



U.S. DEPARTMENT OF COMMERCE

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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

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NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE

Thomas N. Pyke, Jr., Assistant Administrator

NOVEMBER 1990 NUMBER 555 - Part II

Solar-Geophysical Data comprehensive reports

Data for May 1990

International Standard Serial Number: 0038-0911

Library of Congress Catalog Number: 79-640375 //r81

NATIONAL GEOPHYSICAL DATA CENTER

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Boulder, Colorado

Subscription information is on the inside back cover.

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

NUMBER 555

(Issued in Two Parts)

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May 90

H α SOLAR FLARES

MAY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	
0001	SVTO	01	1226	1227	1251	N26	W68	6037	04	26.3	25	SF		3	E		21		
0002	SVTO	01	1525	1525	1535	S20	W68	6043	04	26.5	10	SF		3	E		14		
		01	1819		1825	No Flare Patrol													
0003	HOLL	01	2000	2007	2024	S10	E30	6046	05	4.1	24	SF		3	E		21		
0004	HOLL	01	2146	2146	2156	S10	E27	6046	05	3.9	10	SF		3	E		15		
		01	2318		2326	No Flare Patrol													
		02	1326		1328	No Flare Patrol													
		02	1406		1414	No Flare Patrol													
		02	1910		1914	No Flare Patrol													
		02	2043		2059	No Flare Patrol													
		02	2136		2149	No Flare Patrol													
		02	2153		2219	No Flare Patrol													
		02	2224		2257	No Flare Patrol													
0005		03	0103	01033	0108	N14	W54	6040	04	29.1	5	SN				22	0.5		
	LEAR	03	0103	0103	0108	N14	W52	6040	04	29.2	5	SF		3	E	21			
	YUNN	03	0103	0106	0107D	N14	W55	6040	04	29.0	4D	SB			P	24	0.5		
0006		03	0714	0717	0730	S15	E50	6048	05	7.1	16	SF B	5.7			56		H	
	SVTO	03	0714	0717	0729	S14	E49	6048	05	7.0	15	SF B	5.7	3	E	57		H	
	LEAR	03	0714	0717	0730	S16	E50	6048	05	7.1	16	SF B	5.7	3	E	55			
0007		03	07491	07512	0757	N14	W57	6040	04	29.1	8	SF B	5.2			31		H	
	LEAR	03	0749	0751	0758	N14	W58	6040	04	29.0	9	SF B	5.2	3	E	35		H	
	KANZ	03	0749	0753	0757	N14	W57	6040	04	29.1	8	SF			V				
	SVTO	03	0750	0751	0755	N14	W56	6040	04	29.2	5	SF B	5.2	3	E	27			
0008	KHAR	03	0850		0900	N19	E83	6049	05	9.7	10	SF		2	V	0855		H	
0009	KANZ	03	0850	0850	0900	S12	E83	6050	05	9.6	10	SF			V				
0010	KHAR	03	0858	0900	0905	N11	W15		05	2.2	7	SF		2	V	0900		H	
0011		03	14053	14071	1412	S14	E43	6048	05	6.8	7	SF				18			
	SVTO	03	1405	1407	1413	S13	E43	6048	05	6.8	8	SF		3	E	18			
	KANZ	03	1408	1408	1412	S14	E43	6048	05	6.8	4	SF			V				
0012	HOLL	03	2225E	2226	2242	N14	E72	6049	05	9.4	17D	SF C	1.1	3	E	25			
0013		03	23591	24013	2410	N15	E70	6049	05	9.3	11	1F				131		EFHU	
	LEAR	03	2359	2401	2409	N15	E70	6049	05	9.3	10	1F		3	E	120			
	HOLL	03	2359	2404	2410	N13	E72	6049	05	9.4	11	1F		3	E	124		UH	
	PEKG	04	0000	0002	0010	N17	E70	6049	05	9.3	10	1N			P	0000	210	E	
	PALE	04	0001E	0001U	0013	N14	E69	6049	05	9.2	12D	SF		3	E	70		F	
0014		04	01106	0103*	0124	S10	W00	6046	05	4.0	14	SF B	6.9			71	1.7	EF	
	HOLL	04	0100E	0103	0127D	S09	E00	6046	05	4.0	27D	SF		2	E	30		F	
	PEKG	04	0110	0116	0125	S10	E00	6046	05	4.0	15	SN			P	0115	168	1.7	
	PALE	04	0116	0116	0122	S10	W01	6046	05	4.0	6	SF B	6.9	3	E	15		E	
0015	PEKG	04	0135	0139	0147	N17	E70	6049	05	9.4	12	1F			C	0140	84		
0016		04	02121	02121	0223	N17	E71	6049	05	9.5	11	SF C	1.1			30			
	LEAR	04	0212	0212	0228	N16	E69	6049	05	9.3	16	SF C	1.1	3	E	26			
	PALE	04	0213	0213	0218	N18	E73	6049	05	9.6	5	SF		3	E	34			
0017		04	05143	05214	0536	N18	E69	6049	05	9.5	22	SF				57		D	
	PEKG	04	0514	0522	0536	N17	E68	6049	05	9.4	22	SN			P	0521	42		
	LEAR	04	0516	0524	0535	N17	E68	6049	05	9.4	19	SF		3	E	45			
	SVTO	04	0517	0525	0540	N18	E68	6049	05	9.4	23	SF		3	E	54			
	ABST	04	0519E	0521	0534	N18	E71	6049	05	9.6	15D	1F			P	0521	87		

H α SOLAR FLARES

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May 90

MAY 1990

Grp #	Sta	Start Day	Max (UT)	End (UT)	Lat	NOAA/ USAF CMD Region	CMP Mo Day	Dur (Min)	Imp Opt Xray	Obs See Type	Time (UT)	Area Measurement		Remarks
												Apparent (10-6 Disk)	Corr (Sq Deg)	
0018		04 07574	08001	0806	N15 E57	6049	05 8.6	9	SF			17		DL
	KANZ	04 0757	0800	0807	N15 E56	6049	05 8.6	10	SF		V			
	LEAR	04 0759	0800	0807	N15 E57	6049	05 8.6	8	SF	3	E	17		
	KHAR	04 0801	0801	0804	N15 E59	6049	05 8.8	3	SF	2	V	0801		DL
0019		04 0900*	0908	0922	N17 E66	6049	05 9.4	22	SF C 1.3			48		DF
	KANZ	04 0900	0908	0928	N16 E67	6049	05 9.4	28	SF		V			
	SVTO	04 0903E	0906U	0928D	N17 E67	6049	05 9.5	25D	SF C 1.3	3	E	35		F
	LEAR	04 0904	0908	0921	N16 E66	6049	05 9.4	17	SF	3	E	61		D
	HURB	04 0906	0908	0915D	N18 E63	6049	05 9.2	9D	1F					D
	KHAR	04 0910		0918	N19 E69	6049	05 9.6	8	SF	2	V	0910		
0020	KHAR	04 0952	0953	1002	S12 W07	6046	05 3.9	10	SF	2	V	0953		
0021	KHAR	04 1011	1013	1018	S11 W53	6051	04 30.4	7	SF	2	V	1013		D
0022	KHAR	04 1014	1015	1020	N19 E69	6049	05 9.7	6	SF	2	V	1015		D
0023	SVTO	04 1054	1100	1116	S11 E69	6050	05 9.6	22	SF	3	E		33	
0024	RAMY	04 1454	1454	1459	N14 E52	6049	05 8.5	5	SF	2	E		15	
		04 1746		1807	No Flare Patrol									
		04 1831		1841	No Flare Patrol									
		04 1852		1903	No Flare Patrol									
		04 1915		1938	No Flare Patrol									
		04 1942		1959	No Flare Patrol									
		04 2011		2028	No Flare Patrol									
		04 2032		2043	No Flare Patrol									
		04 2049		2100	No Flare Patrol									
		04 2116		2138	No Flare Patrol									
		04 2211		2218	No Flare Patrol									
		04 2241		2251	No Flare Patrol									
0025	HOLL	04 2254	2256	2311	N15 E55	6049	05 9.1	17	SF	3	E		54	
0026	LEAR	05 0047	0049	0057	N15 E54	6049	05 9.1	10	SF	3	E		27	
0027	SVTO	05 0620	0625	0627	S14 E56	6050	05 9.5	7	SF	3	E		18	F
0028		05 11164	11192	1132	S12 E53	6050	05 9.5	16	SF				21	
	KANZ	05 1116	1119	1132	S11 E53	6050	05 9.4	16	SF		V			
	RAMY	05 1120	1121	1132	S13 E53	6050	05 9.5	12	SF	3	E		21	
0029	HOLL	05 1717	1718	1726	N23 W43	6045	05 2.4	9	SF	3	E		19	
0030	HOLL	05 1758	1801	1808	S08 W74	6051	04 30.2	10	SF	3	E		19	
		05 2059		2117	No Flare Patrol									
		05 2129		2137	No Flare Patrol									
		05 2146		2150	No Flare Patrol									
		05 2201		2217	No Flare Patrol									
0031		06 0304*	0404*	0434	S13 E28	6052	05 8.2	90	1H			224	4.8	ET
	TACH	06 0304	0429	0514D	S12 E27	6052	05 8.2	130D	1B	4	C	0429	408	4.8
	LEAR	06 0328	0404	0434	S14 E28	6052	05 8.3	66	SF	3	E		40	
0032	LEAR	06 0512	0526	0540	N18 E44	6049	05 9.6	28	SF	3	E		13	
0033		06 0530	0531*	0537	S12 E28	6052	05 8.3	7	SN				86	1.9
	LEAR	06 0530	0531	0537	S13 E29	6052	05 8.4	7	SF	3	E		16	
	YUNN	06 0539E	0544	0608D	S12 E28	6052	05 8.3	29D	SN		P		157	1.9
0034		06 06332	06351	0646	S12 E26	6052	05 8.2	13	SF				16	
	LEAR	06 0633	0636	0646	S13 E27	6052	05 8.3	13	SF	3	E		16	
	KANZ	06 0635	0635	0647	S12 E26	6052	05 8.2	12	SF		V			
0035		06 0706	07082	0720	N16 E40	6049	05 9.3	14	SF				18	
	LEAR	06 0706	0708	0719	N18 E43	6049	05 9.6	13	SF	3	E		18	
	KANZ	06 0706	0710	0721	N15 E37	6049	05 9.1	15	SF		V			

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May 90

H α SOLAR FLARES

MAY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/USAF		Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
								Region	Mo Day						Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0036	KHAR	06	1013		1032	N12	W27	6053	05	4.4	19	SF	2	V	1016				D
0037	HOLL	06	1804	1812	1815	N19	E43	6049	05	10.0	11	SF	3	E		16			
0038	HOLL	06	1831	1841	1902	S13	E20	6052	05	8.3	31	SF	4	E		32			F
0039	HOLL	06	1847	1849	1853	S14	E38	6050	05	9.6	6	SF	3	E		11			
0040	HOLL	06	2149E	2149U	2201	N14	E29	6049	05	9.1	120	SF	3	E		20			
0041	HOLL	06	2223	2240	2255	N15	W33	6053	05	4.4	32	SF	3	E		33			
0042	HOLL	07	0050	0050	0057	N13	E25	6049	05	8.9	7	SF	3	E		21			F
0043	HOLL	07	0054E	0055U	0104	S06	W83	6051	04	30.8	100	SF C	4.6	3	E		19		EF
0044		07	0122	01184	0126	S14	E28	6050	05	9.2	4	SF				12			
	HOLL	07	0117E	0118	0125	S14	E27	6050	05	9.1	80	SF	2	E		14			
	LEAR	07	0122	0122	0128	S13	E28	6050	05	9.2	6	SF	3	E		10			
0045		07	0230	02331	0238	S18	E79	6054	05	13.1	8	SF				36			
	PURP	07	0230	0233	0236	S19	E76	6054	05	12.9	6	SF		C	0233	42			
	LEAR	07	0230	0234	0239	S18	E82	6054	05	13.3	9	SF	3	E		29			
0046		07	02294	02352	0244	N14	E24	6049	05	8.9	15	SF C	1.4			48	0.7		E
	PEKG	07	0229	0235	0240	N14	E24	6049	05	8.9	11	SF		P	0235	63	0.7		E
	LEAR	07	0233	0236	0253	N15	E24	6049	05	8.9	20	SF C	1.4	3	E	26			
	PURP	07	0233	0237	0240	N14	E23	6049	05	8.8	7	SF		C	0237	56	0.7		
0047	SVTO	07	0531	0531	0540	S19	E79	6054	05	13.2	9	SF	3	E		26			
0048	KHAR	07	0910E		0915	N11	W42	6053	05	4.2	50	SF	2	V	0910				DH
0049	KHAR	07	0953	0955	0957	N11	W42	6053	05	4.2	4	SF	2	V	0955				D
0050	SVTO	07	1259	1300	1319	S11	E10	6052	05	8.3	20	SF	3	E		10			
0051	SVTO	07	1300	1300	1309	S16	E74	6054	05	13.1	9	SF	3	E		10			
0052		07	13381	13391	1352	N16	E23	6049	05	9.3	14	SF				17			F
	HOLL	07	1338	1339	1401	N16	E25	6049	05	9.5	23	SF	3	E		24			F
	SVTO	07	1338	1340	1350	N17	E22	6049	05	9.2	12	SF	3	E		15			
	RAMY	07	1339	1339	1346	N16	E23	6049	05	9.3	7	SF	3	E		13			F
0053	HOLL	07	1344	1349	1401	S12	E08	6052	05	8.2	17	SF	3	E		17			F
0054	HOLL	07	1436	1436	1446	S12	E10	6052	05	8.4	10	SF	3	E		11			
0055	HOLL	07	1521	1521	1527	N17	E17	6049	05	8.9	6	SF	3	E		17			F
0056	HOLL	07	1607	1608	1622	S13	E08	6052	05	8.3	15	SF	3	E		14			
0057	HOLL	07	1640	1647	1654	S12	E07	6052	05	8.2	14	SF	3	E		10			
0058	HOLL	07	1716	1719	1734	N15	W71	6051A	05	2.3	18	SF	3	E		42			
0059		07	1726*	1729*	1743	S12	E07	6052	05	8.2	17	SF				12			F
	HOLL	07	1726	1729	1736	S12	E07	6052	05	8.2	10	SF	3	E		13			F
	HOLL	07	1737	1747	1750	S12	E07	6052	05	8.3	13	SF	3	E		10			F
0060	HOLL	07	1734	1735	1750	S21	E74	6054	05	13.4	16	SF	3	E		31			F
0061	HOLL	07	1739	1740	1748	N15	E16	6049	05	8.9	9	SF	3	E		10			F
0062	HOLL	07	1743	1745	1754	N15	W72	6051A	05	2.3	11	SF	3	E		13			
0063	HOLL	07	1808	1809	1821	N14	E16	6049	05	9.0	13	SF	4	E		23			EF
0064	HOLL	07	1814	1816	1828	S12	E07	6052	05	8.3	14	SF	4	E		27			F

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Grp #	Sta	Start Day	Start (UT)	Max (UT)	End (UT)	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks
														Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0065	HOLL	07	1909	1913	1925	S22 E75 6054	05	13.6	16	SF		4	E		15		
0066	HOLL	07	1929	1931	1937	N15 E19 6049	05	9.2	8	SF		4	E		16		
0067		07	1933	1943*	2015	N15 W75 6051A	05	2.1	42	SN					43		EK
	HOLL	07	1933	1943	2015	N15 W75 6051A	05	2.1	42	SB			E		51		K
	HOLL	07	1933	1953	2015	N15 W75 6051A	05	2.1	42	SF		3	E		35		E
0068	HOLL	07	2050	2052	2107	N15 W75 6051A	05	2.2	17	SF		3	E		18		
0069	HOLL	07	2115	2115	2139	N16 W74 6051A	05	2.3	24	SF		3	E		15		
0070	HOLL	07	2241	2245	2253	N16 E18 6049	05	9.3	12	SF		3	E		29		F
0071	LEAR	08	0004	0006	0034	N18 E18 6049	05	9.4	30	SF		3	E		27		
0072	HOLL	08	0016	0017	0030	S12 E02 6052	05	8.2	14	SF		3	E		12		
0073		08	00184	00241	0116	S20 E69 6054	05	13.3	58	1B M 1.1					170		FH
	LEAR	08	0018	0025	0126	S18 E69 6054	05	13.3	68	1N		3	E		191		
	HOLL	08	0022	0024	0105	S21 E69 6054	05	13.3	43	1B M 1.1		3	E		149		FH
0074	PURP	08	0020	0024	0040	S18 E64 6054	05	12.9	20	1N			C	0024	237		
0075	LEAR	08	0111	0112	0117	S12 E02 6052	05	8.2	6	SF		3	E		23		
0076		08	0128*	0132*	0144	N15 W79 6051A	05	2.1	16	SF					54		F
	LEAR	08	0128	0132	0138	N16 W79 6051A	05	2.1	10	SF		3	E		76		
	PALE	08	0131E	0131U	0137D	N14 W80 6051A	05	2.0	60	SF		3	E		70		F
	LEAR	08	0143	0145	0149	N15 W79 6051A	05	2.1	6	SF		3	E		16		
		08	0228		0231	No Flare Patrol											
0077	LEAR	08	0344	0346	0352	N13 W81 6051A	05	2.0	8	SF C 2.3		3	E		14		
0078	LEAR	08	0405	0407	0412	N13 E09 6049	05	8.8	7	SF		3	E		16		
0079	SVTO	08	0526	0529	0540	N12 W84 6051A	05	1.9	14	SF		3	E		17		
0080		08	06452	06501	0658	N14 W82 6051A	05	2.1	13	1F					79		D
	ABST	08	0645	0650	0656	N15 W85 6051A	05	1.8	11	1F			C	0650	79		D
	KANZ	08	0647	0651	0659	N13 W80 6051A	05	2.2	12	SF			V				
0081		08	07152	0719	0730	N14 E07 6049	05	8.8	15	SF					15		
	KHAR	08	0715		0730	N14 E06 6049	05	8.7	15	SF		2	V	0718			
	KANZ	08	0715	0719	0732	N14 E07 6049	05	8.8	17	SF			V				
	SVTO	08	0717	0719	0727	N14 E07 6049	05	8.8	10	SF		3	E		15		
0082	SVTO	08	0718	0720	0727	S17 E65 6054	05	13.2	9	SF		3	E		24		
0083		08	07391	07421	0748	N16 E11 6049	05	9.1	9	SB							C
	KANZ	08	0739	0743	0750	N16 E10 6049	05	9.1	11	SN			V				C
	ISTA	08	0740	0742	0746	N16 E12 6049	05	9.2	6	SB				0742			
0084		08	07552	07572	0822	N16 E11 6049	05	9.2	27	SN C 2.0					74		F
	SVTO	08	0755	0757	0818	N16 E11 6049	05	9.2	23	SN C 2.0		3	E		72		
	KHAR	08	0757		0823	N16 E11 6049	05	9.2	26	1F		2	P	0759			
	KANZ	08	0757	0757	0826	N15 E11 6049	05	9.2	29	SN			V				
	LEAR	08	0757E	0759	0820	N16 E10 6049	05	9.1	23D	SF		3	E		77		F
0085	ISTA	08	0756		0815	S16 W13 6048	05	7.3	19	1B							V
0086		08	11131	11182	1130	N16 E10 6049	05	9.2	17	SF					14		F
	RAMY	08	1113	1120	1130	N16 E09 6049	05	9.2	17	SF		2	E		14		F
	KANZ	08	1114	1118	1129	N15 E10 6049	05	9.2	15	SF			V				
0087	HOLL	08	1407	1409	1429	N16 E10 6049	05	9.3	22	SF		3	E		28		F
0088	HOLL	08	1610	1614	1619	N15 W57 6053	05	4.3	9	SF		3	E		11		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	See	Obs Type	Time (UT)	Area Measurement		Remarks	
																	Apparent (10-6 Disk)	Corr (Sq Deg)		
0089	HOLL	08	1621	1626	1645	S13	E11	6050	05	9.5	24	SF			3	E		12		
0090		08	16434	1648*	1710	N14	E03	6049	05	8.9	27	SN	C 2.7				62		EFK	
	HOLL	08	1643	1648	1721	N14	E03	6049	05	8.9	38	SB	C 2.7	3	E		84		F	
	HOLL	08	1643	1705	1721	N14	E03	6049	05	8.9	38	SF			E		29		K	
	SVTO	08	1646	1648	1659	N14	E03	6049	05	8.9	13	SN			2	E		60		F
	RAMY	08	1647	1648	1658	N14	E03	6049	05	8.9	11	SN			3	E		74		FE
0091	HOLL	08	1745	1751	1759	S13	E05	6050	05	9.1	14	SF			3	E		17		
0092	HOLL	08	1809	1812	1820	S13	E05	6050	05	9.1	11	SF	C 1.2	3	E		17		F	
0093	HOLL	08	1846	1847	1906	N15	E02	6049	05	8.9	20	SF	M 3.3	3	E		19			
0094	HOLL	08	1904	1906	1919	S18	E59	6054	05	13.3	15	SF			3	E		27		
0095	HOLL	08	1912	1916	1925	N14	E02	6049	05	8.9	13	SF			3	E		12		
0096	HOLL	08	1928	1929	1945	N14	E02	6049	05	9.0	17	SF			3	E		20		
0097		08	1951*	1958*	2057	S17	E60	6054	05	13.4	66	SN					76		FK	
	HOLL	08	1951	1958	2104	S18	E60	6054	05	13.4	73	SB			E		85		K	
	HOLL	08	1951	2037	2104	S18	E60	6054	05	13.4	73	1N		3	E		159		F	
	RAMY	08	1956	1958	2008D	S17	E59	6054	05	13.3	12D	SF			2	E		20		F
	PALE	08	2026	2037	2044	S15	E60	6054	05	13.4	18	SF			3	E		42		
0098		08	20411	2043	2058	N15	E01	6049	05	8.9	17	SF					47		F	
	HOLL	08	2041	2043	2102	N15	E01	6049	05	8.9	21	SN			3	E		68		F
	PALE	08	2042	2043	2052	N15	E01	6049	05	8.9	10	SF			3	E		23		
	RAMY	08	2042E	2043U	2101	N15	E00	6049	05	8.9	19D	SF			2	E		49		F
																			41	
0099	HOLL	08	2111	2115	2137	S13	W33	6048	05	6.4	26	SF			3	E		41		F
0100	HOLL	08	2129	2130	2136	N16	E05	6049	05	9.3	7	SF			3	E		14		
0101	HOLL	08	2203	2203	2208	N16	E05	6049	05	9.3	5	SF			3	E		13		
0102		08	2249	2251*	2357D	N16	E05	6049	05	9.3	68D	SF					36		FK	
	HOLL	08	2249	2251	2357D	N16	E05	6049	05	9.3	68D	SF			E		17		K	
	HOLL	08	2249	2308	2357D	N16	E05	6049	05	9.3	68D	SF		3	E		54		F	
0103	HOLL	08	2357	2404	2417	S14	E03	6050	05	9.2	20	SF			3	E		21		F
0104	YUNN	09	0301	0302	0304D	S17	E80		05	15.2	3D	SN			P		16		G	
0105	ABST	09	0540	0542	0550	N25	E90	6060	05	16.2	10	1F			C	0542	87		AD	
0106		09	0636	0639	0656	S14	W38	6048	05	6.4	20	SF	C 2.4				15			
	SVTO	09	0636	0639	0656	S15	W37	6048	05	6.5	20	SF	C 2.4	3	E		15			
	KANZ	09	0639E	0646U	0657	S14	W38	6048	05	6.4	18D	SF			V					
0107		09	07142	07162	0720	S15	W36	6048	05	6.6	6	SF					12			
	SVTO	09	0714	0718	0721	S15	W38	6048	05	6.4	7	SF			3	E		12		
	KANZ	09	0716	0716	0720	S15	W35	6048	05	6.6	4	SF			V					
0108	KHAR	09	0756U	0758	0803	N05	E90		05	16.1	7U	SF			2	V			H	
0109	KHAR	09	0832	0833	0836	S22	E85		05	15.9	4	SF			2	V	0833		H	
0110		09	09121	09121	0918	N16	E61	6058	05	14.0	6	SF					12			
	SVTO	09	0912	0912	0919	N16	E61	6058	05	14.0	7	SF			3	E		12		
	KANZ	09	0913	0913	0917	N15	E61	6058	05	14.0	4	SF			V					
0111	KHAR	09	0955		0959	S12	W18	6052	05	8.0	4	SF			2	V	0956		D	
0112		09	09552	09572	1006	S11	W03	6050	05	9.2	11	SF					24		DH	
	SVTO	09	0955	0959	1006	S11	W03	6050	05	9.2	11	SF			3	E		24		H
	KANZ	09	0957	0957	1007	S11	W03	6050	05	9.2	10	SF			V					
	KHAR	09	0957	0958	1005	S12	W03	6050	05	9.2	8	SF			2	P	0958		DH	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement		Remarks	
																Time (UT)	Apparent (10-6 Disk)		Corr (Sq Deg)
0113		09	10181	1019	1023	N13	W66	6053	05	4.4	5	SF					24		
	SVTO	09	1018	1019	1023	N13	W67	6053	05	4.4	5	SF		3	E		24		
	KANZ	09	1019	1019	1023	N13	W64	6053	05	4.6	4	SF			V				
0114		09	1111*	11224	1134	S18	E48	6054	05	13.1	23	SF C 2.4					69	FKU	
	SVTO	09	1111	1122	1137	S18	E49	6054	05	13.2	26	SF C 2.4	3	E			58	UF	
	SVTO	09	1111	1126	1137	S18	E49	6054	05	13.2	26	SF			E		80	K	
	KANZ	09	1122	1122	1129	S19	E47	6054	05	13.1	7	SF			V				
0115	KANZ	09	1219		12190	S18	E80		05	15.6	70	SF			V				
0116		09	13221	1325*	1412	S20	E47	6054	05	13.1	50	1N C 8.5					229	FKU	
	HOLL	09	1322	1325	1413	S21	E47	6054	05	13.2	51	2B C 8.5	3	E			355	UF	
	HOLL	09	1322	1351	1413	S21	E47	6054	05	13.2	51	2B			E		273	K	
	SVTO	09	1323	1327	1418	S18	E47	6054	05	13.1	55	1N	3	E			247	UF	
	SVTO	09	1323	1348	1418	S18	E47	6054	05	13.1	55	1N			E		166	K	
	RAMY	09	1324E	1325U	1358	S20	E47	6054	05	13.1	340	1F	2	E			102	F	
0117		09	1346*	1405*	1440	N17	W01	6049	05	9.5	54	SF C 3.9					55	FH	
	HOLL	09	1346	1407	1449	N15	W04	6049	05	9.3	63	1N C 3.9	3	E			191	FH	
	SVTO	09	1405	1405	1419	N15	W06	6049	05	9.1	14	SF	3	E			24	F	
	RAMY	09	1406E	1406U	1411	N15	W05	6049	05	9.2	50	SF	2	E			28	F	
	SVTO	09	1439	1444	1448	N20	E02	6049	05	9.8	9	SF	3	E			15	F	
	HOLL	09	1452	1454	1513	N20	E06	6049	05	10.1	21	SF	3	E			19		
0118	HOLL	09	1553	1601	1619	N16	W68	6053	05	4.5	26	SF	3	E			92		
0119	HOLL	09	1556	1609	1618	S13	W43	6048	05	6.4	22	SF	3	E			42	F	
0120	HOLL	09	1632	1703	1722	N15	W06	6049	05	9.2	50	SF	3	E			13		
0121	HOLL	09	1727	1728	1741	N16	W06	6049	05	9.3	14	SF	3	E			26		
0122	HOLL	09	1733	1735	1738	N22	E83	6060	05	16.1	5	SF	3	E			11		
0123	HOLL	09	1803	1803	1807	S12	W42	6048	05	6.6	4	SF	3	E			17		
0124	HOLL	09	1853	1854	1921	S10	W24	6052	05	8.0	28	SF	3	E			24		
0125	HOLL	09	1941	1947	1951	S11	W23	6052	05	8.1	10	SF	3	E			30	F	
0126	HOLL	09	2030E	2035U	2041	N16	W05	6049	05	9.5	110	SF	3	E			26		
		09	2106		2109	No Flare Patrol													
0127	HOLL	09	2204	2205	2211	S10	W25	6052	05	8.0	7	SF	3	E			37		
0128	HOLL	09	2204	2207	2212	S20	E40	6054	05	13.0	8	SF	3	E			21		
0129	HOLL	09	2256	2306	2317	S20	E40	6054	05	13.0	21	SF C 2.2	3	E			38		
0130	LEAR	10	0009	0032	0054	N16	W10	6049	05	9.2	45	SF	3	E			15	F	
0131		10	03222	03241	0340	S14	W26	6052	05	8.2	18	SF C 3.8					28	F	
	LEAR	10	0322	0325	0350	S13	W25	6052	05	8.2	28	SF	3	E			42	F	
	PALE	10	0324	0324	0330	S14	W26	6052	05	8.2	6	SF C 3.8	3	E			13	F	
0132		10	04525	04591	0513	S18	E33	6054	05	12.7	21	SF					72	2.2	E
	LEAR	10	0452	0500	0516	S19	E33	6054	05	12.7	24	SF	3	E			24		
	SVTO	10	0455	0459	0517	S18	E33	6054	05	12.7	22	SF	3	E			17		
	ABST	10	0457	0459	0505	S17	E33	6054	05	12.7	8	1F		C	0459		175	2.2	E
0133		10	0504*	0513*	0524	N15	W16	6049	05	9.0	20	SF					22		
	SVTO	10	0504	0513	0517	N15	W17	6049	05	8.9	13	SF	3	E			26		
	LEAR	10	0521	0523	0530	N15	W16	6049	05	9.0	9	SF	3	E			18		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
																	Apparent (10-6 Disk)	Corr (Sq Deg)	
0134		10	06412	06434	0702	S19	E33	6054	05	12.8	21	SN					82	2.2	EF
	ABST	10	0641	0643	0650	S17	E33	6054	05	12.8	9	1N			C	0643	175	2.2	E
	MITK	10	0641	0645	0659	S19	E33	6054	05	12.8	18	SN			C	0645			E
	LEAR	10	0642	0645	0705	S19	E33	6054	05	12.8	23	SF		3	E		41		F
	SVTO	10	0642	0647	0709	S19	E33	6054	05	12.8	27	SF		3	E		30		
	KANZ	10	0643	0647	0707	S19	E32	6054	05	12.7	24	SF			V				
	ISTA	10	0649E		0705	S20	E33	6054	05	12.8	160	1N							F
0135	KANZ	10	0647	0650	0654	N19	W04	6049	05	10.0	7	SF			V				
0136	KHAR	10	0724		0736	N17	W15	6049	05	9.2	12	SF		2	V	0729			D
0137	KHAR	10	0745	0746	0752	S12	W85	6059	05	3.9	7	SN		2	V	0746			DH
0138	KHAR	10	0818	0826	0839	N33	E88	6063	05	17.3	21	SF		2	P	0826			DH
0139	KHAR	10	0822U		0826	N23	W76		05	4.5	4U	SF		2	P				D
0140		10	08557	09073	0933	N20	W06	6049	05	9.9	38	1F					139	2.8	ELU
	SVTO	10	0855	0908	0927	N20	W06	6049	05	9.9	32	SN		4	E		91		
	KANZ	10	0857	0908	0936	N21	W06	6049	05	9.9	39	1F			V				U
	KHAR	10	0900	0910	0936	N21	W06	6049	05	9.9	36	1F		2	P	0913	250	2.8	EL
	LEAR	10	0902	0907	0909D	N20	W06	6049	05	9.9	7D	SF		2	E		75		
0141	KANZ	10	0916	0916	0924	N12	W75	6053	05	4.7	8	SF			V				
0142		10	09593	10002	1011	N15	W19	6049	05	9.0	12	SB					140	1.6	DR
	KHAR	10	0959	1000	1012	N15	W19	6049	05	9.0	13	SB		2	P	1003	140	1.6	DR
	KANZ	10	1002	1002	1010	N15	W19	6049	05	9.0	8	SN			V				
0143		10	11016	11151	1144	S17	E34	6054	05	13.0	43	SF C 8.0					44		F
	SVTO	10	1101	1115	1153	S17	E37	6054	05	13.3	52	SF C 8.0		3	E		57		
	KANZ	10	1104	1116	1144	S16	E34	6054	05	13.0	40	SF			V				
	RAMY	10	1107	1115	1135	S17	E32	6054	05	12.9	28	SF C 8.0		3	E		30		F
0144		10	1253	13006	1326	S20	E29	6054	05	12.7	33	SF C 3.6					36		F
	SVTO	10	1253	1300	1326	S19	E29	6054	05	12.7	33	SF		3	E		34		F
	RAMY	10	1253	1306	1325	S20	E29	6054	05	12.7	32	SF C 3.6		3	E		39		
0145	SVTO	10	1300	1303	1315	S11	W15	6050	05	9.4	15	SF		3	E		37		F
			10 1727		1749	No Flare Patrol													
			10 1753		1822	No Flare Patrol													
			10 1940		2001	No Flare Patrol													
			10 2048		2056	No Flare Patrol													
			10 2107		2141	No Flare Patrol													
			10 2149		2309	No Flare Patrol													
			11 0046		0109	No Flare Patrol													
0146	LEAR	11	0131	0132	0135	N18	E13	6061	05	12.0	4	SF		3	E		14		
0147	LEAR	11	0220	0221	0226	N25	E60	6060	05	15.7	6	SF C 2.7		3	E		13		
0148	LEAR	11	0320	0321	0328	N18	E12	6061	05	12.0	8	SF		3	E		13		
0149	LEAR	11	0332	0333	0341	S14	W39	6052	05	8.2	9	SF		3	E		14		
0150	LEAR	11	0403	0407	0419	N18	E11	6061	05	12.0	16	SF C 3.7		3	E		18		
0151	LEAR	11	0438	0449	0502	S15	E74		05	16.8	24	SF		3	E		44		
0152		11	04403	04451	0454	N18	E11	6061	05	12.0	14	SF					22		
	LEAR	11	0440	0446	0456	N18	E11	6061	05	12.0	16	SF		3	E		27		
	SVTO	11	0443	0445	0452	N18	E11	6061	05	12.0	9	SF		3	E		17		
0153		11	05085	05171	0530	N16	E12	6061	05	12.1	22	SF					38		
	LEAR	11	0508	0517	0528	N18	E12	6061	05	12.1	20	SF		3	E		43		
	SVTO	11	0513	0518	0532	N15	E13	6061	05	12.2	19	SF		3	E		33		

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Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	NOAA/USAF			CMP Mo	Dur Day	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
					Lat	CMD	Region							Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0154	KHAR	11 0723	0724	0731	S13	W45	6052	05	7.9	8	SN	2	V	0724			D	
0155	KHAR	11 0732	0733	0742	S12	W90	6059	05	4.5	10	SF	2	V	0733			DH	
0156	KHAR	11 0735U	0736	0740	N26	E75	6062	05	17.1	5U	SF	2	V	0736			DL	
0157	KHAR	11 0930	0932	0937	N34	E90	6063	05	18.6	7	SB	2	P	0932			DHL	
		11 1433		1436	No Flare Patrol													
0158		11 1458	1501	1521	S20	E14	6054	05	12.7	23	1N C 5.7					132		FH
	HOLL	11 1458	1501	1521	S21	E13	6054	05	12.6	23	1B C 5.7	3	E			132		FH
	KANZ	11 1459	1510U	1510D	S19	E15	6054	05	12.8	11D	SF		V					
0159	HOLL	11 1655	1659	1715	N24	E65	6060	05	16.7	20	SF	3	E			26		
0160	HOLL	11 1701	1702	1728	S20	E20	6054	05	13.2	27	SF	3	E			11		
0161		11 1730	1731	1748	N11	E30	6058	05	14.0	18	SF					46		F
	HOLL	11 1730	1733	1759	N10	E30	6058	05	14.0	29	SN	3	E			82		
	PALE	11 1731	1732	1740	N11	E30	6058	05	14.0	9	SF	3	E			30		F
	RAMY	11 1731	1733	1745	N12	E29	6058	05	13.9	14	SF	3	E			26		
0162	HOLL	11 1749	1753	1809	S10	W34	6050	05	9.2	20	SF	3	E			28		
0163		11 1822	1822	1838	N16	W28	6049	05	9.6	16	SN C 8.9					57		F
	HOLL	11 1822	1822	1835	N16	W28	6049	05	9.6	13	SB C 8.9	3	E			76		F
	PALE	11 1822	1823	1836	N15	W29	6049	05	9.6	14	SF C 8.9	3	E			64		
	RAMY	11 1830E	1833U	1844	N18	W28	6049	05	9.6	14D	SF	3	E			30		
0164	HOLL	11 1915	1917	1924	S18	E71		05	17.2	9	SF	3	E			38		F
0165	HOLL	11 2000	2001	2004	N19	W28	6049	05	9.7	4	SF C 3.6	3	E			15		
0166	HOLL	11 2054	2056	2108	N10	E29	6058	05	14.0	14	SF	3	E			24		F
0167		11 2058	2100*	2127	N29	E86	6063	05	18.6	29	2B X 3.6					494		KM
	HOLL	11 2058	2100	2127	N29	E86	6063	05	18.6	29	2B X 3.6	3	E			405		M
	HOLL	11 2058	2110	2127	N29	E86	6063	05	18.6	29	2B		E			583		K
0168	HOLL	11 2155	2157	2206	N30	E77	6063	05	18.0	11	SF	3	E			56		
0169	HOLL	11 2210	2212	2217	N19	W30	6049	05	9.6	7	SF	3	E			39		F
0170	HOLL	11 2306	2312	2318	N18	W34	6049	05	9.4	12	SF	3	E			10		
0171		11 2347	2348	2358	N18	W32	6049	05	9.5	11	SF C 2.5					88	1.5	DIJ
	LEAR	11 2347	2348	2401	N18	W31	6049	05	9.6	14	SF C 2.5	3	E			60		
	VORO	11 2348E	2349	2356	N17	W32	6049	05	9.5	8D	SF	2	C	2349		116	1.5	DIJ
0172	HOLL	12 0018	0022	0025	N19	W31	6049	05	9.6	7	SF	3	E			16		F
0173		12 0027*	0048	0112	N18	W32	6049	05	9.6	45	1B M 1.8					155	2.0	DIJ
	LEAR	12 0027	0048	0128	N19	W31	6049	05	9.6	61	1B M 1.8	3	E			152		
	YUNN	12 0045	0047	0055	N18	W32	6049	05	9.6	10	1B		C			204	2.7	
	VORO	12 0045E	0049	0059D	N16	W34	6049	05	9.4	14D	SN	2	C	0049		108	1.4	DIJ
0174	LEAR	12 0052	0055	0101	N37	E77	6063	05	18.2	9	SF	3	E			21		
0175	LEAR	12 0114	0115	0126	N23	E52	6060	05	16.0	12	SF	3	E			17		
0176	LEAR	12 0226	0231	0246	N23	E51	6060	05	16.0	20	SF	3	E			29		
0177	YUNN	12 0302E	0303	0307D	S14	E89	6064	05	18.8	5D	SN		P			24		
0178	LEAR	12 0312	0313	0318	N27	E71	6062	05	17.7	6	SF	3	E			19		
0179	LEAR	12 0402	0406	0412	N18	W33	6049	05	9.6	10	SF	3	E			20		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Xray	Obs See	Type	Area Measurement			Remarks	
														Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0180		12	04331	04403	0458	N32 E76	6063	05	18.2	25	SN C	5.9			55		E	
	TACH	12	0433	0443	0503	N32 E80	6063	05	18.5	30	SB		2	C	0443	82		E
	LEAR	12	0434	0440	0454	N32 E71	6063	05	17.8	20	SF C	5.9	3	E		28		
		12	0615		0629	No Flare Patrol												
		12	0640		0643	No Flare Patrol												
0181	LEAR	12	0725	0726	0732	N32 E72	6063	05	18.0	7	SF C	2.6	3	E		43		
0182	KHAR	12	0804	0806	0812	S14 W43	6050	05	9.1	8	SN		2	V	0806			D
0183	KHAR	12	0859		0903	N36 E80	6063	05	18.8	4	SF		2	V	0900			D
0184	KHAR	12	0907	0910	0930	N16 W38	6049	05	9.5	23	1F		2	V	0910			
0185	KHAR	12	0915		0920	S13 E65	6066	05	17.3	5	SF		2	V	0916			E
		12	0941		1223	No Flare Patrol												
0186		12	1132	11377	1211	N31 E74	6063	05	18.3	39	2B X	1.2			272		KZ	
	RAMY	12	1132	1137	1211	N31 E74	6063	05	18.3	39	2B X	1.2	4	E	318		Z	
	RAMY	12	1132	1144	1211	N31 E74	6063	05	18.3	39	2B			E	226		K	
		12	1316		1320	No Flare Patrol												
0187	KANZ	13	0722	0726	0734	N42 E66		05	18.7	12	SF			V				
0188		13	0810	0823	0831	N42 E69		05	19.0	21	SF							D
	KANZ	13	0810	0823	0831	N41 E68		05	18.9	21	SF			V				D
	KHAR	13	0825U		0830U	N43 E70		05	19.1	5U	SF		2	V				D
0189	KANZ	13	0827	0838	0911	N31 E50	6062	05	17.3	44	1F			V				EF
0190		13	0830*	0955	0942	N33 E56	6063	05	17.8	72	1F							E
	KHAR	13	0830		0925	N35 E57	6063	05	17.9	55	1F		2	P	0830			E
	KANZ	13	0955	0955	0958	N31 E56	6063	05	17.8	3	SF			V				
		13	1048		1053	No Flare Patrol												
0191		13	1213*	1239*	1404	S17 E71	6064	05	18.9	111	1F M	2.4			125		EFHK	
	KANZ	13	1213	1239	1401	S15 E71	6064	05	18.9	108	1F			V			EF	
	RAMY	13	1249E	1249U	1407	S18 E70	6064	05	18.9	780	1F		3	E	125		FH	
	HOLL	13	1250	1254	1405	S18 E72	6064	05	19.0	75	1N M	2.4	3	E	201		F	
	HOLL	13	1250	1314	1405	S18 E72	6064	05	19.0	75	SF			E	49		K	
0192		13	14152	14202	1431	S16 E68	6064	05	18.7	16	SF				33		F	
	HOLL	13	1415	1422	1430	S19 E70	6064	05	18.9	15	SF		3	E	33		F	
	KANZ	13	1417	1420	1432	S14 E65	6064	05	18.5	15	SF			V				
0193	HOLL	13	1424	1426	1434	N22 E31	6060	05	16.0	10	SF		3	E		18		
0194	KANZ	13	1424	1439	1458	N42 E65		05	18.9	34	SF			V				
0195		13	1543*	1543*	1625	S18 E71	6064	05	19.1	42	SF				15		F	
	HOLL	13	1543	1543	1556	S19 E71	6064	05	19.1	13	SF		3	E	14			
	HOLL	13	1557	1606	1608	S19 E70	6064	05	19.0	11	SF		3	E	17			
	HOLL	13	1617	1618	1622	S17 E71	6064	05	19.1	5	SF		3	E	12			
	HOLL	13	1622	1624	1629	S19 E71	6064	05	19.1	7	SF		3	E	22		F	
	HOLL	13	1629	1631	1640	S19 E71	6064	05	19.1	11	SF		3	E	11			
	HOLL	13	1643	1643	1654	S18 E73	6064	05	19.2	11	SF		3	E	16			
0196		13	16578	17032	1712	N27 E52	6062	05	17.7	15	SN C	5.4			70		F	
	HOLL	13	1657	1703	1703	N27 E52	6062	05	17.7	6	SN C	5.4	3	E	56		F	
	HOLL	13	1705	1705	1721	N27 E52	6062	05	17.8	16	SF C	5.4	3	E	84		F	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo Day	Dur (Min)	Imp Opt Xray	Obs See Type	Area Measurement			Remarks	
													Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0197		13	1705*	1735*	1837	S17	E70	6064	05	19.0	92	SF C 6.6			37		EFK
	HOLL	13	1705	1735	1848	S18	E70	6064	05	19.0	103	SF	E		69		K
	HOLL	13	1705	1829	1848	S18	E70	6064	05	19.0	103	SN	3 E		56		FE
	RAMY	13	1731E	1830U	1835	S17	E68	6064	05	18.9	64D	SF	2 E		24		F
	PALE	13	1735	1737	1803	S17	E74	6064	05	19.3	28	SF C 6.6	4 E		17		
	PALE	13	1822	1835	1849	S17	E70	6064	05	19.1	27	SF	4 E		18		
0198	HOLL	13	1726	1732	1736	N12	E03	6058	05	13.9	10	SF	3 E		14		F
0199	HOLL	13	1740	1741	1744	N23	E29	6060	05	16.0	4	SF	3 E		12		F
0200	HOLL	13	1818	1821	1832	N29	E53	6062	05	17.9	14	SF	3 E		23		
0201	HOLL	13	1824	1833	1843	N21	E29	6060	05	16.0	19	SF	3 E		22		F
0202	HOLL	13	1836	1845	1905	S18	E36	6066	05	16.5	29	SF	3 E		32		F
0203		13	18412	1844	1852	N30	E52	6063	05	17.9	11	SF			36		F
	HOLL	13	1841	1844	1855	N29	E53	6063	05	17.9	14	SF	3 E		53		F
	PALE	13	1843	1844	1850	N31	E52	6063	05	17.9	7	SF	4 E		20		
0204	HOLL	13	1854	1900	1902	S19	E70	6064	05	19.1	8	SF	3 E		12		
0205		13	1918E	1922	2023	S17	E66	6064	05	18.8	65D	SN C 6.2			40		FK
	RAMY	13	1918E	1922	2023	S17	E66	6064	05	18.8	65D	SB	E		30		K
	RAMY	13	1918E	1929U	2023	S17	E66	6064	05	18.8	65D	SF C 6.2	2 E		50		F
0206	HOLL	13	2132	2137	2154	N23	W50	6049	05	10.0	22	SF	3 E		17		
0207		13	23414	23482	2417	N30	E50	6063	05	17.9	36	SN			91	2.1	EFU
	LEAR	13	2341	2348	2418	N31	E49	6063	05	17.8	37	SN	3 E		92		FE
	PEKG	13	2345	2348	2415	N30	E50	6063	05	17.9	30	1B	P	2348	109	2.1	E
	HOLL	13	2348E	2350	2417	N30	E51	6063	05	18.0	29D	SN	3 E		73		UF
0208	HOLL	14	0045	0046	0059	N30	E49	6063	05	17.9	14	SF C 2.1	2 E		31		
0209	LEAR	14	0213	0215	0229	N25	E22	6060	05	15.8	16	SF C 2.7	3 E		35		F
0210		14	0410	04186	0434	S15	E71	6064	05	19.5	24	SN C 4.5			72		BD
	LEAR	14	0403E	0419U	0434	S15	E71	6064	05	19.5	31D	SF C 4.5	3 E		44		
	PEKG	14	0410	0424	0424D	S15	E74	6064	05	19.8	14D	1N	P	0424	84		D
	ABST	14	0418E	0418	0434	S15	E69	6064	05	19.4	16D	SN	P	0418	87		BD
0211	LEAR	14	0531	0531	0541	S17	E61	6064	05	18.9	10	SF	3 E		18		
0212	LEAR	14	0655	0720U	0738D	S16	E62	6064	05	19.0	43D	SF	2 E		17		
0213	KANZ	14	0748	0748	0751	N12	W05	6058	05	13.9	3	SF	V				
0214		14	0755*	08082	0814	S16	E62	6064	05	19.0	19	SN					DEF
	KHAR	14	0755		0800	S16	E63	6064	05	19.1	5	SF	2 P	0755			E
	HURB	14	0759E	0808	0821D	S17	E58	6064	05	18.7	22D	SN					D
	KHAR	14	0807	0810	0823	S16	E63	6064	05	19.1	16	SF	2 V	0810			E
	ISTA	14	0809		0820	S17	E62	6064	05	19.0	11	1N					F
0215	KHAR	14	0845	0847	0851	N10	W05	6058	05	14.0	6	SF	2 V	0847			D
0216		14	0916	09181	0951	N24	E18	6060	05	15.8	35	1N C 3.0			133	2.8	EFH
	LEAR	14	0916E	0917U	0938D	N21	E21	6060	05	16.0	22D	1F	3 E		100		
	KHAR	14	0916	0918	0950U	N26	E17	6060	05	15.7	34U	1N	2 P	0923	230	2.8	EH
	SVTO	14	0916	0918	0953	N25	E16	6060	05	15.6	37	SN C 3.0	3 E		69		F
	KANZ	14	0916	0919	0949	N24	E16	6060	05	15.6	33	SN	V				
0217		14	1004*	1008*	1113	S16	E62	6064	05	19.1	69	SN C 6.5			67		DEFK
	KHAR	14	0955U	1010	1021	S16	E62	6064	05	19.1	26U	SF	2 V	1010			
	SVTO	14	1004	1008	1131	S15	E62	6064	05	19.1	87	SB	E		45		K
	SVTO	14	1004	1058	1131	S15	E62	6064	05	19.1	87	SB C 6.5	3 E		89		FE
	KANZ	14	1056	1100	1128	S14	E66	6064	05	19.4	32	SN	V				
	HURB	14	1101	1101	1121D	S19	E58	6064	05	18.9	20D	1N					D

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	See	Obs Type	Area Measurement			Remarks		
															Time (UT)	Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)			
0218	SVTO	14	1209	1227	1238	N32	E42	6063	05	17.8	29	SF	C 2.7	3	E		29			
0219		14	14071	14096	1442	N29	E39	6062	05	17.6	35	SF	C 4.3				80		EF	
	RAMY	14	1407	1409	1445	N30	E40	6062	05	17.7	38	SF		3	E		76		F	
	SVTO	14	1408	1415	1434	N29	E35	6062	05	17.3	26	SF	C 4.3	3	E		30			
	HOLL	14	1410E	1410U	1446	N29	E43	6062	05	18.0	36D	1F		2	E		133		FE	
0220	SVTO	14	1408	1408	1432	N32	E39	6063	05	17.7	24	SF		3	E		94		EF	
0221		14	14511	14524	1513	N31	E43	6063	05	18.0	22	1N	M 1.2				202		EFK	
	HOLL	14	1449E	1456	1522	N30	E43	6063	05	18.0	33D	1N		2	E		241		FE	
	SVTO	14	1451	1452	1502	N32	E45	6063	05	18.2	11	1N			E		170		K	
	SVTO	14	1451	1453	1502	N32	E45	6063	05	18.2	11	1N		3	E		214		FE	
	RAMY	14	1452	1453	1526	N30	E40	6063	05	17.8	34	1N	M 1.2	3	E		183		F	
0222		14	1618	1625	1638	N29	E39	6062	05	17.7	20	SF					42		F	
	RAMY	14	1618E	1622U	1627	N29	E40	6062	05	17.8	9D	SF		2	E		27		F	
	HOLL	14	1618	1625	1649	N29	E38	6062	05	17.6	31	SF		4	E		56		F	
0223		14	16421	16434	1704	S16	E52	6064	05	18.6	22	SN	C 4.9				90		FU	
	PALE	14	1642	1643	1654D	S16	E52	6064	05	18.6	12D	SN		3	E		95		F	
	HOLL	14	1642	1644	1707	S17	E52	6064	05	18.6	25	1N	C 4.9	4	E		110		UF	
	SVTO	14	1642	1647	1705D	S15	E52	6064	05	18.6	23D	SN		3	E		70		F	
	RAMY	14	1643	1643	1701	S15	E52	6064	05	18.6	18	SN		3	E		85		F	
0224		14	1744*	1745*	1758	S18	E55	6064	05	18.9	14	SF					20			
	HOLL	14	1744	1745	1751	S18	E56	6064	05	19.0	7	SF		3	E		14			
	RAMY	14	1758	1759	1802	S17	E55	6064	05	18.9	4	SF		3	E		16			
	HOLL	14	1758	1759	1802	S19	E55	6064	05	18.9	4	SF		3	E		29			
0225	HOLL	14	1836	1836	1842	N19	W67	6049	05	9.7	6	SF		3	E		15			
0226		14	1917	1918*	1955	N30	E40	6063	05	17.9	38	SN					41		FK	
	HOLL	14	1917	1918	1951	N29	E39	6063	05	17.9	34	SB			E		35		K	
	HOLL	14	1917	1941	1951	N29	E39	6063	05	17.9	34	SF		3	E		62			
	RAMY	14	1917	1941U	2004	N33	E41	6063	05	18.1	47	SF		2	E		25		F	
0227	HOLL	14	2034	2045	2054	N38	E49	6063	05	18.8	20	SF		3	E		42			
0228		14	2054	2059	2116	S16	E51	6064	05	18.7	22	SF					16			
	RAMY	14	2054	2057U	2118	S15	E53	6064	05	18.9	24	SF		2	E		13			
	HOLL	14	2054	2059	2113	S17	E49	6064	05	18.6	19	SF		3	E		18			
		14	2137		2142	No Flare Patrol														
		14	2201		2210	No Flare Patrol														
		14	2218		2224	No Flare Patrol														
		14	2307		2311	No Flare Patrol														
0229	PALE	15	0021	0030U	0122D	N29	E31	6062	05	17.4	61D	SF		3	E		79		F	
0230	PALE	15	0029	0038U	0113D	S17	E48	6064	05	18.7	44D	1N	M 1.2	3	E		118		EF	
0231	LEAR	15	0257	0257	0307	N32	E44	6063	05	18.6	10	SN	C 8.0	3	E		36		F	
0232	LEAR	15	0431	0436	0445	S17	E50	6064	05	19.0	14	SF		3	E		27		F	
0233	LEAR	15	0514	0516	0520D	S16	E52	6064	05	19.2	6D	SF		3	E		33			
0234	LEAR	15	0604	0610	0616D	S16	E51	6064	05	19.1	12D	SF		3	E		38			
0235	LEAR	15	0645	0647U	0708D	S16	E50	6064	05	19.1	23D	SF		3	E		72			
0236	SVTO	15	0656	0719	0737	N37	E35	6063	05	18.1	41	SF	C 3.7	3	E		61			
0237		15	11111	11205	1139	S18	E46	6064	05	19.0	28	SN	C 3.8				79	1.2	EFT	
	SVTO	15	1111	1125	1143	S17	E46	6064	05	19.0	32	SN	C 3.8	3	E		75		F	
	KAND	15	1112	1120	1135	S19	E47	6064	05	19.0	23	SN			P	1120	83	1.2	ET	
0238	RAMY	15	1153E	1203	1206	S19	E41	6064	05	18.6	13D	SF		2	E		21		F	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/ USAF		CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement		Remarks	
						Region	Mo Day							Time (UT)	Apparent (10-6 Disk)		Corr (Sq Deg)
0239	RAMY	15	1154E	1200U	1205	N32 E31	6063	05	17.9	11D	SF	2	E		70		
0240		15	1238*	1240*	1259	S18 E46	6064	05	19.0	21	SN C 6.0				76	1.2	EFT
	HOLL	15	1238E	1239U	1241D	S21 E42	6064	05	18.7	3D	SF	1	E		38		F
	SVTO	15	1238	1239U	1259	S17 E45	6064	05	18.9	21	SN C 6.0	3	E		58		F
	KAND	15	1238	1240	1255	S19 E46	6064	05	19.0	17	SB		P	1240	83	1.2	ET
	KAND	15	1251	1255	1304	S13 E49	6064	05	19.2	13	SN		P	1255	125		ET
0241		15	12433	1250*	1621	N40 E38	6063	05	18.6	218	2B X 1.7				438	10.0	EFHIKTUY
	RAMY	15	1243	1258	1640	N39 E38	6063	05	18.6	237	1B		E		127		KT
	RAMY	15	1243	1305	1640	N39 E38	6063	05	18.6	237	2B	3	E		576		UY
	KAND	15	1245		1332D	N40 E37	6063	05	18.5	47D	2B		P	1320	561	10.0	EFHIK
	SVTO	15	1246	1250	1613	N42 E38	6063	05	18.6	207	SB		E		41		K
	SVTO	15	1246	1310	1613	N42 E38	6063	05	18.6	207	3B X 1.7	3	E		740		UY
	HOLL	15	1252E	1306	1600	N37 E36	6063	05	18.4	188D	2B	3	E		580		UY
	HURB	15	1257E	1306	1351D	N42 E39	6063	05	18.7	54D	2B						E
	KANZ	15	1411E		1529D	N38 E36	6063	05	18.5	78D	3N		V				U
0242		15	1358	1400*	1428	N17 W24	6058	05	13.7	30	1N				101		EFK
	HOLL	15	1358	1400	1427	N17 W23	6058	05	13.8	29	1N	3	E		151		FE
	SVTO	15	1358	1400	1442	N16 W25	6058	05	13.7	44	1N	3	E		179		F
	RAMY	15	1358	1401	1420	N17 W24	6058	05	13.7	22	SF	3	E		49		F
	HOLL	15	1358	1416	1427	N17 W23	6058	05	13.8	29	SF		E		25		K
	KANZ	15	1411E		1424	N16 W24	6058	05	13.8	13D	1N		V				
0243		15	14533	15034	1533	S18 E43	6064	05	18.9	40	SF				30		F
	RAMY	15	1453	1505	1535	S18 E43	6064	05	18.9	42	SF	3	E		31		F
	SVTO	15	1454	1505	1531	S16 E44	6064	05	18.9	37	SF	3	E		22		F
	KANZ	15	1456	1507	1529D	S17 E43	6064	05	18.9	33D	SF		V				
	HOLL	15	1500E	1503	1533	S20 E43	6064	05	18.9	33D	SF	3	E		38		
0244	HOLL	15	1616E	1619U	1629	N46 E34		05	18.5	13D	SF	2	E		26		F
0245	HOLL	15	1621E	1621U	1626	S20 E40	6064	05	18.7	5D	SF	2	E		18		
0246	HOLL	15	1630	1632	1651	S20 E41	6064	05	18.8	21	SF	3	E		38		
0247	PALE	15	1722	1722	1726	S19 E44	6064	05	19.1	4	SF	3	E		13		
0248		15	1736	1745	1800	S19 E42	6064	05	18.9	24	SF C 9.6				37		F
	RAMY	15	1736E	1741U	1754	S19 E43	6064	05	19.0	18D	SF	3	E		26		F
	PALE	15	1736	1745	1759	S18 E43	6064	05	19.0	23	SF C 9.6	3	E		38		F
	HOLL	15	1738E	1741U	1807	S21 E39	6064	05	18.7	29D	SF	2	E		48		F
0249	PALE	15	1832	1834	1845	S19 E41	6064	05	18.9	13	SF	3	E		35		
0250	PALE	15	1832	1840	1844	N38 E33	6063	05	18.4	12	SF	3	E		30		
0251	PALE	15	1850	1856	1906	S19 E42	6064	05	19.0	16	SF	3	E		12		
0252		15	19251	1929	1940	S20 E42	6064	05	19.0	15	SF C 7.4				30		F
	HOLL	15	1925	1929	1943	S20 E40	6064	05	18.9	18	SF C 7.4	3	E		40		F
	RAMY	15	1926	1928U	1938	S19 E43	6064	05	19.1	12	SF	3	E		20		
0253	VORO	15	2224	2229	2241	N23 W02	6060	05	15.8	17	SF	2	C	2229	45	0.5	DIJ
0254		15	22421	22441	2310	N23 E09	6060	05	16.6	28	SN				60	1.0	EFHJ
	VORO	15	2242	2244	2304	N23 E08	6060	05	16.6	22	SN	2	C	2244	90	1.0	EHJ
	PALE	15	2243	2245	2315	N23 E10	6060	05	16.7	32	SF	3	E		31		F
0255		15	2355	2359U	2408	S16 E40	6064	05	19.0	13	SF				18		F
	LEAR	15	2355		2408	S16 E38	6064	05	18.9	13	SF	3	E		22		
	PALE	15	2357E	2359U	2407	S15 E42	6064	05	19.2	10D	SF	3	E		14		F
0256		16	00148	00167	0026	S18 E34	6064	05	18.6	12	SF				56	1.2	DEIJ
	VORO	16	0014	0017	0023	S18 E32	6064	05	18.4	9	SF	2	C	0017	108	1.3	EIJ
	LEAR	16	0015	0016	0021	S16 E32	6064	05	18.4	6	SF	3	E		17		
	LEAR	16	0022	0022	0033	S19 E37	6064	05	18.8	11	SF	3	E		11		
	VORO	16	0022	0023	0027	S20 E37	6064	05	18.8	5	SF	2	C	0023	90	1.2	DIJ

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0257		16	0025*	0032*	0214	N33	E22	6063	05	17.8	109	2N	M	1.7			396	8.5	EFHIJK
	LEAR	16	0025	0032	0244	N33	E21	6063	05	17.7	139	2N			E		205		K
	LEAR	16	0025	0053	0244	N33	E21	6063	05	17.7	139	2N		3	E		395		FE
	MITK	16	0041		0158	N34	E22	6063	05	17.8	77	2N			P	0111	470	6.5	FIJK
	VORO	16	0043	0053	0203	N33	E19	6063	05	17.5	80	2N		2	C	0105	780	10.5	EIJK
	PALE	16	0043	0102	0141	N33	E24	6063	05	17.9	58	2F	M	1.7	3	E	316		FH
	HOLL	16	0056E	0056U	0125D	N32	E24	6063	05	17.9	29D	1B		2	E		211		F
0258	LEAR	16	0057	0058	0114	S16	E37	6064	05	18.8	17	SF		3	E		18		
0259	LEAR	16	0115	0119	0126	N21	E00	6060	05	16.0	11	SF		3	E		15		
0260	LEAR	16	0207	0210	0225	S18	E37	6064	05	18.9	18	SF	C	4.9	3	E		49	
0261		16	02465	02525	0320	S16	E38	6064	05	19.0	34	SF	C	4.0			34		F
	LEAR	16	0246	0257	0319	S15	E39	6064	05	19.1	33	SF		3	E		38		
	PALE	16	0251	0252	0322	S16	E36	6064	05	18.8	31	SF	C	4.0	3	E	30		F
0262	PALE	16	0347	0347	0359	S16	E36	6064	05	18.9	12	SF		3	E		19		F
0263	LEAR	16	0413	0414	0426	N23	E04	6060	05	16.5	13	SF		3	E		14		
0264		16	0419*	0428*	0523	S16	E41	6064	05	19.3	64	SF					75	1.5	DFKU
	LEAR	16	0419	0428	0536	S16	E41	6064	05	19.3	77	SF			E		55		K
	LEAR	16	0419	0516	0536	S16	E41	6064	05	19.3	77	SF		3	E		42		
	PALE	16	0422	0435	0453D	S16	E41	6064	05	19.3	31D	SF		3	E		57		F
	SVTO	16	0435E	0446U	0506	S15	E40	6064	05	19.2	31D	SF		3	E		91		UF
	ABST	16	0438	0439	0515	S15	E40	6064	05	19.2	37	SF			C	0439	131	1.5	D
0265		16	0445	0447	0527	N21	W02	6060	05	16.0	42	SF	C	5.5			44		
	LEAR	16	0445	0447	0527	N21	W02	6060	05	16.0	42	SF		3	E		44		
	SVTO	16	0446E	0447U	0530D	N21	W03	6060	05	16.0	44D	SF	C	5.5	4	E	45		
0266	ABST	16	0448	0450	0500	N25	E05	6062	05	16.6	12	SF			C	0450	131	1.5	D
0267	ISTA	16	0622E		0625	N32	E23	6063	05	18.1	3D	SF							D
0268	LEAR	16	0642	0647	0653	S19	W41	6054	05	13.1	11	SF		3	E		24		
0269	ISTA	16	0656		0702	N33	E28	6063	05	18.5	6	SN							D
0270		16	07055	07058	0749	S15	E37	6064	05	19.1	44	SF	C	3.6			52		EF
	SVTO	16	0705	0705	0827	S14	E38	6064	05	19.2	82	SN	C	3.6	3	E	71		F
	LEAR	16	0705	0709	0729	S17	E36	6064	05	19.0	24	SF	C	3.6	3	E	33		F
	KANZ	16	0707	0707	0718D	S17	E38	6064	05	19.2	11D	SF			V				
	ISTA	16	0710	0713	0730	S11	E36	6064	05	19.0	20	1F				0713			E
0271	ISTA	16	0742		0752	N32	E31	6063	05	18.8	10	SF							D
0272	KANZ	16	0911	0912	0919	S21	W40	6054	05	13.3	8	SF			V				
0273	LEAR	16	0920	0922	0928	S14	E34	6064	05	18.9	8	SF		2	E		18		
0274		16	09221	09231	0937	N24	E04	6060	05	16.7	15	SF					54		
	LEAR	16	0922	0923	0931	N24	E04	6060	05	16.7	9	SF		3	E		54		
	KANZ	16	0923	0924	0943	N24	E03	6060	05	16.6	20	SF			V				
0275	KANZ	16	0947	0951	0955	S15	E04	6066A	05	16.7	8	SF			V				
0276	SVTO	16	1129	1132	1135	S18	W45	6054	05	13.0	6	SF		3	E		28		
0277	SVTO	16	1142	1145	1153	S12	E37	6064	05	19.3	11	SF		3	E		32		
0278	SVTO	16	1156	1203	1247	S20	W45	6054	05	13.0	51	1N	C	3.6	3	E	149		
0279	RAMY	16	1233	1233	1244	S14	E31	6064	05	18.9	11	SF		3	E		14		
0280	HOLL	16	1359	1408	1431	S14	W53	6054	05	12.6	32	SF		3	E		52		

