SEPTEMBER 2005 NUMBER 733 - Part II

Solar-Geophysical Data comprehensive reports

Data for March 2005 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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SEPTEMBER 2005 NUMBER 733 - Part II

Solar-Geophysical Data comprehensive reports

Data for March 2005 and Late Data

International Standard Serial Number: 0038-0911
Library of Congress Catalog Number: 79-640375 //r81

NATIONAL GEOPHYSICAL DATA CENTER
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Subscription information is on the inside back cover.

SOLAR-GEOPHYSICAL DATA

Number 733
(Issued in Two Parts)

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CONTENTS

DETAILED INDEX OF OBSERVATIONS PUBLISHED IN SOLAR-GEOPHYSICAL DATA

CODE	KIND OF OBSERVATION	JAN 05	FEB	MAR	APR	MAY	JUN	JUL	AUG
A.	SOLAR AND INTERPLANETARY								
A.1	Sunspot Drawings	727A 39	728A 44	729A 39	730A 52	731A 44	732A 46	733A 44	
A.2aa	International Sunspot Numbers	726A 25	727A 23	728A 25	729A 23	730A 25	731A 24	732A 25	733A 25
A.2c	American Sunspot Numbers	726A 25	727A 23	728A 25	729A 23	730A 25	731A 24	732A 25	733A 25
A.3a	Mt. Wilson Magnetograms	727A 39	728A 44	729A 39	730A 52	731A 44	732A 46	733A 44	
A.3b	Sunspot Mag Class and Regions	727A 76	728A 77	729A 76	730A 87	731A 81	732A 81	733A 81	
A.3c	Kitt Peak Magnetograms	727A 39	728A 44	729A 39	730A 52	731A 44	732A 46	733A 44	
A.3d	Mean Solar Magnetic Field (Stanford)	726A 37	727A 31	728A 33	729A 31	730A 37	731A 35	732A 37	733A 35
A.3e	Stanford Magnetograms	727A 39	728A 44	729A 39	730A 52	731A 44	732A 46	733A 44	
A.4	H-alpha Filtergrams	727A 39	728A 44	729A 39	730A 52	731A 44	732A 46	733A 44	
A.5d	PhotometricCa IIFaculaeSanFernando	Jan 92-Dec 96-631B 22; 1997-1998 663B 66							
A.6c	Stanford Solar Mag Field SynopticMap	727A 36	728A 38	729A 36	730A 40	731A 38	732A 40	733A 38	
A.6d	Kitt Peak Solar Mag Field SynopticMap	727A 38	728A 43	729A 38	730A 50	731A 43	732A 45	733A 43	
A.6f	Active Prominences and Filaments	731B 37	732B 21	733B 22					
A.6g	Sac Peak Coronal Line Synoptic Maps	----------	728A 40	----------	730A 44	731A 40	732A 46	733A 40	
A.6h	Photometric White Light SanFernando	Jul-Dec 96 630B 32; 1997-1998 in 663B 51							
A.7h	Coronal Line Emission (Sac Peak)	727A 39	728A 44	729A 39	730A 52	731A 4	732A 46	733A 44	
A.7j	Coronal Hole Daily Maps (NSO/KP)	---------	-------	----------	----------	----------	----------	---------	
A.7k	Coronal Index (Slovak Academy)	1939-1996 -644B 28							
A.7m	Coronal Mass Ejections (CSPSW)	731B 42	732B 26	733B 27					
A.8aa	2800 MHz- Solar Flux (Penticton)	726A 25	727A 23	728A 25	729A 23	730A 25	731A 24	732A 25	733A 25
A.8ac	2800 MHz- Adj. Solar Flux (Penticton)	726A 25	727A 23	728A 25	729A 23	730A 25	731A 24	732A 25	733A 25
A.8g	Adjusted Daily Solar Fluxes Sagamore	726A 25	727A 23	728A 25	729A 23	730A 25	731A 24	732A 25	733A 25
A.10g	Nancay Radioheliograph164&327MHz	727A 95	728A 94	729A 91	730A102	731A106	732A104	733A105	
A.10h	Nobeyama Radioheliograph - 17 GHz	727A 70	728A 72	729A 70	730A 82	731A 75	732A 76	733A 75	
A.11g	Solar X-ray GOES (graphs/event table)	731B 37	732B 15	733B 15					
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	731B 38	732B 22						
A.12g	Solar Particles (GOES)	726A 4	727A 4	728A 4	729A 4	730A 4	731A 4	732A 4	733A 4
A.12i	Solar Energetic Particles (ACE)	731B 41	732B 25	733B 25					
A.13g	Solar Plasma (ACE)	731B 40	732B 24	733B 24					
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	731B 39	732B 23	733B 23					
C.	SOLAR FLARE-ASSOCIATED EVENT								
C.1a	H-alpha Flares	726A 28	727A 26	728A 28	729A 26	730A 28	731A 27	732A 28	733A 28
C.1ba	H-alpha Flare Groups	731B 4	732B 4	733B 4					
C.1d	Flare Patrol Observations	731B 10	732B 7	733B 8					
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	731B 12	732B 9	733B 10					
C.3	Radio Bursts Fixed Frequency Select	726A 34	727A 30	728A 32	729A 30	730A 34	731A 33	732A 34	733A 32
C.4	Radio Bursts Spectral	727A 84	728A 83	729A 82	730A 94	731A 91	732A 91	733A 91	
C.6	Sudden Ionospheric Disturbances	727A 81	728A 82	729A 81	730A 93	731A 89	732A 89	733A 89	
D.	GEOMAGNETIC EVENTS								
D.1a	Geomagnetic Indices	727A102	728A100	729A 99	730A110	731A114	732A113	733A113	
D.1ba	27-day Chart of Kp Indices	727A104	728A102	729A101	730A112	731A116	732A115	733A115	
D.1cb	Monthly Mean aa Indices	727A106	728A103	729A102	730A113	731A117	732A116	733A116	
D.1d	Principal Magnetic Storms	727A112	728A107	729A106	730A117	731A121	732A120	733A120	
D.1f	Sudden Commencements/FlareEffect	727A113	728A108	729A107	730A118	731A122	732A121	733A121	
D.1g	Equatorial Indices Dst	727A110	728A105	729A104	730A115	731A119	732A118	733A118	
D.1l	Polar Cap (PC) Index	727A111	728A106	729A105	730A116	731A120	732A119	733A119	
F.	COSMIC RAYS								
F.1b	Cosmic Ray Neutron Cts (Climax)	727A 97	728A 96	729A 93	730A104	731A113	732A107	733A107	
F.1h	Cosmic Ray Neutron Cts (Thule)	727A 97	728A 96	729A 93	730A104	731A113	732A107	733A107	
F.1l	Cosmic Ray Neutron Cts (Kiel)	727A 97	728A 96	729A 93	730A104	731A113	732A107	733A107	
F.1n	Cosmic Ray Neutron Cts (Beijing)	727A 97	728A 96	729A 93	730A104	731A113	732A107	733A107	
F.1m	Cosmic Ray Neutron Cts (Haleakala)	727A 97	728A 96	729A 93	730A104	731A113	732A107	733A107	
F.1o	Cosmic Ray Neutron Cts (Moscow)	727A 97	728A 96	729A 93	730A104	731A113	732A107	733A107	
F.1p	Cosmic Ray Neutron Cts (Calgary)	727A 97	728A 96	729A 93	730A104	731A113	732A107	733A107	
H.	MISCELLANEOUS								
H.60	ISES Alert Periods	726A 20	727A 18	728A 20	729A 19	730A 20	731A 19	732A 20	733A 20

The entry "727A 39" under Dec, for example, means that the sunspot drawings for Dec appear in SOLAR-GEOPHYSICAL DATA No. 727 Part I, and that they begin on page 39 "A" denotes Part I and "B", Part II. Blanks indicate data not yet received and dashes mark unavailable data.

CONTENTS

Comprehensive Reports Number 733 Part II

DATA FOR **MARCH 2005**

Hα SOLAR FLARES

MARCH 2005

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
		01	1539		1659	No Flare Patrol													
		01	1855		2023	No Flare Patrol													
		01	2200		2202	No Flare Patrol													
		02	0023		0131	No Flare Patrol													
		02	0153		0626	No Flare Patrol													
		02	0710		0742	No Flare Patrol													
		02	1632		1716	No Flare Patrol													
		02	1808		1829	No Flare Patrol													
		02	2022		2028	No Flare Patrol													
		02	2310		2314	No Flare Patrol													
		02	2318		2336	No Flare Patrol													
		02	2347		2400	No Flare Patrol													
		03	0000		0224	No Flare Patrol													
		03	0230		0235	No Flare Patrol													
		03	0241		0318	No Flare Patrol													
		03	0334		0339	No Flare Patrol													
		03	0555		0558	No Flare Patrol													
		03	1959		2006	No Flare Patrol													
		03	2018		2031	No Flare Patrol													
		03	2048		2108	No Flare Patrol													
		04	1032		1033	No Flare Patrol													
		04	1141		1347	No Flare Patrol													
		04	1834		1847	No Flare Patrol													
		04	1926		2058	No Flare Patrol													
		04	2103		2221	No Flare Patrol													
		04	2228		2238	No Flare Patrol													
		05	1039		1615	No Flare Patrol													
		05	1916		2046	No Flare Patrol													
		05	2144		2221	No Flare Patrol													
0001	LEAR	06	0112	0122	0130	N12	E59	10741	03	10.5	18	SF		3	E		26		F
		06	1038		1105	No Flare Patrol													
		06	1120		1136	No Flare Patrol													
		06	1144		1303	No Flare Patrol													
		06	1316		1318	No Flare Patrol													
		06	1320		1417	No Flare Patrol													
		06	1529		1532	No Flare Patrol													
		06	1544		1545	No Flare Patrol													
		06	1547		1841	No Flare Patrol													
		06	1852		1904	No Flare Patrol													
		06	1927		1933	No Flare Patrol													
		06	2044		2246	No Flare Patrol													
		07	1242		1243	No Flare Patrol													
		07	1247		1249	No Flare Patrol													
		07	1254		1303	No Flare Patrol													
		08	1145		1146	No Flare Patrol													
		08	1202		1206	No Flare Patrol													
		08	1217		1219	No Flare Patrol													
		08	1221		1306	No Flare Patrol													
		08	1308		1309	No Flare Patrol													
		08	1314		1336	No Flare Patrol													
		08	1339		1341	No Flare Patrol													
0002	LEAR	09	0234	0237	0300	N12	E18	10741	03	10.5	26	SF		3	E		67		F
0003	LEAR	09	0316	0319	0332	N12	E18	10741	03	10.5	16	SF		3	E		20		
		09	1007		1014	No Flare Patrol													
		09	1028		1133	No Flare Patrol													
		09	1205		1210	No Flare Patrol													
		09	1227		1248	No Flare Patrol													
		09	1316		1400	No Flare Patrol													
0004	HOLL	09	2148	2152	2156	N02	E03	10741	03	10.1	8	SF		3	E		35		FH
		10	0922		1007	No Flare Patrol													
		10	1213		1230	No Flare Patrol													
		10	1310		1311	No Flare Patrol													
		10	1322		1323	No Flare Patrol													

