

JULY 2003 NUMBER 707 - Part II

Solar-Geophysical Data comprehensive reports



Data for January 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**

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World-Wide Web	http://www.ngdc.noaa.gov
Gopher	gopher.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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JULY 2003 NUMBER 707 - Part II

Solar-Geophysical Data comprehensive reports

Data for January 2003 and Late Data

International Standard Serial Number: 0038-0911

Library of Congress Catalog Number: 79-640375 //r81

NATIONAL GEOPHYSICAL DATA CENTER

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Boulder, Colorado

Subscription information is on the inside back cover.

SOLAR-GEOPHYSICAL DATA

Number 707

(Issued in Two Parts)

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

DETAILED INDEX OF OBSERVATIONS PUBLISHED IN SOLAR-GEOPHYSICAL DATA

CODE	KIND OF OBSERVATION	NOV 02	DEC	JAN 03	FEB	MAR	APR	MAY	JUN
A. SOLAR AND INTERPLANETARY									
A.1	Sunspot Drawings	701A 48	702A 50	703A 44	704A 52	705A 43	706A 46	707A 48	
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A.2c	American Sunspot Numbers	700A 27	701A 28	702A 29	703A 25	704A 28	705A 25	706A 25	707A 24
A.3a	Mt. Wilson Magnetograms	701A 48	702A 50	703A 44	704A 52	705A 43	706A 46	707A 48	
A.3b	Sunspot Mag Class and Regions	701A 86	702A 90	703A 84	704A 87	705A 77	706A 86	707A 89	
A.3c	Kitt Peak Magnetograms	701A 48	702A 50	703A 44	704A 52	705A 43	706A 46	707A 48	
A.3d	Mean Solar Magnetic Field (Stanford)	700A 39	701A 39	702A 39	703A 34	704A 38	705A 36	706A 36	707A 38
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A.5d	PhotometricCa II Faculae(SanFernando)	Jan 92-Dec 96 - 631B 22; 1997-1998 in 663B 66							
A.6c	Stanford Solar Mag Field Synoptic Maps	701A 42	702A 44	703A 38	704A 42	705A 40	706A 40	707A 42	
A.6d	Kitt Peak Solar Mag Field Synoptic Map				704A 46	705A 42	706A 45	707A 47	
A.6f	Active Prominences and Filaments	705B 40	706B 33	707B 33					
A.6g	Sac Peak Coronal Line Synoptic Maps	701A 44	702A 46	703A 40	704A 46	-----	706A 42	707A 44	
A.6h	Photometric White Light (San Fernando)	Jul-Dec 96 630B 32; 1997-1998 in 663B 51							
A.7h	Coronal Line Emission (Sac Peak)	701A 48	702A 50	703A 44	704A 52	705A 43	706A 46	707A 48	
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A.8ac	2800 MHz- Adj. Solar Flux (Penticton)	700A 27	701A 28	702A 29	703A 25	704A 28	705A 25	706A 25	707A 24
A.8g	Adjusted Daily Solar Fluxes (Sagamore)	700A 27	701A 28	702A 29	703A 25	704A 28	705A 25	706A 25	707A 24
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A.10h	Nobeyama Radioheliograph -17 GHz	701A 81	702A 84	703A 79	704A 82	705A 77	706A 81	707A 83	
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A.11k	Solar UV NOAA-9	May 86-Dec 88 in 566B 84							
A.11l	Solar UV NIMBUS7	Nov 78-Oct 84 in 542B 82							
A.11m	Solar UV SOLSTICE (UARS)	Oct 91-Sep 94 in 607B 46							
A.11o	Solar UV SUSIM (UARS)	Oct 91-Jan 97 in 629B 30							
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C.1d	Flare Patrol Observations	705B 15	706B 13	707B 12					
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The entry "701A 48" under Nov 02, for example, means that the sunspot drawings for Nov 02 appear in SOLAR-GEOPHYSICAL DATA No. 701, Part I, and that they begin on page 48. "A" denotes Part I and "B", Part II. Blanks indicate data not yet received and dashes mark unavailable data.

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Jan 03

H α S O L A R F L A R E S

JANUARY 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)	
0001	LEAR	01	0752	0752	0802	N19	W22	10234	12	30.7	10	SF		3	E		14		F
		01	1036		1118	No Flare Patrol													
0002	KANZ	01	1203	1208	1216	S08	E00	10239	01	1.5	13	SF		2	E				
0003	KANZ	01	1238	1258	1306	S08	E00	10239	01	1.5	28	SF		2	E				
		01	1329		1343	No Flare Patrol													
		02	1521		1523	No Flare Patrol													
		02	1603		1628	No Flare Patrol													
0004	HOLL	02	2337	2338	2343	S08	E56	10242	01	7.2	6	SF		3	E		16		
0005	LEAR	03	0005	0005	0012	S08	E57	10242	01	7.3	7	SF		3	E		22		F
0006	LEAR	03	0450	0451	0457	S09	E57	10242	01	7.5	7	SF		3	E		15		F
0007		03	10322	10341	1040	S08	E52	10242	01	7.3	8	SF					25		F
	KANZ	03	1032	1035	1040	S08	E53	10242	01	7.4	8	SF		2	E				
	LEAR	03	1034	1034	1039	S09	E51	10242	01	7.3	5	SF		2	E		25		F
0008	KANZ	03	1042	1054	1100	S23	E60	10244	01	8.1	18	SF		2	E				
0009	KANZ	03	1234	1243	1249	S23	E60	10244	01	8.1	15	SF		2	E				
0010	RAMY	03	1309E	1312U	1318	S23	E68	10244	01	8.8	90	SF		3	E		42		F
0011	KANZ	03	1309	1313	1317	S23	E60	10244	01	8.2	8	SF		2	E				
0012	KANZ	03	1329	1330	1343	S23	E60	10244	01	8.2	14	SF		2	E				
		03	1336		1337	No Flare Patrol													
		03	1344		1350	No Flare Patrol													
		03	1352		1434	No Flare Patrol													
		03	1436		1439	No Flare Patrol													
0013	HOLL	03	1440	1442	1453	N18	W51	10234	12	30.8	13	SF		3	E		99		FH
0014	HOLL	03	1454	1458	1500	N19	W51	10234	12	30.8	6	SF		3	E		60		F
0015	HOLL	03	1541	1542	1547	S07	E50	10242	01	7.4	6	SF		3	E		19		F
0016	RAMY	03	1652E	1654U	1700D	S20	W31	10243	01	1.3	80	SF		3	E		12		
0017	HOLL	03	1734	1734	1739	S22	E54	10244	01	7.9	5	SF		3	E		14		F
0018	HOLL	03	1858	1859	1901	S20	W32	10243	01	1.3	3	SF		3	E		13		F
0019		03	1936	1938	1948	S19	W31	10243	01	1.4	12	SF					53		FH
	HOLL	03	1936	1938	1946	S19	W31	10243	01	1.4	10	SF		3	E		88		FH
	RAMY	03	1939E	1939U	1950	S19	W31	10243	01	1.4	110	SF		3	E		18		
0020		03	1953	1959	2011	S23	E56	10244	01	8.1	18	SF					14		
	RAMY	03	1953E	1956U	2012	S24	E55	10244	01	8.1	190	SF		3	E		17		
	HOLL	03	1953	1959	2010	S22	E56	10244	01	8.1	17	SF		3	E		12		
0021	HOLL	03	2046	2050	2108	S19	W31	10243	01	1.5	22	SF		3	E		27		
0022	HOLL	03	2110	2111	2122	S23	E56	10244	01	8.2	12	SF		3	E		23		
0023	HOLL	03	2151	2159	2215	S22	E55	10244	01	8.1	24	SF		3	E		16		
0024		03	2240	22402	2304	S20	W32	10243	01	1.5	24	SF					47		F
	HOLL	03	2240	2240	2300	S20	W34	10243	01	1.3	20	SF		3	E		37		
	LEAR	03	2240	2242	2308	S19	W31	10243	01	1.6	28	SF		3	E		57		F
0025	LEAR	04	0002	0003	0008	S23	E51	10244	01	7.9	6	SF		3	E		23		F

Jan 03

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/	CMP	Dur	Imp	Obs	Time	Area Measurement		Remarks	
								USAF						Region	Mo		Day
0026	LEAR	04	0358	0402	0426	S19	W37	10243	01	1.3	28	SF		3	E	22	F
0027	LEAR	04	0521	0524	0538	S20	W39	10243	01	1.2	17	SF		3	E	41	FH
0028	LEAR	04	0619	0619	0626	S19	W39	10243	01	1.3	7	SF		3	E	16	
0029	LEAR	04	0810	0815	0826	S20	W41	10243	01	1.2	16	SF		3	E	30	FH
0030		04	08553	08577	0922	S26	E48	10244	01	8.1	27	SF				25	F
	LEAR	04	0855	0857	0926	S23	E48	10244	01	8.1	31	SF		3	E	32	F
	SVTO	04	0858	0904	0917	S28	E47	10244	01	8.0	19	SF		3	E	18	
0031	LEAR	04	0930	0932	0941	S23	E48	10244	01	8.1	11	SF		2	E	13	
0032	KANZ	04	1045	1100	1106	S19	W38	10243	01	1.5	21	SF		2	E		
0033	RAMY	04	1132E	1132U	1136	S20	W40	10243	01	1.4	4D	SF		2	E	19	F
0034	RAMY	04	1508	1511	1514	S20	W44	10243	01	1.3	6	SF		3	E	11	F
0035	RAMY	04	1516	1533	1544D	S19	W43	10243	01	1.3	28D	SF		3	E	13	
0036	RAMY	04	1649	1657	1715	S23	E43	10244	01	8.0	26	SF		3	E	22	
0037	RAMY	04	1801	1806	1816	S19	W45	10243	01	1.3	15	SF		3	E	23	F
0038	LEAR	05	0132	0133	0137	S09	E31	10242	01	7.4	5	SF		3	E	11	
0039	LEAR	05	0143	0144	0153	S08	E30	10242	01	7.3	10	SF		3	E	46	F
0040	LEAR	05	0508	0508	0511	S08	E32	10242	01	7.6	3	SF		3	E	25	
0041	LEAR	05	0555	0610	0632	S20	W51	10243	01	1.3	37	SF		3	E	52	F
0042	LEAR	05	0600	0620	0638	S08	E28	10242	01	7.3	38	SF		3	E	64	F
0043	LEAR	05	0756	0758	0805	S08	E27	10242	01	7.3	9	SF		3	E	16	F
0044	LEAR	05	0929	0929	0933	S19	W55	10243	01	1.2	4	SF		3	E	13	F
0045	RAMY	05	1359	1401	1410	S22	E31	10244	01	8.0	11	SF		3	E	15	
0046	LEAR	06	0242	0244	0248	S08	W63	10239	01	1.4	6	SF		3	E	14	
0047	SVTO	06	0940	0941	0958	S25	E18	10244	01	7.8	18	SF		3	E	34	F
		06	1008		1046	No Flare Patrol											
		06	1052		1154	No Flare Patrol											
		06	1418		1430	No Flare Patrol											
		06	1520		1530	No Flare Patrol											
		06	1538		1642	No Flare Patrol											
		06	1700		2201	No Flare Patrol											
		06	2207		2218	No Flare Patrol											
		06	2241		2310	No Flare Patrol											
0048	LEAR	07	0724	0724	0729	S08	E00	10242	01	7.3	5	SF		3	E	20	F
0049		07	0732	0750	0842	S24	E07	10244	01	7.8	70	1F				194	FU
	LEAR	07	0732	0750	0839	S24	E07	10244	01	7.8	67	1F		3	E	182	UF
	SVTO	07	0750E	0753U	0846	S24	E07	10244	01	7.9	56D	1F		2	E	207	F
0050		07	0838	0839	0848	S08	W02	10242	01	7.2	10	1F				28	F
	SVTO	07	0838		0846	S07	W03	10242	01	7.1	8	1F		3	E	35	F
	LEAR	07	0838	0839	0851	S08	W01	10242	01	7.3	13	SF		3	E	21	F
		07	1031		1112	No Flare Patrol											
		07	1157		1232	No Flare Patrol											
		07	1306		1344	No Flare Patrol											

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Jan 03

H α S O L A R F L A R E S

JANUARY 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)	
0051	RAMY	07	1308	1312	1329	S22	E04	10244	01	7.8	21	SF		3	E		24		F
			07 1404		1415	No Flare	Patrol												
			07 1516		1641	No Flare	Patrol												
0052	HOLL	07	1753	1754	1757	S07	W05	10242	01	7.4	4	SF		3	E		14		F
0053	HOLL	07	1930E	1932U	1941D	S21	E02	10244	01	8.0	11D	SF		3	E		21		F
0054	HOLL	07	2233	2233	2237	S11	W07	10242	01	7.4	4	SF		3	E		10		F
0055	HOLL	07	2331E	2342U	2350D	S18	E14	10251	01	9.0	19D	SF		3	E		96		
			08 0005		0011	No Flare	Patrol												
			08 0024		0034	No Flare	Patrol												
0056	LEAR	08	0134	0136	0142D	S13	E83	10251	01	14.3	8D	SF		3	E		76		
0057	LEAR	08	0543	0550	0637	S22	W05	10244	01	7.8	54	1F		3	E		116		F
0058	LEAR	08	0613	0618	0626	S13	W12	10242	01	7.3	13	SF		3	E		20		F
0059	LEAR	08	0729E	0730U	0738	S14	W11	10242	01	7.5	9D	SF		2	E		15		F
			08 0844		1115	No Flare	Patrol												
0060	RAMY	08	1430E	1430U	1449	S13	E76	10251	01	14.3	19D	SF		3	E		30		
			08 1516		1555	No Flare	Patrol												
0061	RAMY	08	1555	1559	1610D	S16	E52	10247	01	12.6	15D	SF		3	E		63		FH
0062	RAMY	08	1558	1558	1601	N11	E13	10245	01	9.6	3	SF		3	E		14		
0063	RAMY	08	1618E	1649U	1731	S16	E53	10247	01	12.7	73D	SF		2	E		64		FH
0064		08	1611E	1624U	1702D	S06	W18	10242	01	7.3	51D	SF					58		FH
	RAMY	08	1611E	1631U	1702D	S08	W18	10242	01	7.3	51D	SF		2	E		65		FH
	HOLL	08	1624E	1624U	1628D	S05	W19	10242	01	7.3	4D	SF		2	E		52		
			08 1637		1649	No Flare	Patrol												
0065	RAMY	08	1704E	1713U	1724D	S08	W17	10242	01	7.4	20D	SF		2	E		14		F
0066	RAMY	08	1854	1855	1902	S25	W09	10244	01	8.1	8	SF		3	E		13		
0067	RAMY	08	1909	1925	1929	S16	E52	10247	01	12.7	20	SF		3	E		17		FH
			08 2137		2216	No Flare	Patrol												
0068	LEAR	08	2304	2323	2351	S16	E49	10247	01	12.7	47	SF		3	E		29		FH
0069	LEAR	09	0026	0031	0038	S13	E68	10251	01	14.1	12	SF		3	E		50		H
0070	LEAR	09	0034	0039	0110	S06	W23	10242	01	7.3	36	SF		3	E		37		F
0071	LEAR	09	0118	0119	0123	S18	W18	10244	01	7.7	5	SF		3	E		15		
0072	LEAR	09	0130	0135	0232	S07	W24	10242	01	7.3	62	1F		3	E		151		FU
0073	LEAR	09	0446	0448	0453	S12	E65	10251	01	14.1	7	SF		3	E		18		
0074	LEAR	09	0454	0459	0503	S12	E65	10251	01	14.1	9	SF		3	E		17		
0075	LEAR	09	0514	0514	0532	S09	W26	10242	01	7.3	18	SF		3	E		25		F
0076	LEAR	09	0533	0535	0616	S14	E64	10251	01	14.1	43	1N		3	E		149		EF
0077	LEAR	09	0628	0631	0633	S15	E45	10247	01	12.7	5	SF		3	E		15		F

H α SOLAR FLARES7
Jan 03

JANUARY 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)	
0078	LEAR	09	0845	0849	0851	S19	E41	10247	01	12.5	6	SF		3	E		31		F
0079	LEAR	09	0912	0912	0915	S04	W30	10242	01	7.1	3	SF		3	E		16		FH
0080	LEAR	09	0934	0934	0939	S16	E41	10247	01	12.5	5	SF		3	E		14		
		09	1036		1120	No Flare Patrol													
0081	RAMY	09	1145E	1145U	1151	S13	E65	10251	01	14.4	6D	SF		3	E		18		F
0082	RAMY	09	1321E	1321U	1326	S12	E60	10251	01	14.1	5D	SF		3	E		23		H
		09	1342		1355	No Flare Patrol													
		09	1402		1410	No Flare Patrol													
0083	RAMY	09	1512E	1512U	1518	S12	E59	10251	01	14.1	6D	SF		3	E		21		F
0084		09	15551	15571	1603	S16	E62	10251	01	14.4	8	SF					36		
	RAMY	09	1555	1557	1605	S17	E61	10251	01	14.3	10	SF		3	E		46		
	HOLL	09	1556	1558	1601	S16	E64	10251	01	14.5	5	SF		3	E		27		
0085		09	17221	17242	1730	S11	E58	10251	01	14.1	8	SF					30		F
	HOLL	09	1722	1724	1730	S10	E59	10251	01	14.1	8	SF		3	E		29		
	RAMY	09	1723	1726	1731	S12	E57	10251	01	14.0	8	SF		3	E		32		F
0086	RAMY	09	1822	1824U	1828D	S12	E59	10251	01	14.2	6D	SF		3	E		10		
0087		09	18411	18431	1902	S16	E70	10251	01	15.1	21	SF					18		
	HOLL	09	1841	1844	1908	S16	E71	10251	01	15.2	27	SF		3	E		20		
	RAMY	09	1842	1843	1855	S17	E68	10251	01	14.9	13	SF		3	E		16		
0088	RAMY	09	1921	1922	1930	S19	E36	10247	01	12.5	9	SF		3	E		19		F
		09	1938		2058	No Flare Patrol													
0089		09	2237	2237	2244	S06	W35	10242	01	7.3	7	SF					22		F
	HOLL	09	2237	2237	2243	S05	W37	10242	01	7.2	6	SF		3	E		28		F
	LEAR	09	2242E	2242U	2246	S08	W33	10242	01	7.5	4D	SF		2	E		16		F
		10	1033		1051	No Flare Patrol													
		10	1224		1317	No Flare Patrol													
0090	HOLL	10	2201	2203	2224	S09	W54	10242	01	6.9	23	SF		3	E		65		
0091		10	23363	2341	2351	S09	W54	10242	01	6.9	15	SF					52		F
	HOLL	10	2336	2341	2346D	S09	W54	10242	01	6.9	10D	SF		3	E		65		
	LEAR	10	2339	2341	2351	S09	W53	10242	01	7.0	12	SF		2	E		39		F
0092	LEAR	11	0031	0048	0101	S08	W54	10242	01	7.0	30	SF		3	E		25		F
0093	LEAR	11	1026	1031	1043D	S22	W49	10244	01	7.7	17D	SF		2	E		20		F
		11	1044		1123	No Flare Patrol													
0094	RAMY	11	1308	1319U	1345	S08	W56	10242	01	7.3	37	SF		3	E		67		F
0095	RAMY	11	1447	1454	1504	S13	E52		01	15.5	17	SF		3	E		28		F
0096	RAMY	11	1450	1450	1457	S16	E14	10247	01	12.7	7	SF		3	E		16		F
0097		11	1510	15121	1516	S12	E33	10251	01	14.1	6	SF					16		FH
	HOLL	11	1510	1512	1516	S11	E33	10251	01	14.1	6	SF		3	E		10		
	RAMY	11	1510	1513	1517	S12	E33	10251	01	14.1	7	SF		3	E		21		FH
0098		11	1605	16052	1614	S08	W56	10242	01	7.5	9	SF					19		F
	HOLL	11	1605	1605	1612	S09	W57	10242	01	7.4	7	SF		3	E		14		F
	RAMY	11	1606E	1607	1616	S08	W56	10242	01	7.5	10D	SF		3	E		24		F

