

NOVEMBER 2004 NUMBER 723 - Part II



Solar-Geophysical Data comprehensive reports

Data for May 2004 and Miscellaneous

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

NEW DATA:

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

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NATIONAL ENVIRONMENTAL SATELLITE,
DATA, AND INFORMATION SERVICE

NATIONAL GEOPHYSICAL
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BOULDER,
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NOVEMBER 2004 NUMBER 723 - Part II

Solar-Geophysical Data comprehensive reports

Data for May 2004 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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Subscription information is on the inside back cover.

SOLAR-GEOPHYSICAL DATA

Number 723
(Issued in Two Parts)

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

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May 04

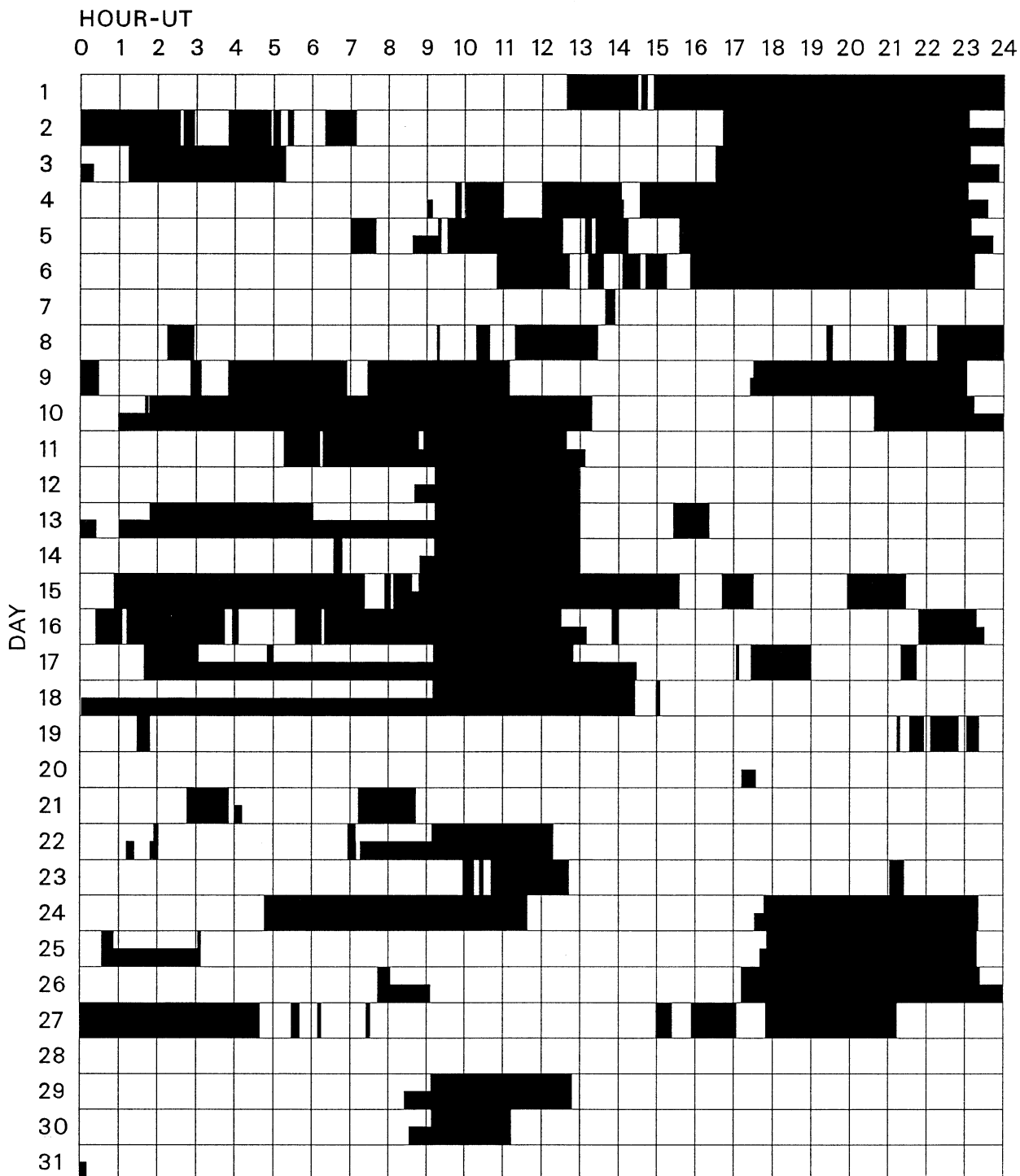
H α S O L A R F L A R E S

MAY 2004

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)	
0020	HOLL	22	1608	1608	1613	S09	E41	10618	05	25.7	5	SF		3	E		18		F
		23	0958		1015	No Flare	Patrol												
		23	1024		1030	No Flare	Patrol												
		23	1042		1243	No Flare	Patrol												
0021	HOLL	23	1441	1452	1510	S10	E30	10618	05	25.9	29	SF		3	E		68		F
0022	HOLL	23	1739	1741	1807	S10	E28	10618	05	25.8	28	SF		3	E		44		F
0023	HOLL	23	1948	1948	2005	S10	E32	10618	05	26.2	17	SF		3	E		15		F
		23	2103		2125	No Flare	Patrol												
		24	0446		1138	No Flare	Patrol												
		24	1747		2321	No Flare	Patrol												
0024	HOLL	24	2247	2247	2249	N20	W36	10615	05	22.2	2	SF		3	E		13		
0025	HOLL	24	2254	2256	2257	N20	W34	10615	05	22.3	3	SF		3	E		13		
		25	0034		0052	No Flare	Patrol												
		25	0303		0307	No Flare	Patrol												
		25	1751		2319	No Flare	Patrol												
0026	LEAR	26	0039	0039	0044	S11	W03	10618	05	25.8	5	SF		3	E		15		
0027	LEAR	26	0323	0335	0350	S11	W02	10618	05	26.0	27	SF		3	E		58		F
		26	0743		0803	No Flare	Patrol												
		26	1712		2324	No Flare	Patrol												
		27	0000		0439	No Flare	Patrol												
0028	LEAR	27	0025	0026	0041	S08	W12	10618	05	26.1	16	SF		3	E		21		F
		27	0529		0541	No Flare	Patrol												
		27	0609		0614	No Flare	Patrol												
		27	0725		0731	No Flare	Patrol												
		27	1459		1524	No Flare	Patrol												
		27	1555		1704	No Flare	Patrol												
		27	1750		2114	No Flare	Patrol												
0029	HOLL	28	1355	1355	1358	S11	W46	10618	05	25.1	3	SF		3	E		18		H
0030	HOLL	28	2044	2046	2050	S10	W39	10618	05	25.9	6	SF		3	E		84		FH
0031	HOLL	28	2304	2304	2307	S11	W51	10618	05	25.1	3	SF		3	E		19		
		29	0907		1248	No Flare	Patrol												
		30	0908		1113	No Flare	Patrol												
0032		31	0013	00157	0043	S08	W72	10618	05	25.6	30	SF					46		FHZ
	HOLL	31	0013	0022	0044	S09	W72	10618	05	25.6	31	SF		3	E		63		FH
	LEAR	31	0014E	0015	0042	S07	W71	10618	05	25.7	28D	SF		3	E		29		ZF

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

MAY 2004



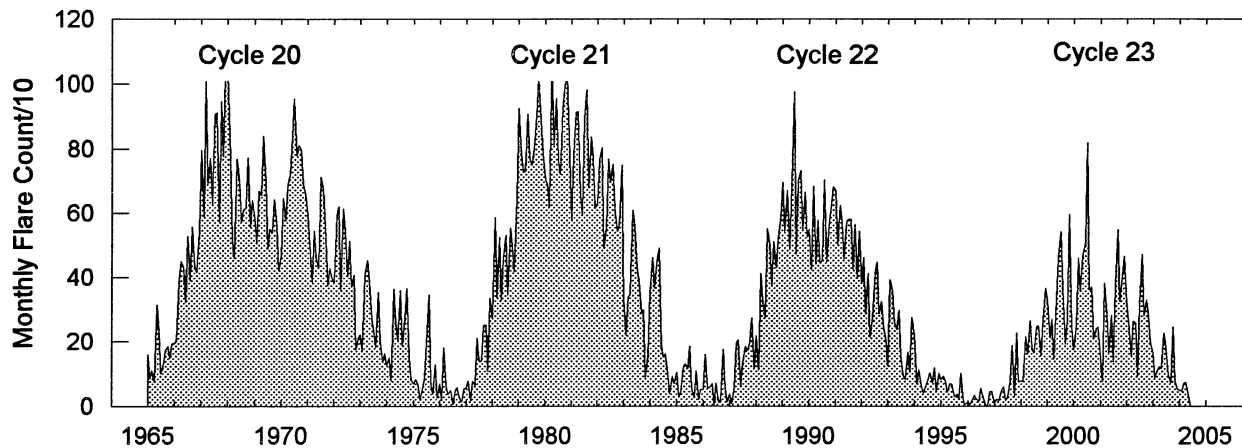
Times of no flare patrol, shown here as shaded areas, combine reports from the stations listed below. Portions of a panel completely shaded mark dates and times of no patrol of any kind (neither visual or cinematographic); portions of a panel with only the bottom half shaded mark times of only visual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

Holloman
Kanzelhoehe

Learmonth

San Vito

Monthly Counts of Grouped Solar Flares Jan 1965 - May 2004



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	117	226	181	94	73	245	78	53	1552
2004	49	47	71	72	32								271

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

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

9
May 04

MAY 2004

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
01	127	TORN	43 NS	0730.0		365.0		10.0		V=0,DISTURBED
	235	CUBA	44 NS	1400.0E		470.0D		13.0		
	280	CUBA	44 NS	1400.0E		470.0D		21.0		
	245	SGMR	43 NS	1557.0	1619.0	46.0	81.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	1618.0	1640.0	462.0	72.0			QL=4 ST=1 TYP=1
	2800	PENT	29 PBI	1502.0	1532.0	92.0U		13.0		
	245	SGMR	8 S	1520.0	1520.0	U		53.0		QL=4 ST=2 TYP=3
02	204	IZMI	43 NS	0600.0		360.0D		60.0		
	127	TORN	44 NS	0630.0E		450.0D		14.0		V=2,ATM.STORM
	245	PALE	43 NS	1618.0	1640.0	89.0	72.0			QL=4 ST=2 TYP=1
	235	CUBA	44 NS	1810.0E		50.0D		6.0		
	280	CUBA	44 NS	1810.0E		50.0D		18.0		
	2800	PENT	1 S	0023.0	0029.0	12.0	3.0			
	2840	PEKG	1 S	0026.0	0029.7	8.0	2.5			
	2840	PEKG	3 S	0050.0	0056.8	7.0	10.2			
	2840	PEKG	5 S	0324.0	0344.5	43.0	36.6			
	2800	HIRA	7 C	0332.0	0345.0	20.0	25.0			0
	500	HIRA	7 C	0332.0	0345.0	25.0	15.0			0
	127	TORN	48 C	0940.7	0941.9	17.0	160.0	50.0		
	900	GORK	46 C	1009.2	1010.2		43.0			
	900	GORK	46 C	1009.2	1009.6	1.6	28.0			
	2950	GORK	7 C	1009.3	1010.3		5.6			
	2950	GORK	7 C	1009.3	1009.7	1.2	4.2			
	600	GORK	41 F	1009.4	1009.6	2.6	16.0			
	600	GORK	41 F	1009.4	1009.8		3.6			
	900	GORK	46 C	1011.3	1011.4	1.7	17.0			
900	GORK	46 C	1011.3	1011.7		44.0				
2950	GORK	1 S	1011.4	1011.7	0.6	8.4				
3000	IZMI	20 GRF	1112.4	1114.8	5.4	6.0	3.6			
245	PALE	8 S	1916.0	1916.0	U	100.0			QL=4 ST=2 TYP=3	
03	204	IZMI	44 NS	0600.0E		360.0D		15.0		
	127	TORN	43 NS	0910.0		240.0		12.0		V=1
	235	CUBA	44 NS	1330.0E		300.0D		7.0		
	280	CUBA	44 NS	1330.0E		300.0D		16.0		
	33	UPIC	45 C	0845.0	0845.5	1.5				UNCERTN
	204	IZMI	25 R	0938.0U		142.0D		45.0		
	245	SGMR	8 S	1300.0	1300.0	U	57.0			QL=4 ST=2 TYP=3
	2800	PENT	1 S	1338.0	1343.0	11.0	7.0			
04	245	SVTO	8 S	0920.0	0920.0	U	77.0			QL=4 ST=2 TYP=3
05	127	TORN	43 NS	0840.0		270.0U		8.0		V=0,ATM.STORM
	280	CUBA	44 NS	1330.0E		300.0D		16.0		
	235	CUBA	44 NS	1330.0E		2130.0D		8.0		
	500	HIRA	8 S	0350.0	0350.0	1.0	10.0			
	33	UPIC	42 SER	0737.0	0935.0	257.5				UNCERTN
245	SVTO	8 S	0909.0	0909.0	U	55.0			QL=4 ST=2 TYP=3	
06	204	IZMI	42 SER	0935.8	0936.8	1.3	16.0			
	127	TORN	4 S/F	1227.7	1234.0	10.0	110.0	30.0		UNCERTAIN
07	127	TORN	43 NS	1402.0		58.0		30.0D		V=2
	204	IZMI	42 SER	1003.6	1004.9	1.6	11.0			
	127	TORN	4 S/F	1004.8	1005.1	1.8	290.0	90.0		
	127	TORN	5 S	1027.1	1030.5	7.0	240.0	120.0		
	33	UPIC	2 S/F	1029.0	1030.5	2.0				
	127	TORN	47 GB	1346.1	1348.9	5.0	3200.0	1600.0		
33	UPIC	46 C	1352.0	1356.5	20.0					
08	127	TORN	43 NS	0730.0	1010.1	333.0	540.0	14.0		V=1
	245	SVTO	49 GB	0956.0	0956.0	U	1200.0			QL=4 ST=2 TYP=6
	204	IZMI	42 SER	1010.4	1010.8	5.9	38.0			
	127	TORN	4 S/F	1028.0U	1029.0U	2.0U	330.0U	110.0		DISTURBED
	204	IZMI	41 F	1028.8	1030.2	3.0	151.0			
	33	UPIC	45 C	1029.5	1030.5	3.5				
09	127	TORN	44 NS	0630.0E		510.0D		16.0		V=1

