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NUMBER 552

(Issued in Two Parts)

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C O N T E N T S

PART I (PROMPT REPORTS)

	Page
DETAILED INDEX FOR 1989-1990	2
DATA FOR JULY 1990	3- 50
DATA FOR JUNE 1990	51-137
LATE DATA.	139-144
Solar Radio Spectral Weissenau Mar 90	
Cosmic Ray Huancayo Apr-May 90	

PART II (COMPREHENSIVE REPORTS)

	Page
DETAILED INDEX FOR 1989-1990	2
DATA FOR FEBRUARY 1990	3-79

DETAILED INDEX OF OBSERVATIONS PUBLISHED IN "SOLAR-GEOPHYSICAL DATA"

CODE	KIND OF OBSERVATION	DEC 89	JAN 90	FEB	MAR	APR	MAY	JUN	JUL
A.	SOLAR AND INTERPLANETARY EVENTS								
A.1	Sunspot Drawings	546A 63	547A 59	548A 64	549A 60	550A 66	551A 60	552A 60	
A.2aa	Internat. Provisional Sunspot Numbers	545A 29	546A 29	547A 27	548A 29	549A 27	550A 29	551A 27	552A 29
A.2c	American Sunspot Numbers	545A 29	546A 29	547A 27	548A 29	549A 27	550A 29	551A 27	552A 29
A.3a	Mt. Wilson Magnetograms	546A 63	547A 59	548A 64	549A 60	550A 66	551A 60	552A 60	
A.3f	SOON Sunspot Mag Class and Regions	546A 94	547A 90	548A 92	549A 91	550A 96	551A 91	552A 90	
A.3c	Kitt Peak Magnetograms	546A 63	547A 59	548A 64	549A 60	550A 66	551A 60	552A 60	
A.3d	Mean Solar Magnetic Field (Stanford)	545A 49	546A 49	547A 45	548A 51	549A 49	550A 55	551A 50	552A 49
A.3e	Stanford Magnetograms	546A 63	547A 59	548A 64	549A 60	550A 66	551A 60	552A 60	
A.4	H-alpha Filtergrams	546A 63	547A 59	548A 64	549A 60	550A 66	551A 60	552A 60	
A.6	H-alpha Synoptic Charts	546A 52	547A 48	548A 54	549A 52	550A 58	551A 52	552A 52	
A.6b	Active Region Carte Synoptique (Paris)	Aug 89 in 548B 94; Sep-Oct 89 in 550B 86							
A.6c	Stanford Solar Mag Field Synoptic Maps	546A 54	547A 50	548A 56	549A 54	550A 60	551A 54	552A 54	
A.6d	Kitt Peak " Mag Field Synoptic Maps	548A156	547A 58	548A 55	549A 53	550A 59	551A 53	552A 53	
A.6e	Mass Ejections from the Sun	550B 73	551B 65	552B 66					
A.6f	Active Prominences and Filaments	550B 74	551B 66	552B 67					
A.6g	Sac Peak Coronal Line Synoptic Maps	546A 56	547A 52	548A 58	549A 56	550A 62	551A 56	552A 56	
A.7h	Coronal Line Emission (Sac Peak)	546A 63	547A 59	548A 64	549A 60	550A 66	551A 60	552A 60	
A.8aa	2800 MHz - Solar Flux (Ottawa)	545A 29	546A 29	547A 27	548A 29	549A 27	550A 29	551A 27	552A 29
A.8ac	2800 MHz - Adj. Solar Flux (Ottawa)	545A 29	546A 29	547A 27	548A 29	549A 27	550A 29	551A 27	552A 29
A.8g	Adjusted Daily Solar Fluxes (Sagamore)	545A 29	546A 29	547A 27	548A 29	549A 27	550A 29	551A 27	552A 29
A.10a	Interferometric Chart (164 MHz) Nancay	---	547A146	548A150	549A144	549A 45	550A 49	551A 44	552A 46
A.10c	East-West Scans - 21 cm - Fleurs	545A 44	547A144	547A 40	---	549A 43	550A 47	551A 42	552A 44
A.10d	East-West Scans - 43 cm - Fleurs	545A 45	547A145	547A 41	---	549A 44	550A 48	551A 43	552A 45
A.10e	East-West Scans - 10 cm - Ottawa	545A 43	546A 43	547A 39	548A 45	549A 42	550A 46	551A 41	552A 43
A.11g	Solar X-ray GOES (graphs/event table)	550B 64	551B 56	552B 58					
A.11k	Solar UV NOAA-9	May 86-Dec 87 in 541B178							
A.11l	Solar UV NIMBUS7	Nov 78-Oct 84 in 542B 82							
A.12e	Solar Particles (IMP H & J)	Jul 86-Aug 87 in 539B112; Sep 87-Mar 88 & May-Nov 88 in 546B124							
A.13e	Solar Plasma (IMP H & J)	550B 63	551B 55	552B 57					
A.13f	Solar Wind (Pioneer 12)	Jan-Dec 88 in 536A153; Jan-Dec 89 in 549A148							
A.16a	SMM Solar Irradiance	Feb 80-Oct 87 in 530B 64							
A.16b	NIMBUS Solar Irradiance	Nov 78-Jul 89 in 534B114							
A.16c	ERBS, NOAA-9&-10 Solar Irradiance	1984-88 in 538B101; 1989 in 551B 78							
A.17	Interplanetary Mag Field (Pioneer 12)	Jan-Jun 88 in 533A130; Jul 88 in 536A152							
A.17c	Inferred Interplanetary Mag Field	1984-1988 data in 542A168; 1989 in 548A154							
C.	SOLAR FLARE-ASSOCIATED EVENTS								
C.1a	H-alpha Flares	545A 32	546A 33	547A 30	548A 32	549A 31	550A 32	551A 30	552A 32
C.1ba	H-alpha Flare Groups	550B 4	551B 4	552B 4					
C.1d	Flare Patrol Observations	545A 42	546A 42	547A 38	548A 44	549A 41	550A 45	551A 40	552A 42
C.1d	Flare Patrol Observations	550B 27	551B 29	552B 24					
C.3	Radio Bursts Fixed Freq.	550B 29	551B 31	552B 26					
C.3	Radio Bursts Fixed Freq. Selected	545A 46	546A 47	547A 43	548A 47	549A 46	550A 50	551A 45	552A 47
C.4d	Radio Bursts Spectral (Culgoora)	Dec 88 in 534A129	548A117				551A118	552A116	
C.4e	Radio Bursts Spectral (Weissenau)	546A130	547A123	548A117	552A140	550A123	551A118	552A116	
C.4f	Radio Bursts Spectral (Sagamore Hill)	546A130	547A123	548A117	549A123	550A123	551A118	552A116	
C.4i	Radio Bursts Spectral (Bleien)	---	---	---	549A123	550A123	551A118		
C.4k	Radio Bursts Spectral (Learmonth)	546A130	547A123	548A117	549A123	550A123	551A118	552A116	
C.4l	Radio Bursts Spectral (Palehua)	546A130	547A123	548A117	549A123	550A123	551A118	552A116	
C.4m	Radio Bursts Spectral (Ondrejov)	---	547A123	548A117	549A123	550A123	551A118		
C.4n	Radio Bursts Spectral (Potsdam)	---	---	---	---	---	551A118	552A116	
C.4o	Radio Bursts Spectral (San Vito)	546A130	547A123	548A117	549A123	550A123	551A118	552A116	
C.6	Sudden Ionospheric Disturbances	546A124	547A118	548A113	549A117	550A119	551A113	552A112	
D.	GEOMAGNETIC & MAGNETOSPHERIC EVENTS								
D.1a	Geomagnetic Indices	546A146	547A137	549A145	549A137	550A140	551A138	552A133	
D.1ba	27-day Chart of Kp Indices	546A148	547A139	548A145	549A139	550A142	551A140	552A135	
D.1cb	Monthly Mean aa Indices	546A149	547A140	548A146	549A140	550A143			
D.1d	Principal Magnetic Storms	546A151	547A141	548A147	549A141	550A144	551A142	552A137	
D.1f	Sudden Commencements/Flare Effects	549A146	549A147	551A144	551A145	551A146			
D.1g	Equatorial Indices Dst	Aug-Dec 87 in 534A163; Mar-Apr 88 in 541A146							
F	COSMIC RAYS								
F.1a	Cosmic Ray Neutron Cts (Deep River)	546A141	547A136	548A142	549A131	550A135	551A133	552A132	
F.1b	Cosmic Ray Neutron Cts (Climax)		548A151		549A131	550A135		552A132	
F.1h	Cosmic Ray Neutron Cts (Thule)	546A141	547A136	548A142	549A131	550A135	551A133	552A132	
F.1i	Cosmic Ray Neutron Cts (Kiel)	546A141	547A136	548A142	549A131	550A135	551A133	552A132	
F.1j	Cosmic Ray Neutron Cts (Tokyo)	546A141	547A136	548A142	549A131	550A135	551A133	552A132	
F.1l	Cosmic Ray Neutron Cts (Huancayo)		548A151			552A142	552A143		
H.	MISCELLANEOUS								
H.60	IUWDS Alert Periods	545A 20	546A 20	547A 18	548A 20	549A 19	550A 20	551A 19	552A 20

The entry "546A 63" under Dec 1989, for example, means that the sunspot drawings for Dec 1989 appear in SOLAR-GEOPHYSICAL DATA No. 546, Part I, and that they begin on page 63. "A" denotes Part I and "B", Part II. Blanks indicate data not yet received and dashes mark unavailable data.

C O N T E N T S

Comprehensive Reports DATA FOR **FEBRUARY 1990** Number 552 Part II

MEUDON CARTE SYNOPTIQUE (Unavailable at time of publication.) Page
Active Regions and Filaments
Synoptic Solar Maps

SOLAR FLARES
H-alpha Solar Flare Groups. 4-23
Intervals of No Flare Patrol Observation. 24
Number of Solar Flares August 1966-present. 25

SOLAR RADIO BURSTS AT FIXED FREQUENCIES. 26-55
Data received late: Selected Graphs of Solar Radio Bursts. 56

INTERPLANETARY SOLAR PARTICLES AND PLASMA
IMP 8 Solar Wind. 57

SOLAR X-RAY RADIATION FROM GOES SATELLITE Graphs 58-62
Preliminary Event List. 63-64
Preliminary Daily Average Background. 65

MASS EJECTIONS FROM THE SUN. 66

ACTIVE PROMINENCES AND FILAMENTS 67-79

SOLAR IRRADIANCE (Data unavailable at time of publication.)

Hα SOLAR FLARES

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0001		01	01573	02061	0222	S17	W78		01	26.2	25	SF	C 5.4				92		EFHI
	VORO	01	0157	0207	0222	S16	W80		01	26.1	25	1F		1	C	0207	179		EIH
	PALE	01	0200	0206	0227	S18	W77		01	26.3	27	SF	C 5.4	3	E		53		F
	LEAR	01	0205E	0205U	0218	S16	W77		01	26.3	13D	SF		2	E		44		F
0002		01	0603	06035	0615	N11	W71	5906	01	27.0	12	SN					35		D
	LEAR	01	0603	0603	0618	N11	W71	5906	01	27.0	15	SF		3	E		24		
	PEKG	01	0604E	0604U	0614	N10	W72	5906	01	26.9	10D	SB			P		42		D
	YUNN	01	0604E	0608	0612	N11	W71	5906	01	27.0	8D	SN			P		39		
0003		01	0625	06281	0641	N14	W24	5913	01	30.5	16	SN					36	0.6	EF
	LEAR	01	0625	0628	0640	N14	W23	5913	01	30.6	15	SF		3	E		26		F
	YUNN	01	0625	0629	0642	N14	W25	5913	01	30.5	17	SN			C		47	0.6	E
0004	LEAR	01	0632	0633	0638	N12	W70	5906	01	27.1	6	SF		3	E		30		F
0005	LEAR	01	0702	0703	0711	N12	W69	5906	01	27.2	9	SF	C 2.4	3	E		41		
0006	YUNN	01	0801	0806	0840	S16	W39	5908	01	29.5	39	SN			C		31	0.4	
		01	0859		0918	No Flare Patrol													
0007	LEAR	01	0949	0950	0959	N11	W71	5906	01	27.2	10	SF		3	E		27		
		01	1106		1133	No Flare Patrol													
		01	1207		1216	No Flare Patrol													
0008	RAMY	01	1322	1329	1353	N09	W29	5904	01	30.5	31	SF	C 2.0	3	E		50		FH
0009	HOLL	01	1606	1608	1655D	N15	W18	5913	01	31.3	49D	SF		3	E		17		
0010		01	2029	2036	2106	N28	W12	5911	01	31.9	37	1N	C 4.0				130		FH
	RAMY	01	2029	2036	2113	N27	W12	5911	01	31.9	44	1N	C 4.0	3	E		149		FH
	PALE	01	2037E	2037U	2059	N28	W12	5911	01	31.9	22D	1F		3	E		111		F
0011	RAMY	01	2033	2033	2038	N11	W76	5906	01	27.2	5	SF		3	E		13		
0012		02	0125	01179	0121	S09	W65	5900	01	28.3	1436	SF					40	0.9	DI
	VORO	02	0113E	0117	0121	S09	W65	5900	01	28.3	8D	SF		1	C	0117	27	0.6	DI
	VORO	02	0125	0126	0130D	S09	W65	5900	01	28.3	5D	SF		1	C	0126	54	1.2	DI
0013	LEAR	02	0255	0255	0301	S12	W59	5917	01	28.8	6	SF		3	E		39		
0014	LEAR	02	0305	0307	0312	N15	E15	5920	02	3.3	7	SF		3	E		13		
0015	LEAR	02	0354	0356	0359	S10	W66	5900	01	28.3	5	SF	C 2.4	3	E		33		
0016	LEAR	02	0818	0823	0856	N15	E11	5920	02	3.2	38	SF		3	E		16		F
0017	LEAR	02	0907	0909	0916	N15	E12	5920	02	3.3	9	SF		3	E		10		
0018	LEAR	02	0915	0915	0920	N27	W68	5909	01	28.2	5	SF		3	E		13		
		02	1059		1122	No Flare Patrol													
0019	SVTO	02	1202	1210	1225	N05	E08	5919	02	3.1	23	SF		3	E		31		
		02	1338		1357	No Flare Patrol													
		02	1433		1449	No Flare Patrol													
		02	1457		1502	No Flare Patrol													
		02	1533		1547	No Flare Patrol													
		02	1700		1719	No Flare Patrol													
0020		02	19351	1938	1942	S10	W79	5900	01	28.0	7	SF	C 4.4				39		
	RAMY	02	1935	1938	1942	S09	W79	5900	01	28.0	7	SF	C 4.4	3	E		49		
	HOLL	02	1936	1938U	1941	S11	W79	5900	01	28.0	5	SF		3	E		29		

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0021		03	01082	01094	0123	S12	W79	5917	01	28.2	15	1N	M 6.9				162		DE
	LEAR	03	0108	0109	0123	S13	W80	5917	01	28.1	15	1N	M 6.9	3	E		180		E
	PALE	03	0109	0109	0124	S13	W81	5917	01	28.0	15	2F	M 6.9	3	E		257		
	PEKG	03	0110	0113	0120	S10	W77	5917	01	28.4	10	1N			P		92		D
	MITK	03	0117E		0126	S10	W78	5917	01	28.3	9D	1F			C	0119	120		
0022	MITK	03	0226	0237	0253	S14	E43		02	6.3	27	1N			C	0237	210	3.0	E
0023	LEAR	03	0643	0647	0730	N16	W51	5913	01	30.5	47	SF	C 4.1	4	E		65		F
0024	LEAR	03	0653	0705	0726	N07	E03	5919	02	3.5	33	SF		4	E		17		F
0025	HTPR	03	0927	0927	0933	S10	W80	5917	01	28.5	6	SN			C				AD
		03	1103		1142	No Flare Patrol													
0026	RAMY	03	1221	1222	1224	N27	W74	5909	01	28.8	3	SF		3	E		12		
		03	1233		1240	No Flare Patrol													
0027	RAMY	03	1316	1319	1323	N05	W06	5919	02	3.1	7	SF	C 1.7	3	E		55		H
0028	RAMY	03	1341	1346	1356	N13	W55	5913	01	30.5	15	SF		3	E		15		
0029	RAMY	03	1715	1729	1732	N13	W56	5913	01	30.6	17	SF		3	E		12		
0030	HOLL	03	1751	1802	1810	N06	W03	5919	02	3.5	19	SF		3	E		20		
0031		03	18206	18233	1826	N14	W56	5913	01	30.6	6	SF	C 3.0				18		
	HOLL	03	1820	1823	1826	N14	W57	5913	01	30.5	6	SF	C 3.0	4	E		21		
	RAMY	03	1826	1826	1855D	N13	W56	5913	01	30.6	29D	SF		3	E		14		
0032	HOLL	03	1927	1929	1950	N14	W57	5913	01	30.6	23	SF	C 3.2	4	E		14		
0033	RAMY	03	1950	1951	2002	N15	W09	5920	02	3.1	12	SF		3	E		16		
0034	HOLL	03	2216	2224	2236	N07	W69	5923	01	29.8	20	SF		4	E		13		
0035	HOLL	03	2300	2301	2312	N06	W07	5919	02	3.4	12	SF	C 1.5	4	E		14		F
0036	LEAR	04	0409	0423	0432	N08	W75	5923	01	29.6	23	SF		3	E		20		
0037		04	1215*	1232*	1430	N14	W20	5920	02	3.0	135	SF	C 3.0				40		F
	RAMY	04	1215	1232	1431	N14	W19	5920	02	3.1	136	SF	C 3.0	3	E		40		F
	KANZ	04	1311	1323	1430	N14	W21	5920	02	3.0	79	SF			V				
0038	RAMY	04	1537	1544	1601	N14	W19	5920	02	3.2	24	SF		3	E		28		F
0039	HOLL	04	1605	1610	1624	N13	W20	5920	02	3.2	19	SF		4	E		12		F
0040		04	1650	16551	1703	N08	W79	5923	01	29.9	13	SF					38		
	HOLL	04	1650	1655	1702	N09	W77	5923	01	30.0	12	SF		4	E		37		
	RAMY	04	1650	1656	1704	N08	W81	5923	01	29.7	14	SF		3	E		38		
0041	HOLL	04	1724	1725	1746	N13	W21	5920	02	3.1	22	SF		4	E		18		F
0042		04	1850*	18546	1905	N14	W22	5920	02	3.1	15	SF					14		F
	RAMY	04	1850	1854	1915	N14	W21	5920	02	3.2	25	SF		3	E		18		F
	HOLL	04	1851	1854	1857	N14	W22	5920	02	3.1	6	SF		3	E		11		F
	HOLL	04	1900	1900	1904	N14	W22	5920	02	3.1	4	SF		3	E		12		F
0043	RAMY	04	1917	1925	1930	N14	W22	5920	02	3.1	13	SF		3	E		16		
0044		04	1938	1945	1952	N12	W24	5920	02	3.0	14	SF	C 2.1				20		F
	HOLL	04	1938	1945	1948	N12	W24	5920	02	3.0	10	SF	C 2.1	3	E		20		F
	RAMY	04	1938	1945	1955	N12	W24	5920	02	3.0	17	SF	C 2.1	3	E		19		F
0045	LEAR	05	0049	0049	0053	N14	W72	5913	01	30.7	4	SF		3	E		15		

Hα S O L A R F L A R E S

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp	Opt	Xray	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0046	LEAR	05	0733	0733	0739	N13	W29	5920	02	3.1	6	SF			3	E		15		
0047	LEAR	05	0750	0757	0822	N14	W29	5920	02	3.1	32	SF	C	1.3	3	E		33		
0048		05	14351	14391	1454	N16	W83	5913	01	30.4	19	SF	C	3.3				21		
	RAMY	05	1435	1439	1451	N18	W89	5913	01	29.9	16	SF	C	3.3	3	E		21		
	KANZ	05	1436	1440	1456	N14	W77	5913	01	30.9	20	SF				V				
0049	KANZ	05	1452	1452	1503	N15	W13	5919	02	4.6	11	SF				V				
0050	HOLL	05	1557	1557	1601	N14	W84	5913	01	30.4	4	SF	C	2.6	3	E		25		
0051	HOLL	05	1659	1710	1728	N14	W87	5913	01	30.2	29	SF	C	9.7	3	E		32		
0052	HOLL	05	1749	1755	1801	N14	W88	5913	01	30.2	12	SF			3	E		63		F
0053	HOLL	05	1812	1814	1823	N14	W87	5913	01	30.3	11	SF			3	E		13		
0054	HOLL	05	1948	1949	1957	S24	W09	5921	02	5.1	9	SF			3	E		25		
0055	HOLL	05	2113	2118	2123	N15	W88	5913	01	30.3	10	SF	C	3.8	3	E		31		
0056	HOLL	05	2211	2212	2222	S25	W10	5921	02	5.1	11	SF			3	E		18		F
0057	HOLL	05	2252	2253	2257	N16	W88	5913	01	30.4	5	SF	C	1.9	3	E		20		
0058	HOLL	05	2314	2318	2328	N13	W38	5920	02	3.1	14	SF			3	E		23		
0059	LEAR	06	0530	0531	0539	N13	W41	5920	02	3.1	9	SF			3	E		16		F
0060	ABST	06	0658	0703	0719	N14	W90	5913	01	30.6	21	1F				C	0703	87		D
0061		06	07002	07014	0714	N12	W42	5920	02	3.1	14	1N	C	5.4				129	3.2	EF
	LEAR	06	0700	0701	0714	N14	W42	5920	02	3.1	14	SF	C	5.4	3	E		40		F
	ABST	06	0702	0705	0713	N11	W43	5920	02	3.0	11	1N				C	0705	218	3.2	E
0062	HTPR	06	0811	0817	0830	N14	W90	5913	01	30.6	19	SN				C				
0063		06	09013	0904	0911	N13	W85	5913	01	31.0	10	SF	C	2.7				200		
	HTPR	06	0901	0904	0915	N14	W90	5913	01	30.7	14	SN				C				
	KANZ	06	0904	0904	0907	N12	W77	5913	01	31.6	3	SF				V				
	SVTO	06	0908E	0908U	0925D	N13	W88	5913	01	30.8	17D	1F	C	2.7	3	E		200		
0064	HTPR	06	0956		1008	N14	W90	5913	01	30.7	12	SF				C				
0065		06	1105*	1106*	1152	N34	W34	5920A	02	3.7	47	1F						212	5.6	FGI
	HTPR	06	1105		1230	N35	W35	5920A	02	3.7	85	2F				C	1125	360	5.6	FGI
	KANZ	06	1106	1106	1110	N36	W32	5920A	02	3.9	4	SF				V				
	KANZ	06	1114	1126	1157	N34	W34	5920A	02	3.7	43	1F				V				F
	RAMY	06	1137	1137	1152	N30	W34	5920A	02	3.8	15	SF			2	E		64		
0066	SVTO	06	1122E	1124U	1251D	N24	W54	5914	02	2.3	89D	SF	C	2.8	3	E		49		F
0067	SVTO	06	1230E	1230U	1352D	N06	W38	5919	02	3.7	82D	SF			3	E		43		F
0068		06	14071	14111	1428	N14	W47	5920	02	3.0	21	SF						26		
	RAMY	06	1407	1411	1426	N14	W47	5920	02	3.0	19	SF			3	E		26		
	KANZ	06	1408	1412	1429	N13	W47	5920	02	3.0	21	SF				V				
0069	HOLL	06	1451	1452	1501	N13	W47	5920	02	3.1	10	SF			3	E		17		F
0070		06	15312	15371	1558	N08	W42	5919	02	3.5	27	SF						20		F
	HOLL	06	1531	1538	1605	N08	W41	5919	02	3.6	34	SF			3	E		27		F
	RAMY	06	1533	1537	1550	N08	W42	5919	02	3.5	17	SF			3	E		13		
0071	HOLL	06	2226	2226	2241	N07	W48	5919	02	3.3	15	SF			3	E		15		F
0072	LEAR	07	0124E	0125U	0134D	N09	W50	5919	02	3.3	10D	SF	C	1.9	2	E		20		
		07	0302		0304	No Flare Patrol														

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP	Mo	Day	Dur (Min)	Opt	Imp Xray	See	Obs Type	Area Measurement Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
		07	0424		0501	No Flare Patrol														
0073	KANZ	07	1308	1312	1328	N12	W60	5920		02	3.0	20	1N			V				
0074		07	15086	15142	1542	N13	W58	5920		02	3.2	34	SF					25		FH
	HOLL	07	1508	1516	1542	N13	W58	5920		02	3.2	34	SF		4	E		25		FH
	KANZ	07	1514	1514	1522D	N13	W57	5920		02	3.3	8D	SF			V				
0075	HOLL	07	1549	1551	1556	N14	W59	5920		02	3.2	7	SF		4	E		14		H
		07	2214		2245	No Flare Patrol														
0076	HOLL	07	2255	2255	2302	N14	W64	5920		02	3.1	7	SF	C 1.9	3	E		19		
0077	HTPR	08	0951	1005	1115	S13	E90	5931		02	15.2	84	SF			C				
0078	SVTO	08	1038	1044	1107D	S19	W58	5925		02	4.0	29D	SF	C 1.0	2	E		35		F
0079		08	11301	1135	1149	N14	W73	5920		02	3.0	19	SF							
	HTPR	08	1130	1135	1149	N15	W72	5920		02	3.0	19	SF			C				
	KANZ	08	1131	1135	1139D	N14	W74	5920		02	2.9	8D	SF			V				
0080	SVTO	08	1354	1359	1410	N30	E66	5929		02	13.8	16	1F		3	E		101		
0081		08	13571	14011	1414	S20	W56	5925		02	4.3	17	SN	C 1.2				52	1.3	F
	HTPR	08	1357	1402	1415	S20	W54	5925		02	4.4	18	SN			C	1402	70	1.3	
	SVTO	08	1358	1401	1413	S20	W57	5925		02	4.2	15	SF	C 1.2	3	E		35		F
0082	HTPR	08	1450		1512D	S13	E90	5931		02	15.4	22D	SN			C				
		08	1551		1742	No Flare Patrol														
		08	1754		2004	No Flare Patrol														
		08	2051		2107	No Flare Patrol														
0083	RAMY	08	2109E	2113U	2121	S20	W63	5925		02	4.1	12D	SF		2	E		29		F
0084	PALE	08	2129	2135	2149D	S21	W63	5925		02	4.1	20D	SF	C 7.5	3	E		64		F
		08	2301		2308	No Flare Patrol														
0085		09	0018	0019	0028	S20	W68	5925		02	3.8	10	SF	C 7.2				53		F
	LEAR	09	0018	0019	0028	S19	W69	5925		02	3.7	10	SF		3	E		78		F
	PALE	09	0020E	0023U	0030D	S22	W68	5925		02	3.8	10D	SF	C 7.2	2	E		28		
0086	YUNN	09	0154	0156	0200	S10	E89	5931		02	15.8	6				C				A
0087	YUNN	09	0734	0737	0828D	S27	E26	5926		02	11.3	54D	SN			P		24	0.3	
0088	HTPR	09	0940	0945	1000	N35	E58	5929		02	14.0	20	SF			C	0945	160		
0089	HTPR	09	1000	1010	1020	S20	W70	5925		02	4.1	20	SF			C	1010	50		
0090		09	1135	11406	1215	S28	E27	5926		02	11.6	40	1N					230	2.8	
	HTPR	09	1135	1140	1215	S28	E28	5926		02	11.7	40	1N			C	1140	230	2.8	
	KANZ	09	1138E	1146	1154D	S28	E26	5926		02	11.5	16D	SF			C				
0091	HTPR	09	1455	1520	1545	N32	W80			02	3.3	50	SF			C	1520	10		K
0092	HTPR	09	1524	1524	1526	S20	W70	5925		02	4.3	2	SF			C	1524	20		D
		09	1617		1652	No Flare Patrol														
0093	HOLL	09	1740	1747	1755	S21	W72	5925		02	4.2	15	SF		3	E		21		
0094	HOLL	10	0013	0015	0022	N02	E46	5932		02	13.4	9	SF		3	E		15		F
0095	YUNN	10	0123	0132	0150	N10	W89	5919		02	3.4	27				C				A
		10	0331		0342	No Flare Patrol														
		10	0353		0436	No Flare Patrol														

Hα SOLAR FLARES

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp	Opt	Xray	Obs See	Type	Time (UT)	Area Measurement Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
0096	KANZ	10	1109	1109	1120	N26	E34	5928	02	13.1	11	SF				V				
0097		10	16321	16341	1642	N26	E30	5928	02	13.0	10	SF						41		F
	RAMY	10	1632	1634	1640	N26	E30	5928	02	13.0	8	SF			3	E		35		F
	HOLL	10	1633	1635	1644	N26	E29	5928	02	12.9	11	SF			3	E		47		
0098	HOLL	10	1742	1742	1747	S12	E63	5931	02	15.5	5	SF			3	E		12		
0099	HOLL	10	2027	2030	2043	N21	E45	5927	02	14.3	16	SF			3	E		12		F
0100	HOLL	10	2210	2211	2216	N15	E41	5927	02	14.0	6	SF			3	E		18		
		11	0036		0229	No Flare Patrol														
0101		11	0112	0118	0121	N18	E36	5927	02	13.8	9	SF						24		
	LEAR	11	0112	0118	0121	N17	E36	5927	02	13.8	9	SF			3	E		25		
	PALE	11	0114E	0117U	0121D	N20	E35	5927	02	13.7	7D	SF			3	E		24		
		11	0422		0427	No Flare Patrol														
0102	SVTO	11	0931	0933	0940	N18	E30	5927	02	13.7	9	SF	B	6.8	3	E		42		
0103	SVTO	11	1138	1140	1146	N21	E29	5927	02	13.7	8	SF	B	7.6	3	E		13		
0104	RAMY	11	1155	1159	1203	N19	E37	5927	02	14.3	8	SF			3	E		43		
0105		11	15282	15295	1543	N11	E04	5930	02	11.9	15	SF						14		
	HOLL	11	1528	1529	1543	N11	E04	5930	02	11.9	15	SF			3	E		18		
	RAMY	11	1530	1534	1543	N11	E04	5930	02	11.9	13	SF			3	E		11		
0106	HOLL	11	1607	1608	1614	N11	E04	5930	02	12.0	7	SF			3	E		17		
0107		11	18272	18272	1839	N20	E27	5927	02	13.8	12	SN	C	1.8				62		EF
	HOLL	11	1827	1827	1842	N18	E28	5927	02	13.9	15	SN	C	1.8	3	E		94		FE
	PALE	11	1829	1829	1836	N21	E26	5927	02	13.8	7	SF			3	E		29		F
		11	2059		2101	No Flare Patrol														
		11	2125		2131	No Flare Patrol														
		12	0026		0041	No Flare Patrol														
		12	0056		0059	No Flare Patrol														
0108		12	0213	0213	0228	N12	W04	5930	02	11.8	15	SN						46	0.9	F
	YUNN	12	0209E	0211U	0227D	N12	W04	5930	02	11.8	18D	SN				P	0211	79	0.9	
	PALE	12	0213	0213	0228	N11	W03	5930	02	11.9	15	SF			3	E		12		F
		12	0513		0523	No Flare Patrol														
		12	0634		0645	No Flare Patrol														
		12	0652		0707	No Flare Patrol														
0109	ABST	12	0709	0717	0722	N15	E18	5927	02	13.7	13	SN				C	0717	87	1.0	D
		12	0807		0819	No Flare Patrol														
0110		12	0840	0851	0934	N20	E17	5927	02	13.7	54	SN						107	1.3	DH
	BUCA	12	0840	0851	0930	N19	E18	5927	02	13.7	50	SN				C	0851	107	1.3	D
	KHAR	12	0930E	0932E	0937	N22	E16	5927	02	13.6	7D	SF			2	V	0932			DH
		12	1021		1024	No Flare Patrol														
0111		12	1111	1115	1130	N20	E17	5927	02	13.8	19	SN						20		DHR
	KHAR	12	1111	1115	1130	N22	E16	5927	02	13.7	19	SN			2	P	1115			DR
	RAMY	12	1128E		1155D	N18	E18	5927	02	13.8	27D	SF			2	E		20		H
		12	1138		1150	No Flare Patrol														
0112	RAMY	12	1422	1422	1427	N19	E17	5927	02	13.9	5	SF			3	E		25		
0113	HOLL	12	1528	1531	1540	N19	E16	5927	02	13.9	12	SF	B	8.2	3	E		21		F

FEBRUARY 1990

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 Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
0114	HOLL	12	1538	1546	1612	N10	W11	5930	02	11.8	34	SF	B	8.7	3	E		39		F
		12	1626		1635	No Flare Patrol														
0115	RAMY	12	1642E	1644U	1658	N19	E14	5927	02	13.8	16D	SF			3	E		23		H
0116		12	17046	1712*	1757	N19	E14	5927	02	13.8	53	SN	C	3.4				58		FK
	RAMY	12	1704	1712	1802	N19	E14	5927	02	13.8	58	SF				E		57		K
	RAMY	12	1704	1725	1802	N19	E14	5927	02	13.8	58	SN			3	E		62		
	PALE	12	1710E	1721	1748	N18	E15	5927	02	13.8	38D	SN			3	E		52		F
	HOLL	12	1710	1723	1813D	N20	E14	5927	02	13.8	63D	SN	C	3.4	3	E		60		F
0117		12	17305	17413	1816	N10	W12	5930	02	11.8	46	SN	C	3.0				44		FH
	RAMY	12	1730	1744	1827	N10	W13	5930	02	11.7	57	SN	C	3.0	3	E		64		F
	PALE	12	1735	1741	1804	N10	W12	5930	02	11.8	29	SN			3	E		23		FH
0118		13	0045	0045*	0120	N21	E09	5927	02	13.7	35	SN	C	1.9				74	0.7	EF
	PALE	13	0045	0045	0112	N21	E08	5927	02	13.6	27	SN	C	1.9	3	E		84		FE
	YUNN	13	0103E	0104	0127	N21	E10	5927	02	13.8	24D	SN				P		63	0.7	
		13	0534		0554	No Flare Patrol														
		13	0600		0647	No Flare Patrol														
0119	SVTO	13	0654	0659	0704	N11	W20	5930	02	11.8	10	SF			3	E		26		
		13	0916		1020	No Flare Patrol														
		13	1025		1131	No Flare Patrol														
		13	1146		1203	No Flare Patrol														
		13	1239		1258	No Flare Patrol														
		13	1302		1314	No Flare Patrol														
0120	RAMY	13	1349	1349	1403	N17	E05	5927	02	13.9	14	SF	B	7.5	3	E		13		
0121	RAMY	13	1513	1514	1522	N13	E00	5927	02	13.6	9	SF			3	E		16		
0122	RAMY	13	1513	1529	1535	N11	W26	5930	02	11.7	22	SF	C	1.0	3	E		33		
0123		13	1741	17402	1752	N11	W26	5930	02	11.8	11	SF	C	1.7				30		FH
	PALE	13	1739E	1740	1750	N11	W24	5930	02	11.9	11D	SF	C	1.7	3	E		40		FH
	RAMY	13	1741	1742	1753	N11	W27	5930	02	11.7	12	SF	C	1.7	3	E		20		F
0124	PALE	13	1929	1931	1955D	N27	W12	5929	02	12.9	26D	SF	C	1.2	3	E		14		F
		13	2117		2119	No Flare Patrol														
0125	VORO	14	0200	0204	0207	N37	W02	5929	02	13.9	7	SF			2	C	0204	81	1.1	EJ
		14	0424		0427	No Flare Patrol														
		14	0435		0448	No Flare Patrol														
		14	0601		0624	No Flare Patrol														
0126		14	0654	06551	0706	N20	W07	5927	02	13.7	12	SF	C	1.2				61	1.2	E
	ABST	14	0653E	0656	0714	N20	W06	5927	02	13.8	21D	SF				P	0656	105	1.2	E
	SVTO	14	0654	0655	0659	N21	W08	5927	02	13.7	5	SF	C	1.2	3	E		17		
		14	1241		1248	No Flare Patrol														
0127	SVTO	14	1250E	1253U	1254D	N12	W39	5930	02	11.6	4D	SF	C	5.5	2	E		32		F
		14	1256		1435	No Flare Patrol														
0128	RAMY	14	1457E	1457U	1505D	S27	W45	5926	02	11.1	8D	SF			2	E		14		
		14	1707		1717	No Flare Patrol														
0129		14	1737*	1743*	1811	N11	W40	5930	02	11.7	34	SN	C	6.4				75		F
	PALE	14	1737	1743	1756	N09	W41	5930	02	11.6	19	1F	C	6.4	3	E		111		F
	HOLL	14	1743E	1745U	1751D	N12	W40	5930	02	11.7	8D	SB			1	E		77		F
	RAMY	14	1755E	1755U	1817	N12	W40	5930	02	11.7	22D	SF			2	E		92		F
	PALE	14	1808	1811	1819	N10	W41	5930	02	11.7	11	SF			3	E		20		F

Hα SOLAR FLARES

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp	Opt	Xray	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0130	RAMY	14	2023	2042	2048	N10	E42		02	18.0	25	SF			3	E		33		
0131		14	23011	23033	2314	N11	W43	5930	02	11.7	13	SF	C	2.2				16		F
	PALE	14	2301	2303	2315	N10	W44	5930	02	11.6	14	SF	C	2.2	3	E		16		F
	LEAR	14	2302	2306	2313	N12	W42	5930	02	11.8	11	SF			3	E		15		F
		15	0124		0129	No Flare Patrol														
0132	SVTO	15	1119	1121	1144D	N34	W06	5929	02	15.0	25D	1N	C	1.5	3	E		110		
0133		15	12092	1228	1237	N13	W49	5930	02	11.8	28	SF						26		
	SVTO	15	1209	1228	1236	N13	W50	5930	02	11.7	27	SF			3	E		24		
	RAMY	15	1211	1225U	1238	N13	W48	5930	02	11.9	27	SF			2	E		27		
0134		15	1310	13101	1318	N12	W52	5930	02	11.6	8	SF						16		
	RAMY	15	1310	1310	1320	N12	W52	5930	02	11.6	10	SF			3	E		15		
	SVTO	15	1310	1311	1317	N13	W53	5930	02	11.5	7	SF			3	E		17		
0135		15	1330*	1340*	1414	N12	W50	5930	02	11.8	44	SF	C	1.9				45		F
	SVTO	15	1330	1359	1427	N12	W51	5930	02	11.7	57	SF	C	1.9	3	E		53		
	KANZ	15	1332	1340	1344	N12	W49	5930	02	11.9	12	SF				V				
	RAMY	15	1332	1358	1430	N12	W52	5930	02	11.6	58	SF	C	1.9	3	E		37		F
	KANZ	15	1400	1404U	1404D	N12	W49	5930	02	11.9	4D	SF				V				
0136		15	1356	1356	1404	N23	W15	5933	02	14.4	8	SF						15		
	KANZ	15	1356	1356	1404D	N22	W17	5933	02	14.3	8D	SF				V				
	RAMY	15	1356	1356	1404	N24	W13	5933	02	14.6	8	SF			3	E		15		
0137	RAMY	15	1536E	1539U	1539D	N15	E59	5936	02	20.1	3D	SF			2	E		18		
		15	1543		1617	No Flare Patrol														
0138		15	1923*	19351	1941	N11	W55	5930	02	11.7	18	SF	C	1.3				21		F
	RAMY	15	1923	1936U	1952D	N12	W56	5930	02	11.6	29D	SF	C	1.3	3	E		34		F
	HOLL	15	1933	1936	1943	N11	W54	5930	02	11.7	10	SF	C	1.3	3	E		17		F
	PALE	15	1935	1935	1939	N10	W54	5930	02	11.7	4	SF			3	E		11		F
0139	PALE	15	2006	2006	2013	N10	W57	5930	02	11.5	7	SF			3	E		12		F
0140	LEAR	16	0529	0530	0533	S12	E40	5937	02	19.2	4	SF			3	E		14		
0141	HTPR	16	0832	0834	0855	N21	W40	5927	02	13.3	23	SF				C	0834	30	0.4	E
0142	HTPR	16	1016	1017	1021	N21	W40	5927	02	13.4	5	SF				C	1017	30	0.4	
0143	HTPR	16	1044	1049	1052	N21	W40	5927	02	13.4	8	SF				C	1049	30	0.4	E
0144	KANZ	16	1237	1251	1315	S15	E32	5937	02	18.9	38	SF				V				
0145	HTPR	16	1420	1422	1430	N18	W32	5927	02	14.2	10	SF				C	1422	20	0.3	E
0146	HTPR	16	1520	1524	1534D	N18	W32	5927	02	14.2	14D	SF				C	1524	20	0.3	
0147	LEAR	17	0728	0728	0735	N25	W36	5935	02	14.5	7	SF			4	E		11		
0148	KANZ	17	0850	0853	0909	N15	E80	5940	02	23.4	19	SF				V				
0149	HTPR	17	0922E	0925	0932	N22	W50	5927	02	13.5	10D	SF				C	0925	10	0.2	D
0150	HTPR	17	0953	1027	1050	S07	E40	5936A	02	20.4	57	SF				C	1027	90	1.2	
0151	SVTO	17	1028	1028	1035	S13	E75	5952A	02	23.1	7	SF			3	E		17		
0152	HTPR	17	1048	1132	1200	N10	W10	5934C	02	16.7	72	SF				C	1132	40	0.4	E
0153		17	11277	11286	1144	N10	E69	5940	02	22.7	17	SN						34		D
	HTPR	17	1127	1129	1144	N13	E70	5940	02	22.7	17	SN				C	1129	40		D
	KANZ	17	1128	1128	1143	N09	E68	5940	02	22.6	15	SN				V				
	SVTO	17	1134	1134	1144	N09	E69	5940	02	22.7	10	SF			3	E		27		

Hα SOLAR FLARES

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0154		17	1218	12181	1226	N09	E66	5940	02	22.5	8	SF					17		
	KANZ	17	1218	1218	1226	N09	E66	5940	02	22.5	8	SF			V				
	SVTO	17	1218	1219	1226	N09	E67	5940	02	22.5	8	SF		3	E		17		
0155		17	12342	1236	1240	N11	E68	5940	02	22.6	6	SF					20		
	SVTO	17	1234	1236	1242	N11	E67	5940	02	22.6	8	SF		3	E		20		
	KANZ	17	1236	1236	1239	N11	E69	5940	02	22.7	3	SF			V				
0156		17	13203	13223	1330	N13	E68	5940	02	22.7	10	SF					34		
	SVTO	17	1320	1325	1331	N12	E66	5940	02	22.5	11	SF		3	E		18		
	KANZ	17	1322	1322	1330	N13	E67	5940	02	22.6	8	SF			V				
	HTPR	17	1323		1330	N13	E70	5940	02	22.8	7	SF			C	1323	50		
0157		17	13273	1330	1338	S08	E83	5941	02	23.8	11	SN					39		
	HTPR	17	1327	1330	1340	S05	E90	5941	02	24.3	13	1N			C	1330	60		
	SVTO	17	1329	1330	1334	S09	E80	5941	02	23.6	5	SF		3	E		18		
	KANZ	17	1330	1330	1341	S11	E80	5941	02	23.6	11	SN			V				
0158		17	13572	14001	1412	N38	W28		02	15.3	15	SF	C 2.3				22	0.5	D
	HTPR	17	1357	1401	1410	N38	W27		02	15.4	13	SF			C	1401	30	0.5	D
	SVTO	17	1359	1400	1414	N38	W30		02	15.1	15	SF	C 2.3	3	E		15		
0159		17	1357	14001	1415	N20	W50	5927	02	13.7	18	SF					40	0.7	
	KANZ	17	1357	1400	1412D	N19	W49	5927	02	13.8	15D	SF			V				
	HTPR	17	1357	1401	1415	N22	W50	5927	02	13.7	18	SF			C	1401	40	0.7	
0160	HTPR	17	1453	1456	1503	N22	W47	5927	02	14.0	10	SF			C	1456	50	0.8	
0161	HOLL	17	1754	1755	1809	N21	W43	5935	02	14.4	15	SF		3	E		20		
0162	HOLL	17	1826	1828	1843	N20	W50	5927	02	13.9	17	SF	C 1.4	3	E		31		F
0163		17	2027	20271	2032	S16	W35	5931	02	15.2	5	SF					30		F
	RAMY	17	2027	2027	2031	S16	W35	5931	02	15.2	4	SF		3	E		20		
	HOLL	17	2027	2028	2032	S15	W35	5931	02	15.2	5	SF		3	E		39		F
0164		17	2107	21101	2120	S15	W36	5931	02	15.1	13	1N	C 1.5				118		F
	RAMY	17	2107	2110	2120	S14	W38	5931	02	15.0	13	1F		3	E		110		F
	HOLL	17	2107	2111	2119	S16	W35	5931	02	15.2	12	1N	C 1.5	3	E		125		F
0165		17	23581	23592	2407	N21	W55	5927	02	13.8	9	SF					30		F
	HOLL	17	2358	2359	2411	N21	W55	5927	02	13.8	13	SF		3	E		43		F
	LEAR	17	2359	2401	2403	N21	W55	5927	02	13.8	4	SF		3	E		18		
0166	HOLL	17	2359		2402	S37	E82	5942	02	24.6	3	SF		3	E		11		F
0167	HOLL	18	0017	0019	0023	S37	E80	5942	02	24.4	6	SF		3	E		20		
0168	LEAR	18	0531	0535	0545	S35	E83	5942	02	24.9	14	SF		3	E		13		
0169	KANZ	18	0816	0820	0824	S35	E78	5942	02	24.6	8	SF			V				
0170		18	10483	1100	1143	N20	W61	5927	02	13.8	55	1F	C 6.9				235		EF
	KANZ	18	1048	1100	1152	N20	W59	5927	02	13.9	64	1F			V				
	SVTO	18	1051	1100	1134	N21	W63	5927	02	13.6	43	1F	C 6.9	3	E		235		FE
0171		18	1052*	1127*	1248	N18	E23	5936	02	20.2	116	2F					159		
	SVTO	18	1052	1123U	1236	N19	E20	5936	02	20.0	104	2F		3	E		266		
	KANZ	18	1052	1127	1301	N17	E21	5936	02	20.0	129	2F			V				
	RAMY	18	1143	1144	1227D	N18	E28	5936	02	20.6	44D	SF		3	E		52		
0172	KANZ	18	1216	1220	1239	S11	W12	5937	02	17.6	23	SF			V				
0173	KANZ	18	1257	1309	1317	N22	W59	5927	02	14.0	20	SF			V				
0174		18	1415	14151	1422	S14	E82	5945	02	24.8	7	SF					67		
	KANZ	18	1415	1415	1423	S13	E86	5945	02	25.1	8	SF			V				
	RAMY	18	1415	1416	1421	S15	E79	5945	02	24.6	6	SF		3	E		54		
	SVTO	18	1415	1416	1423	S14	E82	5945	02	24.8	8	SN		2	E		80		

Hα SOLAR FLARES

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Opt	Imp Xray	See	Obs Type	Area Measurement Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
0175		18	14172	14194	1426	N23	W62	5927	02	13.8	9	SF	C 2.7				13		
	SVTO	18	1417	1419	1423	N23	W64	5927	02	13.7	6	SF	C 2.7	3	E		13		
	KANZ	18	1419	1423	1429	N23	W61	5927	02	13.9	10	SF			V				
0176	RAMY	18	1535	1535	1540	S36	E73	5942	02	24.5	5	SF		3	E		26		
0177	LEAR	18	2323	2338	2403	S37	E68	5942	02	24.4	40	SF		4	E		50		
0178		19	0305*	03302	0335	S34	E68	5942	02	24.5	30	SF					38		
	PALE	19	0305	0330	0343D	S33	E68	5942	02	24.5	38D	SF		3	E		66		
	LEAR	19	0329	0332	0335	S36	E67	5942	02	24.5	6	SF		3	E		11		
0179		19	06376	06386	0708	S16	E83	5947	02	25.6	31	SF	C 2.6				24		
	SVTO	19	0637	0638	0722	S17	E80	5947	02	25.3	45	SF	C 2.6	3	E		25		
	LEAR	19	0643	0644	0653	S16	E86	5947	02	25.8	10	SF		3	E		23		
0180	LEAR	19	0713	0713	0720	S36	E62	5942	02	24.3	7	SF		3	E		12		
0181		19	07271	0733*	0840	S12	W09	5937	02	18.6	73	1N	C 3.7				132		BFGIU
	SVTO	19	0727	0743	0853	S11	W05	5937	02	18.9	86	1F		4	E		190		U
	LEAR	19	0728	0733	0833	S14	W12	5937	02	18.4	65	SF	C 3.7	3	E		75		UF
	ISTA	19	0740E		0835	S09	W11	5937	02	18.5	55D	3B			V				BIG
	KANZ	19	0759E	0759U	0833D	S13	W07	5937	02	18.8	34D	SF			C				
0182		19	0802*	08072	0851	S35	E64	5942	02	24.4	49	1N					48		EF
	ISTA	19	0740E		0840	S35	E64	5942	02	24.4	60D	2B			V				F
	LEAR	19	0802	0808	0819	S36	E63	5942	02	24.4	17	SF		3	E		33		F
	KANZ	19	0805	0807	0822	S36	E63	5942	02	24.4	17	SF			C				
	SVTO	19	0809E	0809	0930	S35	E64	5942	02	24.4	81D	SF		4	E		64		
	ISTA	19	0908		0925	S35	E64	5942	02	24.5	17	1B			V				E
0183	SVTO	19	0810	0810	0817	S17	E83	5947	02	25.6	7	SF		4	E		33		
0184		19	09319	09413	0952	S36	E61	5942	02	24.3	21	SN					54	1.4	E
	SVTO	19	0931	0941	0955D	S35	E61	5942	02	24.3	24D	SB			E		65		
	LEAR	19	0938	0942	0955	S36	E60	5942	02	24.2	17	SF		3	E		35		
	KAND	19	0940	0944	0950	S37	E62	5942	02	24.4	10	SN			P	0944	62	1.4	E
0185	SVTO	19	1034	1051	1228	N12	E44	5940	02	22.7	114	1F		4	E		202		F
0186	KAND	19	1040	1048	1125	N16	E49	5950	02	23.2	45	SN			P	1048	104	1.8	EG
0187		19	1058	11009	1105	S35	E60	5942	02	24.2	7	1N					86	0.9	DT
	KAND	19	1058	1100	1105	S35	E60	5942	02	24.2	7	SN			P	1100	42	0.9	D
	SVTO	19	1058	1109	1109D	S35	E61	5942	02	24.3	11D	1N		4	E		131		T
0188		19	1135*	1235	1249	S16	E82	5947	02	25.7	74	SF	C 5.2				58		
	SVTO	19	1135	1235	1259	S16	E80	5947	02	25.5	84	SF	C 5.2	4	E		58		
	KANZ	19	1235	1235	1239	S17	E84	5947	02	25.9	4	SF			V				
0189		19	1239	1246	1257	S35	E59	5942	02	24.2	18	SN					83	1.8	E
	KANZ	19	1239	1246	1254	S35	E58	5942	02	24.2	15	SF			V				
	KAND	19	1245E		1300	S35	E60	5942	02	24.3	15D	SN			P	1245	83	1.8	E
0190	SVTO	19	1323	1332	1337	S08	E67	5945	02	24.6	14	SF		4	E		80		
0191	RAMY	19	1353	1402	1405	S37	E61	5942	02	24.5	12	SF		3	E		26		
0192	RAMY	19	1412	1416U	1538	S36	E58	5942	02	24.2	86	SF	C 2.6	3	E		61		
0193	RAMY	19	1551	1554	1603	S35	E56	5942	02	24.1	12	SF	C 4.0	3	E		49		F
0194	RAMY	19	1621E	1643U	1650D	S36	E57	5942	02	24.2	29D	SF		2	E		64		F
		19	1631		1636	No Flare Patrol													
0195	RAMY	19	1647E	1647U	1652	N21	W76	5927	02	13.9	5D	SF	C 5.7	2	E		25		F