MARCH 2005

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP	Mo	Day	Dur (Min)	Imp	Opt	Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
		11	0101		0334	No Flare Patrol															
		11	0407		0447	No Flare Patrol															
		11	0501		0555	No Flare Patrol															
		12	0038		0534	No Flare Patrol															
0005	KANZ	12	0840	0841	0849	N13	W29	10741	03	10.2		9	SF			2	E				
0006	KANZ	12	0859	0859	0919	N13	W30	10741	03	10.1		20	SF			2	E				
		13	0101		0547	No Flare Patrol															
		13	0602		0630	No Flare Patrol															
0007	KANZ	13	0808	0810	0819	N13	W43	10741	03	10.1		11	SF			2	E				
0008	KANZ	13	0827	0830	0833	S05	W03	10742	03	13.1		6	SF			2	E				
0009		13	15085	15151	1529	S04	W07	10742	03	13.1		21	SF						22		F
	KANZ	13	1508	1515	1530	S04	W07	10742	03	13.1		22	SF			2	E				
	HOLL	13	1513	1516	1528	S05	W07	10742	03	13.1		15	SF			3	E		22		F
0010	SVTO	13	1518	1522	1523	S06	W05	10742	03	13.3		5	SF			3	E		33		F
		13	2230		2235	No Flare Patrol															
		14	0120		0240	No Flare Patrol															
0011	LEAR	14	0418	0426	0436	S06	W14	10742	03	13.1		18	SF			3	E		11		FU
		14	0809		0825	No Flare Patrol															
		14	0837		0845	No Flare Patrol															
		14	0853		1006	No Flare Patrol															
		14	1156		1215	No Flare Patrol															
0012	KANZ	14	1301	1303	1312	S03	W15	10742	03	13.4		11	SF			2	E				
		14	1841		1921	No Flare Patrol															
		14	2049		2130	No Flare Patrol															
		14	2148		2248	No Flare Patrol															
		14	2331		2400	No Flare Patrol															
		15	0000		0018	No Flare Patrol															
		15	0027		0040	No Flare Patrol															
0013	LEAR	15	0645	0647	0651	N12	W65	10741	03	10.4		6	SF			3	E		14		F
		15	1627		1842	No Flare Patrol															
		15	1915		1921	No Flare Patrol															
		15	1936		2008	No Flare Patrol															
		15	2024		2036	No Flare Patrol															
		16	0104		0158	No Flare Patrol															
		16	0229		0236	No Flare Patrol															
		16	0242		0312	No Flare Patrol															
		16	0317		0325	No Flare Patrol															
		16	0537		0625	No Flare Patrol															
		16	0641		0645	No Flare Patrol															
0014	KANZ	16	1319	1325	1330	S07	W52	10742	03	12.6		11	SF			2	E				
0015	HOLL	16	2313	2313	2318	S06	W52	10742	03	13.1		5	SF			3	E		18		F
		17	0105		0135	No Flare Patrol															
		17	0155		0222	No Flare Patrol															
0016	LEAR	17	0501	0506	0524	S06	W55	10742	03	13.1		23	SF			3	E		12		
0017	KANZ	17	0641	0642	0655	S06	W64	10742	03	12.5		14	SF			2	E				
0018	LEAR	17	0642	0645	0656	S06	W56	10742	03	13.1		14	SF			3	E		18		
0019	KANZ	17	0905	0908	0919	S12	W26	10743	03	15.4		14	SF			2	E				
		17	1629		1741	No Flare Patrol															

Hα SOLAR FLARES

MARCH 2005

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
		17	2043		2057	No Flare Patrol													
		17	2107		2230	No Flare Patrol													
		17	2234		2306	No Flare Patrol													
		17	2351		2400	No Flare Patrol													
		18	0358		0434	No Flare Patrol													
		18	0443		0448	No Flare Patrol													
		18	0459		0509	No Flare Patrol													
0020	KANZ	18	1307	1315	1323	S09	W39	10743	03	15.6	16	SF		2	E				
		18	1734		2114	No Flare Patrol													
		18	2152		2245	No Flare Patrol													
		18	2252		2307	No Flare Patrol													
		18	2351		2400	No Flare Patrol													
		19	0000		0010	No Flare Patrol													
		19	0016		0454	No Flare Patrol													
0021	LEAR	19	0700	0707	0713	S08	W48	10743	03	15.7	13	SF		3	E		32		
		19	1631		2225	No Flare Patrol													
		19	2231		2255	No Flare Patrol													
0022	LEAR	20	0613	0614	0619	S08	W62	10743	03	15.6	6	SF		3	E		22		
		20	1636		1813	No Flare Patrol													
		20	1832		2126	No Flare Patrol													
		20	2132		2223	No Flare Patrol													
		20	2230		2236	No Flare Patrol													
		21	0111		0609	No Flare Patrol													
0023	LEAR	21	0747	0748	0752	S08	W88	10743	03	14.7	5	SF		3	E		16		
0024	LEAR	21	0836	0837	0841	S08	W77	10743	03	15.6	5	SF		3	E		14		
		21	1621		1633	No Flare Patrol													
		21	2202		2234	No Flare Patrol													
		22	1018		1039	No Flare Patrol													
		22	1045		1047	No Flare Patrol													
		22	1101		1102	No Flare Patrol													
		22	1104		1106	No Flare Patrol													
		22	2153		2220	No Flare Patrol													
		22	2255		2300	No Flare Patrol													
		23	0110		0741	No Flare Patrol													
		23	1310		1322	No Flare Patrol													
		23	1341		1358	No Flare Patrol													
		23	1425		1447	No Flare Patrol													
		23	1501		1550	No Flare Patrol													
		23	1610		1821	No Flare Patrol													
		23	2143		2400	No Flare Patrol													
		24	0000		0144	No Flare Patrol													
0025	KANZ	24	1023	1024	1043	N10	E25	10745	03	26.3	20	SF		2	E				
0026	KANZ	24	1117	1118	1123	N10	E24	10745	03	26.3	6	SF		2	E				
		24	1328		1331	No Flare Patrol													
		24	1738		1745	No Flare Patrol													
		24	1926		1931	No Flare Patrol													
		24	2216		2230	No Flare Patrol													
0027	LEAR	24	2340	2344	2355	N09	E18	10745	03	26.3	15	SF		3	E		26		FU
0028	LEAR	25	0742	0742	0750	N13	E12	10745	03	26.2	8	SF		3	E		12		FH
		25	1007		2005	No Flare Patrol													
		25	2009		2052	No Flare Patrol													
		25	2124		2142	No Flare Patrol													
		25	2206		2256	No Flare Patrol													
		26	0259		0347	No Flare Patrol													
		26	0400		0429	No Flare Patrol													

MARCH 2005

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
		26	1004		1448	No Flare Patrol													
		26	1452		1606	No Flare Patrol													
		26	1624		1645	No Flare Patrol													
		26	1704		1720	No Flare Patrol													
		26	1821		1831	No Flare Patrol													
		26	1853		1901	No Flare Patrol													
		26	1906		1915	No Flare Patrol													
		26	1941		2213	No Flare Patrol													
		26	2235		2323	No Flare Patrol													
		27	0947		0952	No Flare Patrol													
		27	0955		0959	No Flare Patrol													
		27	1119		1120	No Flare Patrol													
		27	1127		1129	No Flare Patrol													
		27	1144		1146	No Flare Patrol													
		27	1150		1157	No Flare Patrol													
		27	1213		1225	No Flare Patrol													
		27	1227		1231	No Flare Patrol													
		27	1250		1253	No Flare Patrol													
		28	1005		1115	No Flare Patrol													
		28	1122		2039	No Flare Patrol													
		28	2059		2139	No Flare Patrol													
		28	2149		2302	No Flare Patrol													
		28	2307		2314	No Flare Patrol													
		29	1549		1841	No Flare Patrol													
		30	1112		1312	No Flare Patrol													
		30	1624		1852	No Flare Patrol													
		30	2212		2242	No Flare Patrol													
		31	0107		0202	No Flare Patrol													
		31	0212		0342	No Flare Patrol													
		31	0422		0437	No Flare Patrol													
		31	0538		0555	No Flare Patrol													
		31	0817		0833	No Flare Patrol													
		31	0859		0931	No Flare Patrol													
		31	1729		1838	No Flare Patrol													
		31	2213		2233	No Flare Patrol													
		31	2257		2314	No Flare Patrol													

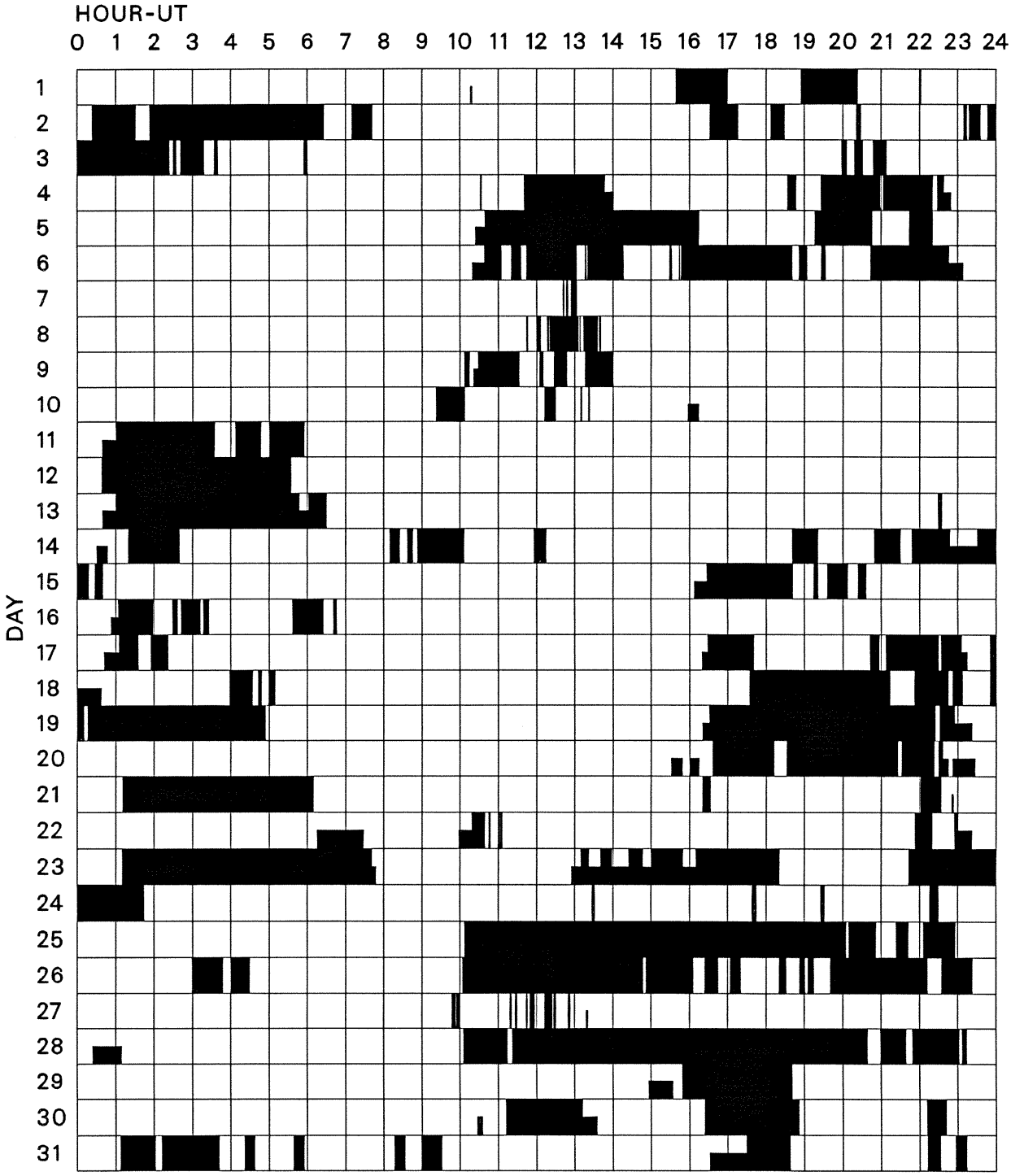
"Remarks"

