

NOVEMBER 2006 NUMBER 747 - Part II



Solar-Geophysical Data comprehensive reports

Data for May 2006 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**

NGDC On-Line Addresses:

World-Wide Web <http://www.ngdc.noaa.gov>

Anonymous FTP: <ftp.ngdc.noaa.gov>

noaa

NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL SATELLITE,
DATA, AND INFORMATION SERVICE

NATIONAL GEOPHYSICAL
DATA CENTER

BOULDER,
COLORADO



U.S. DEPARTMENT OF COMMERCE

Carlos M. Gutierrez, Secretary

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Vice Admiral Conrad C. Lautenbacher, Jr., Under Secretary/Administrator

NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE

Gregory W. Withee, Assistant Administrator

NOVEMBER 2006 NUMBER 747 - Part II

Solar-Geophysical Data comprehensive reports

Data for May 2006 and Late Data

International Standard Serial Number: 0038-0911

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

NATIONAL GEOPHYSICAL DATA CENTER

Christopher G. Fox, Director

Boulder, Colorado

Subscription information is on the inside back cover.

SOLAR-GEOPHYSICAL DATA

Number 747
(Issued in Two Parts)

Editor: Helen E. Coffey

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

Staff: Edward H. Erwin

CONTENTS

PART I (PROMPT REPORTS)

Page

DETAILED INDEX FOR 2006	2
DATA FOR OCTOBER 2006	3-31
DATA FOR SEPTEMBER 2006	33-98

PART II (COMPREHENSIVE REPORTS)

Page

DETAILED INDEX FOR 2006	2
DATA FOR MAY 2006	3-22
INCLUDING:	
ACE SOLAR WIND, INTERPLANETARY MAGNETIC FIELD AND PARTICLES	
-- MONTHLY PLOTS	

DETAILED INDEX OF OBSERVATIONS PUBLISHED IN SOLAR-GEOPHYSICAL DATA

CODE	KIND OF OBSERVATION	MAR 06	APR	MAY	JUN	JUL	AUG	SEP	OCT
A. SOLAR AND INTERPLANETARY									
A.1	Sunspot Drawings	741A 42	742A 40	743A 40	744A 42	745A 42	746A 38	747A 38	
A.2aa	International Sunspot Numbers	740A 24	741A 24	742A 25	743A 23	744A 24	745A 24	746A 23	747A 24
A.2c	American Sunspot Numbers	740A 24	741A 24	742A 25	743A 23	744A 24	745A 24	746A 23	747A 24
A.3a	Mt. Wilson Magnetograms	741A 42	742A 40	743A 40	744A 42	745A 42	746A 38	747A 38	
A.3b	Sunspot Mag Class and Regions	741A 79	742A 75	743A 47	744A 77	745A 79	746A 75	747A 73	
A.3c	Kitt Peak Magnetograms	741A 42	742A 40	743A 40	744A 42	745A 42	746A 38	747A 38	
A.3d	Mean Solar Mag Field (Stanford)	740A 31	741A 33	742A 31	743A 29	744A 31	745A 33	746A 31	747A 29
A.3e	Stanford Magnetograms	741A 42	742A 40	743A 40	744A 42	745A 42	746A 38	747A 38	
A.4	H-alpha Filtergrams	741A 42	742A 40	743A 40	744A 42	745A 42	746A 38	747A 38	
A.5d	Photometric Ca Faculae San Fernando	Jan 92-Dec 96-631B 22; 1997-1998 663B 66							
A.6c	Stanford Solar Mag Field Map	741A 36	742A 34	743A 34	744A 36	745A 36	746A 34	747A 34	
A.6d	Kitt Peak Mag Field Synoptic Map	741A 41	742A 39	743A 39	744A 41	745A 41	746A 37	747A 37	
A.6f	Active Prominences and Filaments	745B 18	746B 21	747B 16					
A.6g	Sac Peak Coronal Line Maps	741A 38	742A 36	743A 36	744A 38	745A 38	746A 36	746A 36	
A.6h	Photometric WL San Fernando	Jul-Dec 96 630B 32; 1997-1998 in 663B 51							
A.7h	Coronal Line Emission (Sac Peak)	741A 42	742A 40	743A 40	744A 42	745A 42	746A 38	747A 38	
A.7j	Coronal Hole Daily Maps (NSO/KP)								
A.7k	Coronal Index (Slovak Academy)	1939-1996 -644B 28							
A.7m	Coronal Mass Ejections (CSPSW)	745B 23	746B 26	747B 21					
A.8aa	2800 MHz- Solar Flux (Penticton)	740A 24	741A 24	742A 25	743A 23	744A 24	745A 24	746A 23	747A 24
A.8ac	2800 MHz Adj Solar Flux (Pent.)	740A 24	741A 24	742A 25	743A 23	744A 24	745A 24	746A 23	747A 24
A.8g	Adjusted Daily Solar Flux SGMR	740A 24	741A 24	742A 25	743A 23	744A 24	745A 24	746A 23	747A 24
A.10g	Nancay Radiohelio 164&327MHz	741A 86	742A 91	743A 89	744A 85	745A 94	746A 91	747A 83	
A.10h	Nobeyama Radioheliogr 17 GHz	741A 73	742A 70	743A 71	744A 72	745A 73	746A 69	747A 68	
A.11g	Solar X-ray GOES (graphs)	745B 11	746B 15	747B 9					
A.11g	Solar X-ray GOES (event table)	740A 28	741A 28	742A 29	743A 27	744A 28	745A 28	746A 27	747A 28
A.11k	Solar UV NOAA-9	May 86-Dec 88 in 566B 84							
A.11l	Solar UV NIMBUS7	Nov 78-Oct 84 in 542B 82							
A.11m	Solar UV SOLSTICE (UARS)	Oct 91-Sep 94 in 607B 46							
A.11o	Solar UV SUSIM (UARS)	Oct 91-Jan 97 in 629B 30							
A.11p	Solar UV Mg II Daily Index	745B 19	746B 22	747B 17					
A.12g	Solar Particles (GOES)	740A 4	741A 4	742A 4	743A 4	744A 4	745A 4	746A 4	747A 4
A.12i	Solar Energetic Particles (ACE)	745B 22	746B 25	747B 20					
A.13g	Solar Plasma (ACE)	745B 21	746B 24	747B 19					
A.16c	ERBS, NOAA-9 & -10 Solar Irradiance	ERBS Oct 84-Jun 00 in 671B 36							
A.16d	UARS Solar Irradiance	Oct 91-May 2001 684B 26 - Complete Mission							
A.16e	VIRGO/SOHO Solar Irradiance	Jan 96-Sep 00 in 678B 46							
A.17c	Inferred Interplanetary Mag Field	1984-1988 data in 542A168; 1989-Jan 94 in 611A118							
A.17d	ACE Interplanetary Mag Field	745B 20	746B 23	747B 18					
C. SOLAR FLARE-ASSOCIATED EVENT									
C.1a	H-alpha Flares	740A 27	741A 27	742A 28	743A 26	744A 27	745A 27	746A 26	747A 27
C.1ba	H-alpha Flare Groups	745B 4	746B 4	747B 4					
C.1d	Flare Patrol Observations	745B 8	746B 7	747B 6					
C.1h	H-alpha Flare Index (ImpxDur)	Jan 76-Dec 85 in 639B 26; Jan 86-Oct 96 in 635B 24; Jan 96-Dec 98 in 665B 63							
C.3	Radio Bursts Fixed Frequency	745B 10	746B 9	747B 8					
C.3	Radio Bursts Fixed Frequency Select		741A 31			744A 30	745A 31	746A 29	
C.4	Radio Bursts Spectral	741A 83	742A 83	743A 84	744A 81	745A 85	746A 80	747A 78	
C.6	Sudden Ionospheric Disturbances	741A 82	742A 82	743A 83	744A 80	745A 84	746A 78	747A 77	
D. GEOMAGNETIC EVENTS									
D.1a	Geomagnetic Indices	741A 93	742A 99	743A 97	744A 91	745A102	746A 99	747A 90	
D.1ba	27-day Chart of Kp Indices	741A 95	742A101	743A 99	744A 93	745A104	746A101	747A 92	
D.1cb	Monthly Mean aa Indices	741A 96	742A102	743A100	744A 94	745A105	746A102	747A 93	
D.1d	Principal Magnetic Storms	741A100	742A106	743A104	744A 98	745A109	746A106	747A 97	
D.1f	Sudden Commencement/FlareEffect	741A101	742A107	743A105	744A 99	745A110	746A107	747A 98	
D.1g	Equatorial Indices Dst	741A 98	742A104	743A102	744A 96	745A107	746A104	747A 95	
D.1l	Polar Cap (PC) Index	741A 99	742A105	743A103	744A 97	745A108	746A105	747A 96	
F. COSMIC RAYS									
F.1b	Cosmic Ray Neutron Cts (Climax)	741A 87	742A 93	743A 91	744A 87	745A 96	746A 93	747A 84	
F.1h	Cosmic Ray Neutron Cts (Thule)	741A 87	742A 93	743A 91	744A 87	745A 96	746A 93	747A 84	
F.1i	Cosmic Ray Neutron Cts (Kiel)	741A 87	742A 93	743A 91	744A 87	745A 96	746A 93	747A 84	
F.1n	Cosmic Ray Neutron Cts (Beijing)	741A 87	742A 93	743A 91	744A 87	745A 96	746A 93	747A 84	
F.1m	Cosmic Ray Neutron Cts (Haleakala)	741A 87	742A 93	743A 91	744A 87	745A 96	746A 93	747A 84	
F.1o	Cosmic Ray Neutron Cts (Moscow)	741A 87	742A 93	743A 91	744A 87	745A 96	746A 93	747A 84	
F.1p	Cosmic Ray Neutron Cts (Calgary)	741A 87	742A 93	743A 91	744A 87	745A 96	746A 93	747A 84	
H. MISCELLANEOUS									
H.60	ISES Alert Periods	740A 20	741A 19	742A 20	743A 19	744A 20	745A 20	746A 19	747A 20

The entry "741A 42" under Mar, for example, means that the sunspot drawings for Mar appear in SOLAR-GEOPHYSICAL DATA No. 741 Part I, and that they begin on page 42 "A" denotes Part I and "B", Part II. Blanks indicate data not yet received and dashes mark unavailable data.

