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Data for September 1989

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S O L A R - G E O P H Y S I C A L D A T A

NUMBER 547

(Issued in Two Parts)

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C O N T E N T S

PART I (PROMPT REPORTS)

PART II (COMPREHENSIVE REPORTS)

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C O N T E N T S

Comprehensive Reports DATA FOR **SEPTEMBER 1989** Number 547 Part II

Hα S O L A R F L A R E S

SEPTEMBER 1989

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
0001	MITK	01	0450	0507	0604	S21	E61	5671	09	5.9	74	1N			C	0507	150		EI
0002		01	0529*	0613*	0732	S16	E47	5669	09	4.8	123	1N					263	4.1	EIJ
	MITK	01	0529	0617	0726D	S18	E53	5669	09	5.3	117D	1B			C	0617	120	2.3	EI
	ATHN	01	0546	0550U	0600D	S18	E47	5669	09	4.8	14D	1N		3	V	0550	175	2.9	
	MITK	01	0606	0633	0726D	S16	E40	5669	09	4.3	80D	1N			C	0633	200	3.0	EIJ
	ATHN	01	0608	0610U	0710	S15	E46	5669	09	4.7	62	1N		3	V	0610	207	2.9	
	KANZ	01	0610	0613	0755	S16	E49	5669	09	5.0	105	SF			C				
	ABST	01	0702E	0703U	0803D	S15	E45	5669	09	4.7	61D	2N			P	0703	611	9.5	E
0003		01	07523	07541	0802	S26	E58	5671	09	5.8	10	SN					42	1.0	DIT
	KAND	01	0752	0754	0802	S25	E59	5671	09	5.9	10	SN			P	0754	42	1.0	DIT
	KANZ	01	0755	0755	0801	S27	E57	5671	09	5.8	6	SF			V				
0004		01	0810*	0816	0829	S18	E59	5671	09	5.8	19	SB					94	2.1	EFIT
	KAND	01	0810	0816	0830	S18	E61	5671	09	6.0	20	SB			P	0816	62	1.4	EFIT
	KANZ	01	0812	0816	0828	S18	E59	5671	09	5.8	16	SN			V				
	ATHN	01	0821	0822U	0826D	S19	E56	5671	09	5.6	5D	1B		3	V	0822	127	2.8	
0005	KAND	01	1015	1020	1035	S16	E56	5669	09	5.7	20	SN			P	1020	83	1.7	DIT
0006	RAMY	01	1126	1127	1134	S15	E52	5671	09	5.4	8	SF		3	E		26		F
0007		01	11262	11281	1135	S18	E39	5669	09	4.4	9	SF					34		EF
	RAMY	01	1126	1128	1133	S18	E39	5669	09	4.4	7	SF		3	E		20		FE
	SVTO	01	1128	1129	1137	S17	E39	5669	09	4.4	9	SF		2	E		47		F
0008		01	1150	11503	1159	S19	E54	5671	09	5.6	9	SN					123	4.1	EFIT
	SVTO	01	1147E	1150U	1159	S19	E54	5671	09	5.6	12D	SF		3	E		99		
	KANZ	01	1150	1150	1200	S20	E54	5671	09	5.6	10	SF			V				
	RAMY	01	1150	1151	1158	S18	E53	5671	09	5.5	8	SN		3	E		63		FE
	KAND	01	1150	1153	1200	S18	E54	5671	09	5.6	10	1N			P	1153	208	4.1	EIT
0009		01	1252	12521	1256	S14	E33	5669	09	4.0	4	SF					26		
	KANZ	01	1252	1252	1255	S14	E32	5669	09	3.9	3	SF			V				
	RAMY	01	1252	1253	1256	S14	E34	5669	09	4.1	4	SF		3	E		26		
0010		01	12581	13001	1312	S18	E54	5671	09	5.6	14	SF					39		
	KANZ	01	1258	1301	1313	S17	E54	5671	09	5.6	15	SF			V				
	RAMY	01	1259	1300	1312	S18	E55	5671	09	5.7	13	SF		3	E		39		
0011		01	1347	1347	1359	S18	E60	5671	09	6.1	12	SF					11		
	KANZ	01	1347		1347D	S17	E58	5671	09	6.0	12D	SF			V				
	RAMY	01	1347	1347	1359	S18	E61	5671	09	6.2	12	SF		3	E		11		
0012		01	1421	14242	1515	N24	W51	5655	08	28.7	54	SF					42		FH
	HOLL	01	1421	1424	1515D	N22	W49	5655	08	28.9	54D	SF		3	E		32		FH
	RAMY	01	1421	1426	1526	N26	W51	5655	08	28.7	65	SF		3	E		34		FH
	SVTO	01	1434E	1439U	1504	N23	W52	5655	08	28.7	30D	SF		2	E		60		FH
0013		01	14391	14392	1456	S17	E51	5671	09	5.5	17	SF					26		F
	SVTO	01	1434E	1441	1504	S16	E52	5671	09	5.5	30D	SF		2	E		51		F
	HOLL	01	1439	1439	1449D	S17	E51	5671	09	5.5	10D	SF		3	E		16		
	RAMY	01	1440	1440	1447	S18	E51	5671	09	5.5	7	SF		3	E		10		
0014		01	1446	1454U	1505	S16	E39	5669	09	4.6	19	SF	M 2.0				44		F
	HOLL	01	1446	1454U	1515D	S16	E39	5669	09	4.6	29D	SF	M 2.0	2	E		26		F
	SVTO	01	1457E	1459U	1505	S16	E39	5669	09	4.6	8D	SF	M 2.0	2	E		63		
0015	RAMY	01	1539	1541	1553	S17	E57	5671	09	6.0	14	SF	M 1.6	3	E		14		
0016		01	17049	17132	1733	S19	E53	5671	09	5.7	29	SF					48		FH
	PALE	01	1704	1714	1751	S19	E55	5671	09	5.9	47	SF		3	E		89		F
	RAMY	01	1711	1713	1727	S19	E55	5671	09	5.9	16	SF		3	E		35		FH
	HOLL	01	1713	1715	1720	S18	E50	5671	09	5.5	7	SF		3	E		20		
0017	PALE	01	1909	1938	1943	S15	E47	5669	09	5.3	34	SF		3	E		72		F
		01	2018		2021	No Flare Patrol													

SEPTEMBER 1989

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0018	PALE	01	2044	2044	2100	S16	E35	5669	09	4.5	16	SF		3	E		22		
		01	2047		2138	No Flare Patrol													
0019	PALE	01	2140	2148	2156	S19	E48	5671	09	5.6	16	SF		3	E		21		F
0020	PALE	01	2237	2237	2253	S19	E47	5671	09	5.5	16	SF		3	E		21		F
0021		01	23509	2355	2502	S19	E44	5671	09	5.3	72	2N	M 5.8				371	3.7	EFIY
	LEAR	01	2350	2355	2439	S19	E42	5671	09	5.2	49	2N	M 5.8	3	E		434		F
	PALE	01	2359	2418U	2524	S19	E47	5671	09	5.6	85	3F		3	E		704		
	MITK	02	0011E		0022D	S19	E39	5671	09	5.0	11D	1B			P	0011	250	3.7	EIY
	HOLL	02	0033E	0035U	0043D	S18	E46	5671	09	5.5	10D	SF		2	E		95		F
0022		02	0141*	0143*	0156	S18	E50	5671	09	5.9	15	SF	C 7.2				45		F
	LEAR	02	0141	0143	0153	S18	E47	5671	09	5.6	12	SF	C 7.2	3	E		77		F
	LEAR	02	0154	0156	0159	S17	E53	5671	09	6.1	5	SF	M 1.1	3	E		13		
0023	LEAR	02	0231	0233	0242	S19	E47	5671	09	5.7	11	SF		3	E		30		
0024	YUNN	02	0330E	0335U	0345	S21	E54	5671	09	6.3	15D	SN			P	0335	94	2.0	
0025	LEAR	02	0432	0435	0440	S17	E51	5671	09	6.1	8	SF		3	E		23		
0026	YUNN	02	0522E	0524	0546	S18	E48	5671	09	5.9	24D	SN			P		31	0.5	
0027		02	05244	05273	0550	S27	W02	5670	09	2.1	26	SN					32	0.6	E
	YUNN	02	0524	0527	0551	S27	W01	5670	09	2.1	27	SN			C		47	0.6	E
	LEAR	02	0528	0530	0550	S27	W02	5670	09	2.1	22	SF		3	E		18		
0028		02	06201	06205	0632	S18	E47	5671	09	5.8	12	1N	M 2.5				171	3.1	DE
	ATHN	02	0618E	0620	0627	S18	E42	5671	09	5.5	9D	1N		3	V	0620	239	3.7	
	BUCA	02	0620	0625	0635	S18	E50	5671	09	6.1	15	SN			C	0625	107	1.9	D
	LEAR	02	0621	0622	0634	S18	E47	5671	09	5.8	13	1B	M 2.5	3	E		110		
	ABST	02	0621	0623	0632	S19	E47	5671	09	5.8	11	1N			C	0623	148	2.5	E
	YUNN	02	0622E	0623U	0632	S18	E48	5671	09	5.9	10D	1B			P	0623	252	4.4	
0029	HTPR	02	0646	0650	0700	S18	E36	5669	09	5.0	14	SF			C	0650	50	0.6	E
0030		02	0840*	0842*	0858	S17	E46	5671	09	5.8	18	SN	C 4.9				86	1.8	E
	ATHN	02	0840	0842	0846	S18	E43	5671	09	5.6	6	SF		3	V	0842	80	1.3	
	LEAR	02	0848	0850	0903	S18	E48	5671	09	6.0	15	SF	C 4.9	3	E		19		
	HTPR	02	0852	0857	0905	S16	E47	5671	09	5.9	13	1B			C	0857	160	2.4	E
0031	HTPR	02	0948	1003	1020	S18	E42	5671	09	5.6	32	1B			C	1003	180	2.3	E
0032		02	1024	1030	1038	S15	E41	5669	09	5.5	14	SN					66	1.3	EI
	HTPR	02	1024	1030	1038	S15	E42	5669	09	5.6	14	SN			C	1030	100	1.3	EI
	SVTO	02	1034E	1035U	1045D	S15	E40	5669	09	5.5	11D	SF		3	E		31		
0033	HTPR	02	1029	1031	1038	S20	E30	5671	09	4.7	9	SN			C	1031	30	0.3	E
0034	SVTO	02	1040	1043	1053	S28	W03	5670	09	2.2	13	SF		3	E		13		
0035	HTPR	02	1049	1052	1105	S15	E42	5669	09	5.6	16	SB			C	1052	80	1.1	E
0036	RAMY	02	1115	1115	1121	S19	E36	5671	09	5.2	6	SF		2	E		27		
0037	RAMY	02	1117	1118	1147	N25	E69	5672	09	7.8	30	SF		3	E		23		
0038		02	11306	1140*	1226	S17	E48	5671	09	6.1	56	1B	M 2.3				271	5.9	EHK
	RAMY	02	1130	1140	1226	S18	E50	5671	09	6.3	56	1B	M 2.3	3	E		206		H
	RAMY	02	1130	1214	1226	S18	E50	5671	09	6.3	56	SF			E		27		K
	HTPR	02	1136		1149D	S15	E42	5671	09	5.7	13D	2B			C	1141	450	5.9	E
	SVTO	02	1145E	1145U	1220D	S17	E51	5671	09	6.4	35D	2B		2	E		401		H
0039		02	13154	1321	1338	S18	E45	5671	09	6.0	23	1N	C 3.8				146	3.3	E
	HOLL	02	1315	1321U	1336	S20	E48	5671	09	6.2	21	SF	C 3.8	3	E		41		
	HTPR	02	1319	1321	1339	S15	E42	5671	09	5.7	20	1B			C	1321	250	3.3	E

Hα SOLAR FLARES

SEPTEMBER 1989

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0040	SVTO	02	1403E	1414U	1435D	S24	W03	5670	09	2.3	32D	SF		2	E		12		
0041		02	1427*	1456*	1522	S17	E39	5669	09	5.6	55	SN					66	1.4	EFI
	RAMY	02	1427	1506	1529	S17	E36	5669	09	5.3	62	SF		4	E		48		F
	HOLL	02	1434	1506	1526	S17	E34	5669	09	5.2	52	SF		3	E		38		F
	HTPR	02	1452	1456	1503	S16	E48	5669	09	6.2	11	SN			C	1456	120	1.9	EI
	HTPR	02	1504	1507	1528	S17	E38	5669	09	5.5	24	SB			C	1507	60	0.8	E
0042	HTPR	02	1526	1543	1555	N25	E53	5672	09	6.7	29	SN			C	1543	100	1.6	
0043	HTPR	02	1544		1557D	S27	W04	5670	09	2.3	13D	SF			C	1548	100		EI
0044		02	1606	16073	1624	N24	W66	5655	08	28.7	18	SF					27		
	HOLL	02	1606	1607	1615	N25	W67	5655	08	28.6	9	SF		3	E		22		
	RAMY	02	1606	1610	1634	N24	W65	5655	08	28.7	28	SF		4	E		32		
0045	RAMY	02	1625	1625	1634	N22	E59	5672	09	7.2	9	SF		4	E		17		
0046		02	1702*	1720*	1751	S18	E35	5669	09	5.4	49	SF	C 5.5				42		EFK
	HOLL	02	1702	1720	1800	S18	E34	5669	09	5.3	58	SF	C 5.5	3	E		50		FE
	HOLL	02	1702	1747	1800	S18	E34	5669	09	5.3	58	SF			E		44		K
	RAMY	02	1718	1721	1732	S19	E36	5669	09	5.5	14	SF		3	E		33		F
0047	HOLL	02	1713	1720	1723	N23	E61	5672	09	7.4	10	SF		3	E		12		
0048		02	1808*	1808*	1830	S18	E32	5669	09	5.2	22	SF	C 4.7				27		F
	HOLL	02	1808	1808	1813	S17	E32	5669	09	5.2	5	SF		3	E		21		
	RAMY	02	1818	1825	1833	S19	E32	5669	09	5.2	15	SF	C 4.7	3	E		23		F
	HOLL	02	1822	1826	1843	S17	E32	5669	09	5.2	21	SF	C 4.7	3	E		36		F
0049	RAMY	02	1903	1905	1908	N22	E58	5672	09	7.2	5	SF		3	E		23		
		02	1922		1928	No Flare Patrol													
0050		02	1930*	1939*	2108	S17	E27	5669	09	4.9	98	SF	C 7.3				36		EF
	HOLL	02	1930	1944	2029	S17	E26	5669	09	4.8	59	SF		2	E		42		FE
	RAMY	02	1933	1939	2159D	S17	E31	5669	09	5.2	146D	SF	C 7.3	3	E		22		F
	HOLL	02	2041	2050	2148	S17	E25	5669	09	4.8	67	SF	M 1.7	3	E		45		FE
0051	HOLL	02	1935	1936	2012	N25	E60	5672	09	7.5	37	SF		3	E		12		
		02	1954		2027	No Flare Patrol													
		02	2108		2115	No Flare Patrol													
		02	2125		2130	No Flare Patrol													
		02	2216		2220	No Flare Patrol													
0052		02	2225*	2233*	2356	S16	E28	5669	09	5.0	91	1N	M 4.6				192	0.6	DEFU
	HOLL	02	2225	2233	2320D	S18	E32	5669	09	5.4	55D	1B	M 4.6	3	E		155		UE
	PALE	02	2226E	2236	2429	S15	E28	5669	09	5.0	123D	2N		3	E		396		F
	LEAR	02	2256E	2256U	2322	S17	E32	5669	09	5.4	26D	1F		1	E		169		
	PURP	02	2314	2318	2325D	S16	E20	5669	09	4.5	11D	SF			C	2318	48	0.6	D
0053	PALE	03	0051	0052	0137	S16	E29	5669	09	5.2	46	SF		3	E		89		F
0054	PALE	03	0149	0154	0211	S27	W11	5670	09	2.2	22	SF		3	E		27		F
0055		03	01579	0158*	0241	S18	E27	5669	09	5.1	44	SF	C 7.0				57	0.8	EFK
	PALE	03	0157	0158	0205	S17	E29	5669	09	5.3	8	SF		3	E		39		F
	URUM	03	0203	0205	0232	S19	E26	5669	09	5.1	29	SF			C		64	0.8	E
	LEAR	03	0206	0217	0256	S18	E26	5669	09	5.1	50	SF	C 7.0		E		37		K
	PALE	03	0206	0219	0254	S17	E29	5669	09	5.3	48	1F	C 7.0	3	E		105		F
	LEAR	03	0206	0243	0256	S18	E26	5669	09	5.1	50	SF		3	E		41		F
0056	LEAR	03	0430	0431	0442	S18	E26	5669	09	5.2	12	SF		3	E		31		
0057	ABST	03	0520	0521	0533	S23	E42	5669A	09	6.4	13	SF			C	0521	87	1.4	PY
0058	SVTO	03	0538	0542	0549	S24	W11	5670	09	2.4	11	SF		3	E		18		

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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
0059		03	0607	0610	0650	S22	W12	5670	09	2.3	43	SF						66	1.5	EF
	SVTO	03	0607	0610	0650	S23	W13	5670	09	2.2	43	SF			3	E		17		F
	ABST	03	0629E	0634U	0658D	S21	W12	5670	09	2.3	29D	SF				C	0634	114	1.5	E
0060	CATA	03	0635	0635	0635D	S14	E17	5669	09	4.5	29D	SN			2	P	0635	112	1.3	
0061		03	07256	07303	0740	S16	E22	5669	09	5.0	15	SN	C	3.5				94	2.0	E
	URUM	03	0725	0730	0740	S17	E22	5669	09	5.0	15	SN				C		161	2.0	E
	LEAR	03	0731	0733	0740	S16	E22	5669	09	5.0	9	SF	C	3.5	3	E		27		
0062	CATA	03	0919	0920	0936	S20	E23	5671	09	5.1	17	SN			2	C	0920	45	0.6	
0063		03	1035	1040	1052	S18	E32	5671	09	5.9	17	1B						222	3.0	E
	URUM	03	1035	1040	1048	S18	E33	5671	09	5.9	13	SB				C		129	1.8	E
	ATHN	03	1035E	1040	1052	S18	E29	5671	09	5.6	17D	1B			3	V	1040	255	3.3	
	CATA	03	1040E	1040	1056	S19	E34	5671	09	6.0	16D	1B			2	P	1040	281	3.9	
0064	RAMY	03	1118	1126	1139	S17	E23	5669	09	5.2	21	SF			3	E		16		
0065		03	11342	11342	1139	N24	E51	5672	09	7.4	5	SN						34	0.9	
	RAMY	03	1134	1134	1139	N24	E51	5672	09	7.4	5	SF			3	E		11		
	CATA	03	1136	1136	1136D	N23	E51	5672	09	7.4	5D	SN			2	P	1136	56	0.9	
0066	RAMY	03	1216	1216	1221	S16	E26	5669	09	5.5	5	SF			3	E		16		
0067		03	1423	14231	1427	N26	E57	5672	09	8.0	4	SF						36		
	HOLL	03	1423	1423	1427	N26	E57	5672	09	8.0	4	SF			3	E		41		
	RAMY	03	1423	1424	1427	N25	E57	5672	09	8.0	4	SF			3	E		31		
0068		03	14281	14312	1458	S17	E19	5669	09	5.0	30	1B	X	1.2				178		FU
	RAMY	03	1428	1431	1500	S18	E16	5669	09	4.8	32	1B	X	1.2	3	E		155		F
	HOLL	03	1429	1431	1455	S18	E19	5669	09	5.0	26	1B	X	1.2	3	E		159		F
	SVTO	03	1433E	1433	1450D	S16	E21	5669	09	5.2	17D	1B			3	E		221		UF
0069		03	1444	1446*	1528	N23	E47	5672	09	7.2	44	SF						49		FK
	RAMY	03	1444	1446	1536	N23	E47	5672	09	7.2	52	SF				E		53		K
	HOLL	03	1444	1502	1511	N24	E48	5672	09	7.3	27	SF			3	E		51		F
	RAMY	03	1444	1502	1536	N23	E47	5672	09	7.2	52	SF			3	E		44		
0070		03	1502	1503*	1556	S21	E23	5671	09	5.4	54	SF						54		FK
	RAMY	03	1502	1503	1556	S21	E23	5671	09	5.4	54	SF				E		57		K
	RAMY	03	1502	1518	1556	S21	E23	5671	09	5.4	54	SF			3	E		52		F
0071		03	1504*	1519*	1623	S19	E17	5669	09	4.9	79	SF						42		EFK
	HOLL	03	1504	1519	1621	S20	E18	5669	09	5.0	77	SF				E		47		K
	HOLL	03	1504	1548	1621	S20	E18	5669	09	5.0	77	SF			3	E		45		FE
	RAMY	03	1556	1556	1626	S18	E16	5669	09	4.9	30	SF			3	E		35		
0072	HOLL	03	1705	1707	1720	S17	E18	5669	09	5.1	15	SF			3	E		24		F
0073	HOLL	03	1725	1726	1732	N27	E55	5672	09	8.0	7	SF			3	E		21		
0074		03	1753	1754	1801	N26	E46	5672	09	7.3	8	SF						19		
	HOLL	03	1753	1754	1800	N25	E47	5672	09	7.4	7	SF			3	E		18		
	PALE	03	1753	1754	1802	N27	E46	5672	09	7.3	9	SF			3	E		20		
0075		03	1755	1755	1800	S16	E18	5669	09	5.1	5	SF						19		F
	HOLL	03	1755	1755	1800	S16	E17	5669	09	5.0	5	SF			3	E		19		
	PALE	03	1755	1755	1801	S15	E18	5669	09	5.1	6	SF			3	E		19		F
0076		03	1839	1840	1909	S16	E25	5671	09	5.7	30	SF	C	5.4				34		F
	PALE	03	1839	1840	1909	S15	E24	5671	09	5.6	30	SF	C	5.4	3	E		39		
	HOLL	03	1839	1840	1909	S18	E26	5671	09	5.7	30	SF	C	5.4	3	E		30		F
0077	PALE	03	1839	1841	1847	N27	E46	5672	09	7.4	8	SF			3	E		17		F
0078	HOLL	03	1859	1902	1909	N25	E48	5672	09	7.5	10	SF			3	E		15		
0079	PALE	03	2004	2005	2009	S15	E16	5669	09	5.0	5	SF			3	E		14		

Hα SOLAR FLARES

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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	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0080	HOLL	03	2010	2107	2119	N26	E53	5672	09	7.9	69	SF		3	E		20		
0081	HOLL	03	2309	2312	2334	S16	E14	5669	09	5.0	25	SF		3	E		17		F
0082		03	23362	23394	2348	S17	E27	5669	09	6.0	12	1N M	1.8				80		F
	HOLL	03	2336	2343	2343D	S17	E27	5669	09	6.0	7D	1B M	1.8	3	E		108		F
	LEAR	03	2338	2339	2348	S18	E26	5669	09	6.0	10	SF M	1.8	2	E		23		
	PALE	03	2340E	2340U	2350D	S16	E28	5669	09	6.1	10D	1N M	1.8	3	E		110		
0083		04	03025	03086	0322	S18	E25	5669	09	6.0	20	SN C	9.9				74	1.2	DF
	URUM	04	0302	0308	0320	S19	E24	5669	09	5.9	18	SN			C		96	1.2	D
	LEAR	04	0303	0310	0322	S18	E24	5669	09	5.9	19	SF C	9.9	3	E		24		
	TACH	04	0307	0314	0325	S18	E26	5669	09	6.1	18	SB		2	C	0314	102	1.3	F
0084		04	0459*	0502*	0530	S18	E22	5669	09	5.9	31	SN C	5.5				78	1.0	DEF
	SVTO	04	0459	0502	0518	S17	E22	5669	09	5.9	19	SF C	5.5	2	E		96		
	ABST	04	0500	0506	0513	S20	E20	5669	09	5.7	13	SN			C	0506	105	1.3	E
	LEAR	04	0500	0506	0518	S18	E20	5669	09	5.7	18	SF C	5.5	3	E		62		
	TACH	04	0505	0525	0535	S16	E21	5669	09	5.8	30	SB		2	C	0525	128	1.5	F
	ABST	04	0513	0525	0535	S20	E21	5669	09	5.8	22	SN			C	0525	87	1.1	E
	LEAR	04	0519	0523	0536	S18	E20	5669	09	5.7	17	SF C	7.7	3	E		47		F
	TACH	04	0535	0537	0542	S18	E26	5669	09	6.2	7	SB		2	C	0537	41	0.5	E
	ABST	04	0538	0540	0544	S18	E27	5669	09	6.3	6	SF			C	0540	61	0.8	D
0085	SVTO	04	0542	0546	0604	S30	W23	5670	09	2.4	22	SF		3	E		42		F
0086		04	0610*	0612*	0659	S16	E08	5669	09	4.9	49	SN M	1.3				160	2.4	DEFITU
	LEAR	04	0610	0612	0622	S15	E14	5669	09	5.3	12	SF		3	E		14		
	SVTO	04	0610E	0655U	0704D	S15	E12	5669	09	5.2	54D	SF		2	E		35		F
	LEAR	04	0625	0631	0714	S18	E10	5669	09	5.0	49	1N M	1.3	3	E		114		F
	KAND	04	0629	0631	0655	S19	E11	5669	09	5.1	26	SN			P	0631	104	1.2	EIT
	ATHN	04	0630E	0633	0640D	S18	E08	5669	09	4.9	10D	1B		3	V	0633	286	3.3	
	BUCA	04	0632E	0634	0700	S16	E10	5669	09	5.0	28D	1N			P	0634	430	4.9	U
	BUCA	04	0634	0634	0720	S12	W03	5669	09	4.0	46	SN			C	0634	64	0.7	D
	CATA	04	0640E	0640	0701	S13	W03	5669	09	4.0	21D	SN		2	P	0640	112	1.2	
	CATA	04	0640E	0640	0701	S19	E11	5669	09	5.1	21D	1B		2	P	0640	281	3.3	
0087		04	0705	07054	0720	S19	E23	5669	09	6.0	15	SN					66	0.8	EIT
	CATA	04	0705	0705	0705D	S19	E22	5669	09	6.0	15D	SN		1	P	0705	56	0.7	
	URUM	04	0705	0707	0720	S19	E24	5669	09	6.1	15	SN			C		80	1.0	E
	KAND	04	0705	0709	0720	S19	E22	5669	09	6.0	15	SF			P	0709	62	0.8	EIT
0088		04	07092	07111	0724	N27	E68	5676	09	9.6	15	SN					82	1.9	DEIT
	LEAR	04	0709	0711	0727	N27	E66	5676	09	9.4	18	SF		3	E		99		
	URUM	04	0710	0712	0720	N26	E65	5676	09	9.3	10	SN			C		80	1.9	D
	BUCA	04	0711E	0711	0725	N28	E72	5676	09	9.9	14D	1B			P	0711	107		D
	KAND	04	0711	0712	0722	N27	E68	5676	09	9.6	11	SN			P	0712	42		EIT
0089		04	08571	0903*	0945	S18	E20	5669	09	5.9	48	1B X	1.1				324	4.4	EFHJK
	LEAR	04	0857	0903	0946	S18	E19	5669	09	5.8	49	2B X	1.1	3	E		369		FH
	LEAR	04	0857	0917	0946	S18	E19	5669	09	5.8	49	1B M	9.0		E		105		K
	ATHN	04	0858	0905	0911	S18	E18	5669	09	5.7	13	2B		3	V	0905	478	5.8	
	KAND	04	0858	0905	0955	S17	E21	5669	09	6.0	57	2B			P	0905	624	7.5	EFHJ
	ATHN	04	0913E	0915	0928D	S18	E21	5669	09	6.0	15D	SF		3	V	0915	143	1.7	
	CATA	04	0939E	0939	1006	S18	E21	5669	09	6.0	27D	1B		2	P	0939	225	2.8	
0090		04	09473	0950	1006	S17	E04	5669	09	4.7	19	SB					136	1.5	EIT
	KAND	04	0947	0950	1005	S17	E04	5669	09	4.7	18	SN			P	0950	104	1.1	EIT
	CATA	04	0950	0950	1006	S17	E03	5669	09	4.6	16	SB		2	C	0950	169	1.9	
0091		04	11183	1121	1132	S15	E13	5669	09	5.4	14	SB					122	1.4	EIT
	KAND	04	1118	1121	1128	S15	E13	5669	09	5.4	10	SN			P	1121	104	1.1	EIT
	CATA	04	1121	1121	1136	S15	E13	5669	09	5.4	15	SB		2	C	1121	141	1.6	
0092		04	11333	11351	1140	S17	E23	5669	09	6.2	7	SB C	5.8				92	1.4	EIT
	KAND	04	1133	1135	1140	S17	E22	5669	09	6.1	7	SB			P	1135	125	1.5	EIT
	RAMY	04	1136E	1136U	1139	S18	E24	5669	09	6.3	3D	SB C	5.8	2	E		38		
	CATA	04	1136	1136	1140D	S17	E22	5669	09	6.1	4D	SB		2	P	1136	112	1.4	

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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
0093		04	12024	12105	1304	S22	E18	5669A	09	5.9	62	1B	M	1.4				204	3.0	EFITU
	RAMY	04	1202	1215	1305	S23	E18	5669A	09	5.9	63	1N	M	1.4	3	E		160		F
	KAND	04	1206	1210	1303	S20	E17	5669A	09	5.8	57	1B				P	1210	249	3.0	EITU
0094	KAND	04	1300	1302	1306	S12	W06	5669	09	4.1	6	SN				P	1302	62	0.7	EIT
0095		04	1255	1259*	1339	N23	E40	5672	09	7.6	44	SN	M	2.0				62	0.9	EFKU
	KAND	04	1255	1259	1315	N23	E40	5672	09	7.6	20	SB				P	1259	62	0.9	EF
	HOLL	04	1304E	1314U	1334	N24	E39	5672	09	7.5	30D	SF			2	E		22		UF
	RAMY	04	1305E	1306U	1354	N23	E41	5672	09	7.7	49D	1N	M	2.0	3	E		113		
	RAMY	04	1305E	1320	1354	N23	E41	5672	09	7.7	49D	SF				E		51		K
0096		04	15183	1525*	1621	S15	E03	5669	09	4.9	63	SF	C	9.7				84		EFK
	HOLL	04	1518	1526	1636	S14	E00	5669	09	4.6	78	1N	C	9.7	3	E		144		FE
	HOLL	04	1518	1609	1636	S14	E00	5669	09	4.6	78	SF				E		41		K
	RAMY	04	1521	1525	1552	S18	E08	5669	09	5.2	31	SF			3	E		66		F
0097	HOLL	04	1659	1659	1708	S19	E11	5669	09	5.5	9	SF			3	E		15		F
0098		04	17052	1705*	1725	N24	E36	5672	09	7.5	20	SF						17		F
	HOLL	04	1705	1705	1724	N25	E37	5672	09	7.6	19	SF			3	E		23		F
	RAMY	04	1707	1721	1726	N24	E36	5672	09	7.5	19	SF			3	E		11		F
0099		04	18102	18112	1823	N25	E35	5672	09	7.5	13	SF						24		F
	HOLL	04	1810	1811	1824	N25	E36	5672	09	7.5	14	SF			3	E		23		F
	PALE	04	1812	1813	1817	N27	E34	5672	09	7.4	5	SF			3	E		16		
	RAMY	04	1812	1813	1829	N24	E35	5672	09	7.5	17	SF			3	E		34		F
0100		04	18481	1849	1900	N24	E36	5672	09	7.6	12	SF						20		F
	HOLL	04	1848	1849	1902	N25	E36	5672	09	7.6	14	SF			3	E		23		F
	RAMY	04	1849	1849	1857	N24	E36	5672	09	7.6	8	SF			3	E		18		F
0101		04	1908	19082	1925	S18	E06	5669	09	5.2	17	SN	C	8.0				38		EF
	RAMY	04	1908	1908	1923	S19	E06	5669	09	5.2	15	SF	C	8.0	3	E		22		F
	PALE	04	1908	1909	1926	S18	E06	5669	09	5.2	18	SN	C	8.0	3	E		45		FE
	HOLL	04	1908	1910	1925	S18	E05	5669	09	5.2	17	SN	C	8.0	3	E		47		FE
0102	HOLL	04	1946	1954	1957	N25	E34	5672	09	7.4	11	SF			3	E		17		F
0103		04	20434	21105	2140	N25	E34	5672	09	7.5	57	1N	C	8.9				88		EF
	PALE	04	2043	2115	2157	N27	E34	5672	09	7.5	74	1N	C	8.9	3	E		111		FE
	HOLL	04	2046	2110	2159D	N25	E34	5672	09	7.5	73D	1N	C	8.9	3	E		122		FE
	RAMY	04	2047	2111	2123	N23	E33	5672	09	7.4	36	SN	C	8.9	3	E		32		F
0104		04	21566	2202*	2228	S18	E11	5669	09	5.7	32	SF						22		F
	PALE	04	2156	2216	2247	S18	E10	5669	09	5.7	51	SF			3	E		21		F
	HOLL	04	2202	2202	2208	S17	E12	5669	09	5.8	6	SF			3	E		24		F
0105	PALE	04	2226	2228	2237	N27	E33	5672	09	7.5	11	SF			3	E		12		
0106	VORO	04	2249	2250	2309	S11	W09	5669	09	4.3	20	SF			2	C	2250	125	1.4	EI
0107		04	2250*	2252*	2318	S21	E14	5669A	09	6.0	28	SF						37	0.7	DFI
	VORO	04	2250	2252	2322	S22	E13	5669A	09	5.9	32	SF			2	C	2259	63	0.7	DI
	HOLL	04	2302	2302	2314	S20	E14	5669A	09	6.0	12	SF			3	E		11		F
0108	PALE	04	2319	2325	2336	N26	E33	5672	09	7.5	17	SF			3	E		10		F
0109	PALE	04	2337	2345	2405	N27	E31	5672	09	7.4	28	SF			3	E		20		F
0110		05	0153	0153	0227	N28	E65	5676	09	10.1	34	SF	C	8.7				58		F
	PALE	05	0153E	0153U	0207D	N30	E63	5676	09	10.0	14D	SF			3	E		60		F
	LEAR	05	0153	0153	0227	N27	E67	5676	09	10.3	34	SF	C	8.7	3	E		56		
0111		05	04571	05001	0508	S17	E13	5669	09	6.2	11	1B	M	1.7				279	3.6	DE
	ABST	05	0457	0501	0509	S17	E13	5669	09	6.2	12	SN				C	0501	175	2.0	D
	URUM	05	0458	0500	0507	S17	E13	5669	09	6.2	9	1B				C		289	3.3	D
	LEAR	05	0458	0501	0509	S17	E12	5669	09	6.1	11	1N	M	1.7	3	E		150		E
	PURP	05	0500E	0500U	0504D	S16	E13	5669	09	6.2	4D	2B				P	0500	503	5.6	

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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	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0112		05	05461	05464	0555	S14	W12	5669	09	4.3	9	SF	C 4.0				54	0.8	DE
	LEAR	05	0546	0546	0558	S15	W11	5669	09	4.4	12	SF	C 4.0	3	E		10		
	URUM	05	0546	0550	0552	S14	W12	5669	09	4.3	6	SN			C		64	0.7	D
	ABST	05	0547	0550	0556	S14	W12	5669	09	4.3	9	SF			C	0550	87	1.0	E
0113		05	0621	0621	0625	S15	W09	5669	09	4.6	4	SF							
	KANZ	05	0613E	0613U	0625	S13	W12	5669	09	4.3	12D	SF			C				
	KANZ	05	0621	0621	0625	S17	W06	5669	09	4.8	4	SF			C				
0114		05	0619*	0638*	0705	N24	E30	5672	09	7.6	46	SF	C 4.0				98	1.7	DEK
	LEAR	05	0619	0638	0709	N24	E31	5672	09	7.6	50	SF	C 4.0		E		77		K
	LEAR	05	0619	0643	0709	N24	E31	5672	09	7.6	50	SF	C 5.7	3	E		82		
	KANZ	05	0631	0647	0713D	N25	E29	5672	09	7.5	42D	1F			C				E
	PURP	05	0652E	0653	0658	N23	E28	5672	09	7.4	6D	SN			P	0653	136	1.7	D
0115	URUM	05	0642	0647	0653	N29	E46	5682	09	8.9	11	1F			C		177	2.7	D
0116		05	0652	06523	0702	S22	W44	5670	09	1.9	10	SF					34	0.7	E
	KAND	05	0652	0652	0700	S21	W44	5670	09	1.9	8	SF			P	0652	42	0.7	E
	LEAR	05	0652	0655	0705	S22	W45	5670	09	1.8	13	SF		3	E		27		
0117		05	0709*	0713*	0726	S17	E01	5669	09	5.4	17	SF					26	0.5	DIT
	KAND	05	0709	0713	0721	S18	E04	5669	09	5.6	12	SN			P	0713	42	0.5	DIT
	KANZ	05	0709	0713U	0729D	S17	E05	5669	09	5.7	20D	SF			C				
	LEAR	05	0723	0723	0730	S16	W07	5669	09	4.8	7	SF		3	E		10		
0118	CATA	05	0935E	0941	0945D	N24	E27	5672	09	7.5	10D	SB		1	P	0941	112	1.4	
0119	KAND	05	1105	1108	1118	S21	W46	5670	09	1.9	13	1B			P	1108	125	2.1	E
		05	1201		1208	No Flare Patrol													
		05	1236		1247	No Flare Patrol													
0120		05	1313	1316*	1357	S18	E06	5669	09	6.0	44	SB	M 3.2				84		FK
	RAMY	05	1313	1316	1357	S18	E06	5669	09	6.0	44	SB			E		84		K
	RAMY	05	1313	1341	1357	S18	E06	5669	09	6.0	44	SB	M 3.2	3	E		83		F
		05	1329		1340	No Flare Patrol													
		05	1406		1417	No Flare Patrol													
		05	1502		1539	No Flare Patrol													
		05	1546		1605	No Flare Patrol													
0121	RAMY	05	1602	1603	1641	S18	W11	5669	09	4.8	39	1N	C 9.3	3	E		106		FH
		05	1621		1625	No Flare Patrol													
0122	RAMY	05	1807	1807	1822	S17	W05	5669	09	5.4	15	SF		3	E		27		F
0123		05	18503	18561	1926	N24	E21	5672	09	7.4	36	SF					17		F
	PALE	05	1850	1856	1935D	N26	E25	5672	09	7.7	45D	SF		3	E		14		
	HOLL	05	1853	1856	1926	N24	E20	5672	09	7.3	33	SF		3	E		15		F
	RAMY	05	1853	1857	1943D	N23	E19	5672	09	7.2	50D	SF		3	E		22		
0124		05	1921	1925	1949	S16	W05	5669	09	5.4	28	SF	C 5.5				31		EF
	HOLL	05	1921	1925	1949	S16	W04	5669	09	5.5	28	SF	C 5.5	3	E		32		FE
	RAMY	05	1921	1925	1957D	S17	W06	5669	09	5.3	36D	SF	C 5.5	3	E		30		F
0125	PALE	05	1945	1945	2006	N27	E25	5672	09	7.8	21	SF		3	E		21		
0126	HOLL	05	1950	1952	2006	S18	W09	5669	09	5.1	16	SF	C 4.7	3	E		20		E
0127		05	2138*	2143*	2253	S17	W03	5669	09	5.7	75	1B	M 4.7				209	3.3	EFIK
	HOLL	05	2138	2143	2226	S16	W12	5669	09	5.0	48	2B		3	E		294		
	RAMY	05	2146E	2147U	2150D	S17	W11	5669	09	5.1	4D	1B	M 4.7	2	E		177		F
	HOLL	05	2206	2214	2306	S17	E03	5669	09	6.1	60	1B			E		134		K
	HOLL	05	2206	2225	2306	S17	E03	5669	09	6.1	60	1B	M 5.7	3	E		133		
	VORO	05	2223E		2239D	S17	E03	5669	09	6.2	16D	1F		2	C	2223	305	3.3	EI

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0128		05	2307*	23464	2428	N28	E56	5676	09	10.3	81	SF						34		F
	LEAR	05	2307	2346	2428	N28	E56	5676	09	10.3	81	SF			3	E		33		F
	HOLL	05	2350	2350	2432D	N27	E57	5676	09	10.4	42D	SF			3	E		36		
0129		05	23362	23412	2409	N25	E21	5672	09	7.6	33	SN	M	1.3				56		F
	HOLL	05	2336	2343	2432D	N26	E23	5672	09	7.8	56D	SN	M	1.3	3	E		86		
	LEAR	05	2338	2341	2409	N24	E19	5672	09	7.4	31	SF			3	E		25		F
0130	LEAR	06	0044	0047	0126	S17	W08	5669	09	5.4	42	SN	M	1.3	3	E		64		EF
		06	0130		0312	No Flare Patrol														
0131		06	0420	04211	0434	S18	W10	5669	09	5.4	14	SN						52	1.0	EF
	ABST	06	0420	0421	0431	S17	W10	5669	09	5.4	11	SN				C	0421	87	1.0	E
	LEAR	06	0420	0422	0436	S18	W09	5669	09	5.5	16	SF			3	E		18		F
0132		06	05495	05533	0603	S17	W03	5669	09	6.0	14	SN	C	8.7				120	1.7	EFU
	TACH	06	0549	0553	0601	S17	W02	5669	09	6.1	12	SB			2	C	0553	168	1.9	U
	ABST	06	0552	0556	0604	S18	W03	5669	09	6.0	12	SN				C	0556	131	1.5	E
	LEAR	06	0554	0556	0604	S17	W03	5669	09	6.0	10	SN	C	8.7	3	E		62		F
0133	LEAR	06	0904	0920	0927	N28	E55	5676	09	10.7	23	SF	C	4.9	3	E		14		F
0134		06	1124	1135*	1227	S18	W25	5669	09	4.6	63	SF						32		FK
	RAMY	06	1124	1135	1227	S18	W25	5669	09	4.6	63	SF				E		33		K
	RAMY	06	1124	1149	1227	S18	W25	5669	09	4.6	63	SF			3	E		31		F
0135		06	1227*	1245*	1333	S19	W07	5669	09	6.0	66	SF						39		FK
	RAMY	06	1227	1245	1333	S19	W10	5669	09	5.7	66	SF				E		43		K
	RAMY	06	1227	1258	1333	S19	W10	5669	09	5.7	66	SF			3	E		41		F
	KANZ	06	1257E		1300D	S19	W04	5669	09	6.2	3D	SF				C				
	SVTO	06	1257	1302	1307D	S20	W03	5669	09	6.3	10D	SF			2	E		32		F
0136	RAMY	06	1407	1411	1421	S18	W25	5669	09	4.7	14	SF			3	E		16		F
0137	RAMY	06	1516	1517	1529	S19	W19	5669	09	5.2	13	SF	C	3.8	3	E		23		F
0138		06	15251	1531	1540	N23	E12	5672	09	7.6	15	SF						16		F
	SVTO	06	1525	1531	1541	N23	E09	5672	09	7.3	16	SF			3	E		17		
	RAMY	06	1526	1531	1538	N23	E14	5672	09	7.7	12	SF			3	E		14		F
0139	RAMY	06	1656	1657	1702	S19	W09	5669	09	6.0	6	SN	C	6.6	3	E		38		E
0140		06	1740	1744*	1826	S19	W18	5669	09	5.4	46	SF	C	9.3				47		FK
	RAMY	06	1740	1744	1826	S19	W18	5669	09	5.4	46	SF				E		48		K
	RAMY	06	1740	1758	1826	S19	W18	5669	09	5.4	46	SF	C	9.3	3	E		46		F
		06	1746		1751	No Flare Patrol														
0141	PALE	06	1853	1857	1915	N29	E43	5676	09	10.1	22	SF			3	E		25		
0142	PALE	06	1853	1856	1859	S19	W20	5669	09	5.3	6	SF			3	E		15		
0143		06	1857*	19087	1918	N24	E08	5672	09	7.4	21	SF						24		
	PALE	06	1857	1908	1912	N25	E07	5672	09	7.3	15	SF			3	E		28		
	PALE	06	1914	1915	1923	N23	E08	5672	09	7.4	9	SF			3	E		20		
0144	HOLL	06	1940	1951	2024	N25	E30	5682	09	9.1	44	SF			3	E		11		F
0145	HOLL	06	2011	2011	2032	S20	W07	5669	09	6.3	21	SF			3	E		22		F
		06	2035		2049	No Flare Patrol														
0146	HOLL	06	2037	2038	2047	S15	W21	5669	09	5.3	10	SF			3	E		19		EF
		06	2104		2110	No Flare Patrol														
		06	2132		2243	No Flare Patrol														
0147	YUNN	07	0019E	0019U	0023	S13	W28	5669	09	4.9	4D	SN				P	0019	47	0.6	E

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0148	LEAR	07	0114	0114	0122	S20	W19	5669	09	5.6	8	SF		3	E		13		
		07	0131		0134	No Flare Patrol													
0149	YUNN	07	0145E	0148	0213	S18	W10	5669	09	6.3	28D	SN			P		79	0.9	
		07	0241		0251	No Flare Patrol													
0150	YUNN	07	0252E	0254E	0254D	S18	W20	5669	09	5.6	2D	SN			P	0254	63	0.8	E
0151	LEAR	07	0308	0309	0312	N23	E04	5672	09	7.4	4	SF		3	E		18		
0152	LEAR	07	0333	0333	0337	S15	W23	5669	09	5.4	4	SF		3	E		19		
0153	YUNN	07	0348	0355	0355D	S19	W22	5669	09	5.5	7D	SN			P		31	0.4	
0154	YUNN	07	0434	0437	0444D	S21	W16	5669	09	6.0	10D	SN			P		31	0.4	D
0155	LEAR	07	0523	0525	0532	N27	E36	5676	09	10.0	9	SF		3	E		14		F
0156		07	0529	0534*	0619	S17	W26	5669	09	5.2	50	SF	M 1.1				54		FK
	LEAR	07	0529	0534	0619	S17	W26	5669	09	5.2	50	SF	M 1.1	3	E		64		F
	LEAR	07	0529	0602	0619	S17	W26	5669	09	5.2	50	SF			E		43		K
0157	LEAR	07	0541	0541	0546	S21	W65	5670	09	2.2	5	SF		3	E		18		
0158	ABST	07	0533	0533	0542D	S04	W37		09	4.5	9D	SN			P	0533	157	2.0	E
0159	LEAR	07	0553	0555	0557	N17	E79	5686	09	13.2	4	SF		3	E		63		
0160	LEAR	07	0601	0602	0609	N27	E39	5676	09	10.3	8	SF	C 7.3	3	E		13		F
0161	PURP	07	0612E	0612U	0619	S16	W33	5669	09	4.7	7D	SN			P	0612	109	1.5	D
0162		07	06454	06483	0656	N20	E88	5687	09	14.0	11	SF					42		AD
	YUNN	07	0645	0648	0652	N17	E88	5687	09	14.0	7	SN			P		24		D
	ABST	07	0648	0649	0654D	N19	E88	5687	09	14.0	6D	1F			C	0649	70		A
	SVTO	07	0649	0651	0701	N23	E89	5687	09	14.1	12	SF		3	E		31		
0163	LEAR	07	0754	0755	0759	N16	E80	5686	09	13.4	5	SF		3	E		27		
0164		07	0801	0802	0818	S20	W16	5669	09	6.1	17	SN					60	1.1	F
	LEAR	07	0801	0802	0809	S21	W16	5669	09	6.1	8	SF		3	E		25		F
	YUNN	07	0806E	0806U	0827	S20	W17	5669	09	6.0	21D	SN			P	0806	94	1.1	
0165		07	08131	08276	0848	N27	E24	5676	09	9.2	35	SN					96	1.9	
	YUNN	07	0813	0827	0850	N26	E26	5676	09	9.4	37	SN			P		157	1.9	
	SVTO	07	0814	0833	0845	N28	E22	5676	09	9.1	31	SF		3	E		36		
0166		07	08222	08254	0849	S15	W33	5669	09	4.8	27	1N	M 1.6				121	2.0	DF
	LEAR	07	0822	0827	0847	S16	W34	5669	09	4.8	25	SN		3	E		75		F
	SVTO	07	0823E	0829	0858	S17	W32	5669	09	4.9	35D	1B	M 1.6	3	E		108		F
	HURB	07	0824	0825	0842	S14	W32	5669	09	4.9	18	1N							D
	PURP	07	0824E	0825	0848	S15	W32	5669	09	4.9	24D	SN			C	0825	143	1.9	D
	YUNN	07	0827E	0827	0848	S13	W34	5669	09	4.8	21D	1B			P		157	2.1	
0167	YUNN	07	0907	0908	0912	N16	E76	5686	09	13.1	5	SN			P		24		D
0168	YUNN	07	0934	0940	0956	N29	E48		09	11.2	22	SN			P		63	1.0	G
0169	YUNN	07	0940	0942	0956	S14	W37	5669	09	4.6	16	SN			P		79	1.1	
0170	YUNN	07	1008E	1011	1036D	S18	W16	5669	09	6.2	28D	SN			P		79	0.9	
0171		07	1017	1021*	1045	N25	E02	5672	09	7.6	28	SF					60	1.0	K
	YUNN	07	1017	1021	1036D	N26	E04	5672	09	7.7	19D	SN			P		94	1.0	
	SVTO	07	1017	1024	1045	N25	E01	5672	09	7.5	28	SF		3	E		73		
	SVTO	07	1017	1034	1045	N25	E01	5672	09	7.5	28	SF			E		14		K

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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
0172	SVTO	07	1223	1233	1305	S23	W61	5670	09	2.8	42	SF		3	E		45		F
0173		07	1232	12332	1248	N21	E64	5680	09	12.4	16	SF	C 3.8				28		F
	SVTO	07	1232	1233	1248	N22	E63	5680	09	12.4	16	SF		3	E		30		F
	RAMY	07	1232	1235	1309D	N20	E65	5680	09	12.5	37D	SF	C 3.8	3	E		26		
0174	RAMY	07	1247	1247	1308	S15	W53		09	3.5	21	SF		3	E		38		
0175	SVTO	07	1340	1344	1348	S16	W32	5669	09	5.1	8	SF		3	E		26		
0176	SVTO	07	1452	1452	1458	N11	E45	5685	09	11.0	6	SF		3	E		13		
0177		07	1533	1537	1547	S18	W20	5669	09	6.1	14	1B	M 1.1				82		FH
	HOLL	07	1533	1537	1547	S17	W21	5669	09	6.0	14	1B	M 1.1	3	E		108		F
	SVTO	07	1533E	1537U	1547	S18	W19	5669	09	6.2	14D	SN		2	E		56		FH
		07	1606		1635	No Flare Patrol													
0178		07	17223	17251	1738	S14	W37	5669	09	4.9	16	SF					19		
	PALE	07	1722	1725	1739	S14	W37	5669	09	4.9	17	SF		3	E		16		
	RAMY	07	1725	1726	1738	S13	W37	5669	09	4.9	13	SF		3	E		22		
0179		07	18466	1846*	1912	S16	W37	5669	09	5.0	26	SF	C 4.2				34		F
	HOLL	07	1846	1846	1851	S18	W35	5669	09	5.1	5	SF		3	E		15		F
	HOLL	07	1851	1858	1923	S16	W38	5669	09	4.9	32	SF		3	E		40		F
	PALE	07	1852	1901	1923	S14	W37	5669	09	5.0	31	SF	C 4.2	3	E		48		F
0180	PALE	07	1850	1851	1858	N24	W07	5672	09	7.2	8	SF		3	E		23		
0181	PALE	07	1932	1950	2013	S14	W33	5669	09	5.3	41	SF		3	E		29		
0182		07	20191	2024	2032	N19	E81	5687	09	14.0	13	SF					34		F
	PALE	07	2019	2024	2032	N19	E82	5687	09	14.1	13	SF		3	E		34		
	HOLL	07	2020	2024	2032	N19	E80	5687	09	13.9	12	SF		3	E		35		F
0183		07	20322	2036	2040	S17	W31	5669	09	5.5	8	SF					22		EF
	HOLL	07	2032	2036	2040	S14	W33	5669	09	5.4	8	SF		3	E		25		FE
	PALE	07	2034	2036	2039	S20	W29	5669	09	5.6	5	SF		3	E		20		
0184		07	2036	20371	2043	N14	E58	5680	09	12.2	7	SF					12		F
	HOLL	07	2036	2037	2041	N13	E57	5680	09	12.1	5	SF		3	E		12		F
	PALE	07	2036	2038	2045	N15	E58	5680	09	12.2	9	SF		3	E		13		F
0185		07	20513	2052*	2147	S15	W39	5669	09	4.9	56	SB	M 1.4				59		FK
	HOLL	07	2051	2052	2149	S15	W39	5669	09	4.9	58	SB			E		51		K
	HOLL	07	2051	2114	2149	S15	W39	5669	09	4.9	58	SB	M 1.4	3	E		60		F
	PALE	07	2054	2114	2142	S16	W40	5669	09	4.8	48	SN	M 1.4	3	E		65		
0186		07	2233	2234	2238	S20	W30	5669	09	5.6	5	SF					15		F
	PALE	07	2233	2234	2237	S21	W31	5669	09	5.6	4	SF		3	E		15		F
	HOLL	07	2233	2234	2238	S19	W28	5669	09	5.8	5	SF		3	E		15		F
0187		07	22391	22401	2247	N14	E85	5687	09	14.4	8	SF					20		
	PALE	07	2239	2241	2247	N15	E89	5687	09	14.7	8	SF		3	E		16		
	HOLL	07	2240	2240	2247	N13	E81	5687	09	14.0	7	SF		3	E		24		
0188	PALE	08	0024	0027	0033	N26	E12	5682	09	8.9	9	SF		3	E		15		
0189		08	0116*	0123*	0211	N25	E12	5682	09	9.0	55	SF					66	1.0	
	PALE	08	0116	0159	0246	N26	E11	5682	09	8.9	90	SF		3	E		89		
	YUNN	08	0121	0123	0125D	N24	E14	5682	09	9.1	4D	SN			P		94	1.0	
	LEAR	08	0126	0128	0136	N25	E12	5682	09	9.0	10	SF		3	E		15		
0190		08	01343	01381	0154	N16	E70	5686	09	13.4	20	SF					26		
	LEAR	08	0134	0138	0147	N14	E69	5686	09	13.3	13	SF		3	E		17		
	PALE	08	0137	0139	0200	N18	E71	5686	09	13.5	23	SF		3	E		35		
0191	PURP	08	0152E	0154	0202	N27	E17	5676	09	9.4	10D	1N			C	0154	408	4.7	

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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	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0192	PALE	08	0200	0224	0245	N17	E49	5680	09	11.8	45	SF		3	E		16		F
0193		08	02321	02341	0244	S19	W32	5669	09	5.7	12	SF	C 5.2				89	2.2	
	LEAR	08	0232	0235	0245	S21	W34	5669	09	5.5	13	SF	C 5.2	3	E		55		
	YUNN	08	0233E	0233U	0243	S20	W33	5669	09	5.6	10D	1N			P	0233	157	2.2	
	PALE	08	0233	0234	0243	S15	W28	5669	09	6.0	10	SF		3	E		55		
0194		08	0243*	0248*	0306	N19	E76	5687	09	13.9	23	SF	C 5.9				40		E
	YUNN	08	0243	0248	0302	N19	E75	5687	09	13.8	19	SN			C		63		E
	LEAR	08	0247	0249	0307	N17	E75	5687	09	13.8	20	SF		3	E		36		
	PALE	08	0304	0307	0310	N21	E78	5687	09	14.1	6	SF	C 5.9	3	E		20		
0195		08	03024	03045	0314	S18	W34	5669	09	5.5	12	SN					39	0.9	E
	YUNN	08	0302	0304	0313	S17	W34	5669	09	5.5	11	SN			C		63	0.9	E
	LEAR	08	0306	0309	0315	S18	W34	5669	09	5.5	9	SF		3	E		15		
0196		08	03233	03337	0421	N27	E28	5676	09	10.3	58	1N	M 1.1				384	6.6	EFU
	TACH	08	0323	0340	0420	N26	E23	5676	09	9.9	57	1B		2	C	0340	306	3.6	U
	PALE	08	0324	0339	0411	N29	E27	5676	09	10.2	47	1N	M 1.1	3	E		229		F
	YUNN	08	0325E	0333	0347D	N26	E29	5676	09	10.4	22D	2N			P		786	9.7	F
	LEAR	08	0326	0340	0431	N26	E32	5676	09	10.6	65	1N	M 1.1	3	E		215		FE
0197	TACH	08	0330	0336	0347	N24	E40	5683	09	11.2	17	SB		2	C	0336	143	2.0	FG
0198	LEAR	08	0336	0337	0340	S15	W40	5669	09	5.1	4	SF		3	E		22		
0199		08	0407*	0408*	0459	S19	W29	5669	09	5.9	52	SN	M 1.1				92	2.4	EFUZ
	TACH	08	0407	0410	0455	S19	W26	5669	09	6.2	48	1B		2	C	0410	184	2.4	UZ
	LEAR	08	0408	0408	0503	S20	W25	5669	09	6.3	55	SF	M 1.1	3	E		81		FE
	PALE	08	0419	0422	0436D	S17	W37	5669	09	5.4	17D	SF		3	E		11		
0200	PALE	08	0420	0422	0436D	N27	E26	5676	09	10.2	16D	SF		3	E		61		
0201	ABST	08	0441	0442	0446	N19	E42	5683	09	11.4	5	SF			C	0442	87	1.2	E
0202		08	0530	05284	0558	S10	E85	5689	09	14.6	28	1N					83		DH
	YUNN	08	0528E	0528	0558	S10	E81	5689	09	14.3	30D	SN			P		79		H
	ABST	08	0530	0532	0536D	S09	E89	5689	09	14.9	6D	1F			C	0532	87		D
0203	ABST	08	0549	0550	0559	N08	E39	5685	09	11.2	10	SF			C	0550	87	1.2	D
0204		08	0634	0638	0648	S08	E88	5686A	09	14.9	14	1N					86		D
	ABST	08	0634	0638	0643D	S10	E90	5686A	09	15.0	9D	1N			C	0638	87		D
	SVTO	08	0634	0638	0648	S06	E86	5686A	09	14.7	14	SF		3	E		86		
0205		08	06415	06463	0654	S20	W37	5669	09	5.4	13	SF	C 5.3				52	1.0	DF
	ABST	08	0641	0648	0653	S19	W40	5669	09	5.2	12	SF			C	0648	87	1.1	F
	LEAR	08	0645	0647	0657	S17	W38	5669	09	5.4	12	SF		3	E		35		F
	URUM	08	0646E	0646	0651	S20	W36	5669	09	5.5	5D	SN			C		64	0.9	D
	SVTO	08	0646	0649	0655	S23	W34	5669	09	5.7	9	SF	C 5.3	3	E		23		
0206	LEAR	08	0726	0728	0732	N20	E59	5686	09	12.8	6	SF		3	E		20		
0207		08	07261	0728*	0748	S15	W31	5669	09	6.0	22	SN	C 6.0				56	0.4	DHI
	LEAR	08	0726	0729	0736	S16	W30	5669	09	6.0	10	SF	C 6.0	3	E		82		
	MITK	08	0727	0728	0735	S16	W30	5669	09	6.0	8	SB			C	0728			HI
	KHAR	08	0740E		0747	S10	W34	5669	09	5.8	7D	SN		2	V	0740			
	KANZ	08	0747E	0747U	0816	S16	W31	5669	09	6.0	29D	SF			C				
	YUNN	08	0812E	0813	0813D	S15	W29	5669	09	6.1	1D	SN			P		31	0.4	D
0208		08	0728E	0728*	0751	S12	E82	5689	09	14.5	23D	SF					61		H
	MITK	08	0728E	0728	0747D	S12	E85	5689	09	14.7	19D	1F			C	0728	110		H
	LEAR	08	0741E	0745	0748	S12	E81	5689	09	14.4	7D	SF		3	E		12		
	KANZ	08	0747E	0750	0754	S11	E79	5689	09	14.3	7D	SF			C				
0209	KHAR	08	0745		0800D	S24	E80		09	14.5	15D	SN		2	P	0748			

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0210		08	0820*	0835*	0903	S14	W45	5669	09	4.9	43	SN	C	7.7				73	1.8	DEFK
	KANZ	08	0820	0842	0906	S14	W47	5669	09	4.8	46	SB				V				
	URUM	08	0824	0835	0900	S13	W46	5669	09	4.9	36	SB				C		64	1.0	D
	LEAR	08	0824	0840	0910	S13	W51	5669	09	4.5	46	SF	C	7.7	3	E		28		
	SVTO	08	0828	0840	0906	S18	W43	5669	09	5.1	38	SN				E		33		K
	SVTO	08	0828	0851U	0906	S18	W43	5669	09	5.1	38	SF			3	E		26		F
	URUM	08	0850	0852	0855	S13	W44	5669	09	5.0	5	1F				C		241	3.7	E
	KANZ	08	0851	0851	0855	S14	W40	5669	09	5.3	4	SF				V				
	YUNN	08	0857E	0857U	0906	S13	W47	5669	09	4.8	9D	SN				P	0857	47	0.8	
0211	YUNN	08	0911	0914	0928	S11	W55	5669	09	4.2	17	SF				C		47	0.9	
0212	KHAR	08	1002U	1004U	1017	S24	E80		09	14.6	15U	SN			2	V	1004			D
0213	RAMY	08	1129	1130	1145	N17	E51	5680	09	12.3	16	SF			3	E		15		
0214		08	1155	1159	1215	S08	E80	5689	09	14.5	20	SF						22		H
	KANZ	08	1155	1159	1215	S11	E79	5689	09	14.4	20	SF				V				
	SVTO	08	1155E	1203U	1215D	S05	E80	5689	09	14.5	20D	SF			2	E		22		H
0215	RAMY	08	1159	1200	1213	N29	E58	5684	09	13.0	14	SF			3	E		22		
0216	KANZ	08	1215	1218	1222	N16	E52	5680	09	12.4	7	SF				V				
0217		08	12183	12221	1235	S10	E80	5689	09	14.5	17	SF						19		
	KANZ	08	1218	1222	1241	S10	E82	5689	09	14.7	23	SF				V				
	RAMY	08	1221	1223	1229	S10	E78	5689	09	14.4	8	SF			3	E		19		
0218	RAMY	08	1241	1247	1253	S14	W44	5669	09	5.2	12	SF			3	E		31		
0219	KANZ	08	1244	1248	1256	S17	W34	5669	09	5.9	12	SF				V				
0220	KANZ	08	1339	1343	1356	N21	E55	5686	09	12.8	17	SF				V				
0221	SVTO	08	1431E	1435U	1439	S24	W99		08	31.9	8D	SF			2	E		21		
0222	KANZ	08	1435		1435D	S20	W40	5669	09	5.5	8D	SF				V				
0223		08	1456	1512	1530	S10	E76	5689	09	14.3	34	SF	C	4.8				43		
	HOLL	08	1456	1512	1526D	S11	E76	5689	09	14.3	30D	SF	C	4.8	3	E		42		
	RAMY	08	1456	1512	1530	S10	E77	5689	09	14.4	34	SF	C	4.8	3	E		44		
0224	HOLL	08	1459	1509	1526D	N15	E49	5680	09	12.3	27D	SF			3	E		54		
0225	HOLL	08	1512	1514	1526D	N31	E29	5676	09	10.9	14D	SF			3	E		18		
0226		08	16201	1622	1636	S20	W42	5669	09	5.5	16	SF						31		
	HOLL	08	1620	1622	1640	S21	W42	5669	09	5.5	20	SF			3	E		33		
	RAMY	08	1621	1622	1632	S20	W42	5669	09	5.5	11	SF			3	E		29		
0227	HOLL	08	1702	1704	1716	N24	E02	5682	09	8.9	14	SF			3	E		20		
0228	PALE	08	1716	1717	1720	S19	W37	5669	09	5.9	4	SF			3	E		22		
0229		08	1750	17531	1858	N18	E33	5683	09	11.2	68	1N	M	1.0				149		FU
	PALE	08	1750	1753	1859	N19	E34	5683	09	11.3	69	1N	M	1.0	3	E		151		F
	HOLL	08	1750	1754	1857	N17	E33	5683	09	11.2	67	1N	M	1.0	3	E		135		UF
	RAMY	08	1754E	1804U	1918D	N17	E33	5683	09	11.2	84D	1N			3	E		162		F
0230	PALE	08	1832	1835	1841	S22	W42	5669	09	5.5	9	SF			3	E		23		
0231	PALE	08	1837	1849	1912	S09	E77	5686A	09	14.5	35	SF			3	E		14		
0232	PALE	08	1856	1857	1909	S19	W38	5669	09	5.9	13	SF	C	5.0	3	E		24		
0233	RAMY	08	2004	2009	2012	S18	W39	5669	09	5.9	8	SF			3	E		17		

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0234		08	2014*	2018*	2040	S15	W53	5669	09	4.8	26	SF	C 7.3				20		F
	RAMY	08	2014	2018	2042	S14	W53	5669	09	4.8	28	SF		3	E		26		
	HOLL	08	2017	2018	2023	S15	W53	5669	09	4.8	6	SF		3	E		12		F
	HOLL	08	2031	2033	2056	S15	W53	5669	09	4.8	25	SF	C 7.3	3	E		23		F
0235		08	20434	20485	2057	S10	E78	5689	09	14.7	14	SF					33		
	HOLL	08	2043	2053	2102D	S11	E75	5689	09	14.5	19D	SF		3	E		39		
	PALE	08	2047	2048	2057	S10	E81	5689	09	14.9	10	SF		3	E		27		
0236		08	20493	20541	2100	N28	E17	5676	09	10.2	11	SF					22		F
	HOLL	08	2049	2055	2121D	N27	E17	5676	09	10.2	32D	SF		3	E		31		F
	PALE	08	2052	2054	2100	N30	E17	5676	09	10.2	8	SF		3	E		13		
0237		08	2103	2130*	2228	S16	W50	5669	09	5.1	85	SN	M 1.6				68		EFK
	PALE	08	2103E	2127U	2221	S15	W53	5669	09	4.9	78D	SF		3	E		58		F
	HOLL	08	2103	2130	2232	S18	W48	5669	09	5.2	89	1N	M 1.6	3	E		104		FE
	HOLL	08	2103	2154	2232	S18	W48	5669	09	5.2	89	SF			E		73		K
	RAMY	08	2115E	2115U	2145D	S15	W50	5669	09	5.1	30D	SN		2	E		39		F
0238	PALE	08	2134	2137	2202	N19	E56	5686	09	13.2	28	SF		3	E		43		F
0239	HOLL	08	2145	2145	2200	N17	E63	5687	09	13.7	15	SF		3	E		33		F
0240		08	21514	2207	2234	N22	W22	5672	09	7.2	43	SF					50		F
	PALE	08	2151	2207	2233	N23	W19	5672	09	7.4	42	SF		3	E		48		
	HOLL	08	2155	2207	2235	N22	W25	5672	09	7.0	40	SF		3	E		51		F
0241	PALE	08	2159	2201	2203	N19	E38	5680	09	11.8	4	SF		3	E		11		
0242		08	2250*	2306*	2418	N28	E16	5676	09	10.2	88	SF	C 4.9				71	1.6	EFIJT
	PALE	08	2250	2306	2331	N30	E16	5676	09	10.2	41	SF		3	E		14		F
	HOLL	08	2302	2337	2426	N28	E16	5676	09	10.2	84	SN	C 4.9	3	E		57		FE
	PALE	08	2334	2338	2427	N30	E16	5676	09	10.2	53	SF	C 4.9	3	E		44		F
	LEAR	08	2336	2339	2408	N28	E16	5676	09	10.2	32	SF	C 4.9	3	E		31		F
	VORO	08	2340E	2341	2414	N26	E16	5676	09	10.2	34D	SF		2	C	2341	125	1.4	EIJT
	YUNN	09	0018E	0018U	0100	N28	E17	5676	09	10.3	42D	SF			P	0018	157	1.8	
0243	PALE	08	2352	2354	2357	N23	E81	5690	09	15.2	5	SF		3	E		68		
0244		08	23531	2354	2357	N19	E66	5687	09	14.0	4	SF					27		
	PALE	08	2353	2354	2357	N17	E66	5687	09	14.0	4	SF		3	E		27		
	LEAR	08	2353	2354	2358	N21	E67	5687	09	14.1	5	SF		3	E		25		
	HOLL	08	2354	2354	2357	N19	E65	5687	09	13.9	3	SF		3	E		28		
0245		09	00111	00121	0020	S17	W39	5669	09	6.0	9	SN					65	1.0	DI
	VORO	09	0011	0012	0020	S17	W41	5669	09	5.9	9	SF		2	C	0012	99	1.4	DI
	HOLL	09	0011	0012	0020	S16	W39	5669	09	6.0	9	SB		3	E		72		
	LEAR	09	0011	0013	0020	S17	W39	5669	09	6.0	9	SN		3	E		46		
	PALE	09	0012	0012	0019	S17	W38	5669	09	6.1	7	SF		3	E		62		
	YUNN	09	0018E	0018U	0020	S16	W40	5669	09	6.0	2D	SN			P	0018	47	0.7	D
0246	YUNN	09	0108	0111	0120	S21	W39	5669	09	6.0	12	SN			C		31	0.5	E
0247		09	01162	0117*	0144	N26	E15	5676	09	10.2	28	SF					62	1.0	EFIJT
	VORO	09	0116	0120	0150	N26	E14	5676	09	10.1	34	SF		2	C	0128	108	1.2	EIJT
	LEAR	09	0117	0117	0130	N24	E17	5676	09	10.4	13	SF		3	E		19		
	YUNN	09	0117	0120	0142	N25	E15	5676	09	10.2	25	SN			C		79	0.9	
	PALE	09	0118	0129	0156	N28	E15	5676	09	10.2	38	SF		3	E		41		F
0248		09	01397	01546	0212	S09	E72	5686A	09	14.5	33	SN					39		F
	YUNN	09	0139	0154	0211D	S10	E71	5686A	09	14.4	32D	SN			P		31		
	PALE	09	0146	0200	0212	S08	E73	5686A	09	14.5	26	SF		3	E		47		F
0249	YUNN	09	0152	0154	0223	S17	W59	5669	09	4.6	31	SF			P		31	0.7	
0250	URUM	09	0210	0213	0223	S16	W39	5691	09	6.1	13	SF			C		80	1.2	D

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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	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0251		09	0250	02501	0306	N24	W03	5682	09	8.9	16	SF					68	1.6	EF
	PALE	09	0250	0250	0311	N24	W03	5682	09	8.9	21	SF		3	E		35		F
	URUM	09	0250	0251	0302	N24	W02	5682	09	9.0	12	SF			C		145	1.6	E
	LEAR	09	0250	0251	0304	N24	W03	5682	09	8.9	14	SF		3	E		24		F
0252	LEAR	09	0322	0349	0406	N26	E00	5682	09	9.1	44	SF		3	E		16		F
0253	LEAR	09	0336	0337	0340	S16	W40	5669	09	6.1	4	SF		3	E		19		
0254	ABST	09	0436	0440	0505	N25	W05	5682	09	8.8	29	SN			C	0440	174	1.9	E
0255		09	04371	04403	0504	S15	W57	5669	09	4.9	27	SN	M 1.1				102	1.7	EF
	TACH	09	0437	0441	0451	S16	W54	5669	09	5.1	14	SB		2	C	0441	56	1.1	E
	LEAR	09	0437	0443	0522	S15	W57	5669	09	4.9	45	SF	M 1.1	3	E		75		F
	ABST	09	0438	0440	0500	S14	W60	5669	09	4.6	22	1N			C	0440	174	2.3	E
0256		09	0526	05272	0546	S12	E70	5689	09	14.5	20	1N					64		D
	ABST	09	0526	0527	0530D	S13	E70	5689	09	14.5	4D	1N			C	0527	87		D
	LEAR	09	0526	0529	0546	S11	E71	5689	09	14.6	20	SF		3	E		42		
0257		09	05281	05304	0603	N18	E31	5680	09	11.6	35	1B	M 1.4				175	2.3	EF
	ABST	09	0528	0531	0600	N18	E32	5680	09	11.7	32	1B			C	0531	174	2.1	E
	MITK	09	0528	0531	0608	N17	E32	5680	09	11.6	40	1B			C	0531	180	2.2	E
	LEAR	09	0529	0530	0604	N18	E31	5680	09	11.6	35	1N	M 1.4	3	E		136		F
	URUM	09	0531E	0534	0559	N18	E30	5680	09	11.5	28D	1B			C		209	2.5	E
0258	LEAR	09	0617	0632	0638	N21	E69	5690	09	14.5	21	SF		3	E		46		F
0259	ATHN	09	0622	0629	0637	N16	E29	5680	09	11.5	15	1B		3	V	0629	286	3.4	
0260		09	0651	0701	0709	S21	W47	5669	09	5.7	18	1N					126	4.1	F
	LEAR	09	0651	0701	0709	S19	W42	5669	09	6.1	18	SF		3	E		49		F
	YUNN	09	0702E	0702U	0707D	S23	W52	5669	09	5.3	5D	1N			P	0702	204	4.1	
0261	YUNN	09	0806	0823	0823D	S10	E68	5689	09	14.4	17D	SN			P		24		D
0262		09	0910	0911	0934	N17	E30	5680	09	11.7	24	1B	X 1.4				361	3.9	EF
	LEAR	09	0910	0911	0934	N18	E28	5680	09	11.5	24	2B	X 1.4	3	E		443		F
	URUM	09	0910E	0911	0941	N16	E27	5680	09	11.4	31D	1B			C		257	3.0	E
	ATHN	09	0928E		0928	N18	E34	5680	09	12.0	31D	1N		3	V	0928	382	4.8	
		09	1207		1222	No Flare Patrol													
		09	1241		1245	No Flare Patrol													
0263		09	1247	1248	1258	N19	E30	5680	09	11.8	11	SN					60		
	RAMY	09	1247E	1247U	1300	N19	E28	5680	09	11.7	13D	SF		2	E		55		
	SVTO	09	1247	1248	1257	N19	E31	5680	09	11.9	10	SN		3	E		65		
0264		09	1249*	13102	1323	S09	E60	5686A	09	14.0	34	SF					46		F
	SVTO	09	1249	1312	1327	S08	E62	5686A	09	14.2	38	SF		3	E		62		
	RAMY	09	1303	1310	1315	S09	E61	5686A	09	14.1	12	SF		2	E		16		
	HOLL	09	1310E	1310	1326	S09	E58	5686A	09	13.9	16D	SF		3	E		61		F
0265	RAMY	09	1303	1304	1329	N27	E10	5676	09	10.3	26	SF		2	E		20		
0266		09	1310	1310	1326	N24	W35	5672	09	6.8	16	SF					22		F
	SVTO	09	1310	1310	1317	N24	W36	5672	09	6.8	7	SF		3	E		21		F
	HOLL	09	1310E	1310U	1326	N24	W35	5672	09	6.8	16D	SF		3	E		19		
	RAMY	09	1310	1310	1335	N25	W34	5672	09	6.9	25	SF		2	E		27		
0267	HOLL	09	1336	1349	1356	N21	E65	5690	09	14.6	20	SF		3	E		10		
0268		09	1338*	1342*	1410	N17	E50	5686	09	13.4	32	SF					16		
	HOLL	09	1338	1342	1419	N17	E49	5686	09	13.3	41	SF		3	E		19		
	RAMY	09	1352	1352	1401	N17	E50	5686	09	13.4	9	SF		3	E		14		
0269	HOLL	09	1341	1349	1356	S09	E58	5686A	09	13.9	15	SF		3	E		15		
0270	RAMY	09	1403	1409	1413	S10	E62	5689	09	14.2	10	SF		3	E		54		

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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	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0271		09	1400	1415	1450D	S16	W58	5669	09	5.2	50D	SF					26		
	HOLL	09	1400	1415	1430D	S17	W60	5669	09	5.0	30D	SF		3	E		14		
	RAMY	09	1416E	1416U	1450D	S16	W57	5669	09	5.3	34D	SF		2	E		38		
0272	HOLL	09	1522	1522	1545	N28	E01	5676	09	9.7	23	SF		3	E		26		F
0273		09	1525	1526	1539	N19	E52	5686	09	13.6	14	SF					19		
	HOLL	09	1525	1526	1539	N16	E53	5686	09	13.7	14	SF		3	E		20		
	RAMY	09	1525	1526	1539	N22	E52	5686	09	13.6	14	SF		3	E		18		
0274	RAMY	09	1532	1535	1545	N21	E18	5683	09	11.0	13	SF		3	E		18		
0275		09	15321	1535	1552	N21	E26	5680	09	11.6	20	SN	C 8.7				81		EF
	HOLL	09	1532	1535	1552	N18	E26	5680	09	11.6	20	SN	C 8.7	3	E		84		FE
	RAMY	09	1533	1535	1553	N24	E25	5680	09	11.6	20	SF		3	E		78		
0276	RAMY	09	1555	1555	1618	N28	E01	5676	09	9.7	23	SF		3	E		30		F
0277	HOLL	09	1633	1633	1637	N25	W32	5672	09	7.2	4	SF		3	E		32		
0278	RAMY	09	1652	1653	1709	N24	W38	5672	09	6.8	17	SF		3	E		27		F
0279		09	1708*	1710*	1733	N18	E48	5686	09	13.4	25	SF					30		FK
	HOLL	09	1708	1711	1737	N16	E47	5686	09	13.3	29	SF		3	E		38		F
	HOLL	09	1708	1722	1737	N16	E47	5686	09	13.3	29	SF			E		30		K
	PALE	09	1709	1710	1714	N20	E53	5686	09	13.8	5	SF		3	E		22		F
	RAMY	09	1709	1728	1743	N18	E48	5686	09	13.4	34	SF		3	E		46		F
	PALE	09	1719	1724	1733	N19	E46	5686	09	13.2	14	SF		3	E		16		F
0280	PALE	09	1816	1818	1823	N19	E50	5686	09	13.6	7	SF		3	E		12		
0281	PALE	09	1851	1852	1915	N20	E24	5680	09	11.6	24	1N	M 1.2	3	E		163		F
0282	PALE	09	1928	1930	1956	S15	W67	5669	09	4.7	28	1F	X 1.3	3	E		188		F
0283	PALE	09	1940	1951	2029	N21	E51	5686	09	13.7	49	SF		3	E		80		F
0284	PALE	09	1955	2003	2012	N18	E18	5683	09	11.2	17	SF		3	E		16		F
		09	2218		2219	No Flare Patrol													
0285		09	22556	2256	2331	N17	E60	5687	09	14.5	36	SF					64		
	HOLL	09	2255	2256	2332D	N16	E60	5687	09	14.5	37D	SF		3	E		58		
	PALE	09	2301	2303U	2331	N18	E61	5687	09	14.6	30	SF		3	E		71		
0286		09	23444	23511	2420	N28	E02	5676	09	10.1	36	SF	C 8.8				64		F
	LEAR	09	2344	2352	2424	N28	E01	5676	09	10.1	40	SF	C 8.8	3	E		56		F
	PALE	09	2347	2352	2425	N28	E04	5676	09	10.3	38	SF	C 8.8	3	E		72		F
	MITK	09	2348	2351	2410	N28	W00	5676	09	10.0	22	SN			C	2351			
0287		09	2358*	2400*	2428	N26	W42	5672	09	6.7	30	SF	C 6.7				78	2.3	EF
	HOLL	09	2358		2430	N27	W40	5672	09	6.9	32	SF		3	E		87		F
	MITK	09	2358	2400	2445	N25	W42	5672	09	6.7	47	1F			C	2400	160	2.3	E
	PALE	10	0001	0014	0020	N25	W43	5672	09	6.7	19	SF	C 6.7	3	E		25		F
	LEAR	10	0008	0012	0017	N26	W41	5672	09	6.8	9	SF	C 6.7	3	E		41		F
0288	PURP	10	0011	0014	0018	N17	E17	5683	09	11.3	7	1F			P	0014	388	4.2	
0289	PALE	10	0029	0033	0042	N20	E21	5680	09	11.6	13	SF		3	E		34		
0290	PALE	10	0030	0111	0215D	N28	E03	5676	09	10.2	105D	SF		3	E		59		F
0291		10	01112	01121	0128	N20	E54	5687	09	14.2	17	SF	C 8.2				24		F
	PALE	10	0111	0112	0123	N21	E55	5687	09	14.3	12	SF		3	E		31		F
	LEAR	10	0113	0113	0133	N18	E54	5687	09	14.2	20	SF	C 8.2	3	E		18		
0292	URUM	10	0114	0117	0133	N29	W04	5676	09	9.7	19	1F			C		338	3.7	E
0293	PALE	10	0130	0130	0133	N25	W38	5672	09	7.1	3	SF		3	E		11		

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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
0294		10	0131E	0138	0223	N28	W04	5676	09	9.7	52D	SN						157	1.7	E
	YUNN	10	0131E	0131U	0155D	N29	W02	5676	09	9.9	24D	SN				P	0131	157	1.7	
	MITK	10	0131E	0138	0223	N26	W07	5676	09	9.5	52D	SF				C	0138			E
0295	LEAR	10	0136	0138	0151	N23	E67	5690	09	15.2	15	SF			3	E		57		
0296		10	01353	01384	0201	N17	E56	5687	09	14.3	26	1N	M	1.3				137	3.0	EF
	MITK	10	0135	0138	0206	N17	E55	5687	09	14.2	31	1B				C	0138	140	2.5	E
	LEAR	10	0135	0139	0208	N16	E57	5687	09	14.4	33	1F	M	1.3	3	E		102		FE
	YUNN	10	0135	0140	0155D	N16	E57	5687	09	14.4	20D	1B				P		157	2.9	
	PALE	10	0136	0139	0204	N20	E56	5687	09	14.3	28	SN			3	E		93		F
	URUM	10	0138	0142	0147	N15	E57	5687	09	14.4	9	1F				C		193	3.6	E
0297		10	01402	01442	0201	N23	W17	5682	09	8.7	21	SF						77	1.4	F
	YUNN	10	0140	0144	0155D	N23	W17	5682	09	8.7	15D	SN				P		126	1.4	
	PALE	10	0142	0145	0203	N23	W18	5682	09	8.7	21	SF			3	E		60		F
	LEAR	10	0142	0146	0159	N24	W15	5682	09	8.9	17	SF			3	E		44		
0298		10	0203	02056	0224	N16	E14	5683	09	11.1	21	SF						95	1.4	E
	URUM	10	0203	0205	0213	N16	E14	5683	09	11.1	10	SF				C		145	1.6	E
	LEAR	10	0208E	0211	0233	N16	E14	5683	09	11.1	25D	SF			3	E		29		
	YUNN	10	0210E	0210U	0225	N17	E15	5683	09	11.2	15D	SN				P	0210	110	1.2	E
0299		10	02194	02236	0240	N18	E20	5680	09	11.6	21	SF	C	8.3				71	1.2	FK
	YUNN	10	0219	0225	0244	N18	E22	5680	09	11.8	25	SN				C		79	0.9	
	PURP	10	0222	0225	0232	N18	E19	5680	09	11.5	10	SF				C	0225	143	1.6	
	LEAR	10	0223	0223	0241	N18	E20	5680	09	11.6	18	SF	C	8.3	3	E		23		F
	LEAR	10	0223	0229	0241	N18	E20	5680	09	11.6	18	SF				E		39		K
0300		10	0223	02253	0250	N27	W00	5676	09	10.1	27	SF						105	1.4	D
	YUNN	10	0223	0225	0300	N26	E02	5676	09	10.2	37	SN				C		157	1.7	
	URUM	10	0223E	0228	0235	N26	E01	5676	09	10.2	12D	SF				C		113	1.2	D
	LEAR	10	0227E	0227	0254	N28	W04	5676	09	9.8	27D	SF			3	E		44		
0301		10	0405*	0416*	0445	N17	E10	5683	09	10.9	40	SN	C	9.4				164	3.2	EFKL
	LEAR	10	0405	0416	0456	N17	E09	5683	09	10.8	51	SN	C	9.4	3	E		85		
	LEAR	10	0405	0427	0456	N17	E09	5683	09	10.8	51	SN				E		71		K
	PALE	10	0406	0416	0428	N16	E09	5683	09	10.8	22	SN	C	9.4	3	E		64		F
	PURP	10	0412	0431	0446	N17	E08	5683	09	10.8	34	1N				C	0431	456	4.8	
	TACH	10	0415	0421	0441	N17	E15	5683	09	11.3	26	SB			4	C	0421	143	1.6	EL
0302		10	04361	04374	0508	N17	E47	5687	09	13.8	32	SF						65	1.1	E
	LEAR	10	0436	0437	0514	N17	E46	5687	09	13.7	38	SF			3	E		39		
	TACH	10	0437	0441	0500	N18	E47	5687	09	13.8	23	SN			4	C	0441	71	1.0	E
	PEKG	10	0455E	0455U	0510	N16	E47	5687	09	13.8	15D	SF				P	0455	84	1.2	E
0303	LEAR	10	0515	0517	0526	N27	W02	5676	09	10.1	11	SF			3	E		20		
0304		10	0527*	05436	0606	S21	W54	5669	09	6.1	39	2N	M	1.3				268	5.0	FUV
	SVTO	10	0527	0547	0620	S24	W55	5669	09	6.0	53	2N			3	E		307		F
	SVTO	10	0534	0549	0557	S26	W46	5669	09	6.6	23	1N			3	E		174		
	LEAR	10	0536	0546	0621	S20	W56	5669	09	5.9	45	2F	M	1.3	3	E		416		F
	URUM	10	0538	0548	0603	S19	W53	5669	09	6.2	25	1B				C		113	2.3	U
	MITK	10	0539	0547	0609D	S23	W57	5669	09	5.8	30D	2B				C	0547	230	5.4	F
	ATHN	10	0540E	0543	0548	S16	W56	5669	09	6.0	8D	2N			3	V	0543	318	5.7	
	TACH	10	0541	0547	0606D	S20	W57	5669	09	5.9	25D	2N			4	C	0557	321	6.5	V
0305		10	06272	06312	0646	N26	W02	5676	09	10.1	19	SN	M	1.0				106	1.4	E
	LEAR	10	0627	0631	0653	N26	W02	5676	09	10.1	26	SN	M	1.0	3	E		83		
	URUM	10	0629	0633	0639	N27	W01	5676	09	10.2	10	SF				C		129	1.4	E
0306	LEAR	10	0638	0639	0657	N21	E56	5690	09	14.6	19	SF			3	E		26		
0307		10	06467	06514	0702	N17	E17	5680	09	11.6	16	SN	C	8.1				162	2.5	EF
	ATHN	10	0646	0651	0658	N16	E16	5680	09	11.5	12	1N			3	V	0651	382	4.1	
	LEAR	10	0650	0652	0704	N19	E21	5680	09	11.9	14	SF	C	8.1	3	E		44		
	SVTO	10	0651	0652	0705	N18	E16	5680	09	11.5	14	SF	C	8.1	3	E		63		F
	CATA	10	0651	0655	0655D	N17	E17	5680	09	11.6	4D	1B			2	P	0655	225	2.5	
	URUM	10	0653	0655	0702	N17	E16	5680	09	11.5	9	SF				C		96	1.0	E
	KANZ	10	0659E		0659D	N17	E17	5680	09	11.6	9D	SF				C				

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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	Xray	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0308		10	07485	07561	0820	S16	W76	5669	09	4.6	32	1N	M 2.8				137	13.2	F
	SVTO	10	0748	0757	0827	S19	W82	5669	09	4.1	39	SN	M 2.8	3	E		87		F
	ATHN	10	0750E	0755U	0800	S16	W79	5669	09	4.3	10D	3N		3	V	0755	255	13.2	
	LEAR	10	0750	0757	0815	S14	W67	5669	09	5.3	25	SF		3	E		37		
	CATA	10	0753	0756	0837	S17	W74	5669	09	4.7	44	1B		2	P	0756	169		
0309		10	0856*	09249	1030	N17	E09	5683	09	11.0	94	SB	C 8.9				81	0.5	EFK
	SVTO	10	0856	0924	1053	N17	E09	5683	09	11.0	117	SB			E		97		K
	SVTO	10	0856	0930	1053	N17	E09	5683	09	11.0	117	SN	C 8.9	3	E		97		F
	URUM	10	0925	0933	0943	N16	E10	5683	09	11.1	18	SB			C		48	0.5	E
0310	CATA	10	0920	0920	0937	S28	E80	5692	09	16.6	17	1N		2	C	0920	84		
0311	URUM	10	0923	0927	0935	N27	W03	5676	09	10.1	12	SB			C		96	1.1	D
0312	SVTO	10	1011	1013	1017	S19	W59	5669	09	5.9	6	SF		3	E		47		
0313	URUM	10	1118	1122	1125	N26	W05	5676	09	10.1	7	SN			C		48	0.5	D
0314	SVTO	10	1119	1126	1139D	N17	E09	5683	09	11.1	20D	SF		3	E		21		
0315	RAMY	10	1120	1124	1156D	N27	E04	5676	09	10.8	36D	SF		3	E		20		
0316	SVTO	10	1216	1216	1230	N26	W07	5676	09	10.0	14	SF		3	E		26		F
0317	SVTO	10	1216	1223	1234	N17	E08	5683	09	11.1	18	SF		3	E		17		
0318	SVTO	10	1230	1241	1310	S23	W74	5669	09	4.8	40	SF		3	E		37		FH
0319	RAMY	10	1247E	1416U	1450D	S16	W57	5691	09	6.2	123D	SF		2	E		38		
0320	SVTO	10	1255	1300	1304D	N18	E13	5680	09	11.5	9D	1N	C 9.4	3	E		102		F
0321	SVTO	10	1306	1308	1318	N26	W08	5676	09	9.9	12	SF		3	E		21		F
0322	SVTO	10	1334	1335	1342	S18	W73	5669	09	5.0	8	SF	C 8.6	3	E		17		F
0323	HOLL	10	1402	1415	1420	N19	E46	5687	09	14.1	18	SF		3	E		20		
0324	HOLL	10	1514	1514	1618D	N27	W09	5676	09	9.9	64D	SF	C 7.8	3	E		32		
0325	HOLL	10	1526	1526	1613D	N18	E16	5680	09	11.9	47D	SF		3	E		23		
0326		10	17405	17461	1758	N17	E02	5683	09	10.9	18	SF					22		H
	RAMY	10	1740	1747	1803	N17	E02	5683	09	10.9	23	SF		3	E		25		H
	PALE	10	1745	1746	1753	N17	E02	5683	09	10.9	8	SF		3	E		19		
0327	PALE	10	1816	1817	1830	N23	E43	5687	09	14.1	14	SF		3	E		14		
0328		10	1830*	1850*	1934	N17	E04	5683	09	11.1	64	SF					56		FH
	RAMY	10	1830	1850	1940	N17	E04	5683	09	11.1	70	SF		3	E		93		FH
	PALE	10	1840	1850	1921	N17	E04	5683	09	11.1	41	SF		3	E		54		F
	PALE	10	1930	1930	1941	N17	E04	5683	09	11.1	11	SF		3	E		20		F
0329	PALE	10	1937	1939	1943	N19	E48	5687	09	14.5	6	SF		3	E		17		
0330	PALE	10	2035	2036	2045	N17	E02	5683	09	11.0	10	SF		3	E		17		
0331	PALE	10	2152	2209	2229	N26	E63	5690	09	15.8	37	SF		3	E		37		F
0332	PALE	10	2154	2201	2210	N17	E01	5683	09	11.0	16	SF		3	E		12		
0333	PALE	10	2204	2250	2331	S16	W57	5691	09	6.6	87	SF		3	E		44		F
0334	PALE	10	2223	2223	2233	N27	W13	5676	09	9.9	10	SF		3	E		17		F
0335	PALE	10	2230	2238	2250	N17	E01	5683	09	11.0	20	SF		3	E		31		F
0336	PALE	10	2234	2254	2311	N18	E43	5687	09	14.2	37	SF		3	E		36		F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp	Opt	Xray	See	Obs Type	Area Measurement Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
		10	2242		2247	No Flare Patrol														
0337		10	2309	2310	2323	N17	W02	5683	09	10.8	14	SF						48		FH
	HOLL	10	2305E	2307U	2317D	N17	W03	5683	09	10.7	12D	SF			2	E		73		FH
	PALE	10	2309	2310	2323	N17	E00	5683	09	11.0	14	SF			3	E		23		F
0338		10	23271	2328	2346	N18	E09	5680	09	11.7	19	SF	C	8.5				175	4.4	EFH
	HOLL	10	2317E	2328U	2356	N18	E09	5680	09	11.6	39D	SF	C	8.5	3	E		81		FH
	PEKG	10	2327	2328	2348	N17	E09	5680	09	11.7	21	1F				P	2328	420	4.4	E
	LEAR	10	2328	2328	2335	N18	E09	5680	09	11.7	7	SF	C	8.5	3	E		23		
0339		11	00002	00041	0021	N29	E25	5684	09	12.9	21	1N						355	4.3	EG
	PEKG	11	0000	0005	0022	N29	E25	5684	09	12.9	22	1N				C	0005	420	5.1	EG
	MITK	11	0002	0004	0015D	N30	E25	5684	09	13.0	13D	1N				C	0004	290	3.5	E
	PURP	11	0007E	0007U	0020	N29	E26	5684	09	13.0	13D	1N				P	0007	354	4.3	
0340		11	00078	0015*	0032	N23	E52	5690	09	15.0	25	SF						23		F
	LEAR	11	0007	0015	0032	N22	E52	5690	09	15.0	25	SF			3	E		11		
	PALE	11	0015	0047	0051D	N24	E52	5690	09	15.0	36D	SF			3	E		35		F
0341		11	00582	01001	0116	N17	W02	5683	09	10.9	18	1F						180	3.2	DE
	HOLL	11	0058	0100	0111D	N17	W03	5683	09	10.8	13D	SF			2	E		60		E
	MITK	11	0059E	0101	0124	N17	W02	5683	09	10.9	25D	1N				C	0101	330	3.4	
	LEAR	11	0100	0100	0108	N17	W01	5683	09	11.0	8	SF			3	E		59		
	PEKG	11	0102E	0102U	0102D	N17	W02	5683	09	10.9	8D	1F				P	0102	273	2.9	D
0342	LEAR	11	0109	0120	0129	N26	E56	5695	09	15.4	20	SF			3	E		14		
0343	PALE	11	0205	0206	0210	N06	W01	5685	09	11.0	5	SF			3	E		10		
0344	PALE	11	0252	0305	0325	S15	W59	5691	09	6.6	33	SF			3	E		25		
0345	YUNN	11	0254E	0303	0337D	S17	W88	5669	09	4.4	43D					P				A
0346		11	0255*	0257*	0333	N18	E41	5687	09	14.2	38	SN						45	0.6	DE
	YUNN	11	0255	0257	0309	N20	E41	5687	09	14.2	14	SN				C		31	0.4	
	PEKG	11	0305E	0305U	0305D	N16	E41	5687	09	14.2	14D	SN				P	0305	59	0.8	D
	MITK	11	0307	0308	0357	N18	E42	5687	09	14.3	50	SF				C	0308			E
0347	PALE	11	0301	0305	0315	N26	W15	5676	09	10.0	14	SF			3	E		25		
0348		11	0313	03141	0332	N16	W04	5683	09	10.8	19	SN						86	1.4	DE
	URUM	11	0313	0315	0320	N17	W03	5683	09	10.9	7	SN				C		96	1.0	E
	PALE	11	0313	0315U	0329	N17	W03	5683	09	10.9	16	SF			3	E		25		
	MITK	11	0313	0315	0412	N15	W04	5683	09	10.8	59	SF				C	0315			
	PEKG	11	0314E	0314U	0316	N16	W05	5683	09	10.7	2D	SB				P	0314	168	1.8	D
	LEAR	11	0314E	0314	0323	N16	W03	5683	09	10.9	9D	SF			3	E		57		
0349	LEAR	11	0321	0321	0324	N18	E09	5680	09	11.8	3	SF			3	E		23		
0350	LEAR	11	0403	0404	0412	N18	E32	5687	09	13.6	9	SF			3	E		22		
0351	LEAR	11	0420	0423	0431	N23	E49	5690	09	14.9	11	SF			3	E		18		
0352		11	04203	0427	0440	N16	W04	5683	09	10.9	20	SN						88	0.9	EF
	URUM	11	0420	0427	0443	N17	W03	5683	09	10.9	23	SF				C		32	0.3	E
	PEKG	11	0422	0427	0437	N16	W04	5683	09	10.9	15	SN				C	0427	126	1.3	E
	ABST	11	0423	0427	0436D	N16	W04	5683	09	10.9	13D	SN				P	0427	105	1.1	F
0353	PURP	11	0446E	0446U	0449	N15	E42	5687	09	14.4	3D	1N				P	0446	170	2.4	E
0354		11	0502	0503	0520	N16	W04	5683	09	10.9	18	SN						64	1.2	D
	PURP	11	0502E	0502U	0534	N17	W04	5683	09	10.9	32D	SN				P	0502	116	1.2	D
	LEAR	11	0502	0503	0506	N16	W04	5683	09	10.9	4	SF			4	E		12		

