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JULY 2008 NUMBER 767 - Part II

Solar-Geophysical Data comprehensive reports

Data for January 2008

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NATIONAL GEOPHYSICAL DATA CENTER

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Data for January 2008 and Miscellaneous
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NATIONAL OCEANIC AND
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NATIONAL ENVIRONMENTAL SATELLITE,
DATA, AND INFORMATION SERVICE

NATIONAL GEOPHYSICAL
DATA CENTER

BOULDER,
COLORADO

SOLAR-GEOPHYSICAL DATA

Number 767

(Issued in Two Parts)

Editor: Edward H. Erwin

Division Chief: William F. Denig
Solar-Terrestrial Physics Division

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The entry "748A 48" under Oct, for example, means the sunspot drawings for Oct appear in SOLAR-GEOPHYSICAL DATA No 748, Part I, and that they begin on page 48, "A" denotes Part I and "B", Part II. Blanks indicate data not yet received and dashes mark unavailable data.

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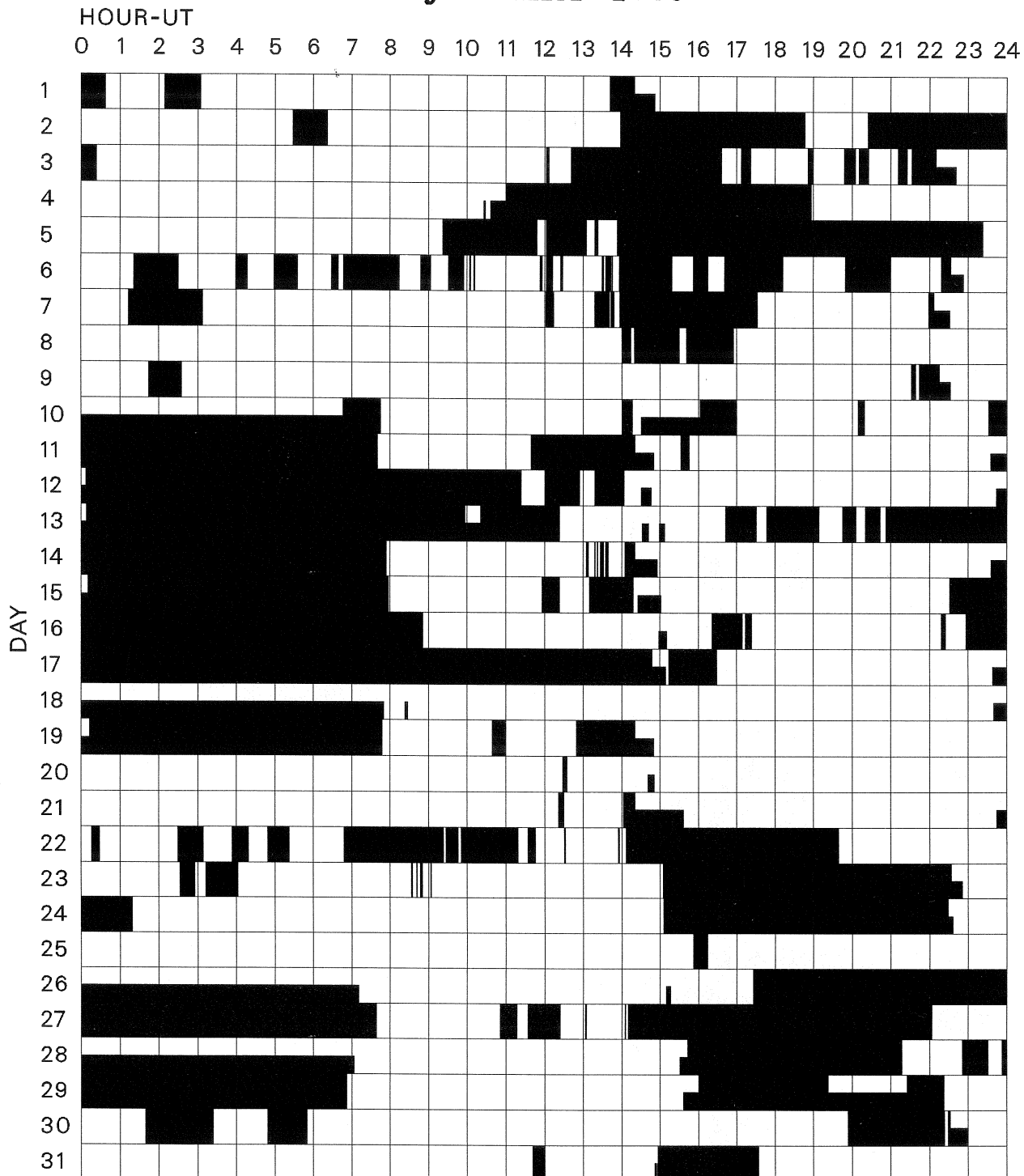
Number 767 Part II

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INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

JANUARY 2008



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.

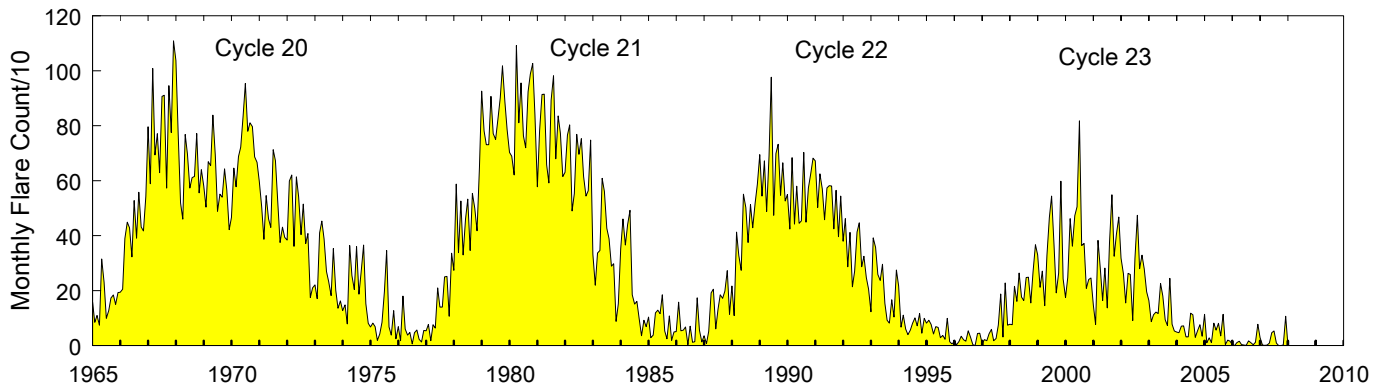
Holloman
Kanzelhoehe

Learmonth

San Vito

Monthly Counts of Grouped Solar Flares

Jan 1965 - Jan 2008



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	33	118	112	30	54	76	34	728
2005	114	10	28	11	82	56	81	35	114	4	20	16	571
2006	4	0	11	16	4	2	1	17	11	3	12	78	159
2007	29	2	1	2	9	47	53	9	0	0	2	107	261
2008	2												2

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

Jan 08

S O L A R R A D I O E M I S S I O N
Outstanding Occurrences
JANUARY 2008

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	33 UPIC	3 S	1317.5	1317.7	0.5U				
23	410 LEAR	48 C	0319.0	0320.0	3.0	180000.0			QL=4 ST=2 TYP=8
	410 LEAR	49 GB	0319.0	0319.0	1241.0	180000.0			QL=4 ST=1 TYP=6
26	410 LEAR	48 C	0526.0	0527.0	12.0	12000.0			QL=4 ST=2 TYP=8

Reports are received routinely from the following observatories:

CUBA = Havana	LEAR = Learmonth	SGMR = Sagamore Hill
GORK = Gorky	PEKG = Peking	SVTO = San Vito
HIRA = Hiraiso	PALE = Palehua	TORN = Torun
IZMI = IZMIRAN	PENT = Penticton	UPIC = Upice

