

MARCH 2004 NUMBER 715 - Part II

# Solar-Geophysical Data comprehensive reports



Data for September 2003 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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MARCH 2004 NUMBER 715 - Part II

# **Solar-Geophysical Data comprehensive reports**

Data for September 2003 and Late Data

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**NATIONAL GEOPHYSICAL DATA CENTER**

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Boulder, Colorado

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# SOLAR-GEOPHYSICAL DATA

Number 715

(Issued in Two Parts)

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<b>ACE SOLAR WIND, INTERPLANETARY MAGNETIC FIELD AND PARTICLES</b>	
<b>-- MONTHLY PLOTS</b>	

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SEPTEMBER 2003

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement		Remarks	
															Time (UT)	Apparent (10-6 Disk)		Corr (Sq Deg)
			01 1831		1849			No Flare	Patrol									
			01 2342		2400			No Flare	Patrol									
			02 0000		0034			No Flare	Patrol									
			02 0934		0949			No Flare	Patrol									
			02 1153		1444			No Flare	Patrol									
			02 1459		1548			No Flare	Patrol									
			02 1620		1628			No Flare	Patrol									
			02 1713		1722			No Flare	Patrol									
			02 1907		1938			No Flare	Patrol									
			02 2151		2204			No Flare	Patrol									
			02 2212		2245			No Flare	Patrol									
			02 2258		2345			No Flare	Patrol									
0001	LEAR	03	0113	0115	0117	S06	W58	10442	08	29.8	4	SF		3	E		10	
0002	KANZ	03	0639	0641	0642	N20	W37	10448	08	31.4	3	SF		2	E			
			03 0953		0955			No Flare	Patrol									
			03 0957		0959			No Flare	Patrol									
			03 1004		1005			No Flare	Patrol									
			03 1109		1110			No Flare	Patrol									
			03 1122		1128			No Flare	Patrol									
			03 1219		1222			No Flare	Patrol									
			03 1224		1229			No Flare	Patrol									
			03 1231		1258			No Flare	Patrol									
			03 1336		1345			No Flare	Patrol									
			03 1350		1356			No Flare	Patrol									
			03 1401		1413			No Flare	Patrol									
			03 1508		1524			No Flare	Patrol									
			03 1701		1731			No Flare	Patrol									
			03 1737		1820			No Flare	Patrol									
			03 2051		2104			No Flare	Patrol									
0003	KANZ	04	1532	1534	1535	S22	W37	10453	09	1.8	3	SF		2	E			
			04 1654		1743			No Flare	Patrol									
			04 2038		2042			No Flare	Patrol									
			04 2135		2145			No Flare	Patrol									
			05 0140		0151			No Flare	Patrol									
			05 0224		0231			No Flare	Patrol									
			05 0253		0402			No Flare	Patrol									
			05 1646		1651			No Flare	Patrol									
			05 1658		1721			No Flare	Patrol									
			05 1935		1957			No Flare	Patrol									
			05 2355		2400			No Flare	Patrol									
			06 0000		0029			No Flare	Patrol									
			06 1004		1006			No Flare	Patrol									
			06 1041		1043			No Flare	Patrol									
			06 1045		1046			No Flare	Patrol									
			06 1050		1142			No Flare	Patrol									
			06 1145		1154			No Flare	Patrol									
			06 1224		1230			No Flare	Patrol									
			06 1248		1259			No Flare	Patrol									
			06 1301		1314			No Flare	Patrol									
			06 1316		1323			No Flare	Patrol									
			06 1510		1516			No Flare	Patrol									
			06 1528		1535			No Flare	Patrol									
			06 1613		1638			No Flare	Patrol									
			06 2148		2400			No Flare	Patrol									
			07 0000		0027			No Flare	Patrol									
			07 0105		0227			No Flare	Patrol									
			07 0247		0314			No Flare	Patrol									
			07 1258		1300			No Flare	Patrol									
0004		07	1403	1404	1433	S18	W64	10450	09	2.7	30	SF				64		F
	HOLL	07	1403	1404	1433	S16	W69	10450	09	2.3	30	SF	3	E		82		F
	SVTO	07	1405E	1405U	1408D	S19	W60	10450	09	3.0	3D	SF	2	E		47		
0005	KANZ	07	1409	1415	1443	S17	W58	10450	09	3.2	34	SF		2	E			

SEPTEMBER 2003

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Xray Opt	Obs See	Type	Area Measurement		Remarks
															Time (UT)	Apparent (10-6 Disk)	
			07 2112		2356			No Flare	Patrol								
			08 0014		0114			No Flare	Patrol								
			08 0916		1301			No Flare	Patrol								
			08 1541		1646			No Flare	Patrol								
			09 0132		0253			No Flare	Patrol								
			09 1019		1030			No Flare	Patrol								
			09 1542		1552			No Flare	Patrol								
			09 1621		1625			No Flare	Patrol								
			09 1639		1654			No Flare	Patrol								
			09 1959		2400			No Flare	Patrol								
			10 0000		0037			No Flare	Patrol								
			10 0230		0537			No Flare	Patrol								
			10 0705		0731			No Flare	Patrol								
			10 0736		0742			No Flare	Patrol								
			10 0929		1028			No Flare	Patrol								
			10 1035		1059			No Flare	Patrol								
			10 1136		1137			No Flare	Patrol								
			10 1352		1353			No Flare	Patrol								
			10 1357		1402			No Flare	Patrol								
			10 1404		1427			No Flare	Patrol								
			10 1636		1650			No Flare	Patrol								
			10 1753		1806			No Flare	Patrol								
			10 1843		1915			No Flare	Patrol								
			10 2150		2200			No Flare	Patrol								
			10 2223		2242			No Flare	Patrol								
0006	LEAR	10	2330	2331	2347	S07 W18	10456	09	9.6	17	SF		3	E		25	F
			12 0509		0616	No Flare	Patrol										
			12 0619		0620	No Flare	Patrol										
0007		12	1524	1524	1528	S06 W41	10456	09	9.6	4	SF					16	F
	SVTO	12	1524E	1524	1528D	S06 W41	10456	09	9.6	4D	SF		3	E		12	F
	HOLL	12	1524	1524	1528	S07 W41	10456	09	9.6	4	SF		3	E		21	F
0008	LEAR	13	0658	0702	0712	S07 W50	10456	09	9.5	14	SF		2	E		33	F
0009	LEAR	13	0738	0741	0829	S06 W52	10456	09	9.4	51	SF		2	E		77	F
			13 0937		0940	No Flare	Patrol										
			13 0942		0945	No Flare	Patrol										
0010	LEAR	14	0124	0125	0143	S07 W61	10456	09	9.5	19	SF		3	E		62	F
0011	KHAR	14	0855	0858	0906	S11 W63	10456	09	9.6	11	SF		2	P	0904	30	D
			14 1005		1023	No Flare	Patrol										
			14 1025		1026	No Flare	Patrol										
0012	HOLL	14	2239	2241	2248	S08 W73	10456	09	9.5	9	SF		3	E		44	
0013	LEAR	15	0058	0103	0117	S07 W77	10456	09	9.3	19	1F		3	E		107	F
0014	KHAR	15	0930	0934	0943	S15 W62	10457	09	10.7	13	SF		2	P	0934	45	D
0015	KANZ	16	0829	0830	0839	S10 E19	10459	09	17.8	10	SF		2	E			
0016	KHAR	16	1035	1037	1044	S10 W90	10456	09	9.7	9	SF		2	P	1038	50	DH
0017		16	1055	10592	1110	S10 E20	10459	09	17.9	15	1F					110	E
	KANZ	16	1055	1059	1110	S10 E18	10459	09	17.8	15	SF		2	E			
	KHAR	16	1057U	1101	1108D	S09 E21	10459	09	18.0	11U	1F		2	P	1101	110	E
0018	LEAR	17	0503	0515	0532	S12 E09	10459	09	17.9	29	SF		3	E		27	F
0019	KANZ	17	1437	1439	1447	N13 W47	10461	09	14.1	10	SF		2	E			
0020	KANZ	18	0544	0549	0600	S10 W50	10462	09	14.5	16	SF		2	E			

6  
Sep 03

H $\alpha$  SOLAR FLARES

SEPTEMBER 2003

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	Time (UT)	Area Apparent (10 <sup>-6</sup> Disk)	Measurement Corr (Sq Deg)	Remarks
0021	KANZ	18	0743	0745	0747	S10	W50	10462	09	14.6	4	SF		2	E				
0022	KANZ	18	0908	0908	0913	S10	W50	10462	09	14.6	5	SF		2	E				
0023	KANZ	18	1239	1249	1253	S11	W11	10459	09	17.7	14	SF		2	E				
0024	KANZ	19	0930	0932	0940	S10	W19	10459	09	18.0	10	SF		2	E				
		19	1628		1629	No Flare	Patrol												
		20	0101		0509	No Flare	Patrol												
0025	KHAR	20	0905E		0914	N08	E80	10464	09	26.4	9D	SF		2	P				
0026	KHAR	20	1108		1120D	N09	W90	10461	09	13.7	12D	SN		2	P				H
		20	2128		2244	No Flare	Patrol												
		21	0023		0211	No Flare	Patrol												
		21	0234		0241	No Flare	Patrol												
		21	0448		0503	No Flare	Patrol												
0027	KHAR	22	0918		0926	N01	E79	10466	09	28.3	8	SF		2	P	0921	20		D
		22	1641		1953	No Flare	Patrol												
		22	2019		2057	No Flare	Patrol												
		22	2131		2249	No Flare	Patrol												
		22	2312		2317	No Flare	Patrol												
0028		23	06141	0615	0620	N06	E38	10464	09	26.1	6	SF					32		
	KANZ	23	0614	0615	0621	N08	E37	10464	09	26.0	7	SF	2	E					
	LEAR	23	0615	0615	0619	N03	E38	10464	09	26.1	4	SF	3	E				32	
0029	KANZ	23	1143	1146	1147	N01	E43	10465	09	26.7	4	SF		2	E				
0030	SVTO	23	1443	1443	1448	N01	E42	10464	09	26.7	5	SF		3	E				18
		23	1626		1645	No Flare	Patrol												
		23	1809		2117	No Flare	Patrol												
0031	LEAR	24	0434	0434	0444	N01	E23	10464	09	25.9	10	SF		3	E			43	FH
0032	SVTO	24	0532	0532	0534	N02	E23	10464	09	25.9	2	SF		3	E			10	
0033		24	0625	06291	0636	N01	E22	10464	09	25.9	11	SF						52	FH
	SVTO	24	0625	0629	0635	N01	E22	10464	09	25.9	10	SF	3	E				64	FH
	LEAR	24	0625	0630	0636	N01	E23	10464	09	26.0	11	SF	3	E				41	FH
0034		24	07151	0717	0724	N01	E20	10464	09	25.8	9	1N						184	FH
	SVTO	24	0715	0717	0725	N01	E20	10464	09	25.8	10	1N	3	E				188	
	LEAR	24	0716	0717	0723	N01	E20	10464	09	25.8	7	1F	3	E				179	FH
0035		24	08541	08551	0900	N01	E20	10464	09	25.9	6	SF						42	FH
	SVTO	24	0854	0855	0901	N01	E20	10464	09	25.9	7	SF	3	E				68	FH
	LEAR	24	0855	0856	0858	N01	E21	10464	09	25.9	3	SF	3	E				15	FH
0036	SVTO	24	0933	0935	0942	N00	E21	10464	09	26.0	9	SF		3	E			51	H
0037		24	0952	0954	1016	N02	E20	10464	09	25.9	24	SF						30	FHL
	KHAR	24	0945E		1028	N03	E21	10464	09	26.0	43D	SF	2	P					L
	SVTO	24	0952	0954	1003	N01	E20	10464	09	25.9	11	SF	3	E				30	FH
0038		24	10352	10391	1045	N03	E18	10464	09	25.8	10	SN						56	HO
	KHAR	24	1035	1039	1045	N04	E19	10464	09	25.9	10	SN	3	P	1039			55	HO
	SVTO	24	1037	1040	1045	N02	E18	10464	09	25.8	8	SF	3	E				58	H
0039	KHAR	24	1106		1112	N03	E19	10464	09	25.9	6	SF		3	P	1109		25	DH
0040	SVTO	24	1156	1157	1201	N01	E19	10464	09	25.9	5	SF		3	E			95	FH
0041	SVTO	24	1253	1254	1258	N01	E18	10464	09	25.9	5	SF		3	E			78	H



SEPTEMBER 2003

Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF		Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
							Region	Mo Day							Apparent (10-6 Disk)	Corr (Sq Deg)	
		24 1419		1434			No Flare Patrol										
0042		24 15271	15291	1533	N02	E17	10464	09	25.9	6	SF				58		FH
	HOLL	24 1527	1530	1534	N02	E17	10464	09	25.9	7	SF	3	E		62		FH
	SVTO	24 1528	1529	1532	N01	E17	10464	09	25.9	4	SF	3	E		55		FH
0043	HOLL	24 1738	1740	1743	N01	E17	10464	09	26.0	5	SF	3	E		37		FH
		24 1959		2051			No Flare Patrol										
		24 2101		2249			No Flare Patrol										
0044	LEAR	24 2323	2323	2328	N02	E11	10464	09	25.8	5	SF	3	E		16		
		25 0033		0044			No Flare Patrol										
0045	KANZ	25 0701	0703	0706	N02	E18	10464	09	26.6	5	SF	2	E				
0046	KANZ	25 1006	1009	1014	N03	E03	10464	09	25.6	8	SF	2	E				
		25 1617		1619			No Flare Patrol										
		25 1637		2156			No Flare Patrol										
		25 2249		2254			No Flare Patrol										
0047	KANZ	26 1206	1218	1224	N01	W01	10464	09	26.4	18	SF	2	E				
0048		26 14522	1455	1500	N03	W03	10464	09	26.4	8	SF				15		
	KANZ	26 1452	1455	1501	N02	W03	10464	09	26.4	9	SF	2	E				
	HOLL	26 1454	1455	1501	N05	W04	10464	09	26.3	7	SF	3	E		16		
	SVTO	26 1455E	1455U	1458	N03	W03	10464	09	26.4	3D	SF	2	E		14		
0049	HOLL	26 1751	1751	1758	N05	W06	10464	09	26.3	7	SF	3	E		34		
0050	KANZ	27 0825	0825	0826	N03	W20	10464	09	25.8	1	SF	2	E				
0051	KANZ	27 1141	1143	1151	N02	W14	10464	09	26.4	10	SF	2	E				
0052	SVTO	27 1142	1143	1150	N14	W20	10464	09	26.0	8	SF	3	E		40		F
0053	KANZ	27 1156	1209	1223	N04	W17	10464	09	26.2	27	SF	2	E				
0054	SVTO	27 1201	1205	1223	N16	W23	10464	09	25.7	22	SF	3	E		19		FH
0055	KANZ	27 1242	1244	1249	N06	W10	10464	09	26.8	7	SF	2	E				
0056	SVTO	27 1244	1247	1250	N17	W16	10464	09	26.3	6	SF	3	E		23		H
0057	KANZ	28 0810	0813	0822	N04	W25	10464	09	26.5	12	SF	2	E				
0058	KANZ	28 1107	1114	1117	N05	W30	10464	09	26.2	10	SF	2	E				
0059	HOLL	28 1553	1555	1620	N03	W34	10464	09	26.1	27	SF	3	E		30		F
0060	HOLL	28 2036	2037	2042	N05	W37	10464	09	26.1	6	SF	3	E		24		
		29 0033		0137			No Flare Patrol										
		29 0143		0149			No Flare Patrol										
		29 0942		1316			No Flare Patrol										
0061	HOLL	29 1731	1737	1742	N03	W37	10464	09	27.0	11	SF	3	E		25		F
0062	HOLL	29 2007	2015	2021	N04	W45	10464	09	26.5	14	SF	3	E		19		F
0063	HOLL	29 2144	2145	2223	N03	W39	10464	09	27.0	39	1F	3	E		107		F
0064	LEAR	30 0029	0032	0049	N09	W40	10464	09	27.0	20	SF	3	E		36		
		30 0434		0445			No Flare Patrol										
0065	LEAR	30 0512	0512	0525	N04	W43	10464	09	27.0	13	SF	3	E		50		F

