

MARCH 2005 NUMBER 727 - Part II



# Solar-Geophysical Data comprehensive reports

Data for September 2004 and Miscellaneous

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

## NEW DATA:

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

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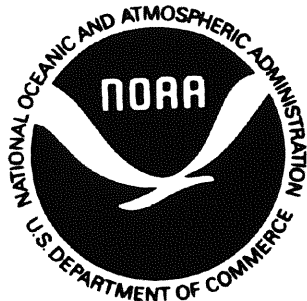
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NATIONAL OCEANIC AND  
ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL SATELLITE,  
DATA, AND INFORMATION SERVICE

NATIONAL GEOPHYSICAL  
DATA CENTER

BOULDER,  
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MARCH 2005 NUMBER 727 - Part II

# **Solar-Geophysical Data comprehensive reports**

Data for September 2004 and Late Data

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**NATIONAL GEOPHYSICAL DATA CENTER**

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Boulder, Colorado

Subscription information is on the inside back cover.

# SOLAR-GEOPHYSICAL DATA

Number 727  
(Issued in Two Parts)

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## CONTENTS

<b>PART I (PROMPT REPORTS)</b>	<b>Page</b>
DETAILED INDEX FOR 2004-2005 .....	2
DATA FOR FEBRUARY 2005 .....	3- 33
DATA FOR JANUARY 2005 .....	35-113

<b>PART II (COMPREHENSIVE REPORTS)</b>	<b>Page</b>
DETAILED INDEX FOR 2004-2005 .....	2
DATA FOR SEPTEMBER 2004 .....	3-30
<b>NEW DATA:</b>	
<b>ACE SOLAR WIND, INTERPLANETARY MAGNETIC FIELD AND PARTICLES</b>	
<b>-- MONTHLY PLOTS</b>	

## DETAILED INDEX OF OBSERVATIONS PUBLISHED IN SOLAR-GEOPHYSICAL DATA

CODE	KIND OF OBSERVATION	JUL 04	AUG	SEP	OCT	NOV	DEC	JAN 05	FEB
<b>A. SOLAR AND INTERPLANETARY</b>									
A.1	Sunspot Drawings	721A 46	722A 46	723A 46	724A 46	725A 44	726A 46	727A 39	
A.2aa	International Sunspot Numbers	720A 25	721A 25	722A 23	723A 25	724A 25	725A 25	726A 25	727A 23
A.2c	American Sunspot Numbers	720A 25	721A 25	722A 23	723A 25	724A 25	725A 25	726A 25	727A 23
A.3a	Mt. Wilson Magnetograms	721A 46	722A 46	723A 46	724A 46	725A 44	726A 46	727A 39	
A.3b	Sunspot Mag Class and Regions	721A 83	722A 83	723A 81	724A 83	725A 79	726A 83	727A 76	
A.3c	Kitt Peak Magnetograms	721A 46	722A 46	723A 46	724A 46	725A 44	726A 46	727A 39	
A.3d	Mean Solar Magnetic Field (Stanford)	720A 38	721A 37	722A 31	723A 35	724A 35	725A 33	726A 37	727A 31
A.3e	Stanford Magnetograms	721A 46	722A 46	723A 46	724A 46	725A 44	726A 46	727A 39	
A.4	H-alpha Filtergrams	721A 46	722A 46	723A 46	724A 46	725A 44	726A 46	727A 39	
A.5d	PhotometricCa II FaculaeSanFernando	Jan 92-Dec 96 631B 22; 1997-1998 in 663B 66							
A.6c	Stanford Solar Mag Field SynopticMap	721A 40	722A 34	723A 40	724A 40	725A 38	726A 40	727A 36	
A.6d	Kitt Peak Solar Mag Field SynopticMap	721A 45	722A 44	723A 45	724A 45	725A 43	726A 45	727A 38	
A.6f	Active Prominences and Filaments	725B 58	726B 38	727B 24					
A.6g	Sac Peak Coronal Line Synoptic Maps	721A 42	722A 38	723A 42	724A 42	725A 40	726A 42		
A.6h	Photometric White Light SanFernando	Jul-Dec 96 630B 32; 1997-1998 in 663B 51							
A.7h	Coronal Line Emission (Sac Peak)	721A 46	722A 46	723A 46	724A 46	725A 44	726A 46	727A 39	
A.7j	Coronal Hole Daily Maps (NSO/KP)								
A.7k	Coronal Index (Slovak Academy)	1939-1996 -644B 28							
A.7m	Coronal Mass Ejections (CSPSW)	725B 63	726B 43	727B 29					
A.8aa	2800 MHz- Solar Flux (Penticton)	720A 25	721A 25	722A 23	723A 25	724A 25	725A 25	726A 25	727A 23
A.8ac	2800 MHz- Adj. Solar Flux (Penticton)	720A 25	721A 25	722A 23	723A 25	724A 25	725A 25	726A 25	727A 23
A.8g	Adjusted Daily Solar Fluxes Sagamore	720A 25	721A 25	722A 23	723A 25	724A 25	725A 25	726A 25	727A 23
A.10g	Nancay Radioheliograph164&327MHz	721A116	722A112	723A 98	724A113	725A103	726A100	727A 95	
A.10h	Nobeyama Radioheliograph - 17 GHz	721A 77	722A 77	723A 76	724A 77	725A 74	726A 77	727A 70	
A.11g	Solar X-ray GOES (graphs/event table)	725B 49	726B 34	727B 16					
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	725B 59	726B 39	727B 25					
A.12g	Solar Particles (GOES)	720A 4	721A 4	722A 4	723A 4	724A 4	725A 4	726A 4	727A 4
A.12i	Interplanetary Particles (ACE)	725B 62	726B 42	727B 28					
A.13g	Solar Plasma (ACE)	725B 61	726B 41	727B 27					
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	725B 60	726B 40	727B 26					
<b>C. SOLAR FLARE-ASSOCIATED EVENT</b>									
C.1a	H-alpha Flares	720A 28	721A 28	722A 26	723A 28	724A 28	725A 28	726A 28	727A 26
C.1ba	H-alpha Flare Groups	725B 4	726B 4	727B 4					
C.1d	Flare Patrol Observations	725B 11	726B 10	727B 7					
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	725B 13	726B 12	727B 9					
C.3	Radio Bursts Fixed Frequency Select	720A 34	721A 34	722A 29	723A 33	724A 33	725A 32	726A 34	727A 30
C.4	Radio Bursts Spectral	721A 97	722A 95	723A 89	724A 95	725A 90	726A 89	727A 84	
C.6	Sudden Ionospheric Disturbances	721A 93	722A 92	723A 87	724A 93	725A 87	726A 87	727A 81	
<b>D. GEOMAGNETIC EVENTS</b>									
D.1a	Geomagnetic Indices	721A122	722A120	723A106	724A121	725A111	726A108	727A102	
D.1ba	27-day Chart of Kp Indices	721A124	722A122	723A108	724A123	725A113	726A110	727A104	
D.1cb	Monthly Mean aa Indices	721A125	722A123	723A109	724A124	725A114	726A111	727A106	
D.1d	Principal Magnetic Storms	721A129	722A127	723A113	724A 128	725A118	726A115	727A112	
D.1f	Sudden Commencements/FlareEffects	721A130	722A128	723A114	724A129	725A119	726A116	727A113	
D.1g	Equatorial Indices Dst	721A127	722A125	723A111	724A126	725A116	726A113	727A110	
D.1l	Polar Cap (PC) Index	721A128	722A126	723A112	724A127	725A117	726A114	727A111	
<b>F. COSMIC RAYS</b>									
F.1b	Cosmic Ray Neutron Cts (Climax)	721A118	722A114	723A100	724A115	725A105	726A102	727A 97	
F.1h	Cosmic Ray Neutron Cts (Thule)	721A118	722A114	723A100	724A115	725A105	726A102	727A 97	
F.1l	Cosmic Ray Neutron Cts (Kiel)	721A118	722A114	723A100	724A115	725A105	726A102	727A 97	
F.1n	Cosmic Ray Neutron Cts (Beijing)	721A118	722A114	723A100	724A115	725A105	726A102	727A 97	
F.1m	Cosmic Ray Neutron Cts (Haleakala)	721A118	722A114	723A100	724A115	725A105	726A102	727A 97	
F.1o	Cosmic Ray Neutron Cts (Moscow)	721A118	722A114	723A100	724A115	725A105	726A102	727A 97	
F.1p	Cosmic Ray Neutron Cts (Calgary)	721A118	722A114	723A100	724A115	725A105	726A102	727A 97	
<b>H. MISCELLANEOUS</b>									
H.60	ISES Alert Periods	720A 20	721A 20	722A 19	723A 20	724A 19	725A 20	726A 20	727A 18

The entry "721A 46" under Jul 04, for example, means that the sunspot drawings for Jul 04 appear in SOLAR-GEOPHYSICAL DATA No. 721, Part I, and that they begin on page 46. "A" denotes Part I and "B", Part II. Blanks indicate data not yet received and dashes mark unavailable data.

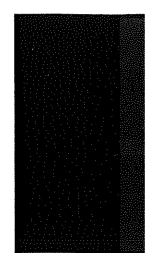
**CONTENTS**

Comprehensive Reports

Number 727 Part II

**DATA FOR SEPTEMBER 2004**

	Page
<b>SOLAR FLARES</b>	
H-alpha Solar Flare Groups .....	4- 6
Intervals of No Flare Patrol Observation .....	7
Number of Solar Flares January 1965-present .....	8
<b>SOLAR RADIO BURSTS AT FIXED FREQUENCIES .....</b>	<b>9-15</b>
<b>SOLAR X-RAY RADIATION FROM GOES SATELLITE</b>	
Graphs .....	16-20
Preliminary Event List .....	21-22
Preliminary Daily Average Background .....	23
<b>ACTIVE PROMINENCES AND FILAMENTS .....</b>	<b>24</b>
<b>SOLAR ULTRAVIOLET DAILY DATA FROM NOAA SATELLITE</b>	
NOAA Mg II Daily Index Version 9.1 .....	25
<b>INTERPLANETARY ENVIRONMENT HOURLY AVERAGE PLOTS</b>	
<b>FROM ADVANCED COMPOSITION EXPLORER (ACE) SATELLITE</b>	
Interplanetary Magnetic Field -- MAG .....	26
Solar Wind Plasma -- SWEPM .....	27
Solar Energetic Particles -- EPAM/SIS (Ions, Electrons, and Carbon) .....	28
<b>SOLAR CORONAL MASS EJECTIONS from SOHO/LASCO SATELLITE</b>	
Table of Events .....	29-30



SEPTEMBER 2004

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/USAF		Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
								Region	Mo Day						Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
			01 1822		1828			No Flare	Patrol										
			01 1858		1905			No Flare	Patrol										
			01 1936		1940			No Flare	Patrol										
			01 1957		2001			No Flare	Patrol										
			01 2044		2308			No Flare	Patrol										
			02 0121		0504			No Flare	Patrol										
			04 0034		0444			No Flare	Patrol										
			04 1642		2257			No Flare	Patrol										
			05 1632		1635			No Flare	Patrol										
			05 1723		1736			No Flare	Patrol										
			05 1931		1935			No Flare	Patrol										
			06 0118		0158			No Flare	Patrol										
			06 0230		0433			No Flare	Patrol										
0001	HOLL	07	1636	1636	1646	S10	W38	10671	09	4.8	10	SF	3	E		17			
0002	LEAR	08	0345	0345	0349	S06	E02	10669	09	8.3	4	SF	3	E		12		FU	
0003	HOLL	08	2001	2001	2005	S05	W05	10669	09	8.4	4	SF	3	E		12			
0004		09	06272	06291	0634	S11	W59	10671	09	4.8	7	SF				43		F	
	SVTO	09	0627	0630	0636	S12	W57	10671	09	5.0	9	SF	3	E		67		F	
	KANZ	09	0628	0629	0633	S11	W61	10671	09	4.7	5	SF	2	E					
	LEAR	09	0629	0629	0633	S10	W60	10671	09	4.8	4	SF	3	E		19			
0005	SVTO	09	0735	0736	0739	S11	W53	10671	09	5.3	4	SF	3	E		19			
0006	SVTO	09	0801	0802	0805	S11	W53	10671	09	5.3	4	SF	3	E		17			
0007	SVTO	09	1049	1050	1053	S13	W61	10671	09	4.8	4	SF	3	E		17			
0008	KANZ	10	1252	1254	1300	N02	E72	10672	09	15.9	8	SF	2	E					
0009	HOLL	12	0008	0035	0109D	N04	E42	10672	09	15.1	61D	2N	3	E		324		FH	
0010	LEAR	12	0011	0037	0201	S01	E47	10672	09	15.5	110	2F	3	E		316		UZ	
0011	LEAR	12	0137	0138	0145	S14	W61	10667	09	7.4	8	SN	3	E		76			
0012	HOLL	12	1832	1832	1835	S08	W64	10669	09	8.0	3	SF	3	E		20			
			13 0213		0256			No Flare	Patrol										
0013	KHAR	13	1107	1109	1112	N03	E32	10672	09	15.8	5	SF	3	P	1109	30		H	
			13 1144		1148			No Flare	Patrol										
			13 1154		1304			No Flare	Patrol										
0014	KANZ	14	0551	0551	0558	N02	E19	10672	09	15.7	7	SF	2	E					
0015		14	0854	09264	1120	N03	E16	10672	09	15.6	146	1F				164		FH	
	KANZ	14	0854	0926	1108	N02	E16	10672	09	15.6	134	1F	2	E					
	SVTO	14	0854	0930	1131	N04	E17	10672	09	15.6	157	1F	3	E		164		FH	
0016		15	07451	07461	0755	N08	E08	10672	09	15.9	10	SF				46		FU	
	SVTO	15	0745	0746	0756	N08	E08	10672	09	15.9	11	SF	3	E		74		UF	
	LEAR	15	0746	0747	0754	N07	E08	10672	09	15.9	8	SF	3	E		19		F	
0017	KHAR	15	1021	1024	1036	S12	E90	10673	09	22.2	15	SF	2	P	1025	25		H	
0018	HOLL	15	1836	1838	1842	N08	W01	10672	09	15.7	6	SF	3	E		20		F	
0019		16	0030	0030	0033	N08	W05	10672	09	15.6	3	SF				16		F	
	LEAR	16	0030	0030	0033	N07	W05	10672	09	15.6	3	SF	3	E		16		F	
	HOLL	16	0030	0030	0033	N08	W05	10672	09	15.6	3	SF	3	E		16			
0020	LEAR	16	0344	0345	0350	N05	W11	10672	09	15.3	6	SF	3	E		18		F	
0021	KHAR	16	0913U		0918U	S12	E71	10673	09	21.7	5U	SF	2	P	0915	20			