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Grp #	Sta	Start Day	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0281	HOLL	16	1410	1414	1426	N31 E27	6063	05	18.7	16	SF		3	E		30		
0282		16	1505*	15295	1600	S15 W54	6054	05	12.5	55	SF					42		
	HOLL	16	1505	1529	1601	S14 W55	6054	05	12.5	56	SF		3	E		70		
	RAMY	16	1534	1534	1600	S16 W54	6054	05	12.5	26	SF		2	E		14		
0283		16	1538*	15501	1604	S16 E32	6064	05	19.1	26	SF					28		F
	SVTO	16	1538	1550	1613	S16 E33	6064	05	19.1	35	SF		3	E		47		
	RAMY	16	1550	1550	1556	S14 E29	6064	05	18.8	6	SF		2	E		12		F
	HOLL	16	1550	1551	1604	S17 E35	6064	05	19.3	14	SF		3	E		25		
0284		16	16114	16171	1631	N31 E24	6063	05	18.6	20	SN C	4.1				54		F
	HOLL	16	1611	1617	1632	N31 E26	6063	05	18.7	21	SN		3	E		67		
	SVTO	16	1611	1618	1635	N32 E22	6063	05	18.4	24	SN C	4.1	3	E		59		
	RAMY	16	1615	1618	1627	N31 E24	6063	05	18.6	12	SF		3	E		35		F
0285	PALE	16	1712	1718	1745	S19 E32	6064	05	19.1	33	SF		3	E		26		
0286	HOLL	16	1729E	1733U	1748	N23 E00	6060	05	16.7	19D	SF		3	E		33		F
0287	PALE	16	1753	1757	1829	S14 E29	6064	05	18.9	36	SF		3	E		16		
0288		16	18352	18362	1902	N22 W08	6060	05	16.1	27	SF					41		
	HOLL	16	1835	1836	1904	N24 W07	6060	05	16.2	29	SF		3	E		52		
	PALE	16	1837	1838	1900	N20 W10	6060	05	16.0	23	SF		3	E		30		
0289	VORO	16	2228	2229	2241	S11 E31	6064	05	19.3	13	SF		2	C	2229	72	0.9	DIJ
0290	HOLL	16	2311	2313	2317	S16 W53	6054	05	12.9	6	SF		3	E		21		
0291	HOLL	17	0012	0024	0033	S13 W59	6054	05	12.5	21	SF		2	E		14		
0292	PALE	17	0119	0134	0149	S18 E25	6064	05	18.9	30	SF		3	E		28		
0293		17	0307	0311*	0344	N31 E20	6063	05	18.7	37	SN M	1.1				49		FK
	PALE	17	0307	0311	0344	N31 E20	6063	05	18.7	37	SF			E		31		K
	PALE	17	0307	0324	0344	N31 E20	6063	05	18.7	37	SN M	1.1	3	E		67		F
0294	ABST	17	0405	0411	0416	N36 E17	6063	05	18.5	11	SF			C	0411	87	1.2	D
0295	LEAR	17	0407	0419	0428	S16 E24	6064	05	19.0	21	SF		3	E		13		
0296	LEAR	17	0420	0424	0436	N37 E15	6063	05	18.4	16	SF		3	E		29		
0297		17	04282	04315	0444	S16 E18	6064	05	18.5	16	SF					92	1.4	E
	LEAR	17	0428	0436	0448	S16 E22	6064	05	18.8	20	SF		3	E		54		
	ABST	17	0430	0431	0440	S16 E15	6064	05	18.3	10	SF			C	0431	131	1.4	E
0298	LEAR	17	0442	0443	0452	S18 W54	6054	05	13.1	10	SF		3	E		25		
0299	SVTO	17	0457	0532	0610	N31 E10	6063	05	18.0	73	SF		4	E		52		F
0300	SVTO	17	0720	0723	0733	S22 W54	6054	05	13.1	13	SF		4	E		53		U
0301	YUNN	17	0811E	0812	0820	S11 E25	6064	05	19.2	9D	SB			P		63	0.7	
0302	KHAR	17	0840U		0845	S16 E13	6064	05	18.3	5U	SF		2	V	0842			DL
0303	KHAR	17	0932	0933	0938	N43 E16		05	18.7	6	SF		2	V	0933			DL
0304		17	09596	1008*	1101	N32 E04	6063	05	17.7	62	1F M	1.0				223	8.3	EHLUV
	SVTO	17	0959	1008	1123	N31 E04	6063	05	17.7	84	SF			E		50		K
	SVTO	17	0959	1022	1123	N31 E04	6063	05	17.7	84	SF M	1.0	3	E		81		
	KHAR	17	1005U	1005U	1035D	N32 E03	6063	05	17.6	30U	2N		2	P	1007	660	8.3	EHLV
	SVTO	17	1005	1008	1017	N34 E05	6063	05	17.8	12	SF		3	E		101		U
	KANZ	17	1035E		1039D	N31 E02	6063	05	17.6	4D	2N			C				
0305	KHAR	17	1012		1025	S19 E18	6064	05	18.8	13	SF		2	V	1012			D

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Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	NOAA/USAF			CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
					Lat	CMD	Region							Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0306	SVTO	17 1105	1106	1111	S22	W58	6054	05	13.0	6	SF	3	E	20		F		
0307	SVTO	17 1109	1110	1113	N08	E60	6068	05	22.0	4	SF	3	E	21				
0308	SVTO	17 1202	1205	1227	S17	W62	6054	05	12.8	25	SF	3	E	82		F		
0309		17 1222	12293	1325	S16	E20	6064	05	19.0	63	SF C	8.8		40		EF		
	SVTO	17 1222	1232	1325	S14	E20	6064	05	19.0	63	SF C	8.8	3	E	42		F	
	KANZ	17 1223E	1229	1252D	S15	E22	6064	05	19.2	29D	SN		C			E		
	HOLL	17 1235E	1235U	1340D	S18	E19	6064	05	19.0	65D	SF		1	E	38		F	
0310		17 1419*	14379	1522	S16	E21	6064	05	19.2	63	1F C	7.6		101		FU		
	RAMY	17 1419	1445	1531	S16	E20	6064	05	19.1	72	1F C	7.6	3	E	129		UF	
	HOLL	17 1436	1437	1530D	S17	E21	6064	05	19.2	54D	SF		3	E	53		F	
	SVTO	17 1441	1446	1514	S14	E22	6064	05	19.3	33	1N		3	E	120		F	
0311	PALE	17 1906	1914	1930	S16	E18	6064	05	19.2	24	SF C	2.3	3	E	17			
0312	PALE	17 2059	2059	2115	S12	E20	6064	05	19.4	16	SF C	3.8	3	E	20			
		17 2211		2216	No Flare Patrol													
0313	PALE	17 2249	2250	2330	S13	E18	6064	05	19.3	41	SF		3	E	15		F	
0314		18 00334	00375	0058	S17	E14	6064	05	19.1	25	SF C	3.5		19		F		
	PALE	18 0033	0042	0106	S16	E16	6064	05	19.2	33	SF C	3.5	3	E	27		F	
	LEAR	18 0037	0037	0049	S18	E12	6064	05	18.9	12	SF		3	E	11			
0315		18 0257*	0302*	0348	S14	E14	6064	05	19.2	51	SF C	6.6		168	2.5	DEFIKT		
	PALE	18 0257	0302	0325D	S15	E14	6064	05	19.2	28D	SF		E	38		K		
	PALE	18 0257	0325	0325D	S15	E14	6064	05	19.2	28D	SF		3	E	91		F	
	PEKG	18 0300	0304	0311	S16	E17	6064	05	19.4	11	SF		P	0304	126	1.4	D	
	LEAR	18 0317	0326	0407	S12	E14	6064	05	19.2	50	SF C	6.6	3	E	80		F	
	TACH	18 0319	0321	0356	S14	E15	6064	05	19.3	37	SB		2	C	0321	148	1.6	EIT
	YUNN	18 0320	0330	0350	S11	E13	6064	05	19.1	30	1F		C		236	2.5		
	PURP	18 0323E	0331U	0351	S14	E13	6064	05	19.1	28D	1F		P	0331	209	2.3		
	PEKG	18 0325	0335	0350	S12	E13	6064	05	19.1	25	1N		P	0335	420	4.5	EF	
0316	LEAR	18 0413	0418	0428	S15	E10	6064	05	18.9	15	SF		3	E	27		F	
0317		18 06291	06291	0633	S18	E80	6070	05	24.4	4	SF			26				
	KANZ	18 0629	0629	0633	S19	E79	6070	05	24.3	4	SF		V					
	SVTO	18 0630	0630	0633	S17	E80	6070	05	24.3	3	SF		3	E	26			
0318	KANZ	18 0704	0708	0712	S10	E66	6069	05	23.2	8	SF		V					
0319		18 0800	08003	0838	S14	E10	6064	05	19.1	38	SF C	2.3		28				
	LEAR	18 0800	0800	0837	S15	E10	6064	05	19.1	37	SF C	2.3	3	E	16			
	SVTO	18 0800	0803	0838	S14	E09	6064	05	19.0	38	SF		3	E	40			
0320		18 09191	09221	0944	S15	E08	6064	05	19.0	25	SF C	2.6		34		F		
	KANZ	18 0919	0923	0935D	S15	E09	6064	05	19.1	16D	SF		V					
	SVTO	18 0920	0922	0944	S15	E07	6064	05	18.9	24	SF C	2.6	3	E	34		F	
0321	SVTO	18 0938	0941	0949	S11	E88	6071	05	25.0	11	SF		3	E	43			
0322	SVTO	18 1113	1115	1118	S12	E85	6071	05	24.9	5	SF		3	E	18			
0323		18 1206	12077	1223	S12	E05	6064	05	18.9	17	SF			20		FK		
	SVTO	18 1206	1207	1223	S12	E05	6064	05	18.9	17	SF		3	E	20		F	
	SVTO	18 1206	1214	1223	S12	E05	6064	05	18.9	17	SF		E	19		K		
0324		18 13379	1338*	1346	S11	E82	6071	05	24.7	9	SF C	2.9		18				
	SVTO	18 1337	1338	1340	S11	E80	6071	05	24.6	3	SF		3	E	18			
	SVTO	18 1346	1348	1352	S11	E83	6071	05	24.8	6	SF C	2.9	3	E	19			
0325	HOLL	18 1440E	1440U	1503	S10	E62	6069	05	23.3	23D	SF		3	E	68			
0326	SVTO	18 1610	1610	1613	N32	W10	6063	05	17.9	3	SF		3	E	22			

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/USAF		Dur (Min)	Imp Opt	Obs Xray	See Type	Area Measurement		Remarks
								Region	Mo Day					Time (UT)	Apparent (10-6 Disk)	
0327	HOLL	18	1623	1623	1629	S11	E62	6069	05	23.3	6	SF	3	E	26	
		18	1654		1659											No Flare Patrol
		18	1705		1712											No Flare Patrol
		18	1756		1811											No Flare Patrol
		18	1846		1905											No Flare Patrol
		18	1909		1929											No Flare Patrol
		18	1957		2012											No Flare Patrol
		18	2016		2020											No Flare Patrol
		18	2049		2053											No Flare Patrol
		18	2103		2109											No Flare Patrol
0328		18	2110E	2112U	2332D	N32	W08	6063	05	18.2	142D	1N	M	1.7	222	FU
	PALE	18	2110E	2112U	2205D	N33	W04	6063	05	18.6	55D	SN			78	F
	HOLL	18	2155E	2155U	2332D	N32	W13	6063	05	17.9	97D	2F	M	1.7	365	UF
0329	LEAR	18	2301E	2312U	2329	S20	W17	6067	05	17.6	28D	SF			20	
0330		18	2307	2323	2348	N33	W14	6063	05	17.8	41	SF			66	F
	LEAR	18	2307	2310U	2310D	N32	W13	6063	05	17.9	3D	1F	2	E	104	
	LEAR	18	2307E	2323U	2358	N35	W15	6063	05	17.8	51D	SF	2	E	68	F
	PALE	18	2321E	2323	2339	N31	W13	6063	05	17.9	18D	SF	3	E	27	F
0331	LEAR	19	0108	0109	0118	S15	E02	6064	05	19.2	10	SF			13	
0332	LEAR	19	0122	0124	0130	N33	W10	6063	05	18.3	8	SF			24	
0333	LEAR	19	0128	0137	0204	S16	E04	6064	05	19.4	36	SF			33	F
0334	LEAR	19	0341	0342	0345	S16	W03	6064	05	18.9	4	SF			21	
0335	LEAR	19	0348	0349	0352	N29	W38	6060	05	16.2	4	SF			27	
0336		19	0424	0425	0428	N35	W11	6063	05	18.3	4	SF			40	0.6
	YUNN	19	0421E	0421U	0429	N40	W08	6063	05	18.5	8D	SF		P	31	0.4
	LEAR	19	0424	0425	0428	N33	W12	6063	05	18.2	4	SF	3	E	25	
	YUNN	19	0425E	0425U	0426	N32	W12	6063	05	18.2	1D	SN		P	63	0.8
0337	LEAR	19	0431	0431	0436	N20	W74		05	13.5	5	SF			75	
0338		19	05101	05121	0518	S14	W06	6064	05	18.8	8	SN			55	0.9
	LEAR	19	0510	0513	0518	S13	W06	6064	05	18.8	8	SF			24	F
	TACH	19	0511	0512	0519	S14	W05	6064	05	18.8	8	SN	2	C	86	0.9
0339		19	06217	06266	0645	S15	W05	6064	05	18.9	24	SF			91	2.5
	YUNN	19	0621	0626	0650	S15	W05	6064	05	18.9	29	1F		C	236	2.5
	LEAR	19	0627	0627	0633	S15	W05	6064	05	18.9	6	SF	3	E	25	F
	SVTO	19	0628	0632	0652	S16	W05	6064	05	18.9	24	SF	3	E	12	
0340		19	06571	06582	0714	S16	W04	6064	05	19.0	17	SF			24	F
	SVTO	19	0657	0700	0722	S16	W05	6064	05	18.9	25	SF	3	E	37	F
	LEAR	19	0658	0658	0705	S16	W03	6064	05	19.1	7	SF	3	E	12	F
0341		19	07298	07382	0748	N10	E43	6068	05	22.5	19	SF			26	F
	LEAR	19	0729	0738	0743	N09	E42	6068	05	22.5	14	SF	3	E	25	F
	SVTO	19	0737	0740	0753	N11	E44	6068	05	22.6	16	SF	3	E	26	
0342		19	0755	0757	0800	N33	W14	6063	05	18.2	5	SF			62	1.2
	LEAR	19	0755	0757	0801	N33	W14	6063	05	18.2	6	SF	3	E	29	
	YUNN	19	0756E	0756U	0800	N33	W15	6063	05	18.1	4D	SF		P	94	1.2
0343		19	08008	0806*	0856	S14	W03	6064	05	19.1	56	SF			162	5.0
	SVTO	19	0800	0806	0852	S15	W02	6064	05	19.2	52	SN		E	29	FK
	SVTO	19	0800	0820	0852	S15	W02	6064	05	19.2	52	SF	3	E	68	K
	LEAR	19	0801	0818	0914	S14	W03	6064	05	19.1	73	SF	3	E	81	F
	YUNN	19	0808	0823	0845	S14	W04	6064	05	19.0	37	1F		C	472	5.0
0344	SVTO	19	1002	1006	1009	S11	E72	6071	05	24.8	7	SF			19	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement		Remarks	
															Time (UT)	Apparent (10-6 Disk)		Corr (Sq Deg)
0345	SVTO	19	1042	1043	1048	N10	W15	6073	05	18.3	6	SF	3	E		13		
0346	RAMY	19	1159	1209	1220	S16	W06	6064	05	19.0	21	SF	3	E		16	F	
0347		19	1223*	1248*	1414	S16	W09	6064	05	18.8	111	2N M 2.0				207	EFK	
	RAMY	19	1223	1301	1411	S16	W09	6064	05	18.8	108	1F	3	E		209	F	
	SVTO	19	1235	1248	1438D	S16	W08	6064	05	18.9	123D	1N	2	E		124	F	
	HOLL	19	1253E	1301	1416	S17	W09	6064	05	18.8	83D	2N M 2.0	3	E		290	FE	
	HOLL	19	1253E	1345	1416	S17	W09	6064	05	18.8	83D	2N		E		204	K	
0348	RAMY	19	1339	1339	1347	N08	E39	6068	05	22.5	8	SF	3	E		15		
0349	HOLL	19	1407	1407	1410	S13	W29	6067	05	17.4	3	SF	3	E		33		
0350		19	15336	15339	1543	S15	E70	6071	05	24.9	10	SF				14		
	HOLL	19	1533	1533	1538	S15	E70	6071	05	24.9	5	SF	3	E		16		
	HOLL	19	1539	1542	1548	S15	E70	6071	05	24.9	9	SF	3	E		13		
0351	RAMY	19	1545	1547	1550	S16	W13	6064	05	18.7	5	SF	3	E		22		
0352	RAMY	19	1600	1600	1611	S17	W07	6064	05	19.1	11	SF	3	E		15		
0353	RAMY	19	1655	1655	1659	S16	W14	6064	05	18.6	4	SF	3	E		18	F	
0354	RAMY	19	1707	1726U	1917	S16	W11	6064	05	18.9	130	SF	3	E		93	F	
0355	RAMY	19	1702	1706	1717	N35	W19	6063	05	18.2	15	SF	3	E		15	H	
0356		19	1910	1910	1932	N08	E39	6068	05	22.7	22	SF				13		
	PALE	19	1910	1910	1924	N09	E38	6068	05	22.6	14	SF	3	E		12		
	RAMY	19	1912E	1912U	1940	N08	E40	6068	05	22.8	28D	SF	3	E		14		
0357	PALE	19	1922	1923	1948D	S13	E70	6071	05	25.1	26D	SF	3	E		20	F	
		19	2014		2026	No Flare Patrol												
		19	2057		2100	No Flare Patrol												
0358	PALE	19	2109	2118	2135D	S20	E57	6070	05	24.2	26D	SF	3	E		36	F	
0359	PALE	19	2258	2258	2305	S17	W14	6064	05	18.9	7	SF	3	E		36	F	
0360	LEAR	20	0013	0020	0025	S15	W18	6064	05	18.6	12	SF	3	E		23		
0361	PALE	20	0125E	0125U	0145D	S16	W13	6064	05	19.1	20D	SN C 7.4	3	E		60	F	
0362		20	0338*	0340*	0516	S16	W16	6064	05	18.9	98	1N M 1.0				181	2.4	
	LEAR	20	0338	0340	0536	S16	W17	6064	05	18.9	118	SN		E		73	K	
	LEAR	20	0338	0419	0536	S16	W17	6064	05	18.9	118	1N M 1.0	3	E		127	F	
	TACH	20	0346E	0407U	0511D	S15	W14	6064	05	19.1	85D	1N	2	C	0407	352	3.9	
	YUNN	20	0404E	0405U	0405D	S15	W15	6064	05	19.0	1D	1B		P	0405	189	2.1	
	PEKG	20	0410	0417	0436	S17	W18	6064	05	18.8	26	1B		P	0417	294	3.3	
	PURP	20	0414E	0430	0440D	S14	W15	6064	05	19.0	26D	SF		C	0430	49	0.5	
0363	LEAR	20	0447	0505	0512	N32	W31	6063	05	17.7	25	SF	3	E		25	F	
0364	LEAR	20	0544	0552	0602	S15	W17	6064	05	18.9	18	SF	3	E		40	F	
0365	LEAR	20	0725	0725	0729	S12	E61	6071	05	24.9	4	SF	3	E		17		
0366	LEAR	20	0821	0827	0831	N36	W23	6063	05	18.5	10	SF	3	E		29		
0367		20	1121*	1125*	1148	S20	E48	6070	05	24.1	27	SF				20	F	
	RAMY	20	1121	1125	1130	S19	E48	6070	05	24.1	9	SF	3	E		15	F	
	RAMY	20	1132	1135	1207	S20	E49	6070	05	24.2	35	SF	3	E		24	F	
0368		20	1220*	12331	1242	N39	W24	6063	05	18.6	22	SF				27		
	SVTO	20	1220	1233	1243	N39	W24	6063	05	18.6	23	SF	3	E		39		
	RAMY	20	1230	1234	1239	N39	W22	6063	05	18.7	9	SF	3	E		16		
	HOLL	20	1232E	1234U	1243	N39	W26	6063	05	18.4	11D	SF	2	E		27		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF			CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
						Lat	Cmd	Region							Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0369		20	13182	13324	1358	N29	W54	6062	05	16.3	40	SF	C 5.7			61		F	
	RAMY	20	1318	1332	1354	N29	W53	6062	05	16.4	36	SF		3	E	62		F	
	HOLL	20	1320	1336	1400	N30	W53	6062	05	16.4	40	SF	C 5.7	3	E	51		F	
	SVTO	20	1347E	1356U	1359	N28	W55	6062	05	16.3	12D	SF		2	E	71			
0370		20	1324	13251	1335	N34	W22	6063	05	18.8	11	SN				38		H	
	HOLL	20	1324	1325	1336	N34	W21	6063	05	18.9	12	SN		3	E	38		H	
	RAMY	20	1324	1326	1334	N33	W22	6063	05	18.8	10	SF		3	E	37			
0371		20	14042	14098	1450	S16	W22	6064	05	18.9	46	SF				38		F	
	HOLL	20	1404	1409	1455	S15	W24	6064	05	18.8	51	SF		3	E	19			
	RAMY	20	1406	1417	1444	S16	W21	6064	05	19.0	38	SF		3	E	56		F	
0372	HOLL	20	1432	1439	1508	S21	E47	6070	05	24.2	36	SF		3	E	18		F	
0373	HOLL	20	1526	1530	1533	N40	W22	6063	05	18.8	7	SF		3	E	11			
0374	HOLL	20	1538	1540	1552	N22	E64	6072	05	25.6	14	SF		3	E	38			
0375	RAMY	20	1548	1551	1601	S19	E47	6070	05	24.2	13	SF		3	E	49			
0376	RAMY	20	1642	1710U	1740	S19	E45	6070	05	24.1	58	SF		3	E	20			
0377		20	17013	17031	1709	N39	W24	6063	05	18.8	8	SF				37			
	HOLL	20	1701	1704	1711	N39	W23	6063	05	18.8	10	SF		3	E	57			
	RAMY	20	1702	1703	1708	N39	W25	6063	05	18.7	6	SF		3	E	39			
	PALE	20	1704	1704	1707	N39	W25	6063	05	18.7	3	SF		3	E	14			
0378	RAMY	20	1735E	1743U	1808	N42	W24		05	18.8	33D	SF		2	E	52			
0379	RAMY	20	1829	1831U	1835D	S12	W29	6064	05	18.6	6D	SF		2	E	38			
0380		20	1850	18501	1904	S12	W28	6064	05	18.7	14	SN	C 4.5			47		F	
	PALE	20	1850	1850	1902	S12	W28	6064	05	18.7	12	SF		3	E	29			
	HOLL	20	1850	1851	1906	S12	W29	6064	05	18.6	16	SN	C 4.5	3	E	65		F	
0381		20	1908	1910*	1953	N34	W25	6063	05	18.8	45	SN				22		FK	
	HOLL	20	1908	1910	1953	N34	W25	6063	05	18.8	45	SF		3	E	25		F	
	HOLL	20	1908	1925	1953	N34	W25	6063	05	18.8	45	SB			E	20		K	
0382	PALE	20	1952	1952	2006	S16	W24	6064	05	19.0	14	SF		3	E	16			
0383		20	2246*	2251*	2506	N34	W42	6063	05	17.6	140	2F	M 1.6			324	5.4	EFJKTU	
	HOLL	20	2246	2251	2521D	N35	W41	6063	05	17.7	155D	SN			E	27		KT	
	HOLL	20	2246	2341	2521D	N35	W41	6063	05	17.7	155D	3M		3	E	790		T	
	LEAR	20	2332	2341	2451	N34	W42	6063	05	17.6	79	2F			E	289		K	
	LEAR	20	2332	2355	2451	N34	W42	6063	05	17.6	79	2F	M 1.6	3	E	219		FE	
	PEKG	20	2351	2400	2535	N34	W44	6063	05	17.5	104	2F			C	2400	294	5.4	UJ
0384	LEAR	21	0029	0031	0041	S17	W28	6064	05	18.9	12	SF		3	E	18		F	
0385	LEAR	21	0105	0108	0126	S15	W26	6064	05	19.1	21	SF		3	E	27		M	
0386		21	01223	01251	0208	N34	W30	6063	05	18.7	46	1B	M 4.8			122	2.5	EF	
	PALE	21	0122	0125	0215	N33	W30	6063	05	18.7	53	1B	M 4.8	3	E	109		F	
	LEAR	21	0123	0126	0214	N33	W29	6063	05	18.7	51	1B		3	E	126		F	
	PEKG	21	0124	0125	0155	N32	W30	6063	05	18.7	31	1B			C	0125	168	2.5	E
	HOLL	21	0125	0125U	0151D	N36	W31	6063	05	18.6	26D	SB		2	E	85		FE	
0387	YUNN	21	0250	0251	0253D	S18	E40	6070	05	24.2	3D	SF			P	31		0.4	
0388	YUNN	21	0305	0308	0335	N19	E15	6074	05	22.3	30	SN			C	24		0.3	
0389		21	0330*	0352*	0414	S15	W32	6064	05	18.7	44	SN				62	0.8	EF	
	YUNN	21	0330	0353	0430D	S16	W31	6064	05	18.8	60D	SN			P	47	0.6		
	TACH	21	0331	0359	0426	S18	W30	6064	05	18.9	55	SB		3	C	0359	112	1.4	E
	PALE	21	0350	0356	0407	S16	W31	6064	05	18.8	17	SF		3	E	43		F	
	LEAR	21	0352E	0352	0409	S16	W33	6064	05	18.6	17D	SF		3	E	84		F	
	YUNN	21	0358	0414	0430D	S11	W33	6064	05	18.7	32D	SN			P	24		0.3	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/	CMP	Dur	Imp	Obs	Area Measurement			Remarks		
								USAF Region					Mo	Day	Time (UT)		Apparent (10-6 Disk)	Corr (Sq Deg)
0390		21	0452*	0456*	0544	S16	W30	6064	05	18.9	52	1N M 1.0			124	1.6	EF	
	TACH	21	0452	0456	0547	S18	W28	6064	05	19.1	55	SB	3	C	0456	148	1.8	E
	LEAR	21	0504	0511	0555	S16	W31	6064	05	18.8	51	1N M 1.0	3	E		116		FE
	PEKG	21	0510	0515	0530	S15	W33	6064	05	18.7	20	1F		P	0515	168	2.1	E
	YUNN	21	0522E	0522U	0540D	S17	W29	6064	05	19.0	18D	SN		P	0522	63	0.8	
0391		21	0542*	0614*	0722	N39	W35	6063	05	18.4	100	2N				338	5.8	BEFI
	LEAR	21	0542	0628	0728	N39	W34	6063	05	18.5	106	2F	3	E		325		F
	YUNN	21	0544	0614	0723	N40	W34	6063	05	18.5	99	2N		C		503	8.5	
	TACH	21	0552E		0600D	N37	W38	6063	05	18.2	8D	1N	3	C	0552	189	3.1	E
	PEKG	21	0615	0632	0645	N40	W36	6063	05	18.3	30	2F		C	0632	336	5.8	E
	ISTA	21	0655E		0752	N37	W35	6063	05	18.5	57D	3B						BI
0392		21	0634	0635*	0709	S11	W32	6064	05	18.9	35	SN				37		K
	LEAR	21	0634	0635	0709	S11	W32	6064	05	18.9	35	SN	3	E		54		
	LEAR	21	0634	0700	0709	S11	W32	6064	05	18.9	35	SF		E		20		K
0393		21	0758	0802	0855	S16	W32	6064	05	18.9	57	1B C 5.6				81		EF
	ISTA	21	0758		0840	S18	W32	6064	05	18.9	42	1B						F
	LEAR	21	0758	0802	0910	S15	W33	6064	05	18.8	72	SN C 5.6	3	E		81		E
0394	LEAR	21	0924	0925	0933	S15	W36	6064	05	18.7	9	SF	3	E		26		
		21	1028		1044	No Flare Patrol												
0395		21	1200*	1207*	1231	S15	W38	6064	05	18.6	31	SN C 5.2				44	1.1	D
	RAMY	21	1200	1207	1210	S15	W39	6064	05	18.5	10	SF	3	E		15		
	RAMY	21	1213	1215	1300	S14	W38	6064	05	18.6	47	SN C 5.2	3	E		54		
	KAND	21	1213	1217	1223	S17	W37	6064	05	18.7	10	SN		P	1217	83	1.1	D
	HOLL	21	1217E	1218U	1244D	S15	W40	6064	05	18.5	27D	SF	1	E		25		
0396		21	1526*	1531*	1605	S14	W39	6064	05	18.7	39	SF C 5.6				52		F
	RAMY	21	1526	1531	1611	S14	W40	6064	05	18.6	45	SF C 5.6	3	E		82		F
	KANZ	21	1535E	1535U	1615	S16	W38	6064	05	18.8	40D	SF		V				
	HOLL	21	1535E	1536U	1551	S14	W41	6064	05	18.5	16D	SF	2	E		59		
	HOLL	21	1557	1559	1604	S13	W37	6064	05	18.9	7	SF	3	E		15		
0397		21	15554	15585	1612	N24	E52	6072	05	25.7	17	SF				36		
	HOLL	21	1555	1558	1612	N22	E53	6072	05	25.7	17	SF	3	E		39		
	RAMY	21	1557	1603	1608	N24	E51	6072	05	25.6	11	SF	3	E		34		
	KANZ	21	1559	1559	1615	N26	E52	6072	05	25.7	16	SF		V				
0398	HOLL	21	1631	1636	1641	S19	E31	6070	05	24.0	10	SF	3	E		13		
0399		21	1809	18091	1836	S15	W38	6064	05	18.9	27	SF C 9.1				57		EF
	HOLL	21	1709E	1809	1849	S14	W36	6064	05	19.0	100D	SN	3	E		77		FE
	PALE	21	1809	1810	1823	S15	W41	6064	05	18.6	14	SF C 9.1	3	E		37		F
	RAMY	21	1821E	1821U	1837	S15	W38	6064	05	18.9	16D	SF	3	E		57		F
0400	RAMY	21	1833E	1833U	1837	N34	W41	6063	05	18.5	4D	SF	3	E		29		F
0401		21	19182	19201	1932	S15	W41	6064	05	18.7	14	SF C 4.9				30		F
	RAMY	21	1918	1920	1939	S14	W40	6064	05	18.8	21	SF C 4.9	3	E		35		F
	PALE	21	1920	1921	1926	S16	W42	6064	05	18.6	6	SF	3	E		26		
0402	RAMY	21	1928	1930	1939	N34	W39	6063	05	18.7	11	SF	3	E		15		
0403	RAMY	21	1941	1943	1957	N34	W40	6063	05	18.6	16	SF	3	E		17		FH
0404	HOLL	21	2044	2045	2102	N36	W44	6063	05	18.3	18	SF C 2.1	3	E		56		F
0405		21	21103	21121	2126	S14	W42	6064	05	18.7	16	SF C 2.7				26		F
	HOLL	21	2110	2112	2133	S13	W42	6064	05	18.7	23	SF	3	E		33		
	PALE	21	2113	2113	2119	S16	W43	6064	05	18.6	6	SF C 2.7	3	E		20		F
0406	HOLL	21	2113	2113	2118	S17	E23	6068B	05	23.6	5	SF	3	E		16		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0407		21	2212*	2217*	2405	N34	W37	6063	05	19.0	113	2B X 5.5				443		FKUZ
	HOLL	21	2212	2217	2339	N35	W36	6063	05	19.0	87	2B X 5.5	3	E		592		ZU
	HOLL	21	2212	2240	2339	N35	W36	6063	05	19.0	87	2B		E		389		K
	PALE	21	2333	2347	2457	N31	W40	6063	05	18.8	84	2N	3	E		347		UF
0408		22	0004*	0016*	0201	S15	W43	6064	05	18.7	117	1N M 3.2				229	4.2	EFHKU
	HOLL	21	2322E	2449	2456D	S13	W43	6064	05	18.7	94D	1B	3	E		246		FE
	MITK	22	0004	0049	0152D	S16	W40	6064	05	19.0	108D	1N		C	0049	270	3.7	E
	PALE	22	0007	0016	0219	S16	W44	6064	05	18.7	132	SF		E		70		K
	PALE	22	0007	0055	0219	S16	W44	6064	05	18.7	132	1F M 3.2	3	E		224		FH
	PEKG	22	0017	0056	0125	S16	W42	6064	05	18.8	68	1B		C	0056	336	4.7	EU
0409		22	03123	03141	0326	S14	W46	6064	05	18.6	14	SN				61	1.4	FZ
	TACH	22	0312	0314	0322	S15	W45	6064	05	18.7	10	SB	2	C	0314	92	1.4	FZ
	LEAR	22	0315	0315	0331	S14	W46	6064	05	18.6	16	SF	3	E		30		
0410		22	03304	03344	0350	S14	W46	6064	05	18.7	20	SN				30	0.6	FZ
	TACH	22	0330	0334	0350	S15	W45	6064	05	18.7	20	SB	2	C	0334	41	0.6	FZ
	LEAR	22	0334	0338	0349	S14	W46	6064	05	18.7	15	SF	3	E		19		
0411	LEAR	22	0515	0526	0618	S14	W47	6064	05	18.7	63	SF	3	E		20		F
0412	LEAR	22	0613	0615	0628	S19	E24	6070	05	24.1	15	SF	3	E		22		
0413		22	0637	06387	0705	S14	W48	6064	05	18.6	28	SF				20		K
	LEAR	22	0637	0638	0705	S14	W48	6064	05	18.6	28	SF		E		23		K
	LEAR	22	0637	0645	0705	S14	W48	6064	05	18.6	28	SF	3	E		18		
0414	LEAR	22	0724	0724	0733	S10	E15	6069	05	23.4	9	SF	3	E		13		
0415	LEAR	22	0748	0753	0825	S14	W49	6064	05	18.6	37	SF C 2.4	4	E		75		
		22	08352	0837	0853	S15	W43	6064	05	19.1	18	SN C 6.4				92	2.7	EF
	SVTO	22	0833E	0837U	0912D	S15	W41	6064	05	19.2	39D	SN C 6.4	2	E		58		F
	LEAR	22	0835	0836U	0902	S14	W46	6064	05	18.9	27	SN	2	E		27		FE
	ATHN	22	0837	0837	0844	S16	W42	6064	05	19.2	7	1N	2	V	0837	191	2.7	
0417		22	11442	11514	1216	N33	W48	6063	05	18.7	32	SF				24		
	RAMY	22	1144	1155	1229	N34	W48	6063	05	18.7	45	SF	2	E		20		
	SVTO	22	1146	1151	1204	N32	W48	6063	05	18.7	18	SF	3	E		27		
0418	RAMY	22	1204	1204	1225	S14	W50	6064	05	18.7	21	SF	2	E		17		
0419	RAMY	22	1242	1242	1251	S14	W50	6064	05	18.7	9	SF	2	E		12		F
0420	SVTO	22	1259	1259	1304	N28	W65	6062	05	17.5	5	SF	3	E		43		
0421	RAMY	22	1344E	1344U	1404	N11	W14	6064B	05	21.5	20D	SF	2	E		13		
0422	RAMY	22	1552	1552	1555	N42	W54		05	18.2	3	SF	2	E		24		F
0423	HOLL	22	1813	1813	1819	N08	W06	6068	05	22.3	6	SF	3	E		24		F
0424	RAMY	22	1919	1922	1929	S14	W54	6064	05	18.7	10	SF	2	E		22		
0425	HOLL	22	2150	2154	2200	N08	W07	6068	05	22.4	10	SF	3	E		13		
0426		23	0018*	0019*	0107	S14	W56	6064	05	18.8	49	SF				11		F
	LEAR	23	0018	0019	0109	S14	W58	6064	05	18.6	51	SF	3	E		11		
	HOLL	23	0051	0055	0105	S13	W55	6064	05	18.9	14	SF	3	E		11		F
0427	LEAR	23	0141	0142	0217	N33	W54	6063	05	18.8	36	SF	3	E		21		
0428	LEAR	23	0203	0206	0216	S14	W57	6064	05	18.8	13	SF	3	E		41		
0429	LEAR	23	0231	0233	0237	N38	W57	6063	05	18.5	6	SF	3	E		25		
0430	LEAR	23	0252	0253	0259	N08	W09	6068	05	22.4	7	SF	3	E		11		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0431		23	04017	04119	0535	N33	W56	6063	05	18.7	94	1N	M 8.7			118	1.2	EF	
	LEAR	23	0401	0420	0535	N33	W55	6063	05	18.8	94	1B	M 8.7	4	E	185		F	
	PEKG	23	0408	0411	0411D	N33	W57	6063	05	18.6		3D	SF		P	0411	50	1.2	E
0432	LEAR	23	0455	0455	0500	S14	W60	6064	05	18.7	5	SF			E		12		
0433	LEAR	23	0517	0518	0533	S14	W60	6064	05	18.7	16	SF			E		24		
0434	ISTA	23	0614E		0634	S14	W55	6064	05	19.1	20D	SF							B
0435		23	06224	06261	0637	S20	E12	6070	05	24.2	15	SF					13		
	KANZ	23	0622	0626	0636	S20	E13	6070	05	24.2	14	SF			V				
	LEAR	23	0626	0627	0638	S19	E12	6070	05	24.2	12	SF		3	E			13	
0436		23	0718*	0727*	0840	S15	W60	6064	05	18.8	82	1N	M 2.0				89	2.2	DEFK
	LEAR	23	0718	0727	0922D	S14	W60	6064	05	18.8	124D	SF			E		43		K
	LEAR	23	0718	0817U	0922D	S14	W60	6064	05	18.8	124D	1B	M 2.0	2	E		105		
	KANZ	23	0731	0818	0844D	S15	W60	6064	05	18.8	73D	1B			V				
	ISTA	23	0742	0818	0944D	S14	W53	6064	05	19.3	122D	1N				0818			K
	PEKG	23	0810	0816	0840	S15	W64	6064	05	18.5	30	SN			P	0816	84	1.8	D
0437		23	0822	0822	0848D	S40	W56		05	18.8	26D	SF					14		
	KANZ	23	0822	0822	0844D	S41	W54		05	18.9	22D	SF			V				
	LEAR	23	0823E	0823U	0848D	S40	W57		05	18.7	25D	SF		2	E		14		
0438		23	08224	08272	0848D	N09	W16	6068	05	22.1	26D	SF					23		
	KANZ	23	0822	0829	0844D	N09	W17	6068	05	22.1	22D	SF			V				
	LEAR	23	0826	0827	0848D	N09	W15	6068	05	22.2	22D	SF		2	E		23		
0439	ATHN	23	1028	1030	1045	S13	W57	6064	05	19.1	17	1N		2	V	1030	191	3.7	
0440	RAMY	23	1120	1121	1125	S13	W63	6064	05	18.7	5	SF		3	E		20		
0441	RAMY	23	1137	1138	1204	S14	W60	6064	05	18.9	27	SF		3	E		27		F
0442		23	13336	13372	1346	S12	E16	6071	05	24.8	13	SF					20		F
	RAMY	23	1333	1337	1350	S12	E16	6071	05	24.8	17	SF		3	E		25		F
	SVTO	23	1339	1339	1343	S12	E17	6071	05	24.8	4	SF		3	E		14		F
0443		23	1349	1349	1354	S14	W62	6064	05	18.9	5	SF					18		
	SVTO	23	1349	1349	1354	S15	W60	6064	05	19.0	5	SF		3	E		13		
	RAMY	23	1350E	1351U	1409D	S14	W64	6064	05	18.7	19D	SF		3	E		24		
0444	RAMY	23	1805	1808	1820	S15	W62	6064	05	19.0	15	SF	C 5.5	3	E		53		
0445	HOLL	23	1841	1844	1908	S13	E12	6071	05	24.7	27	SF		3	E		40		F
0446		23	1835*	1836*	1914	S13	W67	6064	05	18.7	39	SF					23		F
	RAMY	23	1835	1836	1848	S14	W67	6064	05	18.7	13	SF		3	E		45		
	HOLL	23	1842	1843	1912	S13	W65	6064	05	18.9	30	SF		3	E		28		F
	RAMY	23	1901	1905	1913	S14	W67	6064	05	18.7	12	SF		3	E		24		
	HOLL	23	1914	1915	1919	S13	W68	6064	05	18.7	5	SF		3	E		19		F
	RAMY	23	1915	1915	1919	S13	W68	6064	05	18.7	4	SF		3	E		14		
	HOLL	23	1927	1927	1930	S13	W68	6064	05	18.7	3	SF		3	E		10		
0447	HOLL	23	1914	1916	1921	S16	W01	6068B	05	23.7	7	SF		3	E		13		F
0448	HOLL	23	1923	1928	1935	S13	E12	6071	05	24.7	12	SF		3	E		17		F
0449	HOLL	23	1944	1944	1950	S13	W68	6064	05	18.7	6	SF		3	E		14		
0450		23	19538	2009	2034	S12	E10	6071	05	24.6	41	SF					86		F
	HOLL	23	1953	2009	2032	S13	E10	6071	05	24.6	39	SF		3	E		96		F
	RAMY	23	2001	2009	2035	S12	E11	6071	05	24.7	34	SF		3	E		76		F
0451		23	20177	2025	2042	S14	W68	6064	05	18.7	25	SF	C 3.5				26		
	HOLL	23	2017	2025	2037	S13	W69	6064	05	18.6	20	SF	C 3.5	3	E		25		
	RAMY	23	2024	2025	2047	S14	W68	6064	05	18.7	23	SF	C 3.5	3	E		27		

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Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0452		23 2042*	2053*	2111	S14	W65	6064	05	18.9	29	SF						32	
	HOLL	23 2042	2053	2058	S13	W68	6064	05	18.7	16	SF		3	E			12	
	HOLL	23 2059	2103	2118	S15	W63	6064	05	19.1	19	SN		3	E			55	
	RAMY	23 2102	2103	2117	S15	W63	6064	05	19.1	15	SF		3	E			29	
		23 2110		2114	No Flare Patrol													
0453	PALE	23 2222	2223	2231	S12	E12	6071	05	24.8	9	SF		3	E			15	
0454		23 23396	23424	2359	S16	W68	6064	05	18.8	20	SF C 7.5						30	F
	PALE	23 2339	2342	2359	S15	W67	6064	05	18.9	20	SF C 7.5	3	E				18	F
	PURP	23 2345	2346	2359	S17	W70	6064	05	18.7	14	SF			C	2346		42	
0455	PALE	24 0003	0008	0032	S12	E10	6071	05	24.7	29	SF		3	E			18	
0456	PALE	24 0015	0028	0035	S15	W65	6064	05	19.1	20	SF		3	E			20	
0457	PALE	24 0042	0042	0050	S14	W61	6064	05	19.4	8	SF C 3.8	3	E				24	
0458	LEAR	24 0228	0229	0233	N37	W72	6063	05	18.3	5	SF		3	E			10	
0459	TACH	24 0307		0416U	S20	E03	6070	05	24.3	69U	SN		4	C			153	1.7 E
0460	LEAR	24 0449	0458	0529	S15	W68	6064	05	19.0	40	SF		3	E			15	
0461	LEAR	24 0559	0602	0635	S14	W73	6064	05	18.7	36	SF M 1.3	3	E				46	F
0462	KHAR	24 0725	0726	0740	S14	W90	6067	05	17.5	15	SF		2	V	0726			DL
0463		24 08068	0825*	0900	N34	W69	6063	05	18.8	54	SN C 1.0						63	DEH
	LEAR	24 0806	0850	0929D	N34	W71	6063	05	18.7	83D	SF C 1.0	3	E				19	
	BUCA	24 0810	0825	0900	N35	W68	6063	05	18.9	50	1N			C	0825		107	D
	KHAR	24 0814	0823U	0900U	N33	W70	6063	05	18.8	46U	SN		2	P	0823			EH
	KANZ	24 0833E	0833U	0859D	N33	W66	6063	05	19.1	26D	SF			V				
0464	KAND	24 1013	1017	1030	S13	E05	6071	05	24.8	17	SN			P	1017		83	0.9 E
0465	RAMY	24 1647	1648	1657	S10	W15	6069	05	23.6	10	SF		3	E			16	F
0466		24 1853	1857	1908	S09	W21	6069	05	23.2	15	SF						50	FS
	HOLL	24 1850E	1856U	1944D	S09	W20	6069	05	23.3	54D	SF		2	E			72	S
	RAMY	24 1853	1857	1908	S09	W22	6069	05	23.1	15	SF		3	E			27	F
0467		24 19391	19391	1958	N35	W77	6063	05	18.6	19	1F M 1.3						120	
	PALE	24 1939	1939	1956	N32	W75	6063	05	18.9	17	1F M 1.3	3	E				132	
	RAMY	24 1940	1940	2003	N34	W82	6063	05	18.3	23	1F		2	E			149	
	HOLL	24 1943E	1944U	1956	N38	W74	6063	05	18.8	13D	SF		2	E			78	
0468		24 2046	2049	2145	N36	W76	6063	05	18.8	59	1B X 9.3						175	FY
	PALE	24 2046	2049	2145	N33	W78	6063	05	18.7	59	1B X 9.3	3	E				225	YF
	HOLL	24 2058E	2102U	2124D	N38	W75	6063	05	18.8	26D	1N		2	E			125	YF
0469	HOLL	24 2217E	2217U	2231	N18	E78	6077	05	30.9	14D	SF		3	E			23	
0470	HOLL	24 2309	2310	2316	N21	E62	6075	05	29.7	7	SF C 3.0	3	E				60	
0471		24 23321	2340	2354	S11	W77	6064	05	19.2	22	SF C 5.8						49	EJ
	VORO	24 2332		2340D	S13	W79	6064	05	19.0	8D	1F		2	C	2336		99	EJ
	LEAR	24 2333	2340	2348	S10	W74	6064	05	19.4	15	SF C 5.8	3	E				30	
	HOLL	24 2352E	2356U	2359	S10	W78	6064	05	19.1	7D	SF		2	E			19	
0472	HOLL	25 0007	0007	0013	N11	E53	6076	05	29.0	6	SF		3	E			20	
0473	LEAR	25 0125	0128	0137	N22	E89	6077	05	31.9	12	SF		3	E			50	
0474		25 05242	05262	0533	S14	W06	6071	05	24.8	9	SN						56	1.0 F
	TACH	25 0524	0526	0535	S14	W07	6071	05	24.7	11	SB		2	C	0526		92	1.0 F
	LEAR	25 0526	0528	0531	S13	W04	6071	05	24.9	5	SF		3	E			19	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0475	ISTA	25	0730E		0747	N07	W44	6068	05	22.0	17D	1N								B
0476		25	0733I	0740	0804	N23	E80	6077	05	31.5	31	SN					48			GT
	SVTO	25	0733	0740	0757	N22	E76	6077	05	31.1	24	SF		3	E		64			
	ISTA	25	0734E		0901D	N28	E85	6077	05	31.9	87D	1B								G
	LEAR	25	0734	0740	0758	N22	E84	6077	05	31.8	24	SF		3	E		31			
	KANZ	25	0744E	0744U	0816	N21	E75	6077	05	31.1	32D	SF			V					
	KHAR	25	0756E		0815D	N22	E78	6077	05	31.3	19D	SN		2	P	0756				T
0477	ISTA	25	0738E		0750	N11	E47	6076	05	28.8	12D	1N								D
0478	KHAR	25	0806		0815U	N07	W44	6068	05	22.0	9U	SF		2	V	0807				D
0479	KHAR	25	0833	0834	0842	S22	W85	6064	05	18.8	9	SF		2	V	0834				DH
0480		25	0845A	0852	0854	N22	E77	6077	05	31.3	9	SN					11			RT
	KHAR	25	0845		0900U	N22	E78	6077	05	31.3	15U	SN		2	V	0845				RT
	SVTO	25	0849	0852	0854	N21	E76	6077	05	31.2	5	SF		3	E		11			
0481		25	0919A	0921	0937	N22	E77	6077	05	31.3	18	SN	C 2.0				55			HT
	SVTO	25	0919	0921	0937	N21	E76	6077	05	31.2	18	SF	C 2.0	3	E		55			
	KHAR	25	0923		0938U	N22	E78	6077	05	31.4	15U	SN		2	V	0933				HT
0482	KHAR	25	1011		1020	N22	E77	6077	05	31.3	9	SN		2	V	1011				LT
0483	KHAR	25	1035		1043	N22	E77	6077	05	31.3	8	SN			V					LT
0484	RAMY	25	1137	1137	1153	N20	E74	6077	05	31.1	16	1F	C 3.1	3	E		107			
0485	HOLL	25	1254	1255	1258	N18	E72	6077	05	31.0	4	SF	C 2.7	3	E		11			
0486	HOLL	25	1424	1426	1431	S13	W84	6064	05	19.3	7	SF	C 2.9	3	E		14			
0487		25	1507I	1511	1522	N19	E73	6077	05	31.2	15	SF					18			F
	RAMY	25	1507	1511	1523	N20	E74	6077	05	31.3	16	SF		3	E		19			
	HOLL	25	1508	1511	1520	N18	E72	6077	05	31.1	12	SF		3	E		16			F
0488	HOLL	25	1518	1519	1521	S17	W84	6064	05	19.2	3	SF		3	E		13			F
0489	HOLL	25	1616	1617	1621	S13	W77	6064	05	19.9	5	SF		3	E		24			
0490		25	1648	1653	1705	N18	E72	6077	05	31.2	17	SF					34			F
	HOLL	25	1648	1653	1706	N18	E72	6077	05	31.2	18	SF		3	E		34			F
	RAMY	25	1650E	1653	1704	N19	E72	6077	05	31.2	14D	SF		3	E		35			
0491		25	1914A	19217	1938	N21	W47	6074	05	22.2	24	SF					37			F
	HOLL	25	1914	1921	1941	N22	W46	6074	05	22.3	27	SF		3	E		56			F
	RAMY	25	1920	1928	1934	N20	W48	6074	05	22.1	14	SF		3	E		18			
0492	RAMY	25	1929E	1938U	1946	N18	E67	6077	05	30.9	17D	SF		2	E		16			
0493	HOLL	25	2007	2021	2036	S12	W15	6071	05	24.7	29	SF		3	E		46			
0494		25	2106	2106	2139	S11	W16	6071	05	24.7	33	1N	C 8.0				109			FU
	RAMY	25	2106	2106	2127	S11	W16	6071	05	24.7	21	SN	C 8.0	2	E		79			UF
	HOLL	25	2106E	2106	2151	S11	W17	6071	05	24.6	45D	1N	C 8.0	3	E		144			F
	PALE	25	2107E	2107U	2139D	S12	W16	6071	05	24.7	32D	1F		3	E		105			F
0495		25	2133	2134	2142	N19	E70	6077	05	31.2	9	SF					28			F
	PALE	25	2122E	2140U	2149D	N21	E71	6077	05	31.3	27D	SF		3	E		30			F
	HOLL	25	2133	2134	2142	N17	E68	6077	05	31.1	9	SF		3	E		27			
0496	PALE	25	2333	2354	2359	N18	E65	6077	05	30.9	26	SF		3	E		21			
0497	PALE	26	0021	0021	0029	N21	E69	6077	05	31.3	8	SF		3	E		16			

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Obs Opt	Xray	See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0498		26	00224	00274	0046	S13	W16	6071	05	24.8	24	SN					105	1.2	EJ
	MITK	26	0022	0028	0054	S13	W16	6071	05	24.8	32	SN			C	0028			E
	PURP	26	0023	0027	0035D	S13	W17	6071	05	24.7	12D	SF			C	0027	98	1.1	
	VORO	26	0023	0031	0054	S12	W17	6071	05	24.7	31	SF		2	C	0031	134	1.5	EJ
	PEKG	26	0026	0027	0029	S13	W16	6071	05	24.8	3	SN			P	0027	84	0.9	E
0499		26	0118*	0136*	0156	N20	E67	6077	05	31.2	38	SF					48		DF
	VORO	26	0118	0136	0155	N20	E66	6077	05	31.1	37	1F		2	C	0136	90		D
	PALE	26	0127	0137	0153	N18	E64	6077	05	30.9	26	SF		3	E		40		F
	LEAR	26	0133	0136	0152	N21	E69	6077	05	31.3	19	SF		3	E		48		
	LEAR	26	0156	0156	0205	N22	E68	6077	05	31.3	9	SF		3	E		13		
0500	TACH	26	0316	0316	0324	S12	W17	6071	05	24.8	8	SN		2	C	0316	26	0.3	E
0501	TACH	26	0336	0341	0405	S12	W14	6071	05	25.1	29	SB		2	C	0341	117	1.3	E
0502		26	05281	05282	0544	N20	E62	6077	05	31.0	16	SN	C 5.4				30	0.7	E
	TACH	26	0528	0528	0539	N21	E62	6077	05	31.0	11	SB		2	C	0528	26	0.7	E
	SVTO	26	0529	0530	0550	N20	E62	6077	05	31.0	21	SF	C 5.4	3	E		34		
0503	LEAR	26	0715	0717	0725	N22	E71	6077	05	31.7	10	SF		3	E		10		
0504		26	08064	08066	0820	N08	W58	6068	05	22.0	14	SF					13		
	SVTO	26	0806	0806	0821	N07	W58	6068	05	22.0	15	SF		3	E		16		
	LEAR	26	0810	0812	0818	N10	W57	6068	05	22.0	8	SF		3	E		10		
0505	SVTO	26	1002	1005	1018	N20	E58	6077	05	30.8	16	1N	C 7.4	3	E		112		F
0506		26	1329*	13337	1346	N18	E56	6077	05	30.8	17	SF					21		K
	HOLL	26	1329	1333	1348	N18	E57	6077	05	30.9	19	SF			E		20		K
	HOLL	26	1329	1339	1348	N18	E57	6077	05	30.9	19	SF		3	E		31		
	KANZ	26	1335E	1340	1345	N20	E55	6077	05	30.8	10D	SF			C				
	SVTO	26	1340	1340	1343	N18	E57	6077	05	30.9	3	SF		2	E		12		
0507	RAMY	26	1547	1550	1605	N18	W61	6074	05	22.0	18	SF		3	E		20		
0508		26	16209	1621*	1636	N18	E57	6077	05	31.0	16	SF					15		
	RAMY	26	1620	1621	1628	N19	E57	6077	05	31.0	8	SF		3	E		12		
	HOLL	26	1626	1633	1638	N17	E56	6077	05	30.9	12	SF		3	E		17		
	RAMY	26	1629	1636	1641	N19	E58	6077	05	31.1	12	SF		3	E		15		
0509		26	16253	16324	1648	S14	W22	6071	05	25.0	23	SF					20		F
	HOLL	26	1625	1632	1651	S13	W22	6071	05	25.0	26	SF		3	E		25		F
	RAMY	26	1628	1636	1646	S14	W21	6071	05	25.1	18	SF		3	E		15		F
0510	RAMY	26	1712	1716U	1744	S16	W22	6071	05	25.0	32	SF	C 8.4	2	E		20		
0511		26	1718	1726*	1857	N19	E58	6077	05	31.1	99	SN	M 2.4				84		FHK
	HOLL	26	1718	1726	1838	N17	E58	6077	05	31.1	80	SF			E		88		K
	HOLL	26	1718	1800	1838	N17	E58	6077	05	31.1	80	1B	M 2.4	3	E		109		
	RAMY	26	1725E	1751U	1952	N20	E57	6077	05	31.1	147D	SN		3	E		80		F
	PALE	26	1803E		1841	N21	E57	6077	05	31.1	38D	SF		3	E		59		FH
0512	HOLL	26	1744	1745	1754	N11	W61	6068	05	22.1	10	SF		3	E		21		
0513	HOLL	26	2121	2125	2135	S13	W25	6071	05	25.0	14	SF		3	E		39		
0514	PALE	26	2155	2156	2159	S12	W29	6071	05	24.7	4	SF		3	E		18		
0515	PALE	26	2206	2216	2232	N21	E57	6077	05	31.3	26	SF		3	E		34		F
0516	PALE	26	2250	2251	2255	N22	E61	6077	05	31.6	5	SF		3	E		28		
0517	LEAR	27	0128	0140	0216	N23	E58	6077	05	31.5	48	SF		3	E		31		F
0518		27	0630*	06461	0658	N23	E56	6077	05	31.6	28	SF	C 3.4				27		F
	SVTO	27	0630	0647	0658	N22	E55	6077	05	31.5	28	SF		3	E		34		
	LEAR	27	0646	0646	0658	N24	E58	6077	05	31.8	12	SF	C 3.4	3	E		20		F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF		CMP Mo	Dur (Min)	Imp Opt	Obs Xray	Obs See	Type	Area Measurement			Remarks		
						Region	Class							Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)			
0519	KHAR	27	0710		0721	N18 E58	6077	05 31.7	11	SF		2	V	0710			DHL		
0520		27	08073	0810	0818	N22 E54	6077	05 31.5	11	SN C 2.6					53		FL		
	SVTO	27	0807	0810	0818	N22 E53	6077	05 31.4	11	SF C 2.6	3	E			53		F		
	KHAR	27	0810		0818	N23 E54	6077	05 31.5	8	SN		2	V	0810			L		
0521	SVTO	27	1036	1037	1041	N22 E53	6077	05 31.5	5	SF C 1.3	3	E					22		
0522	RAMY	27	1356	1357	1359	N21 E48	6077	05 31.3	3	SF		3	E				14		
0523		27	1555	16163	1645	N22 E48	6077	05 31.3	50	SF C 2.9							32	F	
	HOLL	27	1555	1616	1645	N21 E49	6077	05 31.4	50	SF C 2.9	3	E					35		
	SVTO	27	1601E	1619	1631D	N22 E48	6077	05 31.3	30D	SF		2	E				28	F	
0524	RAMY	27	1726	1726	1731	S19 W47	6070	05 24.1	5	SF		3	E				17	F	
0525	PALE	27	1913E		2113	N23 E48	6077	05 31.5	120D	SF		3	E				36		
0526		27	22144	22181	2224	S16 W52	6070	05 24.0	10	SF							48	H	
	HOLL	27	2214	2218	2258D	S15 W52	6070	05 24.0	44D	SF		4	E				73	H	
	PALE	27	2218	2219	2224	S17 W51	6070	05 24.0	6	SF		3	E				22	H	
0527		27	2343	2348	2401	N22 E46	6077	05 31.5	18	1N C 1.9							128	3.1	EF
	PALE	27	2343	2348	2401	N22 E46	6077	05 31.5	18	SF C 1.9	3	E					65		F
	MITK	27	2347E		2401	N23 E45	6077	05 31.4	14D	1N			C	2348			190	3.1	E
0528		28	0522*	0523*	0602	N22 E41	6077	05 31.4	40	SF C 2.9							67	1.3	DEFK
	ABST	28	0522	0523	0531	N21 E40	6077	05 31.3	9	SF			C	0523			87	1.3	D
	SVTO	28	0534E	0540	0618	N23 E42	6077	05 31.5	44D	SF			E				28		K
	SVTO	28	0534E	0603	0618	N23 E42	6077	05 31.5	44D	SF C 2.9	3	E					87		F
	HURB	28	0601	0601	0611D	N20 E40	6077	05 31.3	10D	1N									E
0529		28	0723	0742	0746	S15 W44	6071	05 25.0	23	SF C 3.0							63		F
	SVTO	28	0723	0742	0746	S15 W44	6071	05 25.0	23	SF		2	E				45		F
	KANZ	28	0723E	0746U	0755D	S14 W44	6071	05 25.0	32D	SF			V						
	SVTO	28	0747E	0808U	0831D	S15 W45	6071	05 24.9	44D	SF C 3.0	2	E					81		F
0530		28	1351	13525	1408	N14 E04	6076	05 28.9	17	SF							42		F
	RAMY	28	1351	1352	1405	N14 E05	6076	05 28.9	14	SF		2	E				32		F
	HOLL	28	1354E	1357U	1412	N14 E05	6076	05 28.9	18D	SF		3	E				51		
	KANZ	28	1357E	1357	1400D	N14 E03	6076	05 28.8	3D	SF			V						
0531		28	15013	1504	1539	N18 E33	6077	05 31.1	38	SF M 1.1							64		EH
	SVTO	28	1501	1504	1542D	N19 E31	6077	05 31.0	41D	SF		3	E				58		
	RAMY	28	1504	1508U	1536	N18 E33	6077	05 31.1	32	SN M 1.1		2	E				85		EH
	HOLL	28	1512E	1512U	1542	N17 E34	6077	05 31.2	30D	SF		3	E				48		
0532		28	17465	1807U	1833	S08 W72		05 23.3	47	SF							56		FU
	HOLL	28	1746	1807U	1833	S08 W74		05 23.2	47	SF		2	E				81		F
	RAMY	28	1751	1819U	1833D	S09 W70		05 23.5	42D	SF		3	E				31		UF
0533	RAMY	28	1749	1751U	1814	N19 E32	6077	05 31.2	25	SF		3	E				22		F
0534	PALE	28	2042	2042	2047	N19 E30	6077	05 31.1	5	SF		3	E				15		F
0535	HOLL	29	0001E	0001U	0004	N20 E26	6077	05 31.0	3D	SF C 2.0	2	E					20		H
0536	MITK	29	0022	0031	0106	S12 W58	6071	05 24.6	44	1N			C	0031			140	2.8	E
0537	LEAR	29	0124	0124	0131	N14 W05	6076	05 28.7	7	SF		3	E				11		
0538		29	03056	03059	0329	N20 E25	6077	05 31.0	24	SN C 2.0							54	0.8	DE
	TACH	29	0305	0305	0313	N20 E26	6077	05 31.1	8	SB		2	C	0305			71	0.9	E
	LEAR	29	0311	0312	0339	N19 E27	6077	05 31.2	28	SF C 2.0	3	E					42		
	PEKG	29	0311	0314	0335	N20 E22	6077	05 30.8	24	SN			P	0314			50	0.6	D
0539	LEAR	29	0421	0425	0435	N20 E26	6077	05 31.2	14	SF		3	E				14		
0540	LEAR	29	0616	0625	0630	N21 E28	6077	05 31.4	14	SF		3	E				20		

H α SOLAR FLARES

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MAY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo Day	Dur (Min)	Imp Opt Xray	Obs See	Type	Area Measurement			Remarks
														Time (UT)	Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	
0541		29	07383	07445	0808	S10	W48	6071	05 25.7	30	SN				37	0.6	
	LEAR	29	0738	0744	0809	S11	W48	6071	05 25.7	31	SF	2	E		35		
	YUNN	29	0741	0749	0807	S09	W49	6071	05 25.6	26	SN		C		39	0.6	
0542	LEAR	29	0748	0749	0754	N21	E24	6077	05 31.2	6	SF	3	E		15		
0543	LEAR	29	0809	0814	0821	N22	E04	6075	05 29.6	12	SF	3	E		22		
0544	HOLL	29	1238E	1238U	1249	N21	E23	6077	05 31.3	11D	SF B	9.7	2	E	24		F
		29	1422		1434	No Flare Patrol											
		29	1458		1512	No Flare Patrol											
0545		29	17281	1729	1746D	S09	W68	6071	05 24.6	18D	SF				52		F
	PALE	29	1728	1732U	1746D	S10	W67	6071	05 24.7	18D	SF	3	E		44		
	HOLL	29	1729	1729	1736D	S08	W69	6071	05 24.5	7D	SF	2	E		59		F
0546	PALE	29	1951E	1951U	2009	S09	W84		05 23.5	18D	SF	3	E		20		
0547		29	20402	20422	2049	N21	E15	6077	05 31.0	9	SF				22		
	HOLL	29	2040	2043	2052	N21	E15	6077	05 31.0	12	SF	3	E		34		
	RAMY	29	2040	2044	2047	N21	E14	6077	05 30.9	7	SF	3	E		13		
	PALE	29	2042	2042	2048	N21	E15	6077	05 31.0	6	SF	3	E		20		
0548		29	2257*	23284	2340	N20	E16	6077	05 31.2	43	SF				20		
	HOLL	29	2257	2328	2343	N20	E17	6077	05 31.2	46	SF	3	E		13		
	LEAR	29	2330	2332	2336	N20	E16	6077	05 31.2	6	SF	2	E		27		
0549		30	00265	0031	0038	S14	W74	6071	05 24.4	12	SF				18		
	HOLL	30	0026	0031	0039	S13	W72	6071	05 24.6	13	SF	3	E		21		
	LEAR	30	0031	0031	0036	S16	W75	6071	05 24.3	5	SF	3	E		14		
0550		30	01283	01351	0148	N20	E15	6077	05 31.2	20	SF				66	1.3	EFJ
	LEAR	30	0128	0136	0148	N20	E15	6077	05 31.2	20	SF	3	E		16		F
	VORO	30	0131	0135	0147	N20	E15	6077	05 31.2	16	SF	2	C	0135	116	1.3	EJ
0551		30	1052	1053	1123	S14	W69	6071	05 25.2	31	SF				44		F
	RAMY	30	1052	1053	1123	S11	W68	6071	05 25.3	31	SF	3	E		35		F
	SVTO	30	1054E	1058U	1113D	S17	W70	6071	05 25.1	19D	SF	2	E		52		F
0552	RAMY	30	1136	1139	1144	N20	E09	6077	05 31.2	8	SF	3	E		22		F
0553		30	13363	1341	1348	N20	E07	6077	05 31.1	12	SF C	1.1			26		F
	HOLL	30	1336	1341	1350	N21	E07	6077	05 31.1	14	SF	3	E		33		
	RAMY	30	1339	1341	1346	N20	E07	6077	05 31.1	7	SF C	1.1	3	E	18		F
		30	1358		1403	No Flare Patrol											
0554		30	18054	18112	1828	S16	E58	6084	06 4.1	23	SF C	1.2			32		F
	HOLL	30	1805	1811	1821	S17	E57	6084	06 4.1	16	SF	3	E		36		
	RAMY	30	1809	1813	1836	S16	E58	6084	06 4.1	27	SF C	1.2	3	E	27		F
		30	1820		1834	No Flare Patrol											
		30	1840		1907	No Flare Patrol											
		30	1943		2011	No Flare Patrol											
		30	2045		2202	No Flare Patrol											
0555	HOLL	31	0037	0042	0048	S09	W17	6078	05 29.7	11	SF	3	E		11		
0556	LEAR	31	0209	0211	0220	S10	W18	6078	05 29.7	11	SF B	7.2	3	E	29		
0557	LEAR	31	0303	0309	0319	N20	E00	6077	05 31.1	16	SF C	1.7	3	E	19		
0558	ABST	31	0446	0448	0500	S11	W18	6078	05 29.8	14	SF		C	0448	174	1.9	E
0559		31	0708*	07201	0731	N15	E29	6080	06 2.5	23	SF				12		F
	SVTO	31	0708	0721	0735	N15	E29	6080	06 2.5	27	SF	3	E		13		
	LEAR	31	0718	0720	0727	N15	E29	6080	06 2.5	9	SF	3	E		12		F

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H α SOLAR FLARES

MAY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement		Remarks
																Time (UT)	Apparent (10-6 Disk)	
0560	LEAR	31	0754	0755	0801	S10	W21	6078	05	29.7	7	SF		3	E		38	
0561		31	1240	1241	1251	N20	W04	6077	05	31.2	11	SF B	7.4				28	F
	HOLL	31	1238E	1238U	1251	N20	W03	6077	05	31.3	13D	SF		2	E		23	F
	SVTO	31	1240	1241	1251	N21	W05	6077	05	31.1	11	SF B	7.4	3	E		33	F
0562	HOLL	31	2013	2014	2105	N20	W09	6077	05	31.1	52	SF		3	E		38	
0563	HOLL	31	2119	2124	2142	S10	W30	6078	05	29.6	23	SF		3	E		22	
0564	HOLL	31	2240	2253	2316	N21	W10	6077	05	31.2	36	SF C	1.4	3	E		72	
0565	HOLL	31	2249	2250	2309	N15	E20	6080	06	2.5	20	SF		3	E		35	

"Remarks"

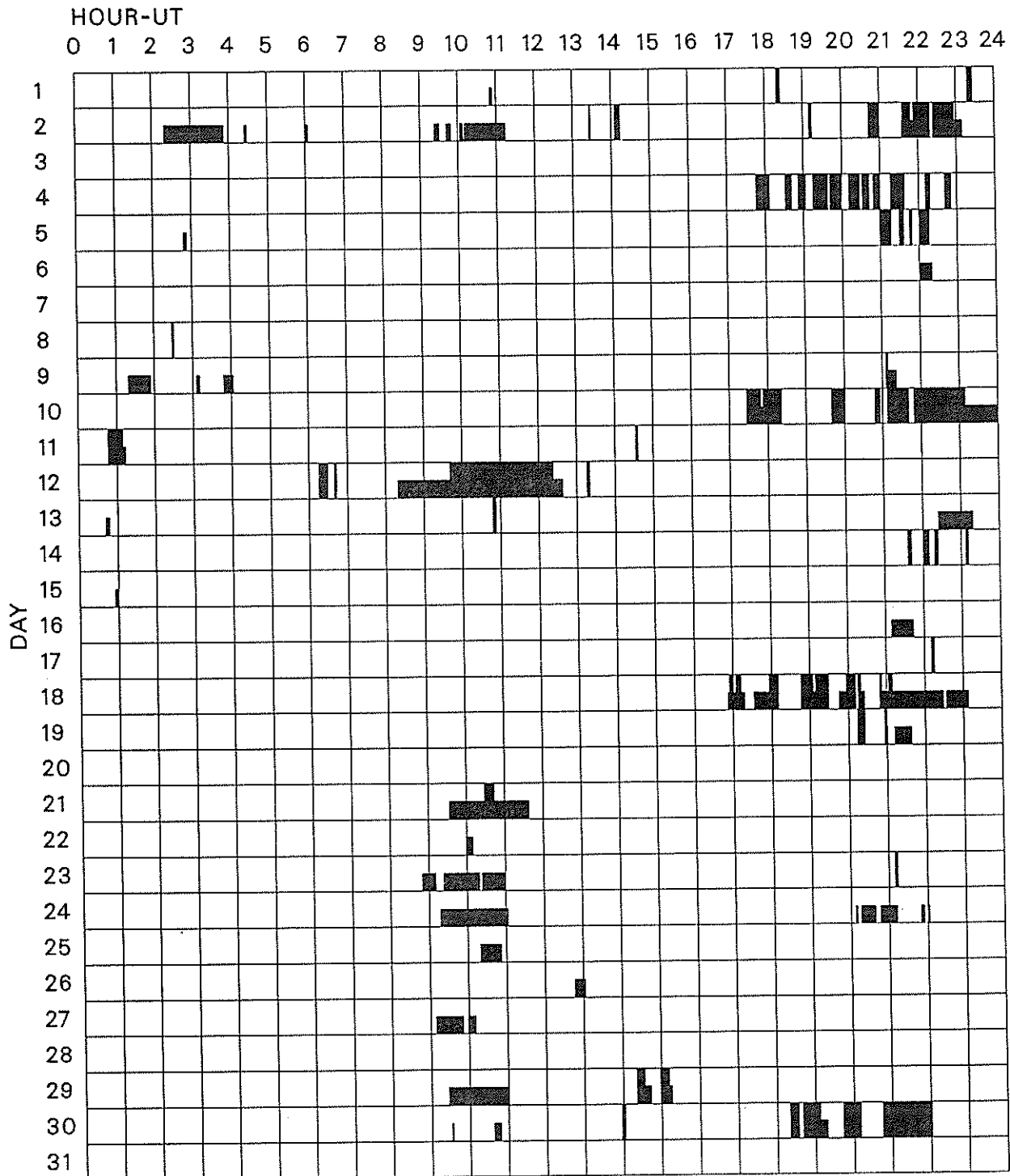
A = Eruptive prominence whose base is less than 90 degrees from central meridian.
 B = Probably the end of a more important flare.
 C = Invisible 10 minutes before.
 D = Brilliant point.
 E = Two or more brilliant points.
 F = Several eruptive centers.
 G = No visible spots in the neighborhood.
 H = Flare accompanied by high-speed dark filament.
 I = Active region very extended.
 J = Distinct variations of plage intensity before or after the flare.
 K = Several intensity maxima.
 L = Existing filaments show signs of sudden activity.
 M = White-light flare.
 N = Continuous spectrum shows effects of polarization.

