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1992 INTERNATIONAL GEOPHYSICAL CALENDAR
with recommended scientific programs

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Hα SOLAR FLARES

MAY 1991

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
0001	HOLL	01	0008	0020	0109	S15	E64	6615	05	5.8	61	SN	C 8.2	3	E		84		EF
		01	0525		0540	No Flare Patrol													
0002	SVTO	01	0616	0617	0620	S09	E67	6615	05	6.3	4	SF		3	E		21		
0003	SVTO	01	0730	0742	0757	S13	E63	6615	05	6.1	27	SF		3	E		25		
0004		01	11362	1146*	1200	S14	E59	6615	05	5.9	24	SF					26		
	SVTO	01	1136	1146	1202	S13	E60	6615	05	6.0	26	SF		3	E		36		
	RAMY	01	1138	1156	1159	S16	E58	6615	05	5.9	21	SF		3	E		17		
0005	HOLL	01	1517	1524	1536	S16	W08	6604	05	1.0	19	SF		3	E		13		F
		01	1539		1545	No Flare Patrol													
0006		01	18163	18192	1828	S14	E56	6615	05	6.0	12	SF	C 1.8				30		EF
	HOLL	01	1816	1821	1830	S14	E57	6615	05	6.1	14	SF	C 1.8	3	E		30		FE
	RAMY	01	1819	1819	1825	S15	E54	6615	05	5.8	6	SF		3	E		30		F
0007		01	19337	19367	2001	S16	E12	6610	05	2.7	28	SF					54		FU
	HOLL	01	1933	1936	2013	S16	E13	6610	05	2.8	40	SF		3	E		70		UF
	RAMY	01	1940	1943	1949	S16	E12	6610	05	2.7	9	SF		3	E		37		F
0008	HOLL	01	1945	1948	2019	S14	E56	6615	05	6.0	34	SF	C 1.8	3	E		35		F
		01	2018		2054	No Flare Patrol													
		01	2119		2127	No Flare Patrol													
0009	HOLL	01	2345E	2347U	2358	S14	E34		05	4.5	13D	SF	B 8.6	3	E		20		F
0010	PALE	02	0213	0214	0231	S14	E55	6615	05	6.2	18	SF	C 2.1	3	E		44		
		02	0501		0502	No Flare Patrol													
0011	LEAR	02	0503	0528	0616	S12	E44	6615	05	5.5	73	SF		3	E		34		
0012	LEAR	02	0706	0706	0717	S12	E45	6615	05	5.7	11	SF	B 8.7	3	E		33		
0013	SVTO	02	0953	1006	1023	S16	W20	6604	04	30.9	30	SF		3	E		33		
0014	SVTO	02	1040	1047	1104	S16	W21	6604	04	30.8	24	SF	B 8.1	3	E		38		
0015	LEAR	03	0035E	0042	0101	S22	W39	6604	04	30.0	26D	SF		2	E		23		
0016	LEAR	03	0305	0306	0332	S14	E36	6615	05	5.8	27	SF		3	E		27		
0017		03	05234	05275	0542	N09	W15	6605	05	2.1	19	SN	C 1.1				98	1.5	EF
	TACH	03	0523	0527	0543	N09	W13	6605	05	2.2	20	1B		3	C	0527	189	2.1	E
	WATU	03	0525	0528	0540	N09	W16	6605	05	2.0	15	SF			C	0528	80	0.9	F
	LEAR	03	0527	0532	0544	N09	W15	6605	05	2.1	17	SF	C 1.1	3	E		25		
0018		03	0544*	05474	0612	S13	E32	6615	05	5.6	28	SN	C 2.9				120	2.0	DEF
	TACH	03	0544	0547	0557D	S13	E32	6615	05	5.6	13D	SB		3	C	0547	163	2.0	E
	LEAR	03	0547	0551	0612	S16	E32	6615	05	5.7	25	SN	C 2.9	3	E		76		FE
	ISTA	03	0554		0610D	S10	E33	6615	05	5.7	16D	1N							D
0019		03	07057	07146	0731	S25	W39	6604	04	30.3	26	SF	C 1.6				61	1.0	EI
	YUNN	03	0650E	0651U	0740	S26	W38	6604	04	30.3	50D	SN			P	0651	31	0.4	
	BUCA	03	0705	0715	0735	S25	W38	6604	04	30.3	30	SF			C	0715	107	1.5	E
	LEAR	03	0707	0720	0737	S25	W40	6604	04	30.2	30	SF	C 1.6	3	E		41		
	WATU	03	0709	0715	0722	S24	W39	6604	04	30.3	13	SF			C	0715	80	1.1	
	ISTA	03	0712		0735	S23	W41	6604	04	30.1	23	1N							I
	SVTO	03	0712E	0714	0718	S26	W38	6604	04	30.3	6D	SF		2	E		48		
		03	1006		1024	No Flare Patrol													
0020	HOLL	03	1323	1327	1334	S25	W42	6604	04	30.3	11	SF	C 1.1	3	E		33		

Hα SOLAR FLARES

MAY 1991

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
0021		03	1440*	15142	1559	S14	E26	6615	05	5.6	79	1F	C 1.7				104		FU
	HOLL	03	1440	1514	1627	S13	E26	6615	05	5.6	107	1F	C 1.7	4	E		162		UF
	RAMY	03	1513	1516	1531	S14	E26	6615	05	5.6	18	SF		4	E		47		F
0022	HOLL	03	1530	1531	1547	S25	W44	6604	04	30.2	17	SF		4	E		44		F
0023	HOLL	03	1548	1559	1642	S21	W46	6604	04	30.1	54	SF		4	E		66		F
0024		03	1804*	1824*	1917	S13	E23	6615	05	5.5	73	SN	C 4.5				110		FK
	HOLL	03	1804	1824	1929	S13	E23	6615	05	5.5	85	SN			E		79		K
	HOLL	03	1804	1838	1929	S13	E23	6615	05	5.5	85	1N	C 4.5	3	E		197		F
	PALE	03	1827	1838	1852	S12	E24	6615	05	5.6	25	SF		3	E		54		
	RAMY	03	1831		1843D	S13	E23	6615	05	5.5	12D	SF		2	E				F
0025	HOLL	03	2216	2220	2247	S21	W46	6604	04	30.4	31	SF		3	E		28		F
0026	HOLL	03	2230	2236	2307	S15	E28	6627A	05	6.0	37	1N	C 5.6	3	E		132		FU
0027	HOLL	03	2347	2349		S15	E20	6615	05	5.5		SN	C 3.6	3	E		94		F
0028	LEAR	04	0017E	0024U	0050	S12	E20	6615	05	5.5	33D	SF		3	E		40		F
0029		04	0030E	0030	0108	S23	W56	6604	04	29.8	38D	SF					84	1.9	DFJ
	HOLL	04	0030E	0030	0058	S23	W53	6604	04	30.0	28D	SF		2	E		61		F
	VORO	04	0046E		0117	S23	W58	6604	04	29.7	31D	SF		2	C	0048	108	1.9	DJ
0030	VORO	04	0250	0253	0259	S10	E17	6615	05	5.4	9	SF		2	C	0253	143	1.6	EIJ
0031		04	0602*	06233	0641	S11	E17	6615	05	5.5	39	SF	C 1.2				78	1.0	DFK
	LEAR	04	0602	0623	0648	S11	E17	6615	05	5.5	46	1F	C 1.2	3	E		106		F
	ABST	04	0607	0626	0632	S10	E16	6615	05	5.4	25	SF			C	0626	61	0.7	DK
	WATU	04	0618	0624	0644	S10	E16	6615	05	5.5	26	SF			C	0624	110	1.2	F
	SVTO	04	0620	0627U	0633D	S12	E19	6615	05	5.7	13D	SF	C 3.0	2	E		34		F
0032		04	08401	0844*	0928	S09	E15	6615	05	5.5	48	1F	C 1.6				113	2.4	EF
	KHAR	04	0835E	0838U	0852	S09	E15	6615	05	5.5	17D	1F		2	P	0843	220	2.4	E
	LEAR	04	0840	0844	0947D	S11	E16	6615	05	5.6	67D	SF		3	E		17		FE
	SVTO	04	0841	0921	1005	S08	E16	6615	05	5.6	84	1F	C 1.6	3	E		101		
	KHAR	04	0913U	0917U	0924D	S09	E14	6615	05	5.4	11U	1N		1	V	0917			E
0033	KHAR	04	0856	0859	0905	S24	W60	6604	04	29.8	9	SF		2	V	0859			DL
0034	HOLL	04	1400	1404	1410	S10	E12	6615	05	5.5	10	SF		3	E		11		F
0035		04	15374	1541	1557	S12	E10	6615	05	5.4	20	SF	C 1.8				34		EF
	HOLL	04	1537	1541	1601	S11	E10	6615	05	5.4	24	SF	C 1.8	3	E		33		FE
	RAMY	04	1541	1541	1553	S13	E09	6615	05	5.3	12	SF		3	E		35		F
0036	HOLL	04	2231	2236	2239	S08	E08	6615	05	5.5	8	SF		3	E		23		
0037		04	2319	2319	2336	S10	E08	6615	05	5.6	17	SF	C 1.5				54	1.0	EFIJT
	LEAR	04	2319	2319	2334	S12	E09	6615	05	5.6	15	SF	C 1.5	3	E		10		F
	VORO	04	2324E		2338	S08	E06	6615	05	5.4	14D	SF		2	C	2324	99	1.0	EIJT
0038	VORO	05	0126	0129	0138	N07	W40	6605	05	2.1	12	SF		2	C	0129	90	1.2	EIT
0039		05	0252*	0255*	0432	N08	W39	6605	05	2.2	100	SN					101	1.8	EFJT
	VORO	05	0252	0255	0300D	N07	W40	6605	05	2.1	8D	SF		2	C	0255	116	1.6	EJT
	LEAR	05	0307	0357	0431	N08	W39	6605	05	2.2	84	SF		3	E		29		F
	TACH	05	0337E	0416	0432	N08	W38	6605	05	2.3	55D	1B		3	C	0416	158	2.1	E
0040		05	05244	05281	0539	S08	E04	6615	05	5.5	15	SF	C 1.9				26		F
	LEAR	05	0524	0528	0540	S09	E04	6615	05	5.5	16	SF	C 1.9	3	E		31		F
	SVTO	05	0528	0529	0538	S08	E04	6615	05	5.5	10	SF		3	E		21		F
0041		05	0532	05324	0554	N06	W40	6605	05	2.2	22	SF					22		
	LEAR	05	0532	0532	0544	N07	W40	6605	05	2.2	12	SF		3	E		10		
	SVTO	05	0536E	0536	0603	N05	W41	6605	05	2.2	27D	SF		3	E		35		

Hα S O L A R F L A R E S

MAY 1991

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	Mo	CMP Day	Dur (Min)	Imp	Opt	Xray	See	Obs Type	Area Measurement Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
0042		05	05571	05595	0624	S10	E03	6615	05	5.5	27	SF						41	0.9	EF
	LEAR	05	0557	0559	0625	S12	E05	6615	05	5.6	28	SF			3	E		20		
	SVTO	05	0558	0604	0623	S09	E02	6615	05	5.4	25	SF			3	E		16		F
	ABST	05	0602E	0607U	0612D	S10	E02	6615	05	5.4	10D	SF				P	0607	87	0.9	E
0043	LEAR	05	0753	0756	0800	S12	E04	6615	05	5.6	7	SF	C	1.2	3	E		18		F
0044		05	15131	1515	1531	S06	W25	6611	05	3.8	18	SF	C	2.2				70		EF
	SVTO	05	1513	1515	1532	S06	W24	6611	05	3.8	19	SF	C	2.2	3	E		78		F
	HOLL	05	1513	1515	1540	S07	W24	6611	05	3.8	27	1N			3	E		104		FE
	RAMY	05	1514	1515	1521	S05	W26	6611	05	3.7	7	SF			4	E		29		F
0045	HOLL	05	1615	1615	1619	S09	W03	6615	05	5.4	4	SF			3	E		16		F
0046	HOLL	05	1959	2003	2007	N07	E90	6621	05	12.6	8	SF			3	E		47		
0047	HOLL	05	2003	2004	2012	S09	W06	6615	05	5.4	9	SF			3	E		22		
0048		05	2023	2031*	2147	S12	E07	6627A	05	6.4	84	1N	M	1.1				118		FKU
	HOLL	05	2023	2031	2147	S12	E07	6627A	05	6.4	84	SN				E		87		K
	HOLL	05	2023	2046	2147	S12	E07	6627A	05	6.4	84	1N	M	1.1	3	E		149		UF
0049		05	22125	2218	2221	N07	E85	6621	05	12.3	9	SN						60		
	HOLL	05	2212	2218	2221	N06	E81	6621	05	12.0	9	SN			3	E		68		
	PALE	05	2217	2218	2221	N08	E89	6621	05	12.6	4	SF			3	E		52		
0050	HOLL	05	2330	2331	2342	S09	W08	6615	05	5.4	12	SF			3	E		52		F
0051	LEAR	06	0057	0124	0203	S10	W05	6615	05	5.7	66	SF			3	E		17		F
0052		06	0310	03182	0324	N05	E82	6623	05	12.3	14	SN						34		D
	TACH	06	0310	0318	0322	N06	E80	6623	05	12.1	12	SB			3	C	0318	15		D
	LEAR	06	0310	0320	0326	N04	E85	6623	05	12.5	16	SF			3	E		53		
0053		06	04321	0442*	0535	N28	E65	6619	05	11.3	63	1F						147		FKS
	TACH	06	0432	0446	0555D	N31	E65	6619	05	11.3	83D	2F			3	C	0446	311		S
	LEAR	06	0433	0442	0535	N27	E65	6619	05	11.2	62	SF				E		65		K
	LEAR	06	0433	0456	0535	N27	E65	6619	05	11.2	62	SF			3	E		64		F
0054	TACH	06	0516	0518	0520U	N06	E79	6621	05	12.1	4U	SN			3	C	0518	30		D
0055	LEAR	06	0537	0539	0553	S10	W07	6615	05	5.7	16	SF			3	E		25		F
0056	LEAR	06	0557	0559	0611	N05	E77	6621	05	12.0	14	SF	C	5.0	3	E		52		
0057		06	0700	0711	0718	S14	W45	6608	05	2.9	18	SN						22		EFG
	LEAR	06	0700	0711	0719	S15	W49	6608	05	2.6	19	SF			3	E		22		F
	ISTA	06	0708E		0718	S14	W41	6608	05	3.2	10D	SN								EG
0058	LEAR	06	0722	0727	0800	S10	W08	6615	05	5.7	38	SF			3	E		36		F
0059		06	13381	13381	1343	N29	E61	6619	05	11.3	5	SF	C	2.6				20		
	HOLL	06	1338	1338	1343	N30	E61	6619	05	11.4	5	SF	C	2.6	3	E		20		
	RAMY	06	1339	1339	1343	N28	E61	6619	05	11.3	4	SF			3	E		20		
0060	SVTO	06	1612E	1613U	1617D	S09	W16	6615	05	5.5	5D	SF	C	1.8	2	E		17		F
0061		06	16581	17001	1708	S06	W18	6615	05	5.3	10	SF	C	4.8				29		F
	SVTO	06	1658E	1659U	1704D	S06	W18	6615	05	5.3	6D	SF			2	E		29		F
	RAMY	06	1658	1700	1709	S05	W16	6615	05	5.5	11	SF	C	4.8	3	E		31		F
	HOLL	06	1659	1701	1706	S08	W19	6615	05	5.3	7	SF			3	E		26		F
0062	PALE	06	1943E	1952U	2001D	S11	W18	6615	05	5.5	18D	SF			3	E		13		F
0063	RAMY	06	2124	2124	2131	N28	E57	6619	05	11.3	7	SF	C	2.5	3	E		33		
		06	2245		2304	No Flare Patrol														

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0064		06	2332	2428*	2532	S07	W22	6615	05	5.3	120	1N					199	2.0	FH
	PALE	06	2321E	2428	2531	S08	W24	6615	05	5.2	130D	1N		3	E		230		FH
	LEAR	06	2332	2434	2554D	S07	W22	6615	05	5.3	142D	1B		3	E		217		F
	WATU	07	0037E	0037	0105	S07	W22	6615	05	5.4	28D	1N			P	0037	270	3.0	F
	URUM	07	0108E	0117	0200	S07	W22	6615	05	5.4	52D	SF			C		80	0.9	F
0065	LEAR	07	0656	0657	0714	N27	E54	6619	05	11.5	18	SF		3	E		14		
0066		07	0736*	0739*	0811	N30	E53	6619	05	11.5	35	SF					20		D
	LEAR	07	0736	0759	0847	N27	E52	6619	05	11.4	71	SF		3	E		26		
	SVTO	07	0737	0739	0750	N31	E52	6619	05	11.4	13	SF		3	E		21		
	ISTA	07	0740		0751	N30	E55	6619	05	11.6	11	SN							D
	SVTO	07	0758	0800	0815	N30	E52	6619	05	11.4	17	SF		3	E		13		
0067		07	07402	0741	0819	S10	W23	6615	05	5.6	39	SN	C 4.5				34		EF
	LEAR	07	0740	0741	0830	S11	W21	6615	05	5.7	50	SF	C 4.5	3	E		45		FE
	ISTA	07	0741		0802	S08	W24	6615	05	5.5	21	1B							F
	SVTO	07	0742	0754U	0824	S11	W24	6615	05	5.5	42	SF		3	E		24		F
0068	SVTO	07	0922	0925	0939	N30	E51	6619	05	11.4	17	SF		3	E		17		
0069		07	0958	10371	1106	S10	W28	6615	05	5.3	68	SN	M 1.4				52		F
	SVTO	07	0958	1037	1113	S11	W27	6615	05	5.4	75	SN	M 1.4	3	E		59		F
	RAMY	07	1036E	1038	1059	S08	W28	6615	05	5.3	23D	SF		2	E		45		F
0070	SVTO	07	1037	1040	1044	N30	E50	6619	05	11.4	7	SF		3	E		12		
0071	HOLL	07	1332	1333	1338	S09	W29	6615	05	5.4	6	SF		3	E		19		F
0072	HOLL	07	1351	1403	1428	S08	W29	6615	05	5.4	37	SF		3	E		20		F
0073	HOLL	07	1403	1406	1421	N29	E50	6619	05	11.5	18	SF		3	E		13		
0074		07	14451	1447	1518	S08	W30	6615	05	5.4	33	SF	C 5.2				27		EF
	HOLL	07	1445	1447	1531	S08	W29	6615	05	5.4	46	SF	C 5.2	3	E		41		FE
	RAMY	07	1446	1447	1506	S08	W31	6615	05	5.3	20	SF		3	E		13		F
0075		07	15271	1529*	1552	N28	E47	6619	05	11.3	25	SF	C 3.1				39		
	HOLL	07	1527	1529	1556	N29	E47	6619	05	11.3	29	SF	C 3.1	3	E		55		
	RAMY	07	1528	1542	1547	N28	E47	6619	05	11.3	19	SF		3	E		23		
0076	HOLL	07	1605	1605	1610	S11	W32	6615	05	5.3	5	SF		3	E		22		F
0077	HOLL	07	1742E	1808U	1822D	S11	W33	6615	05	5.2	40D	SF	C 2.4	2	E		72		F
0078		07	20354	2040	2122	N12	E64	6619A	05	12.7	47	SF	C 4.8				54		F
	HOLL	07	2035	2040	2119	N12	E64	6619A	05	12.7	44	SF		3	E		67		F
	RAMY	07	2039	2109U	2125	N12	E64	6619A	05	12.7	46	SF	C 4.8	3	E		42		F
0079	HOLL	07	2238	2242	2259	S08	W35	6615	05	5.3	21	SF	C 3.2	3	E		80		F
0080	HOLL	07	2334	2340	2352	N11	E62	6621	05	12.6	18	SF		3	E		43		
0081		08	00141	00155	0033	S10	W33	6615	05	5.5	19	SN	C 2.3				41	1.0	DEF
	HOLL	08	0014	0015	0036	S10	W31	6615	05	5.7	22	SF	C 2.3	3	E		13		E
	LEAR	08	0015	0015	0036	S11	W37	6615	05	5.2	21	SF		3	E		25		F
	PEKG	08	0015	0020	0028	S10	W31	6615	05	5.7	13	SB			C	0020	84	1.0	D
0082		08	0119*	0121*	0228	S10	W34	6615	05	5.5	69	SN	C 3.9				39	0.7	DEFK
	LEAR	08	0119	0121	0253	S11	W38	6615	05	5.2	94	SF			E		40		K
	LEAR	08	0119	0221	0253	S11	W38	6615	05	5.2	94	SF		3	E		40		FE
	PALE	08	0120	0121	0129	S12	W33	6615	05	5.6	9	SF	C 3.9	3	E		21		
	URUM	08	0213	0225	0230	S09	W32	6615	05	5.7	17	SN			C		32	0.4	D
	PEKG	08	0215	0223	0235	S10	W32	6615	05	5.7	20	SB			C	0223	84	1.0	D
	PALE	08	0216	0217	0229	S10	W34	6615	05	5.5	13	SF	C 4.7	3	E		19		

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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
0083		08	01381	01431	0159	N28	E43	6619	05	11.4	21	SN	C 5.3				65	1.2	EF
	LEAR	08	0138	0143	0200	N27	E43	6619	05	11.4	22	SF	C 5.3	3	E		69		F
	PALE	08	0138	0143	0211	N27	E42	6619	05	11.3	33	SF	C 5.3	3	E		58		
	PEKG	08	0138	0144	0155	N29	E45	6619	05	11.6	17	SB			P	0144	84	1.5	E
	URUM	08	0139	0143	0150	N28	E42	6619	05	11.3	11	SN			C		48	0.8	E
0084		08	02311	0232	0236	N06	E58	6621	05	12.4	5	SF					18	0.3	D
	URUM	08	0231	0232	0235	N05	E57	6621	05	12.4	4	SF			C		16	0.3	D
	PALE	08	0232	0232	0237	N06	E58	6621	05	12.4	5	SF		3	E		20		
0085		08	03325	03382	0354	N12	E58	6619A	05	12.5	22	1B	C 3.3				87	1.5	DEF
	LEAR	08	0332	0339	0405	N11	E55	6619A	05	12.3	33	1N	C 3.3	3	E		109		FE
	PEKG	08	0335	0338	0346	N13	E61	6619A	05	12.7	11	SB			P	0338	84	1.8	D
	URUM	08	0335	0340	0344	N12	E56	6619A	05	12.4	9	SN			C		32	0.6	D
	TACH	08	0337	0339	0401	N13	E58	6619A	05	12.5	24	1B		3	C	0339	122	2.2	E
0086	TACH	08	0339	0357	0420	S10	W35	6615	05	5.5	41	1B		2	C	0357	163	2.1	EU
0087	TACH	08	0341	0424	0445	N14	E80	6625	05	14.2	64	SB		3	C	0424	41		D
0088	ABST	08	0516	0521	0530	N14	E90	6625	05	15.0	14	SN			C	0521	87		AD
0089		08	06144	06211	0633	N12	E78	6625	05	14.1	19	SN					48		A
	URUM	08	0614	0621	0634	N14	E77	6625	05	14.1	20	SN			C		48		A
	LEAR	08	0618	0622	0632	N11	E78	6625	05	14.1	14	SF		3	E		48		
0090		08	0721*	08131	0856	S10	W37	6615	05	5.5	95	SF	C 2.8				40	0.6	EF
	LEAR	08	0721	0813	0936	S11	W41	6615	05	5.2	135	SF	C 2.8	3	E		31		FE
	URUM	08	0721	0814	0934	S10	W36	6615	05	5.6	133	SF			C		48	0.6	E
	KANZ	08	0809	0813	0817	S11	W35	6615	05	5.7	8	SF		2	C				
	ISTA	08	0812	0814	0818	S10	W35	6615	05	5.7	6	SF							E
0091	SVTO	08	0900	0903	0918D	S05	W12	6627E	05	7.5	18D	SF		3	E		13		
0092	ONDR	08	1031E	1031U	1031U	N27	E36	6619	05	11.2	18U	SF				1031	86	1.3	E
0093	SVTO	08	1037	1040	1044	N30	E50	6619	05	12.4	7	SF		3	E		12		
0094	SVTO	08	1331	1338	1346	N12	E86	6625	05	15.0	15	SF		3	E		39		
0095	SVTO	08	1336	1336	1340	N14	E54	6621A	05	12.6	4	SF		3	E		16		
0096		08	1437	1438	1456	N30	E34	6619	05	11.3	19	SF					23		
	HOLL	08	1437	1438	1453	N29	E34	6619	05	11.3	16	SF		3	E		18		
	SVTO	08	1437	1438	1500	N30	E33	6619	05	11.2	23	SF		3	E		28		
0097		08	15153	15202	1528	N11	E46	6621	05	12.1	13	SF					22		
	HOLL	08	1515	1520	1531	N09	E49	6621	05	12.3	16	SF		3	E		21		
	SVTO	08	1516	1522	1529	N12	E45	6621	05	12.0	13	SF		3	E		23		
	RAMY	08	1518	1520	1524	N12	E45	6621	05	12.0	6	SF		3	E		22		
0098	HOLL	08	1520	1520	1531	N13	E77	6625	05	14.4	11	SF		3	E		49		
0099		08	15382	1546*	1635	N13	E53	6619A	05	12.6	57	SN	M 1.0				101		FK
	HOLL	08	1538	1546	1638	N12	E52	6619A	05	12.6	60	1N		4	E		107		F
	SVTO	08	1538	1548	1634	N14	E53	6619A	05	12.6	56	SN		3	E		92		
	HOLL	08	1538	1601	1638	N12	E52	6619A	05	12.6	60	1N	M 1.0		E		134		K
	SVTO	08	1538	1612	1634	N14	E53	6619A	05	12.6	56	SN			E		81		K
	RAMY	08	1540	1600	1631	N12	E54	6619A	05	12.7	51	SF	M 1.0	4	E		90		F
0100	HOLL	08	1648	1649	1656	N07	E47	6621	05	12.2	8	SF		4	E		17		
0101	HOLL	08	1703	1703	1708	N10	E81	6625	05	14.8	5	SF		4	E		16		
0102	HOLL	08	1759	1801	1808	N09	E47	6621	05	12.3	9	SF		4	E		20		
0103	HOLL	08	1819	1820	1828	N10	E77	6625	05	14.5	9	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
0104		08	1823*	18367	1912	N28	E34	6619	05	11.4	49	1N	C 6.1				82		FHK
	HOLL	08	1823	1836	1916	N27	E33	6619	05	11.3	53	1N			E		120		K
	HOLL	08	1823	1843	1916	N27	E33	6619	05	11.3	53	1N	C 6.1	4	E		109		FH
	PALE	08	1834	1836	1939D	N28	E34	6619	05	11.4	65D	SF		3	E		62		
	RAMY	08	1835	1839	1904	N28	E34	6619	05	11.4	29	SF		3	E		37		FH
0105	HOLL	08	1955	2004	2020	N09	E46	6621	05	12.3	25	SF		4	E		31		
0106	HOLL	08	2008	2011	2024	N30	E32	6619	05	11.3	16	SF		4	E		14		F
0107	HOLL	08	2042	2112	2149	N06	E48	6621	05	12.4	67	SF		3	E		24		F
0108	HOLL	08	2144	2144	2154	N13	E75	6625	05	14.6	10	SF		3	E		12		F
0109	HOLL	08	2234	2301	2406	S08	W48	6615	05	5.3	92	SN	C 4.0	3	E		53		F
0110	HOLL	09	0006	0007	0017	N11	E71	6625	05	14.3	11	SF		3	E		22		FH
0111	HOLL	09	0040	0040	0047	S07	W52	6615	05	5.1	7	SN	C 1.5	3	E		28		F
0112		09	01201	01221	0130	N11	E77	6625	05	14.8	10	SF	C 2.5				48		D
	HOLL	09	0120	0122	0129	N09	E70	6625	05	14.3	9	SF		2	E		30		
	PEKG	09	0121	0123	0130	N12	E80	6625	05	15.1	9	SN			P	0123	42		D
	PALE	09	0122E	0122U	0130	N12	E82	6625	05	15.2	8D	SF	C 2.5	3	E		72		
0113		09	01593	02013	0214	S07	W51	6615	05	5.3	15	SF	C 3.5				62	1.1	D
	LEAR	09	0159	0201	0216	S06	W52	6615	05	5.2	17	SF	C 3.5	3	E		65		
	PEKG	09	0202E	0202	0215	S07	W53	6615	05	5.1	13D	SN			P	0202	63	1.1	D
	PALE	09	0202	0204	0210	S09	W48	6615	05	5.5	8	SF		3	E		58		
0114	SVTO	09	0654	0719	0823	N29	E26	6619	05	11.3	89	SF		4	E		39		
0115	SVTO	09	0701	0721	0808	N10	E39	6621	05	12.2	67	SF		4	E		32		
0116		09	07343	0737*	0759	S12	W50	6627A	05	5.5	25	SF					20		FK
	SVTO	09	0734	0737	0800	S12	W49	6627A	05	5.6	26	SF			E		25		K
	SVTO	09	0734	0747	0800	S12	W49	6627A	05	5.6	26	SF		4	E		15		
	ISTA	09	0737		0756	S13	W52	6627A	05	5.4	19	1F							F
0117	ISTA	09	0810		0820	S14	W54	6627A	05	5.2	10	SN							E
0118		09	0833*	0840*	0907	S08	W56	6615	05	5.1	34	1B	C 4.3				159	3.3	EZ
	SVTO	09	0833	0842	0935D	S09	W56	6615	05	5.1	62D	1N	C 4.3	4	E		117		
	ISTA	09	0835	0840	0855	S09	W54	6615	05	5.3	20	SB							E
	KAND	09	0835	0844	0900	S08	W55	6615	05	5.2	25	1B			P	0844	249	4.5	EZ
	ONDR	09	0906	0910	0927	S08	W57	6615	05	5.1	21	1N				0910	111	2.1	E
0119	ONDR	09	0956	0957U	1001U	S11	W54	6615	05	5.3	5U	SN				0957	86	1.5	E
0120		09	10522	10544	1105	S09	W52	6615	05	5.6	13	SF	C 4.1				57	1.1	EFZ
	URUM	09	1050E	1055	1101	S07	W52	6615	05	5.5	11D	SF			C		32	0.5	E
	SVTO	09	1052	1055	1113	S10	W52	6615	05	5.5	21	SF		3	E		46		F
	KAND	09	1052E	1056	1105	S09	W53	6615	05	5.5	13D	SN			P	1056	83	1.4	EZ
	RAMY	09	1054	1054	1104	S09	W54	6615	05	5.4	10	SF	C 4.1	4	E		28		F
	ATHN	09	1055E	1058	1102	S08	W50	6615	05	5.7	7D	SN		2	V	1058	96	1.5	
0121		09	1148*	12099	1222	S10	W52	6615	05	5.6	34	SN	C 7.9				107		EFZ
	SVTO	09	1148	1209	1228	S10	W52	6615	05	5.6	40	1N		3	E		108		F
	RAMY	09	1203	1218	1220	S09	W54	6615	05	5.4	17	SF	C 7.9	4	E		88		
	KAND	09	1205E	1209	1217	S10	W50	6615	05	5.7	12D	SB			P	1209	125		EZ
	KANZ	09	1206E	1208U	1228D	S10	W53	6615	05	5.5	22D	SF		1	C				
0122	RAMY	09	1233	1236	1243	S09	W54	6615	05	5.5	10	SF	C 8.0	4	E		56		F
0123	RAMY	09	1244	1245	1249	N10	E36	6621	05	12.2	5	SF		4	E		32		
0124		09	1444	1510*	1546	N28	E24	6619	05	11.5	62	SF	C 3.5				53		FH
	RAMY	09	1444	1510	1545	N29	E27	6619	05	11.7	61	SF	C 3.5	4	E		46		FH
	HOLL	09	1447E	1520	1547	N28	E22	6619	05	11.3	60D	SF		2	E		60		FH

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0125		09	17452	1747	1758	S10	W57	6615	05	5.4	13	SN	C 5.9				34		F
	HOLL	09	1745	1747	1757	S10	W56	6615	05	5.5	12	SN	C 5.9	3	E		38		F
	RAMY	09	1747	1747	1758	S09	W58	6615	05	5.4	11	SF		3	E		31		F
		09	2025		2030	No Flare Patrol													
		09	2113		2128	No Flare Patrol													
		09	2132		2141	No Flare Patrol													
0126	PALE	09	2235	2235	2240	S08	W65	6615	05	5.1	5	SF	C 1.6	3	E		25		
0127		10	0115*	0155*	0306	N34	E18	6619	05	11.5	111	1F	C 5.8				161	2.8	EF
	LEAR	10	0115	0155	0253	N33	E23	6619	05	11.9	98	1F		3	E		106		F
	PEKG	10	0140	0214	0247	N34	E18	6619	05	11.5	67	1N			P	0215	252	3.5	E
	YUNN	10	0145E	0145U	0233	N35	E22	6619	05	11.8	48D	SF			P	0145	47	0.7	
	URUM	10	0145	0321	0345D	N35	E14	6619	05	11.2	120D	SF			C		113	1.5	F
	PALE	10	0216	0218	0252	N34	E18	6619	05	11.5	36	SF	C 5.8	3	E		13		F
	PEKG	10	0300	0405	0425	N34	E17	6619	05	11.5	85	2N			P	0405	505	7.1	E
	YUNN	10	0312E	0312U	0345D	N34	E16	6619	05	11.4	33D	SF			P	0312	94	1.3	E
0128	PALE	10	0254	0346	0357D	N39	E10		05	10.9	63D	SF	C 7.0	3	E		64		F
0129		10	0508*	0515*	0552	N16	E60	6625	05	14.8	44	SF					115	2.0	E
	URUM	10	0508	0515	0554	N15	E59	6625	05	14.7	46	SF			C		96	2.0	E
	SVTO	10	0514E	0516U	0604D	N18	E58	6625	05	14.6	50D	SF		1	E		81		
	PEKG	10	0540	0542	0551	N16	E62	6625	05	14.9	11	1N			P	0540	168		E
0130	PEKG	10	0709	0711	0711D	N15	E63	6625	05	15.1	2D	SN			P	0711	168		E
		10	0938		0944	No Flare Patrol													
0131	RAMY	10	1344	1347	1354	N25	E13	6619	05	11.6	10	SF	C 1.9	4	E		14		F
0132		10	14332	14361	1456	S15	W58	6627	05	6.2	23	SF	C 2.6				56		FH
	HOLL	10	1433	1437	1503	S16	W59	6627	05	6.1	30	SF		3	E		82		F
	RAMY	10	1435	1436	1448	S14	W58	6627	05	6.2	13	SF	C 2.6	4	E		30		FH
0133	HOLL	10	1813	1813	1822	N30	E11	6619	05	11.6	9	SF		3	E		18		F
0134	HOLL	10	1906	1946	2041	S08	W71	6615	05	5.5	95	SN	C 5.9	3	E		59		F
0135	RAMY	10	1944	1945	2001	S46	W51		05	6.6	17	SF		2	E		43		F
0136	VORO	10	2208	2215	2323	S19	W68	6627	05	5.7	75	SF		2	C	2215	63		DIJT
0137		10	2334	23367	2416	S10	W72	6615	05	5.6	42	1F					64		EFIJT
	VORO	10	2334	2336	2341D	S13	W71	6615	05	5.6	7D	1F		2	C	2336	81		EIJT
	LEAR	10	2334	2343	2416	S07	W73	6615	05	5.5	42	SF		3	E		47		F
0138		10	23402	2342	2352	S18	W72	6627	05	5.5	12	1F					100		EFIJT
	VORO	10	2340	2342	2350	S19	W73	6627	05	5.4	10	1F		2	C	2342	108		EIJT
	LEAR	10	2342	2342	2353	S16	W70	6627	05	5.7	11	SF		3	E		91		F
0139	LEAR	10	2350	2402	2419	N30	E07	6619	05	11.5	29	SF		3	E		13		F
0140	PEKG	11	0005	0010	0018	N09	E21	6621	05	12.6	13	SN			P	0010	42	0.5	D
0141		11	00511	00531	0100	S06	W76	6615	05	5.3	9	1F					72		DIJT
	VORO	11	0051	0053	0101	S08	W78	6615	05	5.2	10	1F		2	C	0053	90		DIJT
	LEAR	11	0052	0054	0059	S05	W75	6615	05	5.4	7	SF		3	E		55		
0142	LEAR	11	0204	0205	0209	N30	E06	6619	05	11.5	5	SF	C 3.2	3	E		27		
0143	LEAR	11	0508	0516	0524	S05	W80	6615	05	5.2	16	SF	C 2.8	3	E		84		
0144	LEAR	11	0636	0642	0705	N09	E13	6621	05	12.2	29	SF	C 1.8	3	E		23		F
0145		11	08042	08165	0910	S08	W78	6615	05	5.5	66	SF					34		F
	LEAR	11	0804	0816	0910	S06	W81	6615	05	5.3	66	SF		3	E		48		F
	SVTO	11	0806	0821	0910	S09	W76	6615	05	5.6	64	SF		3	E		21		

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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
0146	KHAR	11	0938	0940U	0945	S10	W82	6615	05	5.2	7	SF			2	V	0940			DH
0147	KHAR	11	0940U	0941	0947	N29	E04	6619	05	11.7	7U	SF			2	V	0941			D
0148	KHAR	11	1215	1220U	1225	S10	W82	6615	05	5.3	10	SF			2	V	1220			DH
0149		11	1321	13221	1355	S09	W79	6615	05	5.6	34	SN	M	3.4				50		F
	RAMY	11	1321	1322	1344	S08	W80	6615	05	5.5	23	SN	M	3.4	4	E		49		F
	SVTO	11	1321E	1323U	1401	S09	W79	6615	05	5.6	40D	SF			2	E		54		
	HOLL	11	1321	1323	1401	S09	W79	6615	05	5.6	40	SN			2	E		46		F
0150		11	15192	15231	1529	S08	W82	6615	05	5.5	10	SF	M	1.6				26		
	RAMY	11	1519	1524	1528	S08	W83	6615	05	5.4	9	SF	M	1.6	4	E		36		
	HOLL	11	1521	1523	1530	S09	W80	6615	05	5.6	9	SF			3	E		16		
0151	HOLL	11	1735	1736	1747	S16	W49	6629	05	8.0	12	SF	C	2.6	4	E		12		
0152	HOLL	11	1804	1805	1813	S14	W79	6627	05	5.8	9	SF	C	2.5	3	E		35		F
0153	HOLL	11	1805	1807	1814	S16	E37	6624	05	14.5	9	SF			3	E		14		
0154		11	18261	1827	1847	N06	E17	6623	05	13.0	21	SF	C	2.6				50		EF
	HOLL	11	1826	1827	1852	N05	E17	6623	05	13.0	26	SF	C	2.6	3	E		65		FE
	PALE	11	1827	1827	1842	N06	E17	6623	05	13.0	15	SF			3	E		35		
0155	HOLL	11	1830	1831	1834	N30	E00	6619	05	11.8	4	SF			3	E		13		
0156	HOLL	11	1850	1851	1912	N06	E07	6621	05	12.3	22	SF	C	2.3	3	E		16		F
0157		11	1954*	2025*	2511	N31	W02	6619	05	11.7	317	SN	M	2.1				83	0.4	EFKTYZ
	HOLL	11	1954	2025	2512	N33	W02	6619	05	11.7	318	SN	M	2.1	3	E		96		ZYT
	HOLL	11	1954	2037	2512	N33	W02	6619	05	11.7	318	1N				E		123		KT
	RAMY	11	2000	2052U	2052D	N32	W01	6619	05	11.7	52D	SF			2	E		87		F
	PALE	11	2012E	2054U	2423	N33	W03	6619	05	11.6	251D	SF			3	E		89		FT
	LEAR	11	2301E	2305U	2508	N29	W02	6619	05	11.8	127D	1N			2	E		112		ZF
	PEKG	11	2348	2350	2420	N28	W02	6619	05	11.8	32	SB				P	2350	42	0.5	E
	YUNN	12	0022E	0037	0249	N29	W03	6619	05	11.8	147D	SN				P		31	0.4	
0158	HOLL	11	2237	2302	2337	N08	E06	6621	05	12.4	60	SF			3	E		36		F
0159	HOLL	11	2305	2306	2325	S17	E33	6624	05	14.5	20	SF			3	E		21		F
0160		12	00582	01021	0106	S18	E29	6624	05	14.2	8	SF						39	0.6	F
	YUNN	12	0058	0102	0103	S18	E30	6624	05	14.3	5	SF				C		47	0.6	
	HOLL	12	0100	0103	0108	S17	E28	6624	05	14.2	8	SF			2	E		31		F
0161	YUNN	12	0138	0200	0218	S09	W90	6615	05	5.3	40	SN				C		31		A
0162	LEAR	12	0237	0237	0246	S08	W86	6615	05	5.7	9	SF	C	6.5	3	E		19		
0163	LEAR	12	0709	0725	0737	N07	W02	6621	05	12.1	28	SF			3	E		28		F
0164	LEAR	12	0718	0721	0725	S10	W84	6615	05	6.0	7	SF	C	3.0	3	E		23		F
0165		12	08002	08041	0816	S08	W80	6615	05	6.3	16	SN	C	5.0				69		AE
	URUM	12	0800	0805	0820	S06	W77	6615	05	6.6	20	SN				C		48		A
	LEAR	12	0802	0804	0812	S09	W82	6615	05	6.2	10	SN	C	5.0	3	E		90		E
0166	KHAR	12	0937		0957	S18	W58	6629	05	8.0	20	SF			2	V	0937			D
0167	KHAR	12	0954		0958	S24	W55		05	8.2	4	SF			2	V	0954			DL
0168	KHAR	12	1014	1016	1023	S06	W90	6615	05	5.7	9	SF			2	V	1016			DH
0169	SVTO	12	1238E	1238U	1249	N09	W01	6621	05	12.4	11D	SF			2	E		13		
0170		12	1301	1315	1320	S16	E24	6624	05	14.4	19	SF	C	5.6				18		F
	RAMY	12	1301	1315	1321	S17	E24	6624	05	14.4	20	SF	C	5.6	3	E		17		F
	SVTO	12	1306E	1310U	1320	S16	E25	6624	05	14.4	14D	SF			2	E		20		

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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
0171	HOLL	12	1310	1320	1324	N14	E17	6631	05	13.8	14	SF		2	E		21		F
0172		12	1327*	1331*	1354	S15	E24	6624	05	14.4	27	SF					18		F
	SVTO	12	1327	1331	1334	S15	E23	6624	05	14.3	7	SF		3	E		13		F
	RAMY	12	1334	1335	1338	S16	E25	6624	05	14.5	4	SF		3	E		15		
	HOLL	12	1340	1359	1430	S15	E25	6624	05	14.5	50	SF		3	E		27		F
0173	HOLL	12	1555	1557U	1652	N08	W06	6621	05	12.2	57	SF		3	E		30		
0174	HOLL	12	1555	1559	1614	S19	E22	6624	05	14.3	19	SF		3	E		13		F
0175		12	1614*	1624*	1647	S16	E22	6624	05	14.3	33	SF	C 4.6				37		F
	HOLL	12	1614	1634	1706	S17	E22	6624	05	14.3	52	SF	C 4.6	3	E		55		F
	RAMY	12	1624	1624	1628	S16	E22	6624	05	14.3	4	SF		3	E		19		
0176	HOLL	12	1652	1659	1723	N02	E03	6623	05	12.9	31	SF		3	E		23		F
0177		12	1707	1740	1826	S17	E26	6624	05	14.7	79	1N	M 1.2				152		F
	HOLL	12	1707	1740	1822	S19	E24	6624	05	14.5	75	2B	M 1.2	3	E		260		F
	PALE	12	1806E	1806U	1831	S15	E27	6624	05	14.8	25D	SF		3	E		45		F
0178	HOLL	12	1904E	1904	2008	S17	E20	6624	05	14.3	64D	SF		3	E		65		F
0179	HOLL	12	2035	2051	2120	S18	E22	6624	05	14.5	45	SF		3	E		19		F
0180	VORO	13	0021	0022	0038	N08	W17	6621	05	11.7	17	SF		1	C	0022	72	0.8	DIJ
0181		13	0055	0058	0104	N09	W18	6621	05	11.7	9	SN					35	0.4	DIJ
	YUNN	13	0055	0058	0102	N10	W18	6621	05	11.7	7	SN			C		16	0.2	D
	VORO	13	0055	0058	0107	N08	W17	6621	05	11.8	12	SF		1	C	0058	54	0.6	DIJ
0182	YUNN	13	0135	0205	0257D	S07	W90	6615	05	6.3	82D				P				Y
0183		13	06236	06361	0652	N06	W04	6623	05	13.0	29	SF					73		
	SVTO	13	0623	0637	0656	N07	W03	6623	05	13.0	33	SF		3	E		73		
	KANZ	13	0629	0636	0647	N05	W04	6623	05	13.0	18	SF		1	C				
0184		13	0944	0958	1011	N14	W10	6619A	05	12.6	27	SN					36		EF
	KHAR	13	0943U		1015U	N13	W10	6619A	05	12.6	32U	SN		2	V	0944			E
	SVTO	13	0944	0958	1011	N14	W09	6619A	05	12.7	27	SF		3	E		36		F
0185	KHAR	13	1047	1048U	1105	N33	W23	6619	05	11.6	18	SF		2	V	1048			D
0186		13	1048	1107U	1151	S27	E38		05	16.4	63	1F					246	5.8	EFGLU
	KHAR	13	1048		1125D	S28	E40		05	16.6	37D	1F		2	P	1055			ELG
	HTPR	13	1052E		1052D	S27	E40		05	16.6	37D	2F					413	5.8	
	SVTO	13	1107E	1107U	1151	S27	E33		05	16.0	44D	SF		3	E		79		UF
0187		13	10598	1108	1126	S16	E14	6624	05	14.5	27	SF	C 2.9				39		
	SVTO	13	1059	1108	1126	S15	E12	6624	05	14.4	27	SF	C 2.9	3	E		39		
	KHAR	13	1107		1125D	S18	E16	6624	05	14.7	18D	SF		2	V	1114			
0188	SVTO	13	1310	1311	1314	N04	W09	6623	05	12.9	4	SF		3	E		24		
0189	HOLL	13	1515	1618	1624	N26	W24	6619	05	11.8	69	SF		3	E		16		
		13	1555		1615	No Flare Patrol													
0190	HOLL	13	1834	1835	1848	N15	W47	6629D	05	10.2	14	SF		3	E		38		F
0191	HOLL	13	2113	2129	2218	S17	E04	6624	05	14.2	65	SF		3	E		31		F
		13	2335		2400	No Flare Patrol													
		14	0000		0009	No Flare Patrol													
0192	TACH	14	0437	0457	0601	S11	E80	6633	05	20.2	84	1N		1	C	0457	133		E
0193		14	05545	05591	0626	N08	W14	6623	05	13.2	32	SF					22		
	SVTO	14	0554	0559	0613	N07	W14	6623	05	13.2	19	SF		3	E		22		
	LEAR	14	0559	0600	0639	N08	W15	6623	05	13.1	40	SF		3	E		22		

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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
0194		14	07171	07231	0748	S08	E42	6630	05	17.4	31	SF					33		
	LEAR	14	0717	0723	0745	S10	E39	6630	05	17.2	28	SF		3	E		33		
	KANZ	14	0718	0724	0750	S07	E46	6630	05	17.7	32	SF		2	C				
0195	KHAR	14	0827		0836	N31	W40	6619	05	11.2	9	SF		2	V	0827			D
0196	KHAR	14	0902		0940U	S09	E06	6632	05	14.8	38U	SF		2	V	0902			D
0197	KHAR	14	1022	1023	1028	N27	W36	6619	05	11.6	6	SF		2	V	1023			DL
0198	KHAR	14	1056U	1058	1103	N13	W31	6622A	05	12.1	7U	SF		2	V	1058			DH
0199	KHAR	14	1127	1130	1137D	N08	W21	6621	05	12.9	10D	SF		2	P	1133	170	1.9	E
		14	1211		1217	No Flare Patrol													
0200		14	17302	17363	1807	S19	W01	6624	05	14.6	37	SF	C 3.8				75		F
	HOLL	14	1730	1739	1810	S19	W01	6624	05	14.6	40	SF	C 3.8	3	E		98		F
	PALE	14	1732	1736	1804	S19	W01	6624	05	14.6	32	SF		3	E		52		
0201	LEAR	15	0344	0404	0449	S18	W09	6624	05	14.5	65	SF		3	E		35		
0202		15	06537	0706	0756	N13	W51	6621	05	11.4	63	SF	C 2.0				52	1.0	D
	LEAR	15	0653	0706	0757	N14	W50	6621	05	11.5	64	SF	C 2.0	3	E		38		
	YUNN	15	0700	0734U	0755	N13	W51	6621	05	11.4	55	SN			P	0734	31	0.5	D
	ABST	15	0722E	0723U	0745D	N12	W52	6621	05	11.4	23D	SF			P	0723	87	1.4	D
0203	LEAR	15	0753	0808	0811	S13	E70	6633	05	20.6	18	SF		3	E		12		
		15	0955		1000	No Flare Patrol													
0204	SVTO	15	1102	1103	1123	S18	W10	6624	05	14.7	21	SF		3	E		18		
0205		15	13509	1353*	1412	S18	W12	6624	05	14.7	22	SF					31	0.6	D
	HTPR	15	1350	1353	1415	S18	W11	6624	05	14.7	25	SN				1353	50	0.6	D
	SVTO	15	1352	1356	1416	S19	W13	6624	05	14.6	24	SF		3	E		17		
	HOLL	15	1354	1404	1414	S19	W13	6624	05	14.6	20	SF		3	E		25		
	RAMY	15	1359	1359	1405	S18	W13	6624	05	14.6	6	SF		2	E		31		
0206	SVTO	15	1350	1354	1453	S11	E69	6633	05	20.8	63	SF		3	E		15		
0207	SVTO	15	1445	1450	1528	N31	W48	6619	05	11.8	43	SF		3	E		11		
0208	SVTO	15	1459	1550	1557	S10	E68	6633	05	20.7	58	SF		3	E		17		
0209		15	1548	1602	1627	S08	W12	6632	05	14.7	39	SF	C 1.5				26		F
	SVTO	15	1548	1602	1627	S09	W13	6632	05	14.7	39	SF	C 1.5	3	E		34		
	HOLL	15	1550E	1552U	1620D	S08	W12	6632	05	14.8	30D	SF		3	E		19		F
0210	HOLL	15	1700	1705	1707	S15	E25	6630	05	17.6	7	SF		3	E		20		F
0211		15	1757*	1828*	1911	S16	W20	6624	05	14.2	74	SF					40		FK
	HOLL	15	1757	1828	1909	S16	W20	6624	05	14.2	72	SF		3	E		44		F
	HOLL	15	1757	1848	1909	S16	W20	6624	05	14.2	72	SN			E		55		K
	HOLL	15	1910	1911	1916	S16	W20	6624	05	14.3	6	SF		3	E		21		F
0212		15	18154	18202	1833	N16	W15	6631	05	14.6	18	SF					34		F
	HOLL	15	1815	1822	1840	N15	W14	6631	05	14.7	25	SF		3	E		58		F
	PALE	15	1819	1820	1826	N16	W16	6631	05	14.5	7	SF		3	E		11		F
0213	HOLL	15	1903	1904	1915	S13	E23	6630	05	17.5	12	SF		3	E		31		F
0214		15	2020*	2032*	2126	S16	W25	6624	05	13.9	66	SN	C 6.5				66		FK
	HOLL	15	2020	2032	2120	S16	W25	6624	05	13.9	60	SN			E		92		K
	HOLL	15	2020	2052	2120	S16	W25	6624	05	13.9	60	SN	C 6.5	3	E		94		F
	PALE	15	2116	2116	2138	S16	W26	6624	05	13.9	22	SF		3	E		13		
0215	HOLL	15	2119	2121	2136	N30	W50	6619	05	11.9	17	SF		3	E		26		F

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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
0216	HOLL	15	2258	2306	2314	N30	W52	6619	05	11.9	16	SF	C 1.8	3	E		26		EF
0217		15	23221	23245	2400	S18	W21	6624	05	14.4	38	SF	C 1.5				36		
	LEAR	15	2322	2329	2403	S17	W22	6624	05	14.3	41	SF	C 1.5	3	E		52		
	HOLL	15	2323	2324	2357	S18	W20	6624	05	14.4	34	SF		3	E		21		
0218	HOLL	16	0011	0011	0035	N13	E10	6634	05	16.8	24	SF		3	E		10		F
0219		16	0103*	0120*	0246	N14	E09	6634	05	16.7	103	SF					58	0.6	EF
	WATU	16	0103	0120	0233	N14	E09	6634	05	16.7	90	SF			C	0120	20	0.2	EF
	URUM	16	0214	0221	0300	N13	E09	6634	05	16.8	46	SF			C		96	1.0	E
0220	PALE	16	0135	0141	0145	S12	E64	6633	05	20.9	10	SF		3	E		18		
0221		16	06359	0654*	0830	N33	W55	6619	05	11.9	115	2N M	8.9				372	7.4	FHKU
	LEAR	16	0635	0654	0930D	N30	W56	6619	05	11.9	175D	2B M	8.9	3	E		288		F
	LEAR	16	0635	0702	0930D	N30	W56	6619	05	11.9	175D	3F			E		509		K
	WATU	16	0638	0703	0755	N34	W55	6619	05	11.9	77	3N			C	0703	550	13.0	F
	SVTO	16	0643	0706	0711D	N30	W54	6619	05	12.0	28D	2B		3	E		374		F
	PEKG	16	0644	0700	1015	N35	W58	6619	05	11.6	211	2B			C	0700	378	8.8	U
	HTPR	16	0644E	0709	0907D	N34	W55	6619	05	11.9	143D	2B				0709	490		
	ATHN	16	0654E	0658	0720	N33	W53	6619	05	12.1	26D	2B		2	V	0658	446	9.7	
	HTPR	16	0910E		1002D	N35	W50	6619	05	12.4	52D	1F				0911	200	3.2	
	KHAR	16	0955E		1030U	N36	W58	6619	05	11.7	35U	1F		1	P	1006	110	2.5	H
0222	KHAR	16	1007		1024U	S20	W21	6624	05	14.8	17U	SF		1	V	1008			E
		16	1131		1146	No Flare Patrol													
0223		16	1238	12421	1301	S16	W30	6624	05	14.2	23	SF					82	1.5	F
	HTPR	16	1238	1242	1300	S15	W32	6624	05	14.1	22	SF				1242	120	1.5	
	HOLL	16	1241E	1243	1302	S17	W29	6624	05	14.3	21D	SF		2	E		45		F
0224		16	13581	13593	1410	S16	W32	6624	05	14.1	12	SF					62	1.4	
	HTPR	16	1358	1402	1410	S15	W32	6624	05	14.1	12	SF				1402	110	1.4	
	HOLL	16	1359	1359	1410	S17	W33	6624	05	14.1	11	SF		3	E		15		
0225		16	14231	1444*	1516	S16	W33	6624	05	14.1	53	1F					178	4.3	FZ
	HOLL	16	1423	1503	1529	S16	W34	6624	05	14.0	66	SF		3	E		78		F
	HTPR	16	1424	1444	1520	S15	W35	6624	05	13.9	56	1F				1444	350	4.3	Z
	SVTO	16	1441E	1444	1520	S17	W34	6624	05	14.0	39D	1F		2	E		106		F
	RAMY	16	1444E		1453	S17	W30	6624	05	14.3	9D	SF		3	E				F
		16	1616		1627	No Flare Patrol													
0226	HOLL	16	1651	1704	1739	N13	W01	6634	05	16.6	48	SF		3	E		58		F
0227	HOLL	16	2210	2210	2217	N29	W63	6619	05	12.0	7	SF		3	E		29		F
0228	LEAR	17	0015	0034	0042	N29	W65	6619	05	11.9	27	SF		3	E		13		
0229	HOLL	17	0047	0047U	0107	S17	W35	6624	05	14.4	20	SF		2	E		15		FH
0230	LEAR	17	0104	0104	0109	N09	W56	6621	05	12.8	5	SF	C 1.4	3	E		50		F
0231	LEAR	17	0520	0538	0612	S14	W42	6624	05	14.0	52	SF		3	E		63		
0232		17	0652*	0726*	0822	S18	W38	6624	05	14.4	90	1N	C 3.2				153	1.9	DEFGI
	SVTO	17	0652	0728U	0728D	S17	W39	6624	05	14.3	36D	1F	C 3.2	3	E		228		
	LEAR	17	0714	0726	0911	S19	W39	6624	05	14.3	117	1F		3	E		109		
	HTPR	17	0715	0728	0800	S18	W35	6624	05	14.6	45	SF				0728	150	2.0	
	ISTA	17	0724	0726	0824	S17	W37	6624	05	14.5	60	1B							I
	KAND	17	0725	0736	0810	S16	W39	6624	05	14.3	45	1N			P	0736	166	2.2	E
	ISTA	17	0729		0745	S21	W33	6624	05	14.8	16	1N							G
	WATU	17	0735	0740	0744	S16	W39	6624	05	14.3	9	SF			C	0740	110	1.5	F
	ISTA	17	0800		0924	S17	W40	6624	05	14.3	84	1B							D
0233	HTPR	17	0725	0731	0815	S25	W33		05	14.7	50	SF				0731	50	0.7	G

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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
0234		17	0812	08133	0823	N28	W70	6619	05	11.9	11	1F					56		AF
	LEAR	17	0812	0813	0821	N28	W69	6619	05	11.9	9	SF		3	E		22		F
	HTPR	17	0812	0816	0825	N28	W70	6619	05	11.9	13	1F				0816	90		A
0235		17	0844*	0904	0927	N30	W72	6619	05	11.7	43	1N	M 3.3				150		A
	HTPR	17	0844	0904	0930	N32	W75	6619	05	11.4	46	1N				0904	180		A
	LEAR	17	0902	0904	0924	N30	W68	6619	05	12.0	22	1N		3	E		173		
	SVTO	17	0903	0904	1019D	N29	W73	6619	05	11.6	76D	SF	M 3.3	3	E		96		
0236	HTPR	17	0934	0935	0945	S28	E65		05	22.5	11	SN				0935	60	1.5	
0237	RAMY	17	1134	1145	1203	S13	E47	6633	05	21.0	29	SF		3	E		19		
0238		17	1252	1259	1320	S28	E10	6635	05	18.3	28	SF					97	1.3	FL
	HTPR	17	1252	1259	1320	S28	E10	6635	05	18.3	28	SF				1259	110	1.3	L
	HOLL	17	1304E	1304U	1312D	S28	E09	6635	05	18.2	8D	SF		2	E		84		F
0239		17	1314	1335*	1434	S14	E47	6633	05	21.1	80	SF					61		EFK
	HOLL	17	1314	1335	1434	S14	E47	6633	05	21.1	80	SF			E		70		K
	HOLL	17	1314	1359	1434	S14	E47	6633	05	21.1	80	SF		3	E		52		FE
0240	HOLL	17	1316	1319	1335	N29	W72	6619	05	11.9	19	SF		3	E		22		F
0241		17	13391	13418	1436	S15	W45	6624	05	14.2	57	1B	C 7.1				215	3.8	FKU
	HOLL	17	1339	1341	1434	S15	W46	6624	05	14.1	55	1B	C 7.1	3	E		134		UF
	HOLL	17	1339	1349	1434	S15	W46	6624	05	14.1	55	2B			E		261		K
	HTPR	17	1340	1342	1445	S15	W45	6624	05	14.2	65	1B				1342	250	3.8	
	RAMY	17	1341E		1430	S15	W42	6624	05	14.4	49D	1B		2	E				F
0242	HOLL	17	1355	1401	1423	S32	E53		05	21.8	28	SF		3	E		86		F
0243	HOLL	17	1405	1405	1411	N30	W72	6619	05	11.9	6	SF		3	E		18		F
0244		17	14094	14183	1510	S08	W35	6632	05	15.0	61	1N	C 2.7				153	2.6	FZ
	HOLL	17	1409	1418	1520	S09	W36	6632	05	14.9	71	1B	C 2.7	3	E		204		F
	HTPR	17	1413	1421	1500	S07	W33	6632	05	15.1	47	1N				1421	210	2.6	Z
	RAMY	17	1435E	1435U	1437D	S07	W37	6632	05	14.8	2D	SF		2	E		45		F
0245	HOLL	17	1541	1546	1553	N28	W77	6619	05	11.6	12	SF	C 1.5	3	E		35		F
0246	HOLL	17	1548	1552	1619	S14	E45	6633	05	21.0	31	SF		3	E		20		F
0247		17	1708	1711*	1739	S14	E45	6633	05	21.1	31	SF					22		FK
	HOLL	17	1708	1711	1739	S14	E45	6633	05	21.1	31	SF		3	E		28		F
	HOLL	17	1708	1730	1739	S14	E45	6633	05	21.1	31	SF			E		15		K
0248	HOLL	17	1822	1829	1843	S26	E67	6639	05	23.0	21	SF	C 2.4	3	E		64		F
0249	HOLL	17	1832	1833	1840	S17	W46	6624	05	14.3	8	SF		3	E		41		F
0250	HOLL	17	2029	2117	2125	S14	E42	6633	05	21.0	56	SN	C 1.8	3	E		97		F
0251	HOLL	17	2104	2107	2119	N30	W78	6619	05	11.7	15	SN	C 3.0	3	E		95		E
0252		17	2159	2222*	2405	S14	E41	6633	05	21.0	126	SB	C 4.2				76		FK
	HOLL	17	2159	2222	2359	S14	E43	6633	05	21.2	120	SB	C 4.2	3	E		78		F
	HOLL	17	2159	2306	2359	S14	E43	6633	05	21.2	120	SB			E		89		K
	LEAR	17	2305E	2305U	2417	S15	E38	6633	05	20.8	72D	SB		2	E		61		F
0253	HOLL	17	2208	2209	2213	N30	W80	6619	05	11.6	5	SF		3	E		37		
0254	HOLL	17	2242	2245	2257	S14	E29	6640A	05	20.1	15	SF		3	E		14		F
0255	HOLL	17	2303	2305	2309	N31	W80	6619	05	11.6	6	SN	C 5.9	3	E		50		E
0256	LEAR	18	0042	0048	0106	N32	W84	6619	05	11.4	24	SF		3	E		40		F

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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
0257		18	0046	0103	0142	S16	W52	6624	05	14.1	56	SN	C 6.9				103	0.3	EFU
	LEAR	18	0046	0103	0201	S14	W53	6624	05	14.0	75	1F	C 6.9	3	E		214		FE
	HOLL	18	0046	0105U	0150D	S17	W51	6624	05	14.1	64D	SN		2	E		80		UF
	YUNN	18	0113E	0113U	0124	S17	W53	6624	05	14.0	11D	SN			P	0113	16	0.3	
0258	LEAR	18	0140	0140	0144	S07	W45	6632	05	14.7	4	SF		3	E		26		
0259	TACH	18	0309E		0323	N31	W86	6619	05	11.3	14D	SN		2	C	0317	36		T
0260		18	0353*	04087	0433	S13	E33	6633	05	20.6	40	SN	C 3.0				68	0.8	DEFLT
	LEAR	18	0353	0409	0417	S13	E35	6633	05	20.8	24	SN	C 3.0	3	E		80		FE
	TACH	18	0404	0408	0419	S12	E33	6633	05	20.6	15	SB		2	C	0408	97	1.2	ET
	TACH	18	0408	0415	0502	S14	E30	6633	05	20.4	54	SN		2	C	0415	26	0.3	DTL
0261		18	0419*	0439*	0516	S16	W48	6624	05	14.5	57	SF					100	1.3	DF
	TACH	18	0419	0439	0513	S16	W47	6624	05	14.6	54	SB		1	C	0439	82	1.3	D
	LEAR	18	0421	0449	0537	S14	W50	6624	05	14.4	76	1F		3	E		157		F
	WATU	18	0436	0444	0448	S17	W47	6624	05	14.6	12	SF			C	0444	80	1.3	F
	SVTO	18	0453E	0504U	0529	S18	W47	6624	05	14.6	36D	SF		3	E		94		
	ABST	18	0500	0503	0514	S16	W49	6624	05	14.5	14	SF			C	0503	87	1.3	D
0262		18	0435*	05028	0524	S14	E37	6633	05	21.0	49	SN					115	2.0	EFT
	LEAR	18	0435	0502	0535	S15	E37	6633	05	21.0	60	SN		3	E		53		FE
	SVTO	18	0453E	0508U	0530	S13	E35	6633	05	20.8	37D	SF		3	E		66		
	TACH	18	0502E		0522	S13	E34	6633	05	20.8	20D	SB		1	C	0503	133	1.7	ET
	WATU	18	0502	0505	0512	S13	E37	6633	05	21.0	10	SF			C	0505	150	2.0	
	ABST	18	0505	0510	0520	S14	E40	6633	05	21.2	15	1N			C	0510	175	2.4	E
0263		18	0447*	05039	0525	S09	W46	6632	05	14.7	38	SF					60	1.4	DF
	LEAR	18	0447	0512	0537	S07	W47	6632	05	14.7	50	SF		3	E		38		F
	SVTO	18	0501	0502U	0529	S08	W46	6632	05	14.8	28	SF		3	E		26		
	ABST	18	0501	0503	0515	S07	W45	6632	05	14.8	14	SF			C	0503	87	1.3	D
	WATU	18	0502	0509	0520	S13	W47	6632	05	14.7	18	SF			C	0509	90	1.4	
0264		18	0506	0622*	0723	N18	W90		05	11.3	137	2N					482		K
	SVTO	18	0506	0622	0723	N18	W90		05	11.3	137	2N			E		571		K
	SVTO	18	0506	0643	0723	N18	W90		05	11.3	137	2N		3	E		393		
0265	HTPR	18	0540E		0800	N30	E80		05	24.5	140D	2N				0540	250		ABIK
0266	HTPR	18	0540E	0610	0800	N34	E90		05	25.4	140D	2B				0610	230		ABIKY
0267		18	0530*	0531*	0703	N31	W87	6619	05	11.4	93	2N	X 2.8				228	9.9	AEFTY
	ABST	18	0530	0531	0540	N24	W90	6619	05	11.3	10	1N			C	0531	131		AE
	ABST	18	0530	0534	0650	N30	W90	6619	05	11.1	80	1N			C	0534	87		AE
	TACH	18	0545E	0545	0639D	N28	W85	6619	05	11.6	54D	3F		1	C	0545	388		T
	ATHN	18	0545E	0548U	0610D	N33	W79	6619	05	12.0	25D	2N		3	V	0548	191	9.9	
	LEAR	18	0546E	0546	0748	N32	W85	6619	05	11.5	122D	2B	X 2.8	3	E		440		YF
	ABST	18	0547	0551	0605	N36	W90	6619	05	11.0	18	1N			C	0551	131		AE
	YUNN	18	0654E	0654U	0851	N34	W88	6619	05	11.3	117D				P	0654			Y
0268	LEAR	18	0754	0758	0805	S15	E36	6633	05	21.0	11	SF		3	E		13		
0269		18	0809	0810	0822	N30	W86	6619	05	11.6	13	SB					93		AY
	SVTO	18	0730E	0810U	0836D	N29	W89	6619	05	11.3	66D	SN		2	E		85		
	LEAR	18	0809	0810	0814	N32	W88	6619	05	11.4	5	SB		3	E		63		
	HTPR	18	0809	0810	0830	N30	W80	6619	05	12.0	21	1B				0810	130		AY
0270	HTPR	18	1024	1027	1035	S12	E35	6633	05	21.1	11	SF				1027	100	1.2	
0271	HTPR	18	1212	1216	1230	S12	E35	6633	05	21.1	18	SF				1216	70	0.9	
0272		18	13123	13132	1323	S12	E33	6633	05	21.0	11	SF					54	1.1	F
	HTPR	18	1312	1313	1325	S12	E35	6633	05	21.2	13	SF				1313	90	1.1	
	HOLL	18	1315	1315	1321	S11	E31	6633	05	20.9	6	SF		3	E		17		F
0273	HTPR	18	1356	1358	1410	S30	E50		05	22.5	14	SF				1358	20	0.3	

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0274		18	14032	14112	1421	N18	E40	6638	05	21.6	18	SF					24	0.4	T
	HOLL	18	1403	1413	1417	N17	E39	6638	05	21.5	14	SF		3	E		19		
	HTPR	18	1405	1411	1425	N18	E40	6638	05	21.6	20	SF				1411	30	0.4	T
0275	HOLL	18	1437	1457	1525	N14	W27	6634	05	16.6	48	SF		3	E		36		FH
0276		18	16031	16031	1626	S12	E31	6633	05	21.0	23	SF	C 1.4				48	0.7	EF
	HTPR	18	1603	1603	1620	S12	E32	6633	05	21.1	17	SF				1603	60	0.7	E
	HOLL	18	1604	1604	1631	S12	E30	6633	05	20.9	27	SF	C 1.4	3	E		37		F
0277		18	1604	16141	1652	N14	W28	6634	05	16.5	48	SF					86	1.3	FT
	HOLL	18	1604	1614	1652	N14	W28	6634	05	16.5	48	SF		3	E		61		F
	HTPR	18	1604	1615	1649D	N15	W28	6634	05	16.5	45D	SF				1615	110	1.3	T
0278	PALE	18	1915E	1915U	1948	S07	W55	6632	05	14.7	33D	SF	C 2.3	3	E		32		FH
0279	HOLL	18	1945	1959	2004	S30	E72	6639	05	24.5	19	SF		3	E		16		F
0280	HOLL	18	2051	2054	2115	S12	E27	6633	05	20.9	24	SN	C 2.4	3	E		98		F
0281	HOLL	18	2107	2116	2133	S31	E67	6639	05	24.2	26	SF		3	E		25		
0282	HOLL	18	2229	2229	2235	S17	W61	6624	05	14.3	6	SF		3	E		18		
0283	LEAR	19	0025	0041	0103	S22	E14	6640	05	20.1	38	SF		3	E		21		
0284	LEAR	19	0036	0038	0043	S15	E26	6633	05	21.0	7	SF		3	E		26		
0285	SVTO	19	0456	0506	0529	S17	W71	6624	05	13.8	33	SF		3	E		18		
0286		19	0735	0853	0858	S06	W65	6632	05	14.4	83	1N					67	2.1	DK
	LEAR	19	0735	0853	0934D	S05	W66	6632	05	14.4	119D	SF		3	E		48		
	ONDR	19	0818E	0823U	0858	S07	W64	6632	05	14.5	40D	1N				0823	86	2.1	DK
0287	LEAR	19	0816	0821	0845	N15	W35	6634	05	16.7	29	SF		3	E		22		F
0288	KHAR	19	1000E	1002U	1007	S07	W65	6632	05	14.5	7D	SF		1	P	1004	60	1.4	DLT
0289		19	1017	1018	1021	S07	W65	6632	05	14.5	4	SF							DLT
	KHAR	19	1017	1018	1021	S07	W65	6632	05	14.5	4	SF		1	V	1018			DLT
	KHAR	19	1026U	1026U	1035U	S07	W65	6632	05	14.6	9U	SF		1	P	1026			DLT
0290	KHAR	19	1028	1029	1043D	N17	E24	6638	05	21.2	15D	SF		1	P	1031	80	0.9	H
0291	RAMY	19	1031E	1035U	1052	S11	E18	6633	05	20.8	21D	SF		2	E		25		F
0292		19	13431	13554	1509	S12	E16	6633	05	20.8	86	1N	M 1.2				235		FU
	KANZ	19	1343	1355	1511	S12	E16	6633	05	20.8	88	1B		2	C				U
	RAMY	19	1344	1359	1507	S11	E17	6633	05	20.8	83	1F	M 1.2	3	E		235		F
0293	SVTO	19	1609E	1613	1627	N15	W48	6634	05	16.0	18D	SF		3	E		28		F
0294	KANZ	19	1631	1638	1652	N19	W46	6634	05	16.2	21	SF		2	C				
0295	PALE	20	0014	0029U	0049D	S12	W78	6624	05	14.1	35D	SF		3	E		26		
0296		20	0125*	0151*	0516	S06	W77	6632	05	14.3	231	1F					54		DT
	LEAR	20	0125	0229	0516	S06	W77	6632	05	14.3	231	SF		3	E		37		T
	VORO	20	0149	0151	0157U	S07	W77	6632	05	14.3	8U	1F		1	C	0151	72		D
		20	2042		2046	No Flare Patrol													
0297	LEAR	20	2343E	2343	2402	S29	W38	6635	05	18.0	19D	SF		3	E		40		
0298		21	00031	00064	0023	S09	W03	6633	05	20.8	20	SF					27		F
	PALE	21	0003	0006	0019	S08	W01	6633	05	20.9	16	SF		3	E		15		F
	LEAR	21	0004	0010	0027	S10	W05	6633	05	20.6	23	SF		3	E		39		F
0299	LEAR	21	0144	0144	0150	S32	E41	6639	05	24.3	6	SF		3	E		11		F

