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SOLAR-GEOPHYSICAL DATA

Number 627

(Issued in Two Parts)

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DATA FOR **MAY 1996**

Hα SOLAR FLARES

MAY 1996

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
		01	1208		1241	No Flare Patrol													
		01	1259		1303	No Flare Patrol													
		02	0400		0429	No Flare Patrol													
		03	0559		0629	No Flare Patrol													
		03	0904		0919	No Flare Patrol													
		03	0935		0937	No Flare Patrol													
		04	0319		0335	No Flare Patrol													
		04	0341		0638	No Flare Patrol													
		04	0817		0825	No Flare Patrol													
		04	0926		1009	No Flare Patrol													
		04	1011		1017	No Flare Patrol													
		05	0143		0230	No Flare Patrol													
		06	0951		0955	No Flare Patrol													
		06	0957		1003	No Flare Patrol													
		06	1005		1010	No Flare Patrol													
		06	1016		1019	No Flare Patrol													
		07	0236		0244	No Flare Patrol													
		07	0418		0426	No Flare Patrol													
		07	0432		0444	No Flare Patrol													
		07	0511		0516	No Flare Patrol													
0001	PALE	07	1701	1702	1708	S07	E72	7962	05	13.1	7	SF	B 2.1	3	E		12		
0002	HOLL	07	2114	2115	2118	S10	E65	7962	05	12.8	4	SF		3	E		10		
		08	0127		0501	No Flare Patrol													
0003	SVTO	08	1505	1506	1511	S08	E59	7962	05	13.0	6	SF		3	E		13		
0004		08	1517	1518	1526	S08	E60	7962	05	13.1	9	SF	B 6.2				20		
	HOLL	08	1517	1518	1522	S09	E60	7962	05	13.1	5	SF	B 6.2	3	E		22		
	SVTO	08	1517	1518	1529	S07	E59	7962	05	13.0	12	SF		3	E		17		
0005		08	15481	15501	1559	S08	E59	7962	05	13.1	11	SF	C 1.0				38		
	HOLL	08	1548	1550	1601	S09	E60	7962	05	13.2	13	SF		3	E		38		
	SVTO	08	1549	1551	1557	S08	E58	7962	05	13.0	8	SF	C 1.0	3	E		37		
0006		08	21341	21457	2211	S08	E51	7962	05	12.7	37	1F	C 1.9				108		F
	PALE	08	2134	2152	2214	S08	E52	7962	05	12.8	40	1F		3	E		111		
	HOLL	08	2135	2145	2208	S08	E50	7962	05	12.6	33	1F	C 1.9	4	E		106		F
0007		08	22321	22341	2302	S09	E56	7962	05	13.1	30	SF	B 7.8				38		F
	PALE	08	2232	2235	2307	S09	E56	7962	05	13.1	35	SF		3	E		57		F
	HOLL	08	2233	2234	2257	S09	E55	7962	05	13.1	24	SF	B 7.8	4	E		20		F
		09	0155		0205	No Flare Patrol													
		09	0330		0336	No Flare Patrol													
0008	MEUD	09	1429	1451	1502	S09	E45	7962	05	13.0	33	SF			C	1451	30	0.5	
		10	1026		1042	No Flare Patrol													
0009		10	18172	1819	1831	S08	E32	7962	05	13.2	14	SF	B 2.8				12		
	HOLL	10	1817	1819	1831	S08	E31	7962	05	13.1	14	SF		3	E		14		
	PALE	10	1819	1819	1831	S08	E32	7962	05	13.2	12	SF	B 2.8	3	E		11		
0010		11	16161	16162	1624	S08	E28	7964	05	13.8	8	SF	B 1.3				12		F
	RAMY	11	1616	1616	1624	S08	E27	7964	05	13.7	8	SF		3	E		10		
	HOLL	11	1617	1618	1624	S08	E28	7964	05	13.8	7	SF	B 1.3	3	E		13		F
0011		11	16462	16481	1701	S08	E16	7962	05	12.9	15	SF	B 2.1				17		F
	HOLL	11	1646	1649	1701	S08	E15	7962	05	12.8	15	SF		3	E		23		F
	RAMY	11	1648	1648	1701	S08	E16	7962	05	12.9	13	SF	B 2.1	3	E		11		F
0012		11	1812	1814*	1840	S08	E19	7962	05	13.2	28	SF	B 8.2				50		
	HOLL	11	1812	1814	1839	S08	E19	7962	05	13.2	27	SF		3	E		38		
	PALE	11	1812	1827	1840	S08	E19	7962	05	13.2	28	SF	B 8.2	3	E		63		
0013	PALE	11	1911	1912	1917	S07	E16	7962	05	13.0	6	SF		3	E		20		

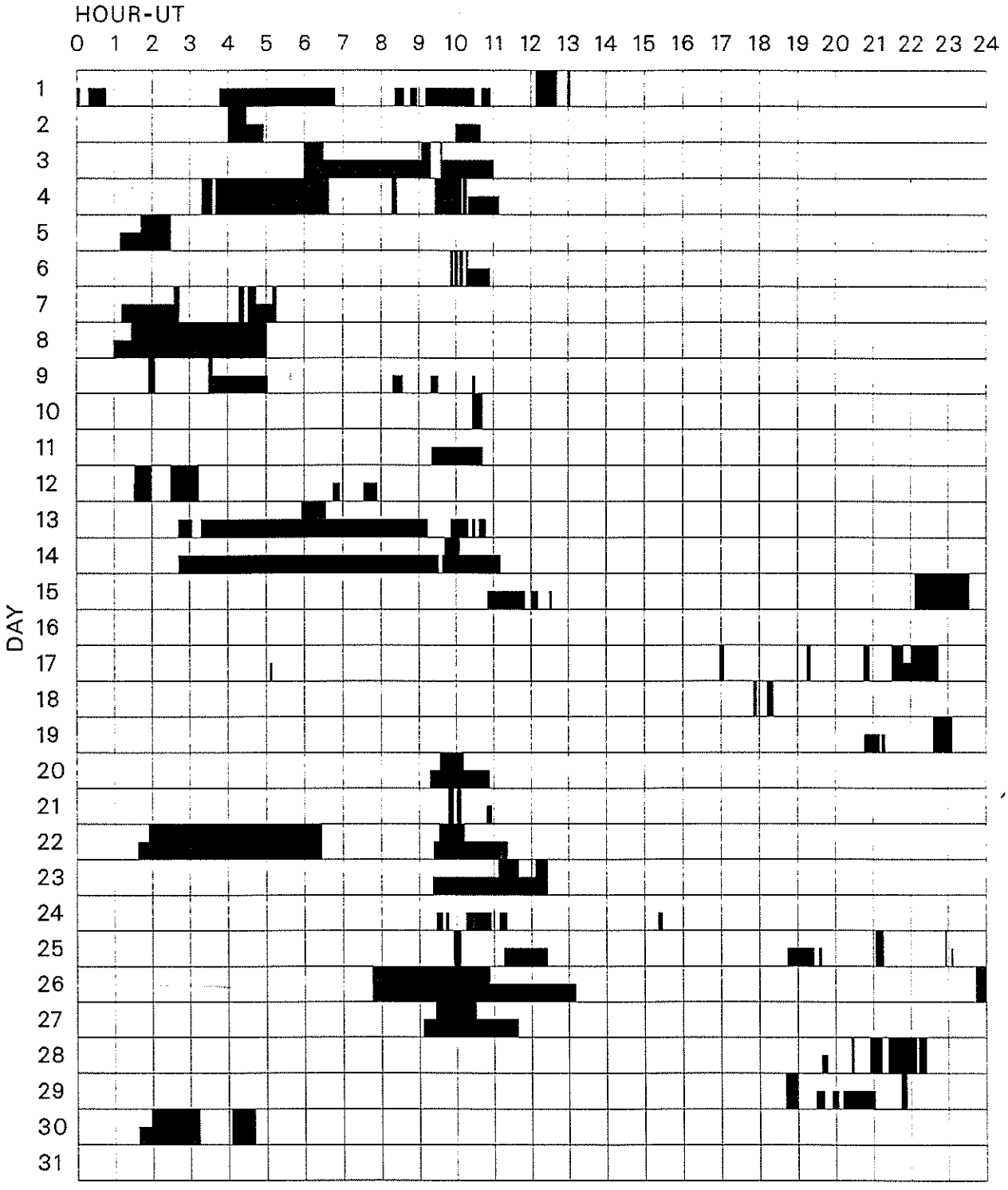
Hα SOLAR FLARES

MAY 1996

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0014		11	2108	2108*	2138	S08	E16	7962	05	13.1	30	SF	C 1.4				38		F
	PALE	11	2108	2108	2137	S08	E17	7962	05	13.1	29	SF		3	E		13		F
	HOLL	11	2108	2122	2140	S08	E16	7962	05	13.1	32	SF	C 1.4	3	E		62		F
0015		12	0017	00172	0028	S08	E14	7962	05	13.1	11	SF	B 1.1				28		
	PALE	12	0017	0017	0032	S09	E14	7962	05	13.1	15	SF		3	E		34		
	HOLL	12	0017	0019	0025	S07	E14	7962	05	13.1	8	SF	B 1.1	3	E		23		
0016	HOLL	12	0048	0050	0054	S08	E14	7962	05	13.1	6	SF	B 1.4	3	E		23		
		12	0133		0159	No Flare Patrol													
		12	0230		0314	No Flare Patrol													
0017		12	16394	16442	1653	S08	E00	7962	05	12.7	14	SF	B 1.8				26		FH
	RAMY	12	1639	1645	1654	S08	E00	7962	05	12.7	15	SF	B 1.8	3	E		21		F
	HOLL	12	1640	1644	1652	S07	E00	7962	05	12.7	12	SF		3	E		14		FH
	PALE	12	1643	1646	1653	S08	E01	7962	05	12.8	10	SF		3	E		43		FH
0018	HOLL	12	1928	1929	1938	S08	E03	7962	05	13.0	10	SF	B 9.1	3	E		44		
		13	0556		0633	No Flare Patrol													
		14	0941		1005	No Flare Patrol													
0019	KHAR	14	1135	1138	1143	S05	W17	7962	05	13.2	8	SF		2	V				D
0020	KHAR	14	1152		1208D	S11	W15	7964	05	13.4	16D	SF		2	V				E
		15	2207		2333	No Flare Patrol													
		17	1657		1704	No Flare Patrol													
		17	1915		1920	No Flare Patrol													
		17	2045		2054	No Flare Patrol													
		17	2130		2148	No Flare Patrol													
		17	2200		2244	No Flare Patrol													
0021	KANZ	18	1149	1153	1157	S12	W65	7962	05	13.6	8	SF		2	C				
		18	1751		1755	No Flare Patrol													
		18	1812		1822	No Flare Patrol													
		19	2236		2306	No Flare Patrol													
		20	0933		1011	No Flare Patrol													
		21	0947		0955	No Flare Patrol													
		21	1001		1007	No Flare Patrol													
		22	0155		0626	No Flare Patrol													
		22	0932		1013	No Flare Patrol													
		23	1107		1139	No Flare Patrol													
		23	1207		1226	No Flare Patrol													
		25	0955		1006	No Flare Patrol													
		25	2104		2116	No Flare Patrol													
		25	2255		2257	No Flare Patrol													
		26	0746		1053	No Flare Patrol													
		26	2344		2400	No Flare Patrol													
		27	0926		1031	No Flare Patrol													
		28	2025		2029	No Flare Patrol													
		28	2054		2114	No Flare Patrol													
		28	2123		2208	No Flare Patrol													
		28	2212		2224	No Flare Patrol													
		29	1841		1859	No Flare Patrol													
		29	2144		2153	No Flare Patrol													
		30	0158		0314	No Flare Patrol													
		30	0405		0441	No Flare Patrol													

