLL	28	1826	1828	1834	S12	E09	9967C	05	29.4	8	SF		3	E		18		F
0237	HOLL	28	2155	2157	2201	N12	W30	9963	05	26.6	6	SF		3	E		21		F
0238	HOLL	28	2247	2248	2250	S18	E78	9973	06	3.9	3	SF		3	E		21		
0239	LEAR	29	0331	0332	0338	S17	E68	9973	06	3.3	7	SF		3	E		73		H
0240	LEAR	29	0503	0503	0506	S19	E71	9973	06	3.6	3	SF		3	E		21		
0241	LEAR	29	0509	0512	0515	S20	E53	9972	06	2.3	6	SF		3	E		13		
0242		29	0740	0740	0744	S17	E70	9973	06	3.6	4	SF					13		
	KANZ	29	0740	0740	0744	S17	E71	9973	06	3.7	4	SF		2	E				
	LEAR	29	0740	0740	0745	S17	E70	9973	06	3.6	5	SF		3	E		13		
0243	KANZ	29	0757E	0757U	0801	N08	E25	9969	05	31.2	4D	SF		2	E				
0244	SVTO	29	1024	1027	1033	S19	E66	9973	06	3.5	9	SF		3	E		73		
0245	SVTO	29	1254	1259	1308	N17	W65	9960	05	24.6	14	SF		3	E		48		
0246	HOLL	29	1254	1254	1318	N12	W79	9960	05	23.6	24	SF		3	E		50		
0247		29	1548	15511	1604	S18	E63	9973	06	3.4	16	SN					74		
	SVTO	29	1548	1551	1602	S17	E64	9973	06	3.5	14	SN		3	E		70		
	HOLL	29	1548	1552	1607	S18	E62	9973	06	3.4	19	SF		3	E		77		
0248		29	1609	1610	1616	S18	E63	9973	06	3.5	7	SF					17		
	HOLL	29	1609	1610	1616	S18	E63	9973	06	3.5	7	SF		3	E		23		
	SVTO	29	1609	1610	1616	S18	E63	9973	06	3.5	7	SF		3	E		11		
0249	SVTO	29	1621	1623	1631	N13	W34	9967	05	27.1	10	SF		3	E		13		

H α SOLAR FLARES

15
May 02

MAY 2002

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)	
0250	HOLL	29	2244	2245	2252	S17	E61	9973	06	3.6	8	SF		3	E		35		
0251	HOLL	29	2325	2325	2335	S18	E59	9973	06	3.5	10	SF		3	E		18		
0252	HOLL	30	0010	0012	0017	S18	E59	9973	06	3.5	7	SF		3	E		49		
0253	SVTO	30	1620	1625	1644	S17	E53	9973	06	3.7	24	SF		3	E		19		F
0254	SVTO	30	1628	1637	1646	S22	E38	9972	06	2.6	18	SF		3	E		20		F
0255	30	1711	17188	1828	S16	E50	9973	06	3.5	77	SF					62		F	
	SVTO	30	1711	1718	1749D	S17	E51	9973	06	3.6	38D	SF		3	E		45		F
	HOLL	30	1711	1726	1828	S16	E49	9973	06	3.4	77	SF		3	E		78		F
0256	HOLL	30	1948	1949	2003	N12	W48	9963	05	27.2	15	SF		3	E		42		F
		30	2322		2330	No Flare Patrol													
0257	31	13023	13051	1312	S18	E36	9973	06	3.3	10	SF					17		F	
	HOLL	31	1302	1306	1315	S18	E36	9973	06	3.3	13	SF		3	E		20		F
	SVTO	31	1305	1305	1310	S19	E35	9973	06	3.2	5	SF		3	E		14		F
0258	HOLL	31	1518	1518	1527	S17	E37	9973	06	3.4	9	SF		3	E		11		F
0259	RAMY	31	1905	1907	1910	S21	E60	9978	06	5.4	5	SF		3	E		33		

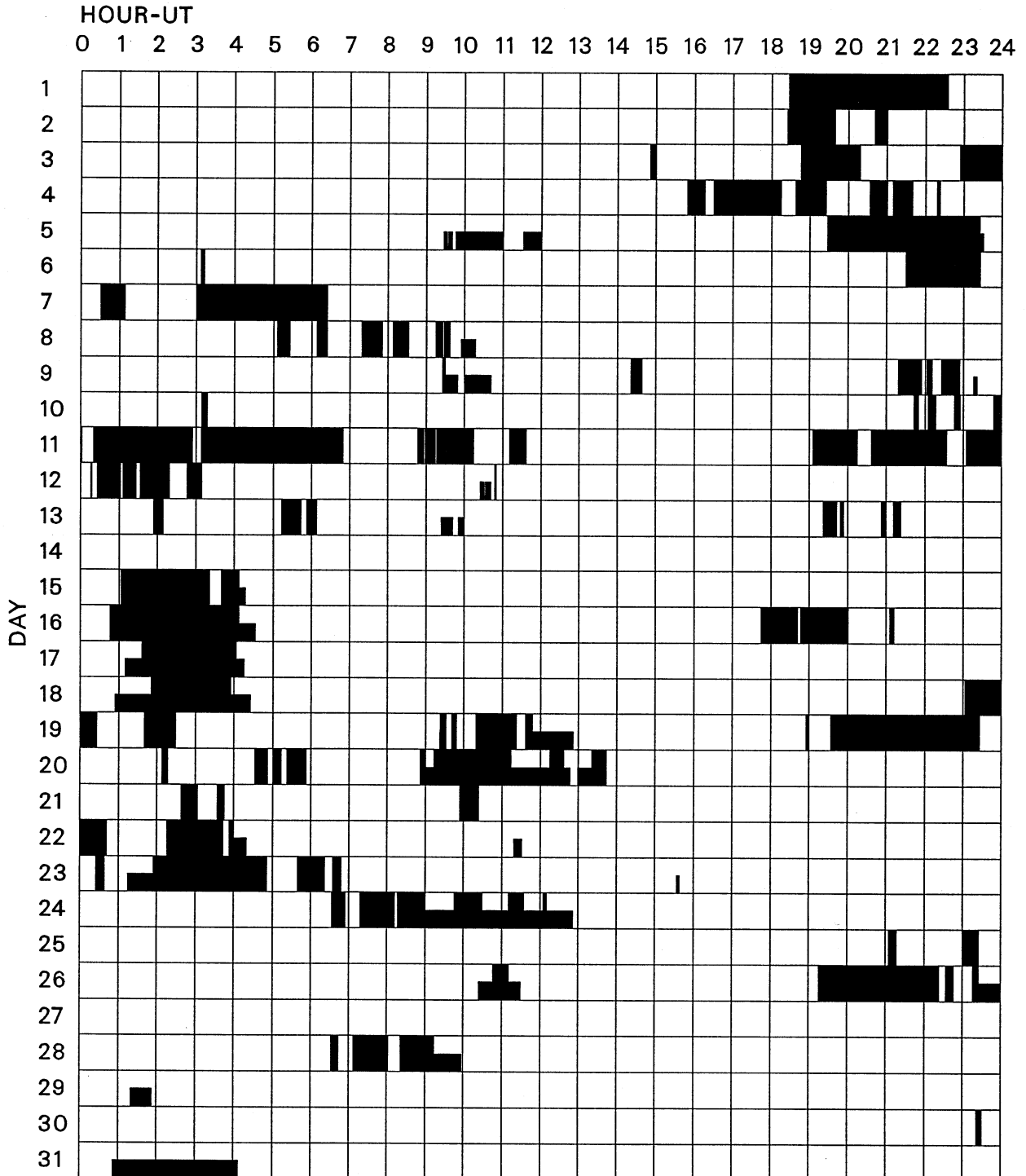
"Remarks"

- | | |
|---|---|
| <p>A = Eruptive prominence whose base is less than 90 degrees from central meridian.
 B = Probably the end of a more important flare.
 C = Invisible 10 minutes before.
 D = Brilliant point.
 E = Two or more brilliant points.
 F = Several eruptive centers.
 G = No visible spots in the neighborhood.
 H = Flare accompanied by high-speed dark filament.
 I = Active region very extended.
 J = Distinct variations of plage intensity before or after the flare.
 K = Several intensity maxima.
 L = Existing filaments show signs of sudden activity.
 M = White-light flare.
 N = Continuous spectrum shows effects of polarization.</p> | <p>O = Observations have been made in the H and K lines of Ca II.
 P = Flare shows Helium D3 in emission.
 Q = Flare shows Balmer continuum in emission.
 R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.
 S = Brightness follows disappearance of filament in same position.
 T = Region active all day.
 U = Two bright branches, parallel or converging.
 V = Occurrence of an explosive phase; important, expansion within roughly 1 minute that often includes a significant intensity increase.
 W = Great increase in area after time of maximum intensity.
 X = Unusually wide H-alpha line.
 Y = System of loop-type prominences.
 Z = Major sunspot umbra covered by flare.</p> |
|---|---|

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

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

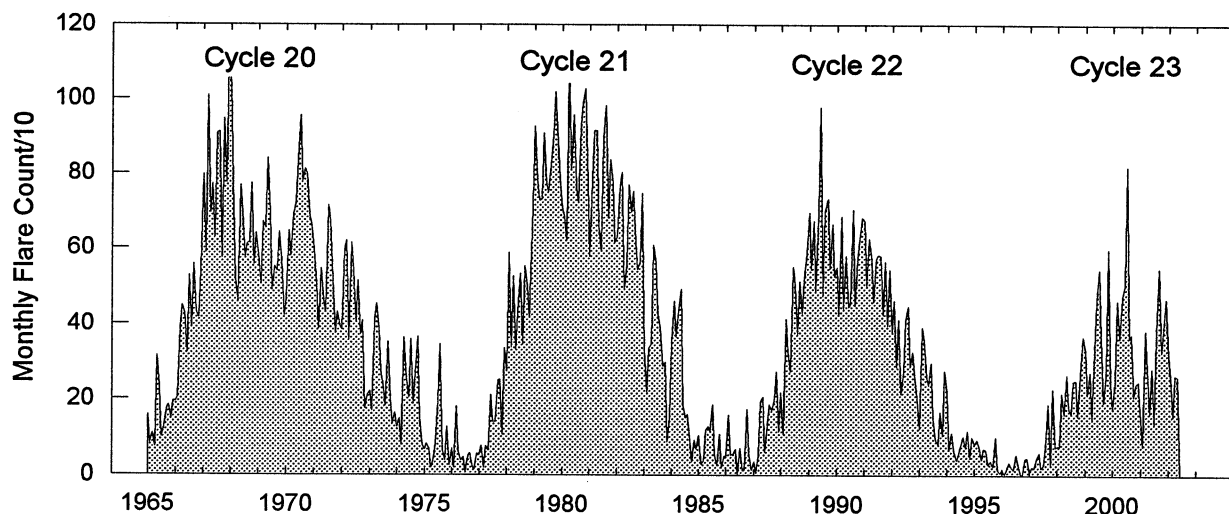
MAY 2002



Times of no flare patrol, shown here as shaded 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	Learmonth	Ramey	San Vito
Mitaka	Voroshilov	Kanzelhoehe	Kharkov

Monthly Counts of Grouped Solar Flares Jan 1965 - May 2002



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	376	549	325	405	468	3597
2002	318	261	155	263	259								1256

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

MAY 2002

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	127	TORN	43 NS	0810.0		310.0		10.0		V=0
	280	CUBA	44 NS	1320.0E		340.0D		14.0		
	235	CUBA	44 NS	1320.0E		540.0D		5.0		
	200	HIRA	8 S	0045.0	0045.0	1.0		35.0		WR
	500	HIRA	8 S	0046.0	0046.0	1.0		85.0		0
	610	LEAR	8 S	0046.0	0046.0	U		120.0		QL=4 ST=3 TYP=3
	2840	PEKG	3 S	0340.0E	0340.8	10.0D		14.1		
	2804	VORO	2 S/F	0341.3	0341.6	1.3		21.3		
	900	GORK	42 SER	0724.8	0834.3	178.7		40.0		
	900	GORK	42 SER	0724.8	0918.3U			47.0		
600	GORK	4 S/F	0917.6	0917.8	0.7		26.0			
02	127	TORN	43 NS	0800.0		360.0		11.0		V=0
	235	CUBA	44 NS	1420.0E		450.0D		4.0		
	280	CUBA	44 NS	1420.0E		450.0D		14.0		
	2840	PEKG	5 S	0326.0	0328.4	8.0		23.4		
	200	HIRA	8 S	0328.0	0328.0	1.0		20.0		0
	2804	VORO	8 S	0328.3	0328.4	0.8		11.8		
	200	HIRA	8 S	0639.0	0639.0	1.0		10.0		0
	204	IZMI	41 F	0639.2	0639.5	0.7		28.0		
	200	IZMI	41 F	0640.3	0640.6	1.5		38.0		
	900	GORK	41 F	0917.8	0918.7	2.0		8.5		
	900	GORK	41 F	0917.8	0919.7			13.0		
	9100	GORK	1 S	0924.6	0927.0U	4.2		11.0		
	3000	IZMI	22 GRF	1122.9	1124.4	4.0		46.0	15.6	
	410	SGMR	8 S	1123.0	1124.0	1.0		46.0		QL=4 ST=2 TYP=3
	4995	SGMR	8 S	1123.0	1124.0	2.0		63.0		QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1123.0	1124.0	2.0		65.0		QL=4 ST=2 TYP=3
	1415	SGMR	8 S	1124.0	1124.0	1.0		41.0		QL=4 ST=2 TYP=3
9500	CUBA	1 S	1357.1	1357.6	1.1		15.0	7.0		
9500	CUBA	1 S	1622.8	1623.3	1.5		11.0	5.0		
2800	PENT	24 R	2045.0	2210.0	107.0U		20.0			
03	204	IZMI	43 NS	0600.0		360.0D		88.0		
	127	TORN	44 NS	0630.0E		510.0D		21.0		V=2
	245	SGMR	43 NS	1122.0	1216.0	561.0	290.0			QL=4 ST=2 TYP=1
	235	CUBA	44 NS	1305.0E		415.0D		13.0		
	280	CUBA	44 NS	1305.0E		415.0D		23.0		
	245	PALE	43 NS	1750.0	1928.0	162.0		180.0		QL=4 ST=2 TYP=1
	245	LEAR	8 S	0357.0	0357.0	U		120.0		QL=4 ST=2 TYP=3
	200	HIRA	8 S	0401.0	0402.0	1.0		155.0		0
	245	LEAR	8 S	0401.0	0401.0	1.0		610.0		QL=4 ST=2 TYP=3
	9100	GORK	20 GRF	0445.8	0449.2	8.2		11.0		
	2840	PEKG	1 S	0503.0	0505.8	7.0		3.0		
	245	SVTO	8 S	0534.0	0534.0	U		52.0		QL=4 ST=2 TYP=3
	2840	PEKG	3 S	0640.0	0646.2	16.0		10.1		
	2950	GORK	2 S/F	0645.0	0646.0	1.9		8.4		
	204	IZMI	7 C	0716.4	0716.4	0.1		51.0		
	204	IZMI	42 SER	1113.9	1115.8	2.5		260.0		
	33	UPIC	45 C	1123.0	1126.5	4.0				
	33	UPIC	4 S/F	1216.0	1216.2	1.0				
	2800	PENT	29 PBI	1753.0	1838.0	65.0		11.0		
	2800	PENT	1 S	2112.0	2119.0	14.0		5.0		
	245	SGMR	8 S	2221.0	2221.0	U		51.0		QL=4 ST=2 TYP=3
	200	HIRA	8 S	2314.0	2315.0	1.0		100.0		0
	2804	VORO	40 F	2314.5	2315.2	1.0		4.3		
8800	PALE	8 S	2330.0	2330.0	1.0		200.0		QL=4 ST=2 TYP=3	
15400	PALE	8 S	2330.0	2330.0	1.0		150.0		QL=4 ST=2 TYP=3	
2840	PEKG	1 S	2330.0	2333.7	7.0		4.3			
8800	LEAR	8 S	2333.0	2333.0	U		120.0		QL=4 ST=2 TYP=3	
15400	LEAR	8 S	2333.0	2333.0	U		180.0		QL=4 ST=2 TYP=3	
04	127	TORN	43 NS	0812.0		408.0		13.0		V=1
	245	PALE	8 S	0041.0	0041.0	1.0		220.0		QL=4 ST=2 TYP=3
	410	PALE	8 S	0041.0	0041.0	1.0		120.0		QL=4 ST=2 TYP=3
	8800	PALE	8 S	0246.0	0247.0	1.0		92.0		QL=4 ST=2 TYP=3
	8800	LEAR	8 S	0250.0	0250.0	U		70.0		QL=4 ST=2 TYP=3
	9100	GORK	2 S/F	0855.0	0855.6	1.5		12.0		
	900	GORK	41 F	0924.8	0927.0			95.0		

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

19
May 02

MAY 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
04	L	900 GORK	41 F	0924.8	0926.6	2.2	60.0			
		33 UPIC	4 S/F	1043.0	1043.2	1.5				
		127 TORN	8 S	1139.5	1140.2	0.7	80.0	40.0		
		9500 CUBA	1 S	1311.7	1311.9	1.4	16.0	8.0		
		9500 CUBA	21 GRF	1318.0	1325.0	24.0	13.0	6.0		
		9500 CUBA	2 S/F	1318.2	1320.4	2.7	20.0	10.0		
		245 SGMR	8 S	1520.0	1520.0	U	130.0		QL=4 ST=2 TYP=3	
		410 SGMR	8 S	1520.0	1520.0	U	23.0		QL=4 ST=2 TYP=3	
		245 SVTO	8 S	1521.0	1521.0	U	110.0		QL=4 ST=2 TYP=3	
		245 SGMR	8 S	2015.0	2015.0	U	89.0		QL=4 ST=2 TYP=3	
2800 PENT	21 GRF	2133.0	2211.0	59.0U	12.0					
9500 CUBA	20 GRF	2142.0	2158.0	26.0	14.0	7.0				
05	L	280 CUBA	44 NS	1305.0E		115.0D		14.0		
		235 CUBA	44 NS	1305.0E		175.0D		4.0		
		200 HIRA	8 S	0209.0	0211.0	2.0	25.0		0	
		410 LEAR	8 S	0437.0	0437.0	U	55.0		QL=4 ST=2 TYP=3	
		200 HIRA	8 S	0442.0	0443.0	3.0	30.0		WR	
		200 HIRA	8 S	0452.0	0453.0	2.0	55.0		0	
		9100 GORK	1 S	0527.3	0527.7	0.9	8.2			
		204 IZMI	42 SER	0603.2	0603.9	0.8	12.0			
		204 IZMI	42 SER	0618.1	0618.8	1.9	29.0			
		2840 PEKG	20 GRF	0717.0	0721.9	10.0	4.5			
		204 IZMI	41 F	0722.6	0722.8	0.5	27.0			
		2840 PEKG	1 S	0804.0	0807.6	9.0	4.5			
		204 IZMI	41 F	0805.5	0805.6	0.3	31.0			
		204 IZMI	7 C	0807.5	0807.6	0.2	18.0			
		2800 PENT	20 GRF	1757.0	1809.0	35.0	2.0			
		2800 PENT	8 S	1909.0	1912.0	6.0	81.0			
		245 SGMR	8 S	1912.0	1912.0	U	130.0		QL=4 ST=2 TYP=3	
2695 SGMR	8 S	1912.0	1912.0	U	74.0		QL=4 ST=2 TYP=3			
200 HIRA	8 S	2200.0	2200.0	1.0	20.0		0			
200 HIRA	8 S	2215.0	2215.0	1.0	15.0		0			
06	L	204 IZMI	43 NS	0600.0		360.0D		50.0		
		245 SGMR	43 NS	1246.0	1557.0	191.0	620.0		QL=4 ST=2 TYP=1	
		280 CUBA	44 NS	1310.0E		110.0D		24.0		
		235 CUBA	44 NS	1310.0E		520.0D		8.0		
		127 TORN	44 NS	1450.0E		10.0D		12.0D	V=1	
		2840 PEKG	3 S	0223.0	0228.3	11.0	11.3			
		2804 VORO	3 S	0228.5	0229.0	1.2	8.4			
		900 GORK	40 F	0626.0	0626.8	2.0	50.0			
		204 IZMI	7 C	0822.5	0822.6	0.2	49.0	6.0		
		204 IZMI	41 F	0828.5	0828.9	0.6	37.0			
		245 LEAR	4 S/F	0830.0	0831.0	3.0	93.0		QL=4 ST=2 TYP=3	
		245 SVTO	8 S	0830.0	0831.0	1.0	76.0		QL=4 ST=2 TYP=3	
		204 IZMI	7 C	0908.7	0908.8	0.1	20.0			
		2840 PEKG	1 S	0948.0	0951.6	7.0	4.0			
		245 SVTO	8 S	1020.0	1020.0	U	59.0		QL=4 ST=2 TYP=3	
		245 SGMR	8 S	1104.0	1104.0	U	71.0		QL=4 ST=2 TYP=3	
		245 SGMR	8 S	1109.0	1111.0	2.0	60.0		QL=4 ST=2 TYP=3	
		245 SGMR	48 C	1136.0	1137.0	1.0	100.0		QL=4 ST=2 TYP=8	
		245 SGMR	8 S	1202.0	1202.0	U	64.0		QL=4 ST=2 TYP=3	
		245 SVTO	8 S	1334.0	1334.0	U	55.0		QL=4 ST=2 TYP=3	
245 SVTO	4 S/F	1556.0	1557.0	3.0	450.0		QL=4 ST=2 TYP=3			
245 SGMR	8 S	1744.0	1744.0	U	72.0		QL=4 ST=2 TYP=3			
245 PALE	8 S	2029.0	2029.0	U	65.0		QL=4 ST=2 TYP=3			
245 PALE	8 S	2036.0	2036.0	U	52.0		QL=4 ST=2 TYP=3			
2800 PENT	40 F	2336.0	2409.0	85.0	10.0					
07	L	245 SVTO	43 NS	0500.0	0615.0	560.0	130.0		QL=2 ST=2 TYP=1	
		245 LEAR	43 NS	0535.0	0615.0	243.0	140.0		QL=4 ST=2 TYP=1	
		204 IZMI	44 NS	0600.0E		360.0D		140.0		
		127 TORN	44 NS	0630.0E		510.0D		860.0	V=1	
		245 SGMR	43 NS	1048.0	1232.0	178.0	200.0		QL=4 ST=2 TYP=1	
		410 SVTO	43 NS	1251.0	1307.0	23.0	100.0		QL=2 ST=2 TYP=1	
		235 CUBA	44 NS	1310.0E		110.0D		23.0		
		280 CUBA	44 NS	1310.0E		110.0D		42.0		
9500 CUBA	2 S/F			2.0	19.0	9.0				

