FEBRUARY 2005 NUMBER 726 - Part II

Solar-Geophysical Data comprehensive reports

Data for August 2004 and Miscellaneous
Explanation of Data Reports Issued as Number 515 (Supplement) July 1987

NEW DATA:

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

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Data for August 2004 and Late Data

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SOLAR-GEOPHYSICAL DATA

Number 726
(Issued in Two Parts)

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NEW DATA:

ACE SOLAR WIND, INTERPLANETARY MAGNETIC FIELD AND PARTICLES -- MONTHLY PLOTS

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DATA FOR AUGUST 2004

Hα SOLAR FLARES

AUGUST 2004

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
		01	1832		1837	No Flare Patrol													
		01	1855		1934	No Flare Patrol													
		01	1944		2102	No Flare Patrol													
		01	2150		2331	No Flare Patrol													
		02	0101		0406	No Flare Patrol													
0001	KHAR	02	0944	0946	1005	S09	E36	10655	08	5.1	21	SF	3	P	0958	35		EH	
0002	KHAR	02	1058U		1103	S11	E32	10655	08	4.9	5U	SF	2	P	1058	20		D	
		02	1758		2303	No Flare Patrol													
0003	LEAR	03	0534	0534	0541	S11	E25	10655	08	5.1	7	SF	3	E		14		F	
0004	LEAR	03	0659	0701	0706	S10	E25	10655	08	5.2	7	SF	3	E		12			
0005	LEAR	03	0827	0828	0832	S10	E23	10655	08	5.1	5	SF	3	E		11			
		03	1954		2107	No Flare Patrol													
		03	2150		2207	No Flare Patrol													
		03	2216		2318	No Flare Patrol													
		04	0039		0044	No Flare Patrol													
		05	1342		1357	No Flare Patrol													
		05	1634		1654	No Flare Patrol													
		05	1713		2058	No Flare Patrol													
		05	2121		2239	No Flare Patrol													
		06	0554		0601	No Flare Patrol													
		06	0610		0622	No Flare Patrol													
		06	0648		0724	No Flare Patrol													
		06	0740		0816	No Flare Patrol													
		06	0926		1015	No Flare Patrol													
		06	1017		1027	No Flare Patrol													
		06	1036		1038	No Flare Patrol													
		06	1126		1130	No Flare Patrol													
		06	1210		1214	No Flare Patrol													
		06	1217		1226	No Flare Patrol													
		06	2213		2325	No Flare Patrol													
		07	0933		0934	No Flare Patrol													
		07	0950		0951	No Flare Patrol													
		07	0953		1027	No Flare Patrol													
0006	HOLL	08	1613	1613	1616	S10	E50	10656	08	12.4	3	SF	3	E		19			
0007	HOLL	08	1706	1708	1734	S13	E50	10656	08	12.5	28	SF	3	E		25			
0008	HOLL	08	1734	1737	1739	S12	E46	10656	08	12.2	5	SF	3	E		12			
0009	HOLL	08	1945	1947	1949	S11	E45	10656	08	12.2	4	SF	3	E		29			
		08	2040		2142	No Flare Patrol													
		08	2232		2325	No Flare Patrol													
0010	LEAR	09	0036	0037	0157	S14	E43	10656	08	12.3	81	SF	3	E		38		FH	
0011		09	0423	0425	0437	S14	E42	10656	08	12.3	14	SF				20		F	
	LEAR	09	0423	0425	0437	S15	E43	10656	08	12.4	14	SF	3	E		23		F	
	SVTO	09	0425E	0425U	0439D	S13	E42	10656	08	12.3	14D	SF	2	E		18		F	
0012	LEAR	09	0458	0459	0502	S12	E40	10656	08	12.2	4	SF	3	E		13		F	
0013	LEAR	09	0716	0716	0721	S12	E39	10656	08	12.2	5	SF	3	E		14		F	
0014		09	07311	07321	0741	S13	E41	10656	08	12.4	10	SF				18		F	
	LEAR	09	0731	0732	0741	S12	E38	10656	08	12.2	10	SF	3	E		13		F	
	SVTO	09	0732	0733	0750D	S14	E44	10656	08	12.6	18D	SF	3	E		24		F	
0015		09	08042	08081	0818	S13	E40	10656	08	12.3	14	SF				61		F	
	LEAR	09	0804	0808	0822	S12	E38	10656	08	12.2	18	SF	3	E		51		F	
	SVTO	09	0806	0809	0815	S14	E42	10656	08	12.5	9	SF	3	E		71		F	

AUGUST 2004

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Area Measurement Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
0016	KANZ	09	1031	1033	1036	S12	E37	10656	08	12.2	5	SF		2	E				
0017	HOLL	09	1758	1759	1813	S12	E34	10656	08	12.3	15	SF		3	E		35		F
0018	HOLL	09	1847	1852	1912	S12	E32	10656	08	12.2	25	SF		3	E		60		
0019	HOLL	09	1933	1934	1939	S12	E31	10656	08	12.1	6	SF		3	E		20		
0020	HOLL	09	1947	1948	2025	S12	E31	10656	08	12.1	38	SF		3	E		19		F
0021	HOLL	09	2031	2034	2037	S12	E31	10656	08	12.2	6	SF		3	E		13		
		09	2204		2234	No Flare Patrol													
		09	2315		2329	No Flare Patrol													
0022	LEAR	10	0604	0607	0612	S12	E26	10656	08	12.2	8	SF		3	E		30		F
0023	LEAR	10	0854	0854	0900	S12	E24	10656	08	12.2	6	SF		3	E		20		F
0024	HOLL	11	0015	0017	0020	S12	E16	10656	08	12.2	5	SF		3	E		22		
0025	LEAR	11	0342	0345	0356	S11	E10	10656	08	11.9	14	SF		3	E		42		
0026	KANZ	11	0705E	0723U	0732	S10	E08	10656	08	11.9	27D	SF		2	E				
0027	LEAR	11	0713	0717	0733	S12	E12	10656	08	12.2	20	SF		3	E		20		F
0028	SVTO	11	0852	0852	0856	S13	E13	10656	08	12.3	4	SF		3	E		30		F
0029		11	1038	10511	1130	S14	E11	10656	08	12.3	52	SF					24		F
	KANZ	11	1017E	1052	1206	S14	E09	10656	08	12.1	109D	SF		2	E				
	SVTO	11	1038	1051	1053	S14	E13	10656	08	12.4	15	SF		3	E		24		F
0030	SVTO	11	1140	1140	1148	S13	E11	10656	08	12.3	8	SF		3	E		48		F
0031	KANZ	11	1245	1250	1319	S13	E07	10656	08	12.0	34	SF		2	E				
0032	HOLL	11	1403	1409	1423	S14	E09	10656	08	12.3	20	SF		3	E		19		
0033	HOLL	11	1428	1433	1446	S13	E08	10656	08	12.2	18	SF		3	E		18		F
0034	HOLL	11	1449	1450	1452	S13	E09	10656	08	12.3	3	SF		3	E		14		F
		11	1711		1712	No Flare Patrol													
0035	HOLL	11	1753	1753	1755	S13	E07	10656	08	12.3	2	SF		3	E		12		F
		11	2156		2312	No Flare Patrol													
		12	0019		0100	No Flare Patrol													
		12	0233		0336	No Flare Patrol													
0036	LEAR	12	0443	0444	0454	S12	E00	10656	08	12.2	11	SF		3	E		14		
0037		12	0458	0505	0546	S13	E03	10656	08	12.4	48	1F					146		F
	LEAR	12	0458	0505	0553	S14	E02	10656	08	12.3	55	1F		3	E		172		F
	SVTO	12	0458E	0517U	0540	S12	E04	10656	08	12.5	42D	SF		2	E		121		F
0038	LEAR	12	0606	0606	0613	S14	E00	10656	08	12.2	7	SF		3	E		16		
0039	LEAR	12	0617	0617	0622	S15	W07	10656	08	11.7	5	SF		3	E		11		
0040	LEAR	12	0628	0634	0637	S14	W07	10656	08	11.7	9	SF		3	E		12		
0041	LEAR	12	0639	0639	0645	S14	W04	10656	08	12.0	6	SF		3	E		15		
0042		12	0909	0910	0913	S13	W02	10656	08	12.2	4	SF					20		F
	SVTO	12	0909	0910	0912	S14	W03	10656	08	12.1	3	SF		3	E		14		
	LEAR	12	0909	0910	0914	S12	W02	10656	08	12.2	5	SF		3	E		25		F

Hα SOLAR FLARES

AUGUST 2004

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
0043	SVTO	12	0932	0950	0956	S14	W03	10656	08	12.2	24	SF		3	E		94		F
0044		12	1035	1039	1043	S14	W03	10656	08	12.2	8	SF					34		F
	SVTO	12	1035	1039	1043	S14	W04	10656	08	12.1	8	SF		3	E		34		F
	KANZ	12	1041E	1041U	1041D	S14	W02	10656	08	12.3	8D	SF		2	E				
		12	1119		1122	No Flare Patrol													
0045	KANZ	12	1131	1135	1140	S14	W04	10656	08	12.2	9	SF		2	E				
		12	1148		1200	No Flare Patrol													
		12	1207		1208	No Flare Patrol													
		12	1212		1214	No Flare Patrol													
		12	1220		1222	No Flare Patrol													
		12	1228		1229	No Flare Patrol													
		12	1231		1241	No Flare Patrol													
0046	HOLL	12	1422	1423	1427	S14	W07	10656	08	12.1	5	SF		3	E		10		F
0047		12	16151	16161	1626	S15	W06	10656	08	12.2	11	SF					60		FR
	HOLL	12	1615	1617	1628	S18	W06	10656	08	12.2	13	SF		3	E		84		FR
	SVTO	12	1616	1616	1623	S12	W06	10656	08	12.2	7	SF		3	E		35		F
0048	HOLL	12	1714	1716	1719	S15	W08	10656	08	12.1	5	SF		3	E		11		
0049	HOLL	12	1855	1858	1901	S15	W13	10656	08	11.8	6	SF		3	E		15		
		12	2240		2323	No Flare Patrol													
		13	0019		0326	No Flare Patrol													
		13	0335		0347	No Flare Patrol													
		13	0356		0405	No Flare Patrol													
0050		13	06401	06415	0650	S14	W16	10656	08	12.1	10	SF					32		F
	LEAR	13	0640	0641	0646	S15	W17	10656	08	12.0	6	SF		3	E		27		F
	SVTO	13	0641	0646	0654	S14	W15	10656	08	12.1	13	SF		3	E		37		F
0051	LEAR	13	0702	0703	0708	S14	W16	10656	08	12.1	6	SF		3	E		11		F
0052		13	07221	0729	0744	S14	W15	10656	08	12.2	22	1F					92		F
	LEAR	13	0722	0729	0743	S12	W18	10656	08	11.9	21	SF		3	E		81		F
	SVTO	13	0723	0729	0745	S15	W12	10656	08	12.4	22	1F		3	E		102		F
0053	SVTO	13	1206	1209	1219	S13	W19	10656	08	12.1	13	1F		3	E		118		
0054	SVTO	13	1326	1326	1331	S14	W17	10656	08	12.3	5	SF		3	E		13		
0055		13	1512	1514	1523	S14	W22	10656	08	12.0	11	1F					90		F
	HOLL	13	1512	1514	1522	S13	W22	10656	08	12.0	10	SF		3	E		68		
	SVTO	13	1512	1514	1524	S14	W21	10656	08	12.0	12	1F		3	E		111		F
0056	HOLL	13	1656	1658	1659	S12	W23	10656	08	12.0	3	SF		3	E		12		
0057	HOLL	13	1808	1815	1826	S13	W24	10656	08	11.9	18	1N		3	E		180		F
		13	2202		2313	No Flare Patrol													
0058	LEAR	13	2347	2348	2352	S12	W27	10656	08	11.9	5	SF		3	E		20		
0059	LEAR	14	0413	0414	0425	S13	W30	10656	08	11.9	12	SF		3	E		75		F
0060	LEAR	14	0432	0437	0441	S13	W31	10656	08	11.8	9	SF		3	E		51		F
0061	SVTO	14	0440	0442	0445	S12	W27	10656	08	12.2	5	SF		3	E		28		F
0062		14	0540	0544	0634	S12	W29	10656	08	12.0	54	2N					231		F
	LEAR	14	0540	0544	0623	S12	W30	10656	08	12.0	43	1N		3	E		190		F
	SVTO	14	0540	0544	0646	S11	W28	10656	08	12.1	66	2N		3	E		272		F
0063	LEAR	14	0624	0624	0627	S13	W30	10656	08	12.0	3	SF		3	E		17		F

AUGUST 2004

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP	Mo	Day	Dur (Min)	Imp	Opt	Xray	See	Obs Type	Time (UT)	Area Measurement Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
0064	SVTO	14	1022	1023	1030	S14	W30	10656	08	12.2		8	SF			3	E		15		F
0065		14	0751	0756	0820	S12	W31	10656	08	12.0		29	1F						129		F
	SVTO	14	0751	0756	0815	S11	W30	10656	08	12.1		24	1F			3	E		131		F
	LEAR	14	0751	0756	0826	S13	W32	10656	08	11.9		35	1F			3	E		127		
	KANZ	14	0807E	0807E	0821D	S13	W31	10656	08	12.0		14D	1F			2	E				
0066	SVTO	14	0934	0935	0938	S13	W30	10656	08	12.1		4	SF			3	E		14		F
0067	SVTO	14	0956	1008	1021	S14	W30	10656	08	12.1		25	1F			3	E		145		F
0068	SVTO	14	1113	1115	1117	S12	W34	10656	08	11.9		4	SF			3	E		30		
0069		14	1204	1205	1214	S14	W32	10656	08	12.1		10	SF						26		F
	KANZ	14	1204	1205	1208	S14	W33	10656	08	12.0		4	SF			2	E				
	SVTO	14	1204	1205	1219	S14	W31	10656	08	12.1		15	SF			3	E		26		F
0070	SVTO	14	1333	1343	1410	S14	W34	10656	08	12.0		37	2N			3	E		304		F
0071	KANZ	14	1350E	1350E	1407D	S13	W36	10656	08	11.9		17D	2N			2	E				
0072	SVTO	14	1454	1455	1459	S13	W36	10656	08	11.9		5	SF			3	E		22		
		14	1517		1552	No Flare Patrol															
0073	SVTO	14	1610	1610	1615	S13	W36	10656	08	11.9		5	SF			3	E		55		
0074	SVTO	14	1631	1633	1639	S14	W33	10656	08	12.2		8	SF			3	E		45		F
0075	SVTO	14	1646	1649	1654	S13	W37	10656	08	11.9		8	SF			3	E		57		F
		14	1724		2244	No Flare Patrol															
0076	HOLL	14	2242	2242	2248	S14	W37	10656	08	12.1		6	SF			3	E		27		
0077	HOLL	14	2249	2249	2255	S14	W37	10656	08	12.1		6	SF			3	E		40		
0078	HOLL	14	2316	2327	2330	S13	W39	10656	08	12.0		14	SF			3	E		13		F
0079	HOLL	14	2339	2340	2344	S12	W41	10656	08	11.9		5	SF			3	E		22		F
0080	LEAR	15	0330	0333	0338	S12	W41	10656	08	12.0		8	SF			3	E		25		F
0081	LEAR	15	0344	0345	0351	S12	W41	10656	08	12.1		7	SF			3	E		34		F
0082		15	0459	0502	0547	S14	W42	10656	08	12.0		48	SF						72		F
	SVTO	15	0459	0502	0543	S15	W41	10656	08	12.1		44	SF			3	E		85		F
	LEAR	15	0459	0502	0551	S12	W44	10656	08	11.9		52	SF			3	E		60		F
0083		15	05571	0603	0608	S14	W42	10656	08	12.1		11	SF						28		F
	LEAR	15	0557	0603	0608	S12	W42	10656	08	12.1		11	SF			3	E		26		F
	SVTO	15	0558	0603	0631D	S15	W42	10656	08	12.1		33D	SF			3	E		30		F
0084	SVTO	15	1128E	1132U	1150	S15	W47	10656	08	11.9		22D	2F			2	E		264		F
0085	SVTO	15	1153E	1159	1216	S14	W51	10656	08	11.6		23D	SF			3	E		35		F
0086	SVTO	15	1238	1240	1304	S15	W45	10656	08	12.1		26	1N			3	E		235		F
0087	SVTO	15	1421	1421	1427	S14	W52	10656	08	11.7		6	SF			3	E		10		
		15	1806		1938	No Flare Patrol															
		15	2019		2325	No Flare Patrol															
		16	0116		0222	No Flare Patrol															
0088	LEAR	16	0337	0341	0352	S12	W54	10656	08	12.1		15	SF			3	E		67		F
0089	LEAR	16	0353	0357	0404	S12	W54	10656	08	12.1		11	SF			3	E		21		F

Hα SOLAR FLARES

AUGUST 2004

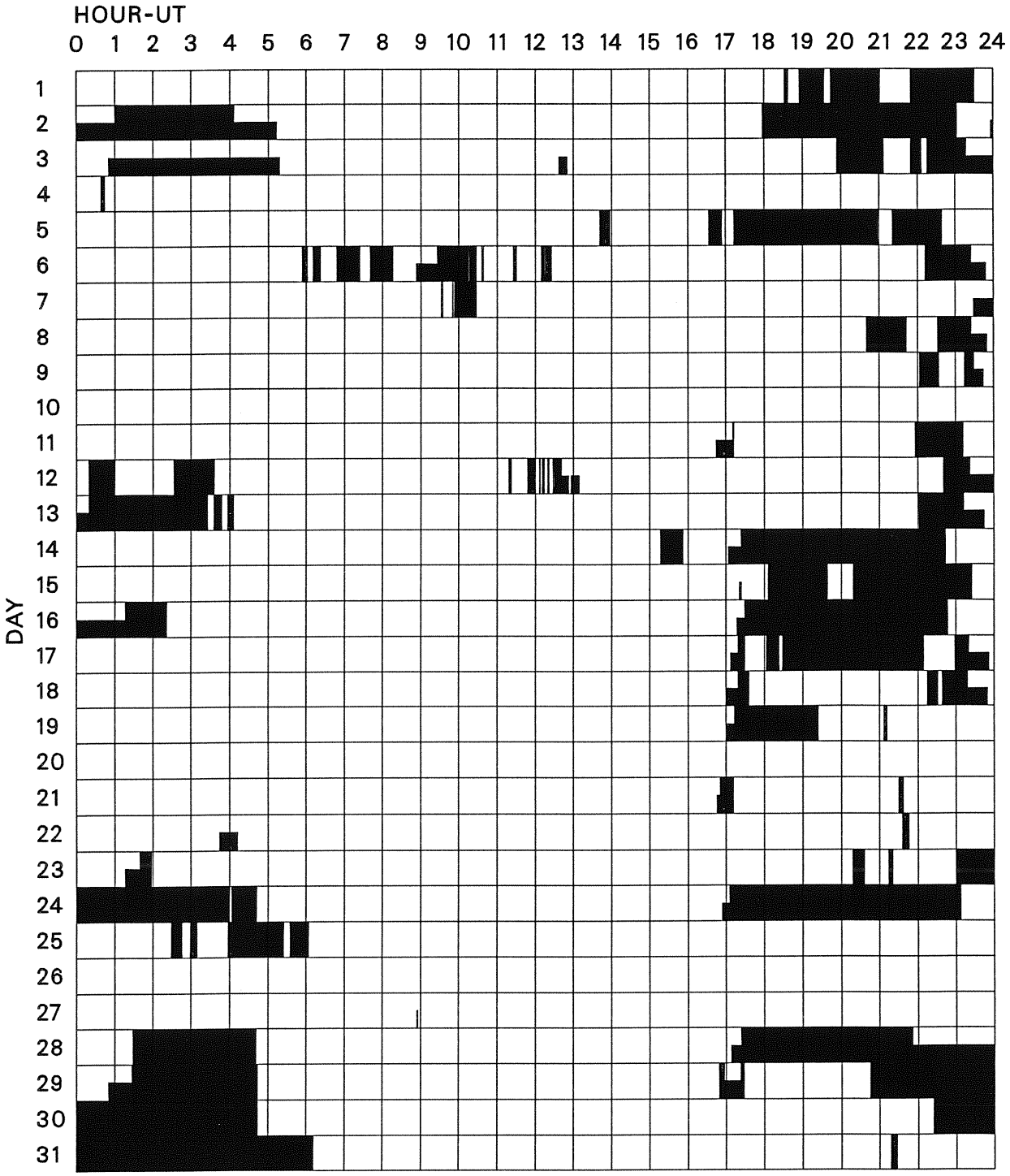
Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0090		16	04453	05021	0520	S14	W54	10656	08	12.1	35	1F					78		F
	LEAR	16	0445	0502	0519	S12	W55	10656	08	12.0	34	SF		3	E		53		F
	SVTO	16	0448	0503	0520	S15	W53	10656	08	12.2	32	1F		3	E		104		F
0091	LEAR	16	0528	0530	0534	S12	W55	10656	08	12.1	6	SF		3	E		20		F
0092		16	05296	05372	0542	S14	W54	10656	08	12.1	13	SF					24		F
	SVTO	16	0529	0537	0542	S15	W54	10656	08	12.1	13	SF		3	E		34		F
	LEAR	16	0535	0539	0541	S12	W55	10656	08	12.1	6	SF		3	E		13		F
0093	LEAR	16	0545	0548	0551	S12	W55	10656	08	12.1	6	SF		3	E		13		F
0094	LEAR	16	0739	0741	0746	S12	W56	10656	08	12.1	7	SF		3	E		15		F
0095		16	0749	07491	0754	S14	W56	10656	08	12.1	5	SF					21		F
	KANZ	16	0744E	0749	0754	S13	W56	10656	08	12.1	10D	SF		2	E				
	SVTO	16	0749	0749	0752	S16	W55	10656	08	12.1	3	SF		3	E		21		
	LEAR	16	0749	0750	0755	S12	W56	10656	08	12.1	6	SF		3	E		21		F
0096		16	1014	1016	1034	S13	W60	10656	08	11.9	20	1F					81		EFH
	SVTO	16	1014	1016	1023	S15	W57	10656	08	12.1	9	SF		3	E		81		F
	KHAR	16	1015E		1045	S11	W64	10656	08	11.6	30D	1F		2	V				HE
0097	SVTO	16	1025	1032	1036	S14	W58	10656	08	12.0	11	SF		3	E		16		F
0098		16	1336	13388	1356	S14	W61	10656	08	11.9	20	SF					36		F
	KANZ	16	1336	1338	1357	S13	W63	10656	08	11.8	21	SF		2	E				
	SVTO	16	1336	1346	1356	S15	W59	10656	08	12.1	20	SF		3	E		36		F
0099	SVTO	16	1716E	1716U	1722D	S12	W61	10656	08	12.1	6D	SF		2	E		39		
		16	1729		2247	No Flare Patrol													
0100	LEAR	17	0201	0204	0207	S12	W66	10656	08	12.1	6	SF		3	E		60		F
0101	LEAR	17	0340	0340	0347	S12	W67	10656	08	12.1	7	SF		3	E		12		F
0102		17	04584	05041	0510	S12	W67	10656	08	12.1	12	SF					46		F
	SVTO	17	0458	0504	0513	S12	W66	10656	08	12.2	15	SF		3	E		72		
	LEAR	17	0502	0505	0507	S12	W68	10656	08	12.1	5	SF		3	E		21		F
0103		17	0519	0520	0524	S12	W67	10656	08	12.2	5	SF					13		
	SVTO	17	0519	0520	0524	S12	W66	10656	08	12.2	5	SF		3	E		13		
	KANZ	17	0520E	0522U	0523	S12	W68	10656	08	12.1	3D	SF		2	E				
0104		17	05441	05461	0548	S12	W68	10656	08	12.1	4	SF					24		
	KANZ	17	0544	0546	0548	S13	W69	10656	08	12.0	4	SF		2	E				
	SVTO	17	0545	0547	0549	S12	W68	10656	08	12.1	4	SF		3	E		24		
0105	SVTO	17	0629	0630	0633	S15	W66	10656	08	12.3	4	SF		3	E		15		
0106	KANZ	17	0703	0706	0706	S12	W73	10656	08	11.8	3	SN		2	E				
0107		17	07371	0739	0741	S13	W70	10656	08	12.0	4	SF					22		F
	KANZ	17	0737	0739	0740	S14	W72	10656	08	11.9	3	SF		2	E				
	SVTO	17	0737	0739	0742	S14	W67	10656	08	12.2	5	SF		3	E		27		F
	LEAR	17	0738	0739	0741	S10	W72	10656	08	11.9	3	SF		3	E		18		
0108		17	1047	1048	1051	N06	E24	10661	08	19.2	4	SF					26		H
	KHAR	17	1035U		1055U	N06	E23	10661	08	19.2	20U	SF		2	V				H
	SVTO	17	1047	1048	1051	N06	E26	10661	08	19.4	4	SF		3	E		26		
		17	1719		1729	No Flare Patrol													
		17	1804		1823	No Flare Patrol													
		17	1828		2209	No Flare Patrol													
		17	2258		2320	No Flare Patrol													
0109		18	0510	0510	0520	N10	E19	10661	08	19.6	10	SF					54		
	SVTO	18	0510	0510	0518	N12	E19	10661	08	19.6	8	SF		3	E		52		
	LEAR	18	0510	0510	0521	N08	E19	10661	08	19.6	11	SF		3	E		55		