JANUARY 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)			
0099		11	16062	16211	1651	S16	E12	10247	01	12.6	45	SF					30		F		
	RAMY	11	1606	1622	1702	S16	E11	10247	01	12.5	56	SF		3	E		42		F		
	HOLL	11	1608	1621	1640	S15	E12	10247	01	12.6	32	SF		3	E		18		F		
0100	RAMY	11	1734	1743	1754	S21	W49	10244	01	8.0	20	SF		3	E		21		F		
0101		11	18421	1845	1851	S08	W58	10242	01	7.4	9	SF					12				
	RAMY	11	1842	1845	1852	S08	W59	10242	01	7.3	10	SF		3	E		12				
	HOLL	11	1843	1845	1850	S09	W58	10242	01	7.4	7	SF		3	E		13				
0102	RAMY	11	1903	1904	1912	S20	W55	10244	01	7.6	9	SF		3	E		22		F		
0103	RAMY	11	1928	1938	1958	S21	W52	10244	01	7.8	30	SF		3	E		13		F		
		11	2017		2224	No Flare Patrol															
0104	LEAR	11	2249	2249	2302	S08	W60	10242	01	7.4	13	SF		3	E		13				
0105	LEAR	12	0039	0039	0055	S16	E05	10247	01	12.4	16	SF		3	E		30		F		
0106	LEAR	12	0422	0425	0445	S12	E51	10254	01	16.0	23	SF		3	E		84				
0107	KANZ	12	0847	0853	0911	S15	E01	10247	01	12.4	24	SF		2	E						
		12	1051		1053	No Flare Patrol															
0108	KANZ	12	1217	1231	1254	S15	E01	10247	01	12.6	37	SF		2	E						
0109	LEAR	13	0437	0442	0508	S25	E10	10250	01	14.0	31	SF		3	E		76		F		
0110	LEAR	13	0451	0456	0519	S16	E43	10254	01	16.5	28	SF		3	E		28				
0111	KANZ	13	0740	0743	0749	S12	E06	10255	01	13.8	9	SF		2	E						
		13	1034		1134	No Flare Patrol															
0112	RAMY	13	1330	1332	1335	S12	E07	10255	01	14.1	5	SF		3	E		14		F		
0113		13	1600	1601	1608	S09	W80	10242	01	7.7	8	SF					30				
	RAMY	13	1600	1601	1608	S09	W80	10242	01	7.7	8	SF		3	E		40				
	HOLL	13	1600	1601	1608	S09	W80	10242	01	7.7	8	SF		3	E		21				
0114		13	16091	16111	1640	S20	W80	10244	01	7.5	31	SF					48		FHS		
	RAMY	13	1609	1612	1642	S20	W84	10244	01	7.2	33	SF		3	E		45		FH		
	HOLL	13	1610	1611	1638	S21	W76	10244	01	7.8	28	SF		3	E		51		S		
0115	KANZ	14	0953	0955	0956	S16	W25	10247	01	12.5	3	SF		2	E						
0116	KANZ	14	1041	1045	1046	S16	W25	10247	01	12.5	5	SF		2	E						
		14	2325		2337	No Flare Patrol															
		14	2350		2354	No Flare Patrol															
		15	0053		0055	No Flare Patrol															
0117	KANZ	15	0915	0924	0944	S16	E07	10254	01	15.9	29	SF		2	E						
0118	RAMY	15	1541	1541	1545	S26	W18	10250	01	14.2	4	SF		3	E		16		F		
		16	0015		0054	No Flare Patrol															
0119	LEAR	16	0105	0108	0118	S11	W27	10255	01	14.0	13	1N		3	E		177		FU		
		16	0125		0130	No Flare Patrol															
		16	0308		0313	No Flare Patrol															
		16	0424		0431	No Flare Patrol															
		16	0436		0443	No Flare Patrol															
0120	LEAR	16	0445E	0448U	0448D	N10	E52	10258	01	20.1	3D	1F		3	E		110				
		16	0449		0712	No Flare Patrol															

JANUARY 2003

Grp #	Sta	Start Day	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)	
0121	KANZ	16	1113	1200	1314	N09 E44	10259	01	19.8	121	1F	2	E				
		16	2332		2400	No Flare	Patrol										
		17	0726		0735	No Flare	Patrol										
		17	0841		0842	No Flare	Patrol										
0122		17	1726	17272	1733	N09 E30	10259	01	20.0	7	SF				32		F
	HOLL	17	1726	1727	1731	N09 E30	10259	01	20.0	5	SF	3	E		15		F
	RAMY	17	1726	1729	1735	N09 E30	10259	01	20.0	9	SF	3	E		48		F
		17	2354		2400	No Flare	Patrol										
		18	0012		0459	No Flare	Patrol										
		18	0506		0553	No Flare	Patrol										
		18	0652		0807	No Flare	Patrol										
		18	0823		0824	No Flare	Patrol										
0123	KANZ	18	0907	0918	0924	S29 W52	10250	01	14.3	17	SF	2	E				
		19	0013		0019	No Flare	Patrol										
		19	0707		0754	No Flare	Patrol										
		19	0803		0805	No Flare	Patrol										
0124		19	1242	1256	1316	N14 E30	10260	01	21.8	34	SF				18		F
	KANZ	19	1242	1256	1318	N15 E28	10260	01	21.6	36	SF	2	E				
	RAMY	19	1254E	1254U	1314	N14 E31	10260	01	21.9	20D	SF	4	E		18		F
0125	KANZ	19	1410	1413	1435	N15 E28	10260	01	21.7	25	SF	2	E				
		20	0014		0024	No Flare	Patrol										
0126	LEAR	20	0707	0709	0724	N16 E21	10260	01	21.9	17	SF	3	E		90		F
0127		20	14456	14457	1452	S23 E60	10266	01	25.2	7	SF				16		
	RAMY	20	1445	1445	1448	S24 E58	10266	01	25.1	3	SF	3	E		15		
	HOLL	20	1451	1452	1456	S22 E62	10266	01	25.4	5	SF	3	E		16		
0128	HOLL	20	2145	2146	2151	S19 E82	10267	01	27.2	6	SF	3	E		18		
0129	HOLL	20	2324	2325	2330D	N16 E10	10260	01	21.7	6D	SF	3	E		26		
		20	2331		2348	No Flare	Patrol										
0130	LEAR	21	0607	0607	0610D	N14 E08	10260	01	21.8	3D	SF	3	E		16		
0131	KANZ	21	0826	0828	0832	S19 E52	10266	01	25.3	6	SF	2	E				
		21	0929		0932	No Flare	Patrol										
		21	0938		0955	No Flare	Patrol										
		21	0959		1131	No Flare	Patrol										
0132	RAMY	21	1254	1310	1328	N15 E05	10260	01	21.9	34	SF	3	E		28		F
0133	RAMY	21	1305	1309	1317	S12 W38	10263	01	18.7	12	SF	3	E		31		
0134	RAMY	21	1824	1825	1901D	S12 W41	10263	01	18.7	37D	SF	3	E		23		FH
0135	HOLL	21	2137	2137	2155	N15 W01	10260	01	21.8	18	SF	3	E		12		F
		21	2336		2400	No Flare	Patrol										
		22	0000		0048	No Flare	Patrol										
		22	0247		0254	No Flare	Patrol										
		22	0328		0339	No Flare	Patrol										
		22	0414		0424	No Flare	Patrol										
0136	LEAR	22	0439	0442	0509	N15 W05	10260	01	21.8	30	1F	3	E		111		F
0137	RAMY	22	1220E	1220U	1228	S23 E36	10266	01	25.3	8D	SF	3	E		18		
0138	RAMY	22	1225E	1225U	1228	S11 W50	10263	01	18.7	3D	SF	3	E		13		

H α SOLAR FLARES

JANUARY 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)		
0139		22	1356	1358	1408	S10	W52	10263	01	18.7	12	SF						17		
	RAMY	22	1354E	1354U	1415	S11	W51	10263	01	18.7	21D	SF		3	E			13		
	SVTO	22	1356	1358	1400	S09	W52	10263	01	18.7	4	SF		3	E			21		
		23	0016		0021	No Flare Patrol														
0140	LEAR	23	0216	0218	0233	S12	W57	10263	01	18.8	17	SF		2	E			53	F	
0141	LEAR	23	0400	0447	0511	S22	E21	10266	01	24.8	71	1N		3	E			117	EF	
0142	LEAR	23	0612	0613	0619	S12	W60	10263	01	18.7	7	SF		3	E			38	F	
0143	LEAR	23	0706	0715	0720	S21	E19	10266	01	24.7	14	SF		3	E			19		
0144		23	07194	07231	0726	S10	W60	10263	01	18.8	7	SF						27		
	SVTO	23	0719	0723	0727	S07	W60	10263	01	18.8	8	SF		3	E			37		
	LEAR	23	0723	0724	0726	S12	W61	10263	01	18.7	3	SF		3	E			17		
0145	LEAR	23	0807	0814	0822	S21	E17	10266	01	24.6	15	SF		3	E			50	F	
		23	1109		1123	No Flare Patrol														
0146	RAMY	23	1151E	1151U	1234	S10	W61	10263	01	18.9	43D	SF		3	E			27	F	
0147		23	1236	1236U	1309	S22	E16	10266	01	24.7	33	1N						194	F	
	RAMY	23	1236E	1236U	1309	S21	E16	10266	01	24.7	33D	1N		3	E			190	F	
	SVTO	23	1236	1244U	1325D	S22	E17	10266	01	24.8	49D	1N		2	E			199	F	
0148		23	1449	1455	1532	S10	W64	10263	01	18.8	43	SF						47	F	
	RAMY	23	1442E	1442U	1524	S10	W64	10263	01	18.8	42D	SF		3	E			37		
	HOLL	23	1449	1455	1541	S13	W60	10263	01	19.1	52	SF		3	E			65	F	
	SVTO	23	1451E	1453U	1456D	S08	W67	10263	01	18.6	5D	SF		2	E			39		
0149	HOLL	23	1543	1543	1551	S12	W64	10263	01	18.8	8	SF		3	E			12		
		23	1716		1754	No Flare Patrol														
		23	1917		1923	No Flare Patrol														
		23	2221		2300	No Flare Patrol														
0150	LEAR	24	0255	0255	0259	S24	E12	10266	01	25.0	4	SF		3	E			12	F	
0151	LEAR	24	0301	0326	0417	S22	E10	10266	01	24.9	76	1N		3	E			239	FU	
0152	LEAR	24	0502	0504	0513	S23	E17	10266	01	25.5	11	SF		3	E			52	FH	
		24	1047		1048	No Flare Patrol														
		24	1105		1106	No Flare Patrol														
		24	1109		1113	No Flare Patrol														
		24	1115		1116	No Flare Patrol														
		24	1125		1128	No Flare Patrol														
0153	RAMY	24	1521	1544U	1544D	S22	E05	10266	01	25.0	23D	1F		3	E			111	F	
0154	HOLL	24	2208	2208	2215	S20	E02	10266	01	25.1	7	SF		3	E			10	S	
		24	2254		2400	No Flare Patrol														
		25	0000		0010	No Flare Patrol														
		25	1035		1834	No Flare Patrol														
0155	HOLL	25	1846	1853U	1927	N13	W26	10268	01	23.8	41	SF		3	E			80	F	
		25	1855		1910	No Flare Patrol														
		26	0659		0703	No Flare Patrol														
0156	KANZ	26	1025	1045	1113	N12	W36	10268	01	23.7	48	SF		2	E					
0157	SVTO	26	1032	1039	1056	N17	W35	10268	01	23.8	24	SF		3	E			30		
		27	0020		0038	No Flare Patrol														
		27	0900		0905	No Flare Patrol														

JANUARY 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)	
			27 0916		0928			No Flare Patrol											
			27 0953		1049			No Flare Patrol											
			27 1101		1111			No Flare Patrol											
0158		27	1132	1150	1202	N06	W12	10273	01	26.6	30	SF						37	
	KANZ	27	1132	1150	1204	N05	W11	10273	01	26.6	32	SF	2	E					
	RAMY	27	1150E	1150U	1159	N06	W13	10273	01	26.5	90	SF	3	E				37	
0159	RAMY	27	1601E	1601U	1611	S02	W37	10266	01	24.9	100	SF	3	E				18	F
0160	HOLL	27	2149	2151	2222	S17	W23	10267	01	26.2	33	SF	3	E				18	F
		28	1343		1357			No Flare Patrol											
		29	0010		0027			No Flare Patrol											
		29	1033		1043			No Flare Patrol											
		29	1045		1048			No Flare Patrol											
		29	1108		1112			No Flare Patrol											
		29	1115		1122			No Flare Patrol											
0161	RAMY	29	1304	1304	1334	N09	W39	10273	01	26.6	30	SF	3	E				32	F
		29	1645		1649			No Flare Patrol											
0162	HOLL	29	2016	2016	2019	S21	W63	10266	01	25.0	3	SF	3	E				12	
		29	2022		2029			No Flare Patrol											
0163		29	2030	2035	2048	S20	W66	10266	01	24.8	18	SF						24	FH
	RAMY	29	2028E	2028U	2110D	S19	W67	10266	01	24.7	420	SF	2	E				19	FH
	HOLL	29	2030	2035	2048	S22	W65	10266	01	24.8	18	SF	3	E				28	F
		29	2108		2129			No Flare Patrol											
0164	LEAR	30	1026	1028	1030D	S11	E52	10274	02	3.3	40	1F	1	E				133	
		30	1031		1134			No Flare Patrol											

"Remarks"

A = Eruptive prominence whose base is less than 90 degrees from central meridian.

B = Probably the end of a more important flare.

C = Invisible 10 minutes before.

D = Brilliant point.

E = Two or more brilliant points.

F = Several eruptive centers.

G = No visible spots in the neighborhood.

H = Flare accompanied by high-speed dark filament.

I = Active region very extended.

J = Distinct variations of plage intensity before or after the flare.

K = Several intensity maxima.

L = Existing filaments show signs of sudden activity.

M = White-light flare.

N = Continuous spectrum shows effects of polarization.

O = Observations have been made in the H and K lines of Ca II.

P = Flare shows Helium D3 in emission.

Q = Flare shows Balmer continuum in emission.

R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.

S = Brightness follows disappearance of filament in same position.

T = Region active all day.

U = Two bright branches, parallel or converging.

V = Occurrence of an explosive phase; important, expansion within roughly 1 minute that often includes a significant intensity increase.

W = Great increase in area after time of maximum intensity.

X = Unusually wide H-alpha line.

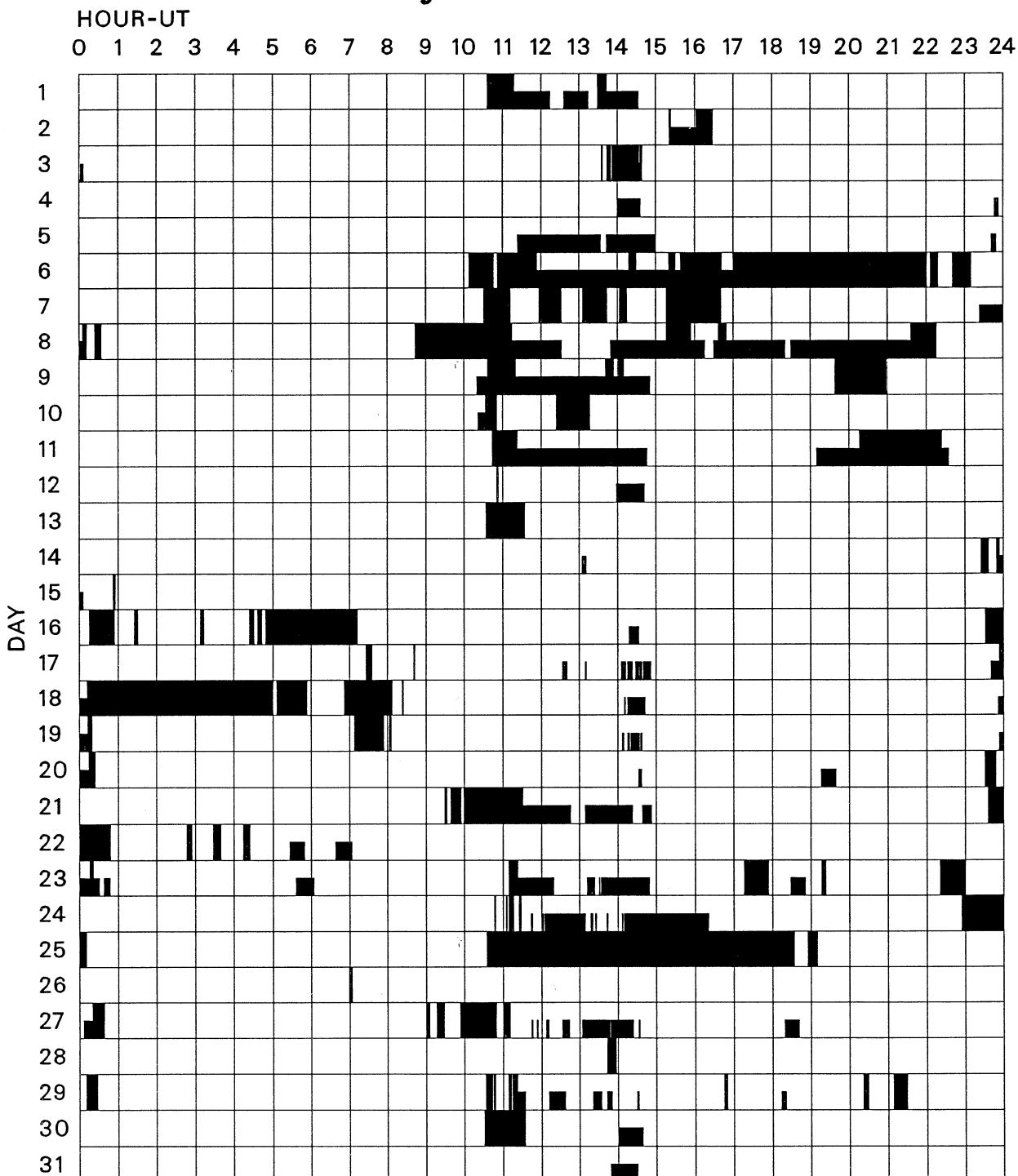
Y = System of loop-type prominences.

Z = Major sunspot umbra covered by flare.