O = Observations have been made in the H and K lines of Ca II.
 P = Flare shows Helium D3 in emission.
 Q = Flare shows Balmer continuum in emission.
 R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.
 S = Brightness follows disappearance of filament in same position.
 T = Region active all day.
 U = Two bright branches, parallel or converging.
 V = Occurrence of an explosive phase; important, expansion within roughly 1 minute that often includes a significant intensity increase.
 W = Great increase in area after time of maximum intensity.
 X = Unusually wide H-alpha line.
 Y = System of loop-type prominences.
 Z = Major sunspot umbra covered by flare.

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

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May 90

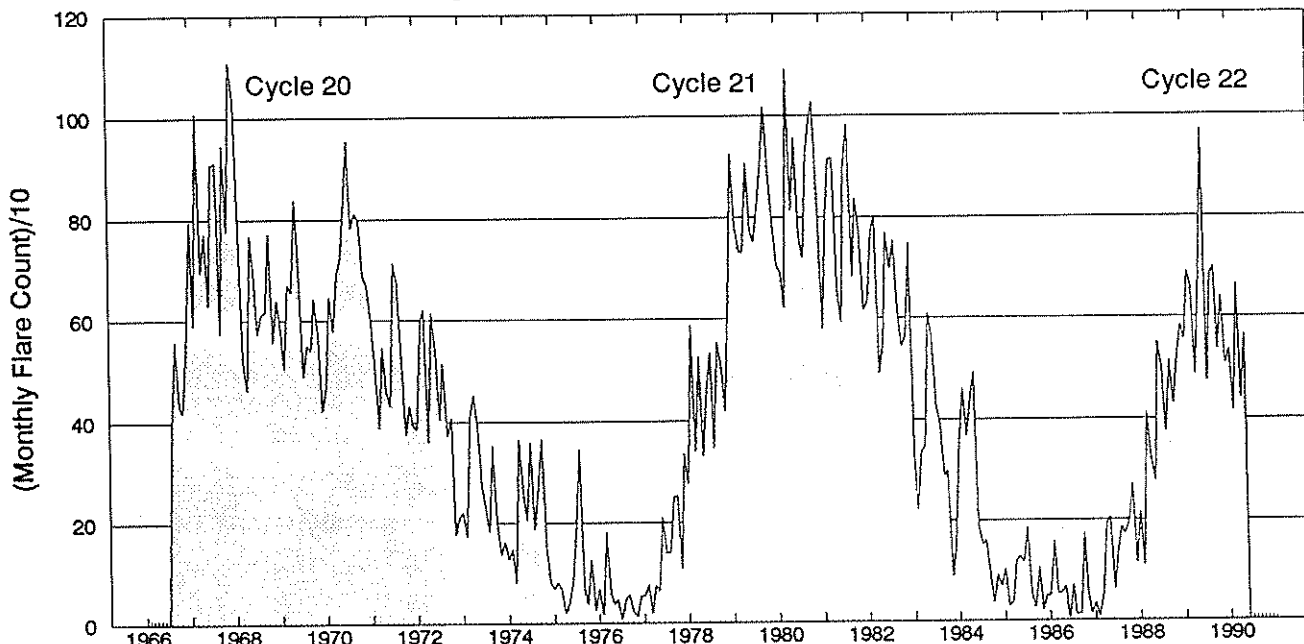
MAY 1990



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

- | | | | | |
|------------|-----------|-------------|------------|------------|
| Abastumani | Holloman | Kanzelhoehe | Palehua | San Vito |
| Athens | Hurbanovo | Kharkov | Peking | Tashkent |
| Bucharest | Istanbul | Learmonth | Purple Mt. | Voroshilov |
| | Kandilli | Mitaka | Ramey | 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	--	--	--	--	--	--	--	2619

*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

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May 90

MAY 1990

Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak (10 -22 W/m 2 Hz)	Mean		
01	2840 PEKG	41 F	0127.0	0129.2	9.0	17.5			
	260 ONDR	41 F	0600.0	1000.6	600.0	29.0			
	536 ONDR	3 S	0927.7	0928.2	1.8	14.0			
	204 IZMI	5 S	0930.0	0930.2	0.5	19.0	8.0		
	430 KRAK	8 S	0936.3	0936.6	0.5	15.0			
02	204 IZMI	43 NS	0600.0		360.0	10.0			
	260 ONDR	41 F	0600.0	0955.9	600.0	228.0			
	536 ONDR	41 F	0627.0	0725.5	230.0	23.0			
	245 SVTO	8 S	0948.0E	0948.0	U	120.0			QL=4 ST=2 TYP=3
	204 IZMI	41 F	0954.0	0955.5	2.5	600.0			
	204 IZMI	8 S	1000.0E	1000.1	0.2D	112.0	80.0		
	204 IZMI	4 S/F	1043.5	1043.7	0.5	20.0			
	536 ONDR	41 F	1157.0	1217.8	35.0	9.0			
	204 IZMI	41 F	1158.0	1158.8	1.5	130.0			
03	9100 GORK	20 GRF	0242.0E	0257.0	75.0D	5.0			
	260 ONDR	41 F	0600.0	0950.6	600.0	32.0			
	536 ONDR	27 RF	0709.0	1008.7	200.0	7.0			
	430 KRAK	8 S	0742.7	0743.0	0.5	20.0			
	430 KRAK	8 S	0748.6	0749.0	0.5	24.0			
	2850 CRIM	1 S	0748.9	0749.2	0.7	5.7	2.0		
	5900 KISV	2 S/F	0749.0	0749.4	1.4	4.0			
	430 KRAK	2 S/F	1045.0	1046.5	1.5	13.0	2.0		
430 KRAK	8 S	1226.2	1226.5	0.5	50.0				
04	245 LEAR	49 GB	0003.0E	0006.0	3.0D	500.0			QL=4 ST=2 TYP=6
	410 LEAR	49 GB	0003.0E	0006.0	3.0D	820.0			QL=4 ST=2 TYP=6
	610 LEAR	49 GB	0003.0E	0006.0	6.0D	710.0			QL=4 ST=2 TYP=6
	245 PALE	49 GB	0005.0E	0006.0	1.0D	560.0			QL=4 ST=2 TYP=6
	410 PALE	49 GB	0005.0E	0006.0	2.0D	960.0			QL=2 ST=2 TYP=6
	610 PALE	8 S	0006.0E	0006.0	U	24.0			QL=4 ST=3 TYP=3
	260 ONDR	41 F	0600.0	1218.2	600.0	32.0			
	245 SVTO	8 S	0618.0E	0618.0	1.0D	180.0			QL=4 ST=2 TYP=3
	536 ONDR	41 F	0640.0	0814.5	220.0	10.0			
	810 KRAK	42 SER	0747.0	0747.5	1.8	52.0			
	536 ONDR	8 S	1311.4	1311.6	1.2	42.0			
	808 ONDR	3 S	1311.9	1312.0	1.1	7.0			
	536 ONDR	42 SER	1443.7	1444.0	54.0	37.0			
05	2695 PENT	4 S/F	0044.0	0049.0	12.5	14.9	4.0		
	260 ONDR	41 F	0600.0E	0917.5	520.0D	31.0			
	1415 SVTO	4 S/F	0824.0E	0829.0	6.0D	240.0			QL=2 ST=2 TYP=5
	204 IZMI	4 S/F	0844.0	0844.4	0.8	70.0			
	430 KRAK	8 S	0938.7	0939.0	0.6	22.0			
	536 ONDR	41 F	1042.0	1047.0	104.0	12.0			
	33 UPIC	4 S/F	1707.6	1707.9	0.9				
06	200 HIRA	44 NS	1940.0E	2343.0	820.0D	25.0	10.0		MR
	245 SGMR	44 NS	2039.0E	2044.0	78.0D	100.0			QL=4 ST=2 TYP=1
	245 LEAR	44 NS	2335.0E	0435.0	500.0D	98.0			QL=4 ST=2 TYP=1
	245 LEAR	8 S	0121.0E	0121.0	1.0D	92.0			QL=4 ST=2 TYP=3
	245 PALE	8 S	0121.0E	0121.0	1.0D	90.0			QL=4 ST=2 TYP=3
	245 LEAR	8 S	0507.0E	0507.0	U	79.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	0507.0E	0507.0	1.0D	71.0			QL=4 ST=2 TYP=3
	260 ONDR	42 SER	0600.0	0734.3	600.0	28.0			
	204 IZMI	8 S	0817.0	0817.1	0.2	85.0	80.0		
	204 IZMI	41 F	0845.8	0846.0	0.7	104.0			
	536 ONDR	41 F	0920.0	1220.0	190.0	9.0			
	204 IZMI	41 F	1123.8	1124.0	0.8	32.0			
	536 ONDR	41 F	1411.0	1411.4	23.0	28.0			
	2800 OTTA	20 GRF	1755.0	1807.0	95.0	3.7	1.0		
	245 SGMR	8 S	1945.0E	1945.0	U	50.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	2031.0E	2031.0	U	53.0			QL=4 ST=2 TYP=3
	245 PALE	8 S	2044.0E	2044.0	1.0D	85.0			QL=4 ST=2 TYP=3
410 PALE	8 S	2213.0E	2213.0	U	120.0			QL=4 ST=2 TYP=3	
07	200 GORK	44 NS	0255.0E		547.0D		5.0		
	245 SVTO	44 NS	0452.0E	0704.0	402.0D	67.0			QL=2 ST=2 TYP=1

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

MAY 1990

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
07	204	IZMI	43 NS	0600.0		360.0	20.0			
	260	ONDR	44 NS	0600.0E	0807.0	600.0D	126.0			
	127	TORN	44 NS	0620.0E		520.0D		5.0		V=1
	100	HIRA	44 NS	1940.0E		820.0D		46.0		
	200	HIRA	44 NS	1940.0E	0326.0	820.0D	50.0	27.0		SR
	245	PALE	8 S	0121.0E	0121.0	1.0D	56.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0435.0E	0435.0	U	92.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0435.0E	0435.0	U	78.0			QL=2 ST=2 TYP=3
	5900	KISV	2 S/F	0456.4	0457.2	2.8	6.0			
	5900	KISV	2 S/F	0530.8	0531.6	7.2	3.0			
	650	GORK	22 GRF	0532.7	0624.1	90.3U	4.0			
	950	GORK	1 S	0601.6	0601.8	0.6	2.0			
	5900	KISV	2 S/F	0627.1	0628.1	4.9	3.0			
	245	SVTO	8 S	0640.0E	0640.0	1.0D	320.0			QL=2 ST=2 TYP=3
	204	IZMI	41 F	0706.0	0708.0	4.0	250.0			
	33	UPIC	45 C	0740.1	0740.8	1.7				
	33	UPIC	2 S/F	0743.3	0743.4	0.5				
	536	ONDR	41 F	0825.0	0826.2	150.0	23.0			
	600	HUMN	2 S/F	0825.0	0826.5	3.8	12.0	5.0		
	650	GORK	4 S/F	0825.3	0826.5	1.5	22.0			
	950	GORK	2 S/F	0825.4	0826.3	1.3	6.0			
	500	HIRA	4 S/F	0825.5	0826.0	1.1	12.0			0
	810	KRAK	8 S	0825.5	0826.0	1.0	35.0			
	808	ONDR	3 S	0825.6	0826.4	2.0	8.0			
	204	IZMI	42 SER	1041.5	1047.5	10.5	150.0			
	127	TORN	4 S/F	1136.0	1136.7	2.3	530.0	270.0		
	5900	KISV	2 S/F	1210.5	1211.1	2.7	2.0			
	5900	KISV	2 S/F	1227.7	1228.8	3.8	3.0			
	2800	OTTA	3 S	1751.5	1752.4	2.0	10.6	4.0		
	08	200	GORK	44 NS	0236.0E		414.0D		5.0	
100		GORK	44 NS	0236.0E		416.0D		5.0		
204		IZMI	43 NS	0600.0		360.0	30.0			V=1
127		TORN	44 NS	0620.0E		520.0D		130.0		
245		LEAR	44 NS	0638.0E	0635.0	72.0D	70.0			QL=4 ST=3 TYP=1
245		SVTO	44 NS	0659.0E	0916.0	630.0D	150.0			QL=4 ST=2 TYP=1
245		SGMR	44 NS	1609.0E	1633.0	439.0D	77.0			QL=2 ST=2 TYP=1
245		PALE	44 NS	1640.0E	1844.0	244.0D	72.0			QL=4 ST=3 TYP=1
100		HIRA	44 NS	1936.0E	2130.0	820.0D	470.0	240.0		
200		HIRA	44 NS	1936.0E	2342.0	820.0D	94.0	69.0		SR
245		PALE	8 S	0001.0E	0001.0	U	170.0			QL=4 ST=3 TYP=3
4995		LEAR	4 S/F	0020.0E	0023.0	8.0D	170.0			QL=4 ST=2 TYP=3
2695		PENT	3 S	0020.7	0023.7	36.0	27.0	6.0		
4995		PALE	4 S/F	0021.0E	0023.0	4.0D	160.0			QL=4 ST=2 TYP=3
2840		PEKG	4 S/F	0021.0	0023.8	12.0	32.7			
2695		LEAR	4 S/F	0022.0E	0023.0	5.0D	32.0			QL=4 ST=2 TYP=3
8800		LEAR	4 S/F	0022.0E	0023.0	3.0D	150.0			QL=4 ST=2 TYP=3
8800		PALE	4 S/F	0022.0E	0023.0	3.0D	170.0			QL=4 ST=2 TYP=3
17000		NOBE	7 C	0022.8	0023.7	2.0	30.0			0,80,35GHz:0
15400		LEAR	8 S	0023.0E	0023.0	1.0D	31.0			QL=4 ST=2 TYP=3
245		PALE	8 S	0051.0E	0052.0	2.0D	110.0			QL=4 ST=2 TYP=3
245		LEAR	8 S	0052.0E	0052.0	1.0D	120.0			QL=4 ST=2 TYP=3
410		LEAR	8 S	0053.0E	0053.0	U	30.0			QL=4 ST=2 TYP=3
245		LEAR	8 S	0404.0E	0405.0	1.0D	83.0			QL=4 ST=2 TYP=3
245		PALE	8 S	0405.0E	0405.0	U	73.0			QL=2 ST=3 TYP=3
245		SVTO	8 S	0405.0E	0405.0	U	81.0			QL=4 ST=2 TYP=3
245		LEAR	8 S	0430.0E	0430.0	U	120.0			QL=4 ST=2 TYP=3
245		PALE	8 S	0430.0E	0430.0	U	100.0			QL=2 ST=2 TYP=3
245		SVTO	8 S	0430.0E	0430.0	U	100.0			QL=4 ST=2 TYP=3
2850		CRIM	24 R	0530.0	0600.0		6.0			
260		ONDR	41 F	0600.0E	0713.8	600.0D	215.0			
245		LEAR	8 S	0620.0E	0621.0	1.0D	70.0			QL=4 ST=3 TYP=3
200		HIRA	42 SER	0635.6	0713.2	41.0	410.0			MR
245	SVTO	4 S/F	0711.0E	0714.0	3.0D	290.0			QL=4 ST=2 TYP=3	
113	POTS	42 SER	0711.6	0716.8	6.6	5300.0				
30	POTS	4 S/F	0711.7	0714.2	6.6	900.0U				
234	POTS	42 SER	0712.2	0713.6	9.3	550.0				
200	GORK	4 S/F	0712.8	0713.5	1.0	420.0				
810	KRAK	7 C	0712.8	0713.5	1.8	17.0	7.0			

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Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak (10 -22 W/m 2 Hz)	Mean		
08	500 HIRA	4 S/F	0712.8	0713.6	1.7	19.0			WR
	430 KRAK	2 S/F	0712.8	0713.7	2.0	35.0	13.0		
	100 GORK	46 C	0712.9	0717.0	4.8	325.0			
	100 GORK	46 C	0712.9	0717.2		230.0			
	950 GORK	46 C	0712.9	0714.3		21.0			
	650 GORK	4 S/F	0712.9	0713.7	2.9	23.0			
	950 GORK	46 C	0712.9	0713.7	2.9	23.0			
	245 LEAR	4 S/F	0713.0E	0714.0	3.0D	300.0			QL=4 ST=3 TYP=3
	808 ONDR	46 C	0713.0	0714.1	3.0	14.0			
	204 IZMI	5 S	0713.0	0713.4	2.5	750.0	500.0		
	600 HUMN	2 S/F	0713.0	0713.5	1.5	11.0	6.0		
	1470 POTS	3 S	0713.0	0713.7	2.0	16.0			
	127 TORN	42 SER	0713.0	0717.7	5.0	8500.0	1100.0		
	2950 GORK	2 S/F	0713.1	0713.8	1.9	5.0			
	33 UPIC	46 C	0713.3	0714.4	2.4				
	536 ONDR	41 F	0713.3	0713.9	10.0	22.0			
	650 GORK	29 PBI	0715.8	0715.8	4.0	2.0			
	950 GORK	29 PBI	0715.8	0715.8	4.0	1.0			
	5900 KISV	45 C	0754.3	0756.3	6.5	7.0			
	5900 KISV	45 C	0754.3	0755.8		6.0			
	2850 CRIM	1 S	0755.2	0756.1	3.8	5.4	2.0		
	9100 GORK	20 GRF	0755.3	0855.0	94.7D	6.0			
	2950 GORK	20 GRF	0755.3	0756.5	8.8	5.0			
	245 LEAR	8 S	0915.0E	0916.0	1.0D	96.0			QL=4 ST=3 TYP=3
	5900 KISV	2 S/F	0959.1	0959.7	2.0	4.0			
	5900 KISV	2 S/F	1051.3	1051.9	2.2	3.0			
	536 ONDR	41 F	1208.0	1221.5	13.5	10.0			
	808 ONDR	41 F	1420.8	1421.5	3.5	7.0			
	245 PALE	49 GB	1642.0E	1647.0	438.0D	1100.0			QL=4 ST=3 TYP=7
	245 SGMR	49 GB	1644.0E	1647.0	5.0D	2100.0			QL=2 ST=2 TYP=7
	2800 OTTA	3 S	1646.0	1647.2	4.5	35.2	7.0		
	245 SVTO	49 GB	1646.0E	1647.0	3.0D	1200.0			
	2695 SVTO	4 S/F	1646.0E	1647.0	434.0D	34.0			QL=4 ST=1 TYP=3
	410 SVTO	4 S/F	1646.0E	1647.0	434.0D	84.0			QL=4 ST=1 TYP=3
	1415 SVTO	4 S/F	1646.0E	1647.0	434.0D	44.0			QL=4 ST=1 TYP=3
	600 HUMN	2 S/F	1646.0	1646.5	2.0	23.0	10.0		
	33 UPIC	45 C	1646.5	1647.7	2.8				
	410 PALE	8 S	1647.0E	1647.0	1.0D	87.0			QL=4 ST=2 TYP=3
	1415 PALE	8 S	1647.0E	1647.0	U	52.0			QL=4 ST=2 TYP=3
	410 SGMR	49 GB	1647.0E	1647.0	1.0D	570.0			QL=2 ST=2 TYP=6
2800 OTTA	4 S/F	1851.4	1852.6	4.8	23.4	5.0			
1415 PALE	8 S	1852.0E	1852.0	U	46.0			QL=4 ST=2 TYP=3	
4995 PALE	8 S	1852.0E	1852.0	1.0D	51.0			QL=4 ST=2 TYP=3	
245 PALE	8 S	1854.0E	1855.0	1.0D	230.0			QL=2 ST=3 TYP=3	
245 SGMR	8 S	1854.0E	1855.0	1.0D	180.0			QL=2 ST=2 TYP=3	
245 PALE	8 S	1859.0E	1859.0	1.0D	67.0			QL=4 ST=2 TYP=3	
410 PALE	8 S	1903.0E	1904.0	1.0D	91.0			QL=4 ST=2 TYP=3	
200 HIRA	45 C	2039.6	2041.0	3.3	1420.0			MR	
100 HIRA	48 C	2039.7	2042.3	3.3	16000.0D				
245 SGMR	49 GB	2040.0E	2041.0	5.0D	810.0			QL=2 ST=2 TYP=6	
2800 OTTA	3 S	2040.5	2041.5	5.3	48.3	10.0			
500 HIRA	46 C	2040.7	2041.2	2.3	178.0			MR	
2695 PALE	8 S	2041.0E	2041.0	U	43.0			QL=4 ST=2 TYP=3	
610 PALE	8 S	2041.0E	2041.0	U	110.0			QL=4 ST=2 TYP=3	
4995 PALE	8 S	2041.0E	2041.0	U	44.0			QL=4 ST=2 TYP=3	
410 PALE	8 S	2041.0E	2041.0	1.0D	130.0			QL=4 ST=2 TYP=3	
410 SGMR	8 S	2041.0E	2041.0	1.0D	130.0			QL=2 ST=2 TYP=3	
610 SGMR	4 S/F	2041.0E	2041.0	199.0D	98.0			QL=4 ST=1 TYP=3	
09	200 GORK	44 NS	0230.0E		423.0D		5.0		
	100 GORK	44 NS	0230.0E		423.0D		20.0		
	113 POTS	44 NS	0510.0E	0600.0U	584.0D	U			
	234 POTS	44 NS	0530.0E	0714.0	541.0D	50.0			
	204 IZMI	43 NS	0600.0		360.0	15.0			
	260 ONDR	44 NS	0600.0E	1244.4	600.0D	133.0			
	127 TORN	44 NS	0620.0E		520.0D		100.0		V=1
	245 SGMR	44 NS	1014.0E	1048.0	650.0D	210.0			QL=2 ST=2 TYP=1
	200 HIRA	44 NS	1936.0E	2033.0	830.0D	32.0	18.0		MR
	650 GORK	1 S	0410.5	0411.2	2.8	3.0			

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean (10 ⁻²² W/m ² Hz)	Int	Remarks
09	950	GORK	1 S	0410.5	0411.2	2.8	2.0			
	650	GORK	2 S/F	0635.2	0637.0	3.3	3.0			
	950	GORK	2 S/F	0636.6	0637.6	2.4	2.0			
	204	IZMI	8 S	0655.0	0655.1	0.3	170.0	100.0		QL=4 ST=2 TYP=3
	245	SVTO	8 S	0714.0E	0714.0	1.0D	65.0			
	536	ONDR	8 S	0817.9	0818.3	1.5	96.0			
	950	GORK	1 S	0819.0	0819.2	0.4	3.0			
	650	GORK	1 S	0819.0	0819.2	0.8	1.0			
	204	IZMI	5 S	0827.4	0828.0	0.6	200.0	180.0		
	536	ONDR	3 S	0924.4	0924.5	0.8	24.0			
	234	POTS	4 S/F	1046.4	1048.7	3.3	250.0			
	245	SVTO	8 S	1047.0E	1048.0	2.0D	150.0			QL=2 ST=2 TYP=3
	204	IZMI	41 F	1047.0	1049.2	3.0	1500.0			
	113	POTS	4 S/F	1048.2	1048.8	1.8	550.0			
	40	POTS	4 S/F	1048.2	1048.8	1.8	5200.0			
	5900	KISV	2 S/F	1120.7	1121.8	4.5	13.0			
	9300	KISV	2 S/F	1121.0	1121.8	5.4	17.0			
	9500	POTS	3 S	1121.4	1121.7	3.6	13.0			
	3000	POTS	1 S	1121.5	1121.9	0.6	4.0			
	536	ONDR	42 SER	1222.0	1250.0	66.0	137.0			
	808	ONDR	1 S	1250.4	1250.6	0.5	5.0			
	4995	SGMR	4 S/F	1322.0E	1323.0	3.0D	110.0			QL=2 ST=2 TYP=3
	4995	SVTO	4 S/F	1322.0E	1323.0	3.0D	130.0			QL=4 ST=2 TYP=3
	9500	POTS	29 PBI	1322.5	1323.2	56.0	124.0			
	2800	OTTA	4 S/F	1322.6	1325.0	5.0	16.9	3.0		
	5200	BERN	4 S/F	1322.8	1323.3	2.5	15.0			
	3200	BERN	4 S/F	1322.8	1323.3	2.5	2.0			
	8400	BERN	4 S/F	1322.8	1323.3	2.5	16.9			
	3000	POTS	4 S/F	1323.0	1325.0	11.0	20.0			
	245	SVTO	8 S	1327.0E	1327.0	U	65.0			QL=2 ST=2 TYP=3
	2695	SGMR	8 S	1338.0E	1339.0	1.0D	410.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	1338.0E	1338.0	1.0D	100.0			QL=2 ST=2 TYP=3
	410	SGMR	8 S	1339.0E	1339.0	U	65.0			QL=4 ST=3 TYP=3
	245	SGMR	8 S	1339.0E	1339.0	1.0D	130.0			QL=2 ST=2 TYP=3
	3000	POTS	3 S	1345.5	1347.0	5.8	8.0			
	2800	OTTA	3 S	1345.8	1347.1	5.6	8.0	1.0		
	100	HIRA	8 S	2207.0	2207.0	0.8	720.0			
	245	PALE	8 S	2207.0E	2207.0	1.0D	200.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2207.0E	2207.0	U	230.0			QL=4 ST=2 TYP=3
	200	HIRA	46 C	2207.1	2207.3	1.8	230.0			WR
10	200	GORK	44 NS	0249.0E		555.0D		5.0		
	204	IZMI	43 NS	0600.0		360.0	20.0			
	260	ONDR	44 NS	0600.0E	0648.0	600.0D	164.0			
	127	TORN	44 NS	0840.0E		380.0D		7.0		V=1
	245	SGMR	44 NS	1500.0E	1601.0	540.0D	390.0			QL=4 ST=3 TYP=1
	245	SGMR	44 NS	1556.0E	1601.0	10.0D	390.0			QL=4 ST=3 TYP=1
	245	SVTO	44 NS	1559.0E	1607.0	92.0D	300.0			QL=4 ST=2 TYP=1
	245	SGMR	44 NS	1657.0E	1657.0	423.0D	55.0			QL=2 ST=3 TYP=1
	245	SGMR	44 NS	1757.0E	2002.0	151.0D	75.0			QL=2 ST=2 TYP=1
	200	HIRA	44 NS	1935.0E	0230.0	320.0D	19.0	8.0		0
	245	LEAR	44 NS	2309.0E	2328.0	91.0D	110.0			QL=2 ST=2 TYP=1
	245	PALE	44 NS	2316.0E	2320.0	34.0D	110.0			QL=4 ST=2 TYP=1
	500	HIRA	4 S/F	0312.0	0315.3	6.5	13.0			0
	650	GORK	20 GRF	0313.1	0315.2	9.7	7.0			
	950	GORK	20 GRF	0313.1	0315.4	7.7	4.0			
	2950	GORK	2 S/F	0314.2	0315.3	2.0	6.0			
	2850	CRIM	25 R	0530.0	0650.0		10.0			
	2840	PEKG	21 GRF	0541.0	0546.0	25.0	10.2			
	100	HIRA	46 C	0639.8	0640.1	1.3	640.0			
	245	LEAR	8 S	0640.0E	0640.0	1.0D	78.0			QL=2 ST=2 TYP=3
	30	POTS	4 S/F	0640.0	0641.1	2.7	150.0D			
	200	HIRA	8 S	0640.0	0640.4	0.9	120.0			WR
	113	POTS	4 S/F	0640.0	0640.7	2.6	200.0			
	200	GORK	4 S/F	0640.1	0641.2	1.7	60.0			
204	IZMI	41 F	0640.2	0641.5	1.8	150.0				
100	GORK	4 S/F	0640.4	0640.9	0.7	30.0D				
2950	GORK	20 GRF	0640.5	0642.1	9.9	5.0				
5900	KISV	2 S/F	0641.0	0642.0	4.3	13.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
10	9300	KISV	22 GRF	0641.0	0642.0	26.4	9.0			
	5900	KISV	23 GRF	0641.0	0646.3	25.0	5.0			
	9100	GORK	2 S/F	0641.2	0642.0	8.4	8.0			
	2850	CRIM	1 S	0641.8	0642.0	0.5	4.0	1.0		
	2840	PEKG	1 S	0650.0	0652.0	3.0	7.7			
	536	ONDR	27 RF	0709.0	0709.6	310.0	20.0			
	650	GORK	46 C	0808.4	0810.2		4.0			
	650	GORK	46 C	0808.4	0809.4	2.9	15.0			
	950	GORK	46 C	0808.5	0810.3		14.0			
	950	GORK	46 C	0808.5	0809.5	2.8	17.0			
	410	LEAR	8 S	0809.0E	0809.0	U	59.0			QL=2 ST=2 TYP=3
	204	IZMI	5 S	0809.0	0809.2	0.3	170.0	100.0		
	808	ONDR	42 SER	0809.4	0809.5	2.5	41.0			
	9100	GORK	20 GRF	0859.3	0908.0	18.7	3.0			
	9100	GORK	2 S/F	1001.1	1001.8	1.9	65.0			
	2850	CRIM	3 S	1001.2	1001.5	3.3	38.0	13.0		
	9300	KISV	4 S/F	1001.2	1001.6	7.3	69.0			
	9500	POTS	3 S	1001.3	1001.7	11.0	51.0			
	2950	GORK	3 S	1001.3	1001.8	0.9	28.0			
	5900	KISV	4 S/F	1001.4	1001.8	4.6	70.0			
	1470	POTS	3 S	1001.5	1001.7	6.5	30.0			
	3000	POTS	3 S	1001.5	1001.7	5.5	29.0			
	950	GORK	4 S/F	1001.6	1001.7	1.3	15.0			
	650	GORK	4 S/F	1001.7	1001.8	3.2	32.0			
	808	ONDR	3 S	1001.9	1002.2	5.0	8.0			
	3013	IZMI	5 S	1002.0E	1002.0	1002.2D	30.0	19.0		
	2950	GORK	29 PBI	1002.5	1002.5	11.2	11.0			
	950	GORK	29 PBI	1002.9	1002.9	7.8	4.0			
	9100	GORK	29 PBI	1003.0	1003.0	21.0	5.0			
	245	SGMR	8 S	1020.0E	1020.0	U	65.0			QL=4 ST=2 TYP=3
	234	POTS	8 S	1020.0	1020.5	1.6	350.0			
	30	POTS	4 S/F	1020.0	1020.9	1.4	4000.0U			
	200	GORK	3 S	1020.1	1020.3	0.7	150.0			
	100	GORK	3 S	1020.1	1020.5	0.7	110.0			
	33	UPIC	8 S	1020.2	1020.5	0.5				
	9100	GORK	21 GRF	1054.0	1136.0	66.0D	8.0			
	5900	KISV	23 GRF	1055.9	1107.5	60.3	13.0			
	9100	GORK	46 C	1056.3	1101.0	22.4	34.0			
	9100	GORK	46 C	1056.3	1106.7		18.0			
	9300	KISV	23 GRF	1056.9	1107.5	50.6	21.0			
	2950	GORK	22 GRF	1058.1	1101.6	61.9	7.0			
	15000	KISV	2 S/F	1100.0	1101.2	5.5	18.0			
	5900	KISV	4 S/F	1100.0	1100.7	2.4	23.0			
	9500	POTS	29 PBI	1100.0	1100.8	40.0	28.0			
	9300	KISV	4 S/F	1100.0	1100.9	3.0	35.0			
	9500	POTS	20 GRF	1250.0	1310.3	35.0	16.0			
	2800	OTTA	4 S/F	1303.5	1309.0	7.8	9.3	2.0		
	9300	KISV	45 C	1309.5	1310.1		8.0			
	9300	KISV	45 C	1309.5	1310.4	4.5	10.0			
	5900	KISV	22 GRF	1309.7	1310.4	15.6	15.0			
2800	OTTA	20 GRF	1346.0	1348.0	10.5	4.5	2.0			
3000	POTS	20 GRF	1422.5	1426.8	18.0	0.7				
8800	SVTO	4 S/F	1423.0E	1424.0	5.0D	130.0			QL=4 ST=2 TYP=3	
15400	SVTO	4 S/F	1423.0E	1424.0	5.0D	110.0			QL=4 ST=2 TYP=3	
9500	POTS	4 S/F	1423.0	1424.4	12.0	111.0				
19600	BERN	46 C	1423.6	1424.6	6.0	4.8				
11800	BERN	46 C	1423.6	1424.6	6.0	15.1				
8400	BERN	46 C	1423.6	1424.6	6.0	13.4				
5200	BERN	46 C	1423.6	1424.6	6.0	5.2				
8800	SGMR	4 S/F	1424.0E	1424.0	5.0D	130.0			QL=4 ST=2 TYP=3	
15400	SGMR	8 S	1424.0E	1424.0	1.0D	110.0			QL=4 ST=2 TYP=3	
4995	SVTO	4 S/F	1424.0E	1426.0	4.0D	55.0			QL=4 ST=2 TYP=5	
4995	SGMR	4 S/F	1424.0E	1424.0	576.0D	38.0			QL=4 ST=1 TYP=3	
1470	POTS	20 GRF	1425.0	1427.0	5.0	5.0				
15400	SVTO	4 S/F	1520.0E	1521.0	6.0D	160.0			QL=4 ST=2 TYP=3	
3200	BERN	46 C	1520.0	1537.5	28.0	1.8				
11800	BERN	46 C	1520.0	1537.5	28.0	62.3				
8400	BERN	46 C	1520.0	1537.5	28.0	37.2				
5200	BERN	46 C	1520.0	1537.5	28.0	4.6				

S O L A R R A D I O E M I S S I O N
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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak	Mean		
							(10 -22 W/m 2 Hz)			
10	35000	BERN	46	C	1520.0	1537.5	28.0	23.2		
	19600	BERN	46	C	1520.0	1537.5	28.0	38.1		
	8800	SVTO	8	S	1521.0E	1521.0	2.00	64.0		QL=4 ST=2 TYP=3
	15400	SGMR	49	GB	1521.0E	1537.0	24.00	740.0		QL=4 ST=2 TYP=7
	2800	OTTA	4	S/F	1522.2	1524.0	4.8	11.5	3.0	
	15400	SVTO	49	GB	1527.0E	1537.0	20.00	720.0		QL=4 ST=2 TYP=7
	245	SGMR	8	S	1530.0E	1530.0	U	130.0		QL=4 ST=2 TYP=3
	245	SVTO	8	S	1530.0E	1530.0	U	100.0		QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	1531.0E	1537.0	13.00	320.0		QL=4 ST=2 TYP=5
	2800	OTTA	4	S/F	1532.3	1534.2	10.0	8.2	2.0	
	4995	SVTO	8	S	1536.0E	1537.0	2.00	40.0		QL=4 ST=2 TYP=3
	245	SVTO	4	S/F	1601.0E	1601.0	3.00	280.0		QL=4 ST=2 TYP=3
	245	PALE	8	S	1841.0E	1841.0	U	130.0		QL=4 ST=2 TYP=3
	410	PALE	8	S	1841.0E	1841.0	U	70.0		QL=4 ST=2 TYP=3
	8800	PALE	49	GB	1920.0E	1925.0	11.00	2400.0		QL=4 ST=2 TYP=7
	245	PALE	4	S/F	1920.0E	1928.0	14.00	380.0		QL=4 ST=3 TYP=5
	2800	OTTA	47	GB	1921.0	1925.9	55.0	1250.0	250.0	
	15400	PALE	49	GB	1921.0E	1925.0	14.00	2600.0		QL=4 ST=2 TYP=7
	4995	PALE	49	GB	1921.0E	1925.0	12.00	1800.0		QL=4 ST=2 TYP=7
	2695	PALE	49	GB	1921.0E	1926.0	16.00	1200.0		QL=4 ST=2 TYP=7
	410	PALE	4	S/F	1921.0E	1922.0	11.00	280.0		QL=4 ST=3 TYP=3
	1415	PALE	49	GB	1921.0E	1926.0	17.00	890.0		QL=4 ST=2 TYP=7
	610	PALE	4	S/F	1921.0E	1922.0	15.00	430.0		QL=4 ST=3 TYP=3
	410	SGMR	4	S/F	1921.0E	1922.0	279.00	280.0		QL=2 ST=1 TYP=3
	1415	SGMR	49	GB	1921.0E	1925.0	279.00	830.0		QL=2 ST=1 TYP=7
	2695	SGMR	49	GB	1921.0E	1925.0	279.00	1400.0		QL=2 ST=1 TYP=7
	4995	SGMR	49	GB	1921.0E	1925.0	279.00	1800.0		QL=4 ST=1 TYP=7
	610	SGMR	4	S/F	1921.0E	1922.0	279.00	470.0		QL=4 ST=1 TYP=3
	15400	PALE	4	S/F	1959.0E	2004.0	7.00	180.0		QL=4 ST=2 TYP=5
	8800	SGMR	4	S/F	1959.0E	2004.0	7.00	150.0		QL=4 ST=2 TYP=5
	8800	PALE	4	S/F	2000.0E	2004.0	5.00	140.0		QL=4 ST=2 TYP=5
	15400	SGMR	8	S	2003.0E	2004.0	2.00	120.0		QL=2 ST=2 TYP=3
	4995	SGMR	8	S	2004.0E	2004.0	1.00	28.0		QL=4 ST=2 TYP=3
	8800	SGMR	4	S/F	2007.0E	2009.0	6.00	320.0		QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	2008.0E	2010.0	4.00	350.0		QL=4 ST=2 TYP=3
	15400	PALE	4	S/F	2008.0E	2010.0	6.00	410.0		QL=4 ST=2 TYP=3
	15400	SGMR	4	S/F	2008.0E	2009.0	4.00	320.0		QL=2 ST=2 TYP=3
	4995	SGMR	4	S/F	2008.0E	2009.0	4.00	50.0		QL=4 ST=2 TYP=3
	410	SGMR	8	S	2014.0E	2014.0	1.00	60.0		QL=4 ST=2 TYP=3
	245	SGMR	8	S	2043.0E	2043.0	U	79.0		QL=4 ST=2 TYP=3
	245	SGMR	8	S	2138.0E	2138.0	U	100.0		QL=4 ST=2 TYP=3
	17000	NOBE	1	S	2238.5	2238.7	1.5	75.0		21L
	35000	NOBE	1	S	2238.5	2238.7	1.0	30.0		0,80GHz:0
	245	LEAR	8	S	2305.0E	2305.0	U	81.0		QL=2 ST=2 TYP=3
	245	SGMR	8	S	2305.0E	2305.0	U	84.0		QL=4 ST=2 TYP=3
15400	LEAR	4	S/F	2351.0E	2401.0	12.00	260.0		QL=4 ST=3 TYP=5	
17000	NOBE	7	C	2351.4	2352.2	19.0	205.0		3L	
35000	NOBE	7	C	2351.4	2401.4		140.0		0	
17000	NOBE	7	C	2351.4	2401.4		284.0		0	
35000	NOBE	7	C	2351.4	2352.4	16.0	402.0		0,80GHz:NO OBS	
15400	PALE	8	S	2352.0E	2352.0	1.00	150.0		QL=2 ST=2 TYP=3	
8800	PALE	8	S	2352.0E	2353.0	2.00	100.0		QL=4 ST=2 TYP=3	
11	200	GORK	44	NS	0245.0E		135.00		5.0	
	204	IZMI	43	NS	0600.0		360.0	10.0		
	260	ONDR	43	NS	1120.0	1144.6	280.0	352.0		
	245	SGMR	44	NS	1132.0E	1208.0	719.00	210.0		QL=4 ST=2 TYP=1
	245	SVTO	44	NS	1205.0E	1329.0U	327.00	140.0		QL=4 ST=2 TYP=1
	200	HIRA	43	NS	2126.0	2140.0	165.0	25.0	6.0	
	8800	PALE	8	S	0001.0E	0003.0	2.00	58.0		QL=4 ST=2 TYP=3
	15400	PALE	8	S	0001.0E	0001.0	1.00	180.0		QL=4 ST=2 TYP=3
	2840	PEKG	1	S	0006.0	0010.6	9.0	10.1		
	200	HIRA	41	F	0224.0	0307.0	78.0	23.0		0
	9100	GORK	23	GRF	0248.0E	0532.1	219.00	15.0		
	9100	GORK	1	S	0316.6	0317.0	0.8	7.0		
	9100	GORK	22	GRF	0421.0	0433.8	47.3	17.0		
	5900	KISV	22	GRF	0430.0	0459.1	40.5	15.0		
	9300	KISV	22	GRF	0431.6	0433.9	31.4	14.0		
2850	CRIM	28	PRE	0523.5	0536.3	12.8	6.0	2.0		

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
11	9300	KISV	28 PRE	0524.0	0530.0	7.5	10.0			
	9300	KISV	47 GB	0524.0	0543.0	26.7	459.0			
	9100	GORK	46 C	0524.0	0525.8	7.2	8.0			
	9100	GORK	46 C	0524.0	0529.9		12.0			
	5900	KISV	30 PBI	0524.3	0547.0	24.5	8.0			
	5900	KISV	47 GB	0524.3	0543.5	22.7	327.0			
	5900	KISV	28 PRE	0524.3	0526.7	3.0	5.0			
	15000	KISV	28 PRE	0528.5	0528.9	3.0	33.0			
	15400	LEAR	8 S	0529.0E	0529.0	1.00	55.0			QL=4 ST=2 TYP=3
	15400	SVTO	8 S	0529.0E	0529.0	1.00	55.0			QL=4 ST=2 TYP=3
	17000	NOBE	28 PRE	0529.4	0529.9	6.9	42.0			11L
	8800	SVTO	49 GB	0532.0E	0543.0	22.00	510.0			QL=4 ST=2 TYP=7
	15000	KISV	47 GB	0532.8	0543.1	13.7	849.0			
	15000	KISV	47 GB	0532.8	0542.4		767.0			
	15000	KISV	30 PBI	0532.8	0546.5	27.1	50.0			
	9100	GORK	47 GB	0533.0	0543.0	21.7	540.0			
	15400	SVTO	49 GB	0533.0E	0543.0	25.00	1100.0			QL=4 ST=2 TYP=7
	5200	BERN	47 GB	0533.0	0533.5	20.0	20.0			
	3200	BERN	47 GB	0533.0	0533.5	20.0	6.6			
	8400	BERN	47 GB	0533.0	0533.5	20.0	41.7			
	11800	BERN	47 GB	0533.0	0533.5	20.0	75.1			
	19600	BERN	47 GB	0533.0	0533.5	20.0	130.2			
	2950	GORK	46 C	0535.9	0543.2		70.0			
	2950	GORK	46 C	0535.9	0537.2	14.8	20.0			
	2695	LEAR	4 S/F	0536.0E	0543.0	10.00	82.0			QL=4 ST=2 TYP=5
	8800	LEAR	4 S/F	0536.0E	0543.0	14.00	430.0			QL=4 ST=2 TYP=5
	4995	LEAR	4 S/F	0536.0E	0543.0	10.00	250.0			QL=4 ST=2 TYP=5
	15400	LEAR	49 GB	0536.0E	0543.0	11.00	1100.0			QL=4 ST=2 TYP=7
	4995	SVTO	4 S/F	0536.0E	0543.0	10.00	280.0			QL=4 ST=2 TYP=5
	2840	PEKG	46 C	0536.0	0543.2	17.0	110.0			
	2850	CRIM	45 C	0536.3	0537.1	10.0	32.0			
	2850	CRIM	45 C	0536.3	0543.2		105.0			
	2850	CRIM	29 PBI	0536.3	0546.3	24.0	13.4	4.0		
	17000	NOBE	46 C	0536.3	0542.9	17.0	1025.0			4L
	35000	NOBE	7 C	0536.3	0542.9	15.0	1940.0			0
	950	GORK	21 GRF	0536.4	0541.7	20.2	6.0			
	650	GORK	21 GRF	0536.5	0542.2	20.0	5.0			
	1415	LEAR	4 S/F	0537.0E	0544.0	8.00	240.0			QL=4 ST=2 TYP=3
	1415	SVTO	4 S/F	0537.0E	0544.0	8.00	250.0			QL=4 ST=2 TYP=3
	2695	SVTO	4 S/F	0537.0E	0537.0	22.00	28.0			QL=4 ST=2 TYP=3
	80000	NOBE	7 C	0539.8	0543.4	10.0				
	500	HIRA	4 S/F	0540.0	0544.0	7.0	11.0			0
	600	HUMN	1 S	0541.0	0543.5	7.0	9.0	3.0		
	950	GORK	46 C	0541.7	0543.4	4.7	23.0			
	950	GORK	46 C	0541.7	0545.9		8.0			
	33	UPIC	32 ABS	0542.0	0545.5	17.0				
	650	GORK	46 C	0542.2	0545.5		11.0			
	650	GORK	46 C	0542.2	0543.7	4.2	15.0			
	5900	KISV	4 S/F	0548.7	0549.9	3.7	30.0			
	15000	KISV	2 S/F	0549.1	0549.9	1.6	45.0			
	9300	KISV	30 PBI	0550.7E	0550.7	16.70	17.0			
	9300	KISV	2 S/F	0552.7	0553.8	2.2	8.0			
	260	ONDR	41 F	0600.0E	0827.8	320.00	89.0			
	536	ONDR	41 F	0630.0	0959.7	315.0	44.0			
	204	IZMI	5 S	0648.7	0649.0	0.3	9.0	5.0		
	9100	GORK	23 GRF	0751.0	0842.9	249.00	13.0			
	204	IZMI	42 SER	0808.0	0810.5	3.5	80.0			
	15000	KISV	2 S/F	0824.0	0824.5	1.3	9.0			
	9300	KISV	2 S/F	0824.1	0824.5	2.7	4.0			
	5900	KISV	2 S/F	0841.0	0842.9	7.0	8.0			
	9300	KISV	22 GRF	0842.1	0842.9	11.9	8.0			
	2950	GORK	1 S	0842.4	0842.9	4.9	5.0			
	9300	KISV	2 S/F	0958.7	0959.7	3.1	26.0			
	9100	GORK	3 S	0959.3	0959.5	1.8	27.0			
	5900	KISV	2 S/F	0959.3	0959.7	2.6	3.0			
	15000	KISV	2 S/F	0959.4	0959.7	1.9	44.0			
	9500	POTS	3 S	0959.5	0959.6	3.5	27.0			
	5900	KISV	45 C	1004.7	1007.0	3.8	7.0			
	5900	KISV	45 C	1004.7	1005.7		6.0			

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Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak (10 -22 W/m 2 Hz)	Mean		
11	9300 KISV	2 S/F	1005.4	1007.0	3.5	6.0			
	9300 KISV	45 C	1106.0	1107.1		5.0			
	9300 KISV	45 C	1106.0	1106.4	6.0	6.0			
	9500 POTS	1 S	1106.0	1106.4	2.0	7.0			
	15000 KISV	22 GRF	1106.2	1107.2	13.1	14.0			
	5900 KISV	2 S/F	1108.9	1109.3	3.1	3.0			
	204 IZMI	25 R	1116.0		44.0	30.0			
	1470 POTS	40 F	1116.5	1117.8	3.5	18.0			
	9300 KISV	2 S/F	1122.5	1122.8	1.5	5.0			
	245 SGMR	8 S	1143.0E	1144.0	1.0D	370.0			QL=4 ST=3 TYP=3
	234 POTS	41 F	1143.6	1144.0	1.5	450.0			
	204 IZMI	41 F	1143.8	1144.0	1.5	800.0			
	40 POTS	41 F	1143.8	1144.2	1.4	300.0U			
	5900 KISV	2 S/F	1211.7	1213.0	3.1	11.0			
	245 SVTO	8 S	1314.0E	1314.0	1.0D	80.0			QL=4 ST=2 TYP=3
	5900 KISV	22 GRF	1328.8	1333.8	12.0	10.0			
	536 ONDR	42 SER	1330.5	1405.4	92.0	172.0			
	2800 OTTA	4 S/F	1455.8	1459.4	9.0	22.4	4.0		
	2800 OTTA	22 GRF	1558.0	1615.0	102.0	14.2	7.0		
	245 PALE	8 S	1650.0E	1651.0	1.0D	84.0			QL=4 ST=2 TYP=3
	2800 OTTA	4 S/F	1730.2	1731.1	4.5	8.1	2.0		
	410 PALE	8 S	1821.0E	1821.0	1.0D	81.0			QL=4 ST=2 TYP=3
	410 SGMR	8 S	1821.0E	1821.0	1.0D	71.0			QL=2 ST=2 TYP=3
	2800 OTTA	3 S	1821.3	1821.9	6.5	20.4	4.0		
	245 SGMR	8 S	1822.0E	1822.0	1.0D	260.0			QL=4 ST=2 TYP=3
	410 PALE	8 S	1940.0E	1940.0	U	62.0			QL=4 ST=2 TYP=3
	15400 PALE	49 GB	1959.0E	1959.0	1.0D	600.0			QL=4 ST=2 TYP=6
	8800 PALE	8 S	1959.0E	1959.0	U	130.0			QL=4 ST=2 TYP=3
	8800 SGMR	8 S	1959.0E	1959.0	U	130.0			QL=4 ST=2 TYP=3
	15400 SGMR	49 GB	1959.0E	1959.0	U	590.0			QL=4 ST=2 TYP=6
	15400 PALE	49 GB	2057.0E	2059.0	17.0D	13000.0			QL=4 ST=2 TYP=7
	8800 PALE	49 GB	2057.0E	2059.0	17.0D	5600.0			QL=4 ST=2 TYP=7
	15400 SGMR	49 GB	2057.0E	2058.0	17.0D	14000.0			QL=4 ST=2 TYP=7
	100 HIRA	48 C	2057.4	2058.2	26.6	16000.0D	750.0D		
	200 HIRA	46 C	2057.7	2057.8	17.2	710.0	80.0		0
	8800 SGMR	49 GB	2058.0E	2058.0	7.0D	3900.0			QL=4 ST=2 TYP=7
	2695 PALE	49 GB	2058.0E	2059.0	16.0D	1300.0			QL=4 ST=2 TYP=7
	410 PALE	49 GB	2058.0E	2102.0	19.0D	1000.0			QL=4 ST=3 TYP=7
	245 PALE	49 GB	2058.0E	2058.0	11.0D	1700.0			QL=4 ST=2 TYP=7
	4995 PALE	49 GB	2058.0E	2059.0	14.0D	2400.0			QL=4 ST=2 TYP=7
	410 SGMR	49 GB	2058.0E	2058.0	17.0D	1100.0			QL=2 ST=2 TYP=7
	610 SGMR	49 GB	2058.0E	2059.0	17.0D	1200.0			QL=4 ST=2 TYP=7
	4995 SGMR	49 GB	2058.0E	2059.0	12.0D	2000.0			QL=4 ST=2 TYP=7
	245 SGMR	49 GB	2058.0E	2058.0	15.0D	2100.0			QL=2 ST=2 TYP=7
	1415 SGMR	49 GB	2058.0E	2059.0	17.0D	1100.0			QL=2 ST=2 TYP=7
610 PALE	49 GB	2058.0E	2059.0	22.0D	890.0			QL=4 ST=2 TYP=7	
1415 PALE	49 GB	2058.0E	2059.0	20.0D	1100.0			QL=4 ST=2 TYP=7	
2695 SGMR	49 GB	2058.0E	2059.0	182.0D	1200.0			QL=4 ST=1 TYP=7	
2800 OTTA	47 GB	2058.4	2059.8	72.0	1500.0	306.0			
500 HIRA	48 C	2058.9	2059.0	39.5	647.0	100.0		WL	
500 HIRA	29 PBI	2058.9	2141.5	70.0	11.0	4.0		0	
245 PALE	8 S	2140.0E	2141.0	1.0D	160.0			QL=4 ST=2 TYP=3	
12	127 TORN	43 NS	1108.0		214.0			35.0	V=2
	260 ONDR	43 NS	1120.0	1140.2	220.0	263.0			
	2695 LEAR	4 S/F	0043.0E	0046.0	11.0D	89.0			QL=4 ST=2 TYP=3
	2840 PEKG	5 S	0044.0	0046.3	6.0	80.4			
	4995 LEAR	8 S	0045.0E	0046.0	2.0D	100.0			QL=4 ST=2 TYP=3
	2695 PENT	3 S	0045.4	0046.8	3.5	68.6		14.0	
	200 HIRA	42 SER	0045.5	0048.8	10.0	6500.0			0
	35000 NOBE	1 S	0045.8	0046.5	1.0	34.0			0,80GHz:0
	17000 NOBE	1 S	0045.8	0046.5	1.5	53.0			0
	500 HIRA	46 C	0045.9	0047.3	7.0	2540.0		95.0	MR
	1415 LEAR	49 GB	0046.0E	0046.0	1.0D	730.0			QL=4 ST=2 TYP=6
	245 LEAR	49 GB	0046.0E	0048.0	3.0D	21000.0			QL=4 ST=2 TYP=6
	15400 LEAR	8 S	0046.0E	0046.0	1.0D	77.0			QL=4 ST=2 TYP=3
	610 LEAR	49 GB	0046.0E	0047.0	1.0D	790.0			QL=4 ST=2 TYP=6
	8800 LEAR	8 S	0046.0E	0046.0	1.0D	110.0			QL=4 ST=2 TYP=3
15400 PALE	8 S	0046.0E	0046.0	1.0D	51.0			QL=4 ST=3 TYP=3	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m 2 Hz)	Mean			
12	610	PALE	49 GB	0046.0E	0047.0	2.0D	790.0			QL=4 ST=2 TYP=6	
	1415	PALE	49 GB	0046.0E	0046.0	1.0D	760.0			QL=4 ST=2 TYP=6	
	245	PALE	49 GB	0046.0E	0048.0	4.0D	17000.0			QL=4 ST=2 TYP=6	
	410	PALE	49 GB	0046.0E	0048.0	3.0D	1800.0			QL=4 ST=2 TYP=6	
	2695	PALE	8 S	0046.0E	0046.0	1.0D	65.0			QL=4 ST=2 TYP=3	
	8800	PALE	8 S	0046.0E	0046.0	1.0D	120.0			QL=4 ST=2 TYP=3	
	4995	PALE	8 S	0046.0E	0046.0	1.0D	110.0			QL=4 ST=2 TYP=3	
	100	HIRA	42 SER	0046.3	0048.2	3.6	1000.0D				
	245	LEAR	8 S	0138.0E	0138.0	U	84.0				QL=4 ST=2 TYP=3
	9100	GORK	23 GRF	0257.0E	0324.9	393.0D	10.0				
	410	SVTO	8 S	0544.0E	0544.0	U	99.0				QL=4 ST=2 TYP=3
	245	SVTO	49 GB	0544.0E	0544.0	U	540.0				QL=4 ST=2 TYP=6
	245	SVTO	8 S	0612.0E	0612.0	U	73.0				QL=4 ST=2 TYP=3
	5900	KISV	2 S/F	0654.3	0656.2	6.1	6.0				
	950	GORK	4 S/F	0658.4	0658.8	0.8	36.0				
	9300	KISV	2 S/F	0714.3	0716.3	8.0	10.0				
	9500	POTS	29 PBI	0715.0	0716.0	30.0	10.0				
	9100	GORK	1 S	0715.3	0716.0	1.5	10.0				
	5900	KISV	2 S/F	0724.3	0726.5	6.2	5.0				
	260	ONDR	41 F	0800.0	1038.6	200.0	109.0				
	950	GORK	1 S	0816.6	0819.6	5.7	3.0				
	536	ONDR	41 F	0825.0	1013.0	180.0	47.0				
	5900	KISV	2 S/F	0915.1	0918.2	5.7	9.0				
	9300	KISV	23 GRF	0915.8	0919.7	12.2	6.0				
	15000	KISV	2 S/F	0917.1	0918.2	5.1	16.0				
	9100	GORK	2 S/F	0917.2	0918.0	2.0	13.0				
	9500	POTS	1 S	0917.4	0918.0	2.6	10.0				
	9300	KISV	2 S/F	0917.5	0918.2	2.0	13.0				
	430	KRAK	42 SER	0943.5	1127.5	104.7	160.0				
	33	UPIC	8 S	1022.8	1023.0	0.4					
	33	UPIC	8 S	1024.0	1024.2	0.4					
	5900	KISV	2 S/F	1033.9	1035.2	3.3	13.0				
	9300	KISV	1 S	1034.5	1035.2	1.0	10.0				
	3013	IZMI	5 S	1034.9	1035.2	1.5	11.0	5.0			
	5900	KISV	47 GB	1125.1	1135.2	14.7	3385.0				
	5900	KISV	47 GB	1125.1	1134.4		861.0				
	5900	KISV	29 PBI	1125.1	1139.8	21.1	34.0				
	9500	POTS	46 C	1126.0	1135.0		2430.0				
	9500	POTS	46 C	1126.0	1130.5	24.0	1960.0				
	536	ONDR	40 F	1126.5	1135.0	33.0	141.0				
	410	SGMR	4 S/F	1127.0E	1127.0	753.0D	64.0				QL=2 ST=1 TYP=3
	9300	KISV	47 GB	1127.4	1131.1		1208.0				
	9300	KISV	47 GB	1127.4	1135.2	23.1	3179.0				
	15400	SGMR	49 GB	1128.0E	1130.0	14.0D	4000.0				QL=4 ST=2 TYP=6
	2695	SGMR	49 GB	1128.0E	1130.0	14.0D	1000.0				QL=4 ST=2 TYP=7
	8800	SGMR	49 GB	1128.0E	1135.0	12.0D	3600.0				QL=4 ST=2 TYP=7
	4995	SGMR	49 GB	1128.0E	1135.0	12.0D	2600.0				QL=4 ST=2 TYP=7
	245	SGMR	49 GB	1128.0E	1133.0	16.0D	780.0				QL=4 ST=2 TYP=7
	2695	SVTO	49 GB	1128.0E	1130.0	16.0D	1000.0				QL=4 ST=2 TYP=7
	4995	SVTO	49 GB	1128.0E	1135.0	13.0D	2800.0				QL=2 ST=2 TYP=7
	15400	SVTO	49 GB	1128.0E	1130.0	16.0D	4200.0				QL=2 ST=2 TYP=6
	8800	SVTO	49 GB	1128.0E	1135.0	13.0D	3900.0				QL=2 ST=2 TYP=7
	3013	IZMI	45 C	1128.3		25.0	660.0D				
	15000	KISV	47 GB	1128.4	1135.2		1668.0				
	15000	KISV	47 GB	1128.4	1130.8	17.1	1945.0				
	3000	POTS	46 C	1128.5		U	32.0				1680.0D
1470	POTS	46 C	1128.5	1131.0	142.0	370.0					
1470	POTS	46 C	1128.5	1135.4		575.0					
808	ONDR	49 GB	1128.5	1134.8	32.0	132.0					
40	POTS	45 C	1128.7	1129.1	22.1	25000.0					
113	POTS	45 C	1128.7	1130.2U	20.3	2800.0D					
600	HUMN	45 C	1128.7	1135.3	49.0	142.0	26.0				
430	KRAK	40 F	1129.0	1135.0		230.0					
1415	SGMR	4 S/F	1129.0E	1135.0	14.0D	360.0				QL=2 ST=2 TYP=5	
430	KRAK	40 F	1129.0	1131.5	49.0	140.0	40.0				
810	KRAK	45 C	1129.5	1131.0	32.0	139.0	49.0				
810	KRAK	45 C	1129.5	1135.1		245.0					
234	POTS	45 C	1129.8	1133.0	26.4	500.0					
127	TORN	49 GB	1129.9	1130.1	13.0	52000.0	7600.0				