AUGUST 2004

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0110		18	10411	10436	1052	N03	E14	10661	08	19.5	11	1N					150		H
	KANZ	18	1041	1043	1052	N02	E13	10661	08	19.4	11	1F		2	E				
	SVTO	18	1042	1043	1053	N03	E14	10661	08	19.5	11	1F		3	E		160		H
	KHAR	18	1046E	1049	1059D	N04	E14	10661	08	19.5	13D	SB		2	P	1046	140		H
0111	KHAR	18	1131U		1134	N04	E14	10661	08	19.5	3U	SF		2	P				D
0112	KHAR	18	1153E		1206D	S15	W88	10656	08	11.8	13D	SN		2	P				H
		18	1719		1736	No Flare Patrol													
0113	HOLL	18	1736	1746	1754	S12	W83	10656	08	12.5	18	SF		3	E		22		F
		18	2215		2231	No Flare Patrol													
		18	2238		2319	No Flare Patrol													
0114	LEAR	19	0223	0224	0228	N09	E07	10661	08	19.6	5	SF		3	E		25		F
		19	1713		1924	No Flare Patrol													
		19	2107		2111	No Flare Patrol													
0115	KHAR	20	1051		1052D	S11	W21		08	18.9	1D	SF		2	V				H
0116	KHAR	20	1107E		1126	S30	E38		08	23.4	19D	SF		2	P				
0117	KHAR	20	1158	1159	1225D	S30	E40		08	23.6	27D	SN		2	P				
0118	KHAR	21	0957		1012	N08	E58		08	25.8	15	SF		2	P				
0119	KHAR	21	1018		1041D	N08	E58		08	25.8	23D	SN		2	P				E
		21	1651		1711	No Flare Patrol													
		21	2130		2137	No Flare Patrol													
		22	2136		2146	No Flare Patrol													
		23	0139		0157	No Flare Patrol													
		23	2018		2036	No Flare Patrol													
		23	2115		2120	No Flare Patrol													
		23	2301		2400	No Flare Patrol													
		24	0000		0359	No Flare Patrol													
		24	0403		0442	No Flare Patrol													
		24	1706		2307	No Flare Patrol													
		25	0229		0246	No Flare Patrol													
		25	0259		0310	No Flare Patrol													
		25	0357		0525	No Flare Patrol													
		25	0535		0604	No Flare Patrol													
0120	LEAR	26	0214	0215	0224	N10	W05	10663	08	25.7	10	SF		3	E		31		FH
		28	0129		0441	No Flare Patrol													
		28	1724		2151	No Flare Patrol													
		29	0127		0444	No Flare Patrol													
		29	1649		1657	No Flare Patrol													
		29	1723		1728	No Flare Patrol													
		29	2045		2400	No Flare Patrol													
		30	0000		0444	No Flare Patrol													
0121	KHAR	30	1152		1157	N06	W69		08	25.3	5	SF		2	P				D
		30	2224		2400	No Flare Patrol													
		31	0000		0611	No Flare Patrol													
0122	KHAR	31	1145		1150	N11	W70		08	26.2	5	SF		2	V				
		31	2118		2127	No Flare Patrol													

INTERVALS OF NO FLARE PATROL OBSERVATION
FOR PRECEDING SOLAR FLARE TABLE

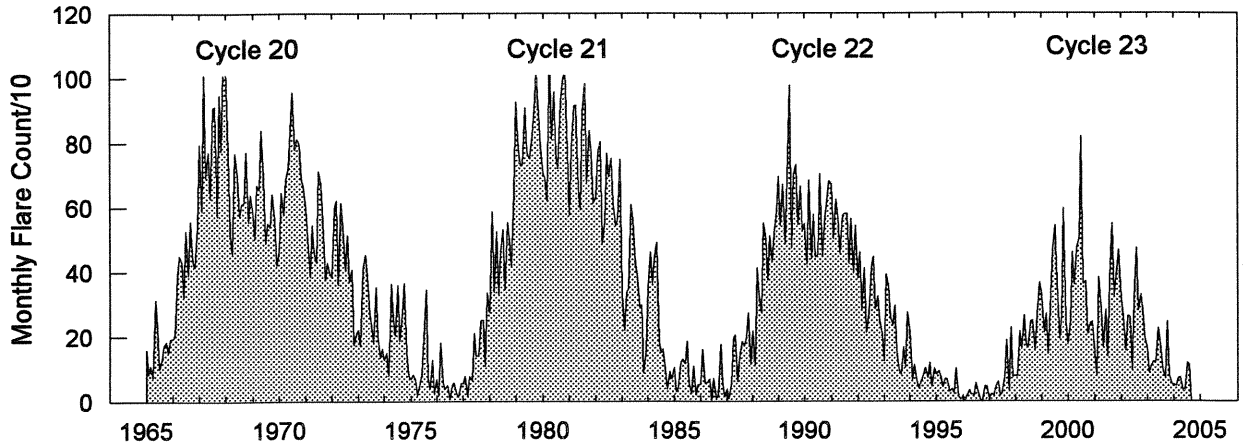
AUGUST 2004



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

Holloman
Kanzelhoehe
Learmonth
Kharkov
San Vito

Monthly Counts of Grouped Solar Flares
Jan 1965 - Aug 2004



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1965	158	85	110	74	315	231	99	127	173	184	150	193	1899
1966	194	205	390	449	429	323	528	391	558	432	417	543	4859
1967	796	589	1009	694	771	629	907	911	573	946	775	1109	9709
1968	1037	773	519	460	768	697	573	611	616	772	556	640	8022
1969	581	504	669	655	839	694	489	551	540	643	566	422	7153
1970	466	646	578	688	722	836	954	780	811	797	687	667	8632
1971	598	505	387	546	461	430	713	673	518	375	431	394	6031
1972	384	599	621	361	614	541	404	515	371	408	175	210	5203
1973	221	171	410	453	388	270	232	182	353	201	136	163	3180
1974	127	148	79	364	255	204	360	187	270	366	153	81	2594
1975	68	82	69	19	42	85	196	346	68	38	127	25	1165
1976	69	18	180	60	38	48	6	47	57	23	13	55	614
1977	54	77	18	76	64	210	140	140	250	252	107	336	1724
1978	274	588	338	526	330	460	533	346	554	499	418	648	5514
1979	926	781	731	731	907	772	750	821	901	1018	888	786	10012
1980	703	689	621	1092	811	956	763	720	924	988	1027	838	10132
1981	578	782	914	915	658	592	893	982	680	836	773	615	9218
1982	631	766	803	490	553	769	696	753	615	544	564	748	7932
1983	332	220	337	346	609	561	427	389	289	298	88	152	4048
1984	353	461	366	440	492	185	151	161	95	36	92	69	2901
1985	104	29	38	119	129	116	185	53	25	108	19	50	975
1986	51	158	54	56	68	3	71	12	14	174	56	13	730
1987	36	7	52	192	205	61	132	185	172	198	273	114	1627
1988	217	109	413	328	274	551	502	375	513	429	518	587	4816
1989	695	544	672	488	691	977	474	699	733	547	665	526	7711
1990	550	424	684	442	580	445	454	703	449	574	623	682	6610
1991	672	503	625	570	458	574	582	581	425	565	396	544	6495
1992	380	462	287	412	214	271	413	447	287	325	248	206	3952
1993	123	392	357	262	237	296	154	92	82	167	104	275	2541
1994	217	67	111	60	40	56	81	101	72	117	45	99	1066
1995	82	95	77	42	69	66	29	37	23	99	14	6	639
1996	14	3	15	34	21	16	54	31	3	0	44	45	280
1997	8	22	18	43	59	18	26	75	188	31	228	74	790
1998	78	76	216	161	264	177	164	248	249	155	268	367	2423
1999	330	212	271	145	330	466	544	368	192	264	598	243	3963
2000	175	248	462	362	473	505	818	364	372	208	241	246	4474
2001	147	77	383	284	164	282	137	376	549	325	405	468	3597
2002	318	261	155	263	259	91	318	474	280	329	279	196	3223
2003	164	87	112	122	117	226	181	94	73	245	78	53	1552
2004	49	47	71	72	32	33	118	112					534

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

SOLAR RADIO EMISSION
Outstanding Occurrences

AUGUST 2004

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
01	245	LEAR	43	NS	0122.0	0129.0	112.0	100.0			QL=4 ST=2 TYP=1
	204	IZMI	44	NS	0600.0E		360.0D		10.0		
	127	TORN	43	NS	0740.0		440.0		3.0		V=1
	2800	PENT	1	S	0002.0	0008.0	12.0	8.0			
	2804	VORO	2	S/F	0007.0	0008.0	2.7	8.9			
	2800	HIRA	1	S	0008.0	0008.0	2.0	10.0			
	245	LEAR	8	S	0100.0	0100.0	U	52.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0130.0	0130.0	U	86.0			QL=4 ST=2 TYP=3
	600	GORK	40	F	0645.1	0645.6	1.3	9.7			
	600	GORK	2	S/F	0737.3	0737.6	0.8	12.0			
	245	LEAR	8	S	0757.0	0757.0	U	59.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1745.0	1745.0	U	63.0			QL=4 ST=2 TYP=3
02	127	TORN	43	NS	1005.0		135.0		1.0		V=1
	235	CUBA	44	NS	1310.0E		500.0D		15.0		
	280	CUBA	44	NS	1310.0E		500.0D		22.0		
	280	CUBA	44	NS	1310.0E		500.0D		15.0		
	280	CUBA	44	NS	1310.0E		500.0D		15.0		
	245	SGMR	43	NS	1616.0	1640.0	201.0	140.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	1623.0	1643.0	229.0	90.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	1623.0	1643.0	457.0	90.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	1629.0	1640.0	44.0	180.0			QL=4 ST=2 TYP=1
	245	SGMR	8	S	1431.0	1431.0	U	72.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1431.0	1431.0	U	80.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1443.0	1444.0	1.0	55.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1444.0	1444.0	U	58.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1515.0	1515.0	1.0	65.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1515.0	1515.0	U	58.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1525.0	1525.0	U	57.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1616.0	1616.0	U	64.0			QL=4 ST=2 TYP=3
	2800	PENT	21	GRF	1733.0	1749.0	119.0	6.0			
	245	SGMR	8	S	1747.0	1747.0U	1.0	90.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2105.0	2105.0	U	96.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2105.0	2105.0	U	110.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2140.0	2140.0	U	86.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2140.0	2140.0	U	100.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2225.0	2226.0	1.0	91.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2225.0	2226.0	1.0	88.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2304.0	2304.0	U	51.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2319.0	2319.0	U	54.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2326.0	2326.0	U	120.0			QL=4 ST=2 TYP=3
03	245	LEAR	43	NS	0022.0	0031.0	40.0	53.0			QL=4 ST=2 TYP=1
	245	LEAR	43	NS	0022.0	0031.0	1418.0	53.0			QL=4 ST=1 TYP=1
	127	TORN	43	NS	0740.0		440.0		8.0		V=1
	245	PALE	8	S	0014.0	0014.0	U	53.0			QL=4 ST=2 TYP=3
	600	GORK	40	F	0920.2	0921.3	2.6	60.0			
	33	UPIC	45	C	1551.0	1551.5	2.0				
	33	UPIC	45	C	1606.0	1606.2	1.2				
	33	UPIC	45	C	1656.0	1656.5	1.5				
	33	UPIC	45	C	1740.0	1741.0	1.5				
	245	SGMR	8	S	2229.0	2229.0	U	70.0			QL=4 ST=2 TYP=3
	410	PALE	48	C	2308.0	2312.0	4.0	460.0			QL=4 ST=2 TYP=8
04	204	IZMI	43	NS	0600.0		360.0D		20.0		
	127	TORN	43	NS	0812.0		408.0		5.0		V=1
	235	CUBA	44	NS	1856.0E		162.0D		8.0		
	280	CUBA	44	NS	1856.0E		162.0D		15.0		
	410	PALE	8	S	0357.0	0357.0	U	67.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0458.0	0458.0	1.0	240.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0458.0	0458.0	1.0	200.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0509.0	0509.0	U	200.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0509.0	0509.0	1.0	180.0			QL=4 ST=2 TYP=3
	204	IZMI	41	F	0745.6	0745.7	0.3	45.0			
	245	LEAR	49	GB	0835.0	0835.0	U	530.0			QL=4 ST=2 TYP=6
	245	SVTO	8	S	0835.0	0835.0	1.0	440.0			QL=4 ST=2 TYP=3
	204	IZMI	45	C	0835.3	0835.4	0.3	1992.0			
	204	IZMI	42	SER	0835.7	0835.9	0.8	199.0			
	245	SVTO	4	S/F	0852.0	0853.0	3.0	95.0			QL=4 ST=2 TYP=3

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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
04	245	LEAR	8	S	0853.0	0853.0	U	98.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1407.0	1407.0	U	64.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1505.0	1505.0	U	63.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1505.0	1505.0	U	54.0			QL=4 ST=2 TYP=3
	33	UPIC	45	C	1550.0	1550.5	2.0				
	33	UPIC	45	C	1718.5	1719.0	1.5				
	245	LEAR	8	S	2351.0	2351.0	U	110.0			QL=4 ST=2 TYP=3
05	204	IZMI	44	NS	0600.0E		360.0D		20.0		
06	127	TORN	44	NS	0800.0E		420.0D		3.0		V=0
	204	IZMI	41	F	1007.3	1007.4	0.3	25.0			
07	127	TORN	43	NS	0820.0		370.0		5.0		V=0
	410	SVTO	8	S	0720.0	0720.0	U	65.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	0746.5	0746.9	0.6	10.0			
	9100	GORK	8	S	0929.2	0929.5	0.6	80.0			
	204	IZMI	42	SER	1006.2	1006.8	1.1	8.0			
	245	SVTO	8	S	1041.0	1041.0	U	28.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1041.0	1041.0	U	35.0			QL=4 ST=2 TYP=3
08	127	TORN	44	NS	0630.0E		390.0D		14.0		V=1
	235	CUBA	44	NS	1310.0E		500.0D		7.0		
	280	CUBA	44	NS	1310.0E		500.0D		16.0		
09	204	IZMI	43	NS	0600.0		360.0D		45.0		
	127	TORN	44	NS	0940.0E		260.0D		14.0		V=1
	235	CUBA	44	NS	1300.0E		480.0D		19.0		
	280	CUBA	44	NS	1300.0E		480.0D		27.0		
	245	PALE	43	NS	1737.0	1737.0	311.0	160.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	1737.0	1738.0	383.0	130.0			QL=4 ST=1 TYP=1
	245	PALE	43	NS	1737.0	1954.0	383.0	140.0			QL=4 ST=1 TYP=1
	245	PALE	43	NS	1737.0	2002.0	383.0	160.0			QL=4 ST=1 TYP=1
	245	SGMR	43	NS	1801.0	2242.0	284.0	140.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1801.0	1801.0	359.0	64.0			QL=4 ST=2 TYP=1
	2840	PEKG	1	S	0323.0	0325.9	7.0	5.5			
	245	LEAR	8	S	0454.0	0454.0	U	73.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0454.0	0454.0	U	63.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0513.0	0513.0	2.0	76.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0513.0	0513.0	2.0	69.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0624.0	0624.0	U	130.0			QL=2 ST=2 TYP=3
	410	LEAR	8	S	0624.0	0624.0	U	100.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0624.0	0624.0	U	98.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0624.0	0624.0	U	290.0			QL=4 ST=2 TYP=3
	204	IZMI	45	C	0624.6	0624.7	0.3	1102.0			
	245	LEAR	48	C	0703.0	0703.0	2.0	160.0			QL=2 ST=2 TYP=8
	245	SVTO	48	C	0703.0	0703.0	2.0	150.0			QL=4 ST=2 TYP=8
	204	IZMI	42	SER	0703.6	0703.9	2.1	92.0			
	245	SVTO	8	S	0936.0	0936.0	U	110.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	1042.0	1042.0	1.0	1900.0			QL=4 ST=2 TYP=6
	245	SVTO	8	S	1057.0	1057.0	U	75.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1057.0	1057.0	U	53.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1101.0	1102.0	2.0	230.0			QL=4 ST=2 TYP=3
	204	IZMI	45	C	1102.4	1102.5	0.2	714.0			
	204	IZMI	42	SER	1103.0	1103.4	0.5	103.0			
	410	SVTO	8	S	1104.0	1104.0	U	23.0			QL=4 ST=2 TYP=3
	204	IZMI	45	C	1107.4	1107.5	0.2	137.0			
	245	SVTO	8	S	1239.0	1239.0	1.0	61.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	1248.0	1248.0	U	650.0			QL=4 ST=2 TYP=6
	410	SVTO	8	S	1248.0	1248.0	U	52.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1624.0	1625.0	1.0	78.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1625.0	1625.0	U	80.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1738.0	1738.0	1.0	87.0			QL=4 ST=2 TYP=3
	9500	CUBA	1	S	1758.8	1759.1	0.9	26.0	13.0		
	9500	CUBA	1	S	2016.6	2017.0	1.1	47.0	23.0		
10	204	IZMI	44	NS	0600.0E		360.0D		20.0		
	127	TORN	44	NS	0630.0E		510.0D	120.0	22.0		V=2
	280	CUBA	44	NS	1302.0E		238.0D		34.0		

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10	235	CUBA	44	NS	1310.0E		230.0D		14.0		
	245	SGMR	43	NS	1400.0	1435.0	455.0	110.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1400.0	1401.0	600.0	97.0			QL=4 ST=1 TYP=1
	245	LEAR	8	S	0001.0	0001.0	U	65.0			QL=4 ST=2 TYP=3
	2840	PEKG	1	S	0106.0	0108.4	8.0	2.5			
	245	LEAR	8	S	0255.0	0255.0	U	66.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0255.0	0255.0	1.0	58.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0320.0	0320.0	U	100.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0452.0	0453.0	1.0	83.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0453.0	0453.0	U	93.0			QL=4 ST=2 TYP=3
	9100	GORK	22	GRF	0603.5	0607.1	20.7	13.0			
	9100	GORK	22	GRF	0603.5	0616.9		10.0			
	245	SVTO	8	S	0605.0	0605.0	U	52.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0613.0	0613.0	U	52.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0642.0	0642.0	U	130.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0642.0	0642.0	U	130.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0716.0	0716.0	U	62.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0716.0	0716.0	U	73.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0730.0	0731.0	1.0	67.0			QL=2 ST=2 TYP=3
	33	UPIC	3	S	1103.8	1104.0	0.7				
	235	CUBA	7	C	1324.5	1324.6	0.7	66.0	33.0		
	245	SVTO	8	S	1419.0	1420.0	1.0	81.0			QL=2 ST=2 TYP=3
	235	CUBA	42	SER	1419.5	1435.4	30.4	82.0U	41.0U		
	280	CUBA	42	SER	1419.9	1446.1	26.9	138.0U	69.0U		
	245	SVTO	8	S	1435.0	1435.0	U	94.0			QL=2 ST=2 TYP=3
	245	SVTO	49	GB	1443.0	1446.0	3.0	650.0			QL=2 ST=2 TYP=6
	410	SVTO	8	S	1446.0	1446.0	U	21.0			QL=2 ST=2 TYP=3
	245	SGMR	49	GB	1446.0E	1446.0U	U	890.0			QL=4 ST=2 TYP=6
	280	CUBA	6	S	1606.7	1606.8	0.2	138.0U	69.0U		
	280	CUBA	7	C	1646.9	1646.9	4.9	138.0U	69.0U		
	245	SVTO	8	S	1649.0	1649.0	2.0	140.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	1649.0	1650.0	2.0	29.0			QL=2 ST=2 TYP=3
	235	CUBA	7	C	1649.1	1650.8	2.1	82.0U	41.0U		
	245	SVTO	8	S	1701.0	1701.0	U	86.0			QL=2 ST=2 TYP=3
	9500	CUBA	1	S	1727.1	1727.7	1.6	15.0	7.0		
	2800	PENT	21	GRF	2138.0	2155.0	54.0U	6.0			
	500	HIRA	7	C	2151.0	2152.0	7.0	15.0			0
	245	PALE	49	GB	2152.0	2152.0	U	620.0			QL=4 ST=2 TYP=6
	245	SGMR	49	GB	2152.0	2152.0	U	660.0			QL=4 ST=2 TYP=6
	245	PALE	8	S	2154.0	2154.0	U	99.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2154.0	2154.0	U	52.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2154.0	2154.0	2.0	110.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	2346.0	2347.0	1.0	650.0			QL=4 ST=2 TYP=6
	245	LEAR	49	GB	2351.0	2351.0	1.0	2800.0			QL=4 ST=2 TYP=6
11	204	IZMI	44	NS	0600.0E		360.0D		50.0		
	127	TORN	43	NS	0845.0		375.0		39.0		V=1
	245	SVTO	43	NS	0958.0	0958.0	30.0	66.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1007.0	1404.0U	407.0	120.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1007.0	1243.0U	833.0	93.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	1205.0	1217.0	61.0	160.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	1306.0	1306.0	U	66.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	1306.0	1306.0	30.0	66.0			QL=4 ST=3 TYP=1
	9100	GORK	2	S/F	0342.5	0343.3	1.0	12.0			
	245	PALE	8	S	0343.0	0343.0	U	190.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0421.0	0422.0	1.0	85.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0421.0	0421.0	U	66.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0422.0	0422.0	U	65.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0439.0	0439.0	U	100.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	0441.0	0441.0	U	56.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	0441.0	0441.0	U	65.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0543.0	0543.0	U	51.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0543.0	0543.0	U	57.0			QL=4 ST=2 TYP=3
	204	IZMI	41	F	0649.8	0650.0	0.4	93.0			
	245	SVTO	8	S	0702.0	0702.0	U	51.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0713.0	0713.0	U	290.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0713.0	0713.0	U	220.0			QL=4 ST=2 TYP=3
	204	IZMI	41	F	0713.2	0713.2	0.4	441.0			
	900	GORK	42	SER	0713.2	0729.7		17.0			