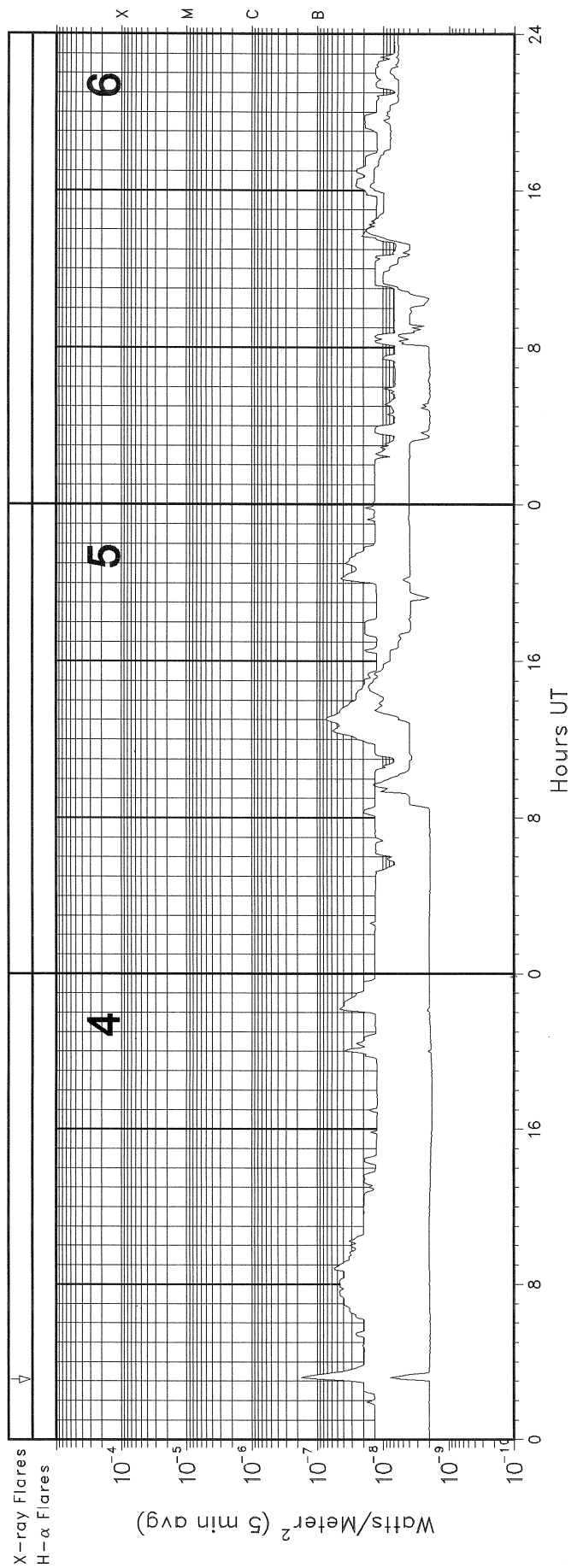
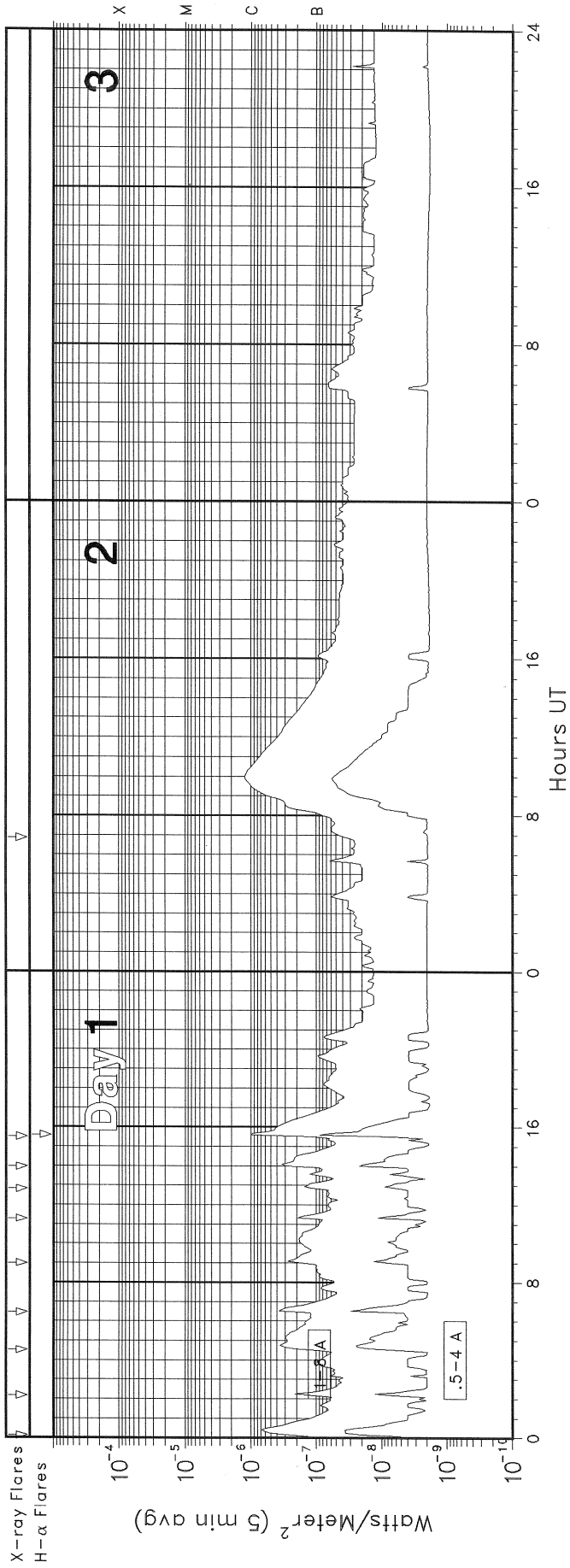
Explanation of Type Code:

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	4O Rise Only	16A Fall A	27AF Rise and Fall AF	
21A Simple 3A GRF	4OF Rise Only F	26O Fall Only	31A Post Burst Decrease A	
2A Simple 1AF	4P Post Rise	26F Fall F	32A Absorption A	

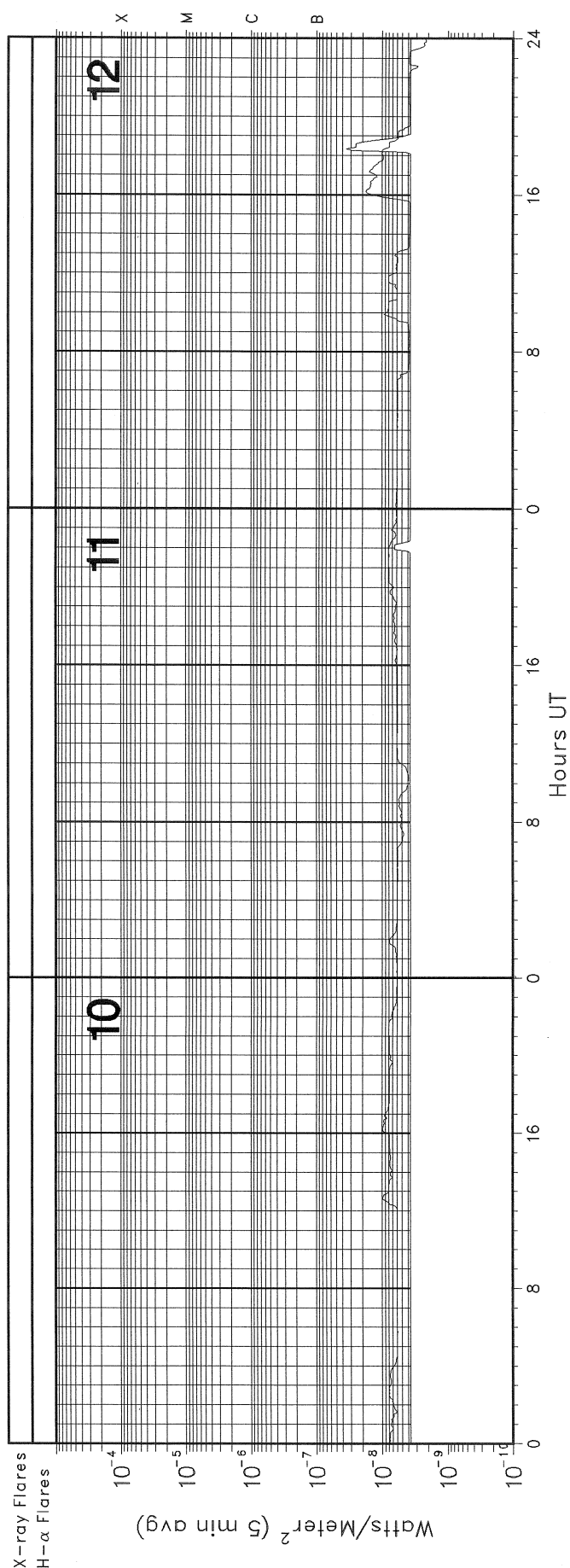
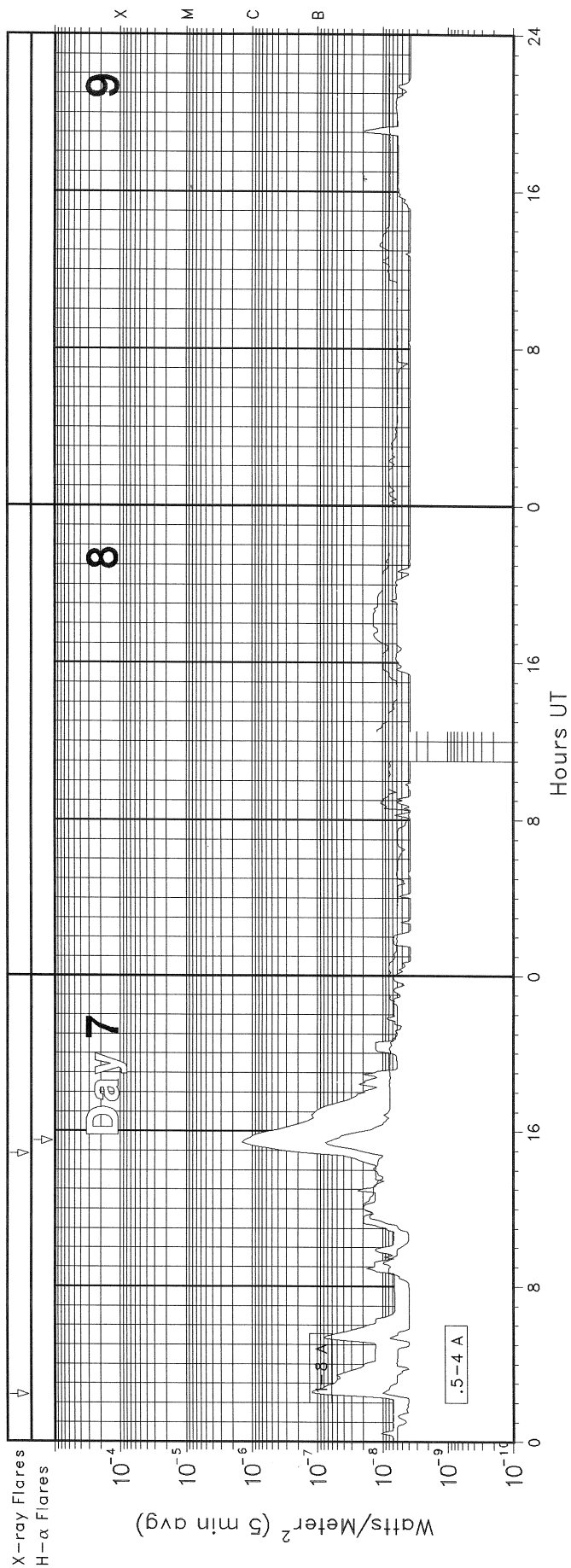
RSTN Site Information: Beginning in April 1986, the RSTN sites LEAR, PALE, SGMR, and SVTO fixed frequency solar radio data are periodically adjusted to several world standard stations. These world standard stations include: Kislovodsk, USSR 15,500 MHz; Penticton, Canada 2800 MHz; and Hiraiso, Japan 500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