A = Eruptive prominence whose base is less than 90 degrees from central meridian.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No visible spots in the neighborhood.
H = Flare accompanied by high-speed dark filament.
I = Active region very extended.
J = Distinct variations of plage intensity before or after the flare.
K = Several intensity maxima.
L = Existing filaments show signs of sudden activity.
M = White-light flare.
N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the H and K lines of Ca II.
P = Flare shows Helium D3 in emission.
Q = Flare shows Balmer continuum in emission.
R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.
S = Brightness follows disappearance of filament in same position.
T = Region active all day.
U = Two bright branches, parallel or converging.
V = Occurrence of an explosive phase; important, expansion within roughly 1 minute that often includes a significant intensity increase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide H-alpha line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

Observation Type: C=Cinematographic, E=Electronic, P=Photographic, V=Visual

INTERVALS OF NO FLARE PATROL OBSERVATION
FOR PRECEDING SOLAR FLARE TABLE

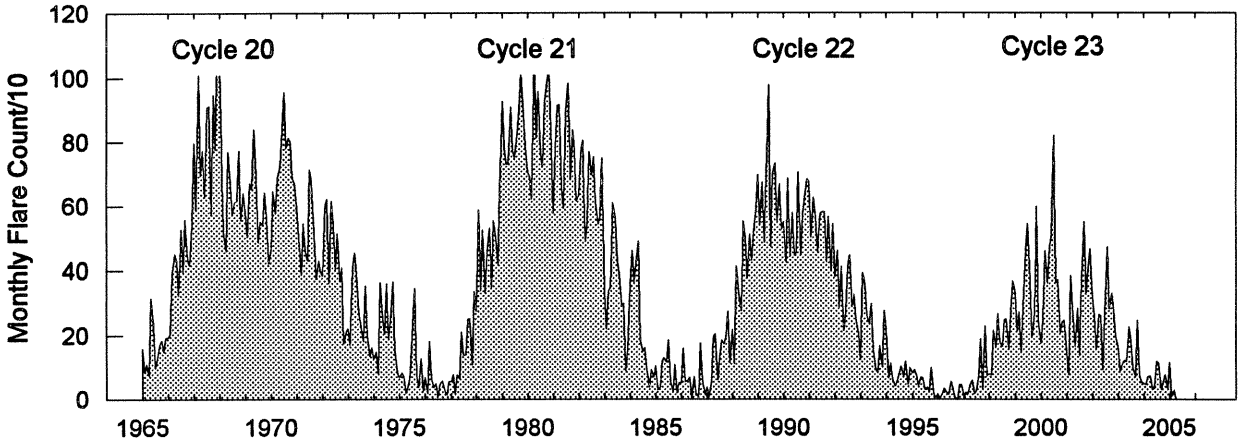
MARCH 2005



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 Learmonth San Vito
Kanzelhoehe

Monthly Counts of Grouped Solar Flares
Jan 1965 - Mar 2005



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										152

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

SOLAR RADIO EMISSION
Outstanding Occurrences

MARCH 2005

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
05	33	UPIC	45	C	0942.0	0942.5	2.0				
06	127	TORN	43	NS	1012.0		163.0		3.0		V=0
07	127	TORN	43	NS	0952.0		158.0		4.0		V=1
08	127	TORN	43	NS	0800.0		420.0		5.0		V=0
	245	PALE	8	S	0059.0	0059.0	U	72.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0105.0	0105.0	U	57.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0835.0	0835.0	1.0	77.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0925.0	0925.0	U	65.0			QL=4 ST=2 TYP=3
09	127	TORN	43	NS	0952.0		308.0		5.0		V=1
	245	PALE	8	S	0136.0	0136.0	U	63.0			QL=4 ST=2 TYP=3
	2950	GORK	1	S	0804.6	0805.1	1.4	3.6			
	900	GORK	41	F	0805.0	0805.1	0.8	21.0			
	900	GORK	41	F	0805.0	0805.5		50.0			
	900	GORK	42	SER	0854.8	0855.7	46.0	60.0			
	900	GORK	42	SER	0854.8	0938.9		40.0			
	9100	GORK	46	C	0926.7	0927.4	1.1	62.0			
	9100	GORK	46	C	0926.7	0927.5		85.0			
	245	SVTO	8	S	1453.0	1453.0	U	73.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1905.0	1905.0	U	62.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1905.0	1905.0	U	59.0			QL=4 ST=2 TYP=3
10	127	TORN	43	NS	1040.0		260.0		6.0		V=1
	245	SGMR	48	C	1138.0	1139.0	5.0	480.0			QL=4 ST=2 TYP=8
	245	SVTO	48	C	1138.0	1139.0	5.0	490.0			QL=4 ST=2 TYP=8
	127	TORN	47	GB	1138.7	1140.3	4.5	1770.0	370.0		
	410	SGMR	48	C	1139.0	1141.0	2.0	140.0			QL=4 ST=2 TYP=8
	410	SVTO	4	S/F	1139.0	1140.0	4.0	140.0			QL=4 ST=2 TYP=3
	33	UPIC	46	C	1139.0	1139.5U	4.0				
	4995	SGMR	8	S	1140.0	1140.0	U	51.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	1140.0	1140.0	U	56.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	1140.0	1140.0	U	62.0			QL=4 ST=2 TYP=3
	15400	SVTO	8	S	1140.0	1140.0	U	28.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1822.0	1822.0	U	150.0			QL=4 ST=2 TYP=3
11	127	TORN	43	NS	1040.0		260.0		9.0		V=0
	235	CUBA	44	NS	1836.0E		219.0D		20.0		
	2804	VORO	22	GRF	0014.0	0055.0	96.0	7.8			
	2840	PEKG	5	S	0030.0	0033.4	7.0	15.1			
	2804	VORO	40	F	0032.5	0033.6	2.2	32.1			
	2800	HIRA	8	S	0034.0	0034.0	1.0	20.0			0
	245	PALE	8	S	1956.0	1956.0	U	200.0			QL=4 ST=2 TYP=3
12	127	TORN	43	NS	0820.0		400.0		50.0		V=2
	235	CUBA	44	NS	1300.0E		510.0D		26.0		
	235	CUBA	44	NS	1330.0E		480.0D		28.0		
	2840	PEKG	1	S	0606.0	0608.9	5.0	7.0			
	245	LEAR	8	S	0608.0	0608.0	1.0	270.0			QL=4 ST=2 TYP=3
	1415	LEAR	8	S	0608.0	0608.0	U	52.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0608.0	0609.0	1.0	310.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0608.0	0608.0	U	62.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	0608.0	0608.0	U	45.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	0609.0	0609.0	U	180.0			QL=2 ST=2 TYP=3
	33	UPIC	2	S/F	0609.0	0609.5	1.5				
	2840	PEKG	3	S	0641.0	0646.5	11.0	52.2			
	33	UPIC	2	S/F	0703.0	0703.5	1.5				
	245	LEAR	49	GB	0815.0	0815.0	U	630.0			QL=4 ST=2 TYP=6
	245	SVTO	49	GB	0815.0	0815.0	U	1400.0			QL=4 ST=2 TYP=6
	410	SVTO	8	S	0815.0	0815.0	U	88.0			QL=4 ST=2 TYP=3
	127	TORN	7	C	0815.0	0815.2	0.8	1700.0	400.0		DISTURBED
	245	SVTO	8	S	0943.0	0943.0	U	310.0			QL=4 ST=2 TYP=3
	33	UPIC	2	S/F	0943.0	0943.5	1.0				
	33	UPIC	45	C	1050.5	1051.0	3.5				
	245	SGMR	8	S	1651.0	1651.0	U	490.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1654.0	1655.0	1.0	100.0			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

MARCH 2005

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
13	127	TORN	43	NS	0903.0		357.0		10.0		V=2
	235	CUBA	44	NS	1330.0E		480.0D		41.0		
	127	TORN	7	C	1310.0	1310.2	0.9	200.0	100.0		
	245	PALE	8	S	2227.0	2227.0	U	68.0			QL=4 ST=2 TYP=3
14	245	SVTO	43	NS	1221.0	1230.0	252.0	190.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	1221.0	1230.0U	699.0	190.0			QL=4 ST=1 TYP=1
	245	SGMR	43	NS	1224.0	1507.0	279.0	170.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1224.0	1224.0	696.0	95.0			QL=4 ST=2 TYP=1
	127	TORN	44	NS	1250.0E		130.0D		170.0		V=2
	235	CUBA	44	NS	1330.0E		480.0D		93.0		
	410	SVTO	43	NS	1426.0	1442.0	40.0	78.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	1658.0	1710.0	62.0	79.0			QL=4 ST=2 TYP=1
	245	LEAR	8	S	0240.0	0240.0	U	95.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0240.0	0240.0	U	99.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1155.0	1155.0	U	57.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1217.0	1217.0	U	100.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1342.0	1342.0	U	52.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1415.0	1416.0	2.0	140.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	1416.0	1416.0	1.0	79.0			QL=2 ST=2 TYP=3
	33	UPIC	46	C	1656.0	1657.5	19.0				
15	245	LEAR	43	NS	0131.0	0710.0	457.0	370.0			QL=4 ST=2 TYP=1
	245	LEAR	43	NS	0131.0	0131.0	1349.0	54.0			QL=4 ST=1 TYP=1
	245	LEAR	43	NS	0131.0	0222.0	1349.0	65.0			QL=4 ST=1 TYP=1
	245	LEAR	43	NS	0131.0	0303.0	1349.0	150.0			QL=4 ST=1 TYP=1
	245	LEAR	43	NS	0131.0	0710.0	1349.0	370.0			QL=4 ST=1 TYP=1
	245	PALE	43	NS	0326.0	0420.0	58.0	100.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	0538.0	0710.0	122.0	370.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	0538.0	0549.0	1102.0	81.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	0538.0	0636.0	1102.0	92.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	0538.0	0709.0	1102.0	150.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	0538.0	0709.0	1102.0	330.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	0538.0	0710.0	1102.0	370.0			QL=4 ST=1 TYP=1
	127	TORN	44	NS	0700.0E		407.0D		5.0		V=1,DISTURBED
	245	PALE	8	S	0222.0	0222.0	U	57.0			QL=4 ST=2 TYP=3
	245	PALE	48	C	0303.0	0305.0	5.0	100.0			QL=4 ST=2 TYP=8
	245	SVTO	8	S	0549.0	0549.0	1.0	81.0			QL=4 ST=2 TYP=3
	245	SVTO	4	S/F	0640.0	0644.0	4.0	270.0			QL=2 ST=2 TYP=3
	2800	HIRA	7	C	0642.0	0646.0	10.0	45.0			0
	2950	GORK	46	C	0642.2	0646.3		48.0			
	2950	GORK	46	C	0642.2	0645.6	11.2	26.0			
	245	SVTO	8	S	0643.0	0644.0	1.0	270.0			QL=2 ST=3 TYP=3
	245	LEAR	8	S	0644.0	0644.0	U	280.0			QL=2 ST=2 TYP=3
	410	LEAR	8	S	0644.0	0644.0	U	51.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0644.0	0644.0	U	79.0			QL=4 ST=2 TYP=3
	9100	GORK	4	S/F	0645.3	0646.4	5.0	17.0			
	245	SVTO	8	S	0829.0	0830.0	1.0	72.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1221.0	1221.0	U	82.0			QL=4 ST=3 TYP=3
	245	SVTO	8	S	1221.0	1221.0	U	130.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1304.0	1304.0	U	68.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1540.0	1540.0	1.0	130.0			QL=4 ST=3 TYP=3
	245	SVTO	8	S	1540.0	1540.0	1.0	84.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1628.0	1629.0	1.0	100.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1628.0	1629.0	1.0	100.0			QL=4 ST=3 TYP=3
	245	SGMR	8	S	1743.0	1743.0	U	60.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1806.0	1807.0	1.0	78.0			QL=4 ST=2 TYP=3
	245	SGMR	48	C	1841.0	1845.0	4.0	190.0			QL=4 ST=2 TYP=8
	245	PALE	48	C	1843.0	1845.0	2.0	170.0			QL=4 ST=2 TYP=8
	245	PALE	8	S	1906.0	1907.0	1.0	130.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1906.0	1906.0	U	120.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1909.0	1909.0	U	74.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2102.0	2102.0	U	91.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2127.0	2127.0	U	64.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2127.0	2127.0	U	52.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2344.0	2344.0	U	79.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	2344.0	2344.0	U	86.0			QL=4 ST=2 TYP=3
16	245	LEAR	43	NS	0422.0	0431.0	146.0	86.0			QL=4 ST=2 TYP=1

