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NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE

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Data for March 1996

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Number 625

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CONTENTS

PART I (PROMPT REPORTS)	Page
DETAILED INDEX FOR 1996	2
DATA FOR AUGUST 1996	3- 33
DATA FOR JULY 1996	35-111

PART II (COMPREHENSIVE REPORTS)	Page
DETAILED INDEX FOR 1996	2
DATA FOR MARCH 1996	3-21

DETAILED INDEX OF OBSERVATIONS PUBLISHED IN SOLAR-GEOPHYSICAL DATA

CODE	KIND OF OBSERVATION	JAN 96	FEB	MAR	APR	MAY	JUN	JUL	AUG
A. SOLAR AND INTERPLANETARY									
A.1	Sunspot Drawings	619A 45	620A 41	621A 39	622A 39	623A 37	624A 41	625A 41	
A.2aa	International Provisional Sunspot Numbers	618A 27	619A 26	620A 28	621A 25	622A 25	623A 23	624A 25	625A 25
A.2c	American Sunspot Numbers	618A 27	619A 26	620A 28	621A 25	622A 25	623A 23	624A 25	625A 25
A.3a	Mt. Wilson Magnetograms	619A 45	620A 41	621A 39	622A 39	623A 37	624A 41	625A 41	
A.3b	Sunspot Mag Class and Regions	619A 92	620A 85	621A 86	622A 85	623A 84	624A 89	625A 88	
A.3c	Kitt Peak Magnetograms	619A 45	620A 41	621A 39	622A 39	623A 37	624A 41	625A 41	
A.3d	Mean Solar Magnetic Field (Stanford)	618A 33	619A 31	620A 33	621A 31	622A 31	623A 27	624A 33	625A 31
A.3e	Stanford Magnetograms	619A 45	620A 41	621A 39	622A 39	623A 37	624A 41	625A 41	
A.4	H-alpha Filtergrams	619A 45	620A 41	621A 39	622A 39	623A 37	624A 41	625A 41	
A.6c	Stanford Solar Mag Field Synoptic Maps	619A 40	620A 36	621A 34	622A 34	623A 32	624A 36	625A 36	
A.6d	Kitt Peak Solar Mag Field Synoptic Maps	619A 44	620A 40	621A 38	622A 38	623A 36	624A 40	625A 40	
A.6f	Active Prominences and Filaments	623B 18	624B 16	625B 17					
A.6g	Sac Peak Coronal Line Synoptic Maps	619A 42	620A 38	621A 36	622A 36	623A 34	624A 38	625A 38	
A.6h	Photometric Observations (San Fernando)	Jan-Jul 95 in 615B 32; Aug 95-Jul 96 in 624B 24							
A.7h	Coronal Line Emission (Sac Peak)	619A 45	620A 41	621A 39	622A 39	623A 37	624A 41	625A 41	
A.7j	Coronal Holes (Sonora, Mexico)	618A 35	619A 33	620A111					
A.8aa	2800 MHz- Solar Flux (Penticton)	618A 27	619A 26	620A 28	621A 25	622A 25	623A 23	624A 27	625A 27
A.8ac	2800 MHz- Adj. Solar Flux (Penticton)	618A 27	619A 26	620A 28	621A 25	622A 25	623A 23	624A 27	625A 27
A.8g	Adjusted Daily Solar Fluxes (Learmonth)	618A 27	619A 26	620A 28	621A 25	622A 25	623A 23	624A 27	625A 27
A.10g	Nancay Radioheliograph - 164 MHz								
A.11g	Solar X-ray GOES (graphs/event table)	623B 10	624B 9	625B 9					
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	Oct 91-Sep 94 in 607B 46							
A.11n	Solar YOHKOH Soft X-ray Images	619A 76	620A 70	621A 70	622A 69	623A 68	624A 71	625A 72	
A.12g	Solar Particles (GOES-7)	618A 4	619A 4	620A 4	621A 4	622A 4	623A 4	624A 4	625A 4
A.12h	Interplanetary Particles (SAMPEX)	Jan-Dec 94 in 618B 30; Jan-Jun 95 in 620B 36							
A.13e	Solar Plasma (IMP-8)	623B 21	624B 19						
A.16c	ERBS, NOAA-9 & -10 Solar Irradiance	1989 in 551B 78; ERBS Oct 84-Dec 95 in 620B 50							
A.16d	UARS Solar Irradiance	1991-1993 in 608B 40							
A.17c	Inferred Interplanetary Mag Field	1984-1988 data in 542A168; 1989-Jan 94 in 611A118							
A.17	IMP-8 Interplanetary Mag Field	623B 22	624B 20	625B 20					
C. SOLAR FLARE-ASSOCIATED EVENTS									
C.1a	H-alpha Flares	618A 30	619A 29	620A 31	621A 28	622A 28	623A 26	624A 28	625A 28
C.1ba	H-alpha Flare Groups	623B 4	624B 4	625B 4					
C.1d	Flare Patrol Observations	623B 6	624B 6	625A 6					
C.3	Radio Bursts Fixed Frequency	623B 8	624B 8	625A 8					
C.3	Radio Bursts Fixed Frequency Selected				621A 29			624A 31	625A 30
C.4	Radio Bursts Spectral	619A 96	620A 88	621A 90	622A 87	623A 87	624A 94	625A 91	
C.6	Sudden Ionospheric Disturbances	619A 95	620A 87	621A 89	622A 86	623A 86	624A 93	625A 89	
D. GEOMAGNETIC EVENTS									
D.1a	Geomagnetic Indices	619A108	620A100	621A102	622A 99	623A101	624A106	625A103	
D.1ba	27-day Chart of Kp Indices	619A110	620A102	621A104	622A101	623A103	624A108	625A105	
D.1cb	Monthly Mean aa Indices	619A111	620A103	621A105	622A102	623A104	624A109	625A106	
D.1d	Principal Magnetic Storms	619A115	620A106	621A108	622A106	623A108	624A113	625A110	
D.1f	Sudden Commencements/Flare Effects	619A116	620A107	621A109	622A107	623A109	624A114	625A111	
D.1g	Equatorial Indices Dst	620A110	622A110	622A111	622A105	623A107	624A112	625A109	
D.1i	Polar Cap (PC) Index	619A114	620A105	621A107	622A104	623A106	624A111	625A108	
F. COSMIC RAYS									
F.1b	Cosmic Ray Neutron Cts (Climax)	619A100	620A 92	621A 94	622A 91	623A100	624A 98	625A 98	
F.1h	Cosmic Ray Neutron Cts (Thule)	619A100	620A 92	621A 94	622A 91	623A100	624A 98	625A 98	
F.1i	Cosmic Ray Neutron Cts (Kiel)								
F.1j	Cosmic Ray Neutron Cts (Tokyo)								
F.1n	Cosmic Ray Neutron Cts (Beijing)	619A100	620A 92	621A 94	622A 91	623A100	624A 98	625A 98	
F.1b	Cosmic Ray Neutron Cts (Haleakala)	619A100	620A 92	621A 94	622A 91	623A100	624A 98	625A 98	
F.1o	Cosmic Ray Neutron Cts (Moscow)	619A100	620A 92	621A 94	622A 91	623A100	624A 98	625A 98	
F.1p	Cosmic Ray Neutron Cts (Calgary)	619A100	620A 92	621A 94	622A 91	623A100	624A 98	625A 98	
H. MISCELLANEOUS									
H.60	IUWDS Alert Periods	618A 20	619A 19	620A 20	621A 19	622A 20	623A 19	624A 20	625A 20

The entry "619A 45" under Jan 96, for example, means that the sunspot drawings for Jan 1996 appear in SOLAR-GEOPHYSICAL DATA No. 619, Part I, and that they begin on page 45. "A" denotes Part I and "B", Part II. Blanks indicate data not yet received and dashes mark unavailable data.

