

OCTOBER 2003 NUMBER 710 - Part II



Solar-Geophysical Data comprehensive reports

Data for April 2003 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**

NGDC On-Line Addresses:

World-Wide Web	http://www.ngdc.noaa.gov
Gopher	gopher.ngdc.noaa.gov
Anonymous FTP:	ftp.ngdc.noaa.gov

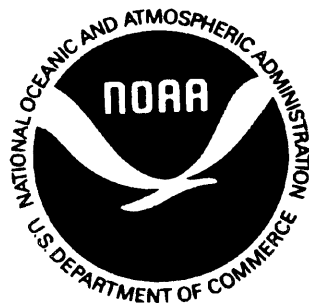
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NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL SATELLITE,
DATA, AND INFORMATION SERVICE

NATIONAL GEOPHYSICAL
DATA CENTER

BOULDER,
COLORADO



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Data for April 2003 and Late Data

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Christopher G. Fox, Acting Director

Boulder, Colorado

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SOLAR-GEOPHYSICAL DATA

Number 710

(Issued in Two Parts)

Editor: Helen E. Coffey

Chief: Herbert W. Kroehl
Solar-Terrestrial Physics Division

Staff: Edward H. Erwin

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

DETAILED INDEX OF OBSERVATIONS PUBLISHED IN SOLAR-GEOPHYSICAL DATA

CODE	KIND OF OBSERVATION	FEB 03	MAR	APR	MAY	JUN	JUL	AUG	SEP
A. SOLAR AND INTERPLANETARY									
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A.2c	American Sunspot Numbers	703A 25	704A 28	705A 25	706A 25	707A 24	708A 26	709A 26	710A 24
A.3a	Mt. Wilson Magnetograms	704A 52	705A 43	706A 46	707A 48	708A 48	709A 44	710A 42	
A.3b	Sunspot Mag Class and Regions	704A 87	705A 77	706A 86	707A 89	708A 88	709A 85	710A 83	
A.3c	Kitt Peak Magnetograms	704A 52	705A 43	706A 46	707A 48	708A 48	709A 44	710A 42	
A.3d	Mean Solar Magnetic Field (Stanford)	703A 34	704A 38	705A 36	706A 36	707A 38	708A 38	709A 34	710A 32
A.3e	Stanford Magnetograms	704A 52	705A 43	706A 46	707A 48	708A 48	709A 44	710A 42	
A.4	H-alpha Filtergrams	704A 52	705A 43	706A 46	707A 48	708A 48	709A 44	710A 42	
A.5d	PhotometricCa II FaculaeSanFernando	Jan 92-Dec 96 - 631B 22; 1997-1998 in 663B 66							
A.6c	Stanford Solar Mag Field Synoptic Map	704A 42	705A 40	706A 40	707A 42	708A 42	709A 38	710A 36	
A.6d	Kitt Peak Solar Mag Field Synoptic Map	704A 46	705A 42	706A 45	707A 47	708A 47	709A 43	710A 41	
A.6f	Active Prominences and Filaments	708B 25	709B 33	710B 34					
A.6g	Sac Peak Coronal Line Synoptic Maps	704A 46		706A 42	707A 44	708A 44	709A 40	710A 38	
A.6h	Photometric White Light SanFernando	Jul-Dec 96 630B 32; 1997-1998 in 663B 51							
A.7h	Coronal Line Emission (Sac Peak)	704A 52	705A 43	706A 46	707A 48	708A 48	709A 44	710A 42	
A.7j	Coronal Hole Daily Maps (NSO/KP)	704A 80	705A 74	706A 76	707A 79	708A 78	709A 75	710A 73	
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A.8ac	2800 MHz- Adj. Solar Flux (Penticton)	703A 25	704A 28	705A 25	706A 25	707A 24	708A 26	709A 26	710A 24
A.8g	Adjusted Daily Solar Fluxes Sagamore	703A 25	704A 28	705A 25	706A 25	707A 24	708A 26	709A 26	710A 24
A.10g	Nancay Radioheliograph-164&327MHz	704A109	705A119	706A126	707A117	708A131	709A122	710A114	
A.10h	Nobeyama Radioheliograph -17 GHz	704A 82	705A 77	706A 81	707A 83	708A 83	709A 79	710A 77	
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A.11l	Solar UV NIMBUS7	Nov 78-Oct 84 in 542B 82							
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A.11o	Solar UV SUSIM (UARS)	Oct 91-Jan 97 in 629B 30							
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A.12g	Solar Particles (GOES-7)	703A 4	704A 4	705A 4	706A 4	707A 4	708A 4	709A 4	710A 4
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A.16d	UARS Solar Irradiance	Oct 91-May 2001 684B 26 - Complete Mission							
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C.1d	Flare Patrol Observations	708B 10	709B 10	710B 10					
C.1h	H-alpha Flare Index (ImpxDur)	Jan 76-Dec 85 in 639B 26; Jan 86-Oct 96 in 635B 24; Jan 96-Dec 98 in 665B 63							
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Apr 03

H α SOLAR FLARES

APRIL 2003

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/USAF		CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
								Region	Mo								Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0001	HOLL	01	0001	0003	0015	S12	W50	10318	03	28.3	14	SF			3	E		10		F
			01 0140		0201			No Flare Patrol												
			01 0346		0557			No Flare Patrol												
0002	KANZ	01	0807	0808	0810	S18	W52	10318	03	28.5	3	SF			2	E				
0003	KANZ	01	0959	1000	1005	S11	E02	10324	04	1.6	6	SF			2	E				
0004	HOLL	01	1436	1437	1512	S14	W56	10318	03	28.5	36	SF			3	E		68		F
0005		01	14361	14441	1456	S13	W58	10318	03	28.3	20	1F						58		F
	KANZ	01	1436	1444	1459	S13	W57	10318	03	28.4	23	1F			2	E				
	RAMY	01	1437	1445	1454	S13	W59	10318	03	28.2	17	SF			3	E		58		F
0006	VORO	02	0012	0014	0023	S12	E07		04	2.5	11	SF			3	C	0014	134	1.4	
0007	HOLL	02	0012	0014	0020	S12	W07	10324	04	1.5	8	SF			3	E		45		
			02 0119		0455			No Flare Patrol												
			02 0706		0850			No Flare Patrol												
0008	SVTO	02	1129	1131	1138	S11	W14	10324	04	1.4	9	SF			3	E		19		
0009	SVTO	02	1511	1512U	1529	S10	W16	10324	04	1.4	18	SF			3	E		40		F
0010	HOLL	02	1527	1528U	1548	S11	W14	10324	04	1.6	21	SF			3	E		31		
			02 1848		2027			No Flare Patrol												
0011	HOLL	02	2042	2043	2047	S12	W21	10324	04	1.3	5	SF			3	E		22		FH
			02 2100		2234			No Flare Patrol												
0012	LEAR	03	0138	0139	0149	S07	W30	10324	03	31.8	11	SF			3	E		53		F
0013	LEAR	03	0434	0437	0443	S07	W32	10324	03	31.8	9	SF			3	E		13		
0014	SVTO	03	1017	1026	1050	S10	W25	10324	04	1.6	33	1F			3	E		147		F
0015	RAMY	03	1038E	1038U	1107	S11	W26	10324	04	1.5	29D	1F			3	E		110		F
			03 1630		1648			No Flare Patrol												
0016	HOLL	03	1817	1818	1824	S12	W30	10324	04	1.5	7	SF			3	E		39		
0017	HOLL	03	2016	2017	2024	S12	W31	10324	04	1.5	8	SF			3	E		24		H
0018	HOLL	03	2235	2236	2243	S11	W35	10324	04	1.3	8	SF			3	E		10		
0019	LEAR	04	0134	0135	0142	N09	W62	10321	03	30.5	8	SF			3	E		15		F
0020	LEAR	04	0238	0241	0248	S04	W65	10323	03	30.3	10	SF			3	E		35		F
			04 0324		0734			No Flare Patrol												
			04 0804		0814			No Flare Patrol												
0021	SVTO	04	0837	0840	0847	S08	W40	10324	04	1.4	10	SF			3	E		51		F
0022	LEAR	04	0839	0840	0847	S08	W48	10324	03	31.8	8	SF			3	E		43		F
			04 1143		1153			No Flare Patrol												
0023	RAMY	04	1213	1216	1223	S12	W40	10324	04	1.5	10	SF			3	E		13		F
0024		04	1347	1355	1402	N06	W62	10321	03	31.0	15	SF						20		
	HOLL	04	1347	1355	1402	N07	W63	10321	03	30.9	15	SF			3	E		20		
	KANZ	04	1352E	1353U	1356D	N06	W61	10321	03	31.0	4D	SF			2	E				

H α S O L A R F L A R E S5
Apr 03

APRIL 2003

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)	
0025	HOLL	04	1415	1416	1427	S12	W43	10324	04	1.3	12	SF	3	E		92		F
0026	HOLL	04	1416	1421	1508	N08	W62	10321	03	31.0	52	SF	3	E		28		F
0027	HOLL	04	1436	1445	1454	S11	W40	10324	04	1.6	18	SF	3	E		37		F
0028		04	1702	17022	1714	N08	W66	10321	03	30.9	12	SF				58		FH
	RAMY	04	1702	1702	1718D	N09	W68	10321	03	30.7	16D	SF	2	E		48		FH
	HOLL	04	1702	1704	1714	N08	W64	10321	03	31.0	12	SF	3	E		68		F
0029	HOLL	04	1729	1732	1741	N08	W64	10321	03	31.0	12	SF	3	E		24		
0030	HOLL	04	1735	1739	1745	S12	W45	10324	04	1.3	10	SF	3	E		36		
0031	HOLL	04	1851	1851	1856	S11	W43	10324	04	1.5	5	SF	3	E		15		
0032	HOLL	04	1857	1858	1900	N08	W66	10321	03	30.9	3	SF	3	E		13		H
0033	HOLL	04	1907	1908	1922	N08	W65	10321	03	31.0	15	SF	3	E		35		F
0034	HOLL	04	1948	1949	1954	N08	W66	10321	03	31.0	6	SF	3	E		18		H
0035	HOLL	04	1950	2017	2123	S11	W40	10324	04	1.8	93	1F	3	E		155		FH
0036	HOLL	04	2050	2055	2109	N08	W66	10321	03	31.0	19	SF	3	E		39		F
		05	0137		0359	No Flare Patrol												
		05	0552		0727	No Flare Patrol												
0037	KANZ	05	0843	0853	0906	S11	W59	10324	03	31.9	23	SF	2	E				
0038	KANZ	05	0908	0922	0959	S11	W59	10324	03	31.9	51	SF	2	E				
0039	KANZ	05	1014	1016	1028	S11	W59	10324	04	1.0	14	SF	2	E				
0040	KANZ	05	1033	1037	1046	S11	W59	10324	04	1.0	13	SF	2	E				
0041		05	1503	1507	1520	S11	W56	10324	04	1.4	17	SF				61		F
	SVTO	05	1503	1506U	1524	S11	W53	10324	04	1.6	21	SF	3	E		95		F
	HOLL	05	1503	1507	1520	S12	W58	10324	04	1.2	17	SF	3	E		63		F
	RAMY	05	1506E	1506U	1515	S10	W56	10324	04	1.4	9D	SF	3	E		25		F
0042	HOLL	05	1723	1723	1726	S12	W59	10324	04	1.3	3	SF	3	E		10		
		06	0016		0042	No Flare Patrol												
		06	1049		1222	No Flare Patrol												
0043	HOLL	06	1922	1923	1947	S09	W71	10324	04	1.5	25	SF	3	E		40		F
		07	0727		0729	No Flare Patrol												
		07	0731		0733	No Flare Patrol												
		07	0738		0739	No Flare Patrol												
		07	0743		0747	No Flare Patrol												
		07	0750		0756	No Flare Patrol												
		07	0800		0802	No Flare Patrol												
		07	0846		0854	No Flare Patrol												
		08	0000		0009	No Flare Patrol												
		08	0029		0048	No Flare Patrol												
		08	0122		0125	No Flare Patrol												
		08	0532		0633	No Flare Patrol												
		08	0649		0657	No Flare Patrol												
		08	0705		0711	No Flare Patrol												
		08	0755		0859	No Flare Patrol												
0044	KANZ	08	1222	1223	1224	N04	E15	10330	04	9.6	2	SF	2	E				
0045	RAMY	08	1941E	1941U	1952D	S10	W63	10326	04	4.1	11D	SF	2	E		12		F
0046	LEAR	09	0117	0121	0130	S10	W71	10326	04	3.7	13	SF	3	E		65		F

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Apr 03

H α SOLAR FLARES

APRIL 2003

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/	CMP	Dur	Imp	Obs	Time	Area Measurement		Corr	Remarks
								USAF Region						Mo	Day		
0047	LEAR	09	0350	0352	0403	S08	W76	10326	04	3.5	13	SF		3	E		19
		09	0938		1039	No Flare Patrol											
0048	HOLL	09	2327	2329	2335	S10	W78	10326	04	4.1	8	1F		3	E		130
0049	HOLL	10	0030	0030	0120D	S10	E77	10334	04	15.8	50D	3F		3	E		732
		10	0033		0039	No Flare Patrol											
		10	0731		1047	No Flare Patrol											
		10	1501		1550	No Flare Patrol											
		10	1652		2400	No Flare Patrol											
0050	VORO	10	2325	2330	2341	S08	E89		04	17.6	16	1N		3	C	2330	99 6.9
		11	0000		0023	No Flare Patrol											
		11	0133		0140	No Flare Patrol											
		11	0200		0208	No Flare Patrol											
		11	0743		0806	No Flare Patrol											
		11	0825		0849	No Flare Patrol											
		11	0900		1204	No Flare Patrol											
		11	1213		1305	No Flare Patrol											
		12	0124		0320	No Flare Patrol											
		12	0336		0821	No Flare Patrol											
		12	0923		1105	No Flare Patrol											
		12	1209		1219	No Flare Patrol											
		12	1237		1257	No Flare Patrol											
		12	1910		1914	No Flare Patrol											
		12	2250		2258	No Flare Patrol											
0051		13	0849Z	0852Z	0902	N07	W50	10330	04	9.6	13	SF					53
	KANZ	13	0849	0854	0902D	N05	W50	10330	04	9.6	13D	SN		2	E		
	SVTO	13	0851	0852	0859	N10	W52	10330	04	9.5	8	SF		3	E		30
	LEAR	13	0851	0854	0906	N07	W49	10330	04	9.7	15	SF		3	E		76
0052		14	08153	08194	0828	S04	E58		04	18.7	13	SF					19
	KANZ	14	0815	0823	0828	S04	E56		04	18.5	13	SF		2	E		
	LEAR	14	0818	0819	0825D	S05	E60		04	18.8	7D	SF		3	E		19
0053	KANZ	14	1310	1316	1323	S08	E22	10334	04	16.2	13	SF		2	E		
		14	1732		1738	No Flare Patrol											
		14	1743		1814	No Flare Patrol											
		14	1819		1833	No Flare Patrol											
		14	1852		1900	No Flare Patrol											
		14	2005		2027	No Flare Patrol											
		14	2110		2124	No Flare Patrol											
		14	2200		2229	No Flare Patrol											
		14	2331		2400	No Flare Patrol											
		15	0000		0439	No Flare Patrol											
		15	1608		1616	No Flare Patrol											
		15	1651		1809	No Flare Patrol											
		15	1822		2309	No Flare Patrol											
0054	KANZ	17	0838	0839	0843	S19	E10	10335	04	18.1	5	SN		2	E		
		17	0931		0945	No Flare Patrol											
		17	0954		0957	No Flare Patrol											
		17	1001		1005	No Flare Patrol											
		17	1139		1144	No Flare Patrol											
		17	1147		1157	No Flare Patrol											
		17	1159		1202	No Flare Patrol											
		17	1222		1415	No Flare Patrol											
		17	1421		1722	No Flare Patrol											
		17	1803		1848	No Flare Patrol											
		17	2255		2305	No Flare Patrol											
		18	1100		1107	No Flare Patrol											
		18	1112		1113	No Flare Patrol											
		18	1115		1116	No Flare Patrol											
		18	1847		2002	No Flare Patrol											

APRIL 2003

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)	
0055	RAMY	19	1440E	1440U	1447	N17	E27	10338	04	21.7	7D	SF		3	E		12		
		20	0000		0057	No	Flare	Patrol											
0056	LEAR	20	0728	0730	0732	S13	E67	10337	04	25.4	4	SF		3	E		20		
0057	HOLL	20	1921	1922	1937	N18	W49	10339	04	17.1	16	SF		3	E		51	F	
0058	HOLL	20	2146	2146	2155	N17	W42	10339	04	17.7	9	SF		3	E		11	F	
0059	HOLL	21	0034	0038	0048	N17	W47	10339	04	17.4	14	SF		3	E		10		
		21	0926		1057	No	Flare	Patrol											
		21	1227		1235	No	Flare	Patrol											
0060		21	13024	13071	1330	N18	E02	10338	04	21.7	28	1N					116	F	
	RAMY	21	1302	1308	1325	N18	E02	10338	04	21.7	23	1N		3	E		115		
	HOLL	21	1306	1307	1334	N17	E03	10338	04	21.8	28	1F		3	E		116	F	
0061	HOLL	21	1554	1600	1610	S13	E47	10337	04	25.2	16	SF		3	E		47	F	
0062	HOLL	21	1742	1742	1747	N16	W53	10339	04	17.7	5	SF		3	E		29		
0063	HOLL	21	1932	1939	1942	N18	W52	10339	04	17.8	10	SF		3	E		11		
		21	2110		2120	No	Flare	Patrol											
0064	HOLL	21	2136	2141	2201	S08	E47	10340	04	25.4	25	SF		3	E		38		
0065	HOLL	21	2232	2232	2237	N18	W64	10339	04	17.1	5	SF		3	E		11		
		22	0202		0214	No	Flare	Patrol											
0066	KANZ	22	0634	0650	0655	N17	W10	10338	04	21.5	21	SF		2	E				
		22	0927		1109	No	Flare	Patrol											
		22	1115		1133	No	Flare	Patrol											
		22	1156		1246	No	Flare	Patrol											
0067		22	16151	1616	1623	N20	W18	10338	04	21.3	8	SF					30	F	
	HOLL	22	1615	1616	1624	N20	W17	10338	04	21.4	9	SF		3	E		31	F	
	RAMY	22	1616	1616	1622	N19	W18	10338	04	21.3	6	SF		3	E		30	F	
0068		22	19574	20051	2020	N19	W14	10338	04	21.8	23	SF					26	F	
	HOLL	22	1957	2006	2022	N20	W14	10338	04	21.8	25	SF		3	E		35		
	RAMY	22	2001	2005	2017	N18	W15	10338	04	21.7	16	SF		3	E		16	F	
0069	HOLL	22	2106	2107	2112	N17	W70	10339	04	17.5	6	SF		3	E		26		
0070	LEAR	23	0045	0102	0140	N22	W25	10338	04	21.1	55	1N		3	E		187	FU	
		23	0206		0318	No	Flare	Patrol											
0071	HOLL	23	1541	1547	1629	N19	W23	10338	04	21.9	48	SF		3	E		82	FH	
0072	SVTO	23	1543	1558	1625	N20	W22	10338	04	22.0	42	1F		3	E		157	F	
0073	HOLL	23	1623	1624	1626	N17	W78	10339	04	17.7	3	SF		3	E		16		
0074	LEAR	24	0532	0533	0548	S15	E08	10337	04	24.8	16	SF		3	E		54	F	
0075	KANZ	24	0559E	0559E	0615	S16	E12	10337	04	25.1	16D	1F		2	E				
		24	0842		0843	No	Flare	Patrol											
		24	0845		0848	No	Flare	Patrol											
		24	0943		0945	No	Flare	Patrol											
		24	0947		0948	No	Flare	Patrol											
		24	0951		0952	No	Flare	Patrol											
		24	0954		1003	No	Flare	Patrol											
		24	1007		1010	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	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
			24 1019		1020			No Flare Patrol											
			24 1033		1034			No Flare Patrol											
			24 1036		1043			No Flare Patrol											
0076	RAMY	24	1250	1251	1312	N21	W39	10338	04	21.5	22	1N		3	E		132		FU
0077	HOLL	24	1250	1310	1321	N19	W36	10338	04	21.8	31	SF		3	E		66		F
0078	HOLL	24	1349	1355	1358	S18	E83	10345	04	30.9	9	SF		3	E		24		
0079	HOLL	24	1423	1435	1439	S18	E83	10345	04	30.9	16	SF		3	E		31		
			24 1616		1700			No Flare Patrol											
0080	HOLL	24	2329	2332	2337	N21	W42	10338	04	21.7	8	SF		3	E		10		F
0081	LEAR	25	0526	0533	0537	N14	E79	10346	05	1.2	11	SF		3	E		41		F
0082	KANZ	25	0603E	0603E	0615	N12	E71	10346	04	30.6	12D	SF		2	E				
0083	KANZ	25	0823	0823	0832	N14	E32	10344	04	27.8	9	SF		2	E				
0084	KANZ	25	0824	0838	0853	N18	W37	10342	04	22.5	29	SF		2	E				
0085	KANZ	25	0921	0925	0927	N18	W45	10342	04	22.0	6	SF		2	E				
0086		25	1348	1415	1430	N22	W54	10338	04	21.4	42	SF					39		H
	HOLL	25	1348	1415	1440	N22	W51	10338	04	21.6	52	SF		3	E		62		
	RAMY	25	1415E	1415U	1419	N22	W56	10338	04	21.3	4D	SF		3	E		16		H
0087	RAMY	25	1424E	1424U	1430	N22	W57	10338	04	21.2	6D	SF		3	E		18		H
0088		25	1715	1725	1733	N22	W56	10338	04	21.4	18	SF					14		
	HOLL	25	1715	1725	1735	N21	W54	10338	04	21.6	20	SF		3	E		14		
	RAMY	25	1720E	1720U	1731	N22	W59	10338	04	21.2	11D	SF		3	E		15		
0089	HOLL	25	1926	1930	1937	N20	W57	10338	04	21.4	11	SF		3	E		34		F
0090	HOLL	25	1943	1953	2008	N19	W58	10338	04	21.4	25	SF		3	E		80		FH
0091	HOLL	25	2054	2056	2113	N21	W62	10338	04	21.1	19	SF		3	E		36		FH
0092	HOLL	26	0057	0058	0105	N20	W65	10338	04	21.1	8	SF		3	E		29		
0093	LEAR	26	0140	0145	0235	N21	W59	10338	04	21.5	55	1F		2	E		120		FH
0094	LEAR	26	0305E	0309	0315	N20	W69	10338	04	20.8	10D	SN		3	E		52		EF
			26 0435		0440			No Flare Patrol											
			26 0449		0500			No Flare Patrol											
			26 0617		0618			No Flare Patrol											
0095	KANZ	26	0656	0702	0704	N13	W59	10338	04	21.8	8	SF		2	E				
0096	KANZ	26	0803	0809	0816	N18	W74	10338	04	20.7	13	1N		2	E				
			26 1032		1033			No Flare Patrol											
0097		26	1423	1423	1428	N20	W74	10338	04	20.9	5	SF					20		
	RAMY	26	1422E	1422U	1429	N19	W74	10338	04	20.9	7D	SF		3	E		18		
	HOLL	26	1423	1423	1428	N20	W73	10338	04	21.0	5	SF		3	E		21		
0098		26	1444	1452	1456	N20	W70	10338	04	21.2	12	SF					20		
	RAMY	26	1444E	1444U	1456	N20	W74	10338	04	20.9	12D	SF		3	E		19		
	HOLL	26	1444	1452	1455	N21	W66	10338	04	21.5	11	SF		3	E		21		
0099	HOLL	26	1525	1527	1529	N21	W66	10338	04	21.6	4	SF		3	E		15		