SOLAR RADIO EMISSION
Outstanding Occurrences

MARCH 2005

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
16	127	TORN	44	NS	0700.0E		480.0D		11.0		V=2
	245	SVTO	43	NS	1139.0	1214.0	212.0	140.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1205.0	1214.0	97.0	160.0			QL=4 ST=2 TYP=1
	235	CUBA	44	NS	1320.0E		490.0D		44.0		
	245	LEAR	8	S	0318.0	0318.0	U	51.0			QL=4 ST=2 TYP=3
	245	LEAR	48	C	0408.0	0410.0	4.0	210.0			QL=4 ST=2 TYP=8
	245	PALE	48	C	0408.0	0408.0	4.0	160.0			QL=4 ST=2 TYP=8
	2950	GORK	3	S	0823.8	0824.0	0.6	5.2			
	900	GORK	2	S/F	0824.0	0824.5	4.5	11.0			
	2950	GORK	2	S/F	0824.7	0825.4	1.5	2.6			
	900	GORK	46	C	0825.2	0825.4	0.8	40.0			
	900	GORK	46	C	0825.2	0825.6		70.0			
	245	SVTO	8	S	1125.0	1125.0	U	85.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1125.0	1125.0	U	46.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	1206.0	1206.0	3.0	100.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1207.0	1207.0	U	56.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1219.0	1219.0	U	400.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1219.0	1219.0	U	310.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1222.0	1222.0	U	150.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1222.0	1222.0	U	92.0			QL=4 ST=2 TYP=3
	2800	PENT	8	S	1542.0	1544.0	5.4	7.0			
	245	SGMR	8	S	1544.0	1544.0	2.0	380.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1544.0	1544.0	2.0	360.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2034.0	2034.0	U	88.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2035.0	2035.0	U	110.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2035.0	2035.0	U	63.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	2115.0	2115.0	1.0	560.0			QL=4 ST=2 TYP=6
	410	SGMR	8	S	2115.0	2115.0	U	130.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	2116.0	2116.0	U	630.0			QL=4 ST=2 TYP=6
	410	PALE	8	S	2116.0	2116.0	U	130.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	2116.0	2116.0	U	67.0			QL=4 ST=2 TYP=3
	2800	HIRA	3	S	2305.0	2307.0	3.0	10.0			0
	245	LEAR	48	C	2313.0	2314.0	30.0	200.0			QL=4 ST=2 TYP=8
	410	LEAR	49	GB	2314.0	2314.0	U	710.0			QL=4 ST=2 TYP=6
	410	PALE	49	GB	2314.0	2314.0	U	1700.0			QL=4 ST=2 TYP=6
	245	PALE	8	S	2314.0	2314.0	U	160.0			QL=4 ST=2 TYP=3
17	127	TORN	43	NS	0656.0		470.0		6.0		V=1
	245	SVTO	43	NS	1152.0	1212.0	178.0	100.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1209.0	1212.0	47.0	92.0			QL=4 ST=2 TYP=1
	235	CUBA	44	NS	1400.0E		435.0D		27.0		
	2804	VORO	21	GRF	0059.0	0102.9	23.5	9.5			
	245	LEAR	8	S	0248.0	0248.0	U	64.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0248.0	0248.0	U	56.0			QL=4 ST=2 TYP=3
	410	LEAR	49	GB	0500.0	0500.0	U	560.0			QL=4 ST=2 TYP=6
	2804	VORO	46	C	0500.0	0500.7	3.7	13.7			
	245	LEAR	49	GB	0506.0	0506.0	U	1100.0			QL=4 ST=2 TYP=6
	245	LEAR	8	S	0521.0	0521.0	U	52.0			QL=4 ST=2 TYP=3
	2950	GORK	5	S	0634.5	0635.2	1.8	1.8			
	9100	GORK	5	S	0634.8	0635.6	2.0	5.4			
	2840	PEKG	3	S	0638.0	0641.7	13.0	11.2			
	900	GORK	41	F	0639.1	0643.4		6.0			
	900	GORK	41	F	0639.1	0639.7	6.4	4.5			
	2950	GORK	46	C	0639.8	0641.5	5.4	4.4			
	2950	GORK	46	C	0639.8	0643.5		5.3			
	245	LEAR	48	C	0640.0	0643.0	3.0	150.0			QL=4 ST=2 TYP=8
	9100	GORK	46	C	0640.6	0642.1	7.4	8.1			
	9100	GORK	46	C	0640.6	0643.6		15.0			
	245	SVTO	48	C	0641.0	0643.0	2.0	120.0			QL=4 ST=3 TYP=8
	127	TORN	7	C	0642.1	0642.5	1.2	250.0D	120.0D		
	245	SVTO	8	S	0643.0	0643.0	U	120.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0643.0	0643.0	U	58.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0819.0	0819.0	U	90.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0819.0	0819.0	U	69.0			QL=4 ST=2 TYP=3
	9100	GORK	28	PRE	0901.2	0903.0	3.4	6.4			
	9100	GORK	46	C	0904.6	0907.1		19.0			
	9100	GORK	46	C	0904.6	0905.3	5.2	61.0			
	245	SVTO	8	S	1125.0	1125.0	U	61.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1128.0	1128.0	U	51.0			QL=4 ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

MARCH 2005

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
17	245	SGMR	48	C	1138.0	1143.0	6.0	120.0			QL=4 ST=2 TYP=8
	245	SVTO	48	C	1139.0	1144.0	5.0	180.0			QL=4 ST=2 TYP=8
	410	SGMR	48	C	1320.0	1321.0	7.0	300.0			QL=4 ST=2 TYP=8
	245	SVTO	8	S	1325.0	1325.0	U	120.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	1325.0	1325.0	U	55.0			QL=4 ST=2 TYP=3
	410	SVTO	4	S/F	1339.0	1345.0	10.0	100.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1358.0	1358.0	U	55.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1919.0	1919.0	U	58.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1941.0	1942.0	1.0	160.0			QL=4 ST=2 TYP=3
18	245	PALE	43	NS	0146.0	0150.0	159.0	160.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	0146.0	0150.0	1334.0	89.0			QL=4 ST=1 TYP=1
	245	LEAR	43	NS	0149.0	0149.0	1331.0	95.0			QL=4 ST=1 TYP=1
	245	LEAR	43	NS	0149.0	0243.0	1331.0	100.0			QL=4 ST=1 TYP=1
	245	LEAR	43	NS	0149.0	0258.0	1331.0	110.0			QL=4 ST=1 TYP=1
	245	LEAR	43	NS	0149.0	0345.0	1331.0	120.0			QL=4 ST=1 TYP=1
	245	LEAR	43	NS	0149.0	0357.0	1331.0	200.0			QL=4 ST=1 TYP=1
	245	PALE	43	NS	0345.0	0345.0	U	120.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	0357.0	0357.0	1203.0	160.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	0522.0	0653.0	115.0	160.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	0522.0	0522.0	1118.0	57.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	0522.0	0548.0	1118.0	63.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	0522.0	0556.0	1118.0	69.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	0522.0	0618.0	1118.0	84.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	0522.0	0643.0	1118.0	93.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	0522.0	0648.0	1118.0	100.0			QL=2 ST=1 TYP=1
	245	SVTO	43	NS	0522.0	0653.0	1118.0	160.0			QL=2 ST=1 TYP=1
	127	TORN	44	NS	0640.0E		422.0D		13.0		V=2
	235	CUBA	44	NS	1330.0E		480.0D		17.0		
	410	PALE	4	S/F	0136.0	0138.0	3.0	94.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0205.0	0205.0	U	210.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0754.0	0754.0	U	67.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0848.0	0848.0	U	83.0			QL=4 ST=2 TYP=3
	245	SVTO	4	S/F	1306.0	1306.0	3.0	100.0			QL=4 ST=2 TYP=3
	33	UPIC	45	C	1322.0	1322.5	2.0				
	245	SGMR	8	S	1400.0	1400.0	U	63.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1400.0	1400.0	U	57.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	2250.0	2250.0	U	94.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2251.0	2251.0	U	140.0			QL=4 ST=2 TYP=3
19	127	TORN	43	NS	1012.0		188.0		5.0		V=0
	2840	PEKG	5	S	0503.0	0506.1	28.2	28.2			
	2950	GORK	2	S/F	0658.0	0659.8	3.1	3.5			
	2950	GORK	4	S/F	0704.9	0706.1	3.1	66.0			
	2800	HIRA	3	S	0705.0	0706.0	3.0	15.0			0
	245	LEAR	8	S	0705.0	0705.0	U	66.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0705.0	0706.0	1.0	64.0			QL=2 ST=2 TYP=3
	610	SVTO	8	S	0705.0	0706.0	2.0	150.0			QL=2 ST=2 TYP=3
	4995	SVTO	8	S	0705.0	0706.0	2.0	80.0			QL=4 ST=2 TYP=3
	9100	GORK	46	C	0705.2	0706.1	4.3	48.0			
	9100	GORK	46	C	0705.2	0706.3		45.0			
	4995	LEAR	8	S	0706.0	0706.0	U	65.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	0706.0	0706.0	1.0	64.0			QL=4 ST=2 TYP=3
	15400	SVTO	8	S	0706.0	0706.0	U	27.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	0740.0	0740.0	U	170.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1205.0	1205.0	U	120.0			QL=4 ST=2 TYP=3
	2800	PENT	24	R	1733.0	1753.0	38.2	6.0			
	2800	PENT	8	S	2014.0	2017.0	7.1	5.0			
20	127	TORN	43	NS	0950.0		210.0		6.0		V=1
	2840	PEKG	1	S	0250.0	0252.4	9.0	5.3			
	2840	PEKG	1	S	0609.0	0612.9	7.0	7.6			
	127	TORN	42	SER	1150.3	1151.9	6.8	440.0			DISTURBED
	245	SGMR	8	S	1151.0	1151.0	U	59.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1151.0	1153.0	2.0	65.0			QL=4 ST=2 TYP=3
	33	UPIC	46	C	1151.0	1152.0	2.0				
	245	SGMR	8	S	1305.0	1305.0	U	51.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1305.0	1305.0	U	100.0			QL=4 ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

MARCH 2005

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
21	127	TORN	43	NS	0824.0		316.0		8.0		V=1
	2695	PALE	8	S	2241.0	2241.0	U	65.0			QL=4 ST=2 TYP=3
23	127	TORN	43	NS	0950.0		210.0		4.0		V=0
24	127	TORN	43	NS	0943.0		317.0		5.0		V=1
	2950	GORK	7	C	1025.2	1025.4	0.9	2.5			
	2950	GORK	7	C	1025.2	1025.7		2.5			
	2840	PEKG	45	C	2337.0	2340.1	9.0	8.6			
	2800	HIRA	7	C	2338.0	2340.0	5.0	15.0			0
	2800	PENT	8	S	2338.0	2340.0	12.3	12.0			
	2804	VORO	41	F	2339.2	2340.2	1.5	12.9			
	2804	VORO	41	F	2339.2	2342.4	3.2	8.2			
25	127	TORN	43	NS	0943.0		242.0		7.0		V=1
	2840	PEKG	45	C	0736.0	0740.3	9.0	8.0			
	2800	HIRA	3	S	0739.0	0741.0	4.0	10.0			0
	1415	LEAR	8	S	0739.0	0740.0	1.0	220.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	0739.0	0740.0	2.0	190.0			QL=4 ST=2 TYP=3
	900	GORK	4	S/F	0739.4	0742.0	2.6	940.0			
	2950	GORK	46	C	0739.5	0740.3	3.2	7.8			
	2950	GORK	46	C	0739.5	0740.7		6.9			
27	410	SGMR	48	C	1339.0	1350.0	621.0	820.0			QL=4 ST=1 TYP=8
	410	SGMR	48	C	1339.0	1352.0	621.0	2800.0			QL=4 ST=2 TYP=8
28	410	LEAR	8	S	0559.0	0600.0	1.0	71.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0603.0	0604.0	2.0	72.0			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:

