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NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE
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Number 654

(Issued in Two Parts)

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AUGUST 1998

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	0051		0132	No Flare Patrol													
		01	0356		0405	No Flare Patrol													
0001	SVTO	01	0622	0631	0707	S19	E44	8288	08	4.6	45	1F		3	E		108		F
0002		01	1102	1105	1116	N17	W06	8286	08	1.0	14	SF					16		E
	KHAR	01	1055E		1118	N17	W08	8286	07	31.8	23D	SN		3	V				E
	SVTO	01	1102	1105	1114	N17	W05	8286	08	1.1	12	SF		3	E		19		
	RAMY	01	1103E	1104U	1115	N18	W05	8286	08	1.1	12D	SF		2	E		14		
		01	2222		2315	No Flare Patrol													
		01	2324		2400	No Flare Patrol													
		02	0000		0444	No Flare Patrol													
0003	SVTO	02	0714	0715	0717	S18	E79	8293	08	8.3	3	SF		3	E		19		
0004	SVTO	02	0849	0855	0910	S19	E78	8293	08	8.3	21	1F		3	E		115		
0005		02	1527	15273	1534	S20	E76	8293	08	8.4	7	SF					20		
	SVTO	02	1527	1527	1533	S19	E78	8293	08	8.6	6	SF		3	E		14		
	HOLL	02	1527	1530	1534	S21	E74	8293	08	8.3	7	SF		3	E		27		
		02	2149		2214	No Flare Patrol													
		02	2239		2400	No Flare Patrol													
		03	0000		0433	No Flare Patrol													
0006	KHAR	03	1138U	1140	1143	S19	E72	8293A	08	9.0	5U	SF		2	V				DH
		03	2129		2135	No Flare Patrol													
		03	2247		2400	No Flare Patrol													
		04	0000		0115	No Flare Patrol													
		04	0136		0513	No Flare Patrol													
0007	SVTO	04	0621	0634	0641	N13	W03	8295	08	4.0	20	SF		3	E		24		
0008	KHAR	04	0953U		0958	S17	E53	8293	08	8.4	5U	SF		2	V				DH
0009	SVTO	04	1508	1508	1519	S24	E53	8293	08	8.7	11	SF		3	E		12		
0010	HOLL	04	1950	1951	2012	N19	W48	8286	08	1.2	22	SF		3	E		31		
		04	2000		2004	No Flare Patrol													
		04	2150		2313	No Flare Patrol													
		05	0426		0440	No Flare Patrol													
0011	SVTO	05	1137	1143	1150	S23	E40	8293	08	8.6	13	SF		3	E		34		
		05	1256		1333	No Flare Patrol													
		05	1906		1911	No Flare Patrol													
		05	2005		2102	No Flare Patrol													
0012	HOLL	05	2008	2008	2103D	S18	E32	8293	08	8.3	55D	SF		3	E		17		
		05	2123		2139	No Flare Patrol													
		05	2156		2328	No Flare Patrol													
		05	2347		2400	No Flare Patrol													
		06	0000		0008	No Flare Patrol													
		06	0023		0044	No Flare Patrol													
		06	0052		0509	No Flare Patrol													
		06	0511		0517	No Flare Patrol													
0013		06	09411	09411	0946	N14	W32	8295	08	4.0	5	SF					17		F
	SVTO	06	0941	0941	0946	N13	W31	8295	08	4.1	5	SF		3	E		17		F
	KANZ	06	0942	0942	0946	N14	W32	8295	08	4.0	4	SF		2	C				
0014	KANZ	06	1002	1002	1006	N24	W52	8283	08	2.4	4	SF		2	C				
0015		06	10221	10251	1030	N28	W50	8283	08	2.5	8	SF					22		
	KANZ	06	1022	1026	1030	N28	W50	8283	08	2.5	8	SF		2	C				
	SVTO	06	1023	1025	1029	N27	W50	8283	08	2.5	6	SF		3	E		22		

Hα SOLAR FLARES

AUGUST 1998

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
0016		06	11171	11251	1142	S23	E29	8293	08	8.7	25	SF					20		F
	SVTO	06	1117	1125	1143	S23	E29	8293	08	8.7	26	SF		3	E		20		F
	KANZ	06	1118	1126	1142	S23	E29	8293	08	8.7	24	SF		2	C				
0017		06	11562	1202	1245	S23	E29	8293	08	8.7	49	SF					94		FH
	SVTO	06	1156	1202	1256	S23	E29	8293	08	8.7	60	SF		3	E		94		FH
	KANZ	06	1158	1202	1234	S23	E29	8293	08	8.7	36	SF		2	C				
0018	KANZ	06	1222	1226	1242	N23	E82	8299	08	12.8	20	SF		2	C				
0019	HOLL	06	1332	1333	1342	N29	W51	8283	08	2.6	10	SF		3	E		19		
0020		06	14224	14265	1439	S23	E26	8293	08	8.6	17	SF					32		F
	KANZ	06	1422	1426	1442	S23	E26	8293	08	8.6	20	SF		2	C				
	RAMY	06	1425	1428	1437	S22	E26	8293	08	8.6	12	SF		3	E		37		F
	SVTO	06	1426	1431	1437	S23	E26	8293	08	8.6	11	SF		3	E		27		F
0021	KANZ	06	1442	1446	1450	S20	E25	8293	08	8.5	8	SF		2	C				
0022	KANZ	06	1634	1634	1638	S22	E18	8293	08	8.1	4	SF		2	C				
0023	HOLL	06	1750	1750	1800	N17	E63	8296	08	11.5	10	SF		3	E		20		
0024	HOLL	06	1801	1808	1815	N18	E64	8296	08	11.6	14	SF		3	E		32		
0025	HOLL	06	1801	1802	1808	S20	E16	8293	08	8.0	7	SF		3	E		12		
0026	HOLL	06	1831	1832	1838	S23	E24	8293	08	8.6	7	SF		3	E		32		
0027		06	1950	1955	2004	S20	E15	8293	08	8.0	14	SF					30		
	HOLL	06	1950	1955	2004	S20	E14	8293	08	7.9	14	SF		3	E		46		
	RAMY	06	1953E	1954U	2005	S20	E16	8293	08	8.0	12D	SF		3	E		15		
0028	HOLL	06	2059	2105	2113	S22	E23	8293	08	8.6	14	SF		3	E		22		
0029	HOLL	06	2212	2213	2217	S23	E22	8293	08	8.6	5	SF		3	E		12		
0030	HOLL	06	2233	2256	2304	S23	E22	8293	08	8.6	31	SF		3	E		40		
0031	HOLL	06	2322	2323	2327	S23	E22	8293	08	8.7	5	SF		3	E		14		
0032	HOLL	07	0005	0006	0012	N18	E60	8296	08	11.6	7	SF		3	E		24		
		07	0100		0115	No Flare Patrol													
		07	0137		0445	No Flare Patrol													
0033	SVTO	07	0642	0658	0719	N14	W44	8295	08	3.9	37	SF		3	E		28		
0034	SVTO	07	0703E	0716U	0754D	N19	E80	8299	08	13.4	51D	SF		3	E		81		
0035		07	07034	07211	0743	N21	E82	8299	08	13.6	40	SF					58		
	KANZ	07	0703	0722	0742	N20	E84	8299	08	13.7	39	SF		2	C				
	SVTO	07	0707	0721	0744	N22	E81	8299	08	13.5	37	SF		3	E		58		
0036		07	0719	0720	0725	S20	E14	8293	08	8.4	6	SF					21		
	SVTO	07	0719	0720	0724	S18	E13	8293	08	8.3	5	SF		3	E		21		
	KANZ	07	0722E	0722U	0726	S21	E16	8293	08	8.5	4D	SF		2	C				
0037	KANZ	07	0806	0810	0814	S21	E10	8293	08	8.1	8	SF		2	C				
0038		07	08301	0834	0848	N20	W19	8290	08	5.9	18	SF					44		
	KANZ	07	0830	0834	0850	N19	W18		08	6.0	20	SF		2	C				
	SVTO	07	0831	0834	0845	N20	W20	8290	08	5.8	14	SF		3	E		44		
0039		07	0854	08562	0916	N19	W19	8290	08	5.9	22	SF					19		F
	SVTO	07	0854	0856	0914	N19	W20	8290	08	5.8	20	SF		3	E		19		F
	KANZ	07	0854	0858	0918	N19	W18	8290	08	6.0	24	SF		2	C				
0040	KANZ	07	1222	1222	1234	S21	E07	8293	08	8.0	12	SF		2	C				

Hα SOLAR FLARES

AUGUST 1998

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
0041		07	1403*	1419*	1507	N18	E51	8296	08	11.5	64	1F					128		F
	HOLL	07	1403	1422	1538	N18	E49	8296	08	11.3	95	1F		3	E		166		
	KANZ	07	1406	1430	1454	N17	E51	8296	08	11.5	48	1F		2	C				
	RAMY	07	1416	1419	1450	N18	E52	8296	08	11.5	34	SF		4	E		91		F
0042	HOLL	07	1515	1516	1518	S20	E05	8293	08	8.0	3	SF		3	E		15		
0043	HOLL	07	1619	1620	1631	S21	E11	8293	08	8.5	12	SF		3	E		27		
0044	HOLL	07	1634	1637	1639	S22	E10	8293	08	8.4	5	SF		3	E		12		
0045	HOLL	07	1758	1759	1802	N14	E82	8299	08	13.9	4	SF		3	E		30		
0046	HOLL	07	2116	2116	2124	S22	E08	8293	08	8.5	8	SF		3	E		12		
0047	HOLL	07	2337	2338	2356	S21	E07	8293	08	8.5	19	SF		3	E		45		F
		08	0011		0056	No Flare Patrol													
		08	0153		0431	No Flare Patrol													
		08	0744		0754	No Flare Patrol													
0048	SVTO	08	0817	0821	0826	N14	E74	8299	08	13.9	9	SF		3	E		40		
		08	0850		0906	No Flare Patrol													
0049	HOLL	08	1357	1406	1409	N15	E72	8299	08	14.0	12	SF		3	E		16		
0050		08	1451	1452	1500	N14	E70	8299	08	13.9	9	SF					24		
	RAMY	08	1451	1452	1459	N14	E71	8299	08	14.0	8	SF		4	E		23		
	HOLL	08	1451	1452	1500	N14	E70	8299	08	13.9	9	SF		3	E		25		
0051	HOLL	08	1535	1535	1540	S22	E00	8293	08	8.6	5	SF		3	E		23		
0052	HOLL	08	1832	1840	1856	N15	E69	8299	08	14.0	24	1F		3	E		121		H
0053	HOLL	08	2233	2234	2238	N16	E65	8299	08	13.9	5	SF		3	E		14		
		08	2245		2336	No Flare Patrol													
0054	HOLL	08	2332	2338	2410D	N15	E64	8299	08	13.8	38D	1F		3	E		148		
		08	2348		2400	No Flare Patrol													
		09	0000		0003	No Flare Patrol													
		09	0048		0109	No Flare Patrol													
		09	0135		0239	No Flare Patrol													
		09	0341		0638	No Flare Patrol													
0055	SVTO	09	0725E	0736U	0756	N15	E56	8299	08	13.5	31D	SF		3	E		44		F
0056	SVTO	09	0841E	0844	0925	N14	E59	8299	08	13.8	44D	1B		3	E		134		F
0057	SVTO	09	0927E	0930U	0938	N19	E63	8299	08	14.2	11D	SF		3	E		28		
0058	HOLL	09	1621	1627	1650	S23	W15	8293	08	8.5	29	SF		3	E		59		F
0059	HOLL	09	1712	1716	1742	N15	E55	8299	08	13.9	30	2B		3	E		324		EH
0060	HOLL	09	1751	1755	1800	N19	E64	8299	08	14.6	9	SF		3	E		39		
		09	1905		1928	No Flare Patrol													
		09	1933		2253	No Flare Patrol													
		09	2333		2400	No Flare Patrol													
		10	0000		0308	No Flare Patrol													
0061	URUM	10	0454E	0454	0459	N16	E43	8299	08	13.5	5D	SN			P		80	1.1	E
0062	SVTO	10	0705	0706	0710	N15	E43	8299	08	13.5	5	SF		3	E		34		
0063	SVTO	10	0807	0809	0831	S23	W20	8293	08	8.8	24	SF		3	E		65		FH

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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
0064	SVTO	10	0814	0814	0823	N15	E51	8299	08	14.2	9	SF		3	E		24		
0065	SVTO	10	0835	0840	0854	S23	W18	8293	08	9.0	19	SF		2	E		45		FH
0066	SVTO	10	1035	1042	1050	S22	W17	8293	08	9.1	15	SF		3	E		26		
0067	SVTO	10	1040	1041	1048	N15	E50	8299	08	14.2	8	SF		3	E		23		H
0068	SVTO	10	1101	1103	1114	N15	E49	8299	08	14.2	13	SF		3	E		60		F
0069	RAMY	10	1102	1103	1113	S16	E50	8299	08	14.2	11	SF		2	E		22		
0070		10	11045	11107	1132	S24	W24	8293	08	8.6	28	SF					58		F
	SVTO	10	1104	1117	1140	S23	W22	8293	08	8.8	36	SF		3	E		81		F
	RAMY	10	1109	1110	1124	S24	W26	8293	08	8.4	15	SF		2	E		36		
0071	SVTO	10	1216	1216	1221	S22	W18	8293	08	9.1	5	SF		3	E		11		F
0072	SVTO	10	1339	1340	1347	N13	E38	8299	08	13.4	8	SF		3	E		28		F
0073	SVTO	10	1356	1358	1406	S25	W28	8293	08	8.4	10	SF		3	E		18		F
0074		10	1455	14561	1504	S24	W29	8293	08	8.4	9	SF					34		
	HOLL	10	1455	1456	1503	S24	W28	8293	08	8.4	8	SF		4	E		34		
	SVTO	10	1455	1457	1506	S25	W30	8293	08	8.3	11	SF		3	E		35		
0075		10	1627	1656	1706	N26	E34	8297	08	13.3	39	SF					42		F
	HOLL	10	1627	1656	1706	N27	E33	8297	08	13.2	39	SF		3	E		28		
	SVTO	10	1631E	1654U	1706	N26	E36	8297	08	13.5	35D	SF		3	E		56		F
0076		10	1631	1632	1636	S24	W30	8293	08	8.4	5	SF					38		
	SVTO	10	1630E	1632U	1636	S25	W30	8293	08	8.4	6D	SF		3	E		47		
	HOLL	10	1631	1632	1637	S23	W29	8293	08	8.4	6	SF		3	E		30		
0077	HOLL	10	1715	1716	1728	N17	E39	8299	08	13.7	13	SF		3	E		25		
0078		10	17164	1721	1726	S24	W30	8293	08	8.4	10	SF					26		
	HOLL	10	1716	1721	1730	S23	W30	8293	08	8.4	14	SF		3	E		40		
	RAMY	10	1720	1721	1723	S24	W30	8293	08	8.4	3	SF		3	E		13		
0079	HOLL	10	1802	1802	1806	N20	W22	8298	08	9.1	4	SF		3	E		17		
		10	1949		2039	No Flare Patrol													
0080	HOLL	10	2111	2113	2116	N21	W22	8298	08	9.2	5	SF		3	E		12		
		10	2135		2400	No Flare Patrol													
		11	0000		0109	No Flare Patrol													
		11	0125		0139	No Flare Patrol													
0081	SVTO	11	0902	0905	0912	N19	W30	8298	08	9.1	10	SF		3	E		17		F
0082	SVTO	11	1109	1109	1113	S23	W39	8293	08	8.4	4	SF		3	E		12		
		11	1757		1801	No Flare Patrol													
		11	2341		2400	No Flare Patrol													
		12	0000		0005	No Flare Patrol													
		12	0042		0436	No Flare Patrol													
0083		12	11523	11592	1206	S23	W52	8293	08	8.5	14	SF					14		
	RAMY	12	1152	1159	1206	S23	W52	8293	08	8.5	14	SF		3	E		12		
	SVTO	12	1155	1201	1206	S23	W51	8293	08	8.6	11	SF		3	E		16		
0084		12	1515	1516	1519	S24	W54	8293	08	8.5	4	SF					19		
	SVTO	12	1515	1516	1519	S24	W54	8293	08	8.5	4	SF		3	E		18		
	HOLL	12	1515	1516	1519	S23	W53	8293	08	8.5	4	SF		3	E		13		
	RAMY	12	1515	1516	1519	S25	W54	8293	08	8.4	4	SF		3	E		27		
		12	1756		1813	No Flare Patrol													

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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
0085	HOLL	12	1821	1822	1841	N33	W04	8297	08	12.4	20	SF		3	E		13		
		12	2102		2125	No Flare Patrol													
		12	2205		2217	No Flare Patrol													
		12	2224		2237	No Flare Patrol													
		12	2312		2319	No Flare Patrol													
		12	2330		2400	No Flare Patrol													
		13	0000		0006	No Flare Patrol													
		13	0014		0027	No Flare Patrol													
0086	SVTO	13	0534	0538	0601	N33	W10	8297	08	12.4	27	SF		3	E		14		
0087	LEAR	13	0744	0745	0749	N14	W02	8299	08	13.2	5	SF		3	E		29		
0088		13	0930	0931	0940	N18	E06	8299	08	13.8	10	SF					23		DH
	KHAR	13	0930		0942	N17	E06	8299	08	13.8	12	SF		2	V				HD
	SVTO	13	0930	0931	0939	N19	E05	8299	08	13.8	9	SF		4	E		23		
0089		13	10141	10162	1036	N15	E06	8299	08	13.9	22	SN					49		DEFZ
	HURB	13	1014	1018	1032	N15	E06	8299	08	13.9	18	1N							D
	SVTO	13	1015	1016	1038	N16	E06	8299	08	13.9	23	SF		4	E		49		F
	KHAR	13	1020E		1038	N14	E05	8299	08	13.8	18D	SN		2	V				ZE
0090	KHAR	13	1123		1130	S27	W52	8300	08	9.4	7	SF		2	V				DH
0091	HURB	13	1233	1240	1247	N15	E04	8299	08	13.8	14	1F							D
0092		13	13351	13385	1352	N14	E04	8299	08	13.9	17	SF					60		F
	SVTO	13	1335	1343	1355	N14	E04	8299	08	13.9	20	SF		3	E		96		F
	RAMY	13	1336	1338	1350	N15	E04	8299	08	13.9	14	SF		3	E		23		
0093		13	1407	1410	1429	N16	E04	8299	08	13.9	22	SF					64		F
	RAMY	13	1407	1410	1425	N16	E04	8299	08	13.9	18	SF		3	E		38		
	SVTO	13	1407	1410	1433	N16	E04	8299	08	13.9	26	SF		3	E		90		F
0094	SVTO	13	1542	1549	1602	S24	W61	8293	08	8.9	20	SF		3	E		19		
0095		13	17504	1756	1806	S24	W60	8293	08	9.1	16	SF					50		
	HOLL	13	1750	1756	1804D	S23	W60	8293	08	9.1	14D	SF		3	E		47		
	RAMY	13	1754	1756	1806	S25	W61	8293	08	9.0	12	SF		4	E		52		
0096	RAMY	13	1923	1924	1926	S23	W66	8293	08	8.7	3	SF		4	E		11		
		13	2033		2045	No Flare Patrol													
0097	HOLL	13	2205	2205	2211	S31	W51	8300	08	9.9	6	SF		3	E		10		
		13	2252		2258	No Flare Patrol													
0098	URUM	14	0059	0101	0114	S29	W75	8293H	08	8.2	15	SN			C		32		E
0099	LEAR	14	0123	0123	0126	S23	W70	8293	08	8.7	3	SF		3	E		13		
0100	LEAR	14	0351	0413	0440	N14	W14	8299	08	13.1	49	SF		3	E		65		
0101	URUM	14	0418E	0418	0446	N17	W03	8299	08	13.9	28D	SB			P		161	1.7	E
0102		14	05001	05015	0537	N28	W18	8297	08	12.8	37	SN					74	1.1	E
	LEAR	14	0500	0501	0536	N29	W19	8297	08	12.7	36	SF		3	E		52		
	URUM	14	0501	0506	0538	N27	W16	8297	08	13.0	37	SN			C		96	1.1	E
0103	URUM	14	0501	0514	0530	S24	W82	8293	08	7.9	29	SN			C		48		D
0104	LEAR	14	0557	0559	0608	S23	W73	8293	08	8.6	11	SF		3	E		37		
0105	LEAR	14	0608	0608	0611	N14	W15	8299	08	13.1	3	SF		3	E		17		
0106		14	0826	0826	0842	S22	W72	8293	08	8.8	16	1N					104		
	LEAR	14	0826	0826	0841	S21	W69	8293	08	9.1	15	1N		3	E		102		
	SVTO	14	0826	0826	0842	S23	W74	8293	08	8.6	16	1N		3	E		107		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0107	KHAR	14	0836		0850U	S27	W68	8290	08	9.0	14U	SF		2	V				D
0108		14	08582	0900	0905	S25	W72	8293	08	8.8	7	SF					16		D
	SVTO	14	0858	0900	0903	S23	W75	8293	08	8.6	5	SF		3	E		16		
	KHAR	14	0900		0910	S28	W67	8293	08	9.1	10	SF		2	V				D
	LEAR	14	0900	0900	0903	S23	W75	8293	08	8.6	3	SF		3	E		17		
0109	LEAR	14	0922	0923	0926	S23	W75	8293	08	8.6	4	SF		3	E		15		
0110	KHAR	14	1105		1112	S27	W65	8293	08	9.4	7	SF		2	V				D
0111	HOLL	14	2155	2155	2200	N15	W13	8299	08	13.9	5	SF		3	E		26		
0112	SVTO	15	0624	0626	0659	S24	W83	8293	08	8.8	35	SF		2	E		34		
0113	SVTO	15	0852	0852	0858	S23	W88	8293	08	8.6	6	SF		2	E		16		
0114		15	1630	1632	1649	N23	W32	8297	08	13.2	19	SF					65		
	HOLL	15	1630	1632	1658	N23	W31	8297	08	13.3	28	SF		3	E		62		
	SVTO	15	1631E	1632U	1640	N23	W33	8297	08	13.1	9D	SF		2	E		68		
0115	SVTO	15	1632E	1635U	1643	N16	W25	8299	08	13.8	11D	SF		2	E		27		F
0116	URUM	16	0354	0410	0426	N17	W28	8299	08	14.0	32	SN			C		96	1.1	E
0117	SVTO	16	1157	1159	1201	N29	W46	8297	08	12.9	4	SF		3	E		56		
0118	SVTO	16	1157	1159	1201	N17	W32	8299	08	14.1	4	SF		3	E		36		
		16	1932		1937	No Flare Patrol													
		16	1952		1955	No Flare Patrol													
		16	2022		2033	No Flare Patrol													
		16	2103		2105	No Flare Patrol													
		16	2130		2135	No Flare Patrol													
		16	2237		2242	No Flare Patrol													
0119	SVTO	17	1339	1351	1354	N18	W48	8299	08	13.9	15	SF		3	E		13		
0120	SVTO	17	1354	1357	1359	N18	W48	8299	08	13.9	5	SF		3	E		12		
0121	HOLL	17	1712	1714	1717	N19	W50	8299	08	13.9	5	SF		3	E		20		
0122	HOLL	17	2030	2033	2044	N17	W52	8299	08	13.9	14	SF		3	E		25		
0123	HOLL	17	2304	2306	2317	N19	W54	8299	08	13.8	13	SF		3	E		15		
0124	LEAR	17	2353	2402	2425	N19	W52	8299	08	14.0	32	SF		3	E		20		E
0125	LEAR	18	0143	0147	0150	N16	W55	8299	08	13.9	7	SF		3	E		11		
0126	LEAR	18	0413	0413	0419	N20	W56	8299	08	13.9	6	SF		3	E		11		
0127		18	0619	0619	0622	N32	W68	8297	08	12.9	3	SF					15		
	LEAR	18	0619	0619	0622	N32	W68	8297	08	12.9	3	SF		3	E		16		
	SVTO	18	0619	0619	0622	N31	W67	8297	08	13.0	3	SF		3	E		14		
0128	LEAR	18	0623	0627	0632	N32	W68	8297	08	12.9	9	SF		3	E		21		
0129	URUM	18	0704E	0704	0707	N19	W60	8299	08	13.7	3D	SF			P		48	1.0	D
0130	HURB	18	0826	0836	0848	N32	E90	8307	08	25.5	22	1B							A
0131	LEAR	18	0826	0831	0842	N33	E68	8307	08	23.7	16	SN		3	E		42		
0132	HURB	18	1238	1244	1304	N32	E90	8307	08	25.6	26	2B							A
		18	2114		2143	No Flare Patrol													
0133	HOLL	18	2213	2216	2350	N33	E87	8307	08	25.8	97	1B		3	E		183		Y

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp	Opt	Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0134	LEAR	18	2319E	2334	2339	N29	E85	8307	08	25.6	20D	SF			2	E		28		
0135	LEAR	19	0251	0252	0259	N15	W64	8299	08	14.3	8	SF			3	E		40		
0136	LEAR	19	0411	0411	0414	N16	W70	8299	08	13.9	3	SF			3	E		11		
		19	0949		0955	No Flare Patrol														
		19	1003		1015	No Flare Patrol														
0137	SVTO	19	1025	1028U	1041D	N17	W71	8299	08	14.0	16D	SF			3	E		29		F
		19	1042		1047	No Flare Patrol														
0138		19	1238	1241	1300	N34	E78	8307	08	25.7	22	SF						36		F
	RAMY	19	1238	1241	1251	N35	E78	8307	08	25.8	13	SF			3	E		13		
	HOLL	19	1249E	1251U	1308	N33	E77	8307	08	25.6	19D	SF			2	E		60		F
0139	SVTO	19	1407	1410	1508	N36	E79	8307	08	25.9	61	SF			3	E		81		FH
0140	HOLL	19	1408	1429	1456	N35	E80	8307	08	26.0	48	SF			4	E		43		F
0141	HOLL	19	1525	1533	1536	N30	E77	8307	08	25.7	11	SF			3	E		11		
		19	2028		2051	No Flare Patrol														
		19	2136		2234	No Flare Patrol														
0142	HOLL	19	2207E	2207U	2238D	N32	E75	8307	08	25.8	31D	1F			3	E		115		
0143	HOLL	19	2256	2302	2306	N30	E70	8307	08	25.5	10	SF			3	E		14		
0144	LEAR	20	0029	0029	0051	N16	W81	8299	08	13.9	22	SF			3	E		27		H
0145	URUM	20	0040	0047	0119	N19	W77	8299	08	14.1	39	1N				C		129		E
0146	SVTO	20	0529	0530	0534	N17	E21	8309	08	21.8	5	SF			3	E		11		
0147	SVTO	20	0553	0615	0631	N18	E24	8309	08	22.1	38	SF			2	E		13		
		20	0955		0957	No Flare Patrol														
0148	KHAR	20	1054		1058	N16	W88	8299	08	13.8	4	SF			2	V				D
0149		20	12273	1232	1306	S34	E36	8320A	08	23.4	39	1N						77		F
	SVTO	20	1227	1232	1303	S34	E36	8320A	08	23.4	36	1N			3	E		105		F
	RAMY	20	1230	1232	1308	S33	E37	8320A	08	23.4	38	SF			2	E		49		
		20	1401		1438	No Flare Patrol														
0150	SVTO	20	1613	1613	1616	N17	E19	8309	08	22.1	3	SF			3	E		14		
		20	1639		1657	No Flare Patrol														
0151	HOLL	20	1949E	1959U	2045D	N31	E62	8307	08	25.7	56D	SF			3	E		48		
		20	2024		2039	No Flare Patrol														
		20	2047		2049	No Flare Patrol														
		20	2146		2318	No Flare Patrol														
		21	0951		1024	No Flare Patrol														
0152	KHAR	21	1049	1052	1103	N12	W90	8299	08	14.7	14	SB			2	V				H
		21	1116		1200	No Flare Patrol														
		21	1313		1317	No Flare Patrol														
0153	HOLL	21	1506	1507	1511	N33	E53	8307	08	25.8	5	SF			3	E		23		F
0154	HOLL	21	1612	1613	1640	N32	E51	8307	08	25.7	28	SF			3	E		16		
		21	1843		1911	No Flare Patrol														
		21	1922		1930	No Flare Patrol														