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

MAY 2004

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
09	245	LEAR	8 S	0129.0	0129.0	U	130.0			QL=4 ST=2 TYP=3
10	500	HIRA	8 S	0423.0	0423.0	1.0	115.0			0
	245	PALE	8 S	0424.0	0424.0	U	80.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	0742.5	0742.6	0.1	3.0			
	204	IZMI	42 SER	0745.5	0747.5	3.5	16.0			
	600	GORK	46 C	0916.8	0919.3	9.2	13.0			
	600	GORK	46 C	0916.8	0921.6		11.0			
	900	GORK	46 C	0916.9	0917.5	11.2	220.0			
	900	GORK	46 C	0916.9	0922.6		18.0			
	900	GORK	46 C	0916.9	0919.8		29.0			
	2840	PEKG	1 S	0920.0	0923.5	7.0	6.4			
	9100	GORK	20 GRF	0920.8	0927.4	42.6	9.0			
	204	IZMI	42 SER	0921.0	0922.0	5.0	13.0			
	2950	GORK	20 GRF	0921.5	0923.8	9.4	8.2			
	204	IZMI	7 C	1008.5	1009.0	1.0	17.0			
204	IZMI	42 SER	1115.6	1115.7	0.5	13.0				
11	127	TORN	43 NS	1022.0		66.0		10.0		V=1, ATM. STORM
	900	GORK	4 S/F	0806.4	0806.5U	0.7	220.0U			
	600	GORK	1 S	0806.5	0806.7	0.4	5.6			
	900	GORK	41 F	0830.7	0831.0	2.9	8.4			
	900	GORK	41 F	0830.7	0832.1		3.6			
	600	GORK	1 S	0830.8	0831.0	0.5	3.4			
12	235	CUBA	44 NS	1539.0E		129.0D		7.0		
	280	CUBA	44 NS	1539.0E		129.0D		14.0		
	900	GORK	42 SER	0628.6	0637.6	19.7	40.0			
	900	GORK	42 SER	0628.6	0647.8		47.0			
	600	GORK	4 S/F	0645.1	0645.4	0.7	17.0			
	900	GORK	41 F	0743.3	0745.4		6.8			
	900	GORK	41 F	0743.3	0743.6	3.3	6.8			
	600	GORK	2 S/F	0745.7	0746.2	0.8	1.8			
	900	GORK	41 F	1018.0	1018.3	3.8	113.0			
	900	GORK	41 F	1018.0	1019.9		11.0			
	600	GORK	7 C	1023.0	1023.1	0.5	2.2			
	600	GORK	7 C	1023.0	1023.3		2.2			
	2800	PENT	40 F	1532.0	1543.0	25.0	37.0			
	410	SVTO	48 C	1539.0	1543.0	5.0	350.0			QL=2 ST=2 TYP=8
	410	SGMR	8 S	1542.0	1542.0	1.0	230.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	1542.0	1543.0	1.0	100.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	1542.0	1543.0	1.0	48.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1542.0	1543.0	1.0	47.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1542.0	1543.0	1.0	220.0			QL=2 ST=3 TYP=3
	610	SVTO	8 S	1542.0	1543.0	1.0	88.0			QL=4 ST=3 TYP=3
	2695	SVTO	8 S	1542.0	1543.0	1.0	46.0			QL=4 ST=2 TYP=3
4995	SVTO	8 S	1542.0	1543.0	1.0	27.0			QL=4 ST=2 TYP=3	
4995	SGMR	8 S	1543.0	1543.0	U	21.0			QL=4 ST=2 TYP=3	
1415	SVTO	8 S	1543.0	1543.0	U	38.0			QL=4 ST=2 TYP=3	
1415	SVTO	8 S	1543.0	1543.0	U	38.0			QL=4 ST=3 TYP=3	
2695	SVTO	8 S	1543.0	1543.0	U	40.0			QL=4 ST=3 TYP=3	
13	127	TORN	44 NS	0750.0E		430.0D		44.0		V=2
	204	IZMI	43 NS	0805.0		235.0D		10.0		
	235	CUBA	44 NS	1300.0E		480.0D		7.0		
	280	CUBA	44 NS	1300.0E		480.0D		15.0		
	9100	GORK	20 GRF	0421.0U	0434.5	81.0D	10.0			
	2950	GORK	20 GRF	0518.0U	0531.4	33.0D	3.5			
	600	GORK	40 F	0805.2	0824.8	25.8	4.9			
	900	GORK	40 F	0822.4	0823.4	3.7	16.0			
	900	GORK	4 S/F	0916.9	0917.2	0.5	30.0			
	600	GORK	42 SER	0917.7	0937.3		3.9			
	600	GORK	42 SER	0917.7	0917.8	19.9	2.7			
	900	GORK	40 F	0948.4	0948.9	1.1	19.0			
14	204	IZMI	44 NS	0600.0E		360.0D		15.0		
	127	TORN	44 NS	0750.0E		160.0D		17.0		V=2
	235	CUBA	44 NS	1310.0E		500.0D		10.0		
	280	CUBA	44 NS	1310.0E		500.0D		20.0		

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

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May 04

MAY 2004

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean (2 Hz)		
14	245	PALE	8 S	0413.0	0413.0			51.0		QL=4 ST=2 TYP=3
	600	GORK	40 F	0528.1	0528.3	0.7		2.4		
	900	GORK	40 F	0528.3	0528.9	0.7		8.1		
	900	GORK	41 F	0713.2	0716.6			19.0		
	900	GORK	41 F	0713.2	0714.8	5.7		6.2		
	600	GORK	41 F	0718.5	0719.5			3.6		
	600	GORK	41 F	0718.5	0718.8	2.5		3.6		
	900	GORK	42 SER	0741.2	0757.5	40.1		18.0		
	900	GORK	42 SER	0741.2	0806.8			23.0		
	600	GORK	40 F	0747.0	0747.5	6.2		8.1		
	600	GORK	2 S/F	0805.1	0805.4	0.7		5.3		
	900	GORK	40 F	1025.9	1027.0	3.1		36.0		
	600	GORK	2 S/F	1030.8	1031.1	0.7		7.9		
	900	GORK	42 SER	1033.5	1034.6	23.9		400.0		
	900	GORK	42 SER	1033.5	1054.9			30.0		
	600	GORK	42 SER	1052.8	1059.7			5.3		
	600	GORK	42 SER	1052.8	1052.9	7.0		2.6		
	245	SGMR	8 S	1058.0	1058.0		U	72.0		QL=4 ST=2 TYP=3
	245	SGMR	8 S	1631.0	1631.0		U	67.0		QL=4 ST=2 TYP=3
	245	SGMR	8 S	2105.0	2105.0	1.0		130.0		QL=4 ST=2 TYP=3
245	PALE	8 S	2106.0	2106.0		U	110.0		QL=4 ST=2 TYP=3	
245	PALE	8 S	2231.0	2232.0	1.0		360.0		QL=4 ST=2 TYP=3	
15	204	IZMI	44 NS	0600.0E		360.0D		15.0		
	127	TORN	43 NS	0910.0		350.0		10.0		V=1
	235	CUBA	44 NS	1320.0E		490.0D		13.0		
	280	CUBA	44 NS	1320.0E		490.0D		20.0		
	245	SGMR	43 NS	1504.0	1504.0	45.0		110.0		QL=4 ST=2 TYP=1
	245	SVTO	43 NS	1534.0	1534.0	30.0		65.0		QL=4 ST=2 TYP=1
	245	LEAR	8 S	0253.0	0254.0	2.0		97.0		QL=4 ST=2 TYP=3
	600	GORK	2 S/F	0605.7	0606.0	0.6		7.8		
	900	GORK	42 SER	0605.8	0633.7	47.8		25.0		
	900	GORK	42 SER	0605.8	0640.8			56.0		
	600	GORK	2 S/F	0733.7	0734.0	0.6		6.6		
	900	GORK	41 F	0733.8	0736.3	5.0		16.0		
	900	GORK	41 F	0733.8	0737.3			16.0		
	204	IZMI	42 SER	0735.8	0735.9	0.2		28.0		
	900	GORK	42 SER	0841.0	1025.2			37.0		
	900	GORK	42 SER	0841.0	0900.3	113.2		19.0		
	600	GORK	40 F	0859.7	0900.7	1.2		3.6		
	245	SVTO	8 S	0958.0	0958.0	1.0		120.0		QL=2 ST=2 TYP=3
	600	GORK	40 F	1024.0	1025.2	1.4		3.6		
	245	SGMR	8 S	1212.0	1212.0		U	62.0		QL=4 ST=2 TYP=3
	245	SVTO	8 S	1212.0	1212.0		U	61.0		QL=2 ST=2 TYP=3
	245	SGMR	8 S	1323.0	1323.0		U	57.0		QL=4 ST=2 TYP=3
	245	SVTO	8 S	1323.0	1323.0	1.0		55.0		QL=2 ST=2 TYP=3
245	SGMR	8 S	1351.0	1351.0		U	65.0		QL=4 ST=2 TYP=3	
245	SVTO	8 S	1351.0	1351.0	2.0		74.0		QL=2 ST=2 TYP=3	
245	SVTO	8 S	1351.0	1351.0	2.0		74.0		QL=2 ST=3 TYP=3	
2800	PENT	29 PBI	1407.0	1441.0	92.0		12.0			
245	SVTO	8 S	1504.0	1504.0		U	120.0		QL=2 ST=2 TYP=3	
16	204	IZMI	44 NS	0600.0E		360.0D		20.0		
	127	TORN	43 NS	0730.0		450.0		17.0		V=2
	235	CUBA	44 NS	1300.0E		510.0D		6.0		
	280	CUBA	44 NS	1300.0E		510.0D		19.0		
	600	GORK	42 SER	0610.7	0638.0	33.0		30.0		
	600	GORK	42 SER	0610.7	0641.2			25.0		
	900	GORK	40 F	0610.8	0624.4	37.3		18.0		
	245	SVTO	8 S	0656.0	0656.0		U	170.0		QL=4 ST=2 TYP=3
	600	GORK	5 S	0942.4	0945.1	7.4		8.8		
	900	GORK	41 F	0947.3	0947.4	0.6		45.0		
	900	GORK	41 F	0947.3	0947.8			11.0		
	127	TORN	5 S	1117.3	1119.0			150.0	80.0	
	2800	PENT	1 S	1754.0	1806.0	30.0		4.0		
17	204	IZMI	44 NS	0600.0E		360.0D		15.0		
	127	TORN	43 NS	0830.0		250.0		10.0		V=1
	235	CUBA	44 NS	1300.0E		350.0D		7.0		

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

MAY 2004

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
17	280	CUBA	44 NS	1300.0E		350.0D		18.0		
	2800	PENT	24 R	0030.0	0131.0	67.0	8.0			
	410	PALE	8 S	0035.0	0035.0	U	81.0			QL=4 ST=2 TYP=3
	2695	LEAR	4 S/F	0414.0	0416.0	3.0	20.0			QL=4 ST=2 TYP=3
	2840	PEKG	5 S	0414.0	0417.0	9.0	19.3			
	4995	LEAR	8 S	0415.0	0416.0	2.0	30.0			QL=4 ST=2 TYP=3
	8800	LEAR	8 S	0415.0	0416.0	2.0	50.0			QL=4 ST=2 TYP=3
	2800	HIRA	4 S/F	0417.0	0417.0	5.0	20.0			
	245	SVTO	8 S	0551.0	0551.0	U	52.0			QL=4 ST=2 TYP=3
	900	GORK	41 F	0611.4	0614.1		7.7			
	900	GORK	41 F	0611.4	0611.8	5.6	7.7			
	600	GORK	2 S/F	0613.9	0614.1	0.4	5.8			
	2950	GORK	1 S	0710.0	0710.7	1.1	7.2			
	9100	GORK	1 S	0710.1	0710.5	0.9	8.0			
	2695	SGMR	8 S	1433.0	1433.0	U	53.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1515.0	1515.0	U	58.0			QL=4 ST=2 TYP=3
	18	127	TORN	43 NS	0821.0		89.0		20.0	
2840		PEKG	45 C	0205.0	0208.7	11.0	54.0			
2800		HIRA	4 S/F	0207.0	0209.0	3.0	45.0			0
900		GORK	46 C	0545.0	0545.2	0.5	35.0			
900		GORK	46 C	0545.0	0545.4		50.0			
600		GORK	3 S	0545.1	0545.2	0.2	5.5			
600		GORK	2 S/F	0548.8	0549.1	0.5	5.5			
900		GORK	42 SER	0707.5	0712.2		4.5			
900		GORK	42 SER	0707.5	0707.8	14.3	17.0			
600		GORK	42 SER	0710.5	0712.1		7.3			
600		GORK	42 SER	0710.5	0710.7	11.4	7.3			
900		GORK	41 F	0807.3	0807.5	1.3	9.0			
900		GORK	41 F	0807.3	0807.7		136.0			
2840		PEKG	45 C	0811.0	0815.9	15.0	52.5			
2950		GORK	46 C	0813.1	0819.1		49.0			
2950		GORK	46 C	0813.1	0815.9	13.7	55.0			
600		GORK	46 C	0813.9	0818.2		23.0			
900		GORK	46 C	0813.9	0817.2	10.1	28.0			
900		GORK	46 C	0813.9	0819.4		46.0			
600		GORK	46 C	0813.9	0815.9	7.8	15.0			
500		HIRA	7 C	0814.0	0830.0	34.0	10.0			WL
1415		LEAR	8 S	0815.0	0817.0	2.0	99.0			QL=4 ST=2 TYP=3
1415		SVTO	4 S/F	0815.0	0817.0	5.0	84.0			QL=4 ST=2 TYP=3
2695		SVTO	4 S/F	0815.0	0816.0	5.0	79.0			QL=4 ST=2 TYP=3
127		TORN	4 S/F	0815.0	0819.0	6.0	160.0	60.0		
2800		HIRA	7 C	0815.0	0816.0	11.0	70.0			SL
3000		IZMI	45 C	0815.4	0818.9	7.8	36.0			
204		IZMI	41 F	0815.6	0819.3	5.3	43.0			
410		SVTO	8 S	0816.0	0816.0	U	36.0			QL=4 ST=2 TYP=3
610		SVTO	8 S	0816.0	0816.0	U	21.0			QL=2 ST=2 TYP=3
245	SVTO	4 S/F	0816.0	0818.0	3.0	75.0			QL=4 ST=2 TYP=3	
9100	GORK	22 GRF	0816.7	0928.3		9.1				
9100	GORK	22 GRF	0816.7	0819.3	80.8	12.0				
245	LEAR	8 S	0818.0	0818.0	U	93.0			QL=4 ST=2 TYP=3	
204	IZMI	29 PBI	0822.4	0832.6	31.6U	13.0				
245	SVTO	8 S	0929.0	0929.0	U	57.0			QL=4 ST=2 TYP=3	
410	SVTO	8 S	0929.0	0929.0	U	58.0			QL=4 ST=2 TYP=3	
2800	PENT	29 PBI	1522.0	1532.0	70.0U	13.0				
2800	PENT	20 GRF	1846.0	1858.0	26.0	3.0				
245	PALE	8 S	1857.0	1857.0	U	51.0			QL=4 ST=2 TYP=3	
19	235	CUBA	44 NS	1300.0E		530.0D		5.0		
	280	CUBA	44 NS	1300.0E		530.0D		16.0		
	900	GORK	42 SER	0828.7	0832.4	12.3	13.0			
	900	GORK	42 SER	0828.7	0832.8		21.0			
	600	GORK	41 F	0832.2	0832.4	2.6	8.1			
	600	GORK	41 F	0832.2	0834.7		6.5			
	900	GORK	41 F	0919.0	0920.1		7.7			
	900	GORK	41 F	0919.0	0919.2	1.3	13.0			
600	GORK	8 S	0919.3	0919.4	0.2	18.0				
20	600	GORK	7 C	0726.8	0727.1		8.1			

