



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

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OCTOBER 1990 NUMBER 554 - Part II

Solar-Geophysical Data comprehensive reports

Data for April 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 554

(Issued in Two Parts)

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H α SOLAR FLARES

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/		Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks	
								Region	Mo Day							Apparent (10-6 Disk)	Corr (Sq Deg)		
			01 0000		0001			No Flare Patrol											
0001	LEAR	01	0416	0417	0423	N19	W52	6000	03	28.3	7	SF	3	E		16			
0002	SVTO	01	0555	0602	0614	S17	W90		03	25.5	19	SF M	4.1	2	E		80	Y	
0003	KHAR	01	0844E		0909D	S10	W90		03	25.7	25D	1F	2	V	0844			H	
0004		01	0913	0917	0925	S11	W09	5996	03	31.7	12	SF						DH	
	KHAR	01	0913		0922D	S11	W09	5996	03	31.7	9D	SF	2	V	0913			DH	
	KANZ	01	0913	0917	0925	S11	W09	5996	03	31.7	12	SF		V					
			01 2013		2058			No Flare Patrol											
			01 2108		2124			No Flare Patrol											
			01 2130		2153			No Flare Patrol											
0005	TACH	02	0441	0443	0504	S10	W18	5996	03	31.8	23	SB	1	C	0443	117	1.3	F	
0006	ISTA	02	0647		0657	N24	E45	6001	04	5.7	10	1N		P				E	
0007		02	0754	0811	0836	S14	W45	5998	03	30.0	42	1N				110	1.6	F	
	ISTA	02	0754		0831	S15	W44	5998	03	30.1	37	1N		P				F	
	YUNN	02	0807E	0811	0840	S13	W46	5998	03	30.0	33D	SN		P		110	1.6		
0008	YUNN	02	0853	0857	0930	S16	W47	5998	03	29.9	37	SN		C		63	1.0		
0009		02	11075	11111	1129	S18	W47	5998	03	30.0	22	SF				30		F	
	SVTO	02	1100E	1102U	1121D	S17	W47	5998	03	30.0	21D	SF	3	E		26		F	
	RAMY	02	1107	1111	1131	S17	W47	5998	03	30.0	24	SF	3	E		33		F	
	KANZ	02	1112	1112	1127	S19	W48	5998	03	29.9	15	SF		V					
0010		02	11133	1116	1136	N23	E39	6001	04	5.5	23	SF C	1.3			29			
	RAMY	02	1113	1116	1144	N23	E39	6001	04	5.5	31	SF C	1.3	3	E	29			
	KANZ	02	1116	1116	1127	N23	E39	6001	04	5.5	11	SF		V					
0011	RAMY	02	1341	1341	1355	N21	E42	6001	04	5.8	14	SF C	2.2	3	E	20		F	
0012	RAMY	02	1536	1540	1544	N21	W76	6000	03	27.9	8	SF		3	E	18			
0013	RAMY	02	1610	1611	1615	N21	E42	6001	04	5.9	5	SF		3	E	17			
0014		02	1704	1706	1740	N21	E38	6001	04	5.6	36	1N M	1.8			112		EF	
	RAMY	02	1704	1706	1739	N21	E39	6001	04	5.7	35	1N M	1.8	3	E	122		FE	
	PALE	02	1705E	1707U	1742	N21	E38	6001	04	5.6	37D	1N		3	E	103		FE	
0015		02	1915	1928U	2000D	N22	E40	6001	04	5.9	45D	SF C	1.3			46		F	
	RAMY	02	1915	1928U	2000D	N21	E38	6001	04	5.7	45D	SF C	1.3	3	E	63		F	
	PALE	02	1929E	1929U	1959D	N22	E43	6001	04	6.1	30D	SF		3	E	29		F	
			02 1942		1945			No Flare Patrol											
0016	HOLL	02	2111	2113	2119	S09	E20	5999	04	4.4	8	SF	2	E		18		F	
			02 2140		2230			No Flare Patrol											
0017		02	2248E	2251U	2302	N21	E38	6001	04	5.9	14D	SF C	3.1			97		EF	
	HOLL	02	2248E	2251U	2306	N21	E37	6001	04	5.8	18D	1N		2	E	117		E	
	PALE	02	2251E	2251U	2256D	N22	E42	6001	04	6.2	5D	SF C	3.1	3	E	81		F	
	LEAR	02	2251E	2251U	2259	N21	E36	6001	04	5.7	8D	SF		2	E	92		F	
0018	HOLL	03	0027	0032	0039	S16	W55	5998	03	29.9	12	SF		3	E	33		F	
0019	LEAR	03	0235	0237	0248	N23	E35	6001	04	5.8	13	SF C	5.1	3	E	13		F	
0020		03	0705*	07203	0815	N24	E30	6001	04	5.6	70	SN C	7.9			96	1.3	E	
	LEAR	03	0705	0723	0825	N22	E32	6001	04	5.7	80	SF C	7.9	3	E	98			
	PEKG	03	0715	0720	0720D	N24	E30	6001	04	5.6	5D	SN		P	0720	63	0.9	E	
	BUCA	03	0715	0722	0737	N25	E27	6001	04	5.4	22	SN		C	0722	54	0.7	E	
	ISTA	03	0814		0824	N22	E33	6001	04	5.9	10	1F		P				E	
	KHAR	03	0818E		0835	N26	E30	6001	04	5.7	17D	1N		2	P	0824	170	2.3	E

H α SOLAR FLARES

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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	(Min)		Opt	Xray	See	Type	Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)
0021	BUCA	03	0747	0747	0753	S13	W63	5998	03	29.7	6	SN		C	0747	54	1.2	D	
0022		03	0823*	0824	0830	N24	E89	6007	04	10.2	7	1N						DY	
	KHAR	03	0823	0824	0830	N24	E88	6007	04	10.1	7	SF	2	V	0824			D	
	KHAR	03	0834		0940D	N24	E90	6007	04	10.3	66D	1B	2	P	0838			Y	
0023		03	1305	1314E	1324	N23	E88	6007	04	10.3	19	SF	C 2.1			40		Y	
	RAMY	03	1305	1314	1323	N23	E88	6007	04	10.3	18	SN		3	E	31		Y	
	SVTO	03	1308E	1316	1324	N24	E90	6007	04	10.5	16D	SF	C 2.1	3	E	58		Y	
	HOLL	03	1310E	1310U	1320D	N22	E90	6007	04	10.5	10D	SF		2	E	31			
	KANZ	03	1319E	1319U	1325D	N23	E85	6007	04	10.1	6D	SF			V				
0024		03	1405*	1410*	1424	N24	E89	6007	04	10.5	19	SF	C 3.0			45			
	SVTO	03	1405	1410	1416	N25	E90	6007	04	10.5	11	SF		3	E	29			
	KANZ	03	1406	1410	1418D	N23	E85	6007	04	10.1	12D	SF			V				
	HOLL	03	1410E	1410U	1448D	N22	E90	6007	04	10.5	38D	SF		2	E	31			
	SVTO	03	1422	1424	1432	N25	E90	6007	04	10.6	10	SN	C 3.0	3	E	75			
0025	HOLL	03	1515	1517	1528	N23	E80	6007	04	9.8	13	SF	C 2.1	3	E	15			
0026		03	1548	1550D	1634	N23	E81	6007	04	9.9	46	SN	C 4.5			44		K	
	HOLL	03	1548	1550	1634	N23	E81	6007	04	9.9	46	SN	C 4.5	3	E	48			
	HOLL	03	1548	1559	1634	N23	E81	6007	04	9.9	46	SN			E	39		K	
0027		03	17054	1712*	1755	N23	E83	6007	04	10.1	50	SF	X 1.0			67		EKY	
	HOLL	03	1705	1716	1818	N23	E82	6007	04	10.0	73	SF			E	88		K	
	HOLL	03	1705	1722	1818	N23	E82	6007	04	10.0	73	1N	X 1.0	3	E	103		YE	
	RAMY	03	1707	1715	1753	N22	E79	6007	04	9.8	46	SF			E	44		K	
	RAMY	03	1707	1722	1753	N22	E79	6007	04	9.8	46	SN		3	E	46		Y	
	PALE	03	1709	1712	1733	N25	E87	6007	04	10.4	24	SF			E	34		K	
	PALE	03	1709	1722	1733	N25	E87	6007	04	10.4	24	SF		3	E	89			
0028	HOLL	03	1910E	1910U	1948D	N22	E90	6007	04	10.7	38D	SF		2	E	31			
0029		03	2033	2035	2048	N23	E79	6007	04	9.9	15	SF	C 2.9			48			
	RAMY	03	2033	2035	2042	N22	E76	6007	04	9.7	9	SF		3	E	37			
	HOLL	03	2033	2035	2055	N24	E82	6007	04	10.2	22	SF	C 2.9	4	E	60			
0030	HOLL	03	2145	2149	2206	N22	E23	6001	04	5.7	21	SF		4	E	39		F	
0031	HOLL	03	2146	2153	2212	N23	E80	6007	04	10.1	26	1B	C 4.5	4	E	108			
0032		03	2307*	2330I	2339	N24	E84	6007	04	10.4	32	SF	C 3.4			31			
	HOLL	03	2307	2331	2339	N23	E81	6007	04	10.2	32	SF	C 3.4	3	E	35			
	LEAR	03	2330	2330	2339	N25	E87	6007	04	10.7	9	SF		3	E	27			
0033	LEAR	04	0038	0041	0047	N25	E87	6007	04	10.8	9	SF	C 3.7	3	E	53			
0034	LEAR	04	0114	0127	0140	N19	E22	6001	04	5.7	26	SF	C 1.7	3	E	44			
0035		04	0140*	0146*	0220	N23	E83	6007	04	10.5	40	1N	C 8.3			73		DH	
	PEKG	04	0140	0148	0246	N24	E90	6007	04	11.0	66	1B			C	0148	84	D	
	LEAR	04	0144	0146	0200	N23	E76	6007	04	9.9	16	SF	C 8.3	3	E	45			
	PURP	04	0151E	0151U	0220	N22	E89	6007	04	10.9	29D	1N			C	0151	138	H	
	LEAR	04	0204	0209	0212	N23	E76	6007	04	9.9	8	SF		3	E	26			
0036		04	03125	0316I	0341	N22	E20	6001	04	5.7	29	SN	C 2.9			82	1.6	E	
	PEKG	04	0312	0316	0340	N23	E19	6001	04	5.6	28	SN			P	0318	126	1.6	E
	LEAR	04	0317	0317	0342	N22	E21	6001	04	5.7	25	SF	C 2.9	3	E	38			
0037	LEAR	04	0523	0527	0531	N24	E81	6007	04	10.5	8	SF		3	E	26			
0038		04	0756	0800	0800	N23	E79	6007	04	10.4	4	SN				172		ADT	
	BUCA	04	0651E		0801	N22	E77	6007	04	10.2	70D	1N			P	0705	172	A	
	KHAR	04	0730E		0747	N24	E80	6007	04	10.5	17D	SN		2	V	0730		DT	
	KHAR	04	0756	0800	0812	N24	E80	6007	04	10.5	16	SN		2	V	0800		DT	

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Apr 90

Ha SOLAR FLARES

APRIL 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF			Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks		
						Lat	Cmd	Region							Mo	Day		Apparent (10-6 Disk)	Corr (Sq Deg)
0039		04	07405	07432	0800	N21	E18	6001	04	5.7	20	SN	C 1.9		84	1.3	EF		
	KHAR	04	0740	0743U	0809	N22	E17	6001	04	5.6	29	SF		2	V	0743		E	
	LEAR	04	0742	0743	0800	N20	E19	6001	04	5.8	18	SF	C 1.9	3	E		41	F	
	PEKG	04	0742	0745	0750	N21	E20	6001	04	5.8	8	SB			P	0745	105	1.3	E
	BUCA	04	0745		0801	N20	E17	6001	04	5.6	16	SF			C	0745	107	1.3	E
0040	KHAR	04	0910		0924	N24	E80	6007	04	10.6	14	SN		2	P	0913	160		T
0041	KHAR	04	1009		1033	N24	E80	6007	04	10.6	24	SN		2	V	1011			DT
0042		04	1042	1121	1133	N22	E78	6007	04	10.4	51	SN					24		ET
	KHAR	04	1042		1100D	N24	E85	6007	04	11.0	18D	SN		2	V	1049			ET
	RAMY	04	1054E	1121	1133	N21	E71	6007	04	9.9	39D	SF		2	E		24		
0043		04	1315	1318U	1425	N23	E72	6007	04	10.1	70	SN	M 7.1				85		FY
	RAMY	04	1315	1318U	1521D	N22	E72	6007	04	10.1	126D	SF	M 7.1	3	E		31		
	HOLL	04	1316E	1320U	1425	N24	E74	6007	04	10.3	69D	SB		2	E		68		YF
	SVTO	04	1325E	1330U	1444D	N24	E71	6007	04	10.0	79D	1B		2	E		156		YF
0044		04	1649*	1700*	1734	N22	E13	6001	04	5.7	45	SF	C 1.7				75		EFKU
	HOLL	04	1649	1700	1737	N21	E13	6001	04	5.7	48	SF	C 1.7	4	E		86		FE
	HOLL	04	1649	1713	1737	N21	E13	6001	04	5.7	48	1F			E		125		K
	PALE	04	1658	1714	1730	N24	E12	6001	04	5.6	32	SF		3	E		30		U
	RAMY	04	1659	1712	1733	N20	E13	6001	04	5.7	34	SF		3	E		59		F
0045	HOLL	04	1706	1708	1718	S07	W03	5999	04	4.5	12	SF		4	E		39		F
0046		04	17252	17271	1737	N30	W08	6006	04	4.1	12	SF					15		F
	HOLL	04	1725	1727	1740	N30	W08	6006	04	4.1	15	SF		4	E		16		F
	PALE	04	1727	1727	1734	N31	W10	6006	04	3.9	7	SF		3	E		11		F
	RAMY	04	1727	1728	1737	N29	W07	6006	04	4.2	10	SF		3	E		18		F
0047		04	17432	17473	1757	N30	W08	6006	04	4.1	14	SF					14		F
	HOLL	04	1743	1750	1800	N31	W08	6006	04	4.1	17	SF		3	E		16		
	RAMY	04	1745	1747	1754	N30	W07	6006	04	4.2	9	SF		3	E		11		F
0048	HOLL	04	1827	1828	1835	N22	E11	6001	04	5.6	8	SF		3	E		13		
0049	HOLL	04	2043E	2043U	2051	S15	W77	5998	03	30.1	80	SF	C 1.6	3	E		49		
			04 2132		2133	No Flare Patrol													
0050	HOLL	04	2324	2325	2331	N22	E72	6007	04	10.5	7	SF	C 1.6	3	E		22		
0051	HOLL	04	2327	2335	2354	N22	E10	6001	04	5.7	27	SF		3	E		25		F
0052	HOLL	05	0003	0006	0020	N30	W11	6006	04	4.1	17	SF		3	E		25		F
0053		05	0058	0101	0116	N21	E10	6001	04	5.8	18	SN	C 5.0				95	1.5	E
	PEKG	05	0058	0101	0111	N21	E10	6001	04	5.8	13	SN			P	0101	126	1.5	E
	LEAR	05	0058	0101	0120	N21	E10	6001	04	5.8	22	SF	C 5.0	3	E		64		
0054	SVTO	05	0547	0553	0621	S42	E90	6009	04	12.6	34	SF		3	E		40		
0055	ISTA	05	0630E		0700	N21	E71	6010	04	10.7	30D	1N			P				EY
0056	ISTA	05	0630E		0701	S16	W79	5998	03	30.4	31D	1N			P				EY
0057		05	07271	07291	0740	N31	W16	6006	04	4.0	13	SN	C 1.0				32	0.6	D
	PEKG	05	0727	0730	0744	N31	W17	6006	04	4.0	17	SN			C	0730	42	0.6	D
	LEAR	05	0728	0729	0735	N31	W15	6006	04	4.1	7	SF	C 1.0	3	E		21		
0058		05	0730*	07561	0806	N29	W77	5995	03	30.4	36	SF					20		DH
	SVTO	05	0730	0757	0813	N28	W74	5995	03	30.6	43	SF		4	E		20		H
	KHAR	05	0754	0756	0759	N30	W80	5995	03	30.1	5	SF		2	V	0756			D

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Grp #	Sta	Start Day	Max (UT)	End (UT)	Lat	CMD	NOAA/USAF		Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks	
							Region	Mo Day							Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)		
0059		05 08043	08063	0818	N31	W16	6006	04	4.1	14	SN	C 1.9		101	1.7	EF		
	KHAR	05 0804	0806	0817	N31	W17	6006	04	4.0	13	SN		2 P	0808	110	1.5	E	
	KAND	05 0806	0809	0815	N32	W16	6006	04	4.1	9	SB		P	0806	145	1.9	EF	
	LEAR	05 0807	0808	0820	N31	W15	6006	04	4.1	13	SF		3 E		70			
	SVTO	05 0807	0809	0818	N31	W16	6006	04	4.1	11	SN	C 1.9	4 E		79			
0060	KHAR	05 0829	0835	0842	N30	W80	5995	03	30.2	13	SF		2 V	0835			D	
0061	KHAR	05 1028		1043	N30	W80	5995	03	30.2	15	SF		2 V				DH	
0062		05 11022	1104	1115	N31	W17	6006	04	4.1	13	SN	C 4.4			34		F	
	KHAR	05 1102		1110	N31	W17	6006	04	4.1	8	SN		2 V	1103				
	RAMY	05 1104	1104	1120	N31	W17	6006	04	4.1	16	SF	C 4.4	3 E		34		F	
0063		05 13351	1345	1428	N23	E61	6007	04	10.3	53	1N	M 3.2			160		EF	
	HOLL	05 1335	1345	1435	N23	E62	6007	04	10.3	60	1N	M 3.2	3 E		236		FE	
	RAMY	05 1336	1345	1422	N24	E63	6007	04	10.4	46	1N		3 E		155		F	
	SVTO	05 1403E	1403U	1427	N22	E59	6007	04	10.1	24D	SF		2 E		88		F	
0064	HOLL	05 1338	1339	1349	N20	E03	6001	04	5.8	11	SF		3 E		30		F	
0065	HOLL	05 1835	1836	1840	N20	W01	6001	04	5.7	5	SF		3 E		15			
0066	RAMY	05 1948	1955	2003	S42	E77	6009	04	12.1	15	SF		3 E		17			
0067	RAMY	05 2017	2023	2041	N22	W03	6001	04	5.6	24	SF		3 E		38			
0068	RAMY	05 2029	2034	2046	N23	E58	6007	04	10.3	17	SF		3 E		15			
		05 2111		2115	No Flare Patrol													
		05 2123		2127	No Flare Patrol													
		05 2159		2209	No Flare Patrol													
0069	VORO	05 2310	2312	2322	N21	W05	6001	04	5.6	12	SF		2 C	2312	63	0.7	DIJ	
0070	LEAR	06 0406	0412	0421	N20	W06	6001	04	5.7	15	SF		3 E		20			
0071		06 0618	0620	0625	N25	E50	6007	04	10.1	7	1N				105	2.0	DFK	
	YUNW	06 0610E	0614U	0723D	N25	E49	6007	04	10.0	73D	SB		P	0614	79	1.5	FK	
	ABST	06 0618	0620	0625	N25	E50	6007	04	10.1	7	1F		C	0620	131	2.4	D	
0072		06 0749*	0757*	0814	N23	E51	6007	04	10.2	25	SF				13		F	
	LEAR	06 0749	0757	0804	N23	E51	6007	04	10.2	15	SF		3 E		10		F	
	LEAR	06 0807	0808	0825	N23	E51	6007	04	10.3	18	SF		3 E		16			
0073	LEAR	06 0759	0807	0824	N29	W29	6006	04	4.0	25	SF		3 E		15			
0074	LEAR	06 0921	0922	0925	N20	W06	6001	04	5.9	4	SF		3 E		27			
		06 1142		1149	No Flare Patrol													
0075	RAMY	06 1350	1356	1417	N30	W30	6006	04	4.2	27	SF		3 E		21		F	
		06 1506		1523	No Flare Patrol													
0076		06 17382	17414	1748	N30	W34	6006	04	4.1	10	SF				15		F	
	RAMY	06 1738	1741	1750	N30	W34	6006	04	4.1	12	SF		3 E		12			
	HOLL	06 1740	1745	1747	N30	W34	6006	04	4.1	7	SF		3 E		18		F	
0077	HOLL	06 1815	1815	1818	N24	E47	6007	04	10.4	3	SF		3 E		19			
0078		06 20271	20282	2034	N20	W13	6001	04	5.8	7	SF				18		F	
	HOLL	06 2027	2028	2035	N19	W12	6001	04	5.9	8	SF		3 E		20			
	RAMY	06 2028	2030	2033	N21	W14	6001	04	5.8	5	SF		3 E		15		F	
0079	HOLL	06 2130	2135	2151	N29	W37	6006	04	4.0	21	SF		3 E		30			

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/USAF		CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
								Region	Day							Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0080	07	15111	15248	1618	N31 E62	6012	04	12.5	67	SF	C	9.5				85			FH
	SVTO	07 1511	1532	1620	N32 E62	6012	04	12.5	69	1N	C	9.5	3	E		120			F
	RAMY	07 1512	1524	1615	N30 E62	6012	04	12.5	63	SF			3	E		66			FH
	HOLL	07 1553E	1553U	1620D	N32 E62	6012	04	12.6	27D	SF			2	E		70			
0081	RAMY	07 1738	1742	1748	N31 W45	6006	04	4.2	10	SF			3	E		28			
		07 2038		2128	No Flare Patrol														
		07 2136		2157	No Flare Patrol														
		07 2204		2223	No Flare Patrol														
		07 2232		2321	No Flare Patrol														
0082	LEAR	08 0012	0017	0020	N31 W49	6006	04	4.1	8	SF			3	E		28			
0083		08 0216	0223*	0255	N20 W33	6001	04	5.6	39	SN						105	1.5		D
	PEKG	08 0216	0223	0255	N20 W33	6001	04	5.6	39	SN			C		0223	105	1.5		D
	PEKG	08 0216	0237	0255	N20 W33	6001	04	5.6	39	SN			C		0237	105	1.5		D
0084	PEKG	08 0250	0255	0301	N24 E29	6007	04	10.3	11	SN				P	0255	63	0.9		D
0085		08 03444	0402*	0513	N24 E28	6007	04	10.3	89	2N	M	1.5				447	7.9		EFKU
	LEAR	08 0344	0402	0514	N24 E29	6007	04	10.4	90	2N	M	1.5	3	E		318			UF
	LEAR	08 0344	0441	0514	N24 E29	6007	04	10.4	90	1N				E		155			K
	PEKG	08 0348	0404	0515	N24 E28	6007	04	10.3	87	2B				P	0404	883	11.9		E
	YUNN	08 0411E	0412U	0533D	N25 E28	6007	04	10.3	82D	2N				P	0412	707	9.7		FU
	ABST	08 0458E	0458U	0510	N25 E25	6007	04	10.1	12D	1N				P	0458	174	2.2		E
0086	YUNN	08 0505E	0505U	0517	S25 W25	6003	04	6.3	12D	SN				P	0505	47	0.6		
0087	SVTO	08 0547	0549	0556	N21 W31	6001	04	5.9	9	SF			3	E		81			F
0088		08 0655	0657	0752	N23 W33	6001	04	5.7	57	SN	C	2.5				32	0.7		EF
	YUNN	08 0649E	0709U	0740	N23 W34	6001	04	5.7	51D	SN				P	0709	47	0.7		E
	LEAR	08 0655	0657	0740	N23 W33	6001	04	5.7	45	SF	C	2.5	3	E		16			F
	ISTA	08 0727E		0815	N22 W33	6001	04	5.8	48D	1B				P					F
0089	SVTO	08 0700E	0700U	0723D	N21 E41	6010	04	11.4	23D	SF			3	E		44			F
0090		08 0726*	07346	0758	N22 E30	6007	04	10.6	32	SN						60	1.0		BDFH
	PEKG	08 0726	0734	0750	N21 E30	6007	04	10.6	24	SN				C	0734	84	1.2		D
	ISTA	08 0727E		0820	N19 E29	6007	04	10.5	53D	1B				P					FHB
	LEAR	08 0731	0735	0755	N23 E31	6007	04	10.7	24	SF			3	E		20			F
	YUNN	08 0735	0740	0809D	N23 E28	6007	04	10.5	34D	SN				P		47	0.6		
	ABST	08 0736	0738	0745	N25 E30	6007	04	10.6	9	SN				C	0738	87	1.2		D
0091		08 08273	0839	0906	N22 W32	6001	04	5.9	39	SN	C	2.7				40			F
	LEAR	08 0827	0839	0903	N22 W33	6001	04	5.8	36	SF	C	2.7	3	E		29			F
	ISTA	08 0830		0910	N22 W33	6001	04	5.8	40	1B				P					F
	SVTO	08 0841E	0841U	0902D	N21 W31	6001	04	6.0	21D	SB			3	E		52			F
0092	ISTA	08 0849		0903	N27 E04	6013B	04	8.7	14	SN				P					DE
0093		08 13102	1314	1354	N20 W36	6001	04	5.8	44	1N	C	5.3				110			F
	HOLL	08 1310E	1314U	1325D	N21 W34	6001	04	5.9	15D	SB			2	E		53			F
	RAMY	08 1310	1314	1358	N20 W36	6001	04	5.8	48	1N	C	5.3	3	E		145			F
	SVTO	08 1312	1314	1350	N19 W37	6001	04	5.7	38	1N			3	E		132			F
0094	HOLL	08 1702	1705	1716	S20 W24	6005	04	6.9	14	SF			3	E		16			
0095	RAMY	09 1102	1109	1124	N19 W48	6001	04	5.8	22	SF	B	9.2	3	E		53			F
0096		09 14524	14561	1522	N30 E35	6012	04	12.4	30	SF						16			F
	HOLL	09 1452	1456	1527	N30 E35	6012	04	12.4	35	SF			3	E		19			F
	RAMY	09 1456	1457	1516	N30 E35	6012	04	12.4	20	SF			3	E		13			
0097		09 16543	16591	1709	N30 E36	6012	04	12.5	15	SF						19			F
	HOLL	09 1654	1700	1712	N30 E35	6012	04	12.4	18	SF			3	E		27			F
	RAMY	09 1657	1659	1706	N29 E36	6012	04	12.5	9	SF			3	E		11			

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Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	Lat	NOAA/ USAF CMD Region	CMP Mo Day	Dur (Min)	Imp Opt	Xray	Obs See Type	Area Measurement			Remarks
												Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
		12 2122		2251		No Flare Patrol									
		12 2310		2400		No Flare Patrol									
		13 0000		0012		No Flare Patrol									
		13 0020		0054		No Flare Patrol									
0120		13 1135*	1138*	1147	N20	W04 6017	04 13.2	12	SF					20	
	KANZ	13 1135	1138	1145	N20	W05 6017	04 13.1	10	SF		V				
	SVTO	13 1136	1139	1145	N19	W04 6017	04 13.2	9	SF		3	E		21	
	RAMY	13 1137	1140	1147	N20	W03 6017	04 13.2	10	SF		3	E		26	
	RAMY	13 1148	1149	1152	N20	W03 6017	04 13.3	4	SF		3	E		14	
0121		13 1142*	1143*	1240	S33	E53 6018	04 17.7	58	SF	C 7.0				14	K
	SVTO	13 1142	1143	1212	S33	E57 6018	04 18.0	30	SF			E		18	K
	SVTO	13 1142	1156	1212	S33	E57 6018	04 18.0	30	SF	C 7.0	3	E		12	
	RAMY	13 1142	1156U	1408	S34	E50 6018	04 17.5	146	SF		3	E		13	
	KANZ	13 1153	1153	1209	S33	E48 6018	04 17.3	16	SF			V			
0122		13 11552	11561	1214	S17	E80 6021	04 19.6	19	SF					16	
	SVTO	13 1155	1156	1208	S16	E80 6021	04 19.6	13	SF		3	E		16	
	KANZ	13 1157	1157	1221	S18	E80 6021	04 19.6	24	SF			V			
0123		13 12201	1221	1232	N30	E69 6022	04 18.9	12	SF					15	
	SVTO	13 1220	1221	1232	N30	E67 6022	04 18.8	12	SF		3	E		15	
	KANZ	13 1221	1221	1233	N31	E71 6022	04 19.1	12	SF			V			
0124	SVTO	13 1500	1515	1530	N34	E72 6022	04 19.4	30	SF		3	E		12	
0125	KANZ	13 1531	1534	1605	N38	W19 6012	04 12.1	34	SF			V			
0126	HOLL	13 1639	1652	1658	S36	E59 6018	04 18.4	19	SF		3	E		33	F
0127	HOLL	13 1711	1722	1739	S34	E46 6018	04 17.4	28	SF		3	E		28	
0128	HOLL	13 1729	1729	1736	S19	E78 6021	04 19.7	7	SF		3	E		14	
0129		13 18311	18337	1902	N28	E70 6022	04 19.2	31	1F	C 6.4				177	EFHK
	HOLL	13 1831	1833	1859	N27	E66 6022	04 18.9	28	1N			E		108	K
	HOLL	13 1831	1840	1859	N27	E66 6022	04 18.9	28	2F	C 6.4	3	E		285	EH
	PALE	13 1832	1840	1909	N30	E77 6022	04 19.8	37	1F		3	E		137	F
		13 2016		2018		No Flare Patrol									
0130		13 2116	2124	2145	S34	E44 6018	04 17.4	29	1B	M 4.9				150	EF
	HOLL	13 2116	2124	2145	S34	E43 6018	04 17.3	29	1B	M 4.9	4	E		171	F
	PALE	13 2119E	2119U	2135D	S33	E46 6018	04 17.5	16D	1N		3	E		129	FE
		13 2319		2335		No Flare Patrol									
0131	HOLL	13 2337E	2338U	2338D	S18	E70 6021	04 19.3	1D	SF		1	E		25	F
		13 2339		2400		No Flare Patrol									
		14 0000		0007		No Flare Patrol									
0132		14 0225*	0226*	0253	N24	W54	04 9.9	28	1N	C 9.0				125	EFU
	PEKG	14 0225	0236	0300	N25	W54	04 9.9	35	2N			P	0236	336	E
	LEAR	14 0226	0226	0233	N25	W56	04 9.8	7	SF	C 9.0	2	E		55	F
	YUNN	14 0226E	0226U	0258	N23	W54	04 9.9	32D	SB			P	0226	47	U
	LEAR	14 0248	0257	0301	N25	W51	04 10.2	13	SF		2	E		61	UF
0133	LEAR	14 0308	0311	0313	N25	W51	04 10.2	5	SF		2	E		19	U
0134		14 0350	0352	0405	S32	E40 6018	04 17.3	15	1B	M 1.3				152	DF
	PEKG	14 0350	0352	0405	S32	E40 6018	04 17.3	15	1B			C	0352	210	D
	PALE	14 0353E	0353U	0408D	S32	E41 6018	04 17.4	15D	SN	M 1.3	3	E		93	F
0135	SVTO	14 0530	0607	0636	N32	E66 6022	04 19.4	66	SF		3	E		63	F
0136	LEAR	14 0607E		0640	N30	E62 6022	04 19.1	33D	SF		1	E		42	F

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Grp #	Sta	Start Day	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)	
0137		14 06493	06502	0702	S14	E76	6021	04 20.0	13	SF			51		F
	SVTO	14 0649	0650	0705	S13	E77	6021	04 20.1	16	SF	4	E	51		F
	KANZ	14 0652	0652	0700	S14	E74	6021	04 19.9	8	SF		V			
0138		14 0652	06521	0704	S32	E38	6018	04 17.3	12	SF C 6.3				28	
	KANZ	14 0652	0652	0704	S31	E37	6018	04 17.2	12	SF		V			
	SVTO	14 0652	0653	0704	S34	E38	6018	04 17.3	12	SF C 6.3	4	E		28	
0139	KANZ	14 0743	0743	0751	N30	W26	6012	04 12.3	8	SF		V			
0140		14 07541	08003	0810	S31	E37	6018	04 17.2	16	SF				76	F
	SVTO	14 0754	0800	0815	S31	E38	6018	04 17.3	21	SN	4	E		59	F
	KANZ	14 0755	0803	0811	S31	E36	6018	04 17.2	16	SF		V			
	LEAR	14 0800E		0804	S31	E37	6018	04 17.2	4D	SF	2	E		94	F
0141	SVTO	14 0818	0831	0902	N30	E62	6022	04 19.2	44	SF	4	E		32	F
0142	KANZ	14 0944	0955	1018	S31	E35	6018	04 17.2	34	SF		V			
0143		14 10272	10333	1126	N26	E53	6022	04 18.5	59	1F C 5.4				110	F
	SVTO	14 1027	1036	1114	N28	E51	6022	04 18.4	47	1N C 5.4	3	E		103	F
	KANZ	14 1029	1033	1059D	N27	E52	6022	04 18.5	30D	1F		V			
	RAMY	14 1041E	1041U	1139	N24	E56	6022	04 18.8	58D	1F	3	E		117	F
0144		14 1108	11057	1126	S32	E36	6018	04 17.3	18	SF C 3.5				37	F
	SVTO	14 1105E	1105	1129	S31	E36	6018	04 17.3	24D	SF C 3.5	3	E		55	F
	RAMY	14 1108	1112	1124	S33	E35	6018	04 17.2	16	SF	3	E		19	F
0145		14 12073	12102	1230	N28	E60	6022	04 19.2	23	SF				30	F
	RAMY	14 1207	1212	1234	N27	E59	6022	04 19.1	27	SF	3	E		37	
	SVTO	14 1210	1210	1225	N30	E60	6022	04 19.2	15	SF	4	E		23	F
0146		14 1210	1212	1230	S15	E70	6021	04 19.8	20	SF				42	F
	SVTO	14 1210	1212	1229	S14	E70	6021	04 19.8	19	SF	4	E		51	F
	RAMY	14 1210	1212	1231	S16	E69	6021	04 19.7	21	SF	3	E		33	
0147		14 12201	1221*	1251	S32	E36	6018	04 17.4	31	SN M 1.0				65	FK
	SVTO	14 1220	1221	1250	S32	E35	6018	04 17.3	30	SN		E		71	K
	SVTO	14 1220	1232	1250	S32	E35	6018	04 17.3	30	SN M 1.0	4	E		51	F
	RAMY	14 1221	1231	1253	S33	E37	6018	04 17.4	32	SN	3	E		72	
0148	SVTO	14 1235	1242	1247	S13	E73	6021	04 20.0	12	SF	4	E		32	
0149	RAMY	14 1248	1251	1257	N31	E64	6022	04 19.6	9	SF	3	E		12	
0150		14 1313	13141	1320	S32	E36	6018	04 17.4	7	SF				20	F
	SVTO	14 1313	1314	1319	S30	E35	6018	04 17.3	6	SF	4	E		23	F
	RAMY	14 1313	1315	1320	S33	E36	6018	04 17.4	7	SF	3	E		17	F
0151		14 14123	14174	1424	S16	E76	6021	04 20.3	12	SF C 3.5				24	H
	HOLL	14 1412	1417	1423	S16	E73	6021	04 20.1	11	SF C 3.5	4	E		30	
	RAMY	14 1415	1421	1425	S15	E79	6021	04 20.6	10	SF	3	E		18	H
0152	HOLL	14 1422	1429	1434	N34	E60	6022	04 19.4	12	SF	4	E		15	
0153		14 1436	1437	1445	S34	E34	6018	04 17.3	9	SF				40	F
	HOLL	14 1436	1437	1444	S33	E33	6018	04 17.2	8	SF	4	E		50	F
	RAMY	14 1436	1437	1446	S35	E34	6018	04 17.3	10	SF	3	E		30	F
0154		14 15391	15391	1545	S30	E33	6018	04 17.2	6	SF				31	
	SVTO	14 1539	1539	1545	S29	E34	6018	04 17.3	6	SF	3	E		21	
	RAMY	14 1539	1540	1545	S31	E34	6018	04 17.3	6	SF	3	E		28	
	HOLL	14 1540	1540	1546	S31	E32	6018	04 17.2	6	SF	4	E		45	
0155		14 1635	1636	1642	S31	E32	6018	04 17.2	7	SF				32	F
	RAMY	14 1635	1636	1641	S31	E32	6018	04 17.2	6	SF	3	E		27	F
	HOLL	14 1635	1636	1643	S31	E31	6018	04 17.1	8	SF	4	E		36	F

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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)				
0156		14	17336	1739	1744	N28	E56	6022	04	19.1	11	SF					12				
	PALE	14	1733	1739	1743	N28	E57	6022	04	19.2	10	SF	3	E			12				
	HOLL	14	1739	1739	1745	N28	E54	6022	04	18.9	6	SF	3	E			13				
0157	HOLL	14	1739	1741	1749	S16	E64	6021	04	19.6	10	SF	3	E				22			
0158	HOLL	14	1740	1741	1749	S32	E32	6018	04	17.3	9	SF	3	E				36			
0159		14	1810*	1816*	1829	N29	E56	6022	04	19.1	19	SF						17			
	PALE	14	1810	1816	1833	N28	E57	6022	04	19.2	23	SF	3	E				20			
	HOLL	14	1815	1816	1820	N30	E55	6022	04	19.1	5	SF	3	E				18			
	RAMY	14	1820	1828	1834	N29	E56	6022	04	19.1	14	SF	3	E				12			
0160		14	1857*	19124	1936	N27	E54	6022	04	19.0	39	SF						33			
	RAMY	14	1857	1914	1949D	N27	E54	6022	04	19.0	52D	SF	3	E				24			
	PALE	14	1906	1912	1939	N28	E57	6022	04	19.2	33	SF	3	E				27			
	HOLL	14	1912	1916	1932	N27	E52	6022	04	18.8	20	SF	4	E				47			
0161		14	1945	1953	1958	S31	E32	6018	04	17.3	13	SF	C 2.4					30	H		
	RAMY	14	1945	1953	1958	S31	E33	6018	04	17.4	13	SF	3	E				25			
	PALE	14	1945	1953	1958	S31	E33	6018	04	17.4	13	SF	3	E				28			
	HOLL	14	1945	1953	1959	S31	E30	6018	04	17.2	14	SF	C 2.4	4	E				38	H	
0162	RAMY	14	2031	2049	2100	N29	E48	6022	04	18.6	29	SF		2	E				23		
0163		14	20511	2056	2108	S33	E31	6018	04	17.3	17	1N	C 5.7					142	EF		
	RAMY	14	2051	2055U	2107	S33	E32	6018	04	17.4	16	1N		2	E			199	FE		
	HOLL	14	2051	2056	2108	S33	E29	6018	04	17.2	17	1N	C 5.7	4	E			125	FE		
	PALE	14	2052	2054U	2127D	S33	E33	6018	04	17.5	35D	1F		3	E			102			
0164	HOLL	14	2258	2259	2305	S30	E29	6018	04	17.2	7	SF		4	E				32		
0165	HOLL	14	2311	2317	2329	N30	E52	6022	04	19.0	18	SF		3	E				51		
0166	HOLL	14	2323	2330	2340	S14	E59	6021	04	19.4	17	SF	C 3.7	3	E				20		
0167		15	02305	02573	0503	N32	E54	6022	04	19.4	153	2B	X 1.4					450	12.8	FIUYZ	
	YUNN	15	0230	0257	0401D	N32	E54	6022	04	19.4	91D	3B		P			0300	550	12.8	U	
	PEKG	15	0235	0300	0410	N33	E56	6022	04	19.5	95	3B		C				631		I	
	PALE	15	0255E	0255U	0345D	N32	E57	6022	04	19.6	50D	2B	X 1.4	3	E				379		ZU
	LEAR	15	0309E	0309U	0526D	N30	E50	6022	04	19.1	137D	2B		1	E				525		ZF
	SVTO	15	0440E	0450U	0556	N31	E55	6022	04	19.5	76D	1F		2	E				167		Y
0168	KHAR	15	0852E		0910	S30	E27	6018	04	17.5	18D	SF		2	P		0853			D	
0169	SVTO	15	0940	0945	1004	S15	E55	6021	04	19.6	24	SN		4	E					53	
0170	RAMY	15	1147	1151	1213	S15	E61	6021	04	20.1	26	SF	M 1.0	2	E					48	F
0171	RAMY	15	1150	1153	1213	S31	E25	6018	04	17.5	23	SF		2	E					67	EF
0172	RAMY	15	1234	1238	1320	S32	E23	6018	04	17.3	46	SF	C 5.4	3	E					73	F
0173	RAMY	15	1333	1334	1343	S32	E22	6018	04	17.3	10	SF		3	E					17	
0174		15	1424	14263	1442	S32	E22	6018	04	17.3	18	SF								34	F
	RAMY	15	1424	1426	1442	S32	E22	6018	04	17.3	18	SF		3	E					26	
	HOLL	15	1428E	1429	1449D	S32	E22	6018	04	17.3	21D	SF		2	E					42	F
0175	RAMY	15	1434	1439	1452	N31	E45	6022	04	19.1	18	SF		3	E					24	F
0176	HOLL	15	1508E	1508	1514	S16	E52	6021	04	19.6	6D	SF		3	E					16	
0177	RAMY	15	1523	1529	1546	S31	E21	6018	04	17.3	23	SF		3	E					16	F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF				Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks		
						Lat	CMD	Region	Mo						Day	Time (UT)	Apparent (10 ⁻⁶ Disk)		Corr (Sq Deg)	
0178		15	1717*	1721*	1814	S31	E20	6018	04	17.3	57	SF	C	9.4		63		EFU		
	RAMY	15	1717	1723U	1859D	S31	E21	6018	04	17.4	102D	SF			3	E	19	F		
	HOLL	15	1718	1721	1733	S31	E20	6018	04	17.3	15	SF			3	E	19	U		
	PALE	15	1718	1736	1807	S30	E20	6018	04	17.3	49	1F			3	E	111			
	HOLL	15	1734	1738	1802	S31	E20	6018	04	17.3	28	1N	C	9.4	4	E	127	UE		
	PALE	15	1815	1816	1848	S32	E21	6018	04	17.4	33	SF			3	E	29	F		
	HOLL	15	1818E	1824	1840	S31	E19	6018	04	17.3	22D	SN	C	3.2	3	E	71	E		
0179	PALE	15	1830	1842	1856	N30	E45	6022	04	19.3	26	SF			3	E	28	F		
0180	HOLL	15	1918	1920	1933	S31	E18	6018	04	17.2	15	SF			3	E	18			
0181		15	1923*	1925*	1946	S14	E57	6021	04	20.1	23	SF					21			
	HOLL	15	1923	1925	1936	S13	E54	6021	04	19.9	13	SF			3	E	30			
	PALE	15	1930	1940	1948	S14	E59	6021	04	20.3	18	SF			3	E	15			
	HOLL	15	1938	1939	1955	S16	E57	6021	04	20.1	17	SF			3	E	18			
0182	HOLL	15	1941	1941	1946	N17	W25	6023	04	13.9	5	SF			3	E	11			
0183	HOLL	15	2055	2056	2111	S14	E52	6021	04	19.8	16	SN	C	6.0	3	E	93			
0184	HOLL	15	2327	2329	2342	S12	E47	6021	04	19.5	15	SF			3	E	47			
0185		15	2346	2348	2442	S13	E52	6021	04	19.9	56	SF					72	1.0	EF	
	LEAR	15	2346	2348	2451	S13	E52	6021	04	19.9	65	SF			3	E	67		F	
	HOLL	15	2346	2349	2448	S14	E51	6021	04	19.8	62	SF			3	E	94		FE	
	PALE	15	2347E	2354U	2446D	S13	E53	6021	04	20.0	59D	SF			3	E	65			
	YUNN	16	0010E	0016U	0028	S13	E51	6021	04	19.8	18D	SN				P	0016	63	1.0	
0186		15	2351	2355*	2443	N31	W45	6012	04	12.4	52	SF	C	9.6			30		FK	
	LEAR	15	2351	2357	2441	N31	W45	6012	04	12.4	50	SF				E	20		K	
	LEAR	15	2351	2423	2441	N31	W45	6012	04	12.4	50	SF			3	E	14		F	
	PALE	15	2353E	2356U	2447D	N31	W46	6012	04	12.4	54D	SF			3	E	33			
	HOLL	15	2355E	2355	2447	N30	W43	6012	04	12.6	52D	SF	C	9.6	3	E	54		F	
0187		16	0039	0041	0048	S30	E31	6025A	04	18.5	9	1F					216	6.0	FG	
	HOLL	16	0039	0041	0049	S29	E30	6025A	04	18.4	10	1F			3	E	105		F	
	LEAR	16	0039	0041	0051	S30	E35	6025A	04	18.8	12	SF			3	E	70			
	YUNN	16	0039	0042	0045	S30	E28	6025A	04	18.2	6	2N				P	472	6.0	FG	
0188		16	0039	0039	0058	S31	E17	6018	04	17.4	19	1B	M	2.0			340	5.0	DF	
	LEAR	16	0039	0039	0106	S32	E18	6018	04	17.4	27	1B			3	E	168		F	
	YUNN	16	0039	0040	0057	S30	E16	6018	04	17.3	18	1B				P	393	4.6	F	
	HOLL	16	0039	0041	0100	S31	E17	6018	04	17.4	21	2B	M	2.0	3	E	277		F	
	PEKG	16	0040E	0040U	0050	S31	E17	6018	04	17.4	10D	2B				C	0040	463	5.5	D
	PURP	16	0040E	0041	0053D	S32	E17	6018	04	17.4	13D	1B				C	0041	400	4.8	
0189	LEAR	16	0139	0139	0143	N23	E60	6030	04	20.7	4	SF			3	E	16			
0190	LEAR	16	0326	0329	0336	N21	W37	6017	04	13.3	10	SF			3	E	15		F	
0191		16	0400	0404*	0442	N27	E33	6022	04	18.7	42	1N	C	3.7			234	3.8	EF	
	PEKG	16	0400	0406	0437	N26	E33	6022	04	18.7	37	1B				C	0406	294	4.3	E
	PALE	16	0401	0404	0436	N27	E31	6022	04	18.6	35	SF	C	3.7	3	E	96		F	
	YUNN	16	0403	0410	0445	N25	E31	6022	04	18.6	42	1B				C	236	3.3		
	LEAR	16	0416E	0423	0452	N31	E36	6022	04	19.0	36D	2F			3	E	311		F	
0192		16	0630	0632	0700	S14	E49	6021	04	20.0	30	3B					472	9.7	BFI	
	PEKG	16	0630	0632	0700	S14	E49	6021	04	20.0	30	3B				C	0632	674	13.9	I
	LEAR	16	0630E	0636U	0732D	S13	E41	6021	04	19.4	62D	2B	X	2.2	3	E	403		F	
	ATHN	16	0632	0633	0652	S08	E49	6021	04	19.9	20	2B			3	V	0633	382	6.0	
	YUNN	16	0633E	0633U	0800	S12	E45	6021	04	19.7	87D	2B				P	0633	629	9.2	F
	ISTA	16	0652E		0830	S14	E43	6021	04	19.5	98D	3B				P			BIF	
	SVTO	16	0708E	0708U	0826D	S13	E47	6021	04	19.8	78D	2N			2	E	273		F	
0193	SVTO	16	0708E	0716U	0826D	N17	W32	6023	04	13.9	78D	SF			2	E	36			
0194	KHAR	16	0936E	0940U	0948	S17	E49	6021	04	20.1	12D	SF			2	V	0940			D

