APRIL 2006 NUMBER 740 - Part II

Solar-Geophysical Data comprehensive reports

Data for October 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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SOLAR-GEOPHYSICAL DATA

Number 740
(Issued in Two Parts)

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-- MONTHLY PLOTS

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Hα SOLAR FLARES

OCTOBER 2005

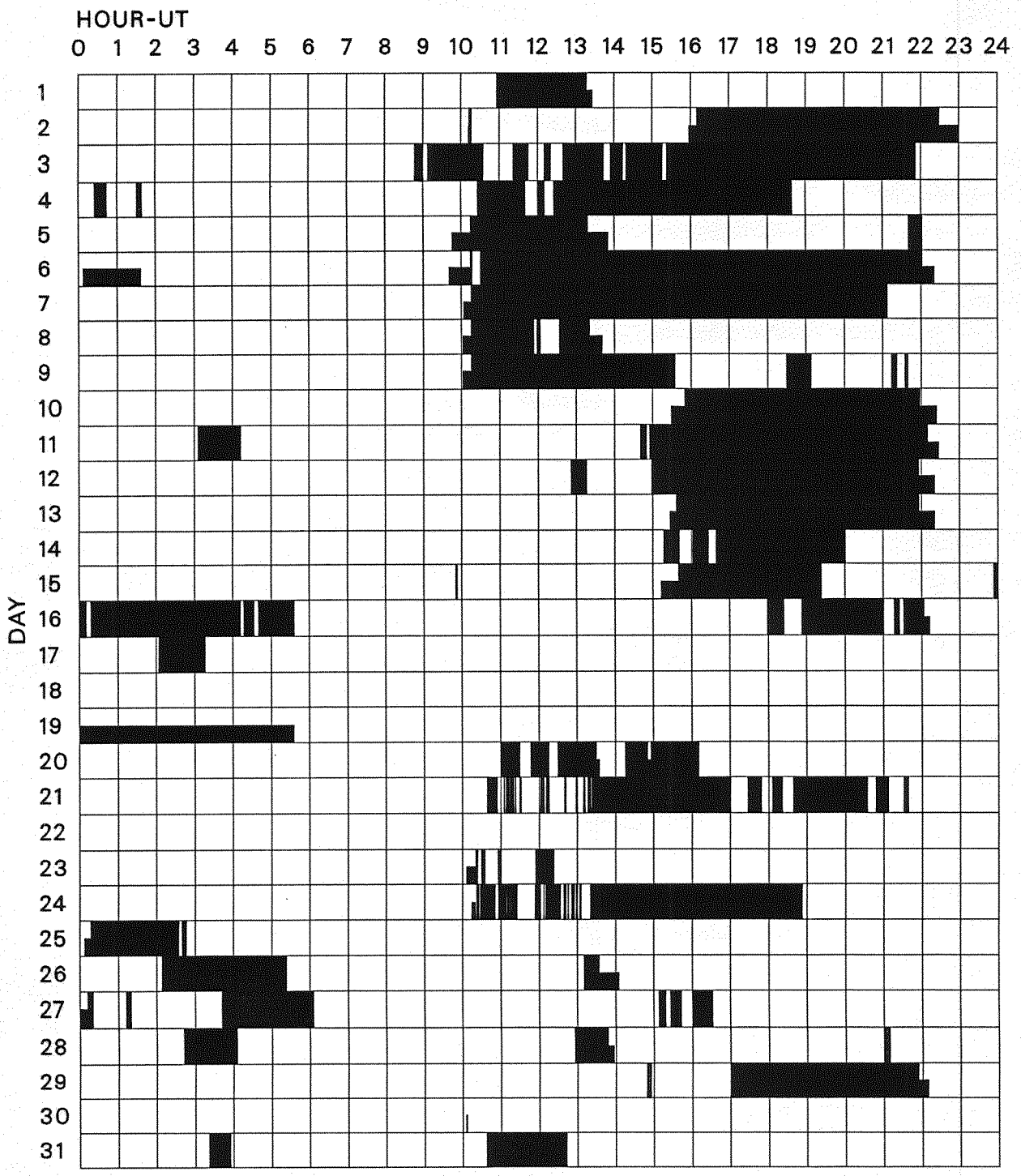
Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	Mo	CMP Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
		01	1056		1317	No Flare Patrol													
		02	1013		1016	No Flare Patrol													
		02	1610		2229	No Flare Patrol													
		03	0847		0900	No Flare Patrol													
		03	0907		1035	No Flare Patrol													
		03	1122		1146	No Flare Patrol													
		03	1211		1221	No Flare Patrol													
		03	1240		1344	No Flare Patrol													
		03	1355		1414	No Flare Patrol													
		03	1419		1516	No Flare Patrol													
		03	1523		2152	No Flare Patrol													
		04	0025		0044	No Flare Patrol													
		04	0131		0138	No Flare Patrol													
		04	1026		1141	No Flare Patrol													
		04	1202		1211	No Flare Patrol													
		04	1226		1839	No Flare Patrol													
0001	LEAR	05	0307	0307	0311	S07	E29	10813	10	7.3	4	SF		3	E		20		F
0002	LEAR	05	0818	0819	0824	S07	E26	10813	10	7.3	6	SF		3	E		12		
		05	1014		1319	No Flare Patrol													
		05	2141		2202	No Flare Patrol													
		06	1014		1017	No Flare Patrol													
		06	1030		2202	No Flare Patrol													
		07	1015		2107	No Flare Patrol													
		08	1015		1154	No Flare Patrol													
		08	1159		1204	No Flare Patrol													
		08	1234		1321	No Flare Patrol													
		09	1015		1535	No Flare Patrol													
		09	1830		1908	No Flare Patrol													
		09	2114		2122	No Flare Patrol													
		09	2135		2139	No Flare Patrol													
		10	1551		2158	No Flare Patrol													
		11	0306		0413	No Flare Patrol													
		11	1441		1450	No Flare Patrol													
		11	1455		2210	No Flare Patrol													
0003		12	0538	0541	0552	S08	W12	10814	10	11.3	14	SF					28		FH
	LEAR	12	0538	0541	0552	S10	W14	10814	10	11.2	14	SF		3	E		30		FH
	SVTO	12	0545E	0545U	0556D	S05	W11	10814	10	11.4	11D	SF		2	E		26		FH
		12	1252		1316	No Flare Patrol													
		12	1458		2156	No Flare Patrol													
0004	KANZ	13	0904	0906	0909	S06	W32	0814	10	11.0	5	SF		2	E				
		13	1537		2156	No Flare Patrol													
		14	1517		1542	No Flare Patrol													
		14	1602		1627	No Flare Patrol													
		14	1639		2001	No Flare Patrol													
		15	0951		0952	No Flare Patrol													
		15	1540		1924	No Flare Patrol													
		15	2354		2400	No Flare Patrol													
		16	0000		0010	No Flare Patrol													
		16	0018		0412	No Flare Patrol													
		16	0417		0433	No Flare Patrol													
		16	0440		0536	No Flare Patrol													
		16	1759		1825	No Flare Patrol													
		16	1853		2101	No Flare Patrol													
		16	2117		2125	No Flare Patrol													
		16	2132		2204	No Flare Patrol													
		17	0204		0316	No Flare Patrol													
		20	1101		1130	No Flare Patrol													
		20	1147		1216	No Flare Patrol													
		20	1230		1330	No Flare Patrol													
		20	1416		1451	No Flare Patrol													
		20	1456		1611	No Flare Patrol													
		21	1039		1054	No Flare Patrol													
		21	1105		1106	No Flare Patrol													

OCTOBER 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
		21	1108		1113	No Flare Patrol													
		21	1115		1120	No Flare Patrol													
		21	1123		1124	No Flare Patrol													
		21	1130		1132	No Flare Patrol													
		21	1203		1208	No Flare Patrol													
		21	1212		1216	No Flare Patrol													
		21	1240		1242	No Flare Patrol													
		21	1258		1300	No Flare Patrol													
		21	1310		1312	No Flare Patrol													
		21	1316		1321	No Flare Patrol													
		21	1323		1701	No Flare Patrol													
		21	1728		1749	No Flare Patrol													
		21	1806		1822	No Flare Patrol													
		21	1839		2035	No Flare Patrol													
		21	2048		2107	No Flare Patrol													
		21	2132		2138	No Flare Patrol													
		23	1021		1023	No Flare Patrol													
		23	1030		1035	No Flare Patrol													
		23	1056		1100	No Flare Patrol													
		23	1155		1223	No Flare Patrol													
		24	1022		1025	No Flare Patrol													
		24	1027		1051	No Flare Patrol													
		24	1056		1108	No Flare Patrol													
		24	1110		1113	No Flare Patrol													
		24	1115		1116	No Flare Patrol													
		24	1118		1121	No Flare Patrol													
		24	1123		1125	No Flare Patrol													
		24	1154		1156	No Flare Patrol													
		24	1158		1202	No Flare Patrol													
		24	1207		1208	No Flare Patrol													
		24	1210		1234	No Flare Patrol													
		24	1239		1242	No Flare Patrol													
		24	1245		1246	No Flare Patrol													
		24	1251		1255	No Flare Patrol													
		24	1258		1300	No Flare Patrol													
		24	1304		1306	No Flare Patrol													
		24	1320		1853	No Flare Patrol													
		25	0017		0235	No Flare Patrol													
		25	0240		0246	No Flare Patrol													
		26	0208		0523	No Flare Patrol													
		26	1311		1334	No Flare Patrol													
		27	0012		0020	No Flare Patrol													
		27	0112		0120	No Flare Patrol													
		27	0342		0605	No Flare Patrol													
		27	1508		1519	No Flare Patrol													
		27	1526		1543	No Flare Patrol													
		27	1601		1632	No Flare Patrol													
		28	0242		0405	No Flare Patrol													
		28	1256		1348	No Flare Patrol													
		28	2101		2109	No Flare Patrol													
		29	1449		1455	No Flare Patrol													
		29	1701		2154	No Flare Patrol													
		31	0321		0355	No Flare Patrol													
		31	1037		1243	No Flare Patrol													