GOES X-RAY DETECTOR

January 2008

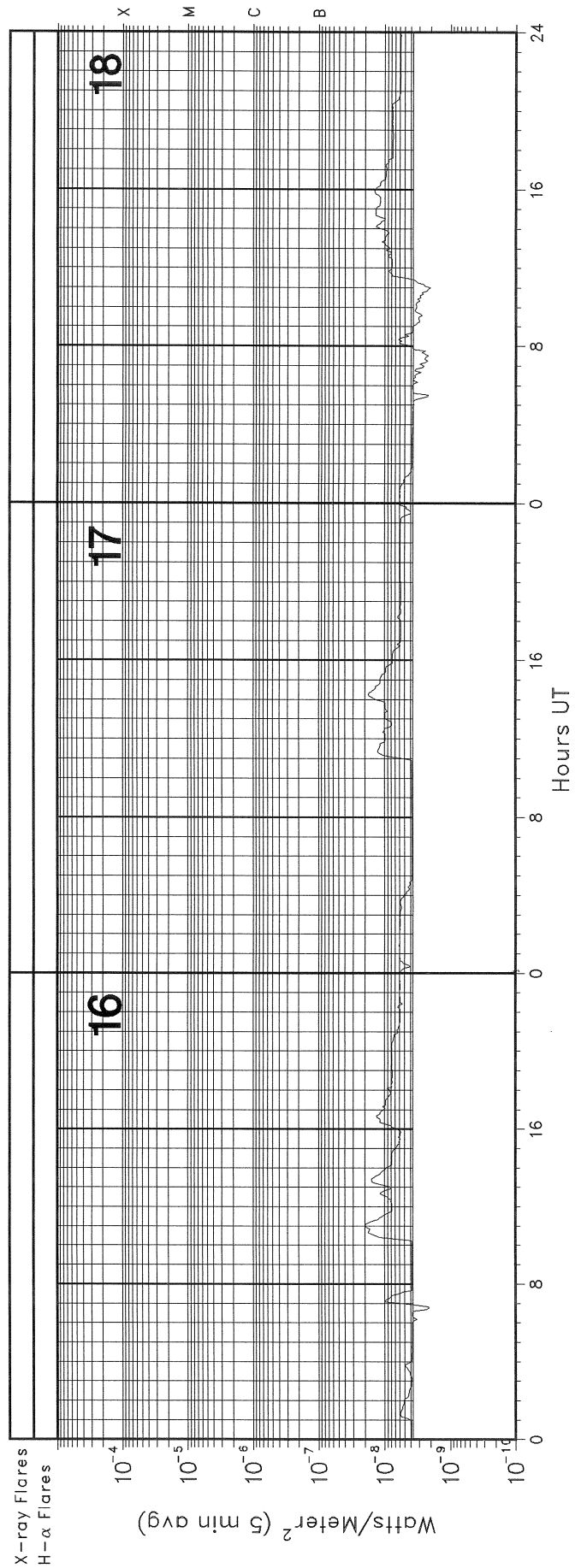
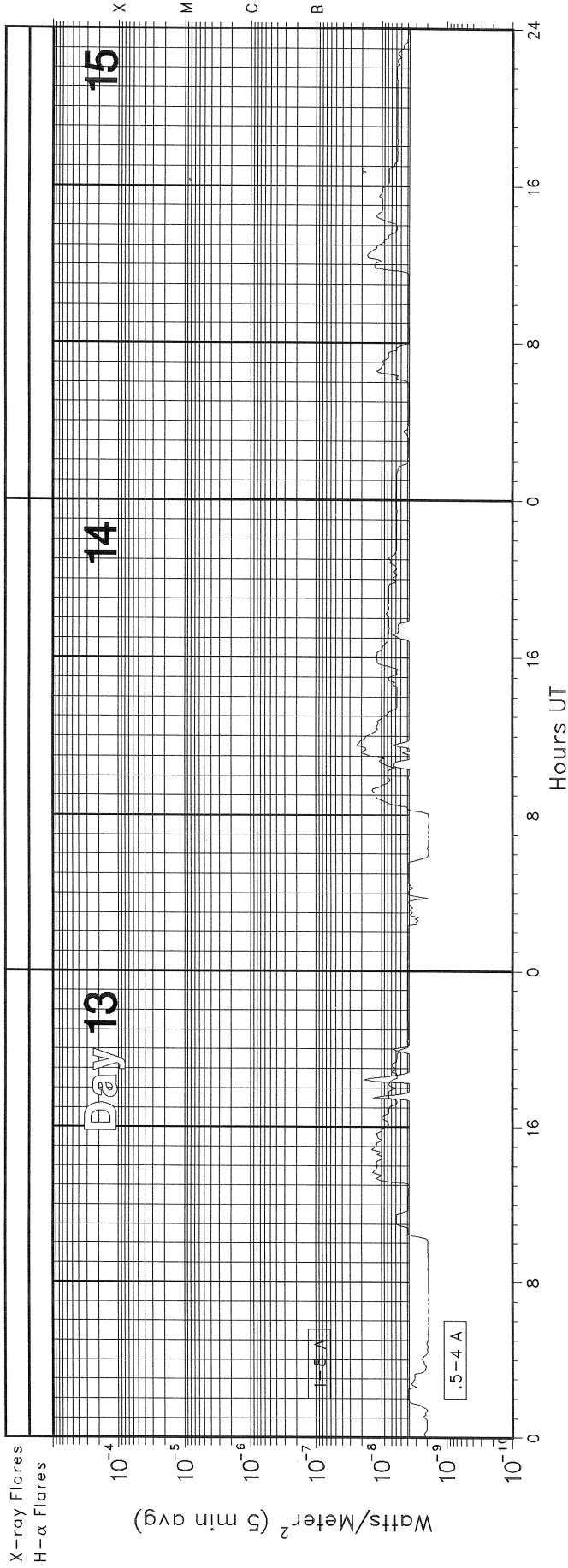