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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	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0355		11	05532	05569	0621	N16	W04	5683	09	10.9	28	1N					289	3.0	E
	MITK	11	0552E	0556	0628	N16	W05	5683	09	10.9	36D	1F			C	0556	370	3.9	
	ABST	11	0552E	0600U	0606D	N15	W03	5683	09	11.0	14D	1N			P	0600	227	2.4	E
	URUM	11	0553	0556	0616	N17	W04	5683	09	10.9	23	SN			C		80	0.8	E
	PURP	11	0555E	0555U	0622	N17	W03	5683	09	11.0	27D	1F			P	0555	462	4.9	
	PEKG	11	0555	0605	0618	N16	W04	5683	09	10.9	23	1B			P	0605	357	3.7	E
	YUNN	11	0605E	0605U	0608D	N17	W03	5683	09	11.0	3D	1N			P	0605	236	2.5	
0356		11	0830*	0833*	0842	N16	W06	5683	09	10.9	12	SF					24		
	SVTO	11	0830	0833	0838	N16	W07	5683	09	10.8	8	SF		3	E		24		
	KANZ	11	0833	0833	0837	N16	W06	5683	09	10.9	4	SF			V				
	KANZ	11	0844	0847	0851	N17	W06	5683	09	10.9	7	SF			V				
0357	KANZ	11	0936	0936	0947	S17	E15	5693	09	12.5	11	SF			V				
0358	KANZ	11	1018	1022	1029	N17	W06	5683	09	11.0	11	SF			V				
0359	CATA	11	1140	1140	1140D	S22	W90	5669	09	4.6	11D	1N		2	P	1140	56		
0360	KANZ	11	1146	1150	1200	S20	W59	5691	09	7.0	14	SF			V				
0361	KANZ	11	1211	1215	1230	S11	E40	5689	09	14.5	19	SF			V				
0362		11	1244*	1244*	1349	N16	W08	5683	09	10.9	65	SF	C 4.0				35		FH
	KANZ	11	1244	1244	1257	N16	W09	5683	09	10.8	13	SF			V				
	RAMY	11	1244	1244	1323	N17	W09	5683	09	10.8	39	SF		2	E		25		F
	KANZ	11	1321	1327U	1327D	N16	W09	5683	09	10.9	6D	SF			V				
	RAMY	11	1327	1330	1441	N16	W08	5683	09	10.9	74	SF	C 4.0	2	E		61		FH
	HOLL	11	1330	1330	1343	N15	W08	5683	09	10.9	13	SF	C 4.0	3	E		23		F
	HOLL	11	1347	1401	1421	N16	W08	5683	09	11.0	34	SF		3	E		32		F
0363	HOLL	11	1435	1436U	1453	N21	E21	5686	09	13.2	18	SF		3	E		15		
0364		11	1509*	15192	1542	N16	W08	5683	09	11.0	33	SF					54		F
	HOLL	11	1509	1519	1546	N16	W08	5683	09	11.0	37	SF		3	E		48		F
	RAMY	11	1521	1521	1537	N15	W07	5683	09	11.1	16	SF		2	E		61		F
0365		11	15462	15491	1600	N26	W18	5676	09	10.2	14	SF					29		F
	HOLL	11	1546	1550	1605	N27	W21	5676	09	10.0	19	SF		3	E		44		
	RAMY	11	1548	1549	1555	N24	W16	5676	09	10.4	7	SF		2	E		14		F
0366	HOLL	11	1553	1555	1605	N16	W10	5683	09	10.9	12	SF		3	E		20		
0367	HOLL	11	1611	1615	1637	N17	W10	5683	09	10.9	26	SF		3	E		33		F
0368	HOLL	11	1615	1617	1623	S20	W75	5669	09	5.9	8	SF		3	E		26		
0369		11	1623	1629	1702	N25	W36	5682	09	8.9	39	1F	C 3.8				142		EFU
	HOLL	11	1623	1629	1707	N26	W36	5682	09	8.9	44	1F	C 3.8	3	E		213		UE
	PALE	11	1640E	1640U	1657	N24	W35	5682	09	9.0	17D	SF		3	E		70		UF
0370		11	1641*	1645*	1724	N16	W11	5683	09	10.9	43	SF					45		FK
	HOLL	11	1641	1645	1725	N16	W11	5683	09	10.9	44	SF			E		47		K
	HOLL	11	1641	1701	1725	N16	W11	5683	09	10.9	44	SF		3	E		48		F
	PALE	11	1657	1700	1723	N16	W11	5683	09	10.9	26	SF		3	E		40		F
0371	PALE	11	1706	1711	1717	N25	E39	5690	09	14.7	11	SF		3	E		15		
0372		11	17151	17162	1726	N16	E23	5686	09	13.5	11	SF					20		
	HOLL	11	1715	1716	1728	N16	E23	5686	09	13.5	13	SF		3	E		26		
	PALE	11	1716	1718	1724	N17	E23	5686	09	13.5	8	SF		3	E		15		
0373		11	18045	18271	1848	N18	W02	5680	09	11.6	44	SF					23		F
	HOLL	11	1804	1828	1846	N18	W01	5680	09	11.7	42	SF		3	E		20		F
	PALE	11	1809	1827	1850	N18	W02	5680	09	11.6	41	SF		3	E		26		F
0374		11	19101	19111	1924	N17	W12	5683	09	10.9	14	SF					18		FH
	HOLL	11	1910	1911	1925	N17	W11	5683	09	11.0	15	SF		3	E		19		F
	PALE	11	1911	1912	1922	N17	W12	5683	09	10.9	11	SF		3	E		17		H

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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
0375		11	1938	1940	2015	N19	W02	5680	09	11.7	37	2B	M	6.2				326		FHU
	HOLL	11	1938E	1940U	2012D	N19	W02	5680	09	11.7	34D	2B	M	6.2	3	E		339		UF
	PALE	11	1938	1940	2015	N19	W02	5680	09	11.7	37	2B	M	6.2	3	E		312		FH
		11	2005		2009	No Flare Patrol														
0376		11	2010E	2010U	2027D	N16	W12	5683	09	10.9	17D	SF						22		F
	PALE	11	2010E	2010U	2022D	N16	W12	5683	09	10.9	12D	SF			3	E		24		F
	HOLL	11	2012E	2013U	2027D	N17	W13	5683	09	10.8	15D	SF			3	E		19		F
0377		11	2058	2101	2125D	N16	W12	5683	09	11.0	27D	SF	C	9.0				18		F
	HOLL	11	2051E	2051U	2114D	N17	W13	5683	09	10.9	23D	SF	C	9.0	3	E		20		F
	PALE	11	2058	2101	2125D	N16	W12	5683	09	11.0	27D	SF			3	E		17		
0378	PALE	11	2150	2150	2155	N17	W13	5683	09	10.9	5	SF			3	E		11		
		11	2209		2212	No Flare Patrol														
0379		11	2304E	2308	2328	N17	W14	5683	09	10.9	24D	SF						46		F
	HOLL	11	2304E	2308	2328	N17	W14	5683	09	10.9	24D	SF			3	E		72		F
	PALE	11	2313E	2314U	2315D	N17	W15	5683	09	10.8	2D	SF			3	E		20		F
0380		11	2328*	2329*	2420	S19	W75	5669	09	6.2	52	SF	M	2.2				62		F
	HOLL	11	2328	2329	2340D	S18	W75	5669	09	6.3	12D	SF			3	E		20		F
	LEAR	11	2343	2345	2420	S20	W74	5669	09	6.3	37	SF			3	E		50		
	HOLL	11	2344	2348	2351D	S20	W76	5669	09	6.2	7D	1N	M	2.2	3	E		115		F
0381	LEAR	12	0233	0235	0239	N17	W16	5683	09	10.9	6	SF			3	E		13		
0382		12	03105	03156	0326	N07	W14	5685	09	11.1	16	SF						100	1.9	EF
	PEKG	12	0310	0315	0325	N07	W14	5685	09	11.1	15	SN				C	0315	50	0.5	E
	PALE	12	0314E	0319	0332D	N06	W15	5685	09	11.0	18D	SF			3	E		25		F
	PURP	12	0314	0321	0327	N07	W15	5685	09	11.0	13	1F				C	0321	306	3.3	E
	LEAR	12	0315	0320	0326	N07	W13	5685	09	11.2	11	SF			3	E		18		F
0383		12	0340	03392	0345	N18	W17	5683	09	10.8	5	SN						65	0.7	CDE
	TACH	12	0339E		0345	N19	W18	5683	09	10.8	6D	SB			1	C	0339	36	0.4	CD
	URUM	12	0339E	0339	0344	N17	W17	5683	09	10.9	5D	SN				C		96	1.0	E
	PEKG	12	0340	0341	0345	N17	W17	5683	09	10.9	5	SF				P	0340	63	0.7	D
0384		12	04361	04372	0444	N28	W33	5676	09	9.6	8	SF						62	1.0	EF
	YUNN	12	0436	0437	0437D	N28	W33	5676	09	9.6	1D	SN				P		63	0.8	E
	LEAR	12	0437	0439	0443	N28	W33	5676	09	9.6	6	SF			3	E		28		F
	URUM	12	0438E	0438	0445	N28	W33	5676	09	9.6	7D	SF				C		96	1.3	E
0385	TACH	12	0501	0504	0521	S20	W88	5669	09	5.5	20	SB			1	C	0504	23		ET
0386		12	05277	0536*	0552	S21	W84	5669	09	5.8	25	1N						136		FY
	PURP	12	0527	0536	0603	S22	W81	5669	09	6.0	36	2N				C	0536	238		
	LEAR	12	0534	0536	0541	S20	W83	5669	09	5.9	7	SF			3	E		33		F
	YUNN	12	0545E	0803	0840D	S21	W87	5669	09	5.6	175D					P				Y
0387	LEAR	12	0740	0741	0746	N18	W09	5680	09	11.6	6	SF			3	E		14		F
0388		12	1009	10082	1151D	N17	E15	5686	09	13.6	102D	2B	M	7.3				683	9.2	F
	SVTO	12	1003E	1009U	1151D	N17	E13	5686	09	13.4	108D	2N	M	7.3	1	E		349		F
	URUM	12	1005E	1008	1025D	N16	E15	5686	09	13.5	20D	2B				C		884	9.5	F
	CATA	12	1009	1010	1028D	N18	E18	5686	09	13.8	19D	2B			2	P	1010	815	9.0	
0389		12	1004E	1010	1032D	N26	E17	5684	09	13.7	28D	1N						145	2.8	F
	SVTO	12	1004E	1010U	1032D	N28	E15	5684	09	13.6	28D	SN			1	E		60		
	SVTO	12	1004E	1014U	1032D	N26	E21	5684	09	14.0	28D	1N			1	E		122		F
	CATA	12	1009E	1010	1028D	N24	E16	5684	09	13.6	19D	1B			2	P	1010	253	2.8	
0390		12	1009	10105	1028D	N14	E10	5671B	09	13.2	19D	1B						376	4.1	
	CATA	12	1009	1010	1028D	N14	E12	5671B	09	13.3	19D	1B			2	P	1010	337	3.6	
	ATHN	12	1010E	1015	1025D	N15	E09	5671B	09	13.1	15D	1B			3	V	1015	414	4.6	
		12	1141		1309	No Flare Patrol														

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP	Mo	Day	Dur (Min)	Opt	Imp	Xray	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0391	RAMY	12	1409	1409	1414	N14	W10	5680	09	11	.8	5	SF			3	E		17		F
0392	HOLL	12	1513	1514	1534	N28	W34	5676	09	10	.0	21	SF			3	E		47		F
0393	HOLL	12	1517	1520	1534	N18	E23	5687	09	14	.4	17	SF			3	E		28		F
0394		12	17441	18071	1835	N16	E10	5686	09	13	.5	51	SF						71		F
	HOLL	12	1744	1807	1831D	N16	E09	5686	09	13	.4	47D	SF			3	E		96		F
	PALE	12	1745	1808	1835	N17	E11	5686	09	13	.6	50	SF			3	E		46		F
0395	PALE	12	1829	1829	1834	N16	W05	5680	09	12	.4	5	SF			3	E		15		
0396		12	1905	1907	1946	N26	W34	5676	09	10	.1	41	SF						59		F
	HOLL	12	1904E	1904U	1936D	N26	W31	5676	09	10	.4	32D	SF			3	E		62		F
	PALE	12	1905	1907	1946	N26	W36	5676	09	10	.0	41	SF			3	E		56		F
0397	HOLL	12	2013E	2014U	2028D	N18	E17	5687	09	14	.1	15D	SF			3	E		66		F
		12	2017		2027	No Flare Patrol															
0398	PALE	12	2031	2033	2113	N18	W07	5680	09	12	.3	42	SF			3	E		22		F
		12	2040		2056	No Flare Patrol															
		12	2107		2115	No Flare Patrol															
0399	LEAR	12	2318	2320	2330	N26	W36	5676	09	10	.2	12	SF			3	E		11		F
0400	VORO	13	0101	0107	0113	N26	W42	5676	09	9	.8	12	SF			2	C	0107	116	1.7	EIJT
0401		13	01019	01105	0133	N16	E07	5686	09	13	.6	32	SF						76	1.1	EFIJT
	VORO	13	0101	0113	0141	N16	E06	5686	09	13	.5	40	SF			2	C	0113	152	1.6	EIJT
	LEAR	13	0108	0110	0135	N16	E07	5686	09	13	.6	27	SF			3	E		12		F
	PEKG	13	0110	0115	0124	N16	E09	5686	09	13	.7	14	SN				C	0115	63	0.6	E
0402		13	0127	0129	0138	N26	W40	5676	09	9	.9	11	SF						68	1.4	DFHIJT
	VORO	13	0127	0129	0135	N26	W40	5676	09	9	.9	8	SF			2	C	0129	99	1.4	DHIJT
	LEAR	13	0127	0129	0140	N27	W41	5676	09	9	.9	13	SF			3	E		38		F
0403	LEAR	13	0258	0306	0323	N27	W41	5676	09	9	.9	25	SF			3	E		25		F
0404		13	03001	03032	0310	N20	E28	5690	09	15	.3	10	SN						31	0.6	D
	PEKG	13	0300	0305	0310	N20	E28	5690	09	15	.3	10	SN				C	0305	50	0.6	D
	LEAR	13	0301	0303	0309	N21	E29	5690	09	15	.3	8	SF			3	E		12		
0405	LEAR	13	0308	0311	0317	N26	E53	5694	09	17	.2	9	SF			3	E		10		
0406		13	03294	03365	0413	N17	E10	5687	09	13	.9	44	2N	M	3.6				516	7.6	EFHIU
	LEAR	13	0329	0338	0422	N16	E06	5687	09	13	.6	53	2N	M	3.6	3	E		274		FE
	PEKG	13	0329	0339	0415	N17	E08	5687	09	13	.7	46	2B				P	0339	1009	10.6	UIF
	LEAR	13	0330	0338	0422	N21	E12	5687	09	14	.1	52	1N			3	E		240		FE
	MITK	13	0331	0340	0403	N17	E07	5687	09	13	.7	32	2N				C	0340	590	6.2	F
	TACH	13	0333	0336	0413	N19	E14	5687	09	14	.2	40	2N			3	C	0336	525	5.8	F
	PALE	13	0336E	0337	0352D	N17	E10	5687	09	13	.9	16D	2B			1	E		266		UH
	PURP	13	0340E	0341	0404	N16	E12	5687	09	14	.1	24D	2N				P	0341	707	7.6	
0407	LEAR	13	0422	0422	0427	N17	W11	5680	09	12	.3	5	SF			3	E		31		
0408		13	06311	06332	0704	N16	E06	5687	09	13	.7	33	1N						115	1.5	FU
	PEKG	13	0631	0635	0702	N16	E08	5687	09	13	.9	31	1N				C	0635	147	1.5	FU
	LEAR	13	0632	0633	0705	N15	E04	5687	09	13	.6	33	SF			3	E		83		
0409		13	0630	0638*	0732	N16	W16	5680	09	12	.0	62	SF						63		F
	LEAR	13	0630	0638	0730	N16	W14	5680	09	12	.2	60	SF			3	E		63		F
	SVTO	13	0647E	0653	0735	N17	W19	5680	09	11	.8	48D	SF			2	E		63		
0410	SVTO	13	0647E	0654	0729	N13	E01	5671B	09	13	.3	42D	SF			2	E		60		

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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
0411		13	06512	06541	0706	S13	E18	5689	09	14.6	15	SF						57	1.2	E
	SVTO	13	0651	0654	0712	S12	E18	5689	09	14.6	21	SF			3	E		35		
	LEAR	13	0651	0655	0703	S12	E17	5689	09	14.6	12	SF			3	E		30		
	PEKG	13	0653	0655	0702	S14	E19	5689	09	14.7	9	SF				C	0655	105	1.2	E
0412		13	0706	0707	0717	N28	W41	5676	09	10.1	11	SN						23	0.3	D
	PEKG	13	0706	0707	0712	N28	W41	5676	09	10.1	6	SN				C	0707	21	0.3	D
	SVTO	13	0706	0707	0722	N27	W41	5676	09	10.1	16	SF			3	E		25		
0413		13	08126	0814*	0837	N26	W42	5676	09	10.1	25	SN	M	1.1				56	1.0	EF
	PEKG	13	0812	0814	0835	N26	W42	5676	09	10.1	23	SN				C	0814	84	1.2	E
	LEAR	13	0813	0828	0836	N26	W42	5676	09	10.1	23	SF	M	1.1	3	E		20		F
	URUM	13	0818	0828	0840	N26	W43	5676	09	10.0	22	SB				C		64	0.9	E
0414	LEAR	13	0908	0910	0924	N26	W46	5676	09	9.8	16	SF			3	E		17		
		13	1149		1200	No Flare Patrol														
0415	HOLL	13	1424	1426	1431	N24	W63	5682	09	8.7	7	SF			3	E		13		F
0416	HOLL	13	1438	1449	1538	N17	E00	5686	09	13.6	60	SF			3	E		50		F
0417	RAMY	13	1712	1720	1800	N24	W48	5676	09	10.0	48	SF			3	E		21		
0418	RAMY	13	1753	1753	1801	N15	W03	5686	09	13.5	8	SF			3	E		20		
0419	RAMY	13	1800	1822	1838	N28	E47	5694	09	17.4	38	SF			3	E		16		
0420	RAMY	13	1907	1908	1916	N24	W49	5676	09	10.0	9	SF			3	E		18		
0421	RAMY	13	1930	1943	1952	N22	W63	5682	09	9.0	22	SF			3	E		18		
		13	2047		2214	No Flare Patrol														
0422		13	2224	2227	2312	N26	W56	5676	09	9.6	48	1F	C	4.1				110	2.9	EIJT
	VORO	13	2224	2227	2256	N26	W57	5676	09	9.5	32	1F			2	C	2227	152	2.9	EIJT
	PALE	13	2234E	2238U	2327	N25	W56	5676	09	9.6	53D	SF	C	4.1	3	E		69		
0423		14	0040*	0053*	0119	N15	W36	5683	09	11.3	39	SF						62	1.1	E
	PEKG	14	0040	0055	0130	N15	W36	5683	09	11.3	50	SN				C	0055	105	1.4	E
	LEAR	14	0051	0053	0103	N15	W36	5683	09	11.3	12	SF			3	E		17		
	URUM	14	0107	0111	0125	N15	W37	5683	09	11.2	18	SF				C		64	0.8	E
0424		14	01387	01442	0158	N27	E44	5694	09	17.5	20	SN						78	1.4	E
	PEKG	14	0138	0144	0200	N27	E45	5694	09	17.6	22	SN				C	0144	105	1.5	E
	LEAR	14	0141	0146	0159	N27	E44	5694	09	17.5	18	SF			3	E		49		
	URUM	14	0145	0146	0154	N27	E44	5694	09	17.5	9	SN				C		80	1.2	E
0425	LEAR	14	0332	0334	0338	N19	W33	5680	09	11.6	6	SF			3	E		12		
0426	URUM	14	0621	0624	0634	N26	E41	5694	09	17.4	13	SF				C		80	1.1	E
0427	LEAR	14	0700	0700	0754	N15	W28	5680	09	12.2	54	SN			3	E		31		
0428		14	06591	07026	0740	N16	W41	5683	09	11.2	41	1N	M	2.4				212	3.4	EFH
	ATHN	14	0659E	0702	0718	N17	W44	5683	09	10.9	19D	1N			2	V	0702	302	4.0	
	LEAR	14	0659	0708	0742	N15	W39	5683	09	11.3	43	1N	M	2.4	3	E		106		F
	URUM	14	0700	0705	0759	N16	W40	5683	09	11.2	59	1B				C		241	3.3	E
	KHAR	14	0724E		0742	N17	W41	5683	09	11.2	18D	1F			2	P	0730	200	2.9	EH
0429	KHAR	14	0735	0738	0745	N24	W72	5682	09	8.7	10	SN			2	V	0738			T
0430		14	07381	0741*	0819	N24	E42	5694	09	17.6	41	1N	M	1.1				191	3.2	EL
	KHAR	14	0738		0815	N25	E40	5694	09	17.4	37	1N			1	P	0745	350	4.6	L
	LEAR	14	0738	0741	0839	N26	E40	5694	09	17.4	61	SF	M	1.1	3	E		79		
	URUM	14	0739	0752	0831	N27	E40	5694	09	17.4	52	SN				C		129	1.8	E
	ATHN	14	0743E	0745	0750	N20	E47	5694	09	17.9	7D	1F			2	V	0745	207	3.2	

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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	Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0431		14	09004	0904	0907	N23	W72	5682	09	8.8	7	SN	C	6.7				41		ELT
	KHAR	14	0842U		0858	N24	W72	5682	09	8.8	16U	SN			2	V	0842			ELT
	LEAR	14	0900	0904	0910	N22	W70	5682	09	9.0	10	SF	C	6.7	3	E		41		
	KHAR	14	0904		0912	N24	W73	5682	09	8.7	8	SN			2	V	0904			LT
0432	KHAR	14	1024E		1032	N24	W72	5682	09	8.9	8D	SN			2	V	1024			T
0433		14	1218	1219	1303	N20	W72	5682	09	9.0	45	SF						54		FH
	RAMY	14	1218	1219	1247	N21	W70	5682	09	9.1	29	SF			3	E		24		H
	SVTO	14	1230E	1246U	1319	N20	W74	5682	09	8.9	49D	SF			2	E		83		F
0434		14	13013	1304*	1334	N28	E38	5694	09	17.5	33	SF						64		F
	RAMY	14	1301	1314	1334	N27	E36	5694	09	17.3	33	SF			3	E		35		F
	SVTO	14	1304	1304	1334	N28	E39	5694	09	17.6	30	SF			2	E		92		F
		14	1606		2231	No Flare Patrol														
0435	LEAR	15	0002	0005	0020	N07	W53	5685	09	11.0	18	SF			3	E		28		F
0436		15	00376	0046	0054	N28	E31	5694	09	17.4	17	SF	C	4.3				19		F
	PALE	15	0037	0046	0056	N29	E30	5694	09	17.4	19	SF	C	4.3	3	E		25		
	LEAR	15	0043	0046	0053	N26	E32	5694	09	17.5	10	SF	C	4.3	3	E		13		F
0437	LEAR	15	0352	0357	0402	N27	E30	5694	09	17.5	10	SF			3	E		19		F
0438	ABST	15	0643	0648	0700	N27	W73	5676	09	9.6	17	1F				C	0648	87		F
0439	CATA	15	0721	0721	0740D	S28	E90	5698	09	22.3	19D	1N			2	P	0721	45		
0440	KHAR	15	0728E		0750	N26	E27	5694	09	17.4	22D	SF			2	V	0729			D
0441		15	08202	08232	0831	N26	E28	5694	09	17.5	11	SN						42	0.5	D
	KAND	15	0820	0823	0830	N26	E29	5694	09	17.6	10	SF				P	0823	42	0.5	D
	KHAR	15	0822	0825	0832	N26	E27	5694	09	17.4	10	SN			2	V	0825			D
0442		15	0845*	0852*	0908	S24	E90	5698	09	22.3	23	SN								DH
	KHAR	15	0845	0852	0902	S22	E90	5698	09	22.3	17	SF			2	V	0852			DH
	KHAR	15	0858	0902	0913	S27	E90	5698	09	22.4	15	SN			2	P	0902			DH
0443		15	0935	0931*	0956D	S28	E90	5698	09	22.4	21D	1F						70		DH
	CATA	15	0919E	0931	0931D	S29	E90	5698	09	22.4	12D	1F			2	P	0931	84		
	KHAR	15	0935		0943D	S27	E90	5698	09	22.4	8D	SF			2	V	0936			DH
	CATA	15	0950E	0956	0956D	S29	E90	5698	09	22.5	6D	1F			2	P	0956	56		
		15	1044		1052	No Flare Patrol														
0444	RAMY	15	1212	1212	1250D	N27	W44	5697	09	12.1	38D	SF			3	E		21		F
0445	RAMY	15	1219	1220	1223	N26	W76	5676	09	9.6	4	SF			3	E		18		
		15	1233		1247	No Flare Patrol														
0446		15	14024	14091	1430	N26	W71	5676	09	10.1	28	SF						84		H
	RAMY	15	1402	1409	1435	N25	W67	5676	09	10.4	33	SF			3	E		83		H
	SVTO	15	1406	1410	1425	N26	W75	5676	09	9.8	19	SF			3	E		86		
		15	1536		1540	No Flare Patrol														
		15	1630		1643	No Flare Patrol														
		15	1733		1829	No Flare Patrol														
0447	PALE	15	1910E	1914U	1925	N16	W32	5686	09	13.4	15D	SF			3	E		40		F
		15	1949		2100	No Flare Patrol														
		15	2107		2111	No Flare Patrol														
		15	2115		2119	No Flare Patrol														
		15	2123		2150	No Flare Patrol														
		15	2158		2221	No Flare Patrol														

Hα S O L A R F L A R E S

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Area Measurement Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
0448		15	2230*	2253*	2409	N23	W24	5690	09	14.1	99	1F	M 2.3				270	9.0	EFIJT
	PALE	15	2230	2348U	2440	N20	W22	5690	09	14.2	130	1F		3	E		172		F
	VORO	15	2237	2253	2448	N24	W26	5690	09	13.9	131	2F		2	C	2309	762	9.0	EIJT
	LEAR	15	2251	2253	2255	N24	W24	5690	09	14.1	4	SF		3	E		14		F
	LEAR	15	2256	2345	2412	N24	W22	5690	09	14.2	76	1F	M 2.3	3	E		131		F
0449	VORO	15	2327	2329	2336	N16	W71	5683	09	10.6	9	1F		2	C	2329	81		DIJT
0450		16	00052	00082	0017	N15	W70	5683	09	10.7	12	SF					32		DITY
	VORO	16	0005	0010	0019	N15	W71	5683	09	10.6	14	SF		2	C	0010	54		DIYT
	LEAR	16	0007	0008	0015	N15	W68	5683	09	10.8	8	SF		3	E		11		
0451	LEAR	16	0030	0032	0036	N18	W32	5686	09	13.6	6	SF		3	E		26		
0452		16	00531	0056	0128	N18	W33	5686	09	13.5	35	1F					266	4.6	EFITY
	VORO	16	0053		0146	N18	W34	5686	09	13.4	53	1F		2	C	0108	278	3.4	EIYT
	LEAR	16	0054	0056	0111	N18	W32	5686	09	13.6	17	SF		3	E		49		
	YUNN	16	0107E	0107U	0143D	N18	W34	5686	09	13.4	36D	2N			P	0107	472	5.9	F
0453		16	0104	01043	0116	N29	W52	5697	09	12.0	12	SF					79	1.8	DITY
	LEAR	16	0104	0104	0116	N29	W51	5697	09	12.0	12	SF		3	E		28		
	VORO	16	0106E	0107	0118	N29	W53	5697	09	11.9	12D	1F		2	C	0107	116	2.1	DIYT
	YUNN	16	0107E	0107U	0114	N30	W51	5697	09	12.0	7D	SN			P	0107	94	1.6	
0454	YUNN	16	0107E	0107U	0143D	N21	W24	5690	09	14.2	36D	1N			P	0107	393	4.5	
0455		16	01471	01511	0200	N30	W51	5697	09	12.1	13	1F					87	2.4	DITY
	LEAR	16	0147	0151	0200	N30	W49	5697	09	12.2	13	SF		3	E		40		
	VORO	16	0148	0152	0201	N29	W53	5697	09	11.9	13	1F		2	C	0152	134	2.4	DIYT
0456	LEAR	16	0220	0220	0235	N29	W52	5697	09	12.0	15	SF		3	E		28		F
0457		16	0258*	0305*	0400	N17	W34	5686	09	13.5	62	SN					54	0.9	EFK
	LEAR	16	0258	0310	0414	N17	W34	5686	09	13.5	76	SF			E		38		K
	LEAR	16	0258	0351	0414	N17	W34	5686	09	13.5	76	SF		3	E		35		F
	YUNN	16	0303	0305	0332	N16	W33	5686	09	13.6	29	SN			C		63	0.8	E
	YUNN	16	0351	0353	0401	N18	W34	5686	09	13.6	10	SN			C		79	1.0	
0458	LEAR	16	0435	0436	0441	N18	W34	5686	09	13.6	6	SF		3	E		24		
0459	LEAR	16	0437	0443	0505	N14	W53	5680	09	12.2	28	SF		3	E		18		
0460		16	0555	0555	0612	N26	W54	5697	09	12.0	17	SF					48	1.5	D
	ABST	16	0538E	0542U	0558D	N27	W56	5697	09	11.9	20D	SF			P	0542	79	1.5	D
	SVTO	16	0555	0555	0612	N26	W52	5697	09	12.2	17	SF		3	E		17		
0461	ABST	16	0540E	0552U	0600D	N17	W35	5686	09	13.6	20D	SF			P	0552	131	1.7	F
0462	SVTO	16	0555	0557	0607	N17	W55	5680	09	12.1	12	SF		3	E		20		
0463	ABST	16	0626E	0630	0635D	N30	W57	5697	09	11.8	9D	1F			P	0630	105	2.1	E
0464	SVTO	16	0701	0702	0713	N16	W37	5686	09	13.5	12	SF		3	E		15		
0465	SVTO	16	0723	0735	0745	N16	W36	5686	09	13.6	22	SF		3	E		14		
0466		16	0751	07514	0808	N16	W37	5686	09	13.5	17	SF	C 3.4				19		F
	LEAR	16	0751	0751	0801	N17	W37	5686	09	13.5	10	SF	C 3.4	3	E		12		
	SVTO	16	0751	0755	0815	N16	W37	5686	09	13.5	24	SF	C 3.4	3	E		26		F
0467	SVTO	16	0830	0831	0834	N29	W54	5697	09	12.1	4	SF		3	E		23		
0468	KANZ	16	0849E		0849D	N17	W38	5686	09	13.5	4D	SF			C				
0469	SVTO	16	0902	0918	1008	S19	E75	5698	09	22.1	66	SF		3	E		53		
0470	SVTO	16	0916	0920	0935	N26	W56	5697	09	12.0	19	SF		3	E		30		F

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0471		16	0938	0939	0954	N17	W38	5686	09	13.5	16	SN						35		D
	SVTO	16	0938	0939	0956	N16	W38	5686	09	13.5	18	SF			3	E		35		
	KHAR	16	0942E		0953	N18	W39	5686	09	13.4	11D	SN			2	V	0942			D
0472	KHAR	16	0950	0951U	1000D	S27	E80	5698	09	22.6	10D	SF			2	V	0951			
0473		16	0955	0952	0958	N28	W57	5697	09	11.9	3	SF						23		F
	SVTO	16	0952E	0952	0958	N26	W55	5697	09	12.1	6D	SF			3	E		23		F
	KHAR	16	0955	0957U	1000D	N29	W59	5697	09	11.8	5D	SF			2	V	0957			
0474	SVTO	16	1036	1037	1043	S21	E71	5698	09	21.9	7	SF			2	E		32		
0475	SVTO	16	1121	1123	1129	N17	W59	5680	09	12.0	8	SF			3	E		12		
0476		16	1343	1343	1359	N16	W40	5686	09	13.5	16	SF						13		
	RAMY	16	1343	1343	1350	N15	W39	5686	09	13.6	7	SF			3	E		13		
	KANZ	16	1343E	1343U	1408	N16	W41	5686	09	13.5	25D	SF				V				
0477	KANZ	16	1408	1408	1419	S23	E72	5698	09	22.1	11	SF				V				
0478		16	14452	14553	1509	S21	E51	5702	09	20.5	24	SF						67		F
	SVTO	16	1445	1458	1512	S21	E52	5702	09	20.6	27	SF			3	E		67		F
	KANZ	16	1447	1455	1506	S21	E50	5702	09	20.4	19	SF				V				
0479		16	15321	15342	1545	N17	W36	5687	09	13.9	13	SF						33		F
	RAMY	16	1532	1534	1546	N17	W35	5687	09	14.0	14	SF			3	E		33		F
	KANZ	16	1533	1536	1544	N17	W37	5687	09	13.8	11	SF				V				
0480	RAMY	16	1622	1634	1652	N14	W73	5683	09	11.2	30	1F	M	1.2	3	E		108		F
0481	RAMY	16	1713	1717	1724	N27	W60	5697	09	12.0	11	SF			3	E		24		F
0482	RAMY	16	1743	1745	1806	N16	W38	5686	09	13.8	23	SF			3	E		32		HU
0483	RAMY	16	1848	1851	1900	N17	W38	5687	09	13.9	12	SF	C	3.3	3	E		14		F
0484	RAMY	16	1929	1939	1958	N25	W61	5697	09	12.1	29	SF			3	E		51		F
0485	RAMY	16	1959	2012	2037	N29	W61	5697	09	12.0	38	SF			3	E		34		F
		16	2205		2248	No Flare Patrol														
		16	2318		2337	No Flare Patrol														
		16	2346		2400	No Flare Patrol														
		17	0000		0007	No Flare Patrol														
		17	0014		0027	No Flare Patrol														
		17	0119		0122	No Flare Patrol														
0486		17	0217*	0225*	0242	N16	W49	5686	09	13.4	25	SN						63	0.9	EG
	YUNN	17	0217	0225	0238	N17	W45	5686	09	13.7	21	SB				P		94	1.4	
	URUM	17	0223	0225	0235	N17	W46	5686	09	13.6	12	SN				C		64	0.9	E
	YUNN	17	0237	0243	0252	N13	W55	5686	09	12.9	15	SN				C		31	0.5	EG
0487	URUM	17	0247	0248	0253	N29	W66	5697	09	11.9	6	1N				C		96		D
0488	PEKG	17	0328	0330	0347	S27	E69	5698	09	22.5	19	1N				C	0330	84		D
0489	SVTO	17	0521E	0534U	0551D	N17	W49	5686	09	13.5	30D	SF			3	E		62		F
0490	KHAR	17	0836	0838U	0845	N27	W71	5697	09	11.8	9	SN			2	V	0838			D
0491	KHAR	17	0843		0857	N16	W51	5686	09	13.5	14	SF			2	V	0845			E
0492	SVTO	17	0859	0904	0906	N29	W02	5694	09	17.2	7	SF			3	E		19		
0493		17	09284	09302	0940	N27	W69	5697	09	12.0	12	SF						20		DH
	KHAR	17	0928	0931	0942	N27	W71	5697	09	11.9	14	SN			2	V	0931			DH
	SVTO	17	0929	0930	0938	N27	W69	5697	09	12.0	9	SF			3	E		20		
	KANZ	17	0932	0932	0940	N28	W67	5697	09	12.2	8	SF				V				

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0494	SVTO	17	1019	1024	1032	S24	E60	5698	09	22.1	13	SF			3	E		14		
0495	SVTO	17	1042	1047	1051	S24	E60	5698	09	22.1	9	SF			3	E		12		
0496	SVTO	17	1106	1111	1114	N26	W71	5697	09	11.9	8	SF			3	E		19		
0497	SVTO	17	1127	1131	1144	S25	E60	5698	09	22.1	17	SF			3	E		27		
0498	KANZ	17	1445	1448	1511	N16	W55	5686	09	13.4	26	SF				V				
		17	1640		1722	No Flare Patrol														
0499	PALE	17	1831	1848	1926	N14	W54	5686	09	13.7	55	1F	M	1.2	3	E		150		F
		17	2118		2133	No Flare Patrol														
		17	2216		2252	No Flare Patrol														
		17	2330		2400	No Flare Patrol														
		18	0000		0002	No Flare Patrol														
		18	0007		0010	No Flare Patrol														
0500	LEAR	18	0205	0206	0216	S26	E52	5698	09	22.1	11	SF			3	E		21		
0501		18	04111	04164	0452	N19	W57	5687	09	13.8	41	1N						139	2.6	E
	TACH	18	0411	0420	0453	N18	W56	5687	09	13.9	42	1B			1	C	0420	128	2.4	E
	PEKG	18	0412	0416	0450	N19	W57	5687	09	13.8	38	1B				C	0416	168	3.1	E
	MITK	18	0417E		0441D	N20	W57	5687	09	13.8	24D	1F				C	0420	120	2.2	E
0502		18	04237	04303	0451	S26	E51	5698	09	22.1	28	1N	C	9.6				186	4.5	D
	PEKG	18	0423	0432	0450	S28	E52	5698	09	22.2	27	2B				C	0432	252	5.3	D
	LEAR	18	0426	0430	0451	S26	E50	5698	09	22.1	25	SF	C	9.6	3	E		87		
	TACH	18	0428	0432	0453	S25	E50	5698	09	22.0	25	1B			1	C	0432	265	5.2	D
	MITK	18	0430	0433	0441D	S27	E52	5698	09	22.2	11D	1N				C	0433	140	2.9	
0503	PEKG	18	0430	0435	0446	N25	W14	5694	09	17.1	16	SF				C	0435	71	0.8	E
0504		18	05236	0534	0544	S24	E52	5698	09	22.2	21	SB	C	3.1				66	1.8	D
	SVTO	18	0523	0534	0637D	S24	E51	5698	09	22.2	74D	SN	C	3.1	3	E		47		
	PEKG	18	0529	0534	0544	S25	E54	5698	09	22.4	15	SB				C	0534	84	1.8	D
0505	PEKG	18	0646	0650	0700	N14	W64	5686	09	13.4	14	SF				C	0650	84	1.8	D
0506		18	0705	0710	0720	N31	W81	5697	09	11.9	15	SN						42		D
	BUCA	18	0705	0710	0720	N32	W80	5697	09	12.0	15	SN				C	0710	43		D
	PEKG	18	0710E	0710U	0710D	N30	W82	5697	09	11.8	15D	SF				C	0710	42		D
0507	KHAR	18	0732		0740	S12	W70	5671C	09	13.0	8	SF			2	V	0732			D
0508	KANZ	18	1014	1018	1021	N28	W13	5694	09	17.4	7	SF				V				
0509	KANZ	18	1032	1036	1040	N25	W79	5697	09	12.3	8	SF				V				
0510		18	10402	10431	1058	N20	W53	5690	09	14.4	18	SN						17		
	KANZ	18	1040	1044	1052	N20	W51	5690	09	14.5	12	SF				V				
	SVTO	18	1042	1043	1104	N20	W55	5690	09	14.2	22	SN			3	E		17		
0511	KANZ	18	1206	1206	1229	N20	W59	5687	09	14.0	23	SF				V				
0512	KANZ	18	1210	1214	1233	S14	E36	5699	09	21.2	23	SF				V				
0513		18	14167	14176	1442	N28	W15	5694	09	17.4	26	SF						13		
	SVTO	18	1416	1417	1440	N27	W17	5694	09	17.3	24	SF			3	E		13		
	KANZ	18	1423	1423	1443	N29	W13	5694	09	17.6	20	SF				V				
0514	KANZ	18	1456	1500	1502	N29	W14	5694	09	17.5	6	SF				V				
		18	1633		1638	No Flare Patrol														
0515	PALE	18	1849	1858	1939	N18	W65	5686	09	13.8	50	2N	M	1.1	3	E		338		
		18	2131		2232	No Flare Patrol														

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0516	PEKG	18	2335E	2335U	2335D	S30	E39	5698	09	22.0	50D	SF				P	2335	50	0.8	D
0517		19	0115*	01396	0156	N26	W23	5694	09	17.3	41	SF						33	0.6	EF
	PEKG	19	0115	0145	0154	N26	W22	5694	09	17.3	39	SF				C	0145	50	0.6	E
	PALE	19	0122	0141	0204	N26	W23	5694	09	17.3	42	SF			3	E		39		F
	LEAR	19	0135	0139	0149	N26	W23	5694	09	17.3	14	SF			3	E		11		
0518		19	01431	01451	0149	N19	W68	5687	09	13.9	6	SF						18		
	LEAR	19	0143	0146	0150	N20	W67	5687	09	13.9	7	SF			3	E		16		
	PALE	19	0144	0145	0148	N18	W69	5687	09	13.8	4	SF			3	E		20		
0519		19	0524	0529	0550	S26	E38	5698	09	22.2	26	1F	C	5.6				88		
	LEAR	19	0524	0529	0541	S27	E36	5698	09	22.0	17	1F	C	5.6	3	E		112		
	SVTO	19	0529E	0529U	0558	S25	E39	5698	09	22.2	29D	SF	C	5.6	2	E		63		
0520		19	0715	0725	0742	N26	W26	5694	09	17.3	27	SN						43		D
	BUCA	19	0715	0725	0750	N26	W27	5694	09	17.2	35	SN				P	0725	43		D
	KANZ	19	0725E	0725U	0733	N25	W26	5694	09	17.3	8D	SF				V				
0521		19	0756*	0759*	0815	S24	E34	5698	09	21.9	19	SF								
	KANZ	19	0756	0759	0811	S21	E35	5698	09	22.0	15	SF				V				
	KANZ	19	0811	0815	0819	S27	E34	5698	09	22.0	8	SF				V				
0522		19	0935*	0943*	1027	S26	E35	5698	09	22.1	52	SN	M	1.2				75	1.4	EF
	KANZ	19	0935	0943	0947	S21	E34	5698	09	22.0	12	SF				V				
	KANZ	19	0951	0955	1001	S26	E33	5698	09	22.0	10	SF				V				
	CATA	19	0959	1005	1011D	S28	E33	5698	09	22.0	12D	SB			2	P	1005	112	1.7	
	SVTO	19	1000E	1003U	1036D	S30	E36	5698	09	22.2	36D	SN	M	1.2	2	E		34		FE
	KANZ	19	1001	1004	1008	S26	E32	5698	09	21.9	7	SF				V				
	ATHN	19	1035	1039	1050	S30	E34	5698	09	22.1	15	SF			1	V	1039	80	1.2	
	KANZ	19	1040	1044	1130	S25	E42	5698	09	22.7	50	SN				V				
0523		19	1122*	1126*	1152	S23	E32	5698	09	21.9	30	SN						72	1.0	
	KANZ	19	1122	1126	1154	S22	E31	5698	09	21.8	32	SN				V				
	CATA	19	1123	1131	1141D	S22	E32	5698	09	21.9	18D	SB			2	P	1131	112	1.6	
	ATHN	19	1128	1130	1133	S23	E30	5698	09	21.8	5	SF			1	V	1130	32	0.4	
	KANZ	19	1134	1142	1209	S24	E36	5698	09	22.3	35	SF				V				
0524	KANZ	19	1217	1221	1236	S22	E33	5698	09	22.0	19	SF				V				
0525	KANZ	19	1232	1232	1257	S27	E42	5701	09	22.8	25	SF				V				
0526		19	15301	15302	1538	S26	E29	5698	09	21.9	8	SF	C	2.7				28		
	KANZ	19	1530	1530	1538	S26	E29	5698	09	21.9	8	SF				V				
	SVTO	19	1531	1532	1537	S26	E29	5698	09	21.9	6	SF	C	2.7	3	E		28		
0527		19	15322	15342	1552D	N28	W28	5694	09	17.4	20D	SN						54		
	SVTO	19	1532	1536	1544D	N28	W28	5694	09	17.4	12D	SN			2	E		54		
	KANZ	19	1534	1534	1552D	N29	W29	5694	09	17.4	18D	SN				V				
		19	1614		1655	No Flare Patrol														
		19	1700		1733	No Flare Patrol														
		19	1745		1756	No Flare Patrol														
		19	1817		2032	No Flare Patrol														
		19	2047		2059	No Flare Patrol														
0528	PALE	19	2131	2132	2309	N26	W34	5694	09	17.2	98	SF	C	3.3	3	E		21		F
		19	2143		2229	No Flare Patrol														
0529	PALE	20	0057	0102	0132	N26	W36	5694	09	17.2	35	SF			3	E		25		F
0530	PALE	20	0126	0126	0133	S25	E29	5698	09	22.3	7	SF			3	E		17		
		20	0131		0152	No Flare Patrol														
		20	0159		0201	No Flare Patrol														
0531		20	02353	02363	0244	S28	E22	5698	09	21.8	9	SN	C	2.4				82	1.6	E
	PALE	20	0235	0236	0245	S27	E23	5698	09	21.9	10	SF	C	2.4	3	E		50		
	URUM	20	0238	0239	0244	S29	E21	5698	09	21.7	6	SN				C		113	1.6	E

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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	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0532	URUM	20	0238	0239	0253	N28	W66	5690	09	14.9	15	1N			C		96		D
0533		20	02537	03042	0315	S28	E25	5698	09	22.1	22	SN					72	1.1	DH
	LEAR	20	0253	0304	0316	S28	E24	5698	09	22.0	23	SF		3	E		92		H
	PALE	20	0259	0306	0315	S27	E26	5698	09	22.1	16	SF		3	E		45		
	URUM	20	0300	0305	0314	S29	E24	5698	09	22.0	14	SB			C		80	1.1	D
0534	KHAR	20	0735	0736U	0742U	S19	W01	5702	09	20.2	7U	SF		2	V	0736			EL
0535	HTPR	20	0855	0903	0915	S25	E24	5698	09	22.2	20	SF			C	0903	20	0.2	
0536	KHAR	20	0910		0923	N23	W70	5690	09	15.0	13	SF		2	V	0910			D
0537	HTPR	20	0919	0920	0928	S24	E24	5698	09	22.2	9	SB			C	0920	30	0.3	E
0538		20	09157	09222	0931	N30	W38	5694	09	17.4	16	SN	C 2.0				96	1.6	DEFI
	KHAR	20	0915	0922	0934	N31	W38	5694	09	17.4	19	SN		2	P	0926	150	2.0	
	HTPR	20	0920	0923	0936	N28	W42	5694	09	17.1	16	SB			C	0923	120	1.6	EI
	KANZ	20	0921	0924	0928	N30	W37	5694	09	17.5	7	SF			V				
	LEAR	20	0922	0923	0927	N30	W37	5694	09	17.5	5	SF	C 2.0	3	E		18		F
	URUM	20	0923E	0924	0928	N31	W38	5694	09	17.4	5D	SN			C		96	1.3	D
0539		20	1152*	1211*	1255	S27	E22	5698	09	22.2	63	SB	C 2.8				62	0.8	EF
	HTPR	20	1152	1211	1230	S28	E20	5698	09	22.0	38	SN			C	1211	30	0.3	E
	HTPR	20	1221	1230	1300	S25	E19	5698	09	22.0	39	SB			C	1230	100	1.1	E
	SVTO	20	1222E	1228U	1320D	S26	E22	5698	09	22.2	58D	SB	C 2.8	3	E		40		F
	KANZ	20	1224	1227	1256	S26	E28	5698	09	22.7	32	SN			V				
	HTPR	20	1235	1243	1315	S28	E19	5698	09	22.0	40	SB			C	1242	80	0.9	E
0540	KANZ	20	1256	1256	1311	S24	E33	5701	09	23.1	15	SF			V				
0541	HTPR	20	1256	1259	1308	S21	E56	5703	09	24.8	12	SF			C	1300	50	0.9	E
0542		20	1343	1346	1350	S36	W12		09	19.6	7	SN					20	0.2	G
	KANZ	20	1343	1346	1350	S36	W10		09	19.8	7	SF			V				
	HTPR	20	1343	1346	1350	S36	W15		09	19.4	7	SN			C	1346	20	0.2	G
0543	HTPR	20	1518		1525D	N25	W41	5694	09	17.5	7D	SN			C	1524	120	1.6	EI
		20	1550		1551	No Flare Patrol													
		20	1631		1634	No Flare Patrol													
		20	1715		1753	No Flare Patrol													
0544	PALE	20	1801	1804	1823	S28	E17	5698	09	22.1	22	SF	C 6.4	3	E		58		F
		20	1922		1941	No Flare Patrol													
		20	2040		2049	No Flare Patrol													
		20	2058		2114	No Flare Patrol													
		20	2123		2153	No Flare Patrol													
		20	2223		2239	No Flare Patrol													
0545	LEAR	21	0011	0012	0035	S27	E13	5698	09	22.0	24	SF	C 2.0	3	E		27		F
0546		21	0129	0135	0142	S28	E12	5698	09	22.0	13	SF	C 3.5				71	1.6	EF
	LEAR	21	0128E	0128U	0140	S28	E13	5698	09	22.1	12D	SF	C 3.5	2	E		16		F
	PEKG	21	0129	0135	0143	S28	E12	5698	09	22.0	14	SF			C	0129	126	1.6	E
0547	PALE	21	0240	0240	0244	S27	E13	5698	09	22.1	4	SF		3	E		13		
0548		21	0258	0313	0337	S27	E13	5698	09	22.1	39	1N	M 2.9				140		E
	PALE	21	0258	0313	0337	S24	E16	5698	09	22.3	39	1N		3	E		144		
	LEAR	21	0259E	0306U	0324D	S27	E11	5698	09	22.0	25D	1N	M 2.9	2	E		135		E
	MITK	21	0306E		0318D	S29	E11	5698	09	22.0	12D	SN			P	0310			
0549	ABST	21	0448	0449	0453	S30	E10	5698	09	22.0	5	SF			C	0449	87	1.1	D
0550	CATA	21	0653	0653	0653D	S25	E43	5703	09	24.6	5D	SF		1	P	0653	84	1.4	
0551	ABST	21	0657	0659	0705	S29	E11	5698	09	22.1	8	SF			C	0659	44	0.6	D

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0552		21	0820*	0836*	0908	S26	E08	5698	09	22.0	48	SN					63	0.7	DEIL
	HTPR	21	0758E		0920	S26	E11	5698	09	22.2	82D	SF			C	0809	60	0.7	EI
	HTPR	21	0820	0836	0900	S29	E07	5698	09	21.9	40	SN			C	0836	100	1.1	E
	KHAR	21	0849	0850	0910	S26	E13	5698	09	22.4	21	SF		2	V	0850			DL
	HTPR	21	0851	0853	0902	S21	E02	5698	09	21.5	11	SN			C	0853	30	0.3	
0553		21	0948*	0953*	1008	S28	E10	5698	09	22.2	20	SF					37	0.7	DE
	HTPR	21	0948	0953	1004	S30	E04	5698	09	21.7	16	SB			C	0954	60	0.7	E
	KHAR	21	0952	0953	1002	S30	E10	5698	09	22.2	10	SF		2	V	0953			E
	SVTO	21	0954	0954	1002	S26	E09	5698	09	22.1	8	SF		3	E		14		
	KHAR	21	1003	1005	1008	S26	E13	5698	09	22.4	5	SF		2	V	1005			D
	KHAR	21	1015	1018	1022	S26	E13	5698	09	22.4	7	SF		2	V	1018			D
0554	HTPR	21	1048		1055D	S30	E04	5698	09	21.8	7D	SN			C	1049	60	0.7	EI
0555	HTPR	21	1123	1125	1128	S23	E01	5698	09	21.5	5	SN			C	1125	80	0.8	E
0556	HTPR	21	1144	1155	1227	S26	E06	5698	09	21.9	43	SN			C	1155	110	1.2	EI
0557		21	11504	1157	1217	N29	W54	5694	09	17.2	27	SN	C 1.8				106	2.6	EF
	HTPR	21	1150	1157	1220	N30	W55	5694	09	17.2	30	1B			C	1158	150	2.6	E
	KANZ	21	1153	1157	1209	N30	W53	5694	09	17.3	16	SF			V				
	SVTO	21	1154	1157U	1221	N28	W53	5694	09	17.3	27	SF	C 1.8	3	E		62		F
0558	KANZ	21	1209	1209	1213	S27	E07	5698	09	22.0	4	SF			V				
0559		21	1233*	12549	1323	S27	E04	5698	09	21.8	50	1N	C 1.9				125	3.8	EFHIK
	SVTO	21	1233	1253U	1256	S27	E04	5698	09	21.8	23	SF	C 1.9	3	E		15		F
	HTPR	21	1246	1254	1330	S28	W01	5698	09	21.4	44	1B			C	1310	350	3.8	EIK
	KANZ	21	1255	1303	1326	S28	E04	5698	09	21.8	31	1F			V				
	SVTO	21	1302	1303	1329	S27	E05	5698	09	21.9	27	1N		3	E		101		F
	RAMY	21	1308E	1308U	1335	S27	E06	5698	09	22.0	27D	SN	M 1.5	2	E		33		FH
0560	HTPR	21	1436		1502D	S28	W02	5698	09	21.4	26D	SN			C	1455	130	1.4	EI
0561	SVTO	21	1556	1600U	1609	S27	E05	5698	09	22.0	13	SF	C 7.8	2	E		20		F
0562	PALE	21	1906E	1933	2002	S27	E03	5698	09	22.0	56D	1F	M 1.9	3	E		110		F
		21	1918		1928	No Flare Patrol													
		21	2020		2135	No Flare Patrol													
		21	2142		2224	No Flare Patrol													
0563	LEAR	22	0103	0103	0118	S26	W01	5698	09	22.0	15	SF	C 6.9	3	E		20		
0564		22	0304	03051	0307	S24	W04	5698	09	21.8	3	SN					116	1.8	DE
	PURP	22	0245E	0245U	0302	S25	W05	5698	09	21.7	17D	1F			P	0245	238	2.9	E
	LEAR	22	0304	0305	0308	S23	W04	5698	09	21.8	4	SF		3	E		20		
	URUM	22	0304	0305	0308	S24	W05	5698	09	21.7	4	SN			C		48	0.6	D
	PURP	22	0304	0306	0310	S24	W03	5698	09	21.9	6	SN			C	0306	156	1.9	D
0565		22	0334	0337	0340	S24	W05	5698	09	21.8	6	SN	C 3.3				44	0.8	D
	URUM	22	0334	0337	0340	S24	W05	5698	09	21.8	6	SN			C		64	0.8	D
	LEAR	22	0334	0337	0341	S23	W05	5698	09	21.8	7	SF	C 3.3	3	E		24		
0566		22	0422*	0428*	0438	S29	W02	5698	09	22.0	16	SF					83	1.0	DE
	ABST	22	0422	0428	0431	S27	W03	5698	09	21.9	9	SF			C	0422	122	1.5	E
	ABST	22	0438	0439	0444	S31	W02	5698	09	22.0	6	SF			C	0439	44	0.6	D
0567	ABST	22	0519	0521	0527	S29	W03	5698	09	22.0	8	SF			C	0521	87	1.1	D
0568		22	05371	05401	0548	S24	W05	5698	09	21.8	11	SN	C 7.7				88	1.3	D
	ABST	22	0537	0540	0548	S24	W07	5698	09	21.7	11	SN			C	0540	87	1.0	D
	LEAR	22	0538	0540	0551	S24	E01	5698	09	22.3	13	SF	C 7.7	3	E		27		
	ATHN	22	0538E	0541	0545D	S22	W08	5698	09	21.6	7D	SF		1	V	0541	127	1.5	
	PURP	22	0542E	0542U	0545	S25	W05	5698	09	21.8	3D	SN			P	0542	109	1.3	D

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0569		22	06223	06272	0641	S28	W02	5698	09	22.1	19	1N	C 4.9				200	3.4	DF
	ABST	22	0622	0629	0638	S31	W02	5698	09	22.1	16	1N			C	0629	175	2.2	D
	SVTO	22	0624	0628	0641	S25	W01	5698	09	22.2	17	1B		3	E		100		F
	LEAR	22	0625	0627	0645	S29	W01	5698	09	22.2	20	SN	C 4.9	3	E		81		
	PURP	22	0627E	0627U	0632D	S29	W02	5698	09	22.1	5D	2N			P	0627	422	5.4	
	ATHN	22	0630E	0632U	0635D	S24	W06	5698	09	21.8	5D	1B		1	V	0632	223	2.7	
0570		22	0715	0726	0738	N24	W67	5694	09	17.1	23	SN					72		E
	HTPR	22	0715E		0731	N23	W67	5694	09	17.1	16D	SF			C	0720	80		E
	BUCA	22	0715	0726	0745	N25	W67	5694	09	17.1	30	SN			P	0726	64		E
0571		22	07371	0739	0748	S24	W09	5698	09	21.6	11	SN					120	1.3	DET
	HTPR	22	0737	0739	0745	S24	W10	5698	09	21.5	8	SN			C	0739	120	1.3	E
	KHAR	22	0738	0739	0750	S25	W08	5698	09	21.7	12	SF		2	P	0739			DT
0572	KHAR	22	0820	0821	0826	S27	E37	5703	09	25.2	6	SF		2	V	0821			DH
0573		22	08474	08502	0900	S24	W08	5698	09	21.7	13	SN					78	1.2	DEHTV
	HTPR	22	0847	0851	0907	S24	W08	5698	09	21.7	20	SB			C	0851	150	1.7	E
	SVTO	22	0848	0852	0858	S23	W08	5698	09	21.7	10	SF		3	E		49		
	URUM	22	0850E	0850	0854	S24	W08	5698	09	21.8	4D	SN			C		64	0.8	D
	LEAR	22	0850	0851	0857	S23	W08	5698	09	21.7	7	SF		3	E		50		
	KHAR	22	0851	0852	0903	S25	W08	5698	09	21.7	12	SB		2	V	0852			DHTV
0574		22	09526	0958	1004	S27	W06	5698	09	21.9	12	SN					80	0.9	E
	HTPR	22	0952	0958	1002	S27	W09	5698	09	21.7	10	SN			C	0958	80	0.9	E
	KHAR	22	0958		1005	S27	W03	5698	09	22.2	7	SF		2	V	0958			
0575		22	10233	10271	1034	S20	W28	5702	09	20.3	11	SN					60	0.7	E
	HTPR	22	1023	1027	1032	S20	W27	5702	09	20.4	9	SF			C	1027	60	0.7	E
	KHAR	22	1026	1028	1035	S19	W29	5702	09	20.2	9	SN		2	V	1028			
0576		22	1012*	1020*	1035	S25	W08	5698	09	21.8	23	SN					76	0.8	DEFHT
	HTPR	22	1012	1021	1025	S27	W09	5698	09	21.7	13	SN			C	1021	80	0.9	EF
	CATA	22	1020	1020	1020D	S28	W06	5698	09	22.0	13D	SB		2	P	1020	68	0.8	
	KHAR	22	1028	1028	1034	S24	W06	5698	09	22.0	6	SF		2	V	1028			D
	HTPR	22	1030	1035	1038	S22	W10	5698	09	21.7	8	SN			C	1035	80	0.8	
	KHAR	22	1033	1035	1039	S25	W08	5698	09	21.8	6	SN		2	V	1035			DHT
	KANZ	22	1035E	1035U	1039	S23	W09	5698	09	21.7	4D	SF			C				
0577	HTPR	22	1059	1100	1103	S27	W10	5698	09	21.7	4	SF			C	1100	20	0.2	
0578		22	11164	11219	1136	N36	E30	5704	09	24.9	20	SN					65	1.0	E
	HTPR	22	1116		1125D	N35	E29	5704	09	24.8	9D	SB			C	1121	80	1.0	E
	KANZ	22	1118	1121	1137	N35	E31	5704	09	24.9	19	SF			V				
	SVTO	22	1119	1122	1142	N38	E31	5704	09	25.0	23	SF		3	E		25		
	KAND	22	1120	1125	1130	N36	E31	5704	09	25.0	10	SN			P	1125	42	0.6	E
	CATA	22	1130E	1130	1140D	N35	E30	5704	09	24.9	10D	SN		2	P	1130	112	1.5	
0579		22	1223*	1227*	1253	S25	W04	5698	09	22.2	30	SF					52	1.0	EFI
	HTPR	22	1223	1227	1229	S27	W09	5698	09	21.8	6	SN			C	1227	120	1.3	EI
	SVTO	22	1237	1238	1245	S24	W03	5698	09	22.3	8	SF		3	E		12		F
	RAMY	22	1250E	1250U	1256	S23	W02	5698	09	22.4	6D	SF		3	E		16		
	HTPR	22	1251E		1308	S28	W02	5698	09	22.4	17D	SF			C	1252	60	0.7	E
	KANZ	22	1252	1252	1306	S24	W04	5698	09	22.2	14	SF			V				
0580	SVTO	22	1249	1257	1323	S21	W29	5702	09	20.3	34	SF		3	E		12		
0581	HTPR	22	1325	1345	1428	S28	W03	5698	09	22.3	63	SF			C	1345	60	0.7	EI
0582	HTPR	22	1457	1502	1520	S28	W03	5698	09	22.4	23	SN			C	1502	60	0.7	EI
		22	1524		1729	No Flare Patrol													
0583	PALE	22	1837	1838	1851	N24	W63	5694	09	17.9	14	SF		3	E		19		F
0584	PALE	22	1841	1842	1856	S25	W06	5698	09	22.3	15	SF		3	E		27		F
		22	1904		1917	No Flare Patrol													

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0585	PALE	22	1927	1929	1946D	S24	E24	5703	09	24.7	19D	SF	C	2.2	3	E		12		F
		22	1936		1944	No Flare Patrol														
		22	2106		2114	No Flare Patrol														
		22	2202		2207	No Flare Patrol														
0586	URUM	23	0255	0300	0305	N27	W82	5694	09	16.7	10	SN				C		64		A
0587	LEAR	23	0309	0309	0314	N29	W71	5694	09	17.6	5	SF			3	E		20		
0588	URUM	23	0321	0322	0324	S29	W12	5698	09	22.2	3	SF				C		48	0.6	D
0589	KHAR	23	0730E		0755	S12	W90		09	16.5	25D	SF			2	P	0730			D
0590	KHAR	23	0836		0846	S29	W15	5698	09	22.2	10	SF			2	V	0836			D
0591	KHAR	23	0855	0856	0905	S12	W90		09	16.6	10	SN			2	V	0856			D
0592		23	08571	08591	0904	N29	W75	5694	09	17.5	7	SF						24		
	KHAR	23	0857	0900	0908	N29	W76	5694	09	17.4	11	SN			2	V	0900			
	LEAR	23	0858	0859	0901	N29	W74	5694	09	17.6	3	SF			3	E		15		
	SVTO	23	0858	0859	0909D	N29	W76	5694	09	17.4	11D	SF			2	E		34		
		23	1230		1320	No Flare Patrol														
		23	1322		1349	No Flare Patrol														
		23	1409		1419	No Flare Patrol														
		23	1447		1456	No Flare Patrol														
		23	1547		1716	No Flare Patrol														
0593	PALE	23	1717E	1717U	1725	S28	W19	5698	09	22.2	8D	SF			3	E		30		F
		23	1917		1923	No Flare Patrol														
		23	1958		2024	No Flare Patrol														
		23	2048		2107	No Flare Patrol														
0594		24	0311	0312	0318	S26	W22	5698	09	22.4	7	SF						16		F
	PALE	24	0305E	0315U	0325D	S27	W22	5698	09	22.4	20D	SF			3	E		19		F
	LEAR	24	0311	0312	0318	S26	W23	5698	09	22.3	7	SF			3	E		14		F
0595	ABST	24	0557	0558	0620	S28	W29	5698	09	22.0	23	SF				C	0558	87	1.2	DV
0596		24	0814*	0823*	0916	S29	W28	5698	09	22.1	62	SN	M	1.4				75	2.2	FHKL
	LEAR	24	0814	0834	0904	S29	W28	5698	09	22.1	50	SF	M	1.4	3	E		54		
	SVTO	24	0817E	0842	0903	S29	W27	5698	09	22.2	46D	SN			2	E		39		F
	CATA	24	0820	0823	0917	S30	W28	5698	09	22.1	57	SB			2	C	0823	112	1.7	
	ATHN	24	0822E	0825U	0855D	S29	W27	5698	09	22.2	33D	1B			3	V	0825	191	2.7	
	KHAR	24	0845E	0912	0920	S29	W28	5698	09	22.2	35D	SN			2	V	0912			LK
	SVTO	24	0910	0911	0917	S29	W27	5698	09	22.3	7	SF			3	E		23		
	LEAR	24	0910	0911	0919	S29	W27	5698	09	22.3	9	SF			3	E		33		
	KHAR	24	0928	0930	0932	S28	W34	5698	09	21.7	4	SN			2	V	0930			HL
0597	KHAR	24	0943		0948	S29	W28	5698	09	22.2	5	SN			2	V	0943			L
0598	KANZ	24	1022	1022	1030	S29	W27	5698	09	22.3	8	SF				C				
0599	CATA	24	1041	1041	1050	S26	W38	5698	09	21.5	9	SN			2	C	1041	56	0.9	
0600	CATA	24	1050	1101	1101D	N25	W90	5694	09	17.5	11D	1N			2	P	1101	73		
0601		24	1130*	11421	1213	S28	W27	5698	09	22.4	43	SF						45		F
	RAMY	24	1130	1142	1213	S28	W27	5698	09	22.4	43	SF			3	E		45		F
	KANZ	24	1143	1143	1146D	S29	W27	5698	09	22.4	3D	SF				V				
		24	1337		1346	No Flare Patrol														
0602		24	1454	1504*	1549	S31	W29	5698	09	22.3	55	SF	C	2.0				28		FHK
	RAMY	24	1454	1504	1549	S31	W29	5698	09	22.3	55	SF	C	2.0	3	E		31		FH
	RAMY	24	1454	1517	1549	S31	W29	5698	09	22.3	55	SF				E		25		K
		24	1707		1812	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	See	Obs	Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
		24	1831		1846	No Flare Patrol														
		24	1918		1924	No Flare Patrol														
-		24	2023		2029	No Flare Patrol														
		24	2033		2229	No Flare Patrol														
0603		25	01453	01481	0204	S30	W38	5698	09	22.1	19	SF	C	3.8				66	1.8	DIY
	VORO	25	0145	0149	0204	S31	W39	5698	09	22.0	19	SF			2	C	0151	116	1.8	DIY
	LEAR	25	0148	0148	0203	S30	W37	5698	09	22.2	15	SF	C	3.8	3	E		15		
0604		25	04102	04151	0419	S23	W04	5703	09	24.9	9	SF						69	1.5	E
	PEKG	25	0410	0415	0420	S23	W05	5703	09	24.8	10	SF				C	0415	126	1.5	E
	LEAR	25	0412	0416	0418	S23	W04	5703	09	24.9	6	SF			3	E		12		
0605	KHAR	25	0740E		0748	S13	E62	5709	09	30.0	8D	SF			2	V	0740			D
0606		25	0740E	0745	0750	S24	W07	5703	09	24.8	10D	1N						148	1.8	DH
	KHAR	25	0740E		0750	S23	W08	5703	09	24.7	10D	SF			2	P	0746	70	0.8	DH
	CATA	25	0742E	0745	0745D	S24	W06	5703	09	24.8	3D	1N			2	P	0745	225	2.7	
0607	KHAR	25	0828	0830	0840	S13	E62	5709	09	30.0	12	SF			2	V	0830			DH
0608	KHAR	25	0928		0936	S24	W38	5698	09	22.4	8	SF			2	V	0930			D
0609		25	0940*	1015*	1034	S28	W42	5698	09	22.1	54	SN	C	2.5				46	1.0	EHKT
	SVTO	25	0940	1015	1041	S27	W42	5698	09	22.1	61	SN	C	2.5	3	E		63		H
	SVTO	25	0940	1033	1041	S27	W42	5698	09	22.1	61	SF				E		12		K
	KHAR	25	0955	1016	1030	S29	W42	5698	09	22.1	35	1N			2	V	1016			HK
	KAND	25	1013	1015	1023	S29	W41	5698	09	22.2	10	SN				P	1015	62	1.0	ET
0610		25	12071	12082	1219	S12	E61	5709	09	30.1	12	SN						48	1.9	E
	SVTO	25	1207	1208	1216	S11	E58	5709	09	29.9	9	SF			3	E		17		
	KAND	25	1208	1208	1216	S12	E66	5709	09	30.5	8	SN				P	1208	42		E
	CATA	25	1210E	1210	1225	S14	E60	5709	09	30.0	15D	SN			2	P	1210	84	1.9	
0611		25	13121	13175	1332	S27	W47	5698	09	21.9	20	SN	M	1.2				70	1.5	EFU
	KANZ	25	1312		1312D	S26	W46	5698	09	22.0	20D	SF				C				
	SVTO	25	1312	1322	1333	S30	W48	5698	09	21.8	21	SF	M	1.2	3	E		57		F
	KAND	25	1313	1317	1330	S26	W48	5698	09	21.8	17	SB				P	1317	83	1.5	EU
		25	1347		1443	No Flare Patrol														
		25	1521		1639	No Flare Patrol														
		25	2132		2200	No Flare Patrol														
0612		25	23404	23432	2406	S16	E78	5708	10	1.9	26	1N	M	3.3				142		EHY
	VORO	25	2340	2343	2407	S16	E75	5708	10	1.7	27	1F			2	C	2343	108		EHY
	MITK	25	2342E		2510D	S18	E80	5708	10	2.1	88D	1B				C	2343	170		EY
	PALE	25	2344	2345	2406	S13	E78	5708	10	1.9	22	1F	M	3.3	3	E		149		
0613		26	0212	02147	0226	S10	E52	5709	09	30.0	14	SN						26	0.5	E
	PALE	26	0212	0214	0226	S10	E54	5709	09	30.1	14	SF			3	E		21		
	YUNN	26	0214E	0221	0223D	S10	E51	5709	09	29.9	9D	SN				P		31	0.5	E
0614	ABST	26	0605	0623	0655	S23	W21	5703	09	24.6	50	SF				C	0623	140	1.8	E
0615		26	0621*	0623*	0733	S28	W58	5698	09	21.7	72	1N						96	2.2	F
	ABST	26	0621	0623	0735	S26	W61	5698	09	21.5	74	1F				C	0623	131	3.4	F
	HTPR	26	0729	0730	0731	S30	W55	5698	09	22.0	2	SN				C	0730	60	1.0	
0616	HTPR	26	0727E		0733	S15	E80	5708	10	2.4	6D	SN				C	0728	70		
0617	CATA	26	0806E	0807	0815D	S16	E90	5712C	10	3.2	9D	1F			2	P	0807	56		
0618		26	0855	0858	0906	S23	W57	5698	09	22.0	11	SF	C	4.6				48	1.1	DFHT
	KHAR	26	0855		0859D	S22	W58	5698	09	21.9	4D	SN			2	V	0858			T
	URUM	26	0855	0858	0902	S23	W58	5698	09	21.9	7	SF				C		48	1.1	D
	SVTO	26	0855E	0858	0911	S25	W54	5698	09	22.2	16D	SF	C	4.6	2	E		48		FH
0619	HTPR	26	0959	1003	1008	S22	W52	5698	09	22.4	9	SF				C	1003	80	1.2	E

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0620		26	10123	10181	1028	S23	W57	5698	09	22.0	16	1N	C 3.8				113	2.4	DEHT
	HTPR	26	1012	1019	1029	S22	W53	5698	09	22.3	17	1B			C	1019	150	2.3	E
	URUM	26	1015	1018	1023	S23	W59	5698	09	21.9	8	SF			C		48	1.2	D
	SVTO	26	1015E	1025U	1031D	S24	W56	5698	09	22.1	16D	SF	C 3.8	1	E		75		H
	KHAR	26	1018E		1032	S22	W59	5698	09	21.9	14D	1N		2	P	1018	180	3.7	TH
0621		26	1023	1026	1030	S14	E74	5708	10	2.0	7	SF					30		E
	HTPR	26	1023	1026	1030	S15	E74	5708	10	2.0	7	SF			C	1026	40		E
	SVTO	26	1025E	1026U	1033D	S13	E75	5708	10	2.1	8D	SF		1	E		19		
0622	KHAR	26	1030	1033	1043	S19	W80	5702	09	20.3	13	SN		2	P	1033	90		D
0623		26	1046	10483	1058	S22	W59	5698	09	21.9	12	SN					48		DT
	KHAR	26	1046	1048	1056	S22	W59	5698	09	21.9	10	SN		2	V	1048			T
	KAND	26	1050E		1059	S23	W60	5698	09	21.8	9D	SB			P				
	URUM	26	1051E	1051	1058	S22	W59	5698	09	21.9	7D	SF			C		48		D
0624	KAND	26	1127	1129	1135	S15	E82	5712C	10	2.7	8	SN			P	1129	21		DI
0625		26	1150*	1154*	1213	S24	W58	5698	09	22.0	23	SN					43		DT
	KAND	26	1150	1154	1205	S23	W60	5698	09	21.9	15	SB			P	1154	83		DT
	SVTO	26	1154E	1154U	1158D	S25	W62	5698	09	21.7	4D	SF		2	E		25		
	RAMY	26	1156E	1158U	1206D	S25	W54	5698	09	22.3	10D	SF		2	E		20		
	KAND	26	1207	1210	1220	S23	W60	5698	09	21.9	13	SN			P	1210	62		DT
	SVTO	26	1209	1209	1214	S26	W54	5698	09	22.3	5	SF		2	E		25		
0626	SVTO	26	1203	1209	1211	S20	W76	5702	09	20.7	8	SF		2	E		11		
0627	KAND	26	1209	1210	1213	S27	W46	5698	09	22.9	4	SN			P	1210	42	0.8	DT
0628		26	1226*	12401	1247	S25	W58	5698	09	22.0	21	SN	C 8.2				88		DT
	RAMY	26	1226	1239U	1248D	S27	W55	5698	09	22.2	22D	SF	C 8.2	3	E		25		
	KAND	26	1239	1241	1247	S23	W60	5698	09	21.9	8	SB			P	1241	42		DT
	CATA	26	1240	1240	1240D	S24	W60	5698	09	21.9	8D	1B		1	P	1240	197		
0629	HTPR	26	1322	1330	1350	S20	W88	5702	09	19.8	28	SN			C	1330	40		E
0630	RAMY	26	1357E	1400U	1420D	S27	W55	5698	09	22.3	23D	SF		3	E		28		H
0631	HTPR	26	1406	1429	1455	S22	W62	5698	09	21.8	49	1B			C	1439	160	3.3	EK
0632	HTPR	26	1415	1419	1430	S13	E43	5709	09	29.8	15	SN			C	1419	60	0.8	E
0633	RAMY	26	1436	1438U	1448	S26	W54	5698	09	22.4	12	SF	C 8.3	3	E		35		
		26	1511		1520	No Flare Patrol													
		26	1535		1644	No Flare Patrol													
0634	RAMY	26	1640E	1645U	1655	S18	E87	5712	10	3.3	15D	SF	C 5.6	3	E		41		
		26	1846		2154	No Flare Patrol													
0635	RAMY	26	2010	2015U	2022	S25	W61	5698	09	22.1	12	SF		3	E		49		
		26	2214		2218	No Flare Patrol													
0636	PALE	26	2318	2318	2324	S27	W69	5698	09	21.6	6	SF		3	E		20		
0637		27	0102	0108	0116	S15	E68	5708	10	2.2	14	SF					30		
	PALE	27	0102	0108	0118	S14	E70	5708	10	2.3	16	SF		3	E		43		
	LEAR	27	0104E	0108	0114	S16	E67	5708	10	2.1	10D	SF		3	E		17		
0638	YUNN	27	0126E	0130	0140D	S14	E68	5708	10	2.2	14D	SN			P		79		
0639	MITK	27	0149	0151	0255	S13	E41	5709	09	30.2	66	SN			C	0151			
0640	PEKG	27	0405	0430	0500	S23	W33	5703	09	24.6	55	SF			C	0430	63	0.9	E
0641	PEKG	27	0500E	0500U	0500D	S24	W66	5698	09	22.1	55D	1N			P	0500	147		E

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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
0642	ABST	27	0600	0604	0610	S22	W80	5698	09	21.1	10	1F				C	0604	131		E
0643	ABST	27	0652	0654	0704	S12	E36	5709	09	30.0	12	SF				C	0654	131	1.7	E
0644	ABST	27	0729	0730	0735	S16	E56	5708	10	1.5	6	SF				C	0730	87	1.7	D
0645		27	0800	08101	0823	S21	W70	5698	09	22.0	23	1N						52		E
	SVTO	27	0800	0811	0816	S22	W70	5698	09	21.9	16	SF			3	E		17		
	BUCA	27	0810E	0810	0830	S20	W70	5698	09	22.0	20D	1N				P	0810	86		E
0646		27	0950*	1001*	1030	S22	W34	5703	09	24.8	40	SN	C	4.5				76	1.7	EF
	KAND	27	0950	1001	1020	S23	W32	5703	09	24.9	30	SB				P	1001	125	1.7	E
	SVTO	27	1018	1031	1039	S22	W35	5703	09	24.7	21	SF	C	4.5	3	E		26		F
0647	KAND	27	1205	1207	1212	S30	W71	5698	09	21.9	7	SN				P	1207	62		E
0648	RAMY	27	1245E	1245U	1259	S30	W72	5698	09	21.9	14D	SF			3	E		25		
0649	RAMY	27	1700	1713	1721	S20	W75	5698	09	22.0	21	SF	M	1.6	3	E		36		F
0650	PALE	27	2013	2017	2024	S28	W86	5698	09	21.1	11	1F			3	E		118		F
		27	2147		2206	No Flare Patrol														
		27	2221		2229	No Flare Patrol														
		27	2234		2239	No Flare Patrol														
		27	2322		2334	No Flare Patrol														
0651	YUNN	28	0214E	0214U	0318D	S22	W87	5698	09	21.4	64D	SN				P	0214	47		H
0652	MITK	28	0326	0338	0353	S21	E80	5712C	10	4.3	27	1N				C	0338	180		E
0653	ABST	28	0609	0610	0627	S19	E72	5712	10	3.7	18	1F				C	0610	96		E
0654	SVTO	28	0747	0802	0803	N32	E65	5710	10	3.5	16	SF			3	E		15		
		28	0901		0914	No Flare Patrol														
0655	CATA	28	0920	0920	0920D	N31	W90		09	21.3	16D	SN			1	P	0920	28		
0656	CATA	28	0920	0920	0920D	S28	E75		10	4.2	16D	1N			1	P	0920	56		
		28	0921		0924	No Flare Patrol														
0657	HTPR	28	0930E		0936	S19	E72	5712	10	3.9	6D	1B				C	0930	180		E
0658	HTPR	28	0933	0939	0950	N25	E90	5714	10	5.4	17	1B				C	0939	70		
0659	HTPR	28	1340	1345	1354	S19	E70	5712	10	3.9	14	2B				C	1345	450		AE
0660	RAMY	28	1347E	1349	1414	S19	E85		10	5.1	27D	1B	M	3.5	3	E		120		FH
0661	HTPR	28	1418	1422	1431	N21	E34	5713	10	1.2	13	SN				C	1422	70	0.8	
		28	1819		1821	No Flare Patrol														
		28	1831		1908	No Flare Patrol														
		28	1916		1949	No Flare Patrol														
		28	2007		2028	No Flare Patrol														
		28	2048		2204	No Flare Patrol														
0662	VORO	28	2321	2323	2332	S19	E67	5712	10	4.1	11	1F			2	C	2323	108		DIY
0663	LEAR	29	0344	0344	0349	N30	E84	5714	10	5.8	5	SF			3	E		16		
0664	YUNN	29	0708E	0715	0720	S16	E62	5712	10	4.0	12D	SN				P		24		D
0665	YUNN	29	0715E	0715U	0740	S28	W86	5698	09	22.6	25D					P	0715			A
0666		29	0731E	0731U	0742	S16	E63	5712	10	4.1	11D	SN						46		H
	YUNN	29	0731E	0731U	0742	S18	E64	5712	10	4.2	11D	SB				P	0731	63		H
	SVTO	29	0732E	0735U	0742	S15	E62	5712	10	4.0	10D	SF			2	E		30		H

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0667	HTPR	29	0836	0837	0844	S22	E42	5715	10	2.6	8	SN			C	0837	100	1.3	EI
0668		29	08523	08564	0913	N19	E60	5717	10	3.9	21	1B					164	3.3	EI
	HTPR	29	0852	0856	0913	N17	E60	5717	10	3.9	21	1B			C	0856	160	3.2	EI
	CATA	29	0855	0900	0911D	N21	E59	5717	10	3.9	16D	1B		1	P	0900	169	3.4	
0669		29	0907	0908	0922	S16	E49	5712	10	3.1	15	1N					94	2.2	EFI
	LEAR	29	0907	0908	0920	S16	E48	5712	10	3.0	13	SF		3	E		48		F
	HTPR	29	0907	0908	0925	S16	E50	5712	10	3.2	18	1B			C	0908	140	2.2	EI
0670	HTPR	29	0920	0925	0947	S24	E34	5715	10	2.0	27	SN			C	0925	60	0.7	E
0671	HTPR	29	0957	1000	1012	S24	W90	5698	09	22.5	15	SN			C	1000	60		A
0672	CATA	29	1000E	1005	1005D	S32	W90	5698	09	22.3	5D	2N		1	P	1000	169		
0673	HTPR	29	1018	1022	1024	S23	E58	5712	10	3.9	6	SF			C	1022	30	0.6	E
0674	HTPR	29	1126	1128	1140	S16	E44	5712	10	2.8	14	SB			C	1128	80	1.0	E
0675	HTPR	29	1141	1145	1345	S24	W90	5698	09	22.5	124	1B			C	1145	150		AE
0676	HTPR	29	1400	1402	1415	S16	E43	5712	10	2.8	15	SF			C	1402	40	0.5	
0677	HTPR	29	1445	1448	1518	S17	E28	5708	10	1.7	33	SF			C	1448	50	0.6	E
		29	1601		1635	No Flare Patrol													
0678	PALE	29	1917	1920	1931	S15	E29	5708	10	2.0	14	SF	C 6.4	3	E		50		F
		29	1932		1950	No Flare Patrol													
		29	1956		2234	No Flare Patrol													
0679	YUNN	30	0222	0228	0233	S22	E50	5712	10	3.9	11	SN			C		16	0.3	D
0680		30	02337	02546	0400	S18	E35	5712	10	2.8	87	2N	M 2.9				471	7.3	FU
	YUNN	30	0233	0304U	0428	S18	E35	5712	10	2.8	115	2N			P	0304	786	11.0	FU
	LEAR	30	0239	0254	0402	S18	E35	5712	10	2.8	83	2N	M 2.9	3	E		338		UF
	URUM	30	0240	0300	0331	S19	E34	5712	10	2.7	51	2N			C		370	5.2	U
	MITK	30	0300E		0306D	S18	E35	5712	10	2.8	6D	2N			C	0304	390	5.6	F
0681	PEKG	30	0241	0255	0352	S12	E40	5712A	10	3.1	71	3B			C	0255	925	13.0	IU
0682	LEAR	30	0302	0303	0322	S24	E29	5715	10	2.4	20	SF		3	E		15		
0683		30	0431	0434	0458	S16	E27	5708	10	2.2	27	SN					71	0.9	E
	YUNN	30	0431	0434	0434D	S15	E29	5708	10	2.4	3D	SN			P		79	1.0	
	YUNN	30	0445E	0445U	0458	S16	E25	5708	10	2.1	13D	SN			P	0445	63	0.8	E
0684	PEKG	30	0439E	0439U	0439D	S11	E35	5712A	10	2.8	13D	SN			P	0439	126	1.6	D
0685		30	0555	05577	0617	N13	E62	5716	10	4.9	22	SN					70	2.0	ADEFK
	TACH	30	0555	0557	0619	N10	E62	5716	10	4.9	24	SB		3	C	0557	87	2.0	DE
	LEAR	30	0555	0600	0614	N13	E61	5716	10	4.8	19	SF		3	E		36		F
	LEAR	30	0555	0604	0614	N13	E61	5716	10	4.8	19	SF			E		43		K
	SVTO	30	0556E	0604	0629D	N15	E62	5716	10	4.9	33D	SN		3	E		98		F
	ABST	30	0616E	0616U	0621	N15	E64	5716	10	5.1	5D	SF			P	0616	87		AD
0686	HTPR	30	0801	0805	0823	S16	E30	5712	10	2.6	22	SF			C	0805	80	0.9	EI
0687	HTPR	30	0804	0806	0820	S19	E16	5708	10	1.5	16	SF			C	0806	20	0.2	
0688	HTPR	30	0815	0818	0827	S27	E43		10	3.7	12	SB			C	0818	40	0.5	E
0689	HTPR	30	0923	0928	0950	S17	E30	5712	10	2.7	27	SF			C	0928	80	0.9	EI
0690		30	09584	10051	1013	S26	E42		10	3.7	15	SB					102	1.5	E
	HTPR	30	0958	1005	1013	S27	E41		10	3.6	15	SB			C	1005	120	1.6	E
	CATA	30	1002	1006	1013	S26	E43		10	3.7	11	SB		1	C	1006	84	1.4	

Hα S O L A R F L A R E S

SEPTEMBER 1989

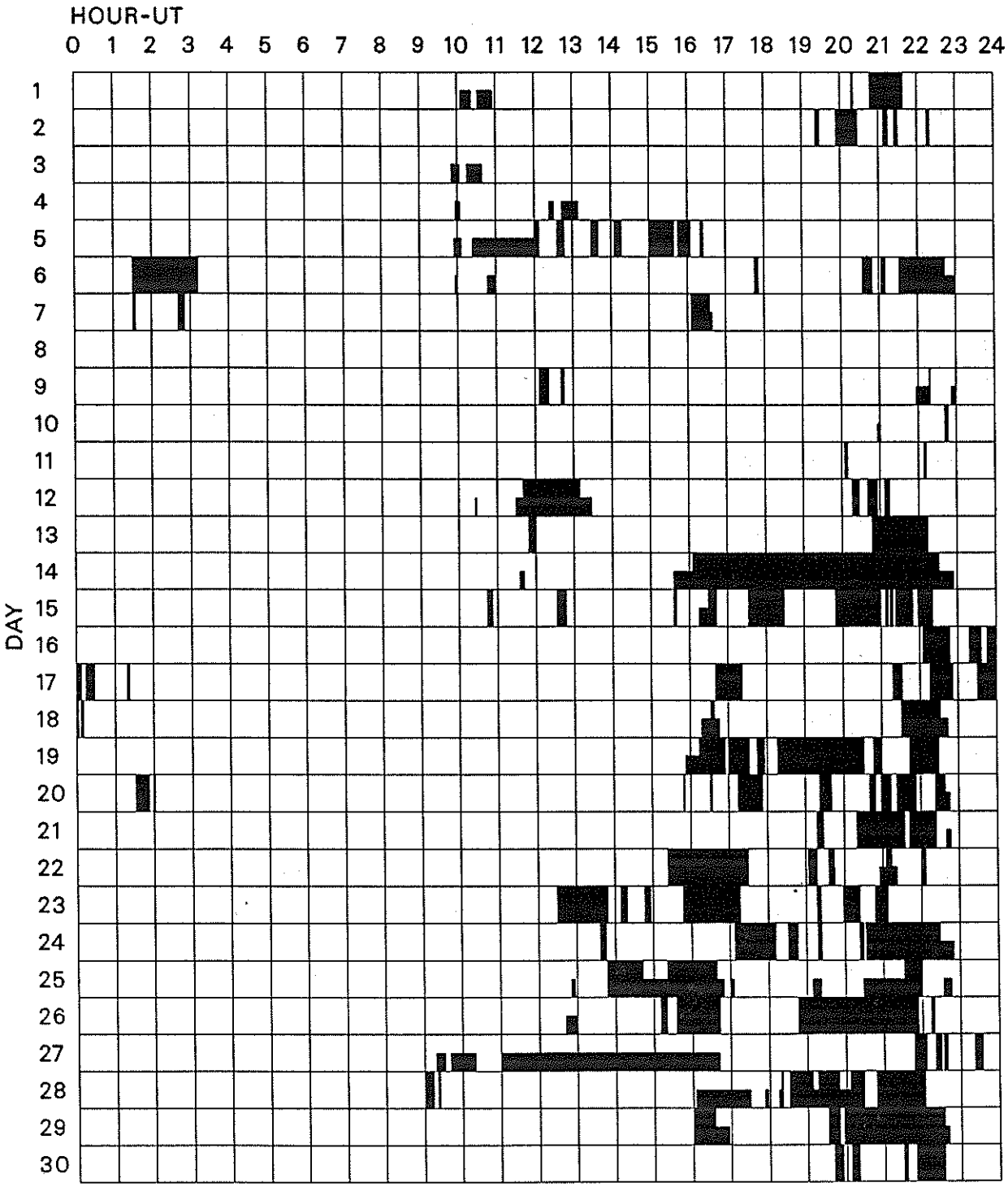
Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0691	CATA	30	1040E	1040	1107	N22	E77	5719	10	6.4	27D	SN		1	P	1040	45		
0692		30	1213*	12342	1251	S17	E19	5708	10	1.9	38	1N					170	2.2	EFI
	HTPR	30	1213	1234	1255	S18	E17	5708	10	1.8	42	1B			C	1234	220	2.2	EI
	RAMY	30	1234	1236	1248	S18	E21	5708	10	2.1	14	1F		3	E		119		F
	KANZ	30	1234	1236	1249	S16	E18	5708	10	1.9	15	1F			V				
0693	HTPR	30	1236	1236	1258	S18	E26	5712	10	2.5	22	SB			C	1236	20	0.2	
0694		30	13504	13535	1404	N18	E44	5717	10	3.9	14	SF					68	1.6	E
	HTPR	30	1350	1353	1359	N17	E42	5717	10	3.8	9	SN			C	1353	120	1.6	E
	RAMY	30	1353	1353	1403	N20	E44	5717	10	3.9	10	SF		3	E		15		
	KANZ	30	1354	1358	1410	N17	E47	5717	10	4.1	16	SF			V				
0695	HTPR	30	1450	1453	1513	S21	E33	5712	10	3.1	23	SF			C	1453	30	0.3	E
0696	HTPR	30	1456	1458	1508	S22	E21	5715	10	2.2	12	SF			C	1458	40	0.4	E
0697	RAMY	30	1938	1938	1957	N36	E34	5710	10	3.5	19	SF		3	E		28		
		30	1941		1955	No Flare Patrol													
0698	RAMY	30	1957	2004U	2030D	N15	E55	5716	10	5.0	33D	SF		2	E		32		
		30	2008		2020	No Flare Patrol													
		30	2129		2135	No Flare Patrol													
		30	2149		2234	No Flare Patrol													
0699	HOLL	30	2256E	2258	2322	S18	E27	5712	10	3.0	26D	SF		3	E		50		

"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.

INTERVALS OF NO FLARE PATROL OBSERVATION
FOR PRECEDING SOLAR FLARE TABLE

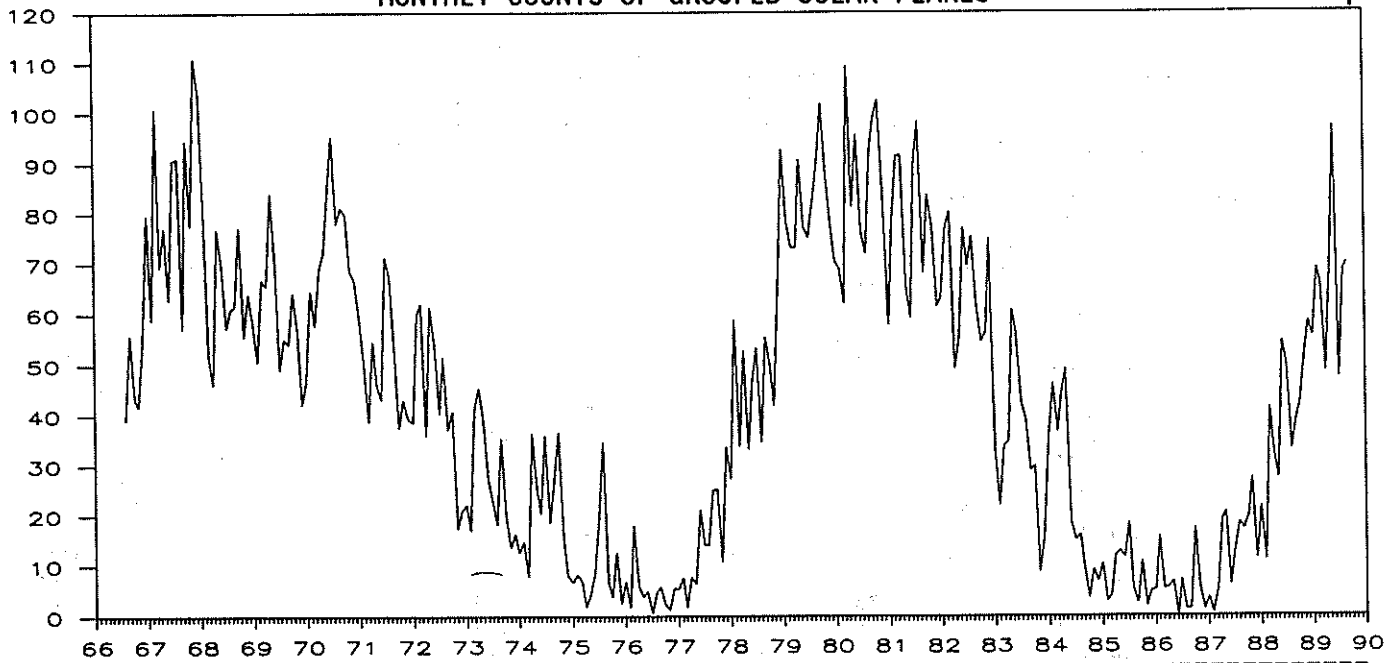
SEPTEMBER 1989



Times of no flare patrol, shown here as shaded areas, combine reports from the observatories listed below. Portions of a panel completely shaded mark dates and times of no patrol of any kind, that is, of neither visual nor cinematographic; portions of a panel with only the bottom half shaded mark times of strictly visual patrol.

Abastumani	Haute Provence	Kanzelhoehe	Palehua	San Vito
Athens	Holloman	Kharkov	Peking	Tashkent
Bucharest	Hurbanovo	Learmonth	Purple Mt.	Urumqi
Catania	Kandilli	Mitaka	Ramey	Voroshilov

MONTHLY COUNTS OF GROUPED SOLAR FLARES*



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1966								391	558	432	417	543	2341
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	544	499	331	390	421	508	584	4618
1989	689	539	658	485	686	971	473	684	699				5884

*Flare counts are preliminary from July 1982 to present. In particular, the monthly totals for the last 6 months may change significantly, as more sites submit their reports. The term "grouped" means that observations of the same event by different stations have been lumped together and counted as one.