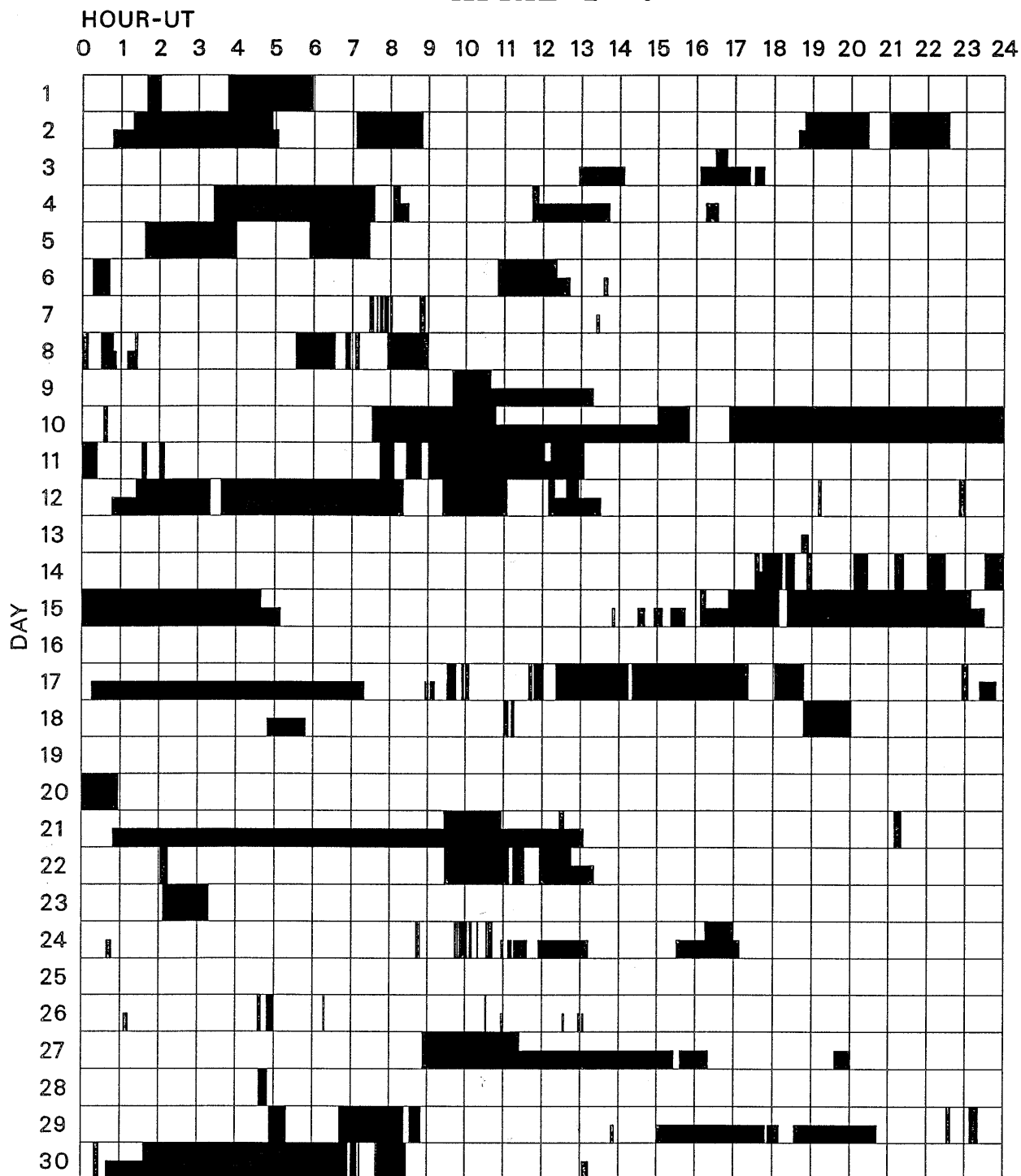
H α S O L A R F L A R E S9
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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
																	Apparent (10-6 Disk)	Corr (Sq Deg)	
0100		26	1634	16341	1638	N20	W72	10338	04	21.2	4	SF					26		H
	RAMY	26	1634	1634	1638	N20	W76	10338	04	20.9	4	SF		3	E		26		H
	HOLL	26	1634	1635	1638	N21	W67	10338	04	21.5	4	SF		3	E		27		
0101	RAMY	26	1758	1759U	1830D	N20	W75	10338	04	21.0	32D	SF		3	E		13		H
0102	HOLL	26	1935	1938	1947	N21	W67	10338	04	21.7	12	SF		3	E		71		F
0103	HOLL	26	2321	2321	2326	N20	W71	10338	04	21.5	5	SF		3	E		17		
0104	HOLL	27	0015	0017	0018	N21	W71	10338	04	21.6	3	SF		3	E		15		
0105	HOLL	27	0030	0033	0036	N20	W71	10338	04	21.6	6	SF		3	E		16		
0106		27	00445	0059	0134	N20	W70	10338	04	21.7	50	2F					333		F
	HOLL	27	0044	0059	0122	N21	W67	10338	04	21.9	38	2F		3	E		384		F
	LEAR	27	0049	0059	0147	N20	W72	10338	04	21.5	58	2F		3	E		282		
0107	LEAR	27	0310	0314	0322	S16	E57	10349	05	1.4	12	SF		4	E		34		
		27	0853		1125	No Flare Patrol													
0108	HOLL	27	1531	1531	1550D	N21	W85	10338	04	21.1	19D	SF		3	E		26		
		28	0436		0450	No Flare Patrol													
0109	HOLL	28	1523	1523	1550	S14	W43	10337	04	25.4	27	SF		3	E		12		F
0110	HOLL	28	1815	1815	1826	N16	W13	10344	04	27.8	11	SF		3	E		20		F
0111	LEAR	29	0436	0442	0444	S12	W56	10337	04	25.0	8	SF		3	E		45		F
0112	LEAR	29	0445	0448	0521D	S12	W55	10337	04	25.0	36D	1F		3	E		104		F
		29	0453		0520	No Flare Patrol													
		29	0642		0823	No Flare Patrol													
		29	0832		0850	No Flare Patrol													
0113	KANZ	29	0907	0910	0925	S13	E28	10349	05	1.5	18	SF		2	E				
0114	KANZ	29	0926	0949	0953	S13	E28	10349	05	1.5	27	SF		2	E				
0115	KANZ	29	0957	1055	1215	S13	E27	10349	05	1.4	138	SF		2	E				
0116	KANZ	29	1245	1252	1419	S13	E24	10349	05	1.3	94	SF		2	E				
0117	HOLL	29	1401	1402	1410	S13	E27	10349	05	1.6	9	SF		3	E		14		
0118	KANZ	29	1420	1445	1502D	S13	E26	10349	05	1.5	42D	SF		2	E				
0119	HOLL	29	2117	2117	2128	S13	E24	10349	05	1.7	11	SF		3	E		11		
		29	2232		2238	No Flare Patrol													
0120	HOLL	29	2241	2242	2245	S13	E17	10349	05	1.2	4	SF		3	E		24		
		29	2308		2321	No Flare Patrol													
0121	HOLL	29	2337	2347	2436	S13	E22	10349	05	1.6	59	SF		3	E		59		
		30	0020		0027	No Flare Patrol													
		30	0137		0656	No Flare Patrol													
		30	0701		0710	No Flare Patrol													
		30	0713		0714	No Flare Patrol													
		30	0738		0739	No Flare Patrol													
		30	0741		0827	No Flare Patrol													
0122	SVTO	30	1251	1252	1259	S12	W52	10340	04	26.6	8	SF		3	E		10		

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

APRIL 2003



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
Kanzelhoehe

Learmonth
Mitaka

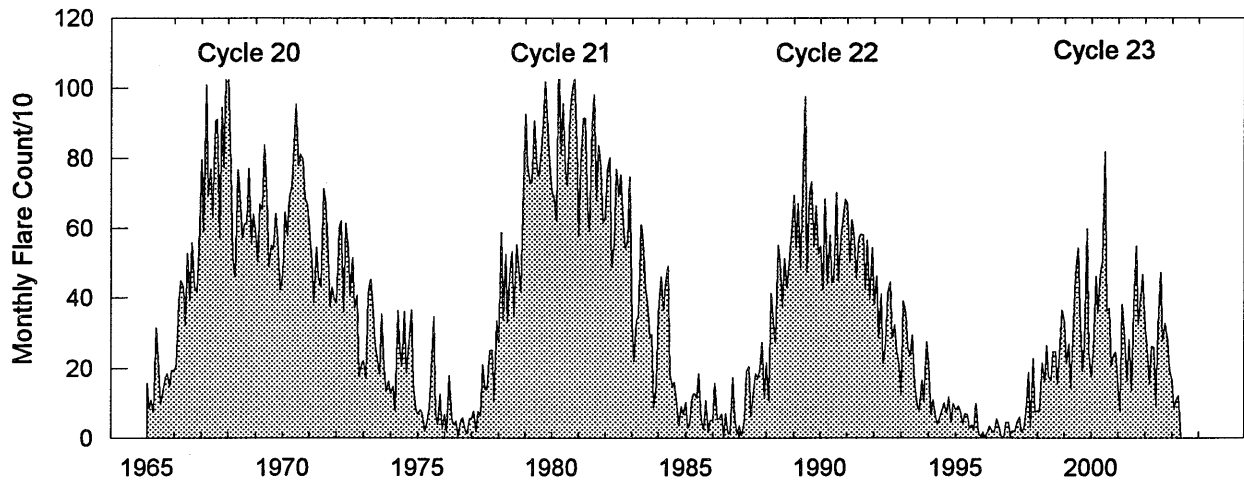
Ramey
Voroshilov

San Vito

Monthly Counts of Grouped Solar Flares

Jan 1965 - Apr 2003

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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	91	318	474	280	329	279	196	3223
2003	164	87	112	122									485

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

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

Outstanding Occurrences

APRIL 2003

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 -22 W/m 2 Hz)		
01	204	IZMI	43 NS	0650.0		250.0D		10.0		
			43 NS	0657.0		483.0		11.0		V=1
	235	CUBA	44 NS	1500.0E		180.0D		10.0		
			44 NS	1500.0E		210.0D		21.0		
	2840	PEKG	1 S	0046.0	0049.1	8.0	5.8			
	204	IZMI	42 SER	0659.3	0702.6	3.5	48.0			
	204	IZMI	42 SER	0712.9	0713.4	0.6	63.0			
	245	SVTO	48 C	1010.0	1010.0	5.0	220.0			QL=4 ST=2 TYP=8
	204	IZMI	42 SER	1017.8	1018.2	1.0	28.0			
	204	IZMI	42 SER	1023.7	1024.6	2.1	41.0			
	245	SVTO	8 S	1036.0	1036.0	U	73.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	1039.3	1039.4	0.2	15.0			
	245	SGMR	8 S	1237.0	1238.0	1.0	93.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1237.0	1238.0	1.0	110.0			QL=4 ST=2 TYP=3
	127	TORN	4 S/F	1403.3	1403.6	1.2	490.0	130.0		
	610	SGMR	8 S	1436.0	1436.0	1.0	40.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1438.0	1438.0	U	78.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1438.0	1438.0	U	79.0			QL=4 ST=2 TYP=3
	2800	PENT	24 R	1544.0	1619.0	46.0U	4.0			
02	204	IZMI	43 NS	0600.0		360.0D		10.0		
	127	TORN	43 NS	0826.0		264.0		14.0		V=0
	2840	PEKG	1 S	0214.0	0218.1	9.0	9.5			
	245	PALE	8 S	0331.0	0332.0	1.0	260.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0737.9	0738.5	0.8	117.0			
	245	LEAR	8 S	0738.0	0738.0	U	180.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0738.0	0738.0	U	170.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1407.0	1408.0	1.0	67.0			QL=4 ST=2 TYP=3
	33	UPIC	46 C	1604.0	1604.5	6.0				
03	204	IZMI	44 NS	0600.0E		360.0D		20.0		
	127	TORN	43 NS	0828.0		370.0		32.0		V=2
	235	CUBA	44 NS	1300.0E		300.0D		10.0		
	280	CUBA	44 NS	1300.0E		530.0D		27.0		
	2840	PEKG	1 S	0138.0	0140.6	4.0	4.9			
	2840	PEKG	20 GRF	0149.0	0152.1	10.0	4.3			
	245	SVTO	4 S/F	0830.0	0833.0	3.0	70.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0832.0	0833.0	1.0	74.0			QL=4 ST=2 TYP=3
	2950	GORK	4 S/F	1019.2	1025.0	9.3	22.0			
	245	SVTO	4 S/F	1022.0	1025.0	12.0	41.0			QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	1023.0	1024.0	9.0	60.0			QL=2 ST=2 TYP=3
	9100	GORK	2 S/F	1023.6	1025.1	3.2	36.0			
	3000	IZMI	20 GRF	1023.9	1025.0	2.7	24.0	12.4		
	15400	SVTO	8 S	1024.0	1025.0	1.0	23.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	1024.0	1025.0	5.0	50.0			QL=4 ST=2 TYP=3
	2695	SVTO	4 S/F	1024.0	1024.0	10.0	30.0			QL=4 ST=2 TYP=3
	900	GORK	46 C	1024.0	1025.2	3.0	42.0			
	900	GORK	46 C	1024.0	1026.5		23.0			
	600	GORK	40 F	1024.1	1027.0	3.0	11.0			
	900	GORK	40 F	1031.8	1035.9	4.6	42.0			
	204	IZMI	41 F	1041.8	1041.9	0.4	49.0			
	2800	PENT	20 GRF	1451.0	1623.0	101.0U	4.0			
	245	SGMR	8 S	1602.0	1602.0	1.0	70.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1602.0	1602.0	1.0	85.0			QL=4 ST=2 TYP=3
	235	CUBA	6 S	1603.0	1603.5	0.9	50.0	25.0		
	280	CUBA	6 S	1603.0	1603.5	0.9	107.0	53.0		
	245	SGMR	8 S	1735.0	1735.0	U	66.0			QL=4 ST=2 TYP=3
	245	PALE	4 S/F	1847.0	1847.0	5.0	61.0			QL=4 ST=2 TYP=3
	2800	PENT	20 GRF	2049.0	2214.0	103.0U	5.0			
04	204	IZMI	44 NS	0600.0E		123.0D		20.0		
	127	TORN	44 NS	0640.0E		370.0D		13.0		V=1
	235	CUBA	44 NS	1600.0E		240.0D		6.0		
	280	CUBA	44 NS	1600.0E		240.0D		22.0		
	245	PALE	43 NS	2057.0	2100.0	28.0	110.0			QL=4 ST=2 TYP=1
	245	LEAR	8 S	0038.0	0038.0	2.0	72.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0038.0	0038.0	2.0	86.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0049.0	0049.0	U	61.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0132.0	0132.0	U	64.0			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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APRIL 2003

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	500	HIRA	7 C	0239.0	0239.0	5.0	10.0		0	
	2840	PEKG	1 S	0504.0	0506.8	5.0	2.7			
	9100	GORK	2 S/F	0613.0	0613.4	0.5	22.0			
	9100	GORK	8 S	0854.0	0854.3	0.5	136.0			
	204	IZMI	41 F	1048.9	1049.0	0.2	127.0			
	245	SVTO	8 S	1109.0	1109.0	U	52.0			QL=4 ST=2 TYP=3
	127	TORN	42 SER	1210.2	1212.0	6.5	250.0	20.0		V=1
	2800	PENT	24 R	1519.0		452.0				
	9500	CUBA	1 S	1907.8	1908.1	1.1	14.0	7.0		
	9500	CUBA	21 GRF	1946.0	2024.0	159.0	39.0	19.0		
	245	PALE	4 S/F	2005.0	2007.0	5.0	59.0			QL=4 ST=2 TYP=3
	2695	SGMR	4 S/F	2005.0	2006.0	4.0	65.0			QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	2005.0	2006.0	9.0	49.0			QL=4 ST=2 TYP=3
	4995	PALE	8 S	2006.0	2006.0	2.0	34.0			QL=4 ST=2 TYP=3
	2695	PALE	4 S/F	2006.0	2006.0	3.0	66.0			QL=4 ST=2 TYP=3
	1415	SGMR	4 S/F	2006.0	2009.0	4.0	31.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	2007.0	2007.0	U	26.0			QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	2015.0	2019.0	10.0	29.0			QL=4 ST=2 TYP=3
	610	PALE	48 C	2019.0	2029.0	15.0	850.0			QL=4 ST=2 TYP=8
	610	SGMR	49 GB	2019.0	2028.0	15.0	970.0			QL=4 ST=2 TYP=6
	410	PALE	8 S	2027.0	2027.0	2.0	35.0			QL=4 ST=2 TYP=3
	245	PALE	4 S/F	2027.0	2033.0	12.0	55.0			QL=4 ST=2 TYP=3
	9500	CUBA	3 S	2047.3	2048.5	3.7	61.0	30.0		
	4995	PALE	8 S	2049.0	2050.0	2.0	45.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	2049.0	2050.0	1.0	42.0			QL=4 ST=2 TYP=3
	15400	PALE	8 S	2049.0	2050.0	2.0	45.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	2049.0	2049.0	1.0	49.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	2049.0	2049.0	1.0	59.0			QL=4 ST=2 TYP=3
	610	PALE	4 S/F	2100.0	2100.0	5.0	72.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2100.0	2100.0	U	87.0			QL=4 ST=2 TYP=3
	610	SGMR	4 S/F	2100.0	2100.0	4.0	86.0			QL=4 ST=2 TYP=3
	410	PALE	4 S/F	2107.0	2108.0	5.0	60.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2108.0	2108.0	U	58.0			QL=4 ST=2 TYP=3
05	127	TORN	43 NS	0750.0		410.0		12.0	V=0	
	235	CUBA	44 NS	1330.0E		360.0D		6.0		
	280	CUBA	44 NS	1330.0E		360.0D		21.0		
	2950	GORK	5 S	0842.6	0843.2	1.6	4.0			
	33	UPIC	46 C	1300.0	1301.5	2.5				
	2800	PENT	1 S	2347.0	2357.0	20.0	4.0			
06	204	IZMI	43 NS	0650.0		268.0U		10.0		
	127	TORN	43 NS	0850.0	1036.5	265.0	390.0	65.0	V=2	
	2840	PEKG	3 S	0802.0	0809.2	12.0	21.6			
	2950	GORK	46 C	0803.3	0809.1		21.0			
	2950	GORK	46 C	0803.3	0808.6	5.9	18.0			
	9100	GORK	28 PRE	0806.5	0806.8	1.5	8.1			
	9100	GORK	7 C	0808.0	0809.1		19.0			
	9100	GORK	7 C	0808.0	0808.5	5.0	22.0			
	3000	IZMI	22 GRF	0808.2	0809.1	1.9	13.0	6.5		
	33	UPIC	46 C	1217.0	1219.0	5.5				
	2800	PENT	29 PBI	1916.0	1923.0	16.0U	20.0			
07	9500	CUBA	1 S	1921.8	1923.2	2.8	6.0	3.0		
	127	TORN	43 NS	0820.0		320.0		15.0	V=0	
	245	LEAR	8 S	0251.0	0251.0	1.0	140.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0251.0	0252.0	1.0	160.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	1043.7	1044.8	1.3	101.0			
	2800	PENT	1 S	1840.0	1847.0	14.0	8.0			
08	245	SGMR	8 S	1927.0	1927.0	U	140.0			QL=4 ST=2 TYP=3
	204	IZMI	43 NS	0600.0		360.0D		20.0		
	127	TORN	43 NS	0828.0		312.0		13.0	V=1	
	235	CUBA	44 NS	1310.0E		520.0D		9.0		
	280	CUBA	44 NS	1310.0E		520.0D		24.0		
	245	SVTO	8 S	0723.0	0724.0	1.0	100.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	0935.0	0937.0	4.0	58.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	0954.0	0955.0	4.0	91.0			QL=4 ST=2 TYP=3
08	410	SVTO	8 S	0958.0	0958.0	U	76.0			QL=4 ST=2 TYP=3

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

APRIL 2003

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	1022.0	1023.0	1.0	99.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1221.0	1222.0	1.0	66.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1221.0	1222.0	2.0	63.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1222.0	1222.0	1.0	42.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1329.0	1329.0	U	110.0			QL=4 ST=2 TYP=3
09	127	TORN	44 NS	0640.0E		400.0D		14.0		V=1
	245	LEAR	8 S	0848.0	0848.0	U	58.0			QL=4 ST=2 TYP=3
	2840	PEKG	3 S	0925.0	0929.5	11.0	24.0			
	600	GORK	4 S/F	0927.3	0929.2	5.3	87.0			
	610	SVTO	4 S/F	0928.0	0929.0	3.0	65.0			QL=4 ST=2 TYP=3
	9100	GORK	1 S	0928.7	0929.3	2.1	13.0			
	410	SVTO	8 S	0929.0	0929.0	1.0	76.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	0929.0	0929.0	U	25.0			QL=4 ST=2 TYP=3
	2950	GORK	2 S/F	0929.0	0929.4	1.5	20.0			
	3000	IZMI	22 GRF	0929.1	0929.4	2.8	21.0	5.4		
	600	GORK	46 C	0954.5	0955.1	7.4	14.0			
	600	GORK	46 C	0954.5	0959.5		21.0			
	204	IZMI	7 C	1135.5	1135.6	0.2	13.0			
	2840	PEKG	3 S	2323.0	2327.2	17.0	156.9			
	2800	HIRA	8 S	2327.0	2327.0	4.0	140.0			0
	1415	PALE	8 S	2327.0	2327.0	U	200.0			QL=4 ST=2 TYP=3
	1415	PALE	8 S	2327.0	2327.0	2.0	200.0			QL=4 ST=2 TYP=3
	2695	PALE	8 S	2327.0	2327.0	1.0	140.0			QL=4 ST=2 TYP=3
	4995	PALE	8 S	2327.0	2328.0	1.0	69.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	2327.0	2328.0	1.0	140.0			QL=4 ST=2 TYP=3
	15400	PALE	8 S	2327.0	2328.0	1.0	74.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	2328.0	2329.0	1.0	88.0			QL=4 ST=2 TYP=3
10	204	IZMI	43 NS	0600.0		360.0D		20.0		
	127	TORN	43 NS	0750.0		350.0		19.0		V=2
	235	CUBA	44 NS	1310.0E		520.0D		9.0		
	280	CUBA	44 NS	1310.0E		520.0D		24.0		
	245	PALE	4 S/F	0134.0	0137.0	3.0	200.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0135.0	0137.0	2.0	170.0			QL=4 ST=2 TYP=3
	245	PALE	48 C	0140.0	0145.0	8.0	230.0			QL=4 ST=2 TYP=8
	245	LEAR	48 C	0141.0	0145.0	6.0	240.0			QL=4 ST=2 TYP=8
	245	LEAR	8 S	0201.0	0201.0	1.0	85.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0309.0	0309.0	1.0	86.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0310.0	0310.0	U	85.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0557.0	0557.0	U	50.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0614.0	0615.0	1.0	51.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0742.0	0742.0	U	96.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	0750.2	0751.4	1.4	22.0			
	245	SVTO	4 S/F	0829.0	0829.0	3.0	58.0			QL=4 ST=2 TYP=3
	9100	GORK	8 S	0838.0	0838.1	0.2	170.0			
	204	IZMI	41 F	0846.4	0846.7	0.5	21.0			
	33	UPIC	8 S	1002.0	1002.5	1.0				
	245	SGMR	8 S	1348.0	1348.0	U	100.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2027.0	2028.0	1.0	430.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	2029.0	2029.0	U	48.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2310.0	2310.0	U	100.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	2341.0	2341.0	U	65.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2341.0	2341.0	1.0	65.0			QL=4 ST=2 TYP=3
11	204	IZMI	44 NS	0600.0E		360.0D		20.0		
	127	TORN	44 NS	0640.0E		480.0D		11.0		V=1
	245	LEAR	8 S	0157.0	0157.0	U	57.0			QL=4 ST=2 TYP=3
	127	TORN	7 C	0709.7	0710.7	1.5	1300.0	240.0		
	245	LEAR	8 S	0710.0	0710.0	U	98.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0710.0	0710.0	U	87.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0710.1	0710.6	1.5	1871.0			
	2840	PEKG	5 S	0724.0	0728.6	9.0	56.9			
	204	IZMI	42 SER	0726.3	0728.1	1.9	26.0	23.3		
	500	HIRA	8 S	0728.0	0729.0	1.0	15.0			0
	3000	IZMI	22 GRF	0728.5	0728.6	1.1	39.0	3.9		
	2800	HIRA	8 S	0729.0	0729.0	1.0	20.0			0
	245	SVTO	4 S/F	0806.0	0806.0	3.0	55.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	0806.4	0806.5	0.2	83.0			