Hα SOLAR FLARES

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0196		19	17221	1723	1736	S36	E56	5942	02	24.2	14	SF	C 5.0				34		H
	RAMY	19	1722	1723	1736	S36	E56	5942	02	24.2	14	SF	C 5.0	2	E		28		H
	HOLL	19	1723	1723	1736	S36	E57	5942	02	24.3	13	SF	C 5.0	3	E		40		H
0197		19	17277	1734	1740	S18	E78	5947	02	25.7	13	SF					30		
	HOLL	19	1727	1734	1741	S17	E81	5947	02	25.9	14	SF		3	E		39		
	RAMY	19	1734	1734	1738	S18	E75	5947	02	25.4	4	SF		2	E		20		
0198		19	1829E	1851U	1909D	S36	E62	5942	02	24.7	40D	SF	C 3.9				50		H
	RAMY	19	1829E	1851U	1905D	S39	E65	5942	02	25.0	36D	SF		2	E		38		H
	PALE	19	1836E	1852U	1909D	S33	E58	5942	02	24.4	33D	SF	C 3.9	3	E		63		
0199		19	1950	2022	2103	S36	E58	5942	02	24.5	73	SF					62		F
	RAMY	19	1950	2018U	2118D	S36	E57	5942	02	24.4	88D	SF		2	E		64		F
	PALE	19	2005E	2022	2103	S36	E59	5942	02	24.6	58D	SF		3	E		60		F
0200	HOLL	19	2118	2118U	2128	S17	E79	5947	02	25.9	10	SF		3	E		26		
		19	2203		2206	No Flare Patrol													
		19	2221		2254	No Flare Patrol													
0201	PALE	19	2303	2303	2309	S32	E57	5942	02	24.5	6	SF		3	E		46		F
0202	PALE	20	0013	0022	0026	S13	E75	5947	02	25.7	13	SF	C 2.0	3	E		53		
0203		20	0100*	0103*	0135	S16	E76	5947	02	25.8	35	1F	C 5.7				75		K
	LEAR	20	0100	0103	0110	S18	E76	5947	02	25.8	10	SF		3	E		38		
	PALE	20	0102	0108	0150	S14	E75	5947	02	25.7	48	1F			E		73		K
	PALE	20	0102	0126	0150	S14	E75	5947	02	25.7	48	1F	C 5.7	3	E		133		
	LEAR	20	0120	0123	0131	S16	E76	5947	02	25.8	11	SF		3	E		55		
0204	LEAR	20	0206	0207	0213	S11	E39	5941	02	23.0	7	SF		3	E		21		
0205	LEAR	20	0425	0426	0431	S35	E50	5942	02	24.2	6	SF		3	E		18		
0206		20	07383	07411	0746	S34	E48	5942	02	24.1	8	SF	C 4.1				22		
	LEAR	20	0738	0742	0746	S34	E48	5942	02	24.1	8	SF	C 4.1	3	E		22		
	KANZ	20	0741	0741	0745	S35	E48	5942	02	24.1	4	SF			V				
0207	KANZ	20	0933	0933	0945	S35	E47	5942	02	24.1	12	SF			V				
0208	KANZ	20	1023	1023	1031	S35	E47	5942	02	24.2	8	SF			V				
0209		20	1116	1119	1158	S14	E45	5941	02	23.9	42	SF					41		
	KANZ	20	1116	1119	1155	S15	E47	5941	02	24.0	39	SF			V				
	SVTO	20	1116E	1119U	1200	S13	E43	5941	02	23.7	44D	SF		3	E		41		
0210		20	1203	12035	1216	S17	E68	5947	02	25.7	13	1F					110		
	KANZ	20	1203	1203	1207	S16	E65	5947	02	25.4	4	SF			V				
	SVTO	20	1203	1208	1226	S18	E70	5947	02	25.8	23	1F		3	E		110		
0211		20	13154	13191	1328	S36	E48	5942	02	24.4	13	SF					17		
	KANZ	20	1315	1319	1327	S35	E47	5942	02	24.3	12	SF			V				
	RAMY	20	1319	1320	1330	S37	E48	5942	02	24.4	11	SF		3	E		17		
0212		20	1424	1426*	1451	S18	E64	5947	02	25.5	27	SF					40		F
	SVTO	20	1424	1426	1437	S18	E63	5947	02	25.4	13	SF		3	E		37		
	RAMY	20	1424	1450	1505	S18	E66	5947	02	25.6	41	SF		3	E		43		F
0213	HTPR	20	1529E	1530	1534D	S37	E50	5942	02	24.7	5D	SN			C	1530	40	0.7	
		20	1635		1705	No Flare Patrol													
		20	1724		1734	No Flare Patrol													
0214	HOLL	20	1757	1757	1803	S16	E66	5947	02	25.7	6	SF		3	E		17		
0215		20	1855*	1930	1935	S37	E47	5942	02	24.6	40	SF	C 2.1				16		F
	RAMY	20	1855	1930	2026D	S38	E46	5942	02	24.5	91D	SF	C 2.1	3	E		16		F
	HOLL	20	1929	1930	1935	S36	E48	5942	02	24.7	6	SF		3	E		17		

Hα SOLAR FLARES

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo Day	Dur (Min)	Imp Opt	Imp Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0216	HOLL	20	2058	2106	2115	S15	E60	5947	02 25.4	17	SF		4	E		39		
0217	PALE	21	0137	0139	0144	N18	E69	5948	02 26.3	7	SF		3	E		25		
0218		21	0225*	0226*	0241	S38	E43	5942	02 24.6	16	SF					22		
	PALE	21	0225	0226	0232	S36	E40	5942	02 24.3	7	SF		3	E		30		
	LEAR	21	0237	0238	0244	S40	E45	5942	02 24.8	7	SF		3	E		18		
	PALE	21	0240	0241	0248	S38	E44	5942	02 24.7	8	SF		3	E		19		
0219		21	02289	02334	0250	S16	E61	5947	02 25.7	22	SF					38		F
	PALE	21	0228	0233	0248	S16	E61	5947	02 25.7	20	SF		3	E		52		F
	LEAR	21	0237	0237	0252	S17	E61	5947	02 25.7	15	SF		3	E		23		F
0220		21	0232*	0243*	0258	N02	E05	5946	02 21.5	26	SF					29		F
	PALE	21	0232	0243	0254	N02	E04	5946	02 21.4	22	SF		3	E		62		F
	LEAR	21	0243	0246	0250	N02	E05	5946	02 21.5	7	SF		3	E		10		F
	LEAR	21	0254	0257	0311	N02	E06	5946	02 21.6	17	SF		3	E		14		
0221	LEAR	21	0413	0414	0418	N13	E61	5948	02 25.8	5	SF		3	E		31		F
0222	LEAR	21	0454	0503	0519	N02	E05	5946	02 21.6	25	SF		3	E		28		
0223	ISTA	21	0755		0809	S04	E18	5952	02 22.7	14	SF			V				E
0224		21	07593	07593	0812	N14	E64	5948	02 26.2	13	SB							E
	ISTA	21	0759	0759	0812	N12	E61	5948	02 25.9	13	SN			V				E
	ISTA	21	0802	0802	0812	N16	E68	5948	02 26.5	10	SB			V				E
0225	HTPR	21	0814	0816	0834	N19	E70	5957A	02 26.7	20	SN			C	0816	50		
0226	HTPR	21	0835	0839	0955	N03	W01	5946	02 21.3	80	SF			C	0839	60	0.6	
		21	1646		1930	No Flare Patrol												
0227	HOLL	21	2058	2059	2103	N02	W03	5946	02 21.6	5	SF		3	E		27		
0228	HOLL	21	2131	2137	2142	S15	E53	5947	02 25.9	11	SF		3	E		10		
0229	HOLL	21	2222	2226	2230	N01	W04	5946	02 21.6	8	1F		3	E		111		
0230	HOLL	21	2231	2231	2235	S13	E25	5941	02 23.8	4	SF		3	E		22		
0231	HOLL	21	2319	2322	2329	S15	E51	5947	02 25.8	10	SF		3	E		19		
0232	HOLL	21	2333	2337	2340	N02	W07	5946	02 21.4	7	SF		3	E		14		F
0233	HOLL	22	0001	0004	0009	N16	E48	5948	02 25.6	8	SF		3	E		11		
0234	LEAR	22	0522	0527	0532	S16	E45	5947	02 25.6	10	SF		3	E		12		
0235	LEAR	22	0540	0544	0554	S15	E48	5947	02 25.9	14	SF	C 1.6	3	E		35		
0236		22	0633*	0641*	0732	N03	W12	5946	02 21.4	59	SN					90	1.3	DF
	LEAR	22	0633	0641	0650D	N02	W10	5946	02 21.5	17D	SF		3	E		55		
	YUNN	22	0641E	0641U	0645D	N04	W11	5946	02 21.4	4D	SN			P	0641	126	1.3	F
	ISTA	22	0712	0723	0732	N04	W14	5946	02 21.2	20	SN			V				D
		22	0659		0708	No Flare Patrol												
0237		22	0716*	0717*	0745	S38	E29	5942	02 24.6	29	SN					74	1.5	EF
	YUNN	22	0716	0717	0733	S37	E29	5942	02 24.6	17	SN			C		110	1.5	F
	KANZ	22	0717	0717	0728	S37	E27	5942	02 24.5	11	SF			C				
	KANZ	22	0717	0746	0810	S39	E32	5942	02 24.9	53	SF			C				
	ISTA	22	0722		0726	S37	E25	5942	02 24.3	4	1B			V				E
	LEAR	22	0738	0750	0809	S39	E30	5942	02 24.7	31	SF		3	E		38		
0238	ISTA	22	0815	0823	0841	N21	W07	5940A	02 21.8	26	SN			V				D

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Area Measurement Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
0239		22	0830*	0841	0903	N16	E52	5948	02	26.3	33	SN	C 4.1				58	1.2	E
	KANZ	22	0830	0841	0909	N16	E51	5948	02	26.2	39	SF			V				
	LEAR	22	0836	0841	0908	N15	E51	5948	02	26.2	32	SF	C 4.1	3	E		52		
	ISTA	22	0840	0841	0900	N15	E52	5948	02	26.3	20	SB			V				E
	YUNN	22	0851E	0851U	0856	N16	E52	5948	02	26.3	5D	SN			P	0851	63	1.2	
0240		22	08453	08496	0903	N05	W05	5946	02	22.0	18	SN					42	0.8	DK
	KANZ	22	0845	0849	0901	N05	W05	5946	02	22.0	16	SF			V				
	LEAR	22	0847	0849	0906	N04	W05	5946	02	22.0	19	SF		3	E		21		
	LEAR	22	0847	0855	0906	N04	W05	5946	02	22.0	19	SN			E		25		K
	ISTA	22	0848	0850	0900	N05	W06	5946	02	21.9	12	SB			V				D
	YUNN	22	0851E	0851U	0856D	N05	W06	5946	02	21.9	5D	SN			P	0851	79	0.8	
0241		22	1021	10236	1044	N16	E49	5948	02	26.1	23	SF	C 3.3				48		F
	LEAR	22	1021	1023	1042D	N16	E49	5948	02	26.1	21D	SF	C 3.3	3	E		50		F
	KANZ	22	1021	1024	1040	N16	E49	5948	02	26.1	19	SF			V				
	SVTO	22	1021	1029	1048	N16	E48	5948	02	26.1	27	SF		2	E		47		
0242	KANZ	22	1036	1036	1044	N16	E41	5947A	02	25.5	8	SF			V				
0243	KANZ	22	1334	1337	1345	N16	E47	5948	02	26.1	11	SF			V				
0244		22	14192	14221	1429	S09	E69	5953	02	27.8	10	SF					26		
	KANZ	22	1419	1423	1426	S09	E70	5953	02	27.8	7	SF			V				
	SVTO	22	1420	1422	1432	S08	E69	5953	02	27.8	12	SF		2	E		30		
	HOLL	22	1421	1422	1429	S09	E69	5953	02	27.8	8	SF		2	E		22		
0245		22	1424	14383	1456	N16	E48	5948	02	26.2	32	SF					30		
	SVTO	22	1424	1441	1453	N15	E48	5948	02	26.2	29	SF		3	E		35		
	HOLL	22	1437E	1438	1500	N16	E49	5948	02	26.3	23D	SF		3	E		25		
0246		22	14382	1446*	1608	S19	E40	5947	02	25.7	90	1N	M 1.2				152		EFK
	KANZ	22	1438	1449	1456D	S19	E41	5947	02	25.7	18D	1N			V				
	SVTO	22	1439	1446	1559D	S19	E39	5947	02	25.6	80D	1N		3	E		170		F
	HOLL	22	1440	1450	1608	S20	E41	5947	02	25.7	88	1N	M 1.2	3	E		247		FE
	RAMY	22	1440	1510	1609	S19	E40	5947	02	25.7	89	1N		3	E		140		F
	HOLL	22	1440	1540	1608	S20	E41	5947	02	25.7	88	1N			E		93		K
	RAMY	22	1440	1541	1609	S19	E40	5947	02	25.7	89	1N			E		112		K
0247	HOLL	22	1507	1513	1522	N18	W03	5950	02	22.4	15	SF		3	E		14		
0248	HOLL	22	1538	1538	1548	N16	E49	5948	02	26.4	10	SF		3	E		26		
0249		22	1613*	16302	1714	N16	E42	5948	02	25.9	61	SF	C 4.4				56		EF
	HOLL	22	1613	1630	1715	N16	E45	5948	02	26.1	62	SF	C 4.4	3	E		69		FE
	RAMY	22	1626	1632	1713	N15	E40	5948	02	25.7	47	SF		3	E		44		F
0250	HOLL	22	1834	1835	1842	N17	W05	5950	02	22.4	8	SF		3	E		17		
0251		22	19432	19461	1956	N17	W06	5950	02	22.4	13	SF					26		F
	HOLL	22	1943	1947	1955	N17	W06	5950	02	22.4	12	SF		3	E		37		F
	RAMY	22	1945	1946	1956	N17	W06	5950	02	22.4	11	SF		3	E		16		
0252	HOLL	22	2034	2047	2113	S09	E68	5953	02	28.0	39	SF		3	E		53		F
0253	HOLL	22	2103	2107	2115	N17	E41	5948	02	26.0	12	SF		3	E		24		FH
0254	HOLL	22	2116	2122	2129	N18	W06	5950	02	22.4	13	SF		3	E		18		
0255	HOLL	22	2152	2156	2202	S17	E32	5947	02	25.3	10	SF	C 1.7	4	E		32		
0256	HOLL	22	2249	2324	2332	N15	E42	5948	02	26.1	43	SF		3	E		19		
0257	HOLL	23	0008	0009	0013	S14	E22	5945	02	24.7	5	SF		3	E		33		
0258	HOLL	23	0026	0028	0032	S11	E61	5953	02	27.6	6	SF		2	E		39		
0259		23	03041	0310*	0324	S20	E34	5947	02	25.7	20	SF					19		F
	LEAR	23	0304	0322	0334	S20	E35	5947	02	25.8	30	SF		3	E		22		
	PALE	23	0305	0310	0315	S19	E34	5947	02	25.7	10	SF		3	E		16		F

Hα SOLAR FLARES

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Area Measurement Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
0260		23	04052	04082	0416	S10	E62	5953	02	27.8	11	SN					76	1.8	DG
	PEKG	23	0405	0410	0415	S09	E63	5953	02	27.9	10	SN			P		84	1.8	DG
	LEAR	23	0407	0408	0416	S10	E62	5953	02	27.8	9	SF		3	E		69		
0261	LEAR	23	0525	0531	0543	S18	E33	5947	02	25.7	18	SF		3	E		34		F
0262	LEAR	23	0626	0627	0632	N15	E38	5948	02	26.1	6	SF		4	E		14		F
0263	KANZ	23	0810	0810	0812	N16	E31	5948	02	25.7	2	SF			V				
0264	RAMY	23	1124	1125	1133	S18	E29	5947	02	25.7	9	SF		3	E		33		F
0265		23	12102	12111	1224	N15	E37	5948	02	26.3	14	SF					22		
	RAMY	23	1210	1212	1230	N14	E37	5948	02	26.3	20	SF		3	E		28		
	KANZ	23	1211	1211	1223	N15	E36	5948	02	26.2	12	SF			V				
	SVTO	23	1212	1212	1219	N15	E37	5948	02	26.3	7	SF		3	E		16		
0266		23	1231	1235	1248	N14	E37	5948	02	26.3	17	SF					31		
	KANZ	23	1231	1235	1246	N14	E37	5948	02	26.3	15	SF			V				
	RAMY	23	1231	1235	1250	N14	E37	5948	02	26.3	19	SF		3	E		31		
0267		23	12503	12575	1401	S19	E28	5947	02	25.7	71	2B	M 2.9				284		FY
	KANZ	23	1250	1258	1415	S19	E28	5947	02	25.7	85	2N			V				
	RAMY	23	1253	1257	1352	S20	E27	5947	02	25.6	59	2B		3	E		297		YF
	SVTO	23	1253	1302	1356	S19	E28	5947	02	25.7	63	2B	M 2.9	3	E		272		
0268	KANZ	23	1323	1325	1329	N15	E27	5948	02	25.6	6	SF			V				
0269		23	14062	14093	1417	S12	W60	5937	02	19.1	11	SF					63		
	SVTO	23	1406	1409	1419	S13	W60	5937	02	19.1	13	SF		3	E		63		
	KANZ	23	1408	1412	1415	S12	W61	5937	02	19.0	7	SF			V				
0270	HOLL	23	1542	1542	1546	S08	E55	5953	02	27.8	4	SF		3	E		10		
0271	HOLL	23	1545	1547	1609	S14	E29	5947	02	25.8	24	SF		3	E		14		
0272		23	1621	1626*	1650	S10	E54	5953	02	27.7	29	SN	M 1.3				60		K
	HOLL	23	1621	1626	1650	S10	E54	5953	02	27.7	29	SF			E		37		K
	HOLL	23	1621	1636	1650	S10	E54	5953	02	27.7	29	SN	M 1.3	3	E		83		
0273	HOLL	23	1706	1706	1715	N15	E34	5948	02	26.3	9	SF		3	E		14		
0274		23	18595	19072	1932	S17	E26	5947	02	25.8	33	SF					87		F
	HOLL	23	1859	1909	1940	S17	E25	5947	02	25.7	41	1F		3	E		126		F
	PALE	23	1901	1907	1924	S16	E27	5947	02	25.8	23	SF		3	E		78		F
	RAMY	23	1904	1909	1933	S18	E26	5947	02	25.8	29	SF		3	E		58		F
0275	HOLL	23	2023	2024	2028	S02	W06	5952	02	23.4	5	SF		3	E		17		
0276		23	20478	20514	2106	S17	E26	5947	02	25.8	19	SF					28		F
	RAMY	23	2047	2051	2108	S17	E25	5947	02	25.8	21	SF		3	E		32		F
	HOLL	23	2047	2052	2108	S17	E26	5947	02	25.8	21	SF		3	E		34		F
	PALE	23	2055	2055	2102	S16	E26	5947	02	25.8	7	SF		3	E		18		F
0277	PALE	23	2212	2213	2218	N19	E27	5948	02	26.0	6	SF		3	E		19		
0278		23	2336*	2337*	2358	N14	E24	5948	02	25.8	22	SF	C 9.8				78		EFK
	HOLL	23	2336	2337	2403	N13	E22	5948	02	25.6	27	SF			E		67		K
	PALE	23	2336	2349	2401	N17	E27	5948	02	26.0	25	SF		3	E		95		
	HOLL	23	2336	2349	2403	N13	E22	5948	02	25.6	27	1N	C 9.8	3	E		136		FE
	LEAR	23	2338	2338	2344	N15	E26	5948	02	25.9	6	SF	C 2.7	3	E		11		F
	LEAR	23	2347	2349	2358	N13	E23	5948	02	25.7	11	SN	C 9.8	3	E		81		E
0279	PALE	24	0025	0026	0029	N19	E27	5948	02	26.1	4	SF		3	E		29		
0280	LEAR	24	0042	0042	0056	N21	E04	5956B	02	24.3	14	SF		3	E		16		
0281	YUNN	24	0147E	0148	0152	S19	E21	5947	02	25.7	5D	SN			P		47	0.5	

Hα SOLAR FLARES

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0282	LEAR	24	0305	0306	0317	N16	E25	5948	02	26.0	12	SF	C 2.1	3	E		42		
0283		24	03173	0321	0328	S08	E49	5953	02	27.8	11	SF	M 1.1				37	0.7	DE
	LEAR	24	0317	0321	0330	S09	E49	5953	02	27.8	13	SF	M 1.1	3	E		24		E
	PEKG	24	0320	0321	0326	S08	E49	5953	02	27.8	6	SF			P		50	0.7	D
0284	LEAR	24	0344	0346	0432	S20	E21	5947	02	25.8	48	SF		3	E		25		F
0285	LEAR	24	0442	0445	0453	N14	E29	5948	02	26.4	11	SF		3	E		23		
0286		24	05057	05058	0529	N15	E25	5948	02	26.1	24	1N	C 5.0				118	2.1	EU
	LEAR	24	0505	0505	0537	N15	E25	5948	02	26.1	32	SF	C 5.0	3	E		67		U
	PEKG	24	0512	0513	0521	N15	E25	5948	02	26.1	9	1B			P		168	2.1	E
0287	LEAR	24	0509	0510	0514	S11	E46	5953	02	27.7	5	SF		3	E		15		
0288	LEAR	24	0622	0625	0634	S10	E47	5953	02	27.8	12	SF		3	E		11		
0289	YUNN	24	0738E	0740	0747	S19	E16	5947	02	25.5	9D	SN			P		55	0.6	
0290		24	0816E		0840	S18	E20	5947	02	25.9	24D	1N					70	0.7	F
	HTPR	24	0816E		0820D	S18	E20	5947	02	25.9	4D	SF			C	0816	70	0.7	
	ISTA	24	0829E		0840	S17	E20	5947	02	25.9	11D	2N			V				F
0291		24	08517	08575	0910	N17	E26	5948	02	26.3	19	SF					20		D
	KANZ	24	0851	0901	0913	N18	E26	5948	02	26.3	22	SF			V				
	LEAR	24	0857	0857	0908	N17	E25	5948	02	26.3	11	SF		3	E		20		
	KHAR	24	0858	0902	0910	N17	E26	5948	02	26.3	12	SF		2	V	0902			D
0292		24	08511	08575	0918	S14	E20	5947	02	25.9	27	SF					16		
	KANZ	24	0851	0857	0923	S14	E19	5947	02	25.8	32	SF			V				
	LEAR	24	0852	0902	0912	S14	E20	5947	02	25.9	20	SF		3	E		16		
0293	KHAR	24	0945	0948	0950	N04	W43	5946	02	21.2	5	SF		2	V	0948			DH
0294		24	10521	10531	1057	N17	E23	5948	02	26.2	5	SF					18		
	SVTO	24	1052	1053	1056	N17	E21	5948	02	26.0	4	SF		3	E		18		
	KHAR	24	1052	1054	1059	N17	E26	5948	02	26.4	7	SN		2	P	1054			
	KANZ	24	1053	1053	1057	N18	E23	5948	02	26.2	4	SF			V				
0295		24	11224	11261	1151	S09	E44	5953	02	27.8	29	SF	C 2.0				31		
	SVTO	24	1122	1126	1154	S08	E45	5953	02	27.8	32	SF	C 2.0	3	E		47		
	KANZ	24	1123	1127	1150	S09	E44	5953	02	27.8	27	SF			V				
	RAMY	24	1126	1143U	1148	S10	E44	5953	02	27.8	22	SF		2	E		15		
0296		24	1139	11431	1150	N17	E24	5948	02	26.3	11	SF					25		F
	KANZ	24	1139	1143	1150	N18	E24	5948	02	26.3	11	SF			V				
	RAMY	24	1139	1144	1149	N16	E23	5948	02	26.2	10	SF		2	E		25		F
0297		24	11571	1158	1202	N04	W48	5946	02	20.9	5	SF					19		
	RAMY	24	1157	1158	1200	N04	W48	5946	02	20.9	3	SF		3	E		19		
	KANZ	24	1158	1158	1205	N03	W48	5946	02	20.9	7	SF			V				
0298		24	12273	12321	1237	N17	E23	5948	02	26.3	10	SF	C 2.2				41		F
	RAMY	24	1227	1232	1239	N16	E23	5948	02	26.3	12	SF	C 2.2	3	E		50		F
	KANZ	24	1229	1233	1237	N17	E23	5948	02	26.3	8	SF			V				
	SVTO	24	1230	1233	1236	N18	E24	5948	02	26.3	6	SF		3	E		32		
0299	KANZ	24	1229	1229	1237	N02	W47	5946	02	21.0	8	SF			V				
0300		24	12352	12418	1310	S10	E42	5953	02	27.7	35	SF					32		
	SVTO	24	1235	1249	1317	S10	E40	5953	02	27.5	42	SF		3	E		34		
	RAMY	24	1237	1241	1305	S10	E43	5953	02	27.7	28	SF		3	E		30		
	KANZ	24	1237	1241	1309	S09	E43	5953	02	27.7	32	SF			V				
0301	KANZ	24	1309	1309	1309	N17	W26	5950	02	22.6	32	SF			V				
0302		24	15031	15031	1508	N02	W50	5946	02	20.9	5	SF					22		
	KANZ	24	1503	1503	1507	N02	W49	5946	02	21.0	4	SF			V				
	HOLL	24	1504	1504	1508	N03	W50	5946	02	20.9	4	SF		3	E		22		

Hα SOLAR FLARES

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Area Measurement Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
0303	HOLL	24	1505	1512	1521	N17	E21	5948	02 26.2	16	SF		3	E		18		
0304	HOLL	24	1531	1536	1540	N17	E18	5948	02 26.0	9	SF		3	E		22		
0305		24	1537*	1550*	1624	N17	E21	5948	02 26.2	47	SF					16		FH
	RAMY	24	1537	1627	1650	N16	E21	5948	02 26.2	73	SF		3	E		17		F
	HOLL	24	1549	1550	1557	N18	E21	5948	02 26.2	8	SF		3	E		14		H
0306		24	15581	15591	1607	N02	W41	5946	02 21.6	9	SF	C 2.5				28		
	RAMY	24	1558	1559	1607	N02	W42	5946	02 21.5	9	SF		3	E		26		
	HOLL	24	1559	1600	1607	N02	W40	5946	02 21.7	8	SF	C 2.5	3	E		30		
0307		24	17003	1708	1718	N18	E20	5948	02 26.2	18	SF					38		F
	RAMY	24	1700	1708	1725	N17	E20	5948	02 26.2	25	SF		3	E		48		F
	HOLL	24	1703	1708	1712	N18	E21	5948	02 26.3	9	SF		3	E		27		
0308	HOLL	24	2010	2012	2019	N04	W53	5946	02 20.9	9	SF		3	E		41		
0309	HOLL	24	2012	2018	2020	S11	E36	5953	02 27.5	8	SF		3	E		10		
0310	HOLL	24	2025	2028	2038	N20	W08	5956B	02 24.2	13	SF		3	E		13		
0311		24	20486	2050*	2108	N16	E18	5948	02 26.2	20	SF					26		F
	HOLL	24	2048	2050	2101	N17	E18	5948	02 26.2	13	SF		3	E		27		F
	RAMY	24	2054	2103	2115	N16	E18	5948	02 26.2	21	SF		3	E		24		F
0312		24	20532	20541	2108	S18	E12	5947	02 25.8	15	SF					29		F
	HOLL	24	2053	2054	2106	S17	E12	5947	02 25.8	13	SF		3	E		38		F
	RAMY	24	2055	2055	2110	S18	E11	5947	02 25.7	15	SF		3	E		20		F
0313		24	21181	21251	2140	S12	E34	5953	02 27.4	22	SF					44		F
	HOLL	24	2118	2126	2140	S11	E35	5953	02 27.5	22	SF		3	E		48		F
	RAMY	24	2119	2125	2203D	S12	E33	5953	02 27.4	44D	SF		2	E		40		
0314	HOLL	24	2131	2134	2149	N02	W52	5946	02 21.0	18	SN	C 3.4	3	E		58		EH
0315		24	22551	2257*	2321	S10	E36	5953	02 27.6	26	SF	C 2.4				28		FK
	LEAR	24	2255	2257	2304	S09	E39	5953	02 27.9	9	SF		3	E		22		
	HOLL	24	2256	2257	2330	S10	E35	5953	02 27.6	34	SF	C 2.4	3	E		32		F
	HOLL	24	2256	2314	2330	S10	E35	5953	02 27.6	34	SF			E		29		K
0316		24	23482	23501	2414	S10	E34	5953	02 27.5	26	SF					49		EF
	HOLL	24	2348	2350	2423	S10	E35	5953	02 27.6	35	SF		3	E		72		FE
	LEAR	24	2350	2351	2404	S10	E34	5953	02 27.5	14	SF		3	E		26		
0317	HOLL	24	2359	2359	2402	S15	E11	5947	02 25.8	3	SF		3	E		21		
0318	PEKG	25	0102	0103	0104	S11	E33	5953	02 27.5	2	SF			P		84	1.0	D
0319	LEAR	25	0141	0142	0200	N02	W53	5946	02 21.1	19	SF	C 1.9	3	E		27		
0320	LEAR	25	0141	0158	0216	S19	E09	5947	02 25.7	35	SF	C 2.3	3	E		48		
0321	LEAR	25	0324	0324	0332	N18	E16	5948	02 26.4	8	SF		3	E		16		
0322	LEAR	25	0348	0355	0401	S10	E34	5953	02 27.7	13	SF		3	E		22		
0323		25	0438*	0509*	0544	S10	E32	5953	02 27.6	66	SF					73	1.5	DFK
	LEAR	25	0438	0509	0556	S10	E33	5953	02 27.7	78	SF		3	E		30		F
	LEAR	25	0438	0520	0556	S10	E33	5953	02 27.7	78	SF			E		63		K
	PEKG	25	0514	0515	0520	S11	E31	5953	02 27.5	6	SN			P		126	1.5	D
0324	LEAR	25	0529	0554	0639	N01	W48	5946	02 21.6	70	SF		3	E		89		F
0325	LEAR	25	0626	0627	0630	S09	E35	5953	02 27.9	4	SF		3	E		21		
0326	ISTA	25	0707		0717	S10	E06	5945	02 25.7	10	SN			V				E

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp	Opt	Xray	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0327		25	07387	07415	0800	N02	W57	5946	02	21.1	22	SN	C	3.0				71	2.8	EF
	ISTA	25	0738	0741	0800	N02	W57	5946	02	21.1	22	1B				V				F
	SVTO	25	0739	0743	0757	N01	W58	5946	02	21.0	18	SF	C	3.0	4	E		25		
	KANZ	25	0739	0743	0758	N01	W57	5946	02	21.1	19	SF				V				
	LEAR	25	0739	0743	0759	N01	W57	5946	02	21.1	20	SF	C	3.0	3	E		38		F
	BUCA	25	0745	0746	0805	N03	W55	5946	02	21.2	20	1N				C	0746	150	2.8	E
0328	ATHN	25	0742E	0742U	0754	N23	W54	5950	02	21.1	12D	1B			3	V	0742	159	2.8	
0329		25	0802	08051	0813	S08	E34	5953	02	27.9	11	SF						13		
	LEAR	25	0802	0805	0816	S08	E34	5953	02	27.9	14	SF			3	E		13		
	KANZ	25	0802	0806	0810	S09	E33	5953	02	27.8	8	SF				V				
0330		25	08213	0825	0831	N02	W52	5946	02	21.5	10	SF						14		
	KANZ	25	0821	0825	0829	N02	W53	5946	02	21.4	8	SF				V				
	LEAR	25	0824	0825	0833	N02	W52	5946	02	21.5	9	SF			3	E		14		
0331	LEAR	25	0824	0824	0833	S09	E33	5953	02	27.8	9	SF			3	E		13		
0332		25	08488	08563	0913	S14	E05	5947	02	25.7	25	SF	C	2.4				37		DU
	SVTO	25	0848	0859	0918	S15	E05	5947	02	25.7	30	SF	C	2.4	3	E		51		U
	KANZ	25	0849	0856	0910	S14	E04	5947	02	25.7	21	SF				V				
	LEAR	25	0856	0856	0914	S15	E05	5947	02	25.7	18	SF	C	2.4	3	E		23		
	KHAR	25	0856	0858	0910	S14	E05	5947	02	25.7	14	SF			2	V	0858			D
0333		25	09263	0930	0940	N16	W40	5950	02	22.3	14	SF						24		
	KANZ	25	0926	0930	0940	N17	W41	5950	02	22.3	14	SF				V				
	LEAR	25	0929	0930	0939	N16	W40	5950	02	22.4	10	SF			3	E		24		
0334		25	09261	09273	0944	N02	W53	5946	02	21.4	18	SF						12		
	KANZ	25	0926	0930	0944	N02	W53	5946	02	21.4	18	SF				V				
	LEAR	25	0927	0927	0945	N02	W53	5946	02	21.4	18	SF			3	E		12		
0335	KHAR	25	1012	1013	1030	N04	W53	5946	02	21.5	18	SN			2	P	1013			H
0336		25	11204	11242	1134	S08	E32	5953	02	27.9	14	SF						80	0.9	E
	KANZ	25	1120	1124	1136	S09	E30	5953	02	27.7	16	SF				V				
	KHAR	25	1124	1126	1132	S08	E33	5953	02	27.9	8	SF			2	P	1129	80	0.9	E
0337	KANZ	25	1217	1217	1220	N18	E10	5948	02	26.3	3	SF				V				
0338	KANZ	25	1224	1224	1240	S07	E28	5953	02	27.6	16	SF				V				
0339	KANZ	25	1255	1259	1303	S19	W02	5947	02	25.4	8	SF				V				
0340	KANZ	25	1303	1307	1310	N21	W17	5956	02	24.2	7	SF				V				
0341	HOLL	25	1631	1633	1644	N02	W62	5946	02	21.0	13	SF			3	E		21		F
0342	HOLL	25	1636	1636	1641	S11	E24	5953	02	27.5	5	SF			3	E		15		
		25	1752		1759	No Flare Patrol														
0343		25	18227	1838	1850	S10	E27	5953	02	27.8	28	SF						26		F
	HOLL	25	1822	1838	1850	S10	E27	5953	02	27.8	28	SF			3	E		32		F
	RAMY	25	1829	1835U	1848D	S11	E27	5953	02	27.8	19D	SF			2	E		20		
0344		25	19281	1930	1936	S24	E11	5957	02	26.7	8	SF	C	1.3				39		
	HOLL	25	1928	1930	1939	S23	E11	5957	02	26.6	11	SF	C	1.3	3	E		51		
	RAMY	25	1929	1930	1933	S24	E11	5957	02	26.7	4	SF	C	1.3	3	E		27		
0345		25	20491	2051	2141	S10	E24	5953	02	27.7	52	SF	C	1.7				61		F
	RAMY	25	2049	2051	2120D	S11	E25	5953	02	27.7	31D	SF			2	E		47		
	HOLL	25	2050	2051	2141	S08	E24	5953	02	27.7	51	SF	C	1.7	3	E		75		F
0346	HOLL	25	2138	2138	2149	S23	E11	5957	02	26.7	11	SF			3	E		27		
0347	HOLL	25	2212	2216	2219D	S23	E11	5957	02	26.8	7D	SF			3	E		50		
		25	2220		2228	No Flare Patrol														

Hα SOLAR FLARES

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp	Opt	Xray	See	Obs Type	Area Measurement Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
		25	2242		2246	No Flare Patrol														
		25	2301		2328	No Flare Patrol														
0348	HOLL	25	2348	2350	2423	S10	E35	5955	02	28.6	35	SF			3	E		72		EF
0349	LEAR	26	0159	0201	0208	N13	E56	5960	03	2.3	9	SF			3	E		13		
0350	VORO	26	0240	0243	0255	S09	W22	5945	02	24.4	15	SF			1	C	0243	81	0.9	EJ
0351	LEAR	26	0333	0340	0404	N16	E03	5948	02	26.4	31	SF			3	E		23		
0352	LEAR	26	0338	0338	0352	N12	E55	5960	03	2.3	14	SF			3	E		16		
0353	LEAR	26	0427	0431	0437	S20	W03	5947	02	25.9	10	SF	C	4.1	3	E		72		
0354	LEAR	26	0430	0433	0437	N03	W66	5946	02	21.2	7	SF			3	E		20		
0355	LEAR	26	0520	0522	0534	S04	W54	5952	02	22.2	14	SF			3	E		23		
0356		26	05521	0554	0604	S04	W54	5952	02	22.2	12	1N	C	2.4				140	3.2	D
	LEAR	26	0552	0554	0607	S03	W54	5952	02	22.2	15	1F	C	2.4	3	E		111		
	PEKG	26	0553	0554	0600	S04	W55	5952	02	22.1	7	1N				C		168	3.2	D
0357	LEAR	26	0625	0626	0633	S20	W04	5947	02	26.0	8	SF	C	1.7	3	E		29		F
0358		26	07165	07223	0732	S19	W01	5947	02	26.2	16	SN	C	2.9				80	1.1	DE
	SVTO	26	0716	0725	0735	S19	W02	5947	02	26.1	19	SF	C	2.9	4	E		73		
	ISTA	26	0720		0735	S18	W00	5947	02	26.3	15	SB				V				E
	LEAR	26	0720	0722	0732	S19	W02	5947	02	26.1	12	SF	C	2.9	3	E		43		
	PEKG	26	0721	0722	0727	S19	W02	5947	02	26.1	6	SF				C		92	1.0	D
	ATHN	26	0724E	0724U	0728D	S19	W01	5947	02	26.2	4D	SB			3	V	0724	111	1.2	
0359	ABST	26	0737	0739	0745	N30	E80	5961	03	4.6	8	1F				C	0739	87		D
0360		26	0839*	08491	0857	S20	W05	5947	02	26.0	18	SN						64	0.9	EF
	KAND	26	0839	0850	0857	S19	W06	5947	02	25.9	18	SN				P	0850	42	0.4	EF
	ISTA	26	0842		0858	S20	W04	5947	02	26.0	16	SN				V				E
	KHAR	26	0845		0855	S20	W06	5947	02	25.9	10	SF			2	V	0845			E
	BUCA	26	0845	0850	0858	S19	W04	5947	02	26.0	13	SN				C	0850	129	1.4	E
	LEAR	26	0849	0849	0859	S20	W05	5947	02	26.0	10	SF			3	E		21		
0361		26	09204	09233	0932	N03	W74	5946	02	20.8	12	SF						104		DEGH
	KAND	26	0920	0923	0930	N01	W76	5946	02	20.7	10	SF				P	0923	104		DG
	ISTA	26	0924		0932	N03	W71	5946	02	21.1	8	SN				V				E
	KHAR	26	0924	0926	0933	N05	W75	5946	02	20.8	9	SF			2	V	0926			DH
0362	KANZ	26	0932	0939	0951	N20	W26	5956	02	24.4	19	SF				C				
0363	KAND	26	1315E		1355D	N30	E70	5961	03	4.0	40D	SN				P	1339	83		D
0364	RAMY	26	1356	1357	1413	S17	W14	5947	02	25.5	17	SF			2	E		18		F
0365	RAMY	26	1508	1508	1516	S20	W14	5947	02	25.5	8	SF			3	E		26		F
		26	1527		1534	No Flare Patrol														
		26	1559		1758	No Flare Patrol														
		26	1839		1906	No Flare Patrol														
		26	1947		1958	No Flare Patrol														
0366	HOLL	26	2056	2059	2100D	S21	W16	5947	02	25.6	4D	SF	C	2.1	3	E		28		F
		26	2101		2121	No Flare Patrol														
		26	2142		2148	No Flare Patrol														
		26	2154		2246	No Flare Patrol														
0367	LEAR	27	0029	0032	0051	S20	W14	5947	02	25.9	22	SF			3	E		19		F
0368	LEAR	27	0252	0252	0255	S20	W13	5947	02	26.1	3	SF			3	E		16		

Hα S O L A R F L A R E S

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0369	LEAR	27	0332	0333	0338	N29	E64	5961	03	4.2	6	SF		3	E		29		F
0370	LEAR	27	0347	0352	0356	N30	E63	5961	03	4.1	9	SF		3	E		14		
0371	LEAR	27	0411	0416	0428	S20	W14	5947	02	26.1	17	SF		3	E		56		F
0372	LEAR	27	0415	0416	0420	N30	E61	5961	03	4.0	5	SF		3	E		11		
0373		27	0508*	05277	0544	N32	E62	5961	03	4.1	36	1F					52		D
	LEAR	27	0508	0527	0544	N30	E61	5961	03	4.0	36	SF		3	E		16		
	ABST	27	0532	0534	0538D	N34	E64	5961	03	4.3	6D	1F			C	0534	87		D
0374	ISTA	27	0657		0715	S20	E54	5958	03	3.4	18	1N			V				B
0375		27	06597	07056	0716	S19	W16	5947	02	26.1	17	SN	C 7.4				123	1.5	DEJ
	YUNN	27	0659	0715U	0720	S19	W20	5947	02	25.8	21	SN			P	0715	47	0.5	E
	ABST	27	0704	0705	0710	S19	W16	5947	02	26.1	6	SN			C	0705	131	1.4	D
	LEAR	27	0704	0706	0719	S20	W17	5947	02	26.0	15	SF	C 7.4	3	E		83		
	SVTO	27	0704	0710	0719	S20	W17	5947	02	26.0	15	SF		3	E		90		
	TACH	27	0706E		0716	S19	W15	5947	02	26.1	10D	1B		1	C	0706	194	2.1	E
	ISTA	27	0706	0706	0715	S18	W13	5947	02	26.3	9	1N			V				J
	ATHN	27	0709E	0711	0716	S16	W17	5947	02	26.0	7D	SN		3	V	0711	191	2.0	
0376		27	0823*	08385	0907	S20	W18	5947	02	26.0	44	SN	C 5.7				131	1.4	EF
	SVTO	27	0823	0843	0920	S20	W19	5947	02	25.9	57	1N	C 5.7	3	E		122		
	KAND	27	0835	0840	0858	S20	W17	5947	02	26.0	23	SB			P	0840	104	1.1	EF
	YUNN	27	0836	0838	0905	S18	W19	5947	02	25.9	29	SN			C		157	1.7	
	KHAR	27	0838	0841	0905	S20	W17	5947	02	26.0	27	SN		2	P	0843	140	1.5	
0377	KHAR	27	0945	0945	0953	S26	W76	5962	02	21.5	8	SF		2	V	0945			DH
0378	KHAR	27	1004	1005	1010	S26	W76	5962	02	21.5	6	SF		2	V	1005			DH
0379		27	10391	10438	1058	N32	E62	5961	03	4.3	19	1F					126	4.6	EH
	SVTO	27	1039	1051	1100	N32	E61	5961	03	4.3	21	SF		3	E		72		
	KHAR	27	1040	1043	1056	N33	E62	5961	03	4.4	16	1F		2	P	1049	180	4.6	EH
0380		27	1054	10571	1110	S20	W18	5947	02	26.1	16	SN					125	1.8	
	KHAR	27	1054	1057	1110	S20	W18	5947	02	26.1	16	SN		2	P	1100	160	1.8	
	SVTO	27	1054	1058	1110	S20	W19	5947	02	26.0	16	SN		3	E		90		
		27	1244		1248	No Flare Patrol													
0381	SVTO	27	1248E	1250	1259	S20	W21	5947	02	25.9	11D	SN	C 2.1	3	E		67		
0382		27	1323	1328	1335	S20	W20	5947	02	26.0	12	SF					36		
	RAMY	27	1320E	1322U	1342D	S20	W20	5947	02	26.0	22D	SF		2	E		27		
	SVTO	27	1323	1328	1335	S19	W19	5947	02	26.1	12	SF		3	E		45		
0383		27	1517E	1519	1613	N31	E63	5961	03	4.6	56D	SF					26		FHK
	HOLL	27	1517E	1519	1613	N31	E63	5961	03	4.6	56D	SF			E		24		K
	HOLL	27	1517E	1543U	1613	N31	E63	5961	03	4.6	56D	SF		3	E		28		FH
0384	RAMY	27	1528	1547	1612	N27	E55	5961	03	3.9	44	SF		2	E		32		F
0385		27	1611*	1632	1642	S17	W24	5947	02	25.8	31	SF					37		F
	HOLL	27	1611	1627U	1637	S17	W24	5947	02	25.8	26	SF		3	E		53		F
	RAMY	27	1622	1632	1647	S17	W24	5947	02	25.8	25	SF		3	E		21		
0386		27	1659	1709	1730	N26	E55	5961	03	4.0	31	SF					38		FH
	RAMY	27	1659	1709	1716	N25	E54	5961	03	3.9	17	SF		3	E		42		
	HOLL	27	1708E	1710U	1745	N26	E56	5961	03	4.1	37D	SF		2	E		34		FH
0387	HOLL	27	1758	1804	1811	S19	W22	5947	02	26.1	13	SF		3	E		17		F
0388		27	18062	1808	1826	N28	E58	5961	03	4.3	20	SN	C 2.6				72		
	HOLL	27	1806	1808	1834	N29	E59	5961	03	4.4	28	SN	C 2.6	3	E		89		
	RAMY	27	1808	1808	1818	N27	E56	5961	03	4.1	10	SF		3	E		54		

Hα SOLAR FLARES

FEBRUARY 1990

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0389		27	18312	18361	1851	S22	W25	5957	02	25.8	20	SF					25		F
	HOLL	27	1831	1836	1855	S21	W25	5957	02	25.8	24	SF		3	E		29		F
	RAMY	27	1833	1837	1847	S22	W25	5957	02	25.8	14	SF		3	E		21		F
0390	HOLL	27	1834	1845	1852	S26	W81	5962	02	21.5	18	SF		3	E		34		
0391	HOLL	27	1844	1845	1850	N31	E55	5961	03	4.1	6	SF		3	E		31		
0392		27	1904*	2022*	2245D	N28	E53	5961	03	3.9	221D	SF					102		FKT
	HOLL	27	1904	2022U	2245D	N31	E55	5961	03	4.1	221D	SF		3	E		55		FT
	RAMY	27	1939	2022	2138D	N27	E52	5961	03	3.9	119D	SF			E		43		K
	RAMY	27	1939	2111	2138D	N27	E52	5961	03	3.9	119D	1N		3	E		209		F
0393	RAMY	27	1930	1937	2001	S20	W22	5957	02	26.1	31	SF	C 3.4	3	E		52		F
		27	2042		2052	No Flare Patrol													
		27	2139		2327	No Flare Patrol													
0394	LEAR	27	2328E	2329U	2426	N29	E54	5961	03	4.2	58D	1F	M 1.7	3	E		170		F
0395	VORO	27	2332E		2416	S21	E58	5958	03	4.4	44D	2F		1	C		287	7.3	E
0396	LEAR	28	0235	0245	0252	N28	E47	5961	03	3.8	17	SF		3	E		15		
0397	LEAR	28	0237	0239	0243	S20	W26	5957	02	26.1	6	SF	C 3.0	3	E		47		
0398	LEAR	28	0336	0336	0339	N27	E54	5961	03	4.3	3	SF	C 3.5	3	E		32		
0399	LEAR	28	0435	0435	0440	N29	E48	5961	03	3.9	5	SF		3	E		11		
0400		28	0457*	0501*	0645	N31	E49	5961	03	4.1	108	1N	M 2.7				127	3.2	DHJK
	MITK	28	0457	0510	0653D	N33	E47	5961	03	3.9	116D	2N			C	0510	310	6.5	JK
	LEAR	28	0458	0501	0721	N30	E50	5961	03	4.1	143	SF			E		93		K
	LEAR	28	0458	0512	0721	N30	E50	5961	03	4.1	143	SF	M 2.7	3	E		60		H
	ABST	28	0507	0510	0515	N34	E50	5961	03	4.2	8	SN			C	0510	87	1.8	D
	ABST	28	0618	0622	0630	N30	E50	5961	03	4.2	12	SN			C	0622	87	1.8	D
	YUNN	28	0630E	0630U	0717	N29	E48	5961	03	4.0	47D	1F			P	0630	126	2.5	
0401	SVTO	28	0847	0852	0855D	N33	E40	5961	03	3.5	8D	1F	C 3.9	3	E		113		
0402		28	0932	1002*	1111	N33	E47	5961	03	4.1	99	2F	C 3.9				220	2.6	FKY
	SVTO	28	0932	1002	1111	N33	E47	5961	03	4.1	99	2F			E		229		K
	SVTO	28	0932	1012	1111	N33	E47	5961	03	4.1	99	2F	C 3.9	3	E		301		YF
	HTPR	28	1005E		1011D	N34	E47	5961	03	4.2	6D	1N			C	1011	130	2.6	
0403	SVTO	28	1135	1136	1143	N32	E47	5961	03	4.2	8	SF		3	E		20		Y
0404	SVTO	28	1147	1156	1208	N30	E44	5961	03	3.9	21	SF		3	E		25		Y
0405	RAMY	28	1157E	1157U	1206	S18	W36	5947	02	25.7	9D	SF	C 2.3	3	E		14		F
0406		28	1251	13146	1416	N30	E43	5961	03	3.9	85	1F	C 6.6				131		FKY
	SVTO	28	1251	1314	1416	N30	E43	5961	03	3.9	85	SF			E		66		K
	SVTO	28	1251	1320	1416	N30	E43	5961	03	3.9	85	1F	C 6.6	3	E		173		Y
	RAMY	28	1257E	1318U	1427D	N29	E44	5961	03	4.0	90D	1F	C 6.6	3	E		155		F
0407	SVTO	28	1336	1346	1356	S21	W33	5957	02	26.0	20	1F		3	E		123		H
0408		28	1428*	1432*	1600	N30	E41	5961	03	3.8	92	1N	M 1.0				125		FK
	RAMY	28	1428	1432	1531	N28	E41	5961	03	3.8	63	SF		3	E		76		F
	SVTO	28	1430	1432	1614	N31	E41	5961	03	3.8	104	1N			E		91		K
	SVTO	28	1430	1549	1614	N31	E41	5961	03	3.8	104	1N	M 1.0	3	E		152		
	RAMY	28	1534	1546U	1549D	N30	E42	5961	03	3.9	15D	1F		3	E		150		F
	RAMY	28	1534	1809	1816D	N30	E42	5961	03	3.9	162D	1N	M 1.2		E		156		K
0409	RAMY	28	1645	1646	1709	S21	W39	5947	02	25.7	24	SF		3	E		46		F
0410	RAMY	28	1751	1755	1813	N14	W30	5948	02	26.5	22	SF	C 7.4	3	E		66		