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

MAY 2002

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	500	HIRA	42	SER	0002.0	0029.0	52.0	60.0		0
	610	LEAR	48	C	0004.0	0004.0	1.0	50.0		QL=4 ST=3 TYP=8
	2840	PEKG	45	C	0338.0	0345.0	16.0	132.0		
	2800	HIRA	42	SER	0339.0	0402.0	31.0	160.0		0
	2804	VORO	42	SER	0339.0	0345.5	13.3	86.6		
	2804	VORO	42	SER	0339.0	0402.8	23.8	114.0		
	2695	LEAR	48	C	0340.0	0345.0	6.0	88.0		QL=4 ST=2 TYP=8
	4995	LEAR	48	C	0340.0	0342.0	7.0	110.0		QL=4 ST=2 TYP=8
	500	HIRA	48	C	0340.0	0413.0	69.0	280.0		WR
	8800	LEAR	48	C	0341.0	0342.0	5.0	71.0		QL=4 ST=2 TYP=8
	200	HIRA	47	GB	0341.0	0417.0	49.0	830.0		0
	1415	PALE	46	C	0342.0	0342.0		42.0	U	QL=4 ST=2 TYP=8
	1415	LEAR	8	S	0344.0	0345.0	2.0	58.0		QL=4 ST=2 TYP=3
	2695	PALE	48	C	0344.0	0345.0	1.0	60.0		QL=4 ST=2 TYP=8
	610	PALE	48	C	0345.0	0345.0	2.0	100.0		QL=4 ST=2 TYP=8
	410	PALE	48	C	0346.0	0346.0	1.0	130.0		QL=4 ST=2 TYP=8
	245	PALE	48	C	0346.0	0350.0	1214.0	140.0		QL=4 ST=1 TYP=8
	245	PALE	48	C	0353.0	0406.0	39.0	1500.0		QL=4 ST=2 TYP=8
	15400	PALE	48	C	0355.0	0401.0	21.0	78.0		QL=4 ST=2 TYP=8
	2840	PEKG	45	C	0356.0	0402.5	27.0	165.8		
	1415	PALE	48	C	0358.0	0402.0	6.0	170.0		QL=4 ST=2 TYP=8
	2695	LEAR	4	S/F	0358.0	0402.0	12.0	140.0		QL=4 ST=2 TYP=3
	245	LEAR	48	C	0358.0	0407.0	32.0	1400.0		QL=4 ST=2 TYP=8
	410	LEAR	48	C	0358.0	0413.0	33.0	210.0		QL=4 ST=2 TYP=8
	1415	LEAR	48	C	0358.0	0403.0	33.0	200.0		QL=4 ST=2 TYP=8
	4995	LEAR	48	C	0358.0	0403.0	33.0	93.0		QL=4 ST=2 TYP=8
	2695	PALE	48	C	0359.0	0402.0	5.0	120.0		QL=4 ST=2 TYP=8
	410	PALE	48	C	0359.0	0413.0	19.0	260.0		QL=4 ST=2 TYP=8
	610	LEAR	48	C	0359.0	0406.0	33.0	490.0		QL=4 ST=2 TYP=8
	8800	LEAR	48	C	0359.0	0402.0	32.0	61.0		QL=4 ST=2 TYP=8
	610	PALE	48	C	0400.0	0406.0	19.0	350.0		QL=4 ST=2 TYP=8
	4995	PALE	46	C	0402.0	0402.0	1.0	48.0		QL=4 ST=2 TYP=8
	600	GORK	46	C	0403.0U	0414.3		780.0		
	600	GORK	46	C	0403.0U	0410.3	53.0D	1100.0		
	900	GORK	46	C	0403.0U	0403.8	33.0D	170.0		
	9100	GORK	30	PBI	0406.0U	0406.0U	73.5D	26.0		
	2950	GORK	29	PBI	0406.0U	0406.0U	76.0D	11.0		
	245	SVTO	48	C	0425.0	0428.0	4.0	71.0		QL=4 ST=2 TYP=8
	9100	GORK	1	S	0455.8	0456.4	1.4	4.5		
	245	LEAR	8	S	0529.0	0529.0		56.0	U	QL=4 ST=2 TYP=3
204	IZMI	41	F	0629.3	0629.6	0.5	512.0			
900	GORK	42	SER	0859.6	1055.1		28.0			
900	GORK	42	SER	0859.6	1012.1	98.7	15.0			
245	SVTO	49	GB	0939.0	0939.0	2.0	580.0		QL=2 ST=2 TYP=6	
410	SGMR	8	S	1517.0	1517.0		59.0	U	QL=4 ST=2 TYP=3	
245	SGMR	8	S	1715.0	1715.0		62.0	U	QL=4 ST=2 TYP=3	
245	SGMR	8	S	1904.0	1904.0		67.0	U	QL=4 ST=2 TYP=3	
245	PALE	8	S	2114.0	2114.0		59.0	U	QL=4 ST=2 TYP=3	
245	SGMR	8	S	2205.0	2205.0		51.0	U	QL=4 ST=2 TYP=3	
08	204	IZMI	44	NS	0600.0E		360.0D	60.0		
	127	TORN	44	NS	0700.0E		480.0D	200.0		V=2
	245	LEAR	43	NS	0913.0	0913.0	24.0	120.0		QL=4 ST=2 TYP=1
	245	SVTO	43	NS	0931.0	0944.0	61.0	210.0		QL=2 ST=2 TYP=1
	245	SGMR	43	NS	1051.0	1441.0	533.0	600.0		QL=4 ST=2 TYP=1
	245	SVTO	43	NS	1150.0	1311.0	273.0	640.0		QL=2 ST=2 TYP=1
	410	SGMR	43	NS	1217.0	1406.0	270.0	390.0		QL=4 ST=2 TYP=1
	410	SVTO	43	NS	1242.0	1318.0	234.0	460.0		QL=2 ST=2 TYP=1
	610	SGMR	43	NS	1243.0	1243.0	238.0	210.0		QL=4 ST=2 TYP=1
	610	SVTO	43	NS	1249.0	1322.0	179.0	270.0		QL=2 ST=2 TYP=1
	1415	SVTO	43	NS	1253.0	1309.0	45.0	200.0		QL=2 ST=3 TYP=1
	235	CUBA	44	NS	1800.0E		230.0D	18.0		
	280	CUBA	44	NS	1800.0E		230.0D	24.0		
	245	LEAR	8	S	0230.0	0230.0		82.0	U	QL=4 ST=2 TYP=3
	2840	PEKG	1	S	0447.0	0451.6	8.0	4.5		
	2840	PEKG	1	S	0737.0	0740.2	8.0	5.3		
245	LEAR	8	S	0804.0	0804.0		160.0	U	QL=4 ST=2 TYP=3	
245	SVTO	8	S	0804.0	0804.0		140.0	U	QL=4 ST=2 TYP=3	
245	LEAR	8	S	0855.0	0855.0		210.0	U	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			
08	245	SVTO	8 S	0855.0	0855.0	U	160.0			QL=4 ST=2 TYP=3	
	245	LEAR	48 C	0905.0	0909.0	5.0	68.0			QL=4 ST=2 TYP=8	
	245	SVTO	8 S	0908.0	0908.0	1.0	52.0			QL=4 ST=2 TYP=3	
	410	SVTO	8 S	0908.0	0908.0	U	61.0			QL=4 ST=2 TYP=3	
	245	SVTO	8 S	1023.0	1023.0	U	160.0			QL=2 ST=2 TYP=3	
	245	SVTO	8 S	1134.0	1134.0	U	59.0			QL=4 ST=2 TYP=3	
	127	TORN	49 GB	1248.0	1259.8	83.0	1700.0	760.0			
	1415	SGMR	48 C	1254.0	1309.0	666.0	210.0				QL=4 ST=1 TYP=8
	245	SGMR	48 C	1300.0	1311.0	64.0	1300.0				QL=4 ST=2 TYP=8
	410	SGMR	48 C	1300.0	1305.0	64.0	430.0				QL=4 ST=2 TYP=8
	610	SGMR	48 C	1300.0	1322.0	64.0	380.0				QL=4 ST=2 TYP=8
	1415	SGMR	48 C	1301.0	1309.0	24.0	210.0				QL=4 ST=2 TYP=8
	2695	SGMR	48 C	1305.0	1309.0	655.0	51.0				QL=4 ST=1 TYP=8
	33	UPIC	47 GB	1309.5	1344.0	103.5					
	2695	SGMR	46 C	1325.0	1325.0	635.0	28.0				QL=4 ST=1 TYP=8
	33	UPIC	29 PBI	1453.0	1507.0	69.0					
	410	SGMR	8 S	1944.0	1944.0	U	52.0				QL=4 ST=2 TYP=3
	200	HIRA	8 S	2230.0	2231.0	1.0	190.0				0
	245	SGMR	8 S	2230.0	2230.0	1.0	130.0				QL=4 ST=2 TYP=3
	09	204	IZMI	44 NS	0600.0E		360.0D		15.0		
127		TORN	44 NS	1040.0E		180.0D		13.0		V=2	
245		SGMR	43 NS	1126.0	1143.0	195.0	150.0			QL=4 ST=2 TYP=1	
410		SGMR	43 NS	1143.0	1143.0	U	76.0			QL=4 ST=2 TYP=1	
235		CUBA	44 NS	1300.0E		180.0D		6.0			
280		CUBA	44 NS	1300.0E		180.0D		19.0			
245		SGMR	43 NS	1654.0	1654.0	94.0	110.0				QL=4 ST=2 TYP=1
245		PALE	43 NS	1749.0	1825.0	66.0	130.0				QL=4 ST=2 TYP=1
200		HIRA	8 S	0215.0	0217.0	3.0	30.0				0
200		HIRA	8 S	0423.0	0423.0	1.0	10.0				0
410		LEAR	8 S	0640.0	0640.0	U	63.0				QL=4 ST=2 TYP=3
410		SVTO	8 S	0640.0	0640.0	U	67.0				QL=4 ST=2 TYP=3
500		HIRA	7 C	0656.0	0659.0	3.0	30.0				0
200		HIRA	7 C	0656.0	0657.0	3.0	50.0				WR
204		IZMI	42 SER	0656.3	0656.6	2.9	78.0				
245		LEAR	8 S	0659.0	0659.0	U	52.0				QL=4 ST=2 TYP=3
200		HIRA	7 C	0712.0	0715.0	4.0	10.0				0
245		SVTO	8 S	0712.0	0714.0	2.0	69.0				QL=4 ST=2 TYP=3
204		IZMI	42 SER	0712.4	0713.1	3.3	70.0				
245		LEAR	8 S	0714.0	0714.0	U	58.0				QL=4 ST=2 TYP=3
245		LEAR	8 S	0734.0	0734.0	U	87.0				QL=4 ST=2 TYP=3
245		SVTO	8 S	0734.0	0734.0	U	64.0				QL=4 ST=2 TYP=3
245		LEAR	8 S	0801.0	0801.0	U	61.0				QL=4 ST=2 TYP=3
245		SVTO	8 S	0801.0	0801.0	U	66.0				QL=4 ST=2 TYP=3
610		SVTO	8 S	0847.0	0847.0	U	66.0				QL=4 ST=2 TYP=3
204		IZMI	42 SER	1035.8	1035.9	0.4	59.0				
127		TORN	48 C	1048.1	1048.8	4.8	380.0	100.0			DISTURBED
204		IZMI	46 C	1048.8	1051.4	3.8	60.0				
33		UPIC	46 C	1049.0	1049.5	4.0					
245		SVTO	8 S	1133.0	1133.0	U	83.0				QL=4 ST=3 TYP=3
204	IZMI	46 C	1142.8	1143.1	0.8	204.0					
245	SVTO	8 S	1143.0	1143.0	U	120.0				QL=4 ST=2 TYP=3	
410	SVTO	8 S	1143.0	1143.0	2.0	61.0				QL=4 ST=2 TYP=3	
204	IZMI	42 SER	1143.9	1144.4	0.8	32.0					
245	SVTO	8 S	1219.0	1219.0	U	56.0				QL=4 ST=2 TYP=3	
245	SVTO	8 S	1244.0	1244.0	U	59.0				QL=4 ST=2 TYP=3	
245	SVTO	8 S	1246.0	1246.0	U	59.0				QL=4 ST=2 TYP=3	
245	SVTO	8 S	1409.0	1409.0	U	99.0				QL=4 ST=2 TYP=3	
245	SVTO	8 S	1440.0	1441.0	1.0	48.0				QL=4 ST=2 TYP=3	
410	SVTO	8 S	1440.0	1440.0	U	75.0				QL=4 ST=2 TYP=3	
245	SVTO	8 S	1654.0	1654.0	U	53.0				QL=4 ST=2 TYP=3	
245	SVTO	8 S	1658.0	1658.0	1.0	51.0				QL=4 ST=2 TYP=3	
245	SGMR	8 S	2051.0	2051.0	U	64.0				QL=4 ST=2 TYP=3	
10	204	IZMI	44 NS	0600.0E		360.0D		10.0			
	127	TORN	44 NS	0630.0E		450.0D		12.0		V=1	
	245	SGMR	43 NS	1213.0	1236.0	251.0	210.0			QL=4 ST=2 TYP=1	
	235	CUBA	44 NS	1300.0E		420.0D		6.0			
	280	CUBA	44 NS	1300.0E		420.0D		17.0			

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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		
10	245	SGMR	43 NS	1710.0	1745.0	121.0	87.0			QL=4 ST=2 TYP=1
	2800	PENT	20 GRF	0014.0	0034.0	36.0	10.0			
	2840	PEKG	3 S	0023.0	0036.8	26.0	16.9			
	2804	VORO	27 RF	0024.2	0035.4	15.8	8.6			
	245	LEAR	8 S	0109.0	0109.0	1.0	220.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0109.0	0110.0	1.0	300.0			QL=4 ST=2 TYP=3
	245	LEAR	48 C	0126.0	0127.0	1.0	66.0			QL=4 ST=2 TYP=8
	410	LEAR	4 S/F	0210.0	0210.0	3.0	71.0			QL=4 ST=2 TYP=3
	410	PALE	48 C	0210.0	0210.0	3.0	82.0			QL=4 ST=2 TYP=8
	245	PALE	8 S	0424.0	0424.0		U	110.0		QL=4 ST=2 TYP=3
	245	LEAR	8 S	0452.0	0452.0	1.0	340.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0452.0	0452.0		U	69.0		QL=4 ST=2 TYP=3
	245	SVTO	8 S	0452.0	0452.0	1.0	260.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0452.0	0452.0	2.0	120.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0539.0	0539.0		U	100.0		QL=4 ST=2 TYP=3
	245	LEAR	8 S	0857.0	0857.0		U	81.0		QL=4 ST=2 TYP=3
	245	SVTO	8 S	0857.0	0857.0	2.0	77.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0910.0	0910.0		U	52.0		QL=4 ST=2 TYP=3
	245	SVTO	8 S	0910.0	0910.0		U	54.0		QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	0949.0	0954.0	5.0	81.0			QL=4 ST=2 TYP=3
	410	SVTO	4 S/F	0949.0	0956.0	9.0	68.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	1002.0	1002.0		U	77.0		QL=4 ST=2 TYP=3
	2950	GORK	1 S	1007.8	1008.7	1.7	5.8			
	9100	GORK	1 S	1007.9	1008.6	1.1	7.8			
	3000	IZMI	7 C	1007.9	1008.6	0.9	20.0	11.8		
	245	SVTO	8 S	1013.0	1013.0		U	62.0		QL=4 ST=2 TYP=3
	245	SGMR	8 S	1043.0	1043.0		U	150.0		QL=4 ST=2 TYP=3
	245	SVTO	8 S	1043.0	1043.0	1.0	100.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1054.0	1054.0		U	51.0		QL=4 ST=2 TYP=3
	245	SGMR	48 C	1104.0	1104.0		U	53.0		QL=4 ST=2 TYP=8
	245	SVTO	4 S/F	1121.0	1125.0	6.0	64.0			QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	1122.0	1125.0	3.0	150.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1147.0	1147.0	1.0	58.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	1154.8	1155.8	1.5	16.0			
	245	SVTO	8 S	1237.0	1237.0		U	140.0		QL=4 ST=2 TYP=3
	245	SVTO	8 S	1337.0	1337.0		U	78.0		QL=4 ST=2 TYP=3
	245	SVTO	8 S	1348.0	1348.0	1.0	64.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1512.0	1512.0		U	85.0		QL=4 ST=2 TYP=3
	245	SVTO	8 S	1605.0	1605.0	1.0	92.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1801.0	1801.0		U	63.0		QL=4 ST=2 TYP=3
245	SGMR	8 S	1953.0	1953.0		U	54.0		QL=4 ST=2 TYP=3	
2800	PENT	29 PBI	2117.0	2125.0	61.0	15.0				
200	HIRA	8 S	2147.0	2147.0	1.0	25.0			0	
245	SGMR	8 S	2147.0	2147.0U		U	100.0		QL=4 ST=2 TYP=3	
2800	PENT	41 F	2339.0	0000.0	26.0	11.0				
2840	PEKG	1 S	2341.0	2344.3	9.0	6.1				
2804	VORO	2 S/F	2343.7	2344.3	2.0	3.9				
500	HIRA	8 S	2356.0	2358.0	2.0	105.0			0	
610	LEAR	8 S	2357.0	2357.0		U	770.0		QL=2 ST=2 TYP=3	
410	LEAR	8 S	2358.0	2358.0		U	51.0		QL=2 ST=2 TYP=3	
2804	VORO	8 S	2358.2	2358.2	0.5	2.9				
11	127	TORN	43 NS	0910.0		290.0		11.0		V=1
	2800	PENT	1 S	0034.0	0040.0	9.0	5.0			
	2840	PEKG	1 S	0037.0	0040.1	9.0	9.0			
	2804	VORO	40 F	0038.2	0040.1	2.1	6.0			
	500	HIRA	8 S	0040.0	0040.0	1.0	15.0			0
	2840	PEKG	1 S	0138.0	0141.6	8.0	9.0			
	2840	PEKG	3 S	0245.0	0249.4	10.0	37.2			
	500	HIRA	42 SER	0246.0	0249.0	3.0	10.0			0
	2804	VORO	4 S/F	0248.8	0249.5	1.2	29.7			
	500	HIRA	8 S	0258.0	0258.0	1.0	10.0			0
	200	HIRA	8 S	0258.0	0258.0	1.0	15.0			0
	245	LEAR	8 S	0258.0	0258.0		U	88.0		QL=4 ST=2 TYP=3
	200	HIRA	8 S	0512.0	0512.0	1.0	55.0			0
	245	LEAR	8 S	0512.0	0512.0		U	81.0		QL=4 ST=2 TYP=3
	245	SVTO	8 S	0512.0	0512.0		U	65.0		QL=4 ST=2 TYP=3
	2840	PEKG	5 S	0652.0	0654.1	7.0	12.4			
9100	GORK	3 S	0652.9	0654.2	10.1	50.0				

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

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May 02

MAY 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m 2 Hz)	Mean			
11	4995	LEAR	48 C	0653.0	0654.0	1.0	60.0			QL=4 ST=2 TYP=8	
	4995	SVTO	8 S	0653.0	0654.0	2.0	67.0			QL=4 ST=2 TYP=3	
	8800	SVTO	8 S	0653.0	0654.0	1.0	57.0			QL=4 ST=2 TYP=3	
	3000	IZMI	22 GRF	0653.6	0654.1	2.2	23.0	9.1			
	2950	GORK	4 S/F	0653.8	0654.2	2.4	11.0U				
	8800	LEAR	46 C	0654.0	0654.0		49.0				QL=4 ST=2 TYP=8
	8800	SVTO	4 S/F	0852.0	0853.0	3.0	210.0				QL=4 ST=2 TYP=3
	2840	PEKG	5 S	0852.0	0853.5	8.0	17.2				
	9100	GORK	4 S/F	0852.2	0853.5	5.3	170.0				
	2950	GORK	4 S/F	0852.3	0853.4	4.4	15.0				
	15400	LEAR	46 C	0853.0	0853.0		43.0				QL=4 ST=2 TYP=8
	4995	LEAR	8 S	0853.0	0853.0	1.0	81.0				QL=4 ST=2 TYP=3
	8800	LEAR	8 S	0853.0	0853.0	2.0	210.0				QL=4 ST=2 TYP=3
	4995	SVTO	8 S	0853.0	0853.0	2.0	100.0				QL=4 ST=2 TYP=3
	15400	SVTO	8 S	0853.0	0853.0	1.0	91.0				QL=4 ST=2 TYP=3
	3000	IZMI	20 GRF	0853.0	0853.7	1.9	15.0	6.4			
	3000	IZMI	45 C	1124.0	1128.4	9.4	112.0	23.5			
	2695	SGMR	4 S/F	1127.0	1128.0	4.0	120.0				QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	1127.0	1128.0	4.0	100.0				QL=4 ST=2 TYP=3
	8800	SGMR	4 S/F	1127.0	1128.0	4.0	72.0				QL=4 ST=2 TYP=3
	2695	SVTO	8 S	1127.0	1128.0	2.0	76.0				QL=4 ST=2 TYP=3
	4995	SVTO	8 S	1127.0	1128.0	2.0	96.0				QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	1127.0	1128.0	3.0	61.0				QL=4 ST=2 TYP=3
	1415	SGMR	8 S	1128.0	1128.0	2.0	32.0				QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	1128.0	1128.0	3.0	41.0				QL=4 ST=2 TYP=3
	15400	SGMR	4 S/F	1128.0	1129.0	3.0	24.0				QL=4 ST=2 TYP=3
	1415	SVTO	8 S	1128.0	1128.0		26.0				QL=4 ST=2 TYP=3
	204	IZMI	7 C	1128.0	1128.3	0.9	48.0				
	204	IZMI	42 SER	1131.2	1132.1	1.1	188.0				
	127	TORN	47 GB	1131.7	1133.6	4.4	2000.0U	380.0			DISTURBED
	204	IZMI	41 F	1133.0	1133.3	3.5	11.0				
	3000	IZMI	7 C	1147.0	1147.3	0.6	12.0	4.7			
	2800	PENT	29 PBI	1447.0	1455.0	78.0	14.0				
245	SGMR	8 S	1520.0	1521.0	1.0	61.0				QL=4 ST=2 TYP=3	
245	SVTO	8 S	1623.0	1623.0		50.0				QL=4 ST=2 TYP=3	
2800	PENT	29 PBI	2111.0	2117.0	81.0U	10.0					
200	HIRA	8 S	2150.0	2151.0	2.0	10.0					
200	HIRA	8 S	2214.0	2214.0	1.0	10.0					
245	PALE	48 C	2259.0	2301.0	17.0	690.0				QL=4 ST=2 TYP=8	
410	PALE	48 C	2300.0	2309.0	16.0	470.0				QL=4 ST=2 TYP=8	
610	PALE	48 C	2300.0	2306.0	15.0	190.0				QL=4 ST=2 TYP=8	
1415	PALE	8 S	2315.0	2315.0	1.0	98.0				QL=4 ST=2 TYP=3	
12	245	LEAR	43 NS	0224.0	0246.0	216.0	64.0			QL=4 ST=2 TYP=1	
	127	TORN	43 NS	0837.0		323.0		11.0		V=0	
	245	SVTO	43 NS	0942.0	0957.0	28.0	110.0			QL=2 ST=3 TYP=1	
	235	CUBA	44 NS	1600.0E		350.0D		4.0			
	280	CUBA	44 NS	1600.0E		350.0D		12.0			
	245	SGMR	43 NS	2026.0	2127.0	110.0	99.0				QL=4 ST=2 TYP=1
	200	HIRA	8 S	0002.0	0003.0	1.0	135.0				
	245	LEAR	8 S	0002.0	0002.0	1.0	100.0				QL=4 ST=2 TYP=3
	245	LEAR	8 S	0059.0	0059.0	1.0	110.0				QL=4 ST=2 TYP=3
	200	HIRA	8 S	0134.0	0134.0	1.0	375.0				
	200	HIRA	8 S	0157.0	0157.0	2.0	45.0				
	2804	VORO	2 S/F	0337.2	0338.1	2.8	9.9				
	200	HIRA	8 S	0414.0	0415.0	1.0	10.0				
	245	LEAR	8 S	0640.0	0641.0	1.0	70.0				QL=4 ST=2 TYP=3
	245	SVTO	8 S	0640.0	0641.0	1.0	56.0				QL=4 ST=2 TYP=3
	245	LEAR	8 S	0659.0	0659.0	1.0	100.0				QL=4 ST=2 TYP=3
	245	SVTO	8 S	0659.0	0659.0		65.0				QL=4 ST=3 TYP=3
	204	IZMI	42 SER	0822.5	0822.6	8.3	24.0				
	245	LEAR	8 S	0824.0	0824.0		66.0				QL=4 ST=2 TYP=3
	245	SVTO	8 S	0824.0	0824.0		51.0				QL=4 ST=2 TYP=3
	245	LEAR	8 S	0843.0	0843.0	1.0	100.0				QL=4 ST=2 TYP=3
	245	SVTO	8 S	0843.0	0843.0	1.0	79.0				QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0843.7	0843.9	0.6	11.0				
245	SVTO	8 S	0930.0	0930.0		61.0				QL=4 ST=2 TYP=3	
245	SGMR	8 S	1157.0	1157.0		69.0				QL=4 ST=2 TYP=3	
204	IZMI	41 F	1157.3	1157.4	0.5	23.0					