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

Outstanding Occurrences

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APRIL 2003

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	500	HIRA	8 S	0807.0	0807.0	1.0	10.0		0	
	204	IZMI	42 SER	0916.2	0919.0	5.4	84.0			
	600	GORK	7 C	0917.6	0918.3		8.0			
	600	GORK	7 C	0917.6	0917.8	1.3	23.0			
	127	TORN	47 GB	0917.8	0919.5	3.2	670.0	80.0		
	33	UPIC	46 C	0918.0	0919.5	2.0				
	245	SVTO	8 S	0919.0	0921.0	2.0	48.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0919.0	0921.0	2.0	96.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0921.0	0921.0	U	53.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0921.0	0921.0	U	91.0			QL=4 ST=2 TYP=3
	610	LEAR	8 S	0921.0	0921.0	U	76.0			QL=4 ST=2 TYP=3
	610	SVTO	8 S	0921.0	0921.0	U	100.0			QL=4 ST=2 TYP=3
	600	GORK	4 S/F	0924.1	0924.2	0.4	135.0			
	33	UPIC	45 C	0942.0	0943.0	1.5				
	204	IZMI	41 F	0942.1	0942.8	1.2	23.0			
	245	SVTO	8 S	1415.0	1416.0	1.0	100.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1416.0	1416.0	U	69.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2017.0	2017.0	U	62.0			QL=4 ST=2 TYP=3
12	204	IZMI	44 NS	0600.0E		360.0D		10.0		
	127	TORN	44 NS	0640.0E		242.0D		17.0		V=1,DISTURBED
	235	CUBA	44 NS	1300.0E		510.0D		7.0		
	280	CUBA	44 NS	1300.0E		510.0D		20.0		
	610	SVTO	8 S	0634.0	0634.0	U	69.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0711.4	0711.9	0.6	248.0			
	245	LEAR	8 S	0719.0	0719.0	U	100.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0719.0	0719.0	U	100.0			QL=4 ST=2 TYP=3
	204	IZMI	45 C	0719.0	0719.2	0.5	1581.0			
	204	IZMI	7 C	0720.1	0720.1	0.1	116.0			
	127	TORN	46 C	0802.0	0803.9	7.0	430.0	140.0		
	204	IZMI	42 SER	0803.0	0806.9	6.0	90.0			
	245	LEAR	8 S	0806.0	0806.0	U	56.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0806.0	0807.0	1.0	51.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0849.0	0850.0	1.0	310.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0849.0	0850.0	1.0	350.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0849.5	0849.7	1.4	324.0			
	410	SVTO	8 S	0850.0	0850.0	U	73.0			QL=4 ST=2 TYP=3
	2840	PEKG	5 S	0857.0	0859.8	6.0	10.4			
	410	SVTO	8 S	0900.0	0901.0	2.0	24.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0901.0	0902.0	1.0	68.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0901.0	0902.0	1.0	68.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0949.0	0950.0	1.0	83.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0949.2	0949.4	2.0	17.0			
	245	SVTO	8 S	1009.0	1010.0	1.0	62.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	1018.0	1020.3	2.9	32.0			
	204	IZMI	41 F	1028.9	1029.1	0.3	50.0			
	204	IZMI	42 SER	1108.8	1109.0	4.6	39.0			
	204	IZMI	42 SER	1121.9	1129.9	8.7	82.0			
	245	SGMR	8 S	1125.0	1125.0	U	56.0			QL=4 ST=2 TYP=3
	204	IZMI	45 C	1125.6	1125.7	0.7	409.0			
	245	SGMR	8 S	1129.0	1130.0	1.0	130.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1129.0	1130.0	1.0	120.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1129.0	1129.0	1.0	93.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1130.0	1130.0	U	44.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1204.0	1204.0	U	240.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1204.0	1204.0	U	230.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1642.0	1642.0	1.0	130.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1642.0	1642.0	U	52.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1642.0	1642.0	1.0	100.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1642.0	1642.0	U	56.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1643.0	1643.0	U	100.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1948.0	1948.0	U	82.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1948.0	1948.0	U	58.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2112.0	2112.0	U	61.0			QL=4 ST=2 TYP=3
13	127	TORN	43 NS	0902.0		225.0		9.0		V=1
	410	LEAR	8 S	0429.0	0430.0	1.0	58.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	0430.0	0430.0	1.0	10.0			0
	2840	PEKG	45 C	0845.0	0850.2	35.0	77.9			

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

APRIL 2003

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
13	127	TORN	48 C	0846.0	0850.0U	15.0	1300.0U	140.0		DISTURBED
	33	UPIC	46 C	0847.0	0850.0	4.5				
	2950	GORK	46 C	0848.0	0850.6	8.4	70.0			
	2950	GORK	46 C	0848.8	0851.3		52.0			
	3000	IZMI	45 C	0849.1	0850.2	3.6	59.0	25.4		
	204	IZMI	42 SER	0849.1	0850.9	5.0	202.0			
	9100	GORK	46 C	0849.5	0851.3		23.0			
	9100	GORK	46 C	0849.5	0850.5	6.3	30.0			
	245	LEAR	8 S	0850.0	0850.0	U	96.0			
	2695	LEAR	8 S	0850.0	0850.0	U	56.0			
	4995	LEAR	8 S	0850.0	0850.0	1.0	60.0			QL=4 ST=2 TYP=3
	600	GORK	46 C	0853.3	0855.0		36.0			QL=4 ST=2 TYP=3
	600	GORK	46 C	0853.3	0854.4	2.5	14.0			
	204	IZMI	42 SER	0912.8	0912.9	0.2	11.0			
	127	TORN	47 GB	1442.0	1442.5	1.0	830.0D	160.0		
	500	HIRA	42 SER	2115.0	2115.0	4.0	65.0			0
	245	SGMR	8 S	2118.0	2118.0	U	150.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2118.0	2118.0	U	45.0			QL=4 ST=2 TYP=3
14	127	TORN	44 NS	0640.0E		500.0D		12.0		V=1
	235	CUBA	44 NS	1305.0E		505.0D		5.0		
	280	CUBA	44 NS	1305.0E		505.0D		15.0		
	600	GORK	45 C	0719.2	0719.3	0.6	58.0			
	600	GORK	45 C	0719.2	0719.5		51.0			
	127	TORN	7 C	0917.0	0919.3	3.4	110.0	40.0		
15	15400	PALE	8 S	1641.0	1641.0	U	51.0			QL=4 ST=2 TYP=3
16	127	TORN	43 NS	0830.0		240.0		8.0		V=0
	410	PALE	48 C	2141.0	2145.0	4.0	170.0			QL=4 ST=2 TYP=8
17	127	TORN	43 NS	0807.0		317.0		10.0		V=0
	245	LEAR	8 S	0836.0	0838.0	2.0	180.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	0836.0	0838.0	3.0	190.0			QL=4 ST=2 TYP=3
	127	TORN	47 GB	0836.0	0837.2	2.8	1900.0	590.0		
	204	IZMI	42 SER	0836.3	0836.4	1.1	131.0			
	600	GORK	1 S	0836.3	0836.6	0.6	6.0			
	204	IZMI	42 SER	0837.7	0838.0	1.4	173.0			
	204	IZMI	42 SER	0909.7	0910.4	0.7	23.0			
	204	IZMI	42 SER	0947.1	0947.2	0.1	10.0			
	204	IZMI	7 C	1025.2	1025.2	0.1	40.0			
	204	IZMI	7 C	1051.0	1051.1	0.1	10.0			
	204	IZMI	7 C	1128.6	1128.6	0.1	18.0			
	204	IZMI	42 SER	1132.1	1132.2	0.5	30.0			
	245	PALE	8 S	2009.0	2009.0	U	150.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2013.0	2013.0	U	79.0			QL=4 ST=2 TYP=3
	500	HIRA	7 C	2122.0	2123.0	3.0	15.0			0
18	127	TORN	43 NS	0820.0		400.0		9.0		V=1
	245	LEAR	8 S	0212.0	0212.0	U	130.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0212.0	0212.0	U	170.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0936.8	0937.8	1.9	22.0			
	204	IZMI	42 SER	0941.7	0942.8	4.2	61.0			
	204	IZMI	41 F	1141.8	1142.3	1.2	123.0			
	127	TORN	7 C	1141.8	1142.5	1.1	80.0	30.0		
	245	SGMR	8 S	1142.0	1142.0	U	62.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1142.0	1142.0	U	69.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1953.0	1954.0	1.0	41.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	1953.0	1954.0	2.0	110.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1953.0	1954.0	1.0	44.0			QL=4 ST=2 TYP=3
	9500	CUBA	3 S	1953.3	1954.1	2.7	63.0	31.0		
	4995	PALE	8 S	1954.0	1954.0	U	68.0			QL=4 ST=2 TYP=3
19	127	TORN	43 NS	0842.0		251.0		9.0		V=0
	245	LEAR	8 S	0054.0	0054.0	U	59.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0054.0	0054.0	U	66.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0410.0	0410.0	U	70.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0725.6	0725.9	0.9	84.0			
	2800	PENT	8 S	2030.0	2032.0	4.0	14.0			

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Outstanding Occurrences

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APRIL 2003

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	127	TORN	43 NS	0738.0		392.0		9.0		V=1
	245	PALE	8 S	0357.0	0357.0	U	57.0			QL=4 ST=2 TYP=3
	245	PALE	48 C	0359.0	0400.0	10.0	190.0			QL=4 ST=2 TYP=8
	245	PALE	8 S	0413.0	0413.0	2.0	130.0			QL=4 ST=2 TYP=3
	2800	PENT	20 GRF	1519.0	1541.0	45.0	3.0			
	8800	SVTO	4 S/F	1536.0	1536.0	504.0	25.0			QL=4 ST=1 TYP=3
	2800	PENT	1 S	1916.0	1922.0	13.0	8.0			
	9500	CUBA	2 S/F	1925.3	1926.2	2.7	18.0	9.0		
	2800	PENT	21 GRF	2112.0	2124.0	69.0	4.0			
21	127	TORN	43 NS	0720.0		460.0		10.0		V=0,DISTURBED
	245	LEAR	8 S	0438.0	0438.0	U	100.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0438.0	0438.0	U	68.0			QL=2 ST=2 TYP=3
	204	IZMI	42 SER	0717.6	0718.1	2.2	86.0			
	127	TORN	4 S/F	0718.0	0718.2	1.2	550.0	120.0		
	204	IZMI	42 SER	0720.0	0722.0	2.5	75.0			
	204	IZMI	7 C	0724.6	0724.8	0.3	11.0			
	245	SVTO	48 C	1302.0	1302.0	8.0	1400.0			QL=4 ST=2 TYP=8
	2695	SVTO	48 C	1302.0	1304.0	7.0	300.0			QL=4 ST=2 TYP=8
	4995	SVTO	48 C	1302.0	1304.0	8.0	540.0			QL=4 ST=2 TYP=8
	410	SVTO	49 GB	1302.0	1306.0	7.0	1800.0			QL=4 ST=2 TYP=6
	245	SGMR	49 GB	1302.0	1302.0	13.0	1500.0			QL=4 ST=3 TYP=6
	410	SGMR	49 GB	1302.0	1306.0	13.0	1900.0			QL=4 ST=3 TYP=6
	610	SGMR	49 GB	1302.0	1305.0	13.0	920.0			QL=4 ST=3 TYP=6
	4995	SGMR	49 GB	1302.0	1304.0	13.0	550.0			QL=4 ST=3 TYP=6
	8800	SGMR	49 GB	1302.0	1304.0	13.0	870.0			QL=4 ST=3 TYP=6
	1415	SGMR	4 S/F	1302.0	1304.0	13.0	240.0			QL=4 ST=3 TYP=3
	2695	SGMR	4 S/F	1302.0	1304.0	13.0	340.0			QL=4 ST=3 TYP=3
	33	UPIC	47 GB	1302.5	1304.0U	14.0				
	9500	CUBA	49 GB	1302.6	1305.0	6.6	584.0	292.0		
	127	TORN	49 GB	1302.9	1304.2	15.0	2600.0	380.0		DISTURBED
	8800	SVTO	48 C	1303.0	1304.0	6.0	660.0			QL=4 ST=2 TYP=8
	15400	SVTO	49 GB	1303.0	1305.0	9.0	850.0			QL=4 ST=2 TYP=6
	1415	SVTO	4 S/F	1303.0	1304.0	6.0	210.0			QL=4 ST=2 TYP=3
	15400	SGMR	49 GB	1303.0	1304.0	12.0	940.0			QL=4 ST=3 TYP=6
	9500	CUBA	29 PBI	1309.2	1309.2	19.0	56.0	28.0		
	2800	PENT	24 R	1430.0	1558.0	122.0	6.0			
	245	SGMR	8 S	1852.0	1852.0	1.0	140.0			QL=4 ST=2 TYP=3
	2800	PENT	24 R	2048.0	2125.0	104.0U	5.0			
22	127	TORN	43 NS	0728.0		380.0		12.0		V=1,DISTURBED
	410	PALE	8 S	0113.0	0113.0	U	58.0			QL=4 ST=2 TYP=3
	127	TORN	42 SER	0713.0	0722.1	15.0	410.0	180.0		
	204	IZMI	41 F	0717.3	0717.6	0.4	41.0			
	204	IZMI	25 R	0717.8	0723.5	8.5	21.0			
	245	LEAR	8 S	0719.0	0719.0	U	76.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	0719.0	0719.0	4.0	67.0			QL=4 ST=2 TYP=3
	204	IZMI	45 C	0719.5	0719.7	0.5	120.0			
	245	LEAR	8 S	0911.0	0911.0	U	63.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0911.0	0911.0	U	62.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	0911.8	0911.8	0.2	89.0	8.7		
	2800	PENT	1 S	1608.0	1615.0	14.0	41.0			
	33	UPIC	4 S/F	1614.5	1615.0	1.5				
	245	SGMR	8 S	1615.0	1615.0	U	140.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1615.0	1615.0	U	50.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	1615.0	1615.0	U	69.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1615.0	1615.0	U	41.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1615.0	1615.0	U	120.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1615.0	1615.0	U	28.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	1615.0	1615.0	U	34.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	1615.0	1615.0	U	46.0			QL=4 ST=2 TYP=3
	9500	CUBA	1 S	1615.0	1615.2	1.6	23.0	11.0		
	235	CUBA	48 C	1947.2	2003.8	30.8	37.0	18.0		
	280	CUBA	48 C	1947.2	2003.8	30.8	124.0	62.0		
	9500	CUBA	21 GRF	1952.0	2008.0	55.0	18.0	9.0		
	610	PALE	48 C	1958.0	2004.0	10.0	240.0			QL=4 ST=2 TYP=8
	610	SGMR	48 C	1958.0	2004.0	10.0	230.0			QL=4 ST=2 TYP=8
	610	SGMR	48 C	1958.0	2004.0	15.0	230.0			QL=4 ST=2 TYP=8
	245	PALE	49 GB	1958.0	2012.0	20.0	7500.0			QL=4 ST=2 TYP=6

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APRIL 2003

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 -22 W/m 2 Hz)		
22	245	SGMR	49 GB	1958.0	2012.0	20.0	6100.0			QL=4 ST=2 TYP=6
	410	SGMR	4 S/F	2000.0	2004.0	7.0	140.0			QL=4 ST=2 TYP=3
	410	SGMR	48 C	2000.0	2004.0	14.0	140.0			QL=4 ST=2 TYP=8
	410	PALE	4 S/F	2003.0	2004.0	3.0	150.0			QL=4 ST=2 TYP=3
	410	PALE	48 C	2003.0	2012.0	11.0	160.0			QL=4 ST=2 TYP=8
	9500	CUBA	2 S/F	2003.4	2004.8	4.6	12.0	6.0		
	1415	PALE	8 S	2004.0	2004.0		100.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	2004.0	2004.0		100.0			QL=4 ST=2 TYP=3
	500	HIRA	7 C	2052.0	2057.0	13.0	35.0			0
	500	HIRA	8 S	2113.0	2113.0	1.0	40.0			0
	410	PALE	8 S	2113.0	2113.0	1.0	72.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2113.0	2113.0	1.0	61.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	2125.0	2126.0	2.0	305.0			WL
	410	PALE	8 S	2125.0	2126.0	1.0	290.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2125.0	2126.0	1.0	270.0			QL=4 ST=2 TYP=3
23	127	TORN	44 NS	0630.0E		510.0D		20.0		V=2
	235	CUBA	44 NS	1305.0E		515.0D		7.0		
	280	CUBA	44 NS	1305.0E		515.0D		22.0		
	2800	PENT	47 GB	0035.0	0035.0U	1.0				
	2840	PEKG	47 GB	0040.0	0106.5	49.0	433.6			
	2804	VORO	4 S/F	0059.3	0101.0U	13.8	65.0			
	2800	HIRA	4 S/F	0100.0	0107.0	17.0	370.0			0
	245	PALE	48 C	0100.0	0102.0	14.0	16000.0			QL=4 ST=2 TYP=8
	410	PALE	48 C	0100.0	0109.0	14.0	5300.0			QL=4 ST=2 TYP=8
	610	PALE	48 C	0100.0	0109.0	14.0	1500.0			QL=4 ST=2 TYP=8
	1415	PALE	48 C	0100.0	0105.0	11.0	210.0			QL=4 ST=2 TYP=8
	4995	PALE	48 C	0100.0	0106.0	14.0	650.0			QL=4 ST=2 TYP=8
	8800	PALE	48 C	0100.0	0102.0	14.0	1200.0			QL=4 ST=2 TYP=8
	15400	PALE	49 GB	0100.0	0102.0	14.0	1000.0			QL=4 ST=2 TYP=6
	2695	PALE	4 S/F	0100.0	0106.0	13.0	470.0			QL=4 ST=2 TYP=3
	500	HIRA	47 GB	0100.0	0110.0	21.0	1970.0			WR
	410	LEAR	49 GB	0128.0	0130.0	3.0	1000.0			QL=4 ST=2 TYP=6
	610	LEAR	49 GB	0128.0	0130.0	3.0	1200.0			QL=4 ST=2 TYP=6
	245	LEAR	4 S/F	0128.0	0130.0	3.0	260.0			QL=4 ST=2 TYP=3
	410	PALE	49 GB	0128.0	0130.0	3.0	1600.0			QL=4 ST=2 TYP=6
	610	PALE	49 GB	0128.0	0130.0	3.0	1200.0			QL=4 ST=2 TYP=6
	245	PALE	4 S/F	0128.0	0130.0	3.0	360.0			QL=4 ST=2 TYP=3
	500	HIRA	47 GB	0129.0	0131.0	3.0	970.0			MR
	500	HIRA	47 GB	0154.0	0301.0	126.0	3060.0			ML
	410	LEAR	4 S/F	0156.0	0156.0	6.0	130.0			QL=4 ST=2 TYP=3
	410	PALE	48 C	0156.0	0202.0	7.0	73.0			QL=4 ST=2 TYP=8
	245	LEAR	48 C	0156.0	0201.0	11.0	140.0			QL=4 ST=2 TYP=8
	245	PALE	48 C	0156.0	0158.0	11.0	220.0			QL=4 ST=2 TYP=8
	610	PALE	8 S	0202.0	0202.0		42.0			QL=4 ST=2 TYP=3
	410	LEAR	48 C	0226.0	0228.0	5.0	220.0			QL=4 ST=2 TYP=8
	410	PALE	8 S	0234.0	0234.0	1.0	170.0			QL=4 ST=2 TYP=3
	410	LEAR	48 C	0238.0	0301.0	46.0	3600.0			QL=4 ST=2 TYP=8
	610	LEAR	48 C	0238.0	0301.0	47.0	2900.0			QL=4 ST=2 TYP=8
	410	PALE	48 C	0238.0	0303.0	57.0	4400.0			QL=4 ST=2 TYP=8
	610	PALE	48 C	0238.0	0259.0	72.0	3700.0			QL=4 ST=2 TYP=8
	245	PALE	48 C	0240.0	0301.0	36.0	650.0			QL=4 ST=2 TYP=8
	245	LEAR	48 C	0242.0	0301.0	32.0	470.0			QL=4 ST=2 TYP=8
	610	LEAR	48 C	0333.0	0338.0	10.0	190.0			QL=4 ST=2 TYP=8
	610	LEAR	8 S	0659.0	0659.0	1.0	150.0			QL=4 ST=2 TYP=3
	610	SVTO	8 S	0659.0	0659.0	1.0	150.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	1139.0	1139.0		57.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1139.0	1139.0		36.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	1139.0	1139.0	1.0	88.0			QL=4 ST=2 TYP=3
	8800	SVTO	8 S	1139.0	1139.0	1.0	74.0			QL=4 ST=2 TYP=3
	3000	IZMI	20 GRF	1139.5	1139.7	0.7	24.0	8.9		
	610	SGMR	8 S	1252.0	1253.0	1.0	60.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1329.0	1329.0		240.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1329.0	1329.0	1.0	230.0			QL=4 ST=2 TYP=3
	2800	PENT	29 PBI	1530.0	1546.0	62.0U	60.0			
	9500	CUBA	21 GRF	1537.0	1554.0	71.0	24.0	12.0		
	4995	SVTO	4 S/F	1542.0	1546.0	6.0	97.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	1542.0	1545.0	5.0	38.0			QL=4 ST=2 TYP=3
	15400	SVTO	4 S/F	1542.0	1542.0	5.0	29.0			QL=4 ST=2 TYP=3