CONTENTS

Comprehensive Reports

Number 747 Part II

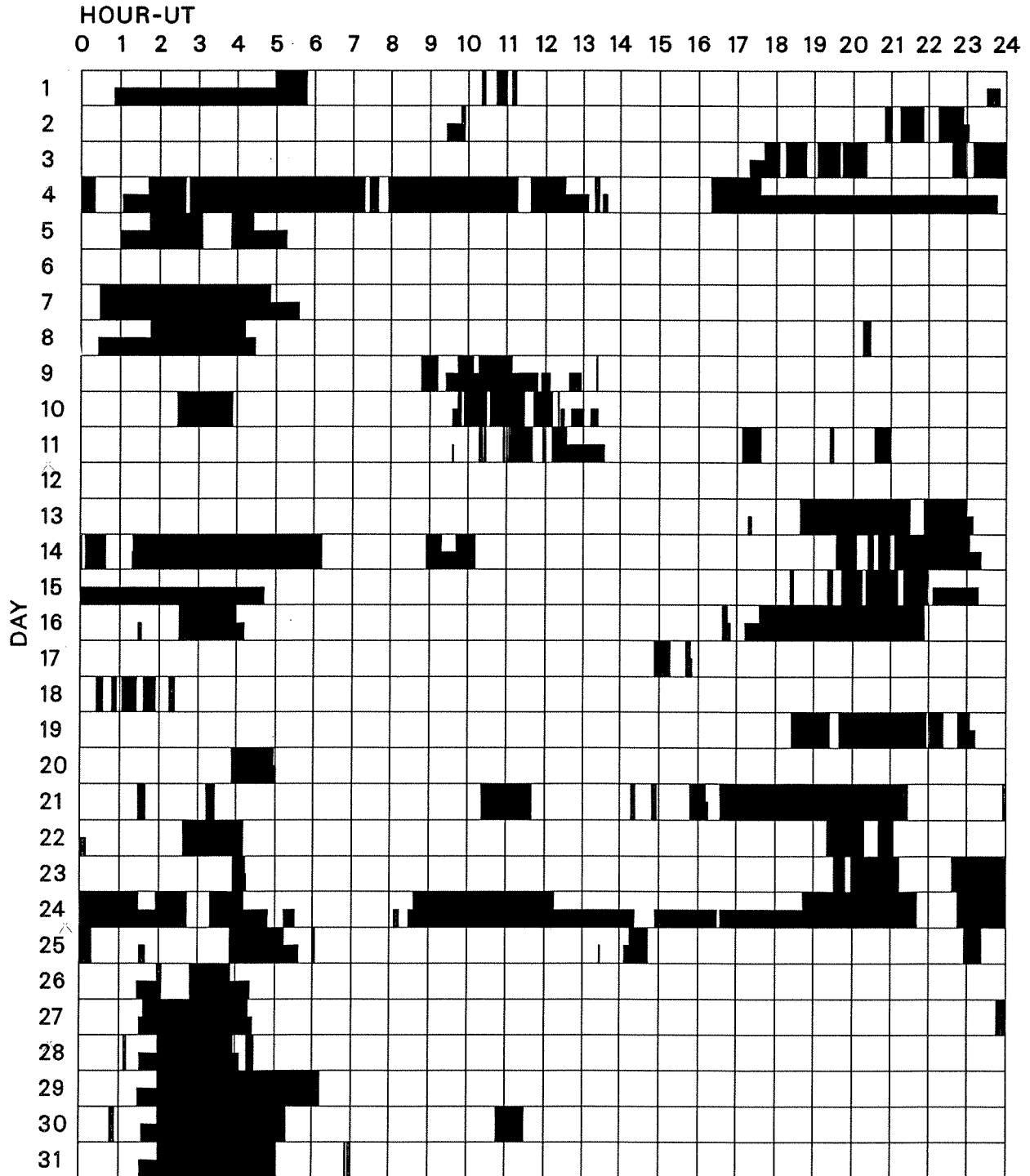
DATA FOR MAY 2006

	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 -- See Solar X-ray Flare List in Jun 06 Prompt Reports	
Preliminary Daily Average Background	15
ACTIVE PROMINENCES AND FILAMENTS	16
SOLAR ULTRAVIOLET DAILY DATA FROM NOAA SATELLITE	
NOAA Mg II Daily Index Version 9.1	17
INTERPLANETARY ENVIRONMENT HOURLY AVERAGE PLOTS	
FROM ADVANCED COMPOSITION EXPLORER (ACE) SATELLITE	
Interplanetary Magnetic Field -- MAG	18
Solar Wind Plasma -- SWEPPAM	19
Solar Energetic Particles -- EPAM/SIS (Ions, Electrons, and Carbon)	20
SOLAR CORONAL MASS EJECTIONS from SOHO/LASCO SATELLITE	
Table of Events	21-22



INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

MAY 2006



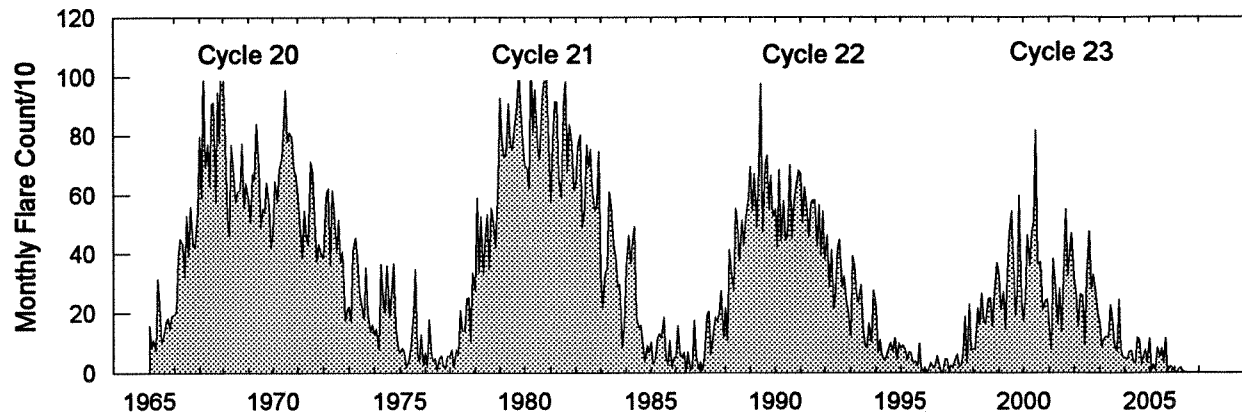
Times of no flare patrol, shown here as shaded areas, combine reports from the stations listed below. Portions of a panel completely shaded mark dates and times of no patrol of any kind (neither visual or cinematographic); portions of a panel with only the bottom half shaded mark times of only visual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

Holloman
Kanzelhoehe

Learmonth

San Vito

Monthly Counts of Grouped Solar Flares Jan 1965 - May 2006



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								35

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

MAY 2006

Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak (10 -22 W/m 2 Hz)	Mean		
02	127 TORN	43 NS	1126.0		84.0				V=1
	245 LEAR	8 S	0652.0	0652.0	U	79.0	7.0		QL=4 ST=2 TYP=3
04	33 UPIC	2 S/F	0732.0	0732.1	1.5				
	33 UPIC	45 C	0838.0	0838.2	1.5				
	33 UPIC	2 S/F	0927.5	0928.0	1.3				
06	33 UPIC	4 S/F	0956.0	0956.3	1.5				
	33 UPIC	45 C	1718.2	1720.0	2.0				
07	33 UPIC	4 S/F	1126.0	1126.3	1.2				
	33 UPIC	45 C	1212.0	1212.5	4.0				UNCERTN
09	245 LEAR	43 NS	0609.0	0609.0	86.0	60.0			QL=4 ST=2 TYP=1
	245 LEAR	43 NS	0609.0	0609.0	1071.0	60.0			QL=4 ST=1 TYP=1
	245 SGMR	8 S	1323.0	1324.0	1.0	76.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	1323.0	1324.0	1.0	93.0			QL=4 ST=2 TYP=3
15	410 LEAR	8 S	2320.0	2320.0	U	110.0			QL=4 ST=2 TYP=3
19	33 UPIC	45 C	1400.8	1401.3	5.2				UNCERTN
20	127 TORN	43 NS	1104.0		146.0				V=1
	127 TORN	27 RF	1048.8		9.5				
25	127 TORN	43 NS	1310.0		56.0		6.0		V=1, DISTURBED
	245 LEAR	8 S	0417.0	0417.0	U	54.0			QL=4 ST=2 TYP=3
	245 LEAR	8 S	0612.0	0612.0	U	210.0			QL=4 ST=2 TYP=3
27	127 TORN	43 NS	0830.0		140.0		1.0		V=0
30	410 LEAR	8 S	0234.0	0234.0	U	66.0			QL=4 ST=2 TYP=3

Reports are received routinely from the following observatories:

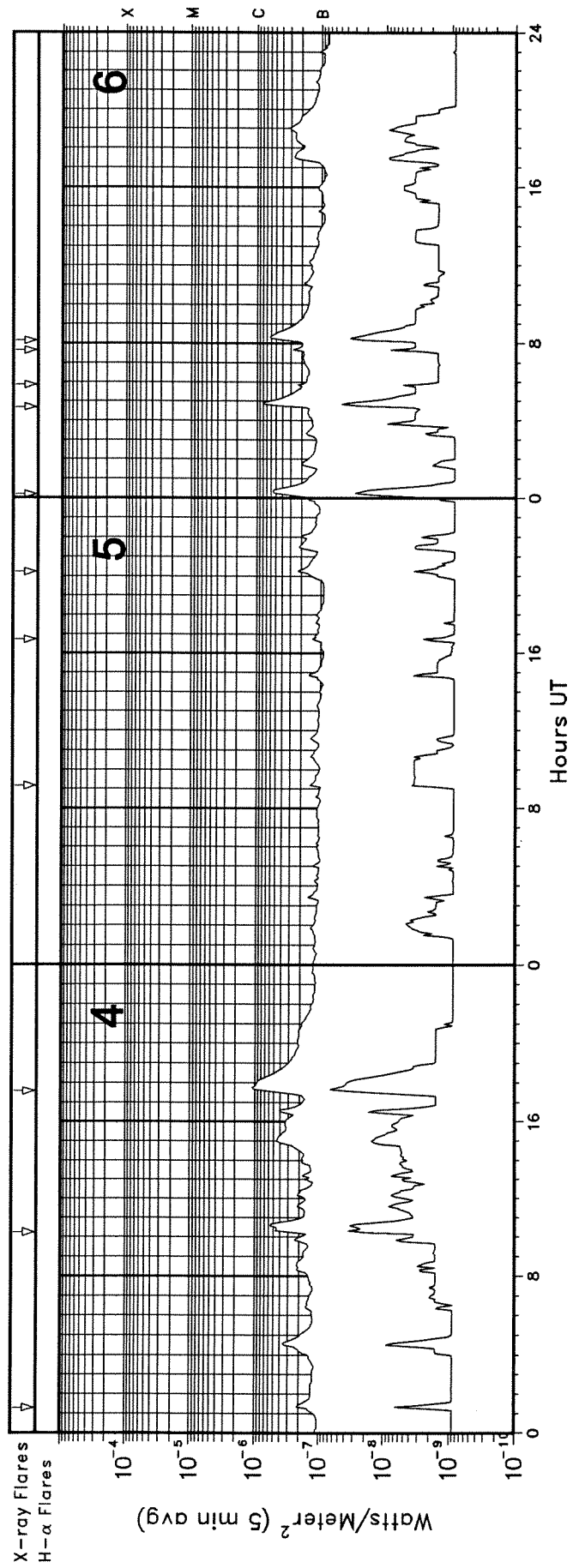
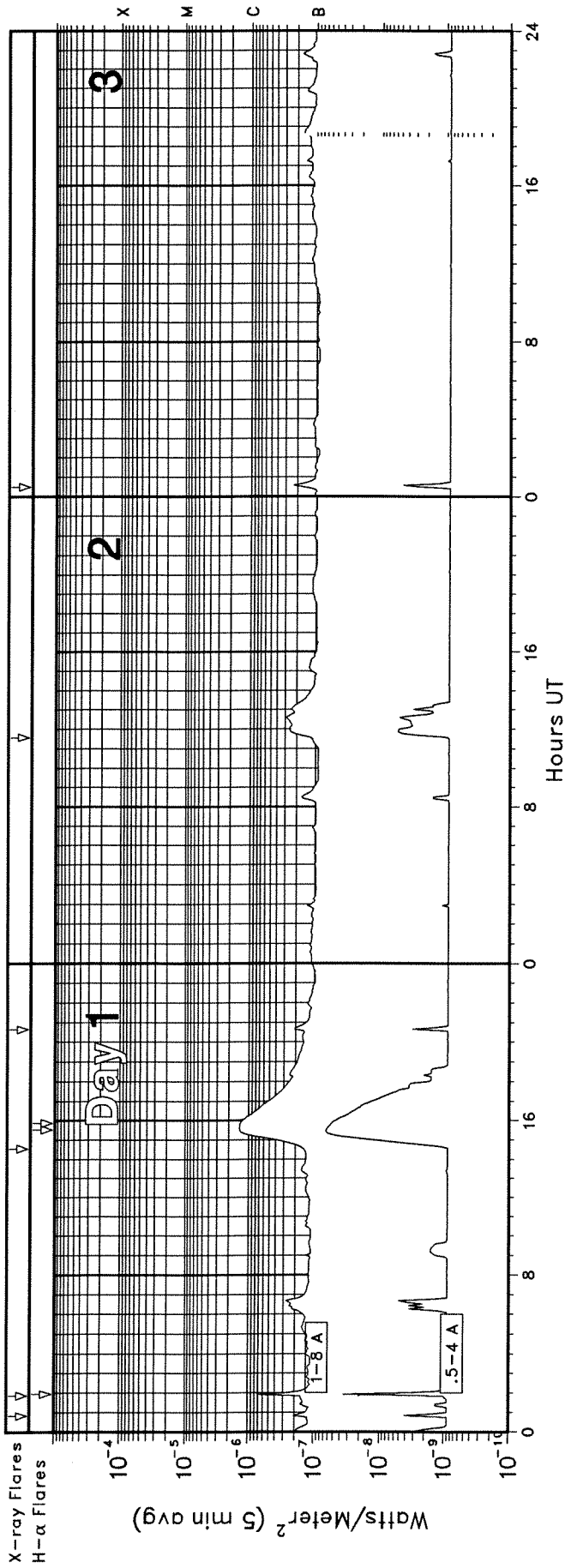
BERN = Berne	HUMN = Humain	ONDR = Ondrejov	SVTO = San Vito
CRIM = Crimea	IZMI = IZMIRAN	PEKG = Peking	TORN = Torun
CUBA = Havana	KISV = Kislovodsk	PALE = Palehua	TRST = Trieste
GORK = Gorky	KRAK = Krakow	PENT = Penticton	TYKW = Toyokawa
HIRA = Hiraiso	LEAR = Learmonth	POTS = Potsdam	UPIC = Upice
HUAN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