INTERVALS OF NO FLARE PATROL OBSERVATION
FOR PRECEDING SOLAR FLARE TABLE

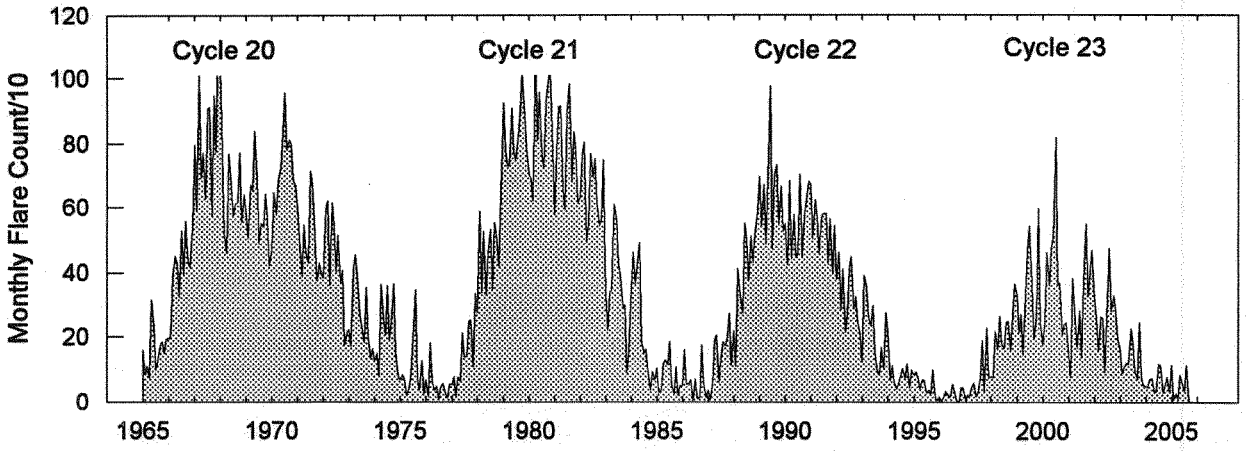
OCTOBER 2005



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 -Oct 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	11	82	56	81	35	114	4			535

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

OCTOBER 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
02	2840	PEKG	1	S	0732.0	0735.3	7.0	2.8			
	2840	PEKG	1	S	0742.0	0745.2	6.0	4.2			
04	127	TORN	43	NS	0905.0		145.0U		1.0		V=0
	2840	PEKG	1	S	0645.0	0647.9	4.0	7.5			
05	127	TORN	43	NS	0834.0		156.0		1.0		V=1
	2840	PEKG	45	C	0815.0	0818.0	4.0	26.0			
	33	UPIC	46	C	0841.0	0842.0	2.5				
	33	UPIC	46	C	1040.0	1040.5	4.5				
	33	UPIC	45	C	1244.0	1244.2	1.0				
06	127	TORN	43	NS	0838.0		152.0		2.0		V=1
07	127	TORN	44	NS	0630.0E		350.0D		2.0		V=1
	33	UPIC	40	F	1032.0	1039.0	7.5				UNCERTAIN
	245	SGMR	8	S	1500.0	1500.0	U	50.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1500.0	1500.0	U	64.0			QL=4 ST=2 TYP=3
09	245	PALE	8	S	0327.0	0327.0	U	65.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0329.0	0329.0	1.0	86.0			QL=4 ST=2 TYP=3
10	2695	SGMR	8	S	1114.0	1114.0	1.0	1100.0			QL=4 ST=1 TYP=3
	2695	SGMR	49	GB	1150.0	1152.0	2.0	1100.0			QL=4 ST=2 TYP=6
11	2800	PENT	1	S	1721.5	1724.2	3.8	1.6			
13	245	LEAR	8	S	0333.0	0333.0	U	55.0			QL=4 ST=2 TYP=3
14	245	LEAR	8	S	0351.0	0351.0	U	63.0			QL=4 ST=2 TYP=3
17	245	LEAR	8	S	0314.0	0314.0	U	52.0			QL=4 ST=2 TYP=3
19	127	TORN	45	C	1129.2	1140.3	13.8	60.0	20.0		
25	8800	LEAR	8	S	0246.0	0246.0	1.0	87.0			QL=4 ST=2 TYP=3
27	2695	SGMR	8	S	1132.0	1133.0	2.0	24.0			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:

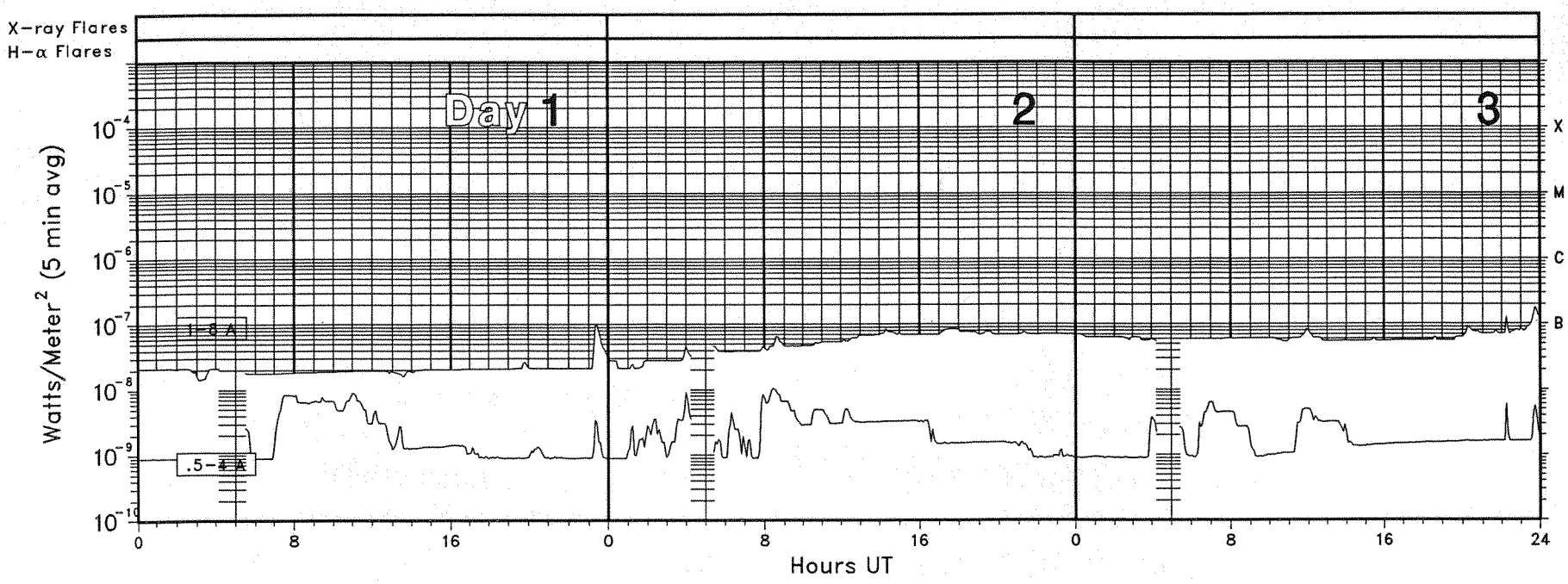
1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple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