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

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May 04

MAY 2004

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean (W/m 2 Hz)		
20	900	GORK	41 F	0726.8	0729.4	7.6	40.0			
	600	GORK	7 C	0726.8	0726.9	0.4	8.1			
	900	GORK	41 F	0729.4	0729.8		20.0			
	600	GORK	4 S/F	0906.5	0906.6	0.3	27.0			
	900	GORK	3 S	0908.4	0908.5	0.2	15.0			
	2695	SGMR	8 S	1716.0	1716.0		46.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	1716.0	1716.0		52.0			QL=4 ST=2 TYP=3
	2800	PENT	20 GRF	1837.0	1853.0	35.0	3.0			
	2800	PENT	20 GRF	2156.0	2207.0	27.0	3.0			
21	127	TORN	43 NS	0820.0		308.0		7.0		V=1
	600	GORK	1 S	0451.6	0451.8	0.4	4.9			
	900	GORK	1 S	0530.0	0530.1	0.2	3.7			
	600	GORK	2 S/F	0530.0	0530.3	0.5	7.3			
	900	GORK	41 F	0545.6	0547.2	3.3	22.0			
	900	GORK	41 F	0545.6	0547.7		117.0			
	2840	PEKG	1 S	0547.0	0550.4	6.0	5.7			
	2950	GORK	21 GRF	0549.1	0556.3	84.3	5.3			
	2950	GORK	1 S	0549.8	0550.4	1.2	5.3			
	9100	GORK	20 GRF	0549.9	0554.9	19.1	9.7			
	33	UPIC	41 F	0608.0	0615.5	13.5				
	2840	PEKG	1 S	0622.0	0625.3	8.0	3.2			
	2950	GORK	2 S/F	0624.6	0625.4	2.3	6.6			
	900	GORK	41 F	0624.7	0625.0	1.3	16.0			
	9100	GORK	20 GRF	0627.6	0629.2	9.1	6.0			
	204	IZMI	42 SER	1022.2	1022.6	1.0	63.0			
	204	IZMI	42 SER	1036.7	1037.0	1.9	15.0			
	2800	PENT	1 S	1616.0	1620.0	8.0	6.0			
	2800	PENT	29 PBI	2205.0	2216.0	27.0U	79.0			
	2840	PEKG	5 S	2214.0	2216.0	9.0	89.6			
	2800	HIRA	8 S	2215.0	2216.0	4.0	80.0			0
	1415	SGMR	8 S	2216.0	2216.0	1.0	340.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	2216.0	2216.0	1.0	89.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	2216.0	2216.0	1.0	78.0			QL=4 ST=2 TYP=3
	9500	CUBA	1 S	2216.3	2216.8	4.0	31.0	15.0		
	1415	PALE	8 S	2217.0	2217.0		400.0			QL=4 ST=2 TYP=3
	2695	PALE	8 S	2217.0	2217.0		98.0			QL=4 ST=2 TYP=3
	4995	PALE	8 S	2217.0	2217.0		86.0			QL=4 ST=2 TYP=3
	2800	PENT	47 GB	2310.0	2350.0	42.0	200.0			
	2840	PEKG	3 S	2330.0	2350.0	43.0	170.8			
	2800	HIRA	7 C	2338.0	2350.0	29.0	195.0			0
	500	HIRA	7 C	2344.0	2351.0	19.0	20.0			0
4995	LEAR	48 C	2346.0	2350.0	9.0	320.0			QL=4 ST=2 TYP=8	
8800	LEAR	48 C	2346.0	2350.0	9.0	550.0			QL=4 ST=2 TYP=8	
4995	LEAR	48 C	2346.0	2350.0	14.0	320.0			QL=4 ST=1 TYP=8	
8800	LEAR	48 C	2346.0	2350.0	14.0	550.0			QL=4 ST=1 TYP=8	
8800	LEAR	49 GB	2346.0	2350.0	14.0	550.0			QL=4 ST=1 TYP=6	
4995	LEAR	4 S/F	2346.0	2350.0	14.0	320.0			QL=4 ST=1 TYP=3	
4995	PALE	48 C	2347.0	2350.0	9.0	320.0			QL=4 ST=2 TYP=8	
15400	PALE	4 S/F	2347.0	2351.0	9.0	320.0			QL=4 ST=2 TYP=3	
2695	LEAR	4 S/F	2348.0	2350.0	7.0	220.0			QL=4 ST=2 TYP=3	
2695	LEAR	4 S/F	2348.0	2350.0	12.0	220.0			QL=4 ST=1 TYP=3	
1415	LEAR	4 S/F	2349.0	2350.0	4.0	77.0			QL=4 ST=2 TYP=3	
2695	PALE	4 S/F	2349.0	2350.0	6.0	220.0			QL=4 ST=2 TYP=3	
8800	PALE	4 S/F	2349.0	2351.0	5.0	340.0			QL=4 ST=2 TYP=3	
1415	LEAR	4 S/F	2349.0	2350.0	11.0	77.0			QL=4 ST=1 TYP=3	
8800	PALE	4 S/F	2349.0	2349.0	11.0	110.0			QL=4 ST=1 TYP=3	
1415	PALE	4 S/F	2350.0	2351.0	4.0	81.0			QL=4 ST=2 TYP=3	
22	204	IZMI	43 NS	0600.0		360.0D		15.0		
	127	TORN	43 NS	1056.0		364.0		41.0		V=2
	245	SGMR	43 NS	1139.0	1203.0	76.0	86.0			QL=4 ST=2 TYP=1
	245	SGMR	43 NS	1139.0	1203.0	74.1.0	86.0			QL=4 ST=1 TYP=1
	245	SVTO	43 NS	1151.0	1203.0	12.0	100.0			QL=4 ST=3 TYP=1
	245	SVTO	43 NS	1151.0	1203.0	54.0	100.0			QL=4 ST=2 TYP=1
	235	CUBA	44 NS	1833.0E		183.0D		11.0		
	280	CUBA	44 NS	1833.0E		183.0D		20.0		
	2840	PEKG	20 GRF	0704.0	0707.4	12.0	3.3			
	204	IZMI	25 R	1025.0		95.0D		40.0		

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
22	204	IZMI	42 SER	1115.1	1116.6	2.7	115.0			
	245	SVTO	8 S	1140.0	1140.0	U	63.0			QL=2 ST=2 TYP=3
	127	TORN	5 S	1150.0	1150.8	2.0	550.0	280.0		
	245	SVTO	8 S	1255.0	1255.0	U	51.0			QL=2 ST=2 TYP=3
	245	SGMR	8 S	1925.0	1925.0	U	51.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2214.0	2214.0	2.0	61.0			QL=4 ST=2 TYP=3
	245	PALE	48 C	2215.0	2215.0	3.0	61.0			QL=4 ST=2 TYP=8
23	204	IZMI	44 NS	0600.0E		360.0D		10.0		
	245	SGMR	43 NS	1110.0	1110.0	770.0	58.0			QL=4 ST=1 TYP=1
	127	TORN	43 NS	1117.0		88.0		10.0		V=1
	235	CUBA	44 NS	1300.0E		510.0D		7.0		
	280	CUBA	44 NS	1300.0E		510.0D		14.0		
	245	SGMR	8 S	1110.0	1110.0	U	58.0			QL=4 ST=3 TYP=3
	127	TORN	5 S	1114.0	1115.2	2.5	170.0	90.0		
	2800	PENT	PBI	1731.0	1739.0	112.0	290.0	50.0		
24	204	IZMI	44 NS	0600.0E		360.0D		20.0		
	127	TORN	43 NS	0824.0		76.0		5.0		V=1
	235	CUBA	44 NS	1300.0E		510.0D		8.0		
	280	CUBA	44 NS	1300.0E		510.0D		16.0		
	600	GORK	41 F	0638.2	0645.2		2.7			
	600	GORK	41 F	0638.2	0638.9	11.9	4.0			
	900	GORK	46 C	0642.9	0643.1		20.0			
	900	GORK	46 C	0642.9	0642.9	0.5	85.0			
	600	GORK	41 F	0723.3	0727.3		2.7			
	600	GORK	41 F	0723.3	0723.5	4.1	2.7			
	900	GORK	41 F	0724.5	0725.0		9.6			
	900	GORK	41 F	0724.5	0724.8	3.7	7.7			
	204	IZMI	25 R	0855.0		185.0D		35.0		
	600	GORK	41 F	0908.0	0908.1	0.8	8.5			
	600	GORK	41 F	0908.0	0908.7		4.9			
	3000	IZMI	20 GRF	1058.4	1100.3	6.9	13.0	5.0		
245	SGMR	8 S	1227.0	1227.0	U	57.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1903.0	1903.0	U	56.0			QL=4 ST=2 TYP=3	
25	127	TORN	43 NS	0900.0		200.0		8.0		V=1
	4995	SGMR	8 S	2218.0	2218.0	U	65.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	2303.0	2303.0	U	73.0			QL=4 ST=2 TYP=3
26	127	TORN	43 NS	0910.0		260.0		7.0		V=0
	4995	LEAR	8 S	0038.0	0038.0	U	89.0			QL=4 ST=2 TYP=3
	2840	PEKG	1 S	0038.0	0039.2	5.0	5.3			
	4995	PALE	8 S	0039.0	0039.0	U	150.0			QL=4 ST=2 TYP=3
	500	HIRA	42 SER	0041.0	0238.0	240.0	80.0			MR
	2840	PEKG	1 S	0319.0	0322.6	8.0	6.9			
	600	GORK	2 S/F	0616.0	0616.2	0.3	4.9			
	900	GORK	42 SER	0616.0	0634.6	32.4	10.0			
	900	GORK	42 SER	0616.0	0643.8		6.8			
	600	GORK	2 S/F	0630.6	0631.0	0.6	3.6			
27	2800	PENT	1 S	0017.0	0025.0	16.0	13.0			
	2840	PEKG	3 S	0019.0	0025.4	16.0	20.7			
	2800	HIRA	1 S	0023.0	0025.0	6.0	20.0			0
	410	PALE	8 S	0048.0	0048.0	1.0	100.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0049.0	0049.0	U	160.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	0050.0	0050.0	1.0	45.0			0
	2840	PEKG	1 S	0627.0	0630.1	6.0	2.3			
	2950	GORK	1 S	0629.9	0630.5	1.1	4.1			
	9100	GORK	1 S	0643.3	0644.1	1.4	7.1			
	600	GORK	42 SER	0707.2	0714.5		3.3			
	600	GORK	42 SER	0707.2	0708.5	26.6	4.0			
	900	GORK	41 F	0707.3	0713.5		12.0			
	900	GORK	41 F	0707.3	0707.5	13.2	3.8			
	2800	PENT	29 PBI	1547.0	1600.0	45.0U	4.0			
2800	PENT	1 S	1910.0	1917.0	14.0	2.0				
28	127	TORN	43 NS	0855.0		125.0		8.0		V=0
	2950	GORK	22 GRF	0604.8	0616.5		2.8			