Explanation of Type Code:

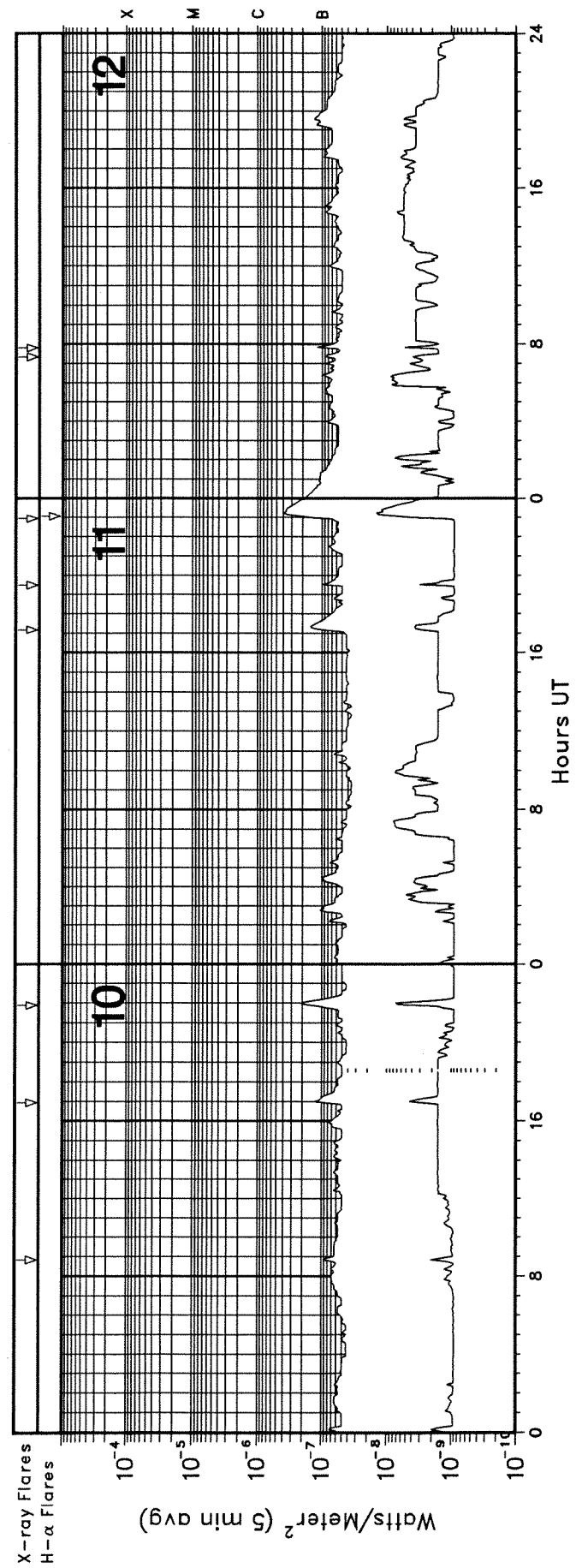
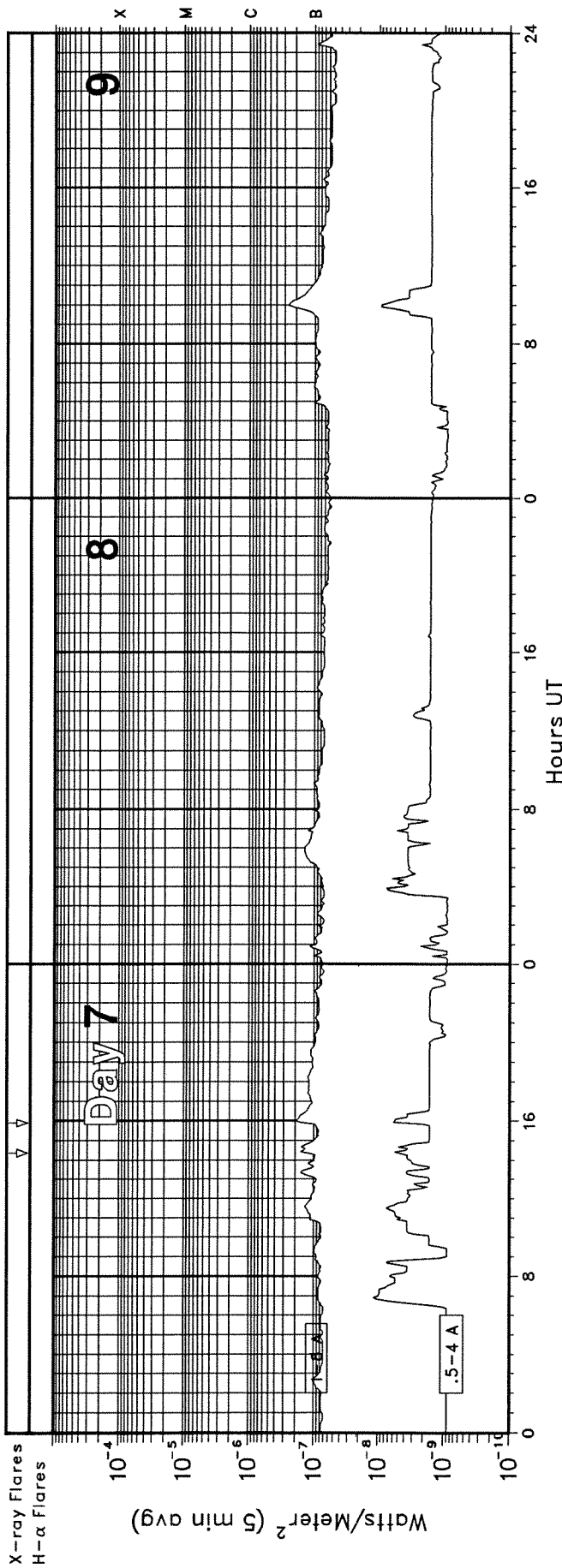
1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple 3F	28 Precursor	41 Group of Bursts	47 Great Burst
6 Minor	23 Simple 3AF	29 Post Burst Increase	42 Series of Bursts	48 Major
1A Simple 1A	4A Simple 2AF	24PF Post Rise F	27F Rise and Fall F	
3A Simple 2A	40 Rise Only	16A Fall A	27AF Rise and Fall AF	
21A Simple 3A GRF	40F Rise Only F	260 Fall Only	31A Post Burst Decrease A	
2A Simple 1AF	4P Post Rise	26F Fall F	32A Absorption A	