CONTENTS

Comprehensive Reports

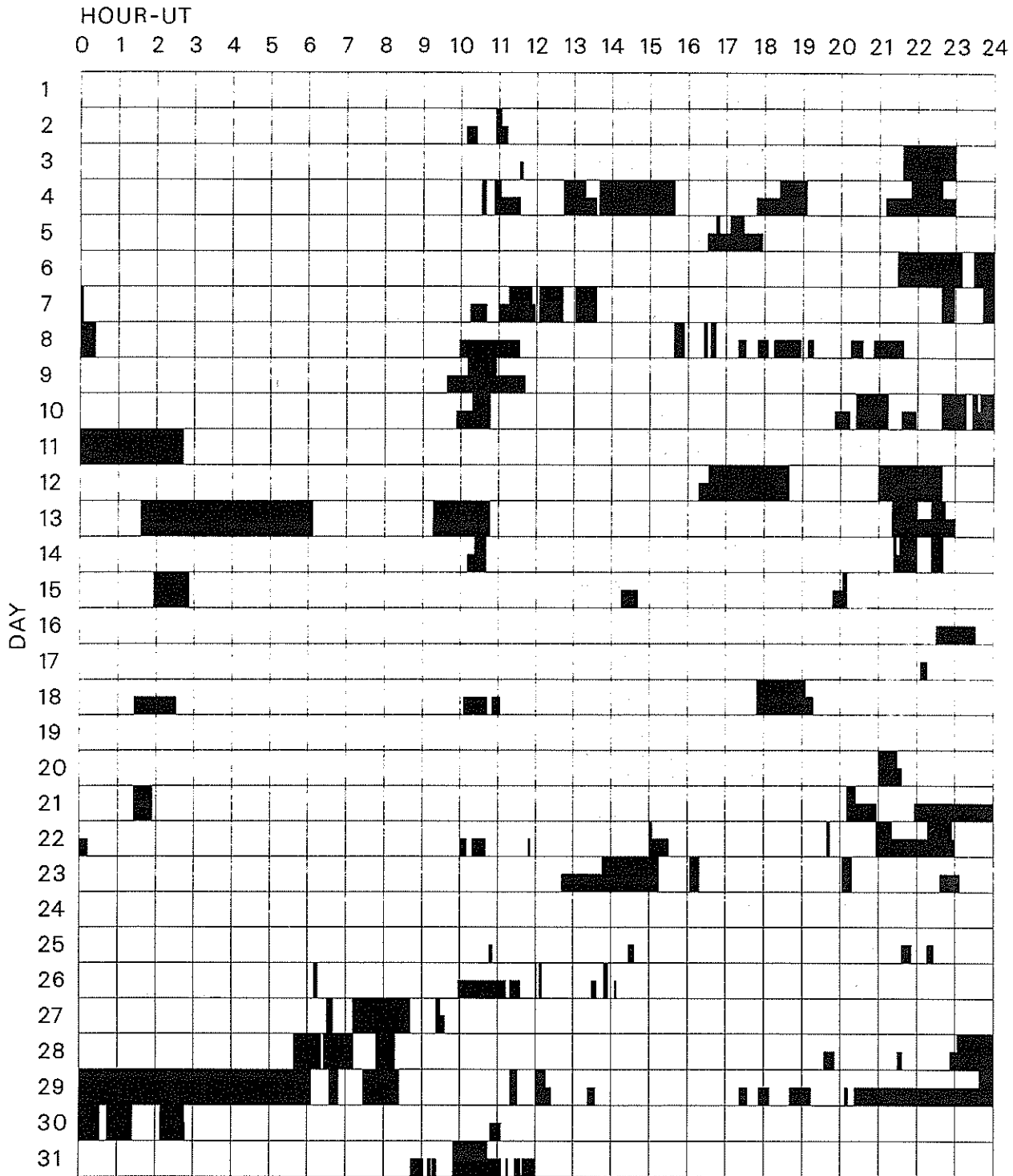
Number 625 Part II

DATA FOR MARCH 1996

	Page
SOLAR FLARES	
H-alpha Solar Flare Groups	4- 5
Intervals of No Flare Patrol Observation	6
Number of Solar Flares January 1965-present	7
SOLAR RADIO BURSTS AT FIXED FREQUENCIES	8
SOLAR X-RAY RADIATION FROM GOES SATELLITE Graphs	9-14
Preliminary Event List	15
Preliminary Daily Average Background	16
ACTIVE PROMINENCES AND FILAMENTS	17-19
SOLAR IRRADIANCE (Unavailable at time of publication.)	
IMP-8 SOLAR WIND Plot (Unavailable at time of publication.)	
IMP-8 INTERPLANETARY MAGNETIC FIELD Plot	20-21

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

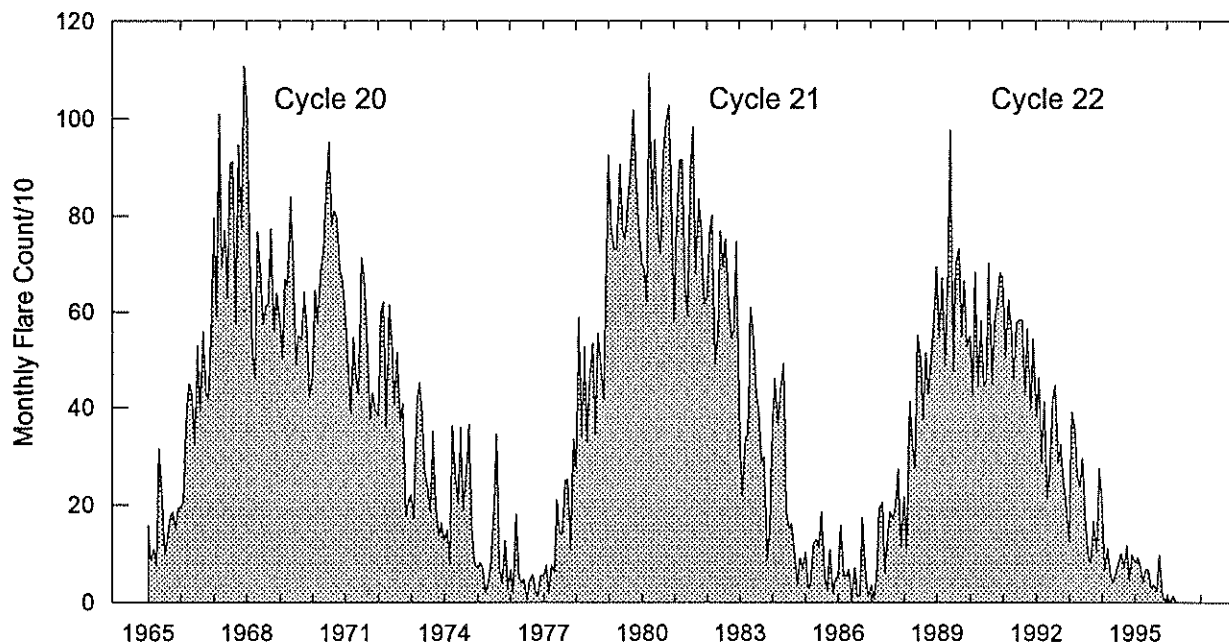
MARCH 1996



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.

- | | | | |
|-------------|-----------|---------|----------|
| Catania | Kharkov | Mitaka | Ramey |
| Holloman | Learmonth | Palehua | San Vito |
| Kanzelhoehe | Meudon | | |

Monthly Counts of Grouped Solar Flares Jan 1965 - Mar 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										32

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

MARCH 1996

Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak (10 -22 W/m ² Hz)	Mean		
04	33 UPIC	8 S	1311.0	1311.2	0.3				
07	33 UPIC	1 S	1335.0	1335.2	0.4				
08	33 UPIC	2 S/F	1155.0	1155.4	0.7				
	33 UPIC	2 S/F	1304.0	1304.3	0.4				
12	204 IZMI	43 NS	0700.0		300.00		5.0		
	204 IZMI	20 GRF	0759.0	0801.0	13.0	4.0			
	204 IZMI	8 S	1142.8	1142.9	0.5	83.0	40.0		
13	200 HIRA	42 SER	0228.5	0231.5	5.0	7.0			WR
	200 HIRA	42 SER	0339.5	0340.9	3.0	5.0			0
	245 SGMR	8 S	1730.0	1731.0	2.0	110.0			QL=4 ST=2 TYP=3
		8 S	1731.0	1731.0	U	120.0			QL=4 ST=2 TYP=3
	200 HIRA	8 S	2146.0	2146.0	0.5	4.0			0
	200 HIRA	8 S	2150.3	2150.4	0.3	8.0			0
14	200 HIRA	8 S	0125.1	0125.7	0.6	7.0			0
	204 IZMI	42 SER	0944.0	0944.4	2.0	53.0			
	204 IZMI	7 C	1034.5	1035.0	1.0	17.0			
	245 SGMR	8 S	1247.0	1250.0	3.0	72.0			QL=4 ST=3 TYP=3
	245 SGMR	4 S/F	1247.0	1248.0	3.0	72.0			QL=4 ST=3 TYP=3
245 SVTO	4 S/F	1247.0	1253.0	8.0	93.0			QL=2 ST=2 TYP=3	
16	245 SGMR	4 S/F	1115.0	1115.0	3.0	79.0			QL=4 ST=2 TYP=3
17	280 CUBA	44 NS	1300.0E		420.00	14.0			
	235 CUBA	44 NS	1520.0E		215.00	5.0			
18	33 UPIC	2 S/F	0819.6	0819.9	0.9				
22	235 CUBA	44 NS	1320.0E		315.00	5.0			
	280 CUBA	44 NS	1320.0E		425.00	11.0			
23	610 SVTO	4 S/F	0942.0	1004.0	858.0	280.0			QL=4 ST=1 TYP=5
26	235 CUBA	44 NS	1325.0E		285.00	6.0			
	280 CUBA	44 NS	1325.0E		425.00	11.0			
	204 IZMI	42 SER	0853.5	0854.0	1.5	25.0			
	200 HIRA	8 S	2343.5	2343.7	0.3	74.0			WL
27	204 IZMI	41 F	0813.0	0813.5	1.0	5.0			