SEPTEMBER 2003

Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area (10 <sup>-6</sup> Disk)	Measurement Apparent	Corr (Sq Deg)	Remarks
0066		30 0757	0759	0810	N02	W48	10464	09	26.7	13	SF						84		E
	LEAR	30 0757	0801	0808	N06	W52	10464	09	26.4	11	SF		3	E			19		
	KANZ	30 0758	0759	0809	N00	W46	10465	09	26.9	11	SF		2	E					
	KHAR	30 0800E		0812	N01	W46	10465	09	26.9	12D	1F		3	P	0806		150		E
0067	KHAR	30 0842	0843	0850	S03	E80	10473B10		6.3	8	SF		3	P	0845		30		DH
0068		30 0844	0851	0908	N08	W44	10464	09	27.1	24	1F						160		FHO
	KHAR	30 0844	0854	0915	N06	W44	10464	09	27.1	31	1N		3	P	0855		210		HO
	KANZ	30 0848	0851	0904	N08	W44	10464	09	27.1	16	1F		2	E					
	LEAR	30 0849	0853	0905	N09	W45	10464	09	27.0	16	1F		3	E			111		F
0069	KHAR	30 0956	0958	1006	S03	E80	10473B10		6.4	10	SF		3	P					D
0070	KHAR	30 1024	1026	1033	N03	W50	10464	09	26.7	9	SF		3	P	1028		40		DO
		30 1041		1042			No Flare												Patrol
		30 1110		1112			No Flare												Patrol
		30 1117		1118			No Flare												Patrol
		30 1124		1125			No Flare												Patrol
		30 1134		1150			No Flare												Patrol
		30 1158		1159			No Flare												Patrol
		30 1201		1206			No Flare												Patrol
		30 1215		1216			No Flare												Patrol
		30 1229		1230			No Flare												Patrol
		30 1311		1312			No Flare												Patrol
0071	HOLL	30 2017	2019	2023	S02	E75	10471	10	6.4	6	SF		3	E			29		F
0072	HOLL	30 2320	2321	2349	N05	W61	10464	09	26.4	29	SF		3	E			27		F
0073	LEAR	30 2322	2322	2343	N04	W53	10464	09	27.0	21	SF		3	E			10		F

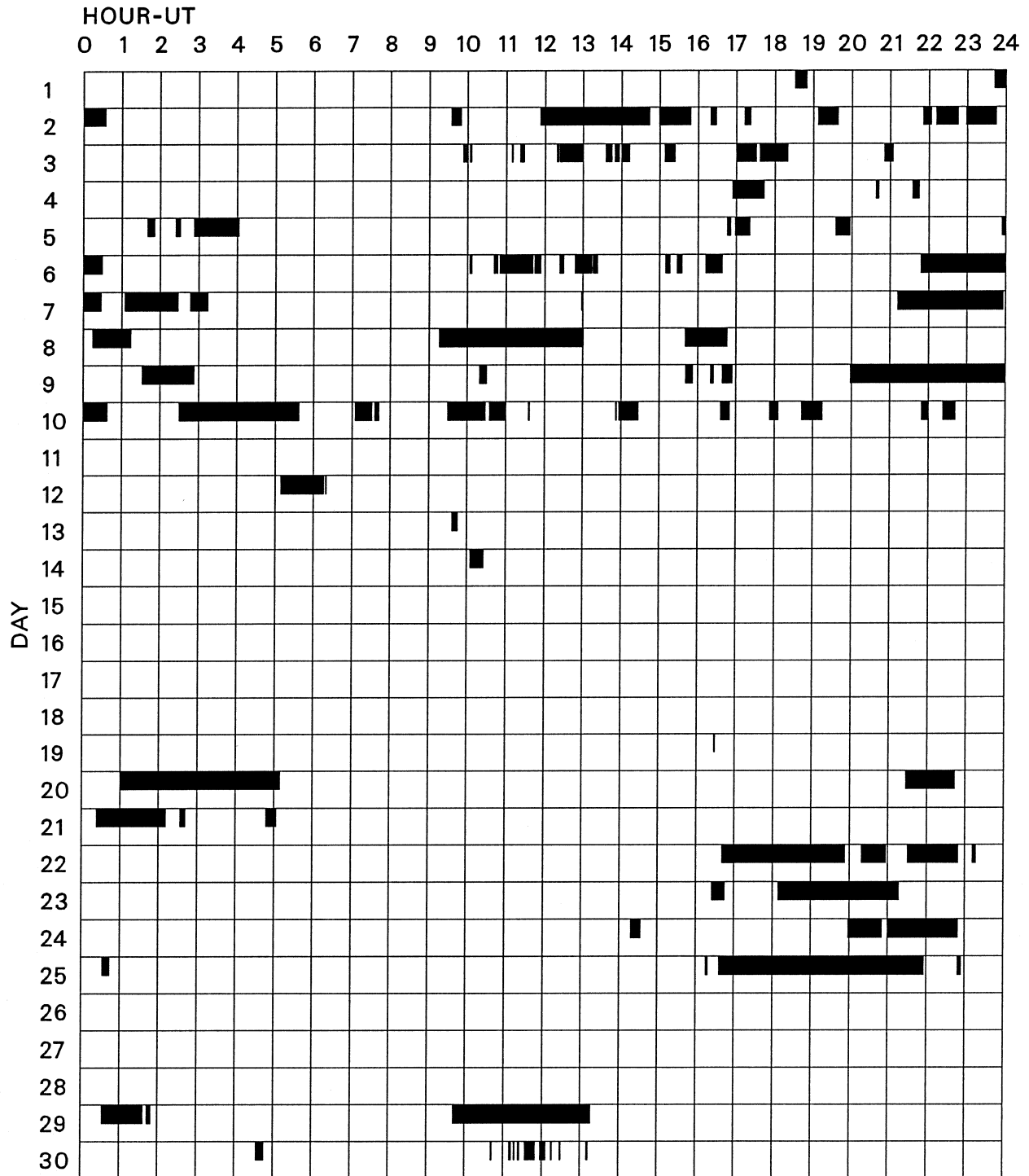
"Remarks"

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

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

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

## SEPTEMBER 2003



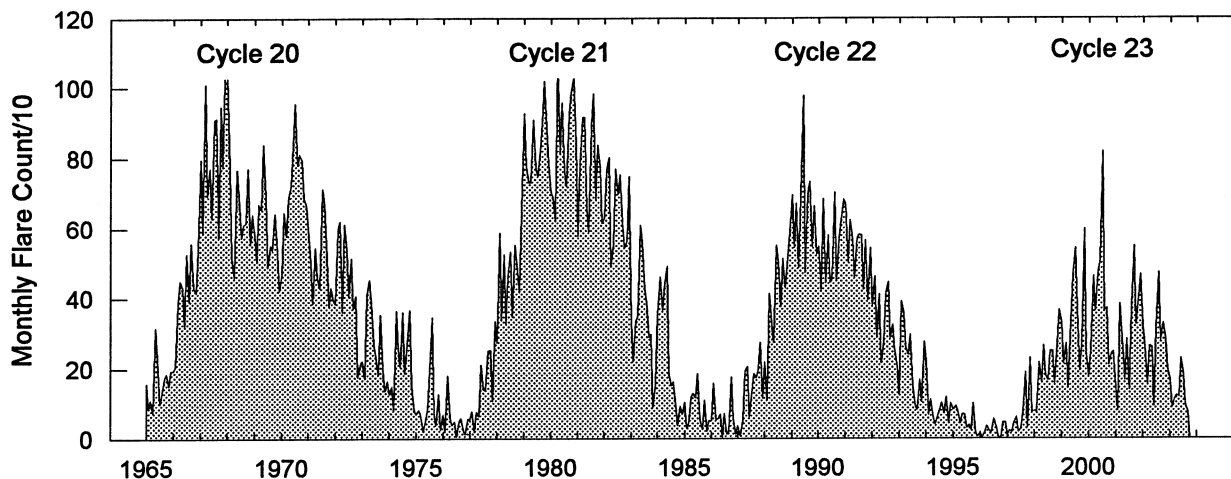
Times of no flare patrol, shown here as shaded areas, combine reports from the stations listed below. Portions of a panel completely shaded mark dates and times of no patrol of any kind (neither visual or cinematographic); portions of a panel with only the bottom half shaded mark times of only visual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

Holloman  
Kankelhoehe

Learmonth  
Kharkov

San Vito

## Monthly Counts of Grouped Solar Flares Jan 1965 - Sep 2003



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				1176

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

11  
Sep 03

SEPTEMBER 2003

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 (2 Hz)		
01	245	SVTO	8 S	0602.0	0602.0	U	57.0			QL=4 ST=4 TYP=3
		SVTO	8 S	0602.0	0602.0	U	57.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	1019.6	1019.8	0.8	80.0			
		IZMI	42 SER	1020.6	1020.9	0.8	26.0			
	204	IZMI	42 SER	1034.2	1034.6	0.9	45.0			
	204	IZMI	7 C	1041.3	1041.4	0.3	9.0			
	245	SGMR	8 S	1222.0	1222.0	U	51.0			QL=4 ST=2 TYP=3
SVTO		8 S	1222.0	1222.0	U	51.0			QL=4 ST=2 TYP=3	
02	127	TORN	43 NS	0747.0		373.0		10.0		V=0
03	127	TORN	43 NS	0700.0		300.0		10.0		V=0
	235	CUBA	44 NS	1300.0E		525.0D		7.0		
	245	PALE	8 S	0131.0	0132.0	1.0	100.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0338.0	0338.0	U	330.0			QL=4 ST=2 TYP=3
		PALE	8 S	0338.0	0338.0	U	380.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0809.8	0810.4	1.0	20.0			
	33	UPIC	45 C	0946.5	0947.8	2.0				
IZMI		41 F	0947.7	0947.8	0.3	16.0				
04	127	TORN	43 NS	0700.0		420.0		13.0		V=1
		CUBA	44 NS	1300.0E		525.0D		17.0		
	204	IZMI	42 SER	0824.1	0824.6	1.0	20.0			
	204	IZMI	42 SER	0828.7	0829.3	2.1	29.0			
	204	IZMI	42 SER	0834.2	0834.6	0.7	74.0			
05	235	CUBA	44 NS	1315.0E		345.0D		7.0		
		CUBA	44 NS	1315.0E		345.0D		16.0		
	245	LEAR	8 S	0448.0	0448.0	U	58.0			QL=4 ST=2 TYP=3
		SVTO	8 S	0448.0	0448.0	U	51.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	0654.9	0654.9	0.1	16.0			
	245	SVTO	8 S	0740.0	0741.0	1.0	260.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0807.0	0807.0	U	130.0			QL=4 ST=2 TYP=3
	2840	PEKG	1 S	2319.0	2322.7	8.0	5.8			
06	127	TORN	44 NS	0600.0E		240.0D		9.0		V=0
	204	IZMI	42 SER	0917.2	0917.4	0.6	14.0			
07	127	TORN	43 NS	0705.0		175.0D		7.0		V=0
	245	PALE	43 NS	2217.0	2230.0	54.0	88.0			QL=4 ST=2 TYP=1
		PALE	43 NS	2217.0	2222.0	103.0	55.0			QL=4 ST=1 TYP=1
		PALE	43 NS	2217.0	2222.0	103.0	57.0			QL=4 ST=1 TYP=1
		PALE	43 NS	2217.0	2230.0	103.0	88.0			QL=4 ST=1 TYP=1
	204	IZMI	7 C	1016.8	1016.9	0.4	12.0			
	204	IZMI	7 C	1046.7	1046.8	0.2	46.0			
	204	IZMI	42 SER	1146.1	1146.2	0.4	24.0			
	8800	SVTO	8 S	1201.0	1201.0	U	96.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1403.0	1404.0	1.0	180.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1403.0	1404.0	2.0	160.0			QL=4 ST=2 TYP=3
	127	TORN	4 S/F	1403.0	1404.2	2.9	470.0	160.0		
	410	SGMR	8 S	1404.0	1404.0	U	29.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	1404.0	1404.0	U	29.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1404.0	1404.0	U	32.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	1404.0	1404.0	U	23.0			QL=4 ST=2 TYP=3
	1415	SVTO	8 S	1404.0	1404.0	1.0	27.0			QL=4 ST=2 TYP=3
2695	SVTO	8 S	1404.0	1404.0	1.0	31.0			QL=4 ST=2 TYP=3	
4995	SVTO	8 S	1404.0	1404.0	U	24.0			QL=4 ST=2 TYP=3	
33	UPIC	45 C	1404.5	1405.5	2.5					
280	CUBA	7 C	1409.2	1416.5	11.8	35.0U	18.0U			
	CUBA	7 C	1409.2	1414.6	11.8	19.0	10.0			
	410	SVTO	8 S	1416.0	1417.0	1.0	60.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	2325.0	2325.0	U	65.0			QL=4 ST=2 TYP=3
08	127	TORN	43 NS	0820.0		100.0		7.0		V=0
	204	IZMI	42 SER	0726.0	0726.2	0.5	15.0			
	245	LEAR	8 S	2339.0	2339.0	U	55.0			QL=4 ST=2 TYP=3
09	127	TORN	43 NS	0710.0		150.0		8.0		V=0
	3000	IZMI	20 GRF	0737.5	0739.3	2.0	12.0	5.6		