GOES X-RAY DETECTOR January 2008



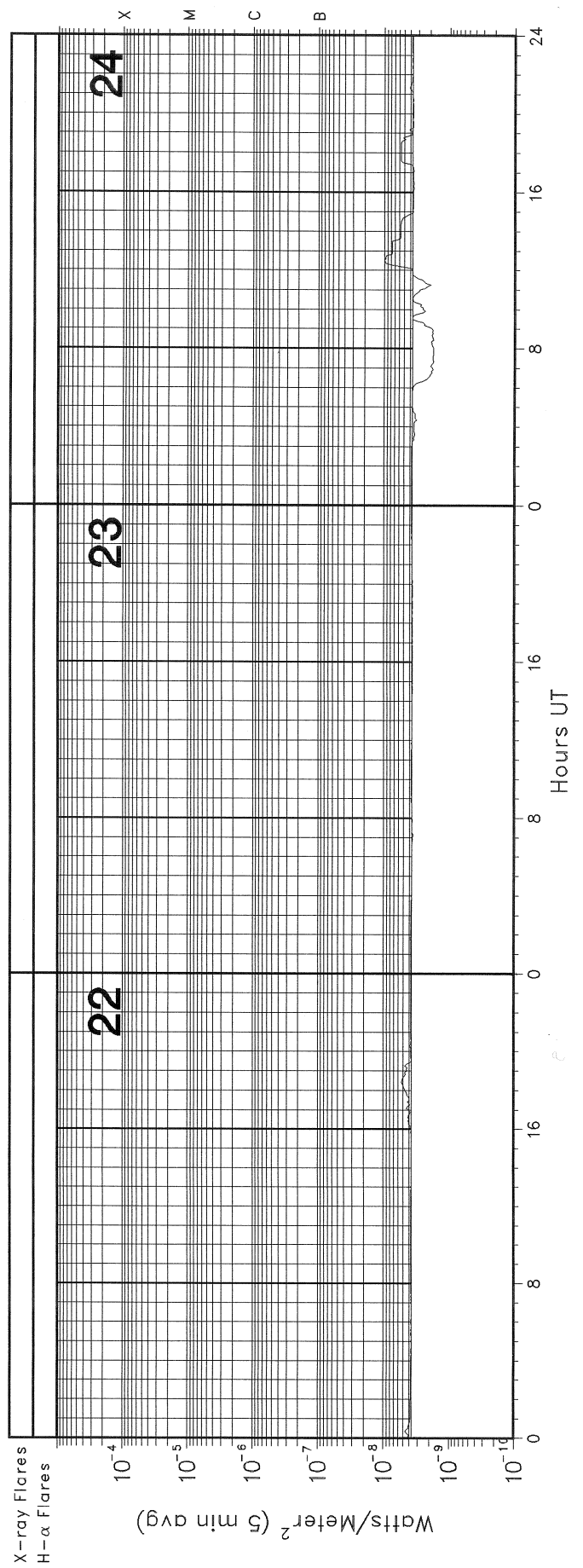
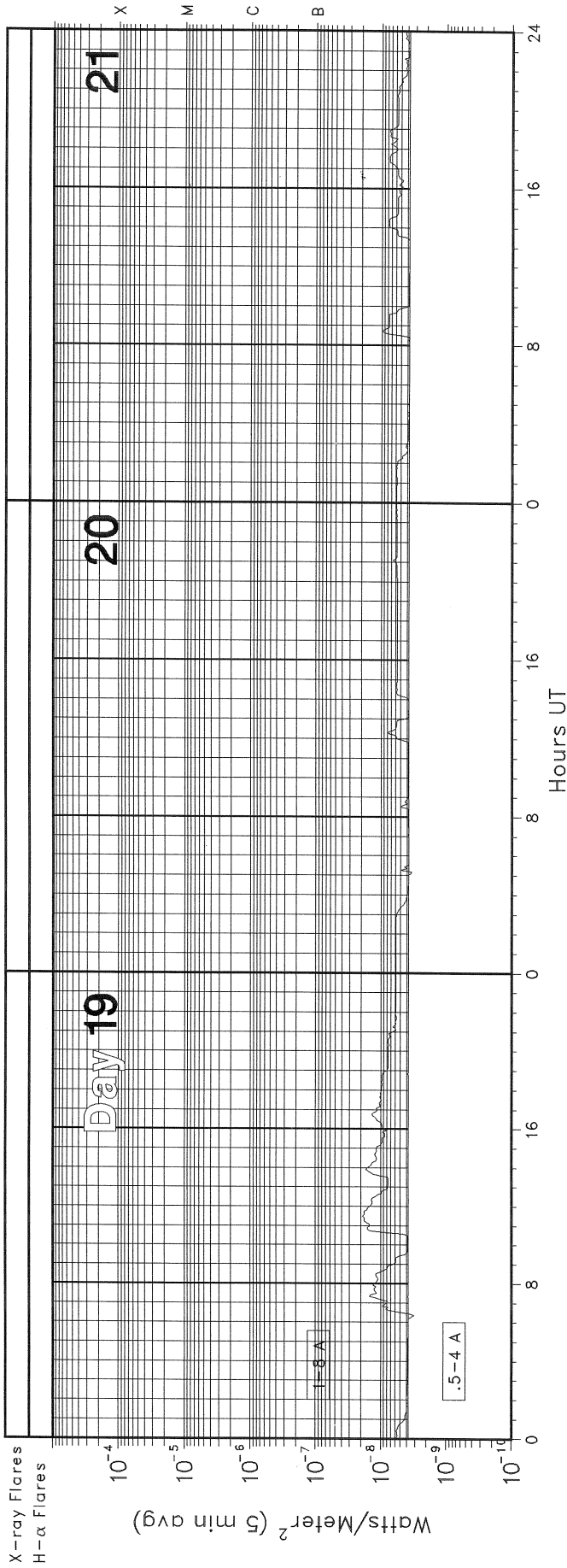
GOES X-RAY DETECTOR

January 2008



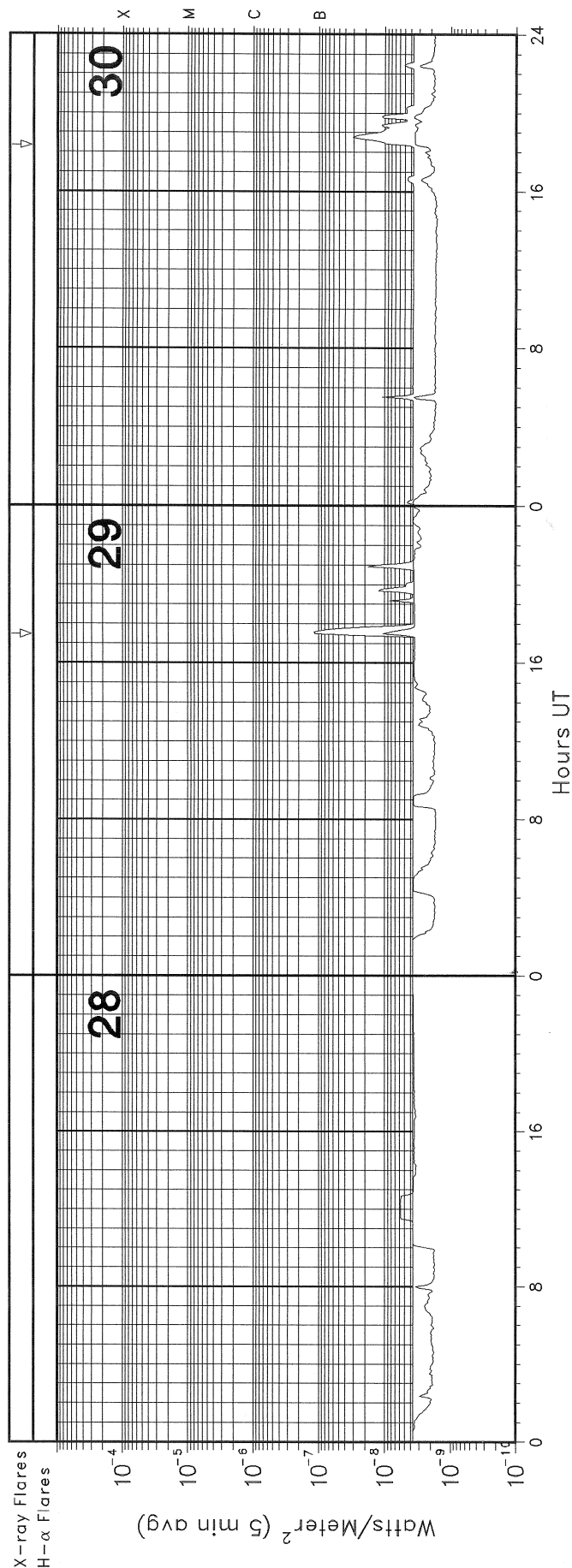
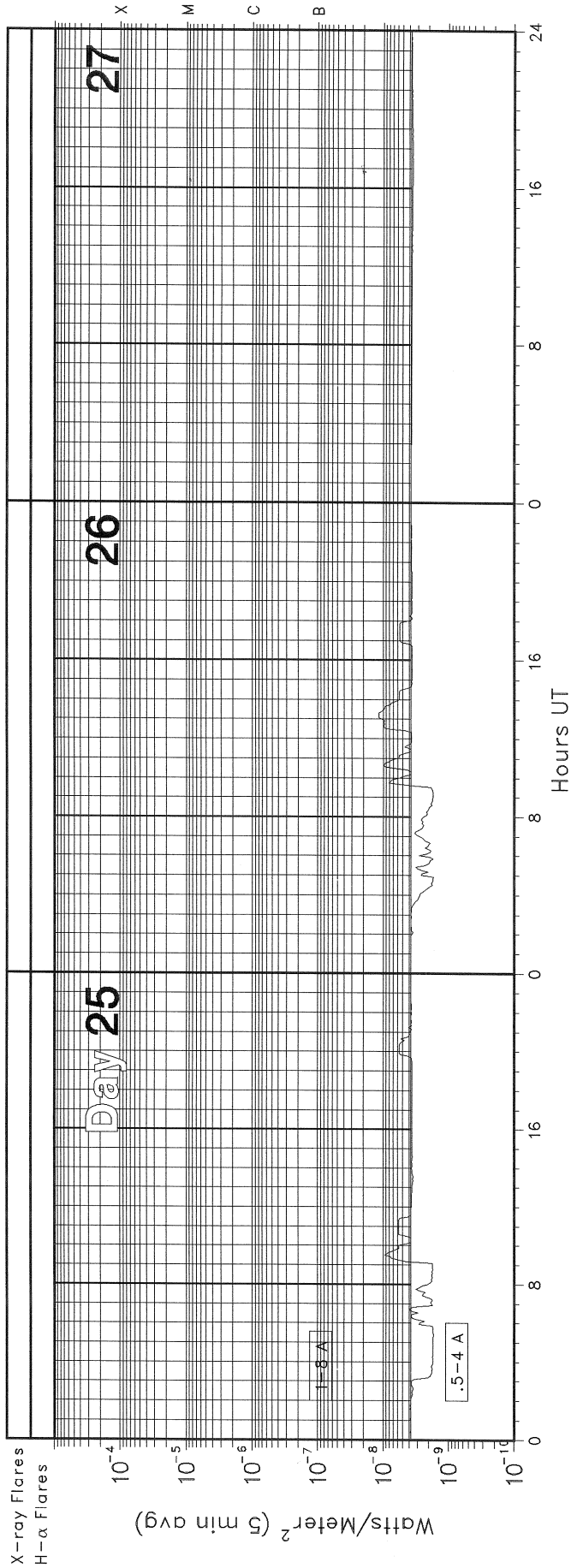
GOES X-RAY DETECTOR