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

MAY 1990

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
12	610	SGMR	20	GRF	1130.0E	1135.0	13.00	330.0		QL=4 ST=2 TYP=2
	1415	SVTO	4	S/F	1130.0E	1135.0	15.00	360.0		QL=4 ST=2 TYP=5
	410	SGMR	4	S/F	1130.0E	1135.0	750.00	210.0		QL=2 ST=1 TYP=5
	610	SVTO	4	S/F	1130.0E	1131.0	750.00	180.0		QL=2 ST=1 TYP=3
	204	IZMI	45	C	1130.0	1130.2	26.0	600.0		
	410	SVTO	4	S/F	1132.0E	1135.0	14.00	140.0		QL=2 ST=2 TYP=5
	204	IZMI	42	SER	1148.8	1149.4	1.4	100.0		
	9300	KISV	23	GRF	1224.3	1226.1		5.0		
	9300	KISV	23	GRF	1224.3	1229.5	23.3	7.0		
	5900	KISV	23	GRF	1224.4	1237.8	16.7	6.0		
	5900	KISV	2	S/F	1224.8	1226.3	3.1	4.0		
	430	KRAK	8	S	1234.2	1234.4	0.3	53.0		
	15000	KISV	4	S/F	1238.4	1239.4	26.0	57.0		
	9300	KISV	4	S/F	1238.6	1239.4	2.4	26.0		
	5900	KISV	2	S/F	1239.2	1239.5	1.0	7.0		
	33	UPIC	45	C	1246.1	1246.5	0.7			
	536	ONDR	42	SER	1328.5	1328.6	17.0	46.0	2.0	
	2800	OTTA	20	GRF	1812.0	1815.0	30.0	5.3	4.0	
2695	PENT	20	GRF	2303.0	2308.0	25.0	10.3			
13	260	ONDR	43	NS	0730.0	0736.5	480.0	220.0		
	9100	GORK	23	GRF	0248.0E	0338.1	137.50	15.0		
	2840	PEKG	1	S	0252.0	0253.9	2.0	9.8		
	2840	PEKG	45	C	0326.0	0329.2	4.0	23.1		
	9100	GORK	46	C	0326.2	0329.1		12.0		
	9100	GORK	46	C	0326.2	0327.9	4.3	15.0		
	2950	GORK	21	GRF	0327.1	0337.8	20.3	5.0		
	2950	GORK	46	C	0327.4	0328.1	2.6	11.0		
	2950	GORK	46	C	0327.4	0329.2		13.0		
	5900	KISV	2	S/F	0415.0	0416.4	3.8	4.0		
	5900	KISV	2	S/F	0426.3	0427.8	4.4	4.0		
	2850	CRIM	2	S/F	0426.7	0428.1	1.7	13.0	4.0	
	950	GORK	1	S	0427.2	0427.7	1.4	5.0		
	2950	GORK	2	S/F	0427.3	0428.0	1.0	7.0		
	650	GORK	1	S	0427.4	0427.7	1.0	2.0		
	2950	GORK	20	GRF	0535.7	0537.2	37.1	8.0		
	2850	CRIM	1	S	0536.1	0536.9	1.7	7.0	2.0	
	245	LEAR	49	GB	0544.0E	0544.0	U	520.0		QL=4 ST=2 TYP=6
	410	LEAR	8	S	0544.0E	0544.0	U	62.0		QL=4 ST=2 TYP=3
	9100	GORK	22	GRF	0548.0	0610.8	81.0	8.0		
	9300	KISV	4	S/F	0619.2	0621.3	4.8	57.0		
	536	ONDR	41	F	0730.0	1039.8	250.0	8.0		
	245	LEAR	8	S	0736.0E	0736.0	1.00	57.0		QL=4 ST=2 TYP=3
	9100	GORK	20	GRF	0810.8	0851.9	79.20	8.0		
	2950	GORK	22	GRF	0811.7	0829.7	79.80	9.0		
	2840	PEKG	21	GRF	0816.0	0829.4	18.0	12.8		
	204	IZMI	41	F	0934.5	0952.5	145.5	40.0	20.0	
	2840	PEKG	45	C	0951.0	0952.9	8.00	100.4		
	5200	BERN	3	S	0951.3	0953.0	2.0	8.2		
	8400	BERN	3	S	0951.3	0953.0	2.0	14.2		
	3200	BERN	3	S	0951.3	0953.0	2.0	10.5		
	11800	BERN	3	S	0951.3	0953.0	2.0	9.0		
	2850	CRIM	3	S	0951.8	0953.0	1.8	136.0	46.0	
	2850	CRIM	29	PBI	0951.8	0954.0	16.0	15.0	5.0	
	9500	POTS	29	PBI	0952.0	0953.0	23.0	48.0		
	9300	KISV	29	PBI	0952.0	0959.0	32.5	9.0		
9300	KISV	4	S/F	0952.0	0953.1	7.0	69.0			
3000	POTS	29	PBI	0952.0	0952.8	18.0	127.0			
3013	IZMI	5	S	0952.0	0952.9	13.0	110.0	55.0		
5900	KISV	4	S/F	0952.3	0953.4	6.3	94.0			
5900	KISV	29	PBI	0952.3	0958.6	32.9	10.0			
15000	KISV	2	S/F	0952.4	0953.2	5.0	21.0			
245	SGMR	8	S	1042.0E	1042.0	U	72.0		QL=4 ST=2 TYP=3	
245	SGMR	8	S	1222.0E	1222.0	1.00	59.0		QL=4 ST=2 TYP=3	
2800	OTTA	4	S/F	1235.0	1237.0	35.0	73.1	15.0		
3000	POTS	40	F	1235.0	1237.1	35.0	150.0			
9500	POTS	21	GRF	1235.0	1240.2	70.0	28.0			
1470	POTS	40	F	1235.0	1240.5U	20.0	15.0			
5900	KISV	45	C	1235.7	1240.2	7.0	35.0			

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

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MAY 1990

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean (2 Hz)		
13	9300	KISV	45 C	1235.7	1240.4	6.8	35.0			
	5900	KISV	45 C	1235.7	1239.5		29.0			
	9300	KISV	45 C	1235.7	1241.5		33.0			
	5900	KISV	23 GRF	1235.7	1247.6	59.6	27.0			
	9300	KISV	23 GRF	1235.7	1247.6	69.0	30.0			
	15000	KISV	22 GRF	1235.7	1247.8	29.6	43.0			
	2695	SGMR	4 S/F	1236.0E	1237.0	9.0D	65.0			QL=2 ST=2 TYP=3
	2695	SVTO	4 S/F	1236.0E	1237.0	5.0D	76.0			QL=2 ST=2 TYP=3
	810	KRAK	4 S/F	1237.5	1239.0	3.3	250.0	12.0		
	808	ONDR	46 C	1237.9	1239.1	9.0	44.0			
	127	TORN	7 C	1238.7	1239.3	1.5	450.0	220.0		
	536	ONDR	41 F	1238.7	1241.9	20.5	39.0			
	430	KRAK	2 S/F	1240.0	1240.7	2.5	45.0	3.0		
	245	SGMR	8 S	1403.0E	1403.0	U	54.0			QL=4 ST=2 TYP=3
	200	HIRA	41 F	2215.8	2252.1	107.0	46.0			0
	2840	PEKG	45 C	2337.0	2344.3D	33.0D	42.6			
2800	OTTA	4 S/F	2340.0	2344.0	39.0	25.4	5.0			
14	204	IZMI	43 NS	0600.0		360.0	10.0			
	200	GORK	43 NS	0630.0		330.0D		5.0		
	100	GORK	43 NS	0648.0		312.0		5.0		
	127	TORN	43 NS	0730.0		450.0		3.0		V=1
	260	ONDR	44 NS	1000.0E	1350.9	300.0D	78.0			
	9100	GORK	23 GRF	0254.0E	0424.0	546.0D	13.0			
	2840	PEKG	45 C	0301.0	0303.4	6.0	8.0			
	5900	KISV	2 S/F	0357.8	0400.1	4.0	7.0			
	15000	KISV	2 S/F	0358.0	0400.1	3.4	17.0			
	9300	KISV	2 S/F	0358.0	0400.2	4.2	13.0			
	9100	GORK	2 S/F	0359.0	0400.0	2.2	13.0			
	2840	PEKG	1 S	0414.0	0415.2	5.0	4.7			
	200	HIRA	41 F	0646.0	0722.0	116.0	24.0			0
	245	SVTO	8 S	0918.0E	0919.0	1.0D	250.0			QL=2 ST=2 TYP=3
	5900	KISV	2 S/F	0947.8	0949.0	3.0	4.0			
	204	IZMI	5 S	1005.5	1005.7	0.8	75.0	35.0		
	5900	KISV	2 S/F	1038.3	1039.1	2.3	7.0			
	9300	KISV	2 S/F	1038.6	1039.2	1.2	7.0			
	430	KRAK	8 S	1044.5	1045.0	1.5	41.0			
	2950	GORK	21 GRF	1052.6	1057.1	14.6	7.0			
	5900	KISV	2 S/F	1054.4	1055.3	5.4	23.0			
	2950	GORK	3 S	1054.4	1055.6	2.6	20.0			
	9100	GORK	1 S	1054.5	1055.2	1.5	8.0			
	11800	BERN	3 S	1054.5	1055.5	2.5	0.4			
	5200	BERN	3 S	1054.5	1055.5	2.5	2.6			
	3200	BERN	3 S	1054.5	1055.5	2.5	2.3			
	8400	BERN	3 S	1054.5	1055.5	2.5	1.0			
	3000	POTS	3 S	1054.5	1055.6	3.7	24.0			
	9300	KISV	2 S/F	1054.6	1055.2	2.2	10.0			
	2850	CRIM	3 S	1054.7	1055.6	5.0	29.0	10.0		
	1470	POTS	1 S	1055.0	1055.7	1.7	4.0			
	536	ONDR	41 F	1221.0	1221.5	2.0	13.0			
2800	OTTA	3 S	1406.5	1408.0	3.8	12.7	2.0			
8400	BERN	3 S	1406.8	1407.9	2.0	0.7				
3200	BERN	3 S	1406.8	1407.9	2.0	2.0				
5200	BERN	3 S	1406.8	1407.9	2.0	1.5				
4995	SGMR	8 S	1451.0E	1452.0	1.0D	54.0			QL=4 ST=2 TYP=3	
2695	SGMR	8 S	1451.0E	1452.0	1.0D	84.0			QL=4 ST=2 TYP=3	
2695	SVTO	8 S	1451.0E	1452.0	1.0D	99.0			QL=2 ST=2 TYP=3	
4995	SVTO	8 S	1451.0E	1452.0	1.0D	64.0			QL=2 ST=2 TYP=3	
3000	POTS	3 S	1451.5	1452.0	2.5	209.0				
2800	OTTA	3 S	1451.5	1452.1	2.7	94.6	19.0			
1470	POTS	4 S/F	1451.7	1452.3	1.3	6.0				
2800	OTTA	20 GRF	1614.0	1625.0	65.0	5.7	2.0			
1415	SGMR	49 GB	1641.0E	1643.0	3.0D	770.0			QL=2 ST=2 TYP=6	
1415	SVTO	49 GB	1641.0E	1643.0	3.0D	620.0			QL=4 ST=2 TYP=6	
600	HUMN	4 S/F	1641.2	1642.8	8.5	243.0	13.0			
2800	OTTA	3 S	1641.3	1643.1	7.0	87.6	18.0			
11800	BERN	3 S	1641.6	1643.0	3.0	3.9				
8400	BERN	3 S	1641.6	1643.0	3.0	4.8				
3200	BERN	3 S	1641.6	1643.0	3.0	6.3				

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

MAY 1990

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
14	5200	BERN	3 S	1641.6	1643.0	3.0	6.2			
	4995	PALE	8 S	1642.0E	1643.0	1.00	77.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	1642.0E	1643.0	1.00	36.0			QL=4 ST=2 TYP=3
	1415	PALE	49 GB	1642.0E	1643.0	2.00	750.0			QL=4 ST=2 TYP=6
	2695	PALE	8 S	1642.0E	1643.0	1.00	78.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	1642.0E	1643.0	1.00	370.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1642.0E	1642.0	1.00	61.0			QL=2 ST=2 TYP=3
	4995	SGMR	8 S	1642.0E	1643.0	1.00	80.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1642.0E	1643.0	2.00	94.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1642.0E	1643.0	1.00	28.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	1642.0E	1642.0	1.00	81.0			QL=4 ST=2 TYP=3
	8800	SVTO	8 S	1642.0E	1643.0	1.00	49.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	1642.0E	1643.0	1.00	100.0			QL=4 ST=2 TYP=3
	610	SVTO	8 S	1642.0E	1642.0	1.00	290.0			QL=2 ST=2 TYP=3
15400	PALE	8 S	1643.0E	1643.0		32.0			QL=4 ST=2 TYP=3	
200	HIRA	45 C	2049.0	2049.5	1.5	32.0			0	
15	200	HIRA	43 NS	0020.0	0437.0	540.00	44.0	7.0		MR
	100	GORK	44 NS	0234.0E		538.00		5.0		
	200	GORK	44 NS	0234.0E		567.00		5.0		
	127	TORN	44 NS	0620.0E		520.00		15.0		V=1
	430	KRAK	44 NS	0658.0E	0840.5	140.00	37.0	11.0		
	200	HIRA	44 NS	1930.0E	2017.0	83.00	23.0	7.0		MR
	200	HIRA	43 NS	2211.0	0743.0	690.00	26.0	6.0		MR
	2695	PENT	3 S	0024.0	0030.7	13.5	240.0	48.0		
	15400	LEAR	8 S	0024.0E	0026.0	2.00	54.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0025.0E	0026.0	1.00	71.0			QL=4 ST=2 TYP=3
	35000	NOBE	1 S	0025.8	0026.1	1.0	66.0			21R, 80GHz:0
	17000	NOBE	7 C	0025.8	0026.1	6.0	77.0			30R
	15400	PALE	8 S	0026.0E	0026.0	1.00	77.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	0026.0E	0026.0	1.00	36.0			QL=4 ST=2 TYP=3
	2840	PEKG	4 S/F	0028.0	0031.3	16.0	284.1			
	500	HIRA	41 F	0029.0	0032.0	4.0	950.0			WR
	1415	LEAR	4 S/F	0029.0E	0029.0	6.00	180.0			QL=4 ST=3 TYP=3
	610	PALE	4 S/F	0029.0E	0032.0	3.00	360.0			QL=4 ST=2 TYP=5
	2695	LEAR	4 S/F	0029.0E	0030.0	25.00	210.0			QL=4 ST=3 TYP=3
	8800	LEAR	4 S/F	0029.0E	0118.0	67.00	72.0			QL=4 ST=3 TYP=3
	4995	LEAR	4 S/F	0029.0E	0029.0	67.00	130.0			QL=4 ST=3 TYP=3
	200	HIRA	46 C	0254.8	0255.6	2.6	240.0			0
	410	LEAR	8 S	0255.0E	0255.0	1.00	26.0			QL=4 ST=2 TYP=3
	4995	LEAR	4 S/F	0255.0E	0256.0	6.00	92.0			QL=4 ST=2 TYP=3
	8800	LEAR	4 S/F	0255.0E	0256.0	8.00	190.0			QL=4 ST=2 TYP=3
	2695	LEAR	4 S/F	0255.0E	0256.0	3.00	29.0			QL=4 ST=2 TYP=3
	245	LEAR	4 S/F	0255.0E	0256.0	3.00	180.0			QL=4 ST=2 TYP=3
	15400	LEAR	4 S/F	0255.0E	0256.0	8.00	83.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0255.0E	0256.0	2.00	180.0			QL=4 ST=2 TYP=3
	9100	GORK	4 S/F	0255.2	0256.3	4.8	210.0			
	200	GORK	4 S/F	0255.2	0256.4	2.8	290.0			
	500	HIRA	4 S/F	0255.2	0255.6	3.5	40.0			0
	100	GORK	4 S/F	0255.4	0257.0	2.1	35.00			
	17000	NOBE	7 C	0255.6	0256.3	10.0	66.0			22R, 80, 35GHz:0
9100	GORK	30 PBI	0300.0	0300.0	168.0	16.0				
500	HIRA	23 GRF	0345.0	0650.0	280.0	16.0	6.0		WR	
2840	PEKG	45 C	0352.0	0355.9	8.0	44.0				
650	GORK	22 GRF	0433.0	0633.5	301.2U	10.0				
9300	KISV	2 S/F	0504.8	0506.0	8.2	6.0				
9100	GORK	1 S	0505.0	0505.8	6.2	3.0				
2850	CRIM	24 R	0505.5	0716.3		10.0				
9300	KISV	45 C	0524.0	0530.2		8.0				
9300	KISV	45 C	0524.0	0526.8	12.0	10.0				
5900	KISV	45 C	0525.7	0530.1	12.3	7.0				
5900	KISV	45 C	0525.7	0526.8		6.0				
9100	GORK	45 C	0526.0	0530.0		7.0				
9100	GORK	45 C	0526.0	0526.6	4.7	7.0				
260	ONDR	41 F	0600.0E	1318.0	600.00	78.0				
2840	PEKG	20 GRF	0633.0	0814.8	169.0	17.9				
2950	GORK	22 GRF	0645.3	0716.2	88.4	11.0				
9100	GORK	20 GRF	0703.0	0728.7	111.0	6.0				
430	KRAK	8 S	0942.3E	0942.5U	0.40	95.0				

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

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MAY 1990

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
15	5900	KISV	2 S/F	1051.3	1054.5	5.4	5.0			
	9300	KISV	2 S/F	1052.7	1054.4	6.4	7.0			
	3013	IZMI	5 S	1054.5	1055.7	2.8	15.0	8.0		
	9100	GORK	20 GRF	1115.0	1124.2	26.1	6.0			
	2800	OTTA	4 S/F	1233.0	1306.5	130.0	276.5	55.0		
	2850	CRIM	28 PRE	1236.0	1257.0	21.0	22.0	7.0		
	5900	KISV	28 PRE	1238.2	1238.6	1.6	6.0			
	3000	POTS	46 C	1240.0	1306.6	130.0	1430.0			
	1470	POTS	46 C	1245.0	1307.0	76.0	250.0			
	2695	SVTO	49 GB	1250.0E	1306.0	670.00	710.0			QL=4 ST=1 TYP=7
	536	ONDR	49 GB	1253.5	1315.7	46.0	116.0			
	5900	KISV	47 GB	1254.6	1317.4		737.0			
	5900	KISV	47 GB	1254.6	1306.5	44.5	917.0			
	5900	KISV	47 GB	1254.6	1320.8		664.0			
	808	ONDR	49 GB	1255.0	1308.5		406.0			
	4995	SGMR	49 GB	1256.0E	1306.0	73.00	870.0			QL=4 ST=2 TYP=6
	600	HUMN	45 C	1256.7	1317.0	58.8	90.0	26.0		
	2850	CRIM	47 GB	1257.0	1306.0	45.0	586.0	195.0		
	2850	CRIM	29 PBI	1257.0	1342.0	68.0	60.4	20.0		
	2695	SGMR	49 GB	1257.0E	1317.0	73.00	580.0			QL=4 ST=2 TYP=7
	4995	SVTO	49 GB	1257.0E	1306.0	76.00	1000.0			QL=4 ST=2 TYP=7
	2850	CRIM	47 GB	1257.0	1317.5		582.0			
	2850	CRIM	47 GB	1257.0	1320.9		579.0			
	9300	KISV	47 GB	1257.5	1321.0		435.0			
	9300	KISV	47 GB	1257.5	1317.4		457.0			
	9300	KISV	47 GB	1257.5	1306.5	39.7	609.0			
	1415	SVTO	4 S/F	1258.0E	1306.0	39.00	210.0			QL=4 ST=2 TYP=5
	1415	SGMR	20 GRF	1258.0E	1306.0	46.00	210.0			QL=2 ST=2 TYP=2
	9500	POTS	46 C	1258.5	1306.5	112.0	500.0			
	15000	KISV	46 C	1259.5	1317.4		249.0			
	15000	KISV	46 C	1259.5	1322.5		274.0			
	15000	KISV	46 C	1259.5	1306.7	39.4	303.0			
	8800	SGMR	49 GB	1300.0E	1306.0	65.00	510.0			QL=4 ST=2 TYP=7
	8800	SVTO	49 GB	1300.0E	1306.0	68.00	740.0			QL=4 ST=2 TYP=7
	15400	SGMR	4 S/F	1300.0E	1306.0	70.00	340.0			QL=4 ST=2 TYP=5
	610	SVTO	20 GRF	1301.0E	1305.0	22.00	130.0			QL=2 ST=2 TYP=2
	610	SGMR	20 GRF	1301.0E	1316.0	37.00	130.0			QL=4 ST=2 TYP=2
	15400	SVTO	4 S/F	1301.0E	1306.0	61.00	320.0			QL=4 ST=2 TYP=3
	234	POTS	46 C	1301.5	1320.4	61.5	65.0			
	410	SGMR	4 S/F	1302.0E	1316.0	36.00	150.0			QL=2 ST=2 TYP=5
410	SVTO	4 S/F	1303.0E	1316.0	31.00	130.0			QL=4 ST=2 TYP=5	
113	POTS	4 S/F	1303.0	1307.1	37.00	350.0				
245	SVTO	20 GRF	1304.0E	1320.0	36.00	76.0			QL=4 ST=2 TYP=2	
245	SGMR	4 S/F	1304.0E	1316.0	43.00	91.0			QL=4 ST=2 TYP=5	
33	UPIC	49 GB	1305.3	1307.3	27.8					
30	POTS	45 C	1306.6	1309.9	25.4	4000.0U				
127	TORN	4 S/F	1308.8	1311.6	5.5	1400.0	320.0			
9300	KISV	29 PBI	1337.2E	1337.2	21.70	143.0				
15000	KISV	29 PBI	1338.9E	1338.9	19.10	98.0				
5900	KISV	29 PBI	1339.1E	1339.1	20.40	153.0				
2800	OTTA	4 S/F	1357.9	1358.8	4.2	17.2	3.0			
536	ONDR	41 F	1400.0	1411.1	110.0	14.0				
245	SGMR	8 S	1453.0E	1453.0	U	58.0			QL=4 ST=2 TYP=3	
16	200	GORK	44 NS	0300.0E		540.00		5.0		
	245	SVTO	44 NS	0447.0E	0448.0	48.00	140.0			QL=2 ST=2 TYP=1
	204	IZMI	43 NS	0600.0		360.0	20.0			
	260	ONDR	44 NS	0600.0E	1618.0	630.00	141.0			
	100	HIRA	43 NS	0642.0		165.00		40.0		
	100	GORK	43 NS	0645.0		255.0		5.0		
	127	TORN	43 NS	0645.0		495.0		30.0		V=2
	430	KRAK	44 NS	0703.0E	0710.0	133.50	120.0	9.0		
	200	HIRA	44 NS	1930.0E	0445.0	840.00	100.0	36.0		MR
	245	SGMR	44 NS	2129.0E	2245.0	127.00	81.0			QL=4 ST=2 TYP=1
	100	HIRA	43 NS	2153.0		720.00		43.0		
	245	LEAR	8 S	0023.0E	0024.0	1.00	89.0			QL=2 ST=2 TYP=3
	1415	LEAR	20 GRF	0043.0E	0053.0	12.00	22.0			QL=4 ST=2 TYP=2
	4995	LEAR	4 S/F	0044.0E	0053.0	19.00	52.0			QL=4 ST=2 TYP=3
2840	PEKG	45 C	0051.00	0053.70	5.00	55.4				

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MAY 1990

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
16	8800	LEAR	8 S	0052.0E	0053.0	2.00	25.0			QL=4 ST=2 TYP=3
	2695	LEAR	20 GRF	0056.0E	0059.0	6.00	35.0			QL=4 ST=2 TYP=2
	410	LEAR	8 S	0059.0E	0059.0	1.00	53.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	0059.0E	0059.0	1.00	85.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0102.0E	0102.0	1.00	24.0			QL=2 ST=2 TYP=3
	2840	PEKG	45 C	0313.0	0315.2	8.0	16.5			
	2950	GORK	21 GRF	0321.2	0447.0	127.4	11.0			
	245	SVTO	8 S	0359.0E	0400.0	U	100.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0409.0E	0409.0	U	74.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0409.0E	0409.0	U	73.0			QL=4 ST=2 TYP=3
	5900	KISV	23 GRF	0415.1	0426.2	75.2	11.0			
	245	LEAR	8 S	0417.0E	0417.0	1.00	55.0			QL=2 ST=2 TYP=3
	9100	GORK	23 GRF	0424.0	0447.3	177.0U	13.0			
	9300	KISV	23 GRF	0424.0	0446.8	74.8	15.0			
	5900	KISV	2 S/F	0436.0	0438.9	5.3	9.0			
	5900	KISV	2 S/F	0445.0	0447.2	9.0	20.0			
	245	LEAR	8 S	0447.0E	0448.0	1.00	160.0			QL=2 ST=2 TYP=3
	5900	KISV	45 C	0513.7	0515.1	5.1	58.0			
	5900	KISV	45 C	0513.7	0514.6		54.0			
	2950	GORK	2 S/F	0514.0	0515.0	2.4	12.0			
	9300	KISV	45 C	0514.0	0515.3		45.0			
	9300	KISV	45 C	0514.0	0514.7	7.2	49.0			
	2850	CRIM	1 S	0514.0	0514.9	2.0	15.0	5.0		
	15000	KISV	45 C	0514.1	0515.3		15.0			
	15000	KISV	45 C	0514.1	0514.7	4.6	18.0			
	500	HIRA	23 GRF	0615.0	0655.0	130.0	18.0	6.0		WR
	650	GORK	22 GRF	0615.8	0656.2	214.6U	11.0			
	5900	KISV	22 GRF	0637.4	0639.7	20.6	13.0			
	9300	KISV	22 GRF	0638.3	0639.7	21.7	12.0			
	536	ONDR	41 F	0640.0	0710.4	210.0	19.0			
	245	LEAR	8 S	0657.0E	0657.0	1.00	55.0			QL=2 ST=2 TYP=3
	2840	PEKG	1 S	0703.0	0705.8	4.0	8.9			
	9300	KISV	4 S/F	0704.4	0705.8	9.8	24.0			
	2850	CRIM	1 S	0704.5	0705.5	2.2	9.0	3.0		
	2950	GORK	1 S	0704.5	0705.8	7.3	7.0			
	5900	KISV	4 S/F	0704.5	0705.8	9.5	37.0			
	9100	GORK	2 S/F	0704.6	0705.6	4.4	20.0			
	3013	IZMI	22 GRF	0704.7	0705.6	7.5	11.0	5.0		
	3000	POTS	3 S	0705.0	0705.5	3.0	12.0			
	9500	POTS	29 PBI	0705.0	0705.7	35.0	17.0			
	15000	KISV	2 S/F	0705.0	0705.8	8.0	9.0			
	5900	KISV	2 S/F	0844.0	0844.2	2.3	6.0			
	410	LEAR	8 S	0909.0E	0909.0	1.00	92.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0909.0E	0909.0	1.00	59.0			QL=4 ST=2 TYP=3
	2950	GORK	22 GRF	0909.0	0922.0	18.6	5.0			
	5900	KISV	2 S/F	0909.5	0910.1	6.0	15.0			
	15000	KISV	2 S/F	0909.6	0910.0	1.7	7.0			
	9100	GORK	1 S	0909.7	0910.0	1.0	8.0			
	9300	KISV	2 S/F	0909.8	0910.0	1.1	11.0			
	950	GORK	1 S	0909.8	0910.1	1.2	4.0			
245	LEAR	8 S	0911.0E	0911.0	1.00	51.0			QL=2 ST=2 TYP=3	
950	GORK	20 GRF	0916.1	0934.5	29.1	4.0				
5900	KISV	2 S/F	0921.2	0922.4	2.6	6.0				
2850	CRIM	1 S	0921.5	0922.5	2.0	12.0	4.0			
430	KRAK	8 S	0942.8E	0943.3U	0.60	26.0				
245	SGMR	8 S	1029.0E	1029.0	1.00	51.0			QL=4 ST=3 TYP=3	
808	ONDR	3 S	1033.7	1034.2	2.0	3.0				
9300	KISV	2 S/F	1228.9	1229.4	1.6	9.0				
15000	KISV	2 S/F	1229.1	1229.4	1.2	8.0				
5900	KISV	2 S/F	1229.2	1229.4	1.0	5.0				
5900	KISV	4 S/F	1231.5	1233.0	2.8	23.0				
15000	KISV	2 S/F	1232.3	1233.0	3.4	13.0				
9300	KISV	2 S/F	1232.3	1232.9	3.2	21.0				
536	ONDR	8 S	1306.4	1306.5	0.5	38.0				
245	SGMR	8 S	1405.0E	1405.0	1.00	160.0			QL=4 ST=2 TYP=3	
245	SVTO	8 S	1405.0E	1405.0	1.00	120.0			QL=4 ST=2 TYP=3	
9500	POTS	3 S	1405.0	1405.7	2.5	17.0				
536	ONDR	42 SER	1511.5	1521.8	11.5	63.0				
2800	OTTA	3 S	1534.0	1534.8	6.0	8.0	2.0			

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Outstanding Occurrences

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MAY 1990

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
16	2800	OTTA	4 S/F	1611.0	1617.0	10.5	11.8	3.0		
17	200	GORK	44 NS	0243.0E		559.0D		5.0		
	245	SVTO	44 NS	0437.0E	0443.0	439.0D	140.0			QL=2 ST=2 TYP=1
	260	DNDR	44 NS	0500.0E	1434.9	660.0D	46.0			
	100	GORK	43 NS	0503.0		75.0		10.0		
	234	POTS	44 NS	0538.0E		U 560.0D				
	204	I2MI	43 NS	0600.0		360.0	20.0			
	127	TORN	44 NS	0620.0E	1150.7	520.0D	500.0	40.0		V=2
	113	POTS	43 NS	1230.0	1343.0	147.0D	85.0			
	245	SGMR	44 NS	1234.0E	2110.0	663.0D	180.0			QL=2 ST=2 TYP=1
	245	SVTO	44 NS	1336.0E	1711.0	241.0D	110.0			QL=2 ST=2 TYP=1
	245	PALE	44 NS	1629.0E	2023.0	322.0D	220.0			QL=4 ST=2 TYP=1
	100	HIRA	44 NS	1930.0E	0243.0	840.0D	630.0	304.0		
	200	HIRA	44 NS	1930.0E	2218.0	840.0D	205.0	89.0		MR
	9100	GORK	23 GRF	0245.0E	0330.9	360.0D	27.0			
	2840	PEKG	45 C	0321.0	0324.3	4.0D	89.4			
	4995	LEAR	4 S/F	0322.0E	0326.0	9.0D	450.0			QL=4 ST=2 TYP=5
	2695	LEAR	4 S/F	0323.0E	0326.0	7.0D	130.0			QL=4 ST=2 TYP=5
	15400	LEAR	4 S/F	0323.0E	0324.0	5.0D	240.0			QL=4 ST=2 TYP=3
	245	LEAR	49 GB	0323.0E	0323.0	3.0D	1500.0			QL=2 ST=2 TYP=6
	1415	LEAR	4 S/F	0323.0E	0324.0	4.0D	53.0			QL=4 ST=2 TYP=3
	8800	LEAR	49 GB	0323.0E	0324.0	8.0D	560.0			QL=4 ST=2 TYP=7
	245	PALE	49 GB	0323.0E	0324.0	1.0D	930.0			QL=4 ST=2 TYP=6
	8800	PALE	4 S/F	0323.0E	0324.0	5.0D	450.0			QL=4 ST=2 TYP=5
	2695	PALE	4 S/F	0323.0E	0326.0	5.0D	100.0			QL=4 ST=2 TYP=3
	4995	PALE	4 S/F	0323.0E	0326.0	6.0D	420.0			QL=4 ST=2 TYP=5
	2950	GORK	46 C	0323.1	0324.2	6.6	68.0			
	9100	GORK	47 GB	0323.1	0324.2	6.9	770.0			
	2950	GORK	46 C	0323.1	0326.5		108.0			
	950	GORK	45 C	0323.3	0324.3	2.2	41.0			
	950	GORK	45 C	0323.3	0326.7		18.0			
	200	HIRA	46 C	0323.4	0323.8	5.1	820.0	150.0		0
	500	HIRA	46 C	0323.5	0324.0	6.0	37.0			0
	17000	NOBE	7 C	0323.6	0324.1	12.0	180.0			18R
	35000	NOBE	7 C	0323.6	0324.1	10.0	72.0			19R,80GHz:UNCER
	650	GORK	46 C	0323.6	0324.3	7.1	30.0			
	650	GORK	46 C	0323.6	0326.8		13.0			
	610	LEAR	8 S	0324.0E	0324.0	1.0D	26.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0324.0E	0324.0	U	43.0			QL=4 ST=2 TYP=3
	1415	PALE	8 S	0324.0E	0324.0	1.0D	58.0			QL=4 ST=2 TYP=3
	15400	PALE	8 S	0324.0E	0324.0	U	160.0			QL=4 ST=2 TYP=3
	2840	PEKG	45 C	0325.0E	0326.8	13.0D	139.1			
	2950	GORK	21 GRF	0350.2	1030.9	489.8	27.0			
	15000	KISV	2 S/F	0426.0	0426.4	2.4	21.0			
	9300	KISV	1 S	0426.2	0426.5	0.9	5.0			
	15000	KISV	2 S/F	0446.2	0446.8	2.4	31.0			
	9300	KISV	2 S/F	0446.3	0446.8	2.1	12.0			
	17000	NOBE	1 S	0446.4	0446.6	1.0	27.0			37R,80,35GHz:0
	100	HIRA	27 RF	0502.0	0523.0	101.0	540.0	170.0		
	9300	KISV	2 S/F	0502.5	0504.5	8.4	10.0			
	950	GORK	20 GRF	0507.4	0515.5	12.2	3.0			
	650	GORK	20 GRF	0507.8	0516.3	44.4	3.0			
	15000	KISV	1 S	0511.6	0511.7	0.4	7.0			
	15000	KISV	1 S	0519.0	0519.3	0.7	8.0			
	950	GORK	20 GRF	0536.5	0546.7	15.6	2.0			
	15000	KISV	2 S/F	0544.0	0544.5	3.1	22.0			
	17000	NOBE	1 S	0544.1	0544.3	1.0	26.0			11R,80,35GHz:0
	9100	GORK	46 C	0755.0	0755.6	8.0	15.0			
	9500	POTS	21 GRF	0755.0	0759.8	10.0	20.0			
	9100	GORK	46 C	0755.0	0759.9		22.0			
	5900	KISV	23 GRF	0755.1	0757.3	8.3	7.0			
	9300	KISV	23 GRF	0755.3	0801.1	8.5	12.0			
	5900	KISV	1 S	0755.3	0755.7	1.0	6.0			
	9300	KISV	2 S/F	0755.5	0755.6	1.1	11.0			
	9300	KISV	45 C	0759.0	0800.0	2.1	14.0			
	9300	KISV	45 C	0759.0	0800.8		12.0			
	5900	KISV	45 C	0759.3	0800.2	1.8	9.0			
	5900	KISV	45 C	0759.3	0800.7		8.0			

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MAY 1990

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
17	5900	KISV	2 S/F	0808.1	0809.0	3.9	9.0			
	9300	KISV	2 S/F	0816.8	0817.3	1.3	6.0			
	5900	KISV	2 S/F	0816.8	0817.4	1.5	4.0			
	536	ONDR	41 F	0820.0	0841.0	50.0	10.0			
	2840	PEKG	21 GRF	0832.0	0840.8	58.00	37.9			
	410	SVTO	8 S	0840.0E	0840.0	1.00	57.0			QL=4 ST=2 TYP=3
	2950	GORK	1 S	0840.5	0840.7	0.9	9.0			
	950	GORK	1 S	0840.5	0840.8	1.1	2.0			
	650	GORK	1 S	0840.6	0840.8	1.2	4.0			
	650	GORK	20 GRF	0849.1	1030.4	102.00	3.0			
	950	GORK	20 GRF	0937.8	1007.0	33.90	2.0			
	2850	CRIM	30 PBI	0955.0	1009.0	120.00	18.0			
	2850	CRIM	3 S	0955.0	1006.6	14.0	52.0			
	3000	POTS	21 GRF	0955.0	1006.7	20.0	39.0			
	2950	GORK	46 C	0955.8	1006.4		28.0			
	2950	GORK	46 C	0955.8	1000.9	15.8	26.0			
	9100	GORK	23 GRF	0955.9	1100.0	124.10	20.0			
	5900	KISV	23 GRF	0956.3	1002.4	37.3	27.0			
	3013	IZMI	22 GRF	0956.5	1006.5	14.0	19.0			
	9300	KISV	22 GRF	0956.6	1006.6	16.8	17.0			
	1470	POTS	20 GRF	0957.0	1006.8	16.0	26.0			
	5900	KISV	45 C	0959.3	0959.5		7.0			
	5900	KISV	45 C	0959.3	1000.7	2.9	11.0			
	5900	KISV	4 S/F	1003.2	1006.6	7.7	20.0			
	15000	KISV	2 S/F	1016.5	1017.5	1.8	33.0			
	9300	KISV	2 S/F	1016.8	1017.4	1.4	11.0			
	536	ONDR	42 SER	1040.0	1048.5	16.0	36.0			
	5900	KISV	4 S/F	1049.8	1050.8	1.9	24.0			
	9100	GORK	3 S	1050.0	1050.8	1.7	16.0			
	9300	KISV	2 S/F	1050.1	1050.9	2.1	17.0			
	3013	IZMI	5 S	1050.4	1050.7	1.3	6.0	3.0		
	204	IZMI	8 S	1152.3	1152.4	0.2	160.0	150.0		
	2800	OTTA	20 GRF	1216.0	1228.0	75.0	33.5	16.0		
	2850	CRIM	20 GRF	1218.0	1227.0	32.0	36.0	13.0		
	5900	KISV	22 GRF	1221.2	1229.6	55.1	38.0			
	9300	KISV	22 GRF	1225.0	1230.5	54.0	35.0			
536	ONDR	8 S	1417.1	1417.4	0.5	41.0				
2800	OTTA	20 GRF	1435.0	1438.0	26.0	16.8	8.0			
3000	POTS	3 S	1435.0	1437.5	5.0	16.0				
9500	POTS	3 S	1435.0	1437.5	8.0	21.0				
4995	SVTO	20 GRF	1436.0E	1437.0	3.00	53.0			QL=4 ST=2 TYP=2	
2800	OTTA	20 GRF	1857.0	1911.0	45.0	8.4	4.0			
2800	OTTA	24 R	2045.0	2057.0	120.00	17.3				
2840	PEKG	5 S	2356.0	2358.1	3.0	17.2				
18	100	GORK	44 NS	0245.0E		555.00	20.0			
	200	GORK	44 NS	0248.0E		552.00	5.0			
	245	SVTO	44 NS	0351.0E	1205.00	827.00	390.0			QL=2 ST=2 TYP=1
	234	POTS	44 NS	0535.0E	0008.00	562.00	U			
	204	IZMI	43 NS	0600.0		360.0	50.0			
	260	ONDR	44 NS	0600.0E	0743.7	640.00	94.0			
	113	POTS	43 NS	0613.0	0805.5	522.00	220.0			
	127	TORN	44 NS	0620.0E		520.00	300.0			V=1
	430	KRAK	44 NS	0705.0E	1154.0	345.00	110.0	13.0		
	30	POTS	43 NS	0817.0	0908.00	193.00	120.0			
	245	SGMR	44 NS	1000.0E	1019.0	840.00	140.0			QL=2 ST=1 TYP=1
	200	HIRA	44 NS	1930.0E	0634.0	840.00	240.0	136.0		0
	100	HIRA	43 NS	2116.0	2238.0	760.00	890.0	410.0		
	245	LEAR	44 NS	2307.0E	0706.0	625.00	380.0			QL=4 ST=2 TYP=1
	2840	PEKG	20 GRF	0027.0	0036.0	47.00	12.3			
	2840	PEKG	1 S	0128.0	0129.5	4.0	3.8			
	9100	GORK	23 GRF	0239.0E	0355.1	561.00	27.0			
	2840	PEKG	28 PRE	0250.0	0257.4	24.00	7.7			
	2840	PEKG	45 C	0314.0	0323.5	15.00	41.4			
	2950	GORK	21 GRF	0314.9	1148.2	525.1	16.0			
	2695	LEAR	4 S/F	0319.0E	0323.0	10.00	56.0			QL=4 ST=2 TYP=3
	950	GORK	22 GRF	0319.7	0324.7	13.1	14.0			
	1415	LEAR	4 S/F	0320.0E	0323.0	6.00	26.0			QL=4 ST=2 TYP=3
	4995	LEAR	4 S/F	0321.0E	0322.0	6.00	31.0			QL=4 ST=2 TYP=3

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean (W/m ² Hz)	Int	Remarks
18	2950	GORK	4 S/F	0321.0	0323.1	7.1	23.0			
	650	GORK	22 GRF	0321.4	0323.7	11.3	8.0			
	410	LEAR	8 S	0322.0E	0322.0	U	40.0			QL=4 ST=2 TYP=3
	2840	PEKG	29 PBI	0329.0	0339.0	32.00	23.0			
	2950	GORK	2 S/F	0416.6	0419.4	5.0	11.0			
	5900	KISV	2 S/F	0518.9	0519.7	5.1	12.0			
	2950	GORK	1 S	0519.2	0519.8	3.1	5.0			
	9300	KISV	22 GRF	0538.7	0544.6	10.3	9.0			
	650	GORK	22 GRF	0629.4E	1049.0	311.90	14.0			
	536	ONDR	41 F	0640.0	0703.9	600.0	18.0			
	8800	LEAR	8 S	0759.0E	0800.0	2.00	55.0			QL=4 ST=2 TYP=3
	8800	SVTO	8 S	0759.0E	0800.0	2.00	84.0			QL=4 ST=3 TYP=3
	9100	GORK	46 C	0759.0	0800.1	10.0	70.0			
	9500	POTS	4 S/F	0759.0	0800.1	14.0	61.0			
	9100	GORK	46 C	0759.0	0805.8		8.0			
	9300	KISV	45 C	0759.1	0800.1	12.9	65.0			
	9300	KISV	45 C	0759.1	0800.6		55.0			
	5900	KISV	4 S/F	0759.2	0800.0	7.8	53.0			
	15000	KISV	45 C	0759.5	0800.1		26.0			
	15000	KISV	45 C	0759.5	0800.6	7.5	38.0			
	950	GORK	20 GRF	0815.6	0838.0	32.40	3.0			
	234	POTS	4 S/F	0857.8	0858.2	0.9	150.0			
	5900	KISV	23 GRF	0917.5	0927.1	15.5	13.0			
	9300	KISV	2 S/F	0918.4	0920.3	6.0	26.0			
	9100	GORK	3 S	0918.9	0920.3	5.1	27.0			
	5900	KISV	4 S/F	0919.1	0920.3	5.1	33.0			
	9500	POTS	3 S	0919.5	0920.3	3.5	18.0			
	5900	KISV	23 GRF	0957.6	1015.6		15.0			
	9300	KISV	22 GRF	0957.6	0959.7	29.2	13.0			
	5900	KISV	23 GRF	0957.6	1004.9	23.8	17.0			
	5900	KISV	2 S/F	1056.2	1059.5	9.1	8.0			
	5900	KISV	22 GRF	1205.3	1213.1	21.8	13.0			
	808	ONDR	3 S	1210.7	1211.1	1.5	9.0			
	5900	KISV	2 S/F	1232.7	1233.2	2.0	6.0			
	5900	KISV	2 S/F	1315.5	1317.0	2.0	8.0			
	410	SGMR	8 S	1430.0E	1431.0	1.00	220.0			QL=2 ST=2 TYP=3
	245	PALE	8 S	1834.0E	1834.0	1.00	150.0			QL=4 ST=2 TYP=3
	2800	OTTA	22 GRF	1930.0	2243.0	400.0	66.7	33.0		
	2800	OTTA	4 S/F	1954.3	2002.2	9.5	16.1	3.0		
	100	HIRA	41 F	2004.0	2006.6	4.6	1000.00			
19	200	GORK	44 NS	0239.0E		411.00		10.0		
	100	GORK	44 NS	0239.0E		411.00		10.0		
	245	PALE	44 NS	0256.0E	0343.0	111.00	110.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	0350.0	0853.0	829.0	490.0			QL=4 ST=2 TYP=1
	33	UPIC	43 NS	0406.5	0647.0	650.0				
	234	POTS	44 NS	0542.0E	0624.5	568.00	220.0			
	113	POTS	44 NS	0546.0E	0802.0	556.00	500.0			
	410	LEAR	44 NS	0551.0E	0714.0	221.00	89.0			QL=4 ST=2 TYP=1
	204	IZMI	43 NS	0600.0		360.0	50.0			
	260	ONDR	44 NS	0600.0E		640.00				
	410	SVTO	44 NS	0602.0E	1358.0	497.00	98.0			QL=2 ST=2 TYP=1
	127	TORN	44 NS	0620.0E		520.00		1200.0		V=0
	30	POTS	43 NS	0720.0	0930.5	350.0	400.00			
	245	SGMR	44 NS	0946.0E	1406.0	833.00	270.0			QL=2 ST=2 TYP=1
	430	KRAK	44 NS	0954.0E	0911.5	367.00	140.0	12.0		
	245	PALE	44 NS	1629.0E	1844.0	738.00	400.0			QL=4 ST=2 TYP=1
	410	PALE	44 NS	1811.0E	1816.0	6.00	83.0			QL=4 ST=2 TYP=1
	100	HIRA	44 NS	1928.0E	2013.0	450.00	620.0	180.0		
	200	HIRA	44 NS	1928.0E	2256.0	840.00	94.0	47.0		MR
	245	LEAR	44 NS	2307.0E	0204.0	467.00	330.0			QL=4 ST=3 TYP=1
	245	PALE	8 S	0302.0E	0302.0	U	280.0			QL=2 ST=2 TYP=3
	950	GORK	20 GRF	0303.0E	0333.0	88.80	5.0			
	650	GORK	22 GRF	0303.0E	0619.3	387.00	13.0			
	9300	KISV	22 GRF	0413.2	0417.7	24.6	14.0			
5900	KISV	22 GRF	0415.0	0419.0	19.7	13.0				
2950	GORK	2 S/F	0422.8	0423.6	2.9	6.0				
5900	KISV	22 GRF	0444.7	0450.0	15.6	15.0				
9100	GORK	23 GRF	0448.0	0856.5	282.00	13.0				

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MAY 1990

Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak (10 ⁻²² W/m ² Hz)	Mean		
19	2950 GORK	20 GRF	0448.0	0819.8	282.00	20.0			
	950 GORK	20 GRF	0527.0	0542.3	29.8	4.0			
	8400 BERN	4 S/F	0623.1	0625.0	3.5	5.2			
	11800 BERN	4 S/F	0623.1	0625.0	3.5	1.4			
	5200 BERN	4 S/F	0623.1	0625.0	3.5	1.2			
	5900 KISV	23 GRF	0623.3	0633.5	21.7	20.0			
	9300 KISV	23 GRF	0623.7	0635.0	22.0	14.0			
	9300 KISV	4 S/F	0623.7	0625.1	6.8	60.0			
	5900 KISV	4 S/F	0623.8	0624.1	8.3	44.0			
	8800 SVTO	4 S/F	0624.0E	0625.0	3.00	66.0		QL=4 ST=2 TYP=3	
	9100 GORK	46 C	0624.0	0625.1	4.9	56.0			
	9100 GORK	46 C	0624.0	0626.7		15.0			
	536 ONDR	41 F	0640.0	0704.2	600.0	19.0			
	5900 KISV	4 S/F	0656.2	0657.8	7.0	27.0			
	9300 KISV	22 GRF	0656.6	0659.0	16.6	8.0			
	2850 CRIM	20 GRF	0745.0	0805.3	51.0	20.0	7.0		
	9300 KISV	22 GRF	0915.3	0931.3	18.7	10.0			
	5900 KISV	2 S/F	1041.3	1042.4	5.7	12.0			
	1470 POTS	20 GRF	1110.0	1126.0	60.0	9.0			
	9500 POTS	21 GRF	1115.0	1304.0	195.0	50.0			
	3000 POTS	20 GRF	1120.0	1133.0	70.0	23.0			
	5900 KISV	45 C	1140.2	1146.0	8.5	12.0			
	5900 KISV	45 C	1140.2	1141.7		12.0			
	5900 KISV	22 GRF	1240.0	1247.5	53.5	65.0			
	3000 POTS	20 GRF	1240.0	1247.7	55.0	17.0			
	9300 KISV	23 GRF	1240.1	1304.1	76.1	57.0			
	4995 SVTO	20 GRF	1243.0E	1248.0	30.00	65.0		QL=4 ST=2 TYP=2	
	15000 KISV	2 S/F	1312.8	1314.2	7.2	17.0			
	9300 KISV	4 S/F	1343.8	1345.3	4.2	176.0			
	15000 KISV	2 S/F	1343.8	1345.4	3.2	24.0			
	5900 KISV	4 S/F	1343.9	1345.4	4.1	41.0			
	8800 SVTO	8 S	1344.0E	1345.0	1.00	110.0		QL=4 ST=2 TYP=3	
9500 POTS	3 S	1344.0	1345.3	4.0	102.0				
8800 SVTO	8 S	1544.0E	1544.0	1.00	96.0		QL=4 ST=2 TYP=3		
245 SGMR	8 S	1900.0E	1900.0	U	240.0		QL=4 ST=2 TYP=3		
410 SGMR	8 S	1905.0E	1905.0	U	62.0		QL=4 ST=2 TYP=3		
2800 OTTA	3 S	1921.4	1922.9	10.0	24.7	5.0			
245 SGMR	8 S	2203.0E	2203.0	U	160.0		QL=4 ST=2 TYP=3		
8800 PALE	8 S	2348.0E	2349.0	1.00	71.0		QL=4 ST=2 TYP=3		
4995 PALE	8 S	2348.0E	2349.0	1.00	48.0		QL=4 ST=2 TYP=3		
20	200 GORK	44 NS	0236.0E		414.00		5.0		
	100 GORK	44 NS	0303.0E		177.00		5.0		
	245 SVTO	44 NS	0416.0E	0539.0	98.00	180.0		QL=4 ST=3 TYP=1	
	410 SVTO	44 NS	0440.0E	0440.0	15.00	57.0		QL=4 ST=2 TYP=1	
	204 IZMI	43 NS	0600.0		360.0	35.0			
	260 ONDR	44 NS	0600.0E	1323.1	640.00				
	245 SVTO	44 NS	0700.0E	0729.0	42.00	130.0		QL=4 ST=2 TYP=1	
	245 LEAR	44 NS	0725.0E	0729.0	5.00	140.0		QL=4 ST=2 TYP=1	
	127 TORN	43 NS	1044.0	1322.9	256.0	2500.0	10.0	V=2	
	245 SGMR	44 NS	1157.0E	1821.0	425.00	95.0		QL=2 ST=2 TYP=1	
	200 HIRA	42 SER	0050.2	0153.0	66.0	540.0		0	
	4995 PALE	4 S/F	0115.0E	0117.0	4.00	42.0		QL=4 ST=2 TYP=3	
	8800 PALE	4 S/F	0115.0E	0117.0	5.00	62.0		QL=4 ST=2 TYP=3	
	8800 LEAR	4 S/F	0116.0E	0117.0	3.00	61.0		QL=4 ST=2 TYP=3	
	4995 LEAR	4 S/F	0116.0E	0117.0	3.00	37.0		QL=4 ST=2 TYP=3	
	500 HIRA	20 GRF	0124.0	0204.0	135.0	18.0	9.0	WL	
	9100 GORK	23 GRF	0248.0E	0350.2	402.00	25.0			
	950 GORK	21 GRF	0300.0E	0302.1	251.40	11.0			
	650 GORK	21 GRF	0300.0E	0434.8	223.50	8.0			
	9100 GORK	46 C	0315.0	0315.6	9.0	27.0			
	9100 GORK	46 C	0315.0	0321.8		10.0			
	2950 GORK	21 GRF	0335.5	0525.5	234.7	13.0			
	9100 GORK	22 GRF	0400.7	0417.4	44.3	15.0			
9100 GORK	2 S/F	0402.2	0404.1	4.8	38.0				
5900 KISV	4 S/F	0402.2	0404.1	7.5	35.0				
5900 KISV	23 GRF	0402.2	0422.7	114.8	18.0				
9300 KISV	4 S/F	0402.4	0404.3	7.0	47.0				
9300 KISV	23 GRF	0402.4	0417.5	134.6	20.0				

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Outstanding Occurrences

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak	Mean		
							(10 ⁻²² W/m ² Hz)			
20	15000	KISV	20 GRF	0403.1	0404.4	24.8	11.0			
	9100	GORK	3 S	0522.7	0523.4	1.6	33.0			
	11800	BERN	3 S	0522.8	0523.3	2.0	0.9			
	8400	BERN	3 S	0522.8	0523.3	2.0	2.6			
	5200	BERN	3 S	0522.8	0523.3	2.0	2.8			
	3200	BERN	3 S	0522.8	0523.3	2.0	1.9			
	650	GORK	46 C	0522.8	0523.3	2.1	20.0			
	2950	GORK	1 S	0522.8	0523.3	2.2	20.0			
	500	HIRA	8 S	0522.8	0523.3	1.0	462.0		0	
	650	GORK	46 C	0522.8	0524.7		9.0			
	2850	CRIM	1 S	0522.9	0523.4	1.0	9.0	3.0		
	410	LEAR	8 S	0523.0E	0523.0	U	380.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0523.0E	0523.0	U	410.0			QL=2 ST=2 TYP=3
	5900	KISV	4 S/F	0523.0	0523.5	4.0	64.0			
	9300	KISV	2 S/F	0523.0	0523.5	5.3	34.0			
	950	GORK	1 S	0523.1	0523.6	1.7	4.0			
	2850	CRIM	26 FAL	0540.0	0630.0		9.0			
	204	IZMI	41 F	0601.0	0603.0	4.0	380.0			
	536	ONDR	41 F	0616.0	0658.5	240.0	32.0			
	650	GORK	3 S	0649.6	0651.1	4.8	8.0			
	245	LEAR	8 S	0650.0E	0651.0	1.00	150.0			QL=2 ST=2 TYP=3
	2950	GORK	1 S	0650.3	0654.0	4.5	4.0			
	234	POTS	4 S/F	0650.3	0650.5	1.4	135.0			
	500	HIRA	45 C	0650.4	0651.0	1.6	14.0		0	
	430	KRAK	2 S/F	0650.5	0651.0	1.2	37.0	13.0		
	204	IZMI	41 F	0650.5	0650.8	1.2	110.0			
	950	GORK	1 S	0650.9	0651.1	0.9	5.0			
	245	SVTO	8 S	0651.0E	0651.0	U	170.0			QL=4 ST=2 TYP=3
	810	KRAK	8 S	0658.7	0658.8	0.1	19.0			
	430	KRAK	8 S	0658.7	0658.8	0.2	38.0			
	245	LEAR	8 S	0714.0E	0715.0	2.00	62.0			QL=2 ST=2 TYP=3
	245	LEAR	8 S	0719.0E	0719.0	2.00	51.0			QL=2 ST=2 TYP=3
	430	KRAK	42 SER	0738.0	0948.0	338.50	120.0			
	9300	KISV	2 S/F	0755.7	0756.8	3.3	9.0			
	204	IZMI	8 S	0811.0	0811.1	0.2	1200.0	1000.0		
	9300	KISV	45 C	0830.7	0832.0	6.0	15.0			
	9300	KISV	45 C	0830.7	0832.8		14.0			
	9500	POTS	1 S	0831.0	0832.0	3.0	7.0			
	204	IZMI	4 S/F	0845.5	0846.0	0.6	600.0			
	234	POTS	4 S/F	0927.6	0927.6	1.1	140.0			
	9500	POTS	1 S	1132.5	1132.8	1.5	7.0			
	113	POTS	4 S/F	1204.6	1205.9	2.5	140.0			
	113	POTS	4 S/F	1220.4	1220.6	0.8	234.0			
	808	ONDR	46 C	1259.5	1302.4	28.0	85.0			
	2800	OTTA	20 GRF	1300.0	1304.0	145.0	35.9	14.0		
	1415	SGMR	4 S/F	1300.0E	1303.0	7.00	480.0			QL=4 ST=2 TYP=3
	9500	POTS	21 GRF	1300.0	1324.0	65.0	12.0			
	1415	SVTO	4 S/F	1300.0E	1303.0	660.00	470.0			QL=4 ST=1 TYP=3
	1470	POTS	45 C	1300.0	1303.5	60.0	530.0			
	3000	POTS	29 PBI	1300.0	1303.7	60.0	27.0			
810	KRAK	3 S	1300.4	1302.8	6.0	81.0	35.0			
536	ONDR	42 SER	1320.2	1325.4	10.5	153.0				
9500	POTS	42 SER	1322.5	1323.0	5.0	17.0				
234	POTS	4 S/F	1322.8	1323.1	4.5	4500.0				
3000	POTS	3 S	1322.8	1323.1	1.2	19.0				
113	POTS	4 S/F	1322.8	1322.9	4.9	1600.0				
410	SGMR	4 S/F	1323.0E	1323.0	3.00	460.0			QL=2 ST=2 TYP=3	
245	SGMR	49 GB	1323.0E	1323.0	6.00	5600.0			QL=4 ST=2 TYP=6	
410	SVTO	49 GB	1323.0E	1323.0	3.00	520.0			QL=4 ST=2 TYP=6	
245	SVTO	49 GB	1323.0E	1323.0	2.00	5000.0			QL=2 ST=3 TYP=6	
600	HUMN	2 S/F	1323.0	1325.5	3.5	77.0	13.0			
1470	POTS	40 F	1323.0	1325.5	3.0	41.0				
40	POTS	41 F	1324.7	1325.6	2.5	1400.0				
610	SGMR	8 S	1325.0E	1325.0	1.00	100.0			QL=4 ST=2 TYP=3	
536	ONDR	42 SER	1505.0	1506.0	50.0	33.0				
808	ONDR	41 F	1550.0	1555.2	55.0	12.0				
2800	OTTA	3 S	1550.5	1551.6	10.5	31.9	6.0			
2800	OTTA	3 S	1609.2	1610.0	1.4	22.2	4.0			
2695	SGMR	8 S	1638.0E	1639.0	1.00	240.0			QL=2 ST=2 TYP=3	

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Outstanding Occurrences

MAY 1990

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
20	2695	SVTO	8 S	1638.0E	1639.0	1.00	280.0			QL=4 ST=2 TYP=3
	2800	OTTA	3 S	1638.7	1639.4	2.4	320.0	112.0		
	245	SGMR	8 S	1644.0E	1645.0	1.00	240.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1644.0E	1645.0	1.00	210.0			QL=2 ST=2 TYP=3
	245	PALE	8 S	1645.0E	1645.0	U	200.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1819.0E	1820.0	1.00	320.0			QL=2 ST=2 TYP=3
	245	PALE	8 S	1820.0E	1820.0	U	270.0			QL=4 ST=2 TYP=3
	2800	OTTA	3 S	1905.2	1908.9	13.2	319.0	64.0		
	2695	PALE	4 S/F	1906.0E	1908.0	6.00	310.0			QL=4 ST=2 TYP=3
	4995	PALE	4 S/F	1906.0E	1908.0	6.00	280.0			QL=4 ST=2 TYP=3
	2695	SGMR	4 S/F	1906.0E	1908.0	6.00	320.0			QL=2 ST=2 TYP=3
	4995	SGMR	4 S/F	1906.0E	1908.0	7.00	280.0			QL=4 ST=2 TYP=3
	8800	SGMR	4 S/F	1906.0E	1908.0	6.00	150.0			QL=4 ST=2 TYP=3
	8800	PALE	4 S/F	1907.0E	1908.0	3.00	130.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	1907.0E	1907.0	1.00	50.0			QL=4 ST=2 TYP=3
	1415	SGMR	4 S/F	1907.0E	1908.0	4.00	91.0			QL=4 ST=2 TYP=3
	15400	SGMR	8 S	1907.0E	1908.0	2.00	51.0			QL=2 ST=2 TYP=3
	15400	PALE	8 S	1908.0E	1908.0	1.00	56.0			QL=4 ST=2 TYP=3
	1415	PALE	8 S	1908.0E	1908.0	1.00	87.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1922.0E	1922.0	U	120.0			QL=4 ST=3 TYP=3
	245	SGMR	8 S	2015.0E	2015.0	U	140.0			QL=2 ST=2 TYP=3
	245	SGMR	8 S	2149.0E	2149.0	U	65.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2207.0E	2208.0	1.00	68.0			QL=4 ST=2 TYP=3
	2695	PENT	22 GRF	2326.0	2340.0	140.0	67.2	27.0		
	4995	LEAR	20 GRF	2332.0E	2339.0	11.00	58.0			QL=4 ST=2 TYP=2
	2695	LEAR	20 GRF	2332.0E	2403.0	40.00	43.0			QL=4 ST=2 TYP=2
	8800	LEAR	4 S/F	2335.0E	2339.0	8.00	43.0			QL=4 ST=2 TYP=3
	1415	LEAR	4 S/F	2335.0E	2339.0	7.00	50.0			QL=4 ST=2 TYP=5
	1415	PALE	4 S/F	2335.0E	2340.0	5.00	58.0			QL=4 ST=2 TYP=5
	4995	PALE	4 S/F	2338.0E	2339.0	3.00	42.0			QL=4 ST=2 TYP=3
	2695	PALE	8 S	2340.0E	2340.0	U	31.0			QL=4 ST=2 TYP=3
	21	100	HIRA	44 NS	0158.0E		240.00		30.0	
100		GORK	44 NS	0236.0E		165.00		5.0		
200		GORK	44 NS	0245.0E		555.00		5.0		
260		ONDR	44 NS	0500.0E	1233.5	700.00	355.0			
204		IZMI	43 NS	0600.0		360.0	15.0			
127		TORN	43 NS	0700.0	1223.7	480.0	850.0	20.0		V=2
245		LEAR	44 NS	2308.0E	2322.0	22.00	230.0			QL=2 ST=2 TYP=1
245		LEAR	43 NS	2309.0	2333.0	1431.00	230.0			QL=4 ST=3 TYP=1
8800		LEAR	8 S	0030.0E	0030.0	U	22.0			QL=4 ST=2 TYP=3
2695		LEAR	8 S	0030.0E	0030.0	U	18.0			QL=4 ST=2 TYP=3
4995		LEAR	8 S	0030.0E	0030.0	2.00	53.0			QL=4 ST=2 TYP=3
4995		PALE	8 S	0030.0E	0030.0	2.00	73.0			QL=4 ST=2 TYP=3
8800		PALE	8 S	0030.0E	0030.0	U	34.0			QL=4 ST=2 TYP=3
245		LEAR	8 S	0110.0E	0110.0	U	75.0			QL=4 ST=2 TYP=3
15400		LEAR	49 GB	0120.0E	0124.0	1360.00	1400.0			QL=4 ST=1 TYP=7
2840		PEKG	3 S	0120.0	0124.8	25.0	418.0			
35000		NOBE	7 C	0120.6	0122.0	9.0	1330.0			11R
17000		NOBE	7 C	0120.6	0124.4	9.0	1110.0			15R
35000		NOBE	29 PBI	0120.6	0129.6	25.0	45.0			0
17000		NOBE	29 PBI	0120.6	0129.6	35.0	60.0			0
2695		PENT	3 S	0120.9	0125.0	13.7	330.0		99.0	
500		HIRA	46 C	0120.9	0124.4	13.0	335.0	40.0		WL
200		HIRA	46 C	0120.9	0128.4	35.0	1400.0	85.0		O
200		HIRA	46 C	0120.9	0121.8		850.0			O
500		HIRA	46 C	0120.9	0121.9		235.0			WL
1415		LEAR	4 S/F	0121.0E	0124.0	7.00	170.0			QL=4 ST=2 TYP=3
610		LEAR	4 S/F	0121.0E	0124.0	8.00	120.0			QL=4 ST=2 TYP=5
2695		LEAR	4 S/F	0121.0E	0124.0	8.00	380.0			QL=4 ST=2 TYP=3
15400		PALE	49 GB	0121.0E	0124.0	8.00	1300.0			QL=4 ST=2 TYP=7
8800		PALE	49 GB	0121.0E	0124.0	9.00	1100.0			QL=4 ST=2 TYP=6
245		LEAR	49 GB	0121.0E	0121.0	11.00	940.0			QL=4 ST=2 TYP=6
410		LEAR	49 GB	0121.0E	0121.0	10.00	630.0			QL=4 ST=2 TYP=6
2695	PALE	4 S/F	0121.0E	0125.0	1359.00	370.0			QL=4 ST=1 TYP=3	
610	PALE	4 S/F	0121.0E	0125.0	1359.00	120.0			QL=4 ST=1 TYP=5	
1415	PALE	4 S/F	0121.0E	0124.0	1359.00	200.0			QL=4 ST=1 TYP=3	
245	PALE	49 GB	0121.0E	0121.0	1359.00	730.0			QL=4 ST=1 TYP=6	
410	PALE	49 GB	0121.0E	0125.0	1359.00	760.0			QL=4 ST=1 TYP=7	