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

MAY 2002

Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density (10 ⁻²² W/m ² Hz)		Int	Remarks
						Peak	Mean		
12	127 TORN	8 S	1208.3	1208.7	0.8	210.0	100.0		
	245 SGMR	48 C	1344.0	1344.0	1.0	50.0			QL=4 ST=2 TYP=8
	245 SGMR	8 S	1354.0	1354.0	1.0	120.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	1402.0	1402.0	U	140.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	1402.0	1402.0	U	86.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	1408.0	1408.0	U	65.0			QL=4 ST=2 TYP=3
	410 SVTO	8 S	1418.0	1418.0	U	65.0			QL=4 ST=2 TYP=3
	245 PALE	8 S	1647.0	1647.0	U	53.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	1647.0	1647.0	U	77.0			QL=4 ST=2 TYP=3
	2695 PALE	8 S	1651.0	1652.0	1.0	490.0			QL=4 ST=2 TYP=3
	2695 SGMR	49 GB	1651.0	1652.0	1.0	520.0			QL=4 ST=2 TYP=6
	2695 SVTO	8 S	1651.0	1652.0	1.0	490.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	1658.0	1658.0	U	230.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	1658.0	1658.0	U	60.0			QL=4 ST=2 TYP=3
	245 PALE	8 S	1935.0	1935.0	U	60.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	1935.0	1935.0	U	51.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	1939.0	1939.0	U	67.0			QL=4 ST=2 TYP=3
	245 PALE	8 S	2127.0	2127.0	1.0	90.0			QL=4 ST=2 TYP=3
	13	245 LEAR	43 NS	0053.0	0053.0	12.0	120.0		
245 LEAR		43 NS	0053.0	0800.0	1387.0	120.0			QL=4 ST=3 TYP=1
245 LEAR		43 NS	0240.0	0257.0	1280.0	150.0			QL=4 ST=3 TYP=1
127 TORN		43 NS	0730.0		400.0		13.0		V=0
245 SGMR		43 NS	1441.0	1441.0	74.0	63.0			QL=4 ST=2 TYP=1
200 HIRA		8 S	0053.0	0053.0	2.0	35.0			
2840 PEKG		1 S	0232.0	0236.4	9.0	4.7			
200 HIRA		7 C	0251.0	0253.0	3.0	30.0			
200 HIRA		8 S	0333.0	0335.0	2.0	30.0			
2840 PEKG		1 S	0335.0	0338.9	6.0	5.1			
2804 VORO		42 SER	0338.1	0346.3	82.1	13.8			
2804 VORO		42 SER	0338.1	0338.9	1.3	3.8			
2840 PEKG		5 S	0342.0	0346.7	8.0	16.2			
8800 LEAR		8 S	0356.0	0356.0	1.0	43.0			QL=4 ST=2 TYP=3
15400 LEAR		8 S	0356.0	0356.0	1.0	55.0			QL=4 ST=2 TYP=3
2840 PEKG		5 S	0412.0	0415.0	7.0	10.2			
2804 VORO		2 S/F	0414.1	0415.4	2.0	10.0			
900 GORK		3 S	0415.0U	0415.1	0.3D	10.0			
600 GORK		3 S	0415.0U	0415.1	1.3D	13.0			
2950 GORK		4 S/F	0415.0U	0415.3	0.5D	4.7			
2840 PEKG		1 S	0450.0	0452.4	9.0	1.9			
9100 GORK		1 S	0451.5	0452.4	3.5	13.0			
900 GORK		40 F	0451.8	0452.1	1.0	8.9			
600 GORK		4 S/F	0451.9	0452.4	0.8	60.0			
2950 GORK		1 S	0452.2	0452.4	0.5	2.3			
900 GORK		46 C	0536.9	0537.0	0.6	30.0			
900 GORK		46 C	0536.9	0537.3		14.0			
2840 PEKG		5 S	0743.0	0745.5	5.0	67.1			
2950 GORK		4 S/F	0745.2	0745.5	0.5	54.0			
3000 IZMI		7 C	0745.3	0745.5	0.4	52.0		16.4	
900 GORK		46 C	0800.5	0801.3	1.6	12.0			
900 GORK		46 C	0800.5	0801.6		16.0			
8800 SVTO		8 S	1110.0	1111.0	1.0	240.0			QL=2 ST=2 TYP=3
245 SGMR		8 S	1232.0	1232.0	U	320.0			QL=4 ST=2 TYP=3
410 SGMR		8 S	1232.0	1232.0	U	51.0			QL=4 ST=2 TYP=3
245 SVTO		8 S	1232.0	1232.0	U	190.0			QL=4 ST=2 TYP=3
410 SVTO		8 S	1232.0	1232.0	U	110.0			QL=4 ST=2 TYP=3
245 SGMR		8 S	1347.0	1347.0	U	130.0			QL=4 ST=2 TYP=3
245 SVTO		8 S	1347.0	1347.0	U	100.0			QL=4 ST=2 TYP=3
9500 CUBA		1 S	1353.8	1354.2	3.2	21.0		10.0	
245 SGMR	48 C	1412.0	1412.0	1.0	79.0			QL=4 ST=2 TYP=8	
245 SVTO	8 S	1412.0	1412.0	1.0	56.0			QL=4 ST=2 TYP=3	
245 SGMR	48 C	1431.0	1431.0	U	50.0			QL=4 ST=2 TYP=8	
410 SVTO	8 S	1639.0	1639.0	U	78.0			QL=4 ST=2 TYP=3	
9500 CUBA	1 S	1741.4	1741.6	0.6	8.0		4.0		
200 HIRA	7 C	2050.0	2051.0	3.0	30.0				
245 LEAR	8 S	2319.0	2319.0	U	62.0			QL=4 ST=2 TYP=3	
245 PALE	8 S	2319.0	2319.0	U	36.0			QL=4 ST=2 TYP=3	
245 LEAR	8 S	2358.0	2358.0	U	54.0			QL=4 ST=2 TYP=3	

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Outstanding Occurrences

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May 02

MAY 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
14	127	TORN	43 NS	0730.0		380.0		11.0		V=0
	235	CUBA	44 NS	1330.0E		500.0D		6.0		
	280	CUBA	44 NS	1330.0E		500.0D		14.0		
	2840	PEKG	1 S	0344.0	0346.5	7.0	4.8			
	2804	VORO	40 F	0345.8	0345.9	1.1	5.1			
	600	GORK	46 C	0632.5	0632.7	0.7	32.0			
	600	GORK	46 C	0632.5	0632.9		10.0			
	600	GORK	42 SER	0636.0	0701.2		15.0			
	600	GORK	42 SER	0636.0	0646.4	25.6	35.0			
	204	IZMI	42 SER	0640.6	0641.1	0.6	28.0			
	245	LEAR	8 S	0825.0	0825.0	U	90.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0825.0	0825.0	U	69.0			QL=4 ST=2 TYP=3
	3000	IZMI	22 GRF	0934.0	0957.4	41.8	7.0	3.6		
	127	TORN	8 S	1114.0	1114.3	1.0	150.0	70.0		
	9500	CUBA	1 S	1312.0	1312.8	1.4	18.0	9.0		
	127	TORN	45 C	1319.0	1320.3	2.7	570.0	130.0		
	2800	PENT	29 PBI	1836.0	1842.0	29.0	79.0			
610	SGMR	8 S	1842.0	1842.0	U	250.0			QL=4 ST=2 TYP=3	
2695	SGMR	8 S	1842.0	1842.0	U	73.0			QL=4 ST=2 TYP=3	
9500	CUBA	1 S	1941.5	1942.3	2.1	24.0	12.0			
15	127	TORN	43 NS	0824.0		370.0		10.0		V=1,DISTURBED
	235	CUBA	44 NS	1305.0E		355.0D		5.0		
	280	CUBA	44 NS	1305.0E		355.0D		19.0		
	2800	PENT	1 S	0014.0	0017.0	7.0	3.0			
	600	GORK	40 F	0627.1	0628.9	4.7	17.0			
	600	GORK	41 F	0656.0	0659.6		115.0			
	600	GORK	41 F	0656.0	0658.9	6.5	70.0			
	610	LEAR	8 S	0658.0	0659.0	1.0	65.0			QL=4 ST=2 TYP=3
	2840	PEKG	45 C	0802.0	0809.7	12.0	10.7			
	2950	GORK	7 C	0806.0U	0806.4	6.0D	9.7			
	3000	IZMI	42 SER	0806.0	0809.6	4.6	12.0			
	2950	GORK	7 C	0806.0U	0809.7		9.7			
	900	GORK	40 F	0806.9	0809.4	4.5	34.0			
	600	GORK	45 C	0807.3	0809.3	2.7	42.0			
	600	GORK	45 C	0807.3	0809.4		150.0			
	2840	PEKG	20 GRF	0815.0	0824.8	25.0	14.6			
	3000	IZMI	20 GRF	0822.7	0834.4	20.7	7.0	3.7		
	2950	GORK	2 S/F	0823.9	0824.7	2.1	13.0			
	3000	IZMI	41 F	0823.9	0824.8	1.9	14.0			
	900	GORK	40 F	1000.3	1001.0	1.0	45.0			
2800	PENT	20 GRF	2054.0	2112.0	38.0	3.0				
2800	PENT	1 S	2219.0	2222.0	6.0	11.0				
245	PALE	8 S	2243.0	2243.0	U	140.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	2243.0	2243.0	U	130.0			QL=4 ST=2 TYP=3	
2800	PENT	29 PBI	2340.0	2415.0	79.0	27.0				
16	410	PALE	43 NS	0026.0	0342.0	252.0	720.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	0028.0	0345.0	250.0	1100.0			QL=4 ST=2 TYP=1
	610	PALE	43 NS	0054.0	0344.0	224.0	950.0			QL=4 ST=2 TYP=1
	610	LEAR	43 NS	0055.0	0144.0	350.0	840.0			QL=4 ST=3 TYP=1
	410	LEAR	43 NS	0124.0	0330.0	321.0	560.0			QL=4 ST=3 TYP=1
	1415	LEAR	43 NS	0254.0	0257.0	51.0	130.0			QL=4 ST=3 TYP=1
	1415	PALE	43 NS	0254.0	0332.0	80.0	120.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	0353.0	0504.0U	198.0	700.0			QL=2 ST=3 TYP=1
	410	SVTO	43 NS	0428.0	0448.0	126.0	400.0			QL=2 ST=2 TYP=1
	610	SVTO	43 NS	0435.0	0459.0	90.0	880.0			QL=2 ST=2 TYP=1
	204	IZMI	43 NS	0600.0	D	360.0D		25.0		
	127	TORN	44 NS	0630.0E		510.0D		110.0		V=1
	610	SVTO	43 NS	0959.0	1101.0	195.0	340.0			QL=2 ST=2 TYP=1
	245	SVTO	43 NS	1020.0	1104.0	74.0	120.0			QL=2 ST=2 TYP=1
	245	SGMR	43 NS	1043.0	1059.0U	162.0	210.0			QL=4 ST=3 TYP=1
	245	SVTO	43 NS	1242.0	1248.0	43.0	110.0			QL=2 ST=2 TYP=1
	235	CUBA	44 NS	1310.0E		520.0D		8.0		
	280	CUBA	44 NS	1310.0E		520.0D		19.0		
	245	SGMR	43 NS	2104.0	2121.0	63.0	110.0			QL=4 ST=2 TYP=1
	2840	PEKG	3 S	0005.0	0015.8	18.0	30.7			
	500	HIRA	7 C	0010.0	0027.0	32.0	50.0			
2800	HIRA	1 S	0011.0	0016.0	7.0	35.0				

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May 02

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

MAY 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
16	2804	VORO	42 SER	0013.6	0032.4	18.8	19.8			
	2804	VORO	42 SER	0013.6	0016.9	5.6	25.6			
	610	LEAR	8 S	0014.0	0015.0	2.0	120.0		QL=4 ST=2 TYP=3	
	610	PALE	8 S	0014.0	0015.0	2.0	140.0		QL=4 ST=2 TYP=3	
	410	LEAR	48 C	0026.0	0028.0	4.0	65.0		QL=4 ST=3 TYP=8	
	2840	PEKG	5 S	0027.0	0034.5	8.0	77.5			
	245	LEAR	48 C	0030.0	0030.0	5.0	98.0		QL=4 ST=3 TYP=8	
	2800	HIRA	8 S	0031.0	0031.0	1.0	40.0			
	200	HIRA	8 S	0033.0	0034.0	3.0	40.0			
	500	HIRA	21 GRF	0112.0	0320.0	356.0	20.0			
	245	LEAR	48 C	0124.0	0124.0	1.0	77.0		QL=4 ST=2 TYP=8	
	1415	PALE	48 C	0254.0	0310.0	28.0	2800.0		QL=4 ST=2 TYP=8	
	1415	LEAR	48 C	0303.0	0310.0	12.0	2300.0		QL=4 ST=3 TYP=8	
	410	LEAR	49 GB	0304.0	0304.0	1.0	980.0		QL=4 ST=3 TYP=6	
	500	HIRA	7 C	0304.0	0320.0	79.0	360.0			
	610	LEAR	49 GB	0305.0	0305.0	U	1200.0		QL=4 ST=3 TYP=6	
	1415	LEAR	48 C	0305.0	0310.0	21.0	2300.0		QL=4 ST=3 TYP=8	
	2840	PEKG	3 S	0307.0	0311.7	11.0D	120.4			
	2804	VORO	40 F	0310.1	0311.9	2.5	54.0			
	2800	HIRA	8 S	0311.0	0311.0	1.0	95.0			
	245	LEAR	49 GB	0316.0	0324.0	10.0	660.0		QL=4 ST=2 TYP=6	
	1415	LEAR	49 GB	0316.0	0325.0	10.0	1000.0		QL=4 ST=2 TYP=6	
	410	LEAR	49 GB	0317.0	0319.0	7.0	3500.0		QL=4 ST=2 TYP=6	
	610	LEAR	49 GB	0317.0	0319.0	7.0	9900.0		QL=4 ST=2 TYP=6	
	410	PALE	4 S/F	0317.0	0319.0	5.0	5200.0		QL=4 ST=2 TYP=3	
	245	PALE	48 C	0319.0	0319.0	3.0	850.0		QL=4 ST=2 TYP=8	
	610	PALE	4 S/F	0319.0	0319.0	3.0	9700.0		QL=4 ST=2 TYP=3	
	2840	PEKG	1 S	0327.0	0332.1	8.0	5.1			
	2804	VORO	1 S	0332.4	0333.0	1.1	2.7			
	245	PALE	48 C	0355.0	0355.0	5.0	1600.0		QL=4 ST=2 TYP=8	
	900	GORK	48 C	0415.0U	0500.0		380.0			
	600	GORK	47 GB	0415.0U	0441.1	255.0D	3400.0			
	900	GORK	48 C	0415.0U	0451.9	202.0D	330.0			
	204	IZMI	25 R	0600.0E		64.0D	225.0	6.9		
	200	HIRA	8 S	0623.0	0624.0	4.0	140.0			
	2840	PEKG	1 S	0713.0	0715.8	6.0	5.9			
	2950	GORK	2 S/F	0715.3	0715.9	1.2	6.0			
	9100	GORK	1 S	0919.4	0920.2	1.4	4.8			
	245	SVTO	8 S	1008.0	1008.0	U	67.0		QL=4 ST=2 TYP=3	
	33	UPIC	46 C	1014.0	1015.5	3.0				
	33	UPIC	45 C	1219.5	1220.5	1.5				
	410	SGMR	8 S	1241.0	1241.0	U	65.0		QL=4 ST=2 TYP=3	
410	SVTO	8 S	1241.0	1241.0	U	60.0		QL=4 ST=3 TYP=3		
33	UPIC	45 C	1423.5	1424.0	1.5					
245	SGMR	8 S	1619.0	1619.0	U	70.0		QL=4 ST=2 TYP=3		
245	SGMR	8 S	1653.0	1653.0	1.0	74.0		QL=4 ST=2 TYP=3		
245	PALE	8 S	1654.0	1654.0	U	52.0		QL=4 ST=2 TYP=3		
245	PALE	48 C	2053.0	2054.0	1.0	75.0		QL=4 ST=2 TYP=8		
245	PALE	8 S	2104.0	2105.0	1.0	120.0		QL=4 ST=2 TYP=3		
200	HIRA	8 S	2105.0	2105.0	1.0	95.0		0		
245	PALE	8 S	2207.0	2207.0	U	90.0		QL=4 ST=2 TYP=3		
17	127	TORN	44 NS	0910.0E		294.0D		7.0		V=1
	235	CUBA	44 NS	1300.0E		530.0D		4.0		
	280	CUBA	44 NS	1300.0E		530.0D		9.0		
	2840	PEKG	3 S	0517.0	0520.1	23.0	139.9			
	2950	GORK	3 S	0518.9	0519.0	5.1	140.0			
	2800	HIRA	3 S	0519.0	0520.0	4.0	125.0			0
	15400	LEAR	48 C	0519.0	0519.0	2.0	60.0		QL=4 ST=2 TYP=8	
	2695	LEAR	8 S	0519.0	0519.0	1.0	110.0		QL=4 ST=2 TYP=3	
	4995	LEAR	8 S	0519.0	0519.0	2.0	250.0		QL=4 ST=2 TYP=3	
	8800	LEAR	8 S	0519.0	0519.0	1.0	190.0		QL=4 ST=2 TYP=3	
	2695	SVTO	8 S	0519.0	0520.0	2.0	110.0		QL=4 ST=2 TYP=3	
	4995	SVTO	4 S/F	0519.0	0519.0	4.0	260.0		QL=4 ST=2 TYP=3	
	8800	SVTO	4 S/F	0519.0	0519.0	4.0	230.0		QL=4 ST=2 TYP=3	
	15400	SVTO	4 S/F	0519.0	0519.0	3.0	76.0		QL=4 ST=2 TYP=3	
	900	GORK	2 S/F	0519.2	0519.5	1.6	8.1			
600	GORK	40 F	0519.5	0520.4	1.1	7.0				
9100	GORK	29 PBI	0521.0U	0521.0	7.4D	46.0				