January 2008



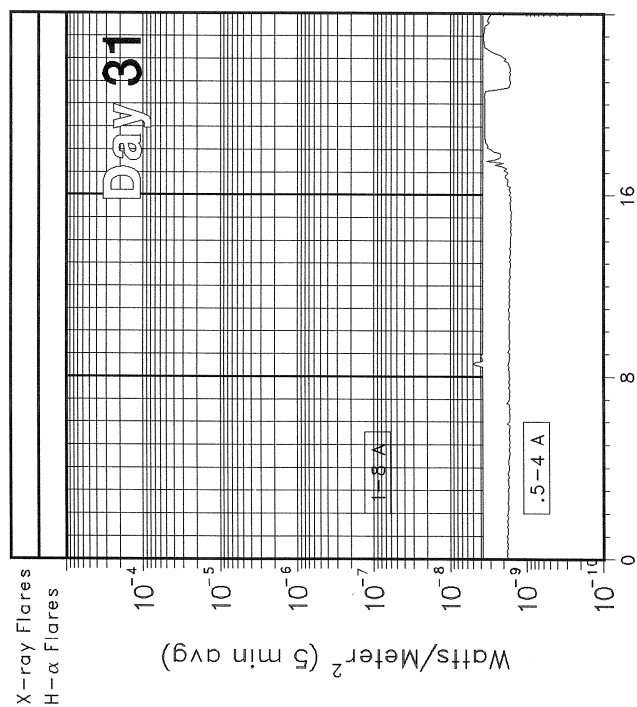
GOES X-RAY DETECTOR

January 2008



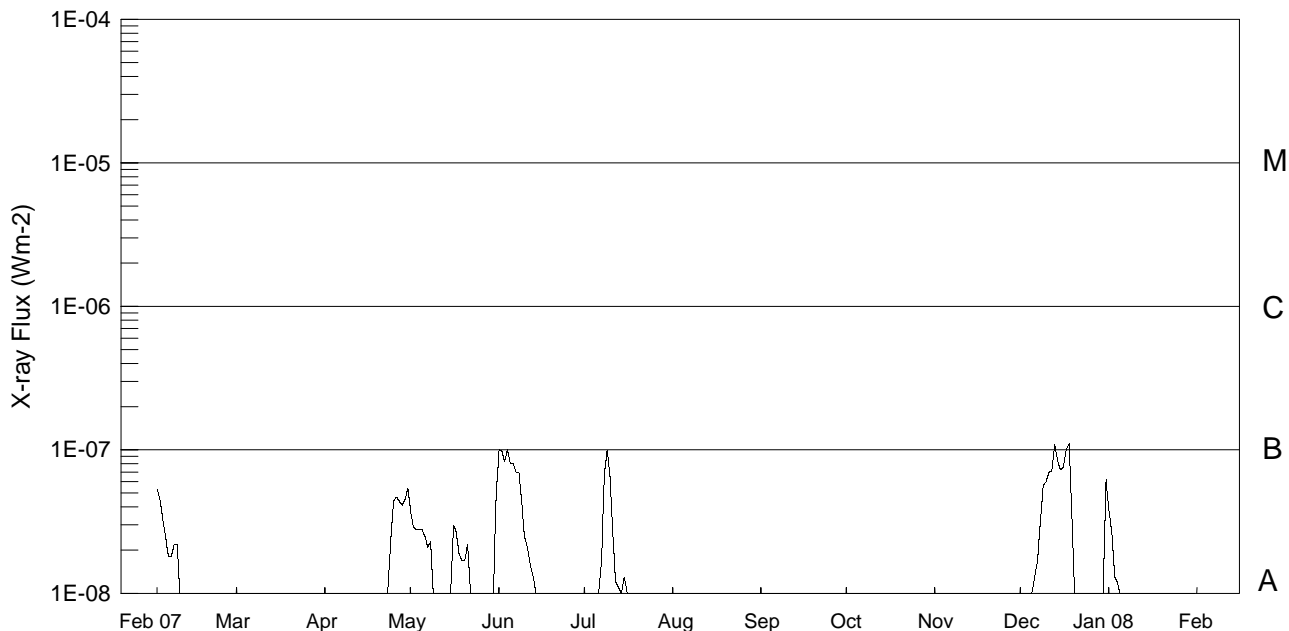
GOES X-RAY DETECTOR

January 2008



Preliminary GOES Satellite Daily X-Ray Background Feb 2007 - Jan 2008

15
Jan 08



Day	Feb 07	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 08
1	A5.3	<A1.0	<A1.0	A3.8	B1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A3.8
2	A4.6	<A1.0	<A1.0	A2.9	A9.9	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A2.7
3	A3.3	<A1.0	<A1.0	A2.8	A8.3	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A1.3
4	A2.5	<A1.0	<A1.0	A2.8	B1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A1.2
5	A1.8	<A1.0	<A1.0	A2.8	A8.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A1.0
6	A1.8	<A1.0	<A1.0	A2.5	A8.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A1.3	<A1.0
7	A2.2	<A1.0	<A1.0	A2.1	A7.0	A1.7	<A1.0	<A1.0	<A1.0	<A1.0	A1.7	<A1.0
8	A2.2	<A1.0	<A1.0	A2.3	A7.0	A6.9	<A1.0	<A1.0	<A1.0	<A1.0	A3.2	<A1.0
9	<A1.0	<A1.0	<A1.0	<A1.0	A4.2	B1.0	<A1.0	<A1.0	<A1.0	<A1.0	A5.7	<A1.0
10	<A1.0	<A1.0	<A1.0	<A1.0	A2.5	A6.3	<A1.0	<A1.0	<A1.0	<A1.0	A6.0	<A1.0
11	<A1.0	<A1.0	<A1.0	<A1.0	A2.1	A2.4	<A1.0	<A1.0	<A1.0	<A1.0	A7.0	<A1.0
12	<A1.0	<A1.0	<A1.0	<A1.0	A1.6	A1.2	<A1.0	<A1.0	<A1.0	<A1.0	A7.1	<A1.0
13	<A1.0	<A1.0	<A1.0	<A1.0	A1.3	A1.1	<A1.0	<A1.0	<A1.0	<A1.0	B1.1	<A1.0
14	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A8.4	<A1.0
15	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A1.3	<A1.0	<A1.0	<A1.0	<A1.0	A7.3	<A1.0
16	<A1.0	<A1.0	<A1.0	A3.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A7.5	<A1.0
17	<A1.0	<A1.0	<A1.0	A2.7	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	B1.0	<A1.0
18	<A1.0	<A1.0	<A1.0	A1.9	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	B1.1	<A1.0
19	<A1.0	<A1.0	<A1.0	A1.7	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A4.0	<A1.0
20	<A1.0	<A1.0	<A1.0	A1.7	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
21	<A1.0	<A1.0	<A1.0	A2.2	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
22	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
23	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
24	<A1.0	<A1.0	A2.2	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
25	<A1.0	<A1.0	A4.4	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
26	<A1.0	<A1.0	A4.7	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
27	<A1.0	<A1.0	A4.4	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
28	<A1.0	<A1.0	A4.1	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
29		<A1.0	A4.5	<A1.0	A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
30		<A1.0	A5.4	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0
31		<A1.0		A5.1		<A1.0	<A1.0		<A1.0		A6.2	<A1.0

Levels below B1.0 are unreliable.

JANUARY 2008

Day	Type	Event Start (UT)	Event End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
-----	------	------------------	----------------	-----	-----	--------	-----	-----	--------	-------------------	------------------	----------	-----	-----------------	---------

NO REPORTS

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.

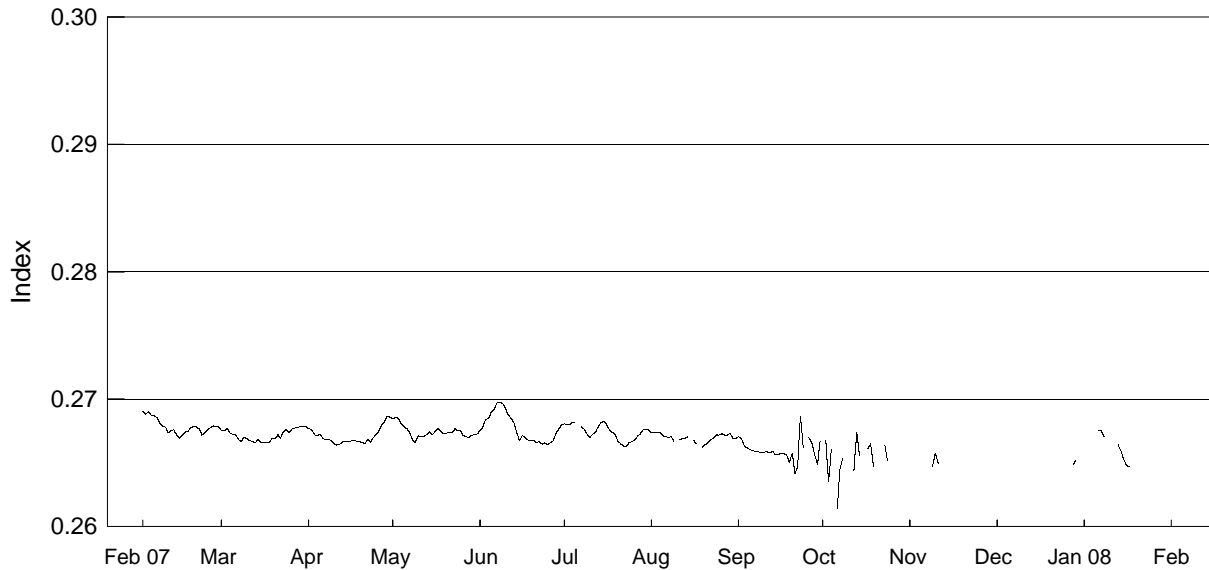
ABST = Abastumani	HOLL = Holloman	RAMY = Ramey
ATHN = Athens	KHAR = Kharkov	SVTO = San Vito
BUCA = Bucharest	LEAR = Learmonth	VORO = Voroshilov
CATA = Catania	PALE = Palehua	VALA = Valasske Mezirici
		WROC = Wroclaw