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Grp #	Sta	Start Day (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)
0195	SVTO	16 1041	1049	1112	N31 E34	6022	04	19.1	31	SF	2	E		69		F
0196	HOLL	16 1345	1346	1355	N11 W12	6026	04	15.7	10	SF	3	E		13		
0197	HOLL	16 1421	1421	1426	S15 E47	6021	04	20.1	5	SF	3	E		25		
0198	HOLL	16 1431	1431	1443	S32 E11	6018	04	17.5	12	SF	3	E		16		
0199	HOLL	16 1440	1441	1447	S15 E39	6021	04	19.6	7	SF	3	E		19		
0200		16 1459	1500	1522	S31 E08	6018	04	17.2	23	SF C 3.4				66		F
	RAMY	16 1459	1500	1521	S31 E08	6018	04	17.2	22	SF	3	E		55		F
	HOLL	16 1459	1500	1524	S31 E07	6018	04	17.2	25	SF C 3.4	3	E		76		
0201	HOLL	16 1540	1543	1548	S13 E47	6021	04	20.2	8	SF	3	E		10		
0202	HOLL	16 1607	1622	1637	N32 E36	6022	04	19.5	30	SF	3	E		50		
0203	HOLL	16 1610	1611	1618	S16 E38	6021	04	19.5	8	SF	3	E		24		
0204		16 1640*	1650*	1730	N32 E34	6022	04	19.4	50	SF				26		F
	HOLL	16 1640	1650	1727D	N32 E33	6022	04	19.3	47D	SF	3	E		24		F
	RAMY	16 1650	1719	1730	N32 E34	6022	04	19.4	40	SF	3	E		28		F
		16 2014		2030	No Flare Patrol											
		16 2209		2215	No Flare Patrol											
		16 2224		2235	No Flare Patrol											
		16 2307		2314	No Flare Patrol											
		16 2323		2328	No Flare Patrol											
		16 2337		2344	No Flare Patrol											
0205		17 0311	03213	0345	S31 E01	6018	04	17.2	34	1N				262		3.0
	YUNN	17 0311	0324	0345	S30 W00	6018	04	17.1	34	1B			P	236		2.7
	PURP	17 0315E	0321	0327D	S32 E02	6018	04	17.3	12D	1F			C	0321	289	3.4
0206	YUNN	17 0505	0512	0523	S31 E01	6018	04	17.3	18	SN			C	47		0.5
0207	YUNN	17 0548E	0554U	0610D	N25 W87		04	10.5	22D				P	0554		AG
0208		17 0600*	06242	0643	S31 E02	6018	04	17.4	43	1N C 3.3				165		2.3
	YUNN	17 0600	0632U	0640	S29 E02	6018	04	17.4	40	SN			P	0632	173	2.0
	SVTO	17 0603	0626	0629D	S31 E03	6018	04	17.5	26D	1F C 3.3	3	E		114		
	KANZ	17 0618E	0625	0649	S33 E03	6018	04	17.5	31D	1F			V			
	ABST	17 0623	0624	0642	S30 E01	6018	04	17.3	19	SN			C	0624	175	2.0
	SVTO	17 0626E	0626	0629D	S31 E03	6018	04	17.5	3D	1F			E	114		
	PURP	17 0626E	0626U	0640	S32 E01	6018	04	17.3	14D	1N			C	0626	248	2.9
0209	KHAR	17 0840		0853	S15 E36	6021	04	20.1	13	SF	2	V		0840		H
0210	KHAR	17 0857	0900	0912	S33 E00	6018	04	17.4	15	SF	2	V		0900		E
0211	KHAR	17 0940	0941	0945D	S15 E36	6021	04	20.1	5D	SF	2	V		0941		EH
0212	RAMY	17 1128	1134	1152	S15 E35	6021	04	20.1	24	SF	3	E		25		F
0213	SVTO	17 1207	1209	1216	S09 W14	6024	04	16.4	9	SF	3	E		16		
0214	RAMY	17 1213	1215	1231	S33 E01	6018	04	17.6	18	SF C 2.5	3	E		12		F
0215	RAMY	17 1334	1336	1341	S33 E00	6018	04	17.6	7	SF	3	E		14		
0216		17 1418	1430	1553	N26 E15	6022	04	18.8	95	2N M 1.4				271		FU
	RAMY	17 1418	1430	1553	N26 E16	6022	04	18.8	95	2N M 1.4	3	E		271		UF
	KANZ	17 1435E	1435U	1442D	N26 E14	6022	04	18.7	7D	2F			V			
0217	RAMY	17 1438	1501	1521	N23 W52	6017A	04	13.6	43	SF	3	E		19		F
0218		17 15546	1601	1617	S32 W02	6018	04	17.5	23	SF C 5.9				63		F
	RAMY	17 1554	1601	1617	S33 W01	6018	04	17.6	23	SF C 5.9	3	E		84		F
	SVTO	17 1600	1601	1635D	S32 W03	6018	04	17.4	35D	SF	2	E		42		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	Lat CMD							Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0219	RAMY	17	1623	1624	1629	S13 E32	6021	04	20.1	6	SF C 4.4	3	E		28		F
0220	RAMY	17	1701	1705	1708	S32 W02	6018	04	17.5	7	SF	3	E		20		F
0221	PALE	17	1741	1741	1753	S33 W03	6018	04	17.5	12	SF	3	E		14		
0222	RAMY	17	1817	1818	1827	S33 W02	6018	04	17.6	10	SF	3	E		14		F
		17	1843		1846	No Flare Patrol											
0223	RAMY	17	1944	1944	1956	S15 E27	6021	04	19.9	12	SF	3	E		17		F
0224	PALE	17	2206E		2230D	S20 E50	6031	04	21.7	24D	SF	3	E		27		
0225	VORO	17	2315	2317	2331	S15 E27	6021	04	20.0	16	SF	2	C	2317	90	0.9	DIJ
0226	VORO	17	2325	2327	2334	N23 W66	6017A	04	12.9	9	SF	2	C	2327	45		DJ
0227	VORO	17	2345	2348	2352	S31 W10	6018	04	17.2	7	SF	2	C	2348	125	1.4	DIJ
0228		18	00101	00132	0037	S34 W04	6018	04	17.7	27	SF				60	1.1	EIJ
	LEAR	18	0010	0015	0051	S33 W04	6018	04	17.7	41	SF	3	E		20		
	VORO	18	0011	0013	0023	S34 W05	6018	04	17.6	12	SF	2	C	0013	99	1.1	EIJ
0229	LEAR	18	0021	0023	0029	S15 E28	6021	04	20.1	8	SF	3	E		18		
0230		18	0049	0050*	0116	S18 E46	6031	04	21.5	27	SF C 2.8				56	0.5	DJ
	VORO	18	0049	0050	0054	S18 E45	6031	04	21.5	5	SF	2	C	0050	54	0.5	DJ
	LEAR	18	0049	0106	0137	S19 E48	6031	04	21.7	48	SF C 2.8	3	E		57		
		18	0202		0208	No Flare Patrol											
0231	LEAR	18	0206	0209	0216	S18 E46	6031	04	21.6	10	SF C 5.5	3	E		39		
		18	0214		0224	No Flare Patrol											
0232	LEAR	18	0216	0229	0238	N28 E08	6022	04	18.7	22	SF	3	E		18		
0233	LEAR	18	0218	0221	0245	S14 E17	6021	04	19.4	27	SF	3	E		20		
		18	0239		0247	No Flare Patrol											
0234		18	0250	0309	0418	S13 E16	6021	04	19.3	88	1F M 1.1				104		K
	LEAR	18	0250	0309	0418	S13 E16	6021	04	19.3	88	1F		E		106		K
	LEAR	18	0250	0337U	0418	S13 E16	6021	04	19.3	88	1F M 1.1	3	E		102		
		18	0251		0315	No Flare Patrol											
0235	LEAR	18	0258	0307	0316	S32 W08	6018	04	17.5	18	SF	3	E		17		
0236		18	03161	0323	0333	S20 E46	6031	04	21.6	17	SF				36		
	PALE	18	0316	0323	0336	S20 E48	6031	04	21.8	20	SF	3	E		49		
	LEAR	18	0317	0323	0330	S19 E44	6031	04	21.5	13	SF	3	E		24		
		18	0329		0401	No Flare Patrol											
0237		18	0332*	0339*	0447	S33 W08	6018	04	17.5	75	1N M 1.5				94		FK
	LEAR	18	0332	0339	0501	S32 W09	6018	04	17.4	89	1N		E		116		K
	LEAR	18	0332	0401	0501	S32 W09	6018	04	17.4	89	1N M 1.5	3	E		113		
	PALE	18	0353	0359	0420	S34 W07	6018	04	17.6	27	SF	3	E		52		F
0238	PALE	18	0336	0337	0349	S15 E28	6021	04	20.3	13	SF	3	E		46		EU
0239	LEAR	18	0424	0425	0452	S19 E44	6031	04	21.5	28	SF	3	E		13		
0240		18	0538	0538	0548	S32 W10	6018	04	17.4	10	SF C 4.2				24		
	LEAR	18	0538	0538	0544	S30 W09	6018	04	17.5	6	SF	3	E		20		
	SVTO	18	0538	0538	0551	S33 W10	6018	04	17.4	13	SF C 4.2	3	E		28		

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																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0241	YUNN	18	0645	0650	0705	N29	E10	6022	04	19.1	20	SN			C		47	0.6		
0242	SVTO	18	0734	0734	0744	S18	E44	6031	04	21.7	10	SF C	3.1	3	E		13			
0243		18	0826	0827	0842	S18	E44	6031	04	21.7	16	SN C	5.4				30			
	LEAR	18	0826	0827	0842	S19	E44	6031	04	21.7	16	SF		3	E		22			
	SVTO	18	0826	0827	0901D	S18	E44	6031	04	21.7	35D	SN C	5.4	3	E		37			
			18 0912		1016	No Flare Patrol														
			18 1020		1027	No Flare Patrol														
0244	RAMY	18	1101	1107	1125	S14	E14	6021	04	19.5	24	SF		3	E		55		F	
0245	RAMY	18	1105	1131	1214	S20	E41	6031	04	21.6	69	SF		3	E		43		F	
0246	RAMY	18	1109	1122	1135	S33	W13	6018	04	17.4	26	SF		3	E		56		FH	
0247		18	1345	1347*	1407	S19	E39	6031	04	21.5	22	SF					28		FK	
	RAMY	18	1345	1347	1407	S20	E39	6031	04	21.5	22	SF			E		19		K	
	RAMY	18	1345	1358	1407	S20	E39	6031	04	21.5	22	SF		3	E		25		F	
	SVTO	18	1352E	1359U	1412D	S18	E38	6031	04	21.5	20D	SF		2	E		41			
0248	RAMY	18	1445	1446	1449	S14	E13	6021	04	19.6	4	SF		3	E		13			
0249	RAMY	18	1716	1716	1721	S11	E16	6021	04	19.9	5	SF		3	E		16		F	
0250		18	17355	1735*	1752	S20	E38	6031	04	21.6	17	SF C	4.0				24		F	
	RAMY	18	1735	1735	1740	S19	E37	6031	04	21.5	5	SF		3	E		12		F	
	PALE	18	1740	1746	1804	S20	E38	6031	04	21.6	24	SF C	4.0	3	E		37		F	
0251	PALE	18	1857	1904	1915	S14	E10	6021	04	19.5	18	SF C	3.5	3	E		31		FH	
0252	HOLL	18	2026	2035	2051	S16	E32	6031	04	21.3	25	SF		3	E		52		F	
0253	VORO	18	2225	2227	2232	S33	W07	6025A	04	18.4	7	SF		2	C	2227	45	0.5	D1J	
0254	VORO	18	2255	2255	2306	S34	W20	6018	04	17.4	11	SF		2	C	2256	116	1.4	E1	
0255		18	23413	23451	2405	S21	E34	6031	04	21.6	24	SF C	2.9				54	1.0	DF1	
	HOLL	18	2341	2346	2403	S19	E34	6031	04	21.6	22	SF C	2.9	3	E		27		F	
	VORO	18	2344	2345	2407	S23	E35	6031	04	21.7	23	SF		2	C	2345	81	1.0	D1	
0256	YUNN	19	0135	0147	0200	S20	E81	6043	04	25.3	25	SN			P		31		G	
			19 0216		0229	No Flare Patrol														
0257		19	03355	03455	0411	S14	E11	6021	04	20.0	36	SN C	4.9				89	1.2	E	
	YUNN	19	0335	0350	0414	S15	E13	6021	04	20.1	39	SN			C		157	1.7		
	LEAR	19	0337	0345	0411	S14	E13	6021	04	20.1	34	SF C	4.9	3	E		48			
	TACH	19	0340	0345	0408	S14	E08	6021	04	19.7	28	SN		1	C	0345	61	0.6	E	
0258	YUNN	19	0411	0416	0435	S11	W09	6028	04	18.5	24	SN			C		79	0.8		
0259	LEAR	19	0418	0420	0429	S13	E02	6021	04	19.3	11	SF		3	E		31			
0260	LEAR	19	0429	0435	0457	S34	W18	6018	04	17.7	28	SF		3	E		27			
0261		19	0620	0643	0703	S33	W20	6018	04	17.7	43	SN					118	1.4	U	
	KAND	19	0620	0643	0657	S35	W20	6018	04	17.7	37	SN			P	0643	125	1.5	U	
	YUNN	19	0636E	0646U	0720	S33	W21	6018	04	17.6	44D	SN			P	0646	110	1.4	U	
	ISTA	19	0637E		0652	S31	W19	6018	04	17.8	15D	1N			P				U	
0262	YUNN	19	0834E	0835U	0850	S11	E23	6032	04	21.1	16D	SN			P	0835	79	0.9		
			19 0912		0954	No Flare Patrol														
			19 1157		1214	No Flare Patrol														
			19 1218		1243	No Flare Patrol														
0263	HOLL	19	1541	1550U	1738	N26	W11	6022	04	18.8	117	1F C	5.2	3	E		137		FU	

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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)	
0264	HOLL	19	1647	1653	1742	S16	W02	6021	04	19.5	55	SF	C 3.9	3	E		86		F
0265	HOLL	19	1745	1757	1812	N16	W41	6027	04	16.6	27	SF		3	E		37		
		19	1959		2014	No Flare Patrol													
0266	HOLL	19	2030E	2030U	2043	S22	E21	6031	04	21.5	13D	SF		3	E		20		
0267		19	2045	2048	2122	S12	W04	6021	04	19.6	37	1N	C 2.9				64		F
	HOLL	19	2045	2048	2128	S14	W06	6021	04	19.4	43	1N	C 2.9	3	E		103		F
	RAMY	19	2111E	2111U	2116	S11	W03	6021	04	19.6	5D	SF		2	E		25		F
		19	2102		2110	No Flare Patrol													
0268		19	2111E	2117	2214	S12	E16	6032	04	21.1	63D	SF					50		F
	RAMY	19	2111E	2115U	2137D	S11	E16	6032	04	21.1	26D	SF		2	E		27		F
	HOLL	19	2114E	2117	2214	S12	E16	6032	04	21.1	60D	SF		2	E		73		
0269	HOLL	19	2154	2217	2242	N27	W12	6022	04	19.0	48	SF	C 2.5	3	E		87		F
0270		19	2245*	2311*	2340	N28	W13	6022	04	18.9	55	SF	C 4.6				93		F
	HOLL	19	2245	2311	2346	N28	W12	6022	04	19.0	61	1F	C 4.6	3	E		236		F
	PALE	19	2302E	2302U	2344D	N28	W14	6022	04	18.9	42D	SF		3	E		26		
	LEAR	19	2323	2324	2335	N28	W13	6022	04	18.9	12	SF		3	E		18		
0271	HOLL	19	2245	2252	2259	S14	E15	6032	04	21.1	14	SF		3	E		43		
0272		20	00523	00574	0118	S12	W06	6021	04	19.6	26	1N	C 2.8				112	2.1	F
	YUNN	20	0052	0057	0125	S12	W07	6021	04	19.5	33	1N			C		204	2.1	F
	PALE	20	0055	0101	0110	S12	W05	6021	04	19.7	15	SF	C 2.8	3	E		21		
0273		20	01393	01462	0237	S32	W32	6018	04	17.5	58	SN	C 2.2				51	1.1	
	YUNN	20	0139	0146	0310	S31	W31	6018	04	17.6	91	SN			C		79	1.1	
	PALE	20	0142	0148	0204	S34	W32	6018	04	17.5	22	SF	C 2.2	3	E		23		
0274	LEAR	20	0402	0406	0413	N17	W83		04	13.9	11	SF		3	E		16		F
0275		20	0615	06194	0709	S10	W08	6021	04	19.6	54	SN	C 6.1				67	0.7	
	LEAR	20	0615	0619	0715	S11	W08	6021	04	19.6	60	SF	C 6.1	3	E		71		
	YUNN	20	0618E	0623	0703	S08	W08	6021	04	19.7	45D	SN			P		63	0.7	
0276		20	06321	06363	0654	N28	W17	6022	04	18.9	22	1N					92	2.1	F
	YUNN	20	0632	0639	0703	N29	W18	6022	04	18.9	31	1N			C		157	2.1	F
	LEAR	20	0633	0636	0645	N28	W16	6022	04	19.0	12	SF		3	E		28		
0277		20	0745*	0831*	0907	S33	E22		04	22.1	82	1N					313	6.8	FG
	YUNN	20	0745	0831	0923D	S32	E22		04	22.1	98D	2N			P		550	6.8	FG
	LEAR	20	0853	0902	0907	S34	E22		04	22.1	14	SF		3	E		76		
0278		20	08241	0826	0838	S14	W10	6021	04	19.6	14	SF					31		L
	KHAR	20	0824	0826	0842	S14	W10	6021	04	19.6	18	SF		2	P	0829			L
	LEAR	20	0825	0826	0835	S15	W09	6021	04	19.7	10	SF		3	E		31		
0279	KHAR	20	0916	0917	0922	S14	W10	6021	04	19.6	6	SF		2	V	0917			D
0280	KHAR	20	0928	0930	0940	S33	W40	6018	04	17.2	12	SF		2	V	0930			DH
0281		20	10004	10051	1012	S36	W38	6018	04	17.4	12	SN					80	1.2	H
	ATHN	20	1000	1005	1012	S38	W35	6018	04	17.6	12	SF		2	V	1005		80	1.2
	KHAR	20	1004	1006	1021D	S33	W40	6018	04	17.2	17D	SN		2	V	1006			H
		20	1022		1030	No Flare Patrol													
		20	1124		1129	No Flare Patrol													
0282	RAMY	20	1131	1139	1212	N09	E62	6029B	04	25.1	41	1F		3	E		104		
0283		20	1143*	1148*	1214	S13	E08	6032	04	21.1	31	SF	C 6.6				22		
	RAMY	20	1143	1148	1208	S13	E08	6032	04	21.1	25	SF		3	E		25		
	RAMY	20	1208	1212	1220	S13	E08	6032	04	21.1	12	SF	C 6.6	3	E		19		

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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)	
0284		20 1221	1240	1313	S13	E06	6032	04	21.0	52	SF				69		F
	RAMY	20 1221	1240	1315	S13	E06	6032	04	21.0	54	SF	3	E		96		
	HOLL	20 1249E	1251U	1311	S13	E06	6032	04	21.0	22D	SF	2	E		42		F
0285	HOLL	20 1528	1531	1544	S19	E11	6031	04	21.5	16	SF	3	E		30		
0286	HOLL	20 1535	1536	1604	N11	W69	6026	04	15.4	29	SF	3	E		60		F
0287	HOLL	20 1552	1553	1559	S11	W10	6021	04	19.9	7	SF	3	E		32		F
		20 1609		1613	No Flare Patrol												
0288	HOLL	20 1646	1649	1653	N30	W21	6022	04	19.0	7	SF	3	E		31		
0289	HOLL	20 1649	1649	1655	S19	E11	6031	04	21.5	6	SF	3	E		20		EF
0290		20 1817	1818U	1852	S32	W41	6018	04	17.5	35	SF M 1.5				78		FH
	RAMY	20 1817	1818U	1852D	S33	W39	6018	04	17.7	35D	SF	2	E		72		FH
	PALE	20 1818E	1822U	1852	S32	W43	6018	04	17.3	34D	SF M 1.5	3	E		85		
		20 1909		1929	No Flare Patrol												
		20 2031		2033	No Flare Patrol												
0291		20 22052	22111	2228	S15	W13	6021	04	19.9	23	SF C 3.2				64		F
	HOLL	20 2205	2212	2228	S15	W13	6021	04	19.9	23	SF	3	E		87		F
	PALE	20 2207	2211	2228	S15	W13	6021	04	19.9	21	SF C 3.2	3	E		40		F
0292		20 2324*	2326*	2426	S33	W44	6018	04	17.5	62	1N C 9.4				128	1.3	FK
	HOLL	20 2324	2326	2455D	S33	W43	6018	04	17.5	91D	SF		E		25		K
	HOLL	20 2324	2357	2455D	S33	W43	6018	04	17.5	91D	2B C 9.4	3	E		301		F
	LEAR	20 2349	2406U	2426	S34	W46	6018	04	17.3	37	SF	2	E		93		
	YUNN	20 2353E	2353U	2430	S32	W45	6018	04	17.4	37D	SB		P	2353	79	1.3	
	PALE	20 2354	2354	2421	S34	W45	6018	04	17.4	27	1F	3	E		140		F
0293		21 05373	05421	0558	S32	W44	6018	04	17.7	21	SN C 2.1				26		0.5
	YUNN	21 0537	0543	0603	S32	W42	6018	04	17.9	26	SN		C		31		0.5
	LEAR	21 0540	0542	0553	S32	W45	6018	04	17.7	13	SF C 2.1	3	E		21		
0294	YUNN	21 0625	0636	0655	S33	W48	6018	04	17.4	30	SN		C		31		0.5
0295		21 06428	06494	0756	S15	W18	6021	04	19.9	74	2B M 2.3				404	5.6	EFIJKUW
	YUNN	21 0642	0650	0803	S14	W20	6021	04	19.8	81	2N		C		472	5.2	FUW
	LEAR	21 0644	0649	0811	S14	W20	6021	04	19.8	87	1N M 2.3	3	E		200		FE
	ATHN	21 0650	0653	0735	S17	W16	6021	04	20.1	45	2B	3	V	0653	541	6.0	
	ISTA	21 0657E		0755	S14	W17	6021	04	20.0	58D	3B		P				FIJKU
0296		21 07001	07011	0710	N33	W25	6022	04	19.3	10	SN				38		0.7
	ISTA	21 0700		0707	N32	W21	6022	04	19.6	7	SN		P				F
	YUNN	21 0700	0702	0716	N32	W29	6022	04	19.0	16	SB		C		47		0.7
	LEAR	21 0701	0701	0708	N34	W24	6022	04	19.4	7	SF	3	E		30		
0297	YUNN	21 0732	0737	0749	N26	W36	6022	04	18.5	17	SF		C		16		0.2
0298	RAMY	21 1120	1125	1131	N14	E48	6038	04	25.1	11	SF	2	E		15		
		21 1208		1214	No Flare Patrol												
0299	RAMY	21 1220	1224	1231	S13	W07	6032	04	21.0	11	SF	3	E		18		
0300	RAMY	21 1223	1224	1256	S17	W25	6021	04	19.6	33	SF C 2.7	3	E		30		F
0301	RAMY	21 1256	1258	1311	N16	W64	6027	04	16.7	15	1F C 2.9	3	E		102		
0302	HOLL	21 1448	1448	1457	S20	E00	6031	04	21.6	9	SF	4	E		13		
0303		21 14521	15044	1548	S32	W54	6018	04	17.3	56	1F C 3.3				80		F
	HOLL	21 1452	1508	1522	S32	W52	6018	04	17.5	30	1F C 3.3	4	E		107		F
	RAMY	21 1453	1504	1615	S33	W55	6018	04	17.2	82	SF	3	E		52		F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/			Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
						Lat	CMD	Region						CMP Mo	Day	Time (UT)		Apparent (10-6 Disk)	Corr (Sq Deg)
0304		21	17466	17475	1800	S32	W54	6018	04	17.5	14	SF C 3.3			19		F	
	RAMY	21	17466	1747	1801	S32	W56	6018	04	17.3	15	SF C 3.3	3	E	24		F	
	PALE	21	1752	1752	1759	S33	W51	6018	04	17.7	7	SF	3	E	14			
0305		21	1858	1916U	2016	S12	W09	6032	04	21.1	78	SF C 7.1			82		EFU	
	RAMY	21	1858	1923U	2006	S12	W10	6032	04	21.0	68	SF C 7.1	3	E	91		UF	
	PALE	21	1913E	1916U	2006	S12	W07	6032	04	21.3	53D	SF	3	E	67		UF	
	HOLL	21	1929E	1929U	2037	S12	W09	6032	04	21.1	68D	SN	3	E	87		FE	
0306		21	1901*	1932*	2023	N30	W36	6022	04	19.0	82	SN			44		FK	
	HOLL	21	1901	1932	2029	N30	W37	6022	04	18.9	88	SB		E	64		K	
	HOLL	21	1901	1956	2029	N30	W37	6022	04	18.9	88	SF	3	E	46		F	
	RAMY	21	1918	1926U	2010	N30	W34	6022	04	19.1	52	SF	3	E	21		F	
0307	HOLL	21	1930	1932	1936	S32	W58	6018	04	17.2	6	SF	3	E	16			
0308		21	19413	1950	2007	S16	W29	6021	04	19.6	26	SF C 7.2			38		EFH	
	HOLL	21	1941	1950	2011	S17	W29	6021	04	19.6	30	SF C 7.2	4	E	62		FE	
	RAMY	21	1944	1945U	2006	S17	W28	6021	04	19.7	22	SF	3	E	23		FH	
	PALE	21	1946E	1947U	2003	S15	W30	6021	04	19.5	17D	SF	3	E	29		H	
0309		21	1949	1955*	2019	S32	W58	6018	04	17.2	30	SN			30		FK	
	HOLL	21	1949	1955	2019	S32	W58	6018	04	17.2	30	SB		E	25		K	
	HOLL	21	1949	2009	2019	S32	W58	6018	04	17.2	30	SF	4	E	34		F	
0310	HOLL	21	2016	2024	2031	N15	E45	6038	04	25.2	15	SF	4	E	11			
0311	HOLL	21	2048	2051	2059	N10	E45	6033	04	25.2	11	SF	4	E	17			
0312	HOLL	21	2052	2056	2102	N30	W36	6022	04	19.0	10	SF	4	E	17			
		21	2334		2335	No Flare Patrol												
		21	2357		2400	No Flare Patrol												
		22	0000		0001	No Flare Patrol												
0313	YUNN	22	0040	0045	0116	N37	W30	6022	04	19.6	36	SN		C	63	1.0	K	
0314		22	02475	0257U	0333	S33	W59	6018	04	17.4	46	SF C 5.3			130	5.0	F	
	YUNN	22	0247	0316U	0345	S35	W58	6018	04	17.5	58	1N		P	0316	236	5.0	
	LEAR	22	0248		0353D	S32	W59	6018	04	17.4	65D	SF	3	E				
	PALE	22	0252	0257U	0321	S32	W59	6018	04	17.4	29	SF C 5.3	3	E	25		F	
0315		22	0524*	0527*	0547	N16	W75	6027	04	16.5	23	SF			57		E	
	TACH	22	0524	0527	0557	N15	W78	6027	04	16.3	33	1N	1	C	0527	145	E	
	LEAR	22	0528	0530	0534	N16	W73	6027	04	16.7	6	SF	3	E	12			
	LEAR	22	0544	0544	0549	N16	W74	6027	04	16.6	5	SF	3	E	15			
0316	LEAR	22	0526	0526	0534	S16	W35	6021	04	19.6	8	SF C 2.0	3	E	15			
0317	LEAR	22	0606	0607	0615	N21	W24	6030	04	20.4	9	SF	3	E	14			
		22	06463	0656	0714	S34	W59	6018	04	17.6	28	SF C 2.1			56	0.7		
	KANZ	22	0646	0656	0707	S34	W57	6018	04	17.7	21	SF		V				
	LEAR	22	0649	0655U	0700D	S34	W58	6018	04	17.7	11D	SF C 2.1	2	E	82			
	YUNN	22	0652E	0700U	0720	S35	W63	6018	04	17.2	28D	SN		P	0700	31	0.7	
0319	YUNN	22	0652	0700	0722D	N19	W29	6030	04	20.1	30D	SN		P	31	0.4		
0320	KHAR	22	0738	0745U	0747D	N34	W33	6022	04	19.7	9D	SN	2	P	0745		H	
0321	KHAR	22	0812E	0823U	0830D	N19	W26	6030	04	20.3	18D	SN	2	V	0823			
0322		22	09164	0932	0956D	N25	E08	6029	04	23.0	40D	1F C 4.0			110		U	
	KANZ	22	0916	0932	0951D	N25	E07	6029	04	22.9	35D	1F		V				
	LEAR	22	0920	0932	0956D	N25	E08	6029	04	23.0	36D	1F C 4.0	3	E	110		U	
		22	0957		1037	No Flare Patrol												
0323	RAMY	22	1039E	1040U	1100D	N25	E06	6029	04	22.9	21D	SF	2	E	30			

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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)	
0324	RAMY	22	1039E	1040U	1058D	N19	W26	6030	04	20.4	19D	SF		2	E		21		F
0325		22	1322E	1323U	1336	S33	W68	6018	04	17.1	14D	SF C	2.5				24		F
	HOLL	22	1322E	1323U	1350D	S33	W68	6018	04	17.1	28D	SF C	2.5	3	E		33		F
	RAMY	22	1323E	1323U	1336	S33	W69	6018	04	17.1	13D	SF		3	E		14		
0326	RAMY	22	1328	1329	1333	N21	W25	6030	04	20.6	5	SF		3	E		12		
0327	HOLL	22	1425	1436	1444	S19	W16	6031	04	21.4	19	SF		3	E		13		
0328	HOLL	22	1518	1519	1522	N34	W39	6022	04	19.5	4	SF		3	E		16		
0329	HOLL	22	1532	1533	1537	S13	W22	6032	04	21.0	5	SF		4	E		14		
0330	HOLL	22	1607	1607	1616	S19	W16	6031	04	21.4	9	SF		4	E		12		
0331	HOLL	22	1724	1729	1733	N21	W30	6030	04	20.4	9	SF		4	E		14		
0332	HOLL	22	1857	1905	1911	S19	W17	6031	04	21.5	14	SF		3	E		15		
0333		22	1912	1918*	2019D	N40	W32		04	20.2	67D	SB					91		EFK
	HOLL	22	1912	1918	2019D	N40	W32		04	20.2	67D	SN		3	E		83		FE
	HOLL	22	1912	1936	2019D	N40	W32		04	20.2	67D	SB			E		99		K
0334	RAMY	22	1915	1918	1922	N29	W46	6022	04	19.2	7	SF C	2.8	3	E		24		
0335	HOLL	22	1932	1936	1939	N21	W31	6030	04	20.4	7	SF		3	E		15		
0336	HOLL	22	2048	2051	2054	S09	E37	6034	04	25.6	6	SF		3	E		27		F
0337	HOLL	22	2051	2052	2109	N15	E32	6038	04	25.3	18	SF		3	E		19		F
0338	HOLL	22	2053	2057	2100	N34	W41	6022	04	19.6	7	SF		3	E		34		F
0339	PEKG	23	0434	0435	0440	S09	E32	6034	04	25.6	6	SN			P	0435	147	1.8	D
0340	LEAR	23	0918	0919	0927	N25	W05	6029	04	23.0	9	SF		3	E		14		F
0341	RAMY	23	1122	1127	1134	S12	W49	6021	04	19.8	12	SF		3	E		30		F
0342	RAMY	23	1203	1303	1349	S11	W50	6021	04	19.7	106	SF		3	E		59		F
0343		23	1235*	1303	1357	S12	W33	6032	04	21.0	82	1N M	1.2				178		FHK
	RAMY	23	1235	1303	1408	S11	W33	6032	04	21.0	93	1N			E		170		K
	RAMY	23	1235	1303	1408	S11	W33	6032	04	21.0	93	2N M	1.2	3	E		292		FH
	SVTO	23	1248E	1309U	1334	S12	W33	6032	04	21.0	46D	1F		2	E		148		F
	HOLL	23	1308E	1314U	1408D	S14	W32	6032	04	21.1	60D	1N		1	E		131		F
	SVTO	23	1309	1309U	1311D	S12	W33	6032	04	21.1	2D	1F		1	E		148		
0344	HOLL	23	1608	1608	1614	S13	E35	6043	04	26.3	6	SF		3	E		29		F
0345		23	1639I	1641I	1656	N26	W10	6029	04	22.9	17	SF					61		F
	HOLL	23	1639	1642	1702	N26	W08	6029	04	23.1	23	SF		4	E		99		
	RAMY	23	1640	1641	1650	N26	W11	6029	04	22.8	10	SF		3	E		23		F
0346		23	1656I	1704	1710	S12	W49	6021	04	20.0	14	SF					33		F
	PALE	23	1656	1704	1711	S13	W49	6021	04	20.0	15	SF		3	E		24		F
	HOLL	23	1703	1704	1710	S11	W49	6021	04	20.0	7	SF		3	E		42		
0347	HOLL	23	1707	1709	1719	S22	E24	6043	04	25.5	12	SF		3	E		17		F
0348	HOLL	23	1723	1725	1731	S18	W29	6031	04	21.5	8	SF		3	E		12		
0349	VORO	23	2212	2213	2220	S15	W63	6021	04	19.1	8	SF		2	C	2213	72	1.5	DIJ
0350	VORO	23	2219	2222	2230	N38	W58	6022	04	19.2	11	SF		2	C	2222	81	1.9	DIJ
0351	VORO	23	2233	2238	2251	S18	W34	6031	04	21.3	18	SN		2	C	2238	152	1.9	EIJ

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/USAF		Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
								Region	Mo Day							Apparent (10-6 Disk)	Corr (Sq Deg)	
0352	VORO	23	2238	2245	2317	N38	W58	6022	04	19.2	39	1F	2	C	2245	90	2.1	DIJ
0353	VORO	24	0010	0011	0016D	N38	W58	6022	04	19.3	6D	1F	2	C	0011	99	2.3	DIJ
0354		24	0024I	0025I	0033	S14	W56	6021	04	19.8	9	SN				22	0.6	
	YUNN	24	0024	0026	0034	S13	W57	6021	04	19.7	10	SN		C		31	0.6	
	LEAR	24	0025	0025	0032	S15	W56	6021	04	19.8	7	SF	3	E		13		
0355		24	01052	0111	0126	N16	E14	6038	04	25.1	21	SN				42	0.4	F
	LEAR	24	0105	0111	0132	N14	E14	6038	04	25.1	27	SF	4	E		52		F
	YUNN	24	0107	0111	0120	N18	E14	6038	04	25.1	13	SN		C		31	0.4	
0356		24	01112	0115	0121	N20	W46	6030	04	20.5	10	SN				18	0.3	F
	YUNN	24	0111	0115	0120	N21	W48	6030	04	20.4	9	SN		C		16	0.3	
	LEAR	24	0113	0115	0122	N20	W45	6030	04	20.6	9	SF	3	E		21		F
0357		24	01393	0147I	0200	N37	W58	6022	04	19.4	21	1H				60	2.1	DIJ
	YUNN	24	0139	0147	0200	N36	W57	6022	04	19.5	21	SN		C		31		
	VORO	24	0142	0148	0151D	N38	W58	6022	04	19.4	9D	1F	2	C	0148	90	2.1	DIJ
0358	LEAR	24	0233	0239	0250	N36	W52	6022	04	19.9	17	SF C 1.7	4	E		16		
0359	LEAR	24	0434	0450	0514	N15	E12	6038	04	25.1	40	SF	3	E		29		F
0360		24	06228	06356	0704	S15	W63	6021	04	19.5	42	1F C 4.6				116	2.3	EF
	KANZ	24	0621E	0641	0709	S15	W62	6021	04	19.6	48D	SF		V				
	LEAR	24	0622	0639	0718	S14	W63	6021	04	19.5	56	1F C 4.6	3	E		126		F
	PEKG	24	0630	0635	0645	S15	W64	6021	04	19.4	15	1F		P	0632	105	2.3	E
0361	KANZ	24	0756	0823	0843	N36	W55	6022	04	19.9	47	SF		V				
0362	LEAR	24	0812	0820	0902	N29	W60	6022	04	19.6	50	SF C 2.6	3	E		58		
		24	0955		1109	No Flare Patrol												
0363	KANZ	24	1118	1122	1137D	N38	W60	6022	04	19.6	19D	SF		C				
		24	1126		1132	No Flare Patrol												
		24	1319		1339	No Flare Patrol												
0364		24	14439	1455	1507	N22	W53	6030	04	20.5	24	SF C 3.3				60		F
	HOLL	24	1443	1455	1542D	N22	W53	6030	04	20.5	59D	SF C 3.3	3	E		80		
	RAMY	24	1452	1455	1507	N21	W53	6030	04	20.5	15	SF	3	E		40		F
0365	HOLL	24	1608	1608	1628D	N38	W59	6022	04	19.9	20D	SF	3	E		22		F
0366	HOLL	24	1653	1653	1702	N35	W63	6022	04	19.7	9	SF	3	E		21		F
0367	HOLL	24	1728	1731	1741	N41	W61		04	19.7	13	SF	3	E		44		H
0368		24	17484	17493	1801	S06	E58	6039	04	29.1	13	SF				28		F
	HOLL	24	1748	1749	1809D	S06	E56	6039	04	28.9	21D	SF	3	E		36		
	PALE	24	1752	1752	1801	S06	E60	6039	04	29.2	9	SF	3	E		20		F
0369	HOLL	24	1753	1756	1800	N40	W60		04	19.8	7	SF C 2.1	3	E		35		F
0370	HOLL	24	1801	1802	1805	N23	W55	6030	04	20.5	4	SF	3	E		12		
0371	HOLL	24	1914	1916	1921	N14	E05	6038	04	25.2	7	SF	3	E		24		
0372		24	20118	2012*	2034	N38	W61	6022	04	19.9	23	SF				35		
	HOLL	24	2011	2012	2014	N39	W60	6022	04	20.0	3	SF	3	E		28		
	HOLL	24	2019	2025	2059	N38	W60	6022	04	20.0	40	SF	3	E		52		
	RAMY	24	2024E	2026U	2029	N38	W63	6022	04	19.7	5D	SF	2	E		26		
0373	HOLL	24	2019	2021	2030	N11	E06	6033	04	25.3	11	SF	3	E		26		
		24	2153		2239	No Flare Patrol												

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Grp #	Sta	Start Day	Max (UT)	End (UT)	Lat	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)	
0393	26	1255E	1343	1410	N22 W74	6030	04 20.8	75D	SF			47		K
	HOLL	26 1255E	1304U	1440	N24 W75	6030	04 20.7	105D	SF	2	E	90		
	HOLL	26 1255E	1343	1440	N24 W75	6030	04 20.7	105D	SF		E	24		K
	KANZ	26 1302E	1304U	1316	N20 W71	6030	04 21.1	14D	SF		C			
	RAMY	26 1320E	1337U	1402	N22 W75	6030	04 20.8	42D	SF	3	E	28		
0394	26	1448E	1502I	1510	N22 W76	6030	04 20.8	22	SF			20		
	SVTO	26 1448	1502	1507	N21 W78	6030	04 20.6	19	SF	3	E	18		
	RAMY	26 1450	1503	1512	N22 W75	6030	04 20.8	22	SF	3	E	22		
0395	RAMY	26 1549E	1606U	1617	N21 W77	6030	04 20.7	28D	SF	2	E	16		H
0396	26	1907	19318	2002	N24 W79	6030	04 20.7	55	SN C 8.1			92		EHK
	HOLL	26 1907	1931	2002	N24 W78	6030	04 20.8	55	SB		E	75		K
	HOLL	26 1907	1939	2002	N24 W78	6030	04 20.8	55	1N C 8.1	4	E	120		E
	RAMY	26 1912E	1935U	2001	N25 W80	6030	04 20.6	49D	SN	2	E	82		H
0397	HOLL	26 1919	1922	1924	S06 E31	6039	04 29.1	5	SF	3	E	12		F
0398	26	2003	2004U	2038	S18 W19	6042	04 25.4	35	SF			22		F
	RAMY	26 2003	2004U	2042	S19 W19	6042	04 25.4	39	SF	2	E	18		F
	HOLL	26 2009E	2010U	2035	S18 W19	6042	04 25.4	26D	SF	3	E	26		F
0399	HOLL	26 2051	2057	2104	N24 W79	6030	04 20.8	13	SF	3	E	43		
0400	26	2113I	2128*	2256	N22 W80	6030	04 20.7	103	1F C 6.0			88		EK
	HOLL	26 2113	2128	2256	N24 W80	6030	04 20.7	103	SF		E	35		K
	HOLL	26 2113	2153	2256	N24 W80	6030	04 20.7	103	1N C 6.0	4	E	142		E
	RAMY	26 2114	2144	2159D	N21 W79	6030	04 20.8	45D	SF		E	41		K
	RAMY	26 2114	2153	2159D	N21 W79	6030	04 20.8	45D	1F	2	E	136		
0401	HOLL	26 2216	2221	2232	S18 W20	6042	04 25.4	16	SF	3	E	54		F
0402	HOLL	26 2220E	2222	2303	N24 W31		04 24.5	43D	SF	3	E	95		F
		26 2232		2238	No Flare Patrol									
0403	LEAR	26 2307	2308	2504	N24 W81	6030	04 20.7	117	SF	3	E	40		
0404	HOLL	27 0008	0016	0029	S19 W20	6042	04 25.5	21	SF	3	E	14		
0405	LEAR	27 0125	0134	0138	N21 W80	6030	04 20.9	13	SF	3	E	36		
0406	YUNN	27 0247	0313	0422	N27 E08	6046B	04 27.7	95	SN		C	79	1.0	
0407	27	0318*	0334*	0359	N16 W26	6038	04 25.2	41	SN			38	0.8	F
	LEAR	27 0318	0352	0357	N16 W27	6038	04 25.1	39	SF	3	E	12		F
	YUNN	27 0330	0334	0401	N17 W26	6038	04 25.2	31	SN		C	63	0.8	
0408	LEAR	27 0505	0513	0519	N13 W25	6033	04 25.3	14	SF	3	E	25		
0409	SVTO	27 0539	0542	0550	N02 W17	6034A	04 26.0	11	SF	3	E	16		
0410	27	0742	0750	0820	N26 W11	6037	04 26.5	38	SN C 1.8			54	0.6	F
	SVTO	27 0742	0750	0814	N27 W12	6037	04 26.4	32	SF C 1.8	3	E	62		F
	YUNN	27 0750E	0750U	0825	N26 W10	6037	04 26.5	35D	SB		P	0750	47	0.6
0411	27	0850I	0852I	0904	N03 W19	6034A	04 25.9	14	SF C 1.4			36	0.3	
	SVTO	27 0850	0853	0908	N02 W19	6034A	04 25.9	18	SF C 1.4	3	E	41		
	YUNN	27 0851	0852U	0852D	N05 W19	6034A	04 25.9	1D	SN		P	0852	31	0.3
	LEAR	27 0851	0852	0859	N03 W19	6034A	04 25.9	8	SF	3	E	35		
0412	HOLL	27 1328	1328	1336	N27 W11	6037	04 26.7	8	SF	3	E	13		F
0413	HOLL	27 1334	1337	1352	S20 W28	6042	04 25.4	18	SF	3	E	28		
0414	27	1447E	1449E	1507	S19 W30	6042	04 25.3	20	SF C 2.8			36		F
	RAMY	27 1447	1449	1456D	S20 W29	6042	04 25.4	9D	SF	3	E	13		F
	HOLL	27 1449	1458	1507	S18 W31	6042	04 25.2	18	SF C 2.8	3	E	60		F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF			Dur (Min)	Imp Opt	Obs See	Type	Area Measurement			Remarks	
						Region	Mo	Day					Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
			27 1737		1742	No Flare Patrol											
0415	HOLL	27	1858	1859	1905	S17	W33	6042	04 25.3	7	SF	3	E		34		
0416	HOLL	27	1916	1919	1930	S19	W32	6042	04 25.4	14	SF	3	E		35		
0417	HOLL	27	2053	2054	2103	S17	W33	6042	04 25.4	10	SF	3	E		18		
0418	HOLL	27	2119	2121	2129	S18	W34	6042	04 25.3	10	SF	3	E		18		
0419	HOLL	28	0004	0005	0012	N17	W40	6038	04 25.0	8	SF	3	E		19		
0420	HOLL	28	0023	0024	0038	N18	W38	6038	04 25.1	15	SF	3	E		29		
0421	LEAR	28	0423	0429	0453	N16	W42	6038	04 25.0	30	SF C 1.2	3	E		25		
0422		28	09262	09263	0942	N17	W44	6038	04 25.0	16	SF C 1.1				16	F	
	SVTO	28	0926	0926	0944	N19	W45	6038	04 24.9	18	SF C 1.1	3	E		14		
	LEAR	28	0928	0929	0940	N15	W44	6038	04 25.1	12	SF	2	E		17	F	
0423		28	1538	15382	1548	S20	W40	6042	04 25.6	10	SF				23	F	
	KANZ	28	1538	1538	1552	S21	W39	6042	04 25.7	14	SF		P				
	RAMY	28	1538	1540	1543	S21	W40	6042	04 25.6	5	SF	2	E		12		
	HOLL	28	1538	1540	1550	S19	W40	6042	04 25.6	12	SF	3	E		34	F	
0424		28	17061	1710	1715	S19	W44	6042	04 25.3	9	SF				22		
	KANZ	28	1706	1710	17220	S19	W44	6042	04 25.3	160	SF		P				
	HOLL	28	1707	1710	1715	S19	W44	6042	04 25.3	8	SF	3	E		22		
0425	HOLL	28	1858	1859	1907	S19	W44	6042	04 25.4	9	SF	3	E		24	F	
0426	HOLL	28	2058	2110	2137	S04	E02	6039	04 29.0	39	SF	3	E		62	F	
0427	LEAR	28	2336	2401	2425	S19	W46	6042	04 25.5	49	SF	3	E		25		
0428	LEAR	29	0113	0115	0132	S20	W47	6042	04 25.4	19	SF	3	E		21		
0429	YUNN	29	0252	0253	0316	N14	W55	6038	04 25.0	24	SN		C		16	0.3	
0430		29	0640	06412	0648	S20	W48	6042	04 25.6	8	SF				36		
	LEAR	29	0640	0641	0648	S21	W48	6042	04 25.6	8	SF	3	E		36		
	KANZ	29	0640	0643	0647	S20	W47	6042	04 25.7	7	SF		P				
0431	SVTO	29	0846	0850	0904	S21	W54	6042	04 25.2	18	SF	3	E		21		
0432	KANZ	29	0847	0847	0853	S20	W37	6043	04 26.5	6	SF		P				
0433	SVTO	29	0946	0949	0959	S08	E61	6046	05 4.0	13	SF	3	E		24		
0434		29	15263	15263	1540	N22	E46	6045	05 3.2	14	SF				22	F	
	KANZ	29	1526	1526	1541	N21	E47	6045	05 3.2	15	SF		P				
	SVTO	29	1529	1529	1540	N23	E46	6045	05 3.2	11	SF	3	E		22	F	
		29	2140		2148	No Flare Patrol											
		29	2153		2201	No Flare Patrol											
0435	VORO	29	2349	2352	2401	N18	W70	6038	04 24.7	12	1F	2	C	2352	143	EIJ	
0436	KANZ	30	0632	0636	0644	N18	W66	6038	04 25.2	12	SF		P				
0437		30	08581	0905	0934	N26	E38	6045	05 3.3	36	SF				35	E	
	KANZ	30	0858	0905	0932	N25	E38	6045	05 3.3	34	SF		P				
	KHAR	30	0859		09030	N28	E40	6045	05 3.5	40	SF	1	V	0859		E	
	SVTO	30	0859	0905	0935	N24	E37	6045	05 3.2	36	SF	3	E		35		
0438		30	10387	10552	1115	N16	W70	6038	04 25.1	37	SF C 1.9				56	H	
	SVTO	30	1038	1055	1118	N16	W72	6038	04 25.0	40	SF C 1.9	3	E		79		
	KANZ	30	1041	1057	1120	N16	W69	6038	04 25.2	39	SF		P				
	RAMY	30	1045	1055	1106	N16	W69	6038	04 25.2	21	SF	3	E		33	H	