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	

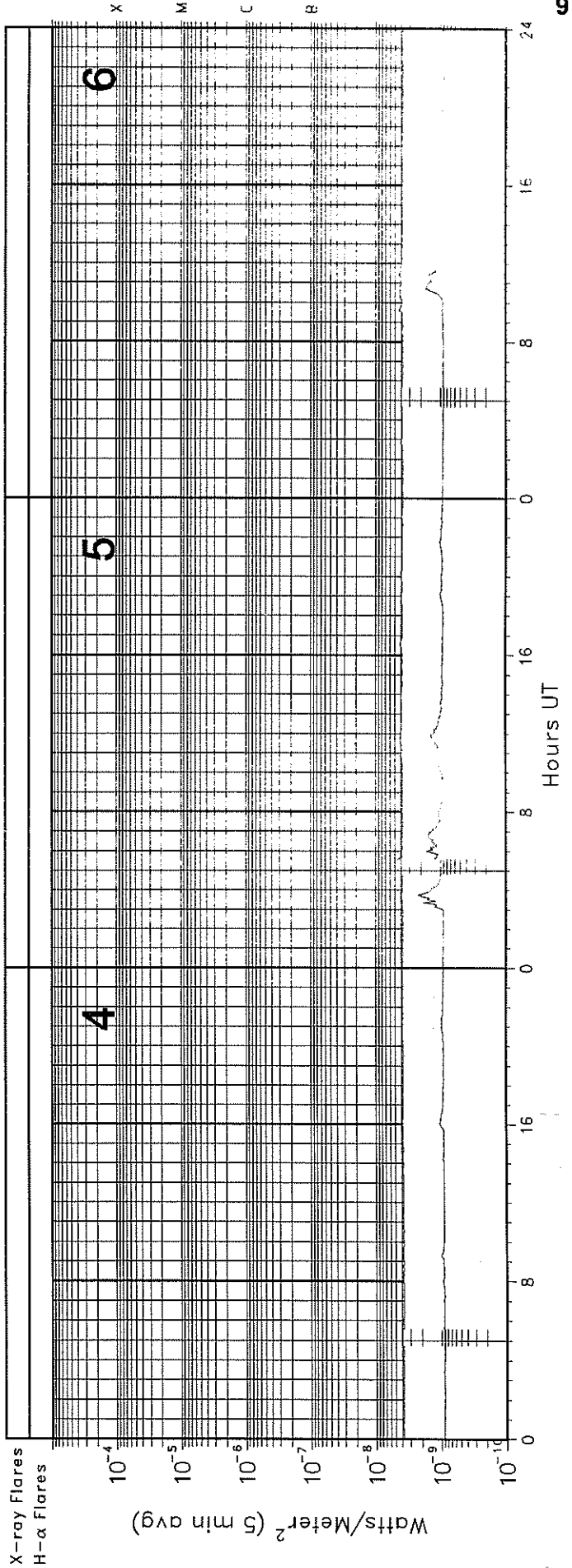
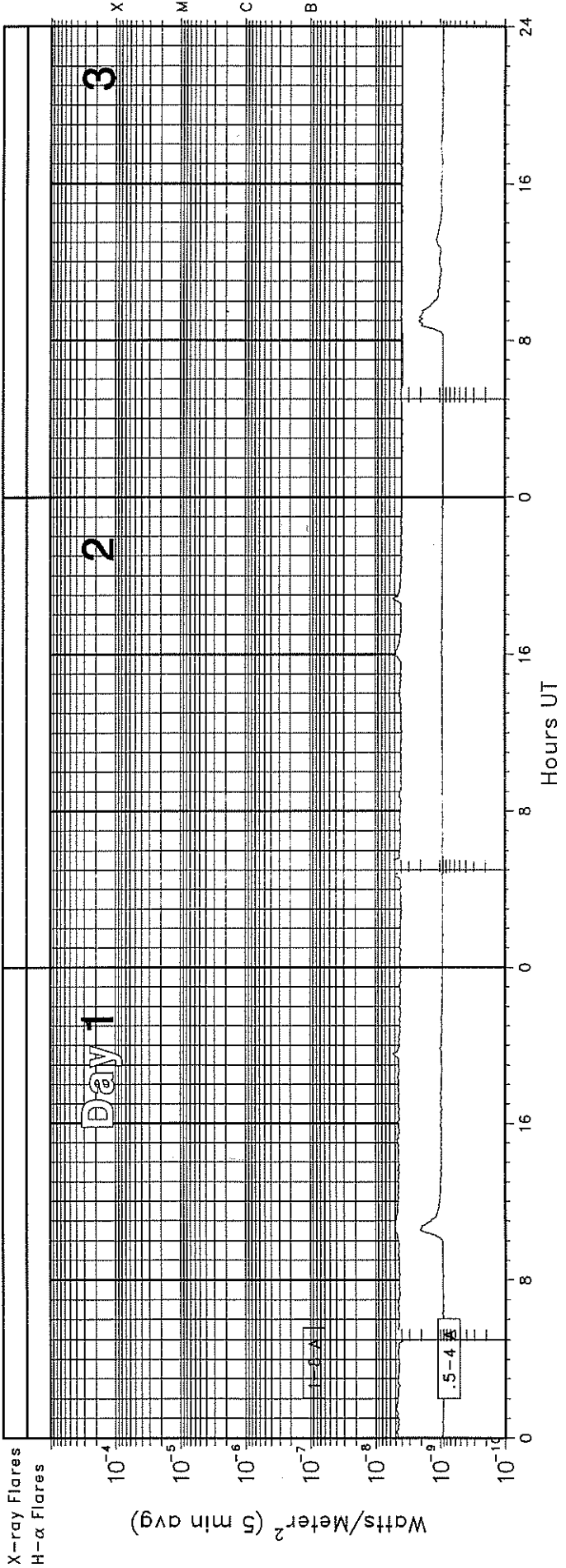
Explanation of Type Code:

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; Hiraiso, Japan 500 and 200 MHz; and Toyokawa, Japan 9400, 3750, 2000 and 1000 MHz.

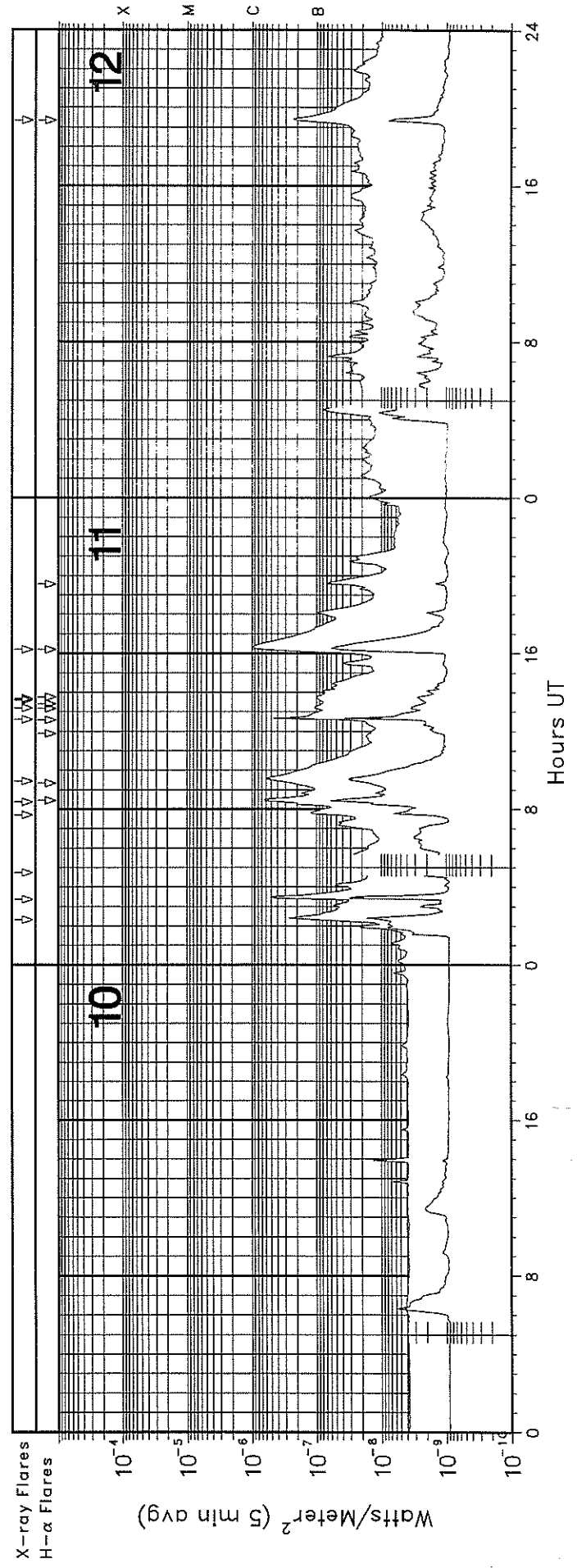
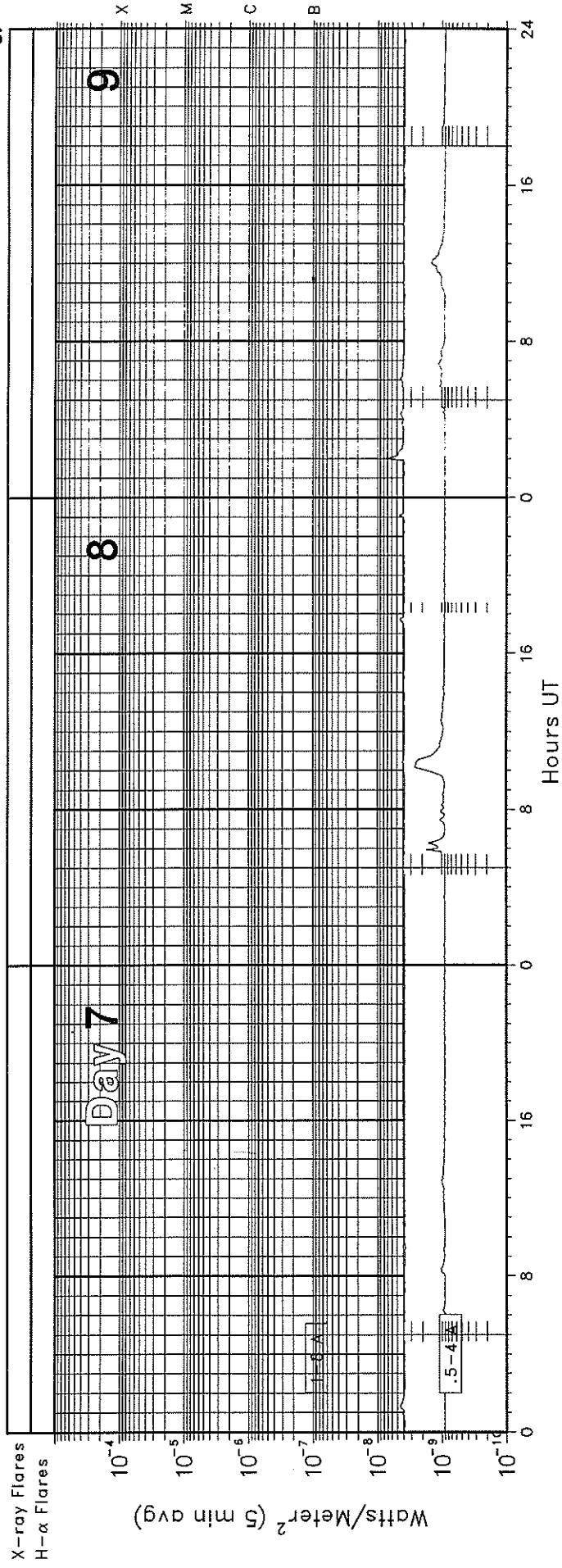
GOES-7 X-RAY DETECTOR