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

Feb 2007 - Jan 2008

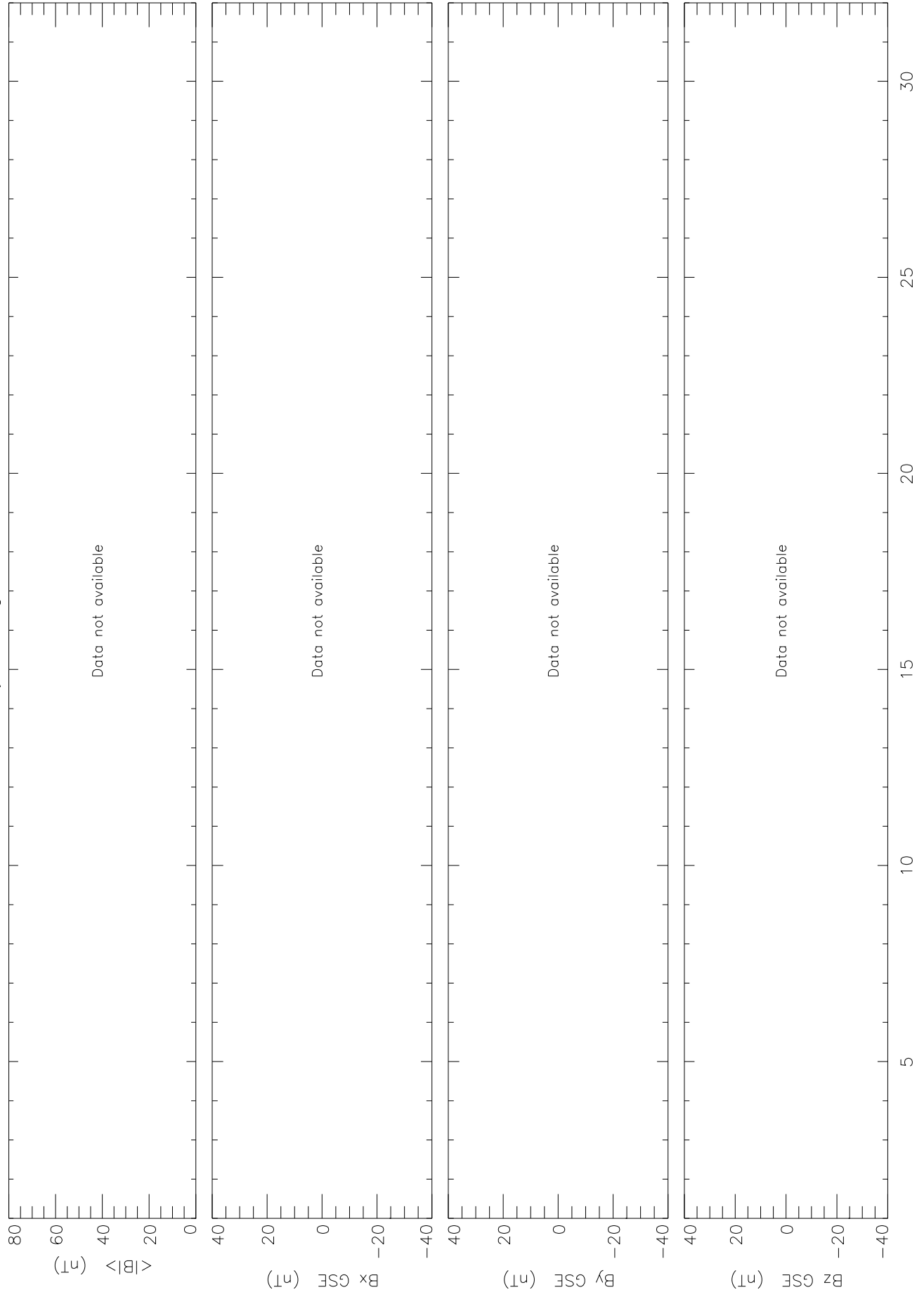
Version 9.1



Day	Feb 07	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 08
1	0.2691	0.2675	0.2677	0.2685	0.2676	0.2681	0.2674	0.2671	---	---	---	---
2	0.2688	0.2675	0.2676	0.2686	0.2678	0.2680	0.2674	0.2669	0.2668	---	---	0.2658
3	0.2690	0.2677	0.2672	0.2685	0.2684	0.2681	0.2674	0.2663	0.2635	---	---	---
4	0.2687	0.2673	0.2671	0.2680	0.2685	0.2682	0.2674	0.2662	0.2661	---	---	---
5	0.2687	0.2673	0.2673	0.2679	0.2690	0.2682	0.2672	0.2661	---	---	---	---
6	0.2685	0.2672	0.2669	0.2677	0.2692	---	0.2671	0.2660	0.2615	---	---	0.2675
7	0.2681	0.2669	0.2669	0.2673	0.2697	0.2678	0.2670	0.2659	0.2645	0.2644	---	0.2675
8	0.2679	0.2667	0.2668	0.2667	0.2698	0.2677	0.2671	0.2659	0.2654	---	---	0.2671
9	0.2678	0.2670	0.2668	0.2666	0.2697	0.2673	0.2667	0.2658	---	0.2647	---	---
10	0.2674	0.2669	0.2665	0.2671	0.2693	0.2670	---	0.2659	---	0.2658	---	---
11	0.2675	0.2668	0.2664	0.2671	0.2688	0.2673	0.2668	0.2659	---	0.2650	---	0.2527
12	0.2676	0.2667	0.2665	0.2671	0.2685	0.2674	0.2669	0.2658	0.2644	---	---	---
13	0.2672	0.2666	0.2666	0.2672	0.2682	0.2678	0.2670	0.2659	0.2674	---	---	0.2664
14	0.2670	0.2668	0.2667	0.2674	0.2674	0.2681	0.2671	0.2657	0.2655	---	---	0.2659
15	0.2672	0.2666	0.2667	0.2672	0.2667	0.2683	---	0.2656	---	---	---	0.2653
16	0.2674	0.2666	0.2667	0.2675	0.2672	0.2680	0.2668	0.2657	---	---	---	0.2648
17	0.2675	0.2666	0.2668	0.2677	0.2670	0.2676	0.2665	0.2657	0.2661	---	---	0.2647
18	0.2677	0.2666	0.2667	0.2675	0.2668	0.2674	---	0.2656	0.2665	---	---	---
19	0.2679	0.2669	0.2667	0.2673	0.2668	0.2672	0.2662	0.2650	0.2647	---	---	---
20	0.2679	0.2669	0.2666	0.2673	0.2668	0.2667	0.2664	0.2657	---	---	---	---
21	0.2677	0.2672	0.2666	0.2674	0.2666	0.2665	0.2666	0.2641	---	---	---	---
22	0.2672	0.2669	0.2668	0.2674	0.2667	0.2663	0.2668	0.2647	---	---	---	---
23	0.2674	0.2675	0.2666	0.2677	0.2665	0.2663	0.2670	0.2687	0.2664	---	---	---
24	0.2676	0.2676	0.2670	0.2675	0.2666	0.2666	0.2672	0.2662	0.2652	---	0.2665	---
25	0.2678	0.2674	0.2672	0.2676	0.2664	0.2667	0.2672	---	---	---	---	---
26	0.2679	0.2677	0.2675	0.2672	0.2666	0.2668	0.2673	0.2670	---	---	---	---
27	0.2678	0.2677	0.2680	0.2671	0.2667	0.2671	0.2672	0.2666	---	---	---	---
28	0.2678	0.2678	0.2683	0.2670	0.2673	0.2673	0.2672	0.2656	---	---	0.2649	---
29	---	0.2678	0.2687	0.2672	0.2677	0.2676	0.2673	0.2649	0.2658	---	0.2652	---
30	---	0.2679	0.2686	0.2672	0.2680	0.2676	0.2669	0.2667	---	---	---	---
31	---	0.2679	---	0.2673	---	0.2676	0.2669	---	---	---	---	---
Mean	0.2679	0.2672	0.2671	0.2674	0.2677	0.2674	0.2670	0.2660	0.2653	0.2650	0.2655	0.2661