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

GOES X-RAY DETECTOR May 2006

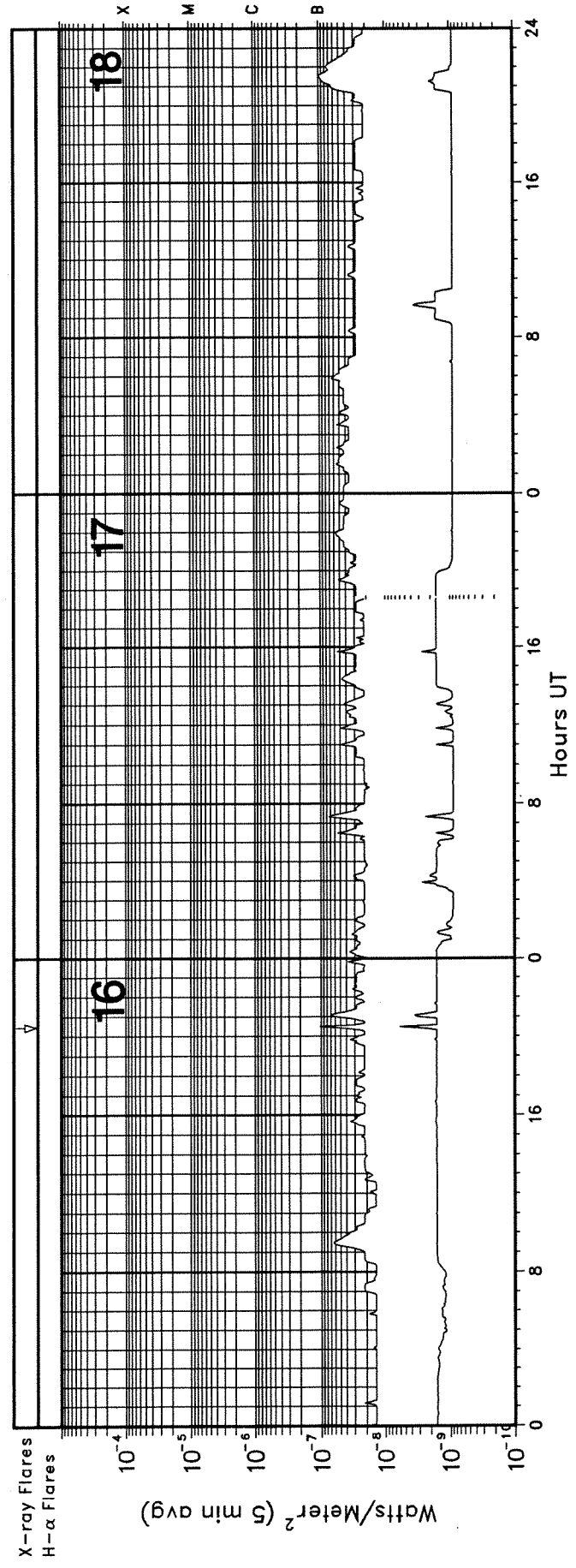
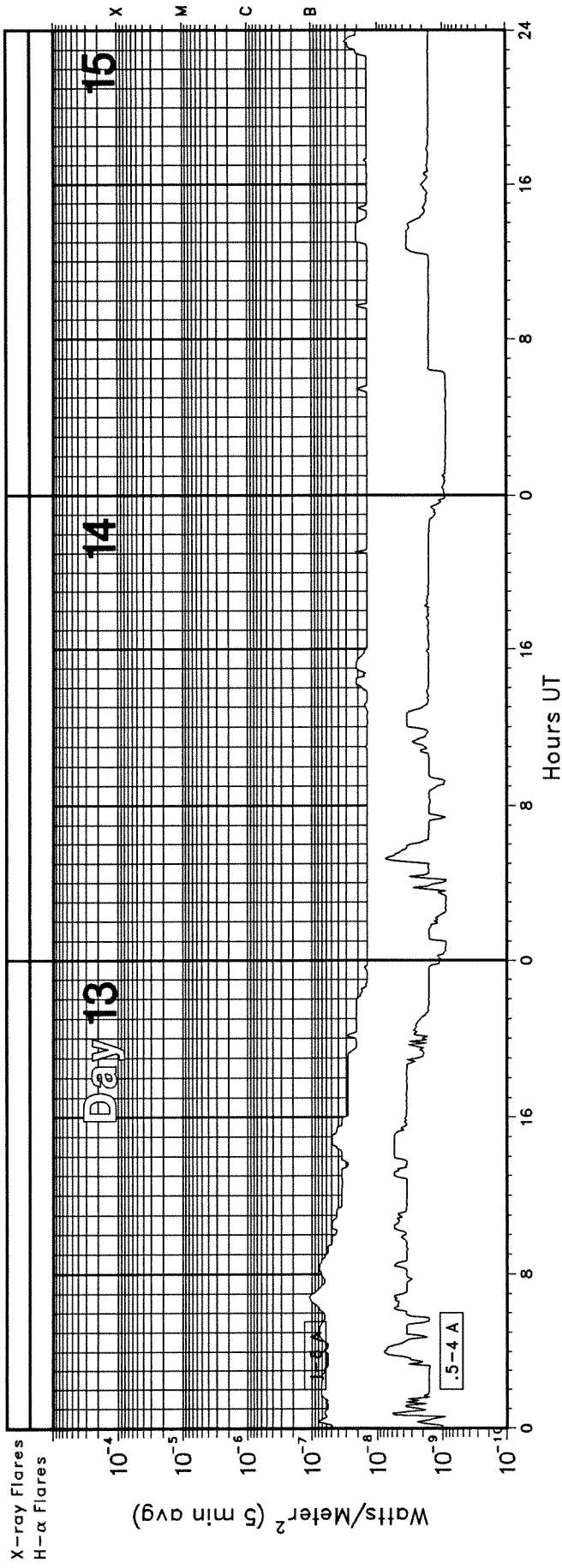


GOES X-RAY DETECTOR May 2006

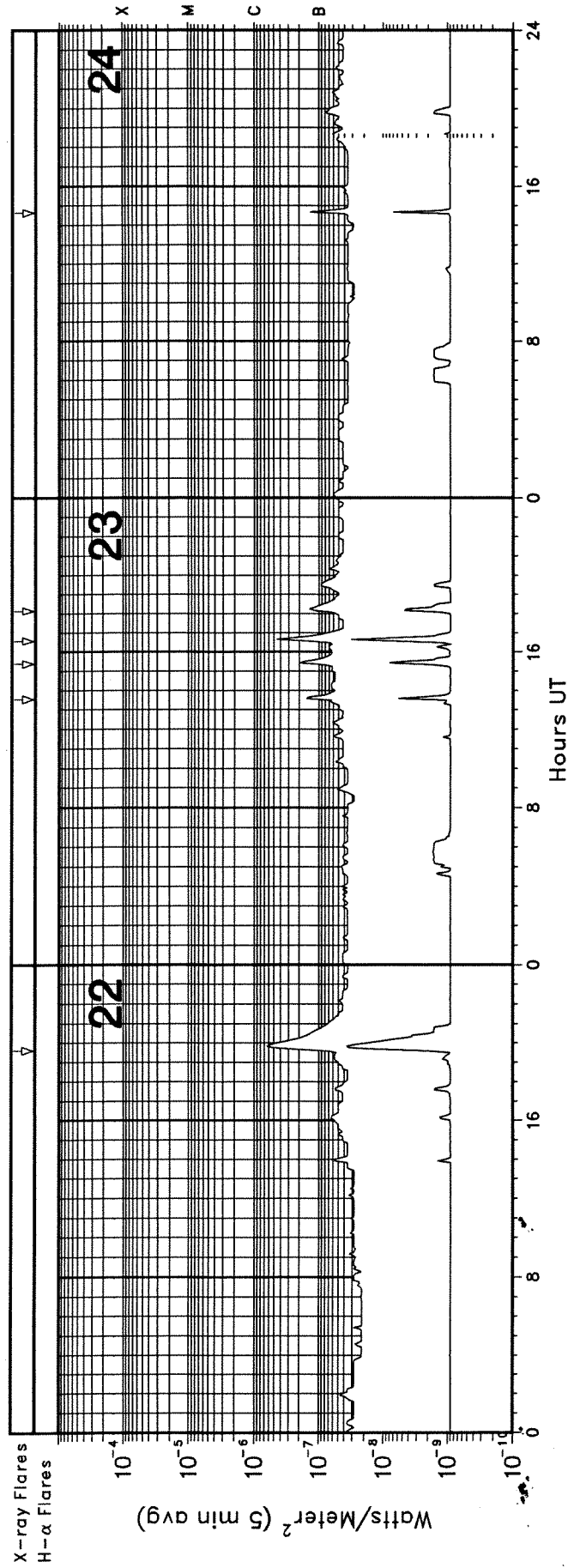
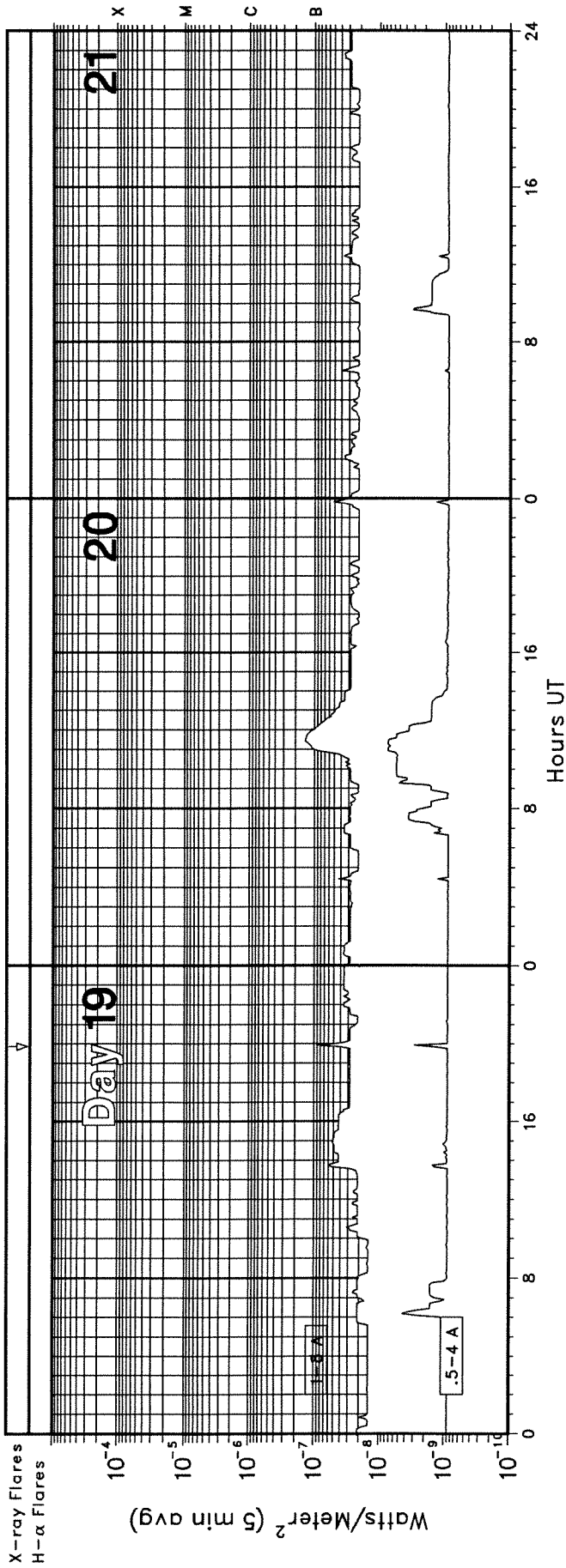