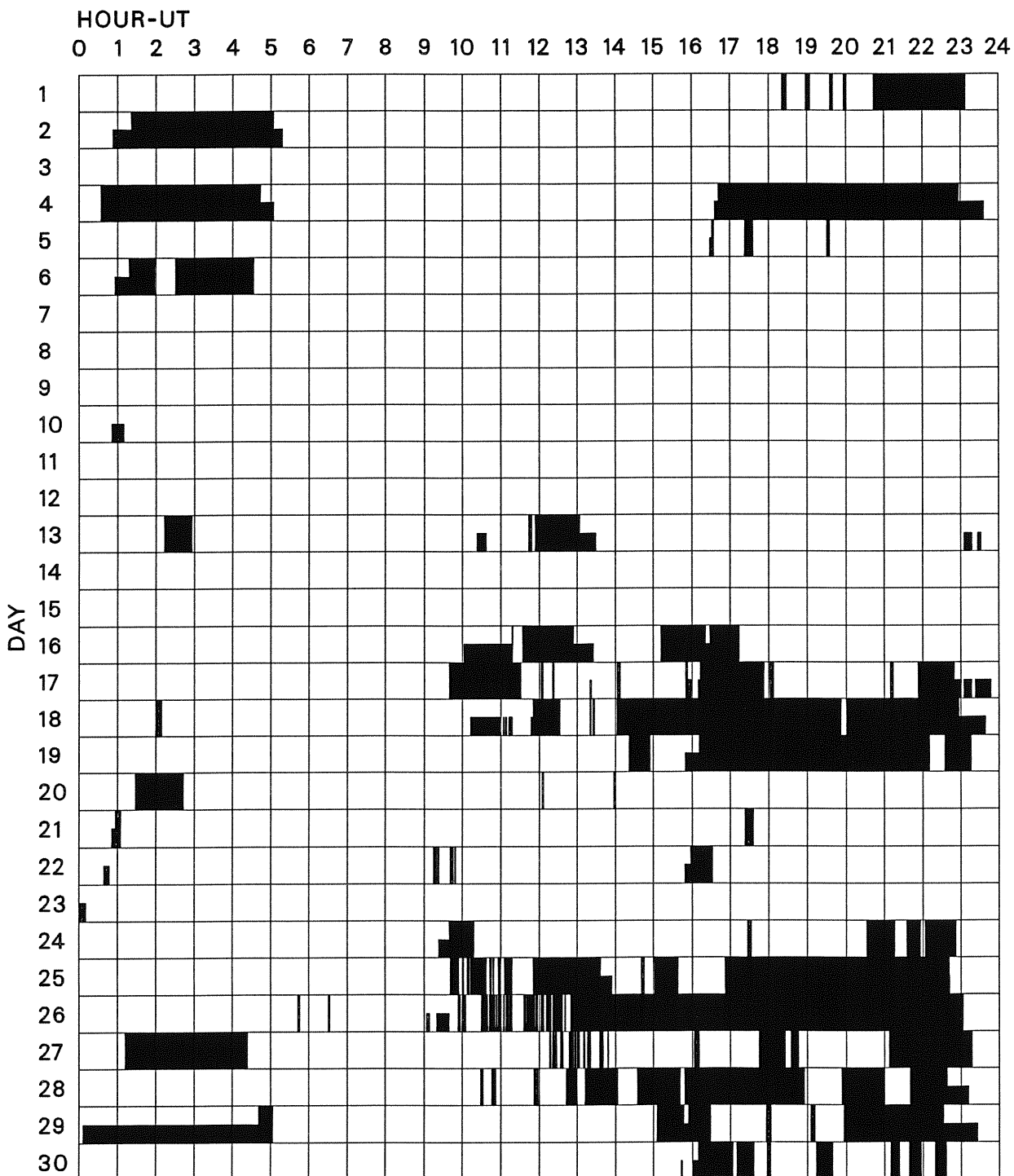






# INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

## SEPTEMBER 2004



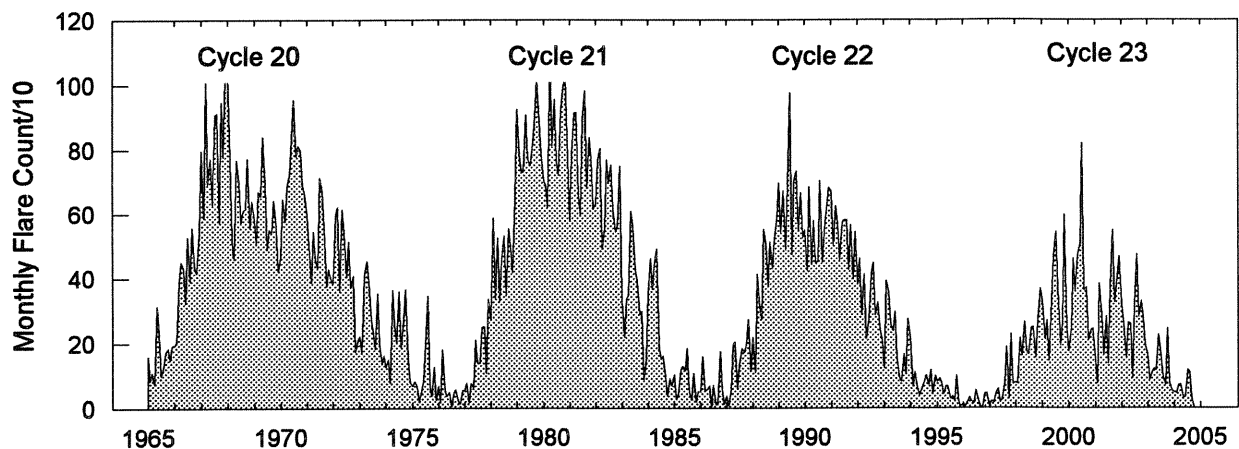
Times of no flare patrol, shown here as shaded areas, combine reports from the stations listed below. Portions of a panel completely shaded mark dates and times of no patrol of any kind (neither visual or cinematographic); portions of a panel with only the bottom half shaded mark times of only visual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

Holloman  
Kanzelhoehe

Learmonth  
Kharkov

San Vito

## Monthly Counts of Grouped Solar Flares Jan 1965 - Sep 2004



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1965	158	85	110	74	315	231	99	127	173	184	150	193	1899
1966	194	205	390	449	429	323	528	391	558	432	417	543	4859
1967	796	589	1009	694	771	629	907	911	573	946	775	1109	9709
1968	1037	773	519	460	768	697	573	611	616	772	556	640	8022
1969	581	504	669	655	839	694	489	551	540	643	566	422	7153
1970	466	646	578	688	722	836	954	780	811	797	687	667	8632
1971	598	505	387	546	461	430	713	673	518	375	431	394	6031
1972	384	599	621	361	614	541	404	515	371	408	175	210	5203
1973	221	171	410	453	388	270	232	182	353	201	136	163	3180
1974	127	148	79	364	255	204	360	187	270	366	153	81	2594
1975	68	82	69	19	42	85	196	346	68	38	127	25	1165
1976	69	18	180	60	38	48	6	47	57	23	13	55	614
1977	54	77	18	76	64	210	140	140	250	252	107	336	1724
1978	274	588	338	526	330	460	533	346	554	499	418	648	5514
1979	926	781	731	731	907	772	750	821	901	1018	888	786	10012
1980	703	689	621	1092	811	956	763	720	924	988	1027	838	10132
1981	578	782	914	915	658	592	893	982	680	836	773	615	9218
1982	631	766	803	490	553	769	696	753	615	544	564	748	7932
1983	332	220	337	346	609	561	427	389	289	298	88	152	4048
1984	353	461	366	440	492	185	151	161	95	36	92	69	2901
1985	104	29	38	119	129	116	185	53	25	108	19	50	975
1986	51	158	54	56	68	3	71	12	14	174	56	13	730
1987	36	7	52	192	205	61	132	185	172	198	273	114	1627
1988	217	109	413	328	274	551	502	375	513	429	518	587	4816
1989	695	544	672	488	691	977	474	699	733	547	665	526	7711
1990	550	424	684	442	580	445	454	703	449	574	623	682	6610
1991	672	503	625	570	458	574	582	581	425	565	396	544	6495
1992	380	462	287	412	214	271	413	447	287	325	248	206	3952
1993	123	392	357	262	237	296	154	92	82	167	104	275	2541
1994	217	67	111	60	40	56	81	101	72	117	45	99	1066
1995	82	95	77	42	69	66	29	37	23	99	14	6	639
1996	14	3	15	34	21	16	54	31	3	0	44	45	280
1997	8	22	18	43	59	18	26	75	188	31	228	74	790
1998	78	76	216	161	264	177	164	248	249	155	268	367	2423
1999	330	212	271	145	330	466	544	368	192	264	598	243	3963
2000	175	248	462	362	473	505	818	364	372	208	241	246	4474
2001	147	77	383	284	164	282	137	376	549	325	405	468	3597
2002	318	261	155	263	259	91	318	474	280	329	279	196	3223
2003	164	87	112	122	117	226	181	94	73	245	78	53	1552
2004	49	47	71	72	32	33	118	112	30				564

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

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

9  
Sep 04

SEPTEMBER 2004

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m <sup>2</sup> Hz)	Mean		
01	245	PALE	8 S	0109.0	0109.0	U	54.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1139.0	1139.0	U	76.0			QL=4 ST=2 TYP=3
03	127	TORN	43 NS	0902.0		138.0		10.0		V=0
	204	IZMI	42 SER	0810.2	0810.8	0.7	26.0			
	410	PALE	8 S	1737.0	1737.0	U	60.0			QL=4 ST=2 TYP=3
	245	PALE	49 GB	1907.0	1908.0	1.0	690.0			QL=4 ST=2 TYP=6
04	204	IZMI	43 NS	0600.0		360.00		10.0		
	127	TORN	43 NS	0820.0		290.0		9.0		V=0, DISTURBED
	245	LEAR	8 S	0136.0	0136.0	U	63.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0137.0	0137.0	U	56.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0144.0	0144.0	U	74.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0302.0	0302.0	1.0	60.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0306.0	0306.0	U	56.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0417.0	0417.0	U	56.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0418.0	0418.0	U	56.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0444.0	0444.0	U	53.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0603.0	0603.0	U	63.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0603.0	0603.0	U	95.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0612.0	0612.0	U	54.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0612.0	0612.0	1.0	56.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1002.0	1003.0	1.0	59.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	1009.0	1009.0	U	59.0			QL=2 ST=2 TYP=3
	410	SVTO	8 S	1009.0	1009.0	U	35.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1031.0	1031.0	1.0	43.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	1031.0	1031.0	1.0	43.0			QL=2 ST=3 TYP=3
	410	SVTO	8 S	1032.0	1032.0	U	65.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1037.0	1037.0	U	99.0			QL=2 ST=2 TYP=3
410	SVTO	8 S	1037.0	1037.0	U	36.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1314.0	1314.0	U	68.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1452.0	1452.0	U	64.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1452.0	1452.0	U	64.0			QL=4 ST=3 TYP=3	
05	245	PALE	8 S	2058.0	2058.0	U	82.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2058.0	2058.0	U	83.0			QL=4 ST=2 TYP=3
06	3000	IZMI	1 S	1111.7	1111.8	0.2	16.0	1.6		
	2800	PENT	29 PBI	1520.0	1534.0	64.0	17.0			
07	127	TORN	44 NS	1350.0E		70.00		43.0		V=1
	9100	GORK	20 GRF	0934.8	1029.8	79.20	12.0			
08	204	IZMI	43 NS	0600.0		360.00		20.0		
	127	TORN	44 NS	0630.0E		450.00		58.0		V=0
	610	LEAR	8 S	0135.0	0135.0	U	140.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	0136.0	0136.0	1.0	35.0			0
	610	PALE	8 S	0136.0	0136.0	U	160.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0438.0	0438.0	U	83.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0646.1	0652.8	22.4	28.0			
	245	LEAR	8 S	0736.0	0736.0	U	100.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	0736.9	0736.9	0.2	25.0			
	245	LEAR	8 S	0812.0	0812.0	U	65.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0812.0	0812.0	U	62.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0838.1	0841.8	7.5	35.0			
	245	LEAR	8 S	0841.0	0841.0	U	71.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0841.0	0841.0	U	70.0			QL=4 ST=2 TYP=3
	33	UPIC	45 C	0933.5	0934.0	1.5				
	33	UPIC	41 F	1138.0	1408.0U	179.0				
	245	SGMR	8 S	1148.0	1148.0	U	59.0			QL=4 ST=2 TYP=3
245	SGMR	8 S	1208.0	1208.0	U	78.0			QL=4 ST=2 TYP=3	
245	SVTO	8 S	1208.0	1208.0	U	55.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1430.0	1430.0	U	67.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	1744.0	1744.0	U	120.0			QL=4 ST=2 TYP=3	
09	204	IZMI	44 NS	0600.0E		360.00		10.0		
	127	TORN	44 NS	0630.0E		510.00		98.0		V=1
	9100	GORK	20 GRF	0556.6	0630.1	44.1	10.0			
	245	SVTO	8 S	0643.0	0644.0	1.0	130.0			QL=4 ST=2 TYP=3

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

SEPTEMBER 2004

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak	Mean		
							(10 -22 W/m <sup>2</sup> Hz)			
09	2950	GORK	20	GRF	0645.0	0647.1	8.1	8.8		
	9100	GORK	20	GRF	0740.1	0743.5	17.4	7.7		
	204	IZMI	7	C	0832.6	0832.7	0.3	160.0		
	9100	GORK	20	GRF	0835.2	0855.9	130.6	13.0		
	204	IZMI	42	SER	1003.5	1003.9	0.6	52.0		
	245	SVTO	8	S	1032.0	1032.0		60.0		QL=4 ST=2 TYP=3
	245	SGMR	8	S	1938.0	1938.0		59.0		QL=4 ST=2 TYP=3
	410	SGMR	8	S	2108.0	2109.0	2.0	70.0		QL=4 ST=2 TYP=3
	410	SGMR	8	S	2117.0	2117.0	1.0	68.0		QL=4 ST=2 TYP=3
10	204	IZMI	44	NS	0600.0E		360.00		10.0	
	127	TORN	44	NS	0630.0E		510.00		39.0	V=1
	2950	GORK	2	S/F	0747.8	0748.3	1.1	5.9		
	9100	GORK	20	GRF	0902.7	0924.4	27.9	11.0		
	2800	PENT	29	PBI	1551.0	1607.0	41.0U	44.0		
	2800	PENT	24	R	1855.0	1921.0	37.0U	10.0		
11	127	TORN	43	NS	0820.0		260.0		6.0	V=0
	410	LEAR	8	S	0208.0	0208.0	1.0	62.0		QL=4 ST=2 TYP=3
	410	PALE	8	S	0208.0	0210.0	2.0	84.0		QL=4 ST=2 TYP=3
	410	LEAR	48	C	0212.0	0215.0	3.0	120.0		QL=4 ST=2 TYP=8
	410	PALE	48	C	0212.0	0215.0	6.0	190.0		QL=4 ST=2 TYP=8
	245	LEAR	8	S	0355.0	0355.0		60.0		QL=4 ST=2 TYP=3
	245	PALE	8	S	0355.0	0355.0		54.0		QL=4 ST=2 TYP=3
	9100	GORK	4	S/F	0606.1	0606.2	0.3	24.0		
	245	SVTO	8	S	1202.0	1202.0		53.0		QL=4 ST=2 TYP=3
	2800	PENT	47	GB	2348.0	2348.0U	1.0U			
12	2804	VORO	28	PRE	0005.0	0026.2	21.2	24.4		
	2840	PEKG	47	GB	0006.0	0121.5	184.0	2384.4		
	8800	LEAR	48	C	0023.0	0119.0	128.0	1400.0		QL=4 ST=2 TYP=8
	4995	LEAR	48	C	0023.0	0119.0	143.0	2800.0		QL=4 ST=2 TYP=8
	4995	LEAR	49	GB	0023.0	0036.0	1417.0	1100.0		QL=4 ST=1 TYP=6
	1415	LEAR	48	C	0024.0	0116.0	125.0	1900.0		QL=4 ST=2 TYP=8
	500	HIRA	7	C	0024.0	0035.0	152.0	120.0		0
	1415	LEAR	48	C	0024.0	0116.0	1416.0	1900.0		QL=4 ST=1 TYP=8
	245	LEAR	48	C	0026.0	0031.0	75.0	390.0		QL=4 ST=2 TYP=8
	410	LEAR	48	C	0026.0	0110.0	78.0	180.0		QL=4 ST=2 TYP=8
	610	LEAR	4	S/F	0026.0	0033.0	99.0	480.0		QL=4 ST=2 TYP=3
	2695	LEAR	48	C	0026.0	0121.0	131.0	2400.0		QL=4 ST=2 TYP=8
	2695	PALE	48	C	0026.0	0121.0	140.0	2800.0		QL=4 ST=2 TYP=8
	4995	PALE	48	C	0026.0	0119.0	148.0	2700.0		QL=4 ST=2 TYP=8
	2800	HIRA	47	GB	0026.0	0122.0	164.0	2135.0		0
	2695	LEAR	49	GB	0026.0	0029.0	1414.0	1300.0		QL=4 ST=1 TYP=6
	245	LEAR	4	S/F	0026.0	0030.0	1414.0	450.0		QL=4 ST=1 TYP=3
	2695	PALE	48	C	0026.0	0032.0	1414.0	1400.0		QL=4 ST=1 TYP=8
	2695	PALE	48	C	0026.0	0113.0	1414.0	1700.0		QL=4 ST=1 TYP=8
	2804	VORO	47	GB	0026.2	0121.8	180.0	2331.0		
	245	PALE	48	C	0027.0	0138.0	71.0	790.0		QL=4 ST=2 TYP=8
	245	PALE	48	C	0027.0	0031.0	1413.0	390.0		QL=4 ST=1 TYP=8
	245	PALE	4	S/F	0027.0	0029.0	1413.0	200.0		QL=4 ST=1 TYP=3
	245	PALE	4	S/F	0027.0	0031.0	1413.0	390.0		QL=4 ST=1 TYP=3
	410	PALE	48	C	0028.0	0137.0	92.0	1400.0		QL=4 ST=2 TYP=8
	610	PALE	48	C	0029.0	0034.0	82.0	440.0		QL=4 ST=2 TYP=8
	8800	PALE	48	C	0029.0	0121.0	147.0	1700.0		QL=4 ST=2 TYP=8
	610	PALE	48	C	0029.0	0034.0	1411.0	430.0		QL=4 ST=1 TYP=8
	610	PALE	4	S/F	0029.0	0029.0	1411.0	52.0		QL=4 ST=1 TYP=3
	610	PALE	4	S/F	0029.0	0031.0	1411.0	160.0		QL=4 ST=1 TYP=3
	15400	LEAR	48	C	0030.0	0119.0	118.0	650.0		QL=4 ST=2 TYP=8
	15400	PALE	48	C	0032.0	0113.0	1408.0	480.0		QL=4 ST=1 TYP=8
	15400	PALE	48	C	0032.0	0119.0	1408.0	680.0		QL=4 ST=1 TYP=8
	15400	PALE	48	C	0033.0	0119.0	89.0	660.0		QL=4 ST=2 TYP=8
	1415	PALE	48	C	0048.0	0117.0	104.0	1700.0		QL=4 ST=2 TYP=8
	245	LEAR	49	GB	0135.0	0137.0	5.0	860.0		QL=4 ST=2 TYP=6
	410	LEAR	4	S/F	0137.0	0137.0	3.0	500.0		QL=4 ST=2 TYP=3
	204	IZMI	42	SER	1124.0	1138.1	16.0	30.0		
	410	SGMR	48	C	1553.0	1611.0	34.0	1400.0		QL=4 ST=2 TYP=8
	410	SVTO	8	S	1554.0	1555.0	1.0	94.0		QL=4 ST=2 TYP=3
	610	SVTO	8	S	1554.0	1555.0	1.0	120.0		QL=4 ST=2 TYP=3