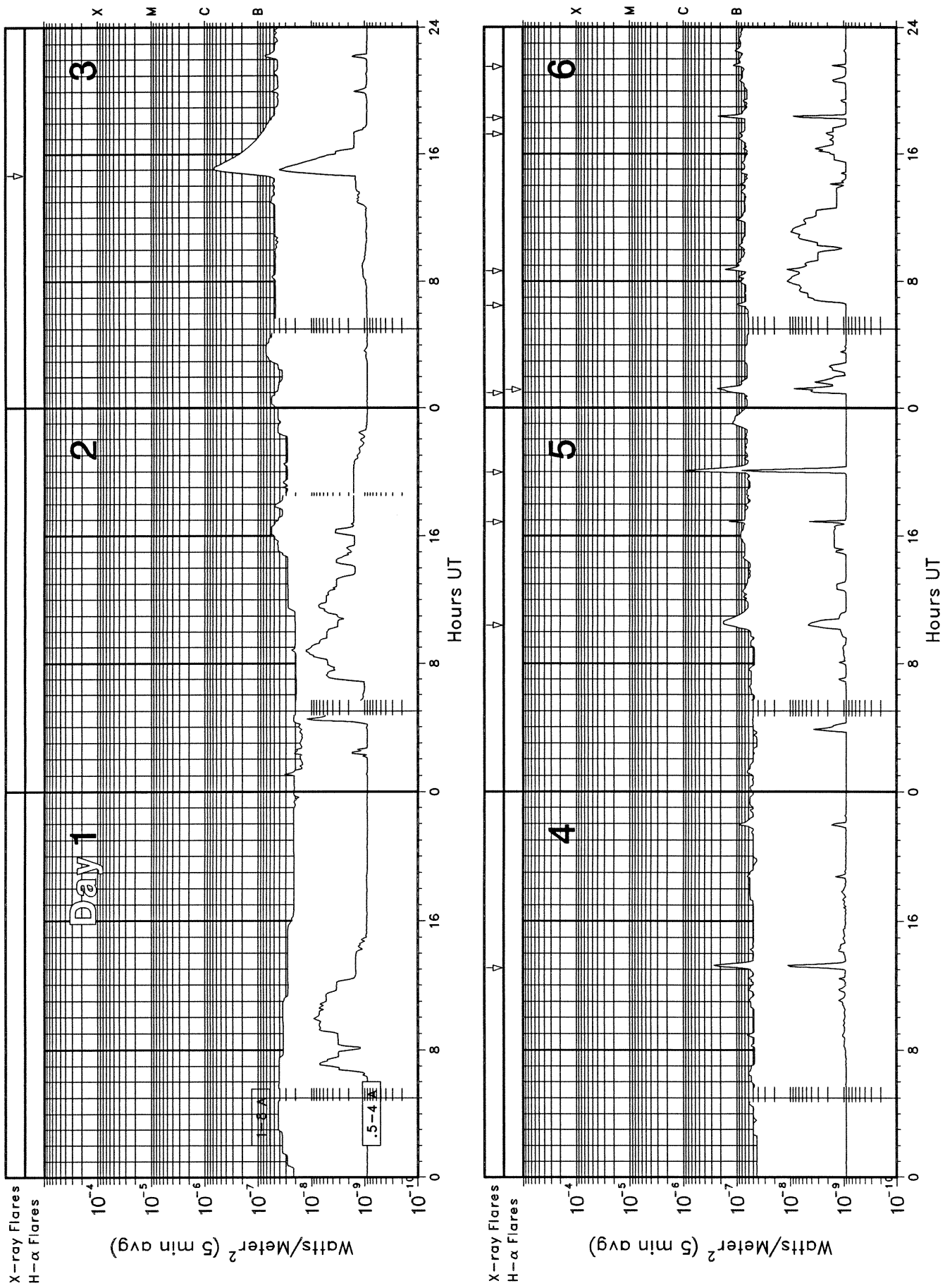
1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple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

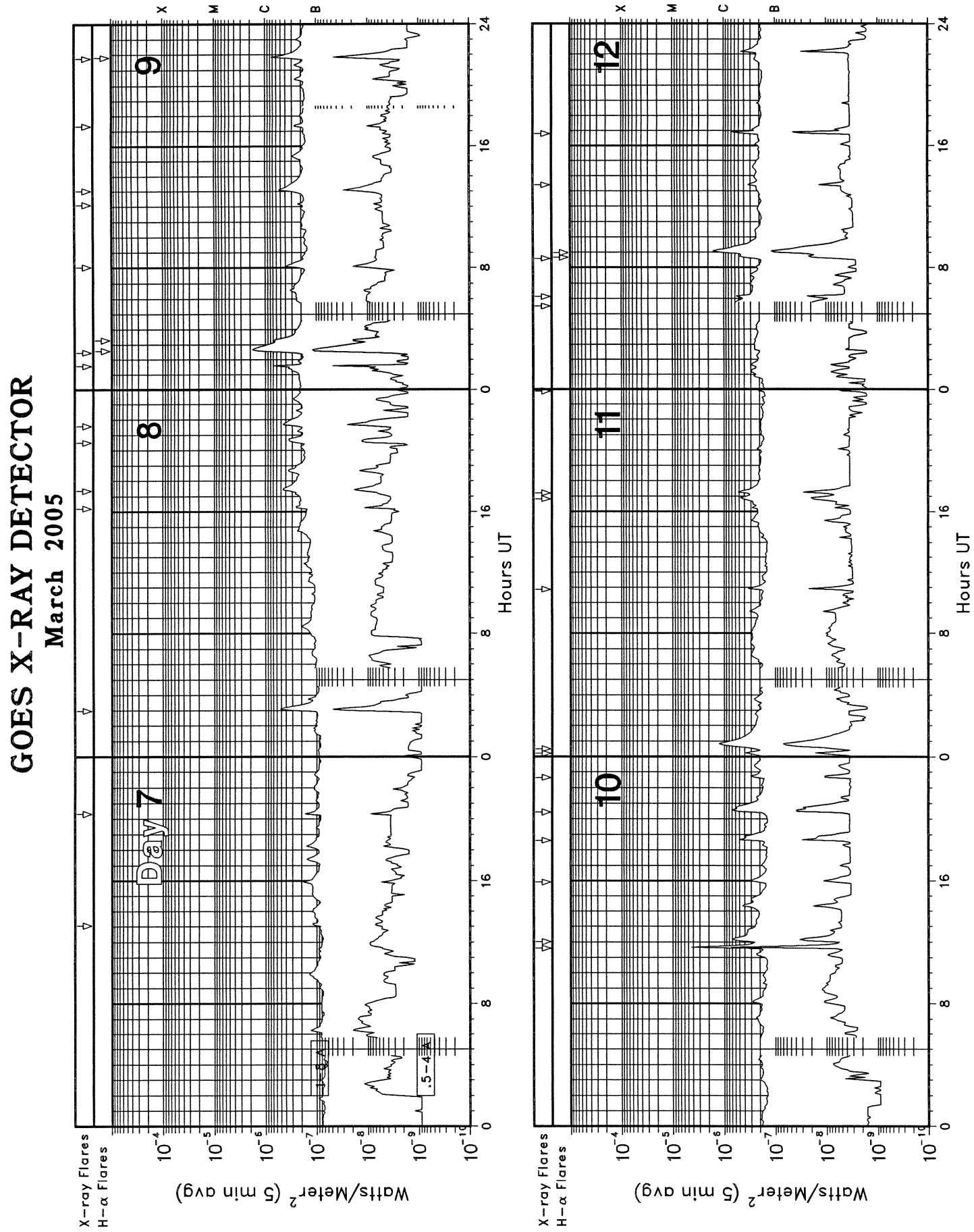
1A Simple 1A	4A Simple 2AF	24PF Post Rise F	27F Rise and Fall F
3A Simple 2A	4O Rise Only	16A Fall A	27AF Rise and Fall AF
21A Simple 3A GRF	4OF Rise Only F	26O Fall Only	31A Post Burst Decrease A
2A Simple 1AF	4P Post Rise	26F Fall F	32A Absorption A