H α SOLAR FLARES

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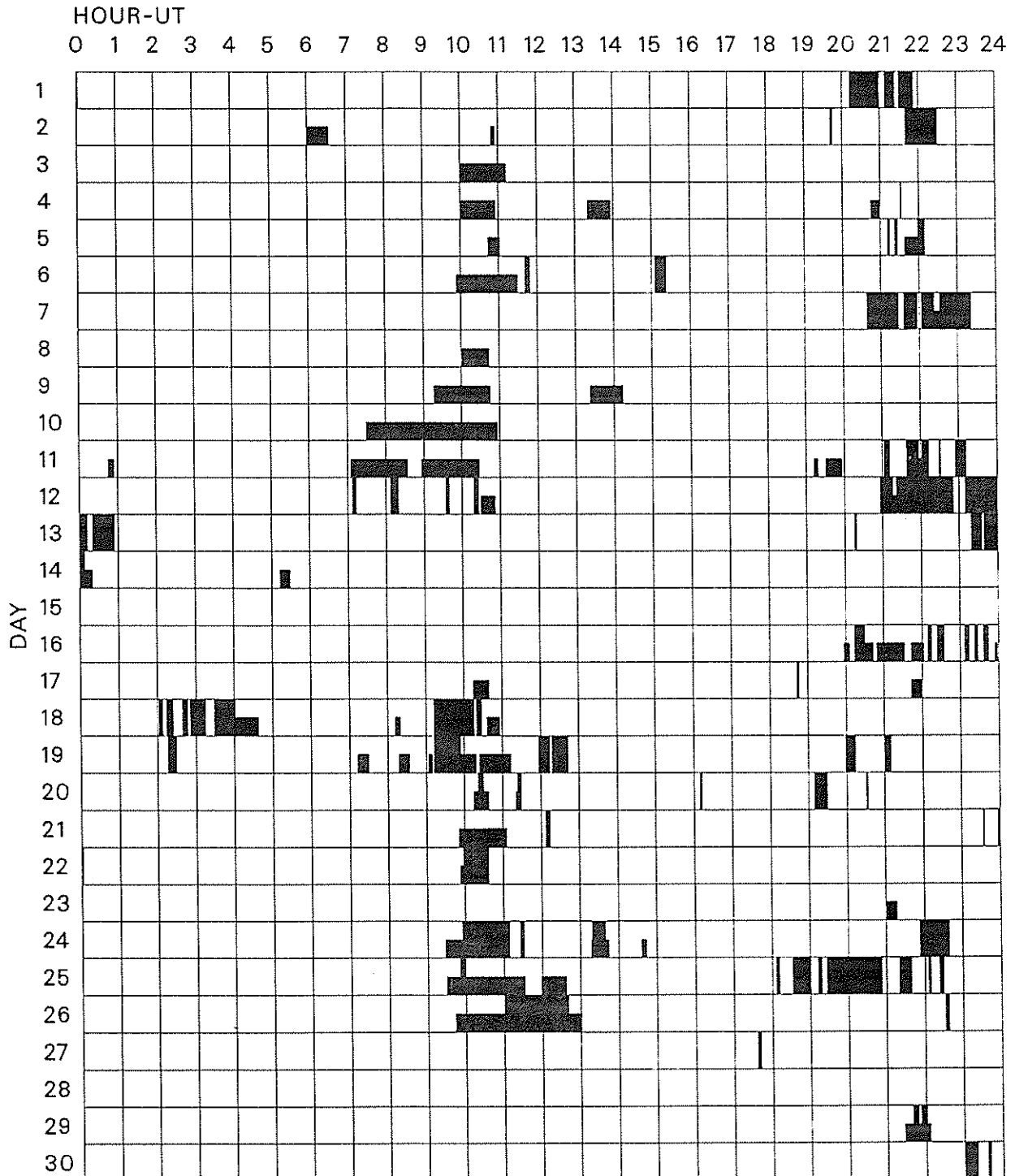
Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0439	KANZ	30	1206	1218	1233	N21	W76	6038	04	24.7	27	1F			P				
			30 2301		2320			No Flare	Patrol										
			30 2337		2341			No Flare	Patrol										

"Remarks"

- | | |
|---|---|
| <p>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.</p> | <p>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.</p> |
|---|---|

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

APRIL 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
Athens
Bucharest

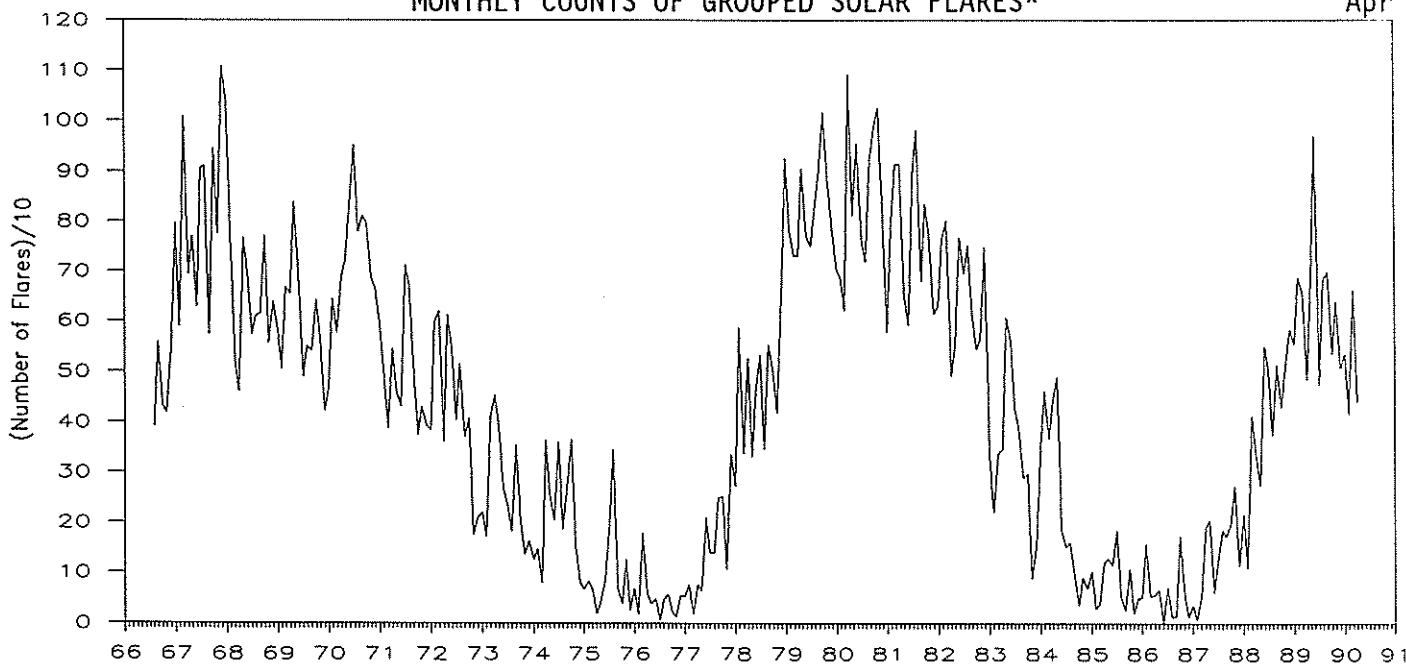
Holloman
Hurbanovo
Istanbul
Kandilli

Kanzelhoehe
Kharkov
Learmonth
Mitaka

Palehua
Peking
Purple Mt.
Ramey

San Vito
Tashkent
Voroshilov
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									2054

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

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

APRIL 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	260	ONDR	44 NS	0700.0E	0934.2	520.0D	165.0			
	650	GORK	20 GRF	0411.2	0421.5	22.3	3.0			
	950	GORK	21 GRF	0413.4	0421.8	22.1	2.0			
	950	GORK	2 S/F	0420.3	0421.4	1.5	4.0			
	2950	GORK	20 GRF	0450.4	0527.4	279.6U	22.0			
	9100	GORK	22 GRF	0506.9	0542.0	326.1D	26.0			
	5900	KISV	2 S/F	0800.2	0801.2	2.8	2.0			
	536	ONDR	41 F	0805.0	0828.0	87.0	27.0			
	9300	KISV	1 S	0809.9	0810.3	0.7	4.0			
	234	POTS	42 SER	0824.3	0833.0	9.3	250.0			
	113	POTS	42 SER	0825.0	0833.1	9.6	300.0			
	950	GORK	21 GRF	0825.1	0831.9	12.8	2.0			
	204	IZMI	41 F	0825.5	0829.0	11.0	220.0			
	30	POTS	42 SER	0826.0	0828.4	8.6	2200.0U			
	808	ONDR	1 S	0827.5	0827.7	1.7	1.0			
	245	SVTO	8 S	0828.0E	0828.0	1.0D	230.0			QL=4 ST=2 TYP=3
	950	GORK	1 S	0828.0	0828.2	0.5	4.0			
	245	LEAR	4 S/F	0832.0E	0833.0	4.0D	56.0			QL=4 ST=2 TYP=3
	808	ONDR	1 S	0832.7	0833.9	2.5	1.0			
	245	SVTO	8 S	0833.0E	0833.0	1.0D	54.0			QL=4 ST=2 TYP=3
	950	GORK	1 S	0833.2	0834.2	1.4	4.0			
	1470	POTS	4 S/F	1204.0	1207.2	7.0	11.0			
	808	ONDR	41 F	1204.0	1207.4	6.0	3.0			
	5900	KISV	45 C	1204.3	1207.6		4.0			
	5900	KISV	45 C	1204.3	1204.8	7.5	5.0			
	2850	CRIM	45 C	1204.4	1207.5		14.0			
	2850	CRIM	45 C	1204.4	1204.7	9.0	15.0	5.0		
	3000	POTS	4 S/F	1204.5	1205.0	5.5	11.0			
02	260	ONDR	44 NS	0700.0E	1241.0	520.0D	176.0			
	204	IZMI	43 NS	0900.0		180.0	10.0			
	127	TORN	43 NS	0924.0	0948.5	106.0	50.0	3.0		V=0
	245	LEAR	8 S	0044.0E	0044.0	1.0D	77.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0044.0E	0044.0	1.0D	20.0			QL=4 ST=2 TYP=3
	650	GORK	22 GRF	0433.5	0436.0	11.3	3.0			
	950	GORK	20 GRF	0434.3	0436.0	8.4	4.0			
	5900	KISV	20 GRF	0656.6	0704.6	18.2	3.0			
	11800	BERN	3 S	0703.8	0705.8	3.0	2.1			
	8400	BERN	3 S	0703.8	0705.8	3.0	6.4			
	5200	BERN	3 S	0703.8	0705.8	3.0	21.4			
	3200	BERN	3 S	0703.8	0705.8	3.0	14.9			
	536	ONDR	27 RF	0800.0	1001.8	430.0	9.0			
	5900	KISV	2 S/F	0823.1	0825.0	2.4	4.0			
	9100	GORK	20 GRF	0852.0	0902.5	23.9	3.0			
	245	SVTO	8 S	0900.0E	0900.0		50.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0905.0E	0905.0	1.0D	62.0			QL=2 ST=2 TYP=3
	9300	KISV	2 S/F	0936.2	0937.6	8.3	5.0			
	808	ONDR	3 S	0937.0	0937.2	1.0	4.0			
	9100	GORK	2 S/F	0937.0	0937.5	8.6	5.0			
	9100	GORK	23 GRF	1107.2	1132.7	52.8D	6.0			
	5900	KISV	2 S/F	1120.6	1121.8	3.9	3.0			
	5900	KISV	2 S/F	1124.9	1126.0	9.1	6.0			
	9300	KISV	2 S/F	1125.2	1125.9	9.5	13.0			
	9100	GORK	1 S	1125.6	1125.9	0.5	10.0			
	245	SGMR	8 S	1255.0E	1255.0		55.0			QL=4 ST=2 TYP=3
	9500	POTS	4 S/F	1338.7	1341.0	4.8	33.0			
	3200	BERN	3 S	1339.0	1341.0	4.0	0.8			
	8400	BERN	3 S	1339.0	1341.0	4.0	5.6			
	5200	BERN	3 S	1339.0	1341.0	4.0	2.2			
	11800	BERN	3 S	1339.0	1341.0	4.0	2.8			
	2800	OTTA	3 S	1703.0	1705.8	18.9	68.2	13.0		
	4995	PALE	8 S	1705.0E	1705.0	1.0D	220.0			QL=4 ST=2 TYP=3
	15400	PALE	8 S	1705.0E	1705.0	1.0D	200.0			QL=4 ST=2 TYP=3
8800	PALE	8 S	1705.0E	1705.0	1.0D	330.0			QL=4 ST=2 TYP=3	
2695	PALE	8 S	1705.0E	1705.0	1.0D	57.0			QL=4 ST=2 TYP=3	
15400	SGMR	8 S	1705.0E	1705.0	1.0D	260.0			QL=4 ST=2 TYP=3	
8800	SGMR	8 S	1705.0E	1706.0	1.0D	350.0			QL=4 ST=2 TYP=3	
2695	SGMR	8 S	1705.0E	1705.0	1.0D	65.0			QL=4 ST=2 TYP=3	
4995	SGMR	8 S	1705.0E	1706.0	1.0D	230.0			QL=4 ST=2 TYP=3	

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

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Apr 90

APRIL 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		
02	2800	OTTA	20 GRF	1920.2	1922.3	55.0	10.2	4.0		
	8800	PALE	8 S	2248.0E	2249.0	1.00	78.0			QL=4 ST=2 TYP=3
03	245	LEAR	44 NS	0039.0E	0039.0	38.00	65.0			QL=4 ST=2 TYP=1
	260	ONDR	44 NS	0700.0E	0909.4	520.00	201.0			
	245	PALE	8 S	0039.0E	0039.0	U	80.0			QL=4 ST=2 TYP=3
	9100	GORK	23 GRF	0443.4	0854.9	383.7	46.0			
	100	HIRA	41 F	0448.2	0510.0	109.0	685.0			
	2840	PEKG	46 C	0452.0	0501.8	19.0	23.0			
	950	GORK	23 GRF	0457.6	0501.9	19.5	5.0			
	100	GORK	41 F	0458.4	0500.2		230.0			
	100	GORK	41 F	0458.4	0510.6		900.0			
	100	GORK	41 F	0458.4	0459.7	14.4	400.0			
	650	GORK	21 GRF	0458.7	0513.6	18.9	3.0			
	200	HIRA	41 F	0458.7	0510.6	35.0	180.0			WR
	2850	CRIM	3 S	0458.9	0502.0	14.0	21.0	7.0		
	5900	KISV	23 GRF	0500.0	0511.1	17.5	4.0			
	9300	KISV	22 GRF	0500.0	0501.9	17.5	6.0			
	5900	KISV	45 C	0501.2	0502.0	5.7	11.0			
	5900	KISV	45 C	0501.2	0504.5		6.0			
	950	GORK	4 S/F	0507.1	0511.1	6.5	50.0			
	650	GORK	4 S/F	0508.4	0509.6	5.2	15.0			
	200	GORK	46 C	0510.2	0510.6	1.5	35.00			
	200	GORK	46 C	0510.2	0510.8		130.0			
	5900	KISV	2 S/F	0545.9	0546.3	3.8	3.0			
	2840	PEKG	3 S	0711.0	0714.9	10.0	40.0			
	2950	GORK	21 GRF	0711.2	0745.2	196.2	13.0			
	2850	CRIM	3 S	0712.0	0715.0	5.0	46.0	15.0		
	2850	CRIM	29 PBI	0712.0	0717.0	60.0	12.0			
	3000	POTS	3 S	0712.5	0715.0	4.5	34.0			
	5900	KISV	23 GRF	0712.5	0722.6	23.5	6.0			
	600	HUMN	1 S	0712.5	0712.7	0.6	7.0	3.0		
	5900	KISV	2 S/F	0712.8	0715.0	5.8	16.0			
	9300	KISV	22 GRF	0713.4	0714.9	28.6	9.0			
	3013	IZMI	5 S	0713.5	0715.0	6.0	26.0	13.0		
	2950	GORK	4 S/F	0714.2	0715.0	2.6	24.0			
	600	HUMN	27 RF	0715.0	0715.5	6.0	4.0	2.0		
	500	HIRA	41 F	0719.0	0719.1	2.0	26.0			O
200	HIRA	42 SER	0739.4	0746.5	7.9	120.0			O	
5900	KISV	2 S/F	0743.8	0745.3	4.0	4.0				
200	GORK	4 S/F	0743.9	0747.5	4.1	30.00				
245	LEAR	8 S	0744.0E	0744.0	U	190.0			QL=4 ST=2 TYP=3	
245	SVTO	8 S	0744.0E	0744.0	U	190.0			QL=4 ST=2 TYP=3	
204	IZMI	41 F	0744.0	0747.4	5.0	125.0				
100	GORK	41 F	0745.0	0821.1		1600.0				
100	GORK	41 F	0745.0	0745.3	52.5	570.0				
100	GORK	41 F	0745.0	0746.9		1190.0				
536	ONDR	49 GB	0800.0	0821.7	70.0	83.0				
5900	KISV	2 S/F	0801.2	0801.9	3.1	4.0				
200	GORK	46 C	0813.6	0827.0		130.0				
200	GORK	46 C	0813.6	0821.2	18.5	30.00				
600	HUMN	45 C	0816.0	0819.0	14.0	45.0	12.0			
810	KRAK	45 C	0816.5	0821.5	13.0	73.0	14.0			
808	ONDR	49 GB	0816.6	0821.6	42.0	78.0				
950	GORK	46 C	0816.8	0828.0		45.0				
5900	KISV	29 PBI	0816.8	0842.0	46.0	311.0				
950	GORK	46 C	0816.8	0835.2		35.0				
950	GORK	46 C	0816.8	0847.2		110.0				
2950	GORK	47 GB	0816.8	0828.2		730.0				
950	GORK	46 C	0816.8	0846.4		34.0				
950	GORK	46 C	0816.8	0838.5		110.0				
2950	GORK	47 GB	0816.8	0826.5		314.0				
5900	KISV	47 GB	0816.8	0828.5	25.2	4013.0				
950	GORK	46 C	0816.8	0818.6	42.9	20.0				
950	GORK	46 C	0816.8	0818.6	42.9	20.0				
2950	GORK	47 GB	0816.8	0821.7	34.8	280.0				
950	GORK	46 C	0816.8	0821.8		120.0				
650	GORK	46 C	0816.8	0821.8		75.0				
650	GORK	46 C	0816.8	0818.8	12.2	110.0				

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

APRIL 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			
03	1415	LEAR	4 S/F	0817.0E	0821.0	33.00	190.0			QL=4 ST=3 TYP=5	
	8800	LEAR	49 GB	0817.0E	0828.0	31.00	4400.0			QL=4 ST=2 TYP=7	
	4995	LEAR	49 GB	0817.0E	0828.0	31.00	3200.0			QL=4 ST=2 TYP=7	
	2695	LEAR	49 GB	0817.0E	0828.0	31.00	850.0			QL=4 ST=2 TYP=7	
	8800	SVTO	49 GB	0817.0E	0828.0	39.00	5000.0			QL=4 ST=2 TYP=7	
	2695	SVTO	49 GB	0817.0E	0828.0	30.00	830.0			QL=4 ST=2 TYP=7	
	4995	SVTO	49 GB	0817.0E	0828.0	32.00	3300.0			QL=4 ST=2 TYP=7	
	2850	CRIM	47 GB	0817.0	0832.1		1152.0				
	2850	CRIM	47 GB	0817.0	0828.2		1429.0				
	430	KRAK	45 C	0817.0	0821.3	12.5	72.0	18.0			
	9500	POTS	46 C	0817.0	0828.3	133.0	3450.0				
	500	HIRA	46 C	0817.0	0821.5	12.5	93.0	18.0		0	
	3000	POTS	46 C	0817.0	0828.5	103.0	1200.00				
	2850	CRIM	47 GB	0817.0	0821.7	43.0	400.0	71.0			
	1470	POTS	46 C	0817.0	0821.7	43.0	225.0				
	9300	KISV	29 PBI	0817.1	0842.0	52.1	487.0				
	9300	KISV	47 GB	0817.1	0828.3	24.9	4644.0				
	9100	GORK	47 GB	0817.1	0828.6	33.9	5300.0				
	15000	KISV	29 PBI	0817.3	0842.0	47.0	204.0				
	3013	IZMI	45 C	0817.3	0828.4	38.0	918.0				
	15000	KISV	47 GB	0817.3	0828.5	24.7	3298.0				
	610	LEAR	4 S/F	0818.0E	0819.0	6.00	120.0				QL=4 ST=2 TYP=5
	15400	LEAR	49 GB	0818.0E	0828.0	35.00	5300.0				QL=4 ST=2 TYP=7
	15400	SVTO	49 GB	0818.0E	0828.0	38.00	4900.0				QL=4 ST=2 TYP=7
	410	LEAR	4 S/F	0819.0E	0821.0	4.00	51.0				QL=4 ST=2 TYP=3
	204	IZMI	41 F	0819.0	0827.0	15.0	200.0				
	1415	SVTO	4 S/F	0819.0E	0821.0	22.00	170.0				QL=4 ST=2 TYP=3
	200	HIRA	46 C	0819.5	0827.0	13.2	70.0	21.0		0	
	100	HIRA	42 SER	0820.0	0835.0	29.0	1000.00				
	410	SVTO	4 S/F	0820.0E	0821.0	940.00	44.0				QL=4 ST=1 TYP=3
	33	UPIC	46 C	0820.9	0821.70	3.4					
	19600	BERN	47 GB	0821.0	0838.0	25.0	292.7				
	3200	BERN	47 GB	0821.0	0838.0	25.0	68.8				
	11800	BERN	47 GB	0821.0	0838.0	25.0	602.7				
	8400	BERN	47 GB	0821.0	0838.0	25.0	473.5				
	35000	BERN	47 GB	0821.0	0838.0	25.0	241.0				
	5200	BERN	47 GB	0821.0	0838.0	25.0	284.1				
	1415	LEAR	4 S/F	0821.0E	0822.0	20.00	140.0				QL=4 ST=2 TYP=5
	127	TORN	48 C	0821.0	0826.7	16.0	1000.0	30.0			
	245	LEAR	4 S/F	0823.0E	0828.0	7.00	74.0				QL=4 ST=3 TYP=5
	650	GORK	30 PBI	0829.0	0829.0	39.0	8.0				
	810	KRAK	46 C	0834.8	0841.0	12.5	69.0	16.0			
	600	HUMN	45 C	0837.5	0846.0	20.5	14.0	4.0			
	650	GORK	46 C	0837.9	0843.0		25.0				
	650	GORK	46 C	0837.9	0841.2		25.0				
	650	GORK	46 C	0837.9	0846.2		33.0				
	650	GORK	46 C	0837.9	0838.6	9.5	13.0				
	245	LEAR	4 S/F	0906.0E	0907.0	3.00	160.0				QL=4 ST=2 TYP=3
	2695	SVTO	8 S	0906.0E	0906.0	1.00	320.0				QL=4 ST=3 TYP=3
	204	IZMI	41 F	0907.0	0908.0	4.0	140.0				
245	SVTO	8 S	0907.0E	0907.0	2.00	170.0				QL=4 ST=3 TYP=3	
430	KRAK	8 S	0930.3	0930.6	0.8	28.0					
5900	KISV	2 S/F	0935.0	0937.0	3.4	5.0					
9300	KISV	2 S/F	0936.2	0936.9	3.6	19.0					
9100	GORK	3 S	0936.3	0936.9	1.1	16.0					
9500	POTS	3 S	0936.5	0937.0	2.0	15.0					
15000	KISV	2 S/F	0936.6	0937.0	1.5	11.0					
5900	KISV	4 S/F	0959.4	1001.1	2.7	33.0					
5900	KISV	29 PBI	0959.4	1002.1	7.8	6.0					
9500	POTS	4 S/F	1000.0	1001.0	2.5	21.0					
9300	KISV	4 S/F	1000.2	1001.1	5.6	32.0					
9100	GORK	46 C	1000.4	1001.0		27.0					
2950	GORK	1 S	1000.4	1001.1	1.3	3.0					
9100	GORK	46 C	1000.4	1000.7	1.3	15.0					
5900	KISV	2 S/F	1059.9	1100.6	4.6	17.0					
9300	KISV	2 S/F	1100.0	1100.6	4.0	16.0					
9500	POTS	1 S	1100.0	1100.8	1.0	10.0					
9100	GORK	2 S/F	1100.2	1100.7	0.9	18.0					
245	SGMR	8 S	1352.0E	1352.0	U	64.0				QL=4 ST=2 TYP=3	

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

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APRIL 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		
03	600	HUMN	27	RF	1512.5	1516.0	16.5	6.0	2.0	
	536	ONDR	41	F	1513.0	1515.7	17.0	8.0		
	808	ONDR	45	C	1513.4	1516.7	9.0	14.0		
	2800	OTTA	4	S/F	1709.0	1717.1	62.1	427.0	128.0	
	15400	SGMR	49	GB	1714.0E	1717.0	25.00	6200.0		QL=2 ST=2 TYP=6
	600	HUMN	45	C	1714.5	1717.0	22.5	158.0	27.0	
	5200	BERN	46	C	1715.0	1717.0	15.0	49.9		
	19600	BERN	46	C	1715.0	1717.0	15.0	272.6		
	11800	BERN	46	C	1715.0	1717.0	15.0	19.2		
	8400	BERN	46	C	1715.0	1717.0	15.0	7.6		
	35000	BERN	46	C	1715.0	1717.0	15.0	192.0		
	3200	BERN	46	C	1715.0	1717.0	15.0	42.2		
	1415	PALE	49	GB	1715.0E	1717.0	21.00	620.0		QL=4 ST=2 TYP=6
	2695	PALE	49	GB	1715.0E	1717.0	21.00	510.0		QL=4 ST=2 TYP=6
	4995	PALE	49	GB	1715.0E	1717.0	23.00	680.0		QL=4 ST=2 TYP=6
	4995	SGMR	49	GB	1715.0E	1717.0	22.00	560.0		QL=2 ST=2 TYP=6
	2695	SGMR	4	S/F	1715.0E	1717.0	21.00	490.0		QL=4 ST=2 TYP=3
	410	PALE	4	S/F	1716.0E	1717.0	3.00	94.0		QL=2 ST=2 TYP=3
	610	PALE	4	S/F	1716.0E	1717.0	4.00	260.0		QL=2 ST=2 TYP=3
	610	SGMR	8	S	1716.0E	1717.0	2.00	310.0		QL=4 ST=2 TYP=3
	1415	SGMR	4	S/F	1716.0E	1717.0	19.00	450.0		QL=4 ST=2 TYP=3
	15400	PALE	49	GB	1716.0E	1717.0	27.00	6600.0		QL=4 ST=2 TYP=6
	8800	PALE	49	GB	1716.0E	1717.0	22.00	2300.0		QL=4 ST=2 TYP=6
8800	SGMR	49	GB	1716.0E	1718.0	21.00	1500.0		QL=2 ST=2 TYP=6	
245	PALE	8	S	1717.0E	1717.0	2.00	390.0		QL=4 ST=2 TYP=3	
245	SGMR	8	S	1717.0E	1717.0	U	470.0		QL=4 ST=2 TYP=3	
410	SGMR	4	S/F	1717.0E	1717.0	403.00	120.0		QL=2 ST=1 TYP=3	
04	2840	PEKG	3	S	0308.0	0317.1	32.0	28.6		
	8800	LEAR	8	S	0316.0E	0317.0	2.00	41.0		QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0316.0E	0317.0	1.00	24.0		QL=4 ST=2 TYP=3
	4995	PALE	8	S	0316.0E	0317.0	2.00	79.0		QL=4 ST=2 TYP=3
	4995	LEAR	8	S	0317.0E	0317.0	1.00	64.0		QL=4 ST=2 TYP=3
	8800	PALE	8	S	0317.0E	0317.0	U	49.0		QL=4 ST=2 TYP=3
	5900	KISV	22	GRF	0521.9	0524.2	19.0	8.0		
	9300	KISV	22	GRF	0523.0	0524.1	17.2	5.0		
	100	HIRA	46	C	0527.5	0527.7	1.6	1000.00		
	200	HIRA	46	C	0527.7	0528.0	1.3	340.0		0
	15400	LEAR	8	S	0634.0E	0634.0	2.00	93.0		QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0634.0E	0634.0	2.00	74.0		QL=4 ST=2 TYP=3
	260	ONDR	42	SER	0700.0E	1335.0	520.00	15.0		
	2950	GORK	21	GRF	0725.2	0811.0	69.5	4.0		
	2840	PEKG	5	S	0738.0	0743.4	14.0	21.5		
	5200	BERN	4	S/F	0740.6	0742.3	6.0	1.2		
	3200	BERN	4	S/F	0740.6	0742.3	6.0	2.6		
	2950	GORK	3	S	0740.9	0742.4	4.2	20.0		
	2850	CRIM	3	S	0741.0	0742.3	5.4	27.0	9.0	
	5900	KISV	2	S/F	0741.1	0742.3	5.2	10.0		
	3000	POTS	3	S	0741.5	0742.4	2.0	20.0		
	536	ONDR	41	F	0813.0	1038.0	160.0	8.0		
	204	IZMI	8	S	0833.0	0833.2	0.2	150.0		
	5900	KISV	2	S/F	0901.3	0901.6	3.7	2.0		
	5900	KISV	2	S/F	0908.4	0909.3	1.8	2.0		
	3000	POTS	46	C	1305.0	1336.1	55.0	1200.00		
	2800	OTTA	47	GB	1312.0	1336.8	33.0	978.0	290.0	
	1470	POTS	46	C	1312.0	1337.5	38.0	200.0		
	600	HUMN	45	C	1314.0	1319.2	27.4	122.0	15.0	
	536	ONDR	49	GB	1314.5	1319.0	30.0	113.0		
	808	ONDR	49	GB	1314.6	1316.5	35.0	58.0		
	234	POTS	42	SER	1314.7	1336.1	26.3	85.0		
	610	SGMR	4	S/F	1315.0E	1318.0	6.00	240.0		QL=4 ST=2 TYP=3
2695	SGMR	49	GB	1315.0E	1336.0	28.00	590.0		QL=4 ST=2 TYP=7	
4995	SGMR	49	GB	1315.0E	1335.0	29.00	1400.0		QL=4 ST=2 TYP=7	
8800	SGMR	49	GB	1315.0E	1335.0	29.00	1100.0		QL=2 ST=2 TYP=7	
1415	SGMR	4	S/F	1315.0E	1336.0	26.00	170.0		QL=4 ST=2 TYP=5	
610	SVTO	4	S/F	1315.0E	1328.0	25.00	140.0		QL=2 ST=2 TYP=5	
410	SVTO	4	S/F	1315.0E	1333.0	24.00	420.0		QL=4 ST=2 TYP=5	
245	SVTO	4	S/F	1315.0E	1333.0	23.00	200.0		QL=4 ST=2 TYP=5	
4995	SVTO	49	GB	1315.0E	1335.0	28.00	1900.0		QL=4 ST=2 TYP=7	

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

APRIL 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		
04	15400	SVTO	49 GB	1315.0E	1319.0	27.00	1400.0			QL=4 ST=2 TYP=7
	2695	SVTO	49 GB	1315.0E	1336.0	28.00	570.0			QL=4 ST=2 TYP=7
	8800	SVTO	49 GB	1315.0E	1335.0	28.00	1900.0			QL=4 ST=2 TYP=7
	11800	BERN	47 GB	1315.0	1335.0	30.0	106.2			
	8400	BERN	47 GB	1315.0	1335.0	30.0	135.2			
	5200	BERN	47 GB	1315.0	1335.0	30.0	128.8			
	19600	BERN	47 GB	1315.0	1335.0	30.0	51.5			
	50000	BERN	47 GB	1315.0	1335.0	30.0	41.8			
	35000	BERN	47 GB	1315.0	1335.0	30.0	38.6			
	3200	BERN	47 GB	1315.0	1335.0	30.0	67.6			
	1415	SVTO	4 S/F	1315.0E	1336.0	30.00	160.0			QL=4 ST=2 TYP=5
	9500	POTS	45 C	1315.0	1335.5		820.0			
	9500	POTS	45 C	1315.0	1319.7	45.0	820.0			
	30	POTS	45 C	1315.2	1335.1	23.7	4000.0U			
	113	POTS	45 C	1315.2	1327.6	24.8	900.0			
	127	TORN	48 C	1315.2	1320.6	23.0	500.0	20.0		
	33	UPIC	48 C	1315.4	1315.8U	25.4				
	410	SGMR	4 S/F	1316.0E	1332.0	20.00	180.0			QL=4 ST=2 TYP=3
15400	SGMR	49 GB	1316.0E	1319.0	27.00	970.0			QL=2 ST=2 TYP=7	
245	SGMR	4 S/F	1321.0E	1337.0	16.00	80.0			QL=4 ST=2 TYP=3	
2800	OTTA	29 PBI	1344.3	1344.3	111.0	14.0	7.0			
05	204	IZMI	43 NS	1030.0		90.0	10.0			
	200	HIRA	44 NS	2018.0E	2230.0	280.00	5.0	3.0		0
	245	PALE	8 S	0104.0E	0104.0	1.00	180.0			QL=4 ST=2 TYP=3
	204	IZMI	4 S/F	0627.5	0628.0	1.0	230.0	200.0		
	260	ONDR	42 SER	0700.0E	1217.0	520.00	113.0			
	204	IZMI	41 F	0830.0	0834.0	5.0	112.0			
	536	ONDR	27 RF	0920.0	1018.0	340.0	6.0			
	2950	GORK	21 GRF	1017.4	1106.3	102.60	6.0			QL=2 ST=2 TYP=3
	610	SVTO	8 S	1024.0E	1024.0	U	130.0			
	9100	GORK	23 GRF	1046.6	1047.6	73.40	7.0			
	3013	IZMI	5 S	1103.0	1104.2	1.5	8.0	4.0		
	5900	KISV	2 S/F	1103.1	1104.0	2.6	11.0			
	9100	GORK	46 C	1103.3	1103.6	1.1	3.0			
	9100	GORK	46 C	1103.3	1103.9		10.0			
	2850	CRIM	1 S	1103.4	1104.0	1.2	11.0	3.0		
	9300	KISV	2 S/F	1103.4	1104.0	2.4	11.0			
	2950	GORK	1 S	1103.6E	1104.0	1.20	8.0			
	245	SGMR	8 S	1246.0E	1246.0	U	74.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1246.0E	1246.0	U	81.0			QL=4 ST=2 TYP=3
	3000	POTS	4 S/F	1342.5	1345.0	7.5U	144.0			
	2800	OTTA	3 S	1343.0	1345.3	5.3	130.7	39.0		
	15400	SGMR	4 S/F	1343.0E	1344.0	3.00	350.0			QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	1343.0E	1345.0	4.00	270.0			QL=4 ST=2 TYP=3
	2695	SGMR	4 S/F	1343.0E	1345.0	4.00	110.0			QL=4 ST=2 TYP=3
	33	UPIC	32 ABS	1343.0	1346.0	20.0				QL=4 ST=1 TYP=3
	8800	SGMR	4 S/F	1343.0E	1343.0	617.00	320.0			
	9500	POTS	4 S/F	1343.0	1343.5	27.0	295.0			
	1470	POTS	3 S	1343.5	1345.7	7.5	19.0			
	3200	BERN	46 C	1343.5	1343.8	3.0	15.1			
	5200	BERN	46 C	1343.5	1343.8	3.0	29.4			
	19600	BERN	46 C	1343.5	1343.8	3.0	26.0			
	35000	BERN	46 C	1343.5	1343.8	3.0	17.6			
8400	BERN	46 C	1343.5	1343.8	3.0	46.2				
11800	BERN	46 C	1343.5	1343.8	3.0	42.0				
2800	OTTA	29 PBI	1348.3	1348.3	60.0	7.9	4.0			
500	HIRA	20 GRF	2150.0	2242.0	128.0	7.0	3.0		WR	
06	2950	GORK	21 GRF	0455.3	0618.3	424.70	16.0			
	200	HIRA	41 F	0610.7	0620.5	17.8	23.0			0
	9100	GORK	20 GRF	0613.2	0626.5	41.7	7.0			
	950	GORK	20 GRF	0613.6	0618.3	17.9	5.0			
	650	GORK	21 GRF	0614.4	0618.1	12.9	7.0			
	500	HIRA	41 F	0616.7	0618.0	3.0	72.0			0
	650	GORK	3 S	0617.4	0617.6	0.3	26.0			
	950	GORK	1 S	0653.2	0655.0	6.2	3.0			
	650	GORK	22 GRF	0653.3	0653.7	13.1	3.0			
	33	UPIC	42 SER	0653.5	0656.4	6.0				

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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
06	2950	GORK	2 S/F	0658.0	0659.2	2.6	3.0			
	260	ONDR	41 F	0700.0	0937.5	520.0	119.0			
	430	KRAK	8 S	0726.5	0727.0	0.7	42.0			
	204	IZMI	41 F	0726.5	0730.0	10.0	80.0			
	536	ONDR	41 F	0811.0	1038.0	160.0	12.0			
	430	KRAK	8 S	0931.0	0931.4	0.6	41.0			
	430	KRAK	8 S	0936.0	0936.3	0.5	19.0			
	1470	POTS	3 S	1130.0	1131.0	3.0	10.0			
	5900	KISV	2 S/F	1130.6	1131.2	1.5	4.0			
	808	ONDR	8 S	1130.8	1131.1	2.0	29.0			
	33	UPIC	45 C	1325.2	1325.9	1.5				
	33	UPIC	45 C	1443.3	1444.6	1.8				
500	HIRA	27 RF	2229.5	2245.0	45.0	15.0	5.0		0	
07	200	HIRA	43 NS	0233.0	0317.0	152.0	8.0	2.0		WL
	200	GORK	44 NS	0359.0E		399.00		5.0		
	260	ONDR	44 NS	0700.0E	1207.4	520.00	182.0			
	200	HIRA	44 NS	2013.0E	0250.0	770.00	11.0	3.0		0
	245	LEAR	8 S	0111.0E	0111.0		54.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0115.0E	0115.0	1.00	61.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0311.0E	0311.0	1.00	62.0			QL=4 ST=2 TYP=3
	9100	GORK	20 GRF	0403.0E	0448.0	216.70	7.0			
	33	UPIC	45 C	0506.0	0506.5	1.5				
	204	IZMI	8 S	0654.8	0654.9	0.2	70.0	60.0		
	204	IZMI	41 F	0852.5	0853.0	1.0	120.0			
	9100	GORK	20 GRF	0921.5	1015.3	74.50	8.0			
	127	TORN	4 S/F	0931.8	0932.6	3.5	300.0	150.0		
	2950	GORK	20 GRF	0943.8	1023.8	52.20	6.0			
	5900	KISV	45 C	1210.9	1212.6	3.5	5.0			
	5900	KISV	45 C	1210.9	1213.8		3.0			
	2800	OTTA	4 S/F	1505.0	1523.3	38.0	264.0	80.0		
	536	ONDR	49 GB	1507.0	1527.4	33.0	94.0			
	245	SGMR	4 S/F	1517.0E	1522.0	523.00	35.0			QL=2 ST=1 TYP=5
	600	HUMN	45 C	1520.6	1527.3	20.0	43.0	15.0		
	4995	SGMR	4 S/F	1521.0E	1523.0	8.00	200.0			QL=4 ST=2 TYP=3
	610	SGMR	4 S/F	1521.0E	1527.0	14.00	150.0			QL=4 ST=2 TYP=3
	2695	SGMR	4 S/F	1521.0E	1523.0	14.00	230.0			QL=4 ST=2 TYP=3
	1415	SGMR	4 S/F	1521.0E	1524.0	11.00	62.0			QL=4 ST=2 TYP=3
	1415	SVTO	4 S/F	1521.0E	1524.0	12.00	68.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	1521.0E	1523.0	18.00	200.0			QL=4 ST=2 TYP=3
	2695	SVTO	4 S/F	1521.0E	1523.0	17.00	210.0			QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	1521.0E	1523.0	17.00	310.0			QL=4 ST=2 TYP=3
	15400	SVTO	4 S/F	1521.0E	1523.0	17.00	120.0			QL=4 ST=2 TYP=3
	808	ONDR	49 GB	1521.0	1530.0	20.0	360.0			
8800	SGMR	8 S	1522.0E	1523.0	2.00	100.0			QL=4 ST=2 TYP=3	
15400	SGMR	8 S	1522.0E	1523.0	2.00	95.0			QL=4 ST=2 TYP=3	
610	SVTO	4 S/F	1527.0E	1530.0	4.00	110.0			QL=2 ST=2 TYP=5	
410	SVTO	8 S	1530.0E	1531.0	1.00	30.0			QL=4 ST=2 TYP=3	
245	SVTO	4 S/F	1532.0E	1534.0	4.00	30.0			QL=4 ST=2 TYP=3	
2800	OTTA	29 PBI	1543.0	1543.0	140.0	16.7	8.0			
08	200	GORK	44 NS	0355.0E		398.00		5.0		
	204	IZMI	43 NS	0600.0		360.0	20.0			
	260	ONDR	44 NS	0700.0E	1523.5	530.00	178.0			
	127	TORN	43 NS	0852.0		258.0	4.0			V=0
	200	HIRA	44 NS	2012.0E	0000.0	300.00	5.0	1.0		0
	2840	PEKG	45 C	0346.0	0355.0	74.0	102.0			
	100	HIRA	46 C	0346.9	0353.7	47.5	640.0	50.0		
	500	HIRA	46 C	0347.5	0418.3	44.0	21.0	6.0		WR
	500	HIRA	46 C	0347.5	0358.5		16.0			0
	2950	GORK	21 GRF	0348.0	0422.5	389.9	15.0			
	200	HIRA	46 C	0348.2	0352.8	34.3	160.0	22.0		0
	2950	GORK	46 C	0351.0	0355.3	15.8	60.0			
	2950	GORK	46 C	0351.0	0357.4		47.0			
	245	PALE	8 S	0352.0E	0353.0	1.00	59.0			QL=4 ST=2 TYP=3
	1415	PALE	20 GRF	0352.0E	0403.0	13.00	51.0			QL=4 ST=2 TYP=2
	2695	PALE	4 S/F	0352.0E	0400.0	12.00	110.0			QL=4 ST=2 TYP=5
9100	GORK	22 GRF	0352.3	0355.7	376.0	33.0				
4995	PALE	4 S/F	0353.0E	0355.0	13.00	63.0			QL=4 ST=2 TYP=3	

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APRIL 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)		
08	2695	LEAR	4 S/F	0354.0E	0355.0	11.00	89.0			QL=4 ST=2 TYP=3
	4995	LEAR	4 S/F	0354.0E	0355.0	13.00	60.0			QL=4 ST=2 TYP=3
	950	GORK	23 GRF	0357.0E	0403.2	65.30	23.0			
	650	GORK	21 GRF	0357.0E	0358.8	44.40	14.0			
	650	GORK	4 S/F	0402.0	0404.9	6.0	19.0			
	650	GORK	45 C	0416.2	0419.1	8.6	15.0			
	650	GORK	45 C	0416.2	0422.5		10.0			
	950	GORK	46 C	0416.4	0422.2		10.0			
	950	GORK	46 C	0416.4	0418.4	8.5	13.0			
	200	HIRA	42 SER	0426.0	0450.8	54.0	180.0			0
	650	GORK	22 GRF	0537.1	0542.2	15.4	7.0			
	500	HIRA	41 F	0538.5	0544.0	8.5	17.0			0
	950	GORK	22 GRF	0726.2	0731.5	13.0	14.0			
	650	GORK	22 GRF	0726.2	0731.6	14.3	6.0			
	500	HIRA	41 F	0728.0	0730.5	9.0	18.0			WR
	2950	GORK	45 C	0836.3	0838.0	5.3	7.0			
	2950	GORK	45 C	0836.3	0839.7		7.0			
	5900	KISV	46 C	0836.6	0838.2	4.6	13.0			
	5900	KISV	46 C	0836.6	0839.6		11.0			
	5900	KISV	46 C	0836.6	0839.9		11.0			
	2850	CRIM	7 C	0837.0	0838.1	4.0	6.0	2.0		
	2850	CRIM	7 C	0837.0	0839.9		7.0			
	9300	KISV	20 GRF	0837.4	0840.1	9.3	6.0			
	2950	GORK	2 S/F	0858.6	0859.0	3.7	2.0			
	5900	KISV	2 S/F	0858.8	0900.8	5.8	5.0			
	5900	KISV	2 S/F	0926.5	0928.2	4.8	7.0			
	2850	CRIM	1 S	0927.1	0928.1	2.6	4.0	1.0		
	9300	KISV	2 S/F	0927.1	0928.2	2.7	8.0			
	2950	GORK	2 S/F	0927.2	0928.1	2.8	3.0			
	2950	GORK	2 S/F	1017.9	1018.8	4.7	2.0			
	204	IZMI	42 SER	1033.0	1037.5	16.0	550.0			
	245	SGMR	8 S	1259.0E	1300.0	1.00	85.0			QL=4 ST=2 TYP=3
	2800	OTTA	3 S	1310.5	1312.6	9.5	14.6	4.0		
	3000	POTS	3 S	1311.0U	1313.5	4.0U	15.0			
	9500	POTS	29 PBI	1312.5	1313.5	48.0	18.0			
	245	SGMR	8 S	1412.0E	1412.0	U	54.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2009.0E	2009.0	U	58.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2026.0E	2026.0	U	74.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2150.0E	2150.0	1.00	71.0			QL=4 ST=2 TYP=3
	09	204	IZMI	43 NS	0600.0		360.0	10.0		
260		ONDR	44 NS	0700.0E	1337.7	530.00	159.0			
245		SGMR	44 NS	2243.0E	2252.0	13.00	180.0			QL=4 ST=3 TYP=1
245		SGMR	44 NS	2251.0E	2252.0	5.00	180.0			QL=4 ST=2 TYP=1
245		LEAR	8 S	0015.0E	0015.0	U	96.0			QL=4 ST=2 TYP=3
245		LEAR	8 S	0544.0E	0544.0	U	52.0			QL=4 ST=3 TYP=3
245		LEAR	8 S	0826.0E	0826.0	U	60.0			QL=4 ST=2 TYP=3
245		SVTO	8 S	0826.0E	0826.0	U	60.0			QL=4 ST=2 TYP=3
2950		GORK	3 S	0827.1	0829.2	2.9	10.0			
3013		IZMI	5 S	0827.5	0829.2	3.0	9.0	5.0		
5900		KISV	2 S/F	0827.8	0829.3	7.0	19.0			
2850		CRIM	3 S	0827.9	0829.1	2.1	16.0	5.0		
9100		GORK	1 S	0828.0	0829.1	2.4	7.0			
9300		KISV	2 S/F	0828.3	0829.2	1.7	7.0			
2950		GORK	29 PBI	0830.0	0830.0	7.0	3.0			
234		POTS	4 S/F	0905.1	0905.5	1.1	200.0			
950		GORK	2 S/F	0925.3	0926.0	4.2	2.0			
2950		GORK	1 S	1103.8	1104.1	1.2	3.0			
5900		KISV	2 S/F	1103.8	1104.2	1.4	4.0			
204		IZMI	5 S	1105.0	1107.0	2.5	70.0			
245		SVTO	8 S	1240.0E	1240.0	U	60.0			QL=2 ST=2 TYP=3
536		ONDR	27 RF	1300.0	1340.0	50.0	6.0			
245		PALE	8 S	1845.0E	1845.0	U	62.0			QL=4 ST=2 TYP=3
245		SGMR	8 S	1845.0E	1845.0	U	76.0			QL=4 ST=2 TYP=3
200		HIRA	42 SER	2035.6	2115.2	86.0	145.0			0
245		SGMR	4 S/F	2230.0E	2234.0	4.00	130.0			QL=4 ST=3 TYP=3
200		HIRA	42 SER	2255.8	2258.7	43.6	140.0			0
245		LEAR	4 S/F	2309.0E	2312.0	4.00	64.0			QL=4 ST=2 TYP=5
245		PALE	8 S	2312.0E	2312.0	1.00	62.0			QL=4 ST=2 TYP=3