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

11  
Sep 04

SEPTEMBER 2004

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
12	610	SGMR	48 C	1554.0	1615.0	29.0	470.0			QL=4 ST=2 TYP=8
	2800	PENT	24 R	1557.0	1611.0	35.0U	3.0			
	410	SVTO	48 C	1559.0	1611.0	28.0	890.0			QL=4 ST=2 TYP=8
	610	SVTO	48 C	1603.0	1619.0	20.0	430.0			QL=4 ST=2 TYP=8
	245	SGMR	4 S/F	1614.0	1619.0	5.0	28.0			QL=4 ST=2 TYP=3
	410	SGMR	4 S/F	1630.0	1635.0	6.0	87.0			QL=4 ST=2 TYP=3
	410	SVTO	4 S/F	1630.0	1635.0	6.0	69.0			QL=4 ST=2 TYP=3
	610	SVTO	48 C	1630.0	1635.0	12.0	470.0			QL=2 ST=2 TYP=8
	610	SGMR	48 C	1632.0	1637.0	7.0	190.0			QL=4 ST=2 TYP=8
	2800	PENT	1 S	1823.0	1831.0	16.0	7.0			
2800	PENT	1 S	2219.0	2224.0	10.0	4.0				
13	127	TORN	44 NS	0950.0E		50.0D		7.0		V=1
	204	IZMI	7 C	0605.0	0605.0	0.1	26.0			
	204	IZMI	7 C	0809.3	0809.4	0.1	20.0			
	9100	GORK	4 S/F	0845.5	0845.7	2.2	14.0			
	9100	GORK	4 S/F	0916.8	0916.9	0.4	40.0			
	245	LEAR	8 S	0920.0	0920.0	U	210.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0920.0	0920.0	U	220.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	1004.9	1005.0	0.1	12.0			
204	IZMI	42 SER	1005.8	1005.8	45.0	40.0				
14	204	IZMI	43 NS	0600.0		360.0D		15.0		
	127	TORN	44 NS	0630.0E		390.0D		53.0		V=0
	2950	GORK	20 GRF	0512.0	0542.0	111.0	11.0			
	9100	GORK	20 GRF	0513.5	0541.2	133.5	7.5			
	900	GORK	2 S/F	0738.3	0738.4	0.4	7.7			
	2950	GORK	1 S	0747.8	0748.2	0.8	3.8			
	9100	GORK	4 S/F	0807.1	0807.2	0.3	18.0			
	2950	GORK	21 GRF	0836.0	0934.9	72.0	37.0			
	9100	GORK	20 GRF	0846.7	0928.0	121.0D	43.0			
	900	GORK	21 GRF	0850.1	0936.3	118.0D	9.0			
	2840	PEKG	3 S	0851.0	0921.8	55.0	90.9			
	3000	IZMI	45 C	0851.8	0922.3	98.8U	86.0			
	900	GORK	46 C	0855.8	0900.2		24.0			
	900	GORK	46 C	0855.8	0858.7	7.8	9.0			
	2950	GORK	2 S/F	0856.0	0857.8	3.3	7.7			
	410	SVTO	48 C	0857.0	0901.0	5.0	240.0			QL=2 ST=2 TYP=8
	410	LEAR	48 C	0858.0	0901.0	4.0	260.0			QL=4 ST=2 TYP=8
	2950	GORK	2 S/F	0901.0	0901.4	1.4	4.5			
	2695	SVTO	4 S/F	0904.0	0922.0	26.0	120.0			QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	0905.0	0924.0	39.0	96.0			QL=4 ST=2 TYP=3
	900	GORK	46 C	0905.6	0910.0U	30.7	180.0U			
	900	GORK	46 C	0905.6	0921.3		180.0U			
	900	GORK	46 C	0905.6	0914.6		125.0			
	1415	SVTO	4 S/F	0906.0	0914.0	21.0	230.0			QL=4 ST=2 TYP=3
	1415	SVTO	4 S/F	0906.0	0914.0	894.0	230.0			QL=4 ST=1 TYP=3
	2950	GORK	46 C	0907.6	0918.2	27.3	60.0			
	204	IZMI	45 C	0907.6	0910.6	83.0	298.0			
	2950	GORK	46 C	0907.6	0922.8		85.0			
	610	LEAR	48 C	0908.0	0922.0	19.0	240.0			QL=4 ST=2 TYP=8
	1415	LEAR	4 S/F	0908.0	0914.0	18.0	190.0			QL=4 ST=2 TYP=3
	245	LEAR	48 C	0908.0	0910.0	20.0	650.0			QL=4 ST=2 TYP=8
	410	LEAR	48 C	0908.0	0921.0	20.0	670.0			QL=4 ST=2 TYP=8
	245	SVTO	48 C	0908.0	0910.0	20.0	510.0			QL=4 ST=2 TYP=8
	410	SVTO	48 C	0908.0	0921.0	20.0	490.0			QL=2 ST=2 TYP=8
	610	SVTO	48 C	0908.0	0933.0	31.0	440.0			QL=2 ST=2 TYP=8
	245	LEAR	49 GB	0908.0	0910.0	892.0	650.0			QL=4 ST=1 TYP=6
	610	LEAR	4 S/F	0908.0	0915.0	892.0	110.0			QL=4 ST=1 TYP=3
	1415	LEAR	4 S/F	0908.0	0914.0	892.0	190.0			QL=4 ST=1 TYP=3
	245	SVTO	49 GB	0908.0	0910.0	892.0	510.0			QL=4 ST=1 TYP=6
	610	SVTO	4 S/F	0908.0	0918.0	892.0	180.0			QL=2 ST=1 TYP=3
	2695	LEAR	4 S/F	0911.0	0922.0	18.0	100.0			QL=4 ST=2 TYP=3
	2695	LEAR	4 S/F	0911.0	0917.0	889.0	74.0			QL=4 ST=1 TYP=3
15400	SVTO	8 S	0919.0	0919.0	U	22.0			QL=4 ST=2 TYP=3	
4995	LEAR	4 S/F	0919.0	0924.0	10.0	70.0			QL=4 ST=2 TYP=3	
33	UPIC	46 C	0926.0	0928.0	7.5					
204	IZMI	42 SER	1033.6	1035.7	2.1	33.0				
245	SVTO	8 S	1047.0	1047.0	1.0	260.0			QL=4 ST=2 TYP=3	

12  
Sep 04

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

SEPTEMBER 2004

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Mean		
14	410	SVTO	8 S	1047.0	1047.0	1.0	110.0			QL=2 ST=2 TYP=3
15	204	IZMI	44 NS	0600.0E		360.0D		10.0		
	127	TORN	44 NS	0750.0E		250.0D		5.0		V=1
	2840	PEKG	3 S	0743.0	0745.8	16.0	39.6			
	3000	IZMI	20 GRF	0744.1	0745.7	3.1	43.0	18.7		
	900	GORK	4 S/F	0744.2	0745.4	4.2	5.5			
	2950	GORK	4 S/F	0744.2	0745.7	4.6	45.0			
	2800	HIRA	3 S	0745.0	0746.0	4.0	35.0			0
	9100	GORK	2 S/F	0745.2	0745.7	2.3	7.8			
	9100	GORK	4 S/F	0858.3	0858.6	0.6	15.0			
	245	SGMR	8 S	1415.0	1415.0	U	59.0			QL=4 ST=2 TYP=3
	2800	PENT	1 S	1742.0	1750.0	15.0	6.0			
	245	PALE	8 S	1850.0	1850.0	U	67.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2003.0	2003.0	U	130.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2101.0	2101.0	U	92.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2101.0	2101.0	U	100.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2254.0	2254.0	U	51.0			QL=4 ST=2 TYP=3
16	204	IZMI	44 NS	0600.0E		360.0D		10.0		
	127	TORN	44 NS	0700.0E		360.0D		11.0		V=1, DISTURBED
	245	SGMR	43 NS	1213.0	1213.0	10.0	66.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	1213.0	1213.0	10.0	66.0			QL=4 ST=3 TYP=1
	245	SVTO	43 NS	1213.0	1213.0	40.0	66.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	1213.0	1213.0	707.0	66.0			QL=4 ST=1 TYP=1
	900	GORK	41 F	0724.7	0725.4	5.8	9.0			
	900	GORK	41 F	0724.7	0729.7		14.0			
	245	SGMR	8 S	1147.0	1147.0	1.0	50.0			QL=4 ST=2 TYP=3
17	127	TORN	43 NS	0840.0		150.0		6.0		V=0
	245	LEAR	8 S	0230.0	0230.0	U	100.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0233.0	0233.0	1.0	480.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0603.3	0603.4	0.7	27.0			
	245	SVTO	8 S	1152.0	1152.0	U	59.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1255.0	1255.0	U	55.0			QL=2 ST=2 TYP=3
	410	SVTO	8 S	1255.0	1255.0	U	35.0			QL=2 ST=2 TYP=3
18	245	SVTO	43 NS	0530.0	0530.0	1.0	71.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	0530.0	0530.0	1110.0	71.0			QL=4 ST=1 TYP=1
	204	IZMI	43 NS	0600.0		180.0U		30.0		
	127	TORN	44 NS	0630.0E		330.0D		7.0		V=1, DISTURBED
	245	SVTO	43 NS	0642.0	0706.0	24.0	140.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	0642.0	0706.0	24.0	140.0			QL=4 ST=3 TYP=1
	245	LEAR	43 NS	0701.0	0706.0	5.0	180.0			QL=4 ST=2 TYP=1
	2804	VORO	20 GRF	0036.0	0037.8	30.0	5.1			
	245	LEAR	8 S	0400.0	0400.0	1.0	89.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0400.0	0400.0	1.0	64.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0440.0	0440.0	U	67.0			QL=4 ST=2 TYP=3
	9100	GORK	4 S/F	0533.7	0533.9	0.4	14.0			
	245	LEAR	8 S	0642.0	0642.0	U	84.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0642.0	0642.0	U	54.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0750.0	0750.0	U	64.0			QL=4 ST=2 TYP=3
	2800	PENT	41 F	1501.0	1609.0	68.0	7.0			
19	235	CUBA	44 NS	1300.0E		515.0D		8.0		
	280	CUBA	44 NS	1300.0E		515.0D		18.0		
	900	GORK	7 C	0550.0	0551.6		2.0			
	900	GORK	7 C	0550.0	0550.7	1.9	5.1			
	1415	SGMR	48 C	1649.0	1708.0	28.0	150.0			QL=4 ST=2 TYP=8
	2695	PALE	48 C	1649.0	1657.0	38.0	530.0			QL=4 ST=2 TYP=8
	2695	PALE	48 C	1649.0	1657.0	431.0	530.0			QL=4 ST=1 TYP=8
	2695	SGMR	48 C	1650.0	1657.0	39.0	520.0			QL=4 ST=2 TYP=8
	1415	PALE	4 S/F	1650.0	1654.0	430.0	100.0			QL=4 ST=1 TYP=3
	4995	PALE	48 C	1651.0	1657.0	34.0	490.0			QL=4 ST=2 TYP=8
	4995	SGMR	48 C	1651.0	1657.0	34.0	490.0			QL=4 ST=2 TYP=8
	4995	PALE	48 C	1651.0	1657.0	429.0	490.0			QL=4 ST=1 TYP=8
	4995	SGMR	4 S/F	1651.0	1651.0	429.0	52.0			QL=4 ST=1 TYP=3
	4995	SGMR	4 S/F	1651.0	1657.0	429.0	460.0			QL=4 ST=1 TYP=3
	610	SGMR	4 S/F	1652.0	1655.0	3.0	31.0			QL=4 ST=1 TYP=3