March 1996



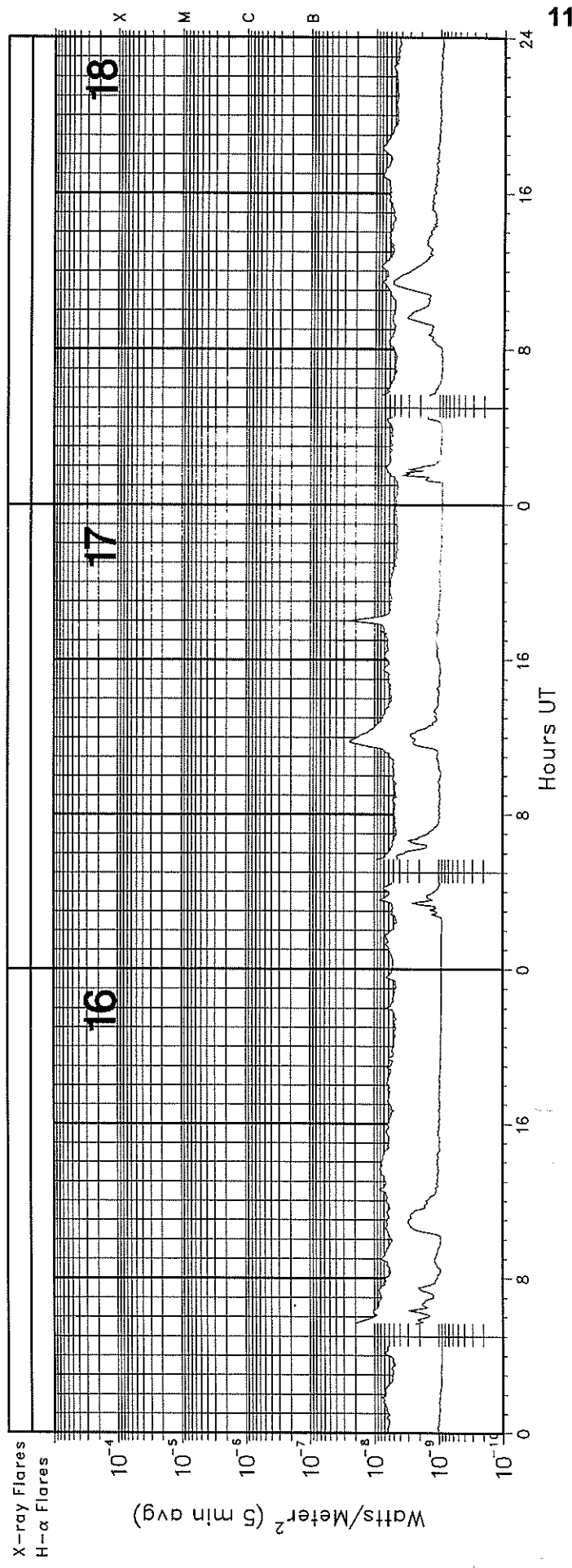
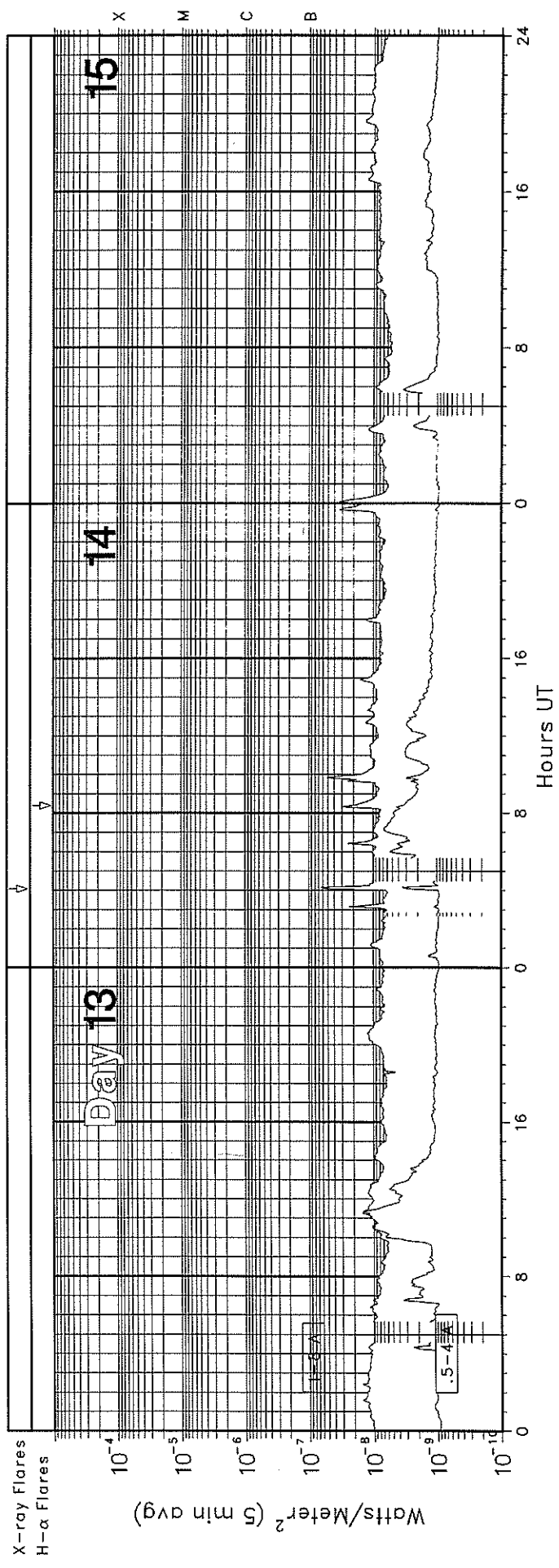
GOES-7 X-RAY DETECTOR

March 1996



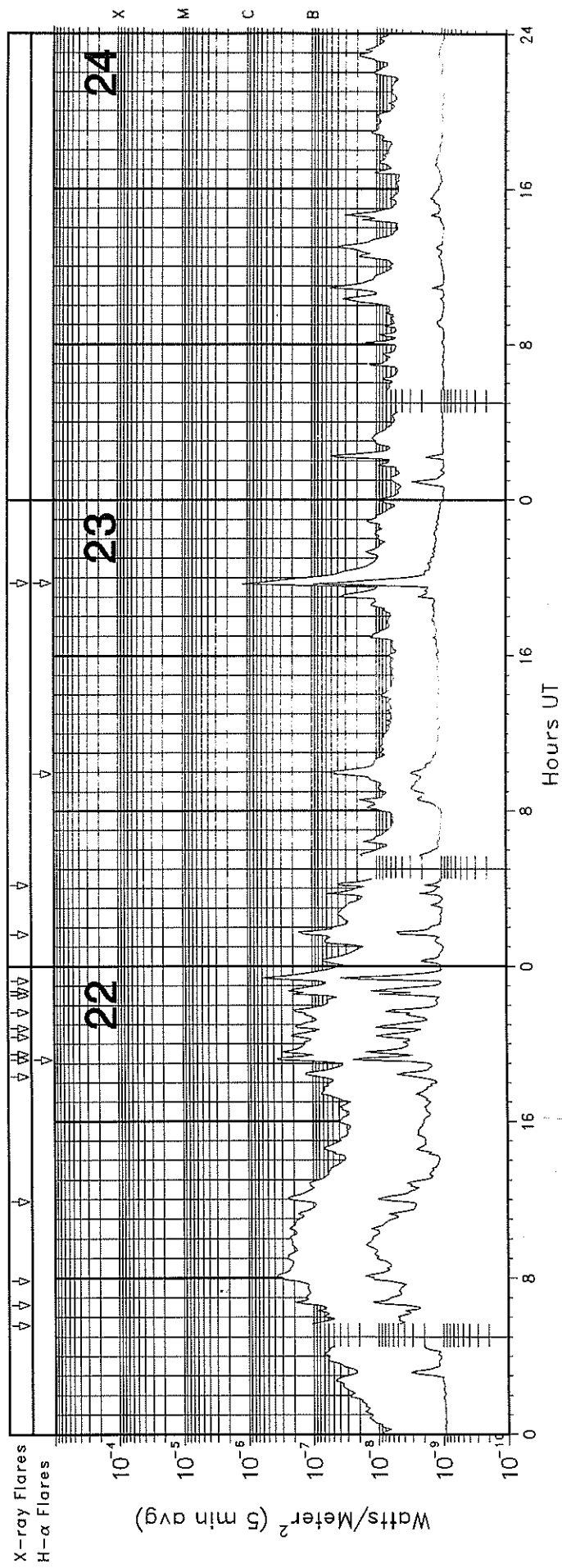
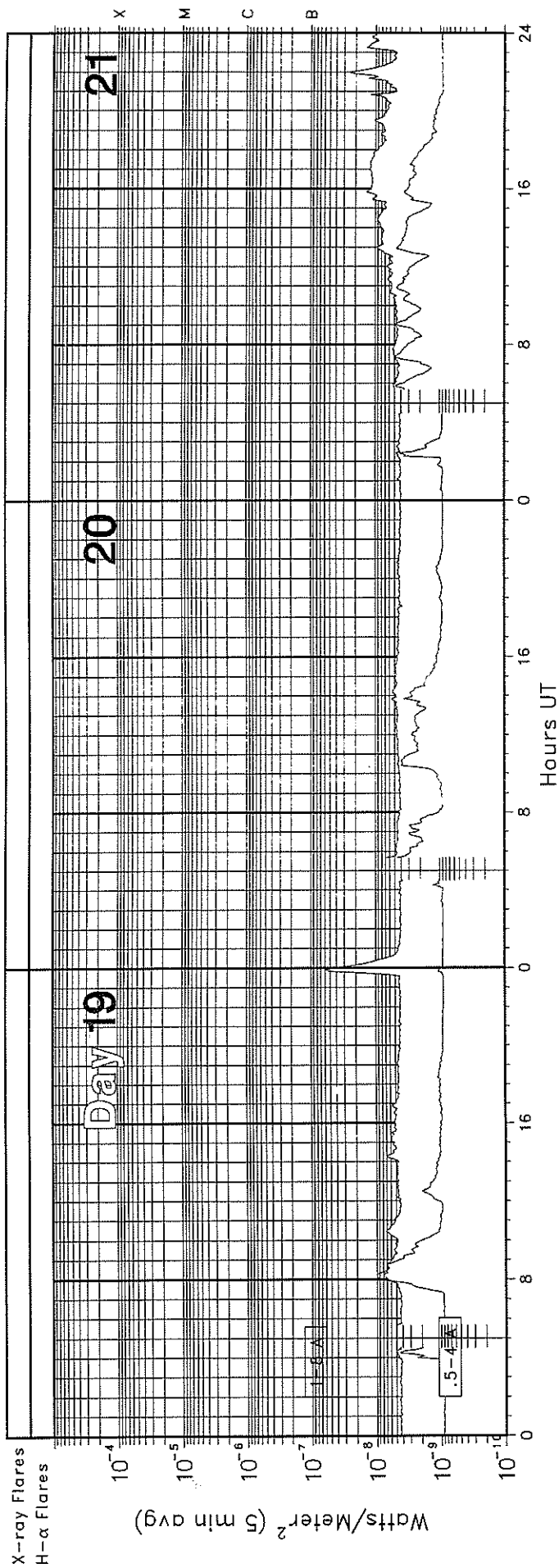
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March 1996