S O L A R R A D I O E M I S S I O N
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MAY 1990

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak	Mean		
							(10 -22 W/m 2 Hz)			
21	80000	NOBE	7 C	0121.4	0122.0	7.0				
	100	HIRA	48 C	0121.5	0125.6	36.0	9300.0	780.0		WL
	245	LEAR	4 S/F	0144.0E	0146.0	5.00	46.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0145.0E	0146.0	1.00	54.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	0146.0E	0146.0	1.00	73.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	0153.0E	0154.0	1.00	80.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0155.0E	0155.0	U	64.0			QL=4 ST=2 TYP=3
	9100	GORK	23 GRF	0236.0E	0313.7	564.00	25.0			
	200	HIRA	24 R	0246.0	0312.0	410.00	18.0	6.0		ML
	650	GORK	22 GRF	0303.0E	0618.5	394.80	13.0			
	9100	GORK	46 C	0347.2	0354.0		12.0			
	9100	GORK	46 C	0347.2	0349.2	12.8	15.0			
	9300	KISV	23 GRF	0502.5	0504.4	42.9	35.0			
	9100	GORK	46 C	0503.0	0504.4	18.0	30.0			
	9100	GORK	46 C	0503.0	0509.7		60.0			
	2950	GORK	20 GRF	0504.1	0505.3	15.5	6.0			
	9300	KISV	4 S/F	0506.6	0510.3	9.6	42.0			
	2950	GORK	21 GRF	0548.7	0645.7	171.6	17.0			
	536	ONDR	41 F	0600.0	1454.0	640.0	65.0			
	950	GORK	21 GRF	0609.3	0623.5	40.9	5.0			
	600	HUMN	2 S/F	0618.0	0618.5	2.0	12.0	4.0		
	9300	KISV	2 S/F	0620.3	0621.5	3.2	6.0			
	9100	GORK	2 S/F	0633.0	0634.2	3.0	18.0			
	3013	I2HI	4 S/F	0633.2	0634.4	3.8	9.0	5.0		
	2950	GORK	45 C	0633.3	0634.1	3.5	9.0			
	2950	GORK	45 C	0633.3	0635.3		10.0			
	950	GORK	2 S/F	0633.3	0633.6	1.0	11.0			
	808	ONDR	6 S	0633.6	0634.1	1.5	15.0			
	3013	I2MI	20 GRF	0638.5	0641.0	12.0	10.0	8.0		
	9300	KISV	23 GRF	0645.4	0701.3	51.2	9.0			
	9100	GORK	4 S/F	0645.7	0648.3	8.3	350.0			
	9300	KISV	4 S/F	0646.6	0648.6	8.2	237.0			
	15400	LEAR	8 S	0647.0E	0648.0	2.00	340.0			QL=4 ST=2 TYP=3
	15400	SVTO	8 S	0647.0E	0648.0	2.00	350.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	0647.0E	0648.0	5.00	370.0			QL=4 ST=2 TYP=3
	9500	POTS	3 S	0647.5	0648.4	5.0	250.0			
	15000	KISV	4 S/F	0647.5	0648.5	3.0	458.0			
	35000	NOBE	1 S	0647.7	0648.3	2.0	110.0			9R,80GHz:UNCERT
	17000	NOBE	1 S	0647.7	0648.3	2.5	255.0			22R
	430	KRAK	42 SER	0702.0E	1233.3	360.00	65.0			
	808	ONDR	8 S	0703.0	0703.2	2.0	9.0			
	2850	CRIM	25 R	0733.0	0736.0		5.0			
	2850	CRIM	1 S	0733.0	0734.5	3.0	5.0	2.0		
	9300	KISV	4 S/F	0757.3	0802.0U	8.2	108.00			
	9300	KISV	29 PBI	0757.3	0805.5	39.1	27.0			
	9100	GORK	4 S/F	0757.7	0800.7	8.3	150.0			
	8800	LEAR	4 S/F	0758.0E	0800.0	8.00	140.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	0758.0E	0800.0	6.00	160.0			QL=4 ST=2 TYP=3
	9500	POTS	3 S	0758.0	0800.7	42.0	138.0			
	15000	KISV	45 C	0759.7	0804.2		15.0			
15000	KISV	45 C	0759.7	0801.7	6.6	45.0				
15400	LEAR	8 S	0800.0E	0800.0	1.00	29.0			QL=4 ST=2 TYP=3	
9100	GORK	1 S	0900.0	0901.5	6.0	15.0				
9300	KISV	2 S/F	0900.5	0901.5	6.1	16.0				
9500	POTS	3 S	0900.5	0901.6	8.0	15.0				
9300	KISV	2 S/F	0924.0	0926.8	6.4	14.0				
9500	POTS	1 S	0926.5	0927.0	3.5	8.0				
9300	KISV	1 S	0938.1	0938.2	0.8	5.0				
650	GORK	22 GRF	0956.7	1042.7	123.30	8.0				
9100	GORK	2 S/F	0958.7	0959.3	1.3	28.0				
9300	KISV	4 S/F	0958.9	0959.4	1.6	26.0				
15000	KISV	1 S	0959.1	0959.3	0.6	7.0				
9500	POTS	8 S	0959.3	0959.4	0.7	20.0				
9500	POTS	1 S	1032.0	1032.7	3.0	8.0				
15000	KISV	4 S/F	1100.6	1102.9	4.6	26.0				
9300	KISV	2 S/F	1103.9	1104.9	1.8	5.0				
9500	POTS	4 S/F	1212.0	1215.3	11.0	39.0				
9300	KISV	23 GRF	1212.0	1228.5	30.6	13.0				
9300	KISV	4 S/F	1212.8	1215.4	7.7	40.0				

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m 2 Hz)	Mean			
21	245	SGMR	8 S	1233.0E	1233.0	1.00	430.0			QL=4 ST=2 TYP=3	
	245	SVTO	8 S	1233.0E	1233.0	1.00	420.0			QL=4 ST=2 TYP=3	
	15400	SGMR	8 S	1530.0E	1531.0	1.00	590.0			QL=4 ST=2 TYP=3	
	8800	SVTO	8 S	1530.0E	1531.0	2.00	390.0			QL=2 ST=2 TYP=3	
	15400	SVTO	8 S	1530.0E	1531.0	1.00	470.0			QL=2 ST=2 TYP=3	
	19600	BERN	3 S	1530.6	1531.0	1.5	33.8				
	8400	BERN	3 S	1530.6	1531.0	1.5	27.6				
	11800	BERN	3 S	1530.6	1531.0	1.5	51.0				
	35000	BERN	3 S	1530.6	1531.0	1.5	17.9				
	8800	SGMR	4 S/F	1808.0E	1809.0	8.00	130.0				QL=2 ST=2 TYP=3
	15400	SGMR	20 GRF	1808.0E	1821.0	15.00	78.0				QL=2 ST=2 TYP=2
	1415	SGMR	8 S	1925.0E	1926.0	1.00	50.0				QL=4 ST=2 TYP=3
	200	HIRA	46 C	2111.9	2112.0	1.5	320.0				0
	610	PALE	8 S	2112.0E	2113.0	1.00	54.0				QL=4 ST=2 TYP=3
	245	PALE	49 GB	2112.0E	2112.0	1.00	2300.0				QL=4 ST=2 TYP=6
	245	SGMR	49 GB	2112.0E	2112.0	1.00	1900.0				QL=4 ST=2 TYP=6
	500	HIRA	46 C	2112.0	2112.6	2.5	78.0				0
	17000	NOBE	29 PBI	2210.8	2227.6	25.0	130.0				0
	17000	NOBE	47 GB	2210.8	2214.7	16.8	11700.0				6R
	2800	OTTA	47 GB	2212.0	2214.8	58.0	2997.0	600.0			
	2695	SGMR	49 GB	2212.0E	2214.0	15.00	2900.0				QL=2 ST=2 TYP=7
	4995	SGMR	49 GB	2212.0E	2214.0	15.00	3700.0				QL=4 ST=2 TYP=7
	15400	SGMR	49 GB	2212.0E	2214.0	14.00	10000.0				QL=2 ST=2 TYP=7
	1415	SGMR	49 GB	2212.0E	2216.0	17.00	3000.0				QL=4 ST=2 TYP=7
	8800	SGMR	49 GB	2212.0E	2214.0	17.00	6400.0				QL=2 ST=2 TYP=7
	610	SGMR	49 GB	2212.0E	2218.0	21.00	2400.0				QL=4 ST=2 TYP=7
	410	SGMR	49 GB	2212.0E	2213.0	24.00	5400.0				QL=2 ST=2 TYP=7
	245	SGMR	49 GB	2212.0E	2215.0	24.00	24000.0				QL=4 ST=2 TYP=7
	500	HIRA	48 C	2212.1	2215.0		1940.0				0
	500	HIRA	48 C	2212.1	2213.0	21.8	3100.0	490.0			ML
	80000	NOBE	29 PBI	2212.1	2225.4	14.0	160.0				0
	35000	NOBE	29 PBI	2212.1	2227.6	24.0	260.0				0
	35000	NOBE	47 GB	2212.1	2214.7	15.5	34700.0				3R
	80000	NOBE	47 GB	2212.1	2214.7	13.3	8700.0				
	100	HIRA	48 C	2212.5		116.0	16000.00	780.00			
	200	HIRA	48 C	2212.5	2335.0		77.0				ML
	200	HIRA	48 C	2212.5	2252.1		180.0				SL
	200	HIRA	48 C	2212.5	2213.9	110.0	35000.0	1140.0			0
	500	HIRA	29 PBI	2234.0E	2234.0	17.00	30.0	10.0			0
	245	SGMR	49 GB	2251.0E	2252.0	3.00	1400.0				QL=4 ST=2 TYP=6
	410	SGMR	49 GB	2251.0E	2253.0	3.00	630.0				QL=2 ST=2 TYP=6
	500	HIRA	48 C	2251.2	2252.6	4.5	1120.0	340.0			SL
	2695	PENT	3 S	2251.3	2253.6	9.0	48.5	10.0			
	610	SGMR	49 GB	2252.0E	2253.0	2.00	1100.0				QL=4 ST=2 TYP=6
	245	SGMR	8 S	2256.0E	2257.0	2.00	170.0				QL=4 ST=2 TYP=3
610	LEAR	8 S	2308.0E	2308.0	2.00	23.0				QL=4 ST=2 TYP=3	
245	LEAR	4 S/F	2308.0E	2309.0	4.00	79.0				QL=2 ST=2 TYP=3	
410	LEAR	8 S	2308.0E	2308.0	U	22.0				QL=4 ST=2 TYP=3	
245	LEAR	4 S/F	2309.0	2309.0	3.00	79.0				QL=4 ST=3 TYP=3	
610	LEAR	8 S	2309.0	2309.0U	1.00	23.0				QL=4 ST=3 TYP=3	
410	LEAR	8 S	2309.0	2309.0U	U	22.0				QL=4 ST=3 TYP=3	
245	SGMR	4 S/F	2320.0E	2322.0	3.00	170.0				QL=4 ST=2 TYP=5	
245	SGMR	4 S/F	2331.0E	2334.0	4.00	180.0				QL=4 ST=2 TYP=3	
22	100	HIRA	44 NS	0010.0E		570.00	25.0				
	100	GORK	44 NS	0236.0E		264.00	5.0				
	200	GORK	44 NS	0300.0E		540.00	5.0				
	260	ONDR	44 NS	0500.0E	1125.4	700.00	115.0				
	430	KRAK	44 NS	0658.0E	1135.4	355.00	130.00	12.0			
	127	TORN	43 NS	0833.0	1142.2	387.0	750.0	15.0			V=0
	200	HIRA	24 R	0004.0E	0004.0E	390.00	10.0	7.0			ML
	4995	LEAR	4 S/F	0012.0E	0013.0	13.00	31.0				QL=4 ST=2 TYP=3
	8800	LEAR	4 S/F	0012.0E	0013.0	13.00	55.0				QL=4 ST=2 TYP=3
	610	LEAR	8 S	0014.0E	0014.0	U	13.0				QL=4 ST=2 TYP=3
	410	LEAR	4 S/F	0120.0E	0123.0	6.00	45.0				QL=4 ST=2 TYP=3
	245	LEAR	4 S/F	0120.0E	0124.0	7.00	130.0				QL=2 ST=2 TYP=3
	610	LEAR	4 S/F	0121.0E	0125.0	4.00	110.0				QL=4 ST=2 TYP=3
	9100	GORK	23 GRF	0239.0E	0842.8	561.00	28.0				
	950	GORK	21 GRF	0300.0E	0303.8	89.10	5.0				

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Outstanding Occurrences

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May 90

MAY 1990

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
22	650	GORK	22 GRF	0300.0E	0303.8	214.7D	7.0			
	950	GORK	4 S/F	0302.6	0302.7	0.3	23.0			
	9300	KISV	2 S/F	0419.4	0420.4	3.1	6.0			
	5900	KISV	2 S/F	0455.8	0456.5	1.7	4.0			
	9300	KISV	2 S/F	0522.1	0522.4	2.1	22.0			
	5900	KISV	2 S/F	0522.1	0522.4	1.5	10.0			
	536	ONDR	41 F	0600.0	1058.4	480.0	71.0			
	5900	KISV	2 S/F	0636.0	0637.3	3.3	7.0			
	9300	KISV	45 C	0636.4	0637.3	2.5	6.0			
	9300	KISV	45 C	0636.4	0636.7		6.0			
	650	GORK	22 GRF	0640.7	0732.5	131.5	8.0			
	9300	KISV	2 S/F	0651.0	0653.4	8.4	12.0			
	9300	KISV	2 S/F	0749.8	0751.8	7.6	12.0			
	9500	POTS	20 GRF	0750.0	0752.0	10.0	6.0			
	2950	GORK	21 GRF	0752.1	1144.9	247.9D	11.0			
	5900	KISV	47 GB	0828.4	0836.1	10.9	278.0			
	5900	KISV	29 PBI	0828.4	0839.3	11.1	20.0			
	9300	KISV	47 GB	0833.0	0836.1	6.4	353.0			
	9300	KISV	29 PBI	0833.0	0839.4	255.0	25.0			
	9100	GORK	3 S	0834.4	0836.1	7.6	320.0			
	204	IZMI	41 F	0834.5	0836.0	2.0	60.0			
	15000	KISV	4 S/F	0834.7	0836.0	4.5	120.0			
	15000	KISV	29 PBI	0834.7	0839.2	10.6	19.0			
	19600	BERN	3 S	0835.0	0836.0	3.0	4.9			
	3200	BERN	3 S	0835.0	0836.0	3.0	1.1			
	5200	BERN	3 S	0835.0	0836.0	3.0	12.9			
	8400	BERN	3 S	0835.0	0836.0	3.0	29.6			
	11800	BERN	3 S	0835.0	0836.0	3.0	19.3			
	15400	LEAR	8 S	0835.0E	0836.0	2.0D	110.0			QL=4 ST=2 TYP=3
	8800	LEAR	4 S/F	0835.0E	0836.0	4.0D	260.0			QL=4 ST=2 TYP=3
	4995	LEAR	4 S/F	0835.0E	0836.0	4.0D	150.0			QL=4 ST=2 TYP=3
	15400	SVTO	8 S	0835.0E	0836.0	2.0D	120.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	0835.0E	0836.0	3.0D	300.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	0835.0E	0836.0	2.0D	140.0			QL=4 ST=2 TYP=3
	3013	IZMI	6 S	0835.0	0836.2	2.5	11.0	5.0		
	2850	CRIM	1 S	0835.1	0836.1	3.3	10.6	3.0		
	2950	GORK	1 S	0835.1	0836.1	2.9	12.0			
	9300	KISV	23 GRF	0939.5	0943.1	36.0	15.0			
	9300	KISV	23 GRF	0939.5	0957.2		13.0			
	9500	POTS	1 S	0942.5	0943.0	2.5	12.0			
	650	GORK	23 GRF	1006.0E	1055.3	111.0D	10.0			
	5900	KISV	2 S/F	1010.9	1011.6	2.5	7.0			
	600	HUMN	27 RF	1020.0	1141.0	113.0	8.0	4.0		
	950	GORK	21 GRF	1021.0	1109.2	96.0D	6.0			
	9300	KISV	45 C	1139.4	1142.0	16.9	111.0			
	9300	KISV	29 PBI	1139.4	1156.3	34.4	13.0			
	650	GORK	46 C	1139.4	1141.5		12.0			
650	GORK	46 C	1139.4	1140.8	3.4	10.0				
9300	KISV	45 C	1139.4	1151.9		33.0				
808	ONDR	41 F	1139.5	1142.1	22.5	8.0				
9100	GORK	46 C	1139.6	1142.0	18.4	120.0				
9100	GORK	46 C	1139.6	1151.8		30.0				
950	GORK	2 S/F	1139.6	1141.9	3.2	9.0				
5900	KISV	45 C	1139.8	1142.0	17.7	81.0				
5900	KISV	45 C	1139.8	1151.8		41.0				
204	IZMI	7 C	1140.0	1142.0	5.0	10.0	5.0			
15400	SGMR	4 S/F	1140.0E	1142.0	4.0D	85.0			QL=4 ST=2 TYP=3	
8800	SGMR	4 S/F	1140.0E	1142.0	4.0D	120.0			QL=4 ST=2 TYP=3	
245	SVTO	8 S	1140.0E	1140.0	1.0D	53.0			QL=4 ST=2 TYP=3	
8800	SVTO	4 S/F	1140.0E	1142.0	4.0D	150.0			QL=4 ST=2 TYP=3	
15400	SVTO	4 S/F	1140.0E	1142.0	3.0D	92.0			QL=4 ST=2 TYP=3	
2850	CRIM	45 C	1140.0	1142.0	18.0	18.0	11.0			
2850	CRIM	29 PBI	1140.0	1158.0	21.0	8.0	3.0			
9500	POTS	29 PBI	1140.0	1142.0	45.0	109.0				
200	GORK	4 S/F	1140.0	1141.2	2.4	68.0				
204	IZMI	41 F	1140.0	1142.2	3.0	420.0				
810	KRAK	2 S/F	1140.0	1141.4	2.8	14.0	5.0			
1470	POTS	42 SER	1140.0	1152.5	25.0	14.0				
3000	POTS	42 SER	1140.0	1151.8	25.0	24.0				

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

MAY 1990

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
22	2850	CRIM	45 C	1140.0	1151.9		33.0			
	2950	GORK	2 S/F	1140.2	1142.0	3.6	12.0			
	113	POTS	42 SER	1140.8	1142.5	13.8	800.0			
	100	GORK	46 C	1141.0	1142.0	4.0	3750.0			
	100	GORK	46 C	1141.0	1142.2		3690.0			
	30	POTS	42 SER	1141.0	1145.5	12.0	1200.0U			
	33	UPIC	42 SER	1142.1	1145.7	5.7				
	2950	GORK	3 S	1150.1	1151.7	6.9	22.0			
	3013	IZMI	20 GRF	1150.5	1151.8	7.0	29.0	15.0		
	4995	SVTO	4 S/F	1151.0E	1151.0	3.00	53.0			QL=4 ST=2 TYP=3
	5900	KISV	29 PBI	1157.5E	1157.5	12.20	10.0			
	5900	KISV	2 S/F	1250.1	1250.9	1.5	9.0			
	2800	OTTA	22 GRF	1337.0	1427.0	205.0	10.3	5.0		
	33	UPIC	45 C	1516.0	1516.2	1.5				
200	HIRA	24 R	2100.0		750.00		5.0			
23	500	HIRA	43 NS	0250.0	0642.0	340.00	26.0	7.0		WL
	200	GORK	44 NS	0300.0E		540.00		5.0		
	100	GORK	44 NS	0412.0E		468.00		5.0		
	245	SVTO	44 NS	0430.0E	0442.0	187.00	120.0			QL=4 ST=2 TYP=1
	245	LEAR	44 NS	0459.0E	0659.0	131.00	89.0			QL=4 ST=2 TYP=1
	600	HUMN	44 NS	0500.0E		420.00				
	260	ONDR	44 NS	0500.0E		700.00				
	127	TORN	44 NS	0620.0E		410.00		20.0		V=1, DISTURBED
	410	SVTO	44 NS	0641.0E	0641.0	40.00	150.0			QL=4 ST=2 TYP=1
	430	KRAK	44 NS	0701.0E	1040.7	360.00	230.00	12.0		
	410	LEAR	8 S	0312.0E	0312.0		53.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	0314.0E	0316.0	2.00	13.0			QL=4 ST=2 TYP=3
	650	GORK	23 GRF	0325.5	0640.8	470.1U	17.0			
	9100	GORK	21 GRF	0333.0	0438.2	122.4	37.0			
	5900	KISV	29 PBI	0359.1	0428.0	79.2	72.0			
	5900	KISV	47 GB	0359.1	0421.3	289.0	1312.0			
	2950	GORK	21 GRF	0359.3	0427.5	483.70	26.0			
	9300	KISV	47 GB	0359.4	0420.6	27.3	1574.0			
	9300	KISV	29 PBI	0359.4	0426.7	58.4	79.0			
	2840	PEKG	45 C	0400.0	0420.8	35.0	446.0			
	950	GORK	23 GRF	0400.6	0412.1	147.8	24.0			
	9100	GORK	47 GB	0401.5	0420.6	34.5	1600.0			
	15000	KISV	47 GB	0401.9	0420.5	22.7	1329.0			
	15000	KISV	29 PBI	0401.9	0424.6	31.3	137.0			
	2850	CRIM	45 C	0402.3	0422.3		376.0			
	2850	CRIM	45 C	0402.3	0419.3		227.0			
	2850	CRIM	45 C	0402.3	0411.9		107.0			
	950	GORK	2 S/F	0402.4	0404.0	3.4	15.0			
	650	GORK	4 S/F	0402.4	0404.3	3.4	20.0			
	2950	GORK	47 GB	0402.5	0421.4		340.0			
	2950	GORK	47 GB	0402.5	0418.4		210.0			
	2950	GORK	47 GB	0402.5	0411.8	23.9	94.0			
	200	HIRA	48 C	0402.6	0510.0	284.0	1600.0	86.0		SL
	200	HIRA	48 C	0402.6	0418.5		150.0			WL
	200	HIRA	48 C	0402.6	0404.6		37.0			O
	4995	PALE	4 S/F	0403.0E	0404.0	3.00	110.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	0403.0E	0404.0	2.00	150.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	0403.0E	0404.0	2.00	67.0			QL=2 ST=3 TYP=3
	8800	SVTO	8 S	0403.0E	0404.0	2.00	130.0			QL=2 ST=3 TYP=3
	200	GORK	4 S/F	0403.0E	0404.8	2.40	25.0			
	17000	NOBE	28 PRE	0403.3	0413.6	10.3	63.0			14L
4995	PALE	49 GB	0408.0E	0421.0	19.00	900.0			QL=4 ST=2 TYP=7	
8800	PALE	49 GB	0409.0E	0420.0	17.00	1500.0			QL=2 ST=2 TYP=7	
4995	SVTO	49 GB	0409.0E	0421.0	17.00	840.0			QL=2 ST=3 TYP=7	
8800	SVTO	49 GB	0409.0E	0420.0	19.00	1400.0			QL=2 ST=3 TYP=7	
2695	PALE	49 GB	0409.0E	0420.0	1191.00	340.0			QL=4 ST=1 TYP=7	
1415	PALE	49 GB	0410.0E	0420.0	16.00	1700.0			QL=4 ST=2 TYP=7	
245	SVTO	49 GB	0412.0E	0421.0	16.00	170.0			QL=2 ST=3 TYP=7	
500	HIRA	42 SER	0412.5	0502.5	70.0	500.0			SL	
650	GORK	46 C	0412.9	0423.2	19.4	5560.0				
650	GORK	46 C	0412.9	0428.4		55.0				
1415	SVTO	49 GB	0413.0E	0420.0	13.00	1100.0			QL=2 ST=3 TYP=7	
15400	SVTO	49 GB	0413.0E	0420.0	14.00	1700.0			QL=2 ST=3 TYP=7	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
23	17000	NOBE	29 PBI	0413.6	0428.0	40.0	90.0		0	
	17000	NOBE	47 GB	0413.6	0420.4	14.4	1660.0		6L	
	410	PALE	49 GB	0414.0E	0415.0	1.00	43.0			QL=4 ST=2 TYP=7
	15400	PALE	49 GB	0414.0E	0420.0	11.00	1500.0			QL=2 ST=2 TYP=7
	245	PALE	49 GB	0414.0E	0421.0	12.00	170.0			QL=4 ST=2 TYP=7
	610	PALE	49 GB	0414.0E	0420.0	12.00	1300.0			QL=4 ST=2 TYP=7
	610	SVTO	49 GB	0414.0E	0420.0	12.00	2400.0			QL=4 ST=3 TYP=7
	2695	SVTO	49 GB	0414.0E	0421.0	10.00	270.0			QL=2 ST=3 TYP=7
	410	SVTO	49 GB	0414.0E	0420.0	11.00	130.0			QL=2 ST=3 TYP=7
	950	GORK	46 C	0414.0	0420.4	22.1	4830.0			
	950	GORK	46 C	0414.0	0425.6		25.0			
	35000	NOBE	7 C	0414.2	0420.4	11.3	1210.0			15L
	80000	NOBE	7 C	0414.2	0420.4	11.3	160.0			
	35000	NOBE	29 PBI	0414.2	0425.5	20.0	116.0		0	
	80000	NOBE	29 PBI	0414.2	0425.5	20.0	50.0			
	100	GORK	3 S	0415.8	0419.9	7.2	230.0			
	610	LEAR	49 GB	0416.0E	0420.0	1184.00	1500.0			QL=4 ST=1 TYP=7
	15400	LEAR	49 GB	0416.0E	0420.0	1184.00	2200.0			QL=4 ST=1 TYP=7
	245	LEAR	49 GB	0416.0E	0421.0	1184.00	180.0			QL=2 ST=1 TYP=7
	4995	LEAR	49 GB	0419.0E	0421.0	1181.00	800.0			QL=4 ST=1 TYP=7
	1415	LEAR	49 GB	0419.0E	0420.0	1181.00	1100.0			QL=4 ST=1 TYP=7
	8800	LEAR	49 GB	0419.0E	0420.0	1181.00	1100.0			QL=4 ST=1 TYP=7
	2850	CRIM	29 PBI	0427.3E	0427.3	18.00	30.0	10.0		
	610	PALE	8 S	0432.0E	0432.0	1.00	54.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	0435.0E	0436.0	1.00	36.0			QL=4 ST=2 TYP=3
	1415	SVTO	8 S	0438.0E	0439.0	1.00	89.0			QL=2 ST=3 TYP=3
	950	GORK	4 S/F	0438.6	0439.6	3.1	330.0			
	650	GORK	4 S/F	0438.6	0440.7	2.9	60.0			
	1415	PALE	8 S	0439.0E	0439.0	U	86.0			QL=4 ST=2 TYP=3
	950	GORK	46 C	0451.8	0453.4		25.0			
	950	GORK	46 C	0451.8	0452.8	2.7	35.0			
	650	GORK	4 S/F	0451.8	0452.9	2.8	30.0			
	200	GORK	46 C	0456.6	0510.1	20.4	1000.0			
	200	GORK	46 C	0456.6	0513.3		650.0			
	200	GORK	46 C	0456.6	0514.8		600.0			
	410	LEAR	49 GB	0458.0E	0503.0	23.00	1400.0			QL=4 ST=2 TYP=6
	245	LEAR	49 GB	0459.0E	0509.0	24.00	2500.0			QL=2 ST=2 TYP=7
	245	SVTO	49 GB	0500.0E	0509.0	16.00	2100.0			QL=2 ST=3 TYP=7
	2850	CRIM	1 S	0501.0	0503.0	6.5	8.3	3.0		
	2950	GORK	2 S/F	0501.0	0503.0	5.6	8.0			
	610	LEAR	4 S/F	0501.0E	0502.0	16.00	340.0			QL=4 ST=2 TYP=3
	410	SVTO	49 GB	0501.0E	0503.0	14.00	1300.0			QL=4 ST=2 TYP=6
	600	HUMN	4 S/F	0501.2	0504.7	6.2	173.0	65.0		
	650	GORK	4 S/F	0501.3	0503.4	4.9	180.0			
	950	GORK	2 S/F	0501.5	0503.5	4.7	9.0			
	610	SVTO	8 S	0502.0E	0502.0	2.00	360.0			QL=4 ST=2 TYP=3
	2695	LEAR	4 S/F	0503.0E	0504.0	4.00	23.0			QL=4 ST=2 TYP=3
	8800	LEAR	8 S	0503.0E	0504.0	1.00	16.0			QL=4 ST=2 TYP=3
	4995	LEAR	4 S/F	0503.0E	0504.0	5.00	21.0			QL=4 ST=2 TYP=3
	950	GORK	4 S/F	0513.7	0515.1	5.3	18.0			
	410	LEAR	8 S	0557.0E	0557.0	U	98.0			QL=4 ST=2 TYP=3
	536	ONDR	42 SER	0600.0	0641.0	170.0	34.0			
	9100	GORK	22 GRF	0610.0	0855.5	350.00	50.0			
	5900	KISV	22 GRF	0718.0	0736.1	37.7	16.0			
	9300	KISV	22 GRF	0718.1	0742.4	40.2	14.0			
	15000	KISV	45 C	0808.8	0813.3		30.0			
	15000	KISV	45 C	0808.8	0814.8	18.0	34.0			
	245	SVTO	49 GB	0823.0E	0823.0	1.00	1200.0			QL=2 ST=2 TYP=6
	9300	KISV	22 GRF	0848.6	0855.2	59.8	29.0			
	5900	KISV	22 GRF	0848.8	0855.6	18.7	15.0			
	536	ONDR	41 F	0850.0	1141.0	390.0	118.0			
	15000	KISV	1 S	0915.9	0916.3	0.7	11.0			
	204	IZMI	5 S	0929.4	0929.8	0.6	250.0	200.0		
	204	IZMI	5 S	0946.5	0946.7	0.3	90.0	45.0		
	5900	KISV	45 C	0958.4	0959.0	2.1	7.0			
	5900	KISV	45 C	0958.4	0959.3		6.0			
	9300	KISV	2 S/F	0958.4	0958.7	2.3	7.0			
	204	IZMI	5 S	1050.0	1050.2	0.3	70.0	35.0		
	5900	KISV	2 S/F	1104.3	1105.0	4.8	10.0			

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

MAY 1990

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
23	15000	KISV	2 S/F	1118.3	1120.2	4.2	10.0			
	5900	KISV	2 S/F	1136.0	1137.2	2.9	9.0			
	9300	KISV	2 S/F	1136.1	1137.3	2.9	7.0			
	410	SGMR	8 S	1138.0E	1138.0	1.00	82.0			QL=4 ST=3 TYP=3
	610	SGMR	8 S	1138.0E	1138.0	1.00	76.0			QL=4 ST=3 TYP=3
	200	GORK	4 S/F	1139.0	1141.1	2.4	25.0			
	650	GORK	46 C	1139.7	1140.1	3.3	17.0			
	650	GORK	46 C	1139.7	1140.9		17.0			
	204	I2MI	5 S	1140.0	1141.0	1.5	200.0	150.0		
	600	HUMN	2 S/F	1140.0	1140.5	1.0	43.0	17.0		
	950	GORK	3 S	1140.0	1140.9	1.6	6.0			
	234	POTS	4 S/F	1140.2	1140.5	1.4	220.0			
	810	KRAK	1 S	1140.5	1141.0	1.2	6.0	3.0		
	1470	POTS	3 S	1140.5	1141.0	1.5	10.0			
	2950	GORK	1 S	1140.5	1140.8	0.8	7.0			
	430	KRAK	8 S	1140.5	1140.9	1.0	230.00			
	3000	POTS	1 S	1140.5	1140.9	1.0	7.0			
	808	ONDR	1 S	1141.0	1141.5	1.5	2.0			
	245	SGMR	8 S	1236.0E	1236.0	1.00	140.0			QL=4 ST=3 TYP=3
	5900	KISV	2 S/F	1338.2	1339.0	2.5	18.0			
	15400	LEAR	49 GB	1416.0E	0000.0	584.00	1500.0			QL=4 ST=1 TYP=6
	245	SGMR	8 S	1442.0E	1442.0	U	57.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1816.0E	1817.0	1.00	93.0			QL=2 ST=2 TYP=3
410	PALE	8 S	1825.0E	1825.0	U	54.0			QL=4 ST=2 TYP=3	
410	SGMR	8 S	1825.0E	1825.0	U	160.0			QL=2 ST=2 TYP=3	
245	LEAR	8 S	2345.0E	2345.0	1.00	130.0			QL=2 ST=2 TYP=3	
245	PALE	8 S	2346.0E	2346.0	U	120.0			QL=4 ST=2 TYP=3	
24	200	GORK	44 NS	0245.0E		555.00		5.0		
	260	ONDR	44 NS	0500.0E	0900.4	700.00	262.0			
	204	I2MI	43 NS	0600.0		360.0	10.0			
	430	KRAK	44 NS	0702.0E	0827.8	367.00	54.0	12.0		
	245	LEAR	44 NS	0757.0E	0758.0	94.00	120.0			QL=4 ST=2 TYP=1
	127	TORN	43 NS	0800.0		350.0		35.0		V=0
	245	SVTO	44 NS	0802.0E	0944.0U	373.00	120.0			QL=4 ST=2 TYP=1
	245	SGMR	44 NS	0942.0E	1302.0	841.00	110.0			QL=2 ST=2 TYP=1
	245	LEAR	44 NS	2310.0E	0149.0	235.00	120.0			QL=4 ST=2 TYP=1
	17000	NOBE	1 S	0148.7	0148.9	0.5	14.0			0,80,35GHz:0
	9100	GORK	23 GRF	0248.0E	0804.6	432.00	32.0			
	245	LEAR	4 S/F	0336.0E	0340.0	5.00	310.0			QL=2 ST=2 TYP=3
	245	PALE	8 S	0340.0E	0340.0	U	300.0			QL=4 ST=2 TYP=3
	5900	KISV	4 S/F	0408.8	0409.6	3.1	42.0			
	9100	GORK	3 S	0409.0	0409.5	1.3	30.0			
	9300	KISV	2 S/F	0409.0	0409.5	1.7	11.0			
	15000	KISV	2 S/F	0419.5	0420.6	1.6	8.0			
	5900	KISV	2 S/F	0429.3	0431.3	4.7	8.0			
	245	PALE	8 S	0437.0E	0437.0	2.00	140.0			QL=4 ST=2 TYP=3
	15000	KISV	45 C	0558.3	0601.1	9.0	35.0			
	15000	KISV	45 C	0558.3	0559.8		32.0			
	9300	KISV	45 C	0558.4	0601.3	9.8	6.0			
	5900	KISV	2 S/F	0558.4	0601.6	6.4	8.0			
	9300	KISV	45 C	0558.4	0559.8		6.0			
	9100	GORK	45 C	0558.5	0601.3		21.0			
	9100	GORK	45 C	0558.5	0559.7	12.5	23.0			
	536	ONDR	41 F	0635.0	0828.3	505.0	128.0			
	234	POTS	4 S/F	0640.9	0641.4	0.8	300.0			
	245	LEAR	8 S	0651.0E	0651.0	U	270.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0651.0E	0651.0	U	290.0			QL=4 ST=2 TYP=3
	113	POTS	4 S/F	0651.0	0651.4	0.8	600.0			
204	I2MI	5 S	0651.5	0651.7	0.5	1500.0	1000.0			
810	KRAK	45 C	0714.8	0718.2	5.7	141.0	35.0			
17000	NOBE	1 S	0729.5	0730.2	4.0	37.0			0,80,35GHz:0	
9300	KISV	2 S/F	0729.8	0730.9	7.2	11.0				
15000	KISV	2 S/F	0730.1	0730.9	6.8	25.0				
810	KRAK	41 F	0730.5	0734.0	4.5	11.0	4.0			
9500	POTS	42 SER	0730.5	0731.0	17.0	14.0				
245	LEAR	8 S	0736.0E	0737.0	1.00	380.0			QL=4 ST=3 TYP=3	
245	SVTO	8 S	0736.0E	0737.0	1.00	390.0			QL=4 ST=2 TYP=3	
234	POTS	41 F	0736.3	0737.4	1.5	700.0				

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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	Int	Remarks
24	204	IZMI	41 F	0737.0	0737.2	2.0	800.0	400.0		
	245	LEAR	8 S	0739.0E	0739.0		66.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0739.0E	0739.0	1.00	60.0			QL=4 ST=2 TYP=3
	9300	KISV	2 S/F	0741.3	0742.9	5.7	11.0			
	5900	KISV	2 S/F	0741.4	0742.9	2.9	5.0			
	650	GORK	23 GRF	0746.8	0800.6	57.0	3.0			
	9300	KISV	2 S/F	0751.6	0753.0	3.8	8.0			
	234	POTS	27 RF	0752.3	0934.3	208.00	70.0			
	245	SVTO	8 S	0757.0E	0758.0	1.00	130.0			QL=4 ST=3 TYP=3
	100	HIRA	27 RF	0800.0		80.00				
	9500	POTS	21 GRF	0800.0	0827.0	90.0	12.0			
	3000	POTS	21 GRF	0800.0	0814.0	90.0	8.0			
	1470	POTS	22 GRF	0800.0	0907.1	95.0	22.0			
	9300	KISV	23 GRF	0801.7	0856.4	119.3	21.0			
	9300	KISV	46 C	0804.0	0805.6		18.0			
	9300	KISV	46 C	0804.0	0804.6	4.8	28.0			
	9500	POTS	3 S	0804.0	0804.6	3.0	25.0			
	9300	KISV	46 C	0804.0	0807.7		10.0			
	950	GORK	23 GRF	0804.1	0819.0	39.0	5.0			
	5900	KISV	46 C	0804.2	0807.1		11.0			
	5900	KISV	46 C	0804.2	0804.7	5.7	18.0			
	5900	KISV	46 C	0804.2	0807.7		13.0			
	5900	KISV	46 C	0804.2	0805.8		13.0			
	15000	KISV	2 S/F	0804.4	0804.6	1.7	11.0			
	204	IZMI	25 R	0805.0		130.0	40.0			
	200	HIRA	46 C	0805.0	0920.0		80.00			ML
	200	HIRA	46 C	0805.0	0837.6	90.00	90.0	23.0		ML
	113	POTS	27 RF	0810.00	0853.0	310.00	40.0			
	810	KRAK	42 SER	0810.4	0828.3	30.0	137.0			
	808	ONDR	48 C	0811.0	0916.6	70.0	92.0			
	950	GORK	4 S/F	0826.1	0828.3	5.2	70.0			
	650	GORK	4 S/F	0826.6	0828.0	3.3	30.0			
	600	HUMN	2 S/F	0827.0	0827.5	3.0	18.0	5.0		
	950	GORK	46 C	0837.7	0840.5		70.0			
	950	GORK	46 C	0837.7	0839.6	4.2	34.0			
	950	GORK	46 C	0837.7	0841.6		50.0			
	204	IZMI	6 S	0838.0	0838.5	1.5	150.0	100.0		
	2950	GORK	20 GRF	0854.9	0857.2	19.2	8.0			
	3000	POTS	3 S	0855.0	0857.0	4.0	7.0			
	5900	KISV	45 C	0855.0	0857.2	5.0	15.0			
	5900	KISV	45 C	0855.0	0856.7		14.0			
	9500	POTS	3 S	0856.0	0857.0	4.0	12.0			
	1470	POTS	3 S	0856.0	0857.0	3.0	7.0			
	2850	CRIM	1 S	0856.0	0857.1	4.0	8.5	3.0		
	650	GORK	23 GRF	0857.0	0909.3	90.0	3.0			
	950	GORK	23 GRF	0903.5	0910.1	15.7	13.0			
	810	KRAK	42 SER	0905.5	0916.4	13.5	97.0			
	950	GORK	4 S/F	0912.0	0912.3	0.8	60.0			
	650	GORK	4 S/F	0916.0	0916.4	1.2	20.0			
	950	GORK	46 C	0916.2	0916.7	3.0	110.0			
950	GORK	46 C	0916.2	0918.9		100.0				
15000	KISV	2 S/F	0946.8	0947.6	7.2	40.0				
9300	KISV	2 S/F	0946.9	0947.6	4.6	14.0				
9500	POTS	3 S	0947.0	0947.6	3.0	20.0				
2850	CRIM	1 S	1010.0	1012.0	5.0	9.0	3.0			
5900	KISV	2 S/F	1011.7	1012.3	2.9	14.0				
2950	GORK	1 S	1013.2	1015.2	5.8	8.0				
113	POTS	8 S	1117.6	1117.7	0.3	350.0				
127	TORN	4 S/F	1151.5	1152.1	1.3	7200.0	2700.0		UNCERTAIN	
15000	KISV	2 S/F	1206.0	1207.8	6.0	22.0				
15400	SGMR	4 S/F	1627.0E	1628.0	4.00	57.0			QL=4 ST=2 TYP=3	
2800	OTTA	22 GRF	1842.5	2020.0	470.0	6.4	3.0			
8800	PALE	4 S/F	1938.0E	1939.0	5.00	120.0			QL=4 ST=2 TYP=3	
15400	PALE	4 S/F	1938.0E	1939.0	5.00	290.0			QL=4 ST=2 TYP=3	
245	PALE	4 S/F	1938.0E	1938.0	3.00	92.0			QL=4 ST=2 TYP=5	
15400	SGMR	4 S/F	1938.0E	1939.0	3.00	260.0			QL=4 ST=2 TYP=3	
2800	OTTA	3 S	1938.5	1939.1	2.0	12.4	3.0			
245	PALE	8 S	2004.0E	2005.0	1.00	170.0			QL=4 ST=2 TYP=3	
8800	PALE	49 GB	2045.0E	2048.0	21.00	43000.0			QL=4 ST=2 TYP=7	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean	Int	Remarks	
24	15400	SGMR	49 GB	2045.0E	2048.0	28.00	42000.0			QL=4 ST=2 TYP=7	
	4995	SGMR	49 GB	2045.0E	2048.0	21.00	20000.0			QL=4 ST=2 TYP=7	
	8800	SGMR	49 GB	2045.0E	2048.0	21.00	45000.0			QL=2 ST=2 TYP=7	
	15400	PALE	49 GB	2045.0E	2048.0	33.00	34000.0			QL=4 ST=2 TYP=7	
	2800	OTTA	47 GB	2045.7	2048.6	85.0	18150.0	3630.0			
	4995	PALE	49 GB	2046.0E	2048.0	17.00	22000.0				QL=4 ST=2 TYP=7
	2695	PALE	49 GB	2046.0E	2048.0	27.00	13000.0				QL=4 ST=2 TYP=7
	2695	SGMR	49 GB	2046.0E	2048.0	27.00	13000.0				QL=4 ST=2 TYP=7
	200	HIRA	48 C	2046.2	2056.1		9000.0				0
	200	HIRA	48 C	2046.2	2047.5	52.8	70000.0	3950.0			0
	1415	PALE	49 GB	2047.0E	2048.0	23.00	19000.0				QL=4 ST=2 TYP=7
	610	SGMR	49 GB	2047.0E	2050.0	26.00	6900.0				QL=4 ST=2 TYP=7
	1415	SGMR	49 GB	2047.0E	2048.0	26.00	21000.0				QL=4 ST=2 TYP=7
	410	SGMR	49 GB	2047.0E	2048.0	26.00	13000.0				QL=2 ST=2 TYP=7
	100	HIRA	48 C	2047.3		45.5	16000.00	1800.00			
	500	HIRA	48 C	2047.7	2051.0		2900.0				0
	500	HIRA	48 C	2047.7	2047.7	58.5	5800.0	275.0			WL
	410	PALE	49 GB	2048.0E	2048.0	24.00	15000.0				QL=4 ST=2 TYP=7
	245	PALE	49 GB	2048.0E	2048.0	21.00	94000.0				QL=4 ST=2 TYP=7
	610	PALE	49 GB	2048.0E	2050.0	24.00	5900.0				QL=4 ST=2 TYP=7
	245	SGMR	49 GB	2048.0E	2048.0	20.00	68000.0				QL=2 ST=2 TYP=7
	500	HIRA	29 PBI	2150.0E	2150.0	28.00	5.0	2.0			0
	245	PALE	8 S	2337.0E	2337.0	1.00	98.0				QL=4 ST=2 TYP=3
	25	260	ONDR	44 NS	0500.0E	0604.4	700.00	120.0			
17000		NOBE	1 S	0110.5	0111.0	2.0	19.0			20L,80,35GHz:0	
245		PALE	4 S/F	0134.0E	0134.0	3.00	130.0			QL=4 ST=2 TYP=3	
245		PALE	8 S	0149.0E	0149.0	1.00	110.0			QL=4 ST=2 TYP=3	
245		PALE	8 S	0159.0E	0159.0	U	57.0			QL=4 ST=2 TYP=3	
17000		NOBE	1 S	0234.8	0235.4	1.0	10.0			0,80,35GHz:0	
245		PALE	8 S	0236.0E	0236.0	U	51.0			QL=4 ST=2 TYP=3	
9100		GORK	23 GRF	0239.0E	0407.9	138.00	15.0				
9100		GORK	3 S	0347.5	0348.6	2.6	20.0				
17000		NOBE	7 C	0348.0	0359.1		160.0				23L
17000		NOBE	7 C	0348.0	0348.5	17.0	35.0				27L
9100		GORK	4 S/F	0357.0	0359.1	8.4	220.0				
9300		KISV	4 S/F	0357.0	0359.5	9.0	216.0				
15000		KISV	4 S/F	0357.5	0359.3	6.3	187.0				
8800		LEAR	4 S/F	0358.0E	0359.0	3.00	190.0				QL=4 ST=2 TYP=3
15400		LEAR	8 S	0358.0E	0359.0	2.00	230.0				QL=4 ST=2 TYP=3
4995		LEAR	8 S	0358.0E	0359.0	2.00	62.0				QL=4 ST=2 TYP=3
15400		PALE	8 S	0358.0E	0359.0	2.00	140.0				QL=4 ST=2 TYP=3
8800		PALE	8 S	0358.0E	0359.0	2.00	190.0				QL=4 ST=2 TYP=3
4995		PALE	8 S	0358.0E	0359.0	2.00	54.0				QL=4 ST=2 TYP=3
8800		SVTO	4 S/F	0358.0E	0359.0	3.00	180.0				QL=2 ST=2 TYP=3
15400		SVTO	4 S/F	0358.0E	0359.0	5.00	160.0				QL=2 ST=2 TYP=3
4995		SVTO	8 S	0358.0E	0359.0	2.00	55.0				QL=2 ST=2 TYP=3
5900		KISV	4 S/F	0358.0	0359.5	8.0	112.0				
35000		NOBE	1 S	0358.6	0359.1	3.0	55.0				8L,80GHz:0
536		ONDR	41 F	0600.0	0839.2	220.0	13.0				
113		POTS	4 S/F	0600.5	0602.1	4.0	280.0				
2950		GORK	1 S	0600.5	0601.7	2.8	4.0				
40		POTS	4 S/F	0600.9	0601.3	4.0	30000.00				
950		GORK	46 C	0600.9	0602.5		32.0				
950		GORK	46 C	0600.9	0601.6	2.7	40.0				
245		SVTO	8 S	0601.0E	0602.0	1.00	50.0				QL=4 ST=2 TYP=3
650		GORK	46 C	0601.0	0603.1		15.0				
33		UPIC	45 C	0601.0	0601.5	1.5					
650	GORK	46 C	0601.0	0601.7	2.5	15.0					
808	ONDR	45 C	0601.0	0601.7	3.0	30.0					
410	LEAR	8 S	0602.0E	0603.0	1.00	66.0				QL=4 ST=2 TYP=3	
410	SVTO	8 S	0602.0E	0603.0	1.00	51.0				QL=4 ST=2 TYP=3	
204	I2MI	8 S	0704.9	0705.0	0.1	110.0	100.0				
536	ONDR	27 RF	0940.0	1040.4	100.0	4.0					
5900	KISV	2 S/F	0940.6	0941.6	2.8	7.0					
1470	POTS	8 S	1134.3	1134.4	0.3	18.0					
245	SVTO	8 S	1140.0E	1140.0	1.00	92.0				QL=4 ST=2 TYP=3	
1470	POTS	4 S/F	1334.7	1335.0	1.3	46.0					
4995	PALE	8 S	2105.0E	2106.0	1.00	120.0				QL=4 ST=2 TYP=3	

S O L A R R A D I O E M I S S I O N
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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
25	4995	SGMR	8 S	2105.0E	2106.0	1.00	110.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	2105.0E	2106.0	2.00	85.0			QL=4 ST=2 TYP=3
	2800	OTTA	3 S	2105.1	2106.2	28.0	77.8	15.0		
	245	PALE	8 S	2106.0E	2106.0	U	69.0			QL=4 ST=2 TYP=3
	2695	PALE	8 S	2106.0E	2106.0	U	72.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2158.0E	2158.0	U	68.0			QL=4 ST=2 TYP=3
26	260	ONDR	44 NS	0500.0E	1128.8	580.00	13.0			
	200	GORK	4 S/F	0336.0	0342.6	8.6	30.0			
	950	GORK	20 GRF	0337.7	0342.8	9.1	2.0			
	200	HIRA	41 F	0338.9	0342.9	5.9	170.0		0	
	650	GORK	2 S/F	0339.3	0343.2	6.1	8.0			
	2950	GORK	2 S/F	0341.8	0342.4	4.9	5.0			
	410	LEAR	8 S	0342.0E	0342.0	U	26.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0342.0E	0342.0	U	91.0			QL=4 ST=2 TYP=3
	100	GORK	45 C	0342.0	0342.4	3.0	720.0			
	100	GORK	45 C	0342.0	0342.7		840.0			
	2950	GORK	1 S	0526.8	0529.0	3.8	4.0			
	2850	CRIM	1 S	0527.0	0529.1	3.0	4.5	1.0		
	536	ONDR	41 F	0603.0	0706.5	450.0	5.0			
	808	ONDR	42 SER	0723.7	0723.9	12.5	6.0			
	204	IZMI	5 S	0732.2	0732.3	0.3	23.0	13.0		
	33	UPIC	45 C	0836.5	0837.5	2.5				
	33	UPIC	45 C	0841.0	0842.1	1.5				
	33	UPIC	3 S	0906.5	0906.6	0.3				
	113	POTS	42 SER	0916.5	0916.5	7.5	1300.0			
	204	IZMI	41 F	0916.5	0916.7	1.0	93.0			
	33	UPIC	8 S	0916.5	0916.7	0.5				
	30	POTS	8 S	0916.6	0916.6	1.0	4000.00			
	113	POTS	4 S/F	1001.0	1002.1	1.9	1100.0			
	204	IZMI	41 F	1001.2	1001.6	10.0	70.0			
	808	ONDR	3 S	1008.2	1008.3	1.0	9.0			
	113	POTS	41 F	1052.1	1055.0	5.6	140.0			
	33	UPIC	46 C	1052.2	1054.7	3.4				
	30	POTS	4 S/F	1052.2	1054.9	3.9	4000.00			
	204	IZMI	41 F	1126.0	1127.0	1.2	300.0			
	204	IZMI	42 SER	1127.5		32.5	25.0			
	430	KRAK	8 S	1144.9	1145.0	0.1	84.0			
	3000	POTS	3 S	1427.0	1428.2	5.5	9.0			
	2800	OTTA	4 S/F	1427.3	1428.0	12.0	7.4	1.0		
	1470	POTS	1 S	1427.5	1428.5	5.0	4.0			
	2800	OTTA	22 GRF	1530.0	1630.0	250.0	9.5	4.0		
	2800	OTTA	3 S	1638.9	1641.0	10.0	23.5	5.0		
	600	HUMN	1 S	1639.0	1642.0	4.0	9.0	4.0		
	245	PALE	8 S	1639.0E	1639.0	1.00	210.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1639.0E	1639.0	1.00	160.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1639.0E	1639.0	1.00	190.0			QL=4 ST=2 TYP=3
2800	OTTA	4 S/F	1742.6	1751.5	27.0	59.5	12.0			
4995	SGMR	20 GRF	1745.0E	1751.0	9.00	67.0			QL=4 ST=2 TYP=2	
4995	PALE	20 GRF	1745.0E	1751.0	10.00	78.0			QL=4 ST=2 TYP=2	
8800	PALE	20 GRF	1745.0E	1751.0	19.00	64.0			QL=4 ST=2 TYP=2	
15400	PALE	8 S	1746.0E	1748.0	2.00	44.0			QL=4 ST=2 TYP=3	
33	UPIC	46 C	1747.1	1748.9	2.7					
2695	PALE	8 S	1748.0E	1749.0	1.00	35.0			QL=4 ST=2 TYP=3	
2695	SGMR	4 S/F	1748.0E	1751.0	9.00	60.0			QL=4 ST=2 TYP=5	
600	HUMN	45 C	1748.0	1758.0	12.0	24.0	10.0			
1415	PALE	4 S/F	1751.0E	1755.0	8.00	140.0			QL=4 ST=2 TYP=5	
1415	SGMR	4 S/F	1751.0E	1755.0	7.00	98.0			QL=4 ST=2 TYP=5	
610	PALE	8 S	1755.0E	1756.0	1.00	34.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1832.0E	1832.0	1.00	56.0			QL=4 ST=2 TYP=3	
610	PALE	8 S	1909.0E	1909.0	1.00	51.0			QL=4 ST=2 TYP=3	
610	SGMR	8 S	1909.0E	1909.0	1.00	51.0			QL=4 ST=2 TYP=3	
200	HIRA	24 R	1926.0E		79.00		8.0		0	
500	HIRA	48 C	2044.1	2053.0	35.5	568.0	113.0		0	
200	HIRA	48 C	2044.2	2053.8	36.3	13000.0	780.0		0	
2800	OTTA	47 GB	2045.6	2050.0	45.0	1395.0	280.0			
245	PALE	49 GB	2046.0E	2051.0	16.00	16000.0			QL=4 ST=2 TYP=7	
245	SGMR	49 GB	2046.0E	2051.0	16.00	14000.0			QL=4 ST=2 TYP=7	
100	HIRA	48 C	2047.5	2047.8U	33.0	16000.00	720.00			

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Mean	Int	Remarks
26	15400	PALE	49 GB	2048.0E	2049.0	6.00	2200.0			QL=4 ST=2 TYP=7
	15400	SGMR	49 GB	2048.0E	2049.0	7.00	2100.0			QL=2 ST=2 TYP=7
	4995	PALE	49 GB	2048.0E	2049.0	11.00	1200.0			QL=4 ST=2 TYP=7
	1415	PALE	49 GB	2048.0E	2050.0	19.00	1300.0			QL=4 ST=2 TYP=7
	610	PALE	49 GB	2048.0E	2054.0	17.00	830.0			QL=4 ST=2 TYP=7
	8800	PALE	49 GB	2048.0E	2049.0	10.00	1200.0			QL=4 ST=2 TYP=7
	2695	PALE	49 GB	2048.0E	2050.0	14.00	1300.0			QL=4 ST=2 TYP=7
	8800	SGMR	49 GB	2048.0E	2049.0	10.00	1200.0			QL=4 ST=2 TYP=7
	610	SGMR	49 GB	2048.0E	2054.0	17.00	870.0			QL=4 ST=2 TYP=7
	2695	SGMR	49 GB	2048.0E	2050.0	16.00	1200.0			QL=4 ST=2 TYP=7
	1415	SGMR	49 GB	2048.0E	2050.0	18.00	1100.0			QL=4 ST=2 TYP=7
	4995	SGMR	49 GB	2048.0E	2049.0	12.00	1100.0			QL=4 ST=2 TYP=7
	410	PALE	49 GB	2048.0E	2051.0	192.00	1000.0			QL=4 ST=1 TYP=7
	500	HIRA	29 PBI	2124.5E	2124.5	20.00	4.0	2.0		0
27	9100	GORK	23 GRF	0230.0E	0430.0	375.00	8.0			
	2950	GORK	46 C	0303.2	0309.5	13.8	167.0			
	2950	GORK	46 C	0303.2	0312.7		128.0			
	2840	PEKG	45 C	0303.5	0309.6	15.0	139.5			
	650	GORK	21 GRF	0307.4	0314.6	12.3	2.0			
	2695	LEAR	4 S/F	0308.0E	0309.0	6.00	280.0			QL=4 ST=2 TYP=3
	650	GORK	46 C	0308.9	0310.3	5.7	7.0			
	650	GORK	46 C	0308.9	0312.4		10.0			
	1415	LEAR	4 S/F	0309.0E	0312.0	5.00	80.0			QL=4 ST=2 TYP=3
	8800	LEAR	4 S/F	0309.0E	0310.0	4.00	48.0			QL=4 ST=2 TYP=3
	4995	PALE	4 S/F	0309.0E	0309.0	4.00	140.0			QL=4 ST=2 TYP=3
	2695	PALE	4 S/F	0309.0E	0310.0	4.00	200.0			QL=4 ST=2 TYP=3
	1415	PALE	4 S/F	0309.0E	0312.0	4.00	87.0			QL=4 ST=2 TYP=5
	9100	GORK	46 C	0309.0	0310.2	5.1	48.0			
	950	GORK	4 S/F	0309.0	0312.4	65.8	23.0			
	9100	GORK	46 C	0309.0	0312.7		16.0			
	15400	LEAR	8 S	0310.0E	0310.0	U	23.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	0310.0E	0310.0	U	44.0			QL=4 ST=2 TYP=3
	610	LEAR	8 S	0500.0E	0500.0	1.00	50.0			QL=4 ST=2 TYP=3
	610	SVTO	8 S	0500.0E	0501.0	1.00	57.0			QL=4 ST=2 TYP=3
	650	GORK	4 S/F	0500.3	0501.2	1.3	60.0			
	500	HIRA	42 SER	0500.3	0500.5	19.0	780.0			0
	2950	GORK	1 S	0500.3	0500.6	1.3	4.0			
	950	GORK	2 S/F	0500.5	0500.7	0.3	20.0			
	650	GORK	41 F	0501.8	0514.1	17.0	15.0			
	650	GORK	41 F	0501.8	0516.4		60.0			
	260	ONDR	41 F	0510.0E	1550.7	690.00	429.0			
	950	GORK	1 S	0514.8	0516.3	3.9	7.0			
	600	HUMN	2 S/F	0515.0	0516.0	1.7	18.0	8.0		
	610	LEAR	8 S	0515.0E	0516.0	1.00	61.0			QL=4 ST=2 TYP=3
	610	SVTO	8 S	0515.0E	0516.0	1.00	50.0			QL=4 ST=2 TYP=3
	1415	LEAR	8 S	0516.0E	0516.0	U	14.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0516.0E	0516.0	U	34.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0644.0E	0646.0	2.00	120.0			QL=4 ST=2 TYP=3
	610	LEAR	4 S/F	0644.0E	0646.0	3.00	69.0			QL=4 ST=2 TYP=3
	5900	KISV	45 C	0644.8	0645.4		3.0			
	5900	KISV	45 C	0644.8	0646.5	6.2	5.0			
	536	ONDR	41 F	0645.0	0808.1	450.0	153.0			
	808	ONDR	41 F	0645.0	0646.8	3.0	5.0			
	650	GORK	4 S/F	0722.8	0723.1	0.8	18.0			
2850	CRIM	1 S	0747.4	0747.7	1.0	10.0	3.0			
2840	PEKG	1 S	0806.0	0807.8	3.0	9.4				
808	ONDR	6 S	0806.8	0807.2	3.0	30.0				
9300	KISV	2 S/F	0806.8	0807.6	1.7	10.0				
5900	KISV	4 S/F	0806.8	0807.7	8.2	16.0				
810	KRAK	2 S/F	0807.0	0807.0	1.1	184.0	6.0			
410	LEAR	8 S	0807.0E	0807.0	1.00	160.0			QL=4 ST=2 TYP=3	
610	LEAR	8 S	0807.0E	0807.0	U	76.0			QL=4 ST=2 TYP=3	
410	SVTO	49 GB	0807.0E	0807.0	1.00	580.0			QL=4 ST=2 TYP=6	
9500	POTS	1 S	0807.0	0807.5	1.0	10.0				
3000	POTS	3 S	0807.0	0807.6	1.5	12.0				
1470	POTS	4 S/F	0807.0	0807.8	2.0	7.0				
950	GORK	4 S/F	0807.2	0807.5	1.0	50.0				
2950	GORK	1 S	0807.3	0807.7	1.5	9.0				