FEBRUARY 1990

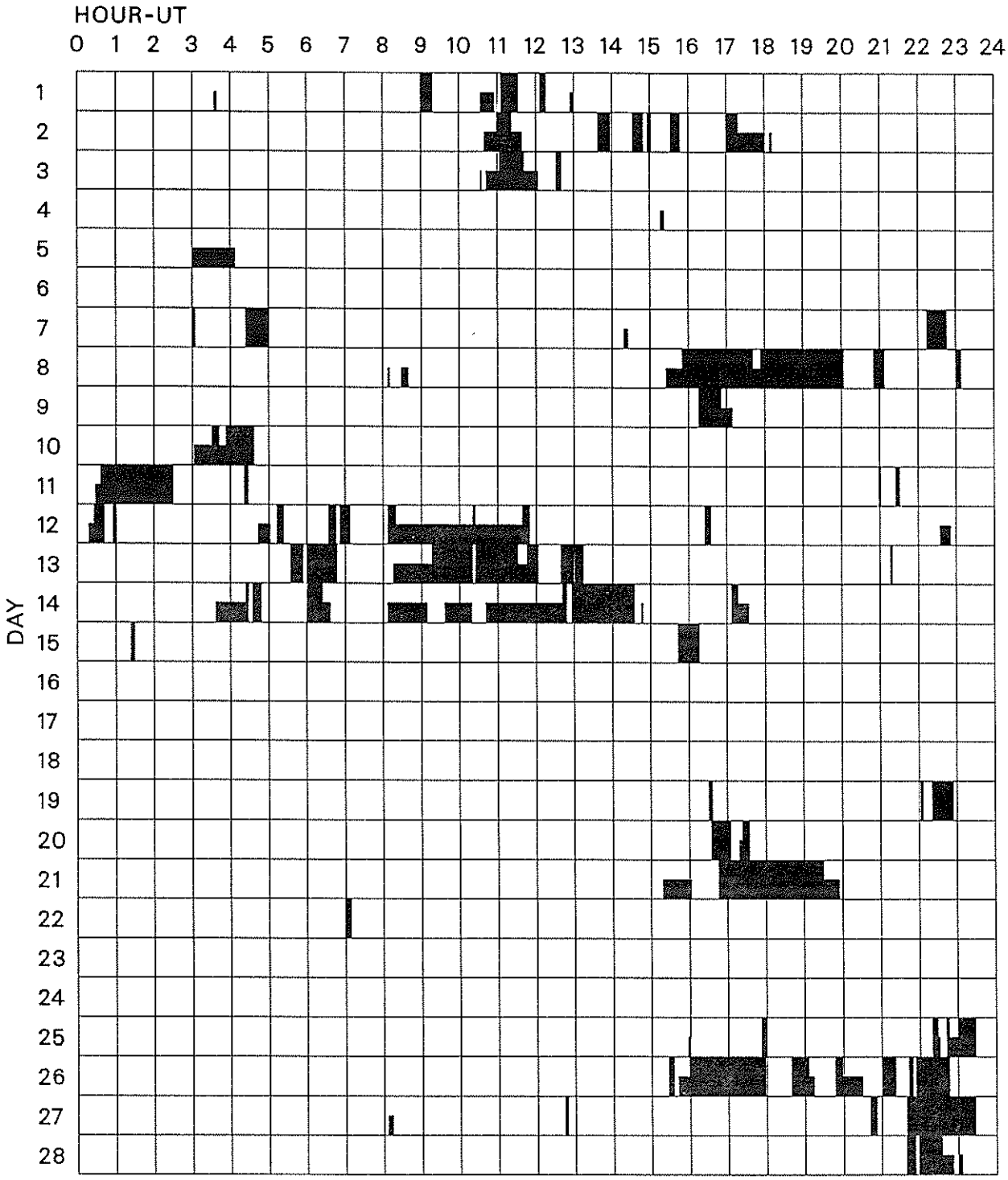
Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0411	RAMY	28	1908	1908	1910	S15	W38	5947	02	25.9	2	SF		3	E		21		F
0412	RAMY	28	2003	2007	2024	N28	E39	5961	03	3.9	21	SF		3	E		95		
0413	RAMY	28	2020	2020	2030	S21	E07	5955	03	1.4	10	SF		3	E		28		
0414	RAMY	28	2028	2039	2157	N29	E39	5961	03	3.9	89	SF	C 3.9	3	E		39		
		28	2138		2152	No Flare Patrol													
		28	2158		2234	No Flare Patrol													
0415		28	23278	23287	2340	N28	E40	5961	03	4.1	13	SF	C 3.5				33		
	LEAR	28	2327	2328	2330	N26	E42	5961	03	4.2	3	SF		3	E		16		
	LEAR	28	2335	2335	2351	N30	E38	5961	03	4.0	16	SF	C 3.5	3	E		50		

"Remarks"

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

INTERVALS OF NO FLARE PATROL OBSERVATION
FOR PRECEDING SOLAR FLARE TABLE

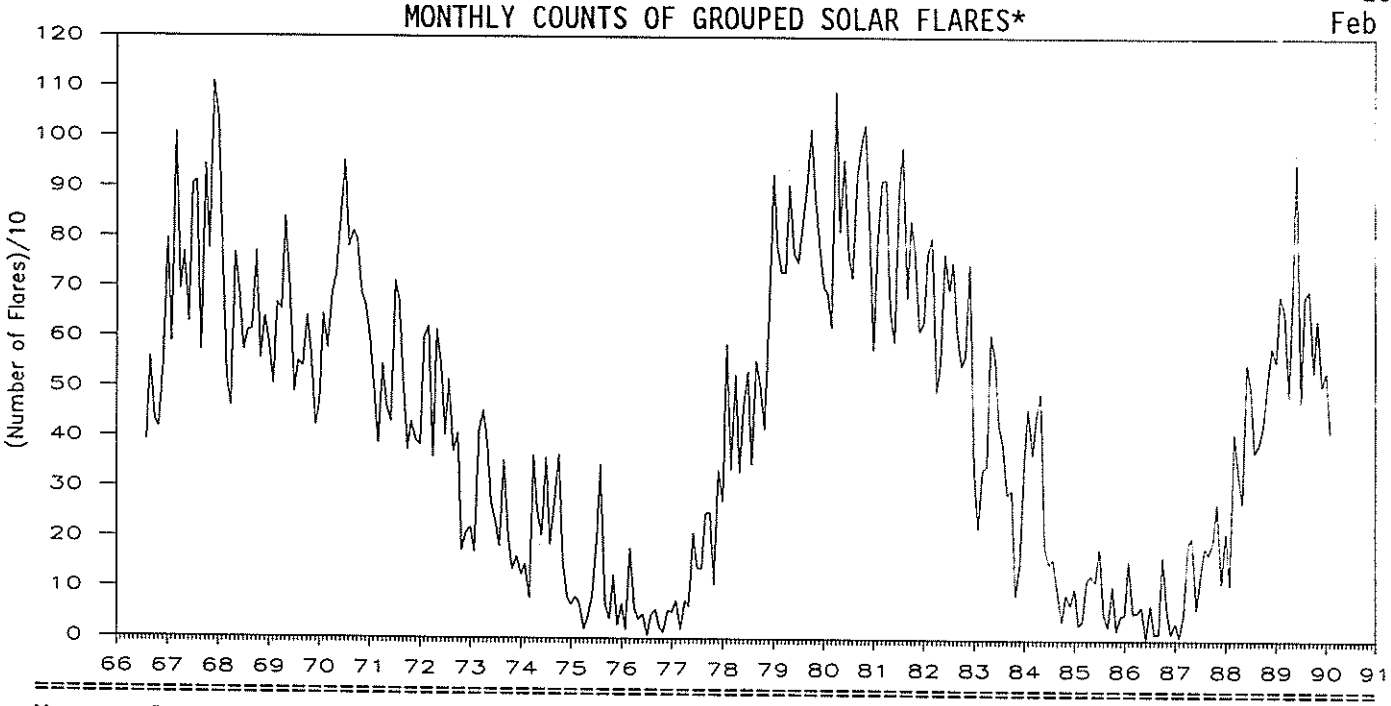
FEBRUARY 1990



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

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

MONTHLY COUNTS OF GROUPED SOLAR FLARES*



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1966								391	558	432	417	543	2341
1967	796	589	1009	694	771	629	907	911	573	946	775	1109	9709
1968	1037	773	519	460	768	697	573	611	616	772	556	640	8022
1969	581	504	669	655	839	694	489	551	540	643	566	422	7153
1970	466	646	578	688	722	836	954	780	811	797	687	667	8632
1971	598	505	387	546	461	430	713	673	518	375	431	394	6031
1972	384	599	621	361	614	541	404	515	371	408	175	210	5203
1973	221	171	410	453	388	270	232	182	353	201	136	163	3180
1974	127	148	79	364	255	204	360	187	270	366	153	81	2594
1975	68	82	69	19	42	85	196	346	68	38	127	25	1165
1976	69	18	180	60	38	48	6	47	57	23	13	55	614
1977	54	77	18	76	64	210	140	140	250	252	107	336	1724
1978	274	588	338	526	330	460	533	346	554	499	418	648	5514
1979	926	781	731	731	907	772	750	821	901	1018	888	786	10012
1980	703	689	621	1092	811	956	763	720	924	988	1027	838	10132
1981	578	782	914	915	658	592	893	982	680	836	773	615	9218
1982	631	766	803	490	553	769	696	753	615	544	564	748	7932
1983	332	220	337	346	609	561	427	389	289	298	88	152	4048
1984	353	461	366	440	492	185	151	161	95	36	92	69	2901
1985	104	29	38	119	129	116	185	53	25	108	19	50	975
1986	51	158	54	56	68	3	71	12	14	174	56	13	730
1987	36	7	52	192	205	61	132	185	172	198	273	114	1627
1988	217	109	413	328	274	551	502	375	390	429	508	584	4680
1989	689	539	658	485	686	971	473	684	699	535	640	507	7566
1990	536	415											951

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

SOLAR RADIO EMISSION
Outstanding Occurrences

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
01	200	GORK	44	NS	0538.0E		382.0D		5.0		
	100	GORK	44	NS	0538.0E		382.0D		5.0		
	204	IZMI	43	NS	0700.0		300.0	30.0			
	127	TORN	44	NS	0700.0E		480.0D		25.0		V=1
	245	SVTO	44	NS	0739.0E	0818.0	54.0D	79.0			QL=4 ST=2 TYP=1
	260	ONDR	43	NS	0810.0	1327.0	380.0	366.0			
	234	POTS	44	NS	1028.0E	1047.0	252.0D	30.0			
	200	HIRA	44	NS	2140.0E	0219.0	615.0D	144.0	15.0		SR
	245	LEAR	44	NS	2229.0E	0134.0	570.0D	380.0			QL=4 ST=2 TYP=1
	200	HIRA	42	SER	0114.0	0129.7	24.0	1700.0			SR
	410	PALE	4	S/F	0128.0E	0131.0	4.0D	60.0			QL=4 ST=2 TYP=3
	2840	PEKG	40	F	0152.0	0203.4	27.0	53.4			
	1415	LEAR	4	S/F	0155.0E	0201.0	8.0D	300.0			QL=4 ST=2 TYP=5
	1415	PALE	8	S	0156.0E	0156.0	U	57.0			QL=4 ST=2 TYP=3
	410	PALE	4	S/F	0157.0E	0200.0	12.0D	96.0			QL=4 ST=2 TYP=3
	610	LEAR	4	S/F	0201.0E	0205.0	6.0D	380.0			QL=4 ST=2 TYP=3
	610	PALE	4	S/F	0201.0E	0205.0	6.0D	440.0			QL=4 ST=2 TYP=3
	500	HIRA	46	C	0201.0	0205.2	6.7	340.0	62.0		O
	410	LEAR	4	S/F	0203.0E	0205.0	5.0D	120.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	0204.0E	0211.0	7.0D	120.0			QL=2 ST=2 TYP=5
	500	HIRA	4	S/F	0306.3	0306.9	1.7	22.0			WR
	5900	KISV	2	S/F	0605.0	0605.6	1.6	3.0			
	5900	KISV	2	S/F	0710.0	0710.9	5.7	10.0			
	9100	GORK	1	S	0710.4	0710.8	1.1	6.0			
	410	LEAR	8	S	0720.0E	0721.0	1.0D	99.0			QL=4 ST=2 TYP=3
	5900	KISV	22	GRF	0859.7	0902.1	11.6	5.0			
	410	SVTO	8	S	1116.0E	1117.0	1.0D	85.0			QL=4 ST=2 TYP=3
	536	ONDR	42	SER	1116.7	1116.8	34.0	108.0			
	536	ONDR	42	SER	1314.7	1314.9	17.0	23.0			
	245	SGMR	4	S/F	1326.0E	1327.0	4.0D	440.0			QL=2 ST=2 TYP=3
	234	POTS	4	S/F	1326.6	1327.5	4.0	1500.0			
	808	ONDR	41	F	1326.6	1327.9	4.0	6.0			
	410	SGMR	4	S/F	1327.0E	1327.0	3.0D	55.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1327.0E	1328.0	1.0D	110.0			QL=4 ST=2 TYP=3
	245	SVTO	4	S/F	1327.0E	1328.0	3.0D	480.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1338.0E	1338.0	U	120.0			QL=4 ST=2 TYP=3
	234	POTS	8	S	1338.6	1338.7	0.5	400.0			
	245	SVTO	8	S	1339.0E	1339.0	U	140.0			QL=4 ST=3 TYP=3
	810	KRAK	8	S	1341.2	1341.5	0.3	23.0			
	245	PALE	8	S	1928.0E	1929.0	1.0D	210.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1928.0E	1929.0	1.0D	110.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2002.0E	2002.0	U	54.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2025.0E	2025.0	U	78.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	2025.0E	2025.0	U	67.0			QL=4 ST=2 TYP=3
	2800	OTTA	20	GRF	2031.0	2036.0	30.0	4.3	2.0		
	245	SGMR	8	S	2040.0E	2040.0	U	50.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	2114.0E	2118.0	5.0D	270.0			QL=4 ST=2 TYP=3
	245	PALE	4	S/F	2115.0E	2118.0	4.0D	420.0			QL=2 ST=2 TYP=5
02	100	GORK	44	NS	0539.0E		381.0D		5.0		
	200	GORK	44	NS	0539.0E		381.0D		5.0		
	245	SVTO	44	NS	0619.0E	0648.0	86.0D	230.0			QL=2 ST=2 TYP=1
	204	IZMI	43	NS	0700.0		360.0	70.0			
	127	TORN	44	NS	0700.0E		480.0D		120.0		V=1
	113	POTS	44	NS	0707.0E	1011.0	445.0D	75.0			
	234	POTS	44	NS	0800.0E	1207.0	392.0D	40.0			
	260	ONDR	43	NS	0800.0	1215.9	390.0	343.0			
	200	HIRA	44	NS	2140.0E	2223.0	110.0D	11.0	4.0		WR
	245	LEAR	8	S	0019.0E	0019.0	1.0D	450.0			QL=2 ST=2 TYP=3
	245	PALE	49	GB	0019.0E	0019.0	1.0D	670.0			QL=4 ST=2 TYP=6
	200	HIRA	46	C	0034.7	0036.0	1.8	375.0			SR
	100	HIRA	42	SER	0228.4	0230.7	13.9	1800.0			WR
	200	HIRA	42	SER	0229.7	0230.4	11.9	1600.0			WR
	245	LEAR	49	GB	0230.0E	0230.0	1.0D	800.0			QL=4 ST=2 TYP=6
	500	HIRA	42	SER	0230.0	0257.5	28.5	41.0			O
	245	PALE	49	GB	0351.0E	0356.0	5.0D	580.0			QL=4 ST=2 TYP=6
	100	HIRA	46	C	0351.3	0353.1	4.0	1300.0			O
	200	HIRA	46	C	0352.1	0353.1	2.2	620.0			O
	500	HIRA	41	F	0352.5	0354.5	6.0	36.0			WR

SOLAR RADIO EMISSION
Outstanding Occurrences

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
02	410	PALE	8	S	0354.0E	0356.0	2.0D	98.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0356.0E	0356.0	U	200.0			QL=2 ST=2 TYP=3
	410	LEAR	8	S	0356.0E	0356.0	1.0D	92.0			QL=2 ST=2 TYP=3
	100	HIRA	42	SER	0455.4	0457.4	41.6	440.0			
	100	HIRA	42	SER	0613.2	0652.0	79.0	470.0			
	100	GORK	41	F	0613.5	0653.4		300.0			
	100	GORK	41	F	0613.5	0615.4	41.2	570.0			
	245	SVTO	8	S	0640.0E	0641.0	1.0D	190.0			QL=2 ST=2 TYP=3
	200	GORK	46	C	0645.0	0652.1		20.0D			
	200	GORK	46	C	0645.0	0645.9	9.0	20.0D			
	5900	KISV	2	S/F	0803.3	0804.4	3.3	10.0			
	100	GORK	41	F	0853.6	0932.2		680.0			
	100	GORK	41	F	0853.6	0900.7	45.8	230.0			
	245	LEAR	8	S	0911.0E	0911.0	2.0D	53.0			QL=2 ST=2 TYP=3
	2950	GORK	2	S/F	0911.1	0911.9	1.3	3.0			
	245	LEAR	8	S	0922.0E	0922.0	1.0D	73.0			QL=2 ST=2 TYP=3
	200	GORK	46	C	0925.3	0932.2		160.0			
	200	GORK	46	C	0925.3	0927.9	3.0	130.0			
	245	LEAR	4	S/F	0932.0E	0933.0	6.0D	94.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0933.0E	0933.0	1.0D	100.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	0936.0E	0936.0	U	390.0			QL=2 ST=2 TYP=3
	536	ONDR	8	S	1017.2	1017.4	0.8	59.0			
	100	GORK	41	F	1045.8	1101.0		230.0			
	100	GORK	41	F	1045.8	1048.7	16.8	250.0			
	113	POTS	4	S/F	1048.2	1048.7	1.7	420.0			
	40	POTS	4	S/F	1048.5	1048.9	1.6U	4900.0			
	200	GORK	4	S/F	1052.3	1054.2	3.4	315.0			
	234	POTS	42	SER	1052.5	1054.2	22.1	375.0			
	204	IZMI	41	F	1053.0	1054.3	3.0	330.0			
	536	ONDR	41	F	1206.0	1254.6	56.0	18.0			
	245	SGMR	8	S	1619.0E	1619.0	1.0D	120.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1657.0E	1657.0	1.0D	57.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1936.0E	1936.0	U	63.0			QL=4 ST=2 TYP=3
	2800	OTTA	4	S/F	1936.7	1936.7	1.0	7.1	1.0		
	2800	OTTA	20	GRF	2000.0	2005.0	11.0	5.6	2.0		
03	200	HIRA	43	NS	0125.0	0244.0	132.0	13.0	3.0		WR
	200	GORK	44	NS	0544.0E		376.0D		5.0		
	100	GORK	43	NS	0612.0		348.0		5.0		
	127	TORN	43	NS	0718.0		462.0		2.0		V=0
	17000	NOBE	1	S	0035.6	0035.8	0.5	14.0			0,80,35GHz:0
	245	PALE	49	GB	0059.0E	0107.0	23.0D	940.0			QL=4 ST=2 TYP=7
	245	LEAR	49	GB	0107.0E	0107.0	6.0D	740.0			QL=4 ST=2 TYP=6
	410	LEAR	4	S/F	0107.0E	0108.0	6.0D	340.0			QL=4 ST=2 TYP=3
	410	PALE	4	S/F	0107.0E	0108.0	3.0D	440.0			QL=4 ST=2 TYP=3
	2840	PEKG	47	GB	0107.0	0108.0	5.0	675.0			
	8800	LEAR	49	GB	0107.0E	0109.0	10.0D	660.0			QL=4 ST=2 TYP=6
	500	HIRA	46	C	0107.5	0109.0	13.0	410.0	37.0		WR
	500	HIRA	29	PBI	0107.5	0120.5	47.5	6.0	2.0		O
	200	HIRA	46	C	0107.6	0107.7	7.3	350.0			O
	100	HIRA	48	C	0107.8	0107.9	8.6	4500.0	525.0		WR
	17000	NOBE	45	C	0107.9	0109.1	3.5	1170.0			3L
	35000	NOBE	45	C	0107.9	0109.1	3.5	1280.0			0,80GHz:UNCERTA
	35000	NOBE	29	PBI	0107.9	0111.4	10.0	25.0			O
	17000	NOBE	29	PBI	0107.9	0111.4	12.0	23.0			O
	4995	PALE	49	GB	0108.0E	0108.0	2.0D	540.0			QL=2 ST=2 TYP=6
	1415	PALE	49	GB	0108.0E	0108.0	5.0D	510.0			QL=4 ST=2 TYP=6
	15400	PALE	49	GB	0108.0E	0109.0	3.0D	1600.0			QL=4 ST=2 TYP=6
	8800	PALE	49	GB	0108.0E	0109.0	2.0D	670.0			QL=4 ST=2 TYP=6
	2695	PALE	49	GB	0108.0E	0108.0	4.0D	720.0			QL=4 ST=2 TYP=6
	1415	LEAR	4	S/F	0108.0E	0108.0	10.0D	480.0			QL=4 ST=2 TYP=3
	4995	LEAR	49	GB	0108.0E	0108.0	11.0D	600.0			QL=4 ST=2 TYP=6
	2695	LEAR	49	GB	0108.0E	0108.0	14.0D	770.0			QL=4 ST=2 TYP=6
	15400	LEAR	49	GB	0108.0E	0109.0	10.0D	1300.0			QL=4 ST=2 TYP=6
	610	LEAR	4	S/F	0108.0E	0109.0	1372.0D	180.0			QL=4 ST=1 TYP=3
	2840	PEKG	29	PBI	0112.0		33.0	3.2			
	200	HIRA	41	F	0600.0	0642.0	76.0	195.0			WR
	200	GORK	41	F	0615.0	0636.1	68.5	160.0			
	200	GORK	41	F	0615.0	0722.4		25.0D			

SOLAR RADIO EMISSION
Outstanding Occurrences

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
03	100	GORK	46	C	0619.0	0619.5	2.0	120.0			
	100	GORK	46	C	0619.0	0619.9		230.0			
	100	GORK	41	F	0709.0	0904.2		30.0D			
	100	GORK	41	F	0709.0	0722.4	132.0	257.0			
	113	POTS	4	S/F	0722.3	0722.6	1.1	250.0			
	40	POTS	4	S/F	0722.3	0722.6	1.8	14000.0			
	260	ONDR	41	F	0800.0	1139.7	390.0	338.0			
	5900	KISV	2	S/F	0847.4	0848.0	1.8	10.0			
	200	GORK	41	F	0853.2	0855.2		20.0			
	200	GORK	41	F	0853.2	0854.2	3.2	25.0D			
	204	IZMI	41	F	0854.0	0854.8	5.0	104.0			
	5900	KISV	4	S/F	0925.8	0926.2	1.3	15.0			
	9100	GORK	1	S	0925.9	0926.2	0.6	15.0			
	15000	KISV	2	S/F	0926.0	0926.2	1.1	8.0			
	100	GORK	8	S	1118.9	1119.8	1.5	2570.0			
	200	GORK	41	F	1119.1	1119.6	21.2	25.0D			
	113	POTS	4	S/F	1119.1	1119.7	0.9	350.0			
	200	GORK	41	F	1119.1	1139.9		160.0			
	204	IZMI	41	F	1119.3	1119.5	0.7	31.0	15.0		
	5900	KISV	23	GRF	1119.3	1123.6	11.1	4.0			
	9100	GORK	1	S	1119.6	1121.1	3.8	12.0			
	234	POTS	4	S/F	1119.6	1119.7	0.5	400.0			
	15000	KISV	2	S/F	1119.8	1121.1	3.0	10.0			
	40	POTS	4	S/F	1119.8	1119.9	0.9	1400.0			
	9500	POTS	1	S	1120.0	1121.0	9.0	10.0			
	3000	POTS	3	S	1120.0	1121.0	5.0	9.0			
	2950	GORK	22	GRF	1120.0	1121.4	11.0	8.0			
	2850	CRIM	1	S	1120.0	1121.6	3.8	10.0	3.0		
	3013	IZMI	2	S/F	1120.2	1121.0	5.0	11.0	6.0		
	5900	KISV	4	S/F	1120.2	1121.1	3.1	27.0			
	5900	KISV	1	S	1139.4	1139.8	0.9	7.0			
	536	ONDR	3	S	1139.5	1140.0	4.0	7.0			
	2950	GORK	1	S	1139.5	1139.7	0.5	2.0			
	1470	POTS	3	S	1139.5	1139.8	1.0	8.0			
	950	GORK	3	S	1139.5	1139.9	0.8	10.0			
	650	GORK	3	S	1139.6	1140.0	0.8	10.0			
	430	KRAK	2	S/F	1139.6	1139.9	0.8	19.0	6.0		
	808	ONDR	3	S	1139.8	1140.4	2.0	7.0			
	245	SVTO	8	S	1140.0E	1140.0	U	270.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1140.0E	1140.0	U	91.0			QL=4 ST=2 TYP=3
	204	IZMI	5	S	1140.0	1140.2	0.6	150.0	80.0		
	810	KRAK	8	S	1140.2	1140.3	0.2	10.0			
	430	KRAK	42	SER	1143.0	1143.1	1.0	67.0			
	410	SGMR	4	S/F	1314.0E	1316.0	646.0D	340.0			QL=4 ST=3 TYP=3
	536	ONDR	42	SER	1316.0	1316.4	6.0	24.0			
	9500	POTS	1	S	1316.0	1316.4	3.0	5.0			
	3000	POTS	1	S	1316.0	1316.5	3.0	6.0			
	1470	POTS	4	S/F	1316.0	1316.9	2.0	7.0			
	808	ONDR	8	S	1319.8	1320.0	1.0	52.0			
04	100	GORK	43	NS	0705.0		295.0		5.0		
	127	TORN	43	NS	0713.0		467.0		4.0		V=1
	2840	PEKG	1	S	0154.0	0156.5	3.0	5.3			
	2840	PEKG	20	GRF	0648.0	0706.2	38.0	5.3			
	100	GORK	46	C	0726.8	0733.4		30.0D			
	100	GORK	46	C	0726.8	0728.8	7.6	30.0D			
	2950	GORK	2	S/F	0744.8	0745.4	0.9	3.0			
	260	ONDR	41	F	0800.0	1050.1	390.0	90.0			
	2950	GORK	22	GRF	0801.6	0812.3	19.6	3.0			
	100	GORK	4	S/F	0813.2	0816.2	3.9	30.0D			
	5900	KISV	20	GRF	0827.8	0844.8	44.2	9.0			
	15000	KISV	2	S/F	0840.8	0841.9	1.6	7.0			
	204	IZMI	42	SER	1015.0	1058.0	48.0	110.0			
	100	GORK	41	F	1027.0	1103.3		230.0			
	100	GORK	41	F	1027.0	1030.3	58.8	230.0			
	200	GORK	41	F	1036.7	1059.1		25.0D			
	200	GORK	41	F	1036.7	1038.3	23.3	30.0D			
	113	POTS	4	S/F	1354.7	1355.1	1.6	100.0			
	234	POTS	4	S/F	1354.7	1355.2	1.0	100.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
04	245	SGMR	8	S	1355.0E	1355.0	U	61.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1355.0E	1355.0	1.0D	61.0			QL=4 ST=2 TYP=3
	40	POTS	4	S/F	1355.1	1355.7	2.3	4500.0			
	234	POTS	42	SER	1413.8	1421.7	16.2	100.0			
	113	POTS	42	SER	1413.9	1421.1	8.1	140.0			
	40	POTS	42	SER	1414.0	1421.6	8.3	15000.0			
	245	SGMR	8	S	1421.0E	1421.0	U	58.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1708.0E	1708.0	U	78.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1708.0E	1708.0	1.0D	55.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1712.0E	1712.0	1.0D	230.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1712.0E	1712.0	1.0D	200.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1728.0E	1728.0	1.0D	57.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	2013.0E	2014.0	2.0D	150.0			QL=2 ST=2 TYP=3
	2695	PENT	3	S	2150.5	2153.0	9.5	9.9	4.0		
	8800	PALE	8	S	2152.0E	2152.0	1.0D	70.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	2152.0E	2152.0	1.0D	65.0			QL=4 ST=2 TYP=3
	200	HIRA	41	F	2218.5	2237.0	41.0	150.0			O
05	100	GORK	44	NS	0544.0E		376.0D		5.0		
	200	GORK	43	NS	0554.0		366.0		5.0		
	127	TORN	43	NS	0901.0		419.0		5.0		V-1,DISTURBED
	100	GORK	46	C	0631.2	0636.6	9.2	240.0			
	100	GORK	46	C	0631.2	0638.6		355.0			
	245	SVTO	8	S	0715.0E	0715.0	U	180.0			QL=4 ST=2 TYP=3
	260	ONDR	41	F	0800.0	1107.3	390.0	23.0			
	100	GORK	41	F	0813.4	1010.7		950.0			
	100	GORK	41	F	0813.4	0952.8		245.0			
	100	GORK	41	F	0813.4	0902.9	118.6	120.0			
	204	IZMI	5	S	0815.8	0816.0	0.8	36.0	18.0		
	200	GORK	46	C	0901.3	0903.6		25.0D			
	200	GORK	46	C	0901.3	0901.7	4.0	17.0			
	113	POTS	4	S/F	0901.5	0902.9	2.5	70.0			
	204	IZMI	5	S	0901.8	0902.0	0.6	30.0	15.0		
	40	POTS	4	S/F	0902.3	0903.4	3.2	6000.0			
	2850	CRIM	1	S	1010.2	1013.0	3.5	8.0	3.0		
	2950	GORK	2	S/F	1010.2	1011.0	6.7	5.0			
	5900	KISV	2	S/F	1010.3	1010.9	4.9	9.0			
	536	ONDR	8	S	1036.9	1037.0	1.2	92.0			
	100	GORK	46	C	1105.8	1106.2	6.2	1420.0			
	100	GORK	46	C	1105.8	1111.5		200.0			
	204	IZMI	29	PBI	1106.0		17.0	3.0			
	40	POTS	4	S/F	1106.0E	1107.1	6.5D	4500.0			
	204	IZMI	41	F	1106.0	1106.2	5.0	85.0			
	200	GORK	46	C	1106.0	1109.4		30.0D			
	200	GORK	46	C	1106.0	1106.4	4.9	30.0D			
	113	POTS	4	S/F	1106.0E	1106.7	5.8D	200.0			
	536	ONDR	41	F	1107.8	1108.7	5.9	7.0			
	430	KRAK	8	S	1109.5	1110.0	0.8	87.0			
	810	KRAK	8	S	1111.3	1111.3	0.1	14.0			
	536	ONDR	8	S	1230.6	1231.1	0.8	26.0			
	245	PALE	49	GB	2034.0E	2034.0	1.0D	990.0			QL=2 ST=2 TYP=6
	245	SGMR	49	GB	2034.0E	2034.0	1.0D	830.0			QL=2 ST=2 TYP=6
	15400	LEAR	8	S	2303.0E	2303.0	U	200.0			QL=4 ST=3 TYP=3
06	127	TORN	43	NS	0911.0		409.0		3.0		V=2,DISTRUBED
	200	HIRA	46	C	0218.5	0221.1	5.9	130.0			O
	245	LEAR	8	S	0220.0E	0220.0	1.0D	63.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0220.0E	0220.0	2.0D	79.0			QL=4 ST=3 TYP=3
	2950	GORK	2	S/F	0659.4	0700.9	7.4	6.0			
	2850	CRIM	1	S	0659.6	0701.0	6.0	11.0	4.0		
	5900	KISV	2	S/F	0659.8	0700.9	4.2	9.0			
	204	IZMI	5	S	0733.0	0733.3	0.7	117.0	65.0		
	260	ONDR	41	F	0800.0	1014.8	390.0	126.0			
	245	LEAR	8	S	0905.0E	0906.0	2.0D	180.0			QL=4 ST=2 TYP=3
	234	POTS	41	F	0905.8	0907.1	1.6	350.0			
	204	IZMI	42	SER	0906.0	0907.0	7.0	380.0			
	245	LEAR	8	S	0912.0E	0912.0	U	190.0			QL=4 ST=2 TYP=3
	234	POTS	4	S/F	1004.5	1005.0	0.9	190.0			
	204	IZMI	41	F	1013.5	1015.0	1.5	90.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

FEBRUARY 1990

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06	2950	GORK	22	GRF	1042.7	1044.3	13.7	3.0			
	204	IZMI	5	S	1111.2	1111.3	0.3	70.0	35.0		
	2950	GORK	22	GRF	1118.0	1140.8	42.0D	6.0			
	204	IZMI	41	F	1128.0	1128.5	3.0	50.0			
	234	POTS	8	S	1200.9	1201.0	0.4	100.0			
	113	POTS	4	S/F	1200.9	1201.1	0.4	385.0			
	40	POTS	4	S/F	1200.9	1201.1	1.6	25000.0			
	40	POTS	4	S/F	1212.8	1216.2	5.5	4800.0			
	113	POTS	4	S/F	1212.8	1215.6	4.3	100.0			
	113	POTS	41	F	1338.1	1348.3	36.1	315.0			
	234	POTS	4	S/F	1342.4	1343.3	1.3	100.0			
	40	POTS	8	S	1351.8	1352.6	1.4	2000.0			
	245	SGMR	8	S	1538.0E	1538.0	U	51.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1538.0E	1538.0	1.0D	52.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	1756.0E	1757.0	2.0D	94.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1757.0E	1757.0	U	61.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2036.0E	2036.0	U	54.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	2113.0E	2113.0	1.0D	13000.0			QL=2 ST=2 TYP=6
07	127	TORN	43	NS	0904.0		386.0		3.0		V=0
	200	HIRA	42	SER	0204.6	0250.1	46.9	44.0			O
	100	HIRA	42	SER	0204.8	0251.4U	47.8	1000.0D			O
	245	LEAR	8	S	0250.0E	0250.0	1.0D	110.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0250.0E	0250.0	U	120.0			QL=4 ST=2 TYP=3
	200	HIRA	42	SER	0628.4	0715.6	69.0	980.0			O
	100	GORK	4	S/F	0630.0	0631.9	2.3	210.0			
	245	LEAR	8	S	0631.0E	0631.0	1.0D	130.0			QL=4 ST=2 TYP=3
	200	GORK	4	S/F	0631.1	0631.7	1.1	30.0D			
	245	SVTO	8	S	0632.0E	0632.0	U	130.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0706.0E	0706.0	1.0D	77.0			QL=4 ST=2 TYP=3
	200	GORK	41	F	0708.8	0709.5	7.9	30.0D			
	200	GORK	41	F	0708.8	0715.7		800.0			
	245	LEAR	8	S	0710.0E	0710.0	U	60.0			QL=4 ST=2 TYP=3
	100	GORK	46	C	0713.9	0714.3	3.1	160.0			
	100	GORK	46	C	0713.9	0716.3		790.0			
	100	GORK	46	C	0713.9	0715.6		5080.0			
	100	HIRA	45	C	0713.9	0715.8	3.1	2100.0			O
	113	POTS	4	S/F	0714.2	0715.9	2.9	21000.0			
	245	LEAR	8	S	0715.0E	0715.0	1.0D	170.0			QL=4 ST=2 TYP=3
	234	POTS	4	S/F	0715.4	0715.6	0.8	385.0			
	204	IZMI	5	S	0715.5	0716.0	0.8	650.0	325.0		
	40	POTS	4	S/F	0715.6	0716.0	2.4	3300.0			
	234	POTS	8	S	0722.7	0723.0	0.4	110.0			
	245	LEAR	8	S	0723.0E	0723.0	U	250.0			QL=4 ST=2 TYP=3
	204	IZMI	5	S	0723.0	0723.2	0.3	320.0	160.0		
	204	IZMI	41	F	0732.0	0733.0	1.5	130.0			
	260	ONDR	41	F	0800.0	1249.7	390.0	93.0			
	536	ONDR	3	S	1026.0	1026.2	2.0	13.0			
	245	SGMR	8	S	1248.0E	1249.0	1.0D	60.0			QL=2 ST=2 TYP=3
	113	POTS	4	S/F	1248.1	1249.0	1.7	3200.0			
	127	TORN	8	S	1248.3	1249.0	1.3	530.0	270.0		
	430	KRAK	8	S	1248.8	1248.9	0.5	53.0			
	245	SVTO	8	S	1249.0E	1249.0	U	64.0			QL=4 ST=2 TYP=3
	536	ONDR	3	S	1341.4	1341.4	1.2	17.0			
	245	SGMR	49	GB	1535.0E	1535.0	1.0D	710.0			QL=2 ST=2 TYP=6
	245	SVTO	49	GB	1535.0E	1536.0	1.0D	580.0			QL=4 ST=2 TYP=6
	200	HIRA	42	SER	2250.0	2258.7	20.5	230.0			O
	245	LEAR	8	S	2259.0E	2259.0	1.0D	210.0			QL=4 ST=2 TYP=3
	200	HIRA	42	SER	2342.7	2358.9	17.2	1700.0			O
	245	LEAR	8	S	2343.0E	2343.0	1.0D	300.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	2359.0E	2359.0	1.0D	750.0			QL=4 ST=2 TYP=6
08	245	LEAR	8	S	0217.0E	0218.0	1.0D	62.0			QL=4 ST=2 TYP=3
	204	IZMI	41	F	0702.0	0703.0	1.8	70.0			
	260	ONDR	41	F	0800.0	1324.5	390.0	149.0			
	127	TORN	42	SER	0800.6	0810.0	10.0	280.0	25.0		
	650	GORK	1	S	1006.5	1006.7	0.5	3.0			
	536	ONDR	41	F	1025.0	1040.8	15.8	15.0			
	650	GORK	21	GRF	1026.7	1029.7	26.8	3.0			

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

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
08	950	GORK	2	S/F	1028.6	1029.8	3.1	8.0			
	5900	KISV	2	S/F	1029.1	1029.7	3.3	6.0			
	808	ONDR	4	S/F	1029.3	1030.0	3.5	3.0			
	9100	GORK	1	S	1029.3	1029.7	0.8	4.0			
	2950	GORK	1	S	1029.3	1029.7	1.5	3.0			
	2850	CRIM	1	S	1029.4	1029.6	1.2	6.0	2.0		
	950	GORK	1	S	1039.0	1041.0	6.6	4.0			
	650	GORK	2	S/F	1040.8	1040.9	0.5	9.0			
	536	ONDR	42	SER	1141.0	1148.7	9.0	26.0			
	2850	CRIM	8	S	1234.0	1234.2	0.4	7.0	2.0		
	536	ONDR	42	SER	1250.0	1250.3	12.5	19.0			
	234	POTS	42	SER	1321.0	1324.4	7.6U	150.0			
	40	POTS	42	SER	1322.2	1322.3	6.7	700.0			
	245	SGMR	8	S	1324.0E	1324.0	U	56.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1324.0E	1324.0	1.0D	60.0			QL=4 ST=2 TYP=3
	127	TORN	4	S/F	1324.2	1324.4	1.0	760.0	380.0		
	113	POTS	42	SER	1324.2	1324.5	6.8	600.0			
	2695	PENT	4	S/F	2131.2	2133.0	1.8	7.7	3.0		
	410	SGMR	8	S	2136.0E	2136.0	U	75.0			QL=4 ST=2 TYP=3
09	200	HIRA	43	NS	0617.0	0703.0	109.0D	6.0	3.0		WR
	204	IZMI	43	NS	0700.0		300.0	80.0			
	245	LEAR	44	NS	0740.0E	0740.0	35.0D	81.0			QL=4 ST=2 TYP=1
	245	LEAR	44	NS	0904.0E	0920.0	105.0D	110.0			QL=4 ST=3 TYP=1
	245	SGMR	44	NS	1626.0E	1627.0	66.0D	61.0			QL=2 ST=2 TYP=1
	245	SGMR	44	NS	1929.0E	1937.0	126.0D	140.0			QL=2 ST=2 TYP=1
	200	HIRA	44	NS	2132.0E		102.0D		6.0		WR
	100	HIRA	46	C	0017.0	0018.6	5.7	630.0			
	200	HIRA	46	C	0017.5	0018.0	4.3	54.0			O
	950	GORK	2	S/F	0548.5	0548.7	1.3	18.0			
	245	LEAR	8	S	0620.0E	0620.0	1.0D	100.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0621.0E	0621.0	U	92.0			QL=2 ST=2 TYP=3
	200	HIRA	42	SER	0621.8	0734.3	84.0	140.0			SR
	245	SVTO	8	S	0740.0E	0741.0	1.0D	83.0			QL=4 ST=3 TYP=3
	260	ONDR	41	F	0800.0	1416.4	400.0				
	204	IZMI	42	SER	0852.0	0906.0	16.0	600.0			
	245	LEAR	8	S	0858.0E	0858.0	U	64.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0905.0E	0905.0	U	77.0			QL=4 ST=2 TYP=3
	650	GORK	21	GRF	0909.1	0928.2	25.7	2.0			
	245	SVTO	8	S	0920.0E	0921.0	1.0D	160.0			QL=4 ST=2 TYP=3
	950	GORK	20	GRF	0925.6	0929.0	10.8	2.0			
	650	GORK	2	S/F	0928.8	0928.9	0.6	5.0			
	650	GORK	8	S	0930.1	0930.2	0.3	16.0			
	650	GORK	3	S	0937.2	0937.4	0.7	6.0			
	204	IZMI	41	F	0950.0	0950.5	2.0	800.0			
	536	ONDR	41	F	1024.0	1024.4	20.0	15.0			
	430	KRAK	41	F	1113.0	1115.3	3.0	16.0	3.0		
	2950	GORK	21	GRF	1136.9	1156.8	27.1D	4.0			
	5900	KISV	2	S/F	1137.6	1140.4	8.9	7.0			
	3000	POTS	3	S	1138.0	1140.3	7.0	10.0			
	2850	CRIM	1	S	1138.4	1140.3	6.0	12.0	4.0		
	950	GORK	46	C	1138.6	1140.0	9.2	16.0			
	2950	GORK	2	S/F	1138.6	1140.1	4.5	7.0			
	950	GORK	46	C	1138.6	1142.5		14.0			
	950	GORK	46	C	1138.6	1141.8		15.0			
	650	GORK	46	C	1138.7	1139.3	4.3	21.0			
	650	GORK	46	C	1138.7	1142.4		13.0			
	1470	POTS	4	S/F	1139.0	1139.8	6.0	21.0			
	808	ONDR	45	C	1139.2	1140.0	6.0	10.0			
	536	ONDR	8	S	1139.6	1139.8	6.5	28.0			
	650	GORK	29	PBI	1143.0	1143.0	11.2	5.0			
	808	ONDR	3	S	1211.0	1211.4	1.3	5.0			
	430	KRAK	8	S	1252.5	1252.8	0.5	24.0			
	40	POTS	41	F	1415.7	1416.0U	7.4	26000.0D			
	234	POTS	41	F	1415.7	1416.2	6.9	5000.0			
	113	POTS	41	F	1415.7	1416.2	7.3	2100.0D			
	410	SGMR	8	S	1416.0E	1416.0	U	150.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1416.0E	1416.0	U	1400.0			QL=2 ST=2 TYP=6
	410	SVTO	8	S	1416.0E	1416.0	1.0D	180.0			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

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
09	245	SVTO	49	GB	1416.0E	1416.0	1.0D	1300.0			QL=4 ST=2 TYP=6
	536	ONDR	8	S	1416.1	1416.3	2.0	137.0			
	245	SGMR	8	S	1418.0E	1418.0	U	55.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1550.0E	1550.0	1.0D	120.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1621.0E	1621.0	U	89.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1751.0E	1751.0	1.0D	160.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1812.0E	1812.0	U	170.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1942.0E	1943.0	2.0D	230.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	1943.0E	1943.0	U	290.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1943.0E	1943.0	1.0D	58.0			QL=4 ST=2 TYP=3
	200	HIRA	46	C	2227.4	2229.0	2.6	3400.0			SR
	100	HIRA	41	F	2227.6	2229.0	4.0	810.0			
	245	PALE	8	S	2230.0E	2230.0	U	54.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2232.0E	2234.0	2.0D	67.0			QL=4 ST=2 TYP=3
	200	HIRA	41	F	2344.9	2346.2	11.9	170.0			MR
	410	LEAR	8	S	2345.0E	2346.0	2.0D	62.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	2345.0E	2346.0	2.0D	86.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2346.0E	2346.0	U	67.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2346.0E	2346.0	U	100.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	2346.0E	2346.0	U	82.0			QL=4 ST=2 TYP=3
10	100	GORK	44	NS	0520.0E		400.0D		5.0		
	200	GORK	44	NS	0520.0E		400.0D		5.0		
	204	IZMI	43	NS	0700.0		360.0	10.0			
	127	TORN	44	NS	0700.0E		480.0D				V=1,DISTURBED
	200	HIRA	43	NS	0712.0		52.0D		17.0		
	260	ONDR	43	NS	0800.0	1309.2	400.0	302.0			
	245	SGMR	44	NS	1658.0E	1744.0	422.0D	91.0			QL=2 ST=3 TYP=1
	245	SGMR	44	NS	1758.0E	2124.0	227.0D	140.0			QL=2 ST=2 TYP=1
	200	HIRA	44	NS	2130.0E	0020.0	640.0D	12.0	6.0		MR
	200	HIRA	42	SER	0037.6	0053.7	37.6	34.0			MR
	500	HIRA	41	F	0236.5	0239.2	21.5	19.0			WR
	245	LEAR	8	S	0238.0E	0239.0	2.0D	110.0			QL=4 ST=2 TYP=3
	200	HIRA	41	F	0238.9	0248.7	29.0	45.0			MR
	245	PALE	8	S	0239.0E	0239.0	1.0D	130.0			QL=4 ST=2 TYP=3
	200	HIRA	42	SER	0330.0	0350.0	150.0	135.0			SR
	245	LEAR	8	S	0342.0E	0342.0	1.0D	69.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0342.0E	0342.0	1.0D	84.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	0519.0E	0520.0	3.0D	57.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0556.0E	0556.0	U	56.0			QL=4 ST=2 TYP=3
	100	GORK	41	F	0627.9	0739.2		210.0			
	100	GORK	41	F	0627.9	0630.3	86.1	350.0			
	204	IZMI	42	SER	0711.0		43.0	155.0			
	200	GORK	41	F	0713.0	0734.4		150.0			
	200	GORK	41	F	0713.0	0714.4	41.0	25.0D			
	204	IZMI	41	F	0845.8	0849.0	4.0	175.0			
	430	KRAK	8	S	0847.7	0848.0	1.0	99.0			
	113	POTS	4	S/F	0847.7	0848.6	1.7	175.0			
	9100	GORK	1	S	0847.9	0848.3	1.0	4.0			
	245	LEAR	8	S	0848.0E	0848.0	U	62.0			QL=4 ST=3 TYP=3
	245	SVTO	8	S	0848.0E	0849.0	1.0D	59.0			QL=4 ST=2 TYP=3
	650	GORK	2	S/F	0848.0	0848.3	1.2	10.0			
	950	GORK	1	S	0848.0	0848.4	1.0	7.0			
	5900	KISV	2	S/F	0848.0	0848.4	1.4	6.0			
	3000	POTS	1	S	0848.0	0848.5	1.0	3.0			
	9500	POTS	1	S	0848.0	0848.5	2.0	3.0			
	1470	POTS	1	S	0848.0	0848.5	1.5	5.0			
	40	POTS	4	S/F	0848.1	0848.4	1.9	18000.0			
	245	LEAR	8	S	0931.0E	0931.0	1.0D	54.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0932.0E	0932.0	1.0D	73.0			QL=4 ST=2 TYP=3
	204	IZMI	4	S/F	0955.0	0955.3	1.0	53.0			
	536	ONDR	41	F	1027.5	1146.0	110.0	33.0			
	9100	GORK	2	S/F	1048.7	1048.9	0.5	23.0			
	100	GORK	41	F	1103.0	1120.2		610.0			
	100	GORK	41	F	1103.0	1119.3	21.5	350.0			
	2950	GORK	22	GRF	1106.4	1108.6	19.1	3.0			
	650	GORK	23	GRF	1106.5	1120.7	24.3	5.0			
	430	KRAK	46	C	1108.5	1148.1	52.5	87.0	5.0		
	650	GORK	2	S/F	1108.6	1108.9	0.7	8.0			

