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Data for April 1991

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H α SOLAR FLARES

APRIL 1991

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/	CMP	Dur	Imp	Obs	Time	Area Measurement		Remarks		
								USAF Region						Mo	Day		(Min)	Opt
0001	LEAR	01	0121	0123	0143	N09	E58	6565	04	5.4	22	SF	3	E	25		F	
0002	VORO	01	0155	0159	0205	S16	W52	6558	03	28.2	10	SF	1	C	0159	27	0.4	DIJ
0003	LEAR	01	0344	0352	0356	S10	E28	6563	04	3.2	12	SF	3	E		48		
0004	LEAR	01	0507	0540	0551	N13	E25	6562	04	3.1	44	SF	3	E		60		
0005	ABST	01	0610	0613	0625	S11	W57	6558	03	28.1	15	1N		C	0613	131	2.4	E
0006	ABST	01	0612	0614	0620	N14	E24	6562	04	3.1	8	SN		C	0614	131	1.5	E
0007		01	0618*	06525	0755	S12	W59	6558	03	27.9	97	1N C 5.1				134	2.2	E
	LEAR	01	0618	0656	0827	S12	W58	6558	03	28.0	129	1F C 5.1	3	E		187		
	PEKG	01	0632	0652	0735	S14	W60	6558	03	27.8	63	1B		P	0652	168	3.4	E
	KANZ	01	0632	0656	0802	S13	W57	6558	03	28.1	90	1F	2	V				
	URUM	01	0645	0657	0735	S11	W62	6558	03	27.7	50	SN		C		48	1.0	E
0008		01	07065	0713*	0746	N13	E24	6562	04	3.1	40	SN				92	2.0	EK
	LEAR	01	0706	0716	0749	N13	E25	6562	04	3.2	43	SF	3	E		56		
	LEAR	01	0706	0726	0749	N13	E25	6562	04	3.2	43	SF		E		51		K
	KANZ	01	0711	0715	0739	N12	E24	6562	04	3.1	28	SF	2	V				
	PEKG	01	0713E	0713	0736D	N14	E22	6562	04	3.0	23D	SB		P	0713	168	2.0	E
		01	0916		0935	No Flare Patrol												
		01	0948		0954	No Flare Patrol												
		01	1013		1016	No Flare Patrol												
		01	1018		1031	No Flare Patrol												
		01	1037		1042	No Flare Patrol												
0009	KANZ	01	1347E	1347U	1358	N11	E19	6563D	04	3.0	11D	SF	2	V				
		01	1911		1916	No Flare Patrol												
		01	1924		1938	No Flare Patrol												
0010	HOLL	01	2029E	2029U	2125	N13	E12	6562	04	2.7	56D	SF	3	E		65		F
0011	HOLL	01	2122	2123	2127	N08	E45	6565	04	5.3	5	SF	3	E		13		
0012	HOLL	01	2355		2404	N08	E43	6565	04	5.2	9	SF	3	E		19		
0013	VORO	02	0142	0143	0146U	N13	E10	6562	04	2.8	4U	SF	1	C	0143	72	0.8	DIJT
0014	VORO	02	0202	0233	0249	N14	E16	6562	04	3.3	47	SF	1	C	0233	81	0.9	DIJKT
0015	VORO	02	0218	0230	0249	N10	E42	6565	04	5.2	31	SF	1	C	0230	54	0.8	DJ
0016	HTPR	02	0705		0740	S19	E85	6566	04	8.8	35	SF		C				A
0017		02	07461	07471	0756	N10	E39	6565	04	5.2	10	SN				80	1.0	H
	HTPR	02	0746	0748	0800	N10	E40	6565	04	5.3	14	SN		C	0748	80	1.0	H
	KANZ	02	0747	0747	0751	N09	E38	6565	04	5.2	4	SF	2	V				
0018	HTPR	02	0830	0842	0900	N20	E13	6562	04	3.3	30	SN		C	0842	130	1.4	
0019		02	08352	08387	0856	N11	E10	6563D	04	3.1	21	SF C 4.1				35		
	SVTO	02	0835	0838	0855	N10	E10	6563D	04	3.1	20	SF C 4.1	3	E		35		
	KANZ	02	0837	0845	0857	N12	E11	6563D	04	3.2	20	SF	2	V				
0020	HTPR	02	1155E	1158	1210D	N12	E42	6565	04	5.7	15D	SF		C	1158	70	1.0	T
0021	HOLL	02	1622	1623	1631	N09	E35	6565	04	5.3	9	SF	3	E		23		
0022	HOLL	02	1805	1807	1820	N15	E07	6562	04	3.3	15	SF	3	E		23		
0023	HOLL	02	1855	1856	1859	N11	E37	6565	04	5.6	4	SF	3	E		17		
0024	HOLL	02	2111	2117	2138	N16	E05	6562	04	3.3	27	SF C 3.1	3	E		30		F

H α SOLAR FLARES

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APRIL 1991

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Time (UT)	Area Measurement		Remarks	
																	Apparent (10-6 Disk)	Corr (Sq Deg)		
0025		02	2251	2303*	2521	N15	E02	6562	04	3.1	150	2N	M	6.1			724	11.3	EFHIJKTU	
	HOLL	02	2251	2303	2505D	N14	E00	6562	04	2.9	134D	3B			E		508		KT	
	HOLL	02	2251	2320	2505D	N14	E00	6562	04	2.9	134D	3B	M	6.1	3	E	886		UYT	
	LEAR	02	2259E	2303	2432	N14	E01	6562	04	3.0	93D	2B			3	E	415		F	
	VORO	02	2328E	2342	2531	N16	E02	6562	04	3.1	123D	3F			1	C	2342	1272	14.0	EIJU
	PALE	02	2331E	2331U	2458D	N13	E03	6562	04	3.2	87D	1F			3	E	230			
	MITK	02	2337E		2606	N16	E05	6562	04	3.4	149D	3F				C	2338	1250	14.1	FHU
	PEKG	03	0044E	0048	0115	N17	E02	6562	04	3.2	31D	2N				P	0048	505	5.7	E
0026		03	01422	01441	0150	S24	E74	6566	04	8.8	8	1F						76		D
	WATU	03	0142	0144	0150	S25	E71	6566	04	8.6	8	SF				C	0144	80		
	VORO	03	0144	0145	0152D	S24	E77	6566	04	9.0	8D	1F			1	C	0145	72		D
0027	LEAR	03	0751	0753	0806	N13	W01	6562	04	3.2	15	SF			3	E		51		
		03	0949		0952	No Flare Patrol														
		03	1004		1042	No Flare Patrol														
0028	HOLL	03	2138E	2138U	2203	N09	E18	6565	04	5.2	25D	SF			2	E		31		
0029	HOLL	03	2145E	2208U	2303	S12	E43	6567	04	7.1	78D	1F	C	3.8	4	E		140		FU
0030		04	01572	0159	0204	S26	E57	6566A	04	8.5	7	SF	C	1.8				52		
	LEAR	04	0157	0159	0207	S26	E54	6566A	04	8.3	10	SF	C	1.8	3	E		74		
	PALE	04	0159	0159	0202	S25	E60	6566A	04	8.7	3	SF			3	E		30		
0031		04	0348*	04142	0458	N14	W13	6562	04	3.2	70	SN	C	1.8				109	1.8	FU
	TACH	04	0348	0416	0524	N16	W12	6562	04	3.2	96	SB			2	C	0416	156	1.8	U
	LEAR	04	0352	0414	0433	N13	W13	6562	04	3.2	41	1F	C	1.8	3	E		117		F
	PALE	04	0414	0415	0428D	N12	W13	6562	04	3.2	14D	SF			1	E		55		F
0032	LEAR	04	0913	0915	0923	N16	W20	6562	04	2.9	10	SF			3	E		36		F
0033	HPR	04	1201		1220	N28	E85		04	11.1	19	SN				C				
0034	HPR	04	1207		1245	N05	W88		03	29.0	38	SF				C				
0035	HOLL	04	1340E	1341U	1359D	N09	E09	6565	04	5.2	19D	SF			1	E		20		F
0036	RAMY	04	1722	1722	1743	S20	E44	6575A	04	8.1	21	SF	C	1.2	3	E		13		F
0037	HOLL	04	1906	1907	1915	N09	E06	6565	04	5.2	9	SF	C	1.0	3	E		31		F
0038	HOLL	04	2006	2011	2014	S10	W19	6563	04	3.4	8	SF			3	E		16		F
0039	HOLL	04	2020	2020	2023	N15	W21	6562	04	3.2	3	SF	C	1.3	3	E		13		F
		04	2057		2125	No Flare Patrol														
0040		04	21376	21377	2145	S21	E44	6566	04	8.3	8	SF						26		F
	HOLL	04	2137	2137	2142	S21	E44	6566	04	8.3	5	SF			3	E		36		F
	HOLL	04	2143	2144	2148	S21	E43	6566	04	8.2	5	SF			3	E		16		
0041	HOLL	04	2153	2207	2349	N16	W24	6562	04	3.1	116	SF	C	2.3	3	E		88		F
0042		04	2259*	2306*	2318	S21	E42	6566	04	8.2	19	SF						16		FH
	HOLL	04	2259	2306	2314	S21	E41	6566	04	8.1	15	SF			3	E		16		FH
	HOLL	04	2315	2316	2321	S21	E43	6566	04	8.3	6	SF			3	E		17		F
0043		05	00012	00025	0024	N08	E03	6565	04	5.2	23	SF						26		F
	LEAR	05	0001	0002	0022	N09	E03	6565	04	5.2	21	SF			3	E		28		F
	HOLL	05	0003	0007	0025	N08	E03	6565	04	5.2	22	SF			3	E		24		F
0044	YUNN	05	0253	0255	0305	N16	W25	6562	04	3.2	12	SN				C		126	1.6	E
0045	LEAR	05	0332	0333	0343	S24	E43	6566	04	8.5	11	SF			3	E		43		F

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Apr 91

H α SOLAR FLARES

APRIL 1991

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	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)		
0046		05	0825*	0853	0922	S09	W26	6563	04	3.4	57	1F	C 1.5		100	0.9	EF	
	LEAR	05	0825	0853	0856D	S09	W26	6563	04	3.4	31D	1F		4	111		F	
	LEAR	05	0848	0853	0931	S09	W26	6563	04	3.4	43	1F	C 1.5	3	111		F	
	YUNN	05	0857E	0857U	0914	S10	W26	6563	04	3.4	17D	SN		P	0857	79	0.9	E
0047	ABST	05	1039E	1042	1046	S09	W26	6563	04	3.5	7D	SF		P	1042	87	1.0	D
0048	HOLL	05	1504	1507	1513	N09	W06	6565	04	5.2	9	SF		3	E	14		F
0049	HOLL	05	1744	1752	1813	N14	W34	6562	04	3.2	29	SF		3	E	25		F
0050	HOLL	05	1840	1840	1854	S09	E50	6570	04	9.5	14	SF		3	E	20		F
0051	HOLL	05	1854	1855	1911	N14	W34	6562	04	3.2	17	SF		3	E	23		
0052	HOLL	05	2245	2247	2310	N09	W10	6565	04	5.2	25	SF		3	E	14		F
0053	LEAR	06	0114	0133	0145	S20	W04	6572	04	5.7	31	SF		3	E	15		F
0054	LEAR	06	0655	0657	0702	S11	W39	6563	04	3.3	7	SF		3	E	18		
0055	HTPR	06	0748	0751	0800	N16	W46	6562	04	2.8	12	1F		C	0751	140	2.2	E
0056		06	0802*	0822*	1000	N13	W46	6562	04	2.9	118	2N	C 7.8		347	9.2	F	
	YUNN	06	0802	0820U	0929D	N15	W47	6562	04	2.8	87D	3B		P	0820	786	12.9	F
	HTPR	06	0805	0822	1015	N15	W47	6562	04	2.8	130	2N		C	0822	360	5.6	
	ISTA	06	0808		0921D	N14	W44	6562	04	3.0	73D	2B		P				F
	LEAR	06	0808	0823	0948	N14	W42	6562	04	3.2	100	1N	C 7.8	3	E	201		
	LEAR	06	0949	0950	0958	N09	W49	6562	04	2.7	9	SF		3	E	41		
0057		06	0935	0937	0954	S22	E26	6566	04	8.4	19	1N			150	2.0		
	LEAR	06	0935	0937	0949	S23	E25	6566	04	8.3	14	1N		3	E	121		
	HTPR	06	0935	0937	1000	S20	E28	6566	04	8.5	25	SN		C	0937	180	2.0	
0058	HTPR	06	1104	1112	1130	S20	W08	6572B	04	5.8	26	SF		C	1112	140	1.4	E
0059	HTPR	06	1108	1115	1130	N08	E40	6577	04	9.5	22	SF		C	1115	80	1.1	E
0060		06	14223	1428	1446	S20	W10	6572	04	5.8	24	SF			78	1.4	F	
	HTPR	06	1422		1455	S20	W09	6572	04	5.9	33	SF		C	1440	140	1.4	
	HOLL	06	1425	1428	1436	S20	W12	6572	04	5.7	11	SF		3	E	15		F
0061	HTPR	06	1438		1455	N08	E40	6577	04	9.6	17	SF		C	1439	80	1.1	
0062		06	1522	1601*	1814	S21	E66	6578	04	11.7	172	SF			56		FK	
	HOLL	06	1522	1601	1814	S21	E66	6578	04	11.7	172	SF		E	52		K	
	HOLL	06	1522	1706	1814	S21	E66	6578	04	11.7	172	SF		3	E	61		F
0063	HOLL	06	1525	1530	1545	S12	W42	6563	04	3.5	20	SF	C 2.1	3	E	19		F
0064	HOLL	06	1530	1530	1538	N13	W46	6562	04	3.2	8	SF		3	E	26		F
0065		06	16051	1611	1646	N09	W18	6565	04	5.3	41	SN			64	1.0	F	
	HOLL	06	1605	1611	1656	N08	W20	6565	04	5.2	51	SF		3	E	39		F
	HTPR	06	1606	1611	1635	N10	W17	6565	04	5.4	29	SN		C	1611	90	1.0	
0066	HOLL	06	1609	1622	1645	N08	E36	6577	04	9.4	36	SF	C 2.1	3	E	27		F
0067		06	1643*	1706*	1728	N13	W46	6562	04	3.2	45	SF			20		F	
	HOLL	06	1643	1706	1723	N13	W46	6562	04	3.2	40	SF		3	E	21		F
	HOLL	06	1724	1724	1734	N13	W46	6562	04	3.2	10	SF		3	E	20		F
0068	HOLL	06	1644	1646	1652	N12	E51	6586A	04	10.5	8	SF		3	E	16		F
0069	HOLL	06	1811	1812	1823	N15	W48	6562	04	3.1	12	SF		3	E	19		F
0070	HOLL	06	1919	1922	1926	S11	W17	6571	04	5.5	7	SF		3	E	12		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/USAF Region	CMP Mo	Dur Day	Imp Opt	Xray	C	See	Obs Type	Time (UT)	Area Measurement		Remarks	
																	Apparent (10-6 Disk)	Corr (Sq Deg)		
0071		07	0017*	00271	0127	N13	W50	6562	04	3.2	70	SF	C 2.5				62		F	
	LEAR	07	0017	0028	0127	N13	W50	6562	04	3.2	70	SF		3	E		99		F	
	HOLL	07	0024	0027	0107D	N14	W50	6562	04	3.2	43D	SF	C 2.5	2	E		75		F	
	PALE	07	0027	0027	0039D	N12	W50	6562	04	3.2	12D	SF		3	E		12		F	
0072	LEAR	07	0031	0054	0119	S09	W47	6563	04	3.5	48	SF		3	E		31			
0073		07	0039	00391	0047	S22	E60	6578	04	11.6	8	SF					32			
	LEAR	07	0039	0039	0049	S22	E60	6578	04	11.6	10	SF		3	E		33			
	HOLL	07	0039	0040	0045	S22	E60	6578	04	11.6	6	SF		2	E		32			
0074	ABST	07	0601	0602	0606	N07	E59	6586A	04	11.7	5	SF			C	0602	87	1.8	D	
0075	SVTO	07	0727	0730	0735	S20	W22	6572	04	5.6	8	SF		3	E		12			
0076	ABST	07	0746	0746	0755	N07	E59	6586A	04	11.7	9	SF			C	0746	87	1.8	D	
0077	LEAR	07	0747	0749	0753	N14	W55	6562	04	3.2	6	SF		3	E		26			
0078		07	0753	0754	0814	S20	E57	6578	04	11.7	21	SF	C 1.1				17			
	LEAR	07	0753	0754	0807	S22	E56	6578	04	11.6	14	SF		3	E		18			
	SVTO	07	0753	0754	0820	S19	E58	6578	04	11.7	27	SF	C 1.1	3	E		16			
0079		07	08082	08114	0834	N13	W54	6562	04	3.3	26	SF					67		F	
	LEAR	07	0808	0811	0840	N13	W55	6562	04	3.2	32	SF		3	E		91		F	
	SVTO	07	0810	0815	0829	N13	W53	6562	04	3.3	19	SF		3	E		43			
0080	SVTO	07	0945	0946	0950	S18	E58	6578	04	11.8	5	SF	C 1.4	3	E		19			
0081	SVTO	07	1254	1301	1308	S14	W55	6563	04	3.4	14	SF		3	E		26			
0082		07	14061	1409	1422	N30	E72	6580	04	13.2	16	SF	C 3.6				14			
	SVTO	07	1406	1409	1420	N31	E73	6580	04	13.3	14	SF	C 3.6	3	E		13			
	HOLL	07	1407	1409	1424	N30	E72	6580	04	13.2	17	SF		3	E		16			
0083		07	1407	1408	1416	S20	E54	6578	04	11.7	9	SN					30		E	
	SVTO	07	1407	1408	1415	S19	E55	6578	04	11.8	8	SF		3	E		24			
	HOLL	07	1407	1408	1416	S20	E54	6578	04	11.7	9	SN		3	E		37		E	
0084	HOLL	07	1714	1720	1736	S12	E14	6568	04	8.8	22	SF		4	E		16			
0085	HOLL	07	2003	2003	2012	N08	E52	6586A	04	11.7	9	SF		3	E		21			
0086		07	2007*	2010*	2035	N29	E68	6580	04	13.2	28	SN	C 3.1				46		K	
	HOLL	07	2007	2010	2046	N30	E71	6580	04	13.4	39	SN			E		63		K	
	HOLL	07	2007	2025	2046	N30	E71	6580	04	13.4	39	SN	C 3.1	3	E		75			
	RAMY	07	2010	2010	2016	N28	E65	6580	04	12.9	6	SF		3	E		19			
	RAMY	07	2024	2024	2031	N29	E65	6580	04	12.9	7	SF		3	E		25			
		07	2113		2138	No Flare Patrol														
		07	2209		2215	No Flare Patrol														
		07	2219		2249	No Flare Patrol														
0087	YUNN	08	0107E	0221	0328D	N27	E63	6580	04	12.9	141D	SN			P		110			
0088	YUNN	08	0156E	0158	0220	S19	W33	6572	04	5.6	24D	SF			P		47	0.6		
0089	YUNN	08	0214	0220	0241	S22	E87	6585	04	14.8	27				C				A	
0090	LEAR	08	0225	0306	0348	N05	E47	6579	04	11.6	83	SF	C 3.0	3	E		73		F	
0091	LEAR	08	0443	0443	0456	N09	W40	6565	04	5.2	13	SF		3	E		53			
0092	LEAR	08	0456	0522	0542	N29	E65	6580	04	13.3	46	SF		3	E		31			
0093	LEAR	08	0509	0514	0524	N05	E46	6579	04	11.6	15	SF	C 3.1	3	E		27			

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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)	
0094		08	0537I	0539*	0607	S25	E91	6582	04	15.3	30	1N	C 2.1				134		ADTY
	SVTO	08	0537	0539	0601	S25	E90	6582	04	15.2	24	SF		3	E		67		
	LEAR	08	0538	0549	0621	S26	E90	6582	04	15.2	43	1N	C 2.1	3	E		187		
	ABST	08	0540E	0541	0600	S24	E90	6582	04	15.2	20D	1N			P	0541	131		AD
	TACH	08	0549E		0600D	S26	E95	6582	04	15.6	11D	1N		2	C	0549	153		TY
0095	LEAR	08	0555	0607	0620	N05	E45	6579	04	11.6	25	SF		3	E		32		
0096	LEAR	08	0655	0708	0728	S20	W35	6572	04	5.6	33	SF		3	E		28		
0097	LEAR	08	0701	0703	0719	N29	E64	6580	04	13.3	18	SF		3	E		33		
0098		08	07056	07116	0733	N07	E45	6579	04	11.7	28	SF					32		0.5
	YUNN	08	0705	0717	0735	N06	E44	6579	04	11.6	30	SN			C		31		0.5
	LEAR	08	0710	0714	0737	N08	E46	6579	04	11.7	27	SF		3	E		51		
	SVTO	08	0711	0711	0727	N07	E45	6579	04	11.7	16	SF		3	E		15		
0099		08	0728*	0743	0752	N30	E63	6580	04	13.3	24	SF					46		
	LEAR	08	0728	0743	0754	N28	E61	6580	04	13.1	26	SF		3	E		62		
	SVTO	08	0743	0743	0749	N31	E65	6580	04	13.4	6	SF		3	E		29		
0100		08	08178	08268	0852	N29	E62	6580	04	13.2	35	SF	C 3.3				119		
	YUNN	08	0817	0834	0905	N28	E61	6580	04	13.1	48	SN			C		189		
	LEAR	08	0824	0826	0850	N30	E64	6580	04	13.4	26	SF	C 3.3	3	E		97		
	SVTO	08	0825	0827	0840	N28	E60	6580	04	13.0	15	SF		3	E		71		
	KANZ	08	0826E		0826D	N31	E64	6580	04	13.4	15D	SF		2	V				
0101	SVTO	08	0923	0924	0932	S24	E89	6582	04	15.3	9	SF		3	E		20		
0102	SVTO	08	0944	0947	1000	N09	W43	6565	04	5.2	16	SF		3	E		25		
0103	SVTO	08	0949	0950	0952	N31	E63	6580	04	13.4	3	SF	C 2.1	3	E		18		
0104		08	1018*	1020*	1038	N31	E62	6580	04	13.3	20	SF	C 1.9				42		
	SVTO	08	1018	1020	1027	N31	E63	6580	04	13.4	9	SF	C 1.9	3	E		77		
	SVTO	08	1030	1037	1043	N31	E61	6580	04	13.2	13	SF		3	E		25		
	SVTO	08	1033	1037	1043	N31	E61	6580	04	13.2	10	SF		3	E		25		
0105	SVTO	08	1019	1020	1025	N06	E43	6579	04	11.6	6	SF		3	E		13		
0106	SVTO	08	1126	1129	1134	N31	E62	6580	04	13.4	8	SF	C 1.8	3	E		35		
0107	SVTO	08	1233	1234	1237	N30	E60	6580	04	13.2	4	SF		3	E		17		
0108	SVTO	08	1246	1254	1304	S23	W04	6566	04	8.2	18	SF	C 1.3	3	E		24		
0109		08	1458	1504	1547	N30	E60	6580	04	13.3	49	1F	C 4.1				109		EF
	RAMY	08	1457E	1457U	1529D	N29	E61	6580	04	13.4	32D	SF		2	E		87		
	SVTO	08	1458	1504	1538D	N31	E59	6580	04	13.3	40D	1F		3	E		100		
	HOLL	08	1458	1504	1547	N29	E61	6580	04	13.4	49	1N	C 4.1	4	E		139		FE
0110	HOLL	08	1530	1530	1535	N13	W71	6562	04	3.3	5	SF		3	E		22		
0111		08	1551	1556	1626	S10	E12	6570	04	9.6	35	1F					76		F
	HOLL	08	1551	1556	1626	S09	E13	6570	04	9.6	35	1F		2	E		101		F
	SVTO	08	1555E	1555U	1615D	S10	E11	6570	04	9.5	20D	SF		2	E		50		F
0112	HOLL	08	1624	1641	1658	N09	W47	6565	04	5.1	34	SF		3	E		41		
0113	HOLL	08	1639	1641	1645	N30	E59	6580	04	13.3	6	SF		3	E		32		
0114	HOLL	08	1811	1816	1857	S23	W07	6566	04	8.2	46	SF	C 2.0	3	E		97		F
0115	HOLL	08	1825E	1826U	1858	S14	E77	6580A	04	14.6	33D	SF		3	E		29		
		08	2118		2130			No Flare Patrol											
		08	2211		2219			No Flare Patrol											
0116	HOLL	08	2259	2304	2312D	S20	W10	6575A	04	8.2	13D	SF		2	E		25		F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0117		08	22595	2304	2312D	N29	E56	6580	04	13.3	13D	SF				30	1.2	DJT
	HOLL	08	2259	2304	2312D	N29	E55	6580	04	13.3	13D	SF	2	E		20		
	VORO	08	2304	2304	2307D	N29	E56	6580	04	13.3	3D	SF	2	C	2304	54	1.2	DJT
	PALE	08	2304E	2304U	2309D	N30	E56	6580	04	13.4	5D	SF	3	E		16		
0118		08	23393	23423	2401	S20	W11	6575A	04	8.1	22	SF				59	0.8	DEFIJT
	VORO	08	2339	2345	2402	S20	W11	6575A	04	8.1	23	SF	2	C	2345	72	0.8	DIJT
	HOLL	08	2341	2343	2404	S20	W11	6575A	04	8.1	23	SN	2	E		78		FE
	LEAR	08	2342	2342	2358	S20	W11	6575A	04	8.1	16	SF	3	E		28		F
0119		08	2344	23508	2501	N29	E55	6580	04	13.3	77	SF				31		FK
	HOLL	08	2344	2350	2501	N29	E55	6580	04	13.3	77	SF	2	E		27		F
	HOLL	08	2344	2358	2501	N29	E55	6580	04	13.3	77	SF		E		35		K
0120	HOLL	08	2344	2344	2510	S20	W44	6572	04	5.6	86	SF	2	E		82		F
0121	HOLL	09	0020	0021	0036	S19	W12	6575A	04	8.1	16	SF	3	E		25		F
0122	VORO	09	0125	0129	0143	S20	W11	6568C	04	8.2	18	SF	2	C	0129	63	0.7	DIJT
0123		09	0134	01381	0152	N29	E55	6580	04	13.4	18	SN				64	1.5	DJT
	LEAR	09	0134	0138	0152	N29	E54	6580	04	13.3	18	SB	3	E		66		
	VORO	09	0134	0139	0153	N29	E56	6580	04	13.4	19	SF	2	C	0139	63	1.5	DJT
0124	YUNN	09	0221E	0223	0228	N30	E53	6580	04	13.3	7D	SN		P		39	0.9	
0125	LEAR	09	0236	0240	0244	N29	E52	6580	04	13.2	8	SN	3	E		22		
0126	VORO	09	0239	0244	0258D	S20	W11	6568C	04	8.3	19D	SF	2	C	0252	90	1.0	DIJT
0127		09	03161	03171	0329	S22	W12	6566	04	8.2	13	SN	C	1.7		46	0.4	F
	YUNN	09	0316	0318	0331	S22	W12	6566	04	8.2	15	SN		C		39	0.4	
	LEAR	09	0317	0317	0327	S22	W13	6566	04	8.1	10	SF	C	1.7	3	E	52	
0128	LEAR	09	0529	0536	0626	N06	E33	6579	04	11.7	57	SF	3	E		32		F
0129	SVTO	09	0534	0542	0617	S21	W13	6566	04	8.2	43	SF	3	E		21		
0130		09	06071	0610	0617	N08	W55	6565	04	5.1	10	SF				16		
	LEAR	09	0607	0610	0622	N09	W54	6565	04	5.2	15	SF	3	E		19		
	SVTO	09	0608	0610	0612	N08	W56	6565	04	5.0	4	SF	3	E		12		
0131		09	06191	06214	0642	S21	W49	6572	04	5.5	23	SF				22		
	LEAR	09	0619	0625	0645	S20	W50	6572	04	5.4	26	SF	3	E		29		
	SVTO	09	0620	0621	0638	S22	W48	6572	04	5.6	18	SF	3	E		14		
0132	SVTO	09	0630	0633	0642	N29	E51	6580	04	13.3	12	SF	3	E		12		
0133		09	08571	0902	0915	N10	E90	6583	04	16.1	18	SN						AG
	HTPR	09	0857		0915	N10	E90	6583	04	16.1	18	SN		C				
	YUNN	09	0858	0902	0915	N09	E89	6583	04	16.0	17			C				AG
0134		09	11383	11464	1204	S24	E70	6591A	04	14.9	26	1F				25		F
	HTPR	09	1138	1150	1205	S23	E70	6591A	04	14.9	27	1F		C				
	SVTO	09	1141	1146	1203	S25	E70	6591A	04	14.9	22	SF	3	E		25		F
0135	HTPR	09	1144		1200	N10	E90	6583	04	16.2	16	SF		C				
0136	HTPR	09	1155	1157	1205	N30	E50	6580	04	13.4	10	1F		C	1157	160	3.0	
0137	HTPR	09	1302E	1315	1345	N20	W30	6576	04	7.2	43D	SF		C	1315	90	1.2	
0138		09	1355	1358	1408	N10	W58	6565	04	5.2	13	SF				36	1.2	
	HTPR	09	1355		1415	N10	W57	6565	04	5.3	20	SF		C	1402	60	1.2	
	SVTO	09	1355	1358	1402	N09	W60	6565	04	5.1	7	SF	3	E		12		
0139	HOLL	09	1423	1429	1447	N09	W59	6565	04	5.2	24	SF	3	E		26		
0140	HOLL	09	1438	1511	1534	S20	W21	6575A	04	8.0	56	SF	3	E		30		

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Grp #	Sta	Start Day	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks		
															Apparent (10-6 Disk)	Corr (Sq Deg)			
0141		09 15235	15357	1609	N29	E49	6580	04	13.5	46	1F	C	7.4		117	4.6	F		
	HOLL	09 1523	1535	1619	N28	E50	6580	04	13.5	56	1F			3	E	101		F	
	HTPR	09 1526	1540	1620	N30	E48	6580	04	13.4	54	1N		1540		C	230	4.6		
	SVTO	09 1528	1540	1607	N30	E47	6580	04	13.3	39	1F	C	7.4	3	E	102		F	
	RAMY	09 1539E	1542	1551	N29	E49	6580	04	13.5	12D	SF			3	E	36		F	
	KANZ	09 1544E	1544U	1549D	N30	E51	6580	04	13.7	5D	1F			1	C				
0142	HTPR	09 1604		1630	N10	E90	6583	04	16.4	26	SF				C				
0143	HOLL	09 1648	1649	1701	S24	W19	6566	04	8.2	13	SF			3	E		22		
0144	HOLL	09 1654	1654	1703	S10	E02	6570	04	9.8	9	SF			3	E		39		
0145	HOLL	09 1812	1816	1826	S19	W20	6575A	04	8.2	14	SF			3	E		14		F
0146	HOLL	09 1827	1847	1929	S19	W22	6575A	04	8.1	62	1B	M	1.0	3	E		115		F
0147	HOLL	09 2055	2055	2101	S19	W22	6568C	04	8.2	6	SF			3	E		10		F
0148	RAMY	09 2110	2112	2116	N09	E89	6583	04	16.6	6	SF			3	E		24		
0149	HOLL	09 2139	2143	2150	S28	E74	6582	04	15.7	11	SF			3	E		21		F
0150	HOLL	09 2143	2204	2227	S19	W23	6575A	04	8.1	44	SF			3	E		21		EF
0151	HOLL	09 2146	2147	2208	S18	W56	6572	04	5.6	22	SF			3	E		29		F
0152	HOLL	09 2203	2203	2211	N08	E89	6583	04	16.6	8	SF			3	E		20		
0153	HOLL	09 2235	2247	2304	S20	W23	6575A	04	8.2	29	SF	C	3.4	3	E		16		F
0154	HOLL	09 2302	2302	2307	N08	E82	6583	04	16.1	5	SN			3	E		27		
0155		09 2320*	2330*	2437	S19	W24	6575A	04	8.1	77	SN	C	3.6				67		EFK
	LEAR	09 2320	2355	2533	S20	W24	6575A	04	8.1	133	1N			3	E		172		F
	HOLL	09 2329	2330	2413	S18	W25	6575A	04	8.1	44	SN				E		18		K
	HOLL	09 2329	2356	2413	S18	W25	6575A	04	8.1	44	SN	C	3.6	3	E		65		FE
	HOLL	10 0021	0022	0028	S19	W24	6575A	04	8.2	7	SF			3	E		14		F
0156	HOLL	09 2339	2340	2341	N08	E81	6583	04	16.0	2	SF			3	E		30		
0157	HOLL	10 0022	0024	0031	N07	E80	6583	04	16.0	9	SF			3	E		16		
0158	LEAR	10 0203	0207	0224	S20	W24	6575A	04	8.2	21	SF	C	3.1	3	E		27		F
0159		10 02475	02526	0314	S19	W27	6575A	04	8.0	27	SF						178	2.8	F
	WATU	10 0247	0252	0316	S19	W29	6575A	04	7.9	29	SF				C	0252	90	1.1	F
	LEAR	10 0249	0255	0315	S19	W27	6575A	04	8.0	26	SF			3	E		51		F
	YUNN	10 0252	0258	0310	S18	W26	6575A	04	8.1	18	1N				C		393	4.6	F
0160		10 0323	03414	0402	N08	E80	6583	04	16.1	39	1N	M	1.3				197		A
	LEAR	10 0323	0341	0402	N09	E79	6583	04	16.1	39	1N	M	1.3	3	E		233		
	URUM	10 0336E	0345	0356D	N08	E81	6583	04	16.2	20D	1N				C		161		A
0161	TACH	10 0604		0630	N10	E88	6583	04	16.9	26	1N			1	C	0610	107		D
0162	HTPR	10 0635		0705	N13	W90	6562	04	3.5	30	SF				C				
0163	HTPR	10 1045		1100	N06	E88	6583	04	17.0	15	SN				C				T
0164		10 12379	1252	1340	N11	E82	6583	04	16.7	63	SF	C	6.0				34		T
	SVTO	10 1237	1252	1453	N12	E79	6583	04	16.5	136	SF	C	6.0	4	E		55		
	HTPR	10 1245		1305	N11	E88	6583	04	17.1	20	SN				C				T
	RAMY	10 1246	1252	1302	N09	E79	6583	04	16.5	16	SF			3	E		12		
0165		10 14052	14114	1442	S20	W32	6566	04	8.1	37	SF						42		F
	HOLL	10 1405	1415	1454	S19	W33	6566	04	8.1	49	SF			3	E		55		F
	SVTO	10 1407	1411	1430	S22	W30	6566	04	8.3	23	SF			4	E		28		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Xray	Obs See	Type	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0166		10	14302	14331	1459	S20	W64	6572	04	5.7	29	SN				49	1.6	EF
	HTPR	10	1430	1433	1500	S20	W64	6572	04	5.7	30	SN		C	1433	80	1.6	E
	HOLL	10	1432	1433	1452	S20	W66	6572	04	5.5	20	SN		E		34		FE
	SVTO	10	1432	1434	1506	S19	W63	6572	04	5.8	34	SF		E		32		F
0167		10	1509	1509	1522	N10	E81	6583	04	16.7	13	1N				12		
	HTPR	10	1509		1525	N11	E85	6583	04	17.0	16	1N		C				
	HOLL	10	1509	1509	1519	N10	E77	6583	04	16.4	10	SF		E	3	12		
0168		10	15121	15151	1528	N28	E36	6580	04	13.4	16	SF M 1.4				63	1.8	F
	HTPR	10	1512	1515	1530	N29	E38	6580	04	13.6	18	SF		C	1515	110	1.8	
	HOLL	10	1513	1516	1527	N27	E35	6580	04	13.4	14	SF M 1.4	3	E		16		F
0169	HTPR	10	1515		1652D	N12	W90	6562	04	3.8	97D	2N		C				
0170	HOLL	10	1628	1634	1641	S12	W52	6584	04	6.8	13	SF		E	3	10		
0171	HOLL	10	1702	1711	1728	S27	E64	6582	04	15.7	26	SF		E	3	49		F
0172	HOLL	10	1708	1716	1723	S12	W53	6584	04	6.7	15	SF		E	3	37		F
0173	HOLL	10	1710	1718	1756	N08	E77	6583	04	16.5	46	SF		E	3	42		F
0174	HOLL	10	1823	1823	1831	S19	W35	6575A	04	8.1	8	SF		E	3	14		
0175	HOLL	10	1828	1839	1846	N10	E75	6583	04	16.4	18	SF		E	3	36		
0176		10	1824*	1836	1854	N14	E50	6581	04	14.5	30	SF				38		
	HOLL	10	1824	1836	1907	N14	E50	6581	04	14.5	43	SF		E	3	62		
	PALE	10	1835	1836	1840	N15	E50	6581	04	14.5	5	SF		E	4	14		
0177	HOLL	10	1829	1829	1836	S26	E62	6582	04	15.6	7	SF		E	3	19		
0178	HOLL	10	1841	1856	1925	S18	W71	6572	04	5.4	44	SF		E	3	27		
0179	HOLL	10	1847	1855	1911	S12	W52	6584	04	6.9	24	SF		E	3	41		
0180	HOLL	10	1952	1954	1959	S26	E62	6582	04	15.6	7	SF		E	3	44		
0181		10	2000*	20167	2044	N10	E76	6583	04	16.5	44	SN M 1.9				77		K
	HOLL	10	2000	2016	2045	N10	E75	6583	04	16.5	45	SN		E	3	82		
	HOLL	10	2000	2023	2045	N10	E75	6583	04	16.5	45	SN		E		86		K
	PALE	10	2017	2017	2042	N11	E77	6583	04	16.6	25	SF M 1.9	4	E		63		
0182	HOLL	10	2119	2131	2148	N09	E77	6583	04	16.7	29	1B C 9.6	4	E		131		
0183	HOLL	10	2207	2210	2213	S28	E60	6582	04	15.6	6	SF		E	2	35		
0184	HOLL	10	2218	2224	2254	S19	W35	6575A	04	8.2	36	1N C 6.0	4	E		129		U
0185	HOLL	10	2220	2221	2235	S19	W17	6570B	04	9.6	15	SF		E	3	36		F
0186	HOLL	10	2228	2254	2316	S26	E60	6582	04	15.6	48	SF		E	3	60		
0187	HOLL	10	2255	2307	2317	S19	W39	6575A	04	8.0	22	SF		E	3	26		
0188		10	23381	23463	2417	N10	E72	6583	04	16.4	39	SN				50		
	HOLL	10	2338	2346	2405D	N09	E71	6583	04	16.3	27D	SN		E	3	37		
	LEAR	10	2339	2349	2417	N10	E72	6583	04	16.4	38	SF		E	3	62		
0189	VORO	10	2356	2359	2415	S20	W40	6575A	04	7.9	19	SF		C	2359	108	1.5	DIJT
0190		11	00158	00205	0030	S11	W20	6570	04	9.5	15	SF				52	0.9	DIT
	VORO	11	0015	0020	0029	S11	W20	6570	04	9.5	14	SF		C	0020	81	0.9	DIT
	HOLL	11	0023	0025	0030	S11	W20	6570	04	9.5	7	SF		E		23		
0191	VORO	11	0134	0135	0142	S22	W75	6572	04	5.3	8	SF		C	0135	36		DJ
0192	VORO	11	0204	0206	0213	S11	W20	6570	04	9.6	9	SF		C	0206	81	0.9	DIT

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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)			
0193		11	02186	02217	0240	S20	W39	6566	04	8.1	22	1F	C	5.9		165	3.0	EFHIJT		
	YUNN	11	0218	0221	0242	S19	W40	6566	04	8.0	24	1N			C	236	3.2	F		
	VORO	11	0220	0228	0309D	S20	W39	6566	04	8.1	49D	1F	1	C	0232	215	2.9	EHIJT		
	PALE	11	0224	0226	0239	S21	W39	6566	04	8.1	15	SF	C	5.9	3	E	43		F	
0194	VORO	11	0222	0226	0246	S10	W56	6575	04	6.9	24	1F			1	C	0226	152	2.7	EIJ
0195	LEAR	11	0252	0317	0404	N29	E26	6580	04	13.1	72	SF	M	1.2	3	E		71		
0196		11	0310	0313	0319	S18	W81	6572	04	5.0	9	SN					32			
	YUNN	11	0310	0313	0319	S17	W84	6572	04	4.7	9	SB				C	39			
	PALE	11	0313E	0313U	0319	S20	W78	6572	04	5.2	6D	SF			3	E	26			
0197		11	03192	03349	0437	S20	W40	6566	04	8.1	78	1N	M	1.0			173	3.8	EFY	
	YUNN	11	0319	0343	0434	S20	W42	6566	04	7.9	75	1N				C	204	2.9	F	
	LEAR	11	0321	0334	0440	S20	W41	6566	04	8.0	79	SN	M	1.0	3	E	69		FE	
	TACH	11	0330E		0348D	S19	W40	6566	04	8.1	18D	1N			1	C	0348	357	4.8	Y
	PALE	11	0345E	0345U	0414D	S21	W38	6566	04	8.2	29D	SF			3	E	61		F	
0198	YUNN	11	0529	0549	0600	S17	W40	6568	04	8.2	31	SN				C	39	0.5	D	
0199		11	05428	0612	0644	N10	E69	6583	04	16.4	62	1N	M	4.9			252	7.4		
	LEAR	11	0542	0612	0646	N10	E68	6583	04	16.3	64	1B	M	4.9	3	E	219			
	YUNN	11	0550	0612	0646	N09	E68	6583	04	16.3	56	2N				C	314			
	KANZ	11	0605E		0605D	N10	E70	6583	04	16.5	56D	SF			1	C				
	ATHN	11	0615E	0615U	0627D	N09	E70	6583	04	16.5	12D	2B			2	V	0615	223	7.4	
	HTPR	11	0622E		0640	N10	E70	6583	04	16.5	18D	1N				C				
0200		11	0601	06073	0646	S26	E50	6582	04	15.1	45	1N					159	3.0	F	
	LEAR	11	0601	0610	0652	S28	E56	6582	04	15.6	51	SF			3	E	90			
	YUNN	11	0603E	0607	0640	S25	E47	6582	04	14.9	37D	1B				P	236	3.7	F	
	KANZ	11	0605E		0605D	S27	E47	6582	04	14.9	37D	SF			1	C				
	HTPR	11	0622E		0645	S25	E50	6582	04	15.1	23D	1N				C	0626	150	2.4	
0201		11	0635	0608	0712	S19	W41	6566	04	8.1	37	SN					176	2.4	E	
	YUNN	11	0603E	0608	0715	S19	W40	6566	04	8.2	72D	1N				P	314	4.3		
	HTPR	11	0622E		0715	S18	W42	6566	04	8.1	53D	SF				C	0626	100	1.4	
	ONDR	11	0635	0642U	0706	S20	W40	6566	04	8.2	31	SN				V	0642	114	1.6	E
0202		11	0647*	06573	0732	N29	E24	6580	04	13.2	45	1N					104	2.4		
	YUNN	11	0647	0657	0751	N29	E24	6580	04	13.2	64	1B				C	173	2.4		
	LEAR	11	0657	0700	0712	N29	E25	6580	04	13.2	15	SF			3	E	36			
0203		11	06541	0655	0700	S17	W77	6572	04	5.4	6	SF					49		AH	
	LEAR	11	0654	0655	0700	S21	W74	6572	04	5.6	6	SF			3	E	49			
	HTPR	11	0655		0700	S13	W80	6572	04	5.2	5	SF				C			AH	
0204	HTPR	11	0731	0732	0738	N10	E68	6583	04	16.4	7	1N				C	0732	120		
0205	LEAR	11	0759	0808	0820	N09	E65	6583	04	16.2	21	SF			3	E		21		
0206	YUNN	11	0835	0837	0913	N29	E24	6580	04	13.2	38	SN				C		31	0.4	
0207		11	0823*	0841*	0852	N09	E67	6583	04	16.4	29	1N	M	2.4			116		EK	
	LEAR	11	0823	0842	0954D	N09	E66	6583	04	16.3	91D	1N	M	2.4	3	E	149			
	LEAR	11	0823	0909	0954D	N09	E66	6583	04	16.3	91D	SB				E	46		K	
	URUM	11	0836	0841	0849	N09	E69	6583	04	16.5	13	1N				C	129		E	
	HTPR	11	0836	0841	0855	N10	E67	6583	04	16.4	19	1F				C	0841	140		
	KANZ	11	0844E		0844D	N10	E67	6583	04	16.4	19D	1N			2	V				
11 1006 1007 No Flare Patrol																				
0208		11	1106	1110*	1201	S19	W43	6566	04	8.2	55	SF					58	1.4		
	KANZ	11	1106	1110	1201	S20	W42	6566	04	8.2	55	SF				V				
	HTPR	11	1115E		1215	S18	W43	6566	04	8.2	60D	SF				C	1130	100	1.4	
	RAMY	11	1129E	1130	1147	S18	W43	6566	04	8.2	18D	SF			3	E	17			
0209		11	1114	1118	1136	N10	E66	6583	04	16.4	22	1N					180			
	KANZ	11	1114	1118	1138	N09	E65	6583	04	16.3	24	1F			2	V				
	HTPR	11	1115E		1135	N10	E67	6583	04	16.5	20D	1B				C	1115	180		

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Grp #	Sta	Day	Start (UT)	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)			
0210	11	1302	1304	1310	N10 E65	6583	04	16.4	8	SF			52				
	RAMY	11	1302	1304	1307	N09 E65	6583	04	16.4	5	SF	3	E	27			
	HTPR	11	1302	1305	1312	N10 E67	6583	04	16.6	10	SF		C	1305	40		
	HOLL	11	1305E	1305U	1315D	N09 E63	6583	04	16.3	10D	SF	1	E	88			
	KANZ	11	1307E		1307D	N10 E65	6583	04	16.4	10D	SF	2	V				
0211	11	1329	1330U	1335D	N10 E64	6583	04	16.4	6D	SF				48			
	HTPR	11	1329		1333D	N10 E66	6583	04	16.5	4D	SF		C	1333	40		
	KANZ	11	1330	1330U	1333D	N10 E64	6583	04	16.4	3D	SF	2	V				
	HOLL	11	1330E	1330U	1335D	N09 E62	6583	04	16.2	5D	SF	1	E	55			
0212	HTPR	11	1433	1436	1442	N15 E65	6583	04	16.5	9	1F		C	1436	100	2.5	
		11	1539		1550	No Flare Patrol											
0213	HOLL	11	1629	1630	1650	S21 W47	6566	04	8.1	21	SF	3	E		16	F	
0214	HOLL	11	1630	1631	1637	N09 E68	6583	04	16.8	7	SF	3	E		26	F	
0215	11	1744	1758*	1827	S22 W45	6566	04	8.3	43	SN				40	FK		
	HOLL	11	1744	1758	1827	S22 W45	6566	04	8.3	43	SF	3	E	43	F		
	HOLL	11	1744	1811	1827	S22 W45	6566	04	8.3	43	SN		E	36	K		
0216	HOLL	11	1750	1753	1757	S11 W30	6570	04	9.5	7	SF	3	E		15	F	
0217	11	1843E	1906	1956	S10 W31	6570	04	9.4	73D	SB	C 9.8			78	FK		
	HOLL	11	1843E	1855U	1956	S10 W31	6570	04	9.4	73D	SN	C 9.8	3	E	92	F	
	HOLL	11	1843E	1906	1956	S10 W31	6570	04	9.4	73D	SB		E	63	K		
0218	11	1852E	1908	2000	S19 W50	6566	04	8.0	68D	SB				52	FK		
	HOLL	11	1852E	1857U	2000	S19 W50	6566	04	8.0	68D	SN	2	E	52	F		
	HOLL	11	1852E	1908	2000	S19 W50	6566	04	8.0	68D	SB		E	51	K		
0219	HOLL	11	1959	2013	2026	N10 E67	6583	04	16.9	27	SF	3	E		25	F	
0220	HOLL	11	2055	2057	2102	N09 E61	6583	04	16.4	7	SF	3	E		18	F	
0221	HOLL	11	2118	2119	2126	S22 W46	6566	04	8.3	8	SF	3	E		19		
0222	HOLL	11	2121	2126	2155	N15 E33	6581	04	14.4	34	1N	3	E		107	FU	
0223	HOLL	11	2147	2151	2158	N08 E60	6583	04	16.4	11	SF	3	E		23		
		12	0106		0128	No Flare Patrol											
		12	0211		0234	No Flare Patrol											
0224	12	0307	0327	0420	S20 W10	6578	04	11.4	73	3N				1008	10.9	FGU	
	TACH	12	0307	0327	0425	S21 W09	6578	04	11.4	78	3F	2	C	0327	1198	13.0	GU
	YUNN	12	0333E	0333	0415	S20 W10	6578	04	11.4	42D	2N		P		817	8.8	F
0225	12	0410*	0417*	0512	S23 W50	6566	04	8.3	62	1N				159	2.7	DE	
	YUNN	12	0410	0420	0430	S26 W47	6566	04	8.5	20	SB		C		47	0.7	D
	WATU	12	0416			S24 W44	6566	04	8.8		SN		P	0419	60	0.9	
	TACH	12	0417	0417	0541	S23 W49	6566	04	8.4	84	1N	2	C	0417	133	2.2	ED
	URUM	12	0420E	0421U	0425D	S23 W50	6566	04	8.3	5D	1F		C		193	3.2	E
	YUNN	12	0434	0447	0530	S23 W54	6566	04	8.0	56	2B		C		472	8.3	
	URUM	12	0452E	0452U	0505	S18 W53	6566	04	8.2	13D	SF		C		48	0.8	E
0226	HTPR	12	0652		0715	N25 W90		04	5.3	23			C				
0227	HOLL	12	1337	1340	1343	N07 E55	6583	04	16.7	6	SF	3	E		16		
0228	HTPR	12	1438	1439	1455	S13 E28	6581B	04	14.7	17	SF		C	1439	100	1.1	
0229	HOLL	12	1536	1539	1548	S20 W60	6566	04	8.1	12	SF	3	E		34	F	
0230	HOLL	12	1541	1542	1550	N30 E07	6580	04	13.2	9	SF	4	E		17		
0231	HOLL	12	1544	1544	1547	N06 E48	6583	04	16.2	3	SF	4	E		20		

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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)		
0232	HOLL	12	1604	1605	1618	N30	E06	6580	04	13.1	14	SF		3	E		13			
0233	HOLL	12	1637	1637	1658	N30	E06	6580	04	13.2	21	SF		3	E		18			
0234	HOLL	12	1638	1638	1645	S11	W44	6570	04	9.4	7	SF		3	E		12			
0235	HOLL	12	1640	1640	1654	N07	E52	6583	04	16.6	14	SF		3	E		16			
0236	HOLL	12	1747	1753	1759	N06	E53	6583	04	16.7	12	SF		3	E		30			
0237		12	20062	20074	2017	N06	E52	6583	04	16.7	11	SF					34			F
	HOLL	12	2006	2011	2021	N06	E52	6583	04	16.7	15	SF		3	E		62			F
	PALE	12	2007	2007	2014	N07	E52	6583	04	16.7	7	SF		3	E		15			
	RAMY	12	2008	2008	2015	N06	E52	6583	04	16.7	7	SF		3	E		25			
0238		12	20284	20332	2046	S10	W43	6570	04	9.6	18	SF C 4.8					63			FH
	HOLL	12	2028	2033	2055	S11	W44	6570	04	9.5	27	1N C 4.8	3	E		112				H
	RAMY	12	2032	2034	2041	S10	W44	6570	04	9.5	9	SF		3	E		26			
	PALE	12	2032	2035	2043	S10	W40	6570	04	9.8	11	SF		3	E		52			FH
0239	HOLL	12	2128	2131	2138	N09	E45	6583	04	16.3	10	SF		3	E		35			
0240		12	2136	2142	2151	S20	W60	6566	04	8.3	15	1N					70			
	HOLL	12	2136	2142	2155	S19	W60	6566	04	8.3	19	1N		3	E		124			
	PALE	12	2142E	2142U	2147	S21	W60	6566	04	8.3	5D	SF		3	E		15			
0241		12	2317	2334	2412	N08	E44	6583	04	16.3	55	1N					89			EF
	LEAR	12	2317	2334	2412	N09	E45	6583	04	16.3	55	1N		3	E		126			FE
	HOLL	12	2347E	2347U	2415D	N08	E44	6583	04	16.3	28D	SF		2	E		52			
0242	LEAR	12	2320	2321	2337	S12	W47	6570	04	9.4	17	1N		3	E		104			EF
0243	LEAR	13	0135	0142	0211	N07	E47	6583	04	16.6	36	SN		3	E		79			
0244	YUNN	13	0225	0235	0303	N20	W88		04	6.4	38				C					AG
0245	LEAR	13	0251	0252	0301	N09	E42	6583	04	16.3	10	SF		3	E		53			
0246		13	03053	03096	0324	N30	W01	6580	04	13.0	19	SN					18	0.3		E
	YUNN	13	0305	0315	0335	N29	W01	6580	04	13.0	30	SN			C		24	0.3		E
	PALE	13	0308	0309	0314	N30	W01	6580	04	13.0	6	SF		3	E		12			
0247	PALE	13	0334	0335U	0353D	S26	W57	6566	04	8.7	19D	SF		3	E		29			
0248	YUNN	13	0518	0522	0535	N10	E40	6583	04	16.2	17	SB			C		126	1.8		
0249	ISTA	13	0750		0757	N19	W01	6581	04	13.2	7	SF			P					D
0250		13	0812	0818	0828	N29	W02	6580	04	13.2	16	SB					121	1.5		E
	ISTA	13	0812		0832	N29	W02	6580	04	13.2	20	SB			P					E
	ONDR	13	0815E	0818	0823	N29	W02	6580	04	13.2	8D	SN		V		0818	121	1.5		E
0251		13	0842*	08486	0919	N08	E45	6583	04	16.7	37	1B					300	4.5		EFK
	HTPR	13	0842	0848	0925	N10	E47	6583	04	16.9	43	2N			C	0848	400	6.2		
	ONDR	13	0844E	0850U	0916	N08	E43	6583	04	16.6	32D	1B		V		0850	263	3.8		EFK
	ISTA	13	0845		0915	N08	E47	6583	04	16.9	30	2B			P					F
	YUNN	13	0852E	0854	0913D	N08	E43	6583	04	16.6	21D	1B			P		236	3.4		F
	KHAR	13	0905		0950D	N08	E47	6583	04	16.9	45D	1N		2	P	0907	300	4.5		E
0252		13	09245	09293	0942	S12	W52	6570	04	9.5	18	SN					94	1.6		EL
	KHAR	13	0924	0930U	0953D	S12	W50	6570	04	9.6	29D	SN		2	P	0931	100	1.7		L
	HTPR	13	0929	0929	0940	S11	W52	6570	04	9.5	11	SF			C	0929	60	1.0		
	ONDR	13	0930E	0932	0943	S12	W54	6570	04	9.3	13D	1N			V	0932	121	2.1		E
0253		13	09464	09475	1002	S18	W70	6566	04	8.1	16	SN					65			L
	HTPR	13	0946	0947	1000	S17	W70	6566	04	8.1	14	SF			C	0947	50			
	KHAR	13	0950	0952	1003	S20	W70	6566	04	8.0	13	SN		2	P	0951	80			L
0254	KHAR	13	1002	1006U	1013	S09	E90	6593	04	20.2	11	SF		2	V	1006				L