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

13  
Sep 04

SEPTEMBER 2004

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m 2 Hz)	Mean			
19	610	SGMR	4 S/F	1652.0	1655.0	3.0	31.0			QL=4 ST=2 TYP=3	
	1415	PALE	48 C	1654.0	1709.0	22.0	110.0			QL=4 ST=2 TYP=8	
	8800	SGMR	4 S/F	1654.0	1658.0	25.0	170.0			QL=4 ST=2 TYP=3	
	410	PALE	8 S	1655.0	1656.0	1.0	62.0			QL=4 ST=2 TYP=3	
	8800	PALE	48 C	1655.0	1657.0	19.0	170.0			QL=4 ST=2 TYP=8	
	8800	PALE	4 S/F	1655.0	1657.0	425.0	170.0			QL=4 ST=1 TYP=3	
	245	SGMR	8 S	1656.0	1656.0	U	41.0			QL=4 ST=1 TYP=3	
	410	SGMR	8 S	1656.0	1656.0	U	28.0			QL=4 ST=1 TYP=3	
	410	SGMR	8 S	1656.0	1656.0	U	28.0			QL=4 ST=2 TYP=3	
	245	SGMR	4 S/F	1656.0	1704.0	10.0	130.0			QL=4 ST=2 TYP=3	
	15400	SGMR	4 S/F	1656.0	1658.0	17.0	87.0			QL=4 ST=2 TYP=3	
	245	PALE	4 S/F	1701.0	1704.0	5.0	140.0			QL=4 ST=2 TYP=3	
	2800	PENT	47 GB	1929.0E	1929.0U	1.0U					
	245	PALE	8 S	2121.0	2121.0	U	65.0				QL=4 ST=2 TYP=3
	20	245	LEAR	43 NS	0441.0	0511.0	1159.0	120.0			QL=4 ST=3 TYP=1
245		SVTO	43 NS	0457.0	0511.0	70.0	98.0			QL=4 ST=2 TYP=1	
204		IZMI	43 NS	0600.0		360.0D		5.0			
127		TORN	44 NS	0630.0E		230.0D		4.0		V=1, DISTURBED	
235		CUBA	44 NS	1300.0E		495.0D		9.0			
280		CUBA	44 NS	1300.0E		495.0D		12.0			
245		SVTO	43 NS	1305.0	1344.0	53.0	110.0				QL=2 ST=2 TYP=1
245		SGMR	43 NS	1307.0	1309.0	91.0	75.0				QL=4 ST=2 TYP=1
245		SGMR	43 NS	1307.0	1309.0	653.0	75.0				QL=4 ST=1 TYP=1
245		LEAR	8 S	0226.0	0226.0	U	87.0				QL=4 ST=2 TYP=3
245		PALE	8 S	0226.0	0226.0	U	85.0				QL=4 ST=2 TYP=3
245		PALE	8 S	0247.0	0247.0	U	51.0				QL=4 ST=2 TYP=3
245		LEAR	8 S	0248.0	0248.0	U	59.0				QL=4 ST=2 TYP=3
245		PALE	8 S	0257.0	0257.0	U	55.0				QL=4 ST=2 TYP=3
245		LEAR	8 S	0258.0	0258.0	U	61.0				QL=4 ST=2 TYP=3
245		LEAR	8 S	0302.0	0302.0	U	54.0				QL=4 ST=2 TYP=3
245		LEAR	8 S	0307.0	0307.0	U	53.0				QL=4 ST=2 TYP=3
245		LEAR	8 S	0313.0	0313.0	U	61.0				QL=4 ST=2 TYP=3
245		LEAR	8 S	0401.0	0401.0	U	82.0				QL=4 ST=2 TYP=3
245		LEAR	8 S	0403.0	0404.0	1.0	110.0				QL=4 ST=2 TYP=3
245		PALE	8 S	0403.0	0403.0	1.0	100.0				QL=4 ST=2 TYP=3
245		LEAR	8 S	0441.0	0441.0	U	51.0				QL=4 ST=2 TYP=3
9100		GORK	4 S/F	0448.5	0448.7	0.6	10.0				
245		LEAR	8 S	0457.0	0457.0	U	55.0				QL=4 ST=2 TYP=3
245		SVTO	8 S	0457.0	0458.0	1.0	67.0				QL=4 ST=2 TYP=3
245		LEAR	8 S	0503.0	0503.0	U	51.0				QL=4 ST=2 TYP=3
245		LEAR	48 C	0505.0	0505.0	3.0	64.0				QL=4 ST=2 TYP=8
245		LEAR	8 S	0511.0	0511.0	U	120.0				QL=4 ST=2 TYP=3
245		SVTO	8 S	0511.0	0511.0	U	98.0				QL=4 ST=2 TYP=3
900		GORK	41 F	0530.7	0536.4		9.6				
900		GORK	41 F	0530.7	0531.8	8.5	12.0				
9100		GORK	1 S	0537.5	0537.8	0.5	2.7				
900		GORK	21 GRF	0640.9	0719.2	67.1	16.0				
204		IZMI	7 C	0645.6	0645.8	0.4	13.0				
2840		PEKG	1 S	0711.0	0714.2	8.0	5.2				
9100	GORK	46 C	0713.6	0714.0	2.9	18.0					
2950	GORK	2 S/F	0713.6	0714.0	1.0	5.9					
9100	GORK	46 C	0713.6	0714.5		15.0					
900	GORK	4 S/F	0713.7	0714.1	0.9	12.0					
245	SVTO	8 S	0742.0	0742.0	U	120.0				QL=4 ST=2 TYP=3	
900	GORK	3 S	0755.0	0755.2	0.5	16.0					
900	GORK	46 C	0800.4	0806.5		10.0					
900	GORK	46 C	0800.4	0804.8	7.3	19.0					
900	GORK	4 S/F	0812.5	0819.5	7.8	12.0					
900	GORK	23 GRF	0824.9	1004.0		18.0					
900	GORK	23 GRF	0824.9	0834.4	110.6	15.0					
900	GORK	4 S/F	0844.0	0846.0	5.0	10.0					
9100	GORK	4 S/F	0844.1	0844.3	0.3	24.0					
2950	GORK	1 S	0850.3	0850.6	0.6	4.5					
245	SGMR	8 S	1307.0	1307.0	U	71.0				QL=4 ST=2 TYP=3	
245	PALE	8 S	2150.0	2150.0	U	55.0				QL=4 ST=2 TYP=3	
21	245	SVTO	43 NS	1229.0	1349.0	122.0	130.0				QL=2 ST=2 TYP=1
	245	SGMR	43 NS	1229.0	1349.0	151.0	77.0				QL=4 ST=2 TYP=1

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

SEPTEMBER 2004

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density (10 -22 W/m <sup>2</sup> Hz)		Int	Remarks
							Peak	Mean		
21	235	CUBA	44 NS	1305.0E		515.0D		8.0		
	280	CUBA	44 NS	1305.0E		515.0D		18.0		
	245	PALE	8 S	0203.0	0204.0	1.0	100.0			QL=4 ST=2 TYP=3
	900	GORK	4 S/F	0451.8	0451.9	0.3	12.0			
	9100	GORK	2 S/F	0525.3	0525.7	0.8	7.7			
	900	GORK	4 S/F	0545.7	0547.5	2.7	4.5			
	245	LEAR	48 C	0622.0	0623.0	3.0	78.0			QL=4 ST=2 TYP=8
	245	SVTO	8 S	0623.0	0623.0	2.0	85.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0624.2	0638.6	21.8	62.0			
	410	LEAR	8 S	0810.0	0810.0	U	78.0			QL=4 ST=2 TYP=3
	2840	PEKG	3 S	0830.0	0834.0	14.0	40.2			
	2695	SVTO	8 S	0833.0	0834.0	1.0	36.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	0833.0	0834.0	2.0	93.0			QL=4 ST=2 TYP=3
	2950	GORK	4 S/F	0833.0	0834.2	3.0	54.0			
	9100	GORK	4 S/F	0833.4	0834.2	5.1	40.0			
	3000	IZMI	20 GRF	0833.6	0834.2	1.6	34.0	13.5		
	900	GORK	1 S	0833.8	0834.3	2.5	6.1			
	4995	LEAR	8 S	0834.0	0834.0	U	86.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0834.0	0834.0	U	38.0			QL=4 ST=2 TYP=3
	8800	SVTO	8 S	0834.0	0834.0	1.0	37.0			QL=4 ST=2 TYP=3
	33	UPIC	46 C	0834.5	0835.0	2.0				
	204	IZMI	41 F	0834.8	0834.9	0.2	104.0			
	2950	GORK	29 PBI	0836.0	0836.0	6.9	6.2			
	9100	GORK	2 S/F	0848.8	0849.2	1.1	8.7			
	2840	PEKG	5 S	0905.0	0907.5	6.0	56.8			
	900	GORK	41 F	0906.5	0907.3		6.1			
	900	GORK	41 F	0906.5	0906.6	1.0	2.5			
	3000	IZMI	5 S	0906.9	0907.3	0.6	38.0	10.3		
	2695	SVTO	8 S	0907.0	0907.0	U	53.0			QL=4 ST=2 TYP=3
	2950	GORK	4 S/F	0907.0	0907.3	0.6	72.0			
	245	SGMR	8 S	1229.0	1229.0	1.0	64.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1257.0	1258.0	1.0	64.0			QL=2 ST=2 TYP=3
	610	SVTO	49 GB	1258.0	1258.0	U	620.0			QL=2 ST=2 TYP=6
33	UPIC	46 C	1645.0	1647.0	2.5					
2800	PENT	8 S	1736.0	1738.0	4.0	18.0				
245	PALE	8 S	1745.0	1745.0	2.0	100.0			QL=4 ST=2 TYP=3	
245	LEAR	8 S	2355.0	2355.0	U	78.0			QL=2 ST=2 TYP=3	
245	LEAR	8 S	2355.0	2355.0	U	78.0			QL=2 ST=3 TYP=3	
245	PALE	8 S	2355.0	2355.0	1.0	110.0			QL=4 ST=2 TYP=3	
22	245	LEAR	8 S	0133.0	0133.0	U	57.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0145.0	0145.0	1.0	78.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0145.0	0145.0	1.0	78.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0157.0	0157.0	U	91.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0157.0	0157.0	U	72.0			QL=4 ST=2 TYP=3
	9100	GORK	4 S/F	0420.1	0420.6	0.9	15.0			
	9100	GORK	4 S/F	0846.3	0846.5	0.4	19.0			
	2950	GORK	21 GRF	0852.0	0859.5	107.0	10.0			
	9100	GORK	20 GRF	0855.0	0918.0	74.0	13.0			
	2950	GORK	8 S	0859.6	0859.6	0.1	8.9			
	900	GORK	40 F	0904.2	0906.0	1.9	4.9			
	204	IZMI	7 C	1029.1	1029.1	0.2	13.0			
	2695	SGMR	8 S	1509.0	1509.0	U	52.0			QL=4 ST=2 TYP=3
	23	900	GORK	41 F	0622.4	0622.5	4.4	3.7		
900		GORK	41 F	0622.4	0623.6		17.0			
2950		GORK	4 S/F	0624.7	0625.1	0.5	18.0			
9100		GORK	4 S/F	0708.8	0709.0	0.4	28.0			
204		IZMI	42 SER	1022.9	1023.1	0.3	20.0			
2800	PENT	1 S	1555.0	1602.0	15.0	3.0				
24	245	SGMR	8 S	1948.0	1948.0	U	110.0			QL=4 ST=3 TYP=3
26	2840	PEKG	5 S	0435.0	0437.3	5.0	12.6			
	2950	GORK	4 S/F	0436.9	0437.3	0.9	14.0			
	2800	HIRA	1 S	0437.0	0437.0	1.0	15.0			0
	2950	GORK	1 S	1018.6	1018.7	0.5	4.4			
28	245	SGMR	8 S	1942.0E	1943.0	2.0D	74.0			QL=4 ST=2 TYP=3



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

15  
Sep 04

SEPTEMBER 2004

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
28	410	SGMR	8 S	1942.0E	1942.0	2.0D	37.0		QL=4 ST=2 TYP=3	
			8 S	1943.0E	1943.0	U	34.0			
			8 S	1944.0E	1944.0	U	50.0			
29	2840	PEKG	1 S	0545.0	0548.5	8.0	6.9		QL=4 ST=1 TYP=6	
	245	LEAR	49 GB	0637.0	0637.0	1043.0	43000.0			
30	410	SGMR	8 S	2015.0	2016.0	2.0	60.0		QL=4 ST=2 TYP=3	

Reports are received routinely from the following observatories:

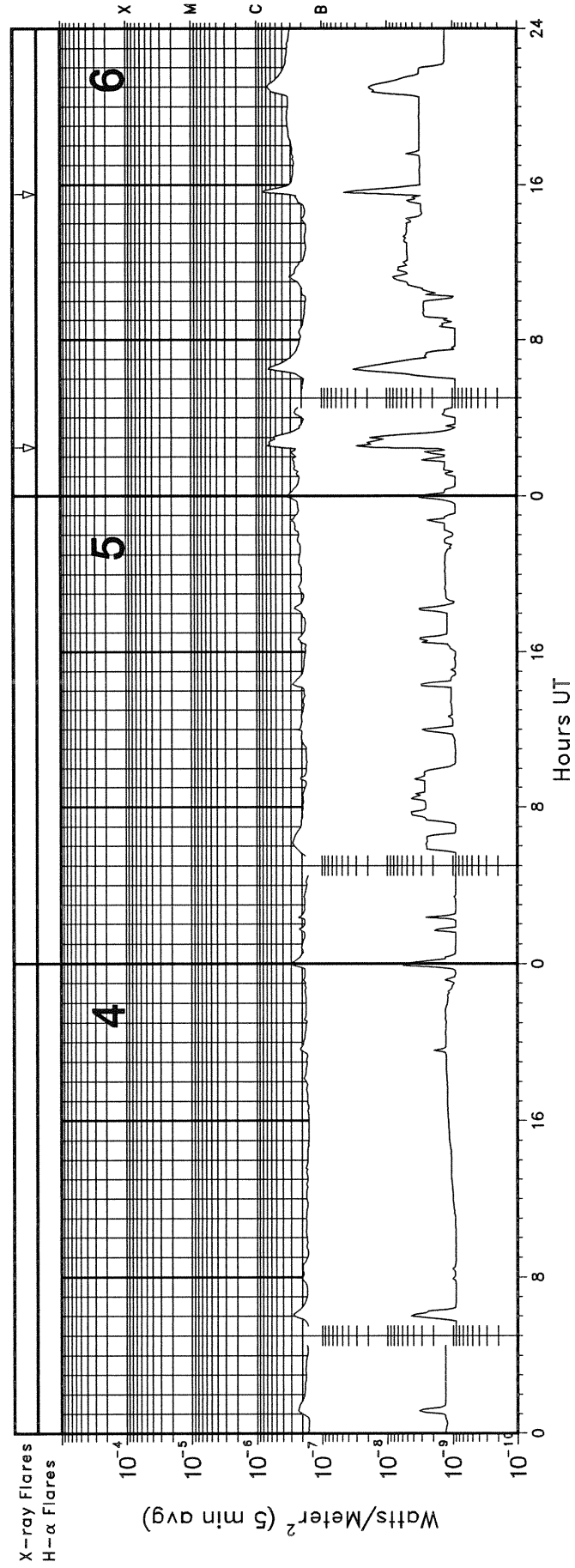
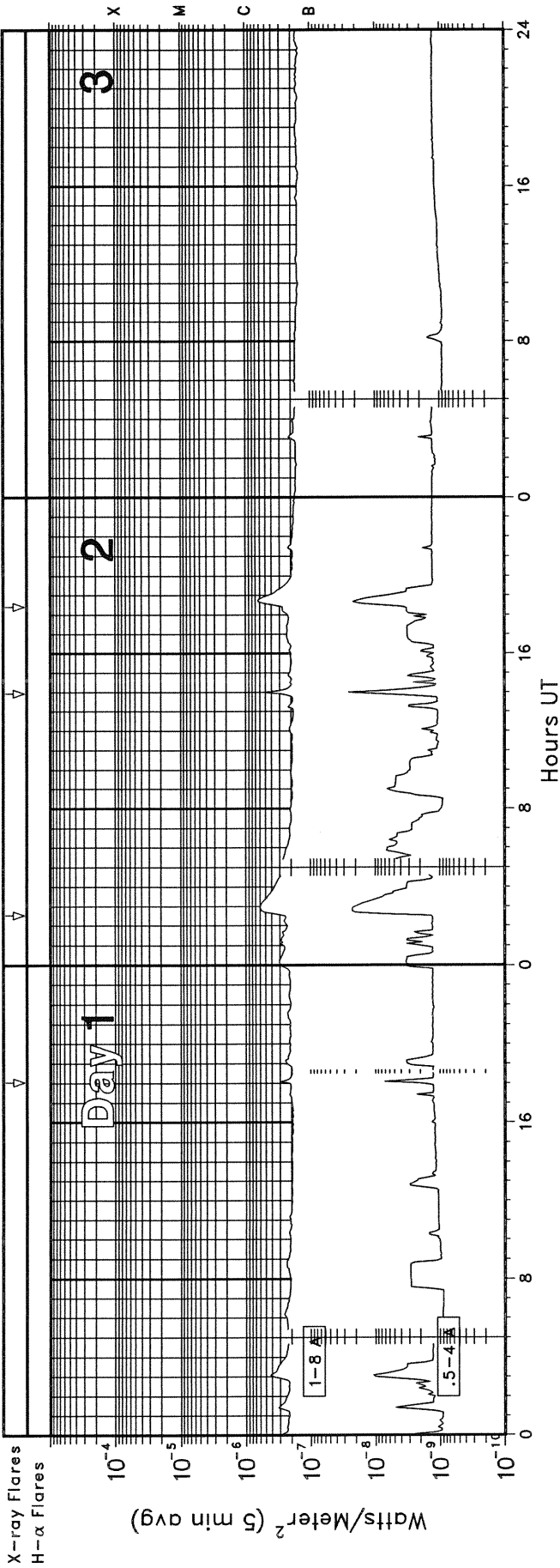
BERN = Berne	HUMN = Humain	ONDR = Ondrejov	SVTO = San Vito
CRIM = Crimea	IZMI = IZMIRAN	PEKG = Peking	TORN = Torun
CUBA = Havana	KISV = Kislovodsk	PALE = Palehua	TRST = Trieste
GORK = Gorky	KRAK = Krakow	PENT = Penticton	TYKW = Toyokawa
HIRA = Hiraio	LEAR = Learmonth	POTS = Potsdam	UPIC = Upice
HUAN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