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

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
10	650	GORK	4	S/F	1146.6	1148.9	3.3	14.0			
	950	GORK	1	S	1147.2	1148.8	3.2	2.0			
	430	KRAK	4	S/F	1211.5	1213.2	2.0	190.0	34.0		
	234	POTS	42	SER	1212.2	1213.3	6.7	250.0			
	234	POTS	42	SER	1212.2	1213.3	6.7	250.0			
	113	POTS	41	F	1212.2	1213.4	2.2	150.0			
	40	POTS	4	S/F	1212.2	1213.4	3.0	30000.0			
	810	KRAK	1	S	1212.7	1213.5	1.0	10.0	2.0		
	245	SVTO	8	S	1213.0E	1213.0	1.0D	120.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	1213.0E	1213.0	1.0D	60.0			QL=4 ST=2 TYP=3
	1470	POTS	4	S/F	1213.0U	1213.0U	1.0U	59.0			
	9500	POTS	1	S	1213.0	1213.2	2.0	5.0			
	3000	POTS	1	S	1213.0U	1213.5U	1.0U	3.0			
	808	ONDR	3	S	1213.3	1213.7	2.0	4.0			
	245	SGMR	8	S	1338.0E	1338.0	1.0D	390.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1339.0E	1339.0	U	420.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1632.0E	1632.0	1.0D	63.0			QL=4 ST=3 TYP=3
	245	SGMR	8	S	1746.0E	1747.0	2.0D	340.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1756.0E	1756.0	1.0D	230.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1803.0E	1803.0	1.0D	320.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1815.0E	1815.0	1.0D	55.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1835.0E	1835.0	1.0D	72.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1840.0E	1841.0	2.0D	150.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1900.0E	1900.0	1.0D	77.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1914.0E	1914.0	U	71.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1920.0E	1920.0	1.0D	75.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1947.0E	1948.0	1.0D	52.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1957.0E	1957.0	2.0D	130.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2006.0E	2006.0	U	190.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2006.0E	2006.0	U	180.0			QL=2 ST=3 TYP=3
	410	SGMR	49	GB	2006.0E	2006.0	U	1100.0			QL=4 ST=3 TYP=6
	245	PALE	8	S	2025.0E	2025.0	U	87.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2133.0E	2134.0	1.0D	320.0			QL=4 ST=2 TYP=5
	500	HIRA	4	S/F	2208.7	2209.1	1.2	60.0			O
	500	HIRA	42	SER	2356.5	2418.0	34.5	290.0			WR
11	100	GORK	44	NS	0522.0E		398.0D		10.0		
	200	GORK	44	NS	0522.0E		398.0D		5.0		
	204	IZMI	43	NS	0700.0		300.0	10.0			
	127	TORN	44	NS	0800.0E		420.0D				V-1,DISTRUBED
	245	SVTO	43	NS	1003.0	1004.0	16.0D	58.0			QL=4 ST=2 TYP=1
	245	SGMR	44	NS	1547.0E	1550.0	69.0D	83.0			QL=2 ST=2 TYP=1
	245	SGMR	44	NS	1935.0E	1954.0	132.0D	86.0			QL=2 ST=2 TYP=1
	100	HIRA	44	NS	2130.0E	0150.0	645.0D	370.0	240.0		
	200	HIRA	44	NS	2130.0E	0300.0	645.0D	90.0	74.0		SR
	245	LEAR	44	NS	2227.0E	0846.0	741.0D	280.0			QL=4 ST=3 TYP=1
	100	HIRA	41	F	0000.0	0017.8	19.8	1600.0			WR
	200	HIRA	42	SER	0007.6	0018.2	25.7	485.0			WR
	410	LEAR	8	S	0008.0E	0008.0	U	160.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0008.0E	0008.0	U	190.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0008.0E	0008.0	U	67.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0008.0E	0008.0	U	180.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	0008.0E	0008.0	U	59.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0008.0E	0008.0	U	180.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0016.0E	0018.0	2.0D	81.0			QL=4 ST=2 TYP=3
	410	LEAR	4	S/F	0016.0E	0018.0	3.0D	270.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0017.0E	0018.0	2.0D	420.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0017.0E	0018.0	2.0D	230.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	0017.0E	0018.0	1.0D	70.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0018.0E	0018.0	1.0D	450.0			QL=2 ST=2 TYP=3
	200	HIRA	41	F	0106.0	0126.4	40.0	86.0			MR
	500	HIRA	4	S/F	0115.7	0116.4	1.8	13.0			WR
	245	LEAR	8	S	0116.0E	0116.0	2.0D	85.0			QL=4 ST=2 TYP=3
	100	GORK	41	F	0542.7	0548.1	27.2	1130.0			
	100	GORK	41	F	0542.7	0605.2		750.0			
	100	GORK	41	F	0542.7	0555.6		375.0			
	950	GORK	4	S/F	0544.3	0549.1	5.4	19.0			
	650	GORK	4	S/F	0544.3	0549.1	6.5	45.0			
	9100	GORK	2	S/F	0544.4	0548.9	6.6	9.0			

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

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
11	2950	GORK	4	S/F	0544.5	0549.1	7.0	16.0			
	200	GORK	41	F	0544.6	0547.1	20.8	120.0			
	200	GORK	41	F	0544.6	0605.2		20.0			
	2840	PEKG	1	S	0545.0	0548.1	7.0	13.3			
	100	HIRA	42	SER	0545.7	0547.5U	30.0	1000.0D			
	500	HIRA	41	F	0545.9	0549.1	4.5	560.0			WR
	200	HIRA	46	C	0545.9	0547.5	4.3	125.0			MR
	245	LEAR	4	S/F	0546.0E	0549.0	3.0D	120.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0548.0E	0549.0	2.0D	200.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0549.0E	0549.0	U	36.0			QL=4 ST=2 TYP=3
	260	ONDR	41	F	0800.0	1159.2	400.0				
	100	GORK	46	C	0844.1	0850.3	8.9	95.0			
	100	GORK	46	C	0844.1	0851.6		280.0			
	950	GORK	45	C	0848.8	0850.3	3.0	7.0			
	950	GORK	45	C	0848.8	0851.4		5.0			
	430	KRAK	42	SER	0849.8	0850.2	5.0	68.0			
	410	LEAR	8	S	0850.0E	0850.0	U	26.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0850.0E	0850.0	U	99.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0850.0E	0850.0	U	25.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0850.0E	0850.0	1.0D	89.0			QL=4 ST=2 TYP=3
	234	POTS	8	S	0850.0	0850.3	0.6	150.0			
	40	POTS	4	S/F	0850.0	0850.5	3.0	2300.0			
	113	POTS	4	S/F	0850.0	0850.5	2.5	100.0			
	810	KRAK	42	SER	0850.2	0850.5	2.0	48.0			
	200	GORK	41	F	0929.1	0930.5	14.3	160.0			
	200	GORK	41	F	0929.1	0942.6		170.0			
	950	GORK	1	S	0930.2	0931.9	2.5	2.0			
	650	GORK	2	S/F	0930.7	0931.9	4.2	6.0			
	100	GORK	41	F	0937.0	0938.1	6.6	190.0			
	100	GORK	41	F	0937.0	0942.1		750.0			
	245	LEAR	8	S	0941.0E	0942.0	2.0D	340.0			QL=4 ST=2 TYP=3
	536	ONDR	7	C	0941.5	0943.0	2.0	18.0			
	113	POTS	4	S/F	0941.6	0942.2	3.4	300.0			
	40	POTS	4	S/F	0941.7	0942.3	2.8	8300.0			
	204	IZMI	41	F	0941.8	0942.0	2.5	300.0			
	650	GORK	2	S/F	0941.8	0942.1	1.7	6.0			
	430	KRAK	4	S/F	0941.8	0942.3	1.2	350.0D	15.0		
	234	POTS	4	S/F	0941.8	0942.5	2.8	275.0			
	410	LEAR	8	S	0942.0E	0942.0	U	290.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0942.0E	0942.0	1.0D	350.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0942.0E	0942.0	1.0D	310.0			QL=4 ST=2 TYP=3
	950	GORK	1	S	0942.0	0942.1	0.3	2.0			
	650	GORK	46	C	0949.9	0950.3	2.1	24.0			
	650	GORK	46	C	0949.9	0951.4		23.0			
	245	LEAR	8	S	1003.0E	1003.0	U	68.0			QL=4 ST=2 TYP=3
	204	IZMI	5	S	1103.2	1103.5	0.5	150.0	75.0		
	536	ONDR	42	SER	1126.0	1155.6	40.0	174.0			
	650	GORK	21	GRF	1128.8	1138.0	15.0	1.0			
	950	GORK	21	GRF	1128.8	1131.2	14.5	2.0			
	5900	KISV	22	GRF	1130.2	1137.5	17.8	6.0			
	200	GORK	41	F	1131.4	1155.4		480.0			
	200	GORK	41	F	1131.4	1153.4	24.2	160.0			
	204	IZMI	24	R	1131.5		22.0	50.0			
	100	GORK	41	F	1131.7	1133.3	25.8	375.0			
	100	GORK	41	F	1131.7	1152.5		2250.0			
	100	GORK	41	F	1131.7	1137.5		280.0			
	808	ONDR	42	SER	1132.0	1159.0	40.0	24.0			
	950	GORK	45	C	1132.4	1133.4		7.0			
	950	GORK	45	C	1132.4	1132.6	1.1	5.0			
	810	KRAK	42	SER	1132.5	1158.0	34.5	214.0			
	650	GORK	45	C	1132.5	1133.4		6.0			
	650	GORK	45	C	1132.5	1132.6	1.3	8.0			
	430	KRAK	42	SER	1136.3	1155.5	29.0	340.0D			
	650	GORK	4	S/F	1136.3	1136.7	1.5	60.0			
	950	GORK	45	C	1136.6	1137.5		3.0			
	950	GORK	45	C	1136.6	1136.8	1.1	19.0			
	650	GORK	1	S	1141.1	1141.4	0.9	6.0			
	40	POTS	41	F	1152.3	1159.0	12.7	23000.0			
	234	POTS	42	SER	1152.5	1158.8	16.7	1000.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
11	113	POTS	41	F	1152.6	1155.6	9.6	900.0			
	204	IZMI	42	SER	1153.5	1159.0	7.0	900.0			
	5900	KISV	2	S/F	1153.6	1155.6	3.7	3.0			
	410	SVTO	49	GB	1155.0E	1156.0	1.0D	780.0			QL=4 ST=3 TYP=6
	245	SVTO	8	S	1155.0E	1156.0	1.0D	330.0			QL=4 ST=3 TYP=3
	610	SVTO	8	S	1155.0E	1156.0	1.0D	100.0			QL=4 ST=3 TYP=3
	610	SVTO	8	S	1159.0E	1159.0	U	220.0			QL=4 ST=3 TYP=3
	245	SVTO	49	GB	1159.0E	1159.0	1.0D	760.0			QL=4 ST=3 TYP=6
	410	SVTO	8	S	1159.0E	1159.0	1.0D	360.0			QL=4 ST=3 TYP=3
	1470	POTS	40	F	1203.5	1205.0	2.5	28.0			
	410	SVTO	8	S	1204.0E	1204.0	1.0D	110.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1204.0E	1204.0	1.0D	280.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1517.0E	1517.0	2.0D	210.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1518.0E	1518.0	U	170.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	1520.0E	1520.0	U	79.0			QL=2 ST=3 TYP=3
	245	SGMR	8	S	1520.0E	1520.0	2.0D	64.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1521.0E	1521.0	U	51.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1534.0E	1534.0	2.0D	120.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1539.0E	1539.0	U	120.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	1726.0E	1726.0	U	80.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1726.0E	1726.0	U	91.0			QL=2 ST=2 TYP=3
	2800	OTTA	4	S/F	1819.8	1820.2	2.3	27.0	6.0		
	1415	SGMR	8	S	1820.0E	1820.0	U	76.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	1826.0E	1826.0	1.0D	58.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	1826.0E	1826.0	1.0D	470.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1826.0E	1826.0	1.0D	360.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	1826.0E	1826.0	1.0D	230.0			QL=4 ST=2 TYP=3
	2695	PALE	8	S	1826.0E	1826.0	1.0D	35.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	1826.0E	1826.0	1.0D	280.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	1826.0E	1826.0	1.0D	94.0			QL=2 ST=2 TYP=3
	245	SGMR	49	GB	1826.0E	1826.0	2.0D	4000.0			QL=2 ST=2 TYP=6
	410	SGMR	8	S	1826.0E	1826.0	2.0D	390.0			QL=4 ST=2 TYP=3
	1415	SGMR	8	S	1826.0E	1826.0	2.0D	230.0			QL=4 ST=2 TYP=3
	2695	SGMR	8	S	1826.0E	1826.0	2.0D	39.0			QL=2 ST=2 TYP=3
	8800	SGMR	8	S	1826.0E	1826.0	2.0D	250.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1826.0E	1826.0	2.0D	120.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	1826.0E	1826.0	2.0D	470.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1826.0E	1826.0	2.0D	64.0			QL=2 ST=2 TYP=3
	2800	OTTA	4	S/F	1826.2	1826.7	7.5	48.8	10.0		
	245	SGMR	8	S	1916.0E	1916.0	U	52.0			QL=2 ST=2 TYP=3
	245	LEAR	4	S/F	2308.0E	2311.0	9.0D	110.0			QL=2 ST=3 TYP=3
	2695	PENT	4	S/F	2321.1	2321.2	1.2	13.3	3.0		
12	200	GORK	44	NS	0510.0E		407.0D		10.0		
	100	GORK	44	NS	0510.0E		407.0D		40.0		
	113	POTS	44	NS	0635.0E	0834.0	487.0D	150.0			
	234	POTS	44	NS	0640.0E	0839.0	483.0D	140.0			
	204	IZMI	43	NS	0700.0		300.0	40.0			
	127	TORN	44	NS	0700.0E		480.0D		165.0U		V=2,DISTUREBD
	260	ONDR	44	NS	0800.0E		410.0D				
	245	SVTO	44	NS	0900.0E	1250.0	322.0D	140.0			QL=4 ST=2 TYP=1
	245	SGMR	44	NS	1448.0E	1713.0	159.0D	130.0			QL=2 ST=2 TYP=1
	100	HIRA	44	NS	2128.0E	0700.0	645.0D	230.0	134.0		
	200	HIRA	44	NS	2128.0E	0709.0	645.0D	95.0	28.0		SR
	245	LEAR	8	S	0227.0E	0227.0	1.0D	220.0			QL=2 ST=3 TYP=3
	245	PALE	8	S	0227.0E	0227.0	1.0D	230.0			QL=2 ST=2 TYP=3
	100	GORK	8	S	0702.0	0702.7	1.2	5170.0			
	113	POTS	4	S/F	0702.3	0702.7	1.7	2000.0			
	40	POTS	4	S/F	0702.4	0702.6	1.1	6800.0			
	500	HIRA	41	F	0702.5	0703.0	7.5	19.0			WR
	2950	GORK	2	S/F	0703.5	0704.2	3.7	4.0			
	100	GORK	41	F	0816.1	0855.0		1400.0			
	100	GORK	41	F	0816.1	0834.1	41.2	780.0			
	100	GORK	41	F	0816.1	0856.9		1600.0			
	950	GORK	22	GRF	0821.6	0839.4	39.0	4.0			
	200	GORK	41	F	0832.2	0846.1		320.0			
	200	GORK	41	F	0832.2	0834.1	24.0	170.0			
	650	GORK	23	GRF	0832.4	0855.0	32.4	2.0			
	430	KRAK	42	SER	0832.6	0839.5	8.3	190.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
12	204	IZMI	42	SER	0833.0	0847.0	22.0	450.0			
	2950	GORK	23	GRF	0833.9	0841.3	24.1	1.0			
	245	LEAR	8	S	0834.0E	0834.0	U	75.0			QL=2 ST=3 TYP=3
	410	LEAR	8	S	0834.0E	0834.0	U	24.0			QL=4 ST=3 TYP=3
	1470	POTS	8	S	0834.3	0834.5	0.7	18.0			
	5900	KISV	2	S/F	0834.4	0836.8	4.6	4.0			
	245	LEAR	4	S/F	0836.0E	0839.0	5.0D	96.0			QL=2 ST=2 TYP=3
	410	LEAR	8	S	0837.0E	0839.0	2.0D	110.0			QL=4 ST=2 TYP=3
	245	SVTO	4	S/F	0837.0E	0839.0	4.0D	100.0			QL=2 ST=2 TYP=3
	2950	GORK	2	S/F	0837.2	0837.6	1.8	10.0			
	2850	CRIM	4	S/F	0837.4	0838.0	0.8	20.0	7.0		
	650	GORK	4	S/F	0838.6	0839.4	2.4	27.0			
	610	LEAR	8	S	0839.0E	0839.0	U	34.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0839.0E	0839.0	1.0D	81.0			QL=2 ST=2 TYP=3
	810	KRAK	8	S	0839.5	0839.5	0.1	9.0			
	9100	GORK	21	GRF	0842.0	0851.2	18.0	7.0			
	245	SVTO	8	S	0845.0E	0846.0	2.0D	260.0			QL=2 ST=2 TYP=3
	9100	GORK	1	S	0845.3	0846.5	2.2	7.0			
	2950	GORK	2	S/F	0845.3	0845.5	1.8	5.0			
	3013	IZMI	2	S/F	0845.4	0846.1	2.0	6.0			
	9100	GORK	1	S	0850.3	0851.2	1.9	7.0			
	5900	KISV	2	S/F	0850.3	0851.3	2.4	6.0			
	2850	CRIM	4	S/F	0850.4	0851.0	2.0	80.0	27.0		
	2950	GORK	4	S/F	0850.4	0851.3	2.0	38.0			
	3013	IZMI	4	S/F	0850.8	0851.2	2.0	30.0			
	3000	POTS	4	S/F	0850.8	0851.3	1.7	33.0			
	1470	POTS	1	S	0850.9	0851.4	1.1	4.0			
	245	LEAR	8	S	0854.0E	0855.0	1.0D	92.0			QL=2 ST=2 TYP=3
	410	LEAR	8	S	0854.0E	0855.0	1.0D	29.0			QL=4 ST=2 TYP=3
	430	KRAK	2	S/F	0854.8	0855.2	0.8	32.0	9.0		
	245	SVTO	8	S	0855.0E	0855.0	1.0D	92.0			QL=2 ST=2 TYP=3
	2950	GORK	2	S/F	0913.1	0913.6	3.3	8.0			
	950	GORK	2	S/F	0929.7	0930.9	1.9	9.0			
	200	GORK	4	S/F	0929.8	0931.0	1.7	4800.0			
	650	GORK	41	F	0929.8	0931.0	6.9	25.0			
	650	GORK	41	F	0929.8	0936.5		8.0			
	204	IZMI	41	F	0930.0	0931.0	3.0	2600.0			
	810	KRAK	2	S/F	0930.0	0931.0	1.5	28.0	3.0		
	245	LEAR	49	GB	0930.0E	0931.0	2.0D	2300.0			QL=2 ST=2 TYP=6
	410	LEAR	8	S	0930.0E	0930.0	1.0D	120.0			QL=4 ST=2 TYP=3
	113	POTS	4	S/F	0930.0	0931.0	2.8	2100.0			
	430	KRAK	4	S/F	0930.0	0931.5	3.5	310.0	7.0		
	536	ONDR	46	C	0930.0	0931.5	6.5	121.0			
	234	POTS	4	S/F	0930.0	0930.7	3.2	4100.0			
	40	POTS	4	S/F	0930.0	0930.9	7.3	25000.0			
	100	GORK	4	S/F	0930.4	0930.9	1.1	4600.0			
	808	ONDR	3	S	0930.7	0931.2	2.0	5.0			
	410	SVTO	8	S	0931.0E	0931.0	1.0D	110.0			QL=2 ST=2 TYP=3
	245	SVTO	49	GB	0931.0E	0931.0	2.0D	2000.0			QL=2 ST=2 TYP=6
	2950	GORK	20	GRF	0932.8	1001.4	68.3	3.0			
	950	GORK	2	S/F	1014.4	1015.0	5.3	2.0			
	100	GORK	41	F	1019.1	1022.5	15.7	3600.0			
	100	GORK	41	F	1019.1	1024.6		1000.0			
	200	GORK	46	C	1022.1	1022.3	1.4	2200.0			
	200	GORK	46	C	1022.1	1022.7		350.0			
	40	POTS	42	SER	1022.2	1022.6	5.3	12000.0			
	113	POTS	42	SER	1022.2	1022.7	5.4	1700.0			
	204	IZMI	41	F	1022.5	1023.0	1.5	2500.0			
	410	SVTO	8	S	1101.0E	1102.0	1.0D	67.0			QL=4 ST=2 TYP=3
	5900	KISV	45	C	1109.5	1118.0	30.2	24.0			
	5900	KISV	45	C	1109.5	1111.6		19.0			
	650	GORK	23	GRF	1109.7	1116.7	12.7	4.0			
	9500	POTS	20	GRF	1110.0	1116.0	22.0	23.0			
	1470	POTS	40	F	1110.0	1114.2	14.0	44.0			
	113	POTS	4	S/F	1110.0	1113.5	9.2	2100.0			
	3000	POTS	40	F	1110.0	1117.5	35.0	32.0			
	40	POTS	4	S/F	1110.1	1113.9	9.5	18000.0			
	9100	GORK	20	GRF	1110.5	1116.7	25.5	23.0			
	2950	GORK	21	GRF	1110.8	1119.4	33.4	4.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
12	2850	CRIM	46	C	1111.0	1117.4		51.0			
	2850	CRIM	46	C	1111.0	1113.4	7.2	53.0	18.0		
	15000	KISV	46	C	1111.1	1116.0	12.4	19.0			
	15000	KISV	46	C	1111.1	1115.1		16.0			
	15000	KISV	46	C	1111.1	1111.6		9.0			
	950	GORK	46	C	1111.3	1118.1		67.0			
	950	GORK	46	C	1111.3	1111.6	13.2	17.0			
	950	GORK	46	C	1111.3	1113.9		49.0			
	3013	IZMI	23	GRF	1111.5	1117.5	6.5	20.0			
	808	ONDR	42	SER	1112.0	1118.0	9.0	47.0			
	100	GORK	46	C	1112.0	1112.6	6.0	4300.0			
	100	GORK	46	C	1112.0	1113.8		4800.0			
	2950	GORK	4	S/F	1113.0	1117.4	6.4	28.0			
	536	ONDR	42	SER	1113.4	1118.1	8.0	139.0			
	810	KRAK	42	SER	1113.5	1118.1	6.2	350.0D			
	430	KRAK	42	SER	1113.5	1118.1	4.5D	320.0D			
	200	GORK	41	F	1113.5	1114.5		1300.0			
	200	GORK	41	F	1113.5	1131.7		160.0			
	200	GORK	41	F	1113.5	1113.8	19.3	3600.0			
	245	SVTO	49	GB	1114.0E	1114.0	1.0D	540.0			QL=2 ST=3 TYP=6
	410	SVTO	8	S	1114.0E	1114.0	U	54.0			QL=4 ST=3 TYP=3
	204	IZMI	41	F	1114.0	1114.3	2.0	2400.0			
	650	GORK	4	S/F	1117.7	1117.8U	0.6	115.0D			
	410	SVTO	49	GB	1118.0E	1118.0	U	600.0			QL=2 ST=3 TYP=6
	245	SVTO	8	S	1118.0E	1118.0	U	220.0			QL=4 ST=3 TYP=3
	2850	CRIM	29	PBI	1118.2E	1118.2	4.0D	6.0	2.0		
	100	GORK	41	F	1130.3	1134.4		620.0			
	100	GORK	41	F	1130.3	1130.6	4.5	1000.0			
	245	SGMR	8	S	1249.0E	1249.0	1.0D	150.0			QL=2 ST=2 TYP=3
	430	KRAK	8	S	1249.0	1249.4	1.0	45.0			
	536	ONDR	8	S	1249.1	1249.4	1.0	37.0			
	810	KRAK	8	S	1249.4	1249.4	0.1	10.0			
	245	SGMR	8	S	1404.0E	1404.0	U	53.0			QL=2 ST=2 TYP=3
	245	SGMR	49	GB	1450.0E	1451.0	2.0D	940.0			QL=2 ST=2 TYP=6
	610	SGMR	8	S	1450.0E	1451.0	2.0D	35.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	1450.0E	1451.0	2.0D	82.0			QL=4 ST=2 TYP=3
	2800	OTTA	22	GRF	1450.5	1554.0	64.5	4.9	2.0		
	245	SVTO	49	GB	1451.0E	1451.0	U	1300.0			QL=2 ST=2 TYP=6
	410	SVTO	8	S	1451.0E	1451.0	U	73.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1454.0E	1454.0	1.0D	58.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1454.0E	1454.0	1.0D	96.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1455.0E	1455.0	U	70.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1457.0E	1457.0	U	160.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	1457.0E	1458.0	1.0D	62.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1458.0E	1458.0	U	56.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1458.0E	1458.0	U	170.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1502.0E	1502.0	1.0D	78.0			QL=2 ST=2 TYP=3
	245	SGMR	49	GB	1549.0E	1549.0	2.0D	1100.0			QL=2 ST=3 TYP=6
	245	SVTO	49	GB	1550.0E	1550.0	U	520.0			QL=4 ST=2 TYP=6
	245	SVTO	8	S	1555.0E	1555.0	1.0D	97.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1607.0E	1607.0	1.0D	290.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1607.0E	1607.0	1.0D	510.0			QL=2 ST=2 TYP=6
	2800	OTTA	4	S/F	1607.5	1608.5	2.0	7.3	2.0		
	2800	OTTA	22	GRF	1622.5	1626.5	38.0	2.7	1.0		
	245	SGMR	49	GB	1623.0E	1623.0	3.0D	530.0			QL=2 ST=2 TYP=6
	410	SGMR	8	S	1623.0E	1623.0	1.0D	140.0			QL=4 ST=2 TYP=3
	410	SGMR	4	S/F	1628.0E	1631.0	4.0D	260.0			QL=4 ST=2 TYP=3
	2800	OTTA	4	S/F	1629.8	1629.9	1.2	25.9	5.0		
	610	SGMR	8	S	1630.0E	1631.0	2.0D	91.0			QL=2 ST=2 TYP=3
	410	SGMR	49	GB	1632.0E	1635.0	4.0D	530.0			QL=4 ST=2 TYP=6
	245	SGMR	49	GB	1634.0E	1634.0	2.0D	670.0			QL=2 ST=2 TYP=6
	610	SGMR	8	S	1634.0E	1634.0	1.0D	230.0			QL=2 ST=2 TYP=3
	2800	OTTA	4	S/F	1640.9	1641.1	1.2	8.3	2.0		
	2695	SGMR	8	S	1710.0E	1710.0	1.0D	25.0			QL=2 ST=2 TYP=3
	4995	SGMR	8	S	1710.0E	1711.0	1.0D	34.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1710.0E	1711.0	1.0D	41.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	1710.0E	1711.0	1.0D	43.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1710.0E	1711.0	1.0D	650.0			QL=2 ST=2 TYP=6
	2800	OTTA	40	F	1716.0	1720.5	17.0	43.9			

SOLAR RADIO EMISSION
Outstanding Occurrences

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
12	410	SGMR	8	S	1717.0E	1717.0	1.0D	370.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1717.0E	1717.0	2.0D	1700.0			QL=2 ST=2 TYP=6
	245	PALE	8	S	2121.0E	2122.0	1.0D	90.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2122.0E	2122.0	U	54.0			QL=2 ST=2 TYP=3
	100	HIRA	42	SER	2245.5	2317.2	48.2	470.0			
	245	LEAR	8	S	2314.0E	2314.0	2.0D	120.0			QL=4 ST=2 TYP=3
13	100	GORK	44	NS	0517.0E		402.0D		25.0		
	200	GORK	44	NS	0518.0E		401.0D		10.0		
	113	POTS	44	NS	0630.0E	0723.0	496.0D	225.0			
	204	IZMI	43	NS	0700.0		300.0	30.0			
	127	TORN	44	NS	0700.0E		480.0D		150.0		V=2
	260	ONDR	44	NS	0800.0E	1134.4	410.0D	330.0			
	234	POTS	44	NS	0830.0E	1118.0	376.0D	45.0			
	100	HIRA	44	NS	2127.0E	0700.0	645.0D	120.0	33.0		
	200	HIRA	44	NS	2127.0E	0025.0	645.0D	43.0	31.0		MR
	200	HIRA	42	SER	0018.5	0044.2	37.6	2300.0			WR
	100	HIRA	42	SER	0018.5	0045.5	35.0	16000.0D			
	500	HIRA	42	SER	0019.3	0059.0	48.0	220.0			MR
	410	LEAR	8	S	0027.0E	0027.0	U	120.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0027.0E	0027.0	U	2000.0			QL=4 ST=2 TYP=6
	245	PALE	49	GB	0027.0E	0027.0	U	2000.0			QL=4 ST=2 TYP=6
	245	LEAR	4	S/F	0031.0E	0036.0	5.0D	120.0			QL=4 ST=2 TYP=5
	245	LEAR	49	GB	0043.0E	0044.0	3.0D	2500.0			QL=4 ST=2 TYP=6
	410	LEAR	4	S/F	0043.0E	0044.0	3.0D	140.0			QL=4 ST=2 TYP=3
	1415	LEAR	49	GB	0044.0E	0045.0	1.0D	900.0			QL=4 ST=2 TYP=6
	8800	LEAR	8	S	0044.0E	0045.0	1.0D	58.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0044.0E	0045.0	2.0D	210.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0044.0E	0045.0	2.0D	330.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0044.0E	0045.0	2.0D	160.0			QL=4 ST=2 TYP=3
	4995	LEAR	8	S	0044.0E	0045.0	1.0D	150.0			QL=4 ST=2 TYP=3
	1415	PALE	49	GB	0044.0E	0045.0	10.0D	940.0			QL=4 ST=2 TYP=6
	610	PALE	4	S/F	0044.0E	0045.0	10.0D	220.0			QL=4 ST=2 TYP=3
	4995	PALE	4	S/F	0044.0E	0045.0	10.0D	160.0			QL=2 ST=2 TYP=3
	2695	PALE	4	S/F	0044.0E	0045.0	10.0D	320.0			QL=4 ST=2 TYP=3
	17000	NOBE	7	C	0044.2	0045.1	26.0	167.0			15L
	35000	NOBE	7	C	0044.2	0045.1	20.0	138.0			0,80GHz:0
	35000	NOBE	7	C	0044.2	0059.2		63.0			0,80GHz:0
	17000	NOBE	7	C	0044.2	0059.2		95.0			20L
	15400	PALE	4	S/F	0045.0E	0045.0	9.0D	140.0			QL=4 ST=2 TYP=3
	410	PALE	4	S/F	0045.0E	0045.0	9.0D	77.0			QL=4 ST=2 TYP=3
	410	LEAR	49	GB	0058.0E	0059.0	1.0D	730.0			QL=4 ST=2 TYP=6
	200	HIRA	8	S	0058.0	0058.2	0.9	35000.0			WR
	100	HIRA	8	S	0058.5	0059.1	0.9	11500.0			WL
	610	LEAR	8	S	0059.0E	0059.0	U	75.0			QL=4 ST=2 TYP=3
	1415	LEAR	8	S	0059.0E	0059.0	U	58.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0059.0E	0059.0	U	19000.0			QL=4 ST=2 TYP=6
	2695	LEAR	8	S	0059.0E	0059.0	U	320.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0059.0E	0059.0	U	86.0			QL=4 ST=2 TYP=3
	410	PALE	49	GB	0059.0E	0059.0	U	750.0			QL=4 ST=2 TYP=6
	245	PALE	49	GB	0059.0E	0059.0	U	20000.0			QL=2 ST=2 TYP=6
	1415	PALE	8	S	0059.0E	0059.0	U	59.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	0059.0E	0059.0	U	49.0			QL=4 ST=2 TYP=3
	100	HIRA	41	F	0133.4	0139.6	8.3	900.0			MR
	2695	LEAR	4	S/F	0137.0E	0137.0	3.0D	140.0			QL=4 ST=2 TYP=3
	2695	PALE	4	S/F	0137.0E	0139.0	3.0D	100.0			QL=4 ST=2 TYP=5
	1415	LEAR	8	S	0139.0E	0139.0	1.0D	100.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0139.0E	0139.0	1.0D	120.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	0139.0E	0139.0	1.0D	100.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	0139.0E	0139.0	1.0D	110.0			QL=4 ST=2 TYP=3
	500	HIRA	8	S	0139.4	0139.7	0.7	65.0			MR
	100	HIRA	46	C	0316.2	0317.2	3.3	2700.0			WR
	100	GORK	46	C	0526.6	0530.2	6.2	810.0			
	100	GORK	46	C	0526.6	0530.8		1000.0			
	100	HIRA	42	SER	0529.0	0552.1	24.0	1000.0D			
	500	HIRA	42	SER	0530.0	0541.3	24.5	88.0			WR
	950	GORK	46	C	0536.0	0541.1		14.0			
	650	GORK	23	GRF	0536.0E	0538.2	6.7D	4.0			
	950	GORK	46	C	0536.0	0540.4	6.7	13.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
13	200	HIRA	42	SER	0537.1	0540.6	16.5	570.0			WR
	100	GORK	46	C	0538.7	0541.5		600.0			
	100	GORK	46	C	0538.7	0540.5	3.5	400.0			
	245	LEAR	8	S	0540.0E	0541.0	2.0D	350.0			QL=4 ST=3 TYP=3
	410	LEAR	8	S	0540.0E	0541.0	2.0D	130.0			QL=4 ST=2 TYP=3
	200	GORK	41	F	0540.0	0541.2	14.2	400.0			
	200	GORK	41	F	0540.0	0553.3		270.0			
	650	GORK	4	S/F	0541.0	0541.5	0.7	29.0			
	100	GORK	46	C	0548.8	0553.2	5.4	1600.0			
	100	GORK	46	C	0548.8	0553.7		810.0			
	245	LEAR	8	S	0553.0E	0553.0	1.0D	98.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0712.0E	0712.0	U	190.0			QL=2 ST=2 TYP=3
	430	KRAK	40	F	0937.5	1036.4	106.5	17.0	5.0		
	5900	KISV	1	S	0946.7	0947.2	1.0	3.0			
	245	LEAR	8	S	1011.0E	1012.0	2.0D	58.0			QL=2 ST=2 TYP=3
	808	ONDR	3	S	1044.0	1044.2	1.0	5.0			
	15000	KISV	2	S/F	1126.5	1126.9	1.9	9.0			
	200	GORK	4	S/F	1133.0	1133.5	2.4	1000.0			
	234	POTS	4	S/F	1133.2	1133.5	2.3	400.0			
	113	POTS	4	S/F	1133.4	1133.5	1.4	8400.0			
	40	POTS	8	S	1133.5	1133.6	0.5	23000.0			
	204	IZMI	41	F	1134.0	1134.8	2.0	900.0			
	9500	POTS	20	GRF	1250.0	1254.3	10.0	6.0			
	1470	POTS	1	S	1253.8	1254.5	1.2	3.0			
	245	SGMR	49	GB	1254.0E	1254.0	2.0D	760.0			QL=2 ST=2 TYP=6
	40	POTS	4	S/F	1254.2	1254.4	2.3	23000.0D			
	113	POTS	4	S/F	1254.3	1254.4	2.3	2500.0			
	3000	POTS	1	S	1254.3	1254.5	0.7	5.0			
	245	SGMR	8	S	1306.0E	1306.0	U	58.0			QL=2 ST=2 TYP=3
	40	POTS	42	SER	1344.0	1349.8	8.2	23000.0D			
	2800	OTTA	4	S/F	1347.7	1348.9	5.0	46.5	10.0		
	1470	POTS	4	S/F	1348.0	1349.0	7.0	20.0			
	3000	POTS	4	S/F	1348.0	1349.6	7.0	30.0			
	9500	POTS	4	S/F	1348.0	1349.6	7.0	36.0			
	113	POTS	4	S/F	1348.4	1349.7	2.6	2500.0D			
	808	ONDR	7	C	1348.8	1349.5	3.0	17.0			
	2800	OTTA	3	S	1450.9	1451.3	2.0	10.9	2.0		
	2695	PENT	3	S	2134.0	2134.9	2.0	14.3	3.0		
14	100	GORK	44	NS	0512.0E		402.0D		10.0		
	200	GORK	44	NS	0513.0E		401.0D		5.0		
	127	TORN	44	NS	0640.0E		500.0D		60.0		V=1
	204	IZMI	43	NS	0700.0		300.0	20.0			
	200	HIRA	45	C	0049.2	0049.8	1.2	325.0			SR
	100	HIRA	46	C	0129.0	0129.5	1.5	1000.0D			
	100	GORK	46	C	0641.0	0652.0		7900.0			
	100	GORK	46	C	0641.0	0648.0		530.0			
	100	GORK	46	C	0641.0	0645.2	12.1	210.0			
	2840	PEKG	45	C	0642.0	0651.3	16.0	470.6			
	100	HIRA	41	F	0642.2		10.6	1000.0D			
	9100	GORK	46	C	0645.0	0652.1		67.0			
	9100	GORK	46	C	0645.0	0647.6	13.3	12.0			
	5900	KISV	23	GRF	0645.8	0648.1	16.1	13.0			
	2950	GORK	4	S/F	0646.2	0652.1	7.9	81.0			
	950	GORK	41	F	0646.3	0652.5		30.0			
	950	GORK	41	F	0646.3	0648.6	7.1	20.0			
	2850	CRIM	46	C	0646.6	0650.3		92.0			
	2850	CRIM	46	C	0646.6	0652.5		223.0			
	2850	CRIM	46	C	0646.6	0647.8	7.0	74.0	21.0		
	15000	KISV	4	S/F	0647.1	0651.9	7.0	99.0			
	650	GORK	41	F	0647.4	0652.1		22.0			
	650	GORK	41	F	0647.4	0648.6	12.1	14.0			
	245	SVTO	4	S/F	0648.0E	0656.0	10.0D	70.0			QL=4 ST=3 TYP=5
	2695	LEAR	4	S/F	0650.0E	0652.0	3.0D	250.0			QL=4 ST=2 TYP=3
	2695	SVTO	4	S/F	0650.0E	0652.0	3.0D	230.0			QL=4 ST=3 TYP=3
	5900	KISV	4	S/F	0650.1	0652.0	4.6	85.0			
	35000	NOBE	7	C	0650.4	0652.1	3.5	48.0			O,80GHz:O
	17000	NOBE	7	C	0650.4	0652.1	3.5	80.0			26L
	8800	LEAR	8	S	0651.0E	0652.0	2.0D	65.0			QL=4 ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
14	4995	LEAR	8	S	0651.0E	0652.0	2.0D	61.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0651.0E	0652.0	2.0D	87.0			QL=4 ST=2 TYP=3
	200	GORK	4	S/F	0651.4	0652.1	1.4	1700.0			
	4995	SVTO	8	S	0652.0E	0652.0	1.0D	69.0			QL=2 ST=3 TYP=3
	2950	GORK	20	GRF	0737.3	0959.3	190.7	4.0			
	260	ONDR	41	F	0800.0E	0846.8	410.0D	182.0			
	204	IZMI	7	C	0910.8	0911.0	0.5	130.0			
	950	GORK	20	GRF	0928.7	0948.0	37.8	2.0			
	15000	KISV	2	S/F	1049.8	1050.2	0.9	5.0			
	245	SGMR	8	S	1230.0E	1230.0	U	66.0			QL=2 ST=2 TYP=3
	2800	OTTA	3	S	1736.5	1741.2	8.0	21.9	6.0		
	245	PALE	4	S/F	1742.0E	1746.0	5.0D	240.0			QL=4 ST=2 TYP=5
	2800	OTTA	29	PBI	1744.5	1800.0	75.0	6.0	3.0		
15	127	TORN	43	NS	0912.0		348.0		3.0		V=0
	260	ONDR	41	F	0800.0	1115.9	410.0	25.0			
	2800	OTTA	4	S/F	1744.5	1745.8	3.0	9.7	2.0		
	15400	PALE	8	S	2007.0E	2008.0	2.0D	73.0			QL=4 ST=2 TYP=3
16	127	TORN	43	NS	0958.0		86.0		2.0		V=1
	15400	LEAR	8	S	0123.0E	0123.0	2.0D	57.0			QL=4 ST=2 TYP=3
	650	GORK	4	S/F	0831.9	0833.1	5.4	18.0			
	245	LEAR	8	S	0832.0E	0833.0	1.0D	210.0			QL=4 ST=2 TYP=3
	9500	POTS	3	S	0832.0	0833.0	2.0	11.0			
	200	GORK	46	C	0832.1	0833.1	1.7	310.0			
	9100	GORK	1	S	0832.1	0833.2	3.9	12.0			
	100	GORK	4	S/F	0832.1	0833.3	1.8	100.0			
	200	GORK	46	C	0832.1	0833.4		210.0			
	5900	KISV	2	S/F	0832.2	0833.2	3.6	13.0			
	3000	POTS	3	S	0832.3	0833.0	1.7	8.0			
	950	GORK	4	S/F	0832.3	0833.1	5.0	13.0			
	204	IZMI	41	F	0832.3	0833.1	1.4	290.0			
	113	POTS	4	S/F	0832.3	0833.1	3.1	700.0			
	2950	GORK	1	S	0832.3	0833.2	2.5	6.0			
	234	POTS	4	S/F	0832.3	0833.2	2.9	550.0			
	1470	POTS	2	S/F	0832.3	0833.4	1.7	8.0			
	15000	KISV	2	S/F	0832.3	0832.9	3.0	12.0			
	3013	IZMI	5	S	0832.5	0833.2	2.3	8.0	4.0		
	810	KRAK	2	S/F	0832.5	0832.5	1.0	46.0	7.0		
	30	POTS	4	S/F	0832.5	0833.6	3.1	200.0U			
	245	SVTO	8	S	0833.0E	0833.0	1.0D	180.0			QL=4 ST=2 TYP=3
	810	KRAK	8	S	0839.6	0839.6	0.3	36.0			
	810	KRAK	2	S/F	0840.5	0841.3	1.7	45.0	8.0		
	5900	KISV	2	S/F	1014.7	1015.8	2.8	2.0			
	200	GORK	41	F	1015.0	1043.0		230.0			
	200	GORK	41	F	1015.0	1017.0	34.7	25.0D			
	260	ONDR	42	SER	1015.0	1046.8	35.0	116.0			
	204	IZMI	41	F	1015.5	1017.0	2.4	60.0			
	9300	KISV	2	S/F	1036.7	1043.4	7.7	4.0			
	808	ONDR	41	F	1041.8	1049.7	9.5	6.0			
	245	LEAR	8	S	1042.0E	1043.0	1.0D	98.0			QL=2 ST=2 TYP=3
	9100	GORK	21	GRF	1042.0	1046.5	8.4	5.0			
	9100	GORK	1	S	1042.6	1043.4	2.1	3.0			
	234	POTS	42	SER	1042.7	1043.0	6.3	275.0			
	113	POTS	42	SER	1042.7	1043.1	7.3	1400.0			
	100	GORK	41	F	1042.7	1043.4	7.2	580.0			
	100	GORK	41	F	1042.7	1048.7		15.0D			
	30	POTS	42	SER	1042.8	1043.2	7.2	5300.0			
	5900	KISV	2	S/F	1042.9	1043.4	1.8	3.0			
	245	SVTO	8	S	1043.0E	1043.0	U	64.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	1043.0	1043.2	7.0	400.0			
	127	TORN	42	SER	1043.0	1043.2	7.0	10600.0	6.0		
	650	GORK	40	F	1045.5	1049.0	5.3	10.0			
	950	GORK	40	F	1045.5	1049.6	5.3	10.0			
	430	KRAK	42	SER	1046.3	1048.7	3.0	270.0			
	2950	GORK	20	GRF	1046.4	1048.9	41.1	3.0			
	536	ONDR	42	SER	1047.5	1047.9	2.5	60.0			
	9100	GORK	1	S	1048.0	1048.6	1.5	3.0			
	9300	KISV	2	S/F	1048.1	1048.7	2.1	4.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
16	410	SVTO	8	S	1049.0E	1049.0	U	340.0			QL=4 ST=3 TYP=3
	245	SVTO	8	S	1049.0E	1049.0	U	50.0			QL=4 ST=3 TYP=3
	260	ONDR	41	F	1245.0	1342.0	57.0	5.0			
	245	LEAR	8	S	2311.0E	2312.0	2.0D	82.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2311.0E	2312.0	1.0D	110.0			QL=4 ST=2 TYP=3
17	127	TORN	43	NS	0722.0	0912.8	458.0	65.0	3.0		V=0
	2695	LEAR	8	S	0635.0E	0637.0	2.0D	130.0			QL=4 ST=2 TYP=3
	2950	GORK	20	GRF	0708.8	0736.3	218.0	6.0			
	204	IZMI	41	F	0721.5	0722.5	2.0	950.0			
	200	GORK	4	S/F	0721.8	0722.5	1.1	170.0			
	100	GORK	4	S/F	0756.0	0756.4	1.0	1800.0			
	113	POTS	4	S/F	0756.1	0756.2	1.0	650.0			
	40	POTS	4	S/F	0756.1	0756.7	1.3	700.0			
	260	ONDR	42	SER	0839.0	0951.1	81.0	46.0			
	204	IZMI	5	S	0856.0	0856.2	0.8	90.0	40.0		
	810	KRAK	8	S	0911.5	0911.6	0.2	21.0			
	204	IZMI	5	S	0950.0	0950.1	1.0	35.0	10.0		
	260	ONDR	41	F	1240.0	1327.9	50.0	5.0			
	245	PALE	8	S	1824.0E	1824.0	1.0D	260.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	2108.0E	2108.0	U	710.0			QL=4 ST=2 TYP=6
	245	SGMR	49	GB	2108.0E	2108.0	1.0D	910.0			QL=2 ST=2 TYP=6
	245	PALE	8	S	2359.0E	2359.0	U	69.0			QL=4 ST=2 TYP=3
18	204	IZMI	41	F	0910.3	0914.0	6.0	230.0			
	200	GORK	46	C	0914.5	0919.0	15.5	180.0			
	200	GORK	46	C	0914.5	0920.8		45.0			
	127	TORN	42	SER	0915.0	0916.0	6.0	500.0	4.0		
	3013	IZMI	20	GRF	0915.6	0916.0	10.0	3.0	2.0		
	113	POTS	42	SER	0915.8	0920.6	5.3	260.0			
	100	GORK	46	C	0918.0	0919.0	3.0	40.0D			
	245	LEAR	4	S/F	0918.0E	0920.0	3.0D	200.0			QL=4 ST=2 TYP=3
	100	GORK	46	C	0918.0	0920.7		740.0			
	234	POTS	41	F	0918.6	0920.6	2.5	275.0			
	245	SVTO	8	S	0920.0E	0921.0	1.0D	140.0			QL=4 ST=2 TYP=3
	127	TORN	40	F	1037.5		35.0		2.0		
	2950	GORK	21	GRF	1040.4	1133.0	52.6D	10.0			
	260	ONDR	42	SER	1043.6	1114.5	35.0	271.0			
	204	IZMI	42	SER	1044.0	1045.3	20.0	270.0			
	9100	GORK	21	GRF	1045.0	1117.0	48.0D	12.0			
	234	POTS	41	F	1045.1	1047.6	7.4	100.0			
	113	POTS	4	S/F	1049.0U	1051.6	5.6U	3500.0			
	3000	POTS	4	S/F	1049.0	1052.6	4.8	9.0			
	200	GORK	41	F	1049.4	1051.7	28.6	360.0			
	200	GORK	41	F	1049.4	1114.9		180.0			
	100	GORK	41	F	1049.6	1051.7	27.9	5600.0			
	100	GORK	41	F	1049.6	1116.8		9300.0			
	100	GORK	41	F	1049.6	1114.9		11800.0			
	2950	GORK	4	S/F	1049.8	1052.6	3.7	9.0			
	3013	IZMI	5	S	1050.5	1052.8	4.0	5.0	3.0		
	9500	POTS	20	GRF	1051.0	1115.0	119.0	13.0			
	9100	GORK	1	S	1051.0	1052.5	2.0	5.0			
	1470	POTS	2	S/F	1051.0	1052.7	2.5	4.0			
	40	POTS	4	S/F	1051.6	1051.7	U	9000.0			
	127	TORN	47	GB	1051.7	1052.3	3.3	1200.0	130.0		
	3000	POTS	20	GRF	1055.0	1137.0	115.0	10.0			
	1470	POTS	20	GRF	1100.0	1129.0	150.0	5.0			
	950	GORK	1	S	1101.0	1103.6	8.0	2.0			
	650	GORK	1	S	1101.5	1103.6	5.6	3.0			
	5900	KISV	22	GRF	1111.7	1114.8	11.8	4.0			
	245	SVTO	8	S	1114.0E	1114.0	2.0D	270.0			QL=4 ST=2 TYP=3
	204	IZMI	41	F	1114.0	1114.3	4.0	600.0			
	127	TORN	47	GB	1114.3	1115.0U	3.2	2200.0D	100.0		
	234	POTS	41	F	1114.3	1116.4	7.8	300.0			
	15000	KISV	2	S/F	1114.3	1114.7	1.1	6.0			
	9100	GORK	1	S	1114.3	1114.8	0.7	5.0			
	9300	KISV	2	S/F	1114.3	1114.8	4.1	4.0			
	245	SVTO	8	S	1116.0E	1116.0	1.0D	160.0			QL=4 ST=2 TYP=3
	430	KRAK	8	S	1116.0	1116.1	0.6	74.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
18	2850	CRIM	1	S	1149.6	1152.8	4.0	12.0	4.0		
	260	ONDR	41	F	1215.5	1216.2	130.0	35.0			
	113	POTS	4	S/F	1240.3	1240.4	1.2	900.0			
	40	POTS	4	S/F	1240.3	1240.5	1.1	3500.0			
	245	SVTO	8	S	1603.0E	1603.0	U	130.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1703.0E	1703.0	1.0D	410.0			QL=2 ST=2 TYP=3
19	245	LEAR	8	S	0033.0E	0034.0	1.0D	68.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0033.0E	0034.0	1.0D	80.0			QL=4 ST=2 TYP=3
	1415	LEAR	8	S	0046.0E	0047.0	2.0D	41.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0046.0E	0047.0	1.0D	120.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0046.0E	0047.0	1.0D	33.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0052.0E	0052.0	U	62.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0052.0E	0052.0	U	100.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0103.0E	0103.0	1.0D	180.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0103.0E	0103.0	1.0D	210.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0126.0E	0126.0	1.0D	150.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0126.0E	0126.0	1.0D	200.0			QL=4 ST=2 TYP=3
	100	GORK	41	F	0548.0	0600.2		520.0			
	100	GORK	41	F	0548.0	0550.2	15.1	1000.0			
	200	HIRA	42	SER	0549.2	0600.0	12.8	110.0			O
	200	GORK	41	F	0549.7	0550.2	13.3	180.0			
	200	GORK	41	F	0549.7	0557.8		180.0			
	245	LEAR	4	S/F	0556.0E	0558.0	5.0D	120.0			QL=4 ST=2 TYP=3
	410	LEAR	4	S/F	0557.0E	0558.0	4.0D	51.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0558.0E	0558.0	2.0D	130.0			QL=4 ST=2 TYP=3
	15000	KISV	2	S/F	0632.9	0633.3	0.7	4.0			
	950	GORK	20	GRF	0633.4E	0733.6	168.1D	5.0			
	9300	KISV	2	S/F	0636.1	0636.6	4.4	4.0			
	5900	KISV	2	S/F	0636.2	0636.7	6.2	4.0			
	650	GORK	20	GRF	0649.9	0733.6	330.1D	6.0			
	2950	GORK	20	GRF	0724.5	0750.5	275.5D	11.0			
	9100	GORK	21	GRF	0730.0	0753.4	69.0	7.0			
	9300	KISV	2	S/F	0742.2	0743.1	5.4	8.0			
	9300	KISV	23	GRF	0742.2	0750.2	22.8	4.0			
	9100	GORK	1	S	0742.5	0742.9	0.8	7.0			
	9500	POTS	1	S	0742.5	0742.9	1.0	7.0			
	260	ONDR	41	F	0800.0	1337.6	390.0	155.0			
	9100	GORK	1	S	0834.0	0834.4	1.5	10.0			
	9500	POTS	1	S	0834.0	0834.5	5.0	8.0			
	9300	KISV	2	S/F	0834.2	0834.5	6.0	10.0			
	5900	KISV	45	C	0834.3	0836.1		4.0			
	5900	KISV	45	C	0834.3	0834.5	3.2	6.0			
	430	KRAK	41	F	0918.0	0921.3	5.2	27.0	9.0		
	430	KRAK	8	S	0949.0	0949.1	0.5	73.0			
	127	TORN	46	C	1043.5	1048.0	16.0	900.0	5.0		
	9100	GORK	20	GRF	1045.0	1136.9	75.0D	7.0			
	9300	KISV	2	S/F	1127.8	1128.2	2.9	4.0			
	5900	KISV	2	S/F	1127.9	1128.2	1.9	2.0			
	9500	POTS	29	PBI	1233.5	1234.3	19.5	21.0			
	810	KRAK	42	SER	1246.1	1253.4	7.5	35.0			
	245	SGMR	8	S	1337.0E	1337.0	U	120.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1337.0E	1337.0	U	120.0			QL=4 ST=2 TYP=3
	113	POTS	41	F	1431.7	1433.4	2.1	7000.0			
	40	POTS	41	F	1431.7	1433.6	4.3	9000.0			
	410	SGMR	8	S	1433.0E	1433.0	U	79.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1433.0E	1434.0	1.0D	310.0			QL=4 ST=3 TYP=3
	234	POTS	4	S/F	1433.6	1433.9	1.1	1100.0			
	245	SVTO	8	S	1434.0E	1434.0	U	130.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1437.0E	1437.0	U	310.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1605.0E	1605.0	1.0D	110.0			QL=4 ST=2 TYP=3
	2800	OTTA	4	S/F	1645.9	1648.3	6.5	30.9	9.0		
	245	SGMR	8	S	1646.0E	1646.0	U	150.0			QL=2 ST=2 TYP=3
	4995	SGMR	4	S/F	1646.0E	1648.0	5.0D	120.0			QL=4 ST=2 TYP=3
	8800	SGMR	4	S/F	1647.0E	1648.0	4.0D	81.0			QL=4 ST=2 TYP=3
	2695	SGMR	8	S	1648.0E	1648.0	U	21.0			QL=2 ST=2 TYP=3
	15400	SGMR	4	S/F	1648.0E	1649.0	3.0D	48.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	1905.0E	1905.0	U	50.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1905.0E	1905.0	U	63.0			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