GOES X-RAY DETECTOR

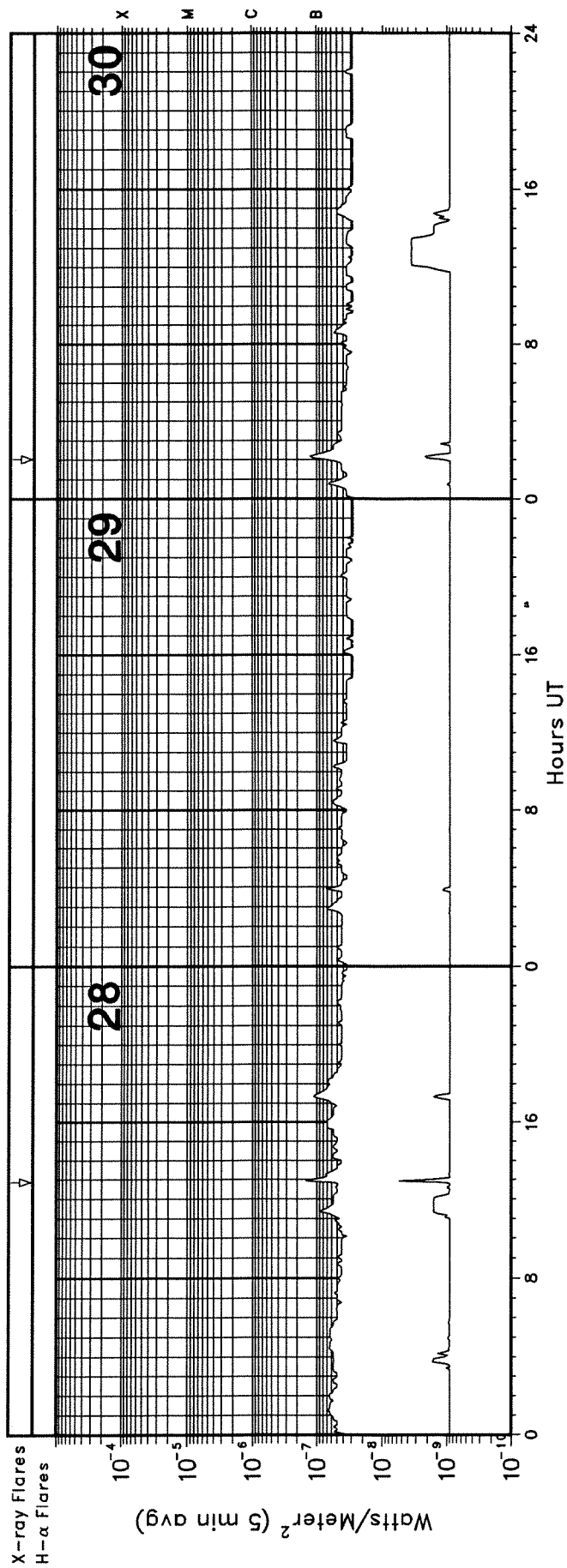
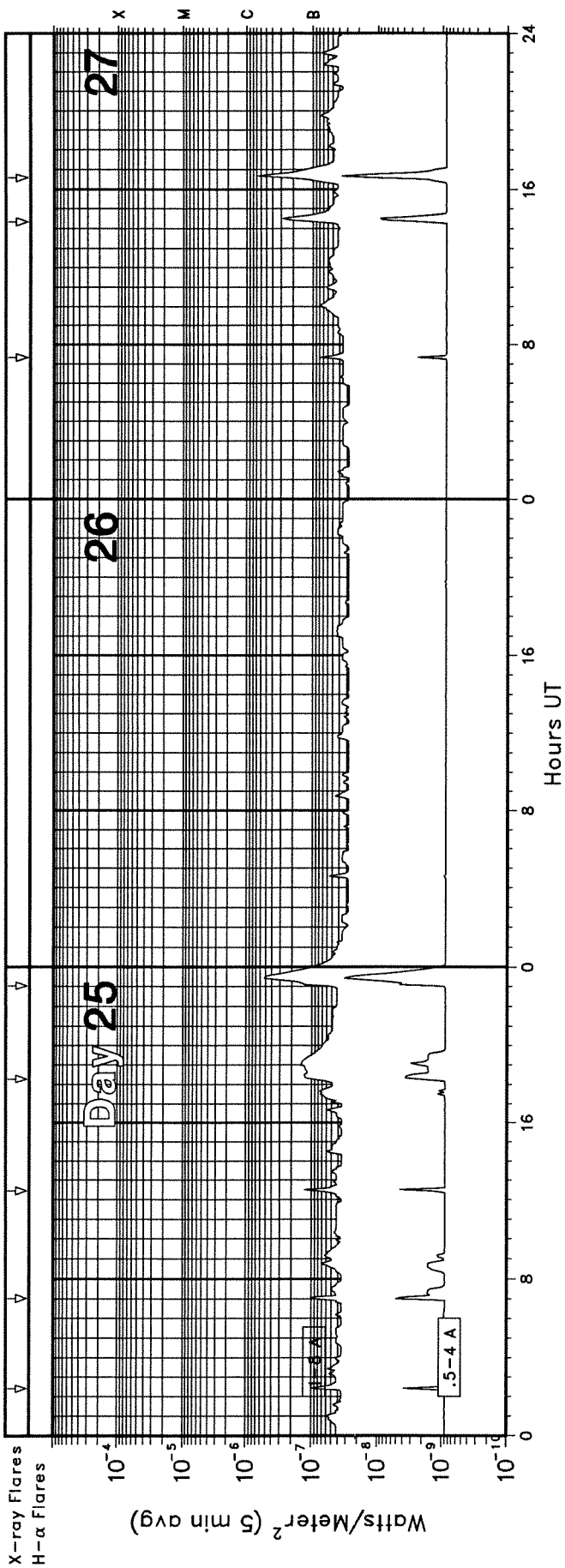
May 2006



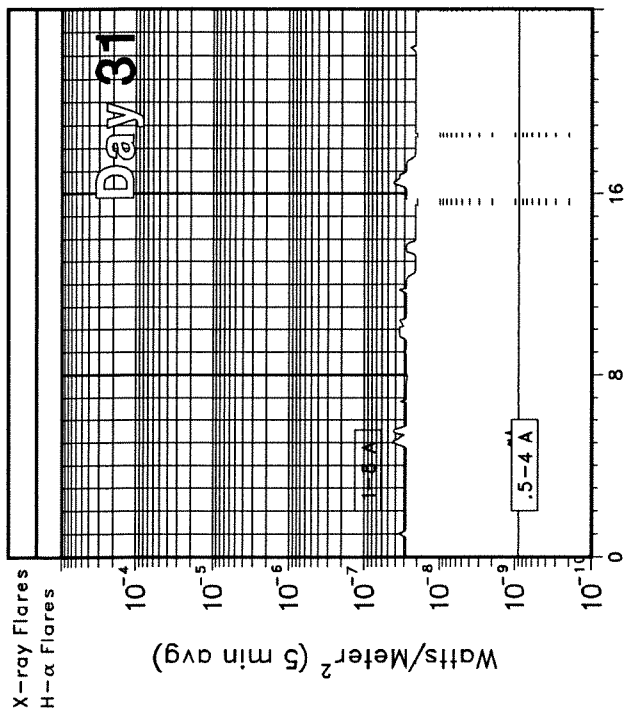
GOES X-RAY DETECTOR May 2006



GOES X-RAY DETECTOR May 2006

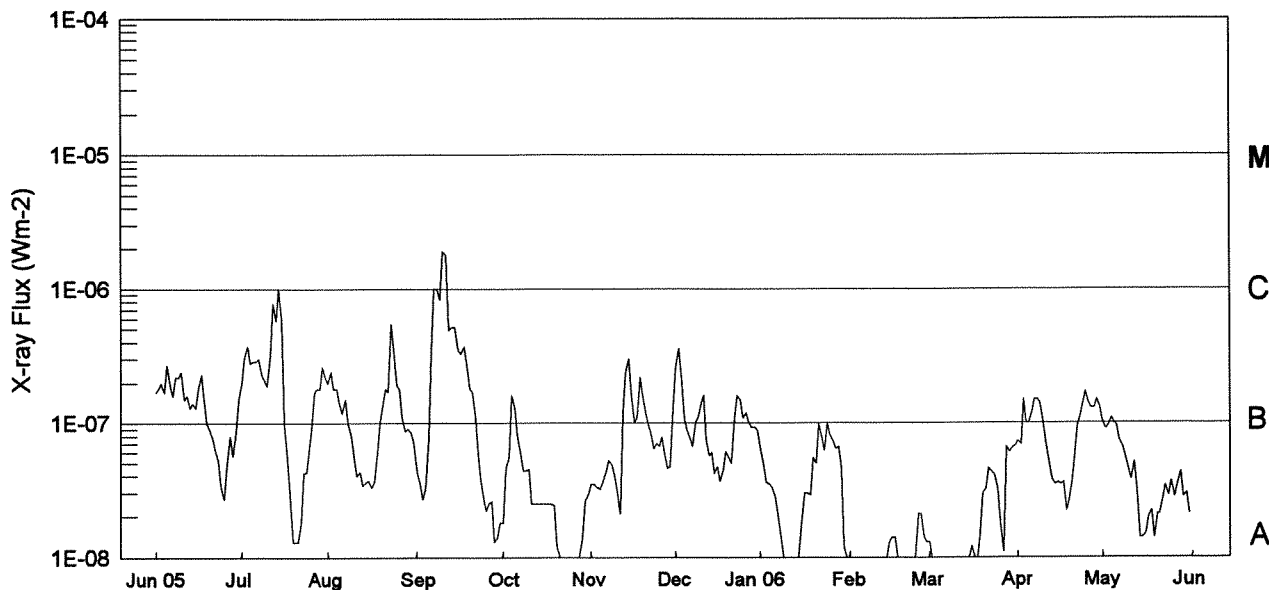


GOES X-RAY DETECTOR May 2006



Preliminary GOES Satellite Daily X-Ray Background Jun 2005 - May 2006

15
May 06



Day	Jun 05	Jul	Aug	Sep	Oct	Nov	Dec	Jan 06	Feb	Mar	Apr	May
1	B1.7	B2.0	B2.0	A4.4	A1.8	A3.5	B2.6	A5.8	<A1.0	A1.3	A7.3	B1.0
2	B1.8	B3.1	B2.4	A3.7	A4.6	A3.5	B3.6	A4.9	<A1.0	<A1.0	A6.9	A9.1
3	B2.0	B3.7	B1.8	A2.7	A5.5	A3.3	B2.3	A3.6	<A1.0	<A1.0	B1.5	A9.6
4	B1.7	B2.8	B1.8	A3.2	B1.6	A3.2	B1.1	A3.5	<A1.0	<A1.0	B1.0	B1.1
5	B2.7	B2.9	B1.4	A7.6	B1.3	A3.6	A8.9	A3.3	<A1.0	<A1.0	B1.0	B1.0
6	B1.9	B2.9	B1.2	B3.4	A8.0	A4.3	A7.7	A2.8	<A1.0	<A1.0	B1.2	A9.6
7	B1.6	B3.0	B1.5	C1.0	A5.9	A5.2	A6.7	A2.1	<A1.0	<A1.0	B1.5	A7.4
8	B2.2	B2.3	B1.0	C1.0	A4.4	A4.9	B1.0	A1.4	<A1.0	<A1.0	B1.5	A6.7
9	B2.2	B2.1	A8.1	B8.3	A4.4	A4.1	B1.1	<A1.0	<A1.0	<A1.0	B1.4	A5.7
10	B2.4	B1.9	A5.5	C1.9	A4.5	A3.1	B1.4	<A1.0	<A1.0	<A1.0	B1.0	A4.5
11	B1.5	B3.2	A4.0	C1.8	A2.5	A2.1	B1.6	<A1.0	<A1.0	<A1.0	A7.1	A3.8
12	B1.6	B7.8	A4.3	B4.9	A2.5	B1.2	A7.5	<A1.0	<A1.0	<A1.0	A5.0	A5.1
13	B1.3	B5.8	A3.4	B5.2	A2.5	B2.4	A5.7	<A1.0	<A1.0	<A1.0	A3.8	A3.2
14	B1.4	C1.0	A3.6	B5.2	A2.5	B3.0	A6.0	<A1.0	<A1.0	<A1.0	A3.5	A1.4
15	B1.3	B5.9	A3.7	B3.5	A2.5	B1.6	A4.2	A1.7	A1.3	<A1.0	A3.6	A1.4
16	B1.8	B1.0	A3.3	B3.3	A2.5	B1.0	A4.7	A3.0	A1.4	A1.2	A3.5	A1.5
17	B2.3	A5.4	A3.6	B3.7	A2.5	B1.1	A3.7	A3.0	A1.4	<A1.0	A3.6	A2.0
18	B1.5	A2.9	A6.1	B2.8	A2.5	B2.2	A4.4	A2.9	<A1.0	<A1.0	A2.2	A2.2
19	B1.0	A1.3	B1.0	B1.8	A2.4	B1.6	A6.1	A5.5	<A1.0	A1.5	A2.7	A1.4
20	A8.8	A1.3	B1.4	B1.7	A1.2	B1.2	A5.5	A5.0	<A1.0	A3.0	A3.5	A2.1
21	A7.8	A1.3	B1.8	B1.1	<A1.0	A9.8	A5.0	A9.8	<A1.0	A3.2	A5.3	A2.1
22	A6.1	A1.8	B1.7	A5.9	<A1.0	A8.2	B1.1	A7.8	<A1.0	A4.6	A9.5	A2.7
23	A5.3	A4.2	B5.5	A3.8	<A1.0	A6.4	B1.6	A6.2	<A1.0	A4.3	B1.1	A3.4
24	A3.4	A4.3	B3.5	A2.7	<A1.0	A7.0	B1.5	B1.0	<A1.0	A4.1	B1.4	A2.9
25	A2.7	A6.3	B1.9	A2.2	<A1.0	A6.7	B1.1	A8.2	A2.1	A3.2	B1.7	A3.7
26	A4.8	A8.9	B1.8	A2.5	<A1.0	A7.8	B1.2	A7.4	A2.1	A1.8	B1.4	A2.8
27	A8.0	B1.7	B1.1	A2.6	<A1.0	A5.7	B1.0	A6.5	A1.4	A1.1	B1.3	A3.5
28	A5.7	B1.8	A8.7	A1.3	<A1.0	A4.6	A9.3	A6.6	A1.3	A6.6	B1.3	A4.3
29	A8.6	B1.8	A9.1	A1.4	A1.4	A4.7	A9.3	A4.6		A6.1	B1.5	A2.8
30	B1.5	B2.6	A8.5	A1.8	A2.6	B1.3	A8.8	A1.2		A6.5	B1.3	A3.0
31		B2.2	A7.1		A2.9		A6.5	<A1.0		A6.8		A2.1