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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)	Mean	Int	Remarks
17	2950	GORK	29 PBI	0524.0	0524.0	16.0	8.5			
	2840	PEKG	20 GRF	0728.0	0806.0	52.0	22.7			
	3000	IZMI	22 GRF	0732.6	0805.7	42.6	23.0	8.2		
	2950	GORK	46 C	0736.0	0803.4		17.0			
	2950	GORK	46 C	0736.0	0750.8	39.8	14.0			
	9100	GORK	46 C	0736.8	0750.7	38.2	56.0			
	9100	GORK	46 C	0736.8	0803.8		53.0			
	1415	LEAR	8 S	0737.0	0738.0	1.0	73.0			QL=4 ST=2 TYP=3
	1415	SVTO	8 S	0737.0	0738.0	1.0	79.0			QL=4 ST=2 TYP=3
	900	GORK	46 C	0738.9	0749.4	30.4	500.0			
	900	GORK	46 C	0738.9	0752.7		500.0			
	600	GORK	46 C	0742.0	0754.1	30.0	330.0			
	600	GORK	46 C	0742.0	0807.4		620.0			
	4995	SVTO	20 GRF	0749.0	0754.0	9.0	34.0			QL=4 ST=2 TYP=2
	8800	SVTO	20 GRF	0749.0	0750.0	9.0	44.0			QL=4 ST=2 TYP=2
	610	LEAR	48 C	0749.0	0807.0	18.0	190.0			QL=4 ST=2 TYP=8
	610	SVTO	48 C	0749.0	0758.0	12.0	200.0			QL=4 ST=2 TYP=8
	500	HIRA	7 C	0749.0	0757.0	23.0	80.0			0
	15400	SVTO	20 GRF	0750.0	0750.0	6.0	31.0			QL=4 ST=2 TYP=2
	410	LEAR	46 C	0756.0	0756.0	U	32.0			QL=4 ST=2 TYP=8
	610	SVTO	48 C	0802.0	0807.0	8.0	350.0			QL=4 ST=2 TYP=8
	4995	SVTO	20 GRF	0803.0	0803.0	4.0	41.0			QL=4 ST=2 TYP=2
	8800	SVTO	20 GRF	0803.0	0803.0	4.0	47.0			QL=4 ST=2 TYP=2
	15400	SVTO	20 GRF	0803.0	0803.0	2.0	25.0			QL=4 ST=2 TYP=2
	204	IZMI	41 F	0803.3U	0803.5	7.6U	6.0			
	8800	LEAR	46 C	0805.0	0805.0	U	44.0			QL=4 ST=2 TYP=8
	3000	IZMI	20 GRF	0845.3	0911.7	113.2	8.0			
	410	SVTO	8 S	0911.0	0911.0	U	430.0			QL=4 ST=2 TYP=3
	33	UPIC	46 C	1155.0	1159.5	4.5				
	204	IZMI	42 SER	1157.8	1157.9	0.8	9.0			
	127	TORN	8 S	1320.3	1320.5	0.6	790.0	390.0		
	2800	PENT	24 R	1339.0	1423.0	85.0	11.0			
	2800	PENT	41 F	1532.0	1556.0	40.0	30.0			
	4995	SGMR	8 S	1555.0	1556.0	2.0	51.0			QL=4 ST=2 TYP=3
1415	SGMR	8 S	1556.0	1556.0	U	21.0			QL=4 ST=2 TYP=3	
2695	SGMR	8 S	1556.0	1556.0	U	31.0			QL=4 ST=2 TYP=3	
8800	SGMR	8 S	1556.0	1556.0	U	24.0			QL=4 ST=2 TYP=3	
410	PALE	8 S	1945.0	1945.0	U	56.0			QL=4 ST=2 TYP=3	
410	SGMR	8 S	1945.0	1945.0	1.0	80.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	2204.0	2204.0	U	50.0			QL=4 ST=2 TYP=3	
2840	PEKG	20 GRF	2300.0	2307.3	17.0	6.6				
18	127	TORN	43 NS	0834.0		386.0		40.0		V=2
	204	IZMI	43 NS	1025.0		95.0D		25.0		
	245	SGMR	43 NS	1144.0	1330.0	219.0	240.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	1244.0	1331.0	104.0	170.0			QL=2 ST=3 TYP=1
	235	CUBA	44 NS	1320.0E		340.0D		17.0		
	280	CUBA	44 NS	1320.0E		340.0D		24.0		
	245	SGMR	43 NS	1737.0	2057.0	285.0	220.0			QL=4 ST=2 TYP=1
	2840	PEKG	20 GRF	0351.0	0358.3	14.0	4.3			
	900	GORK	40 F	0722.0	0723.4	2.1	12.0			
	900	GORK	7 C	0808.2	0809.0		8.1			
	900	GORK	7 C	0808.2	0808.5	3.1	11.0			
	900	GORK	42 SER	0835.0	0921.3		12.0			
	900	GORK	42 SER	0835.0	0902.9	100.0	26.0			
	9100	GORK	2 S/F	0836.9	0837.3	0.7	20.0			
	2840	PEKG	20 GRF	0917.0	0922.1	30.0	9.3			
	2950	GORK	20 GRF	0920.5	0922.1	13.0	7.0			
	9100	GORK	2 S/F	0921.5	0921.9	0.8	6.6			
	245	SVTO	8 S	0939.0	0939.0	U	51.0			QL=4 ST=2 TYP=3
	900	GORK	2 S/F	1024.5	1058.4	33.9D	9.4			
	204	IZMI	41 F	1045.8	1045.8	0.4	255.0			
	600	GORK	4 S/F	1055.7	1100.2	4.5D	13.0			
	245	SGMR	8 S	1106.0	1106.0	U	78.0			QL=4 ST=2 TYP=3
	410	SVTO	4 S/F	1131.0	1133.0	3.0	67.0			QL=2 ST=2 TYP=3
	610	SVTO	4 S/F	1131.0	1133.0	3.0	32.0			QL=2 ST=2 TYP=3
410	SGMR	8 S	1133.0	1133.0	U	52.0			QL=4 ST=2 TYP=3	
245	SVTO	8 S	1718.0	1718.0	U	70.0			QL=2 ST=2 TYP=3	
245	PALE	8 S	2057.0	2057.0	U	81.0			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		
19	204	IZMI	44 NS	0600.0E		360.0D				
	127	TORN	44 NS	0630.0E		510.0D		21.0		V=1
	245	SGMR	43 NS	1947.0	1957.0	62.0	300.0			QL=4 ST=2 TYP=1
	2840	PEKG	1 S	0006.0	0007.6	6.0	9.0			
	200	HIRA	8 S	0007.0	0008.0	2.0	95.0			0
	245	LEAR	8 S	0007.0	0007.0	1.0	100.0			QL=4 ST=2 TYP=3
	2804	VORO	1 S	0007.0	0007.6	1.4	5.1			
	245	LEAR	8 S	0023.0	0023.0	U	94.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	1705.0	1705.0	1.0	41.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	1705.0	1705.0	2.0	51.0			QL=4 ST=2 TYP=3
	2800	PENT	20 GRF	1817.0	1912.0	72.0	2.0			
	2800	PENT	1 S	2140.0	2146.0	11.0	16.0			
	500	HIRA	8 S	2145.0	2146.0	2.0	30.0			0
	4995	SGMR	48 C	2145.0	2146.0	2.0	68.0			QL=4 ST=2 TYP=8
	8800	SGMR	48 C	2145.0	2146.0	3.0	70.0			QL=4 ST=2 TYP=8
20	204	IZMI	44 NS	0600.0E		108.0D		20.0		
	127	TORN	44 NS	0630.0E		510.0D		20.0		V=1, DISTURBED
	500	HIRA	42 SER	0334.0	0338.0	4.0	145.0			0
	245	LEAR	8 S	0529.0	0529.0	U	63.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0650.0	0651.0	1.0	75.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0650.0	0651.0	1.0	84.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	0716.9	0717.1	0.8	145.0			
	245	SVTO	8 S	0721.0	0721.0	U	53.0			QL=4 ST=2 TYP=3
	2950	GORK	2 S/F	0722.0	0722.5	1.6	3.3			
	2840	PEKG	1 S	0742.0	0744.4	5.0	4.5			
	900	GORK	40 F	0746.4	0747.9	4.2	7.4			
	900	GORK	46 C	0756.1	0756.5	1.2	11.0			
	900	GORK	46 C	0756.1	0756.9		21.0			
	900	GORK	41 F	0805.5	0806.4		30.0			
	900	GORK	41 F	0805.5	0805.7	1.2	12.0			
	600	GORK	1 S	0959.6	0959.8	0.4	5.0			
	2840	PEKG	1 S	1002.0	1004.9	6.0	10.1			
	2950	GORK	7 C	1004.7U	1004.7U	0.4D	10.0			
	2950	GORK	7 C	1004.7U	1004.9		5.4			
	204	IZMI	42 SER	1010.7	1011.3	1.9	22.0			
	600	GORK	40 F	1012.6	1013.5	2.7	140.0			
	204	IZMI	46 C	1012.9	1013.6	1.4	1463.0			
	9100	GORK	7 C	1013.4	1014.0		17.0			
	9100	GORK	7 C	1013.4	1013.6		17.0			
	33	UPIC	42 SER	1014.0	1014.5	65.5				
	2840	PEKG	45 C	1015.0	1020.1	21.0	70.9			
	204	IZMI	42 SER	1015.3	1020.5	11.5	89.0			
	2950	GORK	46 C	1016.3	1020.0		72.0			
	2950	GORK	46 C	1016.3	1017.9	7.7	39.0			
	9100	GORK	21 GRF	1016.6	1100.0	43.4D	9.9			
	3000	IZMI	45 C	1016.7	1020.0	5.1	73.0		30.0	
	1415	SGMR	8 S	1017.0	1017.0	1.0	30.0			QL=4 ST=2 TYP=3
	2695	SGMR	4 S/F	1017.0	1019.0	3.0	60.0			QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	1017.0	1019.0	4.0	130.0			QL=4 ST=2 TYP=3
	8800	SGMR	4 S/F	1017.0	1020.0	4.0	120.0			QL=4 ST=2 TYP=3
	600	GORK	46 C	1017.1	1018.0	6.9	170.0			
	600	GORK	46 C	1017.1	1020.0		380.0			
	900	GORK	46 C	1017.2	1018.1	4.3	210.0			
	900	GORK	46 C	1017.2	1020.7		60.0			
	9100	GORK	46 C	1017.3	1032.4		63.0			
	9100	GORK	46 C	1017.3	1020.6	17.9	13.0			
	15400	SGMR	8 S	1019.0	1020.0	2.0	56.0			QL=4 ST=2 TYP=3
600	GORK	21 GRF	1026.6	1041.3	14.7	11.0				
15400	SGMR	4 S/F	1028.0	1032.0	5.0	55.0			QL=4 ST=2 TYP=3	
2950	GORK	46 C	1028.2	1031.6		17.0				
2950	GORK	46 C	1028.2	1029.7	16.3	10.0				
900	GORK	46 C	1028.4	1031.6		180.0U				
900	GORK	46 C	1028.4	1029.7U	6.4	70.0				
600	GORK	46 C	1028.5	1031.7U	5.5	155.0U				
600	GORK	46 C	1028.5	1032.9		150.0				
1415	SGMR	4 S/F	1029.0	1031.0	3.0	91.0			QL=4 ST=2 TYP=3	
3000	IZMI	7 C	1029.0	1031.6	4.9	17.0		5.2		
204	IZMI	41 F	1032.9	1037.2	14.0	73.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
20	245	SGMR	4 S/F	1034.0	1036.0	7.0	150.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1036.0	1036.0	1.0	50.0			QL=4 ST=2 TYP=3
	8800	SGMR	4 S/F	1037.0	1039.0	5.0	28.0			QL=4 ST=2 TYP=3
	9100	GORK	1 S	1039.0	1040.1	3.3	5.9			
	600	GORK	40 F	1039.8	1040.8	1.2	5.0			
	4995	SGMR	8 S	1040.0	1040.0	U	21.0			QL=4 ST=2 TYP=3
	900	GORK	46 C	1048.4	1052.4		65.0			
	900	GORK	46 C	1048.4	1050.6	6.2	90.0			
	9100	GORK	1 S	1049.5	1050.2	1.4	9.9			
	2950	GORK	7 C	1050.0	1050.5	5.2	5.4			
	2950	GORK	21 GRF	1050.0	1058.7	10.0D	5.4			
	2950	GORK	7 C	1050.0	1052.9		8.0			
	3000	IZMI	22 GRF	1050.3	1052.9	4.1	12.0	2.8		
	410	SGMR	49 GB	1052.0	1052.0	U	580.0			QL=4 ST=2 TYP=6
	245	SGMR	8 S	1052.0	1052.0	U	200.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	1052.0	1052.0	U	140.0			QL=4 ST=2 TYP=3
	9100	GORK	4 S/F	1052.0	1054.2	4.2	34.0			
	204	IZMI	41 F	1052.4	1052.6	0.6	74.0			
	600	GORK	46 C	1052.7	1054.5	5.1	5.0			
	600	GORK	46 C	1052.7	1055.5		160.0			
	245	SGMR	4 S/F	1056.0	1101.0	7.0	100.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	1100.8	1101.1	0.8	42.0	5.0		
	410	SGMR	8 S	1101.0	1101.0	U	130.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	1101.0	1101.0	U	58.0			QL=4 ST=2 TYP=3
	2800	PENT	24 R	1439.0	1525.0	67.0	428.0			
	410	SGMR	48 C	1523.0	1525.0	5.0	3600.0			QL=4 ST=2 TYP=8
	245	SGMR	49 GB	1523.0	1523.0	U	810.0			QL=4 ST=2 TYP=6
	410	SGMR	49 GB	1523.0	1523.0	U	2100.0			QL=4 ST=2 TYP=6
	610	SGMR	49 GB	1524.0	1526.0	4.0	1800.0			QL=4 ST=2 TYP=6
	1415	SGMR	49 GB	1524.0	1525.0	4.0	500.0			QL=4 ST=2 TYP=6
	4995	SGMR	49 GB	1524.0	1525.0	4.0	970.0			QL=4 ST=2 TYP=6
	8800	SGMR	49 GB	1524.0	1525.0	4.0	1000.0			QL=4 ST=2 TYP=6
	15400	SGMR	49 GB	1524.0	1525.0	4.0	1200.0			QL=4 ST=2 TYP=6
2695	SGMR	4 S/F	1524.0	1525.0	4.0	420.0			QL=4 ST=2 TYP=3	
33	UPIC	46 C	1524.0	1525.5	3.0					
33	UPIC	31 ABS	1527.0	1529.0	8.0					
33	UPIC	3 S	1531.0	1531.3	0.6					
245	SGMR	8 S	1613.0	1613.0	U	190.0			QL=4 ST=2 TYP=3	
410	PALE	8 S	1804.0	1804.0	U	450.0			QL=4 ST=2 TYP=3	
410	SGMR	8 S	1804.0	1804.0	U	450.0			QL=4 ST=2 TYP=3	
2800	PENT	1 S	2047.0	2050.0	7.0	9.0				
21	127	TORN	44 NS	0630.0E		510.0D		26.0	V=2	
	235	CUBA	44 NS	1310.0E		290.0D		6.0		
	280	CUBA	44 NS	1310.0E		290.0D		12.0		
	15400	LEAR	46 C	0004.0	0018.0	14.0	42.0			QL=4 ST=3 TYP=8
	610	LEAR	49 GB	0014.0	0014.0	U	690.0			QL=4 ST=3 TYP=6
	245	LEAR	8 S	0117.0	0117.0	U	60.0			QL=4 ST=2 TYP=3
	2840	PEKG	1 S	0139.0	0142.5	8.0	5.3			
	2804	VORO	40 F	0141.8	0142.7	1.2	3.8			
	245	LEAR	8 S	0355.0	0355.0	U	62.0			QL=4 ST=2 TYP=3
	2840	PEKG	3 S	0459.0	0504.5	30.0	55.5			
	9100	GORK	46 C	0500.2	0502.1	9.5	40.0			
	2950	GORK	46 C	0500.2	0504.1	9.6	25.0			
	2950	GORK	46 C	0500.2	0504.4		50.0			
	9100	GORK	46 C	0500.2	0504.6		90.0			
	8800	SVTO	48 C	0501.0	0504.0	4.0	81.0			QL=4 ST=2 TYP=8
	15400	SVTO	46 C	0501.0	0504.0	4.0	49.0			QL=4 ST=2 TYP=8
	15400	LEAR	48 C	0502.0	0504.0	3.0	61.0			QL=4 ST=2 TYP=8
	2800	HIRA	1 S	0504.0	0504.0	2.0	35.0			0
	1415	LEAR	8 S	0504.0	0504.0	U	140.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	0504.0	0504.0	U	43.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	0504.0	0504.0	U	42.0			QL=4 ST=2 TYP=3
	8800	LEAR	8 S	0504.0	0504.0	1.0	81.0			QL=4 ST=2 TYP=3
	1415	SVTO	8 S	0504.0	0504.0	1.0	150.0			QL=4 ST=2 TYP=3
2695	SVTO	8 S	0504.0	0504.0	1.0	42.0			QL=4 ST=2 TYP=3	
4995	SVTO	8 S	0504.0	0504.0	1.0	37.0			QL=4 ST=2 TYP=3	
200	HIRA	8 S	0508.0	0508.0	1.0	25.0			0	
2840	PEKG	1 S	0548.0	0551.8	9.0	3.9				

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

MAY 2002

Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
						Peak (10 -22 W/m 2 Hz)	Mean			
21	2950 GORK	1 S	0627.6	0628.2	0.8		3.1			
	2800 PENT	20 GRF	1740.0	1807.0	56.0		6.0			
	2800 PENT	29 PBI	2109.0	2125.0	91.0U		102.0			
	2800 HIRA	4 S/F	2119.0	2125.0	13.0		95.0		0	
	500 HIRA	4 S/F	2121.0	2127.0	10.0		30.0		0	
	2695 SGMR	4 S/F	2122.0	2126.0	7.0		81.0		QL=4 ST=2 TYP=3	
	1415 SGMR	4 S/F	2123.0	2128.0	6.0		54.0		QL=4 ST=2 TYP=3	
	4995 SGMR	4 S/F	2123.0	2125.0	6.0		140.0		QL=4 ST=2 TYP=3	
	245 SGMR	4 S/F	2124.0	2127.0	5.0		120.0		QL=4 ST=2 TYP=3	
	8800 SGMR	4 S/F	2124.0	2125.0	4.0		81.0		QL=4 ST=2 TYP=3	
	15400 SGMR	4 S/F	2124.0	2125.0	4.0		50.0		QL=4 ST=2 TYP=3	
	200 HIRA	7 C	2124.0	2145.0	26.0		130.0		0	
	410 PALE	48 C	2125.0	2125.0		U	55.0		QL=4 ST=2 TYP=8	
	2695 PALE	48 C	2125.0	2125.0	1.0		53.0		QL=4 ST=2 TYP=8	
	410 SGMR	4 S/F	2125.0	2125.0	4.0		53.0		QL=4 ST=2 TYP=3	
	610 PALE	8 S	2220.0	2220.0		U	59.0		QL=4 ST=2 TYP=3	
	610 SGMR	8 S	2220.0	2220.0		U	54.0		QL=4 ST=2 TYP=3	
	2804 VORO	28 PRE	2253.8	2333.5	45.6		17.5			
	2840 PEKG	3 S	2314.0	2359.2	67.0		81.3			
	500 HIRA	7 C	2319.0	2329.0	51.0		195.0		0	
	610 LEAR	48 C	2322.0	2325.0	8.0		150.0		QL=4 ST=2 TYP=8	
	610 PALE	48 C	2322.0	2325.0	7.0		140.0		QL=4 ST=2 TYP=8	
	410 LEAR	48 C	2322.0	2324.0	10.0		160.0		QL=4 ST=2 TYP=8	
	410 PALE	48 C	2322.0	2325.0	10.0		170.0		QL=4 ST=2 TYP=8	
	2800 PENT	1 S	2335.0	2359.0	56.0		42.0			
	2804 VORO	45 C	2339.4	2349.4	30.1		47.5			
	410 PALE	4 S/F	2340.0	2344.0	5.0		100.0		QL=4 ST=2 TYP=3	
	610 PALE	48 C	2341.0	2345.0	5.0		260.0		QL=4 ST=2 TYP=8	
	410 LEAR	4 S/F	2342.0	2344.0	3.0		84.0		QL=4 ST=2 TYP=3	
	2800 HIRA	7 C	2342.0	0000.0	38.0		40.0		0	
	610 LEAR	8 S	2343.0	2345.0	2.0		320.0		QL=4 ST=2 TYP=3	
	1415 LEAR	48 C	2349.0	2351.0	21.0		63.0		QL=4 ST=3 TYP=8	
	2695 LEAR	48 C	2350.0	2351.0	19.0		56.0		QL=4 ST=3 TYP=8	
	410 LEAR	48 C	2358.0	2358.0		U	58.0		QL=4 ST=3 TYP=8	
	22	235 CUBA	44 NS	1310.0E		320.0D			6.0	
		280 CUBA	44 NS	1310.0E		320.0D			12.0	
		610 PALE	8 S	0003.0	0004.0	2.0		320.0		QL=4 ST=2 TYP=3
		2804 VORO	29 PBI	0010.0	0010.0	120.0		17.1		
		610 PALE	8 S	0046.0	0047.0	1.0		190.0		QL=4 ST=2 TYP=3
		610 LEAR	8 S	0047.0	0047.0		U	200.0		QL=4 ST=2 TYP=3
610 LEAR		8 S	0114.0	0114.0		U	140.0		QL=4 ST=2 TYP=3	
2840 PEKG		20 GRF	0323.0	0337.6	45.0		18.4			
200 HIRA		8 S	0329.0	0329.0	1.0		35.0		0	
2840 PEKG		1 S	0822.0E	0824.5	8.0D		7.7			
2950 GORK		1 S	0823.7	0824.4	1.4		5.6			
410 SGMR		8 S	1218.0	1218.0		U	100.0		QL=4 ST=2 TYP=3	
410 SVTO		4 S/F	1218.0	1218.0	4.0		110.0		QL=4 ST=2 TYP=3	
245 SVTO		8 S	1321.0	1321.0		U	130.0		QL=4 ST=2 TYP=3	
2800 PENT		21 GRF	1532.0	1541.0	41.0		4.0			
1415 SGMR		8 S	1621.0	1621.0		U	69.0		QL=4 ST=2 TYP=3	
1415 SVTO		8 S	1621.0	1621.0	1.0		61.0		QL=4 ST=2 TYP=3	
2800 PENT		21 GRF	1802.0	1837.0	90.0U		4.0			
2800 PENT		29 PBI	2041.0	2051.0	52.0		9.0			
1415 PALE		48 C	2349.0	2351.0	20.0		53.0		QL=4 ST=2 TYP=8	
2695 PALE	46 C	2350.0	2351.0	18.0		41.0		QL=4 ST=2 TYP=8		
410 PALE	48 C	2357.0	2358.0	2.0		64.0		QL=4 ST=2 TYP=8		
23	235 CUBA	44 NS	1305.0E		355.0D			4.0		
	280 CUBA	44 NS	1305.0E		355.0D			14.0		
	127 TORN	44 NS	1330.0E		90.0D			13.0		
	245 SVTO	8 S	0911.0	0911.0	1.0		220.0		V=1 QL=4 ST=2 TYP=3	
	245 SGMR	8 S	1559.0	1559.0		U	67.0		QL=4 ST=2 TYP=3	
	245 SGMR	49 GB	1602.0	1602.0		U	510.0		QL=4 ST=2 TYP=6	
	245 SVTO	8 S	1602.0	1602.0		U	280.0		QL=4 ST=2 TYP=3	
2800 PENT	32 ABS	2141.0	2144.0	41.0		2.0				
24	127 TORN	44 NS	1310.0E		110.0D			8.0	V=1, DISTURB	
	235 CUBA	44 NS	1310.0E		290.0D			5.0		

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MAY 2002

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	280	CUBA	44 NS	1310.0E		290.0D		15.0		
	4995	SVTO	8 S	0410.0	0410.0	U	31.0			QL=4 ST=2 TYP=3
	8800	SVTO	8 S	0410.0	0410.0	U	35.0			QL=4 ST=2 TYP=3
	15400	SVTO	8 S	0410.0	0410.0	U	52.0			QL=4 ST=2 TYP=3
	2950	GORK	21 GRF	0631.5	0648.7	31.8	6.6			
	2840	PEKG	3 S	0632.0	0644.4	26.0	10.6			
	2950	GORK	7 C	0640.6	0642.2	5.6	7.7			
	2950	GORK	7 C	0640.6	0644.3		8.8			
	9100	GORK	20 GRF	0640.9	0645.8	21.5	15.0			
	3000	IZMI	22 GRF	0641.8	0644.6	20.6	17.0			
	900	GORK	46 C	0644.4	0645.2		40.0			
	900	GORK	46 C	0644.4	0644.6	0.9	40.0			
	600	GORK	1 S	0654.5	0654.7	0.4	4.2			
	8800	SGMR	8 S	1052.0	1053.0	2.0	91.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	1053.0	1053.0	U	65.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	1053.0	1053.0	U	73.0			QL=4 ST=2 TYP=3
	8800	SVTO	8 S	1053.0	1053.0	U	91.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1254.0	1254.0	U	66.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1333.0	1333.0	1.0	360.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1333.0	1333.0	1.0	300.0			QL=4 ST=2 TYP=3
	127	TORN	7 C	1333.5	1334.0	0.9	6400.0	3200.0U		V=1
	33	UPIC	8 S	1333.5	1334.0	1.0				
	2800	PENT	29 PBI	1855.0	1908.0	37.0U	44.0			
	4995	PALE	8 S	1907.0	1908.0	1.0	39.0			QL=4 ST=2 TYP=3
2695	PALE	8 S	1908.0	1908.0	U	32.0			QL=4 ST=2 TYP=3	
2800	PENT	20 GRF	2122.0	2136.0	31.0	4.0				
2840	PEKG	1 S	2319.0	2323.0	7.0	4.1				
2804	VORO	3 S	2321.2	2323.7	3.7	3.9				
25	127	TORN	44 NS	0910.0E		275.0D		8.0		V=1
	235	CUBA	44 NS	1310.0E		110.0D		4.0		
	280	CUBA	44 NS	1310.0E		110.0D		16.0		
	2840	PEKG	1 S	0108.0	0112.3	8.0	5.4			
	2804	VORO	2 S/F	0111.3	0112.1	1.8	7.2			
	2840	PEKG	3 S	0534.0	0543.5	22.0	13.3			
	2950	GORK	1 S	0543.0	0543.5	1.3	11.0			
	600	GORK	7 C	0543.1	0543.2	0.5	4.1			
	900	GORK	46 C	0543.1	0543.4	1.0	5.1			
	600	GORK	7 C	0543.1	0543.4		11.0			
	900	GORK	46 C	0543.1	0543.8		6.4			
	245	LEAR	8 S	0620.0	0620.0	U	51.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	0620.0	0620.1	0.4	10.0			
	900	GORK	42 SER	0701.8	0712.3		6.4			
	900	GORK	42 SER	0701.8	0704.9	11.9	6.4			
	600	GORK	40 F	0701.9	0702.5	2.2	7.3			
	204	IZMI	42 SER	1107.7	1107.7	0.1	13.0			
	245	SGMR	8 S	1842.0	1842.0	U	84.0			QL=4 ST=2 TYP=3
410	SGMR	49 GB	1944.0	1944.0	U	760.0			QL=4 ST=2 TYP=6	
26	127	TORN	43 NS	0800.0		480.0		10.0		V=1
	235	CUBA	44 NS	1320.0E		510.0D		3.0		
	280	CUBA	44 NS	1320.0E		510.0D		10.0		
	2840	PEKG	1 S	0239.0	0241.2	8.0	3.5			
	245	LEAR	4 S/F	0305.0	0306.0	3.0	120.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0315.0	0315.0	U	120.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	0937.9	0937.9	0.1	10.0			
	3000	IZMI	20 GRF	0945.2	0949.9	11.6	6.0	2.0		
	245	SVTO	8 S	1001.0	1002.0	2.0	95.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	1001.9	1001.9	0.1	7.0			
	245	SVTO	8 S	1239.0	1239.0	U	61.0			QL=4 ST=2 TYP=3
	33	UPIC	46 C	1450.0	1451.0	2.0				
	2800	PENT	29 PBI	1525.0	1531.0	46.0	12.0			
	33	UPIC	42 SER	1611.0	1635.5	95.0				
27	127	TORN	43 NS	0902.0		370.0		10.0		V=1
	235	CUBA	44 NS	1300.0E		530.0D		4.0		
	280	CUBA	44 NS	1300.0E		530.0D		13.0		
	2840	PEKG	1 S	0418.0	0422.9	10.0	8.2			
	2804	VORO	1 S	0427.5	0428.1	1.4	6.5			