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

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

JANUARY 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
Mitaka

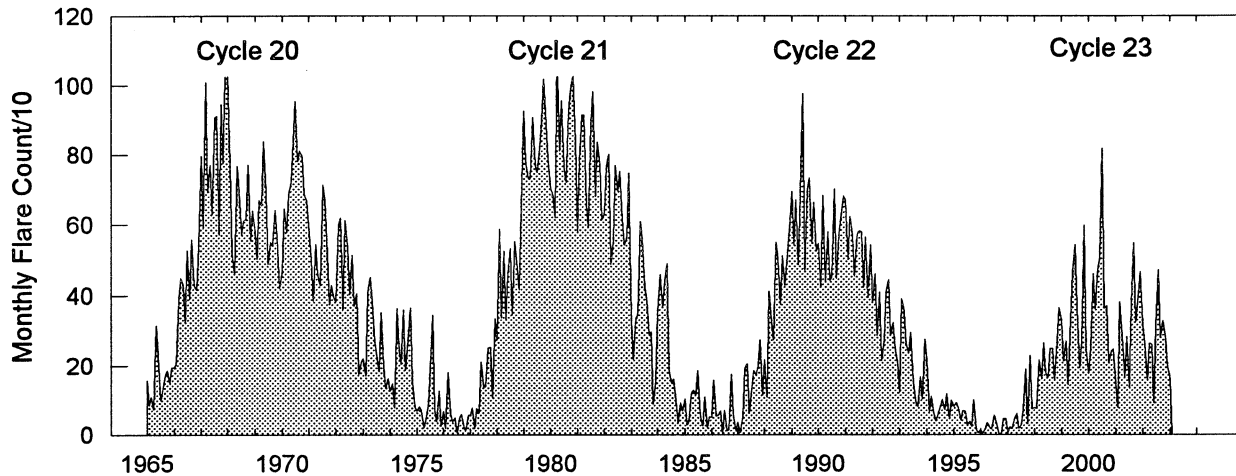
Learmonth
Kanzelhoehe

Ramey

San Vito

Monthly Counts of Grouped Solar Flares Jan 1965 - Jan 2003

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Jan 03



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												164

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

JANUARY 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
01	235	CUBA	44 NS	1405.0E		355.00		5.0		
	235	CUBA	44 NS	1405.0E		355.00		13.0		
	245	LEAR	8 S	0743.0	0744.0	2.0	63.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0743.0	0744.0	2.0	86.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	1020.0	1020.0	U	180.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	1020.0	1020.0	U	58.0			QL=4 ST=2 TYP=3
02	235	CUBA	44 NS	1330.0E		390.00		5.0		
	235	CUBA	44 NS	1330.0E		390.00		13.0		
	245	SVTO	8 S	0728.0	0728.0	2.0	130.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0728.0	0728.0	2.0	130.0			QL=4 ST=4 TYP=3
	245	SVTO	8 S	0826.0	0826.0	U	330.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0826.0	0826.0	U	330.0			QL=4 ST=4 TYP=3
	410	SVTO	8 S	0826.0	0826.0	U	22.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0826.0	0826.0	U	22.0			QL=4 ST=4 TYP=3
	200	HIRA	8 S	2313.0	2313.0	1.0	125.0			0
03	127	TORN	43 NS	1030.0		180.0		8.0		V=0
	235	CUBA	44 NS	1620.0E		280.00		6.0		
	235	CUBA	44 NS	1620.0E		280.00		12.0		
	245	LEAR	8 S	0151.0	0151.0	U	120.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	0152.0	0152.0	1.0	50.0			0
	500	HIRA	8 S	0515.0	0515.0	1.0	10.0			0
	200	HIRA	8 S	0515.0	0515.0	1.0	50.0			0
	200	HIRA	8 S	0637.0	0637.0	1.0	40.0			WR
	600	GORK	7 C	0838.8	0839.0		5.0			
	600	GORK	7 C	0838.8	0838.9	0.5	5.0			
	245	LEAR	8 S	0947.0	0947.0	U	73.0			QL=4 ST=2 TYP=3
	600	GORK	2 S/F	0947.2	0947.4	0.5	7.0			
	33	UPIC	8 S	1422.0	1422.5	0.8				
04	204	IZMI	43 NS	0700.0		300.00		10.0		
	127	TORN	43 NS	0747.0	0927.4	373.0	110.0	18.0		V=1
	235	CUBA	44 NS	1330.0E		270.00		5.0		
	235	CUBA	44 NS	1330.0E		270.00		13.0		
	245	PALE	8 S	0141.0	0141.0	U	360.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	0141.0	0141.0	U	77.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	0142.0	0142.0	1.0	20.0			0
	200	HIRA	8 S	0142.0	0143.0	1.0	205.0			0
	245	LEAR	8 S	0142.0	0142.0	U	290.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0142.0	0142.0	U	73.0			QL=4 ST=2 TYP=3
	2950	GORK	20 GRF	0830.0	1051.0	141.00	31.0			
	600	GORK	22 GRF	0851.0	0915.1		28.0			
	600	GORK	22 GRF	0851.0	0903.8	27.9	51.0			
	9100	GORK	20 GRF	0940.9	1016.4	76.10	34.0			
	245	LEAR	8 S	1000.0	1000.0	U	62.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	1000.0	1000.0	U	70.0			QL=4 ST=2 TYP=3
05	127	TORN	44 NS	0730.0E		390.00		14.0		V=0
	235	CUBA	44 NS	1325.0E		275.00		4.0		
	235	CUBA	44 NS	1325.0E		275.00		13.0		
	200	HIRA	8 S	0130.0	0131.0	1.0	85.0			0
	410	LEAR	8 S	0458.0	0458.0	U	52.0			QL=4 ST=2 TYP=3
	245	LEAR	4 S/F	0504.0	0504.0	5.0	59.0			QL=4 ST=2 TYP=3
	410	LEAR	4 S/F	0504.0	0504.0	5.0	87.0			QL=4 ST=2 TYP=3
	2840	PEKG	20 GRF	0551.0	0608.0	42.0	28.3			
	2800	HIRA	3 S	0555.0	0609.0	22.0	40.0			0
	500	HIRA	8 S	0602.0	0603.0	3.0	15.0			0
	2840	PEKG	1 S	0721.0	0723.3	8.0	5.1			
	204	IZMI	41 F	0722.4	0722.7	1.1	42.0			
	200	HIRA	8 S	0723.0	0723.0	1.0	25.0			0
	204	IZMI	42 SER	0726.4	0726.6	1.6	46.0			
	200	HIRA	8 S	0727.0	0727.0	1.0	30.0			0
	600	GORK	7 C	0838.3	0838.5	0.7	7.0			
	600	GORK	7 C	0838.3	0838.7		5.0			
	2950	GORK	1 S	0952.2	0952.8	1.4	4.0			
	900	GORK	1 S	0952.3	0953.0	2.3	7.0			
	600	GORK	2 S/F	0952.4	0953.0	1.5	21.0			
	245	SVTO	8 S	1205.0	1205.0	U	53.0			QL=4 ST=2 TYP=3

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

Outstanding Occurrences

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Jan 03

JANUARY 2003

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22	Mean W/m 2 Hz)		
05	1415	SVTO	8 S	1205.0	1205.0	1.0	48.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	1205.0	1205.0	1.0	27.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	1205.0	1205.0	1.0	23.0			QL=4 ST=2 TYP=3
06	127	TORN	43 NS	0750.0		370.0		14.0		V=1
	235	CUBA	44 NS	1330.0E		390.0D		8.0		
	235	CUBA	44 NS	1330.0E		390.0D		15.0		
	2840	PEKG	1 S	0116.0	0118.1	5.0	6.9			
	245	LEAR	8 S	0242.0	0242.0	U	270.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	0243.0	0243.0	1.0	50.0			0
	245	LEAR	8 S	0302.0	0302.0	U	150.0			QL=4 ST=2 TYP=3
	410	LEAR	4 S/F	0316.0	0319.0	3.0	63.0			QL=4 ST=2 TYP=3
	410	LEAR	4 S/F	0316.0	0319.0	3.0	63.0			QL=4 ST=3 TYP=3
	200	HIRA	8 S	0410.0	0410.0	1.0	50.0			0
	9100	GORK	20 GRF	0855.0	1023.3	185.0D	23.0			
	204	IZMI	42 SER	0933.6	0934.8	1.5	18.0			
	600	GORK	46 C	0935.0	0937.0		31.0			
	600	GORK	46 C	0935.0	0936.6	3.2	23.0			
	900	GORK	46 C	0935.5	0937.0	2.3	31.0			
	900	GORK	46 C	0935.5	0937.3		11.0			
	2950	GORK	22 GRF	0936.7	0940.0	7.6	9.0			
	2950	GORK	22 GRF	0936.7	0940.7		11.0			
	204	IZMI	7 C	1151.7	1151.9	0.5	71.0			
	245	SGMR	8 S	1424.0	1425.0	1.0	240.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1424.0	1424.0	1.0	180.0			QL=4 ST=2 TYP=3
	127	TORN	8 S	1424.7	1425.1	1.0	520.0	260.0		
	245	SGMR	8 S	1629.0	1629.0	U	290.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	2347.0	2347.0	U	72.0			QL=4 ST=2 TYP=3
	610	LEAR	8 S	2347.0	2347.0	U	71.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	2347.0	2347.0	1.0	68.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	2347.0	2347.0	U	60.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	2348.0	2348.0	1.0	250.0			0
07	127	TORN	43 NS	0755.0		365.0		16.0		V=1
	235	CUBA	44 NS	1400.0E		240.0D		5.0		
	235	CUBA	44 NS	1400.0E		240.0D		15.0		
	410	LEAR	48 C	0226.0	0229.0	3.0	120.0			QL=4 ST=2 TYP=8
	245	LEAR	4 S/F	0226.0	0226.0	3.0	73.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	0712.5	0712.9	0.8	57.0			
	204	IZMI	42 SER	0714.0	0714.1	0.4	29.0			
	2840	PEKG	3 S	0725.0	0749.3	51.0	52.4			
	600	GORK	21 GRF	0725.1	0737.6	28.9	11.0			
	2950	GORK	46 C	0733.2	0746.1	21.1	23.0			
	2950	GORK	46 C	0733.2	0749.9		31.0			
	9100	GORK	21 GRF	0733.8	0756.2	201.0	26.0			
	600	GORK	2 S/F	0734.4	0734.7	1.4	15.0			
	900	GORK	42 SER	0734.8	0744.4	24.5	7.0			
	900	GORK	42 SER	0734.8	0752.8		8.0			
	600	GORK	7 C	0752.4	0752.4	1.0	5.0			
	600	GORK	7 C	0752.4	0752.7		6.0			
	9100	GORK	2 S/F	0825.3	0825.6	0.8	16.0			
	900	GORK	46 C	0937.0	0937.6	2.3	90.0			
	900	GORK	46 C	0937.0	0938.8		46.0			
	2950	GORK	1 S	1032.4	1032.6	0.4	5.0			
	2800	PENT	20 GRF	1834.0	1847.0	45.0	3.0			
	245	PALE	8 S	1935.0	1935.0	U	380.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1935.0	1935.0	U	390.0			QL=4 ST=2 TYP=3
	2800	HIRA	4 S/F	2328.0	2332.0	11.0	100.0			0
	2695	LEAR	8 S	2331.0	2332.0	1.0	81.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	2331.0	2332.0	2.0	120.0			QL=4 ST=2 TYP=3
	8800	LEAR	8 S	2331.0	2332.0	1.0	76.0			QL=4 ST=2 TYP=3
08	127	TORN	44 NS	0730.0E		400.0D		11.0		V=1
	204	IZMI	43 NS	0956.0		124.0D		10.0		
	235	CUBA	44 NS	1330.0E		270.0D		5.0		
	235	CUBA	44 NS	1330.0E		270.0D		18.0		
	245	SGMR	43 NS	1347.0	1353.0	139.0	68.0			QL=4 ST=2 TYP=1
	2840	PEKG	1 S	0231.0	0233.7	7.0	2.7			
	410	LEAR	48 C	0301.0	0303.0	2.0	110.0			QL=4 ST=2 TYP=8

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

Outstanding Occurrences

JANUARY 2003

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22	Mean W/m 2 Hz)		
08	2840	PEKG	20 GRF	0541.0	0549.1	31.0	10.6			
	500	HIRA	8 S	0550.0	0550.0	1.0	45.0			0
	200	HIRA	8 S	0658.0	0658.0	1.0	25.0			WL
	245	LEAR	8 S	0720.0	0720.0	U	60.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0720.0	0720.0	U	50.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	0720.0	0720.1	0.4	24.0			
	2840	PEKG	1 S	0720.0	0724.3	10.0	3.3			
	4995	SVTO	8 S	0724.0	0724.0	1.0	48.0			QL=4 ST=2 TYP=3
	8800	SVTO	8 S	0724.0	0724.0	U	57.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0811.0	0811.0	U	110.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0811.0	0811.0	U	100.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	0811.5	0811.5	0.1	8.0			
	900	GORK	41 F	1036.0	1038.1		15.0			
	900	GORK	41 F	1036.0	1037.4	2.4	15.0			
	600	GORK	2 S/F	1047.0	1047.3	0.7	15.0			
	245	SVTO	8 S	1205.0	1205.0	1.0	57.0			QL=4 ST=3 TYP=3
	245	SGMR	8 S	1250.0	1250.0	U	57.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1347.0	1348.0	1.0	52.0			QL=4 ST=2 TYP=3
	2800	PENT	20 GRF	1712.0	1721.0	18.0	3.0			
09	127	TORN	43 NS	0800.0		370.0		13.0		V=1
	235	CUBA	44 NS	1400.0E		240.0D		6.0		
	235	CUBA	44 NS	1400.0E		240.0D		15.0		
	2840	PEKG	3 S	0126.0	0132.1	17.0	26.5			
	2800	HIRA	1 S	0129.0	0133.0	5.0	30.0			0
	245	LEAR	8 S	0131.0	0131.0	U	85.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0131.0	0131.0	U	57.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	0132.0	0132.0	U	55.0			QL=4 ST=2 TYP=3
	2840	PEKG	45 C	0530.0	0534.7	26.0	28.9			
	2800	HIRA	1 S	0533.0	0535.0	5.0	35.0			
	245	LEAR	8 S	0722.0	0722.0	U	68.0			QL=4 ST=2 TYP=3
	2840	PEKG	1 S	0748.0	0750.5	9.0	9.1			
	2950	GORK	2 S/F	0749.8	0750.5	1.4	12.0			
	600	GORK	2 S/F	0750.1	0750.4	0.6	17.0			
	245	LEAR	8 S	0846.0	0846.0	U	280.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0846.0	0846.0	1.0	250.0			QL=4 ST=2 TYP=3
	600	GORK	41 F	0910.6	0911.4	2.1	15.0			
	600	GORK	41 F	0910.6	0911.7		17.0			
	2950	GORK	45 C	0910.9	0912.1		17.0			
	2950	GORK	45 C	0910.9	0911.3	1.6	8.0			
	204	IZMI	46 C	0955.2	0955.9	1.5	102.0			
	245	SGMR	8 S	1240.0	1240.0	2.0	75.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1631.0	1631.0	U	150.0			QL=4 ST=2 TYP=3
	2800	PENT	1 S	1716.0	1725.0	16.0U	5.0			
	2800	PENT	41 F	1834.0	1842.0	55.0	8.0			
	245	SGMR	8 S	1929.0	1929.0	U	140.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1936.0	1936.0	U	170.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1936.0	1937.0	1.0	99.0			QL=4 ST=2 TYP=3
	2800	PENT	1 S	2107.0	2110.0	6.0	6.0			
	245	PALE	49 GB	2110.0	2111.0	1.0	2200.0			QL=4 ST=2 TYP=6
	410	PALE	49 GB	2111.0	2111.0	U	1500.0			QL=4 ST=2 TYP=6
10	127	TORN	43 NS	1010.0		240.0		12.0		V=1
	245	PALE	48 C	0146.0	0146.0	3.0	52.0			QL=4 ST=2 TYP=8
	245	PALE	8 S	0146.0	0146.0	1.0	52.0			QL=4 ST=2 TYP=3
	245	PALE	4 S/F	0153.0	0153.0	3.0	48.0			QL=4 ST=3 TYP=3
	2840	PEKG	1 S	0733.0	0736.2	7.0	4.1			
	245	LEAR	8 S	0735.0	0735.0	U	300.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0735.0	0735.0	U	180.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	0735.4	0735.6	0.8	19.0			
11	127	TORN	44 NS	0730.0E		400.0D		11.0		V=2
	235	CUBA	44 NS	1300.0E		390.0D		5.0		
	235	CUBA	44 NS	1330.0E		390.0D		14.0		
	200	HIRA	8 S	0451.0	0451.0	1.0	25.0			0
	200	HIRA	8 S	0531.0	0531.0	1.0	15.0			SR
	245	LEAR	8 S	0828.0	0828.0	U	63.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0828.0	0828.0	U	89.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0832.4	0938.5	77.0	79.0			

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

Outstanding Occurrences

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Jan 03

JANUARY 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
11	900	GORK	46 C	0859.3	0901.4		13.0			
	900	GORK	46 C	0859.3	0900.6	3.3	7.0			
12	127	TORN	43 NS	0820.0		340.0		12.0		V=0
	235	CUBA	44 NS	1700.0E		120.0D		4.0		
	235	CUBA	44 NS	1700.0E		120.0D		11.0		
	2840	PEKG	1 S	0036.0	0039.7	7.0	7.6			
	200	HIRA	8 S	0049.0	0049.0	1.0	25.0			WR
	200	HIRA	8 S	0134.0	0134.0	1.0	155.0			WR
	200	HIRA	7 C	0411.0	0416.0	7.0	65.0			0
	245	LEAR	8 S	0414.0	0415.0	2.0	150.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0458.0	0458.0	U	53.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	0616.0	0616.0	1.0	100.0			0
	610	SVTO	48 C	0645.0	0646.0	12.0	220.0			QL=4 ST=2 TYP=8
	610	SVTO	48 C	0645.0	0646.0	12.0	220.0			QL=4 ST=4 TYP=8
	245	SVTO	8 S	0651.0	0651.0	U	24.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0651.0	0651.0	U	24.0			QL=4 ST=4 TYP=3
	1415	SVTO	8 S	0651.0	0652.0	2.0	26.0			QL=4 ST=2 TYP=3
	1415	SVTO	8 S	0651.0	0652.0	2.0	26.0			QL=4 ST=4 TYP=3
	15400	SVTO	8 S	0657.0	0657.0	U	280.0			QL=4 ST=2 TYP=3
	15400	SVTO	8 S	0657.0	0657.0	U	280.0			QL=4 ST=4 TYP=3
	500	HIRA	8 S	2307.0	2307.0	1.0	30.0			0
	610	LEAR	8 S	2357.0	2358.0	1.0	96.0			QL=4 ST=3 TYP=3
	500	HIRA	8 S	2358.0	2358.0	1.0	25.0			0
	245	LEAR	8 S	2358.0	2358.0	U	100.0			QL=4 ST=3 TYP=3
	200	HIRA	8 S	2359.0	2359.0	1.0	75.0			0
13	235	CUBA	44 NS	1303.0E		270.0D		4.0		
	235	CUBA	44 NS	1330.0E		270.0D		13.0		
	245	LEAR	8 S	0001.0	0001.0	2.0	290.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	0002.0	0002.0	1.0	20.0			0
	410	LEAR	8 S	0002.0	0002.0	1.0	150.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0002.0	0002.0	1.0	370.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	0002.0	0003.0	1.0	230.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	0558.0	0558.0	1.0	25.0			0
	245	LEAR	8 S	0558.0	0558.0	U	55.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	0605.0	0605.0	1.0	15.0			0
	204	IZMI	42 SER	0722.1	0723.4	2.0	16.0			
	204	IZMI	42 SER	0736.9	0737.4	1.9	98.0			
	204	IZMI	46 C	0740.8	0741.5	4.0	398.0			
	204	IZMI	42 SER	0828.2	0828.7	0.8	24.0			
	204	IZMI	7 C	0903.8	0903.9	0.4	10.0			
	204	IZMI	7 C	0944.2	0944.3	0.1	7.0			
	204	IZMI	42 SER	1010.6	1013.5	3.3	21.0			
	204	IZMI	45 C	1107.7	1107.9	0.3	159.0			
	245	SVTO	8 S	1448.0	1448.0	1.0	60.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1452.0	1452.0	U	63.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1452.0	1452.0	2.0	65.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1549.0	1549.0	U	93.0			QL=4 ST=2 TYP=3
	610	LEAR	8 S	2357.0	2358.0	1.0	96.0			QL=4 ST=2 TYP=3
	610	LEAR	8 S	2357.0	2358.0	1.0	96.0			QL=4 ST=4 TYP=3
	245	LEAR	8 S	2358.0	2358.0	U	100.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	2358.0	2358.0	U	100.0			QL=4 ST=4 TYP=3
	245	PALE	8 S	2358.0	2358.0	U	100.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	2358.0	2358.0	U	100.0			QL=4 ST=2 TYP=3
14	245	SVTO	43 NS	0928.0	0940.0	50.0	230.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	0928.0	0940.0	872.0	230.0			QL=4 ST=1 TYP=1
	245	LEAR	43 NS	0941.0	0941.0	45.0	220.0			QL=4 ST=2 TYP=1
	245	LEAR	43 NS	0941.0	0941.0	45.0	220.0			QL=4 ST=3 TYP=1
	245	LEAR	43 NS	0941.0	0941.0	859.0	220.0			QL=4 ST=1 TYP=1
	235	CUBA	44 NS	1400.0E		300.0D		5.0		
	235	CUBA	44 NS	1400.0E		300.0D		15.0		
	610	LEAR	8 S	0032.0	0032.0	U	280.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0911.0	0911.0	U	60.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0937.0	0937.0	U	71.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0940.5	0940.9	1.4	40.0			
	204	IZMI	42 SER	0950.6	0952.0	2.5	48.0			
	245	SVTO	8 S	1010.0	1010.0	1.0	130.0			QL=4 ST=2 TYP=3