Explanation of Type Code:

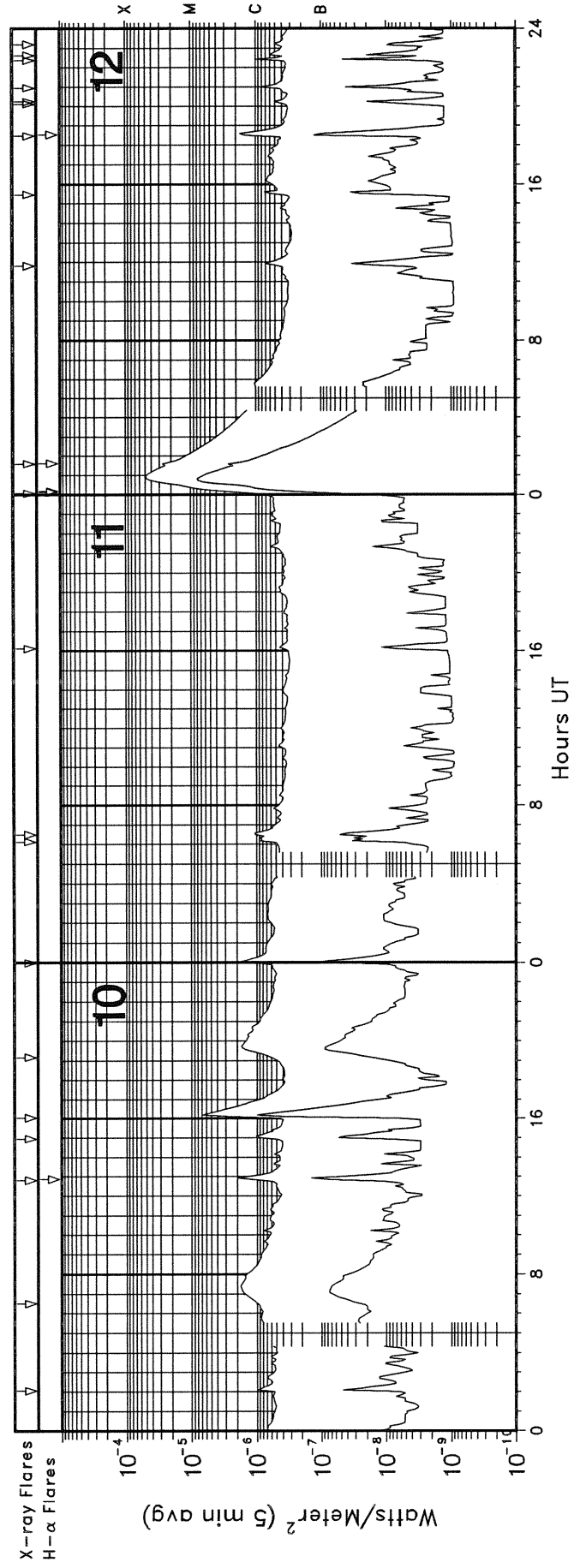
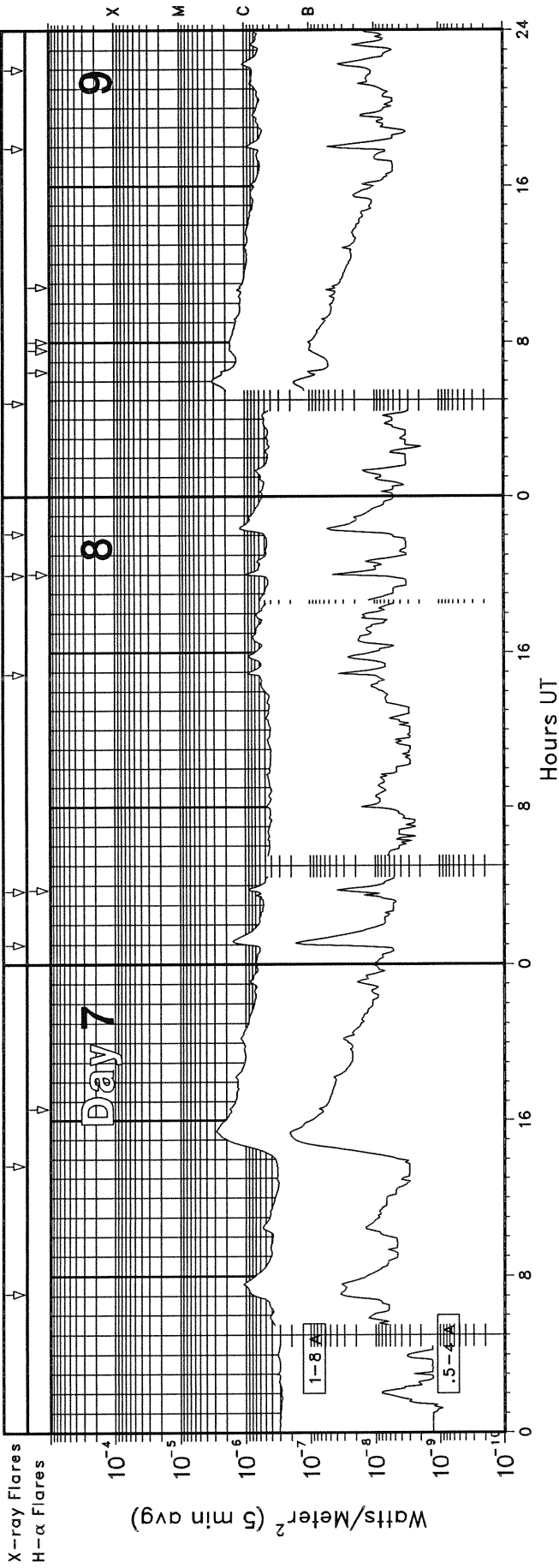
1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple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

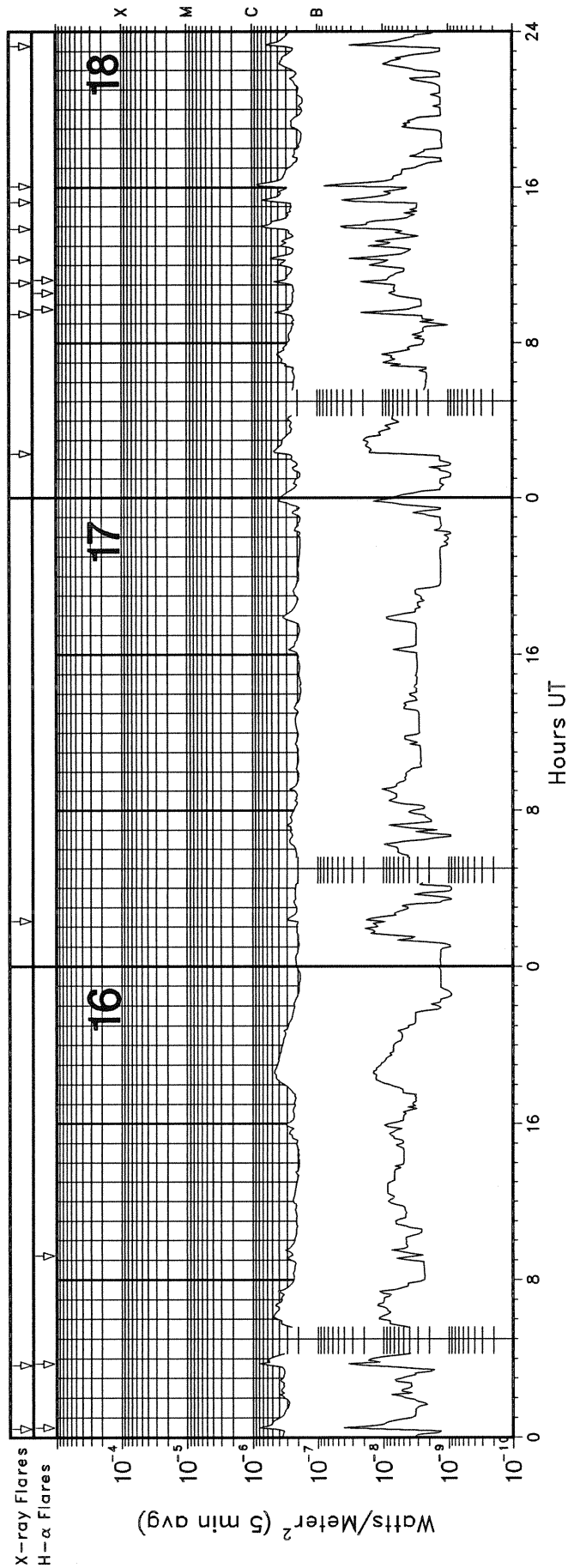
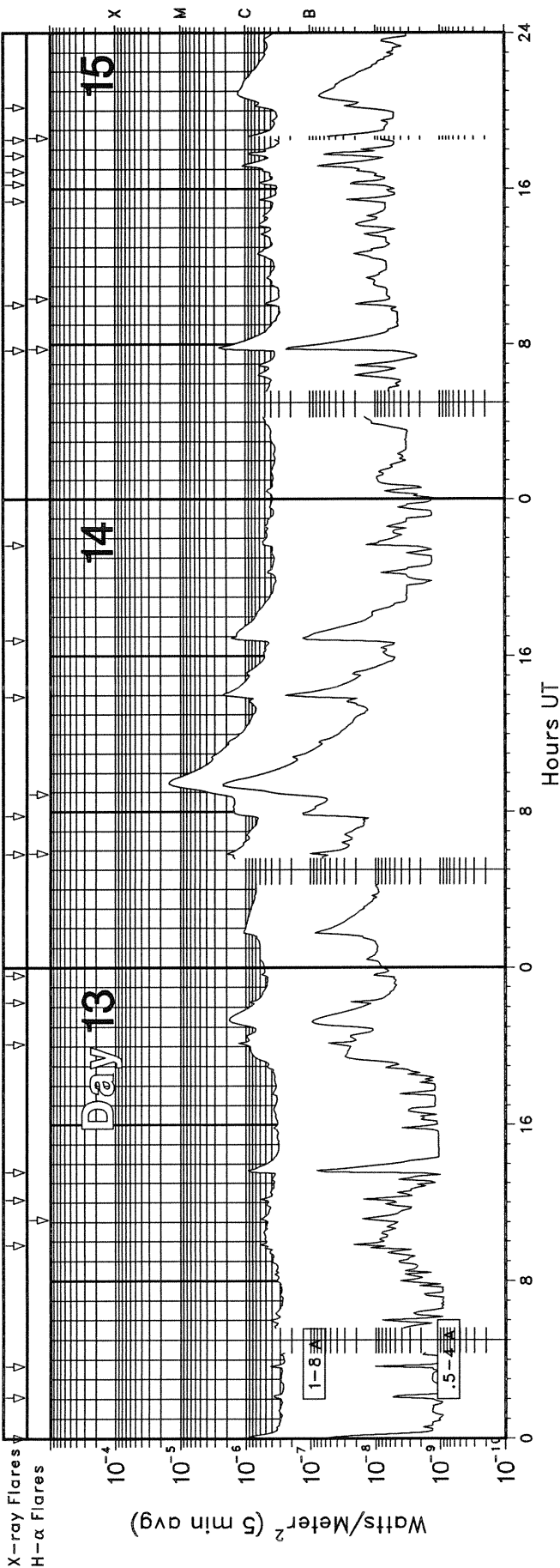
# GOES X-RAY DETECTOR September 2004



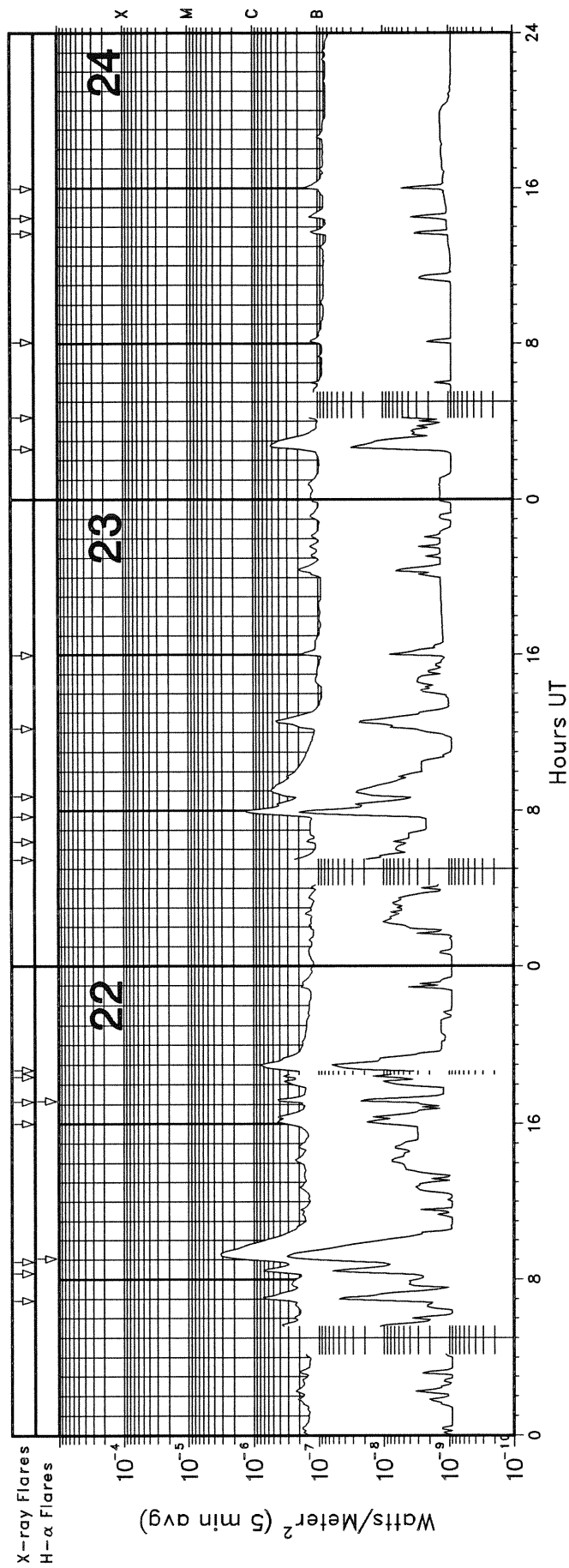
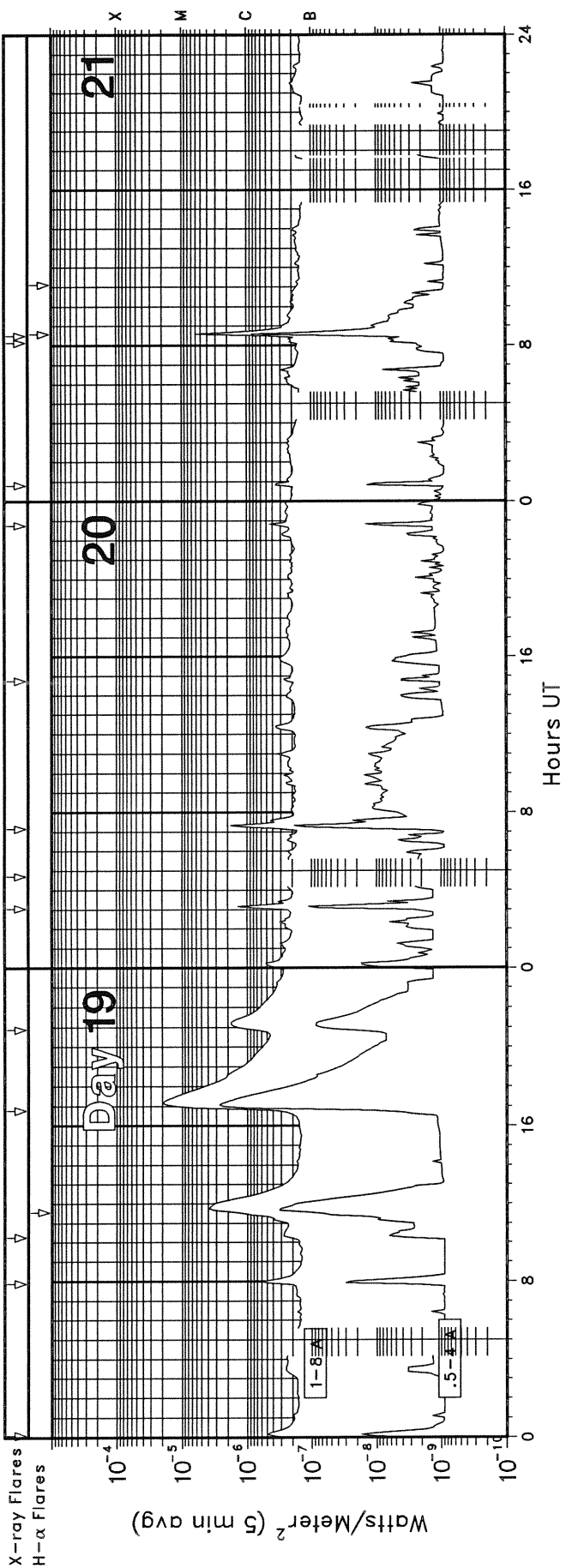
# GOES X-RAY DETECTOR September 2004