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0300	LEAR	21	0353	0354	0409	S10	W52	6642	05	17.2	16	SF		3	E		28		F
0301		21	06219	06257	0638	N22	E88	6644	05	28.0	17	1N					62		AD
	ABST	21	0621	0625	0640	N23	E90	6644	05	28.2	19	1N			C	0628	87		AD
	SVTO	21	0630	0632	0635	N22	E86	6644	05	27.9	5	SF		3	E		36		
0302		21	07007	0713	0728	S30	E38	6639	05	24.3	28	SF					43	0.8	E
	HTPR	21	0700	0713	0730	S30	E40	6639	05	24.4	30	SF				0713	60	0.8	E
	SVTO	21	0707	0713	0725	S30	E36	6639	05	24.1	18	SF		3	E		26		
0303		21	0741*	07524	0808	N21	E88	6644	05	28.1	27	SF					36		T
	HTPR	21	0741	0752	0815	N20	E90	6644	05	28.2	34	SN				0752	40		T
	KANZ	21	0752E	0755	0810	N21	E85	6644	05	27.8	18D	SF		1	C				
	SVTO	21	0753	0756	0758	N23	E89	6644	05	28.2	5	SF		3	E		32		
0304		21	0817*	08582	0900	N20	E86	6644	05	27.9	43	SN					75		DRT
	HTPR	21	0817	0858	0910	N20	E90	6644	05	28.2	53	1N				0858	70		T
	KHAR	21	0825E		0838	N22	E90	6644	05	28.3	13D	SF		2	P	0825			D
	KHAR	21	0850U		0903	N22	E90	6644	05	28.3	13U	SF		2	P	0858			DR
	SVTO	21	0857	0900	0904	N22	E89	6644	05	28.2	7	1F		3	E		105		
	KANZ	21	0858	0858	0906	N20	E84	6644	05	27.8	8	SB		2	C				
	LEAR	21	0858	0900	0902	N17	E76	6644	05	27.1	4	SF		3	E		49		
0305		21	0930*	09431	1008	N22	E89	6644	05	28.2	38	1N	C 5.3				190		T
	HTPR	21	0930	0943	1015	N20	E90	6644	05	28.3	45	1B				0943	160		T
	SVTO	21	0942	0944	0957	N23	E89	6644	05	28.3	15	1N	C 5.3	3	E		221		
	KANZ	21	0946E	0946U	1012	N22	E87	6644	05	28.1	26D	1F		2	C				
0306		21	09413	09506	1055	S30	E39	6639	05	24.5	74	SN					123	2.8	U
	HTPR	21	0941	0956	1100	S30	E37	6639	05	24.3	79	SN				0956	140	2.0	U
	SVTO	21	0944	0950	1050	S31	E39	6639	05	24.5	66	SF		3	E		66		
	KANZ	21	0946E	0953	1102	S29	E37	6639	05	24.3	76D	1F		2	C				
	ATHN	21	0950E	0955U	1005D	S30	E49	6639	05	25.3	15D	1B		3	V	0955	191	3.5	
	RAMY	21	1013E	1013U	1047	S31	E35	6639	05	24.2	34D	SF		2	E		95		
0307	KANZ	21	1046	1050	1054	N22	E88	6644	05	28.2	8	SF		2	C				
0308	SVTO	21	1103	1106	1113	N06	E54	6645	05	25.5	10	SF		3	E		20		
0309		21	11063	11091	1122	N22	E86	6644	05	28.1	16	SF					38		
	KANZ	21	1106	1109	1124	N22	E88	6644	05	28.2	18	SF		2	C				
	SVTO	21	1109	1110	1121	N22	E84	6644	05	27.9	12	SF		3	E		38		
0310	KANZ	21	1158	1202	1239	N22	E88	6644	05	28.3	41	SF		2	C				
0311		21	13143	1318	1326	N22	E88	6644	05	28.3	12	SF					23		
	KANZ	21	1314	1318	1326	N22	E88	6644	05	28.3	12	SF		2	C				
	SVTO	21	1317	1318	1325	N22	E89	6644	05	28.4	8	SF		3	E		23		
0312		21	1341	1354	1416	N22	E88	6644	05	28.3	35	SF					77		
	SVTO	21	1341	1354	1414	N23	E89	6644	05	28.4	33	SF		3	E		77		
	KANZ	21	1341	1354	1419	N22	E88	6644	05	28.3	38	SF		2	C				
0313	SVTO	21	1352	1418	1429	S11	W15	6633	05	20.4	37	SF		3	E		21		F
0314		21	1532*	15507	1603	N23	E84	6644	05	28.1	31	SF					40		
	SVTO	21	1532	1550	1552	N23	E84	6644	05	28.1	20	SF		3	E		19		
	SVTO	21	1552	1557	1614	N23	E83	6644	05	28.0	22	SF		3	E		60		
0315	SVTO	21	1616	1651	1705	N23	E86	6644	05	28.3	49	SF	C 2.3	3	E		62		
		21	1751		1816	No Flare Patrol													
		21	1829		1854	No Flare Patrol													
		21	1858		1935	No Flare Patrol													
		21	1946		2312	No Flare Patrol													
		21	2335		2341	No Flare Patrol													
0316		21	2345	2404	2428	N18	W09	6638	05	21.3	43	1N					134		EFH
	LEAR	21	2345	2404	2428	N18	W09	6638	05	21.3	43	1N		3	E		176		FE
	PALE	22	0004E	0011U	0037D	N18	W09	6638	05	21.3	33D	SF		3	E		93		H

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0317		22	0019*	0023*	0137	S29	W02	6637	05	21.8	78	2N	C 6.4				347	4.0	EFGKU
	LEAR	22	0019	0023	0153	S29	W03	6637	05	21.8	94	2N			E		173		K
	LEAR	22	0019	0039	0153	S29	W03	6637	05	21.8	94	2N	C 6.4	3	E		562		FE
	PALE	22	0020E	0040U	0137D	S29	E01	6637	05	22.1	77D	2F		3	E		314		UF
	WATU	22	0052	0058	0106	S29	W01	6637	05	21.9	14	1N			C	0058	340	4.0	FGU
0318	LEAR	22	0039	0052	0153	N17	E73	6644A	05	27.6	74	SF		3	E		59		F
0319	PALE	22	0123E	0126U	0136D	N23	E82	6644	05	28.4	13D	SF		3	E		90		
0320	TACH	22	0313	0336	0355	N23	E83	6644	05	28.5	42	1N		3	C	0336	214		ET
0321		22	04204	04243	0440	S20	W27	6640	05	20.1	20	SN	C 2.4				74	2.1	EFL
	LEAR	22	0420	0425	0442	S20	W28	6640	05	20.0	22	SF	C 2.4	3	E		32		F
	TACH	22	0421	0424	0436	S19	W27	6640	05	20.1	15	1B		2	C	0424	168	2.1	EL
	SVTO	22	0424	0427	0443	S22	W26	6640	05	20.2	19	SF		3	E		22		
0322	LEAR	22	0441	0446	0451	N18	W12	6638	05	21.3	10	SF		3	E		24		F
0323		22	0456*	0507*	0605	N21	E78	6644	05	28.2	69	1N	C 3.9				98		EFY
	WATU	22	0456	0507	0515	N20	E77	6644	05	28.1	19	1F			P	0507	50		F
	SVTO	22	0512	0554	0624	N23	E76	6644	05	28.1	72	1N	C 3.9	3	E		144		
	TACH	22	0522	0552	0602	N23	E83	6644	05	28.6	40	SB		2	C	0552	96		EY
	LEAR	22	0549	0553	0615	N17	E80	6644	05	28.3	26	1N		3	E		104		
	KANZ	22	0615E	0615U	0627	N21	E74	6644	05	27.9	12D	1F		2	C				
0324		22	0743	07443	0758	N18	W12	6638	05	21.4	15	SF	C 2.4				26		F
	SVTO	22	0743	0744	0759	N18	W12	6638	05	21.4	16	SF	C 2.4	3	E		20		
	LEAR	22	0743	0746	0805	N18	W11	6638	05	21.5	22	SF		3	E		33		F
	KANZ	22	0743	0747	0751	N18	W12	6638	05	21.4	8	SF		2	C				
0325	KANZ	22	1259	1259	1303	S29	W55		05	18.2	4	SF		2	C				
0326	KANZ	22	1333	1333	1344	N18	W18	6638	05	21.2	11	SF		2	C				
0327	SVTO	23	0813	0840	0916	N23	E65	6644	05	28.3	63	SF		3	E		45		
0328		23	0848	08502	0908	S14	W22	6646	05	21.7	20	SF					14		
	SVTO	23	0848	0850	0908	S14	W22	6646	05	21.7	20	SF		3	E		14		
	KANZ	23	0848E	0852	0907	S13	W23	6646	05	21.6	19D	SF		2	C				
0329	SVTO	23	1359	1403	1412	N06	E22	6645	05	25.2	13	SF		3	E		27		
0330		23	16322	16381	1651	N06	E20	6645	05	25.2	19	SF					36		F
	SVTO	23	1632	1639	1653	N06	E21	6645	05	25.3	21	SF		3	E		43		
	PALE	23	1634E	1634U	1649	N05	E18	6645	05	25.0	15D	SF		3	E		30		F
	KANZ	23	1634	1638	1644D	N06	E21	6645	05	25.3	10D	SF		2	C				
0331	KANZ	23	1634	1638	1644D	N22	E57	6644	05	28.1	10D	SF		2	C				
0332	PALE	23	1758	1812	1842	N20	E58	6644	05	28.2	44	SF	C 1.4	4	E		27		F
0333	PALE	23	1905	1905	1931	S15	W44	6633	05	20.5	26	SF		4	E		19		
0334	PALE	23	1905	1916	1935	S19	W47	6640	05	20.2	30	SF	C 3.8	4	E		68		FH
0335		24	03081	03103	0316	N20	E51	6644	05	28.0	8	SF	C 1.1				29	0.8	E
	LEAR	24	0308	0313	0317	N20	E51	6644	05	28.0	9	SF	C 1.1	3	E		23		
	PALE	24	0309	0310	0315	N21	E52	6644	05	28.1	6	SF		3	E		17		
	URUM	24	0309	0312	0315	N19	E51	6644	05	28.0	6	SN			C		48	0.8	E
0336	HTPR	24	0950	1010	1035	N21	E53	6644	05	28.5	45	SF				1010	120	1.9	T
0337	HTPR	24	1110	1120	1135	N21	E53	6644	05	28.5	25	SF				1120	110	1.8	T
0338		24	13212	1323	1328	N21	E46	6644	05	28.1	7	SN							T
	HTPR	24	1321		1328	N20	E48	6644	05	28.2	7	SN							T
	KANZ	24	1323	1323	1327	N22	E44	6644	05	27.9	4	SF		2	C				

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0339	KANZ	24	1323	1334U	1334D	N06	E10	6645	05	25.3	11D	SF		2	C				
0340		24	14133	14204	1439	N05	E12	6645	05	25.5	26	SF					80	0.8	
	HTPR	24	1413	1420	1440	N05	E12	6645	05	25.5	27	SF				1420	80	0.8	
	KANZ	24	1416	1424	1438	N05	E11	6645	05	25.4	22	SF		2	C				
0341	HTPR	24	1540	1548	1600	N24	E46	6644	05	28.2	20	SN				1548	40	0.6	T
0342	PALE	24	1706	1708	1711	N20	E47	6644	05	28.3	5	SF		3	E		17		F
0343	PALE	24	1840E	1844U	1915D	S13	W54	6633	05	20.7	35D	SF		3	E		60		
0344	PALE	24	1842E	1842U	1904D	S13	W43	6646	05	21.5	22D	SF	C 2.3	3	E		16		F
0345	PALE	24	2147E	2150U	2153D	S21	W80		05	18.8	6D	SF		3	E		32		
		25	0326		0333	No Flare Patrol													
0346		25	0412	0414	0423	N18	E40	6644	05	28.2	11	SF	C 3.3				39		F
	LEAR	25	0356E	0421U	0449D	N18	E41	6644	05	28.3	53D	SF	C 3.3	3	E		59		
	PALE	25	0412	0414	0423	N19	E40	6644	05	28.2	11	SF		3	E		19		F
		25	1122		1132	No Flare Patrol													
0347	SVTO	25	1405	1415	1446	N22	E35	6644	05	28.3	41	1F	C 5.7	3	E		106		
0348	SVTO	25	1506	1512U	1655D	N21	E33	6644	05	28.1	109D	SF	C 1.3	2	E		21		
0349	PALE	25	2213	2215	2217	S10	E90	6652	06	1.7	4	SF	C 6.4	3	E		20		
0350	PALE	25	2306	2308	2312	S17	W53	6646	05	21.9	6	SF		3	E		19		
0351	PALE	25	2307	2307	2310	N17	W17	6647	05	24.7	3	SF	C 3.0	3	E		15		
0352	PALE	25	2333	2337	2340	N17	W17	6647	05	24.7	7	SF		3	E		20		
0353	PALE	26	0020	0020	0024	N21	E31	6644	05	28.4	4	SF		3	E		16		
0354		26	03431	03461	0412	N06	W11	6645	05	25.3	29	SN					63	0.9	D
	LEAR	26	0343	0346	0404	N06	W11	6645	05	25.3	21	SF		3	E		42		
	PEKG	26	0344	0347	0421	N07	W11	6645	05	25.3	37	SN			P	0347	84	0.9	D
0355	PEKG	26	0514	0520	0525	N20	E30	6644	05	28.5	11	SN			P	0520	42	0.5	D
0356		26	0535*	0540*	0626	N20	E28	6644	05	28.4	51	SN					56	0.7	DE
	ABST	26	0535	0540	0650	N21	E28	6644	05	28.4	75	SF			C	0640	87	1.1	D
	URUM	26	0538	0540	0550	N19	E29	6644	05	28.4	12	SB			C		64	0.8	D
	PEKG	26	0545	0546	0638	N20	E30	6644	05	28.5	53	SN			P	0555	42	0.5	D
	URUM	26	0558	0602	0615D	N18	E27	6644	05	28.3	17D	SF			C		32	0.4	E
0357	LEAR	26	0819	0823	0838	N20	E24	6644	05	28.2	19	SF	C 1.6	3	E		34		
0358		26	08343	08381	0852	S15	W62	6646	05	21.7	18	SF					44		F
	SVTO	26	0834	0838	0851	S15	W62	6646	05	21.7	17	SF		3	E		50		F
	LEAR	26	0837	0839	0854	S15	W62	6646	05	21.7	17	SF		3	E		39		
0359	LEAR	26	0841	0855	0921	N20	E26	6644	05	28.3	40	SF	C 3.9	3	E		30		
0360		26	08511	08541	0859	S10	E76	6652	06	1.1	8	SF					86		F
	LEAR	26	0851	0855	0900	S14	E74	6652	06	1.0	9	SF		3	E		88		
	SVTO	26	0852	0854	0858	S07	E79	6652	06	1.3	6	SF		3	E		84		F
0361		26	09039	0910*	0948	S12	E45	6649	05	29.8	45	SF	C 2.2				26		F
	LEAR	26	0903	0910	0933D	S13	E43	6649	05	29.6	30D	SF		3	E		27		
	SVTO	26	0912	0921	0948	S12	E47	6649	05	29.9	36	SF	C 2.2	3	E		26		F
0362	PALE	26	2028	2028	2033	N22	E20	6644	05	28.4	5	SF	C 2.0	3	E		13		
0363	LEAR	27	0017	0020	0033	N21	E18	6644	05	28.4	16	SF		3	E		13		F

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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
0364	LEAR	27	0142	0144	0207	N20	E17	6644	05	28.4	25	SF	M 1.1	3	E		32		F
0365		27	0142	0146*	0218	S11	E70	6652	06	1.3	36	1F	C 7.1				127		EFK
	VORO	27	0142	0146	0159	S11	E72	6652	06	1.5	17	1F		1	C	0146	99		E
	LEAR	27	0142	0146	0228	S11	E69	6652	06	1.3	46	1F		3	E		152		F
	LEAR	27	0142	0204	0228	S11	E69	6652	06	1.3	46	1F			E		145		K
	PALE	27	0151E	0151U	0221D	S11	E72	6652	06	1.5	30D	1F	C 7.1	3	E		113		F
0366	PALE	27	0242	0246	0252	N23	E17	6644	05	28.4	10	SF		3	E		18		F
0367		27	02545	03021	0323	N20	W26	6650	05	25.1	29	SN					54	0.8	EF
	LEAR	27	0254	0303	0314	N19	W26	6650	05	25.1	20	SF		3	E		68		F
	PALE	27	0259	0302	0311	N20	W26	6650	05	25.1	12	SF		3	E		27		
	TACH	27	0301E		0343	N20	W26	6650	05	25.1	42D	SB		2	C	0301	66	0.8	E
0368	LEAR	27	0303	0309	0322	S15	W72	6646	05	21.7	19	SF		3	E		31		
0369	TACH	27	0351	0353	0405	S18	W73	6646	05	21.6	14	SN		2	C	0353	8		D
0370		27	0444*	0447*	0536	N06	E77	6654	06	2.0	52	1N					94		DK
	TACH	27	0444	0447	0537	N06	E80	6654	06	2.2	53	1N		2	C	0447	122		DK
	LEAR	27	0526	0530	0534	N05	E74	6654	06	1.8	8	SF		3	E		65		
0371	LEAR	27	0610	0612	0627	N20	W29	6650	05	25.0	17	SF		3	E		37		
0372		27	0641	0643	0716	N22	E14	6644	05	28.3	35	SN	C 2.3				86	1.2	E
	LEAR	27	0641	0643	0737	N21	E13	6644	05	28.3	56	SF	C 2.3	3	E		69		
	ONDR	27	0645E	0645U	0655	N22	E14	6644	05	28.3	10D	SN				0645	104	1.2	E
0373	KANZ	27	0828	0832	0841D	N03	E73	6654	06	1.8	13D	SF		2	C				
0374	RAMY	27	1309	1310	1312	N06	E69	6654	06	1.7	3	SF	C 2.5	3	E		27		
0375	KANZ	27	1548	1548	1556	S06	E60	6652	06	1.1	8	SF		2	C				
0376	KANZ	27	1548	1556	1614	N08	E69	6654	06	1.8	26	SF		2	C				
0377	KANZ	27	1606	1614	1639	S12	W76	6646	05	21.9	33	SF		2	C				
0378	KANZ	27	1614	1621	1628	N07	E67	6654	06	1.7	14	SF		2	C				
0379	RAMY	27	1632	1633	1638	S10	E64	6652	06	1.5	6	SF		3	E		15		
0380	KANZ	27	1647	1647	1651	N09	E72	6654A	06	2.1	4	SF		2	C				
0381	KANZ	27	1655	1655	1705	S06	E58	6652	06	1.0	10	SF		2	C				
0382	KANZ	27	1655	1659	1705	N08	E65	6654	06	1.6	10	SF		2	C				
0383	PALE	27	1907	1908	1919	N06	E67	6654	06	1.8	12	1F	C 7.4	3	E		145		F
0384	PALE	27	1907	1907	1913	S08	E63	6652	06	1.5	6	SF		3	E		18		F
0385		27	19443	1953	2000	N07	E66	6654	06	1.8	16	SF	C 1.9				36		F
	RAMY	27	1944	1953	1959	N06	E64	6654	06	1.6	15	SF	C 1.9	3	E		33		F
	PALE	27	1947	1953	2002	N08	E67	6654	06	1.8	15	SF		3	E		40		F
0386		27	20329	20338	2046	N06	E66	6654	06	1.8	14	SF					20		F
	RAMY	27	2032	2033	2041	N04	E66	6654	06	1.8	9	SF		3	E		17		
	PALE	27	2041	2041	2050	N08	E65	6654	06	1.7	9	SF		3	E		22		F
0387	RAMY	27	2049	2049	2056	S09	E57	6652	06	1.1	7	SF		3	E		21		F
0388	PALE	27	2101	2102	2109	N07	E68	6654	06	2.0	8	SF	C 5.0	3	E		39		
0389	PALE	27	2217	2221U	2227	N08	E65	6654	06	1.8	10	SF	C 2.9	3	E		40		F
0390	PALE	27	2238	2242	2249	N07	E64	6654	06	1.7	11	SF		3	E		46		F

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0391	PALE	27	2311	2313	2330	N05	E65	6654	06	1.8	19	1F	M 1.1	3	E		205		EF
0392	LEAR	27	2327	2349	2432	N18	W51	6647	05	24.1	65	SF		3	E		81		
0393	LEAR	27	2330	2358	2404D	N06	E67	6654	06	2.0	34D	SF		3	E		90		
0394	LEAR	27	2351	2353	2428	N22	E05	6644	05	28.4	37	SF		3	E		44		
0395	LEAR	28	0023	0032	0038	S08	W83	6646	05	21.8	15	SF	C 2.1	3	E		48		
0396		28	0058*	0103*	0144	N04	E64	6654	06	1.8	46	1N	C 3.3				238		FHK
	PALE	28	0058	0103	0111	N07	E69	6654	06	2.2	13	SF	C 3.3	3	E		43		F
	LEAR	28	0058	0104	0202	N01	E62	6654	06	1.7	64	1B			E		108		K
	LEAR	28	0058	0120	0202	N01	E62	6654	06	1.7	64	2B		3	E		477		
	PALE	28	0117	0120	0139	N05	E64	6654	06	1.8	22	2F		3	E		324		FH
0397	WATU	28	0155	0158	0210	S12	W85	6646	05	21.7	15	1N			C	0158	130		
0398		28	03292	03323	0345	N04	E62	6654	06	1.8	16	1F	M 1.5				184	4.0	EF
	URUM	28	0329	0332	0345	N03	E62	6654	06	1.8	16	1N			C		177	3.9	E
	PALE	28	0329	0334	0351	N05	E62	6654	06	1.8	22	1F	M 1.5	3	E		184		F
	WATU	28	0331	0335	0338	N05	E62	6654	06	1.8	7	1F			C	0335	190	4.1	F
0399		28	0421	04373	0456	N06	E62	6654	06	1.8	35	SF					43	1.0	D
	URUM	28	0421	0437	0505	N07	E60	6654	06	1.7	44	SF			C		48	1.0	D
	PALE	28	0435E	0440	0447	N06	E63	6654	06	1.9	12D	SF		2	E		38		
0400		28	0514*	05316	0544	N08	E64	6654	06	2.0	30	1N	M 2.2				156	3.7	EFH
	SVTO	28	0514	0537	0549	N09	E64	6654	06	2.0	35	1F	M 2.2	3	E		169		FH
	URUM	28	0521	0531	0605D	N07	E65	6654	06	2.1	44D	1N			C		129		E
	WATU	28	0529	0531	0538	N07	E62	6654	06	1.9	9	1N			C	0531	170	3.7	F
0401		28	0548E	0550U	0630	S11	W90	6646	05	21.5	42D	1N					87		AD
	ABST	28	0548E	0550U	0616	S11	W90	6646	05	21.5	28D	1N			P	0550	87		AD
	HTPR	28	0557E		0645	S11	W90	6646	05	21.5	48D	SN							
0402		28	0654*	0659*	0719	N07	E59	6654	06	1.7	25	1N	M 3.2				122	1.8	DEHKT
	ABST	28	0654	0659	0713	N08	E60	6654	06	1.8	19	SN			C	0659	87	1.9	D
	HTPR	28	0655	0700	0715	N08	E60	6654	06	1.8	20	1B				0700	100		HT
	YUNN	28	0657	0702	0713	N07	E57	6654	06	1.5	16	SN			C		79	1.5	
	ONDR	28	0658	0659U	0727	N06	E61	6654	06	1.8	29	1N				0659	97	2.1	EK
	KANZ	28	0658	0702	0801D	N07	E59	6654	06	1.7	63D	1N		2	C				
	LEAR	28	0700E	0701U	0817D	N06	E61	6654	06	1.8	77D	2B	M 3.2	3	E		290		
	HTPR	28	0718	0722	0725	N05	E59	6654	06	1.7	7	SN				0722	80		T
0403	YUNN	28	0702	0705	0718	N14	W02	6656	05	28.1	16	SF			C		47	0.5	
0404		28	0727*	07291	0753	S12	W89	6646	05	21.6	26	1N					60		ACDV
	HTPR	28	0727	0730	0800	S12	W90	6646	05	21.5	33	SN							
	ABST	28	0728	0729	0737	S13	W90	6646	05	21.5	9	1N			C	0729	87		ADV
	KANZ	28	0730	0730	0738	S12	W85	6646	05	21.9	8	1N		2	C				
	ONDR	28	0730	0734U	0737D	S12	W90	6646	05	21.5	7D	1B				0734	24		AC
	ONDR	28	0754	0757U	0818	S13	W90	6646	05	21.5	24	2N				0757	69		A
0405		28	0750	0753*	0813	N07	E60	6654	06	1.8	23	1N					95	2.0	EFHT
	HTPR	28	0750	0753	0820	N08	E60	6654	06	1.8	30	1B				0753	110		FHT
	URUM	28	0752E	0752U	0800	N06	E60	6654	06	1.8	8D	1N			C		129	2.7	E
	ONDR	28	0752E	0753	0757D	N07	E62	6654	06	2.0	5D	1N				0753	111	2.5	ET
	YUNN	28	0755E	0806	0820	N08	E60	6654	06	1.8	25D	SN			P		31	0.7	
0406		28	10126	10194	1046	N07	E59	6654	06	1.8	34	1B	M 5.3				153	3.8	EFHT
	HTPR	28	1012	1019	1031	N06	E58	6654	06	1.8	19	1B				1019	130		FHT
	SVTO	28	1018	1023	1031	N08	E57	6654	06	1.7	13	1B	M 5.3	3	E		137		H
	URUM	28	1022E	1022	1030	N07	E58	6654	06	1.8	8D	1B			C		193	3.8	E
	RAMY	28	1032E		1134	N07	E62	6654	06	2.1	62D	SF		3	E				F
0407	HTPR	28	1205		1229D	N08	E58	6654	06	1.8	24D	1F							FT
0408	SVTO	28	1305E	1313U	1330	N08	E55	6654	06	1.7	25D	1B	M 2.4	2	E		127		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	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0409		28	1502	1518	1540D	N08	E58	6654	06	2.0	38D	1B	M 1.7				142		F
	KANZ	28	1502	1518	1540D	N08	E57	6654	06	1.9	38D	1B		2	C				
	SVTO	28	1518E	1520U	1521D	N07	E59	6654	06	2.0	3D	1N	M 1.7	2	E		142		F
0410	KANZ	28	1556	1604	1633	S04	E59	6655	06	2.1	37	SF		2	C				
0411		28	1614	1626	1644	N06	E56	6654	06	1.9	30	1B	M 1.5				124		F
	KANZ	28	1614	1626	1644	N07	E54	6654	06	1.7	30	1B		2	C				
	PALE	28	1624E	1624U	1645D	N06	E59	6654	06	2.1	21D	1B	M 1.5	3	E		124		F
0412	KANZ	28	1703	1706	1720	N05	E53	6654	06	1.7	17	SF		2	C				
0413	PALE	28	2206	2212	2224D	N08	E52	6654	06	1.8	18D	1N	M 1.4	3	E		178		EF
0414		29	0009	00105	0020	N05	E52	6654	06	1.9	11	SF					38	0.9	EIJT
	PALE	29	0009	0010	0021	N05	E52	6654	06	1.9	12	SF		3	E		22		
	VORO	29	0009	0015	0020	N05	E52	6654	06	1.9	11	SF		1	C	0015	54	0.9	EIJT
0415	VORO	29	0038	0039	0046	S10	E43	6652	06	1.2	8	SF		1	C	0039	99	1.3	EI
0416		29	01111	01192	0130	N07	E49	6654	06	1.7	19	SF	C 5.9				98	1.6	EFIJT
	PALE	29	0111	0121	0131	N07	E49	6654	06	1.7	20	SF	C 5.9	3	E		84		F
	VORO	29	0112	0119	0129	N08	E49	6654	06	1.7	17	SF		1	C	0119	81	1.2	EIJT
	URUM	29	0120E	0120	0130	N07	E48	6654	06	1.6	10D	SN			C		129	2.0	E
0417	PALE	29	0205	0211U	0214	N07	E53	6654	06	2.0	9	SF		3	E		15		
0418		29	02581	03014	0318	N07	E48	6654	06	1.7	20	1N	M 1.3				166	1.9	EF
	PALE	29	0258	0301	0318	N07	E49	6654	06	1.8	20	1N	M 1.3	3	E		207		FE
	YUNN	29	0259	0305	0309D	N07	E48	6654	06	1.7	10D	SN			P		126	1.9	
0419	LEAR	29	0303	0303	0322	N21	W09	6644	05	28.4	19	SF		3	E		44		
0420		29	0315*	03265	0348	N14	W14	6656	05	28.1	33	SN					100	1.5	E
	TACH	29	0306E	0326	0349	N13	W14	6656	05	28.1	43D	1B		3	C	0326	240	2.6	E
	LEAR	29	0315	0331	0351	N14	W13	6656	05	28.1	36	SF		3	E		27		
	URUM	29	0326	0330	0344	N14	W15	6656	05	28.0	18	SF			C		32	0.4	E
0421		29	0441*	04475	0513	N07	E48	6654	06	1.8	32	1N	M 1.7				207	3.8	DEFHJKLT
	TACH	29	0441	0447	0546	N05	E49	6654	06	1.9	65	2N		3	C	0447	627	9.9	EJKLT
	PALE	29	0442	0447	0458D	N07	E50	6654	06	1.9	16D	1N		2	E		116		F
	SVTO	29	0442	0447	0515	N08	E48	6654	06	1.8	33	1N	M 1.7	3	E		144		FH
	ONDR	29	0450E	0451	0457	N07	E47	6654	06	1.7	7D	SN				0451	76	1.2	DT
	URUM	29	0450E	0452	0505	N07	E47	6654	06	1.7	15D	1N			C		193	3.0	E
	ABST	29	0454	0454U	0500	N06	E45	6654	06	1.6	6	SF			P	0454	87	1.3	D
0422		29	05081	05106	0527	S09	E39	6652	06	1.1	19	SN					133	2.2	EFT
	SVTO	29	0508	0510	0528	S08	E40	6652	06	1.2	20	SF		3	E		42		F
	ONDR	29	0508	0511U	0518	S08	E38	6652	06	1.1	10	SN				0511	104	1.4	FT
	TACH	29	0508	0516	0536	S08	E41	6652	06	1.3	28	1B		3	C	0516	265	3.7	E
	ABST	29	0509	0511	0520D	S11	E40	6652	06	1.2	11D	1N			C	0511	174	2.4	E
	URUM	29	0512E	0514	0525	S09	E38	6652	06	1.1	13D	SF			C		80	1.1	E
0423		29	06112	0613	0623	N05	E49	6654	06	1.9	12	SF					80	1.3	DEFT
	ABST	29	0611	0613	0621	N05	E50	6654	06	2.0	10	1F			C	0613	174	2.8	F
	YUNN	29	0611E	0613	0627	N06	E49	6654	06	1.9	16D	SN			P		31	0.5	E
	ONDR	29	0613	0615U	0622	N04	E47	6654	06	1.8	9	SF				0615	35	0.5	DT
0424		29	07093	07106	0724	N05	E46	6654	06	1.7	15	1N					152	2.2	DEH
	ABST	29	0709	0710	0725D	N04	E46	6654	06	1.7	16D	1N			C	0710	174	2.7	D
	HTPR	29	0710	0714	0730	N05	E47	6654	06	1.8	20	SN				0714	120	1.7	H
	HURB	29	0711	0715	0722D	N06	E44	6654	06	1.6	11D	2F			V				
	YUNN	29	0711	0716	0722	N05	E47	6654	06	1.8	11	SN			C		94	1.4	E
	WATU	29	0712	0716	0720	N05	E45	6654	06	1.7	8	1F			C	0716	220	3.2	
	KANZ	29	0714E	0714U	0718D	N05	E45	6654	06	1.7	4D	SF		2	C				
0425		29	0809	08101	0816	N04	E50	6654	06	2.1	7	1N					16	0.3	D
	HURB	29	0808E	0810	0816D	N04	E50	6654	06	2.1	8D	1N			V				D
	YUNN	29	0809	0811	0816	N05	E51	6654	06	2.1	7	SN			C		16	0.3	

Hα SOLAR FLARES

MAY 1991

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
0426		29	09292	0934*	1006	N25	W07	6644	05	28.8	37	1N	C 3.1				245	4.5	F
	HTPR	29	0929	0934	0955	N27	W06	6644	05	28.9	26	1N				0934	410	4.5	
	KANZ	29	0931	0935	1013	N24	W06	6644	05	28.9	42	1N		2	C				
	SVTO	29	0943E	0947	1011	N23	W08	6644	05	28.8	28D	SF	C 3.1	3	E		80		F
0427		29	09511	09521	1002	N10	E45	6654	06	1.8	11	SF					40	0.8	
	HTPR	29	0951	0953	1000	N11	E45	6654	06	1.8	9	SF				0953	60	0.8	
	SVTO	29	0952	0952	1004	N08	E45	6654	06	1.8	12	SF		3	E		20		
0428		29	10054	10092	1020	N07	E46	6654	06	1.9	15	SN	C 3.6				96	1.6	EFH
	HTPR	29	1005	1010	1019	N09	E47	6654	06	1.9	14	SN				1010	110	1.6	E
	SVTO	29	1005	1011	1023	N07	E48	6654	06	2.0	18	SN	C 3.6	3	E		83		FH
	KANZ	29	1009	1009	1017	N04	E44	6654	06	1.7	8	SN		2	C				
0429		29	1207	12091	1230	N08	E42	6654	06	1.6	23	1B	M 4.3				194	3.4	H
	HTPR	29	1207	1209	1230	N08	E42	6654	06	1.6	23	1B				1209	250	3.4	H
	SVTO	29	1207	1210	1231	N08	E43	6654	06	1.7	24	1B	M 4.3	3	E		138		H
0430	SVTO	29	1241	1246	1249	N06	E48	6654	06	2.1	8	SF		3	E		18		
0431		29	13092	13111	1331	S08	E33	6652	06	1.0	22	SF					64	1.3	E
	HTPR	29	1309	1312	1335	S08	E31	6652	05	31.9	26	SF				1312	100	1.3	E
	SVTO	29	1311	1311	1327	S08	E35	6652	06	1.2	16	SF		3	E		28		
0432		29	1545E	1629U	1749	S07	E37	6652	06	1.4	124D	1N	M 2.7				385	10.3	FKT
	HTPR	29	1545E		1736D	S08	E40	6652	06	1.6	111D	2B				1525	845	10.3	FK
	SVTO	29	1546E		1745D	S05	E35	6652	06	1.3	119D	SF		3	E		62		FT
	PALE	29	1629E	1629U	1749	S08	E35	6652	06	1.3	80D	1B	M 2.7	2	E		248		F
0433	SVTO	29	1527	1617	1648	N07	E44	6654	06	1.9	81	SF		3	E		56		
0434	PALE	29	1756	1757U	1903D	S08	E28	6652	05	31.8	67D	SF		3	E		14		
		29	1818		1829	No Flare Patrol													
0435	PALE	29	1946E	1953U	2025D	N08	E39	6654	06	1.7	39D	SF	C 8.6	3	E		69		F
0436		29	2214*	23426	2441	N06	E36	6654	06	1.6	147	2B	X 1.0				424	3.5	EFHIJN
	PALE	29	2214	2343	2443	N05	E38	6654	06	1.8	149	2B	X 1.0	3	E		523		FE
	VORO	29	2340	2342	2401	N07	E35	6654	06	1.6	21	1B		1	C	2342	278	3.5	ENIJ
	LEAR	29	2346E	2348	2518	N06	E36	6654	06	1.7	92D	2B		2	E		470		HF
0437		30	0339	0340	0344	N06	E38	6654	06	2.0	5	1N	M 1.4				98	2.3	
	WATU	30	0339	0340	0344	N07	E34	6654	06	1.7	5	1N			C	0340	180	2.3	
	PALE	30	0340E	0343U	0439D	N06	E41	6654	06	2.2	59D	SF	M 1.4	3	E		15		
0438		30	0355	0400	0408	N09	E35	6654A	06	1.8	13	SF					109	1.6	EF
	URUM	30	0342E	0342U	0355	N09	E35	6654A	06	1.8	13D	1N			C		209	2.7	E
	URUM	30	0355	0400	0420	N09	E33	6654A	06	1.6	25	SF			C		32	0.4	E
	SVTO	30	0358E	0406U	0449D	N09	E38	6654A	06	2.0	51D	SF		1	E		86		F
0439		30	07055	07145	0730	N08	E32	6654	06	1.7	25	1N					103	1.3	CEU
	URUM	30	0705	0719	0731	N07	E32	6654	06	1.7	26	SN			C		96	1.2	E
	YUNN	30	0706	0713U	0713D	N08	E32	6654	06	1.7	7D	SN			P	0713	110	1.4	
	KANZ	30	0710	0714	0729	N08	E31	6654	06	1.6	19	SF		2	C				
	HURB	30	0714E	0714	0728D	N07	E33	6654	06	1.8	14D	2N			V				CU
0440		30	0936E	0938*	1002	N07	E30	6654	06	1.6	26D	1B	M 8.2				161	2.0	EFHKRUZ
	HURB	30	0936E	0938	0956D	N05	E30	6654	06	1.6	20D	3B			V				ER
	ONDR	30	0936E	0942	0944D	N08	E32	6654	06	1.8	8D	SB				0942	104	1.3	F
	URUM	30	0940E	0944	0955	N07	E31	6654	06	1.7	15D	1B			C		177	2.1	E
	SVTO	30	0943E	0944U	1007	N07	E30	6654	06	1.6	24D	1F	M 8.2	4	E		178		H
	SVTO	30	0943E	0949	1007	N07	E30	6654	06	1.6	24D	1B			E		140		K
	KAND	30	0950E		1000	N07	E30	6654	06	1.6	10D	1B			P	0950	208	2.5	EUZ
0441	SVTO	30	1114	1116	1124	N04	E32	6654	06	1.9	10	SF		3	E		20		
0442		30	1117	1127	1153	S09	E22	6652	06	1.1	36	1B	M 1.9				280	3.9	EFZ
	SVTO	30	1117	1127	1159	S09	E22	6652	06	1.1	42	1B	M 1.9	3	E		207		F
	KAND	30	1129E		1147	S09	E23	6652	06	1.2	18D	1B			P	1129	353	3.9	EZ

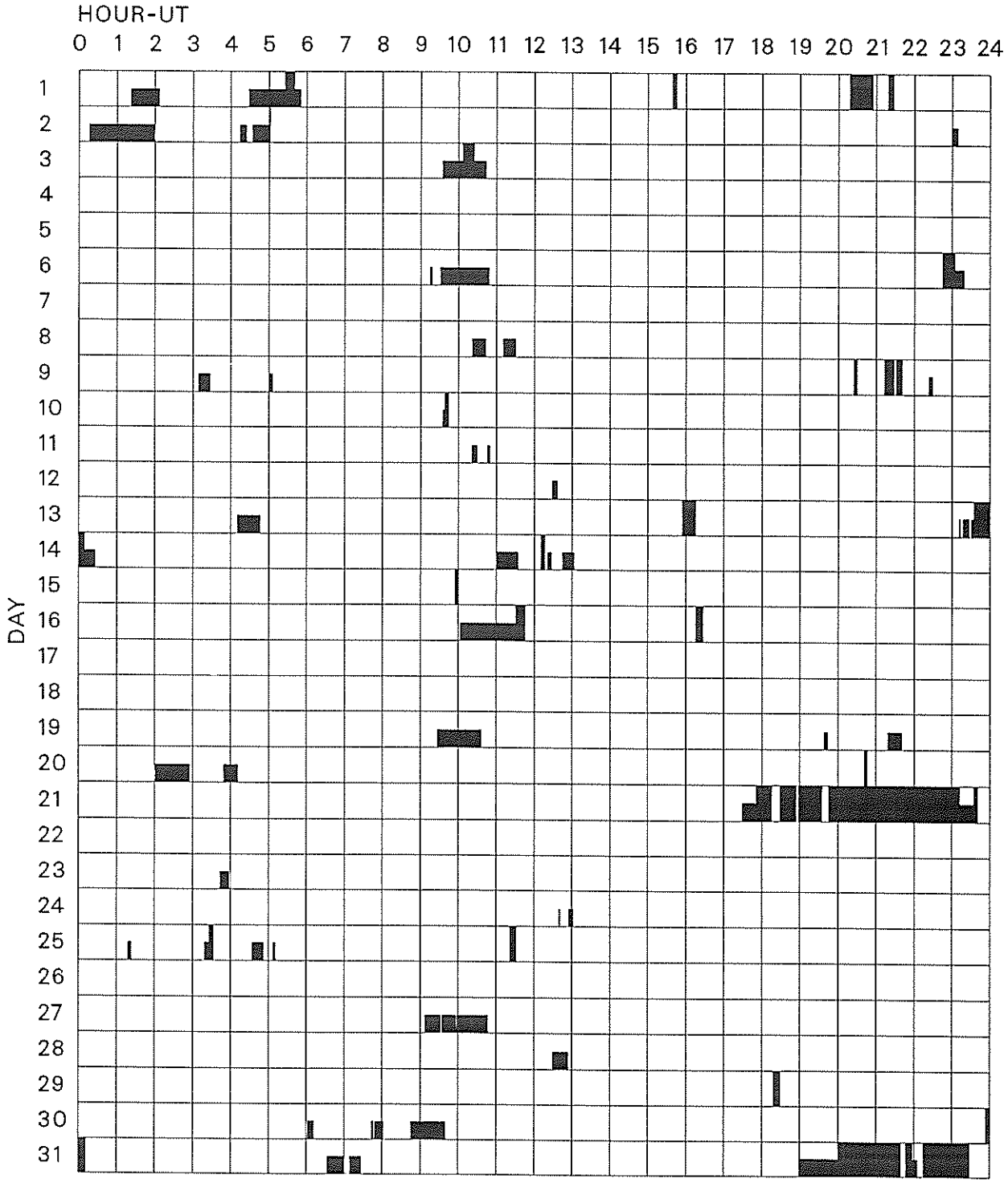
Hα SOLAR FLARES

MAY 1991

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
0443	HTPR	30	1425	1430	1436	N32	W30		05	28.2	11	SF				1430	130	1.6	
0444	SVTO	30	1611	1613	1655	N19	W36	6644	05	27.9	44	SF		3	E		35		
0445	SVTO	30	1651	1652	1658	N04	E31	6654	06	2.0	7	SF		3	E		14		H
0446	SVTO	30	1740	1742	1749	S09	E19	6652	06	1.2	9	SF	C 2.0	2	E		28		
		30	2354		2400	No Flare Patrol													
		31	0000		0011	No Flare Patrol													
0447	LEAR	31	0127	0147	0205	S09	E15	6652	06	1.2	38	SF		3	E		88		F
0448	LEAR	31	0229	0259	0310	S10	E16	6652	06	1.3	41	SF		3	E		32		F
0449		31	0232*	02442	0305	N07	E21	6654	06	1.7	33	1B					388	3.4	EF
	LEAR	31	0232	0246	0318	N08	E24	6654	06	1.9	46	2B		3	E		539		
	URUM	31	0237	0244	0256	N07	E20	6654	06	1.6	19	1B			C		354	3.9	E
	WATU	31	0245	0246	0302	N07	E20	6654	06	1.6	17	1N			P	0246	270	3.0	F
0450		31	0346*	04058	0440	S08	E13	6652	06	1.1	54	2N	M 2.1				415	5.0	EFU
	TACH	31	0346	0407	0434	S06	E16	6652	06	1.3	48	2N		2	C	0407	816	8.8	U
	WATU	31	0356	0411	0431	S09	E12	6652	06	1.1	35	1N			C	0411	320	3.4	F
	URUM	31	0358	0407	0442	S09	E13	6652	06	1.1	44	1B			C		273	2.9	E
	SVTO	31	0402	0405	0435	S10	E14	6652	06	1.2	33	2B		1	E		314		
	LEAR	31	0411E	0413	0500	S08	E09	6652	05	31.8	49D	2N	M 2.1	3	E		351		
0451	LEAR	31	0828	0829	0833	N23	W39	6644	05	28.3	5	SF		3	E		21		F
0452		31	0825	0842*	0952	N07	E20	6654	06	1.8	87	1B	M 1.6				312	3.6	BEF
	LEAR	31	0825	0842	0930D	N06	E22	6654	06	2.0	65D	2B	M 1.6	3	E		283		F
	HTPR	31	0825	0845	1000	N07	E18	6654	06	1.7	95	1B				0845	460	5.0	F
	URUM	31	0825	0856	0945	N07	E20	6654	06	1.8	80	1N			C		193	2.1	E
	KANZ	31	0909E		0909D	N08	E18	6654	06	1.7	80D	1N		2	C				B
0453		31	0830	0842*	0937	N09	E23	6654A	06	2.1	67	1N					169	1.5	EFI
	YUNN	31	0830	0842	0925D	N09	E23	6654A	06	2.1	55D	1N			P		189	2.2	F
	SVTO	31	0842E	0856	0952	N09	E21	6654A	06	1.9	70D	1N		3	E		248		F
	ONDR	31	0845U	0850	0922	N08	E25	6654A	06	2.2	37U	SB				0850	69	0.8	EFI
0454	HTPR	31	1108	1112	1130	S08	E10	6652	06	1.2	22	SF				1112	90	0.9	
0455		31	12145	12322	1246	N07	E15	6654	06	1.6	32	1N	C 7.8				231	3.2	BF
	HTPR	31	1214	1232	1245	N07	E15	6654	06	1.6	31	1N				1232	310	3.2	
	SVTO	31	1215	1234	1247	N07	E14	6654	06	1.5	32	1B	C 7.8	3	E		152		F
	KANZ	31	1219		1246D	N07	E15	6654	06	1.6	27D	SF		2	C				B
0456	SVTO	31	1252	1255	1304	N15	W45	6656	05	28.1	12	SF		3	E		19		
0457		31	1631	1635	1700	N07	E12	6654	06	1.6	29	SF					41		FH
	SVTO	31	1631	1635	1654	N07	E11	6654	06	1.5	23	SF		3	E		53		H
	PALE	31	1634E	1635	1705	N07	E13	6654	06	1.7	31D	SF		3	E		29		FH
0458		31	1645	16573	1735	S10	E06	6652	06	1.1	50	1N	M 2.5				308		FH
	PALE	31	1645	1657	1734D	S11	E05	6652	06	1.1	49D	SF	M 2.5	3	E		91		H
	SVTO	31	1645	1700	1735	S10	E06	6652	06	1.1	50	2B		3	E		524		HF
		31	2001		2139	No Flare Patrol													
		31	2147		2157	No Flare Patrol													
		31	2215		2328	No Flare Patrol													

INTERVALS OF NO FLARE PATROL OBSERVATION
FOR PRECEDING SOLAR FLARE TABLE

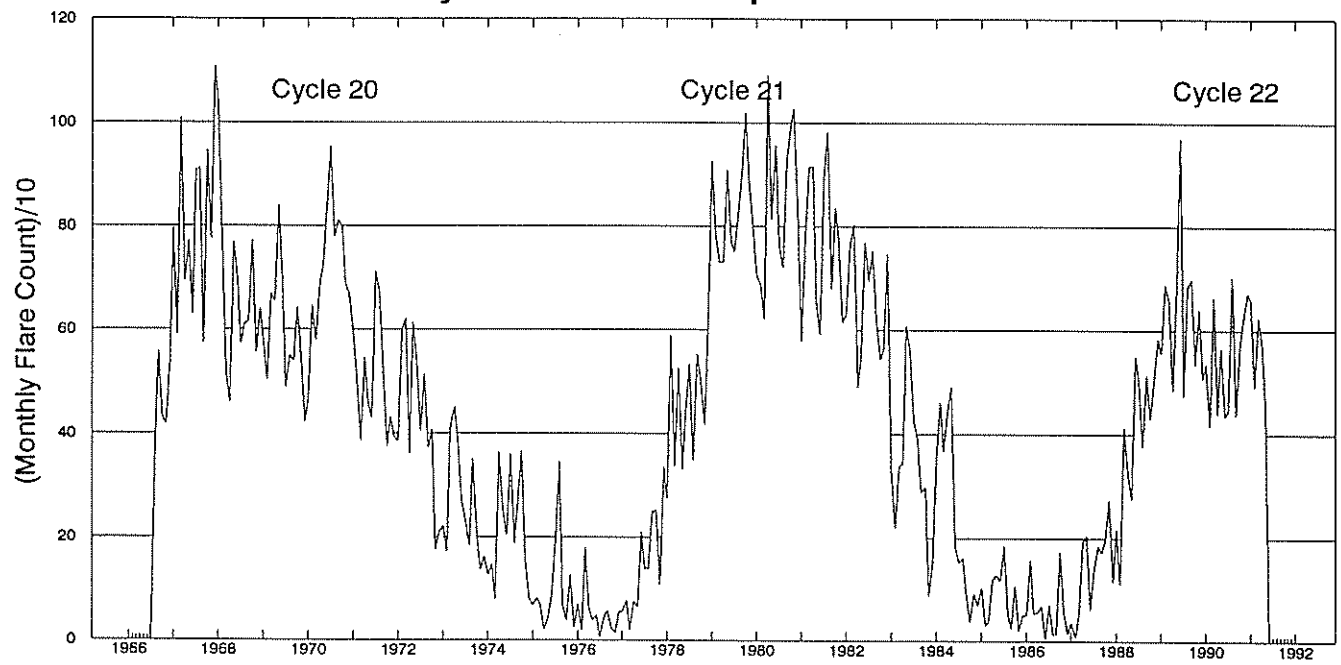
MAY 1991



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

Abastumani	Holloman	Kanzelhoehe	Palehua	Tashkent
Athens	Hurbanovo	Kharkov	Peking	Urumqi
Bucharest	Istanbul	Learmonth	Ramey	Voroshilov
Haute Provence	Kandilli	Ondrejov	San Vito	Watukosek
				Yunnan

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	551	502	375	513	429	508	584	4803
1989	689	539	658	485	686	971	473	684	699	535	640	507	7566
1990	536	415	664	439	565	433	447	703	436	569	619	672	6498
1991	659	491	625	570	458								2803

*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.

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

MAY 1991

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	2840	PEKG	1	S	0012.0	0013.0	3.0	6.8			
	9100	GORK	22	GRF	0245.0E	0301.0U	232.2D	15.0			
	5900	KISV	20	GRF	0458.4	0514.8	40.8	7.0			
	650	GORK	20	GRF	0505.8	0512.9	21.8	3.0			
	950	GORK	20	GRF	0506.8	0512.9	15.1	3.5			
	9300	KISV	20	GRF	0507.2	0514.2	27.8	5.0			
	100	GORK	41	F	0510.5	0511.2	14.2	45.0D			
	100	GORK	41	F	0510.5	0523.6		260.0			
	200	GORK	4	S/F	0510.8	0511.2	0.9	30.0D			
	245	LEAR	8	S	0511.0E	0511.0	U	78.0			QL=4 ST=2 TYP=3
	2950	GORK	20	GRF	0512.3	0513.2	23.3	4.0			
	5900	KISV	1	S	0556.1	0557.7	3.0	3.0			
	235	CUBA	48	C	1931.8	1935.5	9.2	11.0			
02	500	HIRA	6	S	0212.0	0212.2	1.0	54.0	8.0		0
	2950	GORK	20	GRF	0818.7	0825.3	15.6	4.0			
	245	SVTO	8	S	1242.0E	1242.0	U	57.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1759.0E	1759.0	U	280.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1759.0E	1759.0	U	27.0			QL=4 ST=2 TYP=3
03	2950	GORK	20	GRF	0525.0	0527.5	11.2	6.0			
	100	GORK	46	C	0710.6	0711.1	2.8	260.0			
	100	GORK	46	C	0710.6	0712.7		260.0			
	200	GORK	41	F	0710.8	0711.5	16.5	7.0			
	200	GORK	41	F	0710.8	0721.6		7.0			
	1470	POTS	4	S/F	0710.8	0711.9	2.2	7.0			
	650	GORK	2	S/F	0710.9	0711.5	2.1	5.5			
	2950	GORK	1	S	0710.9	0711.6	1.9	19.0			
	33	UPIC	42	SER	0711.0	0806.1	241.5				
	204	IZMI	7	C	0711.0	0711.5	3.0	6.0			
	950	GORK	2	S/F	0711.1	0711.5	1.8	5.0			
	3013	IZMI	5	S	0711.1	0711.6	4.0	13.0	7.0		
	9300	KISV	21	GRF	0711.2	0715.4	12.6	9.0			
	3000	POTS	4	S/F	0711.2	0711.7	1.5	20.0			
	5900	KISV	21	GRF	0711.3	0717.6	13.5	10.0			
	9100	GORK	1	S	0711.3	0711.9	1.4	6.0			
	9500	POTS	20	GRF	0711.4	0720.3	33.6	8.0			
	204	IZMI	22	GRF	0719.0	0722.0	9.0	10.0			
	950	GORK	2	S/F	0719.9	0720.5	0.9	3.0			
	200	GORK	41	F	0806.0	0842.1		11.0			
	100	GORK	41	F	0806.0	0842.2		390.0			
	200	GORK	41	F	0806.0	0806.4	37.0	30.0D			
	100	GORK	41	F	0806.0	0807.6	38.5	520.0			
	204	IZMI	5	S	0806.2	0806.5	0.6	36.0	18.0		
	204	IZMI	5	S	0841.0	0842.0	1.6	17.0	6.0		
	950	GORK	1	S	0841.6	0842.3	1.3	3.0			
	650	GORK	1	S	0841.6	0842.3	1.5	2.0			
	260	ONDR	8	S	1233.4	1233.4	0.3	293.0			
	33	UPIC	8	S	1408.7	1408.9	0.5				
	2800	OTTA	20	GRF	1812.0	1842.0	125.0	92.0	4.0		
	15000	CUBA	20	GRF	1836.0	1852.0	91.0D	22.0			OOR 2007 OFF
04	9100	GORK	22	GRF	0248.0E	0313.1	284.5D	17.0			
	245	LEAR	8	S	0318.0E	0318.0	U	51.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0620.0E	0622.0	2.0D	63.0			QL=4 ST=2 TYP=3
	204	IZMI	41	F	0620.0	0623.4	5.0	38.0			
	500	HIRA	45	C	0620.1	0621.0	6.0	5.0	2.0		0
	245	SVTO	4	S/F	0621.0E	0622.0	4.0D	60.0			QL=4 ST=2 TYP=3
	536	ONDR	41	F	0710.0	0829.0	255.0	32.0			
	9500	POTS	20	GRF	0740.8	0752.0	30.2	8.0			
	9100	GORK	20	GRF	0852.6	0906.0U	37.4	4.0			
	9500	POTS	27	RF	1116.0	1216.6	139.0	10.0			
	9400	HUAN	4	S/F	1812.4	1814.8	7.9	49.3	14.4		
	15400	PALE	4	S/F	1813.0E	1814.0	4.0D	490.0			QL=4 ST=2 TYP=3
	15000	CUBA	3	S	1813.7	1814.6	4.2	340.0	118.0		21R
	15400	SGMR	4	S/F	1814.0E	1814.0	3.0D	440.0			QL=4 ST=2 TYP=3
	15400	LEAR	4	S/F	2305.0E	2313.0	12.0D	68.0			QL=2 ST=2 TYP=5
	4995	LEAR	4	S/F	2307.0E	2309.0	3.0D	20.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	2308.0E	2309.0	1.0D	22.0			QL=4 ST=2 TYP=3

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

MAY 1991

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Mean	Int	Remarks
04	2695	LEAR	8	S	2309.0E	2309.0	1.0D	13.0			QL=2 ST=2 TYP=3
05	15400	LEAR	8	S	0101.0E	0102.0	1.0D	64.0			QL=2 ST=2 TYP=3
	15400	LEAR	8	S	0138.0E	0138.0	1.0D	79.0			QL=2 ST=2 TYP=3
	17000	NOBE	1	S	0141.0	0141.5	1.3	16.0			O 80,35GHz:0
	17000	NOBE	1	S	0213.7	0214.5	1.5	23.0			L 80,35GHz:0
	4995	LEAR	8	S	0224.0E	0225.0	2.0D	110.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0224.0E	0225.0	2.0D	320.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0225.0E	0225.0	1.0D	220.0			QL=4 ST=2 TYP=3
	9100	GORK	23	GRF	0324.0E	0501.2	367.0D	20.0			
	9300	KISV	1	S	0400.6	0401.6	2.2	4.0			
	5900	KISV	22	GRF	0430.6	0449.1		7.0			
	5900	KISV	22	GRF	0430.6	0433.5	24.4	9.0			
	15000	KISV	20	GRF	0432.2	0433.4	27.3	17.0			
	15000	KISV	20	GRF	0432.2	0456.5		23.0			
	9100	GORK	46	C	0432.5	0449.0		21.0			
	17000	NOBE	2	S/F	0432.5	0433.4	30.0	27.0			L
	17000	NOBE	2	S/F	0432.5	0456.4	30.0	47.0			L
	9100	GORK	46	C	0432.5	0456.5		17.0			
	9100	GORK	46	C	0432.5	0433.5	26.9	24.0			
	9300	KISV	23	GRF	0432.5	0456.5	46.6	23.0			
	9300	KISV	3	S	0433.0	0433.6	1.4	23.0			
	9300	KISV	2	S/F	0448.1	0449.0	3.0	13.0			
	15400	SVTO	8	S	0456.0E	0457.0	1.0D	50.0			QL=4 ST=2 TYP=3
	5900	KISV	1	S	0534.5	0536.3	3.0	5.0			
	5900	KISV	1	S	0549.3	0551.1	3.5	4.0			
	9300	KISV	21	GRF	0555.1	0557.2	12.4	10.0			
	5900	KISV	22	GRF	0555.6	0602.0		8.0			
	5900	KISV	22	GRF	0555.6	0559.6	11.7	8.0			
	2850	CRIM	20	GRF	0657.0	0701.5	28.0	6.0	2.0		
	536	ONDR	41	F	0710.0	0714.0	180.0	214.0			
	410	LEAR	8	S	0713.0E	0714.0	1.0D	130.0			QL=4 ST=2 TYP=3
	500	HIRA	42	SER	0713.4	0714.0	3.5	250.0			WL
	410	SVTO	8	S	0714.0E	0714.0	U	110.0			QL=4 ST=2 TYP=3
	9300	KISV	2	S/F	0845.1	0848.5	7.2	6.0			
	15400	LEAR	8	S	0856.0E	0857.0	1.0D	93.0			QL=2 ST=2 TYP=3
	9500	POTS	21	GRF	1110.0	1126.6	45.0	10.0			
	9300	KISV	4	S/F	1136.2	1140.0	7.9	35.0			
	9500	POTS	42	SER	1136.6	1140.0	6.6	30.0			
	15000	KISV	45	C	1136.7	1140.0	8.7	33.0			
	15000	KISV	45	C	1136.7	1137.6		15.0			
	5900	KISV	4	S/F	1138.7	1140.0	4.4	28.0			
	430	KRAK	8	S	1233.0	1233.2	0.5	27.0			
	9300	KISV	45	C	1359.3	1404.3	10.0	74.0			
	9300	KISV	45	C	1359.3	1400.9		24.0			
	9400	HUAN	4	S/F	1359.6	1404.3	10.3	84.6	17.4		
	9500	POTS	42	SER	1359.7	1404.2	10.3	66.0			
	15000	KISV	2	S/F	1400.6	1400.9	1.1	23.0			
	5900	KISV	4	S/F	1403.6	1404.3	4.1	19.0			
	15000	KISV	4	S/F	1403.7	1404.2	4.1	82.0			
	4995	SGMR	8	S	1404.0E	1404.0	U	23.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	1404.0E	1404.0	1.0D	95.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1404.0E	1404.0	2.0D	65.0			QL=4 ST=2 TYP=3
	15400	SVTO	8	S	1404.0E	1404.0	2.0D	110.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	1404.0E	1405.0	1.0D	24.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	1404.0E	1404.0	2.0D	57.0			QL=4 ST=2 TYP=3
	33	UPIC	40	F	1609.8	1614.4	56.7				
	9400	HUAN	2	S/F	1851.3	1853.5	6.9	11.5	5.3		
	9400	HUAN	1	S	1959.4	2005.5	12.1	12.5	5.0		
	2800	OTTA	24	R	2023.0	2109.0	360.0	256.0	12.0		
	500	HIRA	46	C	2028.0U	2031.0	6.0U	90.0U	15.0U		WL,SUNR1SE
	610	PALE	4	S/F	2028.0E	2031.0	5.0D	55.0			QL=4 ST=2 TYP=5
	1415	PALE	8	S	2030.0E	2031.0	1.0D	44.0			QL=4 ST=2 TYP=3
	9400	HUAN	22	GRF	2042.0	2101.6	42.1	40.4	21.3		
	17000	NOBE	1	S	2146.8	2148.3	6.0	45.0			L 80,35GHz:0
	15400	PALE	8	S	2147.0E	2148.0	2.0D	75.0			QL=2 ST=2 TYP=3
	8800	PALE	4	S/F	2147.0E	2148.0	3.0D	89.0			QL=2 ST=2 TYP=3
	15400	SGMR	4	S/F	2147.0E	2148.0	3.0D	67.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	2148.0E	2148.0	U	53.0			QL=2 ST=2 TYP=3

S O L A R R A D I O E M I S S I O N
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MAY 1991

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	4995	SGMR	8	S	2148.0E	2148.0	1.0D	53.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	2148.0E	2148.0	2.0D	95.0			QL=4 ST=2 TYP=3
	2695	SGMR	8	S	2149.0E	2149.0	U	32.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2206.0E	2206.0	U	50.0			QL=4 ST=2 TYP=3
06	200	GORK	43	NS	0457.0		480.0D		5.0		
	204	IZMI	43	NS	0600.0		360.0	10.0			
	260	ONDR	44	NS	0700.0E	1340.0	540.0D	295.0			
	245	SGMR	44	NS	1207.0E	1223.0	91.0D	93.0			QL=2 ST=2 TYP=1
	235	CUBA	44	NS	1300.0E		430.0D		17.0		
	1415	LEAR	8	S	0001.0E	0001.0	U	24.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	0001.0E	0001.0	U	22.0			QL=4 ST=2 TYP=3
	2695	PENT	29	PBI	0010.2	0010.2	90.0	192.0	9.0		
	2695	PENT	4	S/F	0023.6	0027.8	15.2	2310.0	46.0		
	610	LEAR	8	S	0026.0E	0027.0	2.0D	170.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0027.0E	0027.0	2.0D	170.0			QL=4 ST=2 TYP=3
	2840	PEKG	1	S	0124.0	0124.6	3.0	5.5			
	17000	NOBE	1	S	0129.9	0130.3	2.0	16.0			L 80,35GHz:0
	245	LEAR	8	S	0237.0E	0237.0	U	100.0			QL=4 ST=2 TYP=3
	17000	NOBE	1	S	0319.6	0319.9	1.0	26.0			L 80,35GHz:0
	17000	NOBE	1	S	0322.5	0322.8	1.0	25.0			L 80,35GHz:0
	650	GORK	23	GRF	0334.0	0531.8	228.6	16.0			
	950	GORK	23	GRF	0357.7	0443.0	53.8	5.0			
	5900	KISV	23	GRF	0416.1	0624.5	202.2	40.0			
	9100	GORK	23	GRF	0426.5	0636.0	523.0D	31.0			
	9100	GORK	46	C	0427.0	0429.1	9.6	23.0			
	9100	GORK	46	C	0427.0	0434.2		29.0			
	9300	KISV	45	C	0427.0	0434.2	13.9	42.0			
	9300	KISV	23	GRF	0427.0	0624.5	191.6	64.0			
	9300	KISV	45	C	0427.0	0428.7		31.0			
	8800	LEAR	8	S	0428.0E	0429.0	1.0D	19.0			QL=4 ST=2 TYP=3
	15400	SVTO	4	S/F	0429.0E	0434.0	7.0D	37.0			QL=2 ST=2 TYP=3
	610	SVTO	49	GB	0429.0E	0435.0	7.0D	900.0			QL=2 ST=2 TYP=6
	410	SVTO	4	S/F	0429.0E	0435.0	7.0D	43.0			QL=2 ST=2 TYP=3
	8800	SVTO	4	S/F	0429.0E	0434.0	5.0D	20.0			QL=2 ST=2 TYP=3
	950	GORK	46	C	0429.6	0434.2	13.4	95.0			
	950	GORK	46	C	0429.6	0435.4		60.0			
	650	GORK	46	C	0429.6	0434.7		650.0			
	650	GORK	46	C	0429.6	0433.7	13.4	470.0			
	600	HUMN	4	S/F	0430.0	0435.0	10.0	240.0			
	245	SVTO	4	S/F	0430.0E	0433.0	6.0D	10.0			QL=2 ST=2 TYP=3
	610	LEAR	49	GB	0430.0E	0435.0	10.0D	1300.0			QL=4 ST=2 TYP=6
	2840	PEKG	1	S	0430.0	0434.0	10.0	9.5			
	500	HIRA	46	C	0430.0	0435.1	11.0	1600.0	100.0		MR
	200	HIRA	46	C	0430.0	0433.3	4.6	11.0	6.0		WR
	5900	KISV	2	S/F	0430.5	0434.5	6.2	16.0			
	15400	LEAR	4	S/F	0431.0E	0434.0	4.0D	40.0			QL=2 ST=2 TYP=3
	2695	SVTO	4	S/F	0431.0E	0433.0	5.0D	16.0			QL=2 ST=2 TYP=3
	4995	SVTO	4	S/F	0431.0E	0433.0	4.0D	21.0			QL=2 ST=2 TYP=3
	17000	NOBE	2	S/F	0431.1	0434.0	5.0	18.0			L 80,35GHz:0
	15000	KISV	2	S/F	0431.2	0434.2	5.3	27.0			
	2950	GORK	22	GRF	0431.6	0433.6	40.4	10.0			
	245	LEAR	8	S	0432.0E	0433.0	1.0D	12.0			QL=4 ST=2 TYP=3
	410	LEAR	4	S/F	0432.0E	0434.0	3.0D	72.0			QL=4 ST=2 TYP=3
	1415	SVTO	4	S/F	0432.0E	0434.0	4.0D	11.0			QL=2 ST=2 TYP=3
	1415	LEAR	8	S	0434.0E	0434.0	U	11.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0446.0E	0446.0	U	52.0			QL=2 ST=2 TYP=3
	200	HIRA	27	RF	0453.0	0641.0	275.0D	45.0	30.0		WR
	500	HIRA	27	RF	0504.0	0531.0	148.0	20.0	8.0		WR
	950	GORK	20	GRF	0518.7	0530.0	33.1	3.0			
	245	SVTO	8	S	0537.0E	0537.0	U	100.0			QL=4 ST=2 TYP=3
	950	GORK	2	S/F	0557.7	0558.0	0.8	15.0			
	204	IZMI	41	F	0601.0	0602.0	12.0	150.0			
	950	GORK	22	GRF	0602.2	0619.6	34.0	24.0			
	9100	GORK	2	S/F	0620.6	0624.6	11.0	27.0			
	2850	CRIM	1	S	0621.0	0624.5	6.0	8.0	3.0		
	2840	PEKG	1	S	0621.0	0624.5	10.0	8.7			
	2950	GORK	22	GRF	0621.3	0624.7	104.0	8.0			
	3013	IZMI	7	C	0621.5	0625.0	10.0	6.0			

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

MAY 1991

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	17000	NOBE	2	S/F	0621.6	0624.2	5.5	18.0			L 80,35GHz:0
	15000	KISV	2	S/F	0621.6	0624.5	5.1	21.0			
	9100	GORK	2	S/F	0719.1	0724.3	11.3	2.0			
	5900	KISV	2	S/F	0723.6	0724.4	3.5	5.0			
	9300	KISV	2	S/F	0723.7	0725.0	4.3	14.0			
	1470	POTS	8	S	0732.0	0732.2	0.6	14.0			
	15400	LEAR	8	S	0844.0E	0844.0	U	79.0			QL=2 ST=2 TYP=3
	5900	KISV	2	S/F	0857.9	0858.4	1.8	7.0			
	3000	POTS	20	GRF	0930.5	0941.0	23.0	5.0			
	204	IZMI	41	F	0932.0	0934.8	3.0	130.0			
	430	KRAK	8	S	0939.3	0939.4	0.4	200.0D			
	9300	KISV	2	S/F	0952.3	0953.5	6.8	25.0			
	9500	POTS	29	PBI	0952.4	0953.5	7.2	23.0			
	9100	GORK	46	C	0952.5	0956.5		12.0			
	9100	GORK	46	C	0952.5	0953.5	10.1	23.0			
	15000	KISV	2	S/F	0952.8	0953.5	2.5	15.0			
	245	SGMR	8	S	1020.0E	1020.0	U	63.0			QL=4 ST=2 TYP=3
	430	KRAK	42	SER	1022.0	1041.7	89.3	28.0			
	9100	GORK	3	S	1155.7	1157.1	6.8	280.0			
	15000	KISV	4	S/F	1155.8	1157.0	5.9	243.0			
	9500	POTS	4	S/F	1155.8	1156.8	6.7	225.0			
	9300	KISV	4	S/F	1155.9	1157.4	5.9	150.0D			
	9300	KISV	29	PBI	1155.9	1201.8	44.5	15.0			
	15400	SGMR	4	S/F	1156.0E	1156.0	4.0D	290.0			QL=2 ST=2 TYP=3
	8800	SGMR	4	S/F	1156.0E	1157.0	4.0D	220.0			QL=2 ST=2 TYP=3
	8800	SVTO	4	S/F	1156.0E	1157.0	5.0D	220.0			QL=4 ST=2 TYP=3
	15400	SVTO	4	S/F	1156.0E	1157.0	5.0D	330.0			QL=4 ST=2 TYP=3
	5900	KISV	4	S/F	1156.1	1157.2	7.0	48.0			
	4995	SGMR	8	S	1157.0E	1157.0	U	43.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	1157.0E	1157.0	2.0D	41.0			QL=4 ST=2 TYP=3
	9400	HUAN	1	S	1249.4	1251.4	4.9	10.6	3.8		
	6700	CUBA	45	C	1311.0E	1316.0U	16.0D	317.0			11R SUNRISE
	6700	CUBA	30	PBI	1327.0		236.0	31.0	15.0		11R
	9400	HUAN	2	S/F	1335.8	1339.4	6.8	11.6	4.2		
	245	SVTO	4	S/F	1337.0E	1339.0	3.0D	98.0			QL=2 ST=2 TYP=3
	536	ONDR	2	S/F	1337.0	1338.5	3.0	155.0			
	6700	CUBA	2	S/F	1337.9	1339.4	3.6	7.0	3.0		42R
	610	SGMR	8	S	1338.0E	1339.0	1.0D	84.0			QL=4 ST=2 TYP=3
	3000	POTS	40	F	1338.0	1338.4	2.0	7.0			
	1470	POTS	4	S/F	1338.0	1338.6	1.2	14.0			
	600	HUMN	2	S/F	1339.0	1339.3	1.0	40.0	9.0		
	245	SGMR	8	S	1339.0E	1339.0	U	170.0			QL=2 ST=2 TYP=3
	9500	POTS	2	S/F	1339.0	1339.3	1.2	8.0			
	9400	HUAN	1	S	1357.2	1358.6	5.5	12.7	4.6		
	9500	POTS	29	PBI	1358.0	1358.4	14.0	10.0			
	9500	POTS	8	S	1427.8	1428.0	0.7	11.0			
	15000	CUBA	1	S	1428.0	1428.1	0.7	12.0	6.0		30R
	9400	HUAN	1	S	1448.3	1451.5	5.3	10.6	3.7		
	9400	HUAN	3	S	1609.3	1611.6	4.7	29.6	12.6		
	15000	CUBA	1	S	1611.3	1611.5	1.4	23.0	11.0		31R
	6700	CUBA	2	S/F	1611.4	1611.8	5.6	7.0	3.0		34L
	9400	HUAN	4	S/F	1657.0	1659.6	7.6	105.6	38.9		
	2800	OTTA	3	S	1657.5	1659.6	4.5	150.0	4.0		
	6700	CUBA	45	C	1657.5	1659.7	11.5	48.0			10R 1703-1705 O
	15000	CUBA	4	S/F	1658.9	1659.5	8.0U	151.0			11R 1703-1705 D
	600	HUMN	2	S/F	1659.0	1659.2	0.8	42.0	12.0		
	4995	PALE	8	S	1659.0E	1659.0	U	46.0			QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	1659.0E	1659.0	3.0D	90.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1659.0E	1700.0	1.0D	350.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1659.0E	1659.0	1.0D	130.0			QL=4 ST=2 TYP=3
	15400	PALE	4	S/F	1659.0E	1659.0	4.0D	140.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	1659.0E	1659.0	2.0D	110.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	1659.0E	1659.0	1.0D	100.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1659.0E	1700.0	1.0D	490.0			QL=2 ST=2 TYP=3
	8800	SGMR	8	S	1659.0E	1659.0	2.0D	62.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	1659.0E	1700.0	1.0D	130.0			QL=4 ST=2 TYP=3
	15400	SVTO	4	S/F	1659.0E	1700.0	3.0D	110.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	1659.0E	1700.0	3.0D	53.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1700.0E	1700.0	2.0D	350.0			QL=4 ST=2 TYP=3