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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)	Mean	Int	Remarks
27	650	GORK	45 C	0807.4	0807.6	0.7	12.0			
	650	GORK	45 C	0807.4	0807.8		12.0			
	808	ONDR	4 S/F	1019.8	1021.6	3.0	11.0			
	245	SGMR	8 S	1020.0E	1020.0	1.00	87.0			QL=4 ST=2 TYP=3
	33	UPIC	46 C	1549.5	1550.9	6.8				
	2800	OTTA	3 S	1549.8	1551.1	10.2	76.0	15.0		
	245	SVTO	8 S	1550.0E	1550.0	1.00	430.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	1550.0E	1551.0	2.00	94.0			QL=4 ST=2 TYP=3
	500	HIRA	42 SER	2023.0	2028.3	31.5	62.0			0
	200	HIRA	42 SER	2024.4	2029.7	27.0	230.0			0
	2800	OTTA	4 S/F	2025.5	2027.8	5.7	76.2	15.0		
	610	PALE	8 S	2026.0E	2026.0	1.00	42.0			QL=4 ST=2 TYP=3
	2695	PALE	8 S	2026.0E	2027.0	1.00	76.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2029.0E	2030.0	1.00	270.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2029.0E	2030.0	1.00	250.0			QL=4 ST=3 TYP=3
	500	HIRA	46 C	2102.0	2158.0		24.0			WR
	500	HIRA	46 C	2102.0	2114.5	73.0	26.0	12.0		WL
245	SGMR	8 S	2144.0E	2144.0	U	68.0			QL=4 ST=2 TYP=3	
28	260	ONDR	44 NS	0500.0E	0823.5	700.00	335.0			
	200	GORK	43 NS	0700.0		300.00		5.0		
	127	TORN	43 NS	0834.0		320.0		4.0		V=1
	2840	PEKG	47 GB	0427.0	0430.5	39.0	931.8			
	100	HIRA	48 C	0427.8	0428.4U	35.6	16000.00	640.00		
	8800	LEAR	4 S/F	0428.0E	0430.0	19.00	320.0			QL=4 ST=2 TYP=3
	4995	LEAR	49 GB	0428.0E	0429.0	19.00	760.0			QL=4 ST=2 TYP=6
	610	PALE	49 GB	0428.0E	0432.0	16.00	2200.0			QL=4 ST=2 TYP=6
	245	PALE	49 GB	0428.0E	0430.0	17.00	19000.0			QL=4 ST=2 TYP=7
	2695	PALE	49 GB	0428.0E	0430.0	12.00	1500.0			QL=4 ST=2 TYP=6
	1415	PALE	49 GB	0428.0E	0430.0	15.00	2800.0			QL=4 ST=2 TYP=6
	2695	SVTO	49 GB	0428.0E	0430.0	15.00	1500.0			QL=2 ST=2 TYP=6
	8800	SVTO	4 S/F	0428.0E	0430.0	12.00	380.0			QL=2 ST=2 TYP=3
	1415	SVTO	49 GB	0428.0E	0430.0	18.00	2200.0			QL=2 ST=2 TYP=6
	15400	SVTO	4 S/F	0428.0E	0430.0	17.00	180.0			QL=2 ST=2 TYP=3
	4995	SVTO	49 GB	0428.0E	0429.0	13.00	770.0			QL=2 ST=2 TYP=6
	245	SVTO	49 GB	0428.0E	0430.0	19.00	16000.0			QL=2 ST=2 TYP=7
	410	LEAR	49 GB	0428.0E	0430.0	22.00	2600.0			QL=4 ST=2 TYP=6
	2695	LEAR	49 GB	0428.0E	0430.0	22.00	1600.0			QL=4 ST=2 TYP=6
	245	LEAR	49 GB	0428.0E	0430.0	22.00	21000.0			QL=4 ST=2 TYP=7
	610	LEAR	49 GB	0428.0E	0432.0	23.00	2400.0			QL=4 ST=2 TYP=6
	1415	LEAR	49 GB	0428.0E	0430.0	22.00	2100.0			QL=4 ST=2 TYP=6
	15400	LEAR	4 S/F	0428.0E	0430.0	22.00	170.0			QL=4 ST=2 TYP=3
	4995	PALE	49 GB	0428.0E	0429.0	1172.00	780.0			QL=4 ST=1 TYP=6
	650	GORK	47 GB	0428.0	0432.4	17.0	2200.0			
	200	GORK	47 GB	0428.2	0431.3		6500.0			
	200	GORK	47 GB	0428.2	0429.3		9000.0			
	600	HUMN	3 S	0428.2	0432.3	22.3	500.0	146.0		
	200	GORK	47 GB	0428.2	0428.5	39.0	10000.0			
	950	GORK	29 PBI	0428.5	0442.0	15.9	62.0			
	100	GORK	47 GB	0428.5	0429.5		4200.0			
	5900	KISV	47 GB	0428.5	0429.6		822.0			
	950	GORK	47 GB	0428.5	0431.6	13.5	2600.0			
	100	GORK	47 GB	0428.5	0428.6	15.1	5600.0			
	9100	GORK	4 S/F	0428.5	0430.7	16.5	330.0			
	5900	KISV	47 GB	0428.5	0430.7	28.2	825.0			
	2850	CRIM	29 PBI	0428.6	0438.0	14.0	155.0	50.0		
	2850	CRIM	47 GB	0428.6	0430.7	9.4	2270.0	756.0		
	9300	KISV	47 GB	0428.6	0430.7	28.0	393.0			
	9300	KISV	47 GB	0428.6	0429.8		303.0			
	15000	KISV	45 C	0428.7	0430.5	123.0	120.0			
15000	KISV	45 C	0428.7	0429.7		73.0				
80000	NOBE	7 C	0428.7	0430.7	5.0	20.0				
35000	NOBE	7 C	0428.7	0430.7	10.0	100.0			0	
17000	NOBE	7 C	0428.7	0430.7	10.0	146.0			3L	
2950	GORK	47 GB	0428.8	0430.7	10.2	1242.0				
8800	PALE	4 S/F	0429.0E	0430.0	5.00	310.0			QL=2 ST=2 TYP=3	
15400	PALE	8 S	0429.0E	0430.0	2.00	90.0			QL=2 ST=2 TYP=3	
410	PALE	49 GB	0429.0E	0430.0	15.00	3700.0			QL=4 ST=2 TYP=6	
410	SVTO	49 GB	0429.0E	0430.0	17.00	3300.0			QL=2 ST=2 TYP=6	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Mean	Int	Remarks	
28	610	SVTO	49 GB	0429.0E	0432.0	14.00	2300.0			QL=2 ST=2 TYP=6	
	500	HIRA	48 C	0429.0E	0432.0U	31.00	2000.00			0	
	200	HIRA	48 C	0429.0E	0438.3	44.00	1200.0			0	
	2950	GORK	29 PBI	0439.0	0439.0	67.2	66.0				
	650	GORK	29 PBI	0445.0	0445.0	18.0	10.0				
	9300	KISV	45 C	0516.0	0524.4	17.0	32.0				
	9300	KISV	45 C	0516.0	0519.6		23.0				
	5900	KISV	45 C	0516.3	0524.0	15.7	27.0				
	5900	KISV	45 C	0516.3	0519.5		17.0				
	9100	GORK	45 C	0516.4	0524.3		20.0				
	9100	GORK	45 C	0516.4	0519.5	10.6	18.0				
	15000	KISV	45 C	0518.6	0524.2	14.9	25.0				
	15000	KISV	45 C	0518.6	0519.7		20.0				
	950	GORK	2 S/F	0559.8	0600.2	0.7	5.0				
	536	ONDR	27 RF	0600.0	1040.0	390.0	6.0				
	650	GORK	2 S/F	0600.1	0600.3	1.5	6.0				
	2950	GORK	20 GRF	0802.5	0816.6	65.2	4.0				
	200	HIRA	46 C	0810.0	0824.6	63.0	11.0	4.0			0
	650	GORK	22 GRF	0810.7	0829.9	22.5	4.0				
	950	GORK	20 GRF	0822.1	0829.0	18.7	3.0				
	1470	POTS	1 S	1350.8	1351.0	1.2	5.0				
	234	POTS	8 S	1422.1	1422.3	1.3	100.0				
	808	ONDR	1 S	1449.8	1450.0	1.0	4.0				
	2800	OTTA	4 S/F	1458.0	1504.1	15.0	18.4	4.0			
	4995	SGMR	4 S/F	1502.0E	1504.0	7.00	67.0				QL=4 ST=2 TYP=5
	8800	SGMR	4 S/F	1503.0E	1505.0	6.00	72.0				QL=4 ST=2 TYP=5
	8800	SVTO	4 S/F	1503.0E	1505.0	6.00	77.0				QL=4 ST=2 TYP=5
	4995	SVTO	4 S/F	1503.0E	1504.0	5.00	72.0				QL=4 ST=2 TYP=5
	15400	SGMR	4 S/F	1504.0E	1508.0	5.00	50.0				QL=4 ST=2 TYP=5
	15400	SVTO	4 S/F	1504.0E	1505.0	4.00	53.0				QL=4 ST=2 TYP=5
	808	ONDR	3 S	1505.0	1505.4	2.5	4.0				
	2800	OTTA	29 PBI	1513.0	1800.0	425.0	7.9	3.0			
410	PALE	8 S	1743.0E	1743.0	U	55.0				QL=4 ST=2 TYP=3	
410	SGMR	8 S	1743.0E	1743.0	2.00	73.0				QL=2 ST=2 TYP=3	
245	PALE	8 S	1744.0E	1744.0	U	160.0				QL=4 ST=2 TYP=3	
245	SGMR	4 S/F	1744.0E	1744.0	3.00	120.0				QL=4 ST=2 TYP=3	
245	PALE	8 S	1749.0E	1750.0	1.00	120.0				QL=4 ST=2 TYP=3	
245	SGMR	8 S	1749.0E	1750.0	1.00	92.0				QL=4 ST=2 TYP=3	
29	260	ONDR	42 SER	0500.0	1512.9	700.0	408.0				
	536	ONDR	27 RF	0730.0	1041.4	295.0	10.0				
	430	KRAK	8 S	0941.7	0942.0	0.5	80.0				
	808	ONDR	1 S	1238.6	1242.0	4.0	7.0				
	30	POTS	4 S/F	1241.5	1246.2	5.7	1600.0U				
	234	POTS	29 PBI	1242.3	1246.1	60.0	250.0				
	536	ONDR	41 F	1243.6	1244.0	4.0	36.0				
	430	KRAK	42 SER	1244.0	1244.0	0.9	85.0				
	245	SGMR	8 S	1244.0E	1244.0	2.00	170.0				
	113	POTS	29 PBI	1244.0	1251.0	56.0	2800.0				
	127	TORN	45 C	1252.7	1257.1	6.0	120.0	15.0			
	808	ONDR	3 S	1419.1	1419.4	2.5	12.0				
	245	SVTO	8 S	1512.0E	1512.0	U	120.0				
	808	ONDR	42 SER	1512.0	1512.5	7.0	31.0				
	536	ONDR	42 SER	1512.3	1518.0	10.0	154.0				
245	PALE	8 S	1759.0E	1759.0	1.00	84.0					
245	SGMR	8 S	1759.0E	1759.0	2.00	91.0					
245	SGMR	8 S	1803.0E	1803.0	U	62.0					
30	204	IZMI	43 NS	0600.0		360.0	20.0				
	260	ONDR	44 NS	0600.0E	1133.5	640.00	329.0				
	245	SGMR	44 NS	0940.0E	1103.0	382.00	98.0			QL=2 ST=2 TYP=1	
	430	KRAK	43 NS	1045.0	1113.5	127.00	34.0	10.0			
	127	TORN	43 NS	1106.0		170.0		3.0		V=1	
	650	GORK	20 GRF	0611.8	0626.7	26.2	4.0				
	536	ONDR	41 F	0650.0	1214.5	340.0	5.0				
	5900	KISV	2 S/F	0701.1	0702.6	3.1	10.0				
	650	GORK	1 S	0829.6	0829.8	0.4	5.0				
	2950	GORK	1 S	0903.0E	0905.3	4.50	6.0				
	5900	KISV	2 S/F	0904.5	0905.4	3.5	7.0				

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

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May 90

MAY 1990

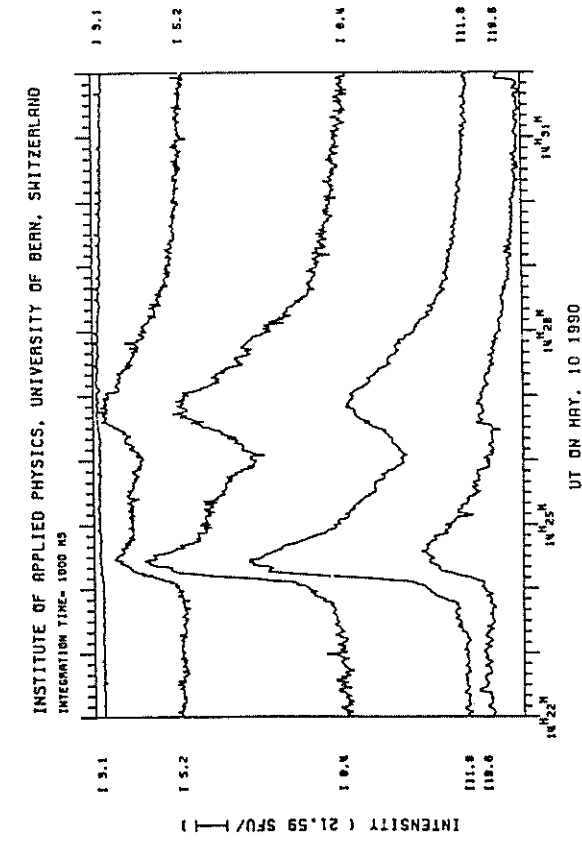
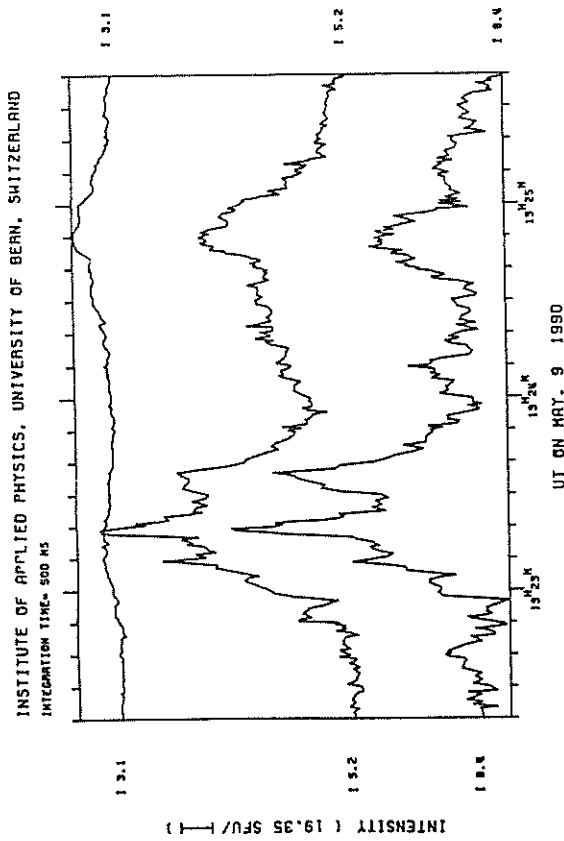
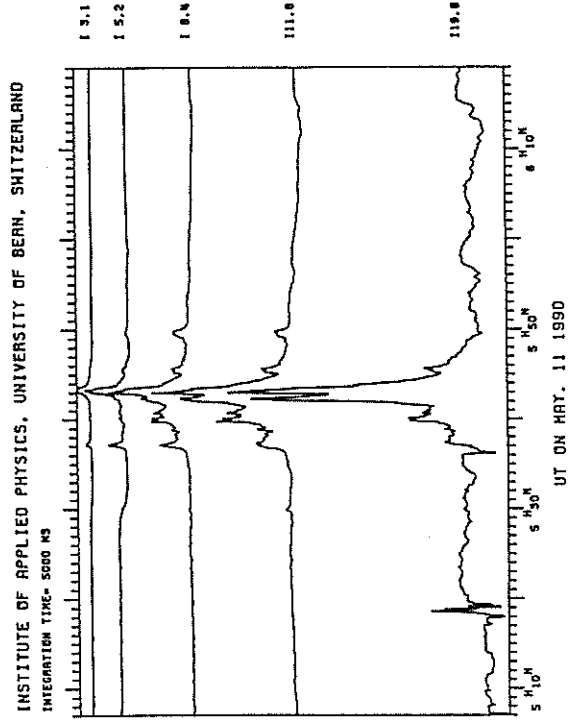
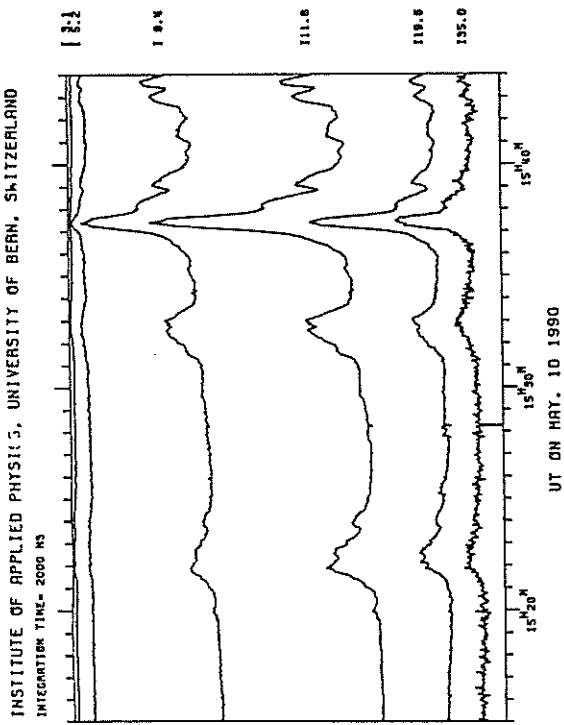
Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak (10 ⁻²² W/m ² Hz)	Mean		
30	2850 CRIM	1 S	0904.6	0905.2	1.8	6.6	2.0		
	9100 GORK	1 S	0904.7	0905.3	3.5	6.0			
	9300 KISV	2 S/F	0905.0	0905.3	1.3	5.0			
	234 POTS	27 RF	0924.5	1154.0	606.0U	50.0			
	245 SVTO	8 S	0940.0E	0940.0	U	120.0			QL=4 ST=2 TYP=3
	30 POTS	27 RF	1029.0	1057.5	91.0	120.0U			
	113 POTS	27 RF	1106.5U	1124.5	112.0U	10.0			
	3000 POTS	1 S	1216.5	1217.6	2.0	5.0			
	5900 KISV	2 S/F	1216.6	1217.0	1.4	8.0			
	9300 KISV	2 S/F	1216.7	1217.0	1.2	12.0			
	9500 POTS	1 S	1216.7	1216.9	0.9	5.0			
	410 SGMR	8 S	1225.0E	1225.0	U	84.0			QL=2 ST=2 TYP=3
	808 ONDR	8 S	1316.0	1316.2	1.7	105.0			
	1470 POTS	3 S	1316.0	1316.2	1.0	10.0			
	536 ONDR	8 S	1445.0	1445.2	1.6	45.0			
	2800 OTTA	40 F	1520.0	1610.0	260.0	5.7	2.0		
	536 ONDR	8 S	1540.8	1541.0	2.5	23.0			
600 HUMN	2 S/F	1719.0	1720.0	2.3	19.0	9.0			
610 SGMR	8 S	1720.0E	1720.0	1.0D	50.0			QL=2 ST=2 TYP=3	
31	260 ONDR	44 NS	0500.0E	0834.4	700.0D	180.0			
	204 IZMI	43 NS	0600.0		360.0	10.0			
	127 TORN	44 NS	1020.0E		240.0D		4.0		V=1, DISTURBED
	200 HIRA	44 NS	1930.0E	0100.0	630.0D	18.0	6.0		WR
	200 HIRA	41 F	0233.0	0237.2	11.2	52.0			0
	5900 KISV	2 S/F	0445.2	0445.9	1.3	3.0			
	536 ONDR	41 F	0620.0	0716.3	60.0	62.0			
	650 GORK	23 GRF	0712.7	0717.8	7.4	3.0			
	500 HIRA	41 F	0713.3	0718.6	7.0	29.0			0
	950 GORK	2 S/F	0717.5	0718.5	1.7	6.0			
	650 GORK	2 S/F	0717.7	0718.1	1.0	8.0			
	536 ONDR	42 SER	0818.4	0830.8	16.0	31.0			
	430 KRAK	42 SER	0831.0	0831.5	6.3	84.0			
	245 LEAR	8 S	0833.0E	0833.0	1.0D	58.0			QL=4 ST=2 TYP=3
	410 LEAR	8 S	0833.0E	0833.0	U	34.0			QL=4 ST=2 TYP=3
	2950 GORK	1 S	1025.2	1026.1	2.7	5.0			
	650 GORK	20 GRF	1033.6	1052.0	40.9	3.0			
536 ONDR	8 S	1232.3	1232.7	1.0	23.0				
2800 OTTA	20 GRF	1510.0	1805.0	285.0	5.2	2.0			
200 HIRA	46 C	2046.9	2047.5	2.0	275.0			0	
245 PALE	8 S	2047.0E	2047.0	1.0D	340.0			QL=4 ST=2 TYP=3	
245 SGMR	8 S	2047.0E	2047.0	1.0D	310.0			QL=4 ST=3 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
		SGMR = Sagamore Hill	UPIC = Upice

Explanation of Type Code:

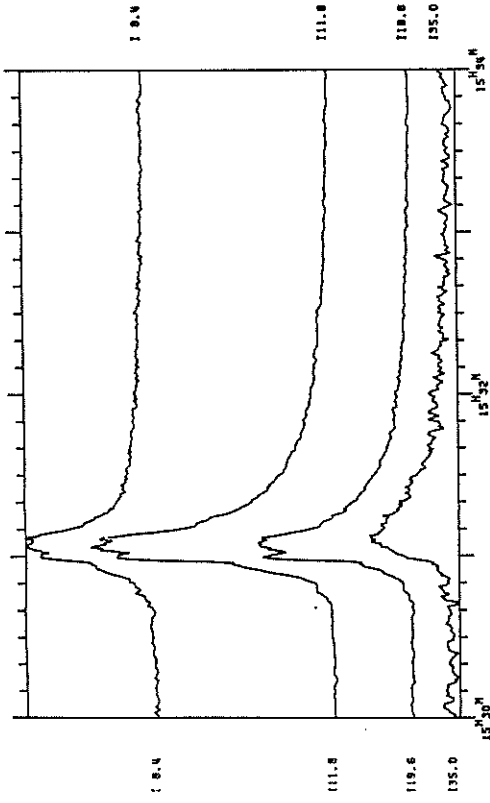
1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple 3F	28 Precursor	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	



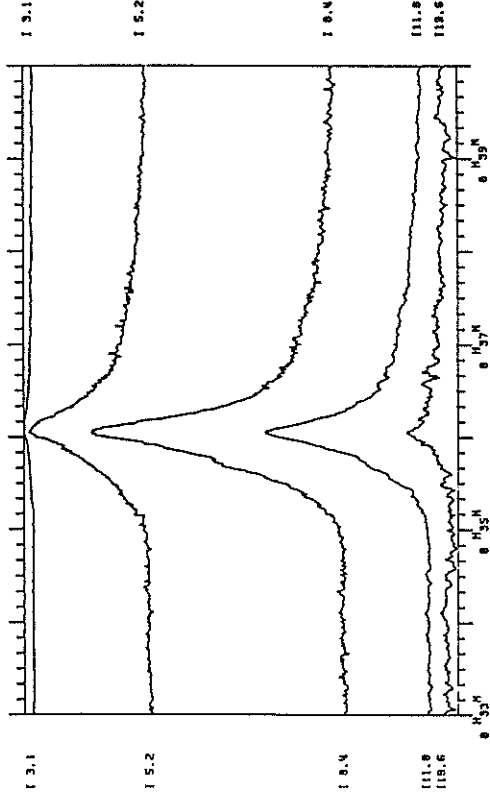
INTENSITY (19.35 SFU/)

INTENSITY (21.59 SFU/)

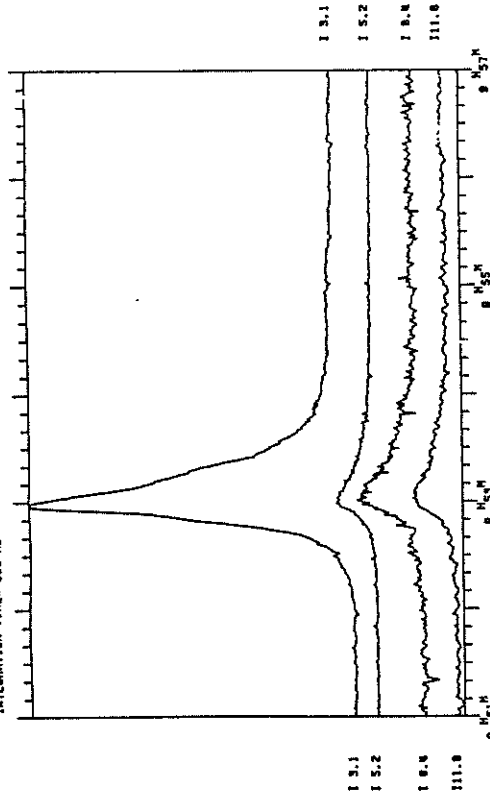
INSTITUTE OF APPLIED PHYSICS, UNIVERSITY OF BERN, SWITZERLAND
INTEGRATION TIME= 500 MS



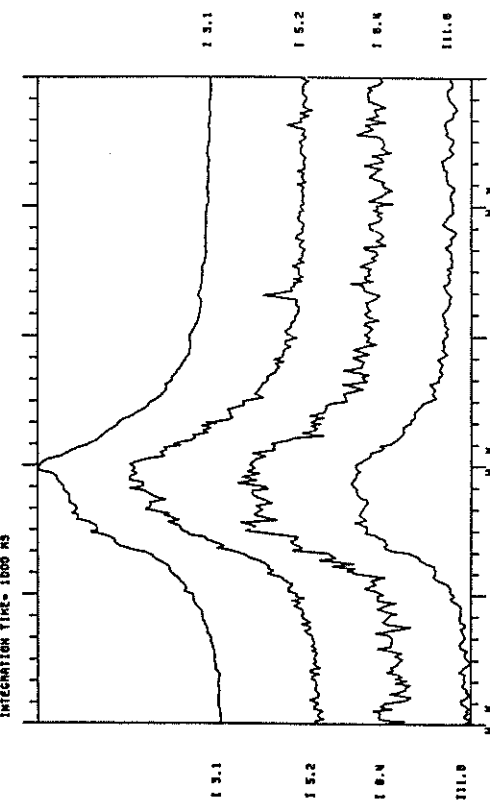
INSTITUTE OF APPLIED PHYSICS, UNIVERSITY OF BERN, SWITZERLAND
INTEGRATION TIME= 500 MS



INSTITUTE OF APPLIED PHYSICS, UNIVERSITY OF BERN, SWITZERLAND
INTEGRATION TIME= 500 MS



INSTITUTE OF APPLIED PHYSICS, UNIVERSITY OF BERN, SWITZERLAND
INTEGRATION TIME= 1000 MS

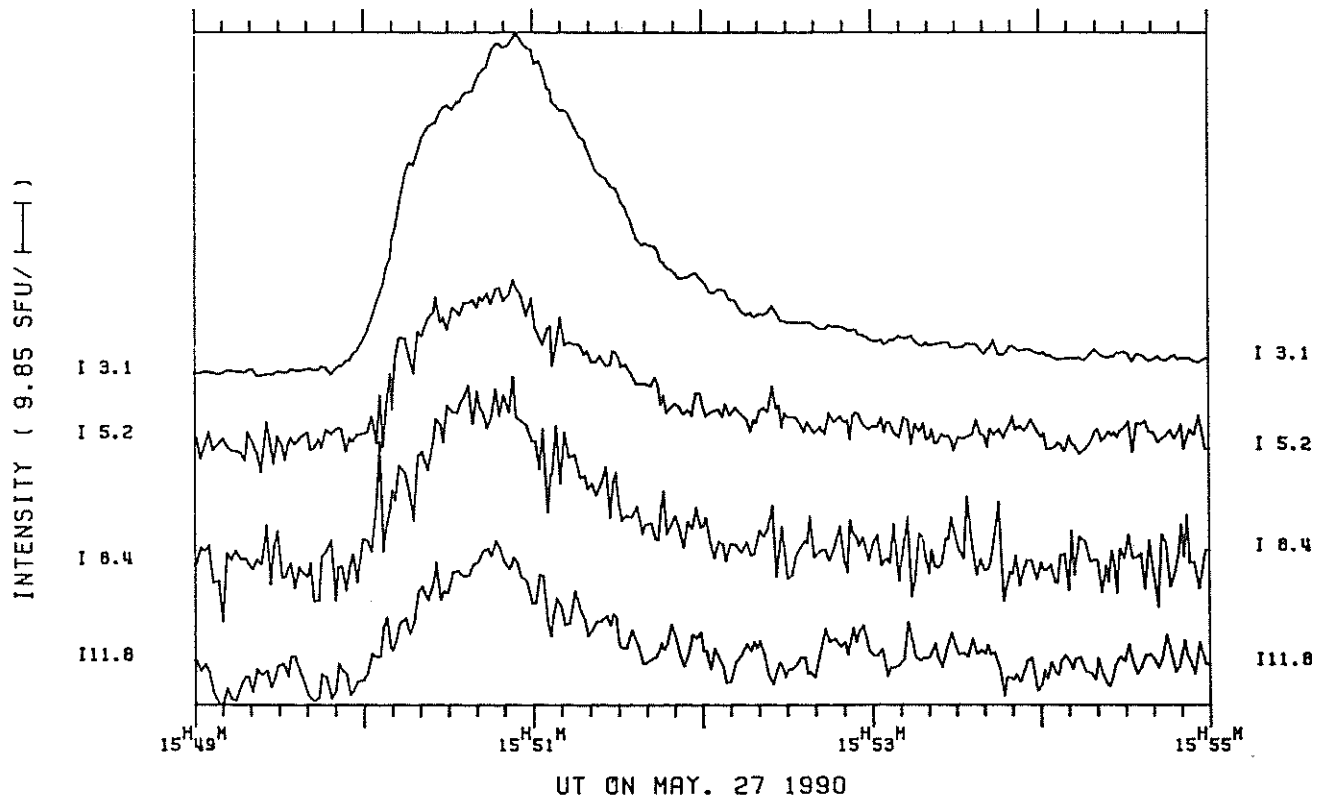


INTENSITY (74.53 SFU / |)

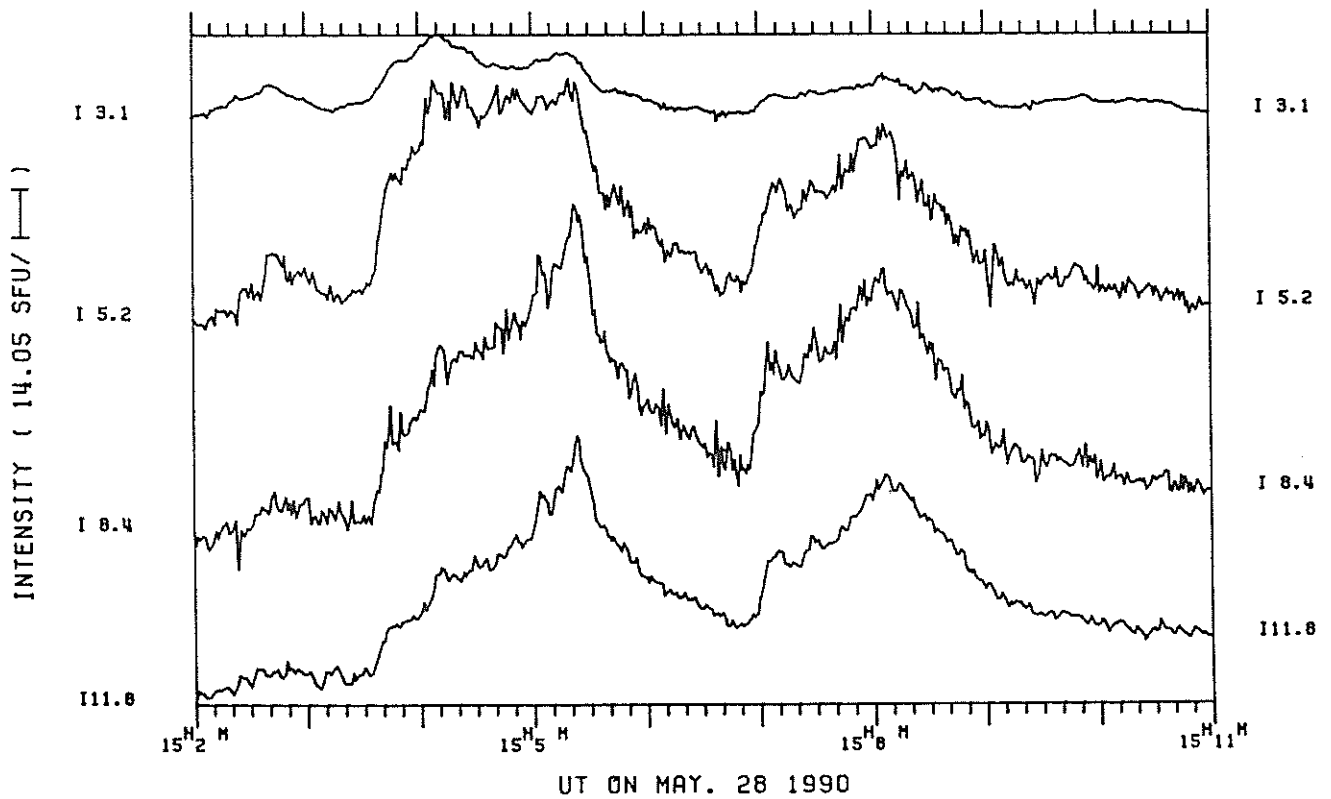
INTENSITY (10.99 SFU / |)

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May 90

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INTEGRATION TIME= 1000 MS

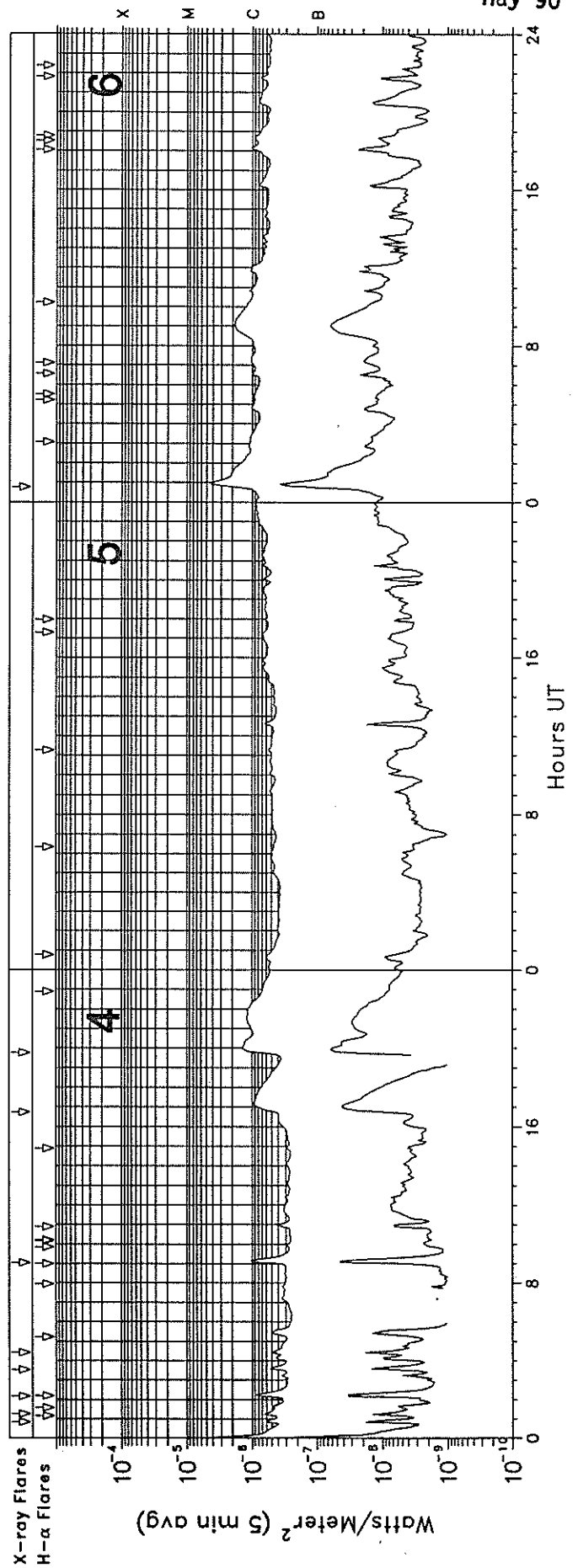
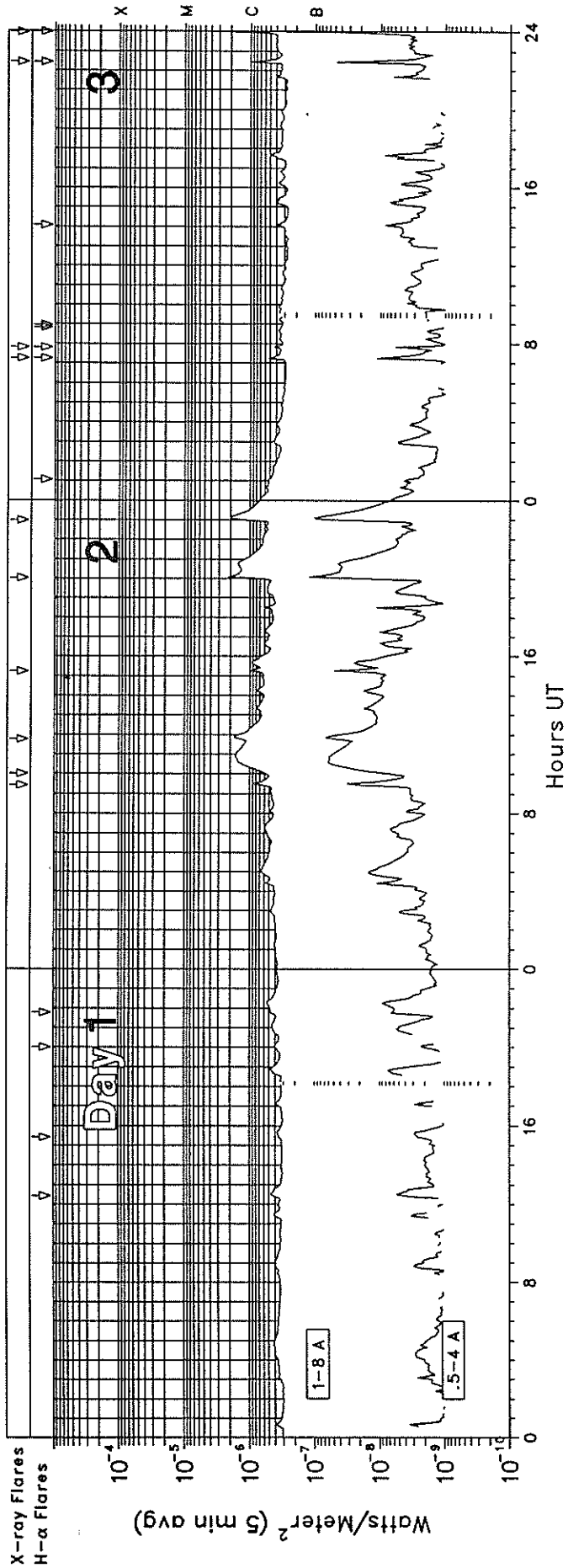


INSTITUTE OF APPLIED PHYSICS, UNIVERSITY OF BERN, SWITZERLAND
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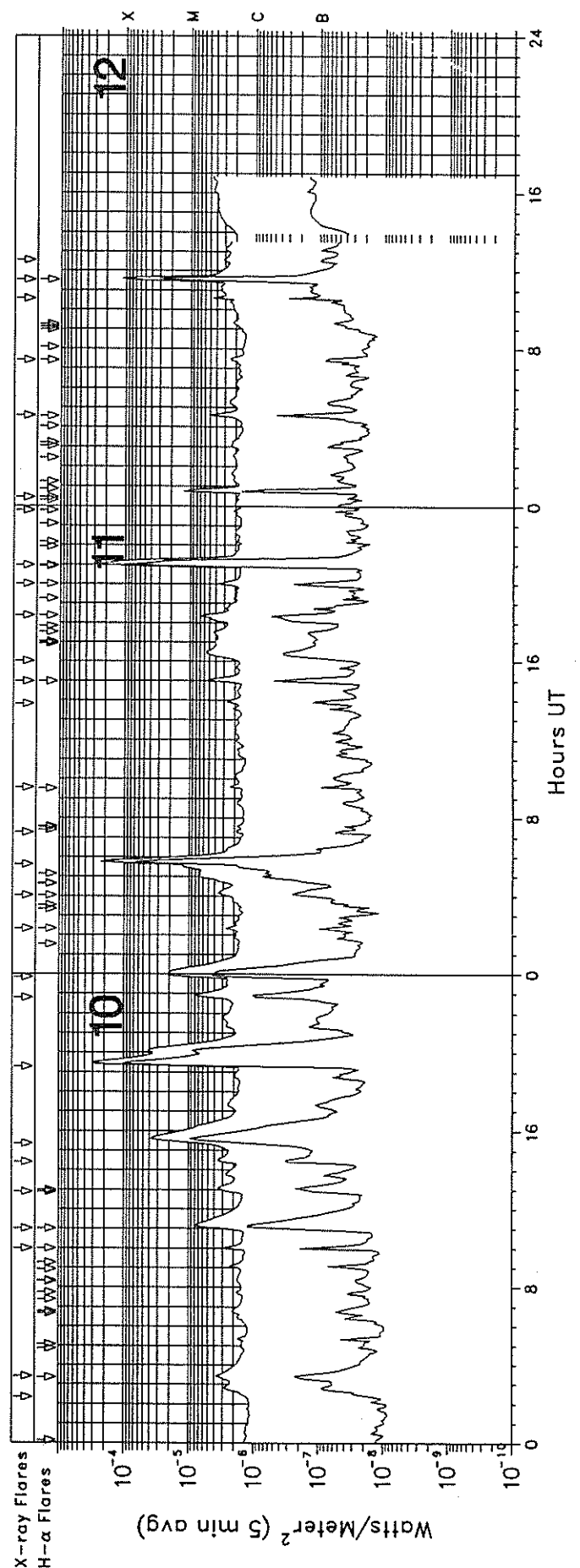
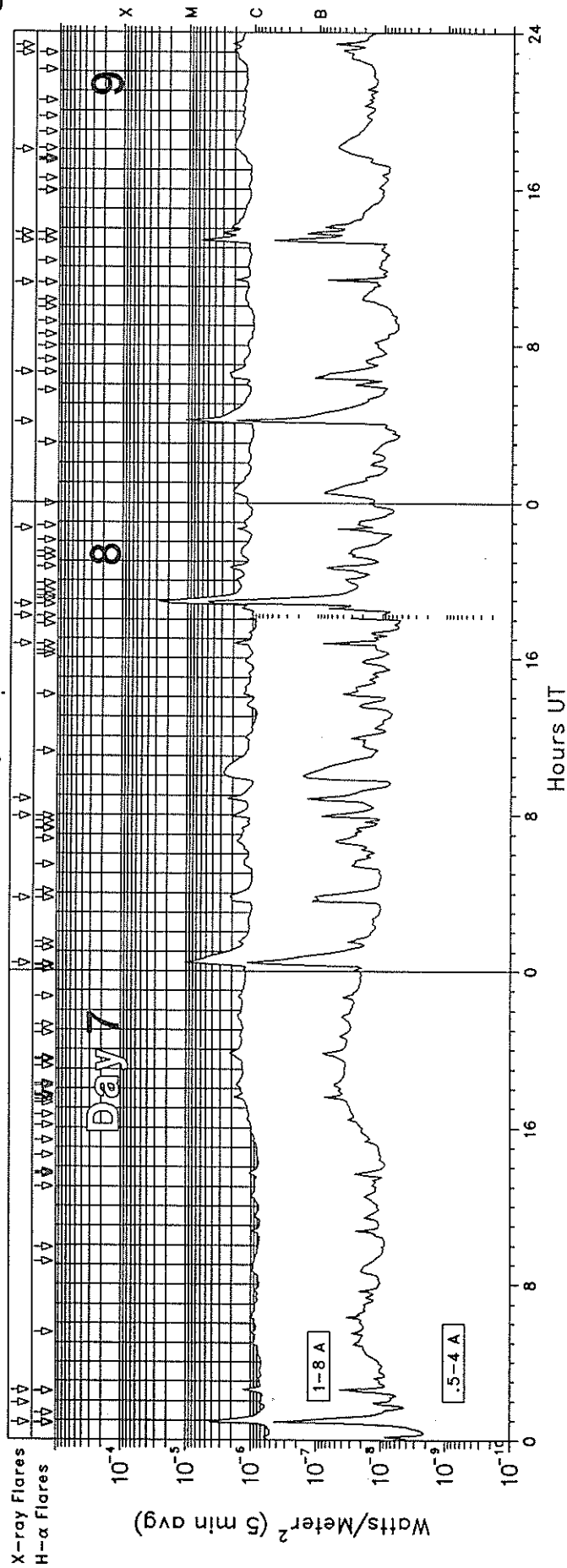
GOES-7 X-RAY DETECTOR

May 1990



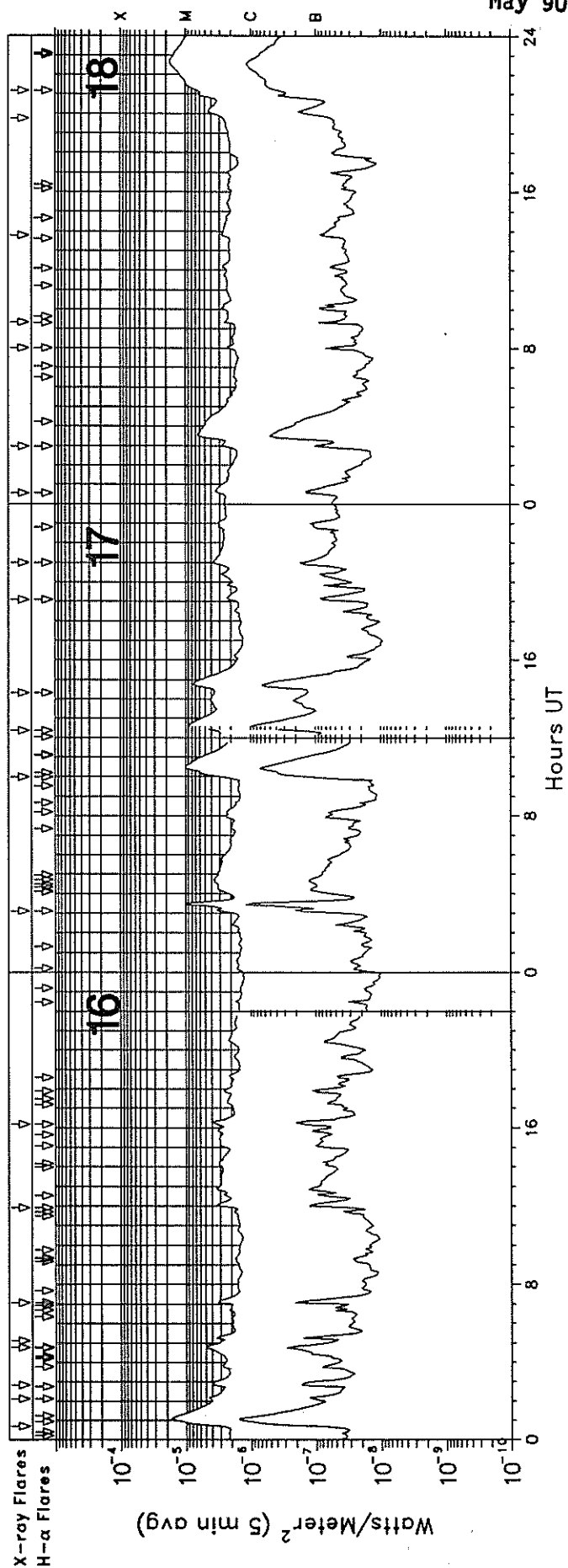
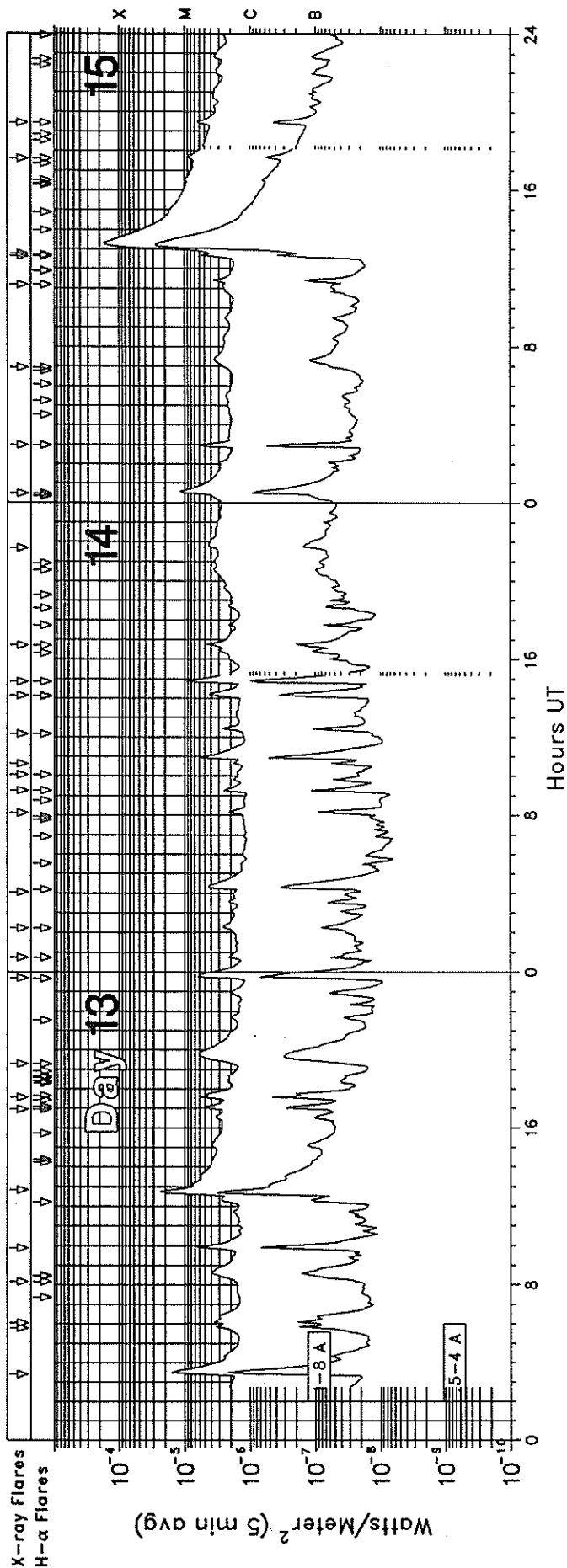
GOES-7 X-RAY DETECTOR

May 1990



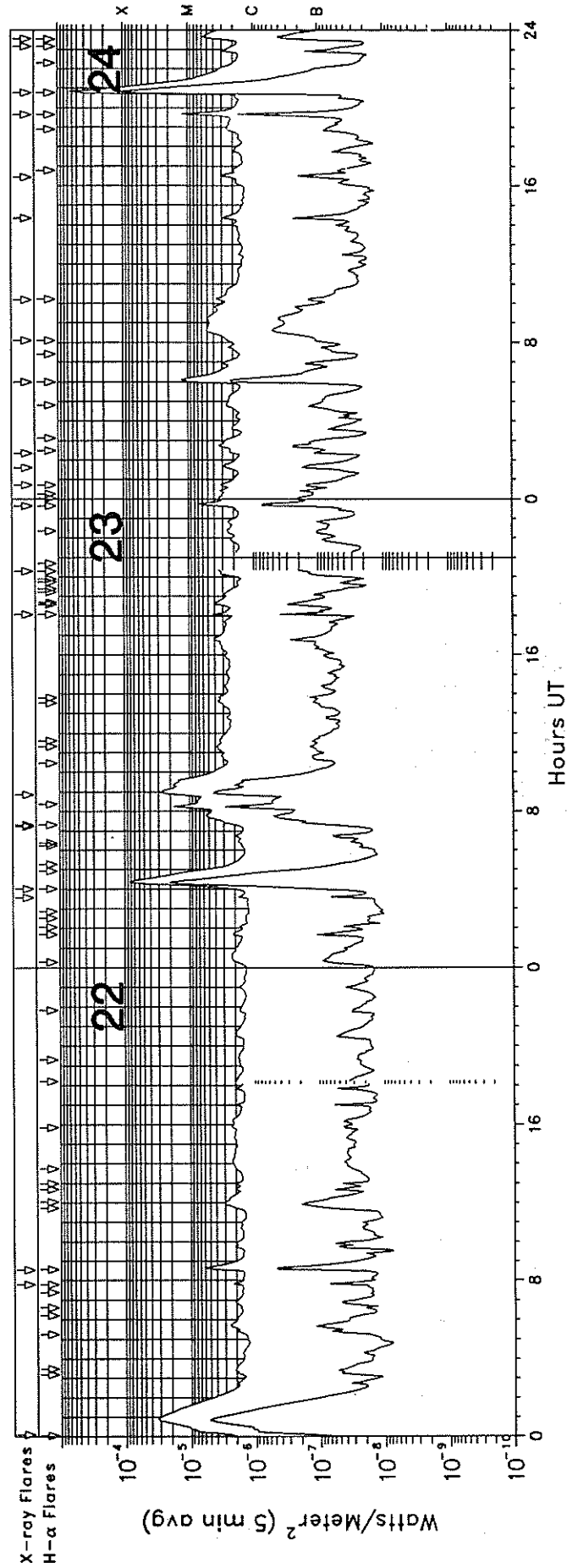
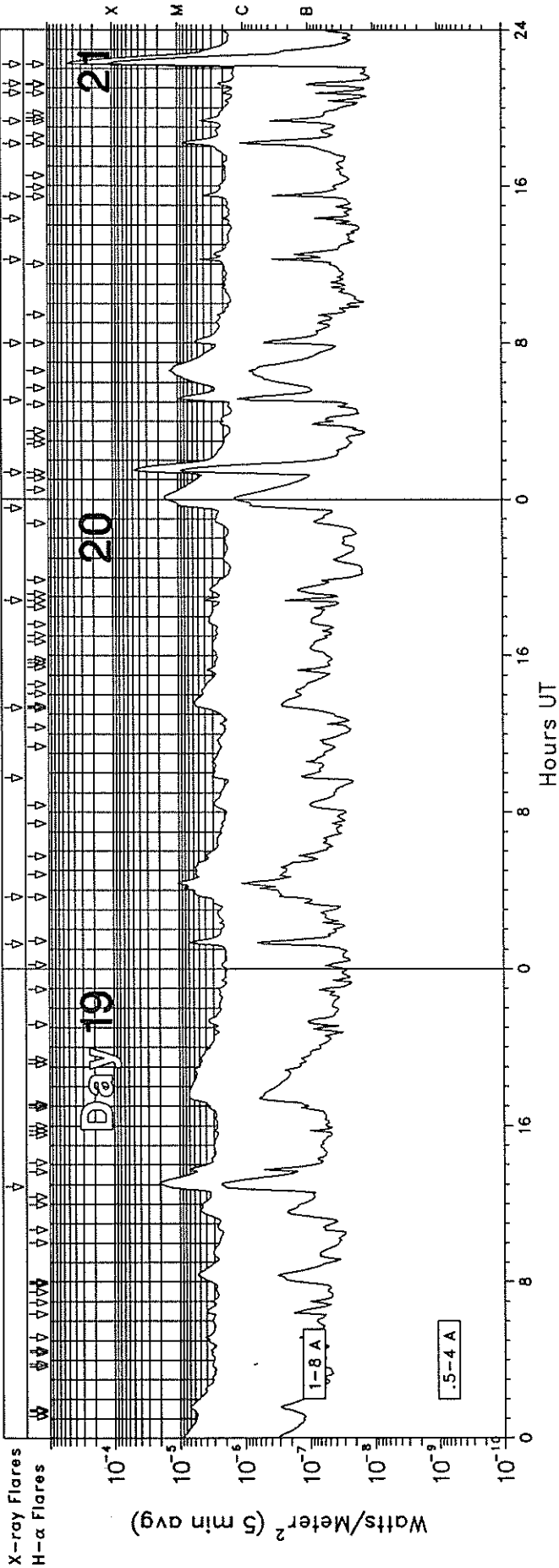
GOES-7 X-RAY DETECTOR

May 1990



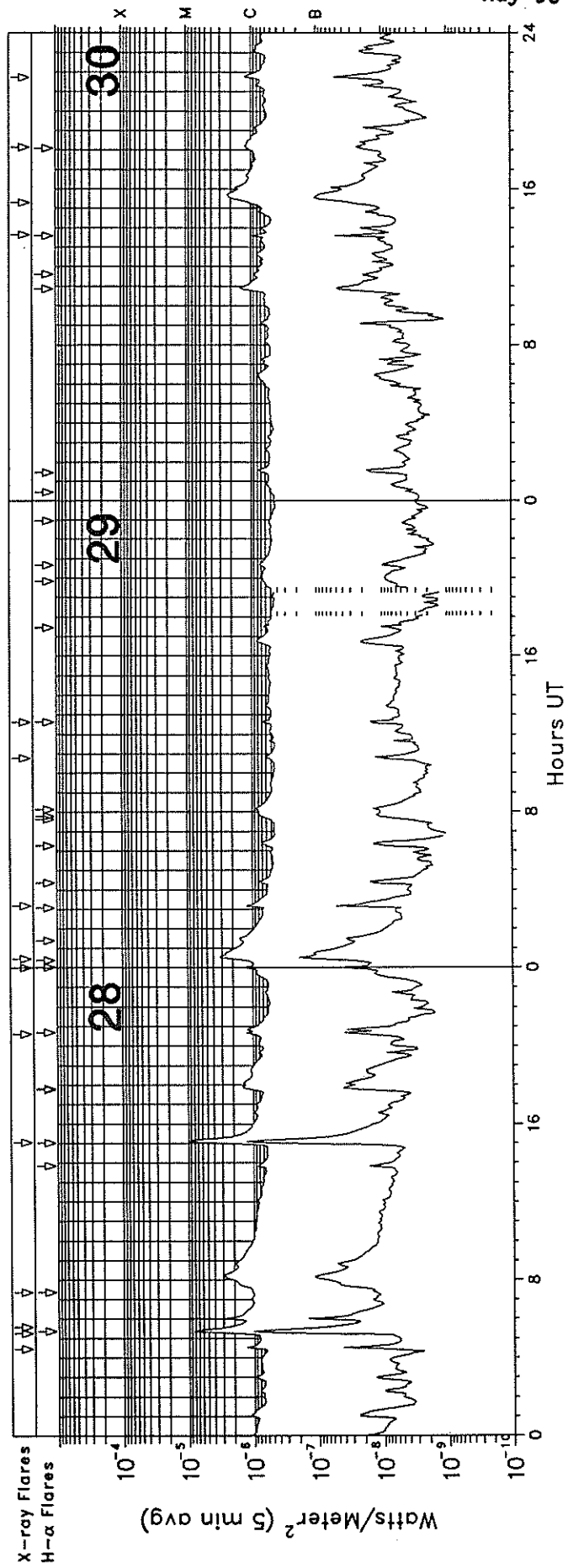
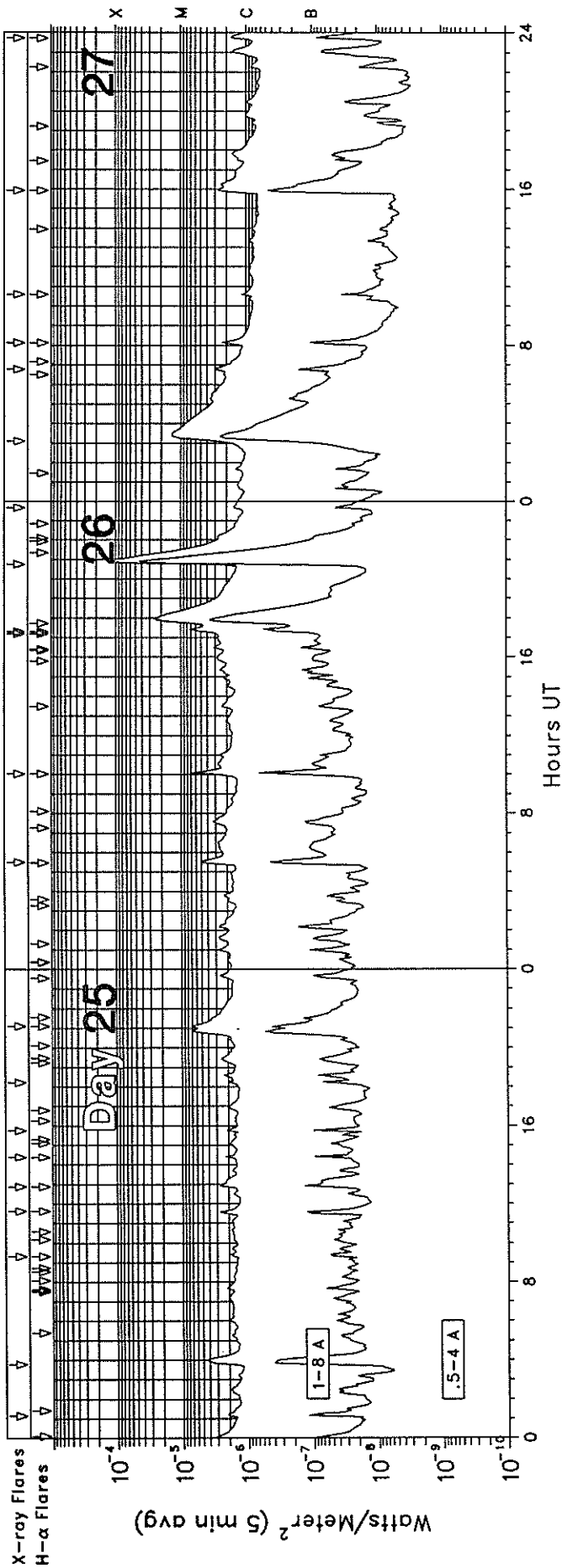
GOES-7 X-RAY DETECTOR

May 1990

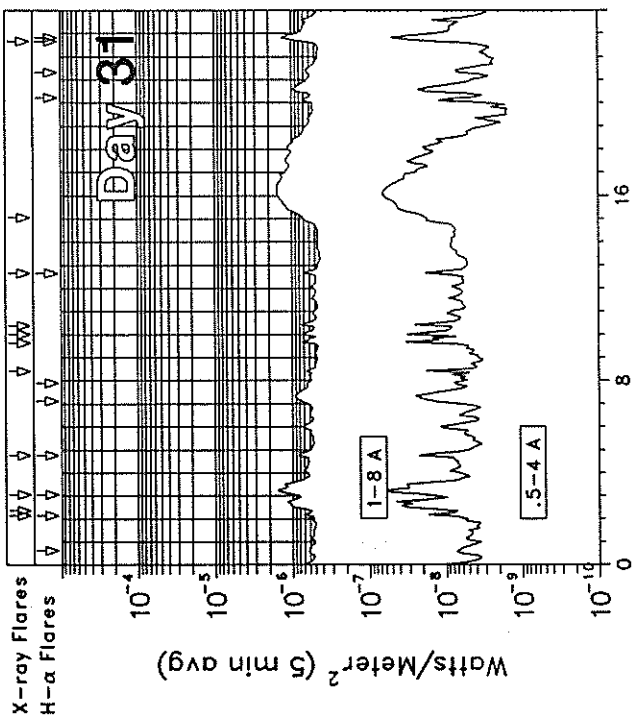


GOES-7 X-RAY DETECTOR

May 1990



GOES-7 X-RAY DETECTOR May 1990



GOES SOLAR X-RAY FLARES
 Preliminary Listing

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 May 90

May 1990

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
02	0926	0931	0936				B9.6	
02	1000	1052	1141				C1.7	
02	1145	1150	1205				C1.7	
02	1514	1519	1523				C1.0	
02	2002	2007	2023				C2.3	
02	2258	2311	2325				C2.0	
03	0714E	0717	0730D	S16	E50	SF	B5.7	6048
03	0749E	0751	0758D	N14	W58	SF	B5.2	6040
03	2225	2226	2242D	N14	E72	SF	C1.1	6049
03	2357	0003	0007				C6.2	
04	0050	0054	0059				B6.9	
04	0116E	0116	0122D	S10	W01	SF	B6.9	6046
04	0211E	0213	0219D	N16	E66	1F	C1.1	
04	0333	0337	0344				B5.7	
04	0425	0428	0431				B6.2	
04	0903	0906U	0928	N17	E67	SF	C1.3	6049
04	1645	1715	1820				B9.0	
04	1946	2003	2045				C1.4	
06	0046	0059	0114				C4.6	
07	0054	0055U	0104D	S06	W83	SF	C4.6	6051
07	0153	0156	0159				B8.3	
07	0232E	0237	0310D	N17	E22	SN	C1.4	6049
08	0022E	0024	0105D	S21	E69	1B	M1.1	6054
08	0344E	0346	0352D	N13	W81	SF	C2.3	6055
08	0755E	0757	0818D	N16	E11	SN	C2.0	6049
08	0848	0854	0859				C2.4	
08	1643E	1648	1721D	N14	E03	SB	C2.7	6049
08	1809E	1812	1820D	S13	E05	SF	C1.2	6050
08	1846E	1847	1906D	N15	E02	SF	M3.3	6049
08	2240	2243	2245				C1.9	
09	0404	0413	0418				M1.2	
09	0636E	0639	0656D	S15	W37	SF	C2.4	6048
09	1111E	1122	1137D	S18	E49	SF	C2.4	6054
09	1322E	1325	1413D	S21	E47	2B	C8.5	6054
09	1346E	1407	1449D	N15	W04	1N	C3.9	6049
09	1759	1808	1826				C2.0	
09	2256E	2306	2317D	S20	E40	SF	C2.2	6054
09	2318E	2325	2340D	N17	W13	SF	C2.3	
10	0220	0249	0301				C3.0	
10	0325E	0328	0336D	S11	W28	SN	C3.8	6052
10	1000	1003	1007				C4.2	
10	1101E	1115	1153D	S17	E37	SF	C8.0	6054
10	1253E	1306	1325D	S20	E29	SF	C3.6	6054
10	1425	1431	1446				C3.5	
10	1521	1539	1626				M3.9	
10	1918	1930	2028				X3.4	
10	2247	2256	2305				C8.7	
10	2350	2357	0032				M2.1	
11	0220E	0221	0226D	N25	E60	SF	C2.7	6060
11	0403E	0407	0419D	N18	E11	SF	C3.7	6061
11	0537	0548	0606				X2.4	
11	0716	0720	0724				C2.2	
11	0934	0938	0943				C2.6	
11	1349	1355	1403				C2.8	
11	1458E	1501	1521D	S21	E13	1B	C5.7	6054
11	1601	1630	1646				C6.7	
11	1822E	1822	1835D	N16	W28	SB	C8.9	6049
11	2000E	2001	2004D	N19	W28	SF	C3.6	6049