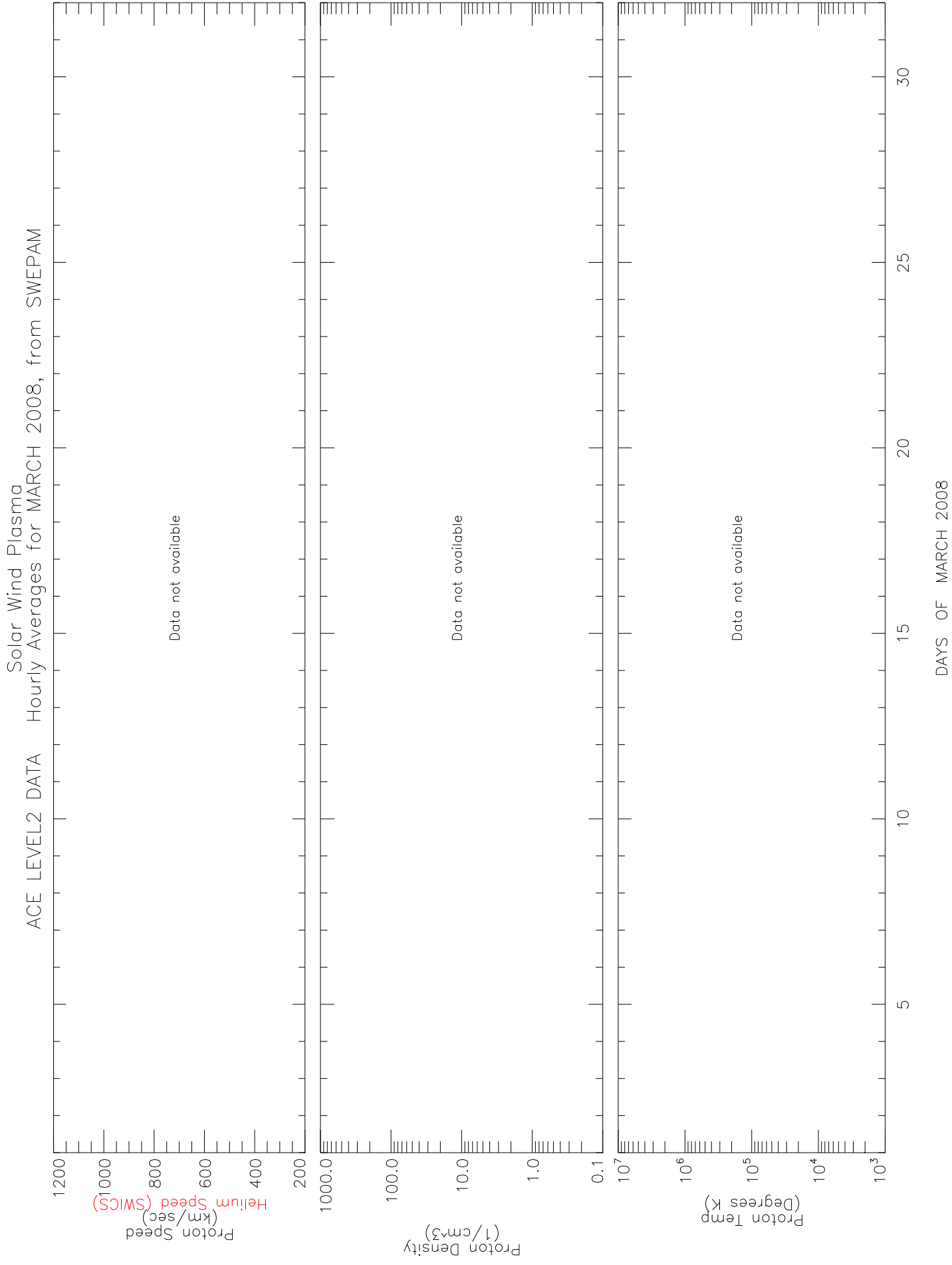
Data at: <http://www.swpc.noaa.gov/ftpmenu/sbuw.html>

ACE LEVEL2 DATA Interplanetary Magnetic Field
Hourly Averages for MARCH 2008, from MAG

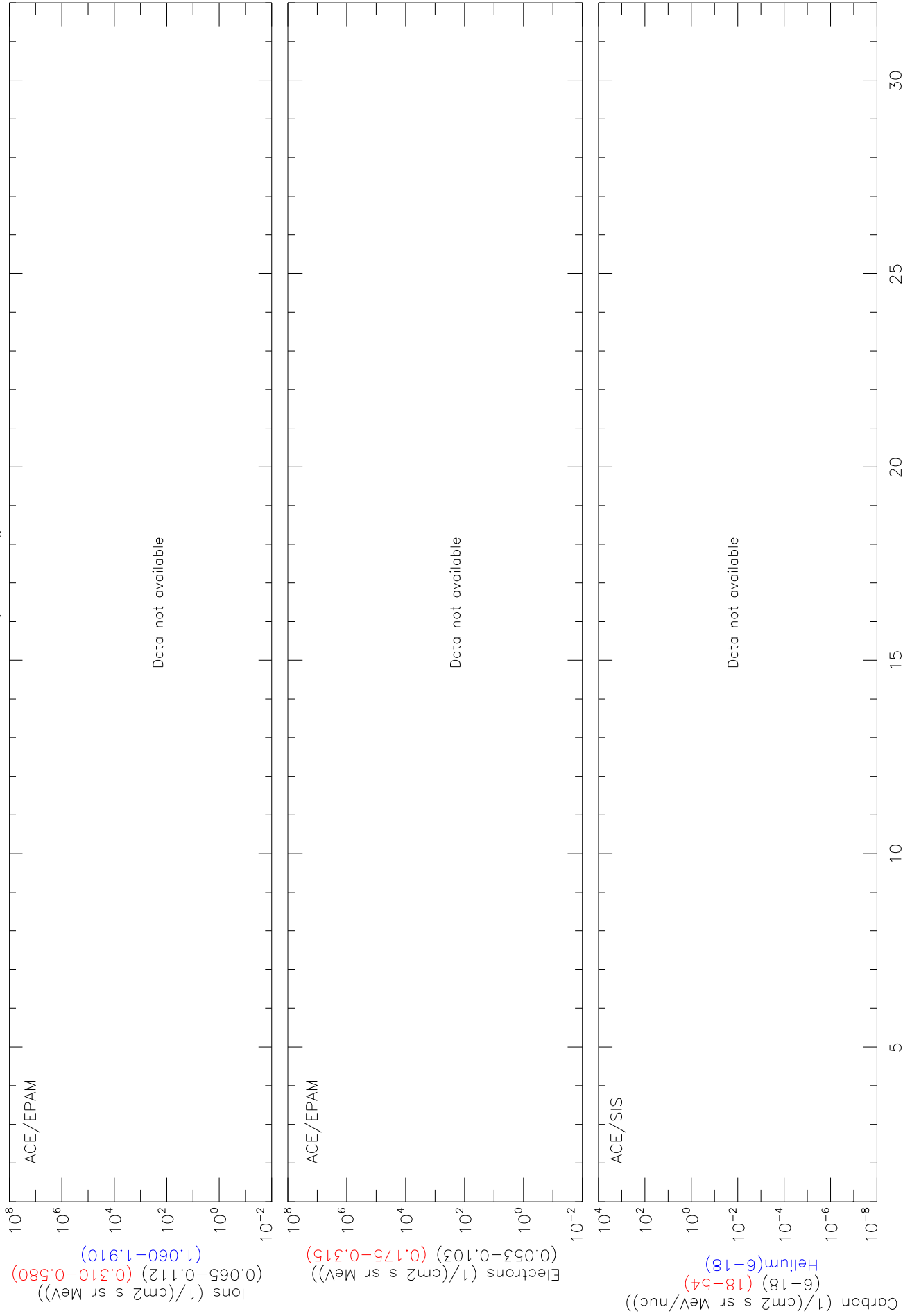


DAYS OF MARCH 2008

ACE LEVEL2 DATA Hourly Averages for MARCH 2008, from SWEPAM



Solar Energetic Particles ACE LEVEL2 DATA Hourly Averages for MARCH 2008



DAYS OF MARCH 2008

SOLAR CORONAL MASS EJECTIONS (CMEs) FROM SOHO/LASCO

<http://cdaw.gsfc.nasa.gov/>

Center for Solar Physics and Space Weather (CSPSW) – The Catholic University of America/NRL/NASA
JANUARY 2008