SOLAR RADIO EMISSION
Outstanding Occurrences

SEPTEMBER 1989

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	200	GORK	43	NS	0330.0		510.0		6.0		
	100	GORK	44	NS	0330.0E		510.0D		13.0		
	245	SVTO	44	NS	0436.0E	0611.0	232.0D	590.0			ST=2 TYP=1
	40	POTS	44	NS	0548.0E	0549.0	222.0D	3000.0			
	234	POTS	44	NS	0548.0E	0642.5	283.0D	275.0			
	204	IZMI	43	NS	0600.0		95.0	50.0			
	33	UPIC	43	NS	0609.1		289.8				
	127	TORN	44	NS	0620.0E		560.0D		19.0		V=1,DISTURBED
	410	SVTO	43	NS	1329.0	1330.0	211.0	62.0			ST=2 TYP=1
	200	HIRA	43	NS	2300.0	0709.0	600.0D	19.0	8.0		ML
	1415	LEAR	4	S/F	0041.0E	0046.0	9.0D	350.0			ST=2 TYP=5
	1415	PALE	4	S/F	0041.0E	0046.0	8.0D	350.0			ST=2 TYP=5
	8800	LEAR	4	S/F	0042.0E	0047.0	6.0D	35.0			ST=2 TYP=3
	4995	LEAR	4	S/F	0042.0E	0047.0	6.0D	24.0			ST=2 TYP=3
	410	LEAR	8	S	0138.0E	0138.0	U	95.0			ST=2 TYP=3
	245	LEAR	49	GB	0138.0E	0138.0	U	630.0			ST=2 TYP=6
	245	PALE	49	GB	0138.0E	0138.0	1.0D	730.0			ST=2 TYP=6
	410	PALE	8	S	0138.0E	0138.0	U	190.0			ST=2 TYP=3
	950	GORK	23	GRF	0314.4	0622.2	525.6D	1259.0			
	650	GORK	23	GRF	0336.4E	0439.2	64.8D	60.0			
	2950	GORK	21	GRF	0340.4	0719.6	439.6	18.0			
	500	HIRA	46	C	0401.3	0429.8	93.0	335.0	94.0		WL
	410	PALE	20	GRF	0402.0E	0411.0	32.0D	200.0			ST=2 TYP=2
	9100	GORK	47	GB	0402.2	0622.1	477.8D	923.0			
	650	GORK	46	C	0403.0	0411.1		37.0			
	650	GORK	46	C	0403.0	0405.6	11.5	51.0			
	950	GORK	46	C	0403.3	0426.0	32.7	81.0			
	950	GORK	46	C	0403.3	0431.5		109.0			
	610	PALE	4	S/F	0404.0E	0433.0	30.0D	160.0			ST=2 TYP=5
	2840	PEKG	28	PRE	0415.0	0604.0	109.0	162.0			
	610	LEAR	4	S/F	0422.0E	0434.0	38.0D	170.0			ST=2 TYP=5
	410	LEAR	4	S/F	0425.0E	0443.0	35.0D	220.0			ST=2 TYP=5
	9100	GORK	1	S	0429.3	0429.8	0.9	20.0			
	650	GORK	4	S/F	0429.7	0434.2	8.0	76.0			
	410	SVTO	4	S/F	0438.0E	0443.0	45.0D	200.0			ST=2 TYP=5
	1415	SVTO	8	S	0441.0E	0442.0	2.0D	42.0			ST=2 TYP=3
	4995	SVTO	4	S/F	0441.0E	0442.0	1159.0D	93.0			ST=1 TYP=3
	2695	SVTO	4	S/F	0443.0E	0444.0	1157.0D	65.0			ST=1 TYP=3
	9300	KISV	29	PBI	0446.8	0655.2	237.0	329.0			
	9300	KISV	47	GB	0446.8	0621.8	128.4	1003.0			
	5900	KISV	47	GB	0447.4	0622.4	134.0	1365.0			
	5900	KISV	29	PBI	0447.4	0701.4	230.6	339.0			
	15000	KISV	47	GB	0449.4	0622.4	129.4	522.0			
	650	GORK	23	GRF	0507.5E	0542.8	392.2U	29.0			
	650	GORK	46	C	0510.6	0530.6		47.0			
	650	GORK	46	C	0510.6	0519.8	22.9	55.0			
	650	GORK	47	GB	0545.3	0621.4	101.7	1183.0			
	650	GORK	47	GB	0545.3	0624.5		718.0			
	500	HIRA	20	GRF	0546.0	0624.6	125.0	362.0	132.0		WL
	2850	CRIM	28	PRE	0547.0E	0604.5	77.0D	85.0			
	410	LEAR	49	GB	0554.0E	0704.0	96.0D	660.0			ST=2 TYP=7
	600	HUMN	20	GRF	0554.0U	0624.4	128.0D	176.0	64.0		
	610	LEAR	49	GB	0555.0E	0624.0	95.0D	590.0			ST=2 TYP=7
	4995	LEAR	49	GB	0559.0E	0622.0	91.0D	1600.0			ST=2 TYP=7
	8800	LEAR	49	GB	0559.0E	0622.0	91.0D	910.0			ST=2 TYP=7
	410	SVTO	4	S/F	0600.0E	0714.0	81.0D	400.0			ST=2 TYP=5
	3013	IZMI	47	GB	0600.5	0623.3	114.5	1300.0	700.0		
	2695	LEAR	49	GB	0604.0E	0620.0	86.0D	2600.0			ST=2 TYP=7
	2840	PEKG	47	GB	0604.0	0619.7	82.0	2435.0			
	2850	CRIM	47	GB	0604.5	0620.0U	40.0	3793.0D			
	2850	CRIM	30	PBI	0604.5	0644.5	100.0	559.0			
	1415	LEAR	49	GB	0605.0E	0624.0	85.0D	1200.0			ST=2 TYP=6
	2695	SVTO	49	GB	0605.0E	0620.0	90.0D	3000.0			ST=2 TYP=6
	1415	SVTO	49	GB	0605.0E	0624.0	90.0D	1200.0			ST=2 TYP=6
	35000	NOBE	20	GRF	0605.4	0622.1	55.0	145.0		15R	
	80000	NOBE	20	GRF	0605.4	0622.1	55.0	23.0			
	17000	NOBE	20	GRF	0605.4	0622.1	80.0	300.0		31R	
	610	SVTO	49	GB	0606.0E	0621.0	76.0D	830.0			ST=2 TYP=7
	15400	SVTO	4	S/F	0606.0E	0622.0	96.0D	450.0			ST=2 TYP=5

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

SEPTEMBER 1989

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	4995	SVTO	49	GB	0606.0E	0622.0	95.0D	1300.0			ST=2 TYP=7
	8800	SVTO	49	GB	0607.0E	0622.0	61.0D	670.0			ST=3 TYP=6
	11800	BERN	47	GB	0607.0	0622.5	80.0	34.2			
	8400	BERN	47	GB	0607.0	0622.5	80.0	45.6			
	3200	BERN	47	GB	0607.0	0622.5	80.0	80.9			
	5200	BERN	47	GB	0607.0	0622.5	80.0	58.1			
	15400	LEAR	4	S/F	0613.0E	0622.0	62.0D	460.0			ST=2 TYP=5
	234	POTS	41	F	0622.1	0622.1	1.0	1100.0			
	2950	GORK	1	S	0634.9	0635.1	0.9	9.0			
	200	GORK	41	F	0635.6	0704.2		555.0			
	200	GORK	41	F	0635.6	0636.2	30.4	555.0			
	15000	KISV	29	PBI	0658.8E	0658.8	22.1D	171.0			
	1470	POTS	21	GRF	0700.0E		300.0D				
	9500	POTS	21	GRF	0700.0E		330.0D				
	3000	POTS	21	GRF	0700.0E		330.0D				
	260	ONDR	41	F	0700.0		580.0				
	610	LEAR	4	S/F	0701.0E	0704.0	8.0D	270.0			ST=2 TYP=3
	410	LEAR	49	GB	0702.0E	0704.0	7.0D	500.0			ST=2 TYP=6
	9100	GORK	4	S/F	0703.9	0704.5	3.3	94.0			
	245	LEAR	49	GB	0704.0E	0704.0	U	850.0			ST=2 TYP=6
	410	LEAR	49	GB	0704.0E	0704.0	4.0D	500.0			ST=2 TYP=6
	245	SVTO	49	GB	0704.0E	0704.0	1.0D	900.0			ST=2 TYP=6
	204	IZMI	8	S	0704.0	0704.1	0.2	1700.0	800.0		
	9500	POTS	4	S/F	0704.0	0704.4	4.0	70.0			
	9300	KISV	4	S/F	0704.1	0704.5	3.4	103.0			
	15000	KISV	4	S/F	0704.1	0704.5	2.7	51.0			
	5900	KISV	4	S/F	0704.2	0704.5	2.8	92.0			
	950	GORK	3	S	0704.3	0704.8	3.3	11.0			
	100	GORK	8	S	0712.8	0713.4	1.4	350.0			
	2840	PEKG	29	PBI	0726.0		103.0	162.0			
	2950	GORK	1	S	0731.7	0732.0	0.8	10.0			
	204	IZMI	26	FAL	0736.0		59.0	30.0			
	2950	GORK	2	S/F	0740.0	0741.8	6.5	20.0			
	2840	PEKG	45	C	0802.0	0809.7	26.0	449.1			
	3013	IZMI	45	C	0802.8	0809.9	25.0	390.0	100.0		
	204	IZMI	20	GRF	0803.0	0813.2	20.0	60.0	30.0		
	2695	LEAR	4	S/F	0804.0E	0809.0	21.0D	360.0			ST=2 TYP=5
	4995	LEAR	49	GB	0804.0E	0809.0	36.0D	670.0			ST=2 TYP=7
	100	GORK	41	F	0806.6	0807.2		583.0			
	100	GORK	41	F	0806.6	0809.5		1750.0			
	100	GORK	41	F	0806.6	0806.8	4.0	700.0			
	200	GORK	46	C	0806.7	0808.2		555.0			
	200	GORK	46	C	0806.7	0806.8	2.3	740.0			
	1470	POTS	46	C	0807.0	0809.6	18.0	189.0			
	3000	POTS	46	C	0807.5	0810.0	18.0	395.0			
	2850	CRIM	46	C	0807.8	0818.0		117.0			
	9100	GORK	46	C	0807.8	0818.0		652.0			
	9100	GORK	46	C	0807.8	0813.7			717.0		
	9100	GORK	46	C	0807.8	0809.7	15.6	610.0			
	2850	CRIM	46	C	0807.8	0812.9		166.0			
	2850	CRIM	46	C	0807.8	0809.9	18.0	410.0	130.0		
	9300	KISV	47	GB	0807.9	0809.7		591.0			
	9300	KISV	47	GB	0807.9	0817.7	18.0	711.0			
	9300	KISV	47	GB	0807.9	0813.8		675.0			
	2695	SVTO	4	S/F	0808.0E	0809.0	13.0D	360.0			ST=2 TYP=5
	4995	SVTO	49	GB	0808.0E	0809.0	14.0D	670.0			ST=2 TYP=7
	15400	LEAR	49	GB	0808.0E	0817.0	21.0D	1900.0			ST=2 TYP=7
	536	ONDR	42	SER	0808.0	0817.8	13.0	75.0			
	15000	KISV	47	GB	0808.3	0818.1	18.0	801.0			
	15000	KISV	47	GB	0808.3	0813.4		502.0			
	15000	KISV	47	GB	0808.3	0809.7		360.0			
	5900	KISV	47	GB	0808.4	0818.7		242.0			
	5900	KISV	47	GB	0808.4	0813.8		342.0			
	5900	KISV	47	GB	0808.4	0812.8		339.0			
	5900	KISV	47	GB	0808.4	0809.8	15.2	648.0			
	5200	BERN	47	GB	0808.5	0817.5	15.0	31.5			
	3200	BERN	47	GB	0808.5	0817.5	15.0	27.0			
	11800	BERN	47	GB	0808.5	0817.5	15.0	85.5			
	8400	BERN	47	GB	0808.5	0817.5	15.0	31.5			

SOLAR RADIO EMISSION
Outstanding Occurrences

SEPTEMBER 1989

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	35000	BERN	47	GB	0808.5	0817.5	15.0	256.5			
	50000	BERN	47	GB	0808.5	0817.5	15.0	225.0			
	19600	BERN	47	GB	0808.5	0817.5	15.0	220.5			
	9500	POTS	46	C	0808.5	0817.6	17.0	680.0			
	650	GORK	46	C	0809.0	0814.0		33.0			
	650	GORK	46	C	0809.0	0810.0	5.2	25.0			
	1415	LEAR	4	S/F	0809.0E	0809.0	5.0D	150.0			ST=2 TYP=3
	8800	LEAR	4	S/F	0809.0E	0813.0	6.0D	320.0			ST=2 TYP=5
	15400	SVTO	49	GB	0809.0E	0817.0	14.0D	1800.0			ST=2 TYP=7
	1415	SVTO	4	S/F	0809.0E	0809.0	12.0D	120.0			ST=2 TYP=5
	8800	SVTO	4	S/F	0809.0E	0817.0	12.0D	480.0			ST=2 TYP=5
	600	HUMN	27	RF	0809.0	0817.4	14.3	52.0	4.0		
	808	ONDR	49	GB	0809.3	0817.1	15.0	76.0			
	234	POTS	8	S	0809.8	0810.1	0.7	1000.0			
	204	IZMI	41	F	0816.8	0817.6	1.8	120.0			
	650	GORK	46	C	0817.0	0817.1	4.2	42.0			
	650	GORK	46	C	0817.0	0820.2		67.0			
	8800	LEAR	8	S	0906.0E	0907.0	1.0D	110.0			ST=2 TYP=3
	15400	LEAR	8	S	0906.0E	0907.0	1.0D	170.0			ST=2 TYP=3
	15400	SVTO	8	S	0906.0E	0907.0	1.0D	130.0			ST=2 TYP=3
	8800	SVTO	8	S	0906.0E	0907.0	1.0D	110.0			ST=2 TYP=3
	2695	LEAR	20	GRF	0906.0E	0916.0	11.0D	66.0			ST=2 TYP=2
	536	ONDR	42	SER	0906.0	0907.2	2.0	126.0			
	204	IZMI	41	F	0906.3	0906.5	1.8	240.0			
	40	POTS	41	F	0906.5	0907.0	2.0	22000.0			
	3000	POTS	3	S	0906.5	0907.2	1.5	7.0			
	9500	POTS	4	S/F	0906.5	0906.8	6.5	108.0			
	9100	GORK	4	S/F	0906.6	0907.0	3.1	128.0			
	9300	KISV	4	S/F	0906.6	0907.0	2.5	103.0			
	5900	KISV	4	S/F	0906.6	0907.0	2.3	38.0			
	950	GORK	46	C	0906.6	0907.2	4.1	15.0			
	950	GORK	46	C	0906.6	0910.2		5.0			
	234	POTS	41	F	0906.6	0907.7	2.1	150.0			
	15000	KISV	4	S/F	0906.7	0907.0	2.6	126.0			
	650	GORK	4	S/F	0906.8	0907.1	1.7	120.0			
	1415	LEAR	8	S	0907.0E	0907.0	U	44.0			ST=2 TYP=3
	245	SVTO	8	S	0907.0E	0908.0	1.0D	310.0			ST=2 TYP=3
	1470	POTS	3	S	0907.0	0907.2	1.5				
	5900	KISV	4	S/F	1008.5	1009.4	2.9	26.0			
	9500	POTS	3	S	1008.5	1009.5	3.5	16.0			
	9100	GORK	1	S	1008.7	1009.4	2.2	25.0			
	100	GORK	41	F	1034.6	1057.0		5366.0			
	100	GORK	41	F	1034.6	1035.2	23.4	700.0			
	2950	GORK	46	C	1037.6	1040.1	13.4	547.0			
	2950	GORK	46	C	1037.6	1043.3		124.0			
	2950	GORK	46	C	1037.6	1040.6		277.0			
	9100	GORK	1	S	1105.9	1106.4	1.7	20.0			
	5900	KISV	2	S/F	1105.9	1106.5	1.9	15.0			
	9500	POTS	3	S	1106.0	1106.4	1.5	18.0			
	9300	KISV	2	S/F	1106.2	1106.5	1.8	18.0			
	536	ONDR	5	S	1126.9	1127.5	3.5	101.0			
	410	SGMR	8	S	1127.0E	1127.0	1.0D	160.0			ST=2 TYP=3
	15400	SGMR	8	S	1127.0E	1128.0	1.0D	220.0			ST=2 TYP=3
	245	SVTO	49	GB	1127.0E	1127.0	1.0D	13000.0			ST=2 TYP=6
	15400	SVTO	8	S	1127.0E	1127.0	1.0D	240.0			ST=2 TYP=3
	410	SVTO	8	S	1127.0E	1127.0	1.0D	160.0			ST=2 TYP=3
	610	SVTO	8	S	1127.0E	1127.0	1.0D	80.0			ST=2 TYP=3
	8800	SVTO	8	S	1127.0E	1127.0	1.0D	71.0			ST=2 TYP=3
	245	SGMR	49	GB	1127.0E	1127.0	753.0D	12000.0			ST=3 TYP=6
	600	HUMN	4	S/F	1127.0	1127.5	3.0	52.0	17.0		
	9300	KISV	4	S/F	1127.1	1127.7	4.6	90.0			
	200	GORK	4	S/F	1127.1	1128.8	2.0	8148.0			
	234	POTS	4	S/F	1127.2	1127.5	6.0	105000.0			
	9100	GORK	4	S/F	1127.3	1128.0	3.4	102.0			
	650	GORK	46	C	1127.3	1127.3	2.7	135.0			
	3013	IZMI	5	S	1127.3	1131.3	5.0	8.0	5.0		
	204	IZMI	41	F	1127.3	1127.5	2.3	4000.0			
	950	GORK	4	S/F	1127.3	1127.7	3.2	19.0			
	650	GORK	46	C	1127.3	1127.8		65.0			

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

SEPTEMBER 1989

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	100	GORK	47 GB	1127.4	1128.0	2.6	23916.0			
	40	POTS	4 S/F	1127.4	1127.6	2.6	38000.0			
	808	ONDR	1 S	1127.5	1128.0	3.0	16.0			
	127	TORN	47 GB	1128.3	1128.7	2.0	2800.0	1400.0		
	410	SGMR	49 GB	1224.0E	1225.0	2.0D	5700.0			ST=2 TYP=6
	610	SGMR	49 GB	1224.0E	1225.0	1.0D	940.0			ST=2 TYP=6
	410	SVTO	49 GB	1224.0E	1225.0	1.0D	5300.0			ST=3 TYP=6
	610	SVTO	49 GB	1224.0E	1225.0	1.0D	900.0			ST=2 TYP=6
	245	SVTO	8 S	1224.0E	1225.0	1.0D	490.0			ST=3 TYP=3
	536	ONDR	42 SER	1224.0	1225.0	140.0				
	234	POTS	8 S	1224.7	1225.1	1.4	250.0			
	245	SGMR	8 S	1225.0E	1225.0	U	390.0			ST=2 TYP=3
	9300	KISV	2 S/F	1228.6	1229.1	2.3	8.0			
	5900	KISV	2 S/F	1228.6	1229.2	2.1	8.0			
	410	SGMR	49 GB	1231.0E	1231.0	4.0D	1200.0			ST=2 TYP=6
	410	SGMR	49 GB	1249.0E	1249.0	U	3200.0			ST=2 TYP=6
	610	SGMR	8 S	1249.0E	1249.0	U	200.0			ST=2 TYP=3
	410	SVTO	49 GB	1249.0E	1249.0	U	1700.0			ST=3 TYP=6
	245	SVTO	8 S	1249.0E	1249.0	U	50.0			ST=3 TYP=3
	610	SVTO	8 S	1249.0E	1249.0	U	160.0			ST=3 TYP=3
	610	SGMR	8 S	1251.0E	1252.0	1.0D	110.0			ST=2 TYP=3
	410	SGMR	8 S	1251.0E	1252.0	1.0D	310.0			ST=2 TYP=3
	245	SVTO	8 S	1251.0E	1252.0	1.0D	210.0			ST=3 TYP=3
	410	SVTO	8 S	1251.0E	1251.0	1.0D	390.0			ST=2 TYP=3
	610	SVTO	8 S	1251.0E	1252.0	1.0D	70.0			ST=2 TYP=3
	410	SGMR	49 GB	1310.0E	1310.0	U	1100.0			ST=2 TYP=6
	8800	SVTO	8 S	1330.0E	1330.0	1.0D	66.0			ST=2 TYP=3
	9500	POTS	40 F	1346.0	1348.0	7.0	16.0			
	1470	POTS	3 S	1346.0	1347.7	7.0				
	3000	POTS	3 S	1346.5	1346.8	2.0	8.0			
	8800	SGMR	4 S/F	1401.0E	1401.0	4.0D	100.0			ST=2 TYP=3
	9500	POTS	3 S	1402.0	1403.0	4.0	45.0			
	410	SGMR	49 GB	1402.0E	1402.0	2.0D	510.0			ST=2 TYP=6
	3000	POTS	1 S	1402.0	1402.5	3.0	4.0			
	3000	POTS	20 GRF	1420.0	1424.5	10.0	6.0			
	1470	POTS	1 S	1423.2	1424.5	3.8				
	15400	SGMR	49 GB	1458.0E	1459.0	2.0D	1500.0			ST=2 TYP=6
	410	SGMR	49 GB	1458.0E	1459.0	8.0D	9400.0			ST=2 TYP=6
	610	SGMR	49 GB	1458.0E	1459.0	3.0D	1800.0			ST=2 TYP=6
	4995	SGMR	8 S	1458.0E	1459.0	2.0D	230.0			ST=2 TYP=3
	245	SGMR	49 GB	1458.0E	1458.0	7.0D				ST=2 TYP=6
	1415	SGMR	4 S/F	1458.0E	1459.0	3.0D	190.0			ST=2 TYP=3
	1415	SVTO	4 S/F	1458.0E	1459.0	3.0D	250.0			ST=2 TYP=3
	610	SVTO	4 S/F	1458.0E	1459.0	3.0D	460.0			ST=2 TYP=3
	410	SVTO	49 GB	1458.0E	1459.0	2.0D	13000.0			ST=2 TYP=6
	15400	SVTO	49 GB	1458.0E	1459.0	3.0D	2200.0			ST=2 TYP=6
	245	SVTO	49 GB	1458.0E	1458.0	5.0D				ST=2 TYP=6
	2695	SVTO	4 S/F	1458.0E	1459.0	3.0D	270.0			ST=2 TYP=3
	8800	SVTO	49 GB	1458.0E	1459.0	3.0D	540.0			ST=2 TYP=6
	4995	SVTO	8 S	1458.0E	1459.0	2.0D	220.0			ST=2 TYP=3
	536	ONDR	45 C	1458.5	1459.3	20.0				
	127	TORN	47 GB	1458.6	1459.7	2.1	24000.0D	1200.0D		
	2800	OTTA	3 S	1458.8	1459.8	9.5	252.8	51.0		
	600	HUMN	4 S/F	1458.8	1459.8	17.0	500.0	15.0		
	2695	SGMR	8 S	1459.0E	1459.0	1.0D	240.0			ST=2 TYP=3
	808	ONDR	5 S	1459.0	1459.6	8.0	20.0			
	4995	SVTO	8 S	1538.0E	1539.0	1.0D	54.0			ST=3 TYP=3
	2800	OTTA	3 S	1538.1	1539.2	11.0	30.5	6.0		
	410	SGMR	4 S/F	1633.0E	1637.0	6.0D	92.0			ST=2 TYP=3
	410	PALE	4 S/F	1654.0E	1700.0	9.0D	84.0			ST=2 TYP=5
	245	PALE	49 GB	1700.0E	1700.0	U	880.0			ST=2 TYP=6
	245	SGMR	49 GB	1700.0E	1700.0	U	790.0			ST=2 TYP=6
	410	SGMR	8 S	1704.0E	1704.0	1.0D	140.0			ST=2 TYP=3
	245	SGMR	4 S/F	1704.0E	1704.0	4.0D	120.0			ST=2 TYP=3
	410	PALE	8 S	1848.0E	1849.0	1.0D	60.0			ST=2 TYP=3
	245	PALE	49 GB	1848.0E	1849.0	1.0D	2500.0			ST=2 TYP=6
	410	SGMR	8 S	1848.0E	1849.0	1.0D	55.0			ST=2 TYP=3
	245	SGMR	49 GB	1848.0E	1849.0	1.0D	2500.0			ST=3 TYP=6
	245	PALE	8 S	2000.0E	2000.0	U	60.0			ST=2 TYP=3

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

SEPTEMBER 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
01	245	SGMR	8	S	2000.0E	2000.0	1.0D	53.0			ST=2 TYP=3
	610	SGMR	8	S	2000.0E	2000.0	U	51.0			ST=2 TYP=3
	500	HIRA	4	S/F	2113.4	2114.7	3.0	9.0		WL	
	200	HIRA	42	SER	2231.7	2233.0	4.0	825.0		O	
	245	PALE	49	GB	2233.0E	2233.0	U	4400.0			ST=2 TYP=6
	245	SGMR	49	GB	2233.0E	2233.0	U	3000.0			ST=2 TYP=6
	4995	LEAR	4	S/F	2349.0E	2354.0	27.0D	66.0			ST=2 TYP=3
	8800	LEAR	4	S/F	2349.0E	2354.0	27.0D	56.0			ST=2 TYP=3
	2695	PENT	4	S/F	2350.8	2355.0	5.5	29.5	8.0		
	4995	PALE	4	S/F	2351.0E	2354.0	5.0D	52.0			ST=2 TYP=3
	15400	LEAR	20	GRF	2354.0E	2409.0	22.0D	65.0			ST=2 TYP=2
	2695	LEAR	4	S/F	2354.0E	2354.0	23.0D	31.0			ST=2 TYP=3
02	245	LEAR	44	NS	0123.0E	0125.0	113.0D	100.0			ST=2 TYP=1
	100	GORK	44	NS	0334.0E		416.0D		5.0		
	200	GORK	43	NS	0335.0		415.0		5.0		
	260	ONDR	44	NS	0530.0E	1057.9	620.0D	180.0			
	234	POTS	44	NS	0550.0E	1329.0	515.0D	38.0			
	204	IZMI	43	NS	0600.0		360.0	25.0			
	245	SVTO	44	NS	0609.0E	0904.0	650.0D	140.0			ST=2 TYP=1
	127	TORN	44	NS	0620.0E		560.0D		50.0	V=0	
	245	LEAR	44	NS	0711.0E	0904.0	165.0D	130.0			ST=2 TYP=1
	245	SGMR	43	NS	1212.0	2045.0	643.0	300.0			ST=2 TYP=1
	245	PALE	44	NS	1903.0E	1904.0	3.0D	89.0			ST=2 TYP=1
	100	HIRA	44	NS	2010.0E	0600.0	770.0D	570.0	266.0		
	200	HIRA	44	NS	2010.0E	0105.0	770.0D	500.0	119.0	SL	
	245	LEAR	44	NS	2249.0E	0042.0	668.0D	210.0			ST=2 TYP=1
	245	PALE	44	NS	2329.0E	2346.0	302.0D	170.0			ST=2 TYP=1
	610	LEAR	8	S	0005.0E	0006.0	1.0D	260.0			ST=2 TYP=3
	610	PALE	8	S	0005.0E	0006.0	1.0D	240.0			ST=2 TYP=3
	245	LEAR	4	S/F	0007.0E	0014.0	7.0D	53.0			ST=2 TYP=3
	200	HIRA	8	S	0013.2	0013.5	0.8	185.0		ML	
	200	HIRA	45	C	0021.9	0024.4	3.4	50.0		ML	
	17000	NOBE	7	C	0152.5	0154.1	4.0	71.0		8L	
	35000	NOBE	1	S	0152.5	0154.1	2.0	114.0		O	
	80000	NOBE	1	S	0152.5	0154.1	2.0	40.0			
	8800	LEAR	8	S	0153.0E	0153.0	U	28.0			ST=2 TYP=3
	15400	LEAR	8	S	0153.0E	0154.0	2.0D	61.0			ST=2 TYP=3
	8800	PALE	8	S	0153.0E	0153.0	1.0D	64.0			ST=2 TYP=3
	15400	PALE	8	S	0153.0E	0154.0	1.0D	59.0			ST=2 TYP=3
	200	HIRA	8	S	0240.9	0240.9	0.9	310.0		O	
	650	GORK	23	GRF	0405.5	0413.2	27.5	3.0			
	9100	GORK	21	GRF	0428.8	1006.6	364.2D	22.0			
	245	LEAR	8	S	0438.0E	0438.0	1.0D	460.0			ST=2 TYP=3
	9100	GORK	1	S	0455.2	0455.9	2.6	11.0			
	5900	KISV	2	S/F	0455.3	0455.9	4.7	18.0			
	9300	KISV	2	S/F	0455.4	0456.1	1.5	17.0			
	2950	GORK	1	S	0455.5	0456.0	2.4	5.0			
	650	GORK	23	GRF	0609.4	0630.4	81.3	34.0			
	600	HUMN	27	RF	0612.6	0623.3	77.3	55.0	8.0		
	5900	KISV	2	S/F	0616.4	0617.5	2.0	10.0			
	500	HIRA	46	C	0618.1	0621.3	31.5	3100.0	55.0	O	
	2950	GORK	21	GRF	0618.5	0624.0	38.0	228.0			
	5900	KISV	47	GB	0618.8	0621.0	6.0	579.0			
	5900	KISV	29	PBI	0618.8	0624.8	16.5	50.0			
	245	SVTO	8	S	0619.0E	0619.0	U	140.0			ST=2 TYP=3
	9100	GORK	4	S/F	0619.5	0620.9	11.2	748.0			
	9300	KISV	47	GB	0619.7	0621.2	4.7	623.0			
	9300	KISV	29	PBI	0619.7	0624.4	5.1	36.0			
	15400	LEAR	49	GB	0620.0E	0621.0	9.0D	680.0			ST=2 TYP=6
	8800	LEAR	49	GB	0620.0E	0621.0	8.0D	590.0			ST=2 TYP=6
	4995	SVTO	49	GB	0620.0E	0621.0	9.0D	530.0			ST=2 TYP=6
	610	SVTO	49	GB	0620.0E	0620.0	1.0D	3700.0			ST=2 TYP=6
	15400	SVTO	49	GB	0620.0E	0621.0	7.0D	570.0			ST=2 TYP=6
	8800	SVTO	49	GB	0620.0E	0621.0	7.0D	510.0			ST=2 TYP=6
	2695	LEAR	49	GB	0620.0E	0621.0	19.0D	710.0			ST=2 TYP=6
	4995	LEAR	49	GB	0620.0E	0621.0	18.0D	550.0			ST=2 TYP=6
	610	LEAR	49	GB	0620.0E	0621.0	13.0D	2400.0			ST=2 TYP=6
	1415	SVTO	4	S/F	0620.0E	0622.0	16.0D	360.0			ST=2 TYP=3

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

SEPTEMBER 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
02	2695	SVTO	49	GB	0620.0E	0621.0	14.0D	720.0			ST=2 TYP=6
	410	LEAR	49	GB	0620.0E	0621.0	1060.0D	16000.0			ST=1 TYP=6
	1415	LEAR	4	S/F	0620.0E	0622.0	1060.0D	330.0			ST=1 TYP=3
	950	GORK	46	C	0620.5	0622.0		2214.0			
	17000	NOBE	7	C	0620.5	0621.0	8.0	360.0		20R	
	35000	NOBE	1	S	0620.5	0621.0	8.0	294.0		0,80GHz:0	
	950	GORK	46	C	0620.5	0621.0	15.5	54.0			
	19600	BERN	47	GB	0620.5	0621.6	4.5	69.0			
	11800	BERN	47	GB	0620.5	0621.6	4.5	71.9			
	8400	BERN	47	GB	0620.5	0621.6	4.5	56.4			
	3200	BERN	47	GB	0620.5	0621.6	4.5	50.7			
	5200	BERN	47	GB	0620.5	0621.6	4.5	36.6			
	650	GORK	4	S/F	0620.6	0621.0	0.8	3375.0			
	2950	GORK	3	S	0620.6	0621.8	3.4	326.0			
	2850	CRIM	47	GB	0620.6	0621.8	27.0	692.0	200.0		
	3013	IZMI	47	GB	0620.7	0622.0	29.5	586.0			
	410	SVTO	49	GB	0621.0E	0621.0	1.0D	6900.0			ST=2 TYP=6
	9300	KISV	2	S/F	0625.8	0626.0	1.3	19.0			
	5900	KISV	2	S/F	0625.8	0626.1	2.8	26.0			
	950	GORK	29	PBI	0636.0	0636.0	23.0	21.0			
	500	HIRA	41	F	0708.0	0712.0	15.0	16.0		WL	
	204	IZMI	8	S	0811.5	0811.6	0.2	116.0			
	650	GORK	22	GRF	0839.0	0842.7	10.1	10.0			
	5900	KISV	4	S/F	0840.6	0842.6	6.2	97.0			
	9100	GORK	4	S/F	0840.7	0842.5	6.6	133.0			
	9300	KISV	4	S/F	0840.7	0842.6	6.8	135.0			
	2850	CRIM	1	S	0840.8	0842.5	5.0	18.5	6.0		
	2950	GORK	4	S/F	0840.8	0842.7	12.4	21.0			
	3013	IZMI	5	S	0840.8	0842.8	4.8	17.0	8.0		
	15400	LEAR	4	S/F	0841.0E	0842.0	5.0D	170.0			ST=3 TYP=3
	4995	LEAR	4	S/F	0841.0E	0842.0	4.0D	42.0			ST=3 TYP=3
	8800	LEAR	4	S/F	0841.0E	0842.0	4.0D	68.0			ST=3 TYP=3
	15400	SVTO	4	S/F	0841.0E	0842.0	5.0D	160.0			ST=2 TYP=3
	600	HUMN	1	S	0841.0	0842.4	5.0	8.0	3.0		
	9500	POTS	3	S	0841.0E	0843.5	6.0D	113.0			
	536	ONDR	42	SER	0841.0	0841.5	14.0	121.0			
	950	GORK	4	S/F	0841.0	0842.9	5.0	12.0			
	2695	LEAR	4	S/F	0842.0E	0842.0	3.0D	26.0			ST=3 TYP=3
	950	GORK	1	S	0854.2	0854.7	1.2	1.0			
	9100	GORK	1	S	1007.8	1008.2	2.6	11.0			
	2950	GORK	1	S	1007.9	1008.1	1.9	5.0			
	3000	POTS	1	S	1008.0	1008.2	2.0	5.0			
	1470	POTS	4	S/F	1008.0	1008.2U	1.0	17.0			
	9500	POTS	3	S	1008.1	1008.8	1.5	11.0			
	245	SVTO	8	S	1049.0E	1049.0	1.0D	120.0			ST=2 TYP=3
	9300	KISV	45	C	1050.0	1056.0		21.0			
	9500	POTS	42	SER	1050.0	1052.0	7.5	29.0			
	3000	POTS	3	S	1050.0	1051.0	11.0	39.0			
	1470	POTS	3	S	1050.0	1051.0	10.0	32.0			
	5900	KISV	45	C	1050.0	1056.1		16.0			
	5900	KISV	45	C	1050.0	1051.3	10.5	45.0			
	9300	KISV	45	C	1050.0	1051.9	8.2	37.0			
	3013	IZMI	5	S	1050.5	1051.2	3.9	24.0	12.0		
	245	SVTO	8	S	1056.0E	1057.0	1.0D	480.0			ST=2 TYP=3
	245	SGMR	8	S	1057.0E	1057.0	U	340.0			ST=2 TYP=3
	234	POTS	8	S	1057.3	1057.4	0.2	550.0			
	204	IZMI	7	C	1057.3	1057.6	0.8	240.0	100.0		
	9500	POTS	45	C	1135.0	1138.4	10.0	136.0			
	3000	POTS	45	C	1135.0	1138.6	13.0	580.0			
	1470	POTS	45	C	1136.0	1138.9	29.0	505.0			
	536	ONDR	42	SER	1136.5	1142.1	11.0	76.0			
	2695	SGMR	4	S/F	1137.0E	1138.0	7.0D	350.0			ST=2 TYP=3
	1415	SVTO	4	S/F	1137.0E	1138.0	7.0D	350.0			ST=2 TYP=3
	8800	SVTO	8	S	1137.0E	1138.0	2.0D	150.0			ST=2 TYP=3
	2695	SVTO	4	S/F	1137.0E	1138.0	7.0D	360.0			ST=2 TYP=3
	4995	SVTO	4	S/F	1137.0E	1138.0	3.0D	200.0			ST=2 TYP=3
	9300	KISV	46	C	1137.2	1144.1		63.0			
	5900	KISV	46	C	1137.2	1144.1		57.0			
	5900	KISV	46	C	1137.2	1138.4	9.7	194.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

SEPTEMBER 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
02	9300	KISV	46	C	1137.2	1143.5		23.0			
	9300	KISV	46	C	1137.2	1138.6	8.0	180.0			
	5900	KISV	46	C	1137.2	1143.6		48.0			
	5200	BERN	4	S/F	1137.3	1148.6	11.3	14.4			
	3200	BERN	4	S/F	1137.3	1148.6	11.3	24.0			
	8400	BERN	4	S/F	1137.3	1148.6	11.3	11.4			
	11800	BERN	4	S/F	1137.3	1148.6	11.3	10.7			
	19600	BERN	4	S/F	1137.3	1148.6	11.3	7.7			
	3013	IZMI	7	C	1137.4	1138.7	8.9	218.0	120.0		
	600	HUMN	1	S	1137.5	1139.0	9.0	9.0	4.0		
	808	ONDR	5	S	1137.8	1138.7	13.0	130.0			
	1415	SGMR	4	S/F	1138.0E	1138.0	6.0D	340.0			ST=2 TYP=3
	8800	SGMR	8	S	1138.0E	1138.0	1.0D	160.0			ST=2 TYP=3
	4995	SGMR	8	S	1138.0E	1138.0	2.0D	210.0			ST=2 TYP=3
	15400	SGMR	8	S	1138.0E	1138.0	1.0D	100.0			ST=2 TYP=3
	15400	SVTO	8	S	1138.0E	1139.0	1.0D	120.0			ST=2 TYP=3
	33	UPIC	45	C	1223.1	1223.4	1.5				
	536	ONDR	42	SER	1320.0	1340.0	110.0	76.0			
	245	SGMR	49	GB	1543.0E	1543.0	2.0D	1300.0			ST=2 TYP=6
	245	SVTO	49	GB	1543.0E	1543.0	U	1200.0			ST=2 TYP=6
	245	SVTO	8	S	1631.0E	1632.0	1.0D	470.0			ST=2 TYP=3
	410	SVTO	8	S	1655.0E	1655.0	U	70.0			ST=2 TYP=3
	245	SVTO	8	S	1655.0E	1655.0	U	180.0			ST=2 TYP=3
	410	PALE	8	S	1719.0E	1720.0	1.0D	100.0			ST=2 TYP=3
	1415	PALE	8	S	1719.0E	1720.0	2.0D	29.0			ST=2 TYP=3
	2695	PALE	8	S	1719.0E	1720.0	2.0D	78.0			ST=2 TYP=3
	15400	PALE	20	GRF	1719.0E	1719.0	9.0D	110.0			ST=2 TYP=2
	4995	PALE	4	S/F	1719.0E	1720.0	5.0D	77.0			ST=2 TYP=3
	8800	PALE	4	S/F	1719.0E	1720.0	9.0D	73.0			ST=2 TYP=3
	410	SGMR	8	S	1719.0E	1720.0	1.0D	74.0			ST=2 TYP=3
	15400	SGMR	8	S	1719.0E	1719.0	2.0D	92.0			ST=2 TYP=3
	2800	OTTA	3	S	1719.7	1721.9	14.5	79.7	16.0		
	245	PALE	8	S	1720.0E	1722.0	2.0D	200.0			ST=2 TYP=3
	8800	SGMR	8	S	1720.0E	1720.0	2.0D	52.0			ST=2 TYP=3
	245	PALE	4	S/F	1732.0E	1732.0	3.0D	100.0			ST=2 TYP=3
	410	PALE	8	S	1818.0E	1819.0	1.0D	81.0			ST=2 TYP=3
	410	SGMR	8	S	1819.0E	1819.0	U	86.0			ST=2 TYP=3
	15400	PALE	8	S	1930.0E	1931.0	2.0D	120.0			ST=2 TYP=3
	15400	SGMR	8	S	1930.0E	1931.0	2.0D	130.0			ST=2 TYP=3
	245	PALE	8	S	2045.0E	2046.0	1.0D	310.0			ST=2 TYP=3
	245	PALE	49	GB	2056.0E	2056.0	U	1500.0			ST=2 TYP=6
	245	SGMR	49	GB	2056.0E	2056.0	1.0D	1200.0			ST=2 TYP=6
	500	HIRA	46	C	2105.0	2109.3	10.5	25.0		O	
	200	HIRA	42	SER	2106.6	2109.2	4.6	1080.0		O	
	15400	PALE	8	S	2107.0E	2109.0	2.0D	220.0			ST=2 TYP=3
	245	SGMR	49	GB	2107.0E	2107.0	2.0D	7300.0			ST=2 TYP=6
	100	HIRA	42	SER	2107.1		4.6	1000.0D			
	2695	PALE	8	S	2109.0E	2109.0	U	80.0			ST=2 TYP=3
	410	PALE	8	S	2109.0E	2109.0	U	88.0			ST=2 TYP=3
	15400	SGMR	8	S	2109.0E	2109.0	U	170.0			ST=2 TYP=3
	8800	SGMR	8	S	2109.0E	2109.0	U	70.0			ST=2 TYP=3
	2695	SGMR	8	S	2109.0E	2109.0	U	76.0			ST=2 TYP=3
	410	SGMR	8	S	2109.0E	2109.0	U	82.0			ST=3 TYP=3
	1415	SGMR	8	S	2109.0E	2109.0	U	38.0			ST=2 TYP=3
	2800	OTTA	3	S	2109.2	2109.5	4.9	112.3	22.0		
	245	PALE	49	GB	2154.0E	2211.0	53.0D	800.0			ST=2 TYP=7
	245	SGMR	49	GB	2157.0E	2211.0	30.0D	840.0			ST=2 TYP=7
	500	HIRA	41	F	2205.5	2216.0	29.0	21.0		WL	
	2800	OTTA	22	GRF	2214.0	2237.0	165.0	17.4	8.0		
	410	PALE	4	S/F	2214.0E	2216.0	3.0D	35.0			ST=2 TYP=3
	15400	PALE	4	S/F	2229.0E	2233.0	21.0D	180.0			ST=2 TYP=3
	8800	SGMR	4	S/F	2230.0E	2232.0	6.0D	100.0			ST=2 TYP=3
	4995	PALE	20	GRF	2230.0E	2247.0	20.0D	49.0			ST=2 TYP=2
	8800	PALE	4	S/F	2230.0E	2232.0	20.0D	87.0			ST=2 TYP=3
	4995	SGMR	8	S	2233.0E	2233.0	U	61.0			ST=2 TYP=3
	2695	PALE	8	S	2236.0E	2236.0	U	25.0			ST=2 TYP=3
	2800	OTTA	3	S	2246.6	2247.3	4.0	26.5	11.0		
03	410	PALE	44	NS	0108.0E	0136.0	1372.0D	140.0			ST=1 TYP=1

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

SEPTEMBER 1989

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
03	100	GORK	44	NS	0330.0E		420.0D		14.0		
	200	GORK	44	NS	0330.0E		420.0D		19.0		
	245	SVTO	44	NS	0438.0E	1111.0	593.0D	370.0			ST=2 TYP=1
	410	SVTO	44	NS	0439.0E	0448.0	1161.0D	84.0			ST=1 TYP=1
	234	POTS	44	NS	0504.0E	1112.0	526.0D	330.0			
	260	ONDR	44	NS	0530.0E	1043.2	600.0D				
	410	LEAR	43	NS	0544.0	0725.0	109.0	71.0			ST=2 TYP=1
	410	SVTO	44	NS	0544.0E	0718.0	112.0D	77.0			ST=2 TYP=1
	204	IZMI	43	NS	0600.0		360.0	200.0			
	127	TORN	44	NS	0620.0E		560.0D		780.0	V=1	
	245	SGMR	43	NS	1044.0	1112.0	321.0	360.0			ST=3 TYP=1
	33	UPIC	43	NS	1100.5		359.5D				
	600	HUMN	43	NS	1426.5	1638.0	180.0D	18.0			
	245	SGMR	44	NS	1641.0E	1730.0	93.0D	130.0			ST=2 TYP=1
	245	SVTO	44	NS	1642.0E	1644.0	15.0D	80.0			ST=2 TYP=1
	245	PALE	44	NS	1648.0E	1726.0	139.0D	97.0			ST=2 TYP=1
	200	HIRA	44	NS	2010.0E	0717.0	770.0D	1100.0	328.0	SL	
	500	HIRA	44	NS	2010.0E	0716.0	770.0D	490.0	122.0	SL	
	100	HIRA	44	NS	2010.0E	2058.0	770.0D	4300.0	480.0	SL	
	245	PALE	44	NS	2159.0E	0255.0	391.0D	1300.0			ST=2 TYP=1
	245	LEAR	43	NS	2248.0	0715.0	669.0D	1600.0			ST=2 TYP=1
	410	LEAR	43	NS	2248.0	0716.0	669.0D	700.0			ST=2 TYP=1
	2950	GORK	21	GRF	0340.4	0719.6	439.6	17.0			
	650	GORK	23	GRF	0400.0E	0711.8	343.2D	12.0			
	9100	GORK	23	GRF	0430.0	0938.8	390.0D	28.0			
	950	GORK	1	S	0431.2	0431.3	0.2	1.0			
	500	HIRA	20	GRF	0533.0	0700.0	123.0	10.0	5.0	O	
	650	GORK	2	S/F	0608.5	0608.7	0.3	5.0			
	5900	KISV	23	GRF	0633.7	0643.5	20.0	10.0			
	9300	KISV	23	GRF	0633.9	0640.6	20.9	8.0			
	5900	KISV	4	S/F	0634.0	0635.2	5.4	31.0			
	3013	IZMI	1	S	0634.0	0635.3	5.5	16.0	10.0		
	9300	KISV	2	S/F	0634.6	0635.4	1.9	15.0			
	9100	GORK	1	S	0634.7	0635.4	1.3	15.0			
	2950	GORK	1	S	0634.9	0635.1	0.9	9.0			
	2850	CRIM	1	S	0634.9	0635.2	1.0	6.0	2.0		
	5900	KISV	46	C	0707.5	0713.1	18.3	46.0			
	5900	KISV	46	C	0707.5	0714.6		45.0			
	5900	KISV	46	C	0707.5	0711.7		40.0			
	2850	CRIM	45	C	0708.5	0713.3		23.0			
	2850	CRIM	45	C	0708.5	0711.8	15.2	24.0	8.0		
	2840	PEKG	45	C	0709.0	0711.7	14.0	25.4			
	3013	IZMI	7	C	0709.5	0711.8	7.5	17.0	9.0		
	9300	KISV	45	C	0709.7	0715.2		42.0			
	9300	KISV	45	C	0709.7	0714.7	14.6	43.0			
	1470	POTS	4	S/F	0710.0	0711.0	3.0	13.0			
	9500	POTS	4	S/F	0710.0	0715.2	14.0	35.0			
	950	GORK	2	S/F	0710.0	0710.8	6.7	3.0			
	3000	POTS	4	S/F	0710.0	0711.8	13.0	24.0			
	9100	GORK	2	S/F	0710.3	0714.8	7.0	35.0			
	15000	KISV	45	C	0710.5	0715.1		34.0			
	15000	KISV	45	C	0710.5	0714.7	7.4	35.0			
	9300	KISV	4	S/F	0730.1	0731.9	3.1	35.0			
	2840	PEKG	5	S	0731.0	0732.0	4.0	16.9			
	3000	POTS	3	S	0731.0	0732.0	2.0	11.0			
	1470	POTS	3	S	0731.0	0732.2	3.0	9.0			
	650	GORK	4	S/F	0731.3	0731.3	1.1	29.0			
	3013	IZMI	1	S	0731.4	0732.0	2.5	7.0	4.0		
	9500	POTS	3	S	0731.5	0732.0	1.5	22.0			
	9100	GORK	46	C	0731.5	1043.2		428.0			
	9100	GORK	46	C	0731.5	0731.5U	1.7	907.0			
	5900	KISV	4	S/F	0731.5	0731.9	1.0	23.0			
	2850	CRIM	1	S	0731.7	0732.0	1.3	12.0	4.0		
	950	GORK	8	S	0731.7	0732.0	1.3	27.0			
	2950	GORK	1	S	0731.7	0732.0	0.8	9.0			
	2950	GORK	2	S/F	0740.0	0741.8	6.5	19.0			
	5900	KISV	2	S/F	0755.1	0757.6	4.0	6.0			
	9300	KISV	2	S/F	0755.8	0757.5	3.1	9.0			
	650	GORK	21	GRF	1021.3	1054.2	38.7D	10.0			

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

SEPTEMBER 1989

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
03	3000	POTS	46	C	1035.0	1040.0	25.0	1020.0			
	9500	POTS	46	C	1035.0E	1040.3	25.0D	745.0			
	2850	CRIM	28	PRE	1035.5	1038.0	2.5	16.0	5.0		
	1470	POTS	46	C	1036.0	1040.0	44.0	710.0			
	3013	IZMI	22	GRF	1036.2	1040.0	18.8	374.0	200.0		
	5900	KISV	47	GB	1036.2	1040.2	9.0	666.0			
	9300	KISV	47	GB	1036.3	1040.6	7.4	835.0			
	2695	SGMR	49	GB	1037.0E	1040.0	8.0D	580.0			ST=3 TYP=6
	4995	SGMR	49	GB	1037.0E	1040.0	8.0D	980.0			ST=3 TYP=6
	1415	SGMR	49	GB	1037.0E	1040.0	7.0D	640.0			ST=3 TYP=6
	8800	SGMR	49	GB	1037.0E	1039.0	8.0D	1400.0			ST=3 TYP=6
	15000	KISV	47	GB	1037.2	1039.7	6.2	668.0D			
	808	ONDR	45	C	1037.5	1040.8	23.0	193.0			
	2950	GORK	46	C	1037.6	1040.1	13.4	497.0			
	2950	GORK	46	C	1037.6	1043.3		113.0			
	2950	GORK	46	C	1037.6	1040.6		251.0			
	536	ONDR	41	F	1037.6	1040.7	153.0	115.0			
	950	GORK	46	C	1037.9	1043.2		75.0			
	950	GORK	46	C	1037.9	1040.8	17.1	227.0			
	2850	CRIM	47	GB	1038.0	1040.0	6.3	591.0	197.0		
	610	SGMR	4	S/F	1038.0E	1040.0	4.0D	180.0			ST=3 TYP=3
	245	SGMR	49	GB	1038.0E	1043.0	5.0D	1100.0			ST=3 TYP=6
	410	SGMR	4	S/F	1038.0E	1038.0	4.0D	270.0			ST=3 TYP=3
	15400	SGMR	49	GB	1038.0E	1039.0	6.0D	1500.0			ST=3 TYP=6
	2850	CRIM	47	GB	1038.0	1043.3		135.0			
	2850	CRIM	29	PBI	1038.0	1044.3	14.3	74.0			
	600	HUMN	04	S/F	1038.3	1040.4	27.6	133.0	15.0		
	650	GORK	46	C	1038.5	1040.2	9.2	370.0			
	650	GORK	46	C	1038.5	1040.9		229.0			
	234	POTS	42	SER	1038.8	1043.2	4.8	1650.0			
	1415	SVTO	4	S/F	1040.0E	1040.0	7.0D	380.0			ST=2 TYP=3
	410	SVTO	4	S/F	1040.0E	1041.0	3.0D	190.0			ST=2 TYP=3
	4995	SVTO	4	S/F	1040.0E	1040.0	8.0D	370.0			ST=2 TYP=3
	2695	SVTO	4	S/F	1040.0E	1040.0	7.0D	460.0			ST=2 TYP=3
	8800	SVTO	49	GB	1040.0E	1040.0	6.0D	510.0			ST=2 TYP=6
	15400	SVTO	49	GB	1040.0E	1040.0	5.0D	850.0			ST=3 TYP=6
	245	SVTO	49	GB	1041.0E	1043.0	19.0D	860.0			ST=2 TYP=6
	204	IZMI	8	S	1042.8	1043.3	0.5	5700.0	1000.0		
	9100	GORK	1	S	1055.1	1055.9	2.0	28.0			
	5900	KISV	1	S	1104.4	1105.3	2.3	9.0			
	5900	KISV	1	S	1110.2	1111.7	3.5	6.0			
	808	ONDR	8	S	1158.0	1158.4	1.2	13.0			
	15400	SVTO	49	GB	1427.0E	1430.0	24.0D	3500.0			ST=2 TYP=6
	8800	SVTO	49	GB	1427.0E	1430.0	24.0D	2300.0			ST=2 TYP=6
	8800	SGMR	49	GB	1428.0E	1430.0	8.0D	2200.0			ST=2 TYP=6
	4995	SGMR	49	GB	1428.0E	1430.0	14.0D	2500.0			ST=2 TYP=6
	4995	SVTO	49	GB	1428.0E	1430.0	23.0D	2000.0			ST=2 TYP=6
	2695	SVTO	49	GB	1428.0E	1429.0	23.0D	4800.0			ST=2 TYP=6
	2800	OTTA	45	C	1428.5	1429.3	1.0	1968.0			
	2800	OTTA	45	C	1428.5	1429.3	31.5	1968.0	390.0		
	1415	SGMR	4	S/F	1429.0E	1430.0	3.0D	83.0			ST=2 TYP=3
	1415	SVTO	4	S/F	1429.0E	1430.0	4.0D	100.0			ST=2 TYP=3
	2800	OTTA	45	C	1429.5	1430.3	30.5	969.0	194.0		
	2800	OTTA	29	PBI	1500.0	1500.0	20.0	23.8	11.0		
	2800	OTTA	4	S/F	1836.3	1843.0	23.8	43.8	9.0		
	2695	SGMR	4	S/F	1838.0E	1842.0	7.0D	56.0			ST=2 TYP=5
	8800	SGMR	4	S/F	1839.0E	1842.0	6.0D	38.0			ST=2 TYP=3
	4995	SGMR	4	S/F	1839.0E	1842.0	6.0D	50.0			ST=2 TYP=3
	245	PALE	4	S/F	2036.0E	2038.0	3.0D	110.0			ST=2 TYP=3
	245	SGMR	4	S/F	2036.0E	2038.0	3.0D	130.0			ST=2 TYP=3
	245	PALE	4	S/F	2042.0E	2050.0	17.0D	2.0			ST=3 TYP=5
	245	SGMR	49	GB	2042.0E	2211.0	131.0D	540.0			ST=2 TYP=7
	410	PALE	8	S	2055.0E	2055.0	U	63.0			ST=3 TYP=3
	245	LEAR	49	GB	2314.0E	2315.0	1.0D	1800.0			ST=2 TYP=6
	245	PALE	49	GB	2315.0E	2315.0	U	2100.0			ST=2 TYP=6
	15400	LEAR	4	S/F	2331.0E	2332.0	29.0D	31.0			ST=1 TYP=3
	2840	PEKG	45	C	2333.0	2336.7	23.0	229.7			
	2695	PENT	3	S	2334.0	2336.5	7.0	215.8	43.0		
	1415	PALE	4	S/F	2335.0E	2336.0	11.0D	230.0			ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

SEPTEMBER 1989

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
03	2695	LEAR	4	S/F	2335.0E	2336.0	25.0D	220.0			ST=1 TYP=3
	8800	LEAR	4	S/F	2336.0E	2336.0	8.0D	250.0			ST=2 TYP=3
	245	LEAR	49	GB	2336.0E	2336.0	1.0D	2500.0			ST=2 TYP=6
	410	PALE	8	S	2336.0E	2338.0	2.0D	140.0			ST=2 TYP=3
	4995	PALE	8	S	2336.0E	2336.0	2.0D	290.0			ST=2 TYP=3
	610	PALE	8	S	2336.0E	2336.0	2.0D	72.0			ST=2 TYP=3
	2695	PALE	8	S	2336.0E	2336.0	2.0D	200.0			ST=2 TYP=3
	15400	PALE	4	S/F	2336.0E	2337.0	9.0D	200.0			ST=2 TYP=3
	8800	PALE	4	S/F	2336.0E	2336.0	8.0D	250.0			ST=2 TYP=3
	610	LEAR	4	S/F	2336.0E	2336.0	11.0D	85.0			ST=2 TYP=3
	4995	LEAR	4	S/F	2336.0E	2336.0	11.0D	390.0			ST=2 TYP=3
	2695	LEAR	4	S/F	2336.0E	2336.0	11.0D	220.0			ST=2 TYP=3
	17000	NOBE	7	C	2336.0	2336.9	9.0	178.0			6L,80,35GHz:0
	410	LEAR	4	S/F	2337.0E	2338.0	3.0D	160.0			ST=2 TYP=3
	1415	LEAR	4	S/F	2337.0E	2337.0	10.0D	170.0			ST=2 TYP=3
04	410	PALE	44	NS	0108.0E	0235.0	202.0D	240.0			ST=2 TYP=1
	610	LEAR	43	NS	0225.0	0712.0	452.0D	240.0			ST=2 TYP=1
	610	PALE	44	NS	0248.0E	0320.0	102.0D	120.0			ST=2 TYP=1
	100	GORK	43	NS	0315.4		524.6		62.0		
	200	GORK	43	NS	0318.3		521.7		769.0		
	245	SVTO	43	NS	0439.0	0715.0	226.0D	1700.0			ST=2 TYP=1
	410	SVTO	43	NS	0439.0	0716.0	226.0D	650.0			ST=2 TYP=1
	33	UPIC	44	NS	0500.0E		548.2D				
	600	HUMN	44	NS	0500.0E	0713.0	389.0D	54.0			
	234	POTS	44	NS	0540.0E	0723.5	470.0D	770.0			
	40	POTS	44	NS	0540.0E	0603.7	470.0D	23000.0			
	204	IZMI	43	NS	0600.0		360.0	100.0			
	260	ONDR	44	NS	0600.0E		600.0D				
	127	TORN	44	NS	0620.0E		460.0D		115.0		V=1
	610	SVTO	43	NS	0630.0	0701.0	115.0D	190.0			ST=2 TYP=1
	536	ONDR	43	NS	0700.0		280.0				
	245	SGMR	44	NS	1242.0E	1252.0	10.0D	78.0			ST=2 TYP=1
	600	HUMN	43	NS	1504.0	1539.0	180.0D	12.0			
	245	SGMR	44	NS	1741.0E	1749.0	44.0D	190.0			ST=2 TYP=1
	2840	PEKG	45	C	0057.0	0104.6	8.0D	33.3			
	4995	LEAR	4	S/F	0147.0E	0148.0	4.0D	63.0			ST=2 TYP=3
	1415	PALE	8	S	0147.0E	0147.0	2.0D	55.0			ST=2 TYP=3
	410	PALE	8	S	0147.0E	0148.0	1.0D	180.0			ST=2 TYP=3
	15400	LEAR	4	S/F	0148.0E	0148.0	4.0D	68.0			ST=2 TYP=3
	4995	PALE	8	S	0148.0E	0148.0	1.0D	32.0			ST=2 TYP=3
	15400	PALE	8	S	0148.0E	0148.0	1.0D	63.0			ST=2 TYP=3
	8800	PALE	8	S	0148.0E	0148.0	1.0D	63.0			ST=2 TYP=3
	17000	NOBE	1	S	0148.0	0148.7	2.0	46.0			7L,80,35GHz:0
	245	LEAR	49	GB	0227.0E	0228.0	1293.0D	2800.0			ST=1 TYP=7
	245	LEAR	49	GB	0228.0E	0228.0	U	2400.0			ST=3 TYP=6
	245	PALE	49	GB	0228.0E	0228.0	U	3400.0			ST=2 TYP=6
	410	PALE	8	S	0236.0E	0237.0	1.0D	210.0			ST=2 TYP=3
	245	LEAR	49	GB	0237.0E	0237.0	8.0D	1400.0			ST=2 TYP=6
	245	PALE	49	GB	0237.0E	0237.0	1.0D	2000.0			ST=2 TYP=6
	2695	LEAR	8	S	0301.0E	0301.0	U	23.0			ST=2 TYP=3
	1415	LEAR	8	S	0301.0E	0303.0	2.0D	25.0			ST=2 TYP=3
	2695	PALE	4	S/F	0301.0E	0302.0	3.0D	60.0			ST=2 TYP=3
	610	PALE	4	S/F	0301.0E	0303.0	3.0D	200.0			ST=2 TYP=3
	1415	PALE	4	S/F	0301.0E	0302.0	4.0D	67.0			ST=2 TYP=3
	8800	LEAR	4	S/F	0301.0E	0303.0	10.0D	230.0			ST=2 TYP=3
	4995	LEAR	4	S/F	0301.0E	0303.0	10.0D	170.0			ST=2 TYP=3
	2840	PEKG	45	C	0301.0E	0303.5	18.0D	65.2			
	17000	NOBE	7	C	0301.7	0303.6	10.0	110.0			10L
	35000	NOBE	7	C	0301.7	0303.6	10.0	53.0			0,80GHz:0
	15400	LEAR	4	S/F	0302.0E	0303.0	9.0D	150.0			ST=2 TYP=3
	8800	PALE	4	S/F	0302.0E	0303.0	7.0D	180.0			ST=2 TYP=3
	4995	PALE	4	S/F	0302.0E	0303.0	7.0D	110.0			ST=2 TYP=3
	610	LEAR	8	S	0303.0E	0303.0	U	160.0			ST=2 TYP=3
	15400	PALE	8	S	0303.0E	0303.0	2.0D	110.0			ST=2 TYP=3
	200	GORK	8	S	0316.8	0318.2	1.7	576.0			
	100	GORK	8	S	0316.8	0317.7	1.7	792.0			
	650	GORK	23	GRF	0318.0E	0715.4	519.0D	181.0			
	950	GORK	21	GRF	0320.1	0430.0	519.9	18.0			

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

SEPTEMBER 1989

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	PALE	49	GB	0322.0E	0322.0	U	1700.0			ST=2 TYP=6
	245	LEAR	49	GB	0324.0E	0324.0	U	1000.0			ST=2 TYP=6
	2950	GORK	21	GRF	0352.5E	0636.0	417.3D	42.0			
	100	GORK	41	F	0415.9	0423.2		1214.0			
	100	GORK	41	F	0415.9	0416.2	10.6	905.0			
	100	GORK	41	F	0415.9	0425.4		2202.0			
	9100	GORK	23	GRF	0421.0	0639.6	459.0D	40.0			
	200	GORK	46	C	0459.0	0501.4		769.0			
	200	GORK	46	C	0459.0	0459.9	2.7	384.0			
	5900	KISV	23	GRF	0459.6	0509.2	16.4	11.0			
	5900	KISV	4	S/F	0459.6	0500.6	5.4	34.0			
	2950	GORK	2	S/F	0459.7	0500.7	5.5	16.0			
	9300	KISV	2	S/F	0459.7	0500.8	3.6	23.0			
	9300	KISV	23	GRF	0459.7	0526.9	60.0	20.0			
	9100	GORK	2	S/F	0459.8	0500.5	2.3	17.0			
	2850	CRIM	1	S	0500.0	0500.8	1.5	17.0	6.0		
	950	GORK	2	S/F	0500.0	0500.8	3.6	7.0			
	15000	KISV	2	S/F	0500.0	0500.9	3.0	7.0			
	5900	KISV	23	GRF	0520.6	0536.5		16.0			
	5900	KISV	23	GRF	0520.6	0546.6		19.0			
	5900	KISV	23	GRF	0520.6	0523.8	39.5	18.0			
	9300	KISV	2	S/F	0521.3	0523.8	3.6	20.0			
	950	GORK	46	C	0523.5	0526.1		12.0			
	950	GORK	46	C	0523.5	0523.6	4.0	13.0			
	100	GORK	4	S/F	0552.9	0553.2	4.4	1019.0			
	5900	KISV	45	C	0602.8	0610.0	9.2	15.0			
	5900	KISV	45	C	0602.8	0606.8		11.0			
	9300	KISV	1	S	0606.3	0606.7	1.3	9.0			
	9300	KISV	1	S	0609.3	0610.0	2.0	17.0			
	9100	GORK	1	S	0609.6	0610.0	2.0	15.0			
	5900	KISV	47	GB	0621.7	0640.8	28.4	272.0			
	15000	KISV	45	C	0623.8	0631.7		64.0			
	15000	KISV	45	C	0623.8	0630.7	53.7	76.0			
	9300	KISV	29	PBI	0624.0	0634.0	23.0	40.0			
	9300	KISV	47	GB	0624.0	0630.6	10.0	280.0			
	2840	PEKG	45	C	0626.0	0630.8	27.0	93.1			
	9100	GORK	4	S/F	0627.9	0630.7	7.4	430.0			
	4995	LEAR	4	S/F	0628.0E	0630.0	8.0D	210.0			ST=2 TYP=3
	3013	IZMI	20	GRF	0628.0	0631.1	18.8	86.0	45.0		
	2850	CRIM	29	PBI	0628.4	0635.0	23.0	27.0	9.0		
	2850	CRIM	45	C	0628.4	0631.1	6.6	85.0	28.0		
	2850	CRIM	45	C	0628.4	0631.9		84.0			
	2950	GORK	46	C	0628.8	0631.7		69.0			
	2950	GORK	46	C	0628.8	0630.9	6.7	78.0			
	8800	LEAR	4	S/F	0629.0E	0630.0	4.0D	200.0			ST=2 TYP=3
	15400	LEAR	4	S/F	0630.0E	0630.0	3.0D	65.0			ST=2 TYP=3
	2695	LEAR	4	S/F	0630.0E	0631.0	4.0D	79.0			ST=2 TYP=3
	950	GORK	3	S	0630.1	0631.9	4.5	8.0			
	1415	LEAR	8	S	0631.0E	0631.0	U	22.0			ST=2 TYP=3
	950	GORK	22	GRF	0652.0	0716.0	86.0	25.0			
	2840	PEKG	30	PBI	0653.0	0704.2	30.0D	30.0			
	4995	LEAR	4	S/F	0700.0E	0705.0	8.0D	40.0			ST=2 TYP=3
	15400	LEAR	4	S/F	0701.0E	0705.0	7.0D	81.0			ST=2 TYP=3
	15000	KISV	4	S/F	0701.5	0705.3	8.0	77.0			
	3013	IZMI	40	F	0701.6	0705.3	13.0	13.0			
	5900	KISV	4	S/F	0701.7	0705.1	23.8	67.0			
	9300	KISV	4	S/F	0701.7	0705.3	7.0	102.0			
	9300	KISV	29	PBI	0701.7	0708.7	24.3	10.0			
	2950	GORK	1	S	0701.8	0705.2	6.7	13.0			
	8800	LEAR	4	S/F	0702.0E	0705.0	6.0D	65.0			ST=2 TYP=3
	3000	POTS	3	S	0703.0	0705.2	4.0	15.0			
	9500	POTS	4	S/F	0703.0	0705.3	27.0	75.0			
	9100	GORK	3	S	0703.2	0705.2	6.4	85.0			
	15400	SVTO	4	S/F	0704.0E	0705.0	3.0D	73.0			ST=2 TYP=3
	8800	SVTO	8	S	0704.0E	0705.0	2.0D	55.0			ST=2 TYP=3
	17000	NOBE	1	S	0704.3	0705.3	4.0	64.0			22L,80,35GHz:0
	1470	POTS	3	S	0704.3	0705.3	3.2	7.0			
	2850	CRIM	1	S	0704.4	0705.5	1.3	15.0	5.0		
	9300	KISV	2	S/F	0840.1	0841.0	1.7	5.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

SEPTEMBER 1989

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	9300	KISV	2	S/F	0844.6	0845.1	2.4	7.0			
	5900	KISV	30	PBI	0849.5	0906.0	25.0	109.0			
	5900	KISV	47	GB	0849.5	0859.5	16.5	874.0			
	5900	KISV	47	GB	0849.5	0903.7		177.0			
	3013	IZMI	45	C	0851.0	0859.8	37.5	300.0			
	3000	POTS	46	C	0855.0	0859.5	35.0	725.0			
	9100	GORK	46	C	0855.6	0903.1		150.0			
	9100	GORK	46	C	0855.6	0859.5	12.8	848.0			
	9300	KISV	47	GB	0855.8	0859.6	19.0	903.0			
	1470	POTS	46	C	0856.0	0904.0	34.0	600.0			
	2850	CRIM	45	C	0856.0	0859.5	12.0	396.0	132.0		
	2850	CRIM	45	C	0856.0	0903.7		364.0			
	2950	GORK	46	C	0856.5	0912.0		9.0			
	2950	GORK	46	C	0856.5	0858.1	24.5	91.0			
	2950	GORK	46	C	0856.5	0859.5		104.0			
	950	GORK	46	C	0856.5	0903.5		147.0			
	9500	POTS	46	C	0856.5	0859.5	34.0	65.0			
	808	ONDR	47	GB	0856.5	0903.5	40.0	95.0			
	2950	GORK	46	C	0856.5	0903.7		91.0			
	950	GORK	46	C	0856.5	0859.7	15.5	184.0			
	2950	GORK	46	C	0856.5	0917.9		40.0			
	410	LEAR	4	S/F	0857.0E	0857.0	8.0D	490.0			ST=2 TYP=3
	610	LEAR	49	GB	0857.0E	0903.0	8.0D	4200.0			ST=2 TYP=6
	8800	LEAR	49	GB	0857.0E	0859.0	8.0D	690.0			ST=2 TYP=7
	15400	LEAR	49	GB	0857.0E	0900.0	12.0D	660.0			ST=2 TYP=7
	2695	LEAR	4	S/F	0857.0E	0903.0	12.0D	470.0			ST=2 TYP=5
	4995	LEAR	49	GB	0857.0E	0859.0	12.0D	580.0			ST=2 TYP=7
	15000	KISV	47	GB	0857.0	0900.2	12.0	757.0			
	30	POTS	41	F	0857.4	0859.6	2.6D	8000.0D			
	650	GORK	48	C	0857.7	0903.0		7043.0			
	650	GORK	48	C	0857.7	0900.0	12.3	120.0			
	100	GORK	41	F	0857.7	0917.3		3057.0			
	100	GORK	41	F	0857.7	0859.3	20.6	9398.0			
	1415	LEAR	4	S/F	0858.0E	0903.0	11.0D	330.0			ST=2 TYP=5
	204	IZMI	41	F	0858.0	0858.4	0.8	5000.0			
	200	GORK	41	F	0858.9	0917.1		769.0			
	200	GORK	41	F	0858.9	0859.2	25.1	6538.0			
	245	LEAR	49	GB	0859.0E	0859.0	1.0D	920.0			ST=2 TYP=6
	234	POTS	42	SER	0859.5	0903.2	6.0	4700.0			
	2850	CRIM	45	C	0911.4	0912.4		29.0			
	2850	CRIM	45	C	0911.4	0911.8	2.0	29.0	10.0		
	9100	GORK	3	S	0911.5	0912.2	2.6	42.0			
	15000	KISV	47	GB	0911.5	0911.6	15.0	67.2			
	5900	KISV	4	S/F	0911.6	0912.3	2.4	79.0			
	610	LEAR	4	S/F	0915.0E	0917.0	5.0D	120.0			ST=3 TYP=3
	410	LEAR	49	GB	0916.0E	0917.0	4.0D	2400.0			ST=3 TYP=6
	8800	LEAR	8	S	0916.0E	0917.0	2.0D	200.0			ST=2 TYP=3
	245	LEAR	49	GB	0916.0E	0916.0	1.0D	550.0			ST=3 TYP=6
	15400	LEAR	49	GB	0916.0E	0917.0	4.0D	590.0			ST=2 TYP=6
	9300	KISV	47	GB	0916.0	0917.6	13.0	273.0			
	650	GORK	4	S/F	0916.3	0917.2	4.7	99.0			
	9100	GORK	4	S/F	0916.4	0917.6	2.7	248.0			
	5900	KISV	3	S	0916.5	0917.8	3.0	100.0			
	950	GORK	4	S/F	0916.6	0918.0	4.4	88.0			
	2850	CRIM	3	S	0916.7	0918.0	5.0	151.0	50.0		
	2695	LEAR	8	S	0917.0E	0917.0	1.0D	180.0			ST=2 TYP=3
	1415	LEAR	8	S	0917.0E	0917.0	2.0D	140.0			ST=2 TYP=3
	610	LEAR	8	S	0917.0E	0917.0	U	140.0			ST=2 TYP=3
	4995	LEAR	8	S	0917.0E	0917.0	1.0D	75.0			ST=2 TYP=3
	2850	CRIM	42	SER	0923.1	0926.2		11.0			
	2850	CRIM	42	SER	0923.1	0923.6	5.0	15.0	5.0		
	5900	KISV	4	S/F	0940.0	0942.7	4.3	102.0			
	9300	KISV	4	S/F	0941.5	0949.2	10.0	53.0			
	9300	KISV	29	PBI	0941.5	0951.5	18.5	16.0			
	9500	POTS	4	S/F	0944.0	0949.4	26.0	146.0			
	3013	IZMI	27	RF	0944.5	1000.0	15.5	31.0			
	15000	KISV	45	C	0944.5	0946.1		29.0			
	15000	KISV	45	C	0944.5	0948.7	20.0	64.0			
	1470	POTS	40	F	0945.0	0949.2	10.0	16.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
04	3000	POTS	40	F	0945.0	0948.5	5.0	33.0			
	2850	CRIM	1	S	0945.7	0946.0	0.5	18.0	6.0		
	9100	GORK	4	S/F	0947.2	0949.2	4.5	158.0			
	2850	CRIM	45	C	0947.3	0948.7	12.7	37.0	12.0		
	2850	CRIM	45	C	0947.3	0948.9		36.0			
	2950	GORK	4	S/F	0947.5	0948.5	3.5	25.0			
	15400	LEAR	8	S	0948.0E	0949.0	1.0D	110.0			ST=2 TYP=3
	8800	LEAR	8	S	0948.0E	0949.0	1.0D	77.0			ST=2 TYP=3
	4995	LEAR	8	S	0948.0E	0949.0	1.0D	44.0			ST=2 TYP=3
	650	GORK	41	F	1017.9	1031.3		25.0			
	650	GORK	41	F	1017.9	1025.4		18.0			
	650	GORK	41	F	1017.9	1049.4		24.0			
	650	GORK	41	F	1017.9	1019.4	32.5	56.0			
	650	GORK	41	F	1017.9	1046.8		30.0			
	1470	POTS	3	S	1019.3	1019.4	1.2	9.0			
	204	IZMI	41	F	1028.3	1028.5	1.5	400.0			
	5900	KISV	45	C	1037.7	1039.0	5.0	7.0			
	5900	KISV	45	C	1037.7	1038.1		5.0			
	2850	CRIM	1	S	1038.5	1039.0	1.0	7.0	2.0		
	650	GORK	46	C	1056.1	1101.1	29.8	36.0			
	650	GORK	46	C	1056.1	1113.2		58.0			
	650	GORK	46	C	1056.1	1109.7		55.0			
	650	GORK	46	C	1056.1	1118.7		103.0			
	808	ONDR	45	C	1109.1	1121.5	12.4	41.0			
	610	SGMR	8	S	1117.0E	1118.0	1.0D	71.0			ST=2 TYP=3
	200	GORK	41	F	1117.1	1133.5		576.0			
	200	GORK	41	F	1117.1	1120.8	17.3	4230.0			
	100	GORK	41	F	1117.3	1133.6		1925.0			
	100	GORK	41	F	1117.3	1120.6	16.9	18457.0			
	5900	KISV	45	C	1117.5	1121.7	9.5	22.0			
	5900	KISV	45	C	1117.5	1120.8		21.0			
	30	POTS	42	SER	1118.4	1133.6	16.5	6000.0D			
	9300	KISV	2	S/F	1118.4	1120.9	5.0	23.0			
	9500	POTS	3	S	1119.0	1121.0	4.5	15.0			
	3000	POTS	4	S/F	1119.0	1121.6	6.0	16.0			
	2850	CRIM	4	S/F	1119.0	1121.7	4.0	22.0	7.0		
	3013	IZMI	40	F	1119.0	1121.8	5.0	17.0			
	1470	POTS	4	S/F	1119.0	1121.9	6.0	17.0			
	950	GORK	46	C	1119.2	1122.0		58.0			
	950	GORK	46	C	1119.2	1121.2		32.0			
	15000	KISV	2	S/F	1119.2	1120.7	4.0	7.0			
	950	GORK	46	C	1119.2	1119.8	4.8	30.0			
	2950	GORK	1	S	1119.4	1121.7	3.9	14.0			
	234	POTS	42	SER	1119.5	1133.6	15.0	3000.0			
	245	SGMR	8	S	1120.0E	1121.0	1.0D	100.0			ST=3 TYP=3
	204	IZMI	41	F	1120.3	1121.0	2.4	2500.0			
	950	GORK	2	S/F	1130.2	1130.7	7.3	20.0			
	1470	POTS	3	S	1132.5	1133.7	5.5	28.0			
	410	SGMR	8	S	1133.0E	1133.0	U	110.0			ST=2 TYP=3
	245	SGMR	49	GB	1133.0E	1133.0	1.0D	1300.0			ST=2 TYP=6
	3000	POTS	3	S	1133.0	1133.5	2.0	26.0			
	2950	GORK	1	S	1133.1	1133.6	2.7	23.0			
	2850	CRIM	1	S	1133.1	1133.7	1.7	35.0	12.0		
	650	GORK	4	S/F	1133.2	1133.8	5.0	14.0			
	5900	KISV	8	S	1133.4	1133.5	0.5	28.0			
	3013	IZMI	1	S	1133.7	1133.9	1.5	23.0	11.0		
	127	TORN	8	S	1134.0	1134.8	1.2	1150.0	580.0		
	15000	KISV	2	S/F	1135.0	1137.9	10.0	57.0			
	9100	GORK	1	S	1136.8	1137.8	2.1	38.0			
	9500	POTS	3	S	1137.0	1138.0	3.0	33.0			
	9300	KISV	2	S/F	1137.1	1137.9	4.0	41.0			
	5900	KISV	21	GRF	1149.0	1150.6	142.0D	66.0			
	5900	KISV	4	S/F	1158.5	1202.9	7.0	65.0			
	9300	KISV	22	GRF	1159.6	1214.4	58.0	69.0			
	2850	CRIM	21	GRF	1200.0	1206.3	120.0	62.0	20.0		
	1470	POTS	21	GRF	1200.0	1203.5	180.0D	27.0			
	9500	POTS	20	GRF	1200.0E	1214.5	180.0D	51.0			
	15000	KISV	23	GRF	1201.5	1303.8	87.0	30.0			
	2695	SGMR	8	S	1202.0E	1203.0	2.0D	60.0			ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
04	4995	SGMR	8	S	1202.0E	1203.0	1.0D	63.0			ST=2 TYP=3
	2695	SGMR	8	S	1205.0E	1206.0	1.0D	61.0			ST=2 TYP=3
	234	POTS	41	F	1205.0	1205.2	1.6	300.0			
	3000	POTS	21	GRF	1205.0E	1214.6	175.0D	63.0			
	15000	KISV	2	S/F	1205.1	1205.3	0.5	9.0			
	4995	SGMR	8	S	1206.0E	1208.0	2.0D	56.0			ST=2 TYP=3
	536	ONDR	41	F	1207.0	1342.8	190.0	13.0			
	600	HUMN	27	RF	1212.0	1218.0	12.0	6.0	2.0		
	2695	SGMR	8	S	1213.0E	1214.0	2.0D	67.0			ST=2 TYP=3
	4995	SGMR	4	S/F	1213.0E	1214.0	5.0D	70.0			ST=2 TYP=3
	2850	CRIM	1	S	1213.0	1214.8	4.0	29.0	10.0		
	245	SGMR	8	S	1237.0E	1237.0	U	74.0			ST=2 TYP=3
	15000	KISV	2	S/F	1303.6	1303.8	2.0	20.0			
	600	HUMN	27	RF	1305.0	1319.0	53.0	10.0	4.0		
	15000	KISV	2	S/F	1334.3	1334.6	1.2	8.0			
	2800	OTTA	4	S/F	1518.3	1526.4	18.8	71.8	14.0		
	4995	SGMR	4	S/F	1524.0E	1526.0	4.0D	180.0			ST=2 TYP=3
	2695	SGMR	8	S	1525.0E	1526.0	2.0D	79.0			ST=2 TYP=3
	8800	SGMR	8	S	1525.0E	1526.0	2.0D	120.0			ST=2 TYP=3
	15400	SGMR	8	S	1525.0E	1526.0	2.0D	67.0			ST=2 TYP=3
	245	SGMR	8	S	1552.0E	1553.0	1.0D	450.0			ST=2 TYP=3
	4995	SGMR	8	S	1907.0E	1908.0	2.0D	180.0			ST=2 TYP=3
	2800	OTTA	3	S	1907.5	1908.4	8.5	84.6	17.0		
	15400	PALE	8	S	1908.0E	1908.0	U	69.0			ST=2 TYP=3
	2695	PALE	8	S	1908.0E	1908.0	1.0D	83.0			ST=2 TYP=3
	8800	PALE	8	S	1908.0E	1908.0	U	70.0			ST=2 TYP=3
	4995	PALE	8	S	1908.0E	1908.0	U	110.0			ST=2 TYP=3
	8800	SGMR	8	S	1908.0E	1908.0	U	190.0			ST=2 TYP=3
	15400	SGMR	8	S	1908.0E	1908.0	U	74.0			ST=2 TYP=3
	245	PALE	8	S	2110.0E	2110.0	1.0D	52.0			ST=2 TYP=3
	245	SGMR	8	S	2110.0E	2110.0	1.0D	54.0			ST=2 TYP=3
05	100	GORK	43	NS	0327.0		513.0		5.0		
	200	GORK	43	NS	0327.0		513.0		5.0		
	127	TORN	44	NS	0620.0E		460.0D		6.0		V=1,DISTURBED
	2840	PEKG	45	C	0150.0	0153.0	30.0	71.1			
	4995	LEAR	4	S/F	0151.0E	0153.0	8.0D	130.0			ST=2 TYP=3
	8800	LEAR	4	S/F	0151.0E	0153.0	8.0D	120.0			ST=2 TYP=3
	1415	LEAR	4	S/F	0152.0E	0153.0	7.0D	25.0			ST=2 TYP=3
	610	LEAR	4	S/F	0152.0E	0153.0	7.0D	35.0			ST=2 TYP=3
	410	LEAR	4	S/F	0152.0E	0153.0	7.0D	33.0			ST=2 TYP=3
	15400	LEAR	4	S/F	0152.0E	0153.0	3.0D	43.0			ST=2 TYP=3
	8800	PALE	4	S/F	0152.0E	0153.0	3.0D	99.0			ST=2 TYP=3
	15400	PALE	4	S/F	0152.0E	0153.0	3.0D	52.0			ST=2 TYP=3
	2695	PALE	8	S	0152.0E	0152.0	2.0D	55.0			ST=2 TYP=3
	4995	PALE	4	S/F	0152.0E	0153.0	3.0D	98.0			ST=2 TYP=3
	500	HIRA	46	C	0152.0	0153.1	12.0	60.0			O
	17000	NOBE	1	S	0152.9	0153.7	4.0	33.0			0,80,35GHz:0
	17000	NOBE	1	S	0215.7	0216.0	1.0	16.0			13L,80,35GHz:0
	650	GORK	21	GRF	0339.0E	0643.7	382.7U	7.0			
	2950	GORK	21	GRF	0400.3	1131.0	479.7D	27.0			
	5900	KISV	2	S/F	0410.3	0412.6	8.0	20.0			
	9300	KISV	2	S/F	0410.4	0413.3	6.0	19.0			
	2950	GORK	1	S	0416.4	0417.0	2.3	9.0			
	9100	GORK	21	GRF	0419.0E	0503.0	80.0D	30.0			
	2840	PEKG	45	C	0450.0	0500.5	22.0	106.8			
	4995	LEAR	4	S/F	0457.0E	0500.0	4.0D	64.0			ST=2 TYP=5
	2695	LEAR	4	S/F	0457.0E	0500.0	5.0D	110.0			ST=2 TYP=5
	5900	KISV	46	C	0457.0	0458.2		41.0			
	950	GORK	46	C	0457.0	0500.7		80.0			
	950	GORK	46	C	0457.0	0458.7	9.3	25.0			
	5900	KISV	46	C	0457.0	0458.7		33.0			
	5900	KISV	46	C	0457.0	0500.7	27.0	62.0			
	9100	GORK	46	C	0457.2	0458.0	4.9	56.0			
	9300	KISV	46	C	0457.2	0501.1		46.0			
	9300	KISV	46	C	0457.2	0458.1		53.0			
	9100	GORK	46	C	0457.2	0500.2		43.0			
	9300	KISV	46	C	0457.2	0500.3	5.5	54.0			
	9300	KISV	46	C	0457.2	0458.6		26.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
05	15000	KISV	46	C	0457.3	0458.2		20.0			
	15000	KISV	46	C	0457.3	0500.3	5.0	28.0			
	15000	KISV	46	C	0457.3	0458.6		7.0			
	200	GORK	4	S/F	0457.4	0458.9	2.4	27.0D			
	2850	CRIM	45	C	0457.5	0458.1	10.0	51.0	27.0		
	2950	GORK	46	C	0457.5	0458.2	7.2	50.0			
	2950	GORK	46	C	0457.5	0500.6		78.0			
	2850	CRIM	45	C	0457.5	0500.8		82.5			
	650	GORK	46	C	0457.8	0458.1	9.3	34.0			
	650	GORK	46	C	0457.8	0500.4		49.0			
	500	HIRA	46	C	0457.8	0458.6	6.5	140.0			MR
	650	GORK	46	C	0457.8	0458.8		15.0			
	650	GORK	46	C	0457.8	0459.9		138.0			
	245	LEAR	49	GB	0458.0E	0458.0	1.0D	1500.0			ST=2 TYP=6
	410	LEAR	8	S	0458.0E	0458.0	1.0D	260.0			ST=2 TYP=3
	1415	LEAR	4	S/F	0458.0E	0500.0	5.0D	90.0			ST=2 TYP=3
	610	LEAR	8	S	0500.0E	0500.0	1.0D	69.0			ST=2 TYP=3
	15400	LEAR	8	S	0500.0E	0500.0	U	28.0			ST=2 TYP=3
	8800	LEAR	8	S	0500.0E	0500.0	1.0D	40.0			ST=2 TYP=3
	15000	KISV	2	S/F	0511.0	0512.8	5.0	9.0			
	9300	KISV	1	S	0513.6	0514.1	1.5	19.0			
	9100	GORK	1	S	0513.8	0514.0	0.9	19.0			
	15000	KISV	1	S	0513.8	0514.1	1.4	33.0			
	9300	KISV	22	GRF	0542.0	0547.4	26.0	18.0			
	5900	KISV	4	S/F	0544.2	0547.1	10.8	30.0			
	15000	KISV	1	S	0544.2	0544.4	1.2	11.0			
	260	ONDR	41	F	0600.0E	1340.5	560.0D	312.0			
	5900	KISV	2	S/F	0601.0	0601.9	2.0	9.0			
	9100	GORK	1	S	0614.5	0617.0	3.3	23.0			
	9300	KISV	46	C	0614.5	0617.1	8.0	24.0			
	9300	KISV	46	C	0614.5	0616.5		20.0			
	9300	KISV	46	C	0614.5	0614.7		11.0			
	2840	PEKG	1	S	0615.0	0617.0	7.0	7.9			
	5900	KISV	2	S/F	0615.6	0617.2	3.0	12.0			
	2850	CRIM	1	S	0616.0	0617.0	1.5	9.6	3.0		
	650	GORK	4	S/F	0649.9	0650.7	1.0	57.0			
	950	GORK	46	C	0650.0	0000.0	0.1	1.0			
	950	GORK	2	S/F	0650.0	0650.2	1.0	4.0			
	536	ONDR	41	F	0710.0	0749.2	60.0	21.0			
	234	POTS	4	S/F	0733.9	0752.4	31.1	120.0			
	9500	POTS	3	S	0819.3	0819.8	3.7	12.0			
	5900	KISV	2	S/F	0827.3	0827.6	3.0	6.0			
	536	ONDR	8	S	0906.3	0907.0	0.7	86.0			
	9500	POTS	1	S	0913.5	0914.2	1.5	7.0			
	1470	POTS	40	F	0945.0	0945.2	3.5	37.0			
	9300	KISV	1	S	1001.8	1002.7	4.5	22.0			
	9500	POTS	3	S	1002.0	1002.5	1.0	18.0			
	15000	KISV	1	S	1002.0	1002.7	2.8	8.0			
	9100	GORK	1	S	1002.3	1002.5	0.9	18.0			
	5900	KISV	3	S	1002.4	1002.6	1.9	20.0			
	5900	KISV	1	S	1008.5	1009.7	2.6	7.0			
	9300	KISV	1	S	1008.5	1009.8	9.0	9.0			
	15000	KISV	1	S	1009.4	1009.7	3.6	8.0			
	650	GORK	22	GRF	1038.5	1045.0	17.1	4.0			
	536	ONDR	42	SER	1039.0	1107.5	35.0	77.0			
	15000	KISV	2	S/F	1106.0	1107.6	9.7	7.0			
	3000	POTS	3	S	1106.0	1107.7	12.0	18.0			
	3013	IZMI	1	S	1106.2	1107.3	3.2	12.0	6.0		
	5900	KISV	2	S/F	1106.3	1107.3	11.0	15.0			
	1470	POTS	1	S	1106.5	1107.5	3.5	5.0			
	2950	GORK	1	S	1106.6	1107.1	2.2	11.0			
	950	GORK	1	S	1106.6	1107.4	2.4	2.0			
	9100	GORK	1	S	1106.7	1107.2	2.0	8.0			
	9300	KISV	2	S/F	1106.8	1107.4	6.0	10.0			
	5900	KISV	2	S/F	1127.8	1129.3	5.6	12.0			
	9300	KISV	2	S/F	1128.7	1129.3	3.2	13.0			
	15000	KISV	46	C	1128.8	1129.2	4.5	14.0			
	15000	KISV	46	C	1128.8	1130.2		10.0			
	15000	KISV	46	C	1128.8	1129.5		10.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
05	9300	KISV	2	S/F	1134.3	1135.3	3.0	8.0			
	5900	KISV	45	C	1141.5	1144.0	10.5	15.0			
	5900	KISV	45	C	1141.5	1144.9		14.0			
	9300	KISV	45	C	1141.7	1145.6	14.0	34.0			
	9300	KISV	45	C	1141.8	1147.3		25.0			
	9500	POTS	4	S/F	1142.0	1145.5	17.0	33.0			
	9100	GORK	2	S/F	1142.6	1145.4	5.4	25.0			
	3000	POTS	45	C	1334.0	1336.7	26.0	260.0			
	2800	OTTA	4	S/F	1334.8	1337.0	15.2	353.1	70.0		
	8800	SGMR	49	GB	1335.0E	1336.0	7.0D	540.0			ST=2 TYP=6
	2695	SGMR	4	S/F	1335.0E	1336.0	7.0D	280.0			ST=2 TYP=3
	4995	SGMR	49	GB	1335.0E	1336.0	7.0D	650.0			ST=2 TYP=6
	536	ONDR	45	C	1335.0	1336.4	17.0	65.0			
	9500	POTS	45	C	1335.0	1336.5	15.0	450.0			
	1470	POTS	45	C	1335.0	1336.5	25.0	153.0			
	234	POTS	42	SER	1335.9	1340.3	6.7	2600.0			
	1415	SGMR	4	S/F	1336.0E	1336.0	6.0D	130.0			ST=2 TYP=3
	410	SGMR	8	S	1336.0E	1336.0	1.0D	330.0			ST=2 TYP=3
	610	SGMR	4	S/F	1336.0E	1337.0	6.0D	56.0			ST=2 TYP=3
	15400	SGMR	4	S/F	1336.0E	1336.0	6.0D	290.0			ST=2 TYP=3
	600	HUMN	45	C	1336.0	1337.0	21.0	44.0	12.0		
	30	POTS	8	S	1336.2	1337.0	4.3	7000.0			
	410	SGMR	8	S	1340.0E	1340.0	2.0D	450.0			ST=2 TYP=3
	245	SGMR	49	GB	1340.0E	1340.0	U	1800.0			ST=2 TYP=6
	4995	SGMR	49	GB	1408.0E	1408.0	2.0D	12000.0			ST=2 TYP=6
	2800	OTTA	4	S/F	1558.0	1602.8	9.0	31.6	6.0		
	1415	SGMR	8	S	1558.0E	1558.0	1.0D	94.0			ST=2 TYP=3
	8800	SGMR	4	S/F	1601.0E	1602.0	3.0D	270.0			ST=2 TYP=3
	4995	SGMR	4	S/F	1601.0E	1602.0	3.0D	79.0			ST=2 TYP=3
	15400	SGMR	4	S/F	1601.0E	1602.0	3.0D	290.0			ST=2 TYP=3
	410	SGMR	49	GB	1602.0E	1602.0	1.0D	970.0			ST=2 TYP=6
	610	SGMR	8	S	1602.0E	1602.0	1.0D	74.0			ST=2 TYP=3
	245	PALE	8	S	1717.0E	1717.0	U	98.0			ST=2 TYP=3
	245	SGMR	8	S	1717.0E	1717.0	U	92.0			ST=2 TYP=3
	2800	OTTA	3	S	1730.9	1732.3	11.1	59.6	12.0		
	2695	PALE	8	S	1731.0E	1732.0	2.0D	60.0			ST=2 TYP=3
	4995	PALE	8	S	1731.0E	1732.0	1.0D	38.0			ST=2 TYP=3
	2695	SGMR	8	S	1731.0E	1732.0	2.0D	58.0			ST=2 TYP=3
	1415	PALE	8	S	1732.0E	1732.0	1.0D	30.0			ST=2 TYP=3
	1415	SGMR	49	GB	2113.0E	2113.0	4.0D	1600.0			ST=3 TYP=6
	8800	SGMR	4	S/F	2113.0E	2113.0	4.0D	1300.0			ST=3 TYP=3
	410	SGMR	4	S/F	2113.0E	2113.0	4.0D	210.0			ST=3 TYP=3
	4995	SGMR	49	GB	2113.0E	2113.0	4.0D	1600.0			ST=3 TYP=6
	610	SGMR	4	S/F	2113.0E	2113.0	4.0D	100.0			ST=3 TYP=3
	2695	SGMR	49	GB	2113.0E	2113.0	4.0D	1100.0			ST=3 TYP=6
	2800	OTTA	47	GB	2141.9	2142.9	36.2	658.1	132.0		
	410	PALE	8	S	2142.0E	2142.0	1.0D	230.0			ST=2 TYP=3
	15400	SGMR	4	S/F	2142.0E	2144.0	6.0D	310.0			ST=3 TYP=3
	8800	SGMR	49	GB	2142.0E	2143.0	8.0D	720.0			ST=3 TYP=6
	4995	SGMR	49	GB	2142.0E	2143.0	8.0D	1400.0			ST=3 TYP=6
	610	SGMR	4	S/F	2142.0E	2143.0	4.0D	90.0			ST=3 TYP=3
	1415	SGMR	49	GB	2142.0E	2143.0	3.0D	1300.0			ST=3 TYP=6
	8800	PALE	49	GB	2142.0E	2142.0	14.0D	690.0			ST=2 TYP=6
	2695	PALE	49	GB	2142.0E	2142.0	18.0D	1100.0			ST=2 TYP=6
	4995	PALE	49	GB	2142.0E	2142.0	13.0D	1000.0			ST=2 TYP=6
	15400	PALE	4	S/F	2142.0E	2144.0	10.0D	340.0			ST=2 TYP=3
	1415	PALE	49	GB	2142.0E	2143.0	17.0D	1400.0			ST=2 TYP=6
	2695	SGMR	49	GB	2142.0E	2143.0	13.0D	1000.0			ST=3 TYP=6
	17000	NOBE	7	C	2142.4	2144.4	20.0	234.0			12L,80,35GHz:NO
	410	SGMR	8	S	2143.0E	2143.0	U	160.0			ST=3 TYP=3
	2800	OTTA	4	S/F	2219.0	2222.9	18.0	191.5	38.0		
	80000	NOBE	1	S	2221.9	2222.5	2.0	68.0			
	17000	NOBE	4	S/F	2221.9	2222.5	5.0	464.0			17L
	35000	NOBE	4	S/F	2221.9	2222.5	2.0	456.0			3L
	4995	PALE	8	S	2222.0E	2222.0	1.0D	230.0			ST=2 TYP=3
	2695	PALE	4	S/F	2222.0E	2222.0	5.0D	370.0			ST=2 TYP=3
	410	PALE	49	GB	2222.0E	2222.0	1.0D	950.0			ST=2 TYP=6
	610	SGMR	49	GB	2222.0E	2222.0	7.0D	540.0			ST=3 TYP=6
	4995	SGMR	49	GB	2222.0E	2222.0	2.0D	670.0			ST=3 TYP=6