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

SEPTEMBER 2003

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		
09	9500 CUBA	1 S	1444.5	1444.8	1.2	17.0	8.0		
10	127 TORN	43 NS	0712.0		198.0		7.0	V=0	
	2840 PEKG	1 S	0611.0	0614.5	6.0	3.6			
11	127 TORN	43 NS	0715.0		465.0		7.0	V=0, DISTURBED	
	500 HIRA	8 S	0716.0	0716.0	1.0	100.0		0	
	610 LEAR	8 S	0716.0	0716.0	U	85.0		QL=4 ST=2 TYP=3	
	610 SVTO	8 S	0716.0	0716.0	U	98.0		QL=4 ST=2 TYP=3	
12	127 TORN	43 NS	0715.0		315.0		7.0	V=0	
	33 UPIC	3 S	0803.0	0804.0	1.5				
	33 UPIC	3 S	0824.5	0825.0	1.0				
	2840 PEKG	1 S	0947.0	0950.3	7.0	2.3			
	245 PALE	8 S	1941.0	1941.0	1.0	180.0		QL=4 ST=4 TYP=3	
	245 PALE	8 S	1941.0	1941.0	1.0	180.0		QL=4 ST=2 TYP=3	
	410 PALE	8 S	1941.0	1941.0	U	78.0		QL=4 ST=4 TYP=3	
	410 PALE	8 S	1941.0	1941.0	U	78.0		QL=4 ST=2 TYP=3	
	610 PALE	8 S	1942.0	1942.0	U	73.0		QL=4 ST=2 TYP=3	
	13	2840 PEKG	1 S	0734.0	0739.3	7.0	6.4		
2840 PEKG		1 S	0952.0	0954.6	5.0	6.5			
33 UPIC		42 SER	1134.5	1135.0	38.5			UNCERTN	
14	127 TORN	43 NS	0820.0		140.0		8.0	V=0	
	2840 PEKG	3 S	0121.0	0124.8	10.0	22.3			
	2804 VORO	3 S	0123.3	0124.6	5.0	22.3			
15	127 TORN	43 NS	0720.0		310.0		7.0	V=0	
	33 UPIC	45 C	1416.0	1416.8	1.5				
	33 UPIC	46 C	1454.5	1455.0	2.0				
16	127 TORN	44 NS	0640.0E		440.0D		6.0	V=1	
	245 LEAR	8 S	0011.0	0011.0	U	53.0		QL=4 ST=2 TYP=3	
	2840 PEKG	1 S	0111.0	0114.5	6.0	4.3			
	204 IZMI	42 SER	0734.0	0734.1	0.9	20.0			
	2840 PEKG	1 S	0829.0	0832.9	7.0	6.6			
17	204 IZMI	43 NS	0600.0		360.0D		10.0		
	127 TORN	43 NS	0813.0		317.0		6.0	V=0	
	235 CUBA	44 NS	1320.0E		400.0D		10.0		
	280 CUBA	44 NS	1320.0E		400.0D		20.0		
	500 HIRA	8 S	0410.0	0410.0	1.0	10.0		0	
	500 HIRA	7 C	0502.0	0512.0	17.0	10.0		0	
18	127 TORN	43 NS	0742.0		310.0		6.0	V=0	
	235 CUBA	44 NS	1330.0E		500.0D		5.0		
	280 CUBA	44 NS	1330.0E		500.0D		22.0		
	500 HIRA	8 S	0036.0	0036.0	1.0	10.0		0	
	204 IZMI	42 SER	1018.2	1032.0	35.0	82.0			
19	127 TORN	44 NS	0620.0E		440.0D		9.0	V=0	
	235 CUBA	44 NS	1400.0E		300.0D		7.0		
	280 CUBA	44 NS	1400.0E		300.0D		21.0		
20	204 IZMI	43 NS	0600.0		360.0D		10.0		
	127 TORN	44 NS	0620.0E		403.0D		8.0	V=1	
	235 CUBA	44 NS	1315.0E		480.0D		7.0		
	280 CUBA	44 NS	1315.0E		480.0D		21.0		
	500 HIRA	7 C	0058.0	0059.0	3.0	10.0		0	
	500 HIRA	8 S	0319.0	0319.0	1.0	10.0		0	
	2840 PEKG	45 C	0934.0	0941.7	15.0	11.6			
	2800 PENT	21 GRF	1510.0	1526.0	82.0U	6.0			
	9500 CUBA	2 S/F	1524.8	1527.4	6.2	7.0	3.0		
	245 SGMR	8 S	1544.0	1544.0	U	63.0		QL=4 ST=2 TYP=3	
	245 SGMR	8 S	1550.0	1550.0	U	81.0		QL=4 ST=2 TYP=3	
	245 SVTO	8 S	1550.0	1550.0	U	57.0		QL=4 ST=2 TYP=3	
	245 PALE	8 S	1931.0	1931.0	U	92.0		QL=4 ST=2 TYP=3	
245 SGMR	8 S	1931.0	1931.0	U	60.0		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

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Sep 03

SEPTEMBER 2003

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		
20	[	245 SGMR	8 S	1946.0	1946.0	U	57.0			QL=4 ST=2 TYP=3
		245 PALE	8 S	1947.0	1947.0	U	68.0			QL=4 ST=2 TYP=3
		245 PALE	8 S	2030.0	2030.0	U	72.0			QL=4 ST=2 TYP=3
		500 HIRA	8 S	2207.0	2207.0	1.0	15.0			0
21	[	245 LEAR	43 NS	0102.0	0111.0	188.0	130.0			QL=4 ST=2 TYP=1
		245 LEAR	43 NS	0102.0	0108.0	1378.0	66.0			QL=4 ST=1 TYP=1
		245 LEAR	43 NS	0102.0	0111.0	1378.0	130.0			QL=4 ST=1 TYP=1
		204 IZMI	44 NS	0600.0E		360.0D		20.0		
		245 PALE	8 S	0102.0	0102.0	U	67.0			QL=4 ST=2 TYP=3
		245 PALE	4 S/F	0111.0	0111.0	3.0	210.0			QL=4 ST=2 TYP=3
		245 PALE	8 S	0134.0	0134.0	U	54.0			QL=4 ST=2 TYP=3
		245 PALE	8 S	0200.0	0200.0	U	140.0			QL=4 ST=2 TYP=3
		500 HIRA	8 S	0807.0	0807.0	1.0	30.0			0
		204 IZMI	42 SER	0808.2	0810.6	4.9	53.0			
		245 LEAR	8 S	0922.0	0922.0	U	74.0			QL=4 ST=2 TYP=3
		245 SVTO	8 S	0922.0	0922.0	1.0	61.0			QL=4 ST=2 TYP=3
		245 SVTO	8 S	1019.0	1020.0	1.0	50.0			QL=4 ST=2 TYP=3
		245 SGMR	8 S	1354.0	1354.0	U	67.0			QL=4 ST=2 TYP=3
2800 PENT	1 S	1554.0	1600.0	12.0	2.0					
2800 PENT	1 S	2050.0	2057.0	14.0	5.0					
22	[	127 TORN	43 NS	0742.0		148.0		7.0		V=1
		245 PALE	8 S	2009.0	2010.0	1.0	61.0			QL=4 ST=2 TYP=3
		245 SGMR	8 S	2009.0	2010.0	1.0	56.0			QL=4 ST=2 TYP=3
		245 PALE	8 S	2115.0	2115.0	U	110.0			QL=4 ST=2 TYP=3
23	[	204 IZMI	43 NS	0600.0		220.0U		10.0		
		127 TORN	44 NS	0620.0E		520.0D		8.0		V=0
		2840 PEKG	1 S	0612.0	0615.0	7.0	5.8			
		8800 SGMR	8 S	1451.0	1451.0	2.0	60.0			QL=4 ST=2 TYP=3
24	[	204 IZMI	44 NS	0600.0E		153.0D		15.0		
		127 TORN	44 NS	0620.0E		520.0D		10.0		V=1
		245 LEAR	8 S	0035.0	0035.0	U	62.0			QL=4 ST=2 TYP=3
		500 HIRA	8 S	0228.0	0228.0	1.0	15.0			0
		245 LEAR	8 S	0432.0	0432.0	1.0	320.0			QL=4 ST=2 TYP=3
		410 LEAR	8 S	0432.0	0433.0	2.0	230.0			QL=4 ST=2 TYP=3
		610 LEAR	8 S	0432.0	0434.0	2.0	76.0			QL=4 ST=2 TYP=3
		2840 PEKG	5 S	0432.0	0434.3	5.0	20.2			
		500 HIRA	7 C	0433.0	0434.0	2.0	105.0			0
		2800 HIRA	8 S	0434.0	0434.0	1.0	20.0			0
		4995 LEAR	8 S	0434.0	0434.0	U	73.0			QL=4 ST=2 TYP=3
		8800 LEAR	8 S	0434.0	0434.0	U	180.0			QL=4 ST=2 TYP=3
		15400 LEAR	8 S	0434.0	0434.0	U	110.0			QL=4 ST=2 TYP=3
		245 LEAR	8 S	0530.0	0530.0	U	96.0			QL=4 ST=2 TYP=3
		410 LEAR	8 S	0530.0	0530.0	U	33.0			QL=4 ST=2 TYP=3
		245 SVTO	8 S	0530.0	0530.0	U	74.0			QL=4 ST=2 TYP=3
		410 SVTO	8 S	0530.0	0530.0	1.0	38.0			QL=4 ST=2 TYP=3
		500 HIRA	8 S	0531.0	0531.0	1.0	10.0			0
		2840 PEKG	3 S	0620.0	0624.7	10.0	12.9			
		500 HIRA	8 S	0624.0	0625.0	1.0	75.0			0
		410 LEAR	49 GB	0624.0	0624.0	1.0	600.0			QL=4 ST=2 TYP=6
		610 LEAR	8 S	0624.0	0624.0	U	58.0			QL=4 ST=2 TYP=3
		410 SVTO	49 GB	0624.0	0624.0	1.0	1800.0			QL=4 ST=2 TYP=6
		610 SVTO	8 S	0624.0	0624.0	U	58.0			QL=4 ST=2 TYP=3
		4995 SVTO	8 S	0624.0	0624.0	1.0	34.0			QL=4 ST=2 TYP=3
		3000 IZMI	20 GRF	0624.6	0624.9	0.6	13.0		6.8	
		2800 HIRA	1 S	0625.0	0625.0	1.0	15.0			0
		410 LEAR	8 S	0630.0	0632.0	2.0	150.0			QL=4 ST=2 TYP=3
500 HIRA	8 S	0631.0	0632.0	2.0	40.0			0		
410 SVTO	8 S	0632.0	0632.0	U	110.0			QL=4 ST=2 TYP=3		
410 LEAR	8 S	0705.0	0705.0	U	200.0			QL=4 ST=2 TYP=3		
410 LEAR	48 C	0713.0	0718.0	5.0	3400.0			QL=4 ST=2 TYP=8		
610 LEAR	4 S/F	0713.0	0716.0	3.0	480.0			QL=4 ST=2 TYP=3		
2840 PEKG	5 S	0713.0	0716.2	6.0	34.6					
500 HIRA	47 GB	0714.0	0718.0	4.0	580.0			WR		
1415 LEAR	8 S	0715.0	0715.0	U	39.0			QL=4 ST=2 TYP=3		
4995 LEAR	8 S	0715.0	0716.0	1.0	71.0			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 2003

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Flux Density Mean	Int	Remarks	
24	610	SVTO	8 S	0715.0	0716.0	1.0	380.0			QL=4 ST=2 TYP=3	
	1415	SVTO	8 S	0715.0	0715.0	1.0	35.0			QL=4 ST=2 TYP=3	
	4995	SVTO	8 S	0715.0	0716.0	1.0	100.0			QL=4 ST=2 TYP=3	
	8800	SVTO	8 S	0715.0	0716.0	1.0	73.0			QL=4 ST=2 TYP=3	
	3000	IZMI	22 GRF	0715.6	0716.1	0.9	52.0	22.8			
	2800	HIRA	8 S	0716.0	0716.0	1.0	35.0				0
	410	SVTO	48 C	0716.0	0718.0	2.0	2600.0				QL=4 ST=3 TYP=8
	410	SVTO	49 GB	0716.0	0718.0	2.0	2600.0				QL=4 ST=2 TYP=6
	2695	SVTO	8 S	0716.0	0716.0	U	35.0				QL=4 ST=2 TYP=3
	15400	SVTO	8 S	0716.0	0716.0	U	32.0				QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0716.5	0716.6	0.3	31.0				
	245	LEAR	49 GB	0717.0	0717.0	1.0	620.0				QL=4 ST=2 TYP=6
	204	IZMI	42 SER	0717.5	0718.1	0.9	117.0				
	245	SVTO	49 GB	0718.0	0718.0	U	1700.0				QL=4 ST=2 TYP=6
	410	LEAR	8 S	0758.0	0758.0	1.0	330.0				QL=4 ST=2 TYP=3
	610	LEAR	49 GB	0758.0	0758.0	2.0	770.0				QL=4 ST=2 TYP=6
	610	SVTO	49 GB	0758.0	0758.0	1.0	670.0				QL=4 ST=2 TYP=6
	500	HIRA	8 S	0759.0	0759.0	1.0	305.0				0
	410	LEAR	8 S	0818.0	0818.0	1.0	100.0				QL=4 ST=2 TYP=3
	410	SVTO	8 S	0818.0	0818.0	1.0	110.0				QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0818.9	0819.2	1.5	145.0				
	245	SVTO	8 S	0853.0	0854.0	2.0	340.0				QL=4 ST=2 TYP=3
	2840	PEKG	1 S	0853.0	0854.9	4.0	8.1				
	204	IZMI	46 C	0853.8	0854.7	1.2	422.0				
	245	LEAR	8 S	0854.0	0854.0	1.0	410.0				QL=4 ST=2 TYP=3
	410	LEAR	8 S	0854.0	0854.0	U	87.0				QL=4 ST=2 TYP=3
	610	LEAR	8 S	0854.0	0854.0	U	120.0				QL=4 ST=2 TYP=3
	410	SVTO	8 S	0854.0	0854.0	1.0	94.0				QL=4 ST=2 TYP=3
	610	SVTO	8 S	0854.0	0854.0	U	110.0				QL=4 ST=2 TYP=3
	33	UPIC	46 C	0854.0	0854.8	2.0					
	3000	IZMI	40 F	0854.5	0854.8	0.7	10.0				
	610	SVTO	8 S	0933.0	0934.0	2.0	63.0				QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0933.3	0933.3	1.9	30.0				
	410	LEAR	8 S	0934.0	0934.0	U	36.0				QL=4 ST=2 TYP=3
	610	LEAR	8 S	0934.0	0934.0	U	60.0				QL=4 ST=2 TYP=3
	410	SVTO	8 S	0934.0	0934.0	U	68.0				QL=4 ST=2 TYP=3
	2840	PEKG	1 S	0934.0	0937.1	6.0	9.9				
	410	SVTO	8 S	1037.0	1037.0	1.0	110.0				QL=4 ST=2 TYP=3
	204	IZMI	41 F	1037.8	1037.9	0.5	137.0				
	610	SGMR	8 S	1155.0	1155.0	1.0	65.0				QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1155.0	1155.0	1.0	22.0				QL=4 ST=2 TYP=3
	610	SGMR	8 S	1157.0	1157.0	1.0	470.0				QL=4 ST=2 TYP=3
	610	SVTO	8 S	1157.0	1157.0	1.0	470.0				QL=4 ST=3 TYP=3
	610	SVTO	8 S	1157.0	1157.0	1.0	470.0				QL=4 ST=2 TYP=3
	245	SGMR	49 GB	1406.0	1407.0	1.0	590.0				QL=4 ST=2 TYP=6
	245	SVTO	49 GB	1406.0	1407.0	1.0	500.0				QL=4 ST=2 TYP=6
	410	SVTO	8 S	1406.0	1407.0	1.0	170.0				QL=4 ST=2 TYP=3
410	SGMR	8 S	1407.0	1407.0	U	110.0				QL=4 ST=2 TYP=3	
610	SGMR	8 S	1407.0	1407.0	U	38.0				QL=4 ST=2 TYP=3	
610	SVTO	8 S	1407.0	1407.0	U	74.0				QL=4 ST=2 TYP=3	
8800	SGMR	49 GB	1454.0	1456.0	2.0	590.0				QL=4 ST=2 TYP=6	
2800	PENT	20 GRF	1513.0	1531.0	44.0	3.0					
2800	PENT	1 S	1731.0	1738.0	14.0	6.0					
245	PALE	8 S	1739.0	1739.0	U	110.0				QL=4 ST=2 TYP=3	
410	PALE	8 S	1739.0	1739.0	U	62.0				QL=4 ST=2 TYP=3	
610	PALE	8 S	1739.0	1739.0	U	110.0				QL=4 ST=2 TYP=3	
245	SGMR	8 S	1739.0	1739.0	U	74.0				QL=4 ST=2 TYP=3	
410	SGMR	8 S	1739.0	1739.0	U	68.0				QL=4 ST=2 TYP=3	
610	SGMR	8 S	1739.0	1739.0	U	140.0				QL=4 ST=2 TYP=3	
245	PALE	8 S	2010.0	2010.0	U	60.0				QL=4 ST=2 TYP=3	
245	SGMR	8 S	2014.0	2014.0	U	74.0				QL=4 ST=2 TYP=3	
25	127	TORN	44 NS	0720.0E		400.0D		12.0		V=2	
	245	SGMR	43 NS	1417.0	1428.0	13.0	110.0			QL=4 ST=2 TYP=1	
	245	SVTO	43 NS	1417.0	1417.0	13.0	100.0			QL=4 ST=2 TYP=1	
	245	SGMR	43 NS	1417.0	1428.0	583.0	110.0			QL=4 ST=1 TYP=1	
	245	SVTO	43 NS	1417.0	1417.0	583.0	100.0			QL=4 ST=1 TYP=1	
	245	SGMR	43 NS	1521.0	1535.0	46.0	160.0			QL=4 ST=2 TYP=1	
	245	SGMR	43 NS	1521.0	1524.0	519.0	160.0			QL=4 ST=1 TYP=1	