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Outstanding Occurrences

MAY 2002

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	2840	PEKG	5 S	0500.0	0503.5	8.0	33.0			
	2804	VORO	2 S/F	0502.8	0503.4	1.5	22.8			
	2840	PEKG	20 GRF	0552.0	0605.2	40.0	27.2			
	3000	IZMI	22 GRF	0601.5	0605.2	4.3	15.0	6.8		
	900	GORK	40 F	1032.3	1032.7	1.2	31.0			
	9500	CUBA	1 S	1646.0	1647.0	2.0	10.0	5.0		
	610	SGMR	8 S	1705.0	1705.0	U	94.0			QL=4 ST=2 TYP=3
	610	SVTO	8 S	1705.0	1705.0	U	59.0			QL=4 ST=2 TYP=3
	1415	SVTO	8 S	1705.0	1705.0	U	21.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	1705.0	1705.0	U	24.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	1705.0	1705.0	U	23.0			QL=4 ST=2 TYP=3
	15400	SVTO	8 S	1705.0	1705.0	2.0	21.0			QL=4 ST=2 TYP=3
	2695	PALE	4 S/F	1803.0	1805.0	5.0	77.0			QL=4 ST=2 TYP=3
	9500	CUBA	21 GRF	1803.0	1812.0	31.0	41.0	20.0		
	9500	CUBA	2 S/F	1803.0	1806.5	6.0	17.0	8.0		
	4995	PALE	4 S/F	1804.0	1805.0	4.0	57.0			QL=4 ST=2 TYP=3
	1415	SGMR	4 S/F	1804.0	1806.0	4.0	43.0			QL=4 ST=2 TYP=3
	2695	SGMR	4 S/F	1804.0	1805.0	4.0	70.0			QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	1804.0	1805.0	4.0	44.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	1805.0	1805.0	U	32.0			QL=4 ST=2 TYP=3
	1415	PALE	8 S	1806.0	1806.0	U	38.0			QL=4 ST=2 TYP=3
	9500	CUBA	1 S	1903.0	1903.5	1.0	13.0	6.0		
	610	PALE	8 S	2124.0	2124.0	U	120.0			QL=4 ST=2 TYP=3
	1415	PALE	8 S	2124.0	2124.0	U	51.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	2124.0	2124.0	U	110.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	2124.0	2124.0	U	68.0			QL=4 ST=2 TYP=3
	9500	CUBA	1 S	2124.4	2124.5	1.6	25.0	12.0		
500	HIRA	8 S	2125.0	2125.0	1.0	25.0				
28	127	TORN	44 NS	0920.0E		300.0D		9.0		V=0
	235	CUBA	44 NS	1340.0E		490.0D		4.0		
	280	CUBA	44 NS	1340.0E		490.0D		15.0		
	2800	PENT	1 S	0040.0	0046.0	14.0	14.0			
	2840	PEKG	45 C	0040.0	0046.4	6.4	11.5			
	2804	VORO	46 C	0045.0	0046.2	3.1	5.6			
	2840	PEKG	1 S	0214.0	0215.9	9.0	4.4			
	500	HIRA	8 S	0348.0	0348.0	1.0	20.0			
	2840	PEKG	5 S	0408.0	0411.9	8.0	21.4			
	2804	VORO	40 F	0411.5	0411.9	1.2	10.3			
	2840	PEKG	1 S	0602.0	0605.7	9.0	8.9			
	3000	IZMI	5 S	0605.5	0605.6	0.3	8.0	2.9		
	500	HIRA	7 C	0607.0	0607.0	13.0	10.0			
	204	IZMI	42 SER	0611.8	0612.3	0.7	8.0			
	245	SGMR	8 S	1126.0	1126.0	U	64.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	1135.7	1135.8	24.3D	16.0			
	410	PALE	8 S	1902.0	1902.0	U	71.0			QL=4 ST=2 TYP=3
410	SGMR	8 S	1903.0	1903.0	U	58.0			QL=4 ST=2 TYP=3	
9500	CUBA	2 S/F	2134.1	2135.8	2.0	13.0	6.0			
9500	CUBA	2 S/F	2155.0	2155.2	1.7	10.0	5.0			
29	204	IZMI	43 NS	0858.0		182.0D		20.0		
	127	TORN	43 NS	0906.0		320.0		10.0		V=1
	245	SGMR	43 NS	1046.0	1052.0U	197.0	230.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	1303.0	1307.0	14.0	84.0			QL=2 ST=2 TYP=1
	235	CUBA	44 NS	1305.0E		525.0D		4.0		
	280	CUBA	44 NS	1305.0E		525.0D		14.0		
	610	PALE	8 S	0032.0	0032.0	U	120.0			QL=4 ST=2 TYP=3
	610	LEAR	8 S	0034.0	0034.0	U	130.0			QL=4 ST=2 TYP=3
	2840	PEKG	5 S	0034.0	0037.0	9.0	36.1			
	1415	PALE	46 C	0035.0	0035.0	U	45.0			QL=4 ST=2 TYP=8
	610	PALE	8 S	0035.0	0035.0	U	53.0			QL=4 ST=2 TYP=3
	610	LEAR	8 S	0036.0	0036.0	U	58.0			QL=4 ST=2 TYP=3
	1415	LEAR	8 S	0036.0	0036.0	1.0	43.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	0036.0	0036.0	1.0	34.0			QL=4 ST=2 TYP=3
	2804	VORO	2 S/F	0036.2	0037.2	5.3	37.4			
2800	HIRA	1 S	0037.0	0037.0	3.0	30.0				
2840	PEKG	5 S	0157.0	0159.5	6.0	11.0				
2840	PEKG	45 C	0239.0	0246.3	26.0	170.0				
2804	VORO	45 C	0242.8	0243.4	13.0	35.6				

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Outstanding Occurrences

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May 02

MAY 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
29	2804	VORO	45 C	0242.8	0246.4	13.0	67.4			
	8800	PALE	48 C	0243.0	0243.0	2.0	75.0			QL=4 ST=2 TYP=8
	610	PALE	8 S	0243.0	0243.0	U	100.0			QL=4 ST=2 TYP=3
	1415	PALE	8 S	0243.0	0244.0	2.0	42.0			QL=4 ST=2 TYP=3
	2695	PALE	8 S	0243.0	0244.0	2.0	120.0			QL=4 ST=2 TYP=3
	4995	PALE	8 S	0243.0	0244.0	2.0	150.0			QL=4 ST=2 TYP=3
	15400	PALE	8 S	0243.0	0243.0	1.0	110.0			QL=4 ST=2 TYP=3
	2800	HIRA	7 C	0243.0	0246.0	11.0	140.0			
	610	LEAR	8 S	0246.0	0246.0	U	100.0			QL=4 ST=2 TYP=3
	1415	LEAR	8 S	0246.0	0246.0	1.0	51.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	0246.0	0246.0	1.0	140.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	0246.0	0246.0	1.0	190.0			QL=4 ST=2 TYP=3
	8800	LEAR	8 S	0246.0	0246.0	U	180.0			QL=4 ST=2 TYP=3
	15400	LEAR	8 S	0246.0	0246.0	U	180.0			QL=4 ST=2 TYP=3
	2840	PEKG	1 S	0330.0	0333.1	9.0	9.0			
	500	HIRA	47 GB	0331.0	0331.0	1.0	655.0			
	2804	VORO	1 S	0332.9	0333.1	1.4	9.0			
	2840	PEKG	1 S	0340.0	0343.8	7.0	3.9			
	245	PALE	49 GB	0429.0	0430.0	1.0	3900.0			QL=4 ST=3 TYP=6
	600	GORK	2 S/F	0546.0	0546.3	0.6	3.2			
	900	GORK	8 S	0547.5	0547.6	0.2	21.0			
	600	GORK	1 S	0619.5	0619.7	0.4	2.4			
	9100	GORK	3 S	0649.7	0650.3	1.1	14.0			
	9100	GORK	2 S/F	0657.1	0658.5	7.7	22.0			
	900	GORK	42 SER	0717.4	0729.4		17.0			
	900	GORK	42 SER	0717.4	0728.8	15.9	28.0			
	600	GORK	4 S/F	0729.3	0729.5	0.7	9.7			
	9100	GORK	3 S	0739.4	0739.7	0.9	30.0			
	200	HIRA	8 S	0750.0	0752.0	3.0	150.0			
	245	SVTO	8 S	0750.0	0751.0	2.0	68.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0750.2	0750.4	0.5	55.0			
	245	LEAR	8 S	0751.0	0751.0	U	80.0			QL=4 ST=2 TYP=3
	204	IZMI	45 C	0751.4	0751.8	0.8	363.0			
	204	IZMI	42 SER	0755.1	0755.3	0.7	7.0			
	900	GORK	40 F	0813.4	0813.8	0.8	11.0			
	9100	GORK	2 S/F	0849.5	0850.1	1.5	5.8			
	900	GORK	41 F	0900.5	0900.7	8.3	10.0			
	900	GORK	41 F	0900.5	0903.7		20.0			
	600	GORK	42 SER	1009.9	1026.1		110.0U			
	600	GORK	42 SER	1009.9	1028.3		110.0U			
	600	GORK	42 SER	1009.9	1022.6	21.3	110.0U			
	900	GORK	46 C	1021.3	1029.3		140.0U			
	900	GORK	46 C	1021.3	1028.3	10.4	140.0U			
	610	SVTO	4 S/F	1022.0	1026.0	4.0	200.0			QL=4 ST=2 TYP=3
	2840	PEKG	45 C	1022.0	1026.0	14.0	42.0			
	9100	GORK	46 C	1025.9	1026.1	4.8	37.0			
	204	IZMI	45 C	1025.9	1026.1	0.7	337.0			
	3000	IZMI	45 C	1025.9	1026.4	4.5	24.0			
	9100	GORK	46 C	1025.9	1028.8		30.0			
	410	SVTO	8 S	1026.0	1026.0	U	390.0			QL=4 ST=2 TYP=3
610	SVTO	8 S	1026.0	1026.0	U	200.0			QL=4 ST=3 TYP=3	
610	SVTO	8 S	1028.0	1028.0	U	620.0			QL=4 ST=2 TYP=3	
204	IZMI	7 C	1029.2	1029.3	0.2	18.0				
900	GORK	42 SER	1034.0	1050.7	19.8	24.0				
900	GORK	42 SER	1034.0	1052.8		140.0U				
410	SVTO	8 S	1052.0	1052.0	U	55.0			QL=4 ST=2 TYP=3	
9100	GORK	3 S	1052.5	1052.8	2.3	25.0				
3000	IZMI	7 C	1052.6	1052.9	1.1	22.0	7.7			
204	IZMI	7 C	1052.7	1052.8	0.3	56.0				
204	IZMI	7 C	1057.0	1057.2	0.3	15.0				
9500	CUBA	1 S	1252.0	1252.5	2.0	7.0	3.0			
610	SGMR	8 S	1548.0	1550.0	2.0	480.0			QL=4 ST=2 TYP=3	
9500	CUBA	45 C	1548.0	1548.8	4.0	36.0	18.0			
9500	CUBA	1 S	1746.0	1747.0	2.0	38.0	19.0			
200	HIRA	7 C	2326.0	2328.0	4.0	15.0				
500	HIRA	8 S	2326.0	2326.0	1.0	100.0				
245	LEAR	8 S	2326.0	2326.0	U	150.0			QL=2 ST=2 TYP=3	
410	LEAR	8 S	2326.0	2326.0	U	47.0			QL=2 ST=2 TYP=3	
610	LEAR	8 S	2326.0	2326.0	U	120.0			QL=2 ST=2 TYP=3	

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

MAY 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
29	245	PALE	8 S	2326.0	2326.0	U	200.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	2326.0	2326.0	U	65.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	2326.0	2326.0	U	100.0			QL=4 ST=2 TYP=3
30	127	TORN	43 NS	0900.0		257.0		10.0		V=0
	235	CUBA	44 NS	1330.0E		500.0D		6.0		
	280	CUBA	44 NS	1330.0E		500.0D		13.0		
	500	HIRA	8 S	0011.0	0011.0	1.0	25.0			
	2840	PEKG	20 GRF	0434.0	0452.4	31.0	10.5			
	2840	PEKG	20 GRF	0509.0	0519.2	29.0	7.8			
	204	IZMI	42 SER	0635.7	0636.6	2.3	34.0			
	245	SGMR	8 S	1132.0	1132.0	1.0	53.0			QL=4 ST=2 TYP=3
	33	UPIC	45 C	1336.5	1337.0	1.5				
	127	TORN	4 S/F	1336.7	1337.3	1.8	540.0	80.0		
	9500	CUBA	20 GRF	1702.0	1718.0	117.0	35.0	17.0		
	245	SGMR	8 S	2003.0	2003.0	U	60.0			QL=4 ST=2 TYP=3
	2840	PEKG	3 S	2248.0	2325.4	73.0	84.9			
	2804	VORO	46 C	2300.0	2326.0	80.0	63.6			
	2804	VORO	46 C	2300.0	2411.5	80.0	134.7			
	2800	HIRA	7 C	2305.0	2325.0	46.0	55.0			0
	500	HIRA	7 C	2309.0	2334.0	40.0	25.0			0
	200	HIRA	7 C	2310.0	2321.0	17.0	20.0			0
	2695	PALE	4 S/F	2314.0	2324.0	28.0	62.0			QL=4 ST=2 TYP=3
	2695	LEAR	48 C	2318.0	2325.0	22.0	61.0			QL=4 ST=2 TYP=8
	15400	PALE	8 S	2329.0	2329.0	1.0	38.0			QL=4 ST=2 TYP=3
1415	PALE	4 S/F	2329.0	2331.0	5.0	30.0			QL=4 ST=2 TYP=3	
410	PALE	8 S	2333.0	2333.0	U	22.0			QL=4 ST=2 TYP=3	
610	PALE	8 S	2333.0	2333.0	U	21.0			QL=4 ST=2 TYP=3	
4995	PALE	8 S	2341.0	2341.0	U	24.0			QL=4 ST=2 TYP=3	
8800	PALE	8 S	2341.0	2341.0	U	29.0			QL=4 ST=2 TYP=3	
200	HIRA	7 C	2354.0	2356.0	5.0	80.0			0	
500	HIRA	8 S	2356.0	2356.0	1.0	20.0			0	
245	LEAR	8 S	2356.0	2356.0	1.0	130.0			QL=4 ST=2 TYP=3	
31	127	TORN	43 NS	0808.0		375.0		10.0		V=0
	235	CUBA	44 NS	1305.0E		525.0D		6.0		
	245	SVTO	43 NS	1443.0	1446.0	12.0	170.0			QL=4 ST=2 TYP=1
	245	SGMR	43 NS	1445.0	1445.0	20.0	240.0			QL=4 ST=2 TYP=1
	2840	PEKG	45 C	0002.0	0011.4	49.0	128.7			
	2800	PENT	40 F	0003.0	0011.0	22.0	301.0			
	500	HIRA	4 S/F	0005.0	0007.0	11.0	20.0			0
	4995	LEAR	48 C	0006.0	0007.0	9.0	240.0			QL=4 ST=2 TYP=8
	15400	PALE	48 C	0006.0	0007.0	6.0	120.0			QL=4 ST=2 TYP=8
	2800	HIRA	7 C	0006.0	0011.0	14.0	100.0			0
	2695	LEAR	48 C	0006.0	0011.0	10.0	100.0			QL=4 ST=2 TYP=8
	2695	PALE	48 C	0006.0	0011.0	10.0	100.0			QL=4 ST=2 TYP=8
	4995	PALE	48 C	0006.0	0007.0	10.0	270.0			QL=4 ST=2 TYP=8
	8800	PALE	48 C	0006.0	0007.0	17.0	290.0			QL=4 ST=2 TYP=8
	245	LEAR	48 C	0007.0	0007.0	U	57.0			QL=4 ST=2 TYP=8
	410	LEAR	46 C	0007.0	0007.0	U	30.0			QL=4 ST=2 TYP=8
	8800	LEAR	48 C	0007.0	0007.0	5.0	160.0			QL=4 ST=2 TYP=8
	15400	LEAR	48 C	0007.0	0007.0	5.0	140.0			QL=4 ST=2 TYP=8
	200	HIRA	8 S	0009.0	0009.0	1.0	30.0			0
	204	IZMI	42 SER	0609.6	0614.7	11.8	288.0			
	204	IZMI	42 SER	0631.3	0647.9	24.3	62.0			
	245	SVTO	8 S	0700.0	0700.0	1.0	55.0			QL=4 ST=2 TYP=3
	2840	PEKG	5 S	0753.0	0757.9	8.0	11.5			
	127	TORN	45 C	0805.6	0806.7	2.5	70.0	20.0		
	204	IZMI	42 SER	0831.1	0837.3	7.0	236.0			
	33	UPIC	3 S	1011.5	1011.8	0.5				
	33	UPIC	3 S	1114.0	1114.5	1.0				
245	SGMR	8 S	1125.0	1125.0	1.0	66.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1134.0	1134.0	1.0	84.0			QL=4 ST=2 TYP=3	
9500	CUBA	21 GRF	1245.0	1245.0	286.0	28.0	14.0			
2695	SVTO	4 S/F	1251.0	1258.0	9.0	17.0			QL=4 ST=2 TYP=3	
4995	SVTO	4 S/F	1254.0	1258.0	6.0	65.0			QL=4 ST=2 TYP=3	
8800	SVTO	4 S/F	1255.0	1258.0	5.0	62.0			QL=4 ST=2 TYP=3	
9500	CUBA	2 S/F	1256.0	1258.9	5.8	42.0	21.0			
245	SGMR	8 S	1423.0	1423.0	U	69.0			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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May 02

MAY 2002

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	2800 PENT	20 GRF	1431.0	1519.0	96.0	12.0			
	245 SGMR	4 S/F	1434.0	1436.0	3.0	170.0		QL=4 ST=2 TYP=3	
	245 SVTO	8 S	1436.0	1436.0	1.0	90.0		QL=4 ST=2 TYP=3	

Reports are received routinely from the following observatories:

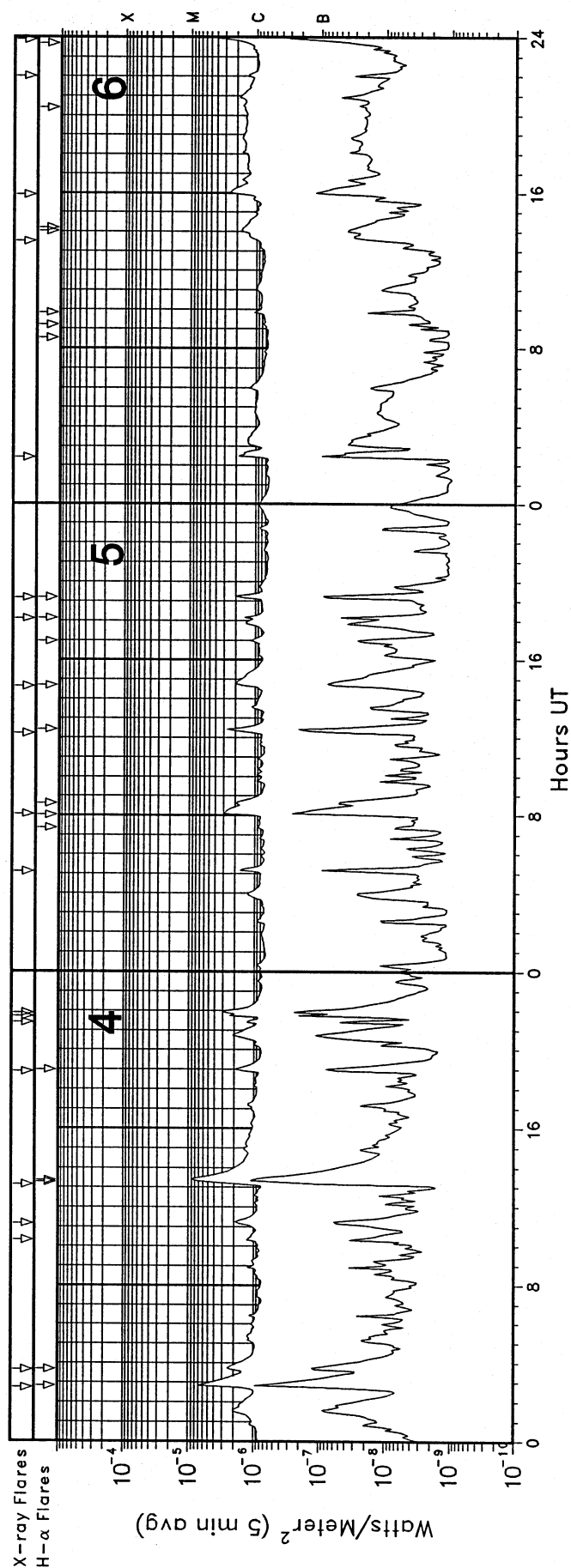
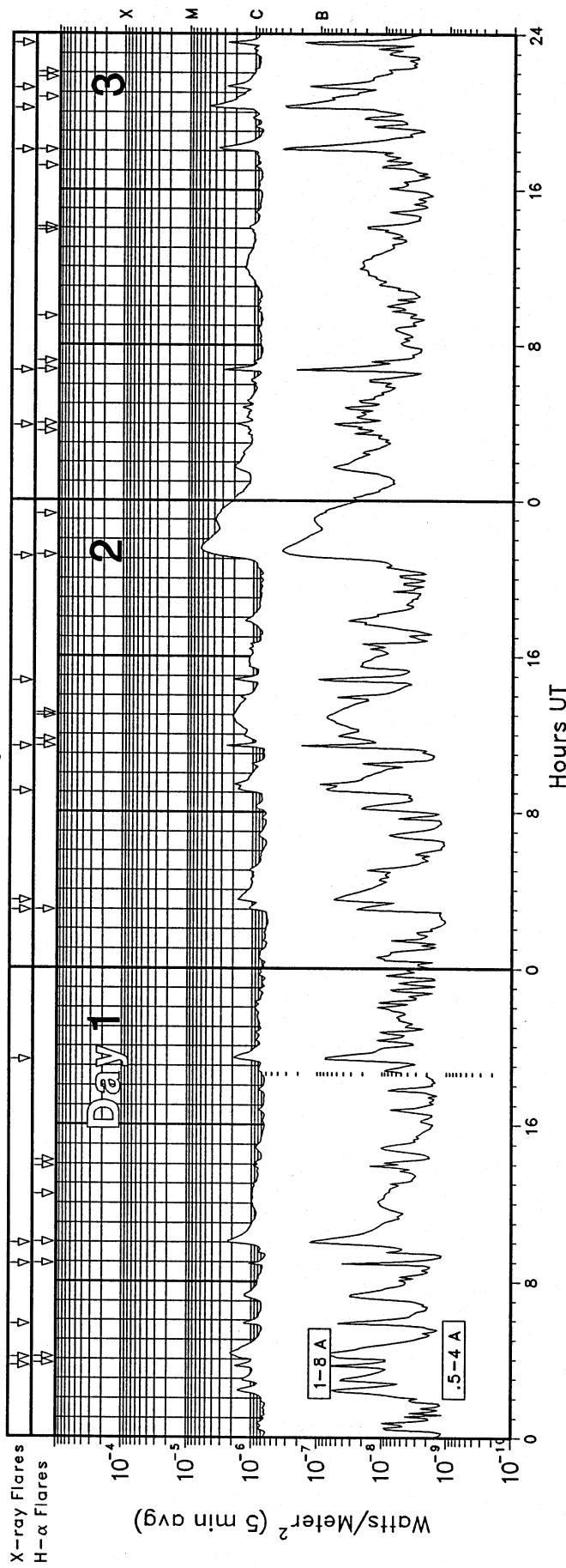
BERN = Berne	HUMN = Humain	ONDR = Ondrejov	SVTO = San Vito
CRIM = Crimea	IZMI = IZMIRAN	PEKG = Peking	TORN = Torun
CUBA = Havana	KISV = Kislovodsk	PALE = Palehua	TRST = Trieste
GORK = Gorky	KRAK = Krakow	PENT = Penticton	TYKW = Toyokawa
HIRA = Hiraiso	LEAR = Learmonth	POTS = Potsdam	UPIC = Upice
HUAN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