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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
05	8800	SGMR	49	GB	2222.0E	2222.0	2.0D	1000.0			ST=3 TYP=6
	1415	SGMR	49	GB	2222.0E	2222.0	1.0D	2400.0			ST=3 TYP=6
	410	SGMR	49	GB	2222.0E	2222.0	1.0D	1300.0			ST=3 TYP=6
	15400	SGMR	49	GB	2222.0E	2222.0	2.0D	720.0			ST=3 TYP=6
	2695	SGMR	49	GB	2222.0E	2222.0	2.0D	660.0			ST=3 TYP=6
	17000	NOBE	1	S	2321.7	2323.0	4.0	24.0			25L,80,35GHz:0
06	200	GORK	43	NS	0345.0		495.0		5.0		
	100	GORK	43	NS	0558.0		362.0		5.0		
	127	TORN	43	NS	0700.0		370.0		1.0		V=0,DISTRUBED
	245	SGMR	44	NS	1156.0E	1418.0	724.0D	120.0			ST=3 TYP=1
	15400	LEAR	8	S	0046.0E	0046.0	U	24.0			ST=2 TYP=3
	4995	LEAR	8	S	0046.0E	0046.0	1.0D	34.0			ST=2 TYP=3
	8800	LEAR	8	S	0046.0E	0046.0	2.0D	39.0			ST=2 TYP=3
	610	LEAR	49	GB	0049.0E	0054.0	8.0D	7600.0			ST=2 TYP=6
	15400	LEAR	4	S/F	0049.0E	0054.0	8.0D	440.0			ST=2 TYP=3
	1415	LEAR	4	S/F	0049.0E	0055.0	8.0D	130.0			ST=2 TYP=3
	2695	LEAR	4	S/F	0050.0E	0055.0	7.0D	220.0			ST=2 TYP=3
	410	LEAR	49	GB	0051.0E	0054.0	6.0D	660.0			ST=2 TYP=6
	245	LEAR	8	S	0052.0E	0054.0	2.0D	390.0			ST=2 TYP=3
	8800	LEAR	4	S/F	0054.0E	0054.0	3.0D	290.0			ST=2 TYP=3
	4995	LEAR	4	S/F	0054.0E	0054.0	3.0D	280.0			ST=2 TYP=3
	245	PALE	8	S	0054.0E	0054.0	1.0D	350.0			ST=2 TYP=3
	410	PALE	4	S/F	0054.0E	0054.0	1386.0D	150.0			ST=1 TYP=3
	2840	PEKG	3	S	0054.0	0054.9	22.0	215.0			
	500	HIRA	46	C	0054.4	0054.7	13.5	4040.0			O
	2695	PENT	3	S	0054.4	0054.9	29.7	258.8	52.0		
	35000	NOBE	2	S/F	0054.5	0054.7	3.0	230.0			14L
	17000	NOBE	2	S/F	0054.5	0054.7	4.0	327.0			24L
	80000	NOBE	1	S	0054.5	0054.7	3.0	74.0			
	410	LEAR	4	S/F	0057.0E	0059.0	3.0D	400.0			ST=2 TYP=3
	245	LEAR	49	GB	0057.0E	0059.0	8.0D	690.0			ST=2 TYP=6
	610	LEAR	4	S/F	0059.0E	0100.0	6.0D	220.0			ST=2 TYP=3
	410	PALE	8	S	0059.0E	0059.0	1.0D	95.0			ST=2 TYP=3
	245	PALE	49	GB	0059.0E	0059.0	1.0D	110.0			ST=2 TYP=6
	2840	PEKG	5	S	0247.0	0248.4	4.0	26.3			
	410	LEAR	8	S	0250.0E	0250.0	2.0D	220.0			ST=2 TYP=3
	410	PALE	8	S	0250.0E	0250.0	2.0D	170.0			ST=2 TYP=3
	2840	PEKG	5	S	0255.0	0255.9	2.0	18.7			
	950	GORK	21	GRF	0350.4	0515.0	291.6	20.0			
	650	GORK	21	GRF	0357.0E	0606.0	342.0D	7.0			
	9100	GORK	21	GRF	0357.1	1135.3	482.9D	32.0			
	2950	GORK	21	GRF	0407.3	0921.0	472.7	18.0			
	17000	NOBE	1	S	0458.3	0458.5	0.8	42.0			19L,80,35GHz:0
	9300	KISV	22	GRF	0505.4	0515.0		8.0			
	9300	KISV	22	GRF	0505.4	0509.6	13.0	8.0			
	5900	KISV	45	C	0505.5	0908.0		9.0			
	5900	KISV	45	C	0505.5	0509.5	9.3	10.0			
	5900	KISV	22	GRF	0529.5	0534.7	12.2	10.0			
	9300	KISV	22	GRF	0529.8	0542.3		14.0			
	9300	KISV	22	GRF	0529.8	0534.5	17.2	16.0			
	950	GORK	2	S/F	0530.0	0534.0	5.0	6.0			
	15000	KISV	45	C	0533.3	0534.4	1.8	15.0			
	15000	KISV	45	C	0533.3	0533.5		9.0			
	650	GORK	4	S/F	0533.8	0534.0	1.1	16.0			
	260	ONDR	41	F	0540.0E		600.0D				
	15000	KISV	46	C	0547.5	0552.0		60.0			
	15000	KISV	46	C	0547.5	0551.2		60.0			
	15000	KISV	46	C	0547.5	0555.9	13.2	85.0			
	2840	PEKG	45	C	0549.0	0551.0	14.0	91.8			
	100	HIRA	42	SER	0549.5	0550.2	5.5	2100.0			WR
	2950	GORK	46	C	0549.6	0556.0		30.0			
	2950	GORK	46	C	0549.6	0551.0	11.7	81.0			
	9300	KISV	45	C	0549.6	0556.0	13.5	222.0			
	200	HIRA	42	SER	0549.6	0549.7	10.1	1990.0			MR
	9300	KISV	45	C	0549.6	0550.9		75.0			
	2850	CRIM	45	C	0549.7	0551.0	12.0	84.0	28.0		
	950	GORK	46	C	0549.7	0551.2	16.3	33.0			
	2850	CRIM	45	C	0549.7	0556.5		36.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
06	950	GORK	46	C	0549.7	0553.5		44.0			
	100	GORK	41	F	0549.7	0550.6	7.7	5095.0			
	100	GORK	41	F	0549.7	0554.9		679.0			
	8800	LEAR	4	S/F	0550.0E	0555.0	7.0D	170.0			ST=2 TYP=5
	15400	LEAR	4	S/F	0550.0E	0555.0	9.0D	230.0			ST=2 TYP=5
	245	LEAR	49	GB	0550.0E	0551.0	6.0D	940.0			ST=2 TYP=7
	2695	LEAR	4	S/F	0550.0E	0551.0	8.0D	87.0			ST=2 TYP=3
	410	LEAR	49	GB	0550.0E	0550.0	6.0D	830.0			ST=2 TYP=7
	4995	LEAR	4	S/F	0550.0E	0551.0	7.0D	93.0			ST=2 TYP=3
	1415	LEAR	8	S	0550.0E	0551.0	2.0D	40.0			ST=2 TYP=3
	245	SVTO	49	GB	0550.0E	0551.0	1.0D	990.0			ST=2 TYP=6
	410	SVTO	8	S	0550.0E	0550.0	1.0D	170.0			ST=2 TYP=3
	30	POTS	42	SER	0550.0	0551.2U	6.8	7000.0D			
	234	POTS	41	F	0550.0	0550.7	7.5	1700.0			
	200	GORK	4	S/F	0550.1	0550.6	6.7	1666.0			
	650	GORK	46	C	0550.2	0551.2	15.8	19.0			
	9100	GORK	4	S/F	0550.2	0555.8	9.2	222.0			
	650	GORK	46	C	0550.2	0556.9		30.0			
	500	HIRA	42	SER	0550.3	0550.8	19.0	155.0			MR
	33	UPIC	45	C	0550.5	0551.0	2.0				
	17000	NOBE	7	C	0550.5	0555.8	10.0	182.0			13L,80,35GHz:BA
	5900	KISV	45	C	0552.0						
	5900	KISV	45	C	0552.0	0555.8	9.0U	351.0			
	610	LEAR	4	S/F	0555.0E	0556.0	3.0D	30.0			ST=2 TYP=3
	15400	SVTO	4	S/F	0555.0E	0555.0	3.0D	180.0			ST=2 TYP=3
	245	SVTO	8	S	0555.0E	0555.0	1.0D	280.0			ST=2 TYP=3
	1415	SVTO	8	S	0555.0E	0556.0	2.0D	50.0			ST=2 TYP=3
	4995	SVTO	8	S	0555.0E	0555.0	2.0D	52.0			ST=2 TYP=3
	410	SVTO	49	GB	0555.0E	0555.0	1.0D	810.0			ST=2 TYP=6
	8800	SVTO	8	S	0555.0E	0555.0	U	140.0			ST=2 TYP=3
	9300	KISV	22	GRF	0635.5	0637.0	13.2	8.0			
	9300	KISV	22	GRF	0635.5	0640.8		8.0			
	5900	KISV	45	C	0735.3	0737.3		7.0			
	5900	KISV	45	C	0735.3	0736.8	4.0	10.0			
	5900	KISV	2	S/F	0737.3	0740.4	5.7	10.0			
	15000	KISV	45	C	0754.0	0800.5		19.0			
	15000	KISV	45	C	0754.0	0759.8	11.0	25.0			
	650	GORK	2	S/F	0754.3E	0755.4	2.7D	4.0			
	33	UPIC	45	C	0754.3	0754.4	1.2				
	950	GORK	1	S	0755.1	0755.5	1.6	3.0			
	15000	KISV	2	S/F	0820.0	0820.5	3.4	13.0			
	5900	KISV	4	S/F	0825.5	0827.0	6.5	26.0			
	15000	KISV	2	S/F	0825.9	0827.2	2.6	9.0			
	9300	KISV	2	S/F	0826.0	0827.2	5.0	18.0			
	9100	GORK	1	S	0826.3	0827.1	3.1	13.0			
	9500	POTS	4	S/F	0827.0	0828.0	3.0	11.0			
	204	IZMI	42	SER	0854.0	0907.8	31.0	80.0			
	234	POTS	4	S/F	0854.2	0854.4	1.0	110.0			
	950	GORK	21	GRF	0903.0	1106.0	177.0	13.0			
	5900	KISV	23	GRF	0905.0	0910.7	20.0	12.0			
	9500	POTS	4	S/F	0919.0	0919.5	4.0	22.0			
	15000	KISV	2	S/F	0919.2	0919.8	5.0	48.0			
	9100	GORK	2	S/F	0919.3	0919.5	1.7	22.0			
	9300	KISV	2	S/F	0919.3	0919.7	4.0	26.0			
	5900	KISV	1	S	0919.4	0919.6	0.5	9.0			
	234	POTS	4	S/F	0924.3	0924.4	0.7	100.0			
	536	ONDR	27	RF	0950.0	1036.3	63.0	7.0			
	9300	KISV	1	S	0952.1	0952.7	2.0	7.0			
	5900	KISV	22	GRF	1001.2	1012.5		5.0			
	5900	KISV	22	GRF	1001.2	1003.8	14.0	5.0			
	9300	KISV	31	ABS	1012.1	1012.5	2.0	5.0			
	9300	KISV	22	GRF	1037.0	1041.4	21.0	17.0			
	950	GORK	2	S/F	1040.7	1041.3	1.1	11.0			
	808	ONDR	2	S/F	1040.9	1041.4	2.0	11.0			
	15000	KISV	23	GRF	1041.2	1041.5	16.0	26.0			
	9300	KISV	22	GRF	1122.5	1124.3	40.0	32.0			
	9500	POTS	29	PBI	1123.0	1124.2	42.0	27.0			
	9100	GORK	2	S/F	1123.4	1124.1	6.6	26.0			
	15000	KISV	2	S/F	1123.8	1124.3	7.0	24.0			

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

SEPTEMBER 1989

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	5900	KISV	23	GRF	1123.8	1124.3	16.0	14.0			
	9500	POTS	21	GRF	1249.0	1257.3	47.0	29.0			
	5900	KISV	22	GRF	1251.0	1302.2	21.0	25.0			
	15000	KISV	21	GRF	1254.0	1302.5		27.0			
	15000	KISV	21	GRF	1254.0	1257.6	12.0	24.0			
	9300	KISV	23	GRF	1255.0	1257.3	25.0	44.0			
	410	SGMR	8	S	1301.0E	1301.0	U	300.0			ST=2 TYP=3
	410	SVTO	8	S	1301.0E	1301.0	1.0D	140.0			ST=2 TYP=3
	3000	POTS	4	S/F	1301.0	1302.4	14.0	15.0			
	1470	POTS	4	S/F	1301.5	1302.4	14.0	25.0			
	1470	POTS	3	S	1354.0	1354.1	1.0	11.0			
	9500	POTS	3	S	1429.7	1430.0	1.3	15.0			
	245	SGMR	8	S	1430.0E	1430.0	1.0D	460.0			ST=2 TYP=3
	245	SVTO	8	S	1430.0E	1430.0	U	200.0			ST=2 TYP=3
	536	ONDR	42	SER	1457.0	1505.0	16.0	18.0			
	410	SGMR	8	S	1511.0E	1511.0	1.0D	59.0			ST=2 TYP=3
	245	SGMR	8	S	1525.0E	1526.0	1.0D	140.0			ST=3 TYP=3
	8800	SGMR	4	S/F	1652.0E	1657.0	6.0D	53.0			ST=2 TYP=3
	1415	SGMR	4	S/F	1653.0E	1655.0	4.0D	50.0			ST=2 TYP=3
	2800	OTTA	4	S/F	1653.1	1655.7	15.0	56.6	11.0		
	4995	SGMR	4	S/F	1654.0E	1655.0	3.0D	58.0			ST=2 TYP=3
	2695	SGMR	4	S/F	1654.0E	1655.0	3.0D	70.0			ST=2 TYP=3
	410	PALE	8	S	1655.0E	1656.0	2.0D	250.0			ST=2 TYP=3
	610	PALE	8	S	1655.0E	1655.0	1.0D	33.0			ST=2 TYP=3
	245	PALE	49	GB	1655.0E	1655.0	U	550.0			ST=2 TYP=6
	1415	PALE	8	S	1655.0E	1655.0	1.0D	27.0			ST=2 TYP=3
	4995	PALE	8	S	1655.0E	1655.0	2.0D	48.0			ST=2 TYP=3
	2695	PALE	8	S	1655.0E	1655.0	2.0D	52.0			ST=2 TYP=3
	8800	PALE	8	S	1655.0E	1655.0	1.0D	52.0			ST=2 TYP=3
	245	SGMR	49	GB	1655.0E	1656.0	2.0D	810.0			ST=2 TYP=6
	410	SGMR	4	S/F	1655.0E	1657.0	3.0D	340.0			ST=2 TYP=3
	15400	PALE	4	S/F	1711.0E	1713.0	3.0D	81.0			ST=2 TYP=3
	4995	PALE	8	S	1713.0E	1713.0	1.0D	73.0			ST=2 TYP=3
	1415	PALE	8	S	1713.0E	1714.0	1.0D	22.0			ST=2 TYP=3
	2695	PALE	8	S	1713.0E	1713.0	1.0D	56.0			ST=2 TYP=3
	610	PALE	49	GB	1713.0E	1713.0	1.0D	630.0			ST=2 TYP=6
	410	PALE	49	GB	1713.0E	1713.0	1.0D	670.0			ST=2 TYP=6
	8800	PALE	8	S	1713.0E	1713.0	1.0D	98.0			ST=2 TYP=3
	2800	OTTA	4	S/F	1713.5	1713.8	6.2	54.4	11.0		
	410	PALE	8	S	1735.0E	1735.0	U	390.0			ST=2 TYP=3
	2800	OTTA	4	S/F	1741.1	1753.8	20.2	32.6	6.0		
	245	PALE	8	S	1746.0E	1746.0	U	230.0			ST=2 TYP=3
	245	PALE	8	S	1900.0E	1901.0	1.0D	83.0			ST=2 TYP=3
	410	PALE	8	S	1939.0E	1939.0	1.0D	54.0			ST=2 TYP=3
	245	PALE	8	S	1939.0E	1940.0	1.0D	240.0			ST=2 TYP=3
	245	SGMR	8	S	1939.0E	1940.0	1.0D	260.0			ST=2 TYP=3
	410	PALE	4	S/F	2001.0E	2002.0	3.0D	81.0			ST=2 TYP=3
	410	SGMR	8	S	2010.0E	2010.0	U	66.0			ST=2 TYP=3
	610	SGMR	8	S	2010.0E	2010.0	2.0D	230.0			ST=2 TYP=3
	245	SGMR	8	S	2035.0E	2036.0	2.0D	160.0			ST=3 TYP=3
	245	PALE	8	S	2036.0E	2036.0	1.0D	150.0			ST=2 TYP=3
	610	SGMR	49	GB	2036.0E	2036.0	1.0D	1100.0			ST=3 TYP=6
	200	HIRA	42	SER	2036.1	2036.2	10.0	490.0		O	
	2800	OTTA	3	S	2036.1	2037.5	3.0	49.5	10.0		
	410	PALE	8	S	2342.0E	2343.0	1.0D	65.0			ST=2 TYP=3
07	200	GORK	44	NS	0327.0E		423.0D		5.0		
	127	TORN	43	NS	0820.0		260.0		1.0	V=0	
	17000	NOBE	8	S	0056.1	0056.2	0.3	72.0			0,80,35GHz:0
	410	LEAR	8	S	0104.0E	0105.0	2.0D	18.0			ST=2 TYP=3
	245	LEAR	8	S	0104.0E	0105.0	1.0D	52.0			ST=2 TYP=3
	245	LEAR	8	S	0117.0E	0117.0	U	88.0			ST=2 TYP=3
	15400	LEAR	8	S	0133.0E	0134.0	2.0D	77.0			ST=2 TYP=3
	8800	LEAR	8	S	0133.0E	0133.0	2.0D	51.0			ST=2 TYP=3
	245	PALE	8	S	0133.0E	0134.0	1.0D	300.0			ST=2 TYP=3
	8800	PALE	8	S	0133.0E	0134.0	2.0D	51.0			ST=2 TYP=3
	15400	PALE	8	S	0133.0E	0134.0	1.0D	53.0			ST=2 TYP=3
	500	HIRA	42	SER	0133.6	0134.1	7.5	40.0		O	
	17000	NOBE	7	C	0133.7	0134.1	8.0	42.0			42L,80,35GHz:0

S O L A R R A D I O E M I S S I O N
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SEPTEMBER 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Mean	Int	Remarks
07	200	HIRA	42	SER	0133.9	0139.3	5.9	2280.0		0	
	410	LEAR	8	S	0134.0E	0134.0	U	120.0			ST=2 TYP=3
	245	LEAR	8	S	0134.0E	0134.0	U	380.0			ST=2 TYP=3
	410	PALE	8	S	0134.0E	0134.0	U	99.0			ST=2 TYP=3
	4995	LEAR	4	S/F	0138.0E	0139.0	3.0D	28.0			ST=2 TYP=3
	410	LEAR	4	S/F	0138.0E	0139.0	3.0D	27.0			ST=2 TYP=3
	8800	PALE	4	S/F	0138.0E	0139.0	4.0D	73.0			ST=2 TYP=3
	245	LEAR	49	GB	0139.0E	0139.0	1.0D	820.0			ST=2 TYP=6
	2695	LEAR	8	S	0139.0E	0139.0	1.0D	14.0			ST=2 TYP=3
	15400	LEAR	8	S	0139.0E	0139.0	1.0D	32.0			ST=2 TYP=3
	8800	LEAR	8	S	0139.0E	0139.0	2.0D	46.0			ST=2 TYP=3
	15400	PALE	8	S	0139.0E	0139.0	1.0D	40.0			ST=2 TYP=3
	245	PALE	49	GB	0139.0E	0139.0	U	630.0			ST=2 TYP=6
	2840	PEKG	5	S	0139.0	0140.6	4.0	11.7			
	950	GORK	23	GRF	0330.0	0533.0	290.0	15.0			
	650	GORK	23	GRF	0330.7E	0346.2	211.3D	5.0			
	410	LEAR	8	S	0331.0E	0331.0	1.0D	95.0			ST=2 TYP=3
	245	LEAR	49	GB	0331.0E	0331.0	1.0D	930.0			ST=2 TYP=6
	410	PALE	8	S	0331.0E	0331.0	1.0D	100.0			ST=2 TYP=3
	245	PALE	49	GB	0331.0E	0331.0	1.0D	1100.0			ST=2 TYP=6
	100	GORK	4	S/F	0331.0	0331.7	1.2	4264.0			
	200	GORK	4	S/F	0331.0	0331.7	2.0	576.0			
	500	HIRA	42	SER	0331.1	0333.2	2.5	66.0		MR	
	950	GORK	1	S	0333.2	0333.6	0.8	5.0			
	650	GORK	4	S/F	0333.3	0333.6	1.5	11.0			
	2950	GORK	21	GRF	0416.2	0536.0	463.8D	26.0			
	950	GORK	2	S/F	0420.8	0421.1	1.0	4.0			
	100	GORK	3	S	0426.5	0427.7	2.4	118.0			
	200	GORK	41	F	0430.0	0536.2		384.0			
	200	GORK	41	F	0430.0	0430.2	67.5	31.0			
	200	GORK	41	F	0430.0	0519.3		1153.0			
	9100	GORK	21	GRF	0433.0	1012.2	447.0D	47.0			
	950	GORK	2	S/F	0517.8	0519.1	2.4	11.0			
	9300	KISV	45	C	0517.8	0519.4	3.4	50.0			
	15000	KISV	4	S/F	0517.8	0519.4	6.2	78.0			
	9300	KISV	45	C	0517.8	0518.6		20.0			
	2950	GORK	1	S	0517.9	0519.1	2.4	16.0			
	9100	GORK	4	S/F	0517.9	0519.2	3.3	47.0			
	245	LEAR	49	GB	0518.0E	0519.0	1.0D	7800.0			ST=3 TYP=6
	245	SVTO	49	GB	0518.0E	0519.0	1.0D	9500.0			ST=2 TYP=6
	5900	KISV	45	C	0518.0	0519.4		20.0			
	5900	KISV	45	C	0518.0	0519.6	3.3	21.0			
	650	GORK	46	C	0518.3	0519.0		19.0			
	500	HIRA	42	SER	0518.3	0519.3	5.0	130.0		0	
	650	GORK	46	C	0518.3	0518.5	1.5	18.0			
	200	HIRA	42	SER	0518.6	0518.8	51.0	1290.0		0	
	15400	LEAR	8	S	0519.0E	0519.0	U	66.0			ST=2 TYP=3
	8800	LEAR	8	S	0519.0E	0519.0	U	42.0			ST=3 TYP=3
	410	LEAR	8	S	0519.0E	0519.0	U	340.0			ST=3 TYP=3
	5900	KISV	23	GRF	0522.0	0602.7	48.3	23.0			
	2950	GORK	1	S	0522.9	0524.9	3.8	11.0			
	9300	KISV	23	GRF	0525.0	0533.2	23.3	22.0			
	15000	KISV	23	GRF	0525.0	0536.7	34.4	49.0			
	5900	KISV	46	C	0529.3	0532.0		29.0			
	5900	KISV	46	C	0529.3	0533.1	10.0	39.0			
	5900	KISV	46	C	0529.3	0536.3		27.0			
	2950	GORK	1	S	0531.7	0533.0	2.1	15.0			
	9100	GORK	2	S/F	0534.7	0536.0	3.7	33.0			
	9300	KISV	45	C	0535.1	0536.2		38.0			
	9300	KISV	45	C	0535.1	0536.7	31.0	38.0			
	500	HIRA	46	C	0535.7	0536.5	1.5	15.0		0	
	245	LEAR	49	GB	0536.0E	0536.0	U	630.0			ST=2 TYP=6
	245	SVTO	8	S	0536.0E	0536.0	1.0D	490.0			ST=2 TYP=3
	650	GORK	4	S/F	0536.0	0536.6	1.3	14.0			
	245	LEAR	49	GB	0551.0E	0551.0	1.0D	1400.0			ST=2 TYP=6
	245	SVTO	49	GB	0551.0E	0551.0	1.0D	1500.0			ST=2 TYP=6
	200	GORK	41	F	0551.5	0606.8		384.0			
	200	GORK	41	F	0551.5	0551.9	18.5	384.0			
	15000	KISV	3	S	0554.7	0555.7	4.7	109.0			

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

SEPTEMBER 1989

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	245	LEAR	8	S	0555.0E	0555.0	U	180.0			ST=2 TYP=3
	410	LEAR	49	GB	0555.0E	0555.0	U	2800.0			ST=2 TYP=6
	610	LEAR	8	S	0555.0E	0555.0	U	90.0			ST=2 TYP=3
	1415	LEAR	8	S	0555.0E	0555.0	U	24.0			ST=2 TYP=3
	8800	LEAR	8	S	0555.0E	0555.0	U	29.0			ST=2 TYP=3
	15400	LEAR	8	S	0555.0E	0555.0	1.0D	94.0			ST=2 TYP=3
	245	SVTO	8	S	0555.0E	0555.0	1.0D	170.0			ST=2 TYP=3
	15400	SVTO	8	S	0555.0E	0555.0	1.0D	98.0			ST=2 TYP=3
	410	SVTO	8	S	0555.0E	0555.0	U	490.0			ST=2 TYP=3
	500	HIRA	46	C	0555.0	0555.2	2.5	875.0		O	
	9100	GORK	1	S	0555.1	0555.5	2.3	34.0			
	650	GORK	4	S/F	0555.2	0555.3	4.1	83.0			
	17000	NOBE	7	C	0555.2	0555.6	2.0	88.0		12L	
	35000	NOBE	1	S	0555.2	0555.6	1.5	86.0		0,80GHz:0	
	950	GORK	4	S/F	0555.2	0555.7	3.8	15.0			
	2950	GORK	1	S	0555.3	0555.7	1.3	13.0			
	9300	KISV	4	S/F	0555.4	0555.7	9.9	32.0			
	260	ONDR	41	F	0600.0E		570.0D				
	410	SVTO	8	S	0600.0E	0600.0	U	51.0			ST=2 TYP=3
	245	SVTO	8	S	0600.0E	0600.0	U	240.0			ST=2 TYP=3
	410	SVTO	8	S	0602.0E	0602.0	U	75.0			ST=2 TYP=3
	245	LEAR	49	GB	0606.0E	0609.0	3.0D	810.0			ST=2 TYP=6
	245	SVTO	49	GB	0606.0E	0609.0	3.0D	1100.0			ST=2 TYP=6
	234	POTS	41	F	0606.6	0609.0	3.4	1900.0			
	100	GORK	46	C	0606.7	0607.0	32.8	829.0			
	100	GORK	46	C	0606.7	0609.2		355.0			
	204	IZMI	41	F	0606.8	0607.0	3.0	580.0			
	15000	KISV	22	GRF	0651.0	0658.9	23.0	20.0			
	9300	KISV	2	S/F	0655.3	0658.9	5.2	23.0			
	3000	POTS	8	S	0655.7	0656.0	0.8	15.0			
	5900	KISV	45	C	0658.0	0658.5		8.0			
	5900	KISV	45	C	0658.0	0658.8	2.0	11.0			
	9500	POTS	3	S	0658.0	0658.9	2.0	13.0			
	9100	GORK	1	S	0658.2	0658.9	1.5	17.0			
	5900	KISV	1	S	0720.7	0721.6	5.0	7.0			
	5900	KISV	46	C	0739.7	0823.0		218.0			
	5900	KISV	46	C	0739.7	0825.1		220.0			
	5900	KISV	46	C	0739.7	0824.1	63.0	266.0			
	5900	KISV	46	C	0739.7	0824.4		237.0			
	5900	KISV	46	C	0739.7	0802.4		68.0			
	5900	KISV	46	C	0739.7	0743.5		22.0			
	5900	KISV	46	C	0739.7	0823.7		174.0			
	9300	KISV	4	S/F	0758.5	0802.3	10.2	45.0			
	4995	LEAR	4	S/F	0800.0E	0802.0	4.0D	54.0			ST=2 TYP=3
	3013	IZMI	1	S	0800.3	0802.3	5.0	7.0	4.0		
	9100	GORK	2	S/F	0800.9	0802.2	3.7	28.0			
	15000	KISV	45	C	0801.0	0801.0		10.0			
	15000	KISV	45	C	0801.0	0802.2	3.0	11.0			
	9500	POTS	3	S	0801.0	0802.2	3.0	27.0			
	8800	SVTO	8	S	0808.0E	0809.0	1.0D	62.0			ST=2 TYP=3
	9300	KISV	46	C	0818.0	0823.0		102.0			
	9300	KISV	46	C	0818.0	0825.2		114.0			
	9300	KISV	46	C	0818.0	0824.3	24.0	142.0			
	200	HIRA	46	C	0818.7	0825.4	7.9	46.0		WR	
	650	GORK	4	S/F	0818.8U	0827.0	18.2U	53.0			
	204	IZMI	7	C	0819.0	0825.5	13.0	50.0			
	2695	SVTO	4	S/F	0820.0E	0824.0	11.0D	310.0			ST=2 TYP=3
	9500	POTS	45	C	0820.0	0824.2	40.0	92.0			
	3013	IZMI	45	C	0820.2	0825.0	13.0	165.0	90.0		
	950	GORK	46	C	0820.3	0826.0		91.0			
	950	GORK	46	C	0820.3	0823.4	11.0	243.0			
	3200	BERN	46	C	0820.5	0823.0	11.0	15.3			
	5200	BERN	46	C	0820.5	0823.0	11.0	15.6			
	3000	POTS	46	C	0820.5	0824.5	40.0	670.0			
	1470	POTS	46	C	0820.5	0823.7	40.0	360.0			
	2950	GORK	47	GB	0820.6	0824.5	9.8	294.0			
	9100	GORK	4	S/F	0820.9	0824.3	9.9	112.0			
	2850	CRIM	45	C	0821.0	0822.0	9.6	187.0	91.0		
	2695	LEAR	4	S/F	0821.0E	0824.0	9.0D	290.0			ST=2 TYP=3

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

SEPTEMBER 1989

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	4995	SVTO	4	S/F	0821.0E	0825.0	8.0D	220.0			ST=2 TYP=3
	1415	SVTO	4	S/F	0821.0E	0823.0	9.0D	300.0			ST=2 TYP=3
	600	HUMN	3	S	0821.0	0826.0	18.0	40.0	16.0		
	1415	LEAR	4	S/F	0821.0E	0823.0	10.0D	340.0			ST=2 TYP=3
	15400	SVTO	4	S/F	0821.0E	0824.0	14.0D	88.0			ST=2 TYP=3
	2850	CRIM	45	C	0821.0	0824.6		274.0			
	536	ONDR	47	GB	0821.0	0826.7	15.0	41.0			
	808	ONDR	45	C	0821.5	0827.0	15.0	58.0			
	15000	KISV	45	C	0821.5	0824.2	12.5	61.0			
	15000	KISV	45	C	0821.5	0824.9		60.0			
	8800	LEAR	4	S/F	0822.0E	0824.0	6.0D	110.0			ST=2 TYP=3
	15400	LEAR	4	S/F	0822.0E	0824.0	7.0D	80.0			ST=2 TYP=3
	410	LEAR	4	S/F	0824.0E	0826.0	3.0D	120.0			ST=2 TYP=5
	245	LEAR	49	GB	0824.0E	0825.0	2.0D	1600.0			ST=2 TYP=6
	610	LEAR	4	S/F	0824.0E	0826.0	4.0D	40.0			ST=2 TYP=3
	245	SVTO	49	GB	0824.0E	0825.0	2.0D	1800.0			ST=2 TYP=6
	100	GORK	4	S/F	0824.5	0826.1	4.3	355.0			
	204	IZMI	5	S	0846.4	0846.6	0.2	60.0	30.0		
	5900	KISV	1	S	0920.0	0920.4	1.5	9.0			
	9300	KISV	2	S/F	0929.0	0930.5	2.0	8.0			
	9500	POTS	21	GRF	0930.0E	1010.0	105.0D	29.0			
	9300	KISV	22	GRF	0940.0	0956.5	26.0	9.0			
	100	GORK	41	F	0945.0	1009.4		236.0			
	100	GORK	41	F	0945.0	0945.8	25.0	236.0			
	9100	GORK	8	S	0947.1	0947.2	0.2	25.0			
	536	ONDR	42	SER	0949.7	1028.3	40.0	26.0			
	15000	KISV	20	GRF	0950.8	0954.0	8.0	8.0			
	15000	KISV	32	ABS	0959.0	1009.0	10.0	15.0			
	204	IZMI	42	SER	1004.0	1009.2	15.5	320.0			
	5900	KISV	22	GRF	1007.5	1017.8	22.0	13.0			
	9300	KISV	23	GRF	1007.7	1012.4	72.0	18.0			
	234	POTS	42	SER	1008.6	1009.5	9.8	165.0			
	200	GORK	41	F	1009.0	1018.0		384.0			
	245	SVTO	49	GB	1009.0E	1009.0	U	650.0			ST=2 TYP=6
	200	GORK	41	F	1009.0	1009.5	9.6	303.0			
	15000	KISV	2	S/F	1009.0	1009.6	3.0	36.0			
	5900	KISV	2	S/F	1034.0	1036.7	7.0	10.0			
	9300	KISV	45	C	1057.0	1058.3		9.0			
	9300	KISV	45	C	1057.0	1057.5	1.5	8.0			
	33	UPIC	45	C	1105.9	1106.0	0.8				
	204	IZMI	7	C	1142.8	1143.4	0.8	40.0	15.0		
	9500	POTS	1	S	1143.5	1144.0	1.5	5.0			
	9300	KISV	1	S	1201.1	1201.3	0.3	7.0			
	536	ONDR	41	F	1215.0	1230.0	22.0	10.0			
	9500	POTS	3	S	1222.0	1222.3	3.0	13.0			
	5900	KISV	22	GRF	1229.0	1322.3	79.0	20.0			
	9500	POTS	3	S	1233.0	1233.2	7.0	11.0			
	15000	KISV	1	S	1244.0	1244.1	0.4	17.0			
	9300	KISV	1	S	1244.0	1244.1	0.3	8.0			
	15000	KISV	23	GRF	1316.0	1333.4	35.0	16.0			
	9300	KISV	8	S	1321.0	1321.1	0.2	48.0			
	9300	KISV	2	S/F	1321.2	1322.5	3.0	18.0			
	9500	POTS	3	S	1325.5	1325.9	1.5	34.0			
	9300	KISV	2	S/F	1331.0	1333.4	6.0	15.0			
	15000	KISV	2	S/F	1352.2	1352.4	1.6	9.0			
	245	SVTO	8	S	1420.0E	1421.0	1.0D	480.0			ST=2 TYP=3
	245	SGMR	49	GB	1420.0E	1421.0	580.0D	710.0			ST=3 TYP=6
	33	UPIC	45	C	1426.6	1426.7	0.7				
	33	UPIC	8	S	1432.0	1432.2	0.4				
	536	ONDR	8	S	1513.5	1514.8	1.3	126.0			
	1415	SVTO	8	S	1523.0E	1523.0	U	85.0			ST=3 TYP=3
	410	SVTO	8	S	1523.0E	1523.0	U	85.0			ST=2 TYP=3
	245	SVTO	49	GB	1523.0E	1523.0	U	3000.0			ST=3 TYP=6
	2800	OTTA	42	SER	1530.5	1533.3	15.5	36.0	10.0		
	245	SVTO	49	GB	1531.0E	1531.0	U	1000.0			ST=3 TYP=6
	5200	BERN	46	C	1532.0	1538.0	12.0	7.6			
	3200	BERN	46	C	1532.0	1538.0	12.0	2.4			
	4995	SGMR	8	S	1533.0E	1534.0	1.0D	69.0			ST=2 TYP=3
	15400	SGMR	8	S	1533.0E	1533.0	U	54.0			ST=2 TYP=3

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

SEPTEMBER 1989

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	2695	SGMR	8	S	1533.0E	1533.0	U	32.0			ST=2 TYP=3
	8800	SGMR	8	S	1533.0E	1533.0	U	57.0			ST=2 TYP=3
	8800	SVTO	8	S	1533.0E	1533.0	U	63.0			ST=2 TYP=3
	15400	SVTO	8	S	1533.0E	1533.0	U	49.0			ST=3 TYP=3
	410	SVTO	8	S	1533.0E	1534.0	1.0D	440.0			ST=3 TYP=3
	4995	SVTO	8	S	1533.0E	1533.0	1.0D	76.0			ST=3 TYP=3
	2695	SVTO	8	S	1533.0E	1533.0	U	36.0			ST=3 TYP=3
	600	HUMN	3	S	1533.0	1534.3	10.0	6.0	3.0		
	410	SGMR	8	S	1534.0E	1534.0	U	310.0			ST=2 TYP=3
	8800	SGMR	8	S	1537.0E	1537.0	1.0D	92.0			ST=2 TYP=3
	410	SGMR	8	S	1537.0E	1537.0	U	230.0			ST=2 TYP=3
	15400	SGMR	8	S	1537.0E	1538.0	1.0D	65.0			ST=2 TYP=3
	245	SGMR	8	S	1537.0E	1537.0	1.0D	150.0			ST=2 TYP=3
	4995	SGMR	8	S	1537.0E	1537.0	1.0D	91.0			ST=2 TYP=3
	4995	SVTO	8	S	1537.0E	1538.0	1.0D	96.0			ST=2 TYP=3
	15400	SVTO	8	S	1537.0E	1537.0	1.0D	68.0			ST=2 TYP=3
	2695	SVTO	8	S	1537.0E	1538.0	1.0D	32.0			ST=2 TYP=3
	8800	SVTO	8	S	1537.0E	1537.0	1.0D	91.0			ST=2 TYP=3
	245	SVTO	49	GB	1540.0E	1540.0	U	4300.0			ST=2 TYP=6
	2800	OTTA	4	S/F	1626.0	1627.0	4.7	94.5	28.0		
	2695	SGMR	4	S/F	1626.0E	1627.0	3.0D	83.0			ST=2 TYP=3
	245	SVTO	8	S	1626.0E	1626.0	U	380.0			ST=2 TYP=3
	2695	SVTO	8	S	1626.0E	1627.0	2.0D	82.0			ST=2 TYP=3
	245	SGMR	49	GB	1651.0E	1652.0	2.0D	610.0			ST=2 TYP=6
	410	PALE	8	S	1727.0E	1727.0	1.0D	65.0			ST=2 TYP=3
	2800	OTTA	4	S/F	1851.0	1854.0	15.3	80.1	16.0		
	2695	SGMR	4	S/F	1851.0E	1853.0	309.0D	81.0			ST=2 TYP=3
	2695	PALE	4	S/F	1852.0E	1853.0	4.0D	63.0			ST=2 TYP=3
	245	PALE	8	S	1853.0E	1855.0	2.0D	55.0			ST=2 TYP=3
	245	SGMR	8	S	1857.0E	1857.0	1.0D	55.0			ST=2 TYP=3
	245	PALE	8	S	1953.0E	1954.0	1.0D	82.0			ST=2 TYP=3
	410	PALE	8	S	2032.0E	2032.0	1.0D	490.0			ST=2 TYP=3
	410	SGMR	8	S	2032.0E	2032.0	1.0D	290.0			ST=2 TYP=3
	2800	OTTA	3	S	2032.3	2032.9	2.5	27.9	6.0		
	100	HIRA	41	F	2102.6	2109.8	27.7	360.0			
	4995	PALE	8	S	2104.0E	2105.0	2.0D	60.0			ST=2 TYP=3
	1415	PALE	4	S/F	2104.0E	2105.0	3.0D	110.0			ST=2 TYP=3
	2695	PALE	4	S/F	2104.0E	2105.0	5.0D	100.0			ST=2 TYP=3
	2695	SGMR	4	S/F	2104.0E	2105.0	5.0D	110.0			ST=2 TYP=3
	245	SGMR	8	S	2104.0E	2105.0	1.0D	58.0			ST=2 TYP=3
	1415	SGMR	4	S/F	2104.0E	2105.0	3.0D	140.0			ST=2 TYP=3
	4995	SGMR	8	S	2104.0E	2105.0	2.0D	65.0			ST=2 TYP=3
	200	HIRA	41	F	2104.3	2109.6	20.5	240.0		0	
	2800	OTTA	4	S/F	2104.6	2105.4	20.0	126.0	25.0		
	500	HIRA	42	SER	2104.8	2114.3	11.5	57.0		0	
	2695	PALE	4	S/F	2112.0E	2114.0	6.0D	56.0			ST=2 TYP=3
	4995	PALE	4	S/F	2112.0E	2114.0	3.0D	44.0			ST=2 TYP=3
	15400	PALE	4	S/F	2112.0E	2114.0	6.0D	41.0			ST=2 TYP=3
	1415	SGMR	4	S/F	2112.0E	2114.0	7.0D	200.0			ST=2 TYP=3
	8800	PALE	8	S	2113.0E	2114.0	1.0D	30.0			ST=2 TYP=3
	245	PALE	8	S	2113.0E	2114.0	1.0D	45.0			ST=2 TYP=3
	1415	PALE	4	S/F	2113.0E	2114.0	5.0D	160.0			ST=2 TYP=3
	245	PALE	8	S	2216.0E	2216.0	U	210.0			ST=2 TYP=3
	410	PALE	8	S	2216.0E	2216.0	1.0D	160.0			ST=2 TYP=3
	200	HIRA	42	SER	2230.4	2313.4	43.0	390.0		0	
	245	LEAR	49	GB	2313.0E	2313.0	1.0D	530.0			ST=2 TYP=6
	245	PALE	49	GB	2313.0E	2313.0	1.0D	520.0			ST=2 TYP=6
	8800	PALE	8	S	2313.0E	2313.0	1.0D	35.0			ST=2 TYP=3
	410	PALE	8	S	2313.0E	2314.0	1.0D	87.0			ST=2 TYP=3
	245	LEAR	8	S	2348.0E	2349.0	2.0D	74.0			ST=2 TYP=3
	410	LEAR	8	S	2349.0E	2349.0	1.0D	16.0			ST=2 TYP=3
08	245	SVTO	43	NS	0749.0	0752.0	25.0D	380.0			ST=2 TYP=1
	410	SVTO	43	NS	0749.0	0808.0	971.0	110.0			ST=2 TYP=1
	610	SVTO	43	NS	0751.0	0808.0	969.0	220.0			ST=2 TYP=1
	245	SGMR	44	NS	1813.0E	2232.0	271.0D	200.0			ST=2 TYP=1
	2840	PEKG	45	C	0230.0E	0233.5	8.0D	19.3			
	610	LEAR	8	S	0231.0E	0231.0	1.0D	83.0			ST=2 TYP=3
	1415	LEAR	8	S	0233.0E	0233.0	1.0D	41.0			ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

SEPTEMBER 1989

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
08	2840	PEKG	3	S	0303.0	0305.9	11.0	13.2			
	2840	PEKG	45	C	0328.0	0335.2	7.2	52.3			
	2840	PEKG	45	C	0328.0	0339.8	20.0	63.3			
	950	GORK	23	GRF	0330.0E	0506.0U	207.0D	14.0			
	650	GORK	22	GRF	0330.0E	0339.1	20.8D	22.0			
	9100	GORK	23	GRF	0330.6	0425.0	512.4D	43.0			
	2950	GORK	23	GRF	0330.7	0436.0	211.3	28.0			
	1415	LEAR	4	S/F	0332.0E	0333.0	5.0D	50.0			ST=2 TYP=3
	1415	PALE	4	S/F	0332.0E	0333.0	3.0D	46.0			ST=2 TYP=3
	4995	LEAR	4	S/F	0332.0E	0335.0	18.0D	86.0			ST=2 TYP=5
	2695	PALE	20	GRF	0333.0E	0339.0	9.0D	57.0			ST=2 TYP=2
	8800	PALE	4	S/F	0333.0E	0335.0	10.0D	49.0			ST=2 TYP=3
	4995	PALE	4	S/F	0333.0E	0335.0	10.0D	69.0			ST=2 TYP=3
	950	GORK	46	C	0333.0E	0339.7		16.0			
	950	GORK	46	C	0333.0E	0334.8	13.8D	19.0			
	2950	GORK	46	C	0333.1	0335.2	13.9	34.0			
	2950	GORK	46	C	0333.1	0339.8		41.0			
	2695	LEAR	8	S	0334.0E	0334.0	1.0D	26.0			ST=2 TYP=3
	8800	LEAR	4	S/F	0334.0E	0335.0	3.0D	30.0			ST=2 TYP=3
	500	HIRA	46	C	0335.7	0336.5	9.5	85.0		0	
	2840	PEKG	29	PBI	0348.0		11.0	11.0			
	2840	PEKG	45	C	0403.0	0407.4		219.2			
	2840	PEKG	45	C	0403.0	0409.5	13.0D	71.6			
	650	GORK	21	GRF	0403.8	0410.7	14.7	6.0			
	200	GORK	46	C	0405.3	0407.4	5.7	33888.0			
	200	GORK	46	C	0405.3	0409.7		555.0			
	200	HIRA	42	SER	0405.5	0407.3	4.6	5000.0		0	
	9100	GORK	46	C	0405.6	0407.6	7.6	586.0			
	9100	GORK	46	C	0405.6	0409.7		195.0			
	410	LEAR	49	GB	0407.0E	0407.0	2.0D	16000.0			ST=2 TYP=6
	8800	LEAR	4	S/F	0407.0E	0407.0	3.0D	360.0			ST=2 TYP=3
	4995	LEAR	4	S/F	0407.0E	0407.0	3.0D	150.0			ST=2 TYP=3
	15400	LEAR	49	GB	0407.0E	0407.0	3.0D	1200.0			ST=2 TYP=6
	610	LEAR	4	S/F	0407.0E	0409.0	3.0D	270.0			ST=2 TYP=5
	2695	PALE	8	S	0407.0E	0407.0	U	100.0			ST=2 TYP=3
	15400	PALE	49	GB	0407.0E	0407.0	1.0D	690.0			ST=2 TYP=6
	8800	PALE	4	S/F	0407.0E	0407.0	3.0D	300.0			ST=2 TYP=3
	410	PALE	49	GB	0407.0E	0407.0	2.0D	12000.0			ST=2 TYP=6
	245	PALE	49	GB	0407.0E	0407.0	3.0D	19000.0			ST=2 TYP=6
	245	LEAR	49	GB	0407.0E	0407.0	1193.0D	18000.0			ST=1 TYP=6
	950	GORK	46	C	0407.0	0409.6		109.0			
	950	GORK	46	C	0407.0	0407.7	3.3	65.0			
	2950	GORK	3	S	0407.2	0407.4	1.3	169.0			
	17000	NOBE	45	C	0407.2	0407.5	5.0	1034.0		19L	
	35000	NOBE	7	C	0407.2	0407.5	5.0	393.0		16L,80GHz:0	
	500	HIRA	46	C	0407.3	0409.5		430.0		WR	
	500	HIRA	46	C	0407.3	0407.5	6.5	2600.0		0	
	100	HIRA	42	SER	0407.3	0407.9	3.0	4800.0		0	
	650	GORK	46	C	0407.4	0407.4		435.0			
	650	GORK	46	C	0407.4	0407.5	3.3	218.0			
	100	GORK	46	C	0407.4	0407.5	2.7	10780.0			
	100	GORK	46	C	0407.4	0409.7		1066.0			
	2695	LEAR	4	S/F	0410.0	0412.0U	10.0D	84.0			ST=2 TYP=3
	2840	PEKG	40	F	0416.0E	0429.1		83.7			
	2840	PEKG	40	F	0416.0E	0431.4	27.0D	71.6			
	2840	PEKG	40	F	0416.0E	0430.9		109.0			
	650	GORK	4	S/F	0416.5	0416.6	1.1	14.0			
	500	HIRA	46	C	0423.8	0429.2		23.0		0	
	650	GORK	2	S/F	0423.8	0424.3	3.2	8.0			
	500	HIRA	46	C	0423.8	0424.8	7.7	25.0		0	
	950	GORK	2	S/F	0424.1	0425.0	1.9	4.0			
	2950	GORK	4	S/F	0427.0	0431.0	7.2	47.0			
	950	GORK	2	S/F	0428.6	0429.3	2.0	5.0			
	2840	PEKG	29	PBI	0443.0		97.0	12.1			
	260	ONDR	41	F	0530.0E	0646.3	600.0D	330.0			
	9100	GORK	1	S	0553.8	0554.8	3.3	39.0			
	5900	KISV	2	S/F	0554.0	0555.3	4.0	23.0			
	9300	KISV	4	S/F	0554.1	0554.9	6.1	43.0			
	410	LEAR	49	GB	0614.0E	0615.0	1.0D	580.0			ST=2 TYP=6

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

SEPTEMBER 1989

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
08	245	LEAR	8	S	0614.0E	0615.0	1.0D	81.0			ST=2 TYP=3
	410	SVTO	49	GB	0614.0E	0615.0	1.0D	610.0			ST=2 TYP=6
	245	SVTO	8	S	0614.0E	0614.0	1.0D	150.0			ST=2 TYP=3
	100	GORK	41	F	0614.6	0646.1		14926.0			
	100	GORK	41	F	0614.6	0615.2	32.5	592.0			
	204	IZMI	7	C	0614.7	0615.0	0.8	155.0			
	500	HIRA	46	C	0614.8	0615.3	1.1	257.0		WR	
	9300	KISV	2	S/F	0644.9	0646.2	3.0	21.0			
	610	SVTO	8	S	0645.0E	0646.0	1.0D	90.0			ST=2 TYP=3
	2840	PEKG	5	S	0645.0	0646.1	2.0	17.6			
	5900	KISV	2	S/F	0645.0	0646.2	3.0	17.0			
	9100	GORK	1	S	0645.1	0646.2	2.0	19.0			
	234	POTS	8	S	0645.9	0646.1	0.7	100.0			
	245	LEAR	8	S	0646.0E	0646.0	U	270.0			ST=2 TYP=3
	610	LEAR	8	S	0646.0E	0646.0	U	240.0			ST=2 TYP=3
	245	SVTO	8	S	0646.0E	0646.0	U	280.0			ST=2 TYP=3
	410	SVTO	49	GB	0646.0E	0646.0	U	590.0			ST=2 TYP=6
	950	GORK	2	S/F	0646.0	0646.2	1.6	23.0			
	30	POTS	8	S	0646.0	0646.2	0.9	4000.0D			
	204	IZMI	41	F	0646.0	0646.5	0.8	600.0			
	2950	GORK	1	S	0646.1	0646.2	0.8	15.0			
	536	ONDR	42	SER	0700.0	0725.6	60.0	70.0			
	5900	KISV	22	GRF	0702.0	0722.6	20.6	11.0			
	234	POTS	42	SER	0718.4	0721.1	3.6	160.0			
	245	LEAR	4	S/F	0720.0E	0721.0	3.0D	100.0			ST=2 TYP=3
	245	SVTO	8	S	0721.0E	0721.0	U	60.0			ST=2 TYP=3
	2840	PEKG	5	S	0725.0	0725.8	9.0	18.2			
	5900	KISV	46	C	0725.1	0725.8	11.0	13.0			
	5900	KISV	46	C	0725.1	0725.9		11.0			
	5900	KISV	46	C	0725.1	0727.9		8.0			
	9300	KISV	2	S/F	0725.3	0725.8	3.9	11.0			
	1470	POTS	3	S	0725.5	0726.0	4.5	6.0			
	3000	POTS	3	S	0725.5	0725.9	6.5	8.0			
	950	GORK	2	S/F	0725.6	0725.7	6.5	12.0			
	2950	GORK	1	S	0725.6	0725.9	3.1	9.0			
	245	LEAR	8	S	0740.0E	0741.0	1.0D	98.0			ST=3 TYP=3
	234	POTS	4	S/F	0740.5	0741.6	1.6	140.0			
	950	GORK	41	F	0740.7	0744.4		1.0			
	950	GORK	41	F	0740.7	0741.6	5.3	2.0			
	245	SVTO	4	S/F	0741.0E	0744.0	3.0D	170.0			ST=2 TYP=3
	410	SVTO	8	S	0744.0E	0744.0	U	72.0			ST=2 TYP=3
	610	SVTO	8	S	0744.0E	0744.0	1.0D	58.0			ST=2 TYP=3
	2850	CRIM	1	S	0746.0	0746.3	0.7	19.0	6.0		
	204	IZMI	41	F	0746.0	0746.6	1.0	95.0			
	9500	POTS	3	S	0750.2	0751.0	3.8	11.0			
	9300	KISV	21	GRF	0753.6	0756.0	11.1	21.0			
	5900	KISV	21	GRF	0754.7	0756.2	14.0	11.0			
	9100	GORK	1	S	0755.3	0756.0	2.2	15.0			
	2850	CRIM	25	R	0801.0	0838.0		29.0			
	2950	GORK	23	GRF	0808.5	0845.0	136.2	15.0			
	5900	KISV	23	GRF	0809.3	0852.6	62.0	34.0			
	9100	GORK	20	GRF	0809.4E	1153.3	230.6D	9.0			
	9500	POTS	21	GRF	0815.0	0852.5	65.0	15.0			
	3000	POTS	21	GRF	0815.0	0851.7	45.0	3.0			
	1470	POTS	21	GRF	0815.0	0823.7	85.0	12.0			
	2840	PEKG	28	PRE	0817.0	0824.0	13.0	16.5			
	9300	KISV	32	ABS	0819.0	0822.3	4.5	11.0			
	15000	KISV	32	ABS	0819.4	0822.5	4.0	22.0D			
	950	GORK	21	GRF	0821.7	0833.0	33.0	4.0			
	100	GORK	41	F	0822.3	0852.1		710.0			
	100	GORK	41	F	0822.3	0840.2		1066.0			
	100	GORK	41	F	0822.3	0839.6	30.7	948.0			
	9300	KISV	23	GRF	0823.5	0852.4	75.5	14.0			
	200	GORK	41	F	0829.2	0851.6		1296.0			
	200	GORK	41	F	0829.2	0840.7	23.0	740.0			
	2840	PEKG	45	C	0830.0	0841.1		69.9			
	2840	PEKG	45	C	0830.0	0840.8		68.8			
	2840	PEKG	45	C	0830.0	0851.8	30.0D	35.2			
	204	IZMI	42	SER	0830.5	0840.3	26.3	800.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

SEPTEMBER 1989

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
08	234	POTS	42	SER	0830.8	0840.6	22.4	700.0			
	2850	CRIM	1	S	0831.0	0833.0	4.0	14.0	5.0		
	3200	BERN	46	C	0831.3	0840.8	14.0	3.7			
	5200	BERN	46	C	0831.3	0840.8	14.0	66.3			
	2950	GORK	1	S	0831.9	0833.0	2.5	9.0			
	950	GORK	2	S/F	0831.9	0832.2	0.7	18.0			
	2695	LEAR	4	S/F	0839.0E	0840.0	5.0D	70.0			ST=2 TYP=3
	3013	IZMI	5	S	0839.0	0840.7	5.0	40.0	20.0		
	2850	CRIM	1	S	0839.5	0839.8	3.5	49.0	18.0		
	2950	GORK	4	S/F	0839.6	0840.9	4.1	48.0			
	600	HUMN	2	S/F	0840.0	0841.0	6.0	21.0	6.0		
	4995	LEAR	8	S	0840.0E	0840.0	2.0D	75.0			ST=2 TYP=3
	245	LEAR	8	S	0840.0E	0840.0	U	230.0			ST=2 TYP=3
	245	SVTO	8	S	0840.0E	0840.0	1.0D	270.0			ST=2 TYP=3
	15400	SVTO	4	S/F	0840.0E	0840.0	3.0D	55.0			ST=2 TYP=3
	4995	SVTO	8	S	0840.0E	0840.0	1.0D	70.0			ST=2 TYP=3
	8800	SVTO	8	S	0840.0E	0840.0	2.0D	58.0			ST=2 TYP=3
	9100	GORK	2	S/F	0840.0	0840.8	3.6	39.0			
	5900	KISV	4	S/F	0840.0	0840.8	3.9	78.0			
	1470	POTS	3	S	0840.0	0840.8	4.0	40.0			
	3000	POTS	4	S/F	0840.0	0840.8	4.0	63.0			
	9500	POTS	3	S	0840.0	0840.8	4.0	42.0			
	9300	KISV	4	S/F	0840.0	0840.9	3.9	50.0			
	950	GORK	2	S/F	0840.1	0840.9	3.2	15.0			
	15000	KISV	2	S/F	0840.2	0840.9	5.0	20.0			
	650	GORK	4	S/F	0840.4	0840.9	1.3	33.0			
	808	ONDR	3	S	0840.5	0841.7	8.3	10.0			
	536	ONDR	42	SER	0840.6	0912.0	50.0	68.0			
	3013	IZMI	20	GRF	0844.5	0851.9	14.3	30.0	15.0		
	2850	CRIM	1	S	0850.0	0851.8	3.0	19.0	6.0		
	2950	GORK	1	S	0850.3	0851.8	2.7	9.0			
	30	POTS	4	S/F	0851.2	0852.0	3.8	1000.0			
	204	IZMI	45	C	0851.5	0851.8	1.2	1200.0			
	950	GORK	1	S	0851.6	0851.9	0.8	2.0			
	5900	KISV	2	S/F	0947.0	0947.7	4.3	6.0			
	9300	KISV	2	S/F	0947.0	0947.7	3.7	6.0			
	5900	KISV	2	S/F	1017.4	1018.0	2.2	4.0			
	245	SVTO	8	S	1019.0E	1019.0	1.0D	100.0			ST=2 TYP=3
	200	GORK	3	S	1019.4	1019.7	1.2	185.0			
	204	IZMI	45	C	1019.5	1019.6	1.0	300.0	150.0		
	536	ONDR	8	S	1032.0	1032.7	2.0	67.0			
	9300	KISV	1	S	1039.5	1039.8	1.3	19.0			
	15000	KISV	1	S	1039.6	1039.8	0.5	6.0			
	5900	KISV	1	S	1039.7	1039.8	0.4	5.0			
	5900	KISV	22	GRF	1123.9	1125.0		6.0			
	5900	KISV	22	GRF	1123.9	1129.4	13.1	10.0			
	9300	KISV	2	S/F	1129.1	1130.3	4.0	6.0			
	200	GORK	4	S/F	1145.0	1146.8	4.0	370.0			
	245	SGMR	8	S	1240.0E	1241.0	1.0D	360.0			ST=2 TYP=3
	245	SVTO	8	S	1240.0E	1241.0	1.0D	350.0			ST=2 TYP=3
	234	POTS	4	S/F	1240.4	1241.1	1.5	550.0			
	9300	KISV	2	S/F	1244.7	1244.9	1.0	6.0			
	5900	KISV	40	F	1244.8	1245.0	3.5	5.0			
	245	SGMR	8	S	1246.0E	1246.0	U	150.0			ST=2 TYP=3
	245	SVTO	8	S	1246.0E	1246.0	1.0D	170.0			ST=2 TYP=3
	15000	KISV	45	C	1248.1	1250.0		10.0			
	15000	KISV	45	C	1248.1	1249.2	2.7	10.0			
	5900	KISV	2	S/F	1250.2	1250.5	1.5	6.0			
	536	ONDR	42	SER	1336.6	1434.0	90.0	31.0			
	610	SGMR	8	S	1340.0E	1341.0	2.0D	65.0			ST=3 TYP=3
	610	SVTO	8	S	1340.0E	1341.0	1.0D	60.0			ST=2 TYP=3
	410	PALE	8	S	1714.0E	1715.0	2.0D	120.0			ST=2 TYP=3
	245	PALE	4	S/F	1739.0E	1743.0	5.0D	230.0			ST=2 TYP=3
	245	SGMR	8	S	1739.0E	1741.0	2.0D	54.0			ST=2 TYP=3
	245	SGMR	8	S	1742.0E	1743.0	2.0D	200.0			ST=2 TYP=3
	2695	PALE	4	S/F	1751.0E	1752.0	3.0D	92.0			ST=2 TYP=3
	410	PALE	4	S/F	1751.0E	1754.0	3.0D	110.0			ST=2 TYP=3
	245	PALE	4	S/F	1751.0E	1753.0	5.0D	200.0			ST=2 TYP=3
	1415	PALE	4	S/F	1751.0E	1753.0	3.0D	99.0			ST=2 TYP=3

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

SEPTEMBER 1989

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
08	2800	OTTA	4	S/F	1751.5	1753.0	4.0	104.3	31.0		
	2695	SGMR	8	S	1752.0E	1752.0	1.0D	87.0			ST=2 TYP=3
	245	SGMR	8	S	1752.0E	1753.0	2.0D	180.0			ST=2 TYP=3
	1415	SGMR	8	S	1752.0E	1753.0	2.0D	100.0			ST=2 TYP=3
	410	SGMR	8	S	1753.0E	1753.0	1.0D	97.0			ST=2 TYP=3
	610	SGMR	4	S/F	1754.0E	1755.0	3.0D	80.0			ST=2 TYP=3
	610	PALE	8	S	1755.0E	1755.0	1.0D	80.0			ST=2 TYP=3
	2800	OTTA	29	PBI	1756.5	1756.5	36.5	13.0	6.0		
	245	PALE	49	GB	1813.0E	1820.0	9.0D	640.0			ST=2 TYP=7
	245	SGMR	49	GB	1819.0E	1820.0	3.0D	570.0			ST=3 TYP=6
	245	PALE	8	S	1855.0E	1855.0	U	100.0			ST=2 TYP=3
	245	PALE	8	S	1916.0E	1918.0	2.0D	220.0			ST=2 TYP=3
	245	PALE	49	GB	2029.0E	2029.0	1.0D	880.0			ST=2 TYP=6
	245	SGMR	49	GB	2029.0E	2029.0	1.0D	870.0			ST=2 TYP=6
	245	PALE	8	S	2120.0E	2120.0	1.0D	120.0			ST=2 TYP=3
09	33	UPIC	43	NS	0529.0		691.0D				
	260	ONDR	44	NS	0600.0E		570.0D				
	127	TORN	43	NS	0908.0	0851.7	118.0	460.0	8.0	V=1	
	200	HIRA	44	NS	2016.0E	0721.0	750.0D	11.0	4.0	MR	
	610	LEAR	4	S/F	0009.0E	0011.0	4.0D	41.0			ST=2 TYP=3
	245	LEAR	4	S/F	0009.0E	0012.0	4.0D	73.0			ST=2 TYP=3
	410	LEAR	49	GB	0010.0E	0011.0	3.0D	1500.0			ST=2 TYP=6
	4995	LEAR	8	S	0010.0E	0012.0	2.0D	44.0			ST=2 TYP=3
	1415	LEAR	4	S/F	0010.0E	0012.0	3.0D	32.0			ST=2 TYP=3
	410	PALE	8	S	0010.0E	0012.0	2.0D	500.0			ST=2 TYP=3
	500	HIRA	46	C	0010.9	0011.2	7.0	150.0		WR	
	2695	LEAR	8	S	0011.0E	0012.0	1.0D	33.0			ST=2 TYP=3
	8800	LEAR	8	S	0011.0E	0012.0	2.0D	16.0			ST=2 TYP=3
	245	LEAR	8	S	0149.0E	0149.0	1.0D	19.0			ST=2 TYP=3
	410	LEAR	8	S	0149.0E	0149.0	1.0D	98.0			ST=2 TYP=3
	410	LEAR	49	GB	0211.0E	0211.0	U	530.0			ST=2 TYP=6
	410	PALE	49	GB	0211.0E	0211.0	U	530.0			ST=2 TYP=6
	245	LEAR	8	S	0236.0E	0236.0	U	430.0			ST=2 TYP=3
	2840	PEKG	5	S	0246.0	0250.1	8.0	10.2			
	410	LEAR	8	S	0248.0E	0249.0	2.0D	350.0			ST=2 TYP=3
	2840	PEKG	1	S	0257.0	0301.0	7.0	3.8			
	245	LEAR	8	S	0320.0E	0320.0	2.0D	54.0			ST=2 TYP=3
	950	GORK	23	GRF	0345.0E	0509.0	294.0D	16.0			
	650	GORK	23	GRF	0400.8U	0737.9	392.2D	9.0			
	245	LEAR	8	S	0404.0E	0404.0	U	140.0			ST=2 TYP=3
	9100	GORK	21	GRF	0405.9	0947.4	387.1D	59.0			
	950	GORK	2	S/F	0421.2	0421.3	2.0	6.0			
	950	GORK	2	S/F	0427.0	0428.8	4.7	2.0			
	2840	PEKG	3	S	0435.0	0438.0	10.0	23.6			
	2840	PEKG	3	S	0435.0	0438.0	10.0	23.6			
	9100	GORK	2	S/F	0436.8	0437.5	5.8	33.0			
	2950	GORK	2	S/F	0437.0	0438.2	3.9	22.0			
	2850	CRIM	1	S	0437.0	0438.4	3.0	33.0	11.0		
	245	LEAR	49	GB	0527.0E	0528.0	3.0D	3000.0			ST=2 TYP=6
	245	SVTO	49	GB	0527.0E	0529.0	3.0D	4000.0			ST=2 TYP=6
	2840	PEKG	5	S	0527.0	0530.5	8.0	180.2			
	2840	PEKG	5	S	0527.0	0530.5	8.0	180.2			
	2950	GORK	23	GRF	0527.4	0533.0	25.4	7.0			
	5900	KISV	47	GB	0527.5	0530.0	8.0	416.0			
	9300	KISV	4	S/F	0527.7	0530.0U	8.8	159.0D			
	200	GORK	4	S/F	0527.7	0529.1	3.6	8333.0			
	200	HIRA	48	C	0527.7	0528.6	5.3	11000.0	1270.0	WR	
	500	HIRA	48	C	0527.8	0541.6		65.0		MR	
	500	HIRA	48	C	0527.8	0529.7	36.5	2130.0	50.0	SR	
	15000	KISV	4	S/F	0528.0	0530.0	7.5	310.0			
	4995	LEAR	4	S/F	0528.0E	0529.0	3.0D	280.0			ST=2 TYP=3
	610	LEAR	49	GB	0528.0E	0529.0	3.0D	1700.0			ST=2 TYP=6
	2695	LEAR	4	S/F	0528.0E	0530.0	3.0D	160.0			ST=2 TYP=3
	1415	LEAR	8	S	0528.0E	0530.0	2.0D	77.0			ST=2 TYP=3
	410	LEAR	49	GB	0528.0E	0529.0	2.0D	2200.0			ST=2 TYP=6
	8800	LEAR	4	S/F	0528.0E	0529.0	3.0D	370.0			ST=2 TYP=3
	1415	SVTO	4	S/F	0528.0E	0530.0	3.0D	80.0			ST=2 TYP=3
	2695	SVTO	4	S/F	0528.0E	0530.0	3.0D	170.0			ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

SEPTEMBER 1989

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	0528.0E	0529.0	4.0D	320.0			ST=2 TYP=3
	610	SVTO	49	GB	0528.0E	0529.0	2.0D	890.0			ST=2 TYP=6
	410	SVTO	49	GB	0528.0E	0529.0	3.0D	700.0			ST=2 TYP=6
	3200	BERN	4	S/F	0528.0	0530.0	18.0	9.4			
	5200	BERN	4	S/F	0528.0	0530.0	18.0	23.1			
	15400	LEAR	4	S/F	0528.0E	0529.0	1112.0D	210.0			ST=1 TYP=3
	950	GORK	4	S/F	0528.0	0530.1	5.8	91.0			
	2850	CRIM	3	S	0528.1	0530.0	3.7	155.0	52.0		
	17000	NOBE	7	C	0528.3		19.0	168.0D			29L,80,35GHz:0
	650	GORK	48	C	0528.4	0530.0		1223.0			
	650	GORK	48	C	0528.4	0529.6	4.1	1386.0			
	2950	GORK	3	S	0528.5	0530.1	3.5	158.0			
	100	GORK	46	C	0528.6	0530.3		8800.0			
	100	HIRA	48	C	0528.6	0529.4	5.9	3500.0			WR
	100	GORK	46	C	0528.6	0529.5	3.0	7333.0			
	33	UPIC	46	C	0529.0		3.5				
	8800	SVTO	8	S	0529.0E	0529.0	1.0D	290.0			ST=2 TYP=3
	15400	SVTO	8	S	0529.0E	0529.0	1.0D	120.0			ST=2 TYP=3
	200	HIRA	29	PBI	0534.7	0540.9	19.0	30.0			WR
	2840	PEKG	30	PBI	0535.0	0542.0	32.0	20.1			
	4995	SVTO	4	S/F	0536.0E	0546.0	10.0D	110.0			ST=2 TYP=5
	950	GORK	8	S	0537.0	0537.1	0.3	21.0			
	5900	KISV	45	C	0537.5	0541.2	15.4	90.0			
	9300	KISV	45	C	0537.5	0541.3	15.1	74.0			
	5900	KISV	45	C	0537.5	0538.4		51.0			
	9300	KISV	45	C	0537.5	0538.4		33.0			
	4995	LEAR	4	S/F	0538.0E	0541.0	5.0D	61.0			ST=2 TYP=5
	410	SVTO	4	S/F	0538.0E	0541.0	4.0D	130.0			ST=2 TYP=3
	650	GORK	41	F	0538.0	0559.2		10.0			
	650	GORK	41	F	0538.0	0548.3		19.0			
	650	GORK	41	F	0538.0	0551.3		12.0			
	650	GORK	41	F	0538.0	0541.7		49.0			
	650	GORK	41	F	0538.0	0538.9	23.0	20.0			
	2850	CRIM	42	SER	0538.1	0541.4		25.0			
	2950	GORK	1	S	0538.1	0538.4	1.3	9.0			
	2850	CRIM	42	SER	0538.1	0538.7	7.0	18.0	8.0		
	950	GORK	4	S/F	0538.1	0538.9	1.5	45.0			
	8800	LEAR	8	S	0540.0E	0541.0	2.0D	43.0			ST=2 TYP=3
	610	LEAR	8	S	0540.0E	0541.0	2.0D	54.0			ST=2 TYP=3
	2950	GORK	2	S/F	0540.0	0541.3	4.4	19.0			
	15000	KISV	2	S/F	0540.0	0541.3	4.5	27.0			
	610	SVTO	8	S	0541.0E	0541.0	U	58.0			ST=2 TYP=3
	245	LEAR	8	S	0543.0E	0543.0	1.0D	250.0			ST=2 TYP=3
	245	SVTO	8	S	0543.0E	0544.0	1.0D	230.0			ST=2 TYP=3
	950	GORK	2	S/F	0545.5	0553.0	7.9	9.0			
	2950	GORK	1	S	0547.6	0548.0	1.4	5.0			
	650	GORK	41	F	0611.9	0620.1		6.0			
	650	GORK	41	F	0611.9	0614.4	9.4	7.0			
	536	ONDR	42	SER	0700.0		510.0				
	245	LEAR	4	S/F	0706.0E	0708.0	3.0D	61.0			ST=2 TYP=3
	100	GORK	41	F	0706.3	0731.0		122.0			
	100	GORK	41	F	0706.3	0711.1	25.2	35.0			
	9300	KISV	1	S	0738.7	0739.4	1.3	15.0			
	245	LEAR	8	S	0739.0E	0739.0	U	270.0			ST=2 TYP=3
	245	SVTO	8	S	0739.0E	0739.0	U	110.0			ST=2 TYP=3
	5900	KISV	2	S/F	0739.0	0739.3	1.3	5.0			
	234	POTS	42	SER	0739.4	0739.4	5.1	200.0			
	9300	KISV	45	C	0741.3	0742.3	3.9	17.0			
	9300	KISV	45	C	0741.3	0743.7		16.0			
	500	HIRA	41	F	0741.6	0742.0	2.0	66.0			WR
	5900	KISV	2	S/F	0742.0	0743.7	4.2	15.0			
	950	GORK	1	S	0800.7	0801.0	0.6	8.0			
	650	GORK	4	S/F	0800.7	0800.9	0.6	10.0			
	200	GORK	4	S/F	0820.9	0825.3	9.1	38.0			
	2840	PEKG	1	S	0824.0	0827.8	8.0	6.3			
	9300	KISV	22	GRF	0825.5	0827.7	13.3	11.0			
	5900	KISV	23	GRF	0826.3	0835.2	22.6	7.0			
	5900	KISV	2	S/F	0826.6	0827.8	4.3	16.0			
	3000	POTS	3	S	0827.0	0827.5	1.5	10.0			

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SEPTEMBER 1989

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	2950	GORK	1	S	0827.0	0827.6	9.0	11.0			
	15000	KISV	2	S/F	0827.2	0827.6	1.0	8.0			
	1470	POTS	8	S	0827.5	0827.6	0.7	12.0			
	2950	GORK	21	GRF	0904.0	0927.0	59.0	9.0			
	100	GORK	47	GB	0908.1	0909.5	9.9	24444.0			
	3013	IZMI	47	GB	0908.1	0910.6	19.9	1321.0			
	200	GORK	47	GB	0908.1	0909.8	11.3	20740.0			
	5900	KISV	47	GB	0908.2	0911.6		3998.0			
	5900	KISV	47	GB	0908.2	0910.7	6.7	4945.0			
	5900	KISV	29	PBI	0908.2	0914.8	27.4	79.0			
	127	TORN	49	GB	0908.3	0917.0U	12.0	3300.0D	150.0		
	4995	SVTO	49	GB	0909.0E	0910.0	9.0D	2700.0			ST=2 TYP=7
	410	LEAR	49	GB	0909.0E	0911.0	12.0D	1200.0			ST=2 TYP=7
	410	SVTO	49	GB	0909.0E	0924.0	18.0D	1200.0			ST=2 TYP=7
	245	SVTO	49	GB	0909.0E	0909.0	14.0D	13000.0			ST=2 TYP=7
	2695	SVTO	49	GB	0909.0E	0910.0	14.0D	1400.0			ST=2 TYP=7
	15400	SVTO	49	GB	0909.0E	0910.0	14.0D	11000.0			ST=2 TYP=7
	610	SVTO	49	GB	0909.0E	0912.0	18.0D	4100.0			ST=2 TYP=7
	8800	SVTO	49	GB	0909.0E	0910.0	11.0D	5800.0			ST=2 TYP=7
	1415	SVTO	49	GB	0909.0E	0911.0	14.0D	2300.0			ST=2 TYP=7
	15400	LEAR	49	GB	0909.0E	0910.0	891.0D	9900.0			ST=1 TYP=7
	9100	GORK	47	GB	0909.0	0911.5		5936.0			
	9500	POTS	45	C	0909.0	0910.5	31.0	5300.0			
	9100	GORK	47	GB	0909.0	0910.6	5.6	7900.0			
	600	HUMN	45	C	0909.0	0912.7	33.4	631.0	112.0		
	2840	PEKG	47	GB	0909.0	0911.8	38.0	578.0			
	1470	POTS	45	C	0909.0	0911.8	36.0	3000.0			
	3000	POTS	45	C	0909.0	0910.8	31.0	3500.0			
	33	UPIC	49	GB	0909.2		15.8				
	15000	KISV	29	PBI	0909.2	0914.1	26.5	210.0			
	9300	KISV	29	PBI	0909.2	0914.4	25.8	123.0			
	9300	KISV	47	GB	0909.2	0911.5	5.2	5144.0			
	15000	KISV	47	GB	0909.2	0911.5	4.9	9942.0			
	950	GORK	47	GB	0909.2	0911.6	8.8	2817.0			
	650	GORK	48	C	0909.3	0912.7	26.7	6528.0			
	650	GORK	48	C	0909.3	0922.9		2490.0			
	30	POTS	45	C	0909.4	0911.0U	25.0	6000.0D			
	234	POTS	29	PBI	0909.4	0909.5	71.0	42000.0			
	2950	GORK	47	GB	0909.4	0911.6	8.6	1241.0			
	204	IZMI	47	GB	0909.4	0909.9	65.6	22000.0			
	2850	CRIM	30	PBI	0909.6	0915.0	9.0	62.0	21.0		
	2850	CRIM	47	GB	0909.6	0910.8	15.4	1400.0	466.0		
	808	ONDR	47	GB	0910.0		64.0				
	950	GORK	30	PBI	0918.0	0918.0	58.0	49.0			
	5900	KISV	1	S	0918.2	0918.5	0.6	11.0			
	410	LEAR	49	GB	0921.0E	0924.0	8.0D	1400.0			ST=3 TYP=6
	610	LEAR	49	GB	0921.0E	0922.0	8.0D	2300.0			ST=3 TYP=6
	5900	KISV	2	S/F	0922.7	0923.0	1.0	15.0			
	950	GORK	4	S/F	0922.7	0924.8	2.5	174.0			
	33	UPIC	29	PBI	0925.0	0951.5	41.5				
	9100	GORK	4	S/F	0927.3	0929.9	6.1	180.0			
	100	GORK	4	S/F	0929.0	0931.6	3.8	122.0			
	950	GORK	2	S/F	0930.7	0932.4	4.7	9.0			
	9100	GORK	4	S/F	0937.9	0941.5	7.1	50.0			
	600	HUMN	4	S/F	0938.6	0939.3	1.9	863.0	263.0		
	200	GORK	4	S/F	0945.3	0950.7	7.5	555.0			
	650	GORK	8	S	0949.1	0949.3	0.3	51.0			
	410	SVTO	49	GB	0950.0E	0951.0	2.0D	1500.0			ST=2 TYP=6
	610	SVTO	49	GB	0950.0E	0951.0	2.0D	5100.0			ST=2 TYP=6
	9300	KISV	45	C	0950.2	0955.1		15.0			
	9300	KISV	45	C	0950.2	0951.6	9.5	31.0			
	5900	KISV	45	C	0950.4	0955.1		38.0			
	950	GORK	47	GB	0950.4	0951.5	1.6	1075.0			
	5900	KISV	45	C	0950.4	0951.5	8.0	60.0			
	204	IZMI	41	F	0950.4	0951.6	1.6	290.0			
	2850	CRIM	42	SER	0950.5	0955.3		45.0			
	2850	CRIM	42	SER	0950.5	0951.5	6.5	50.0	16.0		
	3013	IZMI	7	C	0950.5	0951.5	5.5	44.0	20.0		
	3000	POTS	42	SER	0950.5	0951.5	11.0	57.0			

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SEPTEMBER 1989

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	1470	POTS	42	SER	0950.5	0951.5	20.0	68.0			
	2950	GORK	46	C	0950.6	0955.1		53.0			
	2950	GORK	46	C	0950.6	0951.4	7.8	59.0			
	650	GORK	47	GB	0950.7	0951.7	22.3	7304.0			
	245	SVTO	8	S	0951.0E	0951.0	U	100.0			ST=2 TYP=3
	2695	SVTO	8	S	0951.0E	0951.0	1.0D	59.0			ST=2 TYP=3
	1415	SVTO	8	S	0951.0E	0951.0	1.0D	55.0			ST=2 TYP=3
	9100	GORK	1	S	0951.0	0951.4	1.5	21.0			
	9500	POTS	42	SER	0951.0	0951.5	26.0	16.0			
	15000	KISV	2	S/F	0951.2	0951.7	1.4	12.0			
	410	SVTO	49	GB	0953.0E	0953.0	2.0D	600.0			ST=2 TYP=6
	2695	SVTO	8	S	0954.0E	0955.0	2.0D	57.0			ST=2 TYP=3
	950	GORK	4	S/F	0954.3	0954.9	3.5	15.0			
	410	SVTO	4	S/F	1002.0E	1052.0	50.0D	370.0			ST=2 TYP=3
	950	GORK	46	C	1010.4	1011.3	2.7	16.0			
	950	GORK	46	C	1010.4	1012.4		17.0			
	9300	KISV	2	S/F	1015.0	1015.3	2.5	10.0			
	9300	KISV	2	S/F	1030.1	1030.9	3.3	11.0			
	204	IZMI	41	F	1107.2	1110.5	5.0	1600.0			
	245	SGMR	4	S/F	1108.0E	1110.0	3.0D	200.0			ST=2 TYP=3
	5900	KISV	45	C	1108.8	1111.1		85.0			
	5900	KISV	45	C	1108.8	1110.6	11.4	101.0			
	4995	SGMR	8	S	1109.0E	1110.0	1.0D	80.0			ST=2 TYP=3
	1415	SGMR	8	S	1109.0E	1111.0	2.0D	210.0			ST=2 TYP=3
	1415	SVTO	8	S	1109.0E	1111.0	2.0D	230.0			ST=2 TYP=3
	4995	SVTO	4	S/F	1109.0E	1110.0	3.0D	84.0			ST=2 TYP=3
	1470	POTS	4	S/F	1109.0	1110.4	6.0	210.0			
	3000	POTS	4	S/F	1109.0	1110.5	5.0	36.0			
	234	POTS	4	S/F	1109.1	1111.0	3.0	450.0			
	9300	KISV	45	C	1109.3	1111.1		61.0			
	3013	IZMI	7	C	1109.3	1110.5	5.2	36.0	18.0		
	9300	KISV	45	C	1109.3	1110.6	10.9	80.0			
	600	HUMN	2	S/F	1109.5	1111.4	8.2	17.0	2.0		
	245	SVTO	8	S	1110.0E	1111.0	1.0D	200.0			ST=2 TYP=3
	808	ONDR	5	S	1110.0	1111.1	8.4	95.0			
	9500	POTS	4	S/F	1110.0	1110.3	4.0	36.0			
	410	SGMR	8	S	1132.0E	1132.0	U	120.0			ST=2 TYP=3
	600	HUMN	4	S/F	1241.9	1243.7	7.5	167.0	33.0		
	808	ONDR	41	F	1241.9	1247.8	8.5	30.0			
	410	SGMR	49	GB	1242.0E	1247.0	7.0D	8400.0			ST=3 TYP=7
	610	SGMR	49	GB	1242.0E	1247.0	7.0D	1900.0			ST=3 TYP=7
	5900	KISV	2	S/F	1244.3	1247.2	5.3	15.0			
	33	UPIC	46	C	1245.1	1247.2	3.7				
	9300	KISV	2	S/F	1246.0	1246.8	3.1	9.0			
	610	SVTO	49	GB	1247.0E	1247.0	U	940.0			ST=2 TYP=6
	410	SVTO	49	GB	1247.0E	1247.0	1.0D	3900.0			ST=2 TYP=6
	5900	KISV	2	S/F	1256.9	1257.6	1.2	9.0			
	9300	KISV	2	S/F	1257.3	1257.6	1.8	9.0			
	9500	POTS	3	S	1414.5	1415.1	1.5	20.0			
	600	HUMN	2	S/F	1504.4	1504.6	1.5	309.0	132.0		
	610	SGMR	8	S	1508.0E	1508.0	1.0D	230.0			ST=2 TYP=3
	410	SGMR	49	GB	1508.0E	1508.0	1.0D	2700.0			ST=2 TYP=6
	410	SVTO	49	GB	1508.0E	1508.0	1.0D	2400.0			ST=2 TYP=6
	610	SVTO	8	S	1508.0E	1508.0	1.0D	180.0			ST=2 TYP=3
	600	HUMN	4	S/F	1529.6	1531.0	5.1	793.0	191.0		
	4995	SVTO	4	S/F	1531.0E	1534.0	7.0D	200.0			ST=2 TYP=3
	2695	SGMR	8	S	1533.0E	1534.0	1.0D	38.0			ST=2 TYP=3
	1415	SGMR	8	S	1533.0E	1534.0	1.0D	69.0			ST=2 TYP=3
	15400	SGMR	8	S	1533.0E	1534.0	2.0D	55.0			ST=2 TYP=3
	610	SGMR	49	GB	1533.0E	1533.0	4.0D	4000.0			ST=2 TYP=6
	4995	SGMR	4	S/F	1533.0E	1534.0	4.0D	210.0			ST=2 TYP=3
	410	SGMR	49	GB	1533.0E	1534.0	4.0D	5800.0			ST=2 TYP=6
	410	SVTO	49	GB	1533.0E	1534.0	4.0D	5800.0			ST=2 TYP=6
	610	SVTO	49	GB	1533.0E	1533.0	2.0D	3400.0			ST=2 TYP=6
	245	SVTO	49	GB	1533.0E	1533.0	2.0D	700.0			ST=2 TYP=6
	8800	SVTO	4	S/F	1533.0E	1534.0	4.0D	120.0			ST=2 TYP=3
	2695	SVTO	8	S	1533.0E	1534.0	2.0D	71.0			ST=2 TYP=3
	8800	SGMR	4	S/F	1533.0E	1534.0	507.0D	110.0			ST=1 TYP=3
	33	UPIC	48	C	1533.6		3.5				

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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
09	2800	OTTA	3	S	1533.7	1534.1	4.7	69.6	14.0		
	5200	BERN	3	S	1533.8	1534.3	2.5	14.3			
	3200	BERN	3	S	1533.8	1534.3	2.5	5.4			
	15400	SVTO	8	S	1534.0E	1534.0	U	44.0			ST=2 TYP=3
	245	PALE	8	S	1708.0E	1709.0	1.0D	130.0			ST=2 TYP=3
	245	SGMR	8	S	1708.0E	1709.0	1.0D	140.0			ST=2 TYP=3
	245	PALE	8	S	1809.0E	1809.0	1.0D	270.0			ST=2 TYP=3
	245	SGMR	4	S/F	1809.0E	1809.0	3.0D	290.0			ST=2 TYP=3
	410	SGMR	8	S	1809.0E	1809.0	U	80.0			ST=2 TYP=3
	4995	SGMR	4	S/F	1809.0E	1812.0	12.0D	50.0			ST=2 TYP=3
	2800	OTTA	20	GRF	1810.0	1813.0	40.0D	9.0	4.0		
	245	PALE	8	S	1812.0E	1812.0	U	100.0			ST=2 TYP=3
	15400	SGMR	4	S/F	1849.0E	1851.0	10.0D	240.0			ST=2 TYP=3
	2695	PALE	4	S/F	1851.0E	1851.0	3.0D	170.0			ST=2 TYP=3
	410	PALE	49	GB	1851.0E	1851.0	5.0D	12000.0			ST=2 TYP=6
	4995	PALE	8	S	1851.0E	1851.0	2.0D	310.0			ST=2 TYP=3
	610	PALE	49	GB	1851.0E	1851.0	4.0D	7600.0			ST=2 TYP=6
	8800	PALE	4	S/F	1851.0E	1851.0	3.0D	270.0			ST=2 TYP=3
	1415	PALE	4	S/F	1851.0E	1852.0	3.0D	130.0			ST=2 TYP=3
	245	PALE	49	GB	1851.0E	1851.0	4.0D	7200.0			ST=2 TYP=6
	15400	PALE	4	S/F	1851.0E	1851.0	3.0D	210.0			ST=2 TYP=3
	245	SGMR	49	GB	1851.0E	1851.0	4.0D	7000.0			ST=2 TYP=6
	8800	SGMR	4	S/F	1851.0E	1851.0	5.0D	380.0			ST=2 TYP=3
	610	SGMR	49	GB	1851.0E	1851.0	4.0D	7600.0			ST=2 TYP=6
	410	SGMR	49	GB	1851.0E	1852.0	5.0D	16000.0			ST=2 TYP=6
	2800	OTTA	3	S	1851.2	1851.8	6.0	191.5	38.0		
	2800	OTTA	20	GRF	1909.0	1911.0	18.0D	9.6	4.0		
	15400	SGMR	49	GB	1926.0E	1929.0	13.0D	1000.0			ST=2 TYP=6
	8800	SGMR	49	GB	1926.0E	1929.0	13.0D	1100.0			ST=2 TYP=6
	4995	SGMR	49	GB	1927.0E	1929.0	12.0D	1100.0			ST=2 TYP=6
	2695	SGMR	49	GB	1927.0E	1929.0	12.0D	830.0			ST=2 TYP=6
	2800	OTTA	3	S	1927.0	1929.2	7.8	314.7	63.0		
	1415	SGMR	4	S/F	1928.0E	1929.0	3.0D	170.0			ST=2 TYP=3
	410	SGMR	8	S	1928.0E	1928.0	1.0D	83.0			ST=2 TYP=3
	245	SGMR	8	S	1928.0E	1929.0	2.0D	350.0			ST=2 TYP=3
	610	SGMR	8	S	1929.0E	1929.0	2.0D	42.0			ST=2 TYP=3
	2800	OTTA	29	PBI	1934.7	1934.7	125.0	48.2	19.0		
	245	PALE	8	S	1956.0E	1957.0	1.0D	54.0			ST=2 TYP=3
	245	SGMR	8	S	1956.0E	1957.0	1.0D	51.0			ST=2 TYP=3
	610	PALE	8	S	2001.0E	2002.0	1.0D	81.0			ST=2 TYP=3
	245	PALE	8	S	2001.0E	2001.0	2.0D	400.0			ST=2 TYP=3
	410	PALE	8	S	2001.0E	2002.0	2.0D	180.0			ST=2 TYP=3
	245	SGMR	4	S/F	2001.0E	2001.0	3.0D	360.0			ST=2 TYP=3
	610	SGMR	4	S/F	2001.0E	2002.0	3.0D	160.0			ST=2 TYP=3
	410	SGMR	4	S/F	2001.0E	2002.0	3.0D	170.0			ST=2 TYP=3
	410	PALE	8	S	2121.0E	2121.0	1.0D	85.0			ST=2 TYP=3
	500	HIRA	41	F	2121.5	2122.0	7.0	167.0		SR	
	200	HIRA	42	SER	2232.7	2250.8	20.0	145.0		O	
	245	LEAR	8	S	2251.0E	2251.0	U	120.0			ST=2 TYP=3
	245	PALE	8	S	2251.0E	2251.0	U	150.0			ST=2 TYP=3
	500	HIRA	27	RF	2300.0	2315.0	95.0	9.0	4.0	O	
	245	PALE	8	S	2313.0E	2315.0	2.0D	62.0			ST=2 TYP=3
	410	LEAR	8	S	2314.0E	2315.0	2.0D	52.0			ST=2 TYP=3
	245	LEAR	8	S	2314.0E	2315.0	1.0D	61.0			ST=2 TYP=3
	410	PALE	8	S	2314.0E	2315.0	2.0D	57.0			ST=2 TYP=3
	610	LEAR	8	S	2315.0E	2315.0	1.0D	74.0			ST=2 TYP=3
	610	PALE	8	S	2315.0E	2315.0	U	81.0			ST=2 TYP=3
10	200	GORK	44	NS	0333.0E		432.0D		5.0		
	204	IZMI	43	NS	0600.0		360.0	40.0			
	260	ONDR	44	NS	0600.0E		570.0D				
	234	POTS	44	NS	0604.0E	1258.0U	504.0D	130.0U			
	33	UPIC	43	NS	0605.0		655.0D				
	245	SVTO	43	NS	0624.0	1509.0	622.0D	560.0			ST=2 TYP=1
	127	TORN	43	NS	0850.0	1228.7	280.0	470.0	12.0	V=1	
	245	SGMR	44	NS	1112.0E	1509.0	768.0D	720.0			ST=3 TYP=1
	245	PALE	44	NS	1640.0E	1925.0	703.0D	380.0			ST=2 TYP=1
	410	PALE	44	NS	1950.0E	1953.0	18.0D	67.0			ST=2 TYP=1
	200	HIRA	44	NS	2026.0E	2100.0	750.0D	90.0	36.0	SR	

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

SEPTEMBER 1989

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	44	NS	2241.0E	0638.0	678.0D	310.0			ST=2 TYP=1
	410	PALE	8	S	0011.0E	0012.0	2.0D	240.0			ST=2 TYP=3
	500	HIRA	42	SER	0020.0	0029.8	14.5	315.0			SR
	2840	PEKG	5	S	0031.0	0033.2	8.0	21.8			
	4995	LEAR	8	S	0032.0E	0032.0	2.0D	67.0			ST=2 TYP=3
	15400	LEAR	4	S/F	0032.0E	0032.0	4.0D	35.0			ST=2 TYP=3
	410	LEAR	8	S	0032.0E	0033.0	2.0D	250.0			ST=2 TYP=3
	610	LEAR	8	S	0032.0E	0033.0	2.0D	110.0			ST=2 TYP=3
	410	PALE	8	S	0032.0E	0033.0	2.0D	210.0			ST=2 TYP=3
	4995	PALE	8	S	0032.0E	0032.0	1.0D	60.0			ST=2 TYP=3
	2695	PALE	8	S	0032.0E	0033.0	1.0D	35.0			ST=2 TYP=3
	610	PALE	8	S	0032.0E	0033.0	2.0D	100.0			ST=2 TYP=3
	410	LEAR	4	S/F	0110.0E	0111.0	3.0D	180.0			ST=2 TYP=3
	610	LEAR	8	S	0111.0E	0112.0	2.0D	58.0			ST=2 TYP=3
	410	PALE	8	S	0111.0E	0111.0	1.0D	99.0			ST=2 TYP=3
	2695	PALE	8	S	0111.0E	0112.0	1.0D	45.0			ST=2 TYP=3
	2840	PEKG	5	S	0111.0	0112.3	3.0	26.9			
	410	LEAR	8	S	0129.0E	0129.0	1.0D	69.0			ST=2 TYP=3
	2840	PEKG	5	S	0135.0	0137.5	9.0	18.6			
	200	HIRA	41	F	0158.8	0208.9	15.0	40.0			WR
	100	HIRA	42	SER	0200.0E	0209.2	31.7D	855.0			
	500	HIRA	46	C	0219.5	0226.2	9.7	1430.0	247.0		SR
	2840	PEKG	3	S	0221.0	0226.0	10.0	41.5			
	200	HIRA	46	C	0221.1	0225.5	7.3	920.0			O
	410	LEAR	49	GB	0222.0E	0226.0	6.0D	740.0			ST=2 TYP=6
	8800	LEAR	4	S/F	0222.0E	0226.0	6.0D	210.0			ST=2 TYP=5
	15400	LEAR	4	S/F	0222.0E	0226.0	6.0D	130.0			ST=2 TYP=5
	610	LEAR	49	GB	0222.0E	0227.0	6.0D	2000.0			ST=2 TYP=6
	4995	LEAR	4	S/F	0222.0E	0226.0	6.0D	120.0			ST=2 TYP=5
	4995	PALE	4	S/F	0222.0E	0226.0	5.0D	110.0			ST=2 TYP=5
	410	PALE	49	GB	0222.0E	0226.0	5.0D	520.0			ST=2 TYP=6
	8800	PALE	4	S/F	0222.0E	0226.0	6.0D	210.0			ST=2 TYP=5
	610	PALE	49	GB	0222.0E	0227.0	6.0D	1600.0			ST=2 TYP=6
	245	LEAR	8	S	0223.0E	0225.0	2.0D	170.0			ST=2 TYP=3
	2695	PALE	8	S	0223.0E	0225.0	2.0D	29.0			ST=2 TYP=3
	245	PALE	4	S/F	0223.0E	0226.0	4.0D	200.0			ST=2 TYP=3
	1415	LEAR	8	S	0225.0E	0226.0	2.0D	41.0			ST=2 TYP=3
	1415	PALE	8	S	0225.0E	0226.0	2.0D	45.0			ST=2 TYP=3
	15400	PALE	8	S	0225.0E	0226.0	2.0D	90.0			ST=2 TYP=3
	35000	NOBE	7	C	0225.0	0226.3	5.0	59.0			7L,80GHz:0
	17000	NOBE	7	C	0225.0	0226.3	5.0	84.0			25L
	950	GORK	23	GRF	0336.0E	0438.0	168.0D	9.0			
	650	GORK	23	GRF	0337.0E	0409.0	417.5D	7.0			
	100	GORK	41	F	0348.4	0415.2	41.9	6341.0			
	100	GORK	41	F	0348.4	0429.4		6907.0			
	9100	GORK	21	GRF	0354.5E	0543.8	197.5D	27.0			
	650	GORK	41	F	0357.1	0358.5	6.6	14.0			
	650	GORK	41	F	0357.1	0400.5		14.0			
	650	GORK	41	F	0357.1	0401.6		10.0			
	200	HIRA	42	SER	0357.4	0414.1	35.6	710.0			O
	500	HIRA	42	SER	0357.5	0414.4	30.0	640.0			MR
	100	HIRA	42	SER	0411.2	0415.2	19.1	2900.0			WR
	2950	GORK	21	GRF	0411.5	0545.0	188.1	17.0			
	200	GORK	41	F	0412.0	0414.2	10.0	925.0			
	200	GORK	41	F	0412.0	0415.6		1111.0			
	410	LEAR	49	GB	0413.0E	0414.0	2.0D	900.0			ST=2 TYP=6
	610	LEAR	8	S	0413.0E	0414.0	2.0D	410.0			ST=2 TYP=3
	245	LEAR	49	GB	0413.0E	0414.0	4.0D	910.0			ST=2 TYP=6
	410	PALE	49	GB	0413.0E	0414.0	1.0D	730.0			ST=2 TYP=6
	245	PALE	49	GB	0413.0E	0415.0	5.0D	980.0			ST=2 TYP=6
	650	GORK	46	C	0413.0	0414.2	3.1	368.0			
	950	GORK	4	S/F	0413.0	0414.3	3.0	74.0			
	650	GORK	46	C	0413.0	0414.9		45.0			
	610	PALE	8	S	0414.0E	0414.0	U	370.0			ST=2 TYP=3
	2840	PEKG	1	S	0414.0	0414.5	3.0	3.1			
	9100	GORK	2	S/F	0414.2	0415.5	1.8	26.0			
	650	GORK	4	S/F	0420.3	0422.5	2.7	116.0			
	610	LEAR	8	S	0422.0E	0422.0	U	110.0			ST=2 TYP=3
	610	PALE	8	S	0422.0E	0422.0	U	75.0			ST=2 TYP=3