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0255	KHAR	13	1003		1017	S27	E32	6582A	04	15.9	14	SF		2	V	1003			EL
		13	1239		1252	No Flare Patrol													
0256	HOLL	13	1351	1355	1408	S12	W55	6570	04	9.4	17	SF		3	E		43		
0257	HOLL	13	1515	1526	1553	N09	E39	6583	04	16.6	38	SF		3	E		57		F
0258	HOLL	13	1546	1547	1556	S30	E51	6587	04	17.7	10	SF		3	E		26		
0259	HOLL	13	1615	1619	1649	S25	W64	6566	04	8.7	34	SF		3	E		34		
0260		13	16594	17101	1736	S09	W57	6570	04	9.4	37	SF	C 5.4				60		EF
	RAMY	13	1659	1711	1730	S08	W58	6570	04	9.3	31	SF		3	E		56		F
	HOLL	13	1703	1710	1743	S10	W54	6570	04	9.6	40	SN	C 5.4	4	E		96		E
	PALE	13	1726E	1726U	1735D	S09	W59	6570	04	9.3	9D	SF		3	E		28		F
0261	HOLL	13	1755	1758	1808	S10	W51	6570	04	9.9	13	SF		3	E		21		
0262	HOLL	13	1756	1759	1815	N08	E38	6583	04	16.6	19	SF		3	E		20		
0263	HOLL	13	1919	1921	1924D	S10	E90	6593	04	20.6	5D	SF		2	E		17		
0264	HOLL	13	1930	1931	1959	S24	E12	6582	04	14.7	29	SF		3	E		65		F
		13	2143		2153	No Flare Patrol													
		13	2209		2220	No Flare Patrol													
0265	VORO	13	2303	2309	2326	S10	E89	6593	04	20.6	23	1F		2	C	2309	54		D
0266	HOLL	13	2347E	2347U	2415D	N08	E44	6583	04	17.3	28D	SF		2	E		52		
0267	VORO	14	0016	0018	0030	S26	E21	6582A	04	15.6	14	SF		2	C	0018	63	0.7	DIJT
0268	VORO	14	0030	0033	0055	S19	W79	6566	04	8.0	25	SF		2	C	0033	54		DIJT
0269	VORO	14	0038	0040	0055	S12	W63	6568	04	9.3	17	SF		2	C	0040	90	1.8	DIJT
0270	LEAR	14	0113E	0127	0156	N06	E34	6583	04	16.6	43D	SF		3	E		41		F
0271	VORO	14	0127	0128	0135	S26	E21	6582A	04	15.7	8	SF		2	C	0128	99	1.2	DIJT
0272		14	0315*	03447	0449	S26	E24	6582A	04	16.0	94	1N	M 1.5				302	3.1	F
	LEAR	14	0315	0344	0439	S27	E26	6582A	04	16.2	84	2N	M 1.5	3	E		382		F
	URUM	14	0325	0351	0515	S25	E23	6582A	04	15.9	110	1F			C		289	3.4	F
	YUNN	14	0334	0347	0432	S26	E24	6582A	04	16.0	58	1N			C		236	2.8	F
0273		14	0423	04252	0441	S12	W64	6570	04	9.4	18	SN					80		D
	WATU	14	0423	0425	0435	S12	W63	6570	04	9.4	12	SN			C	0425	40		
	LEAR	14	0423	0427	0444	S12	W64	6570	04	9.4	21	1N		3	E		183		
	URUM	14	0424E	0427	0444	S11	W66	6570	04	9.2	20D	SN			C		16		D
0274	ABST	14	0523	0524	0530	N16	E60	6592	04	18.8	7	1F			C	0524	87		D
0275		14	05412	05422	0558	N07	E28	6583	04	16.3	17	SN	C 8.7				120	1.8	EFY
	LEAR	14	0541	0542	0604	N07	E28	6583	04	16.3	23	SN	C 8.7	3	E		75		F
	ABST	14	0541	0543	0550D	N07	E27	6583	04	16.2	9D	1N			C	0543	174	2.1	E
	TACH	14	0543	0544	0553	N07	E29	6583	04	16.4	10	SB		2	C	0544	112	1.4	EY
0276	ABST	14	0631	0636	0646	S04	E90	6602A	04	21.0	15	1N			C	0636	87		AD
0277		14	0844	08464	0856	S11	E85	6593	04	20.7	12	SN	C 4.2				69		
	SVTO	14	0844	0846	0854	S09	E86	6593	04	20.8	10	SF	C 4.2	3	E		82		
	LEAR	14	0844	0850	0856	S12	E80	6593	04	20.4	12	SN		3	E		93		
	YUNN	14	0846E	0846U	0858	S11	E89	6593	04	21.1	12D	SN			P	0846	31		
0278	SVTO	14	0957	0959	1009	S10	E84	6593	04	20.7	12	SF	C 3.2	3	E		87		
0279	SVTO	14	1027	1029	1033	S07	E81	6602A	04	20.5	6	SF		3	E		36		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Xray	Obs See	Type	Area Measurement		Remarks		
														Time (UT)	Apparent (10-6 Disk)		Corr (Sq Deg)	
	14	1051			1053		No Flare Patrol											
0280	14	12544	1301	1310	S07 E81	6602A	04	20.6	16	SF	M 1.7				86		FH	
	KANZ	14	1254	1257U	1257D	S07 E82	6602A	04	20.7	3D	SF		2	V				
	HOLL	14	1258	1301	1310	S09 E80	6602A	04	20.5	12	SN		2	E		89	FH	
	SVTO	14	1304E	1304U	1310	S05 E82	6602A	04	20.7	6D	SF M 1.7		3	E		83		
0281	SVTO	14	1434	1434	1443	N14 E43	6592	04	17.8	9	SF C 3.4		3	E		16		
0282	14	14549	1457*	1516	S06 E81	6602A	04	20.7	22	SF C 5.4					20			
	SVTO	14	1454	1457	1517	S05 E80	6602A	04	20.6	23	SF		3	E		14		
	HOLL	14	1503	1507	1514	S07 E82	6602A	04	20.8	11	SF C 5.4		4	E		25		
0283	HOLL	14	1516	1517	1522	S18 E25	6594	04	16.5	6	SF		4	E		17		
0284	14	1616*	16263	1644	S08 W72	6570	04	9.3	28	SF C 5.2					41			
	HOLL	14	1616	1626	1655	S09 W69	6570	04	9.5	39	SF C 5.2		3	E		86		
	SVTO	14	1626	1626	1638	S09 W74	6570	04	9.1	12	SF		3	E		10		
	RAMY	14	1629	1629	1639	S07 W72	6570	04	9.3	10	SF		3	E		28		
0285	HOLL	14	1649	1649	1659	S17 E26	6594	04	16.7	10	SF		3	E		23		
0286	14	1651	1651	1658	N13 E54	6592	04	18.8	7	SF					21			
	RAMY	14	1651	1651	1655	N13 E54	6592	04	18.8	4	SF		3	E		25		
	PALE	14	1651E	1651U	1700	N13 E55	6592	04	18.8	9D	SF		3	E		17		
0287	14	19211	19241	1930	N10 E25	6583	04	16.7	9	SF C 3.0					39		F	
	HOLL	14	1921	1924	1932	N10 E25	6583	04	16.7	11	SF C 3.0		3	E		40		F
	RAMY	14	1922	1925	1929	N11 E25	6583	04	16.7	7	SF		3	E		38		
0288	HOLL	14	2004	2006	2009	N28 W20	6580	04	13.3	5	SF		3	E		11		F
0289	14	20364	20411	2049	N12 E52	6592	04	18.8	13	SF C 3.4					30		F	
	HOLL	14	2036	2042	2054	N12 E53	6592	04	18.8	18	SF C 3.4		3	E		38		F
	RAMY	14	2040	2041	2044	N12 E51	6592	04	18.7	4	SF		3	E		21		
0290	HOLL	14	2040	2043	2103	S11 W71	6570	04	9.5	23	SF		3	E		45		F
0291	HOLL	14	2121	2131	2136	S32 E66	6600A	04	20.1	15	SF		3	E		27		F
0292	HOLL	14	2205	2207	2211	S19 E22	6594	04	16.6	6	SF		3	E		45		EF
0293	HOLL	14	2210	2246	2305	N12 E52	6592	04	18.8	55	SF		3	E		45		F
0294	HOLL	14	2236	2236	2241	S12 E71	6593	04	20.3	5	SF		3	E		12		
0295	HOLL	14	2253	2254	2303	S20 W83	6566	04	8.6	10	SF		3	E		20		
0296	HOLL	14	2301	2310	2349	S20 E23	6594	04	16.7	48	SF		3	E		15		F
0297	14	2302*	23251	2414	S10 W72	6570	04	9.5	72	SF					43		F	
	HOLL	14	2302	2326	2426	S10 W71	6570	04	9.6	84	SF		3	E		52		F
	LEAR	14	2320	2325	2401	S10 W73	6570	04	9.5	41	SF		3	E		34		
0298	HOLL	14	2311	2312	2323	S29 W02	6585B	04	14.8	12	SF		3	E		10		F
0299	HOLL	14	2324	2327	2439	N28 W21	6580	04	13.3	75	SF		3	E		18		
0300	14	2324	23253	2356	N12 E50	6592	04	18.7	32	SF					56	1.4	DFI	
	LEAR	14	2324	2325	2402	N12 E50	6592	04	18.7	38	SF		3	E		30		F
	VORO	14	2324	2328	2351	N13 E51	6592	04	18.8	27	SF		1	C	2328	81	1.4	DI
0301	HOLL	14	2325	2326	2332	S12 E77	6593	04	20.8	7	SF		3	E		25		F
0302	14	23294	23343	2359	N05 E18	6583	04	16.3	30	SF C 4.5					54	1.1	EFIJ	
	HOLL	14	2329	2335	2358	N06 E20	6583	04	16.5	29	SN C 4.5		3	E		42		FE
	LEAR	14	2333	2334	2358	N06 E17	6583	04	16.2	25	SF		3	E		22		F
	VORO	14	2333	2337	2400	N04 E17	6583	04	16.2	27	SF		1	C	2337	99	1.1	EIJ

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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	Class							Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0303		15	0020	0021	0027	S12 E74	6593	04	20.6	7	SF				24		F	
	HOLL	15	0020	0021	0027	S11 E76	6593	04	20.7	7	SF	3	E		22		F	
	LEAR	15	0020	0021	0027	S12 E73	6593	04	20.5	7	SF	3	E		27			
0304	HOLL	15	0027	0027	0039	S26 W03	6582	04	14.8	12	SF	3	E		11			
0305	HOLL	15	0031	0032	0039	S10 W71	6570	04	9.7	8	SF	3	E		12			
0306	LEAR	15	0040	0041	0052	N13 E50	6592	04	18.8	12	SF	3	E		21			
0307	LEAR	15	0040	0042	0054	S12 E73	6593	04	20.5	14	SF	3	E		27			
0308	PALE	15	0349	0358	0425D	N06 E16	6583	04	16.3	36D	SF C 6.4	3	E		24			
		15	0427		0444	No Flare Patrol												
0309	ABST	15	0646	0652	0700	S07 E75	6602A	04	20.9	14	SF		C	0652	87		D	
0310		15	06561	0657	0708	N05 E16	6583	04	16.5	12	SN				131		1.4	E
	ABST	15	0656	0658U	0710D	N05 E16	6583	04	16.5	14D	SN		C	0658	131		1.4	E
	KANZ	15	0657	0657	0708	N05 E15	6583	04	16.4	11	SF	2	V					
0311	ABST	15	0712E	0712	0717	N30 W29	6580	04	13.0	5D	1F		C	0717	174		2.6	E
0312	KANZ	15	0826	0834	0838	N06 E11	6583	04	16.2	12	SF	2	V					
0313		15	0923*	0940*	1059	S12 E70	6593	04	20.7	96	2N M 9.8				286		15.0	BEFKT
	SVTO	15	0923	1015U	1021D	S11 E70	6593	04	20.6	58D	2F M 9.8	2	E		334			F
	KANZ	15	0934	1004U	1120D	S11 E69	6593	04	20.6	106D	2N	2	V					
	LEAR	15	0935	0940	0956D	S10 E68	6593	04	20.5	21D	1F	2	E		123			F
	URUM	15	0940E	1015	1100	S13 E69	6593	04	20.6	80D	1N		C		273			F
	ONDR	15	1037E	1043U	1058	S14 E74	6593	04	21.0	21D	3B		V	1043	414		15.0	EFBTK
0314	KANZ	15	1012	1012	1018	N06 E10	6583	04	16.2	6	SF	2	V					
0315	KANZ	15	1106	1106	1113	N07 E15	6583	04	16.6	7	SF	2	V					
0316	SVTO	15	1155E	1159U	1203	N06 E10	6583	04	16.2	8D	SF C 8.3	2	E		16			FH
0317	SVTO	15	1331	1333	1340	N13 E41	6592	04	18.6	9	SF	3	E		17			
0318	HOLL	15	1355	1407	1509	S12 W77	6570	04	9.8	74	SF	3	E		70			
0319	HOLL	15	1417	1417	1424	N17 W16	6581	04	14.4	7	SF	3	E		17			F
0320	HOLL	15	1425	1437	1455	N28 W28	6580	04	13.4	30	SF	3	E		23			F
0321		15	1428*	1435*	1515	S10 E64	6593	04	20.4	47	1N M 2.5				160			FH
	HOLL	15	1428	1435	1523	S10 E65	6593	04	20.5	55	2B M 2.5	3	E		293			FH
	SVTO	15	1429	1434U	1505	S11 E65	6593	04	20.5	36	1F	3	E		167			FH
	SVTO	15	1507	1509	1518	S10 E63	6593	04	20.4	11	SF	3	E		21			F
0322		15	1430	1443	1530	N05 E11	6583	04	16.4	60	SF				67			EF
	HOLL	15	1430	1443	1539	N05 E12	6583	04	16.5	69	SN	3	E		97			FE
	SVTO	15	1434E	1443U	1521	N06 E11	6583	04	16.4	47D	SF	3	E		68			F
	RAMY	15	1451E	1451U	1514D	N05 E11	6583	04	16.4	23D	SF	3	E		36			F
0323	HOLL	15	1456	1457	1508	N27 W30	6580	04	13.3	12	SF	3	E		14			F
0324	HOLL	15	1511	1530	1556	S12 W78	6570	04	9.7	45	SF	3	E		46			
0325	HOLL	15	1518	1523	1552	S24 W12	6582	04	14.7	34	SF	3	E		13			
0326	HOLL	15	1540	1548	1553	N05 E12	6583	04	16.5	13	SF	3	E		10			
0327		15	15449	15541	1619	S12 E67	6593	04	20.7	35	SN M 4.2				70			FH
	HOLL	15	1544	1554	1631	S13 E67	6593	04	20.7	47	1B M 4.2	3	E		146			FH
	SVTO	15	1552	1553U	1608	S11 E66	6593	04	20.6	16	SF	2	E		23			F
	RAMY	15	1553	1555	1618	S13 E69	6593	04	20.9	25	SF	3	E		42			F

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo Day	Dur (Min)	Imp Opt Xray	Obs See Type	Time (UT)	Area Measurement		Remarks			
														Apparent (10-6 Disk)	Corr (Sq Deg)				
0328	HOLL	15	1558	1602	1619	S11	W81	6570	04	9.6	21	SF	3	E	20				
0329	HOLL	15	1620	1621	1635	S30	E27	6587	04	17.8	15	SF	3	E	17		F		
0330		15	1632	1643*	1744	S13	E68	6593	04	20.8	72	SF			58		EFK		
	HOLL	15	1632	1643	1744	S13	E68	6593	04	20.8	72	SF		E	68		K		
	HOLL	15	1632	1714	1744	S13	E68	6593	04	20.8	72	SF	3	E	49		FE		
0331	HOLL	15	1709	1714	1736	N05	E11	6583	04	16.5	27	SF	3	E	27		F		
0332	HOLL	15	1711	1714	1718	S12	W78	6570	04	9.8	7	SF	3	E	12				
0333	HOLL	15	1739	1741	1747	N05	E11	6583	04	16.5	8	SF	3	E	17		F		
0334	HOLL	15	1739	1741	1753	N28	W31	6580	04	13.3	14	SF	3	E	22		F		
0335	HOLL	15	1810	1812	1816	N05	E10	6583	04	16.5	6	SF	3	E	13		F		
0336	HOLL	15	1815	1818	1823	S11	E64	6593	04	20.6	8	SN C	3.5	3	E	42		F	
0337	PALE	15	1829E	1830U	1845	N06	E07	6583	04	16.3	16D	SF C	4.6	3	E	11		F	
0338		15	1901	1905	2104D	N06	E09	6583	04	16.5	123D	1N M	3.9		158		EF		
	PALE	15	1901	1905	1950D	N06	E08	6583	04	16.4	49D	1N M	3.9	3	E	177		F	
	HOLL	15	1903E	1903U	2104D	N06	E08	6583	04	16.4	121D	1N		2	E	140		FE	
	RAMY	15	1932E		1944D	N06	E10	6583	04	16.6	12D	SF		3	E			F	
0339	HOLL	15	1923	1929	1937	S11	E65	6593	04	20.7	14	SF	3	E	18				
0340	HOLL	15	1945	1946	1952	S11	E62	6593	04	20.5	7	SF	3	E	36				
																15 1955		2011	No Flare Patrol
																15 2032		2056	No Flare Patrol
																15 2110		2126	No Flare Patrol
0341	PALE	15	2116	2144U	2150D	N29	W31	6580	04	13.4	34D	SF	3	E	15		F		
0342	PALE	15	2215	2220U	2231D	N29	W38	6580	04	12.9	16D	SF	3	E	56		F		
0343	PALE	15	2215	2221U	2232D	S14	E58	6593	04	20.3	17D	SF C	4.3	3	E	15		F	
0344		15	2323*	2339S	2414	N28	W34	6580	04	13.3	51	SF			94	1.7	DEFJ		
	LEAR	15	2323	2344	2430	N29	W33	6580	04	13.4	67	SF	3	E	72		FE		
	VORO	15	2335	2339	2359	N27	W35	6580	04	13.2	24	SF	1	C	2343	116	1.7	DJ	
0345	LEAR	15	2355	2405	2422	S12	E57	6593	04	20.3	27	SF	3	E	22				
0346	VORO	16	0058	0100	0111	S10	E58	6593	04	20.4	13	SF	1	C	0100	72	1.3	EIJT	
0347	VORO	16	0104	0108	0135	S16	E68	6593A	04	21.2	31	SF	1	C	0108	54		DIJKT	
0348	VORO	16	0111U	0120	0140	S11	E56	6593	04	20.3	29U	SF	1	C	0120	81	1.4	DIJT	
0349	VORO	16	0125	0132	0145	S26	W15	6582	04	14.9	20	SF	1	C	0132	90	1.0	EJ	
0350		16	0240*	0250*	0332	N27	W37	6580	04	13.2	52	1N M	1.1		137	2.2	EFJU		
	YUNN	16	0240	0256	0303D	N27	W38	6580	04	13.1	23D	SN		P	79	1.2			
	PALE	16	0245	0310	0338	N26	W35	6580	04	13.4	53	1F M	1.1	3	E	124		F	
	VORO	16	0248	0250	0259D	N27	W35	6580	04	13.4	11D	SF		1	C	0250	108	1.6	EJ
	URUM	16	0250	0310	0325	N28	W38	6580	04	13.1	35	1N		C		161	2.6	E	
	TACH	16	0304E	0311	0337D	N27	W37	6580	04	13.2	33D	1B		2	C	0311	214	3.4	U
0351	URUM	16	0345	0349U	0400	N28	W38	6580	04	13.2	15	SF		C	64	1.0	E		
0352		16	0350*	04053	0437	S10	E58	6593	04	20.5	47	SN			115	2.8	EFU		
	URUM	16	0350	0405	0445	S10	E55	6593	04	20.3	55	SN		C	96	1.7	E		
	LEAR	16	0351	0405	0444	S12	E57	6593	04	20.4	53	SN	3	E	60		FE		
	PALE	16	0402	0408	0425	S13	E62	6593	04	20.8	23	SF	3	E	73				
	TACH	16	0419E		0435	S07	E60	6593	04	20.7	16D	1N		2	C	0419	230	3.8	U

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Xray	Obs See	Type	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0353	TACH	16	0419E		0500	N06	E04	6583	04	16.5	41D	SB	2	C	0419	92	1.0	Z
0354	TACH	16	0501	0521U	0600D	S08	E50	6598	04	19.9	59D	3F	2	C	0521	1173	21.6	IY
0355		16	0504	05203	0542	S12	E60	6593	04	20.7	38	SN M 1.5				98	1.9	EF
	LEAR	16	0504	0520	0542	S12	E61	6593	04	20.8	38	SN M 1.5	3	E		99		FE
	URUM	16	0504	0523	0542	S11	E58	6593	04	20.6	38	SF		C		96	1.9	E
0356		16	0600*	0605*	0638	N28	W39	6580	04	13.2	38	SN M 1.8				108	2.4	EF
	URUM	16	0600	0605	0610	N29	W39	6580	04	13.2	10	1N		C		241	3.9	E
	LEAR	16	0604	0605	0609	N28	W40	6580	04	13.1	5	SN M 1.8	3	E		26		FE
	KANZ	16	0605E	0605	0654	N27	W37	6580	04	13.4	49D	1N	2	V				
	SVTO	16	0606E	0621	0718	N28	W40	6580	04	13.1	72D	SF	3	E		68		
	URUM	16	0614	0616	0631	N28	W38	6580	04	13.3	17	SN		C		80	1.3	E
	ONDR	16	0625E	0627U	0645	N28	W39	6580	04	13.2	20D	SN		V	0627	124	2.0	E
0357		16	0623*	06464	0706	S15	E62	6593A	04	20.9	43	SF				28		F
	SVTO	16	0623	0650	0706	S14	E62	6593A	04	20.9	43	SF	3	E		28		F
	KANZ	16	0642	0646	0705	S16	E61	6593A	04	20.9	23	SF	2	V				
0358		16	07534	07564	0818	N28	W40	6580	04	13.2	25	SN				34	0.6	D
	YUNW	16	0753	0800	0816	N29	W40	6580	04	13.2	23	SN		C		31	0.5	D
	URUM	16	0755	0756	0812	N29	W40	6580	04	13.2	17	SN		C		48	0.8	D
	KANZ	16	0757	0757	0816	N27	W39	6580	04	13.3	19	SF	2	V				
	SVTO	16	0757	0757	0830	N28	W39	6580	04	13.3	33	SF	3	E		22		
0359		16	0755*	0801*	0855	N06	E01	6583	04	16.4	60	1N				198	2.4	EFOT
	YUNW	16	0755	0801	0851	N06	W01	6583	04	16.2	56	SB		C		31	0.3	E
	SVTO	16	0757	0824	0905	N06	E02	6583	04	16.5	68	1N	3	E		136		FE
	KANZ	16	0757	0824	0910	N05	E01	6583	04	16.4	73	1F	2	V				
	LEAR	16	0759	0818	0901	N05	E00	6583	04	16.3	62	1N	3	E		127		FE
	KHAR	16	0812E	0819U	0845	N07	E02	6583	04	16.5	33D	1N	2	P	0818	380	4.1	EO
	URUM	16	0812	0820	0839	N07	E02	6583	04	16.5	27	1B		C		289	3.0	E
	ONDR	16	0821E	0824U	0831D	N07	E01	6583	04	16.4	10D	1B		V	0824	228	2.4	ETF
0360	SVTO	16	0814	0821	0831	S24	W19	6582	04	14.9	17	SF M 1.3	3	E		22		
0361		16	0835*	0836*	0854	N28	W39	6580	04	13.3	19	SF C 6.5				33	0.8	DEF
	SVTO	16	0835	0837	0843	N26	W40	6580	04	13.2	8	SF	3	E		23		
	URUM	16	0835	0837	0843	N28	W40	6580	04	13.2	8	SN		C		32	0.5	E
	KANZ	16	0836	0836	0840	N26	W39	6580	04	13.3	4	SF	2	V				
	KHAR	16	0850	0853	0900	N28	W38	6580	04	13.4	10	SF	2	V	0853			D
	URUM	16	0850	0855	0900	N29	W39	6580	04	13.3	10	SN		C		64	1.0	E
	SVTO	16	0852	0855	0913	N28	W40	6580	04	13.2	21	SF	3	E		32		
	KANZ	16	0852	0856	0859	N26	W40	6580	04	13.3	7	SF	2	V				
	LEAR	16	0855	0856	0858	N29	W37	6580	04	13.5	3	SF C 6.5	3	E		15		FE
0362		16	09447	09521	1011	N28	W40	6580	04	13.3	27	SF				67		D
	SVTO	16	0944	0953	1007	N28	W41	6580	04	13.2	23	SF	3	E		67		
	KANZ	16	0945	0952	1011	N27	W40	6580	04	13.3	26	SF	2	V				
	KHAR	16	0951	0952	1015	N28	W38	6580	04	13.4	24	SF	2	V	0952			D
0363		16	09515	09573	1012	S24	W22	6582	04	14.7	21	SF C 5.1				56		DF
	SVTO	16	0951	0958	1019	S24	W20	6582	04	14.9	28	SF C 5.1	3	E		56		F
	KHAR	16	0955	0957	1010	S25	W24	6582	04	14.5	15	SF	2	V	0957			D
	KANZ	16	0956	1000	1007	S22	W22	6582	04	14.7	11	SF	2	V				
0364	KHAR	16	0956	1002	1018	S18	W80		04	10.3	22	SF	2	V	1002			DH
0365	KHAR	16	1002	1003	1006D	S15	W05	6594	04	16.0	4D	SF	2	V	1003			D
0366	SVTO	16	1053	1053	1107	S09	E52	6593	04	20.3	14	SF C 6.4	4	E		24		
0367		16	1058*	1059*	1131	N28	W40	6580	04	13.3	33	SF				16		
	SVTO	16	1058	1059	1138	N28	W41	6580	04	13.2	40	SF	4	E		16		
	KANZ	16	1109	1113	1129	N27	W40	6580	04	13.3	20	SN	2	V				
	RAMY	16	1109	1116	1126	N29	W38	6580	04	13.5	17	SF	3	E		16		

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Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0368		16 1129	11294	1141	N07	E00	6583	04	16.5	12	SF					20		
	KANZ	16 1129	1129	1139	N06	W01	6583	04	16.4	10	SF		2	V				
	SVTO	16 1129	1133	1143	N08	E01	6583	04	16.5	14	SF		4	E		20		
0369		16 1129	11294	1140	S22	W22	6582	04	14.8	11	SF					24		F
	RAMY	16 1129	1129	1134	S22	W22	6582	04	14.8	5	SF		3	E		17		F
	SVTO	16 1129	1129	1142	S22	W22	6582	04	14.8	13	SF		4	E		31		F
	KANZ	16 1129	1133	1143	S23	W23	6582	04	14.7	14	SF		2	V				
0370		16 11393	1143*	1204	N28	W42	6580	04	13.2	25	SF					24		
	SVTO	16 1139	1213	1220	N29	W45	6580	04	12.9	41	SF		4	E		30		
	RAMY	16 1142	1143	1147	N28	W40	6580	04	13.4	5	SF		3	E		19		
0371		16 11394	1147*	1224	S10	E51	6593	04	20.3	45	SF	M 1.8				66		
	KANZ	16 1139	1147	1210	S10	E51	6593	04	20.3	31	SF		2	V				
	SVTO	16 1139	1204	1235	S09	E51	6593	04	20.3	56	SF	M 1.8	4	E		92		
	RAMY	16 1143	1154	1226	S11	E52	6593	04	20.4	43	SF		3	E		40		
0372		16 1237	1329	1406	N29	W42	6580	04	13.2	89	SF					51		1.6
	SVTO	16 1237	1329	1406	N28	W44	6580	04	13.1	89	SF		4	E		34		
	HTPR	16 1246E		1247D	N31	W38	6580	04	13.5	10	SF			C	1247	100		1.6
	HOLL	16 1333E	1333U	1356D	N29	W45	6580	04	13.0	23D	SF		1	E		19		
0373	KANZ	16 1304	1307	1319	S23	W23	6582	04	14.8	15	SF		2	V				
0374		16 1320*	1334*	1444	N06	W02	6583	04	16.4	84	SN	M 2.4				117		EFK
	SVTO	16 1320	1402	1516	N06	W03	6583	04	16.3	116	1N	M 2.4	4	E		156		
	RAMY	16 1324	1351	1439	N06	W02	6583	04	16.4	75	SN		3	E		84		F
	RAMY	16 1324	1400	1439	N06	W02	6583	04	16.4	75	SN			E		98		K
	KANZ	16 1330	1334	1428	N06	W03	6583	04	16.3	58	SF		2	V				
	HOLL	16 1339	1353	1440	N06	W02	6583	04	16.4	61	1B		3	E		130		FE
0375		16 1321*	1347*	1416	S10	E48	6593	04	20.2	55	SF					18		F
	SVTO	16 1321	1347	1426	S10	E45	6593	04	19.9	65	SF		4	E		21		
	RAMY	16 1359	1359	1406	S11	E52	6593	04	20.5	7	SF		3	E		15		F
0376	SVTO	16 1331	1339	1352	S20	E01	6594	04	16.6	21	SF		4	E		15		
0377		16 13577	14031	1420	S23	W22	6582	04	14.9	23	SN					64		F
	SVTO	16 1357	1403	1435	S25	W20	6582	04	15.0	38	SN		4	E		83		
	RAMY	16 1402	1404	1416	S22	W24	6582	04	14.7	14	SF		3	E		51		F
	HOLL	16 1403	1403	1413	S23	W23	6582	04	14.8	10	SN		3	E		59		
	KANZ	16 1404	1404	1416	S23	W23	6582	04	14.8	12	SF		2	V				
0378		16 14176	14241	1433	N27	W43	6580	04	13.2	16	SF	C 5.9				56		
	SVTO	16 1417	1425	1440	N28	W44	6580	04	13.1	23	SF	C 5.9	4	E		64		
	KANZ	16 1420	1424	1428	N25	W41	6580	04	13.4	8	SF		2	V				
	HOLL	16 1423	1424	1431	N28	W44	6580	04	13.2	8	SF		3	E		48		
0379	SVTO	16 1445	1449	1513	N28	W45	6580	04	13.1	28	SF	C 4.9	3	E		22		
0380		16 15271	15501	1618	N28	W43	6580	04	13.3	51	SF					58		F
	KANZ	16 1527	1550	1603D	N27	W42	6580	04	13.4	36D	SF		2	V				
	SVTO	16 1528	1551	1614	N28	W45	6580	04	13.1	46	SF		3	E		51		
	RAMY	16 1528	1551	1622	N29	W42	6580	04	13.3	54	SF		3	E		65		F
0381		16 15581	16001	1633	N06	W03	6583	04	16.4	35	1N	M 3.3				99		EF
	HOLL	16 1558	1601	1637	N06	W02	6583	04	16.5	39	1B	M 3.3	3	E		141		FE
	RAMY	16 1559	1600	1629	N06	W03	6583	04	16.4	30	SN		3	E		69		F
	SVTO	16 1559	1601	1634D	N06	W04	6583	04	16.4	35D	SN		3	E		88		F
	KANZ	16 1603E		1603D	N05	W02	6583	04	16.5	35D	1F		2	V				
0382	HOLL	16 1737	1738	1741	S10	E53	6593	04	20.7	4	SF		3	E		17		F
0383		16 1821*	1823*	1920	N06	W04	6583	04	16.5	59	SF	C 4.6				38		
	HOLL	16 1821	1823	1924	N06	W05	6583	04	16.4	63	SF	C 4.6	3	E		70		
	RAMY	16 1822	1823	1836D	N06	W04	6583	04	16.5	14D	SF		3	E		20		
	PALE	16 1848	1852	1916	N06	W04	6583	04	16.5	28	SF		3	E		23		

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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 Time (UT)	Measurement		Remarks
													Apparent (10-6 Disk)	Corr (Sq Deg)	
0384	HOLL	16 1850	1857	1920	N28	W46	6580	04 13.2	30	SF C 3.3	3 E		42		
0385	RAMY	16 1954	1955	1958	N28	W44	6580	04 13.4	4	SF	3 E		12		H
0386		16 2022	2022	2037	N06	W04	6583	04 16.5	15	SF C 5.1			46		F
	RAMY	16 2022	2022	2037	N08	W04	6583	04 16.5	15	SF C 5.1	3 E		43		F
	HOLL	16 2026E	2026U	2034D	N04	W05	6583	04 16.5	8D	SF	2 E		50		F
0387	HOLL	16 2111	2112	2148D	N05	W06	6583	04 16.4	37D	SF	3 E		37		F
0388		16 21297	21309	2142	S10	E48	6593	04 20.5	13	SF			26		
	PALE	16 2129	2130	2143	S09	E47	6593	04 20.4	14	SF	3 E		34		
	HOLL	16 2136	2139	2142	S11	E48	6593	04 20.5	6	SF	3 E		19		
0389	HOLL	16 2152	2202	2211	S07	E52	6593	04 20.8	19	SF	3 E		18		
0390		16 2217	2224	2241	N06	W06	6583	04 16.5	24	1N C 8.3			85		EF
	HOLL	16 2217	2224	2244D	N08	W06	6583	04 16.5	27D	1N C 8.3	3 E		118		FE
	PALE	16 2222E	2224	2241	N05	W07	6583	04 16.4	19D	SF	3 E		52		F
0391		16 22362	2240U	2307	S12	E46	6593	04 20.4	31	1N M 1.0			126		FH
	HOLL	16 2236	2243U	2308D	S13	E44	6593	04 20.3	32D	1N M 1.0	3 E		168		F
	PALE	16 2238	2240U	2307	S11	E47	6593	04 20.5	29	SF	3 E		85		FH
		16 2247		2259	No Flare Patrol										
		16 2308		2314	No Flare Patrol										
		16 2326		2332	No Flare Patrol										
0392	PALE	16 2337E	2359U	2410	S10	E46	6593	04 20.4	33D	SF M 1.1	3 E		13		
0393		17 0026	0028	0051	S10	E43	6593	04 20.2	25	1N			95	2.5	F
	YUNN	17 0026	0028	0037D	S10	E44	6593	04 20.3	11D	1B	P		173	2.5	F
	PALE	17 0038E	0038U	0051	S11	E42	6593	04 20.2	13D	SF	3 E		17		F
0394		17 01441	0147	0156	S08	E49	6593	04 20.7	12	SN M 1.7			97	1.6	F
	WATU	17 0144	0147	0154	S08	E48	6593	04 20.7	10	SF	C	0147	110	1.6	F
	PALE	17 0145	0147	0158	S08	E50	6593	04 20.8	13	SN M 1.7	3 E		84		F
0395	LEAR	17 0150E	0208U	0212	N29	W47	6580	04 13.4	22D	SF	3 E		79		
0396		17 0328	0321*	0348	N28	W50	6580	04 13.2	20	1N			105	3.9	HZ
	PALE	17 0319E	0321	0326	N27	W50	6580	04 13.2	7D	SF	3 E		16		H
	TACH	17 0328	0333	0410	N29	W49	6580	04 13.3	42	1B	2 C	0333	194	3.9	Z
0397		17 0606E	0607U	0628D	S28	W36	6582	04 14.4	22D	SF			104	1.4	D
	HTPR	17 0606E		0607D	S28	W37	6582	04 14.4	1D	SF	C	0607	120	1.6	D
	ABST	17 0606E	0607U	0628D	S27	W34	6582	04 14.6	22D	SF	P	0607	87	1.1	D
0398	MITK	17 0636	0637	0644	N05	W12	6583	04 16.4	8	1F	C	0637	210	2.2	
0399		17 0639*	06542	0734	S10	E42	6593	04 20.4	55	1N M 2.2			241	4.3	EF
	LEAR	17 0639	0654	0743	S12	E42	6593	04 20.4	64	1N M 2.2	3 E		168		FE
	MITK	17 0653	0655	0739D	S10	E42	6593	04 20.4	46D	SN	C	0655			E
	YUNN	17 0653	0656	0724	S09	E41	6593	04 20.4	31	1N	C		314	4.3	
0400		17 0656	0702	0752	N28	W50	6580	04 13.4	56	2N			248	4.8	BEF
	YUNN	17 0656	0702	0758	N29	W51	6580	04 13.3	62	1N	C		157	3.2	F
	BUCA	17 0710E	0712U	0810D	N26	W49	6580	04 13.5	60D	2N	C	0712	322	5.9	
	ONDR	17 0726E	0726U	0745	N28	W51	6580	04 13.3	19D	2B	V	0726	266	5.4	BEF
0401	RAMY	17 1202	1205	1209	N28	W52	6580	04 13.4	7	SF	3 E		26		F
0402	SVTO	17 1322	1323	1327	S09	E27	6598	04 19.6	5	SF	3 E		25		
0403	RAMY	17 1402	1402	1410	N27	W53	6580	04 13.4	8	SF	3 E		27		
0404		17 1439*	14569	1516	N14	W43	6591	04 14.4	37	SF			40	0.9	F
	HTPR	17 1439		1520	N15	W40	6591	04 14.6	41	SF	C	1500	60	0.9	F
	RAMY	17 1456	1456	1508	N14	W43	6591	04 14.4	12	SF	3 E		20		F
	HOLL	17 1502	1505	1521	N12	W45	6591	04 14.2	19	SF	3 E		41		F

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Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/	CMP	Dur	Imp	Obs	Area Measurement	Time	Apparent	Corr	Remarks	
							USAF										Region
0405		17 1618	1618*	1711	N28	W54	6580	04	13.4	53	1N			262	10.0	EF	
	HOLL	17 1459E	1618	1711	N27	W54	6580	04	13.4	132D	1N	3	E	157		FE	
	HTPR	17 1618	1620	1635D	N28	W52	6580	04	13.6	17D	2N		C	1620	500	10.0	
	PALE	17 1639E	1647	1716D	N28	W55	6580	04	13.4	37D	1F	3	E	130		F	
0406		17 1657	1657I	1723	S11	E34	6593	04	20.3	26	SF C 4.5			21		F	
	HOLL	17 1657	1657	1727	S11	E34	6593	04	20.3	30	SF C 4.5	3	E	22		F	
	PALE	17 1657	1658	1719	S11	E33	6593	04	20.2	22	SF	3	E	20		F	
0407	HOLL	17 1711	1715	1757	S19	W17	6594	04	16.4	46	SF	3	E	54		F	
0408	HOLL	17 1813	1814	1820	N28	W56	6580	04	13.4	7	SF	3	E	31		F	
0409	HOLL	17 1850	1858	1902	S11	E33	6593	04	20.3	12	SF	3	E	14			
0410	HOLL	17 2031	2031	2041	S19	W17	6594	04	16.5	10	SF	3	E	12			
0411	HOLL	17 2046	2047	2058	S11	E32	6593	04	20.3	12	SF	3	E	17		F	
0412	HOLL	17 2114	2114	2126	N29	W59	6580	04	13.2	12	SF	4	E	17		F	
0413		17 2120	2142	2207	S11	E32	6593	04	20.3	47	SN			34		F	
	HOLL	17 2120	2142	2214	S11	E32	6593	04	20.3	54	SN	3	E	50		F	
	PALE	17 2149E	2149U	2200	S11	E32	6593	04	20.3	11D	SF	3	E	19		F	
0414		17 2149	2149	2158	N26	W59	6580	04	13.3	9	SF			28			
	PALE	17 2149E	2149U	2158	N26	W58	6580	04	13.4	9D	SF	3	E	28			
	HOLL	17 2149	2149	2159	N27	W60	6580	04	13.2	10	SF	3	E	29			
0415		17 2235	2241	2252	N25	W59	6580	04	13.4	17	SN C 4.1			63		E	
	HOLL	17 2235	2241	2252	N27	W60	6580	04	13.3	17	SN C 4.1	3	E	95		E	
	PALE	17 2236E	2237U	2254D	N23	W58	6580	04	13.5	18D	SF	3	E	31			
0416	LEAR	17 2330	2332	2346	N14	E06	6592	04	18.4	16	SF	3	E	64			
0417		17 2338	2345U	2357D	N28	W60	6580	04	13.3	19D	1N	2	E	101			
		17 2356E	2357U	2405	S10	E32	6593	04	20.4	9D	SF			24		EF	
	HOLL	17 2356E	2357U	2437D	S10	E31	6593	04	20.3	41D	SF	2	E	35		E	
	PALE	17 2357E	2357U	2405	S10	E32	6593	04	20.4	8D	SF	3	E	12		F	
0419		18 0040	0048	0115	S10	E31	6593	04	20.3	35	SF			60	1.5	F	
	LEAR	18 0040	0055	0132	S09	E36	6593	04	20.7	52	SF	3	E	39			
	YUNN	18 0041	0048	0111	S12	E28	6593	04	20.1	30	SN		C	126	1.5		
	PALE	18 0044	0051	0101	S10	E30	6593	04	20.3	17	SF	3	E	14		F	
0420		18 0041	0046	0055	N27	W60	6580	04	13.3	14	SN C 4.3			96		E	
	YUNN	18 0041	0047	0051	N27	W62	6580	04	13.2	10	1N		C	141			
	HOLL	18 0043	0046	0056	N28	W61	6580	04	13.3	13	SN	2	E	89		E	
	LEAR	18 0044	0047	0059	N27	W58	6580	04	13.5	15	SN C 4.3	3	E	76			
	PALE	18 0045	0048	0054	N26	W61	6580	04	13.3	9	SF	3	E	80			
0421	YUNN	18 0123E	0123	0133	S23	W45	6582	04	14.6	10D	SN		P	24	0.4	E	
0422		18 0137	0140	0150	S12	E34	6593	04	20.6	13	SN C 4.6			36	0.5	F	
	YUNN	18 0137	0140	0152	S13	E34	6593	04	20.6	15	SB		C	39	0.5		
	PALE	18 0139	0140	0147	S10	E33	6593	04	20.5	8	SF C 4.6	3	E	32		F	
0423	PALE	18 0234	0242	0251	N26	W60	6580	04	13.4	17	1F	3	E	139			
0424	LEAR	18 0529E	0532	0541	S13	E25	6600	04	20.1	12D	SF C 5.5	2	E	38		F	
0425		18 0639	0705	0723	N27	W62	6580	04	13.4	44	1N			128	2.3	DE	
	ISTA	18 0639		0711	N27	W60	6580	04	13.6	32	1N		P			E	
	ABST	18 0645	0646U	0649D	N27	W61	6580	04	13.5	4D	1N		P	0646	87	2.3	D
	PEKG	18 0705E	0705	0735	N27	W65	6580	04	13.2	30D	1B		P	0705	168		E
0426	HTPR	18 0832	0833	0836	S18	W27	6594	04	16.3	4	SF		C	0833	60	0.7	
		18 0917		0928	No Flare Patrol												

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0427	SVTO	18	1021	1023	1025	N26	W65	6580	04 13.4	4	SF		3	E		15			
0428		18	1121*	1123*	1147	N06	W27	6583	04 16.4	26	SF					71	1.5	F	
	SVTO	18	1121	1139	1200	N04	W30	6583	04 16.2	39	SF		3	E		66		F	
	RAMY	18	1123	1123	1132	N06	W27	6583	04 16.4	9	SF		3	E		31		F	
	HTPR	18	1130E	1139	1145	N07	W25	6583	04 16.6	15D	SN			C	1139	130	1.5		
	RAMY	18	1136	1141	1150	N06	W26	6583	04 16.5	14	SF		3	E		57			
0429		18	11508	12083	1224	N15	W55		04 14.3	34	SF					51	1.2		
	HTPR	18	1150	1208	1230	N15	W55		04 14.3	40	SF			C	1208	60	1.2		
	SVTO	18	1158	1211	1217	N15	W55		04 14.3	19	SF		3	E		42			
0430	HTPR	18	1159	1202	1250	N33	W65	6580	04 13.3	51	SF			C	1202	80			
0431	SVTO	18	1232	1232	1237	N13	W01	6592	04 18.4	5	SF C 2.9		3	E		24			
0432	HOLL	18	1347	1357	1400D	N13	W01	6592	04 18.5	13D	SF		3	E		34		F	
0433		18	15061	15063	1517	N07	W29	6583	04 16.4	11	SF C 3.1					46		F	
	RAMY	18	1506	1506	1518	N06	W28	6583	04 16.5	12	SF C 3.1		3	E		30		F	
	SVTO	18	1506	1509	1521	N08	W30	6583	04 16.4	15	SF		3	E		68			
	HOLL	18	1507	1508	1513	N06	W29	6583	04 16.4	6	SF		2	E		41		F	
0434	SVTO	18	1536	1537	1543	S13	E23	6593	04 20.4	7	SF		3	E		31			
0435	HOLL	18	1720	1722	1734	N12	W32	6583	04 16.3	14	SF		3	E		20			
0436	HOLL	18	1736	1739	1748	N13	E01	6592	04 18.8	12	SF		3	E		28		F	
0437	HOLL	18	1736	1753	1817	N08	W32	6583	04 16.3	41	SF C 2.8		3	E		29		F	
0438	HOLL	18	1830	1833	1835	N28	W71	6580	04 13.2	5	SF		3	E		12			
0439	PALE	18	1844	1844	1855D	S09	E20	6593	04 20.3	11D	SF C 4.5		3	E		15			
		18	2058		2101	No Flare Patrol													
0440	PALE	18	2141	2141	2156	N04	W33	6583	04 16.4	15	SF C 2.0		3	E		26		F	
0441		19	00558	01057	0130	N04	W35	6583	04 16.4	35	SN C 3.0					44	1.0	F	
	LEAR	19	0055	0109	0137	N05	W34	6583	04 16.5	42	SF C 3.0		3	E		34			
	YUNN	19	0057	0105	0130	N04	W35	6583	04 16.4	33	SB			C		79	1.0		
	PALE	19	0103	0112	0124	N04	W35	6583	04 16.4	21	SF		3	E		20		F	
0442		19	03375	03416	0358	N13	W08	6592	04 18.5	21	SN C 3.3					145	2.1	EFU	
	TACH	19	0337	0341	0355	N14	W07	6592	04 18.6	18	SB		2	C	0341	128	1.4	U	
	PEKG	19	0340	0347	0407	N13	W07	6592	04 18.6	27	1N			P	0345	252	2.8	E	
	PALE	19	0342	0345	0353	N13	W09	6592	04 18.5	11	SF C 3.3		3	E		56		F	
0443		19	0417*	0421*	0514	N13	W09	6592	04 18.5	57	SN C 3.4					93	1.1	FU	
	TACH	19	0417	0421	0429	N15	W10	6592	04 18.4	12	SB		2	C	0421	61	0.7	F	
	LEAR	19	0419	0459U	0538	N12	W09	6592	04 18.5	79	SN C 3.4		3	E		98			
	TACH	19	0433	0433	0525	N14	W07	6592	04 18.7	52	SB		2	C	0433	138	1.5	U	
	SVTO	19	0448	0506	0515	N13	W10	6592	04 18.4	27	SF		2	E		81			
	ABST	19	0500E	0508	0523	N13	W08	6592	04 18.6	23D	SN			P	0508	87	1.0	F	
0444	HTPR	19	0642	0643	0655	N13	W45	6583	04 15.9	13	SF			C	0643	50	0.7		
0445		19	0644*	06575	0713	N13	W10	6592	04 18.5	29	SN C 5.7					87	1.4	EF	
	LEAR	19	0644	0657	0714	N13	W08	6592	04 18.7	30	SN C 5.7		3	E		51			
	YUNN	19	0648	0702	0710	N14	W10	6592	04 18.5	22	SB			C		173	1.9	E	
	HTPR	19	0657	0658	0715	N13	W12	6592	04 18.4	18	SN			C	0658	90	1.0		
	SVTO	19	0700E	0700U	0712	N13	W10	6592	04 18.5	12D	SF		3	E		35		F	
0446	ABST	19	0700	0702	0717	S05	W09	6598	04 18.6	17	SN			C	0702	87	0.9	E	
0447		19	07504	0753	0806	S14	E40	6601	04 22.3	16	SN					87	1.0	D	
	HTPR	19	0750	0753	0810	S14	E41	6601	04 22.4	20	SF			C	0753	60	0.8		
	ABST	19	0754	0757U	0802	S14	E40	6601	04 22.3	8	SN			P	0757	114	1.2	D	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/USAF			CMP Mo	Dur Day	Imp Opt	Xray	Obs See	Type	Time (UT)	Area (10 ⁻⁶ Disk)	Measurement Apparent	Corr (Sq Deg)	Remarks	
						Lat	CMD	Region												
0448	ISTA	19	0758		0810	N13	W08	6592	04	18.7	12	1N		P					E	
0449	HTPR	19	0846	0852	0900	S11	E11	6593	04	20.2	14	SF		C	0852	40		0.4		
0450		19	1140	1157	1228	N12	W41	6583	04	16.4	48	SF				33		0.7		
	SVTO	19	1140	1157	1217	N12	W42	6583	04	16.3	37	SF	2	E		16				
	HTPR	19	1150E		1240	N13	W40	6583	04	16.5	50D	SF		C	1152	50		0.7		
0451		19	1259I	1302I	1341	S10	E12	6593	04	20.4	42	SF C	5.4			62		1.2	EH	
	HTPR	19	1259	1303	1307D	S10	E11	6593	04	20.4	8D	SN		C	1303	120		1.2		
	SVTO	19	1259	1303	1401	S09	E14	6593	04	20.6	62	SF	2	E		72			E	
	RAMY	19	1300	1302	1329	S10	E16	6593	04	20.7	29	SF C	5.4	4	E		27			H
	HOLL	19	1301E	1301U	1332	S10	E09	6593	04	20.2	31D	SF	1	E		27				H
0452	HOLL	19	1417	1420	1431	N15	W21	6587B	04	18.0	14	SF C	2.9	3	E		31			F
0453	HOLL	19	1624	1628	1632	S10	E09	6593	04	20.3	8	SF		3	E		21			
0454	VORO	20	0028	0035	0055	N14	W32	6592	04	17.6	27	SF	1	C	0035	134		1.7	EIJ	
0455	HOLL	20	0029	0032	0104	N15	W39	6587B	04	17.1	35	SF C	2.6	3	E		17			F
0456		20	0237E	0239I	0244	N07	W53	6583	04	16.1	7	SF C	3.7			60		1.7	DIJ	
	VORO	20	0237	0239	0242	N08	W54	6583	04	16.1	5	SF		1	C	0239	99		1.7	DIJ
	PALE	20	0239	0240	0247	N06	W52	6583	04	16.2	8	SF C	3.7	3	E		21			
0457	URUM	20	0420	0436	0505	N32	W72	6580	04	14.5	45	2N		C		289			A	
0458	URUM	20	0509	0511	0520	N28	W74	6580	04	14.4	11	1N		C		96			A	
0459	SVTO	20	0631	0632	0636	S26	W75	6582	04	14.4	5	SF		3	E		17			
0460	ABST	20	0719	0724	0728	N30	W90	6580	04	13.2	9	1F		C	0724	87			AD	
0461	SVTO	20	0741	0742	0752	N09	W52	6583	04	16.4	11	SF		3	E		18			
0462		20	0827E	0851	1016	N09	W50	6583	04	16.6	109	3N X	1.0			809		11.8	FHIUV	
	SVTO	20	0827	0852U	1124D	N08	W50	6583	04	16.6	177D	3N X	1.0	3	E	942			FH	
	ISTA	20	0828E		0947	N10	W50	6583	04	16.6	79D	3B		P					IUV	
	HTPR	20	0829	0851	1045	N10	W50	6583	04	16.6	136	3B		C	0851	1250		19.5		
	KANZ	20	0830	0851	0951D	N10	W48	6583	04	16.7	81D	3N		2	V					
	YUNN	20	0907E	0907U	0948D	N09	W53	6583	04	16.4	41D	1N		P	0907	236		4.2	F	
0463	SVTO	20	0854	0857	0902	N14	W80		04	14.3	8	SF		3	E		19			
0464	HTPR	20	1036		1445D	N29	E80		04	26.7	249D	2N		C	1055	350			A	
0465	RAMY	20	1246	1247	1255	N15	W28	6592	04	18.4	9	SF		3	E		24			F
0466		20	1309	1313E	1320	N07	W50	6583	04	16.8	11	SF				16				
	RAMY	20	1309	1313	1317	N09	W50	6583	04	16.8	8	SF		3	E		16			
	KANZ	20	1310E	1315	1323	N05	W50	6583	04	16.8	13D	SF		1	C					
0467		20	1339	1343	1352	N14	W38	6592	04	17.7	13	SF				16				F
	KANZ	20	1339	1343	1344D	N14	W38	6592	04	17.7	5D	SF		1	C					
	HOLL	20	1339	1343	1352	N14	W39	6592	04	17.6	13	SF		3	E		16			F
0468	RAMY	20	1358	1358	1410	S12	W29	6599	04	18.4	12	SF		3	E		27			F
0469	HOLL	20	1434	1437	1440	N13	W25	6592	04	18.7	6	SF		3	E		48			F
0470		20	1632E	1636	1658	N15	W29	6592	04	18.5	26	SF				94		2.8	EF	
	HTPR	20	1632		1645D	N14	W25	6592	04	18.8	13D	1F		C	1641	220		2.8	E	
	RAMY	20	1634	1636	1649	N16	W30	6592	04	18.4	15	SF		3	E		13			F
	HOLL	20	1634	1636	1707	N14	W31	6592	04	18.3	33	SF		3	E		48			F
0471	RAMY	20	1641	1642	1650	S19	W48	6594	04	17.0	9	SF C	7.1	3	E		13			F
0472	HOLL	20	1724	1736	1740	S12	W09	6600	04	20.0	16	SF		3	E		27			

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF/ Region	CMP Mo Day	Dur (Min)	Imp Opt Xray	Obs See	Type	Area Measurement			Remarks													
														Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)														
0473	HOLL	20	1858	1904	1911	N08	W59	6583	04 16.4	13	SF	3	E		19															
0474	HOLL	20	1922	1922	1930	N07	W60	6583	04 16.3	8	SF	3	E		12			F												
0475	HOLL	20	2116	2116	2122	N09	W60	6583	04 16.4	6	SF	3	E		21			F												
0476		20	2138*	2141*	2153	N08	W61	6583	04 16.3	15	SF				45			F												
	HOLL	20	2138	2141	2149	N09	W60	6583	04 16.4	11	SF	3	E		63			F												
	PALE	20	2142	2142	2147	N06	W61	6583	04 16.3	5	SF	3	E		22															
	HOLL	20	2150	2151	2203	N07	W61	6583	04 16.3	13	SF	3	E		65			F												
	PALE	20	2150	2151	2205D	N08	W61	6583	04 16.3	15D	SF	3	E		31															
0477	HOLL	20	2138	2141	2204	S26	W36	6587	04 18.1	26	SF	3	E		26			F												
0478	HOLL	20	2222	2234	2241	S19	W60	6594	04 16.3	19	SF	3	E		16			F												
0479		20	2226*	2234*	2302	S25	W40	6587	04 17.8	36	1F C 4.0				68			F												
	HOLL	20	2226	2234	2259	S25	W39	6587	04 17.9	33	1F C 4.0	3	E		123			F												
	HOLL	20	2300	2302	2305	S25	W40	6587	04 17.8	5	SF	3	E		14			F												
0480	HOLL	20	2240	2244	2253	N15	W43	6587B	04 17.7	13	SF	3	E		26			F												
0481		21	0446*	0501*	0647	S11	W13	6593	04 20.2	121	1N C 8.3				396	5.1		EFIK												
	URUM	21	0446	0501	0515D	S11	W15	6593	04 20.1	29D	1B				289	3.1		E												
	PEKG	21	0502E	0540	0637	S12	W16	6593	04 20.0	95D	2B			0542	757	8.1		E												
	LEAR	21	0504E	0505	0633	S11	W10	6593	04 20.4	89D	1F				153			K												
	LEAR	21	0504E	0542	0633	S11	W10	6593	04 20.4	89D	1F C 8.3	3	E		217			F												
	MITK	21	0550	0550	0715	S10	W12	6593	04 20.3	85	1F			0550	320	3.4		F												
	TACH	21	0601E		0653	S09	W10	6593	04 20.5	52D	2F	2	C	0601	719	7.6		IE												
	URUM	21	0606E	0607U	0650	S11	W16	6593	04 20.0	44D	1F				321	3.5		E												
0482	LEAR	21	0733	0737	0742	S16	W63	6594	04 16.5	9	SF	3	E		30			F												
0483	LEAR	21	0744	0753	0824	S23	E15	6597	04 22.5	40	SF	3	E		29			F												
0484	PEKG	21	0755E	0755	0820	S21	E22	6601	04 23.0	25D	SB			0755	126	1.4		D												
0485	KHAR	21	1018		1037	S13	W44	6599	04 18.1	19	SF	2	V					D												
					1515	1604	No Flare Patrol																							
0486	RAMY	21	1930	1932	1935	S10	W19	6593	04 20.4	5	SF	3	E		19															
0487	HOLL	21	2056	2057	2109	N14	W48	6592	04 18.2	13	SF	3	E		34															
0488	HOLL	21	2219	2221	2233	S05	W14	6593	04 20.9	14	SF	3	E		20			F												
0489	LEAR	22	0514E	0514U	0519	N11	W20		04 20.7	5D	SF	3	E		13			F												
0490	ABST	22	0637	0642	0647	S25	W90	6582	04 15.3	10	1F			0642	87			ADK												
0491	SVTO	22	0707	0708	0718	S28	W90	6582	04 15.3	11	SF C 5.9	3	E		11			F												
0492		22	0738	0740	0747	S13	W24	6593	04 20.5	9	SF				54	0.7		D												
	SVTO	22	0738	0740	0747	S13	W24	6593	04 20.5	9	SF	3	E		48															
	ABST	22	0743E	0743U	0745D	S13	W24	6593	04 20.5	2D	SF			0743	61	0.7		D												
		22	1046		1105	No Flare Patrol																								
		22	1112		1128	No Flare Patrol																								
0493	HOLL	22	1526	1533	1536	S14	W59	6599	04 18.2	10	SF	3	E		20			F												
0494	HOLL	22	1835	1839	1851	S11	W33	6593	04 20.3	16	SF	3	E		13			F												
																			22 1954	2003	No Flare Patrol									
																			22 2025	2034	No Flare Patrol									
																			22 2039	2104	No Flare Patrol									
0495	HOLL	22	2156	2156	2204	N10	W72	6583	04 17.5	8	SF	2	E		26			F												