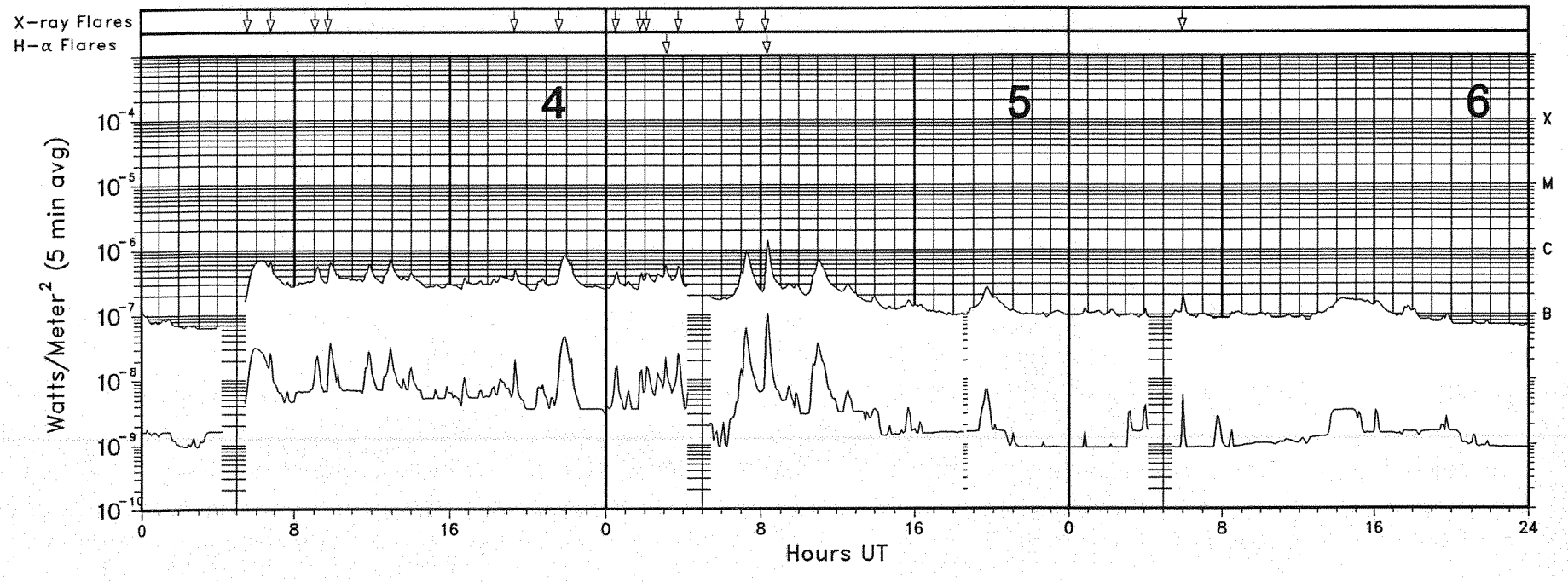
1A Simple 1A	4A Simple 2AF	24PF Post Rise F	27F Rise and Fall F
3A Simple 2A	40 Rise Only	16A Fall A	27AF Rise and Fall AF
21A Simple 3A GRF	40F Rise Only F	260 Fall Only	31A Post Burst Decrease A
2A Simple 1AF	4P Post Rise	26F Fall F	32A Absorption A

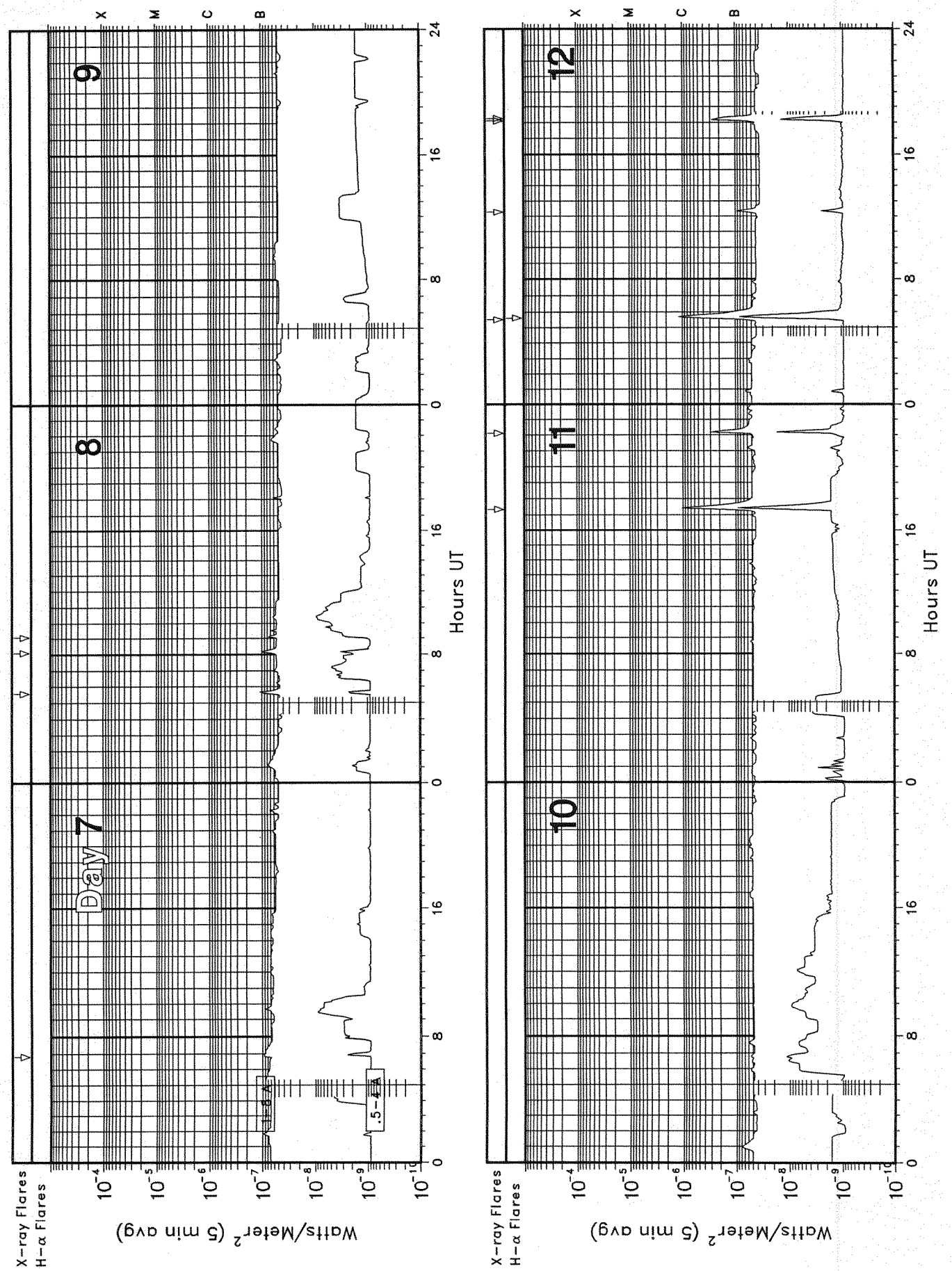
RSTN Site Information: Beginning in April 1986, the RSTN sites LEAR, PALE, SGMR, and SVTO fixed frequency solar radio data are periodically adjusted to several world standard stations. These world standard stations include: Kislovodsk, USSR 15,500 MHz; Penticton, Canada 2800 MHz; and Hiraiso, Japan 500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