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

SEPTEMBER 1989

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	PALE	8	S	0423.0E	0423.0	U	67.0			ST=2 TYP=3
	2840	PEKG	5	S	0454.0	0455.6	6.0	17.6			
	2850	CRIM	1	S	0454.4	0455.6	2.0	17.4	3.0		
	9100	GORK	1	S	0454.6	0455.4	3.5	31.0			
	2950	GORK	1	S	0454.7	0455.5	1.8	17.0			
	5900	KISV	2	S/F	0454.7	0455.8	6.5	26.0			
	17000	NOBE	1	S	0454.9	0455.5	2.0	22.0			35L,80,35GHz:0
	245	LEAR	8	S	0455.0E	0455.0	U	140.0			ST=2 TYP=3
	245	SVTO	8	S	0455.0E	0455.0	U	130.0			ST=2 TYP=3
	950	GORK	5	S	0455.0	0455.6	2.2	3.0			
	9300	KISV	4	S/F	0455.0	0455.8	5.8	33.0			
	15000	KISV	2	S/F	0455.1	0455.8	2.8	21.0			
	100	GORK	41	F	0458.5	0523.0		226.0			
	100	GORK	41	F	0458.5	0509.4	26.3	226.0			
	500	HIRA	42	SER	0458.5	0513.6	15.5	65.0			WR
	650	GORK	41	F	0458.7	0513.1		24.0			
	650	GORK	41	F	0458.7	0502.4		8.0			
	650	GORK	41	F	0458.7	0459.4	15.2	12.0			
	9100	GORK	1	S	0504.6	0504.8	0.6	15.0			
	15000	KISV	1	S	0504.9	0505.0	0.5	12.0			
	9300	KISV	2	S/F	0504.9	0505.1	1.3	12.0			
	950	GORK	4	S/F	0509.0	0509.9	3.9	20.0			
	950	GORK	2	S/F	0518.6	0519.5	5.8	9.0			
	245	LEAR	8	S	0521.0E	0521.0	U	100.0			ST=2 TYP=3
	245	SVTO	8	S	0521.0E	0521.0	2.0D	88.0			ST=2 TYP=3
	5900	KISV	2	S/F	0525.8	0527.2	4.8	31.0			
	9100	GORK	4	S/F	0526.0	0540.5	17.8	163.0			
	9100	GORK	1	S	0526.3	0526.9	3.0	15.0			
	9300	KISV	2	S/F	0526.4	0527.3	3.6	17.0			
	5900	KISV	4	S/F	0533.8	0540.6	9.0	167.0			
	5900	KISV	29	PBI	0533.8	0542.8	29.0	19.0			
	2695	LEAR	20	GRF	0535.0E	0540.0	9.0D	63.0			ST=2 TYP=2
	9300	KISV	29	PBI	0535.0	0542.3	26.7	17.0			
	9300	KISV	4	S/F	0535.0	0540.6	7.3	142.0D			
	2840	PEKG	3	S	0536.0	0540.5	15.0	58.0			
	950	GORK	2	S/F	0536.4	0540.5	6.5	6.0			
	2850	CRIM	3	S	0536.7	0540.5	5.0	29.0	10.0		
	2850	CRIM	30	PBI	0536.7	0541.7	33.0	10.0	3.0		
	4995	SVTO	4	S/F	0537.0E	0540.0	12.0D	120.0			ST=3 TYP=3
	4995	LEAR	4	S/F	0538.0E	0540.0	4.0D	100.0			ST=2 TYP=3
	8800	LEAR	4	S/F	0538.0E	0540.0	3.0D	180.0			ST=2 TYP=3
	8800	SVTO	4	S/F	0538.0E	0540.0	3.0D	150.0			ST=3 TYP=3
	15000	KISV	4	S/F	0538.3	0540.6	4.2	75.0			
	2950	GORK	2	S/F	0538.4	0540.5	4.3	22.0			
	17000	NOBE	7	C	0538.5	0540.4	15.0	75.0			15L,80,35GHz:0
	15400	LEAR	8	S	0539.0E	0540.0	2.0D	84.0			ST=2 TYP=3
	2695	SVTO	8	S	0539.0E	0540.0	1.0D	31.0			ST=2 TYP=3
	15400	SVTO	8	S	0539.0E	0540.0	1.0D	77.0			ST=3 TYP=3
	245	LEAR	49	GB	0540.0E	0540.0	U	760.0			ST=2 TYP=6
	245	SVTO	49	GB	0540.0E	0540.0	U	850.0			ST=3 TYP=6
	245	LEAR	8	S	0558.0E	0559.0	1.0D	80.0			ST=2 TYP=3
	245	SVTO	8	S	0558.0E	0559.0	1.0D	66.0			ST=2 TYP=3
	650	GORK	46	C	0558.8	0602.5	6.4	213.0			
	500	HIRA	46	C	0558.8	0603.5	6.5	510.0			SR
	650	GORK	46	C	0558.8	0603.7		469.0			
	950	GORK	2	S/F	0559.7	0600.1	0.7	5.0			
	536	ONDR	42	SER	0600.0		570.0				
	2840	PEKG	3	S	0600.0	0604.0	10.0	14.6			
	9300	KISV	2	S/F	0600.9	0604.7	7.4	25.0			
	410	LEAR	4	S/F	0601.0E	0602.0	3.0D	120.0			ST=2 TYP=3
	2850	CRIM	1	S	0601.0	0604.5	5.0	12.0	4.0		
	600	HUMN	4	S/F	0601.3	0603.5	3.9	207.0	38.0		
	5900	KISV	4	S/F	0601.4	0604.7	8.7	42.0			
	610	LEAR	8	S	0602.0E	0603.0	2.0D	380.0			ST=2 TYP=3
	410	SVTO	4	S/F	0602.0E	0602.0	1078.0D	110.0			ST=1 TYP=3
	610	SVTO	4	S/F	0602.0E	0603.0	1078.0D	310.0			ST=1 TYP=3
	950	GORK	2	S/F	0602.0	0606.1	6.3	5.0			
	2950	GORK	1	S	0603.0	0603.9	2.0	5.0			
	9100	GORK	1	S	0603.1	0604.5	2.4	13.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

SEPTEMBER 1989

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	8	S	0631.0E	0631.0	U	50.0			ST=2 TYP=3
	9300	KISV	2	S/F	0631.4	0631.7	1.0	7.0			
	245	SVTO	8	S	0632.0E	0632.0	U	100.0			ST=2 TYP=3
	100	GORK	41	F	0633.3	0651.1	25.0	2264.0			
	100	GORK	41	F	0633.3	0653.9		226.0			
	600	HUMN	45	C	0636.2	0648.7	15.8	831.0	182.0		
	650	GORK	48	C	0642.3	0651.3	14.7	1748.0			
	650	GORK	48	C	0642.3	0655.6		4737.0			
	950	GORK	21	GRF	0642.5	0657.0	23.5	2.0			
	500	HIRA	48	C	0642.8	0651.0	19.0	5540.0	695.0		SR
	2850	CRIM	3	S	0645.5	0651.2	14.0	53.0	18.0		
	3013	IZMI	22	GRF	0645.7	0651.2	16.3	44.0	20.0		
	410	LEAR	49	GB	0646.0E	0651.0	11.0D	5400.0			ST=2 TYP=6
	410	SVTO	49	GB	0646.0E	0656.0	11.0D	4100.0			ST=2 TYP=7
	3200	BERN	4	S/F	0646.0	0651.3	15.0	3.5			
	5200	BERN	4	S/F	0646.0	0651.3	15.0	12.1			
	2840	PEKG	45	C	0646.0	0651.5	14.0	66.3			
	200	GORK	4	S/F	0646.2	0651.0	11.0	370.0			
	200	HIRA	46	C	0646.2	0650.5	11.2	620.0	75.0		MR
	950	GORK	46	C	0646.5	0651.5		38.0			
	950	GORK	46	C	0646.5	0650.7	10.5	31.0			
	2950	GORK	4	S/F	0646.7	0651.3	9.9	47.0			
	4995	SVTO	4	S/F	0647.0E	0651.0	9.0D	160.0			ST=2 TYP=3
	610	LEAR	49	GB	0647.0E	0655.0	10.0D	5000.0			ST=2 TYP=7
	9100	GORK	4	S/F	0647.3	0651.2	9.3	280.0			
	4995	LEAR	4	S/F	0649.0E	0651.0	4.0D	140.0			ST=2 TYP=3
	610	SVTO	49	GB	0649.0E	0655.0	7.0D	3900.0			ST=2 TYP=7
	245	SVTO	4	S/F	0649.0E	0655.0	7.0D	270.0			ST=2 TYP=5
	8800	SVTO	4	S/F	0649.0E	0651.0	5.0D	210.0			ST=2 TYP=3
	1470	POTS	4	S/F	0649.0U	0651.5	11.0U	30.0			
	204	IZMI	41	F	0649.0	0650.8	7.5	620.0			
	9500	POTS	4	S/F	0649.5	0651.0	18.0	200.0			
	3000	POTS	4	S/F	0649.5U	0651.5	11.0U	44.0			
	15000	KISV	4	S/F	0649.7	0651.5	5.4	149.0			
	15400	LEAR	4	S/F	0650.0E	0651.0	3.0D	150.0			ST=2 TYP=3
	8800	LEAR	4	S/F	0650.0E	0651.0	3.0D	190.0			ST=2 TYP=3
	245	LEAR	4	S/F	0650.0E	0655.0	6.0D	220.0			ST=2 TYP=5
	15400	SVTO	4	S/F	0650.0E	0651.0	4.0D	150.0			ST=2 TYP=3
	1415	SVTO	8	S	0650.0E	0651.0	1.0D	31.0			ST=2 TYP=3
	17000	NOBE	3	S	0650.1	0651.3	6.0	105.0			17L,80.35GHz:0
	5900	KISV	23	GRF	0743.9	0815.5	62.3	23.0			
	9500	POTS	4	S/F	0745.0	0758.0	50.0	87.0			
	9300	KISV	23	GRF	0745.5	0813.9	59.7	28.0			
	2950	GORK	21	GRF	0746.1	0800.0	118.5	32.0			
	9100	GORK	21	GRF	0746.6	0809.0	178.4D	26.0			
	5900	KISV	46	C	0747.5	0756.0		111.0			
	5900	KISV	46	C	0747.5	0758.0	19.8	116.0			
	5900	KISV	46	C	0747.5	0754.4		108.0			
	950	GORK	21	GRF	0748.0	0804.2	33.0	3.0			
	1470	POTS	4	S/F	0750.0	0756.5	15.0	40.0			
	3000	POTS	4	S/F	0750.0	0752.8	30.0	165.0			
	410	SVTO	8	S	0751.0E	0751.0	U	81.0			ST=2 TYP=3
	4995	LEAR	20	GRF	0751.0E	0758.0	11.0D	85.0			ST=2 TYP=2
	4995	SVTO	20	GRF	0751.0E	0758.0	12.0D	99.0			ST=2 TYP=2
	8800	SVTO	20	GRF	0751.0E	0758.0	25.0D	100.0			ST=2 TYP=2
	9300	KISV	46	C	0751.1	0754.0		78.0			
	9300	KISV	46	C	0751.1	0755.0		86.0			
	9300	KISV	46	C	0751.1	0758.1	14.8	107.0			
	2850	CRIM	45	C	0751.2	0756.0		89.0			
	3013	IZMI	22	GRF	0751.2	0753.0	13.8	94.0	50.0		
	2850	CRIM	45	C	0751.2	0753.1	16.0	200.0	70.0		
	2850	CRIM	45	C	0751.2	0753.5		195.0			
	9100	GORK	46	C	0751.3	0756.0	11.7	72.0			
	9100	GORK	46	C	0751.3	0758.2		91.0			
	2950	GORK	46	C	0751.4	0756.2		66.0			
	2950	GORK	46	C	0751.4	0753.2	8.6	161.0			
	2950	GORK	46	C	0751.4	0758.6		34.0			
	2950	GORK	46	C	0751.4	0754.6		85.0			
	2950	GORK	46	C	0751.4	0753.7		148.0			

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

SEPTEMBER 1989

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	15000	KISV	46	C	0751.6	0755.0		15.0			
	15000	KISV	46	C	0751.6	0754.1		11.0			
	15000	KISV	46	C	0751.6	0758.1	11.3	25.0			
	100	GORK	8	S	0752.0	0754.0	6.4	226.0			
	8800	LEAR	20	GRF	0752.0E	0758.0	9.0D	88.0			ST=2 TYP=2
	2695	SVTO	4	S/F	0752.0E	0753.0	9.0D	200.0			ST=2 TYP=3
	2695	LEAR	4	S/F	0752.0E	0753.0	10.0D	230.0			ST=2 TYP=3
	650	GORK	4	S/F	0752.2	0758.3	8.0	25.0			
	600	HUMN	27	RF	0752.2	0757.6	11.6	4.0	2.0		
	950	GORK	4	S/F	0752.9	0756.4	9.2	19.0			
	15400	LEAR	4	S/F	0755.0E	0758.0	5.0D	47.0			ST=2 TYP=5
	410	LEAR	8	S	0813.0E	0813.0	1.0D	51.0			ST=2 TYP=3
	3013	IZMI	1	S	0815.0	0815.1	2.1	7.0			
	600	HUMN	42	SER	0839.0	0840.0	107.0	50.0			
	650	GORK	46	C	0839.8	0840.1	2.3	70.0			
	650	GORK	46	C	0839.8	0841.5		12.0			
	650	GORK	4	S/F	0906.7	0907.3	1.6	24.0			
	100	GORK	41	F	0912.0	0931.2		2264.0			
	100	GORK	41	F	0912.0	0922.6	20.1	226.0			
	410	LEAR	49	GB	0918.0E	0918.0	1.0D	810.0			ST=2 TYP=6
	410	SVTO	49	GB	0918.0E	0918.0	1.0D	860.0			ST=2 TYP=6
	245	LEAR	8	S	0919.0E	0920.0	2.0D	67.0			ST=2 TYP=3
	204	IZMI	41	F	0919.2	0919.8	0.8	360.0	300.0		
	950	GORK	2	S/F	0920.8	0924.0	5.2	5.0			
	5900	KISV	2	S/F	0926.1	0926.8	2.2	9.0			
	9100	GORK	1	S	0930.6	0931.3	2.2	24.0			
	9300	KISV	2	S/F	0930.9	0931.5	2.1	23.0			
	9500	POTS	3	S	0931.0	0931.5	1.5	19.0			
	950	GORK	1	S	0931.1	0931.2	0.4	4.0			
	5900	KISV	2	S/F	0931.1	0931.5	1.0	8.0			
	15000	KISV	2	S/F	0931.3	0931.4	0.5	12.0			
	410	LEAR	8	S	0933.0E	0933.0	U	84.0			ST=2 TYP=3
	410	SVTO	8	S	0933.0E	0933.0	U	55.0			ST=2 TYP=3
	950	GORK	2	S/F	0933.2	0934.7	2.3	6.0			
	650	GORK	4	S/F	0933.8	0934.7	2.2	12.0			
	410	LEAR	8	S	0945.0E	0946.0	1.0D	50.0			ST=2 TYP=3
	650	GORK	4	S/F	0945.9	0946.5	0.9	23.0			
	100	GORK	41	F	1010.1	1039.5		792.0			
	100	GORK	41	F	1010.1	1030.5	30.0	7700.0			
	950	GORK	2	S/F	1010.5	1012.9	4.6	2.0			
	650	GORK	4	S/F	1011.3	1011.7	0.7	30.0			
	245	SVTO	8	S	1012.0E	1012.0	U	210.0			ST=2 TYP=3
	600	HUMN	45	C	1024.0	1029.6	26.4	300.0	21.0		
	950	GORK	2	S/F	1024.2	1025.6	3.3	3.0			
	5900	KISV	23	GRF	1024.9	1032.4	24.2	11.0			
	410	SVTO	8	S	1025.0E	1025.0	1.0D	110.0			ST=2 TYP=3
	245	SVTO	8	S	1025.0E	1025.0	1.0D	130.0			ST=2 TYP=3
	650	GORK	46	C	1025.0	1028.3		42.0			
	650	GORK	46	C	1025.0	1030.5		1214.0			
	650	GORK	46	C	1025.0	1025.5	6.3	61.0			
	9300	KISV	22	GRF	1025.0	1030.5	21.7	12.0			
	950	GORK	46	C	1029.8	1030.2	1.7	11.0			
	950	GORK	46	C	1029.8	1030.5		17.0			
	610	SVTO	49	GB	1030.0E	1030.0	1.0D	820.0			ST=2 TYP=6
	245	SVTO	8	S	1030.0E	1030.0	U	270.0			ST=2 TYP=3
	410	SVTO	4	S/F	1030.0E	1032.0	5.0D	140.0			ST=2 TYP=3
	5900	KISV	2	S/F	1030.0	1030.5	0.8	7.0			
	808	ONDR	8	S	1030.0	1030.9	2.0	28.0			
	127	TORN	47	GB	1030.7	1031.5	1.7	900.0D	460.0		
	5900	KISV	1	S	1035.8	1036.0	0.5	10.0			
	9300	KISV	1	S	1035.8	1035.9	0.5	8.0			
	410	SGMR	8	S	1039.0E	1039.0	U	430.0			ST=2 TYP=3
	410	SVTO	8	S	1039.0E	1039.0	U	430.0			ST=2 TYP=3
	2850	CRIM	1	S	1039.1	1039.4	0.7	8.0	3.0		
	950	GORK	2	S/F	1039.2	1039.5	0.8	5.0			
	5900	KISV	2	S/F	1153.7	1154.1	1.2	4.0			
	245	SVTO	4	S/F	1254.0E	1256.0	5.0D	440.0			ST=2 TYP=3
	5200	BERN	46	C	1254.0	1257.0	18.0	23.5			
	3200	BERN	46	C	1254.0	1257.0	18.0	9.4			

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

SEPTEMBER 1989

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	2695	SVTO	4	S/F	1254.0E	1256.0	12.0D	150.0			ST=2 TYP=3
	4995	SVTO	4	S/F	1254.0E	1256.0	13.0D	310.0			ST=2 TYP=3
	3000	POTS	4	S/F	1254.5	1256.8	21.0	125.0			
	2800	OTTA	4	S/F	1254.5	1256.9	15.2	149.2	45.0		
	600	HUMN	45	C	1254.7	1258.7	14.0	645.0	192.0		
	9500	POTS	46	C	1255.0	1300.0		415.0			
	245	SGMR	49	GB	1255.0E	1256.0	1.0D	590.0			ST=2 TYP=6
	1415	SVTO	4	S/F	1255.0E	1258.0	6.0D	170.0			ST=2 TYP=3
	610	SVTO	49	GB	1255.0E	1300.0	9.0D	2700.0			ST=2 TYP=7
	410	SVTO	49	GB	1255.0E	1300.0	9.0D	5700.0			ST=2 TYP=6
	4995	SGMR	4	S/F	1255.0E	1256.0	10.0D	330.0			ST=2 TYP=3
	610	SGMR	49	GB	1255.0E	1258.0	10.0D	4800.0			ST=2 TYP=6
	8800	SGMR	4	S/F	1255.0E	1256.0	10.0D	440.0			ST=2 TYP=3
	15400	SGMR	4	S/F	1255.0E	1256.0	10.0D	360.0			ST=2 TYP=3
	15400	SVTO	4	S/F	1255.0E	1256.0	12.0D	360.0			ST=2 TYP=3
	8800	SVTO	4	S/F	1255.0E	1256.0	12.0D	450.0			ST=2 TYP=3
	127	TORN	48	C	1255.0	1312.0	20.0	360.0	60.0		
	1470	POTS	4	S/F	1255.0	1258.3	15.0	180.0			
	808	ONDR	46	C	1255.0	1257.4	11.0	126.0			
	9500	POTS	46	C	1255.0	1259.5		415.0			
	9500	POTS	46	C	1255.0	1256.5	20.0	415.0			
	2695	SGMR	4	S/F	1256.0E	1256.0	6.0D	140.0			ST=2 TYP=3
	1415	SGMR	8	S	1256.0E	1258.0	2.0D	180.0			ST=2 TYP=3
	3000	POTS	3	S	1333.0	1333.5	1.2	10.0			
	9500	POTS	3	S	1333.5	1333.6	1.5	31.0			
	410	SGMR	8	S	1410.0E	1410.0	1.0D	150.0			ST=3 TYP=3
	245	SVTO	8	S	1446.0E	1447.0	1.0D	630.0			ST=2 TYP=3
	245	SGMR	49	GB	1447.0E	1447.0	U	790.0			ST=2 TYP=6
	245	SGMR	49	GB	1501.0E	1501.0	U	620.0			ST=2 TYP=6
	245	SVTO	49	GB	1501.0E	1501.0	1.0D	600.0			ST=2 TYP=6
	600	HUMN	2	S/F	1524.0	1526.3	5.0	35.0	15.0		
	245	SGMR	49	GB	1525.0E	1525.0	2.0D	2200.0			ST=2 TYP=6
	610	SGMR	8	S	1525.0E	1526.0	2.0D	71.0			ST=2 TYP=3
	410	SGMR	8	S	1525.0E	1526.0	2.0D	300.0			ST=2 TYP=3
	610	SGMR	8	S	1932.0E	1932.0	1.0D	62.0			ST=3 TYP=3
	410	PALE	8	S	2028.0E	2028.0	1.0D	66.0			ST=3 TYP=3
	245	SGMR	8	S	2102.0E	2103.0	1.0D	190.0			ST=2 TYP=3
	410	PALE	8	S	2103.0E	2103.0	U	58.0			ST=3 TYP=3
	245	PALE	8	S	2103.0E	2103.0	U	170.0			ST=3 TYP=3
	410	SGMR	8	S	2103.0E	2103.0	U	61.0			ST=2 TYP=3
	245	SGMR	8	S	2112.0E	2113.0	1.0D	180.0			ST=2 TYP=3
	100	HIRA	41	F	2128.0	2133.0	5.9	940.0			
	245	PALE	8	S	2128.0E	2128.0	1.0D	420.0			ST=3 TYP=3
	410	PALE	8	S	2128.0E	2128.0	1.0D	240.0			ST=3 TYP=3
	410	SGMR	8	S	2128.0E	2128.0	2.0D	220.0			ST=2 TYP=3
	245	SGMR	49	GB	2128.0E	2128.0	1.0D	530.0			ST=2 TYP=6
	500	HIRA	41	F	2128.2	2133.5	17.0	635.0		WR	
	410	SGMR	8	S	2132.0E	2132.0	1.0D	270.0			ST=2 TYP=3
	610	PALE	8	S	2133.0E	2133.0	U	300.0			ST=2 TYP=3
	410	PALE	8	S	2133.0E	2133.0	1.0D	290.0			ST=2 TYP=3
	610	SGMR	8	S	2133.0E	2133.0	U	390.0			ST=2 TYP=3
	245	SGMR	49	GB	2133.0E	2133.0	U	850.0			ST=2 TYP=6
	410	PALE	8	S	2144.0E	2144.0	1.0D	290.0			ST=2 TYP=3
	410	SGMR	8	S	2144.0E	2144.0	1.0D	220.0			ST=2 TYP=3
	245	SGMR	8	S	2159.0E	2159.0	U	100.0			ST=2 TYP=3
	245	PALE	8	S	2218.0E	2219.0	1.0D	320.0			ST=2 TYP=3
	410	PALE	8	S	2218.0E	2219.0	1.0D	150.0			ST=2 TYP=3
	610	PALE	8	S	2218.0E	2219.0	1.0D	39.0			ST=2 TYP=3
	245	SGMR	8	S	2218.0E	2219.0	1.0D	420.0			ST=2 TYP=3
	410	SGMR	8	S	2218.0E	2219.0	1.0D	170.0			ST=2 TYP=3
	610	PALE	8	S	2226.0E	2226.0	U	220.0			ST=2 TYP=3
	410	PALE	8	S	2226.0E	2226.0	U	150.0			ST=2 TYP=3
	610	SGMR	8	S	2226.0E	2226.0	U	190.0			ST=2 TYP=3
	410	SGMR	8	S	2226.0E	2226.0	U	100.0			ST=2 TYP=3
	245	SGMR	8	S	2226.0E	2226.0	U	360.0			ST=2 TYP=3
	100	HIRA	41	F	2300.7	2306.6	54.8	1000.0D			
	245	LEAR	49	GB	2306.0E	2308.0	3.0D	860.0			ST=2 TYP=7
	200	HIRA	42	SER	2306.6	2327.7	33.0	1360.0		O	
	500	HIRA	46	C	2307.0	2308.0	9.5	240.0		WR	

SOLAR RADIO EMISSION
Outstanding Occurrences

SEPTEMBER 1989

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	410	LEAR	49	GB	2307.0E	2308.0	1.0D	1200.0			ST=2 TYP=6
	245	PALE	49	GB	2307.0E	2308.0	2.0D	1200.0			ST=2 TYP=6
	4995	LEAR	8	S	2308.0E	2308.0	U	38.0			ST=2 TYP=3
	1415	LEAR	8	S	2308.0E	2308.0	U	25.0			ST=2 TYP=3
	8800	LEAR	8	S	2308.0E	2308.0	U	45.0			ST=2 TYP=3
	410	PALE	49	GB	2308.0E	2308.0	U	3500.0			ST=2 TYP=6
	500	HIRA	46	C	2318.3	2322.3	33.0	1130.0	90.0		SR
	500	HIRA	46	C	2318.3	2328.8		580.0			SR
	410	LEAR	49	GB	2320.0E	2322.0	5.0D	800.0			ST=2 TYP=6
	410	PALE	49	GB	2320.0E	2322.0	5.0D	1000.0			ST=2 TYP=6
	610	LEAR	4	S/F	2321.0E	2322.0	4.0D	390.0			ST=2 TYP=3
	4995	LEAR	4	S/F	2321.0E	2321.0	3.0D	45.0			ST=2 TYP=3
	1415	LEAR	8	S	2321.0E	2322.0	2.0D	47.0			ST=2 TYP=3
	8800	LEAR	8	S	2321.0E	2323.0	2.0D	27.0			ST=2 TYP=3
	4995	PALE	8	S	2321.0E	2321.0	1.0D	38.0			ST=2 TYP=3
	610	PALE	8	S	2321.0E	2322.0	2.0D	370.0			ST=2 TYP=3
	245	PALE	4	S/F	2321.0E	2323.0	4.0D	180.0			ST=2 TYP=3
	1415	PALE	8	S	2321.0E	2321.0	1.0D	42.0			ST=2 TYP=3
	245	LEAR	8	S	2322.0E	2323.0	2.0D	220.0			ST=2 TYP=3
	245	LEAR	49	GB	2326.0E	2327.0	3.0D	880.0			ST=3 TYP=6
	610	LEAR	8	S	2327.0E	2328.0	2.0D	240.0			ST=2 TYP=3
	245	LEAR	49	GB	2327.0E	2327.0	2.0D	880.0			ST=2 TYP=6
	410	LEAR	8	S	2327.0E	2328.0	2.0D	400.0			ST=2 TYP=3
	245	PALE	49	GB	2327.0E	2328.0	1.0D	1300.0			ST=2 TYP=6
	410	PALE	8	S	2327.0E	2328.0	2.0D	390.0			ST=2 TYP=3
	610	PALE	8	S	2327.0E	2328.0	2.0D	220.0			ST=2 TYP=3
	1415	LEAR	8	S	2328.0E	2328.0	1.0D	41.0			ST=2 TYP=3
	8800	LEAR	8	S	2328.0E	2328.0	U	23.0			ST=2 TYP=3
11	100	GORK	44	NS	0322.0E		518.0D	926.0	7.0		
	200	GORK	44	NS	0327.0E		513.0D		6.0		
	33	UPIC	44	NS	0500.0E		720.0D				
	234	POTS	44	NS	0540.0E	1338.0	564.0D	52.0			
	204	IZMI	43	NS	0600.0		360.0	50.0			
	260	ONDR	44	NS	0600.0E		590.0D				
	245	SGMR	44	NS	1122.0E	1135.0	758.0D	88.0			ST=3 TYP=1
	127	TORN	44	NS	1250.0E		130.0D		13.0		V=2
	245	PALE	44	NS	1640.0E	2004.0	702.0D	250.0			ST=2 TYP=1
	100	HIRA	44	NS	2016.0E	0355.0	750.0D	170.0	54.0		
	200	HIRA	44	NS	2016.0E	0340.0	750.0D	84.0	61.0		SR
	245	LEAR	44	NS	2242.0E	0609.0	678.0D	300.0			ST=2 TYP=1
	245	PALE	8	S	0015.0E	0015.0	U	490.0			ST=3 TYP=3
	2840	PEKG	5	S	0037.0	0039.8	7.0	19.1			
	500	HIRA	46	C	0037.8	0039.5	6.0	115.0			MR
	410	LEAR	8	S	0038.0E	0039.0	2.0D	100.0			ST=2 TYP=3
	410	PALE	8	S	0038.0E	0039.0	2.0D	89.0			ST=2 TYP=3
	610	PALE	8	S	0038.0E	0039.0	2.0D	58.0			ST=2 TYP=3
	610	LEAR	8	S	0039.0E	0039.0	1.0D	58.0			ST=2 TYP=3
	2840	PEKG	29	PBI	0044.0		19.0	4.1			
	610	LEAR	4	S/F	0258.0E	0301.0	7.0D	93.0			ST=2 TYP=5
	410	LEAR	4	S/F	0258.0E	0302.0	7.0D	180.0			ST=2 TYP=5
	500	HIRA	46	C	0258.0	0302.2	5.5	235.0			SR
	2840	PEKG	1	S	0259.0	0303.0	8.0	8.9			
	610	PALE	8	S	0301.0E	0301.0	2.0D	82.0			ST=2 TYP=3
	410	PALE	8	S	0302.0E	0302.0	1.0D	180.0			ST=2 TYP=3
	410	LEAR	8	S	0315.0E	0315.0	U	130.0			ST=2 TYP=3
	245	LEAR	49	GB	0315.0E	0315.0	1.0D	560.0			ST=2 TYP=6
	410	PALE	8	S	0315.0E	0315.0	U	130.0			ST=2 TYP=3
	245	PALE	8	S	0315.0E	0315.0	1.0D	470.0			ST=2 TYP=3
	950	GORK	21	GRF	0336.0E	0428.5	481.6D	27.0			
	650	GORK	20	GRF	0359.0	0603.0	144.9D	7.0			
	100	GORK	4	S/F	0434.4	0434.8	1.6	842.0			
	2950	GORK	22	GRF	0445.8	0504.6	19.3	6.0			
	2840	PEKG	1	S	0446.0	0447.0	3.0	3.7			
	5900	KISV	42	SER	0459.2	0502.0	11.5	15.0			
	5900	KISV	42	SER	0459.2	0504.4		8.0			
	9100	GORK	21	GRF	0459.2	0641.4	198.8	20.0			
	5900	KISV	42	SER	0459.2	0508.5		4.0			
	5900	KISV	42	SER	0459.2	0459.7		12.0			

S O L A R R A D I O E M I S S I O N
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SEPTEMBER 1989

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	950	GORK	22	GRF	0459.5	0508.5	9.9	3.0			
	500	HIRA	42	SER	0501.5	0504.3	3.3	217.0			O
	2950	GORK	20	GRF	0552.6	0641.5	55.4	7.0			
	950	GORK	4	S/F	0555.4	0556.0	1.6	16.0			
	950	GORK	2	S/F	0558.6	0600.0	2.4	5.0			
	234	POTS	8	S	0601.1	0601.2	0.7	550.0			
	950	GORK	2	S/F	0618.6	0619.7	2.0	5.0			
	5900	KISV	22	GRF	0635.7	0641.3	12.1	11.0			
	9300	KISV	2	S/F	0639.7	0641.4	3.3	14.0			
	100	GORK	3	S	0645.0	0646.5	2.4	1805.0			
	536	ONDR	42	SER	0730.0	0830.7	200.0	135.0			
	9100	GORK	1	S	0753.1	0753.5	0.8	28.0			
	5900	KISV	1	S	0753.1	0753.5	0.8	22.0			
	9300	KISV	3	S	0753.1	0753.5	1.2	31.0			
	2950	GORK	1	S	0753.2	0753.5	0.8	11.0			
	3013	IZMI	1	S	0753.2	0753.5	0.8	13.0	6.0		
	9500	POTS	8	S	0753.2	0753.5	0.8	20.0			
	3000	POTS	8	S	0753.5	0753.5	0.5	12.0			
	950	GORK	4	S/F	0757.7	0758.0	2.9	23.0			
	650	GORK	4	S/F	0757.7	0758.0	1.4	2.0			
	808	ONDR	42	SER	0757.7	0830.5	34.0	28.0			
	410	LEAR	8	S	0828.0E	0830.0	2.0D	260.0			ST=2 TYP=3
	204	IZMI	45	C	0828.5	0830.6	3.3	980.0			
	200	HIRA	46	C	0829.3	0830.0	2.0	1540.0U			O SUNSET
	200	GORK	4	S/F	0829.6	0830.3	2.4	926.0			
	950	GORK	4	S/F	0829.6	0830.4	2.7	73.0			
	245	LEAR	49	GB	0830.0E	0830.0	1.0D	1000.0			ST=2 TYP=6
	610	LEAR	8	S	0830.0E	0830.0	U	99.0			ST=2 TYP=3
	610	SVTO	8	S	0830.0E	0830.0	U	95.0			ST=2 TYP=3
	410	SVTO	8	S	0830.0E	0830.0	U	230.0			ST=2 TYP=3
	1415	LEAR	4	S/F	0830.0E	0830.0	930.0D	20.0			ST=1 TYP=3
	245	SVTO	49	GB	0830.0E	0830.0	930.0D	1200.0			ST=1 TYP=6
	234	POTS	4	S/F	0830.0	0830.1	1.8	2400.0			
	40	POTS	41	F	0830.0	0831.5	2.2	3400.0			
	1470	POTS	4	S/F	0830.0	0830.6	1.5	18.0			
	650	GORK	4	S/F	0830.1	0830.4	0.7	125.0			
	3013	IZMI	2	S/F	0830.3	0831.0	1.3	7.0	4.0		
	2950	GORK	1	S	0830.4	0830.5	0.4	5.0			
	950	GORK	1	S	0859.6	0859.9	0.4	7.0			
	100	GORK	3	S	0922.0	0923.0	2.6	722.0			
	410	LEAR	8	S	0931.0E	0932.0	1.0D	34.0			ST=2 TYP=3
	950	GORK	4	S/F	0931.7	0933.2	2.9	46.0			
	650	GORK	4	S/F	0931.7	0932.8	2.0	83.0			
	600	HUMN	2	S/F	0932.0	0933.0	2.5	50.0	15.0		
	610	LEAR	8	S	0932.0E	0932.0	1.0D	67.0			ST=2 TYP=3
	610	SVTO	8	S	0932.0E	0932.0	1.0D	76.0			ST=2 TYP=3
	808	ONDR	4	S/F	0932.5	0932.9	2.6	34.0			
	950	GORK	4	S/F	1002.0E	1005.0	3.6D	15.0			
	9100	GORK	22	GRF	1005.3	1146.6	1146.6	21.0			
	2950	GORK	20	GRF	1013.9	1021.0	19.0	11.0			
	100	GORK	4	S/F	1014.3	1020.5	7.1	842.0			
	950	GORK	22	GRF	1016.2	1025.6	15.9	10.0			
	600	HUMN	4	S/F	1019.0	1021.4	12.0	60.0	18.0		
	808	ONDR	41	F	1020.0	1026.0	11.0	8.0			
	650	GORK	4	S/F	1028.7	1030.0	2.2	26.0			
	950	GORK	2	S/F	1036.5	1037.3	1.6	7.0			
	5900	KISV	1	S	1036.9	1037.2	1.8	13.0			
	2950	GORK	1	S	1037.0	1037.2	0.7	9.0			
	1470	POTS	40	F	1105.0	1109.3	7.0	6.0			
	2950	GORK	2	S/F	1107.9	1109.2	3.8	19.0			
	3000	POTS	3	S	1108.0	1109.3	3.5	17.0			
	5900	KISV	3	S	1108.1	1109.2	3.7	15.0			
	9300	KISV	1	S	1108.6	1109.4	2.3	7.0			
	9300	KISV	1	S	1124.6	1125.0	1.1	7.0			
	5900	KISV	45	C	1138.1	1138.5		4.0			
	5900	KISV	45	C	1138.1	1138.7	2.0	5.0			
	9500	POTS	20	GRF	1142.0	1146.0	18.0	9.0			
	1470	POTS	4	S/F	1142.0	1146.2	12.0	83.0			
	950	GORK	4	S/F	1142.0	1146.5	6.3	32.0			

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SEPTEMBER 1989

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	3000	POTS	4	S/F	1142.0	1146.5	13.0	38.0			
	808	ONDR	45	C	1142.9	1146.6	6.5	32.0			
	3200	BERN	4	S/F	1143.0	1146.5	10.0	2.6			
	5200	BERN	4	S/F	1143.0	1146.5	10.0	1.6			
	8400	BERN	4	S/F	1143.0	1146.5	10.0	1.4			
	9300	KISV	45	C	1143.1	1146.1		13.0			
	9300	KISV	45	C	1143.1	1146.7	8.8	14.0			
	3013	IZMI	22	GRF	1143.5	1146.5	9.2	34.0	15.0		
	2950	GORK	4	S/F	1143.5	1146.5	10.2	39.0			
	5900	KISV	45	C	1143.8	1146.1		20.0			
	5900	KISV	45	C	1143.8	1146.8	9.2	21.0			
	1415	SVTO	4	S/F	1144.0E	1145.0	3.0D	66.0			ST=2 TYP=3
	650	GORK	4	S/F	1144.2	1145.9	3.3	10.0			
	234	POTS	4	S/F	1144.9	1145.1	1.0	385.0			
	2695	SGMR	8	S	1145.0E	1145.0	1.0D	55.0			ST=2 TYP=3
	245	SGMR	49	GB	1145.0E	1145.0	U	690.0			ST=2 TYP=6
	245	SVTO	49	GB	1145.0E	1145.0	U	650.0			ST=2 TYP=6
	950	GORK	29	PBI	1148.3	1148.3	9.1	6.0			
	204	IZMI	8	S	1158.0	1158.2	0.4	450.0	200.0		
	536	ONDR	42	SER	1250.0	1436.2	110.0	102.0			
	1470	POTS	2	S/F	1307.0	1308.5	2.5	4.0			
	3000	POTS	4	S/F	1307.5	1308.3	1.5	8.0			
	3000	POTS	3	S	1339.5	1341.0	3.0	8.0			
	808	ONDR	41	F	1340.0	1341.5	2.5	15.0			
	1470	POTS	3	S	1340.0	1340.7	3.0	9.0			
	234	POTS	42	SER	1355.7	1406.8	11.5	165.0			
	245	SGMR	8	S	1359.0E	1359.0	U	370.0			ST=2 TYP=3
	245	SVTO	8	S	1359.0E	1359.0	U	360.0			ST=2 TYP=3
	245	SGMR	8	S	1406.0E	1406.0	1.0D	200.0			ST=2 TYP=3
	245	SVTO	8	S	1406.0E	1407.0	1.0D	150.0			ST=2 TYP=3
	410	SGMR	8	S	1429.0E	1429.0	U	58.0			ST=2 TYP=3
	410	SVTO	8	S	1429.0E	1429.0	U	98.0			ST=2 TYP=3
	610	SGMR	8	S	1551.0E	1553.0	2.0D	130.0			ST=2 TYP=3
	600	HUMN	2	S/F	1552.0	1553.0	1.4	65.0	25.0		
	245	SGMR	8	S	1552.0E	1552.0	U	88.0			ST=2 TYP=3
	245	SVTO	8	S	1632.0E	1633.0	1.0D	180.0			ST=2 TYP=3
	245	SGMR	8	S	1745.0E	1745.0	U	230.0			ST=2 TYP=3
	2800	OTTA	22	GRF	1813.0	1824.0	53.0	14.6	5.0		
	610	SGMR	4	S/F	1818.0E	1823.0	7.0D	160.0			ST=2 TYP=5
	610	SGMR	8	S	1825.0E	1826.0	2.0D	61.0			ST=2 TYP=3
	410	SGMR	8	S	1832.0E	1833.0	2.0D	75.0			ST=3 TYP=3
	245	SGMR	49	GB	1832.0E	1832.0	1.0D	990.0			ST=3 TYP=6
	245	SGMR	8	S	1848.0E	1849.0	2.0D	200.0			ST=2 TYP=3
	610	SGMR	8	S	1900.0E	1900.0	U	53.0			ST=2 TYP=3
	410	SGMR	49	GB	1900.0E	1900.0	1.0D	3100.0			ST=2 TYP=6
	2800	OTTA	4	S/F	1939.0	1941.1	26.0	462.0	139.0		
	1415	PALE	49	GB	1939.0E	1941.0	9.0D	510.0			ST=2 TYP=6
	4995	PALE	49	GB	1939.0E	1940.0	9.0D	550.0			ST=2 TYP=6
	8800	PALE	49	GB	1939.0E	1940.0	9.0D	540.0			ST=2 TYP=6
	2695	PALE	4	S/F	1939.0E	1940.0	9.0D	480.0			ST=2 TYP=3
	15400	PALE	20	GRF	1939.0E	1940.0	11.0D	380.0			ST=2 TYP=2
	1415	SGMR	49	GB	1939.0E	1941.0	10.0D	650.0			ST=2 TYP=6
	2695	SGMR	49	GB	1939.0E	1940.0	10.0D	500.0			ST=2 TYP=6
	15400	SGMR	4	S/F	1939.0E	1940.0	13.0D	400.0			ST=3 TYP=5
	610	SGMR	49	GB	1939.0E	1942.0	14.0D	1900.0			ST=2 TYP=6
	8800	SGMR	49	GB	1939.0E	1940.0	13.0D	690.0			ST=2 TYP=6
	4995	SGMR	49	GB	1939.0E	1940.0	261.0D	790.0			ST=3 TYP=6
	410	SGMR	49	GB	1939.0E	1940.0	261.0D	1800.0			ST=3 TYP=6
	245	SGMR	49	GB	1939.0E	1940.0	261.0D	8700.0			ST=3 TYP=6
	245	PALE	49	GB	1941.0E	1944.0	5.0D	14000.0			ST=3 TYP=6
	410	PALE	49	GB	1941.0E	1944.0	9.0D	960.0			ST=3 TYP=7
	245	PALE	8	S	2019.0E	2020.0	1.0D	310.0			ST=2 TYP=3
	245	SGMR	8	S	2019.0E	2019.0	1.0D	3.0			ST=2 TYP=3
	410	SGMR	8	S	2019.0E	2019.0	1.0D	160.0			ST=2 TYP=3
	245	PALE	8	S	2023.0E	2023.0	U	320.0			ST=2 TYP=3
	245	SGMR	4	S/F	2023.0E	2023.0	217.0D	320.0			ST=3 TYP=3
	245	SGMR	8	S	2102.0E	2102.0	U	150.0			ST=2 TYP=3
	410	SGMR	8	S	2102.0E	2102.0	U	72.0			ST=2 TYP=3
	245	SGMR	8	S	2123.0E	2123.0	U	250.0			ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Mean	Int	Remarks
11	500	HIRA	42	SER	2146.0	2158.8	14.1	40.0			MR
	410	SGMR	8	S	2153.0E	2153.0	U	260.0			ST=2 TYP=3
	410	LEAR	49	GB	2242.0E	2242.0	1.0D	1200.0			ST=3 TYP=6
	410	PALE	49	GB	2242.0E	2242.0	1.0D	1200.0			ST=2 TYP=6
	410	PALE	8	S	2244.0E	2244.0	U	300.0			ST=2 TYP=3
	410	LEAR	4	S/F	2246.0E	2248.0	5.0D	230.0			ST=2 TYP=3
	410	PALE	8	S	2247.0E	2247.0	1.0D	250.0			ST=2 TYP=3
	610	LEAR	4	S/F	2250.0E	2251.0	3.0D	91.0			ST=2 TYP=3
	4995	LEAR	4	S/F	2342.0E	2345.0	5.0D	160.0			ST=2 TYP=3
	4995	PALE	4	S/F	2343.0E	2345.0	7.0D	160.0			ST=2 TYP=3
	8800	LEAR	4	S/F	2344.0E	2345.0	3.0D	180.0			ST=2 TYP=3
	15400	LEAR	4	S/F	2344.0E	2345.0	3.0D	89.0			ST=2 TYP=3
	8800	PALE	4	S/F	2344.0E	2345.0	3.0D	180.0			ST=2 TYP=3
	17000	NOBE	20	GRF	2344.1	2345.9	20.0	46.0			0,80,35GHz:O
	200	HIRA	46	C	2344.9	2345.5	2.4	1045.0			O
	2695	LEAR	8	S	2345.0E	2345.0	1.0D	33.0			ST=2 TYP=3
	245	LEAR	49	GB	2345.0E	2345.0	5.0D	4100.0			ST=2 TYP=6
	410	LEAR	8	S	2345.0E	2345.0	1.0D	63.0			ST=3 TYP=3
	2695	PALE	8	S	2345.0E	2346.0	1.0D	29.0			ST=2 TYP=3
	15400	PALE	8	S	2345.0E	2345.0	1.0D	39.0			ST=2 TYP=3
	245	PALE	49	GB	2345.0E	2345.0	1.0D	4600.0			ST=2 TYP=6
12	200	GORK	44	NS	0327.0E		513.0D		6.0		
	100	GORK	44	NS	0327.0E		513.0D		6.0		
	260	ONDR	44	NS	0600.0E	1345.5	590.0D	139.0			
	127	TORN		NS	0620.0E		520.0D		30.0		V=1
	245	SVTO	44	NS	0810.0E	0834.0	950.0D	55.0			ST=1 TYP=1
	245	SGMR	44	NS	1500.0E	1500.0	540.0D	240.0			ST=3 TYP=1
	245	PALE	44	NS	1707.0E	1811.0	674.0D	150.0			ST=2 TYP=1
	200	HIRA	44	NS	2017.0E	0425.0	750.0D	74.0	50.0		SR
	100	HIRA	44	NS	2017.0E	0520.0	750.0D	180.0	59.0		
	100	HIRA	46	C	0029.7	0029.8	4.6	920.0			WR
	245	LEAR	8	S	0030.0E	0031.0	1.0D	200.0			ST=2 TYP=3
	500	HIRA	42	SER	0030.8	0031.9	3.8	56.0			MR
	245	PALE	8	S	0031.0E	0031.0	U	390.0			ST=2 TYP=3
	245	LEAR	8	S	0034.0E	0034.0	U	160.0			ST=2 TYP=3
	200	HIRA	46	C	0046.2	0052.9	15.2	135.0			SR
	950	GORK	23	GRF	0336.0E	0509.0	369.0D	11.0			
	650	GORK	21	GRF	0342.0E	0536.0	132.0D	3.0			
	2840	PEKG	45	C	0356.0	0358.0	12.0	221.0			
	2840	PEKG	29	PBI	0408.0		19.0	25.7			
	2950	GORK	21	GRF	0427.0	1012.0	453.0D	67.0			
	2840	PEKG	45	C	0428.0	0434.5	15.0	104.0			
	2850	CRIM	45	C	0455.0	0501.2		152.0			
	2850	CRIM	45	C	0455.0	0459.5	15.4	160.0	55.0		
	2850	CRIM	45	C	0455.0	0500.7		164.0			
	2850	CRIM	45	C	0455.0	0459.8		161.0			
	5900	KISV	46	C	0455.2	0503.1		73.0			
	5900	KISV	46	C	0455.2	0501.4		84.0			
	5900	KISV	46	C	0455.2	0500.6		87.0			
	5900	KISV	46	C	0455.2	0459.6	18.6	109.0			
	2695	LEAR	4	S/F	0457.0E	0500.0	13.0D	180.0			ST=2 TYP=3
	9100	GORK		GRF	0457.0	1013.1	425.0D	80.0			
	2950	GORK	46	C	0457.2	0501.3		117.0			
	2950	GORK	46	C	0457.2	0459.4	9.7	134.0			
	2950	GORK	46	C	0457.2	0500.6		136.0			
	9300	KISV	45	C	0457.3	0502.2		45.0			
	9300	KISV	45	C	0457.3	0459.5	14.3	105.0			
	9100	GORK	4	S/F	0457.7	0459.4	7.3	95.0			
	8800	LEAR	4	S/F	0458.0E	0459.0	12.0D	96.0			ST=2 TYP=3
	4995	LEAR	4	S/F	0458.0E	0500.0	12.0D	89.0			ST=2 TYP=3
	950	GORK	22	GRF	0458.7	0500.5	9.7	14.0			
	15400	LEAR	8	S	0459.0E	0459.0	1.0D	30.0			ST=2 TYP=3
	1415	LEAR	4	S/F	0459.0E	0500.0	11.0D	56.0			ST=2 TYP=3
	15000	KISV	45	C	0459.1	0502.2		11.0			
	15000	KISV	45	C	0459.1	0459.7	4.4	15.0			
	650	GORK	46	C	0459.2	0500.1		19.0			
	650	GORK	46	C	0459.2	0502.3		8.0			
	650	GORK	46	C	0459.2	0459.4	7.7	38.0			

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Outstanding Occurrences

SEPTEMBER 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
12	500	HIRA	41	F	0501.8	0502.2	6.0	98.0			MR
	410	LEAR	8	S	0502.0E	0502.0	U	72.0			ST=2 TYP=3
	5900	KISV	2	S/F	0516.4	0517.0	1.8	16.0			
	9300	KISV	2	S/F	0516.4	0517.0	1.5	14.0			
	5900	KISV	2	S/F	0522.5	0523.6	5.9	13.0			
	9300	KISV	2	S/F	0523.0	0523.6	19.0	7.0			
	950	GORK	4	S/F	0530.0	0534.4	7.2	79.0			
	2850	CRIM	45	C	0532.0	0535.0		75.0			
	1415	LEAR	4	S/F	0532.0E	0533.0	5.0D	120.0			ST=2 TYP=3
	245	LEAR	8	S	0532.0E	0533.0	1.0D	120.0			ST=2 TYP=3
	8800	LEAR	4	S/F	0532.0E	0534.0	4.0D	41.0			ST=2 TYP=3
	2850	CRIM	45	C	0532.0	0534.5	6.5	80.0	27.0		
	9300	KISV	4	S/F	0532.1	0534.5	7.8	30.0			
	2950	GORK	45	C	0532.4	0535.0		42.0			
	2950	GORK	45	C	0532.4	0534.5	5.6	48.0			
	5900	KISV	4	S/F	0532.6	0534.3	5.7	22.0			
	9100	GORK	1	S	0532.6	0534.6	7.4	24.0			
	4995	LEAR	8	S	0533.0E	0534.0	2.0D	31.0			ST=2 TYP=3
	15400	LEAR	8	S	0534.0E	0534.0	1.0D	23.0			ST=2 TYP=3
	9300	KISV	21	GRF	0546.2	0555.2	15.5	12.0			
	204	IZMI	41	F	0600.0		360.0		40.0		
	5900	KISV	4	S/F	0608.0	0610.2	7.4	21.0			
	9300	KISV	2	S/F	0608.4	0610.4	6.0	25.0			
	950	GORK	5	S	0609.0	0610.6	3.1	5.0			
	9100	GORK	1	S	0609.1	0610.7	3.5	19.0			
	2950	GORK	1	S	0609.3	0610.2	3.0	9.0			
	650	GORK	23	GRF	0705.4	0848.6	127.2U	11.0			
	245	LEAR	49	GB	0710.0E	0710.0	U	710.0			ST=2 TYP=6
	9500	POTS	20	GRF	0715.0	0751.0	135.0	36.0			
	3000	POTS	20	GRF	0715.0	0751.0	135.0	81.0			
	500	HIRA	46	C	0715.3	0717.5	8.5	35.0			MR
	650	GORK	3	S	0715.6	0718.0	7.2	15.0			
	5900	KISV	25	R	0720.9	0834.3		40.0			
	9300	KISV	25	R	0722.5	0813.4		38.0			
	3013	IZMI	20	GRF	0727.0	0750.0	80.0	75.0	30.0		
	1470	POTS	20	GRF	0730.0	0747.5	90.0	62.0			
	650	GORK	22	GRF	0730.4	0751.6	34.8	155.0			
	15000	KISV	22	GRF	0732.9	0750.7	63.5	21.0			
	950	GORK	20	GRF	0737.0	0745.4	32.0	29.0			
	1415	LEAR	20	GRF	0740.0E	0748.0	22.0D	60.0			ST=2 TYP=2
	4995	LEAR	20	GRF	0740.0E	0751.0	30.0D	65.0			ST=2 TYP=2
	2950	GORK	20	GRF	0740.5	0751.0	31.7	38.0			
	5900	KISV	22	GRF	0741.1	0750.0	32.6	40.0			
	204	IZMI	41	F	0741.2	0753.6	70.0	450.0			
	8800	LEAR	20	GRF	0742.0E	0750.0	16.0D	35.0			ST=2 TYP=2
	9300	KISV	22	GRF	0742.7	0750.6	18.7	18.0			
	100	GORK	4	S/F	0748.5	0750.0	7.4	2068.0			
	200	GORK	4	S/F	0750.4	0753.5	6.7	192.0			
	3013	IZMI	20	GRF	1000.0	1006.2	12.0	122.0	60.0		
	3000	POTS	4	S/F	1002.0U	1006.1	48.0U	96.0			
	5900	KISV	29	PBI	1002.5	1011.1	56.9	68.0			
	5900	KISV	47	GB	1002.5	1006.5	8.6	186.0			
	4995	SVTO	4	S/F	1003.0E	1006.0	8.0D	170.0			ST=2 TYP=3
	2695	SVTO	4	S/F	1003.0E	1006.0	18.0D	150.0			ST=2 TYP=3
	2950	GORK	46	C	1003.3	1005.2	7.6	87.0			
	2950	GORK	46	C	1003.3	1006.3		103.0			
	2950	GORK	46	C	1003.3	1007.4		62.0			
	808	ONDR	3	S	1003.5	1007.4	10.0	14.0			
	9500	POTS	29	PBI	1003.5	1006.5	47.0	100.0			
	1470	POTS	4	S/F	1003.5	1006.7	22.0	93.0			
	5200	BERN	4	S/F	1003.6	1006.3	6.0	13.0			
	3200	BERN	4	S/F	1003.6	1006.3	6.0	7.3			
	11800	BERN	4	S/F	1003.6	1006.3	6.0	9.0			
	8400	BERN	4	S/F	1003.6	1006.3	6.0	11.5			
	15000	KISV	29	PBI	1003.6	1015.3	43.0	68.0			
	9300	KISV	45	C	1003.6	1005.4		86.0			
	9300	KISV	45	C	1003.6	1006.4	5.3	126.0			
	15000	KISV	4	S/F	1003.6	1006.6	11.9	83.0			
	9300	KISV	29	PBI	1003.6	1008.9	50.1	43.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

SEPTEMBER 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
12	9100	GORK	4	S/F	1003.7	1006.5	7.5	96.0			
	1415	SVTO	4	S/F	1004.0E	1006.0	4.0D	78.0			ST=2 TYP=3
	8800	SVTO	4	S/F	1004.0E	1006.0	15.0D	120.0			ST=2 TYP=3
	950	GORK	4	S/F	1004.0E	1006.5	11.0D	31.0			
	600	HUMN	4	S/F	1005.0	1010.0	9.0	32.0	9.0		
	15400	SVTO	4	S/F	1005.0E	1006.0	19.0D	69.0			ST=2 TYP=3
	650	GORK	46	C	1005.3E	1008.3	7.0D	28.0			
	650	GORK	46	C	1005.3E	1009.6		41.0			
	536	ONDR	42	SER	1005.5	1008.7	10.0	60.0			
	2950	GORK	1	S	1036.0	1036.5	1.7	7.0			
	536	ONDR	3	S	1124.6	1125.4	3.0	9.0			
	5900	KISV	2	S/F	1154.8	1155.5	6.7	11.0			
	33	UPIC	3	S	1340.4	1340.6	0.6				
	610	SGMR	8	S	1810.0E	1811.0	2.0D	50.0			ST=2 TYP=3
	610	PALE	8	S	1811.0E	1811.0	1.0D	41.0			ST=2 TYP=3
	410	PALE	49	GB	1811.0E	1811.0	7.0D	860.0			ST=2 TYP=6
	410	SGMR	49	GB	1811.0E	1811.0	7.0D	940.0			ST=2 TYP=6
	500	HIRA	41	F	2114.2	2115.5	5.3	57.0		MR	
	410	PALE	8	S	2115.0E	2115.0	1.0D	100.0			ST=2 TYP=3
	410	SGMR	8	S	2115.0E	2115.0	1.0D	73.0			ST=2 TYP=3
	410	SGMR	8	S	2122.0E	2122.0	U	54.0			ST=2 TYP=3
	410	SGMR	8	S	2228.0E	2228.0	U	210.0			ST=2 TYP=3
	200	HIRA	46	C	2351.2	2353.6	5.3	320.0		WR	
	245	LEAR	49	GB	2352.0E	2354.0	3.0D	1500.0			ST=2 TYP=6
	245	PALE	49	GB	2353.0E	2354.0	1.0D	1200.0			ST=3 TYP=6
	410	PALE	8	S	2355.0E	2356.0	2.0D	70.0			ST=2 TYP=3
13	100	GORK	44	NS	0327.0E		513.0D		553.0		
	200	GORK	44	NS	0327.0E		513.0D		6.0		
	245	SVTO	44	NS	0447.0E	0447.0	1153.0D	94.0			ST=1 TYP=1
	204	IZMI	43	NS	0600.0		360.0	45.0			
	260	ONDR	44	NS	0600.0E	1343.6	570.0D	155.0			
	127	TORN	44	NS	0620.0E	1444.7	520.0D	1800.0	265.0	V=1	
	245	SGMR	44	NS	1852.0E	2030.0	224.0D	170.0			ST=2 TYP=1
	245	PALE	44	NS	1940.0E	2057.0	95.0D	170.0			ST=2 TYP=1
	100	HIRA	44	NS	2017.0E	0505.0	750.0D	240.0	110.0		
	200	HIRA	44	NS	2017.0E	2326.0	750.0D	46.0	19.0	MR	
	2840	PEKG	45	C	0104.0	0109.0	13.0	17.7			
	2840	PEKG	47	GB	0328.0	0334.5	12.0	518.0			
	950	GORK	23	GRF	0330.0E	0445.0	164.0D	15.0			
	2695	PALE	4	S/F	0332.0E	0334.0	9.0D	450.0			ST=2 TYP=3
	9100	GORK	4	S/F	0332.1	0336.1	6.5	135.0			
	650	GORK	23	GRF	0332.5E	0412.0	273.5D	8.0			
	2695	LEAR	4	S/F	0333.0E	0334.0	6.0D	400.0			ST=2 TYP=3
	1415	LEAR	4	S/F	0333.0E	0334.0	6.0D	180.0			ST=2 TYP=3
	1415	PALE	4	S/F	0333.0E	0334.0	6.0D	190.0			ST=2 TYP=3
	8800	PALE	4	S/F	0333.0E	0335.0	5.0D	130.0			ST=2 TYP=3
	4995	PALE	4	S/F	0333.0E	0334.0	5.0D	270.0			ST=2 TYP=3
	4995	LEAR	4	S/F	0333.0E	0334.0	10.0D	270.0			ST=2 TYP=3
	8800	LEAR	4	S/F	0333.0E	0336.0	10.0D	150.0			ST=2 TYP=3
	15400	LEAR	4	S/F	0333.0E	0336.0	1227.0D	91.0			ST=1 TYP=3
	950	GORK	4	S/F	0333.0	0336.2	5.5U	67.0			
	17000	NOBE	20	GRF	0333.3	0336.3	30.0	69.0			6L,80,35GH*Z;NO
	650	GORK	4	S/F	0333.3	0333.7	2.6	103.0			
	500	HIRA	46	C	0334.0	0335.0		110.0		WL	
	500	HIRA	46	C	0334.0	0402.4	60.5	121.0	22.0	MR	
	500	HIRA	46	C	0334.0	0347.7		50.0		WR	
	15400	LEAR	4	S/F	0335.0E	0336.0	8.0D	91.0			ST=2 TYP=3
	15400	PALE	4	S/F	0335.0E	0336.0	1225.0D	34.0			ST=1 TYP=3
	9100	GORK	29	PBI	0338.6	0338.6	63.4	53.0			
	2840	PEKG	29	PBI	0340.0		14.0D				
	610	LEAR	4	S/F	0343.0E	0347.0	6.0D	160.0			ST=2 TYP=3
	650	GORK	47	GB	0343.8	0404.3		155.0			
	650	GORK	47	GB	0343.8	0344.5	25.2	209.0			
	410	LEAR	4	S/F	0344.0E	0347.0	4.0D	120.0			ST=2 TYP=3
	610	PALE	4	S/F	0344.0E	0347.0	6.0D	170.0			ST=2 TYP=3
	950	GORK	46	C	0344.0	0347.6		49.0			
	950	GORK	46	C	0344.0	0345.9	2.5	57.0			
	245	LEAR	49	GB	0345.0E	0347.0	3.0D	3500.0			ST=2 TYP=6

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

SEPTEMBER 1989

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	245	PALE	49	GB	0347.0E	0347.0	1.0D	1600.0			ST=3 TYP=6
	410	PALE	8	S	0347.0E	0347.0	1.0D	290.0			ST=2 TYP=3
	610	PALE	4	S/F	0353.0E	0404.0	14.0D	150.0			ST=2 TYP=5
	610	LEAR	4	S/F	0400.0E	0404.0	7.0D	150.0			ST=2 TYP=3
	410	LEAR	8	S	0403.0E	0404.0	2.0D	35.0			ST=2 TYP=3
	950	GORK	46	C	0403.1	0405.1	7.3	9.0			
	950	GORK	46	C	0403.1	0407.5		17.0			
	100	HIRA	42	SER	0419.8	0428.4	17.8	540.0			
	950	GORK	2	S/F	0421.5	0422.3	2.7	7.0			
	650	GORK	3	S	0421.9	0424.0	3.9	7.0			
	950	GORK	45	C	0456.0	0506.0		2.0			
	950	GORK	45	C	0456.0	0459.2	10.9	4.0			
	9100	GORK	20	GRF	0518.0	0711.3	260.7	9.0			
	2950	GORK	20	GRF	0629.2	0632.1	66.8	9.0			
	5900	KISV	22	GRF	0630.7	0635.0	23.3	9.0			
	2850	CRIM	20	GRF	0631.3	0632.0	28.7	7.0	3.0		
	9300	KISV	20	GRF	0638.3	0644.7	19.0	7.0			
	100	GORK	41	F	0856.3	0908.3		1303.0			
	100	GORK	41	F	0856.3	0857.4	13.9	355.0			
	536	ONDR	47	GB	0900.0		65.0				
	204	IZMI	41	F	0903.9	0904.5	1.0	300.0			
	2950	GORK	20	GRF	0905.5	0908.2	10.8	9.0			
	33	UPIC	45	C	0907.8	0908.3	0.9				
	536	ONDR	42	SER	1031.0	1031.3	8.0	9.0			
	2950	GORK	1	S	1146.2	1147.2	3.1	12.0			
	2850	CRIM	1	S	1146.3	1147.1	2.0	13.0	4.0		
	3013	IZMI	5	S	1146.3	1147.2	3.2	10.0	6.0		
	3200	BERN	3	S	1146.5	1147.1	2.0	7.2			
	1470	POTS	1	S	1146.5	1147.2	1.5	3.0			
	3000	POTS	3	S	1146.5	1147.3	2.5	11.0			
	5900	KISV	1	S	1201.6	1202.3	3.0	6.0			
	808	ONDR	3	S	1231.1	1232.0	4.0	7.0			
	536	ONDR	41	F	1257.7	1258.6	35.0	60.0			
	234	POTS	4	S/F	1342.7	1343.1	1.7	150.0			
	245	SGMR	8	S	1343.0E	1343.0	U	120.0			ST=2 TYP=3
	1470	POTS	3	S	1343.0	1343.5	7.0	17.0			
	3000	POTS	3	S	1343.0	1343.7	7.0	20.0			
	30	POTS	4	S/F	1343.1	1343.9	2.1	4000.0			
	33	UPIC	46	C	1343.4	1344.2	1.8				
	245	PALE	8	S	1725.0E	1725.0	U	61.0			ST=2 TYP=3
	245	PALE	8	S	1852.0E	1852.0	1.0D	71.0			ST=2 TYP=3
	245	PALE	8	S	1942.0E	1942.0	U	82.0			ST=3 TYP=3
	245	PALE	8	S	2128.0E	2129.0	1.0D	100.0			ST=3 TYP=3
	245	SGMR	8	S	2129.0E	2129.0	U	87.0			ST=2 TYP=3
	245	LEAR	4	S/F	2238.0E	2240.0	7.0D	63.0			ST=2 TYP=3
14	200	GORK	44	NS	0323.0E		517.0D		5.0		
	100	GORK	44	NS	0326.0E		514.0D		13.0		
	410	SVTO	43	NS	0518.0	0525.0	42.0D	53.0			ST=2 TYP=1
	204	IZMI	43	NS	0600.0		360.0	20.0			
	260	ONDR	44	NS	0600.0E	1437.3	570.0D	247.0			
	127	TORN	44	NS	0620.0E		520.0D		30.0	V=1	
	245	SVTO	44	NS	0631.0E	0639.0	359.0D	83.0			ST=2 TYP=1
	245	SGMR	44	NS	1152.0E	1159.0	293.0D	67.0			ST=3 TYP=1
	200	HIRA	44	NS	2019.0E	2100.0	750.0D	20.0	8.0	MR	
	245	LEAR	8	S	0031.0E	0032.0	1.0D	89.0			ST=2 TYP=3
	245	LEAR	4	S/F	0038.0E	0039.0	3.0D	190.0			ST=2 TYP=3
	245	LEAR	8	S	0329.0E	0331.0	2.0D	34.0			ST=2 TYP=3
	410	LEAR	8	S	0331.0E	0331.0	1.0D	190.0			ST=2 TYP=3
	9300	KISV	22	GRF	0533.2	0539.0	18.0	17.0			
	9100	GORK	21	GRF	0533.3	0712.9	389.7D	42.0			
	5900	KISV	22	GRF	0535.5	0539.0	20.0	7.0			
	245	LEAR	8	S	0538.0E	0539.0	1.0D	90.0			ST=2 TYP=3
	200	GORK	4	S/F	0538.5	0539.8	3.2	38.0			
	245	SVTO	8	S	0539.0E	0539.0	1.0D	72.0			ST=2 TYP=3
	950	GORK	8	S	0619.4	0619.6	0.5	12.0			
	3000	POTS	4	S/F	0655.0	0702.0	10.0	62.0			
	9300	KISV	47	GB	0655.5E	0700.2	11.2D	1071.0			
	9300	KISV	29	PBI	0655.5E	0706.7	107.3D	59.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

SEPTEMBER 1989

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	5900	KISV	47	GB	0655.7	0700.3	10.3	632.0			
	5900	KISV	29	PBI	0655.7	0706.8	165.4	57.0			
	2840	PEKG	45	C	0657.0	0702.0	12.0	61.6			
	3013	IZMI	22	GRF	0657.5	0700.0	9.5	80.0	40.0		
	500	HIRA	46	C	0658.0	0700.0	9.5	13.0		O	
	1415	LEAR	4	S/F	0658.0E	0701.0	6.0D	50.0			ST=2 TYP=3
	15400	LEAR	49	GB	0658.0E	0700.0	13.0D	980.0			ST=2 TYP=6
	8800	LEAR	49	GB	0658.0E	0700.0	13.0D	980.0			ST=2 TYP=6
	4995	LEAR	4	S/F	0658.0E	0700.0	13.0D	350.0			ST=2 TYP=3
	9100	GORK	47	GB	0658.0	0700.1	12.6	1009.0			
	9500	POTS	4	S/F	0658.0	0700.1	27.0	690.0			
	650	GORK	46	C	0658.2	0700.1		72.0			
	650	GORK	46	C	0658.2	0659.4U	6.4	80.0D			
	650	GORK	46	C	0658.2	0659.9U		80.0D			
	2950	GORK	46	C	0658.3	0700.2	6.7	55.0			
	2950	GORK	46	C	0658.3	0703.2		46.0			
	2850	CRIM	45	C	0658.3	0703.3		50.0			
	2850	CRIM	45	C	0658.3	0700.3	7.0	56.0	21.0		
	2850	CRIM	45	C	0658.3	0701.8		62.0			
	2950	GORK	46	C	0658.3	0701.8		59.0			
	35000	NOBE	45	C	0658.6		10.0	557.0D			3L,80GHz:NO OBS
	17000	NOBE	45	C	0658.6	0700.2	10.0	617.0			12L
	950	GORK	46	C	0658.7	0700.0		18.0			
	950	GORK	46	C	0658.7	0701.5		12.0			
	950	GORK	46	C	0658.7	0659.6	5.7	42.0			
	35000	BERN	47	GB	0659.0	0700.0	8.0	57.4			
	3200	BERN	47	GB	0659.0	0700.0	8.0	8.8			
	11800	BERN	47	GB	0659.0	0700.0	8.0	88.4			
	19600	BERN	47	GB	0659.0	0700.0	8.0	48.6			
	8400	BERN	47	GB	0659.0	0700.0	8.0	83.9			
	5200	BERN	47	GB	0659.0	0700.0	8.0	39.7			
	2695	LEAR	4	S/F	0659.0E	0701.0	12.0D	62.0			ST=2 TYP=3
	35000	BERN	4	S/F	0659.0	0700.3	6.0	82.3			
	19600	BERN	4	S/F	0659.0	0700.3	6.0	49.4			
	5200	BERN	4	S/F	0659.0	0700.3	6.0	38.4			
	11800	BERN	4	S/F	0659.0	0700.3	6.0	91.5			
	3200	BERN	4	S/F	0659.0	0700.3	6.0	5.4			
	8400	BERN	4	S/F	0659.0	0700.3	6.0	84.1			
	1470	POTS	4	S/F	0659.0	0701.4	6.0	47.0			
	600	HUMN	2	S/F	0659.0	0659.5	5.5	26.0	7.0		
	200	GORK	4	S/F	0700.6	0702.4	2.1	407.0			
	950	GORK	29	PBI	0704.4	0704.4	14.4	3.0			
	2950	GORK	29	PBI	0705.0	0705.0	226.0	13.0			
	245	LEAR	8	S	0740.0E	0740.0	U	76.0			ST=2 TYP=3
	950	GORK	1	S	0741.1	0741.6	1.1	2.0			
	410	LEAR	8	S	0754.0E	0754.0	1.0D	52.0			ST=2 TYP=3
	950	GORK	2	S/F	0813.6	0815.4	2.9	3.0			
	950	GORK	21	GRF	0900.0	1106.0	180.0D	11.0			
	650	GORK	46	C	0902.6	0906.4U		90.0D			
	650	GORK	46	C	0902.6	0908.5		39.0			
	650	GORK	46	C	0902.6	0905.6	7.0	32.0			
	650	GORK	46	C	0902.6	0906.8		136.0			
	410	LEAR	4	S/F	0904.0E	0908.0	7.0D	130.0			ST=2 TYP=3
	950	GORK	46	C	0904.8	0905.4	2.7	5.0			
	950	GORK	46	C	0904.8	0906.6		8.0			
	600	HUMN	4	S/F	0904.9	0907.0	4.8	62.0	18.0		
	610	LEAR	4	S/F	0905.0E	0906.0	4.0D	86.0			ST=2 TYP=3
	600	HUMN	45	C	0911.9	0922.7	22.4	860.0	353.0		
	610	LEAR	49	GB	0920.0E	0930.0	16.0D	2900.0			ST=2 TYP=7
	204	IZMI	27	RF	0920.0	0934.0	26.0	25.0			
	410	LEAR	49	GB	0920.0E	0931.0	21.0D	1300.0			ST=2 TYP=7
	3000	POTS	21	GRF	0920.0	0935.0U	65.0	25.0			
	950	GORK	48	C	0920.5	0926.2	31.9	5697.0			
	950	GORK	48	C	0920.5	0929.3		2019.0			
	950	GORK	48	C	0920.5	0949.7		19.0			
	950	GORK	48	C	0920.5	0930.7		2019.0			
	950	GORK	48	C	0920.5	0926.9		5481.0			
	650	GORK	48	C	0920.7	0950.0		136.0			
	650	GORK	48	C	0920.7	0931.0U		2900.0D			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
14	650	GORK	48	C	0920.7	0926.3U	32.6	2900.0D			
	1470	POTS	21	GRF	0921.0U	0929.0U	89.0U	26.0			
	808	ONDR	47	GB	0922.0		35.0				
	245	LEAR	20	GRF	0922.0E	0931.0	15.0D	110.0			ST=2 TYP=2
	2850	CRIM	1	S	0925.3	0930.7	6.8	9.0	3.0		
	3013	IZMI	1	S	0927.5	0930.5	5.0	10.0	5.0		
	600	HUMN	3	S	0939.5	0941.6	6.3	320.0	63.0		
	410	LEAR	4	S/F	0948.0E	0949.0	4.0D	94.0			ST=2 TYP=3
	610	LEAR	8	S	0949.0E	0950.0	2.0D	84.0			ST=2 TYP=3
	5900	KISV	2	S/F	1001.9	1002.3	2.3	3.0			
	234	POTS	42	SER	1158.5	1213.1	14.9	275.0			
	536	ONDR	42	SER	1226.4	1318.5	54.0	28.0			
	3000	POTS	20	GRF	1250.0	1308.8	60.0	20.0			
	1470	POTS	40	F	1255.0U	1308.0U	45.0U	18.0			
	5900	KISV	22	GRF	1255.0	1308.8	16.0	13.0			
	9300	KISV	22	GRF	1258.4	1303.7	16.1	13.0			
	808	ONDR	45	C	1259.0	1309.2	13.0	95.0			
	600	HUMN	2	S/F	1307.0	1307.8	3.0	42.0	10.0		
	234	POTS	4	S/F	1325.3	1325.5	1.6	275.0			
	245	SGMR	8	S	1437.0E	1437.0	U	220.0			ST=2 TYP=3
	245	SVTO	8	S	1437.0E	1437.0	U	250.0			ST=2 TYP=3
	245	SVTO	8	S	1449.0E	1449.0	U	150.0			ST=2 TYP=3
	245	SVTO	8	S	1456.0E	1456.0	1.0D	56.0			ST=2 TYP=3
	245	PALE	8	S	1652.0E	1653.0	1.0D	280.0			ST=2 TYP=3
	245	SGMR	8	S	1652.0E	1653.0	1.0D	210.0			ST=2 TYP=3
	245	PALE	8	S	1720.0E	1721.0	1.0D	68.0			ST=2 TYP=3
	245	SGMR	8	S	1720.0E	1721.0	1.0D	62.0			ST=2 TYP=3
	410	PALE	8	S	1800.0E	1800.0	U	88.0			ST=2 TYP=3
	245	PALE	8	S	1853.0E	1853.0	1.0D	120.0			ST=2 TYP=3
	610	PALE	8	S	1853.0E	1853.0	1.0D	180.0			ST=2 TYP=3
	610	SGMR	8	S	1853.0E	1853.0	1.0D	170.0			ST=2 TYP=3
	245	SGMR	8	S	1853.0E	1853.0	1.0D	99.0			ST=2 TYP=3
	245	PALE	8	S	1954.0E	1955.0	1.0D	170.0			ST=2 TYP=3
	245	SGMR	8	S	1954.0E	1955.0	1.0D	160.0			ST=2 TYP=3
	245	LEAR	8	S	2342.0E	2342.0	1.0D	65.0			ST=2 TYP=3
15	200	GORK	44	NS	0336.0E		507.0D		5.0		
	100	GORK	44	NS	0336.0E		504.0D		5.0		
	204	IZMI	43	NS	0600.0		360.0	10.0			
	127	TORN	44	NS	0620.0E		490.0D		6.0		V=1,DISTURBED
	245	SVTO	44	NS	0629.0E	0656.0	46.0D	62.0			ST=2 TYP=1
	200	HIRA	44	NS	2019.0E		750.0D		23.0		
	245	LEAR	43	NS	2236.0	0039.0	684.0D	290.0			ST=2 TYP=1
	100	HIRA	43	NS	2244.0	2542.0	580.0D	450.0	145.0		
	245	PALE	44	NS	2316.0E	2332.0U	229.0D	130.0			ST=3 TYP=1
	245	LEAR	8	S	0053.0E	0053.0	U	240.0			ST=2 TYP=3
	245	LEAR	8	S	0129.0E	0129.0	2.0D	110.0			ST=2 TYP=3
	410	LEAR	8	S	0129.0E	0129.0	2.0D	170.0			ST=2 TYP=3
	245	PALE	8	S	0129.0E	0129.0	U	100.0			ST=2 TYP=3
	410	PALE	8	S	0129.0E	0129.0	U	120.0			ST=2 TYP=3
	2840	PEKG	5	S	0141.0	0147.0	12.0	5.7			
	200	HIRA	41	F	0319.1	0319.8	21.0	39.0			ML
	950	GORK	1	S	0352.3	0352.5	0.7	7.0			
	650	GORK	4	S/F	0354.7	0356.2	4.9	12.0			
	245	PALE	8	S	0355.0E	0355.0	1.0D	230.0			ST=2 TYP=3
	950	GORK	2	S/F	0355.0	0356.2	2.5	9.0			
	500	HIRA	41	F	0355.3	0356.5	7.0	24.0			O
	100	GORK	3	S	0402.3	0403.3	1.3	116.0			
	950	GORK	2	S/F	0427.1	0427.3	0.7	9.0			
	650	GORK	2	S/F	0443.6	0444.2	1.2	3.0			
	950	GORK	2	S/F	0443.6	0444.3	1.1	5.0			
	245	LEAR	8	S	0505.0E	0507.0	2.0D	64.0			ST=2 TYP=3
	650	GORK	46	C	0538.1	0538.2	0.9	34.0			
	650	GORK	46	C	0538.1	0538.7		5.0			
	950	GORK	41	F	0538.5	0539.7		4.0			
	950	GORK	41	F	0538.5	0538.7	1.7	13.0			
	650	GORK	46	C	0543.0	0544.7		3.0			
	650	GORK	46	C	0543.0	0543.8	2.7	5.0			
	260	ONDR	41	F	0600.0E	1456.4	570.0D	125.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
15	200	HIRA	42	SER	0600.0	0618.5	52.0	85.0		0	
	245	LEAR	8	S	0611.0E	0611.0	U	190.0			ST=2 TYP=3
	950	GORK	1	S	0611.3	0611.5	0.5	3.0			
	9300	KISV	2	S/F	0611.3	0611.6	0.9	5.0			
	100	GORK	41	F	0613.3	0651.1		116.0			
	100	GORK	41	F	0613.3	0619.7	38.7	33.0			
	500	HIRA	41	F	0614.0	0617.5	21.5	11.0		0	
	650	GORK	46	C	0615.0	0631.0		80.0			
	200	GORK	41	F	0615.0	0632.0	63.7	27.0			
	650	GORK	46	C	0615.0	0625.3		20.0			
	650	GORK	46	C	0615.0	0623.3		11.0			
	650	GORK	46	C	0615.0	0629.6		94.0			
	200	GORK	41	F	0615.0	0716.6		29.0			
	650	GORK	46	C	0615.0	0618.6	24.6	11.0			
	204	IZMI	45	C	0615.0	0618.8	21.0	220.0			
	650	GORK	46	C	0615.0	0634.9		31.0			
	5900	KISV	20	GRF	0616.1	0630.0	18.9	3.0			
	950	GORK	2	S/F	0624.0	0625.0	2.1	7.0			
	950	GORK	4	S/F	0628.1	0629.8	5.9	155.0			
	600	HUMN	4	S/F	0628.5	0629.5	11.5	28.0	12.0		
	610	LEAR	4	S/F	0629.0E	0629.0	5.0D	54.0			ST=2 TYP=3
	245	LEAR	8	S	0629.0E	0630.0	2.0D	31.0			ST=2 TYP=3
	245	LEAR	8	S	0715.0E	0715.0	1.0D	58.0			ST=2 TYP=3
	950	GORK	2	S/F	0715.6	0716.0	2.9	14.0			
	650	GORK	2	S/F	0715.6	0716.0	3.1	3.0			
	5900	KISV	2	S/F	0715.7	0718.2	3.0	3.0			
	204	IZMI	41	F	0715.8	0716.9	3.0	130.0			
	5900	KISV	2	S/F	0719.6	0720.0	2.2	2.0			
	950	GORK	2	S/F	0722.1	0723.3	1.5	7.0			
	100	GORK	41	F	0740.4	0748.3	15.9	34.0			
	100	GORK	41	F	0740.4	0755.8		116.0			
	200	GORK	41	F	0751.0	0752.0	6.0	29.0			
	200	GORK	41	F	0751.0	0755.9		185.0			
	245	LEAR	8	S	0755.0E	0755.0	U	290.0			ST=2 TYP=3
	204	IZMI	41	F	0755.2	0755.8	1.0	600.0			
	950	GORK	4	S/F	0755.3	0755.4	1.7	76.0			
	1470	POTS	3	S	0755.5	0756.0	1.5	22.0			
	3000	POTS	1	S	0755.5	0756.0	1.0	2.0			
	113	POTS	4	S/F	0755.5	0755.7	0.6	20.0			
	234	POTS	8	S	0755.6	0755.6	1.0	385.0			
	950	GORK	2	S/F	0823.0	0823.4	1.5	3.0			
	410	LEAR	8	S	0842.0E	0843.0	1.0D	49.0			ST=2 TYP=3
	5900	KISV	1	S	1013.6	1015.2	3.0	3.0			
	5900	KISV	46	C	1044.3	1046.0		3.0			
	5900	KISV	46	C	1044.3	1045.3		2.0			
	5900	KISV	46	C	1044.3	1044.9	4.4	3.0			
	9300	KISV	2	S/F	1101.1	1101.8	7.0	5.0			
	5900	KISV	22	GRF	1112.4	1119.9	14.2	3.0			
	9300	KISV	22	GRF	1113.0	1121.2	10.0	6.0			
	410	SVTO	4	S/F	1130.0E	1132.0	3.0D	120.0			ST=2 TYP=3
	245	SVTO	8	S	1132.0E	1132.0	U	73.0			ST=2 TYP=3
	5900	KISV	2	S/F	1137.8	1139.8	2.5	4.0			
	5900	KISV	2	S/F	1141.5	1143.3	5.5	10.0			
	9300	KISV	1	S	1216.0	1216.5	1.5	5.0			
	5900	KISV	45	C	1218.0	1219.0		3.0			
	5900	KISV	45	C	1218.0	1218.3	2.3	4.0			
	9300	KISV	22	GRF	1237.3	1243.3	7.9	10.0			
	9300	KISV	22	GRF	1237.3	1239.7		8.0			
	234	POTS	4	S/F	1334.1	1334.4	2.0	300.0			
	245	SGMR	8	S	2119.0E	2119.0	U	63.0			ST=2 TYP=3
	200	HIRA	27	RF	2235.0	2500.0	430.0	177.0	37.0	ML	
	245	LEAR	8	S	2251.0E	2251.0	1.0D	56.0			ST=2 TYP=3
	500	HIRA	46	C	2304.0	2316.0		16.0		0	
	500	HIRA	46	C	2304.0	2423.0	104.0	43.0	8.0	WR	
	200	HIRA	46	C	2344.2	2357.4	16.5	400.0	130.0	ML	
16	100	GORK	44	NS	0335.0E		415.0D		6.0		
	200	GORK	44	NS	0335.0E		415.0D		6.0		
	204	IZMI	43	NS	0600.0		360.0	40.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
16	260	ONDR	44	NS	0600.0E	1152.0	580.0D	309.0			
	127	TORN	44	NS	0620.0E		490.0D		11.0		V+1
	245	SVTO	43	NS	0638.0	0646.0	36.0D	81.0			ST=2 TYP=1
	234	POTS	43	NS	0916.5	0924.5	95.0	11.0			
	245	SGMR	44	NS	1401.0E	1421.0	509.0D	200.0			ST=2 TYP=1
	245	PALE	44	NS	1827.0E	1829.0U	590.0D	160.0			ST=3 TYP=1
	200	HIRA	44	NS	2022.0E	2410.0	750.0D	75.0	14.0		MR
	245	LEAR	44	NS	2249.0E	0624.0	625.0D	250.0			ST=2 TYP=1
	245	PALE	44	NS	2316.0E	2302.0	229.0D	130.0			ST=2 TYP=1
	200	HIRA	42	SER	0010.2	0031.9	39.0	345.0			ML
	200	HIRA	46	C	0136.5	0141.9	13.2	330.0			ML
	500	HIRA	42	SER	0326.3	0326.8	13.5	245.0			SL
	5900	KISV	2	S/F	0458.3	0500.1	6.0	4.0			
	9300	KISV	2	S/F	0459.3	0500.1	2.9	4.0			
	100	HIRA	46	C	0520.7	0521.9	15.2	360.0			
	100	GORK	4	S/F	0522.0	0524.2	15.5	433.0			
	5900	KISV	2	S/F	0749.7	0750.5	5.5	10.0			
	9300	KISV	2	S/F	0749.7	0750.5	2.8	8.0			
	9100	GORK	1	S	0749.8	0750.2	6.1	7.0			
	15000	KISV	2	S/F	0836.2	0837.0	5.8	27.0			
	9100	GORK	21	GRF	0836.3	0842.5	17.2	6.0			
	5900	KISV	2	S/F	0836.3	0837.6	7.8	15.0			
	9300	KISV	22	GRF	0836.5	0841.7	19.0	11.0			
	9300	KISV	2	S/F	0837.1	0837.8	2.7	23.0			
	9100	GORK	1	S	0837.3	0837.4	0.8	16.0			
	33	UPIC	8	S	1108.2	1108.3	0.3				
	536	ONDR	42	SER	1118.6	1120.3	75.0	144.0			
	600	HUMN	2	S/F	1120.0	1120.5	1.0	40.0	15.0		
	33	UPIC	3	S	1131.1	1131.3	0.3				
	5900	KISV	2	S/F	1134.4	1135.2	1.7	10.0			
	9300	KISV	2	S/F	1134.4	1135.2	2.0	21.0			
	15000	KISV	2	S/F	1134.9	1135.1	0.5	15.0			
	245	SGMR	8	S	1151.0E	1151.0	1.0D	90.0			ST=2 TYP=3
	245	SVTO	8	S	1151.0E	1151.0	1.0D	100.0			ST=2 TYP=3
	33	UPIC	3	S	1206.0	1206.1	0.4				
	808	ONDR	1	S	1252.4	1252.5	1.0	8.0			
	234	POTS	41	F	1420.3	1421.2	1.8	600.0			
	536	ONDR	42	SER	1426.0	1426.6	20.0	123.0			
	33	UPIC	42	SER	1613.2	1624.1	14.4				
	245	PALE	8	S	1707.0E	1707.0	U	64.0			ST=2 TYP=3
	245	PALE	8	S	1822.0E	1823.0	1.0D	100.0			ST=2 TYP=3
	410	SGMR	8	S	1852.0E	1852.0	U	160.0			ST=2 TYP=3
	245	PALE	4	S/F	2152.0E	2153.0	3.0D	220.0			ST=2 TYP=3
	500	HIRA	20	GRF	2327.0	2425.0	150.0	17.0	8.0		WR
17	204	IZMI	43	NS	0600.0		360.0	10.0			
	260	ONDR	44	NS	0600.0E	1409.3	570.0D	370.0			
	127	TORN	43	NS	0715.0		345.0		2.0		V=0
	200	HIRA	44	NS	2022.0E	0100.0	750.0D	26.0	11.0		MR
	500	HIRA	43	NS	2235.0	0338.0	280.0	12.0	4.0		WR
	200	GORK	3	S	0328.0	0329.9	2.0	740.0			
	200	GORK	41	F	0401.9	0403.2		1296.0			
	200	GORK	41	F	0401.9	0402.2	7.8	925.0			
	200	GORK	41	F	0401.9	0408.6		740.0			
	245	LEAR	4	S/F	0404.0E	0408.0	4.0D	250.0			ST=2 TYP=3
	100	GORK	8	S	0407.5	0408.5	2.3	2944.0			
	200	HIRA	45	C	0407.6	0408.4	2.8	580.0			O
	100	HIRA	46	C	0407.6	0407.9	2.0	980.0			
	245	PALE	8	S	0408.0E	0408.0	U	200.0			ST=2 TYP=3
	9100	GORK	20	GRF	0503.0	0646.8	327.0D	11.0			
	9300	KISV	22	GRF	0639.5	0647.6	57.7	12.0			
	5900	KISV	22	GRF	0641.5	0648.2	22.0	11.0			
	15000	KISV	2	S/F	0646.6	0646.9	3.4	5.0			
	127	TORN	47	GB	0939.8	0941.6	3.0	770.0	380.0		
	127	TORN	42	SER	1218.0	1235.3	18.0	1900.0	12.0		UNCERTAIN
	536	ONDR	42	SER	1404.5	1458.4	55.0	98.0			
	245	SGMR	8	S	1405.0E	1405.0	1.0D	290.0			ST=2 TYP=3
	245	SVTO	8	S	1405.0E	1406.0	1.0D	330.0			ST=2 TYP=3
	245	SGMR	8	S	1409.0E	1409.0	U	380.0			ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
17	410	SGMR	8	S	1409.0E	1409.0	U	50.0			ST=2 TYP=3
	245	SVTO	8	S	1409.0E	1409.0	U	410.0			ST=2 TYP=3
	245	PALE	8	S	2100.0E	2100.0	1.0D	97.0			ST=2 TYP=3
	245	SGMR	8	S	2100.0E	2101.0	1.0D	85.0			ST=2 TYP=3
	410	PALE	8	S	2151.0E	2151.0	1.0D	64.0			ST=2 TYP=3
	245	PALE	8	S	2151.0E	2151.0	2.0D	200.0			ST=2 TYP=3
	245	SGMR	8	S	2151.0E	2151.0	1.0D	150.0			ST=2 TYP=3
	245	SGMR	49	GB	2227.0E	2228.0	1.0D	1200.0			ST=3 TYP=6
	200	HIRA	8	S	2227.3	2228.0	0.8	1185.0		O	
	500	HIRA	8	S	2227.5	2228.1	0.5	24.0		WR	
18	245	LEAR	44	NS	0029.0E	0146.0	572.0D	150.0			ST=2 TYP=1
	245	PALE	44	NS	0146.0E	0335.0	150.0D	100.0			ST=2 TYP=1
	245	SVTO	44	NS	0452.0E	0658.0	701.0D	200.0			ST=2 TYP=1
	204	IZMI	43	NS	0600.0		360.0	25.0			
	260	ONDR	44	NS	0730.0E	1017.6	490.0D	207.0			
	245	SGMR	44	NS	1424.0E	1435.0	483.0D	81.0			ST=2 TYP=1
	200	HIRA	44	NS	2022.0E	2222.0	460.0D	15.0	9.0	MR	
	410	LEAR	4	S/F	0009.0E	0011.0	3.0D	93.0			ST=2 TYP=3
	410	PALE	8	S	0011.0E	0011.0	1.0D	150.0			ST=2 TYP=3
	500	HIRA	41	F	0011.0	0014.7	4.0	103.0		O	
	650	GORK	22	GRF	0341.0E	0450.3	94.7D	23.0			
	9100	GORK	21	GRF	0409.7	0432.4	207.9	28.0			
	2840	PEKG	3	S	0411.0	0416.5	14.0	41.2			
	2950	GORK	4	S/F	0411.9	0416.7	7.6	28.0			
	2850	CRIM	3	S	0415.0	0416.4	5.5	39.0	13.0		
	9100	GORK	1	S	0415.2	0416.6	3.4	25.0			
	2950	GORK	20	GRF	0430.4	0442.0	17.6	5.0			
	15000	KISV	2	S/F	0527.1	0527.5	1.5	10.0			
	5900	KISV	2	S/F	0532.5	0533.5	6.0	10.0			
	9300	KISV	2	S/F	0532.5	0533.5	8.5	21.0			
	9100	GORK	1	S	0532.8	0533.5	2.0	21.0			
	5900	KISV	22	GRF	0547.3	0552.8	11.5	8.0			
	9300	KISV	2	S/F	0642.8	0644.3	9.7	10.0			
	5900	KISV	2	S/F	0643.4	0644.3	7.7	8.0			
	5900	KISV	2	S/F	0729.8	0730.5	1.9	3.0			
	113	POTS	4	S/F	0843.5	0845.1	2.7	45.0			
	30	POTS	4	S/F	0844.5	0845.1	1.0	120.0			
	204	IZMI	8	S	0924.9	0925.0	0.1	280.0	200.0		
	3000	POTS	4	S/F	0938.5	0940.3	5.5	35.0			
	204	IZMI	41	F	0939.8	0940.4	1.5	73.0			
	9300	KISV	2	S/F	0941.9	0942.7	2.0	6.0			
	204	IZMI	41	F	0948.0	0949.5	2.0	180.0			
	5900	KISV	2	S/F	1152.7	1153.4	3.8	7.0			
	9300	KISV	2	S/F	1153.1	1153.3	0.7	6.0			
	5900	KISV	22	GRF	1201.4	1203.8	19.8	9.0			
	9300	KISV	2	S/F	1202.2	1204.2	3.0	6.0			
	536	ONDR	42	SER	1446.5	1446.7	35.0	187.0			
	4995	SGMR	8	S	1854.0E	1854.0	1.0D	60.0			ST=2 TYP=3
	2800	OTTA	4	S/F	1854.5	1857.2	5.7	39.7	12.0		
	245	PALE	8	S	2032.0E	2032.0	2.0D	87.0			ST=2 TYP=5
	245	PALE	8	S	2155.0E	2155.0	1.0D	51.0			ST=2 TYP=3
19	245	PALE	44	NS	0417.0E	0317.0	1183.0D	70.0			ST=1 TYP=1
	33	UPIC	43	NS	0702.0		520.1				
	2840	PEKG	5	S	0157.0	0158.4	5.0	24.3			
	610	LEAR	8	S	0158.0E	0158.0	U	82.0			ST=2 TYP=3
	410	LEAR	8	S	0158.0E	0158.0	U	78.0			ST=2 TYP=3
	610	PALE	8	S	0158.0E	0158.0	U	78.0			ST=2 TYP=3
	15400	SVTO	4	S/F	0424.0E	0526.0	63.0D	50.0			ST=2 TYP=3
	15000	KISV	45	C	0523.4	0526.3	9.7	59.0			
	15000	KISV	45	C	0523.4	0525.9		48.0			
	15400	SVTO	4	S/F	0524.0E	0526.0	3.0D	50.0			ST=2 TYP=3
	5900	KISV	45	C	0524.1	0526.3	10.3	25.0			
	5900	KISV	45	C	0524.1	0527.6		14.0			
	9300	KISV	4	S/F	0524.5	0526.2	12.5	66.0			
	9100	GORK	4	S/F	0524.6	0526.1	5.1	60.0			
	17000	NOBE	7	C	0524.7	0526.1	2.0D	68.0			21R,80,35GHz:BA
	15400	LEAR	8	S	0525.0E	0526.0	2.0D	78.0			ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
19	8800	LEAR	8	S	0525.0E	0526.0	2.0D	61.0			ST=2 TYP=3
	245	LEAR	8	S	0746.0E	0746.0	U	96.0			ST=2 TYP=3
	9300	KISV	23	GRF	0749.5	0800.4	15.3	7.0			
	9500	POTS	3	S	0750.0	0751.0	5.0	36.0			
	8400	BERN	3	S	0750.6	0751.0	1.5	6.0			
	3200	BERN	3	S	0750.6	0751.0	1.5	2.2			
	5200	BERN	3	S	0750.6	0751.0	1.5	8.5			
	9100	GORK	2	S/F	0750.7	0751.0	3.9	34.0			
	9300	KISV	1	S	0750.8	0751.2	4.0	28.0			
	15400	LEAR	8	S	0751.0E	0751.0	U	64.0			ST=2 TYP=3
	15400	SVTO	8	S	0751.0E	0751.0	U	80.0			ST=2 TYP=3
	15000	KISV	1	S	0751.0	0751.2	3.0	42.0			
	15000	KISV	31	ABS	0812.5	0815.6	14.5	5.0D			
	9500	POTS	42	SER	0813.5	0815.5	15.0	14.0			
	9300	KISV	22	GRF	0813.7	0821.0	10.3	18.0			
	9300	KISV	22	GRF	0813.7	0815.5		15.0			
	5900	KISV	22	GRF	0813.8	0821.0		8.0			
	5900	KISV	22	GRF	0813.8	0815.5	18.2	11.0			
	9100	GORK	23	GRF	0814.1	0957.5	225.9D	29.0			
	2850	CRIM	2	S/F	0815.5	0815.7	1.0	12.0	3.0		
	9300	KISV	2	S/F	0824.5	0825.7	4.3	12.0			
	536	ONDR	49	GB	0835.0	1007.0	250.0	50.0			
	260	ONDR	41	F	0840.0	1038.9	410.0D				
	245	LEAR	49	GB	0912.0E	0913.0	2.0D	1100.0			ST=2 TYP=6
	245	SVTO	49	GB	0913.0E	0913.0	1.0D	520.0			ST=2 TYP=6
	234	POTS	8	S	0913.6	0913.8	0.4	275.0			
	113	POTS	8	S	0913.7	0913.8	0.4	15.0			
	15000	KISV	25	R	0938.3	0940.8	11.7	7.0			
	113	POTS	4	S/F	0938.6	0940.0U	5.0	200.0D			
	234	POTS	41	F	0938.6	0940.1	3.1	2500.0			
	30	POTS	4	S/F	0938.8	0941.0U	6.2U	5000.0D			
	9300	KISV	45	C	0938.8	0940.3	5.0	30.0			
	9300	KISV	45	C	0938.8	0940.8		27.0			
	33	UPIC	48	C	0939.0		4.8				
	204	IZMI	47	GB	0939.0	0940.0	3.5	4250.0			
	245	LEAR	8	S	0939.0E	0940.0	1.0D	390.0			ST=2 TYP=3
	245	SVTO	8	S	0939.0E	0940.0	2.0D	350.0			ST=2 TYP=3
	5900	KISV	46	C	0939.1	0940.3		58.0			
	2950	GORK	3	S	0939.1	0940.4	3.5	36.0			
	5900	KISV	46	C	0939.1	0940.4	3.5	61.0			
	5900	KISV	46	C	0939.1	0940.8		30.0			
	3013	IZMI	7	C	0939.2	0940.2	2.3	30.0	15.0		
	2850	CRIM	3	S	0939.6	0940.7	2.3	40.0	13.0		
	9100	GORK	46	C	0939.9	0940.2	1.3	26.0			
	9100	GORK	46	C	0939.9	0940.8		21.0			
	610	LEAR	8	S	0940.0E	0940.0	U	41.0			ST=2 TYP=3
	2695	LEAR	8	S	0940.0E	0940.0	U	42.0			ST=2 TYP=3
	4995	LEAR	8	S	0940.0E	0940.0	U	52.0			ST=2 TYP=3
	410	LEAR	8	S	0940.0E	0940.0	U	180.0			ST=2 TYP=3
	410	SVTO	8	S	0940.0E	0940.0	U	220.0			ST=2 TYP=3
	9500	POTS	4	S/F	0940.0	0940.4	2.0	16.0			
	600	HUMN	2	S/F	0940.0	0940.5	1.5	22.0	10.0		
	1470	POTS	3	S	0940.0	0940.5	3.0	13.0			
	950	GORK	2	S/F	0940.0	0940.6	1.8	5.0			
	650	GORK	4	S/F	0940.1	0940.6	1.4	37.0			
	808	ONDR	6	S	0940.4	0940.8	1.8	20.0			
	9300	KISV	4	S/F	0949.7	0954.4	6.8	108.0			
	9300	KISV	29	PBI	0949.7	0956.5	26.0	20.0			
	15000	KISV	4	S/F	0950.0	0954.3	9.0	66.0			
	2695	LEAR	4	S/F	0952.0E	0954.0	4.0D	59.0			ST=2 TYP=3
	15400	SVTO	4	S/F	0952.0E	0954.0	3.0D	73.0			ST=2 TYP=3
	950	GORK	2	S/F	0952.0	0953.1	2.8	3.0			
	5900	KISV	45	C	0952.0	0954.4	7.0	75.0			
	5900	KISV	45	C	0952.0	0953.9		73.0			
	3200	BERN	4	S/F	0952.3	0954.3	3.5	4.0			
	8400	BERN	4	S/F	0952.3	0954.3	3.5	9.0			
	11800	BERN	4	S/F	0952.3	0954.3	3.5	9.6			
	5200	BERN	4	S/F	0952.3	0954.3	3.5	6.1			
	9100	GORK	4	S/F	0952.5	0954.2	4.0	110.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
19	9500	POTS	4	S/F	0952.5	0954.5	33.0	87.0			
	8800	LEAR	8	S	0953.0E	0953.0	1.0D	60.0			ST=2 TYP=3
	15400	LEAR	8	S	0953.0E	0954.0	1.0D	46.0			ST=2 TYP=3
	4995	LEAR	8	S	0953.0E	0953.0	1.0D	41.0			ST=2 TYP=3
	8800	SVTO	8	S	0953.0E	0954.0	2.0D	71.0			ST=2 TYP=3
	3013	IZMI	7	C	0953.0	0954.2	2.5	28.0	15.0		
	3000	POTS	4	S/F	0953.0	0954.2	32.0	37.0			
	2850	CRIM	3	S	0953.0	0954.3	2.4	46.0	15.0		
	1470	POTS	4	S/F	0953.0	0954.4	2.0	24.0			
	2950	GORK	4	S/F	0953.1	0954.3	1.6	40.0			
	2950	GORK	29	PBI	0954.7	0954.7	33.7	11.0			
	3013	IZMI	29	PBI	0956.0		10.0	3.0			
	2950	GORK	2	S/F	1021.8	1024.3	5.1	9.0			
	2850	CRIM	1	S	1028.3	1031.5	6.0	13.0	4.0		
	650	GORK	21	GRF	1031.0	1043.5	23.0	7.0			
	5900	KISV	30	PBI	1035.3	1047.5	29.0	11.0			
	5900	KISV	4	S/F	1035.3	1037.9	12.0	161.0			
	11800	BERN	4	S/F	1036.0	1038.0	9.0	10.0			
	5200	BERN	4	S/F	1036.0	1038.0	9.0	11.0			
	3200	BERN	4	S/F	1036.0	1038.0	9.0	4.8			
	8400	BERN	4	S/F	1036.0	1038.0	9.0	14.0			
	3000	POTS	4	S/F	1036.0U	1039.8	24.0U	50.0			
	9100	GORK	4	S/F	1036.2	1037.9	8.8	141.0			
	950	GORK	46	C	1036.5	1042.1		8.0			
	950	GORK	46	C	1036.5	1039.7	10.2	13.0			
	3013	IZMI	22	GRF	1036.5	1039.8	11.0	44.0	25.0		
	15000	KISV	46	C	1036.6	1038.0	9.0	45.0			
	15000	KISV	46	C	1036.6	1038.5		41.0			
	15000	KISV	46	C	1036.6	1038.9		32.0			
	15000	KISV	46	C	1036.6	1041.9		20.0			
	2850	CRIM	3	S	1036.7	1039.7	9.0	52.0	17.0		
	808	ONDR	45	C	1037.0	1040.0	9.0	33.0			
	600	HUMN	4	S/F	1037.0	1040.5	8.0	26.0	12.0		
	2950	GORK	46	C	1037.2	1038.0	7.9	29.0			
	2950	GORK	46	C	1037.2	1039.7		41.0			
	2950	GORK	46	C	1037.2	1041.9		32.0			
	113	POTS	8	S	1037.4	1037.5	0.4	42.0			
	234	POTS	4	S/F	1037.4	1038.6	2.6	900.0			
	650	GORK	46	C	1037.5	1042.0		41.0			
	650	GORK	46	C	1037.5	1040.2	6.0	43.0			
	204	IZMI	41	F	1038.2	1038.6	2.5	50.0			
	2950	GORK	21	GRF	1038.8	1054.0	81.2D	9.0			
	15000	KISV	22	GRF	1048.5	1051.6	11.5	11.0			
	5900	KISV	1	S	1052.6	1053.9	2.5	8.0			
	1470	POTS	40	F	1114.0	1122.5	31.0	8.0			
	30	POTS	41	F	1120.0	1126.1	9.5	3400.0			
	3000	POTS	40	F	1120.0	1124.5	13.0	9.0			
	113	POTS	41	F	1120.2	1120.5	7.2	150.0D			
	204	IZMI	41	F	1120.5	1126.2	17.0	145.0			
	234	POTS	41	F	1121.4	1125.6	5.7	120.0			
	15000	KISV	20	GRF	1122.4	1124.7	15.0	11.0			
	9500	POTS	20	GRF	1123.0	1124.8	17.0	9.0			
	113	POTS	41	F	1214.7	1234.0U	21.5	200.0D			
	234	POTS	42	SER	1217.2	1225.6	11.3	3300.0			
	30	POTS	41	F	1217.6	1222.5	16.1	5000.0D			
	410	SGMR	8	S	1218.0E	1218.0	U	73.0			ST=2 TYP=3
	410	SVTO	8	S	1218.0E	1218.0	U	120.0			ST=2 TYP=3
	3000	POTS	4	S/F	1223.0	1232.0U	22.0	13.0			
	245	SGMR	49	GB	1225.0E	1225.0	1.0D	1500.0			ST=2 TYP=6
	245	SVTO	49	GB	1225.0E	1225.0	1.0D	1800.0			ST=2 TYP=6
	245	SVTO	49	GB	1225.0E	1225.0	841.0D	1800.0			ST=2 TYP=6
	808	ONDR	3	S	1228.0	1232.0	11.0	10.0			
	1470	POTS	3	S	1228.0	1232.0	12.0	17.0			
	600	HUMN	27	RF	1228.0	1231.5	14.0	8.0	3.0		
	15000	KISV	2	S/F	1229.0	1229.3	3.0	8.0			
	9500	POTS	3	S	1416.7	1417.7	2.3	22.0			
	245	SGMR	8	S	1528.0E	1528.0	1.0D	95.0			ST=2 TYP=3
	245	SVTO	8	S	1528.0E	1528.0	1.0D	110.0			ST=2 TYP=3
	245	SVTO	8	S	1531.0E	1531.0	U	57.0			ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
19	8800	SVTO	4	S/F	1608.0E	1610.0	12.0D	160.0			ST=2 TYP=5
	4995	SVTO	4	S/F	1608.0E	1610.0	12.0D	160.0			ST=2 TYP=5
	2800	OTTA	4	S/F	1608.5	1611.0	3.9	285.5	85.0		
	8400	BERN	46	C	1608.5	1610.6	6.5	23.8			
	3200	BERN	46	C	1608.5	1610.6	6.5	55.4			
	11800	BERN	46	C	1608.5	1610.6	6.5	34.6			
	5200	BERN	46	C	1608.5	1610.6	6.5	21.5			
	1415	SVTO	8	S	1609.0E	1610.0	2.0D	90.0			ST=2 TYP=5
	2695	SVTO	8	S	1609.0E	1610.0	2.0D	290.0			ST=2 TYP=5
	15400	SVTO	8	S	1610.0E	1610.0	1.0D	340.0			ST=2 TYP=5
	2800	OTTA	29	PBI	1612.4	1612.4	160.0	14.8	7.0		
	245	SVTO	8	S	1613.0E	1615.0	2.0D	320.0			ST=2 TYP=3
	245	PALE	8	S	2122.0E	2122.0	1.0D	100.0			ST=2 TYP=3
	245	SGMR	8	S	2122.0E	2122.0	1.0D	87.0			ST=2 TYP=3
	245	LEAR	8	S	2247.0E	2247.0	1.0D	94.0			ST=2 TYP=3
20	245	SVTO	43	NS	0538.0	1106.0	651.0D	95.0			ST=2 TYP=1
	1415	PALE	8	S	0034.0E	0034.0	U	79.0			ST=2 TYP=3
	610	LEAR	8	S	0258.0E	0258.0	U	140.0			ST=2 TYP=3
	610	PALE	4	S/F	0258.0E	0258.0	1262.0D	140.0			ST=2 TYP=3
	1415	LEAR	8	S	0300.0E	0300.0	2.0D	50.0			ST=2 TYP=3
	8800	LEAR	4	S/F	0300.0E	0300.0	4.0D	170.0			ST=2 TYP=3
	2695	LEAR	4	S/F	0300.0E	0300.0	4.0D	110.0			ST=2 TYP=3
	4995	LEAR	4	S/F	0300.0E	0300.0	4.0D	150.0			ST=2 TYP=3
	15400	LEAR	4	S/F	0300.0E	0300.0	4.0D	110.0			ST=2 TYP=3
	8800	PALE	4	S/F	0300.0E	0300.0	3.0D	160.0			ST=2 TYP=3
	4995	PALE	4	S/F	0300.0E	0300.0	4.0D	140.0			ST=2 TYP=3
	2695	PALE	4	S/F	0300.0E	0300.0	4.0D	130.0			ST=2 TYP=3
	15400	PALE	8	S	0300.0E	0300.0	1.0D	97.0			ST=2 TYP=3
	17000	NOBE	7	C	0300.0	0300.6	6.0	70.0			48R,80,35GHzSKY
	245	LEAR	8	S	0403.0E	0403.0	1.0D	390.0			ST=2 TYP=3
	245	PALE	8	S	0403.0E	0403.0	1.0D	190.0			ST=2 TYP=3
	245	LEAR	8	S	0406.0E	0406.0	U	110.0			ST=2 TYP=3
	9100	GORK	2	S/F	0429.6	0430.2	3.7	24.0			
	17000	NOBE	1	S	0440.0	0440.1	1.0	19.0			22R,80,35GHz:0
	245	SVTO	49	GB	0621.0E	0625.0	11.0D	920.0			ST=2 TYP=6
	245	LEAR	49	GB	0623.0E	0625.0	5.0D	1300.0			ST=2 TYP=6
	200	HIRA	42	SER	0623.1	0624.8	7.9	1700.0			0
	234	POTS	41	F	0623.2	0625.2	5.9	500.0			
	204	IZMI	45	C	0623.5	0625.0	5.0	1350.0			
	113	POTS	42	SER	0623.5	0633.1	12.3	1200.0			
	100	HIRA	42	SER	0624.4	0624.8	11.4	850.0			
	30	POTS	4	S/F	0624.8	0625.2	1.8	1500.0			
	2950	GORK	1	S	0624.9	0625.3	0.9	3.0			
	127	TORN	8	S	0633.3	0633.9	2.0	1200.0	590.0		
	9100	GORK	21	GRF	0642.4	0652.3	208.4	12.0			
	15000	KISV	1	S	0650.0	0653.6	3.6	6.0			
	9300	KISV	1	S	0651.8	0652.3	1.3	11.0			
	5900	KISV	2	S/F	0651.9	0652.5	2.0	6.0			
	2950	GORK	1	S	0652.0	0652.4	0.8	3.0			
	260	ONDR	41	F	0700.0E	1302.2	510.0D	294.0			
	245	SVTO	8	S	0754.0E	0754.0	U	160.0			ST=2 TYP=3
	245	LEAR	8	S	0822.0E	0823.0	2.0D	60.0			ST=2 TYP=3
	5900	KISV	2	S/F	0855.3	0856.3	6.0	8.0			
	9300	KISV	2	S/F	0855.3	0856.3	1.8	13.0			
	15000	KISV	1	S	0855.4	0856.0	1.2	4.0			
	15000	KISV	21	GRF	0900.0	0920.8	32.0	31.0			
	127	TORN	7	C	0910.8	0912.4	2.0	50.0	25.0		
	9500	POTS	3	S	0918.0	0919.5U	6.0	15.0			
	5900	KISV	22	GRF	0918.0	0919.8	9.0	10.0			
	9300	KISV	1	S	0924.3	0925.7	7.0	18.0			
	9100	GORK	2	S/F	0948.8	0949.6	2.0	11.0			
	15000	KISV	23	GRF	0952.5	1006.4	27.0	11.0			
	9300	KISV	22	GRF	0957.0	1006.5	16.5	10.0			
	5900	KISV	22	GRF	1004.0	1007.3	11.0	2.0			
	15000	KISV	1	S	1008.6	1008.7	0.4	7.0			
	536	ONDR	42	SER	1026.4	1027.0	15.5	101.0			
	9300	KISV	22	GRF	1150.0	1154.3		18.0			
	9300	KISV	22	GRF	1150.0	1204.8	31.0	23.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