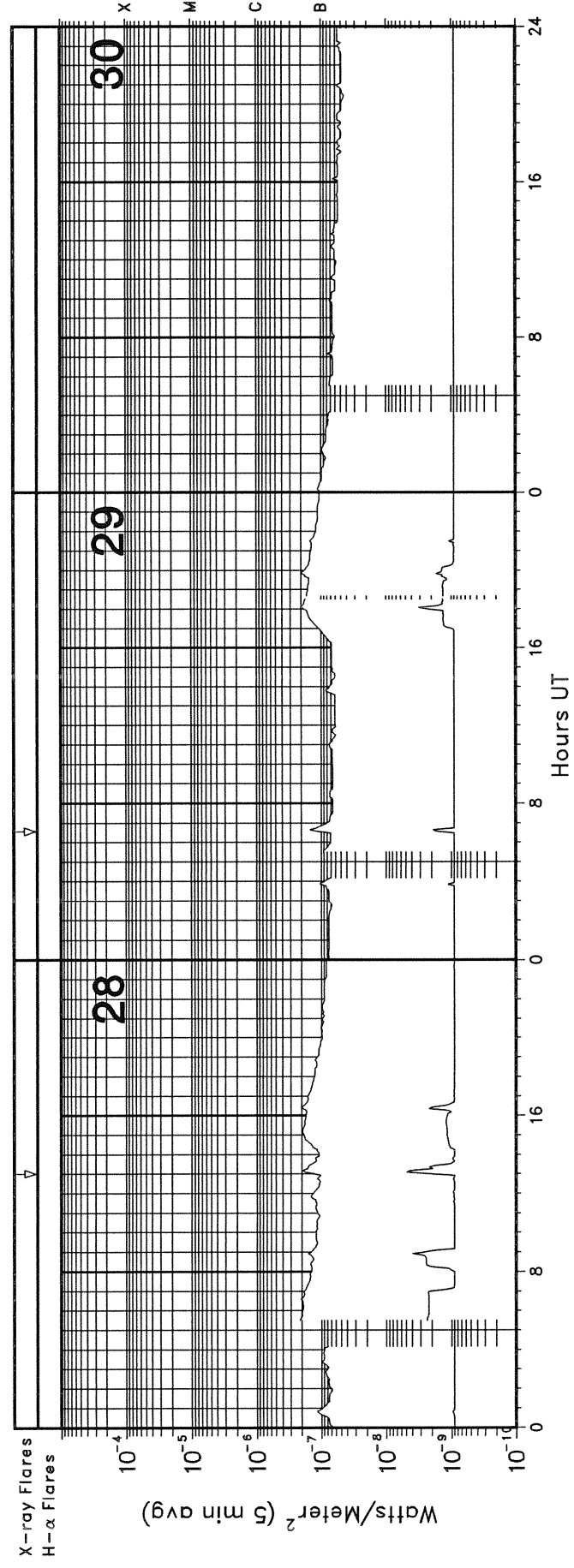
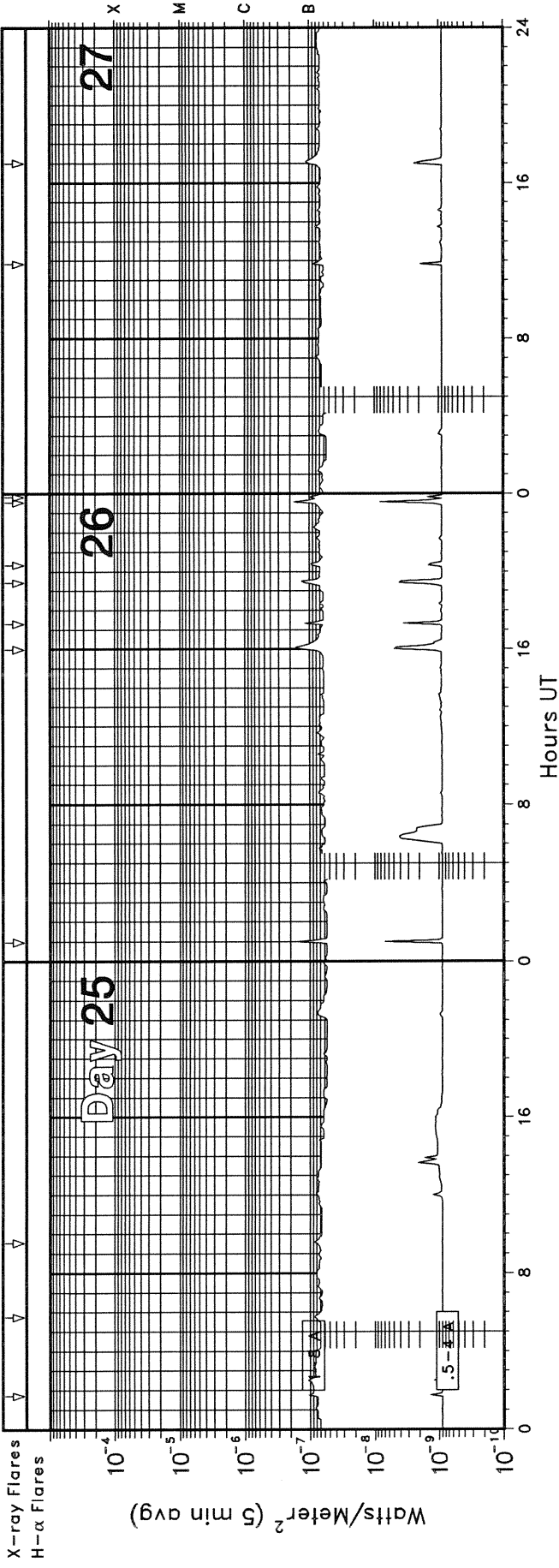
# GOES X-RAY DETECTOR September 2004



# GOES X-RAY DETECTOR September 2004



# GOES X-RAY DETECTOR September 2004



GOES SOLAR X-RAY FLARES  
 \*\*Preliminary Listing\*\*

21  
 Sep 04

September 2004

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	Flux	NOAA/USAF Region
01	1803	1806	1809				B3.4	1.0E-04	
02	0232	0256	0343				B6.0	2.2E-03	
02	1356	1401	1405				B5.7	2.3E-04	
02	1825	1843	1901				B6.4	1.1E-03	
06	0229	0249	0307				B6.9	1.3E-03	10667
06	1530	1539	1549				B8.2	7.1E-04	10667
07	0706	0738	0803				C1.1	3.1E-03	10669
07	1340	1529	1643				C2.8	1.7E-02	
08	0059	0110	0126				C1.5	2.1E-03	
08	0341	0349	0357	S06	E02	SF	B9.0	7.9E-04	10669
08	1453	1458	1505				B9.7	6.2E-04	10669
08	1957	2002	2010	S05	W05	SF	C1.0	6.7E-04	10669
08	2205	2222	2247				C1.2	2.3E-03	
09	0450	0601	0640				C3.2	1.3E-02	10672
09	1755	1800	1813				B9.3	9.1E-04	10671
09	2159	2216	2226				C1.0	1.5E-03	10672
10	0203	0207	0214				C1.0	5.8E-04	10672
10	0630	0726	0746				C1.7	6.7E-03	
10	1249	1256	1302				C2.1	1.2E-03	10672
10	1457	1505	1514				C1.0	8.9E-04	10672
10	1602	1613	1626				C6.9	6.2E-03	10672
10	1911	1945	2003				C1.7	4.0E-03	
10	2359	2406	2414				C1.6	1.2E-03	
11	0608	0613	0627				B9.5	9.4E-04	10672
11	0629	0634	0639				C1.1	6.3E-04	10672
11	1607	1612	1616				B4.5	2.3E-04	10672
12	0004	0056	0133	N04	E42	2N	M4.8	1.5E-01	10672
12	0136	0139	0141	S14	W61	SN	M3.2	8.2E-03	10667
12	1149	1157	1201				B7.1	4.1E-04	
12	1528	1536	1540				B7.9	4.4E-04	
12	1828	1834	1842	S08	W64	SF	C2.0	1.2E-03	10669
12	2007	2010	2012				B4.9	1.2E-04	
12	2014	2017	2020				B6.1	1.8E-04	
12	2057	2102	2106				B8.8	3.8E-04	10672
12	2222	2227	2230				C1.1	3.8E-04	10667
12	2238	2243	2248				B6.6	3.4E-04	10669
12	2311	2314	2317				B6.0	1.9E-04	10672
13	0001	0008	0013				C1.0	5.3E-04	10669
13	0205	0208	0214				B3.9	2.0E-04	
13	0339	0342	0344				B5.0	1.3E-04	10672
13	0949	0952	0955				B6.5	2.1E-04	
13	1208	1211	1213				B6.5	1.7E-04	10667
13	1334	1339	1342				C1.4	4.3E-04	10672
13	2007	2011	2014				C1.4	5.3E-04	10672
13	2214	2217	2219				B9.9	2.6E-04	
13	2336	2339	2344				B6.2	2.6E-04	
14	0549	0552	0554				C2.2	5.7E-04	10672
14	0747	0930	1000	N04	E17	1F	M1.5	4.5E-02	10672
14	1354	1404	1418				C2.3	2.6E-03	
14	1647	1655	1725				C1.8	3.0E-03	
14	2139	2142	2201				B5.7	6.8E-04	

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	Flux	NOAA/USAF Region
15	0742	0749	0802	N08	E08	SF	C2.7	2.3E-03	10672
15	1002	1009	1015				B5.1	3.4E-04	10673
15	1521	1525	1530				B6.4	2.9E-04	10672
15	1613	1621	1627				B6.1	4.4E-04	10672
15	1651	1713	1723				C1.1	1.4E-03	10672
15	1742	1751	1753				C1.1	5.4E-04	10672
15	1830	1841	1853	N08	W01	SF	B9.7	6.4E-04	10672
15	2010	2055	2150				C1.3	5.9E-03	
16	0026	0031	0036	N07	W05	SF	B8.7	3.9E-04	10672
16	0340	0346	0351	N05	W11	SF	B8.4	4.5E-04	10672
17	0218	0223	0233				B3.1	2.5E-04	10673
18	0218	0223	0244				B4.8	6.6E-04	10672
18	0930	0938	0941				B4.8	2.5E-04	10673
18	1106	1110	1114				B5.1	2.0E-04	10673
18	1218	1223	1226				B6.2	2.3E-04	10673
18	1352	1401	1408				B7.5	5.6E-04	10673
18	1514	1520	1527				B7.5	4.4E-04	10672
18	1603	1609	1615				C1.0	5.5E-04	10673
18	2316	2323	2328				B7.1	3.6E-04	10672
19	0006	0012	0019				B5.0	3.5E-04	10673
19	0753	0759	0806				B6.6	3.9E-04	10672
19	1016	1148	1213				C3.8	8.8E-03	10672
19	1646	1712	1739				M1.9	3.9E-02	10672
19	2052	2115	2132				C1.9	3.7E-03	
20	0303	0310	0315				C1.7	7.0E-04	10672
20	0443	0447	0451				B2.6	1.1E-04	
20	0709	0721	0725				C2.1	1.0E-03	10672
20	1445	1449	1452				B3.4	1.1E-04	
20	2246	2250	2253				B5.7	1.8E-04	10672
21	0049	0055	0057				B5.2	1.8E-04	10672
21	0808	0812	0815				B2.3	8.6E-05	10672
21	0830	0836	0839	N06	W75	SF	C7.5	1.9E-03	10672
22	0655	0705	0712				B7.8	5.8E-04	10672
22	0818	0829	0836				B7.9	6.0E-04	10672
22	0854	0920	0936	S13	W08	SF	C3.2	5.7E-03	10673
22	1601	1606	1617				B4.4	3.8E-04	10673
22	1707	1714	1719	N03	W86	SF	B6.2	2.7E-04	10672
22	1823	1827	1831				B3.8	1.5E-04	10672
22	1844	1901	1910				B8.2	9.7E-04	10672
23	0528	0532	0535				B2.6	9.1E-05	
23	0624	0628	0633				B1.6	8.0E-05	10673
23	0742	0800	0807				C1.4	1.3E-03	
23	0843	0905	0926				B5.3	1.1E-03	
23	1212	1235	1245				B4.7	6.0E-04	10673
23	1559	1603	1607				B2.4	8.7E-05	10673
24	0235	0245	0306				B5.4	8.0E-04	10673
24	0411	0427	0445				B3.5	5.8E-04	
24	0804	0807	0814				B1.3	7.6E-05	10673
24	1339	1344	1351				B1.3	8.5E-05	10673
24	1426	1432	1446				B1.3	1.4E-04	10673
24	1557	1602	1611				B1.6	1.2E-04	10673

22  
Sep 04

GOES SOLAR X-RAY FLARES  
\*\*Preliminary Listing\*\*

September 2004

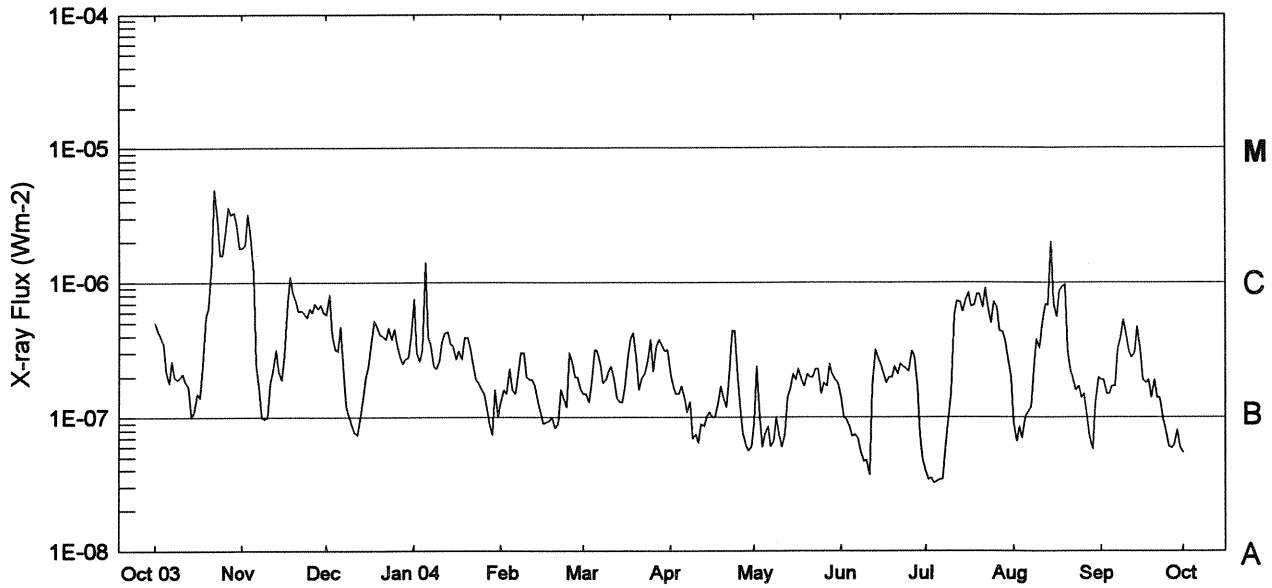
Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	Flux	NOAA/USAF Region
25	0143	0146	0150				B1.1	4.2E-05	10673
25	0545	0548	0550				A9.1	2.6E-05	10673
25	0934	0938	0940				A8.7	3.1E-05	10673
26	0058	0102	0105				B2.0	5.6E-05	10673
26	1559	1604	1612				B1.7	1.1E-04	
26	1718	1722	1725				B1.4	4.5E-05	10673
26	1925	1930	1933				B1.6	6.5E-05	10673
26	2020	2023	2029				B1.0	5.2E-05	