INTERVALS OF NO FLARE PATROL OBSERVATION
FOR PRECEDING SOLAR FLARE TABLE

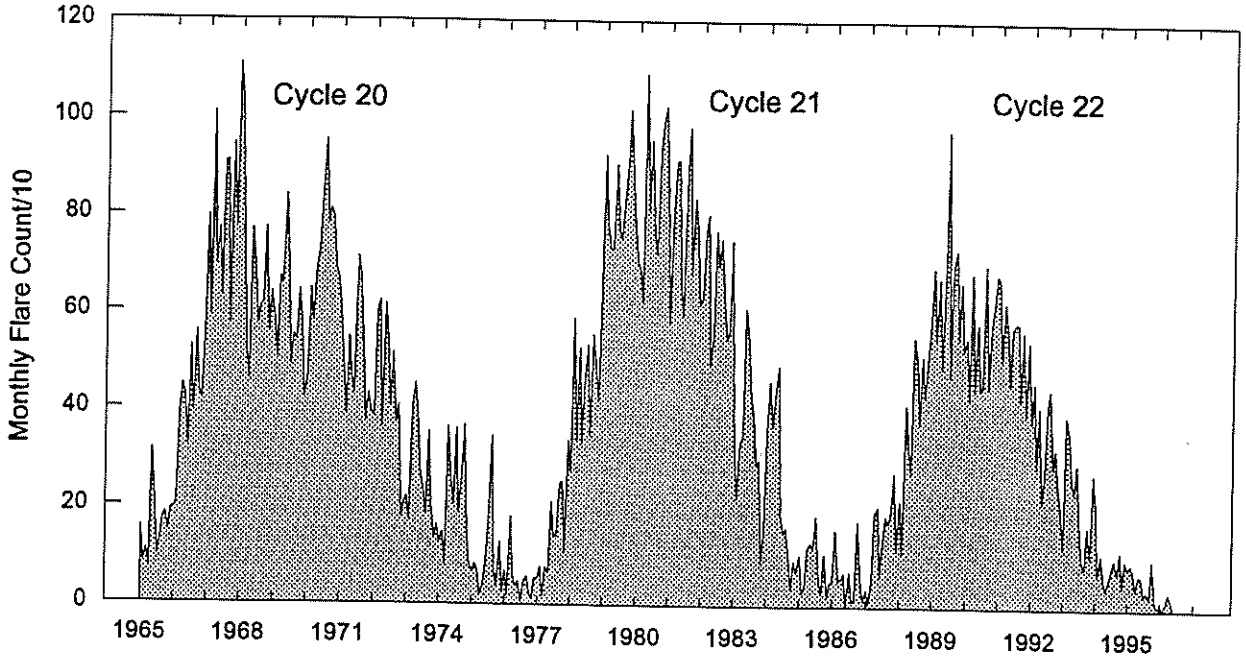
MAY 1996



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 nor cinematographic); portions of a panel with only the bottom half shaded mark times of only visual patrol.

Holloman	Kankelhoehe	Meudon	Ramey
Hurbanovo	Kharkov	Mitaka	San Vito
	Learmonth	Palehua	

Monthly Counts of Grouped Solar Flares
Jan 1965 - May 1996



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								87

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

SOLAR RADIO EMISSION
Outstanding Occurrences

MAY 1996

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
04	204	IZMI	4	S/F	0642.0	0642.5	1.5	27.0			
05	245	SVTO	8	S	0527.0	0528.0	2.0	55.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0528.0	0528.0	U	52.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	1832.0	1832.0	U	37.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1832.0	1832.0	1.0	78.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1832.0	1832.0	U	34.0			QL=4 ST=3 TYP=3
	410	SGMR	8	S	1832.0	1832.0	1.0	73.0			QL=4 ST=3 TYP=3
06	200	HIRA	8	S	0346.3	0346.5	0.5	5.0			O
	3000	IZMI	5	S	0922.5	0923.7	3.0	2.0	1.0		
	204	IZMI	45	C	0922.6	0927.8	10.0	3000.0			
	245	LEAR	49	GB	0923.0	0927.0	5.0	2600.0			QL=4 ST=2 TYP=6
	245	SVTO	49	GB	0923.0	0927.0	6.0	3300.0			QL=4 ST=2 TYP=6
	33	UPIC	45	C	0926.7	0927.0	0.8				
08	245	SGMR	4	S/F	1516.0	1517.0	3.0	74.0			QL=4 ST=2 TYP=3
	245	SVTO	4	S/F	1516.0	1517.0	3.0	75.0			QL=4 ST=2 TYP=3
	410	SVTO	4	S/F	1516.0	1517.0	8.0	95.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1517.0	1517.0	2.0	63.0			QL=4 ST=2 TYP=3
11	410	PALE	8	S	1812.0	1813.0	2.0	57.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	1812.0	1813.0	1.0	49.0			QL=4 ST=2 TYP=3
	2800	HIRA	3	S	2106.0	2107.4	3.0	5.0	3.0		O
	2800	HIRA	3	S	2113.7	2115.4	4.0	6.0	4.0		O
	2800	HIRA	1	S	2121.1	2121.7	2.0	5.0	3.0		O
	2800	HIRA	8	S	2258.0	2258.0	0.1	4.0			O
12	204	IZMI	41	F	0624.5	0625.4	9.0	700.0			
	245	LEAR	4	S/F	0625.0	0625.0	5.0	220.0			QL=4 ST=3 TYP=3
	245	SVTO	8	S	0625.0	0625.0	U	83.0			QL=4 ST=2 TYP=3
	3000	IZMI	1	S	0625.1	0625.5	1.5	3.0	1.0		
	200	HIRA	42	SER	0625.2	0625.5	4.5	66.0			WL
	500	HIRA	42	SER	0625.2	0628.6	4.5	41.0			ML
	2800	HIRA	8	S	0625.5	0625.5	0.1	2.0			O
	410	LEAR	8	S	0627.0	0627.0	2.0	54.0			QL=4 ST=3 TYP=3
	410	SVTO	8	S	0628.0	0628.0	U	62.0			QL=4 ST=2 TYP=3
	500	HIRA	42	SER	0724.7	0738.8	18.0	5.0			WL
	127	TORN	42	SER	0734.2	0735.6	6.0	310.0	30.0		
	204	IZMI	42	SER	0734.5	0736.7	8.5	350.0			
	200	HIRA	42	SER	0734.8	0736.5	6.0	47.0			WL
	204	IZMI	42	SER	1035.0	1039.3	9.5	150.0			
	127	TORN	47	GB	1035.0	1036.3	390.0	600.0	160.0		
	33	UPIC	2	S/F	1036.6	1036.7	0.6				
	245	SGMR	8	S	1326.0	1326.0	1.0	160.0			QL=4 ST=3 TYP=3
	245	SVTO	8	S	1326.0	1326.0	1.0	180.0			QL=4 ST=2 TYP=3
13	2800	HIRA	8	S	0127.0	0127.2	0.6	5.0			O
	33	UPIC	3	S	1120.5	1120.6	1.0				
	245	SGMR	49	GB	1545.0	1545.0	1.0	2100.0			QL=4 ST=2 TYP=6
	410	SGMR	8	S	1545.0	1545.0	U	89.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	1545.0	1545.0	1.0	2300.0			QL=4 ST=2 TYP=6
	410	SVTO	8	S	1545.0	1545.0	1.0	100.0			QL=4 ST=3 TYP=3
	245	SGMR	49	GB	1601.0	1601.0	U	940.0			QL=4 ST=2 TYP=6
	245	SVTO	49	GB	1601.0	1601.0	1.0	890.0			QL=4 ST=2 TYP=6
	410	SVTO	8	S	1601.0	1601.0	U	32.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	2329.0	2330.0	2.0	31.0			QL=4 ST=3 TYP=3
	245	LEAR	8	S	2330.0	2330.0	U	18.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2330.0	2331.0	1.0	46.0			QL=4 ST=2 TYP=3
14	33	UPIC	45	C	0659.5	0659.6	1.0				
15	33	UPIC	4	S/F	1415.7	1415.9	0.7				
	245	SGMR	8	S	1810.0	1810.0	U	140.0			QL=4 ST=2 TYP=3
17	500	HIRA	6	S	0204.6	0205.5	1.0	4.0	2.0		O
	245	LEAR	8	S	0205.0	0205.0	U	270.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0205.0	0205.0	U	100.0			QL=4 ST=2 TYP=3
	200	HIRA	8	S	0205.5	0205.5	0.8	100.0			O

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

MAY 1996

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
17	410	PALE	8	S	0207.0	0207.0	U	210.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0207.0	0207.0	U	230.0			QL=4 ST=2 TYP=3
19	33	UPIC	45	C	1056.0	1056.5	2.0				
21	33	UPIC	2	S/F	0414.0	0414.5	1.2				
22	33	UPIC	2	S/F	1155.5	1156.0	1.2				
23	204	IZMI	7	C	0631.8	0632.0	1.5	27.0			
	204	IZMI	5	S	0948.0	0948.5	1.0	75.0	60.0		
	204	IZMI	5	S	1025.7	1025.9	0.5	50.0	30.0		
	127	TORN	45	C	1113.6	1118.6	7.4	30.0	10.0		
27	204	IZMI	5	S	0618.0	0618.5	1.5	25.0			
	204	IZMI	5	S	0645.5	0646.0	1.0	15.0			

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:

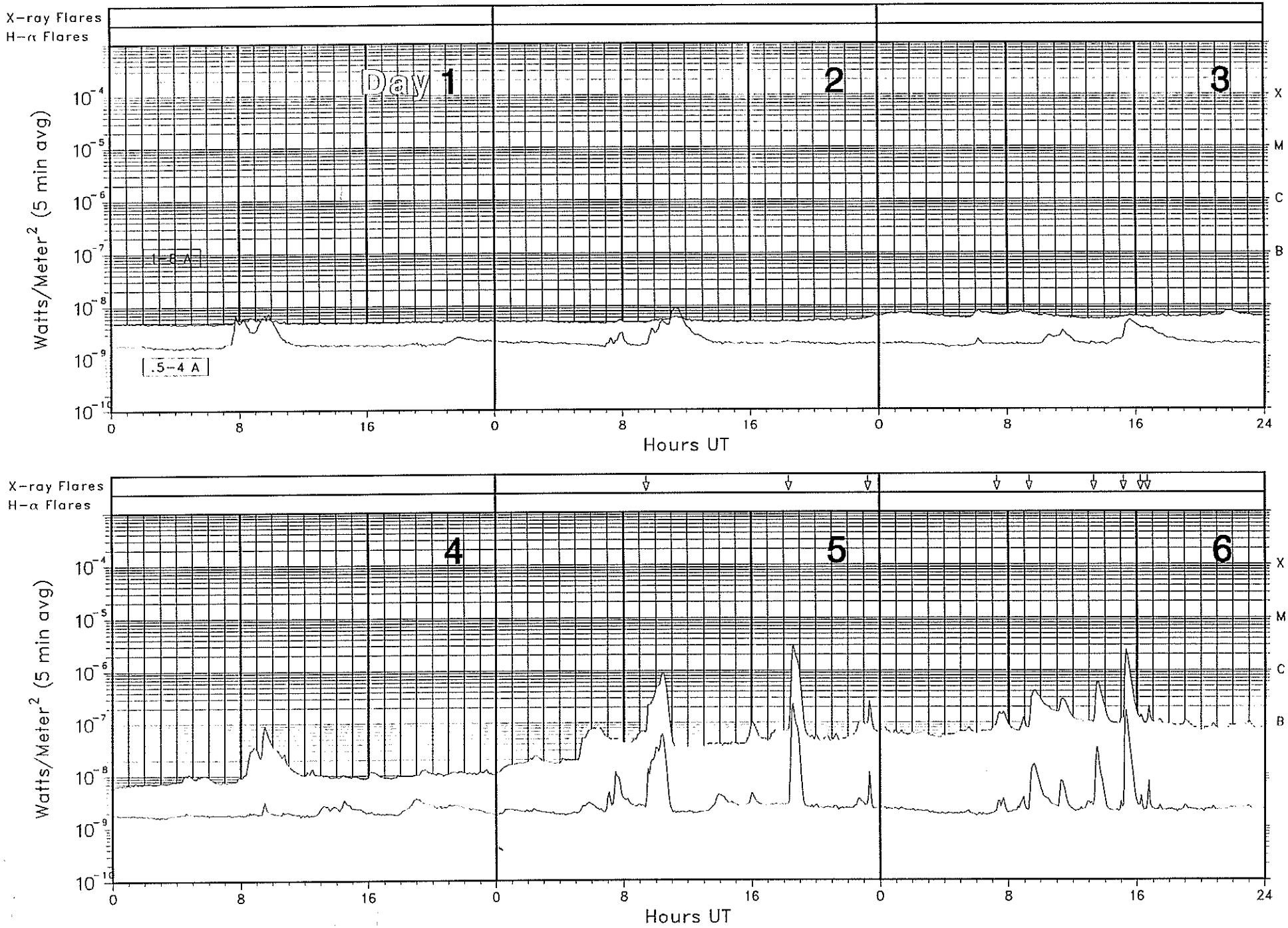
1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple 3F	28 Precusor	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; Hiraiso, Japan 500 and 200 MHz; and Toyokawa, Japan 9400, 3750, 2000 and 1000 MHz.