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

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Sep 03

SEPTEMBER 2003

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		
25	410	LEAR	8 S	0233.0	0233.0	U	59.0			QL=4 ST=2 TYP=3
		500	HIRA	8 S	0234.0	0234.0	1.0	10.0		0
	2840	PEKG	20 GRF	0913.0	0917.4	18.0	8.7			
	204	IZMI	42 SER	1033.2	1108.5	47.6	26.0			
	245	SGMR	8 S	1248.0	1248.0	U	60.0			QL=4 ST=2 TYP=3
		SVTO	8 S	1248.0	1248.0	U	67.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1300.0	1300.0	2.0	91.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1307.0	1308.0	1.0	130.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1307.0	1308.0	1.0	120.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1512.0	1512.0	U	81.0			QL=4 ST=3 TYP=3
	245	SGMR	8 S	1512.0	1512.0	U	81.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1512.0	1512.0	U	54.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1523.0	1523.0	1.0	140.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1530.0	1530.0	U	59.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1537.0	1537.0	U	66.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1557.0	1557.0	U	75.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1557.0	1557.0	U	22.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2045.0	2046.0	1.0	75.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2330.0	2330.0	U	79.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2341.0	2341.0	U	120.0			QL=4 ST=2 TYP=3
26	204	IZMI	43 NS	0600.0		360.0D		15.0		
		127	TORN	44 NS	0620.0E		240.0D		20.0	
	204	IZMI	42 SER	0808.1	0810.2	6.0	43.0			
	204	IZMI	42 SER	1018.1	1020.3	3.0	37.0			
	33	UPIC	4 S/F	1019.8	1020.0	1.2				
	204	IZMI	42 SER	1141.8	1141.9	1.5	27.0			
	245	SGMR	8 S	1454.0	1454.0	U	180.0			QL=4 ST=2 TYP=3
		SVTO	8 S	1454.0	1454.0	U	150.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1454.0	1454.0	U	230.0			QL=4 ST=2 TYP=3
	2800	PENT	20 GRF	1459.0	1511.0	68.0	7.0			
	2800	PENT	8 S	1746.0	1751.0	10.0	29.0			
	410	SGMR	49 GB	1750.0	1751.0	1.0	550.0			QL=4 ST=2 TYP=6
	4995	SGMR	8 S	1750.0	1751.0	1.0	67.0			QL=4 ST=2 TYP=3
	9500	CUBA	3 S	1750.2	1750.8	1.8	36.0	18.0		
	245	PALE	8 S	1751.0	1751.0	U	300.0			QL=4 ST=2 TYP=3
	410	PALE	49 GB	1751.0	1751.0	U	670.0			QL=4 ST=2 TYP=6
	610	PALE	8 S	1751.0	1751.0	U	79.0			QL=4 ST=2 TYP=3
	4995	PALE	8 S	1751.0	1751.0	U	59.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1751.0	1751.0	U	180.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	1751.0	1751.0	U	94.0			QL=4 ST=2 TYP=3
2800	PENT	1 S	1911.0	1915.0	8.0	5.0				
245	PALE	8 S	1953.0	1954.0	1.0	75.0			QL=4 ST=2 TYP=3	
245	LEAR	8 S	2331.0	2331.0	U	130.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	2331.0	2331.0	U	160.0			QL=4 ST=2 TYP=3	
27	204	IZMI	44 NS	0600.0E		360.0D		15.0		
		127	TORN	44 NS	0620.0E		520.0D		90.0	
	245	LEAR	8 S	0005.0	0005.0	U	270.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0548.0	0549.0	1.0	180.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	0626.0	0626.0	1.0	10.0			0
	245	LEAR	8 S	0808.0	0808.0	U	55.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0819.0	0821.0	2.0	63.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0821.0	0821.0	U	70.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0824.0	0824.0	1.0	62.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	1031.5	1031.5	0.1	14.0			
	204	IZMI	42 SER	1040.2	1042.5	3.8	38.0			
	33	UPIC	45 C	1045.0	1047.0	2.5				UNCERTN
	204	IZMI	25 R	1106.0		54.0D		30.0		
	3000	IZMI	40 F	1109.0U	1159.5	51.0D	16.0			
	245	SVTO	4 S/F	1155.0	1157.0	5.0	54.0			QL=2 ST=2 TYP=3
	245	SGMR	8 S	1157.0	1157.0	U	52.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	1209.0	1217.0	8.0	280.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1214.0	1214.0	U	66.0			QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	1216.0	1217.0	3.0	310.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1240.0	1240.0	U	65.0			QL=4 ST=2 TYP=3
245	SVTO	8 S	1240.0	1242.0	2.0	78.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1242.0	1242.0	U	90.0			QL=4 ST=2 TYP=3	
2800	PENT	21 GRF	2115.0	2132.0	71.0	21.0				

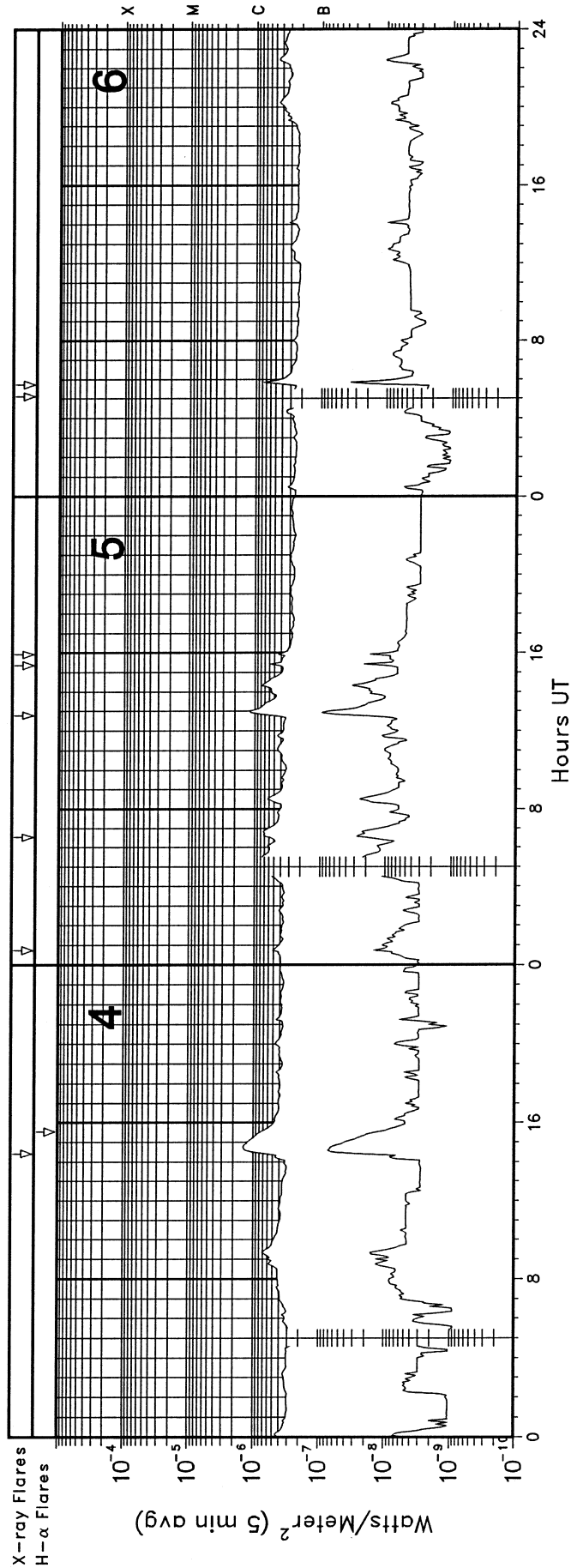
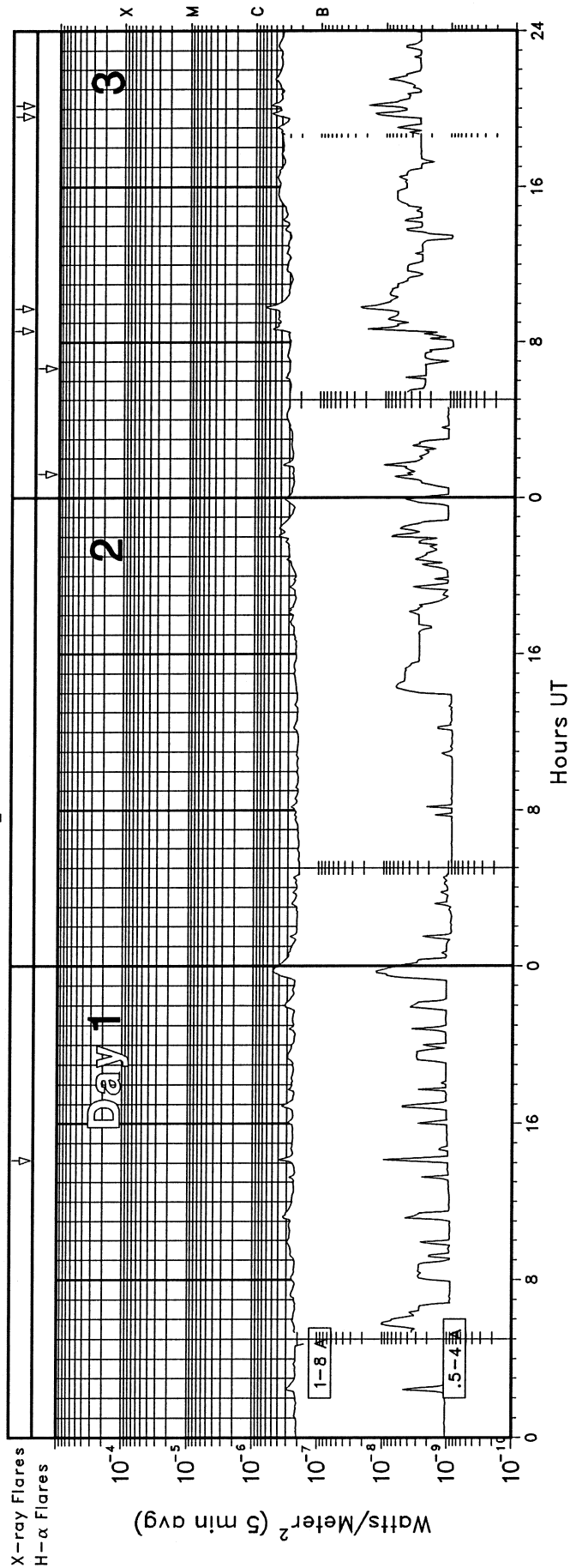
S O L A R R A D I O E M I S S I O N  
Outstanding Occurrences

SEPTEMBER 2003

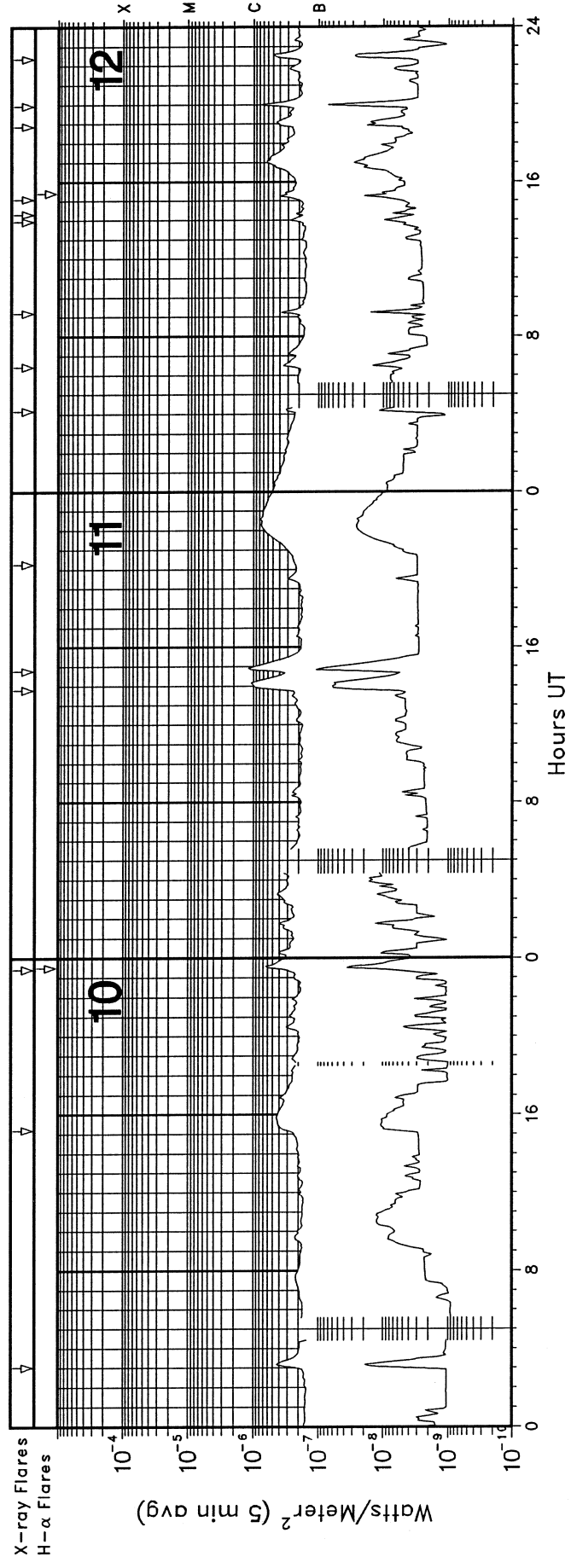
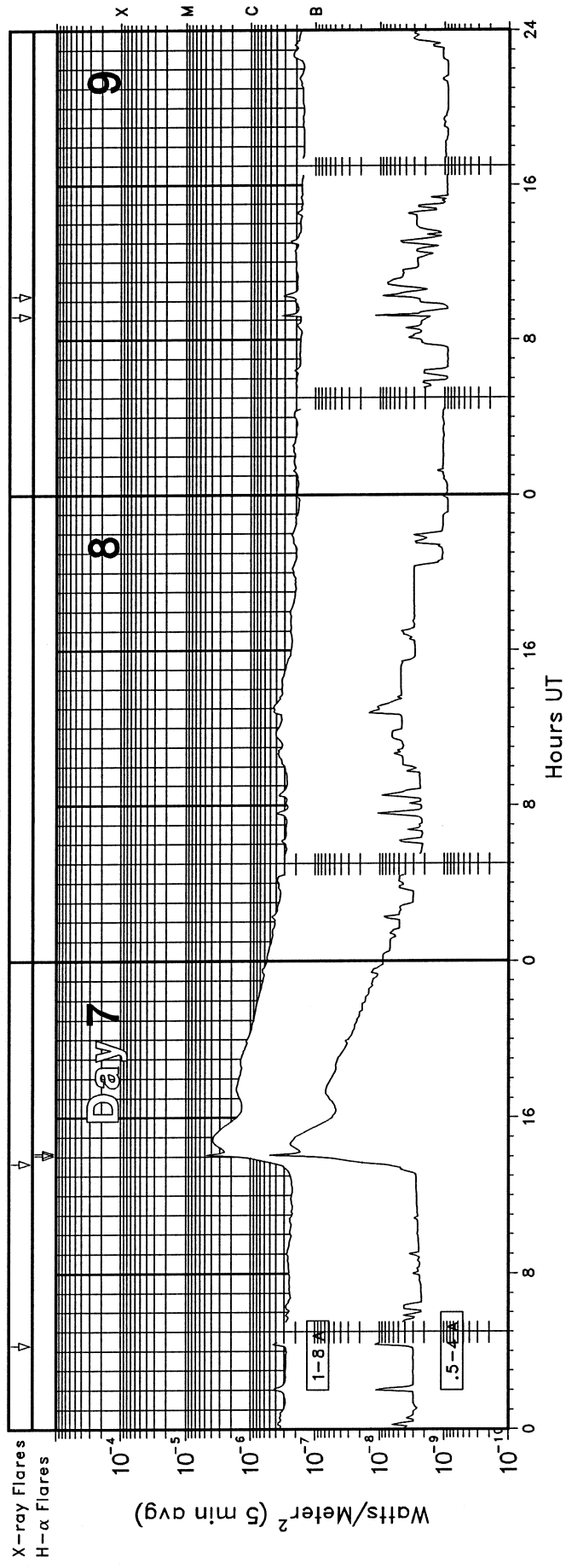
Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m	Mean 2 Hz)		
27	500	HIRA	8 S	2306.0	2306.0	1.0	10.0			WR
28	204	IZMI	44 NS	0600.0E		360.0D		50.0		V=1
			44 NS	0620.0E		370.0D		40.0		
	245	LEAR	8 S	0409.0	0409.0	U	100.0			QL=4 ST=2 TYP=3
	245	LEAR	48 C	0412.0	0415.0	3.0	61.0			QL=4 ST=2 TYP=8
	245	LEAR	8 S	0424.0	0424.0	U	66.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0434.0	0434.0	U	87.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	0522.0	0522.0	1.0	10.0			0
	245	LEAR	8 S	0632.0	0632.0	U	120.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0632.0	0632.0	U	58.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1228.0	1228.0	U	76.0			QL=4 ST=2 TYP=3
245	SGMR	8 S	1245.0	1245.0	U	70.0			QL=4 ST=2 TYP=3	
29	127	TORN	44 NS	0620.0E		430.0D		14.0		V=1
	204	IZMI	41 F	0804.1	0804.3	0.5	71.0			
	204	IZMI	42 SER	0825.7	0827.7	3.7	157.0			
	204	IZMI	46 C	0829.8	0830.1	0.7	2730.0			
	245	LEAR	49 GB	0830.0	0830.0	U	660.0			QL=4 ST=2 TYP=6
	127	TORN	47 GB	0830.0	0830.2	0.7	2400.0	260.0		DISTURBED
	9500	CUBA	2 S/F	1518.0	1518.4	1.5	12.0	3.0		
	8800	SGMR	8 S	1609.0	1609.0	1.0	96.0			QL=4 ST=2 TYP=3
	2800	PENT	29 PBI	2127.0	2144.0	65.0U	36.0			0
	2800	HIRA	1 S	2144.0	2145.0	3.0	35.0			0
500	HIRA	8 S	2149.0	2149.0	1.0	10.0			0	
30	127	TORN	44 NS	0910.0E		210.0D		5.0		V=1
	204	IZMI	43 NS	1006.0		114.0D		10.0		
	2800	PENT	8 S	0027.0	0031.0	9.0	13.0			
	2840	PEKG	45 C	0027.0	0031.3	10.0	21.4			
	2804	VORO	46 C	0028.3	0031.3	7.5	19.8			
	500	HIRA	42 SER	0029.0	0031.0	17.0	40.0			WR
	2800	HIRA	1 S	0031.0	0031.0	1.0	15.0			0
	245	LEAR	8 S	0046.0	0046.0	U	56.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0046.0	0046.0	U	61.0			QL=4 ST=2 TYP=3
	2804	VORO	40 F	0301.3	0302.3	1.4	4.4			
	2840	PEKG	3 S	0507.0	0511.8	12.0	19.6			
	2804	VORO	2 S/F	0509.9	0511.6	3.3	16.6			
	2800	HIRA	1 S	0512.0	0512.0	1.0	15.0			0
	2840	PEKG	45 C	0754.0	0756.8	10.0	6.2			
	3000	IZMI	40 F	0756.6	0758.4	2.0	8.0			
	2840	PEKG	3 S	0846.0	0850.3	14.0	20.6			
	204	IZMI	42 SER	0847.2	0847.3	0.7	65.0			
	245	LEAR	8 S	0848.0	0848.0	1.0	210.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0848.0	0848.0	1.0	75.0			QL=4 ST=2 TYP=3
	204	IZMI	46 C	0848.0	0848.8	1.8	276.0			
	33	UPIC	46 C	0848.5	0850.5	6.0				
	3000	IZMI	40 F	0848.9	0850.6	4.4	12.0			
	204	IZMI	42 SER	0850.0	0850.5	1.6	121.0			
33	UPIC	42 SER	0902.0	0912.0	11.5					
127	TORN	48 C	0910.0	0911.5	1.8	160.0	40.0			
204	IZMI	42 SER	0911.9	0912.1	1.3	25.0				
2840	PEKG	3 S	2315.0	2320.1	13.0	14.8				
2800	HIRA	1 S	2318.0	2320.0	3.0	15.0			0	