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

MAY 1991

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	1415	SGMR	8	S	1701.0E	1702.0	1.0D	19.0			QL=4 ST=2 TYP=3
	9400	HUAN	29	PBI	1704.6	1704.6	21.4	16.9	6.4		
	410	PALE	8	S	1819.0E	1819.0	1.0D	61.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1839.0E	1839.0	U	220.0			QL=4 ST=2 TYP=3
	9400	HUAN	23	GRF	1910.2	1943.8	92.4	29.6	12.6		
	245	SGMR	8	S	1936.0E	1936.0	1.0D	84.0			QL=2 ST=2 TYP=3
	15000	CUBA	1	S	1937.3	1938.5	2.9	44.0	22.0		21L
	9400	HUAN	4	S/F	1937.3	1938.6	3.3	33.8	10.4		
	245	PALE	8	S	2003.0E	2003.0	1.0D	130.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2003.0E	2003.0	1.0D	180.0			QL=2 ST=2 TYP=3
	9400	HUAN	2	S/F	2009.1	2011.6	5.6	16.9	6.2		
	9400	HUAN	4	S/F	2105.2	2107.0	5.4	145.7	62.6		
	15400	PALE	8	S	2106.0E	2106.0	2.0D	120.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	2106.0E	2106.0	1.0D	84.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2121.0E	2121.0	1.0D	91.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2121.0E	2121.0	1.0D	120.0			QL=2 ST=3 TYP=3
	9400	HUAN	1	S	2122.6	2124.6	6.1	14.8	5.8		
	9400	HUAN	4	S/F	2148.8	2152.3	9.9	31.7	14.6		
	245	PALE	8	S	2308.0E	2308.0	U	270.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2308.0E	2309.0	1.0D	82.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2315.0E	2317.0	2.0D	220.0			QL=4 ST=2 TYP=3
	410	LEAR	4	S/F	2318.0E	2322.0	5.0D	480.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2318.0E	2318.0	U	170.0			QL=2 ST=2 TYP=3
	8800	PALE	4	S/F	2318.0E	2327.0	17.0D	130.0			QL=4 ST=2 TYP=3
	410	PALE	4	S/F	2318.0E	2322.0	19.0D	130.0			QL=4 ST=2 TYP=3
	17000	NOBE	4	S/F	2318.0	2327.7	16.0	98.0			L 80,35GHz:0
	410	SGMR	8	S	2322.0E	2322.0	U	290.0			QL=2 ST=2 TYP=3
	15400	LEAR	4	S/F	2323.0E	2328.0	8.0D	160.0			QL=2 ST=2 TYP=3
	8800	LEAR	8	S	2326.0E	2328.0	2.0D	130.0			QL=4 ST=2 TYP=3
	2695	PENT	3	S	2326.2	2327.9	3.3	123.0	5.0		
	15400	PALE	4	S/F	2328.0E	2328.0	9.0D	64.0			QL=4 ST=2 TYP=3
	2840	PEKG	45	C	2353.0	2426.7	65.0D	312.5			
	4995	LEAR	4	S/F	2356.0E	2427.0	41.0D	420.0			QL=4 ST=2 TYP=5
	15400	LEAR	4	S/F	2356.0E	2427.0	41.0D	250.0			QL=2 ST=2 TYP=5
	8800	LEAR	4	S/F	2356.0E	2427.0	41.0D	460.0			QL=4 ST=2 TYP=5
	2695	PENT	4	S/F	2356.5	2438.9		904.0	36.0		
	8800	PALE	4	S/F	2357.0E	2401.0	17.0D	180.0			QL=4 ST=2 TYP=3
	4995	PALE	4	S/F	2359.0E	2401.0	8.0D	190.0			QL=4 ST=2 TYP=3
	2695	PALE	4	S/F	2359.0E	2401.0	8.0D	78.0			QL=4 ST=2 TYP=3
	15400	PALE	4	S/F	2359.0E	2401.0	6.0D	84.0			QL=4 ST=2 TYP=3
	2695	LEAR	4	S/F	2359.0E	2402.0	12.0D	80.0			QL=2 ST=2 TYP=3
	17000	NOBE	21	GRF	2359.3		74.0				
	17000	NOBE	1	S	2359.3	2401.3	8.0	43.0			L 80,35GHz:0
07	200	HIRA	43	NS	0040.0	0103.0	160.0	30.0	23.0		WL
	245	LEAR	44	NS	0102.0E	0235.0	355.0D	96.0			QL=2 ST=2 TYP=1
	200	GORK	44	NS	0248.0E		610.0D		8.0		
	260	ONDR	44	NS	0700.0E	1037.2	540.0D	234.0			
	127	TORN	43	NS	0719.0		497.0		2.0		V=1
	100	GORK	43	NS	0808.0		300.0D		5.0		
	245	SVTO	44	NS	0852.0E	1022.0	316.0D	150.0			QL=2 ST=2 TYP=1
	235	CUBA	44	NS	1253.0E		304.0D		19.0		
	500	HIRA	46	C	0000.3	0000.7	1.0	60.0	10.0		0
	2695	PENT	3	S	0014.5	0015.5	4.4	418.0	9.0		
	500	HIRA	27	RF	0016.7	0047.1	61.0	10.0	5.0		WL
	2695	PALE	4	S/F	0021.0E	0027.0	17.0D	260.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	0022.0E	0022.0	1.0D	24.0			QL=4 ST=2 TYP=3
	4995	PALE	4	S/F	0023.0E	0027.0	15.0D	470.0			QL=4 ST=2 TYP=3
	8800	PALE	49	GB	0025.0E	0027.0	6.0D	520.0			QL=4 ST=2 TYP=6
	17000	NOBE	3	S	0025.5	0027.5	6.0	162.0			L
	35000	NOBE	1	S	0025.5	0027.8	5.0	55.0			0 80GHz:0
	610	PALE	49	GB	0026.0E	0030.0	4.0D	730.0			QL=4 ST=2 TYP=7
	1415	PALE	4	S/F	0026.0E	0027.0	7.0D	100.0			QL=4 ST=2 TYP=3
	500	HIRA	46	C	0026.5	0027.4	4.5	1500.0	150.0		WR
	410	PALE	4	S/F	0027.0E	0030.0	3.0D	160.0			QL=4 ST=2 TYP=3
	410	PALE	4	S/F	0046.0E	0047.0	3.0D	29.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	0049.0E	0049.0	U	23.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0049.0E	0051.0	2.0D	75.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0051.0E	0052.0	2.0D	340.0			QL=2 ST=2 TYP=3

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

Outstanding Occurrences

MAY 1991

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
07	410	PALE	8	S	0052.0E	0054.0	2.0D	30.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	0053.0E	0054.0	1.0D	21.0			QL=4 ST=2 TYP=3
	15400	LEAR	4	S/F	0055.0E	0056.0	7.0D	250.0			QL=2 ST=2 TYP=3
	8800	LEAR	4	S/F	0055.0E	0056.0	7.0D	160.0			QL=4 ST=2 TYP=3
	15400	PALE	4	S/F	0055.0E	0056.0	3.0D	190.0			QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	0055.0E	0056.0	3.0D	220.0			QL=4 ST=2 TYP=3
	17000	NOBE	3	S	0055.5	0056.2	5.0	192.0			L
	35000	NOBE	3	S	0055.5	0056.2	3.5	161.0			L 80GHz:0
	4995	PALE	8	S	0056.0E	0056.0	1.0D	56.0			QL=4 ST=2 TYP=3
	245	PALE	4	S/F	0102.0E	0104.0	3.0D	66.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0105.0E	0106.0	1.0D	89.0			QL=4 ST=2 TYP=3
	2695	PENT	3	S	0138.4	0139.9	5.1	148.0	4.0		
	245	PALE	8	S	0202.0E	0202.0	U	50.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0204.0E	0204.0	1.0D	51.0			QL=4 ST=2 TYP=3
	17000	NOBE	20	GRF	0217.4	0221.2	18.0	18.0			0 80,35GHz:0
	245	PALE	8	S	0235.0E	0235.0	U	98.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0242.0E	0243.0	2.0D	54.0			QL=4 ST=2 TYP=3
	9100	GORK	23	GRF	0248.0E	0941.0	612.0D	31.0			
	245	PALE	8	S	0249.0E	0249.0	U	64.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	0317.0E	0317.0	1.0D	32.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0318.0E	0318.0	1.0D	58.0			QL=4 ST=2 TYP=3
	17000	NOBE	20	GRF	0428.2	0440.6	20.0	17.0			L 80,35Hz:0
	245	LEAR	8	S	0655.0E	0655.0	1.0D	51.0			QL=2 ST=2 TYP=3
	204	IZMI	41	F	0655.0	0659.2		160.0			
	5900	KISV	29	PBI	0656.0	0700.2	21.6	13.0			
	5900	KISV	4	S/F	0656.0	0658.3	4.2	44.0			
	1415	LEAR	8	S	0657.0E	0658.0	2.0D	410.0			QL=4 ST=2 TYP=3
	650	GORK	46	C	0657.2	0707.1		22.0			
	950	GORK	46	C	0657.2	0658.3	9.4	98.0			
	650	GORK	46	C	0657.2	0658.3	13.1	20.0			
	950	GORK	46	C	0657.2	0702.4		20.0			
	9300	KISV	4	S/F	0657.4	0658.3	2.5	57.0			
	9300	KISV	29	PBI	0657.4	0659.9	12.8	13.0			
	1470	POTS	45	C	0657.6	0658.2	9.0	432.0			
	17000	NOBE	1	S	0657.7	0658.2	9.0	55.0			L 80,35GHz:0
	9500	POTS	29	PBI	0657.7	0658.2	12.3	49.0			
	3000	POTS	29	PBI	0657.7	0658.5	3.8	27.0			
	9100	GORK	2	S/F	0657.9	0658.3	2.4	50.0			
	2850	CRIM	29	PBI	0658.0	0701.0	7.0	20.0	7.0		
	15400	LEAR	4	S/F	0658.0E	0658.0	4.0D	81.0			QL=2 ST=2 TYP=3
	4995	SVTO	8	S	0658.0E	0658.0	1.0D	39.0			QL=4 ST=2 TYP=3
	2695	SVTO	8	S	0658.0E	0659.0	1.0D	34.0			QL=4 ST=2 TYP=3
	15400	SVTO	8	S	0658.0E	0658.0	1.0D	75.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	0658.0E	0658.0	1.0D	47.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	0658.0E	0658.0	1.0D	360.0			QL=4 ST=2 TYP=3
	2950	GORK	29	PBI	0658.0	0700.0	60.0	11.0			
	2950	GORK	3	S	0658.0	0658.5	2.0	28.0			
	2840	PEKG	3	S	0658.0	0658.5	21.0	34.0			
	2850	CRIM	3	S	0658.0	0658.6	3.0	36.4	11.0		
	3013	IZMI	7	C	0658.2	0658.5	18.0	17.0	10.0		
	245	SVTO	8	S	0730.0E	0731.0	1.0D	78.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0731.0E	0731.0	U	87.0			QL=2 ST=2 TYP=3
	15000	KISV	4	S/F	0739.7	0741.2	7.5	202.0			
	35000	NOBE	4	S/F	0739.9	0740.7	6.0	115.0			L 80GHZ:0
	17000	NOBE	4	S/F	0739.9	0740.7	12.0	183.0			L
	15400	LEAR	4	S/F	0740.0E	0740.0	9.0D	220.0			QL=2 ST=2 TYP=3
	8800	LEAR	4	S/F	0740.0E	0740.0	5.0D	68.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	0740.0E	0741.0	8.0D	69.0			QL=4 ST=2 TYP=3
	15400	SVTO	4	S/F	0740.0E	0741.0	7.0D	190.0			QL=4 ST=2 TYP=3
	9100	GORK	46	C	0740.1	0744.6		25.0			
	9300	KISV	29	PBI	0740.1	0743.6	8.8	24.0			
	9300	KISV	4	S/F	0740.1	0740.6	3.5	74.0			
	9100	GORK	46	C	0740.1	0740.6	10.9	77.0			
	5900	KISV	20	GRF	0740.4	0743.9	13.6	16.0			
	245	LEAR	8	S	0757.0E	0757.0	U	57.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0757.0E	0757.0	U	54.0			QL=4 ST=2 TYP=3
	204	IZMI	5	S	0757.0	0757.3	0.5	750.0	370.0		
	536	ONDR	40	F	0800.0	1053.0	480.0	138.0			
	9100	GORK	2	S/F	0812.5	0814.5	7.8	22.0			

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

MAY 1991

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	9300	KISV	2	S/F	0812.8	0814.7	7.1	16.0			
	15400	LEAR	8	S	0814.0E	0814.0	1.0D	58.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0825.0E	0825.0	1.0D	420.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0825.0E	0826.0	1.0D	340.0			QL=4 ST=2 TYP=3
	430	KRAK	41	F	0832.7	0833.1	2.0	20.0	5.0		
	204	IZMI	41	F	0840.0	0903.0	35.0	55.0			
	245	LEAR	8	S	0849.0E	0850.0	1.0D	59.0			QL=2 ST=2 TYP=3
	245	LEAR	4	S/F	0852.0E	0852.0	3.0D	150.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0858.0E	0900.0	2.0D	130.0			QL=2 ST=2 TYP=3
	650	GORK	4	S/F	0919.0	0922.0	5.6	30.0			
	950	GORK	2	S/F	0919.0	0922.2	8.0	9.0			
	600	HUMN	2	S/F	0919.5	0922.0	4.5	30.0	5.0		
	430	KRAK	41	F	0919.7	0922.2	6.3	51.0	5.0		
	204	IZMI	41	F	0920.5	0923.3	5.0	320.0			
	200	GORK	46	C	0920.7	0922.0	3.1	210.0			
	9300	KISV	21	GRF	0920.7	0922.2	9.3	14.0			
	200	GORK	46	C	0920.7	0923.4		420.0			
	245	LEAR	8	S	0921.0E	0921.0	2.0D	99.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0921.0E	0922.0	2.0D	110.0			QL=2 ST=2 TYP=3
	5900	KISV	4	S/F	0921.1	0922.3	8.4	17.0			
	100	GORK	4	S/F	0921.2	0922.0	1.4	280.0			
	810	KRAK	41	F	0921.5	0923.1	2.4	11.0	2.0		
	3013	IZMI	5	S	0921.6	0923.5	4.0	4.0	2.0		
	2950	GORK	1	S	0921.9	0923.2	5.0	5.0			
	410	SVTO	8	S	0922.0E	0922.0	U	23.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	0922.0E	0922.0	U	28.0			QL=4 ST=2 TYP=3
	15000	KISV	2	S/F	0955.6	0956.9	3.2	24.0			
	9100	GORK	46	C	0956.2	1006.8		42.0			
	9100	GORK	46	C	0956.2	0956.8	27.4	15.0			
	9100	GORK	46	C	0956.2	1003.9		51.0			
	5900	KISV	21	GRF	0959.4	1006.7	31.6	32.0			
	9300	KISV	21	GRF	1002.3	1003.9	27.0	50.0			
	15000	KISV	4	S/F	1002.7	1004.0	7.7	64.0			
	15400	SVTO	4	S/F	1004.0E	1004.0	3.0D	87.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	1004.0E	1004.0	6.0D	44.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1021.0E	1022.0	1.0D	200.0			QL=2 ST=2 TYP=3
	204	IZMI	42	SER	1022.8	1037.0	26.0	900.0			
	430	KRAK	42	SER	1030.8	1331.5	264.4D	88.0			
	9500	POTS	29	PBI	1033.7	1037.0	26.3	66.0			
	9100	GORK	46	C	1033.8	1037.1		73.0			
	9100	GORK	46	C	1033.8	1035.8	19.3	55.0			
	9300	KISV	29	PBI	1034.0	1040.0	20.4	34.0			
	9300	KISV	4	S/F	1034.0	1037.1	6.0	74.0			
	5900	KISV	23	GRF	1034.1	1046.6	24.8	15.0			
	15000	KISV	4	S/F	1034.1	1035.7	5.6	61.0			
	15000	KISV	29	PBI	1034.1	1039.7	9.1	38.0			
	600	HUMN	2	S/F	1035.0	1035.8	5.0	32.0	4.0		
	15400	SGMR	4	S/F	1035.0E	1035.0	3.0D	62.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	1035.0E	1037.0	8.0D	70.0			QL=4 ST=2 TYP=3
	15400	SVTO	4	S/F	1035.0E	1036.0	7.0D	87.0			QL=4 ST=2 TYP=3
	2950	GORK	3	S	1035.3	1037.1	5.4	28.0			
	5900	KISV	4	S/F	1035.6	1037.2	7.2	52.0			
	1470	POTS	4	S/F	1036.0U	1036.8	2.0U	10.0			
	2850	CRIM	3	S	1036.0	1037.0	3.0	32.0	10.0		
	245	SGMR	49	GB	1036.0E	1036.0	1.0D	880.0			QL=2 ST=2 TYP=6
	8800	SGMR	8	S	1036.0E	1037.0	1.0D	60.0			QL=4 ST=2 TYP=3
	33	UPIC	32	ABS	1036.0	1039.0	29.0				
	3013	IZMI	7	C	1036.0	1037.4	5.0	24.0	13.0		
	200	GORK	41	F	1036.1	1047.0		280.0			
	200	GORK	41	F	1036.1	1037.0	12.7	140.0			
	650	GORK	1	S	1036.1	1037.1	3.1	8.0			
	100	GORK	41	F	1036.1	1037.1	12.5	420.0			
	100	GORK	41	F	1036.1	1046.7		260.0			
	950	GORK	1	S	1036.3	1037.0	2.7	17.0			
	4995	SGMR	8	S	1037.0E	1037.0	U	53.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	1037.0E	1037.0	U	720.0			QL=4 ST=2 TYP=6
	4995	SVTO	8	S	1037.0E	1037.0	1.0D	54.0			QL=4 ST=2 TYP=3
	5900	KISV	1	S	1043.9	1044.8	2.0	7.0			
	127	TORN	7	C	1046.3	1046.9	1.2	530.0	260.0		

S O L A R R A D I O E M I S S I O N
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MAY 1991

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	9300	KISV	22	GRF	1151.7	1227.8	51.6	16.0			
	9500	POTS	42	SER	1215.0	1353.0	160.0U	31.0			
	5900	KISV	22	GRF	1234.8	1240.8	27.8	14.0			
	245	SGMR	8	S	1315.0E	1315.0	U	66.0			QL=4 ST=2 TYP=3
	9300	KISV	23	GRF	1319.8	1323.6	15.9	16.0			
	9300	KISV	1	S	1330.6	1330.8	0.8	18.0			
	245	SGMR	8	S	1331.0E	1332.0	2.0D	110.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1333.0E	1333.0	2.0D	83.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1333.0E	1333.0	U	40.0			QL=4 ST=2 TYP=3
	6700	CUBA	21	GRF	1349.0	1451.0	110.0D	33.0			4R 1639 OFF
	9300	KISV	20	GRF	1350.8	1353.9	8.8	18.0			
	15000	KISV	2	S/F	1351.0	1353.1	5.4	27.0			
	6700	CUBA	1	S	1351.3	1353.5	6.2	8.0	4.0		22R
	5900	KISV	2	S/F	1351.8	1353.1	7.2	11.0			
	810	KRAK	8	S	1352.9	1353.3	0.4	18.0			
	245	SGMR	8	S	1356.0E	1357.0	1.0D	230.0			QL=2 ST=2 TYP=3
	127	TORN	6	S	1356.5	1357.0	0.7	60.0	30.0		
	245	SVTO	8	S	1357.0E	1357.0	U	190.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1440.0E	1440.0	U	50.0			QL=2 ST=2 TYP=3
	6700	CUBA	1	S	1445.0	1449.0	5.5	9.0	4.0		39L
	8800	SGMR	4	S/F	1445.0E	1447.0	7.0D	42.0			QL=4 ST=2 TYP=3
	15400	SGMR	4	S/F	1445.0E	1446.0	7.0D	60.0			QL=4 ST=2 TYP=3
	9400	HUAN	3	S	1445.1	1446.1	12.2	39.3	17.9		
	245	SGMR	4	S/F	1526.0E	1528.0	6.0D	130.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1528.0E	1528.0	1.0D	77.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	1723.0E	1723.0	1.0D	85.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	1723.0E	1723.0	5.0D	120.0			QL=4 ST=2 TYP=3
	9400	HUAN	22	GRF	1749.1	1818.6	66.6	16.7	7.6		
	9400	HUAN	1	S	1913.8	1916.2	4.3	5.9	1.8		
	9400	HUAN	3	S	1939.0	1941.2	4.5	47.2	12.2		
	15400	PALE	4	S/F	1940.0E	1941.0	5.0D	120.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	1941.0E	1941.0	U	100.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1941.0E	1941.0	U	29.0			QL=4 ST=2 TYP=3
	500	HIRA	42	SER	2032.4	2034.8	3.0	250.0			WL
	410	PALE	8	S	2034.0E	2034.0	1.0D	420.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2034.0E	2035.0	1.0D	320.0			QL=4 ST=2 TYP=3
	2800	OTTA	3	S	2038.4	2040.1	4.0	103.0	4.0		
	9400	HUAN	20	GRF	2048.6	2121.1	60.1	21.6	10.9		
	410	PALE	8	S	2133.0E	2133.0	1.0D	50.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2133.0E	2133.0	1.0D	68.0			QL=4 ST=2 TYP=3
	500	HIRA	42	SER	2153.4	2156.0	3.7	70.0			WR
	9400	HUAN	4	S/F	2200.2	2204.5	8.5	29.5	12.3		
	15400	SGMR	8	S	2237.0E	2238.0	1.0D	86.0			QL=4 ST=2 TYP=3
	500	HIRA	46	C	2237.1	2237.8	2.0	20.0	8.0		0
	17000	NOBE	2	S/F	2237.3	2237.8	1.0	102.0			L 80,35GHz:0
08	245	LEAR	44	NS	0050.0E	0146.0	85.0D	100.0			QL=4 ST=2 TYP=1
	200	GORK	44	NS	0245.0E		410.0D		5.0		
	100	GORK	44	NS	0245.0E		410.0D		5.0		
	204	IZMI	43	NS	0600.0		360.0	55.0			
	127	TORN	44	NS	0620.0E		505.0D		6.0		V=1
	245	LEAR	44	NS	0629.0E	0635.0	189.0D	220.0			QL=4 ST=2 TYP=1
	245	SVTO	44	NS	0639.0E	0652.0	589.0D	180.0			QL=4 ST=2 TYP=1
	260	ONDR	44	NS	0700.0E	1012.1	540.0D	516.0			
	245	SGMR	44	NS	1019.0E	1554.0	788.0D	380.0			QL=2 ST=2 TYP=1
	235	CUBA	44	NS	1255.0E		437.0D		29.0		
	245	PALE	44	NS	1800.0E	0000.0U	360.0D	64.0			QL=4 ST=2 TYP=1
	200	HIRA	44	NS	2030.0E	0818.0	750.0D	400.0	50.0		MR
	610	LEAR	43	NS	2317.0	0147.0	393.0	540.0			QL=2 ST=3 TYP=1
	17000	NOBE	2	S/F	0014.8	0015.5	1.0	22.0			L 80,35GHz:0
	8800	LEAR	8	S	0015.0E	0015.0	U	53.0			QL=4 ST=2 TYP=3
	4995	LEAR	8	S	0015.0E	0015.0	U	42.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0015.0E	0015.0	1.0D	46.0			QL=2 ST=2 TYP=3
	15400	LEAR	8	S	0015.0E	0015.0	U	41.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	0051.0E	0051.0	U	63.0			QL=4 ST=2 TYP=3
	500	HIRA	42	SER	0051.4	0055.4	7.5	17.0			WR
	245	PALE	8	S	0055.0E	0055.0	1.0D	150.0			QL=4 ST=2 TYP=3
	2840	PEKG	45	C	0112.0	0114.7	10.0	53.1			
	17000	NOBE	2	S/F	0123.5	0123.9	20.0	18.0			L 80,35GHz:0

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

MAY 1991

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	4	S/F	0137.0E	0138.0	5.0D	330.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0137.0E	0139.0	2.0D	33.0			QL=4 ST=2 TYP=3
	245	PALE	4	S/F	0137.0E	0138.0	3.0D	300.0			QL=4 ST=2 TYP=3
	2840	PEKG	3	S	0137.0	0138.8	10.0	16.3			
	100	HIRA	46	C	0137.3	0139.0	4.0	1000.0D	400.0		ML
	200	HIRA	46	C	0137.3	0138.0	3.0	800.0	200.0		MR
	500	HIRA	42	SER	0137.6	0138.0	6.5	210.0			WR
	4995	LEAR	8	S	0138.0E	0139.0	2.0D	41.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	0138.0E	0139.0	2.0D	41.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0139.0E	0139.0	1.0D	30.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0139.0E	0141.0	2.0D	32.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0139.0E	0139.0	1.0D	25.0			QL=2 ST=2 TYP=3
	410	PALE	8	S	0143.0E	0143.0	1.0D	59.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0146.0E	0146.0	U	81.0			QL=4 ST=2 TYP=3
	2840	PEKG	1	S	0214.0	0215.5	6.0	4.0			
	245	LEAR	8	S	0301.0E	0301.0	2.0D	83.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0302.0E	0302.0	1.0D	55.0			QL=2 ST=2 TYP=3
	17000	NOBE	1	S	0302.7	0302.8	1.0	66.0			L
	35000	NOBE	1	S	0302.7	0302.8	0.5	61.0			0 80GHZ:0
	17000	NOBE	2	S/F	0315.2	0330.3	20.0	27.0			L 80,35GHz:0
	245	PALE	8	S	0324.0E	0325.0	2.0D	83.0			QL=4 ST=2 TYP=3
	9100	GORK	23	GRF	0350.2	0751.0	339.0	29.0			
	245	LEAR	8	S	0403.0E	0404.0	1.0D	72.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0404.0E	0404.0	U	67.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0404.0E	0405.0	1.0D	75.0			QL=4 ST=2 TYP=3
	5900	KISV	2	S/F	0405.3	0407.6	7.5	6.0			
	9300	KISV	2	S/F	0407.0	0407.5	7.7	8.0			
	245	LEAR	8	S	0410.0E	0411.0	2.0D	110.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0410.0E	0411.0	2.0D	130.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0411.0E	0412.0	2.0D	120.0			QL=4 ST=2 TYP=3
	9300	KISV	22	GRF	0430.9	0435.3	22.4	9.0			
	17000	NOBE	2	S/F	0432.1	0432.5	2.0	47.0			L 80,35GHz:0
	15000	KISV	2	S/F	0435.0	0435.3	1.8	24.0			
	9300	KISV	22	GRF	0457.8	0513.1	23.2	13.0			
	9100	GORK	2	S/F	0523.5	0524.7	1.9	14.0			
	9300	KISV	22	GRF	0523.6	0542.2		17.0			
	9300	KISV	22	GRF	0523.6	0524.6	31.4	17.0			
	5900	KISV	20	GRF	0538.6	0542.2	11.4	8.0			
	245	LEAR	8	S	0543.0E	0544.0	2.0D	450.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0544.0E	0545.0	1.0D	410.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0546.0E	0546.0	1.0D	54.0			QL=4 ST=2 TYP=3
	15000	KISV	2	S/F	0559.8	0600.4	1.5	10.0			
	3013	IZMI	7	C	0604.0	0605.0	5.0	5.0			
	950	GORK	20	GRF	0613.0	0812.0	197.0D	8.0			
	650	GORK	20	GRF	0614.6	0725.0	126.0U	6.5			
	2950	GORK	20	GRF	0616.7	0751.4	133.0	12.0			
	245	LEAR	4	S/F	0620.0E	0623.0	3.0D	190.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	0623.0E	0623.0	3.0D	260.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0624.0E	0624.0	1.0D	160.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	0634.0	0643.3	9.3	210.0			
	245	SVTO	8	S	0636.0E	0637.0	1.0D	99.0			QL=4 ST=2 TYP=3
	15000	KISV	22	GRF	0643.5	0650.1	11.9	31.0			
	9100	GORK	46	C	0644.4	0650.0		14.0			
	9100	GORK	46	C	0644.4	0644.9	10.4	8.0			
	536	ONDR	40	F	0700.0	1012.1	220.0	27.0			
	9500	POTS	20	GRF	0910.0	0939.0	45.0	13.0			
	9300	KISV	1	S	0911.1	0912.0	2.1	8.0			
	245	SVTO	8	S	0920.0E	0920.0	U	85.0			QL=4 ST=2 TYP=3
	5900	KISV	20	GRF	0931.1	0936.5	18.1	12.0			
	15000	KISV	20	GRF	0931.4	0936.4	10.6	14.0			
	9300	KISV	20	GRF	0931.4	0936.7	15.9	17.0			
	127	TORN	47	GB	1007.6	1012.0	6.0	3200.0	90.0		
	33	UPIC	42	SER	1008.5	1012.2	147.9				
	15000	KISV	2	S/F	1008.6	1009.3	3.3	10.0			
	1470	POTS	29	PBI	1010.0	1011.6	9.5	4.0			
	245	SGMR	49	GB	1011.0E	1011.0	2.0D	1200.0			QL=2 ST=2 TYP=6
	204	IZMI	45	C	1011.5	1012.0	2.0	1800.0			
	245	SVTO	49	GB	1012.0E	1012.0	828.0D	1500.0			QL=4 ST=3 TYP=6
	245	SGMR	8	S	1013.0E	1013.0	1.0D	77.0			QL=2 ST=2 TYP=3

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

MAY 1991

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	410	SVTO	8	S	1019.0E	1020.0	1.0D	68.0			QL=4 ST=2 TYP=3
	430	KRAK	2	S/F	1024.0U	1030.8U	7.0U	63.0	10.0		
	127	TORN	45	C	1028.1	1028.6	5.0	80.0	15.0		
	810	KRAK	8	S	1151.8	1151.8	0.1	130.0			
	15000	KISV	22	GRF	1212.2	1218.7	18.8	32.0			
	9500	POTS	4	S/F	1218.3	1218.6	2.2	11.0			
	1470	POTS	8	S	1219.4	1219.7	0.6	24.0			
	9300	KISV	22	GRF	1236.0	1246.2	13.0	13.0			
	15000	KISV	1	S	1245.5	1246.1	1.6	11.0			
	9500	POTS	29	PBI	1245.5	1246.2	14.5	13.0			
	6700	CUBA	20	GRF	1304.0E	1325.0E	124.0D	12.0			84R SUNRISE
	9400	HUAN	2	S/F	1310.5	1313.0	5.2	25.4	9.5		
	15400	SGMR	8	S	1312.0E	1312.0	1.0D	64.0			QL=4 ST=2 TYP=3
	9500	POTS	29	PBI	1312.3	1313.0	18.2	29.0			
	9300	KISV	2	S/F	1312.6	1312.9	5.4	24.0			
	15000	KISV	1	S	1312.6	1312.9	1.7	39.0			
	15000	CUBA	1	S	1312.7	1313.0	1.3	51.0	25.0		7R
	15400	SVTO	8	S	1313.0E	1313.0	U	65.0			QL=4 ST=2 TYP=3
	15000	CUBA	20	GRF	1345.0	1613.0	387.0D	50.0			OOR 2012 OFF
	536	ONDR	8	S	1416.0	1416.0	0.3	207.0			
	33	UPIC	42	SER	1459.5	1513.1	38.7				
	9400	HUAN	22	GRF	1520.3	1558.0	61.0	16.3	8.7		
	2800	OTTA	22	GRF	1532.0	1546.0	110.0	222.0	7.0		
	6700	CUBA	21	GRF	1543.0	1558.0	55.0	15.0	7.0		47R
	245	SVTO	8	S	1554.0E	1554.0	1.0D	420.0			QL=2 ST=2 TYP=3
	6700	CUBA	2	S/F	1613.5	1615.0	4.7	9.0	4.0		54R
	6700	CUBA	40	F	1652.0	1655.0	5.0	13.0	6.0		COMPLEX POL
	245	PALE	8	S	1739.0E	1739.0	1.0D	320.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1746.0E	1747.0	2.0D	91.0			QL=4 ST=2 TYP=3
	9400	HUAN	23	GRF	1801.4	1856.8	75.3	17.2	6.0		
	245	SGMR	8	S	1825.0E	1825.0	U	190.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	1825.0E	1825.0	U	110.0			QL=4 ST=2 TYP=3
	245	PALE	4	S/F	1829.0E	1837.0	10.0D	420.0			QL=2 ST=2 TYP=5
	410	SGMR	4	S/F	1830.0E	1833.0	8.0D	120.0			QL=4 ST=2 TYP=3
	2695	SGMR	4	S/F	1831.0E	1837.0	7.0D	50.0			QL=4 ST=2 TYP=3
	4995	SGMR	4	S/F	1831.0E	1835.0	7.0D	63.0			QL=4 ST=2 TYP=3
	8800	SGMR	4	S/F	1831.0E	1835.0	7.0D	39.0			QL=4 ST=2 TYP=3
	410	PALE	4	S/F	1832.0E	1837.0	6.0D	120.0			QL=4 ST=2 TYP=3
	2800	OTTA	3	S	1832.1	1837.0	11.1	467.0	19.0		
	610	PALE	4	S/F	1833.0E	1833.0	4.0D	53.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1833.0E	1837.0	4.0D	540.0			QL=2 ST=2 TYP=6
	6700	CUBA	46	C	1833.0	1835.7	14.0	85.0	21.0		44R
	9400	HUAN	4	S/F	1833.8	1835.2	11.0	45.3	16.9		
	2695	PALE	4	S/F	1834.0E	1837.0	4.0D	47.0			QL=4 ST=2 TYP=3
	4995	PALE	4	S/F	1834.0E	1835.0	5.0D	78.0			QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	1835.0E	1835.0	5.0D	68.0			QL=4 ST=2 TYP=3
	9400	HUAN	1	S	2127.6	2130.3	6.0	14.5	4.1		
	2800	OTTA	3	S	2129.8	2130.1	2.0	104.0	3.0		
09	610	PALE	44	NS	0227.0E	0310.0	1293.0D	210.0			QL=4 ST=1 TYP=1
	410	PALE	44	NS	0240.0E	0309.0	1280.0D	350.0			QL=4 ST=1 TYP=1
	200	GORK	44	NS	0256.0E		400.0D		10.0		
	100	GORK	44	NS	0256.0E		400.0D		20.0		
	204	IZMI	43	NS	0600.0		360.0	300.0			
	245	LEAR	43	NS	0639.0	0812.0	178.0	420.0			QL=4 ST=2 TYP=1
	127	TORN	43	NS	0642.0		498.0		620.0		V=1
	245	SVTO	44	NS	0651.0E	1446.0	638.0D	800.0			QL=4 ST=2 TYP=1
	260	ONDR	44	NS	0700.0E	1322.0	540.0D	547.0			
	430	KRAK	44	NS	0702.2E	1023.6	281.3D	260.0	8.0		
	410	LEAR	43	NS	0707.0	0905.0	150.0	130.0			QL=4 ST=2 TYP=1
	410	SVTO	44	NS	0732.0E	1213.0	282.0D	260.0			QL=4 ST=2 TYP=1
	33	UPIC	43	NS	0750.0	1008.8	440.0				
	245	SGMR	44	NS	0955.0E	2144.0	813.0D	650.0			QL=2 ST=2 TYP=1
	235	CUBA	44	NS	1255.0E		440.0D		95.0		
	245	PALE	43	NS	1632.0	0321.0	731.0	2700.0			QL=4 ST=2 TYP=1
	200	HIRA	44	NS	2030.0E	0330.0	750.0D	900.0	150.0		SR
	410	PALE	44	NS	2228.0E	2233.0	36.0D	75.0			QL=4 ST=2 TYP=1
	17000	NOBE	1	S	0058.7	0058.8	0.5	29.0			L 80,35GHz:0
	245	PALE	8	S	0105.0E	0105.0	U	390.0			QL=4 ST=2 TYP=3

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

MAY 1991

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	2695	PENT	4	S/F	0132.8	0141.2	10.0	2730.0	55.0		
	8800	LEAR	4	S/F	0158.0E	0201.0	5.0D	47.0			QL=4 ST=2 TYP=3
	15400	LEAR	4	S/F	0158.0E	0202.0	4.0D	42.0			QL=2 ST=2 TYP=5
	2840	PEKG	5	S	0158.0	0158.5	6.0	43.3			
	500	HIRA	46	C	0200.3	0201.7	2.0	110.0	15.0		0
	4995	LEAR	8	S	0201.0E	0201.0	1.0D	16.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	0201.0E	0201.0	1.0D	63.0			QL=4 ST=2 TYP=3
	2840	PEKG	3	S	0307.0	0323.3	26.0	13.0			
	17000	NOBE	2	S/F	0310.7	0314.4	17.0	33.0			0 80,35GHz:0
	9100	GORK	23	GRF	0310.9	0648.0	379.0D	36.0			
	650	GORK	23	GRF	0310.9	0325.2	16.3	5.0			
	9100	GORK	2	S/F	0310.9	0314.3	4.3	21.0			
	950	GORK	23	GRF	0311.1	0324.8	18.4	4.0			
	950	GORK	46	C	0311.4	0312.5		7.0			
	2950	GORK	22	GRF	0311.4	0325.5	21.2	12.0			
	650	GORK	46	C	0311.4	0311.7	3.6	29.0			
	950	GORK	46	C	0311.4	0311.7	3.6	10.0			
	650	GORK	46	C	0311.4	0312.8		23.0			
	9100	GORK	2	S/F	0322.2	0325.2	4.1	15.0			
	950	GORK	3	S	0323.1	0323.4	0.5	16.0			
	9100	GORK	46	C	0333.7	0339.4		128.0			
	9100	GORK	46	C	0333.7	0334.6	14.3	17.0			
	8800	PALE	4	S/F	0336.0E	0339.0	7.0D	150.0			QL=4 ST=2 TYP=3
	17000	NOBE	2	S/F	0336.5	0339.3	7.0	48.0			L 80,35GHz:0
	15400	PALE	4	S/F	0337.0E	0339.0	3.0D	110.0			QL=4 ST=2 TYP=3
	15400	LEAR	4	S/F	0414.0E	0416.0	3.0D	69.0			QL=2 ST=2 TYP=3
	650	GORK	23	GRF	0414.0	0649.4	316.0D	19.0			
	15000	KISV	3	S	0414.8	0416.2	2.8	57.0			
	17000	NOBE	1	S	0415.8	0416.1	0.7	42.0			L 80,35GHz:0
	17000	NOBE	1	S	0504.2	0504.6	0.8	15.0			L 80,35GHz:0
	15000	KISV	2	S/F	0504.3	0504.5	1.4	16.0			
	15400	LEAR	8	S	0537.0E	0538.0	1.0D	99.0			QL=2 ST=2 TYP=3
	410	LEAR	4	S/F	0550.0E	0558.0	8.0D	82.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0551.0E	0551.0	1.0D	95.0			QL=2 ST=2 TYP=3
	610	LEAR	49	GB	0551.0E	0558.0	9.0D	2100.0			QL=4 ST=2 TYP=6
	500	HIRA	46	C	0551.0	0558.1	9.5	550.0	100.0		SR
	650	GORK	47	GB	0551.1	0558.8	9.3	1080.0			
	950	GORK	22	GRF	0551.1	0556.8	13.2	9.0			
	600	HUMN	4	S/F	0551.5	0552.0	1.0	30.0	15.0		
	15000	KISV	22	GRF	0552.6	0606.5		16.0			
	15000	KISV	22	GRF	0552.6	0559.8	25.4	22.0			
	610	SVTO	49	GB	0554.0E	0558.0	6.0D	1600.0			QL=2 ST=3 TYP=6
	600	HUMN	4	S/F	0554.5	0559.0	5.4	439.0	103.0		
	2950	GORK	20	GRF	0555.1	0732.5	215.0	11.0			
	5900	KISV	2	S/F	0555.8	0558.0	4.5	8.0			
	410	SVTO	8	S	0556.0E	0558.0	2.0D	60.0			QL=2 ST=2 TYP=3
	9300	KISV	2	S/F	0556.0	0558.3	5.9	15.0			
	610	LEAR	8	S	0559.0E	0600.0	1.0D	71.0			QL=4 ST=2 TYP=3
	15400	SVTO	8	S	0559.0E	0559.0	1.0D	25.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0600.0E	0600.0	U	79.0			QL=2 ST=2 TYP=3
	500	HIRA	42	SER	0603.3	0607.8	8.0	52.0			MR
	500	HIRA	20	GRF	0614.0	0658.0	143.0	40.0	10.0		WR
	950	GORK	22	GRF	0622.4	0657.0	48.5	4.0			
	5900	KISV	22	GRF	0632.8	0639.0	20.9	14.0			
	9300	KISV	22	GRF	0638.6	0655.6	25.1	22.0			
	245	SVTO	4	S/F	0641.0E	0642.0	8.0D	140.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0641.0E	0642.0	1.0D	56.0			QL=4 ST=2 TYP=3
	204	IZMI	25	R	0642.0	0730.0	145.0	1000.0			
	650	GORK	4	S/F	0655.9	0656.9	7.9	44.0			
	600	HUMN	2	S/F	0656.0	0657.0	9.0	36.0	15.0		
	410	LEAR	8	S	0656.0E	0656.0	1.0D	27.0			QL=4 ST=2 TYP=3
	610	LEAR	20	GRF	0656.0E	0656.0	7.0D	74.0			QL=4 ST=2 TYP=2
	500	HIRA	42	SER	0656.3	0657.0	6.5	70.0			WR
	536	ONDR	41	F	0700.0	0903.5	540.0	739.0			
	5900	KISV	2	S/F	0706.3	0708.8	4.1	12.0			
	410	SVTO	8	S	0727.0E	0728.0	2.0D	240.0			QL=2 ST=2 TYP=3
	950	GORK	22	GRF	0732.0	0743.0	16.0	7.0			
	600	HUMN	4	S/F	0739.0	0743.0	9.5	16.0	5.0		
	15000	KISV	2	S/F	0800.8	0801.5	2.8	28.0			

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

Outstanding Occurrences

MAY 1991

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	500	HIRA	42	SER	0809.7	0810.6	5.7	55.0			MR
	600	HUMN	42	SER	0811.0	1025.0		21.0			
	950	GORK	21	GRF	0831.4	0841.4	18.0	3.0			
	9100	GORK	46	C	0839.0	0844.7		22.0			
	9100	GORK	46	C	0839.0	0839.9	12.0	32.0			
	9300	KISV	3	S	0839.5	0840.0	2.3	31.0			
	15000	KISV	2	S/F	0839.5	0840.0	1.2	15.0			
	5900	KISV	22	GRF	0839.6	0840.0	11.5	12.0			
	5900	KISV	22	GRF	0839.6	0844.7		15.0			
	245	LEAR	49	GB	0841.0E	0841.0	U	1300.0			QL=2 ST=2 TYP=6
	245	SVTO	49	GB	0841.0E	0841.0	U	1300.0			QL=2 ST=2 TYP=6
	650	GORK	2	S/F	0841.3	0841.9	0.7	37.0			
	950	GORK	1	S	0841.4	0841.9	0.8	13.0			
	9300	KISV	2	S/F	0843.1	0844.7	5.6	21.0			
	950	GORK	1	S	0848.2	0848.5	0.6	4.0			
	650	GORK	2	S/F	0848.2	0848.5	0.5	15.0			
	9300	KISV	3	S	0904.8	0907.3	7.1	24.0			
	9100	GORK	3	S	0905.5	0907.2	3.9	25.0			
	5900	KISV	2	S/F	0906.8	0907.3	4.3	7.0			
	410	SVTO	49	GB	0911.0E	0911.0	U	720.0			QL=2 ST=2 TYP=6
	245	SVTO	49	GB	0911.0E	0911.0	U	740.0			QL=2 ST=2 TYP=6
	15000	KISV	2	S/F	0911.4	0913.2	3.1	32.0			
	5900	KISV	20	GRF	0927.4	0930.0	17.1	6.0			
	5900	KISV	1	S	0941.3	0942.6	2.9	8.0			
	9300	KISV	22	GRF	0941.3	0946.9	11.2	18.0			
	15000	KISV	1	S	0942.2	0942.7	1.2	9.0			
	15000	KISV	23	GRF	0944.2	0946.9	10.6	22.0			
	5900	KISV	2	S/F	0946.4	0953.5	9.2	8.0			
	15000	KISV	4	S/F	0952.6	0953.5	2.2	82.0			
	9300	KISV	4	S/F	0952.9	0953.5	2.6	35.0			
	8800	SVTO	8	S	0953.0E	0953.0	U	37.0			QL=4 ST=2 TYP=3
	15400	SVTO	8	S	0953.0E	0953.0	1.0D	120.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1023.0E	1024.0	2.0D	43.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	1023.0E	1023.0	2.0D	260.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	1023.0E	1024.0	1.0D	200.0			QL=2 ST=2 TYP=3
	15000	KISV	46	C	1052.1	1054.6		71.0			
	15000	KISV	46	C	1052.1	1053.9	5.4	103.0			
	15400	SGMR	8	S	1053.0E	1053.0	2.0D	120.0			QL=2 ST=2 TYP=3
	15400	SVTO	8	S	1053.0E	1053.0	2.0D	130.0			QL=4 ST=2 TYP=3
	9300	KISV	45	C	1053.6	1054.4		26.0			
	9300	KISV	45	C	1053.6	1054.7	5.9	32.0			
	15000	KISV	2	S/F	1111.0	1113.4	6.4	18.0			
	9300	KISV	2	S/F	1111.5	1114.6	4.5	17.0			
	5900	KISV	2	S/F	1112.5	1114.7	5.0	11.0			
	15000	KISV	4	S/F	1146.9	1148.0	5.7	76.0			
	15400	SGMR	8	S	1147.0E	1148.0	1.0D	80.0			QL=4 ST=3 TYP=3
	15400	SVTO	8	S	1147.0E	1148.0	1.0D	76.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	1203.0E	1203.0	2.0D	52.0			QL=2 ST=2 TYP=3
	15400	SGMR	49	GB	1207.0E	1208.0	2.0D	530.0			QL=2 ST=2 TYP=6
	8800	SVTO	4	S/F	1207.0E	1208.0	3.0D	140.0			QL=4 ST=2 TYP=3
	15400	SVTO	49	GB	1207.0E	1208.0	3.0D	540.0			QL=4 ST=3 TYP=6
	9300	KISV	45	C	1207.4	1208.4	3.6	149.0			
	9300	KISV	45	C	1207.4	1207.8		125.0			
	5900	KISV	4	S/F	1207.6	1208.5	3.3	28.0			
	15000	KISV	4	S/F	1208.3	1208.4	2.0	240.0			
	15400	SVTO	4	S/F	1233.0E	1235.0	4.0D	52.0			QL=4 ST=2 TYP=3
	9400	HUAN	1	S	1313.0	1314.7	5.2	11.5	3.8		
	6700	CUBA	2	S/F	1313.2	1313.9	1.8	9.0	4.0		26R
	245	SGMR	49	GB	1433.0E	1434.0	1.0D	730.0			QL=2 ST=2 TYP=6
	245	SVTO	49	GB	1433.0E	1434.0	1.0D	710.0			QL=2 ST=2 TYP=6
	410	SGMR	4	S/F	1441.0E	1446.0	5.0D	57.0			QL=4 ST=2 TYP=3
	600	HUMN	2	S/F	1442.0	1446.0	13.0	14.0	6.0		
	2800	OTTA	20	GRF	1442.5	1449.5	17.5	111.0	4.0		
	610	SGMR	8	S	1445.0E	1445.0	1.0D	40.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1445.0E	1446.0	2.0D	940.0			QL=2 ST=2 TYP=6
	6700	CUBA	2	S/F	1452.5	1454.0	2.5	5.0	2.0		POL OFF
	15000	CUBA	21	GRF	1507.0	1532.0	75.0	33.0	16.0		22R
	9400	HUAN	4	S/F	1507.8	1510.3	4.3	165.2	64.8		
	6700	CUBA	46	C	1508.7	1510.0		100.0			13R

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

MAY 1991

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	6700	CUBA	46	C	1508.7	1520.9	18.5	180.0	33.0		32R
	600	HUMN	2	S/F	1509.0	1510.0	7.0	24.0	10.0		
	15000	CUBA	46	C	1509.0	1510.0	3.2	205.0	44.0		33R
	610	SGMR	8	S	1509.0E	1510.0	1.0D	47.0			QL=4 ST=2 TYP=3
	2695	SGMR	8	S	1509.0E	1510.0	1.0D	42.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1509.0E	1510.0	2.0D	52.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1509.0E	1510.0	2.0D	130.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	1509.0E	1510.0	2.0D	120.0			QL=4 ST=2 TYP=3
	15400	SVTO	4	S/F	1509.0E	1510.0	5.0D	230.0			QL=4 ST=2 TYP=3
	2800	OTTA	22	GRF	1509.5	1510.0	41.5	278.0	11.0		
	410	SGMR	8	S	1510.0E	1511.0	1.0D	300.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1510.0E	1510.0	1.0D	180.0			QL=2 ST=2 TYP=3
	4995	SVTO	8	S	1510.0E	1510.0	U	53.0			QL=4 ST=2 TYP=3
	9400	HUAN	30	PBI	1512.1	1512.1	55.9	23.0	13.5		
	808	ONDR	48	C	1513.0	1521.2	17.0	31.0			
	9400	HUAN	4	S/F	1517.6	1521.0	6.0	136.3	54.8		
	15000	CUBA	3	S	1517.9	1521.0	6.1	153.0	76.0		33R
	2695	SGMR	4	S/F	1519.0E	1520.0	3.0D	110.0			QL=4 ST=2 TYP=3
	4995	SGMR	4	S/F	1519.0E	1520.0	3.0D	190.0			QL=4 ST=2 TYP=3
	8800	SGMR	4	S/F	1519.0E	1520.0	3.0D	150.0			QL=4 ST=2 TYP=3
	15400	SVTO	8	S	1519.0E	1520.0	2.0D	150.0			QL=4 ST=2 TYP=3
	4995	SVTO	4	S/F	1519.0E	1520.0	3.0D	190.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	1519.0E	1520.0	3.0D	120.0			QL=4 ST=2 TYP=3
	2800	OTTA	3	S	1519.5	1520.5	5.5	807.0	24.0		
	600	HUMN	2	S/F	1520.0	1521.0	1.5	40.0	5.0		
	1415	SGMR	8	S	1520.0E	1520.0	2.0D	51.0			QL=4 ST=2 TYP=3
	2695	SVTO	8	S	1520.0E	1520.0	1.0D	89.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	1520.0E	1520.0	1.0D	97.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	1520.0E	1520.0	1.0D	48.0			QL=4 ST=2 TYP=3
	15000	CUBA	1	S	1526.6	1527.5	3.2	17.0	8.0		PDL DOWN
	6700	CUBA	29	PBI	1527.2		27.8	15.0	7.0		16R
	6700	CUBA	2	S/F	1627.0	1629.1	8.0	10.0	5.0		POL OFF
	410	PALE	8	S	1655.0E	1655.0	U	100.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1717.0E	1717.0	U	620.0			QL=2 ST=2 TYP=6
	15000	CUBA	3	S	1744.0	1746.8	9.1	389.0	39.0		38R
	9400	HUAN	4	S/F	1745.2	1746.5	5.3	86.4	34.1		
	6700	CUBA	2	S/F	1746.0	1747.0	2.0	8.0	4.0		54L
	8800	PALE	8	S	1746.0E	1746.0	1.0D	65.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	1746.0E	1746.0	1.0D	340.0			QL=4 ST=2 TYP=3
	8800	SGMR	4	S/F	1746.0E	1746.0	3.0D	56.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	1746.0E	1746.0	1.0D	390.0			QL=4 ST=2 TYP=3
	9400	HUAN	1	S	1901.8	1903.2	4.3	9.6	4.0		
	245	SGMR	49	GB	1919.0E	1919.0	2.0D	1100.0			QL=2 ST=2 TYP=6
	9400	HUAN	2	S/F	1948.2	1951.2	5.6	11.5	5.0		
	245	PALE	49	GB	2000.0E	2001.0	1.0D	1400.0			QL=2 ST=2 TYP=6
	245	SGMR	49	GB	2000.0E	2001.0	1.0D	990.0			QL=2 ST=2 TYP=6
	245	PALE	49	GB	2004.0E	2004.0	1.0D	700.0			QL=2 ST=2 TYP=6
	410	PALE	8	S	2031.0E	2031.0	1.0D	57.0			QL=4 ST=2 TYP=3
	9400	HUAN	2	S/F	2138.1	2140.2	4.5	9.6	2.5		
	17000	NOBE	1	S	2205.8	2206.1	1.0	23.0			0 80,35GHz:0
	410	PALE	4	S/F	2217.0E	2219.0	3.0D	58.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	2219.0E	2219.0	U	30.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	2220.0E	2225.0	6.0D	1700.0			QL=2 ST=2 TYP=7
	245	SGMR	49	GB	2220.0E	2222.0	6.0D	1900.0			QL=2 ST=2 TYP=6
	410	SGMR	8	S	2223.0E	2223.0	U	55.0			QL=4 ST=2 TYP=3
	17000	NOBE	1	S	2233.6	2234.3	7.0	16.0			0 80,35GHz:0
	410	PALE	8	S	2237.0E	2238.0	1.0D	240.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	2238.0E	2238.0	U	370.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2247.0E	2247.0	U	100.0			QL=4 ST=2 TYP=3
10	610	PALE	44	NS	0227.0E	0351.0	136.0D	410.0			QL=4 ST=2 TYP=1
	950	GORK	44	NS	0232.0E		287.0D		10.0		
	100	GORK	44	NS	0239.0E		410.0D		85.0		
	200	GORK	44	NS	0239.0E		410.0D		25.0		
	410	PALE	44	NS	0240.0E	0419.0	123.0D	560.0			QL=4 ST=2 TYP=1
	410	LEAR	44	NS	0257.0E	0458.0	328.0D	410.0			QL=4 ST=2 TYP=1
	610	LEAR	44	NS	0257.0E	0257.0	322.0D	170.0			QL=4 ST=2 TYP=1
	610	SVTO	44	NS	0359.0E	0402.0	249.0D	410.0			QL=4 ST=2 TYP=1
	410	SVTO	44	NS	0359.0E	0407.0	259.0D	650.0			QL=4 ST=2 TYP=1

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

MAY 1991

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	SVTO	44	NS	0359.0E	0422.0	1201.0D	1200.0			QL=4 ST=1 TYP=1
	33	UPIC	44	NS	0400.0E	0516.0	260.0D				
	600	HUMN	44	NS	0500.0E		540.0D	36.0			
	204	IZMI	43	NS	0600.0		360.0	200.0			
	127	TORN	44	NS	0620.0E		520.0D		290.0		V=1
	810	KRAK	44	NS	0650.0E	0703.5	251.5D	12.0	3.0		
	430	KRAK	44	NS	0650.0E	0650.8	183.5D	122.0	27.0		
	260	ONDR	44	NS	0700.0E	1426.0D	540.0D	570.0			
	536	ONDR	44	NS	0700.0E	0811.6D	180.0D	58.0			
	950	GORK	44	NS	0742.0E		112.0D		3.0		
	245	SGMR	44	NS	0949.0E	2156.0	820.0D	920.0			QL=2 ST=2 TYP=1
	235	CUBA	44	NS	1250.0E		437.0D		37.0		
	245	PALE	44	NS	1631.0E	2156.0	732.0D	640.0			QL=4 ST=2 TYP=1
	200	HIRA	44	NS	2030.0E	0503.0	750.0D	100.0	30.0		WR
	245	LEAR	44	NS	2303.0E	2310.0	239.0D	660.0			QL=4 ST=2 TYP=1
	2840	PEKG	1	S	0054.0	0055.1	3.0	1.6			
	2840	PEKG	1	S	0118.0	0118.5	2.0	4.1			
	500	HIRA	20	GRF	0124.5	0407.5	275.0D	470.0	50.0		SR
	2840	PEKG	47	GB	0126.0	0147.2	34.0	575.0			
	17000	NOBE	20	GRF	0131.4	0146.1	55.0	57.0			L 80,35GHz:0
	4995	PALE	8	S	0134.0E	0134.0	U	26.0			QL=4 ST=2 TYP=3
	1415	LEAR	8	S	0136.0E	0136.0	1.0D	61.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	0136.0E	0136.0	1.0D	57.0			QL=4 ST=2 TYP=3
	2695	LEAR	4	S/F	0138.0E	0141.0	3.0D	150.0			QL=2 ST=2 TYP=3
	2695	PALE	4	S/F	0138.0E	0141.0	3.0D	150.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	0139.0E	0139.0	U	840.0			QL=2 ST=2 TYP=6
	410	PALE	8	S	0139.0E	0139.0	U	25.0			QL=4 ST=2 TYP=3
	1415	PALE	4	S/F	0143.0E	0146.0	6.0D	400.0			QL=4 ST=2 TYP=3
	4995	PALE	20	GRF	0143.0E	0154.0	15.0D	48.0			QL=4 ST=2 TYP=2
	1415	LEAR	4	S/F	0144.0E	0146.0	5.0D	450.0			QL=4 ST=2 TYP=3
	2695	LEAR	49	GB	0144.0E	0146.0	5.0D	780.0			QL=2 ST=2 TYP=6
	2695	PALE	49	GB	0144.0E	0146.0	11.0D	860.0			QL=4 ST=2 TYP=6
	410	PALE	8	S	0145.0E	0145.0	U	58.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0154.0E	0154.0	U	67.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	0212.0E	0214.0	8.0D	320.0			QL=2 ST=2 TYP=3
	610	LEAR	20	GRF	0218.0E	0229.0	13.0D	57.0			QL=4 ST=2 TYP=2
	610	PALE	20	GRF	0223.0E	0229.0	7.0D	64.0			QL=4 ST=2 TYP=2
	650	GORK	22	GRF	0300.0E	0400.0	390.0D	350.0			
	9100	GORK	23	GRF	0306.0U	0527.0	389.0D	36.0			
	2950	GORK	20	GRF	0312.4	0517.4	356.0	22.0			
	5900	KISV	2	S/F	0418.8	0420.2	4.8	5.0			
	9100	GORK	2	S/F	0447.7	0448.4	2.9	10.0			
	5900	KISV	2	S/F	0523.1	0524.1	1.6	6.0			
	9300	KISV	21	GRF	0523.1	0523.7	12.6	18.0			
	9100	GORK	2	S/F	0523.3	0523.6	3.0	16.0			
	15000	KISV	1	S	0523.3	0523.6	0.6	18.0			
	15000	KISV	1	S	0548.3	0548.6	1.0	12.0			
	5900	KISV	1	S	0700.0	0700.9	2.2	6.0			
	200	GORK	41	F	0737.7	0908.1	104.7	730.0			
	200	GORK	41	F	0737.7	0921.3		730.0			
	9300	KISV	22	GRF	0803.2	0811.9	19.4	23.0			
	204	IZMI	42	SER	0807.0	0907.5		1650.0			
	245	LEAR	49	GB	0810.0E	0811.0	2.0D	590.0			QL=2 ST=2 TYP=6
	245	SVTO	49	GB	0810.0E	0811.0	2.0D	720.0			QL=2 ST=2 TYP=6
	9100	GORK	1	S	0810.7	0811.0	1.5	12.0			
	5900	KISV	4	S/F	0811.6	0811.9	2.0	16.0			
	245	LEAR	49	GB	0824.0E	0827.0	4.0D	640.0			QL=2 ST=2 TYP=7
	245	SVTO	49	GB	0827.0E	0827.0	1.0D	680.0			QL=2 ST=2 TYP=6
	245	LEAR	8	S	0923.0E	0923.0	1.0D	220.0			QL=2 ST=2 TYP=3
	245	LEAR	4	S/F	0934.0E	0935.0	3.0D	290.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	0936.0E	0936.0	1.0D	160.0			QL=2 ST=2 TYP=3
	536	ONDR	40	F	1000.0	1011.2	285.0	17.0			
	410	SVTO	8	S	1022.0E	1022.0	U	120.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	1042.0E	1043.0	2.0D	74.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	1043.0E	1043.0	U	180.0			QL=4 ST=2 TYP=3
	5900	KISV	22	GRF	1045.3	1054.0		12.0			
	5900	KISV	22	GRF	1045.3	1050.2	18.5	15.0			
	245	SGMR	8	S	1048.0E	1049.0	2.0D	310.0			QL=4 ST=2 TYP=3
	204	IZMI	41	F	1048.0	1048.3	1.0	1000.0			

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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
10	410	SGMR	4	S/F	1130.0E	1131.0	4.0D	56.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	1130.0E	1131.0	3.0D	580.0			QL=2 ST=2 TYP=6
	245	SGMR	49	GB	1131.0E	1131.0	3.0D	660.0			QL=2 ST=2 TYP=6
	245	SVTO	49	GB	1131.0E	1131.0	2.0D	580.0			QL=2 ST=2 TYP=6
	410	SVTO	8	S	1131.0E	1131.0	1.0D	91.0			QL=2 ST=2 TYP=3
	204	IZMI	42	SER	1131.2	1132.7	6.5	1100.0			
	15000	KISV	1	S	1301.1	1301.4	1.4	9.0			
	6700	CUBA	21	GRF	1303.0E	1445.0	337.0D	38.0			8R SUNR.1316-13
	245	SGMR	8	S	1316.0E	1318.0	2.0D	400.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1317.0E	1318.0	1.0D	400.0			QL=2 ST=2 TYP=3
	127	TORN	4	S/F	1317.4	1318.0	2.0	1500.0	700.0		
	33	UPIC	45	C	1317.5	1318.3	1.5				
	9400	HUAN	1	S	1329.4	1330.8	4.9	14.6	6.2		
	9300	KISV	21	GRF	1330.4	1331.0	21.4	17.0			
	15000	KISV	2	S/F	1330.5	1331.2	2.5	15.0			
	9500	POTS	29	PBI	1330.5	1330.7	14.5	16.0			
	15000	KISV	2	S/F	1340.6	1341.3	2.1	10.0			
	410	SGMR	4	S/F	1342.0E	1343.0	3.0D	110.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	1342.0E	1344.0	3.0D	89.0			QL=2 ST=2 TYP=3
	1470	POTS	2	S/F	1342.6	1343.0	1.9	5.0			
	410	SVTO	8	S	1343.0E	1343.0	1.0D	98.0			QL=2 ST=2 TYP=3
	3000	POTS	2	S/F	1343.5	1344.0	1.5	4.0			
	245	SVTO	8	S	1344.0E	1344.0	U	99.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	1417.0E	1419.0	2.0D	53.0			QL=2 ST=2 TYP=3
	9500	POTS	1	S	1420.8	1421.5	1.8	7.0			
	6700	CUBA	2	S/F	1421.0	1422.0	2.0	6.0	3.0		43R
	245	SGMR	8	S	1421.0E	1421.0	U	92.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	1421.0E	1421.0	U	470.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1421.0E	1421.0	U	350.0			QL=2 ST=2 TYP=3
	3000	POTS	4	S/F	1421.0	1421.3	2.0	9.0			
	1470	POTS	2	S/F	1421.0	1421.5	0.8	4.0			
	15000	CUBA	1	S	1421.1	1421.8	1.8	8.0	4.0		39R
	410	SGMR	8	S	1425.0E	1425.0	1.0D	100.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1425.0E	1426.0	1.0D	410.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1425.0E	1426.0	1.0D	400.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	1425.0E	1426.0	1.0D	57.0			QL=2 ST=2 TYP=3
	127	TORN	7	C	1425.0	1426.0	1.8	2500.0D	1300.0		
	33	UPIC	45	C	1425.5	1426.3	1.5				
	15000	CUBA	1	S	1437.8	1439.3	3.8	10.0	5.0		44R
	245	SVTO	49	GB	1601.0E	1605.0	6.0D	740.0			QL=2 ST=2 TYP=6
	245	SGMR	49	GB	1604.0E	1605.0	2.0D	590.0			QL=2 ST=2 TYP=6
	245	SGMR	8	S	1714.0E	1714.0	U	220.0			QL=2 ST=2 TYP=3
	245	SVTO	49	GB	1720.0E	1724.0	6.0D	810.0			QL=2 ST=2 TYP=6
	410	SGMR	4	S/F	1721.0E	1725.0	5.0D	48.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1721.0E	1724.0	3.0D	1100.0			QL=2 ST=2 TYP=6
	410	SVTO	4	S/F	1721.0E	1722.0	3.0D	61.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	1730.0E	1731.0	1.0D	190.0			QL=4 ST=2 TYP=3
	15000	CUBA	2	S/F	1730.0	1733.1	5.1	20.0	10.0		6R
	245	SGMR	8	S	1731.0E	1731.0	U	260.0			QL=2 ST=3 TYP=3
	245	PALE	49	GB	1801.0E	1802.0	1.0D	600.0			QL=2 ST=2 TYP=6
	245	SGMR	49	GB	1802.0E	1802.0	2.0D	550.0			QL=2 ST=2 TYP=6
	6700	CUBA	1	S	1812.4	1812.9	2.5	6.0	3.0		22R
	15000	CUBA	21	GRF	1848.0	1916.0	80.0D	32.0			00R 2008 OFF
	15000	CUBA	40	F	1849.0	1851.0	4.0	19.0	9.0		28R
	245	PALE	49	GB	1849.0E	1850.0	2.0D	500.0			QL=2 ST=2 TYP=6
	245	SGMR	49	GB	1849.0E	1849.0	2.0D	690.0			QL=2 ST=2 TYP=6
	9400	HUAN	23	GRF	1851.0	1956.8	113.6	50.0	21.4		
	245	SGMR	49	GB	1905.0E	1914.0	11.0D	650.0			QL=2 ST=2 TYP=7
	15400	PALE	4	S/F	1908.0E	1910.0	8.0D	210.0			QL=4 ST=2 TYP=3
	8800	SGMR	4	S/F	1908.0E	1910.0	8.0D	150.0			QL=4 ST=2 TYP=3
	6700	CUBA	23	GRF	1908.0	1911.0	22.0	36.0	17.0		17L
	9400	HUAN	4	S/F	1908.7	1910.5	7.0	187.5	64.8		
	15000	CUBA	4	S/F	1908.7	1910.6	6.5	142.0	43.0		54R
	8800	PALE	4	S/F	1909.0E	1910.0	5.0D	110.0			QL=4 ST=2 TYP=3
	15400	SGMR	4	S/F	1909.0E	1910.0	3.0D	190.0			QL=2 ST=2 TYP=3
	245	SGMR	49	GB	1929.0E	1929.0	1.0D	580.0			QL=2 ST=2 TYP=6
	9400	HUAN	45	C	1937.8	1945.1	17.9	156.3	59.4		
	8800	PALE	20	GRF	1939.0E	1945.0	13.0D	110.0			QL=4 ST=2 TYP=2
	8800	SGMR	20	GRF	1939.0E	1945.0	14.0D	120.0			QL=4 ST=2 TYP=2

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MAY 1991

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	15400	PALE	20	GRF	1939.0E	1945.0	20.0D	110.0			QL=4 ST=2 TYP=2
	15400	SGMR	4	S/F	1940.0E	1945.0	12.0D	99.0			QL=2 ST=2 TYP=3
	6700	CUBA	20	GRF	1940.0	1946.0	22.0D	65.0			10L 2008 OFF
	15000	CUBA	4	S/F	1940.0	1945.7	10.0	55.0	26.0		71R
	4995	PALE	4	S/F	1944.0E	1946.0	15.0D	44.0			QL=4 ST=2 TYP=3
	4995	SGMR	4	S/F	1944.0E	1947.0	11.0D	44.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1946.0E	1950.0	7.0D	2100.0			QL=2 ST=2 TYP=7
	245	PALE	49	GB	1949.0E	1950.0	1.0D	2000.0			QL=2 ST=2 TYP=6
	410	SGMR	8	S	1949.0E	1950.0	1.0D	27.0			QL=4 ST=2 TYP=3
	9400	HUAN	2	S/F	2006.2	2008.2	4.0	14.6	5.4		
	9400	HUAN	22	GRF	2054.1	2104.3	33.3	29.2	13.6		
	17000	NOBE	2	S/F	2156.0	2157.2	12.0	18.0			L 80,35GHz:0
	245	LEAR	8	S	2340.0E	2340.0	U	92.0			QL=2 ST=2 TYP=3
	1415	LEAR	8	S	2341.0E	2341.0	1.0D	150.0			QL=4 ST=2 TYP=3
	2695	PALE	8	S	2341.0E	2341.0	U	31.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	2341.0E	2341.0	1.0D	120.0			QL=4 ST=2 TYP=3
11	200	GORK	44	NS	0236.0E		420.0D		5.0		
	245	SVTO	44	NS	0455.0E	0717.0	756.0D	750.0			QL=4 ST=2 TYP=1
	245	LEAR	44	NS	0500.0E	0716.0	276.0D	700.0			QL=2 ST=2 TYP=1
	204	IZMI	43	NS	0600.0		360.0	150.0			
	260	ONDR	44	NS	0700.0E	0920.0	540.0D	460.0			
	127	TORN	43	NS	0729.0	1034.3	450.0	330.0	6.0		V=1
	410	SVTO	44	NS	0918.0E	1103.0	152.0D	82.0			QL=4 ST=2 TYP=1
	245	SGMR	44	NS	0948.0E	1056.0	822.0D	860.0			QL=2 ST=2 TYP=1
	235	CUBA	44	NS	1300.0E		429.0D		28.0		
	245	PALE	44	NS	2012.0E	2137.0	263.0D	460.0			QL=4 ST=2 TYP=1
	200	HIRA	44	NS	2030.0E	2233.0	270.0D	600.0	150.0		WR
	410	PALE	44	NS	2208.0E	2306.0	116.0D	130.0			QL=4 ST=2 TYP=1
	245	LEAR	44	NS	2303.0E	2325.0	128.0D	120.0			QL=4 ST=2 TYP=1
	245	LEAR	8	S	0109.0E	0109.0	U	270.0			QL=2 ST=2 TYP=3
	245	LEAR	49	GB	0124.0E	0124.0	1.0D	610.0			QL=2 ST=2 TYP=6
	17000	NOBE	2	S/F	0135.5	0135.8	4.0	26.0			L 80,35GHz:0
	610	LEAR	8	S	0203.0E	0204.0	1.0D	85.0			QL=4 ST=2 TYP=3
	2840	PEKG	45	C	0203.0	0204.3	4.0	9.6			
	17000	NOBE	2	S/F	0209.2	0210.6	3.0	22.0			0 80,35GHz:0
	9100	GORK	23	GRF	0254.0E	0312.0U	396.0D	23.0			
	245	LEAR	4	S/F	0336.0E	0337.0	3.0D	130.0			QL=2 ST=2 TYP=3
	100	GORK	4	S/F	0337.3	0338.1	1.2	40.0D			
	200	GORK	4	S/F	0337.3	0338.3	1.4	30.0			
	245	LEAR	8	S	0418.0E	0418.0	2.0D	87.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0437.0E	0437.0	U	52.0			QL=2 ST=2 TYP=3
	9100	GORK	2	S/F	0440.7	0447.0	7.9	9.0			
	245	LEAR	8	S	0456.0E	0456.0	U	82.0			QL=2 ST=2 TYP=3
	9300	KISV	2	S/F	0514.5	0515.6	3.9	9.0			
	9100	GORK	2	S/F	0514.9	0515.6	3.6	11.0			
	536	ONDR	40	F	0700.0		540.0				
	9100	GORK	2	S/F	0707.7	0708.6	3.0	9.0			
	245	SVTO	49	GB	0729.0E	0730.0	1.0D	1100.0			QL=2 ST=2 TYP=6
	204	IZMI	7	C	0729.0	0729.7	2.0	450.0			
	245	LEAR	4	S/F	0746.0E	0748.0	32.0D	360.0			QL=2 ST=2 TYP=3
	15000	KISV	23	GRF	0801.2	0817.9	23.3	30.0			
	8800	LEAR	4	S/F	0802.0E	0804.0	11.0D	46.0			QL=4 ST=2 TYP=3
	15400	LEAR	4	S/F	0802.0E	0804.0	16.0D	140.0			QL=2 ST=2 TYP=3
	15400	SVTO	4	S/F	0802.0E	0804.0	19.0D	140.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	0802.0E	0804.0	13.0D	49.0			QL=4 ST=2 TYP=3
	9300	KISV	23	GRF	0802.3	0812.8	21.2	37.0			
	5900	KISV	22	GRF	0802.4	0806.4	20.9	20.0			
	9100	GORK	46	C	0802.4	0804.6	18.6	70.0			
	15000	KISV	46	C	0802.5	0806.1		53.0			
	15000	KISV	46	C	0802.5	0804.7	5.5	85.0			
	9300	KISV	46	C	0803.2	0806.1		37.0			
	9300	KISV	46	C	0803.2	0804.6	9.4	42.0			
	15000	KISV	2	S/F	0808.7	0809.7	8.8	49.0			
	204	IZMI	7	C	0902.0	0902.5	1.5	75.0			
	204	IZMI	25	R	0920.0	0948.0	160.0	2000.0			
	9300	KISV	2	S/F	0923.5	0925.3	2.9	8.0			
	15000	KISV	2	S/F	0931.8	0933.0	1.7	21.0			
	9300	KISV	2	S/F	0936.2	0937.1	3.1	8.0			