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

GOES X-RAY DETECTOR

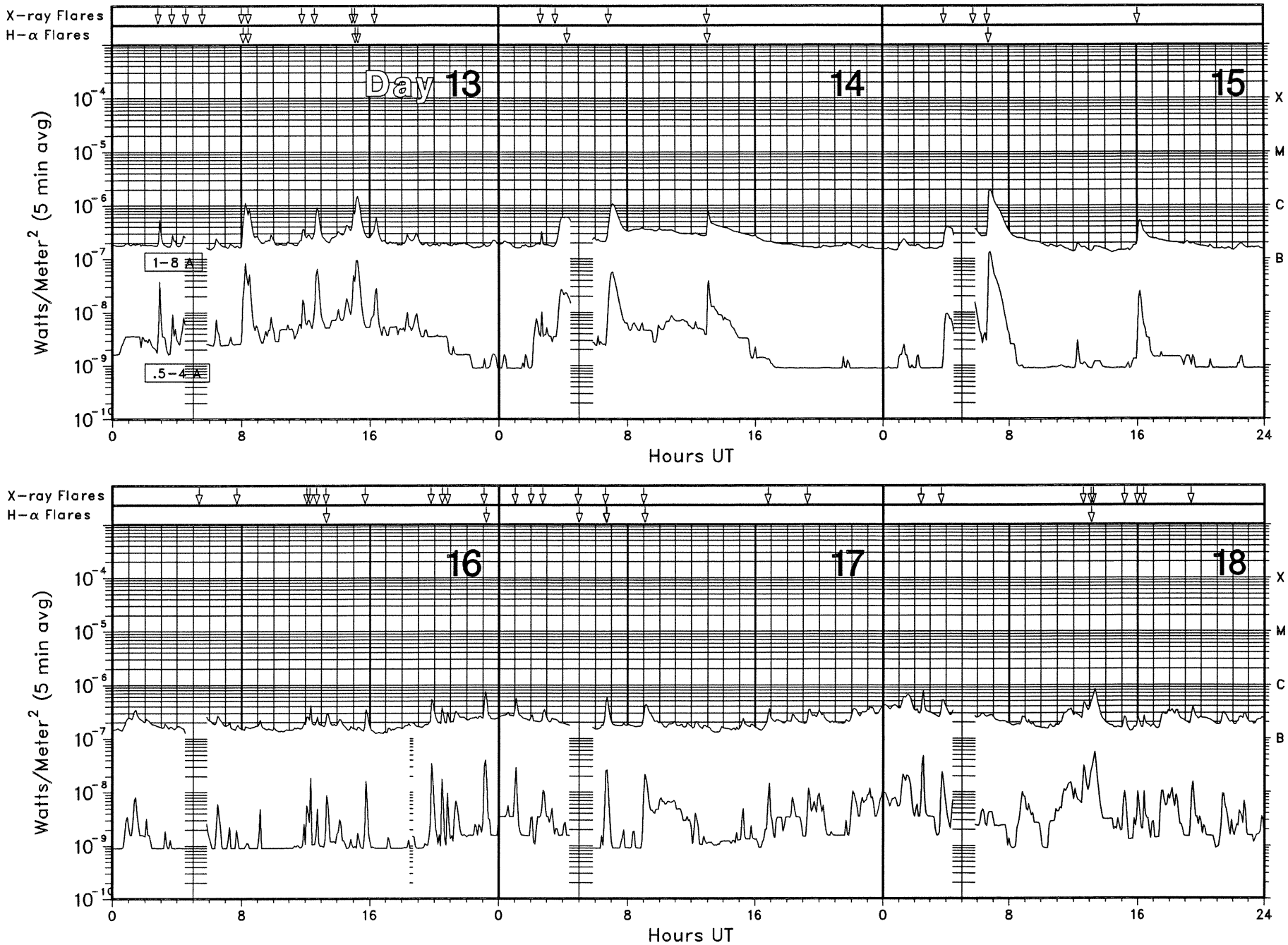
March 2005



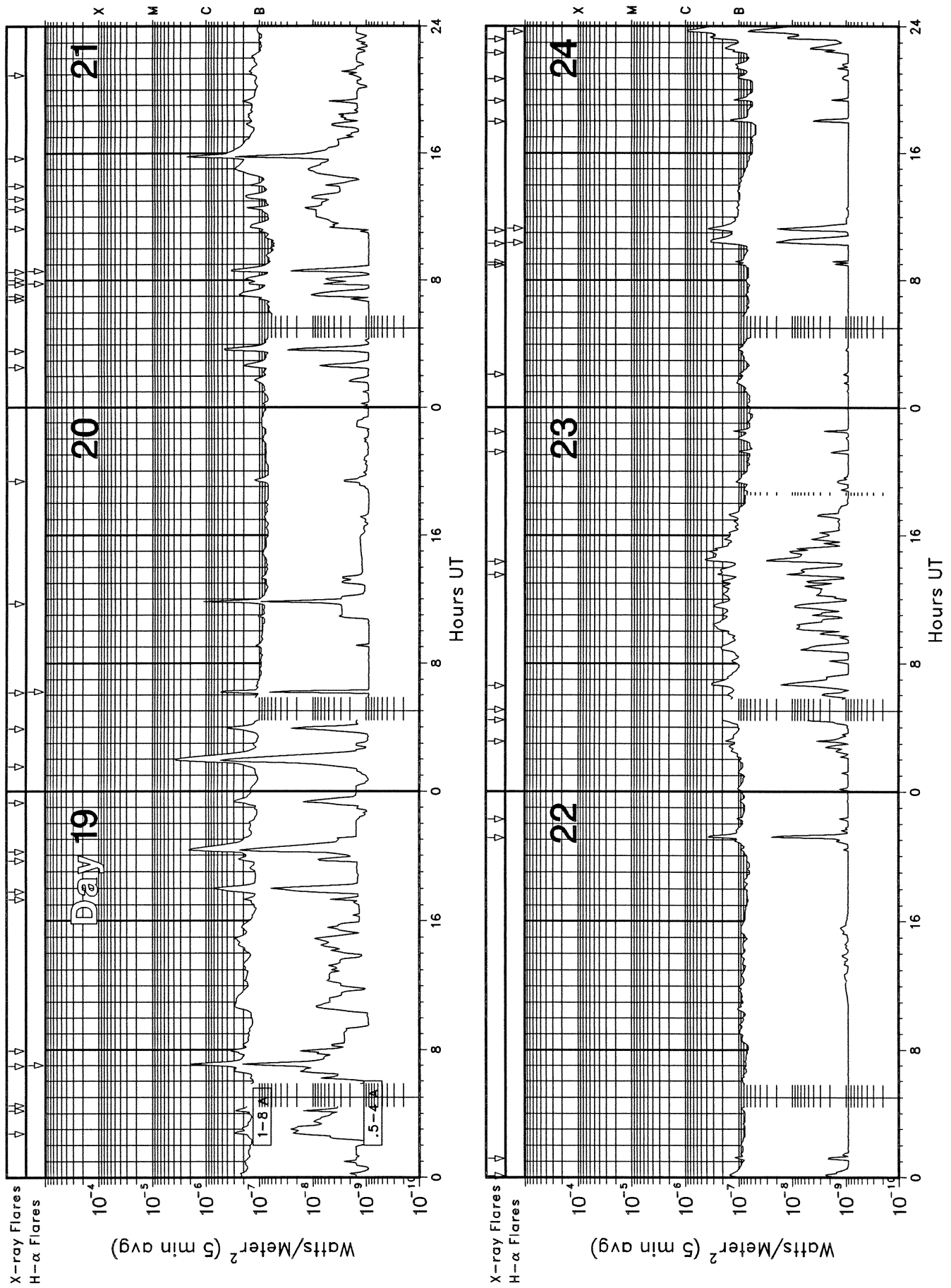

GOES X-RAY DETECTOR
March 2005
X-ray Flares
H-α Flares
Watts/Meter² (5 min avg)
Hours UT
Day 7
8
9
10
11
12
.5-4A
1-8A
X
M
C
B

GOES X-RAY DETECTOR

March 2005

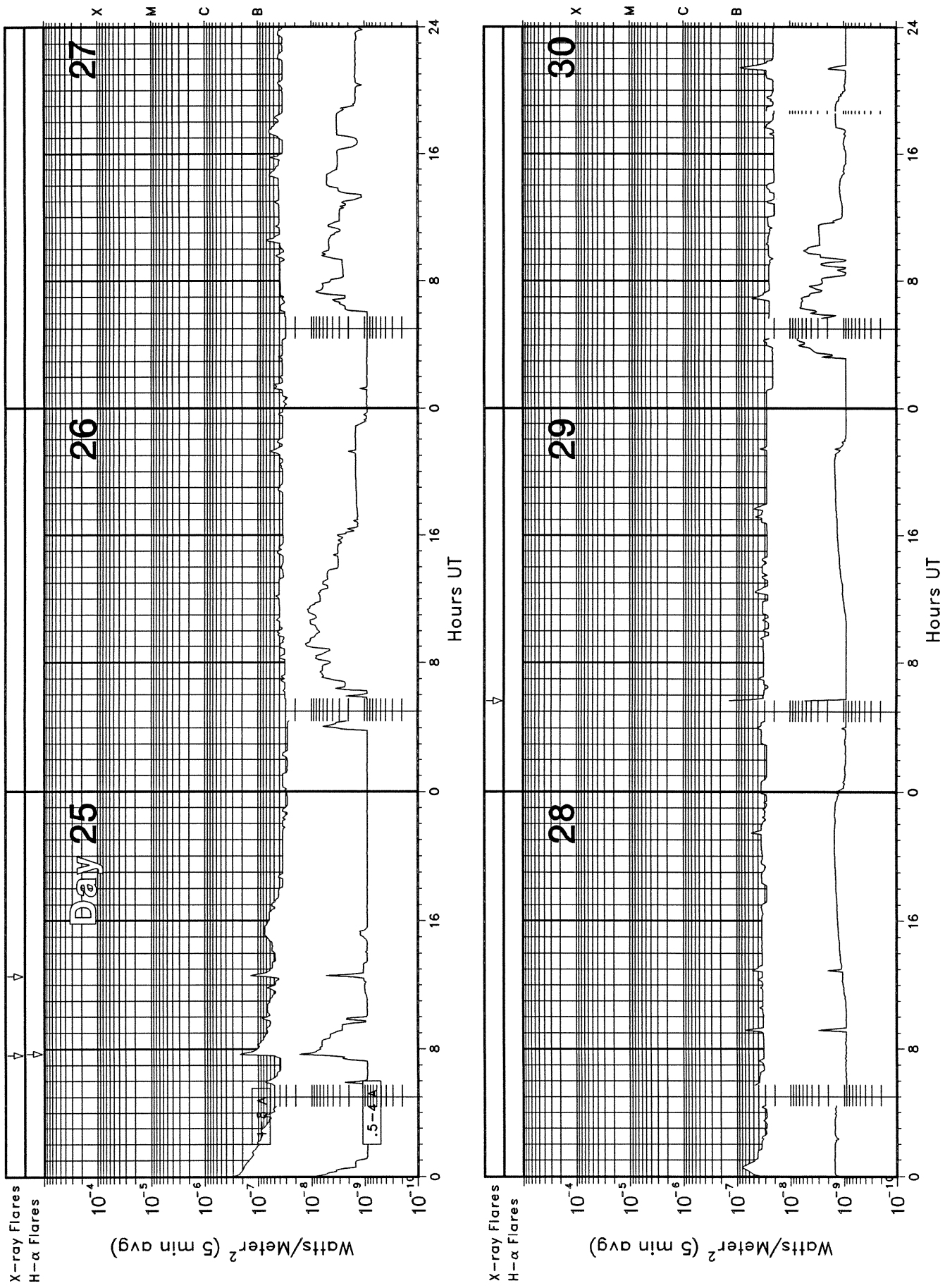


17
Mar 05


GOES X-RAY DETECTOR
March 2005
Day 19
19
20
21
22
23
24
X
M
C
B
1-8 Å
.5-4 Å
X-ray Flares
H-α Flares
Watts/Meter² (5 min avg)
Hours UT
0
8
16
24
10⁻⁴
10⁻⁵
10⁻⁶
10⁻⁷
10⁻⁸
10⁻⁹
10⁻¹⁰