Explanation of Type Code:

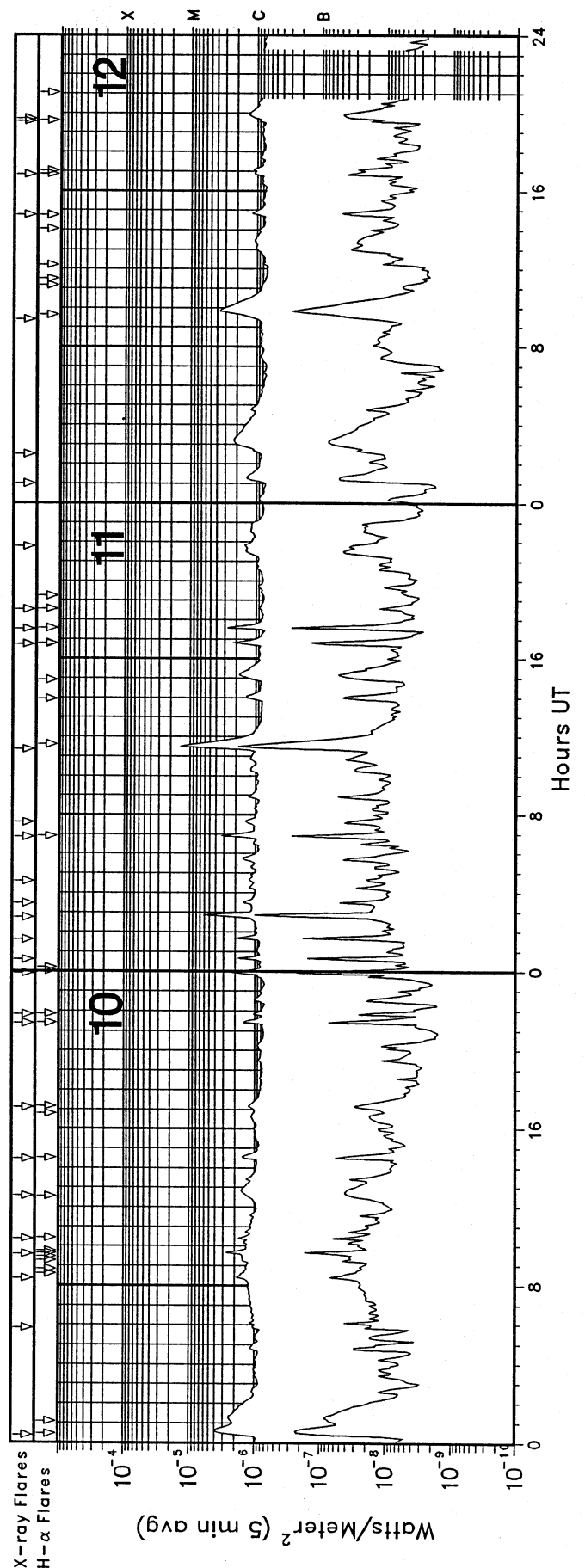
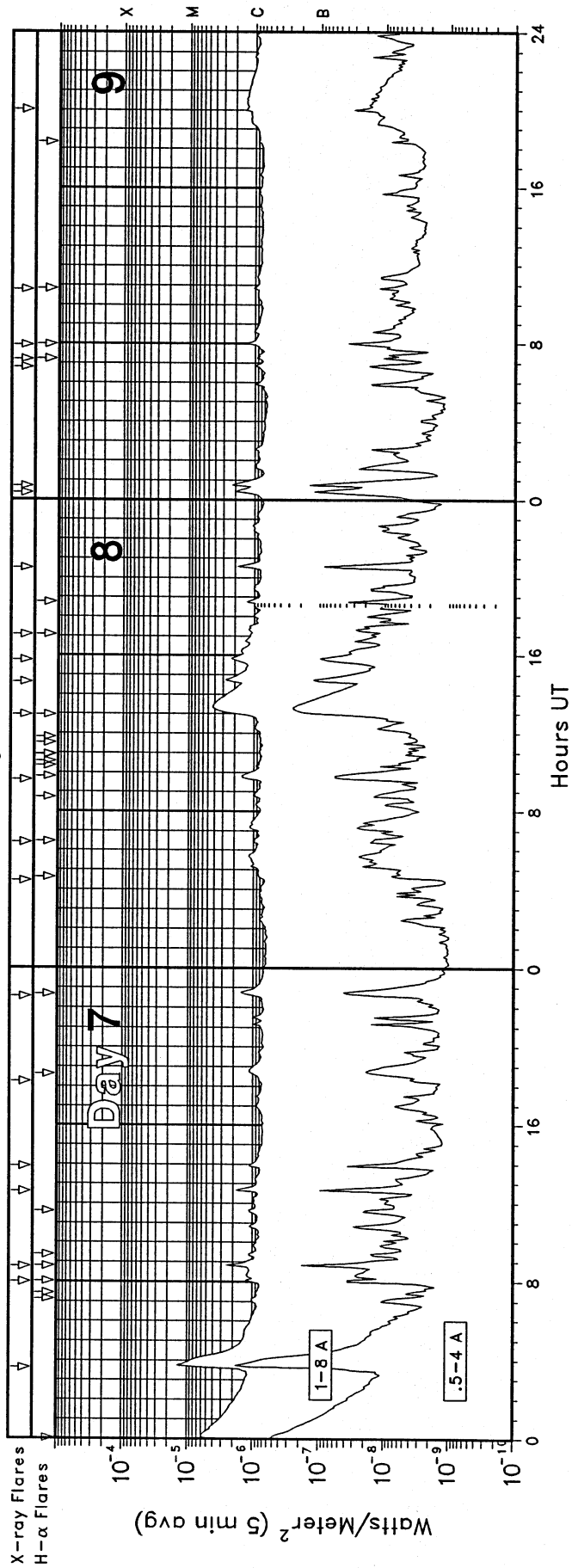
1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple 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.

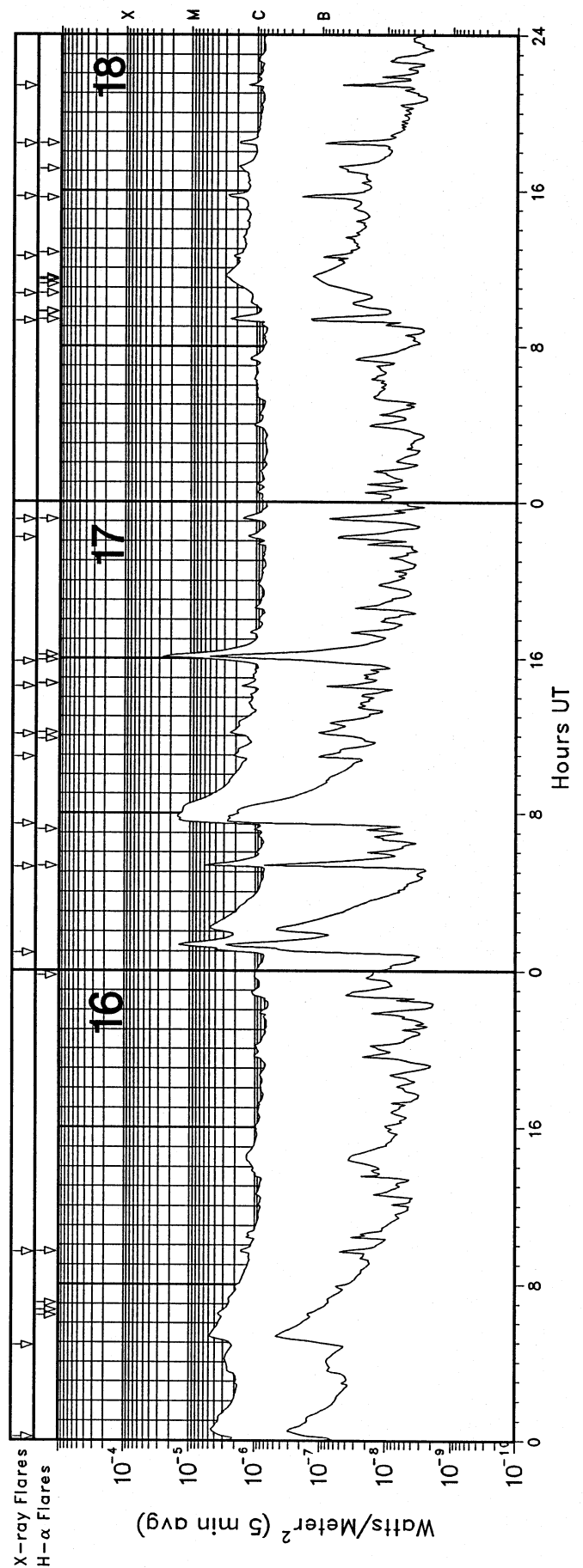
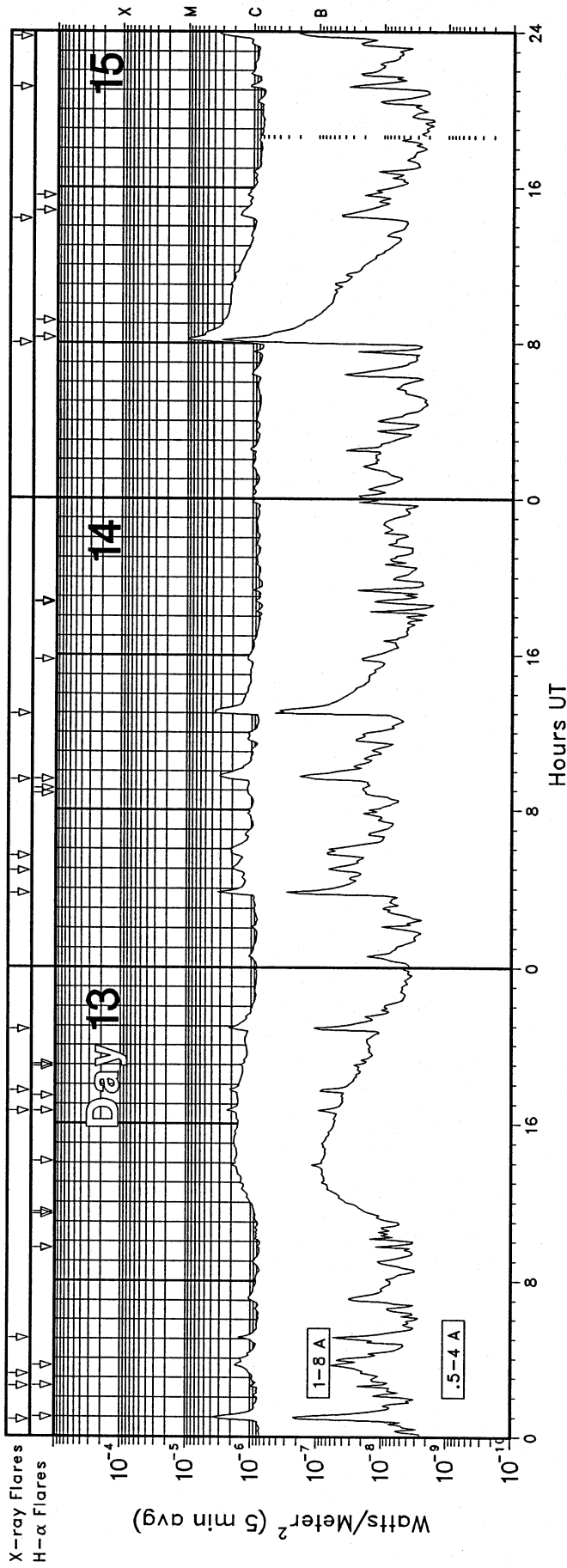
GOES X-RAY DETECTOR May 2002



GOES X-RAY DETECTOR May 2002

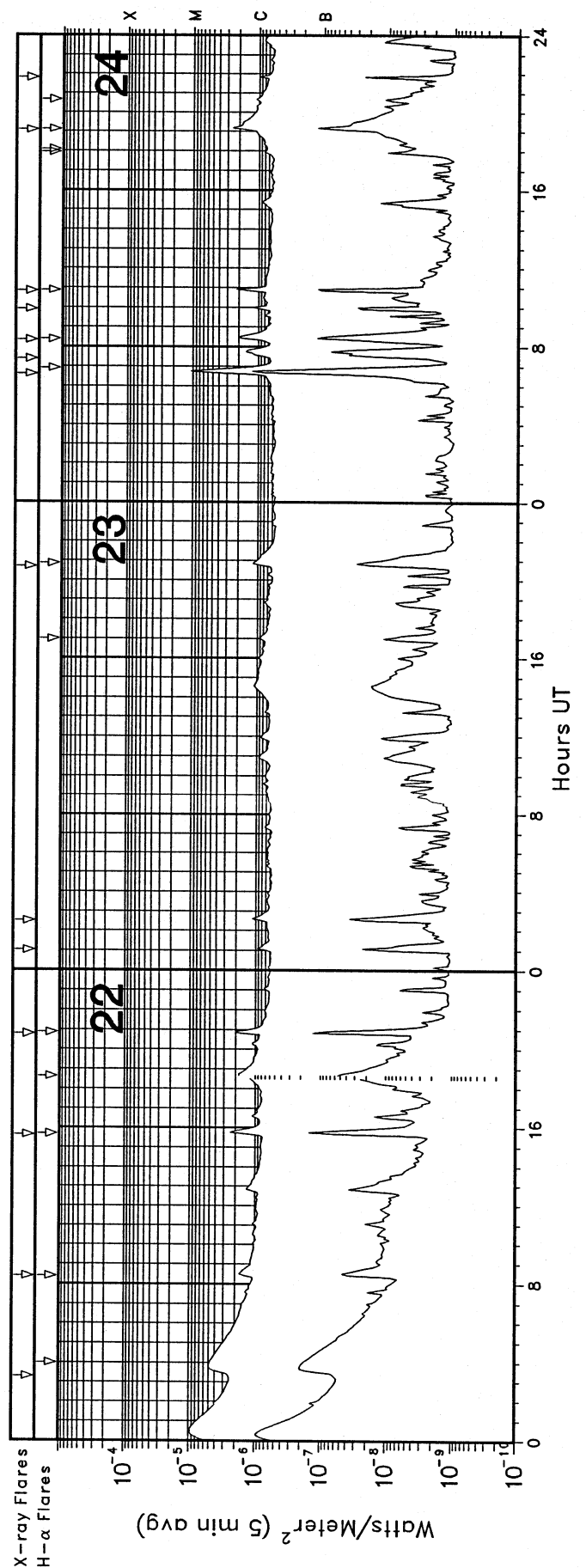
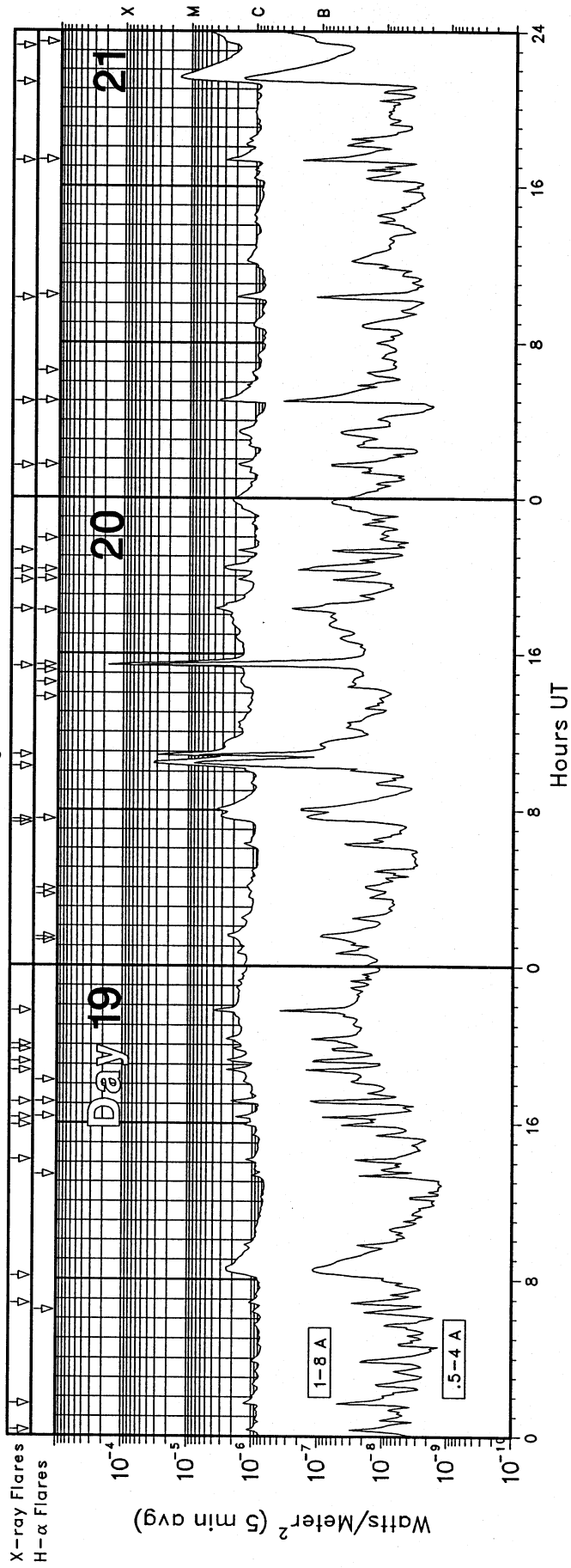


GOES X-RAY DETECTOR May 2002

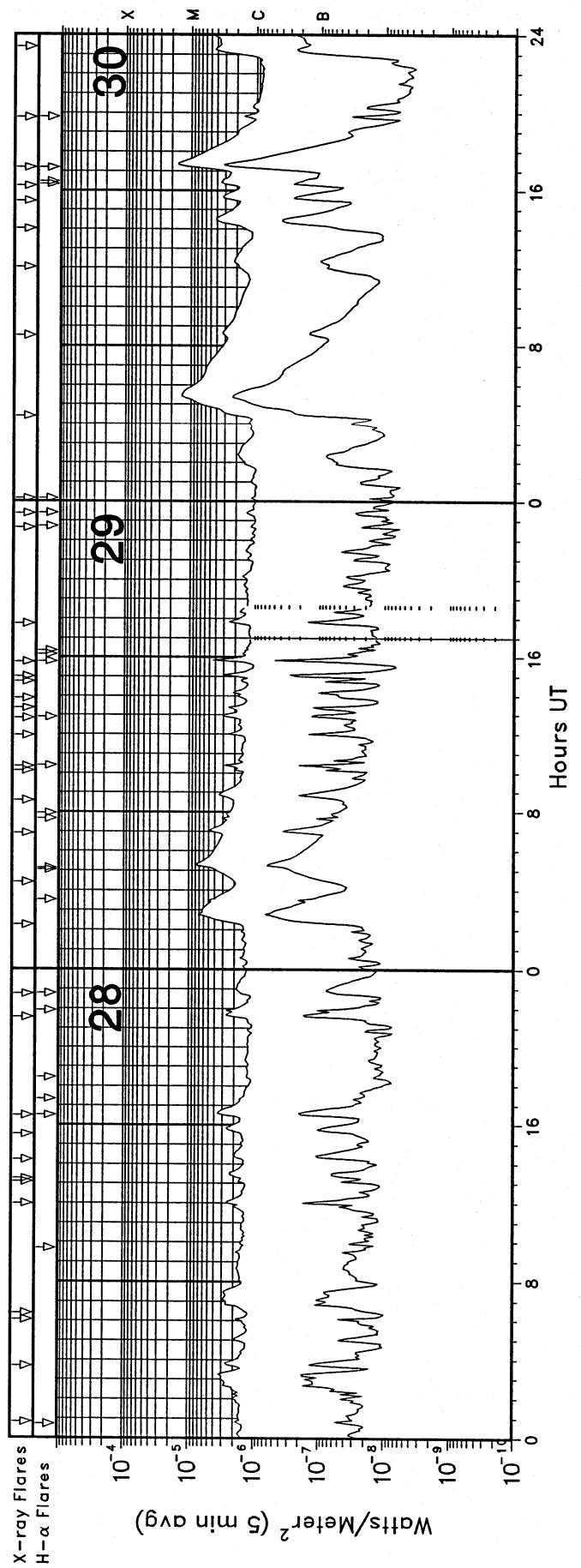
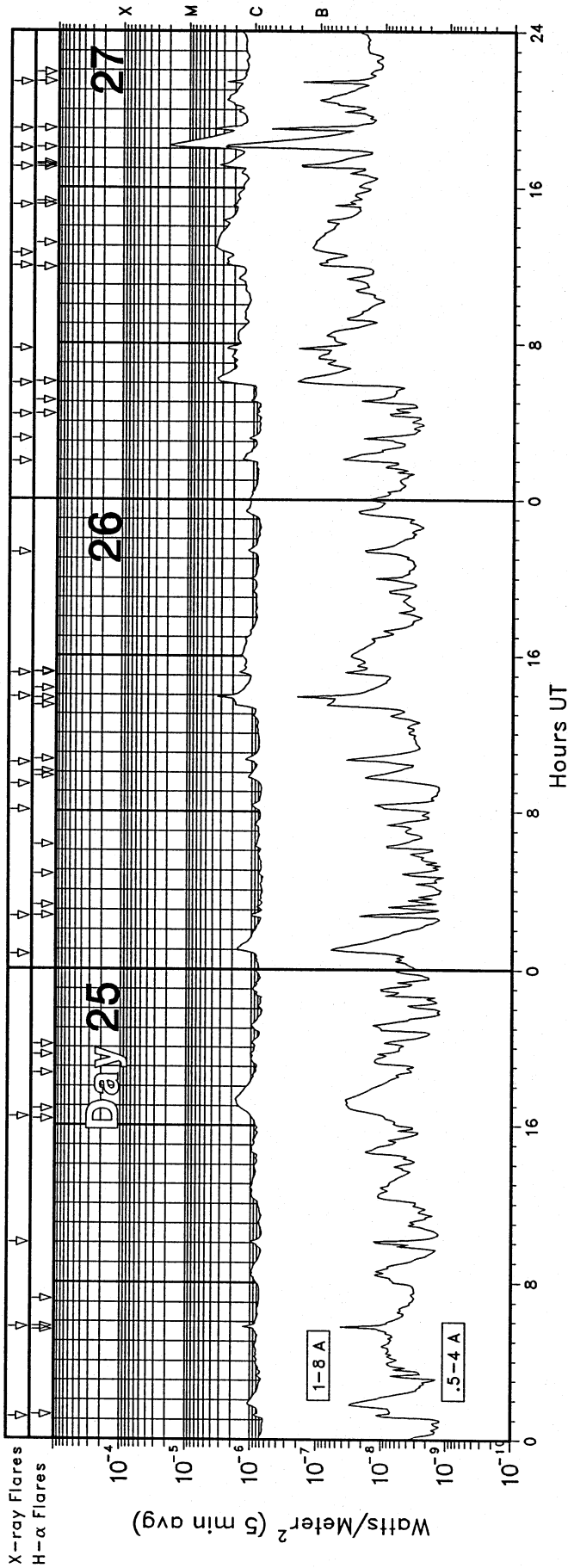