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
09	245	LEAR	8 S	2338.0E	2338.0	1.00	58.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	2358.0E	2358.0	1.00	120.0			QL=4 ST=2 TYP=3
10	245	LEAR	44 NS	0047.0E	0138.0	305.00	190.0			QL=2 ST=2 TYP=1
	260	ONDR	44 NS	0700.0E	0913.9	530.00	125.0			
	245	PALE	8 S	0358.0E	0358.0	U	70.0			QL=4 ST=2 TYP=3
	2840	PEKG	5 S	0407.0	0420.8	74.0	34.0			
	204	IZMI	5 S	0603.5	0604.0	1.3	70.0	35.0		
	2840	PEKG	20 GRF	0740.0	0753.0	67.0	19.6			
	245	LEAR	8 S	0802.0E	0802.0	U	82.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0802.0E	0802.0	U	64.0			QL=4 ST=2 TYP=3
	204	IZMI	5 S	0947.0	0947.3	0.8	43.0	20.0		
	536	ONDR	41 F	1142.0	1150.9	30.0	22.0			
	2950	GORK	21 GRF	1144.7	1221.2	45.30	15.0			
	1470	POTS	4 S/F	1145.0	1151.0	15.0	47.0			
	2850	CRIM	29 PBI	1145.0	1159.0	60.0	10.0			
	2850	CRIM	46 C	1145.0	1150.1		56.0			
	3000	POTS	4 S/F	1145.0	1150.2	10.0U	47.0			
	234	POTS	4 S/F	1145.0	1148.4	15.5	110.0			
	9500	POTS	20 GRF	1145.0	1222.5	150.0	2.0			
	2850	CRIM	46 C	1145.0	1149.9	14.0	39.0	18.0		
	200	GORK	46 C	1145.3	1149.1	8.4	25.0			
	200	GORK	46 C	1145.3	1151.1		160.0			
	600	HUMN	27 RF	1146.0	1154.0	31.0	9.0	2.0		
	950	GORK	46 C	1146.0	1153.2		26.0			
	950	GORK	46 C	1146.0	1152.6	13.8	25.0			
	430	KRAK	46 C	1146.0	1148.6	10.00	20.0	7.0		
	808	ONDR	47 GB	1146.0	1159.8	22.0	20.0			
	9300	KISV	25 R	1146.0	1235.8	106.2	25.0			
	5900	KISV	20 GRF	1146.1	1225.0	103.1	30.0			
	650	GORK	22 GRF	1146.3	1154.1	13.5	13.0			
	30	POTS	46 C	1146.4	1148.4	46.0U	4500.0U			
	810	KRAK	27 RF	1146.7	1153.1	12.7	16.0	8.0		
	9100	GORK	20 GRF	1146.7	1223.4	43.30	25.0			
	100	GORK	46 C	1146.8	1151.3		350.0			
100	GORK	46 C	1146.8	1148.5	14.20	550.0				
204	IZMI	41 F	1147.0	1152.0	13.0	160.0				
113	POTS	46 C	1147.0	1148.4	63.0	150.0				
127	TORN	46 C	1147.0	1148.5	47.0	80.0	5.0			
33	UPIC	47 GB	1147.2	1149.0	12.6					
3013	IZMI	7 C	1148.0	1150.3	12.0	35.0				
2950	GORK	4 S/F	1148.8	1150.2	8.4	32.0				
1415	SVTO	4 S/F	1149.0E	1151.0	5.00	44.0			QL=4 ST=2 TYP=3	
2695	SVTO	4 S/F	1149.0E	1150.0	5.00	42.0			QL=4 ST=2 TYP=3	
245	SGMR	4 S/F	1151.0E	1152.0	3.00	54.0			QL=4 ST=2 TYP=3	
4995	SVTO	8 S	1153.0E	1153.0	1.00	21.0			QL=2 ST=2 TYP=3	
8800	SVTO	8 S	1155.0E	1155.0	U	22.0			QL=2 ST=2 TYP=3	
245	SGMR	8 S	1401.0E	1401.0	U	60.0			QL=4 ST=2 TYP=3	
33	UPIC	45 C	1607.9	1608.2	0.6					
245	SVTO	8 S	1609.0E	1609.0	1.00	56.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	2058.0E	2059.0	1.00	82.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	2059.0E	2059.0	U	81.0			QL=4 ST=2 TYP=3	
11	260	ONDR	44 NS	0700.0E	1121.7	540.00	51.0			
	245	SGMR	44 NS	1809.0E	1824.0	351.00	84.0			QL=4 ST=3 TYP=1
	245	PALE	44 NS	1920.0E	2001.0	152.00	76.0			QL=4 ST=2 TYP=1
	2840	PEKG	20 GRF	0119.0	0133.3	32.0	27.2			
	245	LEAR	8 S	0404.0E	0406.0	2.00	63.0			QL=2 ST=2 TYP=3
	2950	GORK	20 GRF	0721.2	1014.1	283.80	7.0			
	204	IZMI	41 F	0744.0	0744.5	2.5	33.0			
	245	LEAR	8 S	0745.0E	0745.0	U	50.0			QL=2 ST=2 TYP=3
	536	ONDR	41 F	0915.0	1031.0	110.0	13.0			
	5900	KISV	20 GRF	0944.3	0948.9	10.6	4.0			
	204	IZMI	5 S	1136.5	1137.0	0.5	40.0	20.0		
	410	SGMR	8 S	1746.0E	1747.0	1.00	120.0			QL=4 ST=3 TYP=3
	245	PALE	8 S	1823.0E	1824.0	1.00	150.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1823.0E	1824.0	1.00	84.0			QL=4 ST=2 TYP=3
245	PALE	8 S	1841.0E	1841.0	U	80.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	1916.0E	1916.0	1.00	70.0			QL=4 ST=2 TYP=3	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m 2 Hz)	Mean			
11	200	HIRA	41 F	2025.7	2040.2	25.0	160.0			MR	
	200	HIRA	42 SER	2100.0	2100.7	7.9	95.0			MR	
	500	HIRA	41 F	2325.5	2326.5	2.6	21.0			0	
12	200	GORK	43 NS	0413.7		202.3					
	260	ONDR	44 NS	0700.0E	1111.0	540.00	161.0				
	245	SVTO	44 NS	1603.0E	1603.0	60.00	73.0			QL=4 ST=2 TYP=1	
	245	SGMR	44 NS	1603.0E	1834.0	207.00	180.0			QL=2 ST=2 TYP=1	
	245	PALE	44 NS	1749.0E	1827.0	93.00	90.0			QL=2 ST=2 TYP=1	
	2695	PENT	3 S	0034.0	0036.6	10.0	22.7	6.0			
	17000	NOBE	1 S	0255.8	0256.0	9.0	19.0				0,80,35GHz:0
	2840	PEKG	20 GRF	0408.0	0442.2	57.0	19.6				
	500	HIRA	20 GRF	0410.0	0450.0	115.0	8.0	3.0			0
	200	HIRA	27 RF	0423.8	0455.4	80.0	14.0	4.0			0
	9100	GORK	22 GRF	0428.1	0442.1	121.9	20.0				
	650	GORK	21 GRF	0431.6	0450.4	42.0	4.0				
	650	GORK	4 S/F	0432.2	0432.6	1.6	10.0				
	650	GORK	2 S/F	0440.9	0441.9	2.2	4.0				
	950	GORK	1 S	0440.9	0441.9	2.2	2.0				
	2850	CRIM	1 S	0441.0	0442.0	2.3	5.0	1.0			
	950	GORK	2 S/F	0508.4	0509.6	2.3	3.0				
	650	GORK	4 S/F	0508.8	0509.3	1.3	10.0				
	245	LEAR	8 S	0517.0E	0517.0	U	69.0				QL=2 ST=2 TYP=3
	9300	KISV	22 GRF	0543.0	0558.5	23.0	9.0				
	100	HIRA	46 C	0546.0	0548.6	4.8	830.0	360.0			
	200	GORK	46 C	0546.3	0550.4		170.0				
	200	GORK	46 C	0546.3	0549.6	5.4	140.0				
	650	GORK	23 GRF	0546.4	0615.7	50.6	25.0				
	950	GORK	22 GRF	0546.5	0611.3	38.1	8.0				
	113	POTS	4 S/F	0546.6	0549.8	7.5	350.0				
	100	GORK	46 C	0546.8	0548.1	5.0	560.0				
	100	GORK	46 C	0546.8	0549.6		900.0				
	200	HIRA	46 C	0546.9	0549.2	31.0	240.0	18.0			0
	245	LEAR	4 S/F	0547.0E	0549.0	4.00	210.0				QL=2 ST=2 TYP=3
	245	SVTO	4 S/F	0547.0E	0549.0	3.00	190.0				QL=2 ST=2 TYP=3
	234	POTS	4 S/F	0547.0	0548.8	4.6	500.0				
30	POTS	4 S/F	0547.2	0551.2	6.1	250.00					
500	HIRA	4 S/F	0553.5	0554.5	2.5	10.0				0	
5900	KISV	22 GRF	0554.3	0558.5	11.7	7.0					
2850	CRIM	45 C	0554.5	0558.5	30.0	10.0	3.0				
2850	CRIM	45 C	0554.5	0613.9		8.0					
204	IZMI	41 F	0600.0	0607.0	55.0	89.0					
650	GORK	4 S/F	0618.0	0619.3	3.2	40.0					
650	GORK	1 S	0644.8	0645.2	1.7	4.0					
2950	GORK	20 GRF	0915.4	1013.8	72.4	4.0					
204	IZMI	8 S	1113.2	1113.3	0.2	120.0					
536	ONDR	42 SER	1246.5	1315.8	90.0	93.0					
245	PALE	8 S	1719.0E	1720.0	1.00	120.0				QL=4 ST=2 TYP=3	
245	PALE	4 S/F	1749.0E	1757.0	8.00	79.0				QL=4 ST=2 TYP=5	
245	PALE	8 S	1859.0E	1859.0	1.00	170.0				QL=2 ST=2 TYP=3	
245	SGMR	8 S	2221.0E	2221.0	U	68.0				QL=4 ST=2 TYP=3	
13	200	HIRA	43 NS	0030.0	0400.0	300.0	10.0	1.0		WR	
	200	GORK	44 NS	0324.0E		515.00		5.0			
	245	SVTO	44 NS	0433.0E	0503.0	37.00	66.0			QL=4 ST=2 TYP=1	
	204	IZMI	43 NS	0600.0		360.0	30.0				
	245	LEAR	44 NS	0605.0E	0605.0	45.00	67.0			QL=4 ST=2 TYP=1	
	260	ONDR	44 NS	0700.0E	1137.3	540.00	164.0				
	127	TORN	43 NS	1005.0		240.0		5.0		V=1	
	100	GORK	43 NS	1010.8		108.20		5.0			
	245	LEAR	8 S	0036.0E	0036.0	2.00	180.0				QL=2 ST=2 TYP=3
	245	PALE	8 S	0036.0E	0036.0	1.00	160.0				QL=4 ST=2 TYP=3
	245	PALE	8 S	0152.0E	0152.0	1.00	74.0				QL=4 ST=2 TYP=3
	245	PALE	8 S	0351.0E	0352.0	1.00	100.0				QL=4 ST=2 TYP=3
	410	PALE	8 S	0351.0E	0352.0	1.00	140.0				QL=4 ST=2 TYP=3
	200	GORK	4 S/F	0351.3	0352.1	1.0	210.0				
	2950	GORK	21 GRF	0357.8	0821.3	482.20	14.0				
	2950	GORK	2 S/F	0400.0	0400.4	0.8	4.0				
2840	PEKG	45 C	0459.0	0506.8	24.0	12.4					

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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		
13	100	GORK	46 C	0503.6	0504.9		4700.0			
	100	GORK	46 C	0503.6	0503.9	2.0	350.0			
	245	LEAR	49 GB	0504.0E	0504.0	1.00	640.0			QL=4 ST=2 TYP=6
	245	SVTO	49 GB	0504.0E	0504.0	1.00	540.0			QL=4 ST=2 TYP=6
	2850	CRIM	46 C	0504.1	0505.3	18.0	8.0	4.0		
	2850	CRIM	46 C	0504.1	0515.5		11.0			
	2850	CRIM	46 C	0504.1	0506.8		13.0			
	200	GORK	46 C	0504.2	0505.3		625.0			
	200	GORK	46 C	0504.2	0504.9	3.7	1180.0			
	950	GORK	21 GRF	0504.7	0505.6	23.3	5.0			
	2950	GORK	2 S/F	0504.7	0506.8	3.6	9.0			
	650	GORK	1 S	0505.2	0507.0	7.2	3.0			
	950	GORK	1 S	0506.5	0507.0	2.2	5.0			
	5900	KISV	2 S/F	0514.5	0516.1	5.9	7.0			
	2950	GORK	2 S/F	0514.6	0515.4	4.6	7.0			
	9300	KISV	2 S/F	0514.6	0516.4	7.8	6.0			
	9100	GORK	1 S	0515.0	0515.9	6.6	5.0			
	245	LEAR	8 S	0535.0E	0535.0		220.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	0535.0	0535.1	0.6	758.0			0
	9100	GORK	23 GRF	0618.0	1200.00	342.00	27.0			
	9500	POTS	40 F	0737.5	0739.5	4.5	12.0			
	600	HUMN	2 S/F	0738.0	0739.0	1.5	22.0	8.0		
	5900	KISV	45 C	0738.3	0741.0		10.0			
	5900	KISV	45 C	0738.3	0739.4	8.2	18.0			
	2850	CRIM	7 C	0738.4	0739.5		5.0			
	2950	GORK	2 S/F	0738.4	0739.5	3.2	3.0			
	2850	CRIM	7 C	0738.4	0738.9	1.3	3.0	1.0		
	9100	GORK	46 C	0738.5	0739.4	4.1	13.0			
	9300	KISV	45 C	0738.5	0739.4	8.8	20.0			
	9100	GORK	46 C	0738.5	0740.6		6.0			
	9300	KISV	45 C	0738.5	0740.8		17.0			
	500	HIRA	41 F	0738.7	0738.8	2.0	67.0			0
	430	KRAK	42 SER	0739.0	0739.0	40.0	72.0			
	536	ONDR	41 F	0800.0	0944.2	460.0	14.0			
	9100	GORK	2 S/F	0801.3	0802.4	2.5	15.0			
	9300	KISV	2 S/F	0801.5	0802.5	4.3	17.0			
	9500	POTS	3 S	0801.5	0802.5	3.5	13.0			
	5900	KISV	2 S/F	0801.5	0802.7	5.4	9.0			
	15000	KISV	2 S/F	0801.6	0802.5	2.4	8.0			
	600	HUMN	3 S	0811.0	0811.5	1.0	32.0	12.0		
	245	LEAR	8 S	0835.0E	0836.0	1.00	150.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0836.0E	0836.0	1.00	130.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0900.0E	0900.0		99.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0900.0E	0900.0		79.0			QL=4 ST=3 TYP=3
	9500	POTS	20 GRF	0930.0	0944.5	50.0	13.0			
	5900	KISV	22 GRF	0941.0	0944.4	15.8	4.0			
	808	ONDR	41 F	1131.0	1131.1	14.0	8.0			
	200	GORK	41 F	1131.1	1140.0		20.00			
	200	GORK	41 F	1131.1	1136.8	19.2	20.00			
	30	POTS	42 SER	1133.2	1134.0	22.9	4000.00			
113	POTS	42 SER	1133.5	1136.4	17.9	140.0				
100	GORK	41 F	1134.8	1136.4	10.2	820.0				
100	GORK	41 F	1134.8	1144.5		50.0				
100	GORK	41 F	1134.8	1139.9		1050.0				
33	UPIC	42 SER	1135.0	1136.80	19.5					
245	SGMR	8 S	1136.0E	1136.0	1.00	77.0			QL=4 ST=2 TYP=3	
410	SGMR	8 S	1136.0E	1136.0		55.0			QL=2 ST=2 TYP=3	
245	SVTO	8 S	1136.0E	1136.0	1.00	79.0			QL=4 ST=2 TYP=3	
410	SVTO	8 S	1136.0E	1136.0		110.0			QL=4 ST=2 TYP=3	
950	GORK	2 S/F	1136.3	1136.5	1.1	11.0				
650	GORK	1 S	1136.3	1136.5	0.4	2.0				
245	SVTO	8 S	1139.0E	1139.0	1.00	71.0			QL=4 ST=2 TYP=3	
950	GORK	1 S	1140.7	1142.3	4.3	4.0				
650	GORK	1 S	1140.8	1142.5	3.1	3.0				
5900	KISV	2 S/F	1141.7	1142.4	3.5	24.0				
5900	KISV	28 PRE	1141.7	1145.8	5.7	4.0				
2950	GORK	3 S	1141.8	1142.4	3.1	16.0				
2850	CRIM	42 SER	1141.9	1151.0		15.0				
2850	CRIM	42 SER	1141.9	1142.4	14.0	21.0	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		
13	9500	POTS	1 S	1142.0	1142.2	1.0	8.0			
	9100	GORK	2 S/F	1142.0	1142.3	1.1	14.0			
	9300	KISV	2 S/F	1142.0	1142.3	2.8	15.0			
	3000	POTS	3 S	1142.0	1142.4	5.0	20.0			
	3013	IZMI	5 S	1142.0	1142.5	6.0	14.0			
	9300	KISV	28 PRE	1142.0	1145.7	5.2	6.0			
	1470	POTS	3 S	1142.0	1142.8	5.0	10.0			
	9500	POTS	4 S/F	1147.0	1151.6	53.0	146.0			
	9100	GORK	4 S/F	1147.1	1151.7	9.5	160.0			
	9300	KISV	45 C	1147.2	1151.2	8.3	166.0			
	9300	KISV	30 PBI	1147.2	1155.5	53.0	23.0			
	9300	KISV	45 C	1147.2	1152.7		140.0			
	5900	KISV	30 PBI	1147.3	1156.4	56.1	16.0			
	5900	KISV	4 S/F	1147.3	1151.8	9.1	98.0			
	3013	IZMI	5 S	1147.5	1151.3	7.5	11.0	6.0		
	15000	KISV	29 PBI	1147.8	1155.1	29.1	18.0			
	15000	KISV	45 C	1147.8	1152.5		98.0			
	15000	KISV	45 C	1147.8	1151.7	7.3	119.0			
	8800	SVTO	4 S/F	1148.0E	1151.0	9.00	180.0			QL=4 ST=2 TYP=3
	3000	POTS	4 S/F	1148.5	1151.2	6.5	15.0			
	15400	SVTO	4 S/F	1149.0E	1151.0	5.00	120.0			QL=4 ST=2 TYP=3
	2950	GORK	2 S/F	1149.3	1151.1	5.4	12.0			
	4995	SVTO	4 S/F	1150.0E	1151.0	4.00	76.0			QL=4 ST=2 TYP=3
	1470	POTS	20 GRF	1150.0	1151.5	9.0	3.0			
	15400	SGMR	8 S	1151.0E	1151.0	2.00	100.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1151.0E	1151.0	2.00	110.0			QL=4 ST=2 TYP=3
	9300	KISV	45 C	1219.2	1220.2		4.0			
	9300	KISV	45 C	1219.2	1219.6	4.8	5.0			
	113	POTS	4 S/F	1246.3	1246.7	1.3	250.0			
	30	POTS	4 S/F	1246.3	1246.9	1.3	2200.00			
	33	UPIC	45 C	1246.5	1246.7	1.2				
	1470	POTS	3 S	1348.0	1348.7	1.5	12.0			
	808	ONDR	8 S	1348.5	1348.7	2.5	37.0			
	245	SVTO	8 S	1357.0E	1357.0	1.00	67.0			QL=4 ST=2 TYP=3
	234	POTS	4 S/F	1425.7	1427.2	1.7	200.0			
	2800	OTTA	20 GRF	1528.0	1654.0	140.0	6.6	3.0		
	245	PALE	8 S	1715.0E	1715.0	U	110.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	1716.0E	1717.0	1.00	53.0			QL=4 ST=2 TYP=3
	2800	OTTA	3 S	1716.5	1717.0	4.9	20.7	6.0		
	410	PALE	8 S	1955.0E	1955.0	1.00	94.0			QL=2 ST=2 TYP=3
	410	SGMR	8 S	1955.0E	1955.0	1.00	65.0			QL=2 ST=2 TYP=3
	245	SGMR	8 S	2106.0E	2106.0	1.00	83.0			QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	2115.0E	2121.0	8.00	160.0			QL=4 ST=2 TYP=3
	200	HIRA	46 C	2115.2	2115.8	22.0	605.0	47.0		0
	100	HIRA	42 SER	2115.4	2117.7	14.5	900.0			
2800	OTTA	4 S/F	2116.0	2125.4	19.0	198.0	40.0			
8800	SGMR	49 GB	2116.0E	2125.0	15.00	1200.0			QL=2 ST=2 TYP=7	
410	SGMR	4 S/F	2116.0E	2123.0	10.00	180.0			QL=2 ST=2 TYP=5	
1415	SGMR	4 S/F	2116.0E	2125.0	10.00	50.0			QL=4 ST=2 TYP=3	
4995	SGMR	49 GB	2116.0E	2125.0	14.00	680.0			QL=4 ST=2 TYP=7	
2695	SGMR	4 S/F	2116.0E	2125.0	14.00	170.0			QL=4 ST=3 TYP=3	
610	SGMR	4 S/F	2116.0E	2123.0	11.00	35.0			QL=4 ST=2 TYP=3	
500	HIRA	46 C	2116.5	2121.5	12.5	55.0	14.0		0	
1415	PALE	8 S	2117.0E	2117.0	1.00	30.0			QL=4 ST=2 TYP=3	
610	PALE	8 S	2121.0E	2121.0	U	25.0			QL=2 ST=2 TYP=3	
410	PALE	8 S	2121.0E	2121.0	U	100.0			QL=2 ST=2 TYP=3	
8800	PALE	49 GB	2122.0E	2125.0	9.00	990.0			QL=4 ST=2 TYP=6	
15400	SGMR	49 GB	2122.0E	2125.0	8.00	1400.0			QL=4 ST=2 TYP=6	
15400	PALE	49 GB	2123.0E	2125.0	9.00	1300.0			QL=4 ST=2 TYP=7	
4995	PALE	49 GB	2123.0E	2125.0	7.00	550.0			QL=4 ST=2 TYP=6	
2695	PALE	8 S	2126.0E	2126.0	1.00	100.0			QL=4 ST=2 TYP=3	
500	HIRA	46 C	2240.4	2243.9	9.5	20.0			0	
500	HIRA	46 C	2337.5	2346.0	19.0	35.0	10.0		0	
500	HIRA	46 C	2337.5	2353.3		12.0			0	
14	127	TORN	43 NS	0643.0		420.0	4.0		V=1	
	200	GORK	43 NS	0645.0		230.00	5.0			
	260	ONDR	44 NS	0700.0E		540.00				
	33	UPIC	43 NS	0754.0		546.00				

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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)	Flux Density Mean	Int	Remarks
14	100	GORK	43 NS	0858.0		97.00		5.0		
	245	SGMR	44 NS	1117.0E	1233.0	403.00	110.0			QL=2 ST=3 TYP=1
	200	HIRA	42 SER	0211.2	0221.1	19.8	84.0			0
	500	HIRA	46 C	0215.6	0220.7	16.5	9.0			0
	1415	LEAR	4 S/F	0218.0E	0221.0	6.00	24.0			QL=4 ST=2 TYP=3
	2695	LEAR	4 S/F	0219.0E	0222.0	5.00	36.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0220.0E	0222.0	2.00	55.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	0221.0E	0222.0	1.00	15.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0221.0E	0222.0	1.00	63.0			QL=4 ST=3 TYP=3
	500	HIRA	41 F	0241.5	0246.0	6.0	67.0			0
	245	LEAR	8 S	0246.0E	0246.0		U	56.0		QL=4 ST=2 TYP=3
	410	LEAR	8 S	0246.0E	0246.0		U	100.0		QL=4 ST=2 TYP=3
	500	HIRA	41 F	0307.0	0307.0	1.5	35.0			0
	610	LEAR	8 S	0307.0E	0307.0	1.00	120.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	0307.0E	0307.0		U	120.0		QL=2 ST=3 TYP=3
	100	GORK	41 F	0331.3	0349.0			1800.0		
	100	GORK	41 F	0331.3	0332.1	27.0		870.0		
	100	GORK	41 F	0331.3	0350.5			430.0		
	650	GORK	21 GRF	0336.0E	0354.0	36.70		6.0		
	950	GORK	21 GRF	0346.2	0353.1	23.9		5.0		
	200	GORK	41 F	0346.8	0350.2	22.5		190.0		
	200	GORK	41 F	0346.8	0355.6			25.00		
	200	HIRA	41 F	0346.9	0351.8	11.9		108.0		
	245	PALE	4 S/F	0347.0E	0350.0	6.00		360.0		
	2950	GORK	21 GRF	0347.0	0946.1	405.00		16.0		
	2950	GORK	3 S	0347.2	0348.9	4.6		50.0		
	500	HIRA	46 C	0347.5	0350.0	11.0		286.0	15.0	
	4995	LEAR	8 S	0348.0E	0348.0	2.00		57.0		
	2695	LEAR	8 S	0348.0E	0348.0	2.00		57.0		
	1415	LEAR	4 S/F	0348.0E	0350.0	5.00		53.0		
	610	PALE	4 S/F	0348.0E	0350.0	5.00		200.0		
	1415	PALE	4 S/F	0348.0E	0350.0	5.00		48.0		
	4995	PALE	4 S/F	0348.0E	0349.0	4.00		62.0		
	8800	PALE	4 S/F	0348.0E	0349.0	5.00		37.0		
	2695	PALE	8 S	0348.0E	0348.0	2.00		50.0		
	410	PALE	4 S/F	0348.0E	0350.0	5.00		230.0		
	9100	GORK	46 C	0348.0	0350.1			25.0		
	9100	GORK	46 C	0348.0	0348.9	5.0		40.0		
	950	GORK	46 C	0348.4	0349.0	4.4		40.0		
	650	GORK	46 C	0348.4	0349.0	5.0		70.0		
	950	GORK	46 C	0348.4	0350.1			170.0		
	650	GORK	46 C	0348.4	0350.2			180.0		
	650	GORK	46 C	0348.4	0351.4			40.0		
	610	LEAR	4 S/F	0349.0E	0350.0	4.00		200.0		
	410	LEAR	4 S/F	0349.0E	0350.0	4.00		210.0		
	245	LEAR	4 S/F	0349.0E	0350.0	4.00		350.0		
	9100	GORK	29 PBI	0353.0	0353.0	18.0		12.0		
	100	GORK	41 F	0431.2	0436.6			430.0		
	100	GORK	41 F	0431.2	0432.7	7.2		1950.0		
	650	GORK	46 C	0431.9	0436.3			4.0		
950	GORK	1 S	0431.9	0432.7	1.4		4.0			
650	GORK	46 C	0431.9	0432.7	6.4		2.0			
950	GORK	46 C	0448.5	0650.5	130.5		7.0			
950	GORK	46 C	0448.5	0656.6			20.0			
2850	CRIM	20 GRF	0601.5	0606.5	17.0		4.0	1.0		
9100	GORK	20 GRF	0608.1	0614.2	11.3		3.0			
113	POTS	4 S/F	0610.6	0611.1	2.40		200.0			
30	POTS	8 S	0610.6	0611.7	1.6		260.00			
950	GORK	1 S	0611.0	0611.4	0.8		2.0			
650	GORK	1 S	0611.1	0611.5	1.1		1.0			
100	GORK	41 F	0642.5	0643.0	12.3		430.0			
100	GORK	41 F	0642.5	0651.4			540.0			
113	POTS	42 SER	0642.6	0643.2	12.4		150.0			
30	POTS	42 SER	0642.7	0651.5	12.3		240.00			
9100	GORK	23 GRF	0648.2	0815.0	281.80		10.0			
2950	GORK	46 C	0648.2	0653.1			11.0			
2850	CRIM	45 C	0648.2	0650.5			14.0			
2950	GORK	46 C	0648.2	0648.8	6.7		9.0			
3013	IZMI	41 F	0648.2	0648.8	4.0		14.0			

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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		
14	2850	CRIM	45 C	0648.2	0648.9	3.0	10.0	5.0		
	650	GORK	41 F	0648.7	0650.6		3.0			
	650	GORK	41 F	0648.7	0656.7		20.0			
	650	GORK	41 F	0648.7	0648.8	9.4	18.0			
	9300	KISV	2 S/F	0649.9	0650.7	2.0	6.0			
	3000	POTS	3 S	0650.0	0650.5	1.5	9.0			
	9500	POTS	1 S	0650.0	0650.5	1.5	5.0			
	5900	KISV	2 S/F	0650.2	0650.8	1.9	5.0			
	200	GORK	4 S/F	0650.3	0651.3	4.5	25.00			
	650	GORK	21 GRF	0721.8	0801.5	123.6	6.0			
	200	HIRA	72 SER	0752.8	0800.0	21.1	430.0			0
	100	GORK	41 F	0753.2	0813.6		50.0			
	100	GORK	41 F	0753.2	0759.7	21.2	6100.0			
	127	TORN	8 S	0753.7	0754.0	1.5	450.0	200.0		
	200	GORK	41 F	0753.9	0754.0	8.6	20.00			
	200	GORK	41 F	0753.9	0759.8		45.0			
	204	IZMI	5 S	0754.0	0754.2	0.3	37.0	15.0		
	127	TORN	47 GB	0757.2	0758.0	2.7	3600.0	400.0		
	204	IZMI	41 F	0758.4	0759.6	4.5	90.0			
	410	LEAR	8 S	0759.0E	0759.0	1.00	59.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0759.0E	0759.0	1.00	59.0			QL=4 ST=2 TYP=3
	5900	KISV	25 R	0759.0	0818.0	19.0	10.0			
	2850	CRIM	1 S	0759.0	0800.1	1.8	16.0	5.0		
	808	ONDR	41 F	0759.0	0800.1	30.0	9.0			
	5900	KISV	2 S/F	0759.0	0800.2	5.4	11.0			
	9300	KISV	22 GRF	0759.3	0814.5	19.9	11.0			
	2950	GORK	2 S/F	0759.4	0800.1	1.5	12.0			
	3000	POTS	3 S	0759.5	0800.0	1.5	15.0			
	650	GORK	2 S/F	0759.5	0800.2	2.0	12.0			
	950	GORK	2 S/F	0759.5	0800.2	5.1	13.0			
	1470	POTS	3 S	0759.5	0800.2	2.0	15.0			
	245	LEAR	8 S	0801.0E	0801.0	1.00	96.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0801.0E	0801.0	1.00	88.0			QL=4 ST=2 TYP=3
	2850	CRIM	29 PBI	0803.0E	0803.0	3.50	4.0	1.0		
	204	IZMI	41 F	0812.2	0813.2	2.5	62.0			
	2950	GORK	1 S	0826.1	0826.7	1.9	6.0			
	2850	CRIM	1 S	0826.4	0826.6	0.6	7.0	2.0		
	950	GORK	4 S/F	0826.4	0826.6	0.6	40.0			
	3013	IZMI	5 S	0826.5	0826.7	0.8	8.0	4.0		
	536	ONDR	41 F	0912.0	1106.0	140.0	49.0			
	204	IZMI	7 C	0916.5	0919.1	3.5	68.0			
	430	KRAK	2 S/F	0917.5	0918.5	1.5	68.0	4.0		
	3013	IZMI	41 F	0925.0	0928.5	5.0	19.0			
	950	GORK	46 C	0928.0	0928.2	1.0	6.0			
	9300	KISV	2 S/F	0928.0	0928.5	2.3	21.0			
	9500	POTS	3 S	0928.0	0928.5	2.0	12.0			
	3000	POTS	3 S	0928.0	0928.5	1.5	12.0			
	2850	CRIM	1 S	0928.0	0928.6	1.5	14.0	4.0		
	950	GORK	46 C	0928.0	0928.6		16.0			
	1470	POTS	1 S	0928.0	0928.7	1.5	3.0			
9100	GORK	2 S/F	0928.1	0928.5	0.9	20.0				
2950	GORK	2 S/F	0928.1	0928.6	1.1	11.0				
5900	KISV	2 S/F	0928.1	0928.6	1.8	17.0				
15000	KISV	2 S/F	0928.8	0929.0	2.1	10.0				
430	KRAK	8 S	0932.3	0932.5	0.6	20.0				
5900	KISV	22 GRF	1027.5	1033.5	18.0	8.0				
650	GORK	4 S/F	1029.1	1030.2	2.4	30.0				
950	GORK	2 S/F	1029.1	1029.8	2.1	4.0				
2850	CRIM	29 PBI	1031.0D	1031.0	25.0D	4.0				
204	IZMI	41 F	1102.0	1103.1	1.5	75.0				
127	TORN	4 S/F	1102.3	1102.8	2.0	600.0	300.0			
5900	KISV	45 C	1102.4	1103.1		4.0				
5900	KISV	45 C	1102.4	1105.3	5.6	10.0				
245	SGMR	8 S	1103.0E	1103.0	U	52.0			QL=4 ST=2 TYP=3	
245	SVTO	8 S	1103.0E	1103.0	U	58.0			QL=4 ST=2 TYP=3	
3013	IZMI	5 S	1105.0	1105.2	1.5	8.0	4.0			
3000	POTS	8 S	1105.0	1105.3	0.7	8.0				
1470	POTS	3 S	1105.0	1105.4	1.3	11.0				
204	IZMI	42 SER	1105.0	1132.5	45.0	88.0				

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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		
14	430	KRAK	2 S/F	1105.0	1105.6	1.0	50.0	6.0		
	1470	POTS	20 GRF	1127.0	1128.6	5.0	4.0			
	430	KRAK	41 F	1128.5	1129.1	1.5	13.0	3.0		
	5900	KISV	2 S/F	1129.7	1130.0	1.2	6.0			
	9300	KISV	2 S/F	1129.7	1130.0	1.1	5.0			
	204	IZMI	7 C	1150.5	1150.7	0.5	57.0			
	245	SGMR	8 S	1213.0E	1213.0	1.0D	60.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	1213.0E	1213.0	1.0D	61.0			QL=4 ST=2 TYP=3
	30	POTS	42 SER	1213.0	1214.4	33.0U	4000.0U			
	127	TORN	4 S/F	1213.0	1214.6	2.0	1700.0	800.0		
	234	POTS	42 SER	1213.0	1226.7	28.4	650.0			
	113	POTS	42 SER	1213.0	1213.8	17.0	3100.0			
	5900	KISV	23 GRF	1219.0	1231.4	27.1	9.0			
	536	ONDR	47 GB	1219.0	1227.8	18.0	50.0			
	430	KRAK	46 C	1219.5	1223.6	19.0	160.0D	14.0		
	808	ONDR	41 F	1220.0	1227.0	18.0	4.0			
	1470	POTS	42 SER	1220.0	1227.5	35.0	19.0			
	810	KRAK	40 F	1220.5	1220.6	15.0	14.0	5.0		
	600	HUMN	2 S/F	1225.0	1227.0	4.0	27.0	6.0		
	3000	POTS	42 SER	1225.0	1235.0	15.0	26.0			
	9500	POTS	42 SER	1225.0	1233.5	30.0	20.0			
	127	TORN	45 C	1225.5	1226.3	4.0	120.0	30.0		
	5900	KISV	45 C	1225.6	1228.1	4.7	20.0			
	5900	KISV	45 C	1225.6	1227.4		17.0			
	15000	KISV	22 GRF	1225.7	1235.2	16.5	27.0			
	9300	KISV	23 GRF	1226.1	1228.1	13.6	12.0			
	245	SGMR	8 S	1227.0E	1228.0	1.0D	400.0			QL=2 ST=2 TYP=3
	410	SGMR	8 S	1227.0E	1227.0	2.0D	63.0			QL=2 ST=2 TYP=3
	410	SVTO	4 S/F	1232.0E	1234.0	4.0D	160.0			QL=4 ST=2 TYP=3
	245	SVTO	49 GB	1232.0E	1235.0	5.0D	740.0			QL=2 ST=3 TYP=6
	5900	KISV	45 C	1232.3	1235.1		30.0			
	5900	KISV	45 C	1232.3	1233.6	6.7	33.0			
	9300	KISV	45 C	1232.5	1235.0		20.0			
	9300	KISV	45 C	1232.5	1233.6	5.8	21.0			
	245	SGMR	49 GB	1233.0E	1235.0	4.0D	780.0			QL=2 ST=2 TYP=6
	410	SGMR	8 S	1233.0E	1234.0	2.0D	150.0			QL=2 ST=2 TYP=3
	536	ONDR	41 F	1326.0	1411.6	80.0	65.0			
	3000	POTS	3 S	1410.0	1411.4	3.0	12.0			
	1470	POTS	3 S	1410.0	1411.5	3.0	11.0			
	245	SVTO	8 S	1537.0E	1537.0	1.0D	100.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1634.0E	1634.0	1.0D	70.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1634.0E	1635.0	1.0D	230.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	1634.0E	1635.0	1.0D	270.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1634.0E	1634.0	1.0D	85.0			QL=4 ST=2 TYP=3
	245	SGMR	49 GB	1639.0E	1639.0	1.0D	650.0			QL=2 ST=2 TYP=6
410	SGMR	8 S	1639.0E	1639.0	1.0D	190.0			QL=4 ST=2 TYP=3	
410	SVTO	8 S	1639.0E	1639.0	1.0D	140.0			QL=4 ST=2 TYP=3	
245	SVTO	49 GB	1639.0E	1639.0	1.0D	730.0			QL=4 ST=2 TYP=6	
245	PALE	8 S	1752.0E	1752.0	U	76.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1752.0E	1752.0	U	260.0			QL=2 ST=2 TYP=3	
100	HIRA	41 F	2048.5	2054.8	9.6	1900.0			0	
200	HIRA	41 F	2050.2	2054.1	11.0	1500.0			0	
610	SGMR	8 S	2054.0E	2054.0	1.0D	170.0			QL=4 ST=2 TYP=3	
245	SGMR	49 GB	2054.0E	2055.0	2.0D	1600.0			QL=2 ST=2 TYP=6	
410	SGMR	8 S	2054.0E	2054.0	1.0D	430.0			QL=2 ST=2 TYP=3	
500	HIRA	41 F	2054.0	2054.5	5.5	380.0			ML	
245	LEAR	8 S	2257.0E	2258.0	1.0D	150.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	2257.0E	2258.0	1.0D	150.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	2257.0E	2258.0	1.0D	120.0			QL=4 ST=2 TYP=3	
500	HIRA	4 S/F	2257.5	2257.5	1.2	11.0			0	
15	100	GORK	44 NS	0321.0E		75.0D		5.0		
	245	LEAR	8 S	0148.0E	0148.0	1.0D	55.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0148.0E	0148.0	1.0D	58.0			QL=4 ST=2 TYP=3
	500	HIRA	48 C	0226.5	0654.0		1400.0			SR
	500	HIRA	48 C	0226.5	0340.0		6000.0			SR
	500	HIRA	48 C	0226.5	0445.0U	370.0	100000.0D	930.0D		SR
	500	HIRA	48 C	0226.5	0522.3		100000.0			SR
	500	HIRA	48 C	0226.5	0304.5		9000.0			SR

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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
15	8800	LEAR	49 GB	0229.0E	0300.0	223.00	22000.0			QL=2 ST=3 TYP=7
	4995	LEAR	49 GB	0229.0E	0305.0	269.00	16000.0			QL=2 ST=3 TYP=7
	4995	PALE	49 GB	0230.0E	0305.0	122.00	15000.0			QL=4 ST=3 TYP=7
	8800	PALE	49 GB	0230.0E	0300.0	121.00	23000.0			QL=4 ST=3 TYP=7
	2695	LEAR	49 GB	0230.0E	0337.0	294.00	12000.0			QL=2 ST=3 TYP=7
	2695	PALE	49 GB	0231.0E	0335.0	123.00	11000.0			QL=4 ST=3 TYP=7
	15400	PALE	49 GB	0231.0E	0259.0	123.00	20000.0			QL=4 ST=3 TYP=7
	15400	LEAR	49 GB	0231.0E	0259.0	250.00	34000.0			QL=2 ST=3 TYP=7
	35000	NOBE	49 GB	0231.4	0259.3	150.00	18800.0			7R
	80000	NOBE	49 GB	0231.4	0259.3	150.00	3480.0			
	17000	NOBE	49 GB	0231.4	0259.3	184.0	19200.0			10R
	200	HIRA	48 C	0232.3	0455.4		95.0			MR
	200	HIRA	48 C	0232.3	0302.6	271.0	1400.0	90.0		WR
	200	HIRA	48 C	0232.3	0338.9		270.0			0
	1415	LEAR	49 GB	0233.0E	0349.0	291.00	6400.0			QL=2 ST=3 TYP=7
	1415	PALE	49 GB	0234.0E	0434.0	120.00	16000.0			QL=4 ST=3 TYP=7
	610	PALE	49 GB	0235.0E	0434.0	119.00	35000.0			QL=2 ST=3 TYP=7
	410	LEAR	49 GB	0235.0E	0447.0	319.00	67000.0			QL=2 ST=3 TYP=7
	610	LEAR	49 GB	0235.0E	0445.0	320.00				QL=2 ST=3 TYP=7
	410	PALE	49 GB	0236.0E	0304.0	118.00	4500.0			QL=2 ST=3 TYP=7
	245	LEAR	49 GB	0236.0E	0256.0	288.00	2500.0			QL=2 ST=3 TYP=7
	245	PALE	49 GB	0237.0E	0252.0	117.00	4400.0			QL=4 ST=3 TYP=7
	100	HIRA	48 C	0237.6	0305.0		650.0			
	100	HIRA	48 C	0237.6	0253.5	108.0	970.0	75.0		0
	9100	GORK	47 GB	0321.0E	0336.1	159.00	11100.0			
	200	GORK	47 GB	0321.0E	0337.1	177.00	310.0			
	100	GORK	42 SER	0321.0U	0337.3		300.0			
	100	GORK	42 SER	0321.0U	0330.3		115.0			
	100	GORK	42 SER	0321.0E	0328.4	18.00	100.0			
	2950	GORK	49 GB	0327.0E	0337.9	136.00	11960.0			
	650	GORK	49 GB	0331.5	0446.0		620000.0			
	650	GORK	49 GB	0331.5	0348.5	376.5	7850.0			
	650	GORK	49 GB	0331.5	0355.8		8100.0			
	950	GORK	49 GB	0332.0E	0440.5		240000.0			
	950	GORK	49 GB	0332.0E	0355.6		12300.0			
	950	GORK	49 GB	0332.0E	0348.7	420.00	19600.0			
	2850	CRIM	47 GB	0410.0E	0411.0	180.00	2600.0U			
	245	SVTO	4 S/F	0430.0E	0455.0	85.00	420.0			QL=2 ST=2 TYP=3
	15400	SVTO	4 S/F	0430.0E	0447.0	107.00	230.0			QL=2 ST=2 TYP=5
	2695	SVTO	49 GB	0430.0E	0431.0	113.00	1700.0			QL=2 ST=2 TYP=6
	4995	SVTO	20 GRF	0430.0E	0431.0	115.00	1100.0			QL=2 ST=2 TYP=2
	8800	SVTO	4 S/F	0430.0E	0439.0	117.00	540.0			QL=2 ST=2 TYP=3
	1415	SVTO	49 GB	0430.0E	0437.0	112.00	78000.0			QL=2 ST=2 TYP=6
	610	SVTO	49 GB	0430.0E	0446.0	200.00				QL=2 ST=2 TYP=7
	410	SVTO	49 GB	0430.0E	0447.0	256.00	38000.0			QL=2 ST=2 TYP=7
	600	HUMN	47 GB	0500.0E		240.00				
	9300	KISV	1 S	0537.5	0537.6	0.4	5.0			
	2950	GORK	30 PBI	0543.0	0543.0	260.8	230.0			
	9100	GORK	30 PBI	0600.0	0600.0	330.00	100.0			
	810	KRAK	49 GB	0653.5E	0730.0	147.50	710.0	260.0		
430	KRAK	49 GB	0653.5	0701.5	110.50	1900.0	400.0			
536	ONDR	47 GB	0700.0E	0700.1	110.00	90.0				
808	ONDR	47 GB	0700.0E	0732.4	250.00	98.0				
260	ONDR	49 GB	0700.0E	0753.9	90.00	294.0				
1470	POTS	20 GRF	0725.0	0752.7	45.0	18.0				
260	ONDR	42 SER	0850.0	0853.5	430.00	198.0				
200	GORK	41 F	0851.0	0853.3	35.5	790.0				
200	GORK	41 F	0851.0	0925.5	35.5	790.0				
234	POTS	41 F	0851.2	0853.1	3.0	140.0				
113	POTS	4 S/F	0851.2	0853.2	5.4	700.0				
100	GORK	41 F	0851.2	0853.2	35.5	1140.0				
100	GORK	41 F	0851.2	0925.3		170.0				
30	POTS	4 S/F	0851.4	0853.0U	3.6	4000.00				
204	I2MI	45 C	0851.5	0853.4	4.3	1390.0				
245	LEAR	8 S	0852.0E	0853.0	1.00	140.0			QL=4 ST=3 TYP=3	
127	TORN	47 GB	0852.0	0853.7	2.0	1700.0	850.0		UNCERTAIN	
245	SVTO	8 S	0853.0E	0853.0	U	140.0			QL=2 ST=2 TYP=3	
204	I2MI	41 F	0922.3	0925.5	4.5	160.0				
2850	CRIM	1 S	0939.6	0940.6	2.0	18.0	6.0			

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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	
15	2950	GORK	1 S	0939.8	0940.6	1.5	12.0				
	3013	IZMI	5 S	0940.0	0940.5	1.0	9.0	5.0			
	1470	POTS	20 GRF	1145.0	1200.0	30.0	12.0				
	9500	POTS	20 GRF	1145.0	1200.0	30.0	20.0				
	3000	POTS	22 GRF	1145.0	1200.0U	30.0	35.0				
	536	ONDR	41 F	1146.0	1151.4	55.0	27.0				
	3013	IZMI	40 F	1146.0	1151.5	14.0	13.0				
	5900	KISV	46 C	1148.4	1152.0		21.0				
	5900	KISV	46 C	1148.4	1154.2		18.0				
	5900	KISV	46 C	1148.4	1159.5	20.4	28.0				
	15000	KISV	22 GRF	1148.9	1158.1	21.0	36.0				
	9300	KISV	22 GRF	1149.3	1159.5	33.3	45.0				
	113	POTS	4 S/F	1150.1	1151.2	1.1	1400.0				
	245	SGMR	8 S	1151.0E	1151.0	U	290.0			QL=4 ST=2 TYP=3	
	245	SVTO	8 S	1151.0E	1151.0	U	270.0			QL=4 ST=2 TYP=3	
	234	POTS	8 S	1151.0	1151.2	0.5	140.0				
	204	IZMI	41 F	1151.0	1151.5	0.8	550.0				
	30	POTS	8 S	1151.1	1151.3	1.5	1800.0U				
	245	SVTO	8 S	1235.0E	1235.0	U	78.0			QL=4 ST=3 TYP=3	
	245	SVTO	8 S	1314.0E	1314.0	1.00	91.0			QL=4 ST=2 TYP=3	
	245	SGMR	8 S	1427.0E	1427.0	U	51.0			QL=4 ST=2 TYP=3	
	2800	OTTA	3 S	2055.1	2056.1	6.1	31.9	9.0			
	2695	PENT	4 S/F	2345.9	2350.1	8.1	31.5	9.0			
	16	33	UPIC	43 NS	0537.0	1449.5	564.5				
		100	GORK	43 NS	0703.0		198.0		5.0		
		127	TORN	43 NS	0755.0		251.0		4.0		V=1
245		PALE	44 NS	1835.0E	1849.0	51.00	180.0			QL=4 ST=2 TYP=1	
245		SGMR	44 NS	1848.0E	1850.0	53.00	140.0			QL=2 ST=2 TYP=1	
410		SGMR	44 NS	1848.0E	1851.0	129.00	170.0			QL=2 ST=2 TYP=1	
4995		LEAR	4 S/F	0038.0E	0039.0	4.00	130.0			QL=4 ST=2 TYP=3	
8800		LEAR	4 S/F	0038.0E	0039.0	4.00	170.0			QL=4 ST=2 TYP=3	
2695		PALE	4 S/F	0038.0E	0039.0	3.00	100.0			QL=4 ST=2 TYP=3	
2695		PENT	4 S/F	0038.5	0039.5	10.5	94.5	20.0			
15400		LEAR	8 S	0039.0E	0039.0	2.00	41.0			QL=4 ST=2 TYP=3	
410		LEAR	8 S	0039.0E	0039.0	1.00	95.0			QL=4 ST=2 TYP=3	
1415		LEAR	8 S	0039.0E	0039.0	1.00	110.0			QL=4 ST=2 TYP=3	
610		LEAR	8 S	0039.0E	0040.0	2.00	160.0			QL=4 ST=2 TYP=3	
2695		LEAR	8 S	0039.0E	0039.0	2.00	120.0			QL=4 ST=2 TYP=3	
1415		PALE	8 S	0039.0E	0039.0	2.00	120.0			QL=4 ST=2 TYP=3	
610		PALE	8 S	0039.0E	0040.0	2.00	160.0			QL=2 ST=2 TYP=3	
410		PALE	8 S	0039.0E	0039.0	1.00	44.0			QL=2 ST=2 TYP=3	
8800		PALE	4 S/F	0039.0E	0039.0	25.00	210.0			QL=4 ST=2 TYP=5	
500		HIRA	46 C	0039.0	0039.5	10.0	540.0			0	
15400		PALE	8 S	0040.0E	0040.0	1.00	41.0			QL=4 ST=2 TYP=3	
9100		GORK	23 GRF	0327.0	0659.6	513.00	35.0				
500		HIRA	27 RF	0359.0	0409.3	45.0	7.0	3.0		0	
245		LEAR	8 S	0537.0E	0537.0	2.00	240.0			QL=4 ST=2 TYP=3	
245		SVTO	8 S	0537.0E	0537.0	1.00	220.0			QL=4 ST=2 TYP=3	
15000		KISV	1 S	0537.4	0537.5	0.4	8.0				
9100		GORK	1 S	0537.4	0537.6	0.6	8.0				
5900		KISV	1 S	0537.4	0537.6	0.8	6.0				
2950		GORK	1 S	0537.5	0537.6	1.1	16.0				
2850		CRIM	1 S	0537.6	0537.7	2.0	21.0	7.0			
9100		GORK	2 S/F	0601.9	0602.7	2.2	13.0				
15000		KISV	2 S/F	0601.9	0602.7	5.0	44.0				
15400		LEAR	8 S	0602.0E	0602.0	1.00	51.0			QL=4 ST=2 TYP=3	
9300		KISV	2 S/F	0602.1	0602.6	2.0	9.0				
15000	KISV	2 S/F	0614.0	0614.6	2.1	25.0					
9300	KISV	2 S/F	0614.0	0614.9	2.9	9.0					
9100	GORK	1 S	0614.1	0614.9	1.8	8.0					
2950	GORK	21 GRF	0616.6	0644.7	287.7	38.0					
5900	KISV	47 GB	0625.8	0631.1	15.5	1395.0					
5900	KISV	29 PBI	0625.8	0641.3	80.3	281.0					
9100	GORK	47 GB	0627.0	0631.0	25.7	1400.0					
3013	IZMI	45 C	0628.0	0631.0	27.0	894.0					
2695	LEAR	49 GB	0628.0E	0631.0	21.00	1200.0			QL=4 ST=2 TYP=6		
4995	LEAR	49 GB	0628.0E	0631.0	21.00	1200.0			QL=4 ST=2 TYP=6		
4995	SVTO	49 GB	0628.0E	0631.0	25.00	1300.0			QL=2 ST=2 TYP=6		