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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		
28	2950	GORK	22 GRF	0604.8	0611.5	17.8	4.2			
	600	GORK	1 S	0619.6	0619.7	0.3	3.6			
	600	GORK	1 S	0641.9	0642.0	0.4	3.6			
	245	LEAR	8 S	0711.0	0711.0	U	76.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0711.0	0711.0	1.0	64.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0711.8	0711.9	0.9	36.0			
	204	IZMI	7 C	0749.9	0749.9	0.2	14.0			
	245	LEAR	8 S	0751.0	0751.0	U	53.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	0751.7	0751.8	0.2	66.0			
	245	LEAR	8 S	0812.0	0813.0	2.0	53.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0813.0	0813.4	1.2	285.0			
	204	IZMI	42 SER	0815.9	0816.0	0.4	102.0			
	9100	GORK	20 GRF	0828.3	0943.0	122.6	10.0			
	2950	GORK	1 S	0853.2	0853.8	1.6	4.2			
	204	IZMI	42 SER	0855.2	0855.8	0.9	24.0			
	204	IZMI	41 F	0858.1	0858.2	0.8	16.0			
	204	IZMI	41 F	0907.4	0907.6	0.7	20.0			
	204	IZMI	7 C	0909.8	0909.8	0.1	16.0			
	204	IZMI	42 SER	0930.4	0931.3	1.9	22.0			
	600	GORK	2 S/F	0937.7	0937.9	0.4	7.9			
	900	GORK	41 F	0937.8	0940.4	5.4	21.0			
	900	GORK	41 F	0937.8	0940.8		29.0			
	245	SVTO	8 S	1006.0	1006.0	U	200.0			QL=4 ST=2 TYP=3
	204	IZMI	45 C	1006.2	1006.3	0.4	3067.0			
	204	IZMI	42 SER	1006.6	1006.9	3.2	166.0			
	600	GORK	41 F	1006.7	1007.7		19.0			
	600	GORK	41 F	1006.7	1006.8	4.1	85.0			
	900	GORK	41 F	1007.2	1007.7	1.8	13.0			
	900	GORK	41 F	1007.2	1008.7		53.0			
	245	SVTO	8 S	1011.0	1012.0	1.0	76.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	1011.6	1012.7	1.3	367.0			
	204	IZMI	42 SER	1118.4	1119.4	2.0	180.0			
	245	SVTO	8 S	1119.0	1120.0	1.0	81.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1120.0	1120.0	U	75.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1122.0	1122.0	U	64.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1122.0	1122.0	U	62.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	1122.3	1122.4	2.9	99.0			
	610	SVTO	48 C	1128.0	1137.0	9.0	1300.0			QL=4 ST=3 TYP=8
	610	SGMR	8 S	1212.0	1212.0	U	79.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	1317.0	1322.0	5.0	83.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	1317.0	1322.0	5.0	83.0			QL=4 ST=3 TYP=3
	245	SGMR	8 S	1322.0	1322.0	U	85.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1322.0	1322.0	U	150.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1322.0	1322.0	U	220.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1322.0	1322.0	U	220.0			QL=4 ST=3 TYP=3
	410	SGMR	8 S	1327.0	1327.0	U	170.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1327.0	1327.0	U	160.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1445.0	1445.0	U	54.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1445.0	1445.0	U	55.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1726.0	1726.0	U	51.0			QL=4 ST=2 TYP=3
410	PALE	8 S	1727.0	1727.0	U	58.0			QL=4 ST=2 TYP=3	
410	PALE	8 S	1835.0	1835.0	U	100.0			QL=4 ST=2 TYP=3	
410	SGMR	8 S	1835.0	1835.0	U	75.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	2022.0	2022.0	U	71.0			QL=4 ST=2 TYP=3	
2800	PENT	29 PBI	2033.0	2044.0	74.0	7.0				
4995	SGMR	8 S	2043.0	2043.0	1.0	56.0			QL=4 ST=2 TYP=3	
9500	CUBA	2 S/F	2043.6	2043.9	3.2	21.0	10.0			
4995	PALE	8 S	2044.0	2044.0	U	52.0			QL=4 ST=2 TYP=3	
500	HIRA	8 S	2122.0	2122.0	1.0	35.0				
610	PALE	8 S	2122.0	2122.0	U	62.0			QL=4 ST=2 TYP=3	
610	SGMR	8 S	2122.0	2122.0	U	72.0			QL=4 ST=2 TYP=3	
410	SGMR	8 S	2135.0	2135.0	U	52.0			QL=4 ST=2 TYP=3	
500	HIRA	42 SER	2300.0	2305.0	8.0	25.0				
2800	PENT	1 S	2344.0	2349.0	10.0	7.0				
2840	PEKG	1 S	2347.0	2349.3	7.0	8.8				
245	LEAR	8 S	2348.0	2349.0	1.0	170.0			QL=4 ST=2 TYP=3	
2800	HIRA	1 S	2349.0	2349.0	1.0	10.0				
500	HIRA	8 S	2349.0	2349.0	1.0	495.0				
410	LEAR	49 GB	2349.0	2349.0	U	790.0			QL=4 ST=2 TYP=6	

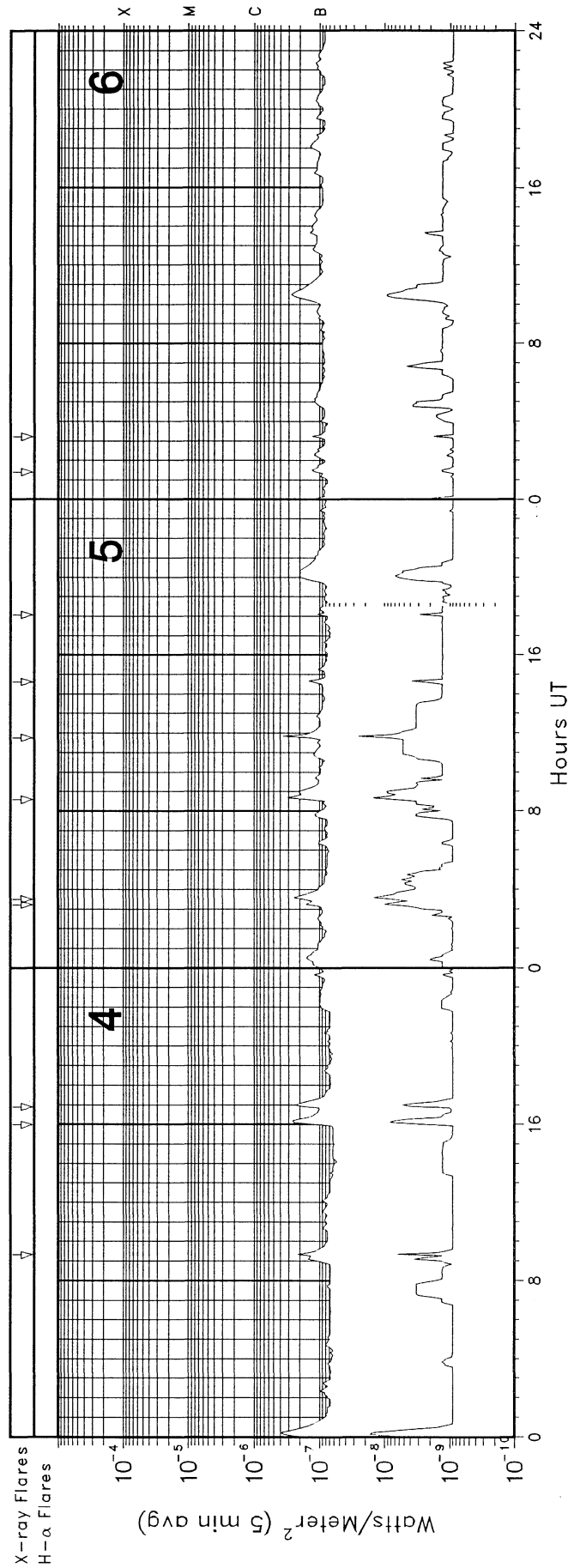
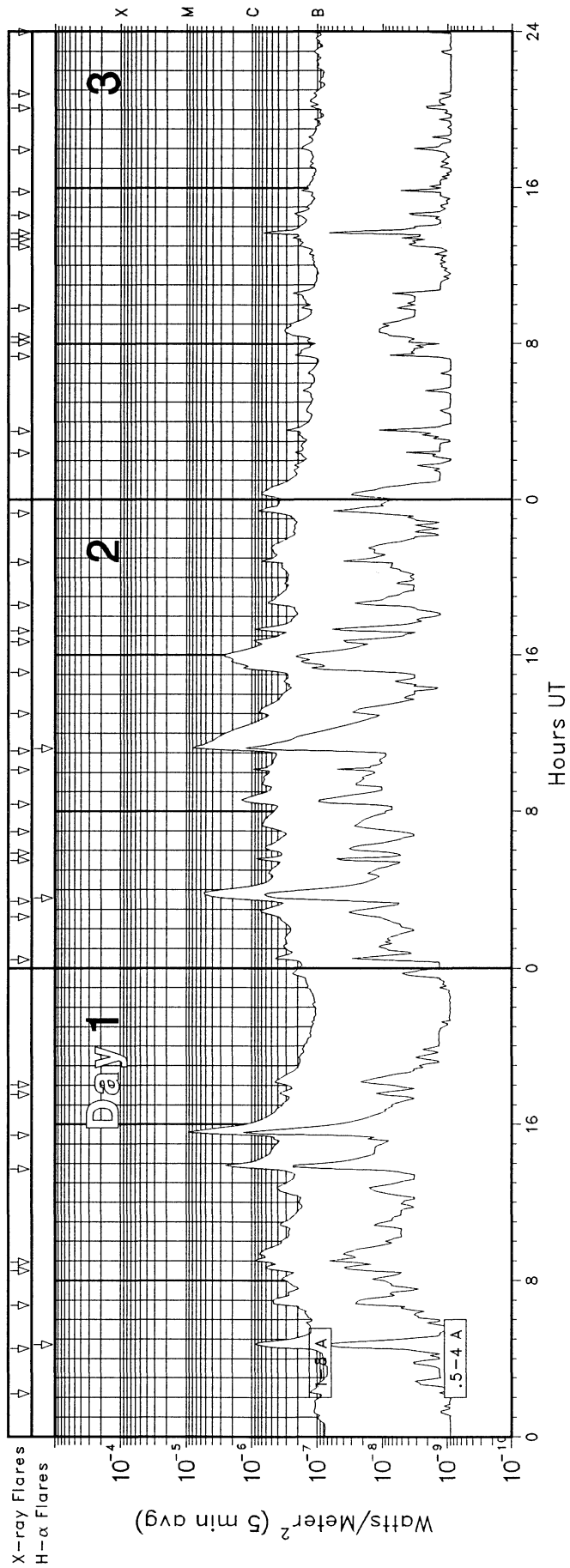
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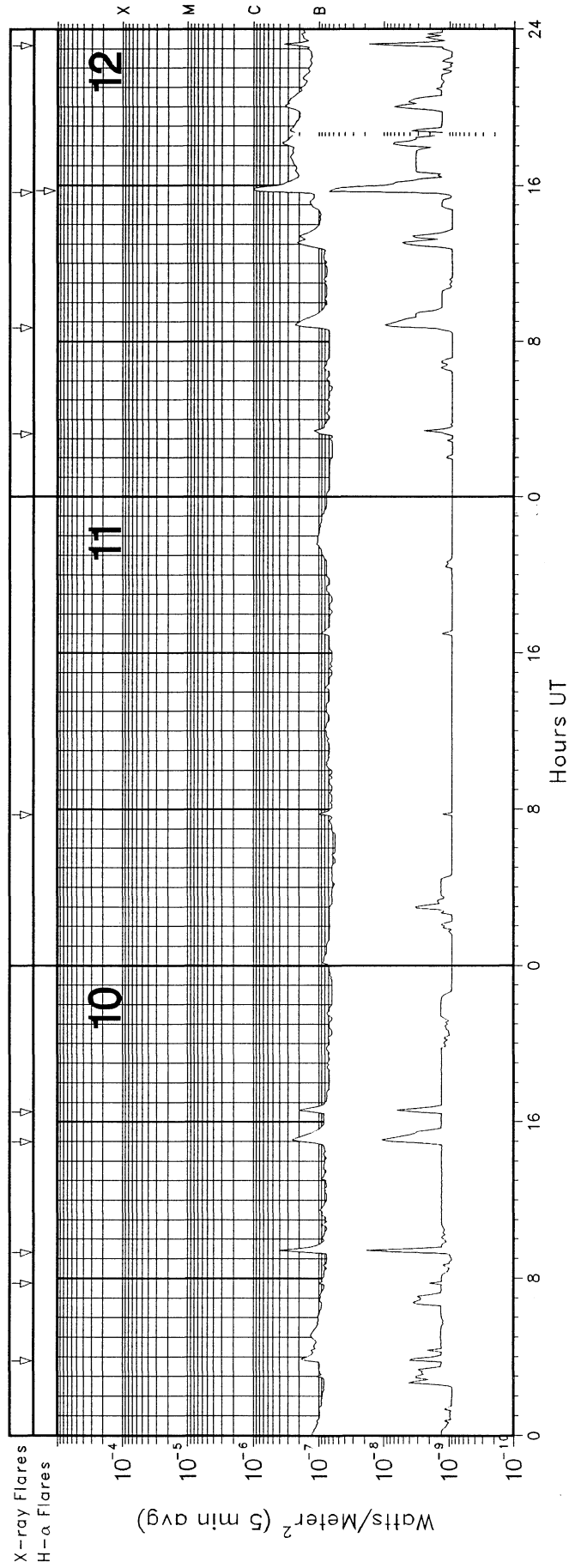
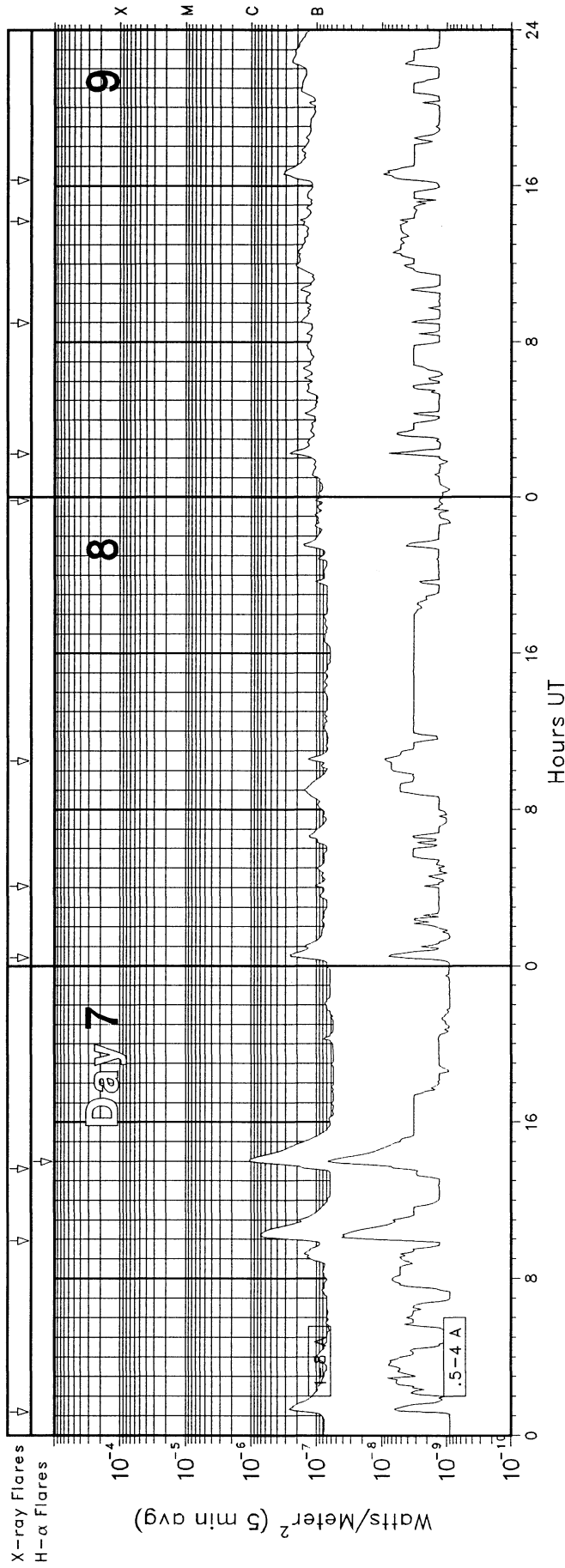
Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m 2 Hz)	Mean			
28	610	LEAR	8 S	2349.0	2349.0	U	70.0			QL=4 ST=2 TYP=3	
	410	PALE	49 GB	2349.0	2349.0	U	740.0			QL=4 ST=2 TYP=6	
	245	PALE	8 S	2349.0	2349.0	U	150.0			QL=4 ST=2 TYP=3	
	610	PALE	8 S	2349.0	2349.0	U	63.0			QL=4 ST=2 TYP=3	
29	245	LEAR	8 S	0247.0	0247.0	1.0	100.0			QL=4 ST=2 TYP=3	
	245	PALE	8 S	0247.0	0247.0	U	87.0			QL=4 ST=2 TYP=3	
	2840	PEKG	1 S	0402.0	0405.3	6.0	2.3				
	900	GORK	42 SER	0634.0	0642.2		4.5				
	900	GORK	42 SER	0634.0	0638.9	15.6	7.5				
	600	GORK	2 S/F	0640.3	0640.5	0.3	3.6				
	900	GORK	42 SER	0716.2	0716.4	10.3	14.0				
	900	GORK	42 SER	0716.2	0719.9		6.0				
	600	GORK	3 S	0719.9	0720.0	0.2	4.9				
	204	IZMI	42 SER	0818.5	0820.5	6.1	52.0				
	900	GORK	40 F	1036.6	1039.5	10.7	11.0				
	600	GORK	7 C	1038.7	1039.0	0.7	9.7				
	600	GORK	7 C	1038.7	1039.2		9.7				
500	HIRA	8 S	2339.0	2339.0	1.0	10.0					
30	127	TORN	43 NS	1135.0		135.0U		7.0		V=1	
	600	GORK	3 S	0608.3	0608.4	0.2	9.1				
	900	GORK	2 S/F	0608.4	0608.6	0.4	6.8				
	2800	PENT	29 PBI	1908.0	1917.0	24.0U	4.0				
	2800	PENT	29 PBI	2354.0	2415.0	47.0U	7.0				
31	900	GORK	42 SER	0452.0	0535.3		130.0				
	900	GORK	42 SER	0452.0	0505.7	156.8	60.0				
	600	GORK	42 SER	0500.2	0512.0		4.0				
	600	GORK	42 SER	0500.2	0500.7	12.2	2.7				
	600	GORK	46 C	0542.2	0555.5		6.6				
	600	GORK	46 C	0542.2	0551.7	14.8	12.0				
	600	GORK	4 S/F	0601.4	0602.3	2.6	9.3				
	600	GORK	46 C	0625.0	0648.3	56.8	20.0				
	600	GORK	46 C	0625.0	0702.9		26.0				
	600	GORK	4 S/F	0730.6	0730.8	0.5	6.6				
	9100	GORK	4 S/F	1032.8	1033.7	3.2	110.0				
	4995	SGMR	8 S	1033.0	1033.0	U	22.0				QL=2 ST=2 TYP=3
	8800	SGMR	8 S	1033.0	1033.0	1.0	88.0				QL=2 ST=2 TYP=3
	15400	SGMR	8 S	1033.0	1033.0	U	32.0				QL=2 ST=2 TYP=3
	2695	SVTO	8 S	1033.0	1033.0	U	28.0				QL=4 ST=2 TYP=3
	4995	SVTO	8 S	1033.0	1033.0	1.0	38.0				QL=4 ST=2 TYP=3
	8800	SVTO	8 S	1033.0	1033.0	1.0	120.0				QL=4 ST=2 TYP=3
	15400	SVTO	8 S	1033.0	1033.0	1.0	62.0				QL=4 ST=2 TYP=3
	900	GORK	40 F	1033.0	1033.3	3.9	80.0				
	2950	GORK	4 S/F	1033.2	1033.7	2.8	28.0				
	600	GORK	40 F	1033.3	1034.3	1.6	24.0				
	9100	GORK	29 PBI	1036.0	1036.0	6.0D	6.1				
	2950	GORK	29 PBI	1036.0	1036.0	6.0D	5.8				
	3000	IZMI	20 GRF	1133.3	1133.7	1.3	24.0		14.1		
	33	UPIC	4 S/F	1505.0	1505.3	1.0					
	245	SGMR	8 S	1620.0	1621.0	1.0	340.0				QL=4 ST=2 TYP=3
	245	SVTO	8 S	1620.0	1621.0	1.0	350.0				QL=4 ST=2 TYP=3
	245	SVTO	8 S	1620.0	1621.0	1.0	350.0				QL=4 ST=3 TYP=3
	245	SGMR	8 S	1929.0	1929.0	U	77.0				QL=4 ST=2 TYP=3
	245	SGMR	8 S	2003.0	2004.0	1.0	200.0				QL=4 ST=2 TYP=3
235	CUBA	7 C	2003.2	2004.3	6.2	37.0		18.0			
280	CUBA	7 C	2003.2	2007.6	6.3	150.0		75.0			
245	PALE	8 S	2004.0	2005.0	1.0	190.0				QL=4 ST=2 TYP=3	
245	SGMR	8 S	2007.0	2007.0	U	130.0				QL=4 ST=2 TYP=3	
245	PALE	8 S	2008.0	2010.0	2.0	110.0				QL=4 ST=2 TYP=3	
245	SGMR	8 S	2009.0	2009.0	U	130.0				QL=4 ST=2 TYP=3	
245	PALE	8 S	2257.0	2258.0	1.0	140.0				QL=4 ST=2 TYP=3	
245	SGMR	8 S	2257.0	2257.0	U	96.0				QL=4 ST=2 TYP=3	
500	HIRA	8 S	2315.0	2315.0	1.0	10.0				0	
245	LEAR	8 S	2357.0	2357.0	U	300.0				QL=4 ST=2 TYP=3	