# GOES X-RAY DETECTOR

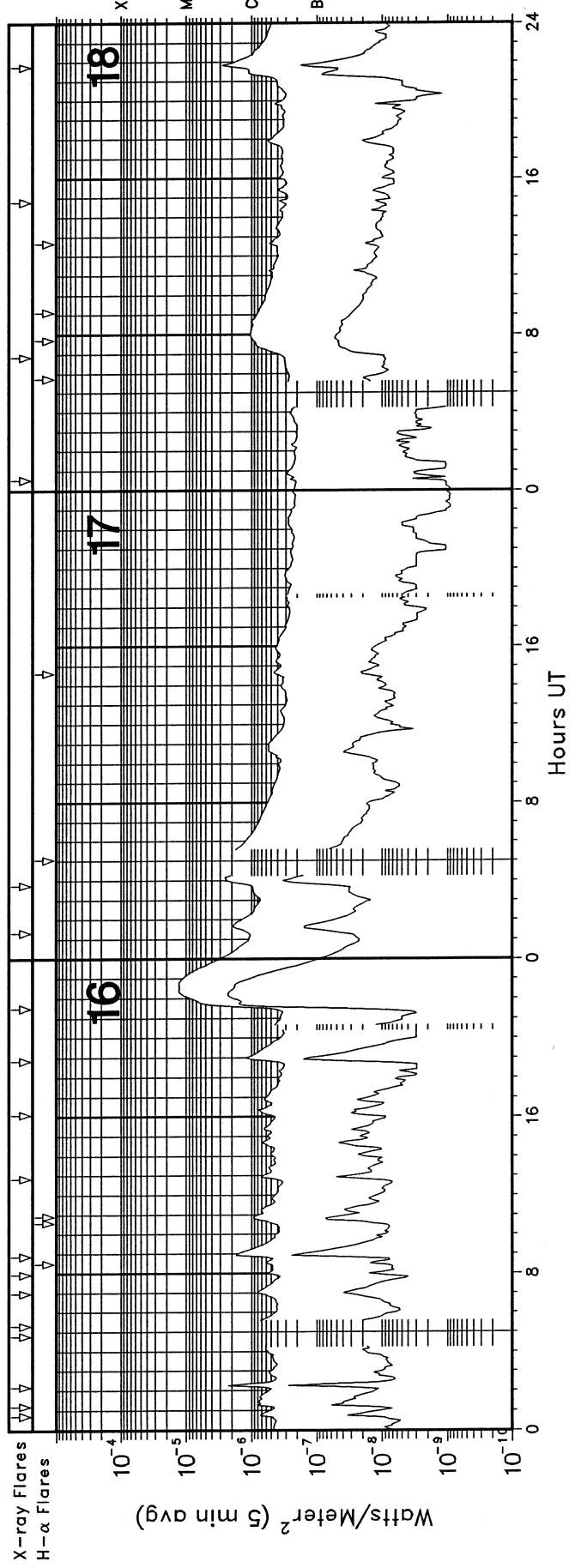
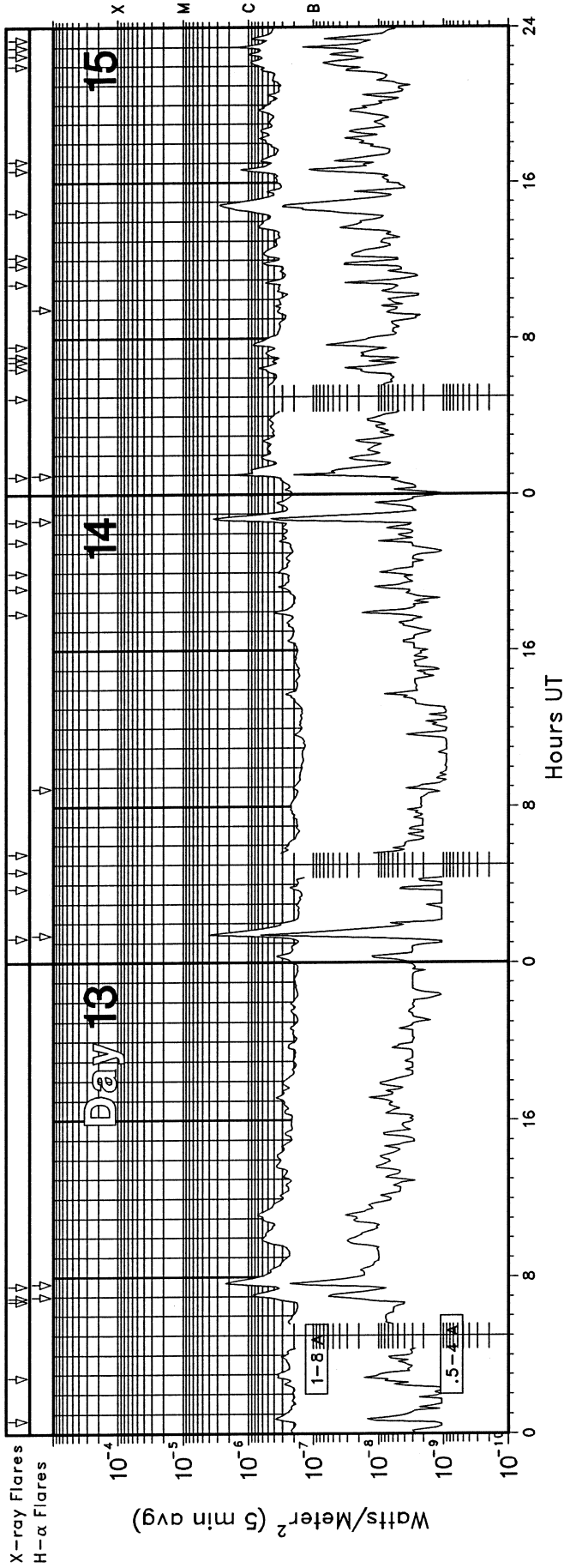
## September 2003



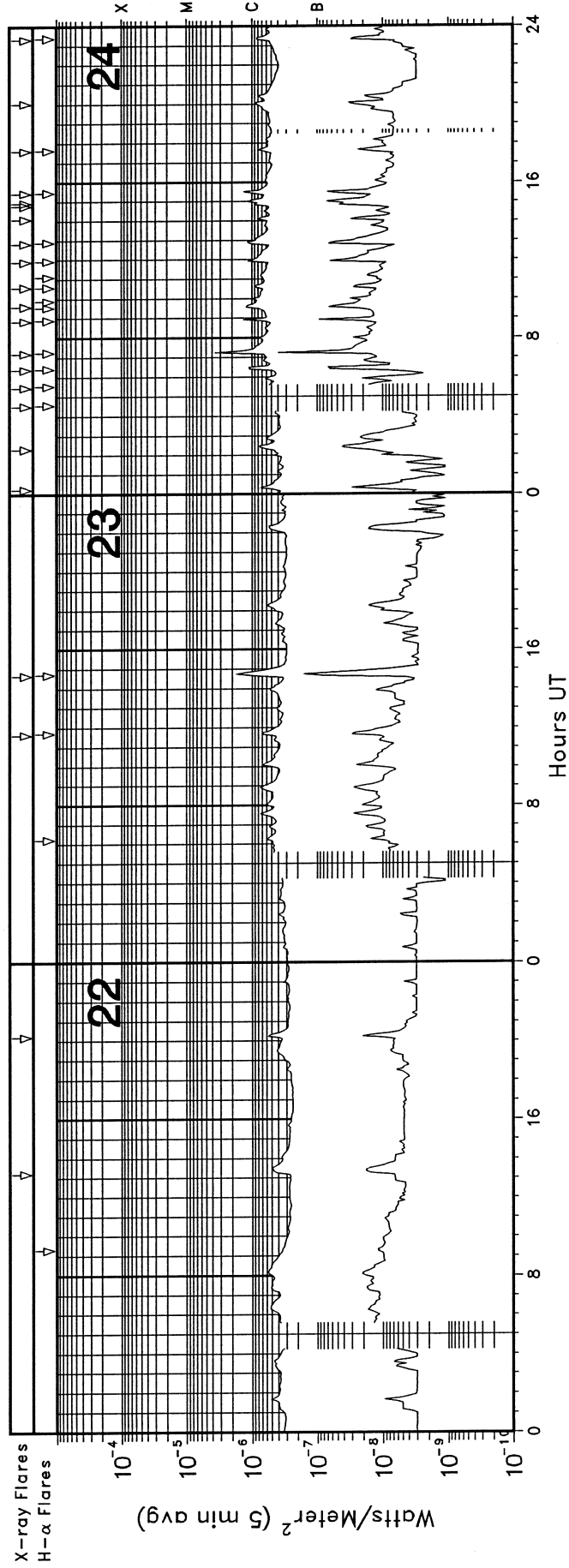
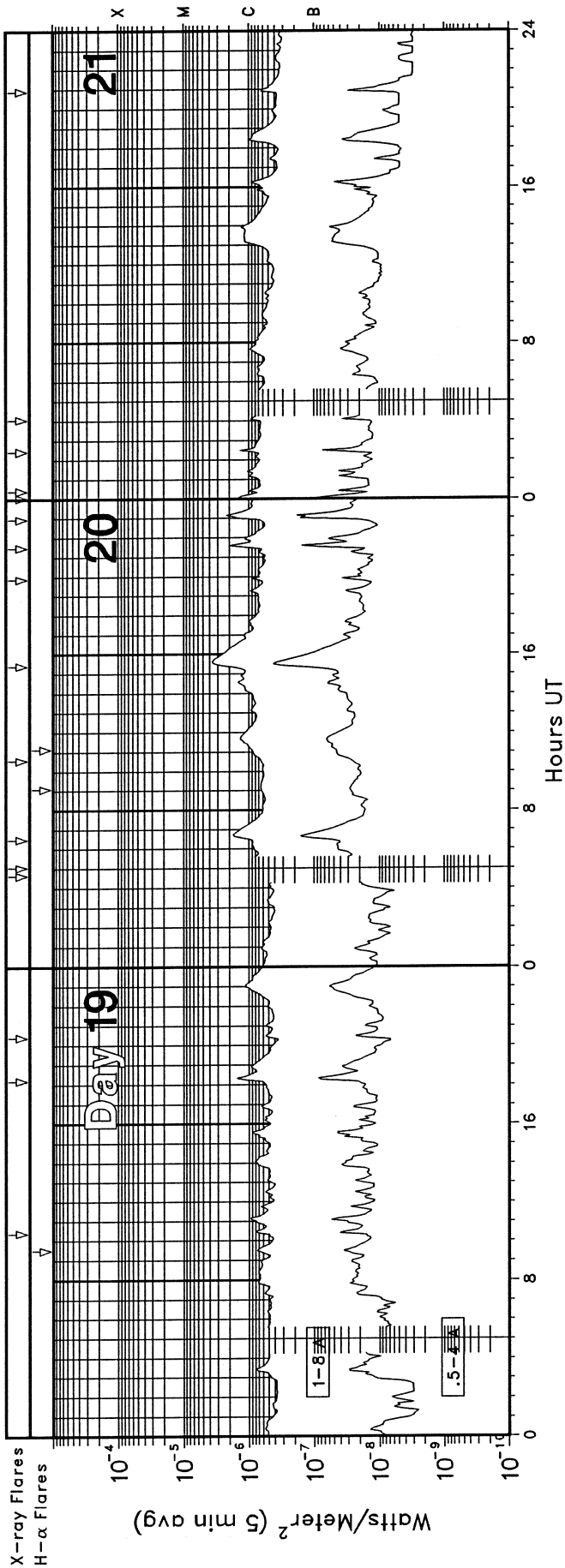
# GOES X-RAY DETECTOR September 2003