Levels below B1.0 are unreliable.

16
May 06

ACTIVE PROMINENCES AND FILAMENTS

MAY 2006

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
02	DSF	0912U	2303U	N01	E08	05	3.0	2	02	0	0	E	LEAR		
03	DSF	1648U	0630U	S33	W07	05	3.1		16	0	0	E	SVTO		
04	DSF	0946U	0752U	S35	W07	05	3.8		14	0	0	E	LEAR		
05	DSF	0059U	1300U	S47	E03	05	5.3	3	39	0	0	E	HOLL		
06	EPL	1621	1755	S23	W90	04	29.8	3		9	9	E	HOLL	0875	
11	EPL	1752	2000	N30	E90	05	18.8	3		6	9	E	HOLL		
12	DSF	0942U	2251U	S24	E52	05	16.4		05	0	0	E	LEAR		
17	DSF	0020U	1255U	S29	W39	05	13.9	3	16	0	0	E	HOLL		
22	DSF	1920U	2020U	S18	E15	05	23.9	3	06	0	0	E	HOLL	0884	
29	DSF	0126U	1246U	S06	W52	05	25.2	3	05	0	0	E	HOLL		
30	SPY	1850	1936	S15	W90	05	24.0	3		6	6	E	HOLL	0885	

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.

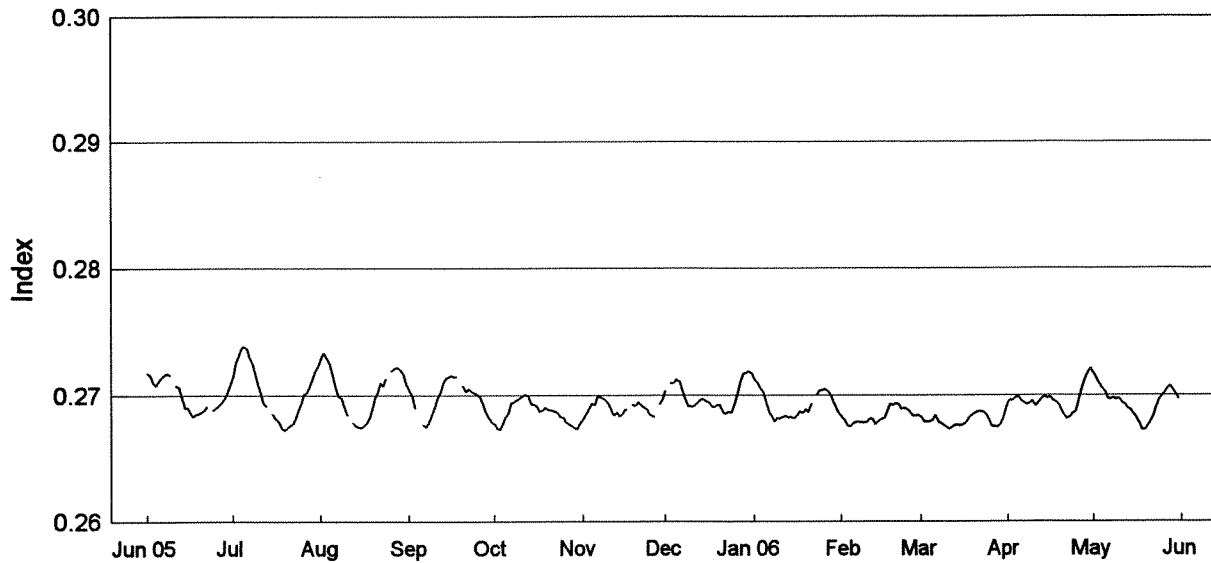
ABST = Abastumani HOLL = Holloman RAMY = Ramey
 ATHN = Athens KHAR = Kharkov SVTO = San Vito
 BUCA = Bucharest LEAR = Learmonth VORO = Voroshilov
 CATA = Catania PALE = Palehua VALA = Valasske Mezirici
 WROC = Wroclaw