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

MAY 1991

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	245	SVTO	49	GB	0940.0E	0942.0	2.0D	1200.0			QL=2 ST=2 TYP=6
	15000	KISV	2	S/F	1024.8	1025.3	2.7	22.0			
	245	SGMR	8	S	1028.0E	1028.0	U	350.0			QL=2 ST=2 TYP=3
	245	SGMR	49	GB	1033.0E	1034.0	2.0D	770.0			QL=2 ST=2 TYP=6
	245	SVTO	49	GB	1034.0E	1034.0	1.0D	860.0			QL=2 ST=2 TYP=6
	9300	KISV	1	S	1047.0	1047.6	1.6	6.0			
	245	SGMR	49	GB	1049.0E	1050.0	1.0D	990.0			QL=2 ST=2 TYP=6
	9300	KISV	2	S/F	1052.7	1056.3	5.5	8.0			
	9300	KISV	22	GRF	1123.0	1133.5	30.0	28.0			
	5900	KISV	22	GRF	1126.8	1134.2	15.4	10.0			
	3013	IZMI	40	F	1148.5	1151.0	9.0	8.0			
	3013	IZMI	40	F	1148.5	1151.0	9.0	8.0			
	5900	KISV	2	S/F	1149.6	1150.9	2.3	14.0			
	3000	POTS	2	S/F	1150.0U	1151.0U	1.5U	6.0			
	5900	KISV	2	S/F	1212.2	1214.5	6.2	11.0			
	15000	KISV	2	S/F	1257.0	1258.8	5.1	20.0			
	15000	KISV	23	GRF	1317.4	1318.8	18.0	28.0			
	15400	SGMR	49	GB	1318.0E	1321.0	11.0D	590.0			QL=4 ST=2 TYP=6
	15400	SVTO	49	GB	1318.0E	1321.0	11.0D	520.0			QL=4 ST=2 TYP=6
	15000	KISV	4	S/F	1319.5	1322.0	7.6	319.0			
	9400	HUAN	4	S/F	1320.8	1321.6	9.0	70.6	26.4		
	8800	SGMR	4	S/F	1321.0E	1321.0	4.0D	57.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	1321.0E	1321.0	8.0D	64.0			QL=4 ST=2 TYP=3
	9300	KISV	23	GRF	1321.3	1329.2		37.0			
	33	UPIC	32	ABS	1321.5	1324.0U	7.0				
	5900	KISV	20	GRF	1321.7	1326.7	20.1	18.0			
	9300	KISV	45	C	1321.8	1323.5	6.1	37.0			
	9300	KISV	45	C	1321.8	1321.9		36.0			
	2695	SVTO	8	S	1323.0E	1323.0	1.0D	35.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	1325.0E	1325.0	U	77.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1326.0E	1327.0	1.0D	480.0			QL=2 ST=2 TYP=3
	9400	HUAN	29	PBI	1329.8	1329.8	31.9	10.1	4.4		
	245	SGMR	49	GB	1350.0E	1350.0	1.0D	850.0			QL=2 ST=2 TYP=6
	245	SVTO	49	GB	1350.0E	1350.0	1.0D	850.0			QL=2 ST=2 TYP=6
	15000	CUBA	21	GRF	1409.0	1531.0	102.0	30.0	15.0		28R
	15000	CUBA	2	S/F	1436.9	1438.1	4.1	43.0	21.0		89R
	9400	HUAN	23	GRF	1437.4	1527.2	131.6	52.4	22.8		
	9400	HUAN	4	S/F	1514.2	1518.7	10.6	54.4	30.2		
	6700	CUBA	22	GRF	1515.0	1520.0	42.0	20.0	10.0		7L
	15000	CUBA	4	S/F	1515.7	1519.3	11.3	109.0	44.0		35R
	15400	SGMR	4	S/F	1516.0E	1519.0	524.0D	130.0			QL=4 ST=3 TYP=3
	15400	SVTO	4	S/F	1517.0E	1519.0	5.0D	110.0			QL=4 ST=2 TYP=3
	8800	SGMR	4	S/F	1517.0E	1520.0	523.0D	55.0			QL=4 ST=3 TYP=3
	8800	SVTO	8	S	1519.0E	1520.0	1.0D	56.0			QL=4 ST=2 TYP=3
	9400	HUAN	1	S	1530.6	1534.1	10.5	14.1	6.1		
	245	SVTO	8	S	1555.0E	1555.0	1.0D	120.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1619.0E	1620.0	2.0D	250.0			QL=2 ST=2 TYP=3
	9400	HUAN	1	S	1636.7	1638.5	9.4	10.1	4.2		
	6700	CUBA	2	S/F	1637.0	1638.9	3.5	12.0	6.0		27R
	245	PALE	8	S	1818.0E	1819.0	1.0D	120.0			QL=4 ST=3 TYP=3
	245	SGMR	8	S	1818.0E	1819.0	1.0D	110.0			QL=2 ST=2 TYP=3
	2800	OTTA	3	S	1826.2	1827.0	2.5	74.0	2.0		
	245	PALE	8	S	1829.0E	1830.0	1.0D	160.0			QL=4 ST=2 TYP=3
	15400	PALE	4	S/F	1850.0E	1851.0	4.0D	300.0			QL=4 ST=2 TYP=3
	4995	PALE	4	S/F	1850.0E	1851.0	3.0D	87.0			QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	1850.0E	1851.0	3.0D	220.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1850.0E	1851.0	2.0D	87.0			QL=4 ST=2 TYP=3
	15400	SGMR	4	S/F	1850.0E	1851.0	4.0D	320.0			QL=4 ST=2 TYP=3
	8800	SGMR	4	S/F	1850.0E	1851.0	5.0D	260.0			QL=4 ST=2 TYP=3
	9400	HUAN	45	C	1850.2	1851.3	9.4	272.1	102.4		
	15000	CUBA	4	S/F	1850.3	1851.3	8.2	53.0	26.0		109R
	6700	CUBA	3	S	1850.3	1851.4	15.7	154.0			21R 1903-1905 O
	2800	OTTA	3	S	1850.5	1851.5	6.1	97.0	3.0		
	245	PALE	8	S	1916.0E	1917.0	1.0D	91.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1920.0E	1920.0	U	130.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1920.0E	1920.0	U	140.0			QL=2 ST=2 TYP=3
	2800	OTTA	8	S	1941.0	1941.1	0.4	319.0	16.0		
	9400	HUAN	41	F	1941.4	2117.0	137.1	60.5	34.2		
	610	PALE	49	GB	1942.0E	1956.0	146.0D	650.0			QL=4 ST=2 TYP=7

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

MAY 1991

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
11	610	SGMR	49	GB	1942.0E	1956.0	150.0D	800.0			QL=4 ST=3 TYP=7
	2800	OTTA	28	PRE	1942.2	1949.8	7.6	65.0	3.0		
	1415	SGMR	49	GB	1948.0E	1957.0	133.0D	2400.0			QL=4 ST=3 TYP=7
	1415	PALE	49	GB	1948.0E	1957.0	140.0D	2300.0			QL=4 ST=2 TYP=7
	2800	OTTA	49	GB	1949.8	2001.9	27.7	238650.0	9500.0		
	2695	SGMR	49	GB	1950.0E	2013.0	120.0D	20000.0			QL=4 ST=3 TYP=7
	2695	PALE	49	GB	1950.0E	2013.0	138.0D	21000.0			QL=4 ST=2 TYP=7
	15400	PALE	4	S/F	1951.0E	2001.0	137.0D	190.0			QL=4 ST=2 TYP=5
	4995	PALE	4	S/F	1952.0E	2001.0	136.0D	240.0			QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	1955.0E	2001.0	133.0D	170.0			QL=4 ST=2 TYP=5
	15400	SGMR	4	S/F	1956.0E	2001.0	74.0D	140.0			QL=4 ST=2 TYP=5
	9400	HUAN	45	C	1956.1	2001.3	9.6	181.4	64.6		
	4995	SGMR	4	S/F	1957.0E	2001.0	73.0D	180.0			QL=4 ST=2 TYP=5
	8800	SGMR	4	S/F	1957.0E	2039.0	73.0D	190.0			QL=4 ST=2 TYP=5
	9400	HUAN	2	S/F	2007.1	2013.0	9.8	12.1	4.8		
	245	PALE	8	S	2011.0E	2011.0	U	81.0			QL=4 ST=2 TYP=3
	2800	OTTA	29	PBI	2017.5	2147.0	390.0	592.0	29.0		
	2800	OTTA	49	GB	2018.9	2020.3	3.8	22990.0	690.0		
	9400	HUAN	3	S	2019.1	2020.5	3.0	32.2	12.4		
	2800	OTTA	49	GB	2022.7	2025.8	5.8	75280.0	2258.0		
	9400	HUAN	2	S/F	2023.6	2026.5	7.6	18.1	6.6		
	2800	OTTA	49	GB	2030.2	2030.5	0.8	9050.0	272.0		
	245	SGMR	4	S/F	2033.0E	2106.0	37.0D	210.0			QL=2 ST=2 TYP=5
	410	PALE	49	GB	2033.0E	2050.0	95.0D	650.0			QL=4 ST=2 TYP=7
	410	SGMR	49	GB	2033.0E	2050.0	157.0D	630.0			QL=4 ST=3 TYP=7
	2800	OTTA	49	GB	2033.4	2034.6	7.2	27720.0	832.0		
	9400	HUAN	45	C	2033.6	2039.7	11.6	131.0	48.4		
	2800	OTTA	4	S/F	2042.5	2049.4	15.6	949.0	28.0		
	9400	HUAN	4	S/F	2046.8	2052.7	10.0	32.2	14.6		
	9400	HUAN	2	S/F	2100.1	2103.6	5.9	18.1	6.6		
	9400	HUAN	4	S/F	2118.4	2122.0	11.2	28.2	15.2		
	2800	OTTA	4	S/F	2125.7	2127.7	6.2	901.0	27.0		
	9400	HUAN	4	S/F	2132.0	2137.0	9.6	30.2	16.1		
	9400	HUAN	2	S/F	2143.8	2146.5	5.4	20.2	8.4		
	410	LEAR	8	S	2306.0E	2306.0	U	70.0			QL=4 ST=2 TYP=3
	17000	NOBE	1	S	2314.0	2315.4	6.0	44.0			L 80,35GHz:0
12	245	PALE	44	NS	0153.0E	0126.0	132.0D	280.0			QL=4 ST=2 TYP=1
	100	GORK	44	NS	0240.0E		410.0D		5.0		
	200	GORK	44	NS	0240.0E		410.0D		5.0		
	204	IZMI	43	NS	0600.0		360.0	20.0			
	127	TORN	44	NS	0620.0E	1056.1	460.0D	490.0	15.0		V=2
	260	ONDR	44	NS	0700.0E		540.0D				
	410	SVTO	44	NS	0706.0E	0751.0	63.0D	120.0			QL=2 ST=2 TYP=1
	430	KRAK	44	NS	0707.5E	0751.1	347.0D	240.0	35.0		
	410	LEAR	44	NS	0720.0E	0752.0	136.0D	140.0			QL=4 ST=2 TYP=1
	245	LEAR	44	NS	0740.0E	0841.0	116.0D	170.0			QL=4 ST=2 TYP=1
	245	SVTO	44	NS	0745.0E	0751.0	24.0D	110.0			QL=2 ST=2 TYP=1
	610	LEAR	44	NS	0745.0E	0751.0	41.0D	100.0			QL=4 ST=2 TYP=1
	610	SVTO	44	NS	0750.0E	0751.0	17.0D	89.0			QL=2 ST=2 TYP=1
	245	SVTO	43	NS	0847.0	0848.0	168.0D	120.0			QL=2 ST=2 TYP=1
	410	SVTO	44	NS	0849.0E	0854.0	118.0D	79.0			QL=2 ST=2 TYP=1
	200	HIRA	44	NS	2030.0E	0343.0	750.0D	30.0	10.0		ML
	245	LEAR	44	NS	2318.0E	2319.0	29.0D	110.0			QL=4 ST=2 TYP=1
	2695	PENT	28	PRE	0033.7	0038.1	30.5	117.0	5.0		
	245	PALE	8	S	0039.0E	0039.0	1.0D	110.0			QL=4 ST=2 TYP=3
	500	HIRA	20	GRF	0041.0	0209.5	229.0	30.0	10.0		MR
	245	LEAR	8	S	0045.0E	0045.0	U	430.0			QL=2 ST=2 TYP=3
	245	PALE	49	GB	0045.0E	0045.0	U	550.0			QL=4 ST=2 TYP=6
	2695	PENT	3	S	0054.0	0056.8	8.9	221.0	7.0		
	2695	PENT	4	S/F	0104.2	0121.1	38.3	1087.0	33.0		
	245	LEAR	8	S	0126.0E	0126.0	2.0D	280.0			QL=2 ST=2 TYP=3
	610	LEAR	4	S/F	0221.0E	0223.0	6.0D	23.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0223.0E	0223.0	1.0D	54.0			QL=2 ST=2 TYP=3
	410	LEAR	4	S/F	0226.0E	0230.0	4.0D	24.0			QL=4 ST=2 TYP=5
	17000	NOBE	1	S	0237.2	0237.4	3.0	18.0			O 80,35GHz:0
	245	LEAR	8	S	0239.0E	0239.0	U	73.0			QL=2 ST=2 TYP=3
	950	GORK	22	GRF	0241.0E	0246.5	112.0D	25.0			
	245	LEAR	8	S	0242.0E	0242.0	1.0D	62.0			QL=2 ST=2 TYP=3

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

MAY 1991

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	23	GRF	0257.0E	0315.0	219.7D	32.0			
	650	GORK	22	GRF	0300.0E	0306.0	138.0D	15.0			
	100	GORK	41	F	0321.2	0330.2		260.0			
	100	GORK	41	F	0321.2	0323.5	11.3	330.0			
	245	SVTO	4	S/F	0358.0E	0403.0	7.0D	240.0			QL=2 ST=2 TYP=5
	245	LEAR	4	S/F	0359.0E	0403.0	5.0D	200.0			QL=2 ST=2 TYP=5
	9300	KISV	21	GRF	0420.7	0422.9	10.0	6.0			
	5900	KISV	2	S/F	0422.2	0423.3	8.0	4.0			
	650	GORK	23	GRF	0527.0	0714.3	243.0D	39.0			
	5900	KISV	21	GRF	0551.3	0552.7	19.1	15.0			
	9300	KISV	23	GRF	0551.8	0602.0	14.1	16.0			
	15000	KISV	4	S/F	0551.8	0552.5	4.4	54.0			
	9100	GORK	46	C	0551.8	0552.6	19.4	52.0			
	9100	GORK	46	C	0551.8	0601.7		18.0			
	15400	LEAR	8	S	0552.0E	0552.0	1.0D	97.0			QL=2 ST=2 TYP=3
	8800	LEAR	8	S	0552.0E	0552.0	2.0D	46.0			QL=4 ST=2 TYP=3
	15400	SVTO	8	S	0552.0E	0552.0	1.0D	89.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	0552.0E	0552.0	1.0D	49.0			QL=4 ST=2 TYP=3
	17000	NOBE	2	S/F	0552.0	0552.2	2.0	65.0			L 80,35GHz:0
	9300	KISV	4	S/F	0552.1	0552.5	1.8	38.0			
	204	IZMI	41	F	0606.0	0606.2	2.0	40.0			
	600	HUMN	20	GRF	0646.0	0752.0	385.0	74.0	7.0		
	9100	GORK	1	S	0651.2	0652.0	2.0	6.0			
	500	HIRA	20	GRF	0652.0	0751.7	104.0	120.0	15.0		MR
	410	SVTO	4	S/F	0652.0E	0655.0	3.0D	70.0			QL=2 ST=2 TYP=5
	950	GORK	23	GRF	0653.7	0714.1	78.3	19.0			
	410	LEAR	8	S	0654.0E	0655.0	1.0D	43.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0654.0E	0655.0	1.0D	120.0			QL=4 ST=2 TYP=3
	650	GORK	4	S/F	0654.1	0655.4	2.4	85.0			
	610	SVTO	8	S	0655.0E	0655.0	U	56.0			QL=4 ST=2 TYP=3
	950	GORK	8	S	0655.3	0655.4	0.2	24.0			
	536	ONDR	41	F	0700.0	0920.0U	402.0	1399.0U			
	536	ONDR	49	GB	0702.0	0751.5	360.0	123.0			
	2950	GORK	2	S/F	0703.9	0706.0	5.1	14.0			
	2850	CRIM	1	S	0705.0	0706.0	1.5	10.6	3.0		
	3013	IZMI	5	S	0705.1	0705.7	1.5	10.0	5.0		
	9100	GORK	2	S/F	0705.2	0705.7	1.7	27.0			
	9300	KISV	4	S/F	0705.2	0705.7	2.2	33.0			
	15000	KISV	1	S	0705.2	0705.7	1.4	12.0			
	5900	KISV	4	S/F	0705.2	0705.8	2.6	34.0			
	3000	POTS	4	S/F	0705.3	0706.0	1.4	14.0			
	9500	POTS	4	S/F	0705.4	0706.0	1.0	23.0			
	5900	KISV	2	S/F	0739.8	0741.1	5.7	6.0			
	808	ONDR	7	C	0740.0	0752.0	16.0	25.0			
	2950	GORK	1	S	0740.3	0741.1	3.5	4.5			
	650	GORK	4	S/F	0746.3	0751.9	12.1	68.0			
	950	GORK	46	C	0750.0	0753.2		20.0			
	950	GORK	46	C	0750.0	0751.8	5.2	20.0			
	8800	LEAR	8	S	0800.0E	0801.0	1.0D	110.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0800.0E	0801.0	1.0D	230.0			QL=2 ST=2 TYP=3
	9100	GORK	3	S	0800.6	0801.1	1.4	146.0			
	9300	KISV	4	S/F	0800.6	0801.2	1.7	113.0			
	9300	KISV	29	PBI	0800.6	0809.7	10.3	7.0			
	17000	NOBE	3	S	0800.7	0801.1	1.0	134.0			L 80,35GHz:
	9500	POTS	8	S	0800.7	0801.1	0.9	114.0			
	15000	KISV	4	S/F	0800.8	0801.1	3.7	69.0			
	5900	KISV	23	GRF	0800.8	0806.8	10.6	8.0			
	15400	SVTO	8	S	0801.0E	0801.0	U	210.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	0801.0E	0801.0	U	110.0			QL=4 ST=2 TYP=3
	5900	KISV	4	S/F	0801.0	0801.2	1.2	44.0			
	9100	GORK	30	PBI	0802.0	0802.0	34.0	10.0			
	15000	KISV	2	S/F	0805.5	0809.7	6.0	17.0			
	9100	GORK	1	S	0806.0	0810.1	7.2	8.0			
	536	ONDR	27	RF	0838.0	0851.1	29.5	62.0			
	200	GORK	41	F	0840.6	0841.6	18.0	370.0			
	200	GORK	41	F	0840.6	0854.7		155.0			
	950	GORK	22	GRF	0840.9	0909.8	49.0D	9.0			
	204	IZMI	42	SER	0841.0	0841.5	16.5	410.0			
	100	GORK	4	S/F	0853.1	0854.2	2.9	330.0			

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

MAY 1991

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	22	GRF	0853.4	0909.4	37.0D	10.0			
	9500	POTS	21	GRF	0857.5	1208.5	278.0	28.0			
	536	ONDR	48	C	0919.2	0920.0U	3.0	1399.0U			
	204	IZMI	5	S	0922.0	0922.2	0.5	310.0	150.0		
	1470	POTS	21	GRF	0937.0	1157.0	330.0	8.0			
	204	IZMI	41	F	0959.0	1000.0	2.0	350.0			
	3000	POTS	21	GRF	1020.0	1145.4	285.0	17.0			
	15000	KISV	29	PBI	1020.2	1025.1	54.5	67.0			
	15000	KISV	4	S/F	1020.2	1023.2	4.9	309.0			
	5900	KISV	47	GB	1020.3	1023.2	5.4	346.0			
	5900	KISV	30	PBI	1020.3	1026.4	54.2	49.0			
	9500	POTS	4	S/F	1020.6	1022.0	11.4	395.0			
	9300	KISV	47	GB	1021.0	1023.2	5.9	378.0			
	9300	KISV	30	PBI	1021.0	1026.9	47.6	28.0			
	4995	SGMR	4	S/F	1022.0E	1023.0	6.0D	270.0			QL=4 ST=2 TYP=3
	2695	SGMR	4	S/F	1022.0E	1023.0	3.0D	44.0			QL=4 ST=2 TYP=3
	8800	SGMR	4	S/F	1022.0E	1023.0	4.0D	290.0			QL=4 ST=2 TYP=3
	15400	SGMR	4	S/F	1022.0E	1023.0	4.0D	320.0			QL=2 ST=2 TYP=3
	3013	IZMI	7	C	1022.0	1023.0	17.5	58.0	28.0		
	4995	SVTO	4	S/F	1022.0E	1023.0	818.0D	260.0			QL=4 ST=1 TYP=3
	2695	SVTO	4	S/F	1022.0E	1023.0	818.0D	39.0			QL=4 ST=1 TYP=3
	2850	CRIM	45	C	1022.0	1024.1		43.0			
	3000	POTS	4	S/F	1022.0	1023.3	8.0D	49.0			
	2850	CRIM	45	C	1022.0	1023.4	5.0	58.0	28.0		
	410	SGMR	8	S	1046.0E	1046.0	2.0D	52.0			QL=4 ST=2 TYP=3
	2800	OTTA	4	S/F	1247.2	1248.7	4.9	281.0	8.0		
	2850	CRIM	3	S	1248.2	1249.0	4.5	31.0	10.0		
	3000	POTS	4	S/F	1248.2	1248.9	4.6	24.0			
	410	SGMR	8	S	1254.0E	1255.0	1.0D	65.0			QL=4 ST=2 TYP=3
	2800	OTTA	4	S/F	1302.3	1303.9	4.5	146.0	3.0		
	1470	POTS	42	SER	1302.4	1303.2	4.1	10.0			
	3000	POTS	4	S/F	1303.0	1305.5	3.5	8.0			
	9400	HUAN	1	S	1313.3	1315.3	4.9	12.3	7.0		
	245	SGMR	8	S	1437.0E	1437.0	U	100.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1437.0E	1437.0	U	100.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1503.0E	1503.0	U	53.0			QL=2 ST=2 TYP=3
	245	SGMR	49	GB	1511.0E	1512.0	2.0D	1100.0			QL=2 ST=2 TYP=6
	245	SVTO	49	GB	1512.0E	1512.0	U	810.0			QL=2 ST=2 TYP=6
	245	SGMR	8	S	1527.0E	1527.0	1.0D	240.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1527.0E	1527.0	1.0D	220.0			QL=2 ST=2 TYP=3
	9400	HUAN	21	GRF	1545.6	1622.0	63.6	26.6	12.0		
	245	SGMR	8	S	1550.0E	1550.0	1.0D	110.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1550.0E	1550.0	1.0D	130.0			QL=2 ST=2 TYP=3
	9400	HUAN	4	S/F	1604.8	1610.3	13.0	51.2	22.0		
	15000	CUBA	1	S	1642.0	1642.5	1.7	21.0	10.0		18R
	245	PALE	8	S	1700.0E	1701.0	2.0D	130.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1701.0E	1701.0	U	130.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1701.0E	1701.0	U	88.0			QL=2 ST=2 TYP=3
	9400	HUAN	21	GRF	1702.4	1742.0	88.8	18.4	5.3		
	2800	OTTA	20	GRF	1732.2	1734.4	38.0	222.0	6.0		
	9400	HUAN	4	S/F	1732.3	1734.8	7.0	69.6	27.1		
	6700	CUBA	2	S/F	1732.5	1734.9	4.5	57.0	28.0		7R
	4995	SGMR	8	S	1734.0E	1734.0	U	46.0			QL=4 ST=3 TYP=3
	8800	SGMR	8	S	1734.0E	1734.0	U	53.0			QL=4 ST=3 TYP=3
	6700	CUBA	29	PBI	1737.0		18.0	19.0	9.0		11R
	9400	HUAN	1	S	1809.8	1812.1	7.5	14.3	4.5		
	245	PALE	8	S	1819.0E	1819.0	U	200.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1819.0E	1819.0	U	160.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	2003.0E	2003.0	1.0D	90.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2003.0E	2003.0	2.0D	94.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	2040.0E	2041.0	2.0D	440.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2040.0E	2041.0	1.0D	390.0			QL=2 ST=2 TYP=3
	9400	HUAN	1	S	2045.2	2048.0	5.5	10.2	2.8		
	500	HIRA	42	SER	2103.0	2104.2	13.0	40.0			0
	410	PALE	8	S	2104.0E	2104.0	U	93.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2104.0E	2104.0	U	120.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2104.0E	2104.0	U	110.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	2104.0E	2104.0	U	50.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2121.0E	2121.0	1.0D	53.0			QL=4 ST=2 TYP=3

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

MAY 1991

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	410	PALE	8	S	2134.0E	2134.0	U	160.0			QL=4 ST=2 TYP=3
	80000	NOBE	3	S	2231.0	2232.0	5.0	93.0			
	35000	NOBE	3	S	2231.0	2232.0	5.0	432.0			L
	17000	NOBE	7	C	2231.0	2232.0	5.0	478.0			0
	8800	PALE	4	S/F	2231.0E	2231.0	3.0D	110.0			QL=4 ST=2 TYP=3
	15400	PALE	49	GB	2231.0E	2232.0	3.0D	570.0			QL=4 ST=2 TYP=6
	15400	SGMR	49	GB	2231.0E	2232.0	2.0D	590.0			QL=4 ST=2 TYP=6
	8800	SGMR	8	S	2231.0E	2231.0	2.0D	110.0			QL=2 ST=2 TYP=3
	410	PALE	8	S	2259.0E	2259.0	U	110.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2308.0E	2308.0	1.0D	71.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	2308.0E	2308.0	U	57.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2314.0E	2314.0	U	51.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	2319.0E	2319.0	U	87.0			QL=2 ST=2 TYP=3
13	200	GORK	44	NS	0246.0E	0344.4	620.0D		5.0		
	204	IZMI	43	NS	0600.0		360.0	15.0			
	127	TORN	43	NS	0645.0	1114.4	403.0	340.0	4.0		V=1
	245	LEAR	8	S	0000.0E	0001.0	1.0D	140.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	0000.0E	0001.0	1.0D	150.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0012.0E	0012.0	U	53.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	0012.0E	0012.0	U	52.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0019.0E	0020.0	2.0D	660.0			QL=2 ST=2 TYP=6
	245	PALE	49	GB	0019.0E	0020.0	2.0D	700.0			QL=4 ST=2 TYP=6
	410	LEAR	8	S	0020.0E	0020.0	U	170.0			QL=4 ST=2 TYP=3
	410	PALE	49	GB	0020.0E	0020.0	2.0D	560.0			QL=4 ST=2 TYP=6
	500	HIRA	42	SER	0020.0	0022.2	3.0	100.0			WR
	2840	PEKG	28	PRE	0026.0	0233.0	127.0	45.0			
	8800	LEAR	4	S/F	0035.0E	0036.0	5.0D	61.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0035.0E	0036.0	2.0D	95.0			QL=2 ST=2 TYP=3
	17000	NOBE	2	S/F	0035.2	0036.5	2.5	50.0			L 80,35GHz:0
	4995	LEAR	4	S/F	0036.0E	0038.0	3.0D	28.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	0036.0E	0036.0	2.0D	68.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	0036.0E	0037.0	2.0D	27.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	0036.0E	0036.0	U	66.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0037.0E	0038.0	1.0D	94.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0047.0E	0048.0	1.0D	56.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	0047.0E	0048.0	1.0D	56.0			QL=4 ST=2 TYP=3
	2840	PEKG	46	C	0053.0	0119.3	66.0	145.7			
	1415	LEAR	8	S	0105.0E	0105.0	2.0D	39.0			QL=4 ST=2 TYP=3
	1415	PALE	4	S/F	0105.0E	0105.0	34.0D	42.0			QL=4 ST=2 TYP=3
	2695	LEAR	4	S/F	0106.0E	0121.0	21.0D	100.0			QL=2 ST=2 TYP=5
	4995	LEAR	4	S/F	0107.0E	0118.0	28.0D	280.0			QL=4 ST=2 TYP=5
	2695	PALE	20	GRF	0107.0E	0121.0	32.0D	100.0			QL=4 ST=2 TYP=2
	4995	PALE	4	S/F	0107.0E	0118.0	30.0D	310.0			QL=4 ST=2 TYP=3
	8800	LEAR	4	S/F	0108.0E	0118.0	27.0D	190.0			QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	0108.0E	0118.0	31.0D	200.0			QL=4 ST=2 TYP=3
	17000	NOBE	20	GRF	0108.5	0118.8	70.0	69.0			0 80,35GHz:0
	15400	LEAR	4	S/F	0111.0E	0120.0	24.0D	120.0			QL=2 ST=2 TYP=3
	15400	PALE	4	S/F	0112.0E	0120.0	25.0D	100.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0116.0E	0116.0	1.0D	380.0			QL=2 ST=2 TYP=3
	245	PALE	4	S/F	0116.0E	0116.0	23.0D	350.0			QL=4 ST=2 TYP=3
	200	HIRA	46	C	0119.8	0121.7	15.0	300.0	50.0		WL
	100	HIRA	42	SER	0120.9	0122.4	27.0	1000.0D			ML
	500	HIRA	6	S	0121.5	0122.0	1.5	13.0	6.0		0
	500	HIRA	45	C	0129.6	0132.0	3.0	11.0	4.0		0
	245	PALE	8	S	0146.0E	0146.0	U	50.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0206.0E	0207.0	1.0D	150.0			QL=2 ST=2 TYP=3
	15400	LEAR	8	S	0207.0E	0208.0	1.0D	47.0			QL=2 ST=2 TYP=3
	8800	LEAR	8	S	0208.0E	0208.0	U	16.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0210.0E	0210.0	2.0D	740.0			QL=2 ST=2 TYP=6
	245	PALE	49	GB	0210.0E	0210.0	U	760.0			QL=4 ST=2 TYP=6
	2950	GORK	47	GB	0230.0E	0941.1	648.0D	1230.0			
	2840	PEKG	47	GB	0233.0	0341.6	218.0	1720.0			
	2695	PALE	49	GB	0235.0E	0339.0	129.0D	1500.0			QL=4 ST=2 TYP=6
	1415	LEAR	49	GB	0235.0E	0346.0	182.0D	1200.0			QL=4 ST=2 TYP=6
	4995	LEAR	49	GB	0235.0E	0338.0	182.0D	920.0			QL=4 ST=2 TYP=6
	2695	LEAR	49	GB	0235.0E	0341.0	182.0D	1500.0			QL=2 ST=2 TYP=6
	1415	PALE	49	GB	0236.0E	0346.0	128.0D	6700.0			QL=2 ST=2 TYP=6
	4995	PALE	49	GB	0236.0E	0338.0	128.0D	1100.0			QL=4 ST=2 TYP=6

SOLAR RADIO EMISSION
Outstanding Occurrences

MAY 1991

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	950	GORK	21	GRF	0236.0E	0318.0	264.7D	730.0			
	8800	PALE	4	S/F	0237.0E	0338.0	106.0D	410.0			QL=4 ST=2 TYP=3
	8800	LEAR	4	S/F	0237.0E	0338.0	182.0D	360.0			QL=4 ST=2 TYP=3
	500	HIRA	27	RF	0243.4	0349.5	163.0	90.0	25.0		WR
	9100	GORK	23	GRF	0257.0E	0309.0U	604.0D	88.0			
	650	GORK	20	GRF	0300.0E	0344.4	212.0D	240.0			
	17000	NOBE	20	GRF	0305.9	0339.0	70.0	77.0			0 80,35GHz:0
	9100	GORK	20	GRF	0309.0	0438.5	89.5D	170.0			
	610	LEAR	4	S/F	0312.0E	0344.0	106.0D	240.0			QL=4 ST=2 TYP=3
	200	GORK	41	F	0326.7	0330.0	17.0	410.0			
	200	GORK	41	F	0326.7	0343.1		5100.0			
	15400	LEAR	20	GRF	0327.0E	0338.0	132.0D	110.0			QL=2 ST=2 TYP=2
	245	LEAR	49	GB	0329.0E	0330.0	130.0D	1500.0			QL=2 ST=2 TYP=6
	100	GORK	41	F	0329.6	0331.0	14.4	1750.0			
	100	GORK	41	F	0329.6	0343.2		390.0			
	15400	PALE	20	GRF	0331.0E	0338.0	73.0D	72.0			QL=4 ST=2 TYP=2
	410	LEAR	4	S/F	0334.0E	0336.0	125.0D	23.0			QL=4 ST=2 TYP=3
	410	PALE	4	S/F	0344.0E	0407.0	25.0D	79.0			QL=4 ST=2 TYP=3
	610	PALE	20	GRF	0344.0E	0347.0	60.0D	240.0			QL=4 ST=2 TYP=2
	410	SVTO	4	S/F	0356.0E	0407.0	12.0D	83.0			QL=2 ST=2 TYP=3
	4995	SVTO	4	S/F	0356.0E	0356.0	16.0D	120.0			QL=2 ST=2 TYP=3
	610	SVTO	4	S/F	0356.0E	0356.0	40.0D	220.0			QL=2 ST=2 TYP=3
	1415	SVTO	49	GB	0356.0E	0359.0	101.0D	850.0			QL=2 ST=2 TYP=6
	2695	SVTO	49	GB	0356.0E	0356.0	113.0D	840.0			QL=2 ST=2 TYP=6
	2850	CRIM	30	PBI	0410.0E	0410.0U	140.0D	600.0D			
	245	PALE	8	S	0411.0E	0411.0	U	34.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	0445.0E	0452.0	7.0D	77.0			QL=2 ST=2 TYP=3
	17000	NOBE	1	S	0450.9	0451.4	1.0	22.0			L 80,35GHz:0
	2840	PEKG	29	PBI	0611.0		69.0	57.3			
	950	GORK	41	F	0630.0	0630.3	4.7	6.5			
	950	GORK	41	F	0630.0	0631.4		15.0			
	2850	CRIM	8	S	0631.1	0631.2	0.3	18.0			
	245	LEAR	8	S	0651.0E	0651.0	1.0D	220.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0651.0E	0652.0	1.0D	200.0			QL=4 ST=2 TYP=3
	260	ONDR	41	F	0700.0	1048.5	540.0	82.0			
	204	IZMI	40	F	0805.0	0815.0	40.0	10.0			
	15400	LEAR	4	S/F	0841.0E	0842.0	3.0D	99.0			QL=2 ST=2 TYP=3
	536	ONDR	46	C	0952.8	1001.0	31.0	416.0			
	245	SGMR	8	S	1048.0E	1048.0	U	73.0			QL=4 ST=2 TYP=3
	950	GORK	1	S	1103.5	1103.8	0.5	2.0			
	245	SGMR	8	S	1109.0E	1109.0	U	71.0			QL=4 ST=2 TYP=3
	33	UPIC	3	S	1114.3	1114.5	0.3				
	33	UPIC	45	C	1304.0	1305.0	2.5				
	15000	CUBA	1	S	1341.3	1341.9	1.3	27.0	13.0		41R
	15000	KISV	1	S	1342.6	1342.9	0.6	18.0			
	9300	KISV	1	S	1342.8	1343.0	3.6	10.0			
	536	ONDR	7	C	1348.8	1349.4	4.0	54.0			
	245	SGMR	8	S	1434.0E	1434.0	U	51.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1607.0E	1608.0	1.0D	76.0			QL=4 ST=2 TYP=3
	33	UPIC	3	S	1615.0	1615.1	0.5				
	15000	CUBA	22	GRF	1648.0	1650.0	12.0	22.0	11.0		21R
	245	SGMR	8	S	1728.0E	1728.0	U	120.0			QL=4 ST=2 TYP=3
	9400	HUAN	22	GRF	1913.2	1923.7	35.4	9.8	2.7		
	245	SGMR	8	S	2016.0E	2016.0	1.0D	64.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2039.0E	2039.0	U	120.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2039.0E	2039.0	2.0D	150.0			QL=4 ST=2 TYP=3
14	200	GORK	44	NS	0252.0E		610.0D		5.0		
	245	LEAR	8	S	0043.0E	0043.0	2.0D	34.0			QL=2 ST=2 TYP=3
	410	LEAR	8	S	0043.0E	0043.0	2.0D	99.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0043.0E	0043.0	1.0D	62.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0043.0E	0043.0	2.0D	16.0			QL=2 ST=2 TYP=3
	4995	LEAR	8	S	0043.0E	0043.0	1.0D	37.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	0043.0E	0043.0	1.0D	33.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0043.0E	0043.0	1.0D	86.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	0043.0E	0043.0	1.0D	42.0			QL=4 ST=2 TYP=3
	500	HIRA	8	S	0043.5	0043.6	0.2	40.0			0
	17000	NOBE	1	S	0043.5	0043.9	0.8	23.0			L 80,35GHz:0
	245	LEAR	8	S	0059.0E	0059.0	U	56.0			QL=2 ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

MAY 1991

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	245	PALE	8	S	0059.0E	0059.0	U	53.0			QL=4 ST=2 TYP=3
	9300	KISV	2	S/F	0413.4	0413.5	0.5	4.0			
	5900	KISV	1	S	0413.4	0413.8	1.0	4.0			
	100	GORK	46	C	0450.6	0452.0		640.0			
	100	GORK	46	C	0450.6	0451.6	2.0	380.0			
	100	HIRA	46	C	0450.6	0451.6	1.3	1000.0D			SL
	200	GORK	46	C	0450.8	0451.4	1.9	260.0			
	200	GORK	46	C	0450.8	0451.8		170.0			
	610	LEAR	8	S	0451.0E	0451.0	U	34.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0451.0E	0451.0	1.0D	150.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0451.0E	0451.0	1.0D	310.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	0451.0E	0451.0	1.0D	230.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0451.0E	0451.0	1.0D	300.0			QL=2 ST=2 TYP=3
	500	HIRA	8	S	0451.0	0451.4	0.5	85.0			WL
	200	HIRA	8	S	0451.1	0451.1	0.6	350.0			WL
	650	GORK	4	S/F	0451.2	0451.5	1.0	27.0			
	9100	GORK	1	S	0455.9	0456.8	2.2	8.0			
	9300	KISV	2	S/F	0456.0	0456.9	2.0	10.0			
	5900	KISV	2	S/F	0456.0	0456.9	3.0	8.0			
	9100	GORK	2	S/F	0554.0	0554.6	2.2	13.0			
	9300	KISV	2	S/F	0554.0	0554.6	3.0	11.0			
	5900	KISV	2	S/F	0554.0	0554.6	2.4	7.0			
	950	GORK	1	S	0609.3	0609.7	0.6	3.0			
	650	GORK	21	GRF	0624.1	0653.3	31.6	5.0			
	9300	KISV	2	S/F	0645.0	0647.6	3.5	7.0			
	5900	KISV	2	S/F	0646.0	0647.7	3.5	7.0			
	650	GORK	4	S/F	0647.3	0647.8	1.9	10.0			
	260	ONDR	42	SER	0700.0	0752.0	540.0	96.0U			
	536	ONDR	41	F	0700.0	0751.6	350.0	44.0			
	245	LEAR	8	S	0747.0E	0748.0	1.0D	81.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0747.0E	0748.0	1.0D	71.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	0748.0	0752.5	5.5	500.0			
	410	LEAR	8	S	0750.0E	0752.0	2.0D	53.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0750.0E	0752.0	8.0D	720.0			QL=2 ST=2 TYP=6
	245	LEAR	49	GB	0751.0E	0752.0	1.0D	720.0			QL=2 ST=2 TYP=6
	610	LEAR	8	S	0751.0E	0752.0	1.0D	21.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	0751.0E	0752.0	1.0D	740.0			QL=2 ST=2 TYP=6
	410	SVTO	8	S	0752.0E	0752.0	U	65.0			QL=2 ST=2 TYP=3
	950	GORK	1	S	0752.1	0752.2	0.2	3.0			
	204	IZMI	5	S	0900.6	0900.7	0.6	38.0	17.0		
	245	SVTO	8	S	0912.0E	0913.0	1.0D	92.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0944.0E	0944.0	1.0D	66.0			QL=2 ST=2 TYP=3
	2950	GORK	20	GRF	1001.0	1052.2	73.2	4.0			
	430	KRAK	8	S	1033.9	1034.2	0.6	184.0			
	810	KRAK	8	S	1034.9	1035.1	0.3	57.0			
	950	GORK	20	GRF	1215.4	1218.0	10.0	3.0			
	245	SGMR	8	S	1216.0E	1216.0	1.0D	82.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	1240.0E	1243.0	4.0D	200.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1249.0E	1250.0	2.0D	44.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	1249.0E	1250.0	2.0D	770.0			QL=2 ST=2 TYP=6
	245	SGMR	49	GB	1250.0E	1250.0	U	790.0			QL=4 ST=2 TYP=6
	33	UPIC	2	S/F	1435.0	1435.2	1.0				
	15000	CUBA	1	S	1439.1	1439.6	2.1	23.0	11.0		1L
	9400	HUAN	1	S	1452.5	1455.5	4.8	5.5	2.7		
	245	SGMR	8	S	1615.0E	1615.0	U	320.0			QL=4 ST=2 TYP=3
	15000	CUBA	1	S	1644.5	1644.8	2.0	17.0	8.0		10L
	245	SVTO	8	S	1706.0E	1707.0	1.0D	230.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	1707.0E	1707.0	U	180.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1707.0E	1707.0	U	220.0			QL=4 ST=2 TYP=3
	15000	CUBA	1	S	1738.5	1739.1	3.7	30.0	15.0		18L
	9400	HUAN	1	S	2049.5	2051.5	4.3	9.1	4.8		
	9400	HUAN	4	S/F	2117.0	2118.1	8.2	109.4	33.8		
	15400	SGMR	8	S	2118.0E	2118.0	1.0D	82.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	2118.0E	2118.0	1.0D	63.0			QL=4 ST=2 TYP=3
	9400	HUAN	2	S/F	2131.2	2134.5	8.6	10.0	2.0		
	200	HIRA	8	S	2221.9	2221.9	0.2	230.0			0
	245	PALE	8	S	2222.0E	2222.0	U	390.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2222.0E	2222.0	U	470.0			QL=4 ST=2 TYP=3
	500	HIRA	8	S	2222.0	2222.3	0.6	45.0			WL

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

Outstanding Occurrences

MAY 1991

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	35000	NOBE	1	S	2253.8	2255.4	4.0	38.0			0 80GHz:0
	17000	NOBE	1	S	2253.8	2255.4	6.0	60.0			R
	8800	PALE	4	S/F	2254.0E	2255.0	5.0D	79.0			QL=4 ST=3 TYP=3
	15400	PALE	4	S/F	2254.0E	2255.0	5.0D	85.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	2254.0E	2255.0	2.0D	71.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	2255.0E	2255.0	U	31.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2309.0E	2309.0	U	68.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	2312.0E	2313.0	1.0D	130.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2322.0E	2324.0	2.0D	100.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	2322.0E	2327.0	6.0D	380.0			QL=4 ST=2 TYP=3
	17000	NOBE	1	S	2322.5	2322.9	3.0	12.0			R 80,35GHz:0
	245	LEAR	8	S	2324.0E	2324.0	U	100.0			QL=2 ST=2 TYP=3
	500	HIRA	42	SER	2325.1	2327.8	2.8	30.0			WL
	200	HIRA	42	SER	2325.3	2327.1	2.6	1000.0			0
	245	LEAR	8	S	2326.0E	2327.0	2.0D	450.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	2326.0E	2327.0	2.0D	490.0			QL=4 ST=2 TYP=3
15	204	IZMI	43	NS	0630.0		150.0	10.0			
	430	KRAK	44	NS	0658.5E	0701.2	119.0D	59.0	11.0		
	127	TORN	43	NS	0716.0		314.0		1.0		V=1
	200	HIRA	43	NS	2113.0	2215.0	170.0	20.0	6.0		0
	17000	NOBE	1	S	0006.9	0015.9	12.0	16.0			R 80,35GHz:0
	8800	PALE	8	S	0044.0E	0044.0	U	420.0			QL=4 ST=2 TYP=3
	500	HIRA	27	RF	0115.0	0133.0	66.0	5.0	3.0		0
	245	LEAR	8	S	0214.0E	0214.0	U	180.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0214.0E	0214.0	U	160.0			QL=4 ST=2 TYP=3
	500	HIRA	8	S	0214.3	0214.9	0.7	16.0			0
	200	HIRA	46	C	0214.5	0214.5	2.3	35.0	5.0		WL
	100	HIRA	8	S	0214.5	0214.6	0.6	1000.0D			ML
	17000	NOBE	1	S	0445.6	0446.3	11.0	24.0			0 80,35GHz:0
	15000	KISV	2	S/F	0445.8	0446.4	2.0	13.0			
	100	GORK	4	S/F	0454.4	0455.3	3.0	190.0			
	200	GORK	4	S/F	0454.7	0455.3	3.0	20.0			
	650	GORK	22	GRF	0459.5	0513.8	29.8	10.0			
	950	GORK	20	GRF	0507.3	0514.4	17.8	5.0			
	17000	NOBE	1	S	0515.5	0516.5	4.0	14.0			R 80,35GHz:0
	600	HUMN	27	RF	0609.0	0705.0	107.0	25.0	10.0		
	650	GORK	22	GRF	0610.7	0703.3	216.0	46.0			
	950	GORK	22	GRF	0612.0	0643.4	141.0	20.0			
	500	HIRA	27	RF	0612.2	0703.0	110.0	30.0	15.0		0
	9100	GORK	23	GRF	0622.2	1003.0	398.0D	17.0			
	260	ONDR	41	F	0700.0	0840.9	540.0	415.0			
	15000	KISV	20	GRF	0707.0	0715.3	15.4	24.0			
	5900	KISV	2	S/F	0711.8	0712.5	4.1	7.0			
	9300	KISV	2	S/F	0712.0	0712.5	2.6	9.0			
	9100	GORK	1	S	0755.5	0755.9	0.8	7.0			
	9300	KISV	2	S/F	0755.5	0755.9	2.0	6.0			
	5900	KISV	2	S/F	0755.7	0756.0	4.5	5.0			
	9100	GORK	46	C	0822.1	0827.3		17.0			
	9100	GORK	46	C	0822.1	0823.5	13.1	6.0			
	5900	KISV	22	GRF	0822.4	0827.3	13.0	10.0			
	9300	KISV	21	GRF	0822.5	0827.2	13.7	15.0			
	2850	CRIM	2	S/F	0827.0	0827.1	0.3	11.0			
	15000	KISV	21	GRF	0827.2	0827.2	15.4	30.0			
	950	GORK	22	GRF	0838.5	0855.4	34.9	7.0			
	245	LEAR	49	GB	0840.0E	0840.0	1.0D	690.0			QL=4 ST=2 TYP=6
	245	SVTO	49	GB	0840.0E	0840.0	1.0D	740.0			QL=4 ST=2 TYP=6
	410	SVTO	8	S	0840.0E	0840.0	1.0D	27.0			QL=4 ST=2 TYP=3
	204	IZMI	8	S	0840.5	0840.6	0.3	1600.0	1200.0		
	15000	KISV	22	GRF	0901.0	0906.8	14.0	26.0			
	536	ONDR	46	C	0924.5	0926.5	4.5	172.0			
	950	GORK	1	S	0930.0	0932.0	4.0	3.0			
	9300	KISV	23	GRF	0950.0	1002.5	31.0	17.0			
	15000	KISV	23	GRF	0951.0	1002.2	18.0	24.0			
	650	GORK	8	S	1015.2	1015.3	0.3	14.0			
	950	GORK	1	S	1016.1	1016.8	1.4	2.0			
	2850	CRIM	2	S/F	1016.9	1017.0	0.3	11.0			
	245	SGMR	8	S	1032.0E	1032.0	U	100.0			QL=4 ST=2 TYP=3
	204	IZMI	5	S	1032.3	1032.5	0.4	500.0	300.0		

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

MAY 1991

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	204	IZMI	41	F	1042.0	1042.5	0.8	37.0			
	33	UPIC	3	S	1129.0	1129.2	0.6				
	204	IZMI	41	F	1132.0	1132.5	0.9	40.0			
	15000	KISV	2	S/F	1201.0	1202.3	2.0	11.0			
	33	UPIC	45	C	1213.5	1215.0	3.5				
	650	GORK	22	GRF	1241.6	1242.8	18.0D	7.0			
	950	GORK	22	GRF	1241.8	1246.5	16.2	9.0			
	9300	KISV	2	S/F	1255.5	1256.4	5.0	7.0			
	15000	KISV	2	S/F	1256.0	1256.5	5.0	26.0			
	33	UPIC	3	S	1307.5	1307.6	0.3				
	6700	CUBA	21	GRF	1434.0	1441.0	32.0	5.0	2.0		00R
	15000	CUBA	23	GRF	1434.0	1444.0	328.0D	29.0			20L
	1415	SVTO	4	S/F	1439.0E	1441.0	561.0D	150.0			QL=2 ST=3 TYP=3
	9500	POTS	4	S/F	1443.8	1444.5	3.2	13.0			
	6700	CUBA	1	S	1444.1	1444.5	2.8	9.0	4.0		20L
	245	SGMR	8	S	1549.0E	1549.0	1.0D	100.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1549.0E	1549.0	1.0D	99.0			QL=4 ST=2 TYP=3
	9400	HUAN	1	S	1551.5	1556.6	9.2	7.1	4.5		
	245	SGMR	8	S	1657.0E	1657.0	2.0D	85.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1657.0E	1657.0	2.0D	77.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	1702.0E	1702.0	U	1300.0			QL=4 ST=2 TYP=6
	410	PALE	8	S	1702.0E	1702.0	U	280.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	1702.0E	1702.0	U	140.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1702.0E	1702.0	U	150.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1702.0E	1702.0	1.0D	1400.0			QL=4 ST=2 TYP=6
	410	SVTO	8	S	1702.0E	1702.0	U	290.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	1702.0E	1702.0	1.0D	1300.0			QL=4 ST=2 TYP=6
	610	SVTO	8	S	1702.0E	1702.0	U	110.0			QL=4 ST=2 TYP=3
	410	SGMR	4	S/F	1702.0E	1702.0	418.0D	230.0			QL=4 ST=1 TYP=3
	15000	CUBA	1	S	1742.6	1743.0	1.2	21.0	10.0		24L
	9400	HUAN	23	GRF	1910.2	1940.9	57.2	14.2	6.0		
	9400	HUAN	1	S	1916.8	1919.8	5.4	16.0	6.4		
	2800	OTTA	3	S	1919.3	1919.4	1.1	188.0	6.0		
	245	SGMR	8	S	2043.0E	2043.0	U	170.0			QL=4 ST=2 TYP=3
	2800	OTTA	3	S	2048.6	2049.5	1.6	218.0	7.0		
	9400	HUAN	22	GRF	2100.6	2117.5	27.5	12.5	5.1		
	245	SGMR	8	S	2109.0E	2109.0	U	61.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2200.0E	2200.0	U	62.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	2256.0E	2259.0	4.0D	12000.0			QL=2 ST=2 TYP=6
	200	HIRA	42	SER	2256.3	2256.8	13.0	18000.0			WL
	410	PALE	49	GB	2257.0E	2257.0	3.0D	550.0			QL=2 ST=2 TYP=6
	410	SGMR	49	GB	2257.0E	2259.0	2.0D	950.0			QL=4 ST=2 TYP=6
	245	SGMR	49	GB	2257.0E	2257.0	3.0D	9800.0			QL=4 ST=2 TYP=6
	500	HIRA	42	SER	2257.0	2257.1	3.2	200.0			WL
	610	PALE	8	S	2259.0E	2259.0	1.0D	60.0			QL=2 ST=2 TYP=3
	610	SGMR	8	S	2259.0E	2259.0	U	60.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	2304.0E	2305.0	5.0D	160.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2307.0E	2307.0	2.0D	110.0			QL=4 ST=2 TYP=3
16	260	ONDR	43	NS	0650.0	0704.0	550.0	238.0			
	200	GORK	43	NS	0651.0		370.0D		5.0		
	127	TORN	43	NS	0651.0		375.0		60.0		V=1
	430	KRAK	44	NS	0654.0E	0706.4	366.5D	170.0	28.0		
	100	GORK	43	NS	0655.0		310.0D		10.0		
	33	UPIC	43	NS	0710.0	0713.2	321.5				
	204	IZMI	43	NS	0830.0		210.0	30.0			
	610	SVTO	44	NS	0936.0E	1028.0	89.0D	130.0			QL=2 ST=2 TYP=1
	410	SVTO	44	NS	0940.0E	0940.0	147.0D	110.0			QL=2 ST=2 TYP=1
	245	SGMR	44	NS	0943.0E	1010.0	147.0D	110.0			QL=4 ST=2 TYP=1
	410	SGMR	44	NS	0946.0E	1011.0	249.0D	75.0			QL=4 ST=2 TYP=1
	610	SGMR	44	NS	0947.0E	1010.0	88.0D	90.0			QL=4 ST=2 TYP=1
	245	SVTO	44	NS	1021.0E	1044.0	208.0D	180.0			QL=2 ST=2 TYP=1
	245	SGMR	44	NS	1310.0E	1349.0	53.0D	95.0			QL=4 ST=2 TYP=1
	15400	LEAR	8	S	0005.0E	0005.0	U	61.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0205.0E	0205.0	U	54.0			QL=4 ST=2 TYP=3
	9100	GORK	23	GRF	0254.0E	0709.0	606.0D	156.0			
	245	LEAR	8	S	0403.0E	0403.0	1.0D	65.0			QL=4 ST=2 TYP=3
	5900	KISV	1	S	0410.0	0410.5	2.0	11.0			
	9300	KISV	2	S/F	0410.0	0410.5	2.0	9.0			

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

Outstanding Occurrences

MAY 1991

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	5900	KISV	22	GRF	0446.5	0456.8	27.0	6.0			
	9100	GORK	1	S	0521.2	0521.9	1.2	8.0			
	5900	KISV	2	S/F	0521.4	0521.6	1.0	6.0			
	2950	GORK	1	S	0542.3	0543.3	2.3	5.0			
	9100	GORK	1	S	0542.6	0543.3	1.6	23.0			
	9300	KISV	1	S	0542.6	0543.3	5.0	23.0			
	5900	KISV	1	S	0542.8	0543.3	4.0	26.0			
	2840	PEKG	47	GB	0631.0	0646.9	156.0	3041.0			
	950	GORK	4	S/F	0632.4	0636.5	4.1D	30.0			
	5900	KISV	47	GB	0633.0	0648.0	33.0	2228.0			
	5900	KISV	30	PBI	0633.0	0706.0	146.7	151.0			
	5900	KISV	47	GB	0633.0	0658.6		905.0			
	2950	GORK	30	PBI	0633.6	0703.0	360.0D	180.0			
	2950	GORK	47	GB	0633.6	0646.7	30.0	2070.0			
	9300	KISV	47	GB	0634.0	0648.5	30.0	3478.0			
	9300	KISV	47	GB	0634.0	0658.7		750.0			
	3013	IZMI	46	C	0634.9	0649.0	120.0	370.0			
	15000	KISV	30	PBI	0635.0	0653.0	147.0	205.0			
	15000	KISV	47	GB	0635.0	0649.8	18.0	5671.0			
	2850	CRIM	3	S	0635.2	0636.4	3.2	90.0	30.0		
	17000	NOBE	28	PRE	0635.3	0636.6	6.7	27.0			R
	9100	GORK	2	S/F	0635.4	0636.6	3.6	42.0			
	808	ONDR	49	GB	0635.5		97.0				
	650	GORK	4	S/F	0635.5	0636.5	2.0	57.0			
	8800	LEAR	8	S	0636.0E	0636.0	1.0D	36.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0636.0E	0636.0	1.0D	36.0			QL=2 ST=2 TYP=3
	4995	LEAR	8	S	0636.0E	0636.0	1.0D	25.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0636.0E	0636.0	1.0D	76.0			QL=2 ST=2 TYP=3
	1415	LEAR	8	S	0636.0E	0636.0	1.0D	94.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0636.0E	0636.0	U	23.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	0636.0E	0636.0	1.0D	42.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	0636.0E	0636.0	1.0D	88.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	0636.0E	0636.0	2.0D	46.0			QL=4 ST=2 TYP=3
	15400	SVTO	8	S	0636.0E	0636.0	1.0D	32.0			QL=4 ST=2 TYP=3
	2695	SVTO	8	S	0636.0E	0636.0	U	64.0			QL=4 ST=2 TYP=3
	600	HUMN	1	S	0636.5	0637.3	1.5	12.0	5.0		
	950	GORK	23	GRF	0641.0	0943.0	384.0D	55.0			
	2850	CRIM	47	GB	0642.0	0658.0		924.0			
	2850	CRIM	47	GB	0642.0	0643.0	28.0	3060.0	1000.0		
	8800	LEAR	49	GB	0642.0E	0647.0	54.0D	3500.0			QL=4 ST=2 TYP=7
	2695	LEAR	49	GB	0642.0E	0646.0	59.0D	5600.0			QL=2 ST=2 TYP=7
	15400	LEAR	49	GB	0642.0E	0649.0	59.0D	8500.0			QL=2 ST=2 TYP=7
	4995	LEAR	49	GB	0642.0E	0648.0	59.0D	1500.0			QL=2 ST=2 TYP=7
	1415	LEAR	49	GB	0642.0E	0645.0	52.0D	14000.0			QL=4 ST=2 TYP=7
	15400	SVTO	49	GB	0642.0E	0649.0	54.0D	6100.0			QL=4 ST=2 TYP=7
	8800	SVTO	49	GB	0642.0E	0647.0	54.0D	3300.0			QL=4 ST=2 TYP=7
	1415	SVTO	49	GB	0642.0E	0655.0	50.0D	12000.0			QL=4 ST=2 TYP=7
	17000	NOBE	47	GB	0642.0	0649.0	78.0	5350.0			R
	80000	NOBE	47	GB	0642.0	0649.0	74.0	1470.0			R
	35000	NOBE	47	GB	0642.0	0649.0	74.0	7750.0			R
	2850	CRIM	30	PBI	0642.0	0710.0	130.0	52.0	17.0		
	4995	SVTO	49	GB	0642.0E	0648.0	1038.0D	1500.0			QL=4 ST=1 TYP=7
	950	GORK	47	GB	0642.0	0715.1		350.0			
	950	GORK	47	GB	0642.0	0756.6		70.0			
	950	GORK	47	GB	0642.0	0658.7	87.0	1500.0			
	9100	GORK	47	GB	0642.0	0647.9	27.0	4400.0			
	650	GORK	23	GRF	0642.5	0944.0	377.0D	89.0			
	410	SVTO	49	GB	0643.0E	0724.0	49.0D	110.0			QL=4 ST=3 TYP=7
	500	HIRA	46	C	0643.0	0653.6	103.0	830.0	50.0		WL
	600	HUMN	47	GB	0643.6	0654.7	101.0	843.0	80.0		
	650	GORK	47	GB	0644.4	0654.0	155.0	7530.0			
	610	SVTO	49	GB	0645.0E	0654.0	49.0D	9700.0			QL=4 ST=2 TYP=7
	2695	SVTO	49	GB	0645.0E	0646.0	47.0D	5000.0			QL=4 ST=2 TYP=7
	610	LEAR	49	GB	0645.0E	0653.0	57.0D	9100.0			QL=4 ST=2 TYP=7
	536	ONDR	49	GB	0646.0	0704.0U	97.0	1525.0U			
	410	LEAR	49	GB	0648.0E	0706.0	53.0D	110.0			QL=4 ST=2 TYP=7
	33	UPIC	32	ABS	0648.0	0658.0U	22.0D				
	200	HIRA	46	C	0648.0	0706.8	136.0D	450.0	50.0		WR,SUNSET
	204	IZMI	45	C	0649.0	0707.0	105.0	350.0			

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

MAY 1991

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	49	GB	0650.0	0704.0	97.0	238.0			
	810	KRAK	49	GB	0654.0E		85.0D				
	200	GORK	46	C	0654.0	0723.0		170.0			
	245	LEAR	49	GB	0654.0E	0706.0	47.0D	370.0			QL=4 ST=2 TYP=7
	245	SVTO	49	GB	0654.0E	0706.0	46.0D	370.0			QL=4 ST=2 TYP=7
	200	GORK	46	C	0654.0	0708.1		240.0			
	200	GORK	46	C	0654.0	0700.5	39.0	40.0D			
	100	GORK	46	C	0658.0	0716.1		640.0			
	100	GORK	46	C	0658.0	0658.6	22.0	390.0			
	100	HIRA	46	C	0701.0	0711.5	140.0D	850.0	250.0		ML
	9300	KISV	30	PBI	0704.0	0719.0	110.6	153.0			
	9100	GORK	46	C	0713.1	0719.1		21.0			
	9100	GORK	46	C	0713.1	0715.2	8.7	40.0			
	9300	KISV	4	S/F	0713.7	0715.2	3.8	136.0			
	2950	GORK	4	S/F	0713.9	0715.0	6.2	47.0			
	2850	CRIM	3	S	0714.6	0715.0	1.2	118.0	30.0		
	2850	CRIM	45	C	0741.2	0801.3		48.0			
	2850	CRIM	45	C	0741.2	0743.3	25.3	17.0	16.0		
	2850	CRIM	45	C	0741.2	0754.5		34.0			
	2850	CRIM	45	C	0741.2	0756.8		34.0			
	610	SVTO	4	S/F	0749.0E	0753.0	7.0D	200.0			QL=4 ST=2 TYP=3
	610	LEAR	4	S/F	0749.0E	0753.0	13.0D	210.0			QL=4 ST=2 TYP=3
	2950	GORK	46	C	0749.9	0801.3		30.0			
	2950	GORK	46	C	0749.9	0801.3	14.8	30.0			
	2950	GORK	46	C	0749.9	0754.5		21.0			
	2950	GORK	46	C	0749.9	0756.9		23.0			
	1415	LEAR	8	S	0752.0E	0753.0	1.0D	22.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0753.0E	0754.0	1.0D	24.0			QL=2 ST=2 TYP=3
	9100	GORK	1	S	0759.6	0801.1	3.6	17.0			
	808	ONDR	27	RF	0925.8	0944.4	97.6	72.0			
	600	HUMN	20	GRF	0928.0	1027.0	106.0	59.0	16.0		
	536	ONDR	27	RF	0928.5	1042.0	103.8	103.0U			
	2850	CRIM	21	GRF	0934.0	0950.0	21.6	9.0	3.0		
	3013	IZMI	22	GRF	0937.0	0953.0	21.0	5.0			
	810	KRAK	27	RF	0940.5E	0947.3	91.0D	54.0	20.0		
	2850	CRIM	1	S	0944.6	0944.8	0.5	13.0	4.0		
	5900	KISV	22	GRF	0949.5	1049.5	77.3	20.0			
	3013	IZMI	23	GRF	1026.0	1039.7	23.0	10.0			
	2850	CRIM	20	GRF	1034.0	1041.7	26.0	22.0	7.0		
	204	IZMI	5	S	1103.8	1104.0	0.6	300.0	150.0		
	536	ONDR	7	C	1126.6	1127.5	1.2	196.0			
	9400	HUAN	22	GRF	1601.4	1632.5	62.6	16.8	3.7		
	6700	CUBA	23	GRF	1629.0	1632.0	19.0	10.0	5.0		15L
	2800	OTTA	3	S	1630.1	1632.3	5.5	100.0	3.0		
	6700	CUBA	1	S	1925.5	1926.0	2.8	10.0	5.0		11R
	15000	CUBA	1	S	1945.3	1945.6	1.5	9.0	4.0		24L
	17000	NOBE	1	S	2208.5	2208.8	1.0	23.0			0 80,35GHz:0
	17000	NOBE	1	S	2308.3	2308.6	1.5	24.0			0 80,35GHz:0
17	127	TORN	43	NS	1017.0		107.0		4.0		V=1
	17000	NOBE	1	S	0002.6	0003.6	2.5	14.0			0 80,35GHz:0
	9100	GORK	23	GRF	0306.0E	0442.0	138.0D	18.0			
	2840	PEKG	45	C	0415.0	0419.7	13.0	237.0			
	2950	GORK	4	S/F	0415.3	0419.9	11.7	135.0			
	9100	GORK	4	S/F	0415.4	0419.7	14.6	550.0			
	35000	NOBE	7	C	0415.7	0419.6	16.0	323.0			R
	17000	NOBE	7	C	0415.7	0419.6	17.0	338.0			R
	8800	LEAR	4	S/F	0416.0E	0419.0	11.0D	480.0			QL=4 ST=2 TYP=3
	4995	LEAR	4	S/F	0416.0E	0419.0	11.0D	270.0			QL=4 ST=2 TYP=3
	15400	LEAR	49	GB	0416.0E	0419.0	10.0D	500.0			QL=2 ST=2 TYP=6
	2695	LEAR	4	S/F	0416.0E	0419.0	17.0D	250.0			QL=2 ST=2 TYP=3
	1415	LEAR	4	S/F	0418.0E	0421.0	4.0D	220.0			QL=4 ST=2 TYP=3
	15400	PALE	4	S/F	0418.0E	0419.0	4.0D	250.0			QL=2 ST=2 TYP=3
	4995	PALE	4	S/F	0418.0E	0419.0	6.0D	270.0			QL=4 ST=2 TYP=5
	8800	PALE	4	S/F	0418.0E	0419.0	5.0D	420.0			QL=2 ST=2 TYP=3
	1415	PALE	4	S/F	0418.0E	0421.0	4.0D	240.0			QL=4 ST=2 TYP=3
	2695	PALE	4	S/F	0418.0E	0420.0	4.0D	190.0			QL=4 ST=2 TYP=3
	1415	SVTO	4	S/F	0418.0E	0420.0	3.0D	190.0			QL=2 ST=2 TYP=3
	8800	SVTO	4	S/F	0418.0E	0420.0	7.0D	470.0			QL=2 ST=2 TYP=3

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

Outstanding Occurrences

MAY 1991

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	15400	SVTO	4	S/F	0418.0E	0419.0	4.0D	230.0			QL=2 ST=2 TYP=3
	2695	SVTO	4	S/F	0418.0E	0420.0	4.0D	200.0			QL=2 ST=2 TYP=3
	4995	SVTO	4	S/F	0418.0E	0420.0	7.0D	290.0			QL=2 ST=2 TYP=3
	80000	NOBE	1	S	0418.1	0419.6	6.0	20.0			
	260	ONDR	41	F	0630.0	0952.0	570.0	35.0			
	9100	GORK	1	S	0631.1	0632.3	3.0	6.0			
	204	IZMI	5	S	0654.0	0654.1	0.2	17.0	8.0		
	536	ONDR	40	F	0700.0	1135.2	280.0	120.0			
	650	GORK	21	GRF	0716.7	0752.6	68.7	4.0			
	950	GORK	1	S	0722.3	0724.1	3.3	4.0			
	650	GORK	2	S/F	0728.6	0729.3	2.1	7.0			
	950	GORK	1	S	0729.1	0729.3	0.4	5.0			
	9100	GORK	2	S/F	0731.3	0732.3	5.2	12.0			
	9300	KISV	2	S/F	0731.9	0732.4	1.4	7.0			
	9100	GORK	21	GRF	0756.3U	0911.5	141.7D	25.0			
	9500	POTS	21	GRF	0800.0	0825.0	120.0	12.0			
	5900	KISV	23	GRF	0801.3	0811.7	30.1	22.0			
	1470	POTS	21	GRF	0802.5	0824.7	93.0	8.0			
	3000	POTS	21	GRF	0803.0	0826.5	48.0	8.0			
	2950	GORK	20	GRF	0803.0	0813.5	55.0D	17.0			
	9100	GORK	46	C	0805.0	0806.5	11.3	11.0			
	9100	GORK	46	C	0805.0	0811.7		23.0			
	9300	KISV	22	GRF	0805.4	0811.7	39.2	24.0			
	2850	CRIM	20	GRF	0805.7	0813.7	34.3	18.0	6.0		
	950	GORK	22	GRF	0806.0	0811.5	8.8	9.0			
	3013	IZMI	22	GRF	0806.0	0813.5	28.0	6.0	3.0		
	9500	POTS	40	F	0810.0	0812.0	5.0	15.0			
	3000	POTS	40	F	0810.5	0813.5	4.5	8.0			
	650	GORK	2	S/F	0810.8	0811.7	2.4	4.0			
	1470	POTS	40	F	0811.0	0813.9	3.5	6.0			
	9100	GORK	4	S/F	0859.5	0904.0	12.0	374.0			
	5900	KISV	46	C	0900.0	0904.0	25.0	234.0			
	9300	KISV	46	C	0900.0	0904.0	27.0	130.0			
	5900	KISV	46	C	0900.0	0906.4		164.0			
	5900	KISV	46	C	0900.0	0905.5		203.0			
	600	HUMN	1	S	0901.0	0901.4	0.8	12.0	5.0		
	8800	LEAR	4	S/F	0901.0E	0903.0	9.0D	330.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	0901.0E	0904.0	9.0D	390.0			QL=2 ST=2 TYP=3
	9500	POTS	4	S/F	0901.0	0903.1	19.0	362.0			
	3013	IZMI	7	C	0901.5	0904.0	15.0	22.0	11.0		
	15000	KISV	46	C	0902.0	0904.0	9.0	294.0			
	15400	LEAR	49	GB	0902.0E	0903.0	8.0D	520.0			QL=2 ST=2 TYP=6
	15000	KISV	46	C	0902.0	0906.3		225.0			
	15000	KISV	46	C	0902.0	0905.4		242.0			
	650	GORK	22	GRF	0902.5U	0907.8	19.5D	1.5			
	2695	LEAR	4	S/F	0903.0E	0904.0	5.0D	28.0			QL=2 ST=2 TYP=3
	4995	LEAR	4	S/F	0903.0E	0905.0	6.0D	100.0			QL=4 ST=2 TYP=3
	4995	SVTO	4	S/F	0903.0E	0905.0	5.0D	110.0			QL=2 ST=2 TYP=3
	2695	SVTO	8	S	0903.0E	0904.0	1.0D	35.0			QL=4 ST=2 TYP=3
	15400	SVTO	4	S/F	0903.0E	0904.0	11.0D	430.0			QL=2 ST=2 TYP=3
	3000	POTS	40	F	0903.2	0904.0	7.3	30.0			
	2950	GORK	4	S/F	0903.3	0904.0	5.1	27.0			
	950	GORK	1	S	0903.3	0905.1	6.1	5.0			
	2950	GORK	29	PBI	0903.3	0908.5	36.5	16.0			
	1470	POTS	40	F	0903.6	0905.0	4.9	13.0			
	1415	LEAR	8	S	0904.0E	0905.0	1.0D	12.0			QL=4 ST=2 TYP=3
	33	UPIC	32	ABS	0905.0	0908.5	26.0				
	1470	POTS	40	F	1013.6	1015.0U	6.4U	7.0			
	127	TORN	27	RF	1017.0	1026.2	30.0	80.0	10.0		
	536	ONDR	48	C	1131.5	1135.2		120.0			
	1470	POTS	21	GRF	1245.0	1259.0	130.0	8.0			
	9400	HUAN	22	GRF	1310.2	1322.4	24.8	7.2	3.2		
	4995	SVTO	8	S	1340.0E	1341.0	2.0D	71.0			QL=2 ST=2 TYP=3
	3000	POTS	29	PBI	1340.0	1341.5	60.5	41.0			
	9500	POTS	23	GRF	1340.0	1341.5	100.0	17.0			
	2850	CRIM	29	PBI	1340.2	1344.2	15.0D	18.0			
	2850	CRIM	3	S	1340.2	1341.7	4.0	68.0	23.0		
	2800	OTTA	3	S	1340.3	1341.7	3.6	501.0	16.0		
	5900	KISV	4	S/F	1340.5	1341.3	7.0	60.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