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22	Mean W/m 2 Hz)		
14	L	245 SVTO	8 S	1010.0	1010.0	1.0	130.0			QL=4 ST=4 TYP=3
		204 IZMI	42 SER	1110.4	1110.5	2.4	30.0			
		127 TORN	4 S/F	1116.5	1117.7	1.7	120.0	60.0		DISTURBED
	C	204 IZMI	42 SER	1116.6	1117.1	1.8	18.0			
		204 IZMI	46 C	1121.5	1121.6	0.8	426.0			
		245 SVTO	8 S	1142.0	1142.0	1.0	270.0			QL=4 ST=2 TYP=3
	C	204 IZMI	46 C	1142.7	1142.9	0.5	183.0			
		127 TORN	4 S/F	1203.3	1204.0U	1.5	190.0	40.0		DISTURBED
		245 SGMR	8 S	1447.0	1447.0	U	100.0			QL=4 ST=3 TYP=3
	C	245 SVTO	8 S	1447.0	1447.0	U	94.0			QL=4 ST=3 TYP=3
		245 SVTO	8 S	1447.0	1447.0	U	95.0			QL=4 ST=2 TYP=3
		245 SGMR	8 S	1604.0	1604.0	U	100.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	1655.0	1655.0	U	74.0			QL=4 ST=2 TYP=3	
	245 SGMR	48 C	1724.0	1724.0	2.0	80.0			QL=4 ST=2 TYP=8	
	245 SGMR	8 S	1749.0	1749.0	U	74.0			QL=4 ST=2 TYP=3	
200 HIRA	8 S	2230.0	2230.0	1.0	15.0			0		
15	C	235 CUBA	44 NS	1335.0E		385.0D		5.0		
		235 CUBA	44 NS	1335.0E		385.0D		13.0		
		245 LEAR	8 S	0047.0	0047.0	U	88.0			QL=4 ST=2 TYP=3
	245 LEAR	8 S	0053.0	0053.0	U	64.0			QL=4 ST=2 TYP=3	
	200 HIRA	8 S	0140.0	0140.0	1.0	75.0			0	
	410 LEAR	8 S	0403.0	0403.0	U	51.0			QL=4 ST=2 TYP=3	
	410 LEAR	8 S	0439.0	0439.0	2.0	100.0			QL=4 ST=2 TYP=3	
	410 LEAR	48 C	0511.0	0515.0	4.0	69.0			QL=4 ST=2 TYP=8	
	204 IZMI	7 C	0916.7	0917.1	1.3	5.0				
	600 GORK	21 GRF	1006.0	1030.0	33.2	24.0				
	600 GORK	2 S/F	1017.4	1017.6	0.6	16.0				
	C	900 GORK	46 C	1019.8	1021.6		6.0			
		900 GORK	46 C	1019.8	1020.8	2.3	32.0			
		900 GORK	21 GRF	1031.1	1038.7	15.0	13.0			
	C	600 GORK	2 S/F	1038.5	1038.7	0.5	16.0			
		900 GORK	46 C	1043.6	1045.1		81.0			
		900 GORK	46 C	1043.6	1044.9	2.0	101.0			
610 SVTO	8 S	1140.0	1140.0	U	77.0			QL=4 ST=2 TYP=3		
245 SGMR	8 S	1540.0	1540.0	U	54.0			QL=4 ST=2 TYP=3		
16	C	127 TORN	44 NS	0730.0E		400.0D		22.0		V=1
		235 CUBA	44 NS	1400.0E		360.0D		12.0		
		2840 PEKG	45 C	0101.0	0106.8	11.0	23.3			
	C	2800 HIRA	8 S	0105.0	0107.0	7.0	30.0			0
		500 HIRA	8 S	0107.0	0107.0	3.0	50.0			0
		200 HIRA	8 S	0107.0	0107.0	1.0	80.0			0
	245 SVTO	8 S	1022.0	1022.0	U	160.0			QL=4 ST=2 TYP=3	
	245 SGMR	8 S	1638.0	1638.0	1.0	79.0			QL=4 ST=2 TYP=3	
2800 PENT	20 GRF	1849.0	1901.0	41.0	4.0					
17	C	127 TORN	44 NS	0730.0E		400.0D		7.0		V=0
		235 CUBA	44 NS	1400.0E		360.0D		4.0		
		235 CUBA	44 NS	1400.0E		360.0D		13.0		
	204 IZMI	42 SER	0733.7	0733.8	0.2	18.0				
	204 IZMI	42 SER	0745.3	0745.3	0.2	9.0				
	204 IZMI	42 SER	0823.3	0823.4	0.6	9.0				
	2800 PENT	1 S	2105.0	2109.0	8.0	3.0				
410 PALE	8 S	2348.0	2348.0	1.0	66.0			QL=4 ST=2 TYP=3		
18	C	127 TORN	44 NS	0730.0E		400.0D		7.0		V=1
		235 CUBA	44 NS	1400.0E		360.0D		3.0		
		235 CUBA	44 NS	1400.0E		360.0D		12.0		
	C	245 PALE	8 S	2312.0	2312.0	2.0	63.0			QL=4 ST=2 TYP=3
		410 PALE	8 S	2312.0	2312.0	1.0	72.0			QL=4 ST=2 TYP=3
19	C	127 TORN	43 NS	0805.0		365.0		11.0		V=1
		235 CUBA	44 NS	1400.0E		240.0D		3.0		
		235 CUBA	44 NS	1400.0E		240.0D		12.0		
	C	200 HIRA	8 S	0415.0	0415.0	1.0	320.0			0
		245 LEAR	8 S	0415.0	0415.0	U	120.0			QL=2 ST=2 TYP=3
		245 SVTO	8 S	0702.0	0702.0	U	27.0			QL=2 ST=2 TYP=3
	410 SVTO	8 S	0702.0	0702.0	U	66.0			QL=2 ST=2 TYP=3	

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

Outstanding Occurrences

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JANUARY 2003

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22	Mean W/m 2 Hz)		
19	245	SVTO	8 S	0757.0	0757.0	1.0	110.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0757.0	0757.0	1.0	110.0			QL=4 ST=4 TYP=3
	127	TORN	47 GB	1136.6	1137.0	1.4		1900.0		DISTURBED
	204	IZMI	42 SER	1137.1	1137.6	0.8	47.0			
	127	TORN	47 GB	1251.3	1252.1	1.6	630.0	120.0		
	610	SVTO	8 S	1412.0	1412.0	U	35.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1413.0	1413.0	2.0	92.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1413.0	1414.0	2.0	51.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1520.0	1521.0	1.0	120.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	1520.0	1521.0	1.0	120.0			QL=2 ST=4 TYP=3
	410	SVTO	8 S	1521.0	1521.0	U	24.0			QL=2 ST=2 TYP=3
	410	SVTO	8 S	1521.0	1521.0	U	24.0			QL=2 ST=4 TYP=3
20	127	TORN	43 NS	1040.0		210.0		8.0		V=1,DISTURBED
	235	CUBA	44 NS	1400.0E		360.0D		3.0		
	235	CUBA	44 NS	1400.0E		360.0D		12.0		
	2840	PEKG	3 S	0704.0	0709.0	18.0	23.3			
	500	HIRA	8 S	0705.0	0705.0	1.0	45.0			0
	1415	LEAR	8 S	0707.0	0707.0	U	59.0			QL=4 ST=2 TYP=3
	1415	SVTO	8 S	0707.0	0707.0	U	61.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	0708.8	0708.9	0.7	140.0			
	200	HIRA	8 S	0709.0	0709.0	1.0	65.0			0
	204	IZMI	42 SER	0710.1	0710.9	4.5	67.0			
	245	SVTO	8 S	0941.0	0941.0	1.0	330.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0941.0	0941.0	U	77.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	1020.9	1021.1	0.5	8.0			
	245	SGMR	8 S	1620.0	1622.0	2.0	74.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	2325.0	2325.0	1.0	10.0			0
	200	HIRA	8 S	2325.0	2325.0	1.0	55.0			0
21	235	CUBA	44 NS	1300.0E		390.0D		4.0		
	235	CUBA	44 NS	1330.0E		390.0D		13.0		
	2840	PEKG	3 S	0221.0	0225.8	17.0	75.9			
	2800	HIRA	3 S	0225.0	0226.0	5.0	65.0			0
	500	HIRA	4 S/F	0225.0	0226.0	3.0	20.0			0
	200	HIRA	7 C	0225.0	0225.0	3.0	110.0			0
	245	LEAR	8 S	0225.0	0225.0	U	220.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0225.0	0225.0	U	76.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	0225.0	0225.0	1.0	94.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0225.0	0225.0	1.0	300.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	0225.0	0225.0	U	67.0			QL=4 ST=2 TYP=3
	2695	PALE	8 S	0225.0	0225.0	1.0	59.0			QL=4 ST=2 TYP=3
	4995	PALE	8 S	0225.0	0225.0	1.0	100.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	0225.0	0225.0	U	52.0			QL=4 ST=2 TYP=3
	15400	PALE	8 S	0225.0	0225.0	1.0	52.0			QL=4 ST=2 TYP=3
	2840	PEKG	45 C	0547.0	0552.5	25.0	240.0			
	2800	HIRA	7 C	0552.0	0553.0	3.0	215.0			MR
	500	HIRA	8 S	0552.0	0554.0	3.0	40.0			0
	200	HIRA	4 S/F	0552.0	0553.0	3.0	115.0			0
	2695	LEAR	8 S	0552.0	0552.0	U	140.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	0552.0	0552.0	1.0	140.0			QL=4 ST=3 TYP=3
	245	LEAR	8 S	0553.0	0553.0	U	350.0			QL=4 ST=3 TYP=3
	410	LEAR	8 S	0553.0	0553.0	U	91.0			QL=4 ST=3 TYP=3
	204	IZMI	42 SER	0851.1	0851.5	0.4	10.0			
	245	LEAR	8 S	0853.0	0854.0	1.0	94.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0853.0	0854.0	1.0	89.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	1015.6	1016.1	0.5	15.0			
	204	IZMI	41 F	1146.0	1146.1	0.3	21.0			
	127	TORN	45 C	1416.0	1416.4	2.0	420.0	210.0		
	9500	CUBA	21 GRF	1500.0	1528.0	82.0	51.0	25.0		
	1415	SVTO	48 C	1505.0	1507.0	23.0	140.0			QL=2 ST=2 TYP=8
	1415	SVTO	48 C	1505.0	1507.0	23.0	140.0			QL=2 ST=3 TYP=8
	1415	SVTO	48 C	1505.0	1507.0	23.0	140.0			QL=2 ST=4 TYP=8
	2695	SVTO	48 C	1505.0	1509.0	23.0	380.0			QL=2 ST=2 TYP=8
	2695	SVTO	48 C	1505.0	1509.0	23.0	380.0			QL=2 ST=3 TYP=8
	2695	SVTO	48 C	1505.0	1509.0	23.0	380.0			QL=2 ST=4 TYP=8
	1415	SGMR	48 C	1505.0	1507.0	42.0	130.0			QL=4 ST=2 TYP=8
	2695	SGMR	48 C	1505.0	1509.0	42.0	380.0			QL=4 ST=2 TYP=8
	1415	SGMR	4 S/F	1505.0	1507.0	535.0	100.0			QL=4 ST=1 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

JANUARY 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
21	1415	SGMR	4 S/F	1505.0	1507.0	535.0	130.0			QL=4 ST=1 TYP=3
	2695	SGMR	4 S/F	1505.0	1507.0	535.0	210.0			QL=4 ST=1 TYP=3
	2695	SGMR	4 S/F	1505.0	1509.0	535.0	380.0			QL=4 ST=1 TYP=3
	1415	SVTO	4 S/F	1505.0	1507.0	535.0	99.0			QL=4 ST=1 TYP=3
	1415	SVTO	4 S/F	1505.0	1507.0	535.0	140.0			QL=4 ST=1 TYP=3
	1415	SVTO	4 S/F	1505.0	1507.0	535.0	140.0			QL=4 ST=4 TYP=3
	2695	SVTO	4 S/F	1505.0	1507.0	535.0	170.0			QL=4 ST=1 TYP=3
	2695	SVTO	4 S/F	1505.0	1509.0	535.0	380.0			QL=4 ST=1 TYP=3
	2695	SVTO	4 S/F	1505.0	1509.0	535.0	380.0			QL=4 ST=4 TYP=3
	4995	SVTO	48 C	1506.0	1509.0	22.0	320.0			QL=2 ST=2 TYP=8
	4995	SVTO	48 C	1506.0	1509.0	22.0	320.0			QL=2 ST=3 TYP=8
	4995	SVTO	48 C	1506.0	1509.0	22.0	320.0			QL=2 ST=4 TYP=8
	8800	SVTO	48 C	1506.0	1509.0	22.0	190.0			QL=2 ST=2 TYP=8
	8800	SVTO	48 C	1506.0	1509.0	22.0	190.0			QL=2 ST=3 TYP=8
	8800	SVTO	48 C	1506.0	1509.0	22.0	190.0			QL=2 ST=4 TYP=8
	4995	SGMR	4 S/F	1506.0	1510.0	40.0	260.0			QL=4 ST=2 TYP=3
	8800	SGMR	4 S/F	1506.0	1510.0	41.0	180.0			QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	1506.0	1507.0	534.0	110.0			QL=4 ST=1 TYP=3
	4995	SGMR	4 S/F	1506.0	1510.0	534.0	260.0			QL=4 ST=1 TYP=3
	8800	SGMR	4 S/F	1506.0	1507.0	534.0	59.0			QL=4 ST=1 TYP=3
	8800	SGMR	4 S/F	1506.0	1510.0	534.0	180.0			QL=4 ST=1 TYP=3
	4995	SVTO	48 C	1506.0	1509.0	534.0	320.0			QL=4 ST=1 TYP=8
	4995	SVTO	48 C	1506.0	1509.0	534.0	320.0			QL=4 ST=4 TYP=8
	8800	SVTO	48 C	1506.0	1509.0	534.0	190.0			QL=4 ST=1 TYP=8
	8800	SVTO	48 C	1506.0	1509.0	534.0	190.0			QL=4 ST=4 TYP=8
	4995	SVTO	4 S/F	1506.0	1507.0	534.0	120.0			QL=4 ST=1 TYP=3
	8800	SVTO	4 S/F	1506.0	1507.0	534.0	55.0			QL=4 ST=1 TYP=3
	15400	SVTO	48 C	1507.0	1511.0	21.0	72.0			QL=2 ST=2 TYP=8
	15400	SVTO	48 C	1507.0	1511.0	21.0	72.0			QL=2 ST=3 TYP=8
	15400	SVTO	48 C	1507.0	1511.0	21.0	72.0			QL=2 ST=4 TYP=8
	15400	SGMR	48 C	1507.0	1510.0	40.0	72.0			QL=4 ST=2 TYP=8
	15400	SGMR	4 S/F	1507.0	1510.0	533.0	72.0			QL=4 ST=1 TYP=3
	15400	SVTO	4 S/F	1507.0	1511.0	533.0	72.0			QL=4 ST=1 TYP=3
	15400	SVTO	4 S/F	1507.0	1511.0	533.0	72.0			QL=4 ST=4 TYP=3
	9500	CUBA	4 S/F	1507.0U	1510.7D	13.3D	120.0	60.0		
	245	SGMR	8 S	1725.0	1725.0	U	140.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2138.0	2138.0	U	200.0			QL=4 ST=2 TYP=3
	2800	PENT	1 S	2300.0	2304.0	8.0	11.0			
	200	HIRA	8 S	2304.0	2305.0	1.0	20.0			0
22	127	TORN	43 NS	1246.0		44.0		5.0		V=1
	235	CUBA	44 NS	1600.0E		180.0D		3.0		
	235	CUBA	44 NS	1600.0E		180.0D		10.0		
	200	HIRA	8 S	0300.0	0300.0	1.0	20.0			0
	2840	PEKG	3 S	0437.0	0440.7	22.0	26.8			
	500	HIRA	7 C	0439.0	0441.0	3.0	20.0			0
	2800	HIRA	4 S/F	0440.0	0441.0	8.0	25.0			0
	200	HIRA	7 C	0441.0	0448.0	7.0	220.0			0
	204	IZMI	42 SER	0714.2	0715.1	1.3	8.0			
	200	HIRA	8 S	0715.0	0715.0	1.0	30.0			0
	204	IZMI	41 F	0750.0	0750.0	0.9	228.0			
	245	SVTO	8 S	0750.0	0750.0	U	120.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0750.0	0750.0	U	120.0			QL=4 ST=2 TYP=3
	15400	PALE	8 S	1806.0	1806.0	1.0	61.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	2309.0	2310.0	1.0	75.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	2310.0	2310.0	1.0	30.0			0
	200	HIRA	8 S	2316.0	2316.0	1.0	30.0			0
23	127	TORN	43 NS	1240.0		120.0D		15.0		V=1
	200	HIRA	8 S	0123.0	0123.0	1.0	40.0			0
	2840	PEKG	3 S	0215.0	0216.8	10.0	41.4			
	2800	HIRA	4 S/F	0217.0	0217.0	2.0	35.0			0
	500	HIRA	8 S	0217.0	0217.0	1.0	15.0			0
	2840	PEKG	45 C	0423.0	0432.4	18.0	30.5			
	500	HIRA	7 C	0427.0	0432.0	7.0	75.0			0
	200	HIRA	7 C	0427.0	0431.0	7.0	20.0			0
	2800	HIRA	3 S	0427.0	0433.0	7.0	30.0			0
	2840	PEKG	3 S	0441.0	0445.6	13.0	19.2			
	200	HIRA	7 C	0443.0	0446.0	5.0	130.0			0

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

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Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak (10 -22	Mean W/m 2 Hz)		
23	500 HIRA	7 C	0444.0	0446.0	4.0	300.0		0	
	2800 HIRA	3 S	0444.0	0446.0	5.0	20.0		0	
	204 IZMI	41 F	0705.4	0705.8	1.0	46.0			
	200 HIRA	8 S	0706.0	0706.0	1.0	40.0		0	
	204 IZMI	42 SER	0804.7	0806.9	5.8	51.0			
	245 SVTO	4 S/F	0806.0	0809.0	4.0	58.0			QL=4 ST=2 TYP=3
	127 TORN	45 C	0806.5		3.8	40.0	10.0		
	245 SVTO	8 S	0826.0	0826.0	2.0	110.0			QL=4 ST=2 TYP=3
	410 SVTO	8 S	0826.0	0826.0	1.0	43.0			QL=4 ST=2 TYP=3
	245 SVTO	4 S/F	0837.0	0838.0	3.0	210.0			QL=4 ST=2 TYP=3
	410 SVTO	8 S	0838.0	0838.0	1.0	39.0			QL=4 ST=2 TYP=3
	245 SVTO	48 C	0843.0	0845.0	5.0	140.0			QL=4 ST=2 TYP=8
	245 SVTO	8 S	0907.0	0907.0	1.0	80.0			QL=4 ST=2 TYP=3
	204 IZMI	42 SER	1124.5	1127.9	4.7	50.0			
	245 SVTO	48 C	1236.0	1241.0	9.0	3400.0			QL=4 ST=2 TYP=8
	410 SVTO	48 C	1236.0	1236.0	4.0	330.0			QL=4 ST=2 TYP=8
	610 SVTO	4 S/F	1236.0	1236.0	8.0	37.0			QL=4 ST=2 TYP=3
	2695 SVTO	4 S/F	1236.0	1238.0	4.0	76.0			QL=4 ST=2 TYP=3
	4995 SVTO	4 S/F	1236.0	1238.0	5.0	100.0			QL=4 ST=2 TYP=3
	245 SVTO	48 C	1236.0	1241.0	684.0	3400.0			QL=4 ST=1 TYP=8
	410 SVTO	48 C	1236.0	1236.0	684.0	330.0			QL=4 ST=1 TYP=8
	610 SVTO	4 S/F	1236.0	1236.0	684.0	37.0			QL=4 ST=1 TYP=3
	2695 SVTO	4 S/F	1236.0	1238.0	684.0	76.0			QL=4 ST=1 TYP=3
	4995 SVTO	4 S/F	1236.0	1238.0	684.0	100.0			QL=4 ST=1 TYP=3
	127 TORN	47 GB	1236.2	1236.3	4.0D	2600.0	130.0		DISTURBED
	2695 SGMR	4 S/F	1237.0	1238.0	3.0	68.0			QL=4 ST=2 TYP=3
	1415 SVTO	4 S/F	1237.0	1239.0	3.0	33.0			QL=4 ST=2 TYP=3
	8800 SVTO	4 S/F	1237.0	1238.0	14.0	77.0			QL=4 ST=2 TYP=3
	1415 SVTO	4 S/F	1237.0	1239.0	683.0	33.0			QL=4 ST=1 TYP=3
	8800 SVTO	4 S/F	1237.0	1238.0	683.0	77.0			QL=4 ST=1 TYP=3
	4995 SGMR	8 S	1238.0	1238.0	1.0	57.0			QL=4 ST=2 TYP=3
	15400 SVTO	4 S/F	1238.0	1239.0	8.0	35.0			QL=4 ST=2 TYP=3
	15400 SVTO	4 S/F	1238.0	1239.0	682.0	35.0			QL=4 ST=1 TYP=3
	245 SVTO	8 S	1442.0	1442.0	U	230.0			QL=4 ST=2 TYP=3
24	127 TORN	43 NS	0757.0		53.0		19.0	V=1	
	127 TORN	43 NS	1133.0		177.0		8.0	V=1	
	235 CUBA	44 NS	1320.0E		280.0D		12.0		
	235 CUBA	44 NS	1320.0E		340.0D		3.0		
	2840 PEKG	45 C	0310.0	0322.0	36.0	140.0			
	245 PALE	48 C	0312.0	0324.0	29.0	9000.0			QL=4 ST=2 TYP=8
	245 PALE	48 C	0312.0	0320.0	1248.0	1100.0			QL=4 ST=1 TYP=8
	4995 LEAR	48 C	0317.0	0318.0	9.0	120.0			QL=4 ST=2 TYP=8
	2800 HIRA	7 C	0317.0	0322.0	14.0	100.0			0
	500 HIRA	47 GB	0317.0	0323.0	17.0	3070.0			0
	4995 LEAR	4 S/F	0317.0	0318.0	1243.0	120.0			QL=4 ST=1 TYP=3
	1415 LEAR	48 C	0318.0	0326.0	8.0	120.0			QL=4 ST=2 TYP=8
	2695 LEAR	4 S/F	0318.0	0322.0	6.0	97.0			QL=4 ST=2 TYP=3
	8800 LEAR	4 S/F	0318.0	0318.0	6.0	82.0			QL=4 ST=2 TYP=3
	1415 PALE	48 C	0318.0	0326.0	9.0	140.0			QL=4 ST=2 TYP=8
	2695 PALE	48 C	0318.0	0322.0	9.0	100.0			QL=4 ST=2 TYP=8
	4995 PALE	48 C	0318.0	0319.0	9.0	140.0			QL=4 ST=2 TYP=8
	245 LEAR	48 C	0318.0	0324.0	17.0	7200.0			QL=4 ST=2 TYP=8
	610 PALE	48 C	0318.0	0324.0	11.0	640.0			QL=4 ST=2 TYP=8
	410 PALE	49 GB	0318.0	0323.0	14.0	12000.0			QL=4 ST=2 TYP=6
	245 LEAR	48 C	0318.0	0322.0	1242.0	1100.0			QL=4 ST=1 TYP=8
	245 LEAR	48 C	0318.0	0324.0	1242.0	5600.0			QL=4 ST=1 TYP=8
	1415 LEAR	48 C	0318.0	0321.0	1242.0	120.0			QL=4 ST=1 TYP=8
	1415 LEAR	4 S/F	0318.0	0321.0	1242.0	120.0			QL=4 ST=1 TYP=3
	2695 LEAR	4 S/F	0318.0	0322.0	1242.0	97.0			QL=4 ST=1 TYP=3
	8800 LEAR	4 S/F	0318.0	0318.0	1242.0	82.0			QL=4 ST=1 TYP=3
	610 PALE	48 C	0318.0	0321.0	1242.0	480.0			QL=4 ST=1 TYP=8
	410 PALE	49 GB	0318.0	0322.0	1242.0	3100.0			QL=4 ST=1 TYP=6
	1415 PALE	4 S/F	0318.0	0322.0	1242.0	110.0			QL=4 ST=1 TYP=3
	2695 PALE	4 S/F	0318.0	0322.0	1242.0	100.0			QL=4 ST=1 TYP=3
	4995 PALE	4 S/F	0318.0	0319.0	1242.0	140.0			QL=4 ST=1 TYP=3
	8800 PALE	8 S	0319.0	0319.0	1.0	62.0			QL=4 ST=2 TYP=3
	8800 PALE	4 S/F	0319.0	0319.0	4.0	62.0			QL=4 ST=2 TYP=3
	200 HIRA	47 GB	0319.0	0321.0	22.0	1230.0			0