GOES X-RAY DETECTOR

May 2002

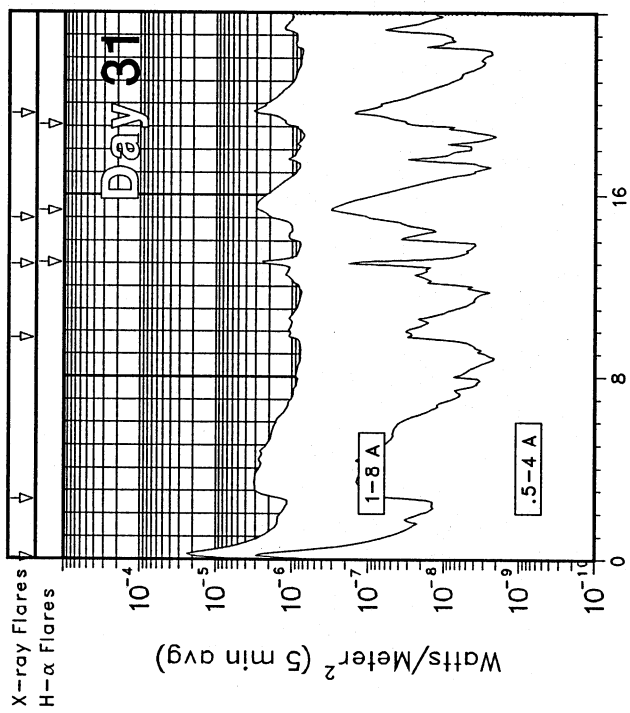


GOES X-RAY DETECTOR May 2002



GOES X-RAY DETECTOR

May 2002



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May 02

GOES SOLAR X-RAY FLARES
Preliminary Listing

May 2002

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
01	0339	0343	0346	N14	W56	SF	C2.3	9921	7.3E-04
01	0404	0419	0432	S28	E67	SF	C2.1	9932	3.0E-03
01	0547	0553	0600				C1.4		9.0E-04
01	0853	0856	0858	S26	E63	SF	C1.4	9932	3.2E-04
01	0957	1003	1017	S31	E65	SF	C2.4	9932	2.5E-03
01	1918	1926	1937				C1.8		1.9E-03
02	0256	0306	0320	N14	W40	SF	C1.1	9919	1.4E-03
02	0326	0332	0351				C1.6		2.2E-03
02	0902	0927	0934				C1.9		3.0E-03
02	1121	1126	1129				C3.0		9.5E-04
02	1444	1450	1455				C2.3		1.1E-03
02	2106	2134	2153	N14	W37	SF	C6.3	9926	1.5E-02
03	0354	0401	0404	S30	E39	SF	C2.0	9932	9.6E-04
03	0642	0647	0652	N16	W48	SF	C3.3	9926	1.4E-03
03	1802	1809	1817	S17	E50	1F	C3.9	9934	2.6E-03
03	2012	2020	2029				C5.4		3.8E-03
03	2114	2121	2127				C2.8		1.7E-03
03	2331	2335	2339				C3.2		1.1E-03
04	0245	0252	0302	S16	E46	SN	C7.8	9934	5.0E-03
04	0339	0345	0357	S17	E44	SF	C2.5	9934	2.5E-03
04	1019	1022	1029				C1.3		7.3E-04
04	1110	1115	1122	N16	E20	SF	C1.9	9928	1.3E-03
04	1309	1325	1338				C9.3	9937	1.0E-02
04	1853	1901	1909	S10	E63	SF	C2.0	9937	1.5E-03
04	2124	2129	2132				C1.4		6.0E-04
04	2143	2148	2153				C2.7		1.2E-03
04	2154	2158	2202				C3.6		1.4E-03
05	0507	0513	0519				C1.7		1.0E-03
05	0804	0808	0811	S20	E28	SF	C4.8	9934	1.3E-03
05	1214	1225	1230	S17	E28	SF	C3.0	9934	1.8E-03
05	1438	1446	1512	S10	E51	SF	C1.9	9937	3.4E-03
05	1807	1811	1814	S17	E22	SF	C1.6	9934	5.7E-04
05	1911	1914	1919	S12	E66	1F	C2.6	9943	9.6E-04
06	0226	0231	0247				C1.8		1.9E-03
06	1329	1405	1431	S20	W18	SF	C1.7	9935	5.0E-03
06	1554	1604	1621				C2.5		3.6E-03
06	2201	2204	2206				C1.7		4.3E-04
06	2353	0011	0041				C6.4		1.5E-02
07	0337	0346	0407				M1.4		1.7E-02
07	0800	0804	0808				C1.4		5.7E-04
07	0846	0852	0855				C2.8		1.1E-03
07	1237	1242	1247				C1.9		9.1E-04
07	1354	1358	1404				C1.1		6.4E-04
07	1815	1848	1907	S12	E42	SF	C1.1	9943	3.0E-03
07	2233	2245	2254	S21	W35	SF	C1.6	9935	1.5E-03
08	0426	0429	0431	S11	E16	SF	B6.8	9937	2.0E-04
08	0624	0628	0633	N16	E25	SF	C1.0	9940	5.2E-04
08	0937	0947	1001				C1.6		1.9E-03
08	1258	1327	1359	S12	W07	SF	C4.2	9934	1.2E-02
08	1439	1445	1453				C2.8		2.0E-03
08	1546	1552	1556				C2.3		1.3E-03
08	1704	1708	1711	S19	W17	SF	C1.1	9934	4.8E-04
08	2030	2035	2042				C1.9		1.1E-03
09	0021	0027	0035				C1.9		1.4E-03
09	0042	0047	0054				C2.4		1.4E-03
09	0647	0650	0655				B9.8		4.5E-04
09	0712	0715	0720	S09	W01	SF	B9.5	9937	4.2E-04

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
09	0756	0800	0806	S08	W03	SF	C1.4	9937	7.5E-04
09	1047	1051	1057	S09	E16	SF	C1.1	9943	5.9E-04
09	2001	2003	2005				C1.6		3.4E-04
10	0023	0039	0054	S07	E52	SF	C4.0	9946	5.8E-03
10	0551	0554	0556				C1.2		3.4E-04
10	0822	0827	0832				C1.8		1.0E-03
10	0936	0940	0942	S06	W18	SF	C3.9	9937	8.9E-04
10	1023	1027	1030	S07	W19	SF	C1.9	9937	6.9E-04
10	1235	1254	1302	S06	E44	SF	C1.6	9946	2.4E-03
10	1428	1432	1443	S07	W20	SF	C1.6	9937	1.3E-03
10	1706	1710	1716	S18	W43	SF	C1.2	9934	7.1E-04
10	2123	2128	2133	S13	W39	SF	C1.6	9934	8.1E-04
10	2150	2154	2157	S20	W43	SF	C1.1	9934	4.3E-04
10	2355	0000	0004	S20	W44	SF	C3.3	9934	1.3E-03
11	0036	0041	0045				C1.9		8.1E-04
11	0137	0142	0146				C2.3		8.9E-04
11	0244	0252	0256				C6.4		3.0E-03
11	0328	0332	0336				C1.6		6.8E-04
11	0435	0440	0444				C1.2		6.5E-04
11	0651	0656	0701				C3.6		1.6E-03
11	0736	0739	0743				C1.6		6.1E-04
11	1121	1132	1141	S06	W31	SF	M1.4	9937	9.9E-03
11	1645	1650	1654	S06	E48	SF	C2.7	9946	1.0E-03
11	1732	1738	1741	S17	W58	SF	C3.7	9934	1.2E-03
11	1832	1836	1837	S15	W57	SF	B9.7	9934	2.6E-04
11	2146	2150	2153				C1.5		6.2E-04
12	0100	0120	0140				C1.4		2.7E-03
12	0229	0316	0400				C2.2	9928	9.0E-03
12	0925	0953	1012				C3.7		6.5E-03
12	1446	1451	1500	S16	W64	SF	C1.2	9934	9.3E-04
12	1650	1653	1659	S16	W66	SF	C1.2	9934	5.9E-04
12	1935	1938	1941	S16	W72	SF	C1.0	9934	3.3E-04
12	1943	1957	2014				C1.4		2.2E-03
13	0051	0101	0109	S17	W77	SF	C3.9	9934	2.9E-03
13	0234	0237	0240	S04	E10	SF	C1.1	9946	3.6E-04
13	0310	0342	0352	S25	E47	SF	C1.8	9948	3.2E-03
13	0501	0507	0511				C1.5		8.2E-04
13	1637	1641	1647	S05	W01	SF	C2.3	9945	1.3E-03
13	1740	1745	1749				C2.3		1.1E-03
13	2049	2056	2103				C2.2		1.6E-03
14	0345	0350	0356				C3.6		1.8E-03
14	0453	0504	0516				C1.9		2.4E-03
14	0539	0603	0609				C2.2		3.4E-03
14	0932	0948	0959	S24	E35	SF	C3.2	9948	4.1E-03
14	1258	1303	1320				C4.2		4.3E-03
15	0800	0813	0825	S23	E23	SF	M1.0	9948	9.6E-03
15	1421	1438	1500				C1.6		3.1E-03
15	2108	2114	2120				C1.1		7.7E-04
15	2344	2359	0006				C3.5		3.6E-03
16	0011	0035	0118				C4.5		1.5E-02
16	0451	0521	0601				C5.0		1.5E-02
16	0939	0943	0950	S01	W47	SF	C1.7	9945	1.0E-03
17	0055	0123	0130				M1.5		1.4E-02
17	0516	0523	0528	N10	E70	2N	C7.0	9957	3.0E-03
17	0727	0754	0840				M1.5		5.2E-02
17	1054	1101	1123				C2.1		3.4E-03
17	1205	1213	1220	N13	E82	SF	C2.4		2.0E-03

GOES SOLAR X-RAY FLARES
 Preliminary Listing

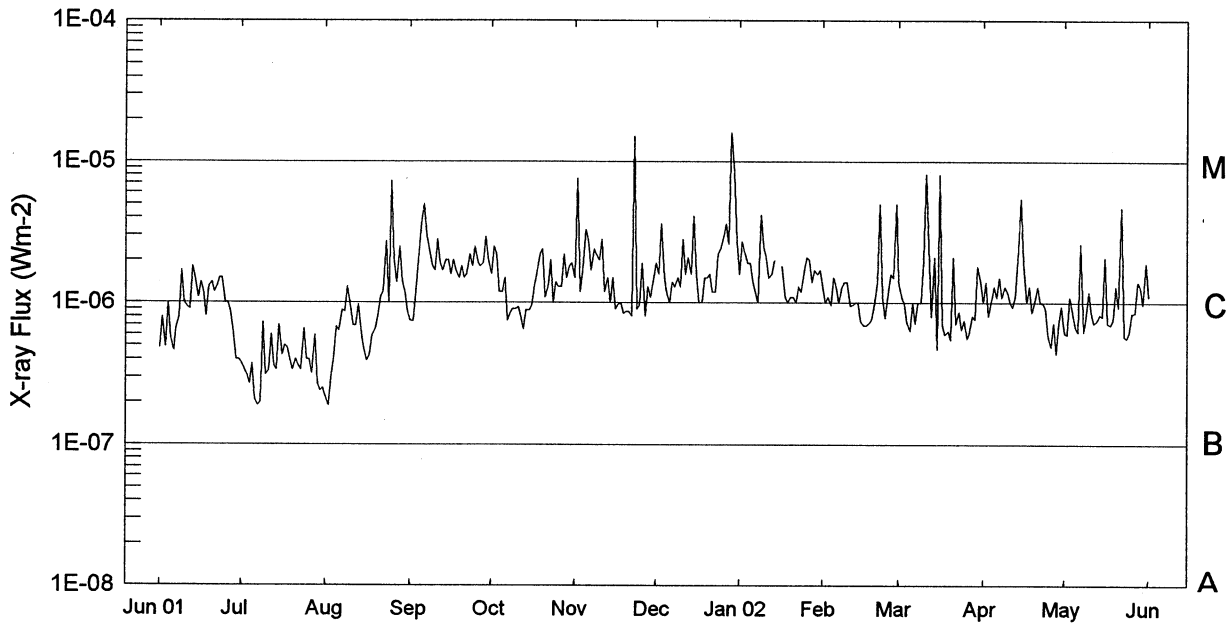
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 May 02

May 2002

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
17	1434	1437	1440				C1.8		5.7E-04
17	1550	1608	1614	S25	E47	SF	M2.9	9954	1.7E-02
17	2210	2215	2221				C1.3		8.2E-04
17	2306	2312	2320	N12	E63	SF	C1.6	9957	1.2E-03
18	0918	0925	0935	N12	E61	SF	C2.6	9957	2.0E-03
18	1042	1139	1209				C3.0	9955	1.1E-02
18	1236	1239	1242				C2.5		8.3E-04
18	1540	1544	1548	N11	E54	SF	C3.4	9957	1.4E-03
18	1824	1829	1833	N11	E53	SF	C2.2	9957	1.0E-03
18	2122	2126	2131				C1.4		6.3E-04
19	0017	0020	0023				C1.3		3.9E-04
19	0138	0143	0149				C1.4		8.0E-04
19	0646	0649	0659	N14	E45	SF	C1.1	9957	8.0E-04
19	0808	0834	0902				C2.5		6.1E-03
19	1407	1410	1412				C1.4		3.8E-04
19	1554	1558	1603				C1.4		6.8E-04
19	1618	1622	1624	N08	E37	SF	C2.3	9957	6.1E-04
19	1704	1711	1716	S22	E76	SF	C2.2	9961	1.3E-03
19	1841	1846	1849				C2.7		1.1E-03
19	1909	1914	1919				C3.1		1.3E-03
19	1946	1950	1954				C2.1		9.2E-04
19	2001	2023	2027				C2.8		3.0E-03
19	2143	2148	2152				C4.7		1.9E-03
20	0719	0733	0734				C2.2		1.1E-03
20	0729	0805	0814	S23	E74	SF	C3.9	9961	7.6E-03
20	1014	1029	1034				M4.7	9961	2.5E-02
20	1049	1053	1056				M5.0	9961	1.2E-02
20	1521	1527	1531	S21	E65	2N	X2.1	9961	6.5E-02
20	1815	1820	1825	S23	E67	1F	C4.1	9961	2.1E-03
20	1946	1951	1956	S24	E70	SF	C1.8	9961	9.8E-04
20	2017	2024	2037	S21	E62	SF	C3.0	9961	3.0E-03
20	2116	2120	2124				C2.0		7.9E-04
21	0139	0144	0148	S24	E58	SF	C2.2	9961	9.3E-04
21	0458	0503	0510	N15	E44	SF	C4.8	9960	2.2E-03
21	1015	1021	1029	N12	E29	SF	C1.9	9960	1.3E-03
21	1717	1723	1730	N11	E69	SF	C3.2	9963	1.8E-03
21	2120	2139	2200	N17	E38	2F	M1.5	9960	2.4E-02
21	2314	0030	0128				C9.7		5.0E-02
22	0318	0354	0502				C5.0		2.5E-02
22	0824	0831	0848				C1.7		2.2E-03
22	1539	1547	1555	S23	E44	SF	C2.5	9961	1.8E-03
22	2048	2054	2059	S23	E40	SF	C2.4	9961	1.2E-03
23	0101	0106	0114				B9.5		6.6E-04
23	0230	0235	0243				C1.1		7.7E-04
23	2042	2051	2110	N11	E38	SF	C1.2	9963	1.7E-03
24	0637	0646	0651				M1.1		5.6E-03
24	0723	0740	0757				C1.3		2.3E-03
24	0821	0828	0838	N18	E35	SF	C2.0	9963	1.7E-03
24	0955	0959	1004				C1.3		5.8E-04
24	1050	1055	1058				C2.9		9.4E-04
24	1905	1911	1921				C2.6	9963	2.0E-03
24	2149	2151	2153				C1.1		2.4E-04
25	0108	0115	0119	N16	W25	SF	B9.3	9957	5.2E-04
25	0543	0547	0550	N12	W09	SF	C1.3	9960	5.0E-04
25	1001	1004	1007				C1.1		3.7E-04
25	1625	1721	1818	S18	W13	SF	C1.7	9961	9.1E-03
26	0045	0106	0122				C1.6		2.9E-03
26	0239	0244	0250	N15	E07	SF	C1.1	9963	6.5E-04

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
26	0804	0821	0828				C1.0		1.3E-03
26	0922	0946	1011				C1.1		2.8E-03
26	1029	1043	1053				C1.3		1.5E-03
26	1353	1356	1358	S23	W11	SF	C4.4	9961	9.8E-04
26	1506	1510	1514	N03	E57	SF	C1.7	9969	7.1E-04
26	2117	2125	2134				C1.2		1.1E-03
27	0157	0208	0226				C1.4		2.2E-03
27	0308	0312	0316				C1.1		5.2E-04
27	0421	0425	0428	S20	W23	SF	B9.7	9961	3.8E-04
27	0557	0615	0634	N09	W65	SF	C3.5	9957	6.5E-03
27	0744	0749	0753				C2.8		1.3E-03
27	1158	1206	1232				C2.7		4.9E-03
27	1236	1259	1351				C3.7		1.5E-02
27	1505	1508	1510	N06	W68	SF	C2.4	9957	6.3E-04
27	1703	1711	1715				C4.0	9957	2.1E-03
27	1800	1810	1823	N11	W69	2F	M2.0	9957	1.9E-02
27	1900	1904	1906	S17	E90	SF	C7.5		1.7E-03
27	2123	2126	2128	S17	E90	SF	C3.4		7.8E-04
28	0049	0052	0054	S17	E90	SF	C2.1		5.5E-04
28	0341	0349	0359				C2.7		2.6E-03
28	0604	0607	0609				C2.2		5.5E-04
28	0624	0709	0745				C2.9		1.1E-02
28	1159	1203	1209				C2.8		1.5E-03
28	1305	1308	1311				C2.0		6.2E-04
28	1315	1335	1341				C2.3		3.2E-03
28	1413	1428	1445				C2.0		3.5E-03
28	1531	1550	1603				C2.6		4.0E-03
28	1629	1635	1649	N06	W82	SF	C3.6	9957	3.9E-03
28	2133	2156	2201	N12	W30	SF	C2.9	9963	3.9E-03
28	2245	2259	2331	S18	E78	SF	C1.8	9973	4.7E-03
29	0215	0246	0322				C8.6		2.0E-02
29	0425	0519	0542	S20	E53	SF	C8.1	9972	2.0E-02
29	0655	0706	0716				C4.7		5.2E-03
29	0835	0854	0906				C3.5		5.2E-03
29	1008	1011	1018				C2.1		1.1E-03
29	1021	1026	1030	S19	E66	SF	C3.4	9973	1.4E-03
29	1157	1201	1209				C2.4		1.5E-03
29	1251	1300	1307	N17	W65	SF	C3.3	9960	2.6E-03
29	1322	1326	1329				C2.6		1.0E-03
29	1353	1412	1419				C2.1		2.8E-03
29	1445	1449	1453				C1.8		7.8E-04
29	1500	1505	1510				C3.3		1.5E-03
29	1546	1551	1554	S17	E64	SN	C5.9	9973	1.6E-03
29	1745	1751	1800				C2.5		1.9E-03
29	2239	2244	2246	S17	E61	SF	C1.2	9973	4.8E-04
29	2323	2325	2328	S18	E59	SF	C1.4	9973	4.1E-04
30	0009	0011	0015	S18	E59	SF	C1.2	9973	4.1E-04
30	0424	0532	0613				M1.3		5.4E-02
30	0832	0841	0849				C3.2		3.2E-03
30	1203	1218	1238				C2.2		4.3E-03
30	1401	1432	1458				C4.1		1.0E-02
30	1528	1540	1555				C3.3		4.5E-03
30	1614	1626	1644				C3.5	9972	5.4E-03
30	1711	1724	1739	S16	E49	SF	M1.6	9973	2.2E-02
30	1946	1950	1955	N12	W48	SF	C1.6	9963	7.8E-04
30	2323	2325	2328				C1.4		1.2E-03
31	0004	0016	0025				M2.4		2.2E-02
31	0237	0321	0506				C3.1		2.4E-02
31	0943	0948	0951				C1.1		5.0E-04
31	1257	1305	1309	S18	E36	SF	C2.7	9973	1.6E-03
31	1459	1524	1553	S17	E37	SF	C3.0	9973	8.3E-03
31	1933	1940	1951				C3.2		3.1E-03