MAY 1991

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	9400	HUAN	22	GRF	1340.5	1421.3	65.4	14.3	8.6		
	4995	SGMR	8	S	1341.0E	1341.0	1.0D	61.0			QL=4 ST=2 TYP=3
	2695	SGMR	8	S	1341.0E	1341.0	2.0D	49.0			QL=4 ST=2 TYP=3
	2695	SVTO	8	S	1341.0E	1341.0	2.0D	48.0			QL=4 ST=2 TYP=3
	6700	CUBA	21	GRF	1341.0	1345.0	51.0	8.0	4.0		00R
	15000	CUBA	3	S	1341.2	1346.3	9.7	11.0	5.0		14R
	1470	POTS	40	F	1341.2	1342.3	10.3	4.0			
	6700	CUBA	1	S	1342.0	1342.3	2.0	22.0	11.0		9R
	2800	OTTA	29	PBI	1343.9	1343.9	15.8	150.0	6.0		
	600	HUMN	27	RF	1357.0	1435.0	50.0	6.0	4.0		
	33	UPIC	42	SER	1414.8	1417.0	64.0				
	15000	CUBA	1	S	1428.4	1429.5	1.5	12.0	6.0		00R
	15000	CUBA	1	S	1511.1	1512.3	3.3	30.0	15.0		30L
	15000	CUBA	1	S	1549.9	1550.3	1.0	11.0	5.0		17L
	9400	HUAN	22	GRF	1625.6	1637.5	43.6	16.1	5.1		
	15000	CUBA	20	GRF	1636.0	1638.0	14.0	20.0	10.0		18L
	410	SGMR	8	S	1817.0E	1817.0	U	54.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2031.0E	2032.0	2.0D	82.0			QL=4 ST=2 TYP=3
	17000	NOBE	1	S	2253.0	2253.3	0.8	27.0			0 80,35GHz:0
	200	HIRA	45	C	2329.3	2344.0	50.0	30.0	8.0		MR
18	200	GORK	43	NS	0254.7		400.0D		5.0		
	100	GORK	43	NS	0412.0		117.0		5.0		
	204	IZMI	43	NS	0600.0		360.0	15.0			
	260	ONDR	44	NS	0630.0E	0925.0	570.0D	79.0			
	127	TORN	43	NS	0836.0		164.0		7.0		V=1
	17000	NOBE	1	S	0029.6	0030.4	2.0	18.0			0 80,35GHz:0
	17000	NOBE	2	S/F	0057.7	0102.8	12.0	71.0			R 80,35GHz:0
	15400	LEAR	8	S	0102.0E	0102.0	1.0D	58.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0236.0E	0236.0	1.0D	61.0			QL=4 ST=2 TYP=3
	17000	NOBE	2	S/F	0248.2	0255.1	13.0	18.0			0 80,35GHz:0
	245	LEAR	8	S	0255.0E	0255.0	1.0D	200.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0255.0E	0255.0	U	150.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0301.0E	0302.0	2.0D	69.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0302.0E	0302.0	U	17.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0302.0E	0303.0	1.0D	53.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	0308.0E	0311.0	5.0D	320.0			QL=4 ST=2 TYP=3
	245	PALE	4	S/F	0310.0E	0311.0	3.0D	350.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0312.0E	0312.0	1.0D	20.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0324.0E	0324.0	1.0D	97.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0324.0E	0324.0	1.0D	100.0			QL=4 ST=2 TYP=3
	2950	GORK	28	PRE	0406.3	0408.2	5.1	44.0			
	4995	LEAR	8	S	0407.0E	0408.0	1.0D	27.0			QL=4 ST=2 TYP=3
	1415	LEAR	8	S	0407.0E	0408.0	1.0D	17.0			QL=4 ST=2 TYP=3
	950	GORK	20	GRF	0407.0	0408.5	9.4	9.0			
	9100	GORK	1	S	0407.4	0408.1	2.1	10.0			
	650	GORK	2	S/F	0407.7	0407.8	4.8	3.0			
	245	LEAR	8	S	0411.0E	0411.0	U	100.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0411.0E	0411.0	U	89.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0411.0E	0411.0	U	110.0			QL=2 ST=2 TYP=3
	9300	KISV	47	GB	0433.0	0514.0	57.0	18025.0			
	5900	KISV	29	PBI	0433.0	0530.0	430.0	1088.0			
	5900	KISV	47	GB	0433.0	0514.5	57.0	20725.0			
	17000	NOBE	28	PRE	0434.4	0438.4	4.0	43.0			R
	15000	KISV	29	PBI	0434.5	0527.0	215.0	1736.0			
	15000	KISV	47	GB	0434.5	0513.4	52.5	22848.0			
	9100	GORK	47	GB	0434.5	0513.6	74.3	19800.0			
	8800	LEAR	49	GB	0435.0E	0513.0	78.0D	26000.0			QL=4 ST=2 TYP=7
	15400	LEAR	49	GB	0435.0E	0513.0	78.0D	36000.0			QL=2 ST=2 TYP=7
	2950	GORK	29	PBI	0437.7	0536.0	234.0D	287.0			
	2950	GORK	47	GB	0437.7	0516.1	58.0	6600.0			
	15400	PALE	49	GB	0438.0E	0446.0	9.0D	2200.0			QL=2 ST=2 TYP=7
	4995	LEAR	49	GB	0438.0E	0514.0	75.0D	17000.0			QL=4 ST=2 TYP=7
	15400	SVTO	49	GB	0438.0E	0513.0	84.0D	19000.0			QL=4 ST=2 TYP=6
	8800	SVTO	49	GB	0438.0E	0513.0	84.0D	23000.0			QL=4 ST=2 TYP=6
	4995	SVTO	49	GB	0438.0E	0515.0	84.0D	18000.0			QL=4 ST=2 TYP=6
	650	GORK	47	GB	0438.1	0513.1	98.0	660.0			
	950	GORK	47	GB	0438.4	0513.0		1260.0			
	950	GORK	47	GB	0438.4	0452.2	96.6	214.0			

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

Outstanding Occurrences

MAY 1991

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
18	950	GORK	47	GB	0438.4	0503.3		1640.0			
	35000	NOBE	47	GB	0438.4	0513.3	100.0	20480.0			R
	17000	NOBE	47	GB	0438.4	0513.3	120.0	18450.0			R
	80000	NOBE	47	GB	0438.4	0506.8	100.0	3640.0			R
	8800	PALE	49	GB	0439.0E	0446.0	8.0D	1300.0			QL=2 ST=2 TYP=7
	2695	PALE	49	GB	0439.0E	0446.0	8.0D	510.0			QL=2 ST=2 TYP=7
	4995	PALE	49	GB	0439.0E	0446.0	8.0D	700.0			QL=2 ST=2 TYP=7
	2695	LEAR	49	GB	0439.0E	0516.0	74.0D	5600.0			QL=2 ST=2 TYP=7
	2695	SVTO	49	GB	0439.0E	0516.0	83.0D	5700.0			QL=4 ST=2 TYP=6
	1415	LEAR	49	GB	0441.0E	0503.0	72.0D	3500.0			QL=4 ST=2 TYP=7
	410	SVTO	4	S/F	0442.0E	0513.0	57.0D	470.0			QL=4 ST=2 TYP=3
	1415	SVTO	49	GB	0443.0E	0503.0	77.0D	3000.0			QL=4 ST=2 TYP=6
	600	HUMN	48	C	0444.0	0515.5	92.0	242.0	52.0		
	1415	PALE	49	GB	0446.0E	0452.0	8.0D	1100.0			QL=2 ST=2 TYP=7
	610	SVTO	49	GB	0446.0E	0513.0	72.0D	670.0			QL=4 ST=2 TYP=6
	33	UPIC	32	ABS	0446.0	0524.0	148.0				
	610	LEAR	49	GB	0448.0E	0514.0	54.0D	600.0			QL=4 ST=2 TYP=7
	500	HIRA	46	C	0454.7	0515.9	73.0	370.0	50.0		WL
	410	LEAR	4	S/F	0458.0E	0515.0	29.0D	370.0			QL=4 ST=2 TYP=5
	2850	CRIM	47	GB	0458.0E	0517.0	50.0D	6000.0			
	2850	CRIM	29	PBI	0458.0E	0546.0	86.0D	55.0	22.0		
	200	GORK	46	C	0503.2	0506.0	16.4	30.0D			
	200	GORK	46	C	0503.2	0514.5		350.0			
	245	SVTO	4	S/F	0504.0E	0517.0	20.0D	440.0			QL=4 ST=2 TYP=3
	200	HIRA	46	C	0504.1	0514.1	33.0	200.0	50.0		0
	100	GORK	46	C	0507.0	0513.1	8.7	510.0			
	100	GORK	46	C	0507.0	0514.6		580.0			
	245	LEAR	20	GRF	0510.0E	0517.0	16.0D	430.0			QL=4 ST=2 TYP=2
	2840	PEKG	47	GB	0520.0E	0526.8	26.0D	1555.6D			
	9300	KISV	29	PBI	0530.0		330.0	869.0			
	33	UPIC	27	RF	0531.0	0544.2	17.0				
	2840	PEKG	29	PBI	0546.0		64.0	83.6D			
	9100	GORK	29	PBI	0548.8	0548.8	221.0D	218.0			
	950	GORK	40	F	0630.3	0637.0	17.4	125.0			
	950	GORK	40	F	0630.3	0641.4		30.0			
	650	GORK	40	F	0630.3	0636.8	17.0	14.0			
	1415	LEAR	8	S	0638.0E	0638.0	U	78.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	0638.0E	0638.0	U	55.0			QL=4 ST=2 TYP=3
	536	ONDR	41	F	0700.0		360.0				
	950	GORK	41	F	0729.5	0729.6	6.1	15.0			
	950	GORK	41	F	0729.5	0730.6		19.0			
	950	GORK	41	F	0729.5	0734.6		26.0			
	430	KRAK	27	RF	0813.0	0817.6	11.5	36.0	8.0		
	100	GORK	46	C	0924.5	0925.0	1.5	900.0			
	100	GORK	46	C	0924.5	0925.4		390.0			
	200	GORK	4	S/F	0924.9	0925.4	1.3	25.0D			
	245	LEAR	8	S	0925.0E	0925.0	U	230.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0925.0E	0925.0	U	160.0			QL=4 ST=2 TYP=3
	204	IZMI	41	F	0925.0	0925.5	1.0	46.0			
	808	ONDR	46	C	1009.0	1016.0	18.0	119.0			
	810	KRAK	41	F	1010.5	1015.9	5.7	57.0	10.0		
	9400	HUAN	1	S	1312.0	1314.2	5.6	7.5	3.4		
	245	PALE	8	S	2033.0E	2033.0	1.0D	220.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	2033.0E	2034.0	4.0D	170.0			QL=4 ST=2 TYP=3
	9400	HUAN	2	S/F	2051.2	2053.6	6.8	17.9	10.4		
	2800	OTTA	4	S/F	2051.2	2052.6	5.1	714.0	21.0		
	2695	SGMR	8	S	2052.0E	2052.0	U	51.0			QL=4 ST=2 TYP=3
	1415	SGMR	8	S	2053.0E	2053.0	U	45.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	2255.0E	2257.0	3.0D	680.0			QL=4 ST=2 TYP=6
	245	SGMR	8	S	2255.0E	2256.0	1.0D	140.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2257.0E	2257.0	U	80.0			QL=4 ST=3 TYP=3
	245	SGMR	49	GB	2257.0E	2257.0	1.0D	730.0			QL=4 ST=3 TYP=6
19	127	TORN	43	NS	1341.0	1356.7	70.0	2700.0	120.0D		V=1
	260	ONDR	41	F	0630.0	1406.0U	570.0	254.0			
	204	IZMI	5	S	0711.5	0711.7	0.6	17.0	8.0		
	33	UPIC	8	S	0712.3	0712.8	0.8				
	536	ONDR	40	F	0750.0	0759.0	25.0	86.0			
	430	KRAK	2	S/F	0846.0	0846.8	1.3	68.0	4.0		

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

MAY 1991

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	200	GORK	46	C	0922.4	0925.0	6.6	17.0			
	100	GORK	46	C	0922.4	0928.1		520.0			
	200	GORK	46	C	0922.4	0928.1		7.0			
	100	GORK	46	C	0922.4	0925.7	6.7	190.0			
	33	UPIC	27	RF	0922.5	0925.6	6.6				
	204	IZMI	7	C	0923.0	0925.0	6.0	34.0	17.0		
	536	ONDR	8	S	1016.5	1016.5	0.5	42.0			
	2850	CRIM	8	S	1029.8	1030.1	0.2	24.0			
	260	ONDR	49	GB	1330.0	1406.0U	90.0	254.0			
	2800	OTTA	22	GRF	1334.0	1345.0	270.0	402.0	20.0		
	33	UPIC	48	C	1337.0	1346.9	61.0				
	6700	CUBA	20	GRF	1339.0	1359.0	295.0	55.0	27.0		24R
	5900	KISV	22	GRF	1339.0	1359.5	170.0	54.0			
	808	ONDR	49	GB	1340.0	1358.0	66.0	336.0			
	3000	POTS	25	R	1340.0	1357.5	75.0D	73.0			
	536	ONDR	49	GB	1340.0	1357.5	90.0	257.0			
	9300	KISV	22	GRF	1340.0	1359.7	70.0	48.0			
	1470	POTS	25	R	1340.0	1356.7	75.0D	328.0			
	600	HUMN	48	C	1340.5	1357.4	80.7	122.0	25.0		
	9500	POTS	24	R	1341.0	1359.5	64.0D	40.0			
	15000	KISV	22	GRF	1342.0	1412.0	47.0	43.0			
	15000	CUBA	23	GRF	1343.0	1409.0	121.0	37.0	18.0		10R
	4995	SVTO	20	GRF	1345.0E	1359.0	41.0D	61.0			QL=4 ST=2 TYP=2
	2800	OTTA	4	S/F	1354.9	1357.4	11.5	747.0	23.0		
	15400	SVTO	20	GRF	1355.0E	1419.0	29.0D	33.0			QL=4 ST=2 TYP=2
	15400	SGMR	20	GRF	1357.0E	1406.0	25.0D	28.0			QL=4 ST=2 TYP=2
	410	SGMR	8	S	1427.0E	1428.0	1.0D	59.0			QL=4 ST=2 TYP=3
	1415	SGMR	8	S	1432.0E	1432.0	1.0D	72.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1443.0E	1445.0	2.0D	110.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1716.0E	1716.0	U	58.0			QL=4 ST=2 TYP=3
	9400	HUAN	1	S	1832.7	1836.5	6.7	13.9	6.7		
	9400	HUAN	1	S	1848.6	1851.0	5.0	9.2	1.3		
20	650	GORK	4	S/F	0607.1	0608.5	2.2	26.0			
	260	ONDR	40	F	0630.0	0942.1	570.0	49.0			
	204	IZMI	7	C	0805.3	0806.0		75.0			
	200	GORK	41	F	0903.0	0923.1		10.0			
	100	GORK	41	F	0903.0	0913.1	25.5	130.0			
	200	GORK	41	F	0903.0	0904.4	22.7	12.0			
	100	GORK	41	F	0903.0	0921.9		1400.0			
	650	GORK	22	GRF	0912.0	0914.7	7.5	6.0			
	33	UPIC	40	F	0942.0	0949.5	56.0				
	245	SVTO	8	S	1002.0E	1002.0	U	88.0			QL=4 ST=2 TYP=3
	650	GORK	4	S/F	1107.6	1107.9	1.0	9.0			
	127	TORN	27	RF	1253.0	1254.2	10.0	40.0	10.0		
	100	HIRA	46	C	2313.8	2315.3	8.0	300.0	50.0		WR
	200	HIRA	46	C	2314.0	2315.3	8.6	65.0	40.0		WR
21	200	GORK	44	NS	0251.0E		410.0D		5.0		
	100	GORK	44	NS	0251.0E		410.0D		5.0		
	204	IZMI	43	NS	0600.0		360.0	15.0			
	127	TORN	44	NS	0620.0E		460.0D		11.0		V=2
	245	SVTO	44	NS	1115.0E	1118.0	50.0D	140.0			QL=4 ST=2 TYP=1
	2695	PENT	20	GRF	0004.0	0046.0	140.0	263.0	13.0		
	260	ONDR	41	F	0630.0	0955.1	570.0	64.0			
	536	ONDR	41	F	0640.0	0950.5	225.0	103.0			
	650	GORK	2	S/F	0657.5	0658.0	2.2	8.0			
	650	GORK	4	S/F	0735.9	0736.7	2.1	30.0			
	950	GORK	23	GRF	0939.5	0958.3	24.7	13.0			
	3000	POTS	29	PBI	0943.5	0951.8	140.0	87.0			
	2950	GORK	21	GRF	0943.7		35.5				
	9100	GORK	46	C	0944.0	0957.0		31.0			
	3013	IZMI	7	C	0944.0	0952.0	28.0	83.0	40.0		
	2850	CRIM	45	C	0944.0	0956.3		63.0			
	9100	GORK	46	C	0944.0	0951.5	23.2	73.0			
	2850	CRIM	45	C	0944.0	0951.8	22.6	106.0	35.0		
	9500	POTS	29	PBI	0944.7	0951.8	130.0	75.0			
	1470	POTS	29	PBI	0945.6	0951.9	123.0	34.0			
	950	GORK	4	S/F	0945.9	0946.8	1.4	46.0			

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

MAY 1991

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	600	HUMN	2	S/F	0946.0	0946.5	1.0	10.0	5.0		
	808	ONDR	2	S/F	0946.0	0947.1	2.2	29.0			
	810	KRAK	2	S/F	0946.0	0946.8	2.0	26.0	6.0		
	2950	GORK	46	C	0948.3	0956.4		40.0			
	2950	GORK	46	C	0948.3	0951.9	13.7	80.0			
	430	KRAK	27	RF	0948.5	0950.7	10.5	46.0	6.0		
	1415	SVTO	8	S	0950.0E	0951.0	2.0D	41.0			QL=4 ST=2 TYP=3
	808	ONDR	7	C	0950.0	0950.1	4.0	39.0			
	950	GORK	4	S/F	0950.1	0951.8	2.4	56.0			
	600	HUMN	2	S/F	0950.3	0951.0	10.0	12.0	4.0		
	810	KRAK	2	S/F	0950.3	0952.0	2.2	33.0D	8.0		
	204	IZMI	41	F	0951.0	0955.0	8.5	220.0			
	245	SGMR	8	S	0954.0E	0955.0	2.0D	120.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0954.0E	0955.0	1.0D	170.0			QL=4 ST=2 TYP=3
	9100	GORK	29	PBI	1007.2	1007.2	33.7	7.0			
	1470	POTS	40	F	1250.0	1256.6	10.6	28.0			
	3000	POTS	2	S/F	1254.0	1255.5	3.0	7.0			
	245	PALE	8	S	2214.0E	2214.0	1.0D	54.0			QL=4 ST=2 TYP=3
22	200	GORK	43	NS	0409.0		530.0D		5.0		
	204	IZMI	43	NS	0900.0		120.0	10.0			
	127	TORN	43	NS	1240.0		140.0		12.0		V=1
	200	HIRA	42	SER	0016.0	0022.0	7.0	140.0			
	500	HIRA	46	C	0016.0	0028.0	13.5	5.0	2.0		WR
	2950	GORK	20	GRF	0603.0	0646.5	109.0D	5.8			
	260	ONDR	41	F	0630.0	1231.5	570.0	49.0			
	950	GORK	22	GRF	0639.3	0645.8	9.2	7.0			
	8800	SVTO	8	S	0818.0E	0818.0	U	75.0			QL=2 ST=2 TYP=3
	950	GORK	1	S	0832.0	0832.2	0.5	3.0			
	536	ONDR	42	SER	0838.0	0840.2	10.5	20.0			
	650	GORK	1	S	1257.0	1258.5	3.0	2.0			
	2950	GORK	1	S	1257.3	1258.7	2.5	3.2			
	950	GORK	1	S	1257.4	1258.5	4.0D	7.0			
	410	SGMR	8	S	1442.0E	1442.0	U	84.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1442.0E	1442.0	U	110.0			QL=2 ST=3 TYP=3
	245	PALE	49	GB	1921.0E	1923.0	2.0D	890.0			QL=4 ST=2 TYP=6
	245	SGMR	49	GB	1921.0E	1923.0	3.0D	800.0			QL=4 ST=2 TYP=6
	245	PALE	8	S	1941.0E	1942.0	1.0D	59.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1941.0E	1942.0	1.0D	64.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1941.0E	1942.0	1.0D	52.0			QL=4 ST=2 TYP=3
23	100	GORK	44	NS	0248.0E		610.0D		5.0		
	200	GORK	44	NS	0254.0E		610.0D		5.0		
	127	TORN	43	NS	0716.0		464.0		3.0		V=1
	9100	GORK	20	GRF	0418.6	0431.9	116.4	12.0			
	204	IZMI	5	S	0626.7	0626.8	0.3	42.0	2.0		
	204	IZMI	42	SER	0704.0	0716.0	12.5	68.0			
	1470	POTS	8	S	0740.5	0740.7	0.5	8.0			
	100	GORK	46	C	0833.7	0842.5		3600.0			
	100	GORK	46	C	0833.7	0836.9	13.2	550.0			
	260	ONDR	41	F	0834.0	1434.4	416.0	132.0			
	204	IZMI	41	F	0834.0	0842.5	35.0	1400.0			
	33	UPIC	46	C	0834.0	0844.8	25.2				
	950	GORK	21	GRF	0835.0	0846.2	16.9	2.5			
	650	GORK	23	GRF	0835.1	0841.0	21.3	6.0			
	127	TORN	47	GB	0838.4	0842.5	6.0	1100.0	90.0		
	200	GORK	46	C	0840.5	0841.3	5.2	420.0			
	200	GORK	46	C	0840.5	0842.5		420.0			
	1470	POTS	40	F	0840.6	0845.3	6.8	7.0			
	950	GORK	46	C	0840.7	0841.0	5.5	9.5			
	950	GORK	46	C	0840.7	0845.4		12.0			
	950	GORK	46	C	0840.7	0842.6		11.0			
	650	GORK	4	S/F	0843.8	0845.4	3.0	20.0			
	600	HUMN	2	S/F	0844.0	0845.0	2.5	13.0	8.0		
	810	KRAK	1	S	0845.2	0845.5	0.9	8.0	4.0		
	430	KRAK	1	S	0845.2	0845.5	1.1	18.0	5.0		
	1470	POTS	4	S/F	0912.2	0912.8	1.0	6.0			
	1470	POTS	8	S	1011.3	1011.5	0.4	7.0			
	1470	POTS	2	S/F	1100.7	1101.0	1.8	4.0			

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MAY 1991

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	1470	POTS	8	S	1206.7	1206.8	0.3	8.0			
	127	TORN	45	C	1321.0	1322.5	4.0	220.0	30.0		
	33	UPIC	45	C	1321.5	1322.0	1.3				
	245	SGMR	8	S	1434.0E	1434.0	U	150.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1434.0E	1434.0	U	160.0			QL=4 ST=2 TYP=3
	536	ONDR	48	C	1532.0	1535.0U	7.0	1900.0U			
	9400	HUAN	1	S	1559.8	1600.8	4.5	7.0	4.6		
	33	UPIC	2	S/F	1707.0	1707.2	0.7				
	2800	OTTA	20	GRF	1900.0	1921.0	180.0	78.0	3.0		
	15400	LEAR	8	S	2354.0E	2355.0	1.0D	67.0			QL=2 ST=2 TYP=5
24	204	IZMI	43	NS	0600.0		360.0	10.0			
	260	ONDR	44	NS	0630.0E	1138.0	570.0D	82.0			
	200	GORK	43	NS	0639.0		380.0D		5.0		
	127	TORN	43	NS	0726.0		290.0		2.0		V=1
	9100	GORK	21	GRF	0257.0E	0307.0U	159.0D	11.0			
	610	LEAR	8	S	0307.0E	0307.0	1.0D	25.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0307.0E	0308.0	2.0D	53.0			QL=2 ST=2 TYP=3
	4995	LEAR	8	S	0307.0E	0308.0	2.0D	62.0			QL=4 ST=2 TYP=3
	2840	PEKG	5	S	0307.0	0308.5	5.0	61.1			
	17000	NOBE	1	S	0307.4	0308.3	2.5	62.0			L 80,35GHz:0
	9100	GORK	2	S/F	0307.5	0308.4	2.6	66.0			
	500	HIRA	6	S	0307.5	0308.4	1.5	17.0	8.0		WR
	950	GORK	2	S/F	0307.5	0308.5	2.2	13.0			
	650	GORK	4	S/F	0307.7	0308.3	2.0	16.0			
	2950	GORK	3	S	0307.7	0308.5	2.4	30.0			
	8800	LEAR	8	S	0308.0E	0308.0	U	63.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0308.0E	0308.0	U	33.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0308.0E	0308.0	U	29.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0308.0E	0310.0	2.0D	160.0			QL=2 ST=2 TYP=3
	1415	LEAR	8	S	0308.0E	0308.0	1.0D	26.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	0308.0E	0308.0	U	65.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	0308.0E	0308.0	U	63.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	0308.0E	0308.0	U	64.0			QL=4 ST=2 TYP=3
	2695	PALE	8	S	0308.0E	0308.0	U	52.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0308.0E	0308.0	U	46.0			QL=4 ST=2 TYP=3
	950	GORK	2	S/F	0346.1	0347.3	2.5	5.0			
	1470	POTS	4	S/F	0835.4	0836.6	2.1	10.0			
	650	GORK	20	GRF	0855.5	1143.2	244.0D	5.0			
	9100	GORK	20	GRF	0918.0	1300.0U	222.0D	11.0			
	2850	CRIM	24	R	1037.0	1130.0		12.0			
	3000	POTS	2	S/F	1321.0U	1322.0U	2.0U	7.0			
	5900	KISV	1	S	1321.0	1321.8	1.0	21.0			
	1470	POTS	2	S/F	1321.6	1321.8	0.8	10.0			
	9400	HUAN	1	S	1407.8	1409.2	4.3	6.2	3.3		
	2800	OTTA	3	S	1834.0	1844.5	27.5	198.0	6.0		
	1415	SGMR	8	S	1843.0E	1843.0	1.0D	21.0			QL=4 ST=2 TYP=3
	2695	SGMR	8	S	1843.0E	1843.0	1.0D	24.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1844.0E	1845.0	2.0D	35.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1844.0E	1845.0	2.0D	31.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	1845.0E	1845.0	U	59.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1957.0E	1957.0	1.0D	78.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2201.0E	2202.0	1.0D	63.0			QL=4 ST=2 TYP=3
	500	HIRA	42	SER	2201.9	2204.3	3.2	17.0			WR
	245	SGMR	8	S	2202.0E	2202.0	U	72.0			QL=4 ST=2 TYP=3
25	100	GORK	43	NS	0300.0		390.0D		5.0		
	127	TORN	44	NS	0620.0E		520.0D		4.0		V=1
	245	LEAR	43	NS	0621.0	0650.0	74.0	76.0			QL=4 ST=2 TYP=1
	260	ONDR	44	NS	0630.0E	1202.5U	570.0D	620.0U			
	100	GORK	4	S/F	0354.5	0355.7	2.9	330.0			
	200	GORK	4	S/F	0354.5	0355.8	2.8	35.0D			
	200	HIRA	46	C	0354.8	0356.0	1.4	150.0	40.0		
	100	HIRA	46	C	0355.4	0355.6	2.0	330.0	180.0		WL
	9100	GORK	20	GRF	0411.4	0418.0	33.6	10.0			
	245	LEAR	8	S	0454.0E	0454.0	1.0D	57.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0537.0E	0538.0	2.0D	71.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0545.0E	0545.0	U	110.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0545.0E	0545.0	U	98.0			QL=2 ST=2 TYP=3

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MAY 1991

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	SVTO	8	S	0557.0E	0558.0	2.0D	180.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0606.0E	0606.0	1.0D	130.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0618.0E	0618.0	U	61.0			QL=4 ST=2 TYP=3
	204	IZMI	5	S	0623.8	0624.0	0.4	47.0	2.0		
	204	IZMI	42	SER	0647.0	0651.0	5.0	82.0			
	204	IZMI	42	SER	0733.0	0801.5	40.0	48.0			
	650	GORK	20	GRF	0734.0	0849.9	116.0D	6.0			
	127	TORN	4	S/F	0808.6	0811.3	3.5	120.0	30.0		
	245	LEAR	8	S	0811.0E	0812.0	1.0D	110.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0812.0E	0812.0	U	76.0			QL=4 ST=2 TYP=3
	536	ONDR	48	C	1030.0	1032.6	6.8	205.0			
	127	TORN	47	GB	1200.6	1203.0	3.1	1800.0D	70.0		
	430	KRAK	8	S	1201.8	1202.0	0.6	41.0			
	410	SGMR	8	S	1202.0E	1203.0	1.0D	59.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1202.0E	1202.0	1.0D	4100.0			QL=4 ST=2 TYP=6
	410	SVTO	8	S	1202.0E	1203.0	1.0D	95.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	1202.0E	1203.0	1.0D	4100.0			QL=4 ST=2 TYP=6
	1470	POTS	4	S/F	1202.5	1203.0	1.1	7.0			
	245	SGMR	8	S	1349.0E	1349.0	1.0D	51.0			QL=4 ST=2 TYP=3
	9400	HUAN	2	S/F	1410.0	1411.9	9.5	14.4	7.5		
	9500	POTS	4	S/F	1410.4	1411.5	4.6	18.0			
	245	SGMR	8	S	1541.0E	1541.0	1.0D	200.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1541.0E	1541.0	U	200.0			QL=4 ST=3 TYP=3
	245	SGMR	8	S	1550.0E	1551.0	2.0D	77.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1940.0E	1941.0	2.0D	61.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1940.0E	1941.0	1.0D	97.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2015.0E	2016.0	1.0D	88.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2240.0E	2240.0	U	65.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2240.0E	2240.0	2.0D	74.0			QL=4 ST=2 TYP=3
	200	HIRA	42	SER	2240.0	2242.9	5.3	40.0			MR
	610	PALE	8	S	2302.0E	2302.0	1.0D	66.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	2302.0E	2302.0	1.0D	65.0			QL=2 ST=2 TYP=3
	200	HIRA	46	C	2304.0	2307.8	4.0	300.0	30.0		O
	245	SGMR	8	S	2305.0E	2306.0	2.0D	470.0			QL=2 ST=2 TYP=3
	610	PALE	8	S	2306.0E	2306.0	U	210.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	2306.0E	2306.0	U	180.0			QL=2 ST=2 TYP=3
	500	HIRA	27	RF	2352.0	2409.0	75.0	10.0	4.0		WR
26	204	IZMI	43	NS	0600.0		120.0	20.0			
	200	GORK	44	NS	0606.0E		99.0D		5.0		
	100	GORK	44	NS	0609.0E		200.0D		5.0		
	127	TORN	44	NS	0620.0E		520.0D		18.0		V=2
	260	ONDR	44	NS	0630.0E	1010.5	570.0D	378.0			
	245	SVTO	44	NS	0915.0E	1148.0	204.0D	570.0			QL=4 ST=2 TYP=1
	245	SGMR	44	NS	0950.0E	1011.0	307.0D	730.0			QL=4 ST=3 TYP=1
	430	KRAK	43	NS	0954.0	1055.0	136.0	95.0	22.0		
	204	IZMI	43	NS	1005.0		115.0	300.0			
	235	CUBA	44	NS	1332.0E		398.0D		17.0		
	245	SGMR	44	NS	2120.0E	2213.0	145.0D	340.0			QL=4 ST=2 TYP=1
	245	PALE	44	NS	2147.0E	2201.0	179.0D	450.0			QL=4 ST=2 TYP=1
	200	HIRA	43	NS	2205.0	2254.0	97.0	100.0	40.0		MR
	245	LEAR	44	NS	2310.0E	2315.0	101.0D	93.0			QL=4 ST=2 TYP=1
	410	PALE	8	S	0024.0E	0025.0	1.0D	99.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0244.0E	0244.0	1.0D	83.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0249.0E	0249.0	2.0D	57.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0252.0E	0252.0	2.0D	60.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0252.0E	0252.0	U	75.0			QL=4 ST=2 TYP=3
	950	GORK	4	S/F	0257.1	0257.3	0.4	19.0			
	245	PALE	8	S	0338.0E	0338.0	U	110.0			QL=4 ST=2 TYP=3
	950	GORK	22	GRF	0431.3	0437.2	7.9	10.0			
	9100	GORK	1	S	0433.0	0434.2	6.9	6.0			
	245	LEAR	8	S	0434.0E	0434.0	1.0D	85.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0434.0E	0434.0	1.0D	100.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0434.0E	0434.0	1.0D	92.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0436.0E	0438.0	2.0D	110.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0436.0E	0438.0	2.0D	140.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0437.0E	0438.0	1.0D	160.0			QL=4 ST=2 TYP=3
	9100	GORK	22	GRF	0515.0	0615.7U	153.0	8.0			
	204	IZMI	42	SER	0706.0	0713.0	8.0	350.0			

S O L A R R A D I O E M I S S I O N
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MAY 1991

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	650	GORK	21	GRF	0755.0	0854.2	95.0D	6.0			
	1470	POTS	2	S/F	0807.4	0807.5	2.2	3.0			
	9100	GORK	20	GRF	0814.3	0822.3	15.7	6.0			
	950	GORK	23	GRF	0830.0	0854.0	40.7	8.0			
	245	SVTO	8	S	0835.0E	0835.0	U	160.0			QL=2 ST=2 TYP=3
	204	IZMI	41	F	0835.2	0835.5	4.0	870.0			
	430	KRAK	42	SER	0835.2	0837.6	3.2	66.0			
	536	ONDR	41	F	0836.0	0850.5	384.0	206.0			
	9100	GORK	2	S/F	0849.0	0851.2	2.2	11.0			
	3000	POTS	4	S/F	0850.0U	0851.4	4.7U	21.0			
	430	KRAK	42	SER	0850.0	0855.0	5.0	149.0			
	1470	POTS	29	PBI	0850.7	0851.5	34.3	20.0			
	2850	CRIM	3	S	0850.9	0851.2	0.8	28.0	7.0		
	2850	CRIM	29	PBI	0850.9	0851.7	3.6	11.0	4.0		
	600	HUMN	2	S/F	0851.0	0851.2	6.0	26.0	3.0		
	2950	GORK	2	S/F	0851.0	0851.3	6.7	20.0			
	650	GORK	4	S/F	0851.0	0851.3	3.0	23.0			
	500	HIRA	8	S	0851.0	0851.5	0.5	2000.0			0
	3013	IZMI	5	S	0851.0	0851.5	4.0	10.0			
	950	GORK	3	S	0851.1	0851.7	2.9	16.0			
	127	TORN	49	GB	0900.0	0903.6	11.0	1600.0	100.0		
	33	UPIC	46	C	0901.2	0903.2	16.0				
	245	LEAR	8	S	0914.0E	0915.0	1.0D	91.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0919.0E	0919.0	1.0D	180.0			QL=2 ST=2 TYP=3
	600	HUMN	27	RF	0953.0	1050.0	130.0	9.0	5.0		
	1470	POTS	2	S/F	0958.2	0958.5	0.9	4.0			
	33	UPIC	8	S	1253.5	1253.6	0.3				
	9400	HUAN	1	S	1333.4	1335.3	4.1	6.5	2.5		
	6700	CUBA	21	GRF	1401.0E	1708.0	310.0D	24.0			OOR RAIN
	6700	CUBA	2	S/F	1414.0	1415.1	2.0	7.0	3.0		30R
	9400	HUAN	1	S	1414.4	1415.9	5.8	10.9	6.1		
	9500	POTS	4	S/F	1414.5	1414.8	1.5	11.0			
	9400	HUAN	20	GRF	1423.1	1436.7	33.5	8.7	3.9		
	245	SVTO	8	S	1457.0E	1457.0	U	170.0			QL=4 ST=2 TYP=3
	9400	HUAN	1	S	1502.6	1504.1	4.1	4.4	3.3		
	245	SVTO	8	S	1544.0E	1544.0	U	51.0			QL=4 ST=2 TYP=3
	9400	HUAN	2	S/F	1546.8	1548.2	4.2	9.3	2.9		
	6700	CUBA	2	S/F	1546.9	1547.2	4.1	8.0	4.0		24R
	9400	HUAN	1	S	1730.6	1732.2	5.6	8.4	4.2		
	6700	CUBA	2	S/F	1754.0	1757.0	5.0	3.0	1.0		OOR
	9400	HUAN	2	S/F	1828.7	1831.8	7.2	5.1	3.3		
	245	PALE	8	S	2018.0E	2018.0	U	61.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	2026.0E	2027.0	2.0D	40.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	2026.0E	2027.0	1.0D	30.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	2026.0E	2027.0	2.0D	61.0			QL=4 ST=2 TYP=3
	9400	HUAN	4	S/F	2026.5	2028.7	9.3	72.7	19.4		
	4995	SGMR	8	S	2027.0E	2027.0	U	45.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	2027.0E	2027.0	U	31.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	2027.0E	2027.0	U	61.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2120.0E	2120.0	U	74.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2125.0E	2125.0	U	75.0			QL=4 ST=2 TYP=3
	500	HIRA	27	RF	2157.7	2222.5	102.0	12.0	6.0		WR
27	245	LEAR	44	NS	0030.0E	0030.0	40.0D	80.0			QL=4 ST=2 TYP=1
	245	PALE	44	NS	0246.0E	0345.0	124.0D	140.0			QL=4 ST=2 TYP=1
	100	GORK	44	NS	0252.0E		610.0D		5.0		
	200	GORK	44	NS	0334.0E		570.0D		5.0		
	245	LEAR	43	NS	0355.0	0413.0	63.0D	120.0			QL=4 ST=2 TYP=1
	245	SVTO	44	NS	0420.0E	0420.0	29.0D	83.0			QL=4 ST=2 TYP=1
	204	IZMI	43	NS	0600.0		360.0	15.0			
	127	TORN	44	NS	0620.0E	0957.6	520.0D	500.0	4.0		V=1
	245	SGMR	44	NS	1806.0E	1808.0	354.0D	400.0			QL=4 ST=3 TYP=1
	200	HIRA	44	NS	2020.0E	0727.0	780.0D	30.0	10.0		MR
	245	LEAR	8	S	0001.0E	0001.0	1.0D	74.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0010.0E	0010.0	U	130.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0026.0E	0028.0	2.0D	63.0			QL=2 ST=2 TYP=3
	2840	PEKG	46	C	0133.0	0140.3	9.0	51.0			
	4995	PALE	8	S	0141.0E	0142.0	1.0D	46.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0246.0E	0247.0	1.0D	71.0			QL=2 ST=2 TYP=3

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

Outstanding Occurrences

MAY 1991

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	9100	GORK	23	GRF	0307.8	0445.0	318.4	14.0			
	245	LEAR	8	S	0324.0E	0325.0	1.0D	89.0			QL=2 ST=2 TYP=3
	17000	NOBE	1	S	0602.0	0602.2	1.0	40.0			R 80,35GHz:0
	15000	KISV	1	S	0602.1	0602.3	1.0	31.0			
	5900	KISV	2	S/F	0602.1	0602.3	1.7	7.0			
	245	LEAR	8	S	0623.0E	0623.0	U	67.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0623.0E	0623.0	U	63.0			QL=4 ST=2 TYP=3
	260	ONDR	42	SER	0630.0	1307.0	570.0	584.0U			
	245	LEAR	8	S	0632.0E	0632.0	U	79.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0632.0E	0632.0	U	100.0			QL=4 ST=2 TYP=3
	2950	GORK	20	GRF	0634.9	0647.5	25.0	5.0			
	9100	GORK	46	C	0639.7	0647.5		20.0			
	9100	GORK	46	C	0639.7	0640.8	22.8	82.0			
	4995	LEAR	8	S	0640.0E	0640.0	1.0D	41.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0640.0E	0640.0	1.0D	49.0			QL=2 ST=2 TYP=3
	8800	LEAR	8	S	0640.0E	0640.0	1.0D	56.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	0640.0E	0640.0	1.0D	49.0			QL=2 ST=2 TYP=3
	8800	SVTO	8	S	0640.0E	0640.0	1.0D	73.0			QL=2 ST=2 TYP=3
	15000	KISV	4	S/F	0640.0	0640.8	4.1	47.0			
	2850	CRIM	1	S	0645.8	0647.5	3.5	4.0	1.0		
	5900	KISV	2	S/F	0645.8	0647.6	4.6	10.0			
	204	IZMI	5	S	0658.0	0658.2	0.4	120.0	6.0		
	5900	KISV	20	GRF	0714.7	0716.8	13.6	11.0			
	1470	POTS	8	S	0723.4	0723.7	0.8	26.0			
	204	IZMI	5	S	0758.3	0758.5	0.5	70.0	3.0		
	1470	POTS	2	S/F	0807.2	0807.6	1.0	4.0			
	9100	GORK	22	GRF	0903.0	1225.0	238.0D	19.0			
	33	UPIC	42	SER	0912.5	0957.6	72.8				
	204	IZMI	42	SER	0928.5	1007.5	40.0	380.0			
	1470	POTS	40	F	0942.6	0946.6	9.4	4.0			
	100	GORK	41	F	0956.5	1007.5		2100.0			
	100	GORK	41	F	0956.5	0957.5	12.0	2800.0			
	200	GORK	41	F	0957.2	1007.3		210.0			
	200	GORK	41	F	0957.2	0957.6	10.5	100.0			
	245	SGMR	8	S	1007.0E	1007.0	U	65.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1007.0E	1007.0	U	110.0			QL=4 ST=2 TYP=3
	127	TORN	47	GB	1007.3	1007.6	1.6	1500.0	750.0		
	536	ONDR	8	S	1142.8	1142.9	0.8	228.0			
	9400	HUAN	22	GRF	1220.6	1226.0	47.7	9.1	6.8		
	6700	CUBA	21	GRF	1252.0E	1512.0	518.0D	24.0			OOR SUNRISE
	245	SGMR	49	GB	1305.0E	1308.0	655.0D	2900.0			QL=4 ST=3 TYP=6
	245	SGMR	49	GB	1307.0E	1307.0	1.0D	2900.0			QL=4 ST=2 TYP=6
	410	SVTO	8	S	1307.0E	1307.0	U	52.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	1307.0E	1307.0	2.0D	3200.0			QL=4 ST=2 TYP=6
	245	SGMR	8	S	1519.0E	1519.0	U	450.0			QL=4 ST=2 TYP=3
	245	SVTO	49	GB	1519.0E	1519.0	1.0D	550.0			QL=4 ST=2 TYP=6
	536	ONDR	42	SER	1520.0	1524.7	40.0	259.0			
	6700	CUBA	1	S	1520.3	1520.8	6.7	6.0	3.0		21R
	410	SGMR	49	GB	1523.0E	1525.0	4.0D	800.0			QL=4 ST=3 TYP=6
	245	SGMR	49	GB	1524.0E	1524.0	3.0D	600.0			QL=4 ST=3 TYP=6
	245	SVTO	49	GB	1524.0E	1525.0	1.0D	690.0			QL=4 ST=2 TYP=6
	1415	SVTO	8	S	1524.0E	1524.0	U	26.0			QL=4 ST=2 TYP=3
	410	SVTO	49	GB	1524.0E	1525.0	1.0D	900.0			QL=4 ST=2 TYP=6
	610	SGMR	8	S	1525.0E	1525.0	U	62.0			QL=4 ST=2 TYP=3
	6700	CUBA	2	S/F	1551.0	1552.5	7.0	11.0	5.0		6L
	9400	HUAN	1	S	1551.5	1553.6	4.7	11.3	3.7		
	245	SGMR	8	S	1604.0E	1605.0	1.0D	150.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1604.0E	1605.0	1.0D	180.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1612.0E	1612.0	1.0D	120.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1612.0E	1612.0	U	130.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1617.0E	1617.0	1.0D	93.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1620.0E	1620.0	1.0D	1400.0			QL=4 ST=2 TYP=6
	410	SGMR	8	S	1620.0E	1620.0	1.0D	53.0			QL=2 ST=2 TYP=3
	245	SVTO	49	GB	1620.0E	1620.0	U	1500.0			QL=4 ST=2 TYP=6
	410	PALE	8	S	1705.0E	1705.0	U	95.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	1705.0E	1705.0	U	3400.0			QL=4 ST=2 TYP=6
	245	SGMR	49	GB	1705.0E	1705.0	2.0D	4400.0			QL=4 ST=2 TYP=6
	410	SGMR	8	S	1705.0E	1705.0	U	76.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1705.0E	1705.0	U	130.0			QL=4 ST=2 TYP=3

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

MAY 1991

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	245	SVTO	49	GB	1705.0E	1705.0	U	3900.0			QL=4 ST=2 TYP=6
	9400	HUAN	3	S	1756.9	1759.3	3.9	52.2	11.3		
	4995	SGMR	8	S	1758.0E	1758.0	U	48.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1758.0E	1758.0	U	50.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1801.0E	1801.0	U	65.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1804.0E	1804.0	U	110.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1808.0E	1808.0	U	69.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	1810.0E	1811.0	1.0D	1000.0			QL=4 ST=2 TYP=6
	245	SGMR	49	GB	1810.0E	1811.0	2.0D	950.0			QL=2 ST=2 TYP=6
	9400	HUAN	22	GRF	1854.4	1905.8	44.6	22.7	8.8		
	610	PALE	8	S	1902.0E	1902.0	1.0D	33.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1902.0E	1902.0	1.0D	79.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1902.0E	1902.0	1.0D	100.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1902.0E	1902.0	1.0D	99.0			QL=2 ST=2 TYP=3
	610	SGMR	8	S	1902.0E	1902.0	1.0D	36.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1903.0E	1905.0	2.0D	920.0			QL=2 ST=2 TYP=6
	245	PALE	49	GB	1904.0E	1905.0	2.0D	970.0			QL=4 ST=2 TYP=6
	410	PALE	8	S	1905.0E	1905.0	U	140.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1906.0E	1906.0	1.0D	63.0			QL=2 ST=2 TYP=3
	245	SGMR	49	GB	1906.0E	1906.0	1.0D	710.0			QL=2 ST=2 TYP=6
	245	PALE	8	S	1922.0E	1922.0	U	59.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1951.0E	1951.0	1.0D	300.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1951.0E	1951.0	1.0D	290.0			QL=2 ST=2 TYP=3
	410	PALE	8	S	1953.0E	1954.0	1.0D	6.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1954.0E	1954.0	U	370.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	2026.0E	2026.0	1.0D	200.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2026.0E	2027.0	1.0D	170.0			QL=2 ST=2 TYP=3
	9400	HUAN	2	S/F	2043.6	2046.5	7.6	11.3	4.2		
	410	PALE	8	S	2049.0E	2049.0	2.0D	110.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2049.0E	2050.0	2.0D	190.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2049.0E	2050.0	1.0D	180.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	2049.0E	2049.0	1.0D	89.0			QL=2 ST=2 TYP=3
	410	PALE	8	S	2053.0E	2054.0	1.0D	83.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	2053.0E	2057.0	5.0D	1500.0			QL=4 ST=2 TYP=7
	245	SGMR	49	GB	2053.0E	2054.0	2.0D	1500.0			QL=2 ST=2 TYP=6
	245	SGMR	49	GB	2057.0E	2057.0	1.0D	1600.0			QL=2 ST=2 TYP=6
	245	PALE	8	S	2100.0E	2101.0	2.0D	410.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2101.0E	2101.0	1.0D	92.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2101.0E	2101.0	1.0D	410.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	2101.0E	2101.0	1.0D	90.0			QL=2 ST=2 TYP=3
	410	PALE	49	GB	2109.0E	2110.0	1.0D	960.0			QL=4 ST=3 TYP=6
	610	PALE	8	S	2109.0E	2110.0	1.0D	63.0			QL=4 ST=3 TYP=3
	245	PALE	49	GB	2109.0E	2110.0	1.0D	3100.0			QL=4 ST=3 TYP=6
	410	SGMR	49	GB	2109.0E	2110.0	2.0D	670.0			QL=2 ST=2 TYP=6
	245	SGMR	49	GB	2109.0E	2110.0	2.0D	3200.0			QL=2 ST=2 TYP=6
	610	SGMR	8	S	2109.0E	2109.0	U	59.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2144.0E	2144.0	U	79.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2200.0E	2201.0	1.0D	38.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	2200.0E	2201.0	1.0D	860.0			QL=4 ST=2 TYP=6
	245	SGMR	49	GB	2200.0E	2201.0	2.0D	780.0			QL=2 ST=2 TYP=6
	17000	NOBE	1	S	2254.6	2254.9	1.0	18.0			0 80,35GHz:0
	245	PALE	49	GB	2309.0E	2313.0	4.0D	7300.0			QL=4 ST=2 TYP=6
	245	SGMR	49	GB	2309.0E	2313.0	5.0D	4500.0			QL=4 ST=3 TYP=6
	410	PALE	49	GB	2310.0E	2313.0	3.0D	760.0			QL=4 ST=2 TYP=6
	245	SGMR	49	GB	2310.0E	2313.0	4.0D	4500.0			QL=2 ST=2 TYP=6
	410	LEAR	8	S	2311.0E	2312.0	2.0D	500.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	2311.0E	2313.0	2.0D	7600.0			QL=4 ST=2 TYP=7
	610	LEAR	8	S	2312.0E	2313.0	1.0D	70.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	2312.0E	2313.0	1.0D	130.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2312.0E	2313.0	2.0D	300.0			QL=2 ST=2 TYP=3
	610	SGMR	8	S	2312.0E	2313.0	2.0D	99.0			QL=2 ST=2 TYP=3
28	100	GORK	44	NS	0312.0E		590.0D		5.0		
	200	GORK	44	NS	0312.0E		590.0D		5.0		
	33	UPIC	43	NS	0515.0		650.3				
	204	IZMI	43	NS	0600.0		360.0	50.0			
	127	TORN	44	NS	0620.0E	0927.5	520.0D	1900.0	30.0		V=2
	260	ONDR	44	NS	0630.0E	0728.0	600.0D	776.0			
	430	KRAK	43	NS	0654.0	0727.0U	333.5D	195.0D	17.0		

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

MAY 1991

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	245	SGMR	44	NS	0934.0E	1541.0	833.0D	260.0			QL=2 ST=2 TYP=1
	245	SVTO	44	NS	1058.0E	1650.0	408.0D	640.0			QL=4 ST=2 TYP=1
	235	CUBA	44	NS	1251.0E		459.0D		57.0		
	245	PALE	44	NS	1628.0E	0114.0	743.0D	390.0			QL=4 ST=2 TYP=1
	200	HIRA	44	NS	2020.0E	0743.0	780.0D	300.0	40.0		SR
	245	LEAR	44	NS	2311.0E	0114.0	618.0D	380.0			QL=2 ST=2 TYP=1
	245	LEAR	49	GB	0005.0E	0005.0	U	2500.0			QL=4 ST=2 TYP=6
	410	LEAR	8	S	0005.0E	0005.0	U	31.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	0005.0E	0005.0	U	2100.0			QL=4 ST=2 TYP=6
	410	PALE	8	S	0005.0E	0005.0	U	51.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0116.0E	0116.0	3.0D	6000.0			QL=4 ST=2 TYP=7
	245	PALE	49	GB	0116.0E	0116.0	3.0D	2000.0			QL=4 ST=2 TYP=6
	500	HIRA	46	C	0117.7	0118.6	2.5	150.0	20.0		0
	410	LEAR	8	S	0118.0E	0118.0	1.0D	110.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0118.0E	0118.0	1.0D	64.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0118.0E	0118.0	1.0D	120.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	0118.0E	0118.0	1.0D	73.0			QL=4 ST=2 TYP=3
	200	HIRA	46	C	0118.0	0119.2	1.3	300.0	50.0		WL
	1415	LEAR	8	S	0119.0E	0119.0	U	22.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0130.0E	0130.0	2.0D	76.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0130.0E	0130.0	2.0D	73.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0203.0E	0203.0	1.0D	71.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0228.0E	0228.0	U	140.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0228.0E	0228.0	U	120.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0235.0E	0235.0	U	87.0			QL=2 ST=3 TYP=3
	245	PALE	8	S	0235.0E	0235.0	U	74.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0304.0E	0304.0	1.0D	70.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	0304.0E	0304.0	1.0D	78.0			QL=4 ST=2 TYP=3
	500	HIRA	46	C	0304.5	0305.0	2.0	80.0	30.0		WL
	245	PALE	8	S	0314.0E	0314.0	U	79.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0331.0E	0331.0	1.0D	610.0			QL=2 ST=2 TYP=6
	245	PALE	49	GB	0331.0E	0332.0	1.0D	610.0			QL=4 ST=2 TYP=6
	950	GORK	2	S/F	0332.4	0332.6	0.4	6.0			
	650	GORK	1	S	0332.4	0332.6	0.6	5.0			
	245	LEAR	8	S	0334.0E	0334.0	1.0D	80.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0337.0E	0337.0	1.0D	220.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0415.0E	0415.0	1.0D	110.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	0415.0E	0415.0	1.0D	87.0			QL=4 ST=2 TYP=3
	100	GORK	46	C	0416.9	0418.6	2.9	35.0			
	100	GORK	46	C	0416.9	0418.9		160.0			
	200	GORK	46	C	0417.6	0419.0	2.4	370.0			
	200	GORK	46	C	0417.6	0419.3		185.0			
	410	LEAR	8	S	0418.0E	0418.0	1.0D	27.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0418.0E	0418.0	1.0D	250.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	0418.0E	0418.0	1.0D	240.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0418.0E	0419.0	1.0D	27.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0418.0E	0419.0	1.0D	38.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0418.0E	0418.0	1.0D	220.0			QL=2 ST=2 TYP=3
	950	GORK	2	S/F	0418.9	0419.1	0.3	5.0			
	650	GORK	1	S	0418.9	0419.1	0.8	6.0			
	245	LEAR	8	S	0439.0E	0439.0	1.0D	64.0			QL=2 ST=2 TYP=3
	9100	GORK	23	GRF	0452.7	1215.0	488.3D	23.0			
	650	GORK	21	GRF	0507.5	0508.2	42.3	3.0			
	2950	GORK	23	GRF	0514.4	0523.1	13.9	6.2			
	950	GORK	21	GRF	0520.6	0523.4	17.7	4.0			
	2840	PEKG	45	C	0521.0	0532.6	16.0	32.2			
	245	LEAR	8	S	0522.0E	0522.0	1.0D	220.0			QL=2 ST=2 TYP=3
	9100	GORK	46	C	0522.5	0524.0	12.0	13.0			
	9100	GORK	46	C	0522.5	0530.5		15.0			
	9100	GORK	46	C	0522.5	0532.6		40.0			
	5900	KISV	42	SER	0522.5	0530.6	14.0	22.0			
	5900	KISV	42	SER	0522.5	0532.7		17.0			
	5900	KISV	42	SER	0522.5	0523.9		20.0			
	245	LEAR	8	S	0528.0E	0528.0	2.0D	130.0			QL=2 ST=2 TYP=3
	100	GORK	46	C	0529.8	0531.0		180.0			
	100	GORK	46	C	0529.8	0530.2	2.7	480.0			
	600	HUMN	41	F	0530.0	0530.5	5.0	180.0			
	410	LEAR	8	S	0530.0E	0530.0	2.0D	340.0			QL=4 ST=2 TYP=5
	1415	LEAR	8	S	0530.0E	0532.0	2.0D	49.0			QL=4 ST=2 TYP=3

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

MAY 1991

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	610	LEAR	49	GB	0530.0E	0530.0	2.0D	720.0			QL=4 ST=2 TYP=6
	2695	SVTO	8	S	0530.0E	0530.0	U	31.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	0530.0E	0530.0	U	31.0			QL=2 ST=2 TYP=3
	610	SVTO	49	GB	0530.0E	0530.0	1.0D	590.0			QL=4 ST=2 TYP=6
	410	SVTO	49	GB	0530.0E	0530.0	3.0D	690.0			QL=4 ST=2 TYP=7
	200	GORK	46	C	0530.0U	0530.2	1.7D	20.0D			
	500	HIRA	42	SER	0530.0	0530.2	3.2	1700.0			WL
	200	GORK	46	C	0530.0U	0531.5		20.0D			
	650	GORK	47	GB	0530.0	0530.5	6.4	450.0			
	2850	CRIM	45	C	0530.1	0533.2		8.0			
	950	GORK	46	C	0530.1	0532.4		116.0			
	2850	CRIM	45	C	0530.1	0532.5		7.0			
	950	GORK	46	C	0530.1	0530.5	6.3	36.0			
	2850	CRIM	45	C	0530.1	0530.6	3.5	34.0	11.0		
	2950	GORK	3	S	0530.1	0530.6	1.9	24.0			
	15400	SVTO	8	S	0532.0E	0532.0	U	46.0			QL=2 ST=2 TYP=3
	8800	SVTO	8	S	0532.0E	0532.0	1.0D	43.0			QL=2 ST=2 TYP=3
	17000	NOBE	2	S/F	0532.2	0532.6	10.0	46.0			0 80,35GHz:0
	15000	KISV	2	S/F	0532.3	0532.4	3.0	38.0			
	2850	CRIM	31	ABS	0533.6	0544.0	13.0	5.0	2.0		
	200	GORK	8	S	0559.8	0600.4	1.2	370.0			
	100	GORK	46	C	0559.8	0600.5	1.5	7100.0			
	100	GORK	46	C	0559.8	0600.8		250.0			
	245	LEAR	49	GB	0600.0E	0600.0	1.0D	3500.0			QL=2 ST=3 TYP=6
	245	SVTO	49	GB	0600.0E	0600.0	U	3400.0			QL=4 ST=2 TYP=6
	204	IZMI	45	C	0600.0	0600.4	0.7	2500.0	150.0		
	950	GORK	22	GRF	0609.6	0614.4	7.7	8.0			
	950	GORK	23	GRF	0629.3	0821.0	356.0D	13.0			
	536	ONDR	42	SER	0630.0	0751.4	600.0	190.0			
	808	ONDR	49	GB	0634.0	0656.0	30.4	73.0			
	950	GORK	47	GB	0637.0	0656.3		275.0			
	950	GORK	47	GB	0637.0	0652.5	26.3	165.0			
	410	SVTO	8	S	0638.0E	0639.0	1.0D	91.0			QL=4 ST=2 TYP=3
	650	GORK	23	GRF	0641.5	1137.0	348.0D	17.0			
	1415	SVTO	20	GRF	0642.0E	0642.0	5.0D	290.0			QL=4 ST=2 TYP=2
	810	KRAK	45	C	0645.0E		13.0D				
	3013	IZMI	41	F	0650.0	0658.8	12.5	7.0			
	650	GORK	4	S/F	0654.2	0658.6	5.5	135.0			
	1470	POTS	42	SER	0656.0	0715.8	40.0	77.0			
	2950	GORK	2	S/F	0656.5	0658.7	3.9	9.3			
	600	HUMN	42	SER	0658.0	0752.0	57.0	130.0			
	500	HIRA	42	SER	0658.0	0701.7	4.5	120.0			0
	610	LEAR	49	GB	0658.0E	0658.0	1.0D	1300.0			QL=4 ST=2 TYP=6
	610	SVTO	49	GB	0658.0E	0658.0	U	690.0			QL=4 ST=2 TYP=6
	2840	PEKG	45	C	0658.0	0658.6	3.0	10.5			
	3000	POTS	42	SER	0658.2U	0728.0U	61.8U	147.0			
	2850	CRIM	42	SER	0658.3	0658.6	1.5	10.0	3.0		
	5900	KISV	1	S	0658.3	0658.7	1.5	11.0			
	9500	POTS	21	GRF	0658.4	0819.0	112.0	10.0			
	2840	PEKG	1	S	0704.0	0705.0	4.0	9.3			
	5900	KISV	2	S/F	0704.4	0705.1	3.3	23.0			
	9100	GORK	2	S/F	0704.5	0705.0	1.5	27.0			
	9500	POTS	4	S/F	0704.5	0705.1	1.5	19.0			
	2950	GORK	2	S/F	0704.6	0705.1	3.7	9.3			
	2850	CRIM	1	S	0704.8	0705.0	2.0	8.0	3.0		
	1415	SVTO	8	S	0714.0E	0715.0	2.0D	130.0			QL=4 ST=2 TYP=3
	5900	KISV	46	C	0715.0	0728.1		31.0			
	5900	KISV	46	C	0715.0	0719.6		12.0			
	5900	KISV	46	C	0715.0	0723.7	14.0	32.0			
	3013	IZMI	41	F	0718.8	0728.3	13.0	30.0			
	2950	GORK	23	GRF	0718.9	1136.9	340.0D	13.0			
	2850	CRIM	45	C	0719.0	0728.3		83.0			
	2850	CRIM	45	C	0719.0	0727.8	11.5	54.0	28.0		
	500	HIRA	42	SER	0719.1	0727.5	9.5	180.0			WL
	9500	POTS	42	SER	0719.2	0723.6	10.3	17.0			
	650	GORK	46	C	0719.4	0723.1		17.0			
	9100	GORK	46	C	0719.4	0728.2		15.0			
	950	GORK	4	S/F	0719.4	0719.7	0.9	33.0			
	650	GORK	46	C	0719.4	0719.8	4.7	10.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

MAY 1991

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	9100	GORK	46	C	0719.4	0723.8		23.0			
	9100	GORK	46	C	0719.4	0719.8	9.8	11.0			
	410	SVTO	8	S	0726.0E	0727.0	2.0D	450.0			QL=4 ST=2 TYP=3
	2950	GORK	4	S/F	0726.5	0728.2	3.6	64.0			
	950	GORK	4	S/F	0727.0	0727.6	3.0	88.0			
	650	GORK	4	S/F	0727.0	0727.7	3.0	85.0			
	204	IZMI	42	SER	0728.0	0749.8	23.0	3600.0			
	245	SVTO	8	S	0742.0E	0743.0	2.0D	130.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0743.0E	0743.0	U	24.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0745.0E	0749.0	7.0D	2700.0			QL=2 ST=2 TYP=7
	610	SVTO	49	GB	0747.0E	0751.0	7.0D	540.0			QL=4 ST=2 TYP=6
	245	SVTO	49	GB	0747.0E	0749.0	3.0D	2600.0			QL=4 ST=2 TYP=6
	200	GORK	41	F	0749.1	0758.1		930.0			
	100	GORK	41	F	0749.1	0749.4	8.9	2900.0			
	200	GORK	41	F	0749.1	0749.7	9.2	2800.0			
	100	GORK	41	F	0749.1	0757.8U		35.0D			
	610	LEAR	8	S	0750.0E	0751.0	2.0D	370.0			QL=4 ST=2 TYP=3
	9100	GORK	46	C	0750.3	0751.3	9.0	19.0			
	9100	GORK	46	C	0750.3	0753.4		66.0			
	9100	GORK	46	C	0750.3	0757.6		15.0			
	5900	KISV	42	SER	0750.5	0753.4	10.0	45.0			
	5900	KISV	42	SER	0750.5	0757.5		18.0			
	1470	POTS	42	SER	0750.5	0752.5	39.5	47.0			
	9500	POTS	42	SER	0750.6	0753.4	8.4	51.0			
	650	GORK	46	C	0750.8	0752.2		107.0			
	2850	CRIM	42	SER	0750.8	0751.2	12.0	18.0			
	650	GORK	46	C	0750.8	0751.3	4.1	128.0			
	2950	GORK	4	S/F	0750.8	0752.5	3.8	43.0			
	2850	CRIM	42	SER	0750.8	0752.6		56.0			
	2850	CRIM	42	SER	0750.8	0757.6		35.0			
	500	HIRA	46	C	0751.0	0751.0	1.6	1500.0	140.0		WL
	3013	IZMI	42	SER	0751.0	0752.8	12.0	115.0			
	2695	LEAR	8	S	0752.0E	0752.0	1.0D	48.0			QL=2 ST=2 TYP=3
	1415	LEAR	8	S	0752.0E	0752.0	1.0D	61.0			QL=4 ST=2 TYP=3
	808	ONDR	8	S	0752.0	0752.5	1.6	76.0			
	950	GORK	4	S/F	0752.2	0752.6	0.9	110.0			
	17000	NOBE	1	S	0752.9	0753.4	2.0	36.0			0 80,35GHz:0
	15400	LEAR	8	S	0753.0E	0753.0	1.0D	64.0			QL=2 ST=2 TYP=3
	4995	LEAR	8	S	0753.0E	0753.0	U	28.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0753.0E	0753.0	U	27.0			QL=4 ST=2 TYP=3
	15400	SVTO	8	S	0753.0E	0753.0	1.0D	20.0			QL=2 ST=2 TYP=3
	2950	GORK	4	S/F	0757.1	0757.4	2.4	28.0			
	950	GORK	3	S	0757.2	0757.6	2.3	9.0			
	2850	CRIM	21	GRF	0815.8	1104.0	184.0	19.0	6.0		
	1470	POTS	40	F	0931.6	0934.0	4.4	8.0			
	2850	CRIM	1	S	0950.2	0950.7	1.3	6.0	2.0		
	1470	POTS	42	SER	0950.2	0950.7	9.3	6.0			
	2950	GORK	1	S	0950.3	0950.6	0.8	4.3			
	9500	POTS	2	S/F	0950.3	0950.8	1.2	7.0			
	245	SGMR	8	S	0954.0E	0954.0	2.0D	210.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0954.0E	0954.0	U	260.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1002.0E	1002.0	1.0D	120.0			QL=2 ST=2 TYP=3
	3013	IZMI	7	C	1015.0	1019.1	10.2	115.0	5.0		
	2950	GORK	4	S/F	1017.7	1019.4	5.5	150.0			
	2850	CRIM	45	C	1018.0	1019.4	6.0	172.0	50.0		
	9100	GORK	46	C	1018.0	1020.4		81.0			
	9100	GORK	46	C	1018.0	1019.4	5.3	200.0			
	2850	CRIM	45	C	1018.0	1020.6		30.0			
	650	GORK	4	S/F	1018.3	1020.4	5.9	106.0			
	3000	POTS	4	S/F	1018.5U	1019.2	4.5U	315.0			
	808	ONDR		S/F	1018.5	1018.5	5.0	392.0			
	950	GORK	46	C	1018.5	1018.6	3.6	150.0			
	950	GORK	46	C	1018.5	1018.9		70.0			
	9500	POTS	4	S/F	1018.6	1019.4	4.9	165.0			
	600	HUMN	41	F	1019.0	1019.5	8.0	42.0			
	1415	SGMR	8	S	1019.0E	1019.0	U	78.0			QL=4 ST=2 TYP=3
	15400	SVTO	8	S	1019.0E	1019.0	2.0D	230.0			QL=2 ST=2 TYP=3
	610	SVTO	8	S	1019.0E	1020.0	1.0D	45.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	1019.0E	1019.0	1.0D	78.0			QL=4 ST=2 TYP=3

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

MAY 1991

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	33	UPIC	32	ABS	1019.5	1022.5	11.0				
	245	SGMR	8	S	1020.0E	1021.0	1.0D	58.0			QL=2 ST=2 TYP=3
	610	SGMR	8	S	1020.0E	1020.0	1.0D	39.0			QL=2 ST=2 TYP=3
	1470	POTS	8	S	1054.0	1054.2	0.5	5.0			
	600	HUMN	27	RF	1105.0	1137.0	102.0	9.0	4.0		
	1470	POTS	8	S	1138.2	1138.4	0.8	5.0			
	1470	POTS	8	S	1155.0	1155.4	0.5	5.0			
	410	SVTO	8	S	1224.0E	1224.0	1.0D	400.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	1225.0E	1225.0	U	41.0			QL=2 ST=2 TYP=3
	245	SGMR	49	GB	1225.0E	1225.0	U	670.0			QL=2 ST=2 TYP=6
	245	SVTO	49	GB	1225.0E	1225.0	U	550.0			QL=2 ST=3 TYP=6
	9500	POTS	40	F	1304.5	1305.3	7.5	5.0			
	9400	HUAN	1	S	1309.4	1312.0	3.9	5.8	2.6		
	1470	POTS	2	S/F	1310.8	1311.0	0.7	8.0			
	410	SGMR	8	S	1327.0E	1328.0	1.0D	62.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	1327.0E	1328.0	1.0D	130.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1421.0E	1421.0	U	130.0			QL=2 ST=2 TYP=3
	6700	CUBA	1	S	1442.5	1443.5	3.5	2.0	1.0		OOR
	9400	HUAN	45	C	1512.0	1519.3	13.0	94.6	38.2		
	6700	CUBA	46	C	1512.8	1518.9	13.2	70.0	21.0		17R
	2800	OTTA	3	S	1512.8	1518.9	10.7	256.0	10.0		
	15000	CUBA	2	S/F	1514.4	1518.8	7.9	51.0	25.0		21R
	2695	SGMR	8	S	1518.0E	1518.0	1.0D	24.0			QL=4 ST=2 TYP=3
	15400	SVTO	8	S	1518.0E	1518.0	1.0D	32.0			QL=2 ST=2 TYP=3
	6700	CUBA	29	PBI	1526.0		16.0	5.0	2.0		OOR
	9400	HUAN	1	S	1535.2	1538.4	5.7	7.7	4.6		
	245	SGMR	8	S	1549.0E	1550.0	2.0D	250.0			QL=2 ST=2 TYP=3
	6700	CUBA	2	S/F	1747.6	1748.1	4.4	7.0	3.0		19R
	410	PALE	8	S	1830.0E	1830.0	1.0D	300.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	1830.0E	1830.0	1.0D	93.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	1830.0E	1831.0	1.0D	52.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	1830.0E	1831.0	1.0D	320.0			QL=4 ST=2 TYP=3
	2695	PALE	8	S	1830.0E	1830.0	1.0D	49.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1830.0E	1831.0	1.0D	400.0			QL=2 ST=2 TYP=3
	4995	SGMR	8	S	1830.0E	1831.0	1.0D	60.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1830.0E	1830.0	1.0D	220.0			QL=2 ST=2 TYP=3
	2800	OTTA	3	S	1830.4	1831.1	2.2	403.0	12.0		
	6700	CUBA	1	S	1830.5	1831.2	2.5	37.0	18.0		22R
	8800	PALE	8	S	1832.0E	1832.0	U	24.0			QL=4 ST=2 TYP=3
	6700	CUBA	1	S	1853.0	1854.0	3.0	5.0	2.0		27R
	410	SGMR	8	S	2034.0E	2035.0	1.0D	170.0			QL=4 ST=2 TYP=3
	500	HIRA	42	SER	2134.5	2135.1	2.0	200.0			WL
	245	SGMR	49	GB	2159.0E	2200.0	1.0D	960.0			QL=2 ST=2 TYP=6
	2800	OTTA	4	S/F	2206.5	2207.3	10.7	184.0	4.0		
	610	SGMR	8	S	2210.0E	2210.0	U	150.0			QL=2 ST=2 TYP=3
	245	PALE	49	GB	2300.0E	2301.0	2.0D	980.0			QL=2 ST=2 TYP=6
	245	SGMR	49	GB	2301.0E	2301.0	U	690.0			QL=2 ST=2 TYP=6
29	100	GORK	44	NS	0254.0E		597.0D		5.0		
	200	GORK	44	NS	0254.0E		600.0D	5.0			
	245	SVTO	44	NS	0507.0E	1606.0	760.0D	330.0			QL=4 ST=2 TYP=1
	204	IZMI	43	NS	0600.0		360.0	150.0			
	127	TORN	44	NS	0620.0E		520.0D		80.0		V=1
	260	ONDR	44	NS	0630.0E	1311.0	600.0D	532.0			
	33	UPIC	43	NS	0650.0		581.0				
	245	SGMR	44	NS	0933.0E	1823.0	826.0D	430.0			QL=2 ST=2 TYP=1
	235	CUBA	44	NS	1253.0E		477.0D		52.0		
	245	PALE	44	NS	1633.0E	1821.0	738.0D	430.0			QL=4 ST=2 TYP=1
	410	PALE	44	NS	1755.0E	1804.0	30.0D	230.0			QL=4 ST=2 TYP=1
	410	SGMR	44	NS	1801.0E	1803.0	113.0D	130.0			QL=2 ST=2 TYP=1
	200	HIRA	44	NS	2020.0E	2246.0	780.0D	70.0	20.0		SR
	500	HIRA	46	C	0037.8	0038.1	1.5	40.0	20.0		ML
	410	LEAR	8	S	0039.0E	0039.0	U	52.0			QL=4 ST=2 TYP=3
	2840	PEKG	45	C	0256.0	0300.3	6.0	35.4			
	9100	GORK	23	GRF	0257.0E	0315.0U	121.6U	10.0			
	500	HIRA	42	SER	0258.3	0258.5	3.5	140.0			0
	2950	GORK	4	S/F	0258.3	0300.6	4.3	25.0			
	9100	GORK	46	C	0258.5	0300.5		37.0			
	9100	GORK	46	C	0258.5	0259.9	8.5	41.0			