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11	900	GORK	42	SER	0713.2	0715.9	19.8	5.7			
	9100	GORK	20	GRF	0714.6	0717.2	9.5	9.7			
	245	LEAR	8	S	0721.0	0721.0	U	96.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0721.0	0721.0	U	92.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	0723.1	0724.6	1.7	102.0			
	9100	GORK	21	GRF	0804.0	1014.5	176.0	27.0			
	2950	GORK	20	GRF	0806.5	0807.9	17.5	7.5			
	245	LEAR	8	S	0819.0	0819.0	U	64.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0819.0	0819.0	U	57.0			QL=4 ST=2 TYP=3
	9100	GORK	4	S/F	0824.6	0825.4	2.8	26.0			
	9100	GORK	46	C	0845.0	0846.4	5.8	32.0			
	9100	GORK	46	C	0845.0	0846.7		25.0			
	245	LEAR	8	S	0859.0	0859.0	U	52.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0859.0	0859.0	U	55.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0902.0	0902.0	U	54.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0910.0	0910.0	U	130.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0910.0	0910.0	U	150.0			QL=4 ST=2 TYP=3
	33	UPIC	42	SER	0916.0	1022.0	68.0				
	245	SVTO	8	S	0939.0	0940.0	1.0	55.0			QL=4 ST=2 TYP=3
	204	IZMI	25	R	0954.0		126.0D		120.0		
	2950	GORK	20	GRF	1011.0	1012.9	31.2	12.0			
	2950	GORK	2	S/F	1043.9	1045.8	2.5	4.6			
	9100	GORK	2	S/F	1045.3	1045.6	1.8	14.0			
	204	IZMI	41	F	1106.1	1107.4	2.1	583.0			
	33	UPIC	46	C	1106.5	1107.0	3.5				
	3000	IZMI	20	GRF	1106.8	1107.4	1.1	10.0	6.5		
	245	SGMR	8	S	1107.0	1107.0	1.0	460.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1107.0	1107.0	U	26.0			QL=4 ST=2 TYP=3
	1415	SGMR	8	S	1107.0	1107.0	U	25.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1107.0	1107.0	U	35.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	1137.0	1140.0	3.0	98.0			QL=4 ST=3 TYP=3
	15400	SVTO	8	S	1139.0	1140.0	1.0	120.0			QL=4 ST=3 TYP=3
	8800	SGMR	8	S	1140.0	1140.0	U	50.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	1140.0	1140.0	U	100.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	1200.0	1217.0	17.0	180.0			QL=4 ST=2 TYP=3
	33	UPIC	42	SER	1212.5	1250.0U	124.5				
	245	SVTO	8	S	1216.0	1217.0	1.0	160.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1243.0	1243.0	U	66.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1247.0	1248.0	2.0	350.0			QL=4 ST=2 TYP=3
	1415	SVTO	49	GB	1247.0	1248.0	1.0	930.0			QL=4 ST=2 TYP=6
	1415	SVTO	49	GB	1247.0	1248.0	1.0	930.0			QL=4 ST=3 TYP=6
	245	SVTO	8	S	1247.0	1248.0	1.0	240.0			QL=2 ST=3 TYP=3
	245	SVTO	8	S	1247.0	1248.0	1.0	250.0			QL=4 ST=2 TYP=3
	33	UPIC	46	C	1247.0	1250.0U	5.0				
	1415	SGMR	49	GB	1248.0	1248.0	1.0	900.0			QL=4 ST=2 TYP=6
	410	SGMR	8	S	1248.0	1248.0	U	44.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1248.0	1248.0	U	57.0			QL=4 ST=2 TYP=3
	2695	SGMR	8	S	1248.0	1248.0	U	33.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1248.0	1248.0	U	55.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1248.0	1248.0	U	26.0			QL=4 ST=2 TYP=3
	2695	SVTO	8	S	1248.0	1248.0	U	33.0			QL=4 ST=2 TYP=3
	2695	SVTO	8	S	1248.0	1248.0	U	33.0			QL=4 ST=3 TYP=3
	4995	SVTO	8	S	1248.0	1248.0	U	53.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	1248.0	1248.0	U	53.0			QL=4 ST=3 TYP=3
	8800	SVTO	8	S	1248.0	1248.0	U	26.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	1248.0	1248.0	U	26.0			QL=4 ST=3 TYP=3
	9500	CUBA	1	S	1248.2	1248.5	1.5	27.0	13.0		
	245	SVTO	8	S	1404.0	1404.0	U	58.0			QL=4 ST=2 TYP=3
	9500	CUBA	1	S	1613.4	1614.3	4.2	31.0	15.0		
	4995	PALE	8	S	1641.0	1641.0	1.0	61.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	1641.0	1641.0	1.0	61.0			QL=4 ST=3 TYP=3
	1415	PALE	8	S	1642.0	1642.0	U	78.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	1642.0	1642.0	U	78.0			QL=4 ST=3 TYP=3
	8800	PALE	8	S	1644.0	1645.0	1.0	60.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	1644.0	1645.0	1.0	60.0			QL=4 ST=3 TYP=3
	245	SGMR	8	S	1929.0	1929.0	U	56.0			QL=4 ST=2 TYP=3
	1415	PALE	49	GB	2013.0	2014.0	1.0	570.0			QL=4 ST=2 TYP=6
	1415	SGMR	8	S	2013.0	2014.0	1.0	410.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2039.0	2039.0	U	96.0			QL=2 ST=2 TYP=3

SOLAR RADIO EMISSION
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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
11	9500	CUBA	2	S/F	2110.5	2112.3	4.6	14.0	7.0		
	245	SGMR	8	S	2149.0	2149.0	U	56.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	2351.0	2351.0	1.0	1900.0			QL=4 ST=2 TYP=6
12	204	IZMI	44	NS	0600.0E		360.0D		45.0		
	127	TORN	44	NS	0630.0E		540.0D		41.0		V=2
	235	CUBA	44	NS	1400.0E		95.0D		16.0		
	280	CUBA	44	NS	1400.0E		95.0D		26.0		
	245	SGMR	43	NS	2011.0	2058.0	164.0	100.0			QL=4 ST=2 TYP=1
	245	LEAR	43	NS	2341.0	0152.0	586.0	500.0			QL=2 ST=2 TYP=1
	245	PALE	8	S	0213.0	0213.0	U	150.0			QL=4 ST=2 TYP=3
	245	PALE	48	C	0216.0	0216.0	4.0	250.0			QL=4 ST=2 TYP=8
	900	GORK	4	S/F	0347.4	0347.9	0.6	110.0			
	2950	GORK	1	S	0400.6	0400.9	0.6	8.5			
	2950	GORK	2	S/F	0410.7	0412.5	3.8	13.0			
	245	LEAR	8	S	0412.0	0412.0	U	68.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	0423.0	0424.0	1.0	70.0			QL=4 ST=2 TYP=3
	2840	PEKG	5	S	0439.0	0442.5	9.0	11.5			
	2804	VORO	3	S	0439.4	0442.7	8.1	13.6			
	9100	GORK	21	GRF	0440.0	0443.1	62.0	19.0			
	4995	PALE	8	S	0446.0	0446.0	U	66.0			QL=4 ST=2 TYP=3
	2804	VORO	29	PBI	0447.5	0458.2	10.7	8.8			
	4995	LEAR	8	S	0500.0	0501.0	2.0	60.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0501.0	0501.0	1.0	63.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	0501.0	0501.0	1.0	57.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	0501.0	0501.0	1.0	58.0			QL=4 ST=2 TYP=3
	9100	GORK	4	S/F	0501.5U	0502.3	4.2D	20.0			
	245	SVTO	8	S	0507.0	0507.0	U	59.0			QL=4 ST=2 TYP=3
	2840	PEKG	1	S	0543.0	0545.9	6.0	7.4			
	245	LEAR	8	S	0545.0	0545.0	U	340.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0545.0	0545.0	U	290.0			QL=4 ST=2 TYP=3
	2950	GORK	2	S/F	0545.4	0546.0	1.2	11.0			
	9100	GORK	4	S/F	0545.5	0546.0	2.6	22.0			
	900	GORK	4	S/F	0545.5	0546.1		60.0			
	900	GORK	4	S/F	0545.5	0545.8	1.0	87.0			
	33	UPIC	46	C	0546.0	0546.5	2.0				
	245	LEAR	8	S	0559.0	0559.0	U	120.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0559.0	0559.0	1.0	98.0			QL=4 ST=2 TYP=3
	9100	GORK	4	S/F	0603.2	0604.3	5.8	15.0			
	9100	GORK	4	S/F	0836.0	0836.7	2.9	16.0			
	9100	GORK	46	C	0933.2	0935.0	9.1	22.0			
	9100	GORK	46	C	0933.2	0937.5		24.0			
	2950	GORK	1	S	0934.8	0935.1	0.9	5.8			
	900	GORK	40	F	0946.0	0946.2	4.0	78.0			
	9100	GORK	2	S/F	0946.5	0947.2	2.3	8.8			
	245	SGMR	8	S	1157.0	1157.0	U	51.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1257.0	1257.0	U	64.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1314.0	1314.0	U	54.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1409.0	1409.0	U	79.0			QL=4 ST=2 TYP=3
	2800	PENT	29	PBI	1430.0						
	245	SGMR	8	S	1558.0	1558.0	U	56.0			QL=4 ST=2 TYP=3
	2695	SGMR	8	S	1616.0	1616.0	U	56.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1616.0	1616.0	U	52.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1646.0	1646.0	U	57.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	1648.0	1648.0	U	71.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	1657.0	1657.0	U	54.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1817.0	1817.0	U	51.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1820.0	1820.0	U	140.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1820.0	1820.0	1.0	58.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1956.0	1957.0	2.0	54.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1957.0	1957.0	1.0	52.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2006.0	2006.0	U	53.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2021.0	2021.0	1.0	90.0			QL=4 ST=2 TYP=3
	2800	PENT	29	PBI	2220.0	2226.0	12.0U	20.0			
	245	PALE	8	S	2225.0	2226.0	1.0	370.0			QL=4 ST=2 TYP=3
	2800	HIRA	1	S	2226.0	2227.0	3.0	20.0			0
	4995	PALE	8	S	2226.0	2226.0	U	54.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	2226.0	2226.0	U	60.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2226.0E	2226.0	U	250.0			QL=4 ST=2 TYP=3

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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
12	4995	SGMR	8	S	2226.0	2226.0	1.0	67.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	2226.0	2226.0	U	54.0			QL=4 ST=2 TYP=3
	2804	VORO	42	SER	2226.0	2227.0	2.9	20.0			
	2840	PEKG	5	S	2226.0	2227.1	5.0	20.2			
	2804	VORO	42	SER	2226.0	2234.1	8.1	5.3			
	2804	VORO	42	SER	2226.0	2249.1	23.1	8.5			
	8800	PALE	4	S/F	2255.0	2255.0	3.0	90.0			QL=4 ST=2 TYP=3
	500	HIRA	8	S	2346.0	2346.0	1.0	60.0			0
13	245	SVTO	43	NS	0436.0	1629.0	773.0	98.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	0436.0	0511.0U	1164.0	68.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	0436.0	1629.0U	1164.0	98.0			QL=4 ST=1 TYP=1
	204	IZMI	44	NS	0600.0E		360.0D		85.0		
	127	TORN	44	NS	0630.0E		540.0D		96.0		V=1
	245	SGMR	43	NS	1103.0	1841.0	550.0	560.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1103.0	1159.0	777.0	76.0			QL=4 ST=1 TYP=1
	245	SGMR	43	NS	1103.0	1206.0	777.0	95.0			QL=4 ST=1 TYP=1
	245	SGMR	43	NS	1103.0	1208.0	777.0	98.0			QL=4 ST=1 TYP=1
	245	SGMR	43	NS	1103.0	1741.0	777.0	250.0			QL=4 ST=1 TYP=1
	245	SGMR	43	NS	1103.0	1836.0	777.0	290.0			QL=4 ST=1 TYP=1
	245	SGMR	43	NS	1103.0	1841.0	777.0	560.0			QL=4 ST=1 TYP=1
	245	PALE	43	NS	1653.0	1841.0	216.0	470.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	2044.0	0152.0	484.0	470.0			QL=4 ST=2 TYP=1
	2840	PEKG	45	C	0339.0	0341.6	6.0	5.2			
	245	LEAR	49	GB	0340.0	0340.0	U	1500.0			QL=2 ST=2 TYP=6
	245	PALE	49	GB	0340.0	0340.0	U	1600.0			QL=2 ST=2 TYP=6
	2840	PEKG	1	S	0605.0	0607.9	6.0	5.4			
	2840	PEKG	1	S	0636.0	0639.5	7.0	6.9			
	2950	GORK	21	GRF	0636.5	0727.0	76.1	14.0			
	9100	GORK	21	GRF	0636.9	0727.0	138.2	30.0			
	9100	GORK	46	C	0636.9	0646.4		28.0			
	9100	GORK	46	C	0636.9	0639.6	12.0	20.0			
	2950	GORK	2	S/F	0637.2	0639.2	3.2	7.1			
	2840	PEKG	1	S	0645.0	0646.4	5.0	6.1			
	2950	GORK	2	S/F	0645.9	0646.4	2.7	7.1			
	2950	GORK	2	S/F	0656.3	0656.8	2.5	5.7			
	4995	SVTO	20	GRF	0720.0	0726.0	42.0	79.0			QL=4 ST=2 TYP=2
	15400	SVTO	20	GRF	0721.0	0727.0	29.0	44.0			QL=4 ST=2 TYP=2
	8800	SVTO	20	GRF	0722.0	0728.0	40.0	55.0			QL=4 ST=2 TYP=2
	9100	GORK	2	S/F	0829.2	0829.5	0.8	7.6			
	2840	PEKG	20	GRF	0936.0	0941.7	18.0	13.7			
	9100	GORK	22	GRF	0937.8	1021.3		11.0			
	9100	GORK	22	GRF	0937.8	0939.4	53.0	16.0			
	2950	GORK	46	C	0938.6	0941.4		10.0			
	2950	GORK	46	C	0938.6	0939.6	8.2	7.0			
	3000	IZMI	20	GRF	0938.9	0940.9	15.5	13.0	5.8		
	33	UPIC	42	SER	0951.0	1054.5	157.0				
	204	IZMI	41	F	1020.3	1020.4	0.6	77.0			
	204	IZMI	41	F	1048.5	1048.8	0.5	83.0			
	204	IZMI	42	SER	1055.3	1055.3	0.4	98.0			
	245	SGMR	8	S	1217.0	1217.0U	U	120.0			QL=4 ST=2 TYP=3
	33	UPIC	46	C	1410.0		3.0				
	2800	PENT	29	PBI	1452.0	1513.0	90.0	19.0			
	8800	SGMR	4	S/F	1513.0	1515.0	3.0	67.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1514.0	1515.0	1.0	44.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	1514.0	1514.0	1.0	42.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1629.0	1629.0	U	87.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1649.0E	1649.0	U	100.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1728.0	1729.0	1.0	120.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1728.0	1728.0	1.0	22.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1754.0E	1754.0	U	140.0			QL=4 ST=2 TYP=3
	2800	PENT	29	PBI	1755.0	1810.0	97.0U	182.0			
	245	PALE	8	S	1808.0	1808.0	U	380.0			QL=4 ST=2 TYP=3
	245	PALE	48	C	1808.0	1808.0	14.0	380.0			QL=4 ST=2 TYP=8
	15400	PALE	48	C	1809.0	1810.0	9.0	530.0			QL=4 ST=2 TYP=8
	15400	PALE	49	GB	1809.0	1810.0	351.0	530.0			QL=4 ST=1 TYP=6
	8800	PALE	48	C	1810.0	1810.0	4.0	510.0			QL=4 ST=2 TYP=8
	2695	PALE	8	S	1810.0	1810.0	2.0	180.0			QL=4 ST=2 TYP=3
	4995	PALE	4	S/F	1810.0	1810.0	4.0	430.0			QL=4 ST=2 TYP=3

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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	8800	PALE	49	GB	1810.0	1810.0	350.0	510.0			QL=4 ST=1 TYP=6
	2695	PALE	4	S/F	1810.0	1810.0	350.0	180.0			QL=4 ST=1 TYP=3
	4995	PALE	4	S/F	1810.0	1810.0	350.0	430.0			QL=4 ST=1 TYP=3
	1415	PALE	8	S	1811.0	1811.0	U	54.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1817.0	1817.0	1.0	53.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1817.0	1817.0	1.0	63.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	1817.0	1818.0	1.0	57.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1824.0	1826.0	2.0	37.0			QL=4 ST=2 TYP=3
	1415	SGMR	8	S	1824.0	1825.0	1.0	24.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1825.0	1825.0	1.0	150.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1825.0	1826.0	1.0	52.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2020.0	2020.0	U	52.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2020.0	2020.0	U	100.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2020.0	2020.0	U	37.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2048.0	2048.0	U	60.0			QL=4 ST=2 TYP=3
	500	HIRA	8	S	2213.0	2213.0	1.0	10.0			WR
	2800	PENT	1	S	2336.0	2343.0	14.0U	9.0			
	2840	PEKG	5	S	2340.0	2343.3	6.0	14.2			
	2800	HIRA	1	S	2341.0	2343.0	3.0	10.0			0
	2804	VORO	2	S/F	2341.6	2343.3	3.7	10.9			
	4995	LEAR	8	S	2342.0	2342.0	1.0	56.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	2342.0	2342.0	1.0	63.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	2342.0	2343.0	1.0	62.0			QL=4 ST=2 TYP=3
	2804	VORO	29	PBI	2345.3	2429.0	125.0	8.1			
14	204	IZMI	44	NS	0600.0E		360.0D		40.0		
	127	TORN	44	NS	0630.0E		540.0D		28.0		V=1
	245	LEAR	8	S	0055.0	0055.0	U	190.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0055.0	0056.0	1.0	200.0			QL=4 ST=2 TYP=3
	500	HIRA	8	S	0339.0	0340.0	1.0	30.0			WR
	610	LEAR	8	S	0339.0	0339.0	U	69.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	0339.0	0339.0	U	67.0			QL=4 ST=2 TYP=3
	2840	PEKG	45	C	0408.0	0414.3	20.0	145.2			
	2800	HIRA	4	S/F	0412.0	0414.0	6.0	100.0			0
	4995	LEAR	8	S	0412.0	0414.0	2.0	200.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0412.0	0414.0	2.0	200.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0412.0	0414.0	2.0	160.0			QL=4 ST=2 TYP=3
	8800	PALE	48	C	0412.0	0414.0	4.0	180.0			QL=4 ST=2 TYP=8
	15400	PALE	8	S	0412.0	0414.0	2.0	140.0			QL=4 ST=2 TYP=3
	4995	PALE	4	S/F	0412.0	0414.0	5.0	260.0			QL=4 ST=2 TYP=3
	2804	VORO	45	C	0412.3	0413.3	6.2	67.6			
	2804	VORO	45	C	0412.3	0414.4	6.2	105.7			
	2695	LEAR	8	S	0413.0	0414.0	1.0	98.0			QL=4 ST=2 TYP=3
	2695	PALE	8	S	0413.0	0414.0	1.0	100.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	0429.0	0429.0	U	64.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0446.0	0446.0	U	57.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0456.0	0456.0	U	62.0			QL=2 ST=2 TYP=3
	2840	PEKG	3	S	0537.0	0543.4	33.0	125.2			
	9100	GORK	46	C	0537.9	0543.3	19.1	380.0			
	9100	GORK	46	C	0537.9	0544.5		165.0			
	2950	GORK	46	C	0539.0	0540.0	11.2	59.0			
	2800	HIRA	7	C	0539.0	0544.0	12.0	95.0			0
	4995	LEAR	48	C	0539.0	0543.0	15.0	240.0			QL=4 ST=2 TYP=8
	8800	LEAR	48	C	0539.0	0543.0	13.0	210.0			QL=4 ST=2 TYP=8
	15400	LEAR	48	C	0539.0	0543.0	12.0	420.0			QL=4 ST=2 TYP=8
	8800	SVTO	48	C	0539.0	0543.0	29.0	230.0			QL=4 ST=2 TYP=8
	4995	SVTO	48	C	0539.0	0543.0	37.0	280.0			QL=4 ST=2 TYP=8
	15400	SVTO	48	C	0539.0	0543.0	34.0	400.0			QL=4 ST=2 TYP=8
	2695	SVTO	20	GRF	0539.0	0543.0	39.0	100.0			QL=4 ST=2 TYP=2
	4995	SVTO	48	C	0539.0	0543.0	1101.0	280.0			QL=4 ST=1 TYP=8
	8800	SVTO	48	C	0539.0	0543.0	1101.0	230.0			QL=4 ST=1 TYP=8
	15400	SVTO	48	C	0539.0	0543.0	1101.0	400.0			QL=4 ST=1 TYP=8
	2695	SVTO	20	GRF	0539.0	0543.0	1101.0	100.0			QL=4 ST=1 TYP=2
	2950	GORK	46	C	0539.0	0543.8		155.0			
	2950	GORK	46	C	0539.0	0548.9		42.0			
	2695	LEAR	48	C	0543.0	0543.0	1.0	96.0			QL=4 ST=2 TYP=8
	245	SVTO	4	S/F	0546.0	0559.0	13.0	55.0			QL=2 ST=2 TYP=3
	2950	GORK	30	PBI	0550.2	0550.2	90.3	32.0			
	9100	GORK	30	PBI	0557.0	0557.0	97.0	37.0			