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 2005 - May 2006

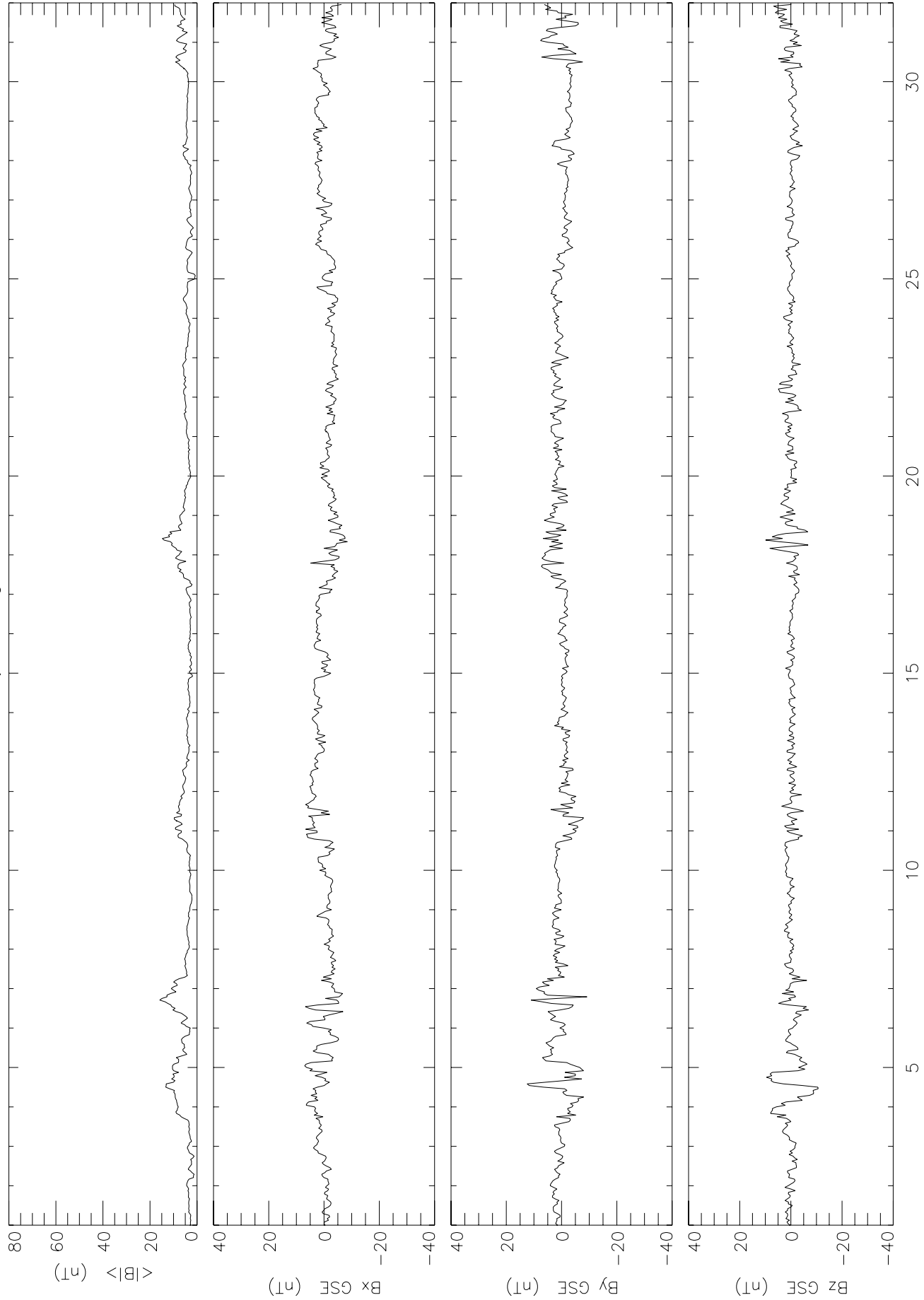
Version 9.1



Day	Jun 05	Jul	Aug	Sep	Oct	Nov	Dec	Jan 06	Feb	Mar	Apr	May
1	0.2718	0.2715	0.2729	0.2704	0.2677	0.2680	0.2704	0.2713	0.2683	0.2683	0.2695	0.2718
2	0.2716	0.2726	0.2733	0.2699	0.2674	0.2684	—	0.2710	0.2680	0.2679	0.2696	0.2713
3	0.2710	0.2732	0.2729	0.2689	0.2673	0.2689	0.2710	0.2706	0.2676	0.2679	0.2696	0.2709
4	0.2708	0.2738	0.2725	—	0.2677	0.2694	0.2710	0.2702	0.2675	0.2679	0.2698	0.2706
5	0.2712	0.2739	0.2717	—	0.2683	0.2692	0.2713	0.2695	0.2677	0.2680	0.2699	0.2703
6	0.2715	0.2737	0.2706	0.2676	0.2686	0.2699	0.2711	0.2687	0.2679	0.2684	0.2696	0.2697
7	0.2717	0.2730	0.2700	0.2674	0.2694	0.2699	0.2704	0.2683	0.2679	0.2678	0.2695	0.2697
8	0.2718	0.2726	0.2698	0.2678	0.2694	0.2697	0.2697	0.2679	0.2678	0.2678	0.2693	0.2698
9	0.2716	0.2718	0.2691	0.2684	0.2696	0.2695	0.2692	0.2682	0.2678	0.2676	0.2693	0.2697
10	—	0.2708	0.2684	0.2690	0.2697	0.2693	0.2691	0.2681	0.2678	0.2674	0.2695	0.2697
11	0.2708	0.2702	—	0.2697	0.2699	0.2688	0.2691	0.2683	0.2681	0.2673	0.2692	0.2695
12	0.2707	0.2694	0.2678	0.2702	0.2701	0.2684	0.2693	0.2684	0.2681	0.2675	0.2694	0.2693
13	0.2699	0.2691	0.2676	0.2709	0.2699	0.2686	0.2695	0.2682	0.2677	0.2676	0.2697	0.2690
14	0.2690	—	0.2675	0.2714	0.2693	0.2683	0.2697	0.2683	0.2679	0.2676	0.2699	0.2688
15	0.2690	0.2685	0.2674	0.2715	0.2693	0.2685	0.2696	0.2681	0.2681	0.2676	0.2698	0.2686
16	0.2686	0.2681	0.2675	0.2716	0.2691	0.2688	0.2695	0.2684	0.2681	0.2677	0.2698	0.2682
17	0.2683	0.2679	0.2678	0.2715	0.2687	0.2689	0.2692	0.2687	0.2686	0.2678	0.2696	0.2678
18	0.2685	0.2674	0.2681	0.2715	0.2688	—	0.2690	0.2686	0.2693	0.2682	0.2695	0.2673
19	0.2685	0.2672	0.2689	—	0.2690	0.2692	0.2692	0.2689	0.2693	0.2684	0.2692	0.2672
20	0.2687	0.2674	0.2697	0.2708	0.2688	0.2692	0.2692	0.2686	0.2693	0.2686	0.2689	0.2675
21	0.2688	0.2676	0.2702	0.2703	0.2688	0.2694	0.2687	0.2694	0.2693	0.2687	0.2684	0.2678
22	0.2691	0.2677	0.2710	0.2705	0.2687	0.2692	0.2685	—	0.2689	0.2687	0.2681	0.2684
23	—	0.2682	0.2707	0.2704	0.2686	0.2691	0.2687	0.2700	0.2690	0.2687	0.2682	0.2690
24	0.2688	0.2688	0.2714	0.2702	0.2683	0.2689	0.2686	0.2704	0.2689	0.2685	0.2685	0.2697
25	0.2690	0.2694	—	0.2701	0.2682	0.2685	0.2693	0.2704	0.2686	0.2681	0.2687	0.2699
26	0.2692	0.2701	0.2720	0.2699	0.2679	0.2684	0.2700	0.2705	0.2684	0.2675	0.2695	0.2702
27	0.2694	0.2702	0.2722	0.2692	0.2677	0.2683	0.2710	0.2703	0.2684	0.2675	0.2704	0.2705
28	0.2698	0.2707	0.2723	0.2686	0.2676	—	0.2717	0.2700	0.2684	0.2675	0.2712	0.2707
29	0.2702	0.2714	0.2720	0.2682	0.2674	0.2693	0.2718	0.2696		0.2676	0.2717	0.2704
30	0.2709	0.2720	0.2717	0.2679	0.2673	0.2697	0.2719	0.2690		0.2680	0.2721	0.2701
31		0.2724	0.2708		0.2677		0.2717	0.2686		0.2687		0.2696
Mean	0.2700	0.2703	0.2703	0.2698	0.2686	0.2690	0.2699	0.2692	0.2630	0.2679	0.2695	0.2694

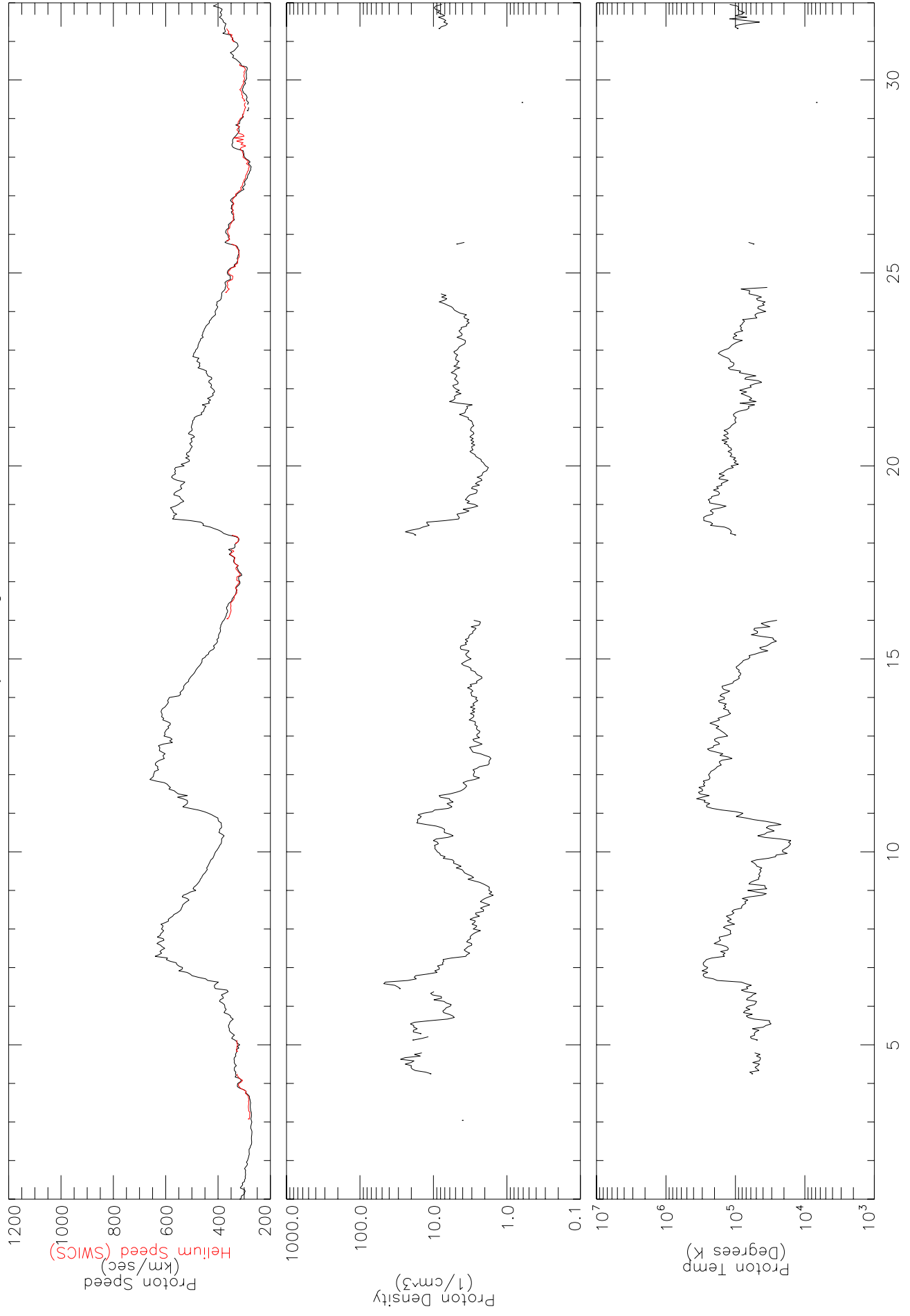
Data at: <http://www.sec.noaa.gov/ftpmenu/sbu.html>

Interplanetary Magnetic Field
ACE LEVEL2 DATA Hourly Averages for MAY 2006, from MAG