GOES X-RAY DETECTOR

October 2005

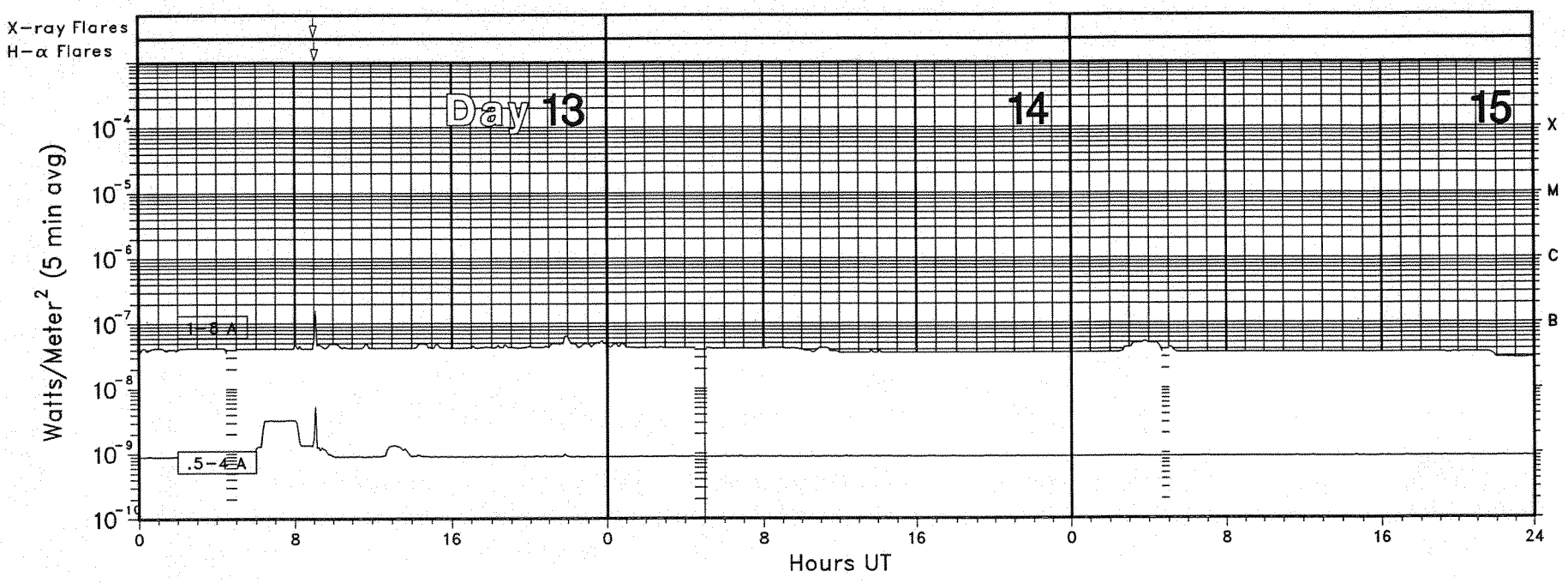


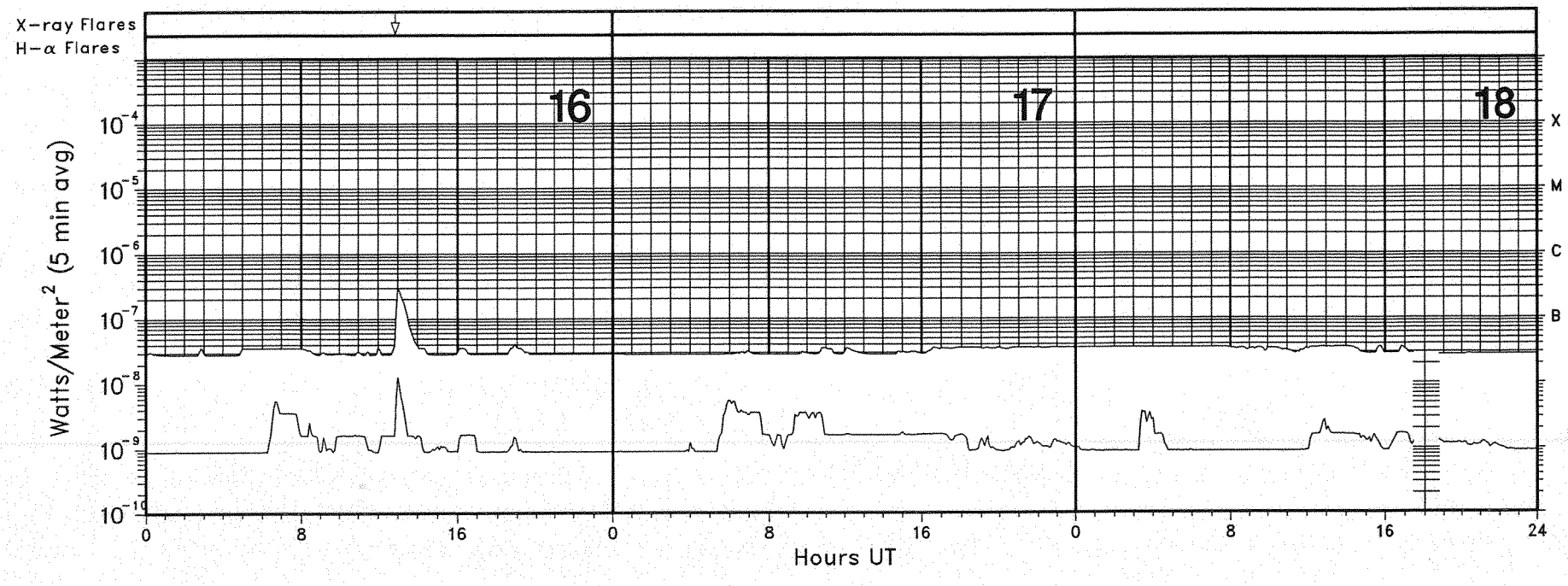



GOES X-RAY DETECTOR
October 2005
Day 7
8
9
10
11
12
X-ray Flares
H-α Flares
Watts/Meter² (5 min avg)
Hours UT
X
M
C
B
1-8 Å
.5-4 Å