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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
14	2840	PEKG	5	S	0631.0	0633.6	4.0	19.6			
	204	IZMI	41	F	0632.8	0633.1	2.1	139.0			
	900	GORK	4	S/F	0632.8	0633.5	2.2	40.0			
	2800	HIRA	1	S	0633.0	0634.0	1.0	10.0			0
	500	HIRA	8	S	0633.0	0634.0	3.0	30.0			WR
	245	LEAR	8	S	0633.0	0633.0	U	280.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0633.0	0633.0	U	60.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0633.0	0633.0	1.0	260.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	0633.0	0633.0	U	83.0			QL=2 ST=2 TYP=3
	610	SVTO	8	S	0633.0	0633.0	U	69.0			QL=4 ST=2 TYP=3
	9100	GORK	2	S/F	0633.0	0633.4	1.1	10.0			
	2950	GORK	4	S/F	0633.0	0633.5	1.2	22.0			
	33	UPIC	45	C	0633.0	0633.5	3.0				
	3000	IZMI	22	GRF	0633.1	0633.6	1.0	14.0	5.2		
	2950	GORK	21	GRF	0745.8	0757.4	33.9	10.0			
	900	GORK	41	F	0746.9	0747.0	1.6	20.0			
	900	GORK	41	F	0746.9	0747.7		80.0			
	9100	GORK	21	GRF	0748.0	0757.6	39.5	24.0			
	9100	GORK	1	S	0750.2	0750.3	1.1	6.4			
	2840	PEKG	1	S	0753.0	0755.2	4.0	9.0			
	9100	GORK	4	S/F	0753.6	0755.3	3.4	63.0			
	8800	LEAR	8	S	0754.0	0755.0	1.0	86.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0754.0	0755.0	2.0	130.0			QL=4 ST=2 TYP=3
	4995	SVTO	4	S/F	0754.0	0755.0	7.0	67.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	0754.0	0755.0	4.0	77.0			QL=4 ST=2 TYP=3
	15400	SVTO	4	S/F	0754.0	0755.0	4.0	110.0			QL=4 ST=2 TYP=3
	2950	GORK	2	S/F	0754.2	0755.1	3.2	13.0			
	2840	PEKG	5	S	0814.0	0817.1	8.0	20.7			
	500	HIRA	8	S	0815.0	0816.0	3.0	15.0			0
	245	LEAR	8	S	0815.0	0815.0	U	320.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0815.0	0815.0	U	72.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0815.0	0815.0	U	280.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	0815.0	0815.0	1.0	150.0			QL=2 ST=2 TYP=3
	610	SVTO	8	S	0815.0	0815.0	U	40.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	0815.0	0815.0	U	57.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	0815.0	0815.0	U	43.0			QL=4 ST=2 TYP=3
	33	UPIC	46	C	0815.0	0816.0	3.0				
	900	GORK	46	C	0815.0	0817.1		47.0			
	900	GORK	46	C	0815.0	0815.8	2.5	42.0			
	204	IZMI	41	F	0815.1	0815.6	1.3	131.0			
	2950	GORK	3	S	0815.2	0815.6	1.0	20.0			
	9100	GORK	4	S/F	0815.2	0815.7	0.7	33.0			
	3000	IZMI	22	GRF	0815.4	0815.7	0.4	13.0	4.8		
	2800	HIRA	8	S	0816.0	0816.0	1.0	20.0			0
	204	IZMI	41	F	0816.6	0816.8	0.8	135.0			
	9100	GORK	40	F	0907.0	0908.8	2.1	14.0			
	9100	GORK	4	S/F	0927.0	0928.8	6.9	16.0			
	2950	GORK	3	S	0927.7	0928.0	0.5	4.3			
	33	UPIC	42	SER	0943.0	1110.0	171.0				
	9100	GORK	21	GRF	0953.7	1011.9	48.3D	21.0			
	2950	GORK	4	S/F	0957.6	1004.1	17.4	23.0			
	900	GORK	7	C	1000.4	1000.6	0.5	11.0			
	900	GORK	7	C	1000.4	1000.7		13.0			
	15400	SVTO	4	S/F	1001.0	1007.0	9.0	40.0			QL=4 ST=2 TYP=3
	9100	GORK	46	C	1001.5	1002.1	8.9	12.0			
	9100	GORK	46	C	1001.5	1007.1		34.0			
	4995	SVTO	4	S/F	1002.0	1007.0	19.0	65.0			QL=4 ST=2 TYP=3
	2840	PEKG	3	S	1002.0	1007.7	13.0	18.2			
	8800	SVTO	4	S/F	1005.0	1007.0	4.0	49.0			QL=4 ST=2 TYP=3
	2695	SVTO	4	S/F	1006.0	1007.0	3.0	25.0			QL=4 ST=2 TYP=3
	3000	IZMI	22	GRF	1006.6	1006.9	4.2	12.0	4.2		
	2695	SGMR	8	S	1340.0	1340.0	U	70.0			QL=4 ST=2 TYP=3
	4995	SGMR	4	S/F	1340.0	1341.0	7.0	140.0			QL=4 ST=2 TYP=3
	8800	SGMR	4	S/F	1340.0	1341.0	8.0	170.0			QL=4 ST=2 TYP=3
	15400	SGMR	4	S/F	1340.0	1342.0	7.0	180.0			QL=4 ST=2 TYP=3
	15400	SVTO	48	C	1340.0	1342.0	17.0	170.0			QL=4 ST=2 TYP=8
	2695	SVTO	4	S/F	1340.0	1340.0	16.0	77.0			QL=4 ST=2 TYP=3
	4995	SVTO	4	S/F	1340.0	1341.0	16.0	130.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	1340.0	1341.0	15.0	140.0			QL=4 ST=2 TYP=3

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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
14	2800	PENT	20	GRF	1458.0	1538.0	79.0U	6.0			
	610	SGMR	8	S	1542.0	1543.0	2.0	270.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1542.0	1543.0	1.0	42.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	1542.0	1543.0	2.0	190.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1543.0	1543.0	U	51.0			QL=4 ST=2 TYP=3
	2800	PENT	41	F	1733.0	1739.0	115.0	9.0			
	245	PALE	8	S	1744.0	1744.0	U	72.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1744.0	1744.0	U	210.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1744.0	1745.0	1.0	150.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1744.0	1744.0	U	220.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1746.0	1746.0	U	26.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1746.0	1746.0	1.0	80.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1747.0	1747.0	U	21.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	1814.0	1814.0	U	58.0			QL=4 ST=2 TYP=3
	410	PALE	48	C	1922.0	1924.0	5.0	260.0			QL=4 ST=2 TYP=8
	245	SGMR	8	S	1922.0	1923.0	2.0	220.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1922.0	1924.0	2.0	210.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1922.0	1924.0	2.0	63.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1923.0	1923.0	U	200.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	1925.0	1925.0	U	83.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1925.0	1925.0	1.0	100.0			QL=4 ST=2 TYP=3
	2800	PENT	29	PBI	2034.0	2048.0	114.0	13.0			
	410	SGMR	4	S/F	2044.0	2047.0	6.0	97.0			QL=4 ST=2 TYP=3
	410	PALE	48	C	2046.0	2046.0	3.0	120.0			QL=4 ST=2 TYP=8
	245	PALE	8	S	2048.0	2049.0	2.0	300.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2048.0	2049.0	1.0	310.0			QL=4 ST=2 TYP=3
	500	HIRA	8	S	2049.0	2049.0	1.0	65.0			0
	245	SGMR	8	S	2100.0	2100.0	U	160.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2103.0	2103.0	U	68.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2103.0	2103.0	1.0	73.0			QL=4 ST=3 TYP=3
	500	HIRA	8	S	2108.0	2108.0	1.0	10.0			0
	610	PALE	8	S	2113.0	2113.0	U	71.0			QL=4 ST=2 TYP=3
	610	SGMR	4	S/F	2117.0	2119.0	8.0	50.0			QL=4 ST=2 TYP=3
	610	PALE	4	S/F	2118.0	2119.0	3.0	60.0			QL=4 ST=2 TYP=3
	610	SGMR	49	GB	2125.0	2131.0	18.0	1500.0			QL=4 ST=2 TYP=6
	610	PALE	48	C	2126.0	2131.0	45.0	1100.0			QL=4 ST=2 TYP=8
	245	SGMR	49	GB	2131.0	2139.0	8.0	540.0			QL=4 ST=2 TYP=6
	410	SGMR	8	S	2132.0	2132.0	U	25.0			QL=4 ST=2 TYP=3
	410	SGMR	4	S/F	2132.0	2139.0	7.0	72.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	2143.0	2143.0	1.0	4000.0			QL=4 ST=2 TYP=6
	410	SGMR	8	S	2143.0	2143.0	U	60.0			QL=4 ST=2 TYP=3
	410	SGMR	4	S/F	2143.0	2143.0	13.0	60.0			QL=4 ST=2 TYP=3
	610	SGMR	48	C	2143.0	2156.0	20.0	320.0			QL=4 ST=2 TYP=8
	245	PALE	48	C	2147.0	2210.0	23.0	78.0			QL=4 ST=2 TYP=8
	500	HIRA	8	S	2149.0	2149.0	1.0	15.0			0
	610	SGMR	4	S/F	2205.0	2210.0	5.0	160.0			QL=4 ST=2 TYP=3
	500	HIRA	8	S	2211.0	2211.0	1.0	40.0			WR
	245	PALE	8	S	2214.0	2214.0	1.0	61.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	2216.0	2216.0	U	65.0			QL=4 ST=2 TYP=3
	500	HIRA	8	S	2309.0	2309.0	1.0	20.0			0
	410	LEAR	4	S/F	2317.0	2320.0	3.0	77.0			QL=2 ST=2 TYP=3
	410	LEAR	4	S/F	2317.0	2320.0	3.0	77.0			QL=4 ST=3 TYP=3
	245	LEAR	8	S	2318.0	2320.0	2.0	180.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	2318.0	2320.0	2.0	180.0			QL=4 ST=3 TYP=3
	500	HIRA	8	S	2320.0	2320.0	1.0	10.0			0
	245	PALE	8	S	2320.0	2320.0	U	140.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2320.0	2320.0	U	110.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2345.0	2345.0	U	97.0			QL=4 ST=2 TYP=3
15	245	SVTO	43	NS	0455.0	0500.0	5.0	100.0			QL=4 ST=2 TYP=1
	204	IZMI	44	NS	0600.0E		360.0D		45.0		
	127	TORN	44	NS	0630.0E		440.0D		45.0		V=1
	245	PALE	43	NS	2224.0	0009.0	264.0	140.0			QL=4 ST=2 TYP=1
	245	LEAR	8	S	0009.0	0009.0	1.0	190.0			QL=4 ST=2 TYP=3
	610	LEAR	49	GB	0016.0	0016.0	U	590.0			QL=4 ST=2 TYP=6
	610	LEAR	49	GB	0016.0	0016.0	1424.0	590.0			QL=4 ST=1 TYP=6
	245	LEAR	8	S	0157.0	0157.0	U	99.0			QL=4 ST=2 TYP=3
	245	LEAR	48	C	0203.0	0206.0	4.0	110.0			QL=4 ST=2 TYP=8
	500	HIRA	8	S	0233.0	0233.0	1.0	90.0			0

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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
15	410	PALE	8	S	0244.0	0244.0	U	99.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	0258.0	0300.0	3.0	54.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0305.0	0305.0	U	90.0			QL=4 ST=2 TYP=3
	9100	GORK	28	PRE	0322.1	0323.7	7.2	11.0			
	2840	PEKG	3	S	0327.0	0329.9	10.0	72.7			
	900	GORK	41	F	0328.8	0333.4		360.0U			
	900	GORK	41	F	0328.8	0329.5	5.5	360.0U			
	245	LEAR	49	GB	0329.0	0329.0	1.0	2500.0			QL=4 ST=2 TYP=6
	610	LEAR	49	GB	0329.0	0329.0	1.0	1100.0			QL=4 ST=2 TYP=6
	410	LEAR	8	S	0329.0	0329.0	1.0	170.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0329.0	0329.0	1.0	45.0			QL=4 ST=2 TYP=3
	4995	LEAR	8	S	0329.0	0329.0	1.0	53.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0329.0	0329.0	1.0	130.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0329.0	0329.0	1.0	150.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	0329.0	0329.0	1.0	2400.0			QL=4 ST=2 TYP=6
	610	PALE	49	GB	0329.0	0330.0	1.0	920.0			QL=4 ST=2 TYP=6
	410	PALE	8	S	0329.0	0329.0	1.0	110.0			QL=4 ST=2 TYP=3
	2695	PALE	8	S	0329.0	0329.0	1.0	56.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	0329.0	0329.0	1.0	98.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	0329.0	0330.0	1.0	100.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	0329.0	0329.0	1.0	120.0			QL=4 ST=2 TYP=3
	2804	VORO	42	SER	0329.0	0330.0	3.1	53.3			
	4995	LEAR	4	S/F	0329.0	0329.0	1231.0	53.0			QL=4 ST=1 TYP=3
	8800	LEAR	4	S/F	0329.0	0329.0	1231.0	130.0			QL=4 ST=1 TYP=3
	15400	LEAR	4	S/F	0329.0	0329.0	1231.0	150.0			QL=4 ST=1 TYP=3
	2804	VORO	42	SER	0329.0	0333.4	4.4	8.4			
	9100	GORK	46	C	0329.3	0333.4		18.0			
	9100	GORK	46	C	0329.3	0329.8	6.7	100.0			
	2800	HIRA	8	S	0330.0	0330.0	1.0	55.0			0
	500	HIRA	47	GB	0330.0	0330.0	2.0	1515.0			WR
	245	LEAR	8	S	0342.0	0343.0	2.0	100.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0416.0	0416.0	2.0	52.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0426.0	0426.0	U	51.0			QL=4 ST=2 TYP=3
	9100	GORK	21	GRF	0448.0	0537.1	156.0	30.0			
	2950	GORK	20	GRF	0458.0	0557.3	187.0	17.0			
	9100	GORK	20	GRF	0458.4	0506.0	24.3	23.0			
	245	LEAR	8	S	0526.0	0526.0	U	53.0			QL=4 ST=2 TYP=3
	900	GORK	40	F	0553.4	0554.6	1.9	30.0			
	9100	GORK	46	C	0555.3	0557.2	12.5	63.0			
	9100	GORK	46	C	0555.3	0558.3		3.7			
	8800	LEAR	8	S	0556.0	0557.0	2.0	80.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0556.0	0557.0	2.0	99.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	0556.0	0557.0	1.0	30.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	0556.0	0557.0	5.0	80.0			QL=4 ST=2 TYP=3
	15400	SVTO	8	S	0557.0	0557.0	U	74.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0600.0	0600.0	U	56.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0603.0	0603.0	U	56.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0610.0	0610.0	U	66.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0610.0	0610.0	U	53.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0649.0	0650.0	1.0	120.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0649.0	0650.0	1.0	96.0			QL=2 ST=2 TYP=3
	204	IZMI	42	SER	0649.5	0650.0	0.7	103.0			
	204	IZMI	41	F	0701.8	0701.9	0.2	93.0			
	33	UPIC	42	SER	0727.0	1111.0	225.0				
	245	LEAR	8	S	0758.0	0758.0	U	63.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	0819.1	0820.8	1.8	72.0			
	9100	GORK	21	GRF	0826.3	0939.0	144.7D	17.0			
	9100	GORK	1	S	1003.0	1003.6	0.6	7.5			
	9100	GORK	8	S	1032.0	1032.2	0.4	55.0			
	3000	IZMI	5	S	1100.7	1100.9	0.4	11.0	6.8		
	204	IZMI	7	C	1101.7	1101.8	0.2	90.0			
	204	IZMI	45	C	1108.9	1109.3	1.0	585.0			
	245	SGMR	8	S	1109.0	1109.0	U	110.0			QL=4 ST=2 TYP=3
	8800	SGMR	4	S/F	1124.0E	1126.0U	10.0D	100.0			QL=4 ST=2 TYP=3
	4995	SVTO	4	S/F	1125.0	1134.0	11.0	120.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	1125.0	1134.0	11.0	100.0			QL=4 ST=2 TYP=3
	3000	IZMI	45	C	1125.9	1134.5	15.7	54.0	18.1		
	15400	SVTO	48	C	1126.0	1127.0	9.0	73.0			QL=4 ST=2 TYP=8
	2695	SVTO	4	S/F	1127.0	1134.0	7.0	52.0			QL=4 ST=2 TYP=3

SOLAR RADIO EMISSION
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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
15	4995	SGMR	8	S	1134.0E	1134.0U	U	64.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	1237.0	1241.0	6.0	110.0			QL=4 ST=2 TYP=3
	15400	SVTO	4	S/F	1237.0	1240.0	6.0	180.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1240.0E	1241.0	2.0D	100.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	1240.0E	1240.0	2.0D	150.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1241.0E	1241.0	1.0D	130.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	1241.0	1241.0	1.0	140.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1404.0	1404.0	U	160.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1404.0	1404.0	U	130.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1509.0	1509.0	1.0	100.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1509.0	1509.0	1.0	65.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1510.0	1511.0	1.0	24.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1624.0	1624.0	U	190.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1624.0	1624.0	U	120.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1820.0	1821.0	2.0	130.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1821.0	1821.0	1.0	120.0			QL=4 ST=2 TYP=3
	2800	PENT	40	F	1829.0	1849.0	33.0U	7.0			
	1415	PALE	8	S	1841.0	1841.0	U	79.0			QL=4 ST=2 TYP=3
	1415	SGMR	8	S	1841.0	1841.0	U	66.0			QL=4 ST=2 TYP=3
	245	PALE	48	C	1845.0	1845.0	5.0	700.0			QL=4 ST=2 TYP=8
	245	SGMR	49	GB	1845.0	1845.0	1.0	710.0			QL=4 ST=2 TYP=6
	245	SGMR	48	C	1847.0	1847.0	3.0	480.0			QL=4 ST=2 TYP=8
	410	SGMR	8	S	1847.0	1848.0	1.0	100.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1848.0	1848.0	U	120.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1948.0	1949.0	1.0	130.0			QL=4 ST=2 TYP=3
	2800	PENT	29	PBI	2031.0	2043.0	121.0	12.0			
	245	PALE	8	S	2101.0	2101.0	U	63.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2101.0	2101.0	U	77.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2127.0	2128.0	1.0	300.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2128.0	2128.0	U	290.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2128.0	2128.0	U	220.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2128.0	2128.0	U	150.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2148.0	2148.0	U	89.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2149.0	2149.0	U	82.0			QL=4 ST=2 TYP=3
	500	HIRA	7	C	2154.0	2155.0	5.0	20.0			0
	245	PALE	8	S	2154.0	2154.0	1.0	220.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2154.0	2156.0	2.0	480.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2154.0	2154.0	U	170.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2154.0	2154.0	2.0	170.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2154.0	2156.0	2.0	440.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2154.0	2154.0	2.0	110.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2211.0	2213.0	2.0	63.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2212.0	2213.0	1.0	140.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2212.0	2213.0	1.0	140.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2212.0	2212.0	1.0	47.0			QL=4 ST=2 TYP=3
	500	HIRA	7	C	2213.0	2214.0	6.0	15.0			WR
	500	HIRA	7	C	2258.0	2302.0	5.0	10.0			0
	245	PALE	8	S	2258.0	2259.0	1.0	68.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2302.0	2302.0	1.0	330.0			QL=4 ST=2 TYP=3
	245	PALE	48	C	2339.0	2341.0	2.0	2000.0			QL=4 ST=2 TYP=8
	245	LEAR	49	GB	2341.0	2341.0	U	2000.0			QL=4 ST=2 TYP=6
	410	LEAR	8	S	2341.0	2341.0	U	200.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2341.0	2341.0	U	220.0			QL=4 ST=2 TYP=3
	500	HIRA	8	S	2342.0	2342.0	1.0	15.0			0
16	245	PALE	8	S	0003.0	0003.0	U	140.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0113.0	0113.0	2.0	310.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0114.0	0114.0	1.0	290.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0310.0	0311.0	1.0	72.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0311.0	0311.0	U	63.0			QL=4 ST=2 TYP=3
	2840	PEKG	5	S	0325.0	0328.2	8.0	40.6			
	610	LEAR	8	S	0328.0	0328.0	U	65.0			QL=4 ST=2 TYP=3
	2804	VORO	4	S/F	0328.0	0328.3	3.7	34.2			
	2800	HIRA	1	S	0329.0	0329.0	2.0	35.0			0
	500	HIRA	8	S	0329.0	0329.0	1.0	15.0			0
	2804	VORO	30	PBI	0331.7	0341.2	80.0	10.6			
	2840	PEKG	1	S	0333.0	0335.0	6.0	4.2			
	2804	VORO	1	S	0334.2	0334.8	1.5	4.9			
	245	LEAR	8	S	0342.0	0342.0	U	85.0			QL=4 ST=2 TYP=3