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp	Opt Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
		21	1954		2018	No Flare Patrol													
		21	2052		2145	No Flare Patrol													
		21	2234		2242	No Flare Patrol													
		21	2251		2320	No Flare Patrol													
0155	LEAR	22	0010E	0010	0140D	N42	E51	8307	08	26.2	90D	2B		3	E		284		
0156	LEAR	22	0158	0215	0230	N26	E44	8307	08	25.5	32	SF		3	E		54		
0157	LEAR	22	0320	0329	0340	N27	E44	8307	08	25.6	20	SF		3	E		38		
0158	LEAR	22	0443	0446	0500	N30	E43	8307	08	25.6	17	SF		3	E		37		
0159	LEAR	22	0508	0512	0517	N19	W03	8309	08	22.0	9	SF		3	E		15		
0160	SVTO	22	0601	0601	0608	N28	E41	8309	08	25.4	7	SF		3	E		12		
0161		22	0847	0849	0852	N30	E47	8307	08	26.1	5	SF					26		H
	LEAR	22	0847	0849	0852	N29	E47	8307	08	26.0	5	SF		3	E		21		
	SVTO	22	0847	0849	0852	N31	E47	8307	08	26.1	5	SF		3	E		32		H
0162	KHAR	22	1103	1107	1117	N35	E45	8307	08	26.0	14	SN		2	V				H
0163	SVTO	22	1307	1307	1311	N30	E45	8307	08	26.1	4	SF		3	E		16		FH
0164	SVTO	22	1506	1506	1511	N30	E44	8307	08	26.1	5	SF		3	E		38		
0165		22	1646*	16592	1744	N28	E35	8307	08	25.4	58	1F					60		
	HOLL	22	1646	1659	1748	N28	E36	8307	08	25.5	62	1F		3	E		108		
	RAMY	22	1700	1701	1739	N29	E34	8307	08	25.4	39	SF		3	E		12		
0166		22	19271	1932	1958	N30	E34	8307	08	25.5	31	1F					72		
	HOLL	22	1927	1932	2006	N30	E35	8307	08	25.6	39	1F		3	E		108		
	RAMY	22	1928	1932	1949	N30	E34	8307	08	25.5	21	SF		3	E		37		
		22	2033		2038	No Flare Patrol													
		22	2050		2054	No Flare Patrol													
		22	2118		2159	No Flare Patrol													
0167	HOLL	22	2147E	2158		N27	E46	8307	08	26.5	D	1F		3	E		137		
0168		23	0229	02346	0256	N14	W13	8309	08	22.1	27	SN					71	1.2	E
	LEAR	23	0229	0240	0250	N17	W13	8309	08	22.1	21	SF		3	E		29		
	URUM	23	0234E	0234	0301	N12	W13	8309	08	22.1	27D	SN			P		113	1.2	E
0169	LEAR	23	0514	0515	0519	N20	E44	8310	08	26.6	5	SF		3	E		23		
0170	LEAR	23	0608	0610	0727	N33	E33	8307	08	25.9	79	SF		3	E		62		EF
0171	SVTO	23	0609	0638	0711	N33	E34	8307	08	25.9	62	SF		3	E		65		F
0172	LEAR	23	0752	0753	0759	N15	W14	8309	08	22.3	7	SF		3	E		14		
0173		23	08313	08314	0843	N16	W15	8309	08	22.2	12	SF					11		
	LEAR	23	0831	0831	0841	N16	W14	8309	08	22.3	10	SF		3	E		11		
	SVTO	23	0834	0835	0845	N17	W16	8309	08	22.1	11	SF		3	E		11		
0174		23	09246	0931	1030	N34	E34	8307	08	26.1	66	1N					316	7.4	EFU
	URUM	23	0924	0928U	1014	N36	E34	8307	08	26.1	50	2B			P		530	7.4	E
	LEAR	23	0926	0931	1000D	N32	E33	8307	08	26.0	34D	1N		3	E		180		FE
	SVTO	23	0930	0937U	1045	N34	E34	8307	08	26.1	75	1N		3	E		239		UF
0175		23	1107	11071	1134	N22	E40	8310	08	26.5	27	SN					84	1.8	EF
	SVTO	23	1107	1107	1156	N22	E39	8310	08	26.5	49	SF		3	E		38		F
	URUM	23	1108E	1108	1113	N22	E40	8310	08	26.5	5D	SN			P		129	1.8	E
		23	2137		2139	No Flare Patrol													
		23	2145		2153	No Flare Patrol													
		23	2205		2221	No Flare Patrol													
		23	2254		2312	No Flare Patrol													

Hα SOLAR FLARES

AUGUST 1998

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp	Opt	Xray	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0176	LEAR	24	0620	0620	0632	N17	W29	8309	08	22.1	12	SF			3	E		14		
0177	SVTO	24	0932E	0933U	0941	N32	E13	8307	08	25.4	9D	SF			3	E		15		
0178		24	1524	1524	1530	N32	E18	8307	08	26.1	6	SF						18		F
	SVTO	24	1524	1524	1530	N33	E18	8307	08	26.1	6	SF			3	E		19		F
	HOLL	24	1524	1524	1530	N32	E18	8307	08	26.1	6	SF			3	E		16		
0179	HOLL	24	2036	2037	2048	N31	E07	8307	08	25.4	12	SF			3	E		13		
0180	HOLL	24	2148	2204	2508D	N35	E09	8307	08	25.6	200D	3B			3	E		892		T
0181	LEAR	24	2312E	2336	2450	N29	W03	8307	08	24.7	98D	1F			3	E		106		U
0182		25	09171	0919	0925	N14	W45	8309	08	22.0	8	SF						15		E
	KHAR	25	0917		0926U	N12	W46	8309	08	21.9	9U	SF			2	V				E
	SVTO	25	0918	0919	0925	N16	W44	8309	08	22.0	7	SF			3	E		15		
		25	1923		1934	No Flare Patrol														
		25	2157		2214	No Flare Patrol														
		25	2243		2400	No Flare Patrol														
		26	0000		0435	No Flare Patrol														
		26	0820		1038	No Flare Patrol														
		26	2005		2010	No Flare Patrol														
		26	2018		2032	No Flare Patrol														
		26	2036		2044	No Flare Patrol														
		26	2118		2123	No Flare Patrol														
0183	SVTO	27	0840	0844	0850	N21	E05	8319	08	27.7	10	SF			3	E		12		
		27	1056		1141	No Flare Patrol														
0184	SVTO	27	1142E	1142U	1204D	N19	E04	8319	08	27.8	22D	SF			2	E		19		
		27	1215		1312	No Flare Patrol														
0185		27	1528	15291	1541	N14	E59	8243	09	1.1	13	SF						42		F
	HOLL	27	1528	1529	1540	N14	E59	8243	09	1.1	12	SF			3	E		53		
	SVTO	27	1528	1530	1542	N15	E59	8243	09	1.1	14	SF			3	E		32		F
		27	1814		1832	No Flare Patrol														
		27	1916		1944	No Flare Patrol														
		27	1951		1958	No Flare Patrol														
		27	2013		2205	No Flare Patrol														
		27	2210		2400	No Flare Patrol														
		28	0000		0011	No Flare Patrol														
0186	SVTO	28	0521E	0521U	0531	S21	E38	8242	08	31.1	10D	SF			3	E		37		F
		28	1646		1704	No Flare Patrol														
		28	1843		2304	No Flare Patrol														
		29	0014		0100	No Flare Patrol														
0187	LEAR	29	0131	0132	0140	N21	W18	8319	08	27.7	9	SF			3	E		35		
0188		29	0457	0500	0509	N20	W16	8319	08	28.0	12	SF						35		F
	LEAR	29	0457	0500	0509	N20	W16	8319	08	28.0	12	SF			3	E		52		F
	SVTO	29	0458E	0500U	0510D	N20	W16	8319	08	28.0	12D	SF			3	E		18		F
0189	SVTO	29	0646	0646	0650	N18	W18	8319	08	27.9	4	SF			3	E		17		
		29	0952		1013	No Flare Patrol														
		29	1326		1331	No Flare Patrol														
		29	1355		1402	No Flare Patrol														
0190	RAMY	29	1532	1534	1547	N30	W45	8307	08	26.1	15	SF			3	E		12		
		29	1539		1857	No Flare Patrol														
		29	1921		2144	No Flare Patrol														

Hα S O L A R F L A R E S

AUGUST 1998

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
0191	HOLL	29	2148	2153	2202	N31	W49	8307	08	26.0	14	SF		3	E		70		
0192	LEAR	30	0039	0040	0054	N19	W29	8319	08	27.8	15	SF		3	E		22		F
0193	LEAR	30	0059	0059	0104	N18	W29	8319	08	27.8	5	SF		3	E		16		F
0194	LEAR	30	0116	0119	0131	N19	W30	8319	08	27.8	15	SF		3	E		20		
0195	LEAR	30	0336	0340	0359	N18	W28	8319	08	28.0	23	SF		3	E		87		F
0196	LEAR	30	0400	0402	0410	N19	W30	8319	08	27.9	10	SF		3	E		23		F
0197	LEAR	30	0430	0431	0443	N19	W29	8319	08	28.0	13	SF		3	E		32		F
0198	LEAR	30	0500	0503	0511	N29	W68	8307	08	24.9	11	SF		3	E		28		
0199	LEAR	30	0514	0540	0612	N21	W33	8319	08	27.7	58	1N		3	E		111		FH
0200	LEAR	30	0618	0620	0646	N21	W33	8319	08	27.7	28	1F		3	E		104		F
0201	LEAR	30	0638	0640	0656	N20	W17	8322	08	29.0	18	SF		3	E		20		
0202	LEAR	30	0643	0651	0707	N29	W69	8307	08	24.9	24	SF		3	E		71		
0203	LEAR	30	0736	0738	0746	N21	W34	8319	08	27.7	10	SF		3	E		15		
0204	LEAR	30	0740	0743	0746	S22	E56	8323	09	3.6	6	SF		3	E		18		
0205	LEAR	30	0854	0903	0907	N21	W35	8319	08	27.7	13	SF		3	E		33		
0206	LEAR	30	0932	0935U	0953D	N21	W35	8319	08	27.7	21D	1N		3	E		106		
		30	0954		1050	No Flare Patrol													
		30	1122		1135	No Flare Patrol													
0207	SVTO	30	1249	1253	1300	S20	E60	8323	09	4.1	11	SF		3	E		30		
0208		30	12531	1255	1303	N30	W56	8307	08	26.1	10	SF					39		
	SVTO	30	1253	1255	1310	N31	W56	8307	08	26.1	17	SF		3	E		64		
	RAMY	30	1254	1255	1256	N30	W57	8307	08	26.0	2	SF		3	E		14		
0209	HOLL	30	1358	1359	1404	S18	E61	8323	09	4.2	6	SF		3	E		43		
0210		30	1328*	1359	1440	N18	W38	8319	08	27.7	72	SF					33		F
	HOLL	30	1328	1359	1438	N16	W38	8319	08	27.7	70	SF		3	E		50		F
	SVTO	30	1428	1433U	1443	N21	W38	8319	08	27.7	15	SF		3	E		16		
0211	SVTO	30	1349E	1357U	1423	N19	W37	8319	08	27.7	34D	SF		3	E		60		
0212		30	14474	1452	1456	N20	W37	8319	08	27.8	9	SF					59		
	SVTO	30	1447	1451U	1536D	N21	W38	8319	08	27.7	49D	SF		3	E		78		
	HOLL	30	1447	1452	1457	N21	W38	8319	08	27.7	10	SF		3	E		71		
	RAMY	30	1451	1452	1455	N19	W36	8319	08	27.9	4	SF		3	E		27		
0213	HOLL	30	1507	1524	1555	S22	E51	8323	09	3.5	48	SF		3	E		65		
0214		30	15282	1531	1534	N20	W38	8319	08	27.7	6	SF					34		FH
	HOLL	30	1528	1531	1535	N21	W38	8319	08	27.7	7	SF		3	E		42		
	RAMY	30	1530	1531	1534	N18	W37	8319	08	27.8	4	SF		3	E		26		FH
0215	RAMY	30	1547	1548	1551	S21	E61	8323	09	4.3	4	SF		3	E		16		
0216	HOLL	30	1602	1603	1611	S22	E51	8323	09	3.6	9	SF		3	E		15		
0217	HOLL	30	1603	1612	1620	N21	W39	8319	08	27.7	17	1F		3	E		109		
0218	HOLL	30	1726	1726	1731	S22	E50	8323	09	3.6	5	SF		3	E		25		
0219	HOLL	30	1753	1756	1800	N21	W40	8319	08	27.7	7	SF		3	E		17		

Hα SOLAR FLARES

AUGUST 1998

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp	Opt	Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0220	RAMY	30	1807E	1808U	1808D	N29	W60	8307	08	26.0	1D	SN			2	E		48		
0221	HOLL	30	1904	1906	1910	N21	W40	8319	08	27.7	6	SF			3	E		12		
0222	RAMY	30	1945E	1946U	1956	N30	W60	8307	08	26.1	11D	SF			2	E		20		
0223	RAMY	30	1947E	1948U	1951	S21	E57	8323	09	4.2	4D	SF			2	E		18		
0224		30	1958	2000	2014	N16	W40	8319	08	27.8	16	SF						24		
	HOLL	30	1958	2000	2014	N14	W41	8319	08	27.7	16	SF			3	E		19		
	RAMY	30	2002E	2003U	2005D	N17	W38	8319	08	27.9	3D	SF			2	E		28		
0225	HOLL	30	2049	2052	2101	S17	E59	8323	09	4.3	12	SF			3	E		33		
0226	HOLL	30	2151	2154	2158	N17	W41	8319	08	27.8	7	SF			3	E		32		
0227	HOLL	30	2247	2259	2304	S22	E47	8323	09	3.6	17	SF			3	E		86		
0228	HOLL	31	0037	0041	0044D	S22	E46	8323	09	3.6	7D	SF			3	E		48		
0229	LEAR	31	0055	0056	0058	S19	W63	8323	08	26.2	3	SF			3	E		27		
0230	LEAR	31	0215	0217	0227	S21	E56	8323	09	4.4	12	SF			3	E		35		
0231		31	02582	03071	0324	N19	W44	8319	08	27.8	26	1N						98	2.4	EF
	LEAR	31	0258	0307	0316	N19	W43	8319	08	27.8	18	SF			3	E		36		F
	URUM	31	0300	0308	0332	N19	W45	8319	08	27.7	32	1B				C		161	2.4	E
0232	LEAR	31	0444	0445	0449	S23	E52	8323	09	4.2	5	SF			3	E		20		
0233	URUM	31	0510E	0510	0552	N37	W73	8307	08	25.3	42D	1B				P		80		E
0234		31	0522	0524	0556	N28	W78	8307	08	25.1	34	1F						78		FH
	SVTO	31	0518E	0519U	0556	N28	W78	8307	08	25.1	38D	SF			2	E		54		FH
	LEAR	31	0522	0524	0555	N29	W78	8307	08	25.1	33	1F			3	E		102		FH
0235		31	0625	0629	0642	N29	W80	8307	08	25.0	17	SF						46		
	SVTO	31	0619E	0628U	0646	N29	W80	8307	08	25.0	27D	SF			3	E		49		
	LEAR	31	0625	0629	0637	N29	W79	8307	08	25.1	12	SF			3	E		43		
0236	LEAR	31	0727	0728	0732	S23	E50	8323	09	4.2	5	SF			3	E		28		
0237	SVTO	31	0824	0826U	0837	N32	W64	8307	08	26.3	13	SF			3	E		31		
0238	LEAR	31	0825	0826	0836	N29	W80	8307	08	25.1	11	SF			3	E		38		
0239		31	0900	0901	0908	S23	E50	8323	09	4.2	8	SF						16		
	LEAR	31	0900	0901	0908	S23	E49	8323	09	4.1	8	SF			3	E		20		
	SVTO	31	0903E	0905U	0909	S23	E50	8323	09	4.2	6D	SF			3	E		13		
0240	SVTO	31	1022	1028	1033	S23	E49	8323	09	4.2	11	SF			3	E		17		
0241		31	15295	1541	1600	N31	W70	8307	08	26.1	31	SF						58		F
	SVTO	31	1529	1541	1609	N32	W69	8307	08	26.2	40	SF			3	E		93		F
	RAMY	31	1534	1541	1551	N30	W71	8307	08	26.1	17	SF			3	E		22		
0242	HOLL	31	1815	1825	1848	S21	E47	8323	09	4.4	33	SF			3	E		36		
0243	HOLL	31	1827	1827	1848	N22	W38	8322	08	28.8	21	SF			3	E		10		
0244	HOLL	31	1835	1836	1843	N21	W53	8319	08	27.7	8	SF			3	E		21		
0245	HOLL	31	1855	1904	1911	N21	W53	8319	08	27.7	16	SF			3	E		16		
0246	HOLL	31	1954	1957	2006	N21	W54	8319	08	27.7	12	SF			3	E		36		
0247	HOLL	31	2039	2041	2046	N21	W54	8319	08	27.7	7	SF			3	E		36		
		31	2101		2135	No Flare Patrol														

Hα SOLAR FLARES

AUGUST 1998

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
0248	HOLL	31	2139	2141	2217	S20	E47	8323	09	4.5	38	SF		3	E		32		

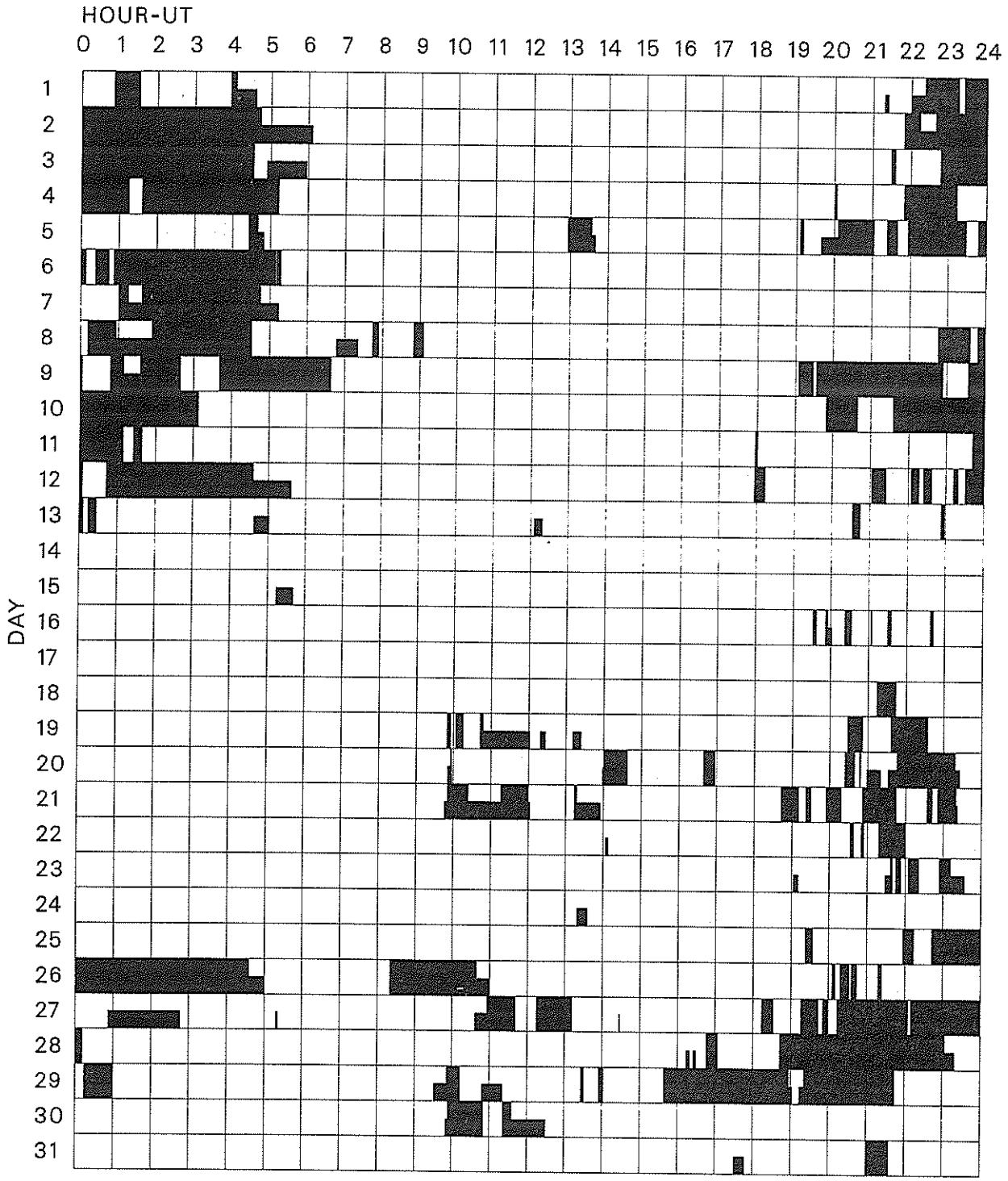
"Remarks"

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

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

INTERVALS OF NO FLARE PATROL OBSERVATION
FOR PRECEDING SOLAR FLARE TABLE

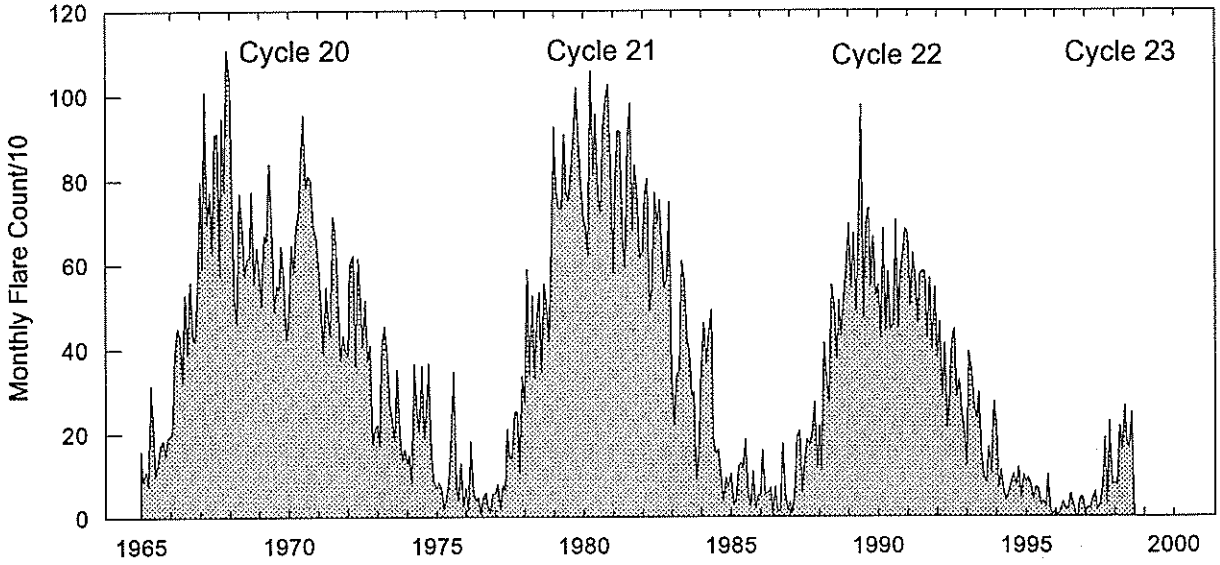
AUGUST 1998



Times of no flare patrol, shown here as shades 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	Ramey	Urumqi
Hurbanovo	Kharkov	Mitaka	San Vito	

Monthly Counts of Grouped Solar Flares
Jan 1965 - Aug 1998



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					1384

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

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

AUGUST 1998

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	280	CUBA	44	NS	1300.0E		530.0D		11.0		
	235	CUBA	44	NS	1300.0E		530.0D		8.0		
	245	LEAR	43	NS	2323.0	2324.0U	14.0	77.0			QL=4 ST=2 TYP=1
	245	SGMR	8	S	1554.0	1554.0	1.0	79.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1554.0	1554.0	1.0	71.0			QL=4 ST=3 TYP=3
	245	PALE	8	S	2323.0	2325.0	2.0	99.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	2323.0	2326.0	3.0	83.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	2323.0	2326.0	3.0	83.0			QL=2 ST=2 TYP=3
02	610	LEAR	8	S	0817.0	0817.0	1.0	76.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	0817.0	0817.0	1.0	60.0			QL=2 ST=2 TYP=3
	610	LEAR	8	S	0851.0	0851.0	U	130.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	0851.0	0851.0	1.0	140.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1016.0	1017.0	1.0	93.0			QL=4 ST=3 TYP=3
	245	SGMR	4	S/F	1521.0	1523.0	3.0	51.0			QL=4 ST=2 TYP=3
03	235	CUBA	44	NS	1300.0E		530.0D		14.0		
	280	CUBA	44	NS	1300.0E		530.0D		18.0		
	245	SVTO	43	NS	1306.0	1351.0	62.0	59.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1306.0	1317.0	164.0	60.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1902.0	1951.0	59.0	150.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	1947.0	1951.0	14.0	140.0			QL=2 ST=2 TYP=1
	245	SGMR	43	NS	2050.0	2057.0	7.0	79.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	2050.0	2057.0	190.0	65.0			QL=2 ST=3 TYP=1
	245	PALE	43	NS	2150.0	2057.0	69.0	65.0			QL=2 ST=2 TYP=1
	245	SGMR	43	NS	2151.0	2153.0	5.0	100.0			QL=4 ST=2 TYP=1
	245	SVTO	8	S	0742.0	0742.0	1.0	120.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0742.0	0742.0	1.0	25.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0749.0	0749.0	1.0	60.0			QL=4 ST=2 TYP=3
	410	PALE	4	S/F	1813.0	1816.0	3.0	82.0			QL=4 ST=2 TYP=3
	410	SGMR	4	S/F	1813.0	1816.0	3.0	76.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1848.0	1850.0	2.0	68.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1850.0	1850.0	U	84.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1902.0	1902.0	1.0	89.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	1920.0	1920.0	1.0	53.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	2238.0	2238.0	U	60.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	2238.0	2238.0	U	72.0			QL=4 ST=2 TYP=3
04	245	LEAR	43	NS	0236.0	0805.0	430.0	210.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	0415.0	0416.0	14.0	75.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	0708.0	0708.0	7.0	69.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	0858.0	0914.0	44.0	97.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1033.0	1041.0	368.0	160.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	1244.0	1418.0	237.0	120.0			QL=4 ST=2 TYP=1
	280	CUBA	44	NS	1300.0E		388.0D		18.0		
	235	CUBA	44	NS	1332.0E		300.0D		9.0		
	245	SGMR	43	NS	1905.0	1914.0	10.0	62.0			QL=4 ST=2 TYP=1
	410	LEAR	4	S/F	0132.0	0133.0	6.0	290.0			QL=4 ST=2 TYP=3
	410	PALE	4	S/F	0132.0	0133.0	6.0	83.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0225.0	0225.0	1.0	120.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0225.0	0225.0	1.0	81.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	0418.0	0418.0	1.0	95.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0418.0	0418.0	1.0	110.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0423.0	0423.0	U	100.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0520.0	0520.0	U	58.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0545.0	0545.0	U	69.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0633.0	0633.0	1.0	55.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0645.0	0645.0	1.0	91.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0804.0	0805.0	2.0	250.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0821.0	0822.0	1.0	64.0			QL=4 ST=2 TYP=3
	245	SVTO	48	C	1029.0	1033.0	5.0	130.0			QL=4 ST=2 TYP=8
	245	SVTO	8	S	1040.0	1041.0	2.0	180.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1143.0	1143.0	1.0	480.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1143.0	1143.0	1.0	32.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1143.0	1143.0	2.0	150.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1143.0	1143.0	1.0	460.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1143.0	1143.0	2.0	210.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1233.0	1235.0	2.0	46.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1233.0	1233.0	U	110.0			QL=4 ST=2 TYP=3