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Outstanding Occurrences

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APRIL 2003

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
23	4995	SGMR	4 S/F	1542.0	1545.0	10.0	68.0			QL=4 ST=2 TYP=3
	9500	CUBA	2 S/F	1542.4	1546.3	5.7	28.0	14.0		
	2695	SGMR	4 S/F	1543.0	1546.0	9.0	66.0			QL=4 ST=2 TYP=3
	8800	SGMR	4 S/F	1543.0	1545.0	9.0	48.0			QL=4 ST=2 TYP=3
	2695	SVTO	4 S/F	1543.0	1546.0	6.0	55.0			QL=4 ST=2 TYP=3
	1415	SVTO	4 S/F	1544.0	1550.0	7.0	55.0			QL=4 ST=2 TYP=3
	1415	SGMR	4 S/F	1545.0	1550.0	7.0	62.0			QL=4 ST=2 TYP=3
	15400	SGMR	4 S/F	1545.0	1546.0	7.0	37.0			QL=4 ST=2 TYP=3
	280	CUBA	7 C	1545.3	1555.1	12.3	37.0	18.0		
	235	CUBA	7 C	1545.3	1546.5	12.3	14.0	7.0		
	610	SVTO	8 S	1547.0	1547.0		30.0			QL=4 ST=2 TYP=3
	410	SGMR	4 S/F	1606.0	1611.0	18.0	94.0			QL=4 ST=2 TYP=3
	410	SVTO	20 GRF	1608.0	1611.0	13.0	100.0			QL=4 ST=2 TYP=2
	610	SGMR	4 S/F	1614.0	1622.0	12.0	52.0			QL=4 ST=2 TYP=3
	610	SVTO	20 GRF	1614.0	1622.0	11.0	100.0			QL=4 ST=2 TYP=2
	245	PALE	8 S	1750.0	1750.0		100.0			QL=4 ST=2 TYP=3
24	204	IZMI	43 NS	0600.0		360.00		55.0		
	127	TORN	44 NS	0630.0E		510.00		110.0		V=1
	235	CUBA	44 NS	1300.0E		510.00		12.0		
	280	CUBA	44 NS	1300.0E		510.00		28.0		
	245	LEAR	8 S	0150.0	0150.0		140.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0217.0	0218.0	2.0	90.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0405.0	0405.0		98.0			QL=4 ST=2 TYP=3
	2804	VORO	42 SER	0451.6	0454.1	5.5	14.4			
	2804	VORO	42 SER	0451.6	0531.7	41.1	45.9			
	2840	PEKG	3 S	0527.0	0531.5	21.0	58.2			
	2950	GORK	46 C	0530.7	0538.0		14.0			
	2950	GORK	46 C	0530.7	0532.9	19.6	48.0			
	2800	HIRA	4 S/F	0531.0	0532.0	5.0	45.0			0
	4995	SVTO	4 S/F	0531.0	0532.0	3.0	70.0			QL=4 ST=2 TYP=3
	9100	GORK	2 S/F	0531.2	0532.9	4.3	31.0			
	4995	LEAR	8 S	0532.0	0532.0	1.0	85.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	0729.0	0729.0	1.0	40.0			MR
	500	HIRA	8 S	0737.0	0737.0	1.0	15.0			MR
	245	SVTO	8 S	0829.0	0830.0	1.0	130.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0830.0	0830.0		170.0			QL=4 ST=2 TYP=3
	245	SVTO	48 C	1036.0	1039.0	3.0	270.0			QL=4 ST=3 TYP=8
	610	SVTO	48 C	1247.0	1252.0	16.0	350.0			QL=4 ST=2 TYP=8
	1415	SGMR	4 S/F	1249.0	1251.0	5.0	100.0			QL=4 ST=2 TYP=3
	1415	SGMR	4 S/F	1249.0	1251.0	8.0	100.0			QL=4 ST=2 TYP=3
	1415	SVTO	4 S/F	1249.0	1253.0	8.0	94.0			QL=4 ST=2 TYP=3
	9500	CUBA	3 S	1250.0	1253.0	7.2	109.0	54.0		
	410	SGMR	48 C	1250.0	1251.0	5.0	860.0			QL=4 ST=2 TYP=8
	410	SGMR	49 GB	1250.0	1251.0	2.0	860.0			QL=4 ST=2 TYP=6
	410	SGMR	49 GB	1250.0	1251.0	5.0	860.0			QL=4 ST=2 TYP=6
	610	SGMR	4 S/F	1250.0	1252.0	4.0	430.0			QL=4 ST=2 TYP=3
	2695	SGMR	4 S/F	1250.0	1253.0	6.0	100.0			QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	1250.0	1253.0	6.0	150.0			QL=4 ST=2 TYP=3
	410	SVTO	48 C	1250.0	1251.0	5.0	3100.0			QL=4 ST=2 TYP=8
	2695	SVTO	4 S/F	1250.0	1253.0	7.0	89.0			QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	1250.0	1253.0	8.0	160.0			QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	1250.0	1253.0	9.0	160.0			QL=4 ST=2 TYP=3
	245	SGMR	49 GB	1251.0	1252.0	7.0	1100.0			QL=4 ST=2 TYP=6
	245	SVTO	48 C	1251.0	1252.0	7.0	830.0			QL=4 ST=2 TYP=8
	8800	SVTO	4 S/F	1251.0	1253.0	6.0	87.0			QL=4 ST=2 TYP=3
	8800	SGMR	4 S/F	1251.0	1253.0	10.0	120.0			QL=4 ST=2 TYP=3
	15400	SGMR	4 S/F	1251.0	1253.0	14.0	90.0			QL=4 ST=2 TYP=3
	15400	SVTO	4 S/F	1251.0	1253.0	12.0	82.0			QL=4 ST=2 TYP=3
	610	SVTO	48 C	1256.0	1259.0	3.0	390.0			QL=4 ST=2 TYP=8
	9500	CUBA	29 PBI	1257.2	1257.2	46.8	43.0	21.0		
	33	UPIC	46 C	1258.5	1303.0	7.0				
	245	SGMR	8 S	1603.0	1603.0		61.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2023.0	2023.0		91.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2023.0	2023.0		75.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	2149.0	2149.0	1.0	15.0			0
	245	SGMR	8 S	2149.0	2149.0		82.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	2231.0	2231.0	2.0	25.0			0
	245	PALE	8 S	2231.0	2231.0		220.0			QL=4 ST=2 TYP=3

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

APRIL 2003

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	1415	PALE	8 S	2231.0	2231.0	U	94.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2231.0	2231.0	U	140.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	2231.0	2231.0	U	47.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	2232.0	2232.0	U	71.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	2232.0	2232.0	U	31.0			QL=4 ST=2 TYP=3
25	204	IZMI	44 NS	0600.0E		360.0D		45.0		
	235	CUBA	44 NS	1305.0E		525.0D		12.0		
	280	CUBA	44 NS	1305.0E		525.0D		28.0		
	245	LEAR	8 S	0036.0	0036.0	U	64.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0224.0	0224.0	U	83.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0319.0	0319.0	U	55.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	0443.0	0443.0	1.0	10.0			0
	2840	PEKG	3 S	0518.0	0531.2	531.2	101.9			
	600	GORK	21 GRF	0524.0	0528.3	19.4	17.0			
	2950	GORK	40 F	0524.8	0526.7	4.0	29.0			
	2800	HIRA	7 C	0526.0	0531.0	10.0	85.0			0
	610	SVTO	4 S/F	0528.0	0537.0	14.0	52.0			QL=4 ST=2 TYP=3
	500	HIRA	4 S/F	0528.0	0538.0	23.0	65.0			0
	600	GORK	46 C	0528.8	0530.2		61.0			
	600	GORK	46 C	0528.8	0529.9	1.9	77.0			
	610	LEAR	8 S	0529.0	0529.0	1.0	73.0			QL=4 ST=2 TYP=3
	410	SVTO	4 S/F	0529.0	0529.0	8.0	51.0			QL=4 ST=2 TYP=3
	1415	SVTO	4 S/F	0529.0	0537.0	9.0	29.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	0529.0	0532.0	12.0	82.0			QL=4 ST=2 TYP=3
	9100	GORK	21 GRF	0529.0	0545.2	57.5	33.0			
	2950	GORK	21 GRF	0529.1	0550.1	57.9	15.0			
	2950	GORK	46 C	0529.1	0531.2	6.5	92.0			
	2950	GORK	46 C	0529.1	0533.7		46.0			
	2695	LEAR	4 S/F	0530.0	0531.0	3.0	82.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	0530.0	0531.0	1.0	68.0			QL=4 ST=2 TYP=3
	2695	SVTO	4 S/F	0530.0	0531.0	11.0	84.0			QL=4 ST=2 TYP=3
	9100	GORK	1 S	0530.2	0531.2	2.4	23.0			
	245	LEAR	8 S	0531.0	0532.0	1.0	100.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	0531.0	0531.0	U	58.0			QL=4 ST=2 TYP=3
	600	GORK	40 F	0532.3	0532.7	0.9	19.0			
	9100	GORK	1 S	0533.5	0533.7	0.7	10.0			
	33	UPIC	46 C	0534.0	0535.5	6.5				
	600	GORK	2 S/F	0535.8	0536.0	0.4	21.0			
	2950	GORK	1 S	0537.1	0537.9	1.5	10.0			
	600	GORK	4 S/F	0537.2	0537.8	1.4	60.0			
	2950	GORK	2 S/F	0542.9	0543.9	2.2	11.0			
	9100	GORK	1 S	0543.2	0544.0	1.5	8.0			
	245	SVTO	8 S	0547.0	0549.0	2.0	85.0			QL=4 ST=3 TYP=3
	600	GORK	7 C	0547.7	0550.0	5.1	16.0			
	600	GORK	7 C	0547.7	0551.0		43.0			
	245	LEAR	8 S	0549.0	0549.0	U	93.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0722.0	0722.0	1.0	100.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0723.0	0723.0	U	110.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0927.0	0927.0	U	290.0			QL=4 ST=2 TYP=3
	204	IZMI	45 C	0927.2	0927.3	0.6	529.0			
	245	SVTO	8 S	1040.0	1040.0	U	53.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1040.0	1040.0	U	88.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	1040.3	1040.3	0.1	26.0			
	410	SGMR	8 S	1241.0	1241.0	U	140.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1241.0	1241.0	1.0	240.0			QL=4 ST=2 TYP=3
	2800	PENT	1 S	1927.0	1929.0	4.0	4.0			
	4995	PALE	8 S	1948.0	1948.0	1.0	110.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	1948.0	1948.0	1.0	100.0			QL=4 ST=2 TYP=3
	15400	PALE	8 S	1948.0	1948.0	U	59.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	1948.0	1948.0	U	34.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	1948.0	1948.0	U	24.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	1948.0	1948.0	2.0	70.0			QL=4 ST=2 TYP=3
	15400	SGMR	8 S	1948.0	1948.0	U	25.0			QL=4 ST=2 TYP=3
	9500	CUBA	3 S	1948.1	1948.3	4.7	104.0	52.0		
	8800	SGMR	8 S	1949.0	1949.0	U	21.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1950.0	1950.0	U	330.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	1950.0	1950.0	1.0	190.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1950.0	1950.0	U	190.0			QL=4 ST=2 TYP=3

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

Outstanding Occurrences

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
25	410	SGMR	8 S	1950.0	1950.0	1.0	170.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2009.0	2009.0	U	81.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2013.0	2013.0	U	100.0			QL=4 ST=2 TYP=3
	2800	PENT	1 S	2052.0	2054.0	4.0	4.0			
	4995	PALE	8 S	2053.0	2054.0	1.0	33.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	2053.0	2054.0	1.0	110.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	2053.0	2054.0	1.0	33.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	2053.0	2054.0	1.0	98.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2054.0	2054.0	U	140.0			QL=4 ST=2 TYP=3
	15400	PALE	8 S	2054.0	2054.0	U	270.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2054.0	2054.0	U	92.0			QL=4 ST=2 TYP=3
	15400	SGMR	8 S	2054.0	2054.0	U	190.0			QL=4 ST=2 TYP=3
	235	CUBA	6 S	2054.0	2054.2	1.5	18.0	9.0		
	280	CUBA	6 S	2054.0	2054.2	1.5	32.0	16.0		
	9500	CUBA	4 S/F	2054.5	2055.0	7.1	99.0	49.0		
	245	PALE	8 S	2056.0	2056.0	U	160.0			QL=4 ST=2 TYP=3
	9500	CUBA	2 S/F	2156.1	2156.7	3.7	22.0	11.0		
26	204	IZMI	44 NS	0600.0E		360.0D		25.0		
	127	TORN	44 NS	0630.0E		510.0D		370.0		V=1
	235	CUBA	44 NS	1305.0E		525.0D		13.0		
	280	CUBA	44 NS	1305.0E		525.0D		29.0		
	2800	PENT	29 PBI	0049.0	0055.0	22.0	61.0			
	2840	PEKG	3 S	0050.0	0056.2	12.0	101.6			
	2804	VORO	46 C	0054.9	0056.2	4.4	63.7			
	2800	HIRA	8 S	0055.0	0056.0	2.0	95.0			0
	15400	LEAR	49 GB	0055.0	0055.0	2.0	580.0			QL=4 ST=2 TYP=6
	245	LEAR	8 S	0055.0	0055.0	1.0	420.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	0055.0	0055.0	1.0	55.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	0055.0	0055.0	U	95.0			QL=4 ST=2 TYP=3
	8800	LEAR	8 S	0055.0	0055.0	1.0	260.0			QL=4 ST=2 TYP=3
	15400	PALE	48 C	0055.0	0055.0	3.0	800.0			QL=4 ST=2 TYP=8
	245	PALE	8 S	0055.0	0055.0	1.0	470.0			QL=4 ST=2 TYP=3
	2695	PALE	8 S	0055.0	0055.0	1.0	63.0			QL=4 ST=2 TYP=3
	4995	PALE	8 S	0055.0	0055.0	U	100.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	0055.0	0055.0	1.0	340.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0104.0	0105.0	1.0	380.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0104.0	0105.0	1.0	400.0			QL=4 ST=2 TYP=3
	2804	VORO	21 GRF	0204.1	0232.7	87.3	8.8			
	500	HIRA	8 S	0235.0	0236.0	1.0	30.0			0
	2840	PEKG	5 S	0300.0	0303.6	6.0	38.9			
	245	LEAR	49 GB	0303.0	0303.0	1.0	4300.0			QL=4 ST=2 TYP=6
	4995	LEAR	8 S	0303.0	0303.0	U	92.0			QL=4 ST=2 TYP=3
	8800	LEAR	8 S	0303.0	0303.0	U	190.0			QL=4 ST=2 TYP=3
	15400	LEAR	8 S	0303.0	0303.0	U	450.0			QL=4 ST=2 TYP=3
	245	PALE	49 GB	0303.0	0303.0	1.0	5200.0			QL=4 ST=2 TYP=6
	15400	PALE	49 GB	0303.0	0303.0	1.0	590.0			QL=4 ST=2 TYP=6
	4995	PALE	8 S	0303.0	0303.0	U	100.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	0303.0	0303.0	U	250.0			QL=4 ST=2 TYP=3
	2804	VORO	42 SER	0303.4	0309.3	5.9	22.5			
	2804	VORO	42 SER	0303.4	0303.7	2.8	35.5			
	2800	HIRA	8 S	0304.0	0304.0	1.0	40.0			0
	500	HIRA	8 S	0304.0	0304.0	1.0	15.0			0
	2840	PEKG	5 S	0305.0	0309.1	9.0	36.7			
	245	LEAR	8 S	0309.0	0309.0	U	100.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0309.0	0309.0	U	100.0			QL=4 ST=2 TYP=3
	15400	PALE	8 S	0309.0	0309.0	U	75.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0755.7	0757.8	2.5	84.0			
	9100	GORK	45 C	0757.0	0758.3		21.0			
	33	UPIC	42 SER	0757.0	0806.5	47.0				
	2950	GORK	5 S	0757.0	0757.6	1.2	3.8			
	9100	GORK	45 C	0757.0	0757.9	2.1	32.0			
	2840	PEKG	45 C	0802.0	0805.6	14.0	154.2			
	204	IZMI	7 C	0803.3	0803.3	0.1	72.0			
	500	HIRA	4 S/F	0804.0	0807.0	5.0	215.0			0
	127	TORN	47 GB	0804.0U	0805.0	2.5D	20000.0	6700.0		DISTURBED
	2950	GORK	46 C	0804.6	0805.5	4.3	150.0			
	2950	GORK	46 C	0804.6	0806.9		40.0			
	9100	GORK	46 C	0804.8	0805.6	2.9	72.0			

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APRIL 2003

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
26	9100	GORK	46 C	0804.8	0806.7		30.0			
	600	GORK	40 F	0804.9	0806.5	3.2	130.0			
	204	IZMI	46 C	0804.9	0805.6	2.7	55400.0			
	2800	HIRA	4 S/F	0805.0	0807.0	4.0	30.0			0
	245	LEAR	49 GB	0805.0	0805.0	2.0	3600.0			QL=4 ST=2 TYP=6
	410	LEAR	8 S	0805.0	0806.0	2.0	240.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	0805.0	0805.0	U	63.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0805.0	0806.0	2.0	300.0			QL=4 ST=2 TYP=3
	610	SVTO	8 S	0805.0	0806.0	2.0	310.0			QL=4 ST=2 TYP=3
	1415	SVTO	8 S	0805.0	0805.0	U	23.0			QL=4 ST=2 TYP=3
	410	SVTO	4 S/F	0805.0	0805.0	955.0	290.0			QL=4 ST=2 TYP=3
	610	SVTO	4 S/F	0805.0	0805.0	955.0	65.0			QL=4 ST=2 TYP=3
	1415	SVTO	4 S/F	0805.0	0805.0	955.0	23.0			QL=4 ST=2 TYP=3
	2695	SVTO	4 S/F	0805.0	0805.0	955.0	47.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	0805.0	0805.0	955.0	58.0			QL=4 ST=2 TYP=3
	15400	SVTO	4 S/F	0805.0	0805.0	955.0	83.0			QL=4 ST=2 TYP=3
	3000	IZMI	7 C	0805.5	0805.8	0.4	76.0	16.3		
	610	LEAR	8 S	0806.0	0806.0	1.0	320.0			QL=4 ST=2 TYP=3
	3000	IZMI	22 GRF	0806.4	0806.9	1.5	30.0	7.5		
	204	IZMI	45 C	0808.4	0808.4	0.2	245.0			
	33	UPIC	4 S/F	1126.0	1126.5	2.0				
	245	SGMR	8 S	1357.0	1357.0	2.0	72.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1357.0	1357.0	2.0	66.0			QL=4 ST=2 TYP=3
	127	TORN	47 GB	1421.4	1421.7	1.0	9000.00	4500.00		DISTURBED
	245	SGMR	8 S	1422.0	1423.0	1.0	95.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1422.0	1423.0	1.0	100.0			QL=4 ST=2 TYP=3
	33	UPIC	3 S	1422.5	1423.5	1.5				
	610	SVTO	8 S	1428.0	1429.0	1.0	40.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1429.0	1429.0	1.0	490.0			QL=4 ST=2 TYP=3
	245	SVTO	49 GB	1429.0	1429.0	1.0	540.0			QL=4 ST=2 TYP=6
	235	CUBA	6 S	1429.2	1429.5	0.7	255.0	127.0		
	280	CUBA	6 S	1429.2	1429.5	0.7	457.0	229.0		
	127	TORN	7 C	1441.3	1441.6	1.0	470.0	150.0		
	8800	SGMR	8 S	1442.0	1442.0	U	35.0			QL=4 ST=2 TYP=3
	15400	SGMR	8 S	1442.0	1442.0	1.0	54.0			QL=4 ST=2 TYP=3
	15400	SVTO	8 S	1442.0	1442.0	U	50.0			QL=4 ST=2 TYP=3
	610	SVTO	8 S	1509.0	1510.0	2.0	92.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1527.0	1527.0	U	120.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1527.0	1527.0	U	130.0			QL=4 ST=2 TYP=3
	245	SGMR	49 GB	1539.0	1539.0	1.0	2300.0			QL=4 ST=2 TYP=6
	410	SGMR	8 S	1539.0	1539.0	1.0	140.0			QL=4 ST=2 TYP=3
	245	SVTO	49 GB	1539.0	1539.0	1.0	2100.0			QL=4 ST=2 TYP=6
	410	SVTO	8 S	1539.0	1539.0	1.0	190.0			QL=4 ST=2 TYP=3
	235	CUBA	6 S	1539.8	1540.1	1.1	69.0	35.0		
	280	CUBA	6 S	1539.8	1540.1	1.1	106.0	53.0		
	245	SGMR	4 S/F	1558.0	1600.0	3.0	240.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	1558.0	1600.0	3.0	260.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1601.0	1601.0	U	22.0			QL=4 ST=2 TYP=3
	2800	PENT	1 S	1602.0	1604.0	5.0	6.0			
	245	SGMR	8 S	1603.0	1604.0	1.0	280.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1603.0	1604.0	2.0	320.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1603.0	1604.0	2.0	210.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1604.0	1604.0	1.0	100.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1633.0	1634.0	1.0	350.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1634.0	1634.0	U	290.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1634.0	1634.0	U	32.0			QL=4 ST=2 TYP=3
	33	UPIC	45 C	1634.0	1635.0	1.5				
	245	PALE	8 S	1658.0	1658.0	1.0	430.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1658.0	1658.0	U	240.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1658.0	1658.0	U	220.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1702.0	1702.0	U	280.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1702.0	1702.0	U	210.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1702.0	1702.0	U	33.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1704.0	1705.0	1.0	36.0			QL=2 ST=2 TYP=3
	245	SGMR	8 S	1706.0	1708.0	2.0	290.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1706.0	1708.0	2.0	360.0			QL=2 ST=2 TYP=3
	245	PALE	8 S	1707.0	1708.0	1.0	310.0			QL=4 ST=2 TYP=3
	2800	PENT	1 S	1754.0	1757.0	6.0	8.0			
	245	PALE	49 GB	1756.0	1756.0	1.0	1000.0			QL=4 ST=2 TYP=6