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Outstanding Occurrences

JANUARY 2003

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22	Mean W/m 2 Hz)		
24	500	HIRA	7 C	0342.0	0344.0	5.0	45.0		0	
	245	PALE	48 C	0342.0	0343.0	6.0	100.0		QL=4 ST=2 TYP=8	
	410	PALE	8 S	0342.0	0343.0	2.0	86.0		QL=4 ST=2 TYP=3	
	2840	PEKG	45 C	0457.0	0503.8	15.0	3.9			
	204	IZMI	7 C	0946.9	0946.9	0.1	9.0			
	204	IZMI	7 C	0954.7	0954.8	0.2	11.0			
	410	SGMR	8 S	1543.0	1543.0	1.0	47.0		QL=4 ST=2 TYP=3	
	610	SGMR	8 S	1543.0	1543.0	1.0	120.0		QL=4 ST=2 TYP=3	
	2695	SGMR	8 S	1543.0	1543.0	1.0	54.0		QL=4 ST=2 TYP=3	
	200	HIRA	8 S	2301.0	2301.0	1.0	20.0		0	
25	127	TORN	43 NS	0757.0		363.0		8.0	V=1	
	235	CUBA	44 NS	1420.0E		450.0D		5.0		
	235	CUBA	44 NS	1420.0E		450.0D		12.0		
	500	HIRA	8 S	0514.0	0514.0	1.0	15.0			
	204	IZMI	42 SER	0801.4	0801.1	17.5	25.0			
	204	IZMI	42 SER	0825.7	0826.4	0.9	27.0			
	204	IZMI	42 SER	0909.4	0909.5	0.5	19.0			
	204	IZMI	41 F	0923.3	0923.4	0.4	10.0			
	33	UPIC	46 C	1124.5	1125.5	2.0				
	204	IZMI	41 F	1124.6	1125.2	1.0	32.0			
	33	UPIC	46 C	1324.0	1325.5	4.5				
	410	SGMR	8 S	1328.0	1328.0	1.0	71.0		QL=4 ST=2 TYP=3	
	245	SGMR	4 S/F	1328.0	1328.0	3.0	110.0		QL=4 ST=2 TYP=3	
	245	SVTO	8 S	1328.0	1328.0	U	74.0		QL=4 ST=2 TYP=3	
	410	SVTO	8 S	1328.0	1328.0	U	62.0		QL=4 ST=2 TYP=3	
	2800	PENT	29 PBI	1831.0	1851.0	61.0U	223.0			
	610	PALE	49 GB	1844.0	1850.0	8.0	970.0		QL=4 ST=2 TYP=6	
	410	SGMR	48 C	1844.0	1847.0	17.0	400.0		QL=4 ST=2 TYP=8	
	610	SGMR	49 GB	1844.0	1849.0	14.0	1200.0		QL=4 ST=2 TYP=6	
	610	PALE	49 GB	1844.0	1850.0	316.0	970.0		QL=4 ST=1 TYP=6	
	410	SGMR	48 C	1844.0	1847.0	316.0	400.0		QL=4 ST=1 TYP=8	
	610	SGMR	49 GB	1844.0	1848.0	316.0	860.0		QL=4 ST=1 TYP=6	
	610	SGMR	49 GB	1844.0	1849.0	316.0	1200.0		QL=4 ST=1 TYP=6	
	410	PALE	48 C	1845.0	1848.0	15.0	410.0		QL=4 ST=2 TYP=8	
	1415	SGMR	48 C	1845.0	1851.0	14.0	170.0		QL=4 ST=2 TYP=8	
	2695	SGMR	4 S/F	1845.0	1851.0	13.0	190.0		QL=4 ST=2 TYP=3	
	410	PALE	48 C	1845.0	1848.0	315.0	410.0		QL=4 ST=1 TYP=8	
	1415	SGMR	4 S/F	1845.0	1848.0	315.0	150.0		QL=4 ST=1 TYP=3	
	2695	SGMR	4 S/F	1845.0	1847.0	315.0	85.0		QL=4 ST=1 TYP=3	
	2695	SGMR	4 S/F	1845.0	1850.0	315.0	130.0		QL=4 ST=1 TYP=3	
	245	SGMR	4 S/F	1846.0	1850.0	15.0	89.0		QL=4 ST=2 TYP=3	
	4995	SGMR	4 S/F	1846.0	1851.0	15.0	170.0		QL=4 ST=2 TYP=3	
	8800	SGMR	4 S/F	1846.0	1851.0	15.0	120.0		QL=4 ST=2 TYP=3	
	245	SGMR	4 S/F	1846.0	1849.0	314.0	61.0		QL=4 ST=1 TYP=3	
	245	SGMR	4 S/F	1846.0	1850.0	314.0	89.0		QL=4 ST=1 TYP=3	
	4995	SGMR	4 S/F	1846.0	1847.0	314.0	71.0		QL=4 ST=1 TYP=3	
	4995	SGMR	4 S/F	1846.0	1850.0	314.0	130.0		QL=4 ST=1 TYP=3	
	8800	SGMR	4 S/F	1846.0	1848.0	314.0	41.0		QL=4 ST=1 TYP=3	
	8800	SGMR	4 S/F	1846.0	1850.0	314.0	93.0		QL=4 ST=1 TYP=3	
	235	CUBA	7 C	1846.4	1855.1	33.4	15.0	7.0		
	235	CUBA	7 C	1846.4	1855.1	33.4	31.0	15.0		
	1415	PALE	48 C	1847.0	1852.0	8.0	120.0		QL=4 ST=2 TYP=8	
	1415	PALE	4 S/F	1847.0	1849.0	313.0	96.0		QL=4 ST=1 TYP=3	
	15400	SGMR	4 S/F	1849.0	1851.0	11.0	59.0		QL=4 ST=2 TYP=3	
	15400	SGMR	4 S/F	1849.0	1850.0	311.0	44.0		QL=4 ST=1 TYP=3	
	2695	PALE	4 S/F	1850.0	1852.0	5.0	130.0		QL=4 ST=2 TYP=3	
	4995	PALE	4 S/F	1851.0	1852.0	4.0	110.0		QL=4 ST=2 TYP=3	
	8800	PALE	4 S/F	1852.0	1853.0	3.0	89.0		QL=4 ST=2 TYP=3	
26	127	TORN	43 NS	0955.0		59.0		11.0	V=1	
	235	CUBA	44 NS	1400.0E		300.0D		3.0		
	235	CUBA	44 NS	1400.0E		300.0D		12.0		
	245	SVTO	8 S	0802.0	0802.0	2.0	66.0		QL=4 ST=2 TYP=3	
	33	UPIC	41 F	1022.5	1023.5	18.0				
	3000	IZMI	40 F	1023.4	1030.5	7.3	12.0			
	2950	GORK	23 GRF	1024.0	1038.3		87.0			
	900	GORK	40 F	1024.0	1037.3	16.4	20.0			
	2950	GORK	23 GRF	1024.0	1037.3	21.0	75.0			

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Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Mean	Int	Remarks
26	2950 GORK	41 F	1026.4	1031.5	5.1	44.0			
	2950 GORK	41 F	1026.4	1033.6		50.0			
	600 GORK	40 F	1028.7	1031.2	16.0	27.0			
	204 IZMI	41 F	1029.9	1031.2	1.9	132.0			
	127 TORN	47 GB	1030.5	1035.6	8.0	1200.0	340.0		
	3000 IZMI	45 C	1031.1	1038.6	12.7	22.0	7.5		
	9100 GORK	20 GRF	1031.2	1038.7	19.80	14.0			
	204 IZMI	42 SER	1033.1	1035.6	11.7	39.0			
27	235 CUBA	44 NS	1330.0E		390.00		5.0		
	235 CUBA	44 NS	1330.0E		390.00		13.0		
	200 HIRA	8 S	0339.0	0339.0	1.0	25.0			0
	204 IZMI	42 SER	0800.5	0802.5	2.6	29.0			
	245 SVTO	8 S	0821.0	0821.0	U	62.0			QL=4 ST=2 TYP=3
	410 SVTO	8 S	0821.0	0821.0	U	25.0			QL=4 ST=2 TYP=3
	204 IZMI	7 C	1016.9	1016.9	0.1	13.0			
	204 IZMI	41 F	1146.3	1146.8	1.2	186.0			
28	127 TORN	43 NS	0800.0		410.0		6.0		V=0
	235 CUBA	44 NS	1400.0E		420.00		3.0		
	235 CUBA	44 NS	1400.0E		420.00		10.0		
	127 TORN	42 SER	0812.4	0818.1	10.0				
	245 LEAR	8 S	0817.0	0817.0	U	120.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	0817.0	0817.0	U	110.0			QL=4 ST=2 TYP=3
	204 IZMI	42 SER	0822.0	0823.1	7.3	13.0			
	204 IZMI	42 SER	1011.2	1012.2	1.0	41.0			
29	235 CUBA	44 NS	1325.0E		305.00		4.0		
	235 CUBA	44 NS	1325.0E		305.00		13.0		
	200 HIRA	47 GB	0625.0	0625.0	1.0	1310.0			0
	127 TORN	47 GB	0953.1	0953.7	2.5		660.0		
	204 IZMI	42 SER	0953.2	0954.6	2.4	55.0			
	245 LEAR	8 S	1031.0	1031.0	U	130.0			QL=4 ST=2 TYP=3
30	235 CUBA	44 NS	1330.0E		390.00		10.0		
31	127 TORN	43 NS	1200.0		170.0		8.0		V=1
	235 CUBA	44 NS	1600.0E		120.00		6.0		
	235 CUBA	44 NS	1600.0E		120.00		14.0		

Reports are received routinely from the following observatories:

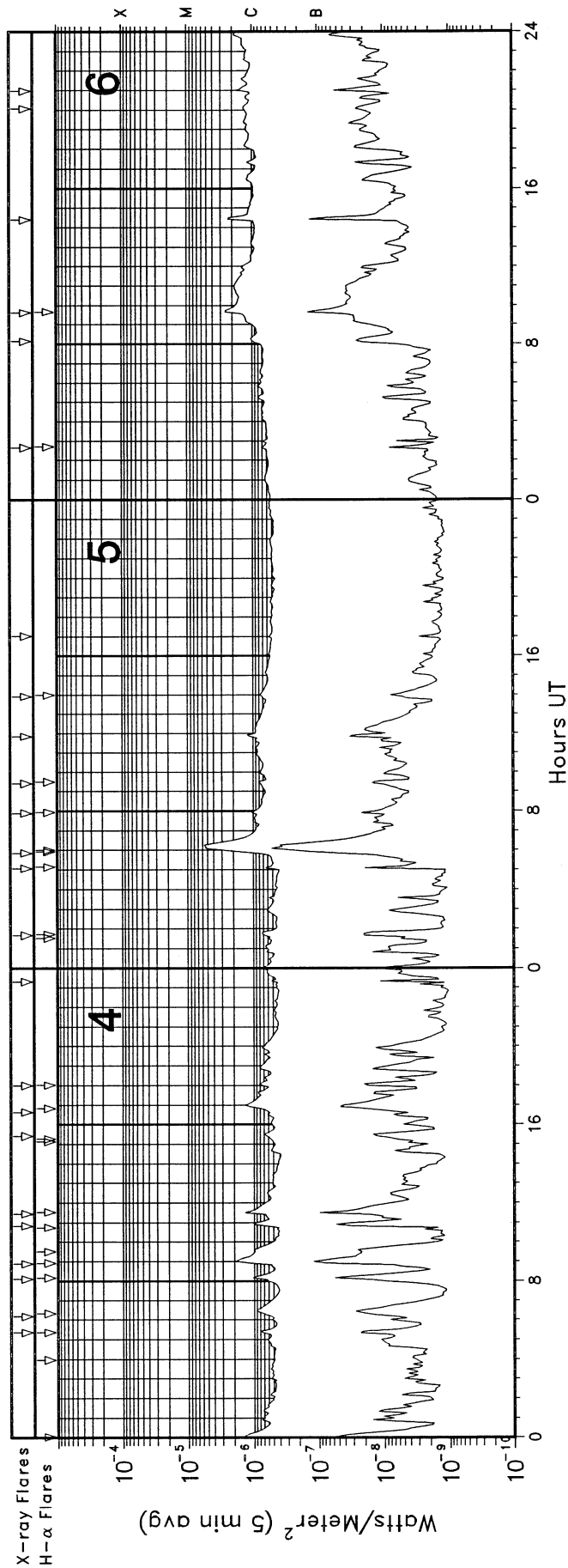
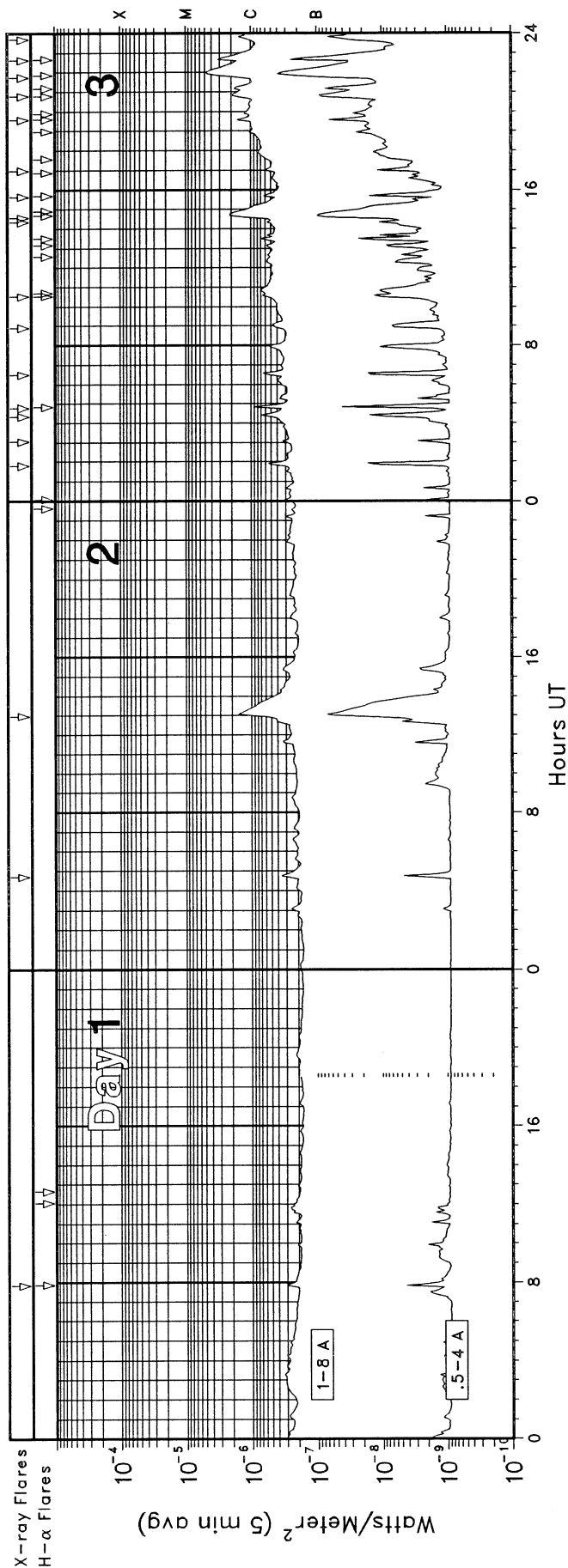
BERN = Berne	HUMN = Humain	ONDR = Ondrejov	SVTO = San Vito
CRIM = Crimea	IZMI = IZMIRAN	PEKG = Peking	TORN = Torun
CUBA = Havana	KISV = Kislovodsk	PALE = Palehua	TRST = Trieste
GORK = Gorky	KRAK = Krakow	PENT = Penticton	TYKW = Toyokawa
HIRA = Hiraiso	LEAR = Learmonth	POTS = Potsdam	UPIC = Upice
HUAN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