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

AUGUST 1998

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	SVTO	8	S	1428.0	1429.0	1.0	140.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1727.0	1727.0	1.0	72.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1812.0	1812.0	1.0	56.0			QL=4 ST=2 TYP=3
┌	245	PALE	8	S	2229.0	2229.0	U	89.0			QL=2 ST=2 TYP=3
└	245	SGMR	8	S	2229.0	2229.0	U	93.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2241.0	2241.0	U	71.0			QL=2 ST=2 TYP=3
05	127	TORN	44	NS	1110.0E	1156.6	60.0D	270.0	20.0		V=1
┌	235	CUBA	44	NS	1300.0E		530.0D		10.0		
└	280	CUBA	44	NS	1300.0E		530.0D		20.0		
┌	245	SGMR	43	NS	1459.0	1500.0	5.0	170.0			QL=4 ST=2 TYP=1
├	245	SVTO	43	NS	1500.0	1500.0	4.0	150.0			QL=4 ST=2 TYP=1
├	245	SGMR	43	NS	1629.0	1725.0	58.0	130.0			QL=4 ST=2 TYP=1
└	245	SVTO	43	NS	1630.0	1725.0	68.0	75.0			QL=4 ST=2 TYP=1
┌	245	LEAR	43	NS	2339.0	0040.0	608.0	1200.0			QL=4 ST=2 TYP=1
└	245	PALE	43	NS	2340.0	0040.0	297.0	1200.0			QL=2 ST=2 TYP=1
	245	PALE	8	S	0106.0	0106.0	1.0	69.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	0119.0	0120.0	2.0	62.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0120.0	0120.0	1.0	59.0			QL=4 ST=2 TYP=3
┌	245	LEAR	8	S	0324.0	0324.0	1.0	51.0			QL=4 ST=2 TYP=3
└	245	PALE	8	S	0324.0	0324.0	1.0	52.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1550.0	1550.0	U	61.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1626.0	1626.0	U	62.0			QL=4 ST=2 TYP=3
	6700	CUBA	23	GRF	1831.0	2149.0	241.0	13.0	6.0		00L
	245	SGMR	8	S	2101.0	2101.0	1.0	50.0			QL=4 ST=2 TYP=3
┌	410	SGMR	8	S	2130.0	2131.0	2.0	23.0			QL=4 ST=2 TYP=3
└	245	SGMR	8	S	2131.0	2131.0	U	430.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2213.0	2214.0	1.0	79.0			QL=4 ST=2 TYP=3
┌	245	SGMR	4	S/F	2216.0	2218.0	4.0	77.0			QL=4 ST=2 TYP=3
├	245	LEAR	8	S	2316.0	2318.0	2.0	110.0			QL=4 ST=2 TYP=3
├	245	SGMR	8	S	2316.0	2318.0	2.0	100.0			QL=4 ST=2 TYP=3
└	245	PALE	4	S/F	2317.0	2318.0	4.0	120.0			QL=2 ST=2 TYP=3
06	245	SVTO	43	NS	0437.0	0437.0	U	52.0			QL=4 ST=2 TYP=1
├	245	SVTO	43	NS	0552.0	1557.0	627.0	280.0			QL=4 ST=2 TYP=1
├	245	SGMR	43	NS	1103.0	1201.0	180.0	260.0			QL=4 ST=2 TYP=1
├	127	TORN	44	NS	1210.0E		170.0D		30.0		V=1
└	245	SGMR	43	NS	1514.0	1557.0	65.0	320.0			QL=4 ST=2 TYP=1
┌	245	PALE	43	NS	1734.0	2024.0	356.0	220.0			QL=2 ST=2 TYP=1
└	245	SGMR	43	NS	1734.0	2021.0	361.0	190.0			QL=4 ST=2 TYP=1
┌	245	LEAR	8	S	0150.0	0151.0	1.0	260.0			QL=4 ST=2 TYP=3
└	410	LEAR	8	S	0151.0	0151.0	U	21.0			QL=4 ST=2 TYP=3
┌	410	LEAR	8	S	0211.0	0211.0	U	66.0			QL=4 ST=2 TYP=3
└	610	LEAR	8	S	0212.0	0212.0	U	38.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0423.0	0423.0	U	80.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0558.0	0559.0	2.0	140.0			QL=4 ST=2 TYP=3
┌	245	SVTO	8	S	0629.0	0630.0	1.0	38.0			QL=4 ST=2 TYP=3
└	410	SVTO	8	S	0630.0	0630.0	U	52.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1106.0	1106.0	U	170.0			QL=4 ST=2 TYP=3
┌	610	SVTO	8	S	1133.0	1134.0	1.0	40.0			QL=4 ST=2 TYP=3
├	245	SVTO	8	S	1133.0	1134.0	1.0	320.0			QL=2 ST=3 TYP=3
└	410	SVTO	8	S	1133.0	1134.0	1.0	170.0			QL=2 ST=3 TYP=3
	127	TORN	4	S/F	1223.4U	1223.6U	2.0U	5200.0	650.0		
	127	TORN	4	S/F	1228.5U	1229.5U	2.0U	1500.0	750.0		
┌	610	SGMR	8	S	1255.0	1255.0	U	79.0			QL=4 ST=2 TYP=3
├	410	SGMR	8	S	1255.0	1255.0	U	120.0			QL=4 ST=2 TYP=3
├	410	SVTO	8	S	1255.0	1255.0	U	110.0			QL=4 ST=2 TYP=3
├	610	SVTO	8	S	1255.0	1255.0	U	55.0			QL=2 ST=2 TYP=3
└	610	SGMR	8	S	1256.0	1256.0	U	57.0			QL=4 ST=2 TYP=3
┌	410	SGMR	8	S	1340.0	1341.0	1.0	160.0			QL=4 ST=2 TYP=3
└	410	SVTO	8	S	1340.0	1341.0	1.0	160.0			QL=4 ST=2 TYP=3
┌	245	SGMR	49	GB	1358.0	1359.0	1.0	550.0			QL=2 ST=2 TYP=6
└	245	SVTO	8	S	1358.0	1359.0	1.0	480.0			QL=4 ST=2 TYP=3
┌	410	SGMR	48	C	1403.0	1406.0	3.0	85.0			QL=4 ST=2 TYP=8
└	410	SVTO	8	S	1403.0	1404.0	2.0	82.0			QL=4 ST=2 TYP=3
┌	410	SGMR	4	S/F	1444.0	1445.0	3.0	120.0			QL=4 ST=2 TYP=3
└	410	SVTO	4	S/F	1444.0	1445.0	3.0	120.0			QL=4 ST=2 TYP=3
┌	245	SVTO	8	S	1514.0	1515.0	1.0	180.0			QL=4 ST=2 TYP=3
└	410	SVTO	48	C	1514.0	1515.0	5.0	52.0			QL=4 ST=2 TYP=8

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

AUGUST 1998

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
06	2800	PENT	1	S	1557.0	1602.0	11.0	11.0			
	245	SVTO	8	S	1612.0	1613.0	1.0	130.0			QL=2 ST=3 TYP=3
	610	PALE	4	S/F	1759.0	1800.0	3.0	45.0			QL=4 ST=2 TYP=3
	410	PALE	4	S/F	1759.0	1801.0	3.0	34.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1800.0	1800.0	2.0	54.0			QL=2 ST=2 TYP=3
	1415	PALE	8	S	1800.0	1800.0	2.0	92.0			QL=4 ST=2 TYP=3
	1415	SGMR	8	S	1800.0	1800.0	U	95.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1800.0	1801.0	1.0	34.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1800.0	1800.0	U	50.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	1800.0	1804.0	4.0	120.0			QL=4 ST=2 TYP=3
	410	SGMR	4	S/F	1844.0	1847.0	4.0	76.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1920.0	1921.0	1.0	72.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1930.0	1930.0	U	210.0			QL=2 ST=2 TYP=3
	410	PALE	49	GB	1947.0	1953.0	8.0	1500.0			QL=2 ST=3 TYP=6
	1415	PALE	4	S/F	1947.0	1950.0	6.0	300.0			QL=4 ST=3 TYP=3
	245	PALE	49	GB	1947.0	1953.0	8.0	1000.0			QL=2 ST=3 TYP=6
	610	PALE	4	S/F	1947.0	1954.0	8.0	140.0			QL=4 ST=3 TYP=3
	245	SGMR	49	GB	1948.0	1950.0	4.0	740.0			QL=4 ST=2 TYP=6
	610	SGMR	8	S	1948.0	1950.0	2.0	66.0			QL=4 ST=2 TYP=3
	410	SGMR	4	S/F	1948.0	1950.0	4.0	250.0			QL=4 ST=2 TYP=3
	1415	SGMR	8	S	1950.0	1950.0	2.0	310.0			QL=4 ST=2 TYP=3
	410	SGMR	4	S/F	1952.0	1953.0	4.0	320.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1952.0	1953.0	4.0	1100.0			QL=4 ST=2 TYP=6
	610	SGMR	8	S	1953.0	1954.0	2.0	150.0			QL=4 ST=2 TYP=3
	1415	SGMR	8	S	1953.0	1954.0	1.0	320.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	1958.0	1958.0	4.0	1100.0			QL=2 ST=2 TYP=6
	410	PALE	49	GB	1958.0	1959.0	2.0	8300.0			QL=2 ST=2 TYP=6
	410	SGMR	4	S/F	1958.0	1959.0	3.0	130.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1958.0	1958.0	2.0	1200.0			QL=4 ST=2 TYP=6
	245	PALE	4	S/F	2003.0	2008.0	5.0	200.0			QL=2 ST=2 TYP=3
	410	PALE	49	GB	2003.0	2006.0	4.0	4800.0			QL=2 ST=2 TYP=6
	410	SGMR	8	S	2003.0	2004.0	1.0	110.0			QL=4 ST=2 TYP=3
	245	SGMR	48	C	2005.0	2008.0	4.0	240.0			QL=4 ST=2 TYP=8
	245	SGMR	4	S/F	2024.0	2025.0	4.0	370.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2025.0	2025.0	1.0	310.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	2226.0	2226.0	1.0	170.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	2315.0	2316.0	2.0	100.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2315.0	2316.0	1.0	67.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	2316.0	2316.0	1.0	30.0			QL=4 ST=2 TYP=3
	610	PALE	4	S/F	2327.0	2330.0	4.0	79.0			QL=4 ST=2 TYP=3
	410	LEAR	4	S/F	2328.0	2330.0	4.0	17.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	2328.0	2330.0	3.0	74.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	2329.0	2330.0	2.0	80.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2329.0	2330.0	1.0	72.0			QL=2 ST=2 TYP=3
	410	PALE	49	GB	2332.0	2335.0	5.0	2400.0			QL=2 ST=2 TYP=6
07	245	PALE	43	NS	0318.0	0318.0	29.0	140.0			QL=2 ST=2 TYP=1
	245	SVTO	43	NS	0926.0	0927.0	36.0	110.0			QL=4 ST=2 TYP=1
	127	TORN	44	NS	1250.0E		130.0D		10.0		V=1,DISTURBED
	235	CUBA	44	NS	1300.0E		530.0D		15.0		
	280	CUBA	44	NS	1300.0E		530.0D		24.0		
	245	SGMR	43	NS	1605.0	1651.0	174.0	130.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	1643.0	1734.0	53.0	230.0			QL=4 ST=3 TYP=1
	245	PALE	43	NS	1651.0	1651.0	49.0	100.0			QL=2 ST=2 TYP=1
	2800	PENT	1	S	0002.0	0007.0	10.0	4.0			
	245	LEAR	4	S/F	0139.0	0140.0	3.0	69.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0141.0	0143.0	2.0	39.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0142.0	0143.0	1.0	220.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0148.0	0148.0	2.0	220.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0148.0	0148.0	U	40.0			QL=4 ST=2 TYP=3
	2840	BEIJ	5	S	0316.0	0317.2	6.0	13.7	9.7		
	245	LEAR	8	S	0318.0	0318.0	1.0	130.0			QL=4 ST=2 TYP=3
	410	LEAR	4	S/F	0318.0	0321.0	5.0	21.0			QL=4 ST=2 TYP=3
	1415	LEAR	8	S	0318.0	0318.0	1.0	17.0			QL=4 ST=2 TYP=3
	4995	LEAR	8	S	0318.0	0318.0	2.0	13.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0318.0	0318.0	1.0	60.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0318.0	0318.0	1.0	11.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	0559.0	0600.0	3.0	46.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0851.0	0851.0	U	93.0			QL=2 ST=2 TYP=3

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

AUGUST 1998

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
07	410	SGMR	8	S	1223.0	1223.0	1.0	16.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1223.0	1223.0	1.0	57.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1227.0	1228.0	2.0	580.0			QL=4 ST=2 TYP=6
	410	SGMR	8	S	1227.0	1228.0	2.0	7.0			QL=4 ST=2 TYP=3
	245	SVTO	48	C	1507.0	1510.0	3.0	100.0			QL=4 ST=3 TYP=8
	245	SGMR	4	S/F	1508.0	1510.0	5.0	84.0			QL=4 ST=2 TYP=3
	6700	CUBA	1	S	1522.8	1523.7	2.0	9.0	4.0		8R
	6700	CUBA	20	GRF	1948.0	1950.0	20.0	8.0	4.0		9L
	245	PALE	4	S/F	2233.0	2236.0	7.0	130.0			QL=2 ST=2 TYP=3
	245	SGMR	48	C	2235.0	2236.0	3.0	150.0			QL=4 ST=2 TYP=8
	2800	PENT	1	S	2336.0	2337.0	23.0	6.0			
08	245	SGMR	43	NS	2157.0	2157.0	60.0	50.0			QL=4 ST=2 TYP=1
	245	LEAR	43	NS	2341.0	2349.0	71.0	53.0			QL=4 ST=2 TYP=1
	2840	BEIJ	4	S/F	0153.0	0215.0	52.0	40.0	26.3		
	2840	BEIJ	4	S/F	0314.0	0316.0	8.0	128.0	84.3		
	15400	LEAR	49	GB	0314.0	0315.0	3.0	1300.0			QL=4 ST=2 TYP=6
	610	LEAR	8	S	0314.0	0314.0	2.0	75.0			QL=4 ST=2 TYP=3
	1415	LEAR	8	S	0314.0	0314.0	2.0	280.0			QL=4 ST=2 TYP=3
	8800	LEAR	4	S/F	0314.0	0315.0	3.0	380.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0314.0	0317.0	7.0	35000.0			QL=4 ST=2 TYP=6
	2695	LEAR	8	S	0314.0	0315.0	2.0	140.0			QL=4 ST=2 TYP=3
	4995	LEAR	8	S	0314.0	0315.0	2.0	180.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	0314.0	0314.0	2.0	74.0			QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	0314.0	0315.0	3.0	270.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	0314.0	0315.0	2.0	180.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	0314.0	0317.0	7.0	40000.0			QL=2 ST=2 TYP=6
	1415	PALE	8	S	0314.0	0314.0	2.0	280.0			QL=4 ST=2 TYP=3
	2700	PURP	4	S/F	0314.0	0315.5	4.0	141.2			
	2800	HIRA	4	S/F	0314.7	0316.0	3.5	130.0	30.0		WR
	410	LEAR	49	GB	0315.0	0316.0	2.0	690.0			QL=4 ST=2 TYP=6
	15400	PALE	49	GB	0315.0	0315.0	2.0	1100.0			QL=2 ST=2 TYP=6
	410	PALE	49	GB	0315.0	0316.0	2.0	1900.0			QL=2 ST=2 TYP=6
	2695	PALE	8	S	0315.0	0315.0	1.0	120.0			QL=4 ST=2 TYP=3
	4995	SGMR	20	GRF	1244.0	1454.0	297.0	31.0			QL=4 ST=2 TYP=2
	8800	SGMR	46	C	1244.0	1451.0	676.0	47.0			QL=4 ST=2 TYP=8
	4995	SGMR	20	GRF	1244.0	1454.0	676.0	31.0			QL=4 ST=3 TYP=2
	4995	SGMR	46	C	1244.0	1454.0	676.0	31.0			QL=4 ST=2 TYP=8
	8800	SGMR	20	GRF	1244.0	1317.0	676.0	31.0			QL=4 ST=3 TYP=2
	8800	SGMR	4	S/F	1244.0	1317.0	676.0	31.0			QL=4 ST=3 TYP=3
	4995	SGMR	20	GRF	1244.0	1605.0	676.0	19.0			QL=4 ST=3 TYP=2
	4995	SGMR	20	GRF	1244.0	1246.0	676.0	19.0			QL=4 ST=3 TYP=2
	8800	SGMR	20	GRF	1244.0	1358.0	676.0	33.0			QL=4 ST=3 TYP=2
	8800	SGMR	20	GRF	1244.0	1450.0	676.0	46.0			QL=4 ST=3 TYP=2
	8800	SGMR	20	GRF	1244.0	1451.0	676.0	47.0			QL=4 ST=3 TYP=2
	8800	SGMR	20	GRF	1244.0	1559.0	676.0	46.0			QL=4 ST=3 TYP=2
	2800	PENT	1	S	1453.0	1454.0	3.0	5.0			
	8800	SGMR	4	S/F	1841.0	1844.0	6.0	130.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2151.0	2151.0	1.0	100.0			QL=4 ST=2 TYP=3
	2840	BEIJ	4	S/F	2334.0	2336.0	4.0	16.3	10.3		
	2800	PENT	1	S	2335.0	2337.0	4.0	9.0			
09	245	LEAR	44	NS	0202.0E	0208.0	8.0D	210.0			QL=4 ST=1 TYP=1
	245	LEAR	43	NS	0202.0	0208.0U	1318.0	210.0			QL=4 ST=1 TYP=1
	127	TORN	44	NS	0700.0E		130.0D		40.0		V=2
	245	SVTO	43	NS	0728.0	0728.0	14.0	78.0			QL=4 ST=2 TYP=1
	280	CUBA	44	NS	1300.0E		530.0D		27.0		
	235	CUBA	44	NS	1300.0E		530.0D		15.0		
	245	LEAR	4	S/F	0202.0	0205.0U	1318.0	88.0			QL=4 ST=1 TYP=3
	245	LEAR	4	S/F	0202.0	0208.0U	1318.0	210.0			QL=4 ST=1 TYP=3
	410	LEAR	8	S	0208.0	0208.0	U	140.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0208.0	0208.0	U	72.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0506.0	0506.0	2.0	64.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0506.0	0506.0	U	75.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0739.0	0740.0	1.0	32.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0740.0	0740.0	U	98.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0740.0	0740.0	U	31.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0740.0	0740.0	U	120.0			QL=2 ST=2 TYP=3
	2840	BEIJ	46	C	0832.0	0847.0	22.0	21.5	13.6		

SOLAR RADIO EMISSION
Outstanding Occurrences

AUGUST 1998

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
09	4995	SVTO	4	S/F	0842.0	0844.0	6.0	62.0			QL=2 ST=3 TYP=3
	8800	LEAR	4	S/F	0843.0	0844.0	4.0	55.0			QL=4 ST=2 TYP=3
	4995	LEAR	4	S/F	0843.0	0844.0	4.0	50.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	0843.0	0844.0	4.0	62.0			QL=2 ST=3 TYP=3
	15400	SVTO	8	S	0846.0	0848.0	2.0	25.0			QL=4 ST=3 TYP=3
	15400	SVTO	8	S	0846.0	0848.0	2.0	15.0			QL=4 ST=3 TYP=3
	2800	PENT	1	S	1416.0	1417.0	4.0	6.0			
	6700	CUBA	46	C	1710.8	1716.2	8.6	483.0			8L
	4995	PALE	4	S/F	1712.0	1716.0	8.0	150.0			QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	1712.0	1716.0	6.0	200.0			QL=4 ST=2 TYP=3
	2695	PALE	4	S/F	1712.0	1716.0	6.0	83.0			QL=4 ST=2 TYP=3
	2695	SGMR	4	S/F	1712.0	1716.0	8.0	100.0			QL=4 ST=2 TYP=3
	8800	SGMR	4	S/F	1712.0	1716.0	10.0	210.0			QL=2 ST=2 TYP=3
	4995	SGMR	4	S/F	1712.0	1716.0	10.0	150.0			QL=4 ST=2 TYP=3
	1415	PALE	4	S/F	1714.0	1716.0	4.0	79.0			QL=4 ST=2 TYP=3
	15400	PALE	4	S/F	1714.0	1716.0	5.0	170.0			QL=2 ST=2 TYP=3
	15400	SGMR	4	S/F	1714.0	1716.0	4.0	190.0			QL=4 ST=2 TYP=3
	1415	SGMR	4	S/F	1714.0	1716.0	8.0	77.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	1715.0	1715.0	7.0	33.0			QL=4 ST=2 TYP=3
	610	SGMR	4	S/F	1716.0	1716.0	6.0	27.0			QL=4 ST=2 TYP=3
	410	SGMR	4	S/F	1716.0	1716.0	6.0	28.0			QL=4 ST=2 TYP=3
	6700	CUBA	29	PBI	1719.4		18.4	54.0	27.0		00L
	245	PALE	8	S	1728.0	1728.0	1.0	110.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1728.0	1728.0	1.0	120.0			QL=4 ST=2 TYP=3
	6700	CUBA	31	ABS	1737.0	1743.2	7.7	4.0	2.0		42R
	6700	CUBA	21	GRF	1746.0	1757.0	27.0	8.0	4.0		5L
	245	PALE	8	S	1749.0	1750.0	2.0	250.0			QL=2 ST=2 TYP=3
	2800	PENT	1	S	1749.0	1750.0	2.0	4.0			
	245	SGMR	8	S	1749.0	1750.0	2.0	250.0			QL=4 ST=2 TYP=3
	6700	CUBA	1	S	1942.5	1943.9	4.5	21.0	10.0		5A
	410	PALE	8	S	2029.0	2030.0	1.0	120.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2030.0	2030.0	U	120.0			QL=4 ST=2 TYP=3
	2800	PENT	28	PRE	2047.0	2052.0	17.0	12.0			
	410	SGMR	8	S	2111.0	2112.0	1.0	62.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2129.0	2129.0	U	70.0			QL=4 ST=2 TYP=3
	6700	CUBA	21	GRF	2152.0	2155.0	9.0U	11.0	5.0U		00L
	6700	CUBA	2	S/F	2152.6	2153.4	1.4	13.0	6.0		12L
	245	SGMR	4	S/F	2210.0	2219.0	10.0	57.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2219.0	2219.0	U	51.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	2226.0	2228.0	2.0	400.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2227.0	2228.0	1.0	450.0			QL=2 ST=2 TYP=3
10	410	SVTO	43	NS	0809.0	0847.0	55.0	100.0			QL=4 ST=3 TYP=1
	127	TORN	44	NS	1246.0E		5.0D				V=1
	1415	SGMR	43	NS	1257.0	1257.0	U	42.0			QL=4 ST=3 TYP=1
	1415	SGMR	43	NS	1257.0	1257.0	60.0	42.0			QL=4 ST=3 TYP=1
	410	SVTO	43	NS	1300.0	1342.0	207.0	270.0			QL=4 ST=3 TYP=1
	245	SVTO	43	NS	1305.0	1343.0	233.0	360.0			QL=4 ST=3 TYP=1
	245	SGMR	43	NS	1307.0	1339.0	219.0	300.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1307.0	1339.0	653.0	300.0			QL=4 ST=2 TYP=1
	610	PALE	43	NS	1730.0	1730.0U	46.0	86.0			QL=4 ST=2 TYP=1
	410	SGMR	43	NS	1752.0	1754.0	66.0	65.0			QL=4 ST=2 TYP=1
	610	PALE	43	NS	2007.0	2126.0	111.0	110.0			QL=2 ST=2 TYP=1
	610	SGMR	43	NS	2007.0	2026.0	122.0	110.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	2035.0	2049.0	65.0	95.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	2042.0	2049.0	74.0	81.0			QL=2 ST=2 TYP=1
	410	SGMR	43	NS	2111.0	2158.0	64.0	150.0			QL=4 ST=2 TYP=1
	410	PALE	43	NS	2112.0	2158.0	63.0	150.0			QL=2 ST=2 TYP=1
	245	PALE	8	S	0018.0	0018.0	U	160.0			QL=2 ST=2 TYP=3
	245	PALE	4	S/F	0153.0	0156.0	3.0	110.0			QL=2 ST=2 TYP=3
	610	PALE	4	S/F	0153.0	0156.0	3.0	18.0			QL=4 ST=2 TYP=3
	410	PALE	4	S/F	0153.0	0156.0	3.0	22.0			QL=4 ST=2 TYP=3
	610	LEAR	4	S/F	0154.0	0156.0	3.0	14.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	0154.0	0156.0	3.0	99.0			QL=4 ST=2 TYP=3
	410	LEAR	4	S/F	0154.0	0156.0	3.0	18.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0219.0	0219.0	U	6.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0219.0	0219.0	U	86.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0219.0	0219.0	U	77.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0348.0	0348.0	U	51.0			QL=4 ST=2 TYP=3