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

Outstanding Occurrences

23
Apr 03

APRIL 2003

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
26	245	SGMR	49 GB	1756.0	1756.0	2.0	790.0			QL=4 ST=2 TYP=6
	410	SGMR	8 S	1756.0	1757.0	1.0	60.0			QL=4 ST=2 TYP=3
	235	CUBA	6 S	1756.0	1756.3	0.5	121.0	61.0		
	280	CUBA	6 S	1756.0	1756.3	0.5	121.0	60.0		
	410	PALE	8 S	1757.0	1758.0	1.0	74.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2216.0	2216.0	U	70.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2301.0	2301.0	1.0	140.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	2313.0	2313.0	1.0	25.0			0
	245	PALE	8 S	2313.0	2313.0	U	290.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	2313.0	2313.0	U	47.0			QL=4 ST=2 TYP=3
	2800	PENT	29 PBI	2336.0	2339.0	48.0	63.0			
	2840	PEKG	3 S	2336.0	2339.6	17.0	76.1			
	245	LEAR	49 GB	2338.0	2339.0	5.0	5500.0			QL=4 ST=2 TYP=6
	245	PALE	49 GB	2338.0	2339.0	5.0	6200.0			QL=4 ST=2 TYP=6
	410	PALE	49 GB	2338.0	2339.0	1.0	960.0			QL=4 ST=2 TYP=6
	2800	HIRA	3 S	2339.0	2340.0	6.0	55.0			0
	500	HIRA	4 S/F	2339.0	2339.0	6.0	190.0			0
	1415	PALE	8 S	2339.0	2339.0	1.0	66.0			QL=4 ST=2 TYP=3
	2695	PALE	8 S	2339.0	2339.0	1.0	71.0			QL=4 ST=2 TYP=3
	4995	PALE	8 S	2339.0	2339.0	U	74.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	2339.0	2339.0	U	120.0			QL=4 ST=2 TYP=3
	15400	PALE	8 S	2339.0	2339.0	U	60.0			QL=4 ST=2 TYP=3
	2804	VORO	3 S	2339.3	2339.6	5.9	60.6			
27	204	IZMI	44 NS	0600.0E		360.0D		10.0		
	127	TORN	44 NS	0630.0E		510.0D		19.0		V=1
	235	CUBA	44 NS	1320.0E		475.0D		11.0		
	280	CUBA	44 NS	1320.0E		475.0D		32.0		
	245	SGMR	43 NS	2209.0	2209.0	20.0	70.0			QL=4 ST=2 TYP=1
	245	LEAR	8 S	0042.0	0042.0	U	180.0			QL=4 ST=2 TYP=3
	245	PALE	49 GB	0052.0	0053.0	1.0	690.0			QL=4 ST=2 TYP=6
	245	LEAR	49 GB	0053.0	0053.0	U	640.0			QL=4 ST=2 TYP=6
	410	PALE	8 S	0053.0	0053.0	U	65.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	0105.0	0105.0	1.0	120.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0106.0	0108.0	2.0	160.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0106.0	0108.0	2.0	180.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0123.0	0123.0	U	80.0			QL=4 ST=2 TYP=3
	2804	VORO	21 GRF	0300.5	0423.2	85.0				
	500	HIRA	42 SER	0354.0	0401.0	36.0	60.0			0
	2840	PEKG	20 GRF	0407.0	0413.4	20.0	14.7			
	2804	VORO	1 S	0411.6	0413.3	3.6	12.4			
	600	GORK	40 F	0645.0	0645.2	1.2	50.0			
	500	HIRA	8 S	0646.0	0646.0	1.0	60.0			0
	2840	PEKG	3 S	0736.0	0739.1	10.0	11.7			
	127	TORN	47 GB	0737.3	0738.2	1.7	5000.0	1300.0		DISTURBED
	204	IZMI	45 C	0737.9	0738.2	0.7	579.0			
	245	LEAR	49 GB	0738.0	0738.0	1.0	2100.0			QL=4 ST=2 TYP=6
	600	GORK	40 F	0738.2	0739.4	3.8	27.0			
	2950	GORK	46 C	0738.4	0739.3	3.8	12.0			
	2950	GORK	46 C	0738.4	0741.5		10.0			
	204	IZMI	45 C	0738.7	0739.1	1.9	831.0			
	9100	GORK	7 C	0738.7	0739.2	1.1	16.0			
	9100	GORK	7 C	0738.7	0739.5		12.0			
	500	HIRA	8 S	0739.0	0740.0	1.0	125.0			0
	3000	IZMI	7 C	0739.1	0739.2	0.6	12.0	4.9		
	245	SVTO	8 S	0810.0	0810.0	U	83.0			QL=4 ST=2 TYP=3
	2800	PENT	24 R	1404.0	1530.0	148.0U	62.0			
	410	SGMR	48 C	1530.0	1533.0	4.0	830.0			QL=4 ST=2 TYP=8
	245	SGMR	49 GB	1530.0	1530.0	4.0	1600.0			QL=4 ST=2 TYP=6
	8800	SGMR	8 S	1530.0	1530.0	1.0	150.0			QL=4 ST=2 TYP=3
	15400	SGMR	8 S	1530.0	1530.0	U	49.0			QL=4 ST=2 TYP=3
	610	SGMR	4 S/F	1530.0	1530.0	4.0	290.0			QL=4 ST=2 TYP=3
	1415	SGMR	4 S/F	1530.0	1530.0	4.0	23.0			QL=4 ST=2 TYP=3
	2695	SGMR	4 S/F	1530.0	1530.0	4.0	65.0			QL=4 ST=2 TYP=3
	410	SVTO	48 C	1530.0	1533.0	3.0	530.0			QL=4 ST=2 TYP=8
	245	SVTO	49 GB	1530.0	1530.0	4.0	1300.0			QL=4 ST=2 TYP=6
	610	SVTO	8 S	1530.0	1530.0	U	120.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	1530.0	1530.0	1.0	56.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	1530.0	1530.0	1.0	110.0			QL=4 ST=2 TYP=3

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Apr 03

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

APRIL 2003

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Mean	Int	Remarks
27	8800	SVTO	8 S	1530.0	1530.0	1.0	140.0			QL=4 ST=2 TYP=3
	15400	SVTO	8 S	1530.0	1530.0	U	64.0			QL=4 ST=2 TYP=3
	9500	CUBA	3 S	1530.1	1530.8	2.0	135.0	67.0		
	9500	CUBA	1 S	1604.3	1604.6	0.8	16.0	8.0		
	245	PALE	8 S	2110.0	2110.0	U	53.0			QL=4 ST=2 TYP=3
	245	PALE	4 S/F	2136.0	2139.0	3.0	66.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	2147.0	2147.0	1.0	80.0			0
	245	LEAR	8 S	2346.0	2346.0	U	59.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	2353.0	2353.0	1.0	86.0			QL=4 ST=2 TYP=3
28	245	LEAR	43 NS	0020.0	0022.0	97.0	68.0			QL=4 ST=2 TYP=1
	127	TORN	44 NS	0630.0E		510.0D		13.0		V=1,DISTURBED
	235	CUBA	44 NS	1310.0E		520.0D		11.0		
	280	CUBA	44 NS	1310.0E		520.0D		30.0		
	245	SGMR	43 NS	1719.0	1741.0	22.0	68.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	2148.0	0017.0	147.0	430.0			QL=4 ST=2 TYP=1
	245	LEAR	8 S	0010.0	0010.0	1.0	69.0			QL=4 ST=2 TYP=3
	2840	PEKG	3 S	0152.0	0155.3	10.0	55.6			
	2804	VORO	4 S/F	0154.6	0155.4	2.2	36.8			
	2800	HIRA	8 S	0155.0	0155.0	1.0	40.0			0
	500	HIRA	8 S	0155.0	0155.0	1.0	20.0			0
	410	LEAR	8 S	0155.0	0155.0	U	71.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0234.0	0234.0	1.0	350.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0245.0	0245.0	U	66.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0256.0	0256.0	U	81.0			QL=4 ST=2 TYP=3
	2804	VORO	23 GRF	0355.0	0441.2	122.0				
	2840	PEKG	45 C	0355.0	0400.5	15.0	74.0			
	2804	VORO	46 C	0359.9	0400.6	2.4	39.3			
	2800	HIRA	8 S	0400.0	0400.0	1.0	25.0			0
	245	LEAR	8 S	0415.0	0415.0	U	70.0			QL=4 ST=2 TYP=3
	2840	PEKG	5 S	0441.0	0443.5	7.0	15.2			
	2804	VORO	40 F	0441.9	0443.1	3.9	13.4			
	500	HIRA	8 S	0443.0	0445.0	4.0	15.0			0
	245	PALE	8 S	1719.0	1719.0	U	89.0			QL=4 ST=2 TYP=3
	9500	CUBA	1 S	1813.2	1814.5	2.6	9.0	5.0		
	500	HIRA	8 S	2212.0	2212.0	1.0	10.0			0
29	204	IZMI	43 NS	0600.0		360.0D		20.0		
	127	TORN	44 NS	0740.0E		460.0D		22.0		V=2
	245	SGMR	43 NS	1207.0	1450.0	395.0	100.0			QL=4 ST=2 TYP=1
	235	CUBA	44 NS	1310.0E		450.0D		14.0		
	280	CUBA	44 NS	1310.0E		450.0D		40.0		
	245	PALE	43 NS	1658.0	1718.0	52.0	100.0			QL=4 ST=2 TYP=1
	2804	VORO	20 GRF	0355.3	0459.6	85.0				
	2800	PENT	20 GRF	1407.0	1448.0	84.0	5.0			
	245	SVTO	8 S	1600.0	1600.0	U	59.0			QL=2 ST=2 TYP=3
	610	SGMR	8 S	1617.0	1617.0	U	94.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1617.0	1617.0	U	61.0			QL=2 ST=2 TYP=3
	410	SVTO	8 S	1617.0	1617.0	1.0	24.0			QL=2 ST=2 TYP=3
	610	SVTO	8 S	1617.0	1617.0	U	90.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1650.0	1651.0	2.0	71.0			QL=2 ST=2 TYP=3
	245	PALE	4 S/F	2018.0	2020.0	4.0	150.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2019.0	2020.0	1.0	120.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2025.0	2025.0	U	85.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2025.0	2025.0	U	64.0			QL=4 ST=2 TYP=3
30	127	TORN	43 NS	0837.0		300.0		11.0		V=1
	235	CUBA	44 NS	1300.0E		300.0D		11.0		
	280	CUBA	44 NS	1300.0E		300.0D		31.0		
	245	LEAR	8 S	0001.0	0001.0	2.0	64.0			QL=4 ST=2 TYP=3
	2840	PEKG	5 S	0729.0	0731.0	9.0	61.0			
	2695	SVTO	8 S	0730.0	0731.0	1.0	51.0			QL=4 ST=2 TYP=3
	9100	GORK	2 S/F	0730.1	0730.6	2.7	15.0			
	2950	GORK	3 S	0730.2	0730.9	7.8	50.0			
	600	GORK	41 F	0730.4	0735.0		2.7			
	600	GORK	41 F	0730.4	0730.6	5.2	1.8			
	3000	IZMI	20 GRF	0730.4	0730.9	1.6	59.0	26.4		
	204	IZMI	7 C	1044.5	1044.6	0.3	14.0			
	245	SGMR	8 S	1250.0	1250.0	U	230.0			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

25
Apr 03

APRIL 2003

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
30	L 245	SVTO	8 S	1250.0	1250.0	U	210.0			QL=4 ST=2 TYP=3
	[410	SGMR	8 S	1448.0	1448.0	1.0	270.0			QL=4 ST=2 TYP=3
	[610	SGMR	8 S	1448.0	1449.0	1.0	49.0			QL=4 ST=2 TYP=3
	[410	SVTO	8 S	1448.0	1448.0	1.0	350.0			QL=4 ST=2 TYP=3
	[245	PALE	8 S	1915.0	1915.0	1.0	77.0			QL=4 ST=2 TYP=3
	[245	SGMR	8 S	1915.0	1915.0	U	79.0			QL=4 ST=2 TYP=3
	[245	SGMR	8 S	2031.0	2031.0	U	51.0			QL=4 ST=2 TYP=3

Reports are received routinely from the following observatories:

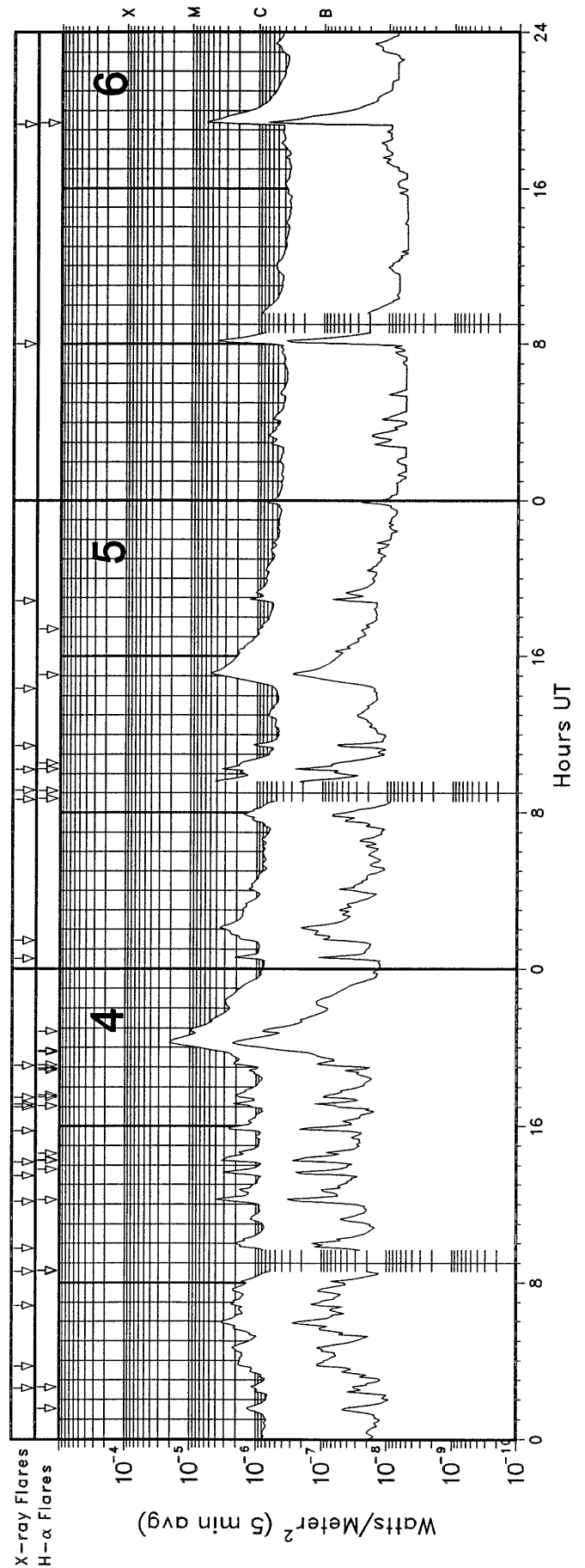
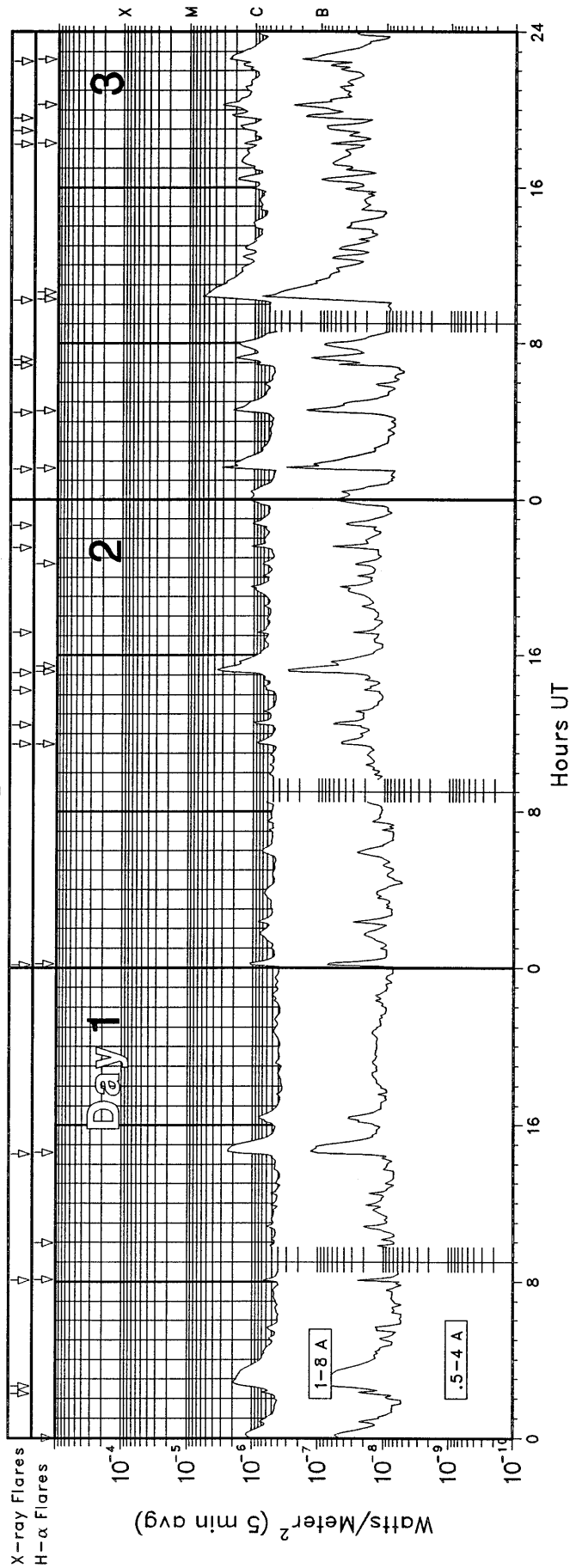
BERN = Berne	HUMN = Humain	ONDR = Ondrejov	SVTO = San Vito
CRIM = Crimea	IZMI = IZMIRAN	PEKG = Peking	TORN = Torun
CUBA = Havana	KISV = Kislovodsk	PALE = Palehua	TRST = Trieste
GORK = Gorky	KRAK = Krakow	PENT = Penticton	TYKW = Toyokawa
HIRA = Hiraiso	LEAR = Learmonth	POTS = Potsdam	UPIC = Upice
HUAN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

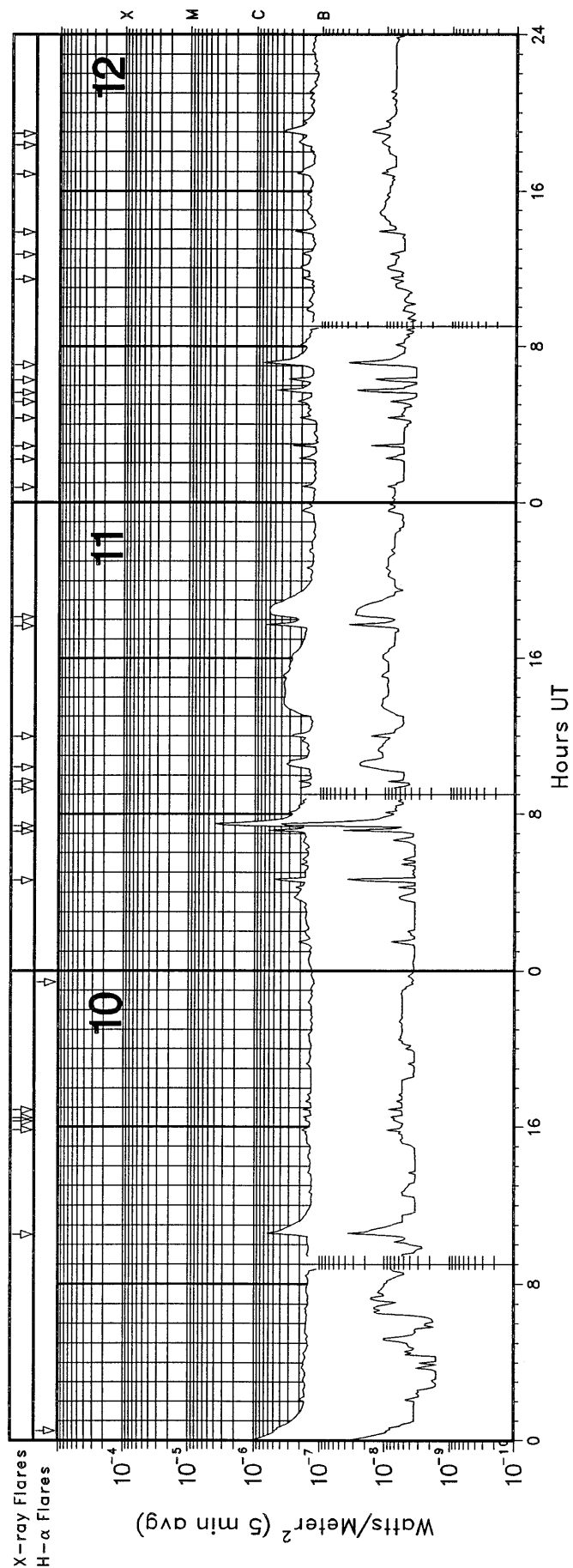
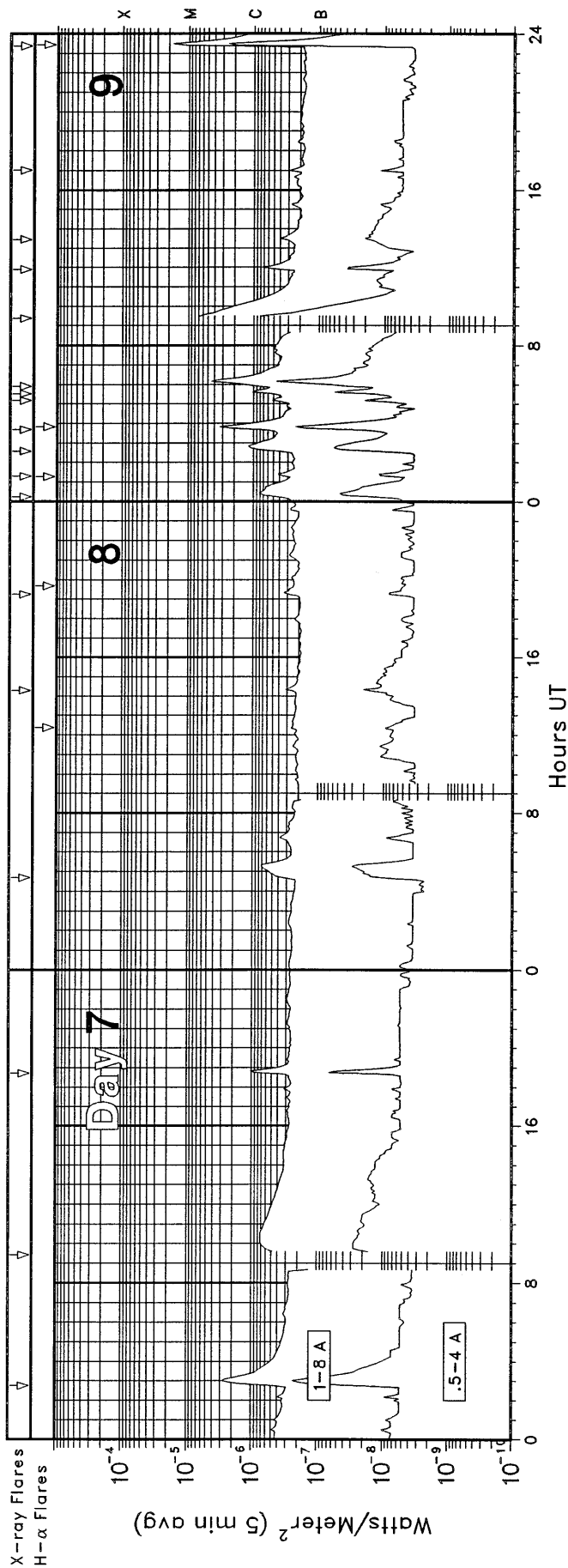
RSTN Site Information: Beginning in April 1986, the RSTN sites LEAR, PALE, SGMR, and SVTO fixed frequency solar radio data are periodically adjusted to several world standard stations. These world standard stations include: Kislovodsk, USSR 15,500 MHz; Penticton, Canada 2800 MHz; and Hiraiso, Japan 500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