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
19	610	SGMR	8	S	1905.0E	1905.0	U	56.0			QL=4 ST=3 TYP=3
	410	SGMR	8	S	1905.0E	1905.0	U	140.0			QL=4 ST=3 TYP=3
	200	HIRA	41	F	2244.0	2255.0	51.0	3.0	2.0		O
20	260	ONDR	43	NS	0800.0	1008.1	390.0	251.0			
	200	HIRA	42	SER	0047.5	0111.0	29.7	250.0			O
	245	PALE	8	S	0208.0E	0208.0	1.0D	150.0			QL=4 ST=2 TYP=3
	204	IZMI	41	F	0717.0	0717.0	2.8	15.0			
	2950	GORK	21	GRF	0719.2	1142.0	280.8D	6.0			
	5900	KISV	2	S/F	0723.7	0724.7	3.6	6.0			
	9100	GORK	20	GRF	0724.0	0724.5	11.0	7.0			
	9300	KISV	2	S/F	0724.0	0724.7	4.0	7.0			
	9100	GORK	21	GRF	0736.8	0740.2	10.1	5.0			
	3013	IZMI	5	S	0737.2	0739.0	5.0	13.0	6.0		
	2950	GORK	4	S/F	0737.2	0738.6	3.6	16.0			
	5900	KISV	4	S/F	0737.3	0738.7	7.1	34.0			
	9300	KISV	23	GRF	0737.4	0740.2	18.7	5.0			
	3000	POTS	4	S/F	0737.4	0738.7	3.6	20.0U			
	9300	KISV	2	S/F	0737.4	0738.8	3.6	24.0			
	9100	GORK	4	S/F	0737.5	0738.7	2.3	21.0			
	9500	POTS	4	S/F	0737.5	0738.8	5.5	18.0			
	1470	POTS	4	S/F	0737.5	0737.9	3.5	7.0			
	2850	CRIM	1	S	0737.7	0738.8	2.5	16.0	5.0		
	15000	KISV	2	S/F	0738.4	0738.7	3.8	13.0			
	200	GORK	4	S/F	0748.6	0749.3	1.5	25.0			
	234	POTS	4	S/F	0748.7	0749.1	1.4	150.0			
	100	GORK	4	S/F	0749.0	0749.4	1.0	35.0			
	204	IZMI	4	S/F	0749.0	0749.4	1.0	23.0			
	113	POTS	4	S/F	0749.0	0749.6	1.1	60.0			
	430	KRAK	4	S/F	0801.2E	0802.0	2.5D	190.0	25.0		
	5900	KISV	2	S/F	0943.5	0944.4	4.0	10.0			
	9300	KISV	2	S/F	0943.5	0944.4	2.9	7.0			
	9100	GORK	1	S	0943.6	0944.2	1.4	7.0			
	204	IZMI	5	S	1000.4	1000.5	0.7	55.0	27.0		
	200	GORK	41	F	1001.1	1008.0		25.0D			
	200	GORK	41	F	1001.1	1001.9	7.4	10.0			
	234	POTS	42	SER	1001.2	1008.2	7.4	100.0			
	100	GORK	41	F	1001.3	1002.3	7.7	30.0			
	100	GORK	41	F	1001.3	1008.4		130.0			
	113	POTS	42	SER	1001.3	1008.8	7.9	85.0			
	245	LEAR	8	S	1008.0E	1008.0	U	160.0			QL=4 ST=2 TYP=3
	9300	KISV	46	C	1020.8	1024.0		5.0			
	9300	KISV	46	C	1020.8	1022.0	5.9	5.0			
	9300	KISV	46	C	1020.8	1025.5		4.0			
	9100	GORK	22	GRF	1021.0	1025.5	15.0	7.0			
	5900	KISV	45	C	1021.2	1022.1		7.0			
	5900	KISV	45	C	1021.2	1024.2	6.1	13.0			
	2950	GORK	2	S/F	1021.3	1022.0	4.4	4.0			
	204	IZMI	5	S	1054.0	1054.2	0.5	30.0	15.0		
	8800	SVTO	8	S	1121.0E	1121.0	U	160.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	1135.4	1135.5	2.3	65.0			
	536	ONDR	8	S	1347.4	1347.5	3.5	44.0			
	808	ONDR	1	S	1347.4	1347.5	1.4	3.0			
	8800	SGMR	49	GB	1401.0E	1402.0	3.0D	790.0			QL=4 ST=1 TYP=6
	245	PALE	8	S	2042.0E	2042.0	1.0D	420.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2042.0E	2042.0	1.0D	380.0			QL=4 ST=2 TYP=3
21	200	GORK	44	NS	0516.0E		91.0D		5.0		
	204	IZMI	43	NS	0700.0		300.0	10.0			
	127	TORN	43	NS	0908.0	1341.1	352.0	200.0	5.0		V=1
	200	HIRA	44	NS	2118.0E	0610.0	660.0D	19.0	7.0		MR
	245	LEAR	8	S	0017.0E	0017.0	1.0D	72.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0017.0E	0017.0	1.0D	110.0			QL=4 ST=2 TYP=3
	200	HIRA	46	C	0411.2	0412.5	2.0	240.0			O
	100	HIRA	46	C	0411.2	0412.9	2.6	780.0			
	245	LEAR	8	S	0412.0E	0413.0	1.0D	150.0			QL=4 ST=2 TYP=3
	100	GORK	8	S	0556.6	0556.9	0.7	750.0			
	200	GORK	8	S	0556.7	0556.9	0.5	30.0D			
	100	GORK	8	S	0558.9	0559.5	1.0	2700.0			

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

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
21	245	LEAR	8	S	0559.0E	0559.0	1.0D	130.0			QL=4 ST=3 TYP=3
	200	GORK	8	S	0559.0	0559.4	0.7	1500.0			
	2950	GORK	22	GRF	0612.8	0822.5	347.2D	9.0			
	9300	KISV	2	S/F	0617.5	0617.8	1.3	5.0			
	5900	KISV	2	S/F	0617.6	0617.9	1.3	5.0			
	245	SVTO	8	S	0745.0E	0745.0	U	90.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0745.0E	0745.0	U	69.0			QL=4 ST=2 TYP=3
	5900	KISV	2	S/F	0758.2	0759.5	4.3	5.0			
	260	ONDR	41	F	0800.0	1304.3	420.0	99.0			
	536	ONDR	3	S	1358.0	1358.1	2.0	12.0			
	245	LEAR	8	S	2318.0E	2318.0	1.0D	93.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2318.0E	2318.0	1.0D	130.0			QL=4 ST=2 TYP=3
22	200	GORK	44	NS	0507.0E		404.0D		5.0		
	234	POTS	44	NS	0620.0E	1125.0U	486.0D	80.0U			
	204	IZMI	43	NS	0700.0		300.0	40.0			
	127	TORN	43	NS	0728.0		452.0		2.0		V=1
	260	ONDR	44	NS	0800.0E	1034.8	420.0D	331.0			
	245	SGMR	44	NS	1228.0E	1455.0	463.0D	150.0			QL=2 ST=2 TYP=1
	200	HIRA	44	NS	2118.0E	0007.0	660.0D	15.0	5.0		MR
	245	PALE	8	S	0331.0E	0331.0	1.0D	55.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0346.0E	0346.0	1.0D	270.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0503.0E	0503.0	2.0D	150.0			QL=4 ST=2 TYP=3
	200	HIRA	46	C	0503.0	0503.1	1.3	364.0			O
	100	HIRA	46	C	0503.0	0504.3	2.1	1200.0			O
	200	GORK	4	S/F	0553.4	0554.6	1.4	20.0			
	245	LEAR	8	S	0700.0E	0700.0	U	57.0			QL=4 ST=2 TYP=3
	200	GORK	4	S/F	0711.4	0712.5	2.0	30.0D			
	245	LEAR	8	S	0713.0E	0713.0	U	69.0			QL=4 ST=2 TYP=3
	2850	CRIM	20	GRF	0713.0	0717.1	8.0	14.0	5.0		
	2950	GORK	22	GRF	0713.2	0717.1	6.4	10.0			
	950	GORK	20	GRF	0715.0	0725.7	17.8	3.0			
	650	GORK	20	GRF	0715.7	0724.5	17.3	4.0			
	3000	POTS	20	GRF	0825.0	0848.5	65.0U	12.0			
	2950	GORK	2	S/F	0836.0	0839.9	5.7	4.0			
	5900	KISV	45	C	0836.1	0838.3		19.0			
	5900	KISV	23	GRF	0836.1	0849.3	36.6	7.0			
	5900	KISV	45	C	0836.1	0839.9	6.2	26.0			
	9300	KISV	22	GRF	0837.0	0839.7	28.6	11.0			
	9500	POTS	20	GRF	0837.0	0839.8	73.0	10.0			
	9100	GORK	22	GRF	0837.9	0839.7	11.8	11.0			
	245	LEAR	8	S	0846.0E	0846.0	1.0D	59.0			QL=4 ST=2 TYP=3
	40	POTS	41	F	0907.9	0908.7	3.7	5400.0			
	200	GORK	4	S/F	0908.0	0908.5	1.0	30.0D			
	100	GORK	46	C	0908.1	0909.0		540.0			
	100	GORK	46	C	0908.1	0908.6	3.3	810.0			
	100	GORK	46	C	0908.1	0910.8		540.0			
	234	POTS	41	F	0908.2	0910.5	2.8U	125.0			
	113	POTS	41	F	0908.2	0908.6	3.8	200.0			
	200	GORK	4	S/F	0909.8	0910.4	0.9	30.0D			
	536	ONDR	42	SER	0910.4	0911.5	1.7	39.0			
	650	GORK	4	S/F	0910.5	0911.1	1.8	32.0			
	950	GORK	2	S/F	0911.0	0911.3	0.7	6.0			
	9500	POTS	20	GRF	0955.0	1021.0	75.0	10.0			
	245	LEAR	8	S	1006.0E	1006.0	U	160.0			QL=4 ST=3 TYP=3
	204	IZMI	5	S	1008.0	1008.3	1.0	180.0	90.0		
	5900	KISV	20	GRF	1020.3	1021.5	20.0	10.0			
	9300	KISV	20	GRF	1020.5	1021.2	21.0	6.0			
	245	LEAR	8	S	1021.0E	1023.0	2.0D	58.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	1025.0E	1026.0	1.0D	58.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	1030.0	1030.5	5.0	700.0			
	100	GORK	41	F	1032.3	1034.5	7.1	10900.0			
	100	GORK	41	F	1032.3	1034.8		7200.0			
	100	GORK	41	F	1032.3	1038.8		540.0			
	113	POTS	41	F	1032.5	1034.6	8.9	3200.0D			
	40	POTS	41	F	1032.5	1035.6	5.4	23000.0			
	245	LEAR	49	GB	1033.0E	1034.0	2.0D	670.0			QL=4 ST=2 TYP=6
	127	TORN	47	GB	1033.3	1034.8	2.5	4400.0	170.0		
	200	GORK	46	C	1033.8	1034.7	5.6	930.0			

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

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
22	200	GORK	46	C	1033.8	1038.8		180.0			
	410	LEAR	8	S	1034.0E	1034.0	1.0D	82.0			QL=4 ST=2 TYP=3
	234	POTS	4	S/F	1034.1	1034.7	1.4	1900.0			
	950	GORK	2	S/F	1034.4	1035.0	0.7	5.0			
	650	GORK	4	S/F	1034.5	1035.0	0.9	20.0			
	536	ONDR	8	S	1034.5	1035.0	0.5	53.0			
	245	LEAR	4	S/F	1038.0E	1039.0	3.0D	140.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1226.0E	1226.0	U	89.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1226.0E	1226.0	U	71.0			QL=4 ST=2 TYP=3
	536	ONDR	3	S	1422.5	1422.5	0.2	16.0			
	4995	SGMR	4	S/F	1439.0E	1443.0	13.0D	220.0			QL=4 ST=2 TYP=3
	4995	SVTO	4	S/F	1439.0E	1443.0	15.0D	200.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	1441.0E	1443.0	7.0D	94.0			QL=4 ST=2 TYP=3
	2695	SVTO	4	S/F	1441.0E	1443.0	8.0D	150.0			QL=4 ST=2 TYP=3
	8800	SGMR	4	S/F	1441.0E	1443.0	10.0D	100.0			QL=4 ST=2 TYP=3
	2695	SGMR	4	S/F	1441.0E	1443.0	10.0D	160.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	1746.0E	1746.0	U	71.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2128.0E	2128.0	U	81.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2318.0E	2318.0	1.0D	74.0			QL=4 ST=2 TYP=3
23	200	GORK	44	NS	0457.0E		408.0D		5.0		
	204	IZMI	43	NS	0700.0		300.0	15.0			
	260	ONDR	44	NS	0740.0E	1410.0	440.0D	208.0			
	127	TORN	43	NS	0840.0	1320.0	380.0	1100.0	4.0		V=1
	200	HIRA	44	NS	2115.0E	0345.0	660.0D	11.0	5.0		MR
	100	HIRA	41	F	0017.9	0019.4	2.2	400.0			O
	200	HIRA	8	S	0248.7	0249.3	1.1	290.0			O
	245	LEAR	8	S	0250.0E	0250.0	U	54.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0341.0E	0341.0	U	90.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0416.0E	0416.0	U	59.0			QL=4 ST=2 TYP=3
	200	GORK	41	F	0624.4	0634.4		30.0D			
	200	GORK	41	F	0624.4	0625.6	10.2	30.0D			
	5900	KISV	46	C	0650.8	0653.0	6.9	14.0			
	5900	KISV	46	C	0650.8	0656.0		10.0			
	5900	KISV	46	C	0650.8	0654.1		12.0			
	5900	KISV	46	C	0650.8	0651.6		9.0			
	9100	GORK	1	S	0652.4	0652.8	1.2	6.0			
	5900	KISV	2	S/F	0703.7	0705.0	2.2	9.0			
	2950	GORK	20	GRF	0705.8	1036.5	283.0	10.0			
	9100	GORK	1	S	0734.0	0734.6	1.0	4.0			
	430	KRAK	42	SER	0809.3	0809.3	1.3	180.0			
	650	GORK	2	S/F	0809.3	0809.5	1.3	11.0			
	100	GORK	46	C	0809.3	0809.6	1.7	1500.0			
	100	GORK	46	C	0809.3	0810.6		800.0			
	200	GORK	4	S/F	0809.4	0809.9	1.2	580.0			
	950	GORK	1	S	0809.5	0809.5	0.6	1.0			
	204	IZMI	8	S	0810.0	0810.1	0.1	70.0	60.0		
	9100	GORK	20	GRF	0821.0	0826.1	7.9	8.0			
	9300	KISV	1	S	0826.0	0826.3	1.0	8.0			
	5900	KISV	2	S/F	0845.0	0846.0	3.0	5.0			
	5900	KISV	2	S/F	0905.2	0905.7	3.8	4.0			
	200	GORK	4	S/F	1010.9	1012.2	1.7	30.0			
	100	GORK	4	S/F	1011.0	1012.1	1.6	40.0			
	100	GORK	4	S/F	1107.9	1108.2	1.1	40.0			
	200	GORK	4	S/F	1108.0	1108.1	1.1	30.0D			
	204	IZMI	5	S	1108.5	1108.7	0.4	80.0	70.0		
	5900	KISV	45	C	1123.6	1124.4	6.4	15.0			
	5900	KISV	45	C	1123.6	1125.4		10.0			
	3000	POTS	4	S/F	1252.5	1254.5	53.0	56.0			
	2695	SGMR	4	S/F	1253.0E	1254.0	7.0D	56.0			QL=2 ST=2 TYP=3
	8800	SGMR	4	S/F	1253.0E	1254.0	7.0D	90.0			QL=2 ST=2 TYP=3
	4995	SGMR	4	S/F	1253.0E	1254.0	7.0D	110.0			QL=2 ST=2 TYP=3
	1470	POTS	4	S/F	1253.0	1257.1	52.0	106.0			
	9500	POTS	29	PBI	1253.0	1254.2	97.0	73.0			
	15400	SGMR	8	S	1254.0E	1254.0	U	28.0			QL=2 ST=2 TYP=3
	8800	SVTO	4	S/F	1254.0E	1254.0	9.0D	83.0			QL=4 ST=2 TYP=3
	15400	SVTO	4	S/F	1254.0E	1254.0	9.0D	48.0			QL=4 ST=2 TYP=3
	4995	SVTO	4	S/F	1254.0E	1254.0	9.0D	100.0			QL=4 ST=2 TYP=3
	808	ONDR	41	F	1255.0	1258.0	80.0	6.0			

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

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
23	1415	SGMR	8	S	1256.0E	1257.0	1.0D	98.0			QL=2 ST=2 TYP=3
	1415	SVTO	8	S	1257.0E	1257.0	U	93.0			QL=4 ST=2 TYP=3
	810	KRAK	42	SER	1304.5	1305.4	1.8	31.0			
	536	ONDR	3	S	1305.2	1305.3	0.5	9.0			
	40	POTS	42	SER	1314.4	1320.4	8.7	40000.0D			
	245	SGMR	4	S/F	1319.0E	1322.0	3.0D	100.0			QL=2 ST=2 TYP=3
	234	POTS	41	F	1319.1	1322.1	4.0	385.0			
	113	POTS	42	SER	1319.4	1320.0	6.0	800.0			
	410	SGMR	8	S	1321.0E	1322.0	1.0D	100.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1322.0E	1322.0	U	120.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1322.0E	1322.0	U	80.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1407.0E	1407.0	U	52.0			QL=2 ST=2 TYP=3
	245	SGMR	49	GB	1409.0E	1410.0	1.0D	500.0			QL=2 ST=2 TYP=6
	234	POTS	4	S/F	1409.8	1410.1	0.7	200.0			
	536	ONDR	42	SER	1409.9	1410.7	3.0	56.0			
	245	SVTO	49	GB	1410.0E	1410.0	U	520.0			QL=4 ST=2 TYP=6
	2800	OTTA	3	S	1436.0	1444.0	125.0	163.4	32.0		
	245	SGMR	8	S	1522.0E	1523.0	2.0D	250.0			QL=2 ST=3 TYP=3
	245	SGMR	8	S	1523.0E	1523.0	U	250.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	1524.0E	1524.0	U	130.0			QL=2 ST=3 TYP=3
	2800	OTTA	3	S	1631.5	1633.0	3.0	13.2	3.0		
	245	SGMR	8	S	1634.0E	1634.0	U	66.0			QL=2 ST=2 TYP=3
	8800	PALE	8	S	1908.0E	1908.0	1.0D	56.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	1917.0E	1918.0	1.0D	150.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1917.0E	1917.0	U	99.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	2003.0E	2003.0	U	53.0			QL=2 ST=2 TYP=3
	8800	PALE	8	S	2046.0E	2047.0	2.0D	62.0			QL=2 ST=2 TYP=3
	4995	PALE	4	S/F	2046.0E	2048.0	5.0D	78.0			QL=2 ST=2 TYP=3
	4995	SGMR	8	S	2046.0E	2048.0	2.0D	62.0			QL=2 ST=2 TYP=3
	200	HIRA	46	C	2237.8	2238.4	2.6	126.0			WR
	245	LEAR	8	S	2238.0E	2239.0	1.0D	120.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2320.0E	2320.0	U	95.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2320.0E	2320.0	U	140.0			QL=4 ST=2 TYP=3
	200	HIRA	42	SER	2331.7	2347.5	30.0	140.0			WR
	245	LEAR	8	S	2346.0E	2348.0	2.0D	460.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	2346.0E	2348.0	2.0D	700.0			QL=4 ST=2 TYP=6
	100	HIRA	42	SER	2346.2	2358.3	12.5	1200.0			O
	2695	PENT	3	S	2347.0	2348.7	3.5	41.0	8.0		
	410	LEAR	8	S	2347.0E	2348.0	2.0D	450.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	2347.0E	2348.0	2.0D	73.0			QL=4 ST=2 TYP=3
	4995	LEAR	8	S	2347.0E	2348.0	2.0D	99.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	2347.0E	2348.0	2.0D	62.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	2347.0E	2348.0	2.0D	51.0			QL=4 ST=2 TYP=3
	2695	PALE	8	S	2347.0E	2348.0	2.0D	39.0			QL=2 ST=2 TYP=3
	8800	PALE	8	S	2347.0E	2348.0	2.0D	95.0			QL=2 ST=2 TYP=3
	17000	NOBE	7	C	2347.5	2348.6	7.0	32.0			13L,80,35GHz:O
	15400	PALE	8	S	2348.0E	2348.0	1.0D	24.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	2348.0E	2348.0	U	23.0			QL=2 ST=2 TYP=3
	610	PALE	8	S	2348.0E	2348.0	1.0D	30.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2348.0E	2348.0	1.0D	460.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2352.0E	2352.0	U	90.0			QL=4 ST=2 TYP=3
24	200	GORK	44	NS	0511.0E		379.0D		5.0		
	204	IZMI	43	NS	0700.0		300.0	15.0			
	127	TORN	43	NS	0805.0	1028.2	415.0	130.0	8.0		V=1
	100	GORK	43	NS	0852.1		157.9		5.0		
	200	HIRA	44	NS	2115.0E	0613.0	660.0D	11.0	5.0		WR
	200	HIRA	46	C	0038.9	0040.3	8.7	100.0	32.0		O
	100	HIRA	41	F	0038.9	0040.3	9.8	780.0			
	245	LEAR	4	S/F	0039.0E	0040.0	4.0D	290.0			QL=4 ST=2 TYP=3
	2840	PEKG	20	GRF	0220.0	0358.0	150.0D	34.0			
	500	HIRA	46	C	0318.4	0319.5	5.3	38.0			O
	610	LEAR	8	S	0319.0E	0319.0	1.0D	65.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	0319.0E	0319.0	1.0D	60.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0503.0E	0503.0	1.0D	350.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0503.0E	0503.0	U	370.0			QL=4 ST=2 TYP=3
	4995	LEAR	8	S	0504.0E	0505.0	2.0D	95.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0504.0E	0505.0	2.0D	110.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0504.0E	0505.0	1.0D	50.0			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

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
24	9100	GORK	5	S	0504.0	0505.2	2.8	114.0			
	17000	NOBE	1	S	0504.5	0505.1	1.5	38.0			8L,80,35GHz:0
	2950	GORK	1	S	0504.5	0505.2	1.7	9.0			
	9100	GORK	29	PBI	0506.8	0506.8	6.7	8.0			
	200	GORK	41	F	0654.3	0712.7		30.0D			
	200	GORK	41	F	0654.3	0654.7	25.3	30.0D			
	2950	GORK	20	GRF	0701.8	0827.1	155.9	8.0			
	5900	KISV	22	GRF	0734.0	0735.5	9.5	6.0			
	9300	KISV	22	GRF	0734.6	0735.4	9.7	5.0			
	260	ONDR	41	F	0740.0E	1229.4	440.0D	243.0			
	5900	KISV	46	C	0758.8	0800.3	14.8	10.0			
	5900	KISV	46	C	0758.8	0811.5		5.0			
	5900	KISV	46	C	0758.8	0804.6		9.0			
	9100	GORK	22	GRF	0804.5	0825.9	50.6	15.0			
	100	GORK	3	S	0809.2	0809.7	0.9	150.0			
	245	LEAR	8	S	0814.0E	0814.0	1.0D	170.0			QL=4 ST=2 TYP=3
	200	GORK	3	S	0814.4	0814.9	1.0	30.0D			
	204	IZMI	5	S	0814.5	0814.7	0.5	220.0	110.0		
	245	SVTO	8	S	0815.0E	0815.0	U	170.0			QL=4 ST=2 TYP=3
	5900	KISV	45	C	0822.4	0828.0		8.0			
	5900	KISV	30	PBI	0822.4	0828.0	20.0	8.0			
	5900	KISV	45	C	0822.4	0825.2	4.8	27.0			
	5900	KISV	45	C	0822.4	0826.8		25.0			
	9500	POTS	29	PBI	0822.5	0825.0	33.0	23.0			
	9300	KISV	30	PBI	0823.2	0828.0	17.4	8.0			
	9300	KISV	4	S/F	0823.2	0825.1	4.8	36.0			
	9100	GORK	3	S	0824.8	0825.0	0.8	19.0			
	9300	KISV	45	C	0838.3	0838.5	6.8	10.0			
	5900	KISV	2	S/F	0838.3	0841.7	7.0	14.0			
	9300	KISV	45	C	0838.3	0841.7		9.0			
	5900	KISV	2	S/F	0851.2	0852.5	5.2	25.0			
	9300	KISV	2	S/F	0851.4	0852.6	6.6	7.0			
	5900	KISV	45	C	0901.4	0906.0		10.0			
	5900	KISV	45	C	0901.4	0905.9	12.1	11.0			
	200	GORK	41	F	0924.7	0927.5	19.1	30.0			
	200	GORK	41	F	0924.7	0933.6		30.0			
	5900	KISV	22	GRF	0926.0	0927.2	11.8	9.0			
	100	GORK	41	F	0947.8	1102.0		150.0			
	100	GORK	41	F	0947.8	1021.1	75.5	300.0			
	9300	KISV	20	GRF	0950.5	0955.6	8.0	5.0			
	9300	KISV	20	GRF	0950.5	0951.7		4.0			
	5900	KISV	23	GRF	0955.5	0958.0	26.2	9.0			
	5900	KISV	1	S	1001.3	1001.6	0.9	6.0			
	9300	KISV	4	S/F	1008.2	1009.7	2.7	24.0			
	9300	KISV	29	PBI	1008.2	1010.9	9.6	5.0			
	9100	GORK	2	S/F	1008.6	1009.6	3.4	22.0			
	5900	KISV	2	S/F	1009.0	1009.5	2.0	11.0			
	9500	POTS	3	S	1009.0	1009.5	3.0	15.0			
	15000	KISV	2	S/F	1009.3	1009.5	1.2	8.0			
	33	UPIC	45	C	1047.5	1049.0	2.0				
	5900	KISV	23	GRF	1137.1	1140.4	10.1	6.0			
	9300	KISV	23	GRF	1137.4	1141.4	14.3	6.0			
	9300	KISV	1	S	1137.8	1138.1	1.0	11.0			
	5900	KISV	4	S/F	1137.9	1138.1	1.1	23.0			
	245	SGMR	8	S	1155.0E	1156.0	1.0D	74.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1155.0E	1156.0	1.0D	79.0			QL=2 ST=2 TYP=3
	808	ONDR	1	S	1218.0	1218.1	1.5	5.0			
	245	SGMR	8	S	1228.0E	1228.0	2.0D	130.0			QL=2 ST=3 TYP=3
	234	POTS	4	S/F	1228.6	1229.1	1.0	100.0			
	33	UPIC	2	S/F	1247.5	1247.9	0.8				
	410	SGMR	8	S	1324.0E	1324.0	U	23.0			QL=2 ST=2 TYP=3
	430	KRAK	8	S	1324.6	1324.8	0.3	190.0			
	410	SVTO	8	S	1325.0E	1325.0	U	84.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1450.0E	1450.0	U	230.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1558.0E	1558.0	1.0D	390.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1601.0E	1601.0	U	60.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1612.0E	1613.0	1.0D	120.0			QL=2 ST=2 TYP=3
	2800	OTTA	3	S	2131.0	2134.3	6.0	38.8	8.0		
	4995	PALE	4	S/F	2133.0E	2134.0	3.0D	130.0			QL=2 ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
24	4995	SGMR	8	S	2133.0E	2134.0	1.0D	110.0			QL=2 ST=2 TYP=3
	8800	PALE	8	S	2134.0E	2134.0	2.0D	59.0			QL=2 ST=2 TYP=3
	200	HIRA	42	SER	2232.3	2251.5	21.1	75.0			WL
	100	HIRA	46	C	2250.8	2251.4	1.3	530.0			
25	200	GORK	44	NS	0509.0E		382.0D		5.0		
	204	IZMI	43	NS	0700.0		300.0	20.0			
	260	ONDR	44	NS	0740.0E	1301.0	450.0D	176.0			
	127	TORN	43	NS	0941.0		319.0		4.0		V=0
	200	HIRA	44	NS	2114.0E	0642.0	660.0D	14.0	8.0		WR
	245	LEAR	8	S	0224.0E	0224.0	U	120.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0224.0E	0224.0	U	150.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0253.0E	0254.0	1.0D	160.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0254.0E	0254.0	U	120.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0510.0E	0510.0	1.0D	100.0			QL=4 ST=2 TYP=3
	9100	GORK	21	GRF	0604.6	0606.0	13.4	6.0			
	100	GORK	41	F	0604.8	0636.0		200.0			
	100	GORK	41	F	0604.8	0618.6	33.4	270.0			
	9300	KISV	2	S/F	0609.7	0610.4	6.0	13.0			
	9100	GORK	1	S	0609.9	0610.4	2.4	11.0			
	5900	KISV	2	S/F	0610.1	0610.4	1.7	8.0			
	200	GORK	4	S/F	0643.7	0644.5	3.1	30.0D			
	2950	GORK	21	GRF	0654.5	0857.4	244.0	12.0			
	5900	KISV	2	S/F	0702.8	0704.4	8.3	8.0			
	245	SVTO	8	S	0730.0E	0730.0	U	58.0			QL=2 ST=2 TYP=3
	100	GORK	41	F	0735.1	0829.5		270.0			
	100	GORK	41	F	0735.1	0740.5	54.7	135.0			
	5900	KISV	4	S/F	0739.8	0742.3	5.0	23.0			
	5900	KISV	29	PBI	0739.8	0744.8	22.8	8.0			
	2950	GORK	46	C	0740.0	0741.2	3.8	7.0			
	2850	CRIM	45	C	0740.0	0742.3		16.0			
	3013	IZMI	4	S/F	0740.0	0742.3	4.0	6.0	3.0		
	2950	GORK	46	C	0740.0	0742.4		10.0			
	2850	CRIM	45	C	0740.0	0740.8	3.4	11.0	5.0		
	200	GORK	4	S/F	0741.6	0742.3	1.3	30.0D			
	245	LEAR	8	S	0752.0E	0753.0	1.0D	57.0			QL=2 ST=3 TYP=3
	9300	KISV	23	GRF	0836.9	0902.0	36.7	12.0			
	9500	POTS	21	GRF	0840.0	0855.7	30.0	32.0			
	9100	GORK	21	GRF	0840.8	1124.0	169.2	13.0			
	5900	KISV	2	S/F	0842.7	0847.2	7.3	11.0			
	9300	KISV	2	S/F	0845.6	0847.1	4.6	16.0			
	9100	GORK	1	S	0846.2	0847.0	2.5	14.0			
	15000	KISV	2	S/F	0846.2	0846.9	2.1	13.0			
	5900	KISV	23	GRF	0850.2	0902.7	23.1	12.0			
	9100	GORK	46	C	0853.0	0857.0		33.0			
	9100	GORK	46	C	0853.0	0855.8	11.7	42.0			
	9300	KISV	45	C	0853.6	0857.3		33.0			
	9300	KISV	45	C	0853.6	0855.8	7.7	35.0			
	5900	KISV	46	C	0855.5	0857.2	5.6	21.0			
	5900	KISV	46	C	0855.5	0859.7		9.0			
	5900	KISV	46	C	0855.5	0900.9		8.0			
	5900	KISV	46	C	0855.5	0855.9		19.0			
	15000	KISV	2	S/F	0855.6	0855.7	0.8	7.0			
	5900	KISV	45	C	0922.3	0927.1		9.0			
	5900	KISV	45	C	0922.3	0927.4	5.2	10.0			
	200	GORK	4	S/F	0934.5	0934.7	0.7	210.0			
	245	LEAR	8	S	1017.0E	1017.0	U	87.0			QL=2 ST=2 TYP=3
	33	UPIC	3	S	1134.2	1134.3	0.5				
	9500	POTS	8	S	1150.0	1150.2	0.6	18.0			
	9300	KISV	2	S/F	1150.1	1150.4	6.0	25.0			
	5900	KISV	2	S/F	1150.1	1150.5	3.6	22.0			
	15000	KISV	2	S/F	1150.3	1150.5	3.0	8.0			
	536	ONDR	41	F	1247.5	1326.3	70.0	17.0			
	234	POTS	4	S/F	1259.7	1301.6	6.6	800.0			
	113	POTS	4	S/F	1259.9	1300.0	6.5	110.0			
	40	POTS	4	S/F	1259.9	1300.0	6.5	14000.0			
	245	SGMR	8	S	1300.0E	1300.0	2.0D	180.0			QL=2 ST=2 TYP=3
	245	SVTO	8	S	1300.0E	1301.0	2.0D	180.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1541.0E	1541.0	2.0D	58.0			QL=2 ST=2 TYP=3

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

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
25	245	SVTO	8	S	1541.0E	1542.0	1.0D	53.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1630.0E	1630.0	2.0D	100.0			QL=2 ST=2 TYP=3
	410	SGMR	8	S	1630.0E	1630.0	2.0D	54.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1707.0E	1707.0	U	110.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1846.0E	1846.0	U	50.0			QL=2 ST=2 TYP=3
	245	SGMR	4	S/F	1849.0E	1855.0	6.0D	240.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	2054.0E	2054.0	U	55.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	2116.0E	2116.0	U	61.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	2122.0E	2122.0	U	61.0			QL=2 ST=2 TYP=3
	200	HIRA	42	SER	2205.3	2206.9	26.0	370.0			O
	100	HIRA	41	F	2230.0	2230.4	2.3	550.0			
	245	LEAR	8	S	2237.0E	2237.0	1.0D	230.0			QL=2 ST=3 TYP=3
	245	PALE	8	S	2237.0E	2237.0	U	370.0			QL=4 ST=2 TYP=3
26	200	GORK	44	NS	0449.0E		402.0D		5.0		
	127	TORN	44	NS	0640.0E		500.0D		15.0		V=1
	204	IZMI	43	NS	0700.0		300.0	20.0			
	234	POTS	44	NS	0700.0E	1159.0	440.0D	33.0			
	260	ONDR	44	NS	0740.0E		450.0D				
	245	SGMR	44	NS	1145.0E	1942.0	569.0D	150.0			QL=2 ST=2 TYP=1
	245	PALE	44	NS	1800.0E	1832.0	52.0D	130.0			QL=4 ST=2 TYP=1
	200	HIRA	44	NS	2113.0E	0313.0	670.0D	35.0	25.0		MR
	245	LEAR	8	S	0003.0E	0004.0	1.0D	120.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	0004.0E	0004.0	U	130.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0012.0E	0012.0	U	50.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	0012.0E	0012.0	1.0D	59.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0059.0E	0059.0	1.0D	63.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0207.0E	0208.0	2.0D	190.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0208.0E	0208.0	U	170.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0208.0E	0208.0	U	240.0			QL=4 ST=2 TYP=3
	100	HIRA	8	S	0408.6	0409.0	1.1	6000.0			O
	100	HIRA	42	SER	0425.6	0426.4	7.6	2100.0			WR
	200	HIRA	42	SER	0425.7	0431.1	6.3	1300.0			O
	610	LEAR	8	S	0426.0E	0426.0	U	57.0			QL=4 ST=2 TYP=3
	500	HIRA	41	F	0430.2	0431.4	2.0	60.0			MR
	8800	LEAR	8	S	0431.0E	0431.0	U	27.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0431.0E	0431.0	U	370.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0431.0E	0431.0	U	980.0			QL=4 ST=2 TYP=6
	4995	LEAR	8	S	0431.0E	0431.0	U	40.0			QL=4 ST=2 TYP=3
	200	GORK	4	S/F	0539.9	0540.4	0.8	30.0			
	200	HIRA	42	SER	0611.2	0624.6	28.4	790.0			WR
	9300	KISV	2	S/F	0611.6	0614.7	6.1	6.0			
	5900	KISV	46	C	0611.7	0614.6	8.8	8.0			
	5900	KISV	46	C	0611.7	0613.6		7.0			
	5900	KISV	46	C	0611.7	0612.7		8.0			
	100	GORK	41	F	0622.4	0637.1		580.0			
	100	GORK	41	F	0622.4	0624.9	16.6	4000.0			
	200	GORK	41	F	0623.0	0625.4	15.6	40.0			
	200	GORK	41	F	0623.0	0637.8		260.0			
	113	POTS	4	S/F	0623.6	0625.3	3.1	900.0			
	100	HIRA	42	SER	0623.6	0624.6	15.2	1700.0			WR
	30	POTS	4	S/F	0624.2	0626.7	3.2	1300.0U			
	15000	KISV	2	S/F	0624.5	0625.3	5.5	7.0			
	9300	KISV	4	S/F	0624.5	0625.3	7.8	28.0			
	2950	GORK	3	S	0624.6	0625.1	1.5	19.0			
	5900	KISV	4	S/F	0624.6	0625.3	7.7	56.0			
	9100	GORK	3	S	0624.7	0625.0	0.7	16.0			
	950	GORK	1	S	0624.7	0625.2	2.3	6.0			
	2850	CRIM	3	S	0624.8	0625.0	1.8	41.0	14.0		
	650	GORK	2	S/F	0624.8	0625.1	2.2	5.0			
	245	LEAR	8	S	0635.0E	0636.0	2.0D	64.0			QL=4 ST=2 TYP=3
	245	SVTO	4	S/F	0635.0E	0636.0	6.0D	75.0			QL=4 ST=2 TYP=3
	113	POTS	4	S/F	0635.3	0637.0	3.4	280.0			
	234	POTS	4	S/F	0635.3	0635.8	1.3	100.0			
	40	POTS	4	S/F	0637.1	0637.2	2.8	4500.0			
	9300	KISV	2	S/F	0643.0	0645.1	5.0	5.0			
	5900	KISV	45	C	0643.2	0643.8	5.4	9.0			
	5900	KISV	45	C	0643.2	0644.8		8.0			
	113	POTS	42	SER	0701.2	0721.3	23.3	600.0			

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

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
26	100	GORK	46	C	0705.5	0706.3	1.5	290.0			
	100	GORK	46	C	0705.5	0706.6		1500.0			
	234	POTS	42	SER	0705.6	0721.7	21.0	1800.0			
	3013	IZMI	5	S	0705.7	0706.0	1.3	4.0	3.0		
	200	GORK	41	F	0705.7	0706.1	21.3	330.0			
	2950	GORK	2	S/F	0705.7	0706.4	1.7	5.0			
	200	GORK	41	F	0705.7	0721.7		2000.0			
	200	GORK	41	F	0705.7	0718.8		1600.0			
	2850	CRIM	1	S	0705.8	0706.1	1.0	5.0	2.0		
	5900	KISV	2	S/F	0705.8	0706.5	2.1	10.0			
	410	SVTO	8	S	0706.0E	0706.0	1.0D	67.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	0706.0	0721.5	18.0	2600.0			
	100	GORK	46	C	0714.0	0721.2		2900.0			
	100	GORK	46	C	0714.0	0715.4	10.0	300.0			
	100	GORK	46	C	0714.0	0718.8		1600.0			
	200	HIRA	41	F	0714.5	0721.5	11.9	2100.0			O
	5900	KISV	2	S/F	0716.0	0716.4	1.2	5.0			
	100	HIRA	42	SER	0716.5	0721.1	6.9	750.0			O
	245	LEAR	49	GB	0717.0E	0721.0	6.0D	570.0			QL=4 ST=2 TYP=6
	245	SVTO	49	GB	0717.0E	0721.0	6.0D	600.0			QL=4 ST=2 TYP=7
	30	POTS	4	S/F	0720.3	0721.4	2.9	1600.0U			
	650	GORK	4	S/F	0720.4	0723.0	3.2	19.0			
	950	GORK	2	S/F	0720.5	0723.1	3.1	8.0			
	9300	KISV	2	S/F	0720.5	0722.5	8.5	5.0			
	5900	KISV	29	PBI	0720.7	0730.2	14.3	3.0			
	5900	KISV	46	C	0720.7	0726.3		13.0			
	5900	KISV	46	C	0720.7	0723.6		14.0			
	5900	KISV	46	C	0720.7	0721.8	9.5	26.0			
	3013	IZMI	40	F	0721.0	0725.5	7.0	4.0	2.0		
	2950	GORK	46	C	0721.0	0721.6	6.0	7.0			
	2950	GORK	46	C	0721.0	0725.9		4.0			
	2850	CRIM	41	F	0721.3	0721.5	0.6	20.0	7.0		
	33	UPIC	4	S/F	0721.8	0722.0	1.7				
	410	LEAR	8	S	0722.0E	0723.0	1.0D	43.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0722.0E	0723.0	1.0D	44.0			QL=4 ST=2 TYP=3
	2850	CRIM	1	S	0725.2	0725.8	1.2	5.0	2.0		
	5900	KISV	23	GRF	0839.5	0841.0	30.5	9.0			
	200	GORK	46	C	0846.1	0849.6	3.9	2900.0			
	200	GORK	46	C	0846.1	0849.8		2800.0			
	113	POTS	4	S/F	0847.7	0849.6	3.3	2800.0D			
	2850	CRIM	3	S	0848.0	0849.5	2.0	37.0	12.0		
	100	GORK	46	C	0848.0	0849.5	2.6	4200.0			
	430	KRAK	4	S/F	0848.0	0849.6	2.2	240.0	50.0		
	100	GORK	46	C	0848.0	0849.7		900.0			
	2950	GORK	4	S/F	0848.2	0849.5	2.8	24.0			
	30	POTS	8	S	0848.2	0849.9	1.9	1800.0U			
	3000	POTS	3	S	0848.3	0849.6	2.7	28.0			
	5900	KISV	4	S/F	0848.4	0849.7	5.6	43.0			
	204	IZMI	5	S	0848.5	0849.0	1.5	2000.0	1000.0		
	9500	POTS	1	S	0848.5	0849.6	3.5	10.0			
	1470	POTS	3	S	0848.5	0849.6	2.0	12.0			
	950	GORK	1	S	0848.5	0849.7	2.5	5.0			
	650	GORK	2	S/F	0848.5	0849.7	2.5	7.0			
	234	POTS	4	S/F	0848.6	0849.2	1.5	550.0			
	127	TORN	4	S/F	0848.7	0850.0U	2.5	2300.0D	1150.0D		
	9100	GORK	3	S	0848.9	0849.4	1.7	12.0			
	9300	KISV	2	S/F	0848.9	0849.7	3.6	16.0			
	410	LEAR	8	S	0849.0E	0849.0	1.0D	57.0			QL=4 ST=2 TYP=3
	15000	KISV	2	S/F	0849.5	0849.8	1.0	6.0			
	100	GORK	41	F	0933.2	0935.0	62.5	145.0			
	100	GORK	41	F	0933.2	1033.8		870.0			
	100	GORK	41	F	0933.2	1011.9		2000.0			
	1470	POTS	3	S	0944.0	0944.3	1.5	7.0			
	113	POTS	4	S/F	1010.9	1011.7	2.3	350.0			
	204	IZMI	41	F	1011.0	1012.0	6.0	250.0	250.0		
	33	UPIC	46	C	1011.2	1012.0	2.7				
	30	POTS	4	S/F	1011.2	1011.7U	3.4	2400.0D			
	200	GORK	4	S/F	1011.6	1011.7	0.7	230.0			
	5900	KISV	2	S/F	1012.0	1012.8	5.5	5.0			

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

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
26	113	POTS	41	F	1032.8	1033.9	2.0	400.0			
	30	POTS	4	S/F	1033.6	1034.0	1.0	7500.0			
	33	UPIC	8	S	1033.7	1034.0	0.8				
	5900	KISV	2	S/F	1108.7	1111.3	6.2	8.0			
	33	UPIC	2	S/F	1124.8	1125.0	0.7				
	9300	KISV	2	S/F	1126.7	1127.7	3.5	5.0			
	5900	KISV	2	S/F	1126.7	1127.9	4.4	4.0			
	5900	KISV	2	S/F	1142.8	1143.2	3.4	5.0			
	245	SVTO	8	S	1143.0E	1144.0	2.0D	86.0			QL=4 ST=2 TYP=3
	808	ONDR	3	S	1143.3	1144.1	3.0	6.0			
	1470	POTS	4	S/F	1143.5	1144.1	0.9	17.0			
	33	UPIC	2	S/F	1144.9	1145.0	0.4				
	245	SVTO	8	S	1254.0E	1254.0	U	51.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1418.0E	1419.0	1.0D	100.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1419.0E	1419.0	U	84.0			QL=4 ST=2 TYP=3
	2800	OTTA	3	S	1619.8	1620.6	10.0	20.9	4.0		
	8800	SGMR	49	GB	1620.0E	1621.0	4.0D	890.0			QL=2 ST=2 TYP=6
	245	SGMR	49	GB	1620.0E	1620.0	2.0D	690.0			QL=2 ST=2 TYP=6
	4995	SGMR	4	S/F	1620.0E	1621.0	5.0D	69.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1902.0E	1903.0	2.0D	770.0			QL=2 ST=2 TYP=6
	245	PALE	49	GB	1903.0E	1903.0	U	950.0			QL=4 ST=2 TYP=6
	245	PALE	8	S	2152.0E	2152.0	U	60.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2304.0E	2305.0	2.0D	210.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2305.0E	2305.0	1.0D	370.0			QL=4 ST=2 TYP=3
27	245	LEAR	44	NS	0040.0E	0935.0	598.0D	110.0			QL=4 ST=2 TYP=1
	100	HIRA	43	NS	0400.0	0531.0	180.0	240.0	70.0		
	100	GORK	44	NS	0438.0E		434.0D		5.0		
	200	GORK	44	NS	0438.0E		434.0D		5.0		
	245	SVTO	44	NS	0546.0E	1321.0	484.0D	350.0			QL=4 ST=2 TYP=1
	113	POTS	44	NS	0610.0E	1236.8	491.0D	350.0			
	127	TORN	44	NS	0630.0E	1421.8	510.0D	6500.0	130.0		V=2
	234	POTS	44	NS	0637.0E	1245.7	464.0D	150.0			
	204	IZMI	43	NS	0700.0		300.0	50.0			
	260	ONDR	44	NS	0740.0E		450.0D				
	245	SGMR	44	NS	1224.0E	1321.0	128.0D	380.0			QL=2 ST=2 TYP=1
	245	SVTO	44	NS	1505.0E	1555.0	71.0D	310.0			QL=2 ST=2 TYP=1
	245	SGMR	44	NS	1541.0E	1555.0	387.0D	310.0			QL=2 ST=2 TYP=1
	200	HIRA	44	NS	2110.0E	0538.0	670.0D	48.0	19.0		ML
	245	LEAR	8	S	0023.0E	0024.0	1.0D	75.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0044.0E	0044.0	U	54.0			QL=4 ST=2 TYP=3
	245	PALE	4	S/F	0248.0E	0250.0	3.0D	180.0			QL=4 ST=2 TYP=3
	200	HIRA	42	SER	0248.8	0250.8	5.3	1100.0			WR
	245	LEAR	8	S	0249.0E	0250.0	2.0D	100.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0340.0E	0340.0	U	8.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0340.0E	0340.0	U	100.0			QL=4 ST=2 TYP=3
	1415	LEAR	8	S	0340.0E	0340.0	U	43.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0340.0E	0340.0	U	90.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0343.0E	0343.0	2.0D	220.0			QL=4 ST=2 TYP=3
	200	HIRA	42	SER	0354.0	0417.8	54.0	2600.0			O
	245	PALE	4	S/F	0355.0E	0356.0	3.0D	75.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0414.0E	0415.0	2.0D	140.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0418.0E	0418.0	U	4800.0			QL=4 ST=3 TYP=6
	100	GORK	4	S/F	0456.4	0457.8	5.1	570.0			
	650	GORK	23	GRF	0556.5	0639.3	178.4	7.0			
	9300	KISV	29	PBI	0702.6	0709.1	38.1	13.0			
	5900	KISV	30	PBI	0702.6	0709.3	37.9	13.0			
	9300	KISV	4	S/F	0702.6	0705.7	6.5	195.0			
	5900	KISV	4	S/F	0702.6	0705.7	6.7	200.0			
	9100	GORK	5	S	0703.7	0705.8	4.0	171.0			
	2950	GORK	3	S	0704.5	0705.7	3.8	22.0			
	8800	LEAR	8	S	0705.0E	0705.0	2.0D	140.0			QL=4 ST=2 TYP=3
	4995	LEAR	8	S	0705.0E	0705.0	1.0D	110.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0705.0E	0705.0	1.0D	91.0			QL=4 ST=2 TYP=3
	4995	SVTO	4	S/F	0705.0E	0706.0	3.0D	110.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	0705.0E	0706.0	3.0D	150.0			QL=4 ST=2 TYP=3
	15400	SVTO	4	S/F	0705.0E	0706.0	3.0D	86.0			QL=4 ST=2 TYP=3
	17000	NOBE	1	S	0705.1	0705.7	2.5	62.0			25L,80,35GHz:O
	2850	CRIM	3	S	0705.5	0705.9	13.0	30.0	1.0		