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
11	2058E	2100	2127D	N29	E86	2B	X3.6	6063
11	2346E	2348	2355	N18	W33	1N	C2.5	
12	0027E	0048	0128D	N19	W31	1B	M1.8	6049
12	0434E	0440	0454D	N32	E71	SF	C5.9	6063
12	0725E	0726	0732D	N32	E72	SF	C2.6	6063
12	1034	1037	1041				C5.2	
12	1132E	1137	1211D	N31	E74	2B	X1.2	6063
12	1232	1235	1237				C4.5	
13	0325	0333	0354				M1.7	
13	0548	0555	0558				C4.1	
13	0603	0607	0614				C3.7	
13	0810	0838	0858				C4.0	
13	0953	0957	1003				C7.0	
13	1250E	1254	1405D	S18	E72	1N	M2.4	6064
13	1657E	1703	1703D	N27	E52	SN	C5.4	6063
13	1735E	1737	1803D	S17	E74	SF	C6.6	6064
13	1918	1929U	2023D	S17	E66	SF	C6.2	6064
13	2342	2349	0001				C8.0	
14	0045E	0046	0059D	N30	E49	SF	C2.1	6063
14	0213E	0215	0229D	N25	E22	SF	C2.7	6060
14	0403	0419U	0434D	S15	E71	SF	C4.5	6064
14	0807	0811	0818				C2.2	
14	0916E	0918	0953D	N25	E16	SN	C3.0	6060
14	1004E	1058	1131D	S15	E62	SB	C6.5	6064
14	1038	1042	1046				C1.9	
14	1209E	1227	1238D	N32	E42	SF	C2.7	6063
14	1408E	1415	1434D	N29	E35	SF	C4.3	6062
14	1452E	1453	1526D	N30	E43	1N	M1.2	6063
14	1642E	1644	1707D	S17	E52	1N	C4.9	6064
14	2141	2152	2209				C4.4	
15	0029E	0032	0130	S18	E53	2B	M1.2	6064
15	0257E	0257	0307D	N32	E44	SN	C8.0	6063
15	0656E	0719	0737D	N37	E35	SF	C3.7	6063
15	1111E	1125	1143D	S17	E46	SN	C3.8	6064
15	1238E	1239U	1259D	S17	E45	SN	C6.0	6064
15	1246E	1310	1613D	N42	E38	3B	X1.7	6063
15	1736E	1745	1759D	S18	E43	SF	C9.6	6064
15	1925E	1929	1943D	S20	E40	SF	C7.4	6064
16	0043E	0102	0141D	N33	E24	2F	M1.7	6063
16	0207E	0210	0225D	S18	E37	SF	C4.9	6064
16	0251E	0252	0322D	S16	E36	SF	C4.0	6064
16	0446	0447U	0530	N21	W03	SF	C5.5	6060
16	0507E	0705	0827D	S14	E38	SN	C3.6	6064
16	0705E	0709	0729D	S17	E36	SF	C3.6	6064
16	1156E	1203	1247D	S20	W45	1N	C3.6	6054
16	1611E	1618	1635D	N32	E22	SN	C4.1	6063
17	0307E	0324	0344D	N31	E20	SN	M1.1	6063
17	0959E	1022	1123D	N31	W04	SF	M1.0	6062
17	1222E	1232	1325D	S14	E20	SF	C8.8	6064
17	1419E	1445	1531D	S16	E20	1F	C7.6	6064
17	1906E	1914	1930D	S16	E18	SF	C2.3	6064
17	2059E	2059	2115D	S12	E20	SF	C3.8	6064
18	0033E	0042	0106D	S16	E16	SF	C3.5	6064
18	0257E	0326	0407D	S12	E14	SF	C6.6	6064
18	0800E	0800	0837D	S15	E10	SF	C2.3	6064
18	0920E	0922	0944D	S15	E07	SF	C2.6	6064
18	1346E	1348	1352D	S11	E83	SF	C2.9	
18	1945	2005	2028				C4.6	
18	2110E	2310U	2358	N32	W13	1F	M1.7	6063

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May 90

GOES SOLAR X-RAY FLARES
Preliminary Listing

May 1990

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
19	1253	1301	1416D	S17	W09	2N	M2.0	6064
20	0115E	0118	0145	S16	W16	1N	C7.4	6064
20	0338E	0419	0536D	S16	W17	1N	M1.0	6064
20	0945	1036	1054				C3.3	
20	1320E	1336	1400D	N30	W53	SF	C5.7	6060
20	1850E	1851	1906D	S12	W29	SN	C4.5	6064
20	2332E	2355	0051D	N34	W42	2N	M1.6	6063
21	0122E	0125	0215D	N33	W30	1B	M4.8	6063
21	0505E	0509	0535D	S16	W29	1N	M1.0	6064
21	0758E	0802	0910D	S15	W33	SN	C5.6	6064
21	1213E	1215	1300D	S14	W38	SN	C5.2	6064
21	1418	1422	1425				C2.2	
21	1526E	1531	1611D	S14	W40	SF	C5.6	6064
21	1809E	1810	1823D	S15	W41	SF	C9.1	6064
21	1918E	1920	1939D	S14	W40	SF	C4.9	6064
21	2044E	2045	2102D	N36	W44	SF	C2.1	6063
21	2113E	2113	2119D	S16	W43	SF	C2.7	6064
21	2212E	2217	2339D	N35	W36	2B	X5.5	6063
22	0007E	0055	0219D	S16	W44	1F	M3.2	6064
22	0748E	0753	0825D	S14	W49	SF	C2.4	6064
22	0833	0837U	0912	S15	W41	SN	C6.4	6064
23	0334	0338	0342				C1.8	
23	0401E	0420	0535D	N33	W55	1B	M8.7	6063
23	0713	0748	0807				C5.8	
23	0718E	0817U	0922	S14	W60	1B	M2.0	6064
23	0851	0904	1000				M2.7	
23	1805E	1808	1820D	S15	W62	SF	C5.5	6064
23	2017E	2025	2037D	S13	W69	SF	C3.5	6064
23	2339E	2342	2359D	S15	W67	SF	C7.5	6064
24	0042E	0042	0050D	S14	W61	SF	C3.8	6064
24	0136	0140	0150				C3.0	
24	0220	0246	0306				C3.5	
24	0559E	0602	0635D	S14	W73	SF	M1.3	6064
24	0806E	0850	0929	N34	W71	SF	C1.0	6063
24	1011	1016	1021				C3.8	
24	1420	1423	1429				C3.1	
24	1626	1632	1639				C3.1	
24	1939E	1939	1956D	N32	W75	1F	M1.3	6063
24	2046E	2049	2145D	N33	W78	1B	X9.3	6063
24	2309E	2310	2316D	N21	E62	SF	C3.0	6077
24	2333E	2340	2348D	S10	W74	SF	C5.8	6064
25	0110	0115	0121				C2.3	
25	0347	0403	0413				C4.3	
25	0919E	0921	0937D	N21	E76	SF	C2.0	6077

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
25	1137E	1137	1153D	N20	E74	1F	C3.1	6077
25	1254E	1255	1258D	N18	E72	SF	C2.7	6077
25	1424E	1426	1431D	S13	W84	SF	C2.9	6064
25	1545	1549	1553				C2.5	
25	1813	1817	1820				C2.1	
25	2106	2106	2151D	S11	W17	1N	C8.0	6071
26	0529E	0530	0550D	N20	E62	SF	C5.4	6077
26	1002E	1005	1018D	N20	E58	1N	C7.4	6077
26	1712E	1716U	1744D	S16	W22	SF	C8.4	6071
26	1718E	1800	1838D	N17	E58	1B	M2.4	6077
26	2045	2058	2133				X1.4	
26	2340	2344	2353				C1.7	
27	0305	0333	0439				M1.3	
27	0646E	0646	0658D	N24	E58	SF	C3.4	6077
27	0807E	0810	0818D	N22	E53	SF	C2.6	6077
27	1036E	1037	1041D	N22	E53	SF	C1.3	6077
27	1555E	1616	1645D	N21	E49	SF	C2.9	6077
27	2343E	2348	0001D	N22	E46	SF	C1.9	6077
28	0428	0433	0438				C1.4	
28	0515	0521	0530				C9.7	
28	0534	0603	0618D	N23	E42	SF	C2.9	6077
28	0723E	0808U	0831	S15	W44	SF	C3.0	6071
28	1504E	1508U	1536D	N18	E33	SN	M1.1	6077
28	2038	2042	2046				C1.3	
29	0000	0001U	0004D	N20	E26	SF	C2.0	6077
29	0027	0034	0051				C3.3	
29	0311E	0312	0339D	N19	E27	SF	C2.0	6077
29	1047	1051	1053				B7.2	
29	1238	1238U	1249D	N21	E23	SF	B9.7	6077
30	1339E	1341	1346D	N20	E07	SF	C1.1	6077
30	1518	1542	1605				C2.2	
30	1809E	1813	1836D	S16	E58	SF	C1.2	6084
30	2143	2149	2156				C1.2	
31	0209E	0211	0220D	S10	W18	SF	B7.2	6078
31	0222	0247	0254				C1.3	
31	0303E	0309	0319D	N20	W00	SF	C1.7	6077
31	0446E	0440	0500D	S12	W18	SF	B9.4	6078
31	0825	0828	0831				B7.4	
31	0939	0943	0947				B8.2	
31	1001	1005	1009				B9.0	
31	1024	1029	1033				B8.3	
31	1240E	1241	1251D	N21	W05	SF	B7.4	6077
31	1503	1609	1712				C1.6	
31	2240E	2253	2316D	N21	W10	SF	C1.4	6077

Preliminary GOES Satellite Data
Daily Average X-ray Background
Jun 1989 - May 1990

Day	1989					1990							
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	
1	B8.2	B9.2	C1.0	C3.9	C1.3	C1.2	C1.6	C1.4	B9.5	C1.1	B7.4	B3.1	
2	C1.5	B9.4	B9.2	C2.5	C1.5	C1.4	C1.2	C1.1	B7.8	C1.1	B5.2	B4.2	
3	C1.4	C1.1	C1.0	C1.9	C1.6	C1.2	C1.1	C1.1	B8.9	C1.0	B7.8	B2.8	
4	C1.6	C1.1	C1.1	C1.9	C1.6	C1.3	C1.5	C1.1	B7.8	B9.1	B6.9	B2.7	
5	C1.5	B8.7	C1.8	C1.7	C1.3	C1.3	C1.1	C1.0	B7.7	B7.0	B6.1	B4.4	
6	C1.9	B8.2	C1.5	C2.3	C1.2	C1.7	C1.0	C1.0	C1.1	B7.5	B5.4	B5.7	
7	C1.9	B7.2	C1.5	C2.1	C1.2	C1.9	C1.5	---	B7.5	B7.4	B4.6	B7.7	
8	C3.0	B7.2	C1.1	C2.5	C1.0	C2.5	C1.4	B7.3	B6.1	B6.7	B4.6	B9.8	
9	C3.0	B7.0	C1.1	C2.3	C1.3	C2.9	C1.2	B6.2	B5.7	B5.4	B4.8	C1.0	
10	C2.5	B6.5	C1.4	C2.7	C1.0	C2.3	B8.9	B6.9	B5.2	B5.9	B6.1	C1.4	
11	C2.1	B6.8	C1.7	C2.3	C1.0	C1.7	B8.1	B7.3	B4.6	B8.5	C1.0	C1.5	
12	C2.0	B6.2	C2.7	C3.8	---	C1.7	B7.2	B7.5	B4.3	B5.8	C1.2	---	
13	C2.3	B7.7	C2.0	C2.3	C2.7	C1.5	B7.3	B7.5	B4.0	B7.1	---	C1.5	
14	C2.7	B7.0	C2.7	C1.9	C1.4	C1.8	B7.4	B6.7	B4.1	B8.8	C1.6	C1.3	
15	C3.3	B7.4	C4.3	C1.7	C1.4	C2.2	B6.3	B9.5	B4.2	C1.0	C1.6	C1.9	
16	C4.1	B7.1	C7.9	C1.9	C1.1	C1.7	B6.2	C1.0	B4.0	C1.2	C1.3	C1.4	
17	C2.7	B6.8	C3.5	C1.1	C1.2	C1.6	B6.8	C1.1	B5.9	B9.3	C1.2	C1.4	
18	C2.5	B7.8	C1.3	C1.1	C2.0	C1.6	B8.8	C1.2	B8.2	C1.3	C1.7	C1.6	
19	C2.5	B7.6	C1.0	C1.4	C3.2	C1.8	C1.1	C1.6	C1.2	C1.6	C1.3	C2.4	
20	C2.3	B7.0	C1.1	B8.9	C1.7	C1.4	B9.6	C1.9	C1.1	C1.1	C1.6	C1.8	
21	C3.4	B8.6	C1.0	B8.3	C1.6	C1.5	C1.2	C1.9	C1.2	C1.3	C1.4	C1.6	
22	C2.0	B7.6	C1.0	B8.9	---	C1.6	C1.5	C1.8	C1.0	C1.9	C1.1	C1.4	
23	C1.7	B7.4	C1.5	B8.6	C2.4	C1.3	C1.2	C1.4	C1.1	C1.4	C1.1	C1.6	
24	C1.1	B9.2	C1.5	B8.7	C1.8	C1.1	C1.4	C1.5	C1.0	C1.4	C1.0	C1.3	
25	B8.3	B9.2	C1.0	C1.1	---	C1.2	C2.2	C1.2	B9.8	C1.1	C1.1	C1.5	
26	B9.8	C1.0	B9.3	C1.5	C1.1	C1.3	C2.7	C1.4	B9.5	C1.7	C1.3	C1.4	
27	C1.0	B9.5	B9.8	C1.6	C1.4	C1.3	C2.7	C1.0	C1.2	C1.6	C1.0	B6.8	
28	C1.1	B8.8	B1.7	C1.8	C1.3	C1.1	C2.6	C1.0	C1.6	C1.8	B5.7	B6.4	
29	C1.2	C1.1	C2.7	C2.4	C1.4	C1.2	C2.7	C1.2		C1.3	B3.8	B4.7	
30	C1.1	C1.0	C1.5	C1.3	C1.4	C1.8	C2.5	C1.1		C1.2	B3.4	B5.5	
31		C1.0	C1.6		C1.6		C1.8	C1.0		C1.0		B4.5	

MASS EJECTIONS FROM THE SUN

MAY 1990

Site	Mo	Day	Observed UT			Location		Freq or Wavelength	Kind of Event
			Start	Max	End	RA*	R/Ro		
SGMR	May	02	1815.0		1819.0			Meter	II
PALE	May	02	1816.0		1818.0			Meter	II
WROC	May	05	0720		0930	300	0.07	H-alpha	S
WROC	May	08	0645		0651	066	0.08	H-alpha	Q
PALE	May	08	1857.0		1904.0			Meter	II
SGMR	May	08	1857.0		1905.0			Meter	II
CULG	May	08	2043					Meter	IV Continuum
CULG	May	09	0400 E		0400			Meter	IV Continuum
WROC	May	09	0839		0852	110	0.07	H-alpha	S
PALE	May	10	1930.0		1934.0			Meter	II
SGMR	May	10	1931.0		1934.0			Meter	II
PALE	May	11	2058.0		2113.0			Meter	IV
SGMR	May	11	2059.0		2119.0			Meter	IV
CULG	May	12	0049		0050.5			Meter	II
POTS	May	12	1128.8		1135.5			40- 90 MHz	IV
WEIS	May	12	1135.0		1150.0			80- 30 MHz	II Herringbone
POTS	May	12	1145.0		1149.7			40- 75 MHz	II
POTS	May	15	0904.3E		0905.9			110-170 MHz	II?
POTS	May	15	1304.8		1321 U			40-170 MHz	IV,II
WEIS	May	15	1304.9		1314.3			110- 30 MHz	II Herringbone
SVTO	May	15	1305.0		1305.0			Meter	II
SGMR	May	15	1305.0		1343.0			Meter	IV
WEIS	May	15	1312.8		1328.5			86- 30 MHz	II Herringbone
CULG	May	21	0128		0133			Meter	II
PALE	May	21	0129.0		0140.0			Meter	II
CULG	May	21	0133		0155			Meter	IV
PALE	May	21	0140.0		0315.0			Meter	IV
LEAR	May	21	0141.0		0830.0			Meter	IV
CULG	May	21	0155		0410			Meter	IV
WROC	May	21	0926		1023	312	0.17	H-alpha	Q
WROC	May	21	1119		1345	315	0.15	H-alpha	S,A
SGMR	May	21	2212.0		2240.0			Meter	IV
PALE	May	21	2214.0		2443.0			Meter	IV
CULG	May	21	2225		2310			Meter	IV
LEAR	May	21	2308.0		0830.0			Meter	IV
CULG	May	21	2310		2355			Meter	IV
LEAR	May	23	0407.0		0930.0			Meter	IV
CULG	May	23	0414		0421.5			Meter	II Herringbone
CULG	May	23	0426		0435			Meter	IV
CULG	May	23	0426.5		0431			Meter	II
CULG	May	23	0435		0510			Meter	IV
SVTO	May	23	0443.0		0944.0			Meter	IV
CULG	May	23	0510		0520			Meter	IV
CULG	May	24	2048		2120			Meter	IV
SGMR	May	24	2048.0		2110.0			Meter	IV
PALE	May	24	2048.0		2159.0			Meter	IV
CULG	May	24	2100		2107			Meter	II
SGMR	May	26	2048.0		2113.0			Meter	IV
PALE	May	26	2048.0		2114.0			Meter	IV
CULG	May	26	2056		2230			Meter	IV
CULG	May	27	0058 E		0058			Meter	IV
LEAR	May	28	0428.0		0457.0			Meter	IV
PALE	May	28	0430.0		0447.0			Meter	IV
WEIS	May	28	0430.3		0448.0			350- 30 MHz	II Herringbone
SVTO	May	28	0432.0		0442.0			Meter	IV
CULG	May	28	0448.5		0452			Meter	II

MASS EJECTIONS FROM THE SUN
MAY 1989

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May 90

Site	Mo	Day	— Observed UT —			Location		Freq or Wavelength	Kind of Event
			Start	Max	End	RA*	R/Ro		
SVTO	May	29	[1250.0		1312.0		Meter	II
WEIS	May	29		1250.3		1251.2		148- 57 MHz	II Herringbone
SGMR	May	29		1304.0		1313.0		Meter	II
WEIS	May	29		1309.0		1312.3		40- 30 MHz	II
SVTO	May	29		1312.0		1351.0		Meter	IV
CULG	May	31	[0242		0300		Meter, dekameter	II
PALE	May	31		0247.0		0304.0		Meter	II
LEAR	May	31		0248.0		0307.0		Meter	II

QUALIFIERS ON START, MAX AND END TIMES

- D = event ended after tabulated time
- E = event began before the tabulated time
- U = uncertain time

TYPE OF EVENT

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

REPORTING STATIONS

- CULG = Culgoora
- LEAR = Learmonth
- PALE = Palehua
- POTS = Potsdam
- SGMR = Sagamore Hill
- SVTO = San Vito
- WEIS = Weissenau
- WROC = Wroclaw

ACTIVE PROMINENCES AND FILAMENTS

MAY 1990

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
01	ASR	0405E	0432D	N22	W90	04	24.3	1		9	9	E	PALE	6033	
01	ADF	0635E	1709D	N25	W88	04	24.5	2	39	9	9	E	SVTO	6037	
01	APR	0820E	0840	N38	E90	05	8.6	1				V	KHAR		
01	SSB	0828			W03	05	7.8			0	0	E	SVTO		
01	ADF	0928E	0940D	N24	W57	04	27.1	1				V	KHAR		
01	ADF	1020E	1035	N24	W57	04	27.1	1				V	KHAR		
01	SSB	1046		316	W33	04	30.2			0	0	E	SVTO		
01	ADF	1058	1110E	N24	W57	04	27.1	1				V	KHAR		
01	DSD	1205E	2029D	N19	E21	05	3.1		04	9	9	E	RAMY	6045	
01	DSD	1210E	2029D	S08	W40	04	28.6		04	9	9	E	RAMY	6039	
01	ADF	1213E	2029D	N29	W49	04	27.8	1	07	9	9	E	RAMY		
01	SSB	1230		286	W05	05	7.9			0	0	E	RAMY		303 W22 316 W34
01	AFS	1307E	1609D	S03	E09	05	2.2		01	7	7	E	RAMY		
01	ADF	1626E	0050D	N26	W70	04	26.3	1	07	9	9	E	HOLL	6037	
01	ADF	1626E	2143D	N14	W28	04	29.7	1	02	6	6	E	HOLL	6040	
01	AFS	1631E	2145D	N19	E20	05	3.2		02	6	6	E	HOLL	6045	
01	AFS	1631E	2145D	S10	E31	05	4.0		02	6	6	E	HOLL	6046	
01	SSB	1633		287	W07	05	8.2			0	0	E	HOLL		319 W29
02	ASR	0133E	0515D	S13	E90	05	8.8			9	9	E	LEAR		
02	ADF	0217E	0440D	N24	W71	04	26.7		06	9	9	E	PALE	6037	
02	ASR	0217E	0440D	N25	W90	04	25.2			8	9	E	PALE	6038	
02	AFS	0217E	0440D	S11	E29	05	4.3		04	9	9	E	PALE	6046	
02	DSD	0217E	0440D	S15	E60	05	6.6		04	9	9	E	PALE	6048	
02	ASR	0406E	0943D	S20	W90	04	25.4			9	9	E	LEAR	6042	
02	APR	0420E	0943D	S27	W90	04	25.3	2		4	7	E	LEAR	6042	
02	ASR	0515E	0943D	N15	E90	05	9.0			9	9	E	LEAR		
02	BSL	0528	0541	N16	E90	05	9.0			9	9	E	LEAR		
02	APR	0555E	0723D	N28	E90	05	9.3	2		9	9	E	SVTO		
02	ASR	0555E	1711D	N17	E90	05	9.1			9	9	E	SVTO		
02	SSB	0740		318	W47	04	30.8			0	0	E	SVTO		
02	ASR	1059E	2223D	N15	E90	05	9.3			9	9	E	RAMY	6049	
02	DSD	1103E	2223D	S13	E52	05	6.4		05	9	9	E	RAMY	6048	
02	ADF	1116E	2223D	N26	W71	04	27.0	1	17	9	9	E	RAMY	6037	
02	ASR	1121E	1711D	S12	E90	05	9.2			9	9	E	SVTO		
02	ASR	1124E	1341D	S14	E90	05	9.3			9	9	E	RAMY		
02	ADF	1125E	1711D	N24	W71	04	27.1	1	16	9	9	E	SVTO	6037	
02	SSB	1130		286	W17	05	9.0			0	0	E	RAMY		304 W34 315 W46
02	ASR	1137E	1341D	S22	W90	04	25.7			9	9	E	RAMY	6038	
02	DSD	1208E	1325D	S16	E55	05	6.7		08	9	9	E	RAMY	6948	
02	DSD	1317E	1725D	S10	W80	04	26.6		02	9	9	E	RAMY	6043	
02	ASR	1414E	2132D	N17	W90	04	25.8			9	9	E	HOLL		
02	ADF	1920E	2042D	N19	W43	04	29.6	1	07	9	9	E	PALE	6040	
02	DSD	2056E	2057D	N27	W64	04	28.0		03	9	9	E	PALE	6037	
02	APR	2132E	2152D	N20	E90	05	9.8	1		8	9	E	HOLL		
02	ASR	2151E	2152D	S07	W90	04	26.3			4	6	E	HOLL	6034	
02	ASR	2322E	0930D	N15	E80	05	9.0			9	9	E	LEAR	6049	
02	AFS	2323E	0930D	S14	E50	05	6.7		02	9	9	E	LEAR	6048	
03	SSB	0508		286	W26	05	9.9			0	0	E	SVTO		318 W58
03	ADF	0509E	1230D	S13	E47	05	6.8	2	05	9	9	E	SVTO	6048	
03	ASR	0510E	1730D	N18	E90	05	10.1			9	9	E	SVTO	6049	
03	APR	0511E	1730D	N24	W88	04	26.5	2		9	9	E	SVTO	6037	
03	APR	0512E	1730D	N24	E90	05	10.2	2		8	8	E	SVTO	6049	
03	ASR	0716E	0854D	S11	W90	04	26.6			9	9	E	SVTO	6034	
03	DSD	0718	1225D	S14	E48	05	6.9		05	9	9	E	SVTO	6048	Flare Associated
03	ASR	0720E	0930D	S10	W90	04	26.6			4	5	E	LEAR	6043	
03	BSD	0750E	0815D	N15	W59	04	28.9		04	5	7	E	LEAR	6040	
03	DSD	0750E	0815D	N15	W59	04	28.9		04	5	5	E	LEAR	6040	
03	DSD	0755E	0825D	N14	W59	04	29.0		11	9	9	E	SVTO	6040	Flare Associated
03	BSL	0850E	0900	N20	E90	05	10.2	1				V	KHAR		
03	ADF	0855E	0930D	N11	W16	05	2.2	1				V	KHAR		
03	BSL	0922E	0930D	N20	E90	05	10.3	1				V	KHAR		
03	AFS	1240E	1550D	N13	W58	04	29.2		02	9	9	E	SVTO	6040	
03	SSB	1244		255	W00	05	7.6			0	0	E	RAMY		284 W29 304 W49
03	SSB	1244		313	W58	05	2.4			0	0	E	RAMY		
03	DSD	1254E	1834D	N16	E73	05	9.1		03	9	9	E	RAMY	6049	
03	ADF	1254E	1834D	N22	W49	04	29.9	1	09	9	9	E	RAMY	6040	
03	ADF	1308E	1829D	S06	W62	04	29.0	1	03	9	9	E	RAMY	6039	
03	DSD	1450E	1834D	S15	E77	05	9.4		03	9	9	E	RAMY		

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
03	APR	1450E	1834D	S20	E90	05	10.5	2		9	9	E	RAMY	6049	
03	ADF	1516E	1833D	S15	E44	05	7.0	1	03	9	9	E	RAMY	6048	
03	ASR	1733E	0027D	S09	W90	04	27.1			8	7	E	PALE	6034	
03	ADF	1733E	0439D	N19	E13	05	4.7		04	7	9	E	PALE		
03	ASR	1733E	0439D	N25	W90	04	26.8			9	9	E	PALE	6037	
03	DSD	1733E	0439D	S13	E81	05	9.8		02	9	9	E	PALE		
03	AFS	1733E	0439D	S15	E43	05	7.0		03	6	9	E	PALE	6048	
03	DSD	1750E	1834D	S10	E03	05	4.0		03	9	9	E	RAMY	6046	
03	ADF	1801E	2023D	N14	W61	04	29.2	1	05	9	9	E	HOLL	6040	
03	SSB	2017		255	W04	05	7.9			0	0	E	HOLL		285 W34 304 W53
03	SSB	2017		321	W70	05	1.9			0	0	E	HOLL		
03	APR	2033E	2332D	S08	W90	04	27.2	1		6	7	E	HOLL	6034	
03	ADF	2149E	0019D	N23	W56	04	29.7	1	11	9	9	E	HOLL	6040	
03	ASR	2225E	0127D	N30	W76	04	28.0			9	9	E	HOLL	6037	
04	DSD	0001	0059D	N14	E71	05	9.4		09	9	9	E	HOLL	6049	Flare Associated
04	APR	0110E	0944D	N26	W90	04	27.1	2		3	5	E	LEAR		
04	AFS	0630E	1706D	S10	W53	04	30.3		02	9	9	E	SVTO		
04	SSB	0635		285	W40	05	11.2			0	0	E	SVTO		
04	AFS	0740E	1706D	N19	E67	05	9.4		02	9	9	E	SVTO	6049	
04	ADF	0800E	0810D	N22	E70	05	9.7	1				V	KHAR		
04	DSD	1135E	2201D	N14	E55	05	8.6		04	9	9	E	RAMY	6049	
04	AFS	1135E	2210D	N16	E62	05	9.2		03	9	9	E	RAMY	6049	
04	AFS	1135E	2210D	S09	W56	04	30.3		02	9	9	E	RAMY		
04	ADF	1135E	2210D	S11	E68	05	9.6	1	06	9	9	E	RAMY		
04	DSD	1135E	2210D	S13	E51	05	8.3		03	9	9	E	RAMY		
04	AFS	1135E	2210D	S14	E50	05	8.3		03	9	9	E	RAMY		
04	DSD	1239E	0100D	N13	E56	05	8.7		05	9	9	E	HOLL	6049	
04	AFS	1241E	0100D	S15	E65	05	9.4		02	9	9	E	HOLL		
04	APR	1244E	0100D	S15	E50	05	8.3	1		9	9	E	HOLL		
04	APR	1244E	2223D	N26	W90	04	27.6	1		9	9	E	HOLL		
04	SSB	1245		256	W14	05	8.8			0	0	E	HOLL		286 W44
04	AFS	1247E	0100D	S08	W56	04	30.3		02	9	9	E	HOLL		
04	SSB	1310		255	W13	05	8.7			0	0	E	RAMY		285 W43 313 W71
04	SDF	1311E	1332D	S31	W17	05	3.2	3	22	0	0	E	RAMY		
04	AFS	1350E	1706D	S11	E50	05	8.3		02	8	9	E	SVTO		
04	AFS	2301E	0100D	N14	W35	05	2.3		02	9	9	E	HOLL		
05	APR	0115E	0935D	N69	E62	05	10.7	1		9	9	E	LEAR		
05	AFS	0130E	0935D	S12	E60	05	9.6		02	9	9	E	LEAR	6959	
05	AFS	0133E	0935D	S07	W63	04	30.3		01	9	9	E	LEAR	6051	
05	ADF	0145E	0935D	N17	E60	05	9.6		04	9	9	E	LEAR	6049	
05	AFS	0146E	0935D	N17	E59	05	9.5		02	9	9	E	LEAR	6049	
05	SDF	0302E	0301D	S21	W20	05	3.6		04	0	0	E	LEAR		
05	AFS	0410E	0446D	N18	E51	05	9.0		02	9	9	E	PALE	6049	
05	AFS	0625E	1719D	S12	E40	05	8.3		02	8	9	E	SVTO	6052	
05	ASR	0725E	1630D	S12	W90	04	28.6			7	8	E	SVTO	6039	
05	APR	0730E	0826D	N40	W90	04	28.1	1				V	KHAR		
05	APR	0900E	1719D	N30	W90	04	28.4	2		9	9	E	SVTO		
05	AFS	1038E	2058D	S13	E38	05	8.3		02	9	9	E	RAMY	6052	
05	AFS	1041E	2058D	S13	E50	05	9.2		02	9	9	E	RAMY	6050	
05	AFS	1042E	2058D	N16	E52	05	9.4		03	9	9	E	RAMY	6049	
05	ASR	1100E	1622D	S08	W90	04	28.8			7	7	E	RAMY	6039	
05	AFS	1135E	1719D	S12	E54	05	9.5		02	9	9	E	SVTO	6050	
05	ASR	1145E	1849D	N14	W90	04	28.8			9	9	E	RAMY	6040	
05	DSD	1210E	1400D	N19	E52	05	9.5		04	9	9	E	SVTO	6049	
05	SDF	1332E	1441D	N12	W11	05	4.7	3	04	0	0	E	RAMY		
05	AFS	1607E	2356D	S15	E51	05	9.5		02	8	8	E	HOLL	6050	
05	AFS	1622E	2058D	S10	W72	04	30.3		02	9	9	E	RAMY	6051	
05	DSD	1626E	1849D	S12	E47	05	9.2		03	9	9	E	RAMY	6050	
05	ASR	1629E	2356D	N15	W90	04	29.0			9	9	E	HOLL	6040	
05	DSD	1632E	1726D	N18	W15	05	4.5		02	9	9	E	RAMY		
05	AFS	1632E	2058D	N15	W16	05	4.5		02	9	9	E	RAMY		
05	ADF	1637E	2035D	N09	W44	05	2.4	1	10	9	9	E	RAMY		
05	AFS	1703E	2356D	S14	E33	05	8.2		03	9	9	E	HOLL	6052	
05	SDF	1735E	1612D	N10	W13	05	4.7		03	0	0	E	HOLL		
05	AFS	1740E	2356D	N16	E50	05	9.5		02	9	9	E	HOLL	6049	
05	AFS	2345E	0250D	S11	E25	05	7.9		04	9	9	E	PALE	6052	
05	APR	2352	0100D	N65	E90	05	14.0	1				C	VORO		
05	ADF	2352E	0100D	N15	W47	05	2.4	1				C	VORO		

ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
06	ASR	0019E	0945D	S12	W79	04 30.1			8	9	E	LEAR	6051	
06	AFS	0238E	0945D	S13	E31	05 8.4		03	9	9	E	LEAR	6052	
06	ADF	0536E	1216D	N18	E49	05 10.0	1	09	9	7	E	SVTO	6049	
06	ADF	0536E	1723D	N15	W52	05 2.3	1	06	9	9	E	SVTO		
06	AFS	0550E	0945D	N14	W26	05 4.3		03	9	9	E	LEAR		
06	DSD	0600E	0701D	S12	E29	05 8.4		04	9	9	E	LEAR	6052	
06	AFS	0622E	1216D	N18	E42	05 9.5		02	9	9	E	SVTO	6049	
06	DSD	0926E	1546D	N15	E36	05 9.1		04	9	9	E	SVTO	6049	
06	AFS	1030E	2110D	S12	E25	05 8.3		03	9	9	E	RAMY	6052	
06	DSD	1033E	1934D	N15	E36	05 9.2		05	9	9	E	RAMY	6049	
06	AFS	1033E	2110D	N16	E36	05 9.2		02	9	9	E	RAMY	6049	
06	ADF	1038E	1934D	N29	W41	05 3.2	1	07	7	7	E	RAMY	6045	
06	AFS	1040E	2110D	N15	W28	05 4.3		02	9	9	E	RAMY	6053	
06	ASR	1053E	1617D	S19	E90	05 13.3			9	9	E	RAMY	6054	
06	AFS	1320E	0143D	S12	E23	05 8.3		03	9	9	E	HOLL	6052	
06	AFS	1324E	0143D	S14	E39	05 9.5		02	9	7	E	HOLL	6050	
06	AFS	1338E	2110D	S12	E40	05 9.6		02	9	9	E	RAMY	6050	
06	ADF	1521E	0143D	N13	E34	05 9.2	1	03	9	9	E	HOLL	6049	
06	ASR	1615	2110D	S09	W88	04 30.1			9	9	E	RAMY	6051	
06	DSD	1721E	0433D	N16	E37	05 9.5		05	9	9	E	PALE	6049	
06	ADF	1721E	0433D	N20	W28	05 4.6		05	8	8	E	PALE	6053	
06	AFS	1721E	0433D	S13	E22	05 8.4		02	9	9	E	PALE	6052	
06	AFS	1929E	0112D	N12	E28	05 8.9		02	9	9	E	HOLL	6049	
06	ASR	2335E	0943D	S18	E90	05 13.8			9	9	E	LEAR	6054	
07	ASR	0050E	0943D	S08	W90	04 30.3			9	9	E	LEAR	6051	
07	DSD	0115E	0305D	N13	W61	05 2.4		09	9	9	E	LEAR		
07	DSD	0116E	0143D	N14	W34	05 4.5		03	9	9	E	HOLL	6053	
07	AFS	0116E	0143D	N16	W34	05 4.5		02	9	9	E	HOLL	6053	
07	ADF	0116E	0143D	N24	W49	05 3.3	1	07	9	9	E	HOLL	6045	
07	SDF	0136E	1236D	N40	E58	05 11.8		30	0	0	E	HOLL		
07	AFS	0250E	0943D	S13	E17	05 8.4		03	9	9	E	LEAR	6052	
07	AFS	0525E	1700D	N14	W39	05 4.3		02	7	8	E	SVTO	6053	
07	AFS	0525E	1700D	N18	E29	05 9.4		03	9	9	E	SVTO	6049	
07	AFS	0525E	1700D	S12	E14	05 8.3		03	9	9	E	SVTO	6052	
07	DSD	0915	0922D	N12	W38	05 4.5	1				V	KHAR		
07	AFS	1027E	2105D	N14	W40	05 4.4		02	9	9	E	RAMY	6053	
07	AFS	1029E	2105D	N15	E23	05 9.2		02	9	9	E	RAMY	6049	
07	AFS	1032E	1700D	S13	E28	05 9.5		02	9	9	E	RAMY	6050	
07	AFS	1033E	2105D	S13	E12	05 8.3		02	9	9	E	RAMY	6052	
07	AFS	1043E	2105D	S21	E80	05 13.6		03	9	9	E	RAMY	6054	
07	ASR	1056E	1700D	S32	E90	05 14.6			9	9	E	SVTO		
07	ASR	1106E	1544D	S33	E90	05 14.6			9	9	E	RAMY		
07	AFS	1112E	1700D	S18	E82	05 13.7		03	9	9	E	RAMY	6054	
07	DSD	1226E	1345D	N18	E16	05 8.7		07	9	9	E	SVTO	6049	
07	ADF	1254E	1838D	N17	E17	05 8.8	1	10	9	9	E	HOLL	6049	
07	ADF	1311E	2105D	N12	W68	05 2.4	1	09	9	9	E	RAMY	6055	
07	ADF	1314E	1823D	S12	W12	05 6.6	1	09	9	9	E	HOLL	6048	
07	DSD	1314E	2105D	N19	E16	05 8.8		04	9	9	E	RAMY	6049	
07	AFS	1324E	0136D	S12	E08	05 8.2		04	9	9	E	HOLL	6052	
07	DSD	1353E	1531D	N17	E25	05 9.5		03	9	9	E	SVTO	6049	
07	ADF	1430E	1700D	N09	W74	05 2.0	2	17	9	9	E	SVTO		
07	DSD	1815E	2244D	S12	E02	05 7.9		02	9	9	E	HOLL	6052	
07	AFS	1818E	0136D	N15	W44	05 4.4		02	9	9	E	HOLL	6053	
07	AFS	1825E	0426D	N17	E22	05 9.4		02	9	9	E	PALE	6049	
07	AFS	1825E	0426D	S12	E07	05 8.3		03	9	9	E	PALE	6052	
07	DSD	1838E	0136D	N14	E13	05 8.7		05	9	9	E	HOLL	6049	
07	ADF	1838E	2115D	H20	E30	05 10.1	1	10	9	9	E	HOLL	6049	
07	BSD	1952E	0113D	N15	W74	05 2.2		02	7	8	E	HOLL		Flare Associated
07	APR	2047E	0019D	N18	E90	05 14.7	1		9	9	E	HOLL		
07	AFS	2115E	0136D	N16	E20	05 9.4		03	9	9	E	HOLL	6049	
07	ADF	2217	2349D	N49	E55	05 12.6	1				C	VORO		
07	ADF	2217E	2349D	N22	W33	05 5.4	1				C	VORO		
07	APR	2217E	2349D	S32	W90	04 30.8	1				C	VORO		
07	APR	2238	2349D	N68	W90	04 29.9	1				C	VORO		
07	ADF	2242	2349D	N48	W45	05 4.2	1				C	VORO		
08	ADF	0001E	0051D	N21	E13	05 9.0	1	07	9	9	E	HOLL	6049	
08	AFS	0005E	0935D	S12	E00	05 8.0		04	9	9	E	LEAR	6052	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
08	AFS	0007E	0935D	N20	E20	05 9.5		06	9	9	E	LEAR	6049	
08	DSD	0051E	0115D	S21	E67	05 13.2		02	9	9	E	HOLL	6054	Flare Associated
08	DSD	0051E	0136D	S11	W21	05 6.4		07	9	9	E	HOLL	6048	
08	DSD	0109E	0345D	S13	W20	05 6.5		08	9	9	E	LEAR	6048	
08	ASR	0510E	0930D	S32	E90	05 15.3			9	9	E	SVTO		
08	AFS	0511E	1710D	N16	E13	05 9.2		03	9	9	E	SVTO	6049	
08	AFS	0512E	1710D	N12	W53	05 4.2		02	9	9	E	SVTO	6053	
08	AFS	0513E	1710D	S12	E00	05 8.2		03	9	9	E	SVTO	6052	
08	DSD	0514E	0552D	S10	E14	05 9.3		06	9	9	E	SVTO	6050	
08	AFS	0552E	0935D	S48	W28	05 5.9		03	9	9	E	LEAR		
08	AFS	0555E	1710D	S48	W27	05 6.0		03	9	9	E	SVTO		
08	BSL	0629E	0646	N23	E90	05 15.2	1				C	ABST		
08	ASR	0635E	0700D	N28	E90	05 15.3			9	9	E	SVTO		
08	ASR	0931E	1710D	N24	E90	05 15.3			9	9	E	SVTO		
08	AFS	1035E	1710D	S08	E46	05 11.9		02	9	9	E	SVTO		
08	AFS	1036E	1710D	S10	W57	05 4.1		02	9	9	E	SVTO		
08	DSD	1055E	1710D	S12	W27	05 6.4		03	9	9	E	RAMY	6048	
08	AFS	1055E	2020D	S11	W04	05 8.1		02	9	9	E	RAMY	6052	
08	AFS	1055E	2120D	N17	E11	05 9.3		03	9	9	E	RAMY	6049	
08	ADF	1055E	2120D	N18	W52	05 4.5	1	04	9	9	E	RAMY	6053	
08	AFS	1055E	2120D	S13	E10	05 9.2		02	9	9	E	RAMY	6050	
08	ADF	1055E	2142D	S16	E62	05 13.1	1	05	9	9	E	RAMY	6054	
08	DSD	1305E	0125D	N15	E03	05 8.8		03	9	9	E	HOLL	6049	
08	AFS	1305E	0125D	N16	E11	05 9.4		02	9	9	E	HOLL	6049	
08	AFS	1309E	2228D	S12	W04	05 8.2		03	9	9	E	HOLL	6052	
08	DSD	1340E	0125D	S11	E08	05 9.2		02	9	9	E	HOLL	6050	
08	DSD	1359E	0125D	S13	W27	05 6.5		03	9	9	E	HOLL	6048	
08	AFS	1407E	0125D	N15	W55	05 4.4		02	9	9	E	HOLL	6053	
08	ASR	1410E	2229D	N15	W90	05 1.8			9	9	E	HOLL	6055	
08	DSD	1428E	1710D	S11	W27	05 6.6		04	9	9	E	RAMY	6048	
08	DSD	1428E	1710D	S12	W29	05 6.4		04	9	9	E	RAMY	6048	
08	SSB	1437		248	W60	05 12.8			0	0	E	HOLL		
08	SSB	1500		250	W63	05 13.1			0	0	E	RAMY		
08	DSD	1735E	1815D	S14	E06	05 9.2		04	9	9	E	RAMY	6050	
08	DSD	1735E	2020D	S10	E06	05 9.2		03	9	9	E	RAMY	6050	
08	AFS	1736E	0059D	N13	W59	05 4.3		02	9	9	E	PALE	6053	
08	AFS	1736E	0059D	N16	E07	05 9.3		03	9	9	E	PALE	6049	
08	DSD	1736E	0059D	N17	E01	05 8.8		03	9	9	E	PALE	6049	
08	AFS	1756E	0059D	S15	E07	05 9.3		02	9	9	E	PALE	6050	
08	ASR	2006E	0059D	N24	E90	05 15.8			9	9	E	PALE		
08	ASR	2009E	0125D	N21	E90	05 15.7			9	9	E	HOLL		
08	DSD	2019E	0125D	N17	E14	05 9.9		04	9	9	E	HOLL	6049	
08	ASR	2053E	0125D	S21	E90	05 15.8			9	9	E	HOLL		
09	ASR	0400E	0510D	N10	W90	05 2.4			9	9	E	LEAR		
09	BSL	0508E	0704D	S49	E90	05 16.8	1				C	ABST		
09	ASR	0510E	1725D	N24	E81	05 15.5			9	9	E	SVTO		
09	AFS	0511E	1725D	N15	W01	05 9.1		03	7	8	E	SVTO	6049	
09	ADF	0512E	1725D	S20	E51	05 13.1	1	07	9	9	E	SVTO	6054	
09	BSL	0534E	0702D	N24	E90	05 16.2	1				C	ABST		
09	DSD	0545E	0640D	S15	W32	05 6.8		09	9	9	E	LEAR	6048	
09	DSD	0601E	0645D	S15	W37	05 6.4		07	9	9	E	SVTO	6048	
09	AFS	0602E	1725D	S13	W13	05 8.3		02	8	8	E	SVTO	6052	
09	APR	0740E	0818D	S40	E90	05 16.6	1				V	KHAR		
09	BSL	0756E	0812D	N05	E90	05 16.1	1				V	KHAR		
09	ADF	0821E	0840D	N13	W07	05 8.8	1				V	KHAR		
09	BSL	0833	0845D	S22	E90	05 16.3	1				V	KHAR		
09	AFS	0901E	1725D	N17	W22	05 7.7		02	9	8	E	SVTO		
09	APR	0915E	1030D	S48	E90	05 16.9					V	ATHN		
09	DSD	0955	1037D	S11	W04	05 9.1		04	9	9	E	SVTO	6050	Flare Associated
09	DSD	0956	1020D	S11	W04	05 9.1	1				V	KHAR		
09	APR	1023E	1725D	S46	E86	05 16.6	2		9	9	E	SVTO		
09	APR	1245E	0030D	S54	E90	05 17.3	1		9	9	E	HOLL		
09	ADF	1247E	0030D	S16	E50	05 13.3	1	09	9	9	E	HOLL	6054	
09	DSD	1335E	2130D	S13	W42	05 6.4		09	9	9	E	HOLL	6048	
09	DSD	1337E	1633D	S13	W42	05 6.4		07	9	9	E	RAMY	6048	
09	ADF	1340E	2228D	S16	E47	05 13.1	1	06	9	9	E	RAMY	6054	
09	DSD	1417E	1520D	N17	W03	05 9.4		10	9	9	E	HOLL	6049	Flare Associated
09	DSD	1633E	0051D	S11	W19	05 8.3		03	9	9	E	PALE	6052	
09	AFS	1633E	0344D	S12	W20	05 8.2		02	9	9	E	PALE	6052	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
09	DSD	1642E	0026D	N15	W06	05	9.2		03	9	9	E	PALE	6049	
09	ADF	1642E	0344D	N27	E03	05	9.9	1	05	9	9	E	PALE	6049	
09	ADF	1659E	0344D	S15	E45	05	13.1	1	05	9	9	E	PALE	6054	
10	AFS	0026E	0117D	N17	W06	05	9.6		03	9	9	E	PALE	6049	
10	AFS	0045E	0909D	N15	W13	05	9.0		02	9	9	E	LEAR	6049	
10	AFS	0046E	0909D	S19	E36	05	12.8		02	9	9	E	LEAR	6054	
10	AFS	0047E	0909D	S13	W26	05	8.1		02	9	9	E	LEAR	6052	
10	DSD	0116E	0344D	N17	W07	05	9.5		04	9	9	E	PALE	6049	
10	AFS	0123E	0344D	N15	W14	05	9.0		02	9	9	E	PALE	6049	
10	ASR	0140E	0344D	S09	E90	05	16.8			9	7	E	PALE		
10	AFS	0158E	0344D	N17	W01	05	10.0		02	9	9	E	PALE	6049	
10	ASR	0300E	0909D	S13	E90	05	16.9			9	9	E	LEAR		
10	APR	0443E	0705D	S47	E90	05	17.7	1				C	ABST		
10	ASR	0520E	1726D	S14	E90	05	17.0			9	9	E	SVTO		
10	AFS	0521E	1726D	N14	W16	05	9.0		03	9	9	E	SVTO	6049	
10	AFS	0522E	1726D	N16	W09	05	9.5		03	9	9	E	SVTO	6049	
10	AFS	0523E	1726D	S13	W28	05	8.1		02	9	9	E	SVTO	6052	
10	ASR	0524E	1726D	S11	W85	05	3.8			9	9	E	SVTO	6059	
10	APR	0526E	1726D	S52	E90	05	17.9	2		9	9	E	SVTO		
10	AFS	0527E	1726D	S18	E32	05	12.7		02	9	9	E	SVTO	6054	
10	ADF	0650E	1726D	N16	W06	05	9.8	2	12	9	9	E	SVTO	6049	
10	APR	0720E	0930	S43	E90	05	17.7	1				V	KHAR		
10	ADF	0725E	0909D	N21	W05	05	9.9	2	06	9	9	E	LEAR	6049	
10	ASR	0852E	0909D	N32	E90	05	17.5			9	9	E	LEAR		
10	ADF	0853	0950	N18	W06	05	9.9	1				V	KHAR		
10	ADF	1050E	2106D	N28	W07	05	9.9	1	12	9	9	E	RAMY	6049	
10	ASR	1706E	0202D	S13	E90	05	17.5			9	9	E	PALE		
10	ASR	1711E	0212D	N30	E90	05	17.8			9	9	E	PALE		
10	DSD	1719E	0120D	N16	W14	05	9.6		04	9	9	E	PALE	6049	
10	DSD	1759E	0157D	S18	E32	05	13.2		05	9	9	E	PALE	6054	
10	ADF	1759E	0212D	N13	E46	05	14.2		04	9	7	E	PALE	6058	
10	ADF	1824E	0212D	N27	E79	05	16.9		08	9	9	E	PALE	6060	
10	ADF	1824E	0212D	S29	E80	05	17.0	1	12	9	9	E	PALE		
10	ADF	2033E	2036D	S20	E32	05	13.3	1	06	9	9	E	HOLL	6054	
11	ASR	0015E	0904D	N39	E90	05	18.3			9	9	E	LEAR		
11	AFS	0017E	0904D	N18	E14	05	12.1		03	9	9	E	LEAR	6061	
11	ADF	0150E	0212D	S17	E25	05	13.0	2	05	9	9	E	PALE	6054	
11	ADF	0255E	0904D	N14	W17	05	9.8	1	13	9	9	E	LEAR	6049	
11	BSD	0613E	1006D	N25	E63	05	16.1		06	9	9	E	SVTO	6060	
11	ADF	0613E	1220D	N13	W19	05	9.8	1	20	9	9	E	SVTO	6049	
11	AFS	0613E	1254D	N18	E09	05	11.9		04	9	9	E	SVTO	6061	
11	BSL	0703E	0728	N35	E90	05	18.5	1				V	KHAR		
11	ADF	0713E	0827D	N25	E75	05	17.1	1				V	KHAR		
11	APR	0730	0812	S42	E90	05	18.7	1				V	KHAR		
11	APR	0745	0807	N24	E90	05	18.3	1				V	KHAR		
11	BSL	0805	0828D	S12	E90	05	18.1	1				V	KHAR		
11	APR	0932	0953D	N37	E90	05	18.6	1				V	KHAR		
11	BSL	0937E	0953D	N34	E90	05	18.6	1				V	KHAR		
11	ASR	0939E	1254D	N33	E90	05	18.5			9	9	E	SVTO		
11	DSD	1155E	1254D	N17	W24	05	9.7		03	9	9	E	SVTO	6049	
11	AFS	1235E	2148D	N18	E06	05	12.0		03	7	8	E	RAMY	6061	
11	DSD	1236E	1334D	N19	W23	05	9.8		05	9	9	E	RAMY	6049	
11	DSD	1239E	1334D	N25	E70	05	16.9		07	9	9	E	RAMY		
11	ADF	1239E	2148D	N26	E66	05	16.6	2	14	9	9	E	RAMY	6060	
11	APR	1259E	1918D	S50	E90	05	19.2	1		9	9	E	HOLL		
11	ADF	1300E	0127D	N21	E69	05	16.8	2	07	9	9	E	HOLL	6060	
11	ASR	1300E	0127D	N28	E90	05	18.6			9	9	E	HOLL	6063	
11	APR	1300E	0127D	N35	E90	05	18.7	1		9	9	E	HOLL	6063	
11	EPL	1314E	1525D	S50	E90	05	19.2			9	9	E	HOLL		
11	ADF	1339E	1712D	N18	W24	05	9.7	2	07	9	9	E	RAMY	6049	
11	DSD	1507E	1625D	S20	E11	05	12.5		03	9	9	E	HOLL	6054	
11		1707E	0354D	N22	W29	05	9.5	1	10	9	9	E	PALE	6049	
11	AFS	1707E	0354D	S11	W34	05	9.1		03	9	9	E	PALE	6050	
11	ADF	1707E	0354D	S19	E23	05	13.5		09	9	9	E	PALE	6054	
11	AFS	1717E	0354D	N18	E04	05	12.0		03	9	9	E	PALE	6061	
11	ADF	1717E	0354D	N25	E66	05	16.8	1	12	9	9	E	PALE	6060	
11	ADF	1717E	0354D	S14	E79	05	17.7		13	9	9	E	PALE		
11	ADF	1717E	0354D	S28	E57	05	16.2		13	9	9	E	PALE		

ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
11	ADF	2204E	0200D	N32	W25	05	9.9	1				C	VORO		
11	APR	2315	0200D	N35	E90	05	19.2	1				C	VORO		
11	APR	2335	0200	N22	E90	05	18.9	1				C	VORO		
12	APR	0059	0200D	N24	W90	05	5.1	1				C	VORO		
12	APR	0750E	0940D	N43	E90	05	19.7	2				V	KHAR		
12	APR	0832E	0925D	S27	E90	05	19.4	2				V	KHAR		
12	ADF	0852E	0940D	S37	E57	05	17.0	1				V	KHAR		
12	BSL	1159	1235	N29	E72	05	18.1			9	9	E	RAMY 6063		Flare Associated
12	ADF	1320E	2129D	N18	W36	05	9.8	1	06	9	9	E	RAMY 6049		
12	AFS	1323E	2129D	N23	E47	05	16.2		02	9	9	E	RAMY 6060		
12	ADF	1325E	0114D	N24	W46	05	9.0	2	15	9	9	E	HOLL 6049		
12	AFS	1341E	0114D	N12	E18	05	13.9		02	9	9	E	HOLL 6058		
12	AFS	1400E	0114D	S07	E08	05	13.2		02	7	8	E	HOLL		
12	ADF	1408E	0114D	N19	E46	05	16.1	2	22	9	9	E	HOLL 6060		
12	ADF	1428E	2129D	S19	E09	05	13.3	1	06	9	9	E	RAMY 6054		
12	ADF	1430E	0114D	S16	E60	05	17.1	2	07	9	9	E	HOLL		
12	ADF	1444E	0114D	N34	E69	05	18.1	1	08	9	9	E	HOLL 6063		
12	ADF	1650E	0420D	N22	W43	05	9.4	1	07	9	9	E	PALE 6049		
12	ADF	1650E	0420D	N27	E43	05	16.0		10	9	9	E	PALE 6062		
12	ADF	1650E	0420D	N39	E88	05	19.8		27	9	9	E	PALE 6063		
12	AFS	1650E	0420D	S09	E07	05	13.2		02	9	9	E	PALE		
12	ADF	1650E	0420D	S15	E54	05	16.8		05	9	9	E	PALE		
12	ADF	1855E	2129D	S14	E57	05	17.1	1	07	9	9	E	RAMY		
12	ASR	1856E	2129D	S14	E89	05	19.5			9	9	E	RAMY 6064		
12	ADF	1857E	2129D	N28	E60	05	17.5	2	14	9	9	E	RAMY 6063		
12	ADF	1943E	2129D	S12	W44	05	9.5	1	06	9	9	E	RAMY 6050		
12	APR	2013E	0420D	N39	E88	05	20.0	2		9	7	E	PALE 6063		
12	APR	2025E	0114D	N39	E90	05	20.1	2		6	5	E	HOLL 6063		
13	AFS	0506E	0847D	S10	W51	05	9.4		02	9	9	E	LEAR 6050		
13	DSD	0950E	1003D	N37	E72	05	19.2	1				V	KHAR		
13	ADF	1014E	1026D	N32	E45	05	17.0	1				V	KHAR		
13	DSD	1300E	1738D	S16	E38	05	16.4		02	9	9	E	RAMY		
13	AFS	1301E	2203D	S14	E76	05	19.3		03	9	9	E	RAMY 6064		
13	DSD	1301E	2203D	S18	E71	05	18.9		08	9	9	E	RAMY 6064		Flare Associated
13	ADF	1310E	2203D	N31	E51	05	17.6	1	25	9	9	E	RAMY 6063		
13	ADF	1314E	1600D	S13	E71	05	18.9	1	04	9	9	E	HOLL 6064		
13	ADF	1314E	2203D	N20	E38	05	16.4	1	20	9	9	E	RAMY 6060		
13	DSD	1317E	1738D	N17	W63	05	8.8		02	9	9	E	RAMY 6049		
13	ADF	1338E	0148D	N20	E35	05	16.2	2	22	9	9	E	HOLL 6060		
13	AFS	1409E	0148D	N11	E05	05	14.0		02	9	9	E	HOLL 6058		
13	ADF	1645E	0433D	N19	W57	05	9.3		06	9	9	E	PALE 6049		
13	AFS	1645E	0433D	S08	W06	05	13.2		03	9	9	E	PALE 6065		
13	AFS	1645E	0433D	S18	E69	05	18.9		03	9	9	E	PALE 6064		
13	ADF	1645E	0438D	N39	E60	05	18.6		10	9	8	E	PALE 6063		
13	AFS	1740E	0148D	N23	E33	05	16.3		03	9	9	E	HOLL 6060		
13	DSD	1935E	0148D	N16	E67	05	18.9		04	9	9	E	HOLL 6064		Flare Associated
13	APR	2100E	2338D	S18	E90	05	20.7	1		7	7	E	HOLL		
13	SSB	2135		120	W02	05	15.4			0	0	E	HOLL		155 W37 194 W76
13	ADF	2150E	2338D	N21	W49	05	10.1	2	10	9	9	E	HOLL 6049		
13	DSD	2355	0020D	N31	E52	05	18.1		04	9	9	E	HOLL 6063		Flare Associated
14	ADF	0020E	0148D	N35	E55	05	18.4	1	15	9	9	E	HOLL 6063		
14	AFS	0020E	0148D	S15	W16	05	12.8		03	9	9	E	HOLL 6054		
14	AFS	0555E	0938D	N12	W04	05	13.9		03	9	9	E	LEAR 6058		
14	APR	0632E	0709D	S21	E90	05	21.2	1				C	ABST		
14	ADF	0755E	0830	N43	E60	05	19.3	1				V	KHAR		
14	DSD	0920E	0928	N27	E16	05	15.6	1				V	KHAR		
14	ADF	0945E	1049D	N43	E60	05	19.3	1				V	KHAR		
14	ADF	1039E	1049D	N40	E05	05	14.8	1				V	KHAR		
14	AFS	1200E	1725D	N17	W11	05	13.7		02	7	8	E	SVTO 6058		
14	ASR	1200E	1725D	S08	W90	05	7.7			9	7	E	SVTO 6052		
14	DSD	1215E	1725D	S16	E55	05	18.7		04	9	9	E	RAMY 6064		
14	AFS	1216E	2132D	S17	E59	05	19.0		03	9	9	E	RAMY 6064		
14	AFS	1217E	1730D	N16	W11	05	13.7		03	9	9	E	RAMY 6058		
14	ADF	1232E	2132D	N21	E15	05	15.7	1	07	9	9	E	RAMY 6060		
14	ADF	1247E	2132D	N21	E25	05	16.4	1	17	9	9	E	RAMY 6060		
14	DSD	1249E	1721D	N27	E34	05	17.2		02	9	9	E	RAMY 6062		
14	ADF	1250E	2132D	N30	E36	05	17.4	2	31	9	9	E	RAMY 6063		

ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
14	ASR	1314E	1723D	N07	E90	05	21.3			9	9	E	RAMY		
14	ADF	1315E	1500D	N23	E17	05	15.9	1	06	9	9	E	SVTO	6060	
14	AFS	1420E	1725D	N17	W69	05	9.3			8	9	E	SVTO	6049	
14	ADF	1545E	0148D	N20	E24	05	16.5	1	22	9	9	E	HOLL	6060	
14	DSD	1545E	1725D	N21	E11	05	15.5		02	9	9	E	SVTO	6060	
14	ADF	1559E	0148D	N39	E57	05	19.3	2	06	9	9	E	HOLL	6063	
14	SSB	1620		122	W14	05	16.3			0	0	E	HOLL		162 W54
14	ADF	1630E	1725D	N44	E51	05	18.9	2	06	9	9	E	SVTO	6063	
14	SDF	1912E	1922D	S29	E53	05	18.9	3	15	0	0	E	HOLL		
14	EPL	1912E	2034D	S46	E90	05	22.3			9	9	E	HOLL		
14	EPL	1914E	2110D	S38	E67	05	20.2			9	9	E	RAMY		
14	DSD	2030E	2132D	N39	E46	05	18.6		04	9	9	E	RAMY	6063	
14	ADF	2110E	2132D	S24	E53	05	19.0	1	23	9	9	E	RAMY		
14	AFS	2241E	0256D	N23	E16	05	16.2		03	9	9	E	PALE	6060	
14	ADF	2241E	0256D	N38	E45	05	18.6	1	09	9	9	E	PALE	6063	
15	SDF	0348E	0057D	S47	E15	05	16.4		22	0	0	E	LEAR		
15	ADF	0540E	1357D	N39	E36	05	18.1	1	11	9	9	E	SVTO	6063	Flare Associated
15	ASR	0541E	1451D	S14	W90	05	8.4			9	9	E	SVTO	6052	
15	AFS	0542E	1730D	N23	E10	05	16.0		03	0	9	E	SVTO	6060	
15	AFS	0543E	1647D	N17	W21	05	13.6		02	9	8	E	SVTO	6058	
15	AFS	0545E	1730D	S16	E50	05	19.0		04	9	9	E	SVTO	6064	Flare Associated
15	ADF	1009E	1730D	N10	W22	05	13.8	1	06	9	9	E	SVTO	6058	
15	APR	1022E	1113D	N29	W90	05	8.4	2		9	9	E	SVTO		
15	EPL	1113E	1125D	N27	W90	05	8.4			9	9	E	SVTO		
15	ASR	1141	1451D	N23	W90	05	8.5			9	9	E	SVTO	6049	
15	AFS	1157E	2052D	N18	W23	05	13.7		03	8	6	E	RAMY	6058	
15	ASR	1157E	2052D	N19	W83	05	9.2			9	9	E	RAMY	6049	
15	AFS	1215E	2052D	N23	E07	05	16.0		03	9	9	E	RAMY	6060	
15	AFS	1215E	2052D	S17	E44	05	18.8		03	9	9	E	RAMY	6064	
15	SDF	1221E	0613D	N03	E27	05	17.5		03	0	0	E	SVTO		
15	SDF	1221E	0613D	N03	E27	05	17.5		03	0	0	E	SVTO		
15	SDF	1221E	0613D	S61	W02	05	15.3		19	0	0	E	SVTO		
15	SDF	1221E	0613D	S61	W02	05	15.3		19	0	0	E	SVTO		
15	ADF	1240E	2052D	N36	E49	05	19.5	1	10	9	9	E	RAMY	6063	
15	ADF	1324E	1749D	N33	E43	05	19.0	2	22	9	9	E	HOLL	6063	
15	DSD	1325E	1353D	N37	E50	05	19.6		07	9	9	E	SVTO	6063	Flare Associated
15	LPS	1335E	1749D	N38	E39	05	18.7			9	9	E	HOLL	6063	Flare Associated
15	LPS	1338E	1730D	N38	E36	05	18.5			9	9	E	RAMY	6063	Flare Associated
15	LPS	1339E	1623D	N40	E36	05	18.5			9	9	E	SVTO	6063	Flare Associated
15	DSD	1353E	1451D	N43	E43	05	19.1		04	9	9	E	SVTO	6063	Flare Associated
15	SDF	1357E	1357D	N39	E36	05	18.5	3	11	0	0	E	SVTO	6063	Flare Associated
15	ADF	1419E	0125D	N19	W11	05	14.7	1	08	9	9	E	HOLL	6058	
15	SDF	1419E	1446	N11	W08	05	15.0		14	0	0	E	HOLL	6058	Flare Associated
15	SSB	1800		456	W02	05	11.6			0	0	E	HOLL		124 W30 154 W60
15	AFS	1910E	0453D	N15	W25	05	13.9		02	9	9	E	PALE	6058	
15	AFS	2130E	0453D	S13	E45	05	19.3		02	9	9	E	PALE	6064	
15	DSD	2232E	0453D	N33	E29	05	18.2		03	9	9	E	PALE	6063	
15	ADF	2234	2358D	N15	W25	05	14.0	1				C	VORO		
15	ADF	2237E	0453D	N33	E26	05	18.0		04	9	9	E	PALE	6063	
15	ADF	2237E	0453D	N38	E32	05	18.5		11	9	9	E	PALE	6063	
15	ADF	2324E	0453D	S23	W36	05	13.2		04	9	9	E	PALE	6054	
15	AFS	2335E	0453D	N23	E01	05	16.0		02	9	9	E	PALE	6060	
15	DSD	2340E	0453D	N26	E09	05	16.7		04	9	9	E	PALE	6060	
15	ADF	2354E	0453D	N13	W27	05	13.9		04	9	9	E	PALE	6058	
16	ADF	0024	0200D	S21	E37	05	18.8	1				C	VORO		
16	APR	0025	0206D	S44	E90	05	23.5	1				C	VORO		
16	DSD	0118E	0453D	N32	E23	05	17.9		03	9	9	E	PALE	6063	Flare Associated
16	AFS	0259E	0941D	N23	E00	05	16.1		03	9	9	E	LEAR	6060	
16	AFS	0530E	0941D	S14	E39	05	19.2		03	9	9	E	LEAR	6064	
16	AFS	0540E	1715D	N17	W33	05	13.7		02	7	8	E	SVTO	6058	
16	ASR	0540E	1715D	N17	W90	05	9.4			9	9	E	SVTO	6049	
16	APR	0540E	1715D	N24	W90	05	9.3	2		9	9	E	SVTO	6049	
16	ADF	0540E	1715D	N42	E33	05	18.9	1	04	9	9	E	SVTO	6063	
16	AFS	0540E	1715D	S14	E39	05	19.2		04	9	9	E	SVTO	6064	
16	DSD	0541E	1455D	S09	E36	05	18.9		04	9	9	E	SVTO	6064	
16	SDF	0613E	0531D	N09	W28	05	14.1		07	0	0	E	SVTO		
16	SDF	0613E	0531D	N21	W23	05	14.5		04	0	0	E	SVTO		
16	SDF	0613E	0531D	N37	E37	05	19.2		08	0	0	E	SVTO		