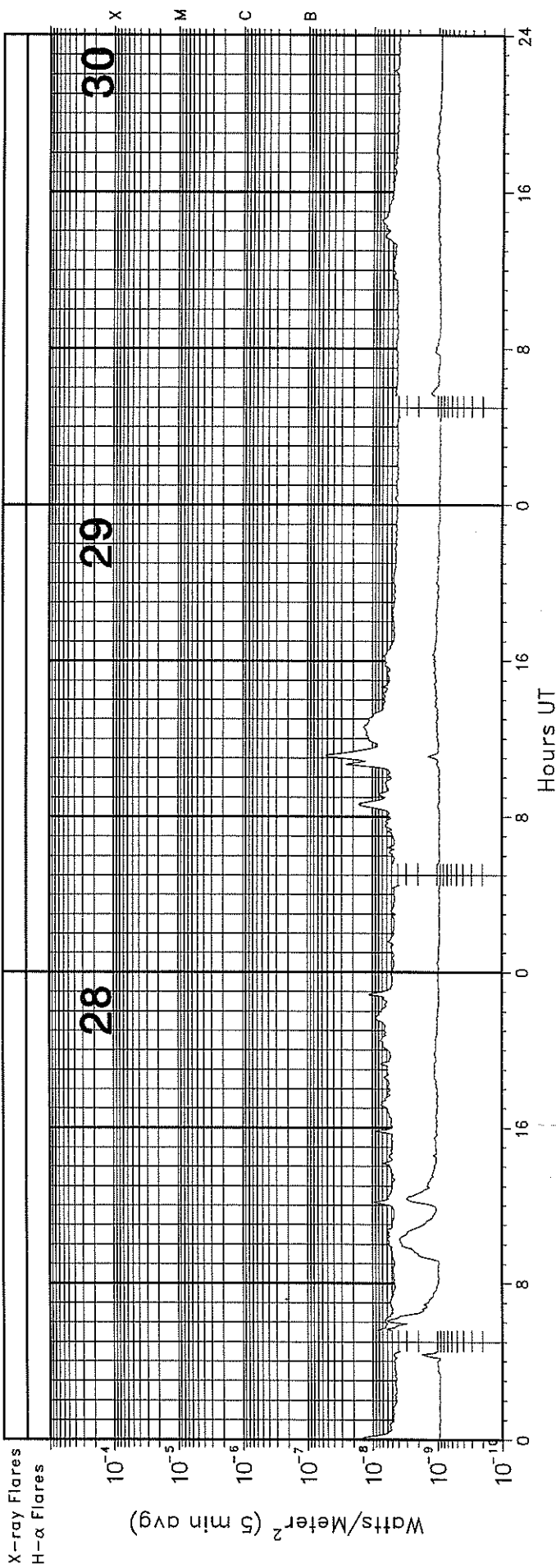
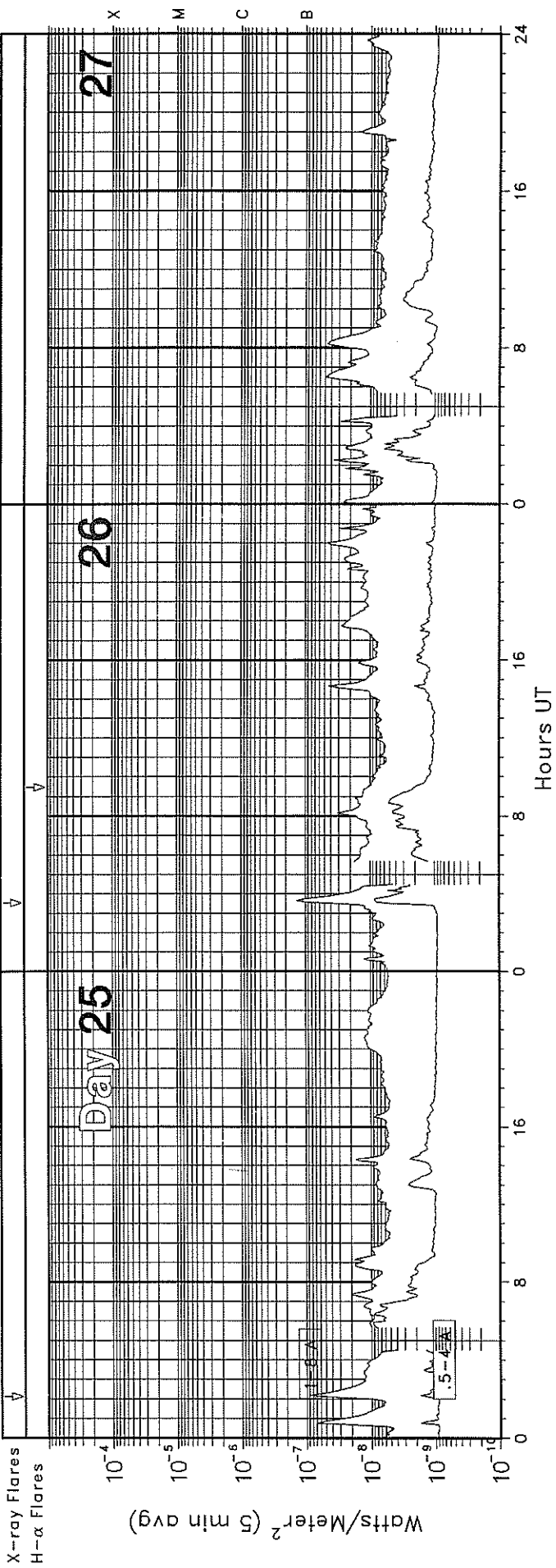
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March 1996