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														Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
			22 2210		2213		No Flare Patrol										
0496	HTPR	23	0802	0806	0830	S12 W48	6593	04	19.7	28	SF		C	0806	110	1.5	E
0497	HTPR	23	1258	1301	1310	N14 W68	6592	04	18.4	12	SF		C	1301	80		
0498	HOLL	23	1327	1330	1337	S14 W41	6593	04	20.5	10	SF	2	E		14		H
0499	HTPR	23	1345	1350	1410	S15 W68	6599	04	18.4	25	SF		C	1350	120		
0500	HTPR	23	1345	1352	1435	S25 E05	6603	04	24.0	50	SF		C	1352	60	0.7	EGL
0501		23	14003	14065	1442	S12 W48	6593	04	20.0	42	SF				67	1.5	
	HTPR	23	1400	1411	1500	S12 W48	6593	04	20.0	60	SF		C	1411	110	1.5	
	HOLL	23	1403	1406	1424	S13 W47	6593	04	20.0	21	SF	3	E		24		
			23 1821		1831	No Flare Patrol											
0502	PALE	23	1845E	1845U	1931D	S13 W49	6593	04	20.1	46D	SF		3	E		19	
			23 1851		1855	No Flare Patrol											
			23 1919		1940	No Flare Patrol											
			23 1945		1946	No Flare Patrol											
			23 2226		2230	No Flare Patrol											
0503	SVTO	24	0533	0534	0538	S14 W50	6593	04	20.4	5	SF		3	E		13	
0504	HTPR	24	1400	1406	1420	S12 W50	6593	04	20.8	20	SN		C	1406	120	1.9	
			24 1441		1446	No Flare Patrol											
0505	PALE	24	1834	1835	1839	S22 W62	6602	04	20.0	5	SF C 1.0	3	E		21		F
0506	PEKG	24	2310E	2317	2403	S20 W12	6601	04	24.0	53D	1N		P	2317	210	2.6	D
0507	PEKG	25	0147E	0205	0250	S30 W04	6603	04	24.7	63D	1N		P	0205	210	2.6	D
0508	LEAR	25	0201	0201	0209	S12 W73	6593	04	19.6	8	SF B 9.1	3	E		43		
0509		25	0305*	0310*	0446	S30 W14	6603	04	24.0	101	1N				196	2.3	DE
	PEKG	25	0300E	0310	0503	S30 W14	6603	04	24.0	123D	1N		P	0310	210	2.6	D
	TACH	25	0305		0455	S30 W14	6603	04	24.0	110	1B	2	C	0305	331	3.8	E
	URUM	25	0316	0336	0420	S29 W13	6603	04	24.1	64	SF		C		48	0.6	E
0510	ABST	25	0608	0610	0629	S11 W90		04	18.5	21	1F		C	0610	87		AD
0511	HTPR	25	0735E		0750	S11 W90		04	18.5	15D	SF		C				A
0512	HTPR	25	0750		0814D	N10 E90	6605	05	2.1	24D	SF		C				A
0513	PEKG	25	0925	0936	0950	N07 E06	6606	04	25.8	25	SN		C	0936	63	0.7	D
0514	HOLL	25	1525E	1527U	1539	S19 E71	6604	05	1.1	14D	SF	2	E		22		
0515	HOLL	25	2045	2045	2055	S21 W80	6602	04	19.7	10	SF	3	E		24		
0516	HOLL	26	0052	0054	0101	S29 E32	6612	04	28.5	9	SF	2	E		25		F
0517	HOLL	26	0056	0058	0106	S28 W26	6603	04	24.0	10	SF	2	E		22		F
0518		26	03023	03106	0341	S29 W28	6603	04	23.9	39	SF C 1.3				84	1.4	DF
	WATU	26	0302	0310	0333	S28 W27	6603	04	24.0	31	SF		C	0310	60	0.8	F
	PEKG	26	0302	0312	0335	S30 W28	6603	04	23.9	33	SN		C	0312	147	1.9	D
	LEAR	26	0305	0316	0355	S29 W29	6603	04	23.8	50	SF C 1.3	3	E		46		F
0519	ABST	26	0612	0613	0624	N07 E89	6605	05	2.9	12	1F		C	0613	87		D
0520	HOLL	26	1351	1354	1404	N07 E79	6605	05	2.5	13	SF	2	E		63		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	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)	
0521	26	16064	1612*	1642	N20 E51			04 30.6	36	1F	C 3.3			113		FK	
	HOLL	26	1606	1613	1649	N20 E50		04 30.5	43	1F		E		121		K	
	HOLL	26	1606	1623	1649	N20 E50		04 30.5	43	1F	C 3.3	3 E		170		F	
	RAMY	26	1610	1612	1629	N20 E52		04 30.6	19	SF		3 E		48		F	
0522	HOLL	26	1620	1635	1643	N08 E76	6605	05 2.4	23	SF		3 E		28			
		26	2137		2304	No Flare Patrol											
0523	LEAR	27	0640E	0645U	0720	N08 E61	6605	05 1.8	40D	SF		3 E		40		F	
0524	HTPR	27	1010		1020	S30 E15	6612	04 28.6	10	SF		C	1018	70	0.8	L	
0525	27	1325*	1332*	1352	S30 W46	6603	04 23.9	27	SF	C 2.1				22		F	
	SVTO	27	1325	1332	1358	S30 W46	6603	04 23.9	33	SF		3 E		19			
	HOLL	27	1328	1339	1353	S30 W47	6603	04 23.9	25	SF		3 E		33		F	
	RAMY	27	1338	1343	1346	S30 W46	6603	04 23.9	8	SF	C 2.1	4 E		15			
0526	HOLL	27	1452	1452	1459	N08 E63	6605	05 2.3	7	SF		3 E		15		F	
0527	HOLL	27	1510	1513	1517	S30 W47	6603	04 23.9	7	SF		3 E		16		F	
0528	HOLL	27	1650	1654	1701	S30 W47	6603	04 24.0	11	SF		3 E		19		F	
0529	27	1710*	1714*	1802	S29 W49	6603	04 23.9	52	SF	C 2.4				47		EFK	
	HOLL	27	1710	1714	1740	S30 W50	6603	04 23.8	30	SF		3 E		86		FE	
	HOLL	27	1710	1720	1740	S30 W50	6603	04 23.8	30	SF		E		71		K	
	RAMY	27	1712	1715	1720	S29 W49	6603	04 23.9	8	SF		3 E		27			
	PALE	27	1720	1729	1828	S29 W48	6603	04 23.9	68	SF	C 2.4	3 E		36		F	
	HOLL	27	1751	1800	1832	S29 W49	6603	04 23.9	41	SF		3 E		29			
	HOLL	27	1751	1807	1832	S29 W49	6603	04 23.9	41	SN		E		31		K	
0530	HOLL	27	1909	1912	1920	S29 E09	6612	04 28.5	11	SF		3 E		42			
0531	PALE	27	1924	1925	1928	S29 W49	6603	04 24.0	4	SF		3 E		13			
0532	27	23292	23326	2508	S29 W52	6603	04 23.9	99	SF	C 9.7				97		EF	
	PALE	27	2329	2338	2420D	S28 W53	6603	04 23.8	51D	1F	C 9.7	3 E		107			
	MITK	27	2331	2332	2508	S29 W50	6603	04 24.1	97	SF		C	2332			E	
	HOLL	27	2335E	2337U	2402D	S29 W53	6603	04 23.8	27D	SN		2 E		87		FE	
	28	0024		0046	No Flare Patrol												
	28	0158		0214	No Flare Patrol												
0533	URUM	28	0429	0435	0440	S30 W54	6603	04 23.9	11	SF		C		16	0.3	E	
0534	28	0500	0507*	0618	S29 W57	6603	04 23.7	78	1F	C 6.3				178	5.4	EF	
	SVTO	28	0453E	0507	0611	S31 W56	6603	04 23.8	78D	1F	C 6.3	3 E		117		F	
	TACH	28	0500	0508	0525D	S28 W60	6603	04 23.5	25D	2N		2 C	0508	255	5.4	E	
	LEAR	28	0607E	0608	0624	S29 W55	6603	04 23.9	17D	1F		3 E		161		F	
0535	ABST	28	0636E	0646U	0654D	S35 W54	6603	04 23.9	18D	1F		C	0646	140	2.8	E	
0536	28	07466	07498	0823	S30 W57	6603	04 23.8	37	1B	M 3.5				168	3.7	DEFJW	
	URUM	28	0746	0755	0839	S29 W57	6603	04 23.8	53	SB		C		64	1.3	E	
	SVTO	28	0746	0757	0846	S31 W56	6603	04 23.9	60	1N	M 3.5	4 E		133		FE	
	ISTA	28	0748	0749	0759	S30 W52	6603	04 24.2	11	1B		P				EFJW	
	ONDR	28	0748	0751	0814	S30 W58	6603	04 23.8	26	1B		V	0751	218	4.6	E	
	PEKG	28	0749	0754	0815	S31 W58	6603	04 23.7	26	2B		P	0754	336	6.8	E	
	ABST	28	0752	0755U	0803D	S30 W60	6603	04 23.6	11D	SF		P	0755	87	2.0	D	
0537	SVTO	28	1117	1122	1130	S31 W58	6603	04 23.9	13	SF		3 E		26			
0538	28	11311	11331	1150	N16 E24	6604B	04 30.3	19	1F					90		FU	
	SVTO	28	1131	1134	1155	N16 E23	6604B	04 30.2	24	1F		3 E		155		UF	
	RAMY	28	1132	1133	1144	N15 E24	6604B	04 30.3	12	SF		3 E		26		F	
0539	SVTO	28	1132	1137	1152	S31 W57	6603	04 24.0	20	SF	C 2.9	3 E		31			

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo Day	Dur (Min)	Imp Opt Xray	Obs See Type	Time (UT)	Area Measurement		Remarks			
														Apparent (10-6 Disk)	Corr (Sq Deg)				
0540	SVTO	28	1152	1154	1201	S04	E72	6611	05	3.9	9	SF	3	E	22				
0541	SVTO	28	1430	1432	1435	S31	W59	6603	04	23.9	5	SF C	2.9	3	E	20			
0542	28	1555	1603	1628	S30	W61	6603	04	23.9	33	SF C	1.9			42				
	SVTO	28	1555	1603	1647	S30	W62	6603	04	23.8	52	SF C	1.9	3	E	50			
	HOLL	28	1601	1603	1610	S29	W60	6603	04	24.0	9	SF		3	E	33			
0543	HOLL	28	1702	1709	1721	S21	W81		04	22.5	19	SF		2	E	50	H		
0544	28	1840	1844	1854	S30	W60	6603	04	24.0	14	SF C	1.6			46				
	HOLL	28	1840	1844	1849	S30	W60	6603	04	24.0	9	SF C	1.6	3	E	43			
	PALE	28	1840	1845	1859	S31	W60	6603	04	24.0	19	SF		3	E	50			
0545	PALE	28	1849	1856	1900	S31	W04	6612	04	28.5	11	SF		4	E	15			
0546	PALE	28	2133	2135	2147	S31	W61	6603	04	24.1	14	SF		4	E	34			
0547	28	2338	2341	2347	S30	W62	6603	04	24.1	9	SF				51	DJ			
	VORO	28	2338	2341	2345	S31	W65	6603	04	23.8	7	SF		2	C	2341	81	DJ	
	LEAR	28	2338	2341	2348	S28	W59	6603	04	24.4	10	SF		3	E	34			
	PALE	28	2339	2341	2348	S31	W62	6603	04	24.1	9	SF		4	E	37			
0548	LEAR	29	0238	0244	0252	S31	W11	6612	04	28.2	14	SF		3	E	23			
0549	TACH	29	0358	0400	0402D	S30	W62	6603	04	24.3	4D	SN		2	C	0400	41	0.9	D
		29	0905		1005	No Flare Patrol													
0550	HOLL	29	1518	1519	1541	S23	E09	6604	04	30.3	23	SF		3	E	21			
0551	HOLL	29	1852	1854	1903	S05	E55	6611	05	3.9	11	SF C	1.0	3	E	12	H		
0552	29	2128*	2141	2214	S23	E42	6608	05	3.1	46	SF C	1.2			40	F			
	HOLL	29	2128	2141	2224	S24	E43	6608	05	3.2	56	SF C	1.2	3	E	57			
	PALE	29	2140	2150	2204	S22	E42	6608	05	3.1	24	SF		3	E	23	F		
0553	HOLL	29	2213	2213	2219	N08	E33	6605	05	2.4	6	SF		3	E	23			
0554	29	2319	2325	2346	N18	E04	6604B	04	30.3	24	SN				96	1.9	E		
	HOLL	29	2319	2325	2346	N18	E05	6604B	04	30.3	27	SF		3	E	24			
	PEKG	29	2324	2327	2340	N18	E04	6604B	04	30.3	16	SN		P	2327	168	1.9	E	
0555	30	0042	0044	0103	S23	E03	6604	04	30.3	21	SF B	9.8			124	2.7	EF		
	LEAR	30	0042	0044	0110	S24	E02	6604	04	30.2	28	SF B	9.8	3	E	97	F		
	PALE	30	0044	0045	0053	S22	E02	6604	04	30.2	9	SF		3	E	24	F		
	PEKG	30	0045E	0051	0107	S23	E04	6604	04	30.3	220	1N		P	0051	252	2.7	E	
0556	LEAR	30	0143	0144	0147	S28	W82	6603	04	23.7	4	SF		3	E	54			
0557	30	0234	0240	0246	S29	W83	6603	04	23.6	12	SF C	2.6			50				
	LEAR	30	0234	0240	0246	S29	W80	6603	04	23.8	12	SF		3	E	54			
	PALE	30	0235	0240	0247	S29	W86	6603	04	23.4	12	SF C	2.6	3	E	45			
0558	LEAR	30	0501	0502	0506	S28	W85	6603	04	23.6	5	SF C	4.2	3	E	64			
0559	SVTO	30	0635	0637	0650	N07	E21	6605	05	1.8	15	SF B	9.6	3	E	15			
0560	SVTO	30	0724	0724	0729	S31	W87	6603	04	23.4	5	SF C	2.1	3	E	15	H		
0561	ABST	30	0724	0735U	0742	S11	E71	6615	05	5.6	18	1F		P	0735	87	D		
0562	SVTO	30	0828	0830	0833	S30	W87	6603	04	23.5	5	SF C	4.2	1	E	36	H		
0563	SVTO	30	0909	0912	0920	S30	W85	6603	04	23.7	11	SF		3	E	17	H		
0564	SVTO	30	1116	1116	1133D	S28	W27	6612	04	28.3	17D	SF B	9.3	3	E	35			
0565	SVTO	30	1227	1229	1231	S30	W89	6603	04	23.5	4	SF C	2.4	3	E	22			

H α SOLAR FLARES

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/USAF		CMP Mo	Dur (Min)	Imp Opt	Xray	See	Obs Type	Area Measurement			Remarks	
								Region	6605							Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0566	30		1242*	1251*	1312	N06	E18	6605	05	1.9	30	SF	C	1.5				27		F
	SVTO	30	1242	1257	1324	N08	E18	6605	05	1.9	42	SF	C	1.5	3	E		29		F
	RAMY	30	1251	1251	1305	N06	E17	6605	05	1.8	14	SF			3	E		32		
	HOLL	30	1257E	1258U	1320D	N06	E19	6605	05	2.0	23D	SF			2	E		25		
	RAMY	30	1306	1306	1308	N05	E17	6605	05	1.8	2	SF			3	E		21		
0567	30		14252	14289	1452	S15	W09	6613	04	29.9	27	SF	C	1.2				32		FK
	HOLL	30	1425	1431	1452	S14	W08	6613	04	30.0	27	SF	C	1.2	3	E		66		F
	SVTO	30	1425	1432	1448	S14	W08	6613	04	30.0	23	SF			3	E		22		F
	RAMY	30	1427	1428	1453	S16	W10	6613	04	29.8	26	SF				E		21		K
	RAMY	30	1427	1437	1453	S16	W10	6613	04	29.8	26	SF			3	E		20		F
0568	30		1507	1510	1513	S30	W86	6603	04	23.9	6	SF						16		
	SVTO	30	1507	1510	1513	S30	W90	6603	04	23.5	6	SF			3	E		14		
	HOLL	30	1507	1510	1513	S29	W83	6603	04	24.1	6	SF			3	E		17		
0569	HOLL	30	1549	1605	1612	S12	E63	6615	05	5.4	23	SF			3	E		44		
0570	HOLL	30	2251	2254	2257	S28	W88	6603	04	24.1	6	SF	C	1.7	3	E		39		

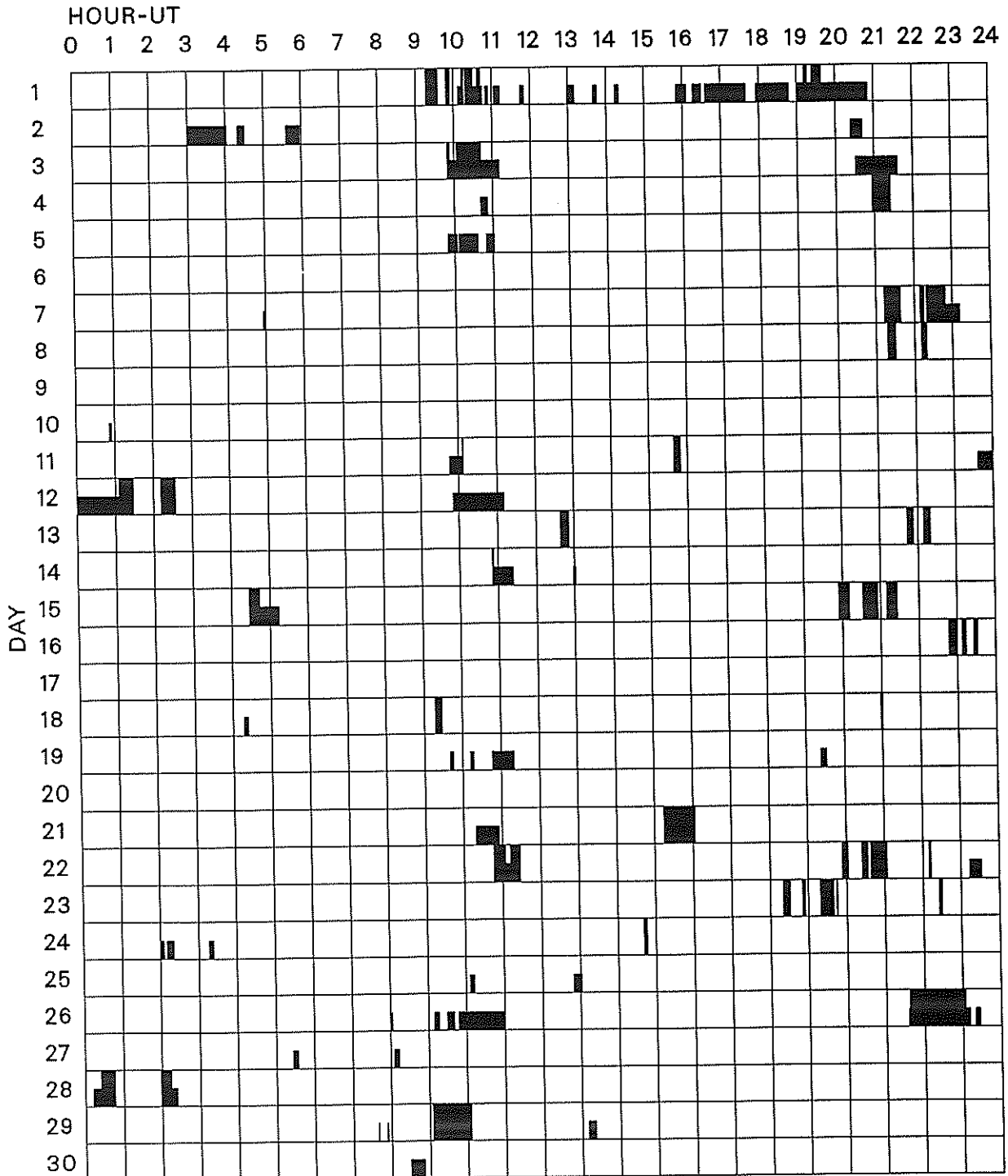
"Remarks"

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

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

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

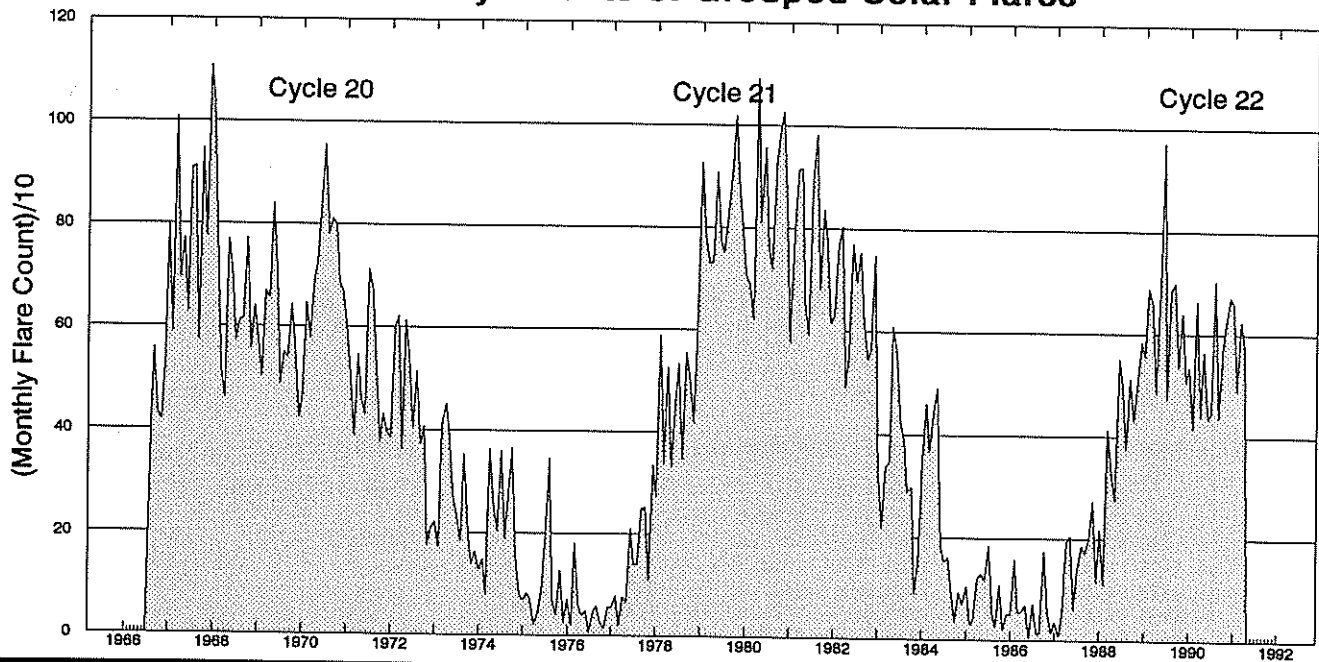
APRIL 1991



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

- | | | | | |
|----------------|-------------|-----------|----------|------------|
| Abastumani | Holloman | Learmonth | Peking | Urumqi |
| Athens | Istanbul | Mitaka | Ramey | Voroshilov |
| Bucharest | Kanzelhoehe | Ondrejov | San Vito | Watakosek |
| Haute Provence | Kharkov | Palehua | Tashkent | Yunnan |

Monthly Counts of Grouped Solar Flares*



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1966	--	--	--	--	--	--	--	391	558	432	417	543	2341
1967	796	589	1009	694	771	629	907	911	573	946	775	1109	9709
1968	1037	773	519	460	768	697	573	611	616	772	556	640	8022
1969	581	504	669	655	839	694	489	551	540	643	566	422	7153
1970	466	646	578	688	722	836	954	780	811	797	687	667	8632
1971	598	505	387	546	461	430	713	673	518	375	431	394	6031
1972	384	599	621	361	614	541	404	515	371	408	175	210	5203
1973	221	171	410	453	388	270	232	182	353	201	136	163	3180
1974	127	148	79	364	255	204	360	187	270	366	153	81	2594
1975	68	82	69	19	42	85	196	346	68	38	127	25	1165
1976	69	18	180	60	38	48	6	47	57	23	13	55	614
1977	54	77	18	76	64	210	140	140	250	252	107	336	1724
1978	274	588	338	526	330	460	533	346	554	499	418	648	5514
1979	926	781	731	731	907	772	750	821	901	1018	888	786	10012
1980	703	689	621	1092	811	956	763	720	924	988	1027	838	10132
1981	578	782	914	915	658	592	893	982	680	836	773	615	9218
1982	631	766	803	490	553	769	696	753	615	544	564	748	7932
1983	332	220	337	346	609	561	427	389	289	298	88	152	4048
1984	353	461	366	440	492	185	151	161	95	36	92	69	2901
1985	104	29	38	119	129	116	185	53	25	108	19	50	975
1986	51	158	54	56	68	3	71	12	14	174	56	13	730
1987	36	7	52	192	205	61	132	185	172	198	273	114	1627
1988	217	109	413	328	274	551	502	375	513	429	508	584	4803
1989	689	539	658	485	686	971	473	684	699	535	640	507	7566
1990	536	415	664	439	565	433	447	703	436	569	619	672	6498
1991	659	491	625	570									2345

*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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Apr 91

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

APRIL 1991

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean	Int	Remarks
01	100	GORK	43 NS	0625.8		140.0D		5.0		
	127	TORN	43 NS	0730.0		363.0		4.0		V=1
	235	CUBA	44 NS	1310.0E		50.1D		15.0		
	280	CUBA	44 NS	1310.0E		52.1D		22.0		
	245	LEAR	8 S	0024.0E	0024.0	U	110.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0024.0E	0024.0	U	99.0			QL=4 ST=2 TYP=3
	410	LEAR	4 S/F	0227.0E	0227.0	4.0D	130.0			QL=4 ST=2 TYP=3
	9100	GORK	21 GRF	0345.0E	0651.0	555.0D	18.0			
	204	IZMI	42 SER	0627.0	0701.0	45.0	31.0			
	950	GORK	1 S	0630.5	0630.7	1.4	6.0			
	33	UPIC	8 S	0819.7	0820.0	0.6				
	610	SGMR	8 S	1141.0E	1141.0	U	59.0			QL=4 ST=2 TYP=3
	9300	KISV	2 S/F	1158.6	1159.9	5.1	11.0			
	5900	KISV	2 S/F	1159.1	1159.4	4.7	7.0			
	2950	GORK	2 S/F	1159.1	1159.8	1.1	8.0			
	9100	GORK	2 S/F	1159.1	1159.9	1.4	12.0			
	430	KRAK	8 S	1159.2	1159.4	0.5	200.0			
	430	KRAK	8 S	1241.9	1242.3	0.6	84.0	16.0		
	1415	PALE	8 S	1920.0E	1920.0	2.0D	63.0			QL=4 ST=2 TYP=3
	2695	PALE	8 S	1920.0E	1920.0	1.0D	160.0			QL=4 ST=2 TYP=3
	4995	PALE	8 S	1920.0E	1920.0	1.0D	97.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1920.0E	1920.0	1.0D	150.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	1920.0E	1920.0	1.0D	62.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1920.0E	1920.0	U	26.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	1920.0E	1920.0	1.0D	100.0			QL=4 ST=2 TYP=3
	6700	CUBA	1 S	1920.0	1920.5	4.0	52.0	25.0		5R
	2800	OTTA	3 S	1920.1	1920.4	15.6	157.7	32.0		
	6700	CUBA	1 S	1951.2	1951.3	2.6	6.0	3.0		7R
	6700	CUBA	1 S	2024.8	2025.5	7.2	4.0	2.0		38L
	2800	OTTA	3 S	2127.0	2130.7	22.9	32.9	10.0		
	6700	CUBA	2 S/F	2127.1	2128.9	6.9	21.0	10.0		6R
	410	PALE	49 GB	2129.0E	2129.0	2.0D	3700.0			QL=4 ST=2 TYP=6
610	PALE	8 S	2129.0E	2129.0	2.0D	170.0			QL=4 ST=2 TYP=3	
8800	PALE	8 S	2129.0E	2129.0	1.0D	37.0			QL=2 ST=2 TYP=3	
410	SGMR	49 GB	2129.0E	2129.0	2.0D	4100.0			QL=4 ST=2 TYP=6	
610	SGMR	8 S	2129.0E	2129.0	2.0D	180.0			QL=4 ST=2 TYP=3	
2695	PALE	8 S	2130.0E	2130.0	1.0D	28.0			QL=4 ST=2 TYP=3	
1415	PALE	4 S/F	2130.0E	2130.0	3.0D	36.0			QL=4 ST=2 TYP=3	
1415	SGMR	4 S/F	2130.0E	2130.0	4.0D	42.0			QL=4 ST=2 TYP=3	
2695	SGMR	8 S	2130.0E	2130.0	1.0D	31.0			QL=4 ST=2 TYP=3	
02	235	CUBA	44 NS	1310.0E		52.0D		16.0		
	9100	GORK	23 GRF	0339.0E	0427.0	561.0D	14.0			
	410	LEAR	4 S/F	0545.0E	0546.0	4.0D	53.0			QL=4 ST=2 TYP=3
	650	GORK	2 S/F	0551.4	0551.6	0.4	10.0			
	950	GORK	2 S/F	0551.4	0551.6	0.4	9.0			
	410	SVTO	49 GB	0611.0E	0611.0	U	710.0			QL=4 ST=3 TYP=6
	2950	GORK	20 GRF	0823.3	0841.0	64.0	8.0			
	9300	KISV	20 GRF	0835.3	0844.5	53.1	9.0			
	245	SVTO	8 S	0857.0E	0858.0	1.0D	120.0			QL=4 ST=2 TYP=3
	410	SVTO	4 S/F	1000.0E	1002.0	11.0D	290.0			QL=4 ST=3 TYP=3
	650	GORK	29 PBI	1000.8	1007.0	68.0	40.0			
	650	GORK	46 C	1000.8	1002.2	6.2	125.0			
	650	GORK	46 C	1000.8	1004.9		62.0			
	200	GORK	46 C	1000.9	1007.1	9.2	18000.0			
	200	GORK	46 C	1000.9	1009.4		5000.0			
	15000	KISV	2 S/F	1000.9	1002.5	8.8	40.0			
	1415	SVTO	4 S/F	1001.0E	1003.0	8.0D	250.0			QL=4 ST=2 TYP=3
	3013	IZMI	7 C	1001.2	1003.2	30.0	206.0			
	3000	POTS	45 C	1001.4	1003.2	28.6D	615.0			
	2950	GORK	4 S/F	1001.4	1003.3	3.2	285.0			
	2950	GORK	29 PBI	1001.4	1004.8	65.0	127.0			
	1470	POTS	45 C	1001.5	1003.8	28.5D	280.0			
2850	CRIM	3 S	1001.6	1003.3	8.0	404.0	130.0			
950	GORK	5 S	1001.8	1004.0	5.2	100.0				
950	GORK	29 PBI	1001.8	1007.0	12.0U	40.0				
5900	KISV	4 S/F	1001.8	1003.2	6.0	120.0				
9500	POTS	4 S/F	1001.8	1002.5	8.2	75.0				
5900	KISV	29 PBI	1001.8	1007.8	35.4	25.0				

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 91

APRIL 1991

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	9100	GORK	2 S/F	1001.9	1002.4	4.1	95.0			
	9300	KISV	4 S/F	1001.9	1002.4	5.5	94.0			
	9300	KISV	29 PBI	1001.9	1007.4	8.0	13.0			
	4995	LEAR	8 S	1002.0E	1002.0	2.0D	78.0			QL=4 ST=2 TYP=3
	1415	LEAR	20 GRF	1002.0E	1003.0	5.0D	260.0			QL=4 ST=3 TYP=2
	610	LEAR	4 S/F	1002.0E	1002.0	3.0D	130.0			QL=4 ST=2 TYP=3
	410	LEAR	49 GB	1002.0E	1002.0	1.0D	1200.0			QL=4 ST=2 TYP=6
	2695	SVTO	4 S/F	1002.0E	1003.0	11.0D	400.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	1002.0E	1003.0	11.0D	210.0			QL=4 ST=2 TYP=3
	610	SVTO	4 S/F	1002.0E	1002.0	11.0D	320.0			QL=4 ST=2 TYP=3
	4995	SVTO	49 GB	1002.0E	1003.0	11.0D	660.0			QL=4 ST=2 TYP=6
	15400	SVTO	4 S/F	1002.0E	1003.0	11.0D	51.0			QL=4 ST=2 TYP=3
	2695	LEAR	4 S/F	1002.0E	1003.0	838.0D	320.0			QL=2 ST=1 TYP=3
	204	IZMI	45 C	1002.0	1006.5	11.5	45000.0			
	245	SVTO	49 GB	1005.0E	1006.0	5.0D	26000.0			QL=4 ST=2 TYP=6
	100	GORK	46 C	1005.7	1011.5		13000.0			
	100	GORK	46 C	1005.7	1009.7	11.2	18000.0			
	127	TORN	47 GB	1006.0	1008.0U	8.0	3400.0	700.0		
	245	LEAR	49 GB	1006.0E	1007.0	1.0D	42000.0			
	9100	GORK	29 PBI	1006.0	1006.0	12.0	20.0			QL=4 ST=3 TYP=6
	810	KRAK	45 C	1006.0E	1006.0U	22.0D	38.0	12.0		
	430	KRAK	45 C	1006.5E	1006.5U	21.0D	16.0	7.0		
	2850	CRIM	29 PBI	1009.6	1009.6	1339.0	32.6	10.0		10
	127	TORN	4 S/F	1014.2	1016.2	2.8	20.0	4.0		
	245	SVTO	8 S	1037.0E	1037.0	2.0D	130.0			QL=4 ST=2 TYP=3
	100	GORK	46 C	1037.0	1037.3	2.0	560.0			
	204	IZMI	41 F	1037.0	1037.5	1.5	200.0			
	100	GORK	46 C	1037.0	1037.6		450.0			
	200	GORK	3 S	1037.0	1037.7	1.2	360.0			
	5900	KISV	20 GRF	1218.7	1219.7	13.5	8.0			
	245	SVTO	8 S	1245.0E	1245.0	U	41.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1245.0E	1245.0	1.0D	250.0			QL=4 ST=3 TYP=3
	245	SVTO	8 S	1313.0E	1313.0	U	69.0			QL=4 ST=2 TYP=3
	127	TORN	42 SER	1322.1	1322.3	4.0	20.0			
	2800	OTTA	20 GRF	2104.5	2124.5	50.0	10.8	5.0		
	2695	PENT	4 S/F	2247.9	2318.1	40.8	141.2	56.0		
	610	LEAR	4 S/F	2251.0E	2302.0	39.0D	370.0			QL=4 ST=2 TYP=5
	410	LEAR	4 S/F	2257.0E	2302.0	35.0D	440.0			QL=4 ST=2 TYP=3
	1415	LEAR	4 S/F	2257.0E	2318.0	45.0D	160.0			QL=4 ST=2 TYP=5
	4995	LEAR	20 GRF	2257.0E	2318.0	45.0D	130.0			QL=4 ST=2 TYP=2
	100	HIRA	48 C	2257.3		57.0	1000.0D	500.0U		
	200	HIRA	48 C	2257.3	2314.0	55.0	10000.0	600.0		
	245	LEAR	49 GB	2258.0E	2312.0	41.0D	1200.0			ML
	2695	LEAR	4 S/F	2258.0E	2318.0	44.0D	130.0			QL=4 ST=2 TYP=7
	410	PALE	4 S/F	2302.0E	2303.0	4.0D	210.0			QL=2 ST=2 TYP=3
610	PALE	8 S	2302.0E	2302.0	2.0D	130.0			QL=2 ST=2 TYP=3	
1415	PALE	4 S/F	2302.0E	2317.0	23.0D	140.0			QL=2 ST=2 TYP=5	
2695	PALE	20 GRF	2302.0E	2318.0	37.0D	170.0			QL=2 ST=2 TYP=2	
4995	PALE	20 GRF	2302.0E	2318.0	37.0D	150.0			QL=2 ST=2 TYP=2	
17000	NOBE	20 GRF	2307.0	2340.7	60.0	52.0			0	
35000	NOBE	20 GRF	2307.0	2340.7	60.0	42.0			0 80GHz:0	
245	PALE	49 GB	2309.0E	2312.0	15.0D	980.0			QL=2 ST=2 TYP=6	
8800	PALE	20 GRF	2311.0E	2337.0	28.0D	65.0			QL=2 ST=2 TYP=2	
8800	LEAR	8 S	2317.0E	2318.0	1.0D	21.0			QL=4 ST=2 TYP=3	
15400	PALE	8 S	2318.0E	2320.0	2.0D	24.0			QL=2 ST=2 TYP=3	
2695	PENT	29 PBI	2328.7	2337.8	135.0D	58.6	29.0			
15400	LEAR	4 S/F	2339.0E	2339.0	3.0D	200.0			QL=2 ST=2 TYP=3	
03	235	CUBA	44 NS	1307.0E		52.6D	16.0			
	280	CUBA	44 NS	1307.0E		52.6D	24.0			
	245	SGMR	44 NS	1632.0E	1632.0	17.0D	73.0			
	2840	PEKG	1 S	0101.0	0102.9	6.0	8.4			
	245	LEAR	8 S	0218.0E	0219.0	1.0D	57.0			
	9100	GORK	22 GRF	0423.0	0445.0U	42.5	4.0			
	5900	KISV	20 GRF	0529.2	0531.6	14.3	10.0			
	430	KRAK	46 C	0734.2	0736.5	5.5	222.0D	12.0		
	810	KRAK	8 S	0743.2	0743.4	0.3	84.0			
	204	IZMI	7 C	0818.0	0818.5	1.0	25.0			
430	KRAK	46 C	0849.5	0851.0	5.0	130.0	20.0			

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Outstanding Occurrences

APRIL 1991

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	430 KRAK	42 SER	1047.5	1049.5U	20.5	225.0D			
	9100 GORK	20 GRF	1210.5	1230.0U	49.0D	4.0			
04	204 IZMI	43 NS	0600.0		360.0	15.0			
	235 CUBA	44 NS	1300.0E		48.0D		14.0		
	280 CUBA	44 NS	1300.0E		48.0D		27.0		
	500 HIRA	8 S	0016.5	0016.6	0.7	260.0			WR
	500 HIRA	6 S	0126.7	0126.7	1.0	8.0		3.0	WR
	2850 CRIM	1 S	0413.5	0413.8	1.2	15.0		5.0	
	2950 GORK	1 S	0413.6	0414.0	1.4	13.0			
	5900 KISV	2 S/F	0706.7	0707.7	3.7	5.0			
	127 TORN	4 S/F	0836.1	0836.6	1.5	550.0	270.0		
	245 LEAR	8 S	0857.0E	0857.0		U	55.0		QL=4 ST=2 TYP=3
	245 SVTO	8 S	0857.0E	0857.0		U	50.0		QL=4 ST=2 TYP=3
	9100 GORK	20 GRF	0911.0	0913.5	11.5	6.0			
	204 IZMI	7 C	0932.0	0932.1	1.0	400.0			
	200 GORK	4 S/F	0932.0	0932.5	1.2	190.0			
	100 GORK	4 S/F	0932.3	0932.4	1.6	530.0			
	204 IZMI	42 SER	0952.0	1001.0	20.0	60.0			
	127 TORN	46 C	1005.4	1009.0	5.0	270.0	20.0		
	430 KRAK	8 S	1006.5	1007.0	1.0	193.0			
	3013 IZMI	7 C	1025.5	1029.5	5.5	3.0	2.0		
	5900 KISV	2 S/F	1027.3	1028.4	5.0	4.0			
204 IZMI	42 SER	1035.0	1036.5	26.0	100.0				
100 GORK	4 S/F	1036.0	1036.5	1.8	1200.0				
200 GORK	4 S/F	1036.0	1036.7	1.2	190.0				
1470 POTS	4 S/F	1133.8	1134.3	1.1	7.0				
9100 GORK	20 GRF	1229.4	1300.0U	31.0D	6.0				
6700 CUBA	1 S	2115.0	2115.2	1.5	18.0	9.0		24L	
05	280 CUBA	44 NS	1306.0E		52.5D		25.0		
	235 CUBA	44 NS	1306.0E		52.5D		16.0		
	4995 LEAR	8 S	0253.0E	0254.0	1.0D	46.0			QL=4 ST=2 TYP=3
	8800 LEAR	8 S	0253.0E	0254.0	1.0D	58.0			QL=4 ST=2 TYP=3
	8800 PALE	8 S	0253.0E	0254.0	1.0D	92.0			QL=2 ST=2 TYP=3
	4995 PALE	8 S	0253.0E	0254.0	1.0D	67.0			QL=4 ST=2 TYP=3
	9100 GORK	22 GRF	0345.0E	0437.5	222.0D	9.0			
	5900 KISV	20 GRF	0552.3	0558.9	25.3	6.0			
	245 LEAR	8 S	0818.0E	0819.0	1.0D	56.0			QL=4 ST=2 TYP=3
	245 LEAR	8 S	0824.0E	0825.0	1.0D	63.0			QL=4 ST=2 TYP=3
	3013 IZMI	41 F	0848.5	0852.0	10.0	5.0			
	5900 KISV	2 S/F	0850.5	0851.9	4.1	10.0			
	2950 GORK	1 S	0851.4	0851.9	5.5	5.0			
	3000 POTS	1 S	0851.4	0851.9	6.6	5.0			
	2850 CRIM	1 S	0851.5	0851.8	1.2	8.4	3.0		
	9500 POTS	2 S/F	0932.0	0932.6	2.0	7.0			
	9100 GORK	1 S	0932.1	0932.6	1.1	4.0			
	204 IZMI	7 C	0935.8	0936.2	1.0	500.0			
	3013 IZMI	5 S	0942.2	0942.6	5.0	33.0	15.0		
	2950 GORK	21 GRF	0944.8	0950.3	12.1	4.5			
	5900 KISV	4 S/F	0944.9	0947.4	6.0	89.0			
	9300 KISV	3 S	0946.7	0947.4	4.7	87.0			
	3000 POTS	29 PBI	0946.7	0947.4	13.3	42.0			
	9100 GORK	2 S/F	0946.8	0947.4	2.3	87.0			
	9500 POTS	4 S/F	0946.8	0947.4	3.2	57.0			
	2695 SVTO	8 S	0947.0E	0947.0	1.0D	49.0			QL=4 ST=2 TYP=3
	4995 SVTO	8 S	0947.0E	0947.0		U	63.0		QL=4 ST=2 TYP=3
	8800 SVTO	8 S	0947.0E	0947.0		U	70.0		QL=4 ST=2 TYP=3
	1415 SVTO	8 S	0947.0E	0947.0		U	22.0		QL=4 ST=2 TYP=3
	15400 SVTO	8 S	0947.0E	0947.0		U	41.0		QL=4 ST=2 TYP=3
2850 CRIM	3 S	0947.0	0947.2	5.0	54.0	18.0			
1470 POTS	40 F	0947.0	0947.5	14.8	22.0				
2950 GORK	3 S	0947.1	0947.4	2.9	40.0				
15000 KISV	4 S/F	0947.1	0947.4	2.8	53.0				
650 GORK	1 S	0947.2	0947.4	3.8	4.0				
950 GORK	1 S	0947.3	0947.5	4.1	5.0				
2950 GORK	21 GRF	1037.7	1037.3	34.5	10.0				
15000 KISV	4 S/F	1032.9	1034.2	2.5	124.0				
4995 SVTO	8 S	1033.0E	1034.0	1.0D	130.0			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		
05	15400	SVTO	8 S	1033.0E	1034.0	1.0D	95.0			QL=4 ST=2 TYP=3
	8800	SVTO	8 S	1033.0E	1034.0	1.0D	130.0			QL=4 ST=2 TYP=3
	5900	KISV	4 S/F	1033.1	1034.2	5.2	183.0			
	9100	GORK	3 S	1033.3	1034.1	1.6	180.0			
	9500	POTS	4 S/F	1033.3	1033.7	2.7	190.0			
	9100	GORK	30 PBI	1033.3	1034.9	13.1	16.0			
	9300	KISV	4 S/F	1033.4	1034.2	4.4	113.0			
	2850	CRIM	3 S	1033.5	1034.0	3.0	93.0	30.0		
	2950	GORK	3 S	1033.5	1034.1	3.5	75.0			
	3013	IZMI	7 C	1033.5	1034.3	12.0	67.0			
	650	GORK	29 PBI	1033.6	1036.0	6.0D	3.0			
	650	GORK	3 S	1033.6	1034.6	2.4	6.0			
	950	GORK	29 PBI	1033.7	1036.0	6.0U	7.0			
	950	GORK	3 S	1033.7	1034.5	2.3	13.0			
	810	KRAK	1 S	1033.7	1034.5	3.0	9.0	5.0		
	1415	SVTO	8 S	1034.0E	1034.0	1.0D	38.0			
	2695	SVTO	8 S	1034.0E	1034.0	1.0D	73.0			QL=4 ST=2 TYP=3
	2850	CRIM	29 PBI	1036.5	1036.5	12.0	11.6	4.0		QL=4 ST=2 TYP=3
	9100	GORK	1 S	1042.0	1042.2	0.7	7.0			
	1470	POTS	42 SER	1119.0	1119.6	7.5	7.0			
05	245	PALE	8 S	2056.0E	2057.0	1.0D	70.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2056.0E	2056.0	1.0D	69.0			QL=4 ST=2 TYP=3
06	200	GORK	43 NS	0800.0		64.0		5.0		
	100	GORK	43 NS	0809.5		54.5		5.0		
	245	LEAR	8 S	0009.0E	0009.0	U	66.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0009.0E	0009.0	U	60.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0022.0E	0022.0	U	54.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0030.0E	0030.0	U	51.0			QL=4 ST=2 TYP=3
	650	GORK	21 GRF	0739.9	0903.0	145.3	8.5			
	650	GORK	4 S/F	0746.9	0750.4	5.9	110.0			
	2850	CRIM	20 GRF	0802.0	0812.0	118.0	22.0	7.0		
	3000	POTS	21 GRF	0804.0	0855.0	150.0	20.0			
	600	HUMN	47 GB	0804.5	0814.4	16.3	622.0	112.0		
	950	GORK	20 GRF	0805.3	0812.3	36.7	5.0			
	650	GORK	47 GB	0805.4	0813.9	15.3	2700.0			
	1470	POTS	21 GRF	0807.0	0855.0	333.0	12.0			
	2950	GORK	21 GRF	0807.2	0845.5	143.0D	16.0			
	9500	POTS	20 GRF	0807.5	0855.0	173.0	20.0			
	610	LEAR	49 GB	0809.0E	0813.0	8.0D	3400.0			QL=4 ST=2 TYP=7
	500	HIRA	46 C	0809.5	0814.2	11.5	1500.0	150.0		WL
	610	SVTO	49 GB	0810.0E	0814.0	6.0D	3100.0			QL=4 ST=2 TYP=7
	810	KRAK	7 C	0811.0	0814.0	4.5	32.0	6.0		
	430	KRAK	27 RF	0811.0	0815.0	72.5	42.0	14.0		
	9100	GORK	20 GRF	0818.0	0930.0	132.0D	23.0			
	610	LEAR	8 S	0819.0E	0819.0	1.0D	58.0			QL=4 ST=2 TYP=3
	600	HUMN	27 RF	0847.1	0915.2	55.4	31.0	10.0		
	650	GORK	22 GRF	0907.1	0917.8	37.9	44.0			
	610	LEAR	4 S/F	0909.0E	0914.0	14.0D	64.0			QL=4 ST=2 TYP=3
	9300	KISV	2 S/F	0934.2	0935.6	8.5	8.0			
	1470	POTS	4A S/F	0934.4	0936.4	3.9	15.0			
	5900	KISV	2 S/F	0934.6	0936.2	7.7	5.0			
	950	GORK	1 S	0934.8	0936.3	3.4	4.0			
	245	LEAR	49 GB	0935.0E	0936.0	2.0D	2600.0			QL=4 ST=2 TYP=6
	245	SVTO	49 GB	0935.0E	0936.0	2.0D	2300.0			QL=4 ST=2 TYP=6
2950	GORK	2 S/F	0935.6	0936.3	1.4	18.0				
3000	POTS	4A S/F	0935.7	0936.4	1.8	16.0				
3000	POTS	20 GRF	1054.0	1115.0U	104.0	8.0				
9500	POTS	20 GRF	1105.0	1116.0U	90.0	10.0				
07	2950	GORK	21 GRF	0809.6	0813.1	28.6	9.0			
	5900	KISV	2 S/F	0809.9	0810.9	7.8	9.0			
	3013	IZMI	5 S	0810.0	0810.3	2.0	16.0	8.0		
	3000	POTS	29 PBI	0810.0	0810.7	6.0	27.0			
	2850	CRIM	3 S	0810.0	0810.9	3.0	30.0	10.0		
	2950	GORK	3 S	0810.1	0810.7	2.3	22.0			
	2850	CRIM	29 PBI	0812.0	0812.0	10.0	10.5	3.0		
	3013	IZMI	21 GRF	0812.5	0813.3	40.0	8.0	4.0		
	33	UPIC	45 C	0842.6	0843.0	1.4				

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APRIL 1991

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
07	430	KRAK	8 S	0845.0	0845.0	0.1	64.0			
		810	KRAK	8 S	0845.0	0845.0	0.1	9.0		
	33	UPIC	45 C	0900.3	0900.8	1.7				
	8800	SVTO	8 S	0943.0E	0943.0	1.0D	64.0			QL=4 ST=2 TYP=3
	5900	KISV	2 S/F	0944.8	0945.3	1.2	5.0			
	2950	GORK	1 S	0945.1	0945.3	1.2	4.0			
	204	IZMI	7 C	1049.1	1049.4	0.8	55.0			
	245	SGMR	4 S/F	1113.0E	1114.0	3.0D	65.0			QL=2 ST=2 TYP=3
	204	IZMI	41 F	1114.2	1114.3	1.6	380.0			
08	235	CUBA	44 NS	1530.0E		31.5D		15.0		
	280	CUBA	44 NS	1530.0E		31.9D		23.0		
	2695	PENT	3 S	0100.2	0100.8	7.0	63.3	13.0		
	204	IZMI	41 F	0609.0	0611.3	2.3D	22.0			
	200	GORK	46 C	0609.7	0612.5		21.0			
	200	GORK	46 C	0609.7	0611.5	4.4	18.0			
	100	GORK	46 C	0610.0	0612.7		270.0			
	100	GORK	46 C	0610.0	0611.8	4.3	130.0			
	100	HIRA	46 C	0610.6	0612.0	2.6	100.0	30.0		WL
	200	HIRA	46 C	0610.6	0611.3	2.6	25.0	10.0		
	204	IZMI	41 F	0624.5	0624.6	1.0	50.0			
	100	GORK	41 F	0727.0	0735.0		1500.0			
	100	GORK	41 F	0727.0	0727.9	10.2	4100.0			
	200	GORK	41 F	0727.1	0734.7		30.0D			
	200	GORK	41 F	0727.1	0727.8	8.9	530.0			
	100	HIRA	42 SER	0727.3		8.6	1000.0D			WL
	200	HIRA	42 SER	0727.3	0727.3U	9.0	250.0			
	204	IZMI	7 C	0727.4	0727.8	2.0	210.0			
	204	IZMI	42 SER	0730.8	0734.5	6.0	40.0			
	33	UPIC	4 S/F	0735.1	0735.2	0.8				
	3000	POTS	20 GRF	0942.5	0948.0	8.5	7.0			
	245	SVTO	8 S	0943.0E	0943.0	1.0D	85.0			QL=4 ST=2 TYP=3
	2950	GORK	20 GRF	0943.6	0948.0	8.0	3.0			
	1470	POTS	2 S/F	0946.5	0948.1	3.1	4.0			
	410	SVTO	8 S	1142.0E	1142.0	2.0D	78.0			QL=4 ST=2 TYP=3
	1415	SVTO	8 S	1142.0E	1143.0	2.0D	62.0			QL=4 ST=2 TYP=3
	610	SVTO	8 S	1142.0E	1143.0	1.0D	75.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1218.0E	1218.0	U	180.0			QL=4 ST=2 TYP=3
3000	POTS	2 S/F	1241.0U	1244.0U	6.0U	5.0				
1470	POTS	2 S/F	1242.0	1244.0	4.4	5.0				
950	GORK	1 S	1242.0	1244.2	4.8	3.0				
650	GORK	1 S	1242.0	1244.2	4.7	2.0				
2950	GORK	1 S	1243.2	1244.4	4.9	5.0				
245	SGMR	8 S	1555.0E	1555.0	U	59.0			QL=4 ST=2 TYP=3	
410	PALE	8 S	1810.0E	1810.0	U	63.0			QL=4 ST=2 TYP=3	
09	127	TORN	43 NS	1016.0	1259.0	272.0	60.0	4.0		V=0
	280	CUBA	44 NS	1305.0E		44.7D		25.0		
	235	CUBA	44 NS	1305.0E		44.7D		16.0		
	2695	LEAR	8 S	0100.0E	0100.0	1.0D	68.0			QL=2 ST=2 TYP=3
	2695	PALE	8 S	0100.0E	0100.0	1.0D	54.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0102.0E	0102.0	U	70.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0102.0E	0102.0	U	69.0			QL=4 ST=2 TYP=3
	500	HIRA	46 C	0316.0	0317.0	2.2	200.0	50.0		ML
	610	LEAR	8 S	0316.0E	0316.0	1.0D	89.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0316.0E	0317.0	1.0D	140.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0316.0E	0316.0	1.0D	150.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	0316.0E	0316.0	1.0D	64.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0316.0E	0317.0	1.0D	110.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	0316.0E	0316.0	1.0D	180.0			QL=4 ST=2 TYP=3
	200	HIRA	6 S	0316.6	0317.3	1.0	200.0	80.0		
	2950	GORK	1 S	0609.0U	0610.1	3.5D	9.0			
	2850	CRIM	1 S	0609.5	0610.0	3.0	12.5	4.0		
	3013	IZMI	5 S	0609.5	0610.0	6.0	14.0	7.0		
	9100	GORK	2 S/F	0609.7	0612.0	3.5	5.0			
	3013	IZMI	5 S	0709.5	0710.8	2.5	6.0	3.0		
	1470	POTS	4 S/F	0709.8	0710.5	15.0	8.0			
	2950	GORK	1 S	0709.8	0710.6	2.3	6.0			
	2850	CRIM	1 S	0710.0	0710.5	1.2	6.0	2.0		