GOES X-RAY DETECTOR

May 2004

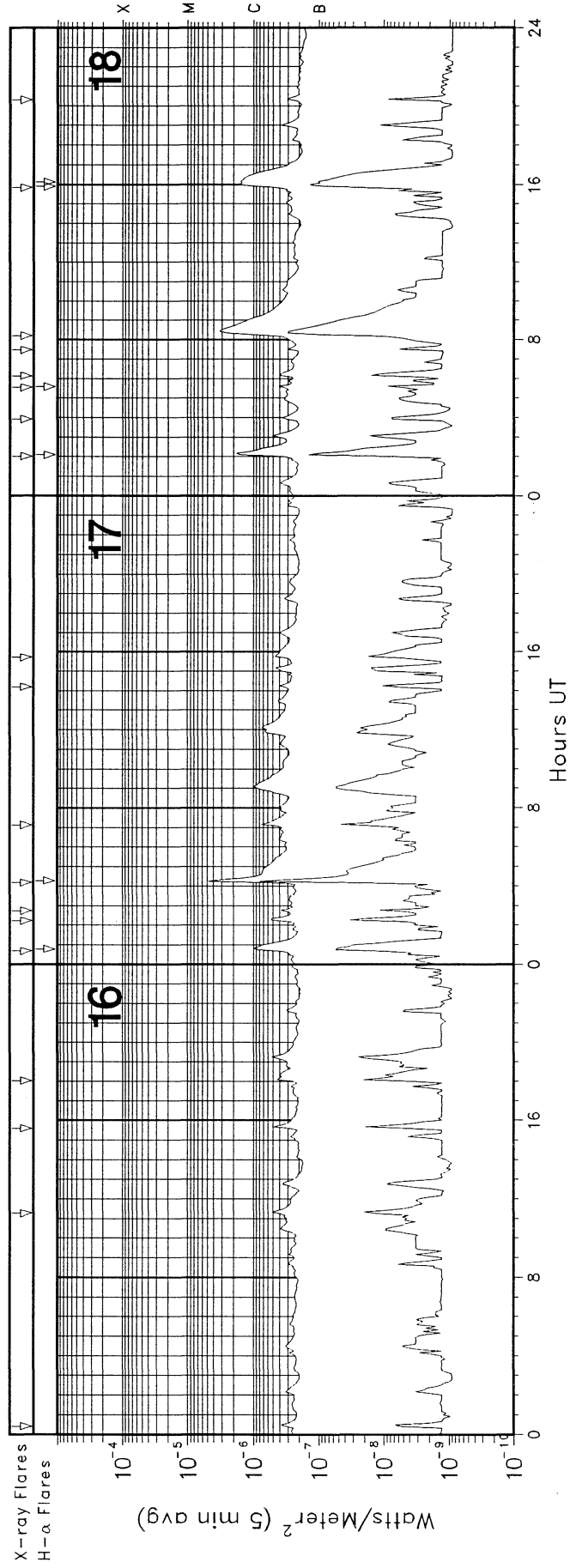
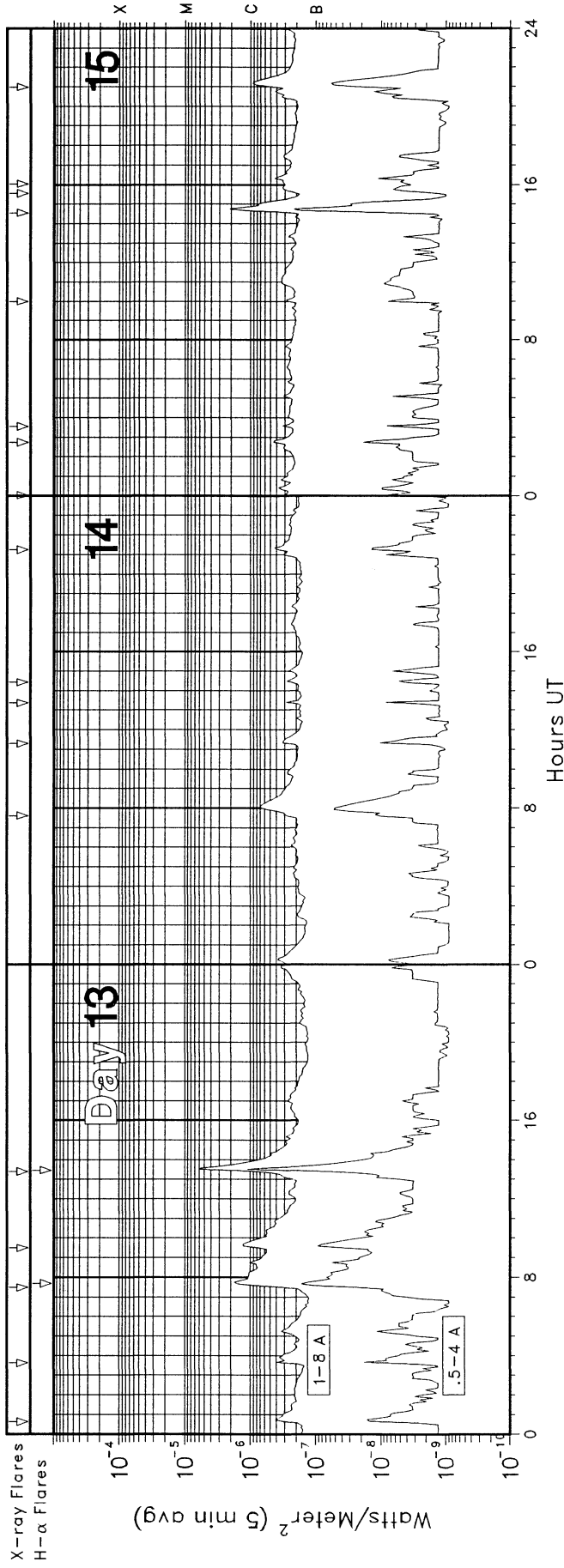