SOLAR RADIO EMISSION
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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	245	PALE	8	S	0342.0	0342.0	U	66.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0408.0	0408.0	U	79.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0413.0	0413.0	1.0	800.0			QL=2 ST=2 TYP=6
	245	PALE	49	GB	0414.0	0414.0	U	750.0			QL=4 ST=2 TYP=6
	9100	GORK	21	GRF	0421.0U	0433.0	114.0D	20.0			
	2950	GORK	21	GRF	0424.0U	0424.0	112.0D	17.0			
	9100	GORK	7	C	0429.0	0430.2		5.2			
	9100	GORK	7	C	0429.0	0429.5	1.6	7.9			
	4995	PALE	8	S	0430.0	0430.0	U	57.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0457.0	0457.0	U	95.0			QL=4 ST=2 TYP=3
	9100	GORK	1	S	0459.3	0459.6	0.8	6.4			
	2950	GORK	1	S	0506.3	0507.0	1.4	7.0			
	9100	GORK	4	S/F	0531.3	0536.7	7.7	44.0			
	2950	GORK	2	S/F	0534.8	0536.6	3.7	9.9			
	9100	GORK	30	PBI	0539.0	0539.0	5.3	9.1			
	9100	GORK	1	S	0541.2	0541.4	1.0	6.5			
	204	IZMI	7	C	0611.4	0611.5	0.1	8.0			
	9100	GORK	2	S/F	0703.8	0704.5	1.0	7.7			
	245	LEAR	8	S	0744.0	0744.0	U	300.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0744.0	0744.0	U	320.0			QL=4 ST=2 TYP=3
	410	SVTO	49	GB	0937.0	0937.0	1.0	550.0			QL=4 ST=2 TYP=6
	245	SVTO	8	S	0937.0	0937.0	U	24.0			QL=4 ST=2 TYP=3
	9100	GORK	21	GRF	1009.0	1026.4	43.0	15.0			
	4995	SVTO	8	S	1013.0	1013.0	1.0	33.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	1013.0	1013.0	1.0	59.0			QL=4 ST=2 TYP=3
	15400	SVTO	8	S	1013.0	1013.0	U	34.0			QL=4 ST=2 TYP=3
	9100	GORK	3	S	1013.2	1013.6	5.3	58.0			
	900	GORK	41	F	1015.0	1015.3	6.0	64.0			
	900	GORK	41	F	1015.0	1015.8		180.0U			
	9100	GORK	4	S/F	1042.6	1043.3	1.5	16.0			
	900	GORK	4	S/F	1044.4	1044.5	0.2	180.0U			
	245	SGMR	8	S	1419.0	1419.0	U	60.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1628.0	1628.0	1.0	340.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1628.0	1628.0	1.0	380.0			QL=4 ST=2 TYP=3
	410	SGMR	49	GB	1631.0	1632.0	1.0	680.0			QL=4 ST=2 TYP=6
	245	SGMR	8	S	1631.0	1631.0	U	56.0			QL=4 ST=2 TYP=3
	410	SVTO	49	GB	1631.0	1632.0	1.0	1600.0			QL=4 ST=2 TYP=6
	245	PALE	8	S	1926.0	1926.0	U	150.0			QL=4 ST=2 TYP=3
	410	PALE	49	GB	1932.0	1932.0	U	540.0			QL=4 ST=2 TYP=6
	410	SGMR	8	S	1932.0	1932.0	U	430.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2017.0	2017.0	U	51.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2020.0	2020.0	U	58.0			QL=4 ST=2 TYP=3
	2800	PENT	21	GRF	2036.0	2050.0	116.0U	10.0			
	410	PALE	8	S	2123.0	2123.0	U	130.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2123.0	2123.0	U	120.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2150.0	2150.0	U	70.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2150.0	2150.0	U	51.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2150.0	2150.0	U	69.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2150.0	2150.0	U	53.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2222.0	2222.0	U	57.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	2349.0	2349.0	1.0	390.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2349.0	2350.0	1.0	260.0			QL=4 ST=2 TYP=3
	500	HIRA	8	S	2350.0	2351.0	1.0	135.0			0
17	127	TORN	43	NS	1032.0		108.0		4.0		V=2,DISTURBED
	500	HIRA	8	S	0010.0	0010.0	1.0	10.0			0
	245	LEAR	49	GB	0016.0	0016.0	U	1300.0			QL=4 ST=2 TYP=6
	245	PALE	49	GB	0016.0	0016.0	U	1100.0			QL=4 ST=2 TYP=6
	410	PALE	8	S	0119.0	0119.0	U	63.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0200.0	0200.0	U	70.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0200.0	0200.0	U	61.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	0200.0	0200.0	U	68.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	0200.0	0200.0	U	67.0			QL=4 ST=2 TYP=3
	9100	GORK	20	GRF	0414.7	0419.7	17.5	10.0			
	2804	VORO	8	S	0416.2	0416.5	0.6	4.0			
	2840	PEKG	5	S	0503.0	0505.5	5.0	14.5			
	2800	HIRA	1	S	0504.0	0506.0	3.0	15.0			0
	245	LEAR	8	S	0523.0	0523.0	1.0	75.0			QL=2 ST=2 TYP=3
	500	HIRA	8	S	0534.0	0534.0	1.0	10.0			0

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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	LEAR	8	S	0534.0	0534.0	U	56.0			QL=2 ST=2 TYP=3
	9100	GORK	46	C	0544.5	0545.2		34.0			
	9100	GORK	46	C	0544.5	0544.8	2.3	38.0			
	204	IZMI	7	C	0707.4	0707.5	0.2	14.0			
	900	GORK	40	F	0733.6	0734.4	1.1	17.0			
	204	IZMI	42	SER	0746.8	0746.8	0.7	14.0			
	900	GORK	4	S/F	0816.7	0817.0	0.6	26.0			
	9100	GORK	46	C	0829.7	0837.2		33.0			
	9100	GORK	46	C	0829.7	0836.7	14.0	29.0			
	2840	PEKG	5	S	0835.0	0837.3	4.0	11.3			
	2950	GORK	45	C	0836.0	0837.2		15.0			
	2950	GORK	45	C	0836.0	0836.8	2.4	9.1			
	3000	IZMI	22	GRF	0836.5	0837.3	1.1	11.0	4.4		
	900	GORK	40	F	0836.6	0837.2	4.7	195.0			
	245	LEAR	8	S	0907.0	0907.0	U	70.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0907.0	0907.0	1.0	59.0			QL=4 ST=2 TYP=3
	204	IZMI	7	C	0907.7	0907.8	0.2	15.0			
	245	SVTO	49	GB	0932.0	0933.0	1.0	740.0			QL=4 ST=2 TYP=6
	410	SVTO	8	S	0932.0	0932.0	U	21.0			QL=4 ST=2 TYP=3
	204	IZMI	41	F	0932.7	0933.3	0.9	242.0			
	9100	GORK	4	S/F	0955.3	0955.7	1.1	15.0			
	127	TORN	4	S/F	1030.0U	1030.0U	1.3D	70.0	20.0		
	204	IZMI	42	SER	1031.9	1032.3	0.6	43.0			
	204	IZMI	41	F	1045.4	1046.5	1.6	236.0			
	2950	GORK	7	C	1045.9	1046.4	1.7	6.2			
	2950	GORK	7	C	1045.9	1046.6		9.3			
	245	SGMR	49	GB	1046.0	1046.0	U	500.0			QL=2 ST=2 TYP=6
	245	SVTO	49	GB	1046.0	1046.0	U	770.0			QL=4 ST=2 TYP=6
	900	GORK	2	S/F	1046.3	1046.7	1.1	4.4			
	204	IZMI	42	SER	1108.2	1108.8	0.7	14.0			
	33	UPIC	42	SER	1156.5	1157.0	70.5				
	245	SGMR	8	S	1254.0	1255.0	1.0	78.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1255.0	1255.0	U	72.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	1329.0	1329.0	1.0	28.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	1329.0	1329.0	1.0	53.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	1518.0	1518.0	U	53.0			QL=4 ST=2 TYP=3
	2800	PENT	29	PBI	1742.0	1804.0	110.0U	66.0			
	8800	SGMR	4	S/F	1801.0	1803.0	5.0	100.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	1802.0	1803.0	2.0	35.0			QL=4 ST=2 TYP=3
	2695	SGMR	4	S/F	1802.0	1804.0	4.0	85.0			QL=4 ST=2 TYP=3
	4995	SGMR	4	S/F	1802.0	1803.0	4.0	110.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1922.0	1923.0	1.0	100.0			QL=4 ST=2 TYP=3
	410	SGMR	4	S/F	1955.0E	2002.0	8.0D	47.0			QL=4 ST=2 TYP=3
	245	SGMR	48	C	1958.0E	2000.0	6.0D	230.0			QL=4 ST=2 TYP=8
	245	PALE	8	S	2353.0	2354.0	1.0	130.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2354.0	2354.0	U	52.0			QL=4 ST=2 TYP=3
18	127	TORN	43	NS	1103.0		77.0		3.0		V=1
	9100	GORK	46	C	0509.0	0509.4	4.2	22.0			
	9100	GORK	46	C	0509.0	0509.8		30.0			
	900	GORK	4	S/F	0619.8	0620.2	0.6	24.0			
	204	IZMI	42	SER	0728.2	0728.4	0.4	28.0			
	204	IZMI	42	SER	0731.9	0732.0	0.8	19.0			
	2950	GORK	23	GRF	0749.2	0842.4		7.6			
	2950	GORK	23	GRF	0749.2	0803.5	104.5	7.6			
	9100	GORK	2	S/F	0823.9	0824.5	1.3	11.0			
	900	GORK	42	SER	0838.8	0841.1		20.0			
	900	GORK	42	SER	0838.8	0839.3	7.0	12.0			
	9100	GORK	4	S/F	0840.5	0841.0	2.2	17.0			
	2950	GORK	1	S	0840.7	0841.2	1.1	4.6			
	2950	GORK	4	S/F	1010.7	1012.5	4.8	150.0			
	204	IZMI	41	F	1035.5	1035.8	0.8	17.0			
	204	IZMI	42	SER	1036.8	1038.2	2.0	27.0			
	127	TORN	47	GB	1039.0U	1043.0U	10.0D	1030.0	260.0		
	245	SVTO	8	S	1041.0	1042.0	1.0	150.0			QL=4 ST=2 TYP=3
	2695	SVTO	8	S	1041.0	1042.0	2.0	110.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	1041.0	1042.0	2.0	210.0			QL=4 ST=2 TYP=3
	204	IZMI	45	C	1041.1	1042.6	2.6	524.0			
	33	UPIC	46	C	1041.5		16.5				

SOLAR RADIO EMISSION
Outstanding Occurrences

AUGUST 2004

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
18	900	GORK	46	C	1041.6	1042.1	6.2	44.0			
	900	GORK	46	C	1041.6	1042.7		27.0			
	3000	IZMI	45	C	1041.7	1042.5	1.8	88.0	22.4		
	9100	GORK	4	S/F	1041.8	1042.5	2.7	70.0			
	2695	SGMR	8	S	1042.0	1042.0	U	100.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1042.0	1042.0	U	140.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	1042.0	1042.0	1.0	31.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	1042.0	1042.0	1.0	85.0			QL=4 ST=2 TYP=3
	204	IZMI	41	F	1044.2	1047.4	5.7	173.0			
	245	SVTO	8	S	1045.0	1045.0	U	71.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1047.0	1048.0	1.0	61.0			QL=4 ST=2 TYP=3
	2800	PENT	29	PBI	1729.0	1735.0	123.0U	159.0			
	15400	SGMR	48	C	1730.0	1732.0	15.0	1400.0			QL=4 ST=2 TYP=8
	15400	SGMR	48	C	1730.0	1732.0	390.0	1400.0			QL=4 ST=1 TYP=8
	15400	SGMR	49	GB	1730.0	1732.0	390.0	1400.0			QL=4 ST=1 TYP=6
	4995	PALE	48	C	1731.0	1732.0	8.0	620.0			QL=4 ST=2 TYP=8
	8800	PALE	48	C	1731.0	1732.0	8.0	1200.0			QL=4 ST=2 TYP=8
	15400	PALE	48	C	1731.0	1732.0	7.0	1400.0			QL=4 ST=2 TYP=8
	4995	SGMR	48	C	1731.0	1732.0	14.0	640.0			QL=4 ST=2 TYP=8
	8800	SGMR	48	C	1731.0	1732.0	14.0	1100.0			QL=4 ST=2 TYP=8
	4995	PALE	48	C	1731.0	1732.0	389.0	620.0			QL=4 ST=1 TYP=8
	8800	PALE	48	C	1731.0	1732.0	389.0	1200.0			QL=4 ST=1 TYP=8
	15400	PALE	48	C	1731.0	1732.0	389.0	1400.0			QL=4 ST=1 TYP=8
	4995	PALE	49	GB	1731.0	1732.0	389.0	620.0			QL=4 ST=1 TYP=6
	8800	PALE	49	GB	1731.0	1732.0	389.0	1200.0			QL=4 ST=1 TYP=6
	8800	SGMR	48	C	1731.0	1732.0	389.0	1100.0			QL=4 ST=1 TYP=8
	8800	SGMR	49	GB	1731.0	1732.0	389.0	1100.0			QL=4 ST=1 TYP=6
	2695	PALE	48	C	1732.0	1735.0	6.0	150.0			QL=4 ST=2 TYP=8
	2695	SGMR	48	C	1732.0	1736.0	7.0	150.0			QL=4 ST=2 TYP=8
	2695	PALE	4	S/F	1732.0	1733.0	388.0	110.0			QL=4 ST=1 TYP=3
	2695	PALE	4	S/F	1732.0	1735.0	388.0	150.0			QL=4 ST=1 TYP=3
	245	SGMR	8	S	1742.0	1742.0	U	79.0			QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	1749.0	1750.0	3.0	120.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	1750.0	1751.0	2.0	100.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	1750.0	1750.0	1.0	62.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1750.0	1751.0	2.0	110.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1750.0	1750.0	1.0	110.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	1750.0	1751.0	2.0	83.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1845.0	1845.0	U	89.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1854.0	1854.0	U	140.0			QL=4 ST=2 TYP=3
	2800	PENT	40	F	2038.0	2118.0	91.0	13.0			
	500	HIRA	8	S	2241.0	2242.0	1.0	15.0			0
19	410	LEAR	8	S	0138.0	0138.0	U	80.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0138.0	0138.0	U	92.0			QL=4 ST=2 TYP=3
	2804	VORO	4	S/F	0222.5	0223.1	2.5	15.8			
	2840	PEKG	5	S	0651.0	0656.1	9.0	17.3			
	2800	HIRA	1	S	0652.0	0656.0	6.0	15.0			0
	4995	SVTO	4	S/F	0652.0	0656.0	6.0	84.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	0652.0	0656.0	6.0	100.0			QL=4 ST=2 TYP=3
	15400	SVTO	4	S/F	0652.0	0653.0	5.0	64.0			QL=4 ST=2 TYP=3
	2950	GORK	45	C	0652.1	0654.1	10.9	10.0			
	2950	GORK	45	C	0652.1	0656.2		25.0			
	15400	LEAR	48	C	0653.0	0653.0	3.0	90.0			QL=4 ST=2 TYP=8
	3000	IZMI	7	C	0653.8	0656.1	3.2	22.0	6.1		
	4995	LEAR	8	S	0655.0	0655.0	1.0	54.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0655.0	0656.0	1.0	100.0			QL=4 ST=2 TYP=3
	500	HIRA	8	S	0738.0	0738.0	1.0	10.0			0
	204	IZMI	7	C	1132.9	1132.9	0.1	6.0			
	245	SGMR	8	S	1305.0	1305.0	U	57.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1305.0	1305.0	U	57.0			QL=4 ST=2 TYP=3
	2800	PENT	21	GRF	1413.0	1429.0	115.0	6.0			
	410	PALE	8	S	2300.0	2300.0	U	210.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2307.0	2307.0	U	71.0			QL=4 ST=2 TYP=3
20	204	IZMI	41	F	0723.8	0723.9	0.6	29.0			
	204	IZMI	41	F	0817.4	0817.6	0.7	13.0			
	204	IZMI	41	F	0823.3	0823.5	0.3	4.0			
	204	IZMI	41	F	0847.5	0848.0	1.0	15.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

AUGUST 2004

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
20	204	IZMI	42	SER	1039.9	1040.1	1.6	32.0			
	204	IZMI	42	SER	1111.2	1117.6	16.5	73.0			
	8800	SGMR	8	S	1205.0	1205.0	U	51.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1529.0	1529.0	U	130.0			QL=4 ST=2 TYP=3
	2800	PENT	1	S	1531.0	1539.0	17.0	9.0			
21	204	IZMI	43	NS	0600.0		140.0U		10.0		
	204	IZMI	42	SER	0621.2	0622.3	1.7	41.0			
	2950	GORK	1	S	0641.5	0642.1	1.5	4.9			
	2950	GORK	2	S/F	0927.2	0927.8	2.0	4.9			
┌	245	SVTO	8	S	0951.0	0951.0	U	120.0			QL=4 ST=2 TYP=3
└	410	SVTO	8	S	0951.0	0951.0	U	180.0			QL=4 ST=2 TYP=3
┌	245	SGMR	8	S	1155.0	1155.0	U	54.0			QL=4 ST=2 TYP=3
└	204	IZMI	7	C	1155.2	1155.2	0.1	37.0			
22	┌ 900	GORK	41	F	0534.0	0535.3		4.7			
	└ 900	GORK	41	F	0534.0	0534.7	1.4	17.0			
	900	GORK	4	S/F	0540.0	0540.6	1.0	21.0			
	2800	PENT	40	F	1748.0	1816.0	65.0	32.0			
┌	245	PALE	8	S	1832.0	1832.0	U	110.0			QL=4 ST=2 TYP=3
└	245	SGMR	8	S	1832.0	1832.0	U	140.0			QL=4 ST=2 TYP=3
┌	410	PALE	8	S	2041.0	2041.0	U	75.0			QL=4 ST=2 TYP=3
└	410	SGMR	8	S	2041.0	2041.0	U	70.0			QL=4 ST=2 TYP=3
┌	245	PALE	8	S	2217.0	2218.0	1.0	340.0			QL=4 ST=2 TYP=3
├	245	SGMR	8	S	2217.0	2217.0	U	73.0			QL=4 ST=2 TYP=3
├	410	PALE	8	S	2218.0	2218.0	U	190.0			QL=4 ST=2 TYP=3
├	245	SGMR	8	S	2218.0	2218.0	1.0	310.0			QL=4 ST=2 TYP=3
└	410	SGMR	8	S	2218.0	2218.0	U	96.0			QL=4 ST=2 TYP=3
23	2804	VORO	3	S	0220.3	0221.5	3.7	8.1			
	410	PALE	8	S	2206.0	2207.0	1.0	70.0			QL=4 ST=2 TYP=3
24	204	IZMI	42	SER	0638.6	0638.7	0.4	113.0			
	245	SVTO	8	S	0639.0	0639.0	U	80.0			QL=4 ST=2 TYP=3
	9100	GORK	4	S/F	0657.3	0657.6	0.7	25.0			
	245	SVTO	8	S	0717.0	0717.0	U	58.0			QL=4 ST=2 TYP=3
┌	245	SVTO	8	S	0943.0	0943.0	U	38.0			QL=4 ST=2 TYP=3
└	410	SVTO	8	S	0943.0	0943.0	U	85.0			QL=4 ST=2 TYP=3
	204	IZMI	7	C	0959.5	0959.7	0.3	8.0			
	204	IZMI	42	SER	1108.8	1109.4	0.8	30.0			
	204	IZMI	42	SER	1156.4	1156.9	0.7	55.0			
┌	245	SGMR	8	S	1315.0	1315.0	1.0	170.0			QL=4 ST=2 TYP=3
└	245	SVTO	8	S	1315.0	1316.0	1.0	120.0			QL=4 ST=2 TYP=3
┌	245	SGMR	8	S	1348.0	1348.0	U	100.0			QL=4 ST=2 TYP=3
└	245	SVTO	8	S	1348.0	1348.0	U	85.0			QL=4 ST=2 TYP=3
	2800	PENT	32	ABS	2047.0	2132.0	87.0				
25	245	LEAR	8	S	0104.0	0104.0	U	100.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0151.0	0151.0	U	60.0			QL=4 ST=2 TYP=3
┌	245	LEAR	8	S	0154.0	0156.0	2.0	110.0			QL=4 ST=2 TYP=3
└	1415	LEAR	8	S	0156.0	0156.0	U	63.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0209.0	0209.0	U	82.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0217.0	0217.0	U	58.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0219.0	0219.0	U	100.0			QL=4 ST=2 TYP=3
┌	245	LEAR	8	S	0400.0	0400.0	U	65.0			QL=4 ST=2 TYP=3
└	245	PALE	8	S	0400.0	0400.0	U	62.0			QL=4 ST=2 TYP=3
┌	900	GORK	41	F	0514.9	0515.0	3.1	95.0			
├	900	GORK	41	F	0514.9	0517.4		50.0			
├	245	LEAR	8	S	0515.0	0515.0	U	100.0			QL=4 ST=2 TYP=3
├	2840	PEKG	45	C	0516.0	0519.1	8.0	10.5			
├	2800	HIRA	1	S	0517.0	0520.0	5.0	10.0			
├	2950	GORK	7	C	0517.1	0518.1	4.9	7.3			
├	2950	GORK	7	C	0517.1	0519.4		12.0			
└	9100	GORK	2	S/F	0518.5	0518.9	2.1	8.5			
	204	IZMI	7	C	0833.5	0833.5	0.1	17.0			
	204	IZMI	7	C	1111.7	1111.8	0.2	38.0			
	204	IZMI	7	C	1153.0	1153.0	0.1	35.0			
	245	PALE	8	S	1842.0	1842.0	U	72.0			QL=4 ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

AUGUST 2004

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
26	127	TORN	43	NS	0910.0		240.0		11.0		V=1
	245	LEAR	8	S	0101.0	0101.0	U	100.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0101.0	0102.0	1.0	93.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	0622.9	0623.2	0.5	9.0			
	245	PALE	8	S	1722.0	1722.0	1.0	88.0			QL=4 ST=2 TYP=3
27	410	PALE	8	S	0356.0	0356.0	U	75.0			QL=4 ST=2 TYP=3
	33	UPIC	45	C	1322.5	1323.0	1.5				
	245	PALE	48	C	1817.0	1817.0	4.0	200.0			QL=4 ST=2 TYP=8
28	245	PALE	8	S	1734.0	1734.0	U	120.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1734.0	1734.0	U	58.0			QL=4 ST=2 TYP=3
30	245	LEAR	8	S	0306.0	0306.0	1.0	140.0			QL=2 ST=2 TYP=3
	2804	VORO	4	S/F	0307.5	0308.4	3.0	13.0			
	2800	HIRA	1	S	0308.0	0309.0	3.0	10.0			0
	204	IZMI	42	SER	0954.9	0955.2	0.7	14.0			
	2800	PENT	21	GRF	1753.0	1808.0	99.0U	9.0			
31	2804	VORO	42	SER	0028.7	0029.6	4.1	5.3			
	2804	VORO	42	SER	0028.7	0043.9	20.2	5.7			
	2840	PEKG	3	S	0529.0	0534.5	22.0	26.5			
	9100	GORK	20	GRF	0529.2	0536.6	39.5	17.0			
	2950	GORK	4	S/F	0530.0	0534.5	16.3	31.0			
	2800	HIRA	1	S	0531.0	0535.0	9.0	25.0			0
	900	GORK	41	F	0531.8	0532.2	5.5	3.7			
	900	GORK	41	F	0531.8	0536.4		3.7			