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
16	ASR	0710E	0941D	N22	W90	05 9.4			9	9	E	LEAR	6049	
16	AFS	0844E	0941D	N28	E14	05 17.4		02	6	8	E	LEAR	6063	
16	ADF	0910E	0941D	N13	W34	05 13.8	1	09	9	9	E	LEAR	6058	
16	DSD	1050E	1630D	N12	W36	05 13.7		05	9	9	E	SVTO	6058	
16	AFS	1103E	1725D	N36	E26	05 18.5		02	9	9	E	RAMY	6063	
16	ADF	1103E	2204D	N09	W27	05 14.4	2	07	9	9	E	RAMY	6058	
16	AFS	1103E	2204D	S15	E38	05 19.3		03	9	9	E	RAMY	6064	
16	AFS	1103E	2204D	S17	E34	05 19.0		03	9	9	E	RAMY	6064	
16	ASR	1244	2204D	N17	W90	05 9.7			9	9	E	RAMY	6049	
16	ASR	1252	1559D	N20	W90	05 9.6			9	9	E	HOLL	6049	
16	SSB	1316		450	W07	05 12.8			0	0	E	SVTO		122 W39
16	SDF	1318E	0018D	N43	E37	05 19.6		16	0	0	E	HOLL		
16	ADF	1323E	0132D	N34	E17	05 17.9	1	06	8	8	E	HOLL	6063	
16	SSB	1357		453	W10	05 12.6			0	0	E	HOLL		101 W18 120 W37
16	SSB	1422		448	W06	05 13.0			0	0	E	RAMY		112 W30
16	DSD	1635E	1725D	S19	W51	05 12.8		03	9	9	E	RAMY	6054	
16	ASR	1735E	0428D	N22	E90	05 23.6			9	9	E	PALE		
16	ADF	1801E	0428D	N10	E71	05 22.1		08	9	9	E	PALE		
16	AFS	1801E	0428D	N15	E34	05 19.3		04	9	9	E	PALE	6064	
16	AFS	1801E	0428D	N20	E30	05 19.0		04	9	9	E	PALE	6064	
16	AFS	1801E	0428D	N23	W07	05 16.2		03	9	9	E	PALE	6060	
16	ADF	1801E	0428D	N35	E21	05 18.4		13	9	9	E	PALE	6063	
16	ADF	1801E	0428D	S15	W52	05 12.8	1	11	8	9	E	PALE	6054	
16	DSD	1801E	0428D	S17	E14	05 17.8		03	9	9	E	PALE	6067	
16	ADF	1801E	0428D	S39	E54	05 21.1		26	9	9	E	PALE		
16	ASR	1801E	0428D	S47	E90	05 24.3			9	9	E	PALE		
16	AFS	2355E	0935D	S14	E33	05 19.5		06	9	9	E	LEAR	6064	
17	DSD	0101	0132D	S16	E18	05 18.4		03	9	9	E	HOLL	6064	
17	APR	0150E	0428D	N20	W90	05 10.2	1		9	9	E	PALE	6061	
17	SDF	0356E	0107D	S11	E47	05 20.7	3	13	0	0	E	LEAR		
17	ADF	0500E	0935D	S38	E43	05 20.7	1	40	6	4	E	LEAR	6064	
17	ASR	0550E	1716D	N13	W90	05 10.4			7	8	E	SVTO	6061	
17	APR	0550E	1716D	N22	W90	05 10.3	1		9	9	E	SVTO	6061	
17	ADF	0550E	1716D	N43	E17	05 18.6	1	14	9	9	E	SVTO	6063	
17	AFS	0550E	1716D	S13	E26	05 19.2		05	9	9	E	SVTO	6064	
17	ADF	0720E	0935D	N38	E10	05 18.1	2	07	8	9	E	LEAR	6063	
17	ADF	0730E	0848D	N38	E10	05 18.1	1				V	KHAR		
17	ADF	0844E	0928	S20	E13	05 18.3	1				V	KHAR		
17	ADF	0914	0926	N38	E08	05 18.0	1				V	KHAR		
17	ADF	1000	1035D	N34	E05	05 17.8	2				V	KHAR		
17	AFS	1411E	2115D	N07	E63	05 22.3		02	9	9	E	RAMY	6068	
17	ADF	1412E	1953D	S13	W10	05 16.8	1	07	9	9	E	RAMY	6067	
17	ADF	1412E	1953D	S13	W10	05 16.8	1	07	9	9	E	RAMY	6067	
17	AFS	1414E	2115D	S14	E21	05 19.2		03	9	9	E	RAMY	6064	
17	DSD	1414E	2115D	S15	E14	05 18.6		04	9	9	E	RAMY	6064	
17	AFS	1417E	1758D	N35	E12	05 18.5		02	9	9	E	RAMY	6063	
17	ADF	1417E	2115D	N43	E16	05 18.9	1	21	9	9	E	RAMY	6063	
17	AFS	1424E	1953D	N24	W19	05 16.1		02	9	9	E	RAMY	6060	
17	AFS	1540E	2239D	S13	W62	05 13.0		02	7	7	E	HOLL	6054	
17	ADF	1540E	2239D	S17	W17	05 16.4	1	05	8	8	E	HOLL	6066	
17	SSB	1656		428	W00	05 15.6			0	0	E	HOLL		459 W31 118 W50
17	AFS	1725E	0113D	S16	W63	05 12.9		03	8	9	E	PALE	6054	
17	DSD	1725E	0139D	N10	E65	05 22.6		03	9	9	E	PALE	6068	
17	ASR	1725E	0139D	N21	W90	05 10.8			9	7	E	PALE	6061	
17	ADF	1725E	0325D	N42	E12	05 18.7		07	9	9	E	PALE	6063	
17	DSD	1725E	0325D	S14	E12	05 18.6		04	9	9	E	PALE	6064	
17	ADF	1725E	0325D	S15	W15	05 16.6		09	9	9	E	PALE	6066	
17	AFS	1725E	0325D	S16	E17	05 19.0		06	9	9	E	PALE	6064	
17	ADF	1725E	0325D	S33	E34	05 20.4		21	9	8	E	PALE		
17	DSD	1756E	2032D	N29	E03	05 18.0		03	9	9	E	RAMY	6063	
17	APR	2200	0116D	N25	W90	05 10.9	2				C	VORO		
17	APR	2216	0115D	S33	E90	05 25.1	1				C	VORO		
17	APR	2300	0115D	S33	W90	05 10.8	1				C	VORO		
17	ASR	2320E	0942D	S13	E90	05 24.8			9	9	E	LEAR	6069	
18	ASR	0108E	0325D	S11	E90	05 24.8			9	9	E	PALE		
18	ADF	0511E	0942D	N37	E03	05 18.4	2	10	9	9	E	LEAR	6063	
18	AFS	0515E	1653D	N17	W60	05 13.6		02	9	9	E	SVTO	6061	
18	AFS	0520E	1653D	S16	W72	05 12.8		02	9	9	E	SVTO	6054	

ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP No	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
18	ADF	0539E	1400D	S08	E69	05	23.4	1	04	9	9	E	SVTO	6069	
18	ASR	0540E	1300D	S11	E90	05	25.0			9	9	E	SVTO		
18	DSD	0817E	0912D	S13	E04	05	18.6		04	9	9	E	SVTO	6064	
18	DSD	1004E	1220D	N40	W02	05	18.2		03	9	9	E	SVTO	6063	
18	ASR	1138E	2001D	S14	E87	05	25.0			9	9	E	RAMY	6071	
18	AFS	1142E	2001D	S10	E66	05	23.4		02	9	9	E	RAMY	6069	
18	ADF	1142E	2102D	S09	E74	05	24.0	1	04	9	9	E	RAMY	6069	
18	AFS	1150E	2102D	N08	E53	05	22.5		03	9	9	E	RAMY	6068	
18	ADF	1153E	1705D	S13	W24	05	16.7	1	05	9	9	E	RAMY	6066	
18	ADF	1222E	1547D	S15	E03	05	18.7	1	07	9	9	E	RAMY	6064	
18	DSD	1222E	2102D	S15	E02	05	18.7		04	9	9	E	RAMY	6064	
18	ADF	1229E	2102D	N43	E04	05	18.8		30	9	9	E	RAMY	6063	
18	ADF	1235E	1717D	N20	W51	05	14.6	1	11	9	9	E	RAMY	6061	
18	AFS	1243E	1543D	S15	W75	05	12.8		02	9	9	E	RAMY	6054	
18	DSD	1243E	1549D	S17	W74	05	12.9		04	9	9	E	RAMY	6054	
18	DSD	1246E	1653D	S14	E01	05	18.6		03	8	9	E	SVTO	6064	
18	ADF	1248E	1705D	S42	E35	05	21.4	1	50	9	9	E	RAMY		
18	APR	1300E	1653D	S11	E90	05	25.3	1		9	9	E	SVTO		
18	DSD	1440E	2233D	S13	E03	05	18.8		03	9	9	E	HOLL	6064	
18	ASR	1520E	2233D	S17	E90	05	25.5			9	9	E	HOLL		
18	SSB	1526		428	W13	05	16.5			0	0	E	HOLL		122 W67
18	AFS	1530E	2233D	N06	E50	05	22.4		03	9	9	E	HOLL	6068	
18	DSD	1612E	2047D	S13	W44	05	15.3		02	9	9	E	HOLL	6066	
18	SSB	1821		419	W06	05	17.3			0	0	E	RAMY		459 W46 110 W56
18	AFS	1950E	0452D	N08	E49	05	22.5		02	9	9	E	PALE	6068	
18	DSD	2023E	0452D	S15	W75	05	13.2		03	9	9	E	PALE	6054	
18	ADF	2028E	2233D	N28	W27	05	16.7	1	11	9	9	E	HOLL	6060	
18	DSD	2125E	0452D	S12	E00	05	18.9		03	9	9	E	PALE	6064	
18	APR	2253E	0452D	N34	W90	05	11.8			9	6	E	PALE		
18	ASR	2340E	0937D	S16	W90	05	12.2			9	9	E	LEAR	6054	
18	AFS	2348E	0937D	S22	E70	05	24.4		03	9	9	E	LEAR	6070	
19	AFS	0007E	0937D	N08	E45	05	22.4		02	7	8	E	LEAR	6068	
19	DSD	0110E	0937D	S14	W05	05	18.7		04	9	9	E	LEAR	6064	
19	ADF	0210E	0937D	N37	W10	05	18.3	1	12	9	7	E	LEAR	6063	
19	ADF	0225E	0937D	N16	E00	05	19.1	1	06	8	8	E	LEAR	6064	
19	ADF	0510E	0959D	N28	W17	05	17.9	1	10	9	9	E	SVTO	6063	
19	ADF	0510E	0959D	N37	W12	05	18.2	1	07	9	9	E	SVTO	6063	
19	AFS	0520E	1605D	S14	W04	05	18.9		02	9	9	E	SVTO	6064	
19	ADF	0540E	1605D	S14	W33	05	16.7	1	05	9	9	E	SVTO	6066	
19	ASR	0645E	0937D	N25	E90	05	26.2			9	9	E	LEAR		
19	DSD	1029E	1415D	S15	W10	05	18.7		04	9	9	E	RAMY	6064	
19	ADF	1031E	2111D	N43	W06	05	18.9	1	06	9	9	E	RAMY	6063	
19	AFS	1033E	2111D	S19	E60	05	24.0		03	9	9	E	RAMY	6070	
19	AFS	1036E	2111D	N07	E41	05	22.5		02	9	9	E	RAMY	6068	
19	AFS	1058E	2045D	N10	W14	05	18.4		02	9	9	E	RAMY		
19	AFS	1100E	2111D	S14	E71	05	24.8		02	9	9	E	RAMY	6071	
19	SSB	1107		421	W17	05	17.9			0	0	E	RAMY		117 W73
19	ASR	1228E	1430D	N26	E84	05	26.0			9	9	E	RAMY		
19	ADF	1355E	2343D	N29	W38	05	16.6	1	12	9	9	E	HOLL	6060	
19	AFS	1450E	2343D	N10	W16	05	18.4		02	9	9	E	HOLL		
19	ASR	1535E	2343D	S07	W90	05	12.9			9	9	E	HOLL	6065	
19	SSB	1554		419	W17	05	18.2			0	0	E	HOLL		459 W57
19	DSD	1704	2051D	N35	W20	05	18.1		03	9	9	E	RAMY	6063	
19	AFS	1820E	0225D	N05	W37	05	17.0		02	7	7	E	PALE		
19	ASR	1820E	0225D	N18	W89	05	13.0			9	9	E	PALE	6058	
19	ASR	1820E	0225D	N26	E87	05	26.5			9	9	E	PALE		
19	AFS	1820E	0246D	N09	E38	05	22.6		03	9	9	E	PALE	6068	
19	DSD	1820E	0246D	N37	W19	05	18.2		04	9	9	E	PALE	6063	
19	ADF	1820E	0246D	N39	W17	05	18.4		09	9	9	E	PALE	6063	
19	ASR	1820E	0246D	S08	W85	05	13.4			9	9	E	PALE	6065	
19	DSD	1820E	0246D	S16	W10	05	19.0		03	9	9	E	PALE	6064	
19	ASR	1820E	0246D	S17	W85	05	13.3			9	9	E	PALE	6054	
19	ASR	1949E	2343D	N23	E81	05	26.1			9	9	E	HOLL		
19	AFS	2105E	0246D	S12	E66	05	24.8		02	9	9	E	PALE	6071	
19	DSD	2238E	0246D	S14	W41	05	16.8		04	9	9	E	PALE	6067	
19	AFS	2345E	0935D	N09	E34	05	22.5		03	9	9	E	LEAR	6068	
19	ASR	2345E	0935D	S07	W90	05	13.2			9	9	E	LEAR	6065	
19	ASR	2348E	0935D	S19	W90	05	13.1			9	9	E	LEAR	6054	
19	DSD	2351E	0935D	N35	W21	05	18.3		03	9	9	E	LEAR	6063	

ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
20	ADF	0918E	1727D	N43	W19	05 18.8	1	23	9	9	E	SVTO	6063	
20	AFS	1049E	1835D	S19	E47	05 24.0		02	9	9	E	RAMY	6070	
20	ADF	1049E	1835D	S22	E51	05 24.4	1	05	9	9	E	RAMY	6070	
20	ASR	1128E	1152	N46	W90	05 13.0			9	9	E	RAMY		
20	BSL	1152	1344D	N46	W90	05 13.0			9	9	E	RAMY		
20	ADF	1235E	1423D	N28	W47	05 16.8		18	9	9	E	HOLL	6060	
20	ADF	1252E	0151D	N36	W29	05 18.2	1	07	9	9	E	HOLL	6063	
20	ASR	1302E	1619D	S06	W90	05 13.8			9	9	E	HOLL	6065	
20	EPL	1311E	1343D	N31	W59	05 15.9	2		9	9	E	HOLL	6060	
20	EPL	1311E	1344D	N36	W90	05 13.3	2		9	9	E	RAMY	6060	
20	DSD	1332E	1625D	N33	W20	05 19.0		05	9	9	E	HOLL	6063	Flare Associated
20	SSB	1339		418	W29	05 19.1			0	0	E	HOLL		
20	SDF	1347E	1350D	N28	W52	05 16.5	3	19	0	0	E	SVTO	6060	
20	ADF	1710E	0455D	N40	W26	05 18.6	1	03	9	9	E	PALE	6063	
21	DSD	0025E	0455D	N19	E17	05 22.3		03	9	9	E	PALE		
21	AFS	0123E	0932D	S19	E41	05 24.2		02	9	9	E	LEAR	6070	
21	AFS	0124E	0932D	N19	E16	05 22.3		03	9	9	E	LEAR		
21	AFS	0205E	0455D	S12	E51	05 24.9		02	9	9	E	PALE	6071	
21	AFS	0258E	0455D	N20	E15	05 22.3		02	9	9	E	PALE		
21	ADF	0610E	0932D	N38	W41	05 17.9		11	9	9	E	LEAR	6063	
21	ADF	1129E	2050D	S14	W31	05 19.1	1	06	9	9	E	RAMY	6064	
21	SSB	1208		388	W11	05 14.9			0	0	E	RAMY		420 W43 431 W54
21	ADF	1231E	0056D	S15	W36	05 18.8	1	07	9	9	E	HOLL	6064	
21	AFS	1238E	2050D	N09	E11	05 22.3		02	8	6	E	RAMY	6068	
21	AFS	1713E	2130D	S18	E32	05 24.1		02	9	9	E	PALE	6070	
21	ADF	1728E	0437D	N31	E41	05 25.0		35	9	9	E	PALE		
21	AFS	2000E	0437D	N10	W46	05 18.4		02	9	9	E	PALE	6073	
21	DSD	2010E	0056D	S15	W45	05 18.4		02	9	9	E	HOLL	6064	
21	DSD	2110E	0437D	S13	W58	05 17.5		03	9	9	E	PALE	6067	
21	AFS	2158E	0437D	N20	E06	05 22.4		02	9	9	E	PALE		
21	LPS	2242	2320D	N35	W38	05 18.9			9	9	E	HOLL	6063	Flare Associated
22	SSB	0036		381	W10	05 15.9			0	0	E	HOLL		397 W26
22	AFS	0042E	0056D	N08	E02	05 22.2		02	9	9	E	HOLL	6068	
22	ADF	0044E	0056D	S12	E20	05 23.5	1	05	9	9	E	HOLL	6069	
22	LPS	0050	0056D	S14	W42	05 18.9			9	9	E	HOLL	6064	Flare Associated
22	AFS	0110E	0437D	N10	E04	05 22.3		02	9	9	E	PALE	6068	
22	DSD	0155E	0258D	S16	W41	05 19.0		04	9	9	E	PALE	6064	Flare Associated
22	AFS	0230E	0939D	S12	E35	05 24.7		04	9	9	E	LEAR	6071	
22	ADF	0519E	0939D	N40	W54	05 17.8	1	06	7	8	E	LEAR	6063	
22	AFS	0521E	0939D	N08	W01	05 22.1		02	7	9	E	LEAR	6068	
22	ASR	0530E	0939D	N21	W89	05 15.4			9	9	E	LEAR	6060	
22	DSD	0545E	0939D	S11	E31	05 24.6		04	9	9	E	LEAR	6071	
22	SDF	0737E	1112D	N20	E38	05 25.2		06	0	0	E	SVTO		
22	SDF	0737E	1112D	N31	W56	05 17.9		22	0	0	E	SVTO		
22	AFS	0759E	0939D	N20	W02	05 22.2		04	9	9	E	LEAR	6074	
22	AFS	0855E	1305D	S15	W42	05 19.2		03	9	9	E	SVTO	6064	
22	AFS	0858E	1305D	S14	W65	05 17.5		02	9	9	E	SVTO	6067	
22	ADF	1125E	2222D	N44	W40	05 19.2	1	14	9	9	E	RAMY	6063	
22	AFS	1125E	2222D	S13	W42	05 19.3		03	9	9	E	RAMY	6064	
22	APR	1200E	2015D	N27	W87	05 15.7	2		9	9	E	RAMY	6060	
22	SDF	1304E	1349D	S26	W55	05 18.3	3	25	0	0	E	RAMY		
22	ADF	1803E	0101D	S15	W51	05 18.9	1	04	9	9	E	PALE	6064	
22	APR	1807E	0101D	N30	W90	05 15.7			9	9	E	PALE	6060	
22	AFS	1811E	0101D	S18	E18	05 24.1		02	9	9	E	PALE	6070	
22	DSD	1816E	2110D	S11	E27	05 24.8		02	9	9	E	PALE	6071	
22	ADF	1818E	0133D	S12	W54	05 18.7	1	06	9	9	E	HOLL	6064	
22	AFS	1819E	0101D	N08	W08	05 22.2		02	9	9	E	PALE	6068	
22	AFS	1821E	0101D	N19	W09	05 22.1		02	9	9	E	PALE	6074	
22	ASR	1847E	2228D	N33	W90	05 15.6			9	9	E	HOLL	6060	
22	SSB	1852		397	W36	05 15.0			0	0	E	HOLL		419 W58 430 W69
22	ASR	2015E	0101D	S28	W90	05 15.8			9	9	E	PALE		
22	ADF	2030E	0101D	S10	E09	05 23.5	1	05	9	9	E	PALE	6069	
22	AFS	2034E	0101D	S13	E28	05 25.0		02	9	9	E	PALE	6071	
22	SDF	2054E	2030D	S30	W61	05 18.1		24	0	0	E	HOLL		
22	ADF	2110E	0101D	S22	E16	05 24.1	1	05	9	9	E	PALE	6070	
23	AFS	0121E	0922D	N19	W12	05 22.1		02	9	9	E	LEAR	6074	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
23	ASR	0146E	0922D	N23	W90	05 16.1			9	9	E	LEAR	6062	
23	AFS	0530E	0922D	N09	W12	05 22.3		03	9	9	E	LEAR	6068	
23	APR	0700E	0922D	N34	W90	05 16.1	1		9	9	E	LEAR	6060	
23	ASR	0820E	0922D	N33	W85	05 16.6			9	9	E	LEAR	6060	
23	AFS	1030E	2217D	N19	W17	05 22.1		02	9	9	E	RAMY	6074	
23	AFS	1036E	2217D	S11	E17	05 24.7		03	9	9	E	RAMY	6071	
23	ADF	1040E	1720D	S13	E05	05 23.8	2	09	9	9	E	RAMY	6069	
23	AFS	1042E	2217D	S18	E08	05 24.0		03	9	9	E	RAMY	6070	
23	AFS	1046E	2217D	N08	W16	05 22.2		03	9	9	E	RAMY	6068	
23	DSD	1048E	1510D	S13	W64	05 18.6		03	9	9	E	RAMY	6064	
23	AFS	1048E	2217D	S14	W58	05 19.1		04	9	9	E	RAMY	6064	
23	ADF	1107E	2000D	S38	W32	05 20.9	2	36	9	9	E	RAMY		
23	SSB	1112		390	W39	05 16.2			0	0	E	SVTO		330 W00
23	ADF	1115E	2217D	N44	W56	05 18.8	1	10	9	9	E	RAMY	6063	
23	DSD	1120E	1329D	S12	E04	05 23.8		08	9	9	E	RAMY	6069	
23	ADF	1320E	0040D	S03	W12	05 22.6	1	03	8	8	E	HOLL	6069	
23	SSB	1954		419	W72	05 22.1			0	0	E	HOLL		
23	AFS	2140E	0407D	N08	E22	05 25.5		03	9	9	E	PALE	6068	
23	AFS	2140E	0407D	N26	E24	05 25.8		02	8	8	E	PALE	6072	
23	AFS	2140E	0407D	S12	E11	05 24.7		03	9	9	E	PALE	6071	
24	APR	0705E	0747	S13	W90	05 17.5	1				V	KHAR		
24	APR	0728E	0757D	S36	E90	05 31.5	1				V	KHAR		
24	DSD	0814	0825	N41	W60	05 19.4	1				V	KHAR		
24	DSD	0817	0832D	N33	W70	05 18.8	1				V	KHAR		
24	DSD	0950E	1006D	N33	W70	05 18.8	1				V	KHAR		
24	AFS	1025E	2145D	N21	E70	05 29.8		02	9	9	E	RAMY	6075	
24	AFS	1026E	2145D	N11	E61	05 29.0		02	9	9	E	RAMY	6076	
24	ADF	1029E	1647D	S15	E40	05 27.5	1	06	9	9	E	RAMY		
24	ADF	1033E	1647D	S24	E15	05 25.6	1	05	9	9	E	RAMY	6072	
24	AFS	1040E	2145D	S13	E05	05 24.8		02	9	9	E	RAMY	6071	
24	ADF	1041E	2145D	N09	W14	05 23.4	1	07	9	9	E	RAMY	6069	
24	APR	1044E	1536D	S08	W87	05 17.9	1		9	9	E	RAMY	6067	
24	ASR	1104E	1647D	N25	W89	05 17.6			9	9	E	RAMY	6062	
24	ASR	1105E	1647D	S11	W88	05 17.8			9	9	E	RAMY	6067	
24	DSD	1139E	1534D	S19	W08	05 23.9		04	9	9	E	RAMY	6070	
24	DSD	1320E	0037D	S05	E19	05 26.0		02	9	9	E	HOLL	6070	
24	ADF	1335E	2230D	N35	W69	05 19.0	1	15	9	9	E	HOLL	6063	
24	DSD	1335E	2230D	N36	W70	05 18.9		02	9	9	E	HOLL	6063	
24	DSD	1340E	0038D	S13	W68	05 19.4		02	9	9	E	HOLL	6064	Flare Associated
24	AFS	1436E	0154D	N10	W31	05 22.3		03	9	9	E	HOLL	6068	
24	AFS	1445E	0154D	S11	E00	05 24.6		02	7	8	E	HOLL	6071	
24	DSD	1445E	0154D	S14	E04	05 24.9		02	9	9	E	HOLL	6071	
24	AFS	1453E	2235D	N26	E16	05 25.9		03	8	8	E	HOLL	6072	
24	DSD	1517E	2235D	N20	W31	05 22.3		02	9	9	E	HOLL	6074	
24	ASR	1524E	0154D	N18	E90	05 31.5			9	9	E	HOLL		
24	AFS	1535E	0154D	N10	E58	05 29.0		02	9	9	E	HOLL		
24	SSB	1540		367	W32	05 19.3			0	0	E	HOLL		391 W55 411 W75
24	DSD	1641E	2008D	S15	W13	05 23.7		02	9	9	E	RAMY	6070	
24	SSB	1652		381	W46	05 17.9			0	0	E	RAMY		400 W65 412 W76
24	DSD	1705E	0122D	N09	W37	05 21.9		05	9	9	E	PALE	6068	
24	AFS	1705E	0126D	N10	E59	05 29.1		02	8	8	E	PALE		
24	DSD	1705E	0126D	N12	E57	05 29.0		03	8	8	E	PALE		
24	AFS	1705E	0415D	N08	W34	05 22.2		03	9	9	E	PALE	6068	
24	DSD	1705E	0415D	N32	W78	05 18.5		04	9	9	E	PALE	6063	
24	ASR	1705E	0415D	N34	W90	05 17.5			8	8	E	PALE	6063	
24	DSD	1705E	0415D	S16	W75	05 19.0		03	9	9	E	PALE	6064	
24	DSD	1749E	0154D	S15	W75	05 19.1		04	8	8	E	HOLL	6064	
24	ASR	1805E	0415D	N20	E90	05 31.6			9	9	E	PALE		
24	ADF	1819E	2008D	N25	W49	05 21.0	1	05	9	9	E	RAMY		
24	SDF	1834E	1856D	S12	W13	05 23.8		14	0	0	E	HOLL	6069	Flare Associated
24	ADF	1925E	0415D	S07	W22	05 23.2	1	09	9	9	E	PALE	6069	
24	DSD	2016E	0415D	S12	W04	05 24.5		02	9	9	E	PALE	6071	
24	DSD	2050E	0131D	N32	W75	05 18.9		08	9	9	E	PALE	6063	Flare Associated
24	DSD	2058E	2227D	N38	W75	05 18.8		25	9	9	E	HOLL	6063	Flare Associated
24	LPS	2115E	2227D	N35	W76	05 18.8			9	9	E	HOLL	6063	Flare Associated
24	LPS	2116E	2146D	N36	W78	05 18.6			9	9	E	PALE	6063	Flare Associated
24	ADF	2227E	0154D	N34	W64	05 19.8	1	17	9	9	E	HOLL	6063	
24	AFS	2345E	0935D	N10	W37	05 22.2		02	9	9	E	LEAR	6068	
24	ASR	2345E	0935D	N21	E90	05 31.9			9	9	E	LEAR		

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
24	ASR	2348E	0935D	N37	W90	05	17.7			8	7	E	LEAR	6063	
25	ASR	0031E	0154D	S11	W90	05	18.2			9	9	E	HOLL	6064	
25	APR	0044E	0154D	N28	W90	05	18.0	2		9	9	E	HOLL		
25	APR	0100E	0935D	N30	W90	05	18.0	1		9	9	E	LEAR	6063	
25	APR	0100E	0415D	N24	W90	05	18.1			9	9	E	PALE	6062	
25	ASR	0231E	0935D	S13	W90	05	18.3			9	9	E	LEAR	6064	
25	APR	0755E	1105D	N05	E90	06	1.1	1				V	KHAR		
25	BSD	0808E	1245D	N21	E75	05	31.1		03	9	9	E	SVTO		
25	ADF	0808E	1650D	S13	W22	05	23.7	1	10	9	9	E	SVTO	6069	
25	BSL	0840E	0850D	S23	W90	05	18.4	1				V	KHAR		
25	BSL	0857E	0942D	N24	W90	05	18.4	1				V	KHAR		
25	ADF	0901E	0927D	N24	E02	05	25.5	1				V	KHAR		
25	BSL	1004E	1010D	S14	W90	05	18.6	1				V	KHAR		
25	APR	1020E	1105D	S40	E90	06	1.8	2				V	KHAR		
25	DSD	1037E	2150D	S12	W05	05	25.1		03	9	9	E	RAMY	6071	
25	ASR	1038E	2150D	S12	W90	05	18.7			9	9	E	RAMY	6064	
25	AFS	1039E	2150D	N10	W46	05	22.0		03	9	9	E	RAMY	6068	
25	ASR	1041E	2150D	N36	W90	05	18.2			9	9	E	RAMY	6063	
25	DSD	1044E	2150D	N19	E73	05	31.0		03	9	9	E	RAMY	6077	
25	ADF	1045E	2150D	N11	E47	05	29.0	1	06	9	9	E	RAMY	6076	
25	SSB	1055		360	W34	05	20.7			0	0	E	RAMY		379 W53
25	ADF	1104E	1342D	S12	W11	05	24.6	2	04	9	9	E	RAMY	6071	
25	ADF	1240E	1629D	N30	E56	05	29.9	1	13	9	9	E	HOLL	6075	
25	ASR	1304E	0154D	N29	W90	05	18.5			9	9	E	HOLL	6063	
25	ASR	1307E	0154D	S12	W90	05	18.8			9	9	E	HOLL	6064	
25	ADF	1311E	1631D	N14	E50	05	29.3	1	06	9	9	E	HOLL	6076	
25	ADF	1316E	0154D	S11	W25	05	23.7	1	10	9	9	E	HOLL	6069	
25	SDF	1409E	1347D	N34	W27	05	23.4		29	0	0	E	RAMY		
25	SDF	1650E	1554D	N43	E28	05	28.0		19	0	0	E	HOLL		
25	SDF	1650E	1220D	N60	E50	05	30.1		36	0	0	E	SVTO		
25	MDP	1730E	1845D	N13	E90	06	1.5			4	6	E	HOLL		
25	SSB	1747		322	W00	05	24.1			0	0	E	HOLL		363 W41 379 W57
25	SSB	1747		395	W73	05	17.0			0	0	E	HOLL		
25	ASR	1933E	0442D	N34	W90	05	18.6			9	9	E	PALE	6063	
25	ASR	1933E	0442D	S17	W90	05	19.0			9	9	E	PALE	6064	
25	ADF	1959E	0442D	N15	E45	05	29.2		05	9	9	E	PALE	6076	
25	ADF	1959E	0442D	N18	W49	05	22.1	1	03	9	9	E	PALE	6074	
25	DSD	1959E	0442D	N21	E70	05	31.2		03	9	9	E	PALE	6077	
25	ADF	1959E	0442D	S13	W28	05	23.7	2	11	8	7	E	PALE	6069	
25	ADF	1959E	0442D	S14	E21	05	27.4	1	06	9	9	E	PALE		
25	DSD	1959E	0442D	S17	W23	05	24.1		04	9	9	E	PALE	6070	
25	MDP	2008E	0442D	N25	E90	06	1.8			9	8	E	PALE		
25	APR	2321E	0106	S46	W90	05	18.5	1				C	VORO		
25	APR	2321E	0106D	N03	E90	06	1.7	1				C	VORO		
25	APR	2321E	0106D	S34	E90	06	2.1	1				C	VORO		
25	APR	2321E	0106D	S38	W90	05	18.7	1				C	VORO		
25	ASR	2337E	0932D	S15	W90	05	19.2			9	9	E	LEAR	6064	
25	SDF	2350E	1214D	N34	W63	05	21.0		27	0	0	E	HOLL		
26	APR	0051	0106	N38	W90	05	18.7	1				C	VORO		
26	BSL	0051	0106	S23	E90	06	2.0	1				C	VORO		
26	BSL	0119	0200D	S23	E90	06	2.0	1				C	VORO		
26	AFS	0245E	0932D	N14	E38	05	29.0		02	9	9	E	LEAR	6076	
26	ASR	0400E	0932D	N15	E90	06	2.0			9	9	E	LEAR		
26	ASR	0539E	1531D	N13	E90	06	2.0			9	9	E	SVTO		
26	AFS	0621E	1531D	N08	W55	05	22.1		02	9	9	E	SVTO	6068	
26	ADF	0621E	1531D	S11	W37	05	23.5	1	11	6	9	E	SVTO	6069	
26	ADF	0621E	1531D	S18	E17	05	27.5	1	15	9	9	E	SVTO		
26	SSB	1143		320	W09	05	25.0			0	0	E	SVTO		
26	SSB	1311		320	W09	05	25.0			0	0	E	HOLL		360 W49 375 W64
26	AFS	1329E	2129D	N20	E66	05	31.6		03	9	9	E	RAMY	6077	
26	SSB	1334		321	W10	05	25.0			0	0	E	RAMY		361 W50 377 W67
26	AFS	1418E	2129D	N12	E29	05	28.8		02	9	9	E	RAMY	6076	
26	ASR	1419E	1659D	N14	E90	06	2.4			9	9	E	RAMY		
26	AFS	1423E	2129D	S14	W19	05	25.2		02	9	9	E	RAMY	6071	
26	ADF	1456E	2336D	S14	W21	05	25.0	2	04	9	9	E	HOLL	6071	
26	DSD	1655E	2129D	S12	E40	05	29.7		02	9	9	E	RAMY	6078	
26	ADF	1656E	2129D	S09	W29	05	24.5	2	06	9	9	E	RAMY	6071	
26	BSD	1726	1759D	N16	E52	05	30.7		05	9	9	E	HOLL	6077	Flare Associated

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ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
26	DSD	1759E	2307D	N16	E52	05 30.7		08	9	9	E	HOLL	6077	
26	DSD	1812E	0426D	N21	E59	05 31.3		04	9	9	E	PALE	6077	Flare Associated
26	AFS	1818E	0426D	N20	E56	05 31.0		02	9	9	E	PALE	6077	
26	ADF	1902E	0426D	S11	W30	05 24.5	1	06	9	9	E	PALE	6071	
26	DSD	1943E	2135D	S10	E41	05 29.9		03	9	9	E	PALE	6078	
26	AFS	2005E	0426D	N08	W62	05 22.2		03	9	9	E	PALE	6068	
26	APR	2010E	0426D	N32	W90	05 19.7			9	9	E	PALE		
26	APR	2010E	0426D	N53	W90	05 19.1			9	9	E	PALE		
26	ADF	2015E	0426D	S08	E01	05 26.9	1	11	9	9	E	PALE		
26	SSB	2021		332	W15	05 24.4			0	0	E	PALE		
26	ASR	2053E	2305D	N33	W90	05 19.7			9	9	E	HOLL	6063	
26	ASR	2055E	0426D	N35	W90	05 19.7			9	9	E	PALE		
26	ASR	2102E	0426D	N15	E90	06 2.7			9	9	E	PALE		
26	APR	2311E	0004	S10	W90	05 20.2	1				C	VORO		
26	ADF	2312E	0113	N36	W43	05 23.5	1				C	VORO		
26	BSL	2318	0004	S11	W90	05 20.2	1				C	VORO		
26	BSL	2318	2336	S23	E90	06 2.9	1				C	VORO		
26	BSL	2336	0017	S20	W90	05 20.1	1				C	VORO		
27	ASR	0143E	0930D	N16	E90	06 2.9			9	9	E	LEAR		
27	AFS	0144E	0930D	S08	W32	05 24.7		02	9	9	E	LEAR	6071	
27	ADF	0601E	1631D	S10	W47	05 23.7	1	11	9	9	E	SVTO	6069	
27	AFS	0601E	1631D	S11	W36	05 24.5		03	9	9	E	SVTO	6071	
27	DSD	0712	0730D	N20	E59	05 31.8	1				V	KHAR		
27	ADF	0737E	0811D	N19	E56	05 31.6	1				V	KHAR		
27	SSB	0743		301	W21	05 27.2			0	0	E	SVTO		
27	APR	0846E	0927D	N34	W90	05 20.2	1				V	KHAR		
27	SSB	1130		320	W22	05 25.9			0	0	E	RAMY		360 W62 100 W16
27	ADF	1130E	1813D	N20	E50	05 31.3	1	06	9	9	E	RAMY	6077	
27	ADF	1315E	0157D	S12	W39	05 24.6	1	07	9	9	E	HOLL	6071	
27	ADF	1317E	1748D	N31	W28	05 25.3	2	10	9	9	E	HOLL	6072	
27	SSB	1320		308	W11	05 26.9			0	0	E	HOLL		320 W23 361 W64
27	AFS	1635E	0438D	S18	E11	05 28.5		02	9	9	E	PALE		
27	AFS	1652E	0438D	N21	E45	05 31.1		02	9	9	E	PALE	6077	
27	DSD	1744E	0438D	N20	E45	05 31.2		02	9	9	E	PALE	6077	
27	AFS	1749E	0438D	S10	W42	05 24.6		03	9	9	E	PALE	6071	
27	ADF	1749E	0438D	S11	W43	05 24.5	1	07	9	9	E	PALE	6071	
27	DSD	1848E	2240D	N18	E43	05 31.0		04	9	9	E	HOLL	6077	
27	SSB	1855		307	W13	05 27.3			0	0	E	PALE		322 W28 359 W65
27	AFS	1905E	0438D	N23	E23	05 29.6		01	9	9	E	PALE	6075	
27	DSD	1909E	2029D	S19	W50	05 24.0		02	9	9	E	PALE	6070	
27	ADF	1910E	0438D	S10	W90	05 21.0	1	12	9	9	E	PALE		
27	APR	1954E	0438D	N23	W90	05 20.9			9	9	E	PALE	6074	
27	ADF	2030E	0438D	S22	W51	05 23.9	2	03	9	9	E	PALE	6070	
28	DSD	0000E	0438D	N18	E39	05 31.0		03	9	9	E	PALE	6077	
28	ASR	0012E	0438D	N09	E90	06 3.8			9	9	E	PALE	6080	
28	ADF	0700E	1543D	S15	W46	05 24.8	1	05	9	9	E	SVTO	6071	
28	SSB	0705		323	W36	05 26.4			0	0	E	SVTO		
28	DSD	1120E	1450D	N20	E32	05 30.9		03	9	9	E	RAMY	6077	
28	ADF	1120E	1711D	S17	W52	05 24.5	1	05	9	9	E	RAMY	6070	
28	ASR	1120E	1716D	N21	W85	05 21.9			9	9	E	RAMY	6074	
28	ADF	1120E	2230D	N18	E34	05 31.1	1	05	9	9	E	RAMY	6077	
28	AFS	1404E	0129D	N13	E00	05 28.6		02	7	7	E	HOLL	6076	
28	ADF	1404E	1821D	N14	E08	05 29.2	1	03	7	7	E	HOLL	6076	Flare Associated
28	DSD	1505E	1940D	N18	E33	05 31.1		03	9	9	E	RAMY	6077	Flare Associated
28	DSD	1705E	0054D	N13	W01	05 28.6		02	9	9	E	PALE	6076	
28	DSD	1705E	0054D	N14	E61	06 2.3		03	9	9	E	PALE	6080	
28	DSD	1705E	0054D	N16	E31	05 31.1		05	9	9	E	PALE	6077	
28	ASR	1705E	0054D	N20	W90	05 21.8			9	6	E	PALE	6074	
28	DSD	1705E	0054D	N26	W38	05 25.7		02	9	9	E	PALE	6072	
28	ADF	1705E	0054D	S07	W25	05 26.8		19	9	9	E	PALE		
28	ADF	1705E	0054D	S12	W55	05 24.6	1	13	9	9	E	PALE	6071	
28	AFS	1705E	0054D	S18	W02	05 28.5		02	9	9	E	PALE	6081	
28	DSD	1718E	0054D	S04	W28	05 26.6		02	9	9	E	PALE		
28	SSB	1740		295	W13	06 4.9			0	0	E	HOLL		310 W28 321 W39
28	AFS	1740E	0129D	S04	W28	05 26.6		01	9	9	E	HOLL		
28	ADF	1943E	0129D	S11	W55	05 24.7	1	09	9	9	E	HOLL	6071	
28	SDF	2211E	1439D	N33	E15	05 30.1		09	0	0	E	HOLL		

ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
29	DSD	0001E	0036D	N22	E28	05	31.1		05	9	9	E	HOLL	6077	Flare Associated
29	SDF	0050E	0030D	N04	W50	05	25.3	3	10	0	0	E	LEAR		
29	AFS	0205E	0937D	N13	W05	05	28.7		03	9	9	E	LEAR	6076	
29	ADF	0700E	0937D	N18	E18	05	30.7	2	06	9	9	E	LEAR	6077	
29	DSD	0825E	0845D	S11	E06	05	29.8		03	9	9	E	LEAR	6078	
29	ADF	1029E	1624D	N10	E64	06	3.2	1	15	9	9	E	RAMY	6080	
29	AFS	1034E	2207D	S16	W13	05	28.4		02	9	9	E	RAMY	6081	
29	AFS	1036E	2207D	S12	E03	05	29.7		02	9	9	E	RAMY	6078	
29	ASR	1050E	1920D	S07	W90	05	22.7			9	9	E	RAMY	6069	
29	ADF	1058E	1914D	S17	W25	05	27.5	1	11	9	9	E	RAMY		
29	DSD	1325E	1523D	N18	E20	05	31.1		06	9	9	E	RAMY	6077	
29	SSB	1525		S14	W45	05	28.5			0	0	E	RAMY		332 W62
29	AFS	1530E	2207D	S04	W41	05	26.6		02	9	9	E	RAMY	6082	
29	APR	1544E	2036D	S10	W90	05	22.9	2		9	9	E	HOLL	6069	
29	AFS	1613E	2207D	N16	E49	06	2.4		02	9	9	E	RAMY	6080	
29	AFS	1615E	0152D	S10	E00	05	29.7		03	9	9	E	HOLL	6078	
29	DSD	1617E	2207D	S18	W75	05	24.0		03	9	9	E	RAMY	6070	
29	AFS	1621E	2207D	N20	E20	05	31.2		02	9	9	E	RAMY	6077	
29	DSD	1656E	0104D	N19	E21	05	31.3		02	9	9	E	PALE	6077	
29	ADF	1656E	0104D	N19	E57	06	3.0		10	9	7	E	PALE	6080	
29	DSD	1656E	0104D	S09	W67	05	24.7		02	9	9	E	PALE	6071	
29	AFS	1656E	0104D	S11	E00	05	29.7		05	9	9	E	PALE	6078	
29	ADF	1656E	0104D	S17	W27	05	27.6		24	8	7	E	PALE		
29	DSD	1656E	0104D	S18	W72	05	24.2		05	9	9	E	PALE	6070	
29	SDF	1808E	1652D	N30	E13	05	30.8		06	0	0	E	PALE		
29	ADF	1826E	2036D	S13	W65	05	24.9	2	13	9	9	E	HOLL	6071	
29	ADF	1856E	1938D	S10	W69	05	24.6	2	14	9	9	E	RAMY	6071	
29	AFS	2345E	0931D	S11	W05	05	29.6		02	7	7	E	LEAR	6078	
30	ADF	0225E	0931D	N20	E13	05	31.1	2	06	9	6	E	LEAR	6077	
30	AFS	0226E	0931D	N21	E14	05	31.2		02	9	9	E	LEAR	6077	
30	ADF	0235E	0931D	N11	E49	06	2.8	3	10	9	9	E	LEAR	6080	
30	ASR	0910E	1738D	S20	W87	05	23.7			9	9	E	SVTO	6070	
30	AFS	0914E	1738D	S11	W08	05	29.8		03	9	9	E	SVTO	6078	
30	SDF	0931	0251D	S60	W16	05	29.0		11	0	0	E	LEAR		
30	AFS	1027E	1645D	S04	W51	05	26.6		02	9	8	E	RAMY	6082	
30	AFS	1028E	1424D	S18	W27	05	28.4		02	9	9	E	RAMY	6081	
30	AFS	1028E	1424D	S18	W27	05	28.4		02	9	9	E	RAMY	6081	
30	ADF	1030E	2019D	N11	E51	06	3.3	1	13	9	9	E	RAMY	6080	
30	AFS	1036E	2044D	S10	W08	05	29.8		03	9	9	E	RAMY	6078	
30	AFS	1037E	2044D	N20	E10	05	31.2		03	9	9	E	RAMY	6077	
30	ADF	1043E	1645D	S11	W66	05	25.5	1	07	9	9	E	RAMY	6071	
30	DSD	1250E	1420D	S14	E58	06	3.9		04	9	9	E	RAMY		
30	ADF	1347E	1615D	N20	E07	05	31.1	1	07	9	9	E	HOLL	6077	
30	ASR	1356E	0158D	S15	W90	05	23.8			9	9	E	HOLL	6070	
30	ASR	1408E	1928D	S10	W86	05	24.1			9	9	E	RAMY	6071	
30	APR	1420E	0158D	S24	W90	05	23.6	2		9	9	E	HOLL	6070	
30	APR	1441E	1529D	S05	W90	05	23.9	2		9	9	E	HOLL	6069	
30	APR	1454E	1542D	S06	W90	05	23.9	2		9	9	E	RAMY	6071	
30	ASR	1511E	1738D	S11	W86	05	24.2			9	8	E	SVTO	6071	
30	APR	1517E	1738D	S14	W90	05	23.8	1		9	9	E	SVTO		
30	EPL	1529E	1608D	S05	W90	05	23.9			9	9	E	HOLL	6069	
30	APR	1535E	1645D	S30	W90	05	23.6	2		9	9	E	RAMY		
30	SSB	1644		S14	W58	05	29.5			0	0	E	HOLL		
30	SDF	1652E	2040D	N28	W38	05	27.7		10	0	0	E	PALE	6072	
30	SDF	1738E	0352D	S15	W55	05	26.6		15	0	0	E	SVTO		
30	ADF	1755E	0158D	N19	E04	05	31.0	2	13	9	9	E	HOLL	6077	
30	ASR	1925E	0035D	S07	E90	06	6.5			9	9	E	PALE		
30	DSD	1925E	0418D	N19	E00	05	30.8		03	9	9	E	PALE	6077	
30	ADF	1925E	0418D	N20	E03	05	31.0	1	06	9	9	E	PALE	6077	
30	DSD	1925E	0418D	S10	W14	05	29.7		02	9	9	E	PALE	6078	
30	AFS	1925E	0418D	S11	W14	05	29.7		03	9	9	E	PALE	6078	
30	AFS	1925E	0418D	S18	W31	05	28.4		02	8	8	E	PALE	6081	
30	ASR	1925E	0418D	S19	W88	05	24.1			9	9	E	PALE	6070	
30	ASR	1925E	2248D	N24	E90	06	6.8			9	9	E	PALE		
30	EPL	2006E	2242D	S15	W90	05	24.0			5	9	E	HOLL	6071	
30	AFS	2328E	0934D	S09	W16	05	29.8		03	9	9	E	LEAR	6078	
30	ASR	2332E	0934D	S11	E90	06	6.7			9	9	E	LEAR	6085	
30	APR	2335E	0140D	N28	W90	05	23.9	1				C	VORO		

ACTIVE PROMINENCES AND FILAMENTS

MAY 1990

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CHP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
30	ASR	2356E	0007D	S21	E90	06	6.9			9	9	E	PALE		
31	BSL	0007	0016	S19	E90	06	6.9			9	9	E	LEAR 6085		
31	BSL	0009E	0026D	S22	E90	06	6.9			9	9	E	HOLL 6085		
31	ASR	0035	0300D	S21	E90	06	6.9			9	9	E	PALE 6085		
31	SDF	0052E	1316D	S03	W56	05	26.8		11	0	0	E	HOLL		
31	ASR	0300E	0418D	S03	W90	05	24.4			9	9	E	PALE 6071		
31	ASR	0430E	1245D	S15	W90	05	24.4			9	9	E	SVTO 6071		
31	AFS	0431E	1735D	S11	W19	05	29.7		03	9	9	E	SVTO 6078		
31	ADF	0535E	1735D	N16	E30	06	2.5	1	05	9	9	E	SVTO 6080		
31	AFS	1305E	0158D	S10	W25	05	29.7		05	9	9	E	HOLL 6078		
31	AFS	1629E	2123D	S11	W26	05	29.7		03	9	9	E	RAMY 6078		
31	SDF	1735E	0343D	S16	W59	05	27.2		07	0	0	E	SVTO		
31	BSD	1738E	0220D	N22	E75	06	6.5		02	9	9	E	PALE 6086		
31	AFS	1738E	0320D	N19	W12	05	30.8		03	9	9	E	PALE 6077		
31	ADF	1738E	0446D	N20	W07	05	31.2		04	9	9	E	PALE 6077		
31	AFS	1738E	0446D	S11	W27	05	29.7		03	9	9	E	PALE 6078		
31	CRN	1747E	0045D	S18	W90	05	24.9		08	8	6	E	HOLL 6070		
31	ADF	2014	0110D	N22	W07	05	31.3	2	07	9	9	E	HOLL 6077	Flare Associated	
31	SDF	2127E	2127D	S07	W69	05	26.7		14	0	0	E	PALE		
31	AFS	2330E	0933D	S09	W30	05	29.7		03	4	5	E	LEAR 6078		

ADF = Active Dark Filament BSL = Bright Surge on Limb LPS = Loops
 AFS = Arch Filament System CAP = CAP Prominence (Tandberg-Hanssen) MDP = Mound Prominence
 APR = Active Prominence CRN = Coronal Rain SDF = Sudden Disappearing Filament
 ASR = Active Surge Region DSD = Dark Surge on Disk SPY = Spray
 BSD = Bright Surge on Disk EPL = Eruptive Prominence on Limb 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 555	Part II	Page
	MEUDON CARTE SYNOPTIQUE Rotations 1822-1823 (November-December 1989) Active Regions and Filaments Synoptic Solar Maps			95-99

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CARTE SYNOPTIQUE
ACTIVE REGIONS
CARRINGTON ROTATION 1822

(5 November to 2 December 1989)

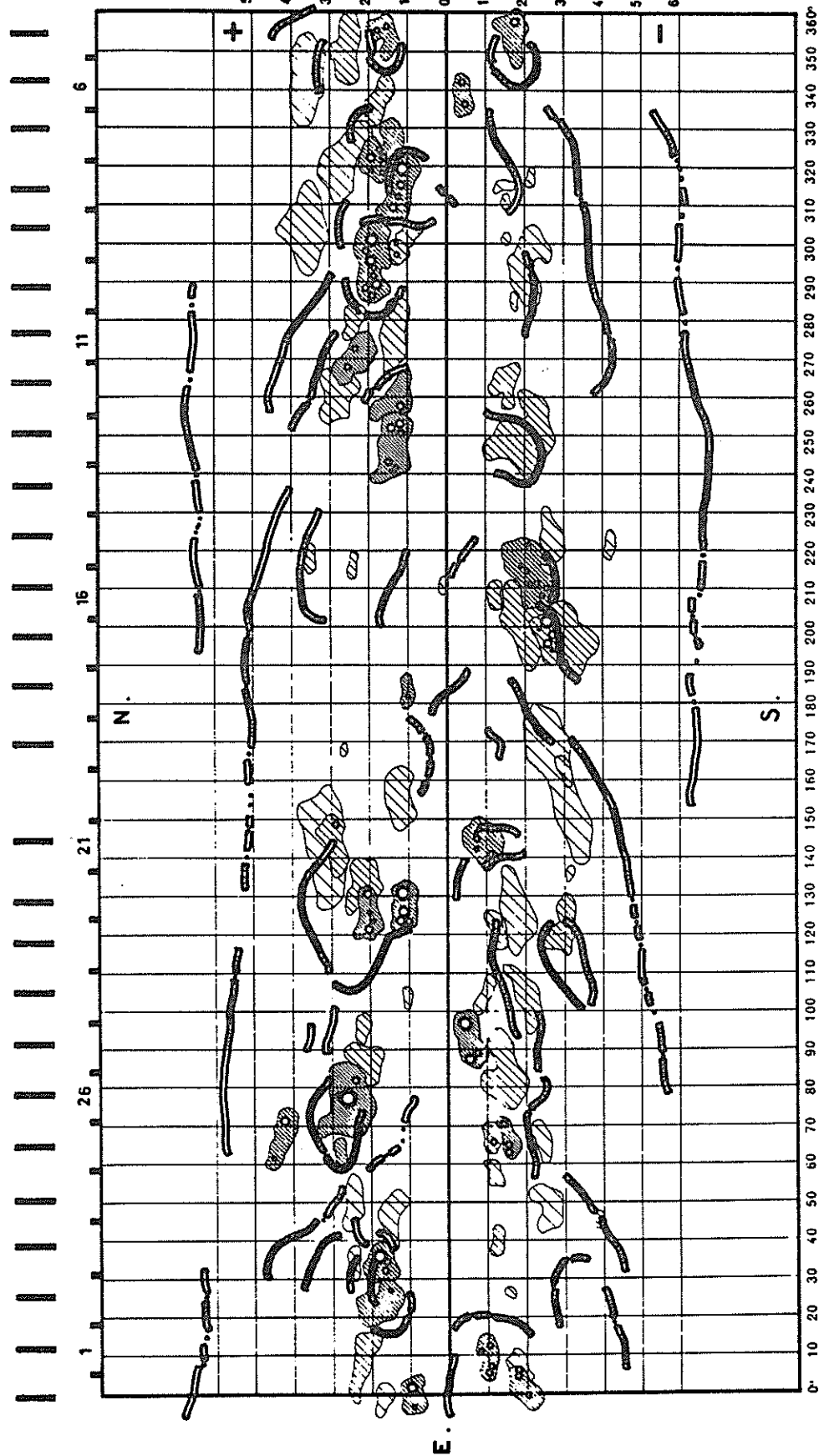
Region No.	Coordinates Lat. Long.	Age at CMP (Days)	Imp	Spotless Region	Region No. in Rotation 1821	Activity at West Limb
1	17 N 354	>6	2		1	decreasing
2	17 S 354	>6	3			decreasing
3	26 N 350	>6	1	x	3	decreasing
4	4 S 339	+3	3			decreasing
5	17 N 336	>6	1	x		decreasing
6	16 N 323	>6	4		10	decreasing
7	26 N 322	>6	1	x		dispersed
8	21 S 316	-2	1	x		disappeared
9	12 N 313	>6	5			decreasing
10	37 N 304	>6	1	x		dispersed
11	10 N 302	>6	1	x	12	disappeared
12	13 N 298	>6	2			decreasing
13	19 N 295	>6	6			stable
14	20 S 294	>6	1	x	13	dispersed
15	17 S 284	+2	1	x		disappeared
16	23 N 279	+2	2			dispersed
17	14 N 275	>6	1	x	17	decreasing
18	24 N 270	>6	3			decreasing
19	15 S 263	>6	1	x	20	decreasing
20	28 N 260	>6	1	x	18	dispersed
21	14 N 259	>6	3			decreasing
22	19 S 249	>6	1	x	20+22	decreasing
23	14 N 246	>6	4		21	decreasing
24	27 S 224	>6	1	x		dispersed
25	36 N 217	+2	1	x		disappeared
26	24 N 216	+1	1	x		disappeared
27	21 S 212	>6	3			decreasing
28	12 S 208	>6	1	x	27	decreasing
29	19 S 200	>6	1	x	27	decreasing
30	28 S 197	>6	4		28	stable
31	11 N 183	+3	2			dispersed
32	29 S 162	>6	1	x	31	decreasing
33	13 N 155	>6	1	x	34	disappeared
34	9 S 144	>6	3			decreasing
35	29 N 143	>6	2			decreasing
36	23 N 132	>6	1	x		dispersed
37	12 N 127	>6	5			decreasing
38	17 S 125	>6	1	x	35+36	dispersed
39	21 N 125	+4	4			decreasing
40	29 S 122	>6	1	x		decreasing
41	12 S 121	+2	1	x		decreasing
42	20 S 104	>6	1	x		decreasing
43	22 N 95	>6	1	x		dispersed
44	5 S 92	0	5			stable
45	22 N 86	>6	1	x	46	decreasing
46	14 S 85	>6	1	x	45	dispersed
47	26 N 77	>6	5			decreasing
48	11 S 67	>6	2			decreasing
49	15 S 66	>6	3			decreasing
50	43 N 66	+6	3			decreasing
51	29 N 62	+4	1	x		disappeared
52	11 S 58	>6	1	x	49	decreasing
53	16 N 46	>6	1	x	51	disappeared
54	39 S 45	-1	1	x		disappeared
55	12 S 40	0	1	x		decreasing
56	18 N 35	>6	4			decreasing
57	26 N 34	>6	1	x	52	disappeared
58	18 N 23	>6	2			decreasing
59	9 S 9	0	3			stable
60	18 S 7	>6	1	x	55	dispersed
61	23 N 7	>6	1	x	56	stable
62	18 S 2	>6	3			decreasing
63	10 N 0	+2	3			decreasing

CARTE SYNOPTIQUE

CARRINGTON ROTATION NUMBER 1822
(5 November to 2 December 1989)

Meudon Observatory

November 1989



Heliographic Longitude

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CARTE SYNOPTIQUE
ACTIVE REGIONS
CARRINGTON ROTATION 1823

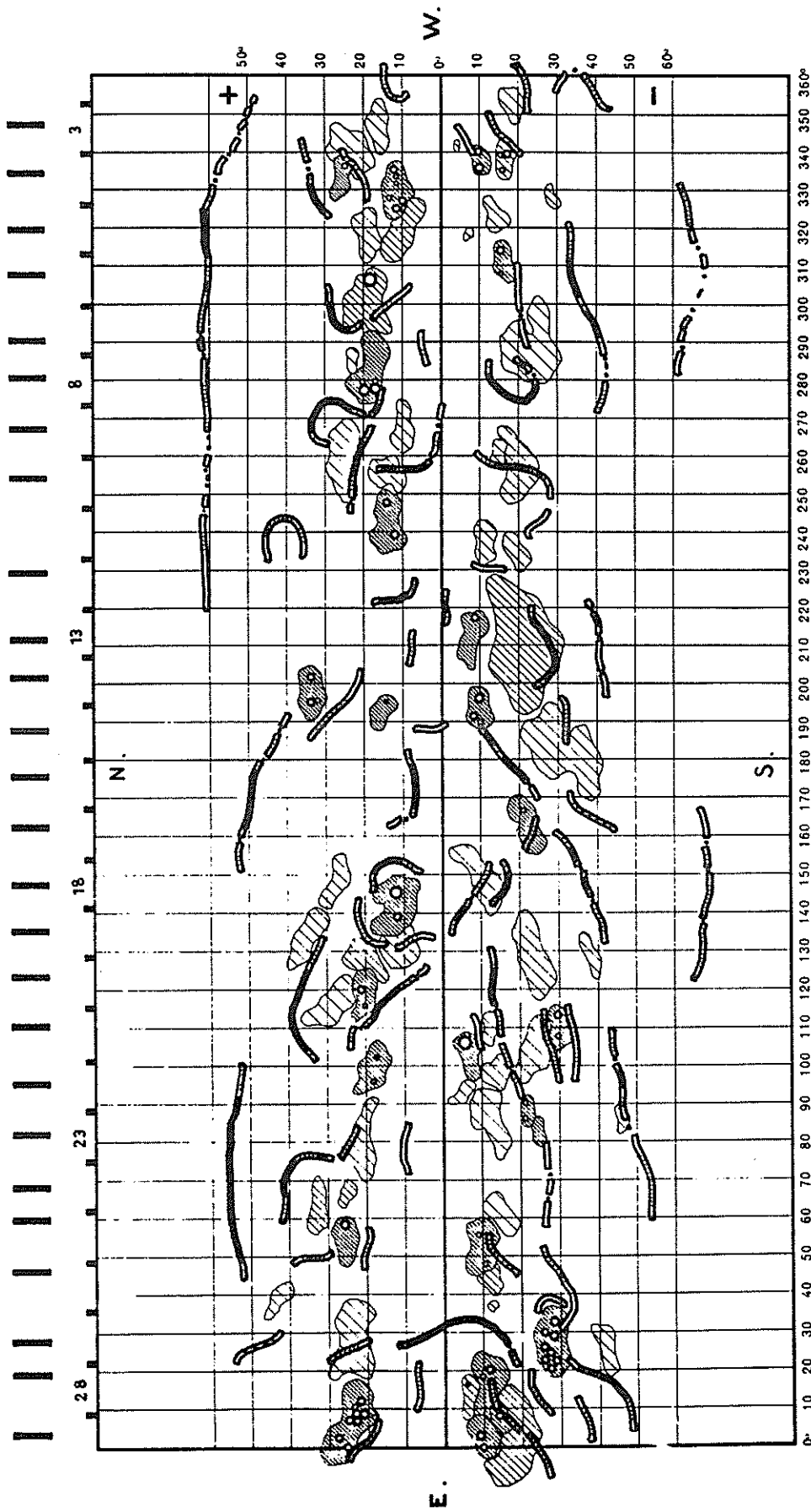
(2 December to 29 December 1989)

Region No.	Coordinates Lat. Long.	Age at CMP (Days)	Imp	Spotless Region	Region No. in Rotation 1822	Activity at West Limb
1	18 S 353	>6	1	x	2	decreasing
2	17 N 347	>6	1	x		dispersed
3	24 N 341	>6	1	x	3	dispersed
4	17 S 339	>6	2			decreasing
5	10 S 338	-3	3			stable
6	26 N 334	-2	2			stable
7	12 N 331	+5	3			decreasing
8	28 S 329	+3	1	x		disappeared
9	13 S 324	>6	1	x		disappeared
10	10 N 321	>6	1	x	9	decreasing
11	20 N 320	>6	1	x	6	dispersed
12	16 S 311	+4	2			decreasing
13	19 N 301	>6	3			decreasing
14	23 N 285	>6	1	x		dispersed
15	18 N 283	>6	4			decreasing
16	10 N 268	>6	1	x		decreasing
17	14 S 261	+2	1	x		dispersed
18	26 N 260	>6	1	x	18+20	decreasing
19	20 S 258	>6	1	x	19	decreasing
20	14 N 256	>6	1	x	21	dispersed
21	14 N 244	>6	3		22+23	decreasing
22	11 S 238	>6	1	x		dispersed
23	19 S 235	>6	1	x		dispersed
24	7 S 212	>6	2			decreasing
25	20 S 211	>6	1	x	27+28+29	decreasing
26	34 N 199	-3	3			increasing
27	9 S 194	-1	3			stable
28	16 N 193	>6	2			decreasing
29	31 S 182	>6	1	x	30	decreasing
30	22 S 164	+6	2			decreasing
31	27 N 148	>6	1	x		disappeared
32	12 N 142	>6	3			decreasing
33	35 N 134	>6	1	x		dispersed
34	12 N 132	>6	1	x	37	dispersed
35	23 S 130	>6	1	x		dispersed
36	38 S 130	>6	1	x		disappeared
37	20 N 128	>6	1	x	39	dispersed
38	20 N 119	>6	2			decreasing
39	30 S 110	-1	2			increasing
40	7 S 103	>6	3			decreasing
41	18 N 99	>6	2			decreasing
42	13 S 98	>6	1	x	44	decreasing
43	5 S 93	>6	1	x		disappeared
44	22 S 89	-1	2			increasing
45	46 S 86	+1	1	x		disappeared
46	25 S 84	-3	1	x		increasing
47	21 N 82	>6	1	x	45+47	decreasing
48	25 N 67	>6	1	x		dispersed
49	33 N 63	>6	1	x		decreasing
50	25 N 55	>6	2			decreasing
51	10 S 52	>6	2			decreasing
52	12 S 45	>6	1	x	55	disappeared
53	43 N 39	>6	1	x		decreasing
54	24 N 29	>6	1	x		dispersed
55	28 S 28	>6	4			stable
56	42 S 26	>6	1	x		dispersed
57	11 S 15	>6	2		59	decreasing
58	7 S 13	>6	2			decreasing
59	15 S 8	>6	2			decreasing
60	24 N 7	>6	5			decreasing
61	10 S 3	>6	3			decreasing
62	18 S 3	>6	1	x	60+62	decreasing

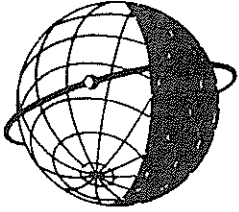
CARTE SYNOPTIQUE
CARRINGTON ROTATION NUMBER 1823
(2 December to 29 December 1989)

December 1989

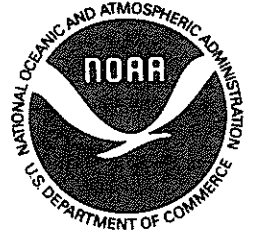
Meudon Observatory



Heliographic Longitude



WORLD DATA CENTER A
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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."