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
16	2850	CRIM	47 GB	0628.0	0632.1		800.0			
	2850	CRIM	47 GB	0628.0	0631.1	25.0	1280.0	426.0		
	9300	KISV	47 GB	0628.1	0631.1	12.5	1331.0			
	9300	KISV	29 PBI	0628.1	0640.6	81.2	127.0			
	950	GORK	46 C	0628.5	0632.3	16.5	220.0			
	950	GORK	46 C	0628.5	0638.8		75.0			
	2950	GORK	47 GB	0628.6	0631.2	15.8	1080.0			
	610	LEAR	4 S/F	0629.0E	0630.0	13.00	110.0			QL=4 ST=2 TYP=3
	1415	SVTO	4 S/F	0629.0E	0631.0	15.00	390.0			QL=2 ST=2 TYP=3
	15400	LEAR	49 GB	0629.0E	0631.0	20.00	1600.0			QL=4 ST=2 TYP=6
	8800	LEAR	49 GB	0629.0E	0631.0	20.00	1200.0			QL=4 ST=2 TYP=6
	1415	LEAR	4 S/F	0629.0E	0631.0	20.00	410.0			QL=4 ST=2 TYP=3
	610	SVTO	4 S/F	0629.0E	0632.0	23.00	92.0			QL=2 ST=2 TYP=3
	15400	SVTO	49 GB	0629.0E	0631.0	24.00	1500.0			QL=2 ST=2 TYP=6
	8800	SVTO	49 GB	0629.0E	0631.0	23.00	1300.0			QL=2 ST=2 TYP=6
	2695	SVTO	49 GB	0629.0E	0631.0	23.00	1100.0			QL=2 ST=2 TYP=6
	15000	KISV	47 GB	0629.1	0631.5	4.8	1558.0			
	15000	KISV	29 PBI	0629.1	0633.9	22.0	215.0			
	810	KRAK	45 C	0629.5	0630.0	19.5	175.0	42.0		
	500	HIRA	46 C	0629.5	0630.0	23.0	103.0	14.0		0
	650	GORK	45 C	0629.6	0633.0	15.4	100.0			
	650	GORK	45 C	0629.6	0639.2		35.0			
	3000	POTS		0630.0E		15.00				
	1470	POTS		0630.0E		45.00				
	9500	POTS		0630.0E		40.00				
	410	LEAR	4 S/F	0630.0E	0631.0	3.00	110.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0630.0E	0630.0	1.00	320.0			QL=2 ST=2 TYP=3
	430	KRAK	4 S/F	0630.0	0631.5	14.8	100.0	12.0		
	33	UPIC	32 ABS	0630.0	0633.5	25.0				
	2840	PEKG	47 GB	0630.0	0637.6	110.0	1404.0			
	200	HIRA	46 C	0630.6	0633.7	6.5	810.0	120.0		0
	245	LEAR	8 S	0631.0E	0631.0	2.00	62.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0631.0E	0631.0	U	57.0			QL=2 ST=2 TYP=3
	204	IZMI	45 C	0631.0	0633.9	5.5	770.0			
	200	GORK	46 C	0631.3	0634.0		1300.0			
	200	GORK	46 C	0631.3	0633.8	4.9	930.0			
	100	HIRA	48 C	0632.3	0636.2	7.3	6800.0	520.0		0
	113	POTS	4 S/F	0632.8	0635.3U	8.9	3500.00			
	100	GORK	46 C	0633.0E	0634.0	5.40	1840.0			
	127	TORN	47 GB	0633.0	0636.0	4.3	27000.0	1100.0		
	100	GORK	46 C	0633.0U	0636.4		6800.0			
	40	POTS	4 S/F	0636.7	0639.2	5.3	2000.0U			
	950	GORK	29 PBI	0645.0	0645.0	213.5	20.0			
	650	GORK	29 PBI	0645.0	0645.0	300.0	12.0			
	260	ONDR	42 SER	0700.0E	1345.5	550.00	100.0			
	536	ONDR	27 RF	0800.0	0935.6	480.0	10.0			
	9100	GORK	22 GRF	0840.9	0844.0	10.1	10.0			
	5900	KISV	2 S/F	0843.4	0844.2	2.1	12.0			
	9300	KISV	2 S/F	0843.9	0844.1	1.0	8.0			
	5900	KISV	23 GRF	0916.8	0928.4	16.7	5.0			
5900	KISV	45 C	0920.4	0921.1		7.0				
5900	KISV	45 C	0920.4	0921.6	4.7	8.0				
15000	KISV	2 S/F	0939.2	0939.5	29.0	14.0				
5900	KISV	2 S/F	1007.6	1008.3	2.1	4.0				
15000	KISV	1 S	1008.5	1008.8	0.7	13.0				
15000	KISV	2 S/F	1017.1	1017.8	3.3	27.0				
245	SGMR	8 S	1154.0E	1154.0	U	55.0			QL=2 ST=2 TYP=3	
245	SVTO	8 S	1154.0E	1154.0	1.00	58.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1245.0E	1246.0	1.00	73.0			QL=4 ST=2 TYP=3	
2800	OTTA	22 GRF	1537.0	1604.5	275.0	10.5	5.0			
245	PALE	8 S	1739.0E	1739.0	1.00	73.0			QL=4 ST=2 TYP=3	
1415	SGMR	8 S	1855.0E	1855.0	1.00	63.0			QL=4 ST=2 TYP=3	
610	PALE	8 S	1929.0E	1929.0	1.00	220.0			QL=2 ST=2 TYP=3	
610	SGMR	8 S	1929.0E	1929.0	1.00	240.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	1935.0E	1935.0	2.00	100.0			QL=4 ST=2 TYP=3	
1415	SGMR	8 S	1935.0E	1935.0	U	58.0			QL=4 ST=2 TYP=3	
610	SGMR	8 S	1954.0E	1955.0	1.00	80.0			QL=4 ST=2 TYP=3	
245	PALE	4 S/F	2026.0E	2027.0	3.00	110.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	2100.0E	2100.0	U	83.0			QL=4 ST=2 TYP=3	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
17	204	IZMI	43 NS	0600.0		360.0	20.0			
	33	UPIC	43 NS	0726.5	1136.6	566.5				
	650	GORK	21 GRF	0310.0E	0311.0	76.70	20.0			
	245	LEAR	8 S	0311.0E	0311.0	U	80.0			QL=4 ST=3 TYP=3
	245	PALE	8 S	0311.0E	0311.0	U	79.0			QL=4 ST=2 TYP=3
	950	GORK	21 GRF	0311.0E	0359.0	262.00	9.0			
	650	GORK	1 S	0313.8	0315.0	1.4	5.0			
	950	GORK	1 S	0314.2	0315.2	1.1	3.0			
	9100	GORK	23 GRF	0330.0E	1141.6	510.00	10.0			
	200	HIRA	46 C	0350.8	0351.8	1.8	970.0			0
	245	LEAR	49 GB	0351.0E	0352.0	2.00	1500.0			QL=4 ST=2 TYP=6
	245	PALE	49 GB	0351.0E	0352.0	1.00	1200.0			QL=4 ST=2 TYP=6
	200	GORK	41 F	0351.2	0352.1	5.8	450.0			
	200	GORK	41 F	0351.2	0355.7		150.0			
	100	HIRA	46 C	0351.3	0352.1	2.0	710.0			
	100	GORK	41 F	0351.7	0355.6		450.0			
	100	GORK	41 F	0351.7	0352.9	4.6	450.0			
	650	GORK	2 S/F	0351.8	0352.7	1.6	7.0			
	950	GORK	1 S	0351.8	0352.9	1.9	2.0			
	410	LEAR	4 S/F	0354.0E	0355.0	3.00	54.0			QL=4 ST=2 TYP=3
	245	LEAR	4 S/F	0354.0E	0355.0	3.00	64.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0354.0E	0355.0	1.00	56.0			QL=4 ST=2 TYP=3
	17000	NOBE	1 S	0401.3	0402.1	1.5	19.0			33R,80,35GHz:0
	2950	GORK	22 GRF	0507.2	0510.2	8.5	5.0			
	15000	KISV	2 S/F	0508.1	0509.7	7.5	22.0			
	5900	KISV	23 GRF	0508.2	0512.7	12.0	4.0			
	9300	KISV	2 S/F	0508.7	0509.7	5.0	14.0			
	9100	GORK	2 S/F	0509.0	0509.7	3.0	15.0			
	5900	KISV	2 S/F	0509.2	0509.7	3.0	5.0			
	5900	KISV	23 GRF	0559.4	0606.0	20.8	4.0			
	9300	KISV	4 S/F	0602.4	0603.2	2.2	27.0			
	3013	IZMI	5 S	0602.5	0603.3	1.5	20.0			
	5900	KISV	4 S/F	0602.5	0603.3	3.0	24.0			
	2950	GORK	4 S/F	0602.7	0603.2	4.5	36.0			
	950	GORK	1 S	0602.7	0603.3	3.3	7.0			
	9100	GORK	2 S/F	0602.7	0603.4	2.9	25.0			
	650	GORK	4 S/F	0602.9	0603.1	4.1	16.0			
	2850	CRIM	41 F	0602.9	0603.2	1.0	63.0	10.0		
	9300	KISV	20 GRF	0619.1	0627.9	17.1	9.0			
	2950	GORK	22 GRF	0619.4	0625.2	23.6	5.0			
	5900	KISV	20 GRF	0621.8	0625.2	11.4	6.0			
	650	GORK	2 S/F	0623.7	0625.2	3.4	5.0			
	950	GORK	46 C	0623.8	0625.0		40.0			
	950	GORK	46 C	0623.8	0623.9	1.9	18.0			
	113	POTS	41 F	0635.0	0635.6	5.0	200.0			
	30	POTS	8 S	0635.6	0635.6	0.2	600.00			
	260	ONDR	42 SER	0650.0E	1430.5	550.00	56.0			
	5900	KISV	20 GRF	0719.4	0721.0	10.8	3.0			
	9300	KISV	2 S/F	0720.3	0721.4	2.8	4.0			
	15000	KISV	45 C	0725.5	0725.7		6.0			
	15000	KISV	45 C	0725.5	0725.9	0.6	7.0			
	430	KRAK	8 S	0940.7	0941.0	0.5	14.0			
	536	ONDR	41 F	1000.0	1049.1	150.0	17.0			
	15000	KISV	2 S/F	1015.0	1015.3	1.7	15.0			
	15000	KISV	1 S	1107.5	1107.7	0.4	9.0			
	2950	GORK	22 GRF	1126.2	1143.4	32.8	11.0			
100	GORK	41 F	1134.6	1145.5		110.0				
100	GORK	41 F	1134.6	1136.7	11.7	680.0				
30	POTS	42 SER	1135.3	1136.7	11.3	1800.00				
200	GORK	3 S	1135.4	1135.7	0.6	150.0				
113	POTS	42 SER	1135.5	1136.4	11.6	200.0				
204	IZMI	41 F	1136.5	1136.6	2.5	170.0				
430	KRAK	8 S	1229.7	1229.7	0.1	38.0				
40	POTS	4 S/F	1426.8	1428.7	8.4	2600.0				
536	ONDR	46 C	1427.0	1430.8	24.0	15.0				
3000	POTS	4 S/F	1427.0	1429.8	55.0	102.0				
2800	OTTA	3 S	1427.5	1430.0	5.2	143.0	30.0			
1470	POTS	4 S/F	1427.5	1430.0	12.5	53.0				
9500	POTS	29 PBI	1427.5	1430.2	23.00	35.0				

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APRIL 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		
17	808	ONDR	45 C	1427.6	1430.6	8.5	41.0			
	2695	SGMR	4 S/F	1428.0E	1430.0	4.0D	130.0			QL=4 ST=2 TYP=3
	2695	SVTO	4 S/F	1428.0E	1429.0	4.0D	130.0			QL=4 ST=2 TYP=3
	113	POTS	4 S/F	1428.7	1430.6	7.3	150.0			
	1415	SGMR	4 S/F	1429.0E	1429.0	3.0D	49.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1429.0E	1430.0	2.0D	49.0			QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	1429.0E	1430.0	4.0D	91.0			QL=4 ST=2 TYP=3
	1415	SVTO	4 S/F	1429.0E	1429.0	3.0D	47.0			QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	1429.0E	1430.0	3.0D	88.0			QL=4 ST=2 TYP=3
	15400	SGMR	4 S/F	1429.0E	1430.0	571.0D	34.0			QL=2 ST=1 TYP=3
	600	HUMN	4 S/F	1429.0	1430.4	15.0	110.0	8.0		
	234	POTS	4 S/F	1429.6	1430.2	7.0	165.0			
	127	TORN	4 S/F	1429.6	1430.6	3.5	200.0D	35.0		
	410	SVTO	8 S	1430.0E	1430.0	1.0D	43.0			QL=4 ST=2 TYP=3
	15400	SVTO	8 S	1430.0E	1430.0	U	34.0			QL=4 ST=2 TYP=3
	610	SVTO	8 S	1430.0E	1430.0	1.0D	130.0			QL=2 ST=2 TYP=3
	8800	SVTO	8 S	1430.0E	1430.0	U	37.0			QL=4 ST=2 TYP=3
	2800	OTTA	29 PBI	1432.7	1432.7	75.0	14.3	7.0		
	600	HUMN	27 RF	1619.0	1623.0	11.0	4.0	2.0		
	2800	OTTA	22 GRF	1622.0	1728.0	170.0	8.6	3.0		
	245	SGMR	8 S	2030.0E	2031.0	1.0D	88.0			QL=4 ST=2 TYP=3
	2800	OTTA	4 S/F	2030.6	2033.2	8.1	18.6	5.0		
	245	PALE	8 S	2031.0E	2031.0	U	87.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2035.0E	2035.0	U	61.0			QL=4 ST=2 TYP=3
	245	LEAR	4 S/F	2315.0E	2316.0	5.0D	170.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2315.0E	2316.0	2.0D	230.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	2344.0E	2346.0	2.0D	89.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	2345.0E	2345.0	U	74.0			QL=4 ST=2 TYP=3
18	127	TORN	43 NS	0715.0		450.0		20.0		V=1
	100	GORK	43 NS	1033.0		87.0D		5.0		
	200	GORK	43 NS	1039.0		81.0D		5.0		
	100	HIRA	48 C	0302.0	0304.6	5.9	1700.0	510.0		WR
	245	LEAR	4 S/F	0303.0E	0304.0	4.0D	130.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0303.0E	0304.0	2.0D	160.0			QL=4 ST=2 TYP=3
	200	HIRA	46 C	0303.3	0304.6	2.6	450.0			O
	9100	GORK	23 GRF	0333.0E	0400.0	507.0D	23.0			
	4995	LEAR	4 S/F	0335.0E	0336.0	3.0D	120.0			QL=4 ST=2 TYP=3
	2850	CRIM	3 S	0335.0	0336.8	2.5	51.5	17.0		
	9100	GORK	2 S/F	0335.8	0336.8	2.5	55.0			
	2695	LEAR	8 S	0336.0E	0336.0	1.0D	48.0			QL=4 ST=2 TYP=3
	8800	LEAR	8 S	0336.0E	0336.0	2.0D	69.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0336.0E	0336.0	1.0D	320.0			QL=4 ST=2 TYP=3
	15400	LEAR	8 S	0336.0E	0336.0	1.0D	28.0			QL=4 ST=2 TYP=3
	1415	LEAR	8 S	0336.0E	0336.0	1.0D	26.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	0336.0E	0336.0	1.0D	90.0			QL=4 ST=2 TYP=3
	4995	PALE	8 S	0336.0E	0336.0	1.0D	140.0			QL=4 ST=2 TYP=3
	2695	PALE	8 S	0336.0E	0336.0	1.0D	58.0			QL=4 ST=2 TYP=3
	650	GORK	4 S/F	0336.2	0336.5	1.3	45.0			
	950	GORK	3 S	0336.2	0336.8	1.3	17.0			
	500	HIRA	46 C	0336.3	0336.5	3.5	1400.0			O
	950	GORK	29 PBI	0337.5	0337.5	13.5	5.0			
	650	GORK	29 PBI	0337.5	0337.5	10.1	5.0			
	2950	GORK	21 GRF	0354.8	0422.6	125.7	13.0			
	410	PALE	8 S	0416.0E	0417.0	1.0D	400.0			QL=2 ST=2 TYP=3
	5900	KISV	23 GRF	0517.2	0527.4	26.0	6.0			
	9100	GORK	3 S	0537.6	0538.2	2.3	30.0			
	2950	GORK	1 S	0537.7	0538.2	1.5	8.0			
	5900	KISV	4 S/F	0537.7	0538.2	4.3	45.0			
	9300	KISV	4 S/F	0537.7	0538.4	4.3	35.0			
	2850	CRIM	1 S	0537.8	0538.2	1.9	8.9	3.0		
15000	KISV	2 S/F	0538.0	0538.3	2.1	14.0				
9300	KISV	2 S/F	0544.1	0544.8	2.2	6.0				
5900	KISV	45 C	0544.6	0544.7	1.7	4.0				
5900	KISV	45 C	0544.6	0545.8		2.0				
245	SVTO	8 S	0605.0E	0605.0	U	56.0			QL=4 ST=2 TYP=3	
260	ONDR	41 F	0650.0E	1120.9	550.0D	7.0				
9300	KISV	2 S/F	0713.0	0716.1	8.2	20.0				
15000	KISV	46 C	0715.0	0717.0		11.0				

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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		
18	15000	KISV	46 C	0715.0	0716.1	2.5	18.0			
	9100	GORK	1 S	0715.0	0716.2	3.0	10.0			
	15000	KISV	46 C	0715.0	0715.8		13.0			
	5900	KISV	2 S/F	0715.8	0716.3	1.8	9.0			
	650	GORK	1 S	0720.6	0721.0	1.4	2.0			
	2950	GORK	20 GRF	0736.0	0827.4	264.00	9.0			
	204	IZMI	7 C	0737.2	0737.5	2.0	17.0			
	536	ONDR	41 F	0917.0	1009.6	70.0	11.0			
	245	SVTO	8 S	0934.0E	0934.0	1.00	100.0			QL=4 ST=2 TYP=3
	9100	GORK	1 S	0947.8	0948.3	1.0	6.0			
	204	IZMI	24 R	1050.0		70.0	20.0			
	234	POTS	27 RF	1050.0	1126.0	190.0	25.0			
	113	POTS	27 RF	1052.0	1126.0	92.0	40.0			
	113	POTS	4 S/F	1239.1	1239.5	0.9	1800.0			
	40	POTS	4 S/F	1239.2	1239.5	0.8	100.0			
17000	NOBE	1 S	2351.7	2352.4	3.0	36.0			25R, 80, 35GHz:0	
19	245	SVTO	44 NS	0425.0E	0429.0	1230.00	130.0			QL=2 ST=2 TYP=1
	127	TORN	43 NS	0846.0		230.0		4.0		V=0
	9100	GORK	22 GRF	0345.0E	0420.4	137.00	10.0			
	245	LEAR	8 S	0656.0E	0656.0	U	58.0			QL=4 ST=2 TYP=3
	260	ONDR	41 F	0710.0E	0907.5	530.00	57.0			
	536	ONDR	27 RF	0720.0	1007.4	480.0	10.0			
	9100	GORK	20 GRF	0833.0	0838.3	39.0	5.0			
	950	GORK	2 S/F	0833.1	0833.7	1.7	6.0			
	2950	GORK	20 GRF	0834.4	0920.0	113.4	10.0			
	204	IZMI	24 R	0850.0		190.0	20.0			
	2850	CRIM	20 GRF	0914.5	0919.6	27.5	18.0		6.0	
	1470	POTS	20 GRF	0915.0	0920.0	35.0	10.0			
	3000	POTS	20 GRF	0915.0	0920.0	30.0	17.00			
	9100	GORK	20 GRF	0919.1	0938.8	109.2	8.0			
	2800	OTTA	20 GRF	1541.0	1603.0	210.0	10.9		5.0	
245	PALE	8 S	1754.0E	1754.0	1.00	70.0			QL=4 ST=2 TYP=3	
20	204	IZMI	43 NS	0755.0		245.0	30.0			
	127	TORN	43 NS	1028.0		130.0		3.0		V=2
	9100	GORK	23 GRF	0324.0E	1006.5	516.00	21.0			
	204	IZMI	7 C	0604.5	0605.0	1.0	30.0			
	260	ONDR	41 F	0650.0E	1139.1	550.00	76.0			
	536	ONDR	41 F	0730.0	1012.3	170.0	8.0			
	2950	GORK	21 GRF	0800.6	1101.1	239.40	20.0			
	113	POTS	4 S/F	0803.6	0804.5	1.7	140.0			
	30	POTS	4 S/F	0803.9	0804.5	1.1	1000.00			
	15400	LEAR	20 GRF	0920.0E	0926.0	7.00	69.0			QL=4 ST=2 TYP=2
	2695	LEAR	8 S	0921.0E	0921.0	2.00	31.0			QL=4 ST=2 TYP=3
	4995	LEAR	4 S/F	0921.0E	0923.0	3.00	31.0			QL=4 ST=2 TYP=3
	8800	LEAR	4 S/F	0921.0E	0923.0	3.00	31.0			QL=4 ST=2 TYP=3
	15400	LEAR	20 GRF	0942.0E	0944.0	4.00	91.0			QL=4 ST=2 TYP=2
	4995	LEAR	4 S/F	0942.0E	0945.0	4.00	59.0			QL=4 ST=2 TYP=5
	1415	LEAR	8 S	0942.0E	0942.0	1.00	29.0			QL=4 ST=2 TYP=3
	2695	LEAR	20 GRF	0942.0E	0943.0	4.00	46.0			QL=4 ST=2 TYP=2
	8800	LEAR	8 S	0942.0E	0943.0	2.00	28.0			QL=4 ST=2 TYP=3
	3013	IZMI	5 S	1000.7	1001.5	2.0	11.0		6.0	
	2950	GORK	1 S	1000.9	1001.5	2.0	8.0			
	5900	KISV	23 GRF	1001.1	1001.4	10.5	25.0			
	113	POTS	4 S/F	1008.5	1011.9	10.5	100.0			
	40	POTS	4 S/F	1011.4	1011.9	4.1	1900.0			
	15400	SGMR	8 S	1100.0E	1100.0	1.00	75.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1100.0E	1100.0	1.00	72.0			QL=4 ST=2 TYP=3
8800	SVTO	8 S	1100.0E	1100.0	1.00	69.0			QL=4 ST=2 TYP=3	
15400	SVTO	8 S	1100.0E	1100.0	1.00	75.0			QL=4 ST=2 TYP=3	
3000	POTS	1 S	1100.0	1100.8	2.0	11.0				
2850	CRIM	1 S	1100.2	1100.8	0.8	14.0		5.0		
650	GORK	1 S	1100.3	1101.3	2.7	2.0				
9300	KISV	4 S/F	1100.3	1100.5	3.7	88.0				
9100	GORK	3 S	1100.3	1100.9	3.4	80.0				
3013	IZMI	5 S	1100.3	1100.9	2.0	11.0		6.0		
5900	KISV	4 S/F	1100.3	1100.9	4.2	49.0				
15000	KISV	4 S/F	1100.4	1100.8	3.4	111.0				

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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		
20	950 GORK	3 S	1100.5	1101.0	3.0	6.0			
	9500 POTS	3 S	1100.5	1100.8	7.5	71.0			
	1470 POTS	3 S	1100.5	1100.9	2.5	10.0			
	808 ONDR	3 S	1100.8	1101.6	4.0	4.0			
	33 UPIC	42 SER	1115.0	1140.9	104.0				
	536 ONDR	42 SER	1136.5	1136.8	80.0	54.0			
	245 SGMR	8 S	1140.0E	1140.0	U	75.0			QL=4 ST=2 TYP=3
	410 SGMR	8 S	1140.0E	1140.0	U	130.0			QL=2 ST=2 TYP=3
	204 IZMI	8 S	1140.5	1140.6	0.8	220.0			
	410 SGMR	8 S	1528.0E	1528.0	U	100.0			QL=2 ST=2 TYP=3
	245 PALE	8 S	1649.0E	1650.0	1.00	63.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	1649.0E	1650.0	1.00	54.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	1649.0E	1650.0	1.00	89.0			QL=4 ST=2 TYP=3
	410 PALE	8 S	1830.0E	1830.0	U	81.0			QL=2 ST=2 TYP=3
	2840 PEKG	3 S	2341.0	2348.8	20.0	24.8			
17000 NOBE	1 S	2347.6	2347.9	1.0	30.0			0,80,35GHz:0	
21	2840 PEKG	1 S	0235.0	0236.0	4.0	6.9			
	17000 NOBE	1 S	0235.8	0236.1	1.0	20.0			0,80,35GHz:0
	2950 GORK	21 GRF	0642.0	0724.4	240.5	27.0			
	2850 CRIM	30 PBI	0643.2	0653.2	120.0	56.0	19.0		
	2850 CRIM	46 C	0643.2	0651.3		105.0			
	2850 CRIM	46 C	0643.2	0649.5		257.0			
	2850 CRIM	46 C	0643.2	0648.5	10.0	145.0	55.0		
	5900 KISV	45 C	0643.8	0651.6		91.0			
	5900 KISV	30 PBI	0643.8	0656.6	57.4	18.0			
	5900 KISV	45 C	0643.8	0648.8	12.8	140.0			
	9100 GORK	23 GRF	0643.8	0657.9	226.20	22.0			
	3013 IZMI	22 GRF	0644.0	0648.6	16.5	90.0	50.0		
	15000 KISV	45 C	0644.0U	0651.7		54.0			
	15000 KISV	30 PBI	0644.0E	0656.7	70.70	32.0			
	15000 KISV	45 C	0644.0U	0648.8	12.7U	70.0			
	9300 KISV	45 C	0644.5	0651.6		69.0			
	9300 KISV	30 PBI	0644.5	0657.7	67.3	26.0			
	9300 KISV	45 C	0644.5	0648.8	13.2	102.0			
	9500 POTS	4 S/F	0645.0	0648.5	20.0	66.0			
	3000 POTS	4 S/F	0645.0	0649.6	15.0	140.0			
	1470 POTS	4 S/F	0645.0	0648.8	15.0	49.0			
	2950 GORK	4 S/F	0645.2	0649.5	10.5	126.0			
	9100 GORK	46 C	0645.7	0651.4		45.0			
	9100 GORK	46 C	0645.7	0648.6	11.3	77.0			
	2695 SVTO	4 S/F	0646.0E	0649.0	9.00	120.0			QL=4 ST=2 TYP=3
	4995 LEAR	4 S/F	0646.0E	0648.0	18.00	140.0			QL=4 ST=2 TYP=3
	2695 LEAR	4 S/F	0646.0E	0649.0	18.00	120.0			QL=4 ST=2 TYP=3
	950 GORK	22 GRF	0646.1	0650.0	15.3	27.0			
	17000 NOBE	20 GRF	0646.2	0648.7	54.0	38.0			0,80,35GHz:0
	650 GORK	20 GRF	0646.6	0650.3	16.4	10.0			
	1415 LEAR	4 S/F	0647.0E	0648.0	9.00	42.0			QL=4 ST=2 TYP=3
	410 LEAR	8 S	0647.0E	0648.0	1.00	43.0			QL=4 ST=2 TYP=3
	1415 SVTO	4 S/F	0647.0E	0648.0	6.00	48.0			QL=4 ST=2 TYP=3
	4995 SVTO	4 S/F	0647.0E	0648.0	5.00	100.0			QL=2 ST=2 TYP=3
	8800 LEAR	4 S/F	0647.0E	0648.0	16.00	82.0			QL=4 ST=2 TYP=3
15400 LEAR	4 S/F	0647.0E	0648.0	16.00	45.0			QL=4 ST=2 TYP=3	
260 ONDR	41 F	0650.0E	1256.6	550.00	366.0				
9100 GORK	2 S/F	0700.0	0700.4	6.0	12.0				
15000 KISV	45 C	0700.3	0701.2		17.0				
15000 KISV	45 C	0700.3	0700.6	4.1	22.0				
9300 KISV	45 C	0700.4	0701.2		11.0				
9300 KISV	45 C	0700.4	0700.6	5.6	14.0				
3013 IZMI	29 PBI	0700.5	0702.2	11.0	15.0				
2950 GORK	2 S/F	0700.7	0702.3	4.9	10.0				
15000 KISV	22 GRF	0713.7	0729.7	35.2	33.0				
2850 CRIM	3 S	0715.0	0718.0	4.7	92.0	30.0			
3000 POTS	4 S/F	0715.0	0718.0	5.0	47.0				
950 GORK	20 GRF	0715.0	0718.2	13.6	8.0				
9500 POTS	29 PBI	0715.0	0718.5	40.0	17.0				
5900 KISV	23 GRF	0715.1	0725.0	24.1	30.0				
5900 KISV	4 S/F	0715.1	0718.4	6.7	67.0				
2950 GORK	4 S/F	0715.3	0718.3	5.5	42.0				

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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	
21	650	GORK	20 GRF	0715.6	0718.2	12.3	6.0				
	2695	LEAR	4 S/F	0716.0E	0718.0	3.0D	45.0			QL=4 ST=2 TYP=3	
	4995	LEAR	4 S/F	0716.0E	0718.0	8.0D	68.0			QL=4 ST=2 TYP=3	
	2695	SVTO	8 S	0716.0E	0718.0	2.0D	44.0			QL=4 ST=2 TYP=3	
	204	IZMI	42 SER	0716.0	0717.0	18.0	62.0				
	4995	SVTO	4 S/F	0716.0E	0718.0	12.0D	79.0			QL=2 ST=2 TYP=3	
	8800	SVTO	4 S/F	0716.0E	0718.0	18.0D	56.0			QL=2 ST=2 TYP=3	
	9300	KISV	23 GRF	0716.0	0727.0	24.8	23.0				
	9300	KISV	2 S/F	0716.0	0718.4	5.8	34.0				
	9100	GORK	22 GRF	0716.1	0718.4	30.5	28.0				
	100	GORK	3 S	0716.2	0717.6	2.4	30.0				
	1470	POTS	3 S	0716.5	0718.4	11.0	15.0				
	200	GORK	4 S/F	0716.9	0717.3	2.0	60.0				
	245	LEAR	8 S	0717.0E	0717.0	U	100.0			QL=4 ST=2 TYP=3	
	8800	LEAR	8 S	0717.0E	0718.0	1.0D	27.0			QL=4 ST=2 TYP=3	
	1415	LEAR	8 S	0717.0E	0718.0	1.0D	13.0			QL=4 ST=2 TYP=3	
	245	SVTO	8 S	0717.0E	0717.0	U	150.0			QL=4 ST=2 TYP=3	
	15400	SVTO	8 S	0718.0E	0718.0	U	25.0			QL=2 ST=2 TYP=3	
	15400	LEAR	8 S	0719.0E	0719.0	U	23.0			QL=4 ST=2 TYP=3	
	9300	KISV	2 S/F	0829.2	0830.0	5.2	24.0				
	5900	KISV	2 S/F	0829.2	0830.0	2.5	11.0				
	15000	KISV	2 S/F	0829.2	0830.0	2.3	15.0				
	9100	GORK	3 S	0829.8	0830.0	2.6	18.0				
	9500	POTS	3 S	0829.8	0830.0	2.7	15.0				
	536	ONDR	41 F	0910.0	0926.8	115.0	15.0				
	33	UPIC	8 S	0916.0	0916.3	0.6					
	204	IZMI	5 S	0916.0	0916.4	0.8	817.0	400.0			
	30	POTS	42 SER	0916.1	0916.4	3.4	4000.0U				
	113	POTS	4 S/F	0916.2	0916.4	1.3	140.0				
	2695	LEAR	8 S	0942.0E	0944.0	2.0D	97.0			QL=4 ST=2 TYP=3	
	1415	LEAR	8 S	0942.0E	0943.0	2.0D	36.0			QL=4 ST=2 TYP=3	
	4995	LEAR	8 S	0943.0E	0943.0	1.0D	97.0			QL=4 ST=2 TYP=3	
	15400	LEAR	8 S	0943.0E	0944.0	1.0D	98.0			QL=4 ST=2 TYP=3	
	610	LEAR	8 S	0943.0E	0943.0	1.0D	12.0			QL=4 ST=2 TYP=3	
	8800	LEAR	8 S	0943.0E	0943.0	1.0D	120.0			QL=4 ST=2 TYP=3	
	204	IZMI	41 F	1043.0	1045.0	6.0	52.0				
	536	ONDR	42 SER	1204.0	1226.5	62.0	80.0				
	808	ONDR	42 SER	1218.0	1246.1	32.0	15.0				
	234	POTS	4 S/F	1255.3	1255.9	2.3	20.0				
	245	SGMR	8 S	1256.0E	1256.0	1.0D	480.0			QL=4 ST=2 TYP=3	
	245	SVTO	49 GB	1256.0E	1256.0	1.0D	510.0			QL=4 ST=2 TYP=6	
	2800	OTTA	22 GRF	1850.0	1945.0	150.0	21.3	10.0			
	200	HIRA	8 S	2313.9	2313.9	1.0	70.0			0	
	22	200	GORK	43 NS	0824.3		127.7D		5.0		
		204	IZMI	43 NS	0900.0		180.0	15.0			
260		ONDR	43 NS	1030.0	1453.0	330.0	112.0				
200		HIRA	43 NS	2100.0	0037.0	300.0	17.0	3.0		MR	
245		PALE	8 S	0049.0E	0049.0	U	160.0			QL=4 ST=2 TYP=3	
245		LEAR	8 S	0050.0E	0050.0	U	74.0			QL=4 ST=2 TYP=3	
9100		GORK	20 GRF	0324.0E	0339.7U	195.4D	5.0				
200		HIRA	45 C	0354.1	0354.8	1.5	140.0			0	
245		LEAR	8 S	0355.0E	0355.0	U	74.0			QL=4 ST=2 TYP=3	
245		PALE	8 S	0355.0E	0355.0	U	70.0			QL=4 ST=2 TYP=3	
204		IZMI	5 S	0604.3	0605.0	2.0	24.0	12.0			
260		ONDR	41 F	0650.0	0825.6	220.0	93.0				
245		LEAR	4 S/F	0736.0E	0738.0	3.0D	56.0			QL=4 ST=2 TYP=3	
200		HIRA	8 S	0737.6	0737.9	0.9	460.0			0	
204		IZMI	41 F	0738.0	0738.2	5.0	1430.0				
536		ONDR	41 F	0800.0	0918.4	150.0	10.0				
204		IZMI	4 S/F	0830.0	0830.3	1.1	150.0				
9100		GORK	22 GRF	0839.0	0923.5	114.0D	13.0				
3000		POTS	20 GRF	0905.0	0923.3	40.0	19.0				
2850		CRIM	46 C	0905.1	0922.0		21.2				
2850		CRIM	46 C	0905.1	0914.4		9.6				
2850		CRIM	46 C	0905.1	0906.5	22.0	9.6	7.0			
2950		GORK	21 GRF	0906.0	0923.4	67.9	16.0				
2950	GORK	1 S	0906.0	0906.6	1.1	7.0					
1470	POTS	40 F	0910.0	0922.0	30.0	27.0					

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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		
22	950 GORK	22 GRF	0910.0	0924.4	21.8	8.0			
	810 KRAK	42 SER	0910.5	0911.8	13.8	22.0			
	650 GORK	22 GRF	0910.8	0924.7	20.7	5.0			
	808 ONDR	23 GRF	0912.0	0925.0	18.0	4.0			
	3013 IZMI	40 F	0913.0	0915.5	16.0	8.0	4.0		
	2850 CRIM	29 PBI	0927.1E	0927.1	18.00	8.0	2.0		
	33 UPIC	45 C	1052.5	1053.4	1.5				
	245 SGMR	8 S	1637.0E	1638.0	1.00	75.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	1637.0E	1638.0	1.00	93.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	1644.0E	1644.0	U	53.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	1644.0E	1644.0	2.00	74.0			QL=4 ST=2 TYP=3
	245 PALE	8 S	1914.0E	1914.0	U	150.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	1914.0E	1914.0	U	140.0			QL=4 ST=3 TYP=3
	245 PALE	8 S	2045.0E	2045.0	U	57.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	2045.0E	2045.0	U	62.0			QL=4 ST=2 TYP=3
	245 PALE	8 S	2159.0E	2159.0	U	92.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	2159.0E	2159.0	U	230.0			QL=4 ST=2 TYP=3
23	200 HIRA	42 SER	0429.7	0431.9	7.3	610.0			0
	100 HIRA	42 SER	0431.0	0435.6	5.9	420.0			
	650 GORK	2 S/F	0431.2	0433.1	2.6	6.0			
	245 LEAR	4 S/F	0433.0E	0434.0	4.00	110.0			QL=4 ST=2 TYP=3
	245 PALE	4 S/F	0434.0E	0434.0	3.00	100.0			QL=4 ST=2 TYP=3
	234 POTS	4 S/F	0607.9	0615.8	15.2	100.0			
	245 LEAR	8 S	0614.0E	0615.0	1.00	200.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	0614.0E	0615.0	1.00	180.0			QL=4 ST=2 TYP=3
	204 IZMI	5 S	0614.2	0615.0	0.8	67.0	32.0		
	113 POTS	4 S/F	0614.7	0614.7		100.0			
	260 ONDR	41 F	0700.0E	0746.2	540.00	269.0			
	950 GORK	23 GRF	0717.0	0739.0	42.2	3.0			
	650 GORK	23 GRF	0727.0	0746.4	38.0	3.0			
	808 ONDR	41 F	0730.0	0732.5	30.0	11.0			
	650 GORK	4 S/F	0730.9	0731.9	2.3	15.0			
	950 GORK	2 S/F	0731.5	0732.4	1.7	13.0			
	810 KRAK	1 S	0731.7	0732.0	1.7	10.0	5.0		
	650 GORK	4 S/F	0736.4	0738.1	3.4	14.0			
	810 KRAK	1 S	0736.5	0738.2	2.3	10.0	5.0		
	950 GORK	2 S/F	0736.8	0737.7	1.9	6.0			
	650 GORK	46 C	0741.5	0742.2	4.6	5.0			
	650 GORK	46 C	0741.5	0744.6		7.0			
	245 LEAR	8 S	0745.0E	0745.0	1.00	150.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	0745.0E	0745.0	1.00	170.0			QL=4 ST=2 TYP=3
	234 POTS	8 S	0745.7	0745.7	1.0	330.0			
	204 IZMI	5 S	0745.8	0746.0	0.8	2240.0	1100.0		
	950 GORK	1 S	0758.5	0758.7	0.6	6.0			
	5900 KISV	23 GRF	0910.5	0931.5	110.1	56.0			
	9100 GORK	20 GRF	0952.9	1012.0	52.1	6.0			
	40 POTS	4 S/F	1100.5	1101.0	1.4	15000.0			
	200 GORK	3 S	1100.6	1101.0	0.7	30.00			
	3013 IZMI	8 S	1100.7	1100.9	0.5	100.0			
	100 GORK	8 S	1100.8	1100.9	0.9	7700.0			
113 POTS	4 S/F	1100.9	1101.0	0.9	4200.0				
3013 IZMI	41 F	1118.2	1118.5	1.2	50.0				
33 UPIC	8 S	1118.7	1118.7	0.6					
536 ONDR	41 F	1140.0	1527.7	230.0	128.0				
9100 GORK	20 GRF	1145.0	1200.0U	15.00	3.0				
245 SVTO	8 S	1241.0E	1241.0	U	100.0			QL=2 ST=2 TYP=3	
430 KRAK	7 C	1250.0	1253.0	11.0	27.0	5.0			
245 SGMR	8 S	1254.0E	1254.0	1.00	160.0			QL=4 ST=2 TYP=3	
245 SGMR	8 S	1731.0E	1731.0	2.00	67.0			QL=4 ST=2 TYP=3	
245 PALE	8 S	1733.0E	1734.0	1.00	81.0			QL=4 ST=2 TYP=3	
245 PALE	8 S	1734.0E	1735.0	2.00	78.0			QL=4 ST=2 TYP=3	
24	200 GORK	43 NS	0330.0		480.0		5.0		
	204 IZMI	43 NS	0600.0		360.0		10.0		
	33 UPIC	43 NS	0723.0	1003.8	410.3				
	127 TORN	44 NS	0950.0E		300.00		1.0		V=1, DISTURBED
	245 PALE	8 S	0203.0E	0203.0	U	69.0			QL=4 ST=2 TYP=3
	500 HIRA	4 S/F	0239.0	0240.5	1.5	14.0			WR

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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		
24	9100	GORK	23 GRF	0324.0E	0808.5	516.00	14.0			
	5900	KISV	2 S/F	0515.8	0517.2	2.4	14.0			
	9300	KISV	2 S/F	0516.3	0517.2	2.0	8.0			
	9100	GORK	2 S/F	0516.8	0517.2	1.2	7.0			
	2950	GORK	1 S	0517.0	0517.2	0.5	4.0			
	1415	LEAR	8 S	0540.0E	0540.0	1.00	82.0			QL=4 ST=2 TYP=3
	260	ONDR	41 F	0650.0	1026.5	550.0	296.0			
	536	ONDR	42 SER	0805.0	0815.6	20.0	45.0			
	200	HIRA	46 C	0806.6	0808.3	3.3	230.0			0
	200	GORK	4 S/F	0806.8	0808.5	4.0	120.0			
	650	GORK	46 C	0806.8	0808.6		7.0			
	650	GORK	46 C	0806.8	0807.8	2.2	7.0			
	245	LEAR	8 S	0807.0E	0807.0	2.00	220.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0807.0E	0807.0	2.00	180.0			QL=4 ST=2 TYP=3
	430	KRAK	8 S	0807.2	0807.5	0.6	103.0			
	234	POTS	4 S/F	0807.3	0807.6	2.7	400.0			
	9300	KISV	2 S/F	0807.3	0807.8	4.0	11.0			
	5900	KISV	2 S/F	0807.3	0807.8	2.3	13.0			
	950	GORK	2 S/F	0807.4	0807.8	0.7	5.0			
	113	POTS	4 S/F	0807.5	0809.1	3.3	700.0			
	100	HIRA	46 C	0807.5	0808.3	2.4	780.0			
	204	IZMI	41 F	0807.5	0808.8	2.5	220.0			
	100	GORK	4 S/F	0807.7	0808.7	2.1	800.0			
	40	POTS	4 S/F	0808.1	0809.1	2.0	600.0			
	650	GORK	23 GRF	0813.1	0816.0	7.3	3.0			
	950	GORK	2 S/F	0815.0	0816.4	5.3	5.0			
	650	GORK	1 S	0815.4	0815.6	0.3	5.0			
	245	LEAR	8 S	0823.0E	0823.0	1.00	60.0			QL=4 ST=2 TYP=3
	40	POTS	4 S/F	0834.8	0835.0	1.7	300.0			
	113	POTS	8 S	0835.3	0835.4	0.9	150.0			
	430	KRAK	8 S	0848.5	0848.6	0.8	46.0			
	536	ONDR	42 SER	0919.0	0919.5	8.0	37.0			
	9300	KISV	2 S/F	1001.3	1001.8	2.0	5.0			
	5900	KISV	2 S/F	1001.3	1001.9	1.3	4.0			
	650	GORK	1 S	1001.6	1001.8	0.5	3.0			
	650	GORK	1 S	1023.5	1023.6	0.3	5.0			
	100	GORK	46 C	1024.8	1028.1		27.0			
	100	GORK	46 C	1024.8	1026.2	4.3	30.0			
	200	GORK	4 S/F	1024.9	1026.3	3.9	60.0			
	245	SGMR	8 S	1025.0E	1026.0	1.00	200.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1025.0E	1026.0	1.00	310.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	1025.3	1026.0	2.0	170.0			
	650	GORK	46 C	1025.3	1027.3		6.0			
	950	GORK	46 C	1025.3	1027.4		9.0			
	950	GORK	46 C	1025.3	1026.6	2.9	9.0			
	650	GORK	46 C	1025.3	1026.6	3.6	5.0			
	810	KRAK	42 SER	1025.5	1027.5	2.5	9.0			
	808	ONDR	41 F	1025.6	1026.8	3.5	6.0			
	5900	KISV	45 C	1114.5	1117.1	8.9	34.0			
	113	POTS	41 F	1114.5	1117.3	6.7	350.0			
	5900	KISV	45 C	1114.5	1117.5		24.0			
	536	ONDR	41 F	1114.9	1116.6	5.0	70.0			
	245	SGMR	4 S/F	1115.0E	1119.0	4.00	160.0			QL=4 ST=2 TYP=3
	234	POTS	41 F	1115.0	1119.2	5.1	100.0			
	200	GORK	4 S/F	1115.0	1119.5	5.1	70.0			
	430	KRAK	41 F	1115.0	1118.5	5.2	25.0	6.0		
	650	GORK	46 C	1115.3	1116.3	4.4	90.0			
	650	GORK	46 C	1115.3	1116.7		45.0			
	100	GORK	4 S/F	1115.4	1117.3	5.8	600.0			
	204	IZMI	45 C	1115.5	1119.5	5.0	11700.0			
	33	UPIC	46 C	1115.6	1116.1	5.0				
	950	GORK	46 C	1115.6	1117.4		65.0			
	30	POTS	4 S/F	1115.6	1117.5	6.9	4000.00			
	127	TORN	48 C	1115.6	1117.6	5.0	900.0	60.0		
	950	GORK	46 C	1115.6	1116.7	5.2	34.0			
	9100	GORK	46 C	1115.7	1117.0	4.3	21.0			
	9300	KISV	45 C	1115.7	1117.0	5.7	22.0			
	9300	KISV	45 C	1115.7	1117.3		15.0			
	9100	GORK	46 C	1115.7	1117.5		14.0			