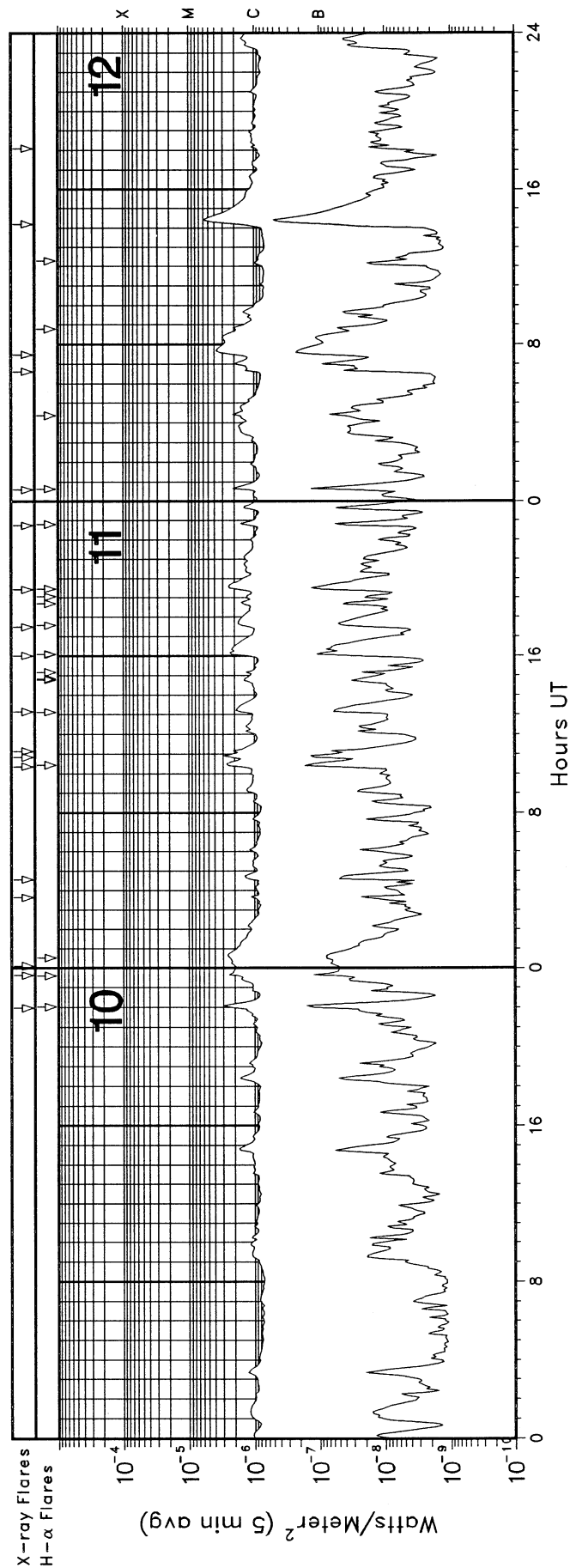
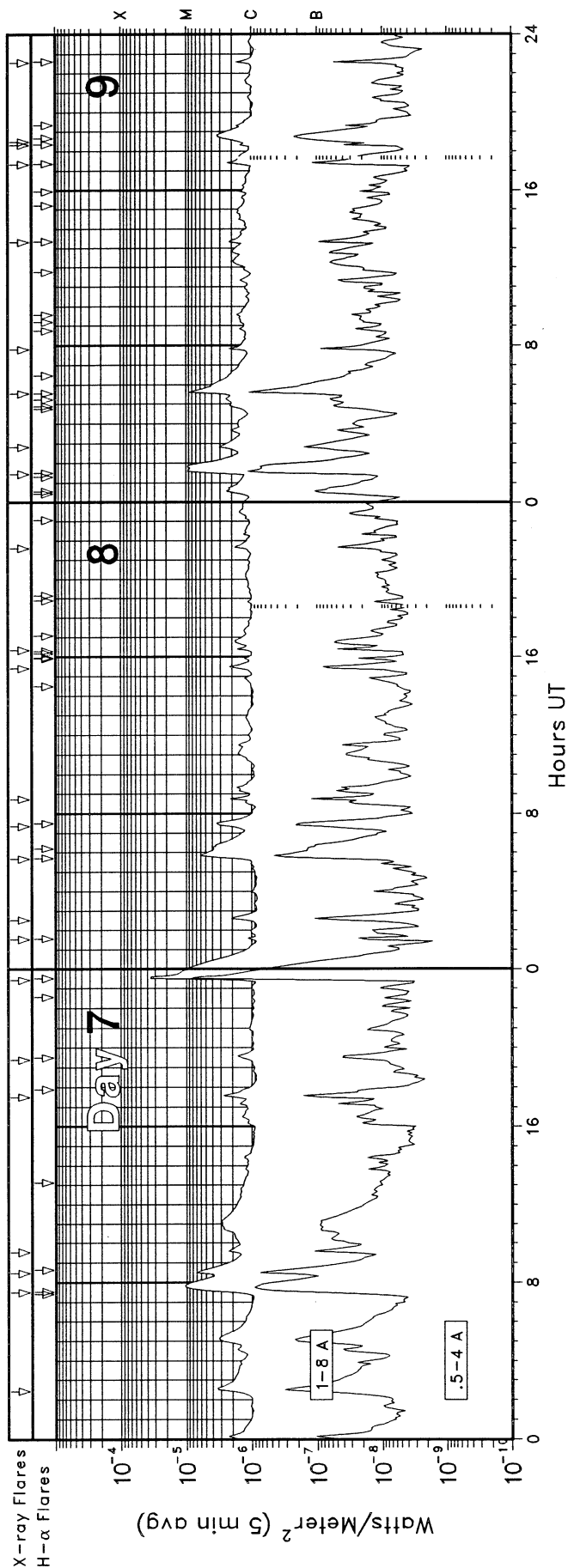
RSTN Site Information: Beginning in April 1986, the RSTN sites LEAR, PALE, SGMR, and SVTO fixed frequency solar radio data are periodically adjusted to several world standard stations. These world standard stations include: Kislovodsk, USSR 15,500 MHz; Penticton, Canada 2800 MHz; and Hiraiso, Japan 500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

GOES X-RAY DETECTOR January 2003

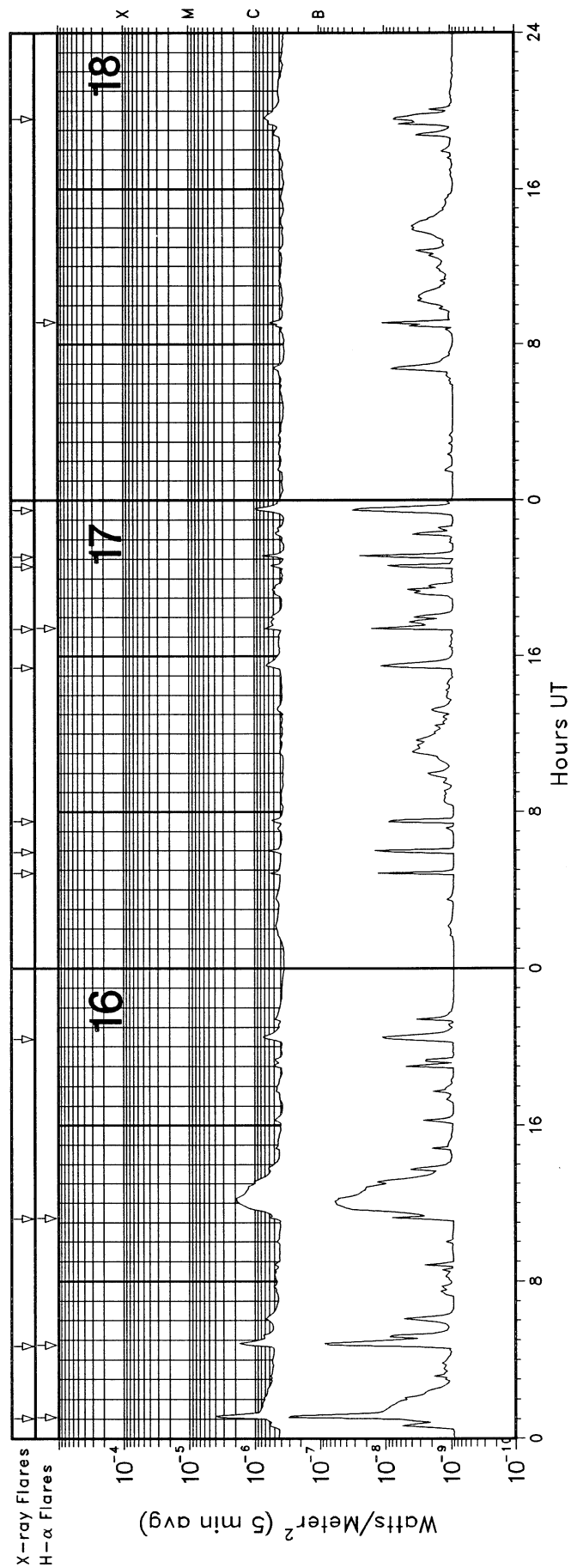
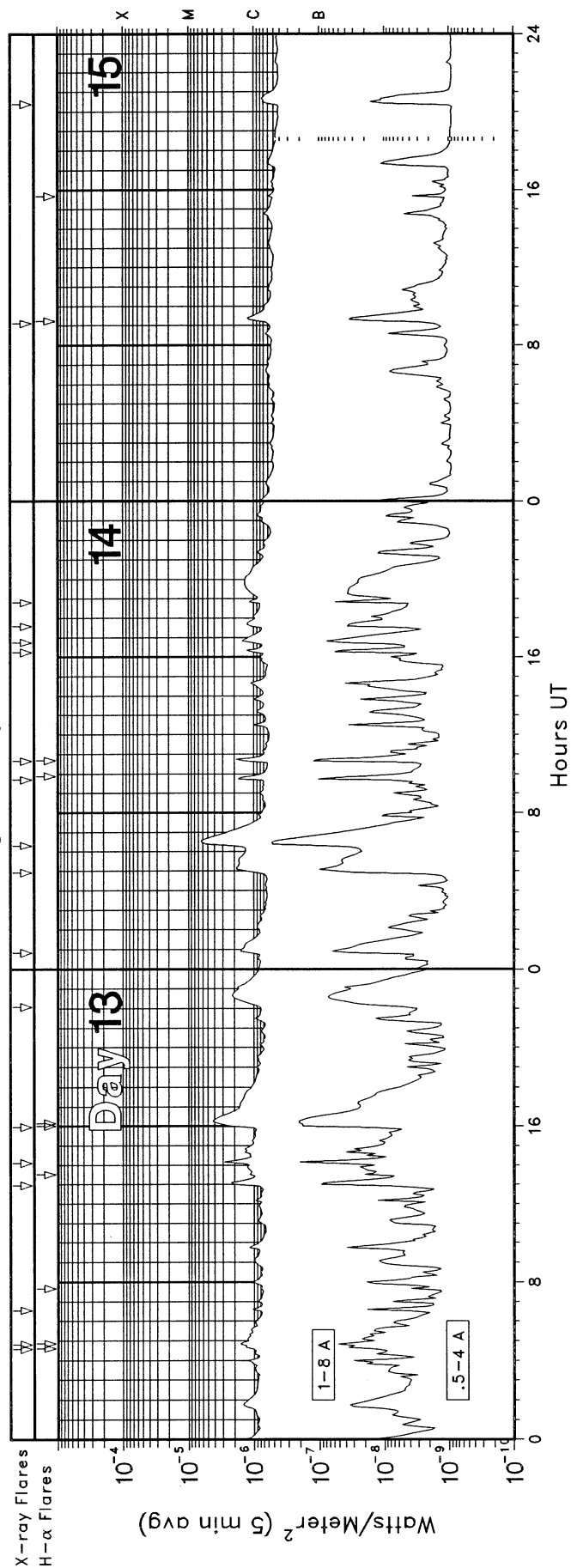


GOES X-RAY DETECTOR

January 2003

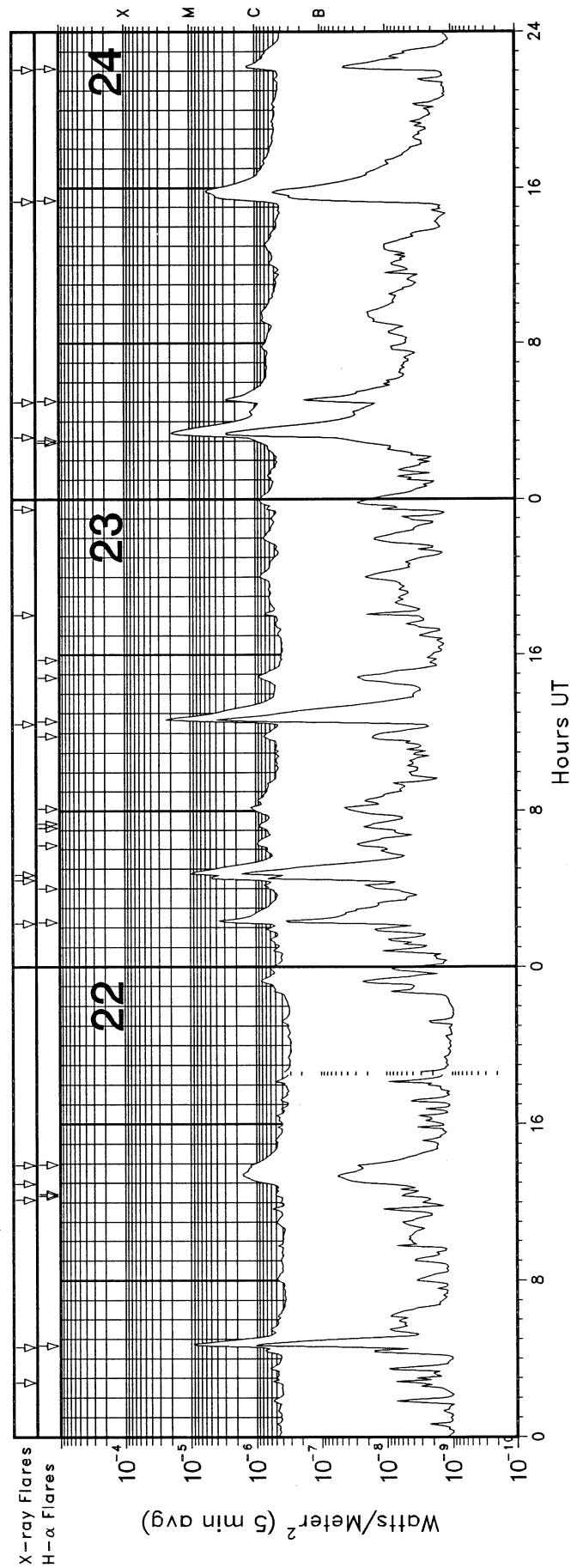
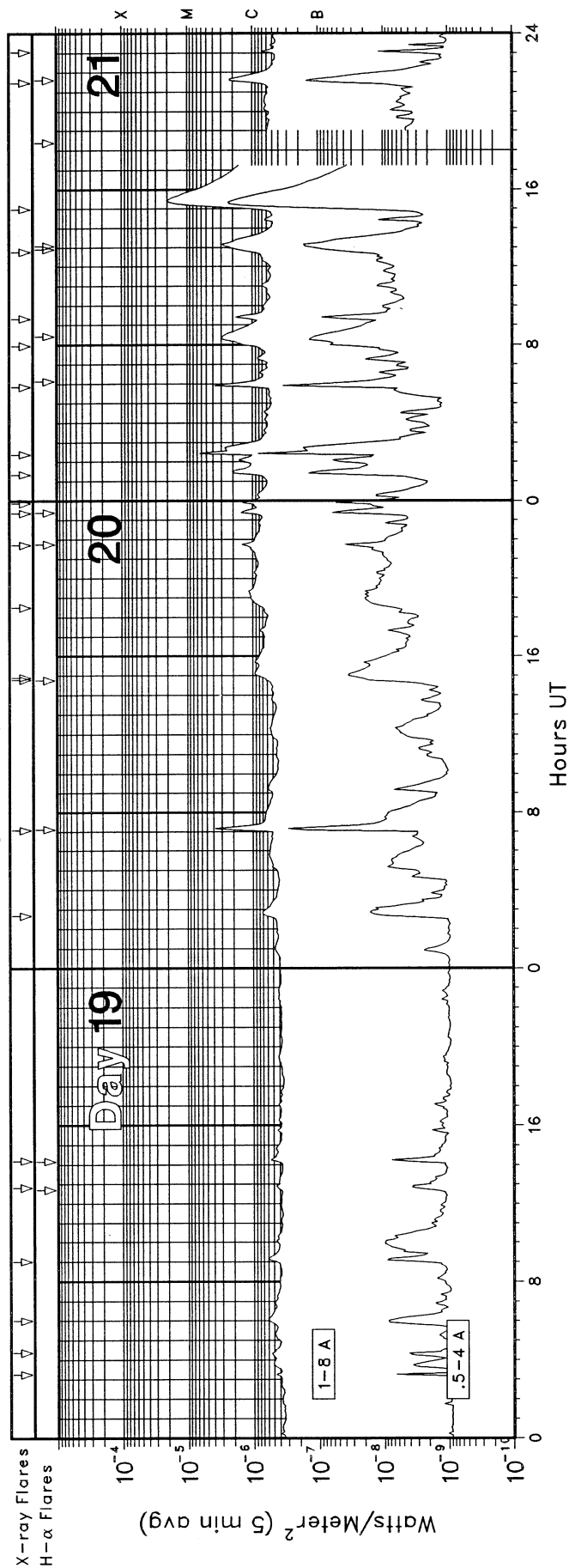


GOES X-RAY DETECTOR January 2003

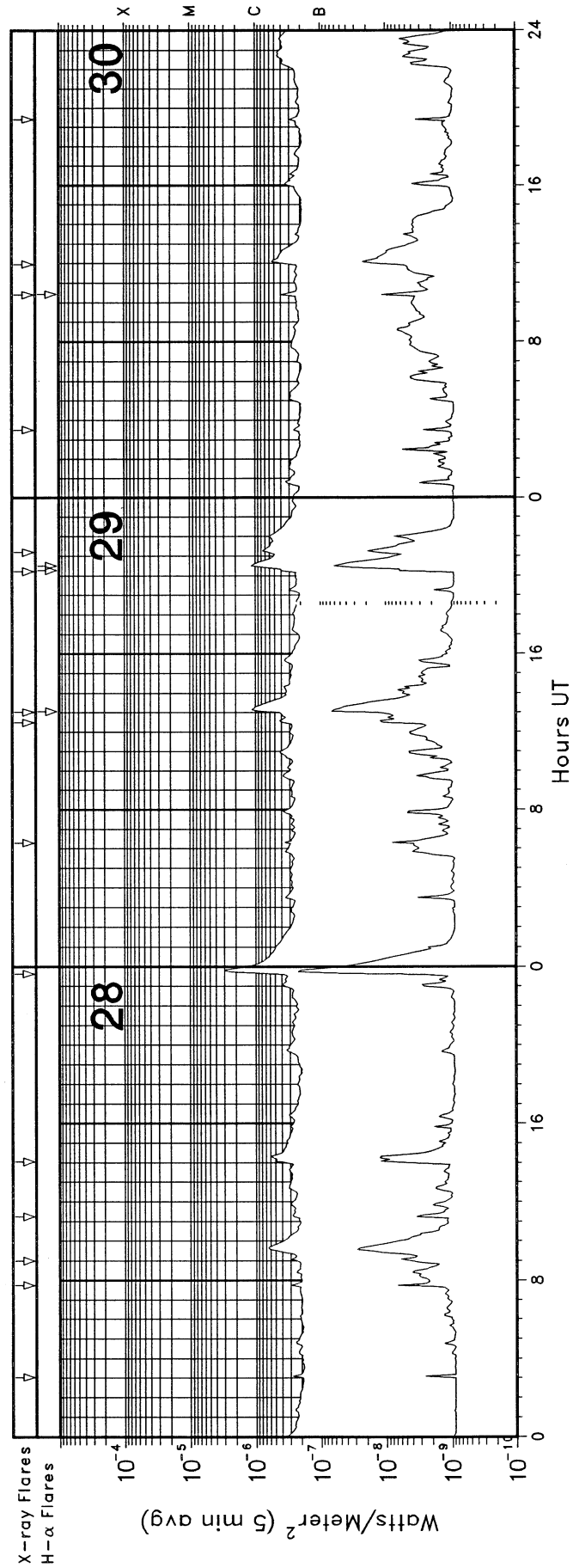
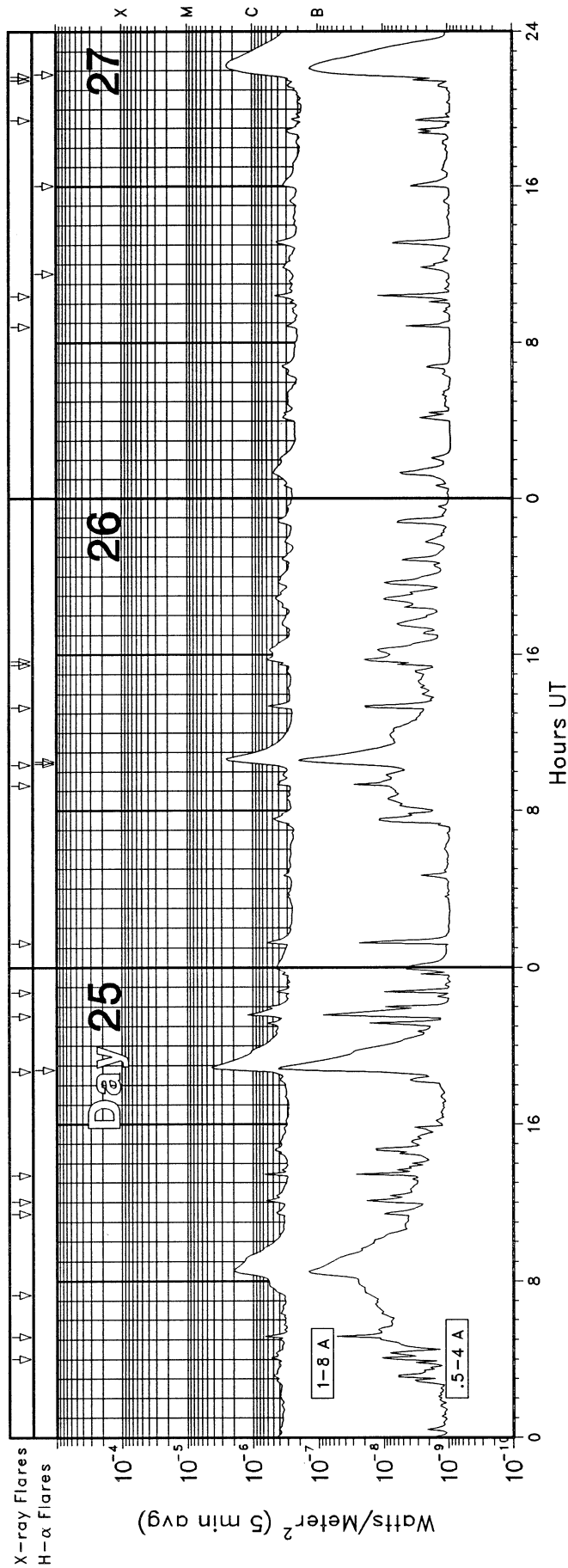