SEPTEMBER 1989

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	9100	GORK	21	GRF	1151.7	1200.2	8.8D	5.0			
	9100	GORK	1	S	1153.8	1154.2	1.0	10.0			
	5900	KISV	2	S/F	1153.8	1154.3	1.0	7.0			
	15000	KISV	1	S	1154.1	1154.3	0.8	7.0			
	9500	POTS	21	GRF	1159.0	1204.5	46.0	18.0			
	5900	KISV	20	GRF	1200.0	1204.6	20.0	8.0			
	5900	KISV	22	GRF	1221.0	1226.0	25.0	17.0			
	5900	KISV	22	GRF	1221.0	1237.7		13.0			
	9300	KISV	22	GRF	1222.8	1226.1	22.0	18.0			
	9300	KISV	22	GRF	1222.8	1237.7		16.0			
	15000	KISV	2	S/F	1223.6	1224.4	2.8	7.0			
	15000	KISV	1	S	1237.0	1237.7	1.4	6.0			
	536	ONDR	42	SER	1427.5	1501.1	33.6	134.0			
	8800	PALE	4	S/F	1759.0E	1801.0	3.0D	90.0			ST=2 TYP=3
	2800	OTTA	3	S	1800.0	1801.4	8.3	65.9	20.0		
	1415	PALE	8	S	1800.0E	1800.0	1.0D	120.0			ST=2 TYP=3
	2695	PALE	8	S	1800.0E	1801.0	1.0D	65.0			ST=2 TYP=3
	15400	SGMR	4	S/F	1800.0E	1801.0	6.0D	200.0			ST=2 TYP=3
	1415	SGMR	8	S	1800.0E	1800.0	1.0D	130.0			ST=2 TYP=3
	2695	SGMR	8	S	1800.0E	1801.0	2.0D	70.0			ST=2 TYP=3
	4995	SGMR	4	S/F	1800.0E	1801.0	3.0D	210.0			ST=2 TYP=3
	15400	PALE	4	S/F	1800.0E	1801.0	14.0D	220.0			ST=2 TYP=3
	8800	SGMR	4	S/F	1800.0E	1801.0	11.0D	190.0			ST=2 TYP=3
	4995	PALE	8	S	1801.0E	1801.0	U	150.0			ST=2 TYP=3
	610	LEAR	8	S	2250.0E	2250.0	1.0D	88.0			ST=2 TYP=3
	17000	NOBE	8	S	2323.5	2323.7	0.6	62.0			0,80,35GHz:0
	245	LEAR	8	S	2324.0E	2325.0	1.0D	62.0			ST=2 TYP=3
	410	LEAR	49	GB	2325.0E	2325.0	U	1900.0			ST=2 TYP=6
	410	PALE	49	GB	2325.0E	2325.0	U	1900.0			ST=2 TYP=6
21	200	HIRA	44	NS	2024.0E		730.0D		25.0		
	245	LEAR	44	NS	2330.0E	0021.0	450.0D	110.0			ST=2 TYP=1
	17000	NOBE	1	S	0011.7	0012.0	1.5	36.0			15R,80,35GHz:0
	200	HIRA	46	C	0126.9	0127.6	1.5	2300.0			O
	8800	LEAR	4	S/F	0127.0E	0127.0	5.0D	89.0			ST=2 TYP=3
	410	LEAR	49	GB	0127.0E	0127.0	1.0D	9300.0			ST=2 TYP=6
	15400	LEAR	4	S/F	0127.0E	0128.0	5.0D	58.0			ST=2 TYP=3
	245	LEAR	49	GB	0127.0E	0127.0	1.0D	680.0			ST=2 TYP=6
	15400	PALE	8	S	0127.0E	0128.0	2.0D	55.0			ST=2 TYP=3
	8800	PALE	8	S	0127.0E	0128.0	2.0D	81.0			ST=2 TYP=3
	2695	PALE	8	S	0127.0E	0128.0	1.0D	51.0			ST=2 TYP=3
	245	PALE	49	GB	0127.0E	0127.0	1.0D	560.0			ST=2 TYP=6
	410	PALE	49	GB	0127.0E	0127.0	1.0D	9000.0			ST=2 TYP=6
	4995	PALE	8	S	0127.0E	0128.0	2.0D	77.0			ST=2 TYP=3
	2840	PEKG	5	S	0127.0	0128.1	5.0	44.2			
	500	HIRA	46	C	0127.4	0127.6	1.5	2750.0			WR
	100	HIRA	46	C	0127.5	0127.7	1.3	890.0			
	17000	NOBE	7	C	0127.5	0127.9	3.0	49.0			43R,80,35GHz:0
	500	HIRA	42	SER	0244.8	0306.4	23.0	310.0			ML
	610	LEAR	8	S	0250.0E	0250.0	2.0D	75.0			ST=2 TYP=3
	15400	LEAR	20	GRF	0257.0E	0259.0	23.0D	360.0			ST=2 TYP=2
	2840	PEKG	45	C	0257.0	0258.4	23.0	153.4			
	17000	NOBE	7	C	0257.9	0259.1	20.0	370.0			9R
	35000	NOBE	7	C	0257.9	0258.3	10.0	390.0			10R,80GHz:0
	2695	LEAR	8	S	0258.0E	0258.0	1.0D	120.0			ST=2 TYP=3
	2695	PALE	8	S	0258.0E	0258.0	1.0D	130.0			ST=2 TYP=3
	4995	PALE	8	S	0258.0E	0258.0	1.0D	180.0			ST=2 TYP=3
	8800	LEAR	20	GRF	0258.0E	0258.0	17.0D	240.0			ST=2 TYP=2
	15400	PALE	4	S/F	0258.0E	0259.0	17.0D	330.0			ST=2 TYP=5
	8800	PALE	4	S/F	0258.0E	0258.0	21.0D	220.0			ST=2 TYP=3
	245	LEAR	8	S	0304.0E	0304.0	U	90.0			ST=2 TYP=3
	245	PALE	8	S	0304.0E	0304.0	U	64.0			ST=2 TYP=3
	200	HIRA	46	C	0304.0	0304.5	2.6	80.0			O
	410	LEAR	8	S	0305.0E	0306.0	2.0D	420.0			ST=2 TYP=3
	410	PALE	8	S	0305.0E	0306.0	2.0D	320.0			ST=2 TYP=3
	610	LEAR	8	S	0306.0E	0306.0	U	72.0			ST=2 TYP=3
	610	PALE	8	S	0306.0E	0306.0	U	70.0			ST=2 TYP=3
	500	HIRA	27	RF	0310.0	0317.5	35.0	13.0	4.0		O
	200	HIRA	20	GRF	0319.8	0354.8	142.0	55.0	12.0		MR

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

SEPTEMBER 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
21	9100	GORK	22	GRF	0341.0E	0425.0	247.0D	16.0			
	410	SGMR	4	S/F	0618.0E	2201.0	944.0D	61.0			ST=1 TYP=3
	15000	KISV	22	GRF	0650.5	0656.8	12.0	24.0			
	5900	KISV	22	GRF	0653.5	0658.0	29.5	8.0			
	9300	KISV	22	GRF	0653.5	0657.6	16.0	13.0			
	9300	KISV	22	GRF	0653.5	0704.7		14.0			
	33	UPIC	46	C	0727.2	0729.7	3.8				
	260	ONDR	41	F	0730.0	1020.3	480.0	319.0			
	5900	KISV	22	GRF	0805.0	0814.0	18.0	8.0			
	9100	GORK	21	GRF	0806.1	0948.7	233.9D	18.0			
	9300	KISV	22	GRF	0806.5	0810.1		7.0			
	9300	KISV	22	GRF	0806.5	0807.8	9.9	10.0			
	15000	KISV	2	S/F	0807.2	0807.6	1.0	9.0			
	3000	POTS	8	S	0852.0	0852.6	1.0	13.0			
	2850	CRIM	4	S/F	0852.2	0852.4	0.9	31.0	8.0		
	536	ONDR	42	SER	0903.5	0948.4	80.0	28.0			
	15000	KISV	40	F	0926.0	0928.2	5.9	8.0			
	9300	KISV	40	F	0928.3	0929.5	8.1	8.0			
	5900	KISV	45	C	0929.3	0929.5	2.3	5.0			
	5900	KISV	45	C	0929.3	0930.6		5.0			
	9500	POTS	40	F	0940.0	0952.5	25.0	29.0			
	15000	KISV	46	C	0943.6	0945.0		9.0			
	15000	KISV	46	C	0943.6	0945.2		9.0			
	15000	KISV	46	C	0943.6	0944.6	2.7	9.0			
	5900	KISV	46	C	0943.7	0945.1	2.7	6.0			
	5900	KISV	46	C	0943.7	0944.7		4.0			
	5900	KISV	46	C	0943.7	0944.9		5.0			
	9100	GORK	1	S	0943.8	0944.8	1.8	8.0			
	1470	POTS	40	F	0944.0	0948.5	6.0	2.0			
	204	IZMI	42	SER	0947.4	0947.5	45.0	165.0			
	5900	KISV	2	S/F	0947.5	0948.9	3.2	5.0			
	15000	KISV	46	C	0947.7	0950.0		7.0			
	15000	KISV	46	C	0947.7	0949.0		10.0			
	15000	KISV	46	C	0947.7	0948.5	4.0	10.0			
	15000	KISV	46	C	0947.7	0949.7		7.0			
	600	HUMN	2	S/F	0948.0	0949.0	1.5	14.0	6.0		
	9300	KISV	45	C	0948.0E	0948.8	3.3D	10.0			
	9300	KISV	45	C	0948.0E	0949.9		6.0			
	5900	KISV	4	S/F	0951.8	0952.7	3.7	25.0			
	15000	KISV	45	C	0952.3	0953.0		12.0			
	2950	GORK	1	S	0952.3	0952.6	0.8	14.0			
	15000	KISV	45	C	0952.3	0952.6	3.7	28.0			
	9100	GORK	3	S	0952.5	0952.6	1.1	36.0			
	2950	GORK	45	C	0952.5	0952.7	0.7	5.0			
	9300	KISV	4	S/F	0952.5	0952.7	3.0	35.0			
	2950	GORK	45	C	0952.5	0952.9		9.0			
	9300	KISV	23	GRF	1015.7	1016.4	12.0	12.0			
	9100	GORK	1	S	1015.8	1016.4	1.5	11.0			
	9500	POTS	3	S	1016.0	1016.3	8.0	11.0			
	9300	KISV	1	S	1019.1	1019.3	0.3	11.0			
	9300	KISV	22	GRF	1033.3	1041.3	20.7	8.0			
	9300	KISV	40	F	1121.7	1126.5	9.0	11.0			
	15000	KISV	45	C	1143.3	1143.5	1.4	8.0			
	15000	KISV	45	C	1143.3	1144.5		6.0			
	9300	KISV	46	C	1146.3	1153.0		8.0			
	9300	KISV	46	C	1146.3	1154.1		2.0			
	9300	KISV	46	C	1146.3	1153.6		10.0			
	9300	KISV	46	C	1146.3	1149.7	8.4	23.0			
	9500	POTS	3	S	1148.5	1149.8	4.5	16.0			
	15000	KISV	2	S/F	1148.7	1149.9	4.4	11.0			
	9100	GORK	2	S/F	1149.0	1149.9	3.2	15.0			
	3000	POTS	3	S	1237.5	1238.4	1.5	7.0			
	5900	KISV	45	C	1238.3	1239.0	1.4	10.0			
	5900	KISV	45	C	1238.3	1238.6		5.0			
	9300	KISV	45	C	1240.2	1243.5	3.6	10.0			
	9300	KISV	45	C	1240.2	1241.9		9.0			
	15000	KISV	2	S/F	1245.6	1246.3	1.3	12.0			
	9300	KISV	23	GRF	1246.0	1253.3	10.5	13.0			
	15000	KISV	45	C	1249.5	1250.1		21.0			

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

SEPTEMBER 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
21	15000	KISV	46	C	1249.5	1252.9		22.0			
	15000	KISV	46	C	1249.5	1250.9	5.5	45.0			
	9300	KISV	45	C	1249.9	1250.2		9.0			
	9300	KISV	45	C	1249.9	1250.9	2.1	23.0			
	9300	KISV	4	S/F	1257.0	1301.5	9.0	198.0			
	5900	KISV	1	S	1258.8	1259.2	0.4	9.0			
	15400	SVTO	4	S/F	1259.0E	1301.0	8.0D	130.0			ST=2 TYP=3
	19600	BERN	46	C	1259.3	1300.8	5.0	7.2			
	5200	BERN	46	C	1259.3	1300.8	5.0	8.0			
	11800	BERN	46	C	1259.3	1300.8	5.0	14.7			
	8400	BERN	46	C	1259.3	1300.8	5.0	15.5			
	3200	BERN	46	C	1259.3	1300.8	5.0	2.7			
	5900	KISV	4	S/F	1259.4	1301.5	19.6	116.0			
	9500	POTS	4	S/F	1259.5	1301.3	31.0	165.0			
	15000	KISV	4	S/F	1259.6	1301.4	18.4	138.0			
	15400	SGMR	4	S/F	1300.0E	1301.0	4.0D	100.0			ST=2 TYP=3
	4995	SGMR	4	S/F	1300.0E	1300.0	4.0D	62.0			ST=2 TYP=3
	8800	SGMR	4	S/F	1300.0E	1301.0	4.0D	130.0			ST=2 TYP=3
	4995	SVTO	8	S	1300.0E	1300.0	2.0D	57.0			ST=2 TYP=3
	8800	SVTO	4	S/F	1300.0E	1301.0	3.0D	140.0			ST=2 TYP=3
	3000	POTS	29	PBI	1300.0	1300.7	30.0	17.0			
	536	ONDR	42	SER	1351.4	1351.5	105.0	20.0			
	9500	POTS	3	S	1417.0	1417.7	5.5	22.0			
	9500	POTS	3	S	1445.5	1446.5	2.5	27.0			
	2695	SVTO	8	S	1457.0E	1457.0	U	71.0			ST=2 TYP=3
	410	SGMR	8	S	1544.0E	1545.0	1.0D	92.0			ST=2 TYP=3
	410	SVTO	8	S	1545.0E	1545.0	U	58.0			ST=2 TYP=3
	8800	SGMR	8	S	1550.0E	1550.0	U	61.0			ST=2 TYP=3
	15400	SGMR	8	S	1550.0E	1550.0	U	78.0			ST=2 TYP=3
	8800	SVTO	8	S	1550.0E	1550.0	1.0D	60.0			ST=2 TYP=3
	15400	SVTO	8	S	1550.0E	1550.0	1.0D	53.0			ST=2 TYP=3
	15400	SGMR	8	S	1554.0E	1555.0	2.0D	420.0			ST=2 TYP=3
	8800	SGMR	4	S/F	1554.0E	1555.0	4.0D	300.0			ST=2 TYP=3
	15400	SVTO	8	S	1554.0E	1555.0	2.0D	430.0			ST=2 TYP=3
	8800	SVTO	4	S/F	1554.0E	1555.0	3.0D	310.0			ST=2 TYP=3
	11800	BERN	4	S/F	1554.8	1555.1	1.5	52.5			
	3200	BERN	4	S/F	1554.8	1555.1	1.5	1.0			
	8400	BERN	4	S/F	1554.8	1555.1	1.5	29.5			
	5200	BERN	4	S/F	1554.8	1555.1	1.5	5.6			
	4995	SGMR	8	S	1555.0E	1555.0	U	44.0			ST=2 TYP=3
	2800	OTTA	4	S/F	1900.0	1937.0	120.0	103.3	20.0		
	245	SGMR	8	S	1907.0E	1907.0	1.0D	77.0			ST=2 TYP=3
	245	PALE	49	GB	1919.0E	1934.0	40.0D	920.0			ST=2 TYP=7
	15400	PALE	4	S/F	1933.0E	1937.0	16.0D	140.0			ST=2 TYP=3
	410	PALE	4	S/F	1933.0E	1937.0	26.0D	190.0			ST=2 TYP=5
	1415	PALE	4	S/F	1934.0E	1937.0	5.0D	82.0			ST=2 TYP=3
	610	PALE	4	S/F	1934.0E	1936.0	5.0D	190.0			ST=2 TYP=3
	610	SGMR	4	S/F	1934.0E	1936.0	5.0D	180.0			ST=2 TYP=3
	2695	SGMR	4	S/F	1934.0E	1937.0	4.0D	80.0			ST=2 TYP=3
	4995	SGMR	4	S/F	1934.0E	1937.0	5.0D	170.0			ST=2 TYP=3
	410	SGMR	4	S/F	1934.0E	1937.0	7.0D	170.0			ST=2 TYP=3
	8800	SGMR	4	S/F	1934.0E	1936.0	7.0D	190.0			ST=2 TYP=3
	245	SGMR	49	GB	1934.0E	1934.0	4.0D	880.0			ST=2 TYP=6
	1415	SGMR	4	S/F	1934.0E	1937.0	266.0D	81.0			ST=1 TYP=3
	4995	PALE	4	S/F	1936.0E	1937.0	3.0D	130.0			ST=2 TYP=3
	2695	PALE	20	GRF	1936.0E	1937.0	7.0D	98.0			ST=2 TYP=2
	245	SGMR	49	GB	1958.0E	1958.0	U	710.0			ST=2 TYP=6
	610	SGMR	8	S	1958.0E	1958.0	1.0D	68.0			ST=2 TYP=3
	200	HIRA	46	C	2024.0E	2055.0	66.0D	60.0			WR SUNRISE
	100	HIRA	46	C	2024.0E	2054.8	56.0D	340.0U	180.0U		SUNRISE
	200	HIRA	42	SER	2150.7	2151.5	18.5	3600.0			O
	245	PALE	8	S	2151.0E	2152.0	2.0D	250.0			ST=2 TYP=3
	245	SGMR	8	S	2151.0E	2152.0	1.0D	180.0			ST=2 TYP=3
	500	HIRA	42	SER	2151.5	2202.0	18.0	118.0			ML
	2800	OTTA	4	S/F	2152.0	2207.0	26.0	82.6	17.0		
	410	PALE	8	S	2152.0E	2152.0	1.0D	110.0			ST=2 TYP=3
	410	PALE	4	S/F	2159.0E	2202.0	3.0D	130.0			ST=2 TYP=3
	245	PALE	49	GB	2159.0E	2201.0	3.0D	5900.0			ST=2 TYP=6
	15400	PALE	8	S	2200.0E	2201.0	2.0D	57.0			ST=2 TYP=3

S O L A R R A D I O E M I S S I O N
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SEPTEMBER 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
21	17000	NOBE	7	C	2200.6	2205.8	17.0	89.0			19R,80,35GHz:O
	610	PALE	8	S	2201.0E	2201.0	1.0D	54.0			ST=2 TYP=3
	245	PALE	4	S/F	2205.0E	2205.0	3.0D	210.0			ST=2 TYP=3
	2695	PALE	8	S	2205.0E	2205.0	1.0D	76.0			ST=2 TYP=3
	410	PALE	8	S	2205.0E	2205.0	1.0D	140.0			ST=2 TYP=3
	15400	PALE	8	S	2205.0E	2205.0	1.0D	130.0			ST=2 TYP=3
	4995	PALE	8	S	2205.0E	2205.0	1.0D	86.0			ST=2 TYP=3
	610	PALE	8	S	2205.0E	2205.0	1.0D	90.0			ST=2 TYP=3
	610	SGMR	8	S	2205.0E	2205.0	1.0D	36.0			ST=2 TYP=3
	245	SGMR	8	S	2205.0E	2205.0	1.0D	110.0			ST=2 TYP=5
	4995	SGMR	8	S	2205.0E	2205.0	1.0D	150.0			ST=2 TYP=3
	2695	SGMR	8	S	2205.0E	2205.0	1.0D	77.0			ST=2 TYP=3
	8800	SGMR	8	S	2205.0E	2205.0	1.0D	190.0			ST=2 TYP=3
	245	LEAR	4	S/F	2302.0E	2303.0	3.0D	68.0			ST=2 TYP=3
22	204	IZMI	43	NS	0600.0		360.0	25.0			
	127	TORN	44	NS	0620.0E		520.0D		3.0		V=2
	260	ONDR	44	NS	0700.0E	1450.0	510.0D	202.0			
	245	SGMR	44	NS	1318.0E	1536.0	542.0D	110.0			ST=2 TYP=1
	245	SVTO	43	NS	1329.0	1536.0	177.0D	89.0			ST=2 TYP=1
	245	PALE	44	NS	1700.0E	2258.0	628.0D	180.0			ST=2 TYP=1
	200	HIRA	44	NS	2024.0E	2300.0	730.0D	37.0	17.0		O
	245	LEAR	44	NS	2232.0E	2258.0	690.0D	230.0			ST=2 TYP=1
	17000	NOBE	7	C	0058.9	0101.9	12.0	71.0			12R,80,35GHz:SK
	15400	LEAR	4	S/F	0101.0E	0101.0	3.0D	76.0			ST=2 TYP=3
	15400	PALE	8	S	0101.0E	0101.0	2.0D	52.0			ST=2 TYP=3
	410	LEAR	49	GB	0207.0E	0208.0	1.0D	870.0			ST=2 TYP=6
	245	LEAR	8	S	0207.0E	0208.0	1.0D	320.0			ST=2 TYP=3
	245	PALE	8	S	0207.0E	0208.0	1.0D	230.0			ST=2 TYP=3
	410	PALE	49	GB	0207.0E	0208.0	1.0D	600.0			ST=2 TYP=6
	410	LEAR	4	S/F	0234.0E	0235.0	3.0D	57.0			ST=2 TYP=3
	245	LEAR	49	GB	0235.0E	0235.0	2.0D	570.0			ST=2 TYP=6
	245	PALE	8	S	0235.0E	0235.0	1.0D	340.0			ST=2 TYP=3
	245	LEAR	8	S	0241.0E	0241.0	1.0D	240.0			ST=2 TYP=3
	245	PALE	8	S	0241.0E	0241.0	1.0D	170.0			ST=2 TYP=3
	410	LEAR	4	S/F	0243.0E	0245.0	3.0D	110.0			ST=2 TYP=3
	1415	LEAR	8	S	0243.0E	0243.0	U	59.0			ST=3 TYP=3
	610	LEAR	8	S	0243.0E	0244.0	2.0D	62.0			ST=3 TYP=3
	410	LEAR	8	S	0245.0E	0245.0	U	110.0			ST=2 TYP=3
	410	LEAR	49	GB	0331.0E	0332.0	1.0D	620.0			ST=2 TYP=6
	500	HIRA	42	SER	0331.8	0338.3	7.0	110.0			O
	410	PALE	8	S	0332.0E	0332.0	U	340.0			ST=2 TYP=3
	410	LEAR	8	S	0333.0E	0333.0	1.0D	180.0			ST=2 TYP=3
	410	LEAR	8	S	0337.0E	0338.0	1.0D	190.0			ST=2 TYP=3
	245	LEAR	8	S	0337.0E	0338.0	1.0D	160.0			ST=2 TYP=3
	610	LEAR	8	S	0337.0E	0338.0	2.0D	150.0			ST=2 TYP=3
	245	PALE	8	S	0338.0E	0338.0	U	150.0			ST=2 TYP=3
	610	PALE	8	S	0338.0E	0338.0	1.0D	130.0			ST=2 TYP=3
	410	PALE	8	S	0338.0E	0338.0	U	210.0			ST=2 TYP=3
	9100	GORK	21	GRF	0511.4	0631.9	371.0	18.0			
	15000	KISV	23	GRF	0514.5	0532.5	34.5	14.0			
	5900	KISV	2	S/F	0516.0	0518.4	14.0	13.0			
	9100	GORK	2	S/F	0517.6	0518.0	2.4	24.0			
	15000	KISV	2	S/F	0517.7	0518.0	2.0	11.0			
	9300	KISV	2	S/F	0517.7	0518.0	9.0	26.0			
	245	LEAR	49	GB	0535.0E	0538.0	4.0D	830.0			ST=2 TYP=7
	245	SVTO	4	S/F	0535.0E	0538.0	4.0D	450.0			ST=2 TYP=5
	9300	KISV	23	GRF	0535.0	0615.5	48.0	10.0			
	2840	PEKG	5	S	0535.0	0538.8	6.0	12.4			
	100	HIRA	41	F	0535.3		4.4	1000.0D			
	5900	KISV	41	F	0535.7	0538.8	6.0	17.0			
	200	HIRA	41	F	0536.3	0536.6	3.5	780.0			O
	500	HIRA	46	C	0536.8	0538.7	3.5	420.0			WL
	410	LEAR	49	GB	0537.0E	0538.0	2.0D	1700.0			ST=2 TYP=6
	410	SVTO	49	GB	0537.0E	0538.0	2.0D	1500.0			ST=2 TYP=6
	2950	GORK	2	S/F	0537.0	0538.7	3.0	11.0			
	650	GORK	4	S/F	0537.1	0538.7	6.4	30.0			
	950	GORK	2	S/F	0537.1	0538.9	6.4	4.0			
	9300	KISV	2	S/F	0538.6	0538.7	0.2	12.0			

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SEPTEMBER 1989

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	15000	KISV	23	GRF	0553.0	0601.8	29.0	10.0			
	5900	KISV	22	GRF	0553.7	0554.8	14.0	4.0			
	15000	KISV	1	S	0606.0	0606.3	1.0	11.0			
	245	LEAR	8	S	0607.0E	0608.0	1.0D	140.0			ST=2 TYP=3
	245	SVTO	8	S	0608.0E	0608.0	U	120.0			ST=2 TYP=3
	5900	KISV	22	GRF	0611.0	0615.4	12.0	4.0			
	15000	KISV	2	S/F	0615.0	0615.5	2.3	23.0			
	9100	GORK	4	S/F	0621.9	0623.5U	7.5	237.0			
	245	SVTO	49	GB	0623.0E	0626.0	11.0D	25000.0			ST=2 TYP=6
	15000	KISV	4	S/F	0623.0	0626.6	19.0	368.0			
	5900	KISV	47	GB	0624.0	0626.7	19.0	397.0			
	9300	KISV	47	GB	0624.0	0626.7	25.0	324.0			
	2840	PEKG	5	S	0625.0	0626.6	8.0	173.2			
	950	GORK	2	S/F	0625.0	0626.7	7.5	26.0			
	3013	IZMI	5	S	0625.5	0627.0	3.5	120.0	70.0		
	2850	CRIM	3	S	0625.8	0626.8	4.2	140.0	47.0		
	1415	LEAR	8	S	0626.0E	0626.0	1.0D	29.0			ST=2 TYP=3
	410	LEAR	8	S	0626.0E	0626.0	1.0D	120.0			ST=2 TYP=3
	2695	LEAR	8	S	0626.0E	0626.0	1.0D	130.0			ST=2 TYP=3
	245	LEAR	49	GB	0626.0E	0626.0	2.0D	28000.0			ST=2 TYP=6
	15400	LEAR	8	S	0626.0E	0626.0	1.0D	290.0			ST=2 TYP=3
	410	SVTO	8	S	0626.0E	0626.0	1.0D	120.0			ST=2 TYP=3
	610	SVTO	8	S	0626.0E	0626.0	1.0D	120.0			ST=2 TYP=3
	8800	SVTO	8	S	0626.0E	0626.0	1.0D	270.0			ST=2 TYP=3
	15400	SVTO	8	S	0626.0E	0626.0	1.0D	260.0			ST=2 TYP=3
	1415	SVTO	8	S	0626.0E	0626.0	1.0D	24.0			ST=2 TYP=3
	2695	SVTO	8	S	0626.0E	0626.0	1.0D	130.0			ST=2 TYP=3
	4995	SVTO	8	S	0626.0E	0626.0	1.0D	230.0			ST=2 TYP=3
	200	HIRA	46	C	0626.0	0626.5	3.0	900.0		MR	
	19600	BERN	3	S	0626.0	0626.6	1.5	29.2			
	5200	BERN	3	S	0626.0	0626.6	1.5	33.8			
	11800	BERN	3	S	0626.0	0626.6	1.5	40.8			
	8400	BERN	3	S	0626.0	0626.6	1.5	36.1			
	3200	BERN	3	S	0626.0	0626.6	1.5	15.4			
	17000	NOBE	3	S	0626.1	0626.7	4.0	255.0			6R,80,35GHz:0
	234	POTS	8	S	0626.3	0627.1	1.3	125000.0			
	500	HIRA	8	S	0626.3	0626.5	0.6	163.0		O	
	113	POTS	4	S/F	0626.3	0626.6	1.0	1100.0			
	204	IZMI	45	C	0626.3	0626.7	3.0	29000.0			
	650	GORK	8	S	0626.4	0626.6	0.4	184.0			
	204	IZMI	5	S	0626.6E	0626.6	8.0D	116.0	50.0		
	650	GORK	29	PBI	0626.8	0626.8	4.0	5.0			
	2950	GORK	21	GRF	0628.0	0751.0	223.0	9.0			
	2950	GORK	3	S	0628.8	0629.5	3.5	47.0			
	5900	KISV	1	S	0645.9	0646.2	1.2	2.0			
	5900	KISV	4	S/F	0702.0	0708.6	15.0	77.0			
	15000	KISV	4	S/F	0703.6	0708.6	9.0	79.0			
	200	HIRA	42	SER	0704.0	0707.6	5.3	385.0		O	
	3000	POTS	4	S/F	0704.0	0708.6	8.0	96.0			
	1470	POTS	4	S/F	0704.0	0708.6	8.0	200.0			
	650	GORK	4	S/F	0704.0	0707.9	7.4	93.0			
	950	GORK	46	C	0704.1	0706.0	6.3	37.0			
	950	GORK	46	C	0704.1	0708.2		66.0			
	2950	GORK	1	S	0704.1	0704.3	0.5	9.0			
	100	HIRA	42	SER	0704.2		5.9	1000.0D			
	9300	KISV	4	S/F	0705.0	0708.7	6.5	42.0			
	500	HIRA	46	C	0706.3	0708.0	5.0	120.0		O	
	113	POTS	4	S/F	0706.9	0707.8	5.1	525.0			
	40	POTS	4	S/F	0706.9E	0707.8	3.9D	24000.0			
	2695	LEAR	8	S	0707.0E	0708.0	2.0D	95.0			ST=2 TYP=3
	8800	LEAR	8	S	0707.0E	0708.0	2.0D	43.0			ST=2 TYP=3
	245	SVTO	8	S	0707.0E	0708.0	1.0D	140.0			ST=2 TYP=3
	2840	PEKG	3	S	0707.0	0708.6	13.0	146.4			
	9100	GORK	4	S/F	0707.5	0708.3	2.9	43.0			
	600	HUMN	4	S/F	0707.5	0708.5	3.5	94.0	12.0		
	3013	IZMI	7	C	0707.5	0708.5	4.0	75.0	35.0		
	9500	POTS	3	S	0707.5	0708.5	5.5	34.0			
	204	IZMI	41	F	0707.5	0707.8	3.0	320.0			
	2950	GORK	3	S	0707.6	0708.2	2.6	44.0			

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SEPTEMBER 1989

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	2850	CRIM	4	S/F	0707.7	0708.7	2.5	154.0	51.0		
	410	LEAR	8	S	0708.0E	0709.0	1.0D	69.0			ST=2 TYP=3
	4995	SVTO	8	S	0708.0E	0708.0	U	60.0			ST=2 TYP=3
	610	SVTO	8	S	0708.0E	0708.0	1.0D	78.0			ST=2 TYP=3
	2695	SVTO	8	S	0708.0E	0708.0	1.0D	110.0			ST=2 TYP=3
	1415	SVTO	8	S	0708.0E	0708.0	1.0D	130.0			ST=2 TYP=3
	8800	SVTO	8	S	0708.0E	0708.0	1.0D	41.0			ST=2 TYP=3
	15400	SVTO	8	S	0708.0E	0708.0	1.0D	50.0			ST=2 TYP=3
	234	POTS	4	S/F	0708.1E	0708.1U	1.4D	385.0			
	17000	NOBE	1	S	0708.3	0708.6	0.6	45.0			35R,80,35GHz:0
	410	SVTO	4	S/F	0709.0E	0709.0	1439.0D	78.0			ST=2 TYP=3
	15000	KISV	1	S	0726.5	0727.0	2.5	11.0			
	15000	KISV	1	S	0730.0	0731.2	2.0	4.0			
	5900	KISV	2	S/F	0730.3	0739.1	11.0	14.0			
	950	GORK	21	GRF	0734.8	0740.0	11.0	1.0			
	650	GORK	4	S/F	0734.9	0738.8	5.9	65.0			
	2695	LEAR	8	S	0737.0E	0738.0	2.0D	61.0			ST=2 TYP=3
	9300	KISV	1	S	0737.0	0739.1	3.0	3.0			
	3000	POTS	4	S/F	0737.0	0738.5	3.0	28.0			
	2840	PEKG	40	F	0737.0	0738.6	4.0	78.1			
	2950	GORK	46	C	0737.4	0737.5	3.0	14.0			
	2950	GORK	46	C	0737.4	0738.5		30.0			
	950	GORK	46	C	0737.4	0737.7	1.9	32.0			
	950	GORK	46	C	0737.4	0738.7		66.0			
	9100	GORK	1	S	0737.4	0738.9	2.9	13.0			
	9500	POTS	1	S	0737.5	0739.0	4.5	9.0			
	1470	POTS	3	S	0737.5	0739.0	4.0	12.0			
	500	HIRA	46	C	0737.5	0738.1	1.8	174.0		0	
	15000	KISV	1	S	0738.2	0739.3	2.2	4.0			
	15000	KISV	45	C	0847.1	0847.4	2.0	12.0			
	15000	KISV	45	C	0847.1	0847.6		8.0			
	9300	KISV	40	F	0847.3	0847.5	1.6	5.0			
	950	GORK	41	F	0848.6	0851.8		46.0			
	950	GORK	41	F	0848.6	0848.9	3.4	20.0			
	15000	KISV	1	S	0849.6	0850.1	1.0	5.0			
	650	GORK	4	S/F	0850.2	0851.9	3.2	35.0			
	808	ONDR	8	S	0851.5	0852.0	1.0	33.0			
	245	LEAR	8	S	0859.0E	0900.0	2.0D	180.0			ST=2 TYP=3
	536	ONDR	42	SER	0900.0	1454.1	380.0	171.0			
	245	SVTO	8	S	0901.0E	0901.0	U	210.0			ST=2 TYP=3
	9300	KISV	1	S	0928.3	0928.5	1.1	5.0			
	9300	KISV	1	S	1000.9	1001.0	0.3	7.0			
	15000	KISV	45	C	1016.3	1016.6	0.8	6.0			
	15000	KISV	45	C	1016.3	1016.8		5.0			
	15000	KISV	1	S	1020.2	1020.4	0.5	6.0			
	5900	KISV	1	S	1020.4	1020.5	0.5	4.0			
	9300	KISV	45	C	1020.5	1021.4	1.9	12.0			
	9300	KISV	45	C	1020.5	1020.6		10.0			
	5900	KISV	1	S	1021.1	1021.2	0.3	6.0			
	15000	KISV	1	S	1021.6	1021.7	0.4	5.0			
	9300	KISV	22	GRF	1054.5	1058.1	8.1	7.0			
	9300	KISV	2	S/F	1111.9	1114.9	5.1	5.0			
	245	SGMR	8	S	1131.0E	1131.0	U	52.0			ST=2 TYP=3
	9300	KISV	2	S/F	1158.0	1158.2	5.1	5.0			
	9300	KISV	42	SER	1217.1	1225.0		8.0			
	9300	KISV	42	SER	1217.1	1218.2	13.0	11.0			
	15000	KISV	45	C	1223.0	1224.1	3.6	7.0			
	15000	KISV	45	C	1223.0	1226.7		6.0			
	5900	KISV	42	SER	1223.1	1224.2	13.4	6.0			
	5900	KISV	42	SER	1223.1	1230.8		6.0			
	9300	KISV	2	S/F	1257.4	1258.3	2.0	6.0			
	8800	PALE	4	S/F	1644.0E	1646.0	3.0D	100.0			ST=2 TYP=3
	2695	PALE	4	S/F	1644.0E	1645.0	3.0D	55.0			ST=2 TYP=3
	4995	PALE	4	S/F	1644.0E	1645.0	3.0D	57.0			ST=2 TYP=3
	15400	PALE	8	S	1701.0E	1702.0	2.0D	75.0			ST=2 TYP=3
	8800	PALE	8	S	1702.0E	1702.0	1.0D	100.0			ST=2 TYP=3
	4995	PALE	8	S	1702.0E	1702.0	U	54.0			ST=2 TYP=3
23	204	IZMI	43	NS	0600.0		360.0	15.0			

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

SEPTEMBER 1989

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
23	260	ONDR	44	NS	0700.0E	1212.2	510.0D	305.0			
	245	SVTO	43	NS	0729.0	0800.0	91.0	79.0			ST=1 TYP=1
	245	SGMR	44	NS	1214.0E	1616.0	299.0D	250.0			ST=2 TYP=1
	245	PALE	44	NS	2005.0E	2053.0	468.0D	180.0			ST=2 TYP=1
	245	LEAR	44	NS	2229.0E	2231.0	505.0D	240.0			ST=2 TYP=1
	245	LEAR	8	S	0320.0E	0320.0	2.0D	300.0			ST=2 TYP=3
	245	PALE	8	S	0333.0E	0333.0	U	160.0			ST=2 TYP=3
	9100	GORK	2	S/F	0435.6	0436.5	3.0	12.0			
	9300	KISV	2	S/F	0444.6	0445.2	1.2	5.0			
	15000	KISV	2	S/F	0459.6	0500.2	1.9	6.0			
	2950	GORK	20	GRF	0509.0	0639.0	153.0	7.0			
	9300	KISV	45	C	0514.2	0514.7	1.6	14.0			
	9300	KISV	45	C	0514.2	0514.9		14.0			
	9300	KISV	22	GRF	0520.0	0530.4	17.4	10.0			
	5900	KISV	22	GRF	0520.6	0524.8	15.6	4.0			
	15000	KISV	22	GRF	0521.5	0530.9	15.0	5.0			
	15000	KISV	2	S/F	0550.3	0550.9	3.7	4.0			
	9100	GORK	20	GRF	0620.2E	0646.8	58.7D	8.0			
	15000	KISV	2	S/F	0628.3	0629.0	1.2	7.0			
	15000	KISV	42	SER	0640.7	0647.0	28.5	27.0			
	15000	KISV	42	SER	0640.7	0641.3		9.0			
	15000	KISV	42	SER	0640.7	0655.5		18.0			
	15000	KISV	42	SER	0640.7	0649.7		9.0			
	15000	KISV	42	SER	0640.7	0657.7		20.0			
	9300	KISV	2	S/F	0646.6	0646.9	1.0	6.0			
	15000	KISV	2	S/F	0709.6	0711.4	5.1	9.0			
	204	IZMI	42	SER	0732.0	0748.8	35.0	120.0			
	245	SVTO	8	S	0738.0E	0738.0	U	97.0			ST=2 TYP=3
	950	GORK	2	S/F	0752.5	0752.8	0.6	18.0			
	15000	KISV	1	S	0817.0	0817.3	0.8	8.0			
	9100	GORK	21	GRF	0821.1	0925.6	128.9D	14.0			
	9300	KISV	2	S/F	0824.6	0824.9	3.6	8.0			
	2950	GORK	20	GRF	0828.5	0836.0	15.8	2.0			
	15000	KISV	2	S/F	0829.0	0834.3	7.9	11.0			
	9100	GORK	1	S	0833.6	0834.2	2.1	7.0			
	9300	KISV	2	S/F	0833.6	0834.3	2.7	8.0			
	9300	KISV	2	S/F	0846.0	0847.1	3.7	6.0			
	15000	KISV	2	S/F	0849.7	0850.6	2.1	7.0			
	15000	KISV	2	S/F	0852.0	0852.9	1.2	7.0			
	15000	KISV	2	S/F	0854.0	0855.0	2.5	9.0			
	3000	POTS	1	S	0857.0	0858.5	3.0	6.0			
	2850	CRIM	1	S	0857.7	0858.4	1.8	7.0	2.0		
	2950	GORK	1	S	0857.7	0858.4	1.6	5.0			
	1470	POTS	1	S	0857.8	0858.5	2.2	3.0			
	113	POTS	4	S/F	0857.8	0902.6U	12.2	3900.0D			
	204	IZMI	41	F	0859.7	0901.4	2.5	270.0			
	127	TORN	47	GB	0901.2	0903.2	10.0	3300.0	1600.0		
	9300	KISV	22	GRF	0911.2	0926.6	28.8	9.0			
	15000	KISV	2	S/F	0911.5	0913.0	2.5	7.0			
	15000	KISV	23	GRF	0921.3	0926.6	18.9	9.0			
	15000	KISV	46	C	0932.0	0932.2	5.5	14.0			
	15000	KISV	46	C	0932.0	0936.2		10.0			
	15000	KISV	46	C	0932.0	0933.3		11.0			
	5900	KISV	2	S/F	0952.5	0954.1	4.7	5.0			
	9500	POTS	42	SER	1019.0	1026.0	11.0	12.0			
	9300	KISV	23	GRF	1019.5	1019.9	10.5	8.0			
	5900	KISV	2	S/F	1025.2	1026.0	3.0	9.0			
	9300	KISV	2	S/F	1025.2	1025.9	2.1	13.0			
	9100	GORK	2	S/F	1025.4	1025.9	1.5	11.0			
	15000	KISV	2	S/F	1025.8	1026.0	1.4	5.0			
	15000	KISV	1	S	1040.2	1040.4	0.5	4.0			
	15000	KISV	2	S/F	1051.3	1052.6	3.7	7.0			
	9300	KISV	2	S/F	1052.0	1052.4	2.5	5.0			
	5900	KISV	22	GRF	1056.8	1100.1	18.5	6.0			
	9300	KISV	2	S/F	1140.8	1141.4	2.2	7.0			
	5900	KISV	2	S/F	1140.9	1141.7	2.4	5.0			
	9300	KISV	23	GRF	1159.0	1213.2	22.5	12.0			
	5900	KISV	22	GRF	1159.0	1207.7	15.3	8.0			
	15000	KISV	2	S/F	1206.5	1207.8	3.0	10.0			

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

SEPTEMBER 1989

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
23	9300	KISV	45	C	1207.3	1209.3		10.0			
	9300	KISV	45	C	1207.3	1207.7	4.0	22.0			
	9500	POTS	40	F	1207.5	1207.7	13.0	17.0			
	245	SVTO	8	S	1237.0E	1239.0	2.0D	75.0			ST=3 TYP=3
	410	SVTO	8	S	1239.0E	1240.0	1.0D	350.0			ST=3 TYP=3
	9500	POTS	20	GRF	1245.0	1251.6	25.0	17.0			
	9300	KISV	22	GRF	1245.4	1252.8	24.6U	21.0			
	15000	KISV	23	GRF	1245.6	1251.5	13.9	21.0			
	5900	KISV	22	GRF	1245.7	1252.8	16.1U	19.0			
	15000	KISV	2	S/F	1246.7	1248.7	2.7	15.0			
	1470	POTS	4	S/F	1328.0	1333.0	15.0	32.0			
	3000	POTS	4	S/F	1328.5	1332.5	27.0	19.0			
	536	ONDR	41	F	1329.0	1447.1	120.0	114.0			
	234	POTS	42	SER	1329.0	1333.3	11.0	100.0			
	113	POTS	42	SER	1329.4	1340.3	17.1	4200.0			
	40	POTS	42	SER	1329.9	1343.7	17.5	9000.0			
	245	SGMR	4	S/F	1330.0E	1333.0	3.0D	94.0			ST=3 TYP=3
	808	ONDR	3	S	1330.0	1331.9	8.0	19.0			
	127	TORN	47	GB	1337.6	1340.4	7.5	2700.0	700.0		
	410	SGMR	8	S	1639.0E	1639.0	U	65.0			ST=3 TYP=3
	245	SGMR	49	GB	1639.0E	1639.0	2.0D	1100.0			ST=3 TYP=6
	245	PALE	49	GB	1705.0E	1706.0	3.0D	610.0			ST=2 TYP=6
	245	SGMR	49	GB	1705.0E	1706.0	2.0D	540.0			ST=2 TYP=6
	245	PALE	8	S	1712.0E	1713.0	1.0D	150.0			ST=2 TYP=3
	245	SGMR	8	S	2052.0E	2053.0	1.0D	120.0			ST=2 TYP=3
	200	HIRA	41	F	2237.3	2240.5	6.0	225.0		WR	
	15400	LEAR	8	S	2308.0E	2309.0	2.0D	51.0			ST=2 TYP=3
	8800	LEAR	4	S/F	2308.0E	2309.0	3.0D	47.0			ST=2 TYP=3
	245	LEAR	8	S	2308.0E	2308.0	1.0D	180.0			ST=2 TYP=3
	500	HIRA	46	C	2308.9	2309.8	2.1	32.0		WR	
	610	LEAR	8	S	2309.0E	2309.0	1.0D	73.0			ST=2 TYP=3
	4995	LEAR	8	S	2309.0E	2309.0	1.0D	26.0			ST=2 TYP=3
	2695	LEAR	8	S	2309.0E	2309.0	1.0D	22.0			ST=2 TYP=3
	1415	LEAR	8	S	2309.0E	2309.0	1.0D	59.0			ST=2 TYP=3
	15400	PALE	8	S	2309.0E	2309.0	1.0D	37.0			ST=2 TYP=3
	8800	PALE	8	S	2309.0E	2309.0	1.0D	46.0			ST=2 TYP=3
	1415	PALE	8	S	2309.0E	2309.0	U	58.0			ST=2 TYP=3
	245	PALE	8	S	2332.0E	2333.0	1.0D	210.0			ST=2 TYP=3
24	245	SVTO	44	NS	0529.0E	0530.0	92.0D	110.0			ST=2 TYP=1
	204	IZMI	43	NS	0847.0		75.0	20.0			
	245	LEAR	8	S	0116.0E	0116.0	U	370.0			ST=2 TYP=3
	245	PALE	8	S	0116.0E	0116.0	1.0D	220.0			ST=2 TYP=3
	9100	GORK	2	S/F	0342.7	0343.7	4.9	34.0			
	15400	LEAR	8	S	0343.0E	0343.0	1.0D	53.0			ST=2 TYP=3
	8800	LEAR	8	S	0343.0E	0343.0	1.0D	38.0			ST=2 TYP=3
	9300	KISV	23	GRF	0442.3	0454.3	39.0	10.0			
	15400	LEAR	4	S/F	0444.0E	0445.0	3.0D	65.0			ST=2 TYP=3
	8800	LEAR	8	S	0444.0E	0445.0	2.0D	35.0			ST=2 TYP=3
	9100	GORK	4	S/F	0444.4	0445.2	4.4	35.0			
	15000	KISV	23	GRF	0444.4	0451.5	20.9	9.0			
	9300	KISV	4	S/F	0444.5	0445.3	7.3	34.0			
	2950	GORK	22	GRF	0444.6	0445.0	8.9	3.0			
	15000	KISV	4	S/F	0444.6	0445.2	5.7	56.0			
	5900	KISV	22	GRF	0444.7	0454.8	38.7	5.0			
	9100	GORK	21	GRF	0457.9	0843.3	332.1D	34.0			
	245	SVTO	8	S	0508.0E	0508.0	1.0D	90.0			ST=2 TYP=3
	15000	KISV	2	S/F	0529.4	0530.3	2.5	5.0			
	9300	KISV	2	S/F	0530.1	0530.4	3.4	5.0			
	15000	KISV	2	S/F	0542.7	0543.0	4.1	6.0			
	5900	KISV	2	S/F	0550.7	0551.5	5.0	3.0			
	9100	GORK	1	S	0557.2	0558.1	3.0	15.0			
	9300	KISV	2	S/F	0557.6	0558.2	5.5	11.0			
	15000	KISV	2	S/F	0557.6U	0558.3U	3.8U	10.0U			
	5900	KISV	2	S/F	0557.7	0558.2	5.5	6.0			
	950	GORK	2	S/F	0604.9	0605.0	0.5	6.0			
	15000	KISV	22	GRF	0612.7	0622.0	59.3	12.0			
	9300	KISV	22	GRF	0618.7	0622.4	11.3	8.0			
	9300	KISV	2	S/F	0644.0	0645.4	5.0	5.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

SEPTEMBER 1989

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	9300	KISV	22	GRF	0651.6	0653.0	12.4	7.0			
	260	ONDR	41	F	0700.0	0840.5	510.0D	290.0			
	9300	KISV	2	S/F	0719.3	0720.2	2.0	3.0			
	9300	KISV	22	GRF	0728.2	0737.1	15.0	5.0			
	15000	KISV	2	S/F	0750.1	0751.8	3.9	7.0			
	2840	PEKG	5	S	0752.0	0755.0	22.0	20.3			
	9300	KISV	2	S/F	0755.4	0757.2	6.1	5.0			
	9300	KISV	23	GRF	0806.8	0819.2	48.0	20.0			
	15000	KISV	23	GRF	0806.8	0819.2	51.7	21.0			
	9500	POTS	21	GRF	0807.0	0823.5	123.0	28.0			
	5900	KISV	23	GRF	0807.2	0833.2	74.5	17.0			
	1470	POTS	4	S/F	0807.5	0810.5	7.5	15.0			
	3000	POTS	3	S	0808.0	0810.5	7.0	18.0			
	2950	GORK	21	GRF	0808.1	0951.0	141.9D	8.8			
	2850	CRIM	1	S	0808.3	0810.6	4.5	20.0	3.0		
	5900	KISV	2	S/F	0808.7	0810.7	5.8	12.0			
	950	GORK	2	S/F	0809.0	0810.0	6.5	23.0			
	2950	GORK	3	S	0809.5	0810.6	4.0	12.0			
	808	ONDR	4	S/F	0809.5	0810.9	3.5	6.0			
	245	LEAR	8	S	0818.0E	0819.0	1.0D	260.0			ST=2 TYP=3
	245	SVTO	8	S	0818.0E	0819.0	1.0D	150.0			ST=2 TYP=3
	234	POTS	42	SER	0818.1	0819.0	6.4	200.0			
	204	IZMI	8	S	0819.0	0819.2	0.4	250.0	100.0		
	9300	KISV	2	S/F	0822.6	0824.9	8.4	11.0			
	245	LEAR	8	S	0823.0E	0824.0	1.0D	110.0			ST=2 TYP=3
	245	SVTO	8	S	0823.0E	0824.0	1.0D	79.0			ST=2 TYP=3
	5900	KISV	2	S/F	0823.0	0823.9	6.5	7.0			
	204	IZMI	41	F	0823.5	0824.2	1.2	30.0			
	9300	KISV	46	C	0832.2	0833.3		11.0			
	15000	KISV	46	C	0832.2	0843.4		16.0			
	9300	KISV	46	C	0832.2	0840.5		9.0			
	15000	KISV	46	C	0832.2	0840.5		10.0			
	15000	KISV	46	C	0832.2	0833.5	14.8	18.0			
	9300	KISV	46	C	0832.2	0838.6		7.0			
	15000	KISV	46	C	0832.2	0838.6		7.0			
	9300	KISV	46	C	0832.2	0843.9	14.5	15.0			
	536	ONDR	8	S	0838.0	0838.3	3.0	39.0			
	5900	KISV	46	C	0838.2	0844.2		7.0			
	5900	KISV	46	C	0838.2	0843.3	13.0	10.0			
	5900	KISV	46	C	0838.2	0840.4		5.0			
	5900	KISV	46	C	0838.2	0838.5		3.0			
	245	SVTO	49	GB	0839.0E	0840.0	6.0D	800.0			ST=2 TYP=7
	234	POTS	29	PBI	0839.3	0840.3	24.0	400.0			
	204	IZMI	41	F	0839.5	0840.5	6.2	1000.0			
	245	LEAR	49	GB	0840.0E	0840.0	2.0D	1000.0			ST=3 TYP=6
	950	GORK	40	F	0840.1	0840.1	7.9	6.0			
	113	POTS	29	PBI	0840.1	0843.7	27.0	55.0			
	2950	GORK	2	S/F	0840.3	0840.5	0.5	7.0			
	245	LEAR	49	GB	0843.0E	0843.0	U	640.0			ST=2 TYP=6
	2950	GORK	1	S	0843.0	0843.2	2.6	2.0			
	15000	KISV	23	GRF	0858.8	0910.2	64.4	16.0			
	9300	KISV	22	GRF	0900.0	0902.0	8.0	8.0			
	950	GORK	2	S/F	0900.0	0900.8	1.1	4.0			
	9300	KISV	2	S/F	0908.9	0911.8	8.3	7.0			
	9300	KISV	23	GRF	0926.2	0939.5	18.7	10.0			
	9100	GORK	2	S/F	0928.3	0929.8	3.8	22.0			
	5900	KISV	2	S/F	0928.8	0930.0	7.1	10.0			
	15000	KISV	3	S	0929.0	0929.9	2.5	40.0			
	9500	POTS	3	S	0929.0U	0929.9U	3.0U	34.0			
	11800	BERN	3	S	0929.1	0929.8	2.5	3.3			
	8400	BERN	3	S	0929.1	0929.8	2.5	1.8			
	5200	BERN	3	S	0929.1	0929.8	2.5	0.4			
	19600	BERN	3	S	0929.1	0929.8	2.5	2.4			
	9300	KISV	2	S/F	0929.2	0929.9	3.2	20.0			
	5900	KISV	2	S/F	0936.5	0940.6	8.3	4.0			
	9300	KISV	2	S/F	0945.1	0948.5	10.0	12.0			
	410	SVTO	8	S	0946.0E	0946.0	1.0D	260.0			ST=2 TYP=3
	5900	KISV	22	GRF	0948.1	0948.3	13.7	7.0			
	9300	KISV	2	S/F	1008.6	1009.0	1.3	4.0			

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

SEPTEMBER 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean	Int	Remarks
24	15000	KISV	45	C	1019.2	1019.5	2.7	8.0			
	15000	KISV	45	C	1019.2	1020.5		6.0			
	9300	KISV	46	C	1019.2	1019.5	5.3	6.0			
	9300	KISV	46	C	1019.2	1020.5		5.0			
	9300	KISV	46	C	1019.2	1020.8		5.0			
	9300	KISV	2	S/F	1034.7	1036.7	6.2	5.0			
	15000	KISV	2	S/F	1036.0	1036.6	1.8	3.0			
	15000	KISV	2	S/F	1046.0	1046.4	1.9	6.0			
	536	ONDR	45	C	1058.6	1101.4	4.0	44.0			
	15000	KISV	1	S	1100.5	1100.9	1.1	4.0			
	410	SVTO	8	S	1101.0E	1102.0	2.0D	400.0			ST=2 TYP=3
	410	SGMR	8	S	1102.0E	1102.0	1.0D	100.0			ST=3 TYP=3
	245	SGMR	8	S	1102.0E	1102.0	U	97.0			ST=3 TYP=3
	245	SVTO	8	S	1102.0E	1102.0	1.0D	250.0			ST=2 TYP=3
	234	POTS	4	S/F	1102.0	1102.4	2.1	150.0			
	5900	KISV	2	S/F	1141.0	1141.6	4.1	7.0			
	15000	KISV	1	S	1141.0	1141.7	1.6	15.0			
	9300	KISV	22	GRF	1141.0	1141.7	18.2	12.0			
	9500	POTS	1	S	1141.5	1141.5	1.0	16.0			
	15000	KISV	2	S/F	1202.0	1203.4	3.8	4.0			
	9300	KISV	45	C	1229.8	1230.5	2.0	5.0			
	9300	KISV	45	C	1229.8	1231.5		5.0			
	9300	KISV	2	S/F	1237.4	1238.9	7.1	9.0			
	15000	KISV	46	C	1237.6	1238.1		5.0			
	15000	KISV	46	C	1237.6	1238.4	2.0	7.0			
	15000	KISV	46	C	1237.6	1238.9		7.0			
	5900	KISV	1	S	1238.4	1239.0	1.2	3.0			
	9500	POTS	1	S	1252.5	1253.5	2.5	10.0			
	9300	KISV	45	C	1252.5	1253.6	6.3	10.0			
	9300	KISV	45	C	1252.5	1256.7		7.0			
	15000	KISV	46	C	1252.7	1253.4		11.0			
	15000	KISV	46	C	1252.7	1253.7	4.5	13.0			
	15000	KISV	46	C	1252.7	1253.9		10.0			
	5900	KISV	1	S	1256.3	1256.8	2.0	4.0			
	9500	POTS	1	S	1312.0	1313.0	1.5	9.0			
	15400	SVTO	8	S	1404.0E	1404.0	1.0D	50.0			ST=2 TYP=3
	9500	POTS	3	S	1404.5	1404.8	2.5	17.0			
	11800	BERN	3	S	1404.6	1405.0	2.0	2.7			
	19600	BERN	3	S	1404.6	1405.0	2.0	2.6			
	8400	BERN	3	S	1404.6	1405.0	2.0	0.7			
	245	SGMR	8	S	1451.0E	1451.0	1.0D	180.0			ST=2 TYP=3
	245	SVTO	8	S	1451.0E	1451.0	1.0D	190.0			ST=2 TYP=3
	15400	SGMR	8	S	1503.0E	1503.0	1.0D	100.0			ST=2 TYP=3
	8800	SGMR	8	S	1503.0E	1503.0	1.0D	61.0			ST=2 TYP=3
	8800	SVTO	8	S	1503.0E	1503.0	1.0D	65.0			ST=2 TYP=3
	15400	SVTO	8	S	1503.0E	1503.0	1.0D	110.0			ST=2 TYP=3
	245	SGMR	8	S	1512.0E	1512.0	2.0D	210.0			ST=2 TYP=3
	245	SVTO	8	S	1512.0E	1512.0	1.0D	210.0			ST=2 TYP=3
	245	SGMR	4	S/F	1516.0E	1519.0	5.0D	130.0			ST=2 TYP=3
	245	SVTO	4	S/F	1516.0E	1519.0	4.0D	140.0			ST=2 TYP=3
	245	SVTO	49	GB	1529.0E	1532.0	4.0D	910.0			ST=2 TYP=7
	8400	BERN	3	S	1530.0	1530.5	1.0	4.2			
	19600	BERN	3	S	1530.0	1530.5	1.0	1.2			
	11800	BERN	3	S	1530.0	1530.5	1.0	3.0			
	3200	BERN	3	S	1530.0	1530.5	1.0	0.8			
	5200	BERN	3	S	1530.0	1530.5	1.0	3.6			
	245	PALE	49	GB	1749.0E	1752.0	5.0D	1800.0			ST=2 TYP=6
	245	SGMR	49	GB	1749.0E	1752.0	7.0D	1800.0			ST=2 TYP=7
	410	SGMR	8	S	1754.0E	1754.0	U	59.0			ST=2 TYP=3
	245	PALE	8	S	1758.0E	1759.0	1.0D	60.0			ST=2 TYP=3
	8800	PALE	8	S	1758.0E	1759.0	1.0D	130.0			ST=2 TYP=3
	15400	PALE	8	S	1758.0E	1759.0	1.0D	110.0			ST=2 TYP=3
	4995	PALE	8	S	1758.0E	1759.0	1.0D	83.0			ST=2 TYP=3
	2695	PALE	8	S	1758.0E	1759.0	1.0D	48.0			ST=2 TYP=3
	245	SGMR	8	S	1758.0E	1759.0	1.0D	70.0			ST=2 TYP=3
	8800	SGMR	8	S	1758.0E	1759.0	1.0D	150.0			ST=2 TYP=3
	2695	SGMR	8	S	1758.0E	1759.0	1.0D	58.0			ST=2 TYP=3
	4995	SGMR	8	S	1758.0E	1759.0	1.0D	91.0			ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

SEPTEMBER 1989

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
25	245	LEAR	43	NS	0532.0	0532.0	2.0	57.0			ST=2 TYP=1
	9100	GORK	2	S/F	0412.3	0412.7	2.1	22.0			
	15000	KISV	22	GRF	0503.2	0503.5	14.8	10.0			
	9300	KISV	22	GRF	0503.4	0509.1	8.6	8.0			
	9100	GORK	1	S	0518.8	0519.1	0.8	5.0			
	15000	KISV	45	C	0518.9	0519.2		5.0			
	9300	KISV	2	S/F	0518.9	0519.3	1.8	8.0			
	15000	KISV	45	C	0518.9	0519.4	1.6	6.0			
	15000	KISV	2	S/F	0528.7	0529.5	4.0	26.0			
	9100	GORK	2	S/F	0528.8	0529.3	2.5	12.0			
	9300	KISV	2	S/F	0528.8	0529.4	6.0	14.0			
	5900	KISV	46	C	0529.1	0529.4	1.3	3.0			
	5900	KISV	46	C	0529.1	0529.6		2.0			
	5900	KISV	46	C	0529.1	0529.9		2.0			
	5900	KISV	22	GRF	0535.3	0539.5	12.7	8.0			
	204	IZMI	5	S	0614.6	0614.7	0.2	160.0	100.0		
	204	IZMI	41	F	0619.0	0619.5	0.8	230.0			
	5900	KISV	2	S/F	0648.8	0650.7	3.5	6.0			
	15000	KISV	45	C	0649.0	0651.0		5.0			
	15000	KISV	45	C	0649.0	0650.5	2.4	7.0			
	9300	KISV	42	SER	0650.0	0651.3	4.1	5.0			
	9300	KISV	42	SER	0650.0	0652.6		5.0			
	9300	KISV	42	SER	0650.0	0653.7		5.0			
	5900	KISV	1	S	0654.0	0654.5	1.1	4.0			
	15000	KISV	45	C	0654.0	0654.6	1.6	7.0			
	15000	KISV	45	C	0654.0	0654.8		7.0			
	15000	KISV	2	S/F	0708.7	0709.2	1.0	7.0			
	9100	GORK	20	GRF	0718.0	1028.0	282.0D	13.0			
	260	ONDR	41	F	0730.0	0955.2	460.0	187.0			
	950	GORK	2	S/F	0735.3	0735.6	1.5	4.0			
	9300	KISV	45	C	0738.8	0740.0	2.1	7.0			
	5900	KISV	45	C	0738.8	0740.3		3.0			
	5900	KISV	45	C	0738.8	0739.3	2.0	5.0			
	9300	KISV	45	C	0738.8	0740.5		6.0			
	5900	KISV	22	GRF	0809.6	0811.3	20.4	7.0			
	15000	KISV	2	S/F	0826.3	0827.0	1.5	7.0			
	15000	KISV	2	S/F	0854.5	0855.1	1.2	10.0			
	5900	KISV	22	GRF	0950.1	0955.2	11.6	10.0			
	245	LEAR	8	S	0954.0E	0955.0	1.0D	140.0			ST=2 TYP=3
	245	SVTO	8	S	0954.0E	0954.0	U	180.0			ST=2 TYP=3
	9300	KISV	2	S/F	0954.2	0955.2	5.0	11.0			
	234	POTS	4	S/F	0954.6	0955.1	1.0	120.0			
	204	IZMI	4	S/F	0954.8	0955.2	1.2	130.0			
	15000	KISV	45	C	0958.5	0959.1		6.0			
	15000	KISV	45	C	0958.5	0958.9	2.7	7.0			
	9300	KISV	22	GRF	1013.1	1014.5	14.4	10.0			
	5900	KISV	2	S/F	1013.5	1015.4	7.7	6.0			
	15000	KISV	2	S/F	1032.7	1033.0	2.0	7.0			
	15000	KISV	2	S/F	1042.6	1042.9	2.1	8.0			
	9300	KISV	2	S/F	1059.8	1100.3	2.3	5.0			
	5900	KISV	45	C	1147.8	1148.1		6.0			
	5900	KISV	45	C	1147.8	1148.5	3.0	6.0			
	650	GORK	21	GRF	1149.4	1154.8	7.1	5.0			
	950	GORK	2	S/F	1150.7	1152.2	5.7	2.0			
	650	GORK	2	S/F	1151.0	1151.2	0.3	11.0			
	2950	GORK	1	S	1153.3	1154.6	3.1	4.0			
	1470	POTS	4	S/F	1212.5E	1212.8U	1.5D	24.0			
	3000	POTS	21	GRF	1310.5	1342.5	95.0	12.0			
	9500	POTS	29	PBI	1310.5	1311.9	50.0	43.0			
	536	ONDR	42	SER	1342.0	1344.7	3.0	138.0			
	2695	PENT	4	S/F	2341.0	2342.9	9.0	119.4	36.0		
	2695	LEAR	4	S/F	2341.0E	2342.0	5.0D	120.0			ST=2 TYP=3
	4995	LEAR	4	S/F	2341.0E	2341.0	5.0D	86.0			ST=2 TYP=3
	15400	LEAR	4	S/F	2341.0E	2344.0	5.0D	120.0			ST=2 TYP=3
	8800	LEAR	4	S/F	2341.0E	2344.0	7.0D	120.0			ST=2 TYP=3
	2695	PALE	4	S/F	2341.0E	2342.0	4.0D	120.0			ST=2 TYP=3
	8800	PALE	4	S/F	2341.0E	2344.0	5.0D	120.0			ST=2 TYP=3
	4995	PALE	4	S/F	2341.0E	2341.0	4.0D	75.0			ST=2 TYP=3
	1415	LEAR	4	S/F	2342.0E	2344.0	4.0D	67.0			ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

SEPTEMBER 1989

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
25	1415	PALE	8	S	2342.0E	2344.0	2.0D	63.0			ST=2 TYP=3
	245	LEAR	49	GB	2343.0E	2344.0	1.0D	1100.0			ST=2 TYP=6
	500	HIRA	46	C	2343.8	2344.1	5.0	14.0		O	
	410	LEAR	8	S	2344.0E	2344.0	U	50.0			ST=2 TYP=3
	15400	PALE	8	S	2344.0E	2344.0	1.0D	87.0			ST=2 TYP=3
	245	PALE	49	GB	2344.0E	2344.0	U	1100.0			ST=2 TYP=6
26	260	ONDR	43	NS	1147.0		21.3				
	245	SGMR	44	NS	1156.0E	1155.0	724.0D	75.0			ST=3 TYP=1
	245	SVTO	44	NS	1217.0E	1220.0	242.0D	90.0			ST=2 TYP=1
	2840	PEKG	1	S	0059.0	0102.7	10.0	13.1			
	9100	GORK	23	GRF	0436.2	1208.7	503.8D	15.0			
	410	LEAR	4	S/F	0516.0E	0517.0	5.0D	28.0			ST=2 TYP=3
	5900	KISV	45	C	0516.8	0517.6	1.5	16.0			
	5900	KISV	45	C	0516.8	0517.8		11.0			
	245	LEAR	49	GB	0517.0E	0517.0	U	2300.0			ST=2 TYP=6
	610	LEAR	4	S/F	0517.0E	0517.0	3.0D	60.0			ST=2 TYP=3
	245	SVTO	49	GB	0517.0E	0517.0	U	1100.0			ST=2 TYP=6
	9100	GORK	2	S/F	0517.3	0517.5	0.7	13.0			
	9300	KISV	45	C	0517.3	0517.6	0.9	16.0			
	650	GORK	4	S/F	0517.3	0517.8	0.8	123.0			
	9300	KISV	45	C	0517.3	0517.9		12.0			
	2950	GORK	45	C	0517.4	0520.1		2.0			
	950	GORK	2	S/F	0517.4	0517.9	1.1	6.0			
	2950	GORK	45	C	0517.4	0517.9	4.1	4.0			
	5900	KISV	2	S/F	0518.5	0519.9	2.0	5.0			
	245	LEAR	49	GB	0519.0E	0519.0	6.0D	610.0			ST=2 TYP=6
	245	SVTO	8	S	0519.0E	0519.0	1.0D	400.0			ST=2 TYP=3
	5900	KISV	23	GRF	0526.8	0529.0	16.6	3.0			
	2950	GORK	23	GRF	0535.7	1148.0	384.3D	8.0			
	15000	KISV	2	S/F	0544.5	0545.5	4.7	9.0			
	9300	KISV	22	GRF	0609.3	0626.9	35.0	10.0			
	5900	KISV	22	GRF	0618.5	0626.8	31.3	7.0			
	260	ONDR	42	SER	0700.0		287.0				
	5900	KISV	22	GRF	0707.8	0726.2	26.2	10.0			
	9300	KISV	22	GRF	0710.8	0726.5	38.2	13.0			
	204	IZMI	41	F	0727.0	0728.0	2.0	380.0			
	9300	KISV	22	GRF	0801.6	0813.9	24.6	11.0			
	1470	POTS	8	S	0802.5	0802.5	1.0	7.0			
	15000	KISV	1	S	0806.6	0806.8	0.6	9.0			
	245	SVTO	8	S	0820.0E	0820.0	U	340.0			ST=2 TYP=3
	204	IZMI	5	S	0820.1	0820.2	0.2	900.0	800.0		
	113	POTS	8	S	0820.1	0820.2	0.4	385.0			
	234	POTS	8	S	0820.1	0820.3	0.5	500.0			
	650	GORK	2	S/F	0821.5	0821.7	0.5	14.0			
	410	LEAR	8	S	0825.0E	0825.0	U	23.0			ST=2 TYP=3
	245	LEAR	8	S	0825.0E	0825.0	U	110.0			ST=2 TYP=3
	9300	KISV	2	S/F	0828.2	0829.0	1.8	4.0			
	245	LEAR	8	S	0844.0E	0845.0	1.0D	62.0			ST=2 TYP=3
	9300	KISV	2	S/F	0852.3	0853.4	6.7	8.0			
	5900	KISV	2	S/F	0852.8	0853.5	3.5	7.0			
	15000	KISV	2	S/F	0853.6	0854.2	1.9	8.0			
	245	LEAR	49	GB	0854.0E	0854.0	1.0D	830.0			ST=2 TYP=6
	245	SVTO	49	GB	0854.0E	0854.0	1.0D	710.0			ST=2 TYP=6
	1470	POTS	42	SER	0854.0	0857.7	4.5	22.0			
	204	IZMI	41	F	0854.2	0857.5	8.0	1600.0			
	950	GORK	2	S/F	0854.3	0854.9	1.2	9.0			
	650	GORK	41	F	0854.5	0857.8		10.0			
	650	GORK	41	F	0854.5	0854.8	4.0	3.0			
	808	ONDR	42	SER	0855.0	0941.2	365.0	269.0			
	245	LEAR	49	GB	0856.0E	0857.0	1.0D	1900.0			ST=2 TYP=6
	245	SVTO	49	GB	0857.0E	0857.0	U	920.0			ST=2 TYP=6
	950	GORK	4	S/F	0857.1	0857.6	1.5	71.0			
	5900	KISV	2	S/F	0857.2	0858.0	1.6	5.0			
	3000	POTS	1	S	0857.5	0857.7	2.0	4.0			
	2950	GORK	1	S	0857.5	0857.8	0.9	3.0			
	245	SVTO	8	S	0932.0E	0932.0	1.0D	160.0			ST=2 TYP=3
	40	POTS	42	SER	0936.6	0947.8	11.8	750.0			
	1470	POTS	1	S	0941.0	0941.5	1.5	3.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

SEPTEMBER 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
26	536	ONDR	42	SER	0941.0	1017.5	329.0	289.0			
	2950	GORK	1	S	0941.5	0941.6	0.5	2.0			
	113	POTS	42	SER	0944.9	0945.3	10.6	70.0			
	234	POTS	42	SER	0945.0	0954.4	11.2	550.0			
	245	LEAR	8	S	1000.0E	1001.0	1.0D	340.0			ST=2 TYP=3
	234	POTS	42	SER	1000.7	1015.6	19.3	4400.0			
	245	SVTO	8	S	1001.0E	1001.0	1.0D	180.0			ST=2 TYP=3
	204	IZMI	42	SER	1001.0	1018.5	18.8	2600.0			
	113	POTS	42	SER	1001.4	1015.5	18.4	1500.0			
	2850	CRIM	1	S	1005.0	1005.3	1.0	9.0	3.0		
	9300	KISV	45	C	1014.0	1018.0		8.0			
	9300	KISV	45	C	1014.0	1015.4	9.0	8.0			
	1470	POTS	4	S/F	1014.0	1015.4	3.0	12.0			
	950	GORK	46	C	1014.2	1017.2		19.0			
	950	GORK	46	C	1014.2	1015.3	8.8	50.0			
	5900	KISV	45	C	1014.3	1018.0		7.0			
	650	GORK	41	F	1014.3	1015.4	4.4	40.0			
	5900	KISV	45	C	1014.3	1015.4	6.2	8.0			
	650	GORK	41	F	1014.3	1017.8		263.0			
	3000	POTS	3	S	1014.5	1015.4	2.5	7.0			
	9100	GORK	1	S	1014.6	1015.4	1.7	7.0			
	2950	GORK	3	S	1015.0	1015.4	1.3	6.0			
	9500	POTS	1	S	1015.0	1015.5	2.0	7.0			
	40	POTS	41	F	1015.0	1015.6	6.5	200.0			
	245	SVTO	49	GB	1017.0E	1018.0	1.0D	1000.0			ST=2 TYP=6
	600	HUMN	1	S	1017.0	1017.5	1.5	180.0	80.0		
	1470	POTS	4	S/F	1024.5	1025.2	1.5	176.0			
	1415	SVTO	8	S	1025.0E	1025.0	U	300.0			ST=2 TYP=3
	950	GORK	2	S/F	1041.7	1042.0	0.8	10.0			
	650	GORK	1	S	1041.7	1042.1	1.0	10.0			
	5900	KISV	45	C	1044.7	1045.3		8.0			
	5900	KISV	45	C	1044.7	1050.7	8.0	13.0			
	2850	CRIM	1	S	1044.8	1045.3	0.8	4.0	1.5		
	2950	GORK	1	S	1044.8	1045.3	0.9	2.0			
	950	GORK	21	GRF	1044.8	1055.6	18.2	2.0			
	204	IZMI	42	SER	1045.0	1055.2	12.3	10000.0			
	9100	GORK	1	S	1045.0	1045.3	0.7	9.0			
	15000	KISV	2	S/F	1045.0	1045.4	1.3	8.0			
	650	GORK	2	S/F	1045.0	1045.7	1.5	14.0			
	113	POTS	42	SER	1045.1	1055.0	12.0	1600.0			
	950	GORK	46	C	1045.1	1046.2		69.0			
	9300	KISV	2	S/F	1045.1	1045.4	1.9	10.0			
	950	GORK	46	C	1045.1	1045.9	1.4	66.0			
	600	HUMN	1	S	1047.0	1048.0	1.5	18.0	8.0		
	650	GORK	4	S/F	1048.5	1050.7	3.9	185.0			
	234	POTS	42	SER	1049.0	1055.1	8.1	1700.0			
	600	HUMN	2	S/F	1049.0	1050.5	4.0	70.0	10.0		
	1470	POTS	4	S/F	1049.0	1050.8	6.0	54.0U			
	950	GORK	46	C	1049.2	1050.5		69.0			
	950	GORK	46	C	1049.2	1049.7	3.4	55.0			
	2850	CRIM	1	S	1050.0	1050.6	1.8	12.0	4.0		
	2950	GORK	3	S	1050.0	1050.7	2.9	13.0			
	9100	GORK	1	S	1050.3	1050.6	1.2	10.0			
	9300	KISV	2	S/F	1050.4	1050.6	1.5	11.0			
	15000	KISV	2	S/F	1050.5	1050.6	2.5	10.0			
	9500	POTS	1	S	1050.5	1050.6	2.0	7.0			
	3000	POTS	3	S	1050.5	1050.6	2.0	20.0			
	650	GORK	29	PBI	1052.4	1052.4	10.6	5.0			
	950	GORK	22	GRF	1124.5	1127.0	9.2	11.0			
	650	GORK	1	S	1124.9	1126.1	6.9	5.0			
	2950	GORK	46	C	1138.1	1139.0	2.4	14.0			
	2950	GORK	46	C	1138.1	1139.3		25.0			
	2950	GORK	46	C	1138.1	1139.5		24.0			
	15400	SVTO	8	S	1139.0E	1141.0	2.0D	140.0			ST=2 TYP=3
	600	HUMN	41	F	1147.0	1150.0	7.0	24.0			
	245	SGMR	8	S	1147.0E	1147.0	U	300.0			ST=2 TYP=3
	245	SVTO	8	S	1147.0E	1147.0	U	340.0			ST=2 TYP=3
	950	GORK	41	F	1147.0	1150.1		19.0			
	950	GORK	41	F	1147.0	1153.2		38.0			