GOES X-RAY DETECTOR April 2003

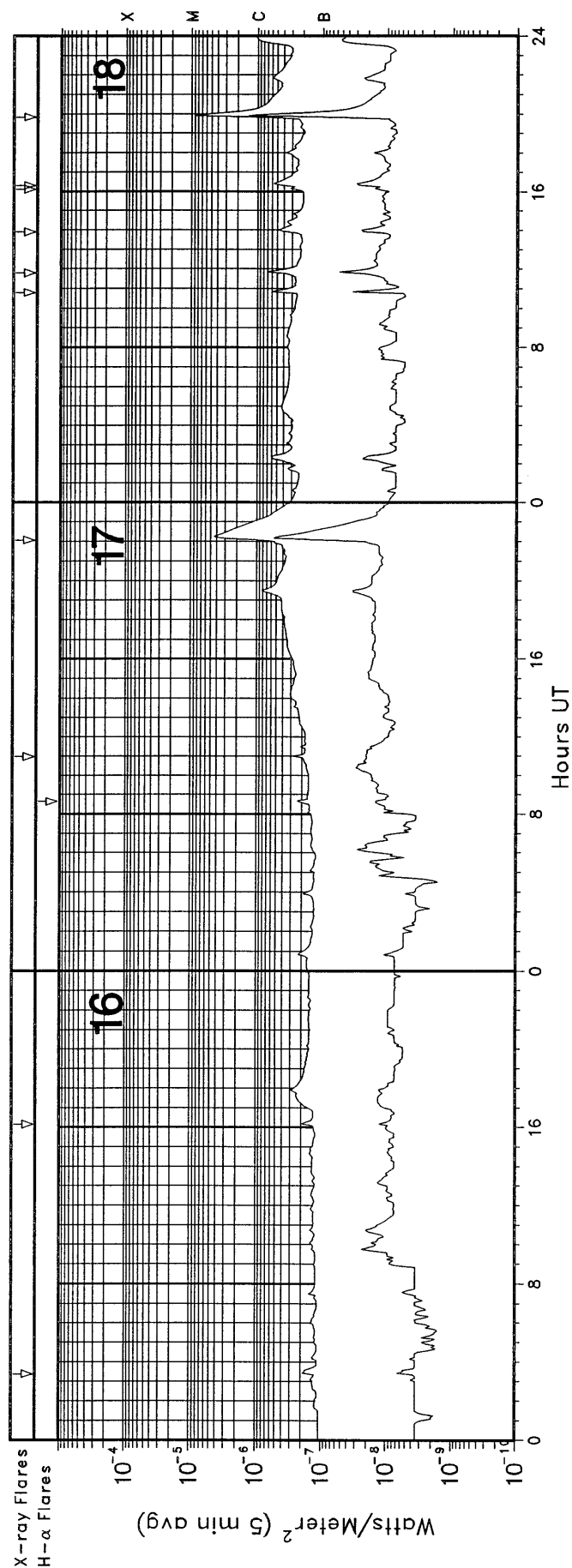
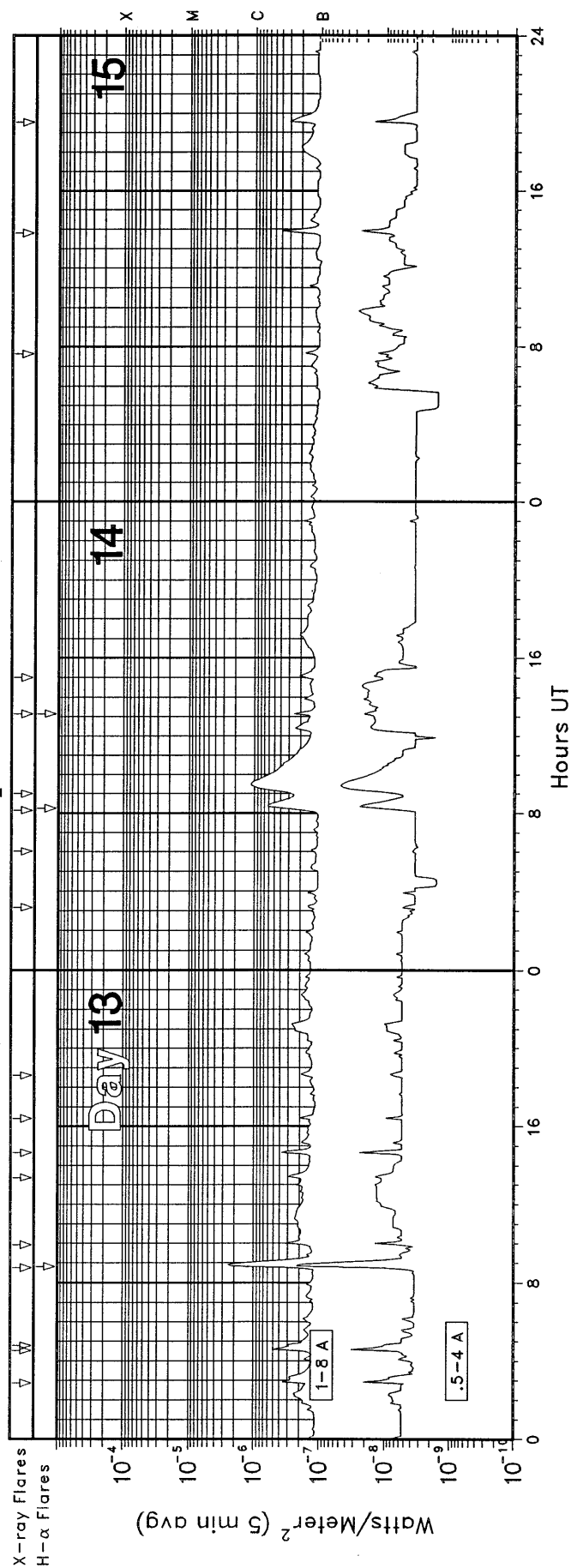


GOES X-RAY DETECTOR

April 2003

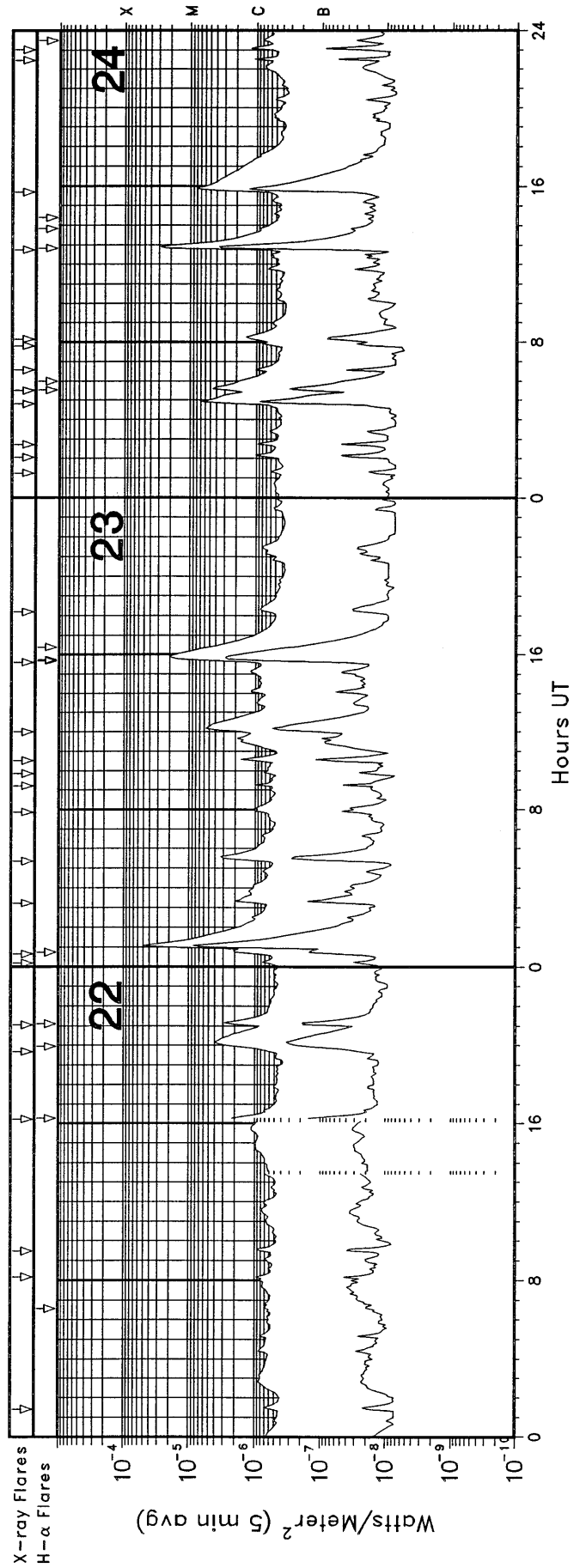
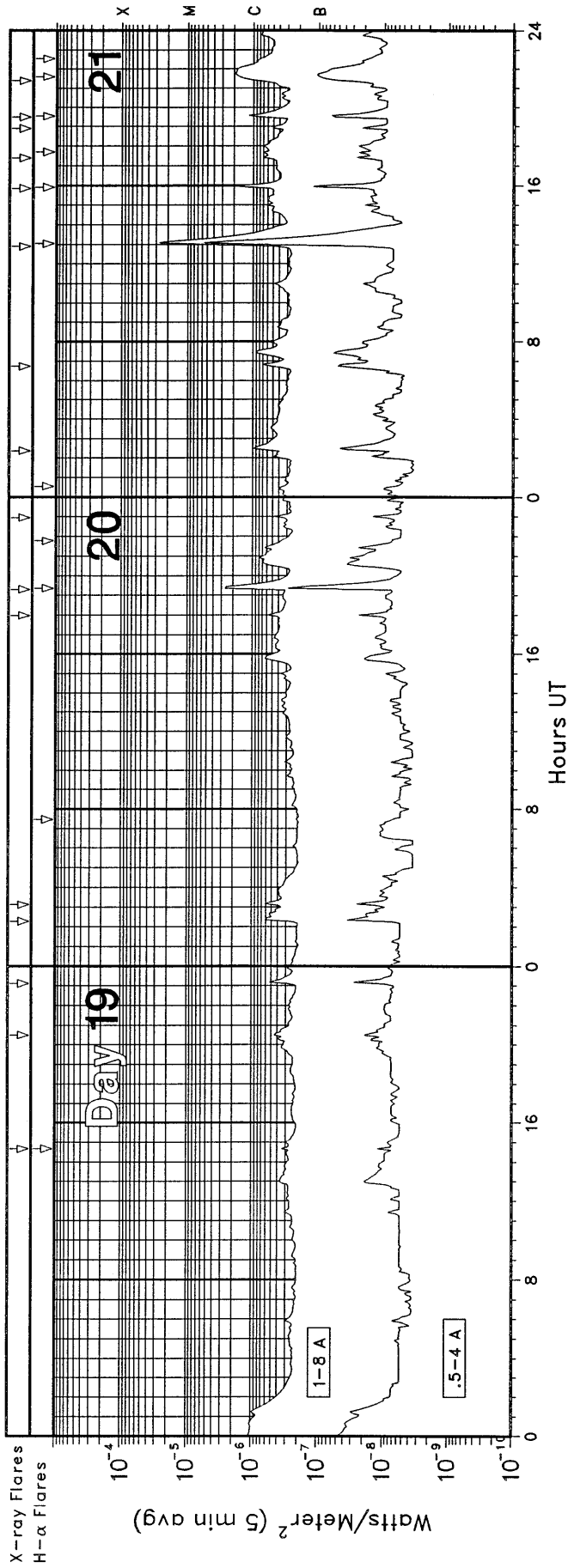


GOES X-RAY DETECTOR April 2003

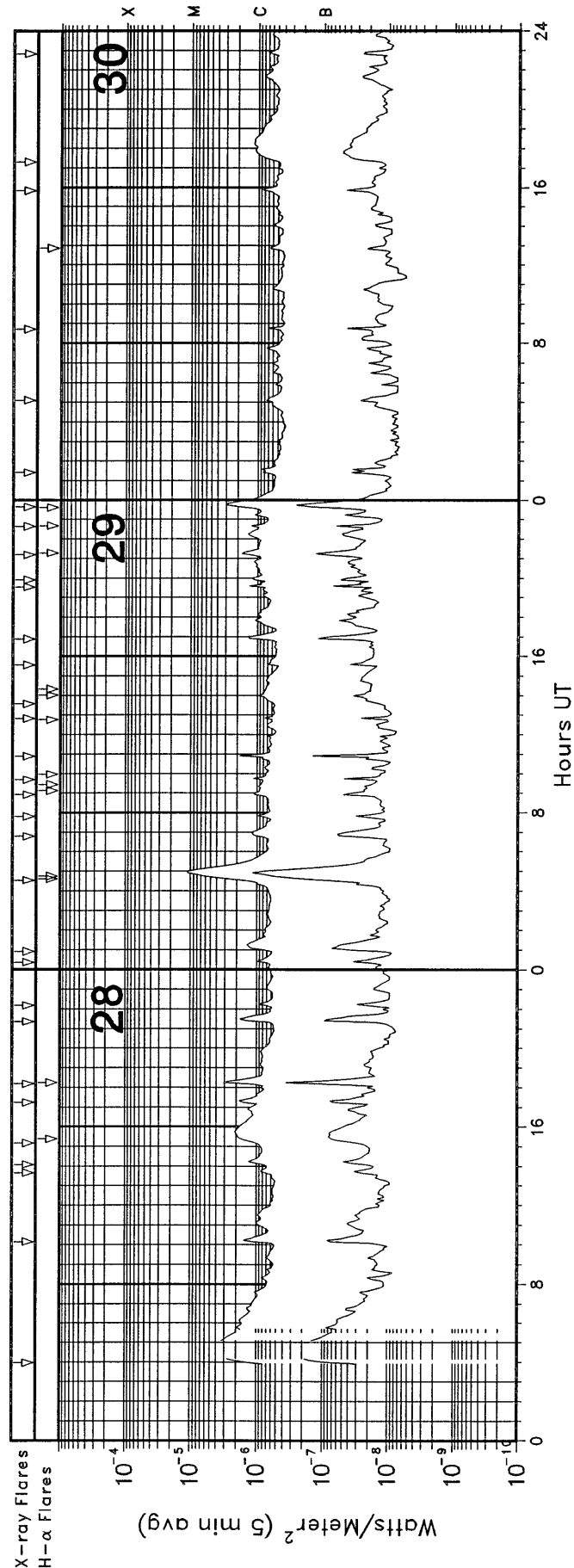
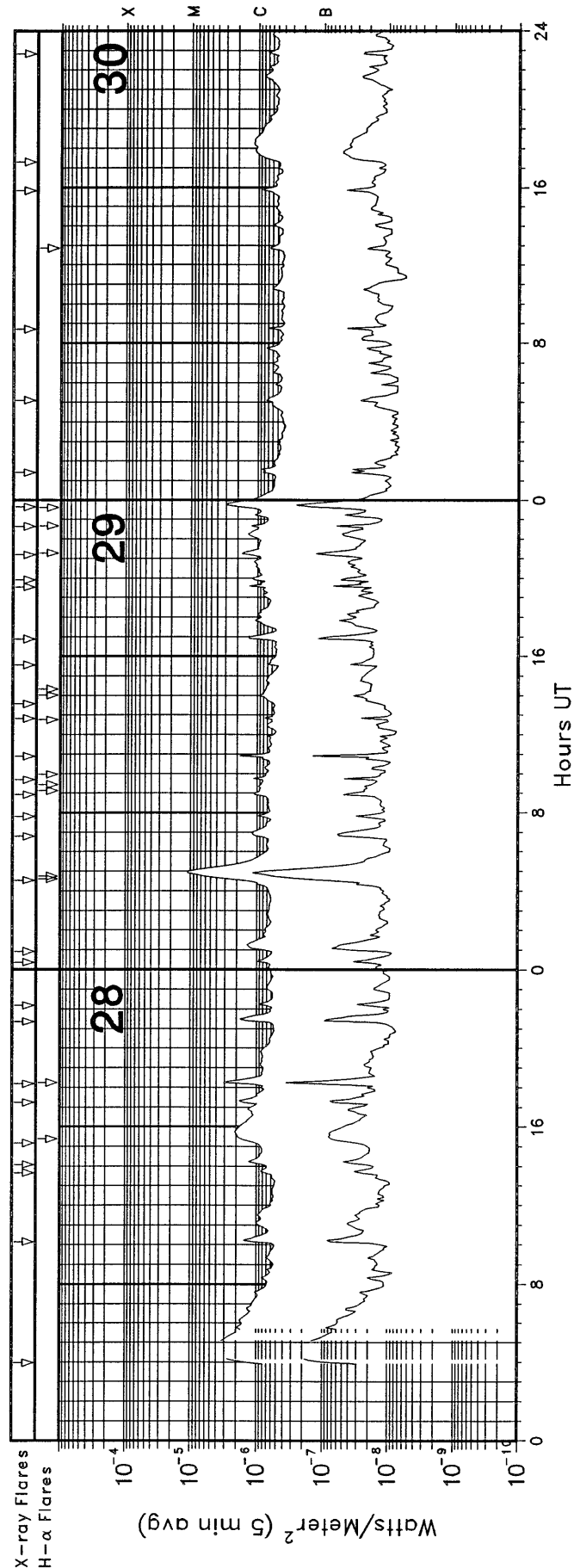
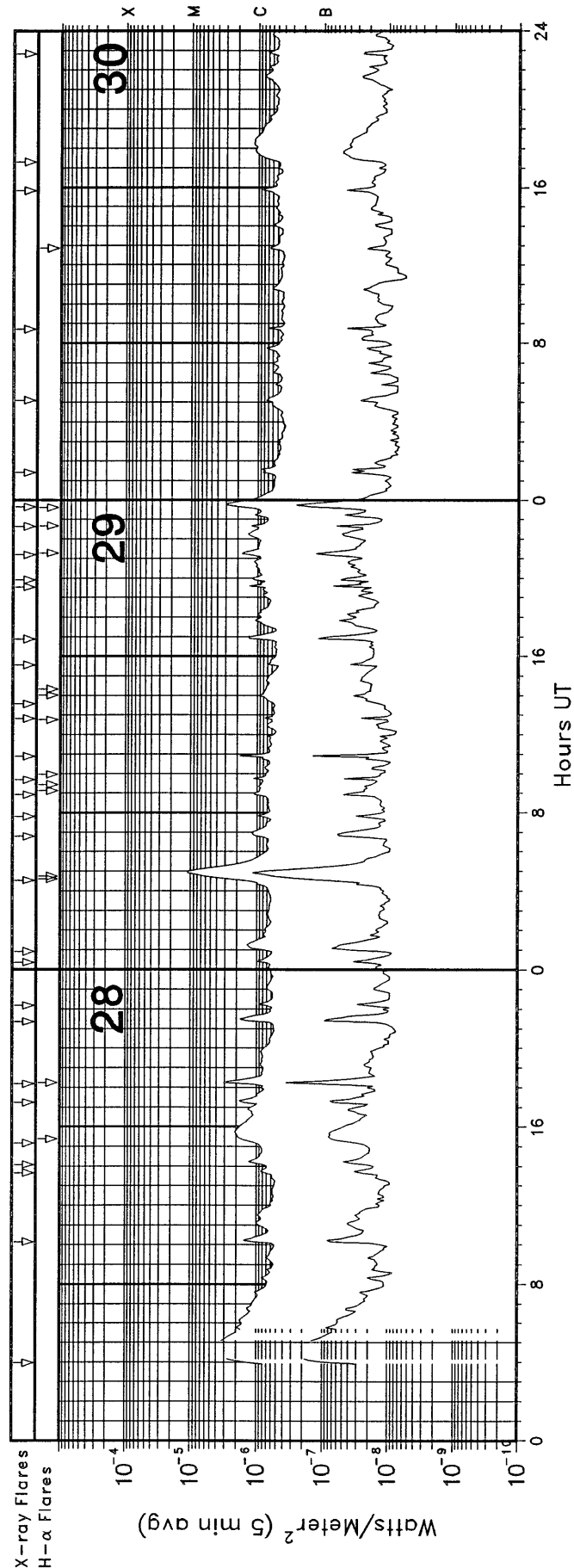
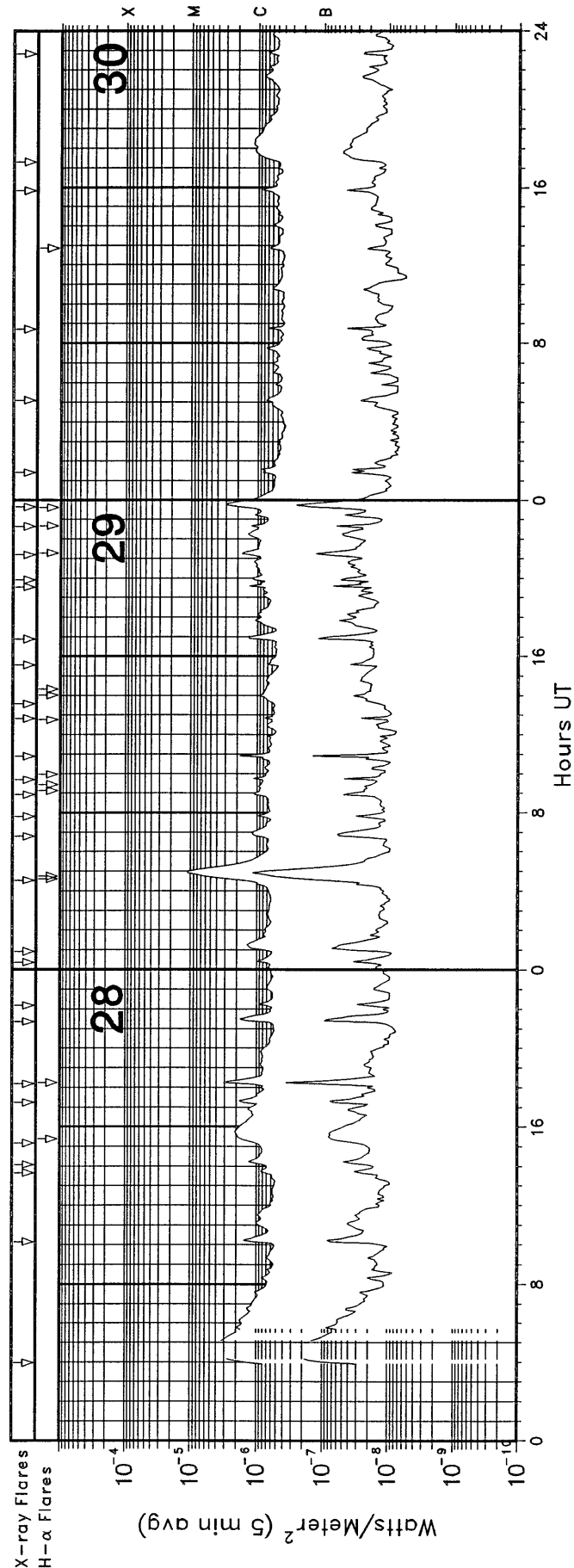
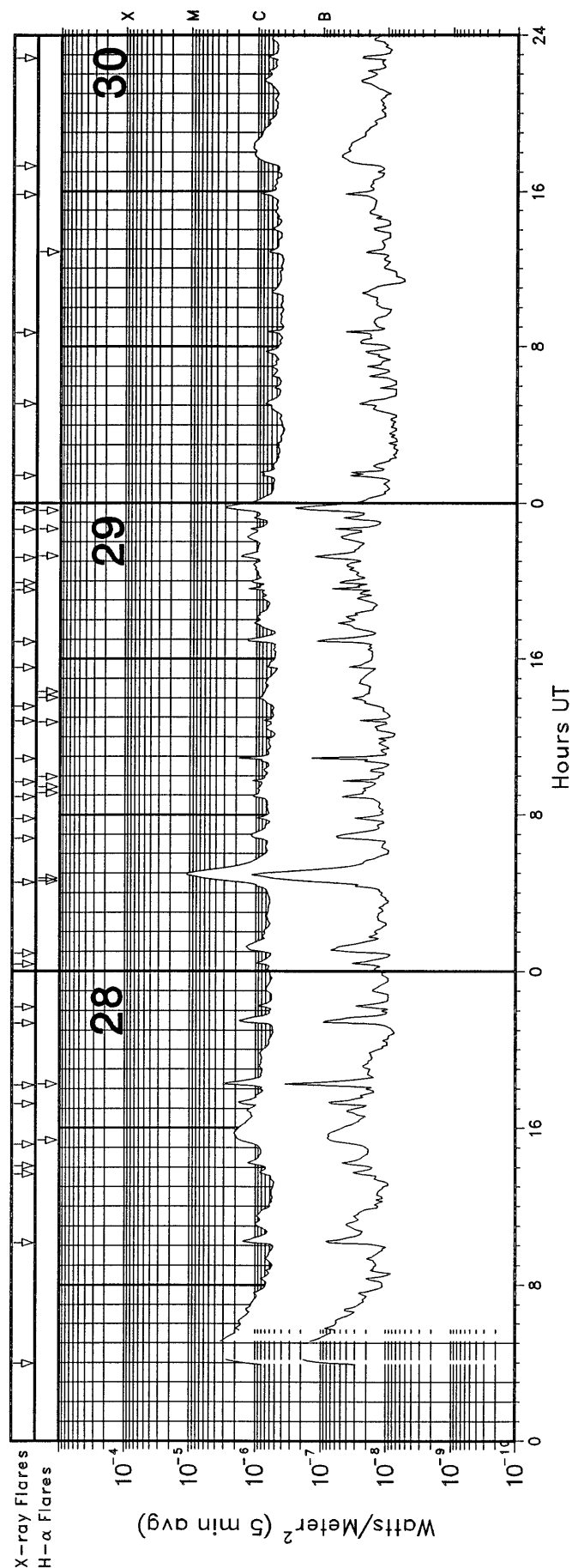
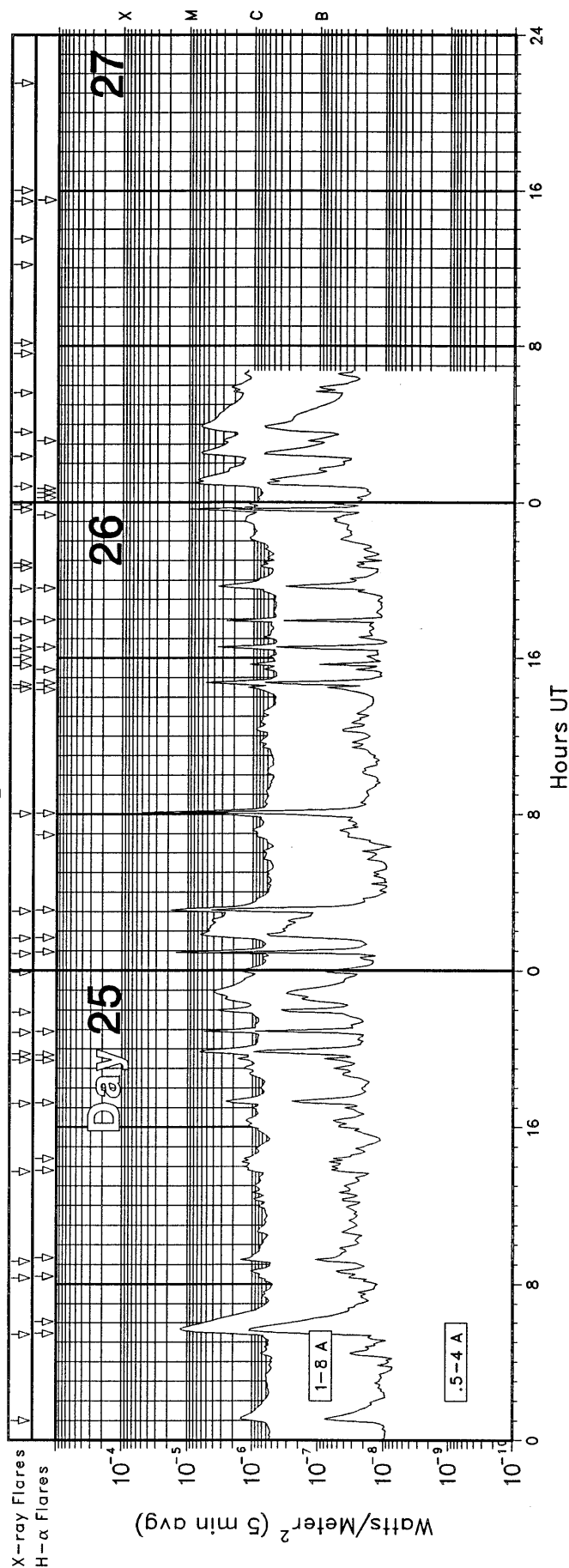