First C2 Appearance		Central Width			Linear Fit			Measurement		Remarks
Date	Time UT	Position Angle degree	Angular Width degree	Speed km/s	Initial km/s	Final km/s	20R km/s	Accel m/s ²	Position Angle degree	
2008/01/01	08:06:04	113	9	341	280	407	467	6.0*	111	Poor Event
2008/01/01	14:30:04	137	13	281	223	340	572	12.3*	130	Very Poor Event
2008/01/01	21:30:07	181	7	416	159	699	2450	250.3*	181	Very Poor; 3pts; Only C2
2008/01/02	00:30:04	112	14	231	150	310	736	21.7*	112	Very Poor; Only C2
2008/01/02	03:54:05	103	15	619	748	485	0	-29.5*	97	
2008/01/02	08:30:04	144	11	319	451	189	0	-74.9*	142	Very Poor; Only C2
2008/01/02	08:54:04	259	24	89	94	84	0	-1.2*	262	Very Poor; Only C2
2008/01/02	09:54:04	85	143	676	437	939	861	22.7	97	Partial Halo
2008/01/02	10:30:28	289	49	103	41	170	257	2.7*	287	Poor Event
2008/01/02	12:54:04	234	9	379	416	338	0	-21.6*	241	Poor Event; 3pts; Only C2
2008/01/02	15:54:04	32	6	665	804	525	0	-80.5*	32	Very Poor; Only C2
2008/01/02	22:06:04	195	6	275	----	----	----	-----	196	Very Poor; 2pts; Only C2
2008/01/02	23:54:04	71	12	112	94	132	176	0.9*	70	Very Poor Event
2008/01/03	09:54:04	352	6	328	430	228	0	-48.2*	349	Very Poor; Only C2
2008/01/03	14:30:05	71	9	133	152	112	0	-2.3*	68	Very Poor Event
2008/01/03	17:06:05	103	12	273	202	353	438	6.6*	104	Very Poor Event
2008/01/03	18:06:04	87	10	275	124	435	492	9.7*	89	Very Poor Event
2008/01/04	03:30:04	78	19	198	206	191	0	-3.0*	75	Very Poor; Only C2
2008/01/04	07:54:04	93	10	329	380	276	0	-11.2*	91	Very Poor Event
2008/01/04	09:54:04	79	37	484	263	709	664	15.8*	80	
2008/01/04	14:54:06	66	10	226	221	231	242	0.4*	66	Very Poor Event
2008/01/04	14:54:06	322	57	322	195	447	509	9.3*	310	Very Poor Event
2008/01/04	20:30:04	126	5	331	374	287	0	-24.0*	124	Very Poor; Only C2
2008/01/05	01:42:04	73	16	272	271	274	274	0.1*	71	Very Poor; Only C3
2008/01/05	11:54:04	76	11	187	171	204	218	0.8*	74	Very Poor Event
2008/01/06	03:30:10	129	6	294	340	245	0	-6.5*	123	Poor Event
2008/01/06	04:30:29	356	8	380	616	116	0	-139.8*	358	Very Poor Event; 3 points
2008/01/06	05:30:04	346	10	326	286	372	1003	39.8*	341	Very Poor; 3pts; Only C2
2008/01/06	09:30:04	64	37	296	266	327	341	2.0*	66	Very Poor Event
2008/01/06	20:30:06	227	18	198	172	224	280	2.3*	234	Very Poor Event
2008/01/07	02:54:04	135	5	282	261	303	461	6.1*	129	Very Poor; Only C2
2008/01/07	04:06:04	327	21	347	271	428	612	12.3*	328	Poor Event
2008/01/07	10:30:26	71	11	178	77	271	342	5.1*	71	Very Poor Event
2008/01/07	21:08:04	71	53	103	0	198	278	3.3*	76	Very Poor Event
2008/01/08	21:30:07	298	17	412	371	459	530	6.0*	300	Poor Event
2008/01/08	22:06:05	128	7	98	96	100	164	0.7*	127	Very Poor; 3pts; Only C2
2008/01/09	01:31:41	347	3	235	160	313	1066	45.6*	346	Very Poor; Only C2
2008/01/09	06:54:04	302	7	231	0	503	1704	120.5*	300	Very Poor; Only C2
2008/01/09	08:54:04	239	9	343	316	375	386	2.3*	243	Very Poor Event
2008/01/09	10:30:21	192	7	297	145	456	1225	63.0*	196	Very Poor; Only C2
2008/01/09	17:42:04	248	18	188	192	183	170	-0.4*	248	Very Poor; Only C3
2008/01/10	06:42:04	239	15	227	212	241	280	1.6*	238	Very Poor Event
2008/01/10	07:32:15	128	9	246	230	264	675	16.8*	124	Very Poor; 3pts; Only C2
2008/01/10	11:30:04	188	5	280	240	320	676	16.3*	186	Very Poor; Only C2
2008/01/10	23:30:04	283	50	184	0	365	419	7.5*	281	Poor Event
2008/01/11	00:30:04	240	10	295	213	374	440	7.6*	242	Very Poor Event
2008/01/11	03:30:04	233	9	343	266	427	454	6.1*	239	Poor Event
2008/01/11	11:06:05	289	19	134	164	103	0	-4.4*	292	Very Poor; Only C2
2008/01/11	22:30:04	302	7	374	355	393	441	2.9*	298	Poor Event

SOLAR CORONAL MASS EJECTIONS (CMEs) FROM SOHO/LASCO

<http://cdaw.gsfc.nasa.gov/>

Center for Solar Physics and Space Weather (CSPSW) – The Catholic University of America/NRL/NASA
JANUARY 2008

First C2 Appearance		Central Width			Linear Fit			Measurement		Remarks
Date	Time UT	Position Angle degree	Angular Width degree	Speed km/s	Initial km/s	Final km/s	20R km/s	Accel m/s ²	Position Angle degree	
2008/01/12	04:30:04	233	9	300	0	527	559	15.4*	239	Very Poor Event
2008/01/13	00:30:04	73	50	114	42	187	287	3.4*	69	Very Poor Event
2008/01/13	11:06:04	62	13	95	74	118	296	3.4*	63	Very Poor; Only C2
2008/01/13	20:54:17	99	26	119	102	137	166	0.8*	101	Poor Event
2008/01/13	22:30:04	73	18	214	138	293	332	4.1*	81	Very Poor Event
2008/01/15	11:30:04	92	24	110	127	91	0	-2.7*	93	Very Poor; Only C2
2008/01/16	04:30:05	82	47	157	118	196	305	3.3*	86	Very Poor Event
2008/01/17	09:30:04	82	39	63	58	67	119	0.4*	89	Very Poor; Only C2
2008/01/17	22:06:04	92	24	224	197	250	249	1.1*	89	
2008/01/19	00:30:04	296	38	165	95	262	258	2.4*	303	Poor Event
2008/01/19	06:54:04	228	24	165	0	315	501	10.4*	231	
2008/01/20	00:54:04	14	10	225	3	465	1743	128.3*	21	Very Poor; 3pts; Only C2
2008/01/20	02:30:04	283	13	233	96	379	414	6.8*	283	Poor Event
2008/01/20	21:30:09	184	5	420	39	839	2854	371.3*	186	Very Poor; 3pts; Only C2
2008/01/21	10:30:25	236	6	562	326	813	1819	136.1*	242	Poor Event; 3pts; Only C2
2008/01/21	11:06:04	143	63	141	144	138	98	-0.5*	132	Very Poor Event
2008/01/21	11:30:04	82	10	317	257	376	811	24.2*	84	Very Poor; Only C2
2008/01/21	12:54:04	109	24	179	145	216	648	16.4*	107	Very Poor; Only C2
2008/01/22	03:30:04	114	9	332	225	446	559	12.0*	115	Poor Event
2008/01/22	22:06:04	150	122	362	243	489	481	7.1	142	Partial Halo
2008/01/23	16:32:40	113	5	406	424	388	374	-1.9*	121	Very Poor Event
2008/01/23	22:30:04	12	8	162	143	182	529	10.7*	16	Very Poor; 3pts; Only C2
2008/01/23	22:30:04	126	68	160	111	208	319	3.8*	136	Poor Event
2008/01/24	05:06:04	102	24	172	135	211	356	4.5*	98	Very Poor Event
2008/01/24	13:31:38	199	5	232	153	318	1367	79.7*	205	Very Poor; 3pts; Only C2
2008/01/24	14:30:04	136	9	104	75	133	278	3.0*	135	Very Poor; Only C2
2008/01/24	20:30:04	97	20	207	168	245	389	5.2*	97	Poor Event
2008/01/25	02:06:04	118	34	261	227	295	341	2.9*	125	Very Poor Event
2008/01/25	05:30:04	123	7	303	264	346	396	4.1*	120	Very Poor Event
2008/01/25	08:54:04	127	12	266	181	361	378	5.3*	122	Very Poor Event
2008/01/26	02:30:04	133	12	266	183	349	386	4.9*	124	Very Poor Event
2008/01/27	03:30:11	17	21	60	45	75	141	0.7*	1	Very Poor Event
2008/01/27	14:30:04	48	28	137	75	204	340	4.6*	43	Very Poor Event
2008/01/28	00:06:26	49	19	253	222	285	289	1.5*	43	Poor Event
2008/01/28	04:30:04	48	19	318	252	385	383	3.4*	45	
2008/01/28	14:30:06	240	5	286	357	215	0	-27.9*	248	Very Poor; Only C2
2008/01/28	16:06:04	267	30	166	0	332	308	4.0	270	
2008/01/29	00:30:04	26	6	386	350	423	677	14.6*	28	Very Poor; Only C2
2008/01/29	15:54:04	91	23	168	169	167	154	-0.2*	88	Very Poor; Only C2
2008/01/29	18:06:04	93	34	200	227	174	0	-2.5	94	

SOLAR CORONAL MASS EJECTIONS (CMEs) FROM SOHO/LASCO

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Center for Solar Physics and Space Weather (CSPSW) – The Catholic University of America/NRL/NASA
JANUARY 2008

First C2 Appearance		Central Width			Linear Fit			----2nd order speed----		Accel	Measurement	
Date	Time UT	Position Angle degree	Angular Width degree	Speed km/s	Initial km/s	Final km/s	20R km/s		m/s ²	Position Angle degree	Remarks	
2008/01/30	03:30:06	241	9	393	506	283	0		-44.5*	249	Poor Event; Only C2	
2008/01/30	07:30:04	280	71	256	237	276	284		1.0*	280		
2008/01/30	08:54:04	87	60	486	641	321	407		-10.5*	64		
2008/01/30	19:30:05	87	48	219	274	166	0		-11.3*	99	Poor Event; Only C2	
2008/01/31	01:31:39	98	24	120	101	139	338		4.3*	101	Very Poor; Only C2	
2008/01/31	03:08:05	302	16	513	701	328	0		-135.4*	300	Very Poor; 3pts; Only C2	
2008/01/31	07:54:04	106	19	210	231	187	45		-2.2*	101	Very Poor Event	
2008/01/31	13:31:42	92	76	33	0	85	241		2.4*	96	Very Poor Event	

* Acceleration is uncertain due to either poor height measurement or a small number of height-time measurements.

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