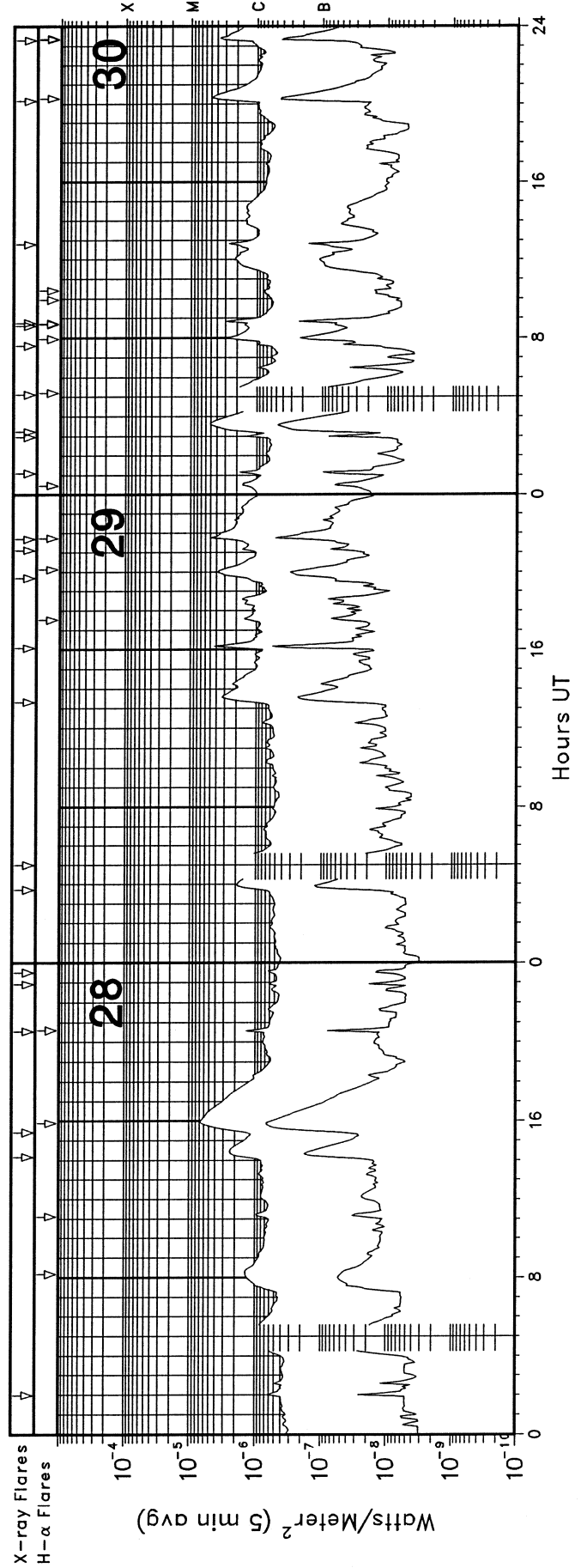
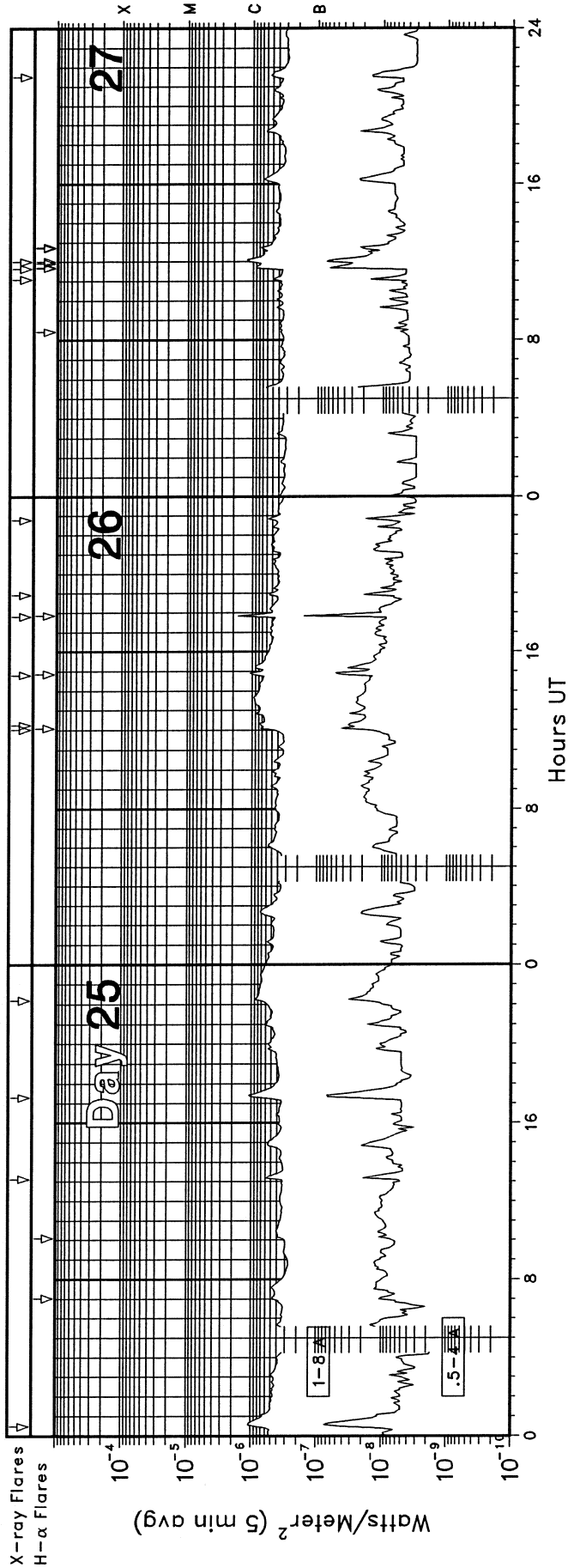
# GOES X-RAY DETECTOR September 2003



# GOES X-RAY DETECTOR September 2003



# GOES X-RAY DETECTOR September 2003



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

September 2003

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
01	1407	1411	1416				B4.1	10444	2.0E-04
03	0836	0843	0901				B5.6		7.0E-04
03	0945	0950	0953				B8.2		3.3E-04
03	1936	1945	1952				B5.9		4.9E-04
03	2010	2014	2016				B7.2		2.2E-04
04	1425	1449	1519				C1.4	10452	3.8E-03
05	0045	0048	0050				B6.1		1.6E-04
05	0632	0635	0702				B7.4		1.2E-03
05	1248	1301	1312				C1.2		1.4E-03
05	1522	1526	1529				B6.6		2.3E-04
05	1555	1558	1601				B5.3		1.6E-04
06	0507	0511	0515				B5.2		2.0E-04
06	0544	0551	0559				B7.9		5.3E-04
07	0417	0421	0428				B4.7	10450	2.6E-04
07	1338	1407	1518	S16	W69	SF	C5.3	10450	1.6E-02
09	0912	0917	0919				B4.3	10456	1.2E-04
09	1014	1017	1021				B3.4	10456	1.3E-04
10	0302	0312	0325				B4.3	10456	5.0E-04
10	1512	1552	1609				B4.3	10456	1.4E-03
10	2326	2336	2344	S07	W18	SF	B6.5	10456	5.8E-04
11	1348	1412	1424				C1.0		1.8E-03
11	1446	1454	1507				C1.2		1.2E-03
11	2016	2237	2408				B7.9		7.4E-03T
12	0410	0413	0420				B3.6		1.9E-04
12	0626	0631	0644				B3.6		3.3E-04
12	0912	0917	0921				B4.0		1.8E-04
12	1356	1400	1408				B2.9		1.8E-04
12	1419	1422	1424				B2.5		6.6E-05
12	1506	1516	1521				B4.3		2.8E-04
12	1853	1906	1917				B4.6		5.8E-04
12	1956	2003	2007				B8.4		4.2E-04
12	2222	2235	2241				B5.7		4.9E-04
13	0039	0046	0057				B3.8		3.6E-04
13	0250	0253	0255				B4.5		1.1E-04
13	0644	0647	0649				B3.5		8.3E-05
13	0654	0705	0715	S07	W50	SF	B8.8	10456	8.4E-04
13	0732	0742	0752	S06	W52	SF	C2.2	10456	1.8E-03
14	0115	0127	0133	S07	W61	SF	C4.4	10456	2.1E-03
14	0346	0349	0353				B2.7		9.6E-05
14	0439	0443	0445				B3.5		9.1E-05
14	0533	0538	0542				B3.3		1.6E-04
14	1754	1758	1803				B4.7		2.1E-04
14	1911	1915	1917				B4.6		1.2E-04
14	1957	2004	2013				B3.5		3.1E-04
14	2134	2138	2141				B3.7		1.4E-04
14	2235	2247	2252	S08	W73	SF	C3.6	10456	2.3E-03
15	0055	0101	0106	S07	W77	1F	C1.9	10456	7.3E-04
15	0456	0501	0514				C1.0		9.4E-04
15	0628	0631	0634				B7.4		2.4E-04
15	0650	0653	0656				B4.9		1.6E-04
15	0704	0715	0728				B5.5		7.1E-04
15	0736	0743	0753				B9.1		7.4E-04

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
15	1047	1052	1058				B5.8		3.2E-04
15	1143	1151	1157				B6.2		4.4E-04
15	1209	1220	1236				B6.0		8.7E-04
15	1427	1450	1458				C2.9		3.4E-03
15	1636	1640	1644				C1.5		5.8E-04
15	1704	1709	1712				B8.4		3.1E-04
15	2200	2214	2220				C1.0		1.0E-03
15	2232	2241	2245				B9.9		7.1E-04
15	2257	2301	2306				C1.5		6.5E-04
15	2322	2326	2334				B9.3		5.6E-04
16	0043	0048	0053				B8.3		4.2E-04
16	0112	0116	0152				B9.0		1.7E-03
16	0211	0218	0221				C2.5		1.0E-03
16	0447	0453	0504				B9.1		8.0E-04
16	0518	0525	0531				C1.4		8.9E-04
16	0657	0701	0713				B8.1		7.3E-04
16	0756	0800	0812				B5.9		4.9E-04
16	0852	0858	0912				C1.8		1.7E-03
16	1251	1258	1308				B7.3		6.5E-04
16	1606	1620	1627				B8.3		8.7E-04
16	1850	1901	1918				C1.1		1.6E-03
16	2130	2224	2331				M1.3		6.9E-02
17	0120	0142	0200				C1.9		3.8E-03
17	0345	0406	0539				C2.4		4.6E-03
18	0033	0036	0038				B2.9		7.6E-05
18	0651	0801	0938				C1.0		8.2E-03
18	1447	1450	1452				B4.4		1.2E-04
18	2145	2151	2157				C2.9		1.8E-03
19	1023	1031	1037				B8.0		6.0E-04
19	1812	1820	1828				C1.6		1.2E-03
19	2025	2030	2041				B5.6		5.0E-04
20	0438	0448	0452				C1.1		8.1E-04
20	0503	0512	0515				C3.0		1.2E-03
20	0630	0645	0705				C1.7		3.0E-03
20	1034	1145	1216				C1.3		6.2E-03
20	1524	1536	1557				C3.6		6.5E-03
20	1952	1955	1959				B9.3		3.5E-04
20	2129	2136	2143				C2.0		1.3E-03
20	2257	2310	2319				C2.3	10464	2.2E-03
21	0003	0008	0013				C1.4	10464	7.8E-04
21	0025	0028	0031				C1.1	10464	3.6E-04
21	0226	0230	0232				C1.8	10464	4.5E-04
21	0404	0407	0412				C1.0		4.3E-04
21	2054	2058	2102				B8.5		3.1E-04
22	1313	1331	1348				B4.9		9.4E-04
22	2012	2016	2025				B5.7		4.1E-04
23	1139	1144	1149				B8.0		4.1E-04
23	1440	1444	1452	N01	E42	SF	C2.1	10464	1.0E-03
24	0015	0023	0027				B8.1	10464	4.5E-04
24	0219	0232	0235				B8.3	10464	6.8E-04
24	0431	0435	0438	N01	E23	SF	C2.1	10464	5.8E-04
24	0528	0532	0536	N02	E23	SF	B7.2	10464	2.7E-04
24	0622	0626	0628	N01	E23	SF	C1.2	10464	3.2E-04
24	0712	0717	0719	N01	E20	1F	C5.4	10464	1.1E-03
24	0851	0855	0857	N01	E21	SF	C2.0	10464	4.2E-04



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

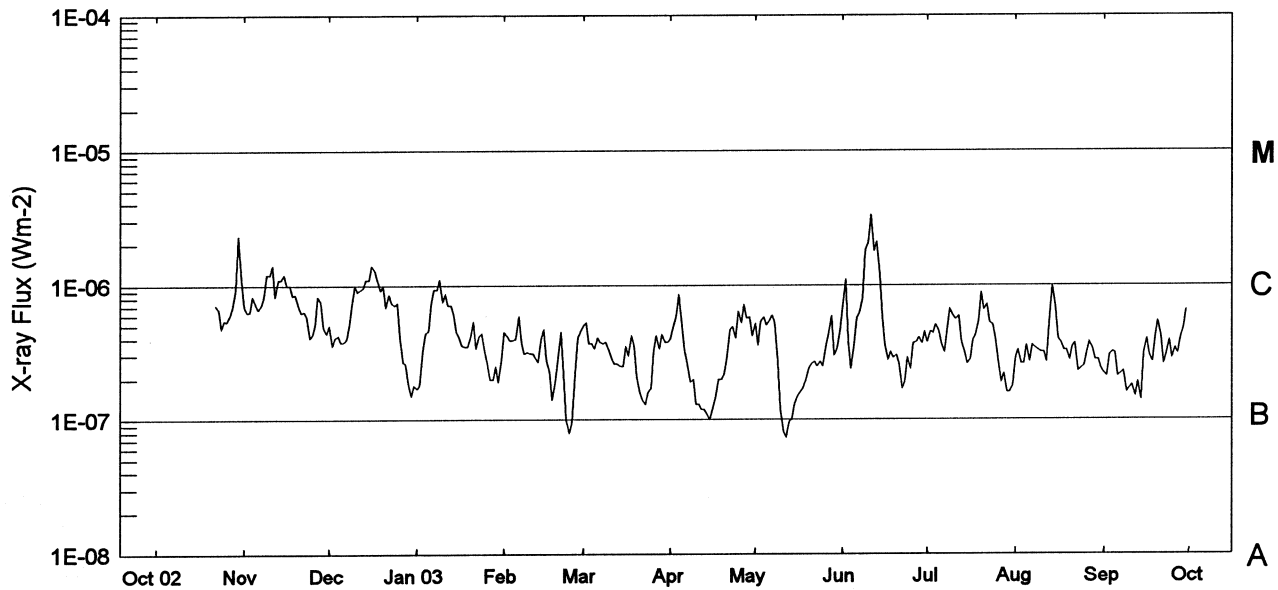
23  
 Sep 03

September 2003

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
24	0936	0939	0942	N00	E21	SF	C1.4	10464	4.7E-04
24	1035	1039	1042	N02	E18	SF	C1.1	10464	3.9E-04
24	1153	1158	1201	N01	E19	SF	C1.4	10464	4.9E-04
24	1250	1254	1257	N01	E18	SF	C1.9	10464	5.2E-04
24	1405	1409	1412				B9.6		3.5E-04
24	1447	1450	1455				B9.7		3.9E-04
24	1456	1504	1508				C1.1	10464	7.4E-04
24	1526	1530	1533	N02	E17	SF	C1.6	10464	5.2E-04
24	1736	1740	1744	N01	E17	SF	B8.8	10464	3.6E-04
24	2002	2005	2007				C1.1	10466	2.9E-04
24	2319	2323	2327	N02	E11	SF	C1.1	10464	4.2E-04
25	0029	0035	0052				C1.1	10464	1.4E-03
25	1308	1313	1320				B6.2		3.9E-04
25	1717	1725	1734				C1.1	10464	9.4E-04
25	2212	2215	2229				B9.2		8.4E-04
26	1202	1207	1215				B7.7		5.2E-04
26	1215	1219	1222				B9.5		3.3E-04
26	1449	1455	1458	N05	W04	SF	C1.3	10464	5.6E-04
26	1748	1752	1755	N05	W06	SF	C2.3	10464	6.0E-04
26	1855	1858	1901				B7.0		2.1E-04
26	2247	2251	2257				B6.1		3.2E-04
27	1105	1109	1111				B6.7		1.9E-04
27	1139	1143	1148	N14	W20	SF	C1.3	10464	4.9E-04
27	1200	1204	1210	N16	W23	SF	C1.3	10464	7.3E-04
27	2130	2134	2148				B5.7		5.5E-04