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

AUGUST 1998

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
10	245	LEAR	4	S/F	0519.0	0521.0	5.0	58.0			QL=4 ST=2 TYP=3
	245	SVTO	48	C	0519.0	0521.0	5.0	50.0			QL=4 ST=2 TYP=8
	245	LEAR	8	S	0705.0	0705.0	1.0	210.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0705.0	0705.0	1.0	260.0			QL=4 ST=2 TYP=3
	245	SVTO	4	S/F	0715.0	0717.0	3.0	160.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0716.0	0717.0	1.0	120.0			QL=4 ST=2 TYP=3
	245	LEAR	20	GRF	0752.0	0757.0	24.0	70.0			QL=4 ST=2 TYP=2
	610	LEAR	20	GRF	0752.0	0758.0	24.0	45.0			QL=4 ST=2 TYP=2
	410	LEAR	20	GRF	0752.0	0808.0	24.0	48.0			QL=4 ST=2 TYP=2
	2695	LEAR	8	S	0813.0	0814.0	1.0	8.0			QL=4 ST=2 TYP=3
	4995	LEAR	8	S	0813.0	0814.0	1.0	9.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0813.0	0814.0	1.0	170.0			QL=2 ST=3 TYP=3
	610	LEAR	8	S	0814.0	0814.0	U	72.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0814.0	0814.0	U	67.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	0814.0	0814.0	U	110.0			QL=2 ST=3 TYP=3
	2840	BEIJ	1	S	0814.0	0814.4	1.0	12.6	8.2		
	410	LEAR	8	S	0822.0	0822.0	2.0	100.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0836.0	0837.0	2.0	59.0			QL=4 ST=2 TYP=3
	610	LEAR	4	S/F	0842.0	0847.0	6.0	56.0			QL=4 ST=2 TYP=3
	410	LEAR	48	C	0843.0	0847.0	5.0	70.0			QL=4 ST=2 TYP=8
	245	SGMR	4	S/F	1039.0	1039.0	6.0	110.0			QL=4 ST=2 TYP=3
	410	SGMR	4	S/F	1039.0	1039.0	6.0	82.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1039.0	1039.0	U	17.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1051.0	1051.0	1.0	71.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1051.0	1051.0	1.0	59.0			QL=4 ST=3 TYP=3
	245	SGMR	8	S	1102.0	1102.0	U	73.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1102.0	1102.0	U	71.0			QL=4 ST=3 TYP=3
	610	SGMR	8	S	1212.0	1213.0	1.0	20.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1212.0	1212.0	1.0	230.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1212.0	1212.0	1.0	200.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1217.0	1218.0	1.0	50.0			QL=4 ST=3 TYP=3
	610	SGMR	8	S	1218.0	1218.0	U	36.0			QL=4 ST=3 TYP=3
	245	SGMR	8	S	1251.0	1251.0	U	100.0			QL=4 ST=3 TYP=3
	245	SVTO	8	S	1251.0	1251.0	U	83.0			QL=4 ST=2 TYP=3
	1415	SVTO	4	S/F	1256.0	1257.0	3.0	41.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	1357.0	1358.0	1.0	550.0			QL=2 ST=2 TYP=6
	245	SGMR	8	S	1426.0	1426.0	1.0	430.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1426.0	1426.0	1.0	490.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1723.0	1724.0	1.0	55.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1732.0	1732.0	1.0	64.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	1841.0	1842.0	3.0	85.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1842.0	1842.0	1.0	81.0			QL=2 ST=2 TYP=3
	410	PALE	8	S	1920.0	1920.0	1.0	87.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1920.0	1920.0	1.0	90.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1933.0	1935.0	2.0	50.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2059.0	2059.0	1.0	63.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	2309.0	2310.0	6.0	71.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2309.0	2310.0	1.0	80.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	2350.0	2350.0	U	72.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2350.0	2350.0	U	79.0			QL=2 ST=3 TYP=3
11	245	LEAR	43	NS	0129.0	0133.0	64.0	55.0			QL=4 ST=2 TYP=1
	410	PALE	43	NS	0344.0	0423.0	52.0	130.0			QL=2 ST=2 TYP=1
	410	SVTO	43	NS	0416.0	0421.0U	1184.0	120.0			QL=4 ST=1 TYP=1
	410	SVTO	43	NS	0416.0	0430.0U	1184.0	160.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	0421.0	0428.0	7.0	73.0			QL=4 ST=2 TYP=1
	610	LEAR	43	NS	0439.0	0443.0	74.0	50.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1135.0	1256.0	92.0	140.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	1151.0	1304.0	172.0	200.0			QL=4 ST=2 TYP=1
	280	CUBA	44	NS	1300.0E		530.0D		19.0		
	235	CUBA	44	NS	1300.0E		530.0D		16.0		
	245	SGMR	43	NS	1420.0	1427.0	23.0	280.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1555.0	1613.0	18.0	230.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	1606.0	1607.0	10.0	150.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1652.0	1653.0	41.0	73.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	2017.0	2017.0	3.0	91.0			QL=4 ST=2 TYP=1
	245	LEAR	8	S	0000.0	0000.0	U	110.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0000.0	0000.0	U	100.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	0112.0	0112.0	U	63.0			QL=2 ST=2 TYP=3

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

AUGUST 1998

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	610	LEAR	8	S	0157.0	0157.0	U	66.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	0157.0	0157.0	U	62.0			QL=2 ST=2 TYP=3
	245	PALE	49	GB	0402.0	0402.0	1.0	900.0			QL=2 ST=2 TYP=6
	245	SVTO	8	S	0603.0	0604.0	1.0	60.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1255.0	1256.0	1.0	230.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1345.0	1347.0	2.0	95.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1427.0	1427.0	U	360.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1654.0	1654.0	U	73.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	1855.0	1855.0	U	62.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1855.0	1855.0	U	64.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1928.0	1928.0	1.0	60.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1928.0	1928.0	1.0	75.0			QL=4 ST=2 TYP=3
12	245	LEAR	43	NS	2350.0	0655.0U	599.0	220.0			QL=4 ST=2 TYP=1
	15400	LEAR	4	S/F	0356.0	0358.0	3.0	11.0			QL=4 ST=2 TYP=3
	1415	LEAR	4	S/F	0357.0	0358.0	3.0	47.0			QL=4 ST=2 TYP=3
	8800	LEAR	4	S/F	0357.0	0358.0	5.0	12.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0357.0	0358.0	2.0	68.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0357.0	0357.0	U	88.0			QL=4 ST=2 TYP=3
	2700	PURP	1	S	0358.0	0358.4	8.0	8.8			
	245	SVTO	8	S	0610.0	0611.0	1.0	79.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0611.0	0611.0	U	120.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	0654.0	0655.0	3.0	74.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0655.0	0655.0	U	68.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0744.0	0745.0	1.0	54.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0744.0	0745.0	1.0	52.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0841.0	0843.0	2.0	60.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0842.0	0843.0	1.0	63.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1816.0	1817.0	2.0	170.0			QL=4 ST=3 TYP=3
	245	SGMR	8	S	1817.0	1817.0	U	190.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1833.0	1833.0	1.0	290.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1833.0	1833.0	1.0	300.0			QL=4 ST=3 TYP=3
	245	PALE	8	S	1923.0	1924.0	1.0	430.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1923.0	1924.0	1.0	430.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1924.0	1924.0	U	66.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1959.0	1959.0	2.0	340.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1959.0	1959.0	1.0	140.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2000.0	2001.0	2.0	15.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	2030.0	2032.0	3.0	59.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2143.0	2143.0	U	170.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2143.0	2143.0	1.0	180.0			QL=4 ST=2 TYP=3
13	245	PALE	43	NS	0008.0	0008.0	54.0	210.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	0422.0	0738.0	649.0	170.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1250.0	1442.0	409.0	250.0			QL=4 ST=2 TYP=1
	280	CUBA	44	NS	1400.0E		240.0D		22.0		
	235	CUBA	44	NS	1400.0E		470.0D		13.0		
	245	PALE	43	NS	1727.0	1727.0	156.0	380.0			QL=4 ST=3 TYP=1
	610	SVTO	43	NS	2050.0	2055.0	1323.0	480.0			QL=4 ST=2 TYP=1
	245	SVTO	8	S	0509.0	0509.0	U	120.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0526.0	0526.0	U	140.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0655.0	0655.0	1.0	260.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0931.0	0932.0	1.0	180.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	1033.0	1033.0	1.0	64.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1046.0	1046.0	U	120.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1048.0	1048.0	1.0	180.0			QL=2 ST=2 TYP=3
	245	SGMR	4	S/F	1120.0	1125.0	5.0	220.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1121.0	1121.0	U	120.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1214.0	1214.0	U	67.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1324.0	1324.0	U	160.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1342.0	1343.0	1.0	52.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1343.0	1343.0	U	52.0			QL=4 ST=2 TYP=3
	2800	PENT	1	S	1406.0	1408.0	9.0	6.0			
	1415	SGMR	4	S/F	1408.0	1409.0	3.0	66.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	1408.0	1409.0	1.0	77.0			QL=4 ST=2 TYP=3
	2695	SVTO	8	S	1409.0	1409.0	U	22.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1442.0	1442.0	U	360.0			QL=2 ST=2 TYP=3
	235	CUBA	7	C	1504.2	1506.3	5.8	144.0			
	280	CUBA	7	C	1504.2	1506.3	5.0	8.3			

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

AUGUST 1998

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	1415	SGMR	4	S/F	1506.0	1507.0	3.0	29.0			QL=4 ST=2 TYP=3
	2800	PENT	29	PBI	1507.0	1507.0	4.0	18.0			
	245	SGMR	8	S	1507.0	1507.0	2.0	260.0			QL=4 ST=2 TYP=3
	2695	SGMR	8	S	1507.0	1507.0	2.0	19.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1507.0	1507.0	2.0	14.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1507.0	1507.0	2.0	80.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1507.0	1507.0	2.0	31.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	1507.0	1507.0	1.0	33.0			QL=4 ST=2 TYP=3
	2695	SVTO	8	S	1507.0	1507.0	U	24.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1507.0	1508.0	1.0	33.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	1507.0	1507.0	1.0	48.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1507.0	1507.0	2.0	260.0			QL=2 ST=2 TYP=3
	6700	CUBA	2	S/F	1507.0	1507.6	1.9	11.0	5.0		8L
	245	SVTO	8	S	1657.0	1659.0	2.0	70.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1708.0	1708.0	2.0	160.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1708.0	1708.0	2.0	47.0			QL=4 ST=2 TYP=3
	6700	CUBA	21	GRF	1710.0	1756.0	50.0	19.0	4.0		6L
	245	SVTO	8	S	1727.0	1727.0	1.0	64.0			QL=4 ST=2 TYP=3
	245	PALE	48	C	1752.0	1754.0	4.0	350.0			QL=4 ST=2 TYP=8
	410	SGMR	4	S/F	1752.0	1754.0	4.0	390.0			QL=4 ST=2 TYP=3
	1415	SGMR	4	S/F	1752.0	1754.0	4.0	55.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	1752.0	1754.0	2.0	77.0			QL=4 ST=2 TYP=3
	2695	SGMR	4	S/F	1752.0	1754.0	4.0	53.0			QL=4 ST=2 TYP=3
	4995	SGMR	4	S/F	1752.0	1754.0	3.0	130.0			QL=4 ST=2 TYP=3
	4995	PALE	4	S/F	1753.0	1754.0	3.0	130.0			QL=4 ST=2 TYP=3
	410	SGMR	4	S/F	1753.0	1754.0	3.0	390.0			QL=4 ST=3 TYP=3
	245	SGMR	4	S/F	1753.0	1757.0	5.0	460.0			QL=4 ST=3 TYP=3
	610	SGMR	4	S/F	1753.0	1754.0	3.0	260.0			QL=4 ST=3 TYP=3
	2800	PENT	29	PBI	1753.0	1753.0	17.0	56.0			
	6700	CUBA	3	S	1753.9	1754.2	1.5	150.0	75.0		11L
	610	PALE	8	S	1754.0	1754.0	2.0	250.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	1754.0	1754.0	U	56.0			QL=2 ST=2 TYP=3
	1415	PALE	8	S	1754.0	1754.0	U	43.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	1754.0	1754.0	U	120.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1754.0	1754.0	2.0	420.0			QL=4 ST=2 TYP=3
	2695	PALE	8	S	1754.0	1754.0	U	42.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	1754.0	1754.0	U	77.0			QL=4 ST=3 TYP=3
	245	SGMR	4	S/F	1754.0	1757.0	4.0	460.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1754.0	1754.0	1.0	110.0			QL=4 ST=3 TYP=3
	1415	SGMR	8	S	1754.0	1754.0	2.0	55.0			QL=4 ST=3 TYP=3
	2695	SGMR	8	S	1754.0	1754.0	2.0	53.0			QL=4 ST=3 TYP=3
	4995	SGMR	8	S	1754.0	1754.0	1.0	130.0			QL=4 ST=3 TYP=3
	235	CUBA	48	C	1754.4E	1757.4	4.1D	2153.0			
	245	PALE	49	GB	1922.0	1923.0	1.0	910.0			QL=4 ST=2 TYP=6
	410	PALE	4	S/F	1922.0	1924.0	3.0	60.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1922.0	1923.0	1.0	840.0			QL=4 ST=2 TYP=6
	610	PALE	8	S	1923.0	1923.0	2.0	52.0			QL=4 ST=2 TYP=3
	2800	PENT	1	S	1923.0	1924.0	3.0	9.0			
	410	SGMR	8	S	1923.0	1924.0	2.0	56.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1923.0	1923.0	2.0	53.0			QL=4 ST=2 TYP=3
	6700	CUBA	2	S/F	1923.2	1924.1	2.7	16.0	8.0		52L
14	2700	PURP	1	S	0055.5	0056.6	4.5	17.0			
	2840	BEIJ	1	S	0057.0	0059.0	5.0	6.3	4.5		
	245	LEAR	8	S	0556.0	0556.0	2.0	270.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0556.0	0556.0	1.0	370.0			QL=4 ST=2 TYP=3
	2840	BEIJ	1	S	0556.0	0556.7	4.0	11.3	8.0		
	8800	LEAR	8	S	0825.0	0826.0	2.0	350.0			QL=4 ST=2 TYP=3
	1415	LEAR	4	S/F	0825.0	0826.0	3.0	340.0			QL=4 ST=2 TYP=3
	2695	LEAR	4	S/F	0825.0	0826.0	3.0	250.0			QL=4 ST=2 TYP=3
	4995	LEAR	4	S/F	0825.0	0826.0	3.0	370.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0825.0	0826.0	2.0	280.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0825.0	0825.0	1.0	140.0			QL=4 ST=2 TYP=3
	1415	SVTO	4	S/F	0825.0	0826.0	3.0	370.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	0825.0	0825.0	1.0	110.0			QL=2 ST=2 TYP=3
	8800	SVTO	8	S	0825.0	0826.0	2.0	270.0			QL=2 ST=2 TYP=3
	15400	SVTO	8	S	0825.0	0826.0	1.0	180.0			QL=4 ST=2 TYP=3
	4995	SVTO	4	S/F	0825.0	0826.0	6.0	440.0			QL=4 ST=2 TYP=3
	2695	SVTO	4	S/F	0825.0	0826.0	3.0	250.0			QL=4 ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

AUGUST 1998

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	HIRA	3	S	0825.5	0826.4	6.0	220.0	70.0		O
	500	HIRA	47	GB	0825.5	0825.9	4.0	1400.0			O
	245	LEAR	8	S	0826.0	0826.0	U	1500.0			QL=4 ST=3 TYP=3
	410	LEAR	49	GB	0826.0	0826.0	U	1700.0			QL=4 ST=2 TYP=6
	410	SVTO	49	GB	0826.0	0826.0	U	2600.0			QL=4 ST=2 TYP=6
	245	SVTO	48	C	0826.0	0828.0	4.0	1500.0			QL=4 ST=2 TYP=8
	2840	BEIJ	45	C	0827.0		12.0	299.0	210.0		
	127	TORN	47	GB	0829.0	0829.7	6.0	1400.0	140.0		
	2800	PENT	1	S	2152.0	2153.0	5.0	6.0			
	245	PALE	8	S	2204.0	2204.0	U	67.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	2204.0	2204.0	1.0	74.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2214.0	2216.0	2.0	52.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2215.0	2216.0	1.0	53.0			QL=2 ST=2 TYP=3
15	127	TORN	44	NS	0620.0E		520.0D		40.0		V=3
	235	CUBA	44	NS	1300.0E		530.0D		8.0		
	280	CUBA	44	NS	1300.0E		530.0D		16.0		
	2840	BEIJ	1	S	0622.0	0625.0	5.0	3.8	2.7		
	410	SVTO	8	S	0725.0	0725.0	U	120.0			QL=4 ST=2 TYP=3
	2840	BEIJ	1	S	0915.0	0917.0	6.0	14.8	10.8		
	245	SVTO	8	S	0916.0	0917.0	1.0	58.0			QL=4 ST=2 TYP=3
	8800	SVTO	20	GRF	0916.0	0917.0	2.0	72.0			QL=2 ST=2 TYP=2
	4995	SVTO	8	S	0916.0	0917.0	2.0	53.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	0916.0	0918.0	2.0	43.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	0916.0	0917.0	2.0	72.0			QL=2 ST=3 TYP=3
	245	SGMR	8	S	1407.0	1409.0	2.0	57.0			QL=4 ST=2 TYP=3
	6700	CUBA	23	GRF	1433.0U	1538.0	88.0U	22.0	11.0		3R
	6700	CUBA	23	GRF	1625.0	1639.0	125.0	25.0	7.0		12L
16	245	PALE	8	S	0015.0	0015.0	U	99.0			QL=4 ST=2 TYP=3
	2800	PENT	45	C	1731.0	1743.0	60.0	97.0			
17	245	SVTO	43	NS	0606.0	0606.0	13.0	78.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	0710.0	0712.0	57.0	150.0			QL=4 ST=2 TYP=1
	245	LEAR	43	NS	0710.0	0712.0	65.0	110.0			QL=4 ST=2 TYP=1
	235	CUBA	44	NS	1300.0E		530.0D		8.0		
	280	CUBA	44	NS	1300.0E		530.0D		16.0		
	245	SGMR	43	NS	1803.0	1803.0	21.0	100.0			QL=4 ST=2 TYP=1
	245	PALE	8	S	0041.0	0042.0	1.0	62.0			QL=4 ST=2 TYP=3
	2840	BEIJ	1	S	0219.0	0219.8	4.0	8.1	6.1		
	245	LEAR	8	S	0606.0	0606.0	1.0	61.0			QL=4 ST=2 TYP=3
	8800	SVTO	20	GRF	0649.0	0700.0	27.0	80.0			QL=2 ST=3 TYP=2
	2840	BEIJ	45	C	0658.0	0700.0	21.0	312.0	237.0		
	2695	LEAR	4	S/F	0659.0	0700.0	6.0	270.0			QL=4 ST=2 TYP=3
	1415	SVTO	4	S/F	0659.0	0700.0	6.0	140.0			QL=4 ST=2 TYP=3
	2695	SVTO	4	S/F	0659.0	0700.0	6.0	290.0			QL=4 ST=2 TYP=3
	2800	HIRA	46	C	0659.5	0700.9	9.0	240.0	60.0		O
	1415	LEAR	4	S/F	0700.0	0700.0	5.0	130.0			QL=4 ST=2 TYP=3
	610	LEAR	4	S/F	0700.0	0700.0	4.0	480.0			QL=4 ST=2 TYP=3
	4995	LEAR	8	S	0700.0	0700.0	2.0	100.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	0700.0	0700.0	U	280.0			QL=2 ST=2 TYP=3
	4995	SVTO	4	S/F	0700.0	0700.0	5.0	130.0			QL=4 ST=2 TYP=3
	500	HIRA	46	C	0700.0	0702.0	12.0	400.0	15.0		O
	410	SVTO	48	C	0700.0	0706.0	12.0	230.0			QL=4 ST=2 TYP=8
	410	LEAR	4	S/F	0701.0	0702.0	6.0	250.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0702.0	0704.0	4.0	10000.0			QL=4 ST=2 TYP=6
	245	SVTO	49	GB	0702.0	0704.0	4.0	12000.0			QL=4 ST=2 TYP=6
	2800	PENT	40	F	1454.0	1540.0	54.0	9.0			
	6700	CUBA	20	GRF	1456.0	1501.0	10.0	9.0	4.0		00L
	245	SGMR	8	S	1755.0	1755.0	U	46.0			QL=4 ST=2 TYP=3
	2800	PENT	45	C	1806.0	1815.0	16.0	6.0			
	245	SGMR	4	S/F	1813.0	1815.0	3.0	59.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1813.0	1813.0	1.0	24.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1813.0	1813.0	U	48.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	1956.0	2001.0	7.0	57.0			QL=4 ST=2 TYP=3
	2800	PENT	40	F	2050.0	2116.0	50.0	296.0			
	8800	PALE	48	C	2113.0	2117.0	8.0	130.0			QL=4 ST=2 TYP=8
	15400	SGMR	4	S/F	2113.0	2117.0	8.0	360.0			QL=4 ST=2 TYP=3
	6700	CUBA	46	C	2113.0	2118.0	15.3	135.0	34.0		

SOLAR RADIO EMISSION
Outstanding Occurrences

AUGUST 1998

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	6700	CUBA	46	C	2113.0	2118.0	15.3	135.0	34.0		13L
	15400	PALE	4	S/F	2113.0	2117.0	13.0	500.0			QL=4 ST=2 TYP=3
	2695	PALE	48	C	2113.0	2117.0	10.0	290.0			QL=4 ST=2 TYP=8
	500	HIRA	46	C	2113.0	2117.5	17.0	40.0	4.0		O
	2800	HIRA	46	C	2113.5	2118.4	15.0	230.0	60.0		O
	1415	PALE	4	S/F	2114.0	2118.0	8.0	140.0			QL=4 ST=2 TYP=3
	4995	PALE	48	C	2114.0	2117.0	7.0	170.0			QL=4 ST=2 TYP=8
	2695	SGMR	48	C	2114.0	2118.0	166.0	280.0			QL=4 ST=1 TYP=8
	4995	SGMR	48	C	2114.0	2117.0	166.0	170.0			QL=4 ST=1 TYP=8
	2695	SGMR	4	S/F	2114.0	2115.0	166.0	150.0			QL=4 ST=1 TYP=3
	2695	SGMR	4	S/F	2114.0	2115.0	166.0	150.0			QL=4 ST=1 TYP=3
	1415	SGMR	4	S/F	2114.0	2118.0	166.0	150.0			QL=4 ST=1 TYP=3
	4995	SGMR	4	S/F	2114.0	2115.0	166.0	89.0			QL=4 ST=1 TYP=3
	4995	SGMR	4	S/F	2114.0	2115.0	166.0	89.0			QL=4 ST=1 TYP=3
	235	CUBA	7	C	2116.8	2117.5	1.2	325.0D			
	280	CUBA	7	C	2116.8	2117.5	1.2	152.0			
	410	PALE	8	S	2117.0	2117.0	2.0	81.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	2117.0	2117.0	1.0	9200.0			QL=4 ST=2 TYP=6
	8800	SGMR	4	S/F	2117.0	2118.0	163.0	88.0			QL=4 ST=1 TYP=3
	245	PALE	4	S/F	2128.0	2128.0	5.0	43.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	2128.0	2128.0	1.0	71.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2253.0	2253.0	1.0	53.0			QL=4 ST=2 TYP=3
18	245	SVTO	43	NS	0625.0	0627.0	5.0	87.0			QL=4 ST=2 TYP=1
	4995	SVTO	49	GB	0000.0	0820.0	U	970.0			QL=4 ST=1 TYP=6
	610	SVTO	8	S	0000.0	0000.0	U	130.0			QL=4 ST=2 TYP=3
	2840	BEIJ	1	S	0243.0	0245.5	6.0	8.4	6.1		
	410	PALE	4	S/F	0319.0	0325.0	6.0	43.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0321.0	0321.0	1.0	240.0			QL=4 ST=2 TYP=3
	410	LEAR	48	C	0321.0	0324.0	4.0	70.0			QL=4 ST=2 TYP=8
	245	PALE	8	S	0321.0	0321.0	1.0	300.0			QL=4 ST=2 TYP=3
	2840	BEIJ	1	S	0353.0	0402.5	12.0	7.5	5.4		
	2840	BEIJ	45	C	0408.0	0412.2	16.0	22.4	16.0		
	15400	LEAR	4	S/F	0409.0	0411.0	11.0	140.0			QL=4 ST=2 TYP=3
	8800	LEAR	20	GRF	0409.0	0416.0	11.0	91.0			QL=4 ST=2 TYP=2
	8800	PALE	48	C	0409.0	0416.0	12.0	87.0			QL=4 ST=2 TYP=8
	245	LEAR	8	S	0410.0	0410.0	U	97.0			QL=4 ST=2 TYP=3
	410	PALE	4	S/F	0410.0	0411.0	4.0	230.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0410.0	0410.0	2.0	110.0			QL=4 ST=2 TYP=3
	4995	LEAR	8	S	0411.0	0412.0	1.0	30.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0411.0	0412.0	1.0	28.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	0411.0	0412.0	2.0	34.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	0411.0	0412.0	2.0	110.0			QL=4 ST=2 TYP=3
	2695	PALE	8	S	0412.0	0412.0	U	22.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	0420.0	0426.0	8.0	53.0			QL=4 ST=2 TYP=3
	245	SVTO	4	S/F	0423.0	0425.0	7.0	83.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0424.0	0424.0	U	32.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	0427.0	0427.0	1.0	40.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0528.0	0528.0	U	53.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0627.0	0627.0	U	60.0			QL=4 ST=2 TYP=3
	2840	BEIJ	45	C	0628.0	0636.3	27.0	9.9	7.1		
	245	SVTO	4	S/F	0634.0	0636.0	4.0	82.0			QL=2 ST=2 TYP=3
	8800	LEAR	4	S/F	0635.0	0636.0	4.0	58.0			QL=4 ST=2 TYP=3
	15400	LEAR	4	S/F	0635.0	0636.0	4.0	60.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	0635.0	0636.0	4.0	68.0			QL=2 ST=2 TYP=3
	15400	SVTO	4	S/F	0635.0	0636.0	4.0	60.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	0635.0	0636.0	2.0	34.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0636.0	0636.0	U	60.0			QL=4 ST=2 TYP=3
	410	SVTO	4	S/F	0805.0	0805.0	4.0	29.0			QL=4 ST=2 TYP=3
	245	SVTO	4	S/F	0805.0	0809.0	4.0	82.0			QL=4 ST=2 TYP=3
	2840	BEIJ	47	GB	0816.0	0820.0	26.0	689.0	500.0		
	15400	SVTO	49	GB	0817.0	0821.0	16.0	4100.0			QL=4 ST=2 TYP=6
	4995	SVTO	49	GB	0817.0	0820.0	12.0	970.0			QL=4 ST=2 TYP=6
	8800	SVTO	49	GB	0817.0	0820.0	15.0	700.0			QL=2 ST=2 TYP=6
	500	HIRA	46	C	0817.5	0818.9	19.0	100.0	10.0		O
	2800	HIRA	46	C	0817.7	0820.2	17.0	540.0			O
	1415	LEAR	48	C	0818.0	0821.0	10.0	280.0			QL=4 ST=2 TYP=8
	2695	SVTO	49	GB	0818.0	0820.0	10.0	680.0			QL=4 ST=2 TYP=6
	1415	SVTO	4	S/F	0818.0	0821.0	10.0	300.0			QL=4 ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