GOES X-RAY DETECTOR

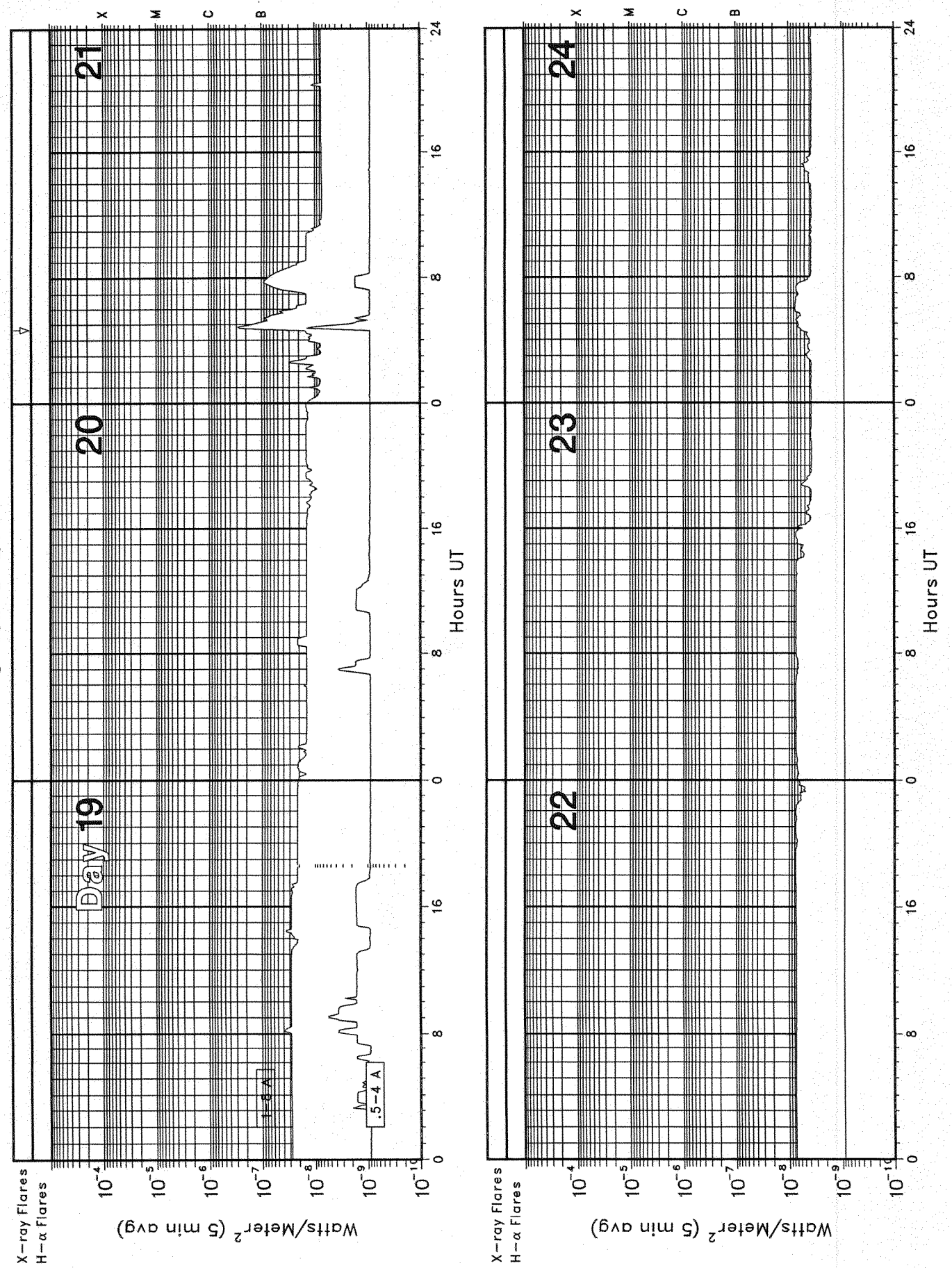
October 2005

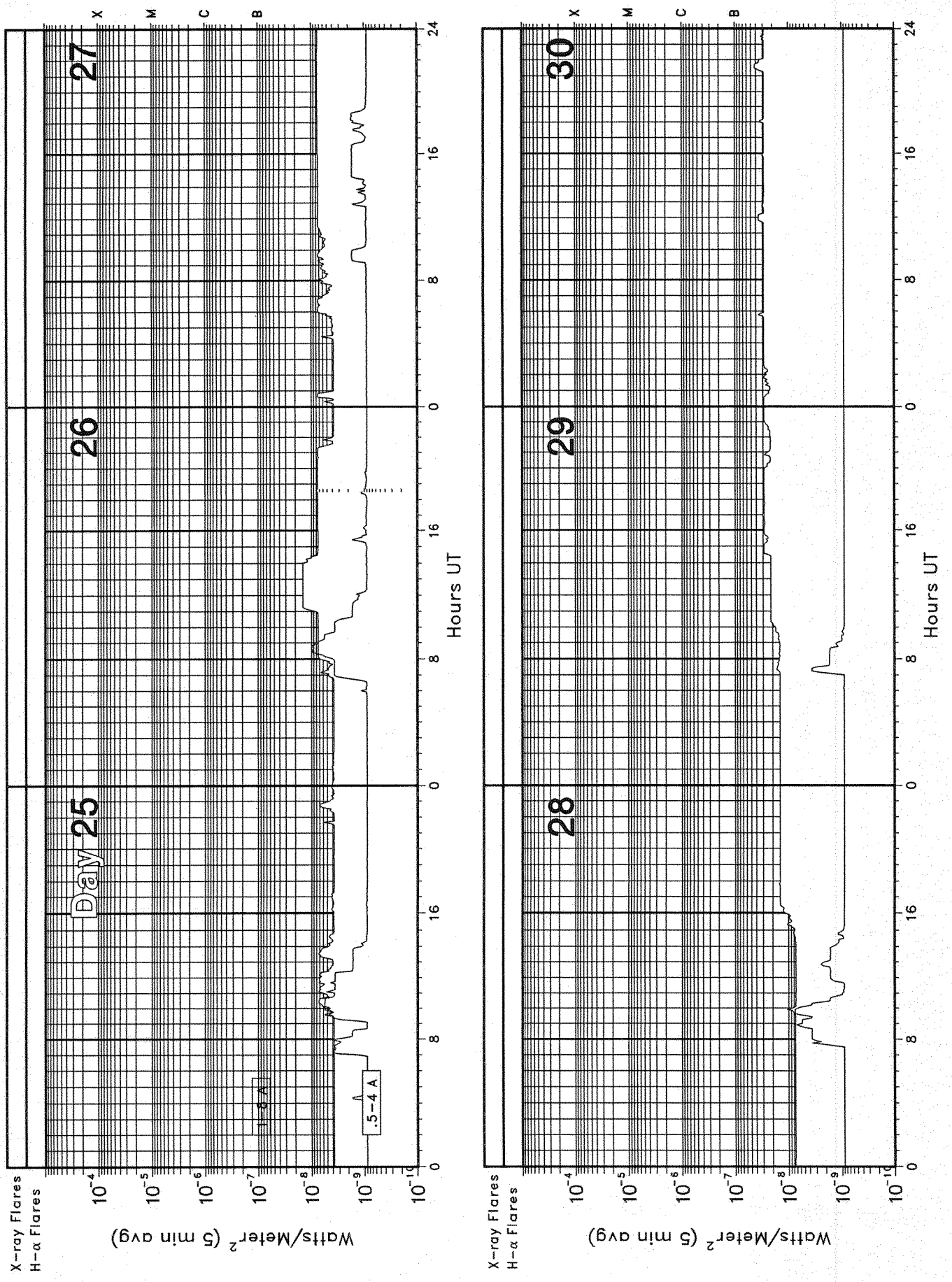




GOES X-RAY DETECTOR

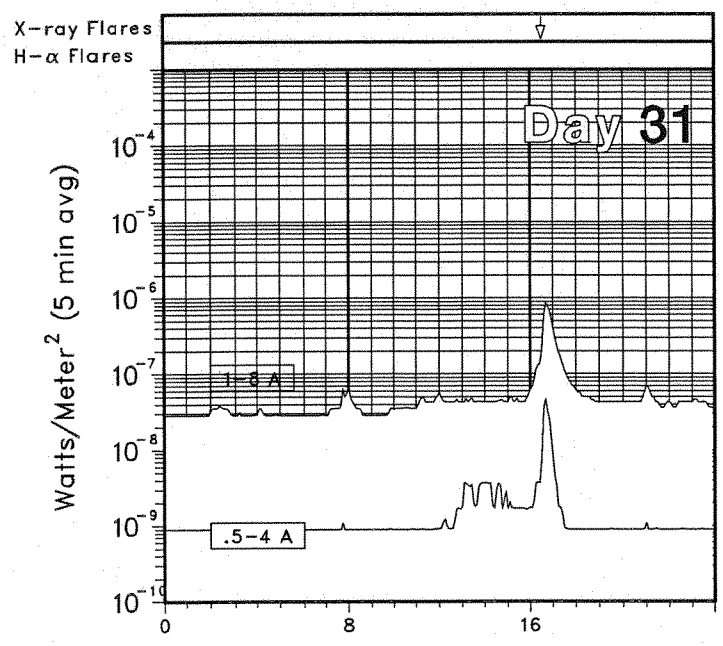
October 2005



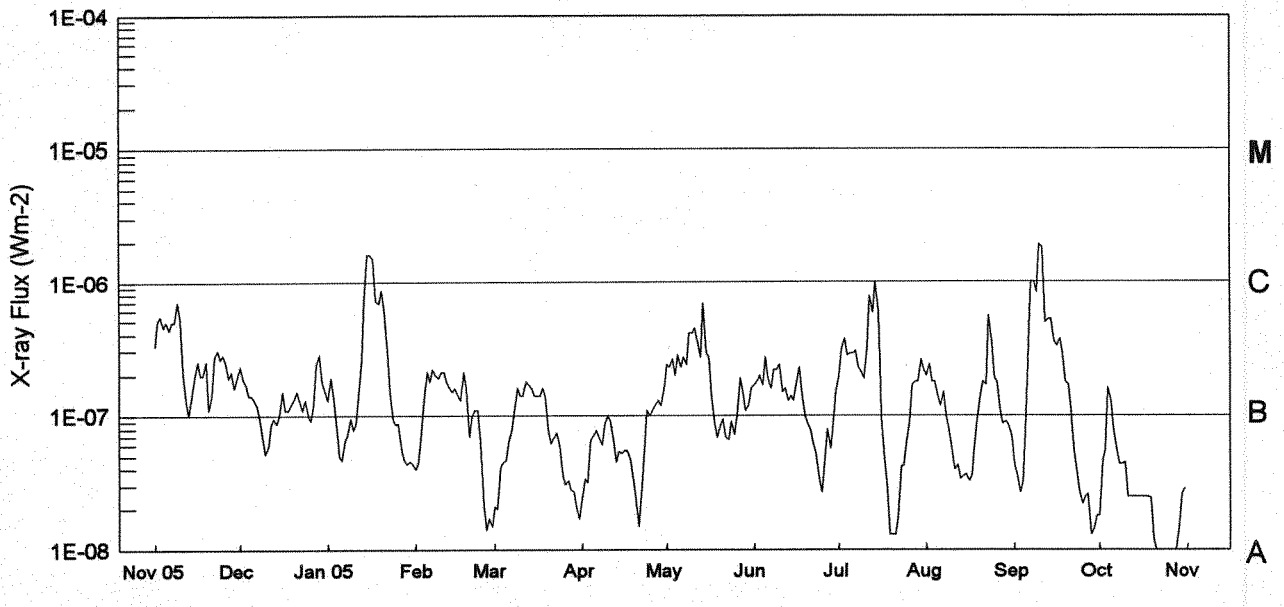

GOES X-RAY DETECTOR
October 2005
X-ray Flares
H-α Flares
Watts/Meter² (5 min avg)
Hours UT
DAY 25
26
27
28
29
30
X
M
C
B
1-8 A
.5-4 A

GOES X-RAY DETECTOR

October 2005



Preliminary GOES Satellite Daily X-Ray Background
Nov 2004 - Oct 2005



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

Levels below B1.0 are unreliable.

ACTIVE PROMINENCES AND FILAMENTS

OCTOBER 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
04	EPL	0529E	0600D	S88	E16	10	5.7			9	9	E	LEAR		
15	DSF	2350U	1926U	S20	W32	10	13.5	3	14	0	0	E	HOLL		
15	DSF	2350U	1926U	S30	W33	10	13.4	3	18	0	0	E	HOLL		
19	DSF	1703	2129	N20	W14	10	18.6		05	0	0	E	HOLL		
23	DSF	2350U	1347U	S11	W32	10	21.6	3	09	0	0	E	HOLL		

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.