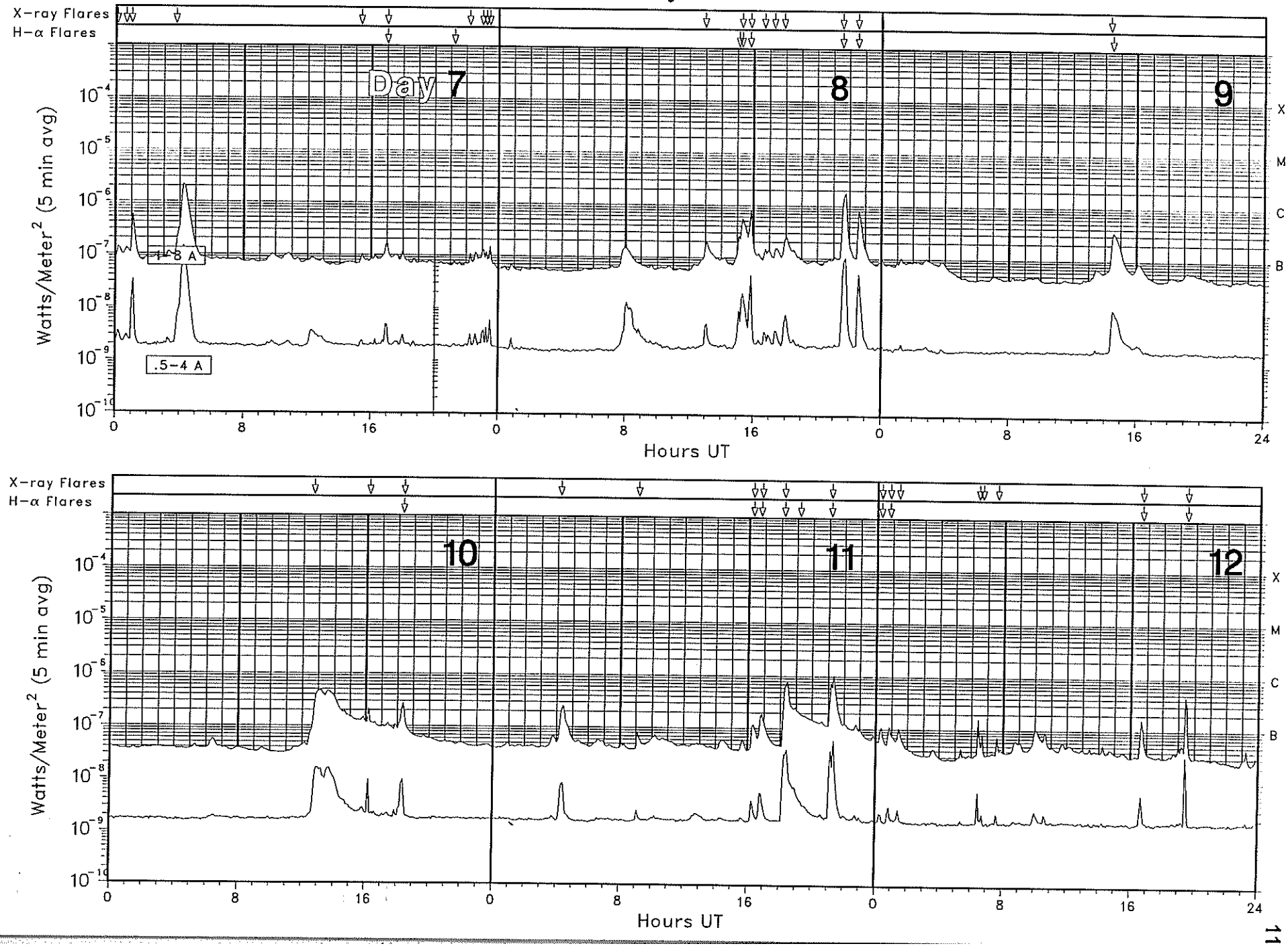
GOES-7 X-RAY DETECTOR

May 1996



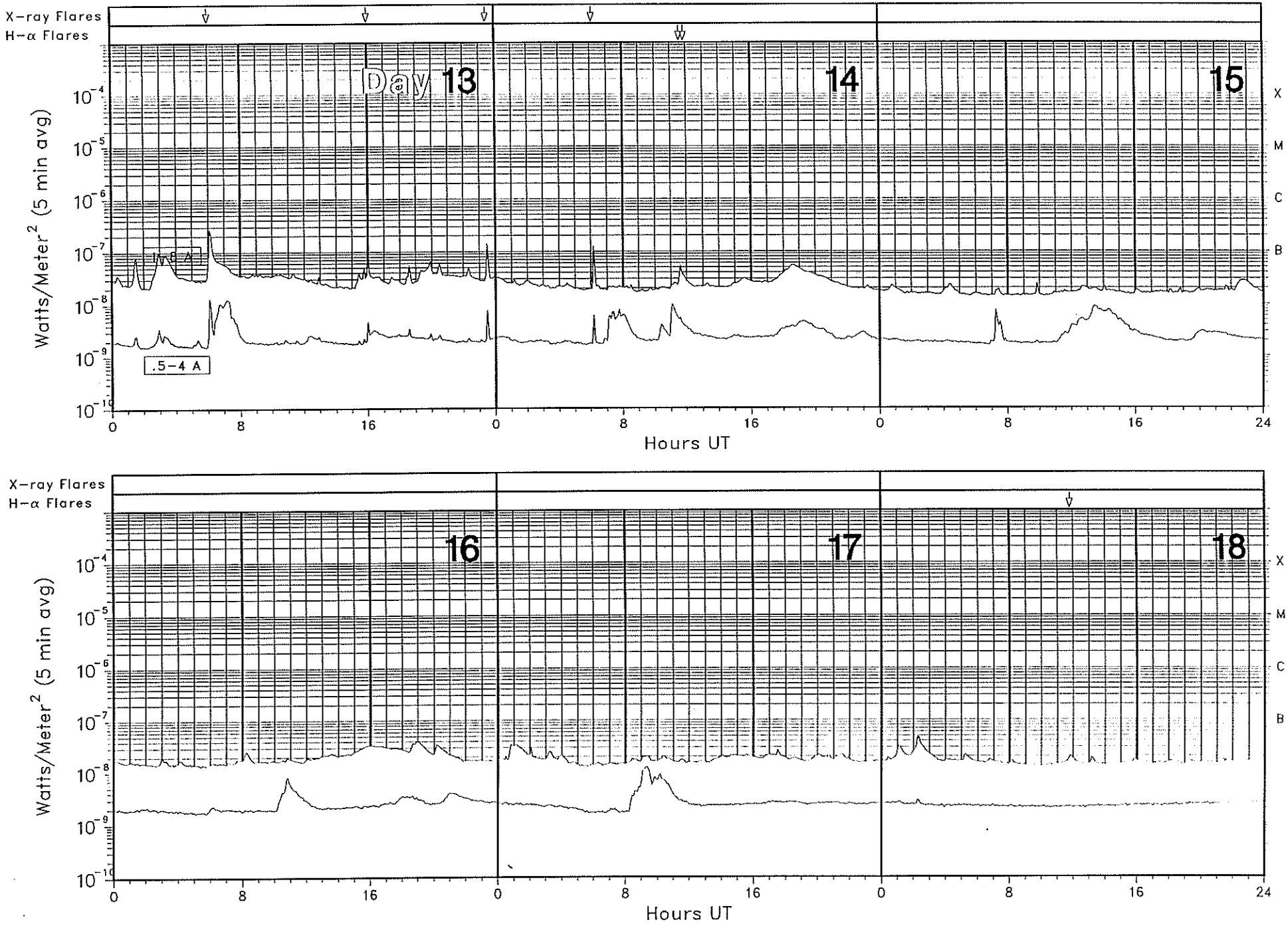
GOES-7 X-RAY DETECTOR

May 1996



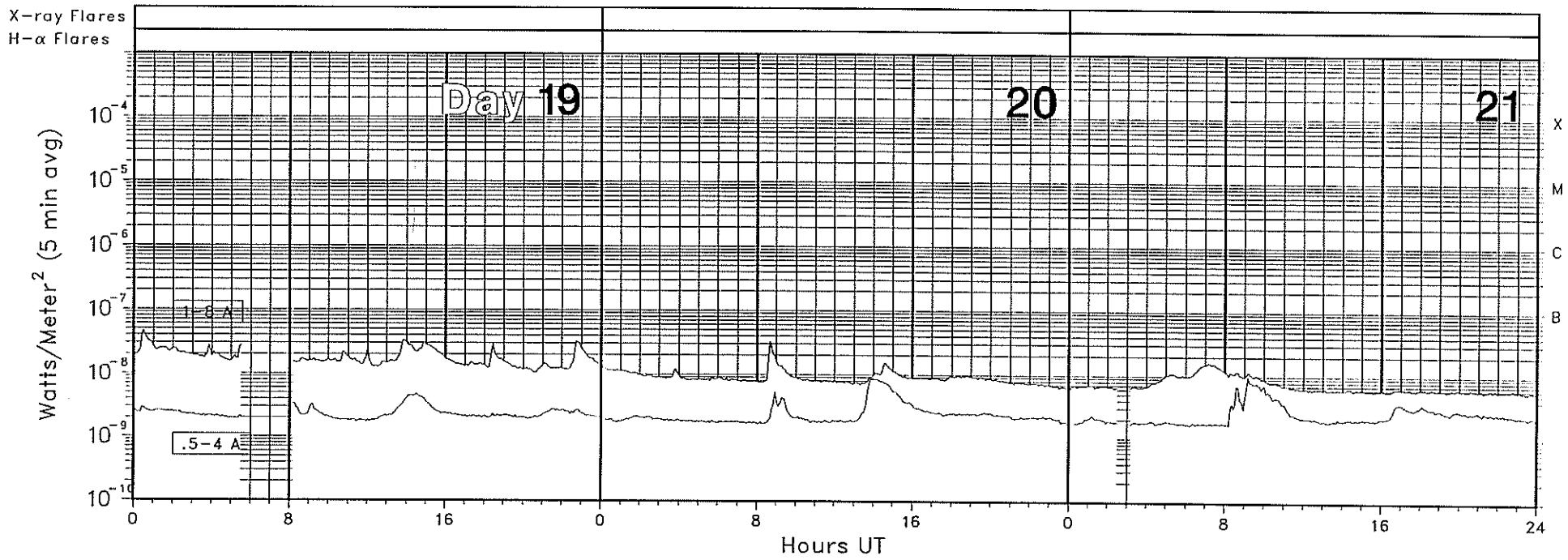
GOES-7 X-RAY DETECTOR

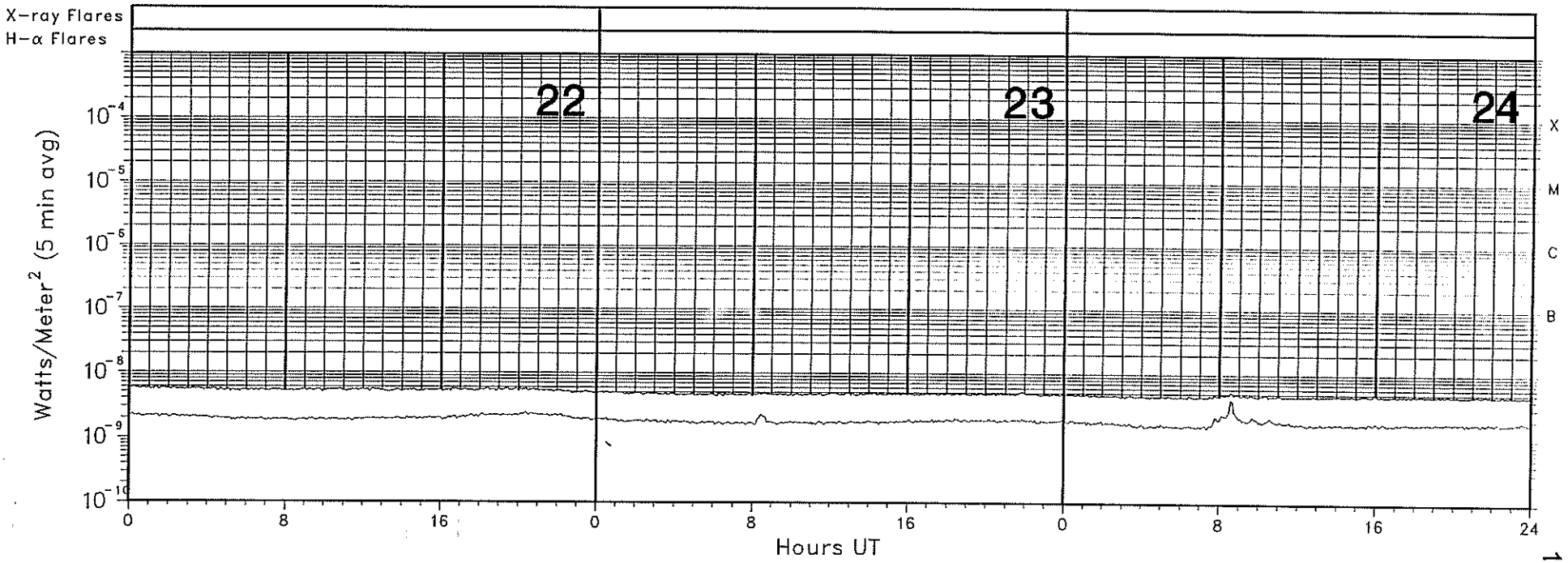
May 1996



GOES-7 X-RAY DETECTOR

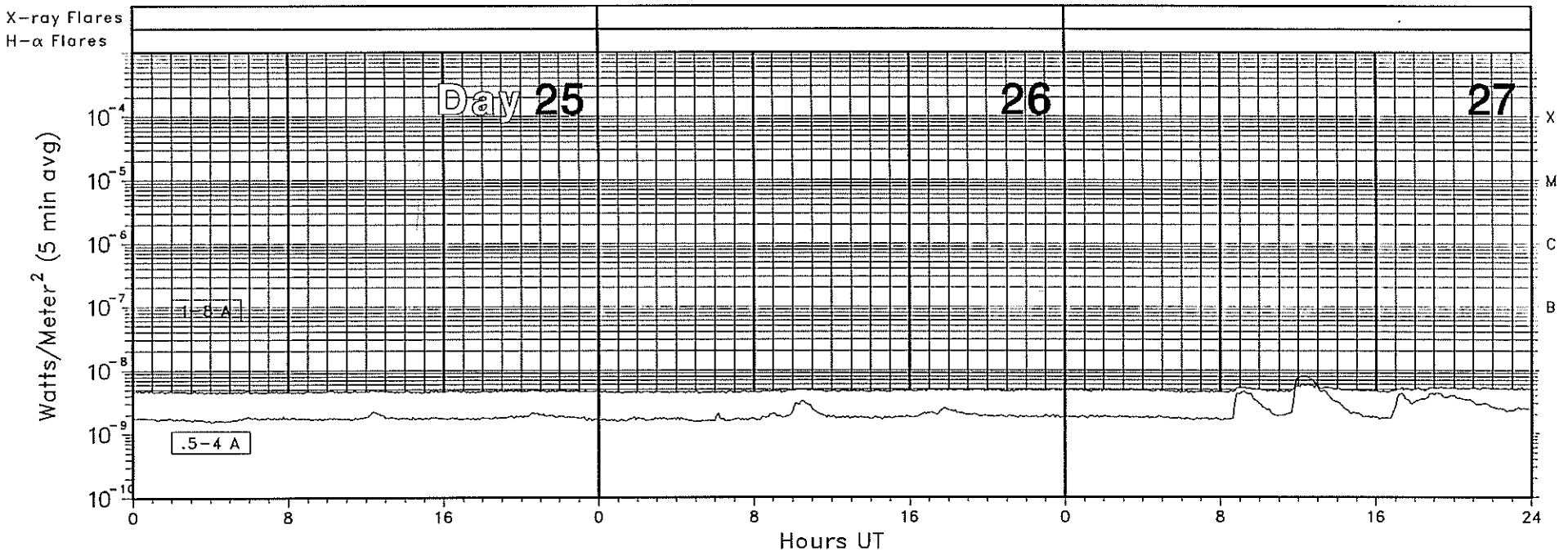
May 1996

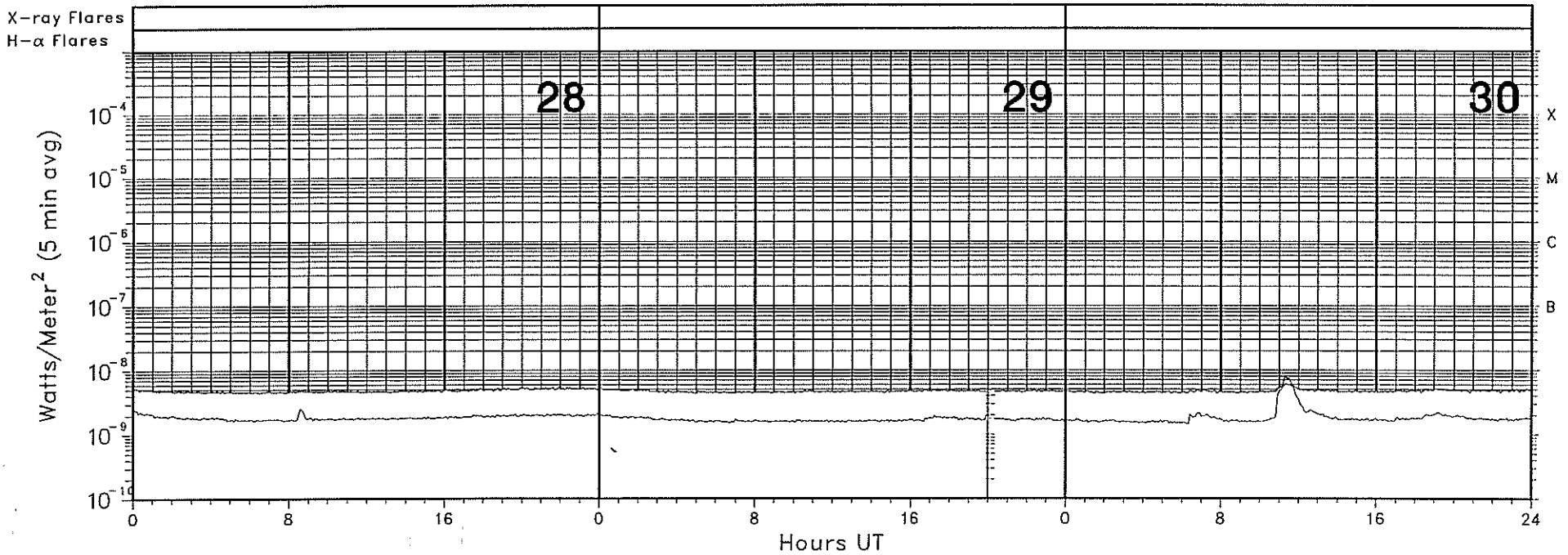




GOES-7 X-RAY DETECTOR

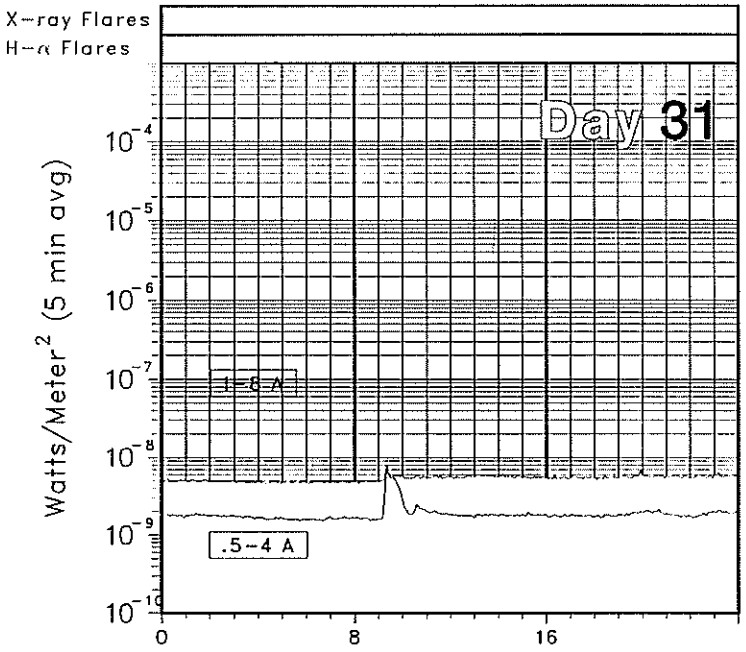
May 1996





GOES-7 X-RAY DETECTOR

May 1996



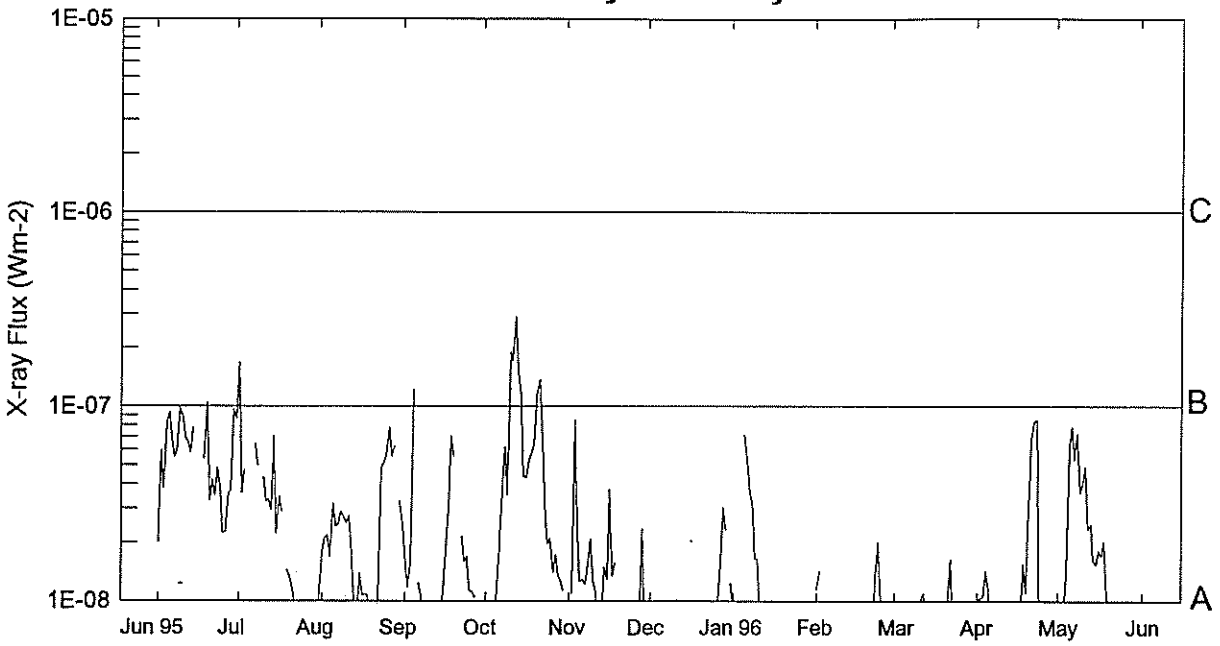
GOES S O L A R X-RAY F L A R E S
Preliminary Listing

May 1996

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp	Opt	Xray	NOAA/ USAF Region
05	0926	1029	1041					B9.4	
05	1822	1838	1853					C3.1	
05	2317	2322	2326					B2.5	
06	0719	0741	0751					B1.4	
06	0920	0937	1010					B4.2	
06	1321	1334	1348					B6.5	
06	1512	1521	1531					C2.5	
06	1616	1619	1621					B1.7	
06	1641	1646	1648					B2.6	
07	0006	0013	0022					B1.3	
07	0037	0040	0043					B1.3	
07	0059	0106	0111					B6.0	
07	0346	0419	0429					C2.3	
07	1521	1525	1530					B1.1	
07	1701	1702	1708	S07	E72	SF		B2.1	7962
07	2212	2216	2219					B1.2	
07	2300	2303	2306					B1.3	
07	2314	2317	2320					B1.3	
07	2327	2331	2333					B1.7	
08	1258	1306	1313					B2.0	