AUGUST 1998

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	610	LEAR	48	C	0819.0	0820.0	941.0	78.0			QL=4 ST=1 TYP=8
	610	LEAR	4	S/F	0819.0	0820.0	941.0	78.0			QL=4 ST=1 TYP=3
	127	TORN	47	GB	0819.0	0822.7	10.0U	1000.0	170.0		
	245	LEAR	48	C	0820.0	0821.0	3.0	9200.0			QL=4 ST=2 TYP=8
	410	SVTO	49	GB	0820.0	0820.0	7.0	2300.0			QL=4 ST=2 TYP=6
	610	SVTO	8	S	0820.0	0820.0	1.0	74.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	0820.0	0821.0	8.0	13000.0			QL=4 ST=2 TYP=6
	610	SVTO	4	S/F	0820.0	0820.0	961.0	74.0			QL=4 ST=2 TYP=3
	410	SVTO	4	S/F	1055.0	1102.0U	11.0	57.0			QL=4 ST=2 TYP=3
	245	SVTO	20	GRF	1055.0	1111.0U	17.0	76.0			QL=4 ST=2 TYP=2
	610	SVTO	4	S/F	1101.0	1105.0	5.0	130.0			QL=4 ST=2 TYP=3
	2800	PENT	41	F	1726.0	1733.0	84.0	15.0			
	245	SGMR	8	S	1745.0	1746.0	1.0	59.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	2150.0	2156.0	8.0	60.0			QL=2 ST=2 TYP=3
	15400	SGMR	49	GB	2213.0	2216.0	14.0	4800.0			QL=4 ST=2 TYP=6
	15400	SGMR	49	GB	2213.0	2216.0	14.0	4800.0			QL=4 ST=2 TYP=6
	8800	SGMR	49	GB	2213.0	2216.0	35.0	2000.0			QL=4 ST=2 TYP=6
	8800	SGMR	49	GB	2213.0	2216.0	35.0	2000.0			QL=4 ST=2 TYP=6
	15400	SGMR	49	GB	2213.0	0000.0	107.0	4800.0			QL=4 ST=2 TYP=6
	15400	PALE	48	C	2213.0	2216.0	127.0	6900.0			QL=2 ST=2 TYP=8
	8800	PALE	48	C	2213.0	2216.0	158.0	2800.0			QL=2 ST=2 TYP=8
	2800	HIRA	47	GB	2213.7	2216.2	220.0	2100.0			O
	2695	SGMR	49	GB	2214.0	2216.0	39.0	2400.0			QL=4 ST=2 TYP=6
	4995	SGMR	49	GB	2214.0	2215.0	36.0	2900.0			QL=4 ST=2 TYP=6
	4995	SGMR	49	GB	2214.0	2215.0	36.0	2900.0			QL=4 ST=2 TYP=6
	4995	SGMR	49	GB	2214.0	2215.0	36.0	2900.0			QL=4 ST=2 TYP=6
	2695	SGMR	49	GB	2214.0	2216.0	39.0	2400.0			QL=4 ST=2 TYP=6
	1415	SGMR	49	GB	2214.0	2216.0	44.0	980.0			QL=4 ST=2 TYP=6
	1415	SGMR	49	GB	2214.0	2216.0	44.0	980.0			QL=4 ST=2 TYP=6
	4995	PALE	49	GB	2214.0	2215.0	157.0	3400.0			QL=2 ST=2 TYP=6
	1415	PALE	49	GB	2214.0	2216.0	157.0	1000.0			QL=2 ST=2 TYP=6
	2695	PALE	49	GB	2214.0	2216.0	157.0	2400.0			QL=2 ST=2 TYP=6
	245	PALE	48	C	2215.0	2216.0	7.0	5300.0			QL=2 ST=2 TYP=8
	610	SGMR	49	GB	2215.0	2216.0	11.0				QL=4 ST=2 TYP=6
	245	SGMR	49	GB	2215.0	2216.0	24.0	5100.0			QL=4 ST=2 TYP=6
	410	PALE	49	GB	2215.0	2216.0	74.0	39000.0			QL=2 ST=2 TYP=6
	610	PALE	49	GB	2215.0	2216.0	99.0				QL=2 ST=2 TYP=6
	410	SGMR	49	GB	2216.0	2216.0	18.0	31000.0			QL=4 ST=2 TYP=6
	410	LEAR	4	S/F	2302.0E	2315.0U	13.0D	24.0			QL=4 ST=2 TYP=3
	15400	LEAR	4	S/F	2302.0E	2312.0U	94.0D	210.0			QL=4 ST=2 TYP=3
	8800	LEAR	48	C	2302.0E	2313.0U	103.0D	350.0			QL=4 ST=2 TYP=8
	1415	LEAR	48	C	2302.0E	2317.0U	109.0D	530.0			QL=4 ST=2 TYP=8
	4995	LEAR	48	C	2302.0E	2313.0U	109.0D	710.0			QL=4 ST=2 TYP=8
	2695	LEAR	48	C	2302.0E	2313.0U	109.0D	990.0			QL=4 ST=2 TYP=8
	610	LEAR	4	S/F	2302.0E	2333.0U	109.0D	82.0			QL=4 ST=2 TYP=3
19	245	SVTO	43	NS	1126.0	1136.0	28.0	58.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	1126.0	1136.0	28.0	58.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1233.0	1409.0	111.0	470.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	1357.0	1400.0	6.0	97.0			QL=4 ST=2 TYP=1
	235	CUBA	44	NS	1400.0E		470.0D		9.0		
	280	CUBA	44	NS	1400.0E		470.0D		18.0		
	245	SVTO	43	NS	1652.0	1652.0	28.0	88.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1736.0	2220.0	312.0	97.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	1757.0	1818.0	118.0	95.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	2119.0	0023.0	261.0	190.0			QL=4 ST=2 TYP=1
	2840	BEIJ	1	S	0845.0	0846.0	2.0	4.0	3.0		
	245	LEAR	8	S	0939.0	0940.0	2.0	72.0			QL=4 ST=2 TYP=3
	245	SVTO	48	C	0940.0	0945.0	13.0	140.0			QL=4 ST=3 TYP=8
	245	LEAR	8	S	0945.0	0945.0	1.0	120.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0948.0	0948.0	1.0	54.0			QL=4 ST=2 TYP=3
	4995	SVTO	4	S/F	1006.0	1009.0	9.0	130.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	1007.0	1010.0	7.0	120.0			QL=2 ST=2 TYP=3
	15400	SVTO	4	S/F	1008.0	1011.0	4.0	51.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1200.0	1200.0	U	73.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1217.0	1217.0	U	58.0			QL=4 ST=2 TYP=3
	15400	SGMR	48	C	1224.0	1238.0	27.0	180.0			QL=4 ST=3 TYP=8
	8800	SGMR	48	C	1226.0	1238.0	25.0	170.0			QL=4 ST=3 TYP=8
	410	SGMR	4	S/F	1236.0	1237.0	15.0	140.0			QL=4 ST=3 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

AUGUST 1998

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
19	2695	SGMR	4	S/F	1236.0	1238.0	15.0	35.0			QL=4 ST=3 TYP=3
	4995	SGMR	4	S/F	1236.0	1239.0	15.0	100.0			QL=4 ST=3 TYP=3
	245	SGMR	4	S/F	1238.0	1238.0	13.0	97.0			QL=4 ST=3 TYP=3
	245	SGMR	8	S	1326.0	1326.0	1.0	130.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1327.0	1327.0	1.0	70.0			QL=4 ST=2 TYP=3
	6700	CUBA	1	S	1327.0	1327.9	2.3	7.0	2.0		33L
	6700	CUBA	49	GB	1405.0	1419.5		200.0			10L
	6700	CUBA	49	GB	1405.0	1410.8	22.0	1611.0			ML
	2800	PENT	4	S/F	1406.0	1409.0	24.0	105.0			
	8800	SVTO	49	GB	1406.0	1412.0	43.0	1000.0			QL=2 ST=2 TYP=6
	15400	SGMR	49	GB	1407.0	1412.0	17.0	1100.0			QL=4 ST=2 TYP=6
	8800	SGMR	49	GB	1407.0	1412.0	14.0	850.0			QL=4 ST=2 TYP=6
	4995	SVTO	48	C	1407.0	1413.0	18.0	510.0			QL=4 ST=2 TYP=8
	15400	SVTO	49	GB	1407.0	1412.0	42.0	1200.0			QL=4 ST=2 TYP=6
	4995	SGMR	20	GRF	1408.0	1413.0	13.0	470.0			QL=4 ST=2 TYP=2
	2695	SGMR	4	S/F	1409.0	1410.0	6.0	110.0			QL=4 ST=2 TYP=3
	2695	SVTO	4	S/F	1409.0	1410.0	6.0	120.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	1409.0	1409.0	1.0	530.0			QL=4 ST=2 TYP=6
	1415	SGMR	8	S	1410.0	1410.0	1.0	35.0			QL=4 ST=2 TYP=3
	1415	SVTO	4	S/F	1410.0	1410.0	3.0	42.0			QL=4 ST=2 TYP=3
	6700	CUBA	29	PBI	1427.0		44.0	16.0	8.0		15L
	245	SGMR	8	S	1639.0	1639.0	1.0	59.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1639.0	1639.0	1.0	55.0			QL=4 ST=2 TYP=3
	6700	CUBA	21	GRF	1652.0	1657.0	21.0	7.0	3.0		00L
	6700	CUBA	1	S	1653.2	1654.0	1.0	8.0	4.0		00L
	6700	CUBA	1	S	1833.8	1834.2	1.0	7.0	3.0		00L
	6700	CUBA	1	S	1840.6	1841.2	2.6	16.0	8.0		5L
	6700	CUBA	23	GRF	1925.0	1948.0	46.0	11.0	5.0		28L
	6700	CUBA	21	GRF	2033.0	2043.0	18.0	13.0	6.0		00L RAIN
	2800	PENT	1	S	2035.0	2037.0	25.0	9.0			
	6700	CUBA	1	S	2035.9	2037.4	5.1	21.0	10.0		00L RAIN
	6700	CUBA	28	PRE	2135.0	2139.0	7.4	35.0	17.0		00L
	2800	PENT	41	F	2138.0	2141.0	53.0	1695.0			
	4995	SGMR	49	GB	2139.0	2143.0	10.0	2600.0			QL=4 ST=2 TYP=6
	8800	SGMR	49	GB	2139.0	2143.0	10.0	2000.0			QL=4 ST=2 TYP=6
	15400	SGMR	49	GB	2139.0	2143.0	22.0	5800.0			QL=4 ST=2 TYP=6
	6700	CUBA	47	GB	2139.4	2156.0	17.0	56.0			6L
	6700	CUBA	47	GB	2139.4	2143.4	27.0D	4469.0			10L 2206 OFF
	1415	SGMR	49	GB	2140.0	2143.0	9.0	740.0			QL=4 ST=2 TYP=6
	2695	SGMR	49	GB	2140.0	2143.0	9.0	1300.0			QL=4 ST=2 TYP=6
	2800	HIRA	47	GB	2140.0	2143.5	52.0	1100.0			0
	280	CUBA	48	C	2141.0	2143.5	6.0	4646.0D			
	235	CUBA	48	C	2141.0	2143.5	6.0	3334.0D			
	610	SGMR	49	GB	2142.0	2143.0	8.0	740.0			QL=4 ST=2 TYP=6
	410	SGMR	49	GB	2142.0	2144.0	15.0	5100.0			QL=4 ST=2 TYP=6
	245	SGMR	49	GB	2143.0	2146.0	4.0	18000.0			QL=4 ST=2 TYP=6
	2840	BEIJ	47	GB	2247.0	2321.0	228.0	856.0	616.0		
20	2840	BEIJ	45	C	0020.0	0029.2	22.0	56.3	39.7		
	2695	LEAR	4	S/F	0026.0	0029.0	5.0	54.0			QL=4 ST=2 TYP=3
	8800	LEAR	4	S/F	0026.0	0029.0	5.0	32.0			QL=4 ST=2 TYP=3
	4995	LEAR	4	S/F	0026.0	0029.0	5.0	76.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0026.0	0027.0	1.0	21.0			QL=4 ST=2 TYP=3
	1415	LEAR	4	S/F	0026.0	0031.0	7.0	26.0			QL=4 ST=2 TYP=3
	2695	PALE	4	S/F	0027.0	0029.0	6.0	69.0			QL=4 ST=2 TYP=3
	2800	PENT	40	F	0027.0	0040.0	19.0	61.0			
	15400	LEAR	4	S/F	0028.0	0029.0	3.0	26.0			QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	0028.0	0029.0	3.0	50.0			QL=4 ST=2 TYP=3
	15400	PALE	4	S/F	0028.0	0029.0	9.0	43.0			QL=4 ST=2 TYP=3
	1415	PALE	4	S/F	0028.0	0031.0	4.0	34.0			QL=4 ST=2 TYP=3
	4995	PALE	4	S/F	0028.0	0029.0	4.0	96.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1035.0	1036.0	1.0	51.0			QL=4 ST=3 TYP=3
	245	SVTO	8	S	1036.0	1036.0	1.0	60.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1126.0	1127.0	2.0	51.0			QL=4 ST=3 TYP=3
	15400	SGMR	4	S/F	1126.0	1126.0	3.0	240.0			QL=4 ST=3 TYP=3
	8800	SVTO	8	S	1126.0	1127.0	2.0	51.0			QL=2 ST=2 TYP=3
	15400	SVTO	8	S	1126.0	1126.0	2.0	190.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1145.0	1146.0	2.0	61.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1145.0	1146.0	1.0	62.0			QL=4 ST=2 TYP=3

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

AUGUST 1998

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	127	TORN	45	C	1232.6	1235.4	4.5	170.0	30.0		
	15400	SGMR	8	S	1233.0	1234.0	2.0	42.0			QL=4 ST=2 TYP=3
	8800	SGMR	49	GB	1310.0	1314.0	5.0	640.0			QL=4 ST=2 TYP=6
	245	SVTO	49	GB	1401.0	1403.0	4.0	700.0			QL=4 ST=2 TYP=6
	610	SGMR	8	S	1402.0	1403.0	1.0	10.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1402.0	1403.0	2.0	22.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1402.0	1403.0	2.0	720.0			QL=4 ST=2 TYP=6
	610	SVTO	8	S	1402.0	1403.0	1.0	6.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	1402.0	1403.0	2.0	50.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1530.0	1530.0	1.0	240.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1530.0	1531.0	1.0	14.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1530.0	1530.0	2.0	290.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1537.0	1539.0	2.0	410.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1538.0	1539.0	1.0	420.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1607.0	1608.0	1.0	32.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1654.0	1655.0	2.0	160.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1655.0	1655.0	U	150.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1903.0	1903.0	U	100.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1903.0	1903.0	U	110.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2323.0	2323.0	U	110.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	2323.0	2323.0	U	9.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2323.0	2323.0	U	130.0			QL=4 ST=2 TYP=3
21	245	SGMR	43	NS	1216.0	1218.0	704.0	65.0			QL=4 ST=1 TYP=1
	280	CUBA	44	NS	1300.0E		530.0D		15.0		
	235	CUBA	44	NS	1300.0E		530.0D		8.0		
	410	PALE	4	S/F	0000.0	0006.0	6.0	55.0			QL=2 ST=2 TYP=3
	4995	LEAR	48	C	0000.0	0008.0	11.0	310.0			QL=4 ST=2 TYP=8
	2695	LEAR	48	C	0000.0	0002.0	10.0	130.0			QL=4 ST=2 TYP=8
	15400	PALE	49	GB	0000.0	0003.0	13.0	1400.0			QL=2 ST=2 TYP=6
	8800	PALE	49	GB	0000.0	0003.0	11.0	690.0			QL=2 ST=2 TYP=6
	4995	PALE	4	S/F	0000.0	0008.0	10.0	290.0			QL=2 ST=2 TYP=3
	1415	LEAR	48	C	0001.0	0003.0	3.0	75.0			QL=4 ST=2 TYP=8
	2695	PALE	4	S/F	0001.0	0003.0	8.0	150.0			QL=2 ST=2 TYP=3
	245	PALE	49	GB	0001.0	0003.0	8.0	1700.0			QL=2 ST=2 TYP=6
	1415	PALE	8	S	0001.0	0003.0	2.0	79.0			QL=2 ST=2 TYP=3
	245	LEAR	48	C	0003.0	0003.0	1.0	1600.0			QL=4 ST=2 TYP=8
	410	LEAR	46	C	0005.0	0006.0	1.0	44.0			QL=4 ST=2 TYP=8
	2840	BEIJ	2	S/F	0657.0	0659.0	6.0	7.8	5.6		
	245	SGMR	4	S/F	1217.0	1218.0	3.0	62.0			QL=4 ST=2 TYP=3
	6700	CUBA	20	GRF	1523.0	1616.0	65.0	5.0	2.0		00L
	6700	CUBA	21	GRF	1942.0	2118.0	123.0D	23.0			00L 2145 RAIN
	2800	PENT	41	F	2032.0	2109.0	108.0	17.0			
	6700	CUBA	3	S	2033.5	2035.6	7.6	14.0	7.0		42L
	1415	PALE	8	S	2035.0	2035.0	1.0	81.0			QL=4 ST=2 TYP=3
	1415	SGMR	8	S	2035.0	2035.0	1.0	93.0			QL=4 ST=2 TYP=3
	6700	CUBA	46	C	2105.0	2111.0	12.8	46.0	16.0		9L
	2840	BEIJ	45	C	2356.0	0002.0	36.0	155.5	119.0		
	2800	PENT	45	C	2358.0	0000.0	62.0	155.0			
	15400	LEAR	48	C	2359.0	0003.0	18.0	1600.0			QL=4 ST=2 TYP=8
	8800	LEAR	48	C	2359.0	0003.0	14.0	780.0			QL=4 ST=2 TYP=8
22	410	PALE	43	NS	0026.0	0032.0	9.0	73.0			QL=4 ST=2 TYP=1
	610	PALE	43	NS	0026.0	0035.0	9.0	64.0			QL=4 ST=2 TYP=1
	610	LEAR	43	NS	0026.0	0035.0	15.0	55.0			QL=4 ST=3 TYP=1
	410	LEAR	43	NS	0026.0	0032.0	15.0	64.0			QL=4 ST=2 TYP=1
	245	LEAR	43	NS	0027.0	0039.0	56.0	240.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	0027.0	0227.0	120.0	220.0			QL=4 ST=2 TYP=1
	127	TORN	44	NS	0620.0E		520.0D		4.0		V=1
	2800	HIRA	46	C	0000.0	0002.5	12.0	110.0	30.0		0
	410	LEAR	8	S	0022.0	0022.0	U	29.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0023.0	0023.0	1.0	89.0			QL=4 ST=2 TYP=3
	2840	BEIJ	45	C	0210.0	0220.0	18.0	4.2	3.2		
	245	SGMR	8	S	1305.0	1305.0	1.0	330.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1305.0	1305.0	1.0	440.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1414.0	1414.0	U	110.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1414.0	1414.0	U	100.0			QL=4 ST=2 TYP=3
	2800	PENT	4	S/F	1504.0	1505.0	16.0	19.0			
	8800	SGMR	8	S	1505.0	1505.0	1.0	140.0			QL=4 ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

AUGUST 1998

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
22	4995	SGMR	8	S	1505.0	1505.0	1.0	60.0			QL=4 ST=2 TYP=3
	1415	SGMR	8	S	1505.0	1506.0	2.0	31.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1505.0	1505.0	1.0	1100.0			QL=4 ST=2 TYP=6
	15400	SGMR	8	S	1505.0	1505.0	1.0	250.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	1505.0	1505.0	1.0	65.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	1505.0	1505.0	1.0	160.0			QL=2 ST=2 TYP=3
	15400	SVTO	8	S	1505.0	1505.0	1.0	290.0			QL=4 ST=2 TYP=3
	2695	SVTO	8	S	1505.0	1506.0	1.0	25.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	1505.0	1505.0	1.0	1300.0			QL=4 ST=2 TYP=6
	1415	SVTO	8	S	1505.0	1506.0	1.0	31.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1506.0	1506.0	1.0	17.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1506.0	1506.0	U	6.0			QL=4 ST=2 TYP=3
	2695	SGMR	8	S	1506.0	1506.0	U	17.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1538.0	1538.0	U	90.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1538.0	1538.0	U	92.0			QL=4 ST=3 TYP=3
	2800	PENT	29	PBI	1925.0	1927.0	6.0D	53.0			
	2695	SGMR	8	S	1927.0	1928.0	1.0	50.0			QL=4 ST=3 TYP=3
	4995	SGMR	8	S	1927.0	1928.0	1.0	52.0			QL=4 ST=3 TYP=3
	245	PALE	8	S	2024.0	2024.0	U	69.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2024.0	2024.0	U	59.0			QL=4 ST=3 TYP=3
23	127	TORN	43	NS	0937.0	1214.4	310.0	130.0	7.0		V=2
	245	SVTO	43	NS	0953.0	0953.0	6.0	78.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	1244.0	1426.0	102.0	76.0			QL=4 ST=3 TYP=1
	245	SGMR	43	NS	1638.0	1638.0	63.0	69.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	1734.0	1741.0	46.0	56.0			QL=4 ST=2 TYP=1
	2840	BEIJ	2	S/F	0606.0	0632.7	44.0	12.8	10.1		
	2840	BEIJ	4	S/F	0927.0	0931.0	14.0	415.0	327.0		
	8800	LEAR	49	GB	0928.0	0931.0	11.0	1000.0			QL=4 ST=2 TYP=6
	4995	SVTO	49	GB	0928.0	0931.0	11.0	970.0			QL=4 ST=2 TYP=6
	8800	SVTO	49	GB	0928.0	0931.0	872.0	2000.0			QL=2 ST=1 TYP=6
	15400	LEAR	49	GB	0929.0	0931.0	8.0	2000.0			QL=4 ST=2 TYP=6
	4995	LEAR	49	GB	0929.0	0931.0	9.0	540.0			QL=4 ST=2 TYP=6
	2695	LEAR	49	GB	0929.0	0931.0	9.0	530.0			QL=4 ST=2 TYP=6
	15400	SVTO	49	GB	0929.0	0931.0	7.0	2000.0			QL=4 ST=2 TYP=6
	2695	SVTO	4	S/F	0929.0	0931.0	9.0	500.0			QL=4 ST=2 TYP=3
	1415	LEAR	4	S/F	0930.0	0932.0	5.0	180.0			QL=4 ST=2 TYP=3
	1415	SVTO	4	S/F	0930.0	0932.0	5.0	200.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0931.0	0932.0	1.0	47.0			QL=4 ST=2 TYP=3
	610	LEAR	4	S/F	0933.0	0936.0	3.0	140.0			QL=4 ST=2 TYP=3
	610	SVTO	4	S/F	0933.0	0936.0	3.0	160.0			QL=4 ST=2 TYP=3
	610	LEAR	4	S/F	0938.0	0940.0	3.0	190.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	0959.0	0959.0	1437.0	62.0			QL=2 ST=3 TYP=3
	245	SVTO	48	C	1148.0	1149.0	7.0	200.0			QL=4 ST=2 TYP=8
	245	SGMR	48	C	1148.0	1149.0	15.0	160.0			QL=4 ST=3 TYP=8
	245	SGMR	8	S	1227.0	1227.0	U	54.0			QL=4 ST=3 TYP=3
	245	SGMR	8	S	1243.0	1244.0	1.0	50.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1310.0	1310.0	U	50.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	1338.0	1341.0	5.0	51.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1426.0	1426.0	U	81.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1606.0	1606.0	U	63.0			QL=4 ST=2 TYP=3
24	235	CUBA	44	NS	1300.0E		148.0D		14.0		
	280	CUBA	44	NS	1300.0E		148.0D		22.0		
	8800	SGMR	8	S	1049.0	1050.0	2.0	76.0			QL=2 ST=2 TYP=3
	15400	SGMR	8	S	1050.0	1050.0	1.0	100.0			QL=2 ST=2 TYP=3
	4995	SVTO	8	S	1050.0	1050.0	1.0	28.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	1050.0	1050.0	1.0	170.0			QL=2 ST=2 TYP=3
	15400	SVTO	8	S	1050.0	1050.0	U	120.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1341.0	1341.0	U	55.0			QL=4 ST=2 TYP=3
	6700	CUBA	2	S/F	1522.9	1523.1	3.9	12.0	6.0		13L
	2800	PENT	40	F	1523.0	1524.0	8.0	474.0			
	245	PALE	8	S	2114.0	2116.0	2.0	53.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2115.0	2116.0	1.0	52.0			QL=4 ST=2 TYP=3
	2800	PENT	45	C	2150.0	2205.0	42.0D	2720.0			
	245	SGMR	8	S	2151.0	2151.0	U	60.0			QL=4 ST=2 TYP=3
	2800	HIRA	47	GB	2155.7	2205.5	180.0	1800.0			O
	410	SGMR	8	S	2156.0	2156.0	U	48.0			QL=4 ST=2 TYP=3
	500	HIRA	46	C	2156.5	2202.5	50.0	160.0	35.0		WL

SOLAR RADIO EMISSION
Outstanding Occurrences

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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
24	1415	PALE	48	C	2157.0	2210.0	39.0	930.0			QL=4 ST=2 TYP=8
	2695	SGMR	49	GB	2157.0	2205.0	34.0	2200.0			QL=4 ST=2 TYP=6
	1415	SGMR	48	C	2157.0	2210.0	34.0	940.0			QL=4 ST=2 TYP=8
	2695	PALE	48	C	2157.0	2205.0	65.0	2100.0			QL=4 ST=2 TYP=8
	410	PALE	4	S/F	2158.0	2203.0	38.0	500.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	2158.0	2203.0	33.0	780.0			QL=4 ST=2 TYP=6
	4995	PALE	49	GB	2158.0	2203.0	64.0	3200.0			QL=4 ST=2 TYP=6
	245	PALE	49	GB	2158.0	2203.0	64.0	830.0			QL=4 ST=2 TYP=6
	610	PALE	48	C	2159.0	2203.0	36.0	290.0			QL=4 ST=2 TYP=8
	610	SGMR	48	C	2159.0	2203.0	32.0	220.0			QL=4 ST=2 TYP=8
	4995	SGMR	49	GB	2159.0	2203.0	32.0	4900.0			QL=4 ST=2 TYP=6
	8800	SGMR	49	GB	2200.0	2203.0	31.0	1900.0			QL=4 ST=2 TYP=6
	15400	PALE	49	GB	2200.0	2203.0	62.0	1200.0			QL=4 ST=2 TYP=6
	8800	PALE	49	GB	2200.0	2203.0	62.0	2100.0			QL=4 ST=2 TYP=6
	15400	SGMR	49	GB	2201.0	2203.0	26.0	910.0			QL=4 ST=2 TYP=6
	2695	LEAR	4	S/F	2255.0	2258.0	65.0	37.0			QL=4 ST=1 TYP=3
	4995	LEAR	4	S/F	2255.0	2256.0	65.0	98.0			QL=4 ST=1 TYP=3
	8800	LEAR	48	C	2255.0	2259.0	65.0	64.0			QL=4 ST=1 TYP=8
	8800	LEAR	20	GRF	2257.0E	2303.0U	9.0D	67.0			QL=4 ST=2 TYP=2
	2695	LEAR	20	GRF	2257.0E	2309.0U	23.0D	42.0			QL=4 ST=2 TYP=2
	4995	LEAR	48	C	2257.0E	2259.0U	23.0D	110.0			QL=4 ST=2 TYP=8
25	280	CUBA	44	NS	1325.0E		405.0D		14.0		
	235	CUBA	44	NS	1325.0E		405.0D		7.0		
	127	TORN	4	S/F	1012.0	1013.1	1.9	40.0	20.0		
26	280	CUBA	44	NS	1300.0E		200.0D		15.0		
	235	CUBA	44	NS	1300.0E		200.0D		7.0		
	245	LEAR	4	S/F	0327.0	0327.0	753.0	91.0			QL=4 ST=1 TYP=3
	245	SVTO	8	S	0557.0	0557.0	1.0	490.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0557.0	0557.0	1.0	54.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	1116.0	1116.0	1.0	510.0			QL=4 ST=2 TYP=6
	410	SVTO	8	S	1116.0	1116.0	1.0	45.0			QL=4 ST=2 TYP=3
	2800	PENT	20	C	2147.0	2156.0	44.0D	9.0			
27	245	LEAR	4	S/F	0327.0	0327.0	753.0	91.0			QL=4 ST=1 TYP=3
28	410	LEAR	8	S	0511.0	0511.0	U	46.0			QL=4 ST=2 TYP=3
	410	LEAR	4	S/F	0523.0	0525.0	4.0	28.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0719.0	0719.0	U	300.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0719.0	0719.0	U	380.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0829.0	0830.0	1.0	69.0			QL=4 ST=2 TYP=3
29	2840	BEIJ	1	S	0338.0	0344.0	15.0	4.1	2.8		
	2840	BEIJ	1	S	0456.0	0457.0	23.0	28.6	19.7		
	245	LEAR	8	S	0848.0	0848.0	1.0	110.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0848.0	0848.0	1.0	36.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1208.0	1208.0	U	120.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1208.0	1208.0	1.0	150.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1208.0	1208.0	1.0	150.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1208.0	1208.0	U	130.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1413.0	1413.0	U	110.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1413.0	1413.0	U	110.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1432.0	1432.0	U	160.0			QL=4 ST=2 TYP=3
	2800	PENT	1	S	1529.0	1530.0	3.0	15.0			
	410	SGMR	8	S	1530.0	1531.0	2.0	140.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	1530.0	1531.0	2.0	110.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	1530.0	1531.0	2.0	110.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1530.0	1531.0	2.0	140.0			QL=4 ST=2 TYP=3
	1415	SGMR	8	S	1531.0	1531.0	1.0	93.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1531.0	1531.0	1.0	100.0			QL=4 ST=2 TYP=3
	2695	SVTO	8	S	1531.0	1531.0	U	26.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1713.0	1715.0	2.0	420.0			QL=4 ST=2 TYP=3
	2800	PENT	29	PBI	1740.0	1832.0	111.0	88.0			
	245	PALE	4	S/F	1831.0	1832.0	3.0	400.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	1831.0	1832.0	4.0	390.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	1832.0	1833.0	2.0	150.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1832.0	1833.0	2.0	180.0			QL=4 ST=2 TYP=3
	410	SGMR	4	S/F	1832.0	1833.0	3.0	160.0			QL=4 ST=2 TYP=3