SOLAR RADIO EMISSION
Outstanding Occurrences

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
27	9100	GORK	29	PBI	0707.7	0707.7	107.1	23.0			
	5900	KISV	2	S/F	0728.6	0732.3	6.4	7.0			
	650	GORK	1	S	0739.0	0740.5	2.8	3.0			
	9500	POTS	21	GRF	0825.0	0839.4	40.0	24.0			
	9300	KISV	2	S/F	0828.6	0830.3	5.5	15.0			
	9100	GORK	22	GRF	0828.6	0838.4	50.7	41.0			
	2950	GORK	1	S	0830.2	0830.4	1.0	2.0			
	245	LEAR	8	S	0834.0E	0834.0	U	110.0			QL=2 ST=2 TYP=3
	9300	KISV	46	C	0837.0	0837.4		29.0			
	9300	KISV	46	C	0837.0	0838.5	7.5	39.0			
	9500	POTS	3	S	0837.0	0837.5	1.0	28.0			
	9300	KISV	29	PBI	0837.0	0844.5	17.3	11.0			
	9300	KISV	46	C	0837.0	0839.8		30.0			
	15000	KISV	23	GRF	0837.2	0844.6	27.8	15.0			
	15000	KISV	45	C	0838.2	0838.5	4.3	25.0			
	15000	KISV	45	C	0838.2	0839.5		19.0			
	9500	POTS	3	S	0838.4	0838.5	0.6	26.0			
	2950	GORK	1	S	0840.4	0841.1	1.6	2.0			
	2850	CRIM	1	S	0840.5	0841.1	1.2	4.0	1.0		
	650	GORK	22	GRF	0901.0	0920.0	51.0	4.0			
	9100	GORK	22	GRF	0919.3	1048.5	160.7D	39.0			
	9300	KISV	2	S/F	0937.2	0937.4	2.5	4.0			
	200	GORK	41	F	0946.0	1011.0		870.0			
	200	GORK	41	F	0946.0	1046.4		370.0			
	200	GORK	41	F	0946.0	0946.7	62.0	250.0			
	808	ONDR	41	F	0954.0	0959.0	50.0	9.0			
	536	ONDR	41	F	1000.6	1000.9	1.0	40.0			
	9300	KISV	2	S/F	1002.6	1005.7	6.0	6.0			
	650	GORK	4	S/F	1008.7	1010.7	4.2	40.0			
	245	LEAR	8	S	1010.0E	1011.0	1.0D	470.0			QL=2 ST=2 TYP=3
	245	SVTO	49	GB	1010.0E	1011.0	1.0D	500.0			QL=2 ST=3 TYP=6
	410	SVTO	8	S	1010.0E	1010.0	1.0D	65.0			QL=4 ST=3 TYP=3
	234	POTS	4	S/F	1010.2	1010.9	1.7	700.0			
	430	KRAK	42	SER	1010.5	1011.0	0.6	74.0			
	204	IZMI	41	F	1011.0	1011.3	0.5	900.0			
	9500	POTS	21	GRF	1045.0	1046.0	18.0	18.0			
	9300	KISV	23	GRF	1045.0	1107.2	22.2	3.0			
	9300	KISV	2	S/F	1045.7	1046.4	1.6	4.0			
	9300	KISV	46	C	1048.0	1050.5		14.0			
	9300	KISV	46	C	1048.0	1051.5		10.0			
	9300	KISV	46	C	1048.0	1048.6	6.0	18.0			
	9300	KISV	46	C	1048.0	1049.7		16.0			
	15000	KISV	45	C	1052.3	1056.3	8.0	15.0			
	15000	KISV	45	C	1052.3	1055.5		12.0			
	9300	KISV	45	C	1055.2	1056.1	9.0	17.0			
	9300	KISV	45	C	1055.2	1055.5		8.0			
	1470	POTS	40	F	1240.0	1254.0	28.0	44.0			
	808	ONDR	41	F	1240.0	1245.9	40.0	12.0			
	536	ONDR	41	F	1251.5	1251.9	40.0	10.0			
	40	POTS	42	SER	1315.2	1328.0	14.1	25000.0			
	234	POTS	42	SER	1315.9	1325.6	12.9	2400.0			
	810	KRAK	2	S/F	1316.0	1316.5	0.8	30.0	3.0		
	2850	CRIM	1	S	1321.0	1321.5	2.0	13.0	4.0		
	3000	POTS	3	S	1321.0	1321.8	1.5	12.0			
	113	POTS	42	SER	1321.3	1321.6	8.2	3500.0D			
	245	SGMR	49	GB	1325.0E	1325.0	1.0D	1100.0			QL=2 ST=2 TYP=6
	245	SVTO	49	GB	1325.0E	1325.0	3.0D	1000.0			QL=2 ST=2 TYP=6
	9500	POTS	4	S/F	1325.0	1326.2	5.0	79.0			
	3000	POTS	4	S/F	1325.0	1326.2	4.0	17.0			
	3000	POTS	4	S/F	1325.0	1327.5		17.0			
	1470	POTS	40	F	1325.0	1327.8	4.0	8.0			
	2850	CRIM	7	C	1325.1	1326.3	3.1	12.0	4.0		
	2850	CRIM	7	C	1325.1	1327.6		13.0			
	8800	SGMR	8	S	1326.0E	1326.0	2.0D	66.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	1326.0E	1326.0	2.0D	100.0			QL=4 ST=2 TYP=3
	33	UPIC	46	C	1326.2	1327.8	2.9				
	4995	SVTO	8	S	1327.0E	1327.0	1.0D	51.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1615.0E	1616.0	1.0D	140.0			QL=4 ST=3 TYP=3
	2800	OTTA	3	S	1929.0	1930.0	4.0	18.3	4.0		

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

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
27	8800	PALE	8	S	1929.0E	1929.0	1.0D	52.0			QL=2 ST=2 TYP=3
	245	PALE	49	GB	1929.0E	1929.0	1.0D	580.0			QL=4 ST=2 TYP=6
	4995	PALE	8	S	1929.0E	1929.0	1.0D	56.0			QL=2 ST=2 TYP=3
	4995	SGMR	8	S	1929.0E	1929.0	1.0D	72.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1929.0E	1929.0	1.0D	51.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1929.0E	1929.0	1.0D	560.0			QL=2 ST=2 TYP=6
	245	PALE	49	GB	1935.0E	1938.0	4.0D	670.0			QL=4 ST=3 TYP=7
	2800	OTTA	4	S/F	1935.5	1936.8	5.0	84.2	17.0		
	2695	PALE	8	S	1936.0E	1937.0	2.0D	100.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1936.0E	1936.0	U	430.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	2048.0E	2048.0	U	87.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2050.0E	2051.0	1.0D	110.0			QL=4 ST=2 TYP=3
	245	PALE	4	S/F	2130.0E	2133.0	3.0D	130.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2150.0E	2152.0	2.0D	100.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	2152.0E	2152.0	1.0D	51.0			QL=2 ST=2 TYP=3
	15400	LEAR	4	S/F	2320.0E	2326.0	10.0D	79.0			QL=4 ST=2 TYP=5
	2695	PENT	4	S/F	2325.0	2328.6	8.0	50.8	10.0		
	8800	LEAR	4	S/F	2325.0E	2326.0	9.0D	83.0			QL=4 ST=2 TYP=3
	4995	LEAR	4	S/F	2325.0E	2326.0	9.0D	90.0			QL=4 ST=2 TYP=3
	4995	PALE	4	S/F	2325.0E	2326.0	8.0D	100.0			QL=4 ST=2 TYP=5
	15400	PALE	4	S/F	2325.0E	2326.0	4.0D	66.0			QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	2325.0E	2326.0	21.0D	130.0			QL=4 ST=2 TYP=3
	17000	NOBE	7	C	2325.2	2326.4	5.0	59.0			13R
	35000	NOBE	7	C	2325.2	2326.4	5.0	30.0			O,80GHZ:O
	1415	LEAR	4	S/F	2326.0E	2332.0	6.0D	32.0			QL=4 ST=2 TYP=5
	2695	LEAR	4	S/F	2326.0E	2328.0	4.0D	50.0			QL=4 ST=2 TYP=3
	2695	PALE	4	S/F	2326.0E	2328.0	3.0D	51.0			QL=4 ST=2 TYP=3
	500	HIRA	41	F	2328.0	2334.7	15.5	35.0			O
	245	LEAR	8	S	2333.0E	2334.0	2.0D	140.0			QL=2 ST=2 TYP=3
	245	PALE	8	S	2333.0E	2334.0	2.0D	200.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2354.0E	2355.0	2.0D	140.0			QL=2 ST=2 TYP=3
	410	LEAR	8	S	2355.0E	2356.0	1.0D	150.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2355.0E	2355.0	1.0D	240.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2355.0E	2356.0	1.0D	200.0			QL=4 ST=2 TYP=3
28	245	LEAR	44	NS	0218.0E	0447.0	474.0D	120.0			QL=2 ST=2 TYP=1
	200	GORK	44	NS	0437.0E		383.0D		10.0		
	100	GORK	44	NS	0437.0E		383.0D		5.0		
	245	SVTO	44	NS	0547.0E	0655.0	189.0D	290.0			QL=4 ST=2 TYP=1
	204	IZMI	43	NS	0700.0		300.0	30.0			
	260	ONDR	44	NS	0740.0E	1346.1	450.0D	262.0			
	127	TORN	44	NS	1240.0E		140.0D		6.0		V=1
	245	SGMR	44	NS	1500.0E	1618.0	153.0D	170.0			QL=2 ST=2 TYP=1
	245	SVTO	44	NS	1526.0E	1550.0	51.0D	390.0			QL=2 ST=2 TYP=1
	245	SGMR	44	NS	1906.0E	1906.0	294.0D	63.0			QL=2 ST=3 TYP=1
	500	HIRA	42	SER	0225.0	0238.6	42.0	114.0			O
	100	HIRA	46	C	0232.9	0233.0	5.3	1900.0			WR
	245	LEAR	49	GB	0233.0E	0233.0	5.0D	1300.0			QL=2 ST=2 TYP=6
	245	PALE	49	GB	0233.0E	0233.0	4.0D	1300.0			QL=4 ST=2 TYP=7
	200	HIRA	46	C	0233.0	0233.4	4.3	530.0			O
	245	PALE	8	S	0258.0E	0259.0	2.0D	67.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	0351.0E	0352.0	1.0D	760.0			QL=4 ST=2 TYP=6
	245	PALE	8	S	0400.0E	0400.0	U	150.0			QL=4 ST=2 TYP=3
	500	HIRA	42	SER	0403.4	0403.9	6.0	17.0			WL
	200	GORK	41	F	0455.0	0458.0	57.4	220.0			
	200	GORK	41	F	0455.0	0538.1		350.0			
	200	GORK	41	F	0455.0	0550.6		430.0			
	9100	GORK	22	GRF	0455.7	0500.1	129.6	120.0			
	15400	LEAR	4	S/F	0457.0E	0500.0	5.0D	150.0			QL=4 ST=2 TYP=3
	8800	LEAR	4	S/F	0457.0E	0500.0	15.0D	85.0			QL=4 ST=2 TYP=3
	4995	LEAR	4	S/F	0457.0E	0500.0	15.0D	67.0			QL=4 ST=2 TYP=3
	17000	NOBE	7	C	0457.2	0459.9	5.5	122.0			11R,80,35GHz:SK
	2950	GORK	23	GRF	0457.8	0514.9	336.7	22.0			
	2695	LEAR	4	S/F	0458.0E	0500.0	3.0D	70.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	0459.0E	0502.0	7.0D	100.0			QL=2 ST=2 TYP=5
	1415	LEAR	8	S	0459.0E	0500.0	1.0D	16.0			QL=4 ST=2 TYP=3
	610	LEAR	4	S/F	0459.0E	0503.0	7.0D	230.0			QL=4 ST=2 TYP=3
	2950	GORK	4	S/F	0459.4	0500.2	2.9	64.0			
	500	HIRA	46	C	0459.5	0503.0	45.0	144.0	11.0		ML

SOLAR RADIO EMISSION
Outstanding Occurrences

FEBRUARY 1990

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
28	500	HIRA	46	C	0459.5	0514.5		25.0			WL
	650	GORK	23	GRF	0459.7E	0501.2	29.0D	16.0			
	410	LEAR	4	S/F	0500.0E	0511.0	12.0D	220.0			QL=4 ST=2 TYP=5
	650	GORK	4	S/F	0501.7	0503.2	2.0	130.0			
	950	GORK	21	GRF	0502.6E	0505.1	56.0D	10.0			
	17000	NOBE	20	GRF	0502.7	0524.5	67.0	37.0			0,80,35GHz:0
	2950	GORK	3	S	0508.7	0510.2	3.3	23.0			
	950	GORK	2	S/F	0509.5	0510.1	1.1	9.0			
	410	LEAR	8	S	0514.0E	0514.0	2.0D	51.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0514.0E	0514.0	2.0D	83.0			QL=2 ST=2 TYP=3
	4995	LEAR	4	S/F	0514.0E	0519.0	17.0D	86.0			QL=4 ST=2 TYP=5
	100	GORK	41	F	0514.4	0515.2	37.8	550.0			
	100	GORK	41	F	0514.4	0550.8		380.0			
	2950	GORK	46	C	0518.5	0524.4		44.0			
	2950	GORK	46	C	0518.5	0519.8	10.3	46.0			
	650	GORK	1	S	0518.7	0519.6	2.4	6.0			
	950	GORK	2	S/F	0519.1	0519.4	1.0	5.0			
	950	GORK	2	S/F	0520.1	0523.1	4.2	9.0			
	5900	KISV	2	S/F	0639.8	0642.9	5.4	4.0			
	200	GORK	41	F	0735.0	0752.4		220.0			
	200	GORK	41	F	0735.0	0738.8	17.9	210.0			
	204	IZMI	41	F	0737.0	0739.0	2.0	300.0			
	5900	KISV	22	GRF	0815.6	0821.4	10.1	5.0			
	100	GORK	41	F	0822.8	0823.1	7.8	410.0			
	100	GORK	41	F	0822.8	0824.5		270.0			
	245	LEAR	8	S	0827.0E	0827.0	U	69.0			QL=2 ST=2 TYP=3
	950	GORK	1	S	0827.2	0827.3	0.7	2.0			
	650	GORK	2	S/F	0827.3	0827.4	0.6	11.0			
	33	UPIC	3	S	0954.0	0954.2	0.3				
	33	UPIC	3	S	0956.3	0956.5	0.3				
	245	LEAR	4	S/F	1033.0E	1036.0	4.0D	100.0			QL=2 ST=2 TYP=3
	9300	KISV	2	S/F	1035.1	1036.4	3.8	7.0			
	5900	KISV	4	S/F	1035.3	1036.4	3.8	21.0			
	100	GORK	46	C	1038.0	1042.5		270.0			
	100	GORK	46	C	1038.0	1039.7	4.7	410.0			
	5900	KISV	2	S/F	1049.0	1049.7	6.2	7.0			
	9300	KISV	2	S/F	1049.4	1049.8	1.9	7.0			
	5900	KISV	22	GRF	1150.3	1154.2	13.5	8.0			
	245	SVTO	49	GB	1325.0E	1325.0	3.0D	1000.0			QL=2 ST=2 TYP=6
	4995	SGMR	8	S	1335.0E	1335.0	1.0D	71.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	1335.0E	1336.0	2.0D	81.0			QL=4 ST=2 TYP=3
	9500	POTS	8	S	1335.5	1335.7	0.8	30.0			
	3000	POTS	3	S	1335.5	1335.8	1.5	7.0			
	234	POTS	41	F	1336.5	1345.8	10.5	140.0			
	113	POTS	41	F	1338.0	1345.2	9.6	100.0			
	40	POTS	41	F	1338.3	1345.0	9.3	750.0			
	127	TORN	4	S/F	1343.6	1344.8	2.7	250.0	90.0		
	2800	OTTA	3	S	1541.0	1542.1	3.0	78.9	16.0		
	4995	SGMR	8	S	1541.0E	1542.0	1.0D	120.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1541.0E	1542.0	1.0D	58.0			QL=4 ST=2 TYP=3
	2695	SGMR	8	S	1541.0E	1542.0	1.0D	68.0			QL=2 ST=2 TYP=3
	4995	SVTO	8	S	1542.0E	1542.0	U	100.0			QL=2 ST=2 TYP=3
	2695	SVTO	8	S	1542.0E	1542.0	U	59.0			QL=2 ST=2 TYP=3
	245	SGMR	49	GB	1623.0E	1623.0	1.0D	520.0			QL=2 ST=2 TYP=6
	245	SGMR	49	GB	1812.0E	1814.0	4.0D	4300.0			QL=2 ST=2 TYP=6
	245	PALE	49	GB	1812.0E	1814.0	14.0D	3800.0			QL=4 ST=2 TYP=6
	410	PALE	8	S	1813.0E	1813.0	1.0D	55.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	1815.0E	1815.0	1.0D	50.0			QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	1815.0E	1822.0	8.0D	270.0			QL=4 ST=2 TYP=5
	1415	PALE	8	S	2019.0E	2019.0	1.0D	61.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2019.0E	2019.0	1.0D	340.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	2019.0E	2020.0	2.0D	100.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	2019.0E	2020.0	2.0D	200.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	2019.0E	2020.0	2.0D	310.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	2019.0E	2020.0	2.0D	120.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	2019.0E	2019.0	2.0D	290.0			QL=2 ST=2 TYP=3
	1415	SGMR	8	S	2019.0E	2019.0	1.0D	72.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	2038.0E	2038.0	U	71.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	2038.0E	2038.0	U	40.0			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

FEBRUARY 1990

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
28	4995	PALE	8 S	2038.0E	2038.0	U	57.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	2038.0E	2038.0	U	68.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	2038.0E	2038.0	U	56.0			QL=4 ST=2 TYP=3
	200	HIRA	24 R	2109.0E	2618.0	670.00	8.0	5.0		O
	500	HIRA	8 S	2326.8	2326.8	0.4	66.0			O

Reports are received routinely from the following observatories:

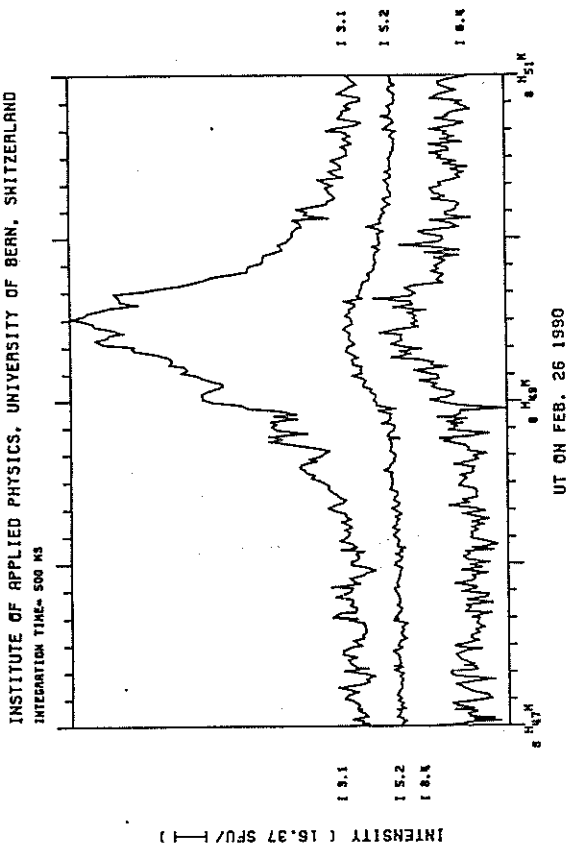
BERN = Berne	IZMI = IZMIRAN	ONDR = Ondrejov	SVTO = San Vito
CRIM = Crimea	KISK = Kislovodsk	OTTA = Ottawa	SYDN = Sydney
GORK = Gorky	KRAK = Krakow	PALE = Palehua	TORN = Torun
HIRA = Hiraiso	LEAR = Learmonth	PENT = Penticton	TRST = Trieste
HUAN = Huancayo	NOBE = Nobeyama	POTS = Potsdam	TYKW = Toyokawa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

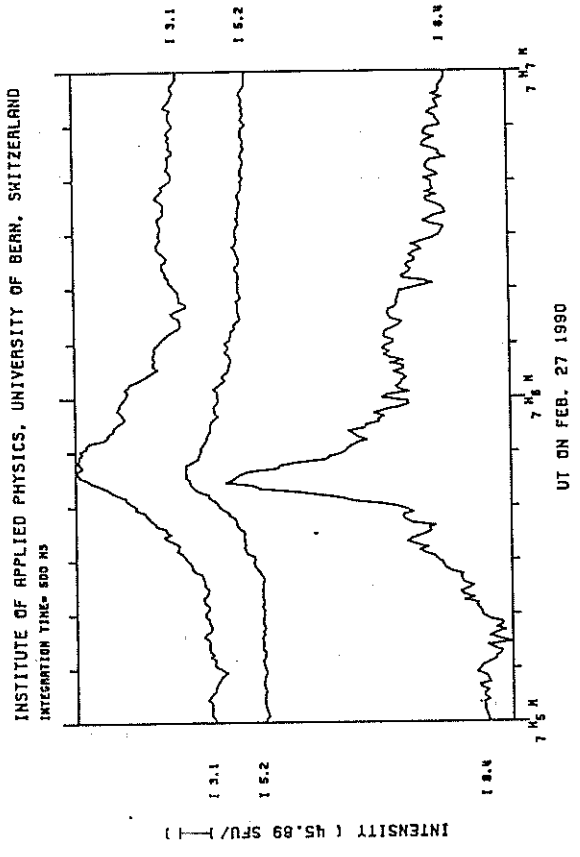
Explanation of Type Code:

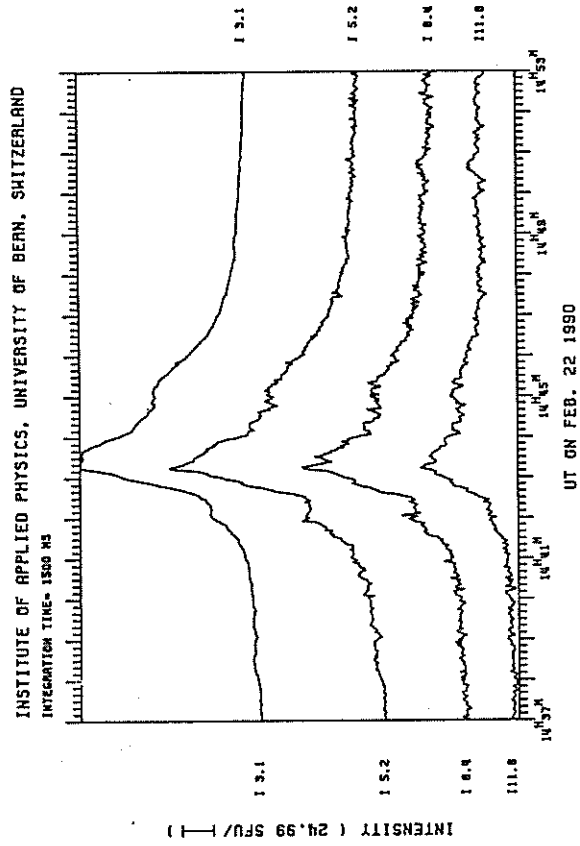
1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple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

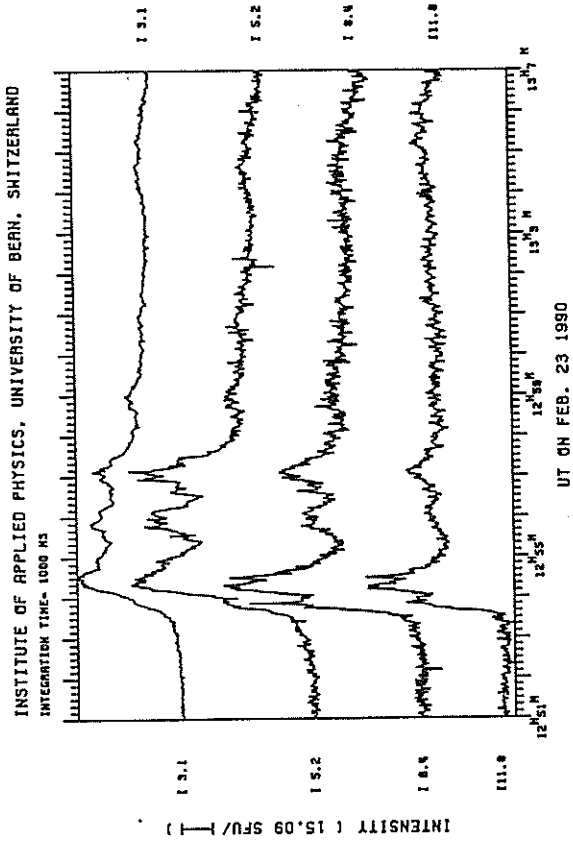
1A Simple 1A	4A Simple 2AF	24PF Post Rise F	27F Rise and Fall F
3A Simple 2A	4O Rise Only	16A Fall A	27AF Rise and Fall AF
21A Simple 3A GRF	4OF Rise Only F	26O Fall Only	31A Post Burst Decrease A
2A Simple 1AF	4P Post Rise	26F Fall F	32A Absorption A

RSTN Site Information: Beginning in April 1986, the RSTN sites LEAR, PALE, SGMR, and SVTO fixed frequency solar radio data are periodically adjusted to several world standard stations. These world standard stations include: Kislovodsk, USSR 15,500 MHz; Ottawa, Canada 2800 MHz; Hiraiso, Japan 500 and 200 MHz; and Toyokawa, Japan 9400, 3750, 2000 and 1000 MHz.

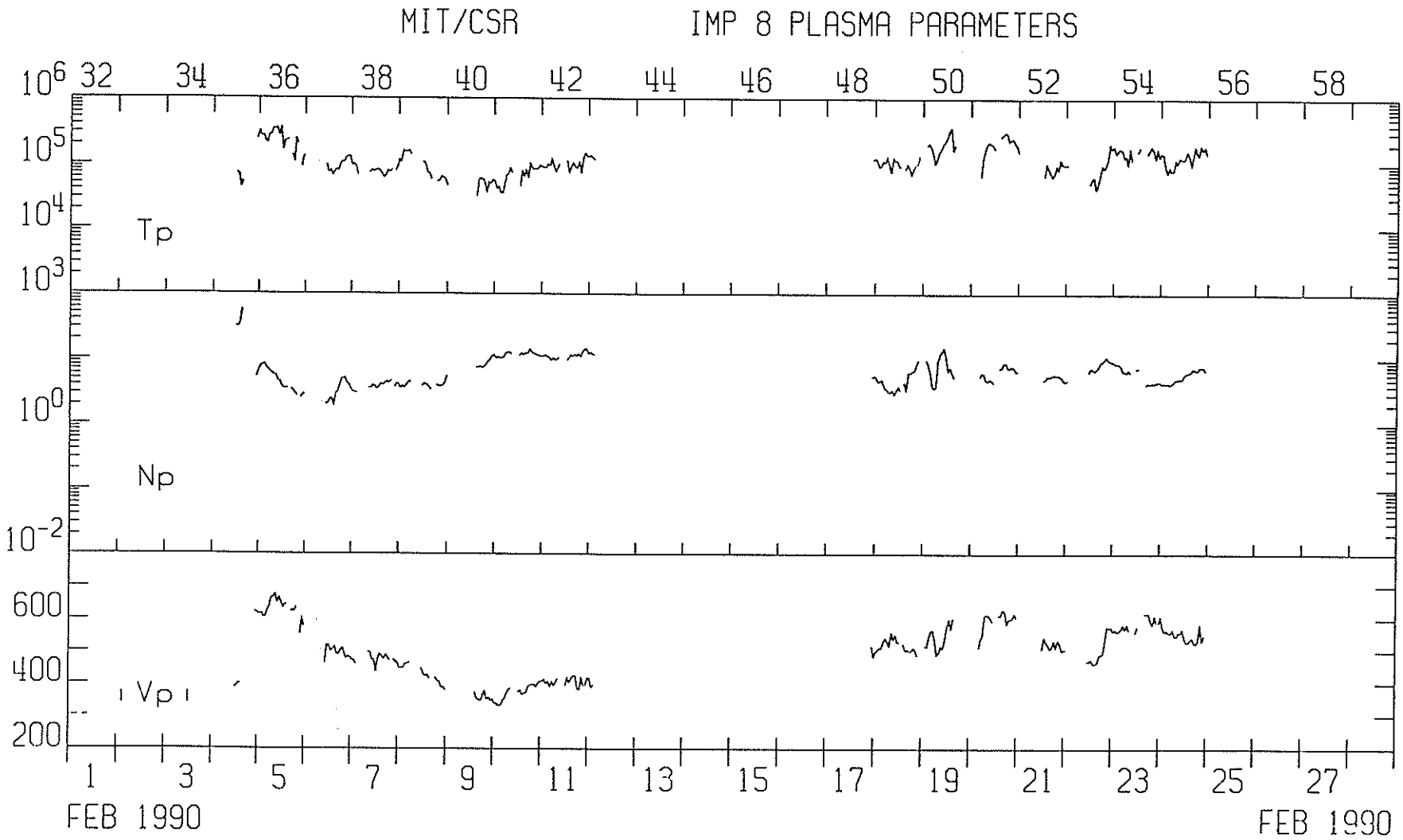

INSTITUTE OF APPLIED PHYSICS, UNIVERSITY OF BERN, SWITZERLAND
INTEGRATION TIME= 500 MS
I 3.1
I 5.2
I 8.4
8 H51 M
8 H57 M
8 H63 M
UT ON FEB. 26 1990
INTENSITY (16.37 SFU/ ⊢⊣)


INSTITUTE OF APPLIED PHYSICS, UNIVERSITY OF BERN, SWITZERLAND
INTEGRATION TIME= 500 MS
I 3.1
I 5.2
I 8.4
7 H51 M
7 H57 M
7 H63 M
UT ON FEB. 27 1990
INTENSITY (45.89 SFU/ ⊢⊣)


INSTITUTE OF APPLIED PHYSICS, UNIVERSITY OF BERN, SWITZERLAND
INTEGRATION TIME= 1500 MS
I 3.1
I 5.2
I 8.4
111.8
14H51M
14H57M
14H63M
14H69M
UT ON FEB. 22 1990
INTENSITY (24.99 SFU/ ⊢⊣)


INSTITUTE OF APPLIED PHYSICS, UNIVERSITY OF BERN, SWITZERLAND
INTEGRATION TIME= 1000 MS
I 3.1
I 5.2
I 8.4
111.8
12H51M
12H57M
12H63M
13H7 M
UT ON FEB. 23 1990
INTENSITY (15.09 SFU/ ⊢⊣)