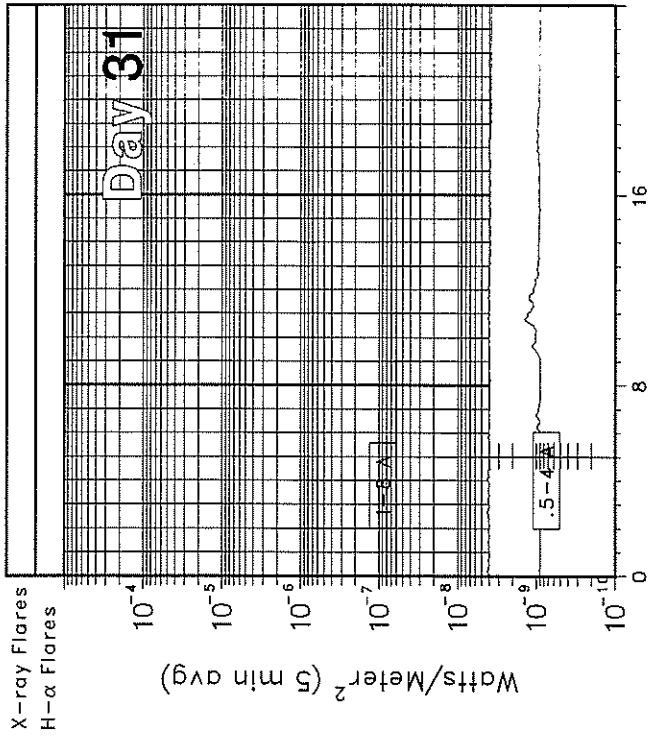
GOES-7 X-RAY DETECTOR

March 1996



GOES-7 X-RAY DETECTOR

March 1996



GOES SOLAR X-RAY FLARES
 Preliminary Listing

15
 Mar 96

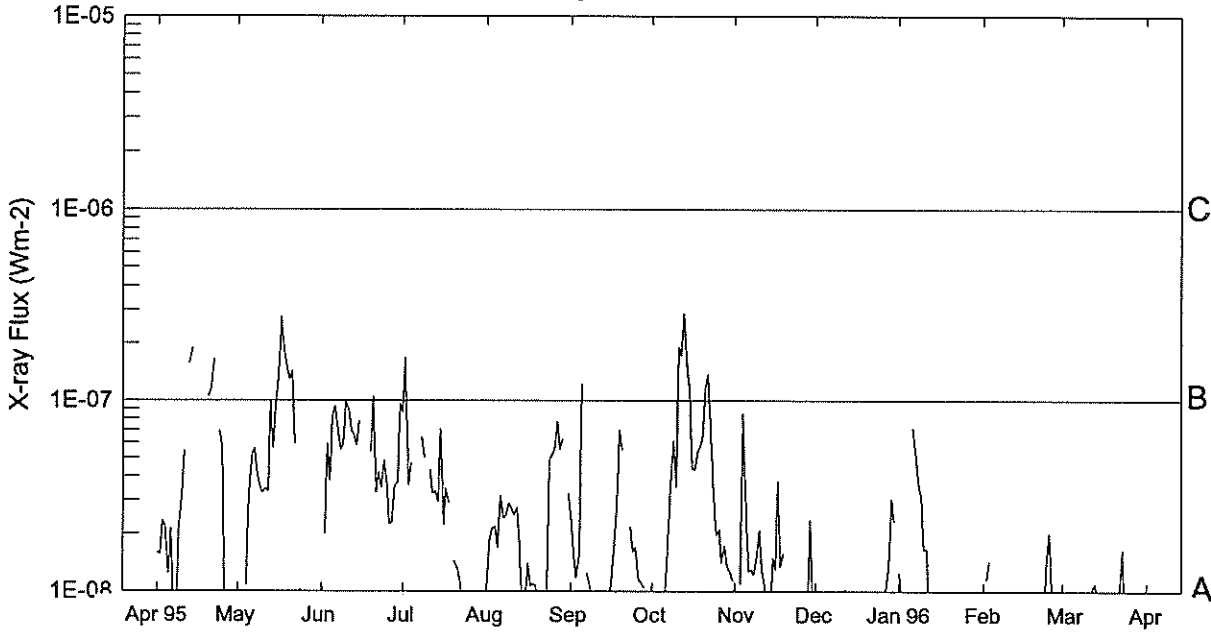
March 1996

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
11	0220	0228	0231				B2.8	
11	0220	0228	0232				B2.7	
11	0322	0330	0333				B7.9	
11	0444	0451	0457				B6.7	
11	0743	0749	0757				B1.4	
11	0823	0829	0833				B9.7	7952
11	0927	0937	0943				B6.8	
11	1237	1242	1244				B8.1	
11	1311	1314	1317				B1.3	
11	1335	1338	1340				B1.1	
11	1341	1344	1346				B1.2	
11	1611	1619	1642	S06	E42	SF	B9.9	7952
12	1921	1923	1932	S04	E26	SF	B2.5	7952
14	0406	0410	0412				B1.5	
22	0534	0538	0544				B1.4	
22	0637	0647	0652				B1.9	

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
22	0751	0808	0819				B3.8	
22	1153	1204	1215				B2.6	
22	1819	1829	1835				B1.4	
22	1911	1913	1918	N07	E14	SF	B4.5	7953
22	1929	1936	1943				B3.3	
22	2021	2029	2033				B2.3	
22	2049	2054	2058				B2.6	
22	2139	2144	2148				B2.2	
22	2231	2237	2243				B2.1	
22	2244	2248	2251				B2.8	
22	2317	2326	2331				B6.7	
23	0140	0144	0148				B2.0	
23	0411	0414	0416				B1.0	
23	1943	1943	1957	N06	W01	SF	C1.5	7953
25	0208	0212	0214				B1.0	
26	0334	0342	0348				B1.3	

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 Apr 95 - Mar 96



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

NOTE: Background levels below B1.0 are unreliable.

ACTIVE PROMINENCES AND FILAMENTS

17
Mar 96

MARCH 1996

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
01	BSL	0831E	0914D	S71	E90	03	9.5	1				C	CATA		
01	ASR	0840E	1112D	S73	E85	03	9.1			6	7	E	SVTO		
01	BSL	1234E	1253	S58	W90	02	22.8	1-				C	CATA		
01	DSD	1933E	2013D	S13	W18	02	29.4		03	9	9	E	HOLL	7949	
02	BSL	0819	0830D	N60	E90	03	10.3	1-				C	CATA		
02	DSF	1001U	0100U	S04	W22	02	29.8		07	0	0	E	LEAR		
02	DSF	1257U	0729U	S03	W23	02	29.8	1				C	CATA		
02	ADF	1635E	1859D	S13	E16	03	3.9	1	04	5	8	E	RAMY		
03	ADF	0150	1033	S11	W34	02	29.5	1	03	6	6	E	LEAR	7949	
03	AFS	2315E	0430D	S22	W22	03	2.3		01	9	9	E	LEAR		
04	AFS	0410E	1025	N11	W22	03	2.5		01	9	9	E	LEAR		
04	DSD	1210E	1909D	S22	W27	03	2.4		02	7	5	E	RAMY		
05	AFS	1424E	2016	N11	W43	03	2.4		02	9	9	E	RAMY		
05	DSD	2300E	0326	N10	W46	03	2.5		01	8	8	E	PALE		
06	DSD	0304E	0740D	N22	W48	03	2.4		02	9	9	E	LEAR		
06	DSD	0620E	0845D	N10	W55	03	2.1		02	9	9	E	SVTO		
06	AFS	0650E	1630	S02	E11	03	7.1		02	9	9	E	SVTO		
06	AFS	0830E	1630	N10	W56	03	2.1		02	6	6	E	SVTO		
06	BSL	0844E	0900D	N59	W90	02	27.6	1-				C	CATA		
06	DSD	1040E	1517D	S03	E08	03	7.0		02	9	9	E	SVTO		
06	AFS	1117E	1621D	S01	E09	03	7.1		01	8	8	E	RAMY	7951	
06	DSD	1117E	1621D	S02	E10	03	7.2		01	9	9	E	RAMY	7951	
06	ADF	1227E	1518D	N14	W56	03	2.3	1	05	9	9	E	SVTO		
08	AFS	1126E	1438D	S16	W35	03	5.8		01	4	4	E	RAMY		
08	ASR	1950E	0059	N08	E82	03	15.0			9	9	E	HOLL		
10	AFS	1523E	2149D	S04	E56	03	14.8		02	8	9	E	RAMY		
11	DSD	1113E	2211	S04	E43	03	14.7		01	9	9	E	RAMY	7952	
11	ADF	1141E	2157D	S07	E47	03	15.0	1	02	9	9	E	RAMY	7952	
11	DSD	1340E	1644D	S03	E41	03	14.6		06	9	9	E	HOLL	7952	
11	AFS	2110	0101	S05	E40	03	14.9		03	9	6	E	HOLL	7952	
11	DSD	2315	2355	S06	E33	03	14.4		02	9	9	E	HOLL	7952	
12	DSD	0119E	0324	S05	E34	03	14.6		05	5	9	E	PALE	7952	
12	AFS	0130	0324	S04	E34	03	14.6		03	7	9	E	PALE	7952	
12	BSL	0917E	0925D	N66	E90	03	20.5	1-				C	CATA		
12	AFS	1035E	1632	S03	E30	03	14.7		02	9	9	E	SVTO	7952	
12	AFS	1038E	1632	S04	E27	03	14.5		01	7	8	E	SVTO	7952	
12	BSL	1040	1103	S88	W90	03	4.0	1-				C	CATA		
12	DSD	1055E	1939D	S05	E29	03	14.6		01	9	9	E	RAMY	7952	
12	AFS	1055E	2040	S05	E31	03	14.8		01	9	9	E	RAMY	7952	
12	BSL	1057	1114	S63	E90	03	20.4	1-				C	CATA		
12	BSL	1057	1215D	S40	E90	03	19.8	1-				C	CATA		
12	BSL	1206	1215D	N01	E90	03	19.2	1-				C	CATA		
12	AFS	1337E	0101D	S03	E29	03	14.7		03	9	9	E	HOLL	7952	
12	DSD	1345E	2040	S04	E31	03	14.9		01	9	9	E	RAMY	7952	
12	AFS	2205E	0230	S04	E25	03	14.8		02	9	9	E	PALE	7952	
13	AFS	0838E	1150D	S04	E19	03	14.8		02	9	9	E	SVTO	7952	
13	DSD	1115E	1659D	S03	E16	03	14.7		03	6	6	E	RAMY	7952	
13	DSD	1130E	1350D	S03	E12	03	14.4		01	5	9	E	RAMY	7952	
13	AFS	1336E	2120	S03	E14	03	14.6		03	7	5	E	HOLL	7952	
13	AFS	1650E	1819	S04	E14	03	14.7		02	9	9	E	PALE	7952	
13	DSF	2119U	1443U	N44	W15	03	12.6	2	22	0	0	E	HOLL		
14	ADF	0820E	0930D	S05	E02	03	14.5	1	09	9	9	E	LEAR	7952	
14	DSD	0938E	1130D	N01	W01	03	14.3		02	9	9	E	SVTO	7952	
14	ADF	0953E	1057D	S02	E00	03	14.4	1	04	9	9	E	SVTO	7952	
14	DSD	0955E	1021	S06	E01	03	14.5		04	9	9	E	LEAR	7952	
14	BSD	1752	1814	N02	W05	03	14.4		02	0	0	E	HOLL	7952	
16	BSL	1211E	1239D	S07	E90	03	23.2	1-				C	CATA		
16	BSL	1218	1236	S87	E90	03	24.9	1-				C	CATA		