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
28	0159	0203	0207				B7.2		2.8E-04
28	1410	1428	1455				C2.3	10464	5.6E-03
28	1525	1558	1645	N03	W34	SF	C6.8	10464	2.3E-02
28	2033	2037	2039	N05	W37	SF	C1.6	10464	4.5E-04
28	2255	2259	2301				B7.5		2.3E-04
28	2331	2334	2337				B7.3		2.3E-04
29	0343	0359	0442				C1.8		3.2E-03
29	0500	0511	0523				C3.9		4.1E-03
29	1320	1339	1402				C3.3		6.3E-03
29	1605	1610	1616				C5.1	10464	2.2E-03
29	1941	2004	2018	N04	W45	SF	C3.8	10464	6.5E-03
29	2107	2111	2118				C1.7		9.8E-04
29	2141	2146	2156	N03	W39	1F	C5.4	10464	3.6E-03
30	0107	0110	0112				C2.4	10464	5.5E-04
30	0258	0302	0306				C1.6	10464	5.9E-04
30	0314	0340	0401				C5.1	10464	1.0E-02
30	0507	0513	0530	N04	W43	SF	C3.3	10464	3.0E-03
30	0737	0801	0815	N06	W52	SF	C2.8	10464	3.6E-03
30	0837	0840	0842				C1.8		4.9E-04
30	0846	0852	0856	N09	W45	1F	C3.2	10464	1.4E-03
30	1247	1250	1253				C3.0	10464	9.1E-04
30	2009	2021	2041	S02	E75	SF	C4.9	10471	7.1E-03
30	2317	2326	2340	N05	W61	SF	C3.9	10464	4.0E-03

# Preliminary GOES Satellite Daily X-Ray Background Oct 2002 - Sep 2003



Day	Oct 02	Nov	Dec	Jan 03	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	*	B7.0	B5.0	B1.7	B4.5	B5.1	B4.0	B5.2	B6.8	B3.8	B2.9	B2.2
2	*	B6.3	B3.6	B1.8	B4.2	B5.3	B5.1	B3.6	C1.1	B4.5	B3.3	B2.1
3	*	B6.4	B4.1	B3.3	B3.9	B3.7	B5.9	B5.4	B3.8	B4.4	B2.6	B3.0
4	*	B8.3	B4.2	B4.4	B3.9	B3.7	B8.6	B5.8	B2.4	B5.1	B2.6	B3.2
5	*	B7.3	B3.8	B4.6	B4.0	B3.4	B5.1	B5.1	B3.6	B4.6	B3.6	B3.1
6	*	B6.7	B3.8	B7.4	B5.9	B4.1	B3.3	B5.4	B5.7	B3.7	B2.7	B2.1
7	*	B7.2	B4.0	B9.3	B3.8	B3.8	B2.5	B6.0	B6.2	B3.2	B3.6	B2.2
8	*	B8.4	B5.0	B9.4	B3.1	B3.7	B1.9	B5.3	B7.9	B4.6	B3.4	B2.3
9	*	C1.2	B7.7	C1.1	B3.2	B3.8	B2.0	B2.7	C1.8	B6.7	B3.3	B1.6
10	*	C1.2	C1.0	B7.6	B3.1	B3.3	B1.3	B1.2	C2.1	B5.9	B3.2	B1.7
11	*	C1.4	B9.1	B8.7	B3.1	B2.9	B1.3	A8.2	C3.3	B5.6	B3.2	B1.8
12	*	B8.3	B9.4	B7.1	B2.9	B2.6	B1.2	A7.4	C1.8	B5.9	B2.7	B1.5
13	*	C1.1	B9.7	B7.1	B2.7	B2.6	B1.2	A9.7	C2.1	B3.8	B6.0	B1.9
14	*	C1.1	C1.1	B6.2	B4.1	B2.5	B1.1	B1.0	C1.2	B3.2	C1.0	B1.4
15	*	C1.2	C1.1	B4.6	B4.7	B2.5	B1.0	B1.3	B5.8	B2.6	B6.8	B3.1
16	*	C1.0	C1.4	B4.1	B2.8	B3.5	B1.2	B1.5	B3.6	B2.8	B4.0	B4.0
17	*	C1.0	C1.3	B3.6	B2.3	B3.0	B1.5	B1.6	B2.8	B3.9	B3.7	B3.0
18	*	B8.5	C1.1	B3.5	B1.4	B4.2	B2.0	B1.7	B3.2	B4.2	B3.3	B2.7
19	*	B8.6	B9.2	B3.5	B1.9	B3.6	B2.0	B2.0	B2.9	B5.4	B3.3	B4.1
20	*	B7.1	C1.0	B4.2	B2.8	B2.1	B2.2	B2.4	B3.0	B8.9	B2.8	B5.4
21	*	B6.3	B6.9	B5.4	B4.5	B1.6	B2.9	B2.6	B2.6	B6.6	B3.5	B4.2
22	B7.1	B6.4	B8.6	B3.4	B2.2	B1.4	B4.7	B2.7	B1.7	B7.2	B3.7	B2.6
23	B6.7	B5.9	B7.4	B4.2	B1.0	B1.3	B4.9	B2.5	B1.9	B5.3	B2.3	B3.0
24	B4.8	B4.1	B7.1	B4.4	A8.0	B1.6	B4.1	B2.7	B2.9	B5.1	B2.4	B3.9
25	B5.5	B4.3	B7.4	B3.2	A9.4	B1.7	B6.4	B2.5	B2.4	B4.0	B2.5	B2.9
26	B5.4	B5.1	B4.2	B2.6	B2.2	B3.3	B5.3	B3.5	B3.7	B2.8	B3.1	B3.4
27	B6.0	B8.3	B2.7	B2.0	B4.1	B4.2	B7.2	B4.3	B3.8	B1.9	B3.8	B3.1
28	B6.9	B7.6	B2.6	B2.0	B4.5	B3.4	B5.7	B5.9	B4.1	B2.2	B3.4	B4.0
29	B9.4	B4.9	B1.9	B2.5		B4.3	B5.8	B3.0	B3.7	B1.6	B2.8	B4.8
30	C2.3	B4.4	B1.5	B1.9		B3.8	B4.2	B3.3	B4.5	B1.6	B2.8	B6.6
31	C1.1		B1.8	B2.8		B3.8		B4.5		B1.8	B2.4	

NOTE: \* = Data not available.

## ACTIVE PROMINENCES AND FILAMENTS

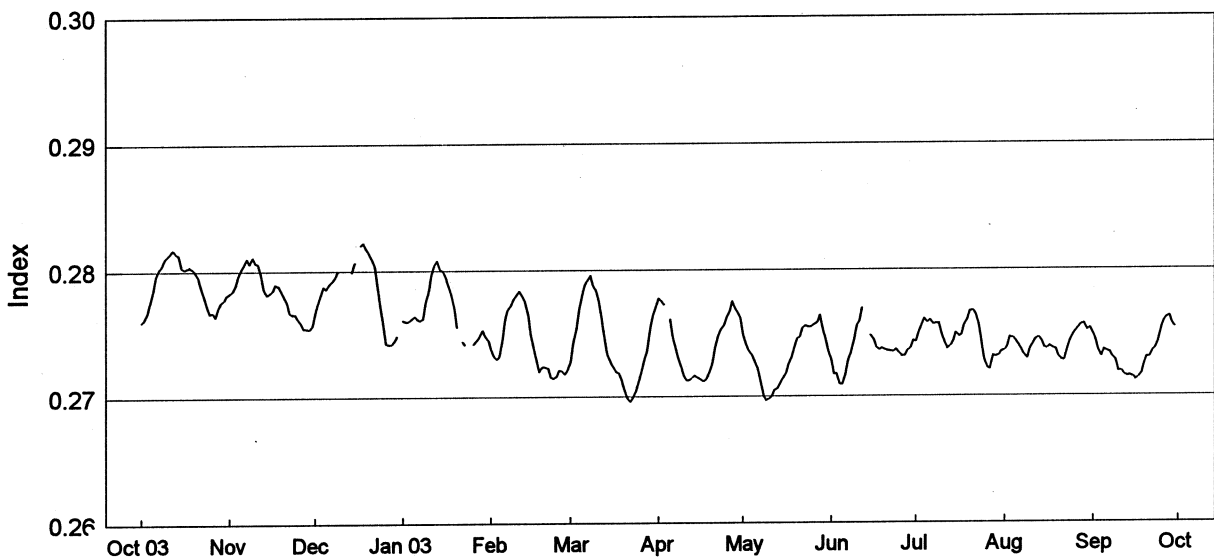
25  
Sep 03

SEPTEMBER 2003

Day	Event Type	Start (UT)	End (UT)	CMP		Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
				Lat	Mo Day								
01	DSF	0045U	1301U	N23 W60	08 27.5		17	0	0	E	HOLL		
04	DSF	1650U	0535U	N26 E10	09 5.5		18	0	0	E	SVTO		
07	DSF	0913U	2357U	S20 W23	09 5.6		19	0	0	E	LEAR		
07	DSF	1430	1716	S38 W18	09 6.1		19	0	0	E	HOLL		
07	DSF	1527U	0453U	S25 W26	09 5.6		10	0	0	E	SVTO		
10	DSF	1952U	1426U	N20 W28	09 8.7		13	0	0	E	HOLL		
12	DSF	0036U	1322U	S13 W12	09 11.1		06	0	0	E	HOLL		
13	DSF	0046U	1317U	S04 W45	09 9.7		06	0	0	E	HOLL	0456	
13	DSF	0933U	2307U	S46 E10	09 14.2		07	0	0	E	LEAR		
13	DSF	1619U	0544U	S11 E52	09 17.6		08	0	0	E	SVTO		
13	DSF	1620U	0541U	N02 W36	09 11.0		09	0	0	E	SVTO		
13	DSF	1838U	2008	S13 E47	09 17.3		08	0	0	E	HOLL		
14	DSD	0820	0838	S10 W58	09 10.0	1	03	9	9	V	KHAR		
14	DSF	1611U	0505U	N35 W03	09 14.4		23	0	0	E	SVTO		
14	DSF	1837	1952	N26 W14	09 13.7	3	19	0	0	E	HOLL		
14	DSF	2010	2204	N17 W29	09 12.6	3	16	0	0	E	HOLL		
15	BSL	1044	1054D	S10 W90	09 8.6	1	02	9	9	V	KHAR		
16	DSD	0925E	0948	S06 W20	09 14.9	1	03	9	9	V	KHAR		
16	ADF	0950	1010	S30 W59	09 11.9	1	04	9	9	V	KHAR		
16	BSL	1008	1047	S11 W90	09 9.6	1	06	9	9	V	KHAR		
16	BSL	1057	1108	S10 W90	09 9.6	1	03	9	9	V	KHAR		
16	LPS	2242	0103	S07 W90	09 10.2			9	9	E	HOLL		
17	DSF	0923U	2302U	N58 E44	09 21.2		24	0	0	E	LEAR		
17	ADF	1035U	1048	S12 W25	09 15.5	1	04	9	9	V	KHAR		
20	BSL	1043	1054	N07 E90	09 27.3	1	02	9	9	V	KHAR		
20	BSL	1102	1110	N08 E90	09 27.3	1	03	9	9	V	KHAR		
20	BSL	1108	1120D	N09 W90	09 13.6	1	05	9	9	V	KHAR		
21	DSD	1109	1121	N05 E64	09 26.3	1	04	9	9	V	KHAR		
21	BSL	1120	1128	N03 E90	09 28.3	1	02	9	9	V	KHAR		
21	BSL	1135	1145D	N02 E90	09 28.3	1	04	9	9	V	KHAR		
22	DSD	1028	1042	N13 E56	09 26.7	1	03	9	9	V	KHAR		
24	DSF	0027U	1312U	S21 W17	09 22.7		24	0	0	E	HOLL		
24	DSF	0530	0726	S21 W21	09 22.6		26	0	0	E	LEAR		
24	DSF	0538	0726	S19 W23	09 22.5		20	0	0	E	SVTO		
24	DSD	0945E	1032	N02 E19	09 25.8	2	15	9	9	V	KHAR		
24	DSD	1036	1118D	N04 E15	09 25.6	2	12	9	9	V	KHAR		
24	DSD	1107	1118D	N02 E17	09 25.8	1	04	9	9	V	KHAR		
24	DSD	1110	1118D	N01 E21	09 26.1	1	05	9	9	V	KHAR		
28	DSF	0924U	2337U	N61 E04	09 28.7			0	0	E	LEAR		
28	DSF	2219	2319	S20 W28	09 26.8	3	24	0	0	E	HOLL		
28	DSF	2318U	1359U	N35 E38	10 2.0		11	0	0	E	HOLL		
28	DSF	2318U	1359U	N56 E01	09 29.0		32	0	0	E	HOLL		
30	BSL	0842	0852	S03 E90	10 7.2	1	02	9	9	V	KHAR		
30	DSD	0844	0905	N08 W45	09 27.0	2	12	9	9	V	KHAR		
30	ADF	0950	1005	S02 W19	09 29.0	1	03	9	9	V	KHAR		
30	ADF	1030	1039	S02 W53	09 26.4	1	04	6	9	V	KHAR		
30	EPL	2026	2034	S01 E90	10 7.6	3		9	9	E	HOLL	0471	Flare Associated
30	EPL	2050	2105	S01 E90	10 7.6	3		9	9	E	HOLL	0471	Flare Associated