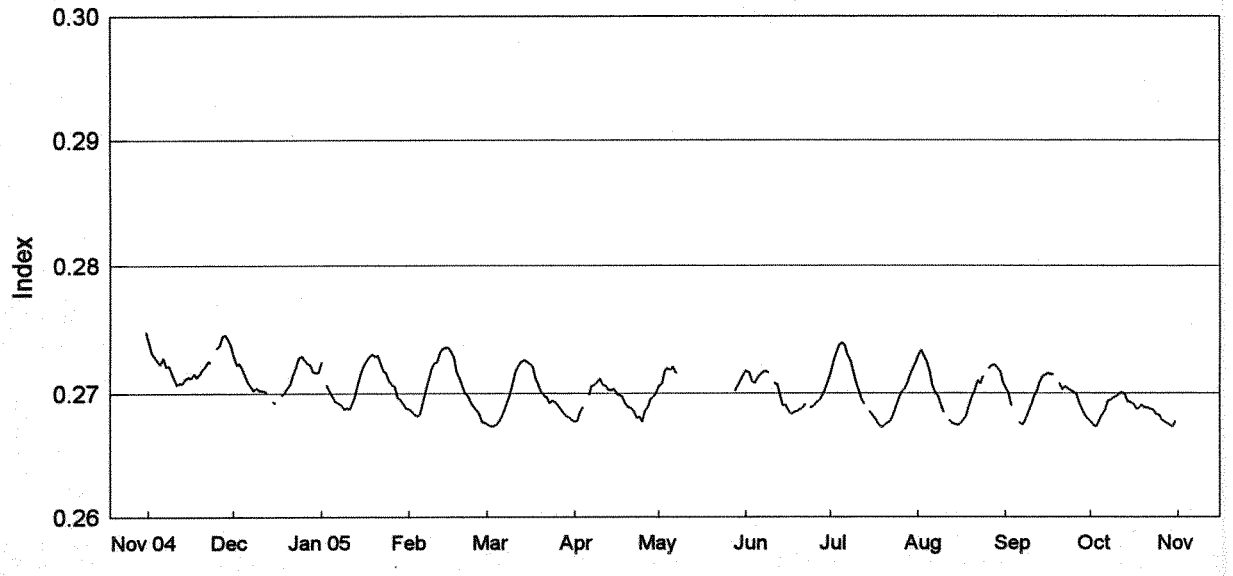
The remark "Bright Emission 1/3" indicates that bright emission was observed 1/3 of time.
The remark "Normal Emission 1/3" indicates that normal emission was observed 1/3 of time.

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

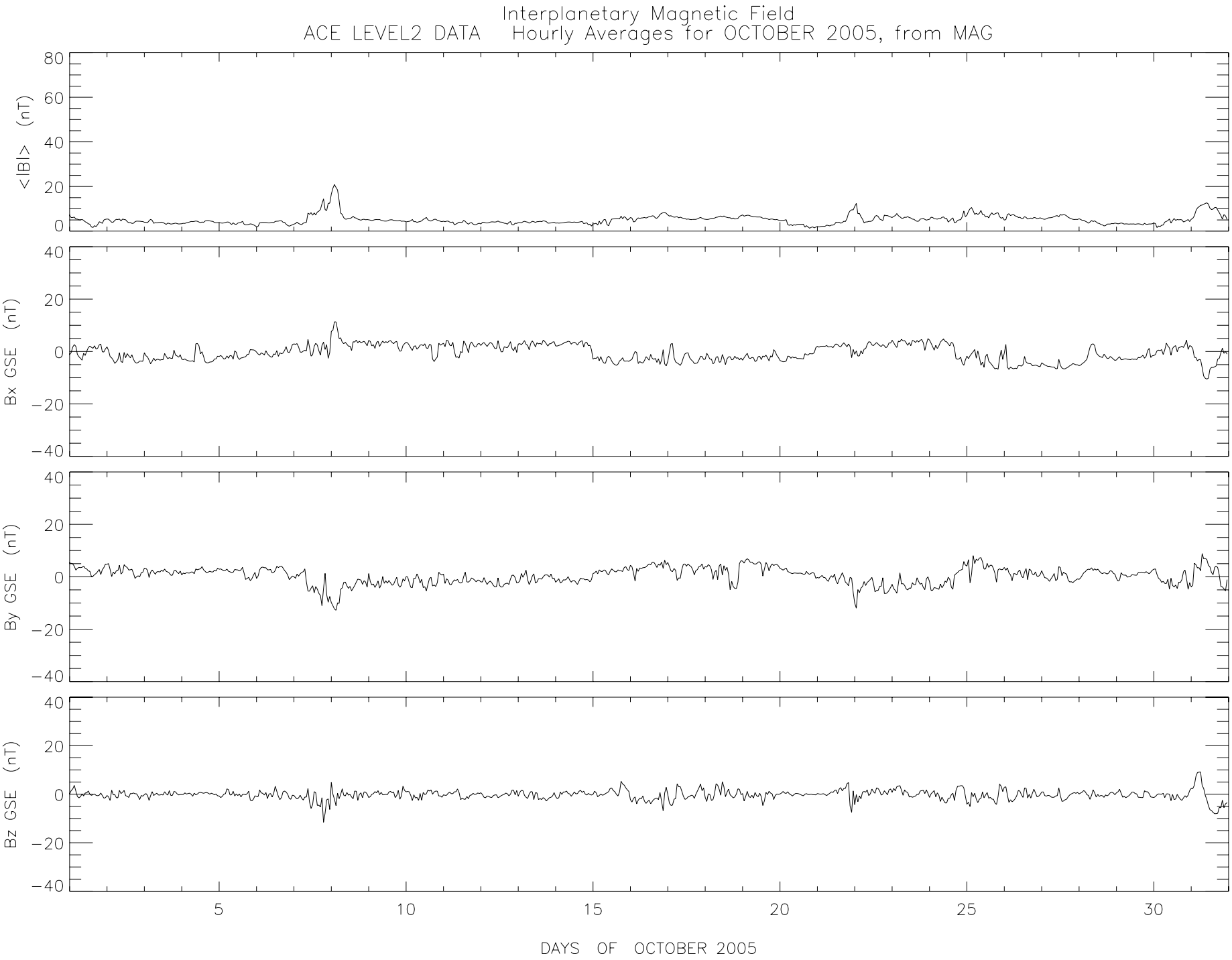
NOTE: The U.S. Air Force solar observing sites (HOLL, LEAR, RAMY, AND SVTO) have changed operational requirements and will only report the following: BSL, EPL, LPS, SPY, and DSF's.

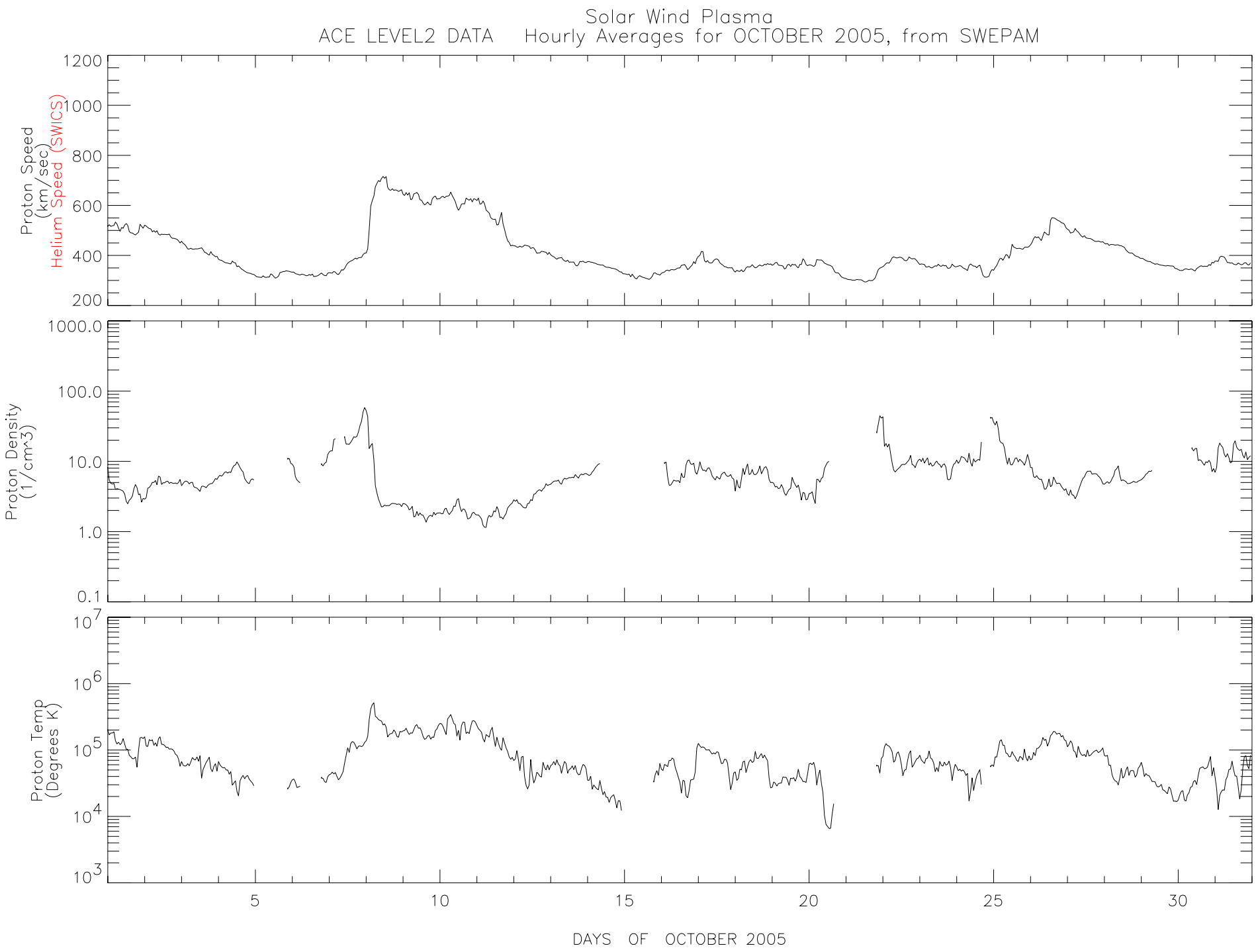
NOAA Solar Ultraviolet (UV) MgII Core-to-Wing Index
Nov 2004 - Oct 2005
Version 9.1