18
Mar 96

ACTIVE PROMINENCES AND FILAMENTS

MARCH 1996

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
16	BSL	1226	1239D	S37	E90	03	23.8	1-				C	CATA		
17	BSL	1009E	1019D	N14	E90	03	24.2	1-				C	CATA		
18	AFS	1200E	1407D	S20	W43	03	15.2		02	7	7	E	SVTO		
18	AFS	1242E	1731D	S19	W43	03	15.2		02	7	4	E	RAMY		
19	BSL	0745	0752D	N74	W90	03	11.1	1-				C	CATA		
19	BSL	0821	0830	S61	W90	03	11.4	1-				C	CATA		
21	BSL	0740	0740D	S03	W90	03	14.6	1-				C	CATA		
21	ASR	0742E	0947D	S03	W90	03	14.6			9	9	E	SVTO	7952	
21	BSL	0750E	0808	S03	W90	03	14.6	1-				C	CATA		
21	BSL	0825	0835	N84	E90	03	29.7	1-				C	CATA		
21	BSL	0911	0916	S54	E90	03	29.1	1-				C	CATA		
21	ADF	0932	1057	N06	E32	03	23.8	1		9	9	V	KHAR		
21	AFS	1033E	1600	N07	E28	03	23.5		04	9	9	E	SVTO	7953	
21	AFS	1100E	2223	N06	E31	03	23.8		01	9	9	E	RAMY	7953	
21	DSD	1105E	1305D	N07	E32	03	23.8		02	9	9	E	RAMY	7953	
21	ADF	1123	1155D	N06	E32	03	23.9	1		9	9	V	KHAR		
21	DSD	1130E	1225D	N11	E30	03	23.7		02	9	9	E	SVTO	7953	
21	DSD	1306E	1340D	N08	E31	03	23.9		03	9	9	E	SVTO	7953	
21	AFS	1325E	2155	N06	E25	03	23.4		03	9	9	E	HOLL	7953	
21	DSD	1325E	2155	N07	E27	03	23.6		02	9	9	E	HOLL	7953	
21	AFS	1437E	1600	N07	E29	03	23.8		02	9	9	E	SVTO	7953	
21	AFS	1437E	1600	N08	E28	03	23.7		03	9	9	E	SVTO	7953	
21	DSD	1500E	2155	S13	W18	03	20.3		01	0	0	E	HOLL		
21	DSD	1652E	2223	N06	E29	03	23.9		04	8	9	E	RAMY	7953	
21	DSD	1747E	0430	N07	E27	03	23.8		03	9	9	E	PALE	7953	
21	AFS	1910E	0430	N07	E25	03	23.7		02	9	9	E	PALE	7953	
22	AFS	0230E	1013D	N07	E21	03	23.7		02	8	9	E	LEAR	7953	
22	AFS	0335E	1013D	N06	E23	03	23.9		02	9	9	E	LEAR	7953	
22	BSL	0726	0740	N53	W90	03	14.6	1-				C	CATA		
22	DSD	0805E	1013D	N07	E19	03	23.8		02	9	9	E	LEAR	7953	
22	BSL	0810E	0820D	N54	W90	03	14.6	1-				C	CATA		
22	BSL	0830E	0857D	N54	W90	03	14.6	1-				C	CATA		
22	AFS	0830E	1430	N07	E16	03	23.5		02	9	9	E	SVTO	7953	
22	AFS	0830E	1430	N07	E19	03	23.8		02	9	9	E	SVTO	7953	
22	BSL	0837	0843	N65	W90	03	14.3	1-				C	CATA		
22	BSL	0916	0930	S65	W90	03	14.3	1-				C	CATA		
22	ADF	0945E	1130D	N07	E20	03	23.9	1			9	V	KHAR		
22	BSL	1152E	1225D	N57	W90	03	14.7	1-				C	CATA		
22	BSL	1236E	1247D	N31	W90	03	15.4	1-				C	CATA		
22	BSL	1236E	1247D	N57	W90	03	14.7	1-				C	CATA		
22	DSF	1240U	0720U	N23	E06	03	23.0	1				C	CATA		
22	AFS	1628E	1936	N07	E15	03	23.8		01	9	9	E	HOLL	7953	
22	DSD	2345E	0450D	N00	E09	03	23.7		02	9	9	E	LEAR	7953	
22	AFS	2345E	1012	N01	E09	03	23.7		02	9	9	E	LEAR	7953	
23	AFS	0718E	1100D	N07	E04	03	23.6		02	7	8	E	SVTO	7953	
23	AFS	0720E	1241	N07	E06	03	23.7		01	8	8	E	SVTO	7953	
23	DSD	0721E	1052D	N09	E01	03	23.4		01	9	9	E	SVTO	7953	
23	BSL	0732E	0741	S65	W90	03	15.2	1-				C	CATA		
23	BSL	0732E	0805D	N07	W90	03	16.6	1-				C	CATA		
23	BSL	0735	0805D	N09	W90	03	16.6	1-				C	CATA		
23	BSL	0741	0802	S25	E90	03	30.3	1-				C	CATA		
23	BSL	0820	0832	N07	W90	03	16.6	1-				C	CATA		
23	BSL	0820	0832	N11	W90	03	16.6	1-				C	CATA		
23	BSL	0900	0910	S65	W90	03	15.3	1-				C	CATA		
23	BSL	0916	0935	S43	W90	03	16.0	1-				C	CATA		
23	BSL	1035	1051D	N15	W90	03	16.6	1-				C	CATA		
23	ADF	1047E	1241	N11	W02	03	23.3	1	04	9	9	E	SVTO	7953	
23	DSD	1120E	1348D	N06	E06	03	23.9		01	7	7	E	RAMY	7953	
23	AFS	1210E	2214	N07	E02	03	23.6		01	7	9	E	RAMY	7953	
24	AFS	0410E	0820	N08	W04	03	23.9		01	9	9	E	LEAR	7953	
24	BSL	0806	0841D	S46	W90	03	16.8	1-				C	CATA		
24	DSD	0920	0957D	N07	W09	03	23.7	1				C	CATA		
24	BSL	0936	0957D	N41	E90	03	31.8	1-				C	CATA		

ACTIVE PROMINENCES AND FILAMENTS

19
Mar 96

MARCH 1996

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
24	AFS	1133E	2038	N05	W07	03	23.9		02	9	9	E	RAMY	7953	
24	DSD	1235E	1825D	N07	W09	03	23.8		02	7	9	E	RAMY	7953	
24	AFS	1331E	0100	N08	W10	03	23.8		02	9	9	E	HOLL	7953	
24	DSD	1441	0100	N09	W10	03	23.9		03	9	9	E	HOLL	7953	
24	DSD	1745E	2015	N08	W13	03	23.8		04	7	9	E	PALE	7953	
24	DSD	2026E	2038	N12	W13	03	23.9		01	9	9	E	RAMY	7953	
25	DSD	0930E	1107D	N03	W20	03	23.9		03	9	9	E	SVTO	7953	
25	DSD	1045E	1430D	N08	W27	03	23.4		02	7	9	E	RAMY	7953	
25	APR	1105	1150D	N47	W90	03	18.6	1		9	9	V	KHAR		
25	AFS	1908E	2218	N01	W09	03	25.1		01	9	9	E	RAMY		
25	AFS	2250E	1011	N02	W11	03	25.1		01	9	9	E	LEAR		
26	DSD	0707E	1011	N01	W15	03	25.2		03	9	9	E	LEAR		
26	ADF	0918E	1110	N01	W16	03	25.2	1		9	9	V	KHAR		
26	DSD	1057E	1239D	N02	W16	03	25.3		02	9	9	E	RAMY	7954	
26	DSD	1057E	1247D	N01	W16	03	25.3		03	9	9	E	RAMY	7954	
26	DSD	1057E	1742D	N02	W17	03	25.2		03	9	9	E	RAMY	7954	
26	DSD	1115	1135	N02	W16	03	25.3	1		9	9	V	KHAR		
26	DSD	1120E	2029D	N07	W38	03	23.6		01	9	9	E	RAMY	7953	
26	ADF	1142E	1542	S02	W19	03	25.1	1	04	9	9	E	SVTO	7954	
26	DSD	1150E	1542	S03	W18	03	25.1		04	9	9	E	SVTO	7954	
26	ADF	1152U	1200D	N01	W16	03	25.3	1		9		V	KHAR		
26	AFS	1241E	2032	N01	W19	03	25.1		01	9	9	E	RAMY	7954	
26	ADF	1435E	1620D	N01	W18	03	25.3	1	02	9	9	E	HOLL	7954	
26	DSD	1717	1740	N05	W22	03	25.1		03	3	4	E	HOLL	7954	
26	AFS	2000E	0424	N01	W09	03	26.2		02	9	9	E	PALE		
27	AFS	0008E	0710D	N03	W26	03	25.1		02	9	8	E	LEAR	7954	
27	AFS	0008E	0710D	N03	W26	03	25.1		02	9	8	E	LEAR	7954	
27	DSD	0950	0959	N11	W51	03	23.5	1		9	9	V	KHAR		
27	ADF	1018	1035	N08	W47	03	23.9	1		9	9	V	KHAR		
27	AFS	1104E	2218	N01	W30	03	25.2		01	9	9	E	RAMY	7954	
27	AFS	1405E	1610	S07	W24	03	25.8		01	9	9	E	HOLL		
27	AFS	1422E	1820D	S07	W24	03	25.8		01	9	9	E	RAMY		
27	DSD	1554E	1731D	N01	W35	03	25.0		01	8	9	E	RAMY	7954	
27	AFS	1619E	0115	N01	W35	03	25.1		02	9	9	E	HOLL	7954	
27	AFS	1705E	0310	N02	W34	03	25.2		03	9	9	E	PALE	7954	
28	AFS	0931E	1210	N00	W44	03	25.1		01	9	9	E	SVTO	7954	
28	BSL	1229E	1238D	N22	W90	03	21.6	1-				C	CATA		
28	AFS	1805E	2303	N01	W48	03	25.2		03	9	9	E	PALE	7954	
29	BSL	1023	1051	N47	E90	04	6.0	1-				C	CATA		
29	BSL	1228E	1242D	N56	E90	04	6.3	1-				C	CATA		
30	BSL	0735E	0746D	N01	W90	03	23.6	1-				C	CATA		
30	BSL	0800	0816	N01	W90	03	23.6	1-				C	CATA		
30	DSF	0949U	0013U	N44	E43	04	3.0	2	10	0	0	E	LEAR		
30	DSF	0949U	0013U	S41	W75	03	24.3	2	23	0	0	E	LEAR		
30	BSL	1151E	1208	S10	E90	04	6.2	1-				C	CATA		
30	BSL	1213	1223	S46	E90	04	7.0	1-				C	CATA		
31	BSL	0749E	0802	N13	E90	04	7.1	1-				C	CATA		
31	BSL	0808	0811D	S06	E90	04	7.1	1-				C	CATA		
31	BSL	0935E	0944	N32	E90	04	7.5	1-				C	CATA		
31	BSL	0935E	0944	S29	E90	04	7.4	1-				C	CATA		
31	BSL	0935E	0944	S74	W90	03	23.1	1-				C	CATA		
31	BSL	0935E	1002D	S42	W90	03	24.0	1-				C	CATA		
31	BSL	1032E	1139D	S41	W90	03	24.1	1-				C	CATA		
31	BSL	1038	1056	S32	W90	03	24.3	1-				C	CATA		
31	BSL	1124	1139D	S52	W90	03	23.8	1-				C	CATA		