GOES X-RAY DETECTOR May 2004

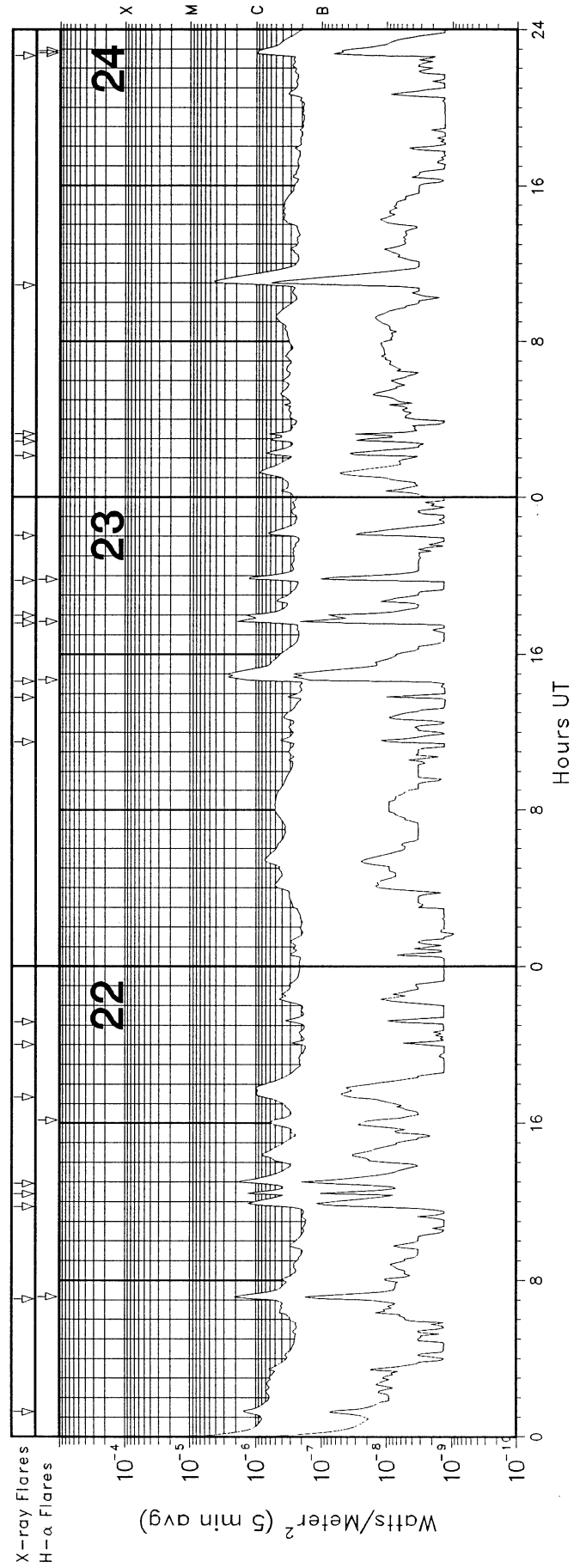
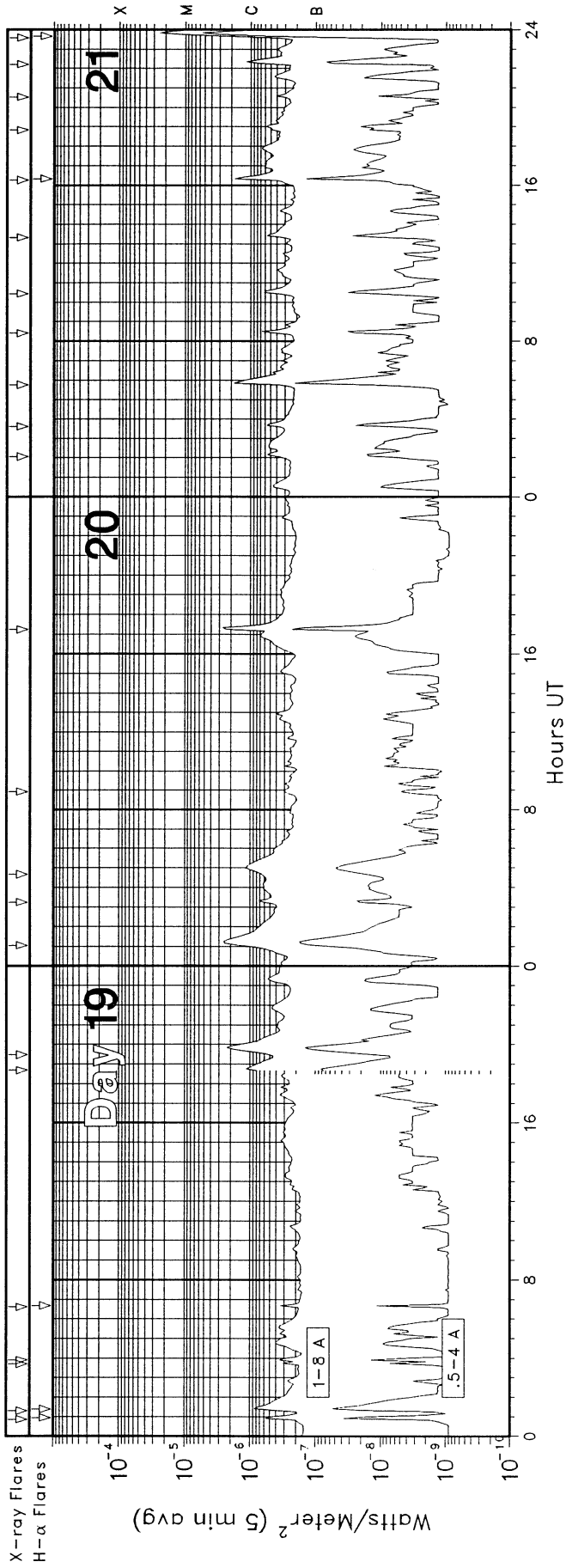


GOES X-RAY DETECTOR

May 2004

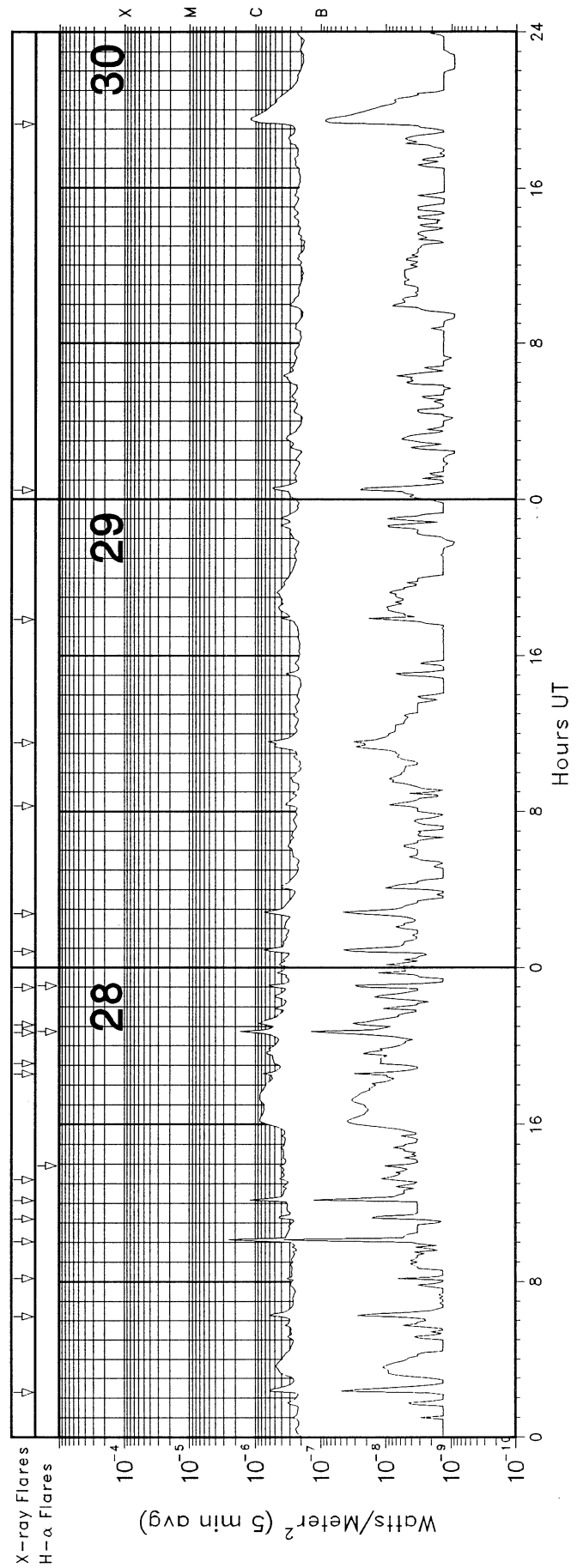
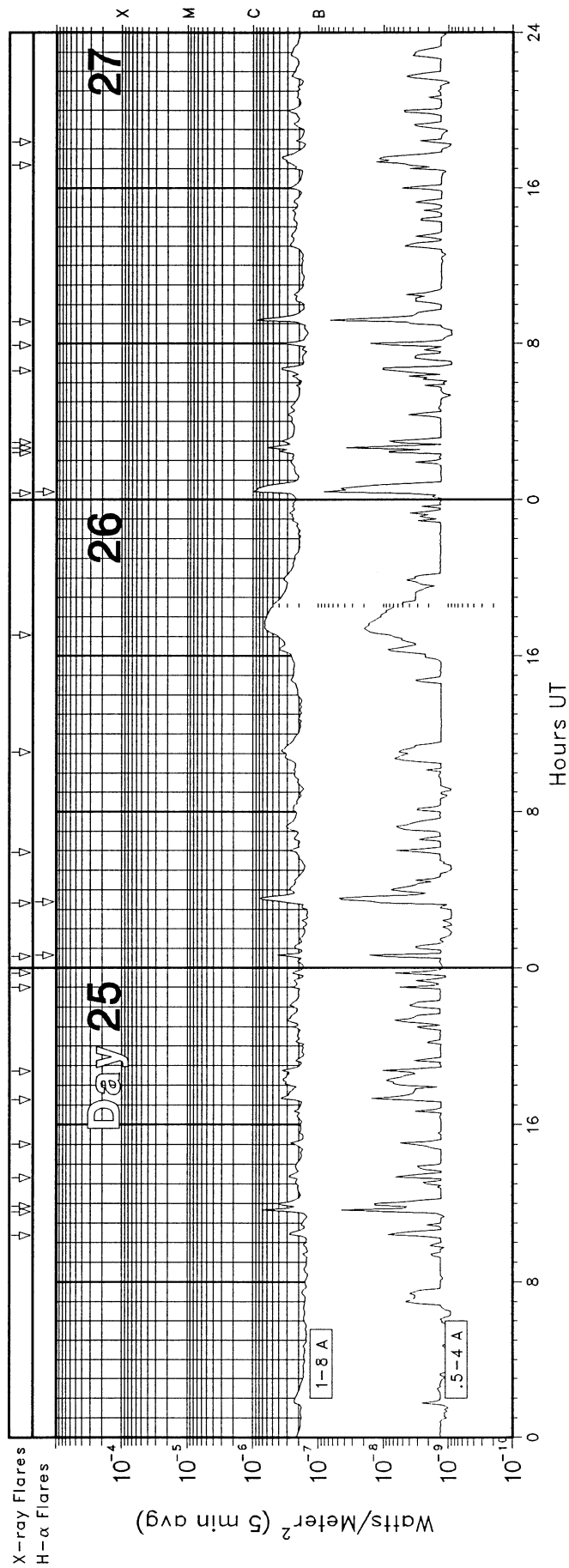