08	1517	1518	1522	S09	E60	SF		B6.2	7962
08	1549	1551	1557	S08	E58	SF		C1.0	7962
08	1640	1644	1650					B1.4	
08	1718	1727	1738					B1.5	
08	1755	1804	1811					B2.4	
08	2135	2145	2208	S08	E50	1F		C1.9	7962
08	2233	2234	2257	S09	E55	SF		B7.8	7962
09	1423	1436	1455					B3.1	
10	1239	1311	1409					B4.4	
10	1609	1613	1615					B3.5	
10	1819	1819	1831	S08	E32	SF		B2.8	7962
11	0410	0426	0434					B2.6	
11	0904	0907	0910					B1.0	
11	1617	1618	1624	S08	E28	SF		B1.3	7964
11	1648	1648	1701	S08	E16	SF		B2.1	7962
11	1812	1827	1840	S08	E19	SF		B8.2	7962
11	2108	2122	2140	S08	E16	SF		C1.4	7962
12	0017	0019	0025	S07	E14	SF		B1.1	7962
12	0048	0050	0054	S08	E14	SF		B1.4	7962
12	0123	0127	0131					B1.1	
12	0623	0627	0629					B2.0	
12	0638	0641	0643					B1.0	
12	0734	0737	0739					B1.0	
12	1639	1645	1654	S08	W00	SF		B1.8	7962
12	1928	1929	1938	S08	E03	SF		B9.1	7962
13	0601	0608	0615					B2.9	
13	1559	1602	1604					B1.3	
13	2328	2331	2334					B1.7	
14	0608	0612	0614					B1.8	

EDITOR's NOTE: Please note that whenever optical flares are given, the times given are times of the optical flares and not the times of the X-ray flares. These data are taken directly from the NOAA SEC "Preliminary Report and Forecast of Solar Geophysical Data" weekly report.