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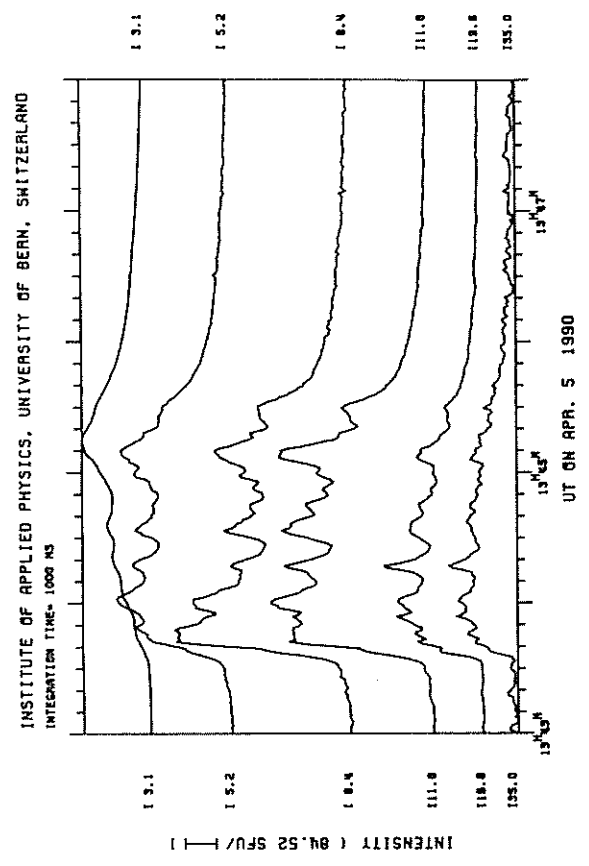
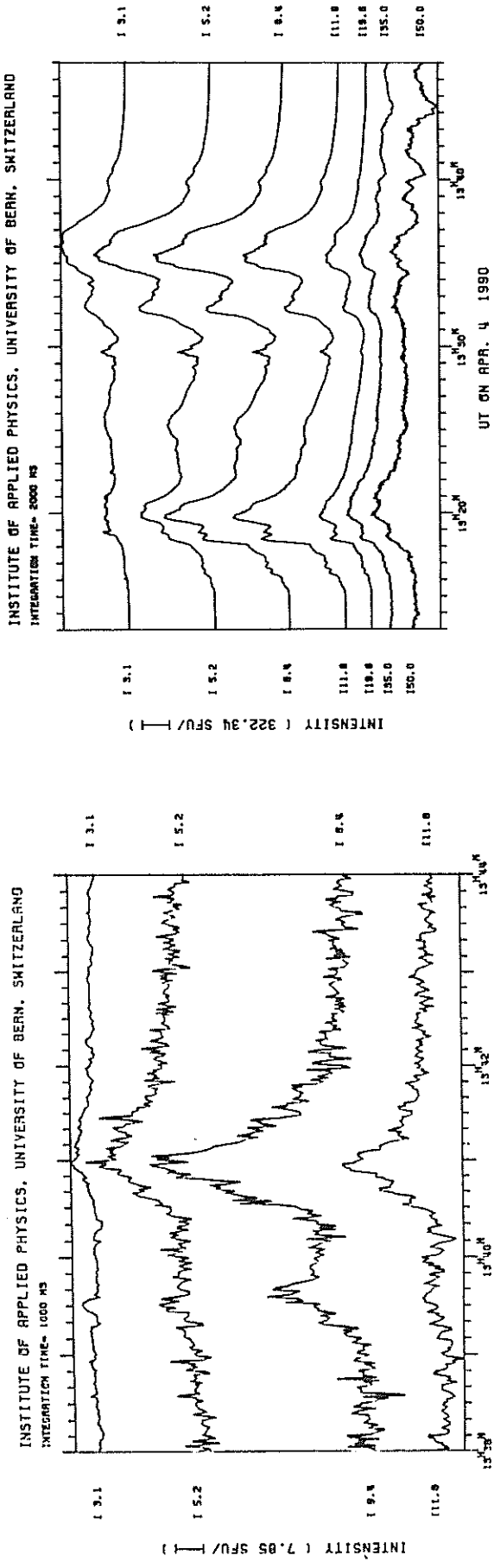
Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak (10 -22 W/m 2 Hz)	Mean		
24	2850 CRIM	1 S	1115.9	1116.2	2.2	28.3	8.0		
	2950 GORK	21 GRF	1115.9	1130.5	44.10	14.0			
	810 KRAK	2 S/F	1116.0	1117.0	3.5	80.0	14.0		
	610 SGMR	8 S	1116.0E	1116.0	1.00	160.0			QL=4 ST=2 TYP=3
	9500 POTS	4 S/F	1116.0	1117.1	2.0	15.0			
	808 ONDR	45 C	1116.0	1116.4	4.5	38.0			
	3013 IZMI	4 S/F	1116.0	1117.5	4.0	15.0	7.0		
	1470 POTS	4 S/F	1116.0	1117.5	4.0	24.0			
	3000 POTS	4 S/F	1116.0	1117.5	4.0	21.0			
	2950 GORK	2 S/F	1116.5	1117.5	1.5	17.0			
	15000 KISV	2 S/F	1228.2	1228.8	1.3	16.0			
	410 SGMR	8 S	1420.0E	1420.0	1.00	68.0			QL=2 ST=2 TYP=3
	410 SVTO	8 S	1420.0E	1420.0	U	51.0			QL=4 ST=2 TYP=3
	536 ONDR	8 S	1420.0	1420.6	1.5	50.0			
	245 SVTO	8 S	1449.0E	1449.0	U	290.0			QL=2 ST=2 TYP=3
	600 HUMN	2 S/F	1752.8	1753.2	1.2	20.0	8.0		
	245 SGMR	8 S	1815.0E	1815.0	U	82.0			QL=4 ST=2 TYP=3
	4995 PALE	8 S	2249.0E	2250.0	1.00	46.0			QL=4 ST=2 TYP=3
	1415 PALE	8 S	2249.0E	2249.0	1.00	100.0			QL=2 ST=2 TYP=3
	1415 SGMR	8 S	2249.0E	2250.0	1.00	120.0			QL=4 ST=2 TYP=3
	1415 LEAR	8 S	2305.0E	2306.0	2.00	55.0			QL=4 ST=2 TYP=3
	1415 SGMR	8 S	2305.0E	2306.0	1.00	140.0			QL=4 ST=2 TYP=3
	610 LEAR	8 S	2306.0E	2307.0	1.00	16.0			QL=4 ST=2 TYP=3
	25	9100 GORK	20 GRF	0318.0E	0318.0U	65.80	7.0		
2950 GORK		2 S/F	0346.3	0347.2	2.6	5.0			
2950 GORK		21 GRF	0431.7	0442.9	72.6	5.0			
9100 GORK		21 GRF	0432.0	0444.0	448.00	7.0			
2850 CRIM		3 S	0432.0	0434.4	5.0	27.5	9.0		
2950 GORK		4 S/F	0432.0	0434.4	4.4	18.0			
950 GORK		2 S/F	0433.3	0434.4	3.8	2.0			
9100 GORK		46 C	0433.3	0441.4		7.0			
9100 GORK		46 C	0433.3	0439.5		5.0			
9100 GORK		46 C	0433.3	0434.5	9.9	17.0			
9300 KISV		2 S/F	0558.3	0559.8	4.8	5.0			
9100 GORK		1 S	0559.0	0600.0	2.2	3.0			
5900 KISV		2 S/F	0559.2	0600.0	3.5	5.0			
5900 KISV		2 S/F	0604.7	0606.6	3.8	3.0			
260 ONDR		41 F	0650.0	0826.7	550.0	24.0			
410 SVTO		8 S	0718.0E	0719.0	1.00	120.0			QL=4 ST=2 TYP=3
610 SVTO		8 S	0945.0E	0945.0	U	89.0			QL=2 ST=2 TYP=3
127 TORN		47 GB	1002.0	1003.7	3.7	1600.0	500.0		
113 POTS		4 S/F	1002.5	1007.4	7.5	1300.0			
204 IZMI		5 S	1005.6	1006.2	1.3	17.0	10.0		
40 POTS		4 S/F	1007.3	1008.5	2.0	700.0			
536 ONDR		42 SER	1100.2	1153.4	75.0	46.0			
5900 KISV		2 S/F	1231.4	1232.0	1.8	9.0			
2800 OTTA		3 S	1806.5	1810.2	17.5	22.5	5.0		
1415 PALE		8 S	2249.0E	2249.0	1.00	100.0			QL=2 ST=3 TYP=3
4995 PALE		8 S	2249.0E	2250.0	1.00	46.0			QL=4 ST=2 TYP=3
1415 PALE		8 S	2334.0E	2335.0	1.00	390.0			QL=2 ST=2 TYP=3
410 PALE		8 S	2336.0E	2337.0	2.00	49.0			QL=2 ST=2 TYP=3
245 PALE		8 S	2337.0E	2337.0	U	72.0			QL=4 ST=2 TYP=3
245 PALE		8 S	2341.0E	2341.0	1.00	220.0			QL=4 ST=2 TYP=3
410 PALE		8 S	2341.0E	2342.0	1.00	120.0			QL=2 ST=2 TYP=3
1415 PALE		49 GB	2344.0E	2354.0	12.00	1100.0			QL=2 ST=3 TYP=7
2695 PENT		4 S/F	2344.2	2348.8	22.5	45.1	9.0		
17000 NOBE		7 C	2345.6	2348.6	8.0	74.0			0,80,35GHz:0
4995 LEAR	4 S/F	2346.0E	2348.0	7.00	200.0			QL=4 ST=2 TYP=3	
8800 LEAR	4 S/F	2346.0E	2348.0	7.00	190.0			QL=4 ST=2 TYP=3	
15400 LEAR	4 S/F	2346.0E	2348.0	6.00	110.0			QL=4 ST=2 TYP=3	
2695 LEAR	4 S/F	2347.0E	2350.0	4.00	49.0			QL=4 ST=2 TYP=3	
8800 PALE	8 S	2350.0E	2350.0	1.00	86.0			QL=2 ST=2 TYP=3	
4995 PALE	4 S/F	2350.0E	2350.0	3.00	100.0			QL=2 ST=3 TYP=3	
1415 LEAR	49 GB	2352.0E	2354.0	8.00	790.0			QL=4 ST=2 TYP=6	
1415 PALE	8 S	2359.0E	0000.0	1.00	140.0			QL=2 ST=2 TYP=3	
26	9100 GORK	23 GRF	0630.0	0812.0	300.00	11.0			
	260 ONDR	41 F	0650.0	0750.4	550.0	110.0			

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

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Apr 90

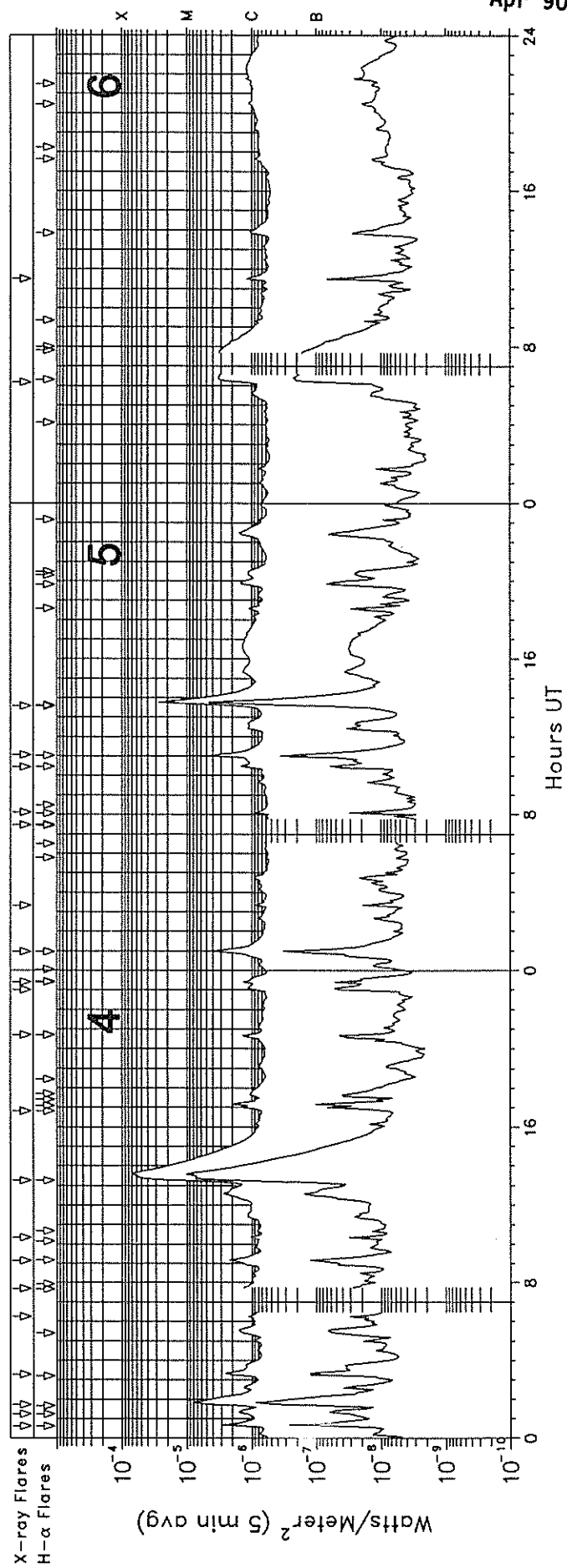
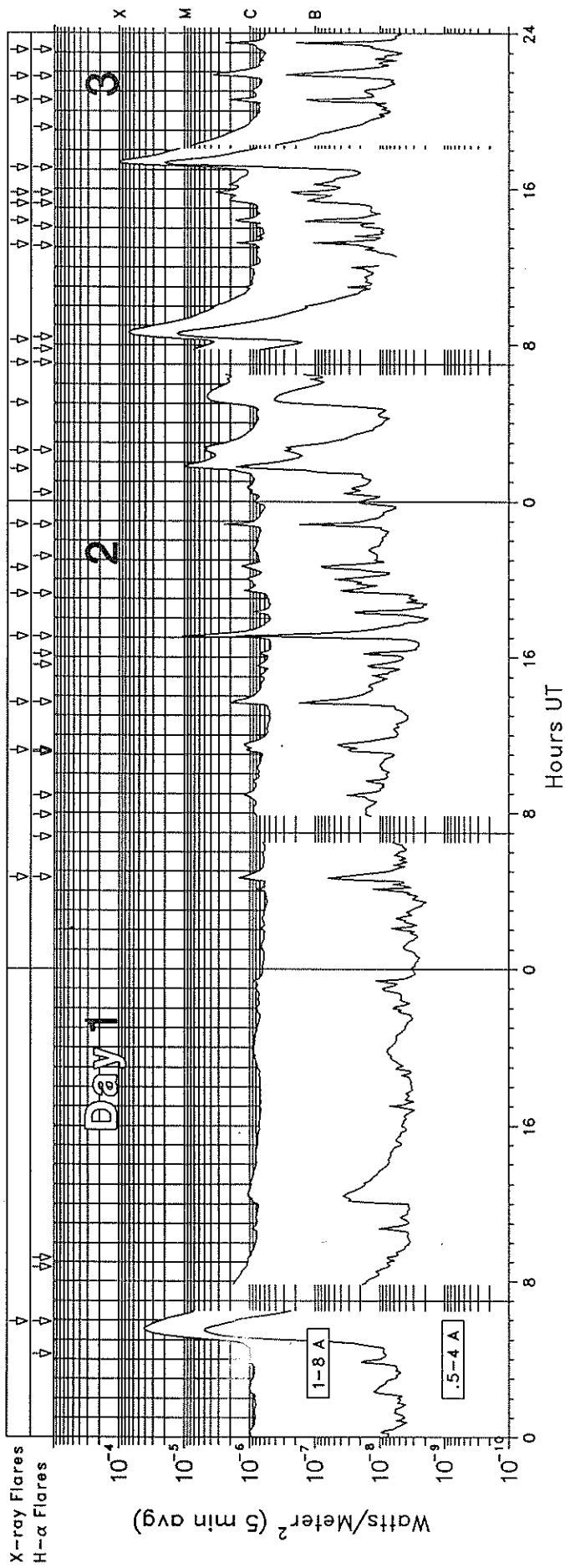
APRIL 1990

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
26	536	ONDR	8 S	0914.5	0914.7	1.0	45.0			
	536	ONDR	42 SER	1012.5	1100.3	48.0	17.0			
	5900	KISV	46 C	1116.8	1118.6	5.6	9.0			
	5900	KISV	46 C	1116.8	1119.9		8.0			
	5900	KISV	46 C	1116.8	1120.9		8.0			
	3013	IZMI	40 F	1117.5	1118.8	4.5	6.0			
	9300	KISV	2 S/F	1118.1	1118.7	3.6	6.0			
	9300	KISV	2 S/F	1123.4	1124.5	8.8	10.0			
	5900	KISV	2 S/F	1123.6	1124.5	4.1	14.0			
	9100	GORK	2 S/F	1124.1	1124.4	1.7	6.0			
	410	SGMR	8 S	1316.0E	1316.0	U	65.0			QL=4 ST=2 TYP=3
410	SGMR	8 S	1319.0E	1319.0	U	420.0			QL=2 ST=2 TYP=3	
2800	OTTA	22 GRF	1514.0	1538.0	160.0	19.8	7.0			
27	2695	PENT	3 S	0017.0	0019.2	10.0	59.8	17.0		
	260	ONDR	41 F	0650.0	0851.6	550.0	129.0			
	536	ONDR	41 F	0700.0	0944.2	190.0	11.0			
	3013	IZMI	5 S	0742.5	0745.3	6.5	5.0	3.0		
	245	LEAR	8 S	0850.0E	0850.0	1.00	69.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0850.0E	0850.0	1.00	68.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	0850.2	0852.1	3.0	150.0			
	113	POTS	4 S/F	0850.2	0851.1	4.3	770.0			
	127	TORN	4 S/F	0850.2	0851.2	2.0	1100.0	150.0		
	30	POTS	4 S/F	0850.3	0851.0	2.3	4000.00			
	410	LEAR	8 S	0851.0E	0851.0	1.00	24.0			QL=4 ST=2 TYP=3
	950	GORK	2 S/F	0851.0	0851.4	1.8	8.0			
	810	KRAK	2 S/F	0851.0	0851.4	1.5	15.0	2.0		
	650	GORK	2 S/F	0851.0	0851.5	1.9	9.0			
	430	KRAK	2 S/F	0851.0	0851.7	1.4	21.0	5.0		
	430	KRAK	8 S	0938.2	0938.6	1.0	21.0			
	430	KRAK	8 S	0941.3	0941.7	0.7	78.0			
	9300	KISV	2 S/F	1129.0	1129.8	6.0	5.0			
	5900	KISV	46 C	1129.5	1131.4		3.0			
	5900	KISV	46 C	1129.5	1130.7		3.0			
5900	KISV	46 C	1129.5	1129.9	5.5	6.0				
28	2840	PEKG	45 C	0014.0	0018.8	16.0	68.8			
	2695	LEAR	4 S/F	0017.0E	0019.0	3.00	58.0			QL=4 ST=2 TYP=3
	500	HIRA	4 S/F	0017.0	0020.1	7.0	8.0			0
	100	HIRA	41 F	0017.2	0023.1	16.5	1000.00			
	610	LEAR	8 S	0019.0E	0020.0	1.00	15.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	0019.0E	0019.0	U	24.0			QL=4 ST=2 TYP=3
	1415	LEAR	8 S	0019.0E	0019.0	1.00	23.0			QL=4 ST=2 TYP=3
	2695	PALE	8 S	0019.0E	0019.0	U	60.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0322.0E	0322.0	1.00	110.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0322.0E	0322.0	1.00	110.0			QL=4 ST=2 TYP=3
	260	ONDR	41 F	0600.0E	1157.8	600.00	77.0			
	536	ONDR	41 F	0810.0	1206.0	270.0	11.0			
	204	IZMI	5 S	1158.6	1158.7	0.2	20.0	15.0		
29	260	ONDR	44 NS	0600.0E	0831.4	185.00	89.0			
	245	PALE	8 S	0159.0E	0159.0	2.00	140.0			QL=4 ST=2 TYP=3
	113	POTS	4 S/F	0830.6	0830.8	0.9	125.0			
	204	IZMI	41 F	0831.0	0831.3	7.0	35.0			
	808	ONDR	3 S	0837.4	0837.5	1.0	9.0			
	260	ONDR	41 F	0905.0	1024.0	415.0	28.0			
30	260	ONDR	41 F	0600.0	1030.5	600.0	14.0			
	100	GORK	46 C	0609.3	0609.5	3.1	1860.0			
	100	GORK	46 C	0609.3	0611.9		1300.0			
	100	GORK	4 S/F	0634.7	0635.2	1.4	980.0			
	536	ONDR	8 S	1502.5	1503.0	1.5	83.0			



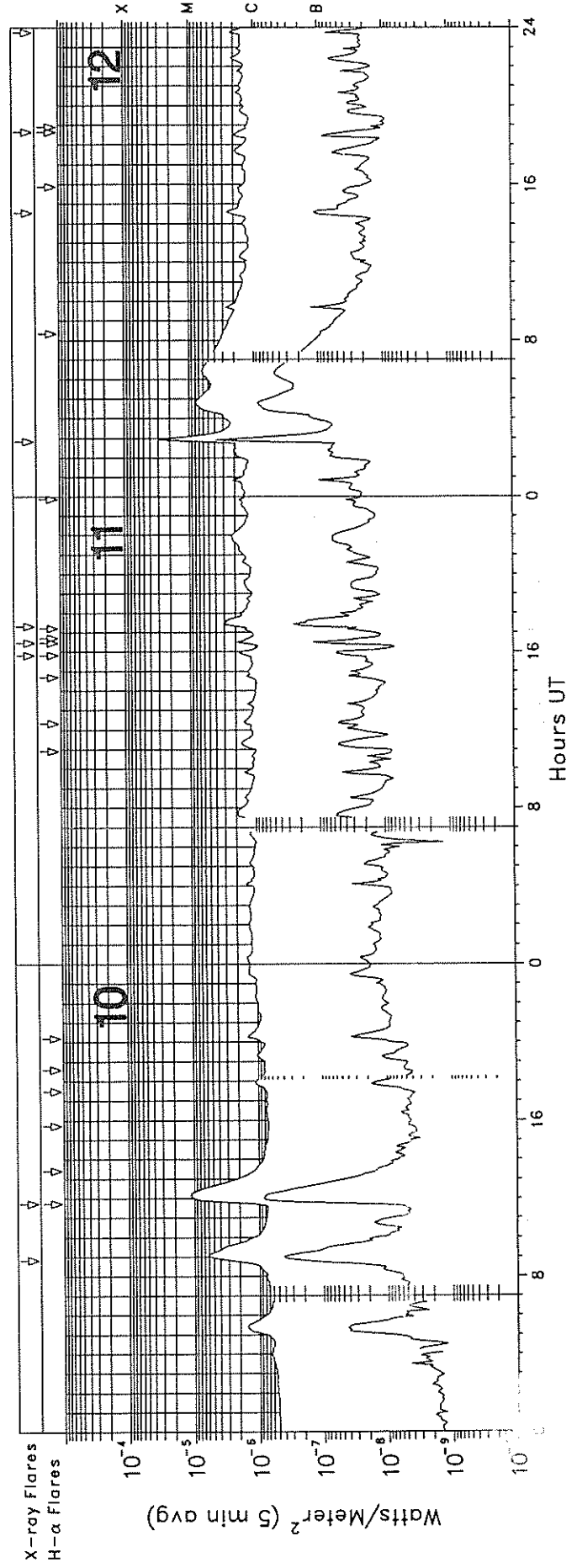
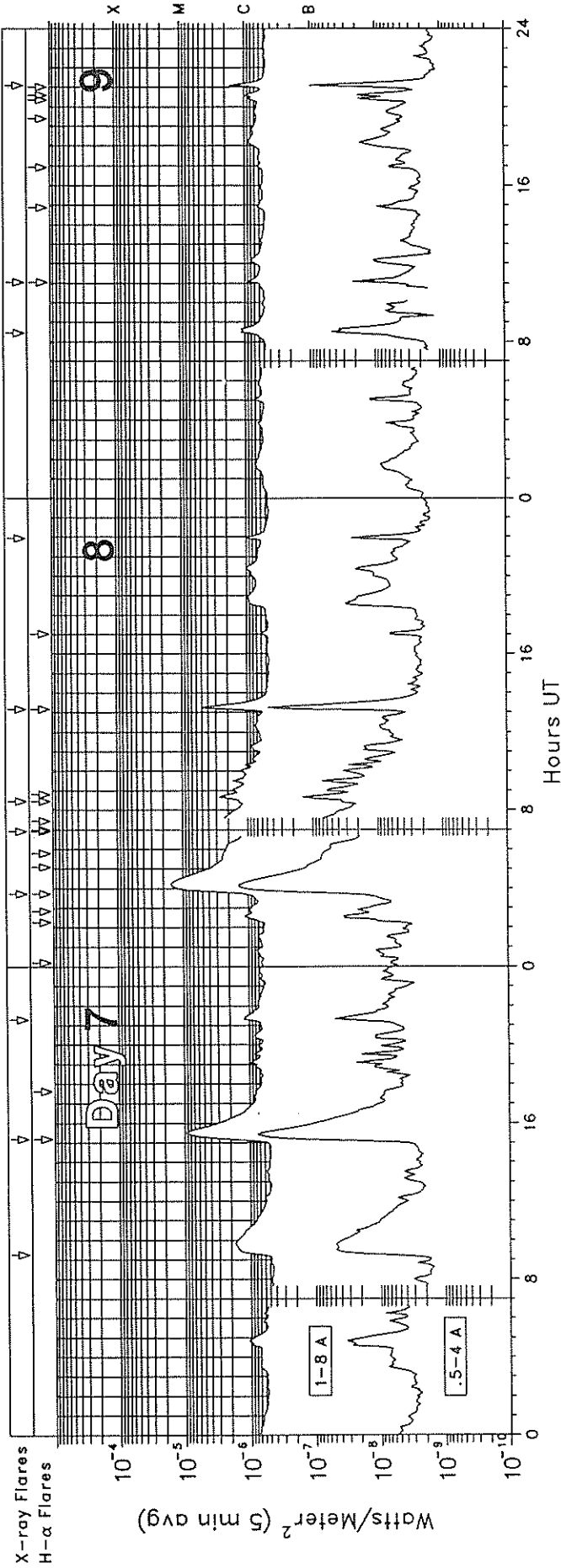
GOES-7 X-RAY DETECTOR

April 1990



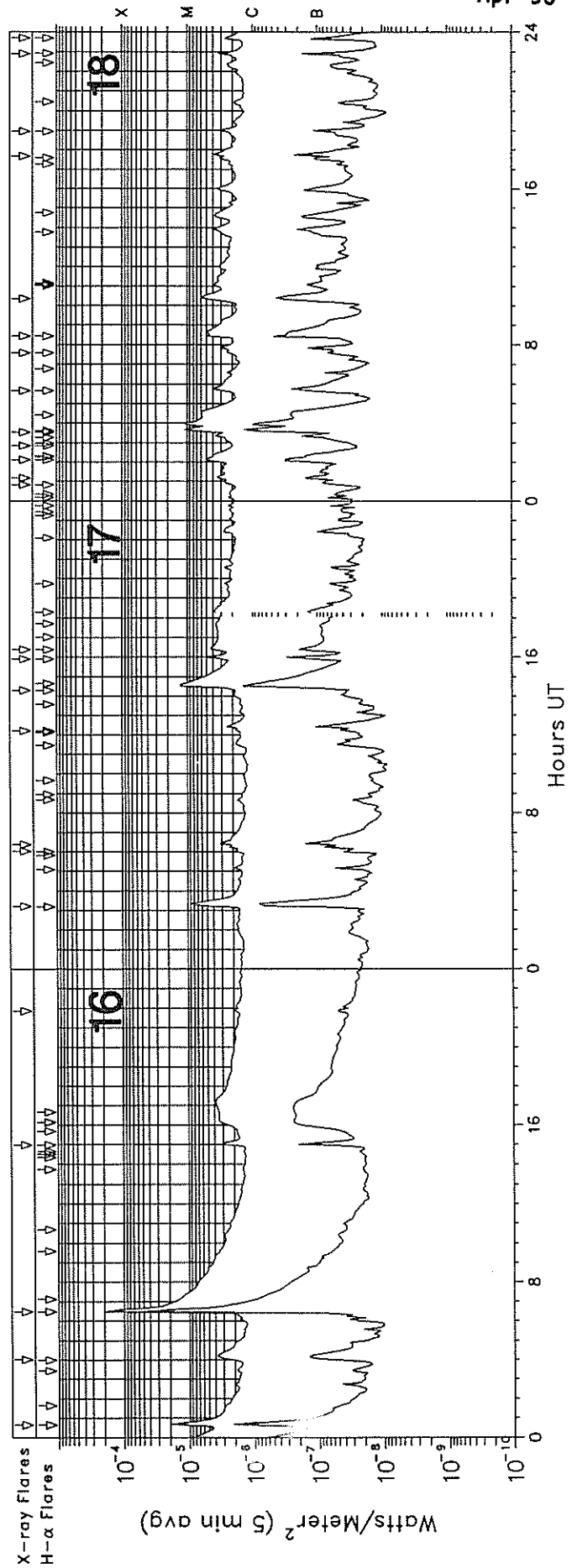
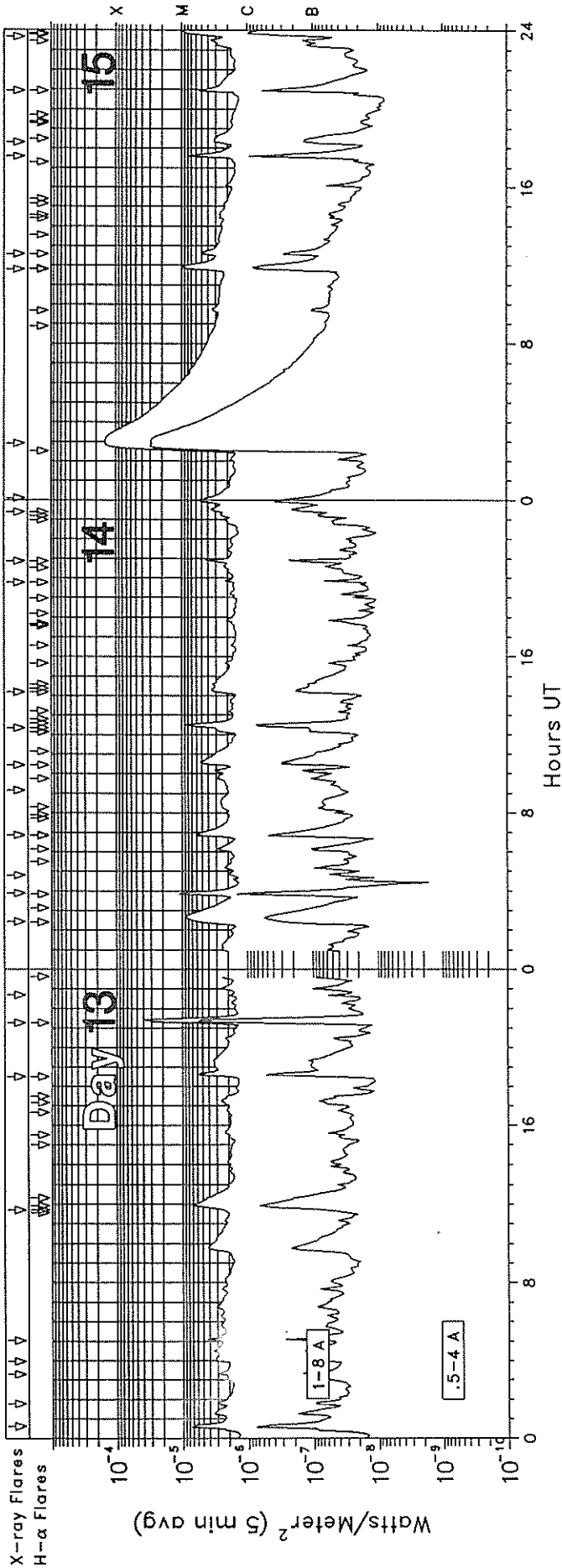
GOES-7 X-RAY DETECTOR

April 1990



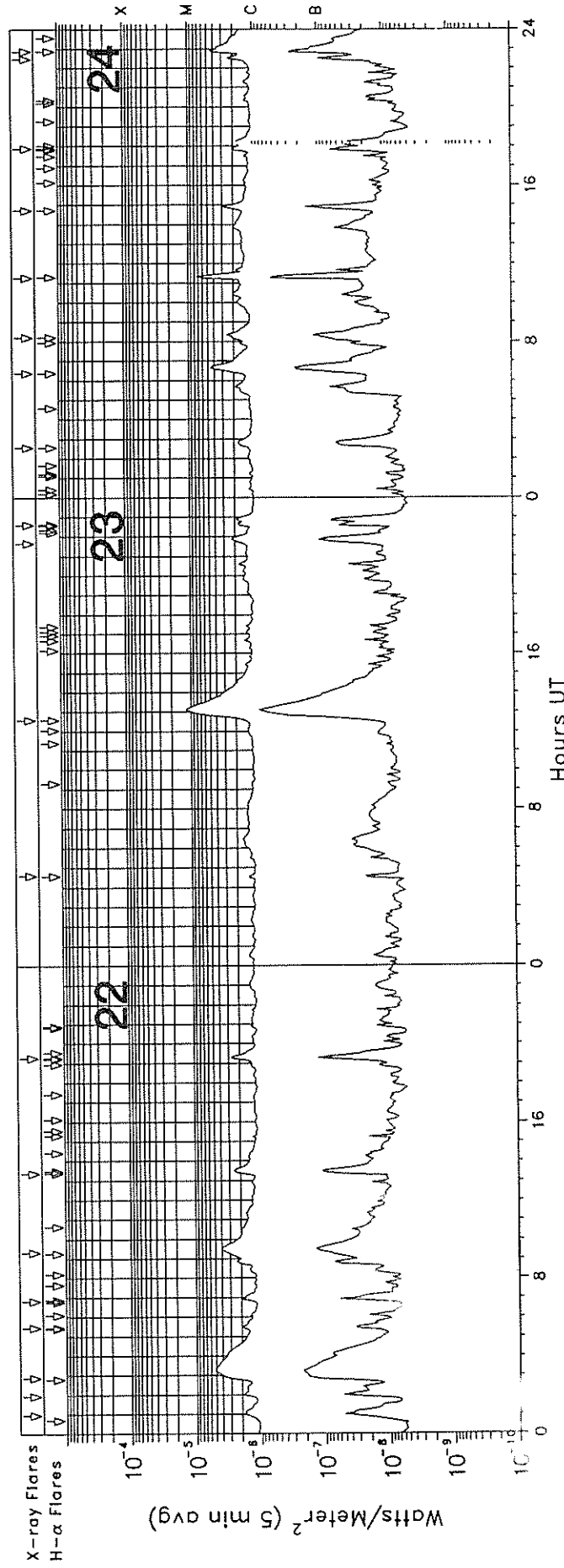
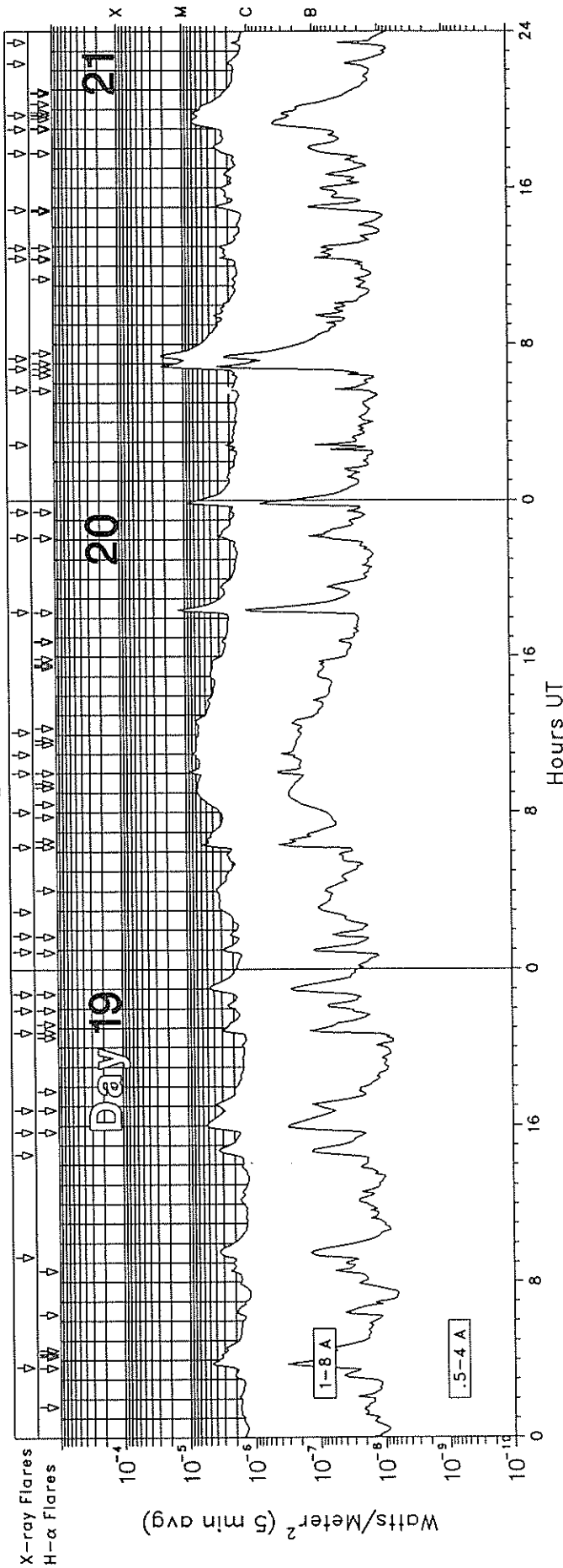
GOES-7 X-RAY DETECTOR

April 1990



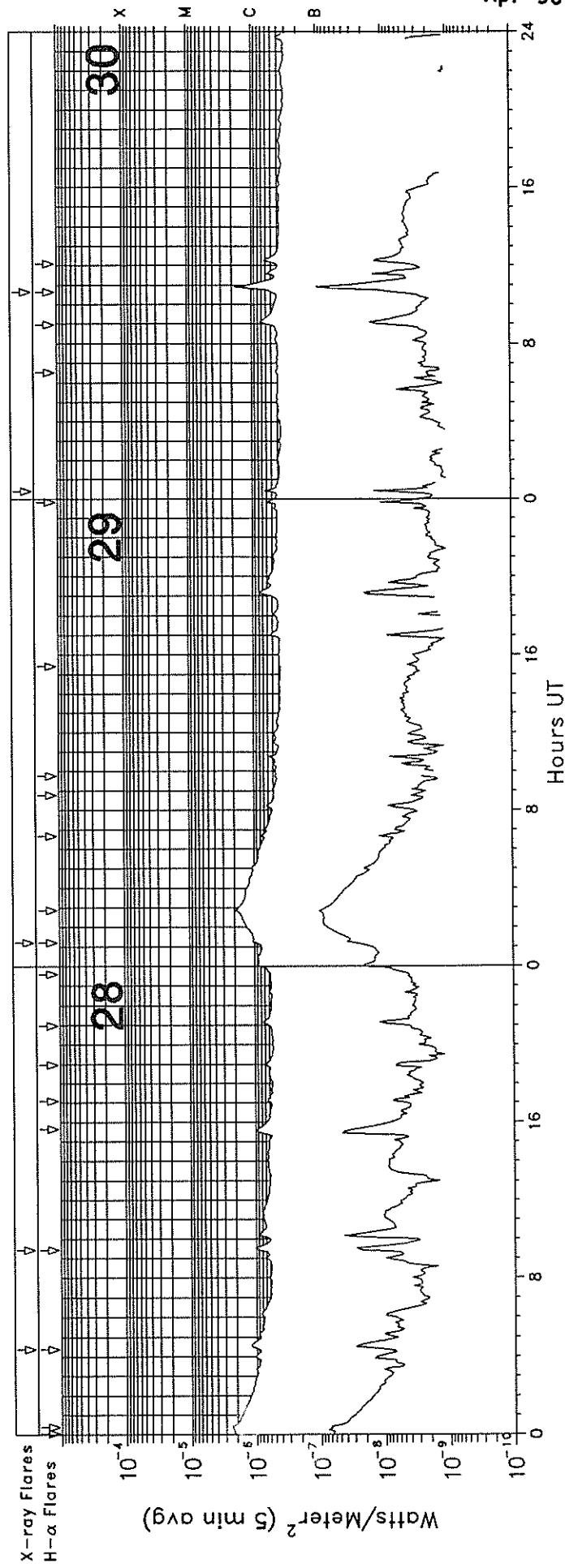
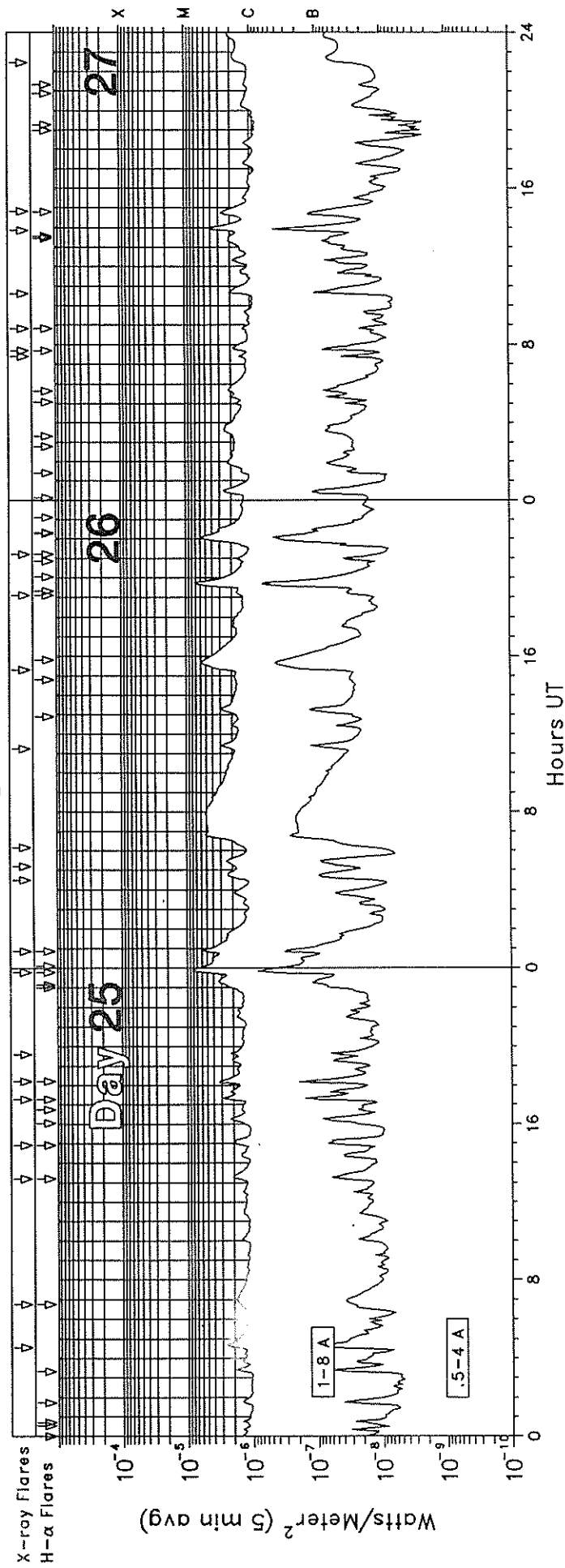
GOES-7 X-RAY DETECTOR

April 1990



GOES-7 X-RAY DETECTOR

April 1990



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Apr 90

GOES SOLAR X-RAY FLARES
Preliminary Listing

April 1990

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
01	0555E	0602	0614D	S17	W90	SF	M4.1	5987
02	0441E	0443	0450D	S11	W18	SF	C1.5	5996
02	1113E	1116	1144D	N23	E39	SF	C1.3	6001
02	1341E	1341	1355D	N21	E42	SF	C2.2	6001
02	1704E	1706	1739D	N21	E39	1N	M1.8	6001
02	1915E	1928U	2000	N21	E38	SF	C1.3	6001
02	2036	2043	2048				C1.3	
02	2251	2251U	2256	N22	E42	SF	C3.1	6001
03	0139	0149	0207				M1.0	
03	0235E	0237	0248D	N23	E35	SF	C5.1	6001
03	0501	0523	0553				C4.5	
03	0705E	0723	0825D	N22	E32	SF	C7.9	6001
03	0816	0842	0945				M7.3	
03	1308	1316	1324D	N24	E90	SF	C2.1	6007
03	1422E	1424	1432D	N25	E90	SN	C3.0	6007
03	1515E	1517	1528D	N23	E80	SF	C2.1	6007
03	1548E	1550	1634D	N23	E81	SN	C4.5	6007
03	1705E	1722	1818D	N23	E82	1N	X1.0	6007
03	2033E	2035	2055D	N24	E82	SF	C2.9	6007
03	2146E	2153	2212D	N23	E80	1B	C4.5	6007
03	2307E	2331	2339D	N23	E81	SF	C3.4	6007
04	0038E	0041	0047D	N25	E87	SF	C3.7	6007
04	0114E	0127	0140D	N19	E22	SF	C1.7	6001
04	0144E	0146	0200D	N23	E76	SF	C8.3	6007
04	0317E	0317	0342D	N22	E21	SF	C2.9	6001
04	0615	0618	0620				C1.4	
04	0742E	0743	0800D	N20	E19	SF	C1.9	6001
04	0908	0911	0915				C2.4	
04	1020	1024	1026				C1.2	
04	1315E	1318U	1521	N22	E72	SN	M7.1	6007
04	1649E	1700	1737D	N21	E13	SF	C1.7	6001
04	2043	2043U	2051D	S15	W77	SF	C1.6	5998
04	2300	2309	2323				C1.1	
04	2324E	2325	2331D	N22	E72	SF	C1.6	6007
05	0058E	0101	0120D	N21	E10	SF	C5.0	6001
05	0319	0323	0328				B9.4	
05	0728E	0729	0735D	N31	W15	SF	C1.0	6006
05	0807E	0809	0818D	N31	W16	SN	C1.9	6006
05	1026	1031	1036				C1.7	
05	1104E	1104	1120D	N31	W17	SF	C4.4	6006
05	1335E	1345	1435D	N23	E62	1N	M3.2	6007
06	0610	0628	0820				C3.2	
06	1130	1135	1137				C1.7	
07	0917	0951	1039				C1.8	
07	1511E	1532	1620D	N32	E62	1N	C9.5	6012
07	2118	2123	2135				C1.2	
08	0344E	0402	0514D	N24	E29	2N	M1.5	6007
08	0655E	0657	0740D	N23	W33	SF	C2.5	6001
08	0827E	0839	0903D	N22	W33	SF	C2.7	6001
08	1310E	1314	1358D	N20	W36	1N	C5.3	6001
08	2155	2200	2204				C1.0	
09	0827	0841	0847				C1.2	
09	1102E	1109	1124D	N19	W48	SF	B9.2	6001
09	2105E	2105	2126D	N21	W55	SF	C1.8	6001
10	0850	0908	0925				C6.1	
10	1144E	1150	1316D	N24	W04	1N	M1.1	6007