GOES X-RAY DETECTOR May 2004

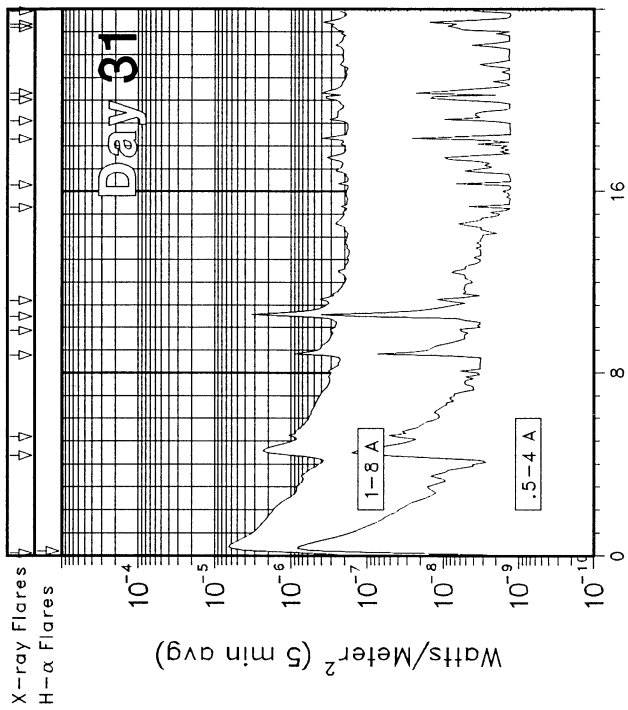


GOES X-RAY DETECTOR

May 2004



GOES X-RAY DETECTOR May 2004



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May 04

GOES SOLAR X-RAY FLARES
Preliminary Listing

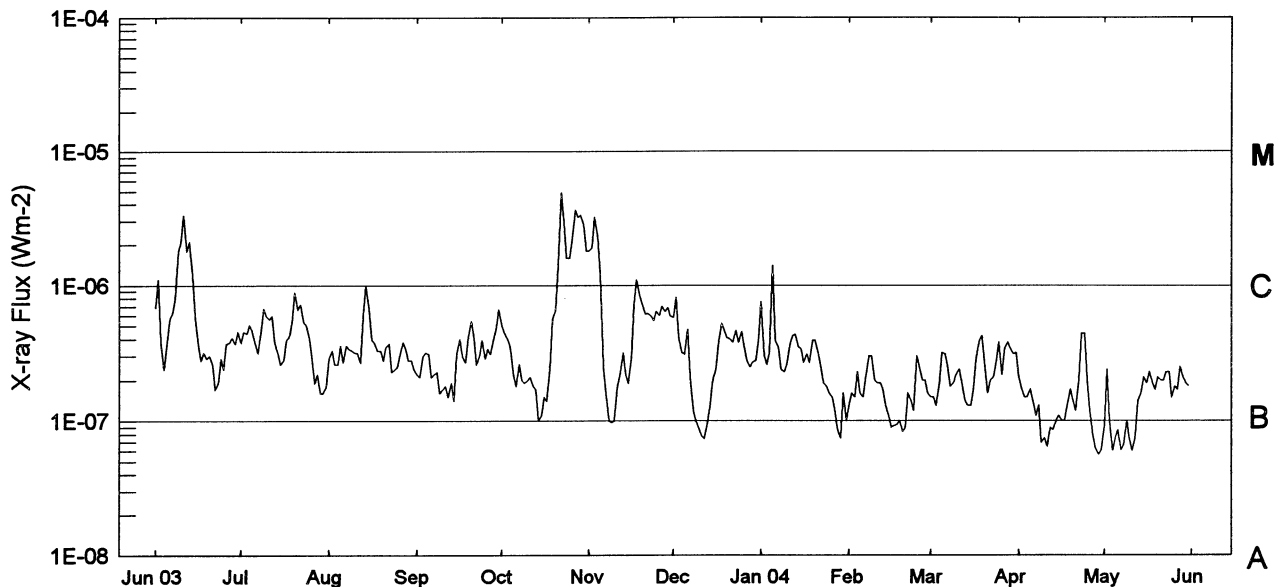
May 2004

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	Flux	NOAA/ USAF Region
19	0637	0641	0643	N10	W60	SF	B4.6	1.1E-04	10612
19	1841	1847	1901				C1.1	1.2E-03	
19	1929	1951	2028				C2.2	4.0E-03	
20	0104	0118	0128				C2.5	3.1E-03	10618
20	0315	0320	0325				B7.7	4.1E-04	
20	0440	0504	0521				C1.1	2.7E-03	10618
20	0856	0859	0902				B3.5	1.1E-04	
20	1714	1719	1723				C3.7	1.4E-03	10618
21	0204	0214	0218				B5.7	4.2E-04	10618
21	0337	0341	0349				B6.1	3.7E-04	10618
21	0546	0551	0604				C2.0	1.5E-03	10618
21	0825	0830	0833				B8.3	2.9E-04	10618
21	1027	1034	1040				B7.0	4.4E-04	10618
21	1320	1327	1336				B5.7	4.5E-04	10618
21	1616	1623	1628	S10	W42	SF	C2.0	9.4E-04	10617
21	1850	1905	1908				B6.3	5.7E-04	10618
21	2032	2036	2040				B4.3	1.8E-04	10617
21	2213	2220	2229				C1.2	8.3E-04	10615
21	2335	2352	2359	S10	E53	SF	M2.6	1.6E-02	10618
22	0116	0119	0123				C1.7	6.7E-04	
22	0702	0712	0719	S12	E50	SF	C2.2	1.5E-03	10618
22	1145	1155	1206				C1.4	1.2E-03	10618
22	1223	1227	1232				C1.5	5.9E-04	10618
22	1255	1302	1308				C2.0	1.1E-03	10618
22	1720	1734	1759				C1.0	2.2E-03	10618
22	2001	2006	2012				B2.9	1.6E-04	10618
22	2110	2115	2122				B3.8	2.3E-04	10618
23	1130	1135	1143				B4.3	3.0E-04	10618
23	1348	1353	1357				B3.6	1.7E-04	10618
23	1437	1452	1513	S10	E30	SF	C2.9	4.2E-03	10618
23	1735	1742	1750	S10	E28	SF	C2.0	1.2E-03	10618
23	1758	1801	1803				C1.6	4.2E-04	10618
23	1944	1954	2001	S10	E32	SF	C1.4	1.0E-03	10618
23	2202	2209	2220				B7.4	5.9E-04	10618
24	0208	0216	0226				B7.0	6.2E-04	10618
24	0251	0300	0304				B6.7	4.0E-04	10618
24	0314	0318	0320				B7.5	2.2E-04	10618
24	1053	1104	1118				C4.6	4.5E-03	10618
24	2239	2248	2306	N20	W36	SF	C1.0	1.3E-03	10615
25	1022	1027	1037				B2.8	2.3E-04	10618
25	1135	1141	1144				B9.0	2.9E-04	10618
25	1152	1200	1203				B5.1	2.4E-04	10618
25	1319	1323	1329				B3.0	1.6E-04	10618
25	1501	1506	1508				B2.7	1.1E-04	10618
25	1716	1722	1732				B3.8	3.1E-04	10618
25	1843	1847	1850				B3.8	1.4E-04	10618
25	2300	2303	2305				B2.7	7.5E-05	10618
25	2345	2348	2350				B3.1	7.5E-05	10618

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	Flux	NOAA/ USAF Region
26	0036	0040	0043	S11	W03	SF	B5.7	1.6E-04	10618
26	0319	0332	0343	S11	W02	SF	B8.2	7.8E-04	10618
26	0556	0601	0603				B2.7	1.0E-04	10618
26	1105	1109	1113				B3.9	1.7E-04	10618
26	1705	1744	1804				B7.3	2.2E-03	10619
27	0021	0027	0043	S08	W12	SF	C1.1	1.1E-03	10618
27	0225	0230	0235				B4.2	2.2E-04	10618
27	0239	0242	0246				B7.0	2.4E-04	10618
27	0256	0300	0306				B3.8	2.1E-04	10618
27	0637	0645	0648				B4.2	2.4E-04	10618
27	0755	0800	0804				B4.5	1.8E-04	10618
27	0907	0913	0919				C1.0	5.1E-04	10619
27	1711	1714	1717				B3.2	9.8E-05	
27	1822	1826	1831				B2.3	1.1E-04	
28	0217	0223	0232				B6.9	4.7E-04	10618
28	0613	0618	0622				B7.0	3.1E-04	10618
28	0810	0814	0816				B4.0	1.2E-04	
28	1003	1011	1013				C4.1	1.1E-03	10618
28	1112	1119	1124				B4.9	2.9E-04	
28	1209	1213	1215				C2.2	4.2E-04	10618
28	1312	1316	1318				B5.1	1.5E-04	
28	1834	1837	1839				B8.9	2.3E-04	
28	1906	1909	1912				B6.3	2.0E-04	
28	2041	2045	2049	S10	W39	SF	C2.1	6.8E-04	10618
28	2105	2111	2121				B8.9	7.4E-04	
28	2259	2305	2308	S11	W51	SF	B8.0	3.2E-04	10618
29	0049	0056	0102				B8.0	5.0E-04	10618
29	0246	0251	0256				B7.6	4.0E-04	10618
29	0817	0823	0835				B3.4	3.4E-04	
29	1132	1135	1138				B7.4	2.2E-04	
29	1751	1755	1757				B7.5	1.5E-04	10618
30	0029	0035	0041				B5.9	3.6E-04	10618
30	1915	1934	1956				C1.2	2.3E-03	10618
31	0007	0028	0100	S09	W72	SF	C6.5	1.4E-02	10618
31	0423	0437	0451				C2.3	3.1E-03	10618
31	0511	0516	0520				C1.1	5.5E-04	10618
31	0847	0852	0856				C1.0	3.9E-04	10618
31	0952	0955	0957				B3.8	9.9E-05	
31	1030	1036	1040				C3.8	1.3E-03	10618
31	1112	1115	1119				B4.5	1.7E-04	10618
31	1518	1521	1523				B2.7	6.5E-05	10618
31	1618	1622	1624				B2.8	8.4E-05	10618
31	1819	1823	1825				B5.0	1.4E-04	10618
31	1907	1911	1915				B3.4	1.4E-04	10618
31	2002	2011	2014				B4.0	2.4E-04	10618
31	2020	2024	2026				B6.2	1.6E-04	10618
31	2312	2315	2317				B3.5	9.5E-05	
31	2320	2328	2331				B4.3	2.2E-04	10618
31	2355	2416	2430				B6.7	1.0E-03	10618

Preliminary GOES Satellite Daily X-Ray Background Jun 2003 - May 2004

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May 04



Day	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 04	Feb	Mar	Apr	May
1	B6.8	B3.8	B2.9	B2.2	B5.0	C1.8	B5.8	B7.5	B1.3	B1.5	B2.1	A9.1
2	C1.1	B4.5	B3.3	B2.1	B4.4	C1.9	B8.1	B3.0	B1.6	B1.5	B1.7	B2.4
3	B3.8	B4.4	B2.6	B3.0	B4.0	C3.2	B4.1	B2.6	B1.5	B1.3	B1.5	B1.0
4	B2.4	B5.1	B2.6	B3.2	B3.5	C2.3	B3.2	B3.2	B2.3	B1.8	B1.5	A6.0
5	B3.6	B4.6	B3.6	B3.1	B2.2	C1.2	B3.1	C1.4	B1.6	B3.2	B1.7	A7.5
6	B5.7	B3.7	B2.7	B2.1	B1.8	B2.5	B4.7	B3.9	B1.5	B3.1	B1.4	A8.5
7	B6.2	B3.2	B3.6	B2.2	B2.6	B1.6	B2.1	B3.5	B2.1	B2.5	B1.1	A6.1
8	B7.9	B4.6	B3.4	B2.3	B2.0	B1.0	B1.2	B2.4	B3.0	B1.8	B1.3	A6.6
9	C1.8	B6.7	B3.3	B1.6	B1.9	A9.7	B1.0	B2.3	B3.0	B1.9	A6.9	B1.0
10	C2.1	B5.9	B3.2	B1.7	B2.0	B1.0	A8.7	B2.6	B2.0	B2.2	A7.5	A7.3
11	C3.3	B5.6	B3.2	B1.8	B2.1	B1.8	A7.7	B3.7	B1.9	B2.4	A6.5	A6.0
12	C1.8	B5.9	B2.7	B1.5	B1.8	B2.2	A7.4	B4.2	B1.9	B1.9	A8.9	A7.6
13	C2.1	B3.8	B6.0	B1.9	B1.7	B3.2	A9.7	B4.3	B1.7	B1.4	A8.6	B1.4
14	C1.2	B3.2	C1.0	B1.4	B1.0	B2.2	B1.3	B3.5	B1.3	B1.3	B1.0	B1.6
15	B5.8	B2.6	B6.8	B3.1	B1.1	B1.9	B2.0	B3.4	B1.1	B1.3	B1.1	B2.1
16	B3.6	B2.8	B4.0	B4.0	B1.5	B2.9	B2.4	B2.7	A9.0	B1.7	B1.0	B1.9
17	B2.8	B3.9	B3.7	B3.0	B1.4	B7.2	B3.8	B3.1	A9.2	B2.9	B1.0	B2.3
18	B3.2	B4.2	B3.3	B2.7	B2.4	C1.1	B5.2	B2.7	A9.4	B3.9	B1.3	B1.9
19	B2.9	B5.4	B3.3	B4.1	B5.6	B8.4	B4.6	B3.9	B1.0	B4.2	B1.7	B1.7
20	B3.0	B8.9	B2.8	B5.4	B6.5	B7.3	B4.1	B3.9	A8.3	B2.7	B1.4	B2.1
21	B2.6	B6.6	B3.5	B4.2	C1.4	B6.1	B4.0	B3.3	A8.9	B1.6	B1.2	B2.0
22	B1.7	B7.2	B3.7	B2.6	C4.9	B6.2	B3.8	B2.5	B1.6	B2.0	B2.0	B2.0
23	B1.9	B5.3	B2.3	B3.0	C3.0	B5.9	B4.6	B1.9	B1.4	B2.1	B4.4	B2.3
24	B2.9	B5.1	B2.4	B3.9	C1.6	B5.5	B3.8	B1.8	B1.2	B2.7	B4.4	B2.3
25	B2.4	B4.0	B2.5	B2.9	C1.6	B6.4	B4.5	B1.6	B3.0	B3.8	B2.0	B1.5
26	B3.7	B2.8	B3.1	B3.4	C2.2	B6.0	B3.5	B1.5	B2.5	B2.2	B1.2	B1.8
27	B3.8	B1.9	B3.8	B3.1	C3.6	B7.0	B2.8	B1.2	B2.0	B3.4	A7.8	B1.7
28	B4.1	B2.2	B3.4	B4.0	C3.2	B6.4	B2.5	A8.7	B2.0	B3.8	A6.2	B2.5
29	B3.7	B1.6	B2.8	B4.8	C3.3	B6.8	B2.7	A7.5	B1.6	B3.4	A5.6	B2.1
30	B4.5	B1.6	B2.8	B6.6	C2.8	B5.9	B2.8	B1.6		B3.1	A6.0	B1.9
31		B1.8	B2.4		C1.8		B3.9	B1.0		B3.2		B1.8

Levels below B1.0 are unreliable.

ACTIVE PROMINENCES AND FILAMENTS

MAY 2004

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
19	DSF	1521	1740	N04	W34	05	17.1		19	0	0	E	HOLL		
19	DSF	1714U	0440U	N20	E39	05	22.7		09	0	0	E	SVTO	0615	
20	DSF	0003U	1231U	N25	E22	05	21.7	3	13	0	0	E	HOLL	0615	
20	DSF	1709U	0418U	N16	W53	05	16.7		08	0	0	E	SVTO		
24	DSF	1731U	0405U	N17	W01	05	24.6		18	0	0	E	SVTO		
24	DSF	1753	1916	N15	W06	05	24.3	3	19	0	0	E	HOLL		
27	BSL	0923	0937	N03	W90	05	20.7	1	03	9	9	V	KHAR		

ADF = Active Dark Filament BSL = Bright Surge on Limb EPL = Eruptive Prominence on Limb
 AFS = Arch Filament System CAP = CAP Prominence (Tandberg-Hanssen) LPS = Loops
 APR = Active Prominence CRN = Coronal Rain MDP = Mound Prominence
 ASR = Active Surge Region DSD = Dark Surge on Disk SDF/DSF = Sudden Disappearing Filament
 BSD = Bright Surge on Disk DSF = Disappearing Solar Filament SPY = Spray
 SSB = Solar Sector Boundary

For SOLAR SECTOR BOUNDARY REPORTS, the latitude field contains the Carrington longitude of the point where a neutral line crosses the solar equator. The comments field may contain the Carrington longitude and central meridian distance of two more intersection points.

The EXTENT field for limb events is the radial extent above the limb in hundredths of solar radius. For disk events this field contains the heliographic extent in whole degrees.

The remark "Bright Emission 1/3" indicates that bright emission was observed 1/3 of time.
 The remark "Normal Emission 1/3" indicates that normal emission was observed 1/3 of time.

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

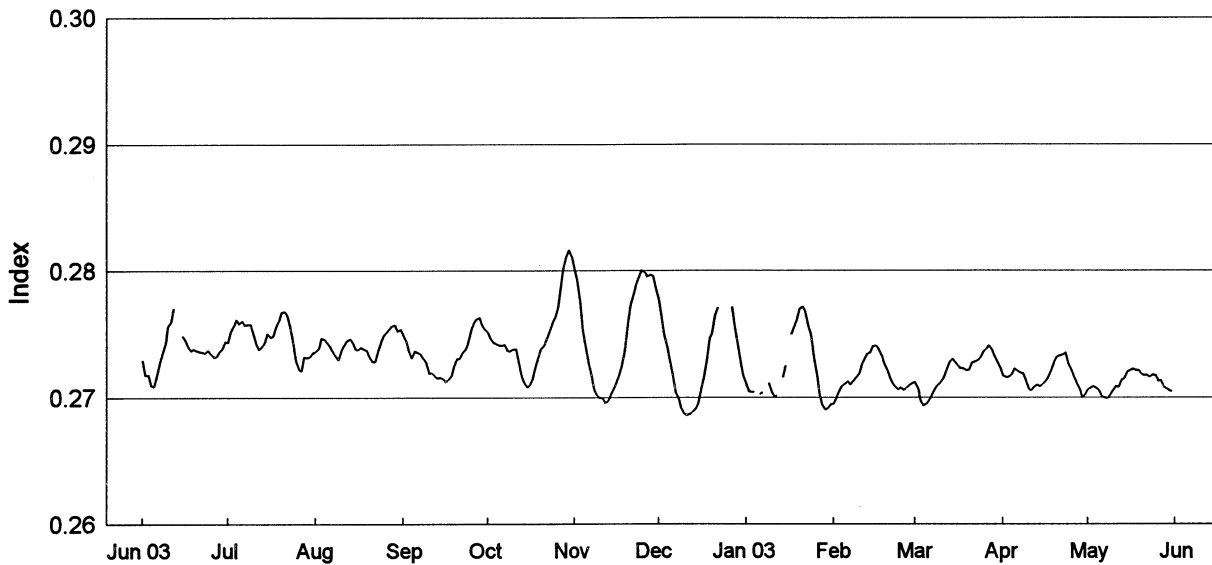
ABST = Abastumani	HOLL = Holloman	RAMY = Ramey
ATHN = Athens	KHAR = Kharkov	SVTO = San Vito
BUCA = Bucharest	LEAR = Learmonth	VORO = Voroshilov
CATA = Catania	PALE = Palehua	VALA = Valasske Mezirici
		WROC = Wroclaw

NOTE: The U.S. Air Force solar observing sites (HOLL, LEAR, RAMY, AND SVTO) have changed operational requirements and will only report the following: BSL, EPL, LPS, SPY, and DSF's.

