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Data for March 1989

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Michael A. Chinnery, Director
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S O L A R - G E O P H Y S I C A L D A T A

NUMBER 541

(Issued in Two Parts)

Editor: Helen E. Coffey

Chief: Joe H. Allen
Solar-Terrestrial Physics Division

Staff: Daniel C. Wilkinson
Carol Weathers
John A. McKinnon

C O N T E N T S

PART I (PROMPT REPORTS)

PART II (COMPREHENSIVE REPORTS)

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

CODE	KIND OF OBSERVATION	JAN 89	FEB	MAR	APR	MAY	JUN	JUL	AUG
A.	SOLAR AND INTERPLANETARY EVENTS								
A.1	Sunspot Drawings	535A 48	536A 61	537A 43	538A 55	539A 63	540A 44	541A 57	
A.2aa	Internat. Provisional Sunspot Numbers	534A 13	535A 13	536A 13	537A 11	538A 13	539A 15	540A 13	541A 13
A.2c	American Sunspot Numbers	534A 13	535A 13	536A 13	537A 11	538A 13	539A 15	540A 13	541A 13
A.3a	Mt. Wilson Magnetograms	535A 48	536A 61	537A 43	538A 55	539A 63	540A 44	541A 57	
A.3b	Mt. Wilson Sunspot Magnetic Class	535A 79	536A 89	537A 74	538A 85	539A 94	540A 74	541A 88	
A.3c	Kitt Peak Magnetograms	535A 48	536A 61	537A 43	538A 55	539A 63	540A 44	541A 57	
A.3d	Mean Solar Magnetic Field (Stanford)	534A 41	535A 37	536A 51	537A 33	538A 44	539A 50	540A 33	541A 45
A.3e	Stanford Magnetograms	535A 48	536A 61	537A 43	538A 55	539A 63	540A 44	541A 57	
A.4	H-alpha Filtergrams	535A 48	536A 61	537A 43	538A 55	539A 63	540A 44	541A 57	
A.6	H-alpha Synoptic Charts	537A142	537A144	538A138	538A 46	539A 54	540A 36	541A 48	
A.6b	Active Region Carte Synoptique (Paris)	Nov 88 in 539B110; Dec 88 in 541B176							
A.6c	Stanford Solar Mag Field Synoptic Maps	535A 42	536A 55	537A 37	538A 48	539A 56	540A 38	541A 50	
A.6d	Kitt Peak " Mag Field Synoptic Maps	535A 41	536A 60	537A 42	538A 47	539A 62	540A 37	541A 56	
A.6e	Mass Ejections from the Sun	539B 93	540B 75	541B158					
A.6f	Active Prominences and Filaments	539B 94	540B 76	541B160					
A.6g	Sac Peak Coronal Line Synoptic Maps	535A 44	536A 56	537A 38	538A 50	539A 58	540A 40	541A 52	
A.7h	Coronal Line Emission (Sac Peak)	535A 48	536A 61	537A 43	538A 55	539A 63	540A 44	541A 57	
A.8aa	2800 MHz - Solar Flux (Ottawa)	534A 13	535A 13	536A 13	537A 11	538A 13	539A 15	540A 13	541A 13
A.8ac	2800 MHz - Adj. Solar Flux (Ottawa)	534A 13	535A 13	536A 13	537A 11	538A 13	539A 15	540A 13	541A 13
A.8g	Adjusted Daily Solar Fluxes (Sagamore)	534A 13	535A 13	536A 13	537A 11	538A 13	539A 15	540A 13	541A 13
A.10a	Interferometric Chart (164 MHz) Nancay	534A 34	535A 31	536A 35	538A140	539A156	539A 39		541A 34
A.10c	East-West Scans - 21 cm - Fleurs	534A 33	535A 29	536A 33	537A 27	538A 33	539A 38	540A 28	541A 32
A.10d	East-West Scans - 43 cm - Fleurs	534A 33	535A 30	536A 34	537A 28	538A 34	539A 38	540A 29	541A 33
A.10e	East-West Scans - 10 cm - Ottawa	534A 32	535A 28	536A 32	537A 26	538A 32	539A 37	540A 27	541A 31
A.10f	East-West Scans - 3 cm - Toyokawa	534A 31	535A 27	536A 31	537A 25	538A 31	539A 36	540A 26	541A 30
A.11g	Solar X-ray GOES (graphs/event table)	539B 83	540B 67	541B148					
A.11k	Solar UV NOAA-9	May 86-Dec 87 in 541B178							
A.12e	Solar Particles (IMP H & J)	Sep 85-May 86 in 525B 60; Jul 86-Aug 87 in 539B112							
A.13e	Solar Plasma (IMP H & J)	538B 99	540B 67	541B147					
A.13f	Solar Wind (Pioneer 12)	Jan-Dec 88 in 536A153							
A.16a	SMM Solar Irradiance	Feb 80-Oct 87 in 530B 64							
A.16b	NIMBUS Solar Irradiance	Nov 78-Feb 87 in 523B 49							
A.16c	ERBS Solar Irradiance	1984-88 in 538B101							
A.17	Interplanetary Mag Field (Pioneer 12)	Jan-Jun 88 in 533A130; Jul 88 in 536A152							
A.17c	Inferred Interplanetary Mag Field	Mar 88 in 524A 40							
B.	IONOSPHERIC RADIO PROPAGATION								
B.52	Field Strength Graphs-North Atlantic	535A128	536A142	537A138	538A134				
B.53	Quality Indices on Paths to Germany	535A130	536A144	537A140	538A136				
C.	SOLAR FLARE-ASSOCIATED EVENTS								
C.1a	H-alpha Flares	534A 16	535A 16	536A 16	537A 15	538A 16	539A 18	540A 16	541A 17
C.1ba	H-alpha Flare Groups	539B 4	540B 4	541B 4					
C.1d	Flare Patrol Observations	534A 30	535A 26	536A 30	537A 24	538A 30	539A 35	540A 25	541A 29
C.1d	Flare Patrol Observations	539B 38	540B 32	541B 41					
C.3	Radio Bursts Fixed Freq.	539B 40	540B 34	541B 43					
C.3	Radio Bursts Fixed Freq. Selected	534A 35	535A 32	536A 36	537A 30	538A 36	539A 40	540A 31	541A 35
C.4d	Radio Bursts Spectral (Culgoora)	Dec 88 in 534A129							
C.4e	Radio Bursts Spectral (Weissenau)	535A111	536A124	537A111	538A116	539A135	540A122	541A122	
C.4f	Radio Bursts Spectral (Sagamore Hill)	535A111	536A124	537A111	538A116	539A135	540A122	541A122	
C.4i	Radio Bursts Spectral (Bleien)	---	---	---	---	---	---	541A122	
C.4k	Radio Bursts Spectral (Learmonth)	535A111	536A124	537A111	538A116	539A135	540A122	541A122	
C.4l	Radio Bursts Spectral (Palehua)	535A111	536A124	537A111	538A116	539A135	540A122	541A122	
C.6	Sudden Ionospheric Disturbances	535A104	536A117	537A102	538A111	539A129	540A114	541A118	
D.	GEOMAGNETIC & MAGNETOSPHERIC EVENTS								
D.1a	Geomagnetic Indices	535A122	536A137	537A132	538A129	539A150	540A144	541A137	
D.1ba	27-day Chart of Kp Indices	535A124	536A139	537A134	538A131	539A152	540A146	541A139	
D.1cb	Monthly Mean aa Indices	535A125	536A140	537A135	538A132	539A153	540A147	541A140	
D.1d	Principal Magnetic Storms	535A126	536A141	537A136	538A133	539A154	540A148	541A141	
D.1f	Sudden Commencements/Flare Effects	536A151	538A143	540A153	540A154	541A144	541A145		
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)	535A119	536A136	537A127	538A123	539A147	540A139	541A136	
F.1b	Cosmic Ray Neutron Cts (Climax)	535A119	536A136	538A141	538A123	539A147	540A139	541A136	
F.1h	Cosmic Ray Neutron Cts (Thule)	535A119	536A136	537A127	538A123	539A147	540A139	541A136	
F.1i	Cosmic Ray Neutron Cts (Kiel)	535A119	536A136	537A127	538A123	539A147	540A139	541A136	
F.1j	Cosmic Ray Neutron Cts (Tokyo)	535A119	536A136	537A127	538A123	539A147	540A139	541A136	
F.1l	Cosmic Ray Neutron Cts (Huancayo)	535A119	536A136	538A141	538A123	540A152		541A136	
H.	MISCELLANEOUS								
H.60	IUWDS Alert Periods	534A 4	535A 4	536A 4	537A 4	538A 4	539A 4	540A 4	541A 4

The entry "535A 48" under Jan 1989, for example, means that the sunspot drawings for Jan 1989 appear in SOLAR-GEOPHYSICAL DATA No. 535, Part I, and that they begin on page 48. "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 **MARCH 1989** Number 541 Part II

Hα SOLAR FLARES

MARCH 1989

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	LEAR	01	0005	0006	0010	N16	W67	5378	02	24.0	5	SF		3	E		54		
0002		01	01111	01122	0122	N12	W70	5373E	02	23.9	11	SN					26		
	LEAR	01	0111	0112	0120	N12	W70	5373E	02	23.9	9	SF		3	E		37		
	YUNN	01	0112	0114	0125	N13	W71	5373E	02	23.8	13	SN			P		16		
0003	YUNN	01	0210	0216	0255	S20	E05	5379	03	1.5	45	SF			P		48	0.5	F
		01	0335		0424	No Flare Patrol													
		01	0455		0556	No Flare Patrol													
0004	SVTO	01	0607	0614	0624	N12	W70	5373E	02	24.1	17	SF	C 5.2	2	E		13		
0005		01	1205	1218*	1304	N12	W79	5373E	02	23.6	59	SF	M 2.3				22		EHIK
	RAMY	01	1205	1218	1248	N12	W78	5373E	02	23.7	43	SF	M 2.3		E		17		K
	RAMY	01	1205	1236	1248	N12	W78	5373E	02	23.7	43	SF	M 2.3	3	E		10		H
	HTPR	01	1255E		1335	N13	W80	5373E	02	23.6	40D	SN			C	1311	40		EI
0006	RAMY	01	1518	1522	1530	N17	E01	5383	03	1.7	12	SF		3	E		17		
0007		01	1651	1652*	1807	N16	W01	5383	03	1.6	76	SF					60		FK
	HOLL	01	1651	1652	1807	N16	W01	5383	03	1.6	76	SF		3	E		71		F
	HOLL	01	1651	1734	1807	N16	W01	5383	03	1.6	76	SF			E		48		K
0008	HOLL	01	1741E	1745U	1841	N11	W09	5377	03	1.0	60D	SF	C 3.8	3	E		66		F
0009	HOLL	01	1756	1802	1806	N13	W74	5378	02	24.3	10	SF		3	E		18		F
0010	HOLL	01	1935	1939	1947	N22	E44	5385	03	5.2	12	SF		3	E		28		
0011	HOLL	01	2114	2117	2128D	N12	W83	5373E	02	23.7	14D	SF	C 4.9	3	E		96		
		01	2137		2142	No Flare Patrol													
		01	2157		2208	No Flare Patrol													
0012	HOLL	01	2352	2404	2414	N12	W88	5373E	02	23.5	22	SN	C 5.8	3	E		78		EF
0013	YUNN	02	0135	0138	0143D	N17	W05	5383	03	1.7	8D	SN			P		80	0.9	E
0014	LEAR	02	0211	0212	0219	N15	W81	5378	02	24.0	8	SF	C 2.7	3	E		28		
0015	LEAR	02	0312	0314	0320	N14	W73	5378	02	24.7	8	SF		3	E		32		
0016		02	0325	0336*	0405	N15	W82	5378	02	24.0	40	SF					98		K
	LEAR	02	0325	0336	0405	N15	W82	5378	02	24.0	40	SF		3	E		69		
	LEAR	02	0325	0349	0405	N15	W82	5378	02	24.0	40	SF			E		126		K
0017	LEAR	02	0356	0358	0426	N11	W18	5377	02	28.8	30	SF		3	E		50		
0018	LEAR	02	0411	0413U	0523	N19	W79	5378	02	24.2	72	1N		3	E		125		
0019	ATHN	02	0647E	0650	0705D	N40	E29		03	4.6	18D	SF		2	V	0650	96	1.6	
0020	ATHN	02	0647E	0650	0705D	N18	W10	5383	03	1.5	18D	1F		2	V	0650	286	3.3	
0021		02	0900*	09102	0929	N19	W06	5383	03	1.9	29	1N	M 2.4				226	5.2	
	SVTO	02	0900	0911	0935	N18	W07	5383	03	1.8	35	1N	M 2.4	3	E		143		
	LEAR	02	0908	0910	0925	N19	W05	5383	03	2.0	17	SF	M 2.4	3	E		85		
	KANZ	02	0908	0912	0926	N18	W06	5383	03	1.9	18	SN		1					
	CATA	02	0910	0910	0915D	N20	W06	5383	03	1.9	5D	2B		1	P	0910	449	5.2	
0022	HTPR	02	1033E		1113D	N15	W19	5377	03	1.0	40D	SN			C	1058	80	0.8	E
0023		02	1059	1107U	1135	N16	W12	5383	03	1.5	36	SN					82	1.0	E
	SVTO	02	1059	1107U	1142	N15	W13	5383	03	1.5	43	SF		3	E		64		
	HTPR	02	1117E		1128	N16	W12	5383	03	1.6	11D	SN			C	1124	100	1.0	E
0024	SVTO	02	1104	1120U	1140	N25	E36	5385	03	5.2	36	SF		3	E		42		

MARCH 1989

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	Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0025		02	1147	1148	1154	N12	W88	5373E	02	24.0	7	SF	M 1.7				55		
	RAMY	02	1147	1148	1154	N14	W87	5373E	02	24.0	7	SF	M 1.7	3	E		63		
	SVTO	02	1147	1148	1155	N10	W89	5373E	02	23.9	8	SF	M 1.7	3	E		47		
0026	SVTO	02	1440	1440	1449	N10	W89	5373E	02	24.0	9	SF		3	E		17		
0027		02	1559	15592	1606	N22	E34	5385	03	5.3	7	SF					23		
	RAMY	02	1559	1559	1604	N23	E35	5385	03	5.4	5	SF		3	E		20		
	HOLL	02	1559	1601	1607	N22	E33	5385	03	5.2	8	SF		3	E		26		
0028	RAMY	02	1650	1650	1655	N17	W12	5383	03	1.8	5	SF		3	E		15		F
0029	RAMY	02	1711	1712	1727	N38	W21	5380	03	1.0	16	SF		3	E		14		F
0030	RAMY	02	1807	1808	1813	N23	E33	5385	03	5.3	6	SF		3	E		12		
		02	1906		2254	No Flare Patrol													
0031	LEAR	03	0011	0031	0041	N21	E31	5385	03	5.4	30	SF	C 3.0	3	E		28		
0032	YUNN	03	0112E	0113	0148	N17	W18	5383	03	1.7	36D	SF			P		80	1.0	E
0033		03	02102	02133	0226	S20	W23	5379	03	1.3	16	SN					57	1.1	F
	YUNN	03	0210	0216	0231	S20	W23	5379	03	1.3	21	SN			C		96	1.1	F
	LEAR	03	0212	0213	0221	S19	W23	5379	03	1.3	9	SF		3	E		18		
0034	LEAR	03	0211	0242	0256	N21	E28	5385	03	5.2	45	SF		3	E		17		
0035		03	0540	05454	0559	N12	W32	5377	02	28.8	19	SN					60	1.4	EF
	ABST	03	0540	0545	0558	N13	W33	5377	02	28.7	18	SN			C	0545	105	1.4	E
	LEAR	03	0540	0549	0600	N12	W32	5377	02	28.8	20	SF		4	E		14		F
0036		03	0606*	06185	0638	S19	W24	5379	03	1.4	32	SN					133	2.4	EFU
	TACH	03	0606	0620	0645	S19	W20	5379	03	1.7	39	1B		1	C	0620	347	3.9	U
	LEAR	03	0607	0623	0644	S20	W25	5379	03	1.3	37	SF		4	E		76		UF
	ABST	03	0612	0622	0628	S18	W28	5379	03	1.1	16	SF			C	0622	87	1.0	E
	SVTO	03	0617	0618	0633	S20	W24	5379	03	1.4	16	SF		2	E		23		
0037		03	0757*	0803*	0830	N16	W90	5378	02	24.6	33	1N					138		DEK
	CATA	03	0757	0803	0803D	N17	W90	5378	02	24.6	6D	1F		1	P	0803	84		
	HTPR	03	0800E		0830	N14	W90	5378	02	24.6	30D	1N			C	0809	200		EK
	ABST	03	0815	0819	0831	N17	W90	5378	02	24.6	16	1N			C	0819	131		D
0038	HTPR	03	0840		0859D	N25	E28	5385	03	5.5	19D	SF			C	0849	40	0.4	E
0039	HTPR	03	0958		1020D	N37	W30	5380	03	1.0	22D	SN			C	1015	100	1.3	EI
0040	HTPR	03	1013		1020D	N20	W20	5383	03	1.9	7D	SN			C	1014	100	1.0	E
0041	RAMY	03	1339	1342	1401	S19	W30	5379	03	1.3	22	SF		3	E		33		F
0042		03	1755	18021	1826	N12	W38	5377	02	28.9	31	SF	C 2.1				66		F
	RAMY	03	1755	1802	1824	N12	W39	5377	02	28.8	29	SF	C 2.1	3	E		54		F
	HOLL	03	1755	1803	1827	N12	W38	5377	02	28.9	32	SF	C 2.1	3	E		77		F
0043	RAMY	03	1813	1817	1824	N22	E20	5385	03	5.3	11	SF		3	E		11		
		03	2259		2316	No Flare Patrol													
		04	0009		0010	No Flare Patrol													
		04	0117		0124	No Flare Patrol													
		04	0147		0202	No Flare Patrol													
0044	YUNN	04	0258	0305	0314	N23	W28	5383	03	2.0	16	SN			C		24	0.3	D
		04	0445		0455	No Flare Patrol													
0045		04	0525	0529	0542	N22	E14	5385	03	5.3	17	1N					132	2.8	EFK
	TACH	04	0500E	0500U	0546	N22	E15	5385	03	5.4	46D	1B		2	C	0500	230	2.8	EK
	LEAR	04	0525	0529	0539	N22	E13	5385	03	5.2	14	SF		3	E		34		F

Hα S O L A R F L A R E S

MARCH 1989

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	TACH	04	0500E	0504U	0544	S18	W37	5379	03	1.4	44D	2N			2	C	0504	600	7.6	U
		04	0922		0930	No Flare Patrol														
		04	1741		1816	No Flare Patrol														
		04	2041		2053	No Flare Patrol														
		04	2059		2215	No Flare Patrol														
0047	VORO	05	0129E	0131	0214	S21	W49	5379	03	1.3	45D	1N			2	C	0141	305	4.9	EIJT
0048	VORO	05	0144	0147	0211	N29	E09	5385	03	5.8	27	SB			2	C	0147	108	1.3	DHIT
		05	0315		0327	No Flare Patrol														
0049	SVTO	05	0615E	0617U	0626	N25	E51	5392	03	9.2	11D	1N			2	E		115		
0050	SVTO	05	0615E	0618U	0628	N28	E73	5392	03	11.0	13D	SF			2	E		80		
0051	YUNN	05	0617E	0617U	0623	S17	W53	5379	03	1.2	6D	SN				P	0617	32	0.5	
0052	ABST	05	0803	0804	0818	N25	E66	5392	03	10.4	15	1F				C	0804	87		D
0053	CATA	05	1038	1038	1042	N24	E63	5392	03	10.3	4	SN			2	C	1038	56		
		05	1500		1526	No Flare Patrol														
		05	1619		1639	No Flare Patrol														
0054	HOLL	05	1736	1739	1749	S33	E90	5394	03	12.9	13	SF			3	E		37		
0055	HOLL	05	1945	1954	2004	S33	E73	5392D	03	11.6	19	SF	C	7.6	3	E		30		
0056	HOLL	05	1950	1957	2025	N11	W65	5377	02	28.9	35	SF			3	E		27		
0057		05	20101	2021	2030	N18	W60	5383	03	1.3	20	SF						44		EF
	HOLL	05	2010	2021	2030	N18	W61	5383	03	1.2	20	SF			3	E		38		E
	RAMY	05	2011	2017U	2040D	N18	W59	5383	03	1.3	29D	SF			2	E		50		F
		05	2247		2252	No Flare Patrol														
		05	2315		2322	No Flare Patrol														
0058		05	23524	23563	2415	S21	W62	5379	03	1.2	23	SF	C	5.2				48		EIT
	HOLL	05	2352	2356	2412	S20	W61	5379	03	1.3	20	SF	C	5.2	3	E		22		
	VORO	05	2355	2359	2420	S21	W63	5379	03	1.2	25	1F			3	C	2402	99		EIT
	LEAR	05	2356	2358	2413	S21	W62	5379	03	1.2	17	SF	C	5.2	3	E		24		
0059		06	00486	0005*	0126	N29	E85	5395	03	12.7	38	2N	M	3.0				201		EHIKT
	MITK	06	0004E	0005	0223D	N31	E90	5395	03	13.1	139D	3N				P	0005	370		
	VORO	06	0048	0117	0127	N29	E87	5395	03	12.8	39	2N			2	C	0117	215		EHIKT
	LEAR	06	0054	0100	0123	N29	E78	5395	03	12.1	29	2N	M	3.0		E		95		K
	LEAR	06	0054	0118	0123	N29	E78	5395	03	12.1	29	2N	M	3.0	3	E		118		
	PURP	06	0106E	0120	0131	N28	E90	5395	03	13.1	25D	2B				C	0120	208		H
0060	LEAR	06	0346	0347	0352	N28	E77	5395	03	12.2	6	SF			3	E		24		
0061		06	0556*	06111	0657	N26	E78	5395	03	12.3	61	1N						66		D
	ABST	06	0556	0612	0718	N25	E80	5395	03	12.4	82	1N				C	0612	87		D
	LEAR	06	0607	0611	0636	N28	E75	5395	03	12.1	29	SF			3	E		44		
0062		06	06111	0612	0624	N24	E53	5392	03	10.3	13	1N						96	3.0	EV
	LEAR	06	0611	0612	0621	N25	E52	5392	03	10.3	10	SF			3	E		35		
	ABST	06	0612	0612	0628	N22	E54	5392	03	10.4	16	1N				C	0612	157	3.0	EV
0063	LEAR	06	0642	0642	0649	S21	W67	5379	03	1.1	7	SF			3	E		25		F
0064		06	0743	0745	0753	N26	E52	5392	03	10.4	10	SN						42	1.1	DK
	LEAR	06	0743	0745	0751	N25	E52	5392	03	10.3	8	SF			3	E		16		
	ABST	06	0743	0745	0752	N27	E53	5392	03	10.4	9	SN				C	0745	87	1.7	DK
	YUNN	06	0744E	0744U	0756	N27	E52	5392	03	10.4	12D	SN				P	0744	24	0.5	

Hα SOLAR FLARES

MARCH 1989

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
0065		06	0754	07542	0802	N28	E78	5395	03	12.4	8	1N					90		DV
	ABST	06	0754	0754	0805	N27	E80	5395	03	12.6	11	1N			C	0754	131		DV
	LEAR	06	0754	0756	0800	N29	E75	5395	03	12.2	6	SF		3	E		50		
0066	YUNN	06	0806	0834	0904	N27	E52	5392	03	10.4	58	SN			C		24	0.5	D
0067	KANZ	06	1134	1136	1143	N29	E76	5395	03	12.4	9	SF		2					
0068		06	1223*	1218*	1253	N29	E76	5395	03	12.5	30	1N	C 4.9				83		HK
	RAMY	06	1211E	1218	1308D	N29	E77	5395	03	12.5	57D	1N			E		40		K
	RAMY	06	1211E	1235U	1308D	N29	E77	5395	03	12.5	57D	1N		2	E		61		H
	KANZ	06	1223	1233	1239	N29	E76	5395	03	12.5	16	1N		2					
	SVTO	06	1228	1232	1240	N31	E74	5395	03	12.3	12	1B	C 4.9	3	E		147		
	KANZ	06	1311	1315	1319	N29	E76	5395	03	12.5	8	SF		2					
0069		06	13543	14101	1655D	N33	E71	5395	03	12.2	181D	3B	X15.0				712		EFY
	SVTO	06	1354	1410	1624D	N35	E69	5395	03	12.1	150D	3B	X15.0	3	E		473		YE
	KANZ	06	1357	1411	1614D	N32	E67	5395	03	11.9	137D	3B		2					
	RAMY	06	1424E	1426U	1655D	N31	E78	5395	03	12.7	151D	3N		1	E		950		YF
		06	1656		1806	No Flare Patrol													
0070	HOLL	06	1809	1922	1938	N30	E67	5395	03	12.0	89	SF		3	E		39		
		06	2126		2131	No Flare Patrol													
0071	HOLL	06	2218	2226	2247	N32	E60	5395	03	11.7	29	SF		3	E		65		
0072	HOLL	06	2255	2255	2313	N31	E66	5395	03	12.2	18	SF		3	E		21		
0073	HOLL	06	2257	2257	2307	S34	E71	5394	03	12.6	10	SF		3	E		23		
0074		06	23503	2402*	2442	N29	E68	5395	03	12.3	52	1N					163		EFHIJKT
	HOLL	06	2350	2403	2432	N27	E61	5395	03	11.7	42	2B		3	E		290		F
	LEAR	06	2353	2402	2430	N28	E70	5395	03	12.5	37	1F		4	E		187		
	LEAR	06	2353	2410	2430	N28	E70	5395	03	12.5	37	1F			E		115		K
	VORO	06	2353	2416	2517	N30	E70	5395	03	12.5	84	2F		2	C	2416	125		EHIJKT
	PALE	07	0002E	0004U	0005D	N31	E71	5395	03	12.6	3D	1N		2	E		100		F
0075		07	0117	01221	0128	N32	E78	5397	03	13.2	11	1N					68		EHIT
	PURP	07	0113E	0122	0126	N32	E77	5397	03	13.1	13D	SN			C	0122	38		E
	VORO	07	0117	0123	0129	N32	E80	5397	03	13.4	12	1F		2	C	0123	99		EHIT
0076	VORO	07	0213	0215	0230	N24	E43	5392	03	10.4	17	SF		1	C	0215	81	1.3	D
0077		07	0519*	0537*	0638	N30	E69	5395	03	12.6	79	1N	M 2.0				167		EFIKU
	LEAR	07	0519	0537	0655	N29	E69	5395	03	12.6	96	1F	M 2.0		E		138		K
	LEAR	07	0519	0558	0655	N29	E69	5395	03	12.6	96	1F	M 2.0	4	E		149		U
	ABST	07	0522	0537	0545	N32	E73	5395	03	13.0	23	1N			C	0537	175		FI
	ABST	07	0554	0602	0613	N32	E73	5395	03	13.0	19	2N			C	0602	218		FI
	SVTO	07	0558E	0558U	0703	N31	E62	5395	03	12.1	65D	SF		2	E		84		F
	PURP	07	0629E	0632	0659	N28	E67	5395	03	12.5	30D	1N			C	0632	238		E
0078	LEAR	07	0556	0600	0618	N18	E57		03	11.6	22	SF		4	E		16		F
0079	PURP	07	0629E	0643	0709	S19	E85	5398	03	13.7	40D	1B			C	0643	133		EG
0080		07	0720	0726*	0809	N33	E67	5395	03	12.6	49	SF					38		K
	SVTO	07	0720	0726	0809	N33	E67	5395	03	12.6	49	SF		3	E		40		
	SVTO	07	0720	0759	0809	N33	E67	5395	03	12.6	49	SF			E		36		K
0081		07	0846*	0913*	1014	N31	E70	5395	03	12.9	88	1N					122		FK
	SVTO	07	0846	0914	1027	N33	E70	5395	03	12.9	101	1F		3	E		102		F
	KANZ	07	0846	0914	1037	N30	E69	5395	03	12.8	111	1N		2					K
	SVTO	07	0846	0949	1027	N33	E70	5395	03	12.9	101	1B			E		174		K
	LEAR	07	0900	0913	0927	N31	E69	5395	03	12.8	27	SF		3	E		71		
	CATA	07	0905	0913	0915D	N30	E72	5395	03	13.0	10D	1B		2	P	0913	141		
0082	HURB	07	0911E	0913	0923D	N30	E44	5392	03	10.8	12D	SF							D

Hα SOLAR FLARES

MARCH 1989

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
0083	KANZ	07	1111	1111	1116	S34	E68	5394	03	12.9	5	SF		2					
0084		07	1135*	1203*	1231	N31	E64	5395	03	12.5	56	SF					40		FH
	RAMY	07	1135	1206	1234	N33	E64	5395	03	12.6	59	SF		3	E		39		FH
	SVTO	07	1145	1203	1213	N30	E65	5395	03	12.6	28	SF		3	E		30		
	SVTO	07	1218	1221	1246	N31	E63	5395	03	12.5	28	SF		3	E		52		F
0085	RAMY	07	1236E	1241	1257	N30	E48	5392	03	11.3	21D	SF		3	E		52		
0086		07	13191	1324*	1348	N30	E65	5395	03	12.7	29	1B	M 4.1				112		FK
	SVTO	07	1319	1327	1348	N31	E65	5395	03	12.7	29	1B	M 4.1	3	E		194		F
	SVTO	07	1319	1342	1348	N31	E65	5395	03	12.7	29	1B	M 4.1		E		30		K
	KANZ	07	1320	1324	1347	N29	E66	5395	03	12.7	27	1B		2					
0087		07	1436*	1453*	1538	N31	E65	5395	03	12.7	62	2B	X 1.8				185		EFHK
	HOLL	07	1436	1453	1525	N30	E64	5395	03	12.6	49	1B	X 1.8	3	E		227		FH
	KANZ	07	1447	1454	1537	N30	E66	5395	03	12.8	50	2N		2					
	SVTO	07	1447	1454	1545	N32	E65	5395	03	12.8	58	2B	X 1.8	3	E		275		FE
	SVTO	07	1447	1517	1545	N32	E65	5395	03	12.8	58	2B			E		54		K
0088		07	1615*	1654	1704	N32	E74	5397	03	13.5	49	1F					72		H
	RAMY	07	1615	1652U	1701	N32	E74	5397	03	13.5	46	1F		2	E		120		H
	HOLL	07	1653	1654	1706	N31	E75	5397	03	13.6	13	SF		3	E		23		
0089	HOLL	07	1653	1703	1724	N29	E63	5395	03	12.6	31	1N	M 3.8	3	E		175		EF
0090	HOLL	07	1947	1947	1953	N29	E62	5395	03	12.7	6	SF		3	E		19		F
0091	RAMY	07	2113	2115	2125	S19	W87	5379	03	1.2	12	SF	C 3.6	3	E		19		
0092	RAMY	07	2120E	2123U	2151D	N32	E71	5397	03	13.5	31D	SF	C 9.2	2	E		63		H
0093		07	2223	2232	2407	N31	E62	5395	03	12.8	104	2N	M 4.2				260		EHIJT
	PALE	07	2223	2232	2235D	N30	E59	5395	03	12.6	12D	2B	M 4.2	3	E		306		
	VORO	07	2316E		2407	N32	E64	5395	03	13.0	51D	2F		2	C	2323	215		EHIJT
0094	VORO	07	2334	2337	2352	N33	E87	5397	03	14.9	18	1F		3	C	2347	45		DT
0095	VORO	08	0002	0010	0019	S19	W88		03	1.3	17	SF		2	C	0010	27		DT
0096		08	01152	01207	0134	N30	E57	5395	03	12.5	19	1N	C 5.7				151	2.1	EFIJKT
	PALE	08	0115	0120	0136	N30	E57	5395	03	12.5	21	1N	C 5.7		E		337		K
	PALE	08	0115	0127	0136	N30	E57	5395	03	12.5	21	1N	C 5.7	2	E		103		F
	VORO	08	0116	0126	0133	N29	E52	5395	03	12.1	17	1N		1	C	0126	125	2.1	EIJT
	LEAR	08	0117	0123	0134	N28	E59	5395	03	12.7	17	SN	C 5.7	3	E		79		F
	PURP	08	0119E	0120	0129	N31	E62	5395	03	12.9	10D	1N			C	0120	109		E
0097	LEAR	08	0118	0119	0122	S17	W92		03	1.1	4	SF		3	E		20		
0098		08	0146*	0150*	0211	N30	E57	5395	03	12.5	25	SF	C 3.5				71	2.0	DEFHIJT
	LEAR	08	0146	0150	0154	N30	E61	5395	03	12.9	8	SF	C 3.5	3	E		75		
	VORO	08	0147	0150	0210	N30	E52	5395	03	12.2	23	SF		1	C	0150	90	1.5	DHIJT
	LEAR	08	0202	0202	0205	N31	E56	5395	03	12.5	3	SF		3	E		22		H
	PALE	08	0202	0203	0205	N32	E56	5395	03	12.5	3	SF		2	E		29		
	VORO	08	0211	0214	0223	N29	E52	5395	03	12.2	12	1F		1	C	0214	143	2.4	EIJT
	LEAR	08	0212	0214	0222	N29	E61	5395	03	12.9	10	SF	C 2.9	3	E		47		
	PALE	08	0212	0215	0221	N30	E62	5395	03	13.0	9	SF	C 2.9	2	E		90		F
0099		08	03003	0303	0309	N32	E58	5395	03	12.7	9	SF	C 7.6				50		
	PALE	08	0300	0302U	0307D	N32	E56	5395	03	12.5	7D	SF	C 7.6	2	E		61		
	LEAR	08	0303	0303	0309	N32	E61	5395	03	12.9	6	SF	C 7.6	3	E		39		
0100		08	0452	0458	0506	N36	E74	5397	03	14.1	14	1N					86		D
	PURP	08	0452	0458	0512	N38	E76	5397	03	14.3	20	1B			C	0458	135		D
	LEAR	08	0453E	0453U	0500	N33	E72	5397	03	13.9	7D	SF		4	E		37		
0101		08	0456*	0504*	0521	N28	E52	5395	03	12.3	25	SF	C 7.6				36		
	LEAR	08	0456	0504	0516	N28	E52	5395	03	12.3	20	SF	C 7.6	4	E		11		
	LEAR	08	0522	0522	0526	N29	E53	5395	03	12.4	4	SF		4	E		61		

MARCH 1989

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
0102	LEAR	08	0628	0631	0636	N30	E57	5395	03	12.7	8	SF	C 4.1	4	E		23		
0103		08	06513	06591	0708	N31	E58	5395	03	12.9	17	1F	C 5.4				80		
	LEAR	08	0651	0659	0707	N30	E58	5395	03	12.8	16	1F	C 5.4	4	E		102		
	SVTO	08	0654	0700	0708	N32	E57	5395	03	12.8	14	SF	C 5.4	3	E		57		
0104		08	07552	07592	0806	N30	E56	5395	03	12.7	11	SN					60		
	YUNN	08	0755	0801	0809	N31	E58	5395	03	12.9	14	SB			C		64		
	SVTO	08	0757	0759	0804	N32	E54	5395	03	12.6	7	SN		3	E		47		
	LEAR	08	0757	0801	0805	N28	E57	5395	03	12.8	8	SF		4	E		68		
0105		08	0825*	0830*	0920	N34	E55	5395	03	12.7	55	2B	M 5.7				247	6.7	BDEFK
	YUNN	08	0825	0832	0832D	N38	E59	5395	03	13.1	7D	SB			C		113		
	PURP	08	0826	0834	0839D	N35	E57	5395	03	12.9	13D	2B			C	0834	286		E
	LEAR	08	0826	0835	0924	N31	E52	5395	03	12.4	58	1N	M 5.7		E		164		K
	LEAR	08	0826	0857	0924	N31	E52	5395	03	12.4	58	1B	M 5.7	3	E		216		F
	CATA	08	0830	0830	0835D	N36	E53	5395	03	12.6	5D	1B		2	P	0830	169		
	ATHN	08	0830E	0833U	0850D	N36	E58	5395	03	13.0	20D	2B		2	V	0833	191	3.7	
	CATA	08	0850E	0900	0900D	N34	E54	5395	03	12.7	10D	2B		2	P	0900	365		
	HURB	08	0854E	0854U	0854D	N34	E53	5395	03	12.6	10D	2F							EB
	HURB	08	0856	0858	0910D	N31	E53	5395	03	12.5	14D	1N							D
	ATHN	08	0858E	0900U	0903D	N33	E58	5395	03	13.0	5D	1B		2	V	0900	127	3.4	
	YUNN	08	0859E	0859	0920	N32	E52	5395	03	12.5	21D	3B			C		563	13.0	FK
	ABST	08	0900E	0900U	0914	N37	E57	5395	03	13.0	14D	2N			P	0900	280		FB
0106	HTPR	08	1114	1118	1200	N35	E71	5397	03	14.1	46	SN			C	1118	70		
0107		08	1118*	1130*	1225	N30	E52	5395	03	12.6	67	SN					65	1.3	EF
	HTPR	08	1118	1130	1211	N30	E58	5395	03	13.0	53	SN			C	1130	50	1.0	E
	HTPR	08	1136	1240	1248	N30	E49	5395	03	12.3	72	SB			C	1240	100	1.6	E
	RAMY	08	1158	1202	1215	N29	E48	5395	03	12.3	17	SF		3	E		45		F
0108		08	1301*	1306*	1344	N30	E50	5395	03	12.5	43	1N	C 9.0				107	1.5	EFIT
	HTPR	08	1301	1306	1331	N30	E57	5395	03	13.0	30	SF			C	1306	30	0.6	
	HTPR	08	1303	1307	1348	N30	E48	5395	03	12.3	45	SB			C	1307	30	0.4	
	RAMY	08	1303	1316	1711D	N29	E48	5395	03	12.3	248D	1N	C 9.0	3	E		117		FET
	HTPR	08	1312	1317	1354	N31	E47	5395	03	12.2	42	1B			C	1317	250	3.6	EI
0109		08	1727	17312	1755	S17	E70	5398	03	14.0	28	SF					36		F
	RAMY	08	1654E	1733	1757	S18	E69	5398	03	13.9	63D	SF		3	E		52		F
	HOLL	08	1727	1731	1753	S16	E70	5398	03	14.0	26	SF		4	E		20		F
0110		08	17301	1732	1737	N31	E48	5395	03	12.5	7	SF	C 3.7				40		H
	RAMY	08	1714E	1716U	1735	N30	E47	5395	03	12.4	21D	SF	C 3.7	3	E		75		
	PALE	08	1730	1732	1736	N31	E50	5395	03	12.7	6	SF		3	E		22		H
	HOLL	08	1731	1732	1740	N31	E47	5395	03	12.4	9	SF		3	E		24		
0111	PALE	08	1801	1804U	1804D	N30	E49	5395	03	12.6	3D	1F	C 4.4	3	E		126		
0112	PALE	08	2049	2053	2104	N31	E45	5395	03	12.4	15	SF		3	E		21		F
0113	HOLL	08	2050	2112	2136	N25	E45	5395	03	12.3	46	SF		3	E		15		
0114	HOLL	08	2052	2054	2103	N33	E63	5397	03	13.9	11	SF		3	E		22		
0115		08	21081	21108	2132	S16	E67	5398	03	14.0	24	SF					50		FK
	PALE	08	2108	2110	2130	S15	E70	5398	03	14.2	22	SF			E		66		K
	PALE	08	2108	2116	2130	S15	E70	5398	03	14.2	22	SF		3	E		36		F
	HOLL	08	2109	2118	2135	S17	E62	5398	03	13.6	26	SF		3	E		47		
0116	HOLL	08	2139	2148	2151	N30	E44	5395	03	12.4	12	SF		3	E		37		
0117	HOLL	08	2139	2141	2146	S35	E51	5394	03	13.0	7	SF		3	E		17		
0118		08	2234	2236	2250	S16	E67	5398	03	14.0	16	SF	C 4.1				52		
	PALE	08	2234	2236	2249	S15	E68	5398	03	14.1	15	SF	C 4.1	3	E		60		
	HOLL	08	2234	2236	2250	S16	E66	5398	03	13.9	16	SF	C 4.1	3	E		44		

Hα SOLAR FLARES

MARCH 1989

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
0119		08	2248	22482	2258	N32	E46	5395	03	12.6	10	SF					47		
	PALE	08	2248	2248	2256	N33	E45	5395	03	12.5	8	SF		3	E		44		
	HOLL	08	2248	2250	2300	N32	E46	5395	03	12.6	12	SF		3	E		50		
0120	PURP	09	0041	0044	0046	S16	E70	5398	03	14.3	5	SN			C	0044	27		E
0121		09	01511	01552	0207	N30	E46	5395	03	12.7	16	SN					66	2.0	DFIJT
	VORO	09	0151	0155	0204	N30	E47	5395	03	12.8	13	SN		2	C	0155	90	1.7	DIJT
	LEAR	09	0152	0155	0204	N28	E46	5395	03	12.7	12	SF		3	E		25		
	PURP	09	0153E	0157	0210	N30	E46	5395	03	12.7	17D	1B			C	0157	116	2.3	D
	PALE	09	0155E	0157U	0211	N33	E45	5395	03	12.6	16D	SF		3	E		35		F
0122		09	0220*	0224*	0256	N31	E48	5395	03	12.9	36	2N	M 1.8				361	10.5	EFHIJKT
	YUNN	09	0220	0244	0300	N32	E51	5395	03	13.1	40	3B			C		643	14.3	
	LEAR	09	0224	0224	0236	N31	E42	5395	03	12.4	12	SF		3	E		17		F
	PALE	09	0228	0230	0300	N30	E48	5395	03	12.9	32	2N			E		80		K
	PALE	09	0228	0242	0300	N30	E48	5395	03	12.9	32	2N	M 1.8	3	E		455		FH
	PURP	09	0237	0242U	0255	N30	E52	5395	03	13.2	18	3B			C	0242	632	14.3	E
	MITK	09	0238	0245	0301	N32	E47	5395	03	12.8	23	2N			C	0245	390	8.2	
	LEAR	09	0239	0243	0259	N30	E49	5395	03	13.0	20	2N	M 1.8	4	E		286		FH
	VORO	09	0240	0243	0258D	N32	E51	5395	03	13.1	18D	2N		1	C	0246	412	9.3	EHIJT
	URUM	09	0242E	0245	0250D	N29	E46	5395	03	12.7	8D	2N			C		338	6.5	E
0123		09	0302*	0313*	0355	N30	E44	5395	03	12.6	53	1B	C 5.8				166	4.0	DEFK
	YUNN	09	0302	0316	0335	N32	E45	5395	03	12.7	33	2B			C		321	6.2	F
	LEAR	09	0303	0313	0333	N28	E47	5395	03	12.8	30	1N	C 5.8	3	E		132		
	PALE	09	0303	0313U	0410D	N29	E47	5395	03	12.8	67D	1B	C 5.8	3	E		102		F
	PALE	09	0303	0404	0410D	N29	E47	5395	03	12.8	67D	1B			E		88		K
	MITK	09	0305	0316	0345	N28	E45	5395	03	12.6	40	1N			C	0316	140	2.7	E
	MITK	09	0306	0316	0325	N31	E42	5395	03	12.4	19	SB			C	0316			D
	PURP	09	0312E	0318	0327D	N28	E47	5395	03	12.8	15D	2B			C	0318	329	6.4	E
	MITK	09	0405	0408	0420	N32	E41	5395	03	12.4	15	1N			C	0408	120	2.2	
	LEAR	09	0406	0407	0414	N31	E41	5395	03	12.4	8	SN	C 7.1	3	E		90		
	PURP	09	0406	0408	0411	N31	E45	5395	03	12.7	5	1N			C	0408	182	3.6	D
	YUNN	09	0406E	0408	0414	N33	E43	5395	03	12.6	8D	1B			P		161	3.1	
0124	LEAR	09	0434	0434	0439	N31	E41	5395	03	12.4	5	SF		3	E		20		
0125		09	04472	04511	0509	N28	E43	5395	03	12.5	22	SN	C 6.9				50	1.1	DE
	PURP	09	0447	0451	0457	N26	E43	5395	03	12.5	10	SN			C	0451	72	1.3	D
	LEAR	09	0449	0452	0515	N30	E41	5395	03	12.4	26	SF	C 6.9	3	E		29		
	YUNN	09	0458E	0458U	0514	N28	E46	5395	03	12.8	16D	SN			P	0458	48	0.9	E
0126		09	04531	04583	0602	S35	E43	5394	03	12.6	69	1B					289	5.5	CEFW
	YUNN	09	0453	0458	0600	S35	E44	5394	03	12.7	67	1B			P		193	3.0	F
	LEAR	09	0453	0458	0615	S34	E41	5394	03	12.5	82	1N		3	E		132		F
	MITK	09	0453	0459	0613D	S33	E43	5394	03	12.6	80D	1N			C	0459	330	5.1	E
	PURP	09	0454	0501	0550	S37	E45	5394	03	12.8	56	2B			C	0501	502	8.3	CEW
0127	YUNN	09	0603	0613	0618	N30	E47	5395	03	12.9	15	SN			C		24	0.5	
0128		09	0603	0613	0621	N34	E65	5397	03	14.4	18	1F					70		D
	YUNN	09	0603	0613	0622	N34	E63	5397	03	14.3	19	SN			C		24		
	PURP	09	0609E	0609U	0618	N35	E66	5397	03	14.5	9D	1F			C	0609	121		D
	ATHN	09	0612E	0614U	0622	N32	E65	5397	03	14.4	10D	1F		2	V	0614	64		
0129		09	06403	06427	0657	N10	E09	5399	03	9.9	17	1N					174	2.0	CGU
	YUNN	09	0640	0642	0653	N10	E09	5399	03	9.9	13	SN			C		32	0.4	
	PURP	09	0641	0646	0656	N11	E09	5399	03	9.9	15	1B			C	0646	315	3.5	GC
	ISTA	09	0643	0649	0703	N10	E09	5399	03	9.9	20	1N			P				U
0130		09	0711	0711	0718	N29	E39	5395	03	12.3	7	SB					72	1.2	DE
	PURP	09	0711E	0711U	0716	N29	E39	5395	03	12.3	5D	1B			C	0711	129	2.2	D
	ISTA	09	0711	0711	0719	N29	E40	5395	03	12.4	8	SB			P				E
	YUNN	09	0713E	0713U	0718	N30	E39	5395	03	12.4	5D	SN			P	0713	16	0.3	

Hα SOLAR FLARES

MARCH 1989

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
0131		09	0745*	0752*	0826	N33	E42	5395	03	12.6	41	SN					56	1.0	DEFIT
	YUNN	09	0745	0751U	0757	N34	E45	5395	03	12.9	12	SN			P	0751	32	0.6	E
	KAND	09	0747	0752	0802	N35	E41	5395	03	12.6	15	SF			P	0752	83	1.5	EFIT
	PURP	09	0748E	0753	0801	N34	E46	5395	03	13.0	13D	SB			C	0753	58	1.2	D
	ATHN	09	0749E	0800U	0810D	N35	E42	5395	03	12.7	21D	SB		2	V	0800	65	1.3	
	HTPR	09	0752E		0817	N31	E44	5395	03	12.8	25D	SF			C	0755	40	0.6	E
	HTPR	09	0752E		0838	N32	E40	5395	03	12.5	46D	SF			C	0812	30	0.4	E
	ISTA	09	0804	0807	0831	N34	E42	5395	03	12.7	27	SN			P				E
	YUNN	09	0804	0811	0838	N34	E41	5395	03	12.6	34	SN			C		24	0.3	E
	KAND	09	0818	0820	0828	N33	E38	5395	03	12.4	10	SN			P	0820	42	0.7	DFIT
	HTPR	09	0831	0834	0854	N31	E43	5395	03	12.7	23	SB			C	0834	100	1.3	E
	KAND	09	0833	0835	0845	N33	E40	5395	03	12.5	12	SN			P	0835	83	1.8	EFIT
	KANZ	09	0833	0839	0841	N28	E44	5395	03	12.8	8	SF		1					
0132		09	08327	08363	0851	N35	E63	5397	03	14.4	19	SF					64	0.8	BD
	HTPR	09	0832	0836	0847	N35	E61	5397	03	14.2	15	SN			C	0836	40	0.8	
	KANZ	09	0839	0839	0846	N35	E65	5397	03	14.5	7	SF		1					
	ABST	09	0846E	0846U	0900	N36	E63	5397	03	14.4	14D	1F			P	0846	87		DB
0133		09	0905*	0913*	0951	N31	E42	5395	03	12.7	46	SF					49	0.8	DEFITU
	HTPR	09	0905	0913	0954	N31	E43	5395	03	12.8	49	SF			C	0936	40	0.5	E
	LEAR	09	0926	0936	0956	N32	E40	5395	03	12.5	30	SF		3	E		49		
	KANZ	09	0930	0937	0948	N27	E42	5395	03	12.7	18	SF		1					
	KAND	09	0935	0937	0947	N28	E41	5395	03	12.6	12	SN			P	0937	62	1.0	FITU
	KANZ	09	0944	0948	0951	N35	E40	5395	03	12.6	7	SF		1					
	ABST	09	0949	0950	0952	N33	E47	5395	03	13.1	3	SF			C	0950	44	0.9	D
0134		09	10041	1009	1031	N29	E42	5395	03	12.7	27	2B					750	5.2	EFIJKT
	HTPR	09	1004	1009	1030	N31	E42	5395	03	12.7	26	3B			C	1009	1000	13.0	EIT
	KAND	09	1005	1009	1030	N29	E42	5395	03	12.7	25	2B			P	1009	499	9.0	EFIJK
	KANZ	09	1005	1009	1032	N28	E42	5395	03	12.7	27	1N		2					
0135		09	11055	1111*	1149	N30	E42	5395	03	12.8	44	1N					161	3.1	DEFIT
	HTPR	09	1105	1145	1250	N31	E42	5395	03	12.8	105	2N			C	1145	400	5.4	E
	KANZ	09	1109	1116	1124	N31	E45	5395	03	13.0	15	SF		2					
	KAND	09	1110	1111	1121	N30	E44	5395	03	12.9	11	SN			P	1111	42	0.8	DFIT
	RAMY	09	1118E	1118	1142	N30	E39	5395	03	12.5	24D	SF		2	E		42		F
0136	HTPR	09	1140	1143	1200	N27	E12	5392	03	10.4	20	SF			C	1143	30	0.3	E
0137		09	12157	1216*	1236	N28	E38	5395	03	12.5	21	SN					64	1.7	DFIT
	RAMY	09	1215	1216	1220	N28	E37	5395	03	12.4	5	SF		3	E		24		F
	KAND	09	1217	1225	1248	N28	E38	5395	03	12.5	31	SB			P	1225	104	1.7	DFIT
	KANZ	09	1222	1226	1241	N27	E40	5395	03	12.6	19	SN		2					
0138	HTPR	09	1236	1240	1253	N35	E59	5397	03	14.2	17	SF			C	1240	30	0.6	
0139	HTPR	09	1305	1315	1340	N28	E12	5392	03	10.5	35	SF			C	1315	20	0.2	
0140		09	1250*	1307*	1446	N30	E40	5395	03	12.7	116	2N	M 2.4				404	3.8	DEFHIKRT
	HTPR	09	1250	1354	1530	N31	E40	5395	03	12.7	160	2B			C	1354	500	6.6	EIT
	RAMY	09	1256	1307	1501D	N27	E40	5395	03	12.6	125D	1N	M 2.4	3	E		133		FE
	KAND	09	1305	1308	1330	N30	E42	5395	03	12.8	25	2B			P	1308	291	5.2	EFIT
	KANZ	09	1307E	1307U	1327	N30	E42	5395	03	12.8	20D	1N		2					
	KANZ	09	1331	1335	1342	N28	E42	5395	03	12.8	11	SN		2					
	KAND	09	1333	1335	1339	N30	E40	5395	03	12.7	6	SN			P	1335	62	1.0	DFIT
	KANZ	09	1335	1342	1405	N36	E45	5395	03	13.2	30	SF		2					
	HOLL	09	1400E	1414	1514	N32	E38	5395	03	12.6	74D	1B			E		61		K
	HOLL	09	1400E	1457	1514	N32	E38	5395	03	12.6	74D	1B		3	E		108		F
	KANZ	09	1451	1459	1503	N30	E35	5395	03	12.4	12	SN		2					
	KANZ	09	1512	1528	1544D	N28	E40	5395	03	12.7	32D	4N		2					
	HOLL	09	1515	1518	1634	N30	E38	5395	03	12.6	79	4B	X 4.0		E		73		K
	HOLL	09	1515	1532	1634	N30	E38	5395	03	12.6	79	4B	X 4.0	4	E				FH
	HTPR	09	1520		1644D	N31	E40	5395	03	12.8	84D	4B			C	1529	2000	26.0	ERTVW

Hα SOLAR FLARES

MARCH 1989

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
0141		09	1305*	13393	1503	S18	E54	5398	03	13.6	118	2B					362	2.6	EFHIUW
	HTPR	09	1305		1532D	S17	E50	5398	03	13.3	147D	2B			C	1345	700	11.0	EIU
	KAND	09	1329	1339	1407D	S15	E55	5398	03	13.7	38D	1B			P	1339	229	4.0	EFHIW
	KANZ	09	1331	1342	1503	S18	E51	5398	03	13.4	92	2N		2					
	RAMY	09	1334E	1334U	1500D	S22	E54	5398	03	13.7	86D	2N		2	E		258		FE
	HOLL	09	1342E	1347U	1503	S17	E61	5398	03	14.2	81D	2B		3	E		259		FH
0142	HOLL	09	1434	1441	1458	N34	E58	5397	03	14.2	24	SF		3	E		39		
0143	HOLL	09	1639	1640	1649	N10	E04	5399	03	10.0	10	SF		4	E		11		
0144		09	1652	1659*	1735	N31	E37	5395	03	12.6	43	SF					28		FK
	HOLL	09	1652	1659	1735	N31	E37	5395	03	12.6	43	SF		4	E		45		F
	HOLL	09	1652	1731	1735	N31	E37	5395	03	12.6	43	SF			E		10		K
0145		09	1744	1804*	1901	N30	E40	5395	03	12.9	77	SF					30		FK
	HOLL	09	1744	1804	1901	N31	E41	5395	03	13.0	77	SF			E		50		K
	HOLL	09	1744	1849	1901	N31	E41	5395	03	13.0	77	SF		4	E		27		F
	RAMY	09	1756E	1758U	1814D	N29	E38	5395	03	12.7	18D	SF		2	E		13		F
0146		09	1758	1802	1818	S36	E42	5394	03	13.1	20	SF					20		F
	RAMY	09	1756E	1759U	1813D	S37	E42	5394	03	13.1	17D	SF		2	E		14		F
	HOLL	09	1758	1802	1818	S34	E42	5394	03	13.1	20	SF		4	E		27		
0147		09	1913	1925	1958	N32	E36	5395	03	12.6	45	1N	M 1.2				86		EF
	HOLL	09	1913	1925	1958	N34	E36	5395	03	12.7	45	1B	M 1.2	4	E		128		FE
	RAMY	09	1933E	1933U	1943D	N31	E37	5395	03	12.7	10D	SF		2	E		43		F
0148	HOLL	09	2019	2019	2040	S35	E40	5394	03	13.0	21	SF		4	E		10		
0149	HOLL	09	2025	2027	2031	N31	E34	5395	03	12.5	6	SF		4	E		14		F
0150	HOLL	09	2121	2122	2128	N33	E33	5395	03	12.5	7	SF		3	E		20		
0151	HOLL	09	2226	2229	2246	N32	E36	5395	03	12.8	20	SF		3	E		19		
0152	HOLL	09	2255	2257	2310	N33	E47	5397	03	13.7	15	SF		3	E		14		
0153		09	2304*	2305*	2437	N32	E32	5395	03	12.5	93	1N	M 1.3				102	3.0	EFK
	HOLL	09	2304	2305	2441	N31	E32	5395	03	12.5	97	1B	M 1.3		E		38		K
	HOLL	09	2304	2324	2441	N31	E32	5395	03	12.5	97	1B	M 1.3	3	E		111		F
	LEAR	09	2314	2324	2416	N30	E36	5395	03	12.8	62	SF	M 1.3	3	E		79		F
	MITK	09	2356E		2449	N34	E30	5395	03	12.4	53D	1N			C	2357	180	3.0	E
0154		10	01034	01091	0120	N27	E33	5395	03	12.6	17	SN	C 6.4				142	2.6	EF
	PURP	10	0103	0109	0118	N28	E33	5395	03	12.6	15	1N			C	0109	317	4.9	E
	LEAR	10	0107	0109	0117	N27	E32	5395	03	12.5	10	SF	C 6.4	3	E		94		F
	YUNN	10	0107	0110	0125	N26	E34	5395	03	12.7	18	SN			C		16	0.2	E
0155		10	01592	02061	0226	N36	E36	5395	03	13.0	27	SN					42	0.8	
	PURP	10	0159	0206	0224	N37	E37	5395	03	13.1	25	SN			C	0206	68	1.3	
	YUNN	10	0201	0207	0228	N35	E34	5395	03	12.8	27	SN			C		16	0.3	
0156		10	0232*	0238*	0349	N31	E31	5395	03	12.5	77	SN	C 7.5				109	1.8	EF
	YUNN	10	0232	0238	0308	N33	E29	5395	03	12.4	36	SN			C		32	0.5	E
	PURP	10	0233	0257	0337	N32	E30	5395	03	12.5	64	1B			C	0257	190	3.0	E
	MITK	10	0328	0330	0337	N30	E30	5395	03	12.5	9	1F			C	0330	190	2.9	E
	PURP	10	0330	0342	0350	N29	E33	5395	03	12.7	20	SB			C	0342	86	1.3	E
	PURP	10	0341	0342	0350	N35	E35	5395	03	12.9	9	SN			C	0342	87	1.5	
	LEAR	10	0345	0406	0428	N31	E30	5395	03	12.5	43	SF	C 7.5	3	E		58		F
	PURP	10	0355	0402	0416	N28	E33	5395	03	12.7	21	SN			C	0402	122	1.9	E
0157	PURP	10	0402	0407	0418	N30	E39	5397	03	13.2	16	SN			C	0407	50	0.9	D
0158	LEAR	10	0541	0541	0546	N30	E27	5395	03	12.4	5	SF		3	E		22		F
0159	YUNN	10	0552	0557	0559	S22	W32	5388A	03	7.8	7	SN			C		16	0.2	
0160	LEAR	10	0554	0604	0609	N31	E29	5395	03	12.5	15	SF		3	E		16		

Hα S O L A R F L A R E S

MARCH 1989

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	Time (UT)	Area Measurement Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
0161		10	0610*	0639*	0807	N31	E31	5395	03	12.7	117	1N	C 9.5				180	3.5	DEFIJKLT
	LEAR	10	0610	0646	0656	N30	E33	5395	03	12.8	46	SF	C 9.5	3	E		42		F
	TACH	10	0638	0639	0713	N29	E32	5395	03	12.8	35	1B		1	C	0639	214	3.5	JLT
	SVTO	10	0659	0811	1421D	N31	E30	5395	03	12.6	442D	2N			E		89		KT
	LEAR	10	0703	0704	0717	N29	E27	5395	03	12.4	14	SF	C 4.9	3	E		32		F
	YUNN	10	0703E	0714	0732	N33	E30	5395	03	12.7	29D	SN			P		129	2.0	E
	PURP	10	0718	0723	0730	N29	E26	5395	03	12.3	12	SN			C	0723	61	0.9	D
	LEAR	10	0719	0722	0737	N30	E26	5395	03	12.3	18	SF		3	E		28		F
	HTPR	10	0728E		0850	N31	E25	5395	03	12.3	82D	1N			C	0751	220	2.4	EI
	PURP	10	0738	0801	0824	N33	E27	5395	03	12.5	46	1B			C	0801	257	4.0	E
	YUNN	10	0742	0753	0820	N35	E29	5395	03	12.6	38	1N			C		129	2.1	F
	TACH	10	0744		0800D	N35	E35	5395	03	13.1	16D	1B		1	C	0744	296	4.8	JLTZU
	LEAR	10	0744	0818	0905	N29	E33	5395	03	12.9	81	1N		3	E		142		
	LEAR	10	0744	0853	0905	N29	E33	5395	03	12.9	81	1N			E		40		K
	ATHN	10	0746E	0750U	0800D	N33	E30	5395	03	12.7	14D	2B		2	V	0750	446	7.3	
	HTPR	10	0751	0819	0840	N33	E32	5395	03	12.9	49	1B			C	0819	200	2.4	E
	YUNN	10	0802E	0814	0822D	N30	E34	5395	03	13.0	20D	1N			P		177	2.8	
	PURP	10	0802	0819	0824D	N31	E35	5395	03	13.1	22D	2N			C	0819	419	6.9	
	ATHN	10	0810E	0818U	0824D	N30	E36	5395	03	13.2	14D	1B		2	V	0818	143	2.3	
	HURB	10	0818E	0819	0826D	N27	E33	5395	03	12.9	8D	1N							D
	HTPR	10	0840	0846	0908	N30	E30	5395	03	12.7	28	1F			C	0846	350	3.9	EIU
0162		10	08058	08153	0836	N11	W06	5399	03	9.9	31	SF					62	0.8	EFU
	HTPR	10	0805	0815	0846	N12	W08	5399	03	9.7	41	SF			C	0815	120	1.2	EU
	SVTO	10	0812	0815	0827	N10	W06	5399	03	9.9	15	SF		3	E		19		
	YUNN	10	0813	0818	0822D	N10	W05	5399	03	10.0	9D	SN			P		48	0.5	F
0163		10	0906*	0916*	1000	N33	E27	5395	03	12.5	54	SF	C 9.3				107	2.3	EFI
	HTPR	10	0906	0933	1025	N35	E25	5395	03	12.4	79	SN			C	0933	120	1.4	EI
	LEAR	10	0915	0916	0940	N30	E24	5395	03	12.3	25	SF	C 9.3	3	E		26		F
	URUM	10	0926	0935	1000	N34	E27	5395	03	12.5	34	1F			C		321	5.0	F
	HTPR	10	0933	0943	1005	N33	E31	5395	03	12.9	32	SF			C	0943	50	0.6	E
	LEAR	10	0941	0943	0948	N31	E27	5395	03	12.5	7	SF		3	E		18		F
0164		10	0907	09073	0924	S34	E32	5394	03	12.9	17	SF					26	0.5	E
	SVTO	10	0907	0907	0923	S34	E33	5394	03	13.0	16	SF		3	E		11		
	HTPR	10	0907	0910	0925	S33	E30	5394	03	12.8	18	SF			C	0910	40	0.5	E
0165		10	1039*	1129*	1213	N33	E30	5395	03	12.8	94	1N	M 4.5				275	3.7	EFHIKTV
	HTPR	10	1039		1140D	N35	E25	5395	03	12.4	61D	2N			C	1139	550	6.7	EIV
	KANZ	10	1042	1134	1212D	N35	E27	5395	03	12.6	90D	2B		2					
	RAMY	10	1109E	1129	1225	N34	E29	5395	03	12.8	76D	2B	M 4.5		E		234		K
	RAMY	10	1109E	1139U	1225	N34	E29	5395	03	12.8	76D	2B	M 4.5	2	E		312		FH
	ATHN	10	1110E	1112U	1125D	N37	E34	5395	03	13.2	15D	1B		2	V	1112	191	3.4	
	KANZ	10	1117	1131	1143	N31	E32	5395	03	13.0	26	SF		2					
	SVTO	10	1139E	1139	1221D	N31	E30	5395	03	12.8	42D	2N		3	E		284		FHT
	HTPR	10	1203E		1220	N32	E30	5395	03	12.9	17D	SF			C	1205	80	0.9	E
	KANZ	10	1209E	1209U	1212D	N28	E31	5395	03	12.9	3D	SF		2					
0166		10	1304*	1310*	1417	N30	E28	5395	03	12.7	73	SN	C 6.2				99	2.4	EFH
	RAMY	10	1304	1310	1418	N28	E25	5395	03	12.5	74	SF	C 6.2	3	E		42		FH
	HOLL	10	1340E	1350U	1417	N31	E25	5395	03	12.5	37D	SF		3	E		36		
	HTPR	10	1355	1400	1417	N32	E29	5395	03	12.9	22	1B			C	1400	220	2.4	E
	KANZ	10	1406E	1406U	1412D	N29	E31	5395	03	13.0	6D	SF		1					
0167		10	1428*	1438*	1509	N33	E27	5395	03	12.7	41	SF					35	1.2	EFH
	HTPR	10	1428	1505	1525	N35	E28	5395	03	12.8	57	SF			C	1505	100	1.2	E
	SVTO	10	1433	1438	1457	N31	E25	5395	03	12.6	24	SF		3	E		29		
	RAMY	10	1439	1447	1456	N35	E28	5395	03	12.8	17	SF		3	E		12		FH
	RAMY	10	1501	1502	1518	N34	E28	5395	03	12.8	17	SF		3	E		21		FH
	SVTO	10	1501	1507	1511	N31	E25	5395	03	12.6	10	SF		3	E		13		
0168		10	1435*	14496	1507	S35	E29	5394	03	12.9	32	SF					39	1.0	EF
	HTPR	10	1435	1455	1515	S34	E29	5394	03	12.9	40	SN			C	1455	80	1.0	E
	SVTO	10	1449	1449	1458	S34	E30	5394	03	13.0	9	SF		3	E		12		
	RAMY	10	1449	1450	1508	S36	E29	5394	03	12.9	19	SF		3	E		25		F

Hα SOLAR FLARES

MARCH 1989

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
0169		10	15205	1527	1546	N31	E28	5395	03	12.8	26	SN	M	1.1				73	1.5	EFHI
	HTPR	10	1520		1549D	N32	E30	5395	03	13.0	29D	SB				C	1529	130	1.5	EI
	RAMY	10	1524	1528U	1607D	N29	E28	5395	03	12.8	43D	SF	M	1.1	2	E		57		FH
	SVTO	10	1525	1527	1546	N32	E27	5395	03	12.8	21	SF	M	1.1	3	E		32		
		10	1635		1710	No Flare Patrol														
0170		10	17239	1723*	1752	N31	E23	5395	03	12.5	29	1F	C	4.9				95		EFK
	RAMY	10	1651E	1725U	1729D	N31	E23	5395	03	12.5	38D	SF			1	E		15		
	HOLL	10	1723	1723	1727	N31	E22	5395	03	12.5	4	SF	C	4.9	3	E		17		E
	RAMY	10	1731E	1737U	1804D	N31	E23	5395	03	12.5	33D	1F			2	E		126		F
	PALE	10	1732	1732	1802	N31	E23	5395	03	12.5	30	2F			3	E		294		E
	HOLL	10	1732	1736	1759	N32	E24	5395	03	12.6	27	SN	M	1.1	4	E		57		FE
	PALE	10	1732	1740	1802	N31	E23	5395	03	12.5	30	2F				E		63		K
0171	HOLL	10	1811	1821	1836	N10	W11	5399	03	9.9	25	SF			4	E		20		
0172		10	1837*	1850*	2158D	N32	E22	5395	03	12.5	201D	3B	X	4.5				762		KUY
	HOLL	10	1837	1916	1919D	N33	E22	5395	03	12.5	42D	3B			4	E		989		
	PALE	10	1848	1850	2158D	N31	E22	5395	03	12.5	190D	3N	X	4.5		E		320		K
	PALE	10	1848	1908	2158D	N31	E22	5395	03	12.5	190D	3B	X	4.5		E		935		K
	PALE	10	1848	1912U	2158D	N31	E22	5395	03	12.5	190D	3B	X	4.5	3	E		803		UY
0173		10	1844	1851	2001	S16	E42	5398	03	14.0	77	SF	C	5.0				28		
	HOLL	10	1844	1851	2001	S17	E42	5398	03	14.0	77	SF	C	5.0	4	E		46		
	RAMY	10	1936E	1936U	2020D	S15	E42	5398	03	14.0	44D	SF			2	E		10		
		10	2132		2145	No Flare Patrol														
0174	HOLL	10	2208	2211	2229	S15	E41	5398	03	14.0	21	SF			4	E		11		
0175		10	2334	23341	2347	N29	E19	5395	03	12.5	13	SN						46		DE
	MITK	10	2332E		2352	N29	E19	5395	03	12.5	20D	SN				C	2336			D
	HOLL	10	2334	2334	2351	N32	E17	5395	03	12.3	17	SN			4	E		63		E
	LEAR	10	2334	2335	2339	N27	E20	5395	03	12.5	5	SF			3	E		30		
0176	HOLL	11	0036	0036	0046	N30	E24	5395	03	12.9	10	SF			3	E		18		E
0177		11	0103	0107	0126	N30	E19	5395	03	12.5	23	1N						139	1.8	EHIJT
	MITK	11	0103	0107	0133	N29	E18	5395	03	12.4	30	1N				C	0107	170	2.3	
	VORO	11	0112E		0120	N31	E20	5395	03	12.6	8D	SF			2	C	0116	108	1.4	EHIJT
0178		11	0138*	0149*	0209	N30	E21	5395	03	12.7	31	1N	M	1.6				147	2.4	EFHIJKTU
	VORO	11	0138	0149	0155	N32	E26	5395	03	13.1	17	1F			2	C	0149	143	2.1	EFKIJT
	MITK	11	0145	0203	0215	N30	E20	5395	03	12.6	30	1B				C	0203	190	2.6	E
	VORO	11	0150	0156	0213	N29	E18	5395	03	12.5	23	1N			2	C	0157	215	2.8	EFHIJKUY
	LEAR	11	0154	0155U	0201D	N28	E17	5395	03	12.4	7D	SF	M	1.6	2	E		44		
	VORO	11	0159	0207	0214	N31	E25	5395	03	13.0	15	SN			2	C	0207	143	1.9	EIJKT
0179		11	02598	0306	0309	N28	E22	5395	03	12.8	10	SN						117	1.6	E
	MITK	11	0259	0306	0309	N29	E22	5395	03	12.8	10	SN				C	0306			E
	PURP	11	0307	0308U	0308D	N28	E22	5395	03	12.8	1D	SN				C	0308	117	1.6	E
0180	URUM	11	0314	0316	0319D	N30	W77	5385	03	5.1	5D	SF				C		145		A
0181	PURP	11	0320E	0321	0338	N19	E32		03	13.6	18D	SN				C	0321	113	1.5	E
0182		11	0329*	0333*	0400	N29	E19	5395	03	12.6	31	1N	M	2.0				225	3.1	DEFK
	PURP	11	0329	0338	0354	N28	E19	5395	03	12.6	25	1B				C	0338	261	3.5	E
	LEAR	11	0330	0333	0406	N27	E18	5395	03	12.5	36	1N	M	2.0		E		222		K
	LEAR	11	0330	0343	0406	N27	E18	5395	03	12.5	36	1N	M	2.0	3	E		200		F
	MITK	11	0331	0334	0405	N28	E18	5395	03	12.5	34	2N				C	0334	390	5.2	
	URUM	11	0340E	0343	0350D	N26	E17	5395	03	12.5	10D	1B				C		257	3.3	E
	URUM	11	0343	0350	0350D	N32	E21	5395	03	12.8	7D	1N				C		193	2.8	D
	PURP	11	0345	0346	0351	N34	E24	5395	03	13.1	6	SB				C	0346	50	0.8	E
0183	LEAR	11	0431	0435	0441	N29	E16	5395	03	12.4	10	SF			3	E		32		
		11	0454		0512	No Flare Patrol														

Hα SOLAR FLARES

MARCH 1989

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
0184	LEAR	11	0503	0509	0513	N30	E20	5395	03	12.8	10	SF		3	E		20		
0185		11	05144	05318	0605	N31	E22	5395	03	12.9	51	1B	M 2.3				155	2.3	EFIT
	LEAR	11	0514	0531	0615	N31	E21	5395	03	12.9	61	1N	M 2.3	3	E		140		FE
	PURP	11	0518	0539	0555D	N31	E21	5395	03	12.9	37D	1B			C	0539	201	2.9	E
	TACH	11	0519E	0523U	0555	N32	E25	5395	03	13.2	36D	SB		2	C	0523	125	1.7	IEFT
0186		11	0642	06411	0704	N30	E17	5395	03	12.6	22	SN	M 1.2				51	1.4	DF
	PURP	11	0640E	0641	0642D	N30	E17	5395	03	12.6	2D	SB			C	0641	101	1.4	D
	LEAR	11	0642	0642	0650	N30	E19	5395	03	12.8	8	SF	M 1.2	3	E		22		F
	SVTO	11	0642	0645U	0717	N31	E16	5395	03	12.5	35	SF	M 1.2	2	E		30		F
0187	HTPR	11	0724	0735	0815	N20	E35		03	14.0	51	SF			C	0735	20	0.2	
0188		11	07442	07462	0753	S14	E36	5398	03	14.0	9	SN					17	0.3	EF
	PURP	11	0744	0746	0748	S15	E36	5398	03	14.0	4	SB			C	0746	24	0.3	E
	SVTO	11	0746	0748	0758	S14	E35	5398	03	14.0	12	SF		3	E		10		F
0189		11	0756	07588	0818	N25	W85	5385	03	4.7	22	1N					106		A
	HTPR	11	0756	0758	0820	N25	W90	5385	03	4.3	24	1B			C	0758	100		
	SVTO	11	0758E	0805	0816	N25	W89	5385	03	4.4	18D	SF		2	E				
	URUM	11	0804E	0806	0815D	N25	W77	5385	03	5.4	11D	1B			C		113		A
0190		11	07589	08046	0816	N31	E17	5395	03	12.7	18	SN					58	0.7	DE
	HTPR	11	0707E		0814	N31	E13	5395	03	12.3	67D	SF			C	0726	60	0.7	E
	HTPR	11	0758	0804	0824	N32	E20	5395	03	12.9	26	SB			C	0804	60	0.7	E
	PURP	11	0806E	0806U	0814	N30	E21	5395	03	13.0	8D	SN			C	0806	82	1.1	D
	HTPR	11	0807	0810	0812	N30	E14	5395	03	12.4	5	SN			C	0810	30	0.3	E
0191		11	0827*	09025	0929	N28	E17	5395	03	12.7	62	2B	M 9.7				697	6.2	EFHIKV
	HTPR	11	0827	0904	0920	N30	E20	5395	03	12.9	53	2B			C	0904	900	11.0	EIV
	SVTO	11	0829	0902	0944	N29	E16	5395	03	12.6	75	2B	M 9.7		E		654		K
	SVTO	11	0829	0905	0944	N29	E16	5395	03	12.6	75	2B	M 9.7	3	E		590		FH
	KANZ	11	0859	0903	0907	N26	E17	5395	03	12.7	8	2N		1					
	URUM	11	0902E	0905	0908D	N28	E16	5395	03	12.6	6D	2N			C		498	6.6	F
	CATA	11	0907E	0907	0907D	N27	E17	5395	03	12.7	6D	2B		2	P	0907	843	11.0	
0192	HTPR	11	0907	0909	0920	S34	E14	5394	03	12.5	13	SB			C	0909	30	0.4	E
0193		11	0910	09141	0932	N38	E17	5395	03	12.7	22	1N					196	2.8	EI
	HTPR	11	0910	0914	0940	N37	E15	5395	03	12.6	30	SF			C	0914	150	1.9	EI
	URUM	11	0915E	0915	0924	N38	E19	5395	03	12.9	9D	1N			C		241	3.8	E
0194		11	09374	0942*	1034	N23	E27		03	13.5	57	SN					70	0.8	
	HTPR	11	0937	0955	1040	N24	E27		03	13.5	63	SB			C	0955	40	0.4	
	HTPR	11	0939	0942	1050	N24	E28		03	13.6	71	SN			C	0941	100	1.1	
	KANZ	11	0941	0948	1013	N20	E26		03	13.4	32	SN		2					
0195		11	0938*	09525	1004	N31	E20	5395	03	13.0	26	SN					156	2.0	EFI
	HTPR	11	0938	0954	1006	N33	E21	5395	03	13.1	28	SN			C	0954	120	1.3	EI
	KANZ	11	0941	0952	1002	N29	E20	5395	03	13.0	21	SN		2					
	URUM	11	0956	0957	1005	N31	E18	5395	03	12.8	9	1F			C		193	2.7	F
0196		11	10103	10121	1020	N29	E15	5395	03	12.6	10	SN	C 8.3				117	1.7	EFH
	SVTO	11	1010E	1011U	1023	N29	E14	5395	03	12.5	13D	SN	C 8.3	3	E		58		FH
	HTPR	11	1010	1012	1023	N32	E17	5395	03	12.8	13	SN			C	1012	120	1.3	E
	YUNN	11	1012E	1012U	1021	N29	E14	5395	03	12.5	9D	SN			P	1012	96	1.3	F
	URUM	11	1012	1013	1017	N29	E13	5395	03	12.4	5	1B			C		193	2.5	E
	KANZ	11	1013	1013	1018	N28	E15	5395	03	12.6	5	SF		2					
0197		11	1038*	1039*	1105	N32	E18	5395	03	12.9	27	SF					53	0.9	EFI
	SVTO	11	1038	1054	1111	N33	E17	5395	03	12.8	33	SF		3	E		36		F
	KANZ	11	1039	1039	1058	N30	E13	5395	03	12.5	19	SF		2					
	KANZ	11	1049	1056	1103	N31	E20	5395	03	13.0	14	SF		2					
	HTPR	11	1050	1057	1109	N34	E21	5395	03	13.1	19	SN			C	1057	70	0.9	EI
0198	HTPR	11	1124	1130	1140	N30	E14	5395	03	12.6	16	SF			C	1130	80	0.9	E

Hα SOLAR FLARES

MARCH 1989

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
0199		11	11563	11591	1220	S18	E23	5398	03	13.2	24	SN					60	0.6	EI
	HTPR	11	1156	1200	1226	S18	E24	5398	03	13.3	30	SN			C	1200	60	0.6	EI
	KANZ	11	1159	1159	1215	S19	E22	5398	03	13.2	16	SF		1					
0200		11	12187	1223*	1249	N31	E15	5395	03	12.7	31	SN	C 9.9				75	1.2	EFH
	HTPR	11	1218	1226	1244	N32	E20	5395	03	13.1	26	SN			C	1226	150	1.7	E
	RAMY	11	1220	1228	1300	N32	E14	5395	03	12.6	40	SN	C 9.9	3	E		56		FE
	SVTO	11	1222	1223	1250	N32	E14	5395	03	12.6	28	SF	C 9.9	3	E		45		FH
	HTPR	11	1222	1230	1250	N31	E12	5395	03	12.5	28	SB			C	1230	50	0.6	E
	KANZ	11	1225	1233	1244	N34	E15	5395	03	12.7	19	SF		2					
	KANZ	11	1225	1233	1244	N29	E19	5395	03	13.0	19	SF		2					
	KANZ	11	1225	1233	1253D	N29	E10	5395	03	12.3	28D	SF		2					
0201		11	12366	1248*	1328	S17	E26	5398	03	13.5	52	SF					60	1.3	EF
	HTPR	11	1236	1248	1345	S18	E23	5398	03	13.3	69	SN			C	1248	120	1.3	E
	RAMY	11	1242	1304	1326	S18	E23	5398	03	13.3	44	SF		3	E		43		F
	SVTO	11	1258E	1258U	1312	S15	E33	5398	03	14.0	14D	SF		3	E		16		
0202	RAMY	11	1316	1316	1326	N30	E13	5395	03	12.6	10	SF		3	E		12		FH
0203		11	1336*	13407	1349	N29	E14	5395	03	12.7	13	SF					29	0.6	EFH
	HTPR	11	1336	1347	1350	N30	E11	5395	03	12.4	14	SN			C	1347	50	0.6	E
	RAMY	11	1339	1340	1345	N30	E17	5395	03	12.9	6	SF		3	E		20		FH
	RAMY	11	1347	1347	1351	N28	E13	5395	03	12.6	4	SF		3	E		18		
0204		11	13586	1405*	1424	N29	E12	5395	03	12.5	26	SF	M 1.0				34	0.6	EFHK
	RAMY	11	1358	1408	1429	N28	E13	5395	03	12.6	31	SF		3	E		41		F
	RAMY	11	1358	1424	1429	N28	E13	5395	03	12.6	31	SF	M 1.0		E		21		K
	HTPR	11	1402	1405	1420	N30	E11	5395	03	12.4	18	SN			C	1405	50	0.6	
	SVTO	11	1402	1405	1436D	N30	E11	5395	03	12.4	34D	SF	M 1.0	3	E		33		FH
	HOLL	11	1404	1407	1416	N28	E13	5395	03	12.6	12	SN	M 1.0	3	E		23		FE
0205		11	1521*	15373	1602	N29	E12	5395	03	12.6	41	2B	X 1.2				467	7.2	EFHIK
	RAMY	11	1520E	1544U	1605	N27	E12	5395	03	12.6	45D	1B		2	E		233		FH
	HTPR	11	1521	1540	1620	N30	E12	5395	03	12.6	59	2B			C	1540	650	7.2	EI
	SVTO	11	1535	1537	1552	N29	E11	5395	03	12.5	17	3N	X 1.2		E		293		K
	HOLL	11	1535	1538	1601	N28	E13	5395	03	12.7	26	2B	X 1.2	4	E		468		H
	SVTO	11	1535	1539	1552	N29	E11	5395	03	12.5	17	3N	X 1.2	2	E		690		FH
0206	HOLL	11	1522	1522	1529	S15	E31	5398	03	14.0	7	SF		4	E		10		
0207	RAMY	11	1633E	1643U	1706D	N27	E08	5395	03	12.3	33D	SF		2	E		27		
0208		11	1727	1731	1734	N30	E11	5395	03	12.6	7	SF					18		
	RAMY	11	1718E	1720U	1736D	N30	E10	5395	03	12.5	18D	SF		2	E		20		
	HOLL	11	1727	1731	1734	N29	E12	5395	03	12.7	7	SF		4	E		16		
0209		11	1827*	1826*	1939	N29	E10	5395	03	12.5	72	2N	M 1.2				231		EFK
	RAMY	11	1818E	1826	1856D	N30	E10	5395	03	12.5	38D	1N	M 1.2		E		86		K
	RAMY	11	1818E	1837U	1856D	N30	E10	5395	03	12.5	38D	1N	M 1.2	2	E		122		F
	HOLL	11	1827	1837	1856	N31	E10	5395	03	12.5	29	1N	M 1.2	4	E		105		FE
	PALE	11	1828	1935U	2014	N29	E06	5395	03	12.2	106	2B		3	E		260		E
	HOLL	11	1902	1903	1909	N32	E12	5395	03	12.7	7	SF		4	E		22		F
	HOLL	11	1933	1940	2016	N27	E10	5395	03	12.6	43	2B	X 1.3	4	E		405		F
	RAMY	11	1935E	1938U	2033D	N27	E11	5395	03	12.7	58D	3B		2	E		615		F
0210		11	19112	1919*	2027	S18	E25	5398	03	13.7	76	1N					72		EFK
	HOLL	11	1911	1919	2034	S18	E25	5398	03	13.7	83	1N		4	E		125		FE
	HOLL	11	1911	2005	2034	S18	E25	5398	03	13.7	83	1N			E		58		K
	PALE	11	1913	1919	2013	S17	E22	5398	03	13.5	60	SN		3	E		67		F
	RAMY	11	1934E	2007U	2033D	S21	E28	5398	03	14.0	59D	SF		2	E		37		
0211	VORO	11	2337	2343	2351	N31	E11	5395	03	12.8	14	SF		3	C	2343	116	1.5	DHIJT

Hα SOLAR FLARES

MARCH 1989

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
0212		12	0016*	0022*	0045	N29	E08	5395	03	12.6	29	2B	M 7.3				298	3.3	DFHIJKTU
	LEAR	12	0016	0022	0043	N28	E09	5395	03	12.7	27	2B	M 7.3		E		370		K
	LEAR	12	0016	0029	0043	N28	E09	5395	03	12.7	27	2B	M 7.3	3	E		394		
	HOLL	12	0018	0026	0044D	N29	E09	5395	03	12.7	26D	2B	M 7.3	3	E		263		F
	MITK	12	0019	0026	0043	N29	E08	5395	03	12.6	24	2B			C	0026	430	5.6	FHIJ
	VORO	12	0027E	0030	0043	N30	E09	5395	03	12.7	16D	1B		2	C	0043	251	3.2	HIJTUY
	VORO	12	0044	0045	0052	N32	E05	5395	03	12.4	8	SN		2	C	0045	81	1.0	DHIJT
0213		12	01076	0115	0126	N28	E04	5395	03	12.3	19	SF					80	1.0	DHIJTUY
	VORO	12	0107	0115	0131	N30	E07	5395	03	12.6	24	SF		2	C	0115	134	1.7	HIJTUY
	VORO	12	0113	0115	0120	N27	E02	5395	03	12.2	7	SF		2	C	0115	27	0.4	DIJTH
0214		12	01358	01435	0201	N30	E05	5395	03	12.4	26	SF					90	1.2	EHIJTUY
	VORO	12	0135	0143	0204	N30	E06	5395	03	12.5	29	SF		2	C	0143	125	1.6	HIJTUY
	VORO	12	0143	0148	0158	N30	E04	5395	03	12.4	15	SF		2	C	0148	54	0.7	EHIJT
0215	VORO	12	0155	0157	0208	N26	E03	5395C	03	12.3	13	SF		2	C	0157	72	0.9	DHIJT
0216	VORO	12	0219	0222	0227	N32	E05	5395	03	12.5	8	SN		2	C	0222	81	1.0	DHIJT
0217	PURP	12	0332	0342	0342D	N28	E04	5395	03	12.4	10D	1B			C	0342	163	2.1	E
0218		12	05224	05301	0555	N31	E01	5395	03	12.3	33	SN	C 7.5				114	2.0	EFHIJ
	MITK	12	0522	0530	0558	N30	W01	5395	03	12.1	36	1N			C	0530	160	2.1	EHIJ
	LEAR	12	0523	0530	0544	N32	E01	5395	03	12.3	21	SF	C 7.5	3	E		27		F
	PURP	12	0526	0531	0604	N31	E02	5395	03	12.4	38	SB			C	0531	155	2.0	E
0219		12	06032	0608*	0632	N30	E08	5395	03	12.9	29	SN	C 8.5				81	2.0	FIJ
	MITK	12	0603	0618	0630	N30	E07	5395	03	12.8	27	SN			C	0618			IJ
	PURP	12	0604	0608	0637	N29	E09	5395	03	12.9	33	SB			C	0608	156	2.0	
	SVTO	12	0605	0609	0630	N32	E08	5395	03	12.9	25	SF		1	E		28		F
	LEAR	12	0605	0618	0633	N29	E07	5395	03	12.8	28	SN	C 8.5	3	E		58		
0220		12	0659E	0704U	0725	N34	E04	5395	03	12.6	26D	SF					108	1.4	E
	PURP	12	0659E	0706U	0725	N32	E02	5395	03	12.4	26D	SF			C	0706	136	1.8	E
	YUNN	12	0704E	0704U	0706D	N36	E07	5395	03	12.8	2D	SF			P	0704	80	1.1	
0221		12	0735*	0738*	0814	N29	E05	5395	03	12.7	39	1N					322	5.3	DEFHKTWX
	KHAR	12	0727E		0740	N30	E02	5395	03	12.5	13D	SF		2	V				D
	PURP	12	0735	0738	0809	N28	E07	5395	03	12.9	34	SB			C	0738	152	1.9	E
	LEAR	12	0736	0738	0753	N28	E05	5395	03	12.7	17	SF		3	E		42		
	LEAR	12	0803	0804	0812	N29	E06	5395	03	12.8	9	SF		2	E		15		
	CATA	12	0803E	0820	0840D	N28	E05	5395	03	12.7	37D	2B		2	P	0820	450	5.7	T
	YUNN	12	0807	0835U	0853D	N29	E05	5395	03	12.7	46D	2N			P	0835	563	7.2	F
	PURP	12	0809	0823	0838D	N29	E03	5395	03	12.6	29D	2B			C	0828	825	10.6	KW
	KHAR	12	0812	0822	0916	N31	E03	5395	03	12.6	64	1B		2	V	0822			EHX
	LEAR	12	0824	0839	0914D	N29	E04	5395	03	12.7	50D	1N		3	E		157		FE
	ATHN	12	0830E	0840U	0850D	N30	E07	5395	03	12.9	20D	2B		3	V	0840	446	6.0	
	CATA	12	0835	0840	0840D	N27	W02	5395	03	12.2	5D	SB		1	P	0840	141	1.8	
	ATHN	12	0835E	0845U	0855D	N31	E09	5395	03	13.1	20D	1B		3	V	0845	191	2.6	
	ATHN	12	0840E	0850U	0910D	N33	E11	5395	03	13.2	30D	1B		3	V	0850	318	4.5	
	CATA	12	0901E	0901	0940D	N30	E07	5395	03	12.9	39D	2B		2	P	0901	562	7.3	T
0222	KHAR	12	1108	1110	1130	N22	E35		03	15.1	22	SF		2	V	1108			D
0223	SVTO	12	1108E	1108U	1119	N34	E16	5397	03	13.7	11D	SF		2	E		15		
0224		12	1115*	1118*	1148	N28	W01	5395	03	12.4	33	SN					126	2.2	DEF
	SVTO	12	1115	1118	1140	N28	W03	5395	03	12.2	25	SF		2	E		20		F
	KHAR	12	1126	1135	1155	N29	W02	5395	03	12.3	29	SN		2	P	1134	160	1.9	E
	CATA	12	1131	1135	1135D	N27	W03	5395	03	12.2	4D	1B		2	P	1135	197	2.5	
	KHAR	12	1143	1143	1150	N30	E05	5395	03	12.9	7	SF		2	V	1143			D
0225	SVTO	12	1242	1248	1305	N28	W01	5395	03	12.4	23	SF		2	E		38		FH
0226		12	1456	15035	1536	N29	E00	5395	03	12.6	40	SB	M 2.5				103		FHK
	SVTO	12	1456	1503	1536	N29	E00	5395	03	12.6	40	SB	M 2.5	2	E		48		FH
	SVTO	12	1456	1508	1536	N29	E00	5395	03	12.6	40	SB	M 2.5		E		158		K

Hα S O L A R F L A R E S

MARCH 1989

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
0227	HOLL	12	1643	1655	1703	S11	E80	5403	03	18.7	20	SF		3	E		38		
0228	HOLL	12	1648	1652	1704	N28	W03	5395	03	12.5	16	SF		3	E		72		F
0229		12	1857*	1903*	1950	N28	W06	5395	03	12.3	53	1B	C 6.0				200		FK
	PALE	12	1857	1908	1934	N27	W06	5395	03	12.3	37	2B	C 6.0	3	E		309		F
	HOLL	12	1901	1903	1953	N27	W09	5395	03	12.1	52	1B	C 6.0		E		237		K
	HOLL	12	1901	1907	1953	N27	W09	5395	03	12.1	52	1B	C 6.0	3	E		220		F
	PALE	12	1949	1952	2001	N30	W02	5395	03	12.7	12	SF		3	E		35		
0230	PALE	12	2018	2025	2028	N32	E13	5397	03	13.9	10	SF		3	E		16		
0231	PALE	12	2028	2037	2037D	N32	W03	5395	03	12.6	9D	2N	M 6.3	3	E		261		
0232	PALE	12	2032	2039	2042	N32	E14	5397	03	14.0	10	SF		3	E		23		F
		12	2104		2132	No Flare Patrol													
		12	2139		2146	No Flare Patrol													
0233	PALE	12	2206	2220U	2232D	N33	E01	5395	03	13.0	26D	SF		3	E		97		F
		12	2206		2227	No Flare Patrol													
		12	2233		2301	No Flare Patrol													
0234	LEAR	12	2335	2337	2343	N28	W04	5395	03	12.7	8	1N	M 1.4	3	E		155		F
0235		13	00231	00251	0052	N40	E01	5395	03	13.1	29	1N					195	4.1	HIJ
	MITK	13	0023	0026	0054	N41	E01	5395	03	13.1	31	1N			C	0026	270	4.1	HIJ
	LEAR	13	0024	0025	0050	N39	E01	5395	03	13.1	26	1F		3	E		120		
0236		13	0125*	0118*	0148	N29	W08	5395	03	12.4	23	1N					230	3.0	EHI
	MITK	13	0111E	0118	0130	N31	W09	5395	03	12.3	19D	SF			C	0118			HI
	MITK	13	0125	0132	0159	N27	W12	5395	03	12.1	34	1N			C	0132	170	2.2	HI
	MITK	13	0133	0136	0141	N29	W04	5395	03	12.7	8	1B			C	0136	290	3.7	HI
	MITK	13	0148	0151	0201	N28	W08	5395	03	12.4	13	SN			C	0151			EI
0237		13	0259	0301*	0413	N29	W02	5395	03	13.0	74	3N					1110	17.7	-EFHIKLS
	MITK	13	0257E	0308	0419	N28	W01	5395	03	13.0	82D				C	0308	1940	24.6	
	MITK	13	0257E	0321	0419	N31	W04	5395	03	12.8	82D	3B			C	0321	1570	20.6	FH-LSUZ
	LEAR	13	0259	0301	0417	N28	W02	5395	03	13.0	78	3N			E		542		K
	LEAR	13	0259	0320	0417	N28	W02	5395	03	13.0	78	3N		3	E		601		UE
	URUM	13	0308E	0309	0355	N28	W03	5395	03	12.9	47D	3B			C		1768	22.4	UI
	YUNN	13	0346E	0348U	0348D	N33	W03	5395	03	12.9	2D	1N			P	0348	241	3.2	F
0238	LEAR	13	0448	0449	0452	N31	W04	5395	03	12.9	4	SF		3	E		14		F
0239		13	0533	0534	0538	N31	W10	5395	03	12.4	5	SN					52	1.2	D
	ABST	13	0532E	0534	0540	N32	W10	5395	03	12.4	8D	SN			P	0534	87	1.2	D
	LEAR	13	0533	0534	0536	N30	W11	5395	03	12.4	3	SF		3	E		17		
0240	LEAR	13	0550	0552	0556	N28	W09	5395	03	12.5	6	SF		3	E		27		F
0241		13	0621*	0630*	0708	N31	W06	5395	03	12.8	47	1N					106	3.2	FIST
	LEAR	13	0621	0630	0637	N33	W08	5395	03	12.6	16	SN		3	E		55		F
	TACH	13	0637		0645D	N34	W07	5395	03	12.7	8D	SN		1	C	0637	90	1.3	FTI
	LEAR	13	0638	0642	0648	N33	W08	5395	03	12.6	10	SF		3	E		19		F
	LEAR	13	0649	0655	0733	N28	W06	5395	03	12.8	44	SF		3	E		58		FS
	ABST	13	0700E	0709	0733	N29	W04	5395	03	13.0	33D	2N			P	0709	393	5.0	F
	SVTO	13	0712E	0712U	0727D	N30	W04	5395	03	13.0	15D	SF		1	E		18		F
0242	ABST	13	0739	0742	0747	N31	W01	5397	03	13.2	8	SN			C	0742	87	1.2	D
0243		13	07496	07534	0802	N40	W00	5395	03	13.3	13	SF					62	0.9	D
	ABST	13	0749	0753	0806	N41	E02	5395	03	13.5	17	SN			C	0753	87	1.3	D
	KHAR	13	0753	0754	0800	N40	W02	5395	03	13.2	7	SF		2	P	0756	50	0.7	
	YUNN	13	0755	0757	0801	N40	W01	5395	03	13.2	6	SF			C		48	0.7	

Hα SOLAR FLARES

MARCH 1989

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	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0244		13	0822*	0823*	0839	N32	W07	5395	03	12.8	17	SF						60	1.4	DH
	KHAR	13	0822	0823	0830	N37	W07	5395	03	12.8	8	SF			2	V	0823			H
	ABST	13	0826	0828	0833	N31	W07	5395	03	12.8	7	SN				C	0828	105	1.4	D
	KHAR	13	0836	0837	0844	N31	W07	5395	03	12.8	8	SF			2	V	0837			D
	LEAR	13	0836	0841	0850	N30	W06	5395	03	12.9	14	SF			3	E		16		
0245		13	0947*	0948*	1000	N34	W13	5395	03	12.4	13	SN								D
	KHAR	13	0947	0948	0955	N34	W13	5395	03	12.4	8	SN			2	P	0948			D
	KHAR	13	0959	1000	1005	N34	W13	5395	03	12.4	6	SF			2	V	0959			D
0246	KHAR	13	1003U		1008	S15	E79	5403	03	19.4	5U	SF			2	V	1003			D
0247	KHAR	13	1027	1028	1034	N34	W13	5395	03	12.4	7	SF			2	V	1028			DH
0248	KHAR	13	1035		1045	S15	E90	5418	03	20.2	10	SF			2	P	1040			D
0249	KHAR	13	1050	1052	1057	N34	W13	5395	03	12.4	7	SF			2	V	1052			D
0250	KHAR	13	1128		1138	N34	W13	5395	03	12.4	10	SF			2	V	1128			D
0251		13	11458	1159	1230	N30	W14	5395	03	12.4	45	SN						84	0.9	FH
	RAMY	13	1145	1155U	1256	N30	W14	5395	03	12.4	71	SF			3	E		98		FH
	KHAR	13	1153	1159	1205	N30	W14	5395	03	12.4	12	SN			2	P	1157	70	0.9	H
0252		13	12391	12411	1247	S14	E70	5403	03	18.8	8	SF						69		H
	SVTO	13	1239	1242	1248	S15	E72	5403	03	19.0	9	SF			2	E		87		
	RAMY	13	1240	1241	1246	S14	E69	5403	03	18.7	6	SF			3	E		51		H
0253		13	12591	1309*	1432	N32	W14	5395	03	12.4	93	1F	M	1.7				100		EFK
	RAMY	13	1259	1309	1452	N32	W14	5395	03	12.4	113	1N	M	1.7		E		101		K
	RAMY	13	1259	1315	1452	N32	W14	5395	03	12.4	113	1N	M	1.7	3	E		147		FE
	SVTO	13	1300	1315	1431	N33	W15	5395	03	12.3	91	SF	M	1.7		E		101		K
	SVTO	13	1300	1344	1431	N33	W15	5395	03	12.3	91	SF			2	E		50		F
	KANZ	13	1313E	1321U	1352	N32	W14	5395	03	12.4	39D	1F			1					E
0254		13	1456	1511	1608	N32	W16	5395	03	12.3	72	SN						52		FH
	HOLL	13	1456	1511	1642	N32	W15	5395	03	12.4	106	SN			3	E		35		F
	SVTO	13	1521E	1521U	1533	N31	W17	5395	03	12.3	12D	SF			2	E		70		FH
0255		13	15451	1548	1556	S34	W06	5394	03	13.2	11	SF						39		
	HOLL	13	1545	1548	1556	S33	W07	5394	03	13.1	11	SF			3	E		40		
	RAMY	13	1546	1548	1555	S34	W06	5394	03	13.2	9	SF			3	E		38		
0256		13	1700*	1737*	1929	N31	W13	5395	03	12.7	149	SN	M	1.5				77		EF
	RAMY	13	1700	1737U	1955	N29	W11	5395	03	12.8	175	SN			2	E		88		FE
	PALE	13	1731	1737	1854	N32	W16	5395	03	12.5	83	SN	M	1.5	3	E		81		FE
	HOLL	13	1825	1828	1938	N31	W12	5395	03	12.8	73	SN			3	E		63		E
0257		13	1816	1819	1829	S16	E06	5398	03	14.2	13	SF						24		F
	PALE	13	1816	1819	1829	S16	E06	5398	03	14.2	13	SF			3	E		30		F
	RAMY	13	1819E	1820U	1829	S17	E06	5398	03	14.2	10D	SF			2	E		18		F
0258		13	1835	1836	1847	N32	E00	5397	03	13.8	12	SF						34		F
	PALE	13	1835	1836	1847	N31	E01	5397	03	13.8	12	SF			3	E		16		
	RAMY	13	1841E	1841U	1944D	N32	W01	5397	03	13.7	63D	SF			1	E		52		F
0259	RAMY	13	1941E	1941U	1952	S34	W11	5394	03	12.9	11D	SF			2	E		11		
0260		13	19462	1949	1959	S18	E72	5403	03	19.3	13	SF						18		F
	HOLL	13	1946	1949	2003	S17	E73	5403	03	19.4	17	SF			3	E		22		
	RAMY	13	1948	1949	1955	S20	E72	5403	03	19.3	7	SF			2	E		14		F
0261		13	19471	1948	1956	S17	E18	5406	03	15.2	9	SF						18		
	HOLL	13	1947	1948	1956	S16	E19	5406	03	15.3	9	SF			3	E		25		
	RAMY	13	1948	1948	1955	S18	E18	5406	03	15.2	7	SF			3	E		12		
0262	PALE	13	2046	2049	2109	S16	E72	5403	03	19.3	23	SF			3	E		35		F
0263	PALE	13	2111	2114	2128	N29	W15	5395	03	12.7	17	SF			3	E		11		F

Hα S O L A R F L A R E S

MARCH 1989

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
		13	2141		2210	No Flare Patrol														
0264	PALE	13	2211	2241	2323D	N31	W13	5395	03	12.9	72D	SN	M	1.2	3	E		47		F
0265	PALE	13	2212	2213	2241	S16	E65	5403	03	18.8	29	SF	C	5.4	3	E		97		
		13	2214		2238	No Flare Patrol														
0266	VORO	14	0002	0003	0011	N37	W05	5397	03	13.6	9	SN			2	C	0003	99	1.4	EIJT
0267	VORO	14	0002	0003	0011	N31	W12	5395	03	13.0	9	SN			2	C	0003	116	1.5	EIJT
0268		14	0038*	0043*	0110	N31	W16	5395	03	12.8	32	1N	C	9.5				160	2.4	DEFIJKT
	YUNN	14	0034E	0043	0043D	N31	W14	5395	03	12.9	9D	1N				P		321	4.3	F
	VORO	14	0038	0047	0051	N30	W16	5395	03	12.8	13	1F			2	C	0047	215	2.8	EIJT
	LEAR	14	0041	0047	0111	N34	W13	5395	03	13.0	30	SF	C	9.5	3	E		32		
	PURP	14	0050	0113	0127	N29	W17	5395	03	12.7	37	1B				C	0113	253	3.4	
	YUNN	14	0051E	0051U	0051D	N31	W13	5395	03	13.0	37D	1N				P	0051	193	2.6	FK
	VORO	14	0057	0058	0123D	N30	W23	5395	03	12.2	26D	SF			2	C	0058	81	1.1	EIJT
	VORO	14	0057	0058	0123D	N36	W16	5395	03	12.7	26D	SF			2	C	0058	27	0.4	DIJT
	VORO	14	0111	0113	0123D	N30	W18	5395	03	12.6	12D	1N			2	C	0113	161	2.1	DIJT
0269		14	00443	00471	0054	N33	W04	5397	03	13.7	10	1F						123	3.1	EIJT
	VORO	14	0044	0047	0123D	N34	W06	5397	03	13.5	39D	1F			2	C	0047	233	3.1	EIJT
	LEAR	14	0047	0048	0054	N32	W03	5397	03	13.8	7	SF			3	E		13		
0270		14	0150*	0227*	0338	N31	W17	5395	03	12.7	108	1N	M	2.0				252	4.6	EFIJKW
	PURP	14	0150	0227	0402	N29	W18	5395	03	12.7	132	1B				C	0227	343	4.6	KW
	LEAR	14	0219	0311	0345	N27	W22	5395	03	12.4	86	1F	M	2.0	3	E		52		F
	PURP	14	0238	0246	0300	N37	W17	5395	03	12.7	22	1B				C	0246	231	3.5	
	MITK	14	0249	0300	0329D	N30	W19	5395	03	12.6	40D	1N				C	0300	170	2.3	EIJ
	PALE	14	0252	0300	0349	N30	W14	5395	03	13.0	57	SN			3	E		34		F
	YUNN	14	0303E	0303U	0338D	N31	W16	5395	03	12.9	35D	2B				P	0303	723	9.8	F
	URUM	14	0317E	0320	0335	N32	W16	5395	03	12.9	18D	1N				C		209	2.9	F
0271	PURP	14	0432	0433	0439	N37	W18	5395	03	12.7	7	SN				C	0433	48	0.7	D
0272	PURP	14	0528E	0528U	0534	N38	W16	5395	03	12.9	6D	SF				C	0528	31	0.3	D
0273		14	0616*	0622*	0738	N31	W20	5395	03	12.7	82	SN	C	9.3				100	1.7	DEF
	PURP	14	0616	0649U	0705	N32	W19	5395	03	12.7	49	1N				C	0649	235	3.4	E
	LEAR	14	0618	0622	0711	N31	W21	5395	03	12.6	53	SF	C	9.3	3	E		48		F
	ABST	14	0621	0627	0646D	N36	W18	5395	03	12.8	25D	SN				P	0627	87	1.3	D
	YUNN	14	0622	0626	0758	N32	W19	5395	03	12.8	96	SN				C		129	1.8	E
	ABST	14	0625	0643U	0646D	N30	W25	5395	03	12.3	21D	SN				P	0643	87	1.3	D
	ABST	14	0631	0643U	0646D	N30	W17	5395	03	12.9	15D	SN				P	0643	114	1.6	F
	PURP	14	0710	0714	0721	N31	W19	5395	03	12.8	11	SB				C	0714	113	1.6	
	YUNN	14	0736	0746	0807	N30	W17	5395	03	13.0	31	SN				C		80	1.1	E
	LEAR	14	0759	0802	0808	N30	W23	5395	03	12.5	9	SF			3	E		12		F
0274	HTPR	14	0826	0855	1125	S17	E17	5406	03	15.6	179	SF				C	0855	30	0.3	
0275		14	0830*	0836*	0937	N29	W24	5395	03	12.5	67	SF	M	1.6				130	2.9	DEFHI
	HTPR	14	0830	0845	0915	N28	W17	5395	03	13.0	45	1N				C	0845	300	3.3	EI
	YUNN	14	0834	0837	0855	N30	W17	5395	03	13.0	21	SN				C		113	1.5	F
	SVTO	14	0835	0857	0921	N30	W21	5395	03	12.7	46	SF	M	1.6	3	E		25		
	LEAR	14	0836	0836	0903	N30	W19	5395	03	12.9	27	SF			3	E		32		F
	HTPR	14	0900	0922	1000	N27	W30	5395	03	12.0	60	1N				C	0922	420	4.6	EI
	YUNN	14	0904	0918	0924	N27	W27	5395	03	12.3	20	SN				C		96	1.4	
	LEAR	14	0905	0913	0918	N29	W24	5395	03	12.5	13	SF			3	E		12		F
	SVTO	14	0924	0943	0948	N27	W29	5395	03	12.1	24	SF			3	E		11		FH
	LEAR	14	0926	0930	0934	N29	W27	5395	03	12.3	8	SF			3	E		12		F
	URUM	14	0934E	0934	0938D	N27	W28	5395	03	12.2	4D	2N				C		450	6.4	E
	KHAR	14	0940E		1017	N29	W29	5395	03	12.1	37D	SF			2	P	0952	100	1.5	DH
	KHAR	14	0952	0958	1025	N32	W19	5395	03	12.9	33	SF			2	P	0952	110	1.6	E
	SVTO	14	0956	0959	1007	N30	W21	5395	03	12.8	11	SF	C	5.2	3	E		11		F
0276	HTPR	14	0837	0839	0844	N15	E90	5409	03	21.2	7	1N				C	0839	120		E

Hα S O L A R F L A R E S

MARCH 1989

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	Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0277		14	1013*	10189	1028	N41	W17		03	13.0	15	SN						120	1.6	DE
	HTPR	14	1013	1018	1022	N40	W17		03	13.0	9	SN				C	1018	120	1.6	E
	KHAR	14	1023	1027	1035	N42	W17		03	13.0	12	SF			2	V	1025			D
0278	KHAR	14	1043	1045	1056	S14	E63	5403	03	19.2	13	SF			2	V	1045			DH
0279		14	1045*	1046*	1102	N32	W20	5395	03	12.9	17	SF								DE
	KHAR	14	1045	1046	1052	N32	W19	5395	03	12.9	7	SF			2	V	1046			E
	KHAR	14	1056	1058	1112	N31	W21	5395	03	12.8	16	SF			2	V	1058			D
0280	HTPR	14	1154	1159	1225	S19	E17	5406	03	15.8	31	SF				C	1159	30	0.3	E
0281		14	12558	13012	1328	N29	W24	5395	03	12.6	33	1N	C	6.6				128	1.7	EFHI
	HTPR	14	1255		1317D	N29	W24	5395	03	12.6	22D	1F				C	1257	250	2.7	EI
	RAMY	14	1259	1303	1335	N29	W20	5395	03	13.0	36	1N	C	6.6	3	E		112		F
	SVTO	14	1301	1301	1320	N29	W21	5395	03	12.9	19	SN			3	E		89		FH
	HTPR	14	1303		1317D	N28	W30	5395	03	12.2	14D	SF				C	1308	60	0.7	E
0282		14	13501	14049	1451	N29	E56	5404	03	19.0	61	1N						105	2.4	EF
	RAMY	14	1350	1408U	1505	N28	E51	5404	03	18.6	75	SN			2	E		94		F
	SVTO	14	1350	1413	1448	N30	E56	5404	03	19.0	58	1F			3	E		109		F
	HOLL	14	1351	1404	1441	N28	E55	5404	03	18.9	50	SF			3	E		98		F
	HTPR	14	1400E		1441D	N30	E60	5404	03	19.3	41D	1N				C	1403	120	2.4	E
0283		14	14205	1429	1452	N32	W24	5395	03	12.7	32	SN						49	1.2	EF
	HTPR	14	1420		1441D	N36	W23	5395	03	12.7	21D	SB				C	1424	100	1.2	E
	HOLL	14	1423	1429	1434	N30	W25	5395	03	12.6	11	SF			3	E		20		F
	RAMY	14	1425	1429	1510	N31	W23	5395	03	12.8	45	SF			3	E		26		
0284		14	14205	14227	1438	S34	W21	5394	03	12.9	18	SF						43	1.1	EF
	HTPR	14	1420	1422	1439	S33	W20	5394	03	13.0	19	SN				C	1422	100	1.1	E
	HOLL	14	1425	1425	1431	S33	W21	5394	03	12.9	6	SF			3	E		19		F
	RAMY	14	1425	1425	1437	S33	W21	5394	03	12.9	12	SF			3	E		27		
	SVTO	14	1425	1429	1444	S35	W22	5394	03	12.8	19	SF			3	E		26		F
0285		14	15441	16063	1628	N34	W08	5397	03	14.0	44	SN						75	1.2	EK
	HTPR	14	1529E		1636D	N35	W08	5397	03	14.0	67D	SB				C	1541	100	1.2	EK
	HOLL	14	1544	1606	1624	N32	W07	5397	03	14.1	40	SF			3	E		59		
	RAMY	14	1545	1609	1632	N34	W09	5397	03	13.9	47	SF			3	E		67		
0286		14	15555	15584	1604	N29	W25	5395	03	12.7	9	SN						48	1.3	EF
	SVTO	14	1545E	1545U	1553	N31	W24	5395	03	12.8	8D	SF			2	E		18		
	HTPR	14	1555	1558	1607	N29	W30	5395	03	12.3	12	SB				C	1558	120	1.3	
	HOLL	14	1600	1601	1606	N28	W26	5395	03	12.6	6	SN			3	E		38		E
	SVTO	14	1600E	1601U	1609	N27	W22	5395	03	12.9	9D	SF			2	E		20		
	RAMY	14	1600	1602	1606	N28	W25	5395	03	12.7	6	SN			3	E		46		FE
0287		14	16461	1701*	1800	N32	W13	5397	03	13.7	74	SN						64		EFK
	RAMY	14	1646	1701	1808	N32	W12	5397	03	13.7	82	SF				E		79		K
	RAMY	14	1646	1712	1808	N32	W12	5397	03	13.7	82	SN			3	E		60		E
	HOLL	14	1647	1708	1753	N32	W15	5397	03	13.5	66	SN			3	E		75		FE
	PALE	14	1707E	1707U	1753	N32	W13	5397	03	13.7	46D	SN			3	E		40		
0288		14	1646	1658*	2037	N32	W22	5395	03	12.9	231	2B	X	1.1				246		FKTU
	HOLL	14	1646	1658	2148	N33	W21	5395	03	13.0	302	2B				E		148		KT
	HOLL	14	1646	1726	2148	N33	W21	5395	03	13.0	302	2B	X	1.1	3	E		431		UF
	PALE	14	1707E	1715U	1815	N31	W25	5395	03	12.7	68D	1B			3	E		159		UF
0289	RAMY	14	1649	1650	1701	S18	E57	5403	03	19.0	12	SF			2	E		11		
0290	RAMY	14	1821	1825	1855	S12	E50	5403	03	18.5	34	SF			3	E		33		
0291	RAMY	14	1822	1825	1842	N32	W24	5395	03	12.9	20	SF			2	E		16		F
0292	PALE	14	1844	1846	1848	S19	E61	5403	03	19.4	4	SF			3	E		31		
0293		14	19267	19332	1940	N32	W08	5397	03	14.2	14	SF						18		F
	RAMY	14	1926	1933	1940	N32	W08	5397	03	14.2	14	SF			3	E		23		F
	PALE	14	1933	1935	1939	N33	W08	5397	03	14.2	6	SF			3	E		14		

Hα SOLAR FLARES

MARCH 1989

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	Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0294		14	19289	1941*	2149	N32	W26	5395	03	12.7	141	SB	M	1.4				82		EFK
	RAMY	14	1928	1941	2149	N32	W27	5395	03	12.7	141	SB	M	1.4		E		84		K
	RAMY	14	1928	2036	2149	N32	W27	5395	03	12.7	141	SN	M	1.4	3	E		99		FE
	PALE	14	1937	1942	2148D	N31	W24	5395	03	12.9	131D	SB	M	1.4		E		68		K
	PALE	14	1937	2004	2148D	N31	W24	5395	03	12.9	131D	SN	M	1.4	3	E		78		FE
0295		14	20084	20111	2016	S18	E55	5403	03	19.0	8	SF						26		
	RAMY	14	2008	2011	2021D	S19	E55	5403	03	19.0	13D	SF			3	E		27		
	PALE	14	2012	2012	2016	S18	E55	5403	03	19.0	4	SF			3	E		26		
0296		14	2058	2058	2106	N20	E23	5407	03	16.6	8	SF						11		F
	HOLL	14	2058	2058	2106	N20	E25	5407	03	16.8	8	SF			3	E		10		
	RAMY	14	2059E	2059U	2110D	N19	E21	5407	03	16.5	11D	SF			2	E		12		F
0297		14	2109	2109*	2151	S16	W09	5398	03	14.2	42	SF						37		
	HOLL	14	2109	2109	2200	S16	W10	5398	03	14.1	51	SF			3	E		15		
	PALE	14	2109	2129	2142	S17	W08	5398	03	14.3	33	SF			3	E		59		
0298	HOLL	14	2142	2146	2157	S19	E51	5403	03	18.8	15	SF			3	E		12		
0299		14	2153	21532	2204	S20	E06	5406	03	15.4	11	SF						18		
	PALE	14	2153	2153	2204	S19	E07	5406	03	15.4	11	SF			3	E		23		
	HOLL	14	2153	2155	2204	S20	E06	5406	03	15.4	11	SF			3	E		12		
0300	PALE	14	2221	2221	2227	N31	W26	5395	03	12.9	6	SF			3	E		24		
0301	VORO	15	0002	0002	0005	N40	W24	5395	03	13.0	3	SN			2	C	0002	36	0.6	DIJT
0302		15	0023	0024	0028	N29	W28	5395	03	12.8	5	SN						72	1.8	EIJT
	LEAR	15	0023	0024	0027	N28	W28	5395	03	12.8	4	SF			3	E		18		
	VORO	15	0023	0024	0030	N30	W29	5395	03	12.7	7	SN			2	C	0024	125	1.8	EIJT
0303	VORO	15	0055	0057	0108	N35	W12	5397	03	14.1	13	SN			1	C	0057	125	1.7	EIJT
0304		15	01017	01063	0114	N29	W32	5395	03	12.5	13	1F						197	2.8	DEIJT
	VORO	15	0101	0106	0114	N29	W29	5395	03	12.8	13	1F			1	C	0106	260	3.6	EIJT
	VORO	15	0108	0109	0119D	N29	W36	5395	03	12.2	11D	1F			1	C	0109	134	2.1	DIJT
0305		15	01063	0116*	0142	S16	W11	5398	03	14.2	36	SN						56	0.6	DEIJKT
	VORO	15	0106	0126	0142	S16	W11	5398	03	14.2	36	SF			1	C	0126	81	0.9	DIJKT
	YUNN	15	0109	0116	0143	S16	W11	5398	03	14.2	34	SN				C		32	0.3	E
0306		15	0110	0111	0118	S20	E04	5406	03	15.3	8	SN						44	0.5	DIJT
	VORO	15	0110	0111	0117	S20	E04	5406	03	15.3	7	SN			1	C	0111	72	0.8	DIJT
	YUNN	15	0112E	0112U	0118	S20	E05	5406	03	15.4	6D	SN				P	0112	16	0.2	
0307	LEAR	15	0302	0305	0321	N30	W37	5395	03	12.2	19	SF			3	E		28		
0308	PALE	15	0332	0334	0336	S16	E52	5403	03	19.1	4	SF			3	E		46		
0309	LEAR	15	0442	0445	0448	N32	W27	5395	03	13.0	6	SF			3	E		13		
0310		15	04571	0501	0512	N34	W24	5397	03	13.3	15	1N	C	5.8				160	2.9	EFIU
	MITK	15	0457	0501	0504	N33	W24	5397	03	13.3	7	SN				C	0501			EI
	LEAR	15	0457	0501	0520	N33	W25	5397	03	13.2	23	1F	C	5.8	3	E		127		F
	YUNN	15	0458	0501	0511	N35	W24	5397	03	13.3	13	1N				C		193	2.9	U
0311		15	06213	0628*	0954	N35	W33	5395	03	12.6	213	2N	M	4.8				351	8.5	DEFIKTZ
	YUNN	15	0621	0657	1005	N35	W33	5395	03	12.6	224	3B				C		1125	19.0	FK
	TACH	15	0624	0628	0634D	N35	W34	5395	03	12.5	10D	1N			1	C	0628	199	3.5	EZ
	LEAR	15	0624	0630	0948	N34	W35	5395	03	12.5	204	1F	M	4.8		E		85		K
	LEAR	15	0624	0650	0948	N34	W35	5395	03	12.5	204	1F	M	4.8	3	E		114		ZF
	PURP	15	0641E	0641U	0641D	N34	W32	5395	03	12.7	204D	SN				P	0641	63	1.0	D
	TACH	15	0705E		0727D	N38	W34	5395	03	12.5	22D	2B			1	C	0705	413	7.2	EZ
	ATHN	15	0807E	0820U	0940D	N33	W31	5395	03	12.9	93D	2N			2	V	0820	700	12.0	
	ISTA	15	0818E		0956	N35	W35	5395	03	12.5	98D	3B				P				IK
	SVTO	15	0837E	0837U	0949D	N38	W32	5395	03	12.8	72D	1N			1	E		110		FT
0312	LEAR	15	0757	0757	0811	S20	E46	5403	03	18.8	14	SF			3	E		63		

Hα SOLAR FLARES

MARCH 1989

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
0313		15	0910*	0910*	0926	N27	W37	5395C	03	12.5	16	SB					105	1.5	EIT
	KAND	15	0910	0910	0915	N27	W37	5395C	03	12.5	5	SB			P	0910	83	1.3	EIT
	HTPR	15	0920E		0933	N26	W37	5395C	03	12.5	13D	SB			C	0925	150	1.9	E
	KAND	15	0925	0925	0930	N27	W37	5395C	03	12.5	5	SB			P	0925	83	1.3	EIT
0314	HTPR	15	0920E		1002D	N28	W50	5395	03	11.5	42D	1N			C	0925	220	3.5	EI
0315	URUM	15	0953E	1000	1009D	N36	W47	5395	03	11.6	16D	1F			C		145	3.2	D
		15	1131		1138	No Flare Patrol													
		15	1145		1149	No Flare Patrol													
0316		15	1204*	1214*	1237	N34	W37	5395	03	12.5	33	1N	M 1.4				102	3.4	EIT
	KAND	15	1204	1214	1235	N35	W37	5395	03	12.5	31	1N			P	1214	187	3.4	EIT
	RAMY	15	1227	1234	1239	N34	W37	5395	03	12.6	12	SF	M 1.4	3	E		17		
0317		15	1320*	13343	1341	N32	W40	5395	03	12.4	21	SN	M 1.1				106	2.0	EF
	HTPR	15	1320	1334	1335	N33	W43	5395	03	12.1	15	SN			C	1334	150	2.0	E
	RAMY	15	1333	1337	1347	N31	W38	5395	03	12.6	14	SN	M 1.1	3	E		63		F
0318	HTPR	15	1333	1340	1355	N27	W42	5395C	03	12.3	22	1N			C	1340	200	2.6	E
0319	HTPR	15	1340	1355	1410	S10	E35	5403	03	18.2	30	SF			C	1355	60	0.7	E
0320	RAMY	15	1424	1425	1431	N31	E44	5404	03	19.1	7	SF	C 4.5	3	E		27		F
0321	RAMY	15	1438	1438	1442	N15	E73	5409	03	21.1	4	SF		3	E		30		H
0322		15	16437	16521	1801	N33	W40	5395	03	12.5	78	1N	M 8.4				246	4.0	EFI
	HOLL	15	1643	1653	1839	N31	W40	5395	03	12.5	116	2B	M 8.4	3	E		379		F
	HTPR	15	1650		1656D	N35	W43	5395	03	12.3	6D	1F			C	1654	300	4.0	EI
	RAMY	15	1650	1652	1755	N34	W38	5395	03	12.7	65	1B	M 8.4	3	E		204		F
	PALE	15	1659E	1659U	1730	N33	W39	5395	03	12.6	31D	SF		3	E		99		F
0323		15	1714*	17226	2110	S18	W26	5398A	03	13.7	236	SF					68		FKT
	RAMY	15	1714	1722	1804	S18	W26	5398A	03	13.7	50	SF		3	E		70		
	HOLL	15	1717	1722	2431	S19	W27	5398A	03	13.6	434	SF		3	E		61		FT
	HOLL	15	1717	1727	2431	S19	W27	5398A	03	13.6	434	SF			E		106		KT
	PALE	15	1726	1728	1732	S18	W26	5398A	03	13.7	6	SF		3	E		37		
0324		15	17351	17372	1753	S13	E34	5403	03	18.3	18	SF					21		F
	RAMY	15	1735	1737	1759	S13	E35	5403	03	18.4	24	SF		3	E		27		
	HOLL	15	1736	1739	1747	S13	E34	5403	03	18.3	11	SF		3	E		15		F
0325		15	1925	19251	1931	S13	E34	5403	03	18.4	6	SF					17		
	RAMY	15	1925	1925	1932	S13	E35	5403	03	18.4	7	SF		3	E		12		
	HOLL	15	1925	1926	1930	S13	E34	5403	03	18.4	5	SF		3	E		22		
0326	PALE	15	1959	2001	2004	S16	E43	5403	03	19.1	5	SF	C 3.7	3	E		25		
0327		15	2012	2022	2026	S16	E44	5403	03	19.2	14	SF					18		F
	PALE	15	2012	2022	2026	S15	E44	5403	03	19.2	14	SF		3	E		21		F
	RAMY	15	2016E	2016U	2029D	S16	E43	5403	03	19.1	13D	SF		2	E		16		
0328	HOLL	15	2121	2124	2127	N29	W47	5395	03	12.2	6	SF	C 8.0	2	E		23		
		15	2151		2211	No Flare Patrol													
0329		16	0043	00461	0055	S16	W28	5398	03	13.9	12	SN					54	1.0	E
	LEAR	16	0043	0047	0055	S17	W28	5398	03	13.9	12	SF		3	E		25		
	PURP	16	0045E	0046	0055	S15	W28	5398	03	13.9	10D	SB			C	0046	82	1.0	E
0330		16	01383	01423	0156	S16	W29	5398	03	13.9	18	SN					61	0.9	EF
	YUNN	16	0138	0145	0158	S16	W28	5398	03	13.9	20	SB			C		96	1.1	F
	LEAR	16	0140	0145	0155	S16	W29	5398	03	13.9	15	SF		3	E		30		F
	PURP	16	0141	0142	0156	S15	W29	5398	03	13.9	15	SB			C	0142	57	0.7	E

Hα S O L A R F L A R E S

MARCH 1989

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
0331		16	01544	0200*	0301	N34	W43	5395	03	12.6	67	1N	M	3.1				113	1.9	EFIJW
	LEAR	16	0154	0203	0315	N28	W48	5395	03	12.3	81	1F	M	3.1	3	E		139		F
	YUNN	16	0156	0200	0246	N34	W38	5395	03	13.0	50	SB				C		96	1.3	F
	PURP	16	0156	0202	0303	N37	W39	5395	03	12.9	67	SB				C	0206	98	1.9	W
	MITK	16	0158	0213	0359D	N35	W47	5395	03	12.3	121D	1N				C	0213	120	2.6	EIJ
0332	LEAR	16	0253	0254	0258	S15	E40	5403	03	19.1	5	SF			3	E		18		F
0333	HTPR	16	0756		0827D	N30	W43	5395	03	12.9	31D	SF				C	0805	50	0.7	
0334	HTPR	16	0859E		0901D	N28	W52	5395	03	12.3	2D	SN				C	0859	50	0.8	
0335		16	09532	0955*	1024	N36	W47	5395	03	12.6	31	2B						376	7.8	F
	ATHN	16	0953	1025	1105D	N35	W44	5395	03	12.9	72D	3B			2	V	1025	796	16.6	
	ISTA	16	0954E		1019	N36	W49	5395	03	12.5	25D	2B				P				F
	CATA	16	0955	0955	1016D	N37	W45	5395	03	12.8	21D	2B			1	P	0955	281	6.0	
	HTPR	16	0956E		1030	N36	W50	5395	03	12.4	34D	SN				C	0956	50	0.9	
0336	ATHN	16	1025	1027	1035D	N03	W16		03	15.2	10D	SF			2	V	1027	175	2.0	
0337	HTPR	16	1041	1044	1046	N28	W47	5395	03	12.8	5	SN				C	1044	30	0.4	
0338	HTPR	16	1138	1140	1206	S14	E35	5403	03	19.1	28	SF				C	1140	30	0.4	
0339		16	12216	12252	1230	N30	W56	5395	03	12.1	9	SN	C	6.2				35	1.0	
	HTPR	16	1221	1225	1229	N30	W58	5395	03	11.9	8	SN				C	1225	30	0.6	
	RAMY	16	1222E	1225U	1229D	N29	W55	5395	03	12.2	7D	SF	C	6.2	3	E		20		
	CATA	16	1227	1227	1231	N31	W54	5395	03	12.2	4	SB			1	C	1227	56	1.3	
0340	RAMY	16	1440	1452	1504	N17	W02	5407	03	16.4	24	SF			2	E		52		
0341	RAMY	16	1524	1526	1645	N36	W47	5395	03	12.9	81	2B	X	3.6	3	E		394		FH
0342		16	1524	1525*	1657	N26	W59	5395	03	12.0	93	2N						151		FHK
	HOLL	16	1524	1525	1657	N27	W57	5395	03	12.2	93	2B			3	E		356		FH
	HOLL	16	1524	1553	1657	N27	W57	5395	03	12.2	93	2B				E		80		K
	RAMY	16	1646E	1651U	1656	N24	W62	5395	03	11.9	10D	SF			2	E		16		F
0343		16	15262	15265	1613	N17	W68		03	11.5	47	SF						19		
	HOLL	16	1526	1526	1613	N18	W64		03	11.8	47	SF			3	E		15		
	RAMY	16	1528	1531	1541D	N16	W72		03	11.2	13D	SF			2	E		23		
0344	RAMY	16	1635	1638	1644	S12	E82	5410A	03	22.9	9	SF			2	E		17		
0345	RAMY	16	1724	1725	1739	N18	E00	5407	03	16.7	15	SF			4	E		16		F
0346		16	1732	1738*	1917D	N31	W59	5395	03	12.1	105D	3N	M	2.4				444		HKY
	RAMY	16	1732	1738	1917D	N31	W59	5395	03	12.1	105D	3B	M	2.4	3	E		657		YH
	RAMY	16	1732	1803	1917D	N31	W59	5395	03	12.1	105D	3N				E		558		K
	RAMY	16	1732	1850	1917D	N31	W59	5395	03	12.1	105D	3N				E		118		K
0347	HOLL	16	1746	1754	1827	N29	W52	5397	03	12.7	41	1N			3	E		105		EF
0348	PALE	16	1818	1819	1824	N31	W44	5397	03	13.3	6	SF			3	E		85		F
0349		16	1826*	1839*	1928	N32	W52	5395	03	12.6	62	1N	M	6.5				102		EFK
	RAMY	16	1826	1915	2030	N31	W55	5395	03	12.4	124	1N	M	6.5	3	E		171		FE
	PALE	16	1838	1839	1850	N31	W45	5395	03	13.2	12	SF			3	E		35		
	HOLL	16	1842	1844	1850	N32	W53	5395	03	12.6	8	SF			3	E		75		
	HOLL	16	1901	1903	1932	N33	W53	5395	03	12.6	31	1B				E		45		K
	HOLL	16	1901	1915	1932	N33	W53	5395	03	12.6	31	1B			3	E		87		F
	PALE	16	1906	1917	1936	N32	W50	5395	03	12.8	30	1N			3	E		196		E
0350		16	20353	2038*	2129	N31	W54	5395	03	12.6	54	1N	X	1.4				242		EFK
	RAMY	16	2035	2040	2131	N29	W60	5395	03	12.1	56	1B	X	1.4	3	E		201		F
	HOLL	16	2036	2042U	2118	N32	W55	5395	03	12.5	42	1B			3	E		264		E
	HOLL	16	2036	2101	2118	N32	W55	5395	03	12.5	42	1B				E		108		K
	PALE	16	2038	2038	2139	N32	W51	5395	03	12.8	61	2F			3	E		342		F
	PALE	16	2038	2056	2139	N32	W51	5395	03	12.8	61	2F				E		296		K

Hα S O L A R F L A R E S

MARCH 1989

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	Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0351	HOLL	16	2120	2125	2128	N18	W70		03	11.5	8	SF			3	E		34		
0352	HOLL	16	2132	2136	2141	N32	W55	5395	03	12.5	9	SF			3	E		44		
0353		16	2203	2212	2214D	N18	W04	5407	03	16.6	11D	1N	M	1.6				146		F
	PALE	16	2202E	2205U	2205D	N16	W04	5407	03	16.6	3D	1F			3	E		120		F
	HOLL	16	2203	2212	2214D	N19	W05	5407	03	16.5	11D	1N	M	1.6	3	E		172		
		16	2215		2255	No Flare Patrol														
0354	MITK	16	2307E		2329	N19	W08	5407	03	16.3	22D	SN				C	2307			
0355	LEAR	16	2333	2335	2339	N34	W52	5395	03	12.8	6	SF			3	E		28		
0356	LEAR	17	0029	0030	0040	S17	W41	5398	03	13.9	11	SF			3	E		16		F
0357	LEAR	17	0107	0113	0120	N30	W53	5395	03	12.9	13	SF			3	E		23		
0358	LEAR	17	0150	0157	0202	N27	W57	5395	03	12.6	12	SF	C	7.6	3	E		41		
0359		17	02164	0220	0225	N32	W56	5395	03	12.7	9	1N						60		
	YUNN	17	0216	0219U	0219D	N33	W55	5395	03	12.7	3D	1N				P	0219	96		
	LEAR	17	0220	0220	0225	N31	W57	5395	03	12.6	5	SF			3	E		23		
0360		17	02171	02187	0236	N17	W09	5407	03	16.4	19	SF						26		
	MITK	17	0217	0218	0232	N18	W09	5407	03	16.4	15	SF				C	0218			
	LEAR	17	0218	0225	0239	N16	W09	5407	03	16.4	21	SF			3	E		26		
0361		17	02352	0237*	0300	N33	W56	5395	03	12.6	25	1N						136	3.8	DEHIT
	VORO	17	0233E	0237	0257U	N33	W56	5395	03	12.6	24U	1B			3	C	0237	143	3.7	DHIT
	LEAR	17	0235	0238	0257	N32	W57	5395	03	12.6	22	1N			3	E		158		
	MITK	17	0237		0255	N34	W59	5395	03	12.4	18	1N				C	0237	80		EHI
	YUNN	17	0254E	0257	0307	N34	W52	5395	03	13.0	13D	1N				P		161	3.8	
0362		17	0257	0259*	0408	N33	W85		03	10.4	71	3N						428		K
	LEAR	17	0257	0259	0408	N33	W85		03	10.4	71	3N				E		713		K
	LEAR	17	0257	0325	0408	N33	W85		03	10.4	71	3N			3	E		143		
0363		17	0318*	0322*	0335	N32	W59	5395	03	12.5	17	1B						150		EI
	YUNN	17	0318	0322	0334	N33	W56	5395	03	12.7	16	1N				C		209		
	MITK	17	0318	0324	0336	N33	W60	5395	03	12.4	18	1B				C	0324	100		I
	PURP	17	0322E	0323	0332D	N35	W60	5395	03	12.3	10D	1B				C	0323	223		E
	PURP	17	0329	0332	0336	N29	W61	5395	03	12.4	7	SB				C	0332	68		E
0364		17	0515E	0515U	0526	N18	W09	5407	03	16.5	11D	SN						56	0.6	BD
	YUNN	17	0515E	0515U	0522	N18	W09	5407	03	16.5	7D	SN				P	0515	24	0.3	D
	ABST	17	0520E	0520U	0530	N18	W09	5407	03	16.5	10D	SF				P	0520	87	1.0	BD
0365		17	0532	05321	0536	N28	W62	5395	03	12.4	4	1N	C	6.6				66		DIV
	LEAR	17	0532	0532	0536	N27	W60	5395	03	12.5	4	SF	C	6.6	3	E		37		
	ABST	17	0532	0533	0536	N29	W63	5395	03	12.3	4	1N				C	0533	96		DIV
0366		17	0556	0558	0604	N35	W59	5395	03	12.5	8	1N	C	7.5				140		DFI
	YUNN	17	0556E	0556U	0600	N35	W57	5395	03	12.7	4D	1B				P	0556	177		
	ABST	17	0556	0558	0605	N36	W61	5395	03	12.3	9	1N				C	0558	175		DI
	MITK	17	0556	0558	0605	N35	W58	5395	03	12.6	9	1N				C	0558	80		I
	LEAR	17	0556	0558	0606	N34	W59	5395	03	12.5	10	1N	C	7.5	4	E		125		F
	SVTO	17	0558E	0558U	0605D	N33	W62	5395	03	12.3	7D	1F			2	E		141		
0367	ABST	17	0633	0637	0644	N20	W06	5407	03	16.8	11	SF				C	0637	96	1.1	E
0368		17	07132	0719*	0747	N34	W61	5395	03	12.4	34	2B	M	6.8				333		DEHIJKZ
	YUNN	17	0713	0719	0742	N34	W59	5395	03	12.6	29	1B				C		241		
	ABST	17	0715	0719	0733	N36	W64	5395	03	12.2	18	2B				C	0719	437		DIK
	MITK	17	0715	0719	0741D	N33	W60	5395	03	12.5	26D	2B				C	0719	350		HIJ
	LEAR	17	0715	0719	0751	N32	W59	5395	03	12.6	36	2B	M	6.8	3	E		464		ZE
	SVTO	17	0715	0721	0800	N32	W57	5395	03	12.8	45	2N	M	6.8	3	E		353		
	LEAR	17	0715	0727	0751	N32	W59	5395	03	12.6	36	2F	M	6.8		E		374		K
	KANZ	17	0726E		0726D	N34	W63	5395	03	12.3	36D	1N			1					
	CATA	17	0740E	0740	0740D	N36	W65	5395	03	12.1	36D	1B			2	P	0740	112		

Hα SOLAR FLARES

MARCH 1989

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		17	07181	07211	0725	N19	W74		03	11.6	7	SF					20		T
	SVTO	17	0718	0721	0721D	N18	W75		03	11.6	3D	SF		3	E		20		T
	LEAR	17	0719	0722	0725	N20	W74		03	11.6	6	SF		3	E		21		
0370	YUNN	17	0742	0745	0800	N17	W13	5407	03	16.3	18	SF			C		32	0.4	
0371		17	08072	0810	0814	N27	W61	5395	03	12.6	7	1N					123		DEIV
	LEAR	17	0807	0810	0815	N26	W62	5395	03	12.5	8	1F		3	E		130		
	KAND	17	0808	0810	0813	N27	W59	5395	03	12.7	5	SN			P	0810	125		EI
	ABST	17	0809	0810	0813	N28	W62	5395	03	12.5	4	1N			C	0810	114		DIV
0372	ATHN	17	0825E	0825U	0840D	N30	W51	5397	03	13.3	15D	1N		2	V	0825	191	4.5	
0373	ISTA	17	0916		0933	N35	W50	5397	03	13.4	17	SF			P				E
0374	KAND	17	1021	1027	1037	N30	W61	5395	03	12.6	16	SN			P	1027	83		EIT
0375		17	1100*	1108*	1148	N33	W62	5395	03	12.5	48	2B	M 4.1				365	7.1	DEITZ
	CATA	17	1100	1110	1110D	N33	W63	5395	03	12.4	10D	3B		2	P	1110	562		
	KAND	17	1103	1108	1131	N33	W62	5395	03	12.5	28	1B			P	1108	395		EIT
	ATHN	17	1103E	1112U	1125D	N33	W55	5395	03	13.1	22D	2B		2	V	1112	271	7.1	
	SVTO	17	1107	1109	1131D	N32	W59	5395	03	12.8	24D	2N	M 4.1	2	E		289		
	RAMY	17	1111E	1111U	1145D	N32	W65	5395	03	12.3	34D	2B		1	E		412		
	KHAR	17	1117E		1132	N36	W68	5395	03	12.0	15D	2N		2	P	1120	400		Z
	CATA	17	1121E	1121	1140D	N34	W64	5395	03	12.4	19D	3B		2	P	1121	815		
	KAND	17	1141	1142	1158	N34	W63	5395	03	12.5	17	SB			P	1142	42		DIT
	KAND	17	1201	1202	1210	N28	W64	5395	03	12.5	9	SB			P	1202	104		DIT
0376		17	1206	1212	1227	S11	E18	5403	03	18.8	21	1N					110	1.1	EFI
	KAND	17	1206	1212	1227	S11	E17	5403	03	18.8	21	SB			P	1212	104	1.1	EFI
	SVTO	17	1206E	1216U	1226D	S11	E18	5403	03	18.8	20D	1F		1	E		117		
0377		17	1601*	1622	1630	N34	W58	5395	03	13.0	29	SF	C 3.9				18		
	RAMY	17	1601	1622	1630	N34	W60	5395	03	12.9	29	SF	C 3.9	2	E		24		
	HOLL	17	1620	1622	1630	N33	W56	5395	03	13.2	10	SF	C 3.9	3	E		11		
0378		17	17291	1737*	1935	N33	W61	5395	03	12.9	126	2B	X 6.5				305		FKMZ
	HOLL	17	1729	1737	1932	N33	W60	5395	03	13.0	123	2B	X 6.5	3	E		499		MZ
	HOLL	17	1729	1815	1932	N33	W60	5395	03	13.0	123	2N			E		146		K
	PALE	17	1730	1736U	1941	N33	W62	5395	03	12.8	131	2B	X 6.5	3	E		270		ZF
0379		17	1834	1835	1854	S12	E13	5403	03	18.7	20	SF					25		F
	RAMY	17	1834	1835	1849	S13	E13	5403	03	18.7	15	SF		3	E		23		F
	HOLL	17	1834	1835	1858	S12	E13	5403	03	18.7	24	SF		3	E		27		
0380	HOLL	17	1909	1911	1913	S15	E16	5403	03	19.0	4	SF		3	E		11		
0381		17	2007	20141	2133	S13	E12	5403	03	18.7	86	2B	M 1.4				306		FH
	HOLL	17	2007	2014	2133	S13	E14	5403	03	18.9	86	2B	M 1.4	3	E		325		FH
	RAMY	17	2010E	2015	2105D	S13	E11	5403	03	18.7	55D	2B	M 1.4	2	E		287		FH
0382	HOLL	17	2137	2139	2146	N34	W64	5395	03	12.8	9	SF	C 4.4	3	E		33		F
0383	HOLL	17	2229	2231	2237	N34	W60	5395	03	13.1	8	SF		3	E		35		E
0384		17	23095	2312*	2332	N36	W67	5395	03	12.6	23	1F	M 2.4				108		EIKT
	VORO	17	2309	2323	2333	N35	W70	5395	03	12.4	24	2F		3	C	2323	260		EIKT
	LEAR	17	2311	2312	2330	N37	W64	5395	03	12.8	19	SF	M 2.4	3	E		27		
	HOLL	17	2314	2314	2333	N36	W66	5395	03	12.7	19	SF	M 2.4	2	E		36		
0385	VORO	18	0015	0018	0020	N35	W70	5395	03	12.4	5	SF		2	C	0018	45		DIT
0386	VORO	18	0108	0109	0113	N35	W70	5395	03	12.4	5	SF		2	C	0109	27		DIT
0387		18	02044	02072	0235	S15	E06	5403	03	18.5	31	SN	C 7.6				192	3.2	EFIZ
	MITK	18	0204	0207	0241	S15	E05	5403	03	18.5	37	SB			C	0207			E
	VORO	18	0204	0208	0244U	S15	E06	5403	03	18.5	40U	1B		2	C	0208	215	2.2	EI
	LEAR	18	0205	0209	0235	S15	E06	5403	03	18.5	30	SN	C 7.6	3	E		88		ZF
	YUNN	18	0206E	0206U	0230	S15	E05	5403	03	18.5	24D	1B			P	0206	402	4.2	
	PALE	18	0208	0216U	0216D	S15	E06	5403	03	18.5	8D	SF		3	E		64		F

Hα SOLAR FLARES

MARCH 1989

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
0388		18	0249	0250	0254	N36	W72	5395	03	12.3	5	SN						54		DIT
	VORO	18	0249	0250	0256	N36	W70	5395	03	12.5	7	SF			2	C	0250	45		DIT
	URUM	18	0250E	0250	0251	N37	W73	5395	03	12.2	1D	SN				C		64		D
0389		18	0726*	07412	0749	S12	E05	5403	03	18.7	23	1N						111	1.6	E
	ISTA	18	0726		0734	S16	E04	5403	03	18.6	8	1F				P				E
	ABST	18	0733	0742	0757	S10	E05	5403	03	18.7	24	1N				C	0742	218	2.3	E
	YUNN	18	0734	0743	0802	S12	E05	5403	03	18.7	28	SN				C		96	1.0	
	ISTA	18	0737		0748	S12	E04	5403	03	18.6	11	1N				P				E
	LEAR	18	0739	0741	0746	S12	E05	5403	03	18.7	7	SF			3	E		18		
0390		18	1243	12431	1259	N36	W75	5395	03	12.5	16	1N	C	9.2				77		
	ATHN	18	1241E	1245U	1252D	N35	W70	5395	03	12.9	11D	2N			2	V	1245	127		
	RAMY	18	1243	1243	1248D	N36	W71	5395	03	12.8	5D	SF	C	9.2	3	E		26		
	SVTO	18	1243	1244	1259	N36	W85	5395	03	11.7	16	SF	C	9.2	3	E		42		
	CATA	18	1244E	1244	1250D	N37	W74	5395	03	12.6	6D	1B			1	P	1244	112		
0391	RAMY	18	1341	1344	1413	S16	E00	5403	03	18.6	32	SF			3	E		23		
0392		18	1655*	1706*	1735	S16	W03	5403	03	18.5	40	SF						18		F
	RAMY	18	1655	1706	1724	S14	W02	5403	03	18.5	29	SF			3	E		19		F
	PALE	18	1705E	1705U	1720D	S14	W02	5403	03	18.6	15D	SF			3	E		26		F
	HOLL	18	1721	1721	1746	S19	W05	5403	03	18.3	25	SF			3	E		10		
0393	RAMY	18	1733	1734	1747	N37	W74	5395	03	12.8	14	SF	M	4.4	3	E		28		
0394	RAMY	18	1838	1839	1846	N14	E40	5409	03	21.8	8	SF			3	E		15		
0395		18	2030	2031	2115D	S16	W04	5403	03	18.5	45D	1B						220		FU
	RAMY	18	2030	2031	2053D	S16	W04	5403	03	18.5	23D	1B			3	E		234		UF
	PALE	18	2037E	2041U	2115D	S16	W04	5403	03	18.5	38D	1B			3	E		206		UF
0396	PALE	18	2103E	2104	2139D	S19	W55	5406	03	14.7	36D	SF			3	E		21		
		18	2116		2124	No Flare Patrol														
0397	HOLL	18	2127E	2130U	2144	S19	E07	5414	03	19.4	17D	SF			2	E		18		
		18	2146		2158	No Flare Patrol														
0398		18	2239*	23081	2323	S12	W05	5403	03	18.6	44	SF						99	1.6	EIK
	VORO	18	2239	2308	2331	S13	W05	5403	03	18.6	52	SF			2	C	2308	152	1.6	EIK
	HOLL	18	2308	2309	2315	S12	W05	5403	03	18.6	7	SF			2	E		46		
0399	VORO	19	0015	0016	0019	N21	E35	5416	03	21.7	4	SF			2	C	0016	36	0.5	DI
0400	YUNN	19	0047E	0047U	0121	N19	E34	5409	03	21.6	34D	SF				P	0047	96	1.3	F
0401		19	00561	00591	0113	N24	W26	5413	03	17.0	17	SN						74	1.0	EG
	YUNN	19	0056	0059	0114	N24	W27	5413	03	16.9	18	SN				C		48	0.7	
	VORO	19	0057	0100	0112	N24	W26	5413	03	17.0	15	SF			2	C	0100	99	1.3	EG
0402	YUNN	19	0142	0145	0154	N19	E34	5409	03	21.7	12	SN				C		96	1.3	
0403	YUNN	19	0304	0307	0319	S28	E86		03	25.8	15	SN				C		48		A
0404	LEAR	19	0420	0421	0430	N18	E32	5409	03	21.6	10	SF	M	1.4	3	E		13		F
0405	YUNN	19	0434	0440	0452	S16	W08	5403	03	18.6	18	SN				C		161	1.7	
0406	YUNN	19	0538	0542		N34	W85	5395	03	12.4						C				A
0407	YUNN	19	0603E	0603	0615	N31	W86	5395	03	12.5	12D					C				AK
0408	YUNN	19	0627	0635	0649	N34	W85	5395	03	12.5	22					C				A
0409	ABST	19	0706	0709	0713	S28	E90	5417	03	26.3	7	1F				C	0709	79		ADV

Hα S O L A R F L A R E S

MARCH 1989

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
0410		19	07308	07375	0749	N33	W87	5395	03	12.4	19	1N	M 1.3				58		ADV
	YUNN	19	0730	0737	0752	N33	W85	5395	03	12.6	22				C				A
	ABST	19	0735	0742	0749	N33	W90	5395	03	12.2	14	1N			C	0742	96		ADV
	LEAR	19	0738	0739	0745	N33	W85	5395	03	12.6	7	SF	M 1.3	2	E		21		
0411		19	09421	09452	1004	S12	W09	5403	03	18.7	22	1F					154	2.5	EFH
	KHAR	19	0940E	0946U	1002	S11	W09	5403	03	18.7	22D	1N		2	P	0944	250	2.5	EH
	SVTO	19	0942	0945	1010	S13	W09	5403	03	18.7	28	1F		3	E		142		
	LEAR	19	0943	0947	0959	S12	W09	5403	03	18.7	16	SF		3	E		69		F
0412	KHAR	19	1018	1020	1026	N14	E47	5411	03	23.0	8	SF		2	V	1020			D
0413	KHAR	19	1023	1025	1035	S27	E90	5417	03	26.4	12	SF		2	P	1025			HT
0414		19	10468	1055	1104	N34	W88	5395	03	12.4	18	1N	C 4.5				18		H
	KHAR	19	1046	1055	1107	N36	W85	5395	03	12.6	21	1N		2	P	1055			H
	SVTO	19	1054	1055	1101	N31	W90	5395	03	12.3	7	SF	C 4.5	3	E		18		
0415	KHAR	19	1048	1051	1056	S27	E90	5417	03	26.5	8	SF		2	V	1051			HT
0416	KHAR	19	1108	1109	1120	S27	E90	5417	03	26.5	12	SF		2	V	1109			HT
0417	KHAR	19	1140		1150	S27	E90	5417	03	26.5	10	SF		2	V	1140			HT
		19	1315		1323	No Flare Patrol													
		19	1327		1331	No Flare Patrol													
		19	1507		1535	No Flare Patrol													
0418	HOLL	19	1816	1819	1829	N18	W41	5407	03	16.6	13	SF	C 9.2	3	E		17		
0419		19	19443	1947*	2005	N16	E23	5409	03	21.6	21	SN	M 1.7				41		FK
	HOLL	19	1944	1947	2004	N16	E24	5409	03	21.6	20	SB	M 1.7		E		49		K
	HOLL	19	1944	1959	2004	N16	E24	5409	03	21.6	20	SF	M 1.7	3	E		46		F
	RAMY	19	1947	1959	2006	N17	E22	5409	03	21.5	19	SF	M 1.7	2	E		28		F
0420		19	2011	2016	2025	S16	W19	5403	03	18.4	14	SF					34		F
	RAMY	19	2011E	2012U	2014D	S16	W19	5403	03	18.4	3D	SF		2	E		43		
	HOLL	19	2011	2016	2025	S16	W19	5403	03	18.4	14	SF		3	E		24		F
0421	VORO	19	2253	2254	2320	N20	E21	5416	03	21.5	27	SN		2	C	2254	90	1.1	EIJT
0422	PALE	20	0057	0101	0113	S17	W59	5406	03	15.5	16	SF		3	E		47		
0423	YUNN	20	0145	0148	0218	S18	W02	5414	03	19.9	33	SN			C		64	0.7	E
0424	YUNN	20	0145	0203U	0233	S18	W65	5406	03	15.1	48	SN			P	0203	16	0.4	
0425	YUNN	20	0221	0227	0248	S20	E09	5415	03	20.8	27	SN			C		40	0.4	E
0426	YUNN	20	0239	0301	0342	S18	W63	5406	03	15.3	63	SN			C		32	0.7	E
0427	YUNN	20	0246	0248	0315	S26	E84	5417	03	26.6	29	SN			C		32		
0428	YUNN	20	0337	0346	0352	S20	E07	5415	03	20.7	15	SN			C		64	0.7	E
0429		20	03554	04011	0417	S26	E89	5417	03	27.1	22	SN	M 2.5				96		
	YUNN	20	0355	0401	0416	S26	E87	5417	03	26.9	21	SN			C		80		
	PALE	20	0358	0401	0409D	S25	E90	5417	03	27.1	11D	SN	M 2.5	3	E		64		
	LEAR	20	0359	0402	0418	S26	E90	5417	03	27.1	19	1F	M 2.5	3	E		144		
0430	PURP	20	0523	0534	0539	S16	W06	5414	03	19.8	16	SF			C	0534	45	0.5	D
0431		20	0519*	06064	0632	N20	E16	5416	03	21.4	73	1N					178	3.5	EFH
	PURP	20	0519	0548U	