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

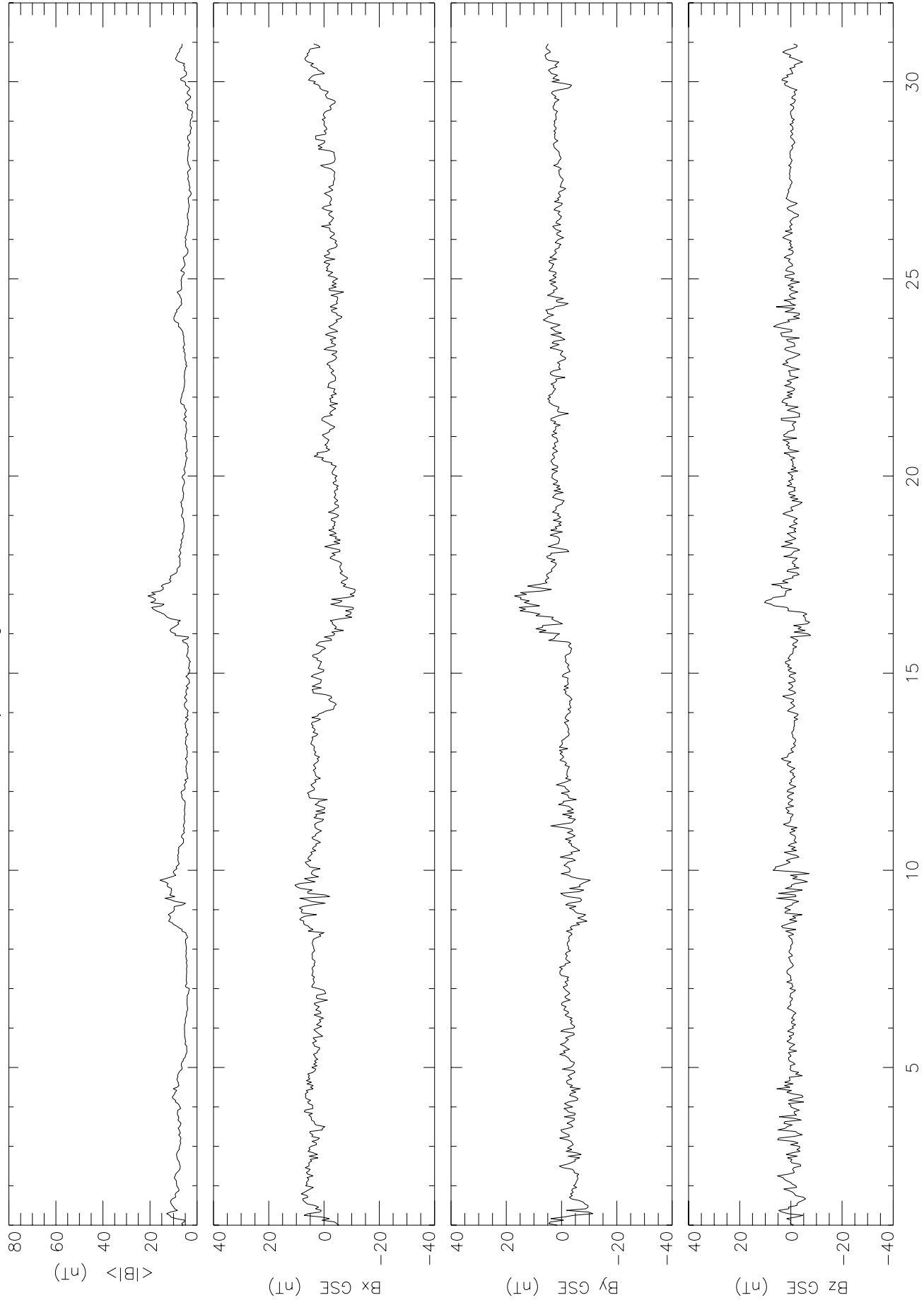
Oct 2002 - Sep 2003  
Version 9.1



Day	Oct 02	Nov	Dec	Jan 03	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.2760	0.2783	0.2767	0.2761	0.2738	0.2728	0.2778	0.2749	0.2729	0.2743	0.2736	0.2749
2	0.2762	0.2785	0.2774	0.2760	0.2732	0.2743	0.2776	0.2741	0.2718	0.2751	0.2739	0.2744
3	0.2767	0.2789	0.2782	0.2760	0.2730	0.2754	0.2772	0.2736	0.2718	0.2756	0.2747	0.2736
4	0.2775	0.2796	0.2788	0.2762	0.2732	0.2769	---	0.2733	0.2710	0.2761	0.2746	0.2731
5	0.2785	0.2802	0.2786	0.2764	0.2745	0.2781	0.2761	0.2728	0.2709	0.2758	0.2744	0.2737
6	0.2796	0.2805	0.2790	0.2762	0.2761	0.2789	0.2747	0.2722	0.2717	0.2760	0.2741	0.2736
7	0.2802	0.2810	0.2792	0.2761	0.2769	0.2793	0.2738	0.2713	0.2728	0.2757	0.2736	0.2734
8	0.2804	0.2806	0.2795	0.2762	0.2772	0.2796	0.2730	0.2701	0.2735	0.2758	0.2732	0.2730
9	0.2810	0.2811	0.2800	0.2775	0.2777	0.2788	0.2724	0.2697	0.2743	0.2758	0.2730	0.2728
10	0.2812	0.2807	---	0.2784	0.2781	0.2784	0.2716	0.2698	0.2756	0.2749	0.2737	0.2720
11	0.2814	0.2806	---	0.2797	0.2784	0.2776	0.2713	0.2700	0.2759	0.2742	0.2741	0.2719
12	0.2817	0.2797	0.2785	0.2805	0.2780	0.2763	0.2713	0.2705	0.2770	0.2738	0.2745	0.2717
13	0.2815	0.2786	---	0.2808	0.2775	0.2746	0.2715	0.2706	---	0.2740	0.2746	0.2715
14	0.2813	0.2782	0.2799	0.2802	0.2765	0.2734	0.2717	0.2710	---	0.2743	0.2744	0.2716
15	0.2804	0.2783	0.2807	0.2800	0.2749	0.2728	0.2715	0.2714	0.2748	0.2750	0.2739	0.2715
16	0.2802	0.2785	---	0.2796	0.2740	0.2724	0.2714	0.2718	0.2745	0.2747	0.2738	0.2713
17	0.2803	0.2790	0.2820	0.2788	0.2729	0.2720	0.2712	0.2725	0.2739	0.2748	0.2740	0.2714
18	0.2804	0.2789	0.2822	0.2782	0.2720	0.2719	0.2714	0.2731	0.2737	0.2756	0.2738	0.2717
19	0.2805	0.2785	0.2817	0.2771	0.2724	0.2714	0.2720	0.2738	0.2738	0.2760	0.2737	0.2725
20	0.2806	0.2781	0.2814	0.2755	0.2724	0.2705	0.2726	0.2746	0.2737	0.2767	0.2731	0.2731
21	0.2796	0.2775	0.2810	---	0.2723	0.2699	0.2738	0.2747	0.2736	0.2768	0.2729	0.2731
22	0.2787	0.2768	0.2804	0.2744	0.2716	0.2696	0.2748	0.2754	0.2736	0.2765	0.2728	0.2735
23	0.2781	0.2766	0.2789	0.2741	0.2715	0.2699	0.2753	0.2756	0.2735	0.2757	0.2737	0.2737
24	0.2773	0.2766	0.2774	---	0.2716	0.2705	0.2756	0.2755	0.2737	0.2743	0.2743	0.2743
25	0.2767	0.2762	0.2758	---	0.2721	0.2712	0.2762	0.2755	0.2734	0.2729	0.2749	0.2753
26	0.2768	0.2759	0.2743	0.2742	0.2721	0.2721	0.2767	0.2757	0.2732	0.2723	0.2751	0.2759
27	0.2764	0.2755	0.2742	0.2745	0.2718	0.2730	0.2775	0.2758	0.2732	0.2721	0.2754	0.2762
28	0.2772	0.2755	0.2742	0.2748	0.2721	0.2736	0.2770	0.2764	0.2736	0.2732	0.2756	0.2763
29	0.2776	0.2754	0.2745	0.2753	---	0.2754	0.2766	0.2752	0.2738	0.2732	0.2757	0.2757
30	0.2778	0.2757	0.2749	0.2748	---	0.2764	0.2762	0.2745	0.2744	0.2732	0.2752	0.2753
31	0.2782	---	---	0.2745	---	0.2770	---	0.2736	---	0.2735	0.2754	---
Mean	0.2790	0.2783	0.2784	0.2768	0.2742	0.2743	0.2741	0.2732	0.2736	0.2748	0.2742	0.2734

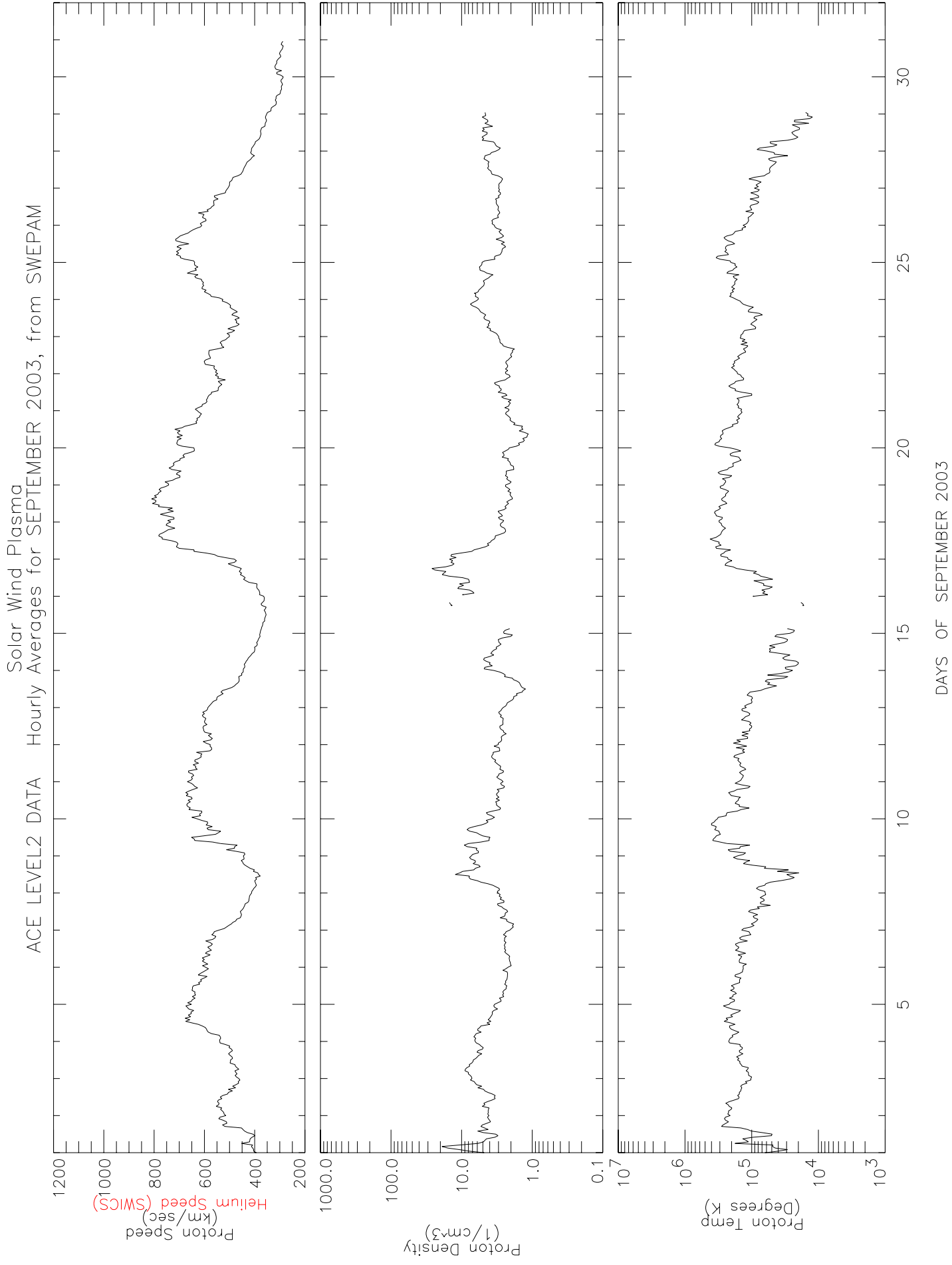
Data at: <http://www.sec.noaa.gov/ftpmenu/sbuv.html>

ACE LEVEL2 DATA Interplanetary Magnetic Field  
Hourly Averages for SEPTEMBER 2003, from MAG

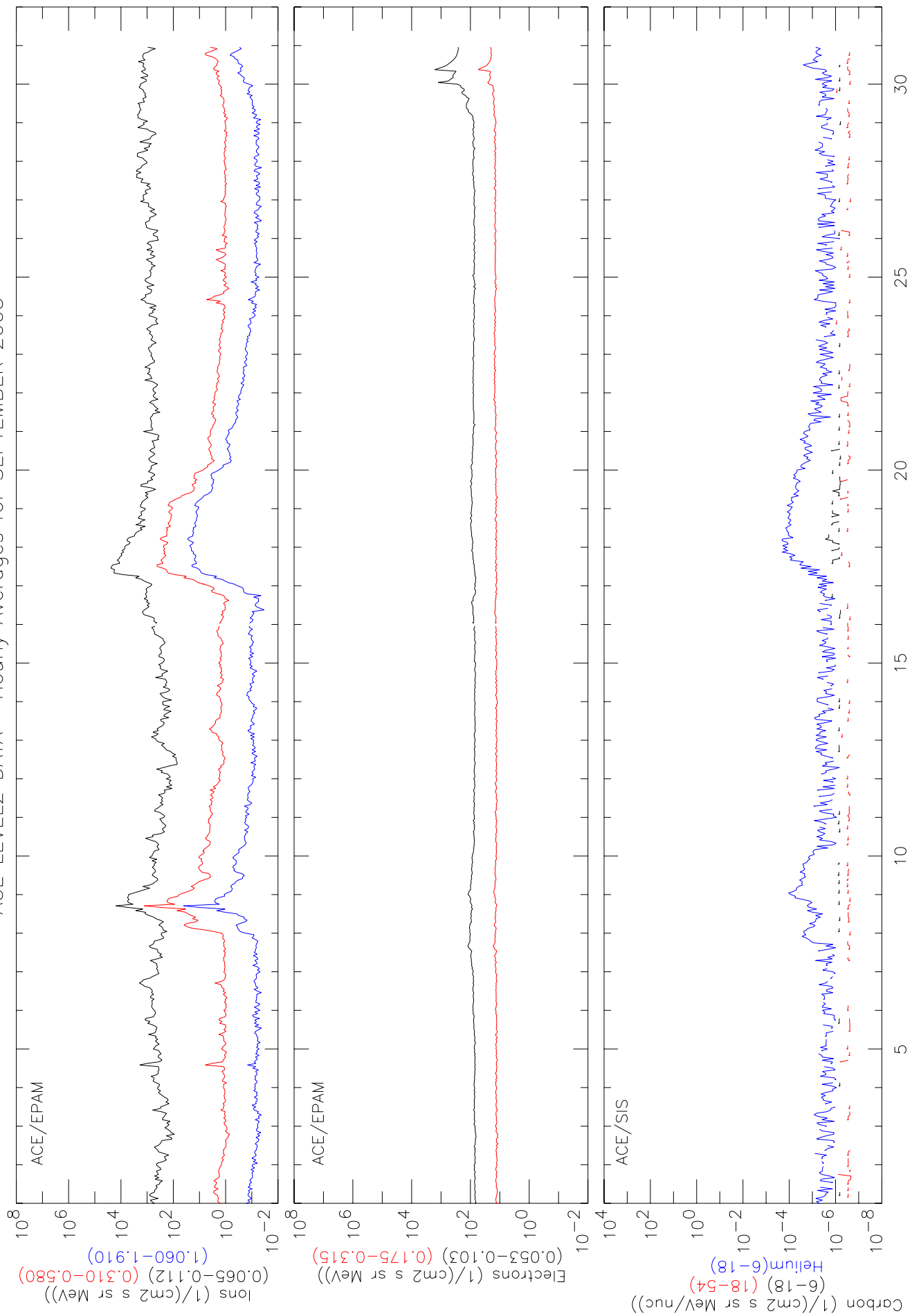


DAYS OF SEPTEMBER 2003

ACE LEVEL2 DATA Hourly Averages for SEPTEMBER 2003, from SWEPAM



# Solar Energetic Particles ACE LEVEL2 DATA Hourly Averages for SEPTEMBER 2003



DAYS OF SEPTEMBER 2003