GOES X-RAY DETECTOR

April 2003



GOES X-RAY DETECTOR April 2003



GOES S O L A R X-RAY F L A R E S
Preliminary Listing

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Apr 03

April 2003

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
01	0216	0220	0224				B7.8		3.1E-04
01	0238	0252	0329				C1.9 10323		4.9E-03
01	0804	0807	0809				B9.1		2.0E-04
01	1432	1445	1506	S14	W56	SF	C2.3 10318		3.9E-03
02	0009	0014	0016	S12	W07	SF	C1.8 10324		4.6E-04
02	1129	1133	1139	S11	W14	SF	B9.5 10324		5.0E-04
02	1228	1236	1239				C1.1 10324		5.9E-04
02	1413	1416	1434				B7.0		8.2E-04
02	1507	1516	1528	S11	W14	SF	C3.6 10324		3.4E-03
02	1709	1713	1715				C1.0 10321		3.1E-04
02	2131	2136	2142				C1.1 10324		6.0E-04
02	2240	2245	2255				C1.0		8.7E-04
03	0135	0141	0145	S07	W30	SF	C3.6 10324		1.3E-03
03	0428	0434	0436	S07	W32	SF	C1.5 10324		5.1E-04
03	0653	0658	0702				C1.0		4.7E-04
03	0710	0717	0724				C1.9		1.4E-03
03	1013	1027	1056	S10	W25	1F	C6.5 10324		1.1E-02
03	1814	1818	1821	S12	W30	SF	C1.8 10324		6.1E-04
03	1856	1910	1916				C1.7		1.8E-03
03	1935	1945	1951				C2.5		1.8E-03
03	2229	2237	2257	S11	W35	SF	C2.4 10324		3.5E-03
04	0236	0239	0244	S04	W65	SF	C1.2 10323		5.3E-04
04	0342	0434	0436				C1.9 10324		5.3E-03
04	0650	0655	0703				C2.4 10324		1.6E-03
04	0835	0840	0844	S08	W48	SF	C2.8 10324		1.0E-03
04	0946	1001	1019				C2.0 10324		3.1E-03
04	1208	1217	1222	S12	W40	SF	C3.9 10324		2.5E-03
04	1328	1341	1347	N07	W63	SF	C3.1 10321		2.2E-03
04	1410	1416	1431	S12	W43	SF	C3.4 10324		3.1E-03
04	1546	1555	1602				C2.7 10321		2.0E-03
04	1700	1704	1706	N08	W64	SF	C1.6 10321		4.4E-04
04	1707	1712	1716				C2.2 10321		9.9E-04
04	1728	1736	1745				C2.0 10000		1.8E-03
04	1905	2019	2040				M1.9 10324		4.2E-02
05	0031	0037	0042				C2.0		1.0E-03
05	0127	0209	0221				C3.4		7.6E-03
05	0841	0851	0858				C1.2		1.1E-03
05	0909	0916	0940				C6.9 10324		9.4E-03
05	1012	1016	1022				C3.5		1.6E-03
05	1126	1131	1134				C1.1		5.1E-04
05	1421	1509	1538	S12	W58	SF	C4.9 10324		1.1E-02
05	1850	1856	1903				C1.2		8.1E-04
06	0800	0811	0819				C4.2 10324		2.9E-03
06	1918	1928	1942	S09	W71	SF	C5.9 10324		5.4E-03
07	0245	0304	0316				C2.6 10324		3.3E-03
07	0925	1030	1149				B7.3		5.3E-03
07	1843	1849	1855				C1.2 10324		6.2E-04
08	0441	0520	0528				B7.7		1.6E-03
08	1417	1421	1427				B3.2		1.8E-04
08	1915	1920	1924				B3.8		1.7E-04
09	0015	0027	0052				B8.0		1.5E-03
09	0118	0126	0130	S10	W71	SF	B4.4 10326		2.8E-04
09	0235	0254	0307				C1.1		1.8E-03
09	0341	0349	0356	S08	W76	SF	C3.8 10326		2.0E-03
09	0510	0513	0516				B6.4		1.9E-04
09	0531	0537	0545				C1.1		7.3E-04
09	0554	0613	0619				C4.7		3.7E-03
09	0922	0933	0949				C6.4		6.6E-03
09	1154	1159	1207				B7.9		4.7E-04
09	1327	1331	1335				B4.2		1.8E-04
09	1701	1704	1706				B3.8		9.3E-05
09	2323	2329	2334	S10	W78	1F	M2.5 10326		8.5E-03
10	1031	1035	1042				B7.3		3.3E-04
10	1551	1554	1556				B2.6		6.0E-05
10	1617	1620	1622				B2.3		5.2E-05
10	1628	1631	1633				B2.1		5.4E-05
10	1652	1655	1657				B2.3		5.5E-05
11	0436	0440	0442				C1.4		2.2E-04
11	0707	0712	0714				B9.3		2.1E-04
11	0723	0730	0732				C7.4		1.7E-03
11	0915	0921	0923				B3.5		1.2E-04
11	0940	0943	0945				B2.8		6.7E-05
11	1024	1027	1029				B3.1		6.8E-05
11	1159	1204	1207				B3.5		1.3E-04
11	1740	1745	1748				B9.8		2.6E-04
11	1808	1833	1857				B6.1		1.6E-03
12	0047	0051	0053				B2.3		6.5E-05
12	0213	0217	0219				B2.6		7.3E-05
12	0253	0256	0258				B4.0		7.9E-05
12	0419	0422	0424				B2.7		6.4E-05
12	0509	0513	0515				B2.8		8.3E-05
12	0538	0546	0548				B6.5		2.2E-04
12	0616	0620	0622				B4.7		1.1E-04
12	0703	0712	0716				B8.9		4.2E-04
12	1126	1130	1132				B2.6		7.6E-05
12	1242	1250	1252				B2.1		1.2E-04
12	1352	1355	1358				B3.0		9.0E-05
12	1652	1656	1701				B2.6		1.2E-04
12	1820	1831	1844				B2.3		3.0E-04
12	1855	1905	1914				B3.9		3.8E-04
13	0252	0257	0302				B4.0		1.8E-04
13	0432	0437	0441				B6.3		2.2E-04
13	0446	0449	0452				B3.6		1.1E-04
13	0845	0854	0903	N07	W49	SF	C2.7 10330		1.8E-03
13	0956	1001	1005				B3.6		1.4E-04
13	1323	1327	1333				B3.0		1.6E-04
13	1439	1443	1446				B5.3		1.5E-04
13	1624	1628	1630				B2.4		7.0E-05
13	1836	1839	1843				B2.2		7.9E-05
14	0310	0314	0317				B1.8		6.6E-05
14	0602	0605	0607				B1.6		4.2E-05
14	0809	0824	0840	S05	E60	SF	B6.4		8.5E-04
14	0900	0930	0955				C1.1 10335		2.7E-03
14	1309	1313	1316				B2.9		1.0E-04
14	1500	1505	1512				B2.3		1.4E-04
15	0738	0741	0746				B1.8 10334		7.8E-05
15	1348	1356	1400				B4.4 10330		2.2E-04
15	1932	1938	1944				B3.7 10334		1.9E-04
16	0323	0326	0340				B2.0		1.8E-04
16	1609	1612	1616				B2.1		8.0E-05
17	1058	1101	1104				B2.8		9.1E-05
17	2204	2216	2236				C4.4		5.9E-03

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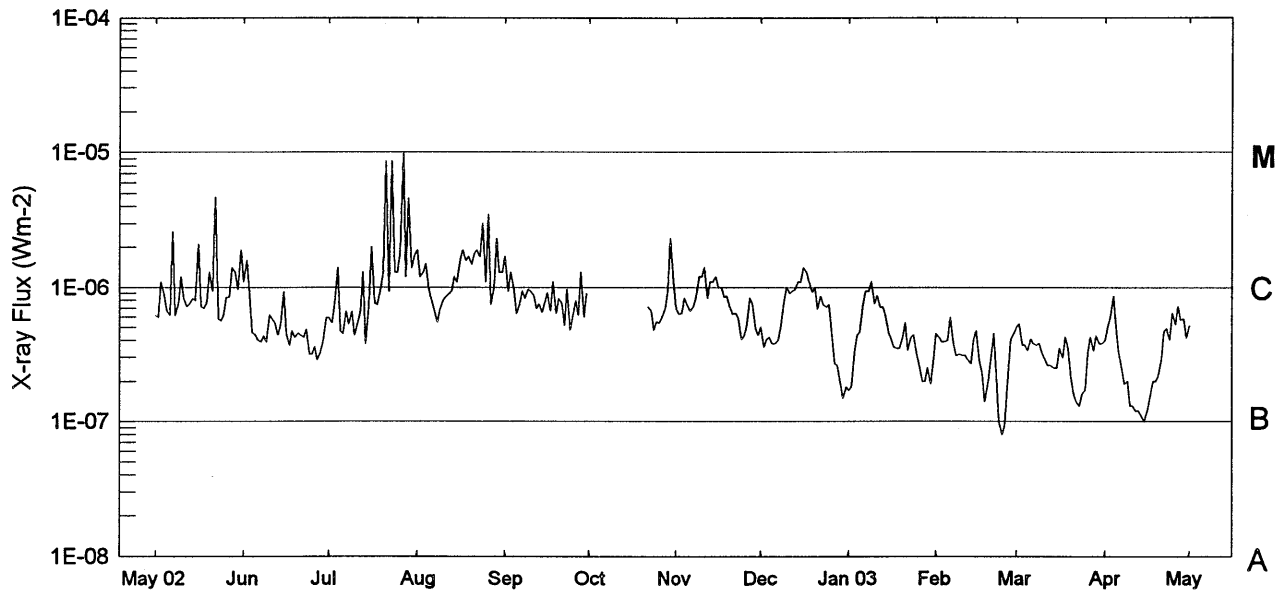
GOES S O L A R X-RAY F L A R E S
Preliminary Listing

April 2003

									NOAA/ USAF											
Start	Max	End							Imp	NOAA/ USAF										
Day (UT)	(UT)	(UT)	Lat	CMD	Opt	Xray	Region	Flux	Day (UT)	(UT)	(UT)	Lat	CMD	Opt	Xray	Region	Flux			
18	1047	1052	1057					B6.6	10337	3.0E-04	25	2154	2200	2204						
18	1147	1152	1156					B7.6	10337	3.2E-04	25	2355	2401	2406			C4.1	10338	1.7E-03	
18	1353	1400	1412					B4.8	10337	4.7E-04							C1.6	10338	9.6E-04	
18	1606	1610	1616					B3.3		1.8E-04	26	0051	0058	0100	N20	W65	SF	M2.1	10338	5.2E-03
18	1618	1626	1638					B5.6		5.8E-04	26	0138	0151	0225	N21	W59	1F	C6.6	10338	1.3E-02
18	1950	1958	2002					M1.1	10337	4.1E-03	26	0301	0306	0312	N20	W69	SN	M2.1	10338	9.3E-03
19	1439	1442	1444	N17	E27	SF		B4.0		1.0E-04	26	0801	0807	0809				M7.0	10338	1.1E-04
19	2030	2033	2036					B5.1		1.6E-04	26	1426	1430	1433	N20	W73	SF	C1.4	10338	4.8E-04
19	2307	2313	2318					B5.7		3.0E-04	26	1439	1446	1450	N21	W66	SF	C6.0	10338	2.4E-03
20	0217	0224	0229					B7.6		3.9E-04	26	1537	1543	1546				C1.3	10338	5.2E-04
20	0307	0312	0319					B6.2		3.9E-04	26	1602	1605	1607				B7.4	10338	1.8E-04
20	1759	1802	1806					B6.1		2.3E-04	26	1630	1635	1638	N21	W67	SF	C5.5	10338	1.3E-03
20	1918	1923	1928	N18	W49	SF		C4.4	10339	1.5E-03	26	1702	1705	1709				B7.7	10338	2.8E-04
20	2258	2301	2305					B4.8		1.8E-04	26	1754	1758	1800	N20	W75	SF	C5.1	10338	8.7E-04
21	0223	0231	0244					B9.9		1.0E-03	26	1934	1941	1948	N21	W67	SF	C3.8	10338	2.2E-03
21	0644	0650	0655					B7.7		4.1E-04	26	2038	2046	2049				B8.5		4.9E-04
21	1254	1307	1314	N18	E02	1N		M2.8	10338	1.5E-02	26	2052	2055	2057				B9.4		2.3E-04
21	1551	1559	1603	S13	E47	SF		C2.3	10337	1.0E-03	26	2337	2340	2342				M2.5	10338	3.4E-03
21	1723	1726	1729					B7.6		2.5E-04	26	2353	2357	2401				C1.2	10338	5.5E-04
21	1854	1858	1903					B5.5		2.7E-04	27	0050	0101	0121	N21	W67	2F	C9.3	10338	1.1E-02
21	1929	1935	1941	N18	W52	SF		C1.3	10339	6.8E-04	27	0222	0236	0249				C6.7	10338	8.2E-03
21	2123	2147	2213	S08	E47	SF		C1.8	10337	4.8E-03	27	0337	0357	0416				C6.5	10338	1.2E-02
22	0125	0132	0139					B7.2		5.3E-04	27	0537	0541	0543				C2.5	10338	7.1E-04
22	0810	0813	0815					C1.1	10338	2.9E-04	27	0737	0740	0743				C8.1		1.9E-03
22	0929	0935	0938					C1.0		4.8E-04	27	0809	0816	0822				C3.6	10338	1.9E-03
22	1613	1617	1622	N20	W17	SF		C2.2	10338	9.3E-04	27	1210	1217	1230				C1.6	10338	1.7E-03
22	1941	2011	2037	N20	W14	SF		C4.0	10338	8.4E-03	27	1329	1333	1341				C1.7	10338	1.1E-03
22	2103	2111	2118	N17	W70	SF		C3.0	10339	2.0E-03	27	1527	1532	1535	N21	W85	SF	M1.7	10338	4.4E-03
23	0011	0015	0022					B7.9		4.6E-04	27	1601	1608	1635				C2.2	10338	3.8E-03
23	0039	0106	0115	N22	W25	1N		M5.1	10338	3.5E-02	27	2131	2134	2139				C1.3	10338	5.6E-04
23	0313	0322	0335					C2.2	10339	2.0E-03	28	0357	0436	0520				C4.4	10337	1.7E-02
23	0522	0536	0545					C3.4	10339	3.2E-03	28	1010	1017	1026				C1.5	10338	1.2E-03
23	0752	0758	0814					B9.8		1.2E-03	28	1340	1346	1349				B8.9	10337	4.2E-04
23	0913	0917	0920					C1.1	10339	3.8E-04	28	1405	1417	1423				C1.3	10338	1.1E-03
23	0951	0956	1001					B7.9		4.2E-04	28	1510	1546	1602	S14	W43	SF	C2.1	10337	5.4E-03
23	1031	1035	1041					C1.9	10338	8.4E-04	28	1714	1719	1726				C2.0	10338	1.2E-03
23	1200	1213	1232					C5.8	10339	8.1E-03	28	1811	1818	1824	N16	W13	SF	C3.3	10344	1.9E-03
23	1536	1556	1611	N20	W22	1F		M2.0	10338	2.7E-02	28	2122	2130	2142				C1.8		1.7E-03
23	1811	1822	1835					B8.6		1.1E-03	28	2211	2215	2222				B9.3		5.4E-04
24	0116	0120	0126					B6.4		3.4E-04	29	0022	0025	0031				C1.0	10337	4.7E-04
24	0204	0210	0214					C1.2		5.2E-04	29	0055	0115	0132				C1.4	10338	2.4E-03
24	0243	0247	0251					C1.0	10339	4.2E-04	29	0432	0459	0510	S12	W55	1F	M1.1	10337	1.6E-02
24	0448	0456	0509					C7.1	10339	5.7E-03	29	0647	0659	0711				C1.1	10349	1.5E-03
24	0530	0538	0547	S15	E08	SF		C4.5	10337	3.8E-03	29	0748	0751	0755				C1.0	10345	3.8E-04
24	0634	0637	0642					C1.0	10339	4.7E-04	29	0855	0859	0903				C1.3	10338	5.4E-04
24	0749	0756	0802					B8.5		5.4E-04	29	0940	0948	0950				C1.6	10338	5.9E-04
24	0809	0816	0823					C1.4	10339	1.1E-03	29	1053	1057	1100				C2.1	10349	6.7E-04
24	1245	1253	1303	N21	W39	1N		M3.3	10338	2.0E-02	29	1249	1252	1254				B8.9	10349	2.3E-04
24	1541	1553	1611					C8.2		9.7E-03	29	1334	1401	1415	S13	E27	SF	B9.9	10349	1.8E-03
24	2228	2233	2235					C1.3	10338	4.2E-04	29	1534	1538	1541				B8.0	10349	2.8E-04
24	2301	2307	2314					C1.2	10339	7.8E-04	29	1653	1659	1704				C1.7	10349	8.4E-04
25	0100	0109	0122					C1.5		1.7E-03	29	1933	1936	1938				C1.5	10349	3.7E-04
25	0523	0540	0558	N14	E79	SF		M1.2	10346	1.8E-02	29	1954	1959	2007				C1.2	10349	8.8E-04
25	0819	0840	0847					C1.0		1.5E-03	29	2111	2119	2125	S13	E24	SF	C1.7	10349	1.3E-03
25	0910	0915	0920					C1.7		7.6E-04	29	2239	2242	2244	S13	E17	SF	C1.4	10349	3.7E-04
25	1344	1416	1422	N22	W51	SF		C1.5	10338	2.7E-03	29	2339	2349	2357	S13	E22	SF	C3.1	10349	2.7E-03
25	1712	1722	1728	N21	W54	SF		C2.7	10338	1.9E-03	30	0125	0128	0131				C1.0	10349	3.1E-04
25	1927	1931	1935	N20	W57	SF		C1.8	10338	7.3E-04	30	0506	0509	0512				B8.8	10349	2.8E-04
25	1945	1954	1959	N19	W58	SF		C7.5	10338	4.3E-03	30	0842	0846	0848				B8.5	10349	2.4E-04
25	2051	2058	2101	N21	W62	SF		C6.8	10338	2.3E-03	30	1549	1553	1558				B9.2	10349	4.5E-04
											30	1718	1815	1919				C1.1	10345	6.9E-03
											30	2250	2254	2300				B7.8	10349	4.1E-04