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

Jun 2003 - May 2004

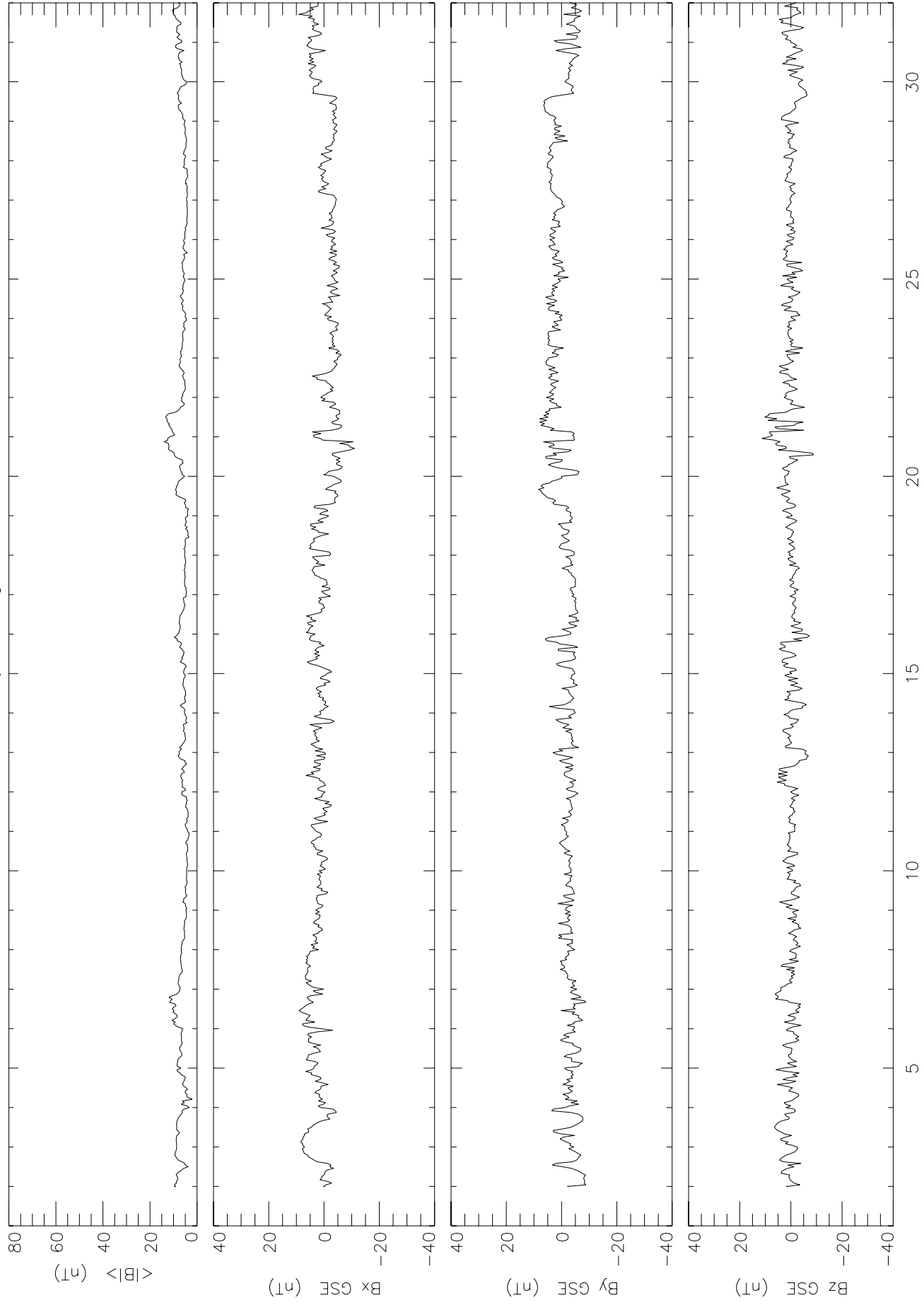
Version 9.1



Day	Jun 03	Jul	Aug	Sep	Oct	Nov	Dec	Jan 04	Feb	Mar	Apr	May
1	0.2729	0.2743	0.2736	0.2749	0.2751	0.2801	0.2777	0.2711	0.2695	0.2712	0.2717	0.2706
2	0.2718	0.2751	0.2739	0.2744	0.2746	0.2792	0.2764	0.2705	0.2699	0.2707	0.2716	0.2708
3	0.2718	0.2756	0.2747	0.2736	0.2743	0.2774	0.2750	0.2704	0.2705	0.2696	0.2716	0.2709
4	0.2710	0.2761	0.2746	0.2731	0.2743	0.2752	0.2740	0.2704	0.2709	0.2694	0.2718	0.2707
5	0.2709	0.2758	0.2744	0.2737	0.2741	0.2738	0.2730	---	0.2711	0.2695	0.2723	0.2705
6	0.2717	0.2760	0.2741	0.2736	0.2741	0.2727	0.2717	0.2703	0.2713	0.2698	0.2721	0.2701
7	0.2728	0.2757	0.2736	0.2734	0.2742	0.2719	0.2704	0.2705	0.2710	0.2703	0.2719	0.2700
8	0.2735	0.2758	0.2732	0.2730	0.2737	0.2706	0.2699	---	0.2713	0.2707	0.2719	0.2700
9	0.2743	0.2758	0.2730	0.2728	0.2737	0.2702	0.2691	0.2711	0.2715	0.2710	0.2714	0.2702
10	0.2756	0.2749	0.2737	0.2720	0.2738	0.2700	0.2688	0.2703	0.2719	0.2712	0.2707	0.2706
11	0.2759	0.2742	0.2741	0.2719	0.2738	0.2700	0.2686	0.2701	0.2725	0.2715	0.2705	0.2709
12	0.2770	0.2738	0.2745	0.2717	0.2728	0.2696	0.2687	0.2701	0.2730	0.2721	0.2708	0.2708
13	---	0.2740	0.2746	0.2715	0.2717	0.2698	0.2688	---	0.2734	0.2727	0.2710	0.2714
14	---	0.2743	0.2744	0.2716	0.2712	0.2702	0.2691	0.2716	0.2735	0.2730	0.2709	0.2715
15	0.2748	0.2750	0.2739	0.2715	0.2708	0.2707	0.2694	0.2725	0.2740	0.2727	0.2710	0.2720
16	0.2745	0.2747	0.2738	0.2713	0.2710	0.2712	0.2706	---	0.2741	0.2725	0.2712	0.2721
17	0.2739	0.2748	0.2740	0.2714	0.2714	0.2717	0.2716	0.2750	0.2738	0.2723	0.2715	0.2723
18	0.2737	0.2756	0.2738	0.2717	0.2723	0.2724	0.2730	0.2756	0.2733	0.2723	0.2721	0.2722
19	0.2738	0.2760	0.2737	0.2725	0.2732	0.2737	0.2746	0.2762	0.2727	0.2722	0.2727	0.2722
20	0.2737	0.2767	0.2731	0.2731	0.2738	0.2754	0.2706	0.2770	0.2722	0.2721	0.2732	0.2719
21	0.2736	0.2768	0.2729	0.2731	0.2740	0.2773	0.2764	0.2772	0.2716	0.2727	0.2733	0.2717
22	0.2736	0.2765	0.2728	0.2735	0.2746	0.2780	0.2771	0.2767	0.2711	0.2728	0.2734	0.2718
23	0.2735	0.2757	0.2737	0.2737	0.2752	0.2789	---	0.2757	0.2708	0.2729	0.2735	0.2716
24	0.2737	0.2743	0.2743	0.2743	0.2758	0.2795	---	0.2749	0.2706	0.2731	0.2726	0.2718
25	0.2734	0.2729	0.2749	0.2753	0.2762	0.2801	0.2781	0.2732	0.2708	0.2736	0.2722	0.2718
26	0.2732	0.2723	0.2751	0.2759	0.2770	0.2799	---	0.2718	0.2706	0.2738	0.2716	0.2713
27	0.2732	0.2721	0.2754	0.2762	0.2786	0.2795	0.2771	0.2702	0.2708	0.2741	0.2712	0.2713
28	0.2736	0.2732	0.2756	0.2763	0.2802	0.2797	0.2756	0.2694	0.2710	0.2738	0.2707	0.2708
29	0.2738	0.2732	0.2757	0.2757	0.2811	0.2796	0.2741	0.2691	0.2711	0.2732	0.2701	0.2707
30	0.2744	0.2732	0.2752	0.2753	0.2817	0.2786	0.2729	0.2691	---	0.2727	0.2702	0.2706
31	---	0.2735	0.2754	---	0.2810	---	0.2717	0.2695	---	0.2723	---	0.2705
Mean	0.2736	0.2748	0.2742	0.2734	0.2748	0.2749	0.2728	0.2722	0.2717	0.2720	0.2717	0.2711

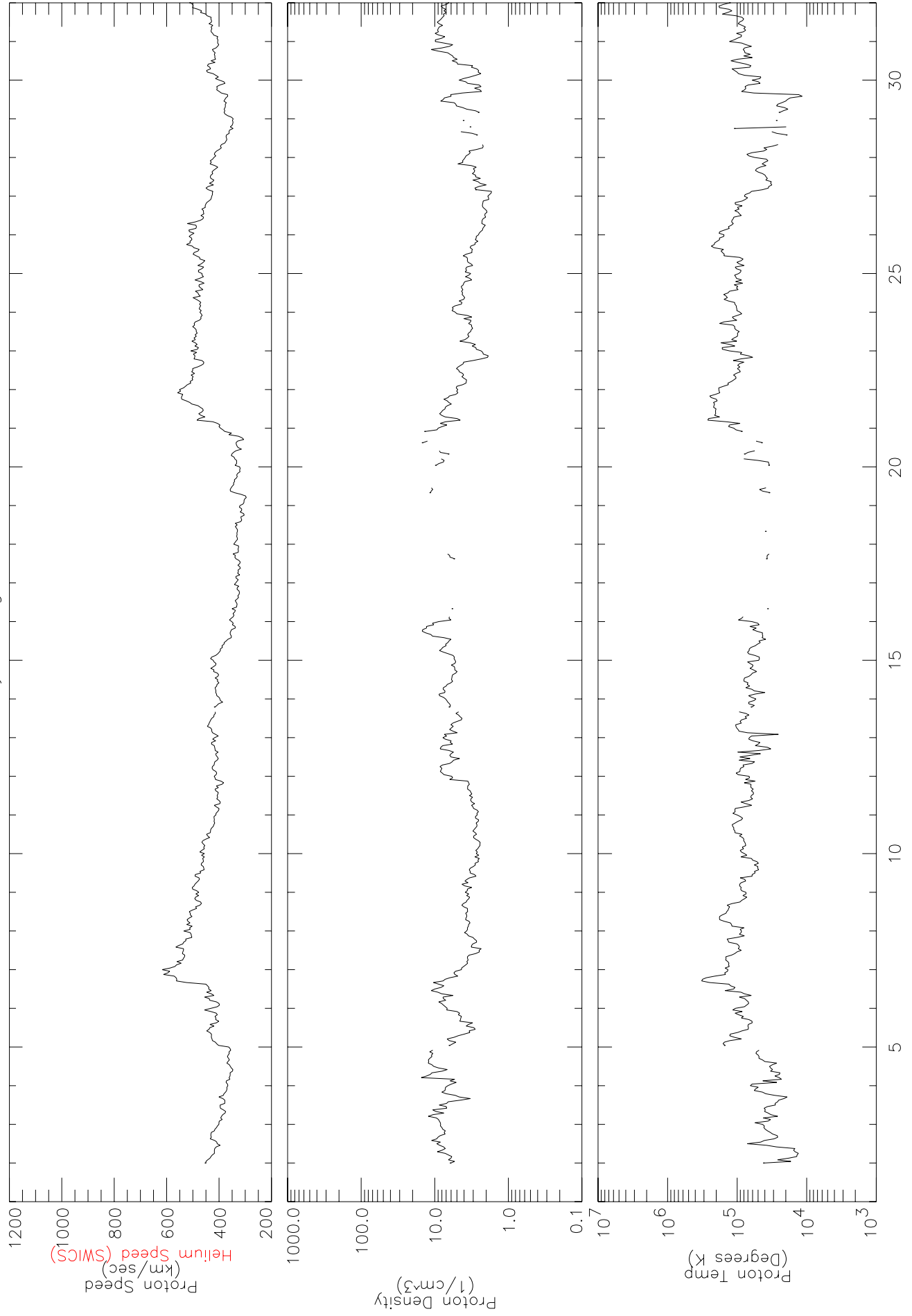
Data at: <http://www.sec.noaa.gov/ftpmenu/sbu.html>

Interplanetary Magnetic Field
ACE LEVEL2 DATA Hourly Averages for MAY 2004, from MAG



DAYS OF MAY 2004

ACE LEVEL2 DATA Solar Wind Plasma Hourly Averages for MAY 2004, from SWEPAM



DAYS OF MAY 2004

Solar Energetic Particles ACE LEVEL2 DATA Hourly Averages for MAY 2004