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

MAY 1991

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	17000	NOBE	20	GRF	0259.1	0304.4	11.0	21.0			0 80,35GHz:0
	950	GORK	1	S	0259.2	0300.2	5.0	5.0			
	100	GORK	41	F	0342.9	0357.0		1000.0			
	100	GORK	41	F	0342.9	0343.1	14.3	10400.0			
	410	LEAR	8	S	0454.0E	0455.0	2.0D	130.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0454.0E	0454.0	U	100.0			QL=2 ST=2 TYP=3
	500	HIRA	46	C	0454.2	0454.3	2.0	140.0	15.0		WL
	245	LEAR	8	S	0455.0E	0455.0	U	120.0			QL=2 ST=2 TYP=3
	2950	GORK	20	GRF	0506.6	0508.6	9.0	6.2			
	2840	PEKG	45	C	0507.0	0509.0	6.0	8.9			
	2950	GORK	20	GRF	0548.5	0610.6	162.0	24.0			
	2840	PEKG	45	C	0600.0	0610.6	29.0	27.3			
	2850	CRIM	45	C	0603.0	0613.0		23.0			
	245	SVTO	8	S	0603.0E	0603.0	U	180.0			QL=2 ST=2 TYP=3
	3013	IZMI	22	GRF	0603.0	0611.0	22.0	13.0			
	9100	GORK	20	GRF	0603.0	0610.5	15.0	19.0			
	2850	CRIM	45	C	0603.0	0610.6	24.0	25.0	8.0		
	5900	KISV	22	GRF	0606.6	0610.8	17.8	34.0			
	100	GORK	41	F	0609.0	0609.3	3.5	250.0			
	100	GORK	41	F	0609.0	0612.6		190.0			
	100	GORK	41	F	0637.0	0808.5		2400.0			
	100	GORK	41	F	0637.0	0637.7	105.3	1400.0			
	100	GORK	41	F	0637.0	0728.9		500.0			
	536	ONDR	40	F	0700.0	1206.6	530.0	543.0			
	2850	CRIM	7	C	0701.0	0706.1		6.4			
	2850	CRIM	7	C	0701.0	0702.9	9.0	9.0	3.0		
	650	GORK	46	C	0710.2	0711.3	7.8	70.0			
	650	GORK	46	C	0710.2	0711.9		70.0			
	9100	GORK	22	GRF	0710.5	0712.8	11.3	14.0			
	3000	POTS	42	SER	0711.0U	0713.0	10.0U	10.0			
	2840	PEKG	45	C	0711.0	0713.0	3.0	10.5			
	3013	IZMI	7	C	0711.0	0713.0	10.0	4.0			
	9500	POTS	20	GRF	0711.0	0717.0	19.0	12.0			
	950	GORK	2	S/F	0711.1	0711.2	2.8	6.5			
	600	HUMN	2	S/F	0711.2	0711.3	0.5	50.0	20.0		
	5900	KISV	22	GRF	0711.2	0712.8	29.2	20.0			
	200	GORK	41	F	0722.1	0728.4	40.6	200.0			
	200	GORK	41	F	0722.1	0743.8		240.0			
	200	GORK	41	F	0722.1	0801.8		280.0			
	430	KRAK	42	SER	0725.5	0726.0	2.2	83.0			
	410	SVTO	8	S	0726.0E	0726.0	1.0D	99.0			QL=2 ST=2 TYP=3
	1470	POTS	2	S/F	0757.8	0758.0	2.2	5.0			
	9100	GORK	2	S/F	0757.8	0758.8	3.5	18.0			
	9500	POTS	29	PBI	0758.2	0758.6	26.8	15.0			
	15000	KISV	2	S/F	0758.2	0758.7	6.1	31.0			
	5900	KISV	2	S/F	0758.4	0758.7	2.4	12.0			
	3000	POTS	27	RF	0758.5	0759.0	53.0	5.0			
	650	GORK	2	S/F	0758.5	0758.7	1.1	4.0			
	200	GORK	41	F	0922.0	0934.4		100.0			
	200	GORK	41	F	0922.0	0923.4	16.2	200.0			
	100	GORK	46	C	0922.8	0934.4	13.9	2200.0			
	100	GORK	46	C	0922.8	0934.9		2400.0			
	9500	POTS	29	PBI	0926.2	0932.5	58.8	15.0			
	1470	POTS	4	S/F	0927.0	0931.4	10.5	152.0			
	3000	POTS	29	PBI	0927.5U	0931.0U	60.5U	69.0			
	9100	GORK	2	S/F	0927.5	0931.6	11.0	20.0			
	2950	GORK	21	GRF	0927.8	1010.6	59.2	9.6			
	950	GORK	2	S/F	0928.7	0930.8	5.5	8.0			
	3013	IZMI	42	SER	0929.0	0931.4	6.0	28.0	1.0		
	650	GORK	2	S/F	0929.7	0930.7	3.6	3.0			
	2850	CRIM	2	S/F	0930.5	0931.5	2.0	70.0U			
	2950	GORK	4	S/F	0931.0	0931.5	2.1	67.0			
	9100	GORK	2	S/F	0951.3	0951.8	3.0	8.0			
	950	GORK	4	S/F	0951.6	0952.2	1.3	22.0			
	33	UPIC	32	ABS	1007.5	1012.0	25.5				
	200	GORK	41	F	1115.0	1201.4		190.0			
	200	GORK	41	F	1115.0	1115.7	46.5	580.0			
	100	GORK	41	F	1115.2	1121.3		1000.0			
	100	GORK	41	F	1115.2	1118.5		400.0			

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

MAY 1991

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	100	GORK	41	F	1115.2	1115.7	6.8	2600.0			
	100	GORK	41	F	1158.2	1201.2		1400.0			
	100	GORK	41	F	1158.2	1201.4		1640.0			
	100	GORK	41	F	1158.2	1159.8	3.8	125.0			
	3000	POTS	4	S/F	1207.0U	1209.0U	17.5U	176.0			
	9500	POTS	45	C	1207.0	1209.4	23.0	428.0			
	610	SVTO	49	GB	1207.0E	1208.0	4.0D	1700.0			QL=4 ST=2 TYP=6
	610	SGMR	49	GB	1207.0E	1208.0	713.0D	3500.0			QL=4 ST=1 TYP=6
	2950	GORK	4	S/F	1207.0	1209.1	4.0	155.0			
	2950	GORK	30	PBI	1207.0	1211.1	14.8	26.0			
	2850	CRIM	3	S	1207.0	1209.3	11.0	173.0	50.0		
	950	GORK	29	PBI	1207.2	1212.0	9.3	8.0			
	950	GORK	4	S/F	1207.2	1209.4	4.8	47.0			
	2800	OTTA	4	S/F	1207.2	1209.5	11.1	2030.0	41.0		
	15000	KISV	47	GB	1207.4	1209.2	7.4	702.0			
	15000	KISV	47	GB	1207.4	1209.5		472.0			
	15000	KISV	47	GB	1207.4	1208.7		482.0			
	808	ONDR	2	S/F	1207.5	1209.0	8.0	42.0			
	600	HUMN	4	S/F	1207.7	1208.3	8.5	587.0	50.0		
	9100	GORK	4	S/F	1207.8	1209.3	8.0	500.0			
	1470	POTS	4	S/F	1207.8	1209.5	14.2	100.0			
	810	KRAK	4	S/F	1207.9	1208.2	5.5	60.0	12.0		
	650	GORK	47	GB	1207.9	1208.3	1.2	2500.0			
	15400	SGMR	49	GB	1208.0E	1209.0	4.0D	710.0			QL=4 ST=2 TYP=6
	410	SGMR	8	S	1208.0E	1209.0	1.0D	110.0			QL=2 ST=2 TYP=3
	15400	SVTO	49	GB	1208.0E	1209.0	5.0D	700.0			QL=4 ST=2 TYP=6
	410	SVTO	8	S	1208.0E	1209.0	1.0D	60.0			QL=2 ST=2 TYP=3
	430	KRAK	42	SER	1209.0	1210.0	2.5	160.0			
	2950	GORK	1	S	1214.2	1214.8	1.9	15.0			
	15000	KISV	29	PBI	1214.8E	1214.8	5.0D	22.0			
	9400	HUAN	2	S/F	1309.6	1311.6	4.6	20.7	10.3		
	600	HUMN	2	S/F	1310.0	1311.0	2.5	34.0	10.0		
	610	SGMR	8	S	1310.0E	1311.0	2.0D	45.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1310.0E	1310.0	1.0D	52.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1310.0E	1310.0	1.0D	410.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	1310.0E	1310.0	1.0D	67.0			QL=2 ST=2 TYP=3
	8800	SVTO	8	S	1310.0E	1311.0	1.0D	39.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	1310.0E	1311.0	1.0D	54.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1310.0E	1310.0	1.0D	340.0			QL=2 ST=2 TYP=3
	2850	CRIM	2	S/F	1310.0	1311.1	2.0	45.0	13.0		
	15000	KISV	2	S/F	1310.0	1311.2	2.5	22.0			
	6700	CUBA	2	S/F	1310.0E	1310.7	3.0D	65.0			34L SUNRISE
	9500	POTS	4	S/F	1310.0	1310.7	2.0	31.0			
	2800	OTTA	4	S/F	1310.2	1311.3	4.2	307.0	6.0		
	3000	POTS	4	S/F	1310.4	1311.0U	3.0U	30.0			
	1470	POTS	4	S/F	1310.4	1311.0	2.2	20.0			
	2695	SVTO	8	S	1311.0E	1311.0	U	35.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1336.0E	1336.0	U	190.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1336.0E	1336.0	U	230.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1336.0E	1336.0	1.0D	240.0			QL=2 ST=2 TYP=3
	1470	POTS	46	C	1340.0	1600.0U	200.0D	5700.0			
	2800	OTTA	24	R	1344.0	1400.0	26.0	173.0	8.0		
	3000	POTS	21	GRF	1345.0U	1550.0U	195.0D	87.0			
	9500	POTS	21	GRF	1345.0	1613.0	195.0D	87.0			
	6700	CUBA	21	GRF	1345.0	1616.0	345.0D	65.0			7R 2030 OFF
	15000	CUBA	21	GRF	1345.0	1619.0	465.0D	107.0			COMPLEX POL
	2850	CRIM	24	R	1345.5	1422.0	80.0D	23.0			
	3000	POTS	40	F	1346.0U	1350.0U	18.0U	13.0			
	15000	CUBA	2	S/F	1347.2	1348.2	5.6	37.0	18.0		41L
	6700	CUBA	2	S/F	1347.3	1350.3	5.7	18.0	9.0		15L
	9500	POTS	40	F	1347.5	1350.0	16.5	13.0			
	9400	HUAN	2	S/F	1347.8	1351.0	5.3	18.8	12.0		
	6700	CUBA	1	S	1354.4	1357.0	5.6	10.0	5.0		20R
	9400	HUAN	1	S	1355.4	1357.6	4.4	6.6	3.8		
	808	ONDR	46	C	1355.5	1403.5	12.0	62.0			
	2800	OTTA	24	R	1410.0	1437.5	45.5	220.0	11.0		
	600	HUMN	20	GRF	1414.0	1628.0	232.0	355.0	62.0		
	410	SGMR	8	S	1427.0E	1428.0	1.0D	50.0			QL=4 ST=2 TYP=3
	536	ONDR	49	GB	1440.0	1605.0	120.0U	699.0U			

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

MAY 1991

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	808	ONDR	49	GB	1453.0	1633.6	107.0	1081.0U			
	2800	OTTA	22	GRF	1455.5	1557.0	385.0	784.0	33.0		
	235	CUBA	25	R	1455.5	1522.2	244.5	417.0			
	410	SGMR	49	GB	1458.0E	1627.0	100.0D	1200.0			QL=2 ST=2 TYP=7
	610	SGMR	49	GB	1458.0E	1627.0	100.0D	1100.0			QL=4 ST=2 TYP=7
	260	ONDR	49	GB	1505.0	1626.0	115.0U	519.0U			
	245	SVTO	49	GB	1513.0E	1624.0	105.0D	770.0			QL=4 ST=2 TYP=7
	245	SGMR	49	GB	1514.0E	1625.0	83.0D	790.0			QL=2 ST=2 TYP=7
	410	SVTO	49	GB	1515.0E	1627.0	103.0D	2300.0			QL=4 ST=2 TYP=7
	15000	CUBA	29	PBI	1521.3		3.2	13.0	6.0		OOR
	1415	SVTO	49	GB	1527.0E	1559.0	53.0D	2500.0			QL=4 ST=2 TYP=7
	1415	SGMR	49	GB	1527.0E	1558.0	70.0D	2700.0			QL=4 ST=2 TYP=7
	3000	POTS	40	F	1529.5	1536.5U	18.5U	34.0			
	4995	SGMR	20	GRF	1534.0E	1606.0	64.0D	64.0			QL=4 ST=2 TYP=2
	9400	HUAN	22	GRF	1539.7						
	610	SVTO	49	GB	1540.0E	1627.0	78.0D	1300.0			QL=4 ST=2 TYP=7
	3000	POTS	4	S/F	1557.0U	1559.5	5.0U	26.0			
	235	CUBA	48	C	1606.0U	1625.0U	40.0U	279.0D			
	3000	POTS	8	S	1616.5U	1617.0U	0.7U	31.0			
	2695	PALE	20	GRF	1628.0E	1644.0	35.0D	100.0			QL=2 ST=3 TYP=2
	4995	PALE	20	GRF	1628.0E	1641.0	40.0D	120.0			QL=2 ST=3 TYP=2
	245	PALE	20	GRF	1628.0E	1628.0U	5.0D	350.0			QL=2 ST=3 TYP=2
	410	PALE	49	GB	1628.0E	1628.0U	12.0D	1500.0			QL=2 ST=3 TYP=6
	610	PALE	49	GB	1628.0E	1628.0U	32.0D	630.0			QL=2 ST=3 TYP=6
	235	CUBA	48	C	1737.3	1833.0	78.7	339.0			
	410	SVTO	49	GB	1739.0E	1740.0	4.0D	700.0			QL=2 ST=2 TYP=6
	410	PALE	49	GB	1740.0E	1740.0	U	520.0			QL=4 ST=3 TYP=6
	410	SGMR	49	GB	1740.0E	1740.0	U	800.0			QL=4 ST=3 TYP=6
	410	PALE	49	GB	1742.0E	1746.0	13.0D	1000.0			QL=4 ST=2 TYP=6
	245	SGMR	20	GRF	1744.0E	1750.0	10.0D	320.0			QL=2 ST=2 TYP=2
	410	SGMR	49	GB	1744.0E	1747.0	10.0D	540.0			QL=2 ST=2 TYP=6
	15000	CUBA	1	S	1846.0U	1848.1	4.0U	39.0			21R
	2800	OTTA	4	S/F	1945.8	1947.9	12.1	221.0	5.0		
	1415	SGMR	8	S	1946.0E	1948.0	2.0D	350.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1946.0E	1947.0	2.0D	51.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1946.0E	1947.0	2.0D	47.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1946.0E	1946.0	1.0D	150.0			QL=2 ST=2 TYP=3
	6700	CUBA	2	S/F	1947.0E	1947.9	4.0D	75.0			17R
	245	SGMR	8	S	2113.0E	2113.0	U	240.0			QL=2 ST=2 TYP=3
	610	SGMR	8	S	2113.0E	2113.0	U	94.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	2114.0E	2114.0	2.0D	85.0			QL=2 ST=2 TYP=3
	500	HIRA	27	RF	2204.0	2238.0	57.0	23.0	12.0		WR
	2840	PEKG	47	GB	2339.0	2343.1	13.0	638.0			
	2695	PENT	4	S/F	2339.4	2343.1	11.6	3809.0	76.0		
	1415	LEAR	49	GB	2340.0E	2344.0	5.0D	500.0			QL=4 ST=2 TYP=7
	8800	LEAR	49	GB	2340.0E	2343.0	13.0D	1000.0			QL=4 ST=2 TYP=6
	4995	LEAR	49	GB	2340.0E	2343.0	12.0D	650.0			QL=4 ST=2 TYP=6
	100	HIRA	46	C	2340.6		4.6	1000.0D			WR
	500	HIRA	46	C	2340.6	2344.1	8.5	340.0	40.0		MR
	17000	NOBE	28	PRE	2340.6	2342.3	1.7	15.0			L
	245	LEAR	49	GB	2341.0E	2342.0	17.0D	3200.0			QL=2 ST=2 TYP=6
	200	HIRA	46	C	2341.0	2342.5	21.0	15000.0	130.0		WR
	8800	PALE	49	GB	2342.0E	2343.0	5.0D	1000.0			QL=4 ST=2 TYP=6
	4995	PALE	49	GB	2342.0E	2343.0	4.0D	710.0			QL=4 ST=2 TYP=6
	15400	PALE	49	GB	2342.0E	2343.0	5.0D	2000.0			QL=4 ST=2 TYP=6
	15400	LEAR	49	GB	2342.0E	2343.0	14.0D	2100.0			QL=2 ST=2 TYP=6
	17000	NOBE	46	C	2342.3	2343.1	4.0	2050.0			L
	80000	NOBE	46	C	2342.3	2343.2	4.0	264.0			
	35000	NOBE	46	C	2342.3	2343.2	4.0	1617.0			L
	35000	NOBE	29	PBI	2346.3	2347.3	10.0	53.0			0
	17000	NOBE	29	PBI	2346.3	2346.3	17.0	42.0			L
	80000	NOBE	29	PBI	2346.3	2347.3	10.0	30.0			
30	200	GORK	44	NS	0314.0E		590.0D		10.0		
	100	GORK	44	NS	0314.0E		590.0D		5.0		
	200	GORK	44	NS	0328.0E	0937.3	580.0D		10.0		
	33	UPIC	43	NS	0408.0		766.5				
	245	SVTO	44	NS	0505.0E	1650.0	763.0D	310.0			QL=4 ST=2 TYP=1
	204	IZMI	43	NS	0600.0		360.0	90.0			

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

MAY 1991

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	127	TORN	44	NS	0620.0E		520.0D		80.0		V=2
	260	ONDR	44	NS	0630.0E	0939.0	600.0D	688.0U			
	430	KRAK	43	NS	0937.5	1113.5	157.5D	133.0	10.0		
	245	SGMR	44	NS	0958.0E	1016.0	842.0D	120.0			QL=2 ST=3 TYP=1
	235	CUBA	44	NS	1313.0E		458.0D		48.0		
	200	HIRA	44	NS	2020.0E	2312.0	780.0D	100.0	30.0		MR
	245	LEAR	44	NS	2312.0E	0353.0	617.0D	240.0			QL=4 ST=2 TYP=1
	245	LEAR	8	S	0036.0E	0036.0	U	99.0			QL=2 ST=3 TYP=3
	245	LEAR	8	S	0046.0E	0047.0	1.0D	130.0			QL=2 ST=2 TYP=3
	500	HIRA	27	RF	0052.5	0124.0	50.0	30.0	5.0		WR
	245	LEAR	8	S	0125.0E	0125.0	2.0D	220.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0153.0E	0153.0	U	110.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0204.0E	0205.0	2.0D	74.0			QL=2 ST=2 TYP=3
	2950	GORK	21	GRF	0300.0E	0345.4	302.0D	33.0			
	245	LEAR	8	S	0311.0E	0311.0	1.0D	410.0			QL=2 ST=2 TYP=3
	9100	GORK	23	GRF	0324.0E	0352.8	576.0D	27.0			
	9100	GORK	46	C	0340.0	0346.0		13.0			
	2840	PEKG	4	S/F	0340.0	0341.5	5.0	44.3			
	9100	GORK	46	C	0340.0	0341.7	9.2	72.0			
	2950	GORK	4	S/F	0341.0	0341.6	3.4	34.0			
	17000	NOBE	2	S/F	0341.1	0341.7	6.0	60.0			L 80,35GHz:0
	950	GORK	4	S/F	0341.8	0341.9	0.5	80.0			
	200	GORK	46	C	0406.3	0408.1	9.4	2000.0			
	200	GORK	46	C	0406.3	0414.9		19000.0			
	200	GORK	46	C	0413.2	0415.1		95.0			
	200	GORK	46	C	0413.2	0413.9	3.3	115.0			
	245	SVTO	8	S	0500.0E	0500.0	U	110.0			QL=2 ST=2 TYP=3
	200	GORK	41	F	0523.1	0528.0	43.3	4000.0			
	200	GORK	41	F	0523.1	0551.3		8000.0			
	100	GORK	42	SER	0523.2	0632.1		6200.0			
	100	GORK	42	SER	0523.2	0528.1	97.1	9400.0			
	100	GORK	42	SER	0523.2	0606.3		4900.0			
	100	GORK	42	SER	0523.2	0551.3		24500.0			
	650	GORK	1	S	0551.1	0551.3	0.8	7.0			
	9100	GORK	1	S	0551.2	0551.3	0.3	22.0			
	950	GORK	1	S	0551.2	0551.3	0.3	4.0			
	650	GORK	1	S	0606.0	0606.2	0.5	6.0			
	3000	POTS	23	GRF	0655.0	0716.5	75.0	16.0			
	200	GORK	4	S/F	0657.0	0700.5	4.0	50.0			
	9500	POTS	20	GRF	0703.5	0717.8	81.5	20.0			
	2850	CRIM	1	S	0709.0	0716.6	12.0	8.0	3.0		
	3013	IZMI	40	F	0712.0	0717.0	8.5	4.0			
	650	GORK	2	S/F	0746.1	0748.7	5.1	2.5			
	100	GORK	41	F	0829.0	0837.3		8200.0			
	100	GORK	41	F	0829.0	0832.6	9.5	1300.0			
	100	GORK	41	F	0932.1	0940.6	18.9	250.0			
	100	GORK	41	F	0932.1	0950.7		1000.0			
	2950	GORK	21	GRF	0933.4	0947.7	68.0	8.5			
	2850	CRIM	3	S	0935.0	0937.0U	7.0	300.0D			
	950	GORK	21	GRF	0935.4	0942.0	39.6	7.0			
	1470	POTS	45	C	0935.6	0938.0	12.0	358.0			
	200	GORK	46	C	0935.7	0937.0	1.9	4600.0			
	200	GORK	46	C	0935.7	0937.3		13000.0			
	3000	POTS	45	C	0936.0U	0937.8	21.0U	1750.0			
	3013	IZMI	45	C	0936.0	0937.3	35.0	430.0			
	650	GORK	47	GB	0936.0	0938.8	8.0	12500.0			
	5900	KISV	29	PBI	0936.3	0940.0	16.9	217.0			
	5900	KISV	47	GB	0936.3	0937.7	5.3	705.0			
	9500	POTS	45	C	0936.6	0937.9	23.4	935.0			
	600	HUMN	4	S/F	0936.7	0938.3	8.8	93.0	12.0		
	536	ONDR	48	C	0936.7	0938.5U	6.5	1685.0U			
	950	GORK	46	C	0936.8	0937.1		330.0			
	9100	GORK	4	S/F	0936.8	0937.6	6.3	1080.0			
	2950	GORK	47	GB	0936.8	0937.8	9.4	510.0			
	950	GORK	46	C	0936.8	0936.9	5.2	640.0			
	4995	SVTO	49	GB	0937.0E	0937.0	6.0D	660.0			QL=4 ST=2 TYP=6
	2695	SVTO	49	GB	0937.0E	0937.0	5.0D	510.0			QL=4 ST=2 TYP=6
	410	SVTO	49	GB	0937.0E	0939.0	3.0D	2700.0			QL=4 ST=2 TYP=6
	610	SVTO	49	GB	0937.0E	0938.0	3.0D	14000.0			QL=4 ST=2 TYP=6

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

Outstanding Occurrences

MAY 1991

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	8800	SVTO	49	GB	0937.0E	0937.0	10.0D	1000.0			QL=4 ST=2 TYP=6
	15400	SVTO	49	GB	0937.0E	0937.0	10.0D	1500.0			QL=4 ST=2 TYP=6
	33	UPIC	32	ABS	0937.0	0941.5	18.0				
	15000	KISV	47	GB	0937.0	0937.6	4.7	669.0			
	808	ONDR	48	C	0937.4	0937.4	7.5	237.0			
	610	SGMR	49	GB	0938.0E	0938.0	1.0D	16000.0			QL=4 ST=3 TYP=6
	410	SGMR	49	GB	0938.0E	0939.0	2.0D	2800.0			QL=4 ST=3 TYP=6
	245	SGMR	8	S	0938.0E	0939.0	1.0D	250.0			QL=2 ST=2 TYP=3
	245	SVTO	49	GB	0938.0E	0939.0	1.0D	550.0			QL=2 ST=2 TYP=6
	204	IZMI	45	C	0938.5	0940.0	3.0	65000.0			
	9100	GORK	29	PBI	0943.1	0943.1	18.9	31.0			
	536	ONDR	40	F	1110.0	1126.2	320.0	746.0			
	410	SGMR	8	S	1112.0E	1112.0	2.0D	76.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	1112.0E	1112.0	1.0D	240.0			QL=2 ST=2 TYP=3
	3000	POTS	4	S/F	1122.0U	1127.0U	13.0U	141.0			
	2850	CRIM	46	C	1123.2	1126.9		172.0			
	2850	CRIM	46	C	1123.2	1124.9	7.0	55.0	55.0		
	2950	GORK	29	PBI	1123.3	1128.0	97.0D	26.0			
	5900	KISV	29	PBI	1123.3	1128.5	20.0	30.0			
	2950	GORK	4	S/F	1123.3	1126.8	4.6	118.0			
	5900	KISV	47	GB	1123.3	1126.8	5.2	354.0			
	3013	IZMI	7	C	1123.8	1126.5	7.0	111.0	6.0		
	950	GORK	21	GRF	1124.0	1127.8	18.0	6.0			
	1470	POTS	4	S/F	1124.2	1126.2	7.8	159.0			
	15000	KISV	4	S/F	1125.4	1126.6	3.0	230.0			
	9500	POTS	4	S/F	1125.5	1126.5	34.5	227.0			
	9100	GORK	4	S/F	1125.6	1126.8	2.8	256.0			
	610	SGMR	49	GB	1126.0E	1126.0	1.0D	840.0			QL=4 ST=2 TYP=6
	610	SVTO	49	GB	1126.0E	1126.0	U	660.0			QL=4 ST=2 TYP=6
	15400	SVTO	8	S	1126.0E	1126.0	2.0D	260.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	1126.0E	1126.0	1.0D	270.0			QL=4 ST=2 TYP=3
	950	GORK	4	S/F	1126.0	1126.7	1.8	150.0			
	650	GORK	4	S/F	1126.2	1126.3	1.7	790.0			
	810	KRAK	45	C	1126.5E	1126.5	1.5D	220.0D			
	808	ONDR	2	S/F	1126.5	1126.5	2.6	117.0			
	9100	GORK	29	PBI	1128.4	1128.4	18.6	31.0			
	3013	IZMI	29	PBI	1133.0		20.0	8.0			
	3000	POTS	22	GRF	1250.0	1321.4	115.0U	12.0			
	9500	POTS	20	GRF	1250.0	1321.4	120.0	13.0			
	1470	POTS	20	GRF	1251.0	1319.5	84.0U	5.0			
	610	SGMR	8	S	1321.0E	1322.0	1.0D	100.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1321.0E	1321.0	1.0D	230.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1321.0E	1321.0	1.0D	61.0			QL=2 ST=2 TYP=3
	410	SVTO	8	S	1321.0E	1321.0	1.0D	130.0			QL=4 ST=2 TYP=3
	9400	HUAN	1	S	1553.4	1555.6	7.7	6.5	2.8		
	245	SGMR	8	S	1609.0E	1610.0	1.0D	400.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1609.0E	1610.0	1.0D	440.0			QL=2 ST=2 TYP=3
	600	HUMN	2	S/F	1650.0	1651.0	3.0	44.0	10.0		
	15000	CUBA	1	S	1739.1	1740.1	4.9	42.0	21.0		36L
	2800	OTTA	3	S	1739.3	1740.9	10.1	758.0	15.0		
	2695	PALE	8	S	1740.0E	1741.0	1.0D	53.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	1740.0E	1741.0	1.0D	66.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	1740.0E	1741.0	2.0D	200.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	1740.0E	1741.0	2.0D	43.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1740.0E	1741.0	2.0D	100.0			QL=4 ST=2 TYP=3
	2695	SGMR	8	S	1740.0E	1741.0	2.0D	89.0			QL=4 ST=2 TYP=3
	2695	SVTO	8	S	1740.0E	1740.0	1.0D	36.0			QL=2 ST=2 TYP=3
	4995	SVTO	8	S	1740.0E	1740.0	1.0D	140.0			QL=2 ST=2 TYP=3
	6700	CUBA	45	C	1740.0	1741.1	11.0	139.0	50.0		36L
	9400	HUAN	4	S/F	1740.2	1742.0	6.4	100.0	20.7		
	9400	HUAN	30	PBI	1746.6	1746.6	46.6	4.3	3.8		
	9400	HUAN	2	S/F	1756.3	1758.4	5.1	12.0	4.5		
	410	PALE	8	S	2205.0E	2206.0	1.0D	67.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	2205.0E	2205.0	1.0D	48.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2205.0E	2206.0	1.0D	88.0			QL=4 ST=2 TYP=3
31	100	GORK	44	NS	0326.0E		580.0D		10.0		
	200	GORK	44	NS	0328.0E		580.0D		10.0		
	245	SVTO	44	NS	0352.0E	0354.0	1208.0D	220.0			QL=4 ST=1 TYP=1

SOLAR RADIO EMISSION
Outstanding Occurrences

MAY 1991

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
31	245	SVTO	44	NS	0452.0E	0525.0	515.0D	430.0			QL=4 ST=2 TYP=1
	33	UPIC	43	NS	0524.5		721.2				
	204	IZMI	43	NS	0600.0		360.0	100.0			
	127	TORN	44	NS	0620.0E	0845.0	520.0D	950.0	40.0		V=1
	260	ONDR	44	NS	0630.0E	0749.5	600.0D	91.0			
	245	SGMR	44	NS	1157.0E	1207.0	10.0D	74.0			QL=2 ST=2 TYP=1
	245	PALE	44	NS	2302.0E	2302.0	58.0D	84.0			QL=4 ST=3 TYP=1
	245	LEAR	44	NS	2313.0E	2344.0	616.0D	240.0			QL=4 ST=2 TYP=1
	2840	PEKG	1	S	0132.0	0136.0	7.0	7.2			
	2840	PEKG	45	C	0239.0	0243.1	16.0	170.6			
	35000	NOBE	3	S	0241.6	0243.0	7.0	133.0			L
	80000	NOBE	3	S	0241.6	0243.0	7.0	54.0			
	17000	NOBE	4	S/F	0241.6	0243.0	10.0	216.0			L
	500	HIRA	46	C	0242.0	0242.0	7.0	350.0	30.0		WR
	410	PALE	8	S	0242.0E	0242.0	1.0D	160.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	0242.0E	0242.0	1.0D	260.0			QL=4 ST=2 TYP=3
	9100	GORK	23	GRF	0312.0E	0854.0	589.2D	30.0			
	2840	PEKG	45	C	0353.0	0406.1	30.0	265.0			
	2950	GORK	1	S	0354.9	0356.5	2.6	9.8			
	200	GORK	41	F	0358.9	0409.1		190.0			
	200	GORK	41	F	0358.9	0402.8	15.6	180.0			
	245	LEAR	49	GB	0359.0E	0400.0	5.0D	1500.0			QL=2 ST=2 TYP=6
	245	PALE	49	GB	0359.0E	0400.0	12.0D	1300.0			QL=4 ST=2 TYP=6
	245	SVTO	49	GB	0400.0E	0400.0	3.0D	1400.0			QL=2 ST=2 TYP=6
	410	SVTO	8	S	0400.0E	0400.0	1.0D	480.0			QL=2 ST=2 TYP=3
	5900	KISV	29	PBI	0400.0	0407.0	35.0	71.0			
	5900	KISV	47	GB	0400.0	0406.1	7.0	293.0			
	9100	GORK	46	C	0400.0	0405.3		245.0			
	650	GORK	46	C	0400.0	0410.3		285.0			
	15000	KISV	4	S/F	0400.0	0405.3	14.0	278.0			
	100	GORK	41	F	0400.0U	0411.5		180.0			
	950	GORK	47	GB	0400.0	0405.5	13.6	850.0			
	500	HIRA	45	C	0400.0	0410.5	13.0	1000.0	100.0		MR
	9100	GORK	46	C	0400.0	0402.5	21.0	84.0			
	100	GORK	41	F	0400.0U	0402.6	15.9D	610.0			
	2950	GORK	29	PBI	0400.0	0412.6	118.0	34.0			
	2950	GORK	4	S/F	0400.0	0405.7	12.6	200.0			
	650	GORK	46	C	0400.0	0405.8	18.0	250.0			
	17000	NOBE	4	S/F	0404.3	0405.3	8.0	237.0			R
	35000	NOBE	4	S/F	0404.3	0405.3	8.0	150.0			R 80GHz:0
	410	SVTO	8	S	0410.0E	0411.0	2.0D	140.0			QL=2 ST=2 TYP=3
	600	HUMN	3	S	0502.7	0502.8	48.0	216.0	24.0		
	410	SVTO	49	GB	0503.0E	0510.0	19.0D	510.0			QL=4 ST=2 TYP=7
	2840	PEKG	45	C	0503.0	0506.0	24.0	201.0			
	500	HIRA	46	C	0503.0	0508.3	34.0	450.0	60.0		WL
	650	GORK	4	S/F	0503.0	0506.5	7.6	320.0			
	650	GORK	29	PBI	0503.0	0510.8	30.0	60.0			
	950	GORK	4	S/F	0503.1	0506.4	7.4	490.0			
	950	GORK	29	PBI	0503.1	0510.5	26.5	36.0			
	4995	LEAR	8	S	0504.0E	0506.0	2.0D	48.0			QL=4 ST=2 TYP=3
	610	SVTO	20	GRF	0504.0E	0507.0	8.0D	390.0			QL=4 ST=2 TYP=2
	2850	CRIM	3	S	0504.0	0505.9	6.0	147.0	45.0		
	5900	KISV	4	S/F	0504.3	0506.0	7.0	46.0			
	9100	GORK	2	S/F	0504.3	0505.8	3.0	20.0			
	8800	LEAR	8	S	0505.0E	0505.0	1.0D	26.0			QL=4 ST=2 TYP=3
	2695	SVTO	8	S	0505.0E	0505.0	2.0D	190.0			QL=4 ST=2 TYP=3
	200	HIRA	46	C	0505.3	0514.2	60.0	700.0	100.0		WL
	4995	SVTO	8	S	0506.0E	0506.0	U	54.0			QL=4 ST=2 TYP=3
	200	GORK	46	C	0506.4	0515.5		360.0			
	200	GORK	46	C	0506.4	0523.6		180.0			
	200	GORK	46	C	0506.4	0508.6	17.6	360.0			
	100	HIRA	46	C	0507.6	0518.3	96.0	1000.0D			
	100	GORK	49	GB	0507.7	0510.2	23.5	29300.0			
	100	GORK	49	GB	0507.7	0510.7		15600.0			
	100	GORK	41	F	0548.6	0550.0	28.9	650.0			
	100	GORK	41	F	0548.6	0612.7		1200.0			
	200	GORK	4	S/F	0615.0	0616.3	2.1	145.0			
	260	ONDR	27	RF	0710.0	0749.5	160.0D	91.0			
	2950	GORK	20	GRF	0734.2	0740.8	22.0	5.0			

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

MAY 1991

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
31	2950	GORK	21	GRF	0824.5	0929.0	213.0	20.0			
	950	GORK	20	GRF	0834.1	1009.0	144.4	3.5			
	5900	KISV	30	PBI	0834.5	0842.0	30.0	14.0			
	3013	IZMI	23	GRF	0834.5	0853.0	60.0	9.0			
	5900	KISV	4	S/F	0834.5	0840.8	7.5	54.0			
	15000	KISV	22	GRF	0837.5	0848.0	48.0	31.0			
	3013	IZMI	7	C	0838.0	0841.0	6.0	40.0	2.0		
	9100	GORK	46	C	0838.3	0841.0		21.0			
	9100	GORK	46	C	0838.3	0839.8	5.2	14.0			
	2950	GORK	4	S/F	0838.6	0840.9	4.9	34.0			
	9500	POTS	20	GRF	0840.0U	0854.0	60.0U	19.0			
	2950	GORK	1	S	0851.4	0853.1	3.0	12.0			
	3000	POTS	20	GRF	0855.0U	0929.0	50.0U	12.0			
	536	ONDR	40	F	0940.0	1631.5		451.0			
	5900	KISV	2	S/F	1042.3	1043.0	5.0	14.0			
	127	TORN	7	C	1053.0	1054.6	2.0	470.0	90.0		
	9500	POTS	20	GRF	1106.5	1110.5	23.5	11.0			
	5900	KISV	22	GRF	1107.0	1110.8	20.0	19.0			
	3000	POTS	20	GRF	1108.0	1111.0	47.0	8.0			
	430	KRAK	42	SER	1217.7	1231.3	16.5	210.0D			
	610	SGMR	8	S	1218.0E	1218.0	U	110.0			QL=4 ST=2 TYP=3
	810	KRAK	42	SER	1221.5	1230.8	12.7	17.0			
	808	ONDR	40	F	1222.0	1356.0	132.0	12.0			
	410	SGMR	8	S	1227.0E	1227.0	U	73.0			QL=4 ST=3 TYP=3
	245	SGMR	8	S	1227.0E	1227.0	U	140.0			QL=4 ST=3 TYP=3
	9500	POTS	20	GRF	1228.0	1234.0	22.0	11.0			
	5900	KISV	4	S/F	1230.5	1232.5	20.0	28.0			
	650	GORK	4	S/F	1230.9	1231.5	4.7	118.0			
	610	SGMR	8	S	1231.0E	1232.0	1.0D	480.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1231.0E	1231.0	U	100.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	1231.0E	1232.0	1.0D	250.0			QL=4 ST=2 TYP=3
	3000	POTS	23	GRF	1231.0	1232.5	19.0	11.0			
	2950	GORK	2	S/F	1231.0	1232.8	4.5	8.3			
	950	GORK	1	S	1231.0	1232.9	4.7	10.0			
	260	ONDR	46	C	1237.0	1239.0	5.0	63.0			
	610	SGMR	8	S	1631.0E	1632.0	1.0D	75.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	1631.0E	1632.0	1.0D	54.0			QL=4 ST=2 TYP=3
	600	HUMN	2	S/F	1631.5	1632.0	1.5	50.0	10.0		
	610	PALE	8	S	1632.0E	1632.0	U	83.0			QL=4 ST=2 TYP=3
	4995	SVTO	49	GB	1651.0E	1655.0	14.0D	2300.0			QL=4 ST=2 TYP=7
	8800	SVTO	49	GB	1651.0E	1654.0	13.0D	3400.0			QL=4 ST=2 TYP=7
	8800	SGMR	49	GB	1651.0E	1654.0	23.0D	4000.0			QL=4 ST=2 TYP=7
	4995	SGMR	49	GB	1651.0E	1655.0	23.0D	2300.0			QL=4 ST=2 TYP=7
	9400	HUAN	47	GB	1651.0	1656.0U	13.2	2959.0	462.4		
	2800	OTTA	49	GB	1651.5	1655.5	50.8	12250.0	24.0		
	15400	SGMR	49	GB	1652.0E	1654.0	428.0D	4500.0			QL=4 ST=1 TYP=7
	4995	PALE	49	GB	1653.0E	1655.0	7.0D	2100.0			QL=4 ST=2 TYP=6
	8800	PALE	49	GB	1653.0E	1654.0	6.0D	2500.0			QL=4 ST=2 TYP=6
	15400	PALE	49	GB	1653.0E	1654.0	14.0D	3900.0			QL=4 ST=2 TYP=6
	1415	SGMR	49	GB	1653.0E	1655.0	11.0D	720.0			QL=4 ST=2 TYP=7
	15400	SVTO	49	GB	1653.0E	1654.0	11.0D	4000.0			QL=4 ST=2 TYP=7
	1415	SVTO	49	GB	1653.0E	1655.0	11.0D	690.0			QL=4 ST=3 TYP=7
	2695	SVTO	49	GB	1653.0E	1655.0	12.0D	1600.0			QL=4 ST=2 TYP=7
	2695	SGMR	49	GB	1653.0E	1655.0	21.0D	1500.0			QL=4 ST=2 TYP=7
	600	HUMN	3	S	1653.6	1655.8	34.7	157.0	22.0		
	410	PALE	49	GB	1654.0E	1654.0	8.0D	880.0			QL=4 ST=2 TYP=6
	1415	PALE	49	GB	1654.0E	1655.0	7.0D	740.0			QL=4 ST=2 TYP=6
	245	PALE	49	GB	1654.0E	1654.0	2.0D	4200.0			QL=4 ST=2 TYP=6
	245	SGMR	49	GB	1654.0E	1654.0	3.0D	4000.0			QL=4 ST=2 TYP=7
	410	SGMR	49	GB	1654.0E	1654.0	8.0D	490.0			QL=4 ST=2 TYP=7
	245	SVTO	49	GB	1654.0E	1654.0	3.0D	4400.0			QL=4 ST=2 TYP=7
	610	SGMR	49	GB	1654.0E	1655.0	14.0D	430.0			QL=4 ST=2 TYP=7
	410	SVTO	49	GB	1654.0E	1654.0	10.0D	870.0			QL=4 ST=2 TYP=7
	610	SVTO	49	GB	1654.0E	1655.0	11.0D	360.0			QL=4 ST=2 TYP=7
	9400	HUAN	29	PBI	1704.2	1704.2	34.5	46.8	19.6		
	410	SGMR	8	S	1918.0E	1918.0	U	72.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2105.0E	2105.0	U	380.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2105.0E	2106.0	2.0D	150.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2105.0E	2105.0	1.0D	270.0			QL=4 ST=2 TYP=3

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

MAY 1991

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
31	410	SGMR	8 S	2106.0E	2106.0	U	66.0			QL=4 ST=2 TYP=3

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
HUMN = Humain		SGMR = Sagamore Hill	UPIC = Upice

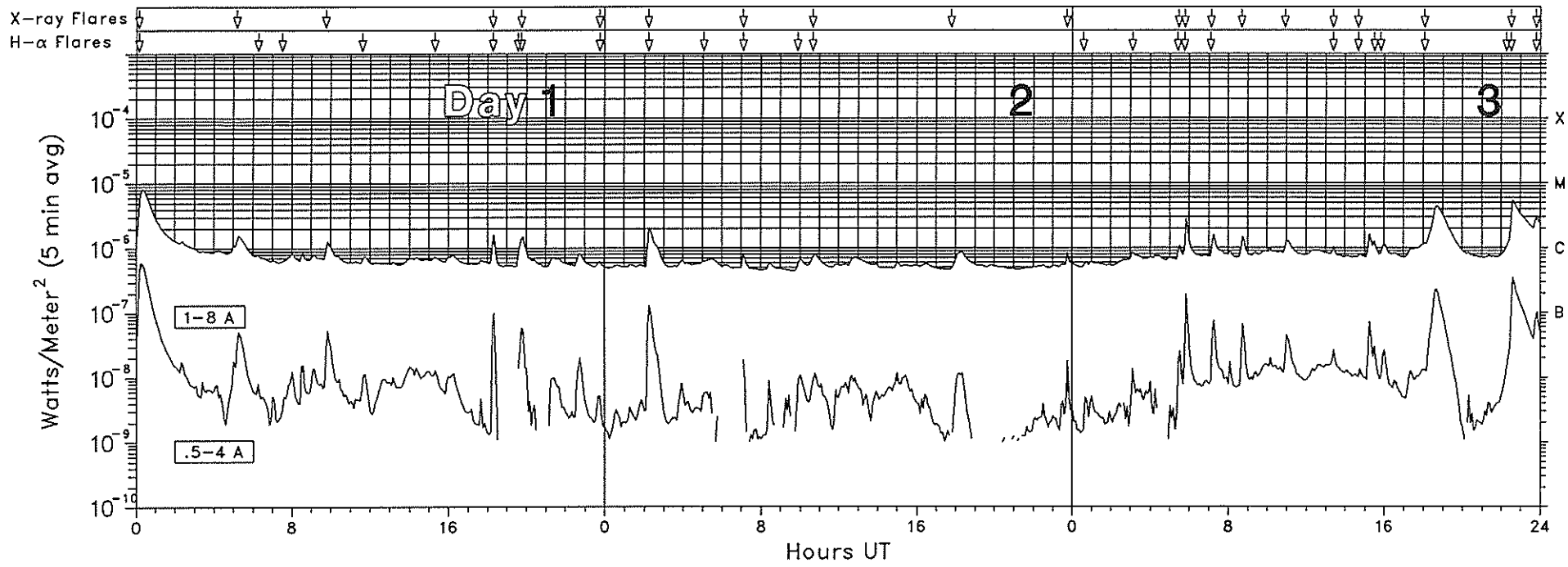
Explanation of Type Code:

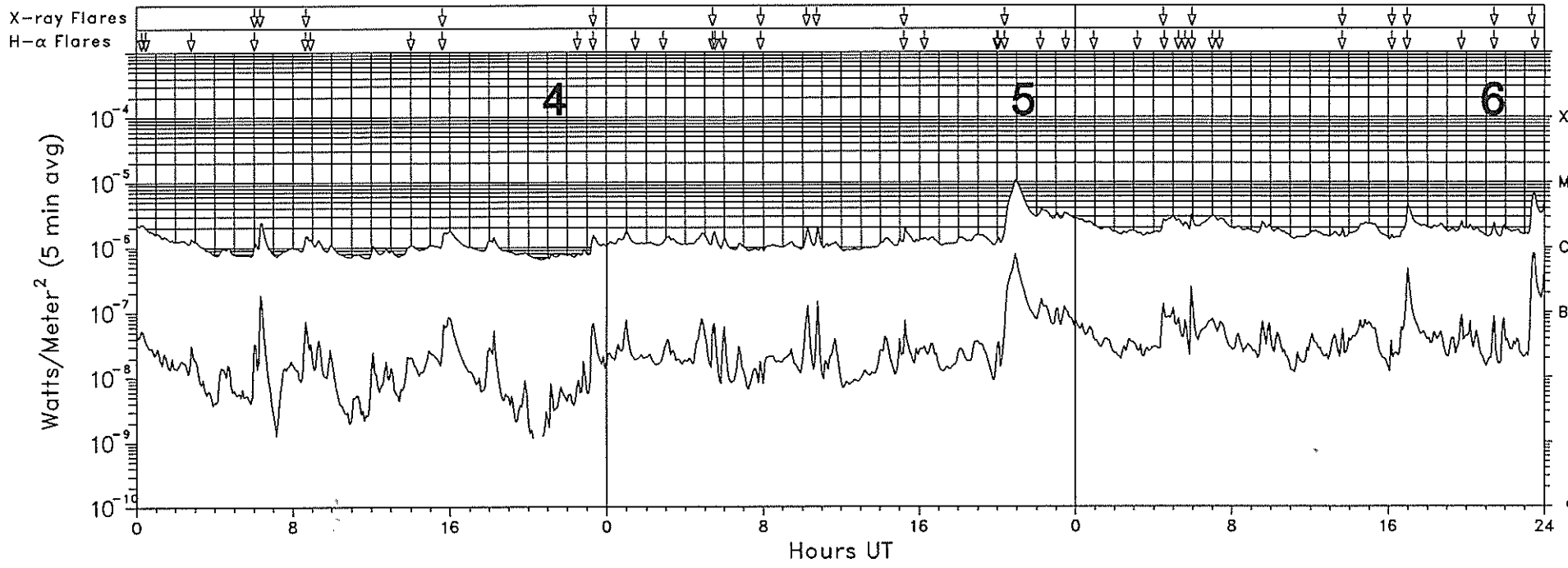
1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple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

GOES-7 X-RAY DETECTOR

May 1991

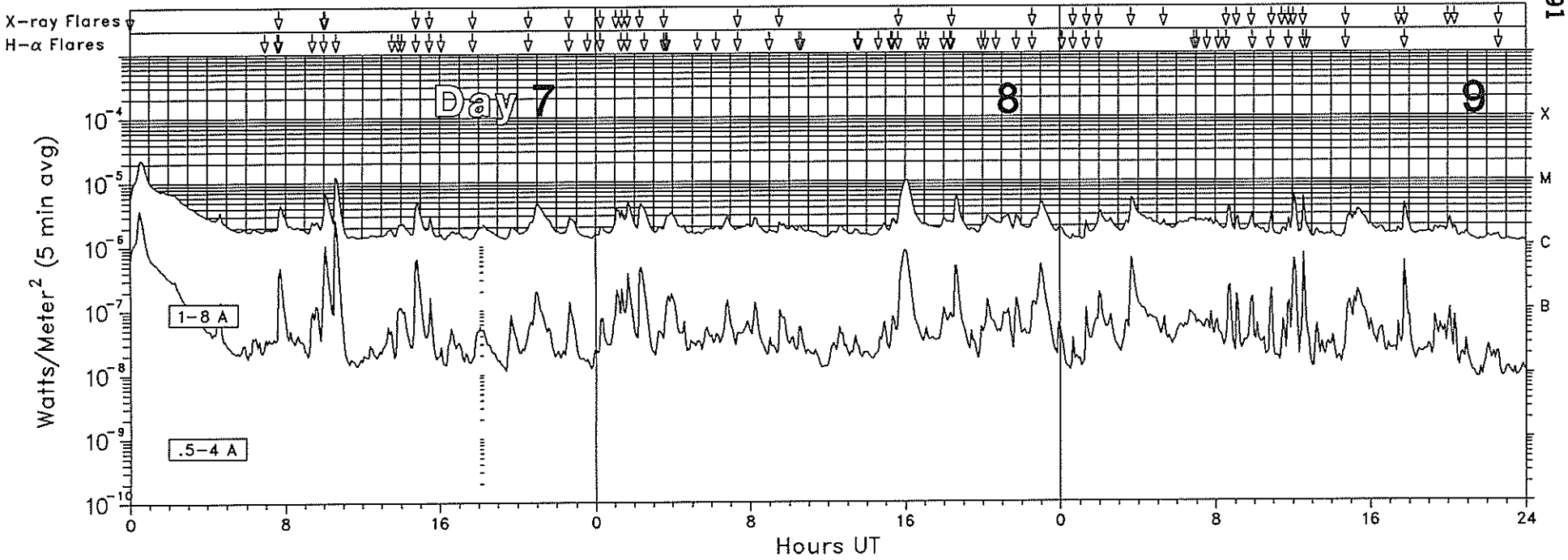


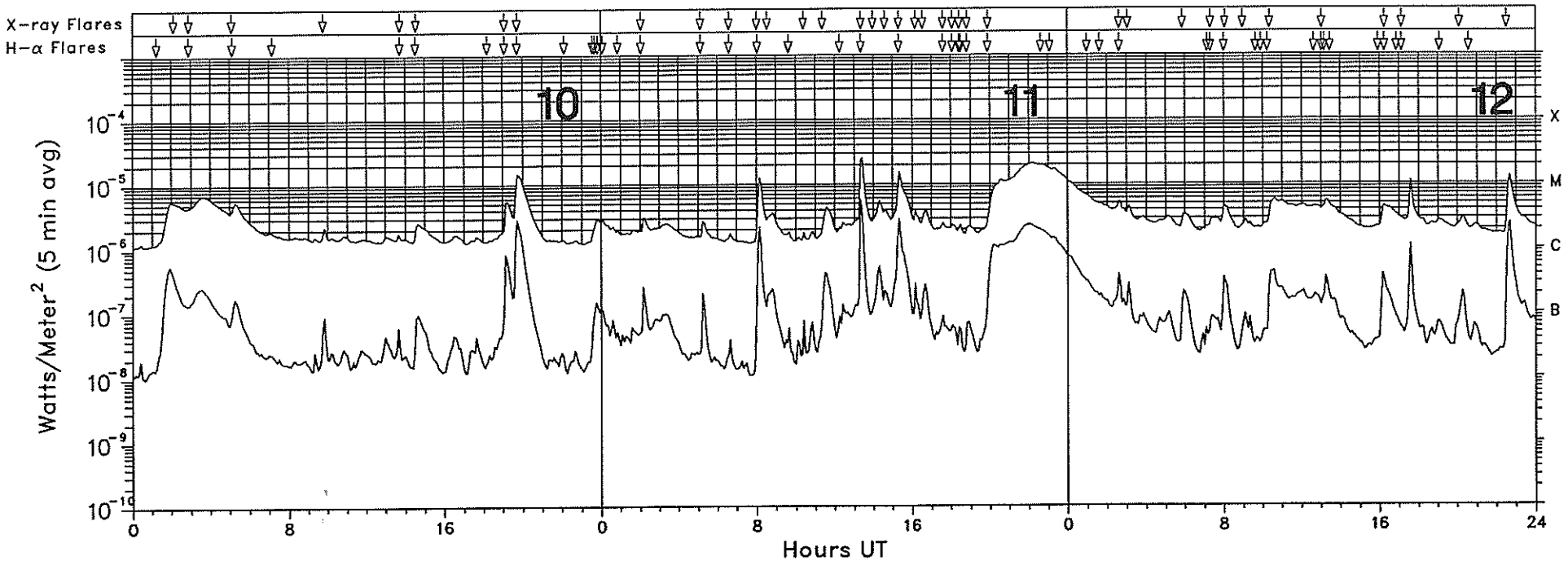


77
May 91

GOES-7 X-RAY DETECTOR

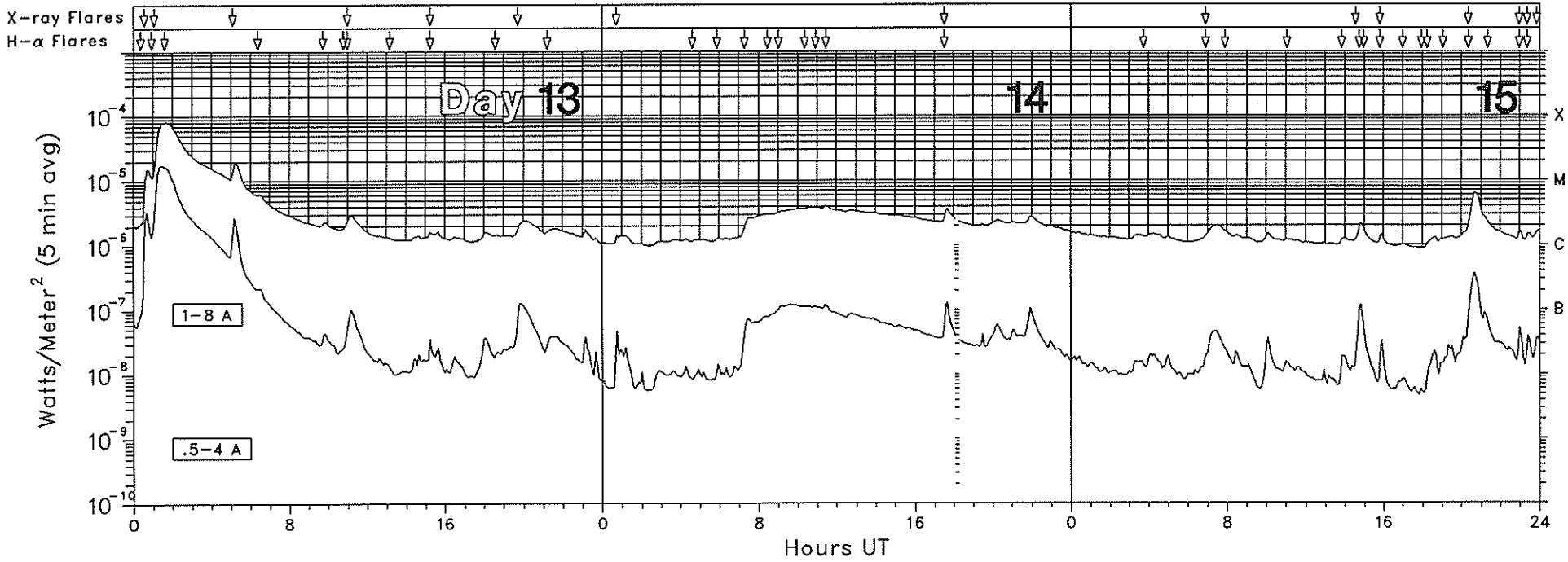
May 1991

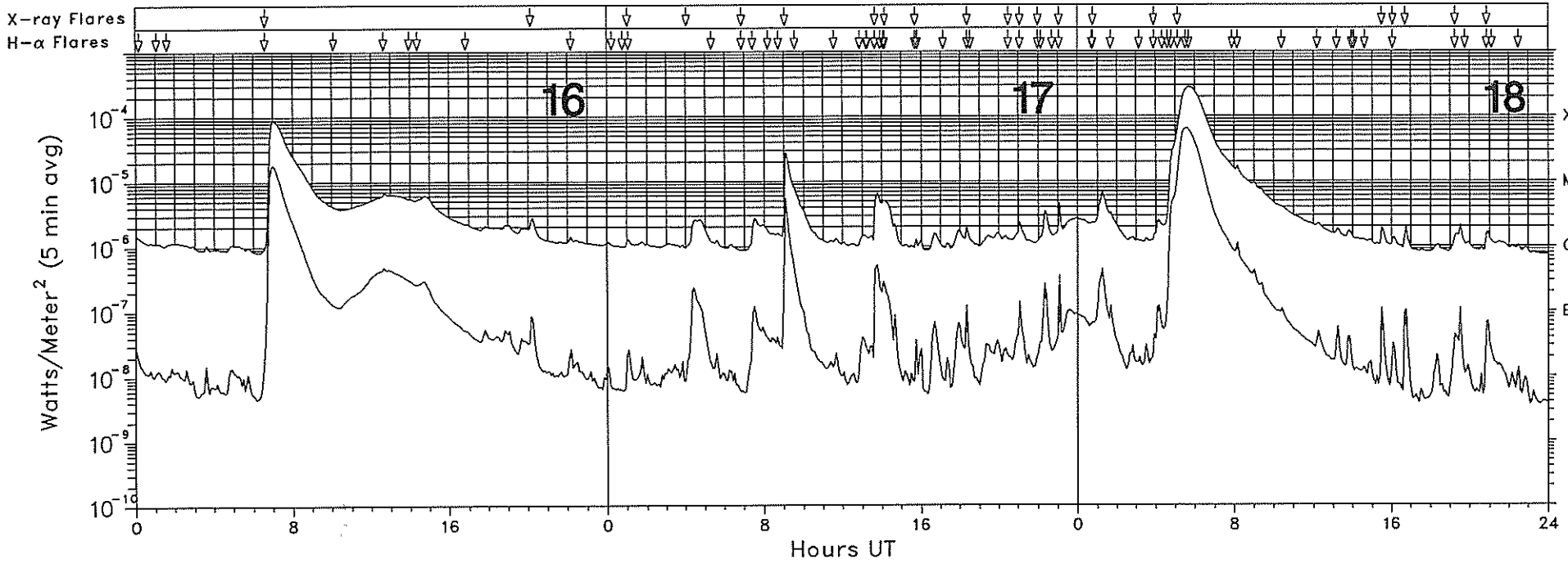




GOES-7 X-RAY DETECTOR

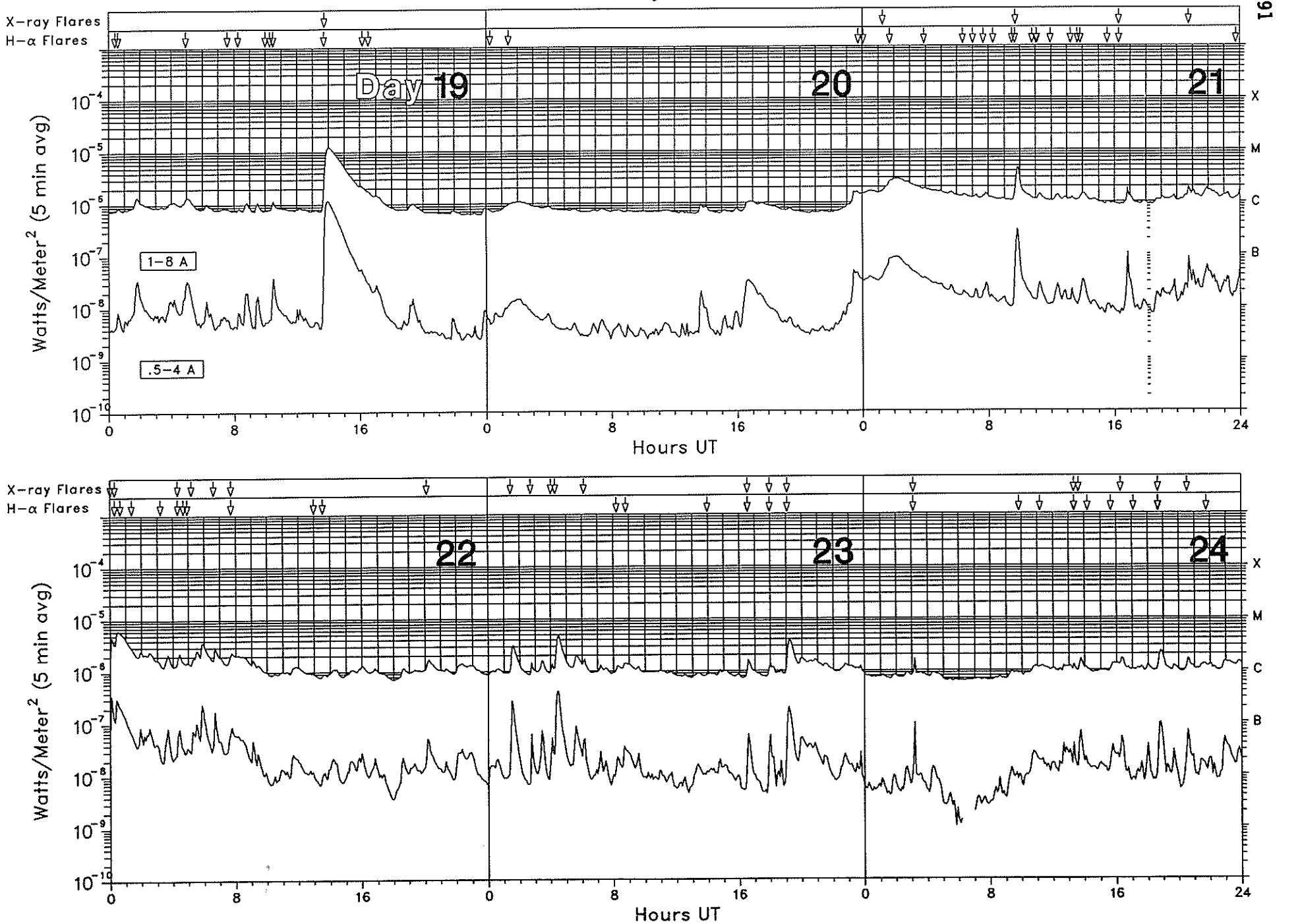
May 1991





GOES-7 X-RAY DETECTOR

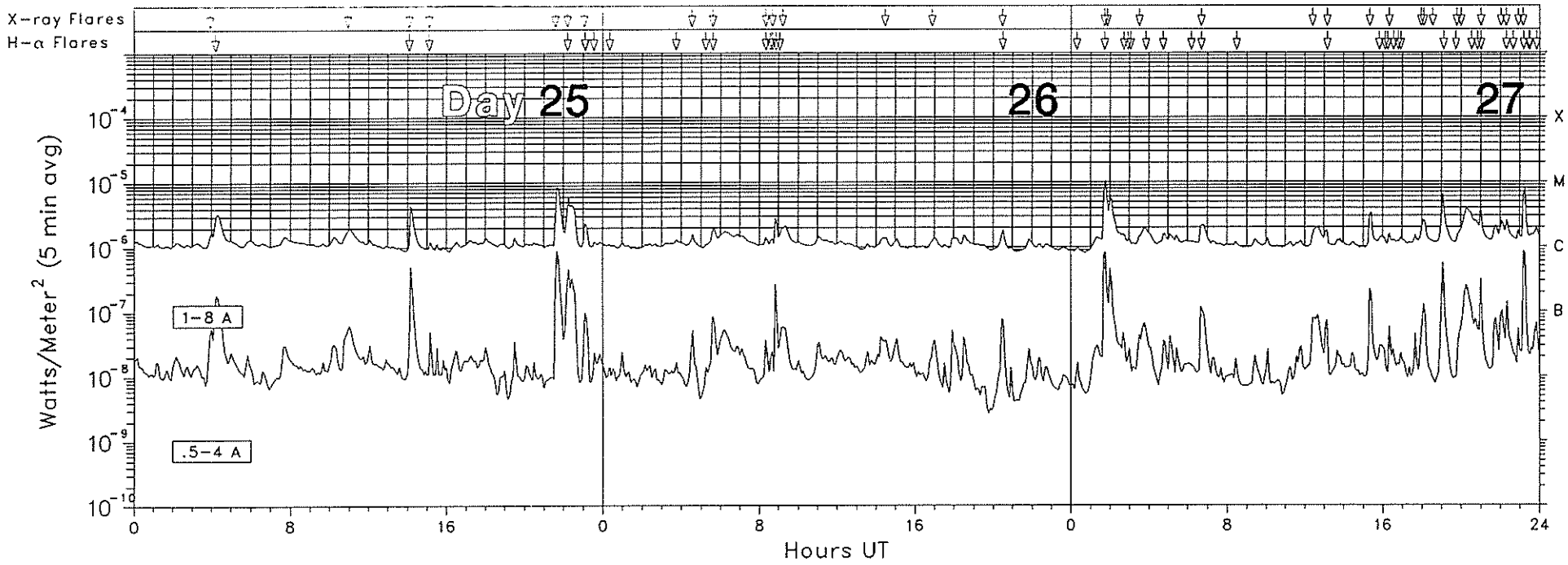
May 1991

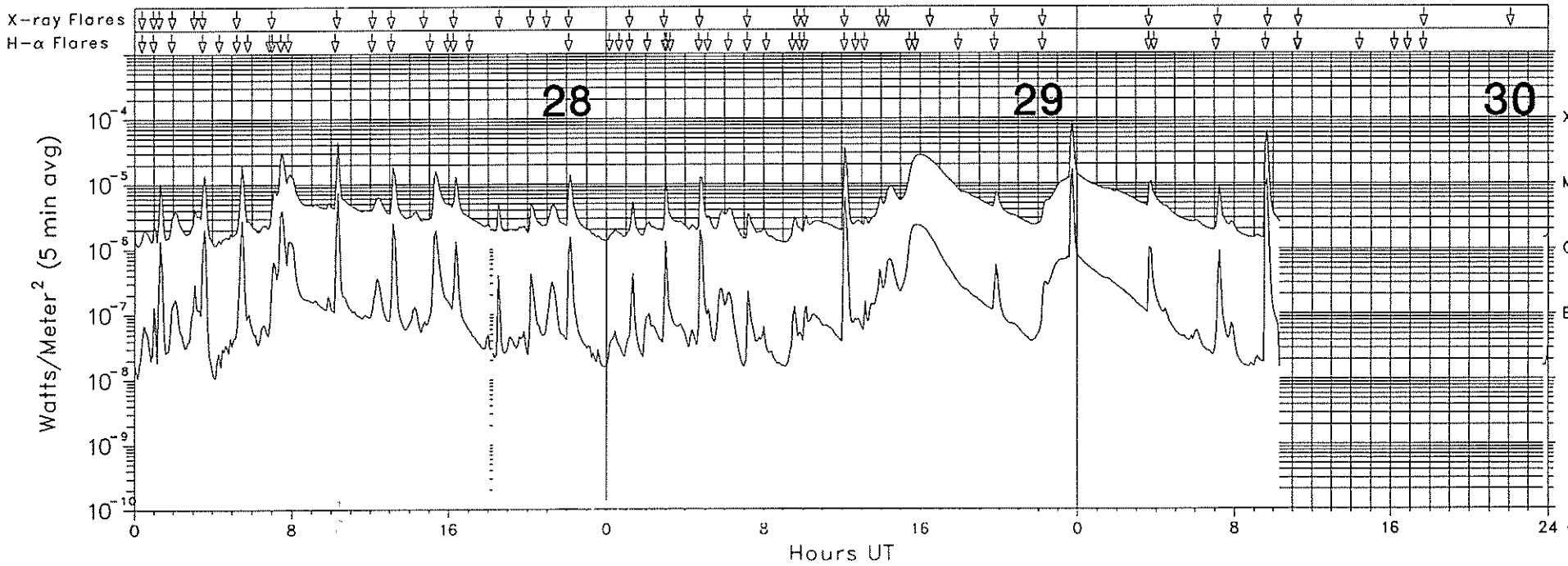


May 91 80

GOES-7 X-RAY DETECTOR

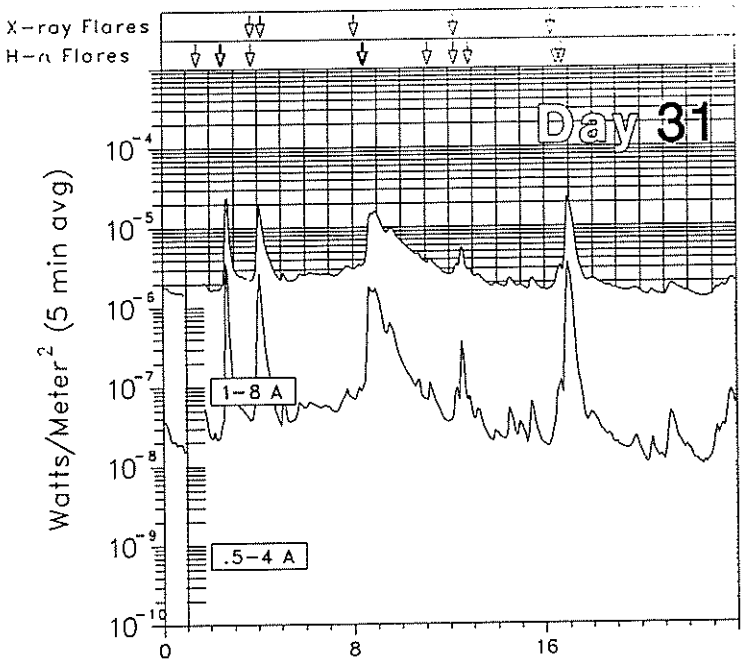
May 1991





GOES-7 X-RAY DETECTOR

May 1991



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

May 1991

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/ USAF Region
01	0008E	0020	0109D	S15	E64	SN	C8.2	6615
01	0510E	0514	0535	N08	E14	SF	C1.6	6605
01	0946	0952	1005				C1.3	
01	1816E	1821	1830D	S14	E57	SF	C1.8	6615
01	1945E	1948	2019D	S14	E56	SF	C1.8	6615
01	2345	2347U	2358D	S14	E34	SF	B8.6	
02	0213E	0214	0231D	S14	E55	SF	C2.1	6615
02	0706E	0706	0717D	S12	E45	SF	B8.7	6615
02	1040E	1047	1104D	S16	W21	SF	B8.1	6614
02	1746	1821	1837				B8.8	
02	2344E	2347	2349	S12	E37	SF	B8.8	6615
03	0527E	0532	0544D	N09	W15	SF	C1.1	6605
03	0547E	0551	0612D	S16	E32	SN	C2.9	6615
03	0707E	0720	0737D	S25	W40	SF	C1.6	6604
03	0841	0849	0855				C1.5	
03	1055	1103	1111				C1.5	
03	1323E	1327	1334D	S25	W42	SF	C1.1	6604
03	1440E	1514	1627D	S13	E26	1F	C1.7	6615
03	1804E	1838	1929D	S13	E23	1N	C4.5	6615
03	2230E	2236	2307D	S15	E28	1N	C5.6	6615
03	2347E	2349	0000D	S15	E20	SN	C3.6	6615
04	0602E	0604	0612D	S11	E21	SF	C1.2	6615
04	0620E	0627U	0633	S12	E19	SF	C3.0	6615
04	0841E	0921	1005D	S08	E16	1F	C1.6	6615
04	1537E	1541	1601D	S11	E10	SF	C1.8	6615
04	2319E	2319	2334D	S12	E09	SF	C1.5	6615
05	0524E	0528	0540D	S09	E04	SF	C1.9	6615
05	0753E	0756	0800D	S12	E04	SF	C1.2	6615
05	1012	1016	1022				C2.1	
05	1043	1048	1053				C2.2	
05	1513E	1515	1532D	S06	W24	SF	C2.2	6611
05	2023E	2046	2147D	S12	E07	1N	M1.1	6615
06	0430E	0435	0506D	S10	W06	SF	C3.1	6615
06	0557E	0559	0611D	N05	E77	SF	C5.0	6621
06	1338E	1338	1343D	N30	E61	SF	C2.6	6619
06	1612	1613U	1617	S09	W16	SF	C1.8	6615
06	1658E	1700	1709D	S05	W16	SF	C4.8	6615
06	2124E	2124	2131D	N28	E57	SF	C2.5	6619
06	2321	2322	2331	S10	W15	SN	C7.8	6615
07	0000E	0034	0154	S07	W22	1B	M2.3	6615
07	0740E	0741	0830D	S11	W21	SF	C4.5	6615
07	0958E	1037	1113D	S11	W27	SN	M1.4	6615
07	1003	1008	1017				C7.2	
07	1445E	1447	1531D	S08	W29	SF	C5.2	6615
07	1527E	1529	1556D	N29	E47	SF	C3.1	6619
07	1742	1808U	1822	S31	W33	SF	C2.4	6615
07	2035E	2040	2119D	N12	E64	SF	C4.8	6621
07	2238E	2242	2259D	S08	W35	SF	C3.2	6615
08	0014E	0015	0036D	S10	W31	SF	C2.3	6615
08	0103	0109	0116				C4.1	
08	0120E	0121	0129D	S12	W33	SF	C3.9	6615
08	0138E	0143	0200D	N27	E43	SF	C5.3	6619
08	0216E	0217	0229D	S10	W34	SF	C4.7	6615
08	0332E	0339	0405D	N11	E55	1N	C3.3	6621
08	0721E	0813	0936D	S11	W41	SF	C2.8	6615
08	0930	0934	0936				C2.8	
08	1540E	1600	1631D	N12	E54	SF	M1.0	6621
08	1823E	1843	1916D	N27	E33	1N	C6.1	6619
08	2234E	2301	0006D	S08	W48	SN	C4.0	6615
09	0040E	0040	0047D	S07	W52	SN	C1.5	6615
09	0122	0122U	0130D	N12	E82	SF	C2.5	6625
09	0159E	0201	0216D	S06	W52	SF	C3.5	6615
09	0338E	0340	0348D	S09	W49	SF	C5.6	6615
09	0519	0520	0522				C2.8	
09	0833E	0842	0935	S09	W56	1N	C4.3	6615
09	0905	0910	0914				C3.2	
09	0952	0956	0959				C3.6	
09	1054E	1054	1104D	S09	W54	SF	C4.1	6615
09	1127	1132	1140				C1.8	
09	1147	1151	1154				C3.1	
09	1203E	1218	1220D	S09	W54	SF	C7.9	6615
09	1233E	1236	1243D	S09	W54	SF	C8.0	6615
09	1444E	1510	1545D	N29	E27	SF	C3.5	6619
09	1726	1729	1731				C2.4	
09	1745E	1747	1757D	S10	W56	SN	C5.9	6615
09	2000	2006	2011				C2.7	
09	2021	2023	2025				C2.2	
09	2235E	2235	2240D	S08	W65	SF	C1.6	6615
10	0208	0208U	0214D	N34	E19	SF	C5.8	6619
10	0254E	0346	0357	N39	E10	SF	C7.0	6619
10	0506	0516	0529				C5.6	
10	0947	0953	0956				C2.4	
10	1344E	1347	1354D	N25	E13	SF	C1.9	6619
10	1435E	1436	1448D	S14	W58	SF	C2.6	6627
10	1906E	1946	2041D	S08	W71	SN	C5.9	6615
10	1944E	1945	2001D	S10	W69	SF	M1.5	6615
11	0204E	0205	0209D	N30	E06	SF	C3.2	6619
11	0508E	0516	0524D	S05	W80	SF	C2.8	6615
11	0636E	0642	0705D	N09	E13	SF	C1.8	6621
11	0802	0814	0824				M1.4	6615
11	0834	0851	0858				C3.7	
11	1024	1027	1030				C2.0	
11	1123	1135	1152				C4.5	
11	1321E	1322	1344D	S08	W80	SN	M3.4	6615
11	1358	1420	1429				C5.5	
11	1436	1438	1442				C4.3	
11	1519E	1524	1528D	S08	W83	SF	M1.6	6615
11	1610	1614	1617				C4.2	
11	1632	1644	1650				C4.3	
11	1735E	1736	1747D	S16	W49	SF	C2.6	6629
11	1804E	1805	1813D	S14	W79	SF	C2.5	6627
11	1826E	1827	1852D	N05	E17	SF	C2.6	6623
11	1850E	1851	1912D	N06	E07	SF	C2.3	6621
11	1954E	2025	0112D	N33	W02	SN	M2.1	6619
12	0237E	0237	0246D	S08	W86	SF	C6.5	6615
12	0303	0308	0311				C4.9	
12	0551	0602	0617				C3.4	
12	0718E	0721	0725D	S10	W84	SF	C3.0	6615
12	0802E	0804	0812D	S09	W82	SN	C5.0	6615
12	0857	0908	0912				C2.9	
12	1021	1038	1226				C5.9	
12	1301E	1315	1321D	S17	E24	SF	C5.6	6624
12	1614E	1634	1706D	S17	E22	SF	C4.6	6624
12	1707E	1740	1822D	S19	E24	2B	M1.2	6624
12	2005	2019	2025				C3.1	
12	2230	2241	2259				M1.3	
13	0033	0042	0057				M1.6	
13	0103	0144	0222				M8.2	
13	0506	0513	0527				M2.0	
13	1059E	1108	1126D	S15	E12	SF	C2.9	6624
13	1515E	1518	1524D	N26	W24	SF	C1.7	6619
13	1943	2002	2036				C2.4	