Preliminary GOES Satellite Daily X-Ray Background
May 95 - May 96



Day	Jun 95	Jul	Aug	Sep	Oct	Nov	Dec	Jan 96	Feb	Mar	Apr	May
1	---	A8.6	A1.5	A2.4	---	---	<A1.0	A1.0	---	<A1.0	<A1.0	<A1.0
2	A1.9	B1.6	A2.9	A1.6	<A1.0	---	---	<A1.0	A1.1	<A1.0	<A1.0	<A1.0
3	A5.9	A3.6	A2.7	A1.1	<A1.0	A .0	---	<A1.0	A1.4	<A1.0	A1.0	<A1.0
4	A3.8	A4.7	A2.4	A1.5	<A1.0	A8.5	<A1.0	---	---	<A1.0	A1.0	<A1.0
5	A8.2	---	A3.4	B1.2	<A1.0	A2.6	<A1.0	---	---	<A1.0	A1.4	A1.3
6	A9.3	---	A3.4	--	<A1.0	A1.2	<A1.0	A7.1	---	<A1.0	A1.1	A5.9
7	A6.7	---	A1.9	A1.2	A1.8	A1.2	<A1.0	A5.0	<A1.0	---	<A1.0	A7.8
8	A5.5	A6.4	A1.8	A1.0	A3.6	A1.2	<A1.0	A3.6	<A1.0	<A1.0	<A1.0	A5.3
9	A5.9	A4.9	A2.2	<A1.0	A6.2	A1.5	<A1.0	A3.1	<A1.0	<A1.0	<A1.0	A7.2
10	A9.8	---	A3.7	--	A3.5	A2.0	<A1.0	A1.6	<A1.0	<A1.0	<A1.0	A3.6
11	A8.8	A4.3	A3.0	--	B1.9	A1.2	<A1.0	A1.6	<A1.0	<A1.0	<A1.0	A4.0
12	A6.9	A3.2	A6.9	<A1.0	B1.7	A1.0	A1.0	<A1.0	<A1.0	A1.0	<A1.0	A4.9
13	A6.5	A3.3	B1.3	<A1.0	B2.9	<A1.0	<A1.0	<A1.0	<A1.0	A1.0	<A1.0	A2.3
14	A5.8	A2.9	A8.6	<A1.0	B1.5	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A2.4
15	A7.8	A7.0	A7.1	<A1.0	B1.1	A1.4	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A1.6
16	---	A2.2	A4.8	A1.0	A4.3	A1.2	<A1.0	---	<A1.0	<A1.0	<A1.0	A1.5
17	---	A3.4	A4.0	A1.7	A4.3	A3.7	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A1.8
18	---	A2.8	A4.9	A2.9	A5.3	A1.3	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A1.7
19	A5.4	---	A5.6	A7.0	A5.7	A1.5	---	<A1.0	<A1.0	<A1.0	A1.5	A2.0
20	B1.0	A1.4	A3.0	A5.4	A6.4	---	<A1.0	<A1.0	---	<A1.0	A1.1	A1.0
21	A3.2	A1.3	A2.0	--	B1.1	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A3.0	<A1.0
22	A4.2	A1.1	A1.0	--	B1.3	<A1.0	<A1.0	<A1.0	<A1.0	A1.0	A6.8	<A1.0
23	A3.4	<A1.0	<A1.0	A2.1	A6.4	<A1.0	---	<A1.0	<A1.0	A1.6	A8.3	<A1.0
24	A4.8	<A1.0	A1.1	A1.5	A3.1	<A1.0	<A1.0	<A1.0	A1.3	<A1.0	A8.5	<A1.0
25	A3.6	<A1.0	<A1.0	A1.6	A1.9	<A1.0	<A1.0	<A1.0	A2.0	<A1.0	A1.0	<A1.0
26	A2.2	<A1.0	<A1.0	A1.1	A2.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
27	A2.2	<A1.0	<A1.0	A1.1	A1.4	<A1.0	<A1.0	<A1.0	---	<A1.0	<A1.0	<A1.0
28	A3.5	<A1.0	A1.2	A1.0	A1.7	<A1.0	A1.3	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
29	A3.7	<A1.0	B1.7	--	A1.3	A2.3	A3.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
30	A9.6	---	B4.3	--	A1.2	<A1.0	A2.2	<A1.0	---	<A1.0	<A1.0	<A1.0
31		<A1.0	B1.9		A1.1		---	---		<A1.0		<A1.0

NOTE: Background levels below B1.0 are unreliable.

ACTIVE PROMINENCES AND FILAMENTS

MAY 1996

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
05	ASR	0535E	0740D	S10	E87	05	11.8			7	7	E	SVTO		
05	ASR	0810E	1020D	S10	E86	05	11.8			9	9	E	SVTO		
05	ADF	0810E	1647	N40	W04	05	5.0	2	23	6	6	E	SVTO		
05	ASR	1121E	1315D	S15	E90	05	12.3			9	9	E	SVTO		
05	ASR	1530E	1647	S06	E90	05	12.4			9	8	E	SVTO		
05	ASR	1613E	2128	S08	E90	05	12.4			7	9	E	RAMY		
05	AFS	1720E	2128	N13	E15	05	6.8		02	9	9	E	RAMY	7961	
05	AFS	1753E	0223	N12	E16	05	6.9		03	9	9	E	PALE		
05	ASR	1753E	0223	S10	E85	05	12.1			9	9	E	PALE		
05	AFS	1926E	0142	N12	E15	05	6.9		02	9	9	E	HOLL	7961	
05	ASR	1926E	0142	S11	W90	04	29.1			9	8	E	HOLL		
06	AFS	0010E	0946	N15	E15	05	7.1		02	9	9	E	LEAR	7961	
06	ASR	0800E	0946	S11	E90	05	13.1			9	9	E	LEAR		
06	ASR	1035E	2149	S07	E90	05	13.2			9	9	E	RAMY	7962	
06	AFS	1137	2149	N12	E05	05	6.9		02	9	9	E	RAMY	7961	
06	AFS	1247E	0133	N12	E07	05	7.0		02	7	6	E	HOLL	7961	
06	ASR	1300E	0133	S09	E90	05	13.3			9	9	E	HOLL	7962	
06	ASR	1531E	1658	S07	E90	05	13.4			9	9	E	SVTO		
06	AFS	1535E	1658	N11	E04	05	6.9		02	7	7	E	SVTO	7961	
07	ASR	0400E	0900	S11	E90	05	13.9			6	7	E	LEAR	7962	
07	ASR	0531E	1115D	S08	E90	05	14.0			9	9	E	SVTO	7962	
07	AFS	0932E	1643	S07	E75	05	13.0		02	9	9	E	SVTO	7962	
07	ASR	0937E	1115D	S05	E90	05	14.1			9	9	E	SVTO	7962	
07	ASR	1124E	1520	S10	E90	05	14.2			9	9	E	RAMY		
07	AFS	1220E	1643	N12	W09	05	6.8		01	9	9	E	SVTO	7961	
07	AFS	1307E	2332	N12	W09	05	6.9		01	5	5	E	HOLL	7961	
07	ADF	1335E	1643	N10	W07	05	7.0	1	03	9	9	E	SVTO	7961	
07	ADF	1340E	1643	S09	E74	05	13.1	1	04	9	9	E	SVTO	7962	
07	DSD	1619E	1807D	S11	E72	05	13.1		02	9	9	E	HOLL	7962	
07	ADF	1800E	1940	S08	E66	05	12.7	1	05	9	9	E	HOLL	7962	
08	ADF	0510E	1649	S10	E43	05	11.4	1	06	9	9	E	SVTO		
08	ADF	0512E	1649	S08	E64	05	13.0	1	04	9	9	E	SVTO	7962	
08	AFS	0515E	1649	S07	E65	05	13.1		01	7	6	E	SVTO	7962	
08	AFS	0710E	1400D	N13	W18	05	6.9		02	9	9	E	SVTO	7961	
08	DSF	1018U	1035U	N14	W14	05	7.4	2	12	0	0	E	SVTO	7961	
08	ADF	1320E	0127	S10	E59	05	13.0	1	05	9	9	E	HOLL	7962	
08	DSD	1320E	0127	S13	E62	05	13.2		02	7	7	E	HOLL	7962	
08	ADF	1405E	1649	S09	E59	05	13.0	1	06	9	9	E	SVTO	7962	
08	ADF	1420E	1525D	N20	W09	05	7.9	1	02	9	9	E	SVTO	7961	
08	ADF	1520E	0127	S12	E39	05	11.6	1	09	9	9	E	HOLL		
08	ADF	1805E	0127	S06	E64	05	13.5	1	10	9	8	E	HOLL	7962	
08	ADF	2048	2143	S10	E55	05	13.0	3	02	0	0	E	HOLL	7962	Flare Associated
09	AFS	0425E	1504	S07	E51	05	13.0		02	9	9	E	SVTO	7962	
09	ADF	0425E	1504	S07	E60	05	13.7	1	07	9	9	E	SVTO	7962	
09	ADF	0425E	1504	S08	E50	05	12.9	1	06	9	9	E	SVTO	7962	
09	ADF	0920U	0940	S06	E57	05	13.7	1		9	9	V	KHAR		
09	ADF	1000	1006	S01	E54	05	13.5	1			9	V	KHAR		
09	ADF	1016	1140U	S09	E62	05	14.1	1			9	V	KHAR		
09	AFS	1201E	1240D	N13	W34	05	6.9		02	6	6	E	SVTO	7961	
09	ADF	1325E	0111	S05	E53	05	13.5	1	05	9	9	E	HOLL	7962	
09	ADF	1325E	0111	S07	E45	05	12.9	1	03	9	9	E	HOLL	7962	
09	AFS	1325E	0111	S07	E46	05	13.0		01	9	7	E	HOLL	7962	
09	ADF	1651E	0423	S10	E36	05	12.4	1	05	9	9	E	PALE	7962	
09	ADF	1710E	2214	S07	E38	05	12.6	1	07	8	9	E	RAMY	7962	
09	AFS	1710E	2214	S08	E45	05	13.1		01	6	7	E	RAMY	7962	
09	DSD	1748	1920	S07	E44	05	13.0		02	9	9	E	PALE	7962	
09	ADF	1910E	0423	S08	E45	05	13.2	1	05	9	9	E	PALE	7962	
10	AFS	0110E	0430	S08	E39	05	13.0		02	9	9	E	LEAR	7962	
10	ADF	0110E	0930	S07	E45	05	13.4		04	9	9	E	LEAR	7962	
10	ADF	0439E	1717	S07	E40	05	13.2	1	06	9	9	E	SVTO	7962	
10	ADF	0439E	1717	S09	E48	05	13.8	1	08	9	9	E	SVTO	7962	
10	AFS	0745E	1717	N25	E49	05	14.1		01	9	9	E	SVTO		
10	AFS	1109E	2220	N24	E48	05	14.2		01	9	9	E	RAMY	7963	
10	AFS	1110E	2220	S08	E34	05	13.0		01	9	9	E	RAMY	7962	
10	AFS	1240E	0146	N07	E34	05	13.1		02	9	9	E	HOLL	7962	