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

AUGUST 1998

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
29	1415	SGMR	4	S/F	1832.0	1833.0	3.0	150.0			QL=4 ST=2 TYP=3
	2695	PALE	8	S	1833.0	1833.0	1.0	68.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	1833.0	1833.0	1.0	330.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	1833.0	1833.0	1.0	83.0			QL=4 ST=2 TYP=3
	2695	SGMR	8	S	1833.0	1833.0	2.0	76.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1833.0	1833.0	2.0	89.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1833.0	1833.0	2.0	41.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1833.0	1833.0	2.0	320.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	2150.0	2151.0	1.0	1000.0			QL=4 ST=2 TYP=6
	410	SGMR	49	GB	2150.0	2150.0	1.0	790.0			QL=4 ST=2 TYP=6
30	245	LEAR	43	NS	0416.0	0726.0	340.0	250.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	0456.0	0851.0	403.0	94.0			QL=4 ST=3 TYP=1
	245	SGMR	43	NS	1259.0	1321.0	34.0	93.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	1313.0	1333.0	20.0	99.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1852.0	1917.0	26.0	77.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	1852.0	1852.0	308.0	63.0			QL=4 ST=3 TYP=1
	410	LEAR	8	S	0031.0	0032.0	1.0	34.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0031.0	0032.0	1.0	11.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0031.0	0032.0	1.0	130.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0050.0	0051.0	1.0	720.0			QL=4 ST=2 TYP=6
	410	LEAR	8	S	0050.0	0051.0	1.0	83.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0050.0	0051.0	1.0	140.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	0050.0	0051.0	1.0	980.0			QL=4 ST=2 TYP=6
	410	LEAR	8	S	0126.0	0126.0	U	190.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0126.0	0126.0	U	330.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0135.0	0135.0	U	71.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0135.0	0135.0	U	56.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0257.0	0258.0	1.0	140.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0258.0	0258.0	U	160.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0323.0	0324.0	1.0	94.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0324.0	0324.0	U	120.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0459.0	0459.0	1.0	66.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0459.0	0459.0	1.0	71.0			QL=2 ST=2 TYP=3
	1415	SVTO	4	S/F	0532.0	0533.0	1108.0	54.0			QL=4 ST=1 TYP=3
	245	LEAR	49	GB	0637.0	0637.0	1.0	1200.0			QL=4 ST=2 TYP=6
	410	LEAR	8	S	0637.0	0637.0	1.0	45.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0637.0	0637.0	1.0	82.0			QL=2 ST=2 TYP=3
	245	SVTO	49	GB	0637.0	0637.0	1.0	1800.0			QL=2 ST=2 TYP=6
	610	LEAR	8	S	0645.0	0645.0	1.0	120.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0645.0	0645.0	1.0	230.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0645.0	0645.0	1.0	660.0			QL=4 ST=2 TYP=6
	245	SVTO	49	GB	0645.0	0645.0	1.0	960.0			QL=2 ST=2 TYP=6
	610	SVTO	8	S	0645.0	0645.0	1.0	130.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	0645.0	0645.0	1.0	260.0			QL=2 ST=2 TYP=3
	245	SVTO	48	C	0647.0	0649.0	3.0	270.0			QL=2 ST=2 TYP=8
	410	LEAR	8	S	0648.0	0649.0	2.0	190.0			QL=4 ST=2 TYP=3
	410	SVTO	48	C	0648.0	0648.0	2.0	380.0			QL=2 ST=2 TYP=8
	610	LEAR	8	S	0649.0	0649.0	1.0	66.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0649.0	0649.0	1.0	220.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	0649.0	0649.0	1.0	67.0			QL=2 ST=2 TYP=3
	245	LEAR	48	C	0705.0	0713.0	13.0	560.0			QL=4 ST=2 TYP=8
	245	SVTO	48	C	0705.0	0713.0	12.0	770.0			QL=2 ST=2 TYP=8
	245	SGMR	8	S	1225.0	1225.0	U	61.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1247.0	1248.0	2.0	63.0			QL=4 ST=2 TYP=3
	410	SGMR	4	S/F	1251.0	1251.0	3.0	230.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1251.0	1251.0	2.0	270.0			QL=2 ST=2 TYP=3
	127	TORN	4	S/F	1252.3	1253.6	2.4	50.0	10.0		
	610	SGMR	8	S	1253.0	1253.0	1.0	120.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	1253.0	1253.0	1.0	51.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1253.0	1253.0	U	62.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1447.0	1449.0	2.0	52.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1637.0	1637.0	1.0	210.0			QL=4 ST=2 TYP=3
	610	PALE	49	GB	1802.0	1803.0	3.0	570.0			QL=4 ST=2 TYP=6
	1415	PALE	4	S/F	1802.0	1803.0	3.0	53.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	1802.0	1803.0	4.0	1800.0			QL=4 ST=2 TYP=6
	410	PALE	49	GB	1802.0	1802.0	3.0	1800.0			QL=4 ST=2 TYP=6
	15400	SGMR	4	S/F	1802.0	1803.0	6.0	190.0			QL=4 ST=2 TYP=3
	8800	SGMR	4	S/F	1802.0	1803.0	6.0	140.0			QL=4 ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

AUGUST 1998

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
30	245	SGMR	49	GB	1802.0	1803.0	6.0	1700.0			QL=4 ST=2 TYP=6
	2695	SGMR	4	S/F	1802.0	1803.0	6.0	77.0			QL=4 ST=2 TYP=3
	610	SGMR	4	S/F	1802.0	1803.0	3.0	440.0			QL=4 ST=2 TYP=3
	1415	SGMR	4	S/F	1802.0	1803.0	4.0	51.0			QL=4 ST=2 TYP=3
	410	SGMR	49	GB	1802.0	1802.0	3.0	1500.0			QL=4 ST=2 TYP=6
	8800	PALE	8	S	1803.0	1803.0	1.0	150.0			QL=4 ST=2 TYP=3
	15400	PALE	4	S/F	1803.0	1803.0	3.0	180.0			QL=4 ST=2 TYP=3
	2695	PALE	4	S/F	1803.0	1803.0	3.0	71.0			QL=4 ST=2 TYP=3
	4995	PALE	4	S/F	1803.0	1803.0	3.0	140.0			QL=4 ST=2 TYP=3
	4995	SGMR	4	S/F	1803.0	1803.0	5.0	120.0			QL=4 ST=2 TYP=3
	245	PALE	48	C	1824.0	1828.0	11.0	73.0			QL=4 ST=2 TYP=8
	610	PALE	49	GB	1825.0	1827.0	21.0	600.0			QL=4 ST=2 TYP=6
	410	PALE	48	C	1826.0	1832.0	10.0	180.0			QL=4 ST=2 TYP=8
	610	SGMR	4	S/F	1826.0	1827.0	14.0	480.0			QL=4 ST=3 TYP=3
	410	SGMR	48	C	1826.0	1832.0	11.0	140.0			QL=4 ST=3 TYP=8
	610	SGMR	4	S/F	1826.0	1827.0	334.0	480.0			QL=4 ST=3 TYP=3
	410	SGMR	48	C	1826.0	1832.0	334.0	140.0			QL=4 ST=3 TYP=8
	245	PALE	49	GB	1927.0	1927.0	1.0	2000.0			QL=4 ST=2 TYP=6
	410	PALE	8	S	1927.0	1927.0	1.0	61.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1927.0	1927.0	1.0	1900.0			QL=4 ST=2 TYP=6
	410	SGMR	8	S	1927.0	1928.0	1.0	42.0.			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1928.0	1928.0	U	32.0			QL=4 ST=2 TYP=3
	410	SGMR	4	S/F	1938.0	1940.0	3.0	53.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	2018.0	2021.0	3.0	71.0			QL=4 ST=2 TYP=3
31	245	SVTO	43	NS	0659.0	0709.0	603.0	280.0			QL=4 ST=2 TYP=1
	410	SVTO	43	NS	0702.0	0715.0	15.0	59.0			QL=4 ST=2 TYP=1
	127	TORN	43	NS	0720.0		300.0		3.0		V=1
	245	LEAR	43	NS	0842.0	0851.0	74.0	110.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1126.0	1550.0	682.0	180.0			QL=4 ST=2 TYP=1
	280	CUBA	44	NS	1320.0E		288.0D		39.0		
	245	PALE	43	NS	1652.0	1854.0	696.0	110.0			QL=2 ST=2 TYP=1
	410	SGMR	43	NS	2211.0	2212.0	37.0	68.0			QL=4 ST=2 TYP=1
	245	LEAR	43	NS	2251.0	2323.0U	446.0	62.0			QL=4 ST=2 TYP=1
	610	SVTO	8	S	0000.0	0000.0	U	320.0			QL=4 ST=3 TYP=3
	610	SVTO	8	S	0000.0	0000.0	U	320.0			QL=4 ST=3 TYP=3
	610	SVTO	4	S/F	0000.0	1536.0	938.0	320.0			QL=4 ST=3 TYP=3
	610	SVTO	4	S/F	0000.0	1811.0	1090.0	320.0			QL=4 ST=3 TYP=3
	245	LEAR	8	S	0249.0	0249.0	U	55.0			QL=4 ST=2 TYP=3
	2840	BEIJ	45	C	0501.0	0510.1	14.0	16.3	9.4		
	245	LEAR	8	S	0624.0	0624.0	U	79.0			QL=4 ST=2 TYP=3
	245	SVTO	48	C	0624.0	0624.0	3.0	100.0			QL=2 ST=2 TYP=8
	610	SVTO	4	S/F	0624.0	0626.0	3.0	17.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	0624.0	0626.0	2.0	19.0			QL=2 ST=2 TYP=3
	610	LEAR	8	S	0625.0	0626.0	1.0	26.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0625.0	0626.0	1.0	32.0			QL=4 ST=2 TYP=3
	245	LEAR	20	GRF	0659.0	0709.0	23.0	200.0			QL=4 ST=3 TYP=2
	245	LEAR	8	S	0724.0	0724.0	U	87.0			QL=4 ST=3 TYP=3
	245	LEAR	8	S	0751.0	0751.0	U	60.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0817.0	0817.0	U	83.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	1026.0	1027.0	2.0	230.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	1026.0	1026.0	U.	34.0			QL=2 ST=2 TYP=3
	245	SVTO	49	GB	1026.0	1026.0	U	950.0			QL=2 ST=2 TYP=6
	610	SGMR	8	S	1053.0	1055.0	2.0	38.0			QL=2 ST=2 TYP=3
	1415	SGMR	4	S/F	1053.0	1054.0	3.0	56.0			QL=2 ST=2 TYP=3
	245	SGMR	4	S/F	1053.0	1054.0	3.0	66.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	1053.0	1053.0	1.0	90.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	1053.0	1053.0	1.0	210.0			QL=2 ST=2 TYP=3
	127	TORN	8	S	1053.5	1054.1	1.5	290.0	140.0		UNCERTAIN
	245	SVTO	8	S	1054.0	1054.0	U	66.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1112.0	1112.0	1.0	64.0			QL=4 ST=3 TYP=3
	610	SGMR	8	S	1112.0	1112.0	1.0	64.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1241.0	1242.0	1.0	190.0			QL=2 ST=2 TYP=3
	2695	SGMR	8	S	1254.0	1254.0	U	38.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1254.0	1254.0	2.0	48.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1254.0	1254.0	2.0	28.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	1254.0	1257.0	4.0	61.0			QL=4 ST=2 TYP=3
	1415	SGMR	8	S	1254.0	1254.0	U	18.0			QL=4 ST=2 TYP=3
	1415	SGMR	8	S	1535.0	1535.0	2.0	66.0			QL=4 ST=2 TYP=3

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

AUGUST 1998

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
31	610	SGMR	8 S	1535.0	1535.0	2.0	410.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	1535.0	1536.0	2.0	69.0			QL=4 ST=2 TYP=3
	410	SVTO	49 GB	1535.0	1535.0	2.0	950.0			QL=2 ST=3 TYP=6
	245	SVTO	49 GB	1535.0	1536.0	1.0	930.0			QL=2 ST=3 TYP=6
	610	SVTO	4 S/F	1535.0	1536.0	3.0	320.0			QL=4 ST=3 TYP=3
	1415	SVTO	8 S	1535.0	1535.0	2.0	94.0			QL=4 ST=3 TYP=3
	8800	SVTO	8 S	1535.0	1536.0	2.0	73.0			QL=2 ST=3 TYP=3
	2695	SGMR	8 S	1536.0	1536.0	1.0	51.0			QL=4 ST=2 TYP=3
	15400	SGMR	8 S	1536.0	1536.0	1.0	39.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1536.0	1536.0	1.0	64.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	1536.0	1536.0	U	47.0			QL=4 ST=3 TYP=3
	2695	SVTO	8 S	1536.0	1536.0	1.0	45.0			QL=4 ST=3 TYP=3
	15400	SVTO	8 S	1536.0	1536.0	U	33.0			QL=4 ST=3 TYP=3
	2695	SVTO	4 S/F	1536.0	0000.0	504.0	45.0			QL=4 ST=3 TYP=3
	245	SGMR	4 S/F	1538.0	1540.0	3.0	200.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1539.0	1540.0	2.0	98.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1539.0	1540.0	2.0	86.0			QL=2 ST=3 TYP=3
	1415	SVTO	8 S	1540.0	1540.0	1.0	30.0			QL=4 ST=3 TYP=3
	245	SVTO	8 S	1540.0	1540.0	U	250.0			QL=2 ST=3 TYP=3
	410	PALE	4 S/F	1708.0	1709.0	3.0	56.0			QL=4 ST=2 TYP=3
	245	PALE	4 S/F	1708.0	1709.0	3.0	91.0			QL=4 ST=2 TYP=3

Reports are received routinely from the following observatories:

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

Explanation of Type Code:

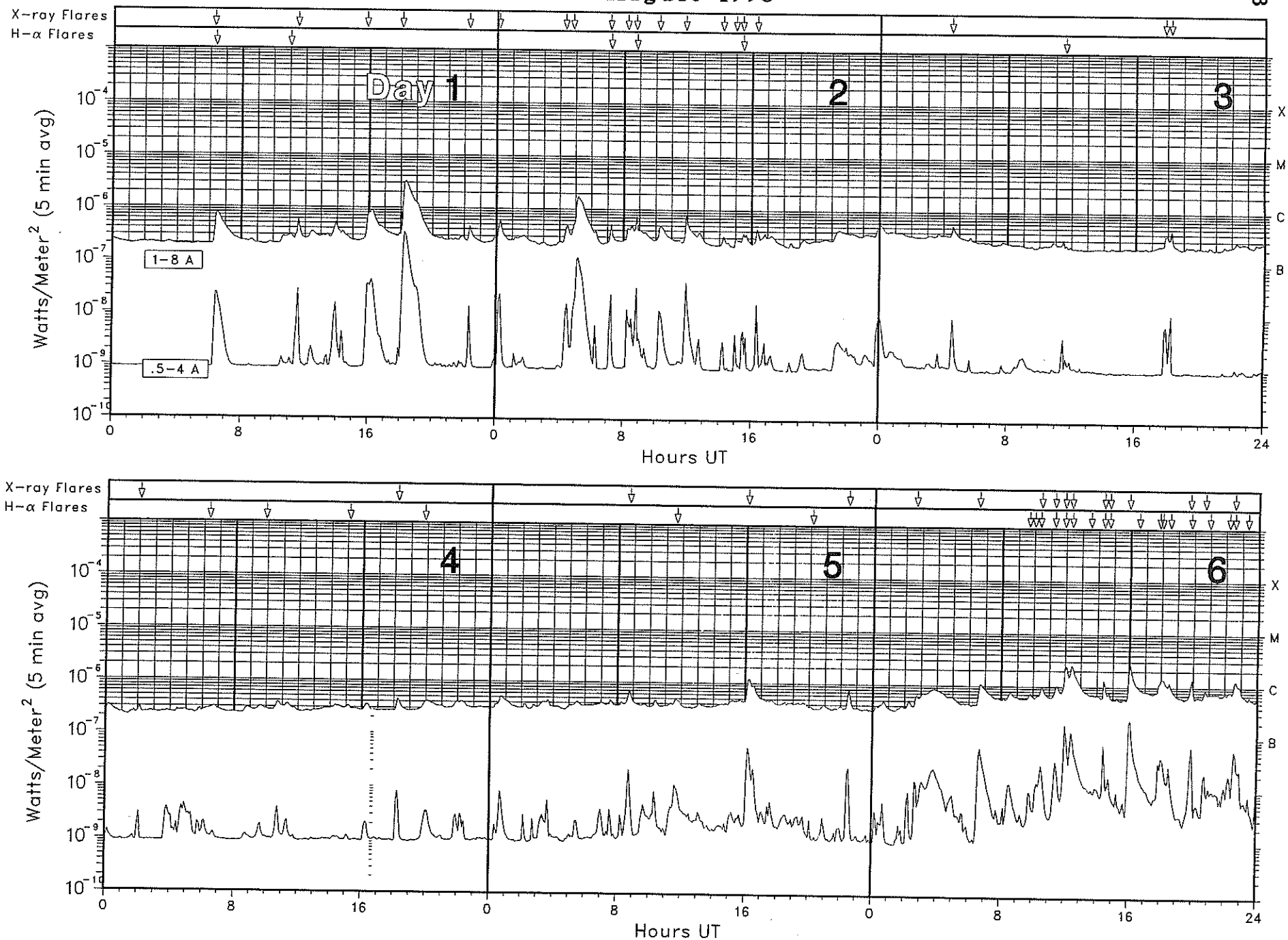
1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple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