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	Flux	NOAA/USAF Region
26	2332	2338	2340				B2.1	7.2E-05	10673
26	2349	2352	2354				B1.1	2.8E-05	
27	1150	1154	1156				B1.0	3.3E-05	
27	1700	1704	1712				B1.1	7.3E-05	
28	1301	1312	1320				B1.9	2.0E-04	10673
29	0634	0640	0648				B1.5	1.1E-04	10675



# Preliminary GOES Satellite Daily X-Ray Background Oct 2003 - Sep 2004

23  
Sep 04



Day	Oct 03	Nov	Dec	Jan 04	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	B5.0	C1.8	B5.8	B7.5	B1.3	B1.5	B2.1	A9.1	B1.4	A3.9	A9.1	B1.9
2	B4.4	C1.9	B8.1	B3.0	B1.6	B1.5	B1.7	B2.4	B1.0	A3.4	A6.6	B1.9
3	B4.0	C3.2	B4.1	B2.6	B1.5	B1.3	B1.5	B1.0	A9.7	A3.5	A8.5	B1.5
4	B3.5	C2.3	B3.2	B3.2	B2.3	B1.8	B1.5	A6.0	A8.5	A3.2	A7.0	B1.5
5	B2.2	C1.2	B3.1	C1.4	B1.6	B3.2	B1.7	A7.5	A7.2	A3.3	B1.0	B1.7
6	B1.8	B2.5	B4.7	B3.9	B1.5	B3.1	B1.4	A8.5	A7.5	A3.4	B1.1	B1.7
7	B2.6	B1.6	B2.1	B3.5	B2.1	B2.5	B1.1	A6.1	A6.9	A3.4	B1.2	B3.2
8	B2.0	B1.0	B1.2	B2.4	B3.0	B1.8	B1.3	A6.6	A5.5	A5.9	B2.3	B4.0
9	B1.9	A9.7	B1.0	B2.3	B3.0	B1.9	A6.9	B1.0	A4.7	B1.0	B3.8	B5.3
10	B2.0	B1.0	A8.7	B2.6	B2.0	B2.2	A7.5	A7.3	A4.8	B1.5	B3.3	B4.3
11	B2.1	B1.8	A7.7	B3.7	B1.9	B2.4	A6.5	A6.0	A3.7	B5.7	B4.9	B3.1
12	B1.8	B2.2	A7.4	B4.2	B1.9	B1.9	A8.9	A7.6	B1.7	B7.3	B6.9	B2.8
13	B1.7	B3.2	A9.7	B4.3	B1.7	B1.4	A8.6	B1.4	B3.2	B7.2	B6.8	B3.0
14	B1.0	B2.2	B1.3	B3.5	B1.3	B1.3	B1.0	B1.6	B2.8	B6.1	C2.0	B4.7
15	B1.1	B1.9	B2.0	B3.4	B1.1	B1.3	B1.1	B2.1	B2.5	B7.5	B7.0	B3.2
16	B1.5	B2.9	B2.4	B2.7	A9.0	B1.7	B1.0	B1.9	B2.1	B8.4	B5.6	B1.9
17	B1.4	B7.2	B3.8	B3.1	A9.2	B2.9	B1.0	B2.3	B1.8	B6.7	B8.7	B1.8
18	B2.4	C1.1	B5.2	B2.7	A9.4	B3.9	B1.3	B1.9	B2.0	B6.8	B9.2	B1.9
19	B5.6	B8.4	B4.6	B3.9	B1.0	B4.2	B1.7	B1.7	B2.0	B8.2	B9.7	B1.4
20	B6.5	B7.3	B4.1	B3.9	A8.3	B2.7	B1.4	B2.1	B2.4	B8.2	B3.2	B1.9
21	C1.4	B6.1	B4.0	B3.3	A8.9	B1.6	B1.2	B2.0	B2.1	B6.5	B2.3	B1.4
22	C4.9	B6.2	B3.8	B2.5	B1.6	B2.0	B2.0	B2.0	B2.5	B9.1	B1.9	B1.4
23	C3.0	B5.9	B4.6	B1.9	B1.4	B2.1	B4.4	B2.3	B2.4	B6.2	B1.6	A9.8
24	C1.6	B5.5	B3.8	B1.8	B1.2	B2.7	B4.4	B2.3	B2.3	B5.0	B1.7	A8.1
25	C1.6	B6.4	B4.5	B1.6	B3.0	B3.8	B2.0	B1.5	B2.2	B7.2	B1.4	A6.1
26	C2.2	B6.0	B3.5	B1.5	B2.5	B2.2	B1.2	B1.8	B3.1	B6.6	B1.5	A5.9
27	C3.6	B7.0	B2.8	B1.2	B2.0	B3.4	A7.8	B1.7	B2.9	B4.4	B1.0	A6.2
28	C3.2	B6.4	B2.5	A8.7	B2.0	B3.8	A6.2	B2.5	B1.7	B4.3	A7.1	A8.1
29	C3.3	B6.8	B2.7	A7.5	B1.6	B3.4	A5.6	B2.1	A7.3	B3.7	A5.8	A6.1
30	C2.8	B5.9	B2.8	B1.6		B3.1	A6.0	B1.9	A4.8	B2.6	B1.3	A5.4
31	C1.8		B3.9	B1.0		B3.2		B1.8		B2.0	B2.0	

Levels below B1.0 are unreliable.

ACTIVE PROMINENCES AND FILAMENTS

SEPTEMBER 2004

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
02	DSF	1738	1920	S08	W54	08	29.8	3	16	9	9	E	HOLL		
04	DSF	1624U	1316U	N20	W32	09	2.2		11	0	0	E	HOLL		
04	DSF	1625U	0536U	N22	W30	09	2.4		09	0	0	E	SVTO		
05	DSD	1242U	1253	S12	E38	09	8.4	1	03	9	0	V	KHAR		
05	DSF	1624U	1316U	N20	W32	09	3.2		11	0	0	E	HOLL		
08	DSF	1324	1519	N01	E35	09	11.2	3	32	0	0	E	SVTO		
08	DSF	1346U	1605	S05	W32	09	6.2	1	17	0	0	E	HOLL		
12	DSF	0003	0027U	S52	E01	09	12.1	3	09	0	0	E	LEAR	0667	Flare Associated
12	BSL	1545	1605	S12	W70	09	7.4	3		8	7	E	HOLL	0667	
13	BSL	1010E	1035	S08	W90	09	6.6	1	08	9	9	V	KHAR		
13	DSD	1010E	1040	N02	E29	09	15.6	1	02	9	4	V	KHAR		
13	DSD	1105	1120D	N02	E29	09	15.7	1	02	9	9	V	KHAR		
14	DSF	1608U	0707U	N37	E40	09	17.9		21	0	0	E	SVTO		
14	SPY	1616	2319	S17	W90	09	7.8	3		6	7	E	HOLL		
15	DSF	0039U	1344U	S36	E37	09	18.0		19	0	0	E	HOLL		
15	BSL	1021	1040	S12	E90	09	22.3	1	03	9	9	V	KHAR		
16	DSD	0920	0950	S11	E67	09	21.5	1	04	9	9	V	KHAR		
17	DSD	1120	1135	S11	E43	09	20.7	1	05	0	9	V	KHAR		
21	DSF	1515U	0559U	N06	E75	09	27.2		14	0	0	E	SVTO		
28	DSF	1543U	0533U	N34	W45	09	25.1		11	0	0	E	SVTO		
29	DSF	0004U	1343U	N34	W47	09	25.2		14	0	0	E	HOLL		

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

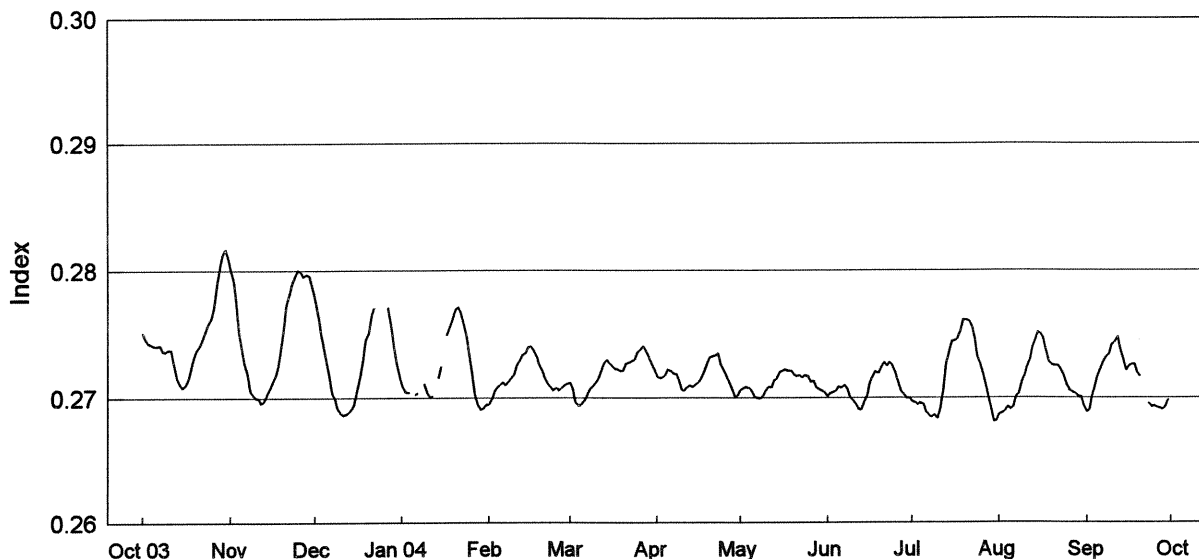
NOTE: The U.S. Air Force solar observing sites (HOLL, LEAR, RAMY, AND SVTO) have changed operational requirements and will only report the following: BSL, EPL, LPS, SPY, and DSF's.