ACTIVE PROMINENCES AND FILAMENTS

MAY 1996

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
10	AFS	1240E	0146	N24	E47	05	14.1		01	9	9	E	HOLL	7963	
10	ADF	1240E	0146	S10	E35	05	13.1		03	6	8	E	HOLL	7962	
10	AFS	1240E	1717	S07	E34	05	13.1		02	9	9	E	SVTO	7962	
10	ADF	1320E	2220	S07	E32	05	12.9	1	05	9	9	E	RAMY	7962	
11	AFS	1040E	1806	S07	E21	05	13.0		02	9	9	E	RAMY	7962	
11	DSD	1112E	1806	S08	E17	05	12.7		01	9	9	E	RAMY	7962	
11	ADF	1227E	1806	S08	E23	05	13.2	1	06	8	9	E	RAMY	7962	
11	ADF	1335E	1806	S08	E21	05	13.1	1	05	8	9	E	RAMY	7962	
11	AFS	1352	0132	S07	E19	05	13.0		02	9	9	E	HOLL	7962	
11	DSD	1647	1710	S08	E15	05	12.8		03	9	9	E	PALE	7962	
11	DSD	1647	1710	S08	E15	05	12.8		03	9	9	E	PALE	7962	
11	DSF	1647	1710	S08	E15	05	12.8		03	9	9	E	PALE	7962	
11	DSD	1719	2200D	S07	E14	05	12.8		02	9	9	E	PALE	7962	
11	DSD	1719	2200D	S07	E14	05	12.8		02	9	9	E	PALE	7962	
11	DSD	1735E	1806	S05	E12	05	12.6		01	9	9	E	RAMY	7962	
11	DSD	1819	1854	S08	E14	05	12.8		02	9	9	E	PALE	7962	
11	DSD	1819	1854	S08	E14	05	12.8		02	9	9	E	PALE	7962	
12	ADF	0053E	0229	S08	E14	05	13.1	1	04	9	9	E	PALE	7962	
12	ADF	0715E	1555	S07	E05	05	12.7	1	02	9	9	E	SVTO	7962	
12	DSD	0800E	0902D	S07	E06	05	12.8		03	9	9	E	SVTO	7962	
12	ADF	0800E	1555	S10	E22	05	14.0	1	09	9	9	E	SVTO	7964	
12	ADF	0849E	1555	S07	E11	05	13.2	1	03	9	9	E	SVTO	7962	
12	DSD	1040E	1050	S05	E03	05	12.7		02	9	9	E	SVTO	7962	
12	ADF	1209E	2122	S08	E08	05	13.1	1	05	9	9	E	RAMY	7962	
12	DSD	1218E	1558D	S07	E03	05	12.7		01	9	9	E	RAMY	7962	
12	ADF	1300E	0135	S09	E02	05	12.7		03	9	9	E	HOLL	7962	
12	AFS	1334E	2122	S08	E07	05	13.1		01	6	8	E	RAMY	7962	
12	DSD	1635E	1703D	S06	W01	05	12.6		04	9	9	E	RAMY	7962	
12	DSD	1640	1702	S10	W04	05	12.4		06	9	9	E	HOLL	7962	Flare Associated
12	DSD	1642E	1659D	S06	E14	05	13.7		03	9	9	E	PALE	7962	
12	ADF	1702E	2046D	S07	E05	05	13.1	1	03	9	9	E	RAMY	7962	
13	AFS	0315E	0925	S04	W05	05	12.8		02	9	9	E	LEAR	7962	
13	DSD	1059E	1418D	S06	W08	05	12.8		01	9	9	E	RAMY	7962	
13	ADF	1258E	2004	S09	W07	05	13.0	1	06	9	9	E	RAMY	7962	
13	ADF	1345E	1700	S08	W08	05	13.0	1	07	9	9	E	SVTO	7962	
13	DSD	1429	0109	S04	W13	05	12.6		02	9	8	E	HOLL	7962	
13	ADF	1820E	2022D	S08	W14	05	12.7	1	03	9	9	E	PALE	7962	
13	ADF	2115E	0109	S09	W13	05	12.9	1	03	9	9	E	HOLL	7962	
13	DSF	2357U	1355U	S46	E51	05	18.2	2	15	0	0	E	HOLL		
14	ADF	1020E	2211	S08	W20	05	12.9	1	04	9	9	E	RAMY	7962	
14	ADF	1134	1208D	S11	W15	05	13.3	1		9		V	KHAR		
14	DSD	1138	1143	S06	W17	05	13.2	1		9		V	KHAR		
14	ADF	1152	1208D	S10	W17	05	13.2	1			9	V	KHAR		
14	ADF	1223E	1737	S08	W19	05	13.1	2	09	7	8	E	SVTO	7962	
14	AFS	1418E	2211	S08	W22	05	12.9		01	9	9	E	RAMY	7962	
14	DSD	1440	1514	S05	W28	05	12.5		04	0	0	E	HOLL	7962	
14	DSD	1818E	2211	S04	W24	05	13.0		01	9	9	E	RAMY	7962	
14	AFS	1940E	0148	S07	W25	05	12.9		01	9	9	E	HOLL	7962	
15	AFS	0909E	0957	S04	W36	05	12.7		01	9	9	E	SVTO	7962	
15	DSD	1032E	1635D	S04	W47	05	11.9		01	9	9	E	RAMY	7962	
15	DSD	1032E	1927D	S05	W46	05	12.0		01	9	9	E	RAMY	7962	
15	DSD	1110E	1843	S09	W39	05	12.5		01	9	9	E	RAMY	7962	
15	DSD	1305E	1610D	S04	W41	05	12.5		01	9	9	E	HOLL	7962	
15	DSD	1312E	1843	S06	W36	05	12.8		01	9	9	E	RAMY	7962	
15	DSD	1721E	0240D	S04	E41	05	18.8		02	9	9	E	PALE	7962	
15	DSD	1900E	1956D	S07	W51	05	12.0		04	9	9	E	RAMY	7962	
16	DSD	0731E	1433D	S03	W49	05	12.6		02	9	9	E	SVTO	7962	
16	DSD	1032E	1635D	S04	W47	05	12.9		01	9	9	E	RAMY	7962	
16	DSD	1032E	1927D	S05	W46	05	13.0		01	9	9	E	RAMY	7962	
16	DSD	1042E	1148D	S05	W45	05	13.1		01	9	9	E	SVTO	7962	
16	DSD	1900E	1956D	S07	W51	05	13.0		04	9	9	E	RAMY	7962	
17	AFS	0837E	1045D	S32	E58	05	21.9		01	9	9	E	SVTO		
17	AFS	1100E	2159	S30	E52	05	21.5		01	9	9	E	RAMY		

ACTIVE PROMINENCES AND FILAMENTS

MAY 1996

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
17	DSD	1456	1525	S05	W64	05	12.8		04	9	9	E	HOLL	7962	
18	DSD	0050E	0059D	S06	W64	05	13.2		02	9	9	E	PALE	7962	
18	ASR	0510E	0553D	S09	W90	05	11.5			9	9	E	SVTO		
18	ASR	0739E	0920D	S12	W90	05	11.5			9	9	E	SVTO		
18	AFS	1613E	1733D	S31	E41	05	21.9		02	3	4	E	RAMY		
19	ASR	0050E	0405	S04	W90	05	12.3			9	9	E	LEAR	7962	
19	ASR	1241E	1700D	S03	W90	05	12.8			8	9	E	RAMY	7962	
19	APR	1424E	2020D	S08	W90	05	12.8	1		7	9	E	RAMY	7962	
19	ASR	1610E	1840D	S05	W90	05	12.9			6	8	E	HOLL	7962	
20	DSD	1149E	1435D	S32	E18	05	21.9		01	9	8	E	RAMY		
20	DSD	1209E	1345D	S27	E59	05	25.1		01	9	9	E	RAMY		
21	DSD	0740E	0830D	S33	E05	05	21.7		01	8	8	E	LEAR		
21	ADF	1015E	1430D	N16	E12	05	22.3	1	15	9	9	E	RAMY		
22	DSF	1014U	1222	N19	E07	05	23.0	2	12	4	4	E	RAMY		
22	DSF	2200U	1251U	N13	W17	05	21.6	2	09	0	0	E	HOLL		
22	DSF	2313U	0030U	N07	W17	05	21.7	2	07	3	2	E	LEAR		
23	DSD	1231E	1630D	S12	E65	05	28.4		01	5	5	E	RAMY	7966	
23	ADF	1308	2044D	S26	E30	05	25.9	1	06	6	5	E	RAMY		
23	ASR	1404	1552D	S38	E90	05	30.9			6	7	E	RAMY		
23	DSF	2313U	0030U	N07	W17	05	22.7	2	07	3	2	E	LEAR		
24	ADF	1356E	2200	S29	E05	05	25.0	1	07	8	9	E	RAMY		
29	BSL	1115U	1205	S32	E90	06	5.3	1		9	9	V	KHAR		
31	AFS	1030E	1828	N08	W04	05	31.1		01	7	7	E	RAMY		
31	AFS	1030E	1828	N35	E35	06	3.2		01	8	9	E	RAMY	7967	
31	DSD	1212E	1332D	N04	E05	05	31.9		01	5	8	E	RAMY		
31	AFS	1803E	0000	N03	E00	05	31.7		01	4	5	E	HOLL		
31	DSD	2110E	2224	N36	E44	06	4.4		01	8	9	E	HOLL		

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

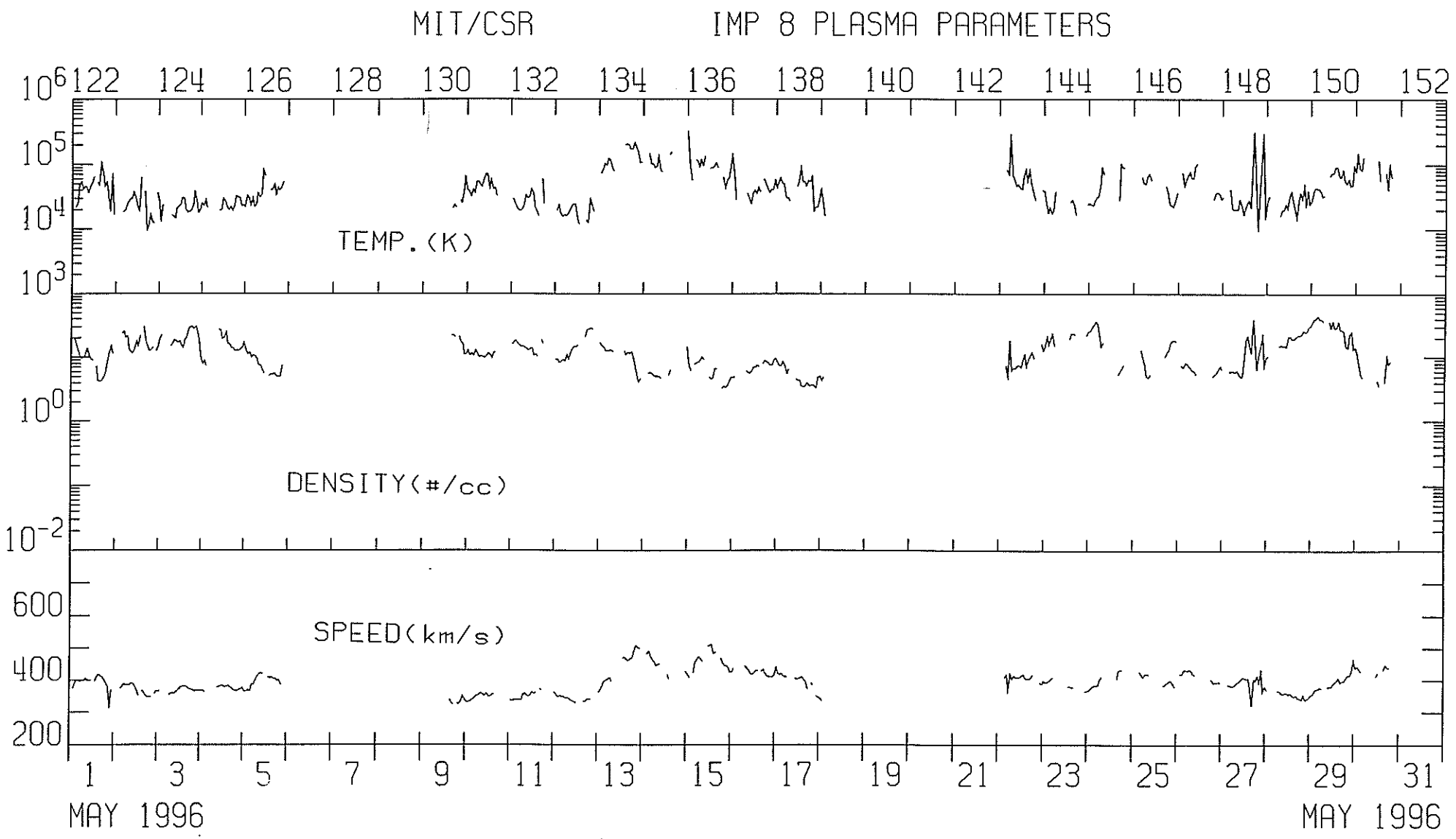
The EXTENT field for limb events is the radial extent above the limb in hundredths of solar radius. For disk events this field contains the heliographic extent in whole degrees.