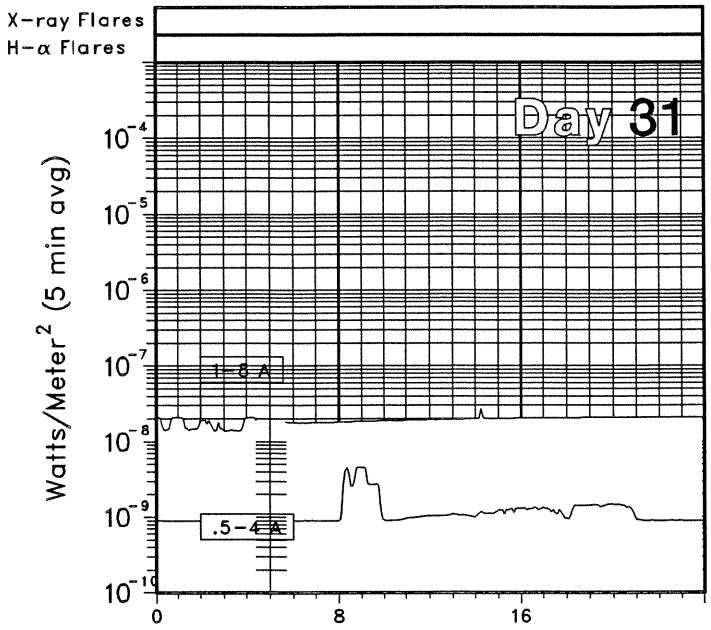
GOES X-RAY DETECTOR

March 2005

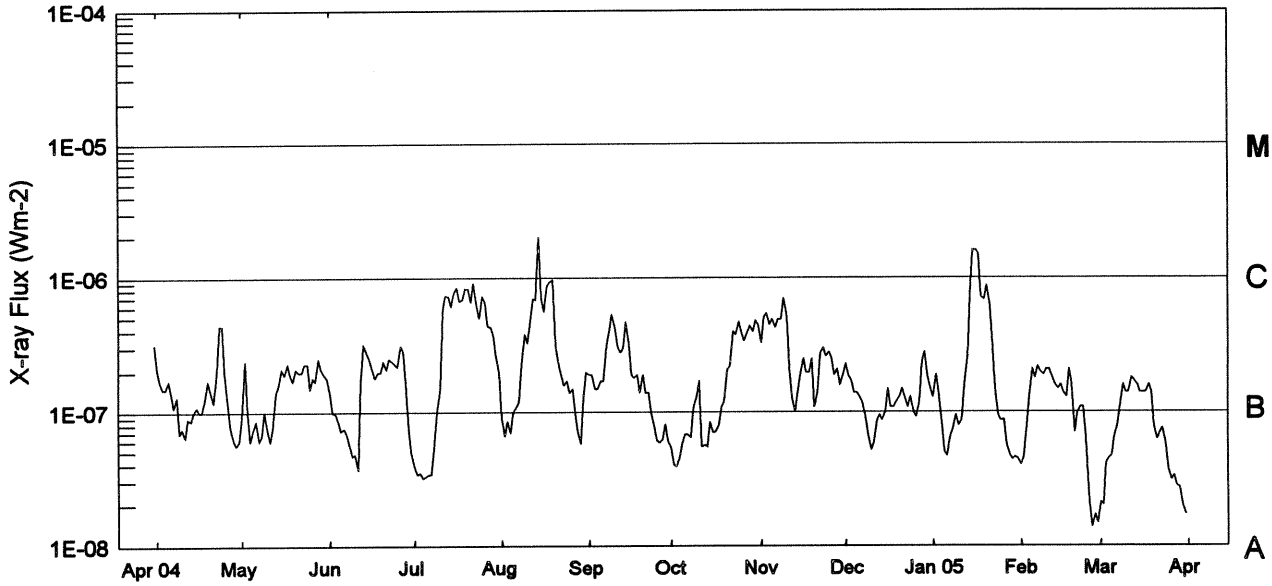


GOES X-RAY DETECTOR

March 2005



Preliminary GOES Satellite Daily X-Ray Background
Apr 2004 - Mar 2005



Day	Apr 04	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 05	Feb	Mar
1	B2.1	A9.1	B1.4	A3.9	A9.1	B1.9	A4.0	B3.3	B2.3	B1.3	A4.0	A2.1
2	B1.7	B2.4	B1.0	A3.4	A6.6	B1.9	A3.9	B5.1	B1.9	B1.9	A4.5	A2.0
3	B1.5	B1.0	A9.7	A3.5	A8.5	B1.5	A4.5	B5.4	B1.7	B1.4	A7.6	A4.1
4	B1.5	A6.0	A8.5	A3.2	A7.0	B1.5	A5.7	B4.5	B1.4	A8.3	B1.3	A4.5
5	B1.7	A7.5	A7.2	A3.3	B1.0	B1.7	A6.8	B4.9	B1.4	A5.0	B2.1	A4.7
6	B1.4	A8.5	A7.5	A3.4	B1.1	B1.7	A6.8	B4.3	B1.3	A4.7	B1.8	A6.4
7	B1.1	A6.1	A6.9	A3.4	B1.2	B3.2	A6.4	B4.9	B1.2	A6.5	B2.2	A7.8
8	B1.3	A6.6	A5.5	A5.9	B2.3	B4.0	B1.1	B4.9	A9.2	A7.3	B2.0	B1.1
9	A6.9	B1.0	A4.7	B1.0	B3.8	B5.3	B1.3	B7.0	A6.8	A9.5	B1.9	B1.6
10	A7.5	A7.3	A4.8	B1.5	B3.3	B4.3	B1.7	B5.2	A5.2	A7.9	B2.1	B1.4
11	A6.5	A6.0	A3.7	B5.7	B4.9	B3.1	A5.5	B2.1	A5.8	A8.6	B2.1	B1.4
12	A8.9	A7.6	B1.7	B7.3	B6.9	B2.8	A5.6	B1.3	A8.5	B1.6	B1.8	B1.8
13	A8.6	B1.4	B3.2	B7.2	B6.8	B3.0	A5.5	B1.0	A9.5	B2.6	B1.6	B1.7
14	B1.0	B1.6	B2.8	B6.1	C2.0	B4.7	A8.3	B1.4	A8.7	B7.3	B1.5	B1.6
15	B1.1	B2.1	B2.5	B7.5	B7.0	B3.2	A7.0	B1.9	B1.0	C1.6	B1.6	B1.4
16	B1.0	B1.9	B2.1	B8.4	B5.6	B1.9	A7.1	B2.5	B1.5	C1.6	B1.4	B1.4
17	B1.0	B2.3	B1.8	B6.7	B8.7	B1.8	A7.9	B2.0	B1.1	C1.5	B1.3	B1.4
18	B1.3	B1.9	B2.0	B6.8	B9.2	B1.9	B1.1	B2.0	B1.1	B7.1	B2.1	B1.6
19	B1.7	B1.7	B2.0	B8.2	B9.7	B1.4	B1.2	B2.5	B1.2	B6.8	B1.6	B1.4
20	B1.4	B2.1	B2.4	B8.2	B3.2	B1.9	B2.1	B1.1	B1.3	B8.7	A7.0	A7.7
21	B1.2	B2.0	B2.1	B6.5	B2.3	B1.4	B2.2	B1.4	B1.5	B6.2	A9.9	A6.2
22	B2.0	B2.0	B2.5	B9.1	B1.9	B1.4	B4.0	B2.7	B1.3	B3.0	B1.1	A6.9
23	B4.4	B2.3	B2.4	B6.2	B1.6	A9.8	B3.8	B3.0	B1.1	B1.5	B1.1	A7.5
24	B4.4	B2.3	B2.3	B5.0	B1.7	A8.1	B4.7	B2.6	B1.3	A9.3	A6.4	A5.8
25	B2.0	B1.5	B2.2	B7.2	B1.4	A6.1	B3.9	B2.8	B1.0	A8.6	A2.1	A3.7
26	B1.2	B1.8	B3.1	B6.6	B1.5	A5.9	B3.4	B2.5	A9.2	A8.7	A1.4	A3.1
27	A7.8	B1.7	B2.9	B4.4	B1.0	A6.2	B3.9	B1.9	B1.2	A5.6	A1.7	A3.3
28	A6.2	B2.5	B1.7	B4.3	A7.1	A8.1	B4.4	B2.1	B2.4	A4.7	A1.5	A2.8
29	A5.6	B2.1	A7.3	B3.7	A5.8	A6.1	B4.0	B1.6	B2.8	A4.4		A2.7
30	A6.0	B1.9	A4.8	B2.6	B1.3	A5.4	B4.8	B1.9	B1.8	A4.6		A2.0
31		B1.8		B2.0	B2.0		B4.5		B1.5	A4.4		A1.7

Levels below B1.0 are unreliable.

ACTIVE PROMINENCES AND FILAMENTS

MARCH 2005

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
14	EPL	0726E	1030	S07	W90	03	7.6	3		0	0	E	LEAR		
14	EPL	0726E	0836	S07	W90	03	7.6	3		9	9	E	SVTO		
15	DSF	0041U	0248U	S01	W14	03	14.0	3	14	0	0	E	LEAR	0742	
15	EPL	1547	1615D	S34	W90	03	8.5	3		1	1	E	SVTO		
20	BSL	0614	0655D	S63	W08	03	19.5	3		7	9	E	LEAR	0743	Flare Associated

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

For SOLAR SECTOR BOUNDARY REPORTS, the latitude field contains the Carrington longitude of the point where a neutral line crosses the solar equator. The comments field may contain the Carrington longitude and central meridian distance of two more intersection points.

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

The remark "Bright Emission 1/3" indicates that bright emission was observed 1/3 of time.
The remark "Normal Emission 1/3" indicates that normal emission was observed 1/3 of time.

Observation Type: C= Cinematographic, E= Electronic, P= Photographic, V= Visual.

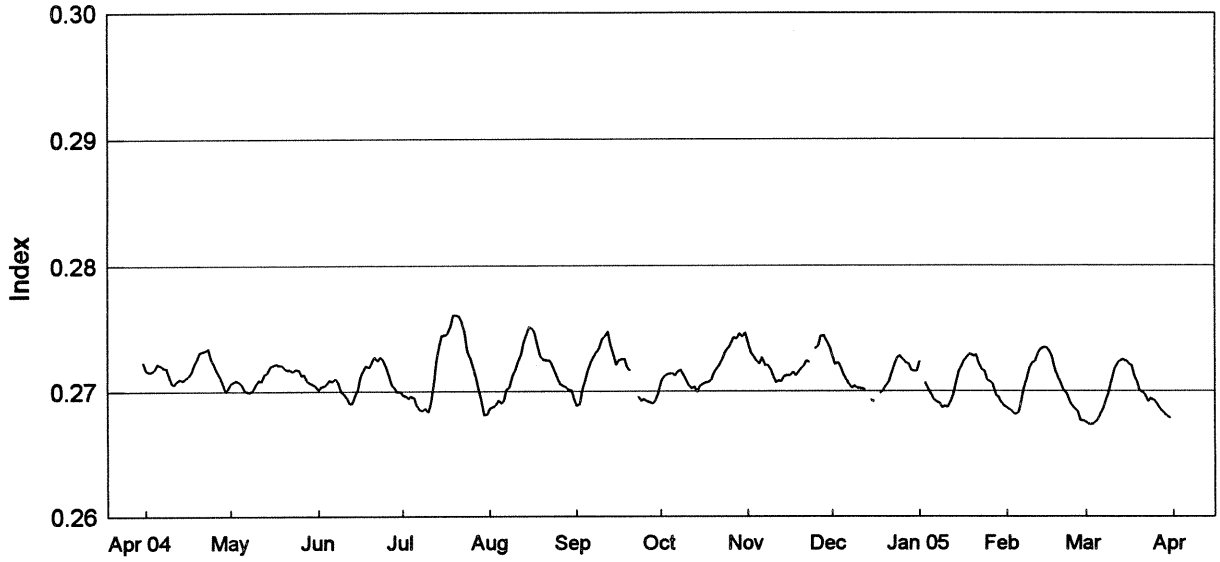
ABST = Abastumani
ATHN = Athens
BUCA = Bucharest
CATA = Catania
HOLL = Holloman
KHAR = Kharkov
LEAR = Learmonth
PALE = Palehua
RAMY = Ramey
SVTO = San Vito
VORO = Voroshilov
VALA = Valasske Mezirici
WROC = Wroclaw