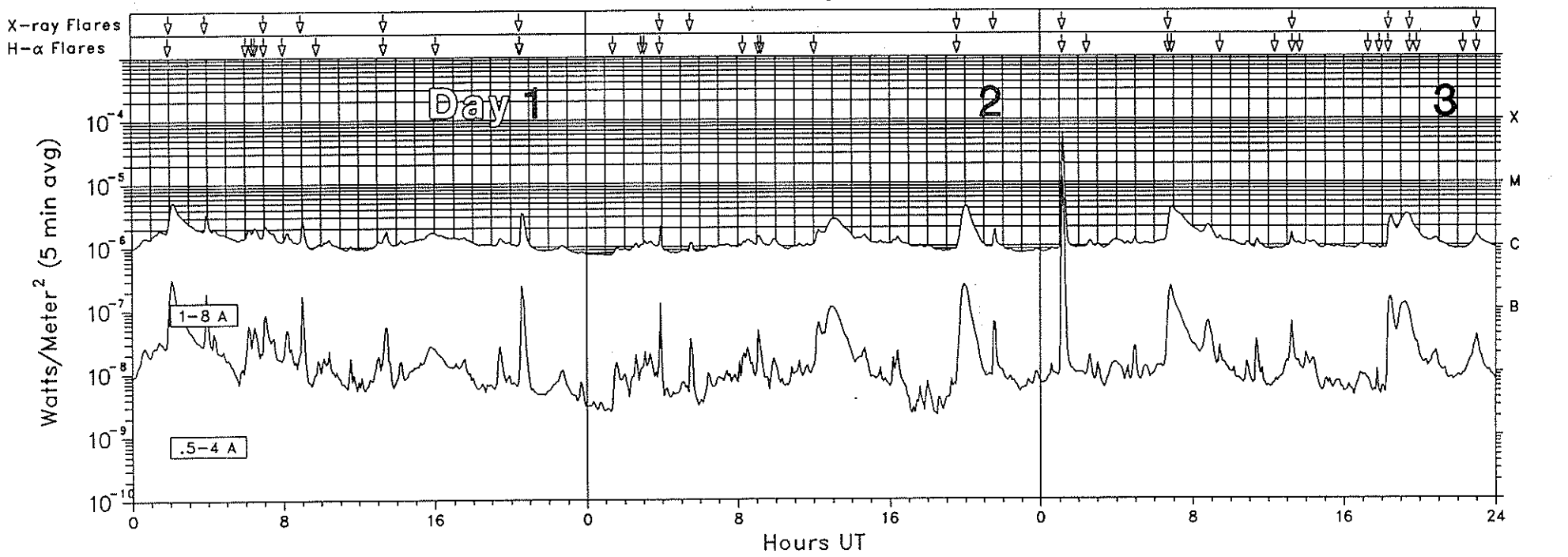
IMP 8 SOLAR WIND PLASMA
FEBRUARY 1990

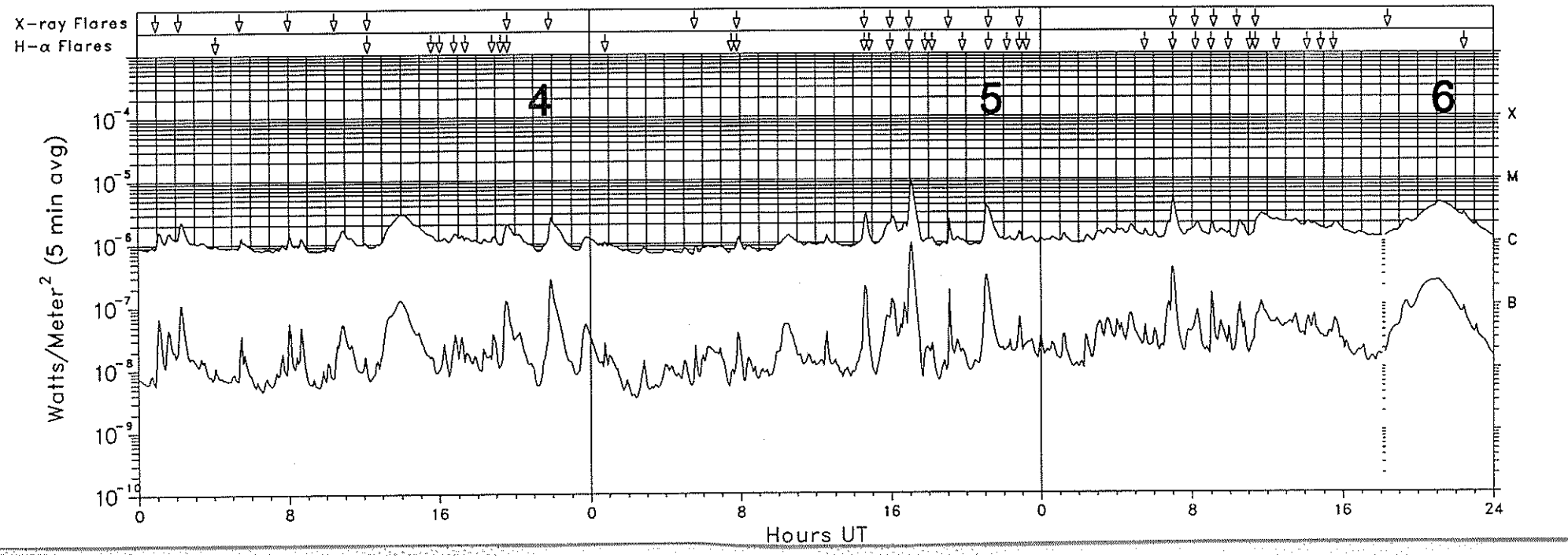


IMP 8 MIT PRELIMINARY ONE-HOUR AVERAGES

GOES-7 X-RAY DETECTOR

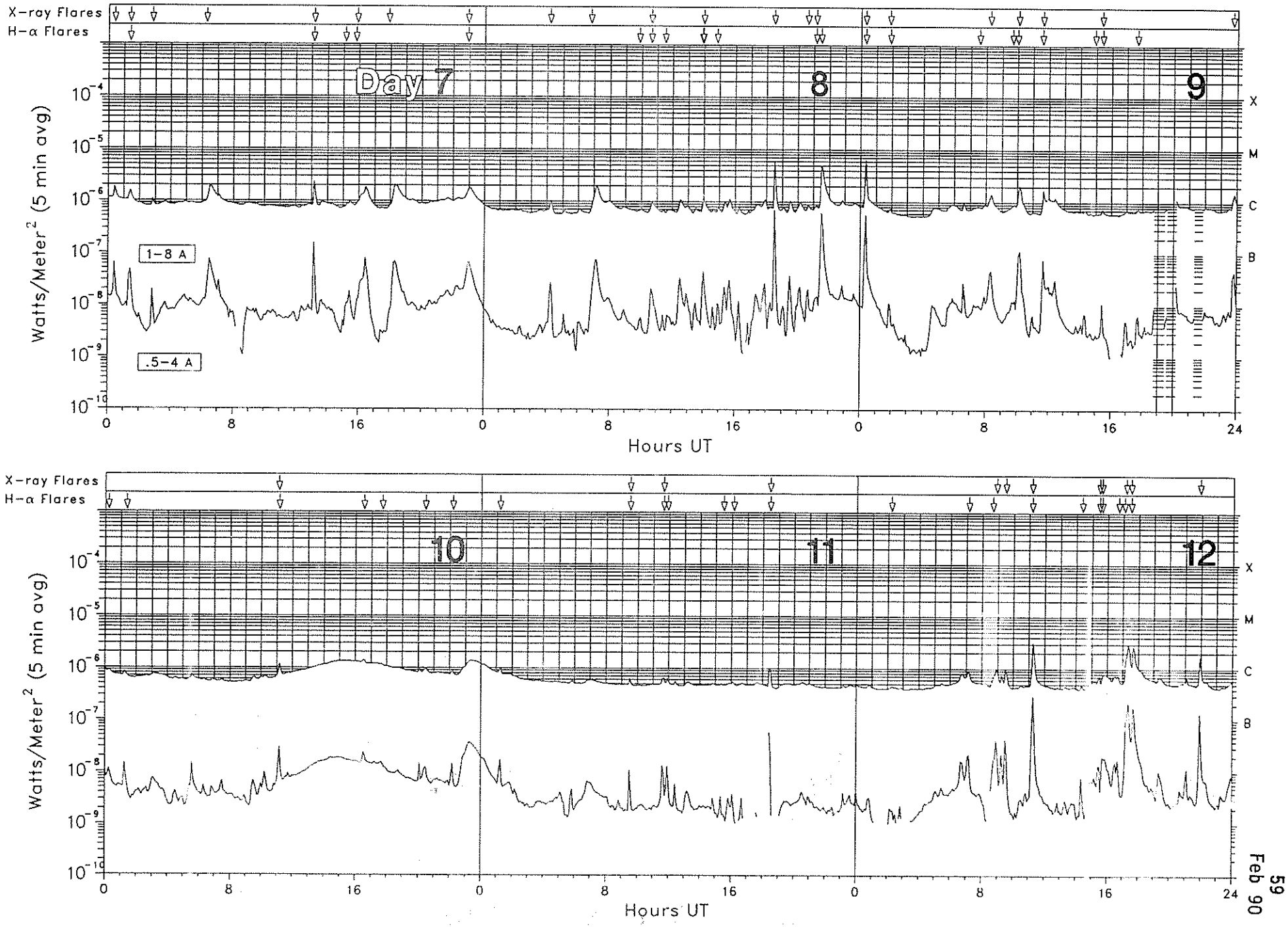
February 1990





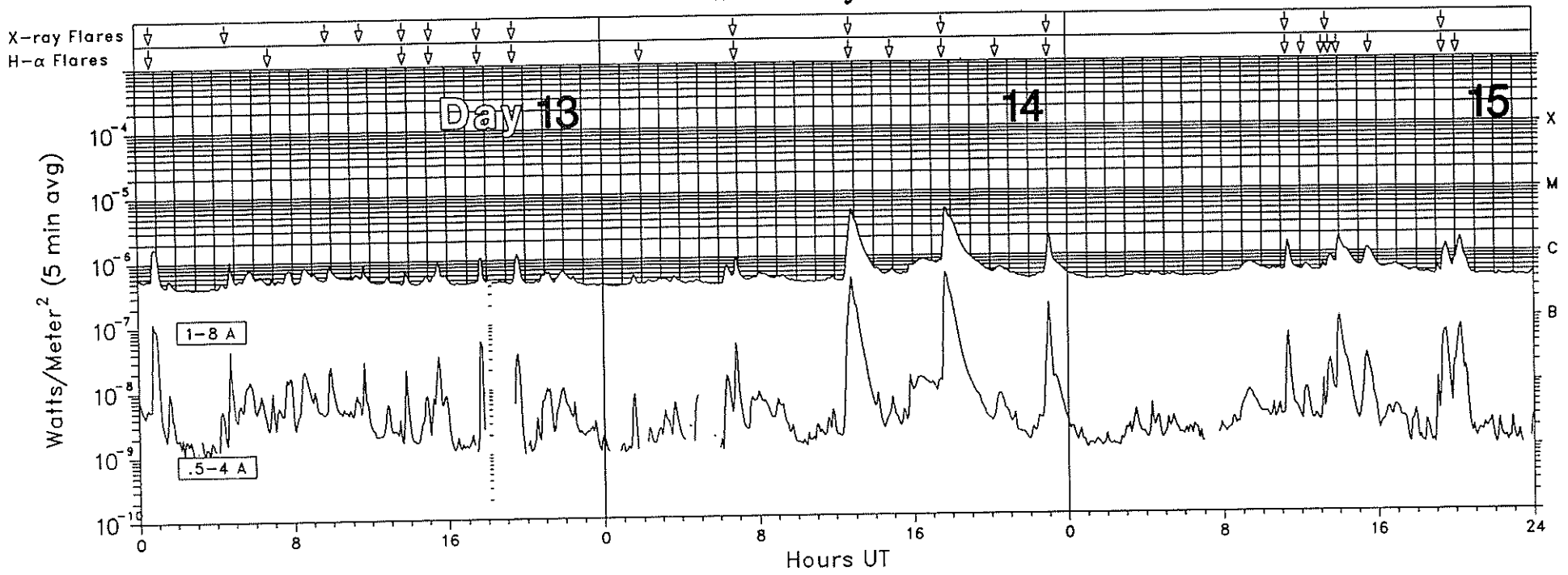
GOES-7 X-RAY DETECTOR

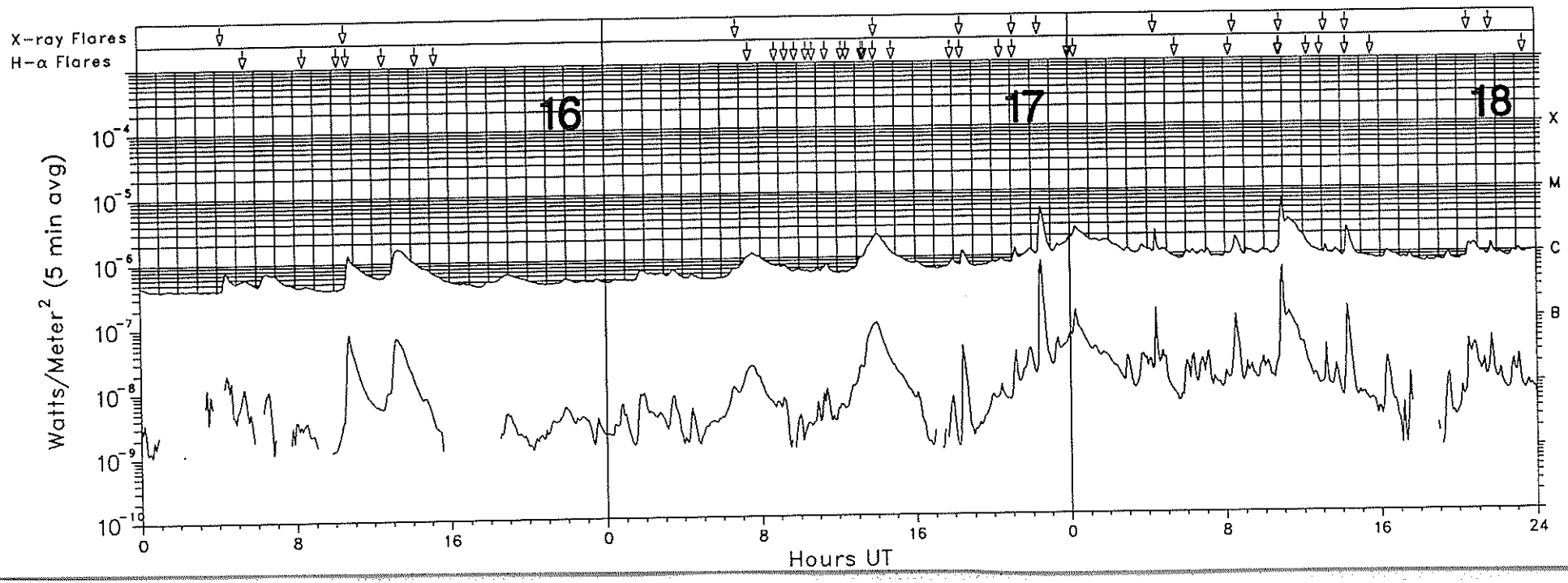
February 1990



GOES-7 X-RAY DETECTOR

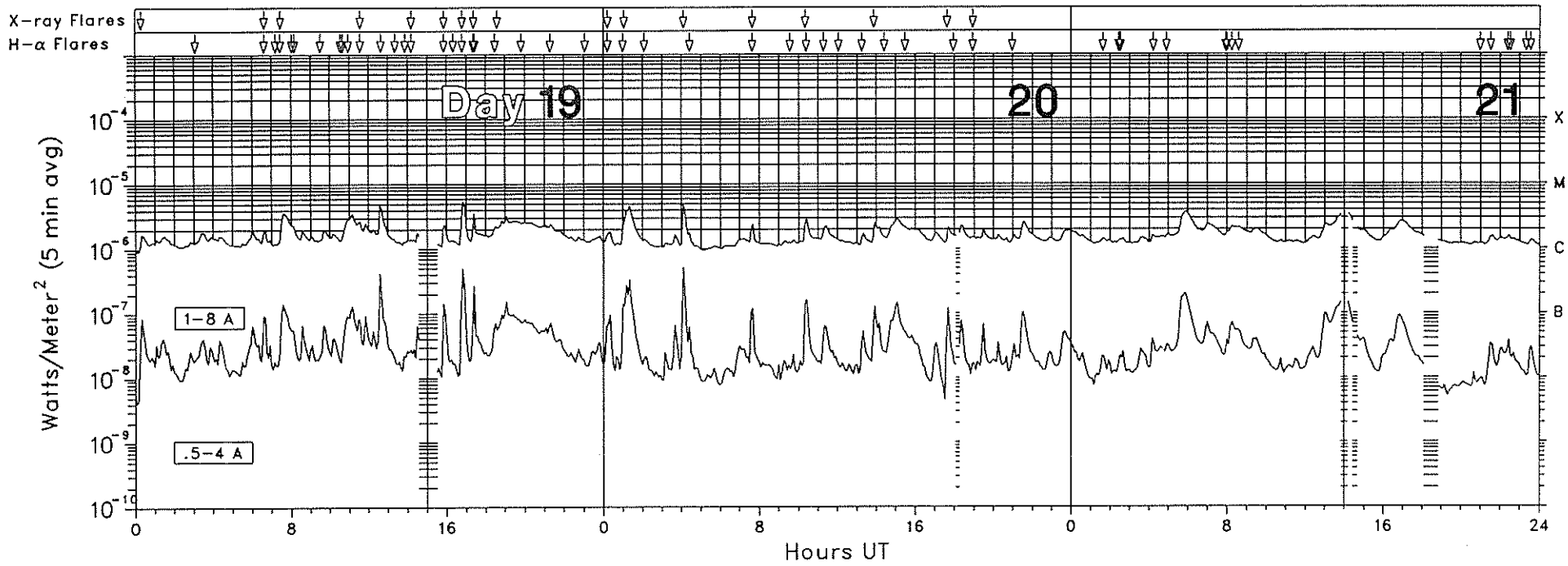
February 1990

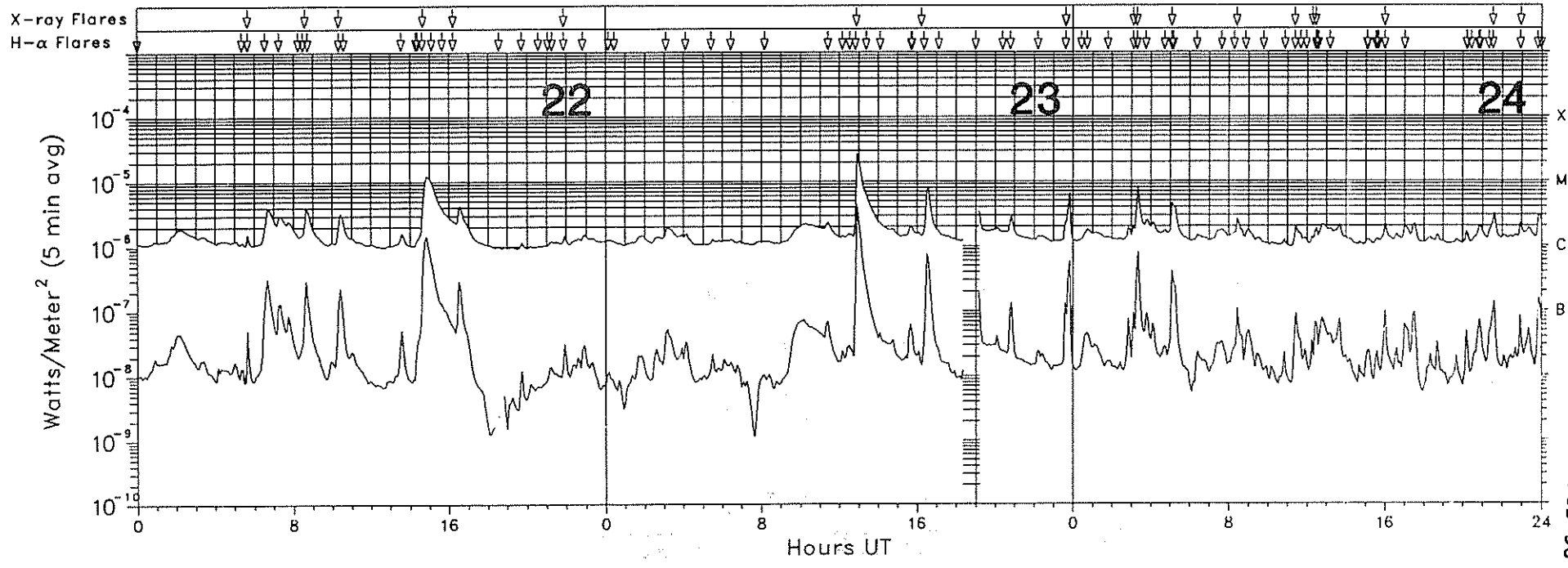




GOES-7 X-RAY DETECTOR

February 1990

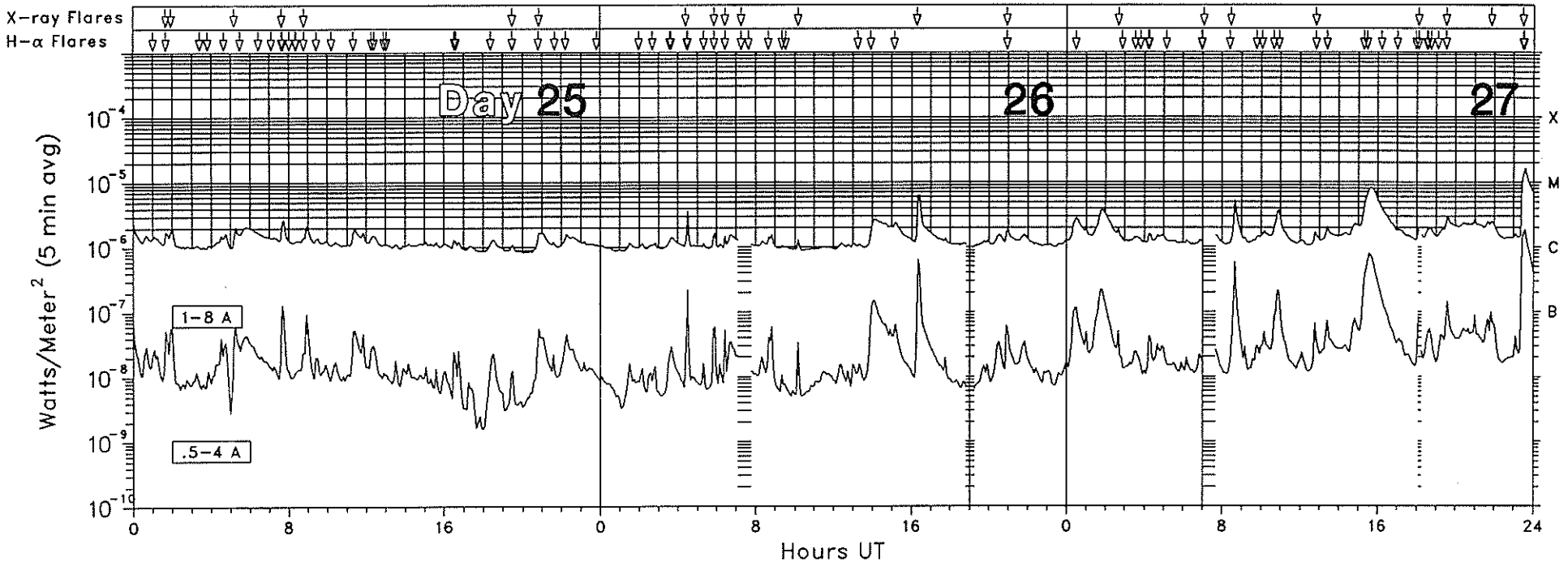


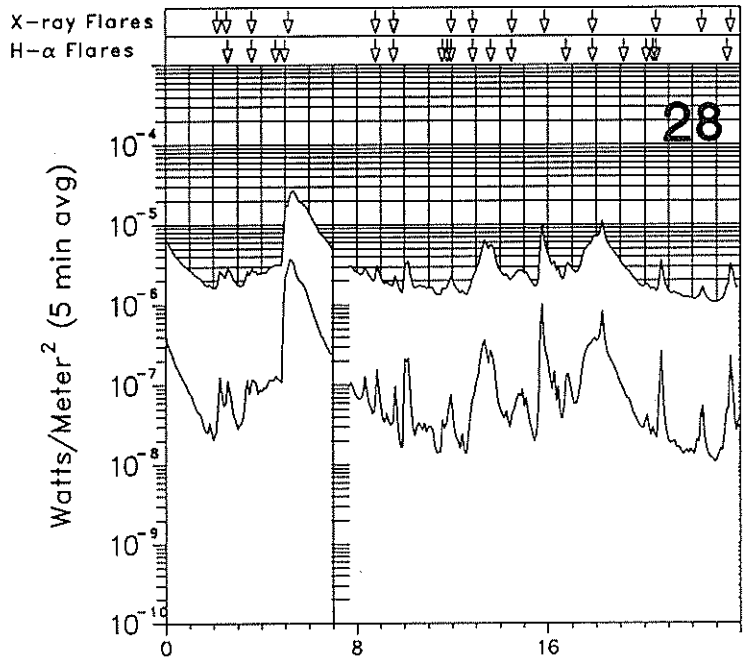


61
Feb 90

GOES-7 X-RAY DETECTOR

February 1990





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

February 1990

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp	Xray	NOAA/ USAF Region
01	0200E	0206	0227D	S18	W77	SF	C5.4		5897
01	0353	0358	0406				C3.4		
01	0702E	0703	0711D	N12	W69	SF	C2.4		5906
01	0859	0903	0908				C3.4		
01	1322E	1329	1353D	N09	W29	SF	C2.0		5904
01	2029E	2036	2113D	N27	W12	1N	C4.0		5911
02	0354E	0356	0359D	S10	W66	SF	C2.4		5900
02	0531	0535	0538				C1.3		
02	1935E	1938	1942D	S09	W79	SF	C4.4		5900
02	2130	2136	2139				C2.3		
03	0109E	0109	0124D	S13	W81	2F	M6.9		5900
03	0643E	0647	0730D	N16	W51	SF	C4.1		5913
03	1316E	1319	1323D	N05	W06	SF	C1.7		5919
03	1820E	1823	1826D	N14	W57	SF	C3.0		5913
03	1927E	1929	1950D	N14	W57	SF	C3.2		5913
03	2300E	2301	2312D	N06	W07	SF	C1.5		5919
04	0059	0108	0117				C1.8		
04	0210	0218	0228				C2.4		
04	0527	0531	0536				C1.4		
04	0800	0805	0811				C1.4		
04	1028	1056	1108				C1.7		
04	1215E	1232	1431D	N14	W19	SF	C3.0		5920
04	1938E	1945	1948D	N12	W24	SF	C2.1		5920
04	2150	2157	2213				C2.6		
05	0536	0540	0544				C1.0		
05	0750E	0757	0822D	N14	W29	SF	C1.3		5920
05	1435E	1439	1451D	N18	W89	SF	C3.3		5913
05	1557E	1557	1601D	N14	W84	SF	C2.6		5904
05	1659E	1710	1728D	N14	W87	SF	C9.7		5904
05	1904	1909	1912				C2.7		
05	2113E	2118	2123D	N15	W88	SF	C3.8		5904
05	2252E	2253	2257D	N16	W88	SF	C1.9		5904
06	0700E	0701	0714D	N14	W42	SF	C5.4		5920
06	0809	0816	0818				C2.3		
06	0908	0908U	0925	N13	W88	1F	C2.7		5904
06	1023	1033	1050				C2.2		
06	1122	1124U	1251	N24	W54	SF	C2.8		5914
06	1823	2108	2224				C4.2		
07	0024	0028	0033				C1.9		
07	0124	0125U	0134	N09	W50	SF	C1.9		5919
07	0249	0253	0256				C1.1		
07	0617	0634	0644				C2.0		
07	1309	1313	1316				C3.0		
07	1553	1628	1639				C1.9		
07	1753	1822	1845				C2.0		
07	2255E	2255	2302D	N14	W64	SF	C1.9		5920
08	0411	0415	0423				C1.0		
08	0647	0715	0735				C1.9		
08	1038E	1044	1107	S19	W58	SF	C1.0		5925
08	1358E	1401	1413D	S20	W57	SF	C1.2		5925
08	1829	1833	1836				M1.1		
08	2037	2041	2046				B9.6		
08	2109	2135	2149	S20	W63	SF	C7.5		5925
09	0018E	0019	0028D	S19	W69	SF	C7.2		5925
09	0152	0155	0157				B9.6		
09	0816	0820	0828				C1.4		
09	1004	1012	1019				C2.3		
09	1136	1143	1147				C1.9		
09	1523	1526	1528				B8.9		
09	2345	2351	2357				C1.6		
10	1107	1113	1117				C1.2		
11	0931E	0933	0940D	N18	E30	SF	B6.8		5927
11	1138E	1140	1146D	N21	E29	SF	B7.6		5927
11	1827E	1827	1842D	N18	E28	SN	C1.8		5927
12	0855	0858	0902				C1.0		
12	0929	0933	0939				C1.0		
12	1110	1119	1123				C3.6		
12	1528E	1531	1540D	N19	E16	SF	B8.2		5927
12	1538E	1546	1612D	N10	W11	SF	B8.7		5930
12	1710E	1723	1813	N20	E14	SN	C3.4		5927
12	1730E	1744	1827D	N10	W13	SN	C3.0		5930
12	2153	2159	2202				C2.0		
13	0045E	0045	0112D	N21	E08	SN	C1.9		5927
13	0442	0447	0453				C1.1		
13	0951	0956	1002				B9.7		
13	1138	1142	1145				B9.9		
13	1349E	1349	1403D	N17	E05	SF	B7.5		5927
13	1513E	1529	1535D	N11	W26	SF	C1.0		5930
13	1741E	1742	1753D	N11	W27	SF	C1.7		5930
13	1929E	1931	1955	N27	W12	SF	C1.2		5928
14	0653	0656	0714D	N20	W06	SF	C1.2		
14	1250	1253U	1254	N12	W39	SF	C5.5		5930
14	1737E	1743	1756D	N09	W41	1F	C6.4		5930
14	2301E	2303	2315D	N10	W44	SF	C2.2		5930
15	1119E	1121	1144	N34	W06	1N	C1.5		5934
15	1322E	1358	1430D	N12	W52	SF	C1.9		5930
15	1923E	1936	1952	N12	W56	SF	C1.3		5930
16	0420	0429	0442				B7.7		
16	1039	1048	1105				C1.3		
17	0652	0734	0811				C1.2		
17	1359E	1400	1414D	N38	W30	SF	C2.3		
17	1826E	1828	1843D	N20	W50	SF	C1.4		5927
17	2107E	2111	2119D	S16	W35	1N	C1.5		5931
17	2224	2232	2241				C5.7		
18	0424	0428	0431				C3.2		
18	0828	0833	0839				C1.9		
18	1051E	1100	1134D	N21	W63	1F	C6.9		5927
18	1309	1312	1315				C1.4		
18	1417E	1419	1423D	N23	W64	SF	C2.7		5927
18	2032E	2035	2039D	S37	E71	SF	C1.3		5942
18	2139	2143	2147				C1.4		
19	0018	0025	0031				C1.8		
19	0637	0638	0722D	S17	E80	SF	C2.6		5947
19	0728E	0733	0833D	S14	W12	SF	C3.7		5937
19	1135E	1235	1259D	S16	E80	SF	C5.2		5947
19	1412E	1416U	1538D	S36	E58	SF	C2.6		5942
19	1551E	1554	1603D	S35	E56	SF	C4.0		5942
19	1647	1647U	1652D	N21	W76	SF	C5.7		5927
19	1723E	1723	1736D	S36	E57	SF	C5.0		5942
19	1836	1852U	1909	S33	E58	SF	C3.9		5942

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

February 1990

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/ USAF Region
20	0013E	0022	0026D	S13	E75	SF	C2.0	5947
20	0102E	0126	0150D	S14	E75	1F	C5.7	5947
20	0405E	0406	0418D	S17	E71	SF	C5.1	5947
20	0738E	0742	0746D	S34	E48	SF	C4.1	5942
20	1020	1026	1028				C4.4	
20	1352	1358	1406				C2.6	
20	1737	1743	1752				C2.2	
20	1855E	1930	2026	S38	E46	SF	C2.1	5942
22	0540E	0544	0554D	S15	E48	SF	C1.6	5947
22	0836E	0841	0908D	N15	E51	SF	C4.1	5948
22	1021E	1023	1042	N16	E49	SF	C3.3	5948
22	1440E	1450	1608D	S20	E41	1N	M1.2	5947
22	1613E	1630	1715D	N16	E45	SF	C4.4	5948
22	2152E	2156	2202D	S17	E32	SF	C1.7	5947
23	1253E	1302	1356D	S19	E28	2B	M2.9	5947
23	1614E	1637	1707D	S11	E53	SN	M1.3	5953
23	2338E	2338	2344D	N15	E26	SF	C2.7	5948
23	2336E	2349	0003D	N13	E22	1N	C9.8	5948
24	0305E	0306	0317D	N16	E25	SF	C2.1	5948
24	0317E	0321	0330D	S09	E49	SF	M1.1	5953
24	0505E	0505	0537D	N15	E25	SF	C5.0	5948
24	0824	0829	0834				C2.7	
24	1122E	1126	1154D	S08	E45	SF	C2.0	5953
24	1216	1219	1221				C1.6	
24	1227E	1232	1239D	N16	E23	SF	C2.2	5948
24	1559E	1600	1607D	N02	W50	SF	C2.5	5946
24	2131E	2134	2149D	N02	W52	SN	C3.4	5946
24	2256E	2257	2330D	S10	E35	SF	C2.4	5953
25	0141E	0142	0200D	N02	W53	SF	C1.9	5946
25	0157E	0201	0215D	S15	E08	1F	C2.3	5947
25	0510E	0514	0525D	S07	E25	SN	C2.4	5953
25	0739B	0743	0757D	N01	W58	SF	C3.0	5946
25	0848E	0859	0918D	S15	E05	SF	C2.4	5947
25	1928E	1930	1939D	S23	E11	SF	C1.3	5957
25	2050E	2051	2141D	S08	E24	SF	C1.7	5953
26	0424E	0431	0438D	S16	W05	SN	C4.1	5947
26	0552E	0554	0607D	S03	W54	1F	C2.4	5952
26	0625E	0626	0633D	S20	W04	SF	C1.7	5947
26	0716E	0725	0735D	S19	W02	SF	C2.9	5947
26	1010	1013	1016				C1.5	
26	1617	1625	1630				C8.1	
26	2056E	2059	2100	S21	W16	SF	C2.1	5947
27	0240	0243	0245				C2.4	
27	0704E	0705	0710D	S22	W16	SN	C7.4	5947
27	0827E	0843	0920D	S20	W19	1N	C5.7	5947
27	1248	1250	1259D	S20	W21	SN	C2.1	5947
27	1806E	1808	1834D	N29	E59	SN	C2.6	5961
27	1930E	1937	2001D	S20	W22	SF	C3.4	5947
27	2151	2155	2158				C3.0	
27	2328	2329U	0026D	N29	E54	1F	M1.7	5961
28	0209	0218	0227				C2.8	
28	0233E	0239	0243D	S20	W26	SF	C3.0	5947
28	0336E	0336	0339D	N27	E54	SF	C3.5	5961
28	0507E	0510	0515D	N34	E50	SN	M2.7	5961
28	0847E	0852	0905D	N33	E49	1F	C3.9	5961
28	0932E	1012	1111D	N33	E47	2F	C3.9	5961
28	0934	0937	0942				C2.4	
28	1157	1157U	1206D	S18	W36	SF	C2.3	5947
28	1251E	1320	1416D	N30	E43	1F	C6.6	5961
28	1430E	1549	1614D	N31	E41	1N	M1.0	5961
28	1552	1816	2003D	N27	E41	2N	M1.2	5961
28	1751E	1755	1813D	N14	W30	SF	C7.4	5948
28	2028E	2039	2157D	N29	E39	SF	C3.9	5961
28	2222	2226	2230				C1.8	
28	2335E	2335	2351D	N30	E38	SF	C3.5	5961

Preliminary GOES Satellite Data
Daily Average X-ray Background
March 1989 - February 1990

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

MASS EJECTIONS FROM THE SUN

FEBRUARY 1990

Site	Mo Day	Observed UT Start	Max	End	Location RA*	R/Ro	Freq or Wavelength	Kind of Event
VORO	Feb 01	0157	0220 U	0242	250	1	H-alpha	S
LEAR	Feb 03	0107.0		0222.0			Meter	IV
PALE	Feb 06	2019.0		2035.0			Meter	II
SGMR	Feb 06	2019.0		2030.0			Meter	II
CULG	Feb 07	0715.5		0718			Meter	IV III
KHAR	Feb 12	1048 E	1050 U	1115 D	323-326	0.37-0.39	H-alpha	S
SVTO	Feb 18	1050.0		1117.0			Meter	IV
WEIS	Feb 18	1101.9		1105.7			70-50 MHz	II
KHAR	Feb 23	1110 E		1115 D	055	0.60-0.62	H-alpha	S
KHAR	Feb 23	1200 E		1218 D	055	0.60-0.62	H-alpha	S
KHAR	Feb 24	0945 E	0950 U	1032 D	278-286	0.70-0.76	H-alpha	S
KHAR	Feb 25	0835 E		0855 D	280-283	0.79-0.83	H-alpha	S
KHAR	Feb 25	1012 E		1040 D	277-280	0.83-0.84	H-alpha	S
KHAR	Feb 25	1058 E		1135 D	257-260	1.00-1.03	H-alpha	S
KHAR	Feb 26	0920 E	0930 U	1005 D	266-267	0.97-1.04	H-alpha	S
KHAR	Feb 27	0802 E		0815 D	245-247	0.95-0.98	H-alpha	S
KHAR	Feb 27	0847 E		0915 D	267-269	0.94-0.96	H-alpha	S
KHAR	Feb 27	0905 E	0910 U	0923 D	245-247	0.95-0.98	H-alpha	S
KHAR	Feb 27	0946 E	0947 U	1010 D	245-247	0.95-0.98	H-alpha	S
KHAR	Feb 27	1012 E	1013 U	1023 D	054-056	0.91-0.96	H-alpha	S
KHAR	Feb 27	1030 E	1032 U	1055 D	054-056	0.91-0.96	H-alpha	S
SVTO	Feb 28	1311.0		1314.0			Meter	II
SVTO	Feb 28	1314.0		1347.0			Meter	IV

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
- PALE = Palehua
- SGMR = Sagamore Hill
- SVTO = San Vito
- VORO = Voroshilov
- WEIS = Weissenau

ACTIVE PROMINENCES AND FILAMENTS

FEBRUARY 1990

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
01	APR	0017	0252	N09	W66	01	27.1	1				C	VORO		
01	AFS	0025E	0321D	N09	W63	01	27.4		03	9	9	E	PALE	5907	
01	DSD	0025E	0321D	N10	W63	01	27.4		04	9	9	E	PALE	5907	
01	AFS	0025E	0321D	N15	E28	02	3.1		02	9	9	E	PALE		
01	ADF	0027	0300D	S33	W75	01	26.2	1				C	VORO		
01	BSL	0059	0116	S25	W90	01	25.2	1				C	VORO		
01	BSL	0105E	0145	N50	W90	01	24.5	1				C	VORO		
01	ADF	0117	0300D	S01	W11	01	31.2	1				C	VORO		
01	APR	0129	0252	S20	W90	01	25.3	1				C	VORO		
01	BSL	0157	0242	S25	W90	01	25.2	2				C	VORO		
01	EPL	0211E	0404D	S24	W74	01	26.5			9	9	E	LEAR		Flare Associated
01	AFS	1315E	2137D	N07	E28	02	3.6		03	9	9	E	RAMY	5919	
01	AFS	1325E	2137D	S12	W51	01	28.8		02	9	9	E	RAMY	5917	
01	DSD	1335E	2137D	N25	E14	02	2.6		03	9	9	E	RAMY	5914	
01	AFS	1337E	2137D	N14	E21	02	3.1		02	9	9	E	RAMY		
01	DSD	1339E	1650D	S10	E30	02	3.8		04	9	9	E	RAMY	5904	Flare Associated
01	ASR	1343E	2137D	N10	W88	01	26.0			9	9	E	RAMY	5907	
01	DSD	1345E	1805D	N14	W72	01	27.2		03	9	9	E	RAMY	5906	
01	AFS	1345E	2137D	N11	W73	01	27.2		02	9	9	E	RAMY	5906	
01	AFS	1415E	2137D	S25	E46	02	5.1		02	9	9	E	RAMY		
01	AFS	1440E	2137D	N14	W26	01	30.7		03	9	9	E	RAMY	5913	
01	AFS	1442E	1445D	N08	E26	02	3.6		02	9	9	E	SVTO	5919	
01	AFS	1442E	1445D	N14	W27	01	30.7		02	9	9	E	SVTO	5913	
01	AFS	1442E	1445D	N15	E22	02	3.3		01	9	9	E	SVTO		
01	AFS	1509E	1907D	N07	E25	02	3.5		04	7	8	E	HOLL	5919	
01	AFS	1509E	1907D	N14	E19	02	3.1		02	9	9	E	HOLL		
01	SSB	1510		391	W17	01	25.8			0	0	E	HOLL		
01	AFS	1530E	2137D	S10	W09	02	1.0		01	7	7	E	RAMY		
01	AFS	1539E	1907D	S25	E46	02	5.2		02	7	7	E	HOLL		
01	AFS	1845E	0220D	N14	E20	02	3.3	1	02	9	9	E	PALE	5920	
01	ASR	2025E	2137D	N39	W88	01	25.8			8	8	E	RAMY	5916	
01	DSD	2045E	2137D	N27	W11	02	1.0		06	9	9	E	RAMY	5911	Flare Associated
01	AFS	2330E	1058D	N23	E06	02	2.4		02	9	9	E	LEAR	5914	
01	ASR	2331E	0602D	N38	W90	01	25.8			9	9	E	LEAR	5916	
01	AFS	2332E	1058D	S09	W14	01	31.9		02	9	9	E	LEAR	5922	
02	APR	0015E	0132D	N14	W90	01	26.3	1				C	VORO		
02	APR	0015E	0132D	S55	W90	01	25.3	1				C	VORO		
02	AFS	0420E	1058D	N14	E14	02	3.2		03	9	9	E	LEAR	5920	
02	BSD	0540E	0713D	S09	W68	01	28.2		04	9	8	E	LEAR	5900	
02	ASR	1030E	1058D	S06	W88	01	26.9			9	9	E	LEAR	5900	
02	AFS	1128E	2153D	N07	E13	02	3.4		02	9	9	E	RAMY	5919	
02	AFS	1139E	2153D	N12	E16	02	3.7		03	9	9	E	RAMY	5920	
02	APR	1216E	1317D	N08	W90	01	26.9	2		9	9	E	RAMY	5906	
02	BSD	1217E	1327D	N07	W83	01	27.4		14	9	9	E	SVTO	5906	
02	AFS	1217E	1327D	N08	E12	02	3.4		03	7	9	E	SVTO	5919	
02	AFS	1217E	1327D	N13	E07	02	3.0		03	9	9	E	SVTO	5920	
02	ASR	1217E	1327D	S06	W90	01	26.9			9	9	E	SVTO	5900	
02	EPL	1317E	1402D	N14	W90	01	26.8	3		9	9	E	RAMY	5906	
02	ASR	1324E	1727D	N12	W90	01	26.9			9	9	E	RAMY	5906	
02	ASR	1404E	1945	S11	W90	01	26.9			8	8	E	RAMY	5900	
02	DSD	1559E	1921D	N09	W49	01	30.1		03	9	9	E	RAMY	5904	
02	SSB	1605		388	W28	01	26.9			0	0	E	RAMY		
02	SSB	1615		388	W28	01	26.9			0	0	E	HOLL		406 W46
02	ASR	1619E	0018D	S08	W90	01	27.0			7	8	E	HOLL	5900	
02	ADF	1627E	2123D	N15	E09	02	3.4	1	07	9	9	E	HOLL	5920	
02	ASR	1921E	0219D	S07	W90	01	27.2			9	9	E	PALE	5900	
02	AFS	1921E	0328D	N09	E09	02	3.5		05	9	9	E	PALE	5919	
02	ASR	1942E	2153D	N15	W90	01	27.1			9	9	E	RAMY	5906	
02	BSL	1944	2006D	S10	W75	01	28.3			9	9	E	HOLL	5900	Flare Associated
02	BSL	1945E	2153D	S04	W90	01	27.2			9	9	E	RAMY	5900	Flare Associated
02	AFS	2118E	0018D	N06	E09	02	3.6		02	9	9	E	HOLL	5919	
02	AFS	2118E	0018D	N14	E02	02	3.0		03	9	9	E	HOLL	5920	
02	CRN	2155E	0018D	N13	W88	01	27.4		03	8	9	E	HOLL	5907	
02	ASR	2257E	1102D	S06	W90	01	27.3			9	9	E	LEAR	5900	
03	AFS	0215E	1102D	N08	E05	02	3.5		02	9	9	E	LEAR	5919	
03	BSD	0506E	1102D	N28	W79	01	28.1		03	9	9	E	LEAR	5909	
03	DSD	1144E	1522D	N05	W05	02	3.1		07	9	9	E	RAMY	5919	Flare Associated
03	AFS	1144E	2205D	N06	E00	02	3.5		02	9	9	E	RAMY	5919	

ACTIVE PROMINENCES AND FILAMENTS

FEBRUARY 1990

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
03	AFS	1145E	2205D	N13	W03	02	3.3		02	9	9	E	RAMY	5920	
03	ASR	1210	2205D	S09	W90	01	27.8			9	9	E	RAMY	5900	
03	DSD	1220E	1945D	N12	W61	01	30.0		04	9	9	E	RAMY	5904	
03	AFS	1221E	2205D	N14	W54	01	30.5		03	9	9	E	RAMY	5913	
03	SSB	1230		418	W69	02	1.9			0	0	E	RAMY		
03	ASR	1233E	2018D	N27	W76	01	28.7			9	9	E	RAMY	5909	Flare Associated
03	AFS	1245E	2205D	N07	W63	01	29.9		02	9	9	E	RAMY		
03	AFS	1403E	1437D	N06	W03	02	3.4		03	9	9	E	SVTO	5919	
03	DSD	1450E	2138D	S15	W71	01	29.3		02	9	9	E	HOLL	5908	
03	DSD	1501E	1727D	N11	W54	01	30.7		04	9	9	E	HOLL	5913	
03	DSD	1510E	1848D	N06	W01	02	3.5		03	9	9	E	HOLL	5919	
03	ASR	1519E	0024D	S10	W90	01	28.0			8	7	E	HOLL	5900	
03	DSD	1526E	2023D	S15	W71	01	29.4		02	9	9	E	RAMY	5908	
03	DSD	1727E	2138D	N13	W64	01	30.0		02	9	9	E	HOLL	5904	
03	AFS	1805E	0024D	N13	W05	02	3.4		03	9	9	E	HOLL	5920	
03	DSD	1848E	2307D	N05	W09	02	3.1		07	9	9	E	HOLL	5919	
03	DSD	1911E	1945D	N06	W08	02	3.2		04	8	8	E	RAMY	5919	
03	DSD	1913E	2023D	N15	W12	02	2.9		02	9	9	E	RAMY	5920	
03	DSD	1916E	2205D	N23	W22	02	2.1		02	9	9	E	RAMY	5914	
03	ASR	2015E	2305D	N23	W82	01	28.6			8	8	E	HOLL	5909	
03	ASR	2018E	2205D	N23	W90	01	28.0			9	9	E	RAMY	5909	
03	ASR	2155E	0028D	S12	W90	01	28.2			9	9	E	PALE	5900	
03	AFS	2155E	0358D	N12	W60	01	30.5		03	9	9	E	PALE	5904	
03	DSD	2155E	0358D	N22	W27	02	1.8		06	9	9	E	PALE	5914	
03	AFS	2207E	0358D	N07	W07	02	3.4		03	9	9	E	PALE	5919	
03	AFS	2207E	0358D	N13	W09	02	3.2		03	9	9	E	PALE	5920	
03	DSD	2207E	0358D	N14	E02	02	4.1		03	9	9	E	PALE	5918	
03	AFS	2250E	1056D	N09	W05	02	3.6		03	9	9	E	LEAR	5920	
03	AFS	2250E	1056D	N14	W09	02	3.3		03	9	7	E	LEAR	5919	
04	APR	0022	0300D	S60	W90	01	27.2	1				C	VORO		
04	APR	0022E	0300D	N50	W90	01	27.5	1				C	VORO		
04	APR	0027	0300D	S36	W90	01	27.9	1				C	VORO		
04	APR	0037	0300D	N33	E90	02	11.2	1				C	VORO		
04	BSL	0050E	0105D	S13	W90	01	28.3	1				C	VORO		
04	ASR	0102E	1056D	N27	W90	01	28.1			9	9	E	LEAR	5909	
04	AFS	0315E	1056D	N08	W76	01	29.5		02	9	9	E	LEAR	5923	
04	AFS	1135E	2119D	N07	W80	01	29.6		02	9	9	E	RAMY	5923	
04	AFS	1137E	2119D	S24	E09	02	5.2		02	8	8	E	RAMY	5921	
04	ADF	1140E	2119D	N14	W14	02	3.4	1	05	9	9	E	RAMY	5920	
04	DSD	1145E	1740D	N06	W15	02	3.4		05	9	9	E	RAMY	5919	
04	ASR	1149E	1955D	N09	W90	01	28.8			9	9	E	RAMY	5917	
04	ASR	1420E	2240D	S12	W90	01	28.9			9	9	E	HOLL	5900	
04	AFS	1436E	0030D	N07	W14	02	3.5		04	9	9	E	HOLL	5919	
04	AFS	1436E	0030D	N13	W20	02	3.1		03	9	9	E	HOLL	5920	
04	AFS	1439E	0030D	S24	E07	02	5.1		03	9	9	E	HOLL	5921	
04	ASR	1442E	2241D	N07	W81	01	29.6			9	9	E	HOLL	5923	
04	DSD	1557E	1924D	N14	W24	02	2.8		05	9	9	E	HOLL	5920	
04	ASR	1708	1727D	S09	W90	01	29.0			9	9	E	RAMY	5900	
04	BSL	1726E	1821D	S10	W90	01	29.1			9	9	E	HOLL	5900	
04	BSL	1727E	1808D	S09	W90	01	29.1			9	9	E	RAMY	5900	
04	AFS	1921E	0421D	S24	E07	02	5.3		02	9	9	E	PALE	5921	
04	DSD	1922E	0303D	S23	E05	02	5.2		03	9	9	E	PALE	5921	
04	AFS	1923E	0421D	N13	W20	02	3.3		03	9	9	E	PALE	5920	
04	AFS	1931E	2242D	S10	W53	01	31.8		01	9	9	E	HOLL	5922	
04	ASR	2240E	1042D	S15	W90	01	29.2			9	9	E	LEAR	5908	
04	AFS	2250E	1042D	N12	W26	02	3.0		02	9	9	E	LEAR	5920	
04	AFS	2258E	1042D	S23	E02	02	5.1		03	9	9	E	LEAR	5921	
04	ASR	2307E	1042D	N10	W90	01	29.3			9	9	E	LEAR	5923	
04	ASR	2310E	0030D	S15	W90	01	29.2			9	9	E	HOLL	5908	
05	BSL	0027E	0057D	S14	W90	01	29.3	1				C	VORO		
05	APR	0027E	0301D	N37	E90	02	12.3	1				C	VORO		
05	APR	0038	0301D	N31	W90	01	29.0	1				C	VORO		
05	BSL	0120	0144	S13	W90	01	29.4	1				C	VORO		
05	AFS	0824E	1455D	S23	W02	02	5.2		03	9	9	E	SVTO	5921	
05	ASR	1016E	1042D	N16	W89	01	29.8			9	9	E	LEAR	5913	
05	ASR	1129E	2200D	N08	W90	01	29.8			8	8	E	RAMY	5923	
05	AFS	1130E	2200D	S23	W06	02	5.0		03	9	9	E	RAMY	5921	
05	ASR	1145E	2054D	S14	W90	01	29.8			9	9	E	RAMY	5908	

ACTIVE PROMINENCES AND FILAMENTS

FEBRUARY 1990

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
05	ASR	1256E	1455D	S16	W90	01	29.8			7	9	E	SVTO	5908	
05	ASR	1338E	1455D	N15	W88	01	30.0			9	9	E	SVTO	5904	
05	ASR	1439E	0019D	N14	W90	01	29.9			9	9	E	HOLL	5904	
05	AFS	1505E	0019D	S23	W06	02	5.2		03	8	5	E	HOLL	5921	
05	SDF	1557E	1422D	N09	W07	02	5.1		07	0	0	E	HOLL		
05	DSD	1720E	1915D	N14	W33	02	3.2		02	9	9	E	HOLL	5920	
05	AFS	1721E	1913D	N16	W35	02	3.1		04	8	9	E	HOLL	5920	
05	AFS	1740E	0015D	S23	W08	02	5.1		03	9	9	E	PALE	5921	
05	DSD	1843E	0019D	N07	W35	02	3.1		06	9	9	E	HOLL	5919	
05	AFS	2125E	0019D	S21	W23	02	4.1		03	9	9	E	HOLL		
05	ASR	2313E	0019D	N22	E88	02	12.7			8	9	E	HOLL		
06	AFS	0000E	0015D	S22	W22	02	4.3		02	9	9	E	PALE		
06	ASR	0010E	1042D	N14	W89	01	30.4			9	9	E	LEAR	5904	
06	CAP	0015E	0015D	N18	W90	01	30.2		07	9	9	E	PALE		
06	AFS	0016E	1042D	S21	W24	02	4.2		03	9	9	E	LEAR		
06	BSL	0521E	0620D	N14	W90	01	30.5	1				C	ABST		
06	AFS	0522E	1042D	N07	W39	02	3.3		03	9	9	E	LEAR	5919	
06	ASR	0804E	1439D	N16	W88	01	30.8			9	9	E	SVTO	5904	
06	ASR	1132E	2154D	N13	W90	01	30.8			9	9	E	RAMY	5904	
06	AFS	1140E	2154D	N07	W41	02	3.4		02	9	9	E	RAMY	5919	
06	AFS	1242E	1439D	S21	W26	02	4.5		02	7	9	E	SVTO		
06	AFS	1242E	1439D	S24	W14	02	5.4		03	7	9	E	SVTO	5921	
06	SSB	1322		338	W29	02	3.6			0	0	E	RAMY		355 W46
06	DSD	1449E	1531D	S27	E61	02	11.4		04	9	9	E	HOLL		
06	MDP	1500E	1710D	N22	E90	02	13.5			9	9	E	HOLL		
06	DSD	1504E	1725D	N06	W46	02	3.2		05	9	9	E	HOLL	5919	
06	DSD	1504E	1725D	N08	W43	02	3.4		03	9	9	E	HOLL	5919	
06	AFS	1512E	2025D	S18	W20	02	5.1		03	8	7	E	HOLL	5921	
06	ADF	1516E	1719D	S20	W33	02	4.1		02	9	9	E	HOLL		
06	AFS	1531E	0031D	S28	E63	02	11.6		04	9	9	E	HOLL		
06	APR	1710E	0031D	N21	E90	02	13.6			9	9	E	HOLL		
06	AFS	1802E	0343D	N07	W43	02	3.5		04	7	9	E	PALE	5919	
06	ADF	1802E	0343D	N26	W53	02	2.6		10	8	7	E	PALE	5914	
06	ADF	1802E	0343D	S15	W32	02	4.3		03	9	7	E	PALE	5918	
06	AFS	1802E	0343D	S22	W34	02	4.1		03	9	9	E	PALE		
06	SSB	1828		351	W45	02	2.5			0	0	E	HOLL		
06	ASR	1918E	0343D	N18	E90	02	13.6			9	9	E	PALE		
06	ASR	2100E	0031D	N14	W90	01	31.1			8	9	E	HOLL	5904	
06	LPS	2245E	0031D	N14	W90	01	31.1			9	9	E	HOLL	5904	
07	BSL	0210	0225	S23	W90	01	31.1	1				C	VORO		
07	APR	0221	0300D	S30	W90	01	31.0	1				C	VORO		
07	BSL	0241	0300D	N15	E90	02	13.9	1				C	VORO		
07	AFS	0800E	1521D	N12	W55	02	3.2		03	8	9	E	SVTO	5920	
07	ASR	0904E	1521D	N31	E90	02	14.5			9	9	E	SVTO		
07	ASR	1112E	1521D	N14	E90	02	14.3			9	9	E	SVTO		
07	AFS	1140E	1153D	N08	W55	02	3.4		02	9	9	E	RAMY	5919	
07	AFS	1142E	1153D	N14	W57	02	3.2		03	9	9	E	RAMY	5920	
07	ASR	1143E	1153D	N15	E88	02	14.1			9	9	E	RAMY		
07	ASR	1144E	1153D	N32	E90	02	14.6			9	9	E	RAMY		
07	AFS	1215E	1521D	S24	W32	02	5.0		02	7	8	E	SVTO	5921	
07	AFS	1350E	1521D	S28	E50	02	11.5		01	9	9	E	SVTO		
07	AFS	1425E	0031D	S28	E50	02	11.5		01	9	9	E	HOLL		
07	DSD	1427E	1450D	S23	W40	02	4.5		02	9	9	E	HOLL	5925	
07	AFS	1458E	2349D	S21	W45	02	4.2		02	9	9	E	HOLL	5925	
07	APR	1502E	2357D	N24	W90	01	31.7	1		9	9	E	HOLL	5924	
07	ASR	1515	2340D	N31	E90	02	14.7			9	9	E	HOLL		
07	ASR	1529E	2340D	N17	E90	02	14.5			9	9	E	HOLL		
07	DSD	1532E	0031D	N13	W60	02	3.1		03	9	9	E	HOLL	5920	Flare Associated
07	ASR	1555E	1622D	N20	W90	01	31.8			9	9	E	HOLL		
07	SSB	1602		357	W63	02	2.6			0	0	E	HOLL		
07	ADF	1700E	2349D	S20	W47	02	4.1	1	05	9	9	E	HOLL	5925	
07	ADF	1700E	2354D	S28	W29	02	5.4	1	04	9	9	E	HOLL	5921	
07	BSL	2347	0008	S12	E90	02	14.8	1				C	VORO		
07	DSD	2349E	0031D	S20	W55	02	3.8		03	9	9	E	HOLL	5925	
08	ADF	0010	0258	N30	E20	02	9.6	1				C	VORO		
08	APR	0020	0258D	N47	E90	02	15.5	1				C	VORO		
08	ADF	0024	0258	S28	W19	02	6.5	1				C	VORO		

ACTIVE PROMINENCES AND FILAMENTS

FEBRUARY 1990

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
08	BSL	0041	0100	S12	E90	02	14.8	1				C	VORO		
08	APR	0041	0258	S37	E90	02	15.3	1				C	VORO		
08	APR	0041	0258	S58	W90	01	31.2	1				C	VORO		
08	BSL	0114	0140	S12	E90	02	14.8	1				C	VORO		
08	BSL	0150	0224	S18	E90	02	14.9	1				C	VORO		
08	BSL	0239	0258	S12	E90	02	14.9	1				C	VORO		
08	BSD	0409E	0632D	N25	W80	02	2.0		10	9	9	E	LEAR	5914	
08	BSL	0541E	0750D	S35	E90	02	15.4	1				C	ABST		
08	AFS	0923E	1338D	S24	W44	02	5.0		03	6	7	E	SVTO	5921	
08	AFS	0923E	1550D	N13	W69	02	3.2		03	9	9	E	SVTO	5920	
08	AFS	0923E	1550D	S20	W55	02	4.2		02	9	9	E	SVTO	5925	
08	AFS	0923E	1550D	S29	E40	02	11.5		02	9	9	E	SVTO	5926	
08	ASR	0936E	1550D	N31	E90	02	15.5			9	9	E	SVTO		
08	BSD	1133	1338D	N15	W76	02	2.7		07	9	9	E	SVTO	5920	Flare Associated
08	ASR	1144E	1312D	N26	W90	02	1.5			9	9	E	SVTO	5914	
08	AFS	1230E	1550D	N25	E58	02	13.0		01	7	9	E	SVTO		
08	DSD	2012E	2210D	N18	W73	02	3.3		03	9	9	E	RAMY	5920	
08	AFS	2025E	2210D	S19	W61	02	4.2		03	9	9	E	RAMY	5925	
08	AFS	2125E	2210D	N14	E39	02	11.8		03	9	9	E	RAMY		
08	AFS	2129E	0419D	N14	E39	02	11.8		02	9	9	E	PALE		
08	AFS	2325E	1019D	S27	E33	02	11.5		02	9	9	E	LEAR	5926	
08	AFS	2326E	1019D	N12	E39	02	11.9		02	9	9	E	LEAR		
08	DSD	2327E	0234D	S21	W61	02	4.3		03	9	9	E	LEAR	5925	
09	DSD	0233E	0427D	N03	E58	02	13.4		02	9	9	E	LEAR		
09	AFS	0427E	1019D	N04	E58	02	13.5		02	9	9	E	LEAR		
09	APR	0523E	0702D	S36	E90	02	16.4	1				C	ABST		
09	ASR	0654E	1019D	N15	W90	02	2.5			9	9	E	LEAR	5920	
09	BSD	1035E	1250D	S20	W76	02	3.6		09	9	9	E	SVTO	5925	
09	AFS	1200E	1450D	N11	E33	02	12.0		03	9	9	E	RAMY	5930	
09	ASR	1200E	1450D	N16	W83	02	3.2			9	9	E	RAMY	5920	
09	DSD	1200E	1450D	S28	E24	02	11.4		03	9	9	E	RAMY	5926	
09	AFS	1209E	1450D	N02	E53	02	13.5		03	9	9	E	RAMY		
09	ADF	1315E	1450D	N15	E42	02	12.7	1	20	9	9	E	RAMY		
09	ADF	1315E	1450D	N18	E54	02	13.7	1	04	9	9	E	RAMY	5927	
09	ASR	1502E	1530D	N15	W86	02	3.1			9	9	E	SVTO	5920	
09	ASR	1502E	1530D	N30	W80	02	3.3			9	9	E	SVTO		
09	APR	1502E	1530D	N54	E90	02	17.4	1		9	9	E	SVTO		
09	DSD	1710E	2215D	S20	W79	02	3.7		08	9	9	E	HOLL	5925	
09	AFS	1717E	0034D	N26	E42	02	13.0		01	6	6	E	HOLL	5928	
09	AFS	1718E	0034D	N12	E29	02	11.9		01	8	8	E	HOLL	5930	
09	AFS	1720E	0034D	N03	E50	02	13.4		02	9	9	E	HOLL		
09	DSD	1722E	0034D	N18	E53	02	13.7		02	9	9	E	HOLL	5927	
09	ASR	1722E	0034D	N18	E58	02	14.1			9	9	E	HOLL	5927	
09	ASR	1733E	0034D	N08	W90	02	3.0			5	5	E	HOLL	5919	
09	AFS	1825E	0352D	N07	E49	02	13.4		03	9	9	E	PALE	5932	
09	ASR	1825E	0352D	N09	W89	02	3.1			9	9	E	PALE	5919	
09	DSD	1825E	0352D	N21	E51	02	13.7		03	9	9	E	PALE	5927	
09	AFS	1825E	0352D	N28	E40	02	12.9		03	9	9	E	PALE	5928	
09	ASR	1825E	2206D	N28	W87	02	3.0			9	9	E	PALE		
09	SDF	2046E	1742D	N19	E26	02	11.8	3	11	0	0	E	HOLL		
09	SDF	2046E	1752D	S06	E16	02	11.1	3	18	0	0	E	HOLL		
09	ASR	2315E	0034D	N14	W90	02	3.2			9	9	E	HOLL	5920	
10	SSB	0225		310	W48	02	9.3			0	0	E	PALE		262 W00
10	SDF	0436E	1600D	N19	E26	02	12.2	3	11	0	0	E	HOLL		
10	SDF	0436E	1600D	S06	E16	02	11.4	3	18	0	0	E	HOLL		
10	AFS	1130E	1850D	N02	E40	02	13.5		03	9	9	E	RAMY	5932	
10	ADF	1133E	1850D	S08	E65	02	15.3	1	09	9	9	E	RAMY	5931	
10	AFS	1136E	1850D	N12	E20	02	12.0		02	9	9	E	RAMY	5930	
10	ADF	1148E	1850D	N35	E54	02	14.8	1	14	9	9	E	RAMY	5929	
10	DSD	1200E	1850D	N18	E43	02	13.8		05	9	9	E	RAMY	5927	
10	BSL	1600E	1742D	N19	E26	02	12.6	3		0	0	E	HOLL		
10	AFS	1619E	1850D	S14	E61	02	15.3		04	9	9	E	RAMY	5931	
10	ADF	1625E	1850D	N22	E33	02	13.2	1	10	9	9	E	RAMY	5928	
10	DSD	1644E	0034D	N18	E41	02	13.8		02	9	9	E	HOLL	5927	
10	ADF	1644E	0034D	N27	E29	02	12.9	1	02	9	9	E	HOLL	5928	Flare Associated
10	ADF	1657E	0034D	N35	E44	02	14.2	1	03	9	9	E	HOLL	5929	
10	SDF	1700E	2118D	N15	E18	02	12.1	3	04	9	9	E	HOLL	5930	
10	SSB	1710		254	W00	02	14.7			0	0	E	HOLL		

FEBRUARY 1990

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
10	AFS	1710E	0034D	N03	E36	02	13.4		02	7	7	E	HOLL	5932	
10	ASR	1733E	0012D	N30	W88	02	3.8			5	5	E	HOLL		
10	DSD	1928E	0349D	N18	E35	02	13.5		04	9	9	E	PALE	5927	
10	ADF	1928E	0349D	N23	E50	02	14.7		07	9	9	E	PALE	5927	
10	ADF	1928E	0349D	N29	E30	02	13.2		08	7	9	E	PALE	5928	
10	ADF	1928E	0349D	N35	E49	02	14.7		07	9	9	E	PALE	5929	
10	ASR	1928E	0349D	S18	W90	02	3.9			9	9	E	PALE	5925	
10	SDF	2020E	2027D	N00	E40	02	13.8		32	0	0	E	PALE		
10	AFS	2254E	0034D	S13	E56	02	15.2		02	9	9	E	HOLL	5931	
11	ADF	1125E	1640D	N05	E26	02	13.4	1	05	9	9	E	RAMY	5932	
11	ADF	1129E	1652D	S08	E48	02	15.1	1	05	9	9	E	RAMY	5931	
11	AFS	1129E	2024D	S14	E50	02	15.2		02	9	9	E	RAMY	5931	
11	DSD	1137E	1929D	N19	E31	02	13.8		05	9	9	E	RAMY	5927	
11	DSD	1158E	1407D	N20	E29	02	13.7		04	9	9	E	SVTO	5927	
11	DSD	1259E	1929D	N12	E06	02	12.0		04	9	9	E	RAMY	5930	
11	DSD	1445E	0025D	N19	E31	02	14.0		09	9	9	E	HOLL	5927	
11	AFS	1453E	2205D	S13	E49	02	15.3		01	9	9	E	HOLL	5931	
11	AFS	1457E	0025D	N11	E04	02	11.9		04	9	9	E	HOLL	5930	
11	SSB	1511		253	W11	02	15.6			0	0	E	HOLL		
11	ADF	1623E	1929D	N20	E18	02	13.0	1	09	9	9	E	RAMY	5928	
11	AFS	1748E	0426D	S15	E43	02	15.0		03	9	8	E	PALE	5931	
11	DSD	1748E	2305D	S15	E43	02	15.0		17	9	9	E	PALE	5931	
11	AFS	1748E	2310D	N01	E19	02	13.2		03	9	9	E	PALE	5932	
11	DSD	1748E	2314D	N18	E24	02	13.6		03	9	9	E	PALE	5927	
11	ADF	1748E	2330D	N23	E31	02	14.1		09	9	9	E	PALE	5927	
11	AFS	1839E	0025D	N16	E29	02	14.0		03	9	9	E	HOLL	5927	
11	DSD	2316E	0300D	N22	E23	02	13.7		04	9	9	E	PALE	5927	
11	DSD	2332E	0300D	N22	E29	02	14.2		03	9	9	E	PALE	5927	
12	AFS	0205E	0323D	N16	E21	02	13.7		02	9	9	E	LEAR	5927	
12	AFS	0208E	0323D	N12	W04	02	11.8		03	9	9	E	LEAR	5930	
12	AFS	0240E	0422D	N18	E20	02	13.6		02	9	9	E	PALE	5927	
12	ADF	0930E	0940D	N22	E15	02	13.5	1				V	KHAR		
12	ADF	1025E	1059D	N22	E15	02	13.6	1				V	KHAR		
12	DSD	1050E	1115D	N12	W13	02	11.5	1				V	KHAR		
12	ADF	1120E	1136D	N37	E13	02	13.5	1				V	KHAR		
12	DSD	1128E	1936D	N17	E19	02	13.9		03	9	9	E	RAMY	5927	Flare Associated
12	AFS	1134E	1936D	N12	W08	02	11.9		02	9	9	E	RAMY	5930	
12	SSB	1221		233	W02	02	15.0			0	0	E	RAMY		255 W25
12	DSD	1228E	1936D	N12	W11	02	11.7		02	9	9	E	RAMY	5930	
12	DSD	1500E	2013D	N14	E17	02	13.9		04	9	9	E	HOLL	5927	
12	ADF	1500E	2013D	N19	E16	02	13.8	1	07	9	9	E	HOLL	5927	
12	AFS	1522E	2013D	N12	W11	02	11.8		04	7	9	E	HOLL	5930	
12	AFS	1523E	1936D	S14	E35	02	15.3		05	8	7	E	RAMY	5931	
12	BSD	1722E	2013D	N20	E15	02	13.9		04	9	9	E	HOLL	5927	Flare Associated
12	AFS	1740E	0423D	N11	W12	02	11.8		03	9	8	E	PALE	5930	
12	DSD	1750E	0305D	N13	W13	02	11.8		03	9	9	E	PALE	5930	Flare Associated
12	SSB	2135		257	W32	02	17.4			0	0	E	PALE		229 W04
12	DSD	2135E	0423D	N21	E10	02	13.7		08	9	9	E	PALE	5927	
13	BSD	0055E	0210D	N20	E11	02	13.9		03	9	9	E	PALE	5927	Flare Associated
13	ADF	0200E	0300D	N37	W42	02	9.7	1				C	VORO		
13	APR	0200E	0300D	S24	W90	02	6.1	1				C	VORO		
13	ADF	0200E	0300D	S25	E27	02	15.2	1				C	VORO		
13	AFS	0752E	1511D	S26	W30	02	11.0		01	9	9	E	SVTO	5926	
13	AFS	0752E	1557D	N11	W21	02	11.7		04	9	9	E	SVTO	5930	
13	ADF	0752E	1557D	N27	W05	02	12.9	1	10	9	9	E	SVTO	5928	
13	APR	0812E	0845D	S22	E90	02	20.2					V	ATHN		
13	DSD	1138E	1432D	N20	E04	02	13.8		04	9	9	E	RAMY	5927	
13	AFS	1141E	2158D	N11	W23	02	11.7		02	9	9	E	RAMY	5930	
13	SSB	1322		219	W02	02	15.0			0	0	E	RAMY		234 W17 267 W50
13	AFS	1743E	2357D	N10	W25	02	11.8		03	9	9	E	HOLL	5930	
13	DSD	1746E	1808D	N11	W25	02	11.8		02	9	9	E	PALE	5930	Flare Associated
13	SSB	1800		224	W09	02	15.5			0	0	E	HOLL		
13	SSB	1803		235	W21	02	16.4			0	0	E	HOLL		267 W53
13	SSB	1804		257	W43	02	18.4			0	0	E	PALE		231 W17
13	AFS	1804E	0423D	N11	W27	02	11.7		03	9	9	E	PALE	5930	
13	DSD	1804E	0423D	N20	E02	02	13.9		05	9	9	E	PALE	5927	
13	DSD	1822E	2357D	N19	E05	02	14.1		03	8	8	E	HOLL	5927	