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
26	113	POTS	41	F	1147.0	1153.3	11.3	1300.0			
	950	GORK	41	F	1147.0	1147.5	9.0	36.0			
	204	IZMI	41	F	1147.0	1153.5	10.0	3000.0			
	650	GORK	46	C	1147.2	1150.1		42.0			
	650	GORK	46	C	1147.2	1153.4		40.0			
	650	GORK	46	C	1147.2	1147.5	9.2	28.0			
	2850	CRIM	1	S	1150.0	1150.3	1.0	9.0	3.0		
	245	SGMR	49	GB	1152.0E	1152.0	3.0D	2400.0			ST=2 TYP=6
	245	SVTO	49	GB	1152.0E	1152.0	2.0D	3000.0			ST=2 TYP=6
	1470	POTS	4	S/F	1152.5	1153.3	2.5	20.0			
	3000	POTS	1	S	1152.5	1153.4	2.5	5.0			
	40	POTS	4	S/F	1152.7	1153.3	2.8	3000.0			
	2950	GORK	1	S	1152.8	1153.3	1.5	6.0			
	234	POTS	4	S/F	1152.8	1153.6	1.7	6900.0			
	127	TORN	47	GB	1153.6	1154.3	5.0	2700.0	60.0		
	950	GORK	2	S/F	1217.4	1217.7	0.6	5.0			
	600	HUMN	41	F	1217.5	1220.5	3.5	15.0			
	650	GORK	41	F	1217.5	1220.6		28.0			
	650	GORK	41	F	1217.5	1217.8	8.5	15.0			
	9300	KISV	2	S/F	1220.2	1220.5	1.4	8.0			
	950	GORK	2	S/F	1220.3	1220.6	0.7	22.0			
	9100	GORK	1	S	1220.3	1220.7	0.9	7.0			
	610	SGMR	8	S	1238.0E	1239.0	2.0D	190.0			ST=2 TYP=3
	1415	SGMR	8	S	1238.0E	1239.0	2.0D	84.0			ST=2 TYP=3
	410	SGMR	8	S	1238.0E	1239.0	2.0D	430.0			ST=2 TYP=3
	410	SVTO	4	S/F	1238.0E	1239.0	3.0D	480.0			ST=2 TYP=3
	1415	SVTO	8	S	1238.0E	1239.0	2.0D	83.0			ST=2 TYP=3
	245	SVTO	49	GB	1238.0E	1241.0	3.0D	3000.0			ST=2 TYP=6
	2695	SGMR	4	S/F	1238.0E	1239.0	682.0D	39.0			ST=1 TYP=3
	950	GORK	4	S/F	1238.0	1239.2	4.0	71.0			
	600	HUMN	4	S/F	1238.0	1239.2	6.0	70.0	10.0		
	2850	CRIM	3	S	1238.0	1239.3	2.5	44.0	15.0		
	1470	POTS	4	S/F	1238.0	1239.5	6.0	69.0			
	3000	POTS	4	S/F	1238.0U	1239.5	4.0U	38.0			
	234	POTS	41	F	1238.0E	1241.6	6.5D	4100.0			
	40	POTS	4	S/F	1238.0	1239.6	3.7	3000.0			
	113	POTS	41	F	1238.2	1241.3	9.2	500.0			
	650	GORK	4	S/F	1238.2	1239.5	2.2	245.0			
	9300	KISV	2	S/F	1238.4	1239.2	5.4	24.0			
	9100	GORK	1	S	1238.9	1239.2	1.1	16.0			
	4995	SVTO	8	S	1239.0E	1239.0	U	32.0			ST=2 TYP=3
	2695	SVTO	8	S	1239.0E	1239.0	U	38.0			ST=2 TYP=3
	3200	BERN	4	S/F	1239.0	1239.3	2.0	3.6			
	5200	BERN	4	S/F	1239.0	1239.3	2.0	4.8			
	11800	BERN	4	S/F	1239.0	1239.3	2.0	1.0			
	8400	BERN	4	S/F	1239.0	1239.3	2.0	2.0			
	9500	POTS	3	S	1239.0	1239.5	2.0	16.0			
	15000	KISV	2	S/F	1239.1	1239.6	1.3	10.0			
	127	TORN	47	GB	1239.2	1242.1	8.0	2100.0	235.0		
	650	GORK	30	PBI	1240.4	1240.4	6.9	10.0			
	650	GORK	3	S	1242.9	1243.1	0.7	17.0			
	245	SVTO	8	S	1319.0E	1319.0	1.0D	190.0			ST=2 TYP=3
	234	POTS	4	S/F	1319.4	1319.9	0.6	400.0			
	113	POTS	4	S/F	1319.5	1320.0	1.2	385.0			
	40	POTS	4	S/F	1319.8	1320.0	1.4	3000.0			
	3000	POTS	1	S	1338.5	1338.8	1.0	5.0			
	1470	POTS	1	S	1338.5	1338.9	1.5	3.0			
	113	POTS	4	S/F	1357.0	1357.6	1.7	280.0			
	40	POTS	4	S/F	1357.6	1358.0	2.4	315.0			
	40	POTS	42	SER	1436.9	1438.6	8.1	12000.0			
	245	SGMR	49	GB	1437.0E	1438.0	1.0D	4200.0			ST=2 TYP=6
	113	POTS	42	SER	1437.0	1438.1	15.5	2000.0			
	234	POTS	42	SER	1437.6E	1437.7	6.1D	7200.0			
	600	HUMN	41	F	1445.0	1447.0	9.5	10.0			
	2800	OTTA	22	GRF	1619.0	1641.0	200.0	30.3	9.0		
	245	SGMR	8	S	1630.0E	1630.0	1.0D	260.0			ST=3 TYP=3
	4995	SGMR	4	S/F	1630.0E	1631.0	3.0D	43.0			ST=2 TYP=3
	600	HUMN	2	S/F	1630.5	1632.0	5.5	35.0	14.0		
	8800	SGMR	8	S	1631.0E	1631.0	2.0D	51.0			ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
26	610	SGMR	8	S	1631.0E	1632.0	2.0D	70.0			ST=2 TYP=3
	245	SGMR	8	S	1739.0E	1739.0	1.0D	120.0			ST=2 TYP=3
	245	PALE	8	S	1811.0E	1811.0	U	300.0			ST=2 TYP=3
	245	SGMR	8	S	1811.0E	1811.0	U	250.0			ST=2 TYP=3
	245	SGMR	8	S	2019.0E	2019.0	U	55.0			ST=3 TYP=3
	410	PALE	4	S/F	2044.0E	2045.0	4.0D	57.0			ST=2 TYP=3
	610	PALE	8	S	2129.0E	2129.0	1.0D	96.0			ST=2 TYP=3
	610	SGMR	8	S	2129.0E	2129.0	1.0D	110.0			ST=2 TYP=3
	245	LEAR	4	S/F	2239.0E	2240.0	4.0D	120.0			ST=2 TYP=3
	245	PALE	8	S	2240.0E	2240.0	U	90.0			ST=2 TYP=3
27	245	LEAR	43	NS	0327.0	0924.0	1233.0	150.0			ST=1 TYP=1
	245	LEAR	43	NS	0327.0	0328.0	1233.0	77.0			ST=1 TYP=1
	204	IZMI	43	NS	0600.0		360.0	25.0			
	260	ONDR	44	NS	0700.0E	1448.5	510.0D	346.0			
	245	SVTO	44	NS	0720.0E	0959.0	345.0D	230.0			ST=2 TYP=1
	234	POTS	43	NS	0850.0	1052.0	372.0D	55.0			
	127	TORN	43	NS	0950.0		190.0		6.0	V=1	
	113	POTS	43	NS	0950.0	1115.0	310.0D	14.0			
	410	SVTO	44	NS	1015.0E	1015.0	170.0D	51.0			ST=2 TYP=1
	245	SGMR	44	NS	1128.0E	2050.0	613.0D	370.0			ST=2 TYP=1
	410	PALE	44	NS	1809.0E	1906.0	221.0D	110.0			ST=2 TYP=1
	410	SGMR	44	NS	1918.0E	1947.0	282.0D	120.0			ST=3 TYP=1
	245	PALE	44	NS	1920.0E	2049.0	527.0D	440.0			ST=2 TYP=1
	200	HIRA	44	NS	2025.0E		450.0D		15.0		
	245	LEAR	44	NS	2225.0E	2305.0	199.0D	290.0			ST=2 TYP=1
	610	LEAR	8	S	0206.0E	0207.0	1.0D	110.0			ST=3 TYP=3
	610	PALE	8	S	0207.0E	0207.0	U	110.0			ST=2 TYP=3
	200	HIRA	41	F	0255.0	0334.0	112.0	70.0		O	
	2840	PEKG	1	S	0332.0	0333.1	7.0	18.1			
	245	PALE	8	S	0343.0E	0344.0	2.0D	66.0			ST=2 TYP=3
	9100	GORK	21	GRF	0419.1	1044.4	520.9D	37.0			
	5900	KISV	22	GRF	0500.7	0504.3	31.4	11.0			
	9300	KISV	2	S/F	0501.8	0505.1	8.0	13.0			
	245	LEAR	8	S	0636.0E	0636.0	U	110.0			ST=2 TYP=3
	245	SVTO	4	S/F	0636.0E	0640.0	6.0D	97.0			ST=2 TYP=5
	650	GORK	4	S/F	0636.1	0636.2	0.9	89.0			
	950	GORK	8	S	0636.1	0636.3	0.6	37.0			
	536	ONDR	41	F	0700.0	0915.0	480.0	77.0			
	9300	KISV	2	S/F	0703.1	0704.9	4.2	13.0			
	15000	KISV	2	S/F	0703.2	0705.3	4.1	16.0			
	5900	KISV	2	S/F	0703.3	0705.0	3.2	7.0			
	245	SVTO	8	S	0712.0E	0712.0	U	130.0			ST=2 TYP=3
	950	GORK	2	S/F	0806.9	0807.5	0.9	9.0			
	650	GORK	1	S	0807.0	0807.4	0.8	6.0			
	650	GORK	22	GRF	0858.4	1107.7	181.6D	41.0			
	808	ONDR	41	F	0920.0	1139.3	150.0	6.0			
	15000	KISV	2	S/F	0920.2	0921.3	2.7	12.0			
	2950	GORK	22	GRF	0947.7	1056.3	192.3D	13.0			
	600	HUMN	20	GRF	0948.5	1049.3	172.5	19.0	9.0		
	5900	KISV	23	GRF	0953.6	1036.5	128.0	17.0			
	9500	POTS	20	GRF	0955.0	1110.0	195.0	19.0			
	5900	KISV	2	S/F	0955.4	0956.6	2.3	12.0			
	1470	POTS	1	S	0955.5	0956.5	2.5	4.0			
	3000	POTS	3	S	0956.0	0956.7	2.0	7.0			
	9300	KISV	22	GRF	0956.4	1000.5	16.1	8.0			
	950	GORK	23	GRF	1029.0	1105.0	94.0	6.0			
	9100	GORK	1	S	1035.8	1036.2	2.3	10.0			
	1470	POTS	3	S	1056.0	1056.4	2.0	6.0			
	3000	POTS	3	S	1056.0	1056.4	2.5	14.0			
	410	SVTO	8	S	1112.0E	1112.0	U	150.0			ST=2 TYP=3
	950	GORK	2	S/F	1129.1	1129.4	1.1	6.0			
	950	GORK	46	C	1134.5	1139.0		11.0			
	950	GORK	46	C	1134.5	1135.4	5.5	9.0			
	950	GORK	2	S/F	1150.7	1151.0	1.0	10.0			
	808	ONDR	42	SER	1426.8	1437.6	36.0	43.0			
	610	SGMR	8	S	1500.0E	1500.0	U	280.0			ST=2 TYP=3
	245	PALE	4	S/F	1659.0E	1700.0	9.0D	98.0			ST=2 TYP=3
	8800	PALE	4	S/F	1701.0E	1704.0	7.0D	160.0			ST=2 TYP=3

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
27	15400	PALE	4	S/F	1701.0E	1704.0	5.0D	150.0			ST=2 TYP=3
	8800	SGMR	20	GRF	1701.0E	1704.0	6.0D	150.0			ST=2 TYP=2
	15400	SGMR	4	S/F	1701.0E	1704.0	6.0D	140.0			ST=2 TYP=3
	4995	SGMR	4	S/F	1703.0E	1705.0	4.0D	39.0			ST=2 TYP=3
	610	SGMR	8	S	1704.0E	1704.0	U	62.0			ST=2 TYP=3
	200	HIRA	46	C	2025.0E	2047.0U	76.0D	365.0U	110.0U		O SUNRISE
	100	HIRA	48	C	2031.0	2057.0	89.0	1000.0	238.0		
	15400	PALE	8	S	2059.0E	2059.0	1.0D	64.0			ST=3 TYP=3
	15400	SGMR	8	S	2059.0E	2059.0	U	51.0			ST=2 TYP=3
	15400	LEAR	8	S	2316.0E	2316.0	U	120.0			ST=3 TYP=3
	610	LEAR	49	GB	2352.0E	2353.0	8.0D	2500.0			ST=2 TYP=6
	610	PALE	49	GB	2352.0E	2353.0	2.0D	2500.0			ST=2 TYP=6
	8800	LEAR	8	S	2353.0E	2354.0	1.0D	32.0			ST=2 TYP=3
	4995	LEAR	8	S	2353.0E	2353.0	2.0D	86.0			ST=2 TYP=3
	15400	LEAR	8	S	2353.0E	2354.0	2.0D	95.0			ST=3 TYP=3
	1415	LEAR	8	S	2353.0E	2354.0	2.0D	57.0			ST=2 TYP=3
	2695	LEAR	4	S/F	2353.0E	2353.0	3.0D	130.0			ST=2 TYP=3
	1415	PALE	8	S	2353.0E	2353.0	2.0D	62.0			ST=2 TYP=3
	4995	PALE	8	S	2353.0E	2353.0	1.0D	81.0			ST=2 TYP=3
	2695	PALE	4	S/F	2353.0E	2353.0	3.0D	130.0			ST=2 TYP=3
	500	HIRA	46	C	2353.0	2353.5	2.2	251.0		O	
	2695	PENT	4	S/F	2353.0	2353.5	13.5	128.1	26.0		
28	245	PALE	44	NS	1928.0E	2053.0	296.0D	140.0			ST=2 TYP=1
	245	SGMR	44	NS	2016.0E	2118.0	100.0D	120.0			ST=2 TYP=1
	610	PALE	8	S	0334.0E	0334.0	U	51.0			ST=3 TYP=3
	2950	GORK	45	C	0335.4	0341.0		17.0			
	2950	GORK	45	C	0335.4	0338.5	7.6	36.0			
	245	LEAR	8	S	0505.0E	0506.0	1.0D	220.0			ST=2 TYP=3
	245	SVTO	8	S	0506.0E	0506.0	U	210.0			ST=2 TYP=3
	9300	KISV	2	S/F	0506.1	0507.5	2.4	6.0			
	245	LEAR	8	S	0510.0E	0511.0	1.0D	78.0			ST=2 TYP=3
	245	SVTO	8	S	0511.0E	0511.0	U	290.0			ST=2 TYP=3
	9100	GORK	21	GRF	0512.0E	0524.5	68.2D	7.0			
	5900	KISV	2	S/F	0517.1	0518.8	6.2	5.0			
	9300	KISV	2	S/F	0517.6	0518.6	4.4	10.0			
	9100	GORK	1	S	0518.0	0518.4	2.5	8.0			
	9100	GORK	21	GRF	0633.0	0642.1	14.0	4.0			
	15000	KISV	2	S/F	0643.3	0644.3	1.7	10.0			
	9300	KISV	2	S/F	0643.7	0644.5	2.8	12.0			
	500	HIRA	46	C	0643.8	0644.0	1.3	168.0		O	
	2950	GORK	1	S	0644.0	0644.2	1.8	5.0			
	9100	GORK	1	S	0644.0	0644.3	0.9	9.0			
	5900	KISV	2	S/F	0644.1	0644.5	1.3	6.0			
	260	ONDR	41	F	0700.0E	0934.1	500.0D	81.0			
	9100	GORK	20	GRF	0803.0	0925.6	88.7	10.0			
	204	IZMI	4	S/F	0823.5	0824.0	0.8	31.0	25.0		
	204	IZMI	5	S	0918.5	0919.0	0.8	58.0	45.0		
	536	ONDR	42	SER	0918.5	0923.5	17.0	135.0			
	127	TORN	7	C	0919.3	0919.8	2.0	110.0	55.0		
	9500	POTS	40	F	0920.0	0925.5	10.0	5.0			
	2850	CRIM	1	S	0922.1	0922.5	1.4	16.0	5.0		
	650	GORK	4	S/F	0922.2	0922.5	5.6	36.0			
	1470	POTS	4	S/F	0922.5	0926.0	9.5	49.0			
	3000	POTS	4	S/F	0922.5	0925.6	9.5	98.0			
	2950	GORK	46	C	0922.7	0926.1		80.0			
	2950	GORK	46	C	0922.7	0925.6	9.5	96.0			
	808	ONDR	5	S	0923.0	0926.2	11.0	87.0			
	3013	IZMI	7	C	0923.0	0925.5	7.0	80.0	40.0		
	950	GORK	4	S/F	0923.2	0926.2	4.8	72.0			
	2850	CRIM	3	S	0924.0	0924.7	4.0	101.0	33.0		
	5900	KISV	4	S/F	0924.7	0925.4	5.3	41.0			
	1415	LEAR	8	S	0925.0E	0925.0	2.0D	34.0			ST=2 TYP=3
	2695	LEAR	8	S	0925.0E	0925.0	2.0D	91.0			ST=2 TYP=3
	610	LEAR	8	S	0925.0E	0925.0	1.0D	18.0			ST=2 TYP=3
	4995	LEAR	8	S	0925.0E	0925.0	U	34.0			ST=2 TYP=3
	2695	SVTO	8	S	0925.0E	0925.0	1.0D	94.0			ST=2 TYP=3
	3200	BERN	4	S/F	0925.0	0925.5	2.0	9.4			
	5200	BERN	4	S/F	0925.0	0925.5	2.0	4.5			

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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
28	9300	KISV	2	S/F	0925.2	0925.4	1.3	9.0			
	3000	POTS	20	GRF	0940.0	0950.0	14.0	4.0			
	9100	GORK	23	GRF	0945.7	1223.8	185.3D	14.0			
	9500	POTS	3	S	0948.5	0950.0	4.5	34.0			
	9100	GORK	4	S/F	0948.7	0949.8	3.1	38.0			
	5900	KISV	4	S/F	0948.8	0949.1	3.5	28.0			
	9300	KISV	4	S/F	0948.9	0949.8	3.4	38.0			
	204	IZMI	5	S	1014.0	1014.2	0.2	170.0	80.0		
	1470	POTS	3	S	1020.0	1021.0	2.0	9.0			
	9100	GORK	2	S/F	1110.6	1111.7	3.3	18.0			
	15400	SVTO	8	S	1111.0E	1111.0	1.0D	78.0			ST=2 TYP=3
	9500	POTS	3	S	1111.0	1111.8	5.0	24.0			
	15000	KISV	2	S/F	1111.4	1111.8	3.2	44.0			
	9300	KISV	2	S/F	1111.4	1111.9	2.8	16.0			
	808	ONDR	42	SER	1214.8	1224.3	15.0	20.0			
	410	SGMR	8	S	1235.0E	1235.0	U	110.0			ST=2 TYP=3
	536	ONDR	42	SER	1338.5	1344.6	15.0	107.0			
	33	UPIC	4	S/F	1340.3	1340.4	0.4				
	808	ONDR	41	F	1341.5	1345.5	8.5	6.0			
	1470	POTS	4	S/F	1344.0	1346.1	11.0	40.0			
	3200	BERN	3	S	1344.5	1345.0	1.5	5.6			
	5200	BERN	3	S	1344.5	1345.0	1.5	1.7			
	3000	POTS	4	S/F	1344.5	1345.4	5.5	63.0			
	610	SGMR	8	S	1345.0E	1345.0	U	150.0			ST=2 TYP=3
	2695	SGMR	8	S	1345.0E	1345.0	U	75.0			ST=2 TYP=3
	2695	SVTO	8	S	1345.0E	1345.0	U	71.0			ST=2 TYP=3
	33	UPIC	45	C	1345.0	1345.1	0.9				
	2800	OTTA	4	S/F	1345.0	1345.4	6.0	76.3	15.0		
	245	SVTO	8	S	1505.0E	1505.0	1.0D	88.0			ST=2 TYP=3
	245	SGMR	8	S	1952.0E	1952.0	U	58.0			ST=2 TYP=3
	245	LEAR	8	S	2321.0E	2321.0	1.0D	83.0			ST=2 TYP=3
	500	HIRA	41	F	2322.0	2322.7	3.2	595.0		0	
29	245	LEAR	44	NS	0029.0E	0235.0	127.0D	87.0			ST=2 TYP=1
	200	HIRA	43	NS	0450.0	0513.0	170.0	8.0	3.0	0	
	260	ONDR	44	NS	0700.0E		480.0D				
	200	HIRA	20	GRF	0017.0	0138.0	125.0	7.0	4.0	0	
	245	LEAR	8	S	0027.0E	0028.0	1.0D	66.0			ST=2 TYP=3
	500	HIRA	27	RF	0038.0	0056.0	64.0	7.0	3.0	0	
	245	PALE	8	S	0228.0E	0228.0	U	71.0			ST=2 TYP=3
	2950	GORK	21	GRF	0446.8	0557.0	152.9	8.0			
	650	GORK	1	S	0516.9	0517.3	0.9	3.0			
	2950	GORK	1	S	0517.0	0517.5	1.4	5.5			
	950	GORK	2	S/F	0517.2	0517.5	0.8	3.0			
	2950	GORK	1	S	0520.7	0521.0	0.7	3.0			
	950	GORK	2	S/F	0520.7	0520.9	0.6	7.0			
	650	GORK	1	S	0520.8	0520.9	0.4	8.0			
	9100	GORK	20	GRF	0549.6	0616.5	69.0	14.0			
	610	LEAR	8	S	0726.0E	0726.0	U	24.0			ST=2 TYP=3
	410	LEAR	8	S	0726.0E	0726.0	U	48.0			ST=2 TYP=3
	410	SVTO	8	S	0726.0E	0726.0	U	69.0			ST=2 TYP=3
	950	GORK	1	S	0726.0	0726.3	1.5	4.0			
	3000	POTS	3	S	0726.0	0726.4	1.0	17.0			
	1470	POTS	3	S	0726.0	0726.5	2.5	12.0			
	2950	GORK	3	S	0726.1	0726.4	1.6	14.0			
	650	GORK	4	S/F	0726.1	0726.4	0.8	24.0			
	3013	IZMI	1	S	0726.2	0726.5	1.0	10.0	5.0		
	650	GORK	23	GRF	0728.6	0752.9	67.4	5.0			
	950	GORK	21	GRF	0733.0	1000.0	327.0D	6.0			
	2950	GORK	23	GRF	0736.5		323.5D				
	410	LEAR	8	S	0743.0E	0743.0	U	68.0			ST=2 TYP=3
	610	LEAR	8	S	0747.0E	0747.0	U	52.0			ST=2 TYP=3
	410	LEAR	8	S	0747.0E	0747.0	U	37.0			ST=2 TYP=3
	950	GORK	2	S/F	0747.3	0747.5	0.5	14.0			
	650	GORK	4	S/F	0747.4	0747.5	0.4	57.0			
	5900	KISV	22	GRF	0754.7	0759.4	22.1	10.0			
	410	LEAR	8	S	0806.0E	0807.0	1.0D	23.0			ST=2 TYP=3
	245	LEAR	8	S	0806.0E	0807.0	1.0D	50.0			ST=2 TYP=3
	2850	CRIM	1	S	0835.0	0836.0	1.5	12.0	3.0		

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Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
29	2950	GORK	1	S	0835.1	0836.0	2.6	7.0			
	3013	IZMI	1	S	0835.5	0836.2	4.3	8.0	4.0		
	950	GORK	2	S/F	0838.3	0839.3	2.2	7.0			
	9100	GORK	21	GRF	0853.2	0908.8	78.4	9.0			
	5900	KISV	4	S/F	0858.9	0901.2	9.4	53.0			
	9300	KISV	4	S/F	0859.4	0901.2	6.8	36.0			
	15000	KISV	2	S/F	0900.5	0901.2	2.1	10.0			
	3000	POTS	3	S	0906.0	0907.4	2.0	40.0			
	2850	CRIM	3	S	0906.1	0907.2	1.8	48.0	10.0		
	2950	GORK	46	C	0906.3	0907.3		36.0			
	2950	GORK	46	C	0906.3	0906.5	1.5	10.0			
	9100	GORK	2	S/F	0906.4	0907.1	2.0	30.0			
	3200	BERN	4	S/F	0906.5	0907.1	1.5	4.0			
	11800	BERN	4	S/F	0906.5	0907.1	1.5	2.5			
	5200	BERN	4	S/F	0906.5	0907.1	1.5	4.0			
	8400	BERN	4	S/F	0906.5	0907.1	1.5	3.2			
	9500	POTS	3	S	0906.5	0907.3	2.5	25.0			
	1470	POTS	3	S	0907.0	0907.5	1.5	6.0			
	245	LEAR	8	S	0952.0E	0952.0	U	98.0			ST=2 TYP=3
	5900	KISV	2	S/F	1002.1	1002.8	2.5	4.0			
	9100	GORK	23	GRF	1029.0	1111.8	151.0D	37.0			
	2850	CRIM	28	PRE	1038.0	1120.0	42.0	39.0	13.0		
	5900	KISV	47	GB	1039.1	1115.7	85.9	11548.0			
	9300	KISV	47	GB	1044.2	1138.0	82.8	11446.0			
	5900	KISV	29	PBI	1044.4	1205.0	132.8	4082.0			
	5900	KISV	45	C	1044.4	1053.3		13.0			
	5900	KISV	45	C	1044.4	1048.5	16.3	26.0			
	9300	KISV	29	PBI	1045.1	1207.0	124.0	2328.0			
	9300	KISV	2	S/F	1045.1	1047.6	9.2	28.0			
	15000	KISV	47	GB	1101.4	1131.0	61.2	14020.0			
	15000	KISV	29	PBI	1101.4	1202.6	86.4	2013.0			
	3000	POTS	47	GB	1102.0		238.0D	2100.0D			
	9500	POTS	47	GB	1103.0		237.0D	6200.0D			
	950	GORK	2	S/F	1109.0	1109.1	0.3	71.0			
	650	GORK	4	S/F	1109.0	1109.1	0.4	235.0			
	650	GORK	23	GRF	1109.6	1142.0	110.4D	231.0			
	950	GORK	8	S	1111.0	1111.1	0.5	71.0			
	650	GORK	4	S/F	1111.0	1111.2U	0.5	278.0D			
	3013	IZMI	45	C	1118.8	1148.0	102.0	4288.0			
	9100	GORK	47	GB	1118.8	1137.8	101.2D	13320.0			
	4995	SGMR	49	GB	1119.0E	1145.0	158.0D	18000.0			ST=2 TYP=7
	650	GORK	4	S/F	1119.7	1120.0U	0.7	278.0D			
	950	GORK	47	GB	1119.7	1126.1		5670.0			
	950	GORK	47	GB	1119.7	1129.1		3070.0			
	950	GORK	47	GB	1119.7	1124.1	18.3	10150.0			
	536	ONDR	47	GB	1120.0		100.0				
	808	ONDR	47	GB	1120.0		100.0				
	1470	POTS	47	GB	1120.0		220.0D	4800.0D			
	11800	BERN	47	GB	1120.0	1133.0	80.0	497.0			
	8400	BERN	47	GB	1120.0	1133.0	80.0	361.0			
	19600	BERN	47	GB	1120.0	1133.0	80.0	1935.0			
	3200	BERN	47	GB	1120.0	1133.0	80.0	1935.0			
	2950	GORK	47	GB	1120.0	1126.0	100.0D	6462.0			
	15400	SGMR	49	GB	1120.0E	1131.0	105.0D	6100.0			ST=2 TYP=7
	8800	SGMR	49	GB	1120.0E	1137.0	156.0D	15000.0			ST=2 TYP=7
	2695	SGMR	49	GB	1120.0E	1126.0	157.0D	6800.0			ST=2 TYP=7
	600	HUMN	47	GB	1120.0	1125.0	200.0	613.0	89.0		
	2850	CRIM	47	GB	1120.0	1148.2		9152.0			
	2850	CRIM	47	GB	1120.0	1126.3		9152.0			
	2950	GORK	47	GB	1120.0	1148.3		6590.0			
	2850	CRIM	47	GB	1120.0	1125.4	182.0	8512.0			
	1415	SGMR	49	GB	1121.0E	1126.0	137.0D	5600.0			ST=2 TYP=7
	234	POTS	45	C	1121.0	1126.8	152.0	36000.0			
	610	SGMR	49	GB	1122.0E	1126.0	108.0D	3700.0			ST=2 TYP=7
	204	IZMI	46	C	1122.5	1132.3	42.0	10000.0	600.0		
	650	GORK	47	GB	1122.5	1126.6		3792.0			
	650	GORK	47	GB	1122.5	1124.8	19.5	3998.0			
	410	SGMR	49	GB	1123.0E	1126.0	99.0D	9000.0			ST=2 TYP=7
	245	SGMR	49	GB	1124.0E	1125.0	116.0D	6800.0			ST=2 TYP=7

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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
29	113	POTS	49	GB	1124.5	1127.0U	144.0	3500.0D			
	33	UPIC	49	GB	1126.0		15.3				
	30	POTS	49	GB	1126.6	1137.7	76.0U	10000.0D			
	127	TORN	49	GB	1126.8		20.0		980.0		
	33	UPIC	29	PBI	1141.3	1158.9	51.7				
	9100	GORK	1	S	1145.7	1147.6	5.1	24.0			
	127	TORN	27	RF	1147.0		52.0		35.0		
	2800	OTTA	47	GB	1150.0E	1150.0	90.0D	4316.0	863.0		
	650	GORK	47	GB	1153.8	1213.4		1278.0			
	650	GORK	47	GB	1153.8	1201.5	65.0	1406.0			
	650	GORK	47	GB	1153.8	1209.6		1226.0			
	650	GORK	47	GB	1153.8	1205.6		1444.0			
	650	GORK	47	GB	1153.8	1220.7		1432.0			
	950	GORK	47	GB	1156.1	1214.0		1455.0			
	950	GORK	47	GB	1156.1	1209.6		1490.0			
	950	GORK	47	GB	1156.1	1205.6		1490.0			
	950	GORK	47	GB	1156.1	1159.8	60.9D	1380.0			
	204	IZMI	22	GRF	1205.5	1223.0	56.0	170.0	80.0		
	245	SVTO	49	GB	1215.0E	1218.0	28.0D	600.0			ST=3 TYP=7
	410	SVTO	49	GB	1215.0E	1217.0	46.0D	1300.0			ST=3 TYP=7
	8800	SVTO	49	GB	1215.0E	1216.0	83.0D	1600.0			ST=3 TYP=7
	1415	SVTO	49	GB	1215.0E	1216.0	92.0D	850.0			ST=3 TYP=7
	2695	SVTO	49	GB	1215.0E	1216.0	92.0D	2800.0			ST=3 TYP=7
	4995	SVTO	49	GB	1215.0E	1216.0	92.0D	2300.0			ST=3 TYP=7
	15400	SVTO	49	GB	1215.0E	1216.0	92.0D	1200.0			ST=3 TYP=7
	610	SVTO	49	GB	1217.0E	1220.0	45.0D	1700.0			ST=3 TYP=7
	245	PALE	8	S	2042.0E	2042.0	1.0D	100.0			ST=2 TYP=3
	2800	OTTA	4	S/F	2048.0	2049.4	5.0	43.9	13.0		
	4995	PALE	4	S/F	2048.0E	2049.0	3.0D	98.0			ST=2 TYP=3
	8800	SGMR	8	S	2048.0E	2049.0	2.0D	70.0			ST=3 TYP=3
	4995	SGMR	8	S	2048.0E	2049.0	2.0D	130.0			ST=3 TYP=3
	8800	PALE	8	S	2049.0E	2049.0	2.0D	64.0			ST=2 TYP=3
	2695	PALE	8	S	2049.0E	2049.0	1.0D	34.0			ST=2 TYP=3
	410	PALE	8	S	2049.0E	2049.0	U	50.0			ST=2 TYP=3
	1415	PALE	8	S	2049.0E	2049.0	1.0D	32.0			ST=2 TYP=3
	610	PALE	4	S/F	2049.0E	2049.0	4.0D	31.0			ST=2 TYP=3
	15400	PALE	8	S	2049.0E	2049.0	1.0D	34.0			ST=2 TYP=3
	245	SGMR	49	GB	2050.0E	2050.0	U	520.0			ST=3 TYP=6
	245	PALE	8	S	2249.0E	2249.0	U	51.0			ST=2 TYP=3
	245	LEAR	8	S	2338.0E	2339.0	1.0D	110.0			ST=2 TYP=3
30	245	LEAR	8	S	0000.0E	0000.0	U	66.0			ST=2 TYP=3
	245	LEAR	8	S	0024.0E	0025.0	2.0D	53.0			ST=2 TYP=3
	2695	PALE	20	GRF	0244.0E	0251.0	27.0D	110.0			ST=2 TYP=2
	1415	PALE	4	S/F	0246.0E	0249.0	10.0D	57.0			ST=2 TYP=3
	2695	LEAR	4	S/F	0247.0E	0250.0	9.0D	66.0			ST=2 TYP=3
	1415	LEAR	4	S/F	0248.0E	0253.0	7.0D	48.0			ST=2 TYP=5
	4995	LEAR	4	S/F	0248.0E	0250.0	12.0D	69.0			ST=2 TYP=3
	4995	PALE	4	S/F	0248.0E	0250.0	23.0D	66.0			ST=2 TYP=3
	8800	LEAR	20	GRF	0249.0E	0259.0	11.0D	36.0			ST=2 TYP=2
	8800	PALE	20	GRF	0249.0E	0255.0	24.0D	46.0			ST=2 TYP=2
	15400	LEAR	20	GRF	0252.0E	0259.0	8.0D	40.0			ST=2 TYP=2
	15400	PALE	8	S	0255.0E	0255.0	U	28.0			ST=2 TYP=3
	9100	GORK	21	GRF	0529.1	0608.8	77.5	15.0			
	950	GORK	23	GRF	0551.0	0612.3	35.2	9.0			
	5900	KISV	4	S/F	0553.5	0556.0	7.4	63.0			
	9300	KISV	29	PBI	0553.5	0559.0	18.8	16.0			
	9300	KISV	4	S/F	0553.5	0556.8	5.4	69.0			
	5900	KISV	29	PBI	0553.5	0600.9	31.7	11.0			
	650	GORK	21	GRF	0554.0E	0609.0	187.5D	14.0			
	2850	CRIM	28	PRE	0554.5	0557.8	9.5	21.5	7.0		
	2950	GORK	23	GRF	0554.6	0606.0	26.3	24.0			
	4995	LEAR	4	S/F	0555.0E	0556.0	3.0D	42.0			ST=2 TYP=3
	8800	LEAR	4	S/F	0555.0E	0556.0	3.0D	58.0			ST=2 TYP=3
	204	IZMI	41	F	0555.0	0608.0	14.0	11.0			
	950	GORK	4	S/F	0555.2	0556.4	2.6	27.0			
	650	GORK	4	S/F	0555.2	0556.9	3.1	23.0			
	500	HIRA	7	C	0555.3	0608.0			7.0	O	
	500	HIRA	7	C	0555.3	0557.4	27.0	24.0	5.0	O	

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

SEPTEMBER 1989

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	9100	GORK	4 S/F	0555.6	0556.9	3.8	55.0			
	3013	IZMI	5 S	0556.0	0558.0	4.0	19.0	10.0		
	15400	LEAR	8 S	0556.0E	0556.0	1.0D	41.0			ST=2 TYP=3
	2695	LEAR	8 S	0556.0E	0557.0	2.0D	27.0			ST=2 TYP=3
	410	LEAR	8 S	0556.0E	0557.0	1.0D	19.0			ST=2 TYP=3
	2950	GORK	1 S	0556.3	0557.7	3.1	14.0			
	2850	CRIM	3 S	0604.0	0608.0	8.0	106.0	33.0		
	2850	CRIM	29 PBI	0604.0	0612.0	15.0	21.0	7.0		
	950	GORK	46 C	0604.0	0606.3	7.4	39.0			
	950	GORK	46 C	0604.0	0607.8		222.0			
	3013	IZMI	22 GRF	0604.0	0607.9	21.0	54.0	30.0		
	5900	KISV	45 C	0604.8	0607.6		22.0			
	5900	KISV	45 C	0604.8	0608.7	11.1	27.0			
	2695	LEAR	4 S/F	0605.0E	0607.0	7.0D	110.0			ST=2 TYP=3
	2695	SVTO	4 S/F	0605.0E	0607.0	6.0D	100.0			ST=2 TYP=3
	9300	KISV	2 S/F	0606.9	0608.6	6.2	10.0			
	1415	LEAR	4 S/F	0607.0E	0607.0	3.0D	59.0			ST=2 TYP=3
	4995	LEAR	8 S	0607.0E	0608.0	2.0D	31.0			ST=2 TYP=3
	1415	SVTO	4 S/F	0607.0E	0608.0	4.0D	58.0			ST=2 TYP=3
	2950	GORK	45 C	0607.0	0608.8		49.0			
	2950	GORK	45 C	0607.0	0607.8	3.8	60.0			
	260	ONDR	41 F	0700.0						
	536	ONDR	41 F	0754.0	0812.7	50.0	26.0			
	9100	GORK	20 GRF	0803.5	0910.5	138.2	7.0			
	650	GORK	22 GRF	0924.0	1008.8	66.0D	10.0			
	5900	KISV	2 S/F	0925.4	0927.0	5.1	4.0			
	9300	KISV	2 S/F	1017.3	1020.6	6.2	6.0			
	5900	KISV	2 S/F	1018.3	1019.1	3.5	3.0			
	5900	KISV	2 S/F	1055.3	1056.7	4.0	4.0			
	3000	POTS	4 S/F	1232.5	1236.0	7.5	24.0			
	1470	POTS	4 S/F	1234.5	1237.0	7.0	25.0			
	5900	KISV	2 S/F	1234.9	1236.7	8.9	8.0			
	2695	SVTO	8 S	1235.0E	1235.0	1.0D	33.0			ST=2 TYP=3
	9300	KISV	20 GRF	1235.0	1238.4	24.5	7.0			
	808	ONDR	41 F	1236.7	1239.0	4.0	6.0			
	536	ONDR	42 SER	1415.5	1421.4	6.5	7.0			
	1470	POTS	4 S/F	1450.0	1451.5	3.0	41.0			

Reports are received routinely from the following observatories:

BERN = Berne	IZMI = IZMIRAN	ONDR = Ondrejov	SVTO = San Vito
CRIM = Crimea	KISK = Kislovodsk	OTTA = Ottawa	SYDN = Sydney
GORK = Gorky	KRAK = Krakow	PALE = Palehua	TORN = Torun
HIRA = Hiraiso	LEAR = Learmonth	PENT = Penticton	TRST = Trieste
HUAN = Huancayo	NOBE = Nobeyama	POTS = Potsdam	TYKW = Toyokawa
		SGMR = Sagamore Hill	UPIC = Upice

Explanation of Type Code:

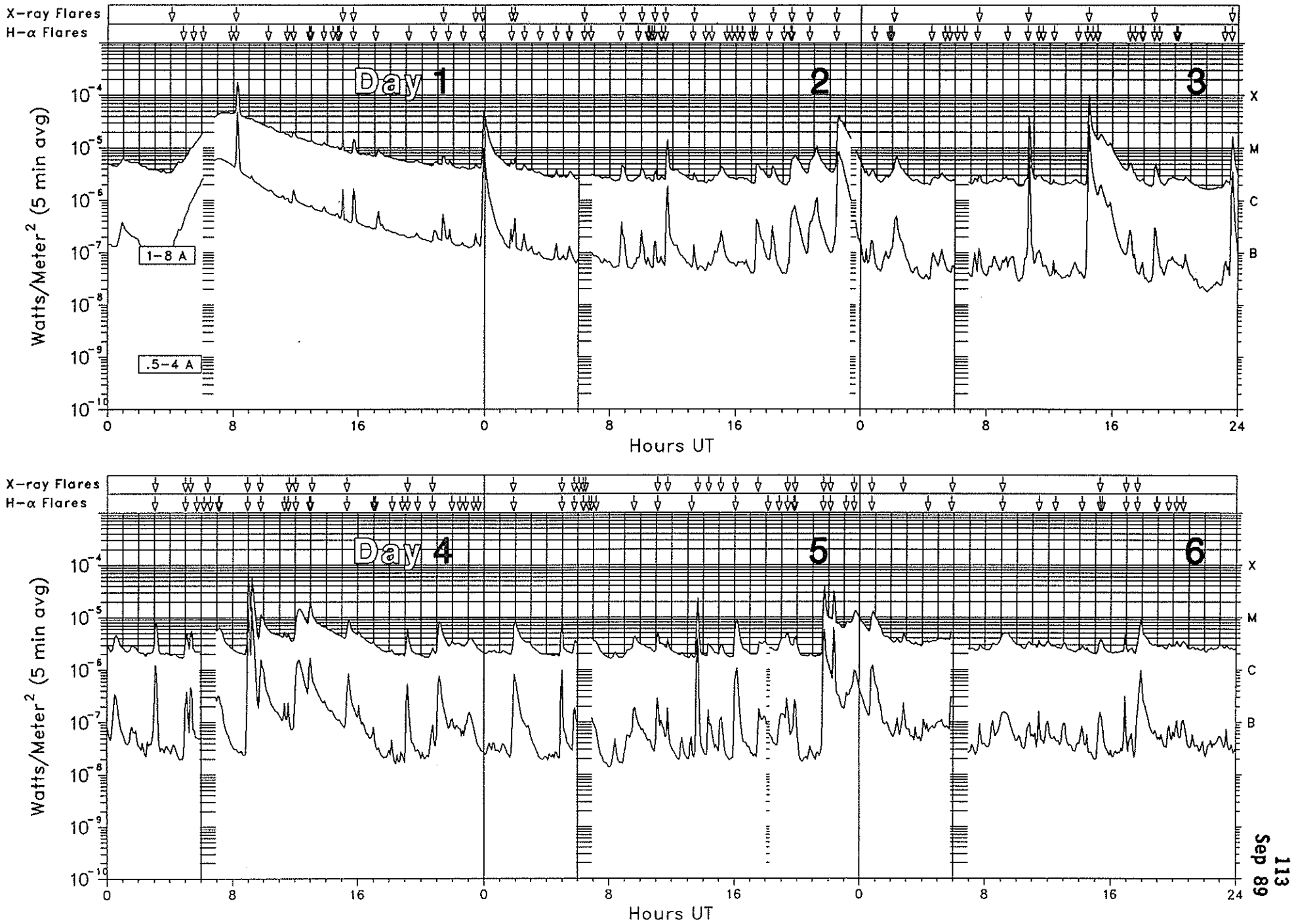
1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple 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; Ottawa, Canada 2800 MHz; Hiraiso, Japan 500 and 200 MHz; and Toyokawa, Japan 9400, 3750, 2000 and 1000 MHz.

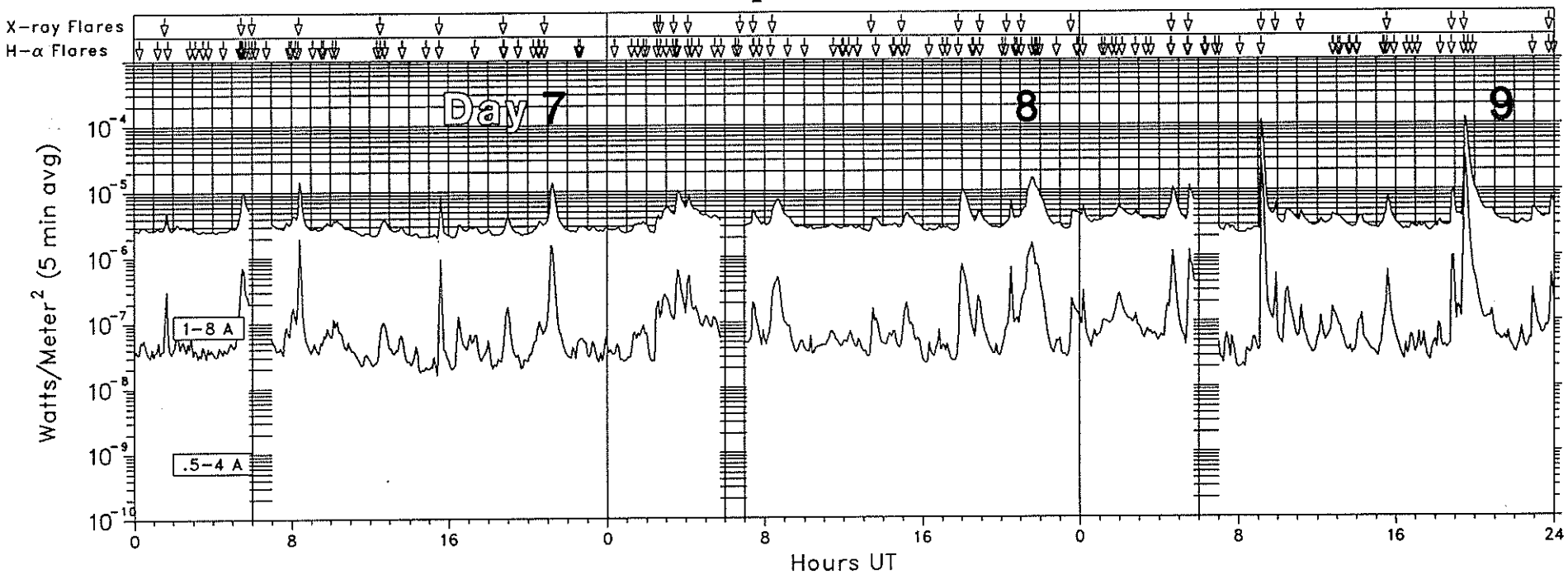
GOES-7 X-RAY DETECTOR

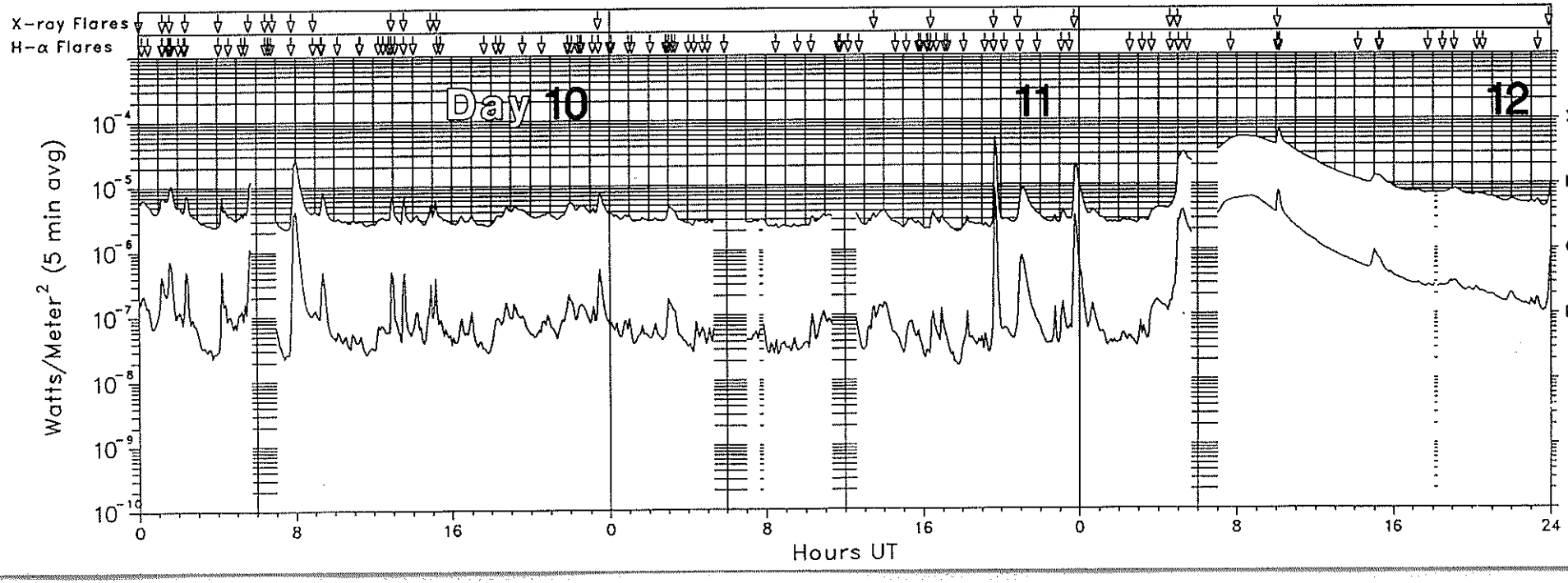
September 1989



GOES-7 X-RAY DETECTOR

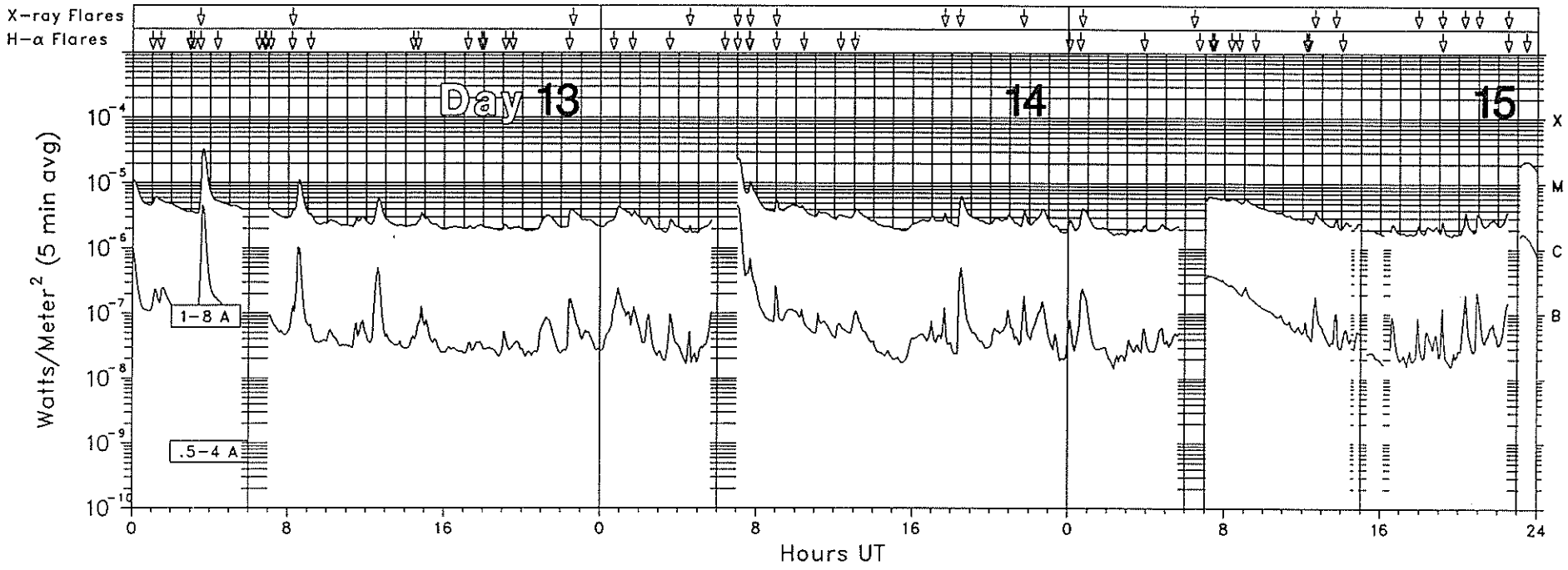
September 1989

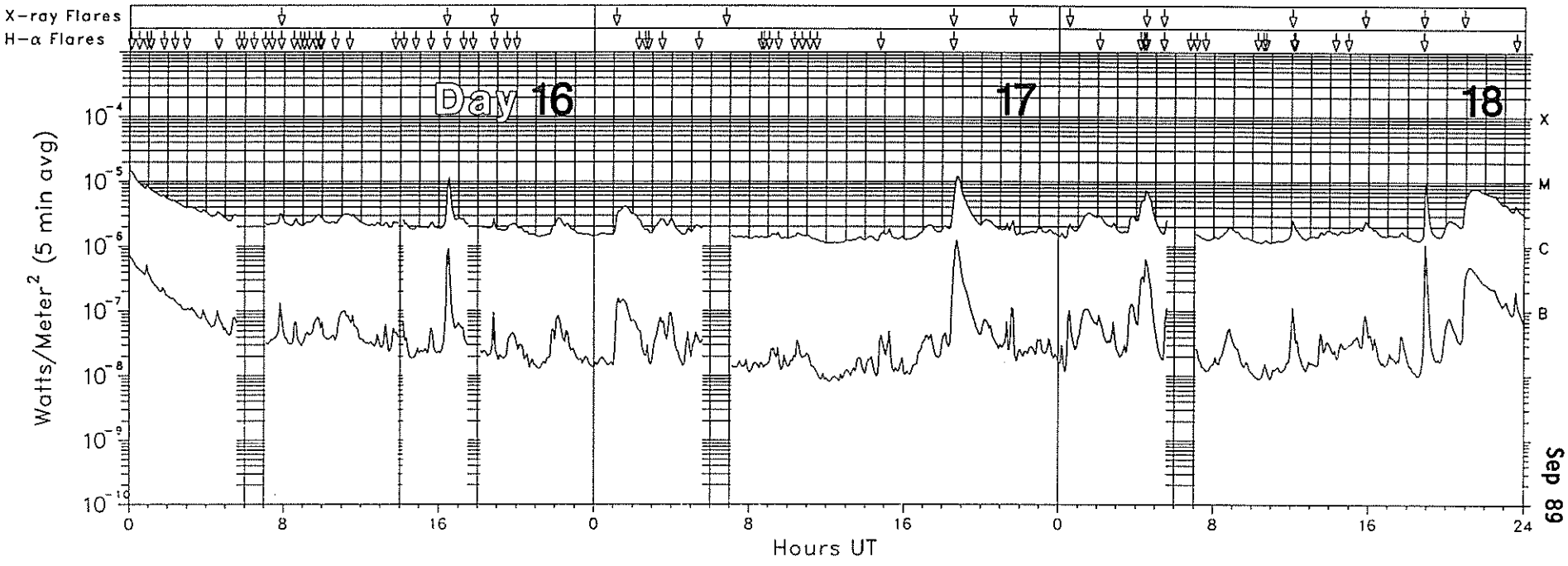




GOES-7 X-RAY DETECTOR

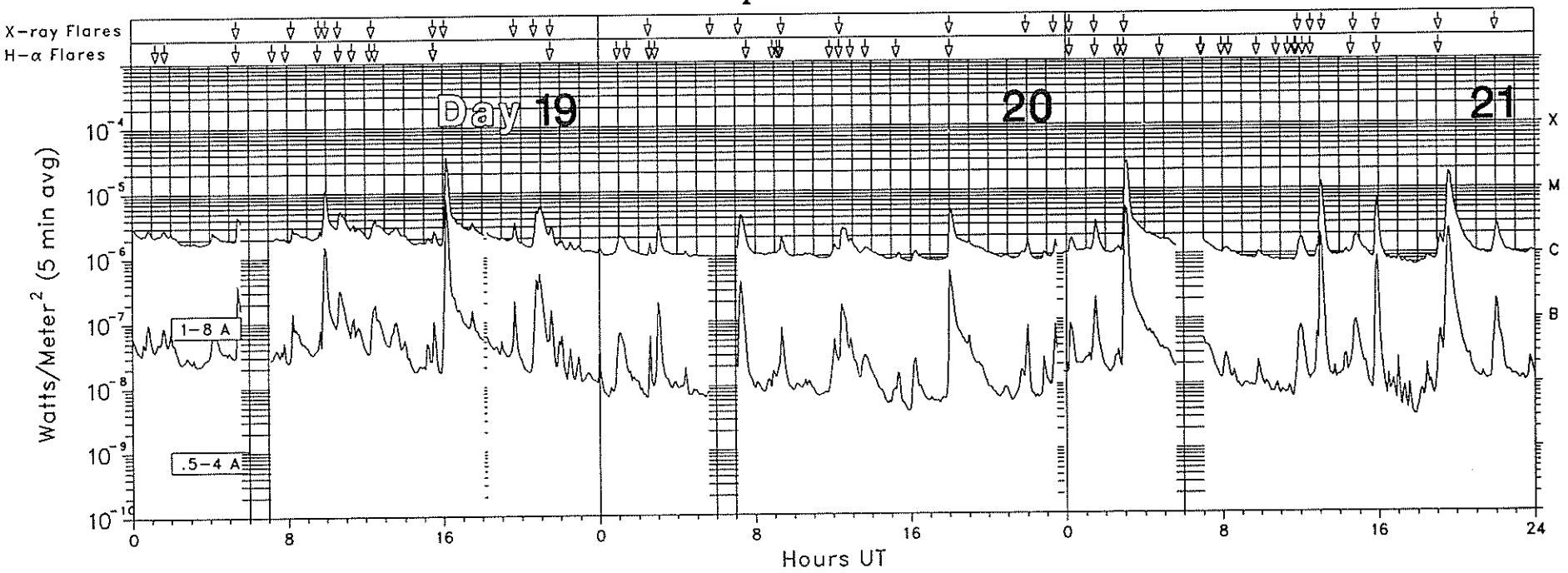
September 1989

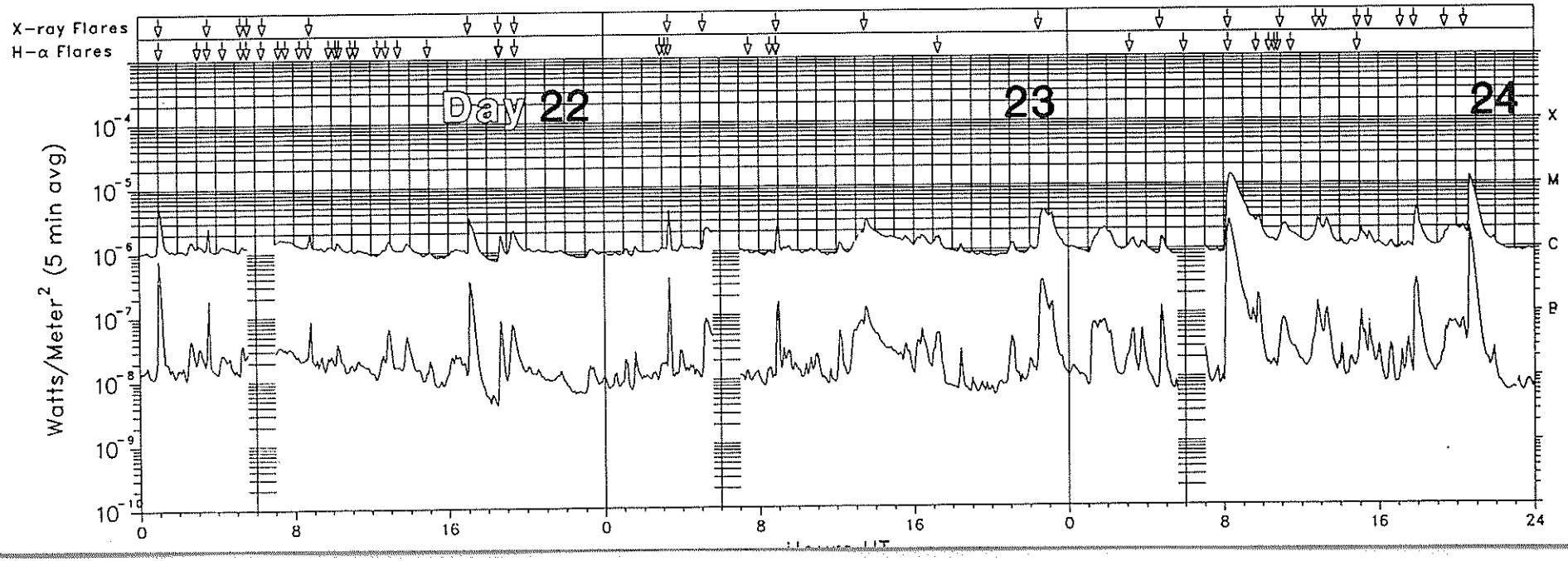




GOES-7 X-RAY DETECTOR

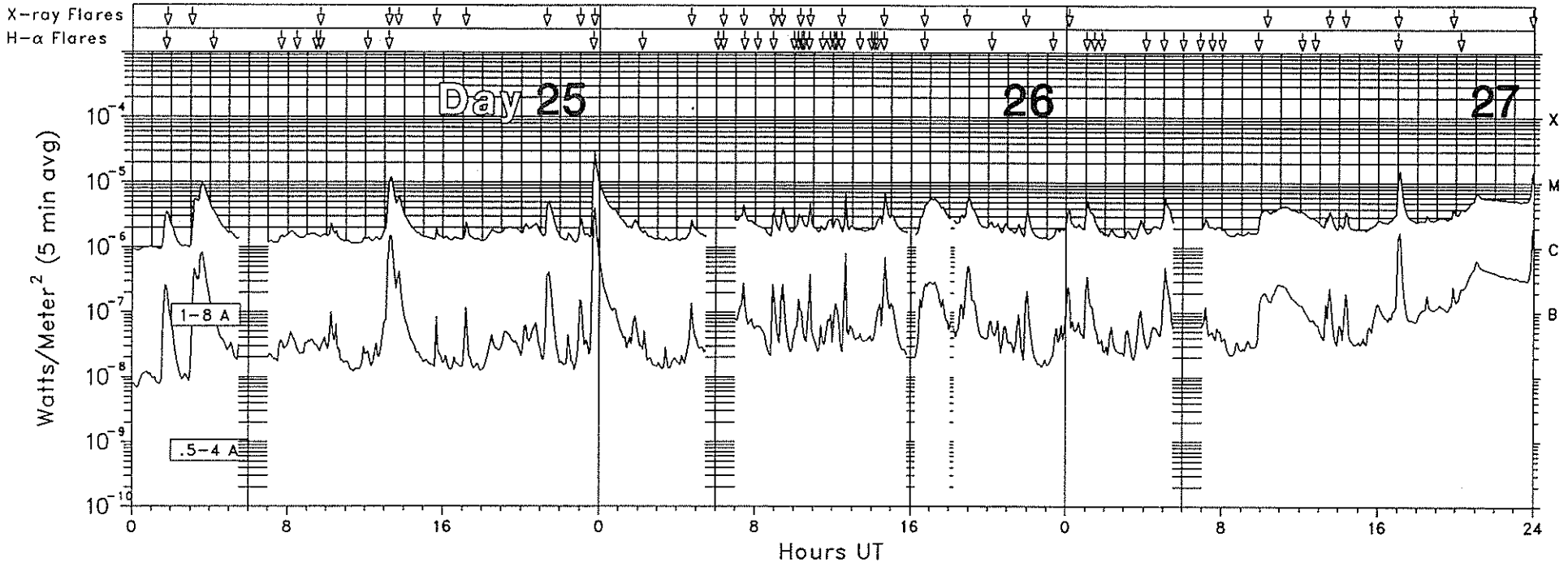
September 1989

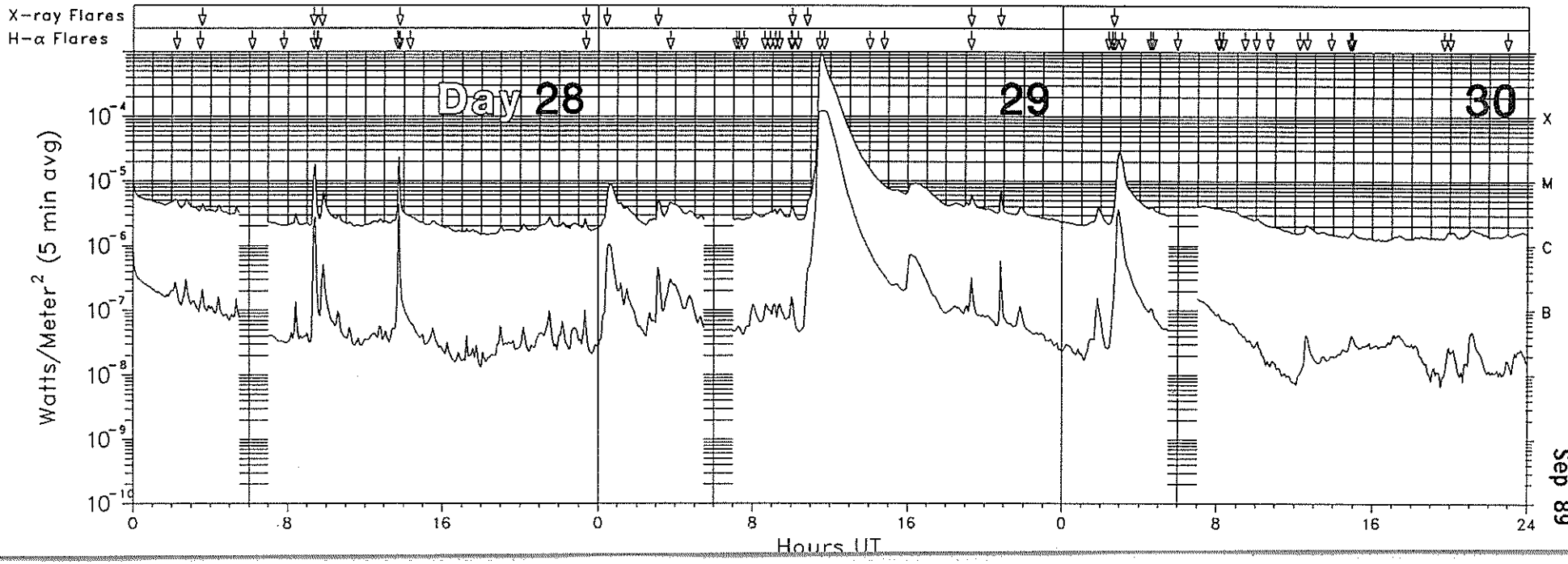




GOES-7 X-RAY DETECTOR

September 1989





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

September 1989

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/ USAF Region
01	0405	0712	1121				M4.6	
01	0810	0818	0820	S20	E65	SB	X2.3	5671
01	1459E	1501	1506D	S16	E39	1N	M2.0	5669
01	1539E	1541	1553D	S17	E57	SF	M1.6	5671
01	2121	2125	2136				M1.0	
01	2323	2326	2328				C5.9	
01	2350E	2355	0039D	S19	E42	2N	M5.8	5669
02	0141E	0143	0153D	S18	E47	SF	C7.2	5671
02	0154E	0156	0159D	S17	E53	SF	M1.1	5669
02	0621E	0622	0634D	S18	E47	1B	M2.5	5669
02	0848E	0850	0903D	S18	E48	SF	C4.9	5669
02	1001	1004	1007				C5.5	
02	1050	1056	1059				C4.4	
02	1130E	1140	1226D	S18	E50	1B	M2.3	5669
02	1320E	1320	1351D	S20	E49	SF	C3.8	5669
02	1702E	1720	1800D	S18	E34	SF	C5.5	5669
02	1822E	1826	1843D	S17	E32	SF	C4.7	5669
02	1933E	1939	2159	S17	E31	SF	C7.3	5669
02	2041E	2050	2148D	S17	E25	SF	M1.7	5669
02	2225E	2233	2320	S18	E32	1B	M4.6	5669
03	0206E	0219	0254D	S17	E29	1F	C7.0	5669
03	0731E	0733	0740D	S16	E22	SF	C3.5	5669
03	1037	1044	1052				M5.0	
03	1428E	1431	1500D	S18	E16	1B	X1.2	5669
03	1839E	1840	1909D	S18	E26	SF	C5.4	5669
03	2336E	2343	0000D	S17	E27	1B	M1.8	5669
04	0303E	0310	0322D	S18	E24	SF	C9.9	5669
04	0500E	0506	0518D	S18	E20	SF	C5.5	5669
04	0519E	0523	0536D	S18	E20	SF	C7.7	5669
04	0625E	0631	0714D	S18	E10	1N	M1.3	5669
04	0857E	0903	0946D	S18	E19	2B	X1.1	5669
04	0946	0952	1035				M1.1	
04	1136	1136U	1139D	S18	E24	SB	C5.8	5669
04	1202E	1215	1305D	S23	E18	1N	M1.4	5669
04	1305	1306U	1354D	N23	E41	1N	M2.0	5672
04	1518E	1526	1636D	S14	W00	1N	C9.7	5669
04	1908E	1909	1926D	S18	E06	SN	C8.0	5669
04	2043E	2115	2157D	N27	E34	1N	C8.9	5672
05	0151E	0158	0210D	N27	E65	1N	C8.7	5676
05	0457E	0459	0508D	S19	E15	SN	M1.7	5669
05	0546E	0546	0558D	S15	W11	SF	C4.0	5669
05	0603E	0604	0616D	S17	E06	SF	C4.5	
05	0619E	0643	0709D	N24	E31	SF	C4.0	5672
05	0628E	0645	0709D	N25	E31	1N	C5.7	
05	1105	1110	1114				C6.4	
05	1144	1148	1152				C3.9	
05	1338E	1341	1357D	S18	E06	SB	M3.2	5669
05	1420	1424	1428				C3.8	
05	1506	1514	1519				C3.1	
05	1602E	1603	1641D	S18	W11	1N	C9.3	5669
05	1729E	1758	1828D	S18	W07	SF	C3.5	5669
05	1922E	1924	1951D	S17	W03	SF	C5.5	5669
05	1950E	1952	2006D	S18	W09	SF	C4.7	5669
05	2139E	2144	2241	S17	W10	2B	M4.7	5669
05	2206E	2225	2306D	S17	E03	1B	M5.7	5669
05	2336E	2343	0032	N26	E23	SN	M1.3	5672
06	0044E	0047	0126D	S17	W08	SN	M1.3	5669
06	0244E	0247	0308D	S17	W15	SN	C5.2	5669
06	0552E	0556	0604D	S18	W03	SN	C8.7	
06	0904E	0920	0927D	N28	E55	SF	C4.9	5676
06	1516E	1517	1529D	S19	W19	SF	C3.8	5669
06	1656E	1657	1702D	S19	W09	SN	C6.6	5669
06	1740E	1758	1826D	S19	W18	SF	C9.3	5669
07	0135E	0139	0157D	S20	W10	SN	C5.5	5669
07	0529E	0534	0630D	S17	W25	1N	M1.1	5669
07	0601E	0602	0609D	N27	E39	SF	C7.3	5676
07	0823	0829	0858D	S17	W32	1B	M1.6	5669
07	1232E	1235	1309	N20	E65	SF	C3.8	5680
07	1533E	1537	1547D	S17	W21	1B	M1.1	5669
07	1846E	1901	1923D	S18	W35	SF	C4.2	5669
07	2051E	2114	2149D	S15	W39	SB	M1.4	5669
08	0232E	0235	0245D	S21	W34	SF	C5.2	5669
08	0242E	0307	0310D	N21	E78	SF	C5.9	5687
08	0324E	0339	0411D	N29	E27	1N	M1.1	5676
08	0408E	0408	0503D	S20	W25	SF	M1.1	5669
08	0646E	0649	0655D	S23	W34	SF	C5.3	5669
08	0726E	0729	0736D	S16	W30	SF	C6.0	5669
08	0824E	0840	0910D	S13	W51	SF	C7.7	5669
08	1325	1332	1337				C4.1	
08	1456E	1512	1530D	S10	E77	SF	C4.8	5689
08	1750E	1754	1857D	N17	E33	1N	M1.0	5680
08	1856E	1857	1909D	S19	W38	SF	C5.0	5669
08	2017E	2033	2056D	S15	W53	SF	C7.3	5669
08	2103E	2130	2232D	S18	W48	1N	M1.6	5669
08	2334E	2338	0027D	N30	E16	SF	C4.9	5676
09	0437E	0443	0522D	S15	W57	SF	M1.1	5669
09	0529E	0530	0604D	N18	E31	1N	M1.4	5680
09	0910E	0911	0934D	N18	E28	2B	X1.4	5680
09	0953	0956	0958				C9.9	
09	1109	1112	1119				C4.8	
09	1532E	1535	1552D	N18	E26	SN	C8.7	5680
09	1851E	1852	1915D	N20	E24	1N	M1.2	5680
09	1928E	1930	1956D	S15	W67	1F	X1.3	5669
09	2344E	2352	0024D	N28	E01	SF	C8.8	5676
10	0001E	0014	0020D	N25	W43	SF	C6.7	5672
10	0113E	0113	0133D	N18	E54	SF	C8.2	5687
10	0135E	0139	0208D	N16	E57	1F	M1.3	5687
10	0223E	0223	0241D	N18	E20	SF	C8.3	5680
10	0405E	0416	0456D	N17	E09	SN	C9.4	5683
10	0536E	0546	0621D	S20	W56	2F	M1.3	5669
10	0627E	0631	0653D	N26	W02	SN	M1.0	5676
10	0650E	0652	0704D	N19	E21	SF	C8.1	5680
10	0748E	0757	0827D	S19	W82	SN	M2.8	5669
10	0856E	0930	1053D	N17	E09	SN	C8.9	5683
10	1255E	1300	1304	N18	E13	1N	C9.4	5680
10	1334E	1335	1342D	S18	W73	SF	C8.6	5669
10	1455	1459	1501				C6.7	
10	1514E	1514	1618D	N27	W09	SF	C7.8	5676
10	2324E	2338	2348D	N18	E09	SF	C8.5	5680
11	1330E	1330	1343D	N15	W08	SF	C4.0	5683
11	1623E	1629	1707D	N26	W36	1F	C3.8	5682
11	1938E	1940	2015D	N19	W02	2B	M6.2	5680
11	2051	2051U	2114	N17	W13	SF	C9.0	5683
11	2344E	2348	0001D	S20	W76	1N	M2.2	5669
12	0435	0814	1057				M5.3	
12	0458E	0459	0508D	S18	W79	SF	M3.2	5669
12	1003	1009U	1151	N17	E13	2N	M7.3	5686
12	2353E	0001	0014	S19	W90	SN	M1.1	5669

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

September 1989

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp	Opt	Xray	NOAA/ USAF Region
13	0329E	0338	0422D	N16	E06		2N	M3.6	5686
13	0813E	0828	0836D	N26	W42		SF	M1.1	5676
13	2234	2238U	2327D	N25	W56		SF	C4.1	5676
14	0433	0436	0440					C2.4	
14	0659E	0708	0742D	N15	W39		1N	M2.4	5683
14	0738E	0741	0839D	N26	E40		SF	M1.1	5694
14	0900E	0904	0910D	N22	W70		SF	C6.7	5682
14	1738	1741	1745					C3.9	
14	1825	1831	1845					C6.7	
14	2141	2147	2152					C4.2	
15	0043E	0046	0053D	N26	E32		SF	C4.3	5694
15	0627	0711	0943					C6.4	
15	1237	1241	1247					C4.2	
15	1342	1346	1349					C3.8	
15	1755	1758	1800					C2.8	
15	1908	1912	1917					C2.9	
15	2017	2022	2027					C3.9	
15	2101	2106U	2106	N15	W34		SF	C3.6	5686
15	2230E	2348U	0040D	N20	W22		1F	M2.3	5687
16	0751E	0751	0801D	N17	W37		SF	C3.4	5686
16	1622E	1634	1652D	N14	W73		1F	M1.2	5683
16	1848E	1851	1900D	N17	W38		SF	C3.3	5686
17	0108	0142	0215					C4.1	
17	0647	0650	0655					C2.8	
17	1831E	1848	1926D	N14	W54		1F	M1.2	5686
17	2136	2140	2143					C3.1	
18	0031	0035	0040					C2.7	
18	0430E	0434	0447D	S26	E53		1N	C9.6	5698
18	0523E	0534	0637	S24	E51		SN	C3.1	5698
18	1202	1208	1215					C2.6	
18	1547	1551	1559					C2.7	
18	1849E	1858	1939D	N18	W65		2N	M1.1	5686
18	2054	2132	2249					C8.0	
19	0524E	0529	0541D	S27	E36		1F	C5.6	5698
19	0814	0818	0822					C3.1	
19	0939	0942	0944					C3.1	
19	1000	1003U	1036	S30	E36		SN	M1.2	5698
19	1038	1045	1100					C5.5	
19	1221	1232	1236					C4.4	
19	1531E	1532	1537D	S26	E29		SF	C2.7	5698
19	1605	1614	1628					M4.1	
19	1939	1944	1947					C4.1	
19	2041	2058	2112					C6.3	
19	2131E	2132	2309D	N26	W34		SF	C3.3	5694
20	0233E	0236	0250D	S29	E21		SN	C2.4	5698
20	0543	0551	0603					C4.1	
20	0710	0719	0729					C4.6	
20	0922E	0923	0927D	N30	W37		SF	C2.0	5694
20	1222	1228U	1320	S26	E22		SB	C2.8	5698
20	1801E	1804	1823D	S28	E17		SF	C6.4	5698
20	2157	2203	2207					C1.8	
20	2323E	2325	2334D	S26	E02		SF	C2.0	5698
21	0011E	0012	0035D	S27	E13		SF	C2.0	5698
21	0128	0128U	0140D	S28	E13		SF	C3.5	5698
21	0259	0306U	0324	S27	E11		1N	M2.9	5698
21	1154E	1157U	1221D	N28	W53		SF	C1.8	5694
21	1233E	1253U	1256D	S27	E04		SF	C1.9	5698
21	1308	1308U	1335D	S27	E06		SN	M1.5	5698
21	1445	1450	1455					C2.0	
21	1555E	1555	1613D	S26	E04		1F	C7.8	5698
21	1906	1933	2002D	S27	E03		1F	M1.9	5698
21	2159	2207	2211					C2.8	
22	0103E	0103	0118D	S26	W01		SF	C6.9	5698
22	0334E	0337	0341D	S23	W05		SF	C3.3	5698
22	0517	0520	0523					C1.5	
22	0538E	0540	0551D	S24	E01		SF	C7.7	5698
22	0625E	0627	0645D	S29	W01		SN	C4.9	5698
22	0850	0853	0855					C2.4	
22	1703	1708	1718					C4.3	
22	1704	1708	1717					C4.0	
22	1837	1843	1847					C2.3	
22	1927E	1929	1946	S24	E24		SF	C2.2	5703
23	0319	0324	0326					C5.8	
23	0508	0518	0705					C2.3	
23	0856	0900	0904					C4.4	
23	1329	1335	1344					C3.2	
23	2230	2245	2318					C4.0	
24	0444	0451	0457					C1.6	
24	0814E	0834	0904D	S29	W28		SF	M1.4	5698
24	1058	1110	1130					C2.3	
24	1247	1255	1303					C2.8	
24	1310	1315	1325					C2.9	
24	1454E	1504	1549D	S31	W29		SF	C2.0	5698
24	1530	1534	1537					C1.9	
24	1708	1711	1714					C1.2	
24	1750	1800	1805					C5.6	
24	1924	2021	2032					C2.6	
24	2023E	2029	2115D	S12	E90		1N	M1.6	5708
25	0148E	0148	0203D	S30	W37		SF	C3.8	5698
25	0303	0338	0358					C9.8	
25	0940E	1015	1041D	S27	W42		SN	C2.5	5698
25	1312E	1322	1333D	S30	W48		SF	M1.2	5698
25	1342	1346	1351					C6.6	
25	1539	1543	1546					C2.5	
25	1708	1713	1719					C2.5	
25	2117	2126	2138					C5.7	
25	2300	2306	2311					C3.0	
25	2344E	2345	0006D	S13	E78		1F	M3.3	5708
26	0443	0447	0450					C2.9	
26	0621	0629	0636					C4.6	
26	0724	0728	0731					C5.0	
26	0855D	0857	0900	S23	W58		SN	C4.6	5698
26	0921	0927	0936					C4.2	
26	1018	1018	1032D	S23	W58		1N	C3.8	5698
26	1049	1052	1054					C5.9	
26	1226E	1239U	1248	S27	W55		SF	C8.2	5698
26	1436E	1438U	1448D	S26	W54		SF	C8.3	5698
26	1640	1645U	1655D	S18	E87		SF	C5.6	5708
26	1852	1902	1912					C5.8	
26	2154	2202	2208					C4.1	
27	0007	0011	0014					C4.4	
27	1018E	1031	1039D	S22	W35		SF	C4.5	5703
27	1329	1333	1339					C3.8	
27	1418	1427	1429					C3.8	
27	1700E	1713	1721D	S20	W75		SF	M1.6	5698
27	1949	1953	1959					C4.2	
27	2355		2400	S19	E85		SN	M1.6	5712

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

September 1989

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp	Opt	Xray	NOAA/ USAF Region
28	0332E	0336	0347D	S21	E80		SF	C4.6	5712
28	0919	0926	0932					M2.9	
28	0946	0952	0959					C7.0	
28	1347	1349	1414D	S19	E85		1B	M3.5	5712
28	2322E	2323	2332D	S19	E52		1N	C3.8	
29	0025	0042	0056					C9.2	
29	0304	0311	0319					C5.3	
29	1000	1004	1010					C4.4	
29	1047	1133	1435					X9.8	5698
29	1917E	1920	1931D	S15	E29		SF	C6.4	5708
29	2048	2052	2056					C8.2	
30	0239E	0254	0402D	S18	E35		2N	M2.9	5712

Preliminary GOES Satellite Data
Daily Average X-ray Background
October 1988 - September 1989

Day	1988 Oct	Nov	Dec	1989 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	C1.0	B5.7	B4.6	C1.7	C1.2	C1.3	B9.2	C1.0	B8.2	B9.2	C1.0	C3.9
2	C1.2	B6.1	B4.7	C2.1	C1.2	C1.3	C1.0	C1.0	C1.5	B9.4	B9.2	C2.5
3	C1.3	B5.2	B4.4	C2.2	C1.6	B9.8	C1.1	B9.1	C1.4	C1.1	C1.0	C1.9
4	C1.0	B5.0	B4.5	C2.0	C2.0	B7.0	C1.0	C1.6	C1.6	C1.1	C1.1	C1.9
5	B8.7	B4.6	B5.7	C1.9	C1.6	C1.3	C1.0	C1.2	C1.5	B8.7	C1.8	C1.7
6	C1.0	B5.8	B6.2	C2.4	C1.9	C2.7	B8.6	C1.1	C1.9	B8.2	C1.5	C2.3
7	B7.4	B5.5	B6.6	C4.7	C1.9	C2.5	C1.0	C1.4	C1.9	B7.2	C1.5	C2.1
8	B5.3	B5.5	B7.4	C4.6	C2.1	C1.9	C1.3	C1.3	C3.0	B7.2	C1.1	C2.5
9	B5.0	B9.2	B7.8	C3.4	C2.2	C2.1	B9.8	C1.3	C3.0	B7.0	C1.1	C2.3
10	B4.7	B9.8	C1.0	C2.5	C1.9	C2.5	B8.1	C1.3	C2.5	B6.5	C1.4	C2.7
11	B4.9	B9.8	C1.3	C3.1	C1.3	C2.8	C2.1	C1.0	C2.1	B6.8	C1.7	C2.3
12	B5.4	B6.3	C1.2	C2.3	C1.1	C2.3	C1.1	C1.0	C2.0	B6.2	C2.7	C3.8
13	B5.4	B8.9	C1.1	C5.0	C1.3	C3.0	C1.2	B9.9	C2.3	B7.7	C2.0	C2.3
14	B4.7	C1.3	C1.4	C3.8	C2.0	C2.4	C1.2	B9.5	C2.7	B7.0	C2.7	C1.9
15	B5.9	B7.9	C2.1	C2.9	C1.5	C2.1	C1.1	B9.0	C3.3	B7.4	C4.3	C1.7
16	B7.8	C1.4	C1.7	C3.1	C1.7	C2.5	C1.1	B7.8	C4.1	B7.1	C7.9	C1.9
17	C1.2	C1.0	C2.0	C2.1	C1.4	C2.3	C1.4	B7.5	C2.7	B6.8	C3.5	C1.1
18	B8.0	B8.1	C1.3	C2.8	C1.3	C2.1	C1.1	B7.2	C2.5	B7.8	C1.3	C1.1
19	B8.3	B8.4	C1.9	C2.0	C1.5	C2.6	C1.0	B7.4	C2.5	B7.6	C1.0	C1.4
20	B6.8	B6.6	C2.2	C2.3	C1.4	C2.3	B9.5	C1.3	C2.3	B7.0	C1.1	B8.9
21	B7.3	C1.1	C2.3	C2.7	C1.7	*	B9.0	C1.3	C3.4	B8.6	C1.0	B8.3
22	B8.2	B8.3	C1.8	C2.1	C2.2	C1.8	C1.2	C1.7	C2.0	B7.6	C1.0	B8.9
23	B8.0	B5.1	C2.3	C1.9	C1.5	C1.6	C1.4	C1.9	C1.7	B7.4	C1.5	B8.6
24	B6.6	B5.3	C2.1	C1.8	C1.4	C1.1	C1.4	C1.9	C1.1	B9.2	C1.5	B8.7
25	B6.0	B5.7	C1.5	C1.4	C1.5	C1.0	C1.0	C1.6	B8.3	B9.2	C1.0	C1.1
26	B5.3	B7.2	C1.3	C1.3	C1.1	B8.9	B9.4	C1.2	B9.8	C1.0	B9.3	C1.5
27	B6.7	B7.5	C1.9	C1.3	B9.5	B9.9	B7.4	B7.5	C1.0	B9.5	B9.8	C1.6
28	B7.3	B4.2	C1.4	C1.1	C1.0	C1.1	B7.6	B7.9	C1.1	B8.8	B1.7	C1.8
29	B8.4	B4.3	B8.7	C1.1		C1.0	C1.0	B9.0	C1.2	C1.1	C2.7	C2.4
30	B8.0	B4.1	C1.0	C8.9		B8.8	B8.4	B9.2	C1.1	C1.0	C1.5	C1.3
31	B6.7			C1.0		B9.6		B9.7		C1.0	C1.6	

MASS EJECTIONS FROM THE SUN

SEPTEMBER 1989

Site	Mo Day	Observed UT Start	Max	End	Location RA°	R/Ro	Freq or Wavelength	Kind of Event
SVTO	Sep 02	1353.0		1358.0			Meter	II
SGMR	Sep 02	1356.0		1357.0			Meter	II
WEIS	Sep 04	0923.3		0924.8			150- 60 MHz	II Herringbone
LEAR	Sep 04	0923.0		0936.0			Meter	II
WEIS	Sep 04	0933.3		0935.5			70- 40 MHz	II Herringbone
WEIS	Sep 09	0546.9		0550.6			76- 30 MHz	II Herringbone
SVTO	Sep 09	0547.0		0554.0			Meter	II
LEAR	Sep 09	0547.0		0559.0			Meter	II
LEAR	Sep 09	0909.0		0931.0			Meter	IV
SVTO	Sep 09	0909.0		0933.0			Meter	IV
WEIS	Sep 09	0910.0		0916.6			1000-220 MHz	IV Decimeter
SVTO	Sep 09	0911.0		0914.0			Meter	II
WEIS	Sep 09	0911.8		0938.2			380- 30 MHz	II Herringbone
SVTO	Sep 09	0917.0		0929.0			Meter	II
SGMR	Sep 10	1254.0		1313.0			Meter	IV
SGMR	Sep 10	1302.0		1305.0			Meter	II
SVTO	Sep 10	1303.0		1304.0			Meter	II
WEIS	Sep 10	1303.0		1304.4			1000-200 MHz	II Herringbone
SVTO	Sep 10	1403.0		1404.0			Meter	II
SGMR	Sep 11	1938.0		1954.0			Meter	IV
PALE	Sep 11	1938.0		2400.0			Meter	IV
SGMR	Sep 11	1951.0		2003.0			Meter	II
LEAR	Sep 12	0641.0		0647.0			Meter	II
SVTO	Sep 12	0642.0		0646.0			Meter	II
WEIS	Sep 12	0643.0		0646.3			46- 30 MHz	II Herringbone
KHAR	Sep 14	0726 E	0726 U	0745 D	283-289	0.71-0.73	H-alpha	S
KHAR	Sep 14	0738 E	0850 U	1045 D	040-053	0.77-0.90	H-alpha	Q
LEAR	Sep 14	0920.7		0936.3			1000-300 MHz	IV Decimeter
KHAR	Sep 15	0845 E	0852 U	0902 D	112	1.00-1.02	H-alpha	S
KHAR	Sep 15	0935 E	09366 U	0943 D	117	1.00-1.02	H-alpha	S
KHAR	Sep 17	0931 E		0940 D	299-301	0.92-0.93	H-alpha	S
KHAR	Sep 17	1028 E	1030 U	1040 D	340-343	0.34-0.37	H-alpha	S
WEIS	Sep 20	0632.7		0634.1			130-110 MHz	II
LEAR	Sep 20	0658.0		0704.0			Meter	II
SVTO	Sep 20	0659.0		0702.0			Meter	II
KHAR	Sep 20	1012 E	1015 U	1028 D	138-141	0.75	H-alpha	S
KHAR	Sep 21	0712 E	0718 U	0733 D	304-305	1.00-1.02	H-alpha	S
KHAR	Sep 22	0818 E	0819 U	0846 D	134	0.68-0.71	H-alpha	S
KHAR	Sep 22	0853	0854 U	0925	190-193	0.55-0.57	H-alpha	S
KHAR	Sep 22	1035 E	1036 U	1043	190-192	0.55-0.57	H-alpha	S
LEAR	Sep 23	0858.0		0908.0			Meter	II
SVTO	Sep 23	0900.0		0905.0			Meter	II
WEIS	Sep 23	0900.0		0910.9			210- 30 MHz	II Herringbone
KHAR	Sep 23	0923		0930 D	211-213	0.58	H-alpha	S
SGMR	Sep 23	1336.0		1352.0			Meter	II
WEIS	Sep 23	1337.4		1346.7			150- 35 MHz	II Herringbone
KHAR	Sep 24	0928	0932 U	0950 D	220	0.75	H-alpha	S
KHAR	Sep 25	0740 E		0946	195	0.48	H-alpha	S
KHAR	Sep 25	0820 E	0827 U	0835 D	233	0.80-0.83	H-alpha	S
KHAR	Sep 25	0825 E		0836 D	106-107	0.92	H-alpha	S
KHAR	Sep 25	1000 E		1045 D	225	0.82	H-alpha	S
KHAR	Sep 25	1030 E		1048 D	249	0.96	H-alpha	S
VORO	Sep 25	2344	2348	2408	095	0.97	H-alpha	SP
KHAR	Sep 26	1028 E	1030 U	1035 D	243	0.87	H-alpha	S
KHAR	Sep 26	1034 E	1048 U	1105 D	069-077	0.75-0.84	H-alpha	S
KHAR	Sep 26	1054 E		1105 D	244	0.90	H-alpha	S

MASS EJECTIONS FROM THE SUN

SEPTEMBER 1989

Site	Mo	Day	Observed UT Start	Max	End	Location RA°	R/Ro	Freq or Wavelength	Kind of Event
WEIS	Sep	26	1240.6		1242.4			270-200 MHz	II
WEIS	Sep	29	1122.8		1141.0			800-180 MHz	IV
LEAR	Sep	29	1125.0		1217.0			Meter	IV
WEIS	Sep	29	1125.7		1156.5			160- 30 MHz	II
SVTO	Sep	29	1135.0		1217.0			Meter	IV
WEIS	Sep	29	1155		1245			1000-180 MHz	IV Decimeter

QUALIFIERS ON START, MAX, AND END TIMES
- D = event ended after tabulated time
- E = event began before tabulated time
- U = uncertain time

TYPE OF EVENT
- A = eruptive active region prominence
- CB = coronal cloud bubble
- D = coronal depletions
- E = coronal enhancement
- EL = coronal expanding loop
- II = Type II radio burst
- IVm = moving Type IV radio burst
- Q = eruptive quiescent prominence
- R = coronal ray streamer
- S = flare-surge if there is a known flare association
- SP = flare-spray if there is a known flare association
- * = movement may be caused by ionospheric refraction

REPORTING STATIONS
- KHAR = Kharkov
- LEAR = Learmonth
- PALE = Palehua
- SGMR = Sagamore Hill
- SVTO = San Vito
- VORO = Voroshilov
- WEIS = Weissenau

ACTIVE PROMINENCES AND FILAMENTS

SEPTEMBER 1989

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
01	ADF	0003	0058D	S04	W38	08	29.3	1				C	VORO		
01	APR	0012	0056D	N35	W90	08	24.9	1				C	VORO		
01	APR	0021	0056D	N65	W90	08	24.0	1				C	VORO		
01	LPS	0628E	1056D	S20	E90	09	8.1			9	9	E	SVTO	5671	
01	BSL	0715E	0757D	S32	E90	09	8.4	1				C	ABST		
01	BSL	0834E	0906	N27	E90	09	8.4	1				C	CATA		
01	AFS	1115E	2011D	S27	E09	09	2.2		02	9	9	E	RAMY	5670	
01	DSD	1151	1502D	S18	E42	09	4.7		13	9	9	E	RAMY	5671	Flare Associated
01	DSD	1202E	1406D	S23	E58	09	6.0		15	9	9	E	SVTO	5671	
01	LPS	1229E	2011D	S16	E47	09	5.1			9	9	E	RAMY	5671	
01	ADF	1413E	0109D	S08	E36	09	4.3	1	09	9	9	E	HOLL	5669	
01	ADF	1413E	0109D	S18	E67	09	6.7	1	23	9	9	E	HOLL	5671	
01	DSD	1432E	1545D	N25	W46	08	29.1		10	9	9	E	RAMY	5655	Flare Associated
01	AFS	1432E	2011D	N23	E25	09	3.5		02	9	9	E	RAMY	5673	
01	DSD	1450E	1511	N21	W55	08	28.5		09	9	9	E	SVTO	5655	
01	DSD	1454E	0109D	N21	W48	08	29.0		11	9	9	E	HOLL	5655	Flare Associated
01	ADF	1500E	2011D	S10	E39	09	4.5	2	12	9	9	E	RAMY	5669	
01	DSD	1654E	2011D	N23	E78	09	7.7		04	9	9	E	RAMY	5672	
01	DSD	1654E	2011D	S27	E04	09	2.0		02	9	9	E	RAMY	5670	
01	ADF	1706E	0243D	N23	W54	08	28.6		06	9	9	E	PALE	5655	
01	DSD	1706E	0243D	S19	E56	09	6.0		09	9	9	E	PALE	5671	
01	DSD	1706E	0243D	S29	E02	09	1.9		06	9	9	E	PALE	5670	
01	DSD	1711E	2007D	S18	E62	09	6.4		05	9	9	E	RAMY	5671	Flare Associated
01	AFS	2342E	0954D	S18	E48	09	5.6		02	9	9	E	LEAR	5671	
02	AFS	0429E	0954D	N23	E16	09	3.4		02	9	9	E	LEAR	5673	
02	DSD	0529E	0954D	S21	E46	09	5.7		02	9	9	E	LEAR	5671	
02	BSL	0616E	0703D	S35	E90	09	9.4	1				C	ABST		
02	AFS	1130E	2159D	N23	E12	09	3.4		02	9	9	E	RAMY	5673	
02	AFS	1130E	2159D	N42	W34	08	30.8		02	8	6	E	RAMY		
02	ADF	1130E	2159D	S20	E62	09	7.2	1	27	9	9	E	RAMY	5671	
02	AFS	1130E	2159D	S27	W04	09	2.2		03	9	9	E	RAMY	5670	
02	BSD	1137	1329D	S18	E49	09	6.2		41	9	9	E	RAMY	5671	Flare Associated
02	BSD	1145E	1446D	S17	E51	09	6.4		39	9	9	E	SVTO	5671	Flare Associated
02	BSL	1158	1221D	S26	E90	09	9.5			9	9	E	RAMY		Flare Associated
02	ASR	1208E	2159D	N27	E90	09	9.5			9	9	E	RAMY		
02	ADF	1400E	1527D	S22	E38	09	5.5	1	06	9	9	E	HOLL	5669	
02	ADF	1400E	2320D	S21	E46	09	6.1	1	09	9	9	E	HOLL	5669	
02	ADF	1400E	2320D	S21	E60	09	7.2	2	13	9	9	E	HOLL	5699	
02	ADF	1430E	2159D	S11	E27	09	4.6	1	09	9	9	E	RAMY	5669	
02	ADF	1455E	1526D	S19	E33	09	5.1	1	10	9	9	E	SVTO	5669	
02	ASR	1505E	1526D	N28	E89	09	9.6			9	9	E	SVTO		
02	AFS	1510E	2320D	S27	W07	09	2.1		03	9	9	E	HOLL	5670	
02	ASR	1700E	2320D	N29	E90	09	9.8			9	9	E	HOLL		
02	DSD	1720	2320D	S18	E46	09	6.2		14	9	9	E	HOLL	5669	Flare Associated
02	AFS	2300E	2320D	N21	W11	09	2.1		03	9	9	E	HOLL		
02	AFS	2341E	0952D	N23	E54	09	7.1		03	9	9	E	LEAR	5672	
02	AFS	2343E	0343D	N21	W12	09	2.1		02	9	9	E	LEAR		
03	ADF	0120E	0432D	N23	W71	08	28.7		06	9	9	E	PALE	5655	
03	DSD	0120E	0432D	S18	E33	09	5.6		07	9	9	E	PALE	5669	
03	DSD	0120E	0432D	S19	W51	08	30.3		04	7	8	E	PALE	5662	
03	DSD	0120E	0432D	S32	W11	09	2.2		04	8	9	E	PALE	5670	
03	AFS	0235E	0952D	S19	E27	09	5.2		02	9	9	E	LEAR	5669	
03	ASR	0540E	1450D	N89	E29	09	5.9			9	9	E	SVTO		
03	ADF	0544E	0815D	S29	W14	09	2.1	1	06	9	9	E	SVTO	5670	
03	BSL	0549E	0700D	N03	E90	09	10.0	1				C	ABST		
03	BSL	0638E	0700D	S30	E90	09	10.3	1				C	ABST		
03	EPL	0724E	0800D	N03	E90	09	10.0	1-				C	CATA		
03	AFS	0725E	1450D	N25	E51	09	7.3		03	9	9	E	SVTO	5672	
03	BSL	0740E	0745	N68	E90	09	11.4	1-				C	CATA		
03	ADF	0830E	1450D	S20	E28	09	5.5	2	09	9	9	E	SVTO	5669	
03	EPL	1040E	1105	N32	E90	09	10.6	1				C	CATA		
03	DSD	1101E	1640D	N24	E51	09	7.4		03	9	9	E	RAMY	5672	
03	DSD	1104E	1640D	N23	E45	09	6.9		06	9	9	E	RAMY	5672	
03	AFS	1114E	1640D	S19	E23	09	5.2		04	9	9	E	RAMY	5669	
03	ADF	1114E	1640D	S19	E49	09	7.2	1	23	9	9	E	RAMY	5669	
03	ASR	1128E	1640D	N17	W80	08	28.5			8	9	E	RAMY	5655	
03	BSL	1132	1136	N17	W90	08	27.7	2				C	CATA		
03	SSB	1134		209	W03	09	4.1			0	0	E	RAMY		