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

Apr 2004 - Mar 2005

Version 9.1



Day	Apr 04	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 05	Feb	Mar
1	0.2717	0.2706	0.2701	0.2697	0.2686	0.2689	0.2707	0.2739	0.2729	0.2724	0.2687	0.2675
2	0.2716	0.2708	0.2704	0.2697	0.2688	0.2690	0.2711	0.2731	0.2723	---	0.2685	0.2673
3	0.2716	0.2709	0.2705	0.2695	0.2689	0.2701	0.2713	0.2729	0.2724	0.2707	0.2683	0.2673
4	0.2718	0.2707	0.2706	0.2696	0.2693	0.2709	0.2715	0.2725	0.2720	0.2702	0.2682	0.2674
5	0.2723	0.2705	0.2709	0.2695	0.2691	0.2717	0.2714	0.2722	0.2714	0.2697	0.2683	0.2677
6	0.2721	0.2701	0.2708	0.2689	0.2692	0.2724	0.2712	0.2728	0.2709	0.2694	0.2691	0.2681
7	0.2719	0.2700	0.2710	0.2686	0.2701	0.2728	0.2717	0.2721	0.2705	0.2693	0.2701	0.2687
8	0.2719	0.2700	0.2707	0.2684	0.2703	0.2732	0.2718	0.2721	0.2702	0.2691	0.2709	0.2693
9	0.2714	0.2702	0.2700	0.2686	0.2711	0.2735	0.2713	0.2717	0.2704	0.2687	0.2719	0.2698
10	0.2707	0.2706	0.2698	0.2683	0.2718	0.2742	0.2709	0.2712	0.2702	0.2689	0.2724	0.2708
11	0.2705	0.2709	0.2695	0.2690	0.2724	0.2743	0.2704	0.2707	0.2702	0.2687	0.2725	0.2718
12	0.2708	0.2708	0.2691	0.2706	0.2730	0.2748	0.2702	0.2708	0.2702	0.2692	0.2732	0.2722
13	0.2710	0.2714	0.2691	0.2726	0.2739	0.2737	0.2703	0.2708	0.2701	0.2698	0.2734	0.2725
14	0.2709	0.2715	0.2696	0.2736	0.2746	0.2729	0.2700	0.2712	---	0.2707	0.2736	0.2726
15	0.2710	0.2720	0.2701	0.2745	0.2752	0.2721	0.2705	0.2713	0.2693	0.2716	0.2736	0.2725
16	0.2712	0.2721	0.2711	0.2745	0.2750	0.2725	0.2706	0.2712	0.2692	0.2722	0.2732	0.2723
17	0.2715	0.2723	0.2718	0.2746	0.2747	0.2727	0.2707	0.2715	---	0.2726	0.2728	0.2721
18	0.2721	0.2722	0.2721	0.2752	0.2737	0.2726	0.2708	0.2712	0.2698	0.2728	0.2717	0.2712
19	0.2727	0.2722	0.2720	0.2761	0.2728	0.2719	0.2709	0.2716	0.2700	0.2731	0.2712	0.2708
20	0.2732	0.2719	0.2724	0.2761	0.2726	0.2717	0.2715	0.2719	0.2704	0.2729	0.2706	0.2701
21	0.2733	0.2717	0.2728	0.2760	0.2726	---	0.2719	0.2721	0.2707	0.2729	0.2701	0.2699
22	0.2734	0.2718	0.2725	0.2756	0.2726	---	0.2722	0.2725	0.2714	0.2723	0.2698	0.2697
23	0.2735	0.2716	0.2728	0.2747	0.2722	0.2695	0.2727	0.2724	0.2720	0.2718	0.2693	0.2692
24	0.2726	0.2718	0.2726	0.2733	0.2717	0.2693	0.2732	---	0.2727	0.2716	0.2689	0.2694
25	0.2722	0.2718	0.2720	0.2727	0.2710	0.2694	0.2736	0.2735	0.2729	0.2710	0.2686	0.2693
26	0.2716	0.2713	0.2714	0.2719	0.2706	0.2692	0.2739	0.2737	0.2726	0.2707	0.2684	0.2690
27	0.2712	0.2713	0.2705	0.2712	0.2705	0.2692	0.2743	0.2744	0.2724	0.2705	0.2677	0.2687
28	0.2707	0.2708	0.2703	0.2701	0.2704	0.2690	0.2743	0.2745	0.2723	0.2697	0.2676	0.2684
29	0.2701	0.2707	0.2700	0.2692	0.2702	0.2693	0.2746	0.2741	0.2717	0.2695		0.2682
30	0.2702	0.2706	0.2700	0.2681	0.2701	0.2699	0.2744	0.2736	0.2716	0.2691		0.2680
31		0.2705		0.2681	0.2694		0.2747		0.2716	0.2689		0.2678
Mean	0.2717	0.2711	0.2709	0.2716	0.2715	0.2715	0.2719	0.2723	0.2723	0.2707	0.2707	0.2697

Data at: http://www.sec.noaa.gov/ftpmenu/sbuv.html

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

MARCH 2005

First C2 Appearance		Central Position	Width Angular	Linear Fit	----2nd order speed-----			Accel	Measurement Position	Remarks
Date	Time UT	Angle degree	Width degree	Speed km/s	Initial km/s	Final km/s	20R km/s	m/s^2	Angle degree	
2005/03/01	00:06:05	197	144	396	288	513	448	4.9	225	Partial Halo
2005/03/01	00:30:05	336	99	226	0	477	375	6.5	330	
2005/03/01	19:31:45	303	73	609	554	670	634	4.6	308	
2005/03/01	21:30:08	213	30	442	406	480	478	2.7	210	
2005/03/02	00:06:05	147	30	196	----	----	----	------	146	
2005/03/02	00:54:05	222	42	237	----	----	----	------	225	
2005/03/02	01:31:42	263	24	487	348	634	994	37.5	267	
2005/03/02	06:30:08	297	73	240	156	338	312	3.2	294	
2005/03/02	17:54:07	299	6	437	----	----	----	------	304	Only C2
2005/03/02	22:30:05	321	58	532	541	522	502	-1.8	322	
2005/03/03	03:30:05	204	36	180	----	----	----	------	207	
2005/03/03	10:06:05	75	65	312	260	365	486	7.0	73	
2005/03/03	10:54:05	218	35	343	320	368	391	2.2	214	
2005/03/04	20:54:29	258	33	321	261	386	574	10.9	253	
2005/03/04	22:06:28	69	31	342	316	372	569	9.7	72	
2005/03/05	00:30:05	253	20	473	354	596	1000	37.7	254	
2005/03/05	01:54:05	264	45	310	334	281	242	-2.2	266	
2005/03/05	11:30:07	340	13	419	459	379	0	-22.7	335	Only C2
2005/03/05	13:54:05	246	21	592	488	690	931	28.7	250	
2005/03/05	14:30:05	108	57	182	127	233	529	10.9	109	Only C2
2005/03/06	03:30:11	263	47	424	494	354	216	-8.4	273	
2005/03/06	05:30:06	81	32	658	668	648	642	-1.5	90	
2005/03/06	05:54:05	130	115	566	511	629	604	4.3	121	
2005/03/06	17:54:06	255	53	183	153	219	275	2.2	259	
2005/03/06	20:59:13	139	33	263	146	387	394	5.7	134	
2005/03/07	03:06:05	35	11	312	----	----	----	------	38	3 points/Only C2
2005/03/07	12:06:05	117	19	303	----	----	----	------	119	
2005/03/07	14:06:28	267	17	468	458	478	508	2.1	269	
2005/03/07	18:30:05	61	26	130	137	122	75	-0.6	66	
2005/03/08	07:31:43	262	51	144	----	----	----	------	250	Only C2
2005/03/08	10:54:05	24	12	776	505	1039	1428	81.3	31	
2005/03/08	13:31:44	86	77	323	354	294	138	-4.6	95	
2005/03/09	02:30:05	81	23	424	281	554	1017	41.3	88	
2005/03/09	07:31:45	268	10	326	----	----	----	------	264	3 points/Only C2
2005/03/10	00:54:05	260	38	533	396	674	738	16.2	256	
2005/03/10	05:06:05	269	15	284	----	----	----	------	266	
2005/03/10	14:54:06	95	19	462	----	----	----	------	99	
2005/03/10	19:54:06	246	21	197	----	----	----	------	240	
2005/03/11	00:54:05	57	25	412	427	398	350	-2.5	63	
2005/03/11	12:54:05	48	12	402	394	410	437	1.6	59	
2005/03/11	15:30:06	119	50	484	455	513	510	2.3	119	
2005/03/12	07:00:05	294	38	297	209	379	1003	40.0	287	Only C2
2005/03/12	13:48:05	57	46	750	768	730	724	-2.8	50	
2005/03/12	15:00:05	313	11	277	----	----	----	------	316	Only C2
2005/03/12	16:48:06	91	98	301	0	602	501	10.6	71	
2005/03/12	23:12:05	284	19	167	----	----	----	------	279	

SOLAR CORONAL MASS EJECTIONS (CMEs)
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Center for Solar Physics and Space Weather (CSPSW) – The Catholic University of America/NRL/NASA

MARCH 2005

First C2 Appearance		Central Position	Angular Width	Linear Fit	----2nd order speed-----			Accel	Measurement Position	Remarks
Date	Time UT	Angle degree	Width degree	Speed km/s	Initial km/s	Final km/s	20R km/s	m/s^2	Angle degree	
2005/03/13	09:24:07	296	46	231	0	450	1211	60.3	298	Only C2
2005/03/13	10:48:05	224	49	180	106	261	247	2.2	223	
2005/03/13	15:36:05	295	54	196	195	197	202	0.1	295	
2005/03/14	08:00:05	259	105	849	748	965	917	11.6	262	
2005/03/15	15:36:05	129	69	649	448	871	773	16.3	111	
2005/03/16	12:48:05	256	23	444	----	----	----	------	255	
2005/03/16	20:12:06	259	44	399	----	----	----	------	258	
2005/03/16	23:48:05	260	50	332	348	313	287	-1.6	254	
2005/03/17	01:24:05	256	49	297	304	289	195	-2.4	256	
2005/03/17	07:12:06	268	40	312	----	----	----	------	262	
2005/03/17	16:00:06	138	33	529	577	476	496	-3.7	142	
2005/03/18	02:12:06	242	125	362	269	469	446	5.2	238	Partial Halo
2005/03/18	13:00:05	254	32	424	371	486	459	3.3	260	
2005/03/18	18:12:05	279	47	217	148	284	675	17.9	289	Only C2
2005/03/19	07:36:05	245	26	369	333	405	653	12.9	248	Only C2
2005/03/19	13:36:05	137	51	174	215	124	0	-3.0	125	
2005/03/19	18:36:06	246	21	247	----	----	----	------	247	Only C2
2005/03/19	20:48:05	253	36	208	249	162	0	-10.1	248	Only C2
2005/03/20	02:12:05	242	89	386	410	359	360	-1.6	247	
2005/03/20	12:12:05	257	56	596	805	360	358	-22.2	247	
2005/03/20	19:12:06	269	17	436	480	389	320	-5.6	264	
2005/03/20	23:24:05	251	28	276	257	295	377	3.1	243	
2005/03/21	14:36:05	84	150	920	1161	640	802	-28.6	86	Partial Halo
2005/03/24	14:00:05	301	47	704	567	853	847	16.6	299	
2005/03/24	21:12:08	254	41	375	321	435	521	7.3	259	
2005/03/25	05:24:06	19	28	296	----	----	----	------	24	observed most C3
2005/03/25	23:12:05	334	45	284	----	----	----	------	332	
2005/03/26	02:12:05	32	69	105	0	222	232	2.3	39	
2005/03/26	02:48:05	338	71	262	259	265	269	0.2	349	
2005/03/26	17:12:05	114	24	259	----	----	----	------	112	Only C2
2005/03/27	07:00:05	24	28	292	148	456	418	6.5	28	
2005/03/27	16:36:05	29	7	444	----	----	----	------	31	
2005/03/27	17:48:05	27	13	396	362	434	501	5.1	29	
2005/03/28	00:12:05	11	25	215	----	----	----	------	14	
2005/03/28	04:36:05	3	30	223	177	273	278	2.0	8	
2005/03/28	07:36:05	76	44	193	152	233	466	7.9	79	Only C2
2005/03/28	17:12:05	74	33	203	----	----	----	------	73	Only C2
2005/03/28	18:00:05	106	66	184	48	306	728	21.7	118	Only C2
2005/03/28	19:36:08	224	73	182	104	274	259	2.3	228	data gap
2005/03/29	12:48:05	234	25	439	603	256	0	-32.3	232	
2005/03/29	13:00:05	73	42	212	189	234	382	4.5	75	Only C2
2005/03/29	14:36:05	261	10	533	----	----	----	------	262	Only C2
2005/03/29	17:24:07	76	48	218	197	239	380	4.3	74	Only C2

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MARCH 2005

First C2 Appearance		Central Position	Width Angular	Linear Fit	----2nd order speed-----			Accel	Measurement Position	Remarks
Date	Time UT	Angle degree	Width degree	Speed km/s	Initial km/s	Final km/s	20R km/s	m/s^2	Angle degree	
2005/03/30	04:24:06	222	21	411	451	364	345	-3.6	222	
2005/03/30	13:36:05	270	13	263	----	----	----	------	270	Only C2
2005/03/30	23:36:05	283	70	472	----	----	----	------	277	Only C2
2005/03/31	02:48:05	68	48	176	----	----	----	------	78	
2005/03/31	05:36:06	81	36	173	----	----	----	------	78	Only C2

If you use data from this catalog, please acknowledge as follows:
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CME heights are measured at the fastest segment of the leading edge
PA= Postion 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.