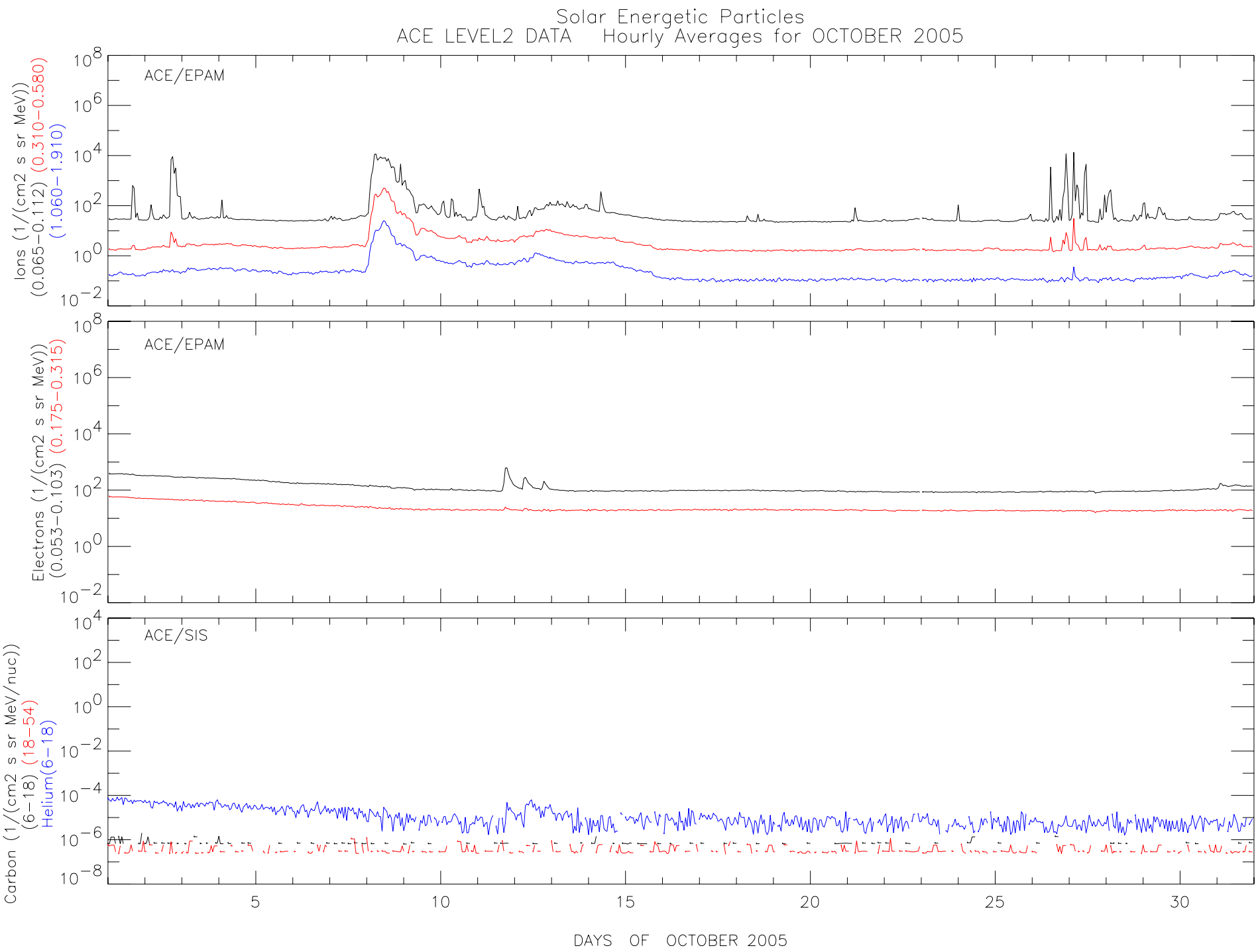


Day	Nov04	Dec	Jan 05	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1	0.2739	0.2729	0.2724	0.2687	0.2675	0.2677	0.2706	0.2718	0.2715	0.2729	0.2704	0.2677
2	0.2731	0.2723	---	0.2685	0.2673	0.2678	0.2707	0.2716	0.2726	0.2733	0.2699	0.2674
3	0.2729	0.2724	0.2707	0.2683	0.2673	0.2685	0.2718	0.2710	0.2732	0.2729	0.2689	0.2673
4	0.2725	0.2720	0.2702	0.2682	0.2674	0.2689	0.2720	0.2708	0.2738	0.2725	---	0.2677
5	0.2722	0.2714	0.2697	0.2683	0.2677	---	0.2719	0.2712	0.2739	0.2717	---	0.2683
6	0.2728	0.2709	0.2694	0.2691	0.2681	0.2699	0.2721	0.2715	0.2737	0.2706	0.2676	0.2686
7	0.2721	0.2705	0.2693	0.2701	0.2687	0.2706	0.2715	0.2717	0.2730	0.2700	0.2674	0.2694
8	0.2721	0.2702	0.2691	0.2709	0.2693	0.2706	---	0.2718	0.2726	0.2698	0.2678	0.2694
9	0.2717	0.2704	0.2687	0.2719	0.2698	0.2709	---	0.2716	0.2718	0.2691	0.2684	0.2696
10	0.2712	0.2702	0.2689	0.2724	0.2708	0.2712	---	---	0.2708	0.2684	0.2690	0.2697
11	0.2707	0.2702	0.2687	0.2725	0.2718	0.2708	---	0.2708	0.2702	---	0.2697	0.2699
12	0.2708	0.2702	0.2692	0.2732	0.2722	0.2706	---	0.2707	0.2694	0.2678	0.2702	0.2701
13	0.2708	0.2701	0.2698	0.2734	0.2725	0.2703	---	0.2699	0.2691	0.2676	0.2709	0.2699
14	0.2712	---	0.2707	0.2736	0.2726	0.2703	---	0.2690	---	0.2675	0.2714	0.2693
15	0.2713	0.2693	0.2716	0.2736	0.2725	0.2703	---	0.2690	0.2685	0.2674	0.2715	0.2693
16	0.2712	0.2692	0.2722	0.2732	0.2723	0.2700	---	0.2686	0.2681	0.2675	0.2716	0.2691
17	0.2715	---	0.2726	0.2728	0.2721	0.2699	---	0.2683	0.2679	0.2678	0.2715	0.2687
18	0.2712	0.2698	0.2728	0.2717	0.2712	0.2697	---	0.2685	0.2674	0.2681	0.2715	0.2688
19	0.2716	0.2700	0.2731	0.2712	0.2708	0.2692	---	0.2685	0.2672	0.2689	---	0.2690
20	0.2719	0.2704	0.2729	0.2706	0.2701	0.2689	---	0.2687	0.2674	0.2697	0.2708	0.2688
21	0.2721	0.2707	0.2729	0.2701	0.2699	0.2689	---	0.2688	0.2676	0.2702	0.2703	0.2688
22	0.2725	0.2714	0.2723	0.2698	0.2697	0.2685	---	0.2691	0.2677	0.2710	0.2705	0.2687
23	0.2724	0.2720	0.2718	0.2693	0.2692	0.2680	---	---	0.2682	0.2707	0.2704	0.2686
24	---	0.2727	0.2716	0.2689	0.2694	0.2681	---	0.2688	0.2688	0.2714	0.2702	0.2683
25	0.2735	0.2729	0.2710	0.2686	0.2693	0.2677	---	0.2690	0.2694	---	0.2701	0.2682
26	0.2737	0.2726	0.2707	0.2684	0.2690	0.2685	---	0.2692	0.2701	0.2720	0.2699	0.2679
27	0.2744	0.2724	0.2705	0.2677	0.2687	0.2689	---	0.2694	0.2702	0.2722	0.2692	0.2677
28	0.2745	0.2723	0.2697	0.2676	0.2684	0.2695	0.2702	0.2698	0.2707	0.2723	0.2686	0.2676
29	0.2741	0.2717	0.2695		0.2682	0.2697	0.2706	0.2702	0.2714	0.2720	0.2682	0.2674
30	0.2736	0.2716	0.2691		0.2680	0.2700	0.2710	0.2709	0.2720	0.2717	0.2679	0.2673
31		0.2716	0.2689		0.2678		0.2715		0.2724	0.2708		0.2677
Mean	0.2723	0.2723	0.2707	0.2707	0.2697	0.2694	0.2712	0.2700	0.2703	0.2703	0.2698	0.2686