ACTIVE PROMINENCES AND FILAMENTS

SEPTEMBER 1989

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
03	DSD	1414E	0043D	N25	E57	09	8.0		06	9	9	E	HOLL	5672	
03	ADF	1600E	1607D	N25	E46	09	7.2	1	10	9	9	E	RAMY	5672	
03	AFS	1721E	0402D	N32	E13	09	4.7		02	8	8	E	PALE	5668	
04	AFS	0220E	1004D	N23	E41	09	7.2		02	9	9	E	LEAR	5672	
04	DSD	0221E	0517D	S15	E15	09	5.2		03	9	9	E	LEAR	5669	
04	ASR	0300E	0741D	N26	W90	08	28.2			9	9	E	LEAR	5655	
04	BSL	0514E	0537D	N66	W90	08	27.2	1				C	ABST		
04	ADF	0521E	0825D	S19	E20	09	5.7	1	06	9	9	E	SVTO	5669	
04	DSD	0550E	0655D	S19	E14	09	5.3		05	9	9	E	SVTO	5669	
04	DSD	0910	1004D	S17	E21	09	6.0		10	9	9	E	LEAR	5669	Flare Associated
04	BSL	0939E	1136	N50	E90	09	12.0	1				C	CATA		
04	BSL	0945E	0956D	N88	W90	08	27.1	1-				C	CATA		
04	BSL	1015	1032	N30	E90	09	11.5	1				C	CATA		
04	SDF	1140E	0810D	N08	W46	09	1.0	1				C	CATA		
04	AFS	1150E	2140D	N16	W27	09	2.4		01	9	9	E	RAMY	5675	
04	AFS	1150E	2140D	N23	E36	09	7.3		02	9	9	E	RAMY	5672	
04	AFS	1150E	2140D	N30	W02	09	4.3		02	9	9	E	RAMY		
04	ADF	1150E	2140D	S21	E22	09	6.2	1	13	9	9	E	RAMY	5669	
04	SSB	1205		210	W18	09	5.3			0	0	E	RAMY		
04	DSD	1337E	1759D	N25	E32	09	7.0		02	9	9	E	HOLL	5672	
04	DSD	1421E	2140D	S18	E02	09	4.7		03	9	9	E	RAMY	5669	
04	AFS	1625E	0034D	S22	E17	09	6.0		01	8	9	E	HOLL	5669	
04	DSD	1631E	0034D	S16	E00	09	4.7		03	9	9	E	HOLL	5669	
04	ADF	1644E	0034D	S18	E32	09	7.1		12	9	9	E	HOLL		
04	AFS	1745E	0439D	N26	E32	09	7.2		03	9	9	E	PALE	5672	
04	AFS	1749E	0034D	S21	W35	09	2.0		02	9	8	E	HOLL	5670	
04	AFS	1759E	0034D	N24	E35	09	7.4		03	9	9	E	HOLL	5672	
04	SSB	1816		193	W04	09	11.7			0	0	E	HOLL		202 W13 210 W21
04	AFS	1900E	0034D	N18	W31	09	2.4		03	9	9	E	HOLL	5675	
04	ASR	1910	2140D	N24	E85	09	11.4			9	9	E	RAMY	5655	
04	ASR	1930E	0439	N23	W87	08	29.2			9	9	E	PALE	5655	
04	AFS	1930E	0439D	N16	W33	09	2.3		02	9	9	E	PALE	5675	
04	DSD	1934E	0439D	S23	W35	09	2.1		02	9	9	E	PALE	5670	
04	APR	2228	2240D	N11	E90	09	11.7	1				C	VORO		
04	APR	2228	2240D	N70	W90	08	27.8	1				C	VORO		
04	DSD	2319E	0034D	S16	W01	09	4.9		07	9	9	E	HOLL	5669	
05	AFS	0300E	1005D	N23	E28	09	7.3		02	9	9	E	LEAR	5672	
05	DSD	0505	0540	S17	E09	09	5.9		12	9	9	E	LEAR	5669	Flare Associated
05	BSL	0532E	0659D	N43	E90	09	12.6	1				C	ABST		
05	BSL	0532E	0659D	N74	E90	09	13.5	1				C	ABST		
05	BSL	0532E	0659D	S16	E90	09	12.0	1				C	ABST		
05	AFS	1209E	2150D	N23	E24	09	7.3		03	9	9	E	RAMY	5672	
05	ADF	1210E	2150D	S13	W15	09	4.4	1	36	9	9	E	RAMY	5669	
05	AFS	1215E	2150D	S19	W04	09	5.2		03	9	9	E	RAMY	5669	
05	ASR	1216E	2150D	N17	E90	09	12.3			9	9	E	RAMY		
05	AFS	1221E	2150D	N27	E56	09	9.9		03	9	9	E	RAMY	5676	
05	AFS	1234	2150D	N16	W40	09	2.5		02	9	9	E	RAMY	5675	
05	DSD	1628E	2150D	S15	W12	09	4.8		12	9	9	E	RAMY	5669	Flare Associated
05	DSD	1637E	1925D	S17	W10	09	4.9		10	9	9	E	PALE	5669	Flare Associated
05	AFS	1720E	2255D	N16	W45	09	2.3		03	9	9	E	PALE	5675	
05	AFS	1720E	2255D	N31	E54	09	10.0		02	9	9	E	PALE	5676	
05	SSB	1840		210	W34	09	6.6			0	0	E	PALE		
05	ADF	2103E	0032D	S18	W16	09	4.6	1	08	9	9	E	HOLL	5669	
05	SSB	2115		212	W37	09	6.8			0	0	E	HOLL		178 W03
05	ASR	2315E	1003D	S19	W90	08	30.2			9	9	E	LEAR	5662	
05	AFS	2318E	0836D	N19	W35	09	3.3		02	9	9	E	LEAR	5675	
05	DSD	2324E	0836D	S19	E13	09	7.0		03	9	9	E	LEAR	5669	
05	AFS	2325E	1003D	N28	E50	09	9.9		03	9	9	E	LEAR	5676	
06	BSL	0445E	0700D	S70	E90	09	14.4	1				C	ABST		
06	BSL	0520E	0700D	S31	W90	08	30.2	1				C	ABST		
06	DSD	0745E	1003D	S17	W23	09	4.6		07	9	9	E	LEAR	5669	
06	ASR	1027E	1645D	N24	E90	09	13.4			9	9	E	SVTO		
06	ADF	1028E	1645D	S23	W14	09	5.3	1	11	9	9	E	SVTO	5669	
06	DSD	1029E	1222D	S19	W24	09	4.6		07	9	9	E	SVTO	5669	
06	AFS	1109E	2131D	S19	W16	09	5.2		03	9	9	E	RAMY	5669	
06	ADF	1109E	2131D	S25	E14	09	7.5	1	26	9	9	E	RAMY	5669	
06	AFS	1111E	2131D	N22	E11	09	7.3		03	9	9	E	RAMY	5672	

ACTIVE PROMINENCES AND FILAMENTS

SEPTEMBER 1989

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
06	AFS	1115E	2131D	N16	W52	09	2.5		03	9	9	E	RAMY	5675	
06	AFS	1120E	2331D	N25	E47	09	10.1		03	9	9	E	RAMY	5676	
06	DSD	1122E	2131D	S29	W61	09	1.7		03	9	9	E	RAMY	5670	
06	ADF	1150E	2131D	S26	W14	09	5.4	1	08	9	9	E	RAMY	5669	
06	ASR	1157	2040D	N18	E90	09	13.3			9	9	E	RAMY	5680	
06	ADF	1222E	1645D	S17	W27	09	4.5	1	19	9	9	E	SVTO	5669	
06	AFS	1233E	1645D	N24	E09	09	7.2		02	9	9	E	SVTO	5672	
06	ASR	1452	2131D	N23	W86	08	31.0			9	9	E	RAMY	5674	
06	ASR	1758E	2131D	N14	E90	09	13.5			9	9	E	RAMY		
06	AFS	1955E	2131D	N24	E28	09	9.0		02	9	9	E	RAMY	5682	
06	SSB	2032		209	W47	09	7.6			0	0	E	RAMY		
06	AFS	2100E	0240D	N23	E05	09	7.3		04	9	9	E	PALE	5672	
06	DSD	2100E	0240D	S20	W12	09	5.9		02	9	9	E	PALE	5669	
06	SSB	2105		210	W49	09	7.7			0	0	E	HOLL		
07	APR	0021E	0059D	N11	E90	09	13.8	1				C	VORO		
07	APR	0021E	0059D	N21	W90	08	31.1	1				C	VORO		
07	APR	0021E	0059D	N42	E90	09	14.4	1				C	VORO		
07	APR	0021E	0059D	N70	E90	09	15.2	1				C	VORO		
07	APR	0021E	0059D	N81	W90	08	29.7	1				C	VORO		
07	BSL	0453E	0511D	N20	E90	09	14.1	1				C	ABST		
07	BSL	0511E	0700D	N43	E90	09	14.6	1				C	ABST		
07	BSL	0511E	0706D	N03	E90	09	13.9	1				C	ABST		
07	DSD	0558E	1003D	S17	W37	09	4.4		10	9	9	E	LEAR	5669	
07	ASR	0559E	1003D	N16	E90	09	14.1			9	9	E	LEAR	5686	
07	ADF	0718E	1605D	S17	W40	09	4.3	1	18	9	9	E	SVTO	5669	
07	AFS	0744E	1605D	S19	W29	09	5.1		03	9	9	E	SVTO	5669	
07	AFS	0838E	1605D	N27	E20	09	8.9		03	9	9	E	SVTO	5682	
07	AFS	0838E	1605D	N30	E31	09	9.8		04	7	9	E	SVTO	5676	
07	ASR	0925E	1605D	N17	E84	09	13.8			9	9	E	SVTO	5686	
07	AFS	0934E	1605D	N24	W03	09	7.2		02	7	9	E	SVTO	5672	
07	ADF	1247E	2049D	S09	W48	09	3.9	1	09	9	9	E	RAMY		
07	AFS	1350E	1605D	N11	E47	09	11.1		02	9	9	E	SVTO	5685	
07	ADF	1509E	0105D	S26	W03	09	7.4		15	9	9	E	HOLL		
07	DSD	1544E	1604D	S17	W19	09	6.2		04	9	9	E	SVTO	5669	Flare Associated
07	ADF	1605E	0105D	S17	W44	09	4.3		15	9	9	E	HOLL	5669	
07	AFS	1715E	0436D	N09	E47	09	11.2		04	9	9	E	PALE	5685	
07	ASR	1715E	0436D	N21	W90	08	31.8			8	9	E	PALE	5667	
07	ADF	1715E	0436D	N27	E17	09	9.0		04	9	6	E	PALE	5682	
07	DSD	1715E	0436D	N27	E33	09	10.3		05	9	9	E	PALE	5676	
07	DSD	1715E	0436D	S21	W25	09	5.8		05	9	9	E	PALE	5669	
07	AFS	1715E	0436D	S24	W05	09	7.3		03	9	9	E	PALE	5672	
07	SDF	1942E	1929D	N15	E31	09	10.2		06	0	0	E	HOLL		
07	AFS	1949E	0105D	N08	E45	09	11.2		03	9	9	E	HOLL	5685	
07	DSD	1951E	0105D	N24	E31	09	10.2		04	9	9	E	HOLL	5676	
07	SSB	1955		189	W40	09	15.1			0	0	E	HOLL		
07	ASR	2100E	0105D	S11	E90	09	14.6			9	9	E	HOLL		
07	ASR	2258E	0035D	S26	W90	09	1.0			9	9	E	HOLL	5670	
07	ASR	2320E	0956D	S27	W90	08	31.9			9	9	E	LEAR	5670	
07	ASR	2325E	0956D	S11	E90	09	14.7			9	9	E	LEAR		
07	BSL	2346	0002	S10	E90	09	14.7	1				C	VORO		
07	APR	2346	0206D	N39	E90	09	15.3	1				C	VORO		
07	BSL	2346E	0012D	S24	W90	09	1.0	1				C	VORO		
08	BSL	0008	0057	S10	E90	09	14.8	1				C	VORO		
08	ASR	0032E	0436D	S09	E90	09	14.8			9	9	E	PALE		
08	APR	0051	0206D	N70	E90	09	16.2	1				C	VORO		
08	BSL	0110	0131	S10	E90	09	14.8	1				C	VORO		
08	BSL	0143	0206D	S10	E90	09	14.8	1				C	VORO		
08	BSL	0527E	0703D	N40	E90	09	15.5	1				C	ABST		
08	ASR	0548E	1505D	S05	E83	09	14.4			9	9	E	SVTO		
08	ASR	0548E	1505D	S31	W86	09	1.4			9	9	E	SVTO	5670	
08	AFS	0624E	1505D	N10	E39	09	11.2		02	9	9	E	SVTO	5685	
08	BSL	0648E	0703D	S10	E90	09	15.0	1				C	ABST		
08	ASR	0714E	0956D	N22	E90	09	15.2			9	9	E	LEAR	5687	
08	ADF	0740E	0755	S10	W36	09	5.6	1				V	KHAR		
08	DSD	0744E	0804D	S16	W29	09	6.1		17	9	9	E	LEAR	5669	Flare Associated
08	APR	0745E	0800D	S24	E90	09	15.3	1				V	KHAR		
08	APR	0750E	0800D	S17	E90	09	15.2					V	ATHN		
08	ADF	0757E	1505D	S20	W55	09	4.1	1	16	9	9	E	SVTO	5669	

SEPTEMBER 1989

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
08	SDF	0944E	2300D	S31	W04	09	8.1		22	0	0	E	LEAR		
08	SSB	1057		212	W71	09	9.5			0	0	E	RAMY		
08	AFS	1057E	2145D	N08	E35	09	11.1		03	8	6	E	RAMY	5685	
08	AFS	1057E	2145D	N18	E51	09	12.3		02	9	9	E	RAMY	5680	
08	AFS	1057E	2145D	N28	E22	09	10.2		02	9	9	E	RAMY	5676	
08	ASR	1057E	2145D	S09	E84	09	14.8			9	9	E	RAMY	5689	
08	ADF	1057E	2145D	S20	W31	09	6.1	1	08	9	9	E	RAMY	5669	
08	ASR	1057E	2145D	S28	W79	09	2.3			9	9	E	RAMY	5670	
08	APR	1445E	1505D	N29	E85	09	15.3	1		9	9	E	SVTO		
08	APR	1445E	1505D	N73	E90	09	16.8	1		9	9	E	SVTO		
08	APR	1449E	1505D	S31	W86	09	1.8	1		9	9	E	SVTO	5670	
08	ASR	1507E	0112D	S11	E78	09	14.5			9	9	E	HOLL		
08	AFS	1700E	0415D	N08	E34	09	11.2		02	9	9	E	PALE	5685	
08	DSD	2014E	0112D	N17	E33	09	11.3		02	9	9	E	HOLL	5680	
08	AFS	2014E	0112D	N18	E47	09	12.4		02	9	9	E	HOLL	5680	
08	SDF	2232E	2349	S40	W13	09	7.9	1				C	VORO		
08	APR	2345	0200D	N70	E90	09	17.2	1				C	VORO		
08	APR	2348	0200D	N40	E90	09	16.3	1				C	VORO		
09	APR	0006	0200D	N13	E90	09	15.8	1				C	VORO		
09	APR	0006E	0200D	N07	E90	09	15.7	1				C	VORO		
09	ADF	0026	0200D	S40	W39	09	5.8	1				C	VORO		
09	BSL	0612E	0701D	N10	E90	09	16.0	1				C	ABST		
09	BSL	0612E	0701D	N37	E90	09	16.5	1				C	ABST		
09	AFS	0740E	0943D	N08	E23	09	11.0		03	9	9	E	LEAR	5685	
09	ADF	1247E	1745D	S20	W55	09	5.3	1	12	9	9	E	RAMY	5669	
09	DSD	1315E	1720D	S08	E62	09	14.2		05	9	9	E	RAMY	5689	
09	AFS	1332E	1332D	N08	E21	09	11.1		02	9	9	E	SVTO	5685	
09	AFS	1700E	0434D	N24	W35	09	7.0		03	9	9	E	PALE	5672	
09	AFS	1703E	0434D	N30	E02	09	9.9		02	9	9	E	PALE	5676	
09	SDF	1740E	1740D	N20	E20	09	11.3		04	0	0	E	PALE	5676	
09	SSB	2236		179	W58	09	16.8			0	0	E	HOLL		
09	ADF	2243E	0046D	S33	E65	09	15.1	1	07	9	9	E	HOLL		
09	AFS	2334E	1002D	N28	W04	09	9.7		02	9	9	E	LEAR	5676	
10	APR	0028	0106D	S25	W90	09	3.0	1				C	VORO		
10	APR	0028E	0106D	N12	E90	09	16.8	1				C	VORO		
10	ADF	0122E	1002D	N11	E26	09	12.0	2	06	9	9	E	LEAR	5680	
10	ADF	0208E	1002D	N23	W16	09	8.8	2	07	9	9	E	LEAR	5682	Flare Associated
10	MDP	0510E	0540D	S20	W90	09	3.3					V	ATHN		
10	BSL	0655	0655D	S13	W90	09	3.5	1-				C	CATA		
10	ASR	0700E	1002D	S16	W90	09	3.5			9	9	E	LEAR	5669	
10	ASR	0738E	1406D	S17	W81	09	4.2			9	9	E	SVTO	5669	
10	ADF	0738E	1406D	S21	W55	09	6.1	1	21	9	9	E	SVTO	5669	
10	ADF	0738E	1406D	S21	W58	09	5.9	1	13	9	9	E	SVTO	5669	
10	AFS	0740E	1002D	N17	E11	09	11.1		03	8	5	E	LEAR	5683	
10	APR	0815E	1002D	S22	W90	09	3.4	3		9	6	E	LEAR	5669	
10	APR	0815E	1406D	S30	W86	09	3.6	1		9	9	E	SVTO	5669	
10	SDF	0834E	0002D	S16	E03	09	10.6		07	0	0	E	LEAR		
10	AFS	0848E	1406D	N18	E09	09	11.0		03	9	9	E	SVTO	5683	
10	AFS	0907E	1406D	N19	E52	09	14.3		02	9	9	E	SVTO	5687	
10	AFS	0924E	1320D	N28	W09	09	9.7		03	9	9	E	SVTO	5676	
10	BSL	0926	0958	S29	E90	09	17.4	2				C	CATA		
10	BSL	1017	1020D	N20	W90	09	3.5	1				C	CATA		
10	BSL	1031E	1110	N21	W90	09	3.5	1				C	CATA		
10	AFS	1040E	1958D	N28	W09	09	9.7		02	9	9	E	RAMY	5676	
10	ASR	1040E	1958D	S16	W90	09	3.6			9	9	E	RAMY	5669	
10	AFS	1045E	1406D	N15	W50	09	6.7		03	6	9	E	SVTO		
10	ADF	1047E	1958D	S20	W56	09	6.2	1	10	9	9	E	RAMY	5669	
10	DSD	1108E	1150D	N18	E05	09	10.8		03	9	9	E	SVTO	5683	
10	DSD	1108E	1406D	N18	E07	09	11.0		05	9	9	E	SVTO	5683	
10	SDF	1140E	0642D	S16	W07	09	9.9	2				C	CATA		
10	DSD	1207E	1406D	N20	E50	09	14.3		05	9	9	E	SVTO	5687	
10	DSD	1221E	1406D	N16	E01	09	10.6		02	9	9	E	SVTO	5683	
10	AFS	1438E	0111D	N17	E06	09	11.1		03	8	8	E	HOLL	5683	
10	ADF	1442E	0111D	S22	W51	09	6.7	1	04	9	9	E	HOLL	5669	
10	SSB	1520		187	W75	09	18.6			0	0	E	HOLL		
10	DSD	1720E	0433D	N16	E02	09	10.9		03	9	9	E	PALE	5683	
10	AFS	1720E	0433D	N18	E03	09	10.9		03	9	9	E	PALE	5683	
10	DSD	1720E	0433D	N22	E46	09	14.2		02	9	9	E	PALE	5687	

ACTIVE PROMINENCES AND FILAMENTS

SEPTEMBER 1989

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
10	AFS	1720E	0433D	N26	E57	09	15.1		02	9	9	E	PALE	5690	
10	ASR	2036E	0433D	S18	W86	09	4.3			9	9	E	PALE	5669	
10	ASR	2050E	0111D	N19	W85	09	4.4			9	9	E	HOLL	5669	
10	DSD	2130E	0111D	N17	E43	09	14.2		05	9	9	E	HOLL	5687	
10	DSD	2334E	0111D	N18	E09	09	11.7		05	9	9	E	HOLL	5680	Flare Associated
10	DSD	2334E	0111D	N18	W03	09	10.7		03	9	9	E	HOLL	5683	Flare Associated
10	DSD	2348E	0220D	N19	E09	09	11.7		02	9	9	E	LEAR	5680	
10	AFS	2348E	1000D	N27	W19	09	9.5		03	9	9	E	LEAR	5676	
10	ASR	2348E	1000D	S29	W90	09	3.9			9	9	E	LEAR	5669	
11	SDF	0040E	1303D	S25	E25	09	13.0		10	0	0	E	HOLL		
11	DSD	0310E	0740D	N18	W03	09	10.9		03	9	9	E	LEAR	5683	
11	BSL	0512E	0706D	N38	E90	09	18.5	1				C	ABST		
11	APR	0512E	0706D	S20	W90	09	4.3	1				C	ABST		
11	BSL	0512E	0706D	S41	E90	09	18.6	1				C	ABST		
11	APR	0530E	1145D	N29	E90	09	18.3					V	ATHN		
11	APR	0530E	1145D	S11	W90	09	4.4					V	ATHN		
11	BSL	0754	0816	N27	W90	09	4.3	1-				C	CATA		
11	BSL	0822	0840	N20	W90	09	4.5	1				C	CATA		
11	BSL	0825	0905D	S20	W90	09	4.5	1-				C	CATA		
11	BSL	0840	0846D	S78	E90	09	19.7	1-				C	CATA		
11	ASR	0907E	1459D	S18	E90	09	18.2			9	9	E	SVTO	5669	
11	ADF	0908E	1459D	S22	W73	09	5.8	1	19	9	9	E	SVTO	5669	
11	BSL	0918E	0926D	N27	W90	09	4.4	1-				C	CATA		
11	BSL	0918E	0926D	S18	W90	09	4.5	1-				C	CATA		
11	BSL	0936E	1000	N27	W90	09	4.4	1-				C	CATA		
11	BSL	1018E	1035D	S20	W90	09	4.5	1				C	CATA		
11	BSL	1140	1142D	S23	W90	09	4.5	1				C	CATA		
11	APR	1214E	1436D	S22	W87	09	4.8	2		9	9	E	SVTO	5669	
11	ASR	1235E	1606D	S15	W88	09	4.9			9	9	E	RAMY	5669	
11	AFS	1235E	1606D	S22	W90	09	4.6		01	8	8	E	RAMY	5669	
11	ADF	1235E	1606D	S25	W75	09	5.7	1	20	9	9	E	RAMY	5669	
11	AFS	1242E	1606D	N24	E45	09	15.0		01	9	9	E	RAMY	5690	
11	ADF	1247E	1606D	N19	E38	09	14.4	1	12	9	9	E	RAMY	5687	
11	AFS	1249E	1606D	N17	W09	09	10.8		03	9	9	E	RAMY	5683	
11	DSD	1326E	1606D	N18	W01	09	11.5		03	9	9	E	RAMY	5680	
11	DSD	1327	1606D	N16	W08	09	10.9		03	9	9	E	RAMY	5683	
11	AFS	1340E	0108D	N15	W08	09	11.0		04	9	9	E	HOLL	5683	
11	DSD	1340E	0108D	N16	W02	09	11.4		04	9	9	E	HOLL	5680	
11	ASR	1401E	0108D	N17	W90	09	4.7			9	9	E	HOLL	5669	
11	ADF	1526E	0108D	N23	W76	09	5.8	1	18	9	9	E	HOLL	5669	
11	ADF	1550E	1606D	N23	W10	09	10.9	1	06	9	9	E	RAMY	5676	
11	AFS	1756E	0108D	S09	E09	09	12.4		03	9	9	E	HOLL		
11	DSD	1912	2035D	N16	W12	09	10.9		03	9	9	E	PALE	5683	Flare Associated
11	DSD	1945	2017D	N19	W04	09	11.5		09	9	9	E	PALE	5680	Flare Associated
11	ASR	2300E	1006D	S11	W90	09	5.2			9	9	E	LEAR	5669	
11	DSD	2348E	0220D	N19	E09	09	12.7		02	9	9	E	LEAR	5680	
12	AFS	0245E	1006D	S09	E05	09	12.5		03	9	9	E	LEAR	5693	
12	APR	0352E	0525	S19	W90	09	5.3			9	9	E	LEAR	5669	
12	LPS	0602	1006D	S21	W90	09	5.3			9	9	E	LEAR	5669	
12	ASR	0612E	1006D	N24	E90	09	19.2			9	9	E	LEAR		
12	APR	0630E	0750D	S18	W90	09	5.4					V	ATHN		
12	BSL	0646E	0704	N25	E90	09	19.2	1-				C	CATA		
12	BSL	0646E	0705D	S15	W90	09	5.5	1				C	CATA		
12	LPS	0706E	1215D	S23	W90	09	5.4			9	9	E	SVTO	5669	
12	LPS	0730E	0830D	S14	W90	09	5.5					V	ATHN		
12	BSL	0755	0818	S16	W90	09	5.5	1				C	CATA		
12	BSL	0949	1009	S15	W90	09	5.6	1				C	CATA		
12	LPS	1045E	1145D	S12	W90	09	5.7					V	ATHN		
12	LPS	1320E	2133D	S17	W90	09	5.7			9	9	E	HOLL	5669	
12	ASR	1356E	2139D	S15	W90	09	5.8			9	9	E	RAMY	5669	
12	LPS	1356E	2139D	S19	W90	09	5.7			9	9	E	RAMY	5669	
12	AFS	1400E	2139D	N17	W22	09	10.9		03	9	9	E	RAMY	5683	
12	AFS	1402E	1940D	N16	W10	09	11.8		03	8	8	E	RAMY	5680	
12	DSD	1403E	1706D	N18	E12	09	13.5		03	9	9	E	RAMY	5685	
12	AFS	1420E	2139D	N21	E28	09	14.7		03	9	9	E	RAMY	5690	
12	ADF	1421E	2139D	N20	E23	09	14.3	1	09	9	9	E	RAMY	5687	
12	AFS	1423E	2139D	S09	W02	09	12.4		02	9	9	E	RAMY	5693	
12	ASR	1425E	1947D	N22	W88	09	5.8			9	9	E	RAMY	5672	

ACTIVE PROMINENCES AND FILAMENTS

SEPTEMBER 1989

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
12	DSD	1426E	1821D	N18	E13	09	13.6		01	9	9	E	HOLL	5687	
12	AFS	1435E	2133D	N17	W20	09	11.1		03	7	9	E	HOLL	5683	
12	AFS	1439E	2133D	S09	W02	09	12.5		02	8	9	E	HOLL	5693	
12	AFS	1705E	0332D	N16	W11	09	11.9		03	9	9	E	PALE	5683	
12	AFS	1705E	0332D	S08	E11	09	13.5		02	9	9	E	PALE		
12	AFS	1705E	0332D	S12	E35	09	15.3		02	9	9	E	PALE	5689	
12	APR	1705E	0332D	S15	W85	09	6.3			9	9	E	PALE	5669	
12	ASR	1705E	0332D	S20	W88	09	6.0			9	9	E	PALE	5669	
12	AFS	1735E	0332D	N25	E43	09	16.1		02	9	9	E	PALE	5690	
12	ADF	1751E	0352D	N16	W11	09	11.9		07	9	9	E	PALE	5680	
12	DSD	1751E	0352D	N17	E04	09	13.0		03	9	9	E	PALE	5686	
12	ADF	1751E	0352D	N28	W63	09	7.8		10	9	9	E	PALE	5672	
12	DSD	1751E	2150D	N17	W24	09	10.9		03	7	9	E	PALE	5683	
12	DSD	1751E	2150D	N30	E02	09	12.9		02	9	9	E	PALE	5684	
12	LPS	1807E	0352D	N16	W90	09	5.9			9	9	E	PALE	5669	
12	AFS	1908E	0352D	N30	E33	09	15.4		02	9	9	E	PALE		
12	AFS	1932E	0332D	N26	W28	09	10.6		03	9	9	E	PALE	5676	
12	APR	2225	0200D	S19	W90	09	6.1	2				C	VORO		
12	APR	2225	0200D	S35	W90	09	5.7	1				C	VORO		
12	LPS	2309E	0412	S17	W90	09	6.1			9	9	E	LEAR	5669	
13	APR	0001	0200D	S18	E90	09	19.8	1				C	VORO		
13	ADF	0006E	0200D	N07	W21	09	11.4	1				C	VORO		
13	DSD	0350E	0352D	N17	E08	09	13.8		08	9	9	E	PALE	5686	Flare Associated
13	APR	0530E	1145D	S09	W90	09	6.5					V	ATHN		
13	APR	0845E	0950D	S23	W90	09	6.4			9	9	E	LEAR	5669	
13	EPL	0848E	0855D	S18	W90	09	6.5	2				C	CATA		
13	AFS	1125E	2046D	N17	W12	09	12.6		02	9	9	E	RAMY	5686	
13	ADF	1125E	2046D	N22	E11	09	14.3	1	09	9	9	E	RAMY	5687	
13	AFS	1125E	2046D	N22	W61	09	8.8		02	9	9	E	RAMY	5682	
13	ADF	1125E	2046D	N28	W50	09	9.6	1	04	9	9	E	RAMY	5680	
13	APR	1125E	2046D	S19	W79	09	7.4	2		9	9	E	RAMY	5669	
13	AFS	1228E	2046D	N24	E20	09	15.1		02	9	9	E	RAMY	5690	
13	ADF	1228E	2046D	N29	E55	09	17.8	1	09	9	9	E	RAMY	5694	
13	ASR	1228E	2046D	S21	W90	09	6.6			9	9	E	RAMY	5669	
13	SDF	1358E	1058D	S01	W02	09	13.4		10	0	0	E	RAMY		
13	SDF	1358E	1058D	S01	W02	09	13.4		10	0	0	E	RAMY		
13	AFS	1441E	1700D	N23	W62	09	8.8		03	9	9	E	HOLL	5682	
13	AFS	1444E	1700D	N24	E20	09	15.1		03	9	9	E	HOLL	5690	
13	AFS	1446E	1700D	N17	W34	09	11.0		02	9	9	E	HOLL	5683	
13	AFS	1449E	1700D	S08	W14	09	12.6		04	5	5	E	HOLL	5693	
13	ADF	1712E	2046D	N23	W36	09	10.9	1	09	9	9	E	RAMY	5676	
13	ASR	1712E	2046D	N23	W90	09	6.8			9	9	E	RAMY	5672	
13	DSD	2005E	2046D	N15	W04	09	13.5		01	9	9	E	RAMY	5686	
13	DSD	2221	2353D	N18	W32	09	11.5	1				C	VORO		
13	BSL	2225E	2253D	N19	E90	09	20.8	1				C	VORO		
13	APR	2225E	2353D	N10	W90	09	7.2	1				C	VORO		
13	APR	2225E	2353D	S57	W90	09	6.1	1				C	VORO		
13	APR	2226	2353D	S19	W90	09	7.1	1				C	VORO		
13	ADF	2322E	1007D	N30	W42	09	10.7	1	08	9	9	E	LEAR	5676	
14	AFS	0500E	1002D	N22	W69	09	8.9		03	7	5	E	LEAR	5682	
14	APR	0515E	1605D	S22	W88	09	7.4	1		9	9	E	SVTO		
14	AFS	0630E	1002D	N27	E42	09	17.5		04	8	4	E	LEAR	5694	
14	DSD	0726E	0745D	N16	W48	09	10.7	1				V	KHAR		
14	SDF	0738E	1045	N40	E50	09	18.4	2				V	KHAR		
14	ADF	0845	0945D	N26	W73	09	8.7	1				V	KHAR		
14	APR	0922E	1012D	N13	W90	09	7.6	1				V	KHAR		
14	APR	0925E	1105D	S18	W90	09	7.5	1				V	KHAR		
14	AFS	1120E	1535D	N16	W10	09	13.7		02	8	6	E	RAMY	5676	
14	AFS	1120E	1535D	N22	W70	09	9.1		02	9	9	E	RAMY	5682	
14	ADF	1120E	1535D	N25	W33	09	11.9	1	20	9	9	E	RAMY	5676	
14	AFS	1120E	1535D	N26	E36	09	17.3		03	9	9	E	RAMY	5694	
14	AFS	1120E	1535D	N27	W53	09	10.3		03	9	9	E	RAMY	5676	
14	ADF	1120E	1535D	N29	W60	09	9.8	1	04	9	9	E	RAMY	5676	
14	APR	1120E	1535D	S16	W90	09	7.6	2		9	2	E	RAMY	5691	
14	DSD	1223	1535D	N21	W72	09	9.0		03	9	9	E	RAMY	5682	Flare Associated
14	ASR	1325E	1535D	N26	W80	09	8.3			9	9	E	RAMY	5672	
14	AFS	2315E	1003D	N25	E29	09	17.2		03	9	9	E	LEAR	5694	

ACTIVE PROMINENCES AND FILAMENTS

SEPTEMBER 1989

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
15	APR	0055E	0201D	N15	E90	09	21.8	1				C	VORO		
15	APR	0055E	0201D	N28	E90	09	22.1	1				C	VORO		
15	APR	0055E	0201D	S17	W90	09	8.2	1				C	VORO		
15	APR	0055E	0201D	S58	W90	09	7.2	1				C	VORO		
15	DSD	0109E	0415D	N15	W39	09	12.1		02	9	9	E	PALE	5680	
15	AFS	0109E	0415D	N17	W21	09	13.4		02	9	9	E	PALE	5686	
15	DSD	0109E	0415D	N17	W53	09	11.0		06	9	9	E	PALE	5683	
15	ADF	0109E	0415D	N22	E00	09	15.0		03	9	9	E	PALE	5686	
15	AFS	0109E	0415D	N26	E26	09	17.1		04	9	9	E	PALE	5694	
15	AFS	0530E	1003D	N28	W41	09	12.0		03	7	3	E	LEAR		
15	APR	0540E	0625D	S04	W90	09	8.5					V	ATHN		
15	EPL	0540E	0700D	S10	W90	09	8.5	2		9	9	E	LEAR		
15	APR	0617E	0638D	S13	W90	09	8.5	1				C	ABST		
15	SPY	0625E	0632D	S04	W90	09	8.5					V	ATHN		
15	BSL	0647	0647D	S28	E90	09	22.3	1-				C	CATA		
15	ADF	0737E	0925D	N29	W45	09	11.8	1				V	KHAR		
15	BSL	0845E	0902	S22	E90	09	22.3	1				V	KHAR		
15	AFS	0848E	1629D	N25	E23	09	17.1		03	9	8	E	SVTO	5694	
15	AFS	0852E	1629D	N29	W43	09	12.0		03	9	9	E	SVTO		
15	BSL	0935E	0943D	S26	E90	09	22.4	1				V	KHAR		
15	BSL	0950	0955D	S28	E90	09	22.4	1-				C	CATA		
15	BSL	1006E	1013	S29	E90	09	22.5	1-				C	CATA		
15	BSL	1037	1043D	N82	W90	09	7.1	1-				C	CATA		
15	AFS	1105E	1614D	N25	E20	09	17.0		03	9	9	E	RAMY	5694	
15	AFS	1105E	1614D	N27	W44	09	12.0		02	9	9	E	RAMY		
15	ASR	1105E	1614D	S24	E90	09	22.4			9	9	E	RAMY		
15	ADF	1105E	1614D	S25	E54	09	19.6	1	06	9	9	E	RAMY		
15	SSB	1118		428	W20	09	13.3			0	0	E	RAMY		451 W43 468 W60
15	ADF	1129E	1614D	N21	W54	09	11.3	1	13	9	9	E	RAMY		
15	DSD	1135E	1255D	N24	E17	09	16.8		03	9	9	E	RAMY	5694	
15	ASR	1315E	1629D	S24	E80	09	21.7			9	9	E	SVTO		
15	AFS	1343E	1614D	N17	W46	09	12.1		02	9	9	E	RAMY	5680	
15	DSD	1415E	1607D	N27	W75	09	9.7		03	9	9	E	RAMY	5676	Flare Associated
15	AFS	1707E	0328D	N27	W49	09	11.9		01	9	9	E	PALE	5697	
15	ADF	2239	0211D	S43	E17	09	17.3	1				C	VORO		
15	AFS	2349E	1008D	N29	W50	09	12.1		03	9	9	E	LEAR	5697	
15	AFS	2350E	1008D	N18	W32	09	13.5		02	9	9	E	LEAR	5686	
16	AFS	0033E	0328D	N15	W55	09	11.8		01	9	9	E	PALE	5680	
16	ASR	0257E	0328D	S22	E90	09	23.0			8	8	E	PALE		
16	ASR	0507E	0751D	S29	E90	09	23.3			9	9	E	LEAR		
16	ASR	0513E	1612D	S25	E74	09	21.9			9	9	E	SVTO		
16	ASR	0635E	1520D	N23	W79	09	10.2			9	9	E	SVTO	5676	
16	ASR	0635E	1520D	N29	W82	09	9.8			9	9	E	SVTO	5676	
16	BSL	0727E	0740	S28	E90	09	23.3	1-				C	CATA		
16	BSL	0807E	0829	S45	E90	09	23.8	1-				C	CATA		
16	BSL	0820	0841	S27	E90	09	23.4	1-				C	CATA		
16	BSL	0951	1024D	N14	W90	09	9.6	1				C	CATA		
16	BSL	1010	1024D	N26	W90	09	9.4	1				C	CATA		
16	BSL	1036E	1047D	N16	W90	09	9.6	1-				C	CATA		
16	APR	1049E	1612D	N16	W88	09	9.8	2		9	9	E	SVTO	5683	
16	APR	1050E	2204D	N16	W90	09	9.6	1		9	9	E	RAMY	5681	
16	AFS	1050E	2204D	N17	W35	09	13.8		02	9	9	E	RAMY	5686	
16	AFS	1050E	2204D	N26	W55	09	12.2		04	9	9	E	RAMY	5697	
16	ADF	1057E	1612D	N31	E13	09	17.5	1	03	9	9	E	SVTO	5694	
16	ASR	1347E	2204D	N31	W90	09	9.5			9	9	E	RAMY	5676	
16	ASR	1347E	2204D	S24	E90	09	23.5			9	9	E	RAMY	5698	
16	ADF	1554E	1612D	N11	W49	09	13.0	1	15	9	9	E	SVTO	5686	
16	ADF	1722E	0427D	N20	W43	09	13.4		08	9	9	E	PALE	5687	
16	DSD	1722E	0427D	N25	E01	09	16.8		02	9	9	E	PALE	5694	
16	AFS	1722E	0427D	N25	E05	09	17.1		03	9	9	E	PALE	5694	
16	AFS	1722E	0427D	N26	W61	09	12.0		03	9	9	E	PALE	5697	
16	ADF	1722E	0427D	S23	E65	09	21.7	1	12	9	9	E	PALE	5698	
16	DSD	1743	2204D	N16	W38	09	13.8		04	9	9	E	RAMY	5686	
16	ASR	2313E	0832D	N27	W90	09	9.9			9	9	E	LEAR	5676	
16	AFS	2348E	0751D	N24	E16	09	18.2		03	9	9	E	LEAR	5694	
16	AFS	2349E	1008D	N29	W50	09	13.1		03	9	9	E	LEAR	5697	
16	AFS	2350E	1008D	N18	W32	09	14.5		02	9	9	E	LEAR	5686	

ACTIVE PROMINENCES AND FILAMENTS

SEPTEMBER 1989

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
17	ASR	0555E	1636D	N27	W89	09	10.3			9	9	E	SVTO	5676	
17	ADF	0557E	1636D	N20	W48	09	13.6	2	10	9	9	E	SVTO	5686	
17	ADF	0805E	0910	N22	W52	09	13.3	1				V	KHAR		
17	BSL	0930	1045	N17	W90	09	10.5	1				C	CATA		
17	DSD	0931	0940D	N30	W73	09	11.6	1				V	KHAR		
17	BSL	1006	1041	S37	E90	09	24.7	1-				C	CATA		
17	DSD	1028E	1040	N27	W07	09	16.9	1				V	KHAR		
17	BSL	1110	1140D	N18	W90	09	10.6	1-				C	CATA		
17	BSL	1130	1140D	S37	E90	09	24.7	1				C	CATA		
18	ASR	0100E	0315D	N17	W90	09	11.2			9	9	E	LEAR	5683	
18	BSL	0132E	0156D	N17	E90	09	24.9	1				C	VORO		
18	MDP	0500E	1003D	S13	W68	09	13.1			7	3	E	LEAR	5693	
18	BSL	0743	0745D	N54	W90	09	10.6	1-				C	CATA		
18	BSL	0743	0745D	N89	E90	09	26.7	1-				C	CATA		
18	APR	0745E	0758D	N30	W90	09	11.2	1				V	KHAR		
18	AFS	0903E	1632D	S15	W74	09	12.8		02	9	7	E	SVTO	5693	
18	BSL	1002	1020	S22	E90	09	25.3	1-				C	CATA		
18	BSL	1116E	1127	N15	W90	09	11.6	1-				C	CATA		
18	ADF	1300E	1632D	N17	W54	09	14.4	1	13	9	9	E	SVTO	5687	
18	ASR	1350E	1632D	S21	E85	09	25.1			9	9	E	SVTO		
18	DSD	1744E	0335D	N15	W67	09	13.7		04	9	9	E	PALE	5686	
18	DSD	1744E	0335D	S27	E45	09	22.2		03	9	9	E	PALE	5698	
18	ADF	1744E	0421D	N20	W50	09	14.9		04	9	9	E	PALE	5690	
18	AFS	1744E	0421D	N29	W17	09	17.4		02	9	8	E	PALE	5694	
18	ASR	2257E	1003D	N27	W90	09	11.9			9	9	E	LEAR	5697	
18	AFS	2317E	1003D	S23	E43	09	22.3		03	9	9	E	LEAR	5698	
19	ASR	0001E	0340D	N19	W90	09	12.1			9	9	E	LEAR	5680	
19	AFS	0138E	1003D	N25	W24	09	17.2		02	9	9	E	LEAR	5694	
19	ASR	0202E	0425D	S22	E84	09	25.5			9	9	E	LEAR		
19	AFS	0631E	1613D	S26	E35	09	22.0		02	8	9	E	SVTO	5698	
19	AFS	0700E	1613D	S20	E14	09	20.4		03	9	9	E	SVTO		
19	BSL	0705E	0710D	N18	W90	09	12.4	1-				C	CATA		
19	BSL	0736E	0805D	N18	W90	09	12.5	1-				C	CATA		
19	BSL	0736E	0805D	S06	E90	09	26.0	1				C	CATA		
19	BSL	0745	0755	S30	E90	09	26.4	1-				C	CATA		
19	BSL	1005E	1011D	N18	W90	09	12.6	1-				C	CATA		
19	BSL	1030	1053D	N18	W90	09	12.6	1-				C	CATA		
19	BSL	1044	1053D	N88	W90	09	11.0	1-				C	CATA		
19	BSL	1109E	1141D	N18	W90	09	12.6	1-				C	CATA		
19	DSD	1812E	0416D	N16	W72	09	14.3		06	9	9	E	PALE	5686	
19	DSD	1812E	0416D	N16	W72	09	14.3		06	9	9	E	PALE	5686	
19	AFS	1812E	0416D	S19	E08	09	20.4		03	9	9	E	PALE		
19	DSD	1939E	0416D	S23	E35	09	22.5		03	9	9	E	PALE	5698	
19	DSD	1939E	0416D	S29	E30	09	22.2		06	9	9	E	PALE	5698	
19	APR	2243E	2343D	N20	E90	09	26.8	1				C	VORO		
19	ADF	2243E	2343D	S27	E19	09	21.4	1				C	VORO		
20	DSD	0312E	0340D	S27	E25	09	22.1		13	9	9	E	LEAR	5698	
20	BSL	0632E	0645D	N17	W90	09	13.4	1-				C	CATA		
20	ADF	0735E	0747D	S24	W02	09	20.2	1				V	KHAR		
20	BSL	0818	0835	S58	W90	09	12.5	1-				C	CATA		
20	BSL	0827	0835D	N80	W90	09	12.0	1-				C	CATA		
20	DSD	1012E	1028D	S31	E35	09	23.2	1				V	KHAR		
20	ASR	1107E	1618D	N15	W90	09	13.6			9	9	E	SVTO	5686	
20	ASR	2258E	0402D	N31	W90	09	13.8			8	9	E	PALE	5695	
20	DSD	2302E	0402D	N26	W38	09	18.0		03	9	9	E	PALE	5694	
21	AFS	0255E	0907D	N34	E47	09	24.9		02	9	9	E	LEAR		
21	BSL	0516E	0614D	N15	W90	09	14.4	1				C	ABST		
21	BSL	0536E	0706D	S31	E90	09	28.3	1				C	ABST		
21	BSL	0640	0653	N53	W90	09	13.6	1-				C	CATA		
21	BSL	0709E	0715D	S12	W90	09	14.5	1-				C	CATA		
21	BSL	0712E	0733	N33	W90	09	14.1	1				V	KHAR		
21	BSL	0727E	0741D	S11	W90	09	14.5	1				C	CATA		
21	BSL	0841	0850	S85	E90	09	29.8	1-				C	CATA		
21	DSD	0846E	0925D	S28	E07	09	21.9		03	9	9	E	SVTO	5698	
21	ADF	0848E	0920D	S27	E09	09	22.1	1				V	KHAR		

ACTIVE PROMINENCES AND FILAMENTS

SEPTEMBER 1989

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
21	BSL	1011D	1056	S10	W90	09	14.7	1				C	CATA		
21	BSL	1106	1136	N18	E90	09	28.3	1-				C	CATA		
21	AFS	1230E	1615D	N35	E42	09	24.9		01	9	9	E	SVTO		
21	AFS	1330E	1834D	N21	W60	09	17.0		02	9	9	E	RAMY	5694	
21	ADF	1333E	1834D	N32	E21	09	23.2	1	21	9	9	E	RAMY		
21	DSD	1335E	1834D	S27	E10	09	22.3		03	9	9	E	RAMY	5698	Flare Associated
21	AFS	1340E	1834D	S22	E44	09	24.9		04	9	9	E	RAMY		
21	DSD	1342E	1615D	S26	E06	09	22.0		05	9	9	E	SVTO	5698	
21	AFS	1620E	1834D	N24	W60	09	17.0		03	9	9	E	RAMY	5694	
21	DSD	1630E	1834D	S27	E07	09	22.2		03	9	9	E	RAMY	5698	
21	AFS	1640E	1834D	N35	E39	09	24.8		02	9	9	E	RAMY		
21	AFS	1800E	1804D	N24	W59	09	17.2		01	9	9	E	PALE	5694	
21	AFS	1802E	0316D	N39	E40	09	25.0		03	9	9	E	PALE	5704	
22	AFS	0101E	1004D	N34	E36	09	24.9		03	9	9	E	LEAR	5704	
22	ASR	0113E	0340D	S23	E90	09	29.0			9	9	E	LEAR	5692	
22	APR	0530E	1105D	N22	E90	09	29.1					V	ATHN		
22	APR	0530E	1105D	S26	W90	09	15.2					V	ATHN		
22	BSL	0708E	0725	N67	W90	09	14.2	1-				C	CATA		
22	AFS	0715E	1545D	N36	E33	09	24.9		02	9	9	E	SVTO	5704	
22	DSD	0818E	0846D	S24	E34	09	25.0	1				V	KHAR		
22	ADF	0821E	1322D	S26	W05	09	21.9	1	02	9	9	E	SVTO	5698	
22	DSD	0853	0925	S25	W10	09	21.6	1				V	KHAR		
22	DSD	0857E	0940D	S23	W08	09	21.7		06	9	6	E	LEAR	5698	
22	DSD	0858E	1000D	S23	W08	09	21.7		06	9	9	E	SVTO	5698	
22	BSL	1005	1020	N74	W90	09	14.1	1-				C	CATA		
22	DSD	1035E	1043D	S25	W10	09	21.7	1				V	KHAR		
22	AFS	1230E	2156D	N35	E29	09	24.8		02	9	9	E	RAMY	5704	
22	AFS	1230E	2156D	S27	W05	09	22.1		03	9	9	E	RAMY	5698	
22	ADF	1253E	2156D	S14	W09	09	21.8	1	10	9	9	E	RAMY	5698	
22	DSD	1300E	2156D	S25	W03	09	22.3		04	9	9	E	RAMY	5698	
22	ADF	1319E	1545D	S22	W02	09	22.4	2	06	9	9	E	SVTO	5698	
22	ADF	1319E	1545D	S23	W02	09	22.4	2	06	9	9	E	SVTO	5698	
22	ADF	1319E	1545D	S24	W02	09	22.4	1	03	9	9	E	SVTO	5698	
22	APR	1326E	2156D	N23	W90	09	15.6	1		9	9	E	RAMY	5694	
22	DSD	1326E	2156D	S23	W03	09	22.3		02	9	9	E	RAMY	5698	
22	AFS	1340E	1545D	S21	W33	09	20.0		02	9	9	E	SVTO	5702	
22	AFS	1343E	1545D	N20	W51	09	18.7		01	9	9	E	SVTO		
22	DSD	1411E	2156D	N20	W49	09	18.8		02	9	9	E	RAMY		
22	AFS	1800E	0406D	N19	W54	09	18.6		02	9	9	E	PALE	5705	
22	DSD	1800E	0406D	N24	W82	09	16.4		02	9	9	E	PALE	5694	
22	AFS	1800E	0406D	N36	E25	09	24.7		02	8	8	E	PALE	5704	
22	AFS	1800E	0406D	S26	W07	09	22.2		02	9	9	E	PALE	5698	
22	DSD	1800E	0406D	S26	W12	09	21.8		03	9	9	E	PALE	5698	
22	ASR	1945E	2156D	S21	W88	09	16.1			9	9	E	RAMY	5692	
23	AFS	0015E	0517D	N34	E23	09	24.8		03	9	6	E	LEAR	5704	
23	DSD	0018E	0730D	N30	W68	09	17.7		02	9	9	E	LEAR	5694	
23	ASR	0305E	1004D	S14	W90	09	16.3			9	9	E	LEAR	5692	
23	APR	0454E	0709D	S15	W90	09	16.4	1				C	ABST		
23	BSL	0522E	0605D	N25	W90	09	16.2	1				C	ABST		
23	APR	0742E	0800D	N22	E90	09	30.2	1				V	KHAR		
23	DSD	0923	0930D	N23	W20	09	21.8	1				V	KHAR		
23	ASR	1009E	1229D	N26	W86	09	16.7			9	9	E	SVTO	5694	
23	AFS	1009E	1229D	S26	W19	09	21.9		02	9	9	E	SVTO	5698	
23	ASR	1732E	0412D	N22	W87	09	17.0			9	9	E	PALE	5694	
23	AFS	1732E	0412D	N36	E12	09	24.7		01	7	7	E	PALE	5704	
23	DSD	1732E	2120D	S16	W12	09	22.8		01	9	9	E	PALE	5701	
23	AFS	2120E	0412D	S16	W14	09	22.8		03	9	9	E	PALE	5701	
23	ASR	2250E	1004D	N22	W90	09	17.0			9	9	E	LEAR	5694	
24	AFS	0020E	0024D	S15	W17	09	22.7		02	9	9	E	LEAR		
24	APR	0542E	0759D	S40	W90	09	16.9	1				C	ABST		
24	ASR	0722E	1212D	N25	W90	09	17.3			9	9	E	SVTO	5694	
24	BSL	0725E	0759D	N61	E90	10	2.2	1				C	ABST		
24	BSL	0729E	0729D	N22	W90	09	17.4	1-				C	CATA		
24	AFS	0738E	1212D	S15	W21	09	22.7		03	9	9	E	SVTO		
24	BSL	0752E	0755	N88	E90	10	2.7	1-				C	CATA		
24	BSL	0752E	0806	N29	W90	09	17.3	1-				C	CATA		
24	BSL	0752E	0806	N48	W90	09	16.8	1-				C	CATA		

ACTIVE PROMINENCES AND FILAMENTS

SEPTEMBER 1989

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
24	BSL	0806	0846	N21	W90	09	17.4	1				C	CATA		
24	BSL	0837	0846	N24	W90	09	17.4	1-				C	CATA		
24	DSD	0840E	1008D	S27	W34	09	21.7		10	9	9	E	SVTO	5698	
24	ADF	0855E	0902D	S20	W40	09	21.3	1				V	KHAR		
24	DSD	0928	0950D	S29	W36	09	21.6	1				V	KHAR		
24	ADF	0930E	1145D	N05	E05	09	24.8					V	ATHN		
24	ADF	0932	0950D	S20	W40	09	21.3	1				V	KHAR		
24	APR	0935E	1145D	S38	W90	09	17.1					V	ATHN		
24	ADF	0940E	1145D	N25	E75	09	30.2					V	ATHN		
24	APR	0945E	1145D	N29	E90	10	1.5					V	ATHN		
24	BSL	0950	1000	N28	W90	09	17.4	1-				C	CATA		
24	BSL	1011	1041	N28	W90	09	17.4	1-				C	CATA		
24	BSL	1017	1025	N63	W90	09	16.4	1-				C	CATA		
24	BSL	1050	1101D	N24	W90	09	17.5	1				C	CATA		
24	DSD	1050	1101D	S27	W42	09	21.2	2				C	CATA		
24	BSL	1101	1101D	S12	E90	10	1.2	1-				C	CATA		
24	ASR	1104E	1115	S10	E90	10	1.2			9	9	E	SVTO		
24	BSL	1115	1122D	S11	E90	10	1.2	1				C	CATA		
24	BSL	1115	1120	S10	E90	10	1.2			9	9	E	SVTO		
24	ASR	1129E	2032D	S12	E90	10	1.2			9	9	E	RAMY		
24	ASR	1130E	2032D	N24	W90	09	17.5			9	9	E	RAMY	5694	
24	AFS	1134E	2032D	N35	E03	09	24.7		02	9	9	E	RAMY	5704	
24	DSD	1135E	2032D	S26	W35	09	21.8		04	9	9	E	RAMY	5698	
24	BSL	1140	1201	N50	E90	10	2.1	1-				C	CATA		
24	BSL	1148	1217	S06	E90	10	1.2	1				C	CATA		
24	BSL	1230	1230D	N48	W90	09	16.9	1-				C	CATA		
24	BSL	1230	1230D	N88	W90	09	16.1	1-				C	CATA		
24	AFS	1415E	2032D	S16	W23	09	22.8		04	8	8	E	RAMY		
24	DSD	2325E	0323D	S27	W43	09	21.6		02	9	9	E	PALE	5698	
24	APR	2347	0300D	S20	W90	09	18.1	1				C	VORO		
25	ADF	0013	0300D	S22	E30	09	27.3	1				C	VORO		
25	ASR	0312E	0410	S16	E90	10	1.9			9	9	E	LEAR	5708	
25	ASR	0314E	0323D	S14	E88	10	1.8			9	9	E	PALE	5708	
25	BSL	0601E	0713D	S17	E90	10	2.1	1				C	ABST		
25	APR	0601E	0809D	N61	E90	10	3.2	1				C	ABST		
25	AFS	0700E	1010D	S12	E62	09	30.0		01	9	9	E	LEAR	5708	
25	BSL	0712	0712D	S26	E90	10	2.3	1-				C	CATA		
25	ASR	0725E	1346D	S14	E90	10	2.1			9	9	E	SVTO	5708	
25	AFS	0726E	1346D	S11	E62	09	30.0		02	9	9	E	SVTO	5708	
25	DSD	0740E	0746	S22	W08	09	24.7	1				V	KHAR		
25	APR	0745E	0830D	S30	E90	10	2.4	1				V	KHAR		
25	DSD	0820E	0837D	S26	W47	09	21.7	1				V	KHAR		
25	DSD	0825E	0836	S13	E64	09	30.2	1				V	KHAR		
25	BSL	0831	0846	N20	W90	09	18.5	1-				C	CATA		
25	ASR	0836E	1225D	N20	W90	09	18.5			9	9	E	SVTO	5705	
25	BSL	0903D	0910	N84	E90	10	3.8	1-				C	CATA		
25	ADF	0920E	0932	S24	W51	09	21.4	1				V	KHAR		
25	BSL	0934	0940	N72	W90	09	17.2	1-				C	CATA		
25	ADF	0950E	1048D	N25	W50	09	21.5	1				V	KHAR		
25	DSD	1000E	1045	S31	W42	09	22.1	1				V	KHAR		
25	SDF	1010E	2220D	N19	W28	09	23.3		19	0	0	E	LEAR		
25	DSD	1011E	1032	S31	W42	09	22.1		03	9	9	E	SVTO	5698	Flare Associated
25	DSD	1030E	1048D	S20	W76	09	19.6	1				V	KHAR		
25	BSL	1055	1108	N86	W90	09	17.0	1-				C	CATA		
25	BSL	1104	1126	N75	W90	09	17.2	1-				C	CATA		
25	BSL	1104	1158	N23	W90	09	18.5	1				C	CATA		
25	BSL	1131	1148	N12	E90	10	2.3	1-				C	CATA		
25	BSL	1158	1200D	N54	W90	09	17.7	1				C	CATA		
25	BSL	1210E	1220	N15	E90	10	2.3	1-				C	CATA		
25	SDF	1240E	0735D	N24	W55	09	21.3	3				C	CATA		
25	ASR	1659E	2131D	S13	E90	10	2.5			9	9	E	RAMY	5708	
25	AFS	1659E	2131D	S19	E56	09	30.0		02	9	9	E	RAMY	5709	
25	AFS	1732E	0401D	S11	E59	09	30.2		04	9	8	E	PALE	5709	
25	DSD	1732E	0401D	S25	W51	09	21.8		03	9	9	E	PALE	5698	
25	DSD	1732E	0401D	S32	W44	09	22.2		03	9	9	E	PALE	5698	
25	ADF	1824E	2131D	S25	W46	09	22.2	1	09	9	9	E	RAMY	5698	
25	ADF	2344	0149D	S05	W20	09	24.5	1				C	VORO		
25	DSD	2344E	0008D	S17	E78	10	1.9	1				C	VORO		
25	ASR	2345E	0200D	S16	E75	10	1.7			9	9	E	LEAR	5708	Flare Associated

ACTIVE PROMINENCES AND FILAMENTS

SEPTEMBER 1989

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
26	ASR	0159E	0401D	N32	E90	10	3.2			9	9	E	PALE		
26	BSL	0549E	0749D	S11	E90	10	3.0	1				C	ABST		
26	BSL	0607E	0804D	N13	E90	10	3.0	1				C	ABST		
26	APR	0607E	0804D	N60	E90	10	4.2	1				C	ABST		
26	DSD	0900E	0925D	S25	W58	09	21.9		06	9	9	E	SVTO	5698	Flare Associated
26	BSL	0926E	0930	N56	W90	09	18.6	1-				C	CATA		
26	BSL	0926E	0936	S38	W90	09	19.1	1-				C	CATA		
26	BSL	0948	1002	S45	E90	10	3.9	1-				C	CATA		
26	AFS	0956E	1215D	S11	E48	09	30.0		03	9	9	E	SVTO	5709	
26	BSL	1019E	1028	S26	E90	10	3.4	1				C	CATA		
26	BSL	1019E	1030D	N02	W90	09	19.7	1-				C	CATA		
26	DSD	1023E	1139D	S25	W60	09	21.8		08	9	9	E	SVTO	5698	Flare Associated
26	DSD	1028E	1035D	S21	W56	09	22.1	1				V	KHAR		
26	ADF	1034E	1105D	S15	E53	09	30.4	2				V	KHAR		
26	DSD	1054	1105D	S22	W60	09	21.8	1				V	KHAR		
26	BSL	1114	1141	N33	E90	10	3.6	1-				C	CATA		
26	BSL	1120	1135	N22	E90	10	3.4	1-				C	CATA		
26	ASR	1335	2112D	S20	W84	09	20.1			9	9	E	RAMY	5702	
26	AFS	1335E	2112D	S11	E45	09	29.9		03	9	9	E	RAMY	5709	
26	ADF	1335E	2112D	S15	E71	10	1.9	1	07	9	9	E	RAMY	5708	
26	ADF	1335E	2112D	S26	W55	09	22.3	1	04	9	9	E	RAMY	5698	
26	DSD	1358E	1917	S26	W56	09	22.2		03	9	9	E	RAMY	5698	Flare Associated
26	ASR	1635E	1934	S26	E90	10	3.7			9	9	E	RAMY	5708	
26	AFS	1655E	0411D	N33	W28	09	24.5		02	7	7	E	PALE	5704	
26	APR	1940E	2112D	S19	E90	10	3.7	1		9	9	E	RAMY	5708	
26	ADF	2309E	0411D	S19	E88	10	3.7		24	9	9	E	PALE	5708	
26	SDF	2330E	2330D	S16	W43	09	23.7		19	0	0	E	PALE		
27	ASR	0540E	0827D	S18	E90	10	4.1			9	9	E	LEAR	5708	
27	BSL	0555E	0634D	S19	E90	10	4.1	1				C	ABST		
27	APR	0612E	0736D	N15	E90	10	4.1	1				C	ABST		
27	APR	0634E	0736D	N60	E90	10	5.2	1				C	ABST		
27	AFS	0712E	1056D	N19	E15	09	28.4		02	9	9	E	SVTO		
27	ASR	0823E	1032D	S30	W68	09	22.0			9	9	E	SVTO	5698	
27	BSL	0825E	0835D	S30	W90	09	20.3					P	BUCH		
27	DSD	0834E	1032D	S22	W69	09	22.0		03	9	9	E	SVTO	5698	
27	APR	0841E	1056D	S14	W85	09	20.9	2		9	9	E	SVTO	5699	
27	APR	0851E	1056D	S19	E78	10	3.3	1		9	9	E	SVTO		
27	ADF	1015E	1230D	N29	E11	09	28.3					V	ATHN		
27	DSD	1155E	1904D	S30	W70	09	22.0		03	9	9	E	RAMY	5698	
27	ASR	1200E	1904D	S18	E90	10	4.3			9	9	E	RAMY		
27	AFS	1230E	1904D	N20	E12	09	28.4		02	9	9	E	RAMY		
27	AFS	1237E	1904D	S11	E35	09	30.1		02	9	9	E	RAMY	5709	
27	APR	1335E	1904D	N39	E90	10	4.9	1		9	9	E	RAMY		
27	AFS	1705E	0135D	N18	E08	09	28.3		02	9	9	E	PALE	5711	
27	ASR	1902E	1904D	S19	W85	09	21.3			9	9	E	RAMY	5698	
28	ASR	0315E	0859D	S26	W90	09	21.1			9	9	E	LEAR	5698	
28	APR	0624E	0625D	S24	E90	10	5.2	1				C	ABST		
28	ASR	0740E	0859D	N29	E90	10	5.4			9	9	E	LEAR		
28	BSL	0759E	0806	S10	W90	09	21.6	1-				C	CATA		
28	BSL	0759E	0806D	N30	E90	10	5.4	1				C	CATA		
28	BSL	0826E	0830D	N30	E90	10	5.4	1				C	CATA		
28	BSL	0842E	0850D	N30	E90	10	5.4	1-				C	CATA		
28	BSL	0915E	0920D	N30	E90	10	5.5	1				C	CATA		
28	BSL	0939E	0954	N31	E90	10	5.5	1				C	CATA		
28	DSD	1033E	1425D	S12	E53	10	2.4		03	9	9	E	RAMY	5708	
28	ADF	1033E	1915D	S21	E45	10	1.9	1	11	9	9	E	RAMY	5708	
28	ASR	1033E	1915D	S25	W90	09	21.5			9	8	E	RAMY	5698	
28	BSL	1222E	1240D	N50	E90	10	6.1	1-				C	CATA		
28	BSL	1234	1240D	N25	E90	10	5.5	1-				C	CATA		
28	BSL	1255E	1414	S25	W90	09	21.6			9	9	E	RAMY	5698	
28	BSL	1352E	1421	S19	E85	10	5.1			9	9	E	RAMY	5712	Flare Associated
28	ASR	1738E	0103D	N29	W89	09	21.7			9	9	E	PALE	5698	
28	ASR	1738E	0103D	N31	E90	10	5.8			9	9	E	PALE	5714	
28	ADF	1738E	0103D	S18	E44	10	2.1		15	9	9	E	PALE	5712	
28	APR	2134E	0230D	N32	W90	09	21.8	1				C	VORO		
28	APR	2134E	0230D	N58	E90	10	6.7	1				C	VORO		

ACTIVE PROMINENCES AND FILAMENTS

SEPTEMBER 1989

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
29	BSL	0210	0230D	N22	E90	10	6.0	1				C	VORO		
29	ASR	0241E	1001D	S27	W90	09	22.1			9	9	E	LEAR	5698	
29	ASR	0245E	1001D	N22	E90	10	6.0			9	9	E	LEAR	5714	
29	BSL	0528E	0648D	S18	W90	09	22.4			9	9	E	LEAR	5698	
29	BSL	0529E	0721D	S19	W90	09	22.4			9	9	E	SVTO	5698	
29	ASR	0547E	1510D	N25	E90	10	6.2			9	9	E	SVTO	5714	
29	DSD	0553E	1328D	N19	E54	10	3.4		04	9	9	E	SVTO		
29	DSD	0610E	1328D	N13	E36	10	2.0		06	9	9	E	SVTO	5708	
29	AFS	0611E	1510D	N16	E42	10	2.4		02	9	9	E	SVTO	5708	
29	APR	0620E	0725D	S04	W90	09	22.5					V	ATHN		
29	DSD	0620E	1343D	S15	E52	10	3.2		03	9	9	E	SVTO	5712	
29	APR	0720E	0750D	S27	W90	09	22.3					V	ATHN		
29	ASR	0721E	1510D	S15	W90	09	22.5			9	9	E	SVTO	5698	
29	DSD	0738E	1328D	S15	E65	10	4.2		08	9	9	E	SVTO	5712	Flare Associated
29	BSL	0823E	0826D	N02	W90	09	22.6	1-				C	CATA		
29	BSL	0823E	0826D	N59	W90	09	21.4	1-				C	CATA		
29	BSL	0944E	0945D	S09	E90	10	6.2	1-				C	CATA		
29	BSL	0944E	0945D	S10	E90	10	6.2	1-				C	CATA		
29	EPL	1016E	1033D	S33	W90	09	22.3	3				C	CATA		
29	BSL	1115E	1126	N02	W90	09	22.7	1-				C	CATA		
29	MDP	1145E	1245D	S23	W90	09	22.5					V	ATHN		
29	LPS	1156	1600D	S26	W90	09	22.5			9	9	E	RAMY	5698	
29	SDF	1209E	0735D	N38	W59	09	24.7	1				C	CATA		
29	LPS	1214E	1510D	S27	W90	09	22.5			9	9	E	SVTO	5698	
29	SDF	1312E	1045D	N15	E43	10	2.8		18	0	0	E	RAMY		
29	DSD	1424E	1600D	N28	E78	10	5.7		03	9	9	E	RAMY	5714	
29	AFS	1424E	1600D	N42	E71	10	5.4		02	9	9	E	RAMY	5714	
29	ADF	1426E	1600D	S21	E60	10	4.2	1	20	9	9	E	RAMY	5712	
29	AFS	1427E	1600D	S23	E37	10	2.4		02	9	9	E	RAMY		
29	AFS	1428E	1600D	N17	E72	10	5.1		02	9	9	E	RAMY		
29	LPS	1636E	1955D	S27	W90	09	22.7			9	9	E	PALE	5698	
29	ADF	1825E	1955D	S17	E31	10	2.1		13	9	9	E	PALE	5712	
30	ASR	0001E	1005D	N23	E90	10	6.9			9	9	E	LEAR	5714	
30	ASR	0305E	0840D	S29	W90	09	23.1			9	9	E	LEAR	5703	
30	BSL	0735E	0740	N23	E90	10	7.2	1-				C	CATA		
30	AFS	0829E	1005D	S25	E25	10	2.3		02	9	9	E	LEAR	5715	
30	BSL	0925	0938	S89	E90	10	8.8	1-				C	CATA		
30	AFS	1045E	2148D	N14	E58	10	4.8		02	9	9	E	RAMY	5716	
30	AFS	1045E	2148D	N18	E44	10	3.8		02	9	9	E	RAMY	5717	
30	BSL	1046	1055	S42	E90	10	7.8	1-				C	CATA		
30	AFS	1047E	2148D	S25	E22	10	2.1		03	9	9	E	RAMY	5715	
30	AFS	1051E	2148D	N23	E67	10	5.6		02	9	9	E	RAMY	5714	
30	ADF	1110E	2148D	S21	E49	10	4.2	1	21	9	9	E	RAMY	5712	
30	DSD	1440E	1610D	N26	E65	10	5.7		03	9	9	E	RAMY	5714	
30	ADF	1608E	2148D	N29	E68	10	6.0	1	07	9	9	E	RAMY	5714	

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
EPL = Eruptive Prominence on Limb
LPS = Loops
MDP = Mound Prominence
SDF = 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.

C O N T E N T S

Comprehensive Reports **MISCELLANEOUS DATA** Number 547 Part II

CARTE SYNOPTIQUE
ACTIVE REGIONS
CARRINGTON ROTATION 1818
(19 July to 15 August 1989)

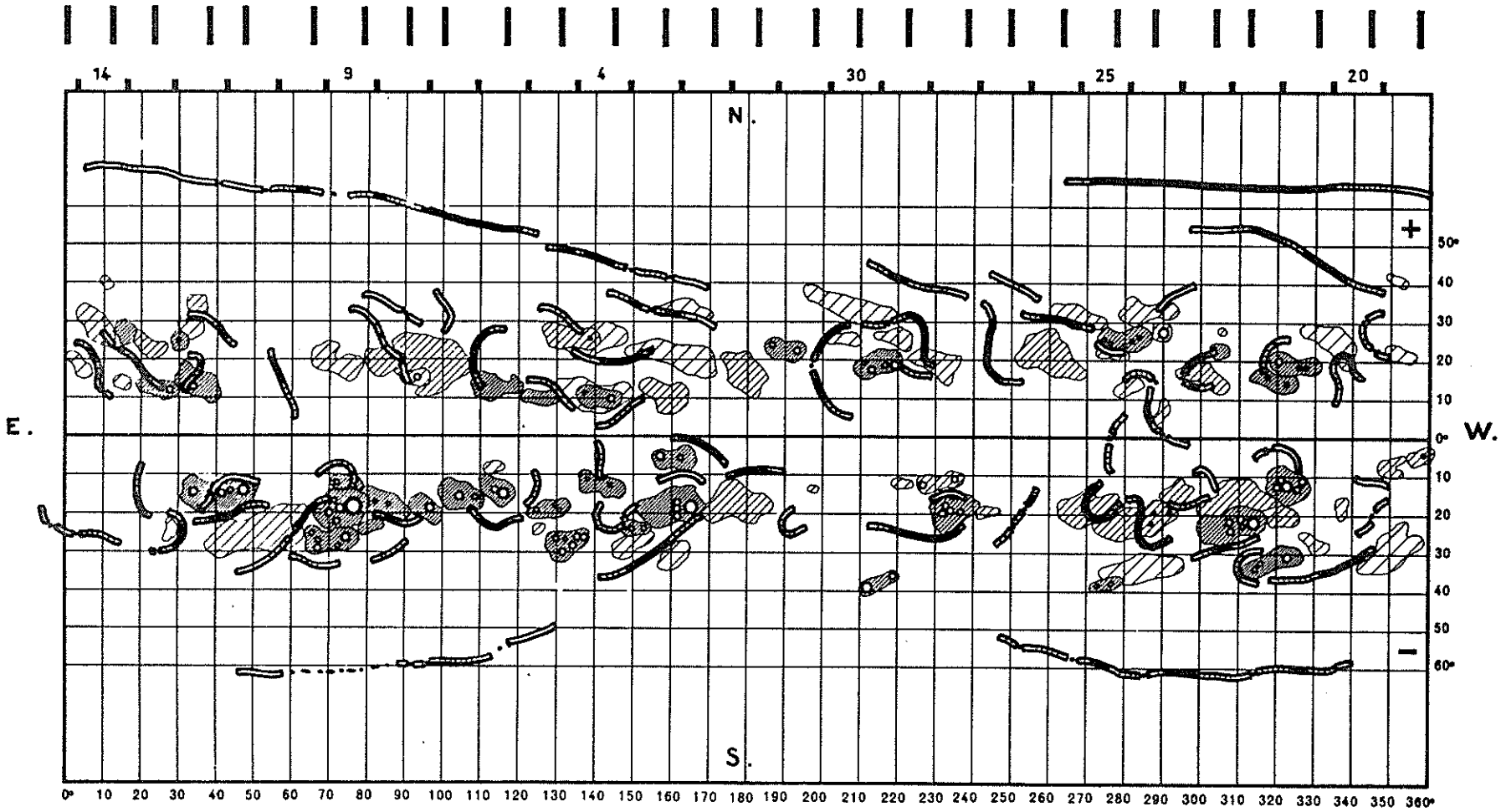
Region No.	Coordinates Lat.	Long.	Age at CMP (Days)	Imp	Spotless Region	Region No. in Rotation 1817	Activity at West Limb
1	5 S	358	>6	2			dispersed
2	7 S	351	>6	1	x		dispersed
3	41 N	351	>6	1	x		disappeared
4	18 S	337	>6	1	x		disappeared
5	27 S	330	>6	1	x		dispersed
6	19 N	325	>6	3			decreasing
7	12 S	323	>6	4			stable
8	21 S	322	>6	1	x	8	decreasing
9	15 N	320	+6	2			decreasing
10	32 S	319	0	3			decreasing
11	14 S	310	>6	1	x	10	dispersed
12	23 S	308	>6	5			decreasing
13	22 N	305	-5	1	x		(?)
14	17 N	301	>6	1	x		disappeared
15	14 S	294	>6	1	x		decreasing
16	28 N	290	>6	3			decreasing
17	33 N	287	>6	1	x		dispersed
18	21 S	285	>6	2		14+20	decreasing
19	25 N	280	>6	2			decreasing
20	21 N	277	>6	1	x		dispersed
21	38 S	275	-1	2			decreasing
22	18 S	270	>6	1	x	23	decreasing
23	32 N	268	>6	1	x		dispersed
24	22 N	261	>6	1	x	24+25	decreasing
25	19 S	245	+1	1	x		disappeared
26	19 S	236	>6	4			decreasing
27	12 S	231	-1	3			decreasing
28	19 N	230	>6	1	x		dispersed
29	12 S	221	+4	1	x		disappeared
30	26 N	220	>6	1	x		decreasing
31	38 S	216	-3	3			increasing
32	19 N	215	0	3			decreasing
33	23 N	190	-3	3			increasing
34	17 N	180	>6	1	x		decreasing
35	17 S	177	>6	1	x	33	dispersed
36	6 S	161	+4	3			decreasing
37	18 S	160	>6	4			decreasing
38	11 N	158	>6	1	x		decreasing
39	24 S	151	-1	2			decreasing
40	28 S	151	>6	1	x		dispersed
41	12 S	143	>6	2			decreasing
42	10 N	142	+1	2			decreasing
43	27 S	133	>6	3			decreasing
44	26 N	133	>6	2			decreasing
45	18 S	129	-2	2			stable
46	10 N	127	>6	1	x		decreasing
47	14 S	115	>6	3			decreasing
48	14 N	115	>6	1	x		decreasing
49	8 S	113	0	1	x		stable
50	15 S	106	>6	2			decreasing
51	20 N	98	>6	1	x	51+53	decreasing
52	18 S	96	>6	3			decreasing
53	16 N	93	>6	2			stable
54	17 S	86	>6	2			decreasing
55	20 N	85	>6	1	x		dispersed
56	23 S	81	>6	1	x		stable
57	12 S	75	-1	2			increasing
58	19 S	74	>6	5		57	stable
59	20 N	71	>6	1	x		decreasing
60	27 S	71	+6	3			decreasing
61	24 S	52	>6	1	x	61	decreasing
62	15 S	41	>6	4			decreasing
63	14 N	35	>6	2			decreasing
64	35 N	35	+5	1	x		disappeared
65	28 N	33	+3	1	x		dispersed
66	25 N	30	-3	2			stable
67	13 N	24	>6	2		65	decreasing
68	24 N	21	>6	1	x	67	dispersed
69	18 N	16	-6	1	x		(?)
70	29 N	9	>6	1	x	67	dispersed

CARTE SYNOPTIQUE

CARRINGTON ROTATION NUMBER 1818
(19 July to 15 August 1989)

Meudon Observatory

July 1989



Heliographic Longitude

139
Late
Jul 89

NOAA Space Environment Services Center

Solar Proton Events Affecting the Earth Environment

January 1976 – January 1990

Preliminary Listing

PARTICLE EVENT					ASSOCIATED FLARE AND ACTIVE REGION					
Start		Maximum		Satellite Proton Flux* $(cm^2\text{-}s\text{-}sr)^{-1}$	Maximum		Importance		Disk Location	NOAA/ USAF Region Number
Date	Time UT	Date	Time UT		Date	Time UT	X-ray	Optical	°Lat °Long	
					1976					
Apr 30	2120	May 01	1700	12	Apr 30	2114	X2	2B	S09 W47	0700
					1977					
Sept 19	1430	Sept 19	2130	200	Sept 19	1054	X2	3B	N08 W58	0889
Nov 22	1400	Nov 22	1800	160	Nov 22	1006	X1	2N	N24 W38	0939
					1978					
Feb 13	0930	Feb 14	1000	850	Feb 13	0255	M7	0B	N22 W13	1001
Apr 11	1530	Apr 11	1630	0	Apr 11	1353	X2	2B	N19 W54	1057
Apr 29	0445	Apr 30	2000	1,000	Apr 28	1306	X5	4B	N22 E41	1092
May 07	0420	May 07	0420	100	May 07	0330	X2	2B	N22 W64	1095
June 02	0730	June 02	0935	19	May 31	1009	M5	2B	N23 W50	1129
June 24	0900	June 25	0230	25	June 22	1709	M2	3B	N19 E18	1164
July 13	0300	July 13	1000	20	---	---	---	---	---	---
Sept 23	1035	Sept 24	0400	2,200	Sept 23	0941	X1	3B	N35 W50	1294
Nov 10	2130	Nov 10	2140	38	Nov 10	0042	M1	2N	N17 E02	1385
					1979					
Feb 17	2020	Feb 17	2205	31	Feb 16	0200	X2	2B	N15 E48	1574
Apr 03	1600	Apr 03	2310	45	---	---	---	---	---	---
June 06	1850	June 07	0005	950	June 04	0409	X1	2B	N20 E34	1781
July 07	0015	July 07	1010	50	---	---	---	---	---	---
Aug 19	0850	Aug 21	0740	500	Aug 18	1343	X1	---	S08 E90	---
Sept 15	1500	Sept 16	1200	60	Sept 14	0802	X2	---	N10 E90	1994
Nov 16	0430	Nov 16	1300	75	Nov 15	1639	M1	0B	N34 W25	2110
					1980					
Feb 06	1340	Feb 06	1850	12	---	---	---	---	---	---
July 17	2300	July 19	1930	100	July 17	0603	M3	1B	S12 E06	2562
					1981					
Mar 30	0900	Mar 30	2115	30	Mar 30	0049	M3	2N	N13 W74	2993
Apr 10	1745	Apr 11	1400	50	Apr 10	1655	X2	3B	N09 W40	3025
Apr 24	1515	Apr 24	2330	160	Apr 24	1400	X5	2B	N18 W50	3049
May 09	1200	May 10	2130	150	May 08	2252	M7	2B	N09 E37	3099
May 15	0300	May 16	1950	130	May 13	0425	X1	3B	N11 E58	3106
July 20	1430	July 20	1825	100	July 20	1329	M5	1B	S26 W75	3204
July 25	0600	July 25	1320	18	---	---	---	---	---	---
Aug 10	0115	Aug 10	0435	57	Aug 07	1916	M4	2B	S10 E24	3257
Oct 08	1235	Oct 13	2247	2,000	Oct 07	2308	X3	1B	S19 E88	3390
Dec 10	0545	Dec 11	0900	65	Dec 09	1854	M5	3B	N12 W16	3496
					1982					
Jan 31	0055	Jan 31	1630	830	Jan 30	2358	X1	3B	S13 E19	3576
June 06	0245	June 06	0245	10	June 03	1146	X8	2B	S09 E72	3763
June 09	0040	June 09	0510	30	June 06	1637	X12	3B	S11 E26	3763
July 11	0700	July 13	1615	2,900	July 09	0742	X9	3B	N17 E73	3804
July 22	2030	July 23	0220	240	July 22	1734	M4	0F	N29 W86	3804
Sept 05	2205	Sept 06	0100	66	Sept 04	0400	M4	3N	N11 E30	3886
Nov 22	1940	Nov 22	2140	40	Nov 22	1828	M7	1N	N11 W43	3994
Nov 26	0605	Nov 26	1500	25	Nov 26	0253	X4	2B	S11 W87	3994
Dec 08	0010	Dec 08	1000	1,000	Dec 07	2354	X2	0B	S14 W81	4007
Dec 17	1845	Dec 18	0945	130	Dec 15	0202	X12	2B	S10 E24	4026
Dec 19	1920	Dec 20	0515	85	Dec 19	1624	M9	2B	N10 W75	4022
Dec 27	0600	Dec 27	1345	190	Dec 25	0752	X2	1B	S14 E31	4033

Solar Proton Events Affecting the Earth Environment—*continued*

PARTICLE EVENT					ASSOCIATED FLARE AND ACTIVE REGION						
Start		Maximum		Satellite Proton Flux* $(cm^2\text{-}s\text{-}sr)^{-1}$	Maximum		Importance		Disk Location		NOAA/ USAF Region Number
Date	Time UT	Date	Time UT		Date	Time UT	X-ray	Optical	°Lat	°Long	
					1983						
Feb 03	1200	Feb 04	1620	340	Feb 02	0619	X4	3B	S19	W08	4077
June 15	0435	June 15	1800	18	June 14	---	---	---	S09	W90	4201
					1984						
Feb 16	0915	Feb 16	1005	660	Feb 16	---	---	---	S12	W95	4408
Feb 19	1310	Feb 21	1415	55	Feb 17	2301	X2	2B	N16	E82	4421
Mar 13	1440	Mar 13	1450	10	---	---	---	---	---		---
Mar 14	0405	Mar 14	0505	100	Mar 14	0334	M2	2B	S12	W42	4433
Apr 25	1330	Apr 26	1420	2,500	Apr 24	0005	X13	3B	S12	E43	4474
May 24	1045	May 24	1140	31	May 24	1503	M6	2B	S09	E24	4492
May 31	1315	May 31	1415	15	May 31	1142	M1	---	S09	W90	4492
					1985						
Jan 22	0415	Jan 31	0550	14	Jan 21	2350	X4	2B	S08	W38	4617
Apr 25	1430	Apr 26	0600	160	Apr 24	0935	X1	3B	N06	E27	4647
July 09	0235	July 09	0325	140	July 09	0204	M2	1B	S16	W36	4671
					1986						
Feb 06	0825	Feb 07	1730	130	Feb 06	0625	X1	3B	S04	W06	4711
Feb 14	1155	Feb 15	0400	130	Feb 14	0929	M6	1B	N01	W76	4713
Mar 06	1835	Mar 06	1930	21	Mar 05	0709	M1	1B	N04	E26	4717
May 04	1255	May 04	1320	16	May 04	1007	M1	---	N06	W90	4727
					1987						
Nov 08	0200	Nov 08	0940	120	Nov 07	2014	M1	---	N31	W90	4875
					1988						
Jan 02	2325	Jan 03	0835	92	Jan 02	2145	X1	3B	S34	W18	4912
Mar 25	2225	Mar 25	2330	58	Mar 25	2145	---	EPL	N22	W90	4965
June 30	1055	June 30	1140	21	June 30	0906	M9	2B	S16	E22	5060
Aug 26	0000	Aug 26	0045	42	Aug 23	1804	M2	EPL	N24	E90	5125
Oct 12	0920	Oct 12	0930	12	Oct 12	0511	X2	2N	S20	W66	5175
Nov 08	2225	Nov 09	0635	13	Nov 07	1105	M3	1N	S17	W47	5212
Nov 14	0130	Nov 14	0235	13	Nov 13	2309	M3	1N	S23	W27	5227
Dec 17	0610	Dec 17	0855	18	Dec 16	0841	X4	1B	N26	E37	5278
Dec 17	2000	Dec 18	0150	29	---	---	---	---	---		---
					1989						
Jan 04	2305	Jan 05	0130	28	Jan 04	1753	M4	1N	S20	W60	5303
Mar 08	1735	Mar 13	0645	3,500	Mar 06	1410	X12	3B	N35	E69	5395
Mar 17	1855	Mar 18	0920	2,000	Mar 17	1744	X6	2B	N33	W60	5395
Mar 23	2040	Mar 24	0110	53	Mar 23	1948	X1	3B	N18	W28	5409
Apr 11	1435	Apr 12	0125	450	Apr 09	0059	X3	4B	N35	E29	5441
May 05	0905	May 05	1000	27	May 04	1115	M5	2N	S20	W36	5464
May 06	0235	May 06	1045	110	May 05	0739	X2	3B	N30	E01	5470
May 23	1135	May 23	1350	68	May 22	0037	M5	2B	S21	E16	5497
May 24	0730	May 24	0905	15	---	---	---	---	---		---
June 18	1650	June 18	1910	18	June 18	1447	C4	0N	N12	W31	5534
June 30	0655	June 30	0710	17	June 29	2127	M3	2B	N26	W60	5555
July 01	0655	July 01	0720	17	---	---	---	---	---		---
July 25	0900	July 25	1225	54	July 25	0844	X2	2N	N25	W84	5603
Aug 12	1600	Aug 13	0710	9,200	Aug 12	1427	X2	2B	S16	W37	5629
Sept 04	0120	Sept 04	0510	44	Sept 03	1432	X1	1B	S18	E16	5669
Sept 12	1935	Sept 13	0825	57	Sept 12	0814	M5	EPL	S18	W79	5669
Sept 29	1205	Sept 30	0210	4,500	Sept 29	1133	X9	EPL	S26	W90	5698
Oct 06	0050	Oct 06	0825	22	---	---	---	---	---		---
Oct 19	1305	Oct 20	1600	73,000	Oct 19	1258	X13	4B	S27	E10	5747
Nov 09	0240	Nov 09	0610	43	---	---	---	---	---		---
Nov 15	0735	Nov 15	0910	71	Nov 15	0659	X3	3B	N11	W26	5786
Nov 27	2000	Nov 28	1105	380	Nov 25	2355	X1	2N	N13	W08	5800
Nov 30	1345	Dec 01	1340	7,300	Nov 30	1229	X2	3B	N26	W59	5800

*Particle flux measured at > 10 MeV at geosynchronous satellite orbit.

SOLAR-GEOPHYSICAL DATA QUESTIONAIRE RESULTS

Notes from the Editor: In April 1989, Mr. Joe H. Allen, Chief, STP Division of NOAA's National Geophysical Data Center sent a "Dear Colleague" letter through the WDC-S for STP to the worldwide scientific community requesting responses to an enclosed questionnaire. The driving force for this questionnaire was to cut back on the monthly report **Solar-Geophysical Data** because of staff and funding reductions. Results of the questionnaire are given on the following two pages.

Changes were implemented immediately within the group that produces SGD. Some tables were eliminated, e.g., Radio Propagation Indices, because of low usage. Easier ways of producing some tables were devised, e.g., in some instances table headings of long listings were put on individually page by page -- the computer now does this automatically. Many changes are transparent to the user. Monies were saved by using scanned daily solar images on the map pages, instead of the expensive halftoning process. Sixty fewer Part II issues were printed, reflecting the actual SGD mailing list. Key entry by a senior staff was contracted out.

We received many written suggestions, some opposing each other, some arguing for their own needed data over other less useful data to them. We appreciate the many positive statements about the need for SGD. The battle against rising costs has and will rage on, especially when funding problems arise. SGD continues only because of the commitment of certain individuals and the generous contribution of data from scientists around the world. What the future holds, no one knows. The current Editor will do the best possible to insure a quality data product. Your suggestions and recommendations will continue to make up a large part of the equation impacting the future of SGD.

The Editor would like to thank the SGD staff for help with generating the questionnaire (using PageMaker) and its results (using Dbase).

SOLAR-GEOPHYSICAL DATA QUESTIONAIRE RESULTS

Number of Questionaires : 228

Number of US / Foreign respondents : 149(%65) / 79(%35)

Part I (PROMPT REPORTS)

Data from one month before date of issue

Data Used:	Often	Sometimes	Never	No Response	Percent of Use
IUWDS ALERT PERIODS.	26(%11)	62(%27)	95(%42)	NR 45(%20)	38%
Graph and Table of SUNSPOT NUMBERS . . .	103(%45)	95(%42)	17(% 7)	NR 13(% 6)	87%
Daily SUNSPOT #s/2800 MHz SOLAR FLUX . .	97(%43)	88(%39)	28(%12)	NR 15(% 7)	82%
Daily Solar Indices (current month only):	99(%43)	83(%36)	31(%14)	NR 15(% 7)	79%
Smoothed Observed & Predicted Sunspot #s:	98(%43)	90(%39)	27(%12)	NR 13(% 6)	82%
Graph of Observed and Predicted SS #s. .	100(%44)	93(%41)	23(%10)	NR 12(% 5)	85%
H-alpha SOLAR FLARES	102(%45)	74(%32)	38(%17)	NR 14(% 6)	77%
Intervals of No Flare Patrol	45(%20)	83(%36)	78(%34)	NR 22(%10)	56%
East-West SOLAR SCANS 3 cm Toyokawa . .	22(%10)	66(%29)	119(%52)	NR 21(% 9)	39%
East-West SOLAR SCANS 10 cm Ottawa . . .	38(%17)	69(%30)	100(%44)	NR 21(% 9)	47%
East-West SOLAR SCANS 21 cm Fleurs . . .	21(% 9)	66(%29)	118(%52)	NR 23(%10)	38%
East-West SOLAR SCANS 43 cm Fleurs . . .	18(% 8)	64(%28)	123(%54)	NR 23(%10)	36%
Solar Interferometric 164 MHz Nancay . .	12(% 5)	70(%31)	123(%54)	NR 23(%10)	36%
Selected Fixed Frequency Events.	42(%18)	72(%32)	94(%41)	NR 20(% 9)	50%
Selected Graphs of Solar Noise Bursts. .	36(%16)	88(%39)	83(%36)	NR 21(% 9)	55%
Stanford MEAN SOLAR MAGNETIC FIELD graph:	55(%24)	80(%35)	73(%32)	NR 20(% 9)	59%
Stanford Mean Solar Magnetic Field table:	36(%16)	83(%36)	87(%38)	NR 22(%10)	52%
Inferred Interplanetary Mag. Polarity. .	45(%20)	83(%36)	71(%31)	NR 29(%13)	56%

Data from two months before date of issue

SOLAR SYNOPTIC CHARTS.	85(%37)	84(%37)	37(%16)	NR 22(%10)	74%
Daily Activity Solar Maps.	100(%44)	71(%31)	35(%15)	NR 22(%10)	75%
SUNSPOT GROUPS	87(%38)	89(%39)	34(%15)	NR 18(% 8)	77%
SUDDEN IONOSPHERIC DISTURBANCES.	53(%23)	100(%44)	60(%26)	NR 15(% 7)	67%
Pioneer XII Interplanetary Mag. Field. .	30(%13)	87(%38)	91(%40)	NR 20(% 9)	51%
Solar Radio SPECTRAL Observations. . . .	55(%24)	69(%30)	81(%36)	NR 23(%10)	54%
COSMIC RAY Neutron Monitor Charts. . . .	31(%14)	79(%35)	98(%43)	NR 20(% 9)	49%
COSMIC RAY Neutron Monitor Tables. . . .	26(%11)	70(%31)	111(%49)	NR 21(% 9)	42%
GEOMAGNETIC Activity Indices	89(%39)	82(%36)	38(%17)	NR 19(% 8)	75%
Daily Average Ap	73(%32)	85(%37)	51(%22)	NR 19(% 8)	69%
Chart of Kp by 27-day Rotation	74(%32)	86(%38)	48(%21)	NR 20(% 9)	70%
Graph and Table of aa Index.	50(%22)	89(%39)	68(%30)	NR 21(% 9)	61%
Hourly Equatorial Dst Index.	54(%24)	70(%31)	83(%36)	NR 21(% 9)	55%
Principal Magnetic Storms.	79(%35)	87(%38)	45(%20)	NR 17(% 7)	73%
Sudden Commencements/Solar Flare Effects:	87(%38)	92(%40)	34(%15)	NR 15(% 7)	78%
RADIO PROPAGATION Quality Indices. . . .	8(% 4)	37(%16)	161(%71)	NR 22(%10)	20%
Field Strength Diagram - N Atlantic Path:	7(% 3)	35(%15)	163(%71)	NR 23(%10)	18%

SOLAR-GEOPHYSICAL DATA QUESTIONAIRE RESULTS continued

Part II (COMPREHENSIVE REPORTS) **Data from six month before date of issue**

Data Used:	Often	Sometimes	Never	No Response	Percent of Use
MEUDON CARTE SYNOPTIQUE Table.	43(%19)	92(%40)	60(%26)	NR 33(%14)	59%
Meudon Carte Synoptique Map.	49(%21)	94(%41)	55(%24)	NR 30(%13)	62%
Comprehensive H-alpha SOLAR FLARES . . .	93(%41)	70(%31)	41(%18)	NR 24(%11)	72%
Intervals of No Flare Patrol	52(%23)	78(%34)	67(%29)	NR 31(%14)	57%
Number of Solar Flares (Aug 66-present).	57(%25)	100(%44)	45(%20)	NR 26(%11)	69%
Solar Radio Bursts at Fixed Frequencies.	60(%26)	74(%32)	67(%29)	NR 27(%12)	58%
Interplanetary Solar Particles & Plasma.	55(%24)	87(%38)	55(%24)	NR 31(%14)	62%
GOES Solar X-ray Radiation	74(%32)	71(%31)	39(%17)	NR 44(%19)	63%
GOES Solar X-ray Graphs.	76(%33)	79(%35)	41(%18)	NR 32(%14)	68%
GOES Solar X-ray Event List.	58(%25)	80(%35)	55(%24)	NR 35(%15)	60%
GOES Solar X-ray Average Background. . .	41(%18)	82(%36)	68(%30)	NR 37(%16)	54%
Mass Ejections from the Sun.	59(%26)	87(%38)	58(%25)	NR 24(%11)	64%
Active Prominences and Filaments	44(%19)	94(%41)	67(%29)	NR 23(%10)	60%
SOLAR IRRADIANCE	31(%14)	79(%35)	89(%39)	NR 29(%13)	49%

General Questions:

	Part I	Part II	Both	Neither	No Response
SGD Subscriber: 1, 2, Both, Neither. . .	18(% 8)	0(% 0)	176(%77)	30(%13)	NR 4(% 2)

	Yes	No	No Response
If SGD Combined - Would you subscribe? .	143(%63)	10(% 4)	NR 75(%33)
If e-mail SGD, would you continue sub.?	136(%60)	33(%14)	NR 59(%26)
Do you use SGD in your work? Yes/No. . .	220(%96)	3(% 1)	NR 5(% 2)
How many colleagues use your copy? . . .	1894(avg 8)		NR 77(%34)
Solar Indices Bulletin subscriber. . . .	34(%15)	NR193(%85)	
Geomagnetic Indices Bulletin subscriber.	28(%12)	NR200(%88)	
Prelim. Report & Forecast of SGD sub.. .	90(%39)	NR138(%61)	
Is Prelim. Report adequate?.	117(%51)	15(% 7) 3	NR 96(%42)
We can use magnetic tapes.	143(%63)	NR 85(%37)	
We can use floppy diskettes.	173(%76)	NR 55(%24)	
We can use CD-ROMs	48(%21)	NR180(%79)	
We cannot use machine-readable form. . .	25(%11)	NR203(%89)	

WORLD DATA CENTER A
FOR
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."