GOES X-RAY DETECTOR

January 2003

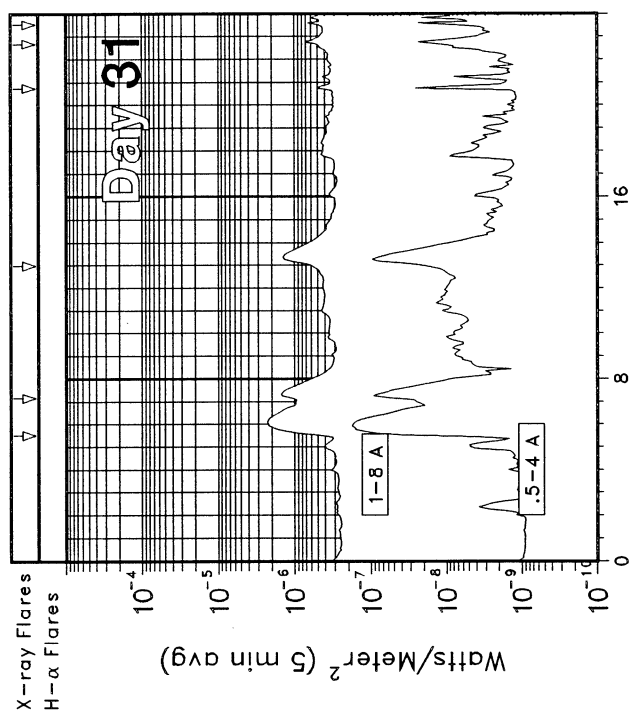


GOES X-RAY DETECTOR January 2003



GOES X-RAY DETECTOR

January 2003



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GOES SOLAR X-RAY FLARES
Preliminary Listing

January 2003

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
01	0749	0753	0759	N19	W22	SF	B3.3	10234	1.7E-04
02	0441	0446	0453				B3.6		2.3E-04
02	1258	1306	1323				C1.5		1.9E-03
03	0147	0156	0159				B6.8		3.4E-04
03	0302	0305	0308				B3.8		1.2E-04
03	0420	0425	0431				B7.2		4.0E-04
03	0447	0452	0456	S09	E57	SF	C1.0	10242	3.9E-04
03	0629	0634	0639				B7.3		3.6E-04
03	0854	0904	0912				B4.9		4.7E-04
03	1031	1034	1037	S09	E51	SF	B8.1	10242	2.3E-04
03	1420	1423	1426				B6.6		2.1E-04
03	1433	1445	1500	N18	W51	SF	C2.0	10234	2.7E-03
03	1538	1543	1547	S07	E50	SF	B6.7	10242	3.2E-04
03	1658	1702	1706	S20	W31	SF	B6.2	10243	2.7E-04
03	1934	1938	1940	S19	W31	SF	C1.9	10243	5.6E-04
03	2046	2050	2059	S19	W31	SF	C2.0	10243	1.4E-03
03	2144	2200	2217	S22	E55	SF	C4.7	10244	7.2E-03
03	2237	2244	2249	S19	W31	SF	C3.3	10243	2.0E-03
03	2341	2354	2357				C1.5	10243	1.3E-03
04	0521	0524	0528	S20	W39	SF	B9.0	10243	3.4E-04
04	0610	0630	0643	S19	W39	SF	B9.2	10243	1.5E-03
04	0806	0813	0819	S20	W41	SF	C1.0	10243	7.0E-04
04	0853	0903	0916	S28	E47	SF	C1.9	10244	2.0E-03
04	1050	1057	1107				C1.0	10243	8.8E-04
04	1127	1132	1138	S20	W40	SF	C1.4	10243	7.7E-04
04	1525	1530	1534	S19	W43	SF	B7.0	10243	3.6E-04
04	1638	1703	1720	S23	E43	SF	C1.3	10244	2.4E-03
04	1800	1808	1814	S19	W45	SF	B8.3	10243	6.5E-04
04	2319	2322	2324				B6.5	10243	1.6E-04
05	0140	0145	0148	S08	E30	SF	B8.7	10242	3.4E-04
05	0504	0508	0510	S08	E32	SF	B8.5	10242	2.3E-04
05	0551	0617	0627	S20	W51	SF	C5.8	10243	8.4E-03
05	0754	0758	0802	S08	E27	SF	C1.0	10242	4.8E-04
05	0924	0928	0932	S19	W55	SF	B9.2	10243	3.9E-04
05	1151	1154	1158				C1.3		5.2E-04
05	1355	1402	1412	S22	E31	SF	B7.7	10244	7.6E-04
05	1701	1703	1705				B5.7	10243	1.3E-04
06	0239	0243	0246	S08	W63	SF	B7.7	10239	2.9E-04
06	0808	0817	0825				C1.0		1.0E-03
06	0937	0943	0954	S25	E18	SF	C2.7	10244	2.4E-03
06	1423	1429	1433				C2.9		1.3E-03
06	2004	2008	2011				C1.3		5.6E-04
06	2058	2104	2113				C1.6		1.3E-03
07	0226	0234	0244				C3.5		3.2E-03
07	0729	0750	0811	S24	E07	1F	M1.0	10244	1.9E-02
07	0828	0833	0838				C7.7	10242	3.9E-03
07	0932	0936	0946				C2.3		1.7E-03
07	1730	1736	1743				C2.8		1.8E-03
07	1923	1936	1942	S21	E02	SF	C1.6	10244	1.6E-03
07	2325	2333	2340	S81	E14	SF	M4.9	10251	2.3E-02
08	0132	0135	0137	S13	E83	SF	C1.4	10251	3.6E-04
08	0231	0238	0245				C2.0		1.5E-03
08	0540	0552	0620	S22	W05	1F	C6.2	10244	1.0E-02
08	0721	0731	0738	S14	W11	SF	C3.4	10242	3.0E-03
08	0844	0847	0849				C2.6		6.3E-04
08	1525	1530	1534				C2.5		1.0E-03
08	1621	1627	1631				C1.7	10242	8.8E-04
08	2137	2142	2150				C1.8		1.2E-03

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
09	0127	0139	0203	S07	W24	1F	C9.8	10242	1.7E-02
09	0249	0253	0257				C3.4		1.4E-03
09	0532	0537	0544	S14	E64	1N	M1.0	10251	5.2E-03
09	0748	0752	0755				C2.6		8.4E-04
09	1319	1323	1327	S12	E60	SF	C2.5	10251	1.0E-03
09	1720	1726	1733	S10	E59	SF	C2.4	10251	1.5E-03
09	1820	1823	1826	S12	E59	SF	C1.7	10251	5.3E-04
09	1830	1850	1903	S16	E71	SF	C4.3	10251	5.1E-03
09	2234	2237	2240	S05	W37	SF	C2.0	10242	5.9E-04
10	2158	2207	2212	S09	W54	SF	C3.0	10242	2.1E-03
10	2337	2341	2350	S09	W54	SF	C2.5	10242	1.7E-03
11	0006	0042	0052	S08	W54	SF	C2.5	10242	6.4E-03
11	0337	0340	0343				C1.2		4.0E-04
11	0434	0444	0455				C1.4		1.6E-03
11	1022	1029	1041	S22	W49	SF	C2.7	10244	2.7E-03
11	1050	1055	1101				C3.0		1.7E-03
11	1109	1111	1112				C2.3		3.9E-04
11	1309	1315	1334	S08	W56	SF	C1.9	10242	2.6E-03
11	1601	1611	1642	S09	W57	SF	C2.3	10242	5.0E-03
11	1729	1744	1810	S21	W49	SF	C1.7	10244	3.8E-03
11	1925	1933	1951	S21	W52	SF	C2.4	10244	3.5E-03
11	2245	2251	2258	S08	W60	SF	C1.6	10242	1.1E-03
12	0036	0042	0050	S16	E05	SF	C2.1	10247	1.4E-03
12	0637	0703	0711				C2.2		3.0E-03
12	0729	0742	0833				C3.7		1.2E-02
12	1412	1425	1443				C6.1		8.0E-03
12	1806	1810	1812				C1.2		3.8E-04
13	0435	0443	0449	S25	E10	SF	C1.3	10250	1.0E-03
13	0449	0453	0457	S16	E43	SF	C1.7	10254	7.5E-04
13	0633	0637	0641				C1.0		4.7E-04
13	1257	1305	1312				C2.4		1.7E-03
13	1406	1411	1416				C3.1		1.4E-03
13	1557	1615	1638				C4.2	10244	8.1E-03
13	2205	2240	2303				C2.1		5.7E-03
14	0050	0058	0123				C1.6		2.8E-03
14	0455	0508	0603				C1.9		6.4E-03
14	0620	0636	0651				C6.4		9.5E-03
14	0942	0948	0954				C2.1		1.1E-03
14	1039	1044	1048				C2.5		8.9E-04
14	1614	1620	1625				C1.4		7.6E-04
14	1645	1653	1705				C1.5		1.6E-03
14	1734	1740	1757				C1.2		1.6E-03
14	1848	1853	1858				C1.2		6.5E-04
15	0907	0924	0940				C1.2		1.9E-03
15	2023	2048	2100				B7.1		1.5E-03
16	0102	0108	0115	S11	W27	1N	C5.3	10255	2.5E-03
16	0442	0450	0457	N10	E52	1F	C1.8	10258	1.2E-03
16	1112	1218	1254				C2.0		7.7E-03
16	2023	2031	2037				B7.5		5.6E-04
17	0450	0453	0455				B7.7		1.8E-04
17	0556	0600	0602				B8.4		2.2E-04
17	0731	0734	0737				B7.6		2.0E-04
17	1524	1533	1546				B6.6		7.7E-04
17	1723	1728	1732	N09	E30	SF	B7.7	10259	3.3E-04
17	2036	2040	2043				B6.4		2.3E-04
17	2106	2110	2113				B9.2		2.7E-04
17	2329	2334	2338				C1.1		4.9E-04

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

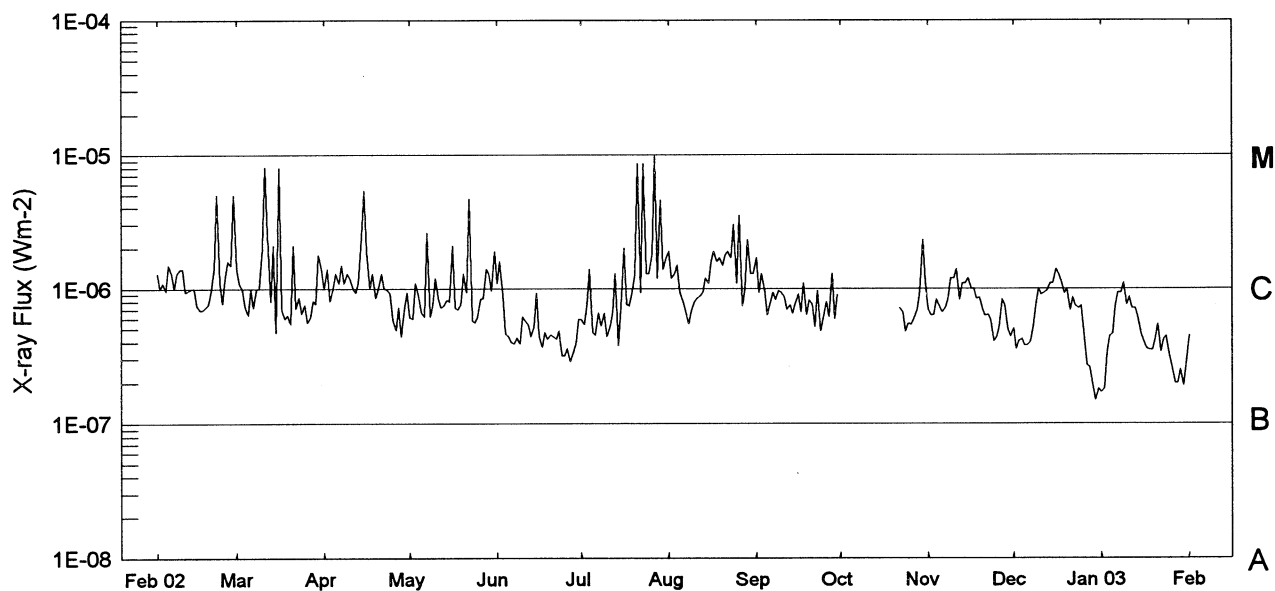
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January 2003

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/ USAF Region	Flux
18	1935	1940	1945				B6.8		3.9E-04
19	0315	0318	0320				B4.8		1.4E-04
19	0421	0423	0425				B5.6		1.3E-04
19	0600	0606	0610				B6.0		3.6E-04
19	0901	0910	0920				B6.1		6.3E-04
19	1249	1255	1258	N14	E31	SF	B4.6	10260	2.4E-04
19	1412	1416	1421				B5.5		2.8E-04
20	0240	0252	0302				B7.1		9.0E-04
20	0704	0710	0716	N16	E21	SF	C4.3	10260	1.9E-03
20	1446	1449	1450	S24	E58	SF	B6.3	10266	1.5E-04
20	1454	1458	1500	S22	E62	SF	B7.6	10266	2.6E-04
20	1830	1921	1933				C1.7		3.7E-03
20	2143	2146	2149	S19	E82	SF	C1.5	10267	5.1E-04
20	2322	2327	2335	N16	E10	SF	C1.6	10260	1.0E-03
20	2353	2358	2401				C1.5		6.4E-04
21	0121	0134	0140				C2.0		1.9E-03
21	0223	0228	0233				C8.1		3.2E-03
21	0550	0557	0602	N14	E08	SF	C4.1	10260	1.9E-03
21	0757	0822	0843				C2.9		6.1E-03
21	0920	0927	0933				C1.8		1.2E-03
21	1246	1310	1331	N15	E05	SF	C3.0	10260	5.3E-03
21	1459	1526	1552				M1.9		4.0E-02
21	2129	2140	2148	N15	W01	SF	C2.3	10260	2.0E-03
21	2302	2306	2310				B7.4		3.1E-04
22	0247	0251	0253				B6.2		2.0E-04
22	0435	0444	0450	N15	W05	1F	M1.2	10260	5.8E-03
22	1208	1210	1212	S23	E36	SF	B4.2	10266	1.0E-04
22	1258	1324	1348				C1.6		3.8E-03
22	1355	1358	1400	S09	W52	SF	C1.3	10263	3.7E-04
23	0212	0219	0225	S12	W57	SF	C4.5	10263	2.1E-03
23	0425	0434	0441	S22	E21	1N	C6.0	10266	3.4E-03
23	0442	0448	0456				M1.0		6.9E-03
23	1228	1243	1249	S22	E17	1N	M2.5	10266	1.4E-02
23	1804	1808	1812				B8.6		3.4E-04
23	2330	2333	2337				B7.4		2.8E-04
24	0312	0327	0340	S22	E10	1N	M1.9	10266	2.1E-02
24	0459	0509	0517	S23	E17	SF	C2.8	10266	2.4E-03
24	1517	1550	1606	S22	E05	1F	C5.6	10266	1.1E-02
24	2204	2214	2228	S20	E02	SF	C1.3	10266	1.6E-03
25	0401	0405	0409				B5.7		2.4E-04
25	0509	0513	0515				C1.2		2.3E-04

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/ USAF Region	Flux
25	0718	0836	0919				C1.9	10268	7.4E-03
25	1125	1129	1133				B5.1		2.1E-04
25	1201	1206	1211				B6.6		3.3E-04
25	1322	1327	1329				B8.8		2.4E-04
25	1842	1855	1911	N13	W26	SF	C4.4	10268	5.2E-03
25	2131	2136	2144				C1.3		7.4E-04
25	2243	2247	2252				B4.7		2.2E-04
26	0114	0117	0122				B7.6		2.8E-04
26	0918	0923	0928				B4.6		2.4E-04
26	1022	1040	1053	N17	W35	SF	C2.6	10268	3.2E-03
26	1319	1325	1330				B6.6		3.3E-04
26	1529	1532	1534				B4.7		1.1E-04
26	1540	1546	1557				B6.2		5.5E-04
27	0849	0853	0856				B3.5		1.2E-04
27	1023	1026	1029				B5.3		1.6E-04
27	1926	1929	1932				B3.3		9.5E-05
27	2131	2134	2136				B3.5		9.6E-05
27	2142	2219	2250	S17	W23	SF	C2.4		7.2E-03
28	0303	0307	0309				B3.1		9.5E-05
28	0745	0748	0750				B3.6		9.0E-05
28	0900	0905	0908				B3.1		1.2E-04
28	1115	1119	1127				B3.1		2.0E-04
28	1403	1420	1428				B5.9		7.8E-04
28	2338	2350	0000	S22	W55	SF	C3.2	10266	2.7E-03
29	0618	0621	0623				B4.0		1.1E-04
29	1230	1234	1239				B4.9		2.2E-04
29	1302	1310	1329	N09	W39	SF	C1.1	10273	1.5E-03
29	2013	2033	2050	S22	W65	SF	C1.1	10266	1.7E-03
29	2111	2115	2128				B7.7		7.1E-04
30	0330	0333	0336				B3.0		9.3E-05
30	1024	1028	1030	S11	E52	1F	B4.8	10274	1.4E-04
30	1158	1208	1234				B5.5		9.5E-04
30	1925	1928	1930				B3.5		8.9E-05
31	0530	0606	0643				C2.2		7.5E-03
31	0709	0720	0737				C1.5		2.2E-03
31	1259	1321	1343				C1.4		2.9E-03
31	2045	2048	2051				B7.1		1.9E-04
31	2241	2245	2250				B7.9		3.5E-04
31	2332	2335	2338				B7.5		2.3E-04

Preliminary GOES Satellite Daily X-Ray Background Feb 2002 - Jan 2003



Day	Feb 02	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 03
1	C1.3	C1.4	C1.0	C1.9	C1.1	B5.9	C1.9	C1.7	*	B7.0	B5.0	B1.7
2	C1.0	C1.1	C1.4	C1.2	C1.6	B5.4	C1.2	B9.4	*	B6.3	B3.6	B1.8
3	C1.1	B9.8	B8.1	C1.3	B9.0	B7.5	C1.3	C1.3	*	B6.4	B4.1	B3.3
4	B9.6	B7.3	C1.0	C1.5	B4.6	C1.4	C1.5	B9.7	*	B8.3	B4.2	B4.4
5	C1.5	B6.4	C1.3	B9.5	B4.4	B4.7	B9.5	B6.4	*	B7.3	B3.8	B4.6
6	C1.3	B9.9	C1.1	B8.0	B4.0	B4.5	B8.0	B7.5	*	B6.7	B3.8	B7.4
7	C1.0	B7.2	C1.5	B6.8	B3.9	B6.6	B6.8	B9.4	*	B7.2	B4.0	B9.3
8	C1.3	C1.0	C1.1	B5.5	B4.3	B5.3	B5.5	B8.3	*	B8.4	B5.0	B9.4
9	C1.4	C1.0	C1.3	B6.8	B3.9	B6.5	B6.8	B9.6	*	C1.2	B7.7	C1.1
10	C1.4	C2.0	C1.2	B8.0	B6.2	B4.4	B8.0	B9.3	*	C1.2	C1.0	B7.6
11	B9.5	C8.1	C1.0	B8.5	B5.8	B5.2	B8.5	B8.7	*	C1.4	B9.1	B8.7
12	B9.6	C2.5	B9.3	B8.9	B5.4	B6.5	B8.9	B7.0	*	B8.3	B9.4	B7.1
13	C1.0	B8.0	C1.1	B9.3	B4.4	C1.3	B9.3	B7.5	*	C1.1	B9.7	B7.1
14	C1.0	C2.1	C2.4	C1.2	B5.2	B3.8	C1.2	B6.5	*	C1.1	C1.1	B6.2
15	B7.4	B4.7	C5.4	C1.1	B9.2	B7.3	C1.1	B7.7	*	C1.2	C1.1	B4.6
16	B6.9	C8.0	C1.9	C1.6	B4.4	C2.0	C1.6	B9.0	*	C1.0	C1.4	B4.1
17	B6.9	B7.0	C1.0	C1.9	B3.7	B7.6	C1.9	B6.7	*	C1.0	C1.3	B3.6
18	B7.2	B6.0	C1.3	C1.6	B4.7	B7.4	C1.6	C1.1	*	B8.5	C1.1	B3.5
19	B7.6	B6.3	B8.6	C1.7	B4.2	B9.7	C1.7	B6.4	*	B8.6	B9.2	B3.5
20	B9.5	B5.5	C1.0	C1.5	B4.5	C1.3	C1.5	B8.2	*	B7.1	C1.0	B4.2
21	C1.4	C2.1	C1.3	C1.8	B4.4	C8.6	C1.8	B7.6	*	B6.3	B6.9	B5.4
22	C5.0	B7.1	C1.0	C1.9	B4.2	B9.3	C1.9	B5.2	B7.1	B6.4	B8.6	B3.4
23	C1.1	B8.6	B9.9	C1.7	B4.8	C8.6	C1.7	B9.7	B6.7	B5.9	B7.4	B4.2
24	B7.8	B6.5	B9.2	C3.0	B3.2	C1.3	C3.0	B4.8	B4.8	B4.1	B7.1	B4.4
25	C1.2	B7.5	B5.9	C1.1	B3.2	C1.3	C1.1	B6.0	B5.5	B4.3	B7.4	B3.2
26	C1.6	B5.6	B4.9	C3.5	B3.6	C1.8	C3.5	B7.9	B5.4	B5.1	B4.2	B2.6
27	C1.5	B6.1	B7.2	B7.4	B2.9	C9.8	B7.4	B6.2	B6.0	B8.3	B2.7	B2.0
28	C5.0	B8.1	B4.4	C1.0	B3.3	C1.2	C1.0	C1.3	B6.9	B7.6	B2.6	B2.0
29		B7.7	B7.1	C2.3	B3.9	C4.6	C2.3	B6.0	B9.4	B4.9	B1.9	B2.5
30		C1.8	B9.4	C1.3	B5.9	C1.4	C1.3	B9.0	C2.3	B4.4	B1.5	B1.9
31		C1.4		C1.3		C1.7	C1.3		C1.1		B1.8	B2.8

NOTE: * = Data not available.