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
11	1550E	1555	1616D	N22	E22	SF	C2.1	6017
11	1628E	1628	1635D	N22	E24	SF	C1.9	6017
11	1720	1728	1747				C3.1	
12	0249	0259	0315				M3.2	
12	1431	1436	1446				C2.7	
12	1838E	1838	1851D	N22	E09	SF	C2.0	6017
12	2345	2348	2355				C2.5	
13	0037E	0038	0044D	S13	E90	SN	C9.5	
13	0146	0150	0155				C3.3	
13	0318	0323	0327				C3.2	
13	0359	0433	0449				C3.4	
13	0503	0508	0510				C5.2	
13	1142E	1156U	1408D	S34	E50	SF	C7.0	6018
13	1831E	1840	1859D	N27	E66	2F	C6.4	6022
13	2116E	2124	2145D	S34	E43	1B	M4.9	6018
13	2241	2244	2246				C2.2	
14	0226E	0226	0233D	N25	W56	SF	C9.0	6007
14	0353	0353U	0408	S32	E41	SN	M1.3	6018
14	0447	0452	0501				C2.0	
14	0652E	0653	0704D	S34	E38	SF	C6.3	6018
14	0910E	1105	1129D	S31	E36	SF	C3.5	6018
14	1027E	1036	1114D	N28	E51	1N	C5.4	6022
14	1220E	1232	1250D	S32	E35	SN	M1.0	6018
14	1412E	1417	1423D	S16	E73	SF	C3.5	6021
14	1945E	1953	1959D	S31	E30	SF	C2.4	6018
14	2051E	2056	2108D	S33	E29	1N	C5.7	6018
14	2323E	2330	2340D	S14	E59	SF	C3.7	6021
14	2365	0001	0008				C5.7	
15	0255	0255U	0345	N32	E57	2B	X1.4	6022
15	1147E	1151	1213D	S15	E61	SF	M1.0	6021
15	1234E	1238	1320D	S32	E23	SF	C5.4	6018
15	1734E	1738	1802D	S31	E20	1N	C9.4	6018
15	1818	1824	1840D	S31	E19	SN	C3.2	6018
15	2055E	2056	2111D	S14	E52	SN	C6.0	6021
15	2340E	2355	0047D	N30	W43	SF	C9.6	6012
16	0039E	0041	0100D	S31	E17	2B	M2.0	6018
16	0401E	0404	0436D	N27	E31	SF	C3.7	6022
16	0630	0636U	0732	S13	E41	2B	X2.2	6021
16	1459E	1500	1524D	S31	E07	SF	C3.4	6018
16	2152	2155	2158				C2.3	
17	0313	0322	0330				C9.6	
17	0601	0605	0608				C2.2	
17	0623E	0624	0642D	S30	E01	SN	C3.3	6018
17	1213E	1215	1231D	S33	E01	SF	C2.5	6018
17	1418E	1430	1553D	N26	E16	2N	M1.4	6022
17	1554E	1601	1617D	S33	W01	SF	C5.9	6018
17	1623E	1624	1629D	S13	E32	SF	C4.4	6021
18	0049E	0106	0137D	S19	E48	SF	C2.8	6031
18	0110	0114	0119				C4.3	
18	0206E	0209	0216D	S18	E46	SF	C5.5	6031
18	0250E	0337U	0418D	S13	E16	1F	M1.1	6021
18	0332E	0401	0501D	S32	W09	1N	M1.5	6018
18	0538E	0538	0551D	S33	W10	SF	C4.2	6018
18	0734E	0734	0744D	S18	E44	SF	C3.1	6031
18	0826E	0827	0901D	S18	E44	SN	C5.4	6031
18	1021	1026	1037				C6.1	
18	1740E	1746	1804D	S20	E38	SF	C4.0	6031
18	1857E	1904	1915D	S14	E10	SF	C3.5	6021

GOES SOLAR X-RAY FLARES
 Preliminary Listing

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April 1990

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
18	2253	2257	2300				C3.6	
18	2341E	2346	0003D	S19	E34	SF	C2.9	6031
19	0337E	0345	0411D	S14	E13	SF	C4.9	6021
19	0918	0935	0951				C3.5	
19	1432	1446	1511				C3.6	
19	1541E	1550U	1738D	N26	W11	1F	C5.2	6022
19	1647E	1653	1742D	S16	W02	SF	C3.9	6021
19	2045E	2048	2128D	S14	W06	1N	C2.9	6021
19	2154E	2217	2242D	N27	W12	SF	C2.5	6022
19	2245E	2311	2346D	N28	W12	1F	C4.6	6022
20	0055E	0101	0110D	S12	W05	SF	C2.8	6021
20	0142E	0148	0204D	S34	W32	SF	C2.2	6018
20	0257	0401	0419				C3.6	
20	0615E	0619	0715D	S11	W08	SF	C6.1	6021
20	0800	0912	1000				C6.8	
20	1000	1004	1013				C9.1	
20	1059	1101	1111				C9.7	
20	1208E	1212	1220D	S13	E08	SF	C6.6	6032
20	1818	1822U	1852D	S32	W43	SF	M1.5	6018
20	2207E	2211	2228D	S15	W13	SF	C3.2	6021
20	2324E	2357	0055	S33	W43	1F	C9.4	6018
21	0251	0254	0256				C2.8	
21	0540E	0542	0553D	S32	W45	SF	C2.1	6018
21	0644E	0649	0811D	S14	W20	1N	M2.3	6021
21	0716	0726	0811D	S14	W20	1N	M2.3	6021
21	1223E	1224	1256D	S17	W25	SF	C2.7	6021
21	1256E	1258	1311D	N16	W64	1F	C2.9	6027
21	1452E	1508	1522D	S32	W52	1F	C3.3	6018
21	1746E	1747	1801D	S32	W56	SF	C3.3	6018
21	1858	1923U	2037D	S12	W09	SN	C7.1	6032
21	1941E	1950	2011D	S17	W29	SF	C7.2	6021
21	2220	2223	2228				C2.0	
21	2326	2327	2328				C1.9	
22	0057	0102	0115				C1.9	
22	0156	0204	0212				C1.9	
22	0252E	0257U	0321D	S32	W59	SF	C5.3	6018
22	0526E	0526	0534D	S16	W35	SF	C2.0	6021
22	0649E	0655U	0700	S34	W58	SF	C2.1	6018
22	0920E	0932	0956	N25	E08	1F	C4.0	6029
22	1322	1323U	1350	S33	W68	SF	C2.5	6018
22	1915E	1918	1922D	N29	W46	SF	C2.8	6022
23	0436	0436	0500D	S07	E33	SN	C1.4	6034

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
23	1235E	1303	1408D	S11	W33	2N	M1.2	6032
23	2139E	2147	2210D	N36	W56	SF	C2.3	6022
23	2236E	2238	2250D	S19	W32	SN	C2.2	6031
24	0233E	0239	0250D	N36	W52	SF	C1.7	6022
24	0622E	0639	0718D	S14	W63	1F	C4.6	6021
24	0812E	0820	0902D	N29	W60	SF	C2.6	6022
24	1115	1120	1126				C9.7	
24	1443E	1455	1542	N22	W53	SF	C3.3	6030
24	1753E	1756	1800D	N40	W60	SF	C2.1	6022
24	2227	2232	2240				C2.5	
24	2251E	2253	2300D	N35	W69	SF	C4.7	6022
25	0433	0443	0453				C2.6	
25	0645E	0652	0658D	S13	W70	SF	C1.8	6021
25	1312E	1314	1403	N12	W04	SN	C1.9	6033
25	1456E	1458	1520D	N30	W79	SF	C2.1	6022
25	1716E	1722	1735D	N30	W77	SF	C2.9	6022
25	1813E	1813	1830D	N17	W09	SF	C3.6	6038
25	1937	1941	1944				C2.5	
25	2347E	2354	0001D	N36	W75	SF	C8.3	6022
26	0052	0053U	0056D	N30	W81	SF	C6.1	6022
26	0429	0448	0506				C2.4	
26	0511	0530	0537				C2.5	
26	0609	0651	0917				C5.2	
26	1115	1126	1132				C3.1	
26	1519	1545	1607				C5.9	
26	1907E	1939	2002D	N24	W78	1N	C8.1	6030
26	2113E	2153	2256D	N24	W80	1N	C6.0	6030
27	0724	0728	0731				C1.5	
27	0742E	0750	0814D	N27	W12	SF	C1.8	6037
27	0850E	0853	0908D	N02	W19	SF	C1.4	6044
27	1037	1044	1101				C2.1	
27	1352	1359	1408				C4.4	
27	1449E	1458	1507D	S18	W31	SF	C2.8	6042
27	2227	0026	0038				C2.4	
28	0423E	0429	0453D	N16	W42	SF	C1.2	6038
28	0926E	0926	0944D	N19	W45	SF	C1.1	6038
29	0112	0251	0359				C1.9	
30	0024	0027	0030				B6.8	
30	1038E	1055	1118D	N16	W72	SF	C1.9	6038

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

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

MASS EJECTIONS FROM THE SUN

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Apr 90

APRIL 1990

Site	Mo	Day	— Observed UT —			Location		Freq or Wavelength	Kind of Event
			Start	Max	End	RA*	R/Ro		
PALE	Apr	03	[	1724.0		1728.0		Meter	II
WEIS	Apr	03		1724.3		1728.3		80-32 MHz	II Herringbone
SGMR	Apr	03		1725.0		1729.0		Meter	II
SGMR	Apr	04	[	1315.0		1347.0		Meter	IV
SVTO	Apr	04		1315.0		1347.0		Meter	IV
SVTO	Apr	07		1522.0		1535.0		Meter	II
SGMR	Apr	10	[	1147.0		1156.0		Meter	IV
SVTO	Apr	10		1148.0		1239.0		Meter	IV
LEAR	Apr	11	[	0748.0		0757.0		Meter	II
WEIS	Apr	11		0748.7		0753.0		74-30 MHz	II Herringbone
SVTO	Apr	11		0749.0		0758.0		Meter	II
SVTO	Apr	13		0505.0		0507.0		Meter	II
LEAR	Apr	14		0412.0		0515.0		Meter	IV
LEAR	Apr	15	[	0245.0		0458.0		Meter	IV
PALE	Apr	15		0250.0		0317.0		Meter	IV
WEIS	Apr	16	[	0633.3		0644.7		180-30 MHz	II Herringbone
SVTO	Apr	16		0634.0		0708.0		Meter	II
WEIS	Apr	16		0704.5		0711.3		42-30 MHz	II
SGMR	Apr	17	[	1629.0		1653.0		Meter	II
SVTO	Apr	17		1630.0		1633.0		Meter	II
WEIS	Apr	17		1630.1		1633.2		76-30 MHz	II Herringbone
WEIS	Apr	17		1634.3		1636.9		68-30 MHz	II Herringbone
WEIS	Apr	17		1638.3		1643.8		68-30 MHz	II Herringbone
SGMR	Apr	17		1708.0		1713.0		Meter	II
WEIS	Apr	25		1005.7		1009.0		150-38 MHz	II Herringbone
LEAR	Apr	28	[	0024.0		0050.0		Meter	II
PALE	Apr	28		0029.0		0047.0		Meter	II
SGMR	Apr	28		1456.0		1457.0		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

REPORTING STATIONS

LEAR = Learmonth
 PALE = Palehua
 SGMR = Sagamore Hill
 SVTO = San Vito
 WEIS = Weissenau

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

ACTIVE PROMINENCES AND FILAMENTS

APRIL 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	ADF	0002	0200D	S27	E39	04	4.0	1				V	KHAR		
01	APR	0002	0200D	N36	E90	04	8.2	1				C	VORO		
01	ADF	0028	0200D	S27	W37	03	29.2	1				C	VORO		
01	APR	0030	0200D	S37	W90	03	24.9	1				C	VORO		
01	APR	0052	0200D	N22	W90	03	25.2	1				C	VORO		
01	APR	0305E	0949D	N36	E85	04	7.9					E	LEAR		
01	ASR	0306E	0949D	S09	W83	03	26.0			9	8	E	LEAR	5988	
01	AFS	0530E	0949D	S16	W29	03	30.1		03	9	9	E	LEAR	5998	
01	ADF	0530E	0949D	S20	W25	03	30.4	1	07	9	9	E	LEAR	5998	
01	LPS	0558	0655	S17	W90	03	25.5			9	9	E	SVTO	5987	Flare Associated
01	ASR	0559	0710	S18	W90	03	25.5			9	9	E	LEAR	5987	
01	BSL	0844E	0910D	S15	W90	03	25.6	1				V	KHAR		
01	DSD	0915E	0925	S12	W10	03	31.6	1				V	KHAR		
01	APR	0927E	1030D	S15	W90	03	25.7	1				V	KHAR		
01	ASR	0931E	0949D	S08	W90	03	25.7			9	9	E	LEAR	5987	
01	APR	0940E	1050D	N24	E90	04	8.3	1				V	KHAR		
01	ADF	1013E	1636D	S20	W27	03	30.5	1	04	9	9	E	SVTO	5998	
01	ASR	1049E	1755D	S07	W90	03	25.8			9	9	E	RAMY	5988	
01	AFS	1054E	1801D	N22	W51	03	28.6		03	9	9	E	RAMY	6000	
01	AFS	1056E	1801D	N18	E56	04	5.7		04	9	9	E	RAMY	6001	
01	ADF	1057E	1801D	N17	E55	04	5.6	1	04	9	9	E	RAMY	6001	
01	ADF	1603E	2329D	S14	W36	03	30.0	1	04	9	9	E	HOLL	5998	
01	AFS	1609E	0116D	S19	E68	04	6.9		01	9	9	E	HOLL		
01	AFS	1612E	2318D	N31	E30	04	4.0		03	9	9	E	HOLL		
01	ADF	1625E	2222D	N18	E52	04	5.6	1	04	9	9	E	HOLL	6001	
01	AFS	1629E	2326D	S11	W14	03	31.6		01	9	9	E	HOLL	5996	
01	ADF	2237	0055D	N04	E33	04	4.4	1				C	VORO		
01	APR	2248E	0200D	S38	W90	03	25.8	1		9	9	E	PALE	5983	
01	ADF	2248	0200D	S38	E42	04	5.3	1				C	VORO		
01	SDF	2250E	2250D	S28	W38	03	30.1		14	0	0	E	PALE		
01	APR	2255	0200D	N40	E90	04	9.3	1				C	VORO		
01	APR	2255	0200D	S38	W90	03	25.8	1				C	VORO		
01	AFS	2329E	0116D	S08	E34	04	4.5		02	5	6	E	HOLL	5999	
01	AFS	2331E	0116D	N22	W63	03	28.2		03	9	9	E	HOLL	6000	
01	ADF	2340E	0551D	S15	W40	03	30.0	1	08	9	9	E	LEAR	5998	
01	APR	2346	0200D	N36	W90	03	25.9	1				C	VORO		
01	APR	2354	0200D	S10	W90	03	26.3	1				C	VORO		
01	APR	2355	0200D	S53	E90	04	9.7	1				C	VORO		
02	APR	0007E	0205D	S04	W90	03	26.4	1		9	9	E	PALE	5988	
02	AFS	0007E	0358D	S18	E66	04	7.0		02	9	9	E	PALE	6005	
02	ADF	0007E	0358D	S20	W36	03	30.3		09	9	9	E	PALE	5998	
02	AFS	0020E	0358D	N21	E50	04	5.8		02	9	9	E	PALE	6001	
02	DSD	0340E	0358D	S15	W43	03	30.0		05	9	9	E	PALE	5998	
02	APR	0615E	1645D	S41	W90	03	26.0	1		9	9	E	SVTO		
02	APR	0616E	1645D	N38	W90	03	26.1	2		9	9	E	SVTO		
02	AFS	0617E	1645D	N32	E21	04	3.9		02	9	9	E	SVTO		
02	ADF	0618E	1645D	S16	W43	03	30.1	1	09	9	9	E	SVTO	5998	
02	AFS	0619E	1645D	S17	W43	03	30.1		02	9	9	E	SVTO	5998	
02	DSD	1044E	2017D	S26	E51	04	6.4		03	9	9	E	RAMY	6003	
02	AFS	1048E	2017D	N30	E22	04	4.2		02	9	9	E	RAMY		
02	AFS	1051E	2017D	N20	W65	03	28.6		02	9	9	E	RAMY	6000	
02	AFS	1052E	2017D	S16	W46	03	30.1		03	9	9	E	RAMY	5998	
02	ADF	1059E	2017D	N18	E44	04	5.8	1	03	9	9	E	RAMY	6001	
02	AFS	1059E	2017D	N20	E43	04	5.7		03	9	9	E	RAMY	6001	
02	SSB	1133		S05	W00	04	2.1			0	0	E	RAMY		
02	ASR	1343E	1557D	N19	W90	03	26.8			9	9	E	RAMY	6000	
02	ASR	1739E	2017D	S12	W90	03	27.0			9	9	E	RAMY		
02	ADF	1743E	0310D	S20	W46	03	30.3		09	9	9	E	PALE	5998	
02	AFS	2046E	0103D	N19	E37	04	5.7		02	8	8	E	HOLL	6001	
02	AFS	2105E	0103D	S15	W52	03	30.0		01	9	9	E	HOLL		
02	ADF	2130E	0103D	N31	E23	04	4.7	1	08	9	9	E	HOLL		
02	SSB	2137		S09	W09	04	2.2			0	0	E	HOLL		324 W24 366 W66
02	ADF	2200E	0014D	N10	W61	03	29.4	1	04	9	9	E	HOLL	5993	
02	DSD	2339E	0532D	N21	E30	04	5.3		03	9	9	E	LEAR	6001	
02	AFS	2340E	1010D	N14	E31	04	5.3		02	9	9	E	LEAR		
03	ASR	0150E	1010D	N23	E90	04	10.0			9	9	E	LEAR		
03	ASR	0313E	0400D	N28	E90	04	10.2			9	9	E	PALE		
03	AFS	0313E	0400D	N31	E12	04	4.1		03	9	9	E	PALE	6006	

ACTIVE PROMINENCES AND FILAMENTS

65
Apr 90

APRIL 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
03	DSD	0313E	0400D	S15	W54	03 30.1		03	9	9	E	PALE	5998	
03	AFS	0340E	0400D	S09	E33	04 5.6		02	9	9	E	PALE		
03	ASR	0630E	0753	N22	E90	04 10.2					P	BUCH		
03	LPS	0709E	0930D	N28	E90	04 10.3			9	9	E	SVTO		
03	LPS	0859E	1343D	N25	E90	04 10.3			9	9	E	SVTO		
03	LPS	0902E	1010D	N25	E90	04 10.3			9	9	E	LEAR		
03	ASR	1140E	2111D	N23	E90	04 10.4			9	9	E	RAMY	6007	
03	ADF	1140E	2111D	N30	E14	04 4.6	1	07	9	9	E	RAMY	6006	
03	LPS	1304E	1403D	N22	E90	04 10.5			9	9	E	RAMY		Flare Associated
03	AFS	1308E	1505D	S08	E27	04 5.6		02	9	9	E	SVTO		
03	AFS	1308E	1505D	S08	E27	04 5.6		02	9	9	E	SVTO		
03	ASR	1310E	2001D	N22	E90	04 10.5			9	9	E	HOLL		Flare Associated
03	AFS	1345E	0109D	S09	E27	04 5.6		01	9	9	E	HOLL		
03	DSD	1405E	0109D	N22	E31	04 6.0		03	9	9	E	HOLL	6001	
03	ASR	1410E	1505D	N25	E90	04 10.6			9	9	E	SVTO		
03	ASR	1517E	0109D	N20	W90	03 27.8			9	9	E	HOLL	6000	
03	BSL	1719	1730	N24	E90	04 10.7			9	9	E	HOLL	6007	Flare Associated
03	ASR	1725E	0038D	N21	W90	03 27.9			9	9	E	PALE	6000	
03	DSD	1725E	0038D	N23	E31	04 6.1		02	9	9	E	PALE	6001	
03	DSD	1725E	0038D	N31	E04	04 4.0		03	9	9	E	PALE	6006	
03	ADF	1725E	0038D	S08	E10	04 4.5		07	9	9	E	PALE	5999	
03	ADF	1725E	0038D	S17	W57	03 30.5		06	9	9	E	PALE	5998	
03	ASR	1725E	1739D	N25	E90	04 10.7			9	9	E	PALE	6007	
03	LPS	1738	2157	N24	E90	04 10.7			9	9	E	HOLL	6001	Flare Associated
03	LPS	1939E	2116D	N25	E90	04 10.8			9	9	E	PALE	6007	
03	AFS	2232E	0109D	N31	E03	04 4.2		03	9	9	E	HOLL	6006	
03	APR	2235	0055D	S62	E90	04 11.9	1				C	VORO		
03	ADF	2250	0055D	N38	W50	03 31.0	1				C	VORO		
03	APR	2252	0055D	N07	W90	03 28.3	1				C	VORO		
03	AFS	2316E	1011D	N31	E03	04 4.2		04	9	9	E	LEAR	6006	
04	APR	0030	0055D	N68	E90	04 12.1	1				C	VORO		
04	APR	0037	0055D	N43	E90	04 11.4	1				C	VORO		
04	ASR	0336E	1011D	N25	E90	04 11.1			9	9	E	LEAR	6007	
04	BSL	0517	0520D	S20	W90	03 28.4	1				C	ABST		
04	ASR	0651E	0801U	N22	E90	04 11.2					P	BUCH		
04	APR	0929E	0952D	S38	E90	04 11.7	1				V	KHAR		
04	DSD	1053E	1730D	N21	E71	04 9.9		03	9	9	E	RAMY	6007	
04	ADF	1053E	2146D	N22	W62	03 30.8	1	16	9	9	E	RAMY	5995	
04	DSD	1325E	1442D	N23	E72	04 10.1		03	9	9	E	HOLL	6007	Flare Associated
04	LPS	1334E	1720D	N23	E76	04 10.4			9	9	E	HOLL	6007	Flare Associated
04	APR	1337E	1744D	N42	E90	04 11.9	1		9	9	E	HOLL		
04	AFS	1443E	0117D	S20	E30	04 6.9		02	9	9	E	HOLL	6005	
04	ADF	1457E	1637D	N19	E48	04 8.3	1	04	9	9	E	HOLL		
04	SSB	1500		307	W30	04 4.1			0	0	E	HOLL		314 W37
04	LPS	1521E	2012D	N23	E71	04 10.1			9	9	E	RAMY	6007	
04	ASR	1744E	0117D	S43	E90	04 12.1			9	9	E	HOLL		
04	APR	1755E	1912D	N43	E90	04 12.2	1		9	9	E	PALE		
04	ADF	1759E	1912D	N22	W67	03 30.7	1	18	9	8	E	PALE	5995	
04	DSD	1854E	0117D	N19	E08	04 5.4		04	9	9	E	HOLL	6001	
04	ASR	1900	2327D	N31	E90	04 11.9			9	9	E	HOLL		
04	ASR	2251E	0117D	S17	W90	03 29.2			9	9	E	HOLL	5998	
05	BSL	0550	0620D	S10	W90	03 29.6	1				C	ABST		
05	ASR	0615E	1625D	N29	E90	04 12.3			9	9	E	SVTO		
05	BSD	0725E	1625D	N28	W74	03 30.6		03	9	9	E	SVTO	5995	
05	AFS	0840E	0954D	N31	W17	04 4.0		03	9	9	E	LEAR	6006	
05	BSL	0855E	0906D	N42	E90	04 12.7	1				V	KHAR		
05	BSL	1030E	1043D	N30	W90	03 29.4	1				V	KHAR		
05	ASR	1048E	1625D	S14	W90	03 29.7			9	9	E	SVTO	5998	
05	BSL	1051E	1102	S12	W90	03 29.8	1				V	KHAR		
05	ADF	1104E	1724D	N31	W09	04 4.7	1	08	9	9	E	RAMY	6006	
05	AFS	1114E	2158D	N21	W02	04 5.3		02	9	9	E	RAMY	6001	
05	ASR	1117E	2020D	N31	W87	03 29.7			9	9	E	RAMY	5995	
05	DSD	1119E	2158D	S43	E80	04 12.1		04	9	9	E	RAMY	6009	
05	SDF	1234E	1405D	S49	E26	04 7.7		66	0	0	E	RAMY		
05	MDP	1325E	0011D	N33	E90	04 12.7			9	9	E	HOLL		
05	APR	1351E	2158D	N34	E90	04 12.7			9	9	E	RAMY		
05	ADF	1400E	2158D	N26	E74	04 11.3	1	14	9	9	E	RAMY	6007	
05	SDF	1424E	0024D	S45	E27	04 7.8		42	0	0	E	HOLL		

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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	NOAA/ USAF Reg#	Remarks
05	ASR	1516E	1709D	N30	E90	04 12.7			9	9	E	RAMY	
05	APR	1530E	1625D	N39	E90	04 12.9	1		9	9	E	SVTO	
05	SSB	1712		271	W08	04 11.0			0	0	E	RAMY	310 W48
05	AFS	1730E	1734D	S18	E14	04 6.8		02	9	9	E	PALE 6005	
05	ADF	1807E	0040D	N24	E60	04 10.4	1	05	9	9	E	HOLL 6007	
05	AFS	1810E	0040D	S19	E16	04 7.0		02	9	9	E	HOLL 6005	
05	AFS	1814E	0048D	N30	W20	04 4.2		06	9	9	E	PALE 6006	
05	ADF	2223	0200D	S36	W30	04 3.5	1				C	VORO	
05	ADF	2235	0200D	S26	E30	04 8.3	1				C	VORO	
05	ADF	2244	0200D	S15	E62	04 10.6	1				C	VORO	
05	APR	2245	0200D	N35	E90	04 13.1	1				C	VORO	
05	AFS	2330E	1068D	N21	W03	04 5.7		03	9	9	E	LEAR 6001	
05	ADF	2331E	0742D	N25	E58	04 10.5	1	06	9	9	E	LEAR 6007	
05	AFS	2332E	1008D	S19	E13	04 7.0		02	9	9	E	LEAR 6005	
05	ADF	2348E	0048D	N24	E57	04 10.4		06	9	9	E	PALE 6007	
06	APR	0011E	0040D	N33	E90	04 13.1	2		9	9	E	HOLL	
06	ASR	0405E	0634D	S41	E90	04 13.5			9	9	E	LEAR 6009	
06	BSL	0628	0706D	N36	E90	04 13.5	1				C	ABST	
06	APR	0805E	0903D	N40	E90	04 13.7	2				E	SVTO	
06	EPL	0808E	0930D	S11	E90	04 13.1			9	9	E	SVTO	
06	SDF	0814E	0608D	S46	E01	04 6.4		71	0	0	E	SVTO	
06	SDF	0910E	0915	N34	E64	04 11.5		27	9	9	E	SVTO 6012	
06	EPL	0918E	0944	N41	E90	04 13.7			9	9	E	SVTO 6012	
06	APR	1117E	2057D	N35	E90	04 13.7	2		9	9	E	RAMY 6012	
06	AFS	1125E	2057D	S43	E70	04 12.2		03	9	9	E	RAMY 6009	
06	ADF	1130E	2057D	N19	E52	04 10.4	1	15	9	9	E	RAMY 6007	
06	ADF	1134E	1654D	N34	W17	04 5.1	1	12	9	9	E	RAMY 6006	
06	AFS	1352E	0045D	S19	E05	04 6.9		02	9	9	E	HOLL 6005	
06	ADF	1411E	0045D	N29	W28	04 4.4	2	06	9	9	E	HOLL 6006	
06	ADF	1445E	1710D	S07	W28	04 4.5	1	07	9	9	E	RAMY 5999	
06	AFS	1642E	0433D	N31	W33	04 4.1		03	9	9	E	PALE 6006	
06	DSD	1642E	0433D	S42	E64	04 11.9		02	9	9	E	PALE 6009	
06	APR	1642E	2139D	N34	E85	04 13.5			9	9	E	PALE 6012	
06	SSB	1726		268	W19	04 11.9			0	0	E	RAMY	307 W58
06	SSB	1800		290	W42	04 14.1			0	0	E	PALE	
06	SDF	1816E	1816D	S52	E32	04 9.5		48	0	0	E	PALE	
06	ADF	2130E	0433D	N25	E52	04 10.9	1	11	9	9	E	PALE 6007	
06	DSD	2139E	0433D	N21	W16	04 5.7		03	8	9	E	PALE 6001	
06	AFS	2307E	0433D	S19	E00	04 7.0		03	9	9	E	PALE 6005	
06	ADF	2320E	1008D	N25	E43	04 10.3	1	05	9	9	E	LEAR 6007	
06	AFS	2321E	1008D	S18	E00	04 7.0		02	9	9	E	LEAR 6005	
06	AFS	2322E	1008D	S42	E64	04 12.2		02	9	9	E	LEAR 6009	
07	AFS	0408E	0433D	S42	E61	04 12.2		03	9	9	E	PALE 6009	
07	BSL	0450	0710	S16	E90	04 14.0	1				C	ABST	
07	AFS	0550E	1008D	N20	W19	04 5.8		02	9	6	E	LEAR 6001	
07	ASR	0931E	1008D	N38	E89	04 14.6			9	9	E	LEAR	
07	AFS	1038E	1705D	S41	E56	04 12.0		02	9	9	E	SVTO 6009	Flare Associated
07	AFS	1042E	2037D	N31	W40	04 4.3		03	9	9	E	RAMY 6006	
07	AFS	1043E	2037D	N22	W20	04 5.9		03	9	9	E	RAMY 6001	
07	AFS	1045E	2037D	N14	E54	04 11.5		02	9	9	E	RAMY 6014	
07	ADF	1046E	2037D	N19	E37	04 10.3	1	12	9	9	E	RAMY 6007	
07	DSD	1118E	1406D	S24	W05	04 7.1		02	9	9	E	RAMY 6003	
07	SSB	1136		256	W16	04 11.7			0	0	E	RAMY	308 W68
07	AFS	1238E	2006D	N31	W05	04 7.1		02	9	9	E	RAMY	
07	AFS	1244E	1705D	S11	E05	04 7.9		01	9	9	E	SVTO	
07	DSD	1559E	1729D	N30	E60	04 12.4		04	9	9	E	RAMY 6012	Flare Associated
07	ADF	1603E	2003D	S15	W12	04 6.8	1	04	9	9	E	RAMY 6005	
07	ADF	1706E	2231D	N22	E36	04 10.5	1	03	9	9	E	HOLL 6007	
07	AFS	2328E	0956D	S41	E49	04 12.0		04	9	9	E	LEAR 6009	
08	BSL	0516E	0750D	S06	E90	04 14.9	1				C	ABST	
08	DSD	0554E	1240D	S41	E49	04 12.2		02	9	9	E	SVTO 6009	
08	AFS	0720E	1705D	N15	E48	04 11.9		01	9	9	E	SVTO 6014	
08	ADF	0833E	1705D	N23	E24	04 10.2	1	03	9	9	E	SVTO 6007	
08	AFS	1033E	2114D	N15	E44	04 11.8		02	9	9	E	RAMY 6014	
08	ADF	1035E	2114D	N29	E57	04 12.9	1	35	9	9	E	RAMY 6012	
08	SSB	1115		230	W04	04 10.7			0	0	E	RAMY	260 W34 276 W50
08	SSB	1117		316	W90	04 7.0			0	0	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
08	AFS	1429E	1620D	N31	W18	04	7.2		03	9	8	E	HOLL		
08	SSB	1432		230	W06	04	10.8			0	0	E	HOLL		
08	DSD	1621E	1945D	N30	E47	04	12.4		06	7	8	E	HOLL	6012	
08	ADF	1914E	0437D	N26	W42	04	5.5		03	9	9	E	PALE	6001	
08	ADF	1914E	0437D	N27	E21	04	10.4		07	9	9	E	PALE	6007	
08	DSD	1914E	0437D	N27	E22	04	10.5		02	9	9	E	PALE	6007	
08	DSD	1939E	0437D	N11	W16	04	7.6		02	9	9	E	PALE		
08	ADF	1939E	0437D	N35	E00	04	8.8		11	9	8	E	PALE		
08	DSD	1939E	0437D	N35	E54	04	13.1		05	9	9	E	PALE	6012	
08	ADF	1955E	0026D	N36	E62	04	13.8	1	11	9	9	E	HOLL		
08	SSB	1958		232	W04	04	11.2			0	0	E	PALE		
08	ADF	2226	0140D	S25	E20	04	10.5	1				C	VORO		
08	ADF	2230	0140D	S39	W60	04	4.1	1				C	VORO		
08	ADF	2308	0140D	N17	W16	04	7.7	1				C	VORO		
08	APR	2308	0140D	N46	E90	04	16.5	1				C	VORO		
08	ADF	2308	0140D	S22	W50	04	5.1	1				C	VORO		
08	APR	2325	0140D	S03	W90	04	2.2	1				C	VORO		
08	ADF	2358	0140D	N47	E22	04	10.8	1				C	VORO		
09	APR	0050	0140D	N69	W90	03	31.9	1				C	VORO		
09	APR	0050	0140D	S27	W90	04	2.0	1				C	VORO		
09	BSL	0506E	0702D	N49	E90	04	16.8	1				C	ABST		
09	BSL	0619E	0702D	N36	E90	04	16.5	1				C	ABST		
09	SSB	1052		230	W17	04	11.7			0	0	E	RAMY		
09	ADF	1102E	2217D	N25	E13	04	10.5	1	09	9	9	E	RAMY	6007	
09	AFS	1157E	1243	N19	W50	04	5.7		02	6	5	E	RAMY	6001	
09	DSD	1243E	1425D	N22	W54	04	5.4		03	3	5	E	RAMY	6001	
09	DSD	1352E	1430D	N21	W48	04	5.9		01	9	9	E	HOLL	6001	
09	DSD	1402E	1741D	S19	W30	04	7.3		02	9	9	E	HOLL	6005	
09	SSB	1423		218	W07	04	10.9			0	0	E	HOLL		231 W20
09	MOP	1427E	0100D	S20	E90	04	16.5			2	2	E	HOLL		
09	AFS	1430E	0100D	N19	W51	04	5.7		02	9	9	E	HOLL	6001	
09	SSB	1441		218	W07	04	11.0			0	0	E	RAMY		
09	ADF	1501E	0100D	N31	E36	04	12.5	1	04	9	9	E	HOLL	6012	Flare Associated
09	AFS	1520E	2040D	S19	E38	04	12.5		02	7	7	E	HOLL		
09	SSB	1738		231	W22	04	12.1			0	0	E	PALE		
09	AFS	1738E	0200D	N19	W53	04	5.7		03	9	9	E	PALE	6001	
09	ADF	1738E	0200D	N24	E12	04	10.7		12	9	9	E	PALE	6007	
09	DSD	1921E	0200D	N20	E22	04	11.5		03	9	9	E	PALE	6012	
09	DSD	2034	2228D	S24	W39	04	6.8		05	9	9	E	HOLL	6003	Flare Associated
09	ASR	2235E	0000D	N32	W80	04	3.6			9	9	E	HOLL	6006	
09	ADF	2255	0200D	N20	E03	04	10.2	1				C	VORO		
09	APR	2307E	0200D	N48	E90	04	17.5	1				C	VORO		
09	ADF	2308	0200D	S29	W20	04	8.4	1				C	VORO		
09	APR	2315	0200	N69	W90	04	1.8	1				C	VORO		
09	ADF	2323	0200D	N17	W29	04	7.8	1				C	VORO		
10	BSL	0002	0017	S33	E90	04	17.1	1				C	VORO		
10	ADF	0029E	0100D	N20	E05	04	10.4	2	05	9	9	E	HOLL	6007	
10	BSL	0032	0106	S33	E90	04	17.2	1				C	VORO		
10	APR	0045	0200D	S29	W90	04	3.0	1				C	VORO		
10	ASR	0050E	0728D	N32	W79	04	3.8			9	9	E	LEAR	6006	
10	BSD	0054E	0728D	N21	W59	04	5.5		04	9	9	E	LEAR	6001	
10	ADF	0105	0200D	N20	W30	04	7.7	1				C	VORO		
10	BSL	0129	0159	S33	E90	04	17.2	1				C	VORO		
10	BSL	0150	0200D	N32	W90	04	2.9	1				C	VORO		
10	DSD	0555E	0726D	N21	W69	04	4.9		07	9	9	E	SVTO	6006	
10	ASR	0605E	0726D	N30	W90	04	3.2			9	9	E	SVTO	6006	
10	DSD	1200E	1417D	N14	E19	04	11.9		03	9	9	E	RAMY	6014	
10	ASR	1200E	2215D	N30	W79	04	4.3			9	9	E	RAMY	6006	
10	ADF	1200E	2215D	N34	E29	04	12.8	1	13	9	9	E	RAMY	6012	
10	DSD	1200E	2215D	N64	W20	04	8.7		04	9	9	E	RAMY	6001	
10	AFS	1340E	0122D	N14	E17	04	11.8		02	9	9	E	HOLL	6014	
10	ASR	1408E	0055D	N29	W90	04	3.5			7	7	E	HOLL	6006	
10	AFS	1518E	0055D	N03	E33	04	13.1		02	9	9	E	HOLL		
10	ASR	1633E	0055D	S33	E90	04	17.8			9	9	E	HOLL		
10	AFS	1635E	0122D	N23	E35	04	13.4		03	9	9	E	HOLL		
10	ADF	1948E	0122D	N34	E24	04	12.7	1	09	9	8	E	HOLL	6012	
10	AFS	2025E	2215D	N24	E32	04	13.3		02	9	9	E	RAMY	6017	

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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	AFS	0332E	0422D	N23	E29	04	13.4		02	9	9	E	PALE	6017	
11	DSD	1044E	1655D	N20	E27	04	13.5		03	9	9	E	RAMY	6017	
11	AFS	1044E	2117D	N22	E26	04	13.4		02	9	9	E	RAMY	6017	
11	ADF	1049E	1655D	S44	E16	04	12.8	1	09	9	9	E	RAMY	6009	
11	ADF	1059E	1708D	N23	W08	04	10.8	1	10	9	9	E	RAMY	6007	
11	ADF	1059E	2117D	N20	W18	04	10.1	1	10	9	9	E	RAMY	6007	
11	ADF	1331E	2252D	N26	W16	04	10.3	1	06	9	9	E	HOLL	6007	
11	AFS	1406E	0113D	N22	E22	04	13.3		04	9	9	E	HOLL	6017	
11	DSD	1406E	2029D	N21	E20	04	13.1		03	9	9	E	HOLL	6017	
11	ADF	1407E	2029D	N18	E29	04	13.8	1	06	9	9	E	HOLL	6017	
11	SSB	1437		232	W47	04	14.3			0	0	E	HOLL		
11	ADF	2034E	0256D	N20	W19	04	10.4		07	9	9	E	PALE	6007	
11	AFS	2034E	0256D	N22	E19	04	13.3		03	9	9	E	PALE	6017	
11	ADF	2034E	0256D	N30	E06	04	12.3		09	9	9	E	PALE	6012	
11	ADF	2034E	0256D	S39	E03	04	12.1		08	9	7	E	PALE	6009	
11	ADF	2043E	0113D	N31	E08	04	12.5	1	06	9	9	E	HOLL	6012	
11	APR	2100E	2215D	N17	E90	04	18.7	1		9	9	E	HOLL		
11	SSB	2300		237	W17	04	14.8			0	0	E	PALE		
12	ASR	0007E	0113D	S22	W84	04	5.5			9	9	E	HOLL	6003	
12	DSD	0010E	0113D	S38	W70	04	6.3		08	9	9	E	HOLL	6018	
12	ASR	0142E	0256D	N32	E90	04	19.2			9	9	E	PALE		
12	ASR	0821E	1415D	N38	E90	04	19.6			9	9	E	SVTO		
12	ASR	0821E	1420D	N31	E90	04	19.4			9	9	E	SVTO		
12	LPS	0821E	1420D	N33	E90	04	19.5			9	9	E	SVTO		
12	AFS	0919E	1420D	N23	E13	04	13.4		02	6	6	E	SVTO	6017	
12	DSD	0958E	1415D	S35	E65	04	17.6		03	9	9	E	SVTO	6018	
12	DSD	1109E	2121D	S39	E72	04	18.3		04	9	9	E	RAMY	6018	
12	ADF	1112E	2121D	N17	E19	04	13.9	2	15	9	9	E	RAMY	6017	
12	ASR	1152E	2118D	N27	W90	04	5.5			9	9	E	RAMY	6001	
12	ASR	1156E	1420D	S13	E90	04	19.3			9	9	E	SVTO		
12	AFS	1233E	1315D	N17	E17	04	13.8		02	9	9	E	RAMY	6017	
12	AFS	1235E	1420D	N19	E16	04	13.7		02	9	9	E	SVTO		
12	ASR	1323E	0019D	S14	E90	04	19.3			9	9	E	HOLL	6021	
12	AFS	1412E	0019D	N03	E05	04	13.0		02	9	9	E	HOLL	6020	
12	AFS	1418E	0019D	S10	E51	04	16.4		03	9	9	E	HOLL		
12	AFS	1420E	0019D	N19	E16	04	13.8		02	9	9	E	HOLL		
12	ASR	1423E	1725D	S23	W90	04	5.7			9	9	E	HOLL	6003	
12	ADF	1432E	2118D	N31	W01	04	12.5	1	11	8	8	E	RAMY	6012	
12	ASR	1439E	1658D	N33	E90	04	19.7			9	9	E	HOLL		
12	APR	1439E	1751D	N29	E90	04	19.7	1		9	9	E	HOLL		
12	EPL	1509E	1604D	N29	E90	04	19.7			9	9	E	HOLL		
12	BSL	1512E	1530D	N24	E90	04	19.6			9	9	E	RAMY		
12	ASR	1751E	0019D	N29	E90	04	19.8			9	9	E	HOLL	6022	
12	SDF	2013E	1307D	S27	W26	04	10.8		15	0	0	E	HOLL		
12	SDF	2013E	1443D	N35	E10	04	13.6		11	0	0	E	HOLL		
12	SSB	2259		171	W04	04	18.3			0	0	E	HOLL		
13	ASR	0714E	1638D	N39	E90	04	20.6			9	9	E	SVTO	6022	
13	ASR	0714E	1638D	S13	E90	04	20.1			9	9	E	SVTO	6021	
13	AFS	0720E	1638D	N18	E06	04	13.8		01	9	9	E	SVTO	6023	
13	AFS	0730E	1638D	S07	E42	04	16.4		01	9	9	E	SVTO		
13	DSD	0920E	1638D	N29	E69	04	18.8		03	9	9	E	SVTO	6022	
13	ADF	1119E	1638D	N24	W42	04	10.2	1	12	9	9	E	SVTO	6007	
13	ADF	1120E	1159D	N25	W39	04	10.4	1	07	9	8	E	RAMY	6007	
13	ADF	1120E	1638D	S43	W19	04	11.9	1	10	9	9	E	SVTO	6009	
13	EPL	1123E	1520D	S54	E90	04	21.2			9	9	E	SVTO		
13	LPS	1309E	1402D	N27	E68	04	18.8			9	9	E	HOLL	6022	
13	ASR	1328E	0114D	N14	E75	04	19.2			9	9	E	HOLL	6021	
13	AFS	1347E	0114D	N17	E04	04	13.9		01	6	6	E	HOLL	6023	
13	AFS	1402E	0114D	N29	E70	04	19.1		03	8	8	E	HOLL	6022	
13	SDF	1420E	0732D	S29	W26	04	11.5		22	0	0	E	SVTO		
13	AFS	1426E	0114D	S09	E34	04	16.1		03	9	9	E	HOLL		
13	EPL	1447E	1505	S27	W90	04	6.6			9	9	E	SVTO		
13	EPL	1450E	1511D	S23	W90	04	6.7			9	9	E	HOLL		
13	BSD	1501	1508	N33	E71	04	19.3		05	9	9	E	SVTO	6022	Flare Associated
13	ASR	1505E	1939D	N31	E73	04	19.4			9	9	E	HOLL	6022	
13	SSB	1516		159	W01	04	18.0			0	0	E	HOLL		248 W90
13	ADF	1525E	1857D	N33	W21	04	12.0	2	14	9	9	E	HOLL	6012	

ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue	Red	Obs Type	Sta	NOAA/	Remarks
										Shift (.1 A)	Shift (.1 A)			Reg#	
13	DSD	1705E	1920D	N19	W06	04	13.2		03	9	9	E	HOLL	6017	
13	ADF	1714E	1933D	S33	E46	04	17.4	1	03	9	9	E	HOLL	6018	
13	ADF	1738E	0408D	N30	E70	04	19.2		14	9	9	E	PALE	6022	
13	DSD	1738E	0408D	N31	E84	04	20.4		03	9	9	E	PALE	6022	
13	AFS	1738E	0408D	N32	E78	04	19.9		03	9	9	E	PALE	6022	
13	AFS	1738E	0408D	S09	E38	04	16.6		02	9	9	E	PALE	6024	
13	BSD	1831E	1925D	N27	E66	04	18.9		11	9	9	E	HOLL	6022	Flare Associated
13	BSD	1831E	1925D	N27	E66	04	18.9		11	9	9	E	HOLL	6022	Flare Associated
13	BSD	1831	1914D	N30	E78	04	19.9		05	9	9	E	PALE	6022	Flare Associated
13	AFS	1920E	0114D	N22	W06	04	13.3		04	9	9	E	HOLL	6017	
13	CRN	2210E	2336D	S60	E90	04	21.8		22	7	9	E	HOLL		
14	AFS	0135E	0900D	N33	E69	04	19.5		01	9	9	E	LEAR	6022	
14	AFS	0138E	0900D	S32	E42	04	17.4		01	9	7	E	LEAR	6018	
14	ADF	0600E	0751D	N22	W52	04	10.2	1	06	8	7	E	SVTO	6007	
14	APR	0600E	0908D	N31	E90	04	21.3	2		9	9	E	SVTO	6022	
14	ASR	0600E	1625D	S31	W90	04	7.1			8	7	E	SVTO		
14	ADF	0710E	1625D	N37	E16	04	15.6	2	61	9	9	E	SVTO		
14	AFS	1050E	2119D	S34	E37	04	17.4		02	9	9	E	RAMY	6018	
14	AFS	1051E	2119D	S15	E69	04	19.7		03	9	9	E	RAMY	6021	
14	AFS	1052E	2119D	S10	E28	04	16.5		03	9	9	E	RAMY	6024	
14	AFS	1056E	2119D	N28	E61	04	19.2		04	9	9	E	RAMY	6022	
14	ADF	1057E	2119D	N27	E56	04	18.8	1	06	9	9	E	RAMY	6022	Flare Associated
14	ADF	1058E	2119D	N23	E66	04	19.5	1	09	9	9	E	RAMY	6022	
14	AFS	1106E	2119D	N16	W07	04	13.9		01	9	9	E	RAMY	6023	
14	AFS	1109E	2119D	N22	W13	04	13.5		02	9	9	E	RAMY	6017	
14	ADF	1110E	2119D	N23	W54	04	10.3	1	04	9	9	E	RAMY	6007	
14	SSB	1117		161	W14	04	19.1			0	0	E	RAMY		172 W25 221 W74
14	AFS	1210E	1625D	N16	W08	04	13.9		02	9	9	E	SVTO	6023	
14	AFS	1249E	2119D	N13	E42	04	17.7		02	9	9	E	RAMY	6025	
14	AFS	1308E	0102D	N16	W09	04	13.9		02	9	9	E	HOLL	6023	
14	ADF	1311E	1910D	S15	E62	04	19.2	1	06	9	9	E	HOLL	6021	
14	AFS	1314E	0102D	N26	E59	04	19.1		03	9	9	E	HOLL	6022	
14	DSD	1415E	1955D	S33	E32	04	17.1		03	9	9	E	HOLL	6018	
14	APR	1425E	1435D	N28	E90	04	21.6	2		9	9	E	HOLL		
14	AFS	1429E	0102D	S09	E25	04	16.5		02	9	9	E	HOLL	6024	
14	EPL	1429E	1507	N28	E90	04	21.6			9	9	E	HOLL		
14	EPL	1432E	1450D	N27	E90	04	21.6			9	9	E	RAMY		
14	EPL	1433	1503	N29	E90	04	21.7			9	9	E	SVTO		
14	AFS	1506E	0102D	N14	E39	04	17.6		01	9	9	E	HOLL		
14	AFS	1509E	1625D	S08	E25	04	16.5		03	9	9	E	SVTO	6024	
14	SSB	1511		187	W42	04	21.8			0	0	E	HOLL		
14	AFS	1550E	1625D	N14	E38	04	17.5		02	9	9	E	SVTO		
14	AFS	1905E	0102D	S16	E90	04	21.6		01	6	6	E	HOLL		
14	AFS	1915E	1917D	N29	E57	04	19.3		03	9	9	E	PALE	6022	
14	AFS	1915E	1917D	S32	E33	04	17.4		02	9	9	E	PALE	6018	
14	AFS	1918E	0102D	N13	E23	04	16.5		01	9	9	E	HOLL		
14	SDF	1920	2020D	N14	E37	04	17.6	2	06	9	9	E	HOLL	6025	
14	ADF	1920E	2020D	N14	E37	04	17.6	1	06	9	9	E	HOLL	6025	
14	DSD	1953	2152D	S31	E30	04	17.2		07	9	9	E	HOLL	6018	Flare Associated
14	AFS	1958E	0102D	S38	E33	04	17.5		01	9	9	E	HOLL	6018	
14	AFS	2010E	2013D	N13	E23	04	16.6		01	9	9	E	PALE		
15	LPS	0340E	0345D	N30	E55	04	19.5			9	9	E	PALE	6022	Flare Associated
15	LPS	0513E	1505D	N31	E55	04	19.5			9	9	E	SVTO	6022	Flare Associated
15	LPS	0518E	0850D	N31	E56	04	19.6			9	9	E	LEAR	6022	
15	BSD	0524E	0710D	N26	E70	04	20.7		10	9	9	E	SVTO		
15	AFS	0526E	1505D	S09	E16	04	16.4		03	9	9	E	SVTO	6024	
15	AFS	0830E	1505D	N10	E04	04	15.6		02	9	9	E	SVTO		
15	SSB	0850		168	W33	04	20.8			0	0	E	SVTO		
15	AFS	0925E	1505D	S13	E63	04	20.1		02	9	9	E	SVTO	6021	
15	ADF	1200E	1956D	S15	E56	04	19.7	1	05	9	9	E	RAMY	6021	
15	DSD	1200E	1956D	S15	E68	04	20.6		04	9	9	E	RAMY	6021	
15	AFS	1200E	1956D	S16	E63	04	20.3		03	9	9	E	RAMY	6021	
15	AFS	1200E	1956D	S31	E24	04	17.4		03	9	9	E	RAMY	6018	
15	SSB	1300		141	W08	04	18.6			0	0	E	RAMY		169 W36 214 W81
15	DSD	1459E	0126D	S31	E19	04	17.1		02	9	9	E	HOLL	6018	
15	ADF	1459E	1912D	S30	E23	04	17.4	1	04	9	9	E	HOLL	6018	
15	AFS	1504E	0126D	S14	E59	04	20.1		04	9	9	E	HOLL	6021	
15	ADF	1504E	0126D	S16	E49	04	19.3	1	05	9	9	E	HOLL	6021	