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.

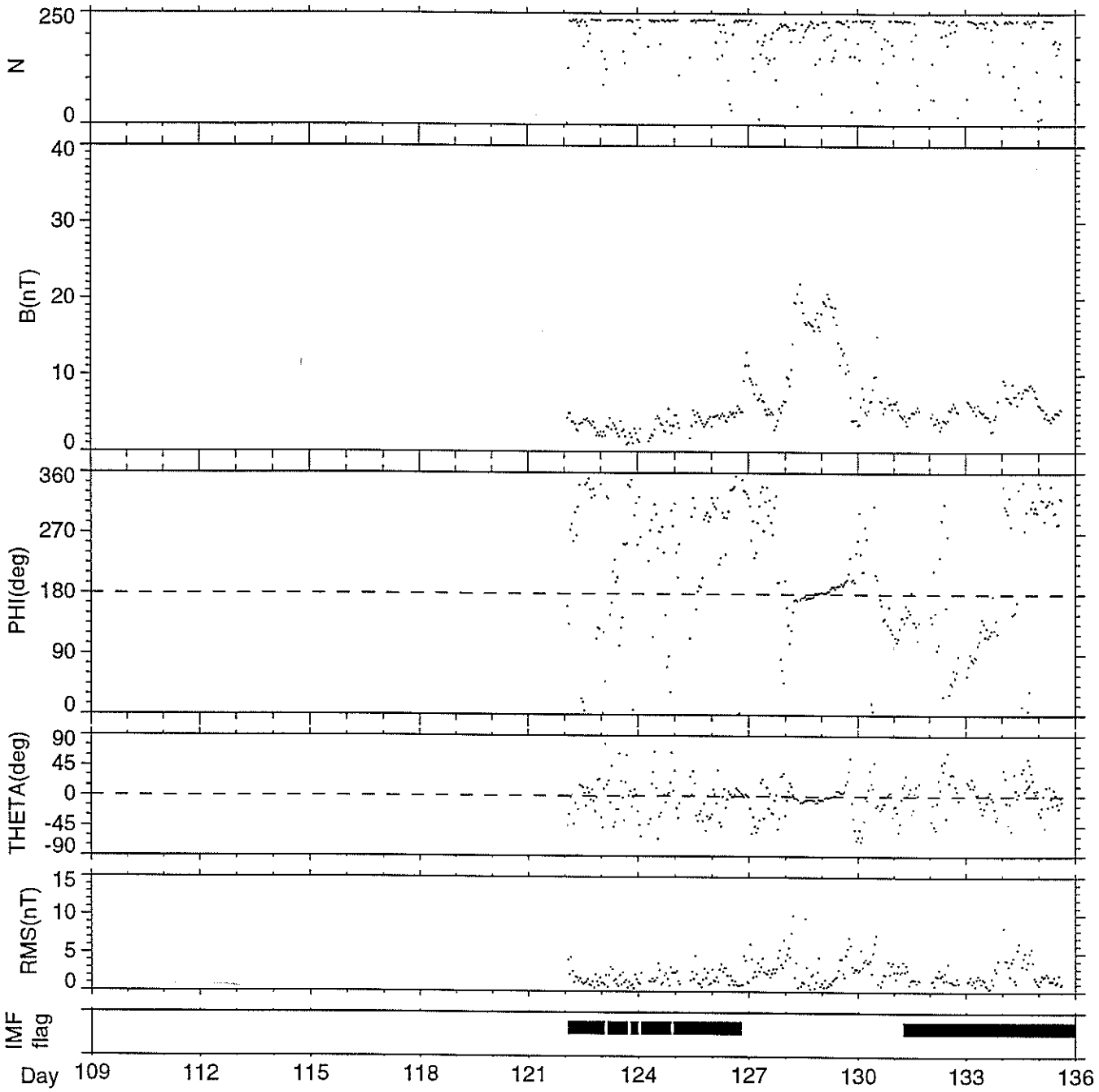
ABST = Abastumani
ATHN = Athens
BUCA = Bucharest
CATA = Catania
HOLL = Holloman
KHAR = Kharkov
LEAR = Learmonth
PALE = Palehua
RAMY = Ramey
SVTO = San Vito
VORO = Voroshilov
VALA = Valasske Mezirici

IMP 8 SOLAR WIND PLASMA
MAY 1996



IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages (c) DOY 122 - 136 May 1 1996 - May 15 1996

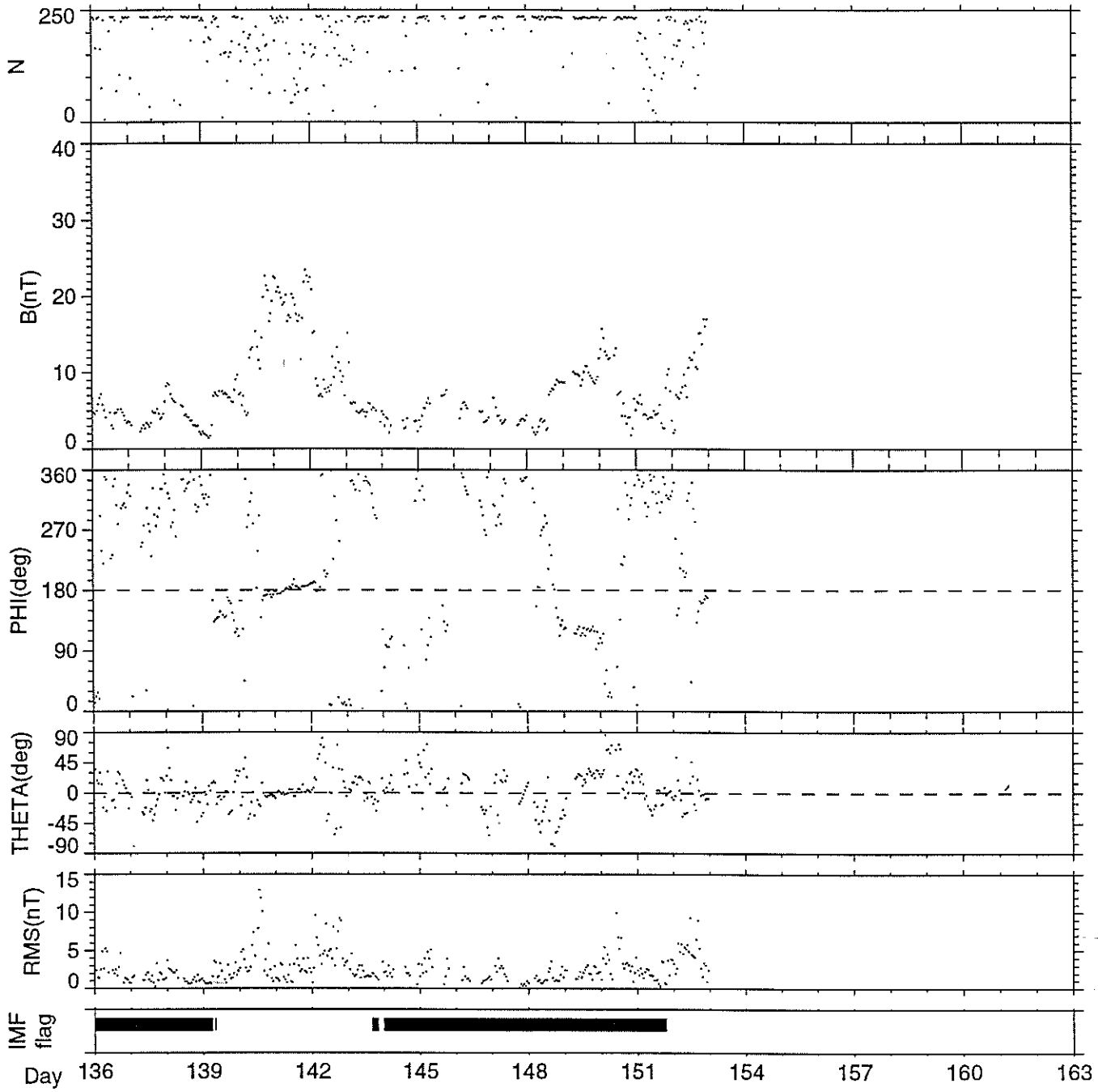


Generation Date : Mon Oct 21 08:22:14 1996

NOTE: The IMF "flag" (black boxes at the bottom of the plots) indicates where the interplanetary magnetic field regions are according to a dynamic model of the location of the bow shock. At all other times IMP-8 is in the magnetosphere.

IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages (c) DOY 136 - 152 May 15 1996 - May 31 1996



Generation Date : Mon Oct 21 08:22:57 1996

NOTE: The IMF "flag" (black boxes at the bottom of the plots) indicates where the interplanetary magnetic field regions are according to a dynamic model of the location of the bow shock. At all other times IMP-8 is in the magnetosphere.

WORLD DATA CENTER A
FOR
SOLAR-TERRESTRIAL PHYSICS

The ICSU Panel on WDCs has recommended that it would be appropriate courtesy to acknowledge in publications that data were obtained from the originating station or investigator through the intermediary of the WDCs. The following statement is suggested:

"Data used in this study were provided by WDC-A for Solar-Terrestrial Physics, NOAA E/GC2, 325 Broadway, Boulder Colorado 80303, USA."