ACTIVE PROMINENCES AND FILAMENTS

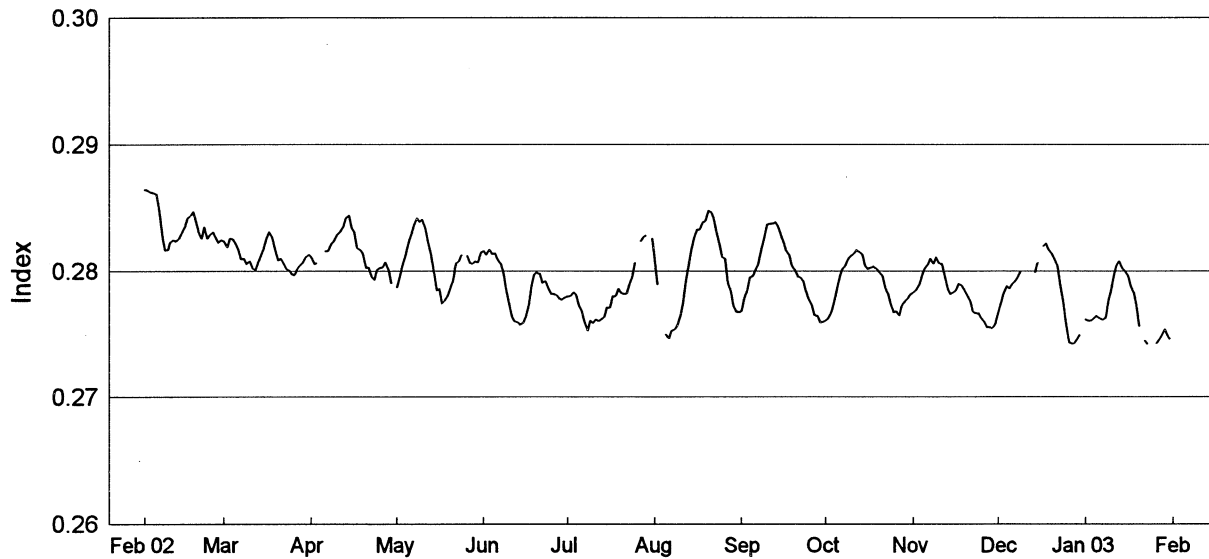
33
Jan 03

JANUARY 2003

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
03	EPL	1506	1757	N22	W90	12	27.8	1		4	6	E	HOLL	0235	
04	DSF	2046U	1125U	S13	E23	01	6.6		23	0	0	E	RAMY		
05	BSL	0727	0812	S30	E90	01	12.4			9	9	E	LEAR		
05	DSF	0848	1005	N26	E09	01	6.1	2	23	0	0	E	SVTO		
05	DSF	1700U	1203U	S29	W42	01	2.4		11	0	0	E	RAMY	0243	
05	DSF	2046U	1125U	S13	E23	01	7.6		23	0	0	E	RAMY		
05	DSF	2341U	1453U	N26	E10	01	6.8		22	0	0	E	HOLL		
06	DSF	1648U	1201U	S31	E36	01	9.5		16	0	0	E	RAMY		
07	DSF	0914U	0048U	N03	W31	01	5.1		13	0	0	E	LEAR		
07	DSF	1506	1744U	S11	E00	01	7.6		05	0	0	E	RAMY	0242	
13	EPL	1313	1432	N14	E90	01	20.3	3		7	5	E	RAMY		
13	BSL	1630	0000	S17	W90	01	6.8			1	3	E	RAMY	0244	Flare Associated
13	BSL	1630	1658	S17	W90	01	6.8			1	3	E	RAMY	0244	Flare Associated
13	EPL	1636	1700	S18	W84	01	7.3	3		9	9	E	HOLL	0244	Flare Associated
14	EPL	1709	1748	S39	E90	01	22.0	1		5	9	E	HOLL		
14	EPL	1732	0000	N07	W90	01	8.0	1		5	5	E	HOLL	0253	
15	EPL	1732	0009	N07	W90	01	9.0	1		5	5	E	HOLL	0253	
16	DSF	2338U	1452U	S03	W04	01	16.7		04	0	0	E	HOLL		
18	DSF	1853U	1155U	N20	W20	01	17.2		10	0	0	E	RAMY		
20	DSF	1020U	2356U	N15	E45	01	23.8		29	0	0	E	LEAR		
20	DSF	1020U	2356U	N37	W42	01	17.0		19	0	0	E	LEAR		
20	DSF	1425U	0714U	N25	E63	01	25.5		21	0	0	E	SVTO		
20	DSF	1425U	0714U	N47	W43	01	17.0		16	0	0	E	SVTO		
20	DSF	1848U	1506U	N14	E39	01	23.7		39	0	0	E	HOLL		
20	DSF	1848U	1506U	N40	W19	01	19.2		25	0	0	E	HOLL		
20	DSF	2102U	1132U	N47	E09	01	21.6		36	0	0	E	RAMY		
21	LPS	1610	1959	S09	E90	01	28.4	1		9	9	E	HOLL		Bright Emission 1/3
21	LPS	1648E	1823	S12	E90	01	28.5			7	4	E	RAMY		
21	EPL	1731	0015	N40	E90	01	29.1	3		6	6	E	HOLL		
21	APR	1842	2120D	N48	E90	01	29.3	1		0	0	E	RAMY		
21	DSF	1848U	1506U	N14	E39	01	24.7		39	0	0	E	HOLL		
21	DSF	1848U	1506U	N40	W19	01	20.2		25	0	0	E	HOLL		
22	EPL	2251E	0410	N39	E90	01	30.2	3		5	5	E	LEAR		
23	DSF	0948U	2314U	S16	E01	01	23.5		10	0	0	E	LEAR		
23	DSF	2354U	1446U	N15	E34	01	26.6		13	0	0	E	HOLL		
27	DSF	1513U	0652	S21	W17	01	26.3		16	0	0	E	SVTO		
27	DSF	1931U	1141U	S19	W21	01	26.2		20	0	0	E	RAMY		
27	DSF	2102U	2136	S19	W19	01	26.4		21	0	0	E	HOLL		
28	BSL	0425	0000	S05	W90	01	21.4			5	5	E	LEAR		
28	BSL	0425	0455D	S05	W90	01	21.4			5	5	E	LEAR		
28	DSF	0951U	0101U	S19	W19	01	27.0		21	0	0	E	LEAR		
29	DSF	2042U	1147U	N33	E22	01	31.6		29	0	0	E	RAMY		
29	DSF	2042U	1147U	S05	W02	01	29.7		11	0	0	E	RAMY	0272	
29	DSF	2359U	1440U	N07	E20	01	31.5		12	0	0	E	HOLL		
30	EPL	1642	1915	S06	W90	01	23.9	2		7	9	E	HOLL		
30	DSF	1734U	1137U	S11	E02	01	30.9		17	0	0	E	RAMY		
31	DSF	1030U	2245U	N27	E28	02	2.6		09	0	0	E	LEAR		
31	DSF	2121	2235	N36	E28	02	3.1		05	0	0	E	HOLL		
31	EPL	2200	2230	N13	W90	01	25.1			9	9	E	HOLL		
31	DSF	2327U	1431U	S12	E02	02	1.1		19	0	0	E	HOLL		

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

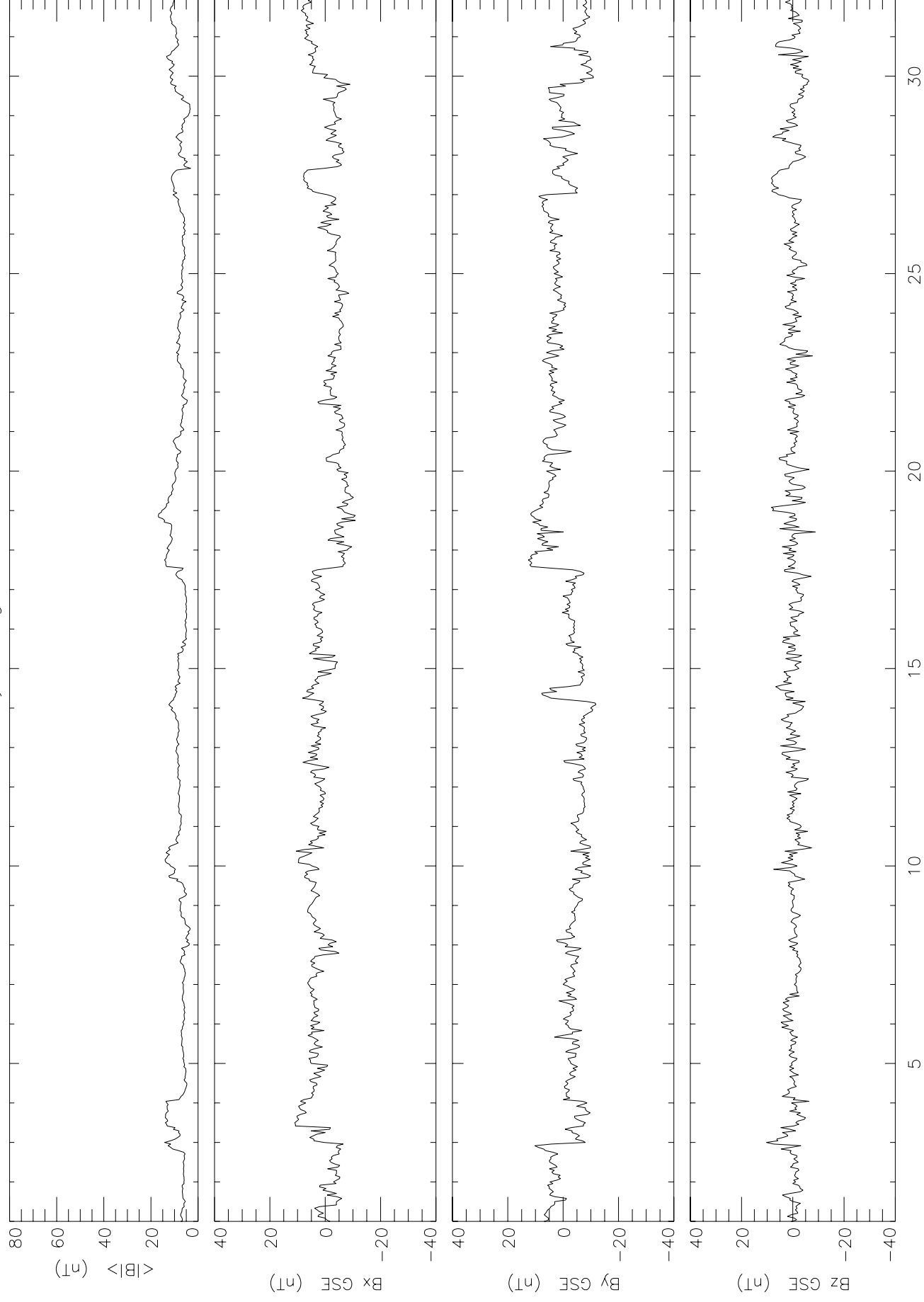
Feb 2002 - Jan 2003
Version 9.1



Day	Feb 02	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 03
1	0.2865	0.2824	0.2811	0.2787	0.2816	0.2780	0.2808	0.2768	0.2760	0.2783	0.2767	0.2761
2	0.2865	0.2819	0.2806	0.2795	0.2813	0.2780	0.2789	0.2778	0.2762	0.2785	0.2774	0.2760
3	0.2863	0.2826	0.2807	0.2806	0.2817	0.2783	---	0.2785	0.2767	0.2789	0.2782	0.2760
4	0.2863	0.2826	---	0.2812	0.2814	0.2781	---	0.2795	0.2775	0.2796	0.2788	0.2762
5	0.2861	0.2822	---	0.2823	0.2814	0.2773	0.2749	0.2796	0.2785	0.2802	0.2786	0.2764
6	0.2849	0.2817	0.2816	0.2829	0.2809	0.2767	0.2746	0.2801	0.2796	0.2805	0.2790	0.2762
7	0.2828	0.2810	0.2816	0.2836	0.2806	0.2759	0.2752	0.2805	0.2802	0.2810	0.2792	0.2761
8	0.2817	0.2810	0.2822	0.2842	0.2799	0.2752	0.2753	0.2817	0.2804	0.2806	0.2795	0.2762
9	0.2817	0.2806	0.2824	0.2839	0.2786	0.2760	0.2756	0.2825	0.2810	0.2811	0.2800	0.2775
10	0.2823	0.2808	0.2829	0.2841	0.2776	0.2758	0.2764	0.2837	0.2812	0.2807	---	0.2784
11	0.2825	0.2803	0.2831	0.2834	0.2764	0.2761	0.2774	0.2838	0.2814	0.2806	---	0.2797
12	0.2824	0.2801	0.2835	0.2824	0.2760	0.2760	0.2791	0.2838	0.2817	0.2797	0.2785	0.2805
13	0.2826	0.2807	0.2842	0.2813	0.2759	0.2761	0.2802	0.2839	0.2815	0.2786	---	0.2808
14	0.2830	0.2812	0.2844	0.2801	0.2757	0.2763	0.2817	0.2836	0.2813	0.2782	0.2799	0.2802
15	0.2835	0.2817	0.2834	0.2785	0.2758	0.2771	0.2826	0.2830	0.2804	0.2783	0.2807	0.2800
16	0.2842	0.2826	0.2831	0.2786	0.2763	0.2771	0.2833	0.2823	0.2802	0.2785	---	0.2796
17	0.2844	0.2831	0.2819	0.2774	0.2773	0.2780	0.2833	0.2816	0.2803	0.2790	0.2820	0.2788
18	0.2847	0.2827	0.2817	0.2776	0.2788	0.2780	0.2839	0.2813	0.2804	0.2789	0.2822	0.2782
19	0.2840	0.2818	0.2814	0.2780	0.2797	0.2786	0.2840	0.2804	0.2805	0.2785	0.2817	0.2771
20	0.2830	0.2809	0.2803	0.2786	0.2799	0.2783	0.2848	0.2801	0.2806	0.2781	0.2814	0.2755
21	0.2826	0.2810	0.2803	0.2793	0.2798	0.2782	0.2847	0.2796	0.2796	0.2775	0.2810	---
22	0.2835	0.2807	0.2795	0.2806	0.2791	0.2782	0.2842	0.2795	0.2787	0.2768	0.2804	0.2744
23	0.2826	0.2802	0.2793	0.2808	0.2792	0.2789	0.2832	0.2792	0.2781	0.2766	0.2789	0.2741
24	0.2829	0.2801	0.2801	0.2813	0.2787	0.2796	0.2822	0.2784	0.2773	0.2766	0.2774	---
25	0.2831	0.2798	0.2803	---	0.2782	0.2807	0.2812	0.2777	0.2767	0.2762	0.2758	---
26	0.2827	0.2797	0.2803	0.2812	0.2782	---	0.2810	0.2773	0.2768	0.2759	0.2743	0.2742
27	0.2823	0.2802	0.2807	0.2807	0.2781	0.2824	0.2791	0.2765	0.2764	0.2755	0.2742	0.2745
28	0.2825	0.2805	0.2801	0.2806	0.2778	0.2827	0.2784	0.2764	0.2772	0.2755	0.2742	0.2748
29		0.2807	0.279	---	0.2777	0.2829	0.2772	0.2759	0.2776	0.2754	0.2745	0.2753
30		0.2811	0.2786	---	0.2779	---	0.2768	0.2759	0.2778	0.2757	0.2749	0.2748
31		0.2813	---	---		0.2826	0.2767		0.2782	---		0.2745
Mean	0.2836	0.2812	0.2814	0.2808	0.2787	0.2782	0.2799	0.2800	0.2790	0.2783	0.2784	0.2768

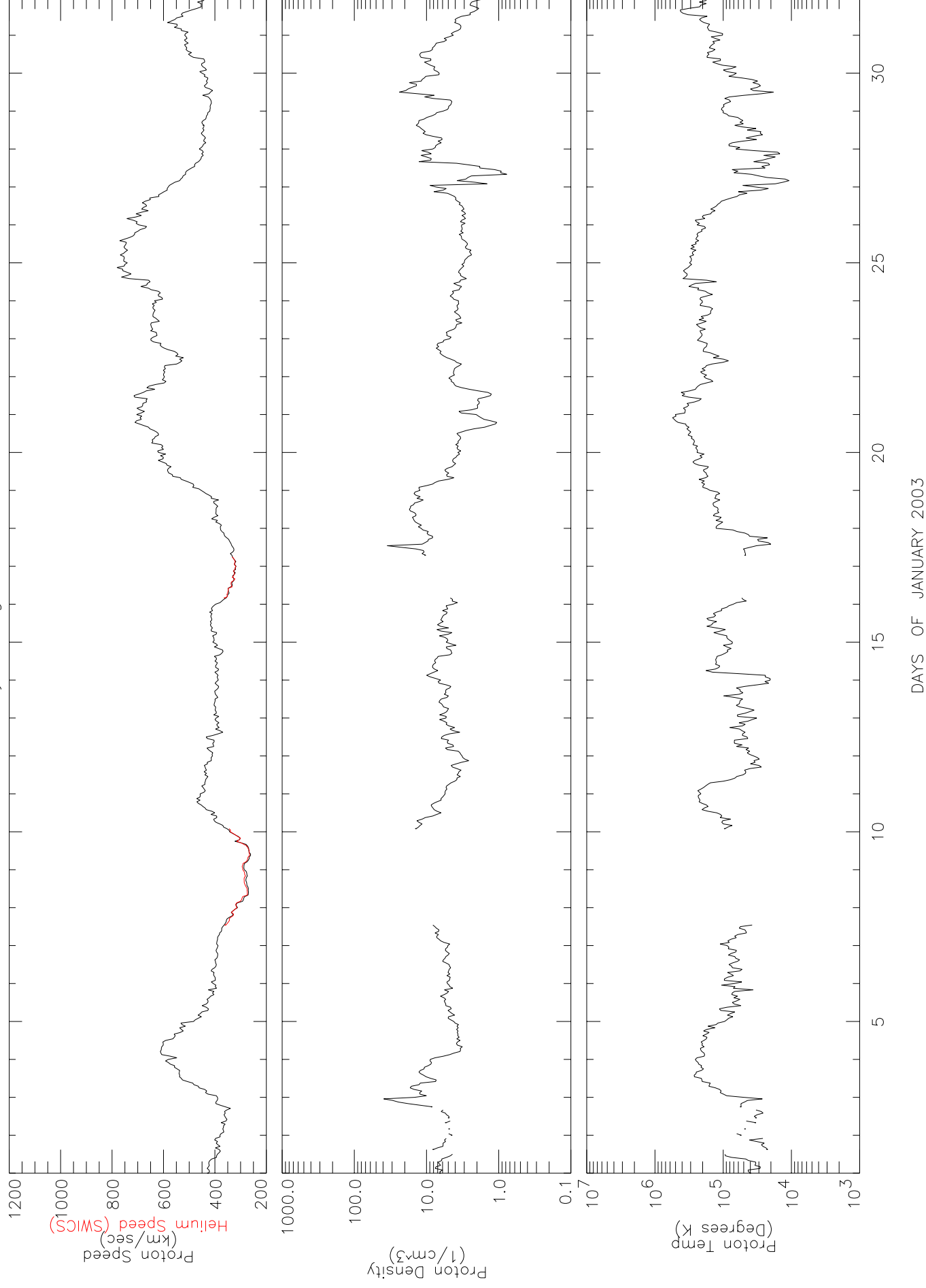
Data at: <http://www.sec.noaa.gov/ftpmenu/sbuu.html>

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



DAYS OF JANUARY 2003

ACE LEVEL2 DATA Solar Wind Plasma Hourly Averages for JANUARY 2003, from SWEPM



Solar Energetic Particles
ACE LEVEL2 DATA Hourly Averages for JANUARY 2003