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

May 1991

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/ USAF Region
14	0043	0047	0052				C1.5	
14	1730E	1739	1810D	S19	W01	SF	C3.8	6624
15	0653E	0706	0757D	N14	W50	SF	C2.0	6621
15	1434	1451	1506				C2.1	
15	1548E	1602	1627D	S09	W13	SF	C1.5	6632
15	2020E	2052	2120D	S16	W25	SN	C6.5	6624
15	2258E	2306	2314D	N30	W52	SF	C1.8	6619
15	2322E	2329	0003D	S17	W22	SF	C1.5	6624
15	2350	2355	0007				C1.7	
16	0635E	0654	0930	N30	W56	2B	M8.9	6619
16	2009	2015	2037				C3.0	
17	0101E	0103	0113D	N04	W57	1F	C1.4	6623
17	0402E	0422	0426	N30	W69	SF	C2.6	6619
17	0652E	0731	0846	S16	W41	1F	C3.2	6624
17	0903E	0904	1019	N29	W73	SF	M3.3	6619
17	1339E	1341	1434D	S15	W46	1B	C7.1	6624
17	1409E	1418	1520D	S09	W36	1B	C2.7	6623
17	1541E	1546	1553D	N28	W77	SF	C1.5	6619
17	1822E	1829	1843D	S26	E67	SF	C2.4	6637
17	2029E	2117	2125D	S14	E42	SN	C1.8	6633
17	2104E	2107	2119D	N30	W78	SN	C3.0	6619
17	2159E	2222	2359D	S14	E43	SB	C4.2	6633
17	2303E	2305	2309D	N31	W80	SN	C5.9	6619
18	0046E	0103	0201D	S14	W53	1F	C6.9	6624
18	0353E	0409	0417D	S13	E35	SN	C3.0	6633
18	0506E	0546	0748D	N32	W85	2B	X2.8	6619
18	1529	1534	1539				C2.1	
18	1604E	1604	1631D	S12	E30	SF	C1.4	6633
18	1642	1645	1648				C3.1	
18	1915	1915U	1948D	S07	W55	SF	C2.3	6632
18	2051E	2054	2115D	S12	E27	SN	C2.4	6633
19	1344E	1359	1507D	S11	E17	1B	M1.2	6633
21	0116	0213	0306				C2.8	
21	0942E	0944	0957D	N23	E89	1N	C5.3	6644
21	1616E	1651	1705D	N23	E86	SF	C2.3	6644
21	2045	2049	2052				C2.3	
22	0002	0008	0021				C5.1	
22	0019E	0039	0153D	S29	W03	2N	C6.4	6637
22	0420E	0425	0442D	S20	W28	SF	C2.4	6640
22	0512E	0554	0624D	N23	E76	1N	C3.9	6644
22	0638	0643	0651				C3.1	
22	0743E	0744	0759D	N18	W12	SF	C2.4	6638
22	2009E	2013	2017D	N20	E72	SF	C1.7	6644
23	0127	0136	0149				C3.2	
23	0244	0247	0250				C1.7	
23	0402	0407	0410				C1.5	
23	0419	0432	0444				C5.1	
23	0607	0611	0614				C1.9	
23	1633E	1638	1648D	N22	E57	SF	C1.6	6644
23	1758E	1812	1842D	N20	E58	SF	C1.4	6644
23	1905E	1916	1935D	S19	W47	SF	C3.8	6640
24	0308E	0313	0317D	N20	E51	SF	C1.1	6644
24	1321	1324	1326				C1.6	
24	1338	1347	1357				C1.7	
24	1617	1623	1635				C1.9	
24	1840E	1842U	1904D	S13	W43	SF	C2.3	6646
24	2033	2040	2044				C1.7	
25	0356	0421U	0449	N18	E41	SF	C3.3	6644
25	1058	1106	1117				C2.0	
25	1406E	1412	1434D	N20	E34	SN	C5.7	6644
25	1506E	1512	1536D	N21	E33	SF	C1.3	6644
25	2135	2143	2153				C9.1	
25	2213E	2215	2217D	S10	E90	SF	C6.4	
25	2304E	2307	2310D	N17	W18	SF	C3.0	6647
26	0432	0436	0439				C1.8	
26	0536	0541	0546				C2.1	
26	0819E	0823	0838D	N20	E24	SF	C1.6	6644
26	0841E	0855	0921D	N20	E26	SF	C3.9	6644
26	0912E	0921	0948D	S12	E47	SF	C2.2	6649
26	1428E	1430	1442D	N16	W30	SF	C1.4	6647
26	1652	1702	1712				C1.4	
26	2027E	2029	2037D	N22	E18	SF	C2.0	6644
27	0142E	0144	0207D	N20	E17	SF	M1.1	6644
27	0151	0151U	0221	S11	E72	1F	C7.1	6652
27	0329	0346	0403				C2.0	
27	0641E	0643	0737D	N21	E13	SF	C2.3	6644
27	1224	1244	1253				C2.0	
27	1309E	1310	1312D	N06	E69	SF	C2.5	6654
27	1520	1525	1540D	N06	E71	SN	C4.6	6654
27	1619	1622	1626				C1.7	
27	1757	1802	1805				C2.3	
27	1805	1809	1814				C2.7	
27	1832E	1908	1924D	N04	E67	2N	C7.4	6654
27	1946E	1953	2002D	N05	E66	SN	C1.9	6654
27	1959	2019	2037				C3.9	
27	2101E	2103	2110D	N04	E65	SF	C5.0	6654
27	2201	2209	2214				C2.4	
27	2218E	2219	2228D	N06	E68	SF	C2.9	6654
27	2254	2258	2301				C1.9	
27	2309E	2314	2324D	N04	E64	1N	M1.1	6654
28	0023E	0032	0038D	S08	W83	SF	C2.1	6646
28	0058E	0103	0111D	N07	E69	SF	C3.3	6654
28	0116	0123	0129				M1.1	
28	0156	0209	0217				C3.9	
28	0303	0308	0312				C4.6	
28	0329E	0334	0351D	N05	E62	1F	M1.5	6654
28	0514E	0537	0549D	N09	E64	1F	M2.2	6654
28	0700	0701U	0817	N06	E61	2B	M3.2	6654
28	1018E	1023	1031D	N08	E57	1B	M5.3	6654
28	1206	1226	1237				C6.5	
28	1305	1313U	1330D	N08	E55	1B	M2.4	6654
28	1442E	1518	1606D	N07	E59	1B	M1.7	6654
28	1614E	1622	1639D	N06	E55	1B	M1.5	6654
28	1833E	1834	1839D	N08	E63	SN	C6.8	6654
28	2009E	2012	2055D	N06	E52	SN	C6.1	6654
28	2059	2120	2131				C4.9	
28	2206E	2213	2222D	N05	E51	1B	M1.4	6654
29	0111E	0121	0131D	N07	E49	SF	C5.9	6654
29	0255E	0301	0318D	N05	E45	2B	M1.3	6654
29	0442E	0447	0515D	N08	E48	1N	M1.7	6654
29	0709	0715	0722				C4.5	
29	0943	0947	1011D	N23	W08	SF	C3.1	6644
29	1005E	1011	1023D	N07	E48	SN	C3.6	6654
29	1207E	1210	1231D	N08	E43	1B	M4.3	6654
29	1355	1359	1404				C6.8	
29	1414E	1419	1431D	N03	E43	SF	C9.4	6654
29	1629	1629U	1749D	S08	E35	1B	M2.7	6652
29	1946	1953U	2025	N08	E39	SF	C8.6	6654
29	2214E	2343	0043D	N05	E38	2B	X1.0	6654

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

May 1991

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/ USAF Region
30	0340	0343U	0439	N06	E41	SF	M1.4	6654
30	0710	0718	0723				C9.5	
30	0943	0944U	1007D	N07	E30	1F	M8.2	6654
30	1117E	1127	1159D	S09	E22	1B	M1.9	6652
30	1741E	1747	1811D	S08	E15	SF	C2.0	6652
30	2205E	2207	2255D	S10	E16	SF	C3.4	6652

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/ USAF Region
31	0344E	0345	0430D	N09	E15	1B	M3.8	
31	0411	0413	0500D	S08	E09	2N	M2.1	6652
31	0806E	0842	0930	N06	E20	2B	M1.6	6654
31	1215E	1234	1247D	N07	E14	1B	C7.8	6654
31	1619E	1656	1808D	S08	E09	2B	M2.5	6652

Preliminary GOES Satellite Data
Daily Average X-ray Background
Jun 1990 - May 1991

Day	1990 Jun	Jul	Aug	Sep	Oct	Nov	Dec	1991 Jan	Feb	Mar	Apr	May
1	B3.1	C1.2	C1.3	B8.7	B5.1	B3.8	C1.0	B7.4	C2.7	C1.3	C2.3	B5.8
2	B3.7	C1.4	C1.2	B8.6	B7.9	B3.7	B7.6	B7.6	C3.9	C2.3	C1.4	B4.7
3	B3.6	C1.2	B7.8	B6.6	C1.5	B4.0	B7.6	B7.4	C3.2	C2.9	B9.2	B6.3
4	B3.8	C1.1	B7.1	B7.3	C1.1	B5.2	B8.6	B7.8	C3.2	C2.9	B8.4	B7.2
5	B4.8	C1.1	B6.9	C1.0	B8.6	B6.7	C1.1	B9.5	C2.0	C2.1	B8.2	B9.1
6	B8.5	C1.0	B7.0	B6.0	B6.9	B9.4	C1.3	C1.1	C2.1	C1.8	C1.0	C1.4
7	C1.2	C1.1	B7.0	B6.6	B9.0	C1.1	C1.2	C1.5	C1.9	C2.2	B9.4	C1.4
8	C1.0	C1.1	B9.6	B5.9	B8.9	B9.8	C1.2	C2.3	C2.0	C1.8	B8.8	C1.5
9	B9.1	C1.1	B7.8	B6.5	B9.0	B8.6	C1.5	C2.0	B8.5	C1.9	C1.3	C1.2
10	C1.3	B9.7	B7.9	B6.9	B6.5	B7.6	C1.8	C1.9	B7.1	C1.4	C2.0	C1.2
11	C1.0	B7.9	B7.2	B8.7	B6.9	B9.6	C2.1	C1.3	B7.3	C1.4	C2.0	C1.5
12	C1.1	B6.0	B7.9	B7.5	B6.4	C1.1	C2.1	B9.4	C1.0	C1.6	C2.3	C2.0
13	C1.0	B7.8	B8.2	B7.6	B8.3	C1.0	C1.9	B7.3	C1.0	C1.6	C2.0	C1.2
14	B8.0	B4.6	B6.3	C1.0	B8.6	C1.1	C1.3	B6.2	C1.1	C1.8	C2.4	C1.4
15	B8.5	B4.3	B6.6	B7.9	C1.4	C1.1	C1.0	B6.7	C1.2	C1.8	C2.9	C1.0
16	B6.9	B4.6	B9.4	B7.4	C1.2	C1.2	B9.1	B7.9	---	C2.3	C3.1	C1.0
17	B5.9	B6.2	C1.2	B9.3	C1.0	C1.5	B7.6	B9.2	C2.3	C2.7	C1.8	C1.0
18	B4.9	B9.5	C1.7	B8.5	C1.2	C1.2	C1.3	C1.2	C2.7	C3.3	C1.5	C1.0
19	B4.8	B4.7	C1.6	B9.3	C1.6	C1.0	C1.6	C1.6	C2.4	C2.5	C1.3	B7.2
20	B5.2	B4.7	C1.9	B8.1	C1.4	B7.5	C1.5	C1.6	C2.3	C2.1	C2.1	B6.6
21	B5.0	B5.8	C2.0	B9.0	C1.4	B8.3	C1.3	C1.5	C2.0	C2.0	C1.1	B9.5
22	B4.6	B6.2	C2.0	B7.9	B9.5	*	C1.3	C2.2	C1.6	C1.9	C2.0	B8.5
23	B4.2	B7.2	C2.2	B9.5	B6.7	B8.0	C1.3	C1.6	C1.5	C3.3	C1.0	B7.9
24	B5.8	B7.3	C2.1	B8.9	B5.6	B8.8	C1.7	C1.9	C1.5	C2.1	B6.3	B7.0
25	B6.0	C1.0	C1.5	B6.9	B6.7	C1.0	C1.2	C2.2	C1.5	C1.7	B6.2	B9.9
26	B5.2	B9.5	C1.8	B4.8	B5.0	B9.8	C1.1	C2.0	C1.2	C1.2	B5.7	B9.8
27	B9.4	B7.0	C1.7	B4.0	B6.4	C1.1	B9.2	C2.4	C1.1	C1.2	B6.2	C1.0
28	C1.3	B7.3	C2.2	B4.1	B4.5	C1.4	B7.9	C2.6	C1.1	C1.2	B8.0	C1.5
29	C1.3	B6.6	C1.5	B4.5	B7.3	C1.4	B8.4	C2.2		C1.6	B6.9	C1.5
30	C1.1	C1.0	C1.5	B4.8	B6.5	C1.1	B8.6	C2.8		C1.9	B5.9	--
31		B9.4	C1.0		B4.4		B7.8	C2.9		C1.8		C1.4

MASS EJECTIONS FROM THE SUN

MAY 1991

Site	Mo Day	Observed UT Start	Max	End	Location RA°	R/Ro	Freq or Wavelength	Kind of Event
SGMR	May 01	1952.0		2012.0			Meter	II
PALE	May 01	1953.0		2007.0			Meter	II
PALE	May 08	1848.0		1857.0			Meter	II
SGMR	May 08	1849.0		1901.0			Meter	II
POTS	May 09	0717.0U		0753 U			170- 40 MHz	II Herringbone
POTS	May 09	0731.5U		0839 U			400- 40 MHz	IV Pulsations
KHAR	May 11	0940 E	0945 U	1014 D	259	1.00-1.02	H-alpha	S
KHAR	May 12	0905 E	0910 U	0927 D	336-339	0.62-0.65	H-alpha	S
KHAR	May 12	0954 E		1024 D	248	0.77-0.78	H-alpha	S
PALE	May 13	0121.0		0141.0			Meter	II
CULG	May 13	0122.0		0140.0			Meter	II
LEAR	May 13	0122.0		0142.0			Meter	II
PALE	May 13	0145.0		0207.0			Meter	IV
LEAR	May 13	0145.0		0449.0			Meter	IV
KHAR	May 13	1037 E	1056 U	1125 D	128-142	0.70-0.85	H-alpha	SP or Q
KHAR	May 14	1018 E	1020 U	1030 D	316-320	0.67-0.70	H-alpha	S
KHAR	May 14	1100 E	1104 U	1115 D	301-304	0.53-0.56	H-alpha	S
ONDR	May 16	0635.5		0727.0			Decimeter	IV
POTS	May 16	0645.8		0737 U			800- 40 MHz	IV,II
SVTO	May 16	0700.0		0712.0			Meter	II
LEAR	May 16	0706.0		0712.0			Meter	II
LEAR	May 16	0712.0		0934.0			Meter	IV
SVTO	May 16	0712.0		1236.0			Meter	IV
KHAR	May 16	1008 E		1035 D	009-015	0.19-0.25	H-alpha	S
KHAR	May 16	1013 E		1026 D	299	0.88	H-alpha	S
CULG	May 18	0506.0		0547.0			Meter	IV
SVTO	May 18	0514.0		0527.0			Meter	II
ABST	May 18	0514	0537	0640 D	302	1.00	H-alpha	SP
LEAR	May 18	0517.0		0554.0			Meter	IV
SVTO	May 18	0527.0		0602.0			Meter	IV
KHAR	May 19	1030 E		1043 D	049	0.47-0.51	H-alpha	S
SGMR	May 19	1336.0		1536.0			Meter	IV
SVTO	May 19	1339.0		1519.0			Meter	IV
KHAR	May 21	0828 E		0900 D	245	1.00	H-alpha	S
KHAR	May 21	0843 E		0915 D	068	1.00-1.05	H-alpha	S
KHAR	May 21	0915 E		0928 D	132	0.78	H-alpha	S
KHAR	May 21	0925 E		0928 D	068	1.00	H-alpha	S
POTS	May 28	0719.6		0739 U			800- 40 MHz	IV
ABST	May 28	0728	0734	0738	257	1.00	H-alpha	SP
POTS	May 28	0749.1		1503 U			400- 40 MHz	IV
LEAR	May 29	2342.0		2345.0			Meter	IV
ONDR	May 30	0836.9		0940.7			Decimeter; meter	II Pulsations
POTS	May 30	0937.0		0940.7			800-150 MHz	II Harmonic
LEAR	May 31	0508.0		0512.0			Meter	II
SVTO	May 31	0508.0		0515.0			Meter	II
SVTO	May 31	0518.0		0754.0			Meter	IV
LEAR	May 31	0518.0		0815.0			Meter	IV

ACTIVE PROMINENCES AND FILAMENTS

MAY 1991

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	0558E	1231D	N05	E09	05	1.9	1	04	9	9	E	SVTO	6605	
01	ADF	0558E	1502D	N15	E24	05	3.1	1	22	6	8	E	SVTO	6605	
01	SSB	0606		150	W03	05	5.0			0	0	E	SVTO		
01	ADF	0812E	0906D	N06	E14	05	2.4	1	07	9	9	E	LEAR	6605	
01	ADF	0813E	0906D	S27	W41	04	28.2	1	05	9	9	E	LEAR	6612	
01	AFS	1029E	2210D	S15	E55	05	5.6		02	9	9	E	RAMY	6615	
01	DSD	1031E	1524D	N04	E09	05	2.1		02	9	9	E	RAMY	6605	
01	AFS	1035E	2210D	S28	W45	04	28.0		02	8	8	E	RAMY	6612	
01	ASR	1036E	1524D	S29	W90	04	24.5			9	9	E	RAMY	6603	
01	AFS	1109E	2210D	S09	E26	05	3.4		01	9	9	E	RAMY	6611	
01	ADF	1225E	1335D	S08	E28	05	3.6	1	06	9	9	E	RAMY	6611	
01	ADF	1229E	1525D	S06	E31	05	3.8	1	06	9	9	E	SVTO	6611	
01	AFS	1238E	1525D	S27	W42	04	28.3		02	9	9	E	SVTO	6612	
01	SSB	1300		149	W05	05	5.2			0	0	E	HOLL		
01	DSD	1302E	1512D	S17	W09	04	30.8		02	9	9	E	HOLL	6614	
01	ASR	1303E	0135D	S29	W90	04	24.6			9	9	E	HOLL	6603	
01	DSD	1305E	1623D	N06	E03	05	1.8		03	9	9	E	HOLL	6605	
01	ADF	1330E	2210D	S12	E37	05	4.4	1	12	9	9	E	RAMY	6611	
01	DSD	1332E	1405D	S16	W10	04	30.8		04	9	9	E	RAMY	6614	
01	DSD	1334E	1405D	S25	W49	04	27.9		02	9	9	E	RAMY	6612	
01	AFS	1502E	1525D	S12	E56	05	5.8		02	9	9	E	SVTO	6615	
01	ADF	1512E	1608D	S17	W07	05	1.1	1	06	9	9	E	HOLL	6614	
01	ADF	1516E	1611D	S09	E28	05	3.7	1	04	9	9	E	RAMY	6611	
01	SSB	1530		152	W09	05	5.5			0	0	E	RAMY		
01	ADF	1619E	0135D	S05	E51	05	5.5	1	18	9	9	E	HOLL	6611	
01	DSD	1755E	0228D	N05	E02	05	1.9		04	7	9	E	PALE	6605	
01	DSD	1755E	0228D	N08	E07	05	2.3		03	7	9	E	PALE	6605	
01	DSD	1755E	0437D	N30	E44	05	5.2		02	9	9	E	PALE	6612	
02	APR	0540E	0930D	N05	E00	05	2.2			9	9	E	LEAR	6605	
02	APR	0541E	0930D	S15	E50	05	6.0			9	9	E	LEAR	6615	
02	SSB	0608		150	W16	05	6.0			0	0	E	SVTO		
02	AFS	0838E	1350D	S11	E48	05	6.0		03	9	9	E	SVTO	6615	
02	DSD	0844E	1350D	S27	W58	04	27.9		04	9	9	E	SVTO	6612	
02	AFS	0851E	1350D	S07	E42	05	5.5		02	9	9	E	SVTO	6615	
02	AFS	0904E	1350D	S27	W27	04	30.3		01	8	7	E	SVTO	6604	
02	AFS	1025E	2148D	S15	E45	05	5.8		02	9	9	E	RAMY	6615	
02	ADF	1025E	2148D	S27	E58	05	6.9	1	24	9	9	E	RAMY	6615	
02	DSD	1028E	1350D	S16	W20	04	30.9		03	9	9	E	SVTO	6614	Flare Associated
02	AFS	1029E	1625D	S17	W21	04	30.8		02	9	9	E	RAMY	6614	
02	DSD	1031E	1238D	S27	W62	04	27.7		03	7	7	E	RAMY	6612	
02	SSB	1137		139	W07	05	5.4			0	0	E	RAMY		144 W32
02	DSD	1545E	0139D	S26	W61	04	28.0		02	9	9	E	HOLL	6612	
02	SSB	1550		148	W19	05	6.3			0	0	E	HOLL		
02	ADF	1558E	0139D	N05	W12	05	1.8	1	07	9	9	E	HOLL	6605	
02	DSD	1713E	0430D	N06	W05	05	2.3		03	9	9	E	PALE	6605	
02	DSD	1713E	0430D	S31	W60	04	28.1		05	9	9	E	PALE	6612	
02	ADF	1717E	0430D	N20	W39	04	29.8	1	09	9	9	E	PALE		
02	ADF	1717E	0430D	S10	E36	05	5.4	1	05	9	9	E	PALE	6615	
02	ADF	1717E	0430D	S17	E48	05	6.4		06	9	9	E	PALE	6615	
02	APR	1720E	0430D	N32	E90	05	9.8			8	9	E	PALE		
02	SDF	1729E	1643D	N04	W11	05	1.9		09	0	0	E	PALE	6605	
03	SDF	0155E	2311D	S07	E20	05	4.6		09	0	0	E	LEAR		
03	AFS	0200E	0940D	S15	E12	05	4.0		02	5	6	E	LEAR		
03	AFS	0230E	0940D	S23	W42	04	30.0		03	5	7	E	LEAR	6604	
03	ADF	0240E	0940D	N05	W09	05	2.4	1	04	5	4	E	LEAR	6605	
03	SSB	0732		150	W29	05	7.2			0	0	E	SVTO		
03	ADF	1026E	2120D	S12	E39	05	6.4	1	07	9	9	E	RAMY	6615	
03	DSD	1035E	1345D	S27	W39	04	30.4		03	9	9	E	RAMY	6604	
03	SSB	1040		138	W19	05	6.3			0	0	E	RAMY		150 W31
03	SDF	1313E	1343D	S03	E24	05	5.3	3	12	0	0	E	RAMY		
03	DSD	1337E	1610D	S26	W40	04	30.4		03	9	9	E	HOLL	6604	
03	DSD	1339E	1657D	N05	W18	05	2.2		05	8	9	E	HOLL	6605	
03	SDF	1415E	0510D	S04	E13	05	4.6		07	0	0	E	SVTO		
03	SSB	1451		117	W00	05	4.9			0	0	E	RAMY		
03	AFS	1454E	0141D	S09	E26	05	5.6	1	02	9	7	E	HOLL	6615	
03	ADF	1618E	0141D	S24	W44	04	30.3	1	07	7	7	E	HOLL	6604	
03	AFS	1719E	2124D	S08	E25	05	5.6		02	9	8	E	PALE	6615	
03	DSD	1736E	2124D	S22	W50	04	30.0		02	8	9	E	PALE	6604	

ACTIVE PROMINENCES AND FILAMENTS

MAY 1991

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	ADF	1743E	2124D	N09	W28	05	1.6	1	05	9	9	E	PALE	6605	
03	ADF	1757E	2124D	S23	W07	05	3.2		03	9	9	E	PALE	6608	
03	DSD	1757E	2124D	S31	W74	04	28.0		08	9	9	E	PALE	6612	
03	DSD	1757E	2124D	S45	W47	04	29.9		02	9	9	E	PALE	6607	
03	SSB	1803		150	W36	05	7.8			0	0	E	HOLL		
03	ADF	2235E	0141D	N18	W45	04	30.5	1	07	9	9	E	HOLL		
04	AFS	0029E	0947D	S10	E20	05	5.5		03	9	9	E	LEAR	6615	
04	DSD	0045E	0141D	N06	W25	05	2.2		03	9	9	E	HOLL	6605	Flare Associated
04	ADF	0046E	0259D	N06	E02	05	4.2	1				C	VORO		
04	ADF	0046E	0259D	S40	W11	05	3.1	1				C	VORO		
04	APR	0055E	0300D	N55	W90	04	26.4	1				C	VORO		
04	AFS	0458E	1259D	S09	E18	05	5.5		03	9	9	E	SVTO	6615	
04	AFS	0507E	1259D	S25	W55	04	30.0		02	9	9	E	SVTO	6604	
04	SSB	0510		153	W44	05	8.6			0	0	E	SVTO		113 W04
04	ADF	0857E	0915D	S24	W63	04	29.6	1				V	KHAR		
04	DSD	1023E	1850D	N05	W29	05	2.3		02	9	9	E	RAMY	6605	
04	ADF	1028E	2152D	S14	E26	05	6.4	1	05	9	9	E	RAMY	6615	
04	DSD	1038E	1711D	S23	W63	04	29.7		03	9	9	E	RAMY	6604	
04	AFS	1135E	2152D	N18	W04	05	4.2		02	9	9	E	RAMY	6617	
04	AFS	1219E	1711D	N07	W30	05	2.3		02	8	8	E	RAMY	6605	
04	ADF	1245E	1711D	S15	W15	05	3.4	1	03	9	9	E	RAMY	6615	
04	SDF	1259E	0526D	N04	W17	05	3.3		07	0	0	E	SVTO		
04	AFS	1335E	0139D	S08	E12	05	5.5		02	9	9	E	HOLL	6615	
04	AFS	1336E	0139D	N08	W30	05	2.3		02	9	9	E	HOLL	6605	
04	AFS	1337E	0120D	S26	W57	04	30.1		02	9	9	E	HOLL	6504	
04	SSB	1345		113	W09	05	5.5			0	0	E	HOLL		154 W51
04	SSB	1402		116	W12	05	5.8			0	0	E	RAMY		155 W51
04	APR	1523E	0139D	N29	E90	05	11.7	1		9	9	E	HOLL		
04	ADF	1529E	0139D	S12	E33	05	7.1	2	12	9	9	E	HOLL	6515	
04	DSD	1810E	0010D	N09	W38	05	1.9		02	9	9	E	PALE	6605	
04	AFS	1810E	0010D	S28	W60	04	30.1		02	8	8	E	PALE	6604	
04	DSD	1810E	0441D	N08	W34	05	2.2		03	9	9	E	PALE	6605	
04	AFS	1810E	0441D	S10	E10	05	5.5		03	9	9	E	PALE	6615	
04	APR	1815E	0010D	N29	E87	05	11.6			9	9	E	PALE		
04	SSB	1820		116	W15	05	6.0			0	0	E	PALE		155 W54
04	DSD	2055E	0010D	S12	W12	05	4.0		03	9	9	E	PALE	6616	
04	SDF	2124E	2000D	S03	E00	05	4.9		10	0	0	E	PALE		
04	ADF	2254E	0300D	S17	W48	05	1.3	1				C	VORO		
04	ADF	2254E	0300D	S42	E10	05	5.8	1				C	VORO		
04	APR	2256E	0232	N34	E90	05	12.1	1				C	VORO		
04	ADF	2330E	0940D	S11	E19	05	6.4	1	11	9	9	E	LEAR	6615	
05	ASR	0107E	0940D	N04	E90	05	11.8			9	9	E	LEAR		
05	ASR	0348E	0441D	N09	E90	05	11.9			9	9	E	PALE		
05	AFS	0444E	1712D	N05	W40	05	2.2		01	9	9	E	SVTO	6605	
05	AFS	0446E	1712D	S10	E05	05	5.6	1	04	9	9	E	SVTO	6615	
05	AFS	0448E	1712D	S24	W65	04	30.2	1	02	9	9	E	SVTO	6604	
05	AFS	0450E	1712D	S07	W18	05	3.8		03	9	9	E	SVTO	6611	
05	APR	0515E	1712D	N34	E90	05	12.4	2		9	9	E	SVTO		
05	ADF	0520E	1712D	N29	E69	05	10.6	1	07	9	9	E	SVTO		
05	SSB	0526		113	W18	05	6.2			0	0	E	SVTO		155 W60 452 W00
05	ASR	0700E	0940D	S28	W90	04	28.3			8	8	E	LEAR	6612	
05	SDF	0947E	2256D	S11	E16	05	6.6		06	0	0	E	LEAR	6615	
05	ADF	1052E	2149D	S13	E13	05	6.4	1	06	9	9	E	RAMY	6615	
05	AFS	1052E	2151D	S10	W01	05	5.4		02	9	9	E	RAMY	6615	
05	ASR	1104E	2151D	N06	E90	05	12.2			9	9	E	RAMY		
05	ADF	1220E	1238D	S17	E08	05	6.1	1				V	KHAR		
05	ASR	1253E	0047D	N07	E90	05	12.3			9	9	E	HOLL		
05	SSB	1255		114	W23	05	6.6			0	0	E	HOLL		151 W60
05	AFS	1257E	0047D	S11	E01	05	5.6		02	9	9	E	HOLL	6615	
05	ADF	1258E	2235D	S11	E10	05	6.3	1	08	9	9	E	HOLL	6615	
05	AFS	1408E	0047D	N09	W44	05	2.3		02	9	9	E	HOLL	6605	
05	BSD	1437E	1950D	N35	E79	05	11.9		05	9	9	E	HOLL		
05	APR	1456E	2010D	N34	E86	05	12.5	2		9	9	E	RAMY	6619	
05	EPL	1508E	1705D	S26	E90	05	12.6	2		9	8	E	RAMY		
05	EPL	1509E	1700D	S23	E90	05	12.6			9	9	E	HOLL		
05	ASR	1630E	0434D	N25	E90	05	12.6			9	9	E	PALE		
05	AFS	1630E	0434D	S10	W03	05	5.5		03	9	9	E	PALE	6615	
05	BSD	1630E	1659D	N35	E80	05	12.1		06	8	8	E	PALE		

ACTIVE PROMINENCES AND FILAMENTS

MAY 1991

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
05	APR	1630E	2220D	S21	E90	05	12.6			9	9	E	PALE		
05	DSD	1639E	2010D	S26	W74	04	30.0		02	9	9	E	RAMY	6604	
05	ASR	1640E	0434D	N06	E90	05	12.4			9	9	E	PALE		
05	AFS	1640E	0434D	S04	E11	05	6.5		02	8	8	E	PALE		
05	AFS	1641E	2151D	N08	W46	05	2.2		02	9	9	E	RAMY	6605	
05	ADF	1650E	2151D	N17	E69	05	10.9	1	09	9	9	E	RAMY	6618	
05	ADF	2035E	2100D	S05	E04	05	6.1	2	12	9	9	E	HOLL	6615	Flare Associated
05	DSD	2100E	2135D	S07	E08	05	6.5		14	9	9	E	HOLL	6615	Flare Associated
06	ASR	0110E	0940D	N04	E90	05	12.8			9	9	E	LEAR	6621	
06	AFS	0230E	0940D	S11	W07	05	5.6		02	9	9	E	LEAR	6615	
06	BSD	0559E	0630D	N08	E83	05	12.5		04	9	9	E	SVTO	6621	Flare Associated
06	AFS	0607E	1705D	S10	W10	05	5.5	1	03	9	9	E	SVTO	6615	
06	BSD	0608E	0645D	N03	E77	05	12.0		05	9	9	E	LEAR	6621	Flare Associated
06	SSB	0608		118	W36	05	7.7			0	0	E	SVTO		
06	BSL	0613E	0622	N08	E90	05	13.0	1				C	ABST		
06	SDF	0940E	2305D	S08	E45	05	9.8		05	0	0	E	LEAR		
06	SDF	0940E	2305D	S08	E45	05	9.8		05	0	0	E	LEAR		
06	AFS	1103E	2210D	S10	W12	05	5.5		03	9	9	E	RAMY	6615	
06	ADF	1123E	2028D	N11	E78	05	12.3	1	08	9	9	E	RAMY	6621	
06	SSB	1139		113	W39	05	7.5			0	0	E	RAMY		
06	AFS	1325E	2234D	S10	W14	05	5.5		03	9	9	E	HOLL	6615	
06	SSB	1525		143	W67	05	10.5			0	0	E	HOLL		
06	AFS	1631E	2210D	N05	E74	05	12.2		02	9	9	E	RAMY	6621	
06	ADF	1634E	2210D	N27	E74	05	12.4	1	14	9	9	E	RAMY	6619	
06	AFS	1637E	0432D	S11	W13	05	5.7		02	9	9	E	PALE	6615	
06	SDF	1705E	0556D	N08	W39	05	3.8		09	0	0	E	SVTO		
06	SDF	1705E	0556D	S01	W28	05	4.6		16	0	0	E	SVTO		
06	SDF	1705E	0556D	S43	E16	05	8.0		11	0	0	E	SVTO		
06	AFS	1713E	0250D	N07	W62	05	2.1		02	9	9	E	PALE	6605	
06	APR	1826E	0250D	N23	W90	04	29.9			9	9	E	PALE		
06	ASR	1950E	2016D	S21	W85	04	30.3			9	9	E	HOLL	6604	
06	ASR	1952E	2044D	S21	W90	04	30.0			9	9	E	RAMY	6604	
06	ASR	1953E	0432D	S21	W90	04	30.0			9	9	E	PALE	6604	
06	SSB	2339		144	W72	05	11.0			0	0	E	PALE		117 W33
06	SSB	2339		453	W21	05	2.9			0	0	E	PALE		441 W09
07	AFS	0551E	1119D	S10	E22	05	8.9		02	9	9	E	SVTO	6615	
07	ADF	0552E	1119D	N29	E47	05	10.9	1	11	8	8	E	SVTO	6619	
07	ADF	0811E	1119D	S09	W48	05	3.7	1	06	9	9	E	SVTO	6611	
07	ADF	0830E	1119D	N11	E58	05	11.7	1	07	9	9	E	SVTO	6621	
07	ASR	0853E	1119D	S16	E90	05	14.2			9	9	E	SVTO		
07	AFS	1110E	2205D	S10	W25	05	5.6		02	9	9	E	RAMY	6615	
07	DSD	1110E	2205D	S11	W23	05	5.7		02	9	9	E	RAMY	6615	
07	DSD	1121E	1617D	N07	W77	05	1.7		01	9	9	E	RAMY	6605	
07	AFS	1125E	2205D	N28	E50	05	11.4		01	9	9	E	RAMY	6619	
07	ADF	1131E	2205D	N15	E67	05	12.5	1	17	9	9	E	RAMY	6621	
07	ASR	1733E	1937D	S18	E90	05	14.6			7	7	E	RAMY		
07	ASR	2112E	0143D	N12	E90	05	14.7			9	9	E	HOLL		
07	DSD	2112E	0143D	S06	W34	05	5.3		02	9	9	E	HOLL	6615	
07	AFS	2112E	0143D	S10	W31	05	5.5		02	9	9	E	HOLL	6615	
07	SSB	2125		137	W77	05	11.3			0	0	E	HOLL		
07	DSD	2202E	0143D	N28	E44	05	11.3		03	9	9	E	HOLL	6619	
08	AFS	0001E	0939D	N26	E42	05	11.3		02	9	9	E	LEAR	6619	
08	ASR	0002E	0939D	N08	E90	05	14.7			9	9	E	LEAR		
08	ASR	0003E	0939D	S19	E90	05	14.9			9	9	E	LEAR		
08	ADF	0004E	0939D	S07	W40	05	5.0	1	05	9	9	E	LEAR	6615	
08	DSD	1029E	1523D	N11	E58	05	12.8		03	9	9	E	RAMY	6621	
08	ADF	1029E	2107D	N10	E45	05	11.8	1	07	9	9	E	RAMY	6621	
08	AFS	1029E	2107D	N12	E56	05	12.6		02	9	9	E	RAMY	6621	
08	DSD	1035E	2107D	N30	E47	05	12.1		03	9	9	E	RAMY	6619	
08	DSD	1037E	2107D	S13	W37	05	5.6		05	9	9	E	RAMY	6615	
08	AFS	1037E	2107D	S17	W30	05	6.2		03	9	9	E	RAMY	6615	
08	AFS	1042E	2107D	N21	W36	05	5.7		02	9	9	E	RAMY	6626	
08	SSB	1046		421	W08	05	6.9			0	0	E	RAMY		449 W36
08	ADF	1241E	0145D	N32	E39	05	11.6	1	13	9	9	E	HOLL	6619	
08	ASR	1242E	1352D	N12	E84	05	14.8			9	9	E	RAMY		
08	AFS	1246E	0145D	S11	W42	05	5.4		04	9	9	E	HOLL	6615	
08	ASR	1246E	2107D	N08	W90	05	1.8			9	9	E	RAMY	6605	

ACTIVE PROMINENCES AND FILAMENTS

MAY 1991

Day	Event Type	Start (UT)	End (UT)	Lat	CMP CMD	Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
08	AFS	1251E	1728D	S11	W42	05	5.4		02	9	9	E	SVTO	6615	
08	AFS	1313E	0145D	N14	E24	05	10.4		02	7	7	E	HOLL	6618	
08	AFS	1331E	0145D	N20	E37	05	11.4		02	9	9	E	HOLL		
08	ASR	1342E	1431D	N08	W90	05	1.8			9	9	E	SVTO	6605	
08	ASR	1342E	1728D	N13	E88	05	15.2			9	9	E	SVTO	6625	
08	AFS	1343E	1728D	N20	W39	05	5.6		02	9	9	E	SVTO		
08	DSD	1344E	1437D	N14	E54	05	12.6		04	9	9	E	SVTO	6621	Flare Associated
08	ADF	1430E	2107D	N09	E65	05	13.5	1	09	9	9	E	RAMY	6623	
08	ASR	1442	1455	N11	E78	05	14.5			9	9	E	HOLL	6625	
08	ADF	1530E	2107D	N34	E39	05	11.7	1	14	9	9	E	RAMY	6619	
08	DSD	1706	1730	N08	E40	05	11.7		06	9	9	E	HOLL	6621	
08	ASR	1747E	2236D	N12	W90	05	2.0			9	9	E	PALE	6605	
08	ADF	1813E	0349D	N26	E33	05	11.3		05	9	9	E	PALE	6619	
08	DSD	1813E	0349D	S12	W45	05	5.4		03	9	9	E	PALE	6615	
08	DSD	1838E	0145D	N27	E32	05	11.3		04	9	9	E	HOLL	6619	Flare Associated
08	ASR	2100E	0145D	S17	E90	05	15.7			9	9	E	HOLL		
08	ADF	2252E	0349D	N12	E44	05	12.3	1	10	9	9	E	PALE	6621	
08	ADF	2252E	0349D	N17	E49	05	12.7	1	07	9	9	E	PALE	6621	
09	DSD	0006E	0145D	N11	E71	05	14.3		05	9	9	E	HOLL	6625	Flare Associated
09	SDF	0115E	1305D	N33	E28	05	11.3		11	0	0	E	HOLL		
09	ADF	0515E	0630D	N31	E15	05	10.4	1	10	9	9	E	SVTO		
09	ADF	0515E	1434D	N33	E31	05	11.7	1	16	9	9	E	SVTO	6619	
09	SDF	0600E	0650D	N33	E31	05	11.7	1	10	9	9	E	SVTO	6619	
09	ASR	0600E	0710D	N09	W90	05	2.5			9	9	E	SVTO	6605	
09	SDF	0607E	2308D	N32	E04	05	9.6		11	0	0	E	LEAR		
09	AFS	0618E	1434D	S14	E67	05	14.3		02	9	7	E	SVTO	6624	
09	SDF	0630E	0650D	N31	E15	05	10.4	1	10	0	0	E	SVTO		
09	AFS	0745E	1434D	N23	W47	05	5.7		02	5	7	E	SVTO	6626	
09	AFS	1025E	1526D	N20	W46	05	5.9		02	9	9	E	RAMY	6626	
09	AFS	1026E	2106D	N10	E71	05	14.8		03	9	9	E	RAMY	6625	
09	AFS	1027E	2106D	S18	E64	05	14.3		02	9	9	E	RAMY	6624	
09	ADF	1030E	1529D	N09	E54	05	13.5	1	07	8	8	E	RAMY	6623	
09	DSD	1031E	2106D	N05	E35	05	12.0		05	9	9	E	RAMY	6621	
09	AFS	1031E	2106D	N12	E44	05	12.7		02	9	9	E	RAMY	6621	
09	ADF	1035E	1403D	N33	E28	05	11.7	1	08	9	9	E	RAMY	6619	
09	DSD	1035E	2106D	N26	E25	05	11.4		05	9	9	E	RAMY	6619	
09	AFS	1039E	2106D	S10	W50	05	5.7		02	9	9	E	RAMY	6615	
09	SSB	1411		397	W00	05	2.3			0	0	E	RAMY		440 W43
09	AFS	1430E	2106D	S15	W21	05	8.0		02	9	9	E	RAMY		
09	DSD	1448E	2316D	N27	E20	05	11.2		04	9	9	E	HOLL	6619	Flare Associated
09	AFS	1505E	2316D	N13	E39	05	12.6		03	9	9	E	HOLL	6621	
09	DSD	1532E	1632D	N26	E25	05	11.6		08	9	9	E	RAMY	6619	Flare Associated
09	ADF	1540E	2316D	N26	E32	05	12.1	2	10	9	9	E	HOLL	6619	
09	ADF	1624E	2106D	S09	W57	05	5.4	1	13	9	9	E	RAMY	6615	
09	ASR	1706E	1732	N16	E90	05	16.5			9	9	E	RAMY		
09	SSB	2045		450	W56	05	5.5			0	0	E	HOLL		
09	AFS	2250E	0409D	S17	W51	05	6.1		03	9	9	E	PALE	6615	
10	APR	0034E	0110D	S34	W90	05	2.8	1				C	VORO		
10	ADF	0039E	0109D	S27	E28	05	12.2	1				C	VORO		
10	AFS	0600E	1603D	S18	W55	05	6.1		03	9	9	E	SVTO		
10	ADF	0603E	1603D	N34	E18	05	11.7	1	10	9	9	E	SVTO	6619	
10	AFS	0635E	0937D	S14	W57	05	6.0		03	9	9	E	LEAR	6515	
10	SSB	0848		422	W35	05	8.6			0	0	E	SVTO		
10	ADF	1021E	2114D	S10	W65	05	5.5	1	14	9	9	E	RAMY	6615	
10	AFS	1021E	2132D	S17	W57	05	6.1		04	6	6	E	RAMY	6627	
10	AFS	1029E	1721D	N26	E14	05	11.5		03	9	9	E	RAMY	6619	
10	DSD	1032E	1721D	N08	E19	05	11.9		03	9	9	E	RAMY	6621	
10	AFS	1032E	2132D	N12	E30	05	12.7		03	7	7	E	RAMY	6621	
10	ADF	1038E	1618D	S27	E23	05	12.2	2	04	9	9	E	RAMY	6622	
10	SSB	1234		396	W11	05	3.3			0	0	E	RAMY		413 W28 448 W63
10	ADF	1438E	1558D	S12	W58	05	6.2	2	06	9	9	E	RAMY		Flare Associated
10	DSD	1439E	2056D	S17	W62	05	5.9		03	9	9	E	RAMY		Flare Associated
10	AFS	1515E	0147D	N27	E11	05	11.5		02	7	8	E	HOLL	6619	
10	ADF	1515E	1725D	N30	E17	05	12.0	1	13	9	9	E	HOLL	6619	
10	AFS	1527E	0147D	S14	E49	05	14.3		02	9	9	E	HOLL	6624	
10	AFS	1530E	0147D	N21	W65	05	5.7		02	9	9	E	HOLL	6626	
10	SSB	1605		427	W44	05	8.4			0	0	E	HOLL		
10	AFS	1608E	2132D	S27	E44	05	14.1		02	9	9	E	RAMY	6624	

ACTIVE PROMINENCES AND FILAMENTS

MAY 1991

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	1717E	2132D	N12	E49	05	14.4		03	9	9	E	RAMY	6625	
10	AFS	1902E	0147D	S04	W15	05	9.7		01	7	7	E	HOLL		
10	AFS	1915E	0147D	N04	E30	05	13.0		01	8	8	E	HOLL	6623	
10	AFS	2006E	0147D	N08	E19	05	12.3		02	8	8	E	HOLL	6621	
10	DSD	2037E	2132D	S08	W74	05	5.3		05	9	9	E	RAMY	6615	
10	APR	2200E	0200D	S06	W90	05	4.2	1				C	VORO		
10	APR	2200E	0200D	S36	W90	05	3.7	1				C	VORO		
10	APR	2200E	0200D	S45	E90	05	18.4	1				C	VORO		
10	ADF	2201E	0158D	S20	W32	05	8.5	1				C	VORO		
10	ADF	2332E	0937D	N30	E05	05	11.4	1	05	9	9	E	LEAR	6619	
11	AFS	0001E	0937D	S18	E41	05	14.1		01	9	9	E	LEAR	6624	
11	DSD	0002E	0937D	N09	W62	05	6.3		02	9	9	E	LEAR		
11	ADF	0003E	0937D	S20	W56	05	6.7	1	09	9	9	E	LEAR	6627	
11	DSD	0208E	0359D	N09	E10	05	11.8		02	9	9	E	PALE	6621	
11	APR	0549E	0937D	S35	E90	05	18.4	2		9	9	E	LEAR		
11	APR	0700E	1519D	S29	E90	05	18.3	2		9	9	E	SVTO		
11	ADF	0701E	1519D	N24	E11	05	12.1	1	14	9	9	E	SVTO	6619	
11	AFS	0702E	1519D	S15	E39	05	14.2	1	03	9	9	E	SVTO	6624	
11	SSB	0703		426	W51	05	9.1			0	0	E	SVTO		
11	APR	0910E	0950D	S09	W90	05	4.6	1				V	KHAR		
11	BSL	0942E	1014D	S11	W90	05	4.6	1				V	KHAR		
11	AFS	0948E	1519D	N04	E21	05	13.0	1	03	9	9	E	SVTO	6623	
11	ADF	1009E	1519D	S16	E38	05	14.3	1	13	9	9	E	SVTO	6624	
11	ADF	1022E	1303D	S27	W54	05	7.2	1	18	9	9	E	RAMY	6627	
11	DSD	1025E	1538D	N11	E46	05	14.9		03	9	9	E	RAMY	6625	
11	ADF	1027E	1813D	S22	E40	05	14.5	1	06	9	9	E	RAMY	6624	
11	ADF	1032E	1305D	N21	E05	05	11.8	1	09	9	9	E	RAMY	6621	
11	ADF	1036E	1731D	N22	E09	05	12.1	1	09	9	9	E	RAMY	6619	
11	DSD	1040	1311D	S10	W77	05	5.6		06	9	9	E	RAMY	6615	
11	AFS	1044E	1541D	S11	E77	05	17.2		02	9	9	E	RAMY		
11	SSB	1048		375	W02	05	5.8			0	0	E	RAMY		414 W41
11	APR	1215E	1225D	S09	W90	05	4.7	1				V	KHRO		
11	SDF	1245E	1244D	S11	E13	05	12.5		08	0	0	E	HOLL		
11	ASR	1300E	0147D	S07	W86	05	5.1			9	9	E	HOLL	6615	
11	APR	1301E	0147D	S36	E90	05	18.8	1		9	8	E	HOLL		
11	DSD	1345E	1820D	N07	E04	05	11.9		03	9	9	E	HOLL	6621	
11	AFS	1405E	0147D	S16	E34	05	14.2		02	9	9	E	HOLL	6624	
11	AFS	1530E	0147D	N03	E18	05	13.0		02	8	8	E	HOLL	6623	
11	SSB	1540		429	W59	05	9.1			0	0	E	HOLL		
11	DSD	1656E	0445D	N07	E04	05	12.0		03	9	9	E	PALE	6621	
11	DSD	1656E	0445D	N28	W01	05	11.6		03	9	9	E	PALE	6619	
11	AFS	1656E	0445D	S17	E35	05	14.4		03	9	9	E	PALE	6624	
11	APR	1701E	0445D	S36	E90	05	18.9			9	9	E	PALE		
11	SSB	1720		430	W61	05	9.1			0	0	E	PALE		401 W42 374 W05
11	ADF	1725E	0445D	N33	W06	05	11.2		09	9	9	E	PALE	6619	
11	ADF	1725E	0445D	S21	E35	05	14.4	1	08	9	9	E	PALE	6624	
11	AFS	1740E	0147D	S17	E37	05	14.5		02	9	9	E	HOLL	6624	
11	DSD	1850E	0445D	N03	E15	05	12.9		03	9	9	E	PALE	6623	
11	ASR	2100E	0445D	S16	E88	05	18.5			9	9	E	PALE		
12	LPS	0002E	0353D	N28	W02	05	11.8			9	9	E	LEAR	6619	Flare Associated
12	LPS	0006E	0147D	N27	W01	05	11.9			9	9	E	HOLL	6619	Flare Associated
12	ASR	0015E	0923D	S07	W90	05	5.3			9	9	E	LEAR	6615	
12	AFS	0016E	0923D	N02	E12	05	12.9		03	9	9	E	LEAR	6623	
12	AFS	0017E	0923D	S18	E29	05	14.2		02	9	9	E	LEAR	6624	
12	AFS	0017E	0923D	S18	E31	05	14.4		02	9	9	E	LEAR	6624	
12	ASR	0138E	0445D	S08	W90	05	5.3			9	9	E	PALE	6615	
12	ASR	0508E	1722D	S10	W90	05	5.4			9	9	E	SVTO	6615	
12	AFS	0509E	1722D	N03	E10	05	13.0	1	03	9	9	E	SVTO	6623	
12	AFS	0510E	1722D	S16	E31	05	14.6	2	04	9	9	E	SVTO	6624	
12	SSB	0511		375	W12	05	6.6			0	0	E	SVTO		
12	ADF	0719E	1722D	S16	E26	05	14.3	1	12	9	9	E	SVTO	6624	
12	EPL	0727	0758	S09	W90	05	5.5			9	9	E	LEAR	6615	Flare Associated
12	EPL	0808E	0813D	S08	W90	05	5.6					V	ATHN		
12	DSD	0905E	0927D	N26	W11	05	11.5	1				V	KHAR		
12	DSD	0954E	1024D	S19	W50	05	8.6	1				V	KHAR		
12	AFS	1007E	1722D	N15	E19	05	13.8	1	02	9	9	E	SVTO		
12	ADF	1150E	1205D	S23	E26	05	14.5	1				V	KHAR		
12	SSB	1244		375	W17	05	6.8			0	0	E	HOLL		425 W67

ACTIVE PROMINENCES AND FILAMENTS

MAY 1991

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	1309E	1457D	N27	W12	05	11.6		03	9	9	E	RAMY	6619	
12	ASR	1310E	1829D	S07	W90	05	5.8			9	9	E	RAMY	6615	
12	ADF	1315E	2254D	N35	W13	05	11.5	1	09	9	9	E	HOLL	6619	
12	AFS	1315E	1829D	S17	E24	05	14.4		02	9	9	E	RAMY	6624	
12	AFS	1326E	1829D	N04	E16	05	13.7		02	9	9	E	RAMY		
12	DSD	1332E	1457D	S08	W09	05	11.9		04	9	9	E	RAMY	6621	
12	ASR	1346E	1631D	S18	W90	05	5.7			9	9	E	RAMY	6627	
12	DSD	1357E	1622D	N04	E01	05	12.6		03	9	9	E	RAMY	6623	
12	ADF	1450E	1624D	S09	W11	05	11.8	1	11	9	9	E	RAMY	6621	
12	ADF	1450E	1829D	S16	E17	05	13.9	1	10	9	9	E	RAMY	6624	
12	AFS	1808E	0443D	N14	E15	05	13.9		02	9	9	E	PALE	6631	
12	ADF	1808E	0443D	S16	E17	05	14.0		12	9	9	E	PALE	6624	
12	AFS	1808E	0443D	S17	E24	05	14.6		03	9	9	E	PALE	6624	
12	ASR	1808E	1935D	S16	W90	05	5.9			8	8	E	PALE	6627	
12	SSB	1905		431	W76	05	9.9			0	0	E	PALE		374 W20
12	DSD	1907E	0443D	N31	W11	05	11.9		03	9	9	E	PALE	6619	
12	ADF	2240E	0153D	N18	W64	05	8.1	1				C	VORO		
12	APR	2241E	0129	N13	W90	05	6.1	1				C	VORO		
13	AFS	0014E	0845D	S19	E20	05	14.5		03	8	9	E	LEAR	6624	
13	APR	0112	0154D	S09	W90	05	6.3	1				C	VORO		
13	ASR	0136E	0845D	S07	W90	05	6.3			9	9	E	LEAR		
13	LPS	0153E	0443D	S09	W90	05	6.3			9	9	E	PALE	6615	
13	LPS	0157E	0845D	S09	W90	05	6.3			9	9	E	LEAR		
13	LPS	0417E	1433D	S10	W90	05	6.4			9	9	E	SVTO	6615	
13	AFS	0526E	1554D	N14	E09	05	13.9		03	9	9	E	SVTO	6631	
13	SSB	0538		374	W25	05	7.5			0	0	E	SVTO		359 W10 348 W00
13	AFS	0726E	1554D	S19	E41	05	16.4	1	02	9	9	E	SVTO		
13	APR	0832E	1125D	S10	W90	05	6.6	2				V	KHAR		
13	APR	0845E	0945D	S05	W90	05	6.6					V	ATHN		
13	ADF	0850E	0925D	S01	E59	05	17.8	1				V	KHAR		
13	SDF	0954E	1106D	S29	E40	05	16.5		07	0	0	E	SVTO		
13	AFS	1017E	1554D	S27	W04	05	13.1	1	02	9	9	E	SVTO		
13	ADF	1018E	1554D	N33	W22	05	11.7	1	14	9	9	E	SVTO	6619	
13	SDF	1037E	1125D	S30	E41	05	16.7	2				V	KHAR		
13	ADF	1049E	1105D	S35	E41	05	16.7	2				V	KHAR		
13	LPS	1229E	1647D	S10	W90	05	6.7			8	7	E	HOLL		
13	ASR	1324E	1447D	S03	W90	05	6.8			6	6	E	RAMY		
13	AFS	1354E	1447D	S08	E15	05	14.7		01	9	9	E	RAMY		
13	DSD	1354E	1447D	S08	E15	05	14.7		02	9	9	E	RAMY		
13	DSD	1406E	1447D	N11	E15	05	14.7		01	9	9	E	RAMY	6625	
13	DSD	1645E	0148D	N26	W25	05	11.7		02	9	9	E	HOLL	6619	
13	AFS	1650E	0148D	S16	E06	05	14.1		02	9	9	E	HOLL	6624	
13	SDF	1710E	1700D	N02	E17	05	15.0		04	0	0	E	HOLL		
13	APR	1730E	0447D	S44	W90	05	6.3			9	8	E	PALE		
13	DSD	1738E	0148D	S08	E13	05	14.7		02	9	9	E	HOLL		
13	SSB	1750		377	W34	05	7.6			0	0	E	HOLL		
13	ADF	1800E	0447D	N30	W23	05	11.9	1	08	9	9	E	PALE	6619	
13	DSD	1800E	0447D	N33	W22	05	12.0		04	6	7	E	PALE	6619	
13	DSD	1840E	1840D	S16	E05	05	14.1		04	6	7	E	PALE	6624	
13	SSB	1905		380	W30	05	7.5			0	0	E	PALE		
13	DSD	2018E	0447D	S08	E12	05	14.7		02	9	9	E	PALE		
13	ADF	2018E	0447D	S10	E50	05	17.6	1	06	9	9	E	PALE	6630	
13	ADF	2018E	0447D	S24	W08	05	13.2	1	08	9	9	E	PALE		
13	ASR	2206E	0148D	S13	E90	05	20.7			9	9	E	HOLL		
14	SSB	0556		358	W23	05	9.8			0	0	E	SVTO		
14	ADF	0823E	0845D	S23	E44	05	17.7	1				V	KHAR		
14	APR	1010E	1044D	S22	W90	05	7.5	1				V	KHAR		
14	DSD	1018E	1030	N31	W31	05	12.0	1				V	KHAR		
14	ADF	1018E	1035D	N24	W37	05	11.6	1				V	KHAR		
14	APR	1044E	2025D	S16	W90	05	7.6	1		6	6	E	RAMY	6629	
14	DSD	1045E	1318D	N07	E00	05	14.4		04	9	9	E	RAMY	6625	
14	AFS	1047E	2025D	S19	E03	05	14.7		03	9	9	E	RAMY	6624	
14	ADF	1049E	2025D	N06	W22	05	12.8	1	09	9	9	E	RAMY	6621	
14	DSD	1100E	1115D	N14	W28	05	12.3	1				V	KHAR		
14	DSD	1242E	1728D	N31	W31	05	12.1		03	9	9	E	HOLL	6619	
14	DSD	1244E	1728D	S05	E08	05	15.1		02	9	9	E	HOLL	6632	
14	ASR	1309E	0025D	S30	E90	05	21.6			9	9	E	HOLL		
14	AFS	1341E	0148D	S08	E02	05	14.7		01	8	8	E	HOLL	6632	

ACTIVE PROMINENCES AND FILAMENTS

MAY 1991

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
14	DSD	1526E	1728D	N09	W03	05	14.4		02	8	8	E	HOLL	6625	
14	SSB	1631		392	W35	05	7.3			0	0	E	PALE		
14	SSB	1651		377	W47	05	8.2			0	0	E	HOLL		
14	APR	1701E	0443D	S16	W90	05	7.9			9	8	E	PALE	6629	
14	APR	1704E	0443D	N50	E90	05	22.3			8	9	E	PALE		
14	ADF	1721E	0443D	N28	W35	05	12.0	1	05	9	9	E	PALE	6619	
14	DSD	1721E	2225D	N28	W43	05	11.4		05	9	9	E	PALE	6619	
14	DSD	1721E	2225D	N32	W31	05	12.3		06	9	9	E	PALE	6619	
14	ADF	1730E	0443D	N07	W34	05	12.2		05	9	9	E	PALE	6621	
14	DSD	1730E	0443D	N14	W59	05	10.3		04	9	9	E	PALE	6618	
14	DSD	1730E	2233D	S30	W30	05	12.4		03	9	9	E	PALE	6622	
14	DSD	1737E	0443D	S08	E02	05	14.9		02	9	9	E	PALE	6632	
14	ADF	1737E	0443D	S19	W03	05	14.5	1	04	9	9	E	PALE	6624	
14	ADF	1737E	2240D	S13	E37	05	17.5	1	05	9	9	E	PALE	6630	
14	ASR	1834E	0443D	S38	E90	05	22.0			9	9	E	PALE		
15	AFS	0221E	0839D	N35	W33	05	12.4		03	9	9	E	LEAR	6619	
15	ADF	0515E	0839D	N28	W41	05	12.0	1	07	9	9	E	LEAR	6619	
15	ADF	0516E	0839D	N08	W40	05	12.2		05	9	9	E	LEAR	6621	
15	ADF	0517E	0839D	N12	W50	05	11.4		05	8	8	E	LEAR	6621	
15	SSB	0733		359	W37	05	10.6			0	0	E	SVTO		
15	SDF	0733E	1412D	S22	W41	05	12.2		09	0	0	E	SVTO		
15	AFS	0733E	1730D	S10	E73	05	20.8		03	9	9	E	SVTO	6633	
15	ADF	1004E	1730D	S17	W13	05	14.4	1	04	9	9	E	SVTO	6624	
15	DSD	1053E	1353D	S18	W10	05	14.7		03	9	9	E	RAMY	6624	
15	ADF	1057E	1735D	N27	W45	05	11.9	1	09	9	9	E	RAMY	6619	
15	DSD	1257E	0141D	N31	W45	05	12.0		02	9	9	E	HOLL	6619	
15	AFS	1259E	0141D	S09	E18	05	16.9		01	8	8	E	HOLL	6630	
15	AFS	1301E	0141D	N13	E16	05	16.7		01	8	8	E	HOLL		
15	AFS	1339E	0141D	N10	W46	05	12.1		01	7	7	E	HOLL	6621	
15	AFS	1350E	0141D	S12	E72	05	21.0		02	8	8	E	HOLL	6633	
15	SSB	1641		323	W12	05	14.0			0	0	E	RAMY		350 W33 375 W59
15	APR	1732E	0442D	S17	W90	05	8.9			8	9	E	PALE		
15	DSD	1743E	0042D	N45	W33	05	13.0		03	7	9	E	PALE	6619	
15	ADF	1758E	0442D	S22	W22	05	14.0		05	8	9	E	PALE	6624	
15	ADF	1816E	0442D	N07	W47	05	12.2		05	8	9	E	PALE	6621	
15	DSD	1833E	0442D	N17	W15	05	14.6		04	9	9	E	PALE	6625	
15	SSB	1915		327	W12	05	13.8			0	0	E	HOLL		378 W63
15	AFS	2254E	0141D	S08	W15	05	14.8		01	9	9	E	HOLL	6632	
16	AFS	0515E	0930D	N12	E06	05	16.7		02	7	6	E	LEAR		
16	ADF	0525E	0930D	S21	W25	05	14.3	2	06	7	8	E	LEAR	6624	
16	SSB	0550		327	W18	05	14.2			0	0	E	SVTO		
16	AFS	0610E	1650D	N12	E06	05	16.7		02	9	9	E	SVTO		
16	ADF	0618E	1650D	S16	E62	05	21.0	1	07	9	9	E	SVTO	6633	
16	DSD	1008E	1035D	N10	W03	05	16.2	1				V	KHAR		
16	DSD	1013	1026D	N24	W60	05	11.8	1				V	KHAR		
16	ADF	1242E	1723D	N35	W62	05	11.6	1	04	9	9	E	RAMY	6619	
16	DSD	1242E	2035D	N33	W61	05	11.7		03	9	9	E	RAMY	6619	
16	ADF	1250E	1526D	S14	W31	05	14.2	2	04	9	9	E	RAMY	6624	
16	AFS	1253E	2035D	S13	E58	05	20.9		03	9	9	E	RAMY	6633	
16	DSD	1257E	0141D	N31	W45	05	13.0		02	9	9	E	HOLL	6619	
16	AFS	1259E	0141D	S09	E18	05	17.9		01	8	8	E	HOLL	6630	
16	AFS	1301E	0141D	N13	E16	05	17.7		01	8	8	E	HOLL		
16	ADF	1307E	2035D	S26	E65	05	21.6	2	08	9	9	E	RAMY		
16	AFS	1310E	0150D	N13	E02	05	16.7	1	02	9	9	E	HOLL		
16	ADF	1325E	1615D	S15	W31	05	14.2	1	05	8	9	E	HOLL	6624	
16	AFS	1339E	0141D	N10	W46	05	13.1		01	7	7	E	HOLL	6621	
16	AFS	1350E	0141D	S12	E72	05	22.0		02	8	8	E	HOLL	6633	
16	AFS	1412E	2035D	N14	E02	05	16.7		02	9	9	E	RAMY	6634	
16	ADF	1617E	1923D	S35	E27	05	18.8	1	24	9	9	E	RAMY		
16	DSD	1635E	0446D	N13	E00	05	16.7		03	9	9	E	PALE	6634	
16	AFS	1635E	0446D	N13	E01	05	16.8		03	9	9	E	PALE	6634	
16	SSB	1643		329	W26	05	14.4			0	0	E	PALE		364 W61 376 W72
16	AFS	1645E	0446D	S08	W25	05	14.8		02	8	8	E	PALE	6632	
16	DSD	1645E	0446D	S13	E58	05	21.1		03	9	9	E	PALE	6633	
16	SDF	1650E	0634D	N27	W13	05	15.7		03	0	0	E	SVTO		
16	SDF	1650E	0634D	N31	W20	05	15.1		08	0	0	E	SVTO		
16	SSB	1705		375	W72	05	9.9			0	0	E	HOLL		
16	DSD	1742E	2225D	S18	W29	05	14.5		02	9	9	E	HOLL	6624	

ACTIVE PROMINENCES AND FILAMENTS

MAY 1991

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
16	AFS	1903E	0150D	S13	E57	05	21.1		03	9	9	E	HOLL	6633	
16	ADF	1904E	0150D	S17	E54	05	20.9	2	09	9	9	E	HOLL	6633	
16	AFS	1950E	0446D	S13	E56	05	21.0		03	9	9	E	PALE	6633	
16	AFS	2254E	0141D	S08	W15	05	15.8		01	9	9	E	HOLL	6632	
17	ADF	0045E	0150D	S20	W31	05	14.7	1	06	9	9	E	HOLL	6624	
17	DSD	0102E	0150D	S17	W36	05	14.3		12	9	9	E	HOLL	6624	Flare Associated
17	ADF	0110E	0936D	S23	W28	05	14.9	1	15	9	9	E	LEAR	6624	
17	SSB	0634		324	W28	05	15.4			0	0	E	SVTO		350 W54 284 W00
17	AFS	0748E	1144D	S13	E51	05	21.2		03	9	9	E	SVTO	6633	
17	BSD	0907E	0920D	N34	W74	05	11.5		04	9	9	E	LEAR	6619	Flare Associated
17	EPL	0910E	1019D	N30	W72	05	11.7	2		9	9	E	SVTO	6619	Flare Associated
17	SDF	0930E	2308D	N27	W12	05	16.5		16	0	0	E	LEAR		
17	APR	1056E	1719D	N33	W88	05	10.5	2		9	9	E	RAMY	6619	
17	ADF	1104E	1719D	S12	W42	05	14.3	2	18	9	9	E	RAMY	6624	
17	DSD	1128E	1130D	S13	E47	05	21.0		03	9	9	E	RAMY	6633	
17	SDF	1144E	0620D	S37	W24	05	15.5		05	0	0	E	SVTO		
17	ADF	1252E	0015D	S16	W47	05	14.0	1	09	9	9	E	HOLL	6624	
17	AFS	1314E	0150D	S14	E47	05	21.1		03	9	9	E	HOLL	6633	
17	ASR	1317E	0150D	S29	E90	05	24.6			9	9	E	HOLL		
17	ADF	1340E	0000D	S09	W35	05	14.9	1	05	9	9	E	HOLL	6632	
17	AFS	1432E	0150D	S09	W38	05	14.7		03	9	9	E	HOLL	6632	
17	SDF	1502E	1430D	S37	E17	05	19.0		06	0	0	E	HOLL		
17	ASR	1505E	1523D	N30	W75	05	11.7			9	9	E	HOLL	6619	
17	SSB	1510		324	W33	05	15.7			0	0	E	HOLL		
17	ASR	1518E	1618D	N28	W85	05	11.0			9	9	E	RAMY	6619	
17	ASR	1523E	0150D	N26	W81	05	11.3			9	9	E	HOLL	6619	
17	AFS	1645E	0401D	N09	W47	05	14.2		02	8	9	E	PALE	6625	
17	AFS	1645E	0401D	S09	W40	05	14.7		02	9	9	E	PALE	6632	
17	AFS	1645E	0401D	S13	E45	05	21.1		03	9	9	E	PALE	6633	
17	ASR	1645E	1912D	S30	E89	05	24.7			9	9	E	PALE		
17	SSB	1650		327	W31	05	15.6			0	0	E	PALE		344 W54 372 W81
17	ADF	1650E	0401D	S15	W47	05	14.1		05	9	9	E	PALE	6624	
17	ASR	1915E	0401D	N30	W88	05	10.9			9	9	E	PALE	6619	
18	ASR	0010E	0916D	N33	W90	05	10.8			9	9	E	LEAR	6619	
18	ADF	0012E	0916D	S16	W47	05	14.4	1	04	9	9	E	LEAR	6624	
18	EPL	0512E	1157D	N28	W90	05	11.2	2		9	9	E	SVTO	6619	Flare Associated
18	APR	0515	0640D	N32	W90	05	11.1	1				C	ABST		
18	LPS	0516	1201D	N31	W90	05	11.1	2		9	9	E	SVTO	6619	Flare Associated
18	BSL	0531	0750D	N30	W90	05	11.1			9	9	E	LEAR	6619	Flare Associated
18	APR	0535E	1030D	N33	W90	05	11.1					V	ATHN		
18	LPS	0600E	0715D	N33	W90	05	11.1					V	ATHN		
18	SSB	0620		284	W01	05	24.5			0	0	E	SVTO		324 W41 350 W67
18	LPS	0634	0916D	N34	W90	05	11.1			9	9	E	LEAR	6619	Flare Associated
18	AFS	0703E	1201D	S12	E37	05	21.1		03	9	9	E	SVTO	6633	
18	LPS	1053E	1654D	N29	W90	05	11.4			9	9	E	RAMY	6619	
18	LPS	1220E	2050D	N26	W72	05	12.9			9	9	E	HOLL	6619	
18	AFS	1239E	1807D	N18	E40	05	21.6		02	9	9	E	RAMY		
18	ADF	1241E	1807D	S12	E23	05	20.3	1	08	9	9	E	RAMY	6633	
18	AFS	1241E	1807D	S12	E32	05	20.9		02	9	9	E	RAMY	6633	
18	DSD	1335E	1730D	S12	E25	05	20.4		02	9	9	E	HOLL	6633	
18	ASR	1340E	0136D	N30	W90	05	11.5			9	9	E	HOLL	6619	
18	ASR	1450E	0136D	N09	W90	05	11.9			9	9	E	HOLL	6621	
18	DSD	1455E	2122D	N09	W58	05	14.3		02	9	9	E	HOLL	6625	
18	AFS	1500E	0136D	S09	W52	05	14.7		02	9	9	E	HOLL	6632	
18	SDF	1500E	1700D	N08	E18	05	20.0		04	0	0	E	HOLL		
18	AFS	1503E	0136D	N14	W28	05	16.5		02	9	9	E	HOLL	6634	
18	AFS	1503E	1600D	N12	W25	05	16.7		02	8	7	E	HOLL	6634	
18	DSD	1503E	1600D	N13	W29	05	16.4		04	9	9	E	HOLL	6634	Flare Associated
18	SSB	1515		355	W77	05	13.5			0	0	E	HOLL		
18	SSB	1618		284	W07	05	25.0			0	0	E	RAMY		330 W53 348 W71
18	AFS	1730E	0136D	S15	E32	05	21.1		03	9	9	E	HOLL	6633	
18	AFS	1730E	0136D	S21	E18	05	20.1		02	9	9	E	HOLL		
18	AFS	1730E	0136D	S28	E22	05	20.4		02	9	9	E	HOLL		
18	AFS	1750E	2025D	N13	W27	05	16.7		02	9	9	E	PALE	6634	
18	AFS	1750E	2025D	N18	E36	05	21.5		02	9	9	E	PALE	6638	
18	ASR	1750E	2025D	N30	W90	05	11.7			9	9	E	PALE	6619	
18	AFS	1750E	2025D	S12	E28	05	20.8		03	9	9	E	PALE	6633	
18	ASR	1904E	2025D	S10	W90	05	12.0			9	9	E	PALE	6621	