Preliminary GOES Satellite Daily X-Ray Background May 2002 - Apr 2003

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Apr 03



Day	May 02	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 03	Feb	Mar	Apr
1	C1.9	C1.1	B5.9	C1.9	C1.7	*	B7.0	B5.0	B1.7	B4.5	B5.1	B4.0
2	C1.2	C1.6	B5.4	C1.2	B9.4	*	B6.3	B3.6	B1.8	B4.2	B5.3	B5.1
3	C1.3	B9.0	B7.5	C1.3	C1.3	*	B6.4	B4.1	B3.3	B3.9	B3.7	B5.9
4	C1.5	B4.6	C1.4	C1.5	B9.7	*	B8.3	B4.2	B4.4	B3.9	B3.7	B8.6
5	B9.5	B4.4	B4.7	B9.5	B6.4	*	B7.3	B3.8	B4.6	B4.0	B3.4	B5.1
6	B8.0	B4.0	B4.5	B8.0	B7.5	*	B6.7	B3.8	B7.4	B5.9	B4.1	B3.3
7	B6.8	B3.9	B6.6	B6.8	B9.4	*	B7.2	B4.0	B9.3	B3.8	B3.8	B2.5
8	B5.5	B4.3	B5.3	B5.5	B8.3	*	B8.4	B5.0	B9.4	B3.1	B3.7	B1.9
9	B6.8	B3.9	B6.5	B6.8	B9.6	*	C1.2	B7.7	C1.1	B3.2	B3.8	B2.0
10	B8.0	B6.2	B4.4	B8.0	B9.3	*	C1.2	C1.0	B7.6	B3.1	B3.3	B1.3
11	B8.5	B5.8	B5.2	B8.5	B8.7	*	C1.4	B9.1	B8.7	B3.1	B2.9	B1.3
12	B8.9	B5.4	B6.5	B8.9	B7.0	*	B8.3	B9.4	B7.1	B2.9	B2.6	B1.2
13	B9.3	B4.4	C1.3	B9.3	B7.5	*	C1.1	B9.7	B7.1	B2.7	B2.6	B1.2
14	C1.2	B5.2	B3.8	C1.2	B6.5	*	C1.1	C1.1	B6.2	B4.1	B2.5	B1.1
15	C1.1	B9.2	B7.3	C1.1	B7.7	*	C1.2	C1.1	B4.6	B4.7	B2.5	B1.0
16	C1.6	B4.4	C2.0	C1.6	B9.0	*	C1.0	C1.4	B4.1	B2.8	B3.5	B1.2
17	C1.9	B3.7	B7.6	C1.9	B6.7	*	C1.0	C1.3	B3.6	B2.3	B3.0	B1.5
18	C1.6	B4.7	B7.4	C1.6	C1.1	*	B8.5	C1.1	B3.5	B1.4	B4.2	B2.0
19	C1.7	B4.2	B9.7	C1.7	B6.4	*	B8.6	B9.2	B3.5	B1.9	B3.6	B2.0
20	C1.5	B4.5	C1.3	C1.5	B8.2	*	B7.1	C1.0	B4.2	B2.8	B2.1	B2.2
21	C1.8	B4.4	C8.6	C1.8	B7.6	*	B6.3	B6.9	B5.4	B4.5	B1.6	B2.9
22	C1.9	B4.2	B9.3	C1.9	B5.2	B7.1	B6.4	B8.6	B3.4	B2.2	B1.4	B4.7
23	C1.7	B4.8	C8.6	C1.7	B9.7	B6.7	B5.9	B7.4	B4.2	B1.0	B1.3	B4.9
24	C3.0	B3.2	C1.3	C3.0	B4.8	B4.8	B4.1	B7.1	B4.4	A8.0	B1.6	B4.1
25	C1.1	B3.2	C1.3	C1.1	B6.0	B5.5	B4.3	B7.4	B3.2	A9.4	B1.7	B6.4
26	C3.5	B3.6	C1.8	C3.5	B7.9	B5.4	B5.1	B4.2	B2.6	B2.2	B3.3	B5.3
27	B7.4	B2.9	C9.8	B7.4	B6.2	B6.0	B8.3	B2.7	B2.0	B4.1	B4.2	B7.2
28	C1.0	B3.3	C1.2	C1.0	C1.3	B6.9	B7.6	B2.6	B2.0	B4.5	B3.4	B5.7
29	C2.3	B3.9	C4.6	C2.3	B6.0	B9.4	B4.9	B1.9	B2.5		B4.3	B5.8
30	C1.3	B5.9	C1.4	C1.3	B9.0	C2.3	B4.4	B1.5	B1.9		B3.8	B4.2
31	C1.3		C1.7	C1.3		C1.1		B1.8	B2.8		B3.8	

NOTE: * = Data not available.

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Apr 03

ACTIVE PROMINENCES AND FILAMENTS

APRIL 2003

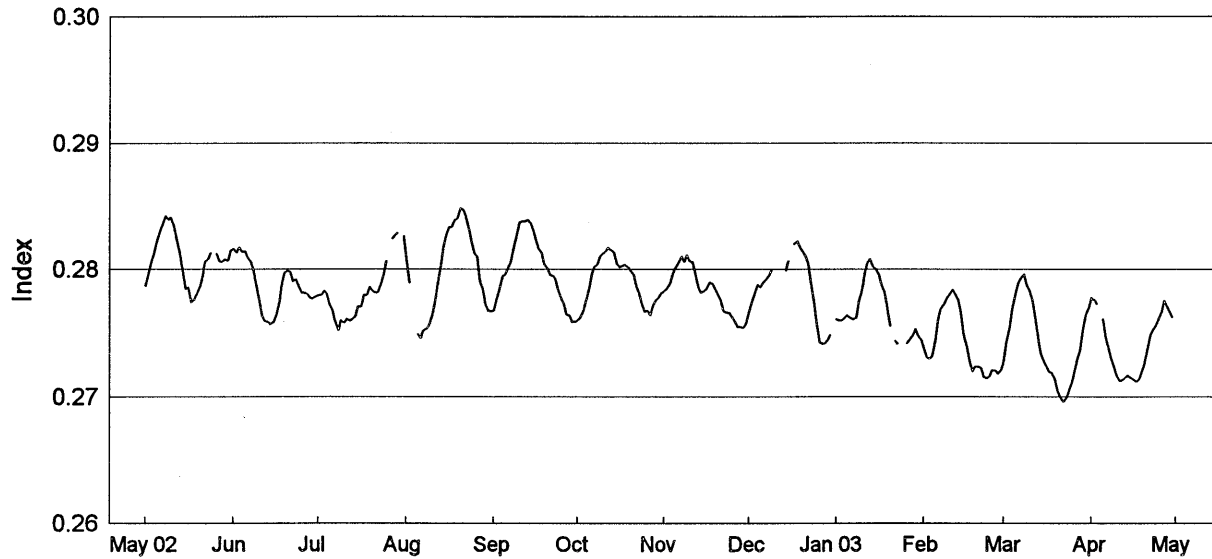
Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
01	DSF	1609	1728	S22	E04	04 2.0	3	07	0	0	E	HOLL	0117	
01	DSF	1632U	0509	N36	W23	03 30.9		13	0	0	E	SVTO		
02	DSF	2046U	1335U	N33	W33	03 31.2		15	0	0	E	HOLL		
03	EPL	1705	1753	S10	W90	03 28.0	3		2	2	E	RAMY	0318	
04	DSF	1944	1956	S03	W43	04 1.6		13	0	0	E	HOLL		Flare Associated
07	DSF	2149U	1100U	N01	E26	04 9.8		09	0	0	E	RAMY		
08	DSF	0045U	1302U	N01	E24	04 9.8		07	0	0	E	HOLL	0330	
10	DSF	0018U	1555U	S29	W14	04 8.9		20	0	0	E	HOLL		
11	DSF	0632U	0037U	S37	W04	04 11.0		10	0	0	E	LEAR		
15	DSF	1717U	1138U	S22	E61	04 20.4		08	0	0	E	RAMY		
15	DSF	2341U	1542U	N21	E29	04 18.2		11	0	0	E	HOLL		
16	DSF	1157U	1222	N15	W51	04 12.6		05	0	0	E	RAMY	0332	
17	DSF	2110	0014	S17	E09	04 18.6		06	0	0	E	HOLL	0335	
17	DSF	2319U	1317U	S15	W04	04 17.7		07	0	0	E	HOLL	0335	
18	DSF	0921U	2335U	S25	E21	04 20.0		13	0	0	E	LEAR	0335	
20	EPL	2104	2118	S10	E90	04 27.6	1		6	8	E	HOLL		
22	DSF	0922U	2321U	S52	E81	04 29.3		43	0	0	E	LEAR		
22	DSF	2051U	1051U	S10	E43	04 26.1		05	0	0	E	RAMY		
23	DSF	2323U	1335U	S06	E34	04 26.5		07	0	0	E	HOLL	0337	
25	DSF	1843	2342	N29	E83	05 2.3		14	0	0	E	HOLL		
26	DSF	0759U	2344U	S03	E58	04 30.7	2	24	0	0	E	LEAR		
26	DSF	1703	2043	S43	E19	04 28.3		07	0	0	E	HOLL		
26	DSF	1920	2139	N10	E90	05 3.6	3	34	0	0	E	HOLL		
26	DSF	2101U	1126U	N01	E90	05 3.6		24	0	0	E	RAMY		
27	DSF	0135	0250	N12	E57	05 1.4	3	07	0	0	E	LEAR	0346	
28	LPS	1718	1732	N22	W90	04 21.8	1		9	9	E	RAMY	0338	
29	DSF	0056U	1354U	S31	E18	04 30.4		07	0	0	E	HOLL		

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

May 2002 - Apr 2003

Version 9.1

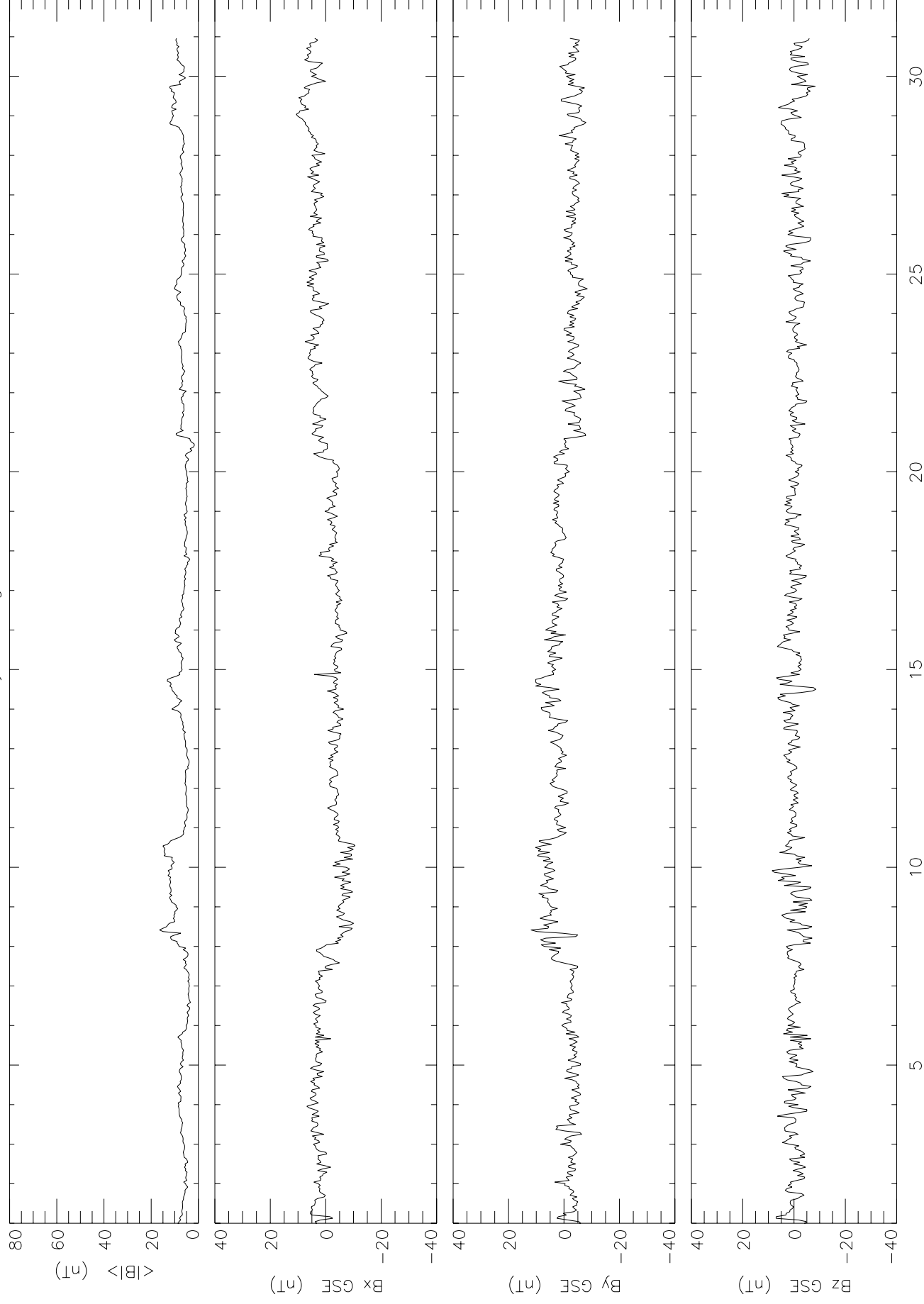
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Apr 03



Day	May 02	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 03	Feb	Mar	Apr
1	0.2787	0.2816	0.2780	0.2808	0.2768	0.2760	0.2783	0.2767	0.2761	0.2738	0.2728	0.2778
2	0.2795	0.2813	0.2780	0.2789	0.2778	0.2762	0.2785	0.2774	0.2760	0.2732	0.2743	0.2776
3	0.2806	0.2817	0.2783	—	0.2785	0.2767	0.2789	0.2782	0.2760	0.2730	0.2754	0.2772
4	0.2812	0.2814	0.2781	—	0.2795	0.2775	0.2796	0.2788	0.2762	0.2732	0.2769	—
5	0.2823	0.2814	0.2773	0.2749	0.2796	0.2785	0.2802	0.2786	0.2764	0.2745	0.2781	0.2761
6	0.2829	0.2809	0.2767	0.2746	0.2801	0.2796	0.2805	0.2790	0.2762	0.2761	0.2789	0.2747
7	0.2836	0.2806	0.2759	0.2752	0.2805	0.2802	0.2810	0.2792	0.2761	0.2769	0.2793	0.2738
8	0.2842	0.2799	0.2752	0.2753	0.2817	0.2804	0.2806	0.2795	0.2762	0.2772	0.2796	0.2730
9	0.2839	0.2786	0.2760	0.2756	0.2825	0.2810	0.2811	0.2800	0.2775	0.2777	0.2788	0.2724
10	0.2841	0.2776	0.2758	0.2764	0.2837	0.2812	0.2807	—	0.2784	0.2781	0.2784	0.2716
11	0.2834	0.2764	0.2761	0.2774	0.2838	0.2814	0.2806	—	0.2797	0.2784	0.2776	0.2713
12	0.2824	0.2760	0.2760	0.2791	0.2838	0.2817	0.2797	0.2785	0.2805	0.2780	0.2763	0.2713
13	0.2813	0.2759	0.2761	0.2802	0.2839	0.2815	0.2786	—	0.2808	0.2775	0.2746	0.2715
14	0.2801	0.2757	0.2763	0.2817	0.2836	0.2813	0.2782	0.2799	0.2802	0.2765	0.2734	0.2717
15	0.2785	0.2758	0.2771	0.2826	0.2830	0.2804	0.2783	0.2807	0.2800	0.2749	0.2728	0.2715
16	0.2786	0.2763	0.2771	0.2833	0.2823	0.2802	0.2785	—	0.2796	0.2740	0.2724	0.2714
17	0.2774	0.2773	0.2780	0.2833	0.2816	0.2803	0.2790	0.2820	0.2788	0.2729	0.2720	0.2712
18	0.2776	0.2788	0.2780	0.2839	0.2813	0.2804	0.2789	0.2822	0.2782	0.2720	0.2719	0.2714
19	0.2780	0.2797	0.2786	0.2840	0.2804	0.2805	0.2785	0.2817	0.2771	0.2724	0.2714	0.2720
20	0.2786	0.2799	0.2783	0.2848	0.2801	0.2806	0.2781	0.2814	0.2755	0.2724	0.2705	0.2726
21	0.2793	0.2798	0.2782	0.2847	0.2796	0.2796	0.2775	0.2810	—	0.2723	0.2699	0.2738
22	0.2806	0.2791	0.2782	0.2842	0.2795	0.2787	0.2768	0.2804	0.2744	0.2716	0.2696	0.2748
23	0.2808	0.2792	0.2789	0.2832	0.2792	0.2781	0.2766	0.2789	0.2741	0.2715	0.2699	0.2753
24	0.2813	0.2787	0.2796	0.2822	0.2784	0.2773	0.2766	0.2774	—	0.2716	0.2705	0.2756
25	—	0.2782	0.2807	0.2812	0.2777	0.2767	0.2762	0.2758	—	0.2721	0.2712	0.2762
26	0.2812	0.2782	—	0.2810	0.2773	0.2768	0.2759	0.2743	0.2742	0.2721	0.2721	0.2767
27	0.2807	0.2781	0.2824	0.2791	0.2765	0.2764	0.2755	0.2742	0.2745	0.2718	0.2730	0.2775
28	0.2806	0.2778	0.2827	0.2784	0.2764	0.2772	0.2755	0.2742	0.2748	0.2721	0.2736	0.2770
29	—	0.2777	0.2829	0.2772	0.2759	0.2776	0.2754	0.2745	0.2753		0.2754	0.2766
30	—	0.2779	—	0.2768	0.2759	0.2778	0.2757	0.2749	0.2748		0.2764	0.2762
31	—		0.2826	0.2767		0.2782		—	0.2745		0.2770	
Mean	0.2808	0.2787	0.2782	0.2799	0.2800	0.2790	0.2783	0.2784	0.2768	0.2742	0.2743	0.2741

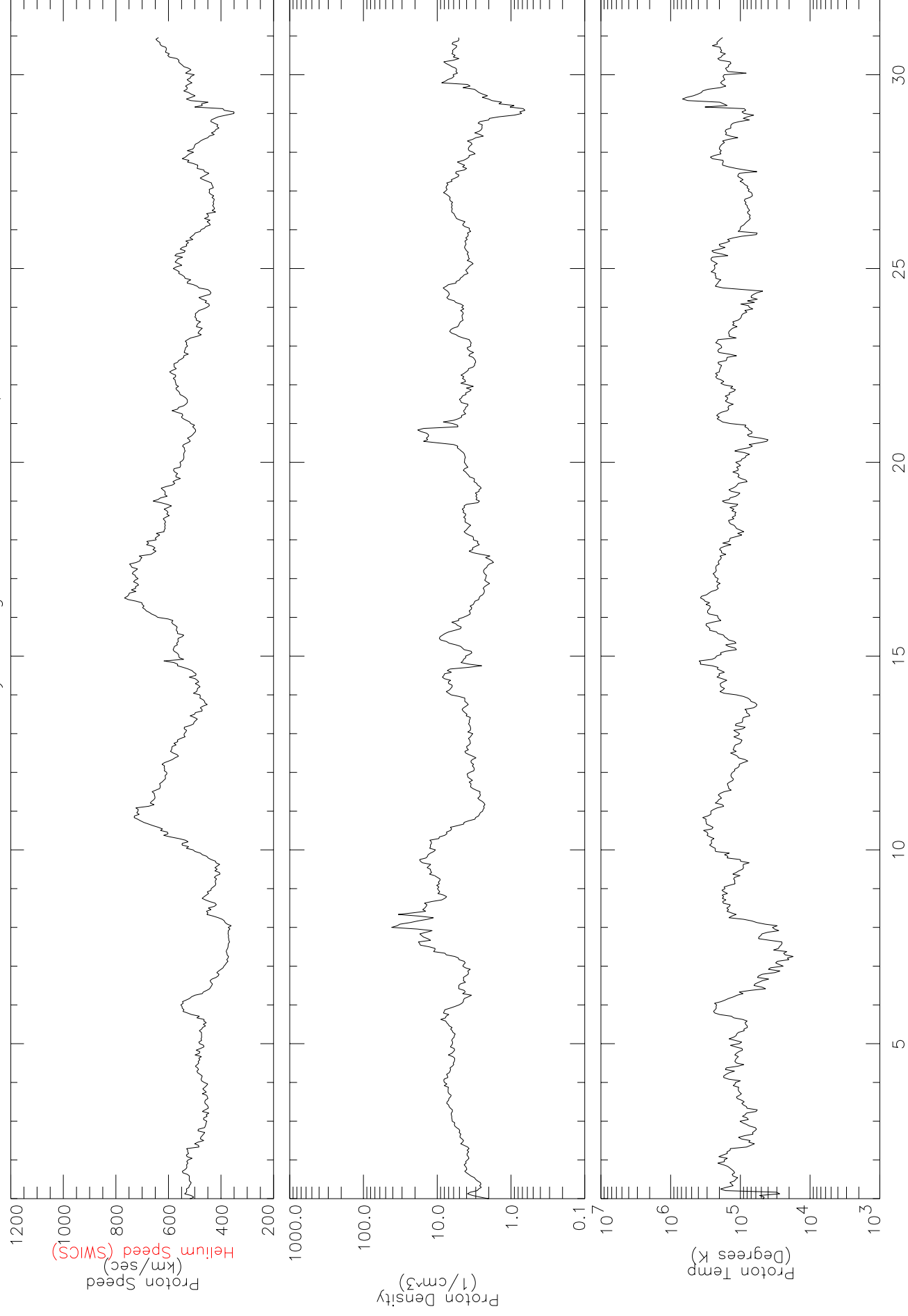
Data at: <http://www.sec.noaa.gov/ftpmenu/sbu.html>

ACE LEVEL2 DATA Interplanetary Magnetic Field
Hourly Averages for APRIL 2003, from MAG



DAYS OF APRIL 2003

ACE LEVEL2 DATA Solar Wind Plasma Hourly Averages for APRIL 2003, from SWEPAM



DAYS OF APRIL 2003

Solar Energetic Particles ACE LEVEL2 DATA Hourly Averages for APRIL 2003