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


Interplanetary Magnetic Field
ACE LEVEL2 DATA Hourly Averages for OCTOBER 2005, from MAG
<|B|> (nT)
Bx GSE (nT)
By GSE (nT)
Bz GSE (nT)
80
60
40
20
0
40
20
0
−20
−40
5
10
15
20
25
30
DAYS OF OCTOBER 2005


Solar Wind Plasma
ACE LEVEL2 DATA Hourly Averages for OCTOBER 2005, from SWEPAM
Proton Speed (km/sec)
Helium Speed (SWICS)
1200
1000
800
600
400
200
Proton Density (1/cm^3)
1000.0
100.0
10.0
1.0
0.1
Proton Temp (Degrees K)
10^7
10^6
10^5
10^4
10^3
5
10
15
20
25
30
DAYS OF OCTOBER 2005


Solar Energetic Particles
ACE LEVEL2 DATA Hourly Averages for OCTOBER 2005
ACE/EPAM
Ions (1/(cm2 s sr MeV))
(0.065–0.112) (0.310–0.580)
(1.060–1.910)
ACE/EPAM
Electrons (1/(cm2 s sr MeV))
(0.053–0.103) (0.175–0.315)
ACE/SIS
Carbon (1/(cm2 s sr MeV/nuc))
(6–18) (18–54)
Helium(6–18)
DAYS OF OCTOBER 2005

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

OCTOBER 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	
2005/10/02	00:30:05	131	70	65	0	133	244	2.4	117	
2005/10/02	05:30:05	82	24	333	377	291	0	-8.8*	84	
2005/10/02	15:30:05	329	5	669	----	----	----	------	324	2 points;Only C2
2005/10/02	18:54:05	184	4	243	----	----	----	------	184	2 points;Only C2
2005/10/02	19:31:45	283	22	294	7	608	2666	291.4*	282	3 points;Only C2
2005/10/02	21:54:05	236	2	----	----	----	----	------	238	1 point; Only C2
2005/10/02	23:06:52	93	22	705	----	----	----	------	93	2 points;Only C2
2005/10/03	00:54:05	183	3	469	----	----	----	------	185	2 points;Only C2
2005/10/03	06:30:05	184	3	360	264	449	1132	49.4*	183	3 points;Only C2
2005/10/03	17:06:07	183	5	431	----	----	----	------	181	2 points;Only C2
2005/10/03	19:54:05	282	46	495	385	616	635	10.4	288	
2005/10/04	05:54:05	126	52	309	264	359	438	5.1	129	
2005/10/04	09:06:05	86	15	484	502	466	318	-6.2*	89	
2005/10/04	18:26:05	152	16	123	70	173	678	18.9*	152	Only C2
2005/10/05	00:50:05	4	5	355	----	----	----	------	5	2 points;Only C2
2005/10/05	07:50:05	150	44	247	121	377	668	17.8	153	
2005/10/05	12:06:05	51	23	369	----	----	----	------	52	3 points;Only C2
2005/10/06	00:26:05	123	6	378	204	568	624	14.7	122	
2005/10/06	08:50:05	250	23	489	490	488	485	-0.2	254	
2005/10/06	14:26:05	127	123	234	170	303	632	15.2*	97	C2; Partial Halo
2005/10/07	06:26:05	313	10	448	85	760	1761	128.2*	309	
2005/10/07	16:06:05	50	19	254	104	405	373	6.3*	55	Only C3
2005/10/08	00:26:05	54	10	174	0	327	555	13.5*	61	
2005/10/08	01:27:18	189	35	183	116	245	464	8.4*	198	
2005/10/08	18:06:05	123	9	602	573	629	918	21.2*	121	3 points;Only C2
2005/10/08	22:06:05	286	16	293	325	264	0	-10.6*	283	Only 3 points
2005/10/09	16:50:05	104	41	173	188	158	63	-1.3*	107	
2005/10/10	13:27:17	93	5	422	704	150	0	-181.7*	93	Only 3 points
2005/10/11	18:26:05	271	68	250	237	264	344	2.6*	290	
2005/10/12	03:06:05	219	20	449	400	501	528	5.7	222	
2005/10/12	06:26:05	269	69	228	219	238	274	1.1	272	
2005/10/12	19:27:18	275	52	354	350	358	417	2.1*	281	Only C2
2005/10/12	21:26:09	247	58	576	640	506	467	-7.9	255	
2005/10/13	03:26:05	290	20	92	75	108	271	2.8*	287	Only C2
2005/10/13	23:26:05	175	5	243	----	----	----	------	175	Only C2
2005/10/14	16:26:05	122	8	329	277	384	1064	44.3*	117	3 points;Only C2
2005/10/15	02:26:06	223	40	385	306	470	709	16.9*	219	
2005/10/16	07:27:20	106	14	196	236	156	0	-11.1*	108	Only C2
2005/10/16	09:50:05	89	49	688	623	755	910	19.7*	100	
2005/10/17	23:29:57	129	6	473	----	----	----	------	126	2 points;Only C2
2005/10/18	16:29:58	105	5	498	----	----	----	------	106	2 points;Only C2

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

OCTOBER 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	
2005/10/18	17:06:05	132	6	455	420	490	877	24.3*	128	3 points;Only C2
2005/10/18	18:29:57	312	40	92	9	171	211	1.8*	308	
2005/10/19	05:29:56	345	6	778	----	----	----	------	341	2 points;Only C2
2005/10/19	08:53:58	347	5	----	----	----	----	------	344	1 point; Only C2
2005/10/19	13:31:48	333	28	82	123	43	0	-17.2*	323	Only C2
2005/10/20	15:36:41	135	6	348	----	----	----	------	134	2 points;Only C2
2005/10/21	07:48:02	189	3	810	----	----	----	------	193	2 points;Only C2
2005/10/21	08:13:40	79	28	314	262	368	597	12.0	80	
2005/10/21	11:58:07	30	5	573	22	1184	3537	516.0*	34	3 points;Only C2
2005/10/21	17:26:51	282	23	241	152	336	770	24.2*	283	Only C2
2005/10/22	06:30:05	Halo	360	253	95	408	433	7.5	247	
2005/10/22	08:06:05	45	8	402	384	420	620	9.9*	49	3 points;Only C2
2005/10/22	20:58:42	347	11	114	97	131	233	1.8*	346	
2005/10/23	08:06:05	203	53	178	82	274	1143	52.9*	213	Only C2
2005/10/23	18:30:05	10	47	110	127	92	0	-2.8*	358	Only C2
2005/10/24	02:54:05	301	34	159	122	196	566	12.6*	296	Only C2
2005/10/24	04:30:05	305	18	375	213	539	746	22.0*	297	
2005/10/24	04:54:05	296	61	227	9	451	401	6.5	305	
2005/10/24	15:54:05	172	132	81	0	158	229	2.2*	160	Partial Halo
2005/10/24	17:30:05	89	30	366	63	647	857	30.8	85	
2005/10/25	07:31:42	150	110	271	24	502	613	15.6	137	
2005/10/26	11:30:06	237	101	119	0	299	370	5.7	251	
2005/10/27	01:31:43	271	9	465	373	565	1538	93.1*	272	3 points;Only C2
2005/10/27	04:30:05	55	4	541	----	----	----	------	55	2 points;Only C2
2005/10/27	05:06:06	276	8	259	244	273	548	10.0*	273	3 points;Only C2
2005/10/27	10:30:17	124	15	746	567	943	2075	174.6*	124	3 points;Only C2
2005/10/27	15:30:05	55	7	519	300	733	1157	53.3	58	
2005/10/27	18:54:05	242	29	188	0	420	844	29.0*	243	
2005/10/28	14:06:28	221	18	251	302	207	0	-12.0*	233	
2005/10/28	14:30:06	66	4	344	183	505	971	39.0*	70	
2005/10/28	17:54:05	135	61	107	13	248	686	19.6*	137	Only C2
2005/10/28	22:30:05	135	66	144	60	234	569	13.2	134	Only C2
2005/10/29	16:30:05	238	29	151	43	244	533	11.6*	238	
2005/10/29	23:30:05	269	63	258	----	----	----	------	269	Only C2
2005/10/31	16:30:05	227	3	358	----	----	----	------	232	2 points;Only C2

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.