ACTIVE PROMINENCES AND FILAMENTS

MAY 1991

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
18	SSB	1908		288	W12	05	25.4			0	0	E	PALE		330 W55 352 W76
18	ASR	1909E	2025D	S26	E90	05	25.8			9	9	E	PALE		
18	SDF	1914E	1649D	N06	E17	05	20.1		08	0	0	E	PALE		
18	AFS	1917E	2025D	S20	E16	05	20.0		02	8	8	E	PALE		
18	DSD	1930E	2025D	S08	W57	05	14.5		02	9	9	E	PALE	6632	Flare Associated
18	DSD	2000	2025D	N14	W31	05	16.5		03	9	9	E	PALE	6634	
18	AFS	2337E	0934D	S27	E17	05	20.3		02	9	9	E	LEAR		
18	AFS	2338E	0934D	S22	E14	05	20.1		02	9	9	E	LEAR		
19	AFS	0506E	1639D	S13	E25	05	21.1		03	9	9	E	SVTO	6633	
19	AFS	0507E	1639D	S23	E16	05	20.4	1	02	9	9	E	SVTO		
19	AFS	0508E	1639D	S20	E13	05	20.2		01	9	9	E	SVTO		
19	AFS	0509E	1639D	S10	W61	05	14.6	1	02	9	9	E	SVTO	6632	
19	SSB	0510		282	W12	05	25.4			0	0	E	SVTO		321 W54
19	BSL	0536E	0800D	N25	E90	05	26.2	1				C	ABST		
19	BSL	0536E	0800D	S14	E90	05	26.0	1				C	ABST		
19	ASR	0744E	1140D	N03	W90	05	12.6			8	7	E	SVTO	6623	
19	ASR	0744E	1140D	S27	W90	05	12.3			7	9	E	SVTO	6622	
19	ADF	1000E	1043D	S07	W66	05	14.5	1				V	KHAR		
19	ADF	1047E	1327D	S15	W66	05	14.4	1	05	9	9	E	RAMY	6624	
19	DSD	1047E	1838D	S06	W65	05	14.6		01	9	9	E	RAMY	6632	
19	AFS	1047E	2118D	S06	W64	05	14.6		02	9	9	E	RAMY	6632	
19	AFS	1052E	1639D	N17	E25	05	21.3	2	04	9	9	E	SVTO	6638	
19	SDF	1102E	1539D	N08	W01	05	19.4		16	0	0	E	SVTO		
19	AFS	1120E	2118D	S11	E08	05	20.1		02	9	9	E	RAMY		
19	AFS	1120E	2118D	S26	E11	05	20.3		03	9	9	E	RAMY		
19	AFS	1121E	2118D	N17	E25	05	21.4		02	9	9	E	RAMY	6638	
19	AFS	1121E	2118D	S18	W42	05	16.3		01	9	9	E	RAMY		
19	AFS	1122E	2118D	N16	W39	05	16.5		02	9	9	E	RAMY	6634	
19	AFS	1324E	2033D	S28	E58	05	24.1		02	9	9	E	RAMY	6639	
19	DSD	1633E	2333D	S11	E16	05	20.9		03	9	9	E	HOLL	6333	
19	SSB	1635		324	W66	05	17.5			0	0	E	HOLL		
19	AFS	1638E	2333D	S26	E09	05	20.4		03	9	9	E	HOLL	6641	
19	AFS	1642E	2333D	N18	E22	05	21.4		03	9	9	E	HOLL	6638	
19	AFS	1642E	2333D	S19	W46	05	16.2		01	7	7	E	HOLL		
19	SSB	1649		331	W63	05	16.9			0	0	E	PALE		
19	SDF	1649E	1718D	N16	E13	05	20.7		13	0	0	E	PALE		
19	ASR	1734E	2112D	N03	W90	05	13.0			8	8	E	RAMY	6623	
19	ASR	1737E	2118D	N12	W89	05	13.0			9	9	E	RAMY	6625	
19	ASR	1741E	1741D	S30	W90	05	12.6			8	9	E	PALE	9622	
19	DSD	1742E	1841D	S14	E14	05	20.8		03	9	9	E	RAMY	6633	
19	ADF	1742E	2114D	S12	E17	05	21.0	1	08	9	9	E	RAMY	6633	
19	ASR	1801E	2031D	S17	W90	05	12.9			8	8	E	RAMY	6622	
19	ASR	1828E	0441D	S08	W90	05	13.0			7	9	E	PALE	6624	
19	ASR	1830E	2118D	N20	W90	05	12.9			9	9	E	RAMY	6631	
19	ADF	1834E	2118D	S34	W13	05	18.7	1	26	9	9	E	RAMY		
19	DSD	1844E	0441D	S07	E17	05	21.0		04	9	9	E	PALE	6633	
19	DSD	1919E	0441D	N19	E30	05	22.1		03	8	9	E	PALE	6638	
19	DSD	2036E	2109D	N13	W42	05	16.7		05	9	9	E	RAMY	6634	
19	AFS	2042E	0441D	S23	E08	05	20.5		04	9	9	E	PALE	6640	
19	ADF	2145E	0156D	N45	E27	05	22.1	1				C	VORO		
19	ADF	2156E	0156D	N13	E03	05	20.1	1				C	VORO		
19	APR	2202E	0248D	S01	W90	05	13.2	1				C	VORO		
19	APR	2202E	0248D	S20	W90	05	13.0	1				C	VORO		
19	ADF	2205E	2333D	N12	W41	05	16.8	2	07	9	9	E	HOLL	6634	
19	AFS	2205E	2333D	S08	W71	05	14.6		02	9	9	E	HOLL	6632	
19	SDF	2306E	1844D	N14	E12	05	20.9		13	0	0	E	HOLL		
19	AFS	2330E	0931D	N15	E19	05	21.4		02	9	9	E	LEAR	6638	
19	ADF	2330E	0931D	N16	E19	05	21.4	1	03	9	9	E	LEAR	6638	
20	ADF	0125E	0931D	S14	E15	05	21.2	1	03	9	9	E	LEAR	6633	
20	AFS	0450E	1726D	S10	W78	05	14.3	2	03	9	9	E	SVTO	6632	
20	AFS	0451E	1418D	N16	W06	05	19.7		02	9	9	E	SVTO	6636	
20	AFS	0452E	1726D	N17	E16	05	21.4	1	03	9	9	E	SVTO	6638	
20	AFS	0453E	1726D	S27	E03	05	20.4	2	04	9	9	E	SVTO	6641	
20	ADF	0454E	1726D	S20	W39	05	17.2	1	25	9	9	E	SVTO		
20	SSB	0455		281	W23	05	26.4			0	0	E	SVTO		263 W05
20	BSL	0718	0741D	N35	W90	05	13.1	1				C	ABST		
20	SDF	0920E	2258D	N05	W15	05	19.3		07	0	0	E	LEAR		
20	SDF	0920E	2258D	N14	W02	05	20.2		17	0	0	E	LEAR		

ACTIVE PROMINENCES AND FILAMENTS

MAY 1991

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
20	AFS	1020E	1915D	S26	W01	05	20.3		02	9	9	E	RAMY	6641	
20	AFS	1023E	1915D	S28	E46	05	24.0		02	9	9	E	RAMY	6635	
20	AFS	1025E	1915D	N18	E14	05	21.5		02	9	9	E	RAMY	6638	
20	ADF	1027E	1915D	S28	W32	05	17.9	1	23	9	9	E	RAMY		
20	ADF	1029E	1425D	S11	E07	05	21.0	1	08	9	9	E	RAMY	6633	
20	AFS	1038E	1054D	S07	W76	05	14.7		02	9	9	E	RAMY	6633	
20	ASR	1042E	1427D	N09	W90	05	13.7			8	8	E	RAMY	6625	
20	SSB	1105		262	W08	05	25.1			0	0	E	RAMY		280 W26 322 W68
20	DSD	1312E	1507D	S06	W80	05	14.6		05	9	9	E	RAMY	6632	
20	DSD	1423E	1506D	N16	W58	05	16.2		03	9	9	E	RAMY	6634	
20	SSB	1718		275	W07	05	26.3			0	0	E	PALE		288 W23
20	SDF	1726E	0429D	N15	W20	05	19.2		09	0	0	E	SVTO		
20	SDF	1726E	0429D	S30	W38	05	17.7		08	0	0	E	SVTO		
20	ASR	1754E	2129D	S01	W90	05	14.0			7	7	E	PALE		
20	ADF	1807E	0445D	S14	E06	05	21.2	1	09	9	9	E	PALE	6633	
20	DSD	1838E	0445D	N05	E67	05	25.8		04	9	9	E	PALE		
20	ADF	1838E	0445D	S10	W52	05	16.9	1	02	9	9	E	PALE	6642	
20	DSD	1838E	0445D	S18	E10	05	21.5		01	9	9	E	PALE	6638	
20	ADF	1838E	0445D	S28	W08	05	20.1	1	05	9	9	E	PALE	6641	
20	APR	1930E	0445D	S31	E90	05	27.9			8	9	E	PALE		
20	ADF	1937E	0102D	S13	E02	05	21.0	1	06	9	9	E	HOLL	6633	
20	ASR	2155E	2315D	S14	W90	05	14.1			9	9	E	PALE	6624	
20	ADF	2217E	2357D	S30	W48	05	17.1	1				C	VORO		
20	APR	2217E	2357D	S38	E90	05	28.2	2				C	VORO		
20	SSB	2245		284	W37	05	27.7			0	0	E	HOLL		316 W69
20	DSD	2317E	0445D	N16	W17	05	19.7		02	9	9	E	PALE	6636	
20	DSD	2317E	0445D	S21	W66	05	15.9		05	9	9	E	PALE		
20	DSD	2317E	0445D	S25	W12	05	20.0		03	9	9	E	PALE	6640	
20	DSD	2317E	0445D	S29	E35	05	23.7		05	5	9	E	PALE	6639	
21	EPL	0002E	0155D	S31	E90	05	28.1			9	9	E	PALE		
21	DSD	0015E	0918D	S11	W06	05	20.5		03	9	9	E	LEAR	6633	Flare Associated
21	APR	0016E	0918D	S18	W90	05	14.1	1		9	9	E	LEAR	6624	
21	ASR	0017E	0918D	S07	W90	05	14.3			9	9	E	LEAR	6632	
21	AFS	0018E	0918D	N17	E07	05	21.5		01	9	9	E	LEAR	6638	
21	DSD	0019E	0918D	S30	E42	05	24.3		04	9	9	E	LEAR	6639	
21	ADF	0020E	0918D	S28	W13	05	20.0	1	06	9	9	E	LEAR	6641	
21	ASR	0033E	0102D	S08	W86	05	14.6			9	9	E	HOLL	6632	
21	APR	0125E	0323D	S50	E90	05	28.7	1		9	9	E	LEAR		
21	APR	0155E	0445D	S31	E90	05	28.2			9	9	E	PALE		
21	ASR	0209E	0445D	N20	E90	05	28.0			9	9	E	PALE		
21	ASR	0404E	1523D	S11	W90	05	14.4			9	9	E	SVTO	6632	
21	SSB	0429		279	W35	05	27.5			0	0	E	SVTO		
21	SSB	0429		279	W35	05	27.5			0	0	E	SVTO		
21	BSL	0502	0530D	N22	E90	05	28.1	1				C	ABST		
21	ADF	0515E	1750D	N07	E61	05	25.8	1	07	9	9	E	SVTO		
21	ASR	0548E	0820D	S17	W90	05	14.4			9	9	E	SVTO	6624	
21	ASR	0601E	0918D	N18	E90	05	28.1			9	9	E	LEAR		
21	BSL	0621	0645D	N22	E90	05	28.2	1				C	ABST		
21	BSL	0828E	0900	S25	W90	05	14.4	1				V	KHAR		
21	BSL	0843	0915	N22	E90	05	28.3	1				V	KHAR		
21	DSD	0915	0928D	S32	E44	05	24.9	1				V	KHAR		
21	BSL	0925	0928D	N22	E90	05	28.3	1				V	KHAR		
21	APR	0950E	1005D	N43	E90	05	28.8					V	ATHN		
21	BSL	0956E	1011D	N22	E90	05	28.3			9	9	E	SVTO		Flare Associated
21	AFS	1014E	1608D	S08	W61	05	16.8		02	9	9	E	RAMY	6642	
21	AFS	1015E	1608D	S19	W18	05	20.0		02	9	9	E	RAMY	6640	
21	AFS	1015E	1608D	S26	W15	05	20.3		02	9	9	E	RAMY	6641	
21	DSD	1019E	1252D	S31	E36	05	24.3		04	9	9	E	RAMY	6639	
21	AFS	1019E	1608D	S28	E35	05	24.2		02	9	9	E	RAMY	6639	
21	AFS	1021E	1608D	N17	E01	05	21.5		02	9	9	E	RAMY	6638	
21	ADF	1023E	1608D	S33	E12	05	22.4	1	12	9	9	E	RAMY	6637	
21	ADF	1029E	1258D	S13	W03	05	21.2	1	11	7	7	E	RAMY	6633	
21	ADF	1036E	1535D	S32	W35	05	18.7	1	19	9	9	E	RAMY		
21	ASR	1059E	1401D	S08	W90	05	14.7			9	9	E	RAMY	6632	
21	ASR	1253E	1331D	N20	W85	05	15.0			9	9	E	RAMY	6634	
21	BSD	1254E	1420D	N19	W78	05	15.6		06	9	9	E	SVTO	6634	
21	DSD	1255E	1333D	N18	W06	05	21.1		03	9	9	E	RAMY	6638	
21	ASR	1359E	0151D	N21	E90	05	28.5			9	9	E	HOLL		
21	SSB	1407		279	W40	05	28.0			0	0	E	RAMY		457 W79

ACTIVE PROMINENCES AND FILAMENTS

MAY 1991

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	ADF	1710E	0151D	S09	W13	05	20.7	1	09	9	9	E	HOLL	6333	
21	SDF	1750E	0614D	N03	W40	05	18.7		06	0	0	E	SVTO		
21	AFS	2338E	0355D	N18	W09	05	21.3		02	9	9	E	PALE	6638	
21	BSD	2348E	2353D	N21	E79	05	28.0		03	9	9	E	PALE		Flare Associated
22	AFS	0011E	0355D	S27	E00	05	22.0		02	9	9	E	PALE	6637	
22	ADF	0011E	0355D	S32	E04	05	22.3	1	04	9	9	E	PALE	6637	
22	DSD	0016E	0355D	N20	W08	05	21.4		02	9	9	E	PALE	6638	Flare Associated
22	DSD	0022E	0151D	N18	W09	05	21.3		03	9	9	E	HOLL	6638	Flare Associated
22	AFS	0025E	0355D	S20	W26	05	20.0		02	9	9	E	PALE	6640	
22	AFS	0033E	0355D	S27	W20	05	20.5		02	9	9	E	PALE	6641	
22	AFS	0044E	0355D	N46	E61	05	27.1		02	9	9	E	PALE		
22	SDF	0052E	1313D	S39	E74	05	28.0		09	0	0	E	HOLL		
22	AFS	0222E	0931D	N18	W10	05	21.3		02	5	5	E	LEAR	6638	
22	DSD	0223E	0441D	S31	E27	05	24.2		03	8	9	E	LEAR	6639	
22	AFS	0224E	0931D	S26	W23	05	20.3		01	9	9	E	LEAR	6641	
22	ASR	0225E	0931D	S23	W90	05	15.2			9	9	E	LEAR		
22	AFS	0226E	0931D	N03	E44	05	25.4		01	9	9	E	LEAR		
22	ASR	0227E	0931D	N20	E90	05	29.0			9	9	E	LEAR		
22	ADF	0228E	0931D	S11	W16	05	20.9	1	09	8	9	E	LEAR	6633	
22	BSD	0440E	1737D	N24	E86	05	28.8		08	9	9	E	SVTO	6644	
22	ASR	0451E	1737D	S28	W90	05	15.2			9	9	E	SVTO		
22	DSD	0457E	0745D	N16	W15	05	21.1		03	9	9	E	SVTO	6638	
22	AFS	0457E	1737D	N17	W11	05	21.4		02	9	9	E	SVTO	6638	
22	AFS	0501E	1737D	S20	W29	05	20.0		01	8	8	E	SVTO	6640	
22	AFS	0513E	1737D	S28	W22	05	20.5		02	7	8	E	SVTO	6641	
22	AFS	0644E	1737D	S14	W06	05	21.8		02	9	9	E	SVTO		
22	APR	0934E	1737D	N16	W90	05	15.6	2		9	9	E	SVTO	6634	
22	AFS	1039E	1542D	S18	W32	05	20.0		02	9	9	E	RAMY	6640	
22	AFS	1054E	1542D	S30	W25	05	20.5		03	9	9	E	RAMY	6641	
22	AFS	1059E	1542D	N20	E77	05	28.3		02	9	9	E	RAMY	6644	
22	DSD	1059E	1542D	N21	E79	05	28.5		02	9	9	E	RAMY	6644	
22	ASR	1145	1542D	S25	W82	05	16.1			9	9	E	RAMY		
22	AFS	1216E	1542D	S25	E42	05	25.8		01	5	6	E	RAMY	6643	
22	DSD	1226E	1526D	S13	W09	05	21.8		03	9	9	E	RAMY		
22	ADF	1247E	1737D	N25	W16	05	21.3	1	13	9	9	E	SVTO	6638	
22	ADF	1252E	1255D	N49	W13	05	21.4	1	22	9	9	E	SVTO		
22	AFS	1330E	0152D	N20	E75	05	28.3		02	9	9	E	HOLL		
22	AFS	1330E	0152D	S14	W09	05	21.9		02	9	9	E	HOLL		
22	AFS	1526E	1542D	S14	W11	05	21.8		03	9	9	E	RAMY		
22	ASR	1658E	0145D	S28	W90	05	15.7	1		9	9	E	PALE		
22	AFS	1714E	0145D	N21	E72	05	28.2		04	9	9	E	PALE	6644	
22	AFS	1714E	0145D	S15	W12	05	21.8		03	9	9	E	PALE		
22	ASR	1855E	0152D	N15	W90	05	16.0			9	9	E	HOLL	6634	
22	AFS	1856E	0152D	N17	W17	05	21.5		02	9	9	E	HOLL	6638	
22	AFS	1858E	0152D	S24	E38	05	25.7		01	9	9	E	HOLL	6643	
22	ASR	1900E	0152D	S28	W90	05	15.7			9	9	E	HOLL		
22	SSB	1904		238	W15	05	25.7			0	0	E	HOLL		290 W67
22	ADF	2158E	0159D	N26	W16	05	21.7	1				C	VORO		
22	APR	2200E	0200D	N37	E90	05	30.2	1				C	VORO		
22	AFS	2245E	0152D	N07	E19	05	24.4		02	9	9	E	HOLL		
22	AFS	2246E	0152D	S20	W38	05	20.0		02	9	9	E	HOLL	6640	
23	DSD	0634E	0700D	N23	E66	05	28.3		04	9	9	E	SVTO	6644	
23	ADF	0635E	1335D	N17	W18	05	21.9	1	20	9	9	E	SVTO	6638	
23	SDF	0728E	0850D	N21	W22	05	21.6	1	09	0	0	E	SVTO	6638	
23	ADF	0945E	1711D	S14	W30	05	21.1	1	11	9	9	E	SVTO	6633	
23	BSD	1117E	1537D	N19	E62	05	28.2		03	9	9	E	RAMY	6644	
23	AFS	1117E	1537D	N20	E60	05	28.0		03	9	9	E	RAMY	6644	
23	AFS	1124E	1537D	N05	E23	05	25.2		02	9	9	E	RAMY	6645	
23	AFS	1127E	1537D	N18	E14	05	24.5		02	9	9	E	RAMY	6647	
23	AFS	1128E	1523D	N12	E13	05	24.4		01	7	7	E	RAMY		
23	AFS	1128E	1537D	N08	E12	05	24.4		02	9	9	E	RAMY		
23	AFS	1133E	1537D	N18	W24	05	21.6		03	9	9	E	RAMY	6638	
23	AFS	1215E	1537D	S19	W47	05	19.9		02	6	7	E	RAMY	6640	
23	DSD	1310E	0154D	N20	E57	05	27.9		02	9	9	E	HOLL	6644	
23	DSD	1313E	1537D	N17	W61	05	18.9		04	9	9	E	RAMY		
23	AFS	1320E	0154D	N05	E22	05	25.2		02	9	9	E	HOLL	6645	
23	AFS	1320E	0154D	N18	E13	05	24.5		02	9	9	E	HOLL		
23	AFS	1320E	0154D	S15	W24	05	21.7		02	9	9	E	HOLL	6646	

ACTIVE PROMINENCES AND FILAMENTS

MAY 1991

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
23	AFS	1634E	0400D	N05	E20	05	25.2		03	9	9	E	PALE	6645	
23	AFS	1634E	0400D	N18	W27	05	21.6		02	9	8	E	PALE	6638	
23	DSD	1634E	0400D	N20	E55	05	27.9		02	9	9	E	PALE	6644	
23	AFS	1634E	0400D	N20	E57	05	28.0		03	9	9	E	PALE	6644	
23	AFS	1640E	0400D	S14	W25	05	21.8		02	9	9	E	PALE	6646	
23	DSD	1645E	1648D	N21	W50	05	19.9		02	9	9	E	PALE		
23	SSB	1655		238	W27	05	26.7			0	0	E	PALE		280 W69
23	ASR	1655E	1855D	S14	E90	05	30.5			9	9	E	PALE		
23	AFS	1717E	0154D	N16	W65	05	18.8		02	9	9	E	HOLL		
23	DSD	1745E	0400D	S29	E06	05	24.2		05	9	9	E	PALE	6639	
23	APR	1746E	0154D	S26	W90	05	16.7	2		9	9	E	HOLL		
23	DSD	1916E	0106D	S17	W45	05	20.4		08	9	9	E	HOLL	6640	Flare Associated
23	ADF	1920E	0107D	S09	W43	05	20.6	1	09	9	9	E	HOLL	6633	
23	DSD	1920E	0157D	S18	W45	05	20.4		09	9	9	E	PALE	6640	Flare Associated
23	SSB	1945		239	W30	05	26.9			0	0	E	HOLL		281 W72
23	AFS	2100E	0154D	N18	W31	05	21.5		02	9	9	E	HOLL	6638	
23	SDF	2256E	0938D	S32	W64	05	18.9		09	9	9	E	LEAR		
24	DSD	0225E	0400D	S10	E78	05	30.0		02	9	9	E	PALE		
24	AFS	0225E	0400D	S17	E06	05	24.5		02	9	9	E	PALE	6647	
24	AFS	0230E	0930D	N17	E55	05	28.3		04	9	9	E	LEAR	6644	
24	ADF	0231E	0930D	S13	W41	05	21.0	2	18	9	9	E	LEAR	6633	
24	BSL	0551E	0810D	N40	W90	05	16.9	1				C	ABST		
24	BSL	0719E	0810D	S25	W90	05	17.3	1				C	ABST		
24	DSD	1250E	1625D	N19	E42	05	27.7		03	9	9	E	HOLL	6644	
24	AFS	1540E	1702D	S12	W40	05	21.6		02	9	9	E	RAMY	6646	
24	AFS	1543E	1702D	N19	E44	05	28.0		03	9	9	E	RAMY	6644	
24	SDF	1551E	0526D	N21	W22	05	23.0		15	0	0	E	SVTO	6638	
24	AFS	1634E	0442D	N21	E47	05	28.3		04	9	9	E	PALE	6644	
24	AFS	1636E	0442D	N17	E01	05	24.8		02	8	8	E	PALE	6647	
24	AFS	1638E	0442D	S14	W37	05	21.9		02	8	8	E	PALE	6646	
24	SSB	1643		238	W40	05	27.8			0	0	E	PALE		286 W87
24	DSD	1652E	1702D	S14	E77	05	30.5		03	9	9	E	RAMY	6648	
24	AFS	1700E	0246D	S30	W33	05	22.1		02	9	9	E	PALE	6637	
24	AFS	1710E	0244D	S15	W38	05	21.8		02	8	8	E	PALE	6646	
24	ADF	1715E	1729D	S28	W35	05	22.0	1	02	9	9	E	PALE	6637	
24	ADF	1722E	0248D	N02	E10	05	25.5	1	03	9	9	E	PALE	6645	
24	SDF	1855E	1325D	N32	W48	05	21.0		06	0	0	E	HOLL		
25	AFS	0237E	0921D	N17	E41	05	28.2		03	7	7	E	LEAR	6644	
25	AFS	0318E	0921D	N17	W08	05	24.5		02	9	7	E	LEAR	6647	
25	AFS	0615E	1735D	N22	E39	05	28.2	2	04	9	9	E	SVTO	6644	
25	AFS	0616E	1735D	N17	W11	05	24.4		02	9	9	E	SVTO	6647	
25	AFS	0617E	1735D	N04	E00	05	25.3	1	03	9	9	E	SVTO	6645	
25	ASR	0747E	1735D	S10	E90	06	1.1			8	8	E	SVTO		
25	ADF	0748E	1735D	N05	W02	05	25.2	1	11	9	9	E	SVTO	6645	
25	SDF	0921E	0320D	N43	E90	06	1.8		42	0	0	E	LEAR		
25	SDF	0921E	0320D	N51	E25	05	27.5		11	0	0	E	LEAR		
25	ADF	1248E	0148D	S14	W47	05	22.0	1	06	9	9	E	HOLL	6633	
25	AFS	1303E	0152D	N02	E35	05	28.1		03	9	9	E	HOLL	6644	
25	AFS	1309E	0152D	N03	W04	05	25.2		02	8	7	E	HOLL	6645	
25	AFS	1313E	0152D	S16	W50	05	21.7		02	9	9	E	HOLL	6646	
25	DSD	1313E	2210D	S16	W48	05	21.9		03	9	9	E	HOLL	6646	
25	AFS	1316E	0152D	N16	W15	05	24.4		02	9	9	E	HOLL	6647	
25	ASR	1319E	0152D	S07	E90	06	1.3			9	9	E	HOLL	6648	
25	SSB	1325		237	W51	05	28.7			0	0	E	HOLL		
25	APR	1642E	0152D	S34	W90	05	18.5	2		9	9	E	HOLL		
25	APR	1709E	0447D	S34	W90	05	18.5			8	9	E	PALE		
25	ASR	1720E	1734D	N13	W90	05	18.9			9	9	E	PALE		
25	CAP	1728E	1940D	N11	W90	05	18.9		20	9	9	E	HOLL		
25	EPL	1734E	1755D	N09	W90	05	19.0			9	9	E	PALE		
25	SDF	1735E	0437D	N44	E90	06	2.2		46	0	0	E	SVTO		
25	DSD	1741E	0447D	S13	W51	05	21.9		03	9	9	E	PALE	6633	
25	ASR	1755E	0447D	N08	W90	05	19.0			9	9	E	PALE		
25	ADF	1801E	0359D	N16	W56	05	21.5		04	7	5	E	PALE	6636	
25	ASR	1802E	2050D	S08	E90	06	1.5			9	9	E	PALE		
25	ADF	1816E	0447D	S18	W66	05	20.7		07	9	9	E	PALE	6640	
25	ADF	1947E	0447D	N06	W04	05	25.5		02	6	6	E	PALE	6645	
25	AFS	1947E	0447D	N17	W17	05	24.5		02	9	9	E	PALE	6647	
25	ADF	1947E	0447D	S11	E68	05	30.9		06	9	9	E	PALE	6648	

ACTIVE PROMINENCES AND FILAMENTS

MAY 1991

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
25	DSD	1947E	0447D	S14	W51	05	22.0		02	9	9	E	PALE	6646	
25	ADF	1947E	0447D	S23	W04	05	25.5		02	9	8	E	PALE	6643	
25	AFS	1947E	0447D	S31	E30	05	28.2		09	9	9	E	PALE	6644	
25	DSD	2324E	0152D	S17	W55	05	21.8		06	9	9	E	HOLL	6646	
26	DSD	0027E	0152D	N14	W72	05	20.6		05	9	9	E	HOLL	6636	
26	AFS	0037E	0933D	N17	W21	05	24.4		03	9	9	E	LEAR	6647	
26	SDF	0437E	0841D	S29	E19	05	27.7		08	0	0	E	SVTO		
26	ASR	0555E	1725D	N08	E90	06	2.0			9	9	E	SVTO		
26	AFS	0556E	1725D	N20	E26	05	28.2	1	04	9	9	E	SVTO	6644	
26	AFS	0557E	1725D	N17	W25	05	24.3		03	9	9	E	SVTO	6647	
26	AFS	0558E	1725D	N20	W15	05	25.1		02	9	9	E	SVTO	6650	
26	APR	0739E	1725D	N32	E89	06	2.4	1		9	9	E	SVTO		
26	ASR	0820E	0933D	N43	E90	06	2.8			9	9	E	LEAR		
26	ASR	0820E	0933D	S10	E90	06	2.1			9	9	E	LEAR		
26	ADF	0955E	1035D	N34	W61	05	21.5	1				V	KHAR		
26	DSD	1025E	1053	N21	E27	05	28.5		04	9	9	E	SVTO	6644	
26	AFS	1222E	2132D	S13	E44	05	29.8		02	9	9	E	RAMY	6649	
26	AFS	1226E	2132D	N18	W27	05	24.5		02	9	9	E	RAMY	6647	
26	DSD	1227E	2132D	S10	W63	05	21.8		04	9	9	E	RAMY	6646	
26	AFS	1227E	2132D	S13	W63	05	21.8		02	9	9	E	RAMY	6646	
26	DSD	1229E	2132D	N20	E27	05	28.6		05	9	9	E	RAMY	6644	
26	AFS	1229E	2132D	N21	E25	05	28.4		02	9	9	E	RAMY	6644	
26	APR	1234E	2132D	S30	W90	05	19.4	1		9	9	E	RAMY	6641	
26	APR	1237E	2132D	S16	W90	05	19.7	1		9	9	E	RAMY	6633	
26	ASR	1324E	2132D	N05	E90	06	2.3			9	9	E	RAMY	6654	
26	APR	1327E	2036D	N31	E90	06	2.7	1		9	9	E	RAMY		
26	AFS	1328E	2132D	S26	E08	05	27.2		02	9	9	E	RAMY	6651	
26	AFS	1329E	2132D	N19	W19	05	25.1		02	9	9	E	RAMY	6650	
26	ASR	1330E	0145D	N06	E90	06	2.3			9	9	E	HOLL	6654	
26	ADF	1331E	2132D	S05	E76	06	1.2	1	07	9	9	E	RAMY	6652	
26	AFS	1334E	0145D	N19	E22	05	28.2		03	9	9	E	HOLL	6644	
26	SSB	1334		178	W05	06	1.4			0	0	E	RAMY		235 W62
26	AFS	1340E	0145D	S15	W63	05	21.8		02	9	9	E	HOLL	6646	
26	AFS	1345E	0145D	N17	W28	05	24.4		03	9	9	E	HOLL	6647	
26	AFS	1346E	0145D	S13	E42	05	29.7		02	9	9	E	HOLL	6649	
26	AFS	1424E	0145D	S24	E36	05	29.4		02	9	9	E	HOLL	6653	
26	AFS	1700E	0145D	S26	E07	05	27.2		03	9	9	E	HOLL	6651	
26	SSB	1702		189	W18	06	2.5			0	0	E	HOLL		237 W66
26	ASR	1759E	0458D	N06	E90	06	2.5			9	9	E	PALE		
26	ADF	1759E	0458D	S14	E89	06	2.5	1	10	9	9	E	PALE	6652	
26	ASR	1759E	2016D	S07	E90	06	2.5			9	9	E	PALE	6652	
26	ASR	1759E	2016D	S14	E90	06	2.5			9	9	E	PALE	6652	
26	ADF	1815E	0458D	N18	W71	05	21.3		08	9	9	E	PALE	6638	
26	ADF	1815E	0458D	N27	E21	05	28.4	1	08	9	9	E	PALE	6644	
26	DSD	1815E	0458D	S10	W68	05	21.6		02	9	9	E	PALE	6646	
26	AFS	1820E	0458D	S12	E41	05	29.8		03	9	9	E	PALE	6647	
26	AFS	1820E	0458D	S13	E85	06	2.2		04	9	9	E	PALE	6649	
26	ASR	1830E	0145D	S09	E90	06	2.5			9	9	E	HOLL		
26	APR	1830E	0145D	S15	E90	06	2.6	1		9	9	E	HOLL		
26	ADF	1850E	0145D	N26	E73	06	1.4	1	18	9	9	E	HOLL		
26	APR	2147E	0200D	S15	W90	05	20.1	1				C	VORO		
26	BSL	2249	2315	N05	E90	06	2.7	1				C	VORO		
26	SSB	2310		177	W10	06	1.7			0	0	E	PALE		202 W35
26	AFS	2320E	0458D	S22	E05	05	27.3		03	8	8	E	PALE	6651	
26	DSD	2324E	0152D	S17	W55	05	22.8		06	9	9	E	HOLL	6646	
26	ASR	2330E	0458D	S14	W88	05	20.3			9	9	E	PALE	6633	
26	ASR	2330E	0458D	S19	W89	05	20.2			8	8	E	PALE	6640	
26	APR	2330	0126	S12	W90	05	20.2	1				C	VORO		
27	APR	0007	0200D	N10	E90	06	2.8	1				C	VORO		
27	ASR	0010E	0910D	S10	W90	05	20.2			9	9	E	LEAR	6633	
27	AFS	0011E	0910D	N18	W33	05	24.5		02	9	9	E	LEAR	6647	
27	AFS	0012E	0910D	S17	E43	05	30.3		01	9	9	E	LEAR	6648	
27	AFS	0013E	0910D	N22	W24	05	25.2		02	9	9	E	LEAR	6650	
27	ASR	0014E	0910D	N06	E90	06	2.7			9	9	E	LEAR		
27	ASR	0015E	0116D	S08	E90	06	2.7			9	9	E	PALE		
27	AFS	0035E	0458D	N21	W25	05	25.1		02	9	9	E	PALE	6650	
27	AFS	0040E	0458D	N22	E17	05	28.3		03	9	9	E	PALE	6644	
27	AFS	0046E	0143D	N20	W25	05	25.1		02	9	9	E	HOLL	6650	

ACTIVE PROMINENCES AND FILAMENTS

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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
27	ADF	0050E	0143D	N07	W17	05	25.8	1	08	9	9	E	HOLL	6645	
27	AFS	0804E	0910D	N01	E06	05	27.8		02	9	9	E	LEAR		
27	ADF	1017E	2113D	N08	E38	05	30.3	1	14	9	9	E	RAMY	6654	
27	AFS	1028E	1412D	S16	E32	05	29.9		03	7	7	E	RAMY	6649	
27	DSD	1030E	1323D	S13	E38	05	30.3		04	9	9	E	RAMY	6648	
27	DSD	1032E	1325D	N16	W43	05	24.2		04	8	8	E	RAMY	6647	
27	ADF	1037E	1326D	N15	E14	05	28.5	1	10	9	9	E	RAMY	6644	
27	ASR	1040E	1550D	N16	W90	05	20.6			9	9	E	RAMY	6638	
27	ASR	1042E	1506D	S11	W90	05	20.7			9	9	E	RAMY	6633	
27	SSB	1055		167	W06	06	1.5			0	0	E	RAMY		194 W33
27	DSD	1255E	0141D	N19	E04	05	27.8		03	8	8	E	HOLL	6644	
27	AFS	1255E	0141D	N20	E09	05	28.2		03	6	6	E	HOLL	6644	
27	ASR	1257E	0141D	S12	W82	05	21.4			8	8	E	HOLL	6646	
27	AFS	1259E	0141D	N17	W41	05	24.4		02	7	7	E	HOLL	6647	
27	ADF	1305E	0141D	S10	E59	06	1.0	1	08	9	9	E	HOLL	6652	
27	ASR	1321E	1858D	N16	W88	05	20.9			8	8	E	HOLL	6638	
27	BSL	1329E	1355D	N05	E67	06	1.6			9	9	E	HOLL	6654	
27	ASR	1330E	1414D	S09	E90	06	3.3			8	8	E	RAMY		
27	ASR	1348E	1859D	N08	E76	06	2.3			9	9	E	HOLL	6654	
27	ASR	1401E	1440D	N09	E80	06	2.6			9	9	E	RAMY	6654	
27	ASR	1533E	1559D	N09	E79	06	2.6			9	9	E	RAMY	6654	
27	SSB	1617		191	W33	06	3.9			0	0	E	HOLL		
27	ASR	1635E	1810D	S20	E90	06	3.6			9	9	E	RAMY		
27	BSL	1642E	1708D	N07	E68	06	1.8			9	9	E	PALE	6654	
27	BSL	1644E	1714D	N05	E68	06	1.8			9	9	E	HOLL	6654	Flare Associated
27	BSL	1644E	1710D	S07	E65	06	1.6			9	9	E	RAMY	6654	
27	DSD	1650E	0458D	N17	W47	05	24.1		04	9	9	E	PALE	6647	
27	AFS	1650E	0458D	S25	E06	05	28.2		03	9	9	E	PALE	6651	
27	AFS	1650E	2052D	N21	W34	05	25.1		02	8	8	E	PALE	6650	
27	AFS	1650E	2053D	N18	W43	05	24.4		03	9	9	E	PALE	6647	
27	SSB	1656		177	W19	06	2.6			0	0	E	PALE		196 W38 209 W51
27	DSD	1656E	0458D	N22	E01	05	27.8		05	9	9	E	PALE	6644	
27	AFS	1656E	0458D	N22	E08	05	28.3		04	9	9	E	PALE	6644	
27	AFS	1656E	2053D	N11	E05	05	28.1		02	7	8	E	PALE		
27	DSD	1708E	1930D	N07	E68	06	1.8		18	9	9	E	PALE	6654	
27	ASR	1759E	0458D	N06	E90	06	3.5			9	9	E	PALE		
27	ADF	1759E	0458D	S14	E89	06	3.5	1	10	9	9	E	PALE	6652	
27	BSL	1802	1831	N05	E68	06	1.8			9	9	E	RAMY	6654	
27	BSL	1805E	1850D	N05	E67	06	1.8			9	9	E	HOLL	6654	Flare Associated
27	ADF	1815E	0458D	N18	W71	05	22.3		08	9	9	E	PALE	6638	
27	ADF	1815E	0458D	N27	E21	05	29.4	1	08	9	9	E	PALE	6644	
27	DSD	1815E	0458D	S10	W68	05	22.6		02	9	9	E	PALE	6646	
27	AFS	1820E	0458D	S12	E41	05	30.8		03	9	9	E	PALE	6647	
27	AFS	1820E	0458D	S13	E85	06	3.2		04	9	9	E	PALE	6649	
27	ASR	1824E	1936D	S22	W90	05	20.8			9	9	E	RAMY		
27	ASR	1914E	2240D	N16	W90	05	21.0			9	9	E	PALE	6638	
27	BSL	1931E	2032D	N05	E65	06	1.7			9	9	E	HOLL	6654	Flare Associated
27	ASR	2029E	0128D	N17	W90	05	21.0			9	9	E	HOLL	6638	
27	CRN	2032E	2151D	N08	E90	06	3.6		27	9	9	E	HOLL		
27	DSD	2111E	2329D	N06	E68	06	2.0		12	9	9	E	PALE	6654	
27	ASR	2119E	0458D	S13	W88	05	21.2			9	9	E	PALE	6646	
27	MDP	2151E	0129D	N01	E90	06	3.6			9	9	E	HOLL		
27	AFS	2320E	0458D	S22	E05	05	28.3		03	8	8	E	PALE	6651	
27	BSL	2323E	0000D	N04	E62	06	1.6			9	9	E	HOLL	6654	Flare Associated
27	BSL	2329E	0055D	N06	E66	06	1.9			9	9	E	PALE	6654	Flare Associated
27	ASR	2330E	0458D	S14	W88	05	21.3			9	9	E	PALE	6633	
28	LPS	0000E	0112D	N07	E67	06	2.0			9	9	E	HOLL	6654	
28	LPS	0000E	0120D	N05	E90	06	3.7			9	9	E	LEAR	6654	
28	DSD	0055E	0129D	N05	E65	06	1.9		05	9	9	E	PALE	6654	
28	AFS	0056E	0911D	N20	E06	05	28.5		02	9	9	E	LEAR	6644	
28	AFS	0057E	0911D	S16	E31	05	30.4		02	9	9	E	LEAR	6648	
28	ADF	0114E	0911D	S14	E55	06	1.2	2	09	9	9	E	LEAR	6652	
28	BSD	0115E	0159D	N07	E66	06	2.0		08	9	9	E	PALE	6654	
28	DSD	0122E	0458D	N11	E00	05	28.0		04	9	9	E	PALE		
28	BSL	0129E	0224D	N05	E65	06	1.9			9	9	E	PALE	6654	Flare Associated
28	BSL	0135E	0141D	N05	E57	06	1.3			9	9	E	HOLL	6654	
28	DSD	0224E	0359D	N05	E66	06	2.0		05	9	9	E	PALE	6654	
28	BSD	0315E	0352D	N07	E64	06	1.9		26	9	9	E	PALE	6654	
28	BSL	0359E	0458D	N04	E63	06	1.9			9	9	E	PALE	6654	

ACTIVE PROMINENCES AND FILAMENTS

MAY 1991

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
28	ADF	0438E	1701D	N11	E65	06	2.1	1	12	9	9	E	SVTO	6654	
28	SSB	0458		176	W25	06	3.1			0	0	E	SVTO		
28	DSD	0520E	1019D	N06	E63	06	1.9		10	9	9	E	SVTO	6654	Flare Associated
28	DSD	0536E	0627D	N11	E70	06	2.5		04	9	9	E	SVTO	6654	Flare Associated
28	APR	0728	0738D	S14	W90	05	21.5	1				C	ABST		
28	DSD	1032E	1208D	N04	E59	06	1.8		19	9	9	E	RAMY	6654	
28	AFS	1032E	1208D	N06	E58	06	1.8		02	9	9	E	RAMY	6654	
28	DSD	1039E	1208D	N20	W07	05	27.9		03	9	9	E	RAMY	6644	
28	AFS	1039E	1208D	N21	W01	05	28.4		02	7	7	E	RAMY	6654	
28	AFS	1041E	1208D	N13	W03	05	28.2		02	9	9	E	RAMY		
28	ADF	1048E	1208D	S06	E52	06	1.3	1	05	9	9	E	RAMY	6652	
28	AFS	1255E	0149D	N13	W05	05	28.2		02	9	9	E	HOLL		
28	DSD	1300E	0149D	N02	E55	06	1.6		17	9	9	E	HOLL	6654	Flare Associated
28	ASR	1321E	0149D	S12	W90	05	21.8			9	9	E	HOLL	6646	
28	CRN	1411E	2309D	N08	E90	06	4.3		07	8	8	E	HOLL		
28	AFS	1428E	0051D	N17	W54	05	24.5		02	9	9	E	HOLL	6647	
28	AFS	1450E	0149D	S24	W19	05	27.1		02	9	9	E	HOLL	6651	
28	SSB	1500		154	W08	06	1.7			0	0	E	HOLL		198 W52
28	AFS	1502E	0149D	N22	W04	05	28.3		04	9	9	E	HOLL	6644	
28	AFS	1630E	0458D	N18	W54	05	24.6		03	9	9	E	PALE	6647	
28	AFS	1630E	2003D	N21	W04	05	28.4		04	9	9	E	PALE	6644	
28	AFS	1635E	0458D	N13	W06	05	28.2		02	9	9	E	PALE		
28	ASR	1635E	0458D	S10	W90	05	21.9			9	9	E	PALE	6646	
28	AFS	1635E	0458D	S25	W17	05	27.4		03	9	9	E	PALE	6651	
28	SSB	1659		178	W33	06	3.9			0	0	E	PALE		196 W51
28	APR	1940E	2316D	S32	W90	05	21.7	1		9	9	E	HOLL	6637	
28	DSD	1941E	0149D	N21	W12	05	27.9		04	9	9	E	HOLL	6644	
28	CAP	1945E	0149D	S12	W90	05	22.0	1	01	9	9	E	HOLL	6646	
28	DSD	2003E	0458D	N21	W09	05	28.1		04	9	9	E	PALE	6644	
28	AFS	2017E	0149D	N05	E57	06	2.1		01	9	9	E	HOLL	6654	
28	ADF	2018E	0052D	N03	E57	06	2.1	1	08	9	9	E	HOLL	6654	
28	ADF	2021E	0149D	S14	E55	06	2.0	1	06	9	9	E	HOLL	6652	
28	ASR	2029E	0128D	N17	W90	05	22.0			9	9	E	HOLL	6638	
28	BSL	2147E	2228D	S35	W77	05	22.7			9	9	E	HOLL	6637	
28	EPL	2147E	2214D	S36	W90	05	21.7			9	9	E	PALE	6637	
28	MDP	2151E	0129D	N01	E90	06	4.6			9	9	E	HOLL		
28	BSD	2216E	2252D	N04	E52	06	1.8		43	9	9	E	HOLL	6654	Flare Associated
28	APR	2228E	0230D	S13	W90	05	22.1	1				C	VORO		
28	APR	2228E	0230D	S18	E90	06	4.8	1				C	VORO		
28	APR	2228E	0230D	S29	E90	06	5.0	1				C	VORO		
28	ADF	2229E	0228D	N37	E07	05	29.5	1				C	VORO		
28	EPL	2232	2346D	S32	W90	05	21.8	1				C	VORO		
28	APR	2253E	2258	S35	W88	05	21.9	3		9	9	E	PALE	6637	
28	EPL	2258	2315	S35	W88	05	21.9			9	9	E	PALE	6637	
28	EPL	2259E	2313D	N34	E90	06	5.1			9	9	E	HOLL	6637	
28	BSL	2323E	0000D	N04	E62	06	2.6			9	9	E	HOLL	6654	Flare Associated
28	BSL	2330E	2359	N05	E65	06	2.8			9	9	E	LEAR	6654	
29	AFS	0114E	0415D	N01	E51	06	1.9		03	9	9	E	LEAR	6654	
29	ADF	0114E	0415D	N02	E53	06	2.0	1	08	9	9	E	LEAR	6654	
29	ADF	0141E	0415D	S09	E44	06	1.4	1	03	9	9	E	LEAR	6652	
29	ADF	0142E	0415D	N13	W14	05	28.0	1	03	9	9	E	LEAR	6656	
29	ASR	0200E	0415D	S10	W90	05	22.3			9	9	E	LEAR	6646	
29	DSD	0435E	1018D	N06	E51	06	2.0		03	9	9	E	SVTO	6654	
29	AFS	0435E	1018D	N08	E48	06	1.8		02	9	9	E	SVTO	6654	
29	ASR	0437E	1315D	S17	W90	05	22.3			9	9	E	SVTO	6646	
29	DSD	0452E	0956D	N06	E47	06	1.7		05	9	9	E	SVTO	6654	Flare Associated
29	AFS	0502E	1745D	S06	E42	06	1.3		02	8	8	E	SVTO	6652	
29	AFS	0524E	1745D	S26	W26	05	27.2		03	9	9	E	SVTO	6651	
29	SSB	0527		178	W40	06	4.6			0	0	E	SVTO		
29	AFS	0532E	1745D	N12	W14	05	28.2		02	7	8	E	SVTO	6656	
29	APR	0540	0625D	S14	W90	05	22.4	1				C	ABST		
29	ADF	0606E	1745D	N09	E54	06	2.3	1	09	9	9	E	SVTO	6654	
29	APR	0640E	0805D	S14	W90	05	22.5	1				C	ABST		
29	BSL	0747E	0805D	S17	W90	05	22.5	1				C	ABST		
29	DSD	1219E	0151D	N13	E52	06	2.4		15	9	9	E	HOLL	6654	
29	DSD	1230E	0151D	N18	W18	05	28.1		02	9	9	E	HOLL	6644	
29	DSD	1237E	0151D	N18	W53	05	25.5		02	9	9	E	HOLL	6650	
29	SSB	1245		142	W08	06	1.7			0	0	E	HOLL		
29	AFS	1315E	0151D	S24	W32	05	27.1		02	9	9	E	HOLL	6651	

ACTIVE PROMINENCES AND FILAMENTS

MAY 1991

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	AFS	1323E	0151D	N13	W18	05	28.2		02	9	9	E	HOLL	6656	
29	DSD	1415E	0151D	S09	E32	06	1.0		09	9	9	E	HOLL	6652	Flare Associated
29	SDF	1428E	1537D	S06	E35	06	1.2		07	9	9	E	HOLL	6652	Flare Associated
29	DSD	1716E	0456D	N20	W26	05	27.7		02	9	9	E	PALE	6644	
29	AFS	1719E	0150D	S24	W34	05	27.1		02	9	9	E	PALE	6651	
29	DSD	1722E	0456D	N06	E46	06	2.2		02	9	9	E	PALE	6654	
29	AFS	1731E	0456D	N13	W21	05	28.1		02	9	9	E	PALE	6656	
29	AFS	1735E	0456D	S06	W26	05	27.8		02	8	8	E	PALE	6652	
29	SSB	1740		179	W48	06	5.4			0	0	E	PALE		
29	SDF	1745E	0437D	S04	W17	05	28.5		13	0	0	E	SVTO	6648	
29	ADF	2107E	0153D	N04	E42	06	2.0	1	05	9	9	E	PALE	6654	
29	APR	2330E	0040D	N41	W90	05	22.6	1				C	VORO		
29	DSD	2346E	0111D	N05	E38	06	1.8		04	9	9	E	LEAR	6654	
29	LPS	2352E	0151D	N04	E45	06	2.3			9	9	E	HOLL	6654	Flare Associated
29	DSD	2352E	0230D	N07	E33	06	1.5	1	05	9	9	E	PALE	6654	
29	BSD	2358E	0028D	N04	E37	06	1.8		13	9	9	E	HOLL	6654	Flare Associated
30	AFS	0215E	0456D	N11	E45	06	2.5		03	9	9	E	PALE	6654	
30	SSB	0437		156	W31	06	3.6			0	0	E	SVTO		179 W54
30	ADF	0510E	1750D	N07	E44	06	2.5	1	07	9	9	E	SVTO	6654	
30	ADF	0528E	1035D	N04	W56	05	26.0	1	07	5	6	E	SVTO	6645	
30	AFS	0534E	1535D	N12	W28	05	28.1		02	7	9	E	SVTO	6656	
30	DSD	0944E	1030D	N05	E31	06	1.7		09	9	9	E	SVTO	6654	Flare Associated
30	SDF	1035E	1224D	N04	W56	05	26.2		07	0	0	E	SVTO	6645	
30	DSD	1258E	2125D	S09	E20	06	1.0		02	9	9	E	HOLL	6652	
30	DSD	1302E	2127D	N04	E29	06	1.7		02	9	9	E	HOLL	6654	
30	AFS	1310E	0130D	S05	E35	06	2.2		02	9	9	E	HOLL		
30	SSB	1314		156	W36	06	4.0			0	0	E	HOLL		
30	ASR	1442E	0130D	N16	W88	05	23.9			8	8	E	HOLL	6647	
30	SSB	1715		185	W18	06	6.2			0	0	E	PALE		141 W36
30	DSD	1716E	0456D	N20	W26	05	28.7		02	9	9	E	PALE	6644	
30	DSD	1722E	0456D	S24	W34	05	28.1		02	9	9	E	PALE	6654	
30	AFS	1731E	0456D	N13	W21	05	29.1		02	9	9	E	PALE	6656	
30	AFS	1735E	0456D	S06	W26	05	28.8		02	8	8	E	PALE	6652	
30	SDF	1750E	0527D	S25	E55	06	4.0		22	0	0	E	SVTO		
30	DSD	1827E	0224D	N07	E37	06	2.5		04	9	9	E	PALE	6654	
30	DSD	1827E	0224D	N14	W32	05	28.3		02	9	9	E	PALE	6656	
30	DSD	1827E	0224D	N20	W38	05	27.9		03	9	9	E	PALE	6644	
30	AFS	1827E	0224D	S05	E33	06	2.2		02	9	9	E	PALE	6655	
30	DSD	1827E	0224D	S07	E24	06	1.6		04	9	9	E	PALE	6652	
30	DSD	1827E	0224D	S15	W12	05	29.9		02	9	9	E	PALE	6649	
30	DSD	1827E	0224D	S17	E01	05	30.8		02	8	8	E	PALE	6648	
30	ADF	1827E	0224D	S27	W47	05	27.1		03	9	9	E	PALE	6651	
30	APR	2020E	0224D	N47	W90	05	23.3			9	9	E	PALE		
30	APR	2020E	0224D	S23	E90	06	6.8			9	9	E	PALE		
30	AFS	2124E	0130D	S06	E30	06	2.1		02	9	9	E	HOLL	6655	
30	ADF	2125E	0130D	S15	E03	05	31.1	1	04	9	9	E	HOLL	6648	
30	SDF	2146E	1625D	S23	W24	05	29.0		04	0	0	E	HOLL		
30	SDF	2146E	1625D	S32	E62	06	4.8		04	0	0	E	HOLL		
31	AFS	0115E	0930D	S08	E27	06	2.1		02	8	9	E	LEAR	6655	
31	AFS	0116E	0930D	N12	W39	05	28.1		02	9	9	E	LEAR	6656	
31	ADF	0117E	0930D	S07	E19	06	1.5	1	06	9	9	E	LEAR	6652	
31	ADF	0520E	1751D	S07	E18	06	1.6	1	09	9	9	E	SVTO	6652	
31	AFS	0522E	1751D	S09	E56	06	4.4		02	9	9	E	SVTO		
31	SSB	0527		179	W67	06	7.3			0	0	E	SVTO		155 W43
31	SDF	0527E	0917D	N03	E39	06	3.1		06	0	0	E	SVTO		
31	APR	0530E	1159D	N17	W90	05	24.4	2		9	9	E	SVTO	6647	
31	ASR	0531E	1534D	N19	W90	05	24.4			9	9	E	SVTO	6650	
31	ADF	0548E	1751D	N08	E22	06	1.9	1	06	9	9	E	SVTO	6654	
31	ADF	0555E	1751D	N20	W33	05	28.7	1	05	9	9	E	SVTO	6644	
31	AFS	0638E	1751D	S14	W02	05	31.1		02	9	9	E	SVTO	6648	
31	ASR	0641E	1751D	N19	E90	06	7.1			9	9	E	SVTO		
31	ASR	1028E	1751D	N10	E90	06	7.2			9	9	E	SVTO		
31	DSD	1153E	1418D	N19	W43	05	28.2		05	9	9	E	SVTO	6644	
31	AFS	1214E	1425D	N08	E15	06	1.6		02	9	9	E	SVTO	6654	
31	ADF	1340E	0101D	S08	E07	06	1.1	1	08	9	9	E	HOLL	6652	
31	ADF	1343E	2330D	N19	W42	05	28.4	1	10	9	9	E	HOLL	6644	
31	SSB	1410		156	W50	06	5.3			0	0	E	HOLL		179 W73
31	DSD	1425E	1533D	N07	E14	06	1.6		04	9	9	E	SVTO	6654	

ACTIVE PROMINENCES AND FILAMENTS

MAY 1991

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
31	ASR	1543E	1624D	N15	W90	05	24.8			9	9	E	SVTO	6647	
31	DSD	1635E	1706D	N07	E10	06	1.4		09	9	9	E	SVTO	6654	Flare Associated
31	DSD	1647E	2213D	N06	E11	06	1.5		09	9	9	E	HOLL	6654	Flare Associated
31	DSD	1703E	0318D	N04	E07	06	1.2		08	9	9	E	PALE	6654	Flare Associated
31	DSD	1734E	0318D	S07	E05	06	1.1		04	9	9	E	PALE	6652	
31	APR	1757E	0318D	S21	E90	06	7.6			9	9	E	PALE		
31	SSB	1801		179	W22	06	6.8			0	0	E	PALE		155 W44
31	DSD	1831E	0318D	S16	W10	05	31.0		04	9	9	E	PALE	6648	

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 567 Part II

Page

1992 INTERNATIONAL GEOPHYSICAL CALENDAR. 107-112
with recommended scientific programs

International Geophysical Calendar 1992

This Calendar continues the series begun for the IGY years 1957-58, and is issued annually to recommend dates for solar and geophysical observations which cannot be carried out continuously. Thus, the amount of observational data in existence tends to be larger on Calendar days. The recommendations on data reduction and especially the flow of data to **World Data Centers (WDCs)** in many instances emphasize Calendar days. The Calendar is prepared by the **International Ursigram and World Days Service (IUWDS)** with the advice of spokesmen for the various scientific disciplines. For some programs, greater detail concerning recommendations appears from time to time published in **IAGA News, IUGG Chronicle, URSI Information Bulletin** or other scientific journals or newsletters.

The definitions of the designated days remain as described on previous Calendars. **Universal Time (UT)** is the standard time for all world days. **Regular Geophysical Days (RGD)** are each Wednesday. **Regular World Days (RWD)** are three consecutive days each month (always Tuesday, Wednesday and Thursday near the middle of the month). **Priority Regular World Days (PRWD)** are the **RWD** which fall on Wednesdays. **Quarterly World Days (QWD)** are one day each quarter and are the **PRWD** which fall in the **World Geophysical Intervals (WGI)**. The **WGI** are fourteen consecutive days in each season, beginning on Monday of the selected month, and normally shift from year to year. In 1992 the **WGI** will be March, June, September and December.

The Solar Eclipses are:

a.) 4-5 January 1992 (annular) begins at N11 E137, crosses Central Pacific Ocean (crossing Oceania, then Philippines, Japan, extreme coast of N.E. Asia, N. Australia, and W. coast of N. America), ends at N33 W118; maximum duration 12 minutes.

b.) 30 June 1992 (total) begins at S35 E35, crosses South Atlantic Ocean (crossing Central S. America, then S.W. Africa); ends at S51 E39; maximum duration 5 minutes 20 seconds; .

c.) 23-24 December 1992 (partial), greatest eclipsing in the Arctic region; also in E. China, Korea, Japan, extreme E. of U.S.S.R., and S.W. Alaska; maximum phase 0.84.

Meteor Showers (selected by R. Hawkes, Canada) include important visual showers and also unusual showers observable mainly by radio and radar techniques. The dates for Northern Hemisphere meteor showers are: Jan 3-4 (Quadrantid); Apr 21-23 (Lyrid); May 3-6 (Eta-Aquarid); Jun 5-11 (Arietid, Zeta-Perseid); Jul 27-29 (Beta-Taurid); Aug 10-14 (Perseid); Oct 21-22 (Orionid); Nov 17-18 (Leonid); Dec 12-14 (Geminid); Dec 22-23, 1992 (Ursid); and Jan 3-4, 1993 (Quadrantid). The dates for Southern Hemisphere meteor showers are: Apr 23 (Pi-Puppid); May 3-6 (Eta-Aquarid); Jun 5-11 (Zeta-Perseid, Beta-Taurid); Jul 27-29 (S. Delta-Aquarid); Oct 21-22 (Orionid); Nov 17-18 (Leonid); and Dec 12-14, 1992 (Geminid).

The occurrence of unusual solar or geophysical conditions is announced or forecast by the IUWDS through various types of geophysical **"Alerts"** (which are widely distributed by telegram and radio broadcast on a current schedule). Stratospheric warmings **(STRATWARM)** are also designated. The meteorological telecommunications network coordinated by WMO carries these worldwide Alerts once daily soon after 0400 UT. For definitions of Alerts see IUWDS "Synoptic Codes for Solar and Geophysical Data, Third Revised Edition 1973" and its amendments. **Retrospective World Intervals** are selected and announced by MONSEE and elsewhere to provide additional analyzed data for particular events studied in the ICSU Scientific Committee on Solar-Terrestrial Physics (SCOSTEP) programs.

RECOMMENDED SCIENTIFIC PROGRAMS

OPERATIONAL EDITION

(The following material was reviewed in 1991 by spokesmen of IAGA, WMO and URSI as suitable for coordinated geophysical programs in 1992.)

Airglow and Aurora Phenomena. Airglow and auroral observatories operate with their full capacity around the New Moon periods. However, for progress in understanding the mechanism of many phenomena, such as low latitude aurora, the coordinated use of all available techniques, optical and radio, from the ground and in space is required. Thus, for the airglow and aurora 7-day periods on the Calendar, ionosonde, incoherent scatter, special satellite or balloon observations, etc., are especially encouraged. Periods of approximately one weeks' duration centered on the New Moon are proposed for high resolution of ionospheric, auroral and magnetospheric observations at high latitudes during northern winter.

Atmospheric Electricity. Non-continuous measurements and data reduction for continuous measurements of atmospheric electric current density, field, conductivities, space charges, ion number densities, ionosphere potentials, condensation nuclei, etc.; both at ground as well as with radiosondes, aircraft, rockets; should be done with first priority on the **RGD** each Wednesday, beginning on 1 January 1992 at 0000 UT, 8 January at 0600 UT, 15 January at 1200 UT, 22 January at 1800 UT, etc. (beginning hour shifts six hours each week, but is always on Wednesday). Minimum program is at the same time on **PRWD** beginning with 15 January at 1200 UT. Data reduction for continuous measurements should be extended, if possible, to cover at least the full RGD including, in addition, at least 6 hours prior to indicated beginning time. Measurements prohibited by bad weather should be done 24 hours later. Results on sferics and ELF are wanted with first priority for the same hours, short-period measurements centered around the minutes 35-50 of the hours indicated. **Priority Weeks** are the weeks which contain a PRWD; minimum priority weeks are the ones with a QWD. The World Data Centre for Atmospheric Electricity, 7 Karbysheva, Leningrad 194018, USSR, is the collection point for data and information on measurements.

Geomagnetic Phenomena. It has always been a leading principle for geomagnetic observatories that operations should be as continuous as possible and the great majority of stations undertake the same program without regard to the Calendar.

Stations equipped for making magnetic observations, but which cannot carry out such observations and reductions on a continuous schedule are encouraged to carry out such work at least on RWD (and during times of **MAGSTORM** Alert).

Ionospheric Phenomena. Special attention is continuing on particular events which cannot be forecast in advance with reasonable certainty. These will be identified by Retrospective World Intervals. The importance of obtaining full observational coverage is therefore stressed even if it is possible to analyze the detailed data only for the chosen events. In the case of vertical incidence sounding, the need to obtain quarter-hourly ionograms at as many stations as possible is particularly stressed and takes priority over recommendation (a) below when both are not practical.

For the vertical incidence (VI) sounding program, the summary recommendations are: (a) All stations should make soundings on the hour and every quarter hour; (b) On **RWDs**, ionogram soundings should be made at least every quarter hour and preferably every five minutes or more frequently, particularly at high latitudes; (c) All stations are encouraged to make f-plots on **RWDs**; f-plots should be made for high latitude stations, and for so-called "representative" stations at lower latitudes for all days (i.e., including **RWDs** and **WGIs**) (Continuous records of ionospheric parameters are acceptable in place of f-plots at temperate and low latitude stations); (d) Copies of hourly ionograms with appropriate scales for **QWDs** are to be sent to WDCs; (e) Stations in the eclipse zone and its conjugate area should take continuous observations on solar eclipse days and special observations on adjacent days. See also recommendations under **Airglow and Aurora Phenomena.**

For the incoherent scatter observation program, every effort should be made to obtain measurements at least on the **Incoherent Scatter Coordinated Observation Days**, and intensive series should be attempted whenever possible in WGIs or the **Airglow and Aurora Periods.** The need for collateral VI observations with not more than quarter-hourly spacing at least during all observation periods is stressed. Special programs: Dr. J. Holt, M.I.T. Haystack Observatory, Route 40, Westford, MA 01886 U.S.A., URSI Working Group G.5. Phone: (617)981-5625, e-mail address: AMES::"jmh@chaos.haystack.edu".

For the ionospheric drift or wind measurement by the various radio techniques, observations are recommended to be concentrated on the weeks including **RWDs.**

For traveling ionosphere disturbances, propose special periods for coordinated measurements of gravity waves induced by magnetospheric activity, probably on selected **PRWD** and **RWD.**

For the ionospheric absorption program half-hourly observations are made at least on all **RWDs** and half-hourly tabulations sent to WDCs. Observations should be continuous on **solar eclipse** days for stations in eclipse zone and in its conjugate area. Special efforts should be made to obtain daily absorption measurements at temperate latitude stations during the period of Absorption Winter Anomaly, particularly on days of abnormally high or abnormally low absorption (approximately October-March, Northern Hemisphere; April-September, Southern Hemisphere).

For back-scatter and forward scatter programs, observations should be made and analyzed on all **RWDs** at least.

For synoptic observations of mesospheric (D region) electron densities, several groups have agreed on using the **RGD** for the hours around noon.

For ELF noise measurements involving the earth-ionosphere cavity resonances any special effort should be concentrated during the **WGIs.**

It is recommended that more intensive observations in all programs be considered on days of **unusual meteor activity.**

Meteorology. Particular efforts should be made to carry out an intensified program on the **RGD** -- each Wednesday, UT. A desirable goal would be the scheduling of meteorological rocketsondes, ozone sondes and radiometer sondes on these days, together with maximum-altitude rawinsonde ascents at both 0000 and 1200 UT.

During **WGI** and **STRATWARM** Alert Intervals, intensified programs are also desirable, preferably by the implementation of RGD-type programs (see above) on Mondays and Fridays, as well as on Wednesdays.

Solar Phenomena. Observatories making specialized studies of solar phenomena, particularly using new or complex techniques, such that continuous observation or reporting is impractical, are requested to make special efforts to provide to WDCs data for **solar eclipse** days, **RWDs** and during **PROTON/FLARE ALERTS**. The attention of those recording solar noise spectra, solar magnetic fields and doing specialized optical studies is particularly drawn to this recommendation.

FLARES22(FLAre RESearch at the maximum of solar cycle 22). 1990-1995 worldwide Solar-Terrestrial Energy Program (STEP) project. Aimed at understanding basic physical processes of transient solar activity and its coupling with the solar-terrestrial environment, including times of the various solar **ALERTS**. Coordinates satellite and ground-based observations. Observational campaigns are driven by specific scientific objectives rather than observations per se. Satellites include SOLAR-A, GRO, CORONAS, WIND, GEOTAIL, ULYSSES, etc. Program will focus on international collaboration of data analyses and theoretical work via electronic mail and workshops. For more information, contact Dr. M. Machado, Department of Physics, The University of Alabama in Huntsville, Huntsville, AL 35899 USA. Phone: (205)895-6676; FAX number is (205)895-6790; SPAN e-mail address is SSL::MACHADO or SOLAR::MMACHADO.

SOLTIP (SOlar connection with Transient Interplanetary Processes). Program within the SCOSTEP STEP (Solar-Terrestrial Energy Program) project: 1990-1995. Its focus is on remote and <u>in situ</u> observations and analyses of solar-generated phenomena and their propagation throughout the heliosphere, including times following the various solar **ALERTS**. Desired goals include: (1) interplanetary scintillation observation of remote radio galaxies as well as telemetry signals to/from interplanetary spacecraft; (2) coordination of Earth-orbiting spacecraft such as IMP-8 in the solar wind and solar-orbiting spacecraft such as ICE, GIOTTO, SAKIGAKE, VOYAGER 1/2, PIONEER 10/11, ULYSSES, RELICT, WIND, SOHO, Galileo, and ACE. Contact is Dr. M. Dryer, NOAA R/E/SE, 325 Broadway, Boulder, CO 80303 USA. Phone: (303)497-3978; FAX number (303)497-3645; SPAN e-mail address SELVAX::MDRYER.

Space Research, Interplanetary Phenomena, Cosmic Rays, Aeronomy. Experimenters should take into account that observational effort in other disciplines tends to be intensified on the days marked on the Calendar, and schedule balloon and rocket experiments accordingly if there are no other geophysical reasons for choice. In particular it is desirable to make rocket measurements of ionospheric characteristics on the same day at as many locations as possible; where feasible, experimenters should endeavor to launch rockets to monitor at least normal conditions on the **Quarterly World Days (QWD)** or on **RWDs**, since these are also days when there will be maximum support from ground observations. Also, special efforts should be made to assure recording of telemetry on **QWD** and **Airglow and Aurora Periods** of experiments on satellites and of experiments on spacecraft in orbit around the Sun.

The **International Ursigram and World Days Service (IUWDS)** is a permanent scientific service of the **International Union of Radio Science (URSI)**, with the participation of the **International Astronomical Union** and the **International Union Geodesy and Geophysics.** **IUWDS** adheres to the **Federation of Astronomical and Geophysical Data Analysis Services (FAGS)** of the **International Council of Scientific Unions (ICSU).** The **IUWDS** coordinates the international aspects of the world days program and rapid data interchange.

This Calendar for 1992 has been drawn up by H.E. Coffey, of the IUWDS Steering Committee, in association with spokesmen for the various scientific disciplines in SCOSTEP, IAGA and URSI and other ICSU organizations. Similar Calendars are issued annually beginning with the IGY, 1957-58, and are published in various widely available scientific publications.

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Additional copies are available upon request to IUWDS Chairman, Dr. R. Thompson, IPS Radio and Space Services, Department of Administrative Services, P.O. Box 1548, Chatswood, NSW 2057, Australia (FAX number (61)(2)414 8331; e-mail address is richard@ipso.ips.oz.au), or IUWDS Secretary for World Days, Miss H.E. Coffey, WDC-A for Solar-Terrestrial Physics, NOAA E/GC2, 325 Broadway, Boulder, Colorado 80303, USA (FAX number (303)497-6513; e-mail address is 9555::hcoffey).

Footnotes to front of calendar --

NOTES on other dates and programs of interest:

1. Days with unusual meteor shower activity are: Northern Hemisphere Jan 3-4; Apr 21-23; May 3-6; Jun 5-11; Jul 27-29; Aug 10-14; Oct 21-22; Nov 17-18; Dec 12-14, 22-23, 1992; Jan 3-4, 1993. Southern Hemisphere Apr 23; May 3-6; Jun 5-11; Jul 27-29; Oct 21-22; Nov 17-18; Dec 12-14, 1992.

2. SOLTIP (Solar connection with Transient Interplanetary Processes). Observing Program 1990 - 1995: solar-generated phenomena and their propagation throughout the heliosphere. (See Explanations.)

3. FLARES22 (FLAre RESearch at solar cycle 22 maximum). Observing Program 1990-1995: basic physical processes of transient solar activity and its coupling with solar-terrestrial environment. (See Explanations.)

4. Day intervals that IMP 8 satellite is in the solar wind (begin and end days are generally partial days): 29 Dec 1991-6 Jan 1992; 10-19 Jan; 23-31 Jan; 4-12 Feb; 16-25 Feb; 29 Feb-8 Mar; 13-21 Mar; 26 Mar-3 Apr; 7-15 Apr; 20-28 Apr; 3-10 May; 15-22 May; 28 May-3 Jun; 9-16 Jun; 22-29 Jun; 5-12 Jul; 17-24 Jul; 30 Jul-6 Aug; 12-19 Aug; 23-31 Aug; 7-12 Sep; 19-25 Sep; 1-8 Oct; 14-21 Oct; 26 Oct-2 Nov; 8-15 Nov; 21-28 Nov; 3-11 Dec; 16-24 Dec; 28 Dec 1992-5 Jan 1993. Note that there will not necessarily be total IMP 8 data monitoring coverage during these intervals. (Information kindly provided by the WDC-A for Rockets and Satellites, NASA GSFC, Greenbelt, MD 20771 U.S.A.).

5. + Incoherent Scatter Coordinated Observations Days (see Explanations) starting at 1600 UT on the first day of the intervals indicated, and ending at 1600 UT on the last day of the intervals: 27-29 Jan 1992; 30 Mar-3 Apr CADITS/MLTCS; 5-6 May; 23-24 Jun; 30 Jul-5 Aug CADITS/MLTCS; 22-23 Sep SUNDIAL; 27-28 Oct; 23-26 Nov GISMOS; 26-27 Jan 1993

   where CADITS = Coupling and Dynamics of the Ionosphere-Thermosphere System;
   GISMOS = Global Ionospheric Simultaneous Measurements of Substorms;
   MLTCS = Mesosphere, Lower-Thermosphere Coupling Study;
   SUNDIAL = Coordinated study of the ionosphere/magnetosphere.

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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."