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

## Aug 2003 - Sep 2004

Version 9.1

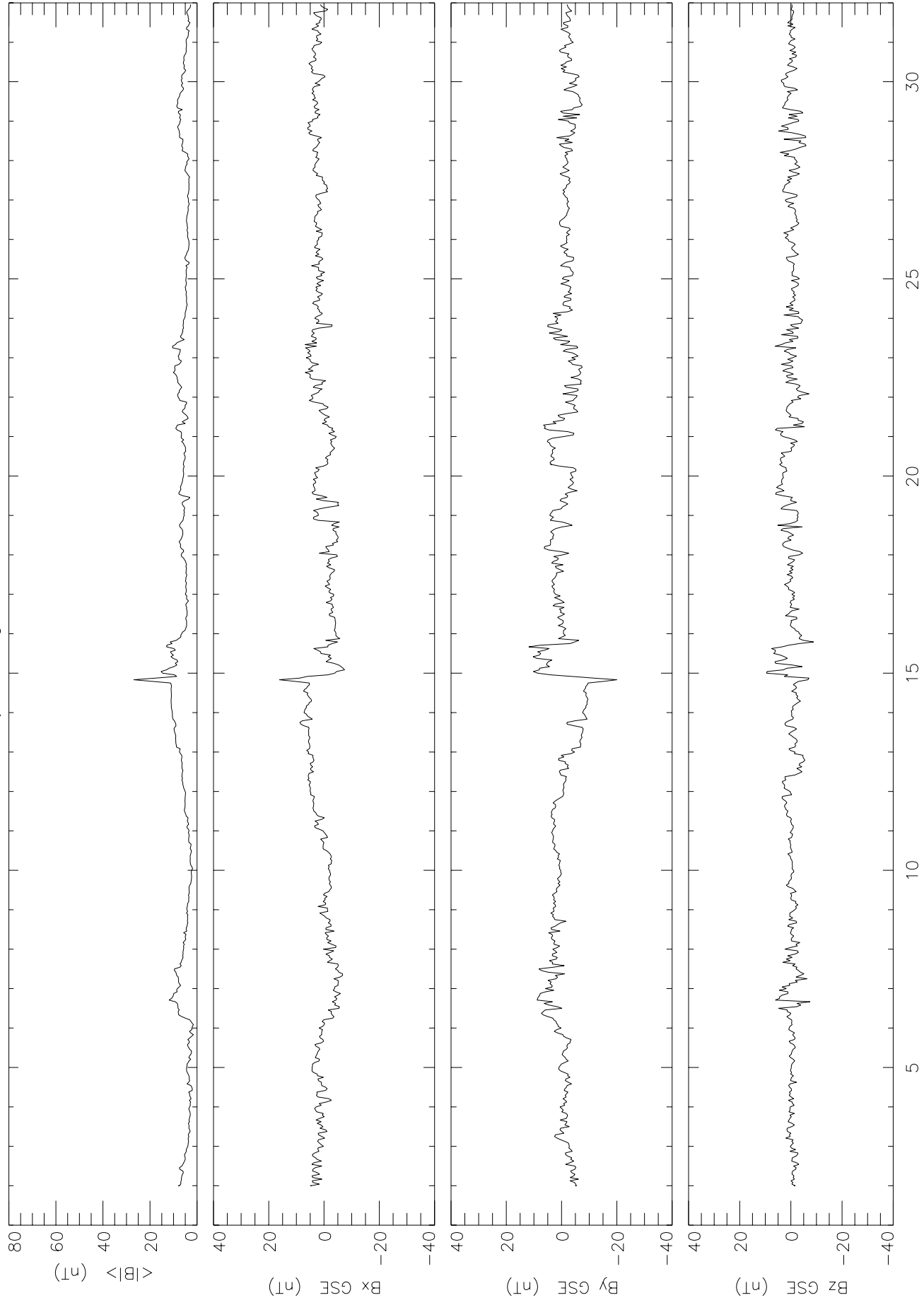
25  
Sep 04



Day	Oct 03	Nov	Dec	Jan 04	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.2751	0.2801	0.2777	0.2711	0.2695	0.2712	0.2717	0.2706	0.2701	0.2697	0.2686	0.2689
2	0.2746	0.2792	0.2764	0.2705	0.2699	0.2707	0.2716	0.2708	0.2704	0.2697	0.2688	0.2690
3	0.2743	0.2774	0.2750	0.2704	0.2705	0.2696	0.2716	0.2709	0.2705	0.2695	0.2689	0.2701
4	0.2743	0.2752	0.2740	0.2704	0.2709	0.2694	0.2718	0.2707	0.2706	0.2696	0.2693	0.2709
5	0.2741	0.2738	0.2730	---	0.2711	0.2695	0.2723	0.2705	0.2709	0.2695	0.2691	0.2717
6	0.2741	0.2727	0.2717	0.2703	0.2713	0.2698	0.2721	0.2701	0.2708	0.2689	0.2692	0.2724
7	0.2742	0.2719	0.2704	0.2705	0.2710	0.2703	0.2719	0.2700	0.2710	0.2686	0.2701	0.2728
8	0.2737	0.2706	0.2699	---	0.2713	0.2707	0.2719	0.2700	0.2707	0.2684	0.2703	0.2732
9	0.2737	0.2702	0.2691	0.2711	0.2715	0.2710	0.2714	0.2702	0.2700	0.2686	0.2711	0.2735
10	0.2738	0.2700	0.2688	0.2703	0.2719	0.2712	0.2707	0.2706	0.2698	0.2683	0.2718	0.2742
11	0.2738	0.2700	0.2686	0.2701	0.2725	0.2715	0.2705	0.2709	0.2695	0.2690	0.2724	0.2743
12	0.2728	0.2696	0.2687	0.2701	0.2730	0.2721	0.2708	0.2708	0.2691	0.2706	0.2730	0.2748
13	0.2717	0.2698	0.2688	---	0.2734	0.2727	0.2710	0.2714	0.2691	0.2726	0.2739	0.2737
14	0.2712	0.2702	0.2691	0.2716	0.2735	0.2730	0.2709	0.2715	0.2696	0.2736	0.2746	0.2729
15	0.2708	0.2707	0.2694	0.2725	0.2740	0.2727	0.2710	0.2720	0.2701	0.2745	0.2752	0.2721
16	0.2710	0.2712	0.2706	---	0.2741	0.2725	0.2712	0.2721	0.2711	0.2745	0.2750	0.2725
17	0.2714	0.2717	0.2716	0.2750	0.2738	0.2723	0.2715	0.2723	0.2718	0.2746	0.2747	0.2727
18	0.2723	0.2724	0.2730	0.2756	0.2733	0.2723	0.2721	0.2722	0.2721	0.2752	0.2737	0.2726
19	0.2732	0.2737	0.2746	0.2762	0.2727	0.2722	0.2727	0.2722	0.2720	0.2761	0.2728	0.2719
20	0.2738	0.2754	0.2706	0.2770	0.2722	0.2721	0.2732	0.2719	0.2724	0.2761	0.2726	0.2717
21	0.2740	0.2773	0.2764	0.2772	0.2716	0.2727	0.2733	0.2717	0.2728	0.2760	0.2726	---
22	0.2746	0.2780	0.2771	0.2767	0.2711	0.2728	0.2734	0.2718	0.2725	0.2756	0.2726	---
23	0.2752	0.2789	---	0.2757	0.2708	0.2729	0.2735	0.2716	0.2728	0.2747	0.2722	0.2695
24	0.2758	0.2795	---	0.2749	0.2706	0.2731	0.2726	0.2718	0.2726	0.2733	0.2717	0.2693
25	0.2762	0.2801	0.2781	0.2732	0.2708	0.2736	0.2722	0.2718	0.2720	0.2727	0.2710	0.2694
26	0.2770	0.2799	---	0.2718	0.2706	0.2738	0.2716	0.2713	0.2714	0.2719	0.2706	0.2692
27	0.2786	0.2795	0.2771	0.2702	0.2708	0.2741	0.2712	0.2713	0.2705	0.2712	0.2705	0.2692
28	0.2802	0.2797	0.2756	0.2694	0.2710	0.2738	0.2707	0.2708	0.2703	0.2701	0.2704	0.2690
29	0.2811	0.2796	0.2741	0.2691	0.2711	0.2732	0.2701	0.2707	0.2700	0.2692	0.2702	0.2693
30	0.2817	0.2786	0.2729	0.2691	---	0.2727	0.2702	0.2706	0.2700	0.2681	0.2701	0.2699
31	0.2810	---	0.2717	0.2695	---	0.2723	---	0.2705	---	0.2681	0.2694	---
Mean	0.2748	0.2749	0.2728	0.2722	0.2717	0.2720	0.2717	0.2711	0.2709	0.2716	0.2715	0.2715

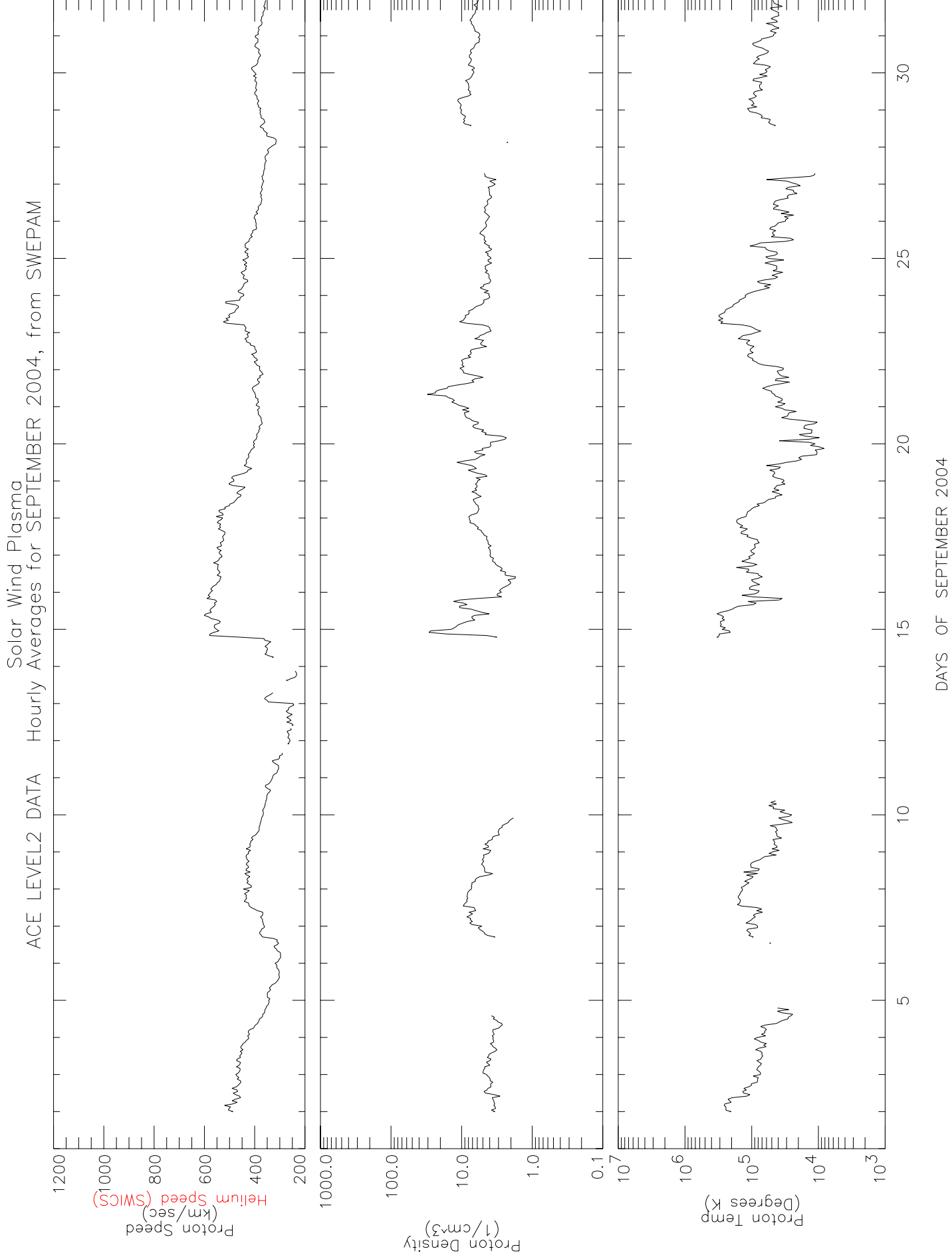
Data at: <http://www.sec.noaa.gov/ftpmenu/sbuw.html>

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

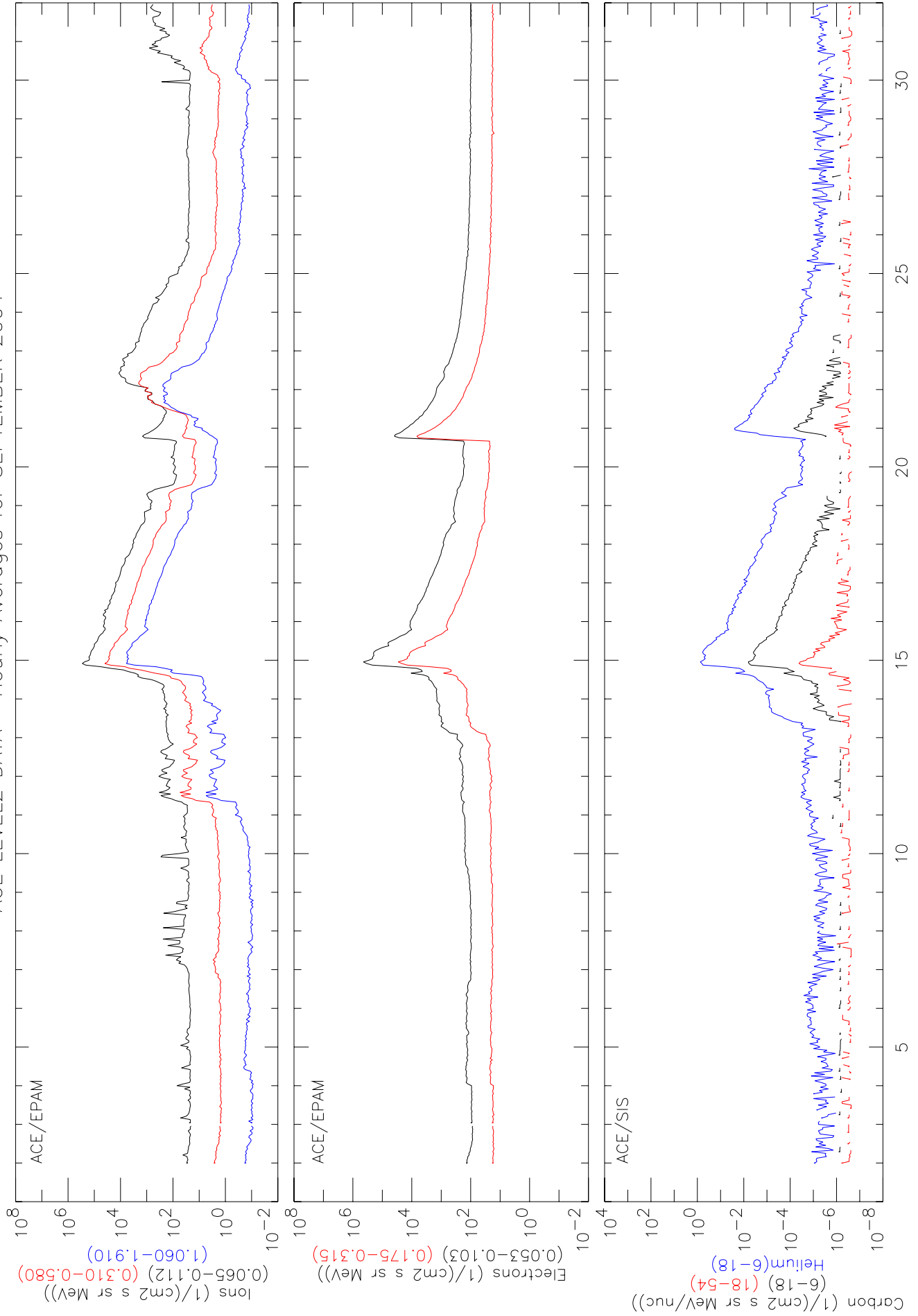


DAYS OF SEPTEMBER 2004

ACE LEVEL2 DATA Hourly Averages for SEPTEMBER 2004, from SWEPAM



# Solar Energetic Particles ACE LEVEL2 DATA Hourly Averages for SEPTEMBER 2004



# 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  
SEPTEMBER 2004

First C2 Appearance		Central Width						Measurement		
Date	Time UT	Position Angle degree	Angular Width degree	Linear Fit Speed km/s	—2nd order speed— Initial km/s Final km/s 20R km/s			Accel m/s <sup>2</sup>	Position Angle degree	Remarks
2004/09/01	02:30:05	123	36	273	137	405	1136	51.8	117	Only C2
2004/09/01	03:30:05	260	67	401	506	293	0	-12.0	269	
2004/09/01	15:38:12	Halo	360	420	375	462	478	3.9	249	
2004/09/01	23:06:07	294	10	----	----	----	----	-----	290	Only 2 points, Unable to measure
2004/09/02	09:06:05	290	8	425	----	----	----	-----	287	Only 3 points/C2
2004/09/02	16:54:29	245	48	177	99	270	447	7.8	243	
2004/09/03	00:30:05	Halo	360	751	819	682	606	-13.7	125	
2004/09/03	10:30:18	Halo	360	737	774	698	697	-4.9	331	
2004/09/03	19:31:48	293	34	338	349	327	297	-1.4	291	
2004/09/04	02:06:05	273	41	359	112	613	880	31.4	279	
2004/09/04	06:54:05	Halo	360	1067	1226	909	978	-22.7	107	
2004/09/05	05:30:05	86	29	232	205	258	399	5.1	88	
2004/09/05	06:54:06	310	87	580	507	657	624	5.7	303	
2004/09/05	07:54:05	85	133	441	465	415	280	-5.7	92	Partial Halo
2004/09/05	18:54:05	92	118	639	616	663	685	3.9	103	
2004/09/05	20:58:41	103	>172	1173	1229	1114	1147	-8.4	103	Partial Halo
2004/09/06	10:30:18	112	62	289	298	279	270	-0.7	126	
2004/09/06	17:30:05	178	139	344	143	557	576	12.9	148	Partial Halo
2004/09/07	15:30:06	97	214	757	779	733	748	-1.9	80	Partial Halo
2004/09/07	19:31:48	224	127	257	120	389	768	23.8	235	Partial Halo
2004/09/08	19:31:49	110	10	379	506	253	0	-26.6	110	
2004/09/08	23:06:05	99	52	512	----	----	----	-----	109	Only 2 points/C2
2004/09/09	06:06:05	101	52	257	223	289	604	12.8	99	Only C2
2004/09/09	07:31:48	82	122	607	598	618	612	0.8	87	Partial Halo
2004/09/09	11:54:05	276	84	320	331	308	265	-1.7	275	
2004/09/09	14:06:31	257	44	751	780	722	718	-3.8	265	
2004/09/10	20:34:11	89	23	545	----	----	----	-----	95	Only 3 points
2004/09/10	22:19:05	253	45	379	230	530	734	20.6	265	
2004/09/11	00:54:06	257	46	461	372	566	542	7.5	268	
2004/09/12	00:36:06	Halo	360	1328	1192	1484	1405	22.5	132	
2004/09/12	12:12:05	246	9	505	434	571	757	17.4	249	
2004/09/12	18:48:12	262	30	182	266	97	0	-33.4	258	Only C2
2004/09/13	02:24:12	48	28	359	306	416	513	7.0	52	
2004/09/13	20:48:05	262	47	289	----	----	----	-----	268	Only 2 points/C2
2004/09/14	01:24:06	102	32	564	657	468	0	-18.4	106	
2004/09/14	03:12:09	135	106	271	241	301	398	4.2	121	
2004/09/14	10:12:05	Halo	360	462	533	387	0	-13.0	162	
2004/09/15	09:12:08	148	16	376	391	360	287	-3.0	142	
2004/09/15	20:12:07	267	23	268	346	191	0	-41.8	266	Only C2
2004/09/16	03:24:05	38	25	308	438	184	0	-37.2	52	
2004/09/16	15:36:05	129	57	298	197	408	384	4.5	120	

## 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  
SEPTEMBER 2004

First C2 Appearance		Central Width			Linear Fit			—2nd order speed—		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 <sup>2</sup>	Position Angle degree		
2004/09/16	16:12:07	53	34	528	693	370	0	-43.3	59		
2004/09/16	21:24:07	141	42	309	192	422	859	29.1	137		
2004/09/17	21:18:05	144	101	247	415	93	0	-48.1	151	Only C3	
2004/09/19	22:18:13	262	99	----	----	----	----	-----	257	Only 1 points, Only C3, Unable to measure	
2004/09/20	08:42:05	248	23	528	377	668	890	50.4	245	Only 3 points/C3	
2004/09/20	12:12:05	237	15	238	329	139	0	-36.3	235	Only C2	
2004/09/23	08:54:06	271	37	256	----	----	----	-----	267	Only 3 points/C2	
2004/09/23	13:24:05	150	15	211	176	244	275	2.2	147		
2004/09/23	14:54:05	244	6	827	455	1223	3257	427.1	241	Only 3 points/C2	
2004/09/25	07:36:38	274	37	446	264	610	820	25.4	273		
2004/09/25	14:48:05	283	110	499	444	562	539	4.3	271		
2004/09/28	15:12:08	257	112	545	511	586	567	2.5	302		
2004/09/29	20:24:05	288	57	627	614	641	646	3.7	297	Only C3	
2004/09/30	10:24:13	311	21	----	----	----	----	-----	298	Only 1 points, Only C2, Unable to measure	
2004/09/30	10:24:13	66	29	----	----	----	----	-----	67	Only 2 points, Only C2, Unable to measure	

If you use data from this catalog, please acknowledge as follows:

"This CME catalog is generated and maintained by the Center for Solar Physics and Space Weather, The Catholic University of America in cooperation with the Naval Research Laboratory and NASA. SOHO is a project of international cooperation between ESA and NASA."

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

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.