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

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

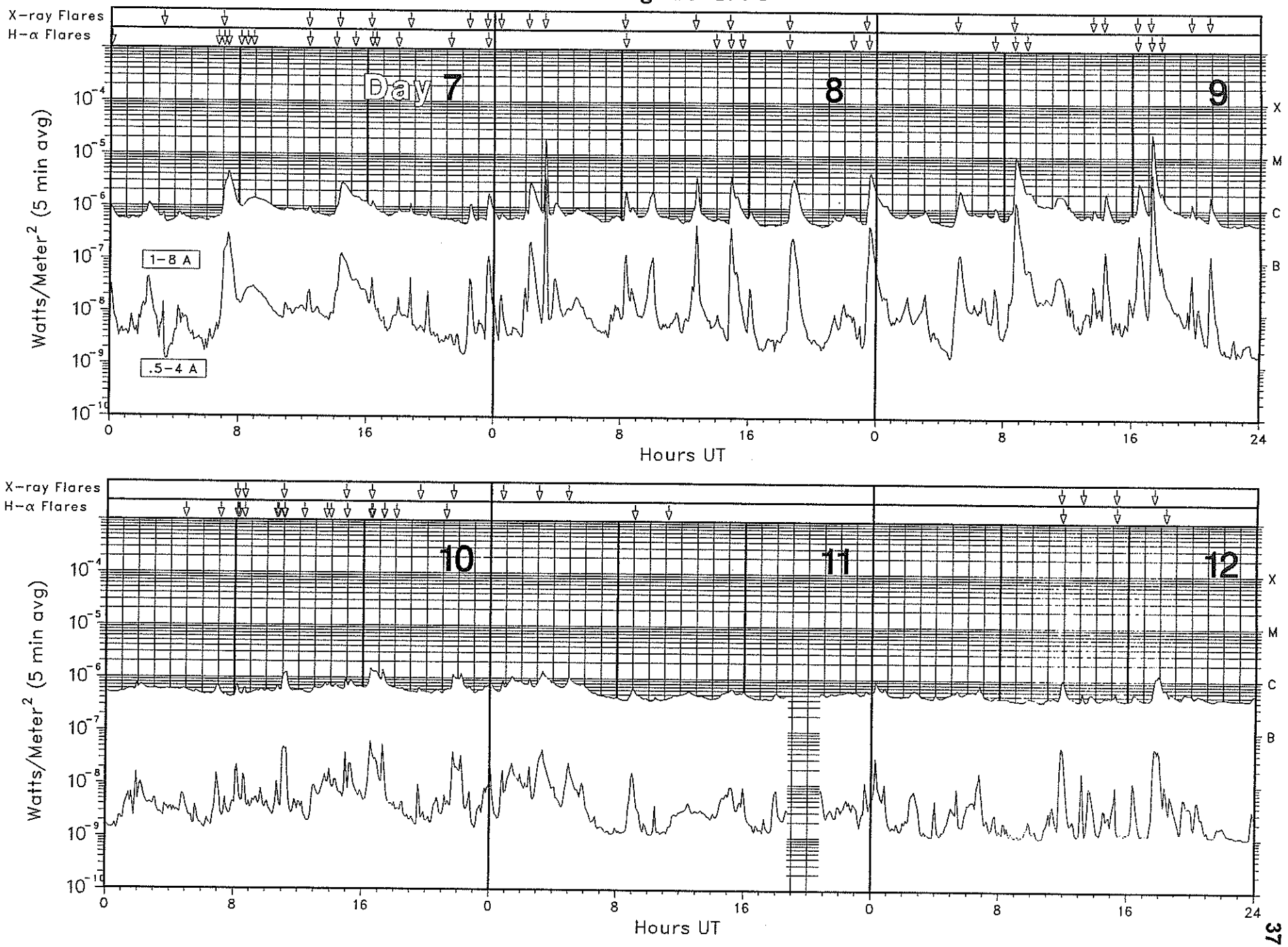
GOES X-RAY DETECTOR

August 1998



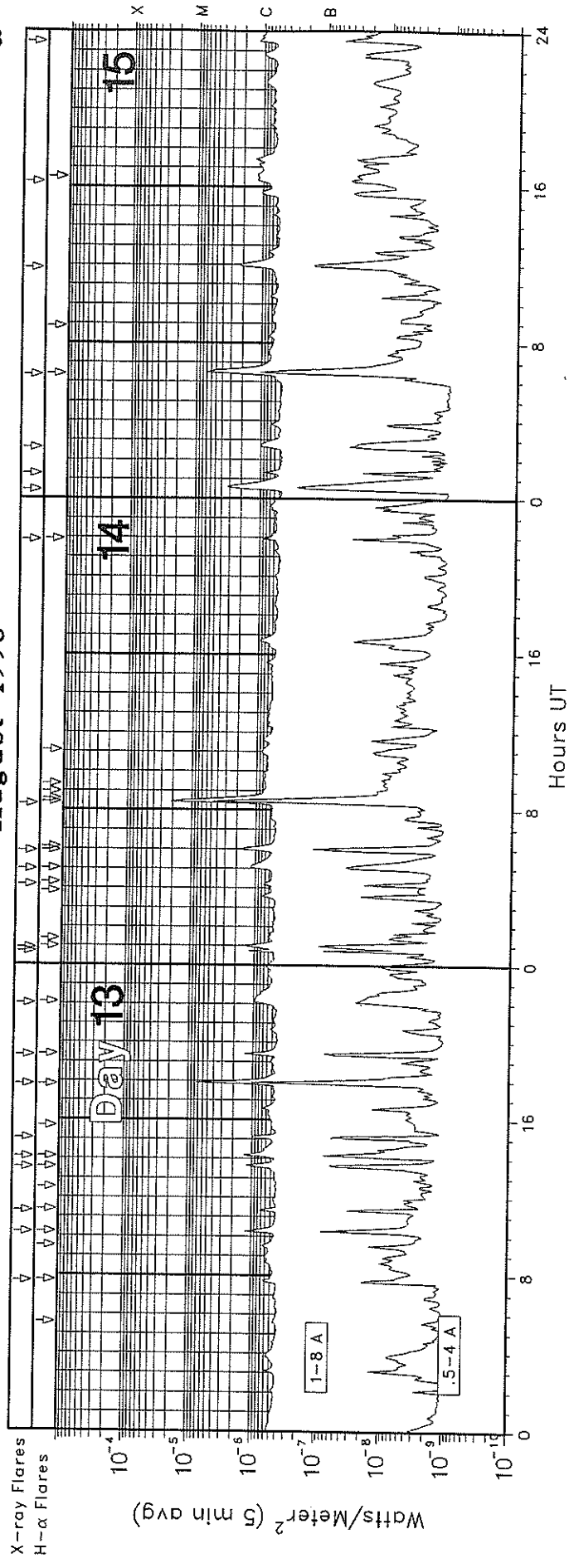
GOES X-RAY DETECTOR

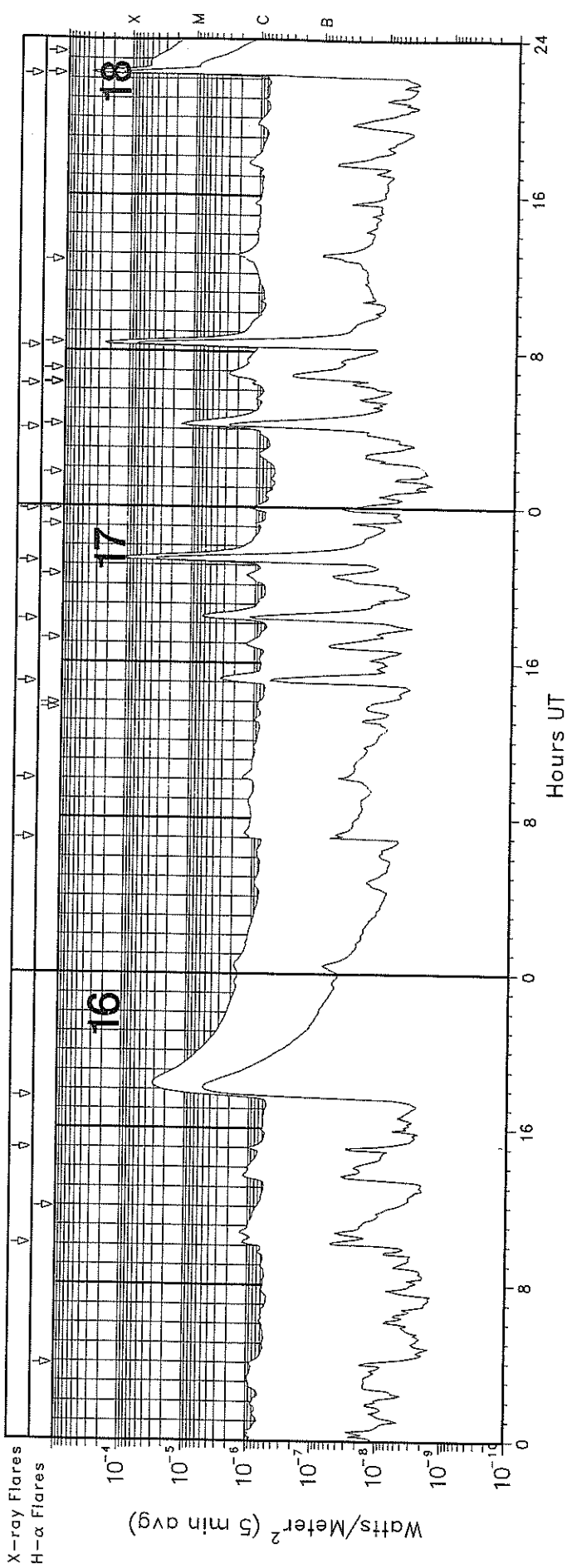
August 1998



GOES X-RAY DETECTOR

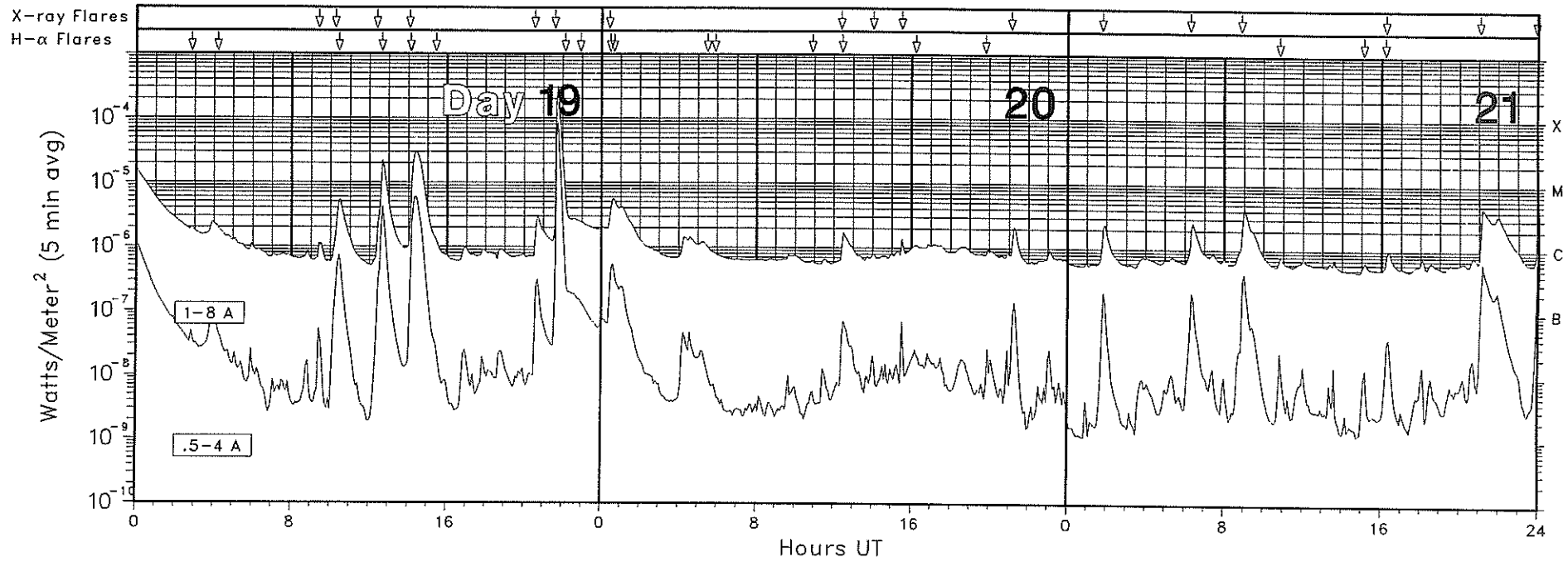
August 1998

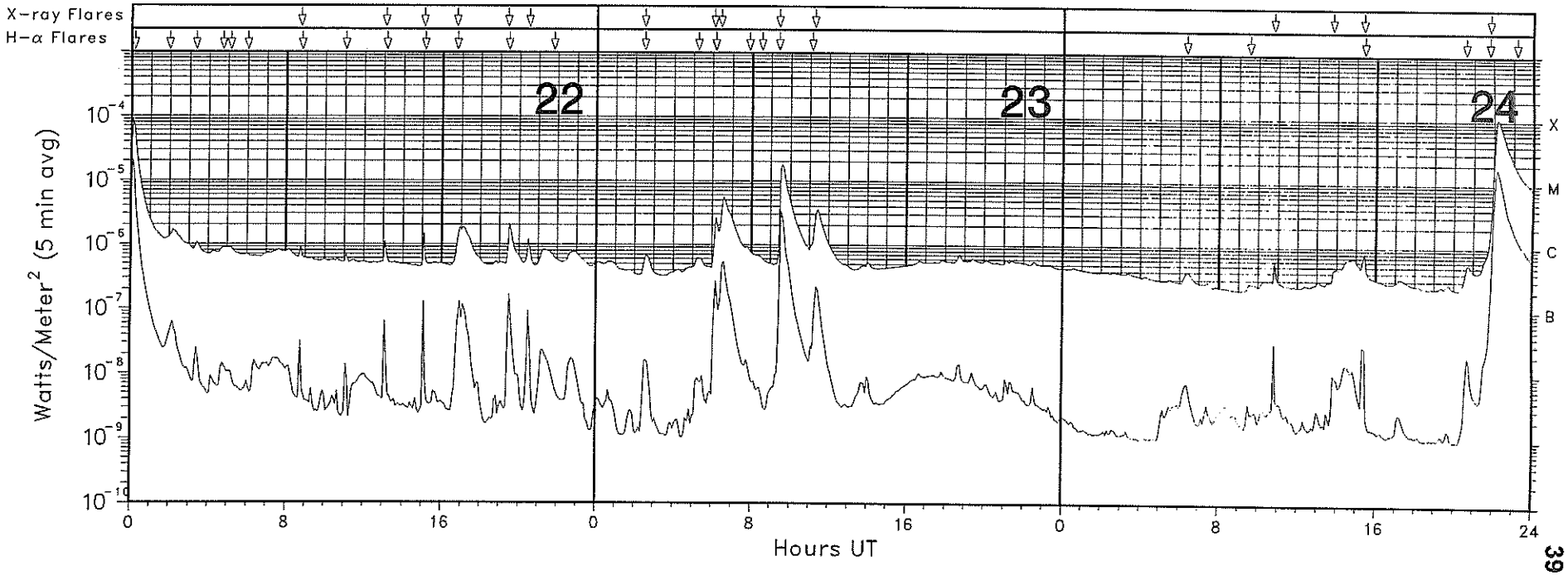




GOES X-RAY DETECTOR

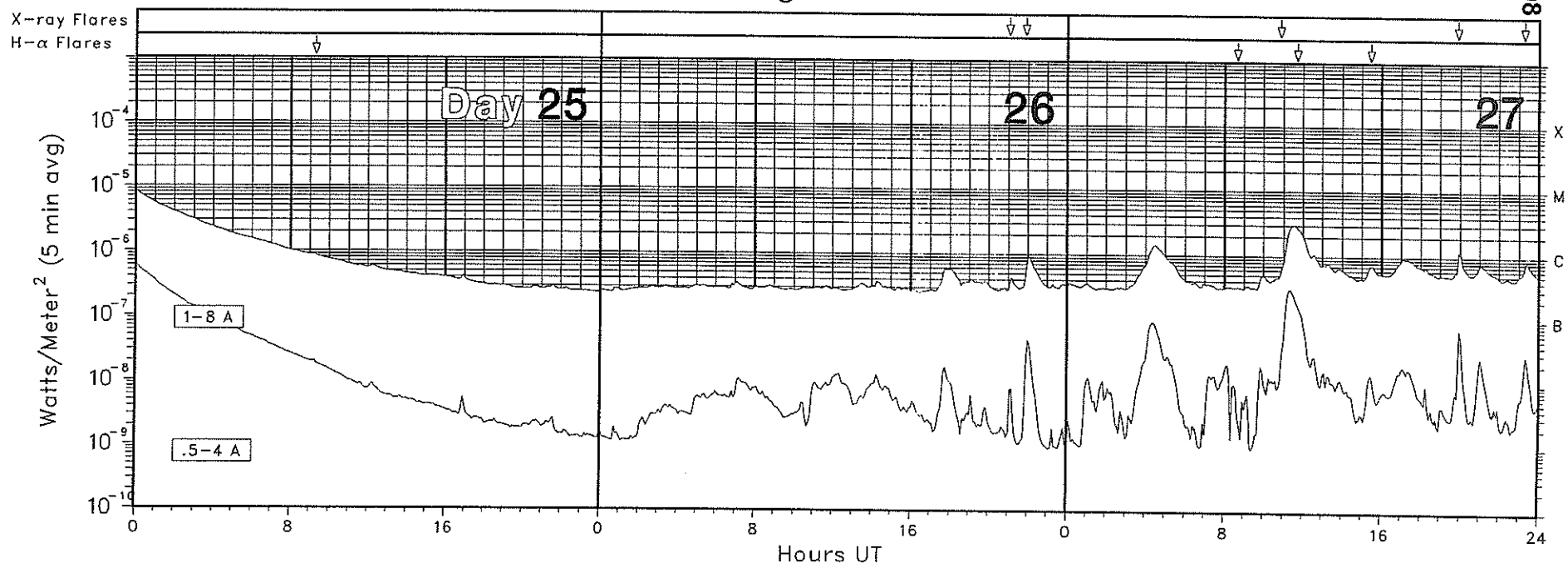
August 1998

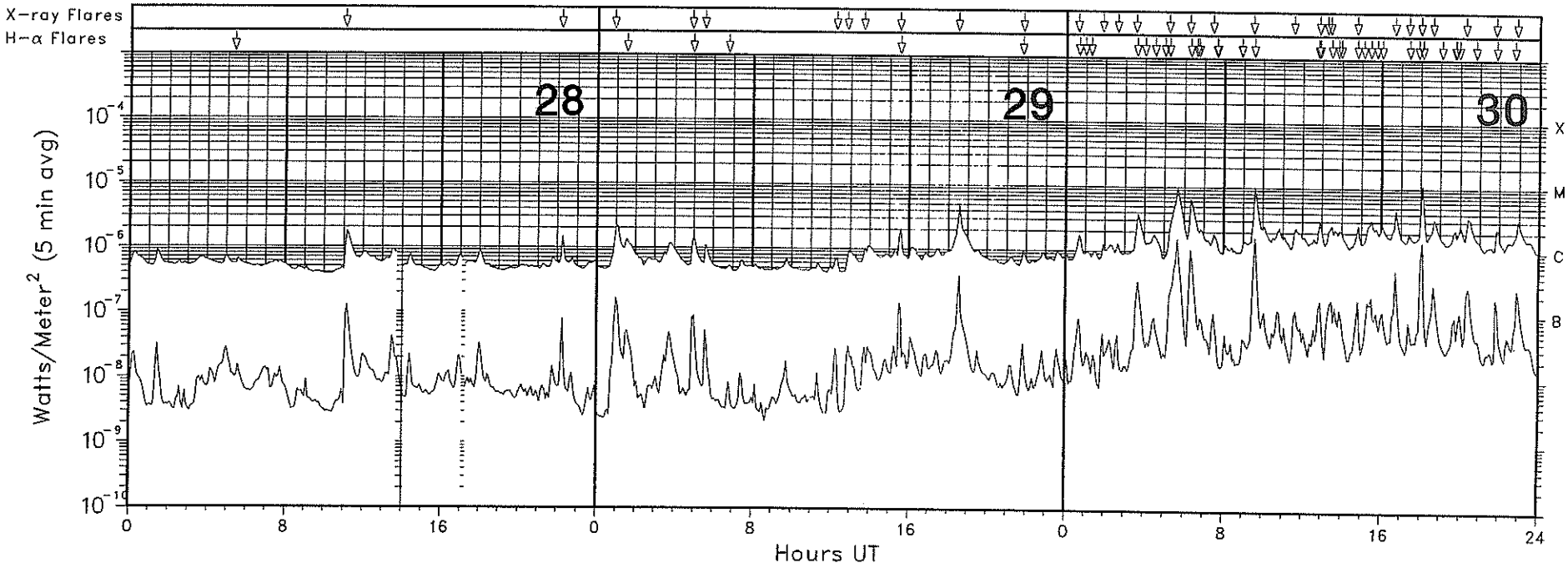




GOES X-RAY DETECTOR

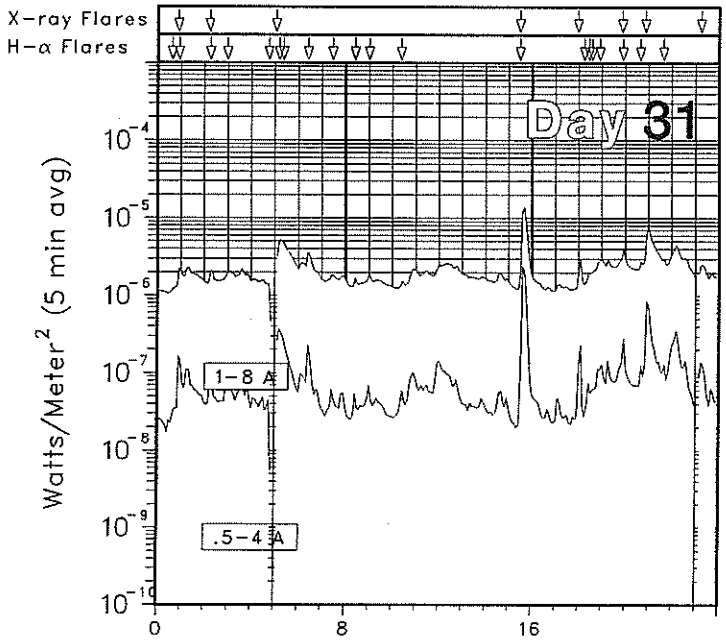
August 1998





GOES X-RAY DETECTOR

August 1998



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

August 1998

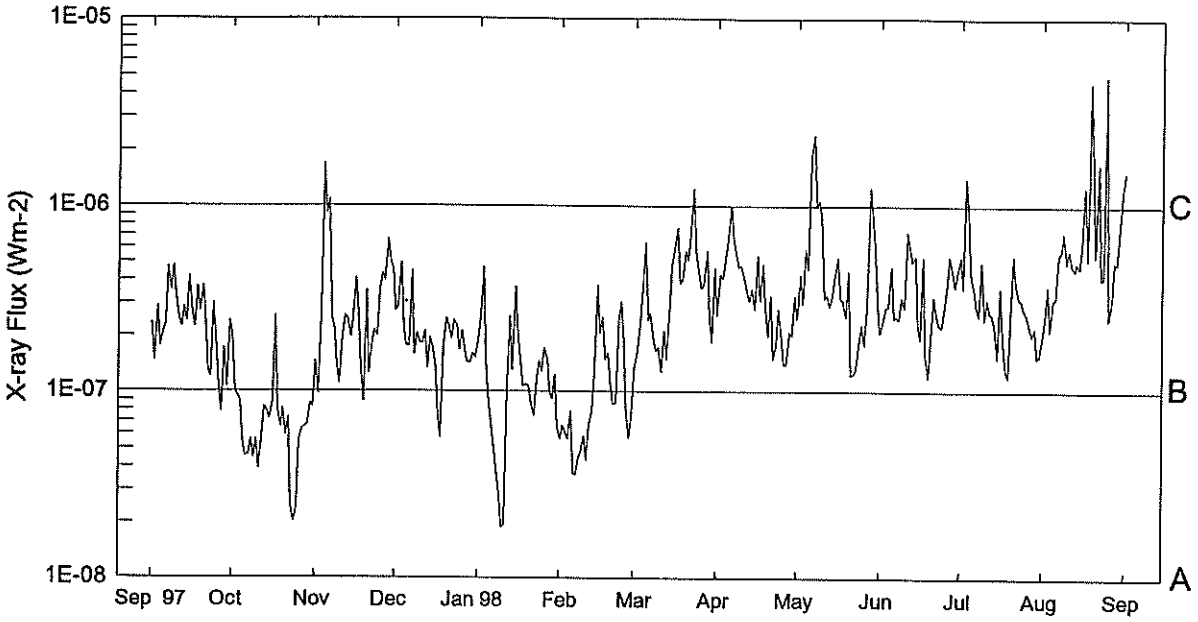
Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp	Xray	NOAA/ USAF Region	Flux
01	0618	0630	0651	S19	E44	1F	B7.8	8288		1.2E-03
01	1131	1137	1141				B6.2			2.9E-04
01	1552	1610	1628				B9.2			1.6E-03
01	1804	1820	1842				C3.3			5.1E-03
01	2217	2221	2225				B5.3			2.0E-04
02	0009	0015	0019				B7.0			2.8E-04
02	0422	0432	0438				B5.1			4.2E-04
02	0450	0513	0532				C1.7			2.7E-03
02	0711	0715	0717	S18	E79	SF	B8.2			1.8E-04
02	0814	0818	0822				B6.1			2.1E-04
02	0846	0852	0854	S19	E78	1F	B9.2			3.1E-04
02	1014	1019	1029				B5.8			4.2E-04
02	1151	1156	1201				B8.9			3.8E-04
02	1411	1415	1419				B3.5			1.5E-04
02	1459	1503	1506				B3.6			1.2E-04
02	1525	1530	1536	S21	E74	SF	B3.8	8293		2.3E-04
02	1619	1623	1626				B6.5			1.9E-04
03	0431	0437	0443				B5.7			3.6E-04
03	1748	1755	1807				B4.0			4.1E-04
03	1811	1815	1818				B5.5			1.8E-04
04	0202	0205	0209				B3.3			1.3E-04
04	1810	1816	1825				B4.5			3.6E-04
05	0841	0846	0852				B6.9			4.1E-04
05	1605	1615	1627				C1.2			1.4E-03
05	2224	2230	2235				B9.0			4.5E-04
06	0238	0351	0438				B8.3			4.8E-03
06	0633	0643	0711				C1.0			2.1E-03
06	1026	1033	1043	N27	W50	SF	C1.0	8283		9.1E-04
06	1117	1127	1143	S23	E29	SF	C1.0	8293		1.4E-03
06	1156	1203	1213	S23	E29	SF	C2.8			2.1E-03
06	1221	1225	1234				C2.6			1.8E-03
06	1422	1428	1433	S22	E26	SF	C1.4	8293		7.4E-04
06	1442	1445	1447				B9.1			2.3E-04
06	1556	1605	1612				C2.8			1.9E-03
06	1945	1954	2001	S20	E14	SF	C1.4	8293		9.8E-04
06	2040	2045	2052				B9.2			6.0E-04
06	2231	2238	2257	S23	E22	SF	C1.3	8293		1.7E-03
07	0318	0321	0323				B9.3			2.3E-04
07	0701	0722	0735				C4.8	8295		6.5E-03
07	1221	1225	1227				C1.1			3.6E-04
07	1417	1431	1451	N18	E52	SF	C2.9	8296		5.1E-03
07	1616	1622	1626	S21	E11	SF	C1.2	8293		7.1E-04
07	1843	1847	1850				C1.2			4.6E-04
07	2227	2235	2241				C1.2			8.7E-04
07	2334	2343	2353	S21	E07	SF	C1.8	8293		1.7E-03
08	0026	0030	0032				C1.0			2.9E-04
08	0212	0221	0236				C3.1			3.4E-03
08	0312	0317	0320				M3.0			7.0E-03
08	0813	0822	0827	N14	E74	SF	C2.1	8299		1.3E-03
08	1240	1248	1252				C4.2			2.0E-03
08	1448	1458	1504	N14	E71	SF	C4.0	8299		2.5E-03
08	1832	1850	1908				C3.6	8299		5.4E-03
08	2322	2338	2354	N15	E64	1F	C5.1			5.6E-03
09	0506	0517	0527				C2.2			2.3E-03
09	0838	0847	0900	N14	E59	1B	M1.0	8299		9.1E-03
09	1333	1339	1348				C1.0			8.8E-04
09	1415	1423	1430				C2.1			1.5E-03
09	1619	1626	1641	S23	W15	SF	C3.4	8293		3.4E-03
09	1709	1718	1723	N15	E55	2B	M3.3	8299		1.4E-02
09	1941	1946	1952				C1.3			7.7E-04
09	2050	2055	2101				C2.0			9.7E-04
10	0805	0814	0816	N15	E51	SF	B8.4	8299		4.6E-04
10	0835	0840	0842	S23	W18	SF	B7.6	8293		2.8E-04
10	1059	1103	1107	N15	E49	SF	C1.6	8293		5.2E-04
10	1452	1456	1502	S24	W28	SF	C1.0	8293		5.3E-04
10	1628	1632	1636	N27	E33	SF	C1.7	8297		6.9E-04
10	1931	1934	1936				B8.3			2.1E-04
10	2137	2142	2206	N21	W22	SF	C1.1	8298		1.7E-03
11	0047	0051	0054				B9.6			3.6E-04
11	0302	0321	0343				C1.4			2.7E-03
11	0454	0459	0509				C1 0			
12	1146	1159	1207	S23	W51	SF	C1.0	8293		1.1E-03
12	1308	1311	1314				B7.0			2.1E-04
12	1513	1516	1518	S23	W53	SF	B6.9	8293		1.8E-04
12	1736	1759	1808				C1.3			2.1E-03
13	0741	0744	0746	N14	W02	SF	B9.0	8299		2.1E-04
13	1012	1016	1021	N16	E06	SF	C1.5	8299		5.6E-04
13	1118	1122	1127				B9.0			3.7E-04
13	1334	1340	1345	N15	E04	SF	C1.3	8299		6.9E-04
13	1405	1412	1418	N16	E04	SF	C1.3	8299		8.1E-04
13	1504	1509	1512				C1.5			5.2E-04
13	1750	1756	1800	S25	W61	SF	C9.5	8293		2.8E-03
13	1920	1925	1928	S23	W66	SF	C1.8	8293		5.7E-04
13	2201	2208	2233	S31	W51	SF	B9.8	8300		1.7E-03
14	0043	0047	0049				C1.8			3.9E-04
14	0055	0101	0105				C1.5			7.1E-04
14	0410	0414	0417	N14	W14	SF	B8.7	8299		3.2E-04
14	0458	0508	0520	N29	W19	SF	C1.2			1.4E-03
14	0555	0603	0608	S23	W73	SF	C1.9	8299		1.1E-03
14	0819	0828	0832	S23	W74	1N	M3.1	8293		9.6E-03
14	2152	2156	2200	N15	W13	SF	B9.5	8299		3.9E-04
15	0026	0038	0045				C3.3			2.5E-03
15	0116	0120	0124				B9.7			3.8E-04
15	0236	0244	0257				C1.0			1.1E-03
15	0621	0633	0638	S24	W83	SF	C7.6	8293		4.3E-03
15	1150	1201	1209				C2.4			2.1E-03
15	1615	1636	1650				C1.2	8299		2.4E-03
15	2327	2331	2341				C1.3			9.1E-04
16	1003	1012	1025				C1.2			1.4E-03
16	1456	1500	1505				C1.1			5.3E-04
16	1737	1821	1859				M3.1			1.0E-01
17	0658	0717	0921				C1.3			9.5E-03
17	1000	1007	1110				C1.5			4.7E-03
17	1458	1511	1523				C3.3			3.8E-03
17	1811	1824	1835				C6.9			7.1E-03
17	2110	2120	2130				X1.2			9.3E-02
17	2351	2357	0006	N19	W52	SF	C1.2	8299		1.0E-03
18	0400	0416	0427				M1.5	8299		1.4E-02
18	0616	0626	0631	N32	W68	SF	C1.2	8297		1.0E-03
18	0814	0824	0832	N33	E68	SN	X2.8	8307		1.7E-01
18	2210	2219	2228	N33	E87	1B	X4.9	8307		3.0E-01