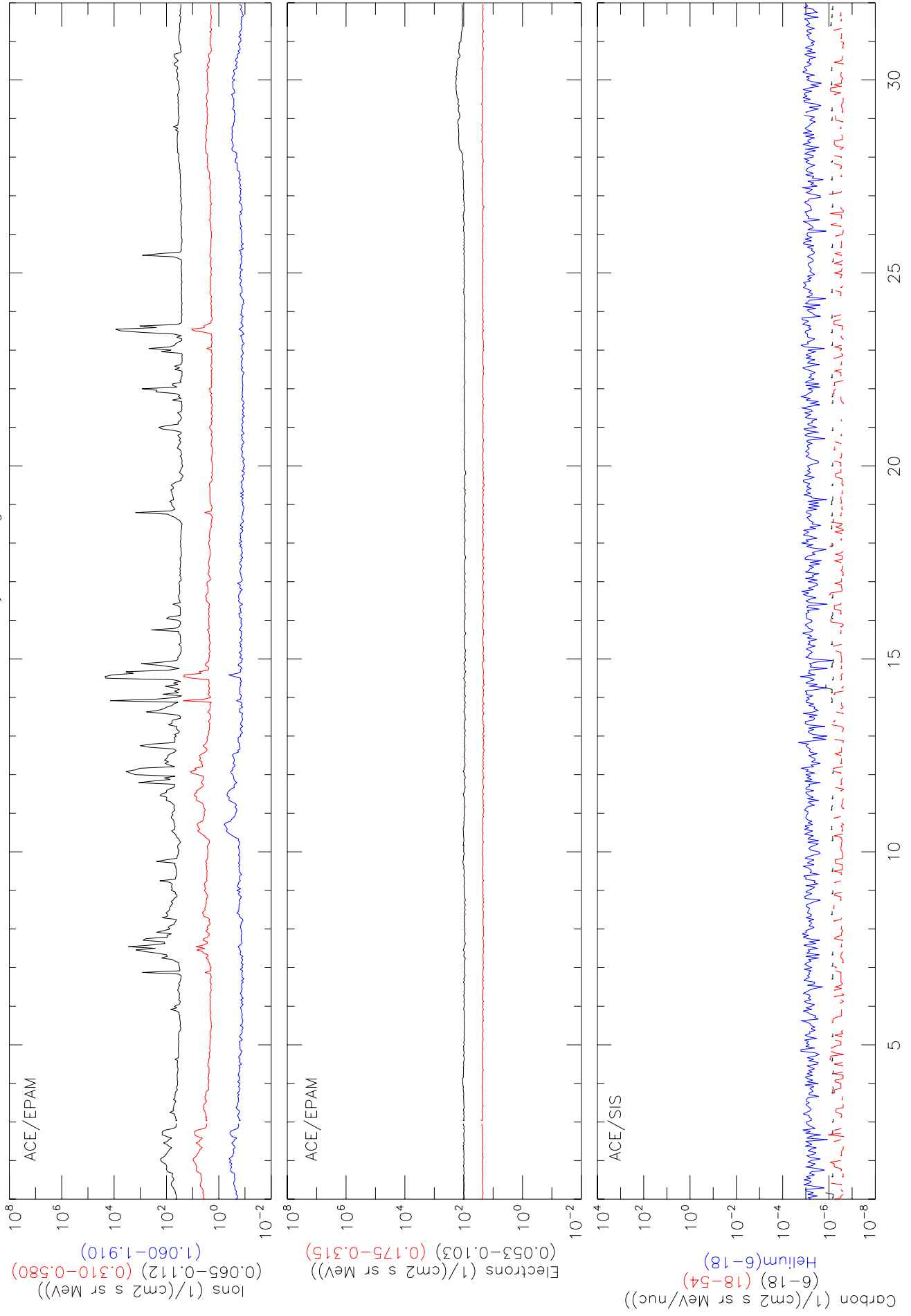
DAYS OF MAY 2006

ACE LEVEL2 DATA Solar Wind Plasma Hourly Averages for MAY 2006, from SWEPAM



DAYS OF MAY 2006

Solar Energetic Particles
 ACE LEVEL2 DATA Hourly Averages for MAY 2006



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
MAY 2006

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	
2006/05/01	04:06:04	263	22	258	270	247	208	-1.2*	255	
2006/05/01	10:06:05	289	30	211	197	226	263	1.2*	299	Poor Event
2006/05/01	15:30:04	HalO	360	487	448	529	522	3.0*	262	
2006/05/02	05:30:04	120	66	111	----	----	----	-----	130	Very Poor;OnlyC2
2006/05/02	09:30:04	36	10	329	----	----	----	-----	41	Very Poor Event; 3 points;Only C2
2006/05/02	12:30:04	284	57	411	446	374	278	-5.2*	275	
2006/05/03	00:54:04	73	49	207	27	375	871	31.6*	85	Only C2
2006/05/03	16:06:04	231	15	467	----	----	----	-----	239	Very Poor Event
2006/05/03	23:06:04	236	24	724	762	688	655	-6.4*	238	Poor Event
2006/05/04	01:54:05	214	216	509	333	707	714	16.7	230	Partial Halo
2006/05/04	08:30:05	314	48	338	202	505	445	6.9*	307	
2006/05/04	15:06:04	249	57	508	685	305	220	-17.5	242	
2006/05/04	18:30:04	103	39	122	----	----	----	-----	104	Very Poor;OnlyC2
2006/05/05	01:31:43	226	10	362	248	482	483	7.5*	231	Poor Event
2006/05/05	02:30:04	270	20	199	112	286	290	3.0*	270	
2006/05/05	09:54:27	253	38	276	----	----	----	-----	247	Very Poor Event
2006/05/05	13:32:17	220	46	363	305	424	463	5.2*	224	Poor Event
2006/05/05	20:54:04	234	21	552	603	494	485	-5.5*	243	
2006/05/06	03:54:08	248	48	386	452	322	294	-5.2*	243	Poor Event
2006/05/06	05:54:04	247	45	162	----	----	----	-----	255	Very Poor Event; Only C2
2006/05/06	15:30:04	233	14	326	----	----	----	-----	238	Very Poor;OnlyC2
2006/05/06	17:54:04	237	21	388	----	----	----	-----	240	Very Poor Event
2006/05/06	20:58:40	234	23	458	437	479	481	1.7*	243	
2006/05/07	03:54:04	241	24	376	495	245	69	-10.0*	240	
2006/05/07	06:30:04	246	45	429	501	355	0	-12.9*	244	
2006/05/07	15:30:04	121	26	379	349	410	444	3.5*	122	
2006/05/07	15:54:27	65	14	391	----	----	----	-----	71	Very Poor;OnlyC2
2006/05/08	02:30:04	296	40	159	----	----	----	-----	292	Very Poor Event
2006/05/08	04:30:05	249	66	278	250	306	478	6.9	244	
2006/05/08	05:54:04	246	54	354	364	342	345	-0.6	242	
2006/05/08	06:30:04	306	33	486	585	384	279	-11.7*	297	
2006/05/08	20:30:05	295	12	159	----	----	----	-----	290	Very Poor Event
2006/05/08	21:54:05	300	31	234	201	267	334	3.0*	288	Poor Event
2006/05/09	03:30:04	292	13	233	----	----	----	-----	293	Very Poor;OnlyC2
2006/05/09	08:30:04	257	30	209	----	----	----	-----	265	Very Poor Event
2006/05/10	14:30:05	62	25	151	----	----	----	-----	64	Very Poor;OnlyC2
2006/05/10	15:06:04	298	10	279	----	----	----	-----	289	Very Poor Event
2006/05/11	05:30:04	97	47	92	----	----	----	-----	91	Very Poor;OnlyC2
2006/05/11	12:06:04	101	15	170	----	----	----	-----	98	Very Poor Event
2006/05/11	17:30:04	222	57	177	98	255	649	17.0*	211	Poor; Only C2
2006/05/11	17:30:04	76	59	93	0	180	210	1.9*	84	Poor Event
2006/05/12	00:30:04	223	35	134	----	----	----	-----	225	Very Poor;OnlyC2
2006/05/12	19:54:04	83	30	306	292	323	332	1.1*	84	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
MAY 2006

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	
2006/05/13	00:30:04	77	23	218	271	165	0	-6.4*	84	Poor Event
2006/05/13	01:30:04	251	26	176	127	225	388	5.7*	255	Poor Event
2006/05/13	05:00:02	82	24	223	----	----	----	-----	80	Very Poor;OnlyC2
2006/05/13	06:46:58	82	28	322	367	275	0	-6.2*	81	
2006/05/13	08:48:26	89	62	170	125	222	377	5.3*	87	Poor Event
2006/05/13	18:54:04	60	12	237	----	----	----	-----	61	Very Poor Event
2006/05/13	20:06:04	89	51	309	186	435	436	6.7*	88	
2006/05/14	15:30:05	96	54	78	----	----	----	-----	95	Very Poor;OnlyC2
2006/05/14	21:30:07	Halo	360	316	391	238	93	-6.2*	108	
2006/05/15	06:54:04	110	15	230	----	----	----	-----	104	Very Poor;OnlyC2
2006/05/15	11:30:04	252	16	328	----	----	----	-----	253	Very Poor Event
2006/05/15	13:31:39	248	46	441	390	491	536	5.7*	252	
2006/05/15	17:06:04	99	84	294	342	247	0	-5.7	99	
2006/05/16	01:54:04	277	10	437	----	----	----	-----	273	Very Poor Event; 3 points;Only C2
2006/05/16	03:54:05	278	11	327	----	----	----	-----	276	Very Poor;OnlyC2
2006/05/16	10:54:04	292	12	326	----	----	----	-----	289	Very Poor;OnlyC2
2006/05/16	12:06:04	123	25	284	235	338	372	3.5*	122	Poor Event
2006/05/16	13:31:40	275	15	683	504	878	2102	181.2*	271	Poor Event; Only 3 points;Only C2
2006/05/16	20:30:04	82	42	264	239	288	360	3.1*	91	Poor Event
2006/05/17	03:30:04	106	43	206	216	197	0	-2.3*	97	Poor; Only C2
2006/05/17	05:30:04	242	41	211	21	432	434	8.3*	239	Poor Event
2006/05/17	05:30:04	105	77	193	182	204	245	1.1*	98	
2006/05/17	08:30:05	4	7	329	----	----	----	-----	5	Very Poor Event; 2 points;Only C2
2006/05/17	15:06:04	305	10	600	----	----	----	-----	304	Very Poor;OnlyC2
2006/05/17	23:06:04	238	34	594	633	552	574	-4.0*	231	
2006/05/17	23:06:04	238	42	309	167	467	593	13.3*	233	
2006/05/18	05:30:04	97	28	341	----	----	----	-----	92	Very Poor;OnlyC2
2006/05/18	10:06:04	110	64	269	296	242	0	-7.5*	124	Poor; Only C2
2006/05/18	20:30:04	230	42	230	221	240	280	1.3*	232	Poor Event
2006/05/18	22:30:27	90	64	363	364	362	362	-0.1	97	
2006/05/19	03:06:04	311	16	643	----	----	----	-----	310	Very Poor Event; 3 points;Only C2
2006/05/19	07:54:05	229	27	322	----	----	----	-----	231	Very Poor Event
2006/05/19	15:30:04	90	90	337	310	364	475	5.4*	97	
2006/05/19	23:06:04	242	35	710	606	825	771	9.9	240	
2006/05/20	12:30:04	92	81	342	436	246	0	-19.6*	89	Poor Event
2006/05/20	16:30:27	254	21	567	421	717	753	16.4*	256	Poor Event
2006/05/21	00:54:04	121	19	189	----	----	----	-----	117	Very Poor;OnlyC2
2006/05/22	00:54:04	108	41	117	----	----	----	-----	108	Very Poor;OnlyC2
2006/05/22	06:30:05	96	33	282	----	----	----	-----	95	Very Poor;OnlyC2
2006/05/22	20:54:04	104	118	448	420	476	549	5.4*	62	
2006/05/22	21:54:04	269	82	445	----	----	----	-----	275	Very Poor;OnlyC2
2006/05/24	20:30:05	96	60	150	----	----	----	-----	99	Very Poor;OnlyC2

=====

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
MAY 2006

First C2 Appearance		Central Width			Linear Fit			Accel m/s ²	Measurement		Remarks
Date	Time UT	Position Angle degree	Angular Width degree	Speed km/s	----2nd order Initial km/s	Final km/s	20R km/s		Position Angle degree		
2006/05/25	00:30:04	310	8	393	----	----	----	-----	301	Very Poor Event; 3 points; Only C2	
2006/05/25	10:30:19	289	18	236	----	----	----	-----	292	Very Poor Event	
2006/05/25	19:54:04	252	88	337	349	323	231	-2.9*	258	Poor Event	
2006/05/26	00:06:04	Haló	360	479	598	344	394	-8.6	254		
2006/05/26	07:31:44	230	16	291	----	----	----	-----	230	Very Poor; Only C2	
2006/05/26	09:30:04	297	23	295	----	----	----	-----	293	Very Poor Event	
2006/05/26	10:54:04	135	47	354	417	285	0	-18.9*	131	Poor; Only C2	
2006/05/27	01:58:18	114	31	207	----	----	----	-----	112	Very Poor; Only C2	
2006/05/27	05:24:05	113	10	235	----	----	----	-----	110	Very Poor Event	
2006/05/27	12:48:36	219	7	592	----	----	----	-----	224	Very Poor; Only C2	
2006/05/27	15:12:04	250	21	270	----	----	----	-----	252	Very Poor; Only C2	
2006/05/27	19:12:04	126	21	372	----	----	----	-----	126	Very Poor; Only C2	
2006/05/28	16:48:04	124	45	362	263	459	858	27.4*	123	Only C2	
2006/05/28	17:48:05	268	24	340	411	262	0	-8.8*	262	Poor Event	
2006/05/28	20:12:04	259	56	43	----	----	----	-----	267	Very Poor Event	
2006/05/29	20:57:13	177	15	175	----	----	----	-----	168	Very Poor; Only C2	
2006/05/30	17:12:04	260	11	260	----	----	----	-----	251	Very Poor Event	
2006/05/30	19:36:04	257	38	306	290	325	419	3.9*	262	Poor Event	
2006/05/30	21:36:04	78	33	157	----	----	----	-----	81	Very Poor; Only C2	
2006/05/31	06:12:04	95	16	383	----	----	----	-----	94	Very Poor; Only C2	
2006/05/31	11:12:05	83	28	379	----	----	----	-----	86	Very Poor; Only C2	
2006/05/31	15:00:04	80	30	269	197	340	753	21.8*	86	Poor; Only C2	
2006/05/31	16:48:04	262	89	422	588	246	0	-26.2*	256		
2006/05/31	21:48:04	89	27	381	380	383	384	0.1*	91		

CME heights are measured at the fastest segment of the leading edge

PA= Position Angle measured from Solar North in degrees (Counter clockwise)

ONLINE -- Click on date to view java script movies -- <http://cdaw.gsfc.nasa.gov/>

ONLINE -- Click on time to see height-time digital files

ONLINE -- Click on speed to view height-time plot

Numbers in 2nd order fit columns correspond to the speed at the last height of measurement and at a distance of 20 solar radii.