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
09	1470	POTS	40 F	0731.0	0743.3	15.0	8.0			
	9100	GORK	20 GRF	0906.3	0927.0	48.4	4.0			
	9500	POTS	4 S/F	1245.5	1246.2	1.9	11.0			
	9500	POTS	2 S/F	1349.2	1350.0	1.8	8.0			
	3000	POTS	4 S/F	1349.4	1350.0	1.6	7.0			
	2800	OTTA	4 S/F	1839.8	1845.1	8.1	36.5	11.0		
	410	SGMR	8 S	1843.0E	1843.0	1.0D	75.0			QL=4 ST=2 TYP=3
	2695	SGMR	4 S/F	1844.0E	1845.0	3.0D	33.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1844.0E	1844.0	1.0D	38.0			QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	1844.0E	1844.0	3.0D	75.0			QL=4 ST=2 TYP=3
245	LEAR	8 S	2320.0E	2320.0	2.0D	98.0			QL=4 ST=2 TYP=3	
10	280	CUBA	44 NS	1250.0E		52.0D		26.0		
	235	CUBA	44 NS	1250.0E		52.0D		17.0		
	410	LEAR	8 S	0042.0E	0042.0		U	83.0		QL=4 ST=2 TYP=3
	410	PALE	8 S	0042.0E	0042.0		U	55.0		QL=4 ST=2 TYP=3
	2695	PENT	8 S	0047.2	0047.3	0.6	21.2	5.0		
	2840	PEKG	1 S	0321.6E	0321.8	1.4D	8.5			
	2950	GORK	1 S	0408.5	0411.1	3.6	7.0			
	204	IZMI	8 S	0612.5	0612.5	0.2	20.0			
	9100	GORK	20 GRF	0832.5	0854.0	55.4	4.0			
	204	IZMI	7 C	1121.0	1121.7	1.5	30.0			
	33	UPIC	45 C	1210.0	1210.1	2.3				
	127	TORN	7 C	1210.0	1210.3	0.9	20.0	10.0		
	5900	KISV	22 GRF	1243.9	1246.1	16.1	13.0			
	9100	GORK	2 S/F	1245.3	1245.8	2.1	14.0			
	9300	KISV	22 GRF	1245.6	1246.1	17.3	16.0			
	245	SGMR	8 S	1544.0E	1544.0		U	84.0		QL=4 ST=2 TYP=3
	8800	PALE	8 S	2015.0E	2016.0	2.0D	43.0			QL=2 ST=2 TYP=3
	15400	PALE	8 S	2016.0E	2016.0		U	55.0		QL=4 ST=2 TYP=3
	500	HIRA	6 S	2218.5	2220.5	4.0	9.0	3.0		WR
	2695	PENT	3 S	2236.7	2237.3	2.8	13.6	4.0		
245	SGMR	8 S	2244.0E	2244.0	1.0D	79.0			QL=4 ST=2 TYP=3	
500	HIRA	8 S	2248.0	2248.5	0.6	17.0	10.0		0	
11	127	TORN	43 NS	1126.0	1127.4	30.0	220.0	4.0		V=2
	235	CUBA	44 NS	1305.0E		44.5D		16.0		
	280	CUBA	44 NS	1305.0E		44.5D		26.0		
	410	PALE	8 S	0005.0E	0005.0	1.0D	100.0			QL=4 ST=3 TYP=3
	610	PALE	8 S	0005.0E	0005.0	1.0D	50.0			QL=4 ST=3 TYP=3
	410	LEAR	4 S/F	0043.0E	0044.0	8.0D	91.0			QL=2 ST=2 TYP=3
	2840	PEKG	46 C	0309.0	0312.4	4.5	39.8			
	35000	NOBE	1 S	0311.2	0312.0	2.0	35.0			0 80GHZ:0
	17000	NOBE	1 S	0311.2	0312.0	2.0	33.0			0
	8800	PALE	8 S	0312.0E	0312.0		U	50.0		QL=2 ST=2 TYP=3
	9100	GORK	23 GRF	0339.0E	0633.0	561.0D	55.0			
	245	LEAR	8 S	0340.0E	0340.0		U	62.0		QL=2 ST=2 TYP=3
	2950	GORK	1 S	0410.1	0411.0	1.5	3.0			
	2950	GORK	21 GRF	0509.5	0615.9	165.0	27.0			
	9300	KISV	23 GRF	0523.0	0641.4	142.0	14.0			
	5900	KISV	23 GRF	0529.0	0611.1	145.0	75.0			
	2840	PEKG	21 GRF	0551.0	0624.0	119.0D	26.3			
	950	GORK	2 S/F	0603.0U	0604.1	1.1D	3.0			
	950	GORK	2 S/F	0603.0E	0604.1	1.4D	13.0			
	2850	CRIM	21 GRF	0608.0	0616.0	35.0	15.4	5.0		
	17000	NOBE	1 S	0608.3	0611.0	20.0	21.0			0 80,35GHZ:0
	8800	LEAR	4 S/F	0609.0E	0611.0	9.0D	49.0			QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	0609.0E	0611.0	7.0D	61.0			QL=2 ST=2 TYP=3
	9100	GORK	46 C	0609.2	0621.1		23.0			
	9100	GORK	46 C	0609.2	0611.2	18.7	45.0			
15400	LEAR	4 S/F	0610.0E	0614.0	8.0D	45.0			QL=4 ST=2 TYP=5	
4995	LEAR	4 S/F	0610.0E	0611.0	8.0D	57.0			QL=4 ST=2 TYP=3	
8800	SVTO	4 S/F	0610.0E	0611.0	6.0D	54.0			QL=2 ST=2 TYP=3	
15400	SVTO	4 S/F	0610.0E	0611.0	6.0D	43.0			QL=2 ST=2 TYP=3	
2840	PEKG	45 C	0610.0	0611.0	14.0	12.0				
3013	IZMI	40 F	0610.5	0611.0	12.0	10.0				
2850	CRIM	1 S	0610.5	0611.1	1.5	12.4	4.0			
2950	GORK	1 S	0610.6	0611.2	2.0	10.0				
2950	GORK	1 S	0620.1	0621.1	1.7	5.0				

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

APRIL 1991

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	15000 KISV	20 GRF	0622.0	0629.5	23.0	38.0			
	2850 CRIM	1 S	0653.0	0654.0	2.5	21.6	7.0		
	2840 PEKG	1 S	0653.0	0654.0	3.0	21.6			
	2950 GORK	1 S	0653.2	0654.2	2.2	18.0			
	950 GORK	46 C	0653.2	0654.3		43.0			
	950 GORK	46 C	0653.2	0653.8	1.8	60.0			
	3013 IZMI	5 S	0653.5	0654.1	2.0	11.0	7.0		
	3000 POTS	4 S/F	0653.5	0654.3	1.7	18.0			
	9100 GORK	2 S/F	0653.7	0654.2	2.0	14.0			
	9500 POTS	3 S	0653.7	0654.5	2.1	13.0			
	100 GORK	46 C	0654.0	0654.5	1.8	1100.0			
	100 GORK	46 C	0654.0	0654.7		630.0			
	33 UPIC	4 S/F	0654.5	0655.1	2.3				
	650 GORK	1 S	0654.5	0654.7	0.7	3.0			
	2850 CRIM	21 GRF	0832.0	0834.5	21.0	6.0	2.0		
	9300 KISV	4 S/F	0833.3	0841.0	8.0	66.0			
	9100 GORK	46 C	0837.0	0841.0		80.0			
	5900 KISV	1 S	0837.0	0837.8	1.5	5.0			
	9300 KISV	1 S	0837.0	0837.8	1.4	12.0			
	9100 GORK	46 C	0837.0	0837.9	12.7	14.0			
	8800 LEAR	8 S	0839.0E	0840.0	2.00	58.0			QL=4 ST=2 TYP=3
	8800 SVTO	4 S/F	0839.0E	0841.0	3.00	72.0			QL=2 ST=2 TYP=3
	5900 KISV	4 S/F	0839.3	0841.1	3.0	36.0			
	3013 IZMI	5 S	0839.5	0841.2	3.0	15.0	8.0		
	2850 CRIM	1 S	0839.8	0841.0	3.0	20.0	7.0		
	4995 LEAR	8 S	0840.0E	0841.0	1.00	30.0			QL=4 ST=2 TYP=3
	4995 SVTO	8 S	0840.0E	0841.0	1.00	34.0			QL=2 ST=2 TYP=3
	2695 SVTO	8 S	0840.0E	0841.0	2.00	33.0			QL=4 ST=2 TYP=3
	2695 LEAR	8 S	0841.0E	0841.0	U	21.0			QL=2 ST=2 TYP=3
	9500 POTS	40 F	0910.0	0917.4	10.4	6.0			
	950 GORK	1 S	0911.0E	0913.3	2.30	5.0			
	650 GORK	1 S	0913.1	0913.3	0.6	2.0			
	204 IZMI	42 SER	0923.8	0924.0	5.0	80.0			
	204 IZMI	41 F	1003.2	1003.4	1.0	200.0			
	3013 IZMI	45 C	1059.0	1117.0	40.0	884.0	400.0		
	2950 GORK	21 GRF	1104.8	1124.5	116.00	34.0			
	9500 POTS	45 C	1105.0	1114.9	45.0	1300.0			
	9100 GORK	47 GB	1109.9	1114.9	24.2	2100.0			
	9300 KISV	47 GB	1112.3	1115.0	13.3	519.0			
	9300 KISV	30 PBI	1112.3	1128.1	25.1	40.0			
	15400 SVTO	49 GB	1113.0E	1115.0	6.00	2300.0			QL=2 ST=2 TYP=6
	8800 SVTO	49 GB	1113.0E	1115.0	9.00	1600.0			QL=2 ST=2 TYP=6
	4995 SVTO	49 GB	1113.0E	1115.0	9.00	1700.0			QL=2 ST=2 TYP=6
	8800 SGMR	49 GB	1113.0E	1115.0	13.00	1500.0			QL=4 ST=2 TYP=6
	4995 SGMR	49 GB	1113.0E	1115.0	13.00	1500.0			QL=4 ST=2 TYP=6
	15400 SGMR	49 GB	1113.0E	1115.0	11.00	2400.0			QL=4 ST=2 TYP=6
	3000 POTS	45 C	1113.2	1115.0	26.8	3900.0			
	650 GORK	30 PBI	1113.3	1121.0		8.0			
	650 GORK	46 C	1113.3	1115.3	7.7	460.0			
	650 GORK	46 C	1113.3	1116.5		43.0			
	2950 GORK	47 GB	1113.4	1119.3		220.0			
	2950 GORK	47 GB	1113.4	1115.3	10.9	960.0			
	1470 POTS	45 C	1113.4	1114.5	31.6	535.0			
	950 GORK	30 PBI	1113.5	1121.0	18.0	17.0			
	950 GORK	4 S/F	1113.5	1115.5	7.5	120.0			
	600 HUMN	4 S/F	1113.7	1115.3	14.3	193.0	9.0		
	610 SGMR	8 S	1114.0E	1115.0	1.00	340.0			QL=4 ST=2 TYP=3
	610 SVTO	4 S/F	1114.0E	1115.0	3.00	490.0			QL=4 ST=2 TYP=3
	2695 SVTO	49 GB	1114.0E	1115.0	9.00	990.0			QL=4 ST=2 TYP=6
	1415 SVTO	4 S/F	1114.0E	1114.0	8.00	400.0			QL=4 ST=2 TYP=3
	2695 SGMR	49 GB	1114.0E	1115.0	12.00	960.0			QL=4 ST=2 TYP=6
	1415 SGMR	4 S/F	1114.0E	1114.0	12.00	380.0			QL=4 ST=2 TYP=3
	33 UPIC	32 ABS	1114.0	1117.5	32.0				
	810 KRAK	45 C	1114.4	1115.1	10.0	158.0	28.0		
	430 KRAK	45 C	1114.6	1114.6	9.5	131.0	6.0		
	245 SGMR	49 GB	1116.0E	1117.0	2.00	880.0			QL=4 ST=2 TYP=6
	245 SVTO	49 GB	1116.0E	1117.0	2.00	850.0			QL=4 ST=2 TYP=6
	204 IZMI	45 C	1116.0	1117.6	8.0	2200.0			
	200 GORK	46 C	1116.0U	1118.9		1400.0			

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

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APRIL 1991

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	GORK	46 C	1116.0U	1117.9	3.5D	2700.0			
	127	TORN	48 C	1116.6	1117.2	8.2	800.0	50.0		
	100	GORK	46 C	1117.0	1117.8	2.2	380.0			
	100	GORK	46 C	1117.0	1118.9		760.0			
	2850	CRIM	47 GB	1123.1	1125.2	27.0	1243.0			
	9300	KISV	2 S/F	1126.6	1127.5	3.0	8.0			
	9300	KISV	45 C	1131.6	1132.4	3.0	11.0			
	9300	KISV	45 C	1131.6	1131.9		9.0			
	650	GORK	45 C	1131.8	1132.4		3.0			
	950	GORK	45 C	1131.8	1132.4		7.0			
	650	GORK	45 C	1131.8	1131.9	0.9	5.5			
	950	GORK	45 C	1131.8	1131.9	0.8	5.0			
	1470	POTS	8 S	1158.6	1158.8	0.4	15.0			
	3000	POTS	23 GRF	1427.0U	1433.5U	14.5U	7.0			
1470	POTS	8 S	1433.2	1433.5	0.8	22.0				
9500	POTS	4 S/F	1435.2	1437.0	6.4	19.0				
12	280	CUBA	44 NS	1300.0E		42.2D		29.0		
	235	CUBA	44 NS	1300.0E		42.2D		16.0		
	2840	PEKG	1 S	0150.0	0150.8	3.0	9.5			
	9100	GORK	23 GRF	0333.0E	0455.2	454.0D	33.0			
	2950	GORK	21 GRF	0337.0E	0453.9	509.0D	26.6			
	200	HIRA	6 S	0337.4	0337.8	2.0	200.0	70.0		
	2840	PEKG	1 S	0418.0	0419.2	2.0	9.5			
	2950	GORK	1 S	0418.4	0419.3	1.6	10.0			
	650	GORK	2 S/F	0418.8	0419.2	2.4	13.0			
	950	GORK	3 S	0418.8	0419.3	2.4	10.0			
	610	LEAR	8 S	0419.0E	0419.0	U	82.0			QL=2 ST=2 TYP=3
	610	PALE	8 S	0419.0E	0419.0	U	65.0			QL=4 ST=2 TYP=3
	9100	GORK	2 S/F	0420.4	0420.7	0.6	17.0			
	2840	PEKG	3 S	0442.0	0447.0	15.0	16.9			
	2950	GORK	2 S/F	0444.7	0447.0	5.3	16.0			
	2850	CRIM	1 S	0445.0	0447.0	6.0	18.0	6.0		
	950	GORK	45 C	0446.0	0448.2		7.0			
	950	GORK	45 C	0446.0	0446.9	6.8	9.0			
	650	GORK	45 C	0446.6	0447.1	4.4	9.0			
	650	GORK	45 C	0446.6	0448.4		8.5			
	9300	KISV	1 S	0620.5	0620.9	3.0	9.0			
	9100	GORK	1 S	0620.6	0620.8	1.2	6.0			
	5900	KISV	1 S	0620.7	0621.0	23.0	4.0			
	204	IZMI	42 SER	0911.0	0912.5	3.0	80.0			
	810	KRAK	8 S	0946.5	0947.0	0.5	88.0			
	9500	POTS	2 S/F	0946.8	0947.2	2.2	10.0			
	9100	GORK	1 S	0946.8	0947.3	1.8	12.0			
	5900	KISV	1 S	0946.9	0947.3	0.3	8.0			
	15000	KISV	1 S	0947.0	0947.2	1.5	6.0			
	9300	KISV	1 S	0947.0	0947.2	3.0	15.0			
	127	TORN	46 C	1200.3	1201.2	1.6	130.0	50.0		
	430	KRAK	8 S	1203.0	1204.0	1.8	70.0			
	5900	KISV	1 S	1232.7	1233.1	2.0	9.0			
	9300	KISV	1 S	1233.0	1233.1	0.5	6.0			
9500	POTS	23 GRF	1301.0	1311.8	19.0	17.0				
5900	KISV	2 S/F	1303.3	1305.3	5.0	15.0				
9300	KISV	2 S/F	1303.5	1305.2	3.0	10.0				
9300	KISV	2 S/F	1311.5	1311.9	2.0	15.0				
245	SGMR	8 S	1614.0E	1614.0	U	63.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1905.0E	1906.0	1.0D	99.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	1906.0E	1906.0	U	78.0			QL=4 ST=2 TYP=3	
610	PALE	8 S	2141.0E	2141.0	1.0D	410.0			QL=4 ST=2 TYP=3	
610	SGMR	49 GB	2141.0E	2141.0	1.0D	530.0			QL=4 ST=2 TYP=6	
245	PALE	8 S	2318.0E	2319.0	1.0D	53.0			QL=4 ST=2 TYP=3	
17000	NOBE	1 S	2334.5	2334.8	0.8	10.0			L 80,35GHz:0	
13	235	CUBA	44 NS	1304.0E		44.6D		18.0		
	280	CUBA	44 NS	1304.0E		44.6D		27.0		
	2950	GORK	1 S	0333.0	0333.5	1.4	10.5			
	9100	GORK	4 S/F	0419.4	0420.5	4.2	365.0			
	9100	GORK	23 GRF	0425.4	0523.6	121.6	16.0			
950	GORK	1 S	0432.1	0432.5	0.6	8.0				

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

APRIL 1991

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	5900	KISV	4 S/F	0516.5	0520.5	7.0	118.0			
	9300	KISV	4 S/F	0516.5	0520.5	12.0	128.0			
	2950	GORK	21 GRF	0517.1	0524.4	118.0	10.0			
	2695	SVTO	4 S/F	0518.0E	0519.0	4.0D	98.0			QL=4 ST=2 TYP=3
	1415	SVTO	4 S/F	0518.0E	0519.0	5.0D	55.0			QL=4 ST=3 TYP=3
	4995	SVTO	4 S/F	0518.0E	0519.0	5.0D	94.0			QL=4 ST=2 TYP=3
	610	SVTO	49 GB	0518.0E	0520.0	2.0D	2900.0			QL=4 ST=3 TYP=6
	15400	SVTO	4 S/F	0518.0E	0519.0	3.0D	290.0			QL=4 ST=3 TYP=3
	15400	LEAR	8 S	0519.0E	0520.0	2.0D	300.0			QL=4 ST=2 TYP=3
	610	LEAR	49 GB	0519.0E	0520.0	2.0D	6800.0			QL=2 ST=2 TYP=6
	8800	LEAR	8 S	0519.0E	0520.0	2.0D	230.0			QL=4 ST=2 TYP=3
	2695	SVTO	4 S/F	0519.0E	0519.0	4.0D	100.0			QL=4 ST=3 TYP=3
	4995	SVTO	4 S/F	0519.0E	0521.0	3.0D	95.0			QL=4 ST=3 TYP=3
	8800	SVTO	4 S/F	0519.0E	0520.0	4.0D	540.0			QL=4 ST=3 TYP=3
	410	SVTO	49 GB	0519.0E	0519.0	1.0D	840.0			QL=4 ST=3 TYP=6
	15400	SVTO	4 S/F	0519.0E	0520.0	4.0D	260.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0519.0E	0519.0	1.0D	27.0			QL=4 ST=2 TYP=3
	2840	PEKG	45 C	0519.0	0520.4	7.0	113.0			
	650	GORK	29 PBI	0519.6	0524.0	10.8	5.0			
	950	GORK	29 PBI	0519.6	0524.0	12.6	9.0			
	650	GORK	46 C	0519.6	0520.6	4.4	285.0			
	950	GORK	46 C	0519.6	0520.6	4.4	32.0			
	950	GORK	46 C	0519.6	0520.9		53.0			
	650	GORK	46 C	0519.6	0520.9		350.0			
	2950	GORK	4 S/F	0519.8	0520.5	4.2	84.0			
	35000	NOBE	4 S/F	0519.8	0520.5	3.0	53.0			L 80GHz:0
	17000	NOBE	4 S/F	0519.8	0520.5	3.0	268.0			L
	2850	CRIM	3 S	0519.9	0520.6	4.0	110.0	35.0		
	245	LEAR	8 S	0520.0E	0520.0	U	44.0			QL=4 ST=2 TYP=3
	410	LEAR	49 GB	0520.0E	0520.0	1.0D	1600.0			QL=2 ST=2 TYP=6
	4995	LEAR	8 S	0520.0E	0520.0	1.0D	94.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	0520.0E	0520.0	2.0D	99.0			QL=2 ST=2 TYP=3
	1415	LEAR	8 S	0520.0E	0520.0	1.0D	58.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0520.0E	0520.0	1.0D	32.0			QL=4 ST=3 TYP=3
	410	SVTO	49 GB	0520.0E	0520.0	1.0D	1000.0			QL=4 ST=3 TYP=6
	15000	KISV	4 S/F	0520.0	0520.5	3.0	457.0			
	2840	PEKG	29 PBI	0526.0	0526.0	56.0	10.0			
	2950	GORK	21 GRF	0753.0	0849.8	157.0D	25.0			
	9100	GORK	23 GRF	0807.8	0913.0	142.0D	20.0			
	2850	CRIM	3 S	0840.0	0846.5	10.0	116.0U			
	3013	IZMI	7 C	0841.0	0846.0	10.0	95.0			
	2950	GORK	4 S/F	0841.2	0846.1	8.5	97.0			
	9300	KISV	46 C	0841.2	0846.1		93.0			
	9300	KISV	46 C	0841.2	0845.4	33.4	107.0			
	9300	KISV	46 C	0841.2	0847.5		103.0			
	9300	KISV	30 PBI	0841.2	0918.5	100.2	22.0			
	3000	POTS	4 S/F	0842.0E	0846.2	18.0D	94.0			
	1470	POTS	4 S/F	0842.0E	0846.2	16.3D	35.0			
	2695	LEAR	4 S/F	0842.0E	0846.0	8.0D	110.0			QL=2 ST=2 TYP=3
	4995	SVTO	4 S/F	0842.0E	0845.0	16.0D	190.0			QL=2 ST=2 TYP=3
4995	LEAR	4 S/F	0842.0E	0845.0	23.0D	190.0			QL=4 ST=2 TYP=3	
9100	GORK	2 S/F	0842.8	0847.4	5.9	86.0				
9100	GORK	29 PBI	0842.8	0848.7	24.3	30.0				
9500	POTS	23 GRF	0843.0E	0847.3	42.0D	57.0				
950	GORK	3 S	0843.0	0846.0	8.1	12.0				
810	KRAK	41 F	0843.0	0845.0	4.2	8.0	3.0			
8800	SVTO	4 S/F	0843.0E	0847.0	10.0D	68.0			QL=2 ST=2 TYP=5	
8800	LEAR	4 S/F	0843.0E	0847.0	28.0D	93.0			QL=4 ST=2 TYP=5	
650	GORK	46 C	0843.1	0845.0		30.0				
650	GORK	46 C	0843.1	0843.3	3.5	45.0				
650	GORK	29 PBI	0843.1	0846.6	4.5	4.0				
1415	SVTO	4 S/F	0844.0E	0846.0	3.0D	34.0			QL=4 ST=2 TYP=3	
1415	LEAR	8 S	0845.0E	0846.0	1.0D	28.0			QL=4 ST=2 TYP=3	
33	UPIC	32 ABS	0846.0	0854.0	31.0					
15400	SVTO	8 S	0847.0E	0847.0	U	26.0			QL=2 ST=2 TYP=3	
2850	CRIM	29 PBI	0850.0	0850.0	30.0	23.0	7.0			
1470	POTS	2 S/F	0942.7	0944.8	3.1	4.0				
2850	CRIM	1 S	0944.0	0944.8	1.8	6.0	2.0			
9300	KISV	2 S/F	1018.4	1019.2	2.0	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	Mean W/m 2 Hz)		
13	3000	POTS	20 GRF	1040.0E	1103.5	60.0D	11.0			
	410	SGMR	8 S	1931.0E	1931.0	U	57.0			
	245	PALE	8 S	2004.0E	2004.0	U	62.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2004.0E	2004.0	U	77.0			QL=4 ST=2 TYP=3
14	33	UPIC	43 NS	0740.7		559.3D				
	2840	PEKG	21 GRF	0017.0	0126.0	103.0	31.7			
	245	LEAR	8 S	0029.0E	0030.0	1.0D	150.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	0029.0E	0029.0	U	79.0			QL=4 ST=2 TYP=3
	500	HIRA	46 C	0029.5	0029.5	3.0	15.0	5.0		0
	245	PALE	8 S	0030.0E	0030.0	U	130.0			QL=4 ST=2 TYP=3
	2840	PEKG	3 S	0112.0	0116.2	10.0	30.1			
	2840	PEKG	5 S	0127.0	0127.7	2.0	49.9			
	2840	PEKG	21 GRF	0313.0	0425.5	279.0	68.1			
	500	HIRA	46 C	0324.0	0327.1	8.0	8.0	5.0		WL
	2840	PEKG	5 S	0334.0	0334.7	2.0	13.5			
	2950	GORK	21 GRF	0338.0	0425.3	292.0	35.0			
	9100	GORK	23 GRF	0342.0E	0410.8	407.0D	40.0			
	100	GORK	42 SER	0454.1	0741.3		130.0			
	100	GORK	42 SER	0454.1	0850.7		650.0			
	100	GORK	42 SER	0454.1	1005.7		390.0			
	100	GORK	42 SER	0454.1	0535.9	314.7	520.0			
	200	GORK	42 SER	0456.5	0741.2		180.0			
	200	GORK	42 SER	0456.5	0541.5	283.0	180.0			
	200	GORK	42 SER	0456.5	0850.8		180.0			
	5900	KISV	23 GRF	0538.1	0544.9	12.7	7.0			
	9300	KISV	23 GRF	0539.5	0543.4	12.1	11.0			
	2840	PEKG	5 S	0540.0	0542.2	4.0	14.8			
	2950	GORK	1 S	0540.4	0542.3	3.9	15.0			
	2850	CRIM	1 S	0540.6	0542.0	2.5	16.0	5.0		
	500	HIRA	46 C	0540.7	0541.0	1.5	1000.0	120.0		WR
	9100	GORK	2 S/F	0540.7	0542.2	3.7	60.0			
	5900	KISV	4 S/F	0540.8	0542.2	3.8	39.0			
	950	GORK	46 C	0541.0	0542.0		30.0			
	650	GORK	46 C	0541.0	0542.0		40.0			
	8800	LEAR	8 S	0541.0E	0542.0	1.0D	51.0			QL=4 ST=2 TYP=3
	410	LEAR	49 GB	0541.0E	0541.0	1.0D	1100.0			QL=2 ST=2 TYP=6
	4995	LEAR	8 S	0541.0E	0542.0	1.0D	22.0			QL=4 ST=2 TYP=3
	8800	SVTO	8 S	0541.0E	0542.0	1.0D	53.0			QL=2 ST=2 TYP=3
	410	SVTO	49 GB	0541.0E	0541.0	U	1500.0			QL=4 ST=2 TYP=6
	950	GORK	46 C	0541.0	0541.1	2.3	60.0			
	650	GORK	46 C	0541.0	0541.1	2.3	13.0			
	9300	KISV	4 S/F	0541.0	0542.2	2.2	59.0			
	650	GORK	46 C	0541.0	0541.7		16.0			
	15000	KISV	2 S/F	0541.5	0542.1	1.8	25.0			
	610	LEAR	8 S	0542.0E	0542.0	U	270.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	0542.0E	0542.0	U	14.0			QL=2 ST=2 TYP=3
	4995	SVTO	8 S	0542.0E	0542.0	U	28.0			QL=2 ST=2 TYP=3
	610	SVTO	8 S	0542.0E	0542.0	U	67.0			QL=4 ST=2 TYP=3
	1470	POTS	20 GRF	0642.0E	0654.6	20.0D	12.0			
	410	LEAR	8 S	0740.0E	0741.0	1.0D	69.0			QL=2 ST=2 TYP=3
	245	LEAR	8 S	0740.0E	0741.0	1.0D	85.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0740.0	0741.2	1.5	200.0			
	245	SVTO	8 S	0741.0E	0741.0	U	78.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0741.0E	0741.0	U	89.0			QL=4 ST=2 TYP=3
9500	POTS	2 S/F	0746.0	0747.5	20.0	10.0				
5900	KISV	4 S/F	0746.1	0747.4	8.8	17.0				
9300	KISV	45 C	0746.4	0747.5	3.7	15.0				
9300	KISV	45 C	0746.4	0746.8		3.0				
204	IZMI	7 C	0816.3	0816.5	1.5	25.0				
5900	KISV	2 S/F	0840.2	0841.9	2.5	6.0				
127	TORN	42 SER	0842.6	0850.8	24.0	280.0	10.0			
204	IZMI	42 SER	0844.0	0850.5	24.0	200.0				
245	LEAR	8 S	0850.0E	0850.0	1.0D	380.0			QL=4 ST=2 TYP=3	
245	SVTO	8 S	0850.0E	0850.0	1.0D	380.0			QL=4 ST=2 TYP=3	
3000	POTS	40 F	0935.0	1002.5	43.0	14.0				
810	KRAK	8 S	1015.2	1015.5	0.5	34.0				
204	IZMI	42 SER	1023.0	1031.4	9.5	50.0				
127	TORN	42 SER	1029.1	1029.5	7.0	110.0	5.0			

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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	8 S	1054.0	1054.5	0.8	65.0			
	127 TORN	42 SER	1113.3	1126.6	16.0	120.0	5.0		
	810 KRAK	8 S	1115.7	1115.8	0.1	34.0			
	204 IZMI	42 SER	1123.0	1126.8	6.0	23.0			
	127 TORN	42 SER	1137.3	1138.0	26.0	40.0	5.0		
	127 TORN	47 GB	1207.4	1214.2	9.0	680.0	50.0		
	245 SGMR	8 S	1212.0E	1212.0	U	51.0			QL=4 ST=2 TYP=3
	127 TORN	42 SER	1248.5	1248.6	11.0	140.0	5.0		
	127 TORN	46 C	1327.5	1327.7	3.0	190.0	20.0		
	127 TORN	42 SER	1344.9	1346.2	11.5	150.0	5.0		
	127 TORN	45 C	1421.9	1422.6	2.0	60.0D	20.0		
	245 SGMR	8 S	1422.0E	1423.0	1.0D	68.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	1422.0E	1423.0	1.0D	74.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	1428.0E	1429.0	1.0D	280.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	1429.0E	1429.0	U	290.0			QL=4 ST=2 TYP=3
	245 PALE	8 S	1650.0E	1650.0	1.0D	54.0			QL=4 ST=2 TYP=3
	410 PALE	8 S	1650.0E	1650.0	U	180.0			QL=4 ST=2 TYP=3
	410 SGMR	8 S	1650.0E	1650.0	U	270.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	1650.0E	1650.0	1.0D	59.0			QL=4 ST=2 TYP=3
	245 SVTO	4 S/F	1650.0E	1655.0	6.0D	91.0			QL=2 ST=2 TYP=3
	245 PALE	8 S	1656.0E	1656.0	U	160.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	1656.0E	1656.0	U	130.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	1656.0E	1656.0	U	140.0			QL=2 ST=2 TYP=3
	410 PALE	8 S	1659.0E	1700.0	1.0D	69.0			QL=4 ST=2 TYP=3
	245 PALE	49 GB	2002.0E	2009.0	9.0D	760.0			QL=4 ST=2 TYP=7
	245 SGMR	49 GB	2002.0E	2009.0	9.0D	730.0			QL=4 ST=2 TYP=7
	100 HIRA	42 SER	2106.6	2114.6	8.6	280.0			SL
	200 HIRA	42 SER	2109.3	2115.0	17.0	150.0			NL
	245 PALE	8 S	2123.0E	2124.0	2.0D	110.0			QL=4 ST=2 TYP=3
	245 SGMR	8 S	2124.0E	2124.0	1.0D	99.0			QL=4 ST=2 TYP=3
245 PALE	8 S	2151.0E	2152.0	1.0D	81.0			QL=4 ST=2 TYP=3	
245 SGMR	8 S	2151.0E	2152.0	1.0D	72.0			QL=4 ST=2 TYP=3	
15	245 PALE	8 S	0008.0E	0008.0	1.0D	66.0			QL=4 ST=2 TYP=3
	200 HIRA	42 SER	0008.1	0041.6	33.5D	290.0			NE
	100 HIRA	42 SER	0008.6		17.0	1000.0D			SL
	245 LEAR	8 S	0021.0E	0021.0	1.0D	110.0			QL=4 ST=2 TYP=3
	2840 PEKG	3 S	0207.0	0213.6	11.0	58.5			
	17000 NOBE	1 S	0210.4	0213.6	5.0	18.0			0 80,35GHz:0
	9100 GORK	23 GRF	0348.0E	1013.0U	556.0D	75.0			
	2840 PEKG	1 S	0348.0	0349.4	4.0	9.2			
	950 GORK	2 S/F	0404.1	0405.6	1.5	8.0			
	9300 KISV	2 S/F	0502.0	0502.6	3.9	17.0			
	9100 GORK	2 S/F	0502.1	0502.7	1.9	17.0			
	15000 KISV	1 S	0502.2	0502.6	1.3	8.0			
	2840 PEKG	1 S	0546.0	0547.6	4.0	8.4			
	9300 KISV	22 GRF	0546.4	0547.1	10.0	12.0			
	9100 GORK	1 S	0546.7	0547.0	0.7	10.0			
	5900 KISV	1 S	0546.7	0547.1	1.3	9.0			
	2950 GORK	1 S	0546.8	0547.2	1.4	6.0			
	245 LEAR	8 S	0550.0E	0550.0	U	61.0			QL=4 ST=2 TYP=3
	245 SVTO	8 S	0550.0E	0550.0	1.0D	63.0			QL=4 ST=2 TYP=3
	5900 KISV	2 S/F	0603.2	0604.4	5.3	11.0			
	9300 KISV	22 GRF	0612.9	0616.2	13.0	19.0			
	5900 KISV	22 GRF	0613.5	0617.7	10.9	12.0			
	204 IZMI	7 C	0652.2	0652.3	0.5	220.0			
	204 IZMI	5 S	0653.5	0654.0	3.0	4.0	2.0		
	9300 KISV	22 GRF	0815.3	0818.1	10.7	14.0			
	5900 KISV	22 GRF	0815.5	0818.0	10.5	9.0			
	2950 GORK	21 GRF	0823.2		217.0D				
	3000 POTS	21 GRF	0850.0	1008.5	195.0	46.0			
	410 LEAR	8 S	0859.0E	0859.0	1.0D	73.0			QL=2 ST=2 TYP=3
	410 SVTO	8 S	0859.0E	0900.0	1.0D	100.0			QL=4 ST=2 TYP=3
1470 POTS	21 GRF	0902.5	1003.5	162.0	19.0				
9500 POTS	21 GRF	0910.0	1010.0	195.0	51.0				
9500 POTS	4 S/F	0926.5	0936.6	23.5	245.0				
15000 KISV	29 PBI	0926.8	0942.2	33.3	86.0				
15000 KISV	47 GB	0926.8	0940.5		380.0				
15000 KISV	47 GB	0926.8	0936.8	15.4	564.0				

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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		
15	9300	KISV	4 S/F	0927.0	0937.4	21.0	95.0D			
	9300	KISV	23 GRF	0927.0	1012.4	171.3	62.0			
	5900	KISV	23 GRF	0927.2	1013.1	174.1	61.0			
	5900	KISV	47 GB	0927.2	0940.5		163.0			
	5900	KISV	47 GB	0927.2	0936.8	20.8	228.0			
	8800	SVTO	4 S/F	0932.0E	0936.0	868.0D	250.0			QL=4 ST=1 TYP=3
	15400	SVTO	4 S/F	0932.0E	0936.0	868.0D	490.0			QL=4 ST=1 TYP=5
	4995	LEAR	4 S/F	0935.0E	0936.0	6.0D	170.0			QL=4 ST=2 TYP=5
	8800	LEAR	4 S/F	0935.0E	0940.0	6.0D	190.0			QL=4 ST=2 TYP=5
	3013	IZMI	23 GRF	0935.0	1008.5	75.0	28.0			
	3013	IZMI	7 C	0935.0	0936.8	12.0	96.0	50.0		
	33	UPIC	32 ABS	0935.5	0941.0	57.5				
	3000	POTS	4 S/F	0935.5	0936.5	14.5	120.0			
	2850	CRIM	4 S/F	0935.6	0936.9	7.0	220.0	70.0		
	15400	LEAR	4 S/F	0936.0E	0937.0	6.0D	390.0			QL=2 ST=2 TYP=5
	2695	LEAR	4 S/F	0936.0E	0936.0	7.0D	170.0			QL=2 ST=2 TYP=3
	1470	POTS	40 F	0936.5	0939.4	20.0	31.0			
	1415	LEAR	8 S	0939.0E	0939.0	1.0D	24.0			QL=4 ST=2 TYP=3
	810	KRAK	41 F	0939.5	0940.7	2.0	10.0	1.0		
	9500	POTS	41 F	0957.6	1000.5	11.2	40.0			
	9300	KISV	4 S/F	0957.7	1000.6	4.7	45.0			
	5900	KISV	2 S/F	0957.8	1000.7	3.6	11.0			
	204	IZMI	42 SER	1000.0	1001.5	7.0	135.0			
	5900	KISV	2 S/F	1007.8	1008.3	2.2	11.0			
	9300	KISV	2 S/F	1007.8	1008.4	3.5	23.0			
	9100	GORK	2 S/F	1008.0	1008.4	1.0	16.0			
	1470	POTS	8 S	1013.0	1013.2	0.5	30.0			
	8800	SGMR	8 S	1032.0E	1032.0	U	52.0			QL=2 ST=2 TYP=3
	4995	SGMR	8 S	1032.0E	1032.0	U	56.0			QL=2 ST=2 TYP=3
	5900	KISV	2 S/F	1046.1	1047.0	2.3	10.0			
	9300	KISV	2 S/F	1046.5	1047.0	1.7	17.0			
	9100	GORK	2 S/F	1046.5	1047.2	1.3	15.0			
	33	UPIC	42 SER	1108.3	1113.0	7.9				
	127	TORN	41 F	1115.3	1120.2	6.0	50.0	5.0		
	2950	GORK	1 S	1151.4	1152.2	2.0	12.0			
	5900	KISV	4 S/F	1151.4	1152.5	7.0	49.0			
	9500	POTS	4 S/F	1151.5	1152.0	1.4	29.0			
	3000	POTS	4 S/F	1151.5U	1152.2U	1.5U	13.0			
	9300	KISV	4 S/F	1151.6	1152.0	5.6	39.0			
	9100	GORK	2 S/F	1151.6	1151.9	2.8	37.0			
	950	GORK	1 S	1151.6	1151.9	1.5	4.0			
	3013	IZMI	5 S	1151.7	1152.0	4.0	12.0	6.0		
	5900	KISV	2 S/F	1246.7	1247.3	7.1	12.0			
	33	UPIC	46 C	1418.2	1419.3	2.2				
	127	TORN	8 S	1418.9	1419.1	1.2	370.0D	190.0		
	245	SGMR	8 S	1419.0E	1419.0	U	73.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1419.0E	1419.0	U	81.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1428.0E	1429.0	2.0D	140.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	1428.0E	1429.0	2.0D	54.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	1428.0E	1429.0	3.0D	130.0			QL=4 ST=2 TYP=3
4995	SVTO	8 S	1428.0E	1429.0	2.0D	72.0			QL=4 ST=2 TYP=3	
15400	SGMR	4 S/F	1428.0E	1429.0	572.0D	120.0			QL=2 ST=1 TYP=3	
3000	POTS	4 S/F	1428.0	1429.5	7.0	39.0				
1470	POTS	4 S/F	1428.0	1429.8	7.3	39.0				
2800	OTTA	3 S	1428.7	1429.1	2.3	40.1	12.0			
9500	POTS	4 S/F	1428.8	1429.2	2.6	125.0				
1415	SGMR	8 S	1429.0E	1429.0	1.0D	31.0			QL=4 ST=2 TYP=3	
2695	SGMR	8 S	1429.0E	1429.0	1.0D	42.0			QL=4 ST=2 TYP=3	
15400	SVTO	8 S	1429.0E	1429.0	2.0D	130.0			QL=4 ST=2 TYP=3	
1415	SVTO	8 S	1429.0E	1429.0	1.0D	34.0			QL=4 ST=2 TYP=3	
2695	SVTO	8 S	1429.0E	1429.0	1.0D	48.0			QL=4 ST=2 TYP=3	
2800	OTTA	29 PBI	1431.0	1453.1	22.1D	15.8	7.0			
2800	OTTA	4 S/F	1549.7	1549.7	66.0	101.7	30.0			
2695	SGMR	4 S/F	1550.0E	1553.0	4.0D	92.0			QL=4 ST=2 TYP=3	
8800	SGMR	4 S/F	1550.0E	1552.0	8.0D	240.0			QL=4 ST=2 TYP=3	
8800	SVTO	4 S/F	1550.0E	1552.0	7.0D	230.0			QL=4 ST=2 TYP=3	
15400	SVTO	4 S/F	1550.0E	1552.0	10.0D	310.0			QL=4 ST=2 TYP=3	
4995	SVTO	4 S/F	1551.0E	1553.0	6.0D	210.0			QL=4 ST=2 TYP=3	
2695	SVTO	4 S/F	1551.0E	1553.0	3.0D	93.0			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

APRIL 1991

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)		
15	15400 PALE	4 S/F	1900.0E	1902.0	8.0D	81.0			QL=4 ST=2 TYP=3
	2800 OTTA	3 S	1900.0	1902.9	4.7	39.6	12.0		
	8800 PALE	4 S/F	1901.0E	1902.0	7.0D	160.0			QL=2 ST=2 TYP=3
	4995 SGMR	4 S/F	1901.0E	1902.0	7.0D	90.0			QL=4 ST=2 TYP=3
	2695 SGMR	4 S/F	1901.0E	1902.0	3.0D	38.0			QL=4 ST=2 TYP=3
	8800 SGMR	4 S/F	1901.0E	1902.0	7.0D	130.0			QL=4 ST=2 TYP=3
	4995 PALE	4 S/F	1902.0E	1902.0	6.0D	95.0			QL=4 ST=2 TYP=3
	2800 OTTA	29 PBI	1904.7	1904.7	65.0	18.1	9.0		
	2800 OTTA	4 S/F	2013.2	2013.9	3.1	571.0	114.0		
	2800 OTTA	4 S/F	2014.3	2014.7	1.2	237.9	48.0		
17000 NOBE	20 GRF	2254.5	2256.9	10.0	24.0			0 80,35GHz:0	
16	127 TORN	43 NS	0852.0	1121.8	180.0	20.0	5.0		V=0
	2840 PEKG	5 S	0053.0	0056.3	6.0	69.6			
	35000 NOBE	4 S/F	0056.7	0058.4	30.0	66.0			0 80GHz:0
	17000 NOBE	4 S/F	0056.7	0058.4	50.0	86.0			0
	8800 LEAR	4 S/F	0057.0E	0058.0	7.0D	43.0			QL=4 ST=2 TYP=3
	15400 LEAR	4 S/F	0057.0E	0058.0	7.0D	110.0			QL=2 ST=2 TYP=3
	15400 PALE	8 S	0057.0E	0058.0	1.0D	120.0			QL=4 ST=2 TYP=3
	2695 PALE	8 S	0058.0E	0058.0	U	50.0			QL=4 ST=2 TYP=3
	2840 PEKG	3 S	0129.0	0133.5	18.0	47.2			
	410 LEAR	4 S/F	0133.0E	0136.0	15.0D	55.0			QL=2 ST=2 TYP=3
	4995 LEAR	4 S/F	0134.0E	0135.0	3.0D	38.0			QL=4 ST=2 TYP=3
	2695 LEAR	4 S/F	0134.0E	0135.0	3.0D	39.0			QL=2 ST=2 TYP=3
	1415 LEAR	4 S/F	0134.0E	0135.0	4.0D	40.0			QL=4 ST=2 TYP=3
	500 HIRA	46 C	0134.0	0134.5	16.0	1300.0	10.0		0
	610 LEAR	8 S	0135.0E	0135.0	2.0D	18.0			QL=4 ST=2 TYP=3
	8800 LEAR	8 S	0135.0E	0136.0	2.0D	25.0			QL=4 ST=2 TYP=3
	15400 LEAR	8 S	0136.0E	0136.0	1.0D	27.0			QL=2 ST=2 TYP=3
	410 PALE	8 S	0136.0E	0136.0	U	59.0			QL=4 ST=2 TYP=3
	245 LEAR	20 GRF	0139.0E	0144.0	18.0D	410.0			QL=4 ST=2 TYP=2
	410 PALE	4 S/F	0139.0E	0140.0	11.0D	110.0			QL=4 ST=2 TYP=3
	245 PALE	20 GRF	0140.0E	0144.0	17.0D	380.0			QL=4 ST=2 TYP=2
	200 HIRA	7 C	0140.0	0140.2	28.0	170.0	14.0		0
	200 HIRA		0140.0	0149.3		40.0			0
	8800 LEAR	8 S	0306.0E	0306.0	U	51.0			QL=4 ST=2 TYP=3
	15400 LEAR	8 S	0306.0E	0306.0	U	130.0			QL=2 ST=2 TYP=3
	15400 PALE	8 S	0306.0E	0306.0	U	100.0			QL=4 ST=2 TYP=3
	8800 PALE	8 S	0306.0E	0306.0	U	100.0			QL=2 ST=2 TYP=3
	35000 NOBE	8 S	0306.1	0306.4	1.0	104.0			0 80GHz:0
	17000 NOBE	8 S	0306.1	0306.4	1.0	127.0			L
	9100 GORK	23 GRF	0342.0E	0624.0	558.0D	38.0			
	35000 NOBE	7 C	0344.2	0406.2	70.0	57.0			0 80GHz:0
	17000 NOBE	7 C	0344.2	0406.2	75.0	62.0			0
	9100 GORK	2 S/F	0345.3	0347.9	6.6	24.0			
	2950 GORK	21 GRF	0400.5	0614.4	540.0D	29.0			
	2695 LEAR	8 S	0401.0E	0401.0	U	61.0			QL=2 ST=2 TYP=3
	8800 LEAR	4 S/F	0401.0E	0406.0	7.0D	82.0			QL=4 ST=2 TYP=3
	2840 PEKG	3 S	0401.0	0405.2	11.0	17.4			
	9100 GORK	2 S/F	0401.3	0406.3	9.3	90.0			
	2950 GORK	1 S	0403.0	0405.0	3.8	13.0			
	1415 LEAR	4 S/F	0403.0E	0405.0	4.0D	48.0			QL=4 ST=2 TYP=3
15400 LEAR	4 S/F	0403.0E	0406.0	4.0D	59.0			QL=2 ST=2 TYP=3	
4995 PALE	8 S	0404.0E	0406.0	2.0D	55.0			QL=4 ST=2 TYP=3	
8800 PALE	8 S	0405.0E	0406.0	1.0D	84.0			QL=2 ST=2 TYP=3	
2840 PEKG	1 S	0438.0	0438.8	5.0	5.5				
9100 GORK	46 C	0603.0	0616.1		22.0				
9100 GORK	46 C	0603.0	0613.7	21.0	17.0				
9300 KISV	23 GRF	0604.0	0604.8	26.2	8.0				
204 IZMI	41 F	0609.5	0609.7	0.6	120.0				
5900 KISV	45 C	0612.8	0618.1	6.6	17.0				
5900 KISV	45 C	0612.8	0613.8		10.0				
9300 KISV	45 C	0613.3	0616.2	8.7	17.0				
9300 KISV	45 C	0613.3	0613.8		13.0				
5900 KISV	2 S/F	0622.2	0623.0	2.9	5.0				
5900 KISV	2 S/F	0759.0	0759.3	1.7	6.0				
9300 KISV	2 S/F	0759.1	0759.3	1.0	7.0				
5900 KISV	23 GRF	0808.5	0818.7	36.4	16.0				
5900 KISV	45 C	0808.9	0814.5	5.8	13.0				

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Outstanding Occurrences

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
16	5900	KISV	45 C	0808.9	0809.9		13.0			
	9300	KISV	23 GRF	0813.8	0824.9	32.5	17.0			
	3013	IZMI	7 C	0814.5	0816.0	6.0	10.0	5.0		
	9300	KISV	46 C	0815.0	0815.3		9.0			
	9300	KISV	46 C	0815.0	0817.4	5.8	10.0			
	9300	KISV	46 C	0815.0	0815.8		10.0			
	15400	LEAR	8 S	0824.0E	0824.0		51.0			QL=2 ST=2 TYP=3
	9300	KISV	2 S/F	0835.8	0836.1	0.7	5.0			
	9100	GORK	2 S/F	0954.6	0955.8	2.1	33.0			
	9500	POTS	4 S/F	0954.6	0955.8	2.2	22.0			
	9300	KISV	4 S/F	0954.8	0955.8	3.9	37.0			
	5900	KISV	4 S/F	0954.9	0955.8	3.3	22.0			
	15000	KISV	4 S/F	1049.4	1052.6	6.4	207.0			
	9100	GORK	3 S	1051.9	1052.5	3.4	96.0			
	5900	KISV	3 S	1051.9	1052.5	4.0	31.0			
	9300	KISV	3 S	1051.9	1052.5	4.9	53.0			
	15400	SGMR	8 S	1052.0E	1052.0	1.0D	130.0			QL=2 ST=2 TYP=3
	8800	SGMR	8 S	1052.0E	1052.0	1.0D	80.0			QL=4 ST=2 TYP=3
	8800	SVTO	8 S	1052.0E	1052.0	1.0D	86.0			QL=4 ST=2 TYP=3
	15400	SVTO	8 S	1052.0E	1052.0	2.0D	210.0			QL=4 ST=2 TYP=3
	3013	IZMI	5 S	1127.5	1129.0	2.0	8.0	4.0		
	2850	CRIM	21 GRF	1128.3	1158.0	50.0	25.0	8.0		
	3000	POTS	4 S/F	1128.3U	1129.0U	2.2U	13.0			
	2850	CRIM	1 S	1128.3	1129.3	1.3	11.0	3.0		
	2950	GORK	1 S	1128.5	1129.3	1.4	8.0			
	9100	GORK	46 C	1136.9	1152.4		195.0			
	9300	KISV	23 GRF	1137.9	1156.0	65.2	43.0			
	9300	KISV	23 GRF	1137.9	1143.4		33.0			
	5900	KISV	23 GRF	1139.0	1153.1	68.2	60.0			
	5900	KISV	23 GRF	1139.0	1143.7		25.0			
	15000	KISV	23 GRF	1139.1	1143.8	39.3	52.0			
	9100	GORK	46 C	1139.6	1143.7	23.4	27.0			
	3000	POTS	42 SER	1140.0U	1151.0U	21.0U	85.0			
	15400	SVTO	4 S/F	1140.0E	1152.0	15.0D	270.0			QL=4 ST=2 TYP=3
	9500	POTS	4 S/F	1140.0	1152.2	21.0	180.0			
	2950	GORK	4 S/F	1140.7	1143.0	3.5	39.0			
	2850	CRIM	40 F	1140.9	1142.8	4.0	45.0			
	3013	IZMI	42 SER	1141.0	1152.3	19.0	60.0			
	1470	POTS	42 SER	1143.2	1151.9	14.5	65.0			
	5900	KISV	4 S/F	1147.3	1152.3	5.7	133.0			
	15400	SGMR	4 S/F	1148.0E	1152.0	8.0D	230.0			QL=2 ST=2 TYP=5
	4995	SGMR	4 S/F	1148.0E	1152.0	8.0D	100.0			QL=4 ST=2 TYP=3
	15000	KISV	4 S/F	1148.2	1152.3	7.4	257.0			
	2850	CRIM	4 S/F	1148.3	1151.9	12.0	200.0	60.0		
	2950	GORK	46 C	1148.7	1152.2	10.9	78.0			
	2950	GORK	46 C	1148.7	1155.8		85.0			
	2950	GORK	46 C	1148.7	1156.8		85.0			
2695	SGMR	4 S/F	1149.0E	1151.0	7.0D	360.0			QL=4 ST=2 TYP=5	
2695	SVTO	4 S/F	1149.0E	1151.0	3.0D	330.0			QL=4 ST=2 TYP=3	
9300	KISV	4 S/F	1149.4	1152.3	7.2	201.0				
4995	SVTO	4 S/F	1150.0E	1152.0	7.0D	110.0			QL=4 ST=2 TYP=3	
1415	SGMR	8 S	1151.0E	1151.0	1.0D	33.0			QL=4 ST=2 TYP=3	
1415	SVTO	4 S/F	1151.0E	1151.0	6.0D	33.0			QL=4 ST=2 TYP=3	
410	SGMR	8 S	1152.0E	1152.0		97.0			QL=4 ST=2 TYP=3	
8800	SVTO	4 S/F	1152.0E	1152.0	5.0D	120.0			QL=4 ST=2 TYP=3	
2695	SGMR	8 S	1155.0E	1155.0		270.0			QL=4 ST=2 TYP=3	
2695	SVTO	4 S/F	1155.0E	1155.0	3.0D	250.0			QL=4 ST=2 TYP=3	
2695	SGMR	8 S	1156.0E	1156.0	1.0D	160.0			QL=4 ST=2 TYP=3	
1415	SGMR	8 S	1343.0E	1344.0	1.0D	240.0			QL=4 ST=2 TYP=3	
9500	POTS	40 F	1343.5	1344.2	3.3	20.0				
3000	POTS	40 F	1343.6	1344.1	2.8	12.0				
1470	POTS	8 S	1343.9	1344.0	0.8	135.0				
1415	SVTO	8 S	1344.0E	1344.0		240.0			QL=4 ST=2 TYP=3	
2800	OTTA	22 GRF	1526.5	1600.5	82.0	26.0	8.0			
8800	SGMR	8 S	1548.0E	1548.0	1.0D	65.0			QL=4 ST=2 TYP=3	
8800	SGMR	8 S	1558.0E	1559.0	2.0D	69.0			QL=4 ST=2 TYP=3	
4995	SGMR	4 S/F	1558.0E	1600.0	5.0D	67.0			QL=4 ST=2 TYP=3	
4995	SVTO	8 S	1600.0E	1600.0		56.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1913.0E	1913.0	1.0D	78.0			QL=4 ST=2 TYP=3	