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

August 1998

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp	Xray	NOAA/ USAF Region	Flux
19	0923	0928	0934				C	1.3		7.1E-04
19	1014	1029	1040	N17	W71	SF	C	5.8	8299	6.0E-03
19	1222	1242	1251	N35	E78	SF	M	2.3	8307	1.8E-02
19	1404	1426	1444	N35	E80	SF	M	3.0	8307	4.8E-02
19	2033	2039	2055				C	3.2		3.1E-03
19	2135	2145	2150	N32	E75	1F	X	3.9		1.5E-01
20	0025	0038	0057	N16	W81	SF	C	5.7	8307	8.7E-03
20	1224	1232	1249	S34	E36	1N	C	1.8		2.1E-03
20	1401	1404	1406				C	1.0		2.6E-04
20	1529	1532	1535				C	1.7		4.8E-04
20	2107	2118	2126				C	2.1		1.9E-03
21	0147	0154	0203				C	2.5		2.0E-03
21	0617	0625	0635				C	2.7		2.3E-03
21	0853	0903	0915				C	4.5		4.4E-03
21	1614	1620	1629	N32	E51	SF	C	1.0	8307	8.4E-04
21	2103	2114	2139				C	5.1		7.5E-03
21	2357	0009	0016	N42	E51	2B	M	9.0		6.1E-02
22	0844	0848	0850	N31	E47	SF	C	1.3	8307	3.2E-04
22	1304	1307	1310	N30	E45	SF	C	1.4	8307	3.7E-04
22	1503	1506	1509	N30	E44	SF	C	1.9	8307	4.7E-04
22	1645	1708	1730	N28	E36	1F	C	1.9	8307	4.1E-03
22	1924	1932	1940	N30	E34	SF	C	2.2	8307	1.4E-03
22	2030	2033	2035				C	1.6		3.9E-04
23	0229	0241	0249	N17	W13	SF	B	6.7	8309	7.5E-04
23	0605	0612	0620	N33	E33	SF	C	2.8		1.7E-03
23	0626	0637	0650				C	5.5		6.1E-03
23	0923	0934	0947	N32	E33	1N	M	2.2	8307	1.7E-02
23	1114	1125	1138	N22	E39	SF	C	3.6		4.1E-03
24	1047	1051	1054				B	7.6		2.2E-04
24	1347	1452	1515				B	7.0		2.9E-03
24	1521	1525	1527	N33	E18	SF	C	1.1	8307	3.1E-04
24	2150	2212	2235	N35	E09	3B	X	1.0	8307	1.6E-01
26	2104	2110	2117				B	4.5		3.2E-04
26	2154	2204	2218				B	9.5		1.1E-03
27	1051	1129	1208				C	3	0 8319	
27	1953	1958	2003				C	1.6		7.1E-04
27	2317	2324	2329				B	9	7	
28	1103	1110	1124				C	1.8		1.7E-03
28	2211	2216	2220				C	1.6		6.4E-04
29	0054	0103	0111				C	2.5		1.9E-03
29	0454	0459	0507	N20	W16	SF	C	1.7	8319	1.0E-03
29	0533	0538	0544				C	1.2		6.5E-04
29	1215	1219	1223				B	8.0		3.5E-04
29	1249	1257	1321				B	9.5		1.6E-03
29	1341	1345	1351				C	1.0		5.7E-04
29	1529	1535	1539	N30	W45	SF	C	2.5	8307	1.1E-03
29	1830	1836	1840				C	5.3		2.3E-03
29	2149	2152	2155	N31	W49	SF	C	1.1	8307	3.6E-04
30	0036	0041	0049	N19	W29	SF	C	1.8	8319	1.2E-03
30	0151	0156	0202				C	1.3		7.4E-04
30	0236	0240	0244				C	1.4		6.0E-04
30	0333	0341	0352	N18	W28	SF	C	4.3	8319	3.2E-03
30	0512	0541	0551	N21	W33	1N	M	1.0		1.2E-02
30	0615	0620	0633	N21	W33	1F	C	6.8		5.2E-03
30	0726	0730	0735				C	2.0		9.7E-04
30	0929	0937	0943	N21	W35	1N	M	1.0	8319	5.8E-03
30	1133	1141	1200				C	2.4		3.3E-03
30	1251	1257	1300	N31	W56	SF	C	3.1	8307	1.5E-03
30	1316	1320	1325				C	2.5		1.1E-03
30	1326	1329	1332	N16	W38	SF	C	3.4		9.9E-04
30	1446	1451	1454	N21	W38	SF	C	2.8	8319	1.2E-03
30	1642	1647	1651				C	5.4		2.1E-03
30	1723	1726	1729	S22	E50	SF	C	2.3	8323	7.1E-04
30	1800	1805	1809	N29	W60	SN	M	1.3	8319	4.7E-03
30	1837	1842	1850				C	3.3		2.3E-03
30	2017	2031	2037				C	3.6		3.5E-03
30	2148	2154	2159	N17	W41	SF	C	2.8	8319	1.5E-03
30	2252	2256	2301	S22	E47	SF	C	3.6	8323	1.6E-03
31	0053	0056	0107	S19	W63	SF	C	2.3	8323	1.7E-03
31	0213	0220	0222	S21	E56	SF	C	2.4	8323	1.1E-03
31	0503	0514	0541	N29	W78	1F	C	5.7		9.9E-03
31	1529	1539	1547	N32	W69	SF	M	1.5	8307	1.0E-02
31	1759	1806	1808				C	3.8		1.4E-03
31	1952	1956	2000	N21	W54	SF	C	4.4		1.8E-03
31	2051	2101	2111				C	7.8		7.1E-03
31	2315	2318	2324				C	2.9		1.4E-03

Preliminary GOES Satellite Daily X-Ray Background
Sep 97 - Aug 98



Day	Sep 97	Oct	Nov	Dec	Jan 98	Feb	Mar	Apr	May	Jun	Jul	Aug
1	B2.3	B2.0	B1.4	B2.7	B1.9	A5.6	B1.3	B2.6	B2.4	B2.0	B5.3	B1.9
2	B1.4	B1.0	A9.7	B2.8	B2.6	A6.6	B1.5	B4.3	B4.2	B2.4	B3.6	B2.4
3	B2.8	A9.4	B2.6	B4.9	B4.7	A6.1	B2.2	B4.1	B2.9	B2.8	C1.4	B3.7
4	B1.7	A8.9	C1.6	B2.2	B1.4	A5.5	B3.6	B5.2	B5.8	B2.8	B9.2	B2.1
5	B2.0	A5.3	B9.1	B1.7	A9.4	A7.9	B6.3	B6.6	B4.6	B4.7	B4.2	B3.1
6	B2.3	A4.5	C1.0	B1.7	A6.5	A3.6	B2.4	C1.0	C1.8	B2.4	B3.5	B3.1
7	B4.7	A4.6	B2.4	B4.4	A5.0	A3.5	B2.6	B6.6	C2.4	B2.5	B2.8	B5.4
8	B3.5	A5.5	B2.2	B1.5	A3.8	A4.5	B1.9	B5.6	B9.9	B2.4	B2.5	B5.8
9	B4.8	A4.4	B1.4	B2.0	A2.9	A4.7	B1.6	B4.7	C1.0	B3.2	B5.0	B7.2
10	B3.3	A5.5	B1.1	B1.8	A1.8	A5.7	B1.7	B4.8	B8.7	B2.8	B2.4	B4.9
11	B2.4	A3.9	B2.0	B1.8	A1.9	A4.3	B1.2	B4.1	B3.1	B7.2	B3.1	B5.8
12	B2.2	A5.8	B2.5	B2.1	B1.1	A6.6	B2.1	B3.5	B3.3	B6.0	B2.6	B4.8
13	B2.8	A8.2	B2.4	B1.3	B2.5	A7.9	B1.4	B3.1	B2.8	B5.0	B2.6	B4.5
14	B2.4	A7.9	B1.9	B1.9	B1.3	B1.4	B2.5	B3.6	B3.2	B5.3	B2.2	B4.9
15	B4.1	A7.1	B2.3	B1.6	B3.6	B3.7	B4.8	B2.8	B4.4	B2.3	B1.5	B4.6
16	B2.6	A8.6	B4.1	B1.3	B2.0	B2.0	B6.1	B5.4	B5.3	B1.9	B3.6	B6.5
17	B2.2	B2.5	B2.6	A7.5	B1.5	B2.5	B7.6	B3.1	B3.1	B5.3	B2.0	C1.2
18	B3.6	A8.0	B1.3	A5.7	B1.0	B1.4	B3.8	B4.9	B3.0	B1.5	B1.2	B5.1
19	B2.7	A6.5	A8.9	B1.7	B1.0	B1.6	B4.0	B3.0	B2.5	B1.2	B1.2	C4.5
20	B3.7	A8.1	B3.5	B2.4	B1.0	B1.1	B5.7	B2.0	B4.4	B1.9	B2.5	C1.6
21	B2.3	A5.8	B1.2	B2.2	A8.6	A8.6	B5.1	B3.3	B1.2	B3.2	B5.4	B5.3
22	B1.2	A7.2	B1.7	B1.9	A7.4	A8.6	B7.5	B1.5	B1.2	B2.6	B3.8	C1.6
23	B1.2	A2.4	B2.1	B2.4	B1.1	B2.4	C1.2	B1.8	B1.3	B2.2	B3.1	B4.0
24	B2.9	A2.0	B2.0	B2.2	B1.4	B3.0	B5.6	B2.8	B1.8	B2.2	B3.1	B4.1
25	B1.7	A2.3	B3.6	B1.6	B1.2	B1.8	B4.3	B2.0	B2.2	B2.7	B2.7	B4.9
26	B1.0	A5.5	B4.3	B2.1	B1.7	A8.0	B3.6	B1.4	B1.7	B3.8	B2.6	B2.4
27	A7.8	A6.3	B3.9	B1.6	B1.5	A5.6	B3.8	B1.4	B2.7	B5.3	B2.2	B3.0
28	B1.7	A6.5	B6.6	B1.4	A9.9	A7.5	B5.6	B2.1	C1.2	B4.4	B2.0	B5.0
29	B1.0	A6.7	B5.0	B1.4	A9.1		B2.5	B2.0	B8.8	B3.7	B2.2	B4.8
30	B2.4	A8.6	B4.6	B1.6	B1.2		B1.8	B3.3	B5.9	B4.4	B1.5	B7.3
31		A8.2		B1.5	A6.6		B4.6		B2.7		B1.5	C1.2

ACTIVE PROMINENCES AND FILAMENTS

AUGUST 1998

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	DSF	1556U	0504U	S39	W44	07	30.2		14	0	0	E	SVTO		
02	DSF	2238U	1045U	S57	W06	08	2.4	2	12	0	0	E	RAMY		
02	DSF	2329U	1526U	N11	E05	08	3.3	3	11	0	0	E	HOLL		
03	DSD	1110E	1215	S20	E62	08	8.2	1	03	9		V	KHAR		
03	BSD	1138U	1143	S19	E72	08	8.9	1	03	9	9	V	KHAR		
03	BSL	1142	1223	S20	E90	08	10.3	1	04	9	9	V	KHAR		
03	DSF	2210U	1054U	N33	W19	08	2.4	2	05	0	0	E	RAMY	8283	
03	DSF	2210U	1054U	S21	E21	08	5.5	2	11	0	0	E	RAMY		
04	DSD	0955	1000	S16	E54	08	8.5	1	01		9	V	KHAR		
04	ADF	1008	1015D	N27	W65	07	30.5	1	03	6	9	V	KHAR		
04	DSF	1845U	1253U	S46	E45	08	8.5		16	0	0	E	RAMY		
06	SPY	1605E	1712	N14	E90	08	13.5			9	9	E	RAMY		
06	BSL	1612E	1700	N13	E90	08	13.5			9	9	E	SVTO		
06	DSF	1830U	1121U	N22	W44	08	3.4	2	07	0	0	E	RAMY	8292	
07	DSF	1329U	0545U	N18	E03	08	7.8		32	0	0	E	SVTO		
07	DSF	1826U	1049U	N21	E00	08	7.8		25	0	0	E	RAMY		
08	DSF	0152U	1240U	N14	W10	08	7.3		21	0	0	E	HOLL		
08	DSF	2250	1240U	N23	W01	08	8.9		28	0	0	E	HOLL		
10	DSF	0933U	2351U	S23	E24	08	12.2		10	0	0	E	LEAR		
10	DSF	1621U	0508U	S19	E20	08	12.2		15	0	0	E	SVTO		
10	DSF	1621U	0508U	S19	E20	08	12.2		16	0	0	E	SVTO		
10	DSF	1948U	1442U	S18	W18	08	9.4		14	0	0	E	RAMY		
11	DSF	1604U	0519U	N16	W65	08	6.7		10	0	0	E	SVTO		
11	EPL	1953	2130	S44	E90	08	19.3	3		0	0	E	HOLL		
13	DSD	0918U	0935	S22	W58	08	9.0	1	03	9	9	V	KHAR		
13	DSD	0923U	0940	N19	E07	08	13.9	1	06	9		V	KHAR		
13	DSD	1125	1140	S29	W53	08	9.5	1	04	9	4	V	KHAR		
14	BSL	0839	0853	S25	W90	08	7.5	1	02	4	9	V	KHAR		
14	BSL	0849	0910D	S23	W90	08	7.5	1	02	9	9	V	KHAR		
14	DSF	1621U	0455U	S37	E04	08	15.0		18	0	0	E	SVTO		
14	DSF	2149U	1134U	S34	W04	08	14.6		35	0	0	E	RAMY		
15	BSL	0900E	0912	N15	W90	08	8.6	1	02	6	9	V	KHAR		
15	BSL	0900E	0915	S26	W90	08	8.6	1	02	6	9	V	KHAR		
15	DSD	0937E	0955	N12	W20	08	13.9	1	03	9	9	V	KHAR		
15	BSL	0943	1005D	S26	W90	08	8.6	1	06	9	9	V	KHAR		
17	DSF	0936U	2332U	N44	W38	08	14.2		15	0	0	E	LEAR		
17	DSF	0936U	2332U	S30	E22	08	19.1		09	0	0	E	LEAR		
17	DSF	1755U	1150U	S51	E16	08	19.1		10	0	0	E	RAMY		
17	LPS	2159E	0142	N32	E90	08	25.0			9	9	E	HOLL		
17	LPS	2317E	0143	N29	E90	08	25.0	1		9	6	E	LEAR		
18	LPS	0539	0835D	N33	E90	08	25.4			9	9	E	LEAR	8307	
18	LPS	0539E	0850D	N35	E90	08	25.4			9	9	E	SVTO		
18	DSF	0945U	2345U	S30	W56	08	14.0	2	15	0	0	E	LEAR		
18	LPS	2314	0039	N29	E90	08	26.0			9	9	E	HOLL	8307	Flare Associated
18	LPS	2319E	0948	N29	E90	08	26.0			9	9	E	LEAR	8307	Flare Associated
19	DSF	0037U	1326U	N27	W02	08	18.9		12	0	0	E	HOLL		
19	DSF	0037U	1326U	N39	E53	08	23.3		08	0	0	E	HOLL		
19	DSF	1512U	0508U	N14	W52	08	15.7		06	0	0	E	SVTO		
19	DSF	1625U	1112U	S25	W45	08	16.2		08	0	0	E	RAMY	8305	
20	ADF	1050U	1115D	N18	E21	08	22.0	1	04		9	V	KHAR		
20	BSL	1054	1059	N18	W90	08	13.6	1	03	9		V	KHAR		
20	EPL	1604E	1616D	S16	E90	08	27.5	3		9	9	E	RAMY		
20	BSL	1607E	1623	S17	E90	08	27.5			6	7	E	SVTO		
21	APR	1055	1103	N12	W90	08	14.6	1	05	9	9	V	KHAR		
21	BSL	1055	1105	N20	W90	08	14.6	1	08	6	9	V	KHAR		

ACTIVE PROMINENCES AND FILAMENTS

AUGUST 1998

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
21	BSL	1100U	1115D	N18	W90	08 14.6	1	03	9	9	V	KHAR		
22	DSD	1110	1125D	N34	W47	08 18.9	1	04	9	9	V	KHAR		
23	DSF	1843U	1225U	S26	W26	08 21.7		10	0	0	E	RAMY	8304	
24	LPS	2220	2242	N30	E07	08 25.5	1		9	9	E	HOLL	8307	Flare Associated
26	DSF	1629U	0618U	S22	E40	08 29.8		11	0	0	E	SVTO		
26	DSF	2207U	1152U	S20	E40	08 30.0		13	0	0	E	RAMY		
28	EPL	0607	0740	S12	W90	08 21.5	3		9	9	E	LEAR	8232	
28	DSF	1610U	0510U	S16	W38	08 25.8		12	0	0	E	SVTO		
29	DSF	0928U	2305U	S14	W31	08 27.0		07	0	0	E	LEAR	8313	
29	DSF	1204U	0748U	S41	E21	08 31.2		39	0	0	E	SVTO		
30	DSF	0944U	2321U	N26	W14	08 29.3	2	10	0	0	E	LEAR		
30	DSF	1619U	1146U	N29	W18	08 29.3		09	0	0	E	RAMY		
31	BSL	0518E	0613D	N35	W79	08 24.9			9	9	E	SVTO	8307	Flare Associated
31	EPL	0527E	0651D	N37	W80	08 24.8	1		9	9	E	LEAR	8307	
31	DSF	1848U	1158U	S35	E51	09 4.9		06	0	0	E	RAMY		

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.

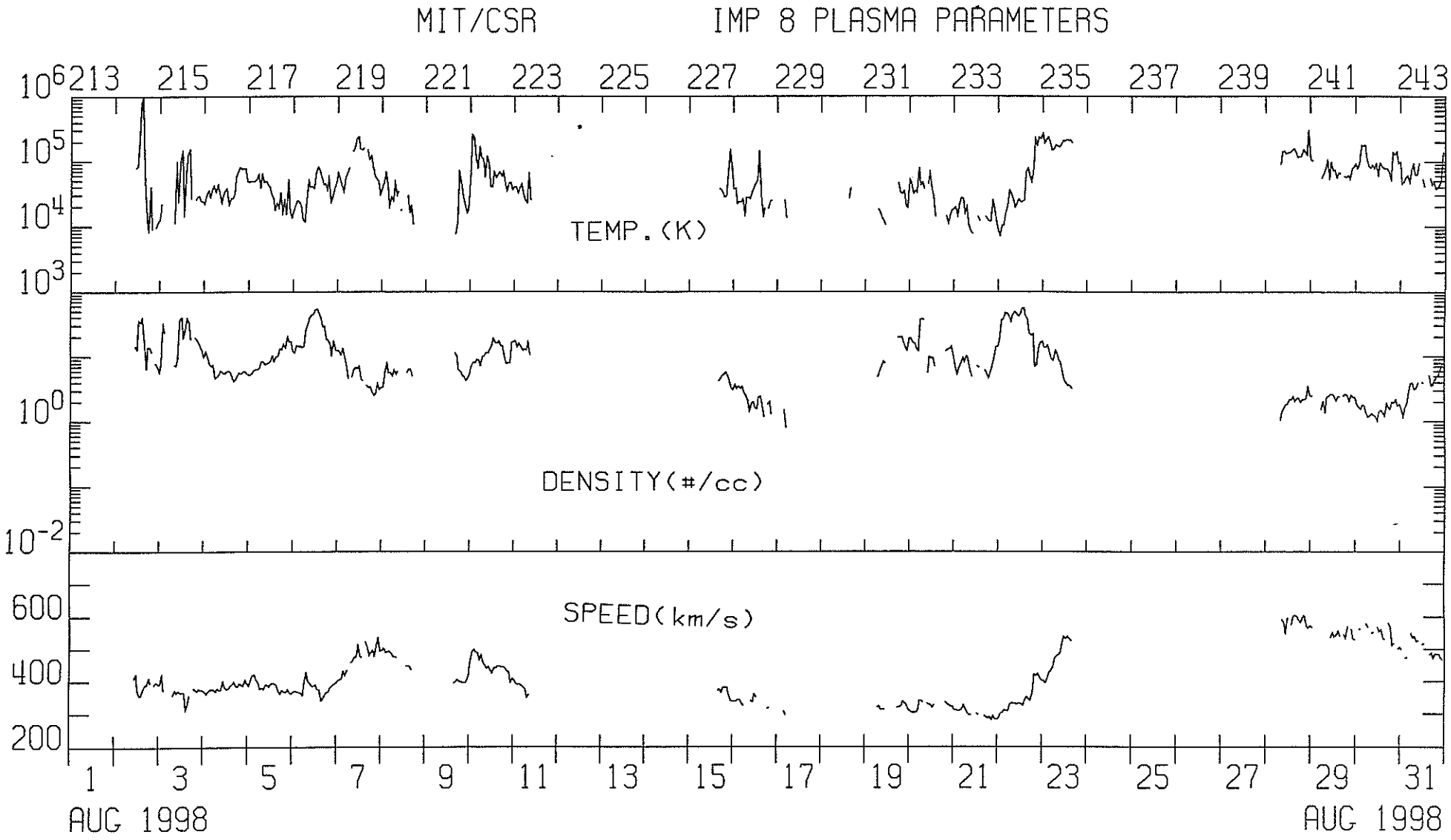
The remark "Bright Emission 1/3" indicates that bright emission was observed 1/3 of time.
The remark "Normal Emission 1/3" indicates that normal emission was observed 1/3 of time.

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.

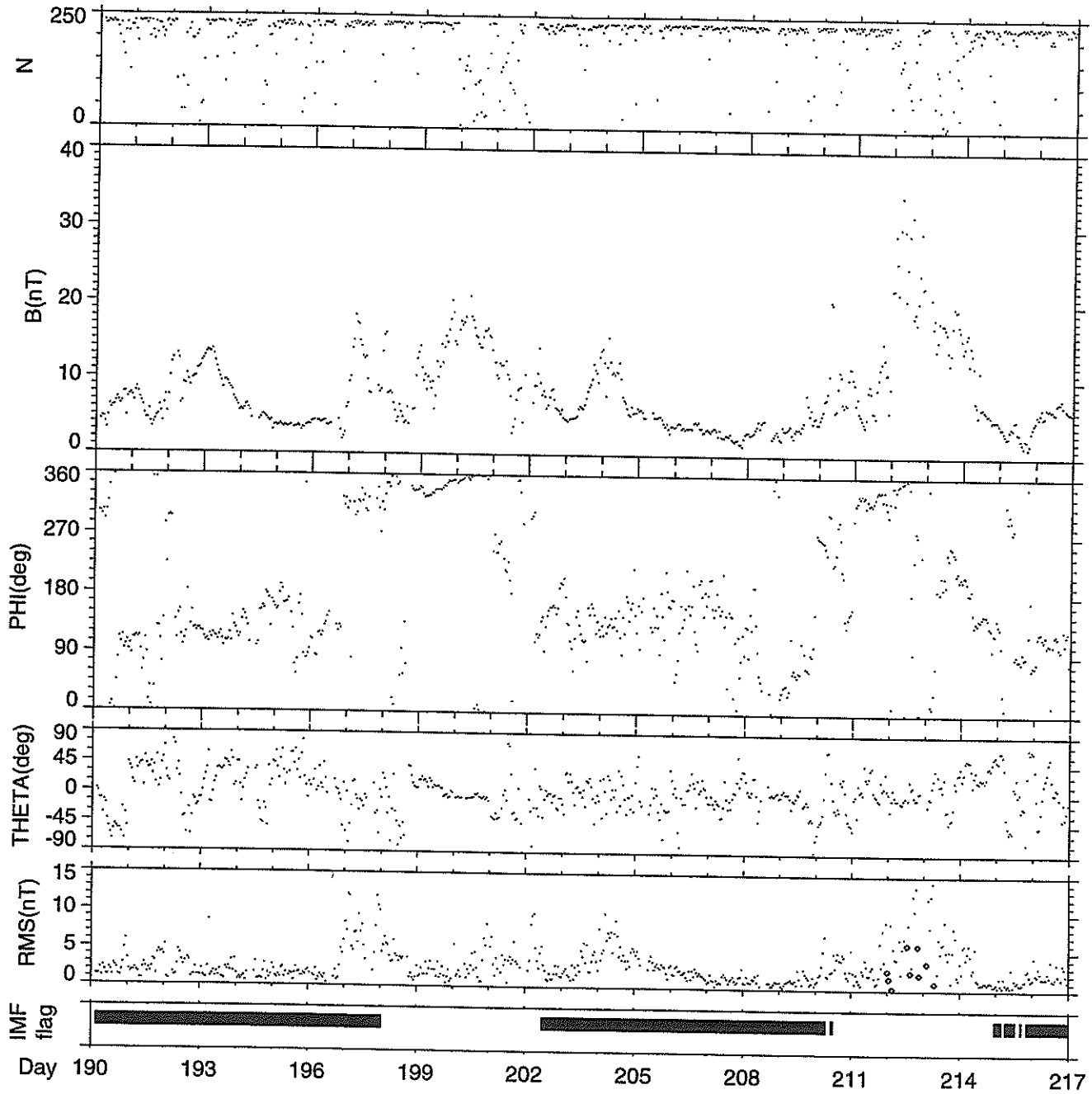
IMP 8 SOLAR WIND PLASMA
AUGUST 1998



IMP 8 MIT ONE-HOUR AVERAGES

IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages (c) DOY 190 - 217 July 9 1998 - August 5 1998

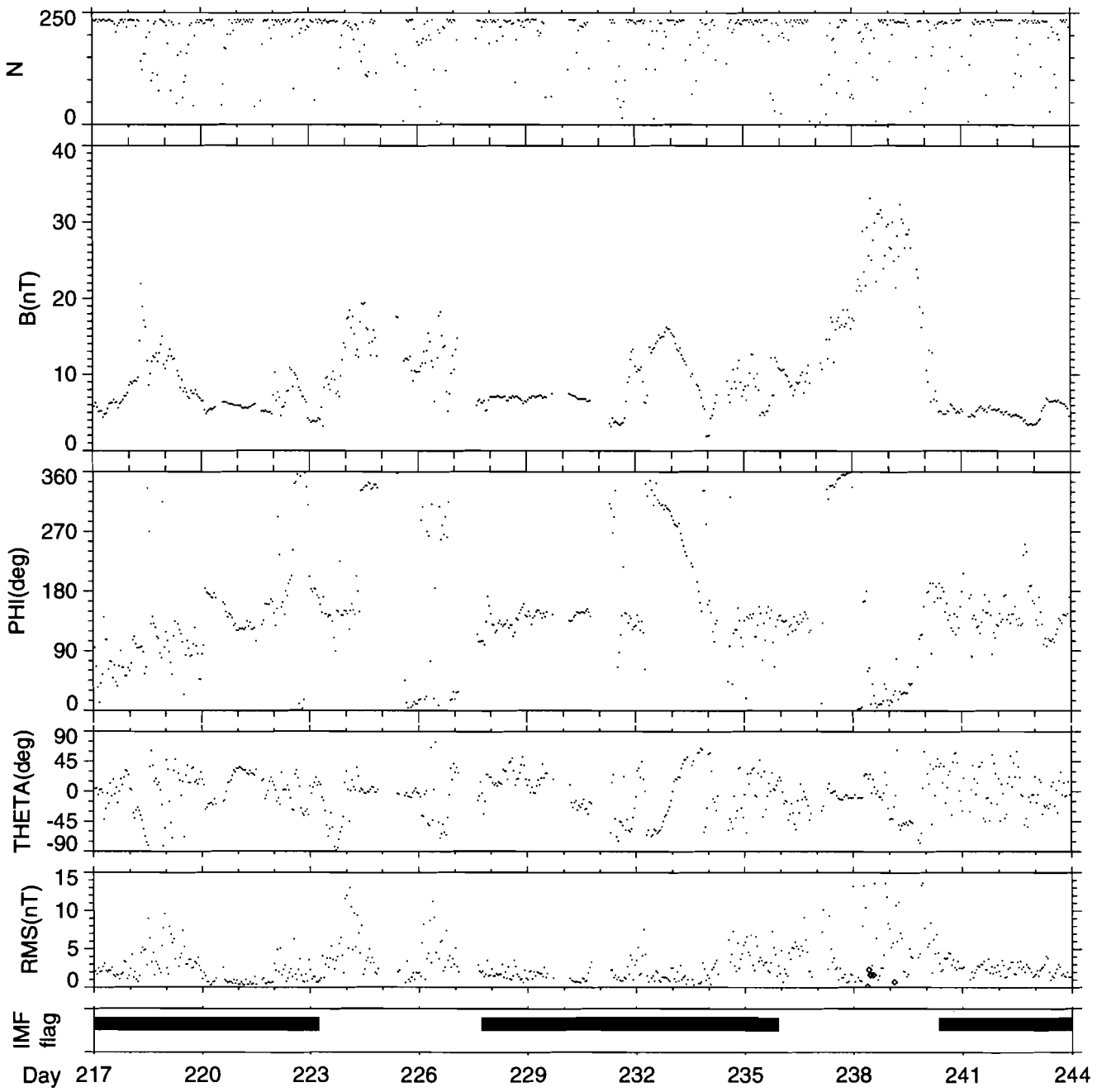


Generation Date : Mon Nov 9 16:06:14 1998

NOTE: The IMF "flag" (black boxes at the bottom of the plots) indicates where the interplanetary magnetic field regions are according to a dynamic model of the location of the bow shock. At all other times IMP-8 is in the magnetosphere.

IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages (c) DOY 217 - 244 August 5 1998 - September 1 1998



Generation Date : Mon Nov 9 16:06:15 1998

NOTE: The IMF "flag" (black boxes at the bottom of the plots) indicates where the interplanetary magnetic field regions are according to a dynamic model of the location of the bow shock. At all other times IMP-8 is in the magnetosphere.

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SOLAR-TERRESTRIAL PHYSICS

The ICSU Panel on WDCs has recommended that it would be appropriate courtesy to acknowledge in publications that data were obtained from the originating station or investigator through the intermediary of the WDCs. The following statement is suggested:

"Data used in this study were provided by WDC-A for Solar-Terrestrial Physics, NOAA E/GC2, 325 Broadway, Boulder Colorado 80303, USA."