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	

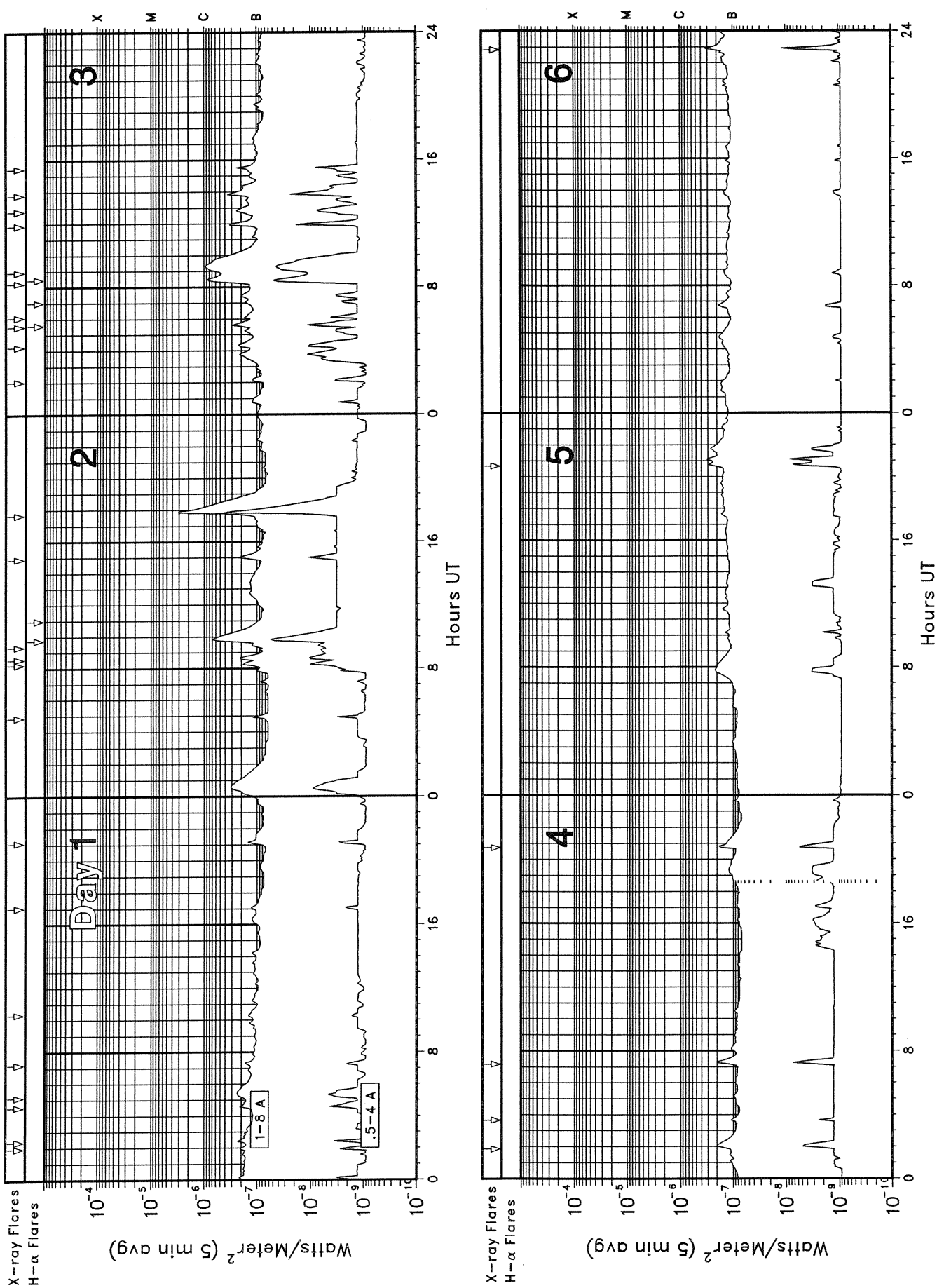
Explanation of Type Code:

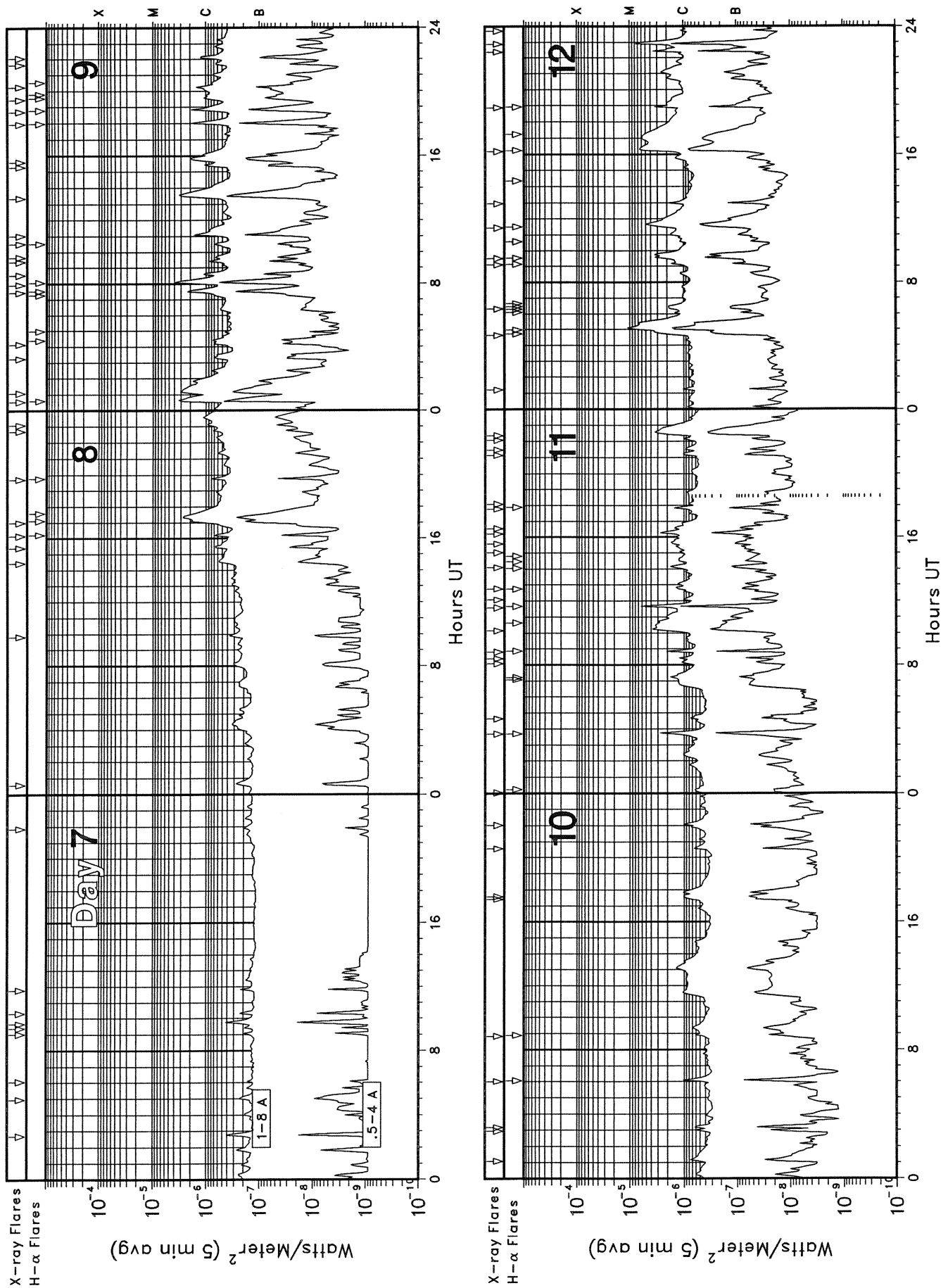
1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple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

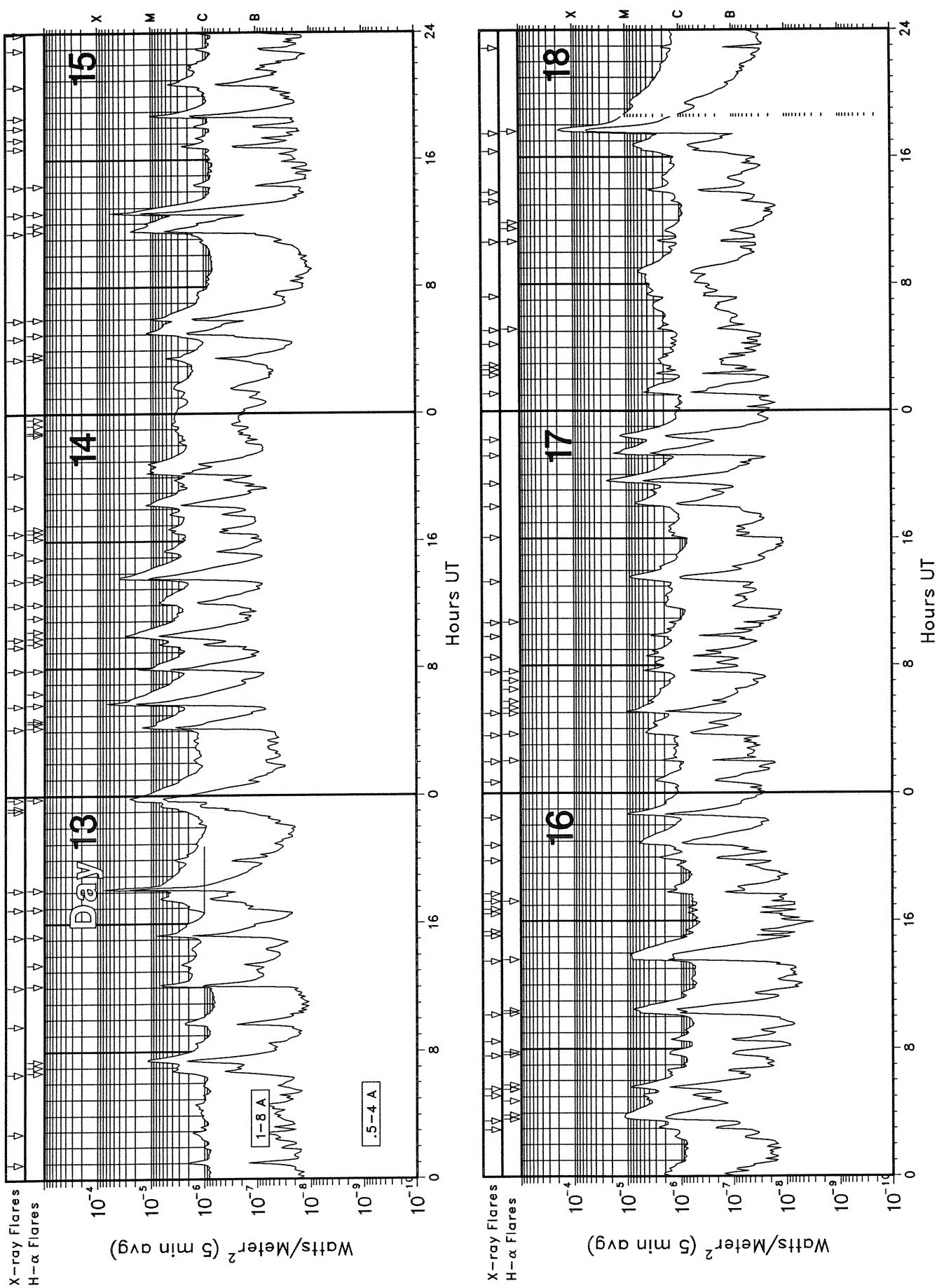
1A Simple 1A	4A Simple 2AF	24PF Post Rise F	27F Rise and Fall F
3A Simple 2A	40 Rise Only	16A Fall A	27AF Rise and Fall AF
21A Simple 3A GRF	40F Rise Only F	260 Fall Only	31A Post Burst Decrease A
2A Simple 1AF	4P Post Rise	26F Fall F	32A Absorption A

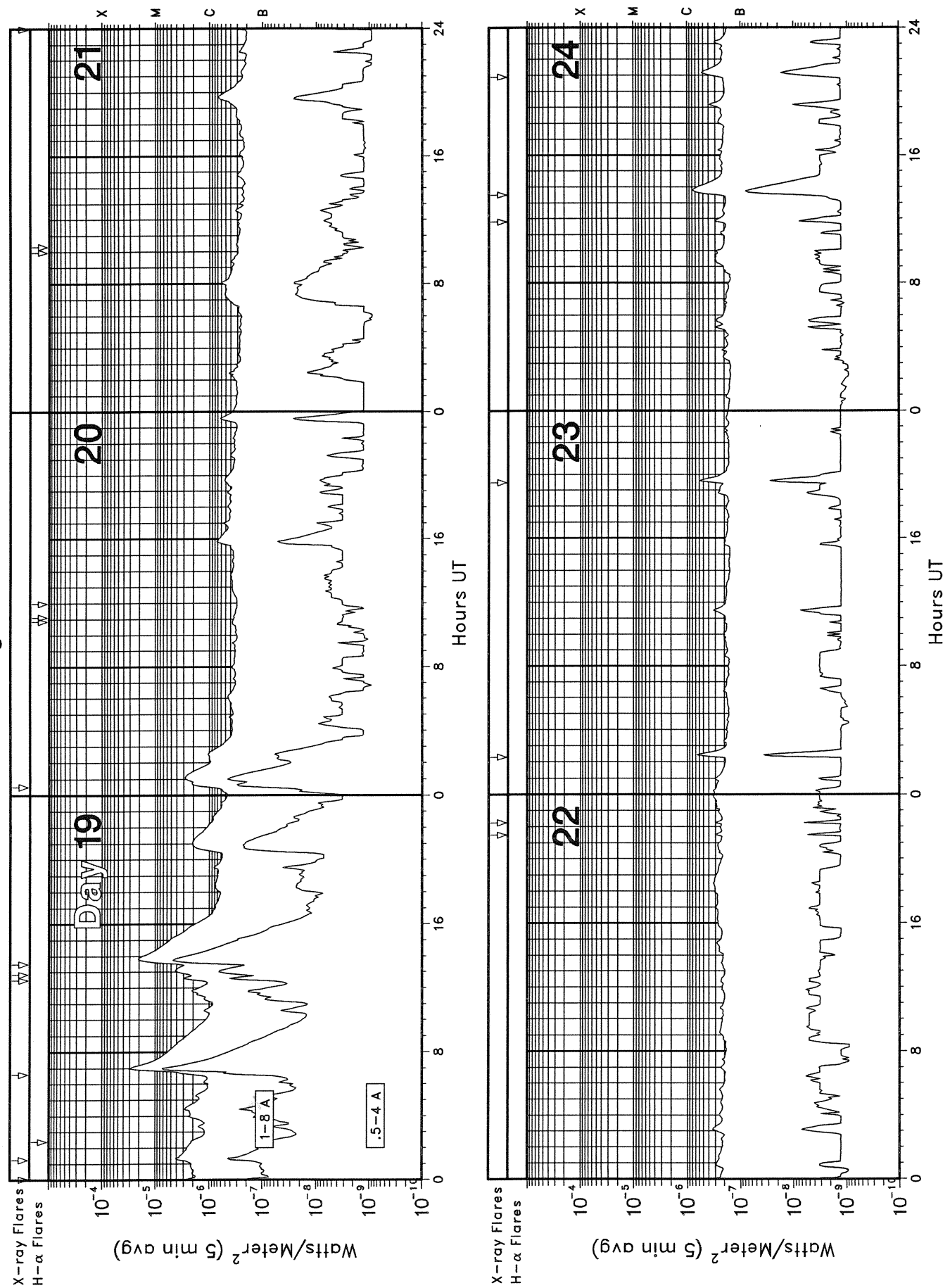
RSTN Site Information: Beginning in April 1986, the RSTN sites LEAR, PALE, SGMR, and SVTO fixed frequency solar radio data are periodically adjusted to several world standard stations. These world standard stations include: Kislovodsk, USSR 15,500 MHz; Penticton, Canada 2800 MHz; and Hiraiso, Japan 500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

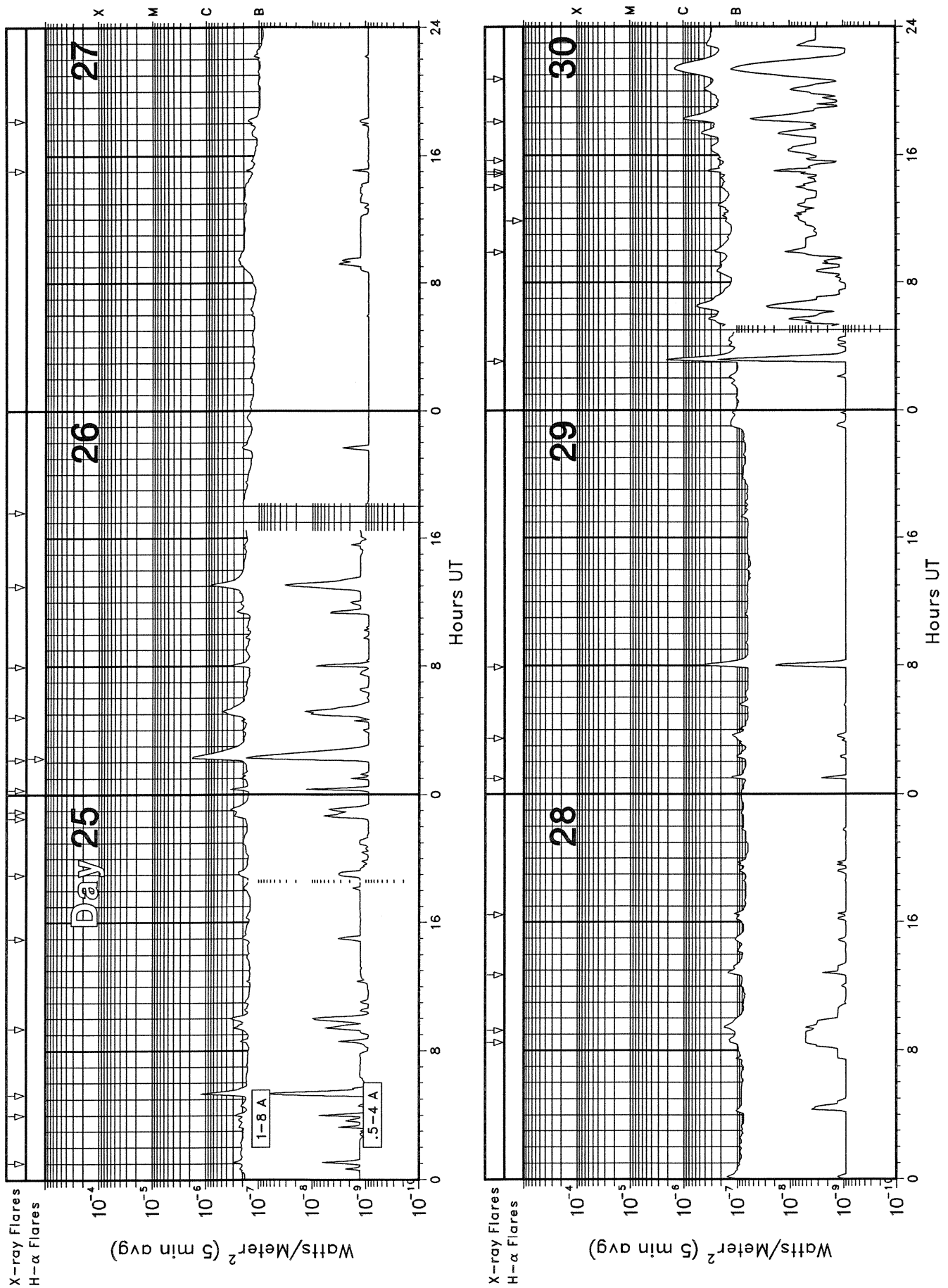
28
Aug 04


GOES X-RAY DETECTOR
August 2004
Day 1
1-8 A
.5-4 A
X-ray Flares
H-α Flares
Watts/Meter² (5 min avg)
Hours UT
X
M
C
B
1
2
3
4
5
6


GOES X-RAY DETECTOR
August 2004
Day 7
8
9
10
11
12
1–8 A
.5–4 A
X-ray Flares
H-α Flares
Watts/Meter² (5 min avg)
Hours UT
X
M
C
B


GOES X-RAY DETECTOR
August 2004
Day 13
14
15
16
17
18
X
M
C
B
1-8 A
.5-4 A
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
August 2004
Day
19
20
21
22
23
24
X
M
C
B
1-8 A
.5-4 A
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
August 2004
Day 25
26
27
28
29
30
X
M
C
B
1-8 A
.5-4 A
X-ray Flares
H-α Flares
Watts/Meter² (5 min avg)
Hours UT
0
8
16
24
10⁻⁴
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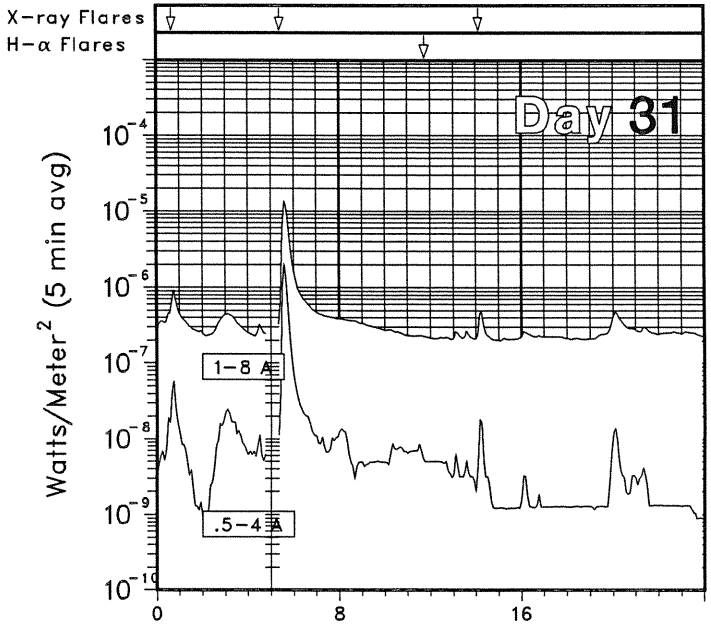
GOES X-RAY DETECTOR