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

APRIL 1991

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	17000 NOBE	1 S	2238.0	2238.6	1.5	20.0		0	80,35GHz:0	
	500 HIRA	42 SER	2303.8	2308.0	5.0	80.0		0		
	610 LEAR	8 S	2307.0E	2308.0	1.00	14.0		QL=4	ST=2 TYP=3	
	410 LEAR	8 S	2307.0E	2308.0	1.00	70.0		QL=2	ST=2 TYP=3	
	1415 LEAR	8 S	2307.0E	2307.0	U	11.0		QL=4	ST=2 TYP=3	
17	204 IZMI	43 NS	0600.0		360.0	10.0			V=1	
	127 TORN	43 NS	0746.0		370.0		3.0			
	15400 LEAR	4 S/F	0000.0E	0000.0	7.00	80.0		QL=2	ST=2 TYP=3	
	2840 PEKG	5 S	0023.0	0025.1	7.0	35.2				
	4995 LEAR	8 S	0024.0E	0025.0	2.00	75.0		QL=4	ST=2 TYP=3	
	2695 LEAR	8 S	0024.0E	0025.0	1.00	46.0		QL=2	ST=2 TYP=3	
	1415 LEAR	8 S	0024.0E	0025.0	2.00	27.0		QL=4	ST=2 TYP=3	
	8800 LEAR	8 S	0024.0E	0025.0	1.00	44.0		QL=4	ST=2 TYP=3	
	610 LEAR	8 S	0024.0E	0024.0	1.00	17.0		QL=4	ST=2 TYP=3	
	2840 PEKG	45 C	0143.0	0147.5	7.0	34.2				
	2840 PEKG	45 C	0143.0	0144.8		32.6				
	35000 NOBE	7 C	0144.4	0205.5	30.0	45.0			0 80GHz:0	
	17000 NOBE	7 C	0144.4	0205.5	30.0	34.0			L	
	2840 PEKG	41 F	0203.0	0207.4	10.0	12.2				
	2840 PEKG	5 S	0240.0	0241.9	18.0	11.4				
	9100 GORK	23 GRF	0354.0E	0834.8	540.00	38.0				
	2840 PEKG	20 GRF	0555.0	0559.2	10.0	14.7				
	2950 GORK	21 GRF	0624.0	0817.9	283.0	23.0				
	5900 KISV	2 S/F	0635.1	0635.7	1.3	18.0				
	9100 GORK	2 S/F	0638.7	0639.0	0.5	14.0				
	9300 KISV	2 S/F	0638.7	0638.9	0.6	13.0				
	610 LEAR	8 S	0651.0E	0652.0	1.00	200.0			QL=4	ST=2 TYP=3
	610 SVTO	8 S	0651.0E	0652.0	1.00	430.0			QL=4	ST=2 TYP=3
	9300 KISV	45 C	0651.6	0652.5	8.7	107.0				
	5900 KISV	45 C	0651.6	0653.7		75.0				
	9300 KISV	45 C	0651.6	0653.8		86.0				
	5900 KISV	45 C	0651.6	0652.8	6.8	106.0				
	17000 NOBE	4 S/F	0651.7	0652.3	3.0	89.0			0 80,35GHz:0	
	9100 GORK	46 C	0651.7	0652.4	4.7	120.0				
	9100 GORK	46 C	0651.7	0653.7		80.0				
	9500 POTS	4 S/F	0651.8	0652.5	4.6	100.0				
	950 GORK	4 S/F	0651.9	0653.0	5.1	95.0				
	650 GORK	29 PBI	0651.9	0657.0	6.00	3.0				
	950 GORK	29 PBI	0651.9	0657.0	48.00	20.0				
	650 GORK	46 C	0651.9	0653.4		284.0				
	15000 KISV	4 S/F	0651.9	0652.5	2.7	106.0				
	650 GORK	46 C	0651.9	0652.5	51.0	136.0				
	2950 GORK	4 S/F	0651.9	0653.7	10.9	85.0				
	500 HIRA	42 SER	0651.9	0654.8	4.5	170.0			0	
	2850 CRIM	4 S/F	0651.9	0652.9	6.0	117.0	39.0			
1470 POTS	4 S/F	0652.00	0652.5	4.00	91.0					
600 HUMN	2 S/F	0652.0	0652.7	7.5	141.0	8.0				
4995 LEAR	4 S/F	0652.0E	0653.0	4.00	55.0			QL=4	ST=2 TYP=3	
15400 LEAR	8 S	0652.0E	0652.0	U	110.0			QL=2	ST=2 TYP=3	
1415 LEAR	4 S/F	0652.0E	0654.0	6.00	210.0			QL=4	ST=2 TYP=3	
2695 LEAR	4 S/F	0652.0E	0652.0	6.00	120.0			QL=2	ST=2 TYP=3	
2695 SVTO	4 S/F	0652.0E	0652.0	7.00	130.0			QL=4	ST=2 TYP=3	
15400 SVTO	8 S	0652.0E	0652.0	2.00	120.0			QL=2	ST=2 TYP=3	
8800 SVTO	4 S/F	0652.0E	0652.0	4.00	100.0			QL=2	ST=2 TYP=3	
1415 SVTO	4 S/F	0652.0E	0654.0	6.00	190.0			QL=4	ST=2 TYP=3	
4995 SVTO	4 S/F	0652.0E	0653.0	5.00	64.0			QL=2	ST=2 TYP=3	
3013 IZMI	7 C	0652.0	0653.8	11.0	62.0					
3000 POTS	5 S	0652.5	0653.7	5.5	85.0					
9500 POTS	20 GRF	0710.5	0739.0	59.5	10.0					
600 HUMN	2 S/F	0739.0	0739.2	0.8	23.0	8.0				
5900 KISV	22 GRF	0930.7	0945.1		15.0					
5900 KISV	22 GRF	0930.7	0942.9	49.9	13.0					
9300 KISV	22 GRF	0933.9	0934.5	37.8	13.0					
9100 GORK	3 S	0942.0	0943.0	2.4	13.0					
9500 POTS	29 PBI	0942.3	0943.0	7.4	13.0					
1470 POTS	40 F	0950.0	0953.0	7.0	31.0					
33 UPIC	45 C	1103.5	1103.7	1.3						
9500 POTS	26 FAL	1125.0	1139.5	40.0	10.0					

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 91

APRIL 1991

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	245	SGMR	8 S	1509.0E	1509.0	U	84.0			QL=4 ST=2 TYP=3
	2800	OTTA	3 S	1616.3	1618.0	5.1	24.3	7.0		
	610	LEAR	8 S	2307.0E	2308.0	1.0D	14.0			QL=4 ST=2 TYP=3
	1415	LEAR	8 S	2307.0E	2307.0	U	11.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	2307.0E	2308.0	1.0D	70.0			QL=2 ST=2 TYP=3
	2840	PEKG	3 S	2353.0	2404.8	16.0	17.4			
	610	LEAR	4 S/F	2355.0E	2356.0	8.0D	63.0			QL=4 ST=2 TYP=3
	8800	LEAR	4 S/F	2355.0E	2356.0	5.0D	69.0			QL=4 ST=2 TYP=3
	4995	LEAR	4 S/F	2355.0E	2356.0	8.0D	31.0			QL=4 ST=2 TYP=3
	15400	LEAR	4 S/F	2355.0E	2356.0	3.0D	130.0			QL=2 ST=2 TYP=3
	8800	PALE	8 S	2355.0E	2356.0	2.0D	56.0			QL=2 ST=2 TYP=3
	35000	NOBE	4 S/F	2355.6	2356.8	5.0	71.0			0 80GHz:0
	17000	NOBE	4 S/F	2355.6	2356.8	6.0	118.0			0
	4995	PALE	8 S	2356.0E	2356.0	1.0D	26.0			QL=4 ST=2 TYP=3
	18	127	TORN	44 NS	0812.0E		400.0D		3.0	
245		SVTO	44 NS	1212.0E	1224.0	12.0D	65.0			QL=4 ST=2 TYP=1
15400		LEAR	4 S/F	0000.0E	0000.0	7.0D	80.0			QL=2 ST=2 TYP=3
8800		LEAR	8 S	0024.0E	0025.0	1.0D	44.0			QL=4 ST=2 TYP=3
4995		LEAR	8 S	0024.0E	0025.0	2.0D	75.0			QL=4 ST=2 TYP=3
2695		LEAR	8 S	0024.0E	0025.0	1.0D	46.0			QL=2 ST=2 TYP=3
1415		LEAR	8 S	0024.0E	0025.0	2.0D	27.0			QL=4 ST=2 TYP=3
610		LEAR	8 S	0024.0E	0024.0	1.0D	17.0			QL=4 ST=2 TYP=3
2840		PEKG	5 S	0039.0	0044.0	8.0	23.8			
15400		LEAR	8 S	0045.0E	0045.0	U	55.0			QL=2 ST=2 TYP=3
2840		PEKG	5 S	0152.0	0155.0	6.0	11.1			
245		LEAR	8 S	0228.0E	0228.0	U	160.0			QL=4 ST=2 TYP=3
245		PALE	8 S	0228.0E	0228.0	U	140.0			QL=4 ST=2 TYP=3
1415		LEAR	8 S	0232.0E	0233.0	2.0D	61.0			QL=4 ST=2 TYP=3
9100		GORK	23 GRF	0345.0E	0418.0	229.0D	18.0			
9300		KISV	20 GRF	0524.4	0533.4	36.7	10.0			
2840		PEKG	1 S	0527.0	0529.6	6.0	10.0			
5900		KISV	21 GRF	0528.1	0529.3	19.9	7.0			
2850		CRIM	1 S	0528.4	0529.5	2.0	12.0		4.0	
2950		GORK	1 S	0528.8	0529.5	1.7	6.3			
245		SVTO	8 S	0603.0E	0603.0	U	67.0			QL=4 ST=3 TYP=3
204		IZMI	5 S	0603.5	0603.7	0.5	300.0		150.0	
9300		KISV	2 S/F	0616.5	0617.4	2.4	9.0			
9100		GORK	1 S	0617.0	0617.5	1.0	7.0			
9300		KISV	2 S/F	0657.5	0658.4	4.6	7.0			
9300		KISV	2 S/F	0711.2	0712.3	1.7	5.0			
9300		KISV	2 S/F	0736.5	0736.9	1.8	7.0			
204		IZMI	7 C	0738.0	0738.2	0.2	94.0		45.0	
15000		KISV	22 GRF	0753.9	0758.7	9.8	20.0			
5900		KISV	2 S/F	0754.0	0755.9	8.2	8.0			
9300		KISV	2 S/F	0754.1	0755.9	8.6	8.0			
2950		GORK	1 S	0810.6	0811.3	1.8	3.0			
430		KRAK	8 S	0832.0	0832.0	0.3	103.0			
245		LEAR	8 S	0832.0E	0832.0	U	230.0			QL=4 ST=2 TYP=3
410		LEAR	8 S	0832.0E	0832.0	U	110.0			QL=2 ST=2 TYP=3
410		SVTO	8 S	0832.0E	0832.0	U	100.0			QL=4 ST=3 TYP=3
245		SVTO	8 S	0832.0E	0832.0	U	240.0			QL=4 ST=3 TYP=3
33		UPIC	4 S/F	0832.0	0832.3	1.3				
204		IZMI	41 F	0832.0	0832.4	0.8	700.0			
3000		POTS	29 PBI	0928.7	0930.2	36.9	14.0			
2950		GORK	1 S	0929.6	0930.3	2.8	20.0			
9300		KISV	22 GRF	0933.9	0943.0		21.0			
9300		KISV	20 GRF	1012.0	1012.8	12.9	10.0			
9500		POTS	29 PBI	1012.2	1013.0	7.8D	11.0			
9100		GORK	2 S/F	1012.2	1013.7	5.2	8.0			
9100	GORK	23 GRF	1101.9	1221.0	118.0D	14.0				
9500	POTS	29 PBI	1106.2	1113.5	33.8	26.0				
9300	KISV	21 GRF	1106.6	1113.5	16.0	21.0				
5900	KISV	20 GRF	1107.0	1114.2	20.1	7.0				
9100	GORK	46 C	1107.3	1108.1	13.7U	5.0				
9100	GORK	46 C	1107.3	1113.4		20.0				
1470	POTS	20 GRF	1205.0	1212.8	20.0	7.0				
9100	GORK	1 S	1231.7	1232.0	1.0	12.0				
9500	POTS	2 S/F	1309.4	1310.5	3.1	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		
18	33 UPIC	45 C	1314.3	1315.9	2.1				
	2800 OTTA	3 S	1842.6	1843.8	5.6	47.8	10.0		
	4995 PALE	8 S	1843.0E	1843.0	1.0D	35.0			QL=4 ST=2 TYP=3
	8800 PALE	8 S	1843.0E	1843.0	1.0D	81.0			QL=2 ST=2 TYP=3
	15400 PALE	8 S	1843.0E	1843.0	2.0D	130.0			QL=4 ST=2 TYP=3
	610 PALE	8 S	1843.0E	1843.0	1.0D	130.0			QL=4 ST=2 TYP=3
	2695 PALE	8 S	1843.0E	1843.0	1.0D	49.0			QL=4 ST=2 TYP=3
	1415 PALE	8 S	1843.0E	1843.0	1.0D	31.0			QL=4 ST=2 TYP=3
	610 SGMR	8 S	1843.0E	1843.0	U	160.0			QL=4 ST=2 TYP=3
	2695 SGMR	8 S	1843.0E	1843.0	1.0D	50.0			QL=4 ST=2 TYP=3
	1415 SGMR	4 S/F	1843.0E	1843.0	317.0D	33.0			QL=4 ST=1 TYP=3
	15400 SGMR	4 S/F	1843.0E	1843.0	317.0D	100.0			QL=2 ST=1 TYP=3
	8800 SGMR	4 S/F	1843.0E	1843.0	317.0D	63.0			QL=2 ST=1 TYP=3
	4995 SGMR	4 S/F	1843.0E	1843.0	317.0D	43.0			QL=4 ST=1 TYP=3
	17000 NOBE	1 S	2238.8	2238.9	0.8	21.0			R 80,35GHz:0
17000 NOBE	1 S	2352.7	2353.4	1.5	13.0			0 80,35GHz:0	
19	245 SVTO	44 NS	0425.0E	0435.0	27.0D	78.0			QL=4 ST=2 TYP=1
	204 IZMI	43 NS	0600.0		360.0	10.0			
	127 TORN	43 NS	0850.0		330.0		4.0		V=1
	200 HIRA	44 NS	2030.0E	0630.0	750.0D	15.0	4.0		WR
	17000 NOBE	1 S	0108.3	0108.7	0.8	16.0			R 80,35GHz:0
	17000 NOBE	1 S	0312.9	0313.2	1.3	41.0			R 80,35GHz:0
	35000 NOBE	3 S	0319.7	0320.2	2.0	260.0			R 80GHz:0
	17000 NOBE	3 S	0319.7	0320.2	2.5	264.0			R
	15400 LEAR	8 S	0320.0E	0320.0	U	210.0			QL=2 ST=2 TYP=3
	15400 PALE	8 S	0320.0E	0320.0	1.0D	200.0			QL=4 ST=2 TYP=3
	9100 GORK	23 GRF	0336.0U	1101.8	565.0D	30.0			
	2950 GORK	2 S/F	0352.3	0352.8	4.2	7.0			
	2840 PEKG	1 S	0353.5	0354.0	1.5	9.6			
	9100 GORK	46 C	0455.0	0506.3		20.0			
	9100 GORK	46 C	0455.0	0459.3	21.8	28.0			
	17000 NOBE	2 S/F	0455.5	0459.0	20.0	34.0			R 80,35GHz:0
	2950 GORK	22 GRF	0457.0	0458.3	18.0	5.0			
	17000 NOBE	2 S/F	0534.1	0539.9	14.0	18.0			0 80,35GHz:0
	5900 KISV	2 S/F	0619.7	0620.8	6.5	11.0			
	5900 KISV	2 S/F	0646.0	0646.6	1.7	12.0			
	2950 GORK	22 GRF	0654.0	0655.0	3.7	3.0			
	5900 KISV	45 C	0654.6	0658.3		21.0			
	5900 KISV	45 C	0654.6	0656.6	5.1	24.0			
	9300 KISV	46 C	0655.9	0658.0		22.0			
	9300 KISV	46 C	0655.9	0701.0		16.0			
	9300 KISV	46 C	0655.9	0656.8	9.7	23.0			
	9100 GORK	46 C	0656.3	0701.0		15.0			
	9100 GORK	46 C	0656.3	0658.3		20.0			
	9100 GORK	46 C	0656.3	0656.7	7.6	15.0			
	9500 POTS	42 SER	0656.4	0658.3	6.6	17.0			
	17000 NOBE	2 S/F	0657.3	0701.5	6.5	22.0			0 80,35GHz:0
	950 GORK	2 S/F	0657.4	0658.5	2.3	10.0			
	650 GORK	1 S	0657.7	0657.8	2.0	3.0			
	5900 KISV	2 S/F	0734.0	0736.2	4.8	11.0			
	5900 KISV	2 S/F	0817.7	0818.5	7.5	8.0			
9300 KISV	20 GRF	0817.8	0818.5	10.7	9.0				
9100 GORK	3 S	0849.6	0850.1	2.7	24.0				
5900 KISV	4 S/F	0849.7	0850.1	2.0	22.0				
9300 KISV	2 S/F	0849.7	0850.1	3.6	28.0				
2950 GORK	1 S	0849.7	0850.7	3.7	3.0				
5900 KISV	22 GRF	0922.8	0923.9	10.8	8.0				
9300 KISV	22 GRF	0923.3	0924.1	9.8	9.0				
2950 GORK	1 S	0923.4	0924.2	5.1	2.5				
15000 KISV	2 S/F	0952.1	0952.4	2.1	14.0				
2950 GORK	20 GRF	0955.6	0959.0	55.4	7.5				
5900 KISV	22 GRF	0957.3	0958.4	3.2	12.0				
9300 KISV	22 GRF	0957.8	1017.0	29.3	13.0				
15000 KISV	22 GRF	1014.2	1014.4	14.6	16.0				
9100 GORK	46 C	1043.8	1047.6	16.0	67.0				
9100 GORK	46 C	1043.8	1050.7		28.0				
9500 POTS	29 PBI	1043.8	1047.7	39.5	72.0				
9300 KISV	23 GRF	1043.9	1101.9	25.4	15.0				

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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	
19	15000	KISV	29 PBI	1046.5	1052.0	15.0	43.0				
	15000	KISV	47 GB	1046.5	1047.6	5.5	580.0				
	8800	SGMR	8 S	1047.0E	1047.0		38.0				
	15400	SGMR	49 GB	1047.0E	1047.0	5.0D	690.0			QL=4 ST=2 TYP=3	
	8800	SVTO	8 S	1047.0E	1047.0	1.0D	45.0			QL=4 ST=2 TYP=6	
	15400	SVTO	49 GB	1047.0E	1047.0	4.0D	650.0			QL=4 ST=2 TYP=3	
	9300	KISV	4 S/F	1047.4	1047.6	7.6	52.0			QL=4 ST=2 TYP=6	
	33	UPIC	32 ABS	1048.0	1051.5	18.0					
	5900	KISV	20 GRF	1052.9	1055.5	11.1	8.0				
	15000	KISV	2 S/F	1123.6	1125.0	6.6	29.0				
	2950	GORK	2 S/F	1257.0	1259.8	3.3D	21.0				
	1470	POTS	29 PBI	1258.8	1259.7	22.0	42.0				
	5900	KISV	4 S/F	1259.0	1259.5	1.7	40.0				
	9100	GORK	2 S/F	1259.3	1259.8	0.8	20.0				
	3000	POTS	29 PBI	1259.3	1259.8	5.7	21.0				
	9300	KISV	2 S/F	1259.4	1259.8	1.3	23.0				
	2850	CRIM	1 S	1259.5	1259.9	1.5	23.0	7.0			
	20	204	IZMI	44 NS	0600.0E		360.0D	15.0			
		127	TORN	44 NS	0620.0E		330.0D		40.0		V=1
9100		GORK	23 GRF	0339.0E	0627.0	298.6D	36.0				
9300		KISV	2 S/F	0505.3	0509.0	7.0	11.0				
15000		KISV	1 S	0505.5	0509.0	8.3	14.0				
17000		NOBE	1 S	0508.0	0508.9	1.7	16.0			R 80,35GHz:0	
5900		KISV	21 GRF	0511.3	0514.8	19.4	7.0				
9300		KISV	1 S	0514.4	0514.7	2.3	4.0				
15000		KISV	2 S/F	0551.6	0554.0	5.3	16.0				
17000		NOBE	2 S/F	0552.0	0553.9	3.0	31.0			R 80,35GHz:0	
5900		KISV	22 GRF	0612.1	0620.6	40.3	11.0				
15000		KISV	23 GRF	0612.2	0626.6	14.4D	55.0				
9300		KISV	23 GRF	0613.6	0626.7	33.9	27.0				
15400		LEAR	4 S/F	0619.0E	0620.0	10.0D	92.0			QL=4 ST=2 TYP=3	
15400		SVTO	4 S/F	0619.0E	0620.0	12.0D	87.0			QL=4 ST=2 TYP=3	
17000		NOBE	4 S/F	0619.1	0620.6	16.0	81.0			R 80,35GHz:0	
9100		GORK	46 C	0619.3	0619.5	2.5	7.0				
9300		KISV	2 S/F	0619.3	0620.7	3.3	21.0				
9100		GORK	46 C	0619.3	0620.8		20.0				
8800		LEAR	8 S	0620.0E	0620.0		25.0			QL=4 ST=2 TYP=3	
15000		KISV	4 S/F	0620.0	0620.7	1.9	64.0				
9300		KISV	22 GRF	0657.0	0659.4	15.8	11.0				
9300		KISV	GRF	0657.0	0704.8		13.0				
9100		GORK	2 S/F	0658.0	0659.5	7.3	13.0				
2950		GORK	21 GRF	0839.6	1054.0	170.0D	140.0				
2850		CRIM	28 PRE	0840.0	0847.0	7.0	20.0				
3013		IZMI	7 C	0840.0	0850.5	15.0	160.0				
9100		GORK	21 GRF	0842.0	0857.0	169.0D	47.0				
5900		KISV	30 PBI	0842.6	1028.4		2985.0				
5900		KISV	47 GB	0842.6	1018.7	105.8	8604.0				
1470		POTS	47 GB	0843.0E	1021.5	347.0D	325.0				
9300		KISV	47 GB	0843.7	1014.1	104.0	12258.0				
9300		KISV	PBI	0843.7	1027.7		2898.0				
3000		POTS	47 GB	0844.0E	1025.0U	346.0D	4200.0D				
650		GORK	21 GRF	0845.7		14.0D					
950		GORK	21 GRF	0845.8	0854.0	18.6	9.0				
2695		LEAR	4 S/F	0846.0E	0850.0	12.0D	240.0				
600		HUMN	1 S	0846.4	0849.3	8.1	7.0	3.0		QL=2 ST=2 TYP=3	
2950		GORK	4 S/F	0846.7	0850.4	10.2	195.0				
9500		POTS	47 GB	0847.0E	1005.0U	343.0D	6500.0D				
4995		LEAR	4 S/F	0847.0E	0850.0	9.0D	120.0			QL=4 ST=2 TYP=3	
1415	LEAR	4 S/F	0847.0E	0848.0	7.0D	130.0			QL=4 ST=2 TYP=3		
1415	SVTO	4 S/F	0847.0E	0848.0	7.0D	130.0			QL=4 ST=2 TYP=3		
2695	SVTO	4 S/F	0847.0E	0850.0	9.0D	200.0			QL=4 ST=2 TYP=3		
4995	SVTO	4 S/F	0847.0E	0850.0	12.0D	150.0			QL=4 ST=2 TYP=3		
8800	SVTO	4 S/F	0847.0E	0851.0	12.0D	64.0			QL=4 ST=2 TYP=3		
2850	CRIM	4 S/F	0847.0	0850.3	13.0	279.0	90.0				
430	KRAK	3 S	0847.0	0847.9	4.5	13.0	5.0				
15000	KISV	30 PBI	0847.4	1028.2	143.5	1427.0					
9100	GORK	2 S/F	0847.4	0851.5	9.6	40.0					
15000	KISV	47 GB	0847.4	1018.7	100.5	7221.0					

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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
20	950	GORK	5 S	0847.5	0849.5	6.5	38.0			
	33	UPIC	32 ABS	0848.0	0858.0U	280.0				
	650	GORK	5 S	0848.3	0849.5	4.3	8.0			
	245	LEAR	8 S	0849.0E	0849.0	2.0D	110.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0850.0E	0851.0	1.0D	57.0			QL=4 ST=2 TYP=3
	15400	SVTO	20 GRF	0850.0E	0900.0	11.0D	36.0			QL=4 ST=2 TYP=2
	2850	CRIM	30 PBI	0900.0	0900.0	173.0D	27.0			
	2850	CRIM	45 C	0927.0	0943.2		67.0			
	2850	CRIM	45 C	0927.0	0940.6		62.0			
	2850	CRIM	45 C	0927.0	0938.9	20.0	79.0	25.0		
	9100	GORK	47 GB	0929.3	1004.0	121.0D	16000.0			
	204	IZMI	45 C	0930.0	1007.0	60.0	120.0			
	430	KRAK	45 C	0932.5		41.0	91.0D	26.0U		
	2950	GORK	46 C	0933.4	0943.1		38.0			
	2950	GORK	46 C	0933.4	0938.9	12.4	57.0			
	650	GORK	21 GRF	0933.8	1021.7	61.0D	55.0			
	2695	SVTO	4 S/F	0934.0E	0939.0	11.0D	61.0			QL=4 ST=2 TYP=3
	2695	LEAR	4 S/F	0935.0E	0943.0	12.0D	73.0			QL=2 ST=2 TYP=5
	4995	LEAR	4 S/F	0935.0E	0943.0	10.0D	170.0			QL=4 ST=2 TYP=5
	950	GORK	47 GB	0935.0	1004.5	46.7	230.0			
	950	GORK	30 PBI	0935.0	1021.7	65.4	40.0			
	245	SVTO	8 S	0936.0E	0937.0	1.0D	140.0			QL=4 ST=2 TYP=3
	15400	SVTO	4 S/F	0936.0E	0943.0	8.0D	51.0			QL=4 ST=2 TYP=5
	8800	SVTO	4 S/F	0936.0E	0943.0	11.0D	110.0			QL=4 ST=2 TYP=5
	4995	SVTO	20 GRF	0936.0E	0938.0	13.0D	120.0			QL=4 ST=2 TYP=2
	3013	IZMI	45 C	0936.0	1019.5	85.0	3200.0			
	8800	LEAR	8 S	0937.0E	0938.0	1.0D	56.0			QL=4 ST=2 TYP=3
	1415	LEAR	8 S	0938.0E	0938.0		20.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0942.0E	0942.0	2.0D	47.0			QL=4 ST=2 TYP=3
	1415	SVTO	8 S	0942.0E	0943.0	1.0D	36.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0942.0E	0942.0		25.0			QL=4 ST=2 TYP=3
	650	GORK	3 S	0942.8	0943.5	1.3	6.0			
	2850	CRIM	47 GB	0947.0	1004.0	83.0	1186.0	1000.0		
	2850	CRIM	47 GB	0947.0	1019.1		3603.0			
	245	LEAR	4 S/F	0948.0E	0950.0	3.0D	160.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	0950.0E	1006.0	22.0D	140.0			QL=4 ST=2 TYP=5
	15400	SVTO	49 GB	0950.0E	1004.0	71.0D	15000.0			QL=4 ST=2 TYP=6
	4995	SVTO	49 GB	0951.0E	1018.0	81.0D	8900.0			QL=4 ST=2 TYP=7
	8800	SVTO	49 GB	0951.0E	1004.0	81.0D	16000.0			QL=4 ST=3 TYP=7
	2950	GORK	47 GB	0953.3	1004.0	60.0	1140.0			
	2950	GORK	47 GB	0953.3	1019.1		3160.0			
	600	HUMN	45 C	0953.4	1004.4	28.7	91.0	12.0		
	2695	SVTO	49 GB	0954.0E	1019.0	69.0D	2300.0			QL=4 ST=2 TYP=7
	810	KRAK	45 C	0954.5U	1020.0U	29.5D	63.0	23.0		
	127	TORN	49 GB	0956.0	1000.3	20.0	1500.0	370.0		
	1415	SVTO	4 S/F	0957.0E	1021.0	63.0D	270.0			QL=4 ST=2 TYP=5
	610	SVTO	4 S/F	0959.0E	1004.0	11.0D	150.0			QL=4 ST=2 TYP=3
	410	SVTO	4 S/F	0959.0E	1004.0	10.0D	130.0			QL=4 ST=2 TYP=3
	650	GORK	46 C	1000.0	1020.4		36.0			
	650	GORK	46 C	1000.0	1004.5	21.7	110.0			
2695	SGMR	49 GB	1004.0	1018.0	53.0D	3600.0			QL=2 ST=2 TYP=7	
15400	SGMR	49 GB	1005.0	1018.0	52.0D	1000.0			QL=2 ST=2 TYP=7	
4995	SGMR	49 GB	1005.0	1019.0	52.0D	9600.0			QL=2 ST=2 TYP=7	
8800	SGMR	49 GB	1008.0	1018.0	40.0D	15000.0			QL=2 ST=2 TYP=7	
33	UPIC	27 RF	1009.2	1026.1	47.3					
1415	SGMR	20 GRF	1011.0	1031.0	46.0D	200.0			QL=2 ST=2 TYP=2	
950	GORK	2 S/F	1026.4	1027.3	2.2	10.0				
430	KRAK	27 RF	1030.0	1034.0	10.0	10.0	4.0			
950	GORK	40 F	1108.5	1114.4	9.1	12.0				
810	KRAK	7 C	1154.0	1154.7	5.0	28.0	10.0			
600	HUMN	2 S/F	1154.2	1156.2	14.5	14.0	3.0			
2850	CRIM	1 S	1154.3	1155.2	1.5	29.0	8.0			
3013	IZMI	7 C	1154.3	1155.3	6.0	16.0	8.0			
9300	KISV	4 S/F	1154.4	1155.3	3.1	93.0				
15000	KISV	4 S/F	1154.4	1155.3	1.7	84.0				
5900	KISV	4 S/F	1154.4	1155.4	2.9	103.0				
430	KRAK	8 S	1154.5	1155.4	1.1	35.0				
15400	SGMR	8 S	1155.0E	1155.0	2.0D	75.0			QL=4 ST=2 TYP=3	
1415	SGMR	8 S	1155.0E	1155.0	2.0D	38.0			QL=4 ST=2 TYP=3	

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Flux Density Mean	Int	Remarks
20	8800	SGMR	8 S	1155.0E	1155.0	2.0D	74.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1155.0E	1155.0	2.0D	78.0			QL=4 ST=2 TYP=3
	8800	SVTO	8 S	1155.0E	1155.0	U	82.0			QL=4 ST=2 TYP=3
	15400	SVTO	8 S	1155.0E	1155.0	U	76.0			QL=4 ST=2 TYP=3
	33	UPIC	2 S/F	1307.5	1307.6	0.5				
	127	TORN	47 GB	1357.4	1358.0	2.7	1200.0	320.0		
	33	UPIC	46 C	1357.5	1358.5	4.5				
	600	HUMN	2 S/F	1534.2	1534.7	6.4	7.0	2.0		
21	245	LEAR	8 S	0011.0E	0011.0	U	230.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0011.0E	0011.0	U	230.0			QL=4 ST=2 TYP=3
	200	HIRA	6 S	0011.1	0011.4	1.0	300.0	50.0		0
	9100	GORK	22 GRF	0339.0E	0540.2	300.0D	24.0			
	2840	PEKG	21 GRF	0430.0	0557.4	142.0D	24.1			
	2950	GORK	22 GRF	0444.0	0452.3	206.0	18.0			
	2850	CRIM	20 GRF	0449.0	0452.0	14.0	14.0	5.0		
	2840	PEKG	3 S	0449.0	0452.2	14.0	15.9			
	950	GORK	2 S/F	0451.0	0454.3	4.3	4.0			
	5900	KISV	20 GRF	0532.3	0540.1	20.3	14.0			
	9300	KISV	20 GRF	0533.1	0540.1	50.3	12.0			
	5900	KISV	2 S/F	0730.6	0731.1	2.1	4.0			
	9300	KISV	1 S	0730.6	0731.1	1.4	5.0			
	100	GORK	46 C	0736.4	0740.3	19.6	45.0			
	100	GORK	46 C	0736.4	0753.8		410.0			
	200	GORK	46 C	0740.0	0746.2	14.4	15.0			
	200	GORK	46 C	0740.0	0752.4		210.0			
	204	IZMI	42 SER	0740.0	0749.8	16.0	159.0			
	127	TORN	46 C	0742.0	0749.0	20.0	1400.0	60.0		
	650	GORK	20 GRF	0742.7	0752.0	20.3	5.5			
950	GORK	22 GRF	0742.7	0753.1	15.1	8.0				
33	UPIC	42 SER	0749.7	0749.9	6.8					
1470	POTS	4 S/F	0752.6	0753.3	1.7	9.0				
9300	KISV	1 S	0831.4	0831.8	3.5	6.0				
5900	KISV	1 S	0831.6	0831.8	3.2	3.0				
1470	POTS	3 S	1048.3U	1049.8U	3.2U	9.0				
1470	POTS	24 R	1122.7	1125.5	11.7	7.0				
430	KRAK	8 S	1158.3	1158.5	0.3	129.0				
1470	POTS	27 RF	1341.5	1341.8	6.3	9.0				
22	8800	PALE	8 S	0048.0E	0048.0	1.0D	52.0			QL=2 ST=2 TYP=3
	5900	KISV	2 S/F	0625.3	0626.2	3.1	3.0			
	5900	KISV	2 S/F	0736.0	0738.8	8.8	5.0			
	410	LEAR	8 S	0738.0E	0738.0	1.0D	80.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0738.0E	0738.0	1.0D	98.0			QL=4 ST=2 TYP=3
	3013	IZMI	7 C	0738.0	0738.7	5.0	5.0	3.0		
	1470	POTS	2 S/F	0738.0	0738.8	2.4	4.0			
	2850	CRIM	1 S	0738.0	0738.9	1.1	8.3	2.0		
	3000	POTS	2 S/F	0738.5	0738.7	0.9	6.0			
	650	GORK	1 S	0738.5	0738.8	1.3	2.0			
	2950	GORK	1 S	0738.5	0738.8	1.2	4.4			
	950	GORK	2 S/F	0738.5	0738.8	1.3	5.0			
	430	KRAK	2 S/F	0738.5	0738.9	0.8	86.0	8.0		
	9300	KISV	20 GRF	0832.6	0841.4	12.5	5.0			
	9100	GORK	45 C	1007.2	1007.8	4.1	6.0			
	5900	KISV	2 S/F	1007.3	1009.7	5.5	8.0			
	9300	KISV	45 C	1007.4	1009.2		8.0			
	9300	KISV	45 C	1007.4	1007.8	5.6	9.0			
	1470	POTS	40 F	1019.3	1027.4	11.2	11.0			
	3000	POTS	1 S	1022.7	1023.0	1.5	7.0			
245	SVTO	8 S	1029.0E	1029.0	1.0D	68.0			QL=4 ST=2 TYP=3	
3000	POTS	20 GRF	1120.0	1129.6	15.0	5.0				
1470	POTS	40 F	1124.3	1129.5	25.7	19.0				
2800	OTTA	8 S	1646.8	1646.9	0.7	15.6	5.0			
23	9300	KISV	1 S	0522.4	0522.6	2.5	5.0			
	1470	POTS	2 S/F	0724.0	0724.8	1.6	4.0			
	3000	POTS	2 S/F	0758.8	0801.5	4.2	6.0			
	3013	IZMI	2 S/F	0759.2	0801.5	4.5	4.0	2.0		
	2850	CRIM	1 S	0759.8	0801.5	4.2	7.0	2.0		

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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
23	L	2950	GORK	1 S	0800.7	0801.6	2.1	5.0		
		3013	IZMI	1 S	0828.5	0829.5	1.5	4.0	2.0	
		1470	POTS	2 S/F	0828.6	0829.7	2.1	3.0		
		2950	GORK	1 S	0829.1	0829.8	1.0	2.0		
		127	TORN	42 SER	1004.7	1006.6	3.0	10.0	5.0	
		1470	POTS	2 S/F	1326.0	1327.0	2.4	4.0		
		3000	POTS	2 S/F	1326.3	1326.7	1.2	4.0		
24		200	HIRA	6 S	0056.6	0057.3	1.3	10.0	4.0	WR
		8800	SVTO	8 S	0629.0E	0629.0	1.0D	74.0		QL=4 ST=2 TYP=3
		245	LEAR	49 GB	0828.0E	0828.0	U	510.0		QL=4 ST=2 TYP=6
		410	LEAR	8 S	0835.0E	0835.0	U	60.0		QL=2 ST=2 TYP=3
		430	KRAK	2 S/F	1003.5	1003.7	2.5	22.0	4.0	
		204	IZMI	7 C	1011.1	1011.3	0.4	137.0	70.0	
25	L	245	LEAR	8 S	0057.0E	0057.0	U	89.0		QL=4 ST=2 TYP=3
		245	PALE	8 S	0057.0E	0057.0	U	96.0		QL=4 ST=2 TYP=3
		245	LEAR	8 S	0140.0E	0140.0	U	180.0		QL=4 ST=2 TYP=3
		245	PALE	8 S	0140.0E	0140.0	U	170.0		QL=4 ST=2 TYP=3
		2840	PEKG	1 S	0200.0	0200.8	2.0	5.0		
		245	LEAR	8 S	0235.0E	0235.0	1.0D	130.0		QL=4 ST=2 TYP=3
		245	PALE	8 S	0235.0E	0235.0	1.0D	130.0		QL=4 ST=3 TYP=3
		245	LEAR	49 GB	0316.0E	0318.0	3.0D	660.0		QL=4 ST=2 TYP=6
		245	PALE	49 GB	0316.0E	0318.0	3.0D	760.0		QL=4 ST=2 TYP=6
		245	LEAR	4 S/F	0416.0E	0417.0	3.0D	320.0		QL=4 ST=2 TYP=3
		245	PALE	4 S/F	0416.0E	0417.0	3.0D	340.0		QL=4 ST=2 TYP=3
		9100	GORK	2 S/F	0458.2	0458.6	0.6	7.0		
		204	IZMI	41 F	0620.0	0624.0	5.0	75.0		
		245	LEAR	8 S	0654.0E	0654.0	1.0D	180.0		QL=4 ST=2 TYP=3
		245	SVTO	8 S	0654.0E	0655.0	1.0D	190.0		QL=4 ST=2 TYP=3
		100	GORK	4 S/F	0654.0U	0654.6	2.0D	9900.0		
		200	GORK	4 S/F	0654.0U	0654.9	1.5D	1700.0		
		100	HIRA	6 S	0654.6		1.3	1000.0D		WL
		200	HIRA	6 S	0654.6	0654.9	1.3	1300.0	200.0	0
		204	IZMI	41 F	0655.0	0655.4	0.6	140.0		
		204	IZMI	41 F	0839.5	0840.2	5.0	57.0		
		127	TORN	42 SER	1045.5	1046.4	2.0	60.0		
		245	SGMR	8 S	1106.0E	1106.0	1.0D	61.0		QL=2 ST=2 TYP=3
204	IZMI	41 F	1106.5	1107.0	1.0	80.0				
430	KRAK	42 SER	1331.7	1332.0	1.7	31.0				
245	SGMR	8 S	1441.0E	1441.0	U	140.0		QL=4 ST=2 TYP=3		
245	SVTO	8 S	1441.0E	1441.0	U	110.0		QL=4 ST=2 TYP=3		
245	SGMR	8 S	1633.0E	1634.0	1.0D	53.0		QL=4 ST=2 TYP=3		
245	SGMR	8 S	1635.0E	1635.0	1.0D	55.0		QL=4 ST=2 TYP=3		
245	PALE	8 S	1801.0E	1802.0	1.0D	150.0		QL=4 ST=2 TYP=3		
245	SGMR	8 S	1801.0E	1802.0	1.0D	220.0		QL=4 ST=2 TYP=3		
26		204	IZMI	43 NS	0600.0		360.0	7.0		
		245	LEAR	8 S	0025.0E	0026.0	1.0D	66.0		QL=4 ST=2 TYP=3
		245	PALE	8 S	0025.0E	0026.0	1.0D	60.0		QL=4 ST=2 TYP=3
		245	LEAR	8 S	0146.0E	0147.0	1.0D	79.0		QL=4 ST=2 TYP=3
		245	PALE	8 S	0146.0E	0147.0	1.0D	74.0		QL=4 ST=2 TYP=3
		245	LEAR	8 S	0410.0E	0411.0	1.0D	54.0		QL=4 ST=2 TYP=3
		245	PALE	8 S	0410.0E	0411.0	1.0D	51.0		QL=4 ST=2 TYP=3
		245	SVTO	8 S	0745.0E	0746.0	1.0D	52.0		QL=4 ST=2 TYP=3
		204	IZMI	41 F	0745.6	0746.0	1.0	160.0		
		245	LEAR	8 S	0746.0E	0746.0	U	58.0		QL=4 ST=2 TYP=3
		204	IZMI	7 C	0847.0	0847.2	1.0	53.0	26.0	
		245	SGMR	8 S	1244.0E	1244.0	1.0D	52.0		QL=4 ST=2 TYP=3
		2800	OTTA	20 GRF	1603.0	1616.5	155.0	10.5	5.0	
	245	PALE	8 S	1916.0E	1916.0	U	72.0		QL=4 ST=2 TYP=3	
	245	SGMR	8 S	1916.0E	1916.0	U	98.0		QL=4 ST=2 TYP=3	
	410	SGMR	8 S	1916.0E	1916.0	U	99.0		QL=4 ST=2 TYP=3	
27		15400	LEAR	8 S	0429.0E	0429.0	U	120.0		QL=4 ST=2 TYP=3
		15400	LEAR	8 S	0612.0E	0612.0	U	53.0		QL=4 ST=2 TYP=3
		204	IZMI	42 SER	0740.0	0746.5	44.0	26.0		
		33	UPIC	2 S/F	1413.5	1413.9	1.2			
		33	UPIC	2 S/F	1417.6	1418.0	1.7			

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
28	9100	GORK	22	GRF	0327.0	0500.0	216.0	8.0		
	245	PALE	8	S	0409.0E	0409.0	U	78.0		QL=4 ST=2 TYP=3
	1415	LEAR	8	S	0450.0E	0451.0	2.0D	50.0		QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0451.0E	0451.0	1.0D	58.0		QL=4 ST=2 TYP=3
	2850	CRIM	20	GRF	0548.0	0608.0	37.0	6.0	2.0	
	245	LEAR	8	S	0615.0E	0616.0	1.0D	79.0		QL=4 ST=2 TYP=3
	245	SVTO	8	S	0615.0E	0615.0	U	97.0		QL=4 ST=2 TYP=3
	204	IZMI	41	F	0615.2	0615.5	1.3	280.0		
	204	IZMI	42	SER	0714.0	0729.0	45.0	61.0		
	2950	GORK	21	GRF	0746.3	0801.0	163.0D	8.0		
	9300	KISV	46	C	0747.0	0751.0		44.0		
	9300	KISV	46	C	0747.0	0749.7	5.0	74.0		
	9500	POTS	21	GRF	0747.5	0802.0	67.7	18.0		
	9100	GORK	30	PBI	0747.5	0752.0	138.0	16.0		
	5900	KISV	45	C	0747.5	0751.5		29.0		
	9100	GORK	46	C	0747.5	0749.7	4.5	72.0		
	5900	KISV	45	C	0747.5	0749.7	4.6	57.0		
	9100	GORK	46	C	0747.5	0750.9		15.0		
	4995	LEAR	8	S	0748.0E	0749.0	2.0D	34.0		QL=4 ST=2 TYP=3
	3000	POTS	21	GRF	0748.0	0937.0	124.0	10.0		
	2850	CRIM	7	C	0748.0	0751.5		14.0		
	2850	CRIM	7	C	0748.0	0749.8		22.0		
	2850	CRIM	7	C	0748.0	0748.8	4.0	9.7	7.0	
	15000	KISV	45	C	0748.1	0751.1		59.0		
	15000	KISV	45	C	0748.1	0749.7	4.0	60.0		
	3013	IZMI	7	C	0748.3	0749.8	6.0	21.0		
	2950	GORK	2	S/F	0748.4	0749.7	3.8	14.0		
	3000	POTS	40	F	0748.5	0749.6	3.5	12.0		
	80000	NOBE	2	S/F	0748.7	0749.6	4.0	15.0		
	17000	NOBE	2	S/F	0748.7	0749.6	5.0	63.0		0
	35000	NOBE	2	S/F	0748.7	0749.6	5.0	67.0		0
	9500	POTS	40	F	0748.8	0749.5	3.2	51.0		
	8800	LEAR	8	S	0749.0E	0749.0	2.0D	56.0		QL=2 ST=2 TYP=3
	15400	LEAR	8	S	0749.0E	0749.0	2.0D	50.0		QL=2 ST=2 TYP=3
	4995	SVTO	8	S	0749.0E	0749.0	1.0D	29.0		QL=4 ST=2 TYP=3
	8800	SVTO	8	S	0749.0E	0749.0	1.0D	50.0		QL=4 ST=2 TYP=3
	15400	SVTO	4	S/F	0749.0E	0749.0	3.0D	68.0		QL=4 ST=2 TYP=3
	33	UPIC	32	ABS	0749.0	0753.0	33.0			
	2850	CRIM	29	PBI	0752.0	0752.0	45.0	2.0	1.0	
	3013	IZMI	5	S	0852.0	0853.5	1.5	8.0	4.0	
	950	GORK	40	F	0852.4	0853.1	3.5	210.0		
	950	GORK	40	F	0852.4	0855.4		8.0		
5900	KISV	8	S	0852.9	0853.4	0.8	18.0			
2850	CRIM	1	S	0853.0	0853.3	1.0	8.0	2.0		
650	GORK	8	S	0853.1	0853.2	0.5	15.0			
2950	GORK	1	S	0853.1	0853.3	1.0	6.3			
9100	GORK	1	S	0853.1	0853.3	0.6	15.0			
9300	KISV	1	S	0853.1	0853.3	0.5	14.0			
810	KRAK	8	S	0853.5	0853.5	0.1	36.0			
33	UPIC	42	SER	1035.3	1049.0	14.5				
810	KRAK	8	S	1053.8	1053.8	0.1	21.0			
3000	POTS	20	GRF	1129.0	1136.2	31.0	7.0			
5900	KISV	20	GRF	1129.1	1136.2	17.9	7.0			
9500	POTS	20	GRF	1130.0	1137.0	30.0	6.0			
9300	KISV	20	GRF	1132.7	1136.3	11.8	6.0			
410	SVTO	8	S	1427.0E	1427.0	1.0D	23.0		QL=4 ST=3 TYP=3	
2800	OTTA	3	S	1844.1	1844.6	3.1	11.7	3.0		
29	245	LEAR	44	NS	0259.0E	0304.0	114.0D	130.0		QL=4 ST=2 TYP=1
	200	GORK	44	NS	0331.0E		570.0D		5.0	
	127	TORN	43	NS	0907.0		103.0		6.0	V=1
	204	IZMI	43	NS	0909.0		171.0	20.0		
	15400	LEAR	8	S	0114.0E	0114.0	1.0D	92.0		QL=2 ST=2 TYP=3
	245	PALE	8	S	0304.0E	0304.0	1.0D	150.0		QL=4 ST=2 TYP=3
	2850	CRIM	2	S/F	0403.0	0403.2	1.0	60.0	10.0	
	2950	GORK	1	S	0414.0	0414.2	1.2	6.6		
	650	GORK	46	C	0430.3	0437.2		60.0		
	650	GORK	46	C	0430.3	0500.2		80.0		
650	GORK	46	C	0430.3	0433.2	53.7	110.0			

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

APRIL 1991

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
29	650	GORK	46 C	0430.3	0433.6		100.0			
	650	GORK	46 C	0430.3	0453.7		50.0			
	610	SVTO	4 S/F	0431.0E	0433.0	3.0D	110.0			QL=2 ST=2 TYP=3
	610	PALE	4 S/F	0432.0E	0433.0	7.0D	100.0			QL=4 ST=3 TYP=5
	950	GORK	23 GRF	0432.0	0439.4	53.8	4.0			
	2695	SVTO	8 S	0433.0E	0433.0	U	40.0			QL=2 ST=2 TYP=3
	2950	GORK	4 S/F	0433.0	0433.2	4.0	40.0			
	500	HIRA	45 C	0433.0	0443.2	48.0	80.0	30.0		WR
	950	GORK	46 C	0433.0	0437.3		11.0			
	950	GORK	46 C	0433.0	0434.5		15.0			
	950	GORK	46 C	0433.0	0433.6	6.4	38.0			
	2840	PEKG	45 C	0433.0	0433.6	3.0	58.3			
	2850	CRIM	8 S	0434.9	0435.0	0.5	7.0	1.0		
	610	LEAR	4 S/F	0449.0E	0454.0	7.0D	78.0			QL=4 ST=2 TYP=3
	610	LEAR	4 S/F	0458.0E	0500.0	8.0D	130.0			QL=4 ST=2 TYP=3
	950	GORK	2 S/F	0505.1	0505.2	0.3	8.0			
	610	LEAR	8 S	0514.0E	0514.0	1.0D	61.0			QL=4 ST=2 TYP=3
	600	HUMN	2 S/F	0537.0	0538.0	1.5	33.0	12.0		
	610	LEAR	8 S	0537.0E	0537.0	1.0D	52.0			QL=4 ST=2 TYP=3
	500	HIRA	7 C	0537.0	0537.4	8.5	23.0	3.0		WR
	650	GORK	4 S/F	0537.1	0537.7	1.4	54.0			
	950	GORK	1 S	0537.5	0537.6	0.4	3.0			
	650	GORK	22 GRF	0619.0	0623.4	8.0	13.0			
	500	HIRA	46 C	0620.5	0622.6	6.5	24.0	8.0		WR
	600	HUMN	2 S/F	0621.0	0623.7	6.0	15.0	7.0		
	204	IZMI	42 SER	0715.0	0716.0	45.0	20.0			
	950	GORK	8 S	0812.0	0812.1	0.2	19.0			
	9100	GORK	1 S	0833.0	0833.4	1.5	6.0			
	5900	KISV	1 S	0833.0	0833.4	1.5	4.0			
	9300	KISV	1 S	0833.1	0833.4	2.6	6.0			
	3000	POTS	20 GRF	0856.5	0948.0	93.5	6.0			
	2950	GORK	20 GRF	0903.7	0939.5	94.5	4.5			
	245	LEAR	8 S	0917.0E	0917.0	1.0D	51.0			QL=4 ST=2 TYP=3
	1470	POTS	29 PBI	0924.4	0924.8	3.6	3.0			
	5900	KISV	2 S/F	0924.5	0925.5	1.7	6.0			
	9300	KISV	2 S/F	0924.5	0925.5	4.9	13.0			
15000	KISV	1 S	0925.0	0925.5	1.3	8.0				
9500	POTS	4 S/F	0925.0	0925.5	1.3	11.0				
9100	GORK	1 S	0925.0	0925.6	1.2	14.0				
100	GORK	4 S/F	1029.3	1029.5	1.0	770.0				
245	SGMR	8 S	1041.0E	1041.0	2.0D	66.0			QL=4 ST=2 TYP=3	
200	GORK	4 S/F	1041.3	1041.8	1.0	90.0				
33	UPIC	42 SER	1041.5	1041.6	24.5					
245	SGMR	8 S	1423.0E	1423.0	U	66.0			QL=4 ST=2 TYP=3	
30	200	GORK	44 NS	0328.0E		370.0D		5.0		
	204	IZMI	44 NS	0600.0E		360.0D	15.0			
	15400	LEAR	8 S	0116.0E	0117.0	1.0D	63.0			QL=2 ST=2 TYP=3
	500	HIRA	42 SER	0231.4	0240.0	9.0	2200.0			WR
	610	LEAR	8 S	0239.0E	0240.0	1.0D	120.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	0239.0E	0240.0	1.0D	110.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0433.0E	0433.0	U	110.0			QL=2 ST=2 TYP=3
	610	LEAR	8 S	0500.0E	0501.0	1.0D	67.0			QL=4 ST=2 TYP=3
	1415	LEAR	8 S	0500.0E	0501.0	1.0D	150.0			QL=4 ST=2 TYP=3
	1415	SVTO	8 S	0500.0E	0501.0	2.0D	120.0			QL=2 ST=2 TYP=3
	610	SVTO	8 S	0500.0E	0501.0	1.0D	110.0			QL=2 ST=2 TYP=3
	650	GORK	4 S/F	0500.3	0501.0	0.7	140.0			
	9300	KISV	2 S/F	0500.5	0501.1	2.6	23.0			
	5900	KISV	4 S/F	0500.5	0500.9	3.5	24.0			
	9100	GORK	2 S/F	0500.8	0501.1	1.1	14.0			
	2950	GORK	4 S/F	0500.8	0501.4	5.2	22.0			
	950	GORK	46 C	0500.8	0501.6		38.0			
	950	GORK	46 C	0500.8	0500.9	1.0	170.0			
	2850	CRIM	1 S	0500.9	0501.2	2.0	24.0	7.0		
	4995	LEAR	8 S	0501.0E	0501.0	U	19.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	0501.0E	0501.0	U	22.0			QL=4 ST=2 TYP=3
	650	GORK	1 S	0634.5	0634.9	0.8	4.0			
	950	GORK	2 S/F	0634.6	0634.9	0.7	4.5			
	5900	KISV	1 S	0723.8	0724.5	1.5	3.0			

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 91

APRIL 1991

Day	Freq Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
						Peak (10 -22 W/m ² Hz)	Mean		
30	3013 IZMI	1 S	0724.0	0724.5	2.0	3.0	2.0		
	3000 POTS	1 S	0724.0	0724.5	1.0	7.0			
	2950 GORK	1 S	0724.1	0724.5	1.0	4.0			
	1470 POTS	1 S	0724.3	0724.5	0.9	4.0			
	810 KRAK	8 S	0725.4	0726.0	0.6	34.0			
	5900 KISV	1 S	0737.7	0739.2	3.3	4.0			
	2695 LEAR	8 S	0828.0E	0828.0	1.0D	37.0			QL=4 ST=2 TYP=3
	2695 SVTO	8 S	0828.0E	0828.0	2.0D	34.0			QL=4 ST=2 TYP=3
	1415 SVTO	8 S	0828.0E	0829.0	2.0D	470.0			QL=4 ST=2 TYP=3
	4995 SVTO	8 S	0828.0E	0828.0	2.0D	33.0			QL=4 ST=2 TYP=3
	8800 SVTO	4 S/F	0828.0E	0828.0	1432.0D	19.0			QL=4 ST=2 TYP=3
	3000 POTS	4 S/F	0828.0	0828.6	3.5	69.0			
	1470 POTS	4 S/F	0828.2	0828.6	2.6	100.0			
	9100 GORK	46 C	0828.4	0829.4		19.0			
	9100 GORK	46 C	0828.4	0828.8	1.8	28.0			
	15000 KISV		0828.5	0829.3		6.0			
	950 GORK	46 C	0828.5	0829.4		125.0			
	2950 GORK	46 C	0828.5	0829.4		24.0			
	9300 KISV	45 C	0828.5	0829.4		20.0			
	15000 KISV	45 C	0828.5	0828.7	1.5	8.0			
	2950 GORK	45 C	0828.5	0828.8	3.3	33.0			
	950 GORK	46 C	0828.5	0828.8	1.8	80.0			
	650 GORK	2 S/F	0828.5	0828.8	0.4	4.0			
	3013 IZMI	41 F	0828.5	0828.8	4.5	28.0			
	9300 KISV	45 C	0828.5	0828.8	2.5	27.0			
	5900 KISV	45 C	0828.6	0829.5		23.0			
	5900 KISV	45 C	0828.6	0828.8	2.4	33.0			
	1415 LEAR	49 GB	0829.0E	0829.0	U	610.0			QL=4 ST=2 TYP=6
	810 KRAK	8 S	1119.5	1119.7	0.4	162.0			
	1470 POTS	4 S/F	1226.0	1226.3	1.6	22.0			
3000 POTS	4 S/F	1226.0	1226.5	1.5	24.0				
1470 POTS	8 S	1418.2	1418.6	0.8	5.0				
33 UPIC	42 SER	1544.5	1544.7	10.2					
410 SGMR	8 S	1959.0E	2000.0	1.0D	99.0			QL=4 ST=2 TYP=3	

Reports are received routinely from the following observatories:

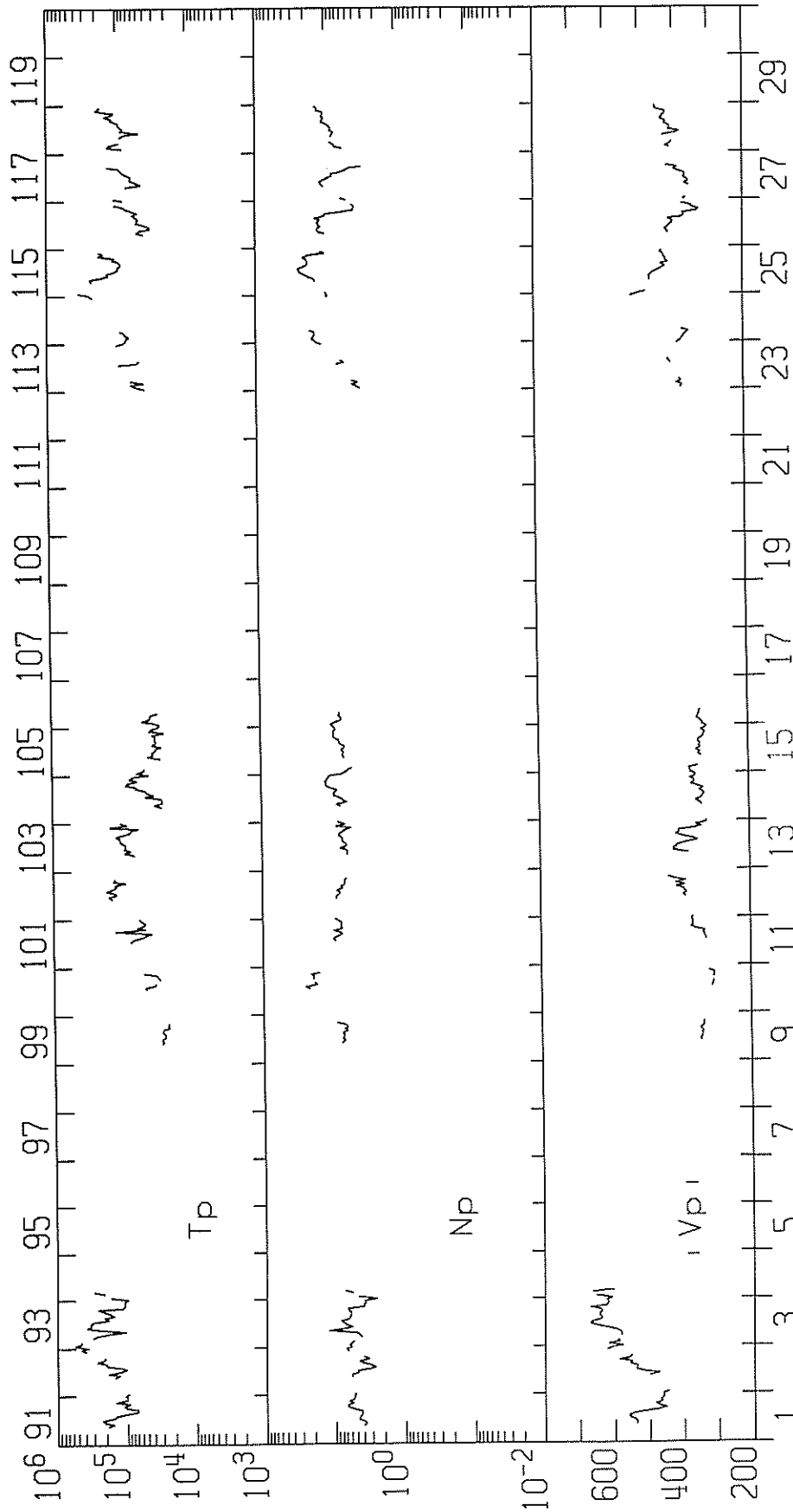
BERN = Berne	IZMI = IZMIRAN	ONDR = Ondrejov	SVTO = San Vito
CRIM = Crimea	KISK = Kislovodsk	OTTA = Ottawa	SYDN = Sydney
GORK = Gorky	KRAK = Krakow	PALE = Palehua	TORN = Torun
HIRA = Hiraiso	LEAR = Learmonth	PENT = Penticton	TRST = Trieste
HUAN = Huancayo	NOBE = Nobeyama	POTS = Potsdam	TYKW = Toyokawa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

Explanation of Type Code:

1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple 3F	28 Precursor	41 Group of Bursts	47 Great Burst
6 Minor	23 Simple 3AF	29 Post Burst Increase	42 Series of Bursts	48 Major
1A Simple 1A	4A Simple 2AF	24PF Post Rise F	27F Rise and Fall F	
3A Simple 2A	40 Rise Only	16A Fall A	27AF Rise and Fall AF	
21A Simple 3A GRF	40F Rise Only F	26O Fall Only	31A Post Burst Decrease A	
2A Simple 1AF	4P Post Rise	26F Fall F	32A Absorption A	

IMP 8 SOLAR WIND PLASMA
APRIL 1991

MIT/CSR IMP 8 PLASMA PARAMETERS

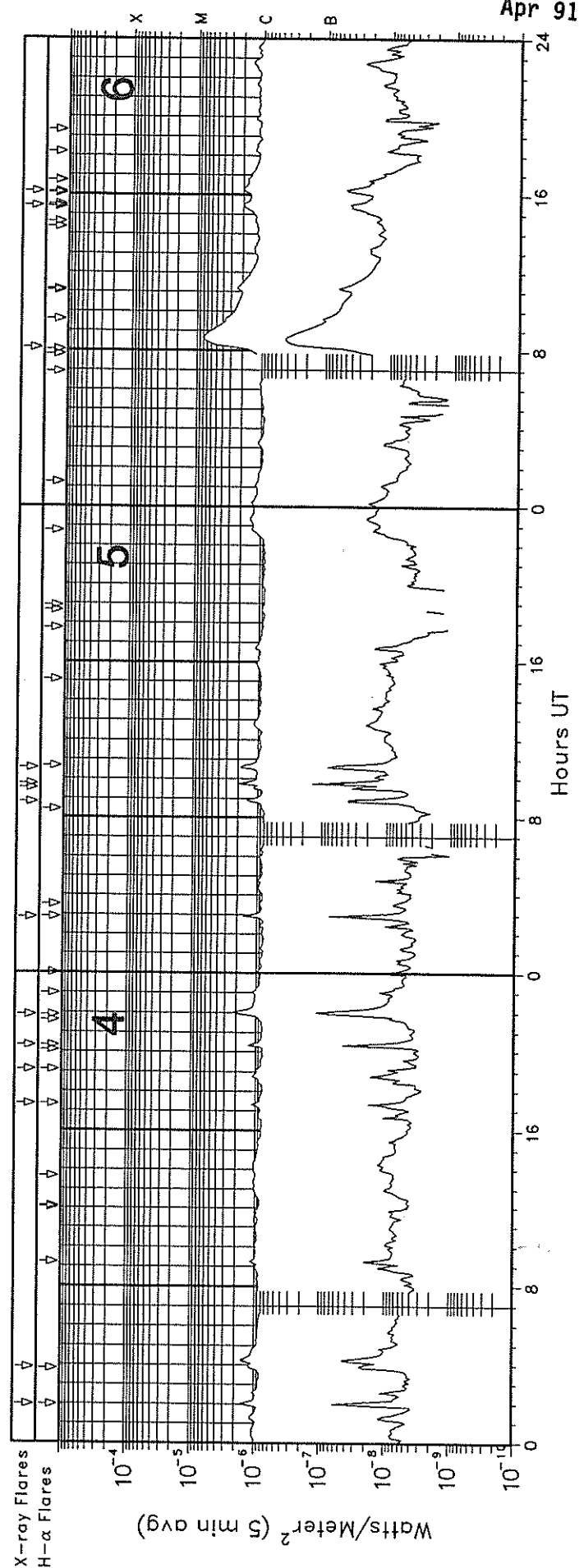
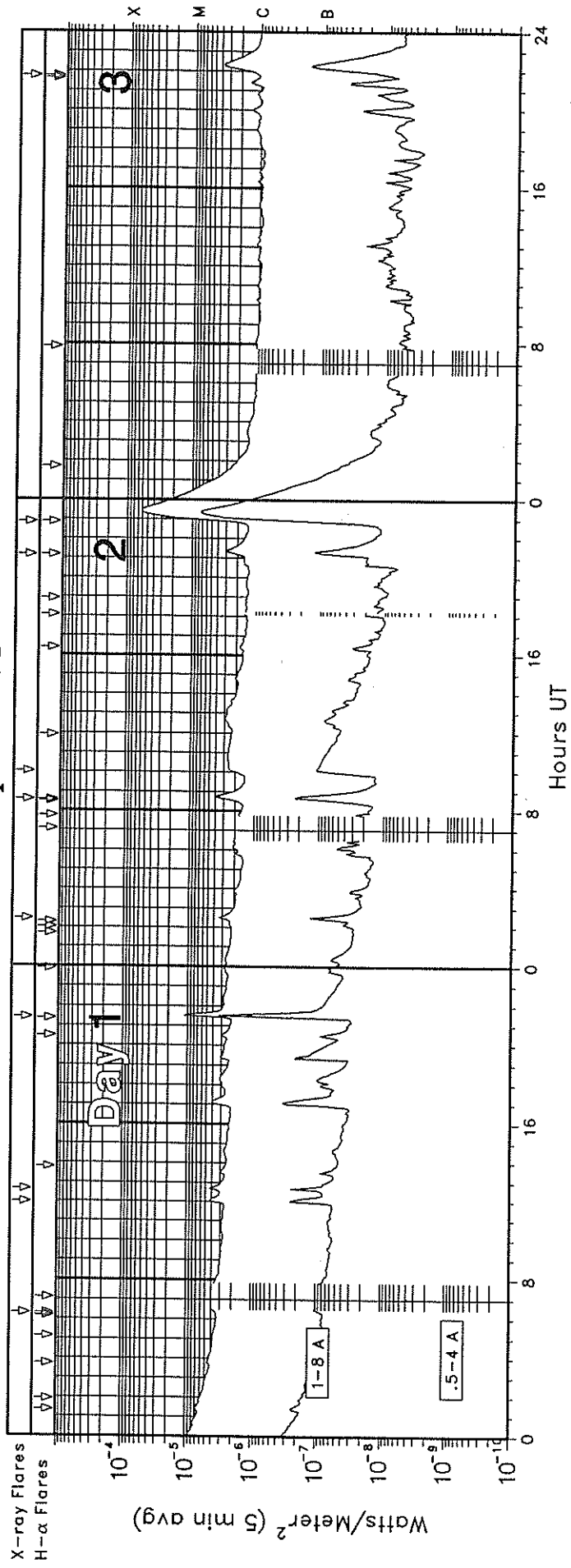


APR 1991

IMP 8
MIT
PRELIMINARY ONE-HOUR AVERAGES

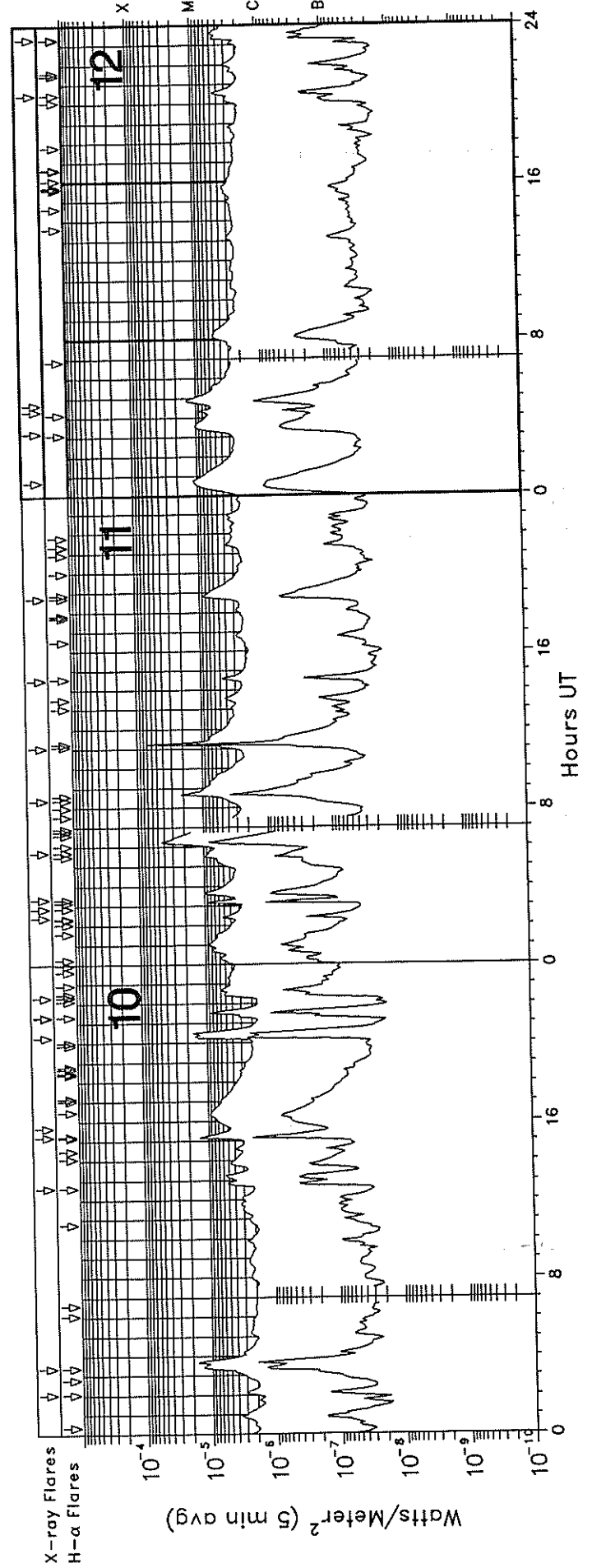
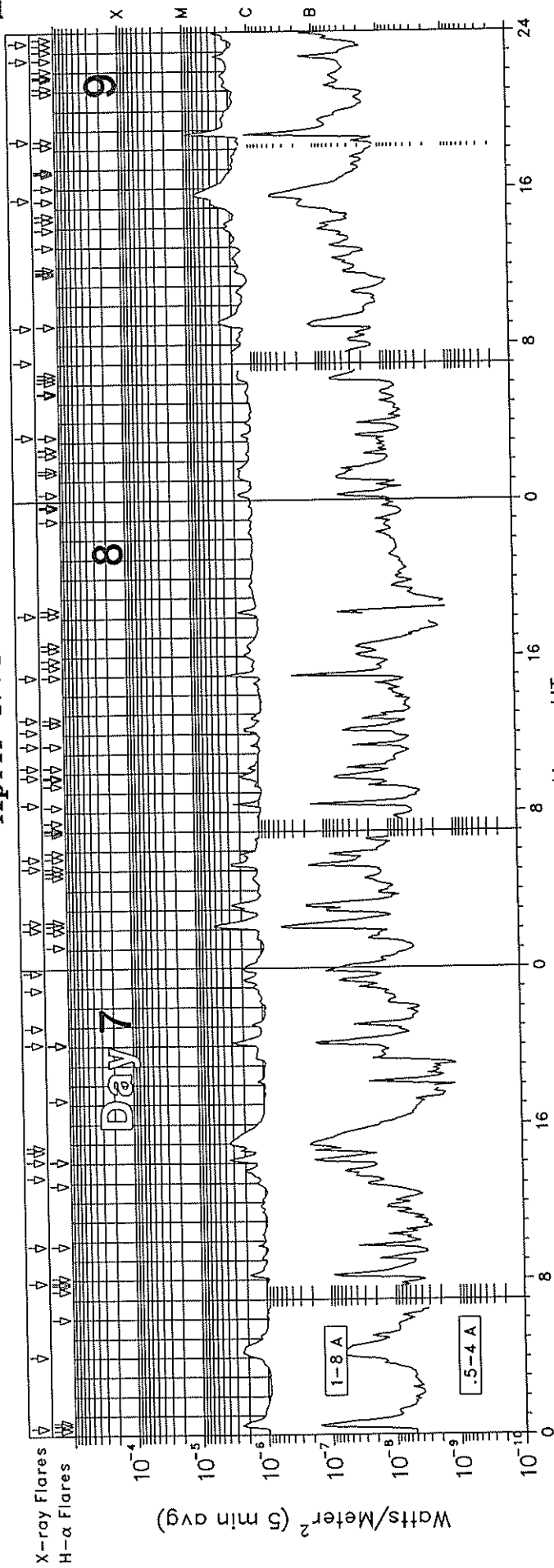
GOES-7 X-RAY DETECTOR

April 1991



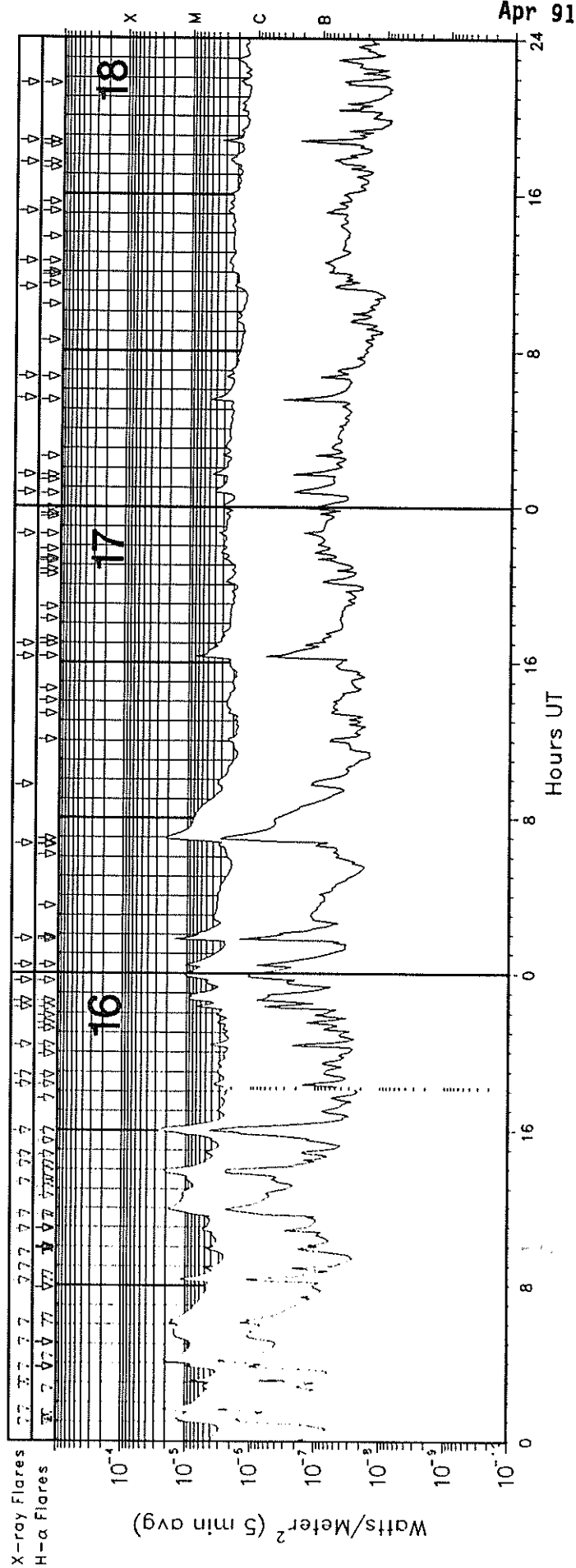
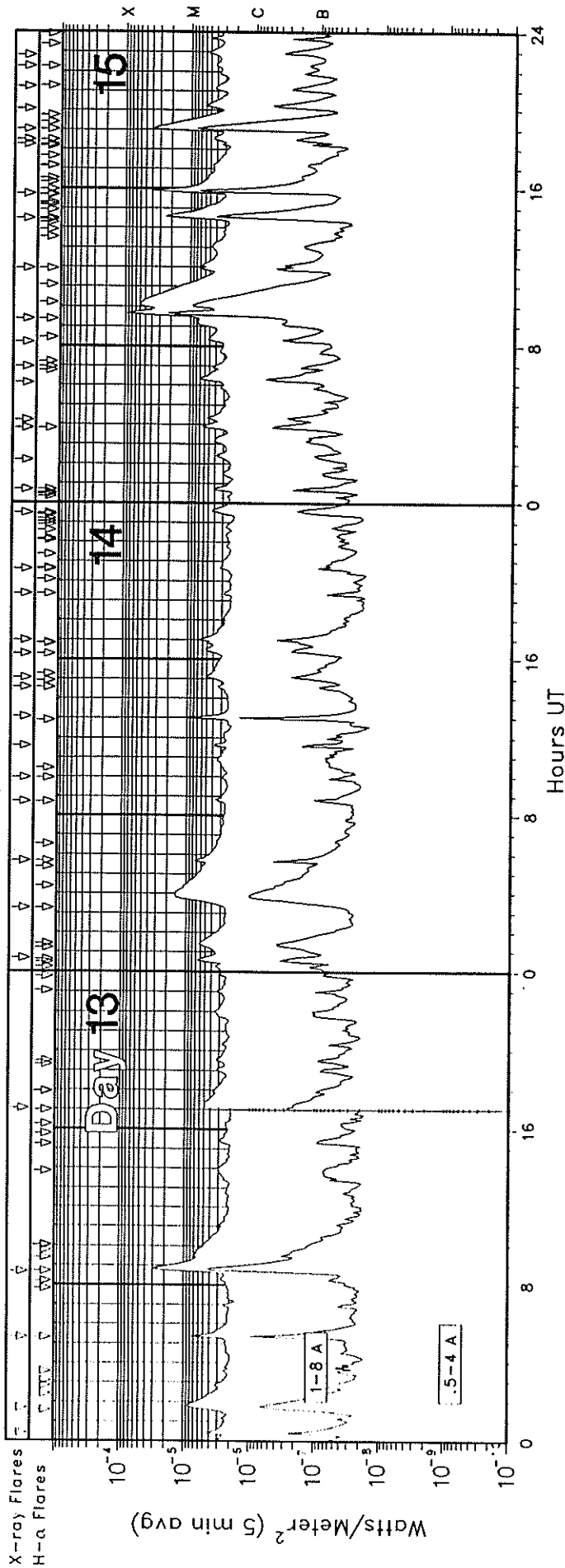
GOES-7 X-RAY DETECTOR

April 1991



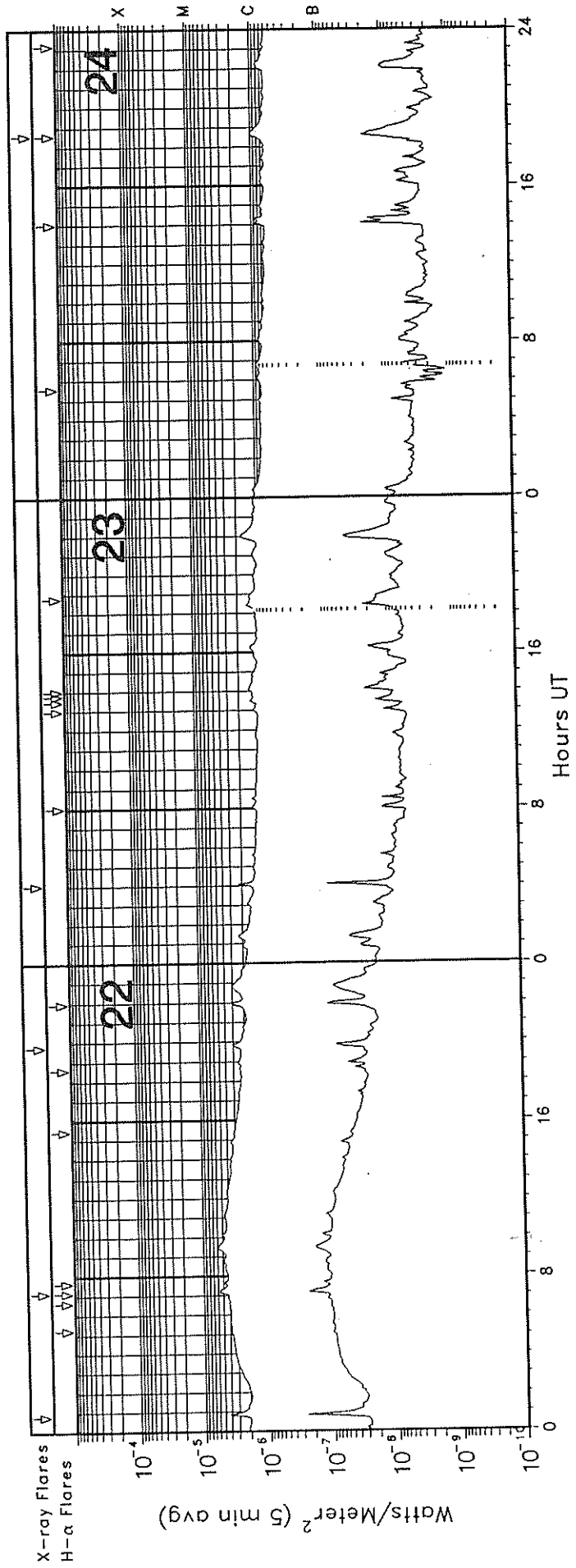
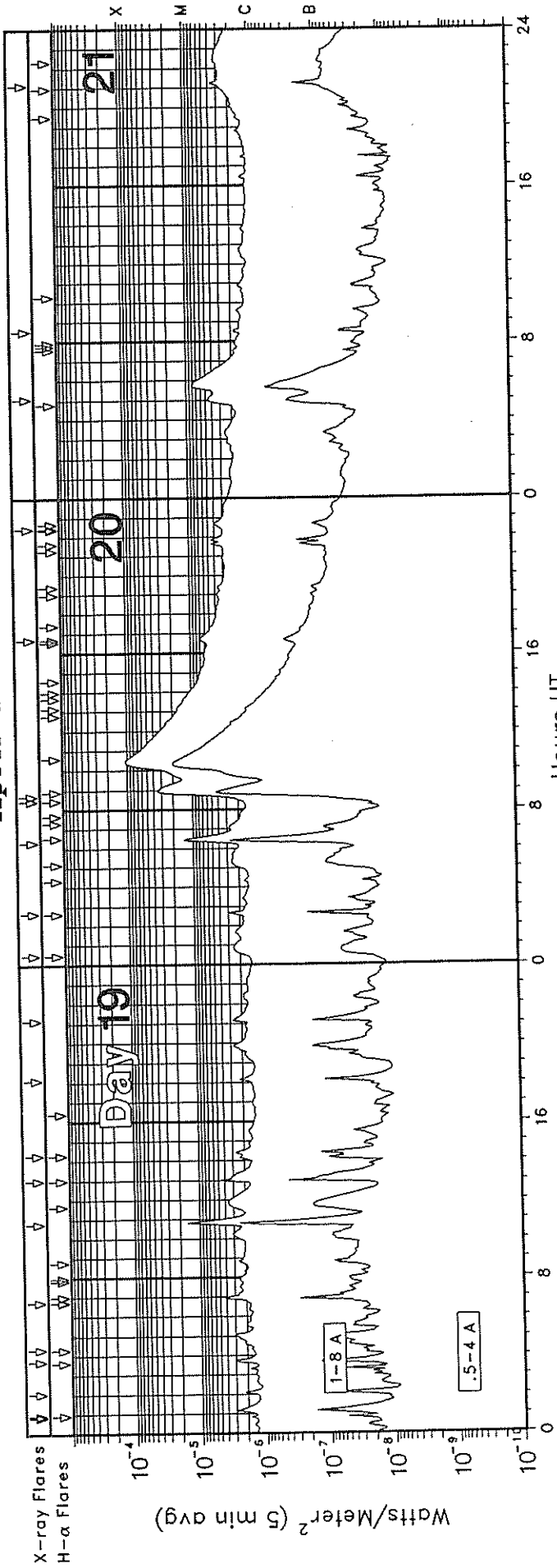
GOES-7 X-RAY DETECTOR

April 1991



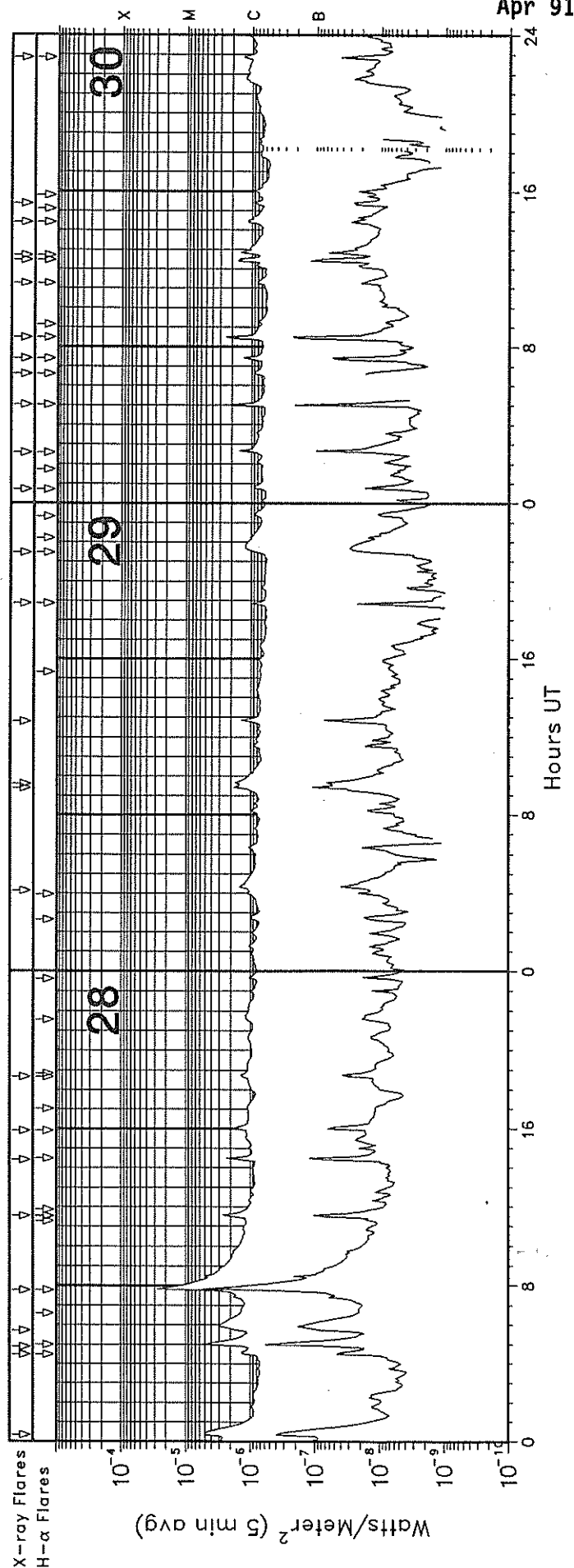
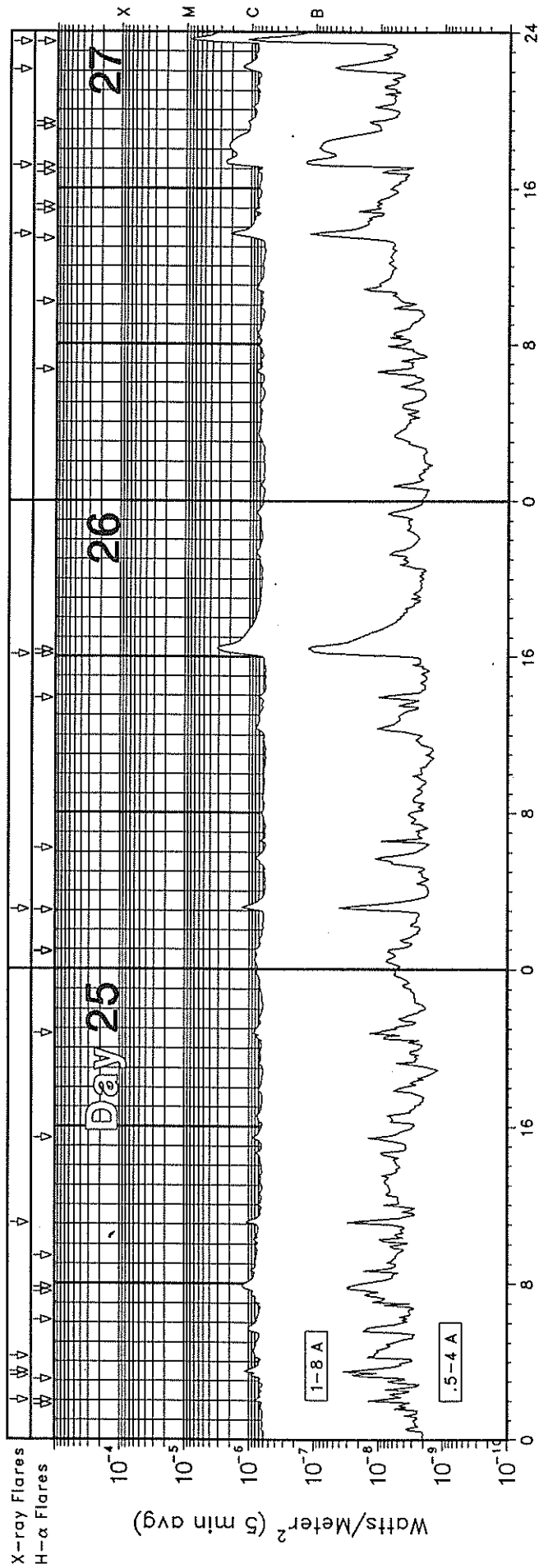
GOES-7 X-RAY DETECTOR

April 1991



GOES-7 X-RAY DETECTOR

April 1991



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Apr 91

GOES SOLAR X-RAY FLARES
Preliminary Listing

April 1991

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
01	0618E	0656	0827D	S12	W58	1F	C5.1	6558
01	1158	1203	1216				C4.5	
01	1239	1243	1249				C4.5	
01	2126	2134	2142				M1.2	
02	0228	0232	0238				C3.4	
02	0835E	0838	0855D	N10	E10	SF	C4.1	6562
02	1002	1050	1131				C2.6	
02	2111E	2117	2138D	N16	E05	SF	C3.1	6562
02	2251E	2320	0105	N14	W00	3B	M6.1	6562
03	2145	2208U	2303D	S12	E43	1F	C3.8	6567
04	0157E	0159	0207D	S26	E54	SF	C1.8	6566
04	0352E	0414	0433D	N13	W13	1F	C1.8	6562
04	1722E	1722	1743D	S20	E44	SF	C1.2	6566
04	1906E	1907	1915D	N09	E06	SF	C1.0	6565
04	2020E	2020	2023D	N15	W21	SF	C1.3	6562
04	2153E	2207	2349D	N16	W24	SF	C2.3	6562
05	0252	0258	0302				C1.7	
05	0848E	0853	0931D	S09	W26	1F	C1.5	6563
05	0931	0934	0938				C1.3	
05	0945	0949	0952				C2.6	
05	1032	1036	1038				C2.4	
06	0808E	0823	0948D	N14	W42	1N	C7.8	6562
06	1525E	1530	1545D	S12	W42	SF	C2.1	6563
06	1609E	1622	1645D	N08	E36	SF	C2.1	6577
07	0023E	0031	0045D	N16	W52	SN	C2.5	6562
07	0405	0418	0440				C2.5	
07	0753E	0754	0820D	S19	E58	SF	C1.1	6578
07	0945E	0946	0950D	S18	E58	SF	C1.4	6578
07	1318	1340	1345				C2.2	
07	1407E	1409	1424D	N30	E72	SF	C3.6	6580
07	1438	1442	1449				C2.3	
07	1450	1503	1519				C3.5	
07	2007E	2025	2046D	N30	E71	SN	C3.1	6580
07	2058	2108	2111				C1.6	
07	2255	2304	2309				C1.4	
07	2349	2356	0014				C1.8	
08	0202	0213	0223				C5.5	
08	0225E	0306	0348D	N05	E47	SF	C3.0	6579
08	0509E	0514	0524D	N05	E46	SF	C3.1	6579
08	0538E	0549	0621D	S26	E90	1N	C2.1	
08	0824E	0826	0850D	N30	E64	SF	C3.3	6580
08	0949E	0950	0952D	N31	E63	SF	C2.1	6580
08	1018E	1020	1027D	N31	E63	SF	C1.9	6580
08	1126E	1129	1134D	N31	E62	SF	C1.8	6580
08	1210	1214	1220				C1.8	
08	1246E	1254	1304D	S23	W04	SF	C1.3	6566
08	1458E	1504	1547D	N29	E61	1N	C4.1	6580
08	1811E	1816	1857D	S23	W07	SF	C2.0	6566
09	0317E	0317	0327D	S22	W13	SF	C1.7	6566
09	0709	0717	0732				C3.0	
09	0854	0910	0925				C3.2	
09	1528E	1540	1607D	N30	E47	1F	C7.4	6580
09	1827E	1847	1929D	S19	W22	1B	M1.0	6566
09	2235E	2247	2304D	S20	W23	SF	C3.4	6566
09	2329E	2356	0013D	S18	W25	SN	C3.6	6566

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
10	0203E	0207	0224D	S20	W24	SF	C3.1	6566
10	0323E	0341	0402D	N09	E79	1N	M1.3	6583
10	1237E	1252	1453D	N12	E79	SF	C6.0	6583
10	1513E	1516	1527D	N27	E35	SF	M1.4	6580
10	1541	1620	1651				C9.5	
10	2017E	2017	2042D	N11	E77	SF	M1.9	6583
10	2117	2123	2128				C3.4	
10	2119E	2131	2148D	N09	E77	1B	C9.6	6583
10	2218E	2224	2254D	S19	W35	1N	C6.0	6566
11	0224E	0226	0239D	S21	W39	SF	C5.9	6566
11	0252E	0317	0404D	N29	E26	SF	M1.2	6580
11	0321E	0334	0440D	S20	W41	SN	M1.0	6566
11	0542E	0612	0646D	N10	E68	1B	M4.9	6583
11	0823E	0842	0954	N09	E66	1N	M2.4	6583
11	1103	1117	1201				M9.5	
11	1431	1439	1443				C5.0	
11	1843	1855U	1956D	S10	W31	SN	C9.8	6570
12	0042E	0045	0049D	S20	W55	SF	M1.2	6566
12	0313E	0329	0418D	S17	W09	2N	M1.0	6578
12	0421E	0423	0427D	S18	W55	1B	M1.0	6566
12	0440E		0506D	S18	W55	2N	M1.4	6566
12	2028E	2033	2055D	S11	W44	1N	C4.8	6570
12	2320E	2325	2332D	S22	W62	1B	C5.5	6566
13	0025E	0029	0035D	N03	W29	SF	C4.8	6580
13	0141E	0150	0205D	N03	W29	SN	C8.5	6580
13	0519E	0521	0531D	N09	E40	SB	C9.2	6583
13	0841	0852	1007				M3.1	
13	1703E	1710	1743D	S10	W54	SN	C5.4	6570
14	0042E	0045	0050D	S11	W59	SF	C6.7	6570
14	0315E	0344	0439D	S27	E16	2N	M1.5	6582
14	0541E	0543	0550D	N07	E26	1N	C8.7	
14	0844E	0846	0854D	S09	E86	SF	C4.2	6593
14	0957E	0959	1009D	S10	E84	SF	C3.2	6593
14	1135	1140	1144				C4.6	
14	1304	1304U	1310D	S05	E82	SF	M1.7	6593
14	1434E	1434	1443D	N14	E43	SF	C3.4	6592
14	1503E	1507	1514D	S07	E82	SF	C5.4	6593
14	1616E	1626	1655D	S09	W69	SF	C5.2	6570
14	1658	1703	1708				C7.2	
14	1921E	1924	1932D	N10	E25	SF	C3.0	6583
14	2036E	2042	2054D	N12	E53	SF	C3.4	6592
14	2329E	2335	2358D	N06	E20	SN	C4.5	6583
15	0041E	0044	0051D	N29	W23	SF	C4.3	6580
15	0211	0225	0234				C3.8	
15	0349E	0358	0425	N06	E16	SF	C6.4	6583
15	0413E	0417	0420D	N14	E42	SF	C5.6	6592
15	0607E	0617	0636D	N14	E42	SF	C7.2	6592
15	0656E	0658	0710D	N05	E16	SN	C4.6	
15	0812	0822	0840				C5.5	
15	0923E	1015U	1021	S11	E70	2F	M9.8	6593
15	1155	1159U	1203D	N06	E10	SF	C8.3	6583
15	1428E	1435	1523D	S10	E65	2B	M2.5	6593
15	1544E	1554	1631D	S13	E67	1B	M4.2	6593
15	1815E	1818	1823D	S11	E64	SN	C3.5	6593
15	1829	1830U	1845D	N06	E07	SF	C4.6	6583
15	1901E	1905	1950	N06	E08	1N	M3.9	6583
15	2003	2015	2027				C6.1	
15	2113E	2114	2120D	S24	W10	SF	C4.4	6582

GOES SOLAR X-RAY FLARES
 Preliminary Listing

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 Apr 91

April 1991

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
15	2215E	2221U	2232	S14	E58	SF	C4.3	6593
15	2249	2258	2306				C5.8	
16	0058E	0106U	0135	S11	E61	SF	M1.3	6593
16	0136	0140	0235				M2.4	
16	0251E	0253	0256D	N29	W35	SF	C5.9	6580
16	0306E	0308	0317D	N29	W35	1N	M1.1	6580
16	0345E	0347	0355D	N04	W37	SN	M1.0	
16	0504E	0520	0542D	S12	E61	SN	M1.5	6593
16	0603E	0605	0610D	N29	W36	1N	M1.8	6580
16	0814E	0821	0831D	S24	W19	SF	M1.3	6582
16	0855E	0856	0858D	N29	W37	SF	C6.5	6580
16	0941E	0958	1019D	S24	W20	SF	C5.1	6582
16	1053E	1053	1107D	S09	E52	SF	C6.4	6593
16	1139E	1204	1235D	S09	E51	SF	M1.8	6593
16	1320E	1402	1516D	N06	W03	1N	M2.4	6583
16	1417E	1425	1440D	N28	W44	SF	C5.9	6580
16	1445E	1449	1513D	N28	W45	SF	C4.9	6580
16	1558E	1601	1637D	N06	W02	1B	M3.3	6583
16	1821E	1823	1924D	N06	W05	SF	C4.6	6583
16	1850E	1857	1920D	N28	W46	SF	C3.3	6580
16	2022E	2022	2037D	N08	W04	SF	C5.1	6583
16	2217E	2224	2244	N08	W06	1N	C8.3	6583
16	2236E	2243U	2308	S13	E44	1N	M1.0	6593
16	2337	2359U	0010D	S10	E46	SF	M1.1	6593
17	0025	0027	0031				M1.2	
17	0145E	0147	0158D	S08	E50	SN	M1.7	6593
17	0639E	0654	0743D	S12	E42	1N	M2.2	6593
17	0943	0950	0959				C3.5	
17	1616	1622	1628				C8.6	
17	1657E	1657	1727D	S11	E34	SF	C4.5	6593
17	2235E	2241	2252D	N27	W60	SN	C4.1	6580
18	0044E	0047	0059D	N27	W58	SN	C4.3	6580
18	0139E	0140	0147D	S10	E33	SF	C4.6	6593
18	0533	0533	0540D	S09	E31	SF	C5.5	
18	0640E	0643	0653D	N29	W64	2F	C3.4	6580
18	1112	1124	1126				C2.4	
18	1232E	1232	1237D	N13	W01	SF	C2.9	6592
18	1506E	1506	1518D	N06	W28	SF	C3.1	6583
18	1736E	1753	1817D	N08	W32	SF	C2.8	6583
18	1844E	1844	1855	S09	E20	SF	C4.5	6593
18	2141E	2141	2156D	N04	W33	SF	C2.0	6583
19	0050	0053	0055				C1.9	
19	0055E	0109	0137D	N05	W34	SF	C3.0	6583
19	0203	0207	0210				C2.5	
19	0342E	0345	0353D	N13	W09	SF	C3.3	6592
19	0419E	0459U	0538D	N12	W09	SN	C3.4	6592
19	0644E	0657	0714D	N13	W08	SN	C5.7	6592
19	1046	1051	1103				M1.7	
19	1300E	1302	1329D	S10	E16	SF	C5.4	6593
19	1417E	1420	1431D	N15	W21	SF	C2.9	6592
19	1808	1812	1816				C2.3	
19	2109	2114	2120				C3.1	
20	0029E	0032	0104D	N15	W39	SF	C2.6	6592
20	0239E	0240	0247D	N06	W52	SF	C3.7	6583
20	0619	0629	0644				M1.5	

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
20	0827E	0852U	1124	N08	W50	3N	X1.0	6583
20	0842	0901	0934				M3.5	
20	1641E	1642	1650D	S19	W48	SF	C7.1	6594
20	2226E	2234	2259D	S25	W39	1F	C4.0	6587
21	0504	0542	0633D	S11	W10	1F	C8.3	6593
21	0831	0834	0840				C2.0	
21	2108	2117	2125				C4.9	
22	0047	0053	0058				C4.4	
22	0707E	0708	0718D	S28	W90	SF	C5.9	6582
22	1944	1951	1957				C3.1	
23	0403	0407	0410				C2.5	
24	1834E	1835	1839D	S22	W62	SF	C1.0	6602
25	0201E	0201	0209D	S12	W73	SF	B9.1	6600
25	0316	0322	0324				C1.1	
25	0329	0333	0338				C1.2	
25	0416	0420	0422				C1.0	
25	1104	1108	1117				C1.1	
26	0305E	0316	0355D	S29	W29	SF	C1.3	6603
26	1606E	1623	1649D	N20	E50	1F	C3.3	
27	1338E	1343	1346D	S30	W46	SF	C2.1	6603
27	1710E	1729	1832D	S29	W48	SF	C2.4	6603
27	2204	2214	2224				C2.3	
27	2329E	2338	0020	S28	W53	1F	C9.7	6603
28	0019	0025	0036				C5.4	
28	0428	0437	0446				C1.4	
28	0453	0507	0624D	S31	W56	1F	C6.3	6603
28	0543	0558	0615				C3.1	
28	0746E	0757	0846D	S31	W56	1N	M3.5	6603
28	1132E	1137	1152D	S31	W57	SF	C2.9	6603
28	1425E	1432	1436D	S31	W59	SF	C2.9	6603
28	1555E	1603	1647D	S30	W62	SF	C1.9	6603
28	1840E	1844	1849D	S30	W60	SF	C1.6	6603
29	0409	0423	0431				C1.5	
29	0924	0929	0933				C2.0	
29	0937	0940	0946				C1.8	
29	1248	1252	1256				C1.5	
29	1852E	1854	1903D	S05	E55	SF	C1.0	6611
29	2128E	2141	2224D	S24	E43	SF	C1.2	6608
30	0042E	0044	0110D	S24	E02	SF	B9.8	6604
30	0235E	0240	0247D	S29	W86	SF	C2.6	6603
30	0501E	0502	0506D	S28	W85	SF	C4.2	6603
30	0635E	0637	0650D	N07	E21	SF	B9.6	6605
30	0724E	0724	0729D	S31	W87	SF	C2.1	6603
30	0828E	0830	0833D	S30	W87	SF	C4.2	6603
30	1116E	1116	1133	S28	W27	SF	B9.3	6612
30	1227E	1229	1231D	S30	W89	SF	C2.4	6603
30	1242E	1257	1324D	N08	E18	SF	C1.5	6605
30	1425E	1431	1452D	S14	W08	SF	C1.2	6613
30	1522	1525	1528				C1.2	
30	2251E	2254	2257D	S28	W88	SF	C1.7	6603

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

1990		1991										
Day	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
1	B3.1	B3.1	C1.2	C1.3	B8.7	B5.1	B3.8	C1.0	B7.4	C2.7	C1.3	C2.3
2	B4.2	B3.7	C1.4	C1.2	B8.6	B7.9	B3.7	B7.6	B7.6	C3.9	C2.3	C1.4
3	B2.8	B3.6	C1.2	B7.8	B6.6	C1.5	B4.0	B7.6	B7.4	C3.2	C2.9	B9.2
4	B2.7	B3.8	C1.1	B7.1	B7.3	C1.1	B5.2	B8.6	B7.8	C3.2	C2.9	B8.4
5	B4.4	B4.8	C1.1	B6.9	C1.0	B8.6	B6.7	C1.1	B9.5	C2.0	C2.1	B8.2
6	B5.7	B8.5	C1.0	B7.0	B6.0	B6.9	B9.4	C1.3	C1.1	C2.1	C1.8	C1.0
7	B7.7	C1.2	C1.1	B7.0	B6.6	B9.0	C1.1	C1.2	C1.5	C1.9	C2.2	B9.4
8	B9.8	C1.0	C1.1	B9.6	B5.9	B8.9	B9.8	C1.2	C2.3	C2.0	C1.8	B8.8
9	C1.0	B9.1	C1.1	B7.8	B6.5	B9.0	B8.6	C1.5	C2.0	B8.5	C1.9	C1.3
10	C1.4	C1.3	B9.7	B7.9	B6.9	B6.5	B7.6	C1.8	C1.9	B7.1	C1.4	C2.0
11	C1.5	C1.0	B7.9	B7.2	B8.7	B6.9	B9.6	C2.1	C1.3	B7.3	C1.4	C2.0
12	---	C1.1	B6.0	B7.9	B7.5	B6.4	C1.1	C2.1	B9.4	C1.0	C1.6	C2.3
13	C1.5	C1.0	B7.8	B8.2	B7.6	B8.3	C1.0	C1.9	B7.3	C1.0	C1.6	C2.0
14	C1.3	B8.0	B4.6	B6.3	C1.0	B8.6	C1.1	C1.3	B6.2	C1.1	C1.8	C2.4
15	C1.9	B8.5	B4.3	B6.6	B7.9	C1.4	C1.1	C1.0	B6.7	C1.2	C1.8	C2.9
16	C1.4	B6.9	B4.6	B9.4	B7.4	C1.2	C1.2	B9.1	B7.9	---	C2.3	C3.1
17	C1.4	B5.9	B6.2	C1.2	B9.3	C1.0	C1.5	B7.6	B9.2	C2.3	C2.7	C1.8
18	C1.6	B4.9	B9.5	C1.7	B8.5	C1.2	C1.2	C1.3	C1.2	C2.7	C3.3	C1.5
19	C2.4	B4.8	B4.7	C1.6	B9.3	C1.6	C1.0	C1.6	C1.6	C2.4	C2.5	C1.3
20	C1.8	B5.2	B4.7	C1.9	B8.1	C1.4	B7.5	C1.5	C1.6	C2.3	C2.1	C2.1
21	C1.6	B5.0	B5.8	C2.0	B9.0	C1.4	B8.3	C1.3	C1.5	C2.0	C2.0	C1.1
22	C1.4	B4.6	B6.2	C2.0	B7.9	B9.5	*	C1.3	C2.2	C1.6	C1.9	C2.0
23	C1.6	B4.2	B7.2	C2.2	B9.5	B6.7	B8.0	C1.3	C1.6	C1.5	C3.3	C1.0
24	C1.3	B5.8	B7.3	C2.1	B8.9	B5.6	B8.8	C1.7	C1.9	C1.5	C2.1	B6.3
25	C1.5	B6.0	C1.0	C1.5	B6.9	B6.7	C1.0	C1.2	C2.2	C1.5	C1.7	B6.2
26	C1.4	B5.2	B9.5	C1.8	B4.8	B5.0	B9.8	C1.1	C2.0	C1.2	C1.2	B5.7
27	B6.8	B9.4	B7.0	C1.7	B4.0	B6.4	C1.1	B9.2	C2.4	C1.1	C1.2	B6.2
28	B6.4	C1.3	B7.3	C2.2	B4.1	B4.5	C1.4	B7.9	C2.6	C1.1	C1.2	B8.0
29	B4.7	C1.3	B6.6	C1.5	B4.5	B7.3	C1.4	B8.4	C2.2		C1.6	B6.9
30	B5.5	C1.1	C1.0	C1.5	B4.8	B6.5	C1.1	B8.6	C2.8		C1.9	B5.9
31	B4.5		B9.4	C1.0		B4.4		B7.8	C2.9		C1.8	

MASS EJECTIONS FROM THE SUN

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Apr 91

APRIL 1991

Site	Mo	Day	Observed UT			Location		Freq or Wavelength	Kind of Event	
			Start	Max	End	RA	R/Ro			
POTS	Apr	02	1001.6		1021.0			700- 40 MHz	II Harmonic, IV	
ONDR	Apr	02	1006.0		1009.5			Decimeter; meter	IV	
WEIS	Apr	02	1006.7		1018.7			480-370 MHz	II Herringbone	
SVTO	Apr	02	1007.0		1023.0			Meter	II	
PALE	Apr	02	2300.0		2545.0			Meter	IV	
LEAR	Apr	02	2300.0		2652.0			Meter	IV	
CULG	Apr	02	2307.0		2338.0			Meter	IV	
ONDR	Apr	04	1006.1		1007.0			Decimeter; meter	II	
ONDR	Apr	06	0813.2		0816.4			Decimeter	IV	
LEAR	Apr	10	2348.0		2406.0			Meter	II	
PALE	Apr	10	2351.0		2406.0			Meter	II	
POTS	Apr	11	1113.4		1142.5			800- 70 MHz	II Harmonic, IV	
ONDR	Apr	11	1114.0		1119.0			Decimeter; meter	IV	
WEIS	Apr	11	1115.7		1118.3			360-120 MHz	II	
PALE	Apr	11	2351.0		2406.0			Meter	II	
KHAR	Apr	13	0937	E	1010	D	096	0.75	H-alpha	S
KHAR	Apr	15	0902	E	0911	D	327	0.69	H-alpha	S
KHAR	Apr	15	0907	E	0920	D	323	0.76	H-alpha	S
KHAR	Apr	15	0919	E	0920	D	155	0.42	H-alpha	S
SGMR	Apr	15	1546.0		1617.0				Meter	IV
SVTO	Apr	15	1556.0		1614.0				Meter	IV
KHAR	Apr	16	0956	E	1023	D	250-248	1.00-1.09	H-alpha	SP
POTS	Apr	20	0959	U	1023.00				170- 40 MHz	IV, II Herringbone
SVTO	Apr	20	1001.0		1046.0				Meter	IV
WEIS	Apr	20	1007.7		1013.2				120- 30 MHz	II Herringbone
SGMR	Apr	20	1008.0		1045.0				Meter	IV
KHAR	Apr	21	1209	E	1224	D	252	0.90	H-alpha	S
PALE	Apr	22	2204.0		2239.0				Meter	IV
POTS	Apr	29	1408.5		1416.0				170-100 MHz	II
SVTO	Apr	29	1403.0		1410.0				Meter	II
SGMR	Apr	29	1403.0		1421.0				Meter	II

QUALIFIERS ON START, MAX AND END TIMES

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

TYPE OF EVENT

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

REPORTING STATIONS

CULG = Culgoora
 KHAR = Kharkov
 LEAR = Learmonth
 ONDR = Ondrejov
 PALE = Palehua
 POTS = Potsdam
 SGMR = Sagamore Hill
 SVTO = San Vito
 WEIS = Weissenau