ACTIVE PROMINENCES AND FILAMENTS

FEBRUARY 1990

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
13	ADF	1824E	2357D	S12	E18	02	15.1	1	03	8	9	E	HOLL	5931	
13	ADF	1929	2158D	N27	W09	02	13.1	1	08	9	9	E	RAMY	5928	Flare Associated
13	ADF	1930E	0423D	N26	W10	02	13.0	1	09	9	9	E	PALE	5928	
13	BSL	2355	0005D	N17	E90	02	20.8	1				C	VORO		
13	APR	2355	0300D	S27	W90	02	7.0	1				C	VORO		
14	ADF	0001	0300D	S26	E25	02	15.9	1				C	VORO		
14	APR	0005	0300D	N23	W90	02	7.1	1				C	VORO		
14	APR	0017	0300D	S27	W90	02	7.0	1				C	VORO		
14	ADF	0053	0300D	N39	W60	02	9.2	1				C	VORO		
14	AFS	0707E	1458D	N11	W34	02	11.7		02	7	9	E	SVTO	5930	
14	AFS	1450E	2205D	N12	W37	02	11.8		03	9	9	E	RAMY	5930	
14	SSB	1514		207	W05	02	15.1			0	0	E	RAMY		222 W20
14	DSD	1806E	0402D	N09	W41	02	11.7		02	9	8	E	PALE	5930	
14	DSD	1806E	0402D	N15	E42	02	17.9		04	9	9	E	PALE		
14	DSD	1806E	0402D	N32	W15	02	13.6		05	9	9	E	PALE	5929	
14	DSD	1806E	0402D	N34	W01	02	14.7		06	7	9	E	PALE	5934	
14	ADF	1855E	2205D	S18	E63	02	19.6	1	05	9	9	E	RAMY		
14	AFS	2224E	2248D	N14	E69	02	20.1		03	8	8	E	HOLL		
14	ADF	2225E	2248D	S14	E57	02	19.2	1	08	9	9	E	HOLL		
14	SSB	2242		207	W09	02	15.5			0	0	E	HOLL		222 W24 229 W31
14	AFS	2337E	0403D	N13	W43	02	11.7		02	9	9	E	LEAR	5930	
15	ASR	0056	1051D	N11	E90	02	21.8			9	9	E	LEAR		
15	ASR	0130E	0402D	S28	E90	02	22.1			9	9	E	PALE		
15	ASR	0221E	0402D	N09	E90	02	21.8			9	9	E	PALE		
15	AFS	0807E	1541D	N13	W47	02	11.8		02	9	9	E	SVTO	5930	
15	EPL	0925E	1033D	N13	E90	02	22.2			9	9	E	SVTO		
15	DSD	1217E	1530D	N13	W48	02	11.9		03	9	9	E	RAMY	5930	
15	AFS	1217E	2123D	N12	W51	02	11.7		02	8	6	E	RAMY	5930	
15	DSD	1240E	1530D	N17	W18	02	14.1		04	9	9	E	RAMY	5927	
15	DSD	1240E	1518D	N18	W18	02	14.1		01	9	9	E	SVTO	5927	
15	SSB	1304		208	W17	02	16.1			0	0	E	RAMY		227 W36
15	ASR	1304E	2123D	N08	E90	02	22.3			9	9	E	RAMY		
15	ASR	1304E	1541D	N11	E90	02	22.3			9	9	E	SVTO		
15	AFS	1328E	1541D	S20	W17	02	14.3		02	7	8	E	SVTO		
15	ADF	1645E	2123D	S08	E45	02	19.1	1	13	9	9	E	RAMY	5937	
15	ASR	1700E	0040D	N10	E90	02	22.5			8	8	E	HOLL		
15	SSB	1705		207	W19	02	16.2			0	0	E	HOLL		219 W31 229 W41
15	AFS	1710E	2356D	S20	W18	02	14.3		02	9	9	E	HOLL		
15	DSD	1752E	1835D	N20	W23	02	14.0		13	9	9	E	HOLL	5927	
15	ASR	1754E	0404D	N12	E90	02	22.5			9	9	E	PALE		
15	AFS	1754E	0404D	N53	W10	02	14.9		02	9	9	E	PALE	5930	
15	SSB	1811		211	W23	02	16.6			0	0	E	PALE		210 W26
15	ADF	1855E	2359D	S17	E42	02	19.0	1	06	9	9	E	HOLL	5937	
15	AFS	2359E	0040D	N11	W56	02	11.8		03	7	8	E	HOLL	5930	
16	ASR	0555E	1050D	N12	E90	02	23.0			9	9	E	LEAR		
16	AFS	1525E	0044D	N10	W64	02	11.8		03	9	9	E	HOLL	5930	
16	DSD	1601E	0044D	N19	W35	02	14.0		02	9	9	E	HOLL	5927	
16	AFS	1629E	2132D	N12	W67	02	11.6		02	9	9	E	RAMY	5930	
16	APR	1631E	2132D	N36	W90	02	9.5	2		9	9	E	RAMY		
16	DSD	1633E	1952D	N18	W34	02	14.1		02	9	9	E	RAMY	5927	
16	ADF	1634E	0044D	N15	E19	02	18.1	1	06	9	9	E	HOLL		
16	ADF	1635E	1952D	N14	E19	02	18.1	1	06	9	9	E	RAMY		
16	ADF	1644E	2132D	S25	E55	02	20.9	1	08	9	9	E	RAMY		
16	SSB	1703		176	W01	02	22.4			0	0	E	RAMY		208 W33 222 W47
16	AFS	1739E	0013D	N08	W64	02	11.9		02	9	9	E	PALE	5930	
16	SDF	1750E	1359D	N39	W01	02	16.7	3	17	0	0	E	RAMY		
17	SDF	0206E	0045D	N50	W30	02	14.5		23	0	0	E	LEAR		
17	ASR	0430E	1052D	S08	E90	02	23.9			9	9	E	LEAR		
17	SDF	0645E	0709D	N37	W18	02	15.8		23	0	0	E	SVTO		
17	APR	0707E	1606D	N31	E90	02	24.4			9	9	E	SVTO		
17	ASR	0707E	1606D	S14	E90	02	24.1			9	9	E	SVTO		
17	AFS	1034E	1606D	S06	E38	02	20.3		02	9	9	E	SVTO		
17	ADF	1347E	1657D	S03	E20	02	19.1	1	16	7	7	E	RAMY	5937	
17	ADF	1348E	2148D	N19	E38	02	20.5	1	10	8	8	E	RAMY	5936	
17	DSD	1358E	2021D	N21	W48	02	13.9		04	9	9	E	RAMY	5927	
17	AFS	1702E	0045D	S12	W35	02	15.1		02	9	9	E	HOLL	5931	

FEBRUARY 1990

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
17	ADF	1702E	2213D	N19	E33	02	20.2	1	03	8	8	E	HOLL	5936	
17	SSB	1704		170	W08	02	22.9			0	0	E	RAMY		177 W15 198 W36
17	SSB	1705		211	W49	02	18.6			0	0	E	RAMY		224 W62 231 W69
17	SSB	1707		252	W90	02	22.6			0	0	E	RAMY		
17	DSD	1727E	1945D	N09	E65	02	22.6		03	8	8	E	HOLL	5940	
17	ADF	1727E	2214D	N13	E71	02	23.1	1	09	9	9	E	HOLL	5940	
17	ASR	1744E	2215D	S14	E90	02	24.5			7	7	E	HOLL		
17	SSB	1747		273	W12	02	23.2			0	0	E	HOLL		
17	SSB	1758		273	W12	02	23.2			0	0	E	HOLL		278 W16 308 W46
17	SSB	1802		331	W69	02	14.9			0	0	E	HOLL		352 W90
17	APR	1833E	0045D	S32	E90	02	24.9	1		9	9	E	HOLL		
17	ASR	1833E	2216D	S35	E90	02	25.0			9	9	E	HOLL		
17	DSD	1925E	0045D	N19	W48	02	14.1		04	9	9	E	HOLL	5927	
17	ADF	1938E	0045D	S17	E15	02	18.9	1	10	9	9	E	HOLL	5937	
17	DSD	1945E	1949D	N17	E71	02	23.2		03	9	9	E	PALE	5940	
17	ASR	1945E	1949D	S18	E89	02	24.6			9	9	E	PALE		
17	BSD	2310E	2316D	S36	E80	02	24.4		06	9	9	E	LEAR		
18	DSD	0009E	0451D	N21	W55	02	13.8		07	9	9	E	LEAR	5927	
18	BSL	0030E	0110D	S33	E90	02	25.2	1				C	VORO		
18	APR	0045	0242D	N38	W90	02	10.7	1				C	VORO		
18	APR	0136	0242D	S29	E90	02	25.1	1				C	VORO		
18	ASR	0447E	1042D	S17	E90	02	25.0			9	9	E	LEAR		
18	ASR	0626E	1042D	N12	W90	02	11.5			9	9	E	LEAR	5930	
18	SDF	0635E	1315D	N20	W01	02	18.2		09	0	0	E	SVTO		
18	ASR	0700E	1533D	S17	E90	02	25.1			9	9	E	SVTO		
18	ADF	0701E	1533D	N15	E63	02	23.1	1	12	9	9	E	SVTO	5940	
18	AFS	0702E	1533D	S09	E38	02	21.1		02	8	8	E	SVTO		
18	ADF	0703E	1533D	S09	E69	02	23.5	1	11	9	9	E	SVTO	5941	
18	ASR	0704E	1533D	S11	E90	02	25.1			9	9	E	SVTO		
18	ASR	0705E	1533D	N12	W90	02	11.5			8	8	E	SVTO	5930	
18	SSB	0706		158	W04	02	22.6			0	0	E	SVTO		178 W24 221 W67
18	SSB	0707		230	W76	02	21.1			0	0	E	SVTO		
18	AFS	0828E	1533D	S37	E10	02	19.1		02	9	9	E	SVTO		
18	ASR	1045E	1056D	N24	E82	02	24.8			9	9	E	SVTO		
18	ASR	1052	1117	N21	W64	02	13.5			9	9	E	SVTO	5927	Flare Associated
18	BSL	1123E	1242D	N22	W57	02	14.1			9	9	E	RAMY	5927	
18	AFS	1228E	1947D	S36	E75	02	24.5		02	9	9	E	RAMY	5942	
18	ASR	1231E	1947D	S18	E90	02	25.4			9	9	E	RAMY		
18	ADF	1236E	1538D	S07	E08	02	19.1	1	03	9	9	E	RAMY	5937	
18	SSB	1250		157	W06	02	22.8			0	0	E	RAMY		174 W22 179 W28
18	SSB	1252		206	W55	02	19.0			0	0	E	RAMY		231 W80
18	ASR	1304E	1947D	N23	W90	02	11.6			9	9	E	RAMY	5945	
18	ASR	1421E	1611D	S16	E87	02	25.2			9	9	E	RAMY	5945	Flare Associated
18	SSB	1847		158	W10	02	23.1			0	0	E	HOLL		173 W25 211 W63
18	SSB	1847		218	W70	02	20.4			0	0	E	HOLL		
18	ADF	1927E	0032D	S28	W33	02	16.2	2	06	9	9	E	HOLL		
18	DSD	1948E	0407D	N13	E61	02	23.4		03	9	8	E	PALE	5940	
18	DSD	1948E	0407D	N15	W54	02	14.7		04	9	8	E	PALE	5927	
18	ADF	1948E	0407D	N20	E17	02	20.1		09	8	7	E	PALE	5936	
18	ADF	1948E	0407D	S04	E66	02	23.7		06	9	7	E	PALE	5941	
18	DSD	1948E	0407D	S08	E31	02	21.1		02	9	8	E	PALE	5944	
18	ADF	1948E	0407D	S15	E07	02	19.3		06	9	9	E	PALE	5937	
18	DSD	1948E	0407D	S33	E71	02	24.5		02	9	9	E	PALE	5942	
18	ASR	1948E	0407D	S34	E90	02	26.0			9	9	E	PALE	5942	
18	ASR	2016E	0407D	S08	E90	02	25.6			9	9	E	PALE	5945	
18	SSB	2031		160	W03	02	23.3			0	0	E	PALE		170 W18
18	ASR	2303E	1048D	S17	E90	02	25.8			9	9	E	LEAR		
19	BSD	0056E	0107D	N25	W67	02	13.8		15	9	9	E	LEAR	5927	
19	BSD	0109E	0113	N21	W66	02	14.0		04	9	9	E	PALE	5927	
19	ADF	0115E	1048D	S10	E00	02	19.0	2	07	9	9	E	LEAR	5937	
19	ASR	0238	0247D	N25	W90	02	12.1			9	9	E	PALE	5927	
19	BSD	0243E	0305D	N24	W68	02	13.8		35	9	9	E	LEAR	5927	
19	BSL	0247E	0305D	N26	W90	02	12.1			9	9	E	PALE	5927	
19	ASR	0305E	0407D	N20	W90	02	12.2			9	9	E	PALE	5927	
19	ASR	0330E	0407D	S02	W90	02	12.4			8	9	E	PALE	5931	
19	AFS	0407E	1048D	S36	E66	02	24.5		03	9	9	E	LEAR	5942	
19	BSD	0600	0623	N25	W73	02	13.6		19	9	9	E	LEAR	5927	
19	ASR	0658E	1543D	S15	W90	02	12.5			9	9	E	SVTO		

ACTIVE PROMINENCES AND FILAMENTS

FEBRUARY 1990

Day	Event Type	Start (UT)	End (UT)	Lat	CMP CMD	Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
19	AFS	0658E	1543D	S35	W65	02	14.1		02	9	9	E	SVTO	5942	
19	DSD	0825E	1543D	N24	W76	02	13.5		10	9	9	E	SVTO	5927	
19	DSD	0843E	0903D	N25	W74	02	13.6		09	9	9	E	LEAR	5927	
19	BSD	1119E	1310D	S14	E75	02	25.1		04	9	9	E	SVTO	5945	
19	APR	1130E	1230D	S48	W90	02	11.9					V	ATHN		
19	DSD	1324E	2137D	S10	E66	02	24.5		02	9	9	E	RAMY	5945	
19	AFS	1324E	2137D	S36	E61	02	24.4		03	9	9	E	RAMY	5942	
19	DSD	1335E	1543D	S08	E68	02	24.7		03	9	9	E	SVTO	5945	
19	ADF	1346E	2137D	N17	E53	02	23.6	1	09	9	9	E	RAMY	5940	
19	AFS	1356E	2137D	N02	E27	02	21.6		02	9	9	E	RAMY	5946	
19	AFS	1517E	0000D	S36	E61	02	24.5		03	9	9	E	HOLL	5942	
19	SSB	1518		147	W10	02	23.2			0	0	E	RAMY		158 W21 171 W34
19	SSB	1519		197	W60	02	28.2			0	0	E	RAMY		227 W90
19	SDF	1529E	1250D	S32	W20	02	18.1		43	0	0	E	RAMY		
19	AFS	1545E	0000D	N02	E27	02	21.7		02	8	8	E	HOLL	5946	
19	AFS	1701E	0000D	S13	W46	02	16.2		02	9	9	E	HOLL		
19	ADF	1708E	0000D	S18	E80	02	25.8	1	04	8	8	E	HOLL	5947	
19	AFS	1712E	0000D	S12	E56	02	23.9		02	8	8	E	HOLL	5941	
19	SSB	1713		133	W00	02	22.2			0	0	E	HOLL		
19	SSB	1714		148	W12	02	23.3			0	0	E	HOLL		159 W23 176 W40
19	SDF	1715E	1400D	S23	W12	02	18.8		24	0	0	E	HOLL		
19	DSD	1730	1800D	S35	E57	02	24.3		12	9	9	E	HOLL	5942	Flare Associated
19	DSD	1734E	1808D	S35	E54	02	24.0		13	9	9	E	RAMY	5942	Flare Associated
19	BSD	1849E	1854	N25	W77	02	13.8		05	8	8	E	HOLL	5927	
19	BSD	1850E	1900	N26	W80	02	13.6		10	9	9	E	RAMY	5927	Flare Associated
19	BSL	1854	1414	N25	W90	02	12.8			9	8	E	HOLL	5927	
19	BSL	1855	1945D	N26	W80	02	13.6			9	9	E	RAMY	5927	Flare Associated
19	DSD	1910E	2053D	S35	E56	02	24.3		17	9	9	E	HOLL	5942	
19	BSD	1913E	2053D	N24	W75	02	14.0		05	9	8	E	HOLL	5927	
19	ASR	2016E	0221D	N17	W90	02	13.0			9	9	E	PALE	5927	
19	ASR	2016E	0353D	N37	W90	02	12.6			9	9	E	PALE	5929	
19	AFS	2040E	0353D	N05	E23	02	21.6		02	9	9	E	PALE	5946	
19	ADF	2040E	0353D	N18	E05	02	20.2		09	9	9	E	PALE	5936	
19	DSD	2040E	0353D	S11	W08	02	19.2		02	9	9	E	PALE	5937	
19	ADF	2040E	0353D	S16	W65	02	14.9		07	9	8	E	PALE	5931	
19	DSD	2040E	0353D	S33	E60	02	24.6		04	9	9	E	PALE	5942	
19	SDF	2046E	2046D	S45	W20	02	18.2		34	0	0	E	PALE		
20	ASR	0022E	0350D	S18	E73	02	25.6			9	9	E	LEAR	5947	
20	AFS	0115E	1045D	N02	E20	02	21.5		03	9	9	E	LEAR	5946	
20	AFS	0228E	1045D	S36	E52	02	24.3		04	9	9	E	LEAR	5942	
20	ASR	0503E	1045D	N24	W90	02	13.2			9	9	E	LEAR	5927	
20	AFS	1140E	1521D	N03	E14	02	21.5		01	7	9	E	SVTO	5946	
20	AFS	1140E	1521D	S36	E51	02	24.6		03	9	9	E	SVTO	5942	
20	ASR	1148E	1521D	N19	W90	02	13.6			9	9	E	SVTO	5927	
20	ASR	1230E	2159D	N20	W90	02	13.6			9	9	E	RAMY	5927	
20	ADF	1250E	1600D	S12	E44	02	23.8	1	04	9	9	E	RAMY	5941	
20	AFS	1250E	2159D	N02	E14	02	21.6		03	9	9	E	RAMY	5946	
20	AFS	1250E	2159D	S18	E66	02	25.6		03	9	9	E	RAMY	5947	
20	AFS	1250E	2159D	S36	E49	02	24.5		03	9	9	E	RAMY	5942	
20	AFS	1250E	2159D	S36	W19	02	19.0		02	8	6	E	RAMY	5943	
20	DSD	1348E	1837D	N16	E74	02	26.2		05	9	9	E	RAMY	5948	
20	APR	1400E	1521D	N23	E90	02	27.5	2		9	9	E	SVTO		
20	DSD	1420E	2159D	S37	E49	02	24.5		03	9	9	E	RAMY	5942	
20	AFS	1502E	0047D	N02	E12	02	21.5		03	9	9	E	HOLL	5946	
20	DSD	1502E	0047D	S16	E63	02	25.4		07	9	9	E	HOLL	5947	
20	ASR	1502E	0047D	S17	W90	02	13.8			9	9	E	HOLL	5927	
20	AFS	1502E	0047D	S36	E48	02	24.5		04	9	9	E	HOLL	5942	
20	ASR	1502E	2140D	S10	E90	02	27.4			9	9	E	HOLL		
20	ASR	1510E	1833D	S12	E90	02	27.4			9	9	E	RAMY		
20	EPL	1510E	1521D	S10	E90	02	27.4	2		9	9	E	SVTO		
20	DSD	1527E	1834D	S16	E63	02	25.4		05	9	9	E	RAMY	5947	Flare Associated
20	SDF	1543E	1307D	S30	W12	02	19.7		60	0	0	E	SVTO		
20	APR	1813E	0047D	N09	E90	02	27.5	1		9	9	E	HOLL	5948	
20	SSB	1820		158	W36	02	25.4			0	0	E	PALE		
20	ADF	1820E	0200D	N20	W06	02	20.3	1	07	9	9	E	PALE	5936	
20	DSD	1820E	0408D	N14	E68	02	25.9		03	9	9	E	PALE	5948	
20	AFS	1820E	0408D	N17	E72	02	26.2		03	9	9	E	PALE	5948	
20	ADF	1820E	0408D	S05	W23	02	19.0	1	09	9	9	E	PALE	5937	
20	ASR	1820E	0408D	S09	E89	02	27.4			9	9	E	PALE		

FEBRUARY 1990

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
20	DSD	1820E	0408D	S16	E61	02	25.4		04	9	9	E	PALE	5947	
20	ADF	1820E	0408D	S16	E64	02	25.6		06	9	9	E	PALE	5947	
20	DSD	1820E	0408D	S33	E42	02	24.1		03	9	9	E	PALE	5942	
20	AFS	1820E	0408D	S36	E48	02	24.6		03	9	9	E	PALE	5942	
20	DSD	1820E	0408D	S37	E46	02	24.5		03	9	9	E	PALE	5942	
20	SSB	1825		160	W37	02	25.6			0	0	E	HOLL		
20	SDF	1834E	1834D	S28	W16	02	19.5		24	0	0	E	PALE		
20	AFS	1837E	2159D	N16	E71	02	26.2		03	9	9	E	RAMY	5948	
20	AFS	2124E	0047D	N17	E70	02	26.2		03	9	9	E	HOLL	5948	
20	AFS	2330E	1040D	S36	E45	02	24.6		03	9	9	E	LEAR	5942	
20	AFS	2331E	1040D	N01	E08	02	21.6		02	9	9	E	LEAR	5946	
20	AFS	2331E	1040D	N02	E07	02	21.5		04	9	9	E	LEAR	5946	
20	AFS	2332E	1040D	N17	E68	02	26.1		02	9	9	E	LEAR	5948	
21	AFS	0006E	0408D	N02	E06	02	21.4		03	9	9	E	PALE	5946	
21	DSD	0006E	0408D	N04	E08	02	21.6		04	9	9	E	PALE	5946	
21	ASR	0135E	0408D	N16	W90	02	14.2			9	9	E	PALE	5927	
21	ASR	0421E	0432	N15	W90	02	14.4			9	9	E	LEAR	5927	
21	BSL	0432	0448	N15	W90	02	14.4			9	9	E	LEAR	5927	
21	ASR	0448E	1040D	N15	W90	02	14.4			9	9	E	LEAR	5927	
21	ASR	0515E	0820D	N23	E90	02	28.1			9	9	E	LEAR	5948	
21	ASR	0830E	1040D	S10	E90	02	28.1			9	9	E	LEAR		
21	AFS	0850E	1527D	N02	E03	02	21.6		03	9	9	E	SVTO	5946	
21	ADF	0851E	1527D	N19	E66	02	26.4	1	22	9	9	E	SVTO	5948	
21	APR	1313E	1524D	N27	E68	02	26.8	2		9	9	E	SVTO		
21	ASR	1434E	1940D	N16	W90	02	14.8			9	9	E	HOLL	5927	
21	AFS	1435E	1611D	N01	W01	02	21.5		03	9	9	E	RAMY	5946	
21	ADF	1435E	1611D	S19	E54	02	25.7	1	04	9	9	E	RAMY	5947	
21	EPL	1513E	1619D	N22	E90	02	28.5			9	9	E	HOLL		
21	SDF	1527E	0809D	S50	W13	02	20.5		61	0	0	E	SVTO		
21	AFS	1540E	0038D	N02	W02	02	21.5		03	9	9	E	HOLL	5946	
21	ADF	1540E	1947D	N00	W02	02	21.5		04	9	9	E	HOLL	5946	
21	AFS	1613E	0038D	S38	E37	02	24.7		02	9	9	E	HOLL	5942	
21	AFS	1627E	0038D	S03	E11	02	22.5		02	9	9	E	HOLL		
21	AFS	1635E	0038D	S08	W19	02	20.3		02	9	9	E	HOLL		
21	SDF	1635E	1359D	S34	E10	02	22.5		12	0	0	E	HOLL		
21	AFS	1645E	0038D	N17	E60	02	26.2		04	9	9	E	HOLL	5948	
21	DSD	1645E	1944D	S13	E40	02	24.7		02	9	9	E	HOLL	5945	
21	AFS	2040E	0410D	N03	W06	02	21.4		02	9	9	E	PALE	5946	
21	AFS	2040E	0410D	S18	W53	02	17.8		02	9	9	E	PALE	5947	
21	AFS	2327E	1048D	N02	W07	02	21.4		02	9	9	E	LEAR	5946	
21	DSD	2328E	0544D	S16	E45	02	25.4		04	9	9	E	LEAR	5947	
21	AFS	2329E	1048D	S39	E34	02	24.7		02	9	9	E	LEAR	5942	
21	AFS	2330E	1048D	N16	E55	02	26.1		03	9	9	E	LEAR	5948	
22	AFS	0322E	0410D	N15	E52	02	26.1		03	9	9	E	PALE	5948	
22	AFS	0505E	1048D	N17	E03	02	22.4		02	9	9	E	LEAR	5950	
22	AFS	0920E	1559D	S04	E02	02	22.5		02	9	9	E	SVTO	5952	
22	AFS	0921E	1559D	N02	W11	02	21.6		02	7	8	E	SVTO	5946	
22	ASR	0922E	1559D	S19	E90	03	1.2			9	9	E	SVTO		
22	AFS	0923E	1559D	N17	E49	02	26.1		03	9	9	E	SVTO	5948	
22	ADF	0924E	1559D	S14	E46	02	25.9	1	06	9	9	E	SVTO	5947	
22	SSB	0926		100	W19	02	22.4			0	0	E	SVTO		100 W64
22	AFS	1359E	2110D	S05	E00	02	22.6		02	9	9	E	RAMY	5952	
22	AFS	1406E	2110D	N17	E47	02	26.1		03	9	9	E	RAMY	5948	
22	ADF	1406E	2110D	N18	E59	02	27.1	1	10	9	9	E	RAMY	5948	
22	ADF	1435E	1740D	S08	E37	02	25.4	1	07	9	9	E	RAMY	5947	
22	DSD	1504E	1918D	S37	E25	02	24.6		03	9	9	E	RAMY	5942	
22	DSD	1515E	0015D	S34	E18	02	24.1		03	9	9	E	HOLL	5942	
22	AFS	1520E	0048D	S37	E26	02	24.7		04	9	9	E	HOLL	5942	
22	AFS	1524E	0018D	S05	W01	02	22.6		03	9	9	E	HOLL	5952	
22	ADF	1524E	1938D	N15	E19	02	24.1	1	20	9	9	E	RAMY		
22	SSB	1532		101	W04	02	22.7			0	0	E	HOLL		117 W20 162 W65
22	AFS	1741E	2110D	S19	E39	02	25.7		03	9	9	E	RAMY	5947	
22	AFS	1802E	0048D	N17	E45	02	26.2		04	9	9	E	HOLL	5948	
22	ASR	1824E	0048D	S19	E90	03	1.6			9	9	E	HOLL		
22	DSD	1918E	2110D	S13	E25	02	24.7		02	9	9	E	RAMY	5945	
22	SSB	2010		112	W17	02	23.7			0	0	E	RAMY		129 W35 159 W65
22	AFS	2032E	0417D	S36	E22	02	24.6		01	8	8	E	PALE	5942	
22	AFS	2033E	0417D	S03	W01	02	22.8		01	8	8	E	PALE	5952	

ACTIVE PROMINENCES AND FILAMENTS

FEBRUARY 1990

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
22	AFS	2034E	0417D	S10	E63	02	27.6		02	9	9	E	PALE	5953	
22	DSD	2054E	0020D	S09	E67	02	27.9		06	9	9	E	HOLL	5953	Flare Associated
22	DSD	2106E	0048D	N12	E42	02	26.0		03	9	9	E	HOLL	5948	Flare Associated
22	ADF	2107E	0048D	N04	W21	02	21.3	1	08	9	9	E	HOLL	5946	
22	AFS	2335E	1047D	N15	E41	02	26.1		06	9	9	E	LEAR	5948	
23	AFS	0711E	1047D	N17	W11	02	22.5		02	9	9	E	LEAR	5950	
23	AFS	0717E	1608D	N16	W11	02	22.5		02	9	9	E	SVTO	5950	
23	AFS	0840E	1047D	S04	W11	02	22.5		02	8	9	E	LEAR	5952	
23	SSB	0955		104	W17	02	23.7			0	0	E	LEAR		108 W21
23	DSD	1110E	1115D	N15	E33	02	26.0	1				V	KHAR		
23	DSD	1123E	2143D	N13	E29	02	25.7		04	9	9	E	RAMY	5948	
23	AFS	1123E	2143D	N16	E35	02	26.1		02	9	9	E	RAMY	5948	
23	ADF	1127E	1352	S19	E33	02	26.0	1	07	9	9	E	RAMY	5947	
23	DSD	1130E	1832D	N04	W27	02	21.5		03	7	7	E	RAMY	5946	
23	ADF	1150E	2118D	N18	W03	02	23.3	1	06	9	9	E	RAMY	5950	
23	ADF	1150E	2119D	N20	W41	02	20.3	1	05	9	9	E	RAMY	5951	
23	AFS	1150E	2143D	N17	W13	02	22.5		03	9	9	E	RAMY	5950	
23	DSD	1200E	1220D	N15	E32	02	25.9	1				V	KHAR		
23	ASR	1208E	2143D	N10	E90	03	2.3			9	9	E	RAMY		
23	LPS	1222E	1410D	S18	E23	02	25.3			9	9	E	SVTO	5947	
23	ADF	1235E	1522D	S18	E26	02	25.5	1	04	9	9	E	SVTO	5947	
23	SDF	1253	1352	N19	E33	02	26.0		07	0	0	E	RAMY	5947	Flare Associated
23	LPS	1318E	1432D	S21	E32	02	26.0			9	9	E	RAMY	5947	Flare Associated
23	DSD	1417E	1510D	S19	E26	02	25.6		04	9	9	E	SVTO	5947	
23	AFS	1454E	0048D	N18	E33	02	26.1		02	9	9	E	HOLL	5948	
23	DSD	1515E	0015D	S34	E18	02	25.1		03	9	9	E	HOLL	5942	
23	AFS	1518E	0048D	S05	W15	02	22.5		02	8	5	E	HOLL	5952	
23	AFS	1523E	0048D	S09	E55	02	27.8		02	9	9	E	HOLL	5953	
23	AFS	1524E	0018D	S05	W01	02	23.6		03	9	9	E	HOLL	5952	
23	AFS	1525E	2143D	N20	E09	02	24.3		02	9	9	E	RAMY	5956	
23	MDP	1549E	2243D	N11	E90	03	2.4			9	9	E	HOLL		
23	AFS	1556E	0048D	N20	E08	02	24.3		02	9	9	E	HOLL		
23	DSD	1639	1727D	S10	E54	02	27.7		10	9	9	E	RAMY	5953	Flare Associated
23	SDF	1722E	1457D	S38	W15	02	22.5	3	05	0	0	E	HOLL		
23	DSD	1813E	0309D	N01	W26	02	21.8		01	9	9	E	PALE	5946	
23	DSD	1813E	0309D	N17	W22	02	22.1		03	9	9	E	PALE	5950	
23	DSD	1813E	0309D	N18	E26	02	25.7		04	9	9	E	PALE	5948	
23	DSD	1813E	0309D	N22	E31	02	26.1		03	9	9	E	PALE	5948	
23	AFS	1813E	0309D	N38	E14	02	24.9		03	8	9	E	PALE	5942	
23	DSD	1813E	0309D	S04	W13	02	22.8		04	9	9	E	PALE	5952	
23	AFS	1813E	0309D	S07	E53	02	27.7		05	9	9	E	PALE	5953	
23	DSD	1813E	0309D	S14	E26	02	25.7		03	9	8	E	PALE	5947	
23	DSD	1813E	2304D	N17	E33	02	26.3		03	9	9	E	PALE	5948	
23	ASR	1820E	0309D	N14	E90	03	2.6			9	8	E	PALE		
23	ASR	1820E	0309D	N26	E90	03	2.7			8	8	E	PALE		
23	AFS	1835E	2143D	N03	W30	02	21.5		02	9	9	E	RAMY	5946	
23	ADF	1840E	2143D	S04	W14	02	22.7	1	08	9	9	E	RAMY	5952	
23	SSB	1844		442	W00	02	20.6			0	0	E	RAMY		448 W08 106 W24
23	SSB	1848		113	W31	02	24.8			0	0	E	RAMY		153 W71
23	ADF	2028E	0048D	S04	W16	02	22.6	2	10	9	9	E	HOLL	5952	Flare Associated
23	DSD	2054E	0020D	S09	E67	02	28.9		06	9	9	E	HOLL	5953	Flare Associated
23	AFS	2120E	0048D	N21	E05	02	24.3		02	9	9	E	HOLL	5956	
23	DSD	2157E	0048D	N16	E25	02	25.8		09	9	9	E	HOLL	5948	
23	AFS	2211E	0048D	N17	W19	02	22.5		03	5	7	E	HOLL	5950	
23	SSB	2221		449	W09	02	20.2			0	0	E	HOLL		105 W25 119 W39
23	SSB	2222		158	W78	03	1.3			0	0	E	HOLL		
23	AFS	2320E	1040D	N20	E04	02	24.3		02	7	9	E	LEAR	5956	
24	ADF	0147	0235D	S22	W20	02	22.5	1				C	VORO		
24	APR	0203	0235D	N01	W90	02	17.4	1				C	VORO		
24	APR	0213	0235D	S35	W90	02	16.9	1				C	VORO		
24	DSD	0601E	1040D	N04	W42	02	21.1		08	9	9	E	LEAR	5946	
24	DSD	0702E	1608D	N02	W42	02	21.1		04	9	9	E	SVTO	5946	
24	ADF	0702E	1608D	N16	W13	02	23.3	1	13	9	9	E	SVTO		
24	AFS	0702E	1608D	N17	E23	02	26.0		05	9	9	E	SVTO	5948	
24	AFS	0702E	1608D	S17	E21	02	25.9		04	9	7	E	SVTO	5947	
24	DSD	0945E	1005D	N03	W36	02	21.7	2				V	KHAR		
24	DSD	1015E	1032D	N03	W46	02	21.0	1				V	KHAR		
24	DSD	1115E	1215D	N14	E18	02	25.8		02	9	9	E	RAMY	5948	

FEBRUARY 1990

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
24	AFS	1115E	2204D	N17	E25	02	26.4		04	9	9	E	RAMY	5948	
24	DSD	1121E	1436D	N06	W43	02	21.2		03	9	9	E	RAMY	5946	
24	AFS	1126E	2204D	S10	E43	02	27.7		02	9	9	E	RAMY	5953	
24	DSD	1127E	2032D	S16	E15	02	25.6		02	9	9	E	RAMY	5947	
24	ADF	1129E	2204D	N21	E22	02	26.2	1	06	9	9	E	RAMY	5948	
24	ASR	1130E	1504D	S19	E90	03	3.3			9	9	E	SVTO	5955	
24	AFS	1136E	2032D	S08	W70	02	19.2		02	9	9	E	RAMY	5937	
24	DSD	1209E	1635D	S18	E66	03	1.5		03	9	9	E	RAMY	5955	
24	DSD	1222E	2032D	N03	W47	02	21.0		04	9	9	E	RAMY	5946	
24	DSD	1507E	0049D	N04	W47	02	21.1		02	9	9	E	HOLL	5946	
24	AFS	1507E	2045D	N02	W43	02	21.4		02	7	7	E	HOLL	5946	
24	SSB	1527		427	W00	02	22.6			0	0	E	HOLL		
24	SSB	1527		450	W19	02	20.8			0	0	E	HOLL		114 W43 161 W90
24	AFS	1555E	0049D	N18	E19	02	26.1		04	7	7	E	HOLL	5948	
24	DSD	1555E	0049D	N19	E23	02	26.4		02	9	9	E	HOLL	5948	Flare Associated
24	AFS	1615E	0049D	S11	E37	02	27.5		02	7	7	E	HOLL	5953	
24	AFS	1615E	2251D	N20	W05	02	24.3		02	7	7	E	HOLL	5956	
24	AFS	1626E	2032D	S19	E65	03	1.6		03	9	9	E	RAMY	5955	
24	DSD	1626E	2032D	S20	E18	02	26.1		04	9	9	E	RAMY	5947	
24	DSD	1748E	2032D	N14	E18	02	26.1		03	9	9	E	RAMY	5948	
24	ASR	2035E	0049D	S24	E90	03	3.8			9	9	E	HOLL		
24	ADF	2035E	2250D	S24	E67	03	2.0	1	07	9	9	E	HOLL	5955	
24	AFS	2042E	0049D	S24	E25	02	26.8		02	9	9	E	HOLL	5957	
24	ASR	2045E	0049D	N30	E86	03	3.6			9	7	E	HOLL		
24	AFS	2221E	0049D	S03	W32	02	22.5		03	9	9	E	HOLL	5952	
25	AFS	0002E	1045D	S24	E23	02	26.8		03	9	9	E	LEAR	5957	
25	ASR	0032E	0529D	N29	E90	03	4.1			9	9	E	LEAR	5959	
25	ADF	0356E	1045D	N17	E12	02	26.1	1	04	9	9	E	LEAR	5948	
25	ADF	0623E	1045D	N04	W46	02	21.8	1	09	9	9	E	LEAR	5946	
25	AFS	0730E	1515D	N22	W12	02	24.4		01	7	7	E	SVTO	5956	
25	AFS	0730E	1515D	S10	E29	02	27.5		02	7	7	E	SVTO	5953	
25	AFS	0730E	1610D	N18	E12	02	26.2		02	6	6	E	SVTO	5948	
25	AFS	0730E	1610D	S03	W38	02	22.5		01	9	9	E	SVTO	5952	
25	AFS	0730E	1610D	S17	E07	02	25.8		02	7	8	E	SVTO	5947	
25	AFS	0730E	1610D	S23	E20	02	26.8		01	9	9	E	SVTO	5957	
25	AFS	0812E	1045D	S09	E27	02	27.4		02	8	9	E	LEAR	5953	
25	AFS	0818E	1045D	S03	W39	02	22.4		02	9	9	E	LEAR	5952	
25	AFS	0823E	1045D	N21	W13	02	24.3		02	9	9	E	LEAR	5956	
25	DSD	0835E	0855D	N05	W54	02	21.3	1				V	KHAR		
25	DSD	1012E	1040D	N03	W57	02	21.2	1				V	KHAR		
25	BSL	1058E	1135D	S11	W90	02	18.7	1				V	KHAR		
25	APR	1130E	1146D	S09	W90	02	18.7	2		9	9	E	SVTO		
25	ASR	1150E	1515D	S08	W90	02	18.7			9	8	E	SVTO	5937	
25	AFS	1204E	2120D	S24	E16	02	26.7		02	9	9	E	RAMY	5957	
25	AFS	1304E	2120D	N10	E60	03	2.0		03	9	9	E	RAMY	5960	
25	AFS	1305E	2120D	N17	E08	02	26.1		04	9	9	E	RAMY	5948	
25	DSD	1312E	2120D	N04	W62	02	20.9		04	9	9	E	RAMY	5946	
25	AFS	1313E	2120D	S04	W42	02	22.4		02	9	9	E	RAMY	5952	
25	ADF	1313E	2120D	S05	W38	02	22.7	1	11	9	9	E	RAMY	5952	
25	ADF	1349E	1850D	S10	W26	02	23.6	1	03	9	9	E	RAMY	5941	
25	SSB	1352		433	W15	02	23.1			0	0	E	RAMY		104 W45 114 W55
25	ADF	1425E	1827D	S16	W60	02	21.0	2	10	9	9	E	HOLL	5944	
25	ADF	1440E	0041D	S09	W04	02	25.3	1	12	9	9	E	HOLL	5945	
25	ADF	1445E	1830D	N05	W59	02	21.2	1	09	9	9	E	HOLL	5946	
25	DSD	1459E	1832D	N13	E00	02	25.6		02	9	9	E	HOLL	5948	
25	SSB	1725		114	W58	02	26.9			0	0	E	HOLL		117 W61
25	SSB	1725		127	W71	02	28.2			0	0	E	HOLL		
25	SSB	1725		419	W03	02	24.3			0	0	E	HOLL		432 W16
25	SSB	1725		441	W25	02	22.5			0	0	E	HOLL		104 W48
25	ASR	1824E	1935D	S08	W90	02	19.0			9	9	E	HOLL	5937	
26	ADF	0053	0300D	S18	E25	02	27.9	1				C	VORO		
26	BSL	0114	0126	S15	W90	02	19.2	1				C	VORO		
26	APR	0116	0300D	S27	W90	02	19.0	1				C	VORO		
26	BSL	0138	0216	S15	W90	02	19.2	1				C	VORO		
26	APR	0140	0300D	S25	E90	03	5.0	1				C	VORO		
26	ASR	0204E	0545D	S18	W86	02	19.5			9	9	E	LEAR	5954	
26	AFS	0206E	1045D	N11	E55	03	2.2		03	9	9	E	LEAR	5960	
26	DSD	0440E	0532D	S19	W01	02	26.1		09	9	9	E	LEAR	5947	

ACTIVE PROMINENCES AND FILAMENTS

FEBRUARY 1990

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
26	BSD	0638E	0737D	N29	E73	03	4.0		06	9	9	E	LEAR		
26	APR	0645E	0658D	S01	W90	02	19.5	1				C	ABST		
26	AFS	0709E	1558D	N12	E52	03	2.2		02	9	9	E	SVTO	5960	
26	AFS	0710E	1558D	S37	W72	02	20.5		02	9	9	E	SVTO		
26	ADF	0711E	1558D	S09	W14	02	25.2	1	11	9	9	E	SVTO	5948	
26	BSD	0830E	0929D	N29	E71	03	3.9		02	9	9	E	LEAR		
26	ADF	0900E	1045D	S12	W04	02	26.1	2	06	9	9	E	LEAR	5947	Flare Associated
26	SDF	0920E	2247D	N30	E23	02	28.2	3	08	0	0	E	LEAR		
26	DSD	0921E	0940D	S04	W85	02	20.0	2				V	KHAR		
26	BSL	0930E	1005D	S05	W90	02	19.7	1				V	KHAR		
26	SSB	1158		114	W68	02	27.8			0	0	E	RAMY		
26	SSB	1158		413	W07	02	25.5			0	0	E	RAMY		431 W25 101 W55
26	ADF	1158E	2153D	N06	W68	02	21.4	1	04	9	9	E	RAMY	5946	
26	AFS	1158E	2153D	N10	E48	03	2.1		03	9	9	E	RAMY	5960	
26	DSD	1158E	2153D	N27	E67	03	3.7		03	9	9	E	RAMY		
26	ADF	1158E	2153D	S02	W66	02	21.6	1	04	9	9	E	RAMY	5952	
26	DSD	1158E	2153D	S20	W06	02	26.0		03	9	9	E	RAMY	5947	
26	DSD	1319E	2130D	S11	E11	02	27.4		04	9	9	E	RAMY	5953	
26	ADF	1414E	2153D	N19	W32	02	24.1	1	05	9	9	E	RAMY	5956	
26	AFS	1420E	2153D	N20	W29	02	24.4		02	9	9	E	RAMY	5956	
26	DSD	1818E	1838D	S18	W14	02	25.7		02	9	9	E	PALE	5947	
26	AFS	1819E	1838D	N11	E46	03	2.2		02	9	9	E	PALE	5960	
26	AFS	1819E	1838D	N22	W31	02	24.4		02	9	9	E	PALE	5956	
26	DSD	1820E	1838D	N28	E71	03	4.3		03	9	9	E	PALE	5961	
26	ADF	1830E	2313D	S20	W14	02	25.7	1	05	9	9	E	HOLL	5947	
26	AFS	1920E	2313D	N11	E46	03	2.3		02	9	9	E	HOLL	5960	
26	AFS	1922E	2313D	N20	W31	02	24.4		02	8	8	E	HOLL	5956	
26	AFS	1924E	2313D	S20	W10	02	26.0		03	9	9	E	HOLL	5947	
26	AFS	1926E	2313D	N09	E10	02	27.6		02	9	9	E	HOLL		
26	DSD	1927E	2313D	N28	E69	03	4.2		04	9	9	E	HOLL	5961	
26	AFS	1927E	2313D	N30	E69	03	4.2		03	9	9	E	HOLL	5961	
26	AFS	2330E	0952D	S19	W14	02	25.9		02	9	9	E	LEAR	5947	
26	ADF	2331E	0952D	S18	E35	03	1.6	1	03	9	9	E	LEAR	5955	
26	AFS	2333E	0952D	N11	E43	03	2.2		02	9	9	E	LEAR	5960	
26	ADF	2334E	0952D	N27	E69	03	4.3	1	07	9	6	E	LEAR	5961	
26	APR	2354	0300D	S25	E90	03	6.0	1				C	VORO		
26	ADF	2356	0219	N24	W04	02	26.7	1				C	VORO		
27	ADF	0046	0300D	S15	E13	02	28.0	1				C	VORO		
27	APR	0144	0300D	S26	W90	02	20.1	1				C	VORO		
27	DSD	0441	0449	N26	E70	03	4.6		17	9	9	E	LEAR	5961	
27	DSD	0513E	0952D	N28	E62	03	4.1		06	9	9	E	LEAR	5961	
27	BSL	0705E	0806D	N52	W90	02	19.6	1				C	ABST		
27	AFS	0715E	1614D	S19	W16	02	26.1		02	9	9	E	SVTO	5947	
27	DSD	0802E	0815D	S25	W77	02	21.4	1				V	KHAR		
27	DSD	0847E	0915D	S04	W75	02	21.7	1				V	KHAR		
27	DSD	0905E	0923D	S25	W77	02	21.4	1				V	KHAR		
27	SDF	0924E	2247D	N30	E23	03	1.2	3	08	0	0	E	LEAR		
27	AFS	0936E	1614D	N12	E37	03	2.2		02	9	9	E	SVTO	5960	
27	ADF	0940E	1614D	N32	E54	03	3.7	1	06	9	9	E	SVTO	5961	
27	DSD	0946E	1010D	S25	W78	02	21.4	1				V	KHAR		
27	APR	0955E	1030D	S27	W90	02	20.4	1				V	KHAR		
27	DSD	1005E	1614D	N29	E60	03	4.1		07	9	9	E	SVTO	5961	
27	DSD	1012E	1023D	N32	E64	03	4.5	1				V	KHAR		
27	DSD	1030E	1055D	N32	E63	03	4.4	1				V	KHAR		
27	ASR	1220E	2138D	N04	W80	02	21.5			9	9	E	RAMY	5946	
27	AFS	1252E	1614D	N22	W17	02	26.2		02	7	7	E	SVTO	5948	
27	ADF	1300E	2138D	S13	W24	02	25.7	1	09	9	9	E	RAMY	5947	
27	DSD	1300E	2138D	S21	W20	02	26.0		03	9	9	E	RAMY	5947	
27	DSD	1314E	2138D	N26	E56	03	3.9		08	9	9	E	RAMY	5961	
27	AFS	1314E	2138D	N28	E54	03	3.8		02	9	9	E	RAMY	5961	
27	ASR	1335E	1614D	N04	W90	02	20.8			9	9	E	SVTO	5946	
27	AFS	1342E	2138D	N10	E34	03	2.1		02	9	9	E	RAMY	5960	
27	SSB	1510		398	W07	02	20.3			0	0	E	RAMY		
27	DSD	1520E	2026D	N27	E57	03	4.1		10	9	9	E	HOLL	5961	Flare Associated
27	ADF	1540E	2026D	S19	E26	03	1.6	1	08	9	9	E	HOLL	5955	
27	SSB	1547		399	W08	02	20.2			0	0	E	HOLL		446 W55
27	ADF	1759E	2138D	N27	E41	03	2.9	1	09	9	9	E	RAMY	5959	
27	ADF	2331E	0404D	N17	W10	02	27.2	1	03	9	9	E	LEAR	5948	

ACTIVE PROMINENCES AND FILAMENTS

FEBRUARY 1990

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
28	BSL	0002	0033	S01	W90	02	21.3	1				C	VORO		
28	ADF	0002	0125	S07	E28	03	2.1	1				C	VORO		
28	APR	0012	0125D	S10	E90	03	6.8	1				C	VORO		
28	BSL	0022	0046	N04	W90	02	21.3	1				C	VORO		
28	BSL	0046	0056	S01	W90	02	21.3	1				C	VORO		
28	BSL	0105	0125	S01	W90	02	21.3	1				C	VORO		
28	BSL	0115	0125	N04	W90	02	21.3	1				C	VORO		
28	DSD	0245E	0427D	S19	W25	02	26.2		11	9	9	E	LEAR	5947	
28	ADF	0417E	1038D	N33	E49	03	4.1	1	04	9	9	E	LEAR	5961	
28	BSL	0528E	0600D	S34	W90	02	21.0	1				C	ABST		
28	BSD	0529E	1038D	N27	E51	03	4.2		05	9	9	E	LEAR	5961	
28	AFS	0531E	1038D	S19	W32	02	25.8		02	9	9	E	LEAR	5947	
28	SSB	0810		413	W31	02	27.3			0	0	E	SVTO		
28	DSD	0820E	0840D	N28	E49	03	4.2		05	9	9	E	SVTO	5961	
28	DSD	0820E	0840D	N31	E52	03	4.4		04	9	9	E	SVTO	5961	
28	DSD	0836	0855	S20	W28	02	26.2		05	9	9	E	SVTO	5947	
28	DSD	0840	0901	S15	W39	02	25.4		03	9	9	E	SVTO	5947	
28	AFS	0900E	1620D	S38	W45	02	24.7		02	8	8	E	SVTO	5942	
28	ASR	0945E	1620D	S26	W90	02	21.4			9	9	E	SVTO	5962	
28	LPS	1103E	1236D	N33	E46	03	4.1			9	9	E	SVTO	5961	Flare Associated
28	DSD	1157E	1631D	N27	E40	03	3.6		04	9	9	E	RAMY	5961	
28	LPS	1157E	2157D	N30	E46	03	4.1			9	9	E	RAMY	5961	
28	ASR	1320E	2157D	S02	W90	02	21.8			9	9	E	RAMY	5952	
28	AFS	1326E	2157D	N10	E22	03	2.2		03	9	9	E	RAMY	5960	
28	LPS	1328	1358D	N32	E43	03	4.0			9	9	E	SVTO	5961	Flare Associated
28	ADF	1329E	1933D	N27	E32	03	3.0	1	11	9	9	E	RAMY	5959	
28	DSD	1341E	1520D	S21	W32	02	26.1		08	9	9	E	SVTO	5947	Flare Associated
28	DSD	1345	1606D	S20	E32	03	3.0		07	9	9	E	RAMY	5947	Flare Associated
28	ASR	1410E	1515D	N15	W90	02	21.8			9	9	E	SVTO	5950	
28	ASR	1538E	1948D	N25	E90	03	7.6			9	9	E	RAMY		
28	ADF	1605E	1938D	N24	W32	02	26.2	1	06	9	9	E	RAMY	5957	
28	SSB	1805		411	W35	02	27.9			0	0	E	RAMY		431 W55 446 W70
28	DSD	1932E	2157D	S24	E31	03	3.2		03	9	9	E	RAMY	5958	
28	DSD	1938E	2157D	S19	W37	02	26.0		04	9	9	E	RAMY	5947	
28	AFS	1942E	2157D	S36	W53	02	24.6		03	9	9	E	RAMY	5942	

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

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

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

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

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

WORLD DATA CENTER A
FOR
SOLAR-TERRESTRIAL PHYSICS

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

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