August 2004



GOES S O L A R X-RAY F L A R E S
Preliminary Listing

August 2004

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	Flux	NOAA/ USAF Region
01	0156	0159	0202				B2.6	8.0E-05	10655
01	0222	0226	0233				B2.4	1.4E-04	
01	0432	0436	0443				B2.2	1.3E-04	10654
01	0508	0524	0547				B2.3	5.1E-04	
01	0711	0719	0724				B1.8	1.2E-04	
01	1020	1023	1026				B1.5	5.2E-05	
01	1701	1707	1711				B1.3	7.6E-05	
01	2105	2110	2115				B1.5	8.3E-05	
02	0452	0456	0500				B1.3	5.1E-05	
02	0813	0818	0826				B1.9	1.3E-04	
02	0834	0838	0846				B2.6	1.5E-04	10654
02	0920	0951	1011				B7.0	1.1E-03	10655
02	1454	1501	1512				B2.2	1.9E-04	10655
02	1739	1754	1800				C3.9	2.1E-03	10655
03	0203	0207	0221				B1.2	1.2E-04	
03	0413	0420	0430				B2.3	2.1E-04	10655
03	0530	0536	0545	S11	E25	SF	B3.0	2.2E-04	10655
03	0604	0607	0610				B1.9	6.2E-05	10655
03	0814	0829	0846	S10	E23	SF	B9.1	1.2E-03	10655
03	0855	0923	0944				B9.6	2.3E-03	10655
03	1152	1159	1205				B3.9	2.3E-04	10655
03	1246	1249	1258				B2.6	1.7E-04	10655
03	1347	1352	1400				B3.8	2.4E-04	10655
03	1526	1530	1534				B2.8	1.0E-04	10655
04	0151	0204	0206				B2.0	1.4E-04	10655
04	0340	0343	0346				B1.1	3.8E-05	
04	0710	0721	0729				B2.0	1.9E-04	10655
04	2044	2048	2052				B2.8	8.8E-05	
05	2040	2108	2114				B3.3	5.4E-04	10655
06	2249	2256	2301				B3.7	2.1E-04	10656
07	0242	0246	0252				B4.6	2.1E-04	10656
07	0457	0502	0512				B2.4	1.9E-04	10656
07	0604	0607	0610				B1.7	5.5E-05	
07	0902	0906	0908				B2.7	7.0E-05	10655
07	0924	0927	0930				B2.2	6.7E-05	10656
07	0940	0946	0950				B5.1	2.0E-04	10656
07	1019	1023	1026				B3.3	9.4E-05	10656
07	1147	1151	1153				B2.7	7.6E-05	10656
07	2152	2156	2200				B2.0	8.6E-05	
08	0035	0042	0049				B2.8	2.1E-04	10656
08	0950	0956	1003				B3.8	2.6E-04	10656
08	1426	1433	1506				B5.7	1.2E-03	10656
08	1524	1528	1534				B7.6	3.9E-04	10656
08	1609	1613	1616	S10	E50	SF	B9.5	2.9E-04	10656
08	1659	1724	1736	S13	E50	SF	C2.7	4.5E-03	10656
08	1943	1948	1952	S11	E45	SF	B8.9	3.9E-04	10656
08	2243	2246	2249				B7.9	2.6E-04	10656
08	2305	2309	2313				C1.0	4.6E-04	10656
09	0033	0039	0043	S14	E43	SF	C5.1	1.7E-03	10656
09	0105	0113	0135	S11	E41	1N	C3.0	4.5E-03	10656
09	0314	0318	0335				B7.2	7.9E-04	10656
09	0409	0413	0417				B8.9	3.4E-04	10656
09	0726	0733	0739	S12	E38	SF	C2.4	1.4E-03	10656
09	0756	0808	0814	S12	E38	SF	C4.8	2.7E-03	10656
09	0832	0840	0843				C1.1	6.6E-04	10656
09	0922	0928	0932				B9.6	4.6E-04	10656
09	0940	0943	0946				B8.4	2.5E-04	10656
09	1031	1034	1036				B9.0	2.3E-04	10656
09	1101	1106	1115				C1.7	1.0E-03	10656
09	1322	1335	1348				C3.3	3.5E-03	10656
09	1518	1527	1532				C1.1	7.4E-04	10656
09	1536	1550	1559				C1.9	2.1E-03	10656
09	1756	1801	1807	S12	E34	SF	C2.0	9.4E-04	10656
09	1843	1851	1856	S12	E32	SF	C2.2	9.7E-04	10656
09	1927	1935	1942	S12	E31	SF	C1.3	8.3E-04	10656
09	2015	2018	2020	S12	E31	SF	C2.2	4.6E-04	10656
09	2138	2143	2152				B6.9	5.1E-04	10656
09	2204	2209	2212	S11	E30	SF	C1.8	6.3E-04	10656
10	0105	0111	0122				B7.7	6.6E-04	10656
10	0257	0301	0305				B6.5	2.7E-04	10656
10	0310	0314	0316				B9.6	2.5E-04	10656
10	0601	0607	0611	S12	E26	SF	C1.1	5.0E-04	10656
10	0851	0858	0902	S12	E24	SF	B6.2	3.6E-04	10656
10	1725	1729	1735				C1.0	5.1E-04	10656
10	1735	1738	1743				C1.2	5.0E-04	
10	2034	2039	2042				B7.6	3.1E-04	10656
10	2202	2207	2212				C1.0	5.4E-04	10655
11	0003	0015	0019	S12	E16	SF	B7.0	5.5E-04	10656
11	0341	0346	0349	S11	E10	SF	C3.2	1.1E-03	10656
11	0438	0441	0444				B8.6	2.6E-04	10658
11	0805	0810	0820				C1.1	8.9E-04	10656
11	0823	0826	0829				C1.3	4.2E-04	10656
11	0849	0852	0855	S13	E13	SF	C2.9	7.1E-04	10656
11	1009	1015	1040	S14	E13	SF	C4.2	5.9E-03	10656
11	1135	1141	1145	S13	E11	SF	C7.6	2.5E-03	10656
11	1205	1209	1211				C1.3	3.9E-04	10656
11	1246	1249	1252				C1.7	5.3E-04	10656
11	1406	1411	1415	S14	E09	SF	C1.8	8.9E-04	10656
11	1502	1505	1507				C1.4	3.7E-04	10656
11	1535	1539	1544				C1.8	9.1E-04	10656
11	1612	1617	1623				C2.8	1.5E-03	10656
11	1633	1636	1638				C1.6	4.1E-04	10656
11	1747	1753	1756	S13	E07	SF	C1.7	7.1E-04	10656
11	1805	1809	1812				B9.9	3.5E-04	10656
11	2109	2114	2118				C1.3	5.5E-04	10656
11	2129	2134	2139				C1.0	5.5E-04	10656
11	2205	2210	2215				C1.0	5.5E-04	10656
11	2222	2237	2256	S13	E02	SF	C3.4	5.2E-03	10656
12	0113	0118	0121				C1.2	4.6E-04	10656
12	0438	0505	0520	S14	E02	1F	M1.2	1.4E-02	10656
12	0619	0629	0633	S14	W07	SF	C2.2	1.6E-03	10656
12	0907	0911	0915	S12	W02	SF	C1.8	7.2E-04	10656
12	0931	0935	0942	S14	W03	SF	C4.0	1.9E-03	10656
12	1127	1143	1152				C4.9	5.4E-03	10656
12	1257	1301	1304				C2.1	6.7E-04	10656
12	1611	1623	1729	S18	W06	SF	C6.5	2.4E-02	10656
12	1853	1857	1859	S15	W13	SF	C4.4	1.1E-03	10656
12	2223	2227	2229				C6.1	1.1E-03	10656
12	2253	2258	2303	S12	W07	SN	C9.9	4.0E-03	10656
12	2343	2346	2349				C1.2	3.8E-04	10656
13	0056	0102	0108				C2.2	1.2E-03	10656
13	0252	0255	0258				C1.9	6.2E-04	10656
13	0636	0729	0738				M1.2	1.8E-02	10656
13	0936	0943	0957				C2.4	2.5E-03	10656
13	1202	1209	1212	S13	W19	1F	M1.1	3.3E-03	10656
13	1510	1516	1521	S14	W21	1F	C8.6	3.5E-03	10656
13	1655	1658	1703	S12	W23	SF	C2.3	1.0E-03	10656
13	1807	1812	1815	S13	W24	1N	X1.0	2.7E-02	10656

GOES S O L A R X-RAY F L A R E S
Preliminary Listing

August 2004

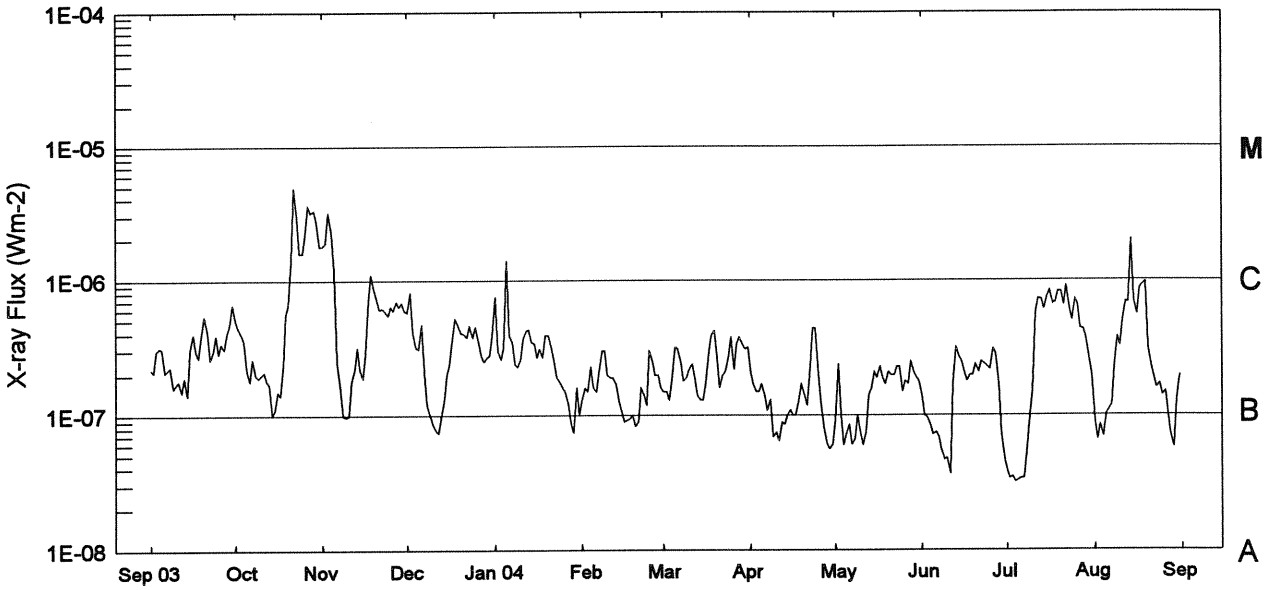
Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp	Xray	Flux	NOAA/ USAF Region
13	2304	2307	2310				C	3.5	1.1E-03	10656
13	2314	2343	2346				M	3.0	1.7E-02	10656
13	2346	2350	2354	S12	W27	SF	M	2.8	1.2E-02	10656
14	0410	0414	0417	S13	W30	SF	M	2.4	5.6E-03	10656
14	0536	0544	0552	S11	W28	2N	M	7.4	3.8E-02	10656
14	0751	0756	0759	S13	W32	1F	M	2.3	6.2E-03	10656
14	0923	0929	0937	S13	W30	SF	C	8.1	4.9E-03	10656
14	0952	1007	1017	S14	W30	1F	M	3.2	2.8E-02	10656
14	1201	1211	1235	S14	W31	SF	C	7.4	1.2E-02	10656
14	1331	1343	1350	S14	W34	2N	M	5.6	2.8E-02	10656
14	1515	1525	1532				C	5.9	5.0E-03	10656
14	1629	1647	1654	S14	W33	SF	C	5.2	5.8E-03	10656
14	1809	1818	1832				M	1.3	1.3E-02	10656
14	2009	2016	2059				M	1.3	2.8E-02	10656
15	0327	0333	0335	S12	W41	SF	C	6.9	2.2E-03	10656
15	0445	0506	0522	S12	W44	SF	M	1.2	1.5E-02	10656
15	0554	0600	0604	S12	W42	SF	M	1.2	5.4E-03	10656
15	1123	1132	1148	S15	W47	2F	M	2.6	2.4E-02	10656
15	1234	1241	1243	S15	W45	1N	M	9.4	2.2E-02	10656
15	1418	1424	1432	S14	W52	SF	C	1.7	1.1E-03	10656
15	1642	1650	1656				C	2.9	1.7E-03	10656
15	1716	1721	1726				C	1.4	7.7E-04	10656
15	1759	1803	1812				C	1.6	1.1E-03	10656
15	1837	1845	1850				M	1.2	5.6E-03	10656
15	2037	2046	2054				C	4.9	3.5E-03	10656
15	2255	2300	2302				C	2.1	6.4E-04	10656
15	2355	2413	2422				C	2.3	2.8E-03	10656
16	0258	0305	0314				C	2.8	2.1E-03	10656
16	0331	0347	0415	S12	W54	SF	M	1.1	2.4E-02	10656
16	0505	0509	0514	S15	W53	1F	C	5.9	2.8E-03	10656
16	0530	0538	0545	S15	W54	SF	C	9.4	6.6E-03	10656
16	0735	0749	0755				C	1.9	1.8E-03	10656
16	0829	0835	0841				C	1.7	9.6E-04	10656
16	1010	1031	1042	S15	W57	SF	C	8.0	1.1E-02	10656
16	1330	1338	1417	S15	W59	SF	C	9.0	2.0E-02	10656
16	1505	1508	1510				C	1.1	2.9E-04	10656
16	1521	1525	1530				B	8.5	4.2E-04	10656
16	1629	1632	1635				B	8.8	2.6E-04	10656
16	1646	1651	1656				B	8.0	4.2E-04	10656
16	1716	1719	1721	S12	W61	SF	B	8.4	2.0E-04	10656
16	1744	1751	1758				C	1.9	1.2E-03	10656
16	1949	2000	2006				C	2.8	2.0E-03	10656
16	2046	2055	2120				C	6.2	9.5E-03	10656
16	2229	2244	2252	S12	W62	1F	M	1.1	8.1E-03	10656
17	0041	0050	0059				C	2.9	2.8E-03	10656
17	0157	0203	0206	S12	W66	SF	C	2.9	1.0E-03	10656
17	0335	0347	0410	S12	W67	SF	C	4.5	7.4E-03	10656
17	0459	0506	0514	S12	W66	SF	M	1.1	6.4E-03	10656
17	0735	0740	0747	S14	W67	SF	C	5.2	2.9E-03	10656
17	0832	0837	0842				C	4.9	2.3E-03	10656
17	0952	0958	1002				C	4.1	1.9E-03	10656
17	1044	1047	1050	N06	E26	SF	C	1.8	5.6E-04	10661
17	1319	1340	1351				C	8.8	1.1E-02	10656
17	1605	1648	1703				C	1.6	4.9E-03	10656
17	1800	1814	1828				C	7.2	8.8E-03	10656
17	1926	1937	1948				M	2.4	2.1E-02	10656
17	2112	2121	2139				M	1.8	1.9E-02	10656
17	2212	2228	2237				M	1.3	1.5E-02	10656
18	0106	0110	0115				C	6.1	2.0E-03	10656
18	0217	0223	0228				C	3.3	1.5E-03	10656
18	0238	0242	0247				C	1.8	8.7E-04	10656
18	0255	0319	0325				C	2.5	4.1E-03	10656
18	0414	0417	0420				C	1.6	5.3E-04	
18	0506	0510	0514	N12	E19	SF	C	3.0	1.1E-03	10661
18	0714	0726	0735				C	4.1	4.5E-03	10656
18	1040	1044	1048	N03	E14	1F	C	3.2	1.2E-03	10661
18	1312	1315	1322				C	1.4	7.7E-04	10656
18	1348	1356	1403				C	4.0	2.8E-03	10656
18	1621	1646	1701				C	7.2	1.4E-02	10656
18	1729	1740	1754	S12	W83	SF	X	1.8	1.8E-01	10656
18	2253	2258	2302				C	2.3	1.0E-03	10656
19	0002	0006	0009				C	2.6	9.0E-04	10656
19	0115	0119	0126				C	4.7	2.6E-03	10656
19	0635	0701	0718				M	3.0	4.0E-02	10656
19	1228	1239	1248				C	3.0	2.9E-03	10656
19	1250	1307	1325				C	4.2	7.5E-03	10656
19	1329	1351	1416				M	2.1	4.1E-02	10656
20	0031	0107	0136				C	2.8	8.7E-03	
21	2358	2402	2404				B	7.9	1.4E-04	10661
22	2129	2133	2137				B	3.2	1.4E-04	10661
22	2215	2219	2221				B	3.4	1.1E-04	10664
23	0218	0227	0235				B	6.8	5.3E-04	10663
23	1929	1936	1947				B	6.1	5.2E-04	10663
24	1148	1152	1200				B	3.0	2.0E-04	
24	1330	1352	1412				B	7.6	1.5E-03	
24	2054	2112	2127				B	5.4	8.2E-04	
25	0102	0106	0110				B	3.0	1.3E-04	
25	0359	0403	0407				B	3.1	1.3E-04	10661
25	0515	0521	0526				C	1.3	5.8E-04	10661
25	0922	0926	0930				B	3.2	1.4E-04	
25	1459	1504	1509				B	2.0	1.2E-04	
25	1858	1910	1914				B	2.4	2.3E-04	
25	2230	2241	2245				B	3.0	2.2E-04	
25	2256	2306	2312				B	3.4	2.9E-04	
26	0017	0021	0025				B	3.8	1.4E-04	10661
26	0208	0219	0230	N10	W05	SF	C	1.8	1.7E-03	10663
26	0449	0513	0517				B	5.6	6.1E-04	
26	0757	0802	0810				B	3.6	2.2E-04	10662
26	1259	1304	1313				B	8.4	6.1E-04	
26	1737	1743	1751				B	3.1	2.3E-04	
27	1504	1506	1507				B	1.8	3.2E-05	
27	1809	1814	1817				B	1.7	7.9E-05	
28	0830	0841	0843				B	1.4	1.1E-04	
28	0915	0928	0937				B	1.8	2.0E-04	
28	1243	1253	1302				B	1.5	1.5E-04	
28	1627	1632	1637				B	1.2	6.3E-05	
29	0059	0104	0108				B	1.6	6.8E-05	10664
29	0328	0339	0345				B	1.3	1.2E-04	10663
29	0755	0803	0810				B	4.6	2.9E-04	10664
30	0304	0311	0318				C	2.4	1.1E-03	10663
30	0954	1000	1010				B	2.6	2.3E-04	10663
30	1400	1403	1405				B	2.5	6.2E-05	10663
30	1449	1452	1454				B	2.5	6.2E-05	10663

GOES S O L A R X-RAY F L A R E S
Preliminary Listing

August 2004

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	Flux	NOAA/ USAF Region
30	1458	1502	1504				B4.8	1.2E-04	10663
30	1541	1544	1547				B2.6	7.9E-05	
30	1806	1818	1829				C1.0	1.1E-03	10663
30	2045	2125	2147				C1.4	3.4E-03	
31	0040	0046	0052				B9.3	5.8E-04	10663
31	0524	0538	0547				M1.4	1.1E-02	10663
31	1407	1415	1420				B5.5	3.3E-04	10663

Preliminary GOES Satellite Daily X-Ray Background
Sep 2003 - Aug 2004



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

Levels below B1.0 are unreliable.

ACTIVE PROMINENCES AND FILAMENTS

AUGUST 2004

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
02	DSD	0943	1003	S07	E34	08	4.9	1	03	9	9	V	KHAR		
02	DSD	1042	1050	S07	E33	08	4.9	1	02	9	9	V	KHAR		
12	DSF	2020U	1343U	S17	W17	08	11.5	3	26	0	0	E	HOLL		S=2 C=
14	DSF	2158U	2252U	S21	W45	08	11.5		06	0	0	E	HOLL		S=2 C=
16	DSD	1020	1053D	S10	W60	08	11.9	1	04	9	9	V	KHAR		
17	DSF	0332	0535	S08	E37	08	19.9	3	09	0	0	E	LEAR		S=2 C=
17	DSF	0443U	0535	S05	E32	08	19.6	3	11	0	0	E	SVTO		S=2 C=
17	DSD	1050U	1055U	S05	E23	08	19.2	1	04	9	9	V	KHAR		
17	DSF	2350U	1336U	S08	E41	08	21.1		11	0	0	E	HOLL		S=2 C=
18	APR	1018E	1053	S16	W90	08	11.6	1	03	9	9	V	KHAR		
18	DSD	1046E	1130	N03	E12	08	19.3	2	12	9	9	V	KHAR		
18	SPY	1737E	0000	S16	W90	08	11.9	1		0	0	E	HOLL	0656	Flare Associated
18	SPY	1737E	1753	S16	W90	08	11.9	1		0	0	E	HOLL	0656	Flare Associated
18	SPY	1737E	1753	S16	W90	08	11.9	1		0	0	E	HOLL	0656	Flare Associated
18	EPL	2116	0000	S17	W90	08	12.0	1		9	9	E	HOLL	0656	S=1 C=1-
18	EPL	2116	2237D	S17	W90	08	12.0	1		9	9	E	HOLL	0656	S=2 C=
20	DSD	1051U	1052D	S12	W21	08	18.9	1			9	V	KHAR		
24	BSL	1345	0000	S05	E90	08	31.3			9	9	E	SVTO		S=1 C=1-
24	BSL	1345	1437	S05	E90	08	31.3			9	9	E	SVTO		S=2 C=
26	SPY	0034	0000	N01	W90	08	19.3	3		9	9	E	HOLL	0661	S=1 C=1-
26	SPY	0034	0103	N01	W90	08	19.3	3		9	9	E	HOLL	0661	S=2 C=
27	EPL	0906E	0000	S02	W90	08	20.6	3		9	9	E	SVTO		S=1 C=1-
27	EPL	0906E	0931	S02	W90	08	20.6	3		9	9	E	SVTO		S=2 C=
29	DSF	0047U	1335U	S03	E19	08	30.4		13	0	0	E	HOLL		S=2 C=
29	ADF	1030U	1206D	S11	W75	08	23.8	1	05	9	9	V	KHAR		
30	DSF	2039U	1327U	N12	E21	09	1.4		11	0	0	E	HOLL		S=2 C=

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.

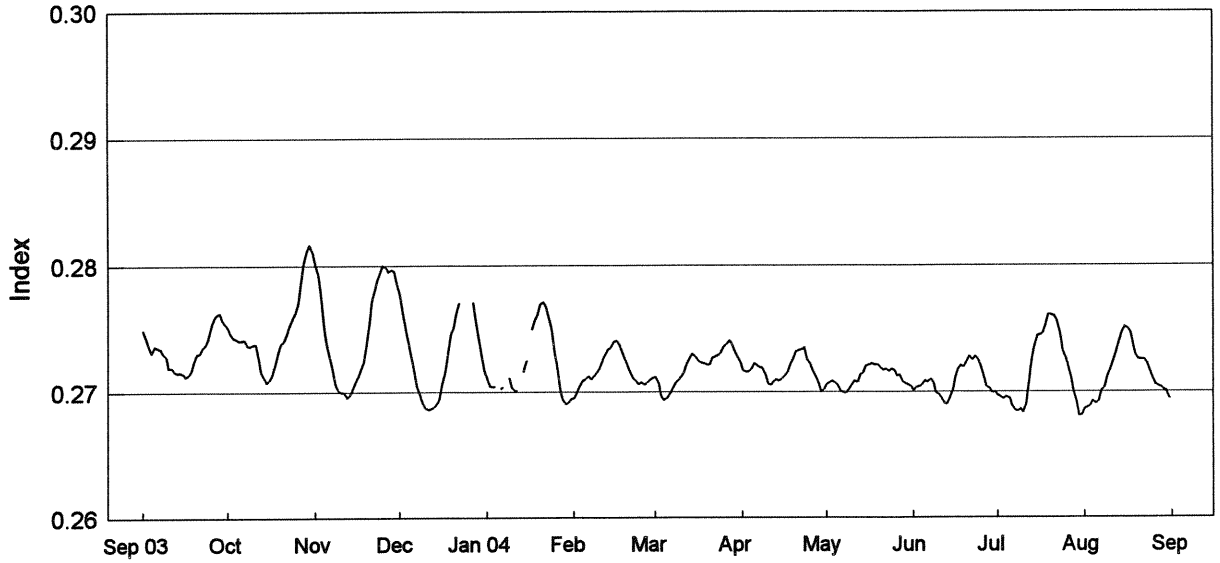
The remark "Bright Emission 1/3" indicates that bright emission was observed 1/3 of time.
The remark "Normal Emission 1/3" indicates that normal emission was observed 1/3 of time.