Preliminary GOES Satellite Daily X-Ray Background Jun 2001 - May 2002



Day	Jun 01	Jul	Aug	Sep	Oct	Nov	Dec	Jan 02	Feb	Mar	Apr	May
1	B4.8	B3.8	B2.2	B7.5	C1.6	C1.5	C1.9	C1.6	C1.3	C1.4	C1.0	C1.9
2	B7.9	B3.4	B1.9	B7.4	C2.5	C7.5	C1.6	C2.7	C1.0	C1.1	C1.4	C1.2
3	B4.9	B3.1	B3.0	C1.2	C2.2	C1.2	C3.6	C2.3	C1.1	B9.8	B8.1	C1.3
4	C1.0	B2.7	B4.1	C2.0	C1.2	C1.7	C1.5	C1.9	B9.6	B7.3	C1.0	C1.5
5	B5.6	B3.7	B6.8	C3.7	C1.2	C3.3	C1.2	C1.9	C1.5	B6.4	C1.3	B9.5
6	B4.6	B2.1	B6.4	C5.0	C1.5	C2.7	C1.0	C1.4	C1.3	B9.9	C1.1	B8.0
7	B6.6	B1.9	B8.9	C3.0	B7.5	C1.7	C1.4	C1.2	C1.0	B7.2	C1.5	B6.8
8	B7.9	B2.0	B8.7	C2.4	B8.4	C2.4	C1.3	C1.0	C1.3	C1.0	C1.1	B5.5
9	C1.7	B7.3	C1.3	C1.8	B9.1	C2.2	C1.5	C4.2	C1.4	C1.0	C1.3	B6.8
10	C1.0	B3.1	C1.0	C1.7	B9.0	C2.0	C1.3	C2.5	C1.4	C2.0	C1.2	B8.0
11	B9.3	B3.3	B6.9	C2.8	B9.3	C2.8	C2.8	C2.1	B9.5	C8.1	C1.0	B8.5
12	B9.0	B6.0	B6.9	C1.9	B8.0	C1.2	C1.6	C1.5	B9.6	C2.5	B9.3	B8.9
13	C1.8	B3.6	B9.7	C1.7	B6.5	C1.5	C2.1	C1.6	C1.0	B8.0	C1.1	B9.3
14	C1.5	B3.4	B5.9	C2.0	B8.9	C1.0	C1.6	C2.0	C1.0	C2.1	C2.4	C1.2
15	C1.1	B7.0	B4.8	C2.0	B8.9	C1.5	C4.1	*	B7.4	B4.7	C5.4	C1.1
16	C1.4	B4.3	B3.9	C1.6	B9.5	B9.1	C1.6	*	B6.9	C8.0	C1.9	C1.6
17	C1.2	B5.0	B4.3	C2.0	C1.3	B9.8	C1.0	C1.8	B6.9	B7.0	C1.0	C1.9
18	B8.1	B4.8	B5.9	C1.7	C1.6	B9.9	C1.0	C1.1	B7.2	B6.0	C1.3	C1.6
19	C1.3	B3.8	B6.5	C1.5	C2.2	B8.4	C1.5	C1.0	B7.6	B6.3	B8.6	C1.7
20	C1.4	B3.4	B8.1	C1.8	C2.4	B8.7	C1.5	C1.1	B9.5	B5.5	C1.0	C1.5
21	C1.2	B4.0	C1.1	C1.5	C1.1	B8.7	C1.6	C1.1	C1.4	C2.1	C1.3	C1.8
22	C1.3	B3.6	C1.2	C1.6	C1.3	B8.1	C1.2	C1.0	C5.0	B7.1	C1.0	C1.9
23	C1.5	B3.4	C2.7	C2.2	C2.0	M1.5	C1.2	C1.3	C1.1	B8.6	B9.9	C1.7
24	C1.5	B6.6	C1.0	C1.8	C1.0	B9.0	C2.2	C1.2	B7.8	B6.5	B9.2	C3.0
25	C1.0	B4.0	C7.2	C2.5	C1.4	B9.6	C2.4	C1.7	C1.2	B7.5	B5.9	C1.1
26	C1.0	B4.0	C2.0	C1.9	C1.3	C1.9	C2.9	C2.1	C1.6	B5.6	B4.9	C3.5
27	B8.8	B3.2	C1.4	C1.8	C1.3	B8.1	C3.6	C2.0	C1.5	B6.1	B7.2	B7.4
28	B6.5	B5.9	C2.5	C1.9	C2.2	C1.3	C2.6	C1.4	C5.0	B8.1	B4.4	C1.0
29	B4.0	B2.7	C1.4	C2.9	C1.5	C1.1	M1.6	C1.7		B7.7	B7.1	C2.3
30	B4.0	B2.4	C1.2	C2.0	C1.8	C1.4	C8.4	C1.6		C1.8	B9.4	C1.3
31		B2.5	B8.7		C1.9		C2.7	C1.7		C1.4		C1.3

NOTE: * = Data not available.

ACTIVE PROMINENCES AND FILAMENTS

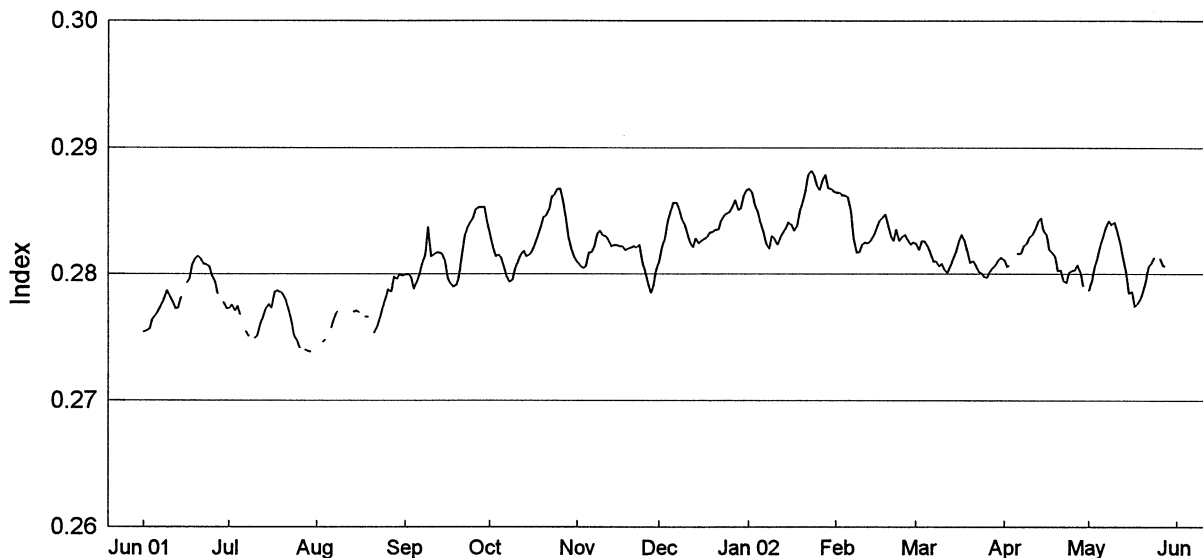
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May 02

MAY 2002

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
01	DSF	0922U	2357U	S10	E47	05	4.9		10	0	0	E	LEAR		
01	DSF	1202	1242	S16	W45	04	28.2		12	0	0	E	SVTO		
01	DSF	2320U	1326U	S15	E58	05	6.4		20	0	0	E	HOLL		
02	CAP	0839E	1142D	S19	E90			2	6			P	WROC		
02	DSF	2038U	2102U	N19	W42	04	29.7	3	07	0	0	E	HOLL	9926	
04	DSF	1618U	1201U	S15	W01	05	4.6		09	0	0	E	SVTO		
06	APR	0812E	0950	S14	E90	05	13.2	2	12	9	9	V	KHAR		
06	EPL	0905	0943D	S15	E90			1	7			P	WROC		
06	APR	0915U	0955D	S10	E90	05	13.2	1	04	9	9	V	KHAR		
06	APR	1042E	1115D	S17	E90	05	13.3	1	12	9	9	V	KHAR		
07	EPL	0002E	0259	S39	W90	04	29.8	3		9	8	E	LEAR		
07	APR	0838E	1208D	S23	E90			1	10			P	WROC		
07	APR	0843E	1217D	S42	W90			1	13			P	WROC		
08	APR	0818E	0955D	S45	E90			2	7			P	WROC		
08	EPL	0941E	0955D	S13	E90			2	16			P	WROC		
08	DSD	0950U	1018	S19	W14	05	7.3	1	06	9	9	V	KHAR		
08	APR	1036U	1225D	S30	W90	05	1.6	2	05	9	9	V	KHAR		
09	DSD	1140U	1215D	N02	E44	05	12.8	1	04	9	9	V	KHAR		
10	ADF	1106	1130	S18	E28	05	12.6	1	06	9	9	V	KHAR		
11	DSF	1501U	0500U	S30	E11	05	12.5		17	0	0	E	SVTO		
12	EPL	0310E	0334	N17	W90	05	5.3	3		8	9	E	LEAR	9928	
12	ADF	1055E	1225	S10	E18	05	13.8	2	11	9	9	V	KHAR		
12	DSD	1135	1148	S14	W22	05	10.8	1	03	9	9	V	KHAR		
13	DSF	0101U	1720U	N16	E43	05	16.3		17	0	0	E	HOLL		
13	APR	0845E	0902	S27	W90	05	6.5	1	04	9	9	V	KHAR		
13	ADF	0845E	0915	S22	E48	05	17.0	1	05	9	9	V	KHAR		
13	DSD	0903	0912	S14	E48	05	17.0	1	03	9	9	V	KHAR		
13	DSD	0944	0954	S14	E42	05	16.6	1	06	9	9	V	KHAR		
14	APR	0832E	1126D	S41	E90			1	6			P	WROC		
14	BSL	0849E	0910	S21	E90			1	6			P	WROC		
14	ADF	0850E	0930D	S14	E34	05	16.9	2	16	9	6	V	KHAR		
14	ADF	0902U	0930D	S17	E53	05	18.4	1	05	9	9	V	KHAR		
15	DSF	0026U	1314U	N46	E26	05	17.2		07	0	0	E	HOLL		
15	EPL	0824E	1055	N46	W90			2	27			P	WROC		
15	DSF	1919U	1107U	N51	E20	05	17.5		14	0	0	E	RAMY		
16	DSF	0553	0710U	N48	E31	05	18.8	3	06	0	0	E	SVTO		
17	DSF	0102U	1252U	S32	E48	05	20.8		14	0	0	E	HOLL		
17	DSF	0517	0732	S31	E36	05	20.1	3	10	0	0	E	SVTO		
17	EPL	0827E	1224D	N15	E90			1	8			P	WROC		
17	APR	1153E	1304D	N13	E90			1	3			P	WROC		
19	APR	0834E	0843D	N10	W90			1	6			P	WROC		
19	DSF	1717U	0526U	N00	E09	05	20.4		13	0	0	E	SVTO		
21	DSF	0117U	1255U	S21	W52	05	17.1		23	0	0	E	HOLL		
21	DSF	1716U	0400U	S27	W38	05	18.7		36	0	0	E	SVTO		
21	DSF	1929U	1135U	S30	W34	05	19.1		43	0	0	E	RAMY		
23	DSF	1921U	1050U	S20	W47	05	20.2		08	0	0	E	RAMY		
24	DSF	0717U	0007U	S33	W41	05	21.0		15	0	0	E	LEAR		
24	ADF	1030E	1110D	S30	W15	05	23.3	2	10	9	9	V	KHAR		
26	DSD	0845E	0905	N10	E62	05	31.1	1	03	9	9	V	KHAR		
26	DSF	0850U	2356U	S25	E32	05	28.8		12	0	0	E	LEAR		
26	ADF	1002	1010	N19	E02	05	26.6	1	08	9	9	V	KHAR		

NOAA Solar Ultraviolet (UV) MgII Core-to-Wing Index

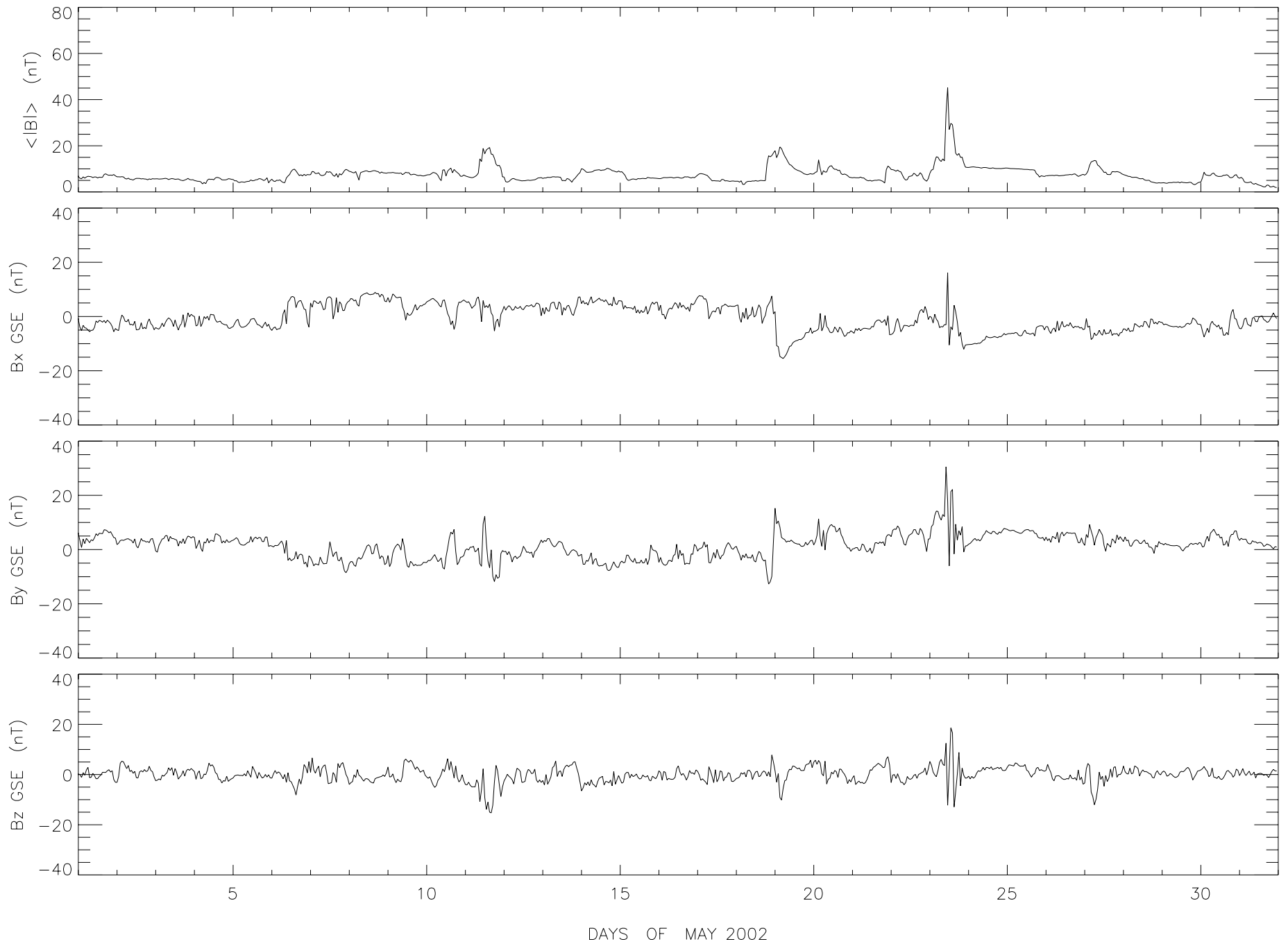
Jun 2001 - May 2002
Version 9.1



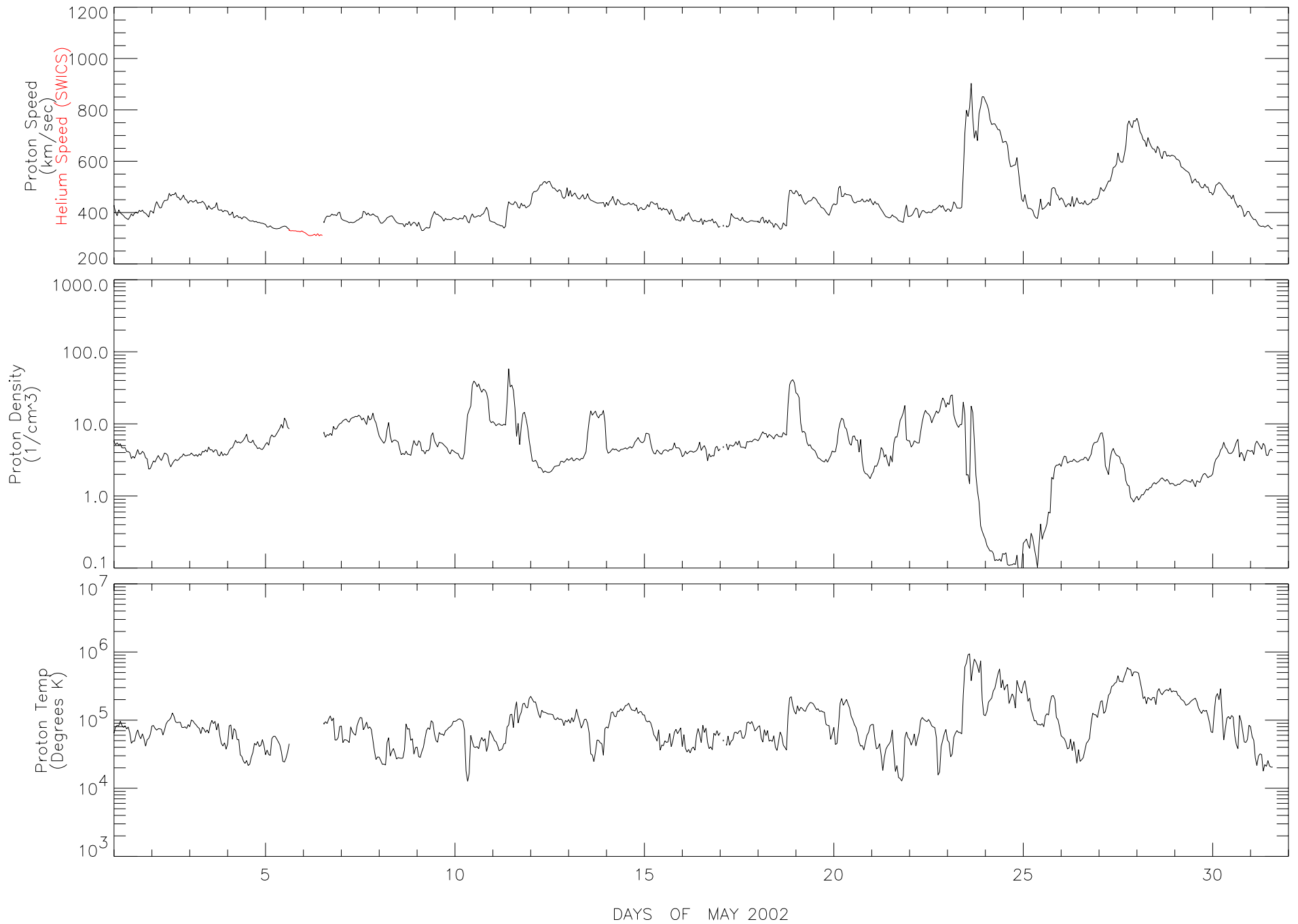
Day	Jun 01	Jul	Aug	Sep	Oct	Nov	Dec	Jan 02	Feb	Mar	Apr	May
1	0.2754	0.2773	0.2738	0.2800	0.2831	0.2809	0.2821	0.2868	0.2865	0.2824	0.2811	0.2787
2	0.2755	0.2775	---	0.2800	0.2822	0.2807	0.2828	0.2865	0.2865	0.2819	0.2806	0.2795
3	0.2756	0.2771	0.2746	0.2797	0.2814	0.2805	0.2841	0.2855	0.2863	0.2826	0.2807	0.2806
4	0.2764	0.2774	0.2748	0.2788	0.2815	0.2806	0.2850	0.2849	0.2863	0.2826	---	0.2812
5	0.2767	0.2767	---	0.2794	0.2813	0.2817	0.2857	0.2841	0.2861	0.2822	---	0.2823
6	0.2770	---	0.2757	0.2800	0.2805	0.2817	0.2857	0.2833	0.2849	0.2817	0.2816	0.2829
7	0.2775	0.2754	0.2764	0.2808	0.2798	0.2821	0.2851	0.2824	0.2828	0.2810	0.2816	0.2836
8	0.2780	0.2750	0.2770	0.2815	0.2794	0.2832	0.2844	0.2820	0.2817	0.2810	0.2822	0.2842
9	0.2787	---	---	0.2837	0.2795	0.2834	0.2839	0.2830	0.2817	0.2806	0.2824	0.2839
10	0.2783	0.2749	---	0.2814	0.2804	0.2831	0.2832	0.2828	0.2823	0.2808	0.2829	0.2841
11	0.2779	0.2751	---	0.2815	0.2810	0.2830	0.2825	0.2823	0.2825	0.2803	0.2831	0.2834
12	0.2773	0.2759	---	0.2817	0.2815	0.2827	0.2821	0.2828	0.2824	0.2801	0.2835	0.2824
13	0.2773	0.2766	---	0.2817	0.2818	0.2822	0.2828	0.2832	0.2826	0.2807	0.2842	0.2813
14	0.2782	0.2772	0.2770	0.2816	0.2814	0.2823	0.2824	0.2836	0.2830	0.2812	0.2844	0.2801
15	---	0.2776	0.2771	0.2810	0.2815	0.2823	0.2826	0.2841	0.2835	0.2817	0.2834	0.2785
16	0.2793	0.2773	0.2769	0.2797	0.2818	0.2822	0.2828	0.2839	0.2842	0.2826	0.2831	0.2786
17	0.2796	0.2786	---	0.2792	0.2823	0.2822	0.2829	0.2834	0.2844	0.2831	0.2819	0.2774
18	0.2807	0.2787	0.2766	0.2790	0.2830	0.2819	0.2833	0.2838	0.2847	0.2827	0.2817	0.2776
19	0.2812	0.2786	0.2766	0.2791	0.2836	0.2820	0.2833	0.2850	0.2840	0.2818	0.2814	0.2780
20	0.2814	0.2784	---	0.2798	0.2845	0.2821	0.2835	0.2856	0.2830	0.2809	0.2803	0.2786
21	0.2812	0.2780	0.2753	0.2816	0.2846	0.2822	0.2835	0.2867	0.2826	0.2810	0.2803	0.2793
22	0.2808	0.2771	0.2758	0.2830	0.2851	0.2821	0.2842	0.2879	0.2835	0.2807	0.2795	0.2806
23	0.2808	0.2763	0.2765	0.2836	0.2862	0.2823	0.2846	0.2882	0.2826	0.2802	0.2793	0.2808
24	0.2806	0.2751	0.2773	0.2841	0.2863	0.2808	0.2848	0.2879	0.2829	0.2801	0.2801	0.2813
25	0.2799	0.2747	0.2781	0.2844	0.2868	0.2802	0.2849	0.2870	0.2831	0.2798	0.2803	---
26	0.2794	0.2741	0.2788	0.2851	0.2868	0.2793	0.2853	0.2867	0.2827	0.2797	0.2803	0.2812
27	0.2784	---	0.2786	0.2853	0.2859	0.2785	0.2859	0.2875	0.2823	0.2802	0.2807	0.2807
28	---	0.2740	0.2798	0.2853	0.2844	0.2791	0.2851	0.2879	0.2825	0.2805	0.2801	0.2806
29	0.2777	0.2739	0.2796	0.2853	0.2829	0.2803	0.2852	0.2869		0.2807	0.279	---
30	0.2773	0.2738	0.2800	0.2842	0.2819	0.2810	0.2861	0.2868		0.2811	0.2786	---
31		---	0.2799		0.2813		0.2867	0.2866		0.2813	---	---
Mean	0.2785	0.2764	0.2771	0.2817	0.2827	0.2816	0.2841	0.2851	0.2836	0.2812	0.2814	0.2808

Data at: <http://www.sec.noaa.gov/ftpmenu/sbuv.html>

Interplanetary Magnetic Field
ACE LEVEL2 DATA Hourly Averages for MAY 2002, from MAG



Solar Wind Plasma
ACE LEVEL2 DATA Hourly Averages for MAY 2002, from SWEPAM



Solar Energetic Particles
ACE LEVEL2 DATA Hourly Averages for MAY 2002