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Apr 91

ACTIVE PROMINENCES AND FILAMENTS

APRIL 1991

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
01	ASR	0030E	1012D	S24	W89	03 25.2			9	9	E	LEAR	6555	
01	ASR	0039E	1012D	N16	W85	03 25.7			9	9	E	LEAR	6559	
01	ASR	0228E	0630D	S20	W90	03 25.3			9	9	E	LEAR	6555	
01	ASR	0239E	1012D	S11	W90	03 25.4			9	9	E	LEAR	6560	
01	AFS	0847E	1622D	S10	E26	04 3.3		02	9	9	E	SVTO	6563	
01	AFS	0855E	1622D	N09	E51	04 5.2		02	9	9	E	SVTO	6565	
01	ASR	1032E	1622D	S23	W90	03 25.6			9	9	E	SVTO	6555	
01	AFS	1045E	2211D	N10	E53	04 5.4		02	9	9	E	RAMY	6565	
01	ADF	1047E	2010D	N13	E24	04 3.3	1	07	9	9	E	RAMY	6562	
01	AFS	1049E	2211D	S10	E25	04 3.3		03	9	9	E	RAMY	6563	
01	DSD	1051E	1440D	S15	E42	04 4.6		03	9	9	E	RAMY		
01	AFS	1106E	2211D	N15	E23	04 3.2		02	9	9	E	RAMY	6562	
01	ASR	1155E	1710D	S25	W90	03 25.6			9	9	E	RAMY	6555	
01	ASR	1155E	2211D	S22	W90	03 25.7			9	9	E	RAMY	6555	
01	BSL	1203	1211D	S25	W90	03 25.6			9	9	E	SVTO	6555	
01	BSL	1205E	1222D	S25	W90	03 25.6			9	9	E	RAMY	6555	
01	ASR	1222E	1634D	N18	W90	03 25.8			9	9	E	RAMY	6559	
01	ADF	1332E	0116D	N12	E26	04 3.5	1	10	9	9	E	HOLL	6562	
01	ASR	1449E	1858D	S08	E90	04 8.4			9	9	E	RAMY		
01	ASR	1449E	2211D	S26	E90	04 8.6			9	9	E	RAMY		
01	ASR	1515E	1622D	S12	E90	04 8.4			9	9	E	SVTO		
01	ASR	1515E	1622D	S27	E90	04 8.6			9	9	E	SVTO		
01	SSB	1744		232	W55	04 4.5			0	0	E	PALE		
01	AFS	1744E	0234D	N09	E47	04 5.3		03	9	9	E	PALE	6565	
01	ASR	1744E	0234D	S24	E90	04 8.7			9	9	E	PALE		
01	APR	1744E	2120D	S13	E90	04 8.5			9	9	E	PALE		
01	ASR	1744E	2123D	S29	W90	03 25.8			9	9	E	PALE	6555	
01	ASR	1755E	1812D	S30	W90	03 25.8			9	9	E	RAMY	6555	
01	BSL	1812E	1838D	S30	W90	03 25.8			9	9	E	RAMY	6555	
01	DSD	2112E	0234D	N13	E12	04 2.8		03	9	9	E	PALE	6562	
01	DSD	2133E	0234D	S12	E50	04 5.7		02	9	9	E	PALE		
01	LPS	2133E	0312D	S18	E90	04 8.7			9	9	E	PALE		
01	SSB	2218		227	W52	04 4.2			0	0	E	HOLL		
01	APR	2305E	0205D	N33	E90	04 9.1	1				C	VORO		
01	APR	2305E	0245D	S26	E90	04 8.9	1				C	VORO		
01	APR	2317E	0245D	N21	W90	03 26.2	1				C	VORO		
02	ASR	0035E	0418D	S25	E90	04 9.0			9	9	E	LEAR		
02	APR	0630E	1643D	N15	W90	03 26.5	1		9	9	E	SVTO		
02	ASR	1031E	1045	S25	W90	03 26.6			9	9	E	SVTO		
02	ADF	1450E	0115D	N06	E38	04 5.5	1	14	9	9	E	HOLL	6565	
02	ADF	1450E	2238D	N14	E44	04 5.9	1	09	9	9	E	HOLL	6565	
02	DSD	1534E	2239D	N16	E02	04 2.8		03	9	9	E	HOLL	6562	
02	DSD	1656E	1805D	N19	E04	04 3.0		02	9	9	E	RAMY	6562	
02	SSB	1908		290	W66	04 10.9			0	0	E	HOLL		
02	BSD	1921E	2249D	S25	E74	04 8.5		08	9	9	E	HOLL	6566	
02	ADF	1943E	1943D	N15	E06	04 3.3		06	9	9	E	PALE	6562	
03	APR	0000E	0300D	N12	W90	03 27.3	1				C	VORO		
03	AFS	0319E	1003D	S12	E01	04 3.2		02	9	9	E	LEAR	6563	
03	ASR	0324E	1003D	S13	W90	03 27.4			9	9	E	LEAR	6558	
03	ADF	0602E	1003D	S13	E59	04 7.7	1	16	9	9	E	LEAR		
03	AFS	0602E	1003D	S14	E61	04 7.9		02	9	9	E	LEAR		
03	DSD	1047E	1309D	S13	W04	04 3.1		04	9	9	E	RAMY	6563	
03	ASR	1049E	1313D	S12	W90	03 27.8			9	9	E	RAMY	6558	
03	DSD	1055E	1539D	S15	E56	04 7.7		03	9	9	E	RAMY		
03	SSB	1100		218	W63	04 5.0			0	0	E	RAMY		
03	DSD	1309E	1537D	S08	E01	04 3.6		03	9	9	E	RAMY	6563	
03	AFS	1610E	0117D	N15	W06	04 3.2		02	9	9	E	HOLL	6562	
03	AFS	1620E	0117D	S20	E06	04 4.1		01	9	9	E	HOLL		
03	AFS	1621E	0117D	N08	E20	04 5.2		03	9	9	E	HOLL	6565	
03	ADF	1622E	0117D	S12	E55	04 7.8	1	14	9	9	E	HOLL	6567	
03	AFS	1857E	0428D	N13	W07	04 3.3		02	9	9	E	PALE	6562	
03	ADF	1857E	0428D	N15	W03	04 3.6		13	9	9	E	PALE	6562	
03	ADF	1859E	1950D	S09	W06	04 3.3	1	04	9	9	E	HOLL	6563	
03	ADF	1904E	1949D	N06	E16	04 5.0	1	07	9	9	E	HOLL	6565	
03	AFS	1920E	0032D	S11	W04	04 3.5		02	9	9	E	PALE	6563	
03	AFS	1920E	0428D	S10	W04	04 3.5		03	9	9	E	PALE	6563	
03	AFS	1920E	0428D	S19	E05	04 4.2		01	9	9	E	PALE		
03	ADF	1920E	2321D	S12	E51	04 7.6		04	9	9	E	PALE	6567	

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Day	Event Type	Start (UT)	End (UT)	Lat	Cmd	CMP No	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
03	DSD	1930E	0025D	N08	E15	04	4.9		03	9	9	E	PALE	6565	
03	ADF	1930E	0428D	N07	E17	04	5.1		05	9	9	E	PALE	6565	
03	AFS	1930E	0428D	N08	E17	04	5.1		02	9	9	E	PALE	6565	
03	AFS	2305E	1005D	S12	E51	04	7.8		03	7	8	E	LEAR	6567	
03	AFS	2310E	1005D	S13	E61	04	8.6		03	5	3	E	LEAR	6568	
03	AFS	2315E	1005D	N12	W11	04	3.1		03	5	6	E	LEAR	6562	
03	AFS	2342E	0428D	S14	E53	04	8.0		02	9	9	E	PALE	6567	
04	DSD	0027E	0428D	N12	W09	04	3.3		02	9	9	E	PALE	6562	
04	ADF	0045E	0243D	N03	E08	04	4.6	1				C	VORO		
04	APR	0100E	0245D	N09	W90	03	28.4	1				C	VORO		
04	SSB	0656		144	W00	04	7.6			0	0	E	SVTO		
04	ADF	0755E	1508D	N15	W12	04	3.4	1	12	9	9	E	SVTO	6562	
04	ADF	1046E	1911D	N17	W18	04	3.1	2	05	9	9	E	RAMY	6562	
04	ADF	1051E	1644D	S10	E11	04	5.3	1	04	9	9	E	RAMY	6565	
04	ADF	1336E	0120D	N15	W15	04	3.4	1	09	9	9	E	HOLL	6562	
04	SSB	1349		148	W08	04	8.2			0	0	E	HOLL		173 W33
04	DSD	2313E	2332D	S24	E42	04	8.2		08	9	9	E	HOLL	6566	Flare Associated
04	DSD	2314E	0425D	S19	E48	04	8.6	1	06	9	9	E	PALE	6566	
04	ADF	2320E	1003D					1	10	9	9	E	LEAR	6562	
04	DSD	2321E	2347D	S20	E42	04	8.2		06	9	9	E	LEAR	6566	
04	AFS	2330E	0425D	S12	E38	04	7.8		03	9	9	E	PALE	6567	
05	ADF	0030E	0425D	N14	W20	04	3.5	1	09	9	9	E	PALE	6562	
05	ADF	1108E	2201D	N17	W30	04	3.2	1	06	9	9	E	RAMY	6562	
05	ADF	1333E	0119D	N13	W28	04	3.4	1	10	9	9	E	HOLL	6562	
05	AFS	1423E	2143D	S11	E00	04	5.6		02	9	9	E	HOLL		
05	AFS	1429E	2143D	N13	E65	04	10.5		01	9	9	E	HOLL		
05	AFS	1437E	1709D	S19	E32	04	8.0		01	9	9	E	HOLL	6566	
05	SSB	1450		144	W18	04	9.0			0	0	E	HOLL		272 W46
05	SDF	1502E	1043D	N02	W57	04	1.4		09	0	0	E	SVTO		
05	AFS	1709E	2143D	S19	W30	04	3.4		01	9	9	E	HOLL		
05	ADF	1802E	0250D	N15	W30	04	3.5	1	08	9	9	E	PALE	6562	
05	AFS	1802E	0250D	N16	W33	04	3.2		02	9	9	E	PALE	6562	
05	AFS	1832E	0250D	N08	E48	04	9.4		02	9	9	E	PALE	6569	
05	AFS	1834E	2143D	N14	W29	04	3.6		01	9	9	E	HOLL	6562	
05	AFS	1835E	0250D	S50	W03	04	5.5		02	9	9	E	PALE	6573	
05	SSB	1937		143	W19	04	9.1			0	0	E	PALE		170 W46
05	ADF	2343E	1010D	N17	W36	04	3.2	1	05	9	9	E	LEAR	6562	
06	ADF	0027E	1010D	N08	W08	04	5.4	1	02	9	9	E	LEAR	6565	
06	ADF	0037E	1010D	S14	E37	04	8.8	1	02	9	8	E	LEAR	6568	
06	ADF	0043E	1010D	S11	W35	04	3.4	1	02	9	9	E	LEAR	6563	
06	AFS	0050E	1010D	S21	W06	04	5.6		02	9	9	E	LEAR	6572	
06	BSL	0604E	0748D	S25	E90	04	13.2	1				C	ABST		
06	AFS	1041E	2141D	S20	W11	04	5.6		02	9	9	E	RAMY	6572	
06	DSD	1043E	2110D	S10	W42	04	3.3		03	9	9	E	RAMY	6563	
06	ADF	1044E	2141D	N11	W38	04	3.6	2	17	9	9	E	RAMY	6562	
06	DSD	1055E	1613D	N24	E47	04	10.1		02	9	9	E	RAMY	6574	
06	ADF	1057E	2117D	S10	E27	04	8.5	1	08	8	8	E	RAMY	6568	
06	AFS	1059E	1616D	S11	W14	04	5.4		02	9	9	E	RAMY	6571	
06	AFS	1059E	2113D	N08	W14	04	5.4		02	9	9	E	RAMY	6565	
06	ADF	1105E	1621D	S10	E17	04	7.7	1	08	9	9	E	RAMY	6567	
06	DSD	1139E	2114D	S27	E28	04	8.7		02	9	9	E	RAMY	6566	
06	SDF	1212E	0658D	S09	E06	04	6.9		04	0	0	E	SVTO		
06	SSB	1330		143	W29	04	9.9			0	0	E	HOLL		172 W58
06	ADF	1331E	0107D	N13	W42	04	3.4	1	12	9	9	E	HOLL	6562	
06	ADF	1401E	1808D	S18	W12	04	5.7	1	02	9	9	E	HOLL	6572	
06	SDF	1502E	1043D	N02	W57	04	2.4		09	0	0	E	SVTO		
06	AFS	1715E	0418D	S20	E68	04	11.9		03	9	9	E	PALE		
06	AFS	1715E	0418D	S20	W15	04	5.6		03	9	9	E	PALE	6572	
06	AFS	1715E	2135D	N08	W19	04	5.3		02	9	9	E	PALE	6565	
06	AFS	1715E	2140D	N08	E34	04	9.3		02	9	9	E	PALE		
06	SSB	1720		174	W63	04	13.3			0	0	E	PALE		
06	ADF	1720E	0418D	N12	W44	04	3.4		08	9	9	E	PALE	6562	
06	ADF	1720E	0418D	S11	E22	04	8.4	1	07	9	9	E	PALE	6568	
06	DSD	1720E	2142D	S25	E26	04	8.7		02	9	9	E	PALE	6566	
06	AFS	2332E	0955D	N09	W23	04	5.2		04	9	9	E	LEAR	6565	
06	AFS	2332E	0955D	N14	W50	04	3.2		03	9	9	E	LEAR	6562	

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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
07	ADF	0015E	0418D	N10	W24	04 5.2		08	9	9	E	PALE	6565	
07	AFS	0015E	0418D	S09	E38	04 9.9		04	9	9	E	PALE	6570	
07	ADF	0015E	0418D	S24	E18	04 8.4		04	9	9	E	PALE	6566	
07	ADF	0205E	0955D	S15	E14	04 8.1	2	09	9	9	E	LEAR	6568	
07	AFS	0228E	0955D	S22	E60	04 11.7		03	9	9	E	LEAR	6578	
07	DSD	0229E	0955D	S13	W52	04 3.2		02	9	9	E	LEAR	6563	
07	AFS	0230E	0955D	S13	W22	04 5.4		02	9	9	E	LEAR	6571	
07	ASR	0457E	0955D	N29	E76	04 13.2			9	9	E	LEAR		
07	ADF	0533E	1631D	N12	W51	04 3.4	1	09	9	9	E	SVTO	6562	
07	BSL	0540E	0808D	N06	E90	04 14.0	1				C	ABST		
07	BSL	0652E	0808D	S04	E90	04 14.0	1				C	ABST		
07	AFS	1037E	2112D	S20	W25	04 5.5		02	9	9	E	RAMY	6572	
07	ADF	1039E	1620D	S08	W50	04 3.7	1	06	9	9	E	RAMY	6563	
07	ADF	1042E	2112D	N13	W57	04 3.1	1	16	9	9	E	RAMY	6562	
07	AFS	1051E	1742D	N11	W29	04 5.3		02	9	9	E	RAMY	6565	
07	DSD	1053E	1233D	N07	E46	04 10.9		02	9	9	E	RAMY		
07	AFS	1055E	1948D	S21	E53	04 11.5		03	9	9	E	RAMY	6578	
07	AFS	1056E	1611D	S51	W25	04 5.3		02	9	9	E	RAMY	6573	
07	ASR	1114E	1626D	N27	E71	04 13.0			9	9	E	RAMY		
07	DSD	1226E	1618D	N09	W34	04 5.0		02	9	9	E	RAMY	6565	
07	APR	1317E	1333	N20	E90	04 14.4	2		9	9	E	RAMY		
07	EPL	1322E	1355D	N26	E90	04 14.5			9	9	E	SVTO		
07	EPL	1332E	1410D	N22	E90	04 14.5			9	9	E	HOLL		
07	EPL	1333E	1451D	N22	E90	04 14.5			9	9	E	RAMY		
07	ADF	1410E	1728D	N11	W30	04 5.3	1	06	9	9	E	HOLL	6565	
07	DSD	1410E	2208D	S09	E13	04 8.6		02	9	9	E	HOLL	6568	
07	DSD	1410E	2208D	S09	W58	04 3.2		03	9	9	E	HOLL	6563	
07	DSD	1415E	1522D	S20	E06	04 8.0		03	9	9	E	RAMY	6566	
07	DSD	1415E	1522D	S27	E12	04 8.5		02	9	9	E	RAMY	6566	
07	ADF	1430E	2208D	S09	E13	04 8.6	2	08	9	9	E	HOLL	6568	
07	ASR	1442E	1525D	S26	E90	04 14.6			9	9	E	SVTO		
07	APR	1451E	1624D	N22	E90	04 14.5	2		9	9	E	RAMY		
07	SSB	1520		147	W47	04 11.6			0	0	E	HOLL		
07	AFS	1740E	0322D	N07	E55	04 11.8		02	9	9	E	PALE		
07	DSD	1740E	0322D	N08	W37	04 5.0		02	9	9	E	PALE	6565	
07	AFS	1740E	0322D	S20	W28	04 5.6		02	9	9	E	PALE	6572	
07	SSB	1745		175	W77	04 14.7			0	0	E	PALE		108 W09
07	ADF	1745E	0322D	N14	W61	04 3.1		12	9	9	E	PALE	6562	
07	ADF	2325E	1000D	N12	W31	04 5.6	1	09	9	9	E	LEAR	6565	
08	AFS	0230E	0322D	N30	E68	04 13.4		01	9	9	E	PALE		
08	ASR	0230E	0322D	S25	E89	04 15.0			9	9	E	PALE		
08	BSL	0556E	0618D	S24	E90	04 15.2	1				C	ABST		
08	ASR	0601E	1640D	S25	E90	04 15.2			9	9	E	SVTO		Flare Associated
08	AFS	0620E	1640D	S21	W34	04 5.6		03	9	9	E	SVTO	6572	
08	AFS	0623E	1640D	N07	E46	04 11.7		02	9	9	E	SVTO	6579	Flare Associated
08	ADF	0835E	1640D	N09	W41	04 5.3	1	05	9	9	E	SVTO	6565	
08	ADF	1053E	2103D	N11	W67	04 3.4	1	12	9	9	E	RAMY	6562	
08	DSD	1055E	1541D	S11	W68	04 3.3		02	9	9	E	RAMY	6563	
08	AFS	1106E	1542D	S25	W04	04 8.1		02	9	9	E	RAMY	6566	
08	ADF	1108E	2103D	S14	W08	04 7.8	1	14	9	9	E	RAMY	6567	
08	AFS	1114E	1115D	S20	W39	04 5.5		02	9	9	E	RAMY	6572	
08	AFS	1425E	0115D	N20	W79	04 2.5	1	12	9	9	E	HOLL	6562	
08	AFS	1459E	1632D	S20	E41	04 11.8		02	9	9	E	RAMY	6578	
08	DSD	1544E	1629D	S10	E15	04 9.8		03	9	9	E	RAMY	6570	
08	SSB	1546		458	W12	04 4.3			0	0	E	RAMY		
08	ADF	1953E	2309D	S22	E36	04 11.6		09	9	9	E	PALE	6578	
08	AFS	2103E	2309D	S06	E37	04 11.6		02	9	9	E	PALE	6579	
08	AFS	2103E	2309D	S06	E39	04 11.8		02	9	9	E	PALE	6579	
08	APR	2256E	0258D	S16	W65	04 4.0	1				C	VORO		
08	ADR	2256E	0258D	S31	W49	04 5.1	1				C	VORO		
08	APR	2300E	0300D	N16	W90	04 2.1	1				C	VORO		
08	APR	2300E	0300D	S37	E90	04 16.2	1				C	VORO		
08	ADF	2339E	0957D	S08	W06	04 8.5	1	28	9	9	E	LEAR	6567	
09	AFS	0006E	0957D	S19	W45	04 5.6		02	9	9	E	LEAR	6572	
09	AFS	0007E	0957D	S15	E50	04 12.8		02	9	9	E	LEAR		
09	ADF	0008E	0957D	S21	E36	04 11.8	1	10	9	9	E	LEAR	6578	
09	BSD	0019E	0120D	S29	E72	04 14.6		09	9	9	E	HOLL	6582	

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Day	Event Type	Start (UT)	End (UT)	Lat	CHD	CMP No	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
09	ASR	0102E	0115D	N04	E90	04	15.8			9	9	E	HOLL		
09	SSB	0525		432	W00	04	6.8			0	0	E	SVTO		
09	AFS	0535E	1458D	N06	E32	04	11.6		03	7	8	E	SVTO	6579	
09	AFS	0536E	1705D	N30	E51	04	13.2		02	9	9	E	SVTO	6580	
09	AFS	0537E	1705D	S21	W13	04	8.2		02	9	9	E	SVTO	6566	Flare Associated
09	ADF	0538E	1705D	S09	W08	04	8.6	2	08	9	9	E	SVTO	6568	
09	BSD	0540E	0730D	S15	W80	04	3.2		03	9	9	E	SVTO	6563	
09	AFS	0600E	1705D	S22	W48	04	5.6		02	9	9	E	SVTO	6572	Flare Associated
09	APR	0605E	1705D	N15	W90	04	2.4	2		9	9	E	SVTO	6562	
09	ADF	0607E	1705D	S11	W18	04	7.9	2	07	9	9	E	SVTO	6567	
09	AFS	0615E	1505D	N08	W55	04	5.1		03	9	9	E	SVTO	6565	
09	ADF	0625E	1705D	S19	E34	04	11.9	1	06	9	9	E	SVTO	6578	
09	ASR	1055E	1505D	S09	W90	04	2.7			9	9	E	SVTO	6563	
09	ADF	1106E	2227D	N27	E51	04	13.4	1	09	9	9	E	RAMY	6580	
09	AFS	1140E	1705D	S25	E79	04	15.6		03	9	9	E	SVTO		
09	ASR	1337E	0120D	N08	E90	04	16.3			9	9	E	HOLL		
09	APR	1352E	0120D	N16	W90	04	2.7	1		9	9	E	HOLL	6562	
09	AFS	1439E	0120D	S19	W19	04	8.2		03	9	9	E	HOLL	6566	
09	SDF	1705E	0617D	N41	W13	04	8.6		06	0	0	E	SVTO		
09	AFS	1857E	0120D	S10	W56	04	5.6		03	9	9	E	HOLL	6572	
09	ASR	1858E	2055D	N09	E90	04	16.5			9	9	E	PALE		
09	AFS	1858E	2055D	N28	E46	04	13.4		03	9	9	E	PALE	6580	
09	AFS	1858E	2055D	N30	E46	04	13.4		02	9	9	E	PALE	6580	
09	ADF	1858E	2055D	S19	E22	04	11.5		04	9	9	E	PALE	6578	
09	AFS	1858E	2055D	S26	E77	04	15.8		02	9	9	E	PALE		
09	ADF	1915E	2055D	N12	W55	04	5.6		06	9	9	E	PALE	6565	
09	APR	1915E	2055D	N19	W83	04	3.5			9	9	E	PALE	6562	
09	DSD	1915E	2055D	S20	W52	04	5.8		01	9	9	E	PALE	6572	
09	AFS	1915E	2055D	S21	W56	04	5.5		03	9	9	E	PALE	6572	
09	AFS	1915E	2055D	S51	W48	04	5.7		02	9	9	E	PALE	6573	
09	AFS	1925E	2055D	N08	W07	04	9.3		03	9	9	E	PALE	6577	
09	ADF	1925E	2055D	S09	W27	04	7.8		04	9	9	E	PALE	6567	
09	AFS	1925E	2055D	S11	W13	04	8.8		04	9	9	E	PALE	6568	
09	ADF	1925E	2055D	S11	W33	04	7.3		07	9	9	E	PALE	6567	
09	AFS	1925E	2055D	S20	W20	04	8.3		04	9	9	E	PALE	6566	
09	ASR	2140E	2209D	S37	E90	04	17.1			9	9	E	RAMY		
09	APR	2141E	2308D	S31	E90	04	17.0	2		9	9	E	HOLL		
09	ASR	2320E	0120D	S08	W90	04	3.2			9	9	E	HOLL	6563	
09	ASR	2335E	0120D	S33	E90	04	17.1			9	9	E	HOLL		
09	DSD	2340E	0955D	S21	W27	04	7.9		03	9	9	E	LEAR	6566	Flare Associated
09	AFS	2341E	0955D	S20	W59	04	5.5		03	9	9	E	LEAR	6572	
09	AFS	2342E	0955D	S27	E73	04	15.7		02	9	9	E	LEAR	6582	
09	ASR	2343E	0955D	N08	E90	04	16.7			9	9	E	LEAR		
09	ASR	2344E	0955D	S33	E90	04	17.1			9	9	E	LEAR		
10	ADF	0001E	0955D	S18	W23	04	8.2	1	06	9	9	E	LEAR	6566	
10	AFS	0518E	1702D	S21	W26	04	8.2	1	03	9	9	E	SVTO	6566	
10	AFS	0519E	1702D	N29	E38	04	13.2		02	8	8	E	SVTO	6580	
10	ADF	0521E	1702D	S11	W32	04	7.8	2	10	9	9	E	SVTO	6567	
10	ADF	0528E	1702D	S20	E21	04	11.8	2	07	9	9	E	SVTO	6578	
10	ADF	0532E	1702D	S09	W22	04	8.6	1	07	9	9	E	SVTO	6568	
10	AFS	0536E	1702D	N08	W67	04	5.2	1	02	9	9	E	SVTO	6565	
10	ADF	0540E	1702D	N14	E56	04	14.5	2	10	9	9	E	SVTO	6581	
10	AFS	0600E	1702D	S22	W60	04	5.6		02	9	9	E	SVTO	6572	
10	AFS	0602E	1702D	S25	E70	04	15.7		02	9	9	E	SVTO	6582	
10	ASR	0604E	1702D	N10	E90	04	17.0			9	9	E	SVTO	6583	
10	APR	0606E	1702D	N11	W90	04	3.5	1		9	9	E	SVTO	6562	
10	APR	0608E	0928D	S12	W90	04	3.5	1		9	9	E	SVTO	6572	
10	SSB	0617		419	W00	04	8.8			0	0	E	SVTO		397 W00
10	BSL	0657E	0723D	N10	W90	04	3.5	1				C	ABST		
10	ASR	0930E	1702D	S25	E90	04	17.4			9	9	E	SVTO		
10	ADF	1108E	1932D	S18	W32	04	8.0	2	03	9	9	E	RAMY	6566	
10	ASR	1114E	1712D	N07	E82	04	16.6			9	9	E	RAMY	6583	
10	ADF	1155E	1930D	S14	E17	04	11.8	2	16	9	9	E	RAMY	6578	
10	SSB	1350		112	W51	04	11.6			0	0	E	HOLL		
10	AFS	1351E	0107D	S18	W32	04	8.1		02	9	9	E	HOLL	6566	
10	DSD	1352E	0107D	N26	E33	04	13.1		03	9	9	E	HOLL	6580	
10	APR	1500E	1826D	N11	W90	04	3.8	1		9	9	E	HOLL	6562	
10	AFS	1501E	0107D	S19	W66	04	5.6		01	9	9	E	HOLL	6572	
10	AFS	1502E	0107D	S11	W26	04	8.7		01	9	9	E	HOLL	6568	

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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
10	ADF	1503E	0107D	S13	W36	04	7.9	1	07	9	9	E	HOLL	6567	
10	AFS	1506E	1834D	S26	E65	04	15.7		01	9	9	E	HOLL	6582	
10	EPL	1534E	1636D	N34	W90	04	3.5			9	9	E	HOLL	6562	
10	EPL	1534	1536D	N12	W90	04	3.9			9	9	E	SVTO		
10	EPL	1537E	1653D	N14	W90	04	3.8	2		9	9	E	RAMY	6562	
10	MDP	1718E	0414D	N13	W90	04	3.9			9	9	E	PALE	6565	
10	ADF	1733E	0414D	S11	W39	04	7.8	1	09	9	9	E	PALE	6567	
10	ADF	1733E	0414D	S12	W28	04	8.6	1	09	9	9	E	PALE	6568	
10	AFS	1733E	0414D	S20	W36	04	8.0		04	9	9	E	PALE	6566	
10	DSD	1750E	0414D	N26	E31	04	13.1		02	9	9	E	PALE	6580	
10	DSD	1750E	0414D	N26	E31	04	13.1		05	9	9	E	PALE	6580	
10	ADF	1750E	0414D	S11	W48	04	7.1	1	08	9	9	E	PALE	6575	
10	DSD	1750E	0414D	S20	W74	04	5.1		05	9	9	E	PALE	6572	
10	ADF	1750E	0414D	S23	E11	04	11.6	1	07	9	9	E	PALE	6578	
10	DSD	1816E	0414D	N12	E79	04	16.7		05	9	9	E	PALE	6583	
10	ADF	1816E	0414D	N15	E51	04	14.6	1	16	9	9	E	PALE	6581	
10	AFS	1816E	0414D	S12	W55	04	6.6		02	9	9	E	PALE		
10	ADF	1816E	0414D	S23	E65	04	15.8	1	10	9	9	E	PALE	6582	
10	ADF	2354E	0309D	N07	E37	04	13.8	1				C	VORO		
10	APR	2356E	0310D	S14	W90	04	4.2	1				C	VORO		
10	APR	2356E	0310D	S34	W90	04	3.8	1				C	VORO		
11	DSD	0022E	0954D	S21	W77	04	5.1		10	9	9	E	LEAR	6572	
11	DSD	0026E	0954D	N32	E29	04	13.3		04	9	9	E	LEAR	6580	
11	AFS	0031E	0954D	S12	W18	04	9.7		02	9	9	E	LEAR	6570	
11	AFS	0049E	0414D	N29	E28	04	13.2		03	9	9	E	PALE	6580	
11	APR	0141E	0310D	S57	E90	04	18.9	1				C	VORO		
11	APR	0202E	0310D	S45	E90	04	18.5	1				C	VORO		
11	ASR	0313E	0954D	N13	E90	04	17.9			9	9	E	LEAR	6583	
11	BSL	0548E	0551D	E18	W90	04	4.4	1				C	ABST		
11	BSL	0548E	0551D	E36	W90	04	4.0	1				C	ABST		
11	BSL	0548E	0551D	N16	E90	04	18.1	1				C	ABST		
11	BSD	0615E	0649D	N12	E75	04	16.9		06	8	8	E	LEAR	6583	Flare Associated
11	APR	0800E	1000D	N01	E90	04	18.0					V	ATHN		
11	APR	0805E	1000D	S17	W90	04	4.5					V	ATHN		
11	APR	0810E	1000D	S34	W90	04	4.2					V	ATHN		
11	AFS	0824E	0954D	S20	W44	04	8.0		02	9	9	E	LEAR	6566	
11	BSD	1129E	1302	N08	E65	04	16.3		14	9	9	E	RAMY	6583	
11	SSB	1139		106	W62	04	12.0			0	0	E	RAMY		
11	AFS	1349E	0105D	N11	E67	04	16.6		01	9	9	E	HOLL	6583	
11	AFS	1351E	0107D	S18	W32	04	9.1		02	9	9	E	HOLL	6566	
11	DSD	1352E	0107D	N26	E33	04	14.1		03	9	9	E	HOLL	6580	
11	ADF	1354E	1832D	S19	W42	04	8.4	1	04	9	9	E	RAMY	6566	
11	AFS	1501E	0107D	S19	W66	04	6.6		01	9	9	E	HOLL	6572	
11	AFS	1502E	0107D	S11	W26	04	9.7		01	9	9	E	HOLL	6568	
11	ADF	1503E	0107D	S13	W36	04	8.9	1	07	9	9	E	HOLL	6567	
11	DSD	1507E	1630D	S22	W40	04	8.5		02	9	9	E	RAMY	6566	
11	AFS	1624E	0105D	S24	W42	04	8.4		02	9	9	E	HOLL	6566	
11	AFS	1625E	0105D	N30	E21	04	13.3		02	9	9	E	HOLL	6580	
11	ADF	1626E	0105D	N11	E38	04	14.5	1	13	9	9	E	HOLL	6581	
11	MDP	1718E	0414D	N13	W90	04	4.9			9	9	E	PALE	6565	
11	ADF	1733E	0414D	S11	W39	04	8.8	1	09	9	9	E	PALE	6567	
11	ADF	1733E	0414D	S12	W28	04	9.6	1	09	9	9	E	PALE	6568	
11	AFS	1733E	0414D	S20	W36	04	9.0		04	9	9	E	PALE	6566	
11	DSD	1750E	0414D	N26	E31	04	14.1		02	9	9	E	PALE	6580	
11	DSD	1750E	0414D	N26	E31	04	14.1		05	9	9	E	PALE	6580	
11	ADF	1750E	0414D	S11	W48	04	8.1	1	08	9	9	E	PALE	6575	
11	DSD	1750E	0414D	S20	W74	04	6.1		05	9	9	E	PALE	6572	
11	ADF	1750E	0414D	S23	E11	04	12.6	1	07	9	9	E	PALE	6578	
12	AFS	1038E	2204D	N28	E11	04	13.3		02	9	9	E	RAMY	6580	
12	ADF	1039E	2204D	N12	E27	04	14.5	1	18	9	9	E	RAMY	6581	
12	DSD	1044E	1343D	S29	E65	04	17.5		04	9	9	E	RAMY	6587	
12	ADF	1045E	1659D	N05	E52	04	16.3	1	07	9	9	E	RAMY	6583	
12	ADF	1045E	1842D	N00	E55	04	16.5	1	12	9	9	E	RAMY	6583	
12	AFS	1058E	1411D	S23	W50	04	8.6		03	8	8	E	RAMY	6566	
12	ADF	1102E	1343D	S14	W52	04	8.5	1	07	9	9	E	RAMY	6568	
12	ADF	1104E	1655D	S09	W64	04	7.6	2	09	9	9	E	RAMY	6584	
12	AFS	1320E	0103D	S25	W52	04	8.5		03	9	9	E	HOLL		
12	ADF	1332E	0103D	N12	E26	04	14.5	1	21	9	9	E	HOLL	6581	

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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
12	ASR	1338E	1837D	N13	E78	04 18.4			9	9	E	RAMY		
12	AFS	1406E	0103D	N06	E55	04 16.7		03	9	9	E	HOLL	6583	
12	ADF	1526E	0103D	S26	E34	04 15.3	1	14	9	9	E	HOLL	6582	
12	BSD	1616E	1835D	N28	E11	04 13.5		03	9	9	E	HOLL	6580	
12	AFS	1624E	0103D	N06	W32	04 10.3		03	9	9	E	HOLL	6569	
12	AFS	1637E	0103D	S29	E65	04 17.8		01	9	9	E	HOLL	6587	
12	AFS	1637E	2055D	S18	W60	04 8.1		03	9	9	E	PALE	6566	
12	APR	1650E	2055D	S13	E90	04 19.5	1		9	9	E	PALE		
12	ASR	1711E	2128D	S20	W90	04 5.8			9	9	E	RAMY	6572	
12	SSB	1712		109	W78	04 13.5			0	0	E	PALE		417 W25 407 W15
12	SSB	1737		418	W26	04 11.3			0	0	E	RAMY		111 W79
12	SSB	1829		420	W28	04 11.2			0	0	E	HOLL		442 W50 112 W80
12	ASR	1930E	0103D	S21	W90	04 5.9			6	6	E	HOLL	6572	
12	ASR	2030E	2055D	S21	W90	04 5.9			9	9	E	PALE	6572	
12	DSD	2033	0103D	S11	W43	04 9.6		02	9	9	E	HOLL	6570	Flare Associated
13	AFS	0250E	0844D	S10	W48	04 9.5		04	9	9	E	LEAR	6570	
13	AFS	0304E	0338D	N07	E43	04 16.3		02	9	9	E	PALE	6583	
13	AFS	0304E	0338D	N10	E49	04 16.8		03	9	9	E	PALE	6583	
13	ASR	0346E	0844D	S11	W90	04 6.4			9	9	E	LEAR	6567	
13	AFS	0657E	0844D	N06	E40	04 16.3		03	9	9	E	LEAR	6583	
13	ADF	0924E	1115D	S09	W80	04 7.4	1				V	KHAR		
13	ADF	0925E	0953	S26	E27	04 15.5	1				V	KHAR		
13	DSD	0937E	1010D	S08	E50	04 17.1	1				V	KHAR		
13	APR	1002E	1030	S09	E90	04 20.2	1				V	KHAR		
13	ADF	1003E	1050	S26	E32	04 15.9	1				V	KHAR		
13	AFS	1059E	1944D	N13	E66	04 18.4		02	9	9	E	RAMY	6592	
13	AFS	1101E	1944D	N07	E41	04 16.5		03	9	9	E	RAMY	6583	
13	AFS	1102E	1944D	N08	E20	04 14.9		03	9	9	E	RAMY	6591	
13	AFS	1103E	1622D	N28	W02	04 13.3		02	9	9	E	RAMY	6580	
13	APR	1104E	1944D	S07	W90	04 6.7	1		9	9	E	RAMY	6567	
13	DSD	1105E	1629D	S22	W63	04 8.6		03	9	9	E	RAMY	6566	
13	AFS	1106E	1944D	S10	W51	04 9.6		03	9	9	E	RAMY	6570	
13	ADF	1109E	1944D	S26	E35	04 16.2	2	15	9	9	E	RAMY	6582	
13	DSD	1338E	0049D	N15	E26	04 15.5		04	9	9	E	HOLL	6581	
13	SDF	1340E	0626D	S31	E33	04 16.2		15	0	0	E	SVTO		
13	DSD	1418E	1626D	S11	W48	04 10.0		05	9	9	E	RAMY	6570	
13	AFS	1439E	2000D	S23	W67	04 8.4		02	8	8	E	HOLL	6566	
13	ADF	1441E	0123D	S09	W71	04 8.3	1	19	9	9	E	HOLL	6567	
13	DSD	1444E	2000D	S10	W54	04 9.5		05	9	9	E	HOLL	6570	
13	AFS	1521E	2000D	N05	E35	04 16.2		02	9	9	E	HOLL		
13	ADF	1613E	1619	N12	E10	04 14.4	1	19	9	9	E	RAMY	6582	
13	AFS	1645E	0338D	N08	E29	04 15.9		02	9	9	E	PALE		
13	AFS	1645E	0338D	N09	E54	04 17.7		03	9	9	E	PALE	6583	
13	AFS	1700E	0338D	N29	E06	04 14.2		02	8	8	E	PALE	6580	
13	AFS	1700E	0338D	S12	W41	04 10.6		03	9	9	E	PALE	6570	
13	AFS	1700E	0338D	S26	E34	04 16.3		03	9	9	E	PALE	6582	
13	ADF	1705E	0338D	N11	E23	04 15.4		12	9	9	E	PALE	6581	
13	ADF	1705E	0338D	S26	E34	04 16.3		10	9	9	E	PALE	6582	
13	ASR	1726E	2000D	S14	W90	04 6.9			9	9	E	HOLL	6584	
13	AFS	1726E	1822D	N08	E40	04 16.7		02	9	9	E	PALE	6583	
13	AFS	1726E	1822D	N15	E64	04 18.6		03	9	9	E	PALE	6592	
13	AFS	1726E	1822D	N30	W08	04 13.1		03	9	9	E	PALE	6580	
13	ASR	1726E	1822D	S14	W90	04 6.9			9	9	E	PALE	6584	
13	ASR	1730E	1822D	S10	E90	04 20.5			9	9	E	PALE		
13	AFS	1730E	1822D	S10	W58	04 9.4		03	9	9	E	PALE	6570	
13	DSD	1735E	1822D	S19	W78	04 7.8		03	9	9	E	PALE	6566	
13	AFS	1741E	1822D	N09	E16	04 14.9		02	8	8	E	PALE	6591	
13	DSD	2033	0338D	S12	W44	04 10.5		03	9	9	E	PALE	6570	Flare Associated
13	APR	2240E	0231D	S12	E90	04 20.7	1				C	VORO		
13	APR	2240E	0231D	S15	E90	04 20.7	1				C	VORO		
14	BSL	0107	0123	S12	W90	04 7.3	1				C	VORO		
14	ADF	0140E	0944D	N29	W11	04 13.2	1	09	9	9	E	LEAR	6580	
14	AFS	0141E	0944D	N05	W35	04 11.4		02	9	9	E	LEAR	6579	
14	ASR	0142E	0944D	S08	E90	04 20.8			9	9	E	LEAR		
14	ASR	0142E	0944D	S13	E90	04 20.9			9	9	E	LEAR		
14	BSL	0526E	0803D	N01	E90	04 20.9	1				C	ABST		
14	BSL	0532E	0753D	S30	W90	04 7.1	1				C	ABST		
14	BSL	0534E	0803D	S06	E90	04 21.0	1				C	ABST		

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks	
14	BSL	0542E	0803D	S03	E90	04 21.0	1				C	ABST			
14	ASR	0730E	0743	S04	E90	04 21.0			9	9	E	SVTO			
14	BSL	0744E	0800D	S04	E90	04 21.0			9	9	E	SVTO			
14	ASR	0800E	1418D	S04	E90	04 21.1			9	9	E	SVTO			
14	APR	0840E	1204D	N03	E90	04 21.1	2		9	9	E	SVTO			
14	ADF	0842E	1701D	N12	E00	04 14.4	2	20	9	9	E	SVTO			
14	APR	1058E	1839D	S09	W90	04 7.7	1		8	8	E	RAMY	6567		
14	ADF	1104E	2140D	N11	W01	04 14.4	1	19	9	9	E	RAMY	6581		
14	DSD	1112E	1515D	N08	E21	04 16.0		03	9	9	E	RAMY	6583		
14	ADF	1115E	1913D	S28	E44	04 17.9	1	10	9	9	E	RAMY	6587		
14	BSD	1121E	1223D	S12	E80	04 20.5		05	9	9	E	RAMY			
14	ASR	1121E	2012D	S13	E90	04 21.3			9	9	E	RAMY			
14	DSD	1124E	1724D	S17	E29	04 16.7		03	9	9	E	RAMY			
14	SSB	1127		421	W52	04 12.7			0	0	E	RAMY			
14	DSD	1159E	2010D	S10	W66	04 9.5		05	9	9	E	RAMY	6570		
14	BSD	1300	1408D	S07	E82	04 20.7		10	9	9	E	HOLL		Flare Associated	
14	ASR	1402E	0124D	S21	W85	04 8.1			9	9	E	HOLL	6566		
14	ADF	1408E	0124D	S14	W68	04 9.4	1	07	9	9	E	HOLL	6570		
14	AFS	1408E	1744D	S11	W66	04 9.6		02	9	9	E	HOLL	6570		
14	ADF	1430E	1755D	N10	W03	04 14.4	1	20	9	9	E	HOLL	6581		
14	DSD	1445E	2123D	S20	E24	04 16.4		02	9	9	E	HOLL			
14	SSB	1450		427	W59	04 12.2			0	0	E	HOLL			
14	DSD	1701E	1723D	N31	W21	04 13.0		05	9	9	E	RAMY	6580		
14	SDF	1701E	0529D	N37	E43	04 18.2		19	0	0	E	SVTO			
14	AFS	1726E	0400D	N14	E53	04 18.7		01	9	9	E	PALE	6592		
14	ASR	1726E	0400D	S10	E86	04 21.2			9	9	E	PALE			
14	AFS	1726E	0400D	S25	E06	04 15.2		02	9	9	E	PALE	6582		
14	ADF	1726E	0400D	S25	E10	04 15.5		09	9	9	E	PALE	6582		
14	ASR	1726E	1731D	N20	W85	04 8.2			9	9	E	PALE	6566		
14	ASR	1726E	1731D	S10	E86	04 21.2			9	9	E	PALE			
14	AFS	1734E	0400D	N11	E76	04 20.4		04	9	9	E	PALE	6583		
14	AFS	1734E	0400D	N28	W17	04 13.4		02	9	9	E	PALE	6580		
14	AFS	1734E	0400D	S06	E25	04 16.6		04	9	9	E	PALE	6583		
14	AFS	1734E	0400D	S11	W70	04 9.5		01	9	9	E	PALE	6568		
14	ADF	1734E	0400D	S13	W69	04 9.5		05	9	9	E	PALE	6568		
14	ADF	1742E	0400D	S13	E74	04 20.3		10	9	9	E	PALE			
14	APR	2215E	2320D	S03	E90	04 21.6	1		9	9	E	HOLL			
14	ADF	2310E	0037D	N46	E10	04 15.8	1				C	VORO			
14	APR	2325E	0030D	S08	W90	04 8.2	1				C	VORO			
14	AFS	2345E	0956D	N27	W25	04 13.0		02	9	9	E	LEAR	6580		
14	AFS	2346E	0956D	N05	E21	04 16.6		02	9	9	E	LEAR	6583		
14	ASR	2347E	0956D	S21	W90	04 8.1			9	9	E	LEAR	6566		
14	ASR	2347E	0956D	S23	W90	04 8.0			9	9	E	LEAR	6566		
15	AFS	0007E	0956D	N08	W01	04 14.9		02	9	9	E	LEAR	6591		
15	ADF	0007E	0956D	S14	E66	04 20.0	1	06	9	9	E	LEAR	6593		
15	SDF	0017E	2249D	N35	E05	04 15.4		07	0	0	E	LEAR			
15	ADF	0551E	1619D	S21	E72	04 20.8	1	25	9	9	E	SVTO	6593		
15	ADF	0553E	1619D	S22	E49	04 19.0	1	22	9	9	E	SVTO			
15	ADF	0818E	0835D	S16	W53	04 11.3	1				V	KHAR			
15	DSD	0902E	0911	N31	W28	04 13.2	1				V	KHAR			
15	DSD	0907E	0920D	N35	W37	04 12.4	1				V	KHAR			
15	DSD	0918E	0920D	S29	E12	04 16.3	1				V	KHAR			
15	DSD	1158E	1214D	N07	E09	04 16.2		03	9	9	E	SVTO	6583	Flare Associated	
15	AFS	1220E	1944D	S20	E14	04 16.6		02	9	9	E	RAMY	6594		
15	AFS	1224E	1944D	S12	E68	04 20.6		03	9	9	E	RAMY	6593		
15	ADF	1224E	1944D	S23	E67	04 20.7	1	23	9	9	E	RAMY	6593		
15	SSB	1255		410	W54	04 14.7			0	0	E	RAMY			
15	SSB	1341		356	W01	04 11.4			0	0	E	HOLL		407 W52	
15	DSD	1438E	1458D	S11	E65	04 20.5		18	9	9	E	SVTO	6593	Flare Associated	
15	ASR	1500E	0049D	S11	W81	04 9.5			9	9	E	HOLL	6570		
15	AFS	1501E	0049D	N13	E41	04 18.7		02	9	9	E	HOLL	6592		
15	ASR	1502E	0049D	S24	W90	04 8.7			6	6	E	HOLL	6566		
15	AFS	1503E	0049D	N29	W29	04 13.3		01	9	9	E	HOLL	6580		
15	ADF	1503E	0049D	N31	W33	04 13.0	1	08	9	9	E	HOLL	6580		
15	DSD	1600E	2142D	S12	E66	04 20.6		05	9	9	E	HOLL	6593	Flare Associated	
15	SDF	1829E	1610D	N48	W01	04 15.7			16	0	0	E	HOLL		
15	AFS	1948E	0435D	S11	E59	04 20.3		01	9	9	E	PALE	6593		
15	ADF	1948E	0435D	S14	E67	04 20.9		12	9	9	E	PALE	6593		
15	ADF	2259E	0000D	N09	W38	04 13.1	1				C	VORO			

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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
15	APR	2336E	0000D	S07	W90	04 9.2	1				C	VORO		
15	ASR	2345E	0930D	S10	W90	04 9.2			9	9	E	LEAR	6570	
15	AFS	2346E	0930D	N05	E04	04 16.3		02	9	9	E	LEAR	6583	
16	APR	0001E	0301D	S07	W90	04 9.2	1				C	VORO		
16	ADF	0002E	0300D	N09	W39	04 13.1	1				C	VORO		
16	ADF	0005	0300D	N48	W10	04 15.2	1				C	VORO		
16	AFS	0058E	0435D	N06	E04	04 16.3		03	9	9	E	PALE	6583	
16	ASR	0445E	0930D	S15	W84	04 9.8			9	9	E	LEAR	6570	
16	AFS	0530E	0930D	S28	E53	04 20.4		02	9	9	E	LEAR	6596	
16	SDF	0534E	0921D	N01	W15	04 15.1		06	0	0	E	SVTO		
16	ASR	0740E	1644D	N11	W90	04 9.5			9	9	E	SVTO	6570	
16	AFS	0741E	1644D	N28	W40	04 13.2	1	03	9	9	E	SVTO	6580	
16	ADF	0830E	0900D	N17	W82	04 10.1	1				V	KHAR		
16	APR	0840E	0915D	N17	W90	04 9.5	1				V	KHAR		
16	BSL	0956E	1023D	S20	W90	04 9.5	2				V	KHAR		
16	BSL	1003	1052	S21	W90	04 9.5			9		E	SVTO		
16	ADF	1110E	2140D	S12	E44	04 19.8	1	13	9	9	E	RAMY	6593	
16	SSB	1208		342	W00	04 13.4			0	0	E	SVTO		
16	SDF	1208E	1541D	N24	W01	04 16.4		10	0	0	E	SVTO		
16	BSL	1304E	1322	S22	W90	04 9.6			9	9	E	RAMY	6566	
16	BSL	1305E	1321	S25	W90	04 9.6			9	9	E	SVTO		
16	BSL	1311E	1333D	S22	W90	04 9.6			9	9	E	HOLL	6566	
16	ASR	1322	1435D	S22	W90	04 9.6			9	9	E	RAMY	6566	
16	ASR	1335E	2244D	S16	W90	04 9.7			9	9	E	HOLL	6570	
16	SDF	1619E	0534D	N47	W10	04 15.8		19	0	0	E	SVTO		
16	SSB	1621		359	W19	04 12.2			0	0	E	HOLL		425 W85
16	AFS	1628E	2244D	S19	W03	04 16.4		02	7	7	E	HOLL	6594	
16	ASR	1714E	2024D	S16	E90	04 23.5			8	8	E	RAMY		
16	ASR	1856E	0110D	S17	E90	04 23.6			9	9	E	PALE		
16	ASR	1901E	1903D	S21	W90	04 9.9			9	9	E	PALE		
16	AFS	2114E	0125D	N28	W47	04 13.2		04	9	9	E	PALE	6580	
16	ADF	2114E	0440D	N06	W07	04 16.4		04	9	9	E	PALE	6583	
16	ADF	2114E	0440D	S24	W29	04 14.6		07	9	9	E	PALE	6582	
16	ASR	2115E	2244D	S19	W90	04 10.0			9	9	E	HOLL		
16	ADF	2119E	2244D	S10	W57	04 12.6	1	06	9	9	E	HOLL	6589	
16	DSD	2127E	0440D	S10	W58	04 12.5		06	9	9	E	PALE	6589	
16	ADF	2127E	0440D	S12	E49	04 20.6		06	9	9	E	PALE	6593	
16	ADF	2127E	0440D	S18	E39	04 19.9	1	19	9	9	E	PALE	6596	
16	BSD	2148E	2220D	S19	E80	04 23.0		15	9	9	E	HOLL		
16	ASR	2155E	2220D	S28	E90	04 23.9			9	9	E	HOLL		
16	DSD	2300E	0440D	S10	E47	04 20.5		07	9	9	E	PALE	6593	Flare Associated
17	BSL	0311E	0537D	S22	W90	04 10.2			9	9	E	LEAR		
17	BSL	0317E	0405D	S23	W90	04 10.2			9	9	E	PALE		
17	DSD	0320E	0440D	N31	W50	04 13.2		05	9	9	E	PALE	6580	Flare Associated
17	AFS	0646E	0945D	N06	W10	04 16.5		03	9	9	E	LEAR	6583	
17	AFS	1051E	1851D	S06	E13	04 18.4		02	8	8	E	RAMY	6583	
17	DSD	1055E	1851D	N28	W52	04 13.4		06	9	9	E	RAMY	6580	
17	ADF	1112E	1851D	S20	W07	04 16.9	2	06	9	9	E	RAMY	6594	
17	APR	1233E	1525D	N27	E90	04 24.5	1		9	9	E	SVTO		
17	AFS	1234E	1525D	N28	W54	04 13.3	1	03	9	9	E	SVTO	6580	
17	ADF	1235E	1525D	S13	E26	04 19.5	2	20	9	9	E	SVTO		
17	SSB	1426		353	W25	04 13.5			0	0	E	SVTO		
17	AFS	1506E	0126D	N28	W54	04 13.4		02	9	9	E	HOLL	6580	
17	ADF	1519E	0126D	S10	E40	04 20.6	1	07	9	9	E	HOLL	6593	
17	SSB	1541		358	W31	04 13.1			0	0	E	HOLL		
17	AFS	1645E	0440D	S09	E43	04 20.9		03	9	9	E	PALE	6593	
17	DSD	1700E	0340D	S19	W18	04 16.3		02	9	9	E	PALE	6594	
17	DSD	1708E	0440D	N11	W21	04 16.1		03	9	9	E	PALE	6583	
17	SSB	1728		361	W34	04 12.9			0	0	E	PALE		343 W17
17	ADF	1728E	0440D	S20	W16	04 16.5		07	9	9	E	PALE	6594	
17	AFS	2150E	0440D	N06	W18	04 16.6		03	9	9	E	PALE	6583	
17	ASR	2236E	0000D	N27	W90	04 10.9			9	9	E	HOLL		
17	ASR	2244E	0000D	N25	W90	04 11.0			9	9	E	PALE		
17	AFS	2336E	0634D	N06	W19	04 16.6		03	9	9	E	LEAR	6583	
18	AFS	0032E	0440D	S22	W45	04 14.6		02	9	9	E	PALE	6582	
18	SDF	0034E	1305D	S25	W18	04 16.6		08	0	0	E	HOLL		
18	DSD	0035E	0248D	N15	E02	04 18.2		02	9	9	E	PALE	6592	