ACTIVE PROMINENCES AND FILAMENTS

APRIL 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	NOAA/USAF Sta Reg#	Remarks
15	ADF	1713E	0438D	N29	E44	04 19.2		07	9	9	E	PALE 6022	
15	DSD	1713E	0438D	N33	E45	04 19.3		03	9	9	E	PALE 6022	
15	ADF	1713E	0438D	N35	W43	04 12.3		05	9	9	E	PALE 6012	
15	ADF	1713E	0438D	N41	W44	04 12.1		08	9	9	E	PALE 6009	
15	DSD	1713E	0438D	S13	E57	04 20.0		02	9	9	E	PALE 6021	
15	DSD	1713E	0438D	S30	E23	04 17.5		02	9	9	E	PALE 6018	
15	ADF	1713E	0438D	S38	E37	04 18.7		08	9	9	E	PALE	
15	SSB	1745		167	W37	04 21.1			0	0	E	HOLL	186 W56 200 W70
15	ADF	2340E	0732D	N27	E34	04 18.6	1	15	9	9	E	LEAR 6022	
16	ASR	0258E	0438D	N26	E90	04 23.1			9	9	E	PALE	
16	AFS	0258E	0438D	N27	E33	04 18.7		08	9	9	E	PALE 6022	
16	ASR	0730E	1638D	N27	E90	04 23.3			9	9	E	SVTO	
16	DSD	0955E	1002D	N31	W41	04 13.2	1				V	KHAR	
16	SSB	1126		164	W44	04 21.8			0	0	E	RAMY	
16	ASR	1127E	1333D	N25	E90	04 23.4			9	9	E	RAMY	
16	ADF	1146E	2013D	N25	E42	04 19.7	1	11	9	9	E	RAMY 6022	
16	DSD	1355E	1843D	S32	E06	04 17.0		05	9	9	E	HOLL 6018	
16	ADF	1358E	1710D	S18	E40	04 19.6	1	06	7	8	E	HOLL 6021	
16	ADF	1359E	2223D	N26	E28	04 18.7	1	06	9	9	E	HOLL 6022	
16	ASR	1405E	1829D	N25	E90	04 23.5			8	8	E	HOLL	
16	ASR	1502E	1621D	N25	W90	04 9.6			9	9	E	HOLL 6007	
16	ASR	1510E	1612D	N25	W89	04 9.7			9	9	E	RAMY 6007	
16	BSL	1512	1538D	N25	W90	04 9.7			9	9	E	HOLL 6007	
16	BSL	1522E	1638D	N19	W90	04 9.8			9	9	E	SVTO 6007	
16	ASR	1621E	1830D	N34	E90	04 23.8			8	8	E	HOLL	
16	APR	1709E	1822D	N22	W90	04 9.8			9	9	E	HOLL 6007	
16	ADF	1715E	1915D	S17	E39	04 19.7	1	04	9	9	E	PALE 6021	
16	APR	1720E	1837D	N25	W90	04 9.7			9	9	E	RAMY 6007	
16	ADF	1730E	0003D	N28	E40	04 19.8	1	11	9	9	E	PALE 6022	
16	AFS	1745E	0003D	N22	W46	04 13.2		02	9	9	E	PALE 6017	
16	DSD	1855E	0003D	N31	E35	04 19.5		02	9	9	E	PALE 6022	
17	ADF	0019E	0456D	S16	E30	04 19.3	1	12	9	9	E	LEAR 6021	
17	ASR	0055E	0456D	N27	E90	04 24.0			9	9	E	LEAR 6029	
17	AFS	0125E	0456D	S29	E02	04 17.2		03	9	9	E	LEAR 6018	
17	SSB	0550		169	W59	04 23.3			0	0	E	SVTO	
17	ASR	0550E	0643D	N22	W90	04 10.3			9	9	E	SVTO 6007	
17	DSD	0648E	1112D	S30	E02	04 17.4		04	9	9	E	SVTO 6018	Flare Associated
17	DSD	0833E	0920D	S31	W01	04 17.3	1				V	KHAR	
17	DSD	0833E	0920D	S35	E03	04 17.6	1				V	KHAR	
17	DSD	0940E	0945D	S31	W01	04 17.3	1				V	KHAR	
17	ADF	1042E	1830D	N13	E11	04 18.3	1	06	8	8	E	RAMY 6025	
17	DSD	1046E	1630D	N29	E31	04 19.9		03	9	9	E	RAMY 6022	
17	ADF	1046E	1830D	N25	E29	04 19.7	1	24	9	9	E	RAMY 6022	
17	ADF	1054E	1058D	S17	E25	04 19.3	1	04	9	9	E	RAMY 6021	
17	AFS	1054E	2233D	S14	E34	04 20.0		04	9	9	E	RAMY 6021	
17	AFS	1100E	2233D	S33	E02	04 17.6		03	9	9	E	RAMY 6018	
17	DSD	1105E	1440D	N20	W54	04 13.3		03	9	9	E	RAMY 6017	
17	APR	1108E	2233D	N42	W88	04 10.2			9	9	E	RAMY 6014	
17	AFS	1110E	2233D	N21	E42	04 20.7		02	9	9	E	RAMY	
17	ADF	1115E	1830D	S49	E27	04 19.7	1	14	7	7	E	RAMY	
17	DSD	1213	1310D	S34	E02	04 17.7		03	9	9	E	RAMY 6018	Flare Associated
17	AFS	1356E	1407D	N21	E38	04 20.5		04	9	9	E	HOLL	
17	DSD	1400E	1615D	S31	W04	04 17.3		05	9	9	E	RAMY 6018	
17	AFS	1402E	1407D	N12	W31	04 15.2		02	9	9	E	HOLL 6026	
17	SDF	1436E	1517D	S29	E32	04 20.1	3	19	0	0	E	RAMY	
17	DSD	2008E	2035	S30	W07	04 17.3		06	9	9	E	RAMY 6018	
17	SDF	2200E	2200D	S20	W13	04 16.9		27	0	0	E	PALE	
17	BSL	2200	2226	N32	W90	04 10.8	1				C	VORO	
17	ADF	2212	0201D	N13	W03	04 17.7	1				C	VORO	
17	ADF	2212	0201D	N48	W23	04 16.0	1				C	VORO	
17	ADF	2258	0201D	S15	W38	04 15.1	1				C	VORO	
17	APR	2259	0201D	N69	W90	04 9.8	1				C	VORO	
17	APR	2259	0201D	S30	E90	04 25.0	1				C	VORO	
18	APR	0000	0201D	N43	W90	04 10.6	1				C	VORO	
18	ADF	0117	0201D	N28	E33	04 20.6	1				C	VORO	
18	AFS	0323E	0438D	N33	E14	04 19.2		04	8	9	E	PALE 6022	
18	ADF	0516E	1628D	N29	E11	04 19.1	1	06	9	9	E	SVTO 6022	

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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	NOAA/USAF Sta	Reg#	Remarks
18	AFS	0528E	1628D	S19	E44	04	21.6		02	9	9	E	SVTO	6031	
18	AFS	0616E	1502D	S09	W25	04	16.4		02	9	9	E	SVTO	6024	
18	AFS	0626E	1502D	N11	W40	04	15.2		02	9	9	E	SVTO	6026	
18	DSD	0740E	0755D	N35	E12	04	19.3	1				V	KHAR		
18	ADF	0800E	0818D	N30	E14	04	19.4	1				V	KHAR		
18	ASR	0831E	1318D	N21	E90	04	25.2			9	9	E	SVTO		
18	ADF	1057E	1919D	S42	E57	04	23.1	1	19	9	9	E	RAMY	6031	
18	AFS	1057E	2224D	S20	E40	04	21.5		03	9	9	E	RAMY	6031	
18	AFS	1103E	2224D	N25	E67	04	23.6		02	9	9	E	RAMY	6029	
18	AFS	1107E	2224D	N12	W39	04	15.5		02	9	9	E	RAMY	6026	
18	AFS	1109E	2224D	S08	W26	04	16.5		03	8	8	E	RAMY	6024	
18	ADF	1111E	2224D	N26	E15	04	19.6	1	28	9	9	E	RAMY	6022	
18	ADF	1114E	2224D	S13	E13	04	19.4	1	07	9	9	E	RAMY	6021	
18	APR	1123E	1934D	N45	W85	04	11.4	1		9	9	E	RAMY	6014	
18	ADF	1131E	2140D	S49	E13	04	19.6	1	17	9	9	E	RAMY		
18	SDF	1131E	2140D	S49	E13	04	19.6	3	17	9	9	E	RAMY		
18	ASR	1539E	1934D	N33	W87	04	11.7			9	9	E	RAMY	6012	
18	DSD	1555	1934D	S14	E00	04	18.7		03	9	9	E	RAMY	6021	
18	DSD	1607E	1647D	N27	E03	04	18.9		05	9	9	E	RAMY	6022	Flare Associated
18	DSD	1905E	2110D	S13	E10	04	19.5		11	9	9	E	PALE	6021	Flare Associated
18	ADF	1929E	0127D	N30	E07	04	19.4	1	05	9	9	E	HOLL	6022	
18	SSB	1940		100	W10	04	18.8			0	0	E	RAMY		130 W40 133 W44
18	ADF	2216	0201D	N03	E12	04	19.8	1				C	VORO		
18	ADF	2225	0201D	S52	E30	04	21.5	1				C	VORO		
18	APR	2230	0201D	N43	W90	04	11.5	1				C	VORO		
18	APR	2230	0201D	S38	E90	04	26.2	1				C	VORO		
18	ADF	2232	0201D	N38	W55	04	14.5	1				C	VORO		
18	ADF	2353	0201D	N33	E13	04	20.0	1				C	VORO		
19	ADF	0220E	0958D	N29	E00	04	19.1	1	05	9	9	E	LEAR	6022	
19	DSD	0237E	0323D	N29	W01	04	19.0		06	9	9	E	PALE	6022	
19	AFS	0250E	0958D	S13	E26	04	21.1		03	9	9	E	LEAR	6031	
19	ADF	0550E	1604D	N29	W03	04	19.0	1	06	9	9	E	SVTO	6022	
19	AFS	0550E	1604D	S14	E06	04	19.7		02	9	9	E	SVTO	6021	
19	AFS	0551E	1604D	N24	E58	04	23.7		03	7	7	E	SVTO	6029	
19	AFS	0551E	1604D	S30	W22	04	17.5		02	9	9	E	SVTO	6018	
19	AFS	0552E	1604D	N13	W52	04	15.3		02	9	9	E	SVTO	6026	
19	ASR	0835E	0958D	N11	E76	04	25.1			7	6	E	LEAR		
19	AFS	1110E	1725D	N12	W55	04	15.3		03	9	9	E	RAMY	6026	
19	ADF	1111E	2140D	N30	W04	04	19.1	1	06	9	9	E	RAMY	6022	
19	AFS	1114E	1734D	N22	E56	04	23.8		02	9	9	E	RAMY	6029	
19	AFS	1127E	1735D	S09	W41	04	16.4		02	9	9	E	RAMY	6024	
19	SSB	1132		460	W19	04	14.9			0	0	E	RAMY		109 W28 135 W55
19	ASR	1304E	1604D	N28	E90	04	26.6			9	9	E	SVTO		
19	APR	1408E	1431	N34	W90	04	12.4	2		9	9	E	RAMY	6012	
19	EPL	1408E	1738D	N34	W90	04	12.4	2		9	9	E	RAMY	6012	
19	ASR	1418E	1738D	S08	E90	04	26.3			9	9	E	RAMY		
19	EPL	1433E	1630D	N34	W90	04	12.4	2		9	9	E	HOLL	6012	
19	EPL	1433E	1604D	N31	W90	04	12.5			9	9	E	SVTO	6012	
19	AFS	1457E	1604D	N16	W41	04	16.5		02	9	9	E	SVTO	6027	
19	ADF	1502E	0033D	N28	W08	04	19.0	1	04	9	9	E	HOLL	6022	
19	SSB	1535		439	W01	04	16.7			0	0	E	HOLL		116 W37 134 W55
19	AFS	1650E	0323D	N30	E07	04	20.2		03	9	9	E	PALE	6022	
19	AFS	1720E	0323D	S13	E18	04	21.1		02	9	9	E	PALE	6021	
19	AFS	2320E	0950D	S12	W03	04	19.7		02	8	7	E	LEAR	6021	
19	AFS	2355E	0950D	S12	E14	04	21.0		02	8	7	E	LEAR	6032	
20	ASR	0001E	0950D	N27	E87	04	26.8			9	9	E	LEAR		
20	ADF	0128E	0351D	N16	W33	04	17.5	1	08	9	9	E	PALE	6025	
20	AFS	0128E	0351D	N16	W46	04	16.6		03	9	9	E	PALE	6027	
20	ADF	0128E	0351D	N16	W62	04	15.3		05	9	9	E	PALE	6026	
20	DSD	0128E	0351D	N26	W16	04	18.8		03	9	9	E	PALE	6022	
20	ADF	0128E	0351D	S34	W29	04	17.7		04	9	7	E	PALE	6018	
20	DSD	0418E	0950D	S13	E12	04	21.1		02	9	9	E	LEAR	6032	
20	ADF	0824	0852D	S13	W09	04	19.7	1				V	KHAR		
20	DSD	0932	0940	S36	W40	04	17.2	1				V	KHAR		
20	DSD	1014	1021D	S36	W40	04	17.2	1				V	KHAR		
20	AFS	1128E	1450D	N12	E61	04	25.1		02	9	9	E	SVTO	6033	
20	ADF	1128E	1450D	N15	E63	04	25.2	1	07	9	9	E	SVTO	6033	
20	AFS	1206E	2135D	N17	W51	04	16.6		03	9	9	E	RAMY	6027	

ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMP CMD	Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	NOAA/USAF Sta Reg#	Remarks
20	AFS	1216E	2135D	N10	E62	04	25.2		02	9	9	E	RAMY 6033	
20	ADF	1217E	2135D	N17	E69	04	25.7	1	14	9	9	E	RAMY 6033	
20	ADF	1223E	1958D	N19	W69	04	15.2	1	07	9	9	E	RAMY 6026	
20	SSB	1230		434	W07	04	18.0			0	0	E	RAMY	448 W21 100 W33
20	SSB	1232		110	W43	04	21.3			0	0	E	RAMY	
20	DSD	1317E	1719D	S32	W44	04	17.1		03	9	9	E	HOLL 6018	
20	DSD	1330E	2249D	S16	W11	04	19.7		02	9	9	E	HOLL 6021	
20	ADF	1349E	0129D	S13	E06	04	21.0	1	12	9	9	E	HOLL 6032	
20	ADF	1359E	2135D	N34	W17	04	19.2	1	13	9	9	E	RAMY 6022	
20	AFS	1414E	2010D	S08	W57	04	16.3		02	9	9	E	RAMY 6024	
20	ADF	1443E	1727D	N26	E32	04	23.1	1	05	9	9	E	HOLL 6029	
20	SSB	1730		105	W41	04	21.1			0	0	E	HOLL	140 W76
20	DSD	1730E	2249D	N30	W14	04	19.6		02	9	9	E	HOLL 6022	
20	ADF	1826E	2209D	S36	W42	04	17.4	3	07	9	9	E	HOLL 6018	Flare Associated
20	SSB	2122		422	W20	04	19.2			0	0	E	PALE	445 W10
20	DSD	2222E	0407D	N34	W22	04	19.2		04	8	6	E	PALE 6022	
20	ADF	2222E	0407D	S13	E05	04	21.3		06	9	9	E	PALE 6032	
20	AFS	2222E	0407D	S17	W16	04	19.7		02	9	9	E	PALE 6021	
20	AFS	2222E	0407D	S25	E07	04	21.5		05	8	8	E	PALE 6027	
20	ADF	2222E	0407D	S27	E10	04	21.7		11	8	9	E	PALE 6031	
21	AFS	0005E	0957D	N10	E56	04	25.2		04	8	6	E	LEAR	
21	AFS	0005E	0957D	S16	W17	04	19.7		04	6	5	E	LEAR 6021	
21	AFS	0010E	0957D	N20	W06	04	20.5		02	6	4	E	LEAR 6030	
21	AFS	1110E	1835D	N14	E48	04	25.1		03	9	9	E	RAMY 6033	
21	DSD	1110E	2158D	S32	W50	04	17.5		03	9	9	E	RAMY 6018	
21	ADF	1110E	2159D	N33	W26	04	19.4	1	08	9	9	E	RAMY 6022	
21	AFS	1218E	2159D	S13	W08	04	20.9		02	9	9	E	RAMY 6032	
21	SSB	1229		104	W50	04	21.8			0	0	E	RAMY	
21	SSB	1229		417	W03	04	20.2			0	0	E	RAMY	436 W22 449 W35
21	AFS	1322E	0125D	S14	W20	04	20.0		03	9	8	E	HOLL 6021	
21	ADF	1330E	2046D	N32	W19	04	20.0	1	06	9	9	E	HOLL 6022	
21	AFS	1410E	2021D	N16	W65	04	16.7		02	8	6	E	RAMY 6027	
21	ADF	1414E	2053D	S33	W51	04	17.5	1	03	9	9	E	HOLL 6018	
21	DSD	1426E	0125D	N28	W36	04	18.8		03	9	9	E	HOLL 6022	
21	ADF	1446E	0125D	N18	W13	04	20.6	1	04	9	9	E	HOLL 6030	
21	AFS	1446E	0125D	N20	W14	04	20.5		03	9	9	E	HOLL 6030	
21	SSB	1610		105	W53	04	22.1			0	0	E	HOLL	
21	AFS	1730E	0438D	S13	W09	04	21.0		02	9	9	E	PALE 6032	
21	ADF	1748E	0438D	S13	W04	04	21.4	1	04	9	9	E	PALE 6032	
21	AFS	1800E	2230D	S33	W56	04	17.3		03	9	9	E	PALE 6018	
21	ADF	1805E	0200D	N36	E26	04	23.8	2	13	9	9	E	PALE 6029	
21	AFS	1815E	0200D	N30	W33	04	19.2		02	9	9	E	PALE 6022	
21	DSD	1950E	2130D	S15	W28	04	19.7		06	9	9	E	RAMY 6021	Flare Associated
21	DSD	2000E	2230D	S16	W26	04	19.9		12	9	9	E	PALE 6021	Flare Associated
22	AFS	0145E	0956D	N15	E42	04	25.2		04	9	9	E	LEAR 6038	
22	AFS	0159E	0438D	N16	E42	04	25.3		02	9	9	E	PALE 6038	
22	AFS	0200E	0956D	S13	W14	04	21.0		03	9	9	E	LEAR 6032	
22	AFS	0204E	0956D	N20	W19	04	20.6		04	9	9	E	LEAR 6030	
22	ADF	0310E	0438D	N19	W22	04	20.4	2	03	9	9	E	PALE 6030	
22	DSD	0738E	0747D	N27	W46	04	18.7	1				V	KHAR	
22	DSD	0745E	0747D	N35	W34	04	19.6	1				V	KHAR	
22	ADF	0812E	0830D	N18	W27	04	20.3	1				V	KHAR	
22	ADF	1119E	2157D	S34	W64	04	17.4	1	04	9	9	E	RAMY 6018	
22	ADF	1126E	2157D	S12	W34	04	19.9	1	04	9	9	E	RAMY 6021	
22	DSD	1140E	1630D	N20	W27	04	20.4		04	9	9	E	RAMY 6030	
22	DSD	1210E	1635D	N28	W40	04	19.4		03	9	9	E	RAMY 6022	
22	DSD	1310E	2354D	N20	W29	04	20.3		05	9	9	E	HOLL 6030	
22	DSD	1332E	2354D	N27	W49	04	18.7		08	8	7	E	HOLL 6022	
22	SSB	1410		437	W37	04	19.6			0	0	E	RAMY	104 W64
22	AFS	1447E	2354D	S13	W22	04	20.9		03	9	9	E	HOLL 6032	
22	ADF	1447E	2354D	S18	W26	04	20.6	1	08	9	9	E	HOLL 6032	
22	ADF	1700E	0438D	S19	W24	04	20.9	1	03	9	6	E	PALE 6032	
22	AFS	1715E	0126D	N35	W36	04	19.8		03	9	9	E	PALE 6022	
22	DSD	1725	1858D	N20	W29	04	20.5		04	9	9	E	RAMY 6030	
22	DSD	2120E	0115D	N20	W31	04	20.5		02	9	9	E	PALE 6030	
22	AFS	2125E	0133D	N18	E31	04	25.2		02	9	9	E	PALE 6038	
22	ADF	2231	0031D	N32	W39	04	19.8	1				C	VORO	
22	APR	2231	0031D	N45	W90	04	15.5	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	NOAA/USAF Sta	Reg#	Remarks
22	ADF	2233	0031D	N03	W47	04	19.4	1				C	VORO		
22	ADF	2236	0031D	S30	E22	04	24.7	1				C	VORO		
22	APR	2240	0031D	N63	E90	04	30.9	1				C	VORO		
22	ADF	2241	0031D	N23	W52	04	18.9	1				C	VORO		
22	ADF	2243	0001D	S08	W18	04	21.6	1				C	VORO		
22	DSD	2245E	0135D	S08	E44	04	26.2		03	9	9	E	PALE	6034	
22	ADF	2246	0001D	N32	W39	04	19.9	1				C	VORO		
22	ADF	2246	0001D	S55	W20	04	21.2	1				C	VORO		
22	APR	2250	0001D	N48	E90	04	30.5	1				C	VORO		
22	APR	2326	0001D	N35	W90	04	15.8	1				C	VORO		
22	ADF	2330E	0955D	S11	W27	04	20.9	1	08	9	9	E	LEAR	6032	
22	ASR	2333E	0842D	N12	E90	04	29.8			9	9	E	LEAR	6040	
23	BSL	0002	0030D	S36	W90	04	15.8	1				C	VORO		
23	ADF	0205E	0438D	N35	W44	04	19.6	2	10	9	9	E	PALE	6022	
23	AFS	0425E	0840D	S19	W22	04	21.5		02	9	9	E	LEAR	6031	
23	DSD	0835E	0955D	S11	W52	04	19.4		04	9	9	E	LEAR	6021	
23	DSD	0848E	0955D	N15	E22	04	25.0		04	9	9	E	LEAR	6038	
23	AFS	1000E	1610D	S14	W33	04	20.9		01	9	9	E	SVTO	6032	
23	ADF	1010E	1610D	S12	W33	04	20.9	1	08	9	9	E	SVTO	6032	
23	ADF	1010E	1610D	S16	W29	04	21.2	1	11	9	9	E	SVTO	6032	
23	AFS	1023E	1610D	N19	E31	04	25.8		01	9	9	E	SVTO	6038	
23	ADF	1043E	2220D	N16	E69	04	28.7	1	08	9	9	E	RAMY	6040	
23	DSD	1049E	1703D	N16	E19	04	24.9		03	9	9	E	RAMY	6038	
23	DSD	1110E	1654D	N35	W56	04	19.0		04	9	9	E	RAMY	6022	
23	ADF	1117E	1552D	S11	E80	04	29.5	1	12	9	9	E	RAMY	6027	
23	DSD	1147E	1550D	N11	W33	04	21.0		07	9	9	E	RAMY	6032	Flare Associated
23	AFS	1450E	0104D	N22	W40	04	20.5		02	7	7	E	HOLL	6030	
23	DSD	1503E	0104D	S13	W37	04	20.8		02	9	9	E	HOLL	6032	
23	DSD	1540E	0104D	S08	E74	04	29.2		05	9	9	E	HOLL	6039	
23	AFS	1542E	0109	N13	E19	04	25.1		02	8	8	E	HOLL	6038	
23	DSD	1555E	1703D	S06	E69	04	28.8		05	9	9	E	RAMY	6039	
23	DSD	1634E	0104D	S21	W32	04	21.2		04	9	9	E	HOLL	6031	
23	DSD	1635E	0104D	S08	E32	04	26.1		05	9	9	E	HOLL	6034	
23	ADF	1636E	0104D	S25	E24	04	25.5	1	05	9	9	E	HOLL	6036	
23	AFS	1636E	0104D	S29	E29	04	26.0		02	8	8	E	HOLL	6036	
23	ADF	1707E	2149D	S10	W54	04	19.6	1	04	9	9	E	RAMY	6021	
23	SDF	1707E	2149D	S10	W54	04	19.6	3	04	9	9	E	RAMY	6021	
23	SSB	1715		418	W33	04	22.3			0	0	E	RAMY		430 W45 440 W56
23	SSB	1718		108	W83	04	24.5			0	0	E	RAMY		
23	AFS	1728E	0143D	N15	E18	04	25.1		02	9	9	E	PALE	6038	
23	AFS	1728E	0143D	N20	W43	04	20.4		04	9	9	E	PALE	6030	
23	ADF	1728E	0143D	N26	W12	04	22.8	1	05	9	9	E	PALE	6029	
23	DSD	1728E	0143D	N29	E35	04	26.5		04	9	9	E	PALE	6037	
23	ADF	1728E	0143D	N31	W46	04	20.1	1	08	9	9	E	PALE	6022	
23	AFS	1728E	0143D	N32	W52	04	19.6		02	9	7	E	PALE	6022	
23	ADF	1728E	0143D	S12	W51	04	19.9		07	9	9	E	PALE	6021	
23	AFS	1728E	0143D	S13	W37	04	20.9		03	9	9	E	PALE	6032	
23	AFS	1728E	0143D	S14	W55	04	19.6		04	9	9	E	PALE	6021	
23	SSB	1801		434	W19	04	21.1			0	0	E	PALE		453 W03
23	ADF	2201	0151D	N32	W55	04	19.6	1				C	VORO		
23	ADF	2201	0151D	S10	W30	04	21.7	1				C	VORO		
23	ADF	2208	0151D	S30	E10	04	24.7	1				C	VORO		
23	ADF	2208	0151D	S41	E14	04	25.1	1				C	VORO		
23	ADF	2208	0151D	S55	W40	04	20.5	1				C	VORO		
23	APR	2209	0151D	N45	W90	04	16.4	1				C	VORO		
23	ADF	2218	0151D	S25	E37	04	26.8	1				C	VORO		
23	APR	2223	0151D	S15	E90	04	30.7	1				C	VORO		
23	ADF	2238	0151D	N05	W63	04	19.2	1				C	VORO		
23	AFS	2330E	0954D	N09	E14	04	25.0		02	8	7	E	LEAR	6033	
23	ADF	2335E	0954D	S13	W33	04	21.5	1	07	9	9	E	LEAR	6032	
23	APR	2350	0151D	N64	E90	05	2.0	1				C	VORO		
24	SDF	0017E	0026D	S27	E33	04	26.6		05	0	0	E	LEAR		
24	AFS	0109E	0954D	N15	E15	04	25.2		02	9	9	E	LEAR	6038	
24	AFS	0135E	0954D	S42	W29	04	21.7		02	9	8	E	LEAR		
24	EPL	0830E	0910	N43	W90	04	16.9	3				V	KHAR		
24	AFS	1144E	2152D	N10	E56	04	28.7		02	9	9	E	RAMY	6040	
24	AFS	1145E	2152D	S07	E63	04	29.2		02	9	9	E	RAMY	6039	
24	AFS	1148E	2152D	N14	E08	04	25.1		04	9	9	E	RAMY	6038	

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
24	ADF	1151E	2007D	N26	E31	04 26.9	1	08	9	9	E	RAMY	6037	
24	ADF	1205E	2152D	S04	W39	04 21.6	1	19	9	9	E	RAMY	6032	
24	ADF	1449E	2130D	N38	W68	04 19.1	1	28	9	9	E	HOLL	6022	
24	ADF	1541E	1843D	S14	W42	04 21.5	1	05	9	9	E	HOLL	6032	
24	ADF	1553E	1844D	S16	E24	04 26.5	1	05	9	9	E	HOLL		
24	SSB	1646		400	W28	04 24.7			0	0	E	RAMY		416 W44 427 W55
24	SSB	1648		439	W67	04 21.2			0	0	E	RAMY		102 W90
24	SSB	1714		421	W49	04 22.9			0	0	E	HOLL		428 W56 437 W65
24	BSD	1728	1742D	N41	W60	04 19.8		09	9	9	E	HOLL	6022	Flare Associated
24	SDF	1801E	2243	S24	E43	04 28.1		06	0	0	E	PALE		
24	AFS	1804E	0329D	N15	E04	04 25.0		02	9	9	E	PALE	6038	
24	AFS	1804E	0329D	N20	W57	04 20.4		04	9	9	E	PALE	6030	
24	ADF	1804E	0329D	N31	W62	04 19.9		04	8	9	E	PALE	6022	
24	AFS	1804E	0329D	N33	W68	04 19.3		03	8	9	E	PALE	6022	
24	DSD	1804E	0329D	S04	E59	04 29.2		02	9	9	E	PALE	6039	
24	ADF	1804E	0329D	S12	W72	04 19.3		07	9	9	E	PALE	6021	
24	ADF	1804E	0329D	S13	W47	04 21.2		06	9	9	E	PALE	6032	
24	ASR	2255E	0329D	N33	W90	04 17.8			9	9	E	PALE	6022	
24	ASR	2310E	0950D	N32	W90	04 17.8			9	9	E	LEAR	6022	
24	AFS	2328E	0950D	N15	E02	04 25.1		03	9	9	E	LEAR	6038	
25	AFS	0717E	0838D	N15	W03	04 25.1		03	9	9	E	SVTO	6038	
25	AFS	0845E	0950D	S05	E49	04 29.0		04	9	9	E	LEAR	6039	
25	SDF	0913E	2248D	S25	E40	04 28.5	3	52	0	0	E	LEAR		
25	ASR	1137E	2119D	N30	W88	04 18.6			9	9	E	RAMY	6022	
25	ADF	1137E	2119D	N35	W74	04 19.6	1	17	9	9	E	RAMY	6022	
25	AFS	1153E	1702D	S13	W60	04 21.0		03	9	9	E	RAMY	6032	
25	AFS	1154E	1702D	S12	W73	04 20.0		03	9	9	E	RAMY	6021	
25	AFS	1230E	1628D	N07	E50	04 29.3		02	9	9	E	RAMY	6039	
25	SSB	1241		372	W11	04 20.1			0	0	E	RAMY		418 W57 427 W66
25	ASR	1309E	0119D	N31	W85	04 18.8			9	9	E	HOLL	6022	
25	AFS	1316E	0119D	N15	W03	04 25.3		01	8	8	E	HOLL	6038	
25	ADF	1325E	0119D	S07	E01	04 25.6	1	06	9	9	E	HOLL	6034	
25	ADF	1329E	2341D	N24	E22	04 27.3	1	10	8	8	E	HOLL		
25	SSB	1339		372	W12	04 20.1			0	0	E	HOLL		418 W58
25	AFS	1608E	2344D	S17	W53	04 21.6		02	7	7	E	HOLL	6031	
25	ASR	1643E	0339D	N30	W80	04 19.4	1		9	9	E	PALE	6022	
25	AFS	1657E	2346D	S12	W79	04 19.7		02	7	7	E	HOLL	6021	
25	AFS	1725E	2356D	N25	W28	04 23.5		02	6	6	E	HOLL	6029	
25	DSD	1806E	2255D	N13	W14	04 24.7		02	9	9	E	HOLL	5938	Flare Associated
25	ASR	2309E	0953D	N32	W90	04 18.8			9	9	E	LEAR	6022	
25	ASR	2323E	0953D	S13	W85	04 19.6			9	9	E	LEAR	6021	
25	ASR	2335E	2347D	N40	W90	04 18.6			8	9	E	HOLL	6022	
26	LPS	0005	0119D	N40	W90	04 18.7			9	9	E	HOLL	6022	
26	LPS	0018E	0155D	N36	W90	04 18.8			9	9	E	LEAR	6022	
26	LPS	0105E	0300D	N32	W90	04 18.9			9	9	E	PALE	6022	
26	ASR	0331E	0339D	S12	W90	04 19.4	1		9	9	E	PALE	6021	
26	ASR	1300E	0133D	N31	W90	04 19.4			9	9	E	HOLL	6022	
26	APR	1300E	1405D	N35	W90	04 19.3	1		6	6	E	HOLL	6022	
26	LPS	1316E	1648D	N34	W90	04 19.4	1		9	9	E	HOLL	6022	
26	LPS	1320E	1735D	N33	W90	04 19.4			9	9	E	RAMY	6022	
26	ASR	1327E	2159D	N22	W76	04 20.7			9	9	E	RAMY	6030	Flare Associated
26	ASR	1329E	2159D	N37	W90	04 19.3			9	9	E	RAMY	6022	
26	AFS	1330E	2159D	N26	E01	04 26.6		02	9	9	E	RAMY	6037	
26	DSD	1331E	1512D	N21	W01	04 26.5		04	9	9	E	RAMY	6037	
26	AFS	1336E	2159D	N16	W19	04 25.1		03	9	9	E	RAMY	6038	
26	ADF	1340E	2159D	S11	W73	04 21.1	1	07	9	9	E	RAMY	6021	
26	ASR	1413E	0133D	S10	W90	04 19.8			6	6	E	HOLL	6021	
26	LPS	1414E	1650D	N32	W90	04 19.5			9	9	E	SVTO	6022	
26	ADF	1430E	2131D	S12	W69	04 21.4	1	06	9	9	E	HOLL	6032	
26	AFS	1433E	0133D	S19	W16	04 25.4		02	9	9	E	HOLL		
26	AFS	1433E	2133D	S19	W02	04 26.4		02	9	9	E	HOLL	6034	
26	ASR	1452E	0133D	N24	W78	04 20.6			9	9	E	HOLL	6030	Flare Associated
26	AFS	1517E	2159D	S18	W01	04 26.6		02	9	9	E	RAMY	6043	
26	ASR	1517E	1535D	N37	W90	04 19.4			9	9	E	SVTO	6022	
26	ADF	1600E	1758D	N26	E15	04 27.8	1	04	7	7	E	HOLL		
26	SSB	1619		370	W24	04 21.3			0	0	E	HOLL		416 W70
26	SSB	1626		422	W76	04 24.6			0	0	E	RAMY		
26	LPS	1648E	1650D	N36	W90	04 19.5	1		9	9	E	PALE	6022	

ACTIVE PROMINENCES AND FILAMENTS

APRIL 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
26	LPS	1649E	1758D	N39	W79	04 20.3	1		8	8	E	HOLL	6022	
26	LPS	1650E	1848D	N37	W90	04 19.4			9	9	E	RAMY	6022	
26	AFS	1811E	2136D	N24	W78	04 20.7		02	9	9	E	HOLL	6030	
26	AFS	1827E	0133D	N27	E00	04 26.8		02	6	6	E	HOLL	6037	
26	AFS	1829E	0025D	N03	W09	04 26.1		01	7	7	E	HOLL		
26	SDF	1918E	2140D	S58	W68	04 20.9		14	0	0	E	HOLL		
26	BSD	1937E	1951	N21	W77	04 20.9		07	9	9	E	RAMY	6030	Flare Associated
26	BSL	1951	2049D	N21	W77	04 20.9			9	9	E	RAMY	6030	Flare Associated
26	DSD	2120E	2351D	N27	W03	04 26.6		03	9	9	E	HOLL	6037	
26	AFS	2140E	0133D	S18	W06	04 26.4		02	9	9	E	HOLL	6043	
26	AFS	2205E	0023D	N27	W42	04 23.6		02	9	9	E	HOLL	6029	
26	BSD	2230E	2336D	N23	W81	04 20.7		02	9	9	E	PALE	6030	
26	ASR	2310E	0940D	N21	W90	04 20.1			9	9	E	LEAR	6030	
26	AFS	2320E	0940D	S19	W20	04 25.4		02	9	9	E	LEAR	6042	
26	ASR	2352E	0940D	S10	W90	04 20.2			9	9	E	LEAR	6032	
27	ASR	0330E	0340D	N12	E30	04 29.4	1		9	9	E	PALE	6021	
27	AFS	0552E	1704D	S20	W23	04 25.5		03	9	9	E	SVTO	6042	
27	ASR	0614E	1704D	N20	W90	04 20.4			9	9	E	SVTO	6030	
27	ASR	0620E	1704D	S16	W90	04 20.4			9	9	E	SVTO	6032	
27	ASR	0940E	1704D	N32	W90	04 20.3			9	9	E	SVTO	6022	
27	ASR	1304E	0137D	S11	W90	04 20.8			4	6	E	HOLL	6032	
27	AFS	1312E	0137D	S19	W29	04 25.3		02	9	9	E	HOLL	6042	
27	ASR	1319E	0137D	N21	W90	04 20.6			8	8	E	HOLL	6030	
27	DSD	1327E	1643D	S17	W16	04 26.3		02	9	9	E	HOLL	6043	
27	SSB	1330		366	W32	04 22.3			0	0	E	SVTO		
27	SSB	1414		353	W19	04 23.5			0	0	E	HOLL		380 W46
27	APR	1432E	1704D	S22	E90	05 4.5	1		9	9	E	SVTO		
27	AFS	1445E	2220D	S20	W29	04 25.4		02	9	9	E	RAMY	6042	
27	ASR	1446E	2220D	S12	W90	04 20.8			9	9	E	RAMY	6032	
27	ASR	1610E	2220D	N22	W90	04 20.7			9	9	E	RAMY	6030	
27	ADF	1642E	2019D	S13	W18	04 26.3	1	07	9	9	E	HOLL	6034	
27	AFS	1829E	0025D	N03	W09	04 27.1		01	7	7	E	HOLL		
27	AFS	1836E	2220D	N27	W13	04 26.8		03	9	9	E	RAMY	6037	
27	ASR	1950	1953D	S13	W90	04 21.0			9	9	E	RAMY	6021	
27	APR	2240E	2256D	N32	W90	04 20.8	2		9	9	E	HOLL		
27	ADF	2253	0200D	N27	W58	04 23.4	1				C	VORO		
27	ADF	2254	0200D	S26	W52	04 23.9	1				C	VORO		
27	ADF	2301	0200D	N37	W60	04 23.1	1				C	VORO		
27	SDF	2302E	1339D	S14	W50	04 24.2		14	0	0	E	HOLL		
27	SDF	2302E	1339D	S42	W42	04 24.5		36	0	0	E	HOLL		
27	APR	2327	0200D	N53	W90	04 20.3	1				C	VORO		
27	APR	2328	0200D	S03	W90	04 21.2	1				C	VORO		
28	DSD	0029	0830D	S33	W21	04 26.3		02	9	9	E	LEAR	6042	
28	ASR	0830E	0952D	S21	W90	04 21.4			9	9	E	LEAR	6031	
28	AFS	0835E	1649D	S03	E08	04 28.9		02	9	9	E	SVTO	6039	
28	DSD	0935E	1014D	N12	W42	04 25.2		04	9	9	E	SVTO	6033	
28	AFS	1049E	2213D	S19	W38	04 25.5		03	9	9	E	RAMY	6042	
28	ASR	1049E	2213D	S19	W85	04 22.0			9	9	E	RAMY	6031	
28	ADF	1107E	1649D	N16	W45	04 25.0	1	09	9	8	E	SVTO	6038	
28	ADF	1150E	2213D	S09	E08	04 29.1	1	05	9	9	E	RAMY	6039	
28	SSB	1325		343	W22	04 25.2			0	0	E	RAMY		371 W50
28	ADF	1408E	0013D	S18	W39	04 25.6	1	05	9	9	E	HOLL	6042	
28	ADF	2229	0200D	S28	E57	05 3.4	1				C	VORO		
28	APR	2240	0200D	N23	E90	05 5.9	1				C	VORO		
29	BSD	0017E	0605D	S22	W44	04 25.6		03	9	9	E	LEAR	6042	
29	APR	0029	0200D	N36	E90	05 6.2	1				C	VORO		
29	DSD	0236E	0309D	N10	W02	04 28.9		02	9	9	E	PALE	6040	
29	ADF	0236E	0309D	N14	W53	04 25.1	1	05	9	9	E	PALE	6033	
29	ADF	0236E	0309D	N28	W19	04 27.6		08	8	6	E	PALE		
29	ADF	0236E	0309D	S09	E69	05 4.3		06	9	8	E	PALE		
29	AFS	0236E	0309D	S21	W48	04 25.4		03	9	9	E	PALE	6042	
29	AFS	0259E	0939D	S20	W50	04 25.3		05	9	9	E	LEAR	6042	
29	AFS	0605E	1712D	S20	W49	04 25.5		02	9	9	E	SVTO	6042	
29	AFS	0612E	1712D	S20	W36	04 26.5		02	9	9	E	SVTO	6043	
29	DSD	0755	0800D	S09	E67	05 4.3	1				V	KHAR		
29	AFS	0928E	1712D	S08	E62	05 4.0		01	9	9	E	SVTO		
29	ADF	1139E	2212D	N26	E50	05 3.4	1	06	9	9	E	RAMY	6045	

ACTIVE PROMINENCES AND FILAMENTS

APRIL 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	NOAA/USAF Sta Reg#	Remarks
29	DSD	1144E	1626D	S22	W49	04 25.7		05	9	9	E	RAMY 6042	
29	DSD	1158E	1712D	S24	W51	04 25.5		05	9	9	E	SVTO 6042	
29	ADF	1222E	1931D	N17	W57	04 25.2	1	09	8	8	E	RAMY 6038	
29	ADF	1350E	1626D	N28	W38	04 26.6	1	15	9	9	E	RAMY 6037	
29	DSD	1655E	2014D	S07	W12	04 28.8		03	9	9	E	RAMY 6039	
29	AFS	1735E	1845D	N17	W61	04 25.1		02	8	9	E	PALE 6038	
29	AFS	1742E	1845D	S19	W45	04 26.3		02	9	9	E	PALE 6043	
29	DSD	1754E	0439D	S06	W09	04 29.1		04	9	9	E	PALE 6039	
29	ADF	1827E	1845D	N22	W59	04 25.2	1	08	9	9	E	PALE 6037	
29	APR	2225	0200D	S60	W90	04 22.0	1				C	VORO	
29	SSB	2233		317	W14	04 28.6			0	0	E	HOLL	350 W47
29	ADF	2233	0200D	N23	W54	04 25.8	1				C	VORO	
29	APR	2235	0200D	S39	W90	04 22.6	1				C	VORO	
29	ADF	2307	0200D	N52	W08	04 29.3	1				C	VORO	
29	ADF	2310E	2309D	N23	W65	04 24.9	1	03	8	8	E	HOLL 6038	
29	APR	2329	0200D	N39	E90	05 7.3	1				C	VORO	
30	ASR	0006E	0846D	S16	E90	05 6.8			9	9	E	LEAR	
30	AFS	0245E	0846D	S10	E52	05 4.0		02	9	9	E	LEAR 6046	
30	AFS	0247E	0846D	S19	W50	04 26.3		02	9	9	E	LEAR 6043	
30	ASR	0505E	1420D	S12	E90	05 7.0			9	9	E	SVTO	
30	AFS	0506E	1714D	S21	W64	04 25.3		02	9	9	E	SVTO 6042	
30	AFS	0507E	1714D	S08	E51	05 4.0		02	9	9	E	SVTO 6046	
30	SSB	0508		316	W17	04 29.0			0	0	E	SVTO	
30	DSD	0540E	0846D	S19	W52	04 26.3		03	9	9	E	LEAR 6043	
30	APR	0718E	1527D	N19	W90	04 23.4	1		8	7	E	SVTO	
30	ADF	0809E	0820	N13	W20	04 28.8	1				V	KHAR	
30	AFS	0940E	1714D	N14	E26	05 2.4		02	8	8	E	SVTO	
30	AFS	1053E	2213D	S10	E48	05 4.1		02	9	9	E	RAMY 6046	
30	AFS	1058E	2213D	S19	W65	04 25.5		03	9	9	E	RAMY 6043	
30	DSD	1102E	1425D	S06	W22	04 28.8		03	7	7	E	RAMY 6039	
30	DSD	1103E	1430D	N16	W70	04 25.1		04	9	9	E	RAMY 6038	
30	ADF	1108E	2213D	N26	W49	04 26.6	1	21	9	9	E	RAMY 6037	
30	ASR	1210E	1649D	N22	W84	04 24.0			9	9	E	RAMY 6038	
30	ADF	1330E	0121D	S10	E44	05 3.9	1	26	9	9	E	HOLL 6046	
30	SSB	1644		313	W20	04 29.7			0	0	E	RAMY	
30	DSD	1658E	0432D	S20	W58	04 26.3		02	9	9	E	PALE 6043	
30	AFS	1658E	0432D	S21	W71	04 25.3		02	9	9	E	PALE 6042	
30	AFS	1703E	0432D	S10	E45	05 4.1		02	8	7	E	PALE 6046	
30	AFS	1730E	0432D	S19	W58	04 26.3		02	9	9	E	PALE 6043	
30	ADF	1739E	0432D	N16	W14	04 29.7	1	08	9	9	E	PALE 6040	
30	SSB	1838		318	W26	04 29.4			0	0	E	HOLL	354 W62
30	AFS	1912E	2031D	S02	W01	04 30.7		01	8	8	E	RAMY	

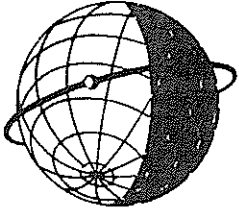
ADF = Active Dark Filament BSL = Bright Surge on Limb LPS = Loops
 AFS = Arch Filament System CAP = CAP Prominence (Tandberg-Hanssen) MDP = Mound Prominence
 APR = Active Prominence CRN = Coronal Rain SDF = Sudden Disappearing Filament
 ASR = Active Surge Region DSD = Dark Surge on Disk SPY = Spray
 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.

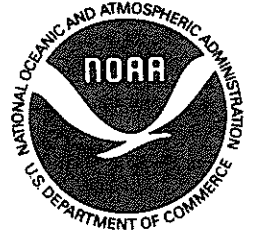
The EXTENT field for limb events is the radial extent above the limb in hundredths of solar radius. For disk events this field contains the heliographic extent in whole degrees.

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.



WORLD DATA CENTER A
FOR
SOLAR-TERRESTRIAL PHYSICS



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

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