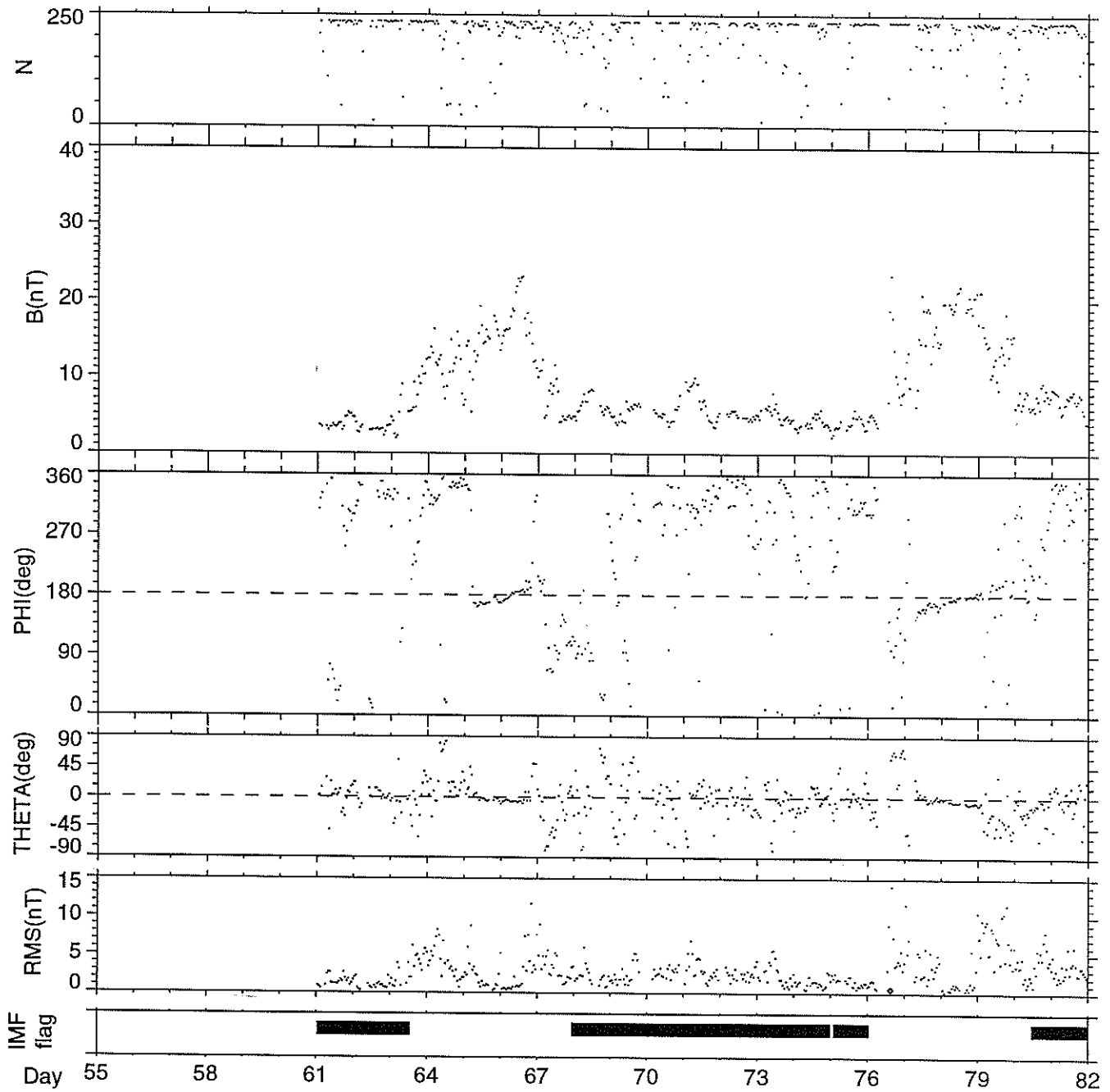
IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages

(c) DOY 61 - 82

March 1 1996 -

March 22 1996



Generation Date : Tue Jun 18 09:33:30 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.

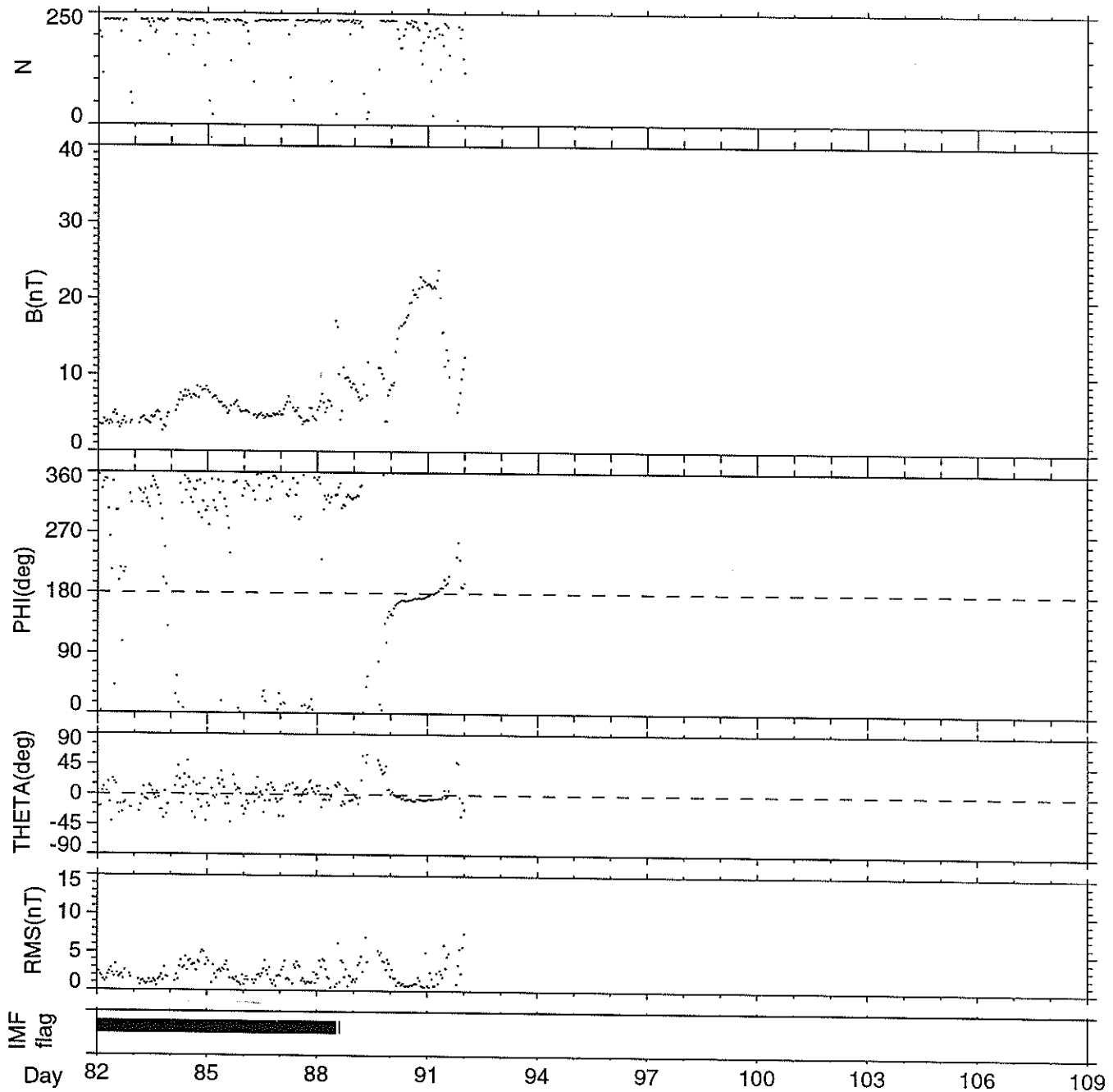
IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages

(c) DOY 82 - 92

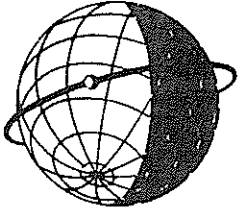
March 22 1996 -

April 1 1996



Generation Date : Tue Jun 18 09:34:07 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.



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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."