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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
18	APR	0515E	0634D	S15	W90	04 11.4	2		6	7	E	LEAR		
18	APR	0930E	1627D	S15	W90	04 11.6	2		8	8	E	SVTO		
18	AFS	1040E	1730D	N12	E02	04 18.6		02	9	9	E	RAMY	6592	
18	AFS	1041E	1730D	N05	W24	04 16.6		03	9	9	E	RAMY	6583	
18	DSD	1042E	1730D	N27	W63	04 13.5		03	9	9	E	RAMY	6580	
18	AFS	1042E	1730D	N29	W62	04 13.6		02	9	9	E	RAMY	6580	
18	ADF	1044E	1730D	S24	W48	04 14.7	1	07	9	9	E	RAMY	6582	
18	AFS	1045E	1324D	S25	W41	04 15.3		02	9	9	E	RAMY	6582	
18	AFS	1201E	1627D	N05	W27	04 16.5		02	9	9	E	SVTO	6583	
18	ADF	1310E	2325D	S23	W53	04 14.5	1	07	9	9	E	HOLL	6582	
18	DSD	1319E	1510D	S22	E43	04 21.8		03	9	9	E	RAMY	6597	
18	ADF	1506E	1614D	S26	W10	04 17.8	1	21	9	9	E	RAMY	6587	
18	AFS	1640E	0425D	N06	W28	04 16.6		03	9	9	E	PALE	6583	
18	AFS	1640E	0425D	N11	W30	04 16.4		02	9	9	E	PALE	6583	
18	AFS	1640E	0425D	N13	E00	04 18.7		03	9	9	E	PALE	6592	
18	DSD	1640E	0425D	N27	W70	04 13.2		04	9	9	E	PALE	6580	
18	AFS	1640E	0425D	S11	E26	04 20.6		03	9	9	E	PALE	6593	
18	DSD	1640E	2115D	N32	W69	04 13.2		03	9	9	E	PALE	6580	
18	ADF	1710E	0425D	S31	W42	04 15.4		08	9	9	E	PALE	6582	
18	SSB	1714		354	W41	04 14.3			0	0	E	PALE		339 W25
18	ADF	1714E	0425D	S27	W42	04 15.4	1	09	9	9	E	PALE	6582	
18	DSD	2115E	0425D	N09	W25	04 17.0		03	9	9	E	PALE	6583	
18	DSD	2115E	0425D	S10	E73	04 24.4		03	9	9	E	PALE	6593	
18	SDF	2258E	1328D	N20	W40	04 15.9		15	0	0	E	HOLL		
18	SDF	2258E	1328D	N44	W10	04 18.1		12	0	0	E	HOLL		
19	APR	0052E	0253D	N10	W90	04 12.3	1				C	VORO		
19	APR	0052E	0253D	N18	W90	04 12.2	1				C	VORO		
19	AFS	0058E	0719D	S26	W12	04 18.1		02	9	9	E	LEAR	6587	
19	DSD	0059E	0550D	N08	W37	04 16.3		03	9	9	E	LEAR	6583	
19	ASR	0141E	0719D	N33	W90	04 11.9			9	9	E	LEAR	6580	
19	AFS	0453E	1715D	N13	W10	04 18.4		02	9	9	E	SVTO	6592	
19	ADF	0455E	1715D	N10	W38	04 16.3	1	08	9	9	E	SVTO	6583	
19	BSL	0522E	0801D	S10	W90	04 12.5	1				C	ABST		
19	BSL	0522E	0801D	S18	W90	04 12.4	1				C	ABST		
19	AFS	0545E	0719D	S13	W14	04 18.2		03	4	5	E	LEAR	6599	
19	ADF	0600E	0719D	N19	W47	04 15.7	2	14	4	5	E	LEAR	6583	
19	BSL	0647E	0801D	N31	W90	04 12.2	1				C	ABST		
19	SSB	0711		308	W02	04 18.7			0	0	E	SVTO		
19	SSB	1127		342	W39	04 16.1			0	0	E	RAMY		
19	AFS	1128E	1836D	N15	W18	04 18.1		03	9	9	E	RAMY	6592	
19	ADF	1137E	1609D	N20	W48	04 15.8	2	11	9	9	E	RAMY		
19	SDF	1137E	1609D	N20	W48	04 15.8		11	9	9	E	RAMY		
19	ADF	1147E	1643D	N30	W74	04 13.7	2	18	9	9	E	RAMY	6580	
19	ASR	1153E	1239	N19	W78	04 13.5			9	9	E	RAMY	6581	
19	AFS	1214E	1610D	S26	E31	04 21.9		02	9	9	E	RAMY	6597	
19	ADF	1237E	1836D	S23	W55	04 15.3	2	07	9	9	E	RAMY	6582	
19	DSD	1311	1338	S09	E09	04 20.2		13	9	9	E	RAMY	6593	Flare Associated
19	ASR	1313E	1350	N33	W73	04 13.7			9	9	E	RAMY	6580	
19	DSD	1317E	1355D	S10	E09	04 20.2		10	9	9	E	HOLL	6593	Flare Associated
19	ASR	1338E	1429D	N30	W75	04 13.7			9	9	E	RAMY	6580	
19	DSD	1400E	1625D	S08	E11	04 20.4		13	9	9	E	SVTO	6593	
19	ADF	1448E	1600D	N14	E50	04 23.4	1	14	8	9	E	SVTO		
19	ADF	1457E	0129D	S01	E20	04 21.1	1	19	9	9	E	HOLL	6593	
19	DSD	1513E	2030D	S14	W19	04 18.2		03	9	9	E	HOLL	6599	
19	DSD	1514E	1541	S13	W18	04 18.3		03	9	9	E	RAMY	6599	
19	SDF	1600E	1633D	N14	E50	04 23.4		14	9	9	E	SVTO		
19	ASR	1643E	1830D	N34	W84	04 13.0			9	9	E	RAMY	6580	
19	ADF	2030E	0402D	S07	E11	04 20.7		06	9	9	E	PALE	6593	
19	DSD	2030E	0402D	S09	E05	04 20.2		03	9	9	E	PALE	6593	
19	AFS	2030E	0402D	S22	E26	04 21.8		03	9	9	E	PALE	6597	
19	AFS	2038E	0402D	N15	W26	04 17.9		03	9	9	E	PALE	6592	
19	ADF	2038E	0402D	S25	W60	04 15.2		08	9	9	E	PALE	6582	
19	ASR	2101E	2103D	N17	W90	04 13.0			9	9	E	PALE	6581	
19	APR	2310E	0300D	N35	W90	04 12.8	1				C	VORO		
19	ADF	2311E	0259D	N03	E32	04 22.3	1				C	VORO		
19	ADF	2311E	0259D	N35	W40	04 16.8	1				C	VORO		
20	ASR	0200E	0649D	N18	W90	04 13.2			9	9	E	LEAR	6581	
20	AFS	0201E	0649D	N16	W27	04 18.0		02	9	9	E	LEAR	6592	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
20	AFS	0202E	0649D	S11	W26	04	18.1		02	9	9	E	LEAR	6599	
20	ADF	0203E	0649D	N13	W45	04	16.7	1	09	9	9	E	LEAR	6583	
20	ADF	0204E	0649D	S18	W40	04	17.0	1	04	9	9	E	LEAR	6594	
20	ASR	0505E	0948D	W27	W90	04	13.2			9	9	E	SVTO	6580	
20	ASR	0505E	1650D	N15	W90	04	13.4			9	9	E	SVTO	6581	
20	ASR	0512E	0649D	N31	W90	04	13.1			9	9	E	LEAR	6580	
20	BSL	0548E	0621D	N28	W90	04	13.2	1				C	ABST		
20	AFS	0558E	1650D	N14	W31	04	17.9		02	9	9	E	SVTO	6592	
20	ADF	0603E	1650D	N10	W52	04	16.3	1	09	9	9	E	SVTO	6583	
20	SSB	0645		308	W15	04	19.7			0	0	E	SVTO		345 W52
20	BSL	0713E	0803D	N30	W90	04	13.2	1				C	ABST		
20	BSL	0723E	0803D	N19	W90	04	13.4	1				C	ABST		
20	DSD	0906E	0922D	N05	W52	04	16.5		04	9	9	E	SVTO	6583	Flare Associated
20	AFS	1035E	2031D	N13	W28	04	18.3		02	9	9	E	RAMY	6599	
20	ADF	1038E	2031D	S24	E02	04	20.6	1	07	9	9	E	RAMY	6596	
20	ADF	1042E	1522	S05	E06	04	20.9	1	07	9	9	E	RAMY	6592	
20	ASR	1151E	1525D	N17	W90	04	13.6			9	9	E	RAMY	6581	
20	LPS	1250E	0129D	N26	W90	04	13.5			9	9	E	HOLL	6580	
20	AFS	1345E	0129D	N12	W58	04	16.2		02	9	9	E	HOLL	6583	
20	AFS	1350E	0129D	N15	W35	04	17.9		03	9	9	E	HOLL	6592	
20	SSB	1404		300	W12	04	20.6			0	0	E	RAMY		
20	ADF	1437E	1735D	S25	W71	04	15.1	1	07	9	9	E	HOLL	6582	
20	AFS	1446E	0129D	S19	W56	04	16.3		02	9	9	E	HOLL	6594	
20	AFS	1452E	0129D	S13	W32	04	18.2		02	7	6	E	HOLL	6599	
20	SSB	1457		352	W64	04	16.0			0	0	E	HOLL		
20	SDF	1523E	1815D	S19	E33	04	23.1	3	13	0	0	E	RAMY	6493	
20	ASR	1655E	0038D	N30	W90	04	13.6			9	9	E	PALE	6580	
20	SDF	1715E	0606D	S25	W02	04	20.6		18	0	0	E	SVTO		
20	AFS	1733E	0438D	N12	W60	04	16.2		04	9	9	E	PALE	6583	
20	ADF	1733E	0438D	S01	E03	04	20.9	1	14	9	9	E	PALE	6593	
20	ADF	1733E	0438D	S21	W50	04	16.9		03	9	9	E	PALE	6594	
20	DSD	1733E	0438D	S24	W67	04	15.5		10	9	9	E	PALE	6582	
20	ADF	1733E	0438D	S25	W02	04	20.6	1	10	9	9	E	PALE	6596	
20	ADF	1743E	0438D	N03	E60	04	25.2		03	9	9	E	PALE		
21	LPS	0028E	0835D	N30	W90	04	13.9			9	9	E	LEAR	6580	
21	LPS	0038E	0438D	N30	W90	04	13.9			9	7	E	PALE	6580	
21	AFS	0058E	0924D	N14	W63	04	16.3		02	9	9	E	LEAR	6583	
21	AFS	0100E	0924D	N16	W40	04	18.0		02	9	9	E	LEAR	6592	
21	AFS	0101E	0924D	S17	W61	04	16.4		02	9	9	E	LEAR	6594	
21	ADF	0103E	0924D	S23	W76	04	15.2	1	09	9	9	E	LEAR	6582	
21	ADF	0105E	0924D	N04	E51	04	24.8	1	05	9	9	E	LEAR		
21	ADF	1036E	2206D	S24	W11	04	20.6	1	14	9	9	E	RAMY	6596	
21	ADF	1044E	1054D	N16	W52	04	17.5	1				V	KHAR		
21	SSB	1108		277	W00	04	27.2			0	0	E	RAMY		306 W29 332 W55
21	DSD	1209E	1224D	S17	W67	04	16.4	1				V	KHAR		
21	ADF	1254E	1635D	N10	W70	04	16.3	1	05	9	9	E	SVTO	6583	
21	SSB	1412		282	W07	04	27.7			0	0	E	HOLL		348 W73
21	ADF	1626E	1940D	S03	W09	04	21.0	1	14	9	9	E	HOLL	6593	
21	SSB	1639		310	W04	04	20.9			0	0	E	PALE		290 W21
21	AFS	1646E	0106D	S26	E01	04	21.8		01	9	9	E	HOLL	6597	
21	ADF	1647E	1803D	N14	W53	04	17.7	1	08	9	9	E	HOLL	6592	
21	AFS	1648E	0106D	S13	W46	04	18.2		01	9	9	E	HOLL	6599	
21	ADF	1744E	0051D	S21	W78	04	15.7		08	9	9	E	PALE	6582	
21	AFS	1744E	0119D	N14	W75	04	16.1		08	9	9	E	PALE	6583	
21	DSD	1751E	0051D	N17	W54	04	17.6		03	9	9	E	PALE	6592	
21	DSD	1751E	0119D	N27	W48	04	18.0		06	9	8	E	PALE	6587	
21	ADF	1751E	0119D	S06	W13	04	20.8	1	10	9	9	E	PALE	6593	
21	DSD	1758E	0119D	S17	E35	04	24.4		02	9	8	E	PALE		
21	ADF	1758E	0119D	S21	W64	04	16.8		08	9	9	E	PALE	6594	
21	ADF	1758E	0119D	S24	W16	04	20.5	1	12	9	9	E	PALE	6595	
21	BSD	2107	2131D	N09	W75	04	16.2		02	9	9	E	RAMY	6583	
21	ADF	2249E	0259D	N03	E07	04	22.5	1				C	VORO		
21	ADF	2249E	0259D	N12	E17	04	23.2	1				C	VORO		
21	ADF	2249E	0259D	N38	E13	04	23.0	1				C	VORO		
21	APR	2250E	0300D	N05	W90	04	15.2	1				C	VORO		
22	ASR	0036E	0119D	N05	W90	04	15.3			9	8	E	PALE	6583	
22	BSL	0541E	0726D	S25	W90	04	15.3	1				C	ABST		
22	ASR	0555E	0945D	N10	W77	04	16.5			9	9	E	LEAR	6583	

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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	SSB	0643		300	W34	04 22.3			0	0	E	SVTO	280 W14
22	ADF	0700E	0945D	S09	W21	04 20.7	1	09	9	9	E	LEAR 6593	
22	ASR	0701E	1718D	N07	W90	04 15.5			9	9	E	SVTO 6583	
22	ADF	0702E	1718D	S05	W20	04 20.8	2	08	9	9	E	SVTO 6593	
22	EPL	0712E	1215D	S25	W90	04 15.3			9	9	E	SVTO 6582	
22	ASR	0715E	0945D	S19	W90	04 15.4			9	9	E	LEAR 6594	
22	AFS	0720E	1718D	N13	W53	04 18.3		02	9	9	E	SVTO 6592	
22	AFS	0721E	1718D	S15	W54	04 18.2	1	02	9	9	E	SVTO 6599	
22	ASR	1106E	1900D	N06	W83	04 16.2			9	9	E	RAMY 6583	
22	ASR	1135E	1718D	N03	W90	04 15.7			9	9	E	SVTO 6583	
22	ASR	1312E	0116D	N04	W90	04 15.8			9	9	E	HOLL 6583	
22	ADF	1313E	0116D	S09	W22	04 20.9	1	11	9	9	E	HOLL 6593	
22	SSB	1638		305	W44	04 22.3			0	0	E	HOLL	
22	SSB	1659		307	W05	04 22.2			0	0	E	PALE	289 W25
22	ASR	1718E	2058D	N02	W90	04 16.0			9	9	E	PALE 6583	
22	SDF	1718E	0622D	S32	E07	04 23.3		09	0	0	E	SVTO	
22	DSD	1733E	0016D	N10	W79	04 16.8		08	9	9	E	PALE 6583	
22	ADF	1733E	0353D	S07	W27	04 20.7	1	07	9	9	E	PALE 6593	
22	ADF	1747E	0353D	S15	W37	04 19.9		05	9	9	E	PALE 6600	
22	ADF	1747E	0353D	S16	W60	04 18.2	1	05	9	9	E	PALE 6599	
22	ADF	1747E	0353D	S25	W29	04 20.5		14	9	9	E	PALE 6596	
22	DSD	1848E	1900D	S09	W33	04 20.3		02	9	9	E	RAMY 6593	
22	AFS	1850E	1900D	S14	W60	04 18.2		02	9	9	E	RAMY 6599	
22	ASR	1853E	1900D	N21	W90	04 15.9			9	9	E	RAMY 6592	
22	AFS	1854E	1900D	N16	W65	04 17.8		02	9	9	E	RAMY 6592	
23	ASR	0140E	0947D	N05	W90	04 16.3			9	9	E	LEAR 6583	
23	ADF	0512E	1243D	S09	W37	04 20.4	1	09	9	9	E	SVTO 6593	
23	ASR	0525E	1005D	N09	W90	04 16.5			9	9	E	SVTO 6583	
23	AFS	0650E	1243D	S18	W03	04 23.0		02	5	7	E	SVTO 6601	
23	SDF	0716E	0937D	N27	W01	04 23.2		04	0	0	E	SVTO	
23	SSB	0927		281	W29	04 29.7			0	0	E	SVTO	303 W52
23	SDF	0935E	1038D	S08	W25	04 21.5		16	0	0	E	SVTO 6593	
23	AFS	0937E	1042D	S25	W43	04 20.1		02	9	9	E	SVTO 6596	
23	ADF	1057E	2018D	S05	W46	04 20.0	1	08	9	9	E	RAMY 6593	
23	AFS	1110E	1640D	S18	W05	04 23.1		02	6	6	E	RAMY 6601	
23	DSD	1110E	1640D	S19	W13	04 22.5		02	9	9	E	RAMY 6601	
23	DSD	1121E	1507D	S15	W68	04 18.3		02	9	9	E	RAMY 6599	
23	APR	1122E	1640D	S20	W90	04 16.6	2		9	9	E	RAMY 6594	
23	SDF	1243E	0507D	N38	W13	04 22.5		10	0	0	E	SVTO	
23	SDF	1243E	0507D	S23	E51	04 27.4		08	0	0	E	SVTO	
23	DSD	1339E	1608D	S14	W43	04 20.3		09	9	9	E	HOLL 6593	Flare Associated
23	SDF	1519E	1158D	N27	W04	04 23.3	3	16	0	0	E	RAMY	
23	SSB	1615		307	W59	04 23.1			0	0	E	HOLL	
23	AFS	1700E	2117D	S10	W41	04 20.6		03	9	9	E	PALE 6593	
23	ADF	1730E	2135D	S10	W38	04 20.9	1	08	9	9	E	HOLL 6593	
23	AFS	1730E	2135D	S10	W38	04 20.9		02	9	9	E	HOLL 6593	
23	SSB	2117		255	W10	04 28.0			0	0	E	PALE	278 W33 307 W62
23	ADF	2117E	0442D	S08	W46	04 20.4		07	9	9	E	PALE 6593	
23	DSD	2135E	0442D	S17	W74	04 18.3		03	9	9	E	PALE 6599	
23	DSD	2135E	0442D	S30	E05	04 24.3		09	9	9	E	PALE	
23	APR	2201E	0110D	N20	E90	04 30.8			9	9	E	PALE	
23	ADF	2235E	0159D	N12	W13	04 23.0	1				C	VORO	
23	ADF	2235E	0159D	N39	W10	04 23.1	1				C	VORO	
23	APR	2245	0150	S08	W90	04 17.2	1				C	VORO	
23	APR	2245E	0200D	S15	E90	04 30.8	1				C	VORO	
23	ADF	2247	0159D	N05	W16	04 22.7	1				C	VORO	
23	ASR	2345E	0442D	S08	W90	04 17.2			9	9	E	PALE	
24	AFS	0040E	0442D	S30	E02	04 24.2		01	9	9	E	PALE	
24	ASR	0045E	0246D	N16	E90	04 30.8			9	9	E	PALE	
24	AFS	0225E	0954D	S01	E29	04 26.3		02	9	9	E	LEAR	
24	DSD	0240E	0442D	S12	W51	04 20.3		03	9	9	E	PALE 6593	
24	SDF	0442E	1630D	N31	W10	04 23.4		15	0	0	E	PALE	
24	ADF	0505E	1138D	S09	W51	04 20.4	2	08	9	9	E	SVTO 6593	
24	SSB	0507		280	W39	04 30.7			0	0	E	SVTO	309 W68
24	DSD	0507E	0618D	S29	E00	04 24.2		08	9	9	E	SVTO	
24	ASR	0748E	0954D	S32	W90	04 17.2			9	9	E	LEAR 6587	
24	AFS	1032E	1759D	S29	W03	04 24.2		01	9	9	E	RAMY	
24	AFS	1050E	1602D	N06	E33	04 26.9		01	9	9	E	RAMY	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
24	AFS	1051E	1759D	S10	E18	04 25.8		01	9	9	E	RAMY		
24	SDF	1353E	1622D	N27	W02	04 24.4		05	0	0	E	HOLL		
24	ASR	1559E	1759D	S13	W82	04 18.5			9	9	E	RAMY	6599	
24	ASR	1600E	0055D	S15	W86	04 18.1			9	9	E	HOLL	6599	
24	ASR	1630E	1757D	S13	W88	04 18.0			9	9	E	PALE	6599	
24	ASR	1635E	0240D	S27	W88	04 17.8			9	9	E	PALE	6587	
24	ASR	1646E	0055D	S29	W90	04 17.6			9	9	E	HOLL	6597	
24	SSB	1718		252	W18	04 28.7			0	0	E	PALE		280 W46 307 W73
24	SSB	1745		301	W67	04 24.6			0	0	E	HOLL		
24	DSD	1750E	0432D	S30	W07	04 24.2		04	9	9	E	PALE	6603	
24	ASR	2325E	0432D	S09	W88	04 18.4			9	9	E	PALE	6598	
24	BSD	2340E	0940D	S08	W77	04 19.2		03	9	9	E	LEAR	6598	
25	BSL	0538E	0751D	N34	W90	04 18.1	1				C	ABST		
25	BSL	0538E	0751D	S11	W90	04 18.5	1				C	ABST		
25	AFS	0550E	1609D	S30	W13	04 24.2		02	9	9	E	SVTO	6603	
25	SSB	0637		229	W02	04 27.4			0	0	E	SVTO		
25	ASR	0834E	1030D	N12	E90	05 2.1			9	9	E	SVTO		
25	AFS	0905E	1609D	S23	W71	04 19.9		02	9	9	E	SVTO	6602	
25	ASR	1035E	1733D	S09	W90	04 18.7			9	9	E	RAMY	6600	
25	AFS	1037E	1733D	S22	W70	04 20.1		02	9	9	E	RAMY	6602	
25	DSD	1039E	1514D	S28	W19	04 23.9		02	9	9	E	RAMY	6603	
25	AFS	1039E	1733D	S29	W17	04 24.1		02	9	9	E	RAMY	6603	
25	AFS	1041E	1733D	S21	E64	04 30.3		02	9	9	E	RAMY		
25	AFS	1043E	1609D	N08	E05	04 25.8		02	9	9	E	SVTO		
25	AFS	1056E	1733D	N08	E06	04 25.9		02	9	9	E	RAMY		
25	AFS	1230E	1609D	S19	E62	04 30.2		02	9	9	E	SVTO		
25	ASR	1308E	0136D	S11	W90	04 18.8			9	9	E	HOLL	6600	
25	AFS	1313E	0136D	S29	W19	04 24.1		02	7	7	E	HOLL	6603	
25	AFS	1314E	0136D	N08	E04	04 25.8		02	9	9	E	HOLL		
25	SSB	1531		230	W08	04 27.9			0	0	E	HOLL		299 W77
25	ASR	1646E	0055D	S29	W90	04 18.6			9	9	E	HOLL	6597	
25	SDF	1718E	1639D	N12	W10	04 25.0		07	0	0	E	PALE		
25	ADF	1724E	1733D	N18	E70	05 1.0	1	15	9	9	E	RAMY		
25	DSD	1819E	0423D	N08	E01	04 25.8		02	9	9	E	PALE		
25	ADF	1819E	0423D	N20	E67	04 30.9	1	10	9	9	E	PALE		
25	DSD	1819E	0423D	S12	W67	04 20.7		02	9	9	E	PALE	6593	
25	ADF	1819E	0423D	S19	W44	04 22.4		06	9	6	E	PALE	6601	
25	DSD	1819E	0423D	S29	W21	04 24.1		02	9	9	E	PALE	6603	
25	AFS	1852E	0136D	S22	E59	04 30.3		02	9	9	E	HOLL	6604	
25	AFS	1858E	0136D	S10	W01	04 25.7		02	9	9	E	HOLL		
25	ADF	2319E	0030D	N13	W39	04 23.0	1				C	VORO		
25	ADF	2319E	0030D	N49	W40	04 22.6	1				C	VORO		
25	APR	2327E	0026D	S33	W90	04 18.8	1				C	VORO		
26	AFS	0220E	0947D	S28	W28	04 23.9		02	9	9	E	LEAR	6603	
26	AFS	0220E	0947D	S29	W26	04 24.0		02	9	9	E	LEAR	6603	
26	AFS	0221E	0947D	N07	W02	04 25.9		02	9	9	E	LEAR	6606	
26	SSB	0521		229	W15	04 28.4			0	0	E	SVTO		
26	AFS	0553E	0727D	S20	W28	04 24.1		02	9	9	E	SVTO	6603	
26	DSD	0553E	0727D	S31	W30	04 23.9		04	9	9	E	SVTO	6603	
26	ASR	0606E	0727D	N09	E90	05 3.0			9	9	E	SVTO	6605	
26	ADF	0612E	0727D	N21	E48	04 29.9	1	09	9	9	E	SVTO		
26	SDF	0727E	1059D	S26	W54	04 22.1		05	0	0	E	SVTO		
26	ASR	0745E	0947D	N04	E85	05 2.7			9	9	E	LEAR	6605	
26	ASR	1026E	2136D	S08	W90	04 19.7			9	9	E	RAMY	6593	
26	ADF	1028E	2136D	S27	W40	04 23.3	1	07	9	9	E	RAMY	6603	
26	AFS	1028E	2136D	S29	W29	04 24.2		02	9	9	E	RAMY	6603	
26	SSB	1039		226	W15	04 28.4			0	0	E	RAMY		254 W43
26	SSB	1325		226	W16	04 28.5			0	0	E	HOLL		
26	AFS	1340E	2134D	S22	E47	04 30.2		01	9	9	E	HOLL	6604	
26	AFS	1341E	2134D	N18	E03	04 26.8		02	7	8	E	HOLL		
26	ADF	1342E	2134D	N18	E56	04 30.8	1	15	9	9	E	HOLL		
26	BSD	1640E	2044D	N07	E76	05 2.4		08	9	9	E	RAMY	6605	
26	ADF	1726E	0300D	S19	W50	04 22.9	1	16	8	8	E	PALE	6601	
26	ADF	1726E	1728D	S19	W50	04 22.9	1	16	8	8	E	PALE	6601	
26	ADF	1731E	0300D	N06	E68	05 1.8		04	9	9	E	PALE	6605	
26	ADF	1731E	0300D	N18	E54	04 30.8	1	06	9	9	E	PALE		
26	DSD	1731E	0300D	S19	E57	05 1.1		03	9	9	E	PALE	6604	
26	LPS	1842E	1904D	S08	W90	04 20.0			9	9	E	PALE	6593	

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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
27	DSD	0440E	0918D	S04	W72	04 21.8		02	9	9	E	LEAR	6605	
27	BSL	0614E	0804D	S10	W90	04 20.5	1				C	ABST		
27	BSL	0634E	0804D	S10	E90	05 4.0	1				C	ABST		
27	AFS	1023E	2148D	S40	E31	04 29.9		02	9	9	E	RAMY	6607	
27	AFS	1030E	2148D	N09	E64	05 2.2		02	9	9	E	RAMY	6605	
27	ADF	1030E	2148D	N14	E72	05 2.9	1	16	9	9	E	RAMY	6605	
27	ASR	1039E	1517D	S06	W90	04 20.7			9	9	E	RAMY	6593	
27	ADF	1144E	1715D	N08	E55	05 1.6	1	10	8	8	E	SVTO	6605	
27	AFS	1309E	0104D	S23	E35	04 30.2		02	7	8	E	HOLL	6604	
27	ASR	1310E	0100D	S11	W90	04 20.8			9	9	E	HOLL	6593	
27	AFS	1311E	0104D	S14	E66	05 2.5		01	9	9	E	HOLL		
27	AFS	1312E	0104D	S30	W45	04 24.0		03	9	9	E	HOLL	6603	
27	AFS	1314E	0104D	S41	E31	04 30.1		01	9	9	E	HOLL	6607	
27	ADF	1317E	0100D	N18	E72	05 3.0	1	21	9	9	E	HOLL	6605	
27	AFS	1317E	0104D	N08	E65	05 2.4		01	9	9	E	HOLL	6605	
27	AFS	1318E	0104D	S29	E11	04 28.4		03	9	9	E	HOLL		
27	APR	1638E	0104D	S13	E90	05 4.5	1		9	9	E	HOLL		
27	SDF	1641E	1306D	S25	E02	04 27.8	3	09	0	0	E	RAMY		
27	APR	1700E	1715	S10	E90	05 4.5	2		9	9	E	RAMY		
27	ASR	1707E	0437D	S23	W90	04 20.8			9	9	E	PALE		
27	EPL	1715	1740D	S10	E90	05 4.5	2		9	9	E	RAMY		
27	EPL	1717E	1850D	S13	E90	05 4.5			9	9	E	HOLL		
27	ASR	1720E	0437D	S09	E90	05 4.5			7	9	E	PALE		
27	APR	1752E	2148D	S10	E90	05 4.5	2		9	9	E	RAMY	6603	
27	AFS	1810E	0437D	N06	E65	05 2.6		05	9	9	E	PALE	6605	
27	ADF	1810E	0437D	N11	E72	05 3.2	1	18	9	9	E	PALE	6605	
27	ADF	1810E	0437D	S20	W70	04 22.4		07	7	8	E	PALE	6601	
27	ADF	1829E	0437D	N10	W28	04 25.7	1	06	9	8	E	PALE	6606	
27	AFS	1829E	0437D	S29	E09	04 28.5		03	9	9	E	PALE		
27	AFS	1829E	0437D	S42	E25	04 29.8		03	9	9	E	PALE	6607	
27	SDF	2246E	1300D	S23	E10	04 28.7		09	0	0	E	HOLL		
28	SDF	0437E	1900D	S26	W18	04 26.8		10	0	0	E	PALE		
28	AFS	0540E	1703D	S14	E24	04 30.0		02	9	8	E	SVTO		
28	AFS	0541E	1703D	S16	E39	05 1.2		02	9	9	E	SVTO		
28	AFS	0542E	1703D	N10	E55	05 2.4	1	03	9	9	E	SVTO	6605	
28	ADF	0543E	1703D	N09	E47	05 1.8	1	19	9	9	E	SVTO	6605	
28	SDF	0906E	1215D	S23	W09	04 27.7		09	0	0	E	SVTO		
28	ADF	1036E	1728D	S27	W55	04 24.1	1	04	9	9	E	RAMY	6603	
28	AFS	1036E	2220D	S30	W55	04 24.1		02	9	9	E	RAMY	6603	
28	ADF	1043E	2220D	N13	E59	05 2.9	2	15	9	9	E	RAMY	6605	
28	APR	1110E	1115	S10	E90	05 5.2	2		9	9	E	RAMY		
28	EPL	1115	1155	S10	E90	05 5.2	2		9	9	E	RAMY		
28	DSD	1127E	1246D	S28	W01	04 28.4		04	9	9	E	RAMY		
28	APR	1155	1909D	S10	E90	05 5.2	2		9	9	E	RAMY		
28	AFS	1325E	1729D	S29	W61	04 23.8		02	9	9	E	HOLL	6603	
28	SSB	1326		232	W49	05 1.2			0	0	E	HOLL		
28	ADF	1330E	0138D	N07	E54	05 2.6	1	09	9	9	E	HOLL	6605	
28	AFS	1330E	0138D	N07	E54	05 2.6		02	9	9	E	HOLL	6605	
28	AFS	1423E	1609D	S15	E21	04 30.2		02	9	9	E	HOLL		
28	SDF	1453	1503	S30	W01	04 28.5	2	03	0	0	E	HOLL		
28	DSD	1605E	0042D	S30	W62	04 23.8		02	9	9	E	HOLL	6603	
28	DSD	1609E	0042D	S29	W05	04 28.3		03	9	9	E	HOLL		
28	BSD	1705E	1727D	S21	W81	04 22.5		04	9	9	E	HOLL	6601	Flare Associated
28	SDF	1720	1810D	S31	W07	04 28.2		04	9	9	E	HOLL	6612	
28	DSD	1725E	1909D	S20	W79	04 22.7		03	9	9	E	RAMY	6601	
28	AFS	1735E	0442D	N09	E49	05 2.4		03	9	9	E	PALE	6605	
28	AFS	1735E	0442D	S13	E50	05 2.5		02	8	8	E	PALE	6610	
28	DSD	1735E	0442D	S28	W05	04 28.3		03	9	9	E	PALE	6612	
28	AFS	1735E	0442D	S28	W07	04 28.2		03	9	9	E	PALE	6612	
28	AFS	1735E	0442D	S30	W63	04 23.8		03	9	9	E	PALE	6603	
28	SSB	1740		232	W51	05 1.4			0	0	E	PALE		189 W08
28	ADF	1740E	0442D	N14	E54	05 2.8		12	9	9	E	PALE	6605	
28	DSD	1745E	2049D	S22	W82	04 22.4		04	9	9	E	PALE	6601	
28	ASR	1842E	0442D	S13	E90	05 5.6			9	9	E	PALE		
28	AFS	2003E	0442D	S40	E12	04 29.8		03	9	9	E	PALE	6607	
28	AFS	2005E	0442D	N08	W42	04 25.7		01	9	9	E	PALE	6606	
28	DSD	2026E	0315D	S06	E65	05 3.7		03	9	9	E	PALE	6611	
28	AFS	2026E	0442D	S05	E66	05 3.8		02	9	9	E	PALE	6611	

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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
28	ADF	2227E	0259D	S37	E60	05	3.8	1				C	VORO		
28	APR	2235E	0300D	N17	W90	04	22.1	1				C	VORO		
28	APR	2235E	0300D	S09	W90	04	22.2	1				C	VORO		
28	AFS	2324E	0835D	N08	E45	05	2.3		03	9	9	E	LEAR	6605	
28	AFS	2325E	0835D	S29	W10	04	28.2		03	9	9	E	LEAR	6612	
28	APR	2343	0300D	S22	E90	05	5.9	1				C	VORO		
29	ASR	0044E	0138D	S12	E90	05	5.8			8	8	E	HOLL		
29	SDF	0442E	1700D	N50	W36	04	26.1		15	0	0	E	PALE		
29	AFS	0628E	1309D	S31	W67	04	24.0		02	9	9	E	SVTO	6603	
29	AFS	0631E	1309D	N12	E40	05	2.3		03	9	9	E	SVTO	6605	
29	ADF	0631E	1309D	N15	E44	05	2.6	1	15	9	9	E	SVTO	6605	
29	AFS	0635E	1309D	S29	W13	04	28.2		04	9	9	E	SVTO	6612	
29	AFS	0830E	1309D	N08	W49	04	25.7		02	9	9	E	SVTO	6606	
29	AFS	0833E	1309D	S22	E10	04	30.1		02	9	9	E	SVTO	6604	
29	DSD	1045E	1622D	S31	W67	04	24.2		02	9	9	E	RAMY	6603	
29	ADF	1059E	1622D	N12	E40	05	2.5	2	09	9	9	E	RAMY	6605	
29	ADF	1059E	2215D	N11	E34	05	2.0	1	13	9	9	E	RAMY	6605	
29	ADF	1334E	1556D	S27	W58	04	25.0	1	03	9	9	E	RAMY		
29	AFS	1334E	1950D	S28	W55	04	25.3		02	7	7	E	RAMY		
29	AFS	1405E	1740D	N08	W51	04	25.8		02	8	8	E	HOLL	6606	
29	AFS	1410E	0138D	S13	E05	04	30.0		02	9	9	E	HOLL	6613	
29	DSD	1411E	1740D	S16	E16	04	30.8		03	9	9	E	HOLL	6614	
29	BSD	1555E	1710D	S30	W78	04	23.5		05	8	8	E	RAMY	6603	
29	DSD	1605E	0042D	S30	W62	04	24.8		02	9	9	E	HOLL	6603	
29	DSD	1609E	0042D	S29	W05	04	29.3		03	9	9	E	HOLL		
29	ADF	1648E	0443D	N05	E34	05	2.2	1	04	9	9	E	PALE	6605	
29	DSD	1648E	1952D	N08	E33	05	2.2		04	9	9	E	PALE	6605	
29	AFS	1648E	1952D	S05	E54	05	3.7		02	9	9	E	PALE	6611	
29	AFS	1648E	1952D	S14	E37	05	2.5		02	9	9	E	PALE	6610	
29	AFS	1654E	0137D	S13	E04	04	30.0		03	9	9	E	PALE	6613	
29	AFS	1654E	1952D	N08	W54	04	25.6		01	9	9	E	PALE	6606	
29	AFS	1654E	1952D	S23	E06	04	30.2		03	7	8	E	PALE	6604	
29	AFS	1654E	1955D	S29	W56	04	25.3		03	8	8	E	PALE		
29	SSB	1700		190	W22	05	6.6			0	0	E	PALE		226 W58
29	DSD	1700E	2043D	S30	W19	04	28.2		03	9	9	E	PALE	6612	
29	SSB	1730		230	W62	05	2.4			0	0	E	HOLL		
29	AFS	1735E	0138D	S15	E37	05	2.5		02	9	9	E	HOLL	6610	
29	AFS	1735E	0138D	S41	W01	04	29.6		03	9	9	E	HOLL	6607	
29	ADF	1745E	0138D	N05	E32	05	2.1	1	05	9	9	E	HOLL	6605	
29	DSD	1857E	0051D	S07	E52	05	3.7		02	9	9	E	HOLL	6611	Flare Associated
29	DSD	1912E	0443D	S04	E55	05	3.9		03	9	9	E	PALE	6611	
29	BSD	2000	2038D	S27	W83	04	23.4		04	9	9	E	PALE	6603	
29	ADF	2040E	0443D	S07	E53	05	3.8		06	9	9	E	PALE	6611	
29	AFS	2044E	0443D	S40	W02	04	29.7		02	7	8	E	PALE	6607	
29	AFS	2315E	0443D	S12	E34	05	2.5		02	9	9	E	PALE	6610	
29	DSD	2318E	0013D	S24	W84	04	23.5		04	9	9	E	PALE	6603	
29	AFS	2318E	0237D	N15	E07	04	30.5		03	9	9	E	PALE		
30	AFS	0055E	0818D	N06	E31	05	2.3		03	9	9	E	LEAR	6605	
30	AFS	0056E	0818D	S17	E33	05	2.5		02	9	9	E	LEAR	6610	
30	AFS	0058E	0818D	S42	W05	04	29.6		03	9	9	E	LEAR	6607	
30	BSD	0146	0443D	S27	W84	04	23.5		09	9	9	E	PALE	6603	
30	BSD	0151E	0818D	S28	W82	04	23.7		09	9	9	E	LEAR	6603	
30	DSD	0343E	0443D	S14	E30	05	2.4		03	9	9	E	PALE	6610	
30	ASR	0505E	0530D	S29	W80	04	23.9			9	9	E	SVTO	6603	
30	DSD	0628E	0930D	N06	E26	05	2.2		05	9	9	E	SVTO	6605	
30	ADF	0628E	1709D	N15	E36	05	3.0	1	19	9	9	E	SVTO	6605	
30	AFS	0641E	1443D	S14	E29	05	2.5		02	9	9	E	SVTO	6610	
30	AFS	0642E	1709D	S41	W07	04	29.7		02	9	9	E	SVTO	6607	
30	ASR	0723E	1040D	S31	W86	04	23.5			9	9	E	SVTO	6603	Flare Associated
30	ADF	0951E	1709D	N05	E22	05	2.0	1	06	9	9	E	SVTO	6605	
30	AFS	1032E	1309D	S15	E26	05	2.4		02	8	8	E	RAMY	6610	
30	ADF	1033E	2207D	N03	E23	05	2.1	1	09	9	9	E	RAMY	6605	
30	AFS	1036E	1309D	S24	W06	04	30.0		02	9	9	E	RAMY	6604	
30	AFS	1039E	1841D	S40	W11	04	29.5		02	8	8	E	RAMY	6607	
30	ADF	1040E	1151D	S27	W25	04	28.5	1	06	9	9	E	RAMY	6612	
30	DSD	1058E	1309D	S08	E42	05	3.6		02	9	9	E	RAMY	6611	
30	ASR	1106E	1709D	S30	W90	04	23.4			9	9	E	SVTO	6603	
30	DSD	1121E	1309D	S14	E70	05	5.8		02	9	9	E	RAMY		

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ACTIVE PROMINENCES AND FILAMENTS

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
30	ADF	1258E	0100D	N04	E21	05	2.1	1	03	9	9	E	HOLL	6605	
30	AFS	1304E	0137D	S14	E66	05	5.5		02	8	8	E	HOLL		
30	MDP	1306E	2321D	S30	E90	05	7.6			3	4	E	HOLL		
30	ASR	1308E	0137D	S29	W84	04	24.0			9	9	E	HOLL	6603	
30	AFS	1330E	1845D	N10	W67	04	25.5		02	9	9	E	RAMY	6606	
30	AFS	1452E	1709D	S24	W07	04	30.1		01	9	9	E	SVTO	6604	
30	ADF	1635E	0427D	N05	E21	05	2.3		05	9	9	E	PALE	6605	
30	AFS	1635E	0427D	S13	E63	05	5.4		03	9	9	E	PALE	6615	
30	DSD	1635E	0427D	S15	E21	05	2.3		03	9	9	E	PALE	6610	
30	ASR	1635E	1912D	S30	W87	04	23.8			9	9	E	PALE	6303	
30	DSD	1635E	1943D	N09	E22	05	2.3		02	9	9	E	PALE	6605	
30	SSB	1655		168	W13	05	5.8			0	0	E	PALE		232 W77
30	ADF	1900E	0427D	S24	E32	05	3.3		05	9	9	E	PALE	6608	
30	ADF	2030E	0427D	N17	W13	04	29.9		05	9	9	E	PALE		
30	DSD	2030E	0427D	S12	E67	05	5.9		03	9	9	E	PALE	6615	
30	DSD	2030E	0427D	S30	W32	04	28.3		02	9	9	E	PALE	6612	
30	ASR	2200E	0427D	S30	W88	04	24.0			9	9	E	PALE	6603	

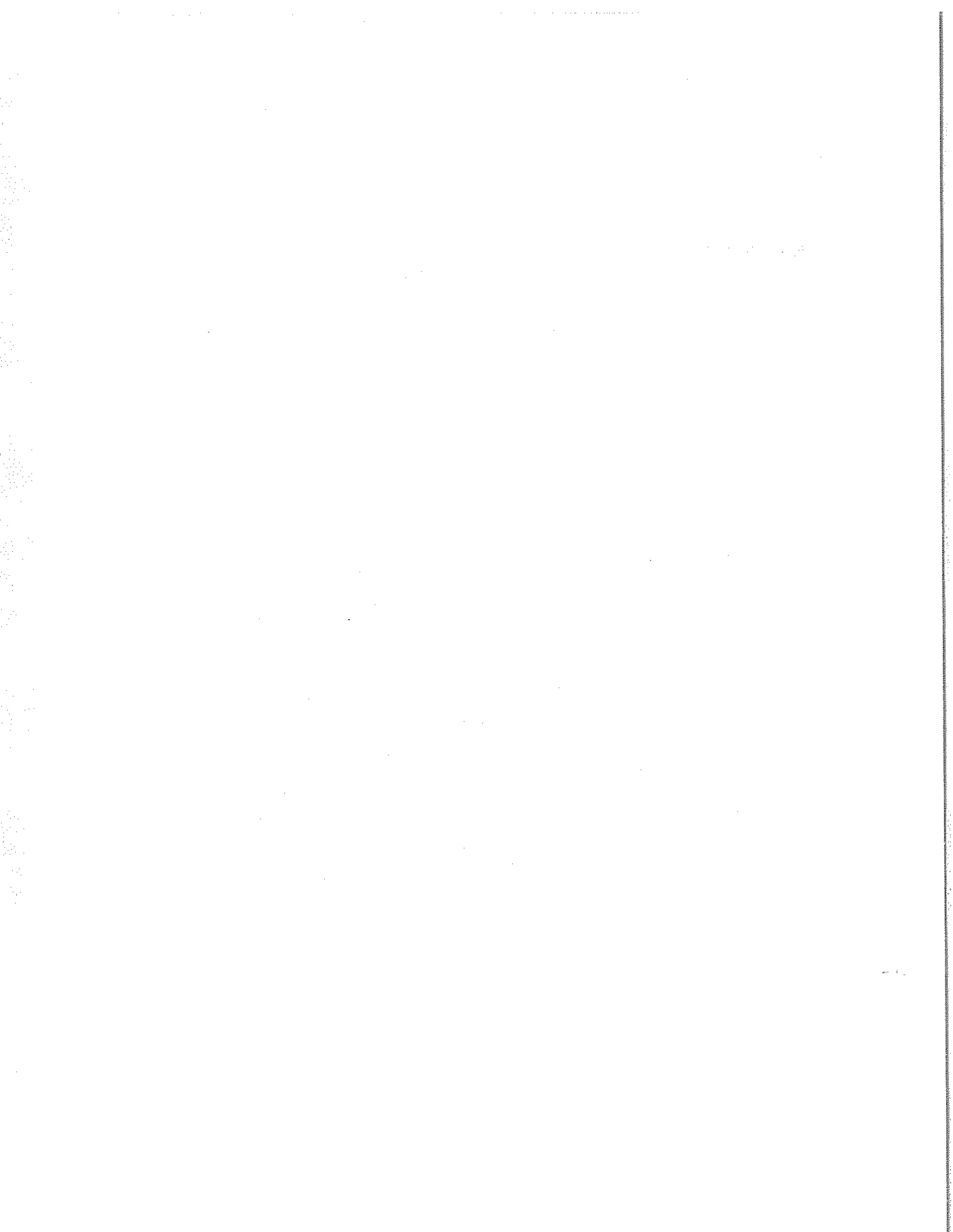
ADF = Active Dark Filament BSL = Bright Surge on Limb LPS = Loops
 AFS = Arch Filament System CAP = CAP Prominence (Tandberg-Hanssen) MDP = Mound Prominence
 APR = Active Prominence CRN = Coronal Rain SDF = Sudden Disappearing Filament
 ASR = Active Surge Region DSD = Dark Surge on Disk SPY = Spray
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

For SOLAR SECTOR BOUNDARY REPORTS, the latitude field contains the Carrington longitude of the point where a neutral line crosses the solar equator. The comments field may contain the Carrington longitude and central meridian distance of two more intersection points.

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

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

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



C O N T E N T S

Comprehensive Reports

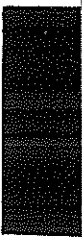
MISCELLANEOUS DATA

Number 566

Part II

Page

NOAA9 SOLAR ULTRAVIOLET DATA May 1986-December 1988 84-87



NOAA9 SBUV2 Solar Ultraviolet Data 1986-1988

EXPLANATION

The Mg II core-to-wing ratio was developed by Heath and Schlesinger (1986) for use with the solar ultraviolet measurements from the Solar Backscatter Ultraviolet (SBUV) experiment on the Nimbus-7 satellite. Mg II ratios for Nimbus-7 have been published in Solar-Geophysical Data, Comprehensive Reports, No. 542 Part II, pp. 82 - 91, Oct. 1989. The Mg II ratios presented here are derived from the discrete-wavelength mode measurements of the SBUV2 monitor aboard the NOAA9 satellite. A modified ratio has been used to reduce noise and those values have been converted to equivalent Nimbus-7 values using a linear regression relation (Donnelly, 1990, 1991). These results supersede earlier results published in Solar-Geophysical Data, No. 529 - Part II, pp. 74-75, Sept. 1988, and No. 541 - Part II, pp. 178-180.

REFERENCES

- Donnelly, R.F., Solar UV Spectral Irradiance Variations, J. Geomagnetism and Geoelectricity, 43, Suppl. Is., 8 pp., 1991.
- Donnelly, R.F., Solar UV Temporal Variations During Solar Cycle 22 & The Twentieth Century, Climate Impact of Solar Variability, NASA Conf. Publ. 3086, ed K.H. Schatten and A. Arking, NASA GSFC, Greenbelt, MD, 328-335, 1990.
- Heath, D.F., and B.M. Schlesinger, The Mg 280-nm Doublet as a Monitor of Changes in Solar Ultraviolet Irradiance, J. Geophys. Res., 91, 8672-8682, 1986.

MgII Core to Wing Ratio
1986 NIMBUS7 Equivalent Values Derived from NOAA9 Measurements

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1						0.2639	0.2634	0.2639	0.2637	0.2640	0.2664	0.2645
2						0.2636	0.2633	0.2639	0.2636	0.2642	0.2665	0.2643
3						0.2636	0.2633	0.2640	0.2635	0.2644	0.2661	0.2641
4						0.2635	0.2634	0.2641	0.2637	0.2641	0.2658	0.2641
5						0.2633	0.2634	0.2640	0.2636	0.2644	0.2656	0.2638
6						0.2634	0.2637	0.2641	0.2635	0.2643	0.2651	0.2634
7						0.2633	0.2639	0.2641	0.2637	0.2643	0.2648	0.2633
8						0.2635	0.2638	0.2642	0.2638	0.2645	0.2642	0.2634
9						0.2638	N/A	0.2637	N/A	0.2646	0.2636	0.2633
10						0.2638	0.2646	0.2638	0.2635	0.2642	0.2634	0.2636
11						0.2638	0.2646	0.2640	0.2638	0.2642	0.2632	0.2638
12						0.2641	0.2648	0.2637	0.2638	0.2640	0.2634	0.2640
13						0.2641	0.2646	0.2638	0.2635	0.2636	0.2634	0.2643
14						0.2642	0.2639	0.2638	0.2635	0.2631	0.2637	0.2644
15						0.2645	0.2649	0.2639	0.2636	0.2629	0.2640	0.2642
16						0.2649	0.2650	0.2639	0.2636	0.2631	0.2645	0.2645
17						0.2648	0.2651	0.2639	0.2632	0.2634	0.2647	0.2645
18						0.2648	0.2650	0.2636	0.2632	0.2640	0.2649	0.2647
19						0.2647	0.2651	0.2637	0.2634	0.2643	0.2651	0.2644
20						0.2646	0.2649	0.2637	0.2634	0.2645	0.2652	0.2643
21						0.2643	0.2649	0.2636	0.2633	0.2649	0.2651	0.2645
22						0.2641	0.2648	0.2635	0.2634	0.2654	0.2652	0.2645
23						0.2644	0.2645	0.2634	0.2634	0.2659	0.2653	0.2643
24						0.2640	0.2643	0.2635	0.2634	0.2663	0.2655	0.2641
25						0.2639	0.2640	0.2633	0.2633	0.2667	0.2653	0.2643
26						0.2638	0.2639	0.2634	0.2635	0.2668	0.2651	0.2643
27					0.2654	0.2634	0.2637	0.2636	0.2634	0.2668	0.2651	0.2640
28					0.2650	0.2634	N/A	0.2636	0.2633	0.2669	0.2651	0.2640
29					0.2648	0.2636	0.2639	0.2636	0.2634	0.2667	0.2648	0.2638
30					0.2644	0.2634	N/A	0.2633	0.2636	0.2667	0.2644	N/A
31					0.2642		0.2639	0.2633		0.2663		0.2634

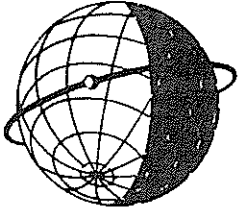
MgII Core to Wing Ratio
1987 NIMBUS7 Equivalent Values Derived from NOAA9 Measurements

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.2636	N/A	0.2641	0.2641	0.2650	0.2647	0.2651	0.2671	0.2662	0.2659	0.2683	0.2676
2	0.2635	0.2635	0.2643	0.2639	0.2649	0.2649	0.2650	0.2663	0.2660	0.2661	0.2688	0.2674
3	0.2634	0.2636	0.2641	0.2642	0.2648	0.2649	0.2652	0.2661	0.2662	0.2665	0.2688	0.2673
4	0.2636	0.2634	0.2643	0.2638	0.2649	0.2651	0.2654	0.2659	0.2664	0.2664	0.2687	0.2673
5	0.2636	0.2635	0.2642	0.2640	0.2654	0.2655	0.2652	0.2653	0.2664	0.2667	0.2686	0.2670
6	0.2637	0.2635	0.2641	0.2644	0.2660	0.2657	0.2650	0.2652	0.2664	0.2670	0.2681	N/A
7	0.2636	0.2633	0.2642	0.2645	0.2665	0.2659	0.2651	0.2652	0.2664	0.2670	0.2680	0.2668
8	0.2636	0.2635	0.2642	0.2652	0.2668	0.2662	0.2649	0.2653	0.2663	0.2669	0.2681	0.2666
9	0.2638	0.2637	0.2641	0.2656	0.2672	0.2660	0.2648*	0.2654	0.2663	0.2671	0.2680	0.2668
10	0.2635	0.2637	0.2637	0.2665	0.2675	0.2657	0.2646	N/A	0.2666	0.2672	0.2680	0.2668
11	0.2636	0.2636	0.2635	0.2668	0.2677	0.2658	N/A	0.2661	0.2670	0.2675	0.2677	0.2665
12	0.2638	0.2639	0.2636	0.2669	0.2676	0.2658	N/A	0.2661	0.2670	0.2675	0.2676	0.2662
13	0.2636	0.2640	0.2635	0.2676	0.2670	0.2660	0.2648	0.2664	0.2670	0.2677	0.2673	0.2664
14	0.2638	0.2639	0.2636	0.2678	0.2665	0.2661	0.2648	0.2670	0.2669	0.2683	0.2674	0.2670
15	0.2641	0.2643	0.2641	0.2678	0.2665	0.2662	0.2653	0.2675	0.2670	0.2688	0.2672	0.2676
16	0.2644	0.2642	0.2639	0.2675	0.2666	0.2660	0.2656	0.2679	0.2669	0.2688	0.2671	0.2682
17	0.2644	0.2640	0.2641	0.2673	0.2666	0.2661	0.2659	0.2679	0.2671	0.2684	0.2670	0.2682
18	0.2648	0.2640	0.2643	0.2668	0.2666	0.2662	0.2662	0.2681	0.2669	N/A	0.2674	0.2682
19	0.2647	0.2642	0.2644	0.2662	0.2668	0.2667	N/A	0.2679	0.2670	0.2681	0.2677	0.2680
20	0.2647	0.2640	0.2647	0.2652	0.2666	0.2665	0.2667	0.2679	0.2668	0.2678	0.2677	0.2682
21	0.2647	0.2643	0.2649	0.2649	0.2664	0.2668	0.2673	0.2680	0.2666	0.2673	0.2679	0.2681
22	0.2650	0.2642	0.2649	0.2649	0.2666	0.2667	0.2680	0.2676	0.2658	0.2665	0.2684	0.2679
23	0.2651	0.2641	0.2647	0.2647	0.2666	0.2662	0.2686	0.2674	0.2656	0.2658	0.2691	0.2677
24	0.2648	N/A	0.2648	0.2650	0.2667	0.2659	0.2691	0.2671	0.2655	0.2657	0.2692	0.2674
25	0.2643	0.2639	0.2647	0.2649	0.2664	0.2656	0.2690	0.2668	0.2654	0.2658	0.2691	0.2672
26	0.2642	0.2641	0.2646	0.2645	0.2660	N/A	0.2688	0.2665	0.2652	0.2663	0.2689	0.2675
27	0.2639	0.2643	0.2645	0.2643	0.2653	0.2654	0.2685	0.2663	0.2651	0.2669	0.2687	0.2674
28	0.2637	0.2642	0.2644	0.2643	0.2647	0.2652	N/A	0.2660	0.2649	0.2673	0.2679	0.2676
29	0.2637		0.2644	0.2644	0.2643	0.2651	0.2680	0.2659	0.2655	0.2678	0.2678	0.2679
30	0.2637		0.2642	0.2646	0.2646	0.2653	0.2679	0.2658	0.2657	0.2680	0.2676	0.2686
31	0.2638		0.2642		0.2644		0.2675	N/A		0.2682		0.2685

MgII Core to Wing Ratio
1988 NIMBUS7 Equivalent Values Derived from NOAA9 Measurements

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.2685	0.2693	0.2689	0.2717	0.2700	0.2724	0.2750	0.2768	0.2770	N/A	N/A	0.2760
2	0.2682	0.2701	0.2691	0.2713	0.2702	0.2726	0.2757	0.2763	0.2770	N/A	N/A	0.2760
3	0.2685	0.2705	0.2697	0.2708	0.2701	0.2730	0.2760	0.2756	0.2768	N/A	N/A	0.2753
4	0.2684	0.2705	0.2697	0.2702	0.2701	0.2735	0.2760	0.2747	0.2765	N/A	N/A	0.2751
5	0.2687	0.2706	0.2693	0.2695	0.2706	0.2744	0.2757	0.2737	0.2764	N/A	N/A	0.2754
6	0.2688	0.2702	0.2691	0.2684	0.2709	0.2758	0.2748	0.2734	0.2755	N/A	N/A	0.2756
7	0.2689	0.2698	0.2691	0.2685	0.2712	0.2758	0.2737	0.2738	0.2746	N/A	N/A	0.2757
8	0.2685	0.2697	0.2689	0.2695	0.2716	0.2760	0.2722	0.2742	0.2734	N/A	N/A	0.2756
9	0.2681	0.2694	0.2683	0.2708	0.2724	0.2764	0.2711	0.2745	0.2731	N/A	N/A	0.2762
10	0.2683	0.2690	0.2680	0.2720	0.2727	0.2751	0.2707	0.2741	0.2733	N/A	N/A	0.2769
11	0.2685	0.2688	0.2675	0.2727	0.2729	0.2738	0.2710	0.2741	0.2731	N/A	N/A	0.2775
12	0.2692	0.2688	0.2681	N/A	0.2723	0.2730	0.2711	0.2738	0.2733	N/A	N/A	0.2782
13	0.2697	0.2688	0.2686	0.2737	0.2717	0.2717	0.2716	0.2738	0.2731*	N/A	N/A	0.2789
14	0.2701	0.2689	0.2690	0.2736	0.2709	0.2706	0.2717	0.2735	0.2726*	N/A	0.2759	0.2802
15	0.2700	0.2694	0.2696	0.2737	0.2703	0.2705	0.2724	0.2734	0.2723*	N/A	0.2759	0.2807
16	0.2702	0.2697*	0.2697	0.2735	0.2699	0.2706	0.2723	0.2730	0.2717*	N/A	0.2762	0.2809
17	0.2702	0.2699	0.2703	0.2735	0.2692	0.2706	0.2730	0.2724	0.2720*	N/A	0.2766	0.2810
18	0.2699	0.2701	0.2701	0.2729	0.2688	0.2707	0.2733	N/A	0.2731*	N/A	0.2761	N/A
19	0.2699	0.2700	0.2706	0.2719	0.2685	0.2712	0.2736	0.2711	0.2723*	N/A	N/A	N/A
20	0.2697	0.2699	0.2702	0.2711	0.2689	0.2713	0.2726	0.2710	N/A	N/A	0.2744	0.2797
21	0.2693	0.2694	0.2705	N/A	0.2693	0.2716	0.2722	0.2711	N/A	N/A	0.2749	0.2786
22	0.2690	0.2688	0.2698	0.2708	0.2703	0.2720	0.2720	0.2712	N/A	N/A	N/A	0.2787
23	0.2686	0.2685	0.2689	0.2701	0.2709	0.2721	0.2727	0.2720	N/A	N/A	N/A	N/A
24	0.2686	0.2682	0.2690	0.2700	0.2716	0.2720	0.2733	0.2726	N/A	N/A	N/A	0.2782
25	0.2678	0.2677	0.2690	0.2697	0.2718	0.2723	0.2731	0.2742	N/A	N/A	N/A	0.2780
26	0.2678	0.2677*	0.2696	0.2698	0.2721	0.2727	0.2737	0.2751	N/A	N/A	0.2735	0.2776
27	N/A	0.2673	0.2700	0.2696	0.2724	0.2729	0.2745	0.2766	N/A	N/A	0.2737	0.2779
28	N/A	0.2679	0.2707	0.2698	0.2722	0.2736	0.2752	0.2776	N/A	N/A	0.2744	0.2778
29	0.2677	0.2687	0.2712	0.2696	0.2724	0.2742	0.2759	0.2782	N/A	N/A	0.2746	0.2778
30	0.2681		0.2715	0.2698	0.2721	0.2748	0.2766	0.2778	N/A	N/A	0.2752	0.2777
31	0.2686		0.2719		0.2725		N/A	0.2776		N/A		0.2764

*U.S. Government Printing Office: 1991 — 673-029/41001



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

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