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

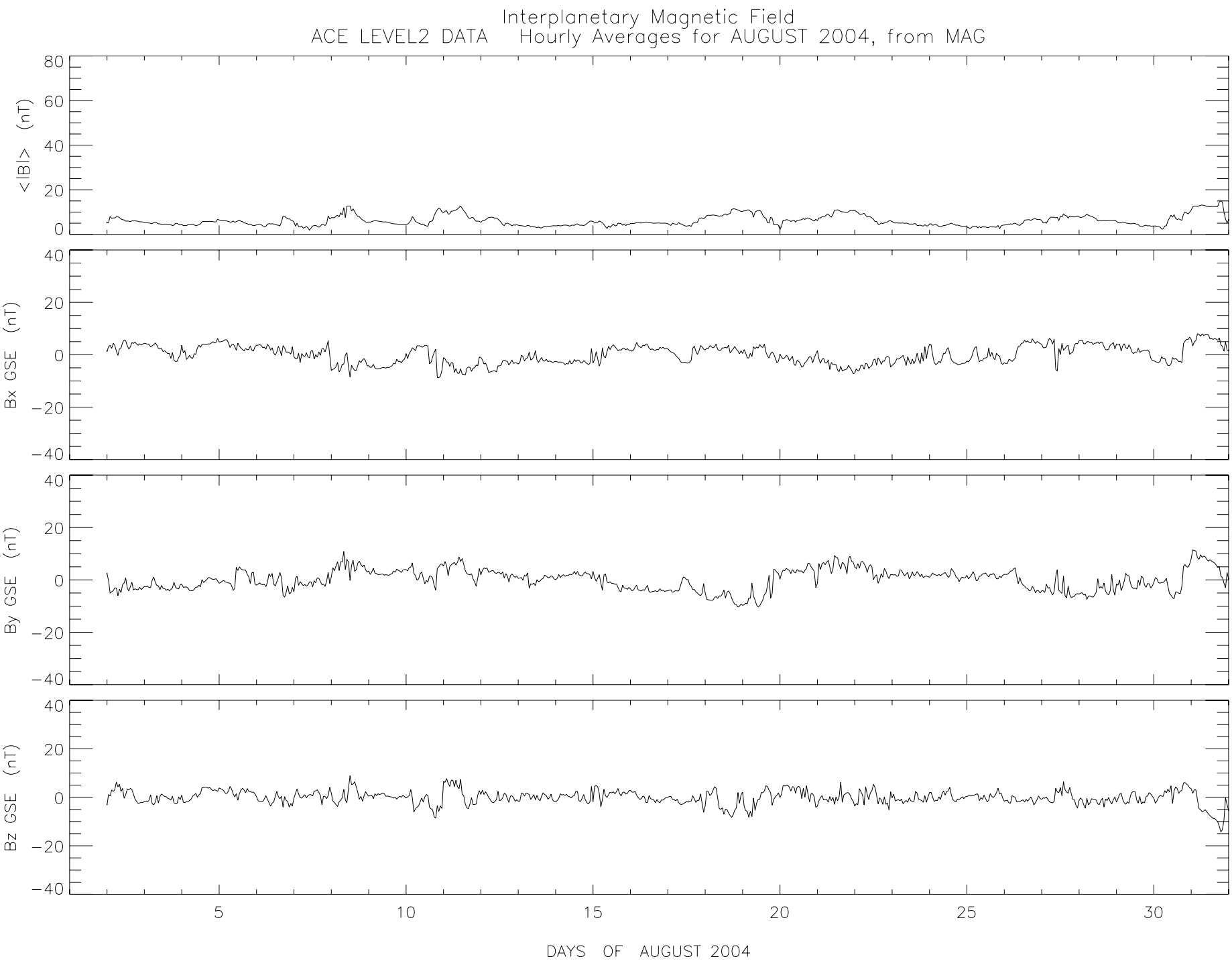
NOTE: The U.S. Air Force solar observing sites (HOLL, LEAR, RAMY, AND SVTO) have changed operational requirements and will only report the following: BSL, EPL, LPS, SPY, and DSF's.

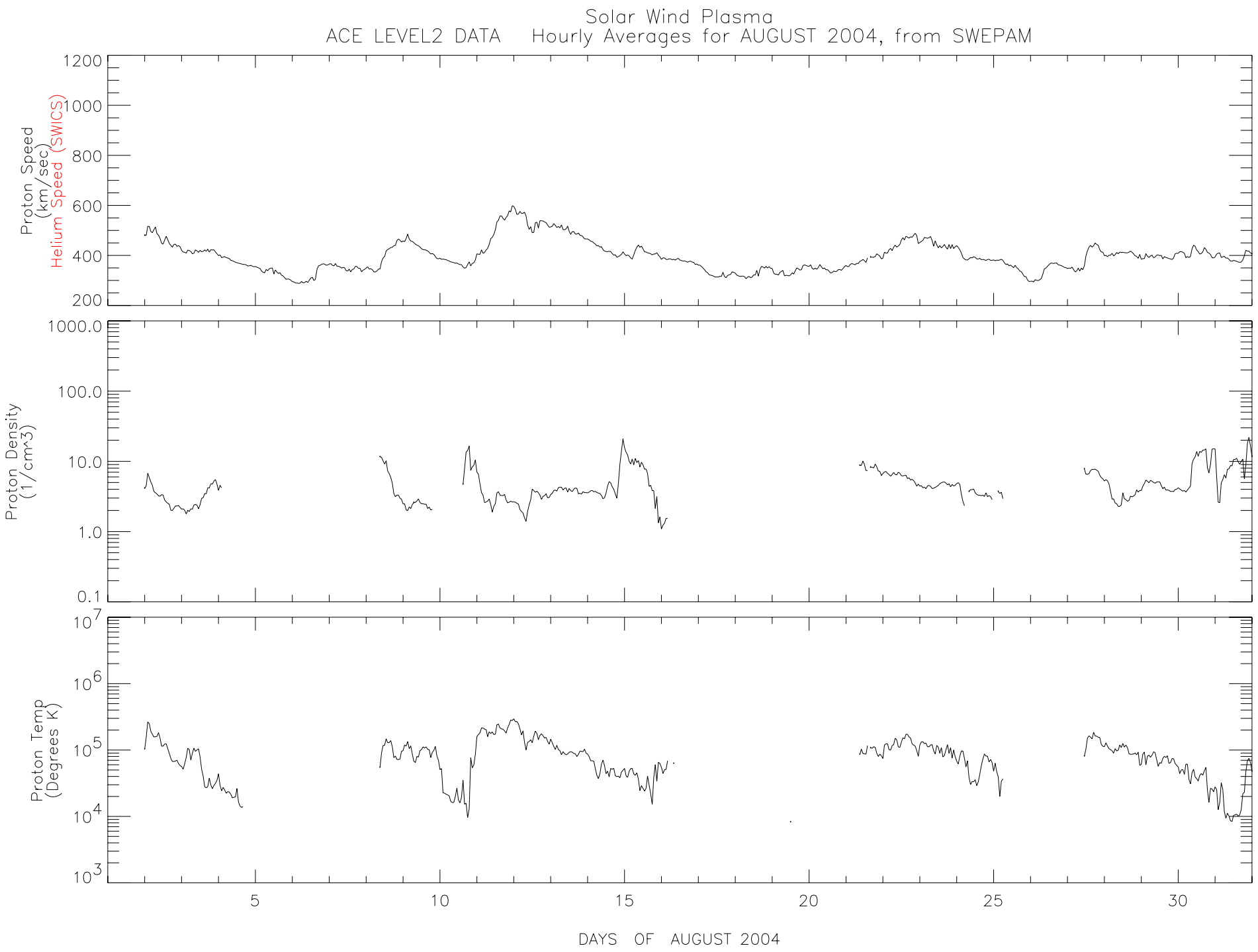
NOAA Solar Ultraviolet (UV) MgII Core-to-Wing Index
Sep 2003 - Aug 2004
Version 9.1

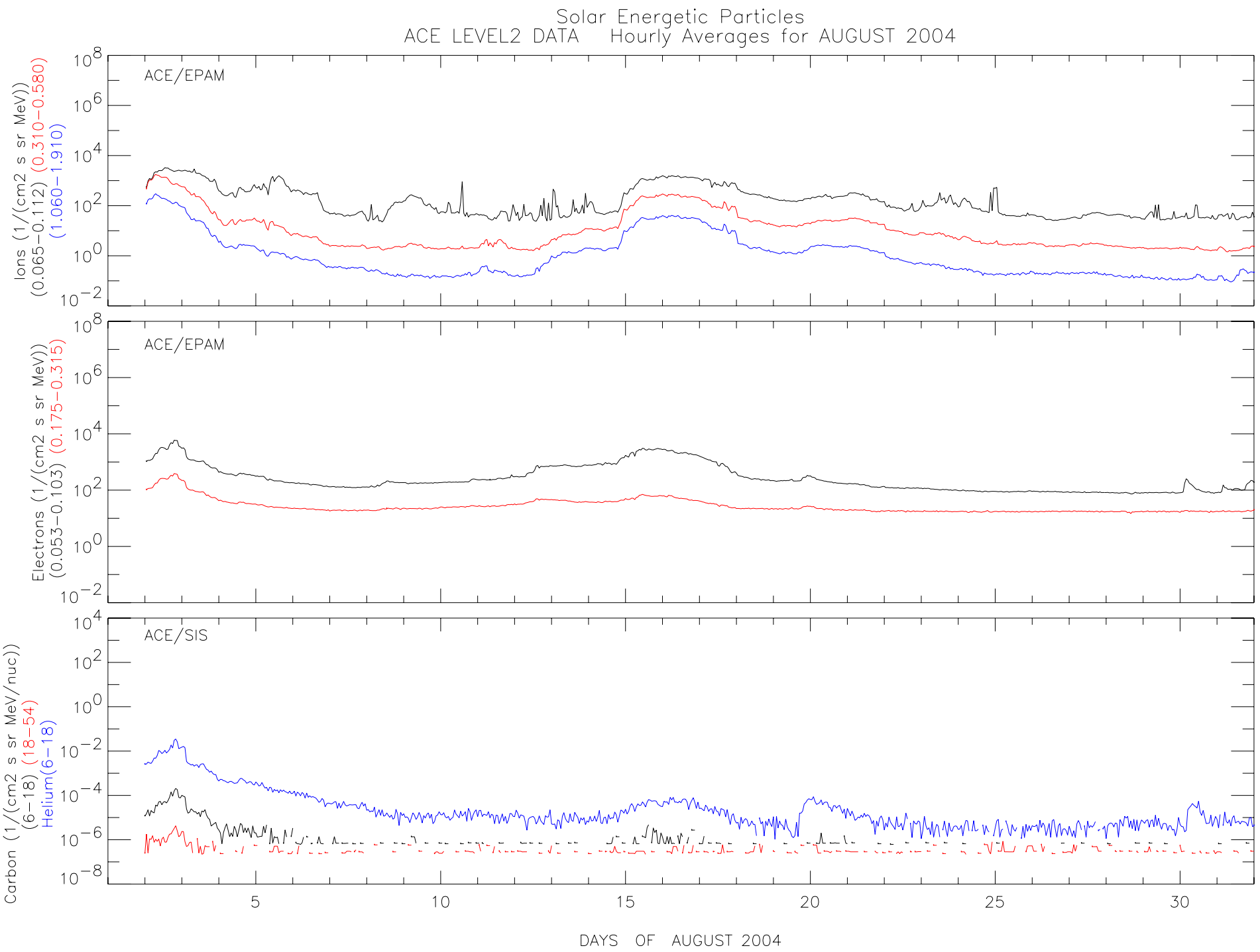


Day	Sep 03	Oct	Nov	Dec	Jan 04	Feb	Mar	Apr	May	Jun	Jul	Aug
1	0.2749	0.2751	0.2801	0.2777	0.2711	0.2695	0.2712	0.2717	0.2706	0.2701	0.2697	0.2686
2	0.2744	0.2746	0.2792	0.2764	0.2705	0.2699	0.2707	0.2716	0.2708	0.2704	0.2697	0.2688
3	0.2736	0.2743	0.2774	0.2750	0.2704	0.2705	0.2696	0.2716	0.2709	0.2705	0.2695	0.2689
4	0.2731	0.2743	0.2752	0.2740	0.2704	0.2709	0.2694	0.2718	0.2707	0.2706	0.2696	0.2693
5	0.2737	0.2741	0.2738	0.2730	----	0.2711	0.2695	0.2723	0.2705	0.2709	0.2695	0.2691
6	0.2736	0.2741	0.2727	0.2717	0.2703	0.2713	0.2698	0.2721	0.2701	0.2708	0.2689	0.2692
7	0.2734	0.2742	0.2719	0.2704	0.2705	0.2710	0.2703	0.2719	0.2700	0.2710	0.2686	0.2701
8	0.2730	0.2737	0.2706	0.2699	----	0.2713	0.2707	0.2719	0.2700	0.2707	0.2684	0.2703
9	0.2728	0.2737	0.2702	0.2691	0.2711	0.2715	0.2710	0.2714	0.2702	0.2700	0.2686	0.2711
10	0.2720	0.2738	0.2700	0.2688	0.2703	0.2719	0.2712	0.2707	0.2706	0.2698	0.2683	0.2718
11	0.2719	0.2738	0.2700	0.2686	0.2701	0.2725	0.2715	0.2705	0.2709	0.2695	0.2690	0.2724
12	0.2717	0.2728	0.2696	0.2687	0.2701	0.2730	0.2721	0.2708	0.2708	0.2691	0.2706	0.2730
13	0.2715	0.2717	0.2698	0.2688	----	0.2734	0.2727	0.2710	0.2714	0.2691	0.2726	0.2739
14	0.2716	0.2712	0.2702	0.2691	0.2716	0.2735	0.2730	0.2709	0.2715	0.2696	0.2736	0.2746
15	0.2715	0.2708	0.2707	0.2694	0.2725	0.2740	0.2727	0.2710	0.2720	0.2701	0.2745	0.2752
16	0.2713	0.2710	0.2712	0.2706	----	0.2741	0.2725	0.2712	0.2721	0.2711	0.2745	0.2750
17	0.2714	0.2714	0.2717	0.2716	0.2750	0.2738	0.2723	0.2715	0.2723	0.2718	0.2746	0.2747
18	0.2717	0.2723	0.2724	0.2730	0.2756	0.2733	0.2723	0.2721	0.2722	0.2721	0.2752	0.2737
19	0.2725	0.2732	0.2737	0.2746	0.2762	0.2727	0.2722	0.2727	0.2722	0.2720	0.2761	0.2728
20	0.2731	0.2738	0.2754	0.2706	0.2770	0.2722	0.2721	0.2732	0.2719	0.2724	0.2761	0.2726
21	0.2731	0.2740	0.2773	0.2764	0.2772	0.2716	0.2727	0.2733	0.2717	0.2728	0.2760	0.2726
22	0.2735	0.2746	0.2780	0.2771	0.2767	0.2711	0.2728	0.2734	0.2718	0.2725	0.2756	0.2726
23	0.2737	0.2752	0.2789	----	0.2757	0.2708	0.2729	0.2735	0.2716	0.2728	0.2747	0.2722
24	0.2743	0.2758	0.2795	----	0.2749	0.2706	0.2731	0.2726	0.2718	0.2726	0.2733	0.2717
25	0.2753	0.2762	0.2801	0.2781	0.2732	0.2708	0.2736	0.2722	0.2718	0.2720	0.2727	0.2710
26	0.2759	0.2770	0.2799	----	0.2718	0.2706	0.2738	0.2716	0.2713	0.2714	0.2719	0.2706
27	0.2762	0.2786	0.2795	0.2771	0.2702	0.2708	0.2741	0.2712	0.2713	0.2705	0.2712	0.2705
28	0.2763	0.2802	0.2797	0.2756	0.2694	0.2710	0.2738	0.2707	0.2708	0.2703	0.2701	0.2704
29	0.2757	0.2811	0.2796	0.2741	0.2691	0.2711	0.2732	0.2701	0.2707	0.2700	0.2692	0.2702
30	0.2753	0.2817	0.2786	0.2729	0.2691		0.2727	0.2702	0.2706	0.2700	0.2681	0.2701
31		0.2810		0.2717	0.2695		0.2723		0.2705		0.2681	0.2694
Mean	0.2734	0.2748	0.2749	0.2728	0.2722	0.2717	0.2720	0.2717	0.2711	0.2709	0.2716	0.2715

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


Interplanetary Magnetic Field
ACE LEVEL2 DATA Hourly Averages for AUGUST 2004, 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 AUGUST 2004


Solar Wind Plasma
ACE LEVEL2 DATA Hourly Averages for AUGUST 2004, 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 AUGUST 2004


Solar Energetic Particles
ACE LEVEL2 DATA Hourly Averages for AUGUST 2004
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 AUGUST 2004

SOLAR CORONAL MASS EJECTIONS (CMEs) FROM SOHO/LASCO

http://cdaw.gsfc.nasa.gov/

Center for Solar Physics and Space Weather (CSPSW) – The Catholic University of America/NRL/NASA

AUGUST 2004

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	
2004/08/01	14:30:05	270	85	387	380	394	393	0.5	276	Only C3
2004/08/02	15:54:05	143	16	417	342	492	909	30.3	145	
2004/08/02	20:54:05	139	21	393	240	550	601	14.5	139	
2004/08/02	23:06:05	77	61	393	294	492	1314	68.2	79	Only 3 points/C2
2004/08/03	00:54:05	251	5	499	----	----	----	------	250	Only 2 points/C2
2004/08/04	01:31:47	78	59	412	407	418	544	5.5	85	Only 3 points/C2
2004/08/04	13:31:45	78	58	561	560	563	567	0.4	69	
2004/08/05	07:54:05	69	47	521	504	537	589	3.8	68	
2004/08/05	21:30:08	65	39	492	501	484	451	-2.0	65	
2004/08/06	10:30:19	268	48	103	0	271	355	5.4	262	
2004/08/07	06:30:05	67	48	238	168	315	526	10.5	65	
2004/08/08	08:54:05	Halo	360	1004	904	1112	1166	24.1	93	
2004/08/09	06:30:05	305	13	426	481	370	0	-14.7	296	
2004/08/09	11:54:20	266	57	294	284	303	341	1.5	259	
2004/08/09	15:06:06	266	45	668	691	642	652	-2.4	263	
2004/08/10	12:54:05	191	49	297	234	356	581	11.6	177	
2004/08/10	16:54:05	258	38	273	207	341	480	7.9	267	
2004/08/10	16:54:05	Halo	360	183	0	350	548	12.6	156	
2004/08/11	06:54:05	69	17	421	389	453	570	7.2	65	
2004/08/12	05:54:07	198	115	176	161	193	267	2.0	197	
2004/08/12	06:30:05	28	10	609	538	673	972	31.1	25	Only 3 points
2004/08/13	00:30:05	286	27	445	455	436	403	-1.9	288	
2004/08/13	19:36:05	196	96	412	418	403	406	-0.4	205	
2004/08/14	02:30:05	263	91	307	161	464	800	25.3	268	
2004/08/14	19:54:05	209	94	189	137	244	411	6.2	210	
2004/08/14	21:54:05	222	143	252	213	294	308	2.1	221	Partial Halo
2004/08/15	15:30:05	211	93	195	133	262	339	4.1	213	
2004/08/16	00:30:06	234	39	199	99	302	508	10.3	232	
2004/08/16	06:06:06	115	12	227	227	227	233	0.1	115	Only 3 points/C2
2004/08/16	12:30:05	302	96	589	466	714	696	11.2	298	
2004/08/17	06:06:05	116	131	637	497	780	773	14.4	127	Partial Halo
2004/08/18	16:54:05	91	26	760	769	751	746	-1.4	89	
2004/08/18	17:54:05	258	120	602	596	608	607	0.5	250	
2004/08/18	18:30:05	89	75	651	693	608	529	-8.4	86	
2004/08/18	19:31:46	118	56	152	107	199	388	5.7	127	Only C2
2004/08/19	02:54:05	85	15	594	565	623	760	11.2	84	
2004/08/19	05:06:05	103	39	279	183	384	423	6.5	106	

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

AUGUST 2004

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	
2004/08/20	06:30:05	61	58	417	473	362	0	-9.6	68	
2004/08/20	13:31:46	54	21	543	538	548	554	0.8	56	
2004/08/20	15:54:05	63	160	667	571	761	1235	52.4	47	Only C2, Partial Halo
2004/08/21	05:54:05	325	23	262	----	----	----	------	332	Only 3 points/C2
2004/08/21	07:31:50	269	73	182	187	176	64	-1.3	250	Only C2
2004/08/21	23:06:50	257	75	205	191	222	239	0.8	270	
2004/08/22	05:54:05	93	32	421	569	271	0	-47.1	90	
2004/08/22	17:30:05	94	42	321	278	364	608	12.0	85	Only C2
2004/08/23	00:30:05	98	36	403	456	347	137	-7.9	81	
2004/08/23	22:30:05	306	50	----	----	----	----	------	302	Only 1 points, Only C2, Unable to measure
2004/08/24	13:54:05	83	105	817	819	815	816	-0.2	91	
2004/08/24	21:30:08	242	>91	571	678	474	0	-31.5	257	
2004/08/25	13:31:46	136	182	108	0	195	330	4.5	105	Partial Halo
2004/08/25	18:52:22	263	10	420	329	502	718	17.5	259	Only 3 points
2004/08/26	06:30:05	246	54	127	0	280	365	5.6	243	
2004/08/26	12:30:06	206	119	184	75	295	372	5.5	205	
2004/08/26	16:54:29	316	16	157	161	154	101	-0.6	318	Only C2
2004/08/26	21:54:06	111	67	280	157	410	463	8.2	108	
2004/08/27	09:30:05	261	70	554	351	767	729	17.0	249	
2004/08/28	12:30:05	266	16	429	----	----	----	------	264	Only 3 points/C2
2004/08/29	02:30:05	274	29	1195	1340	1044	849	-46.3	270	
2004/08/30	03:54:05	269	100	362	320	401	776	21.8	277	Only C2
2004/08/30	05:54:05	271	48	89	56	123	460	8.5	268	Only C2
2004/08/30	16:54:07	265	64	252	311	195	0	-9.7	277	
2004/08/30	23:30:06	282	43	273	311	236	0	-15.1	283	Only C2
2004/08/31	05:54:05	272	70	311	350	271	199	-3.4	267	
2004/08/31	07:54:05	268	53	132	0	274	366	5.8	270	Not LE
2004/08/31	14:54:05	265	76	503	----	----	----	------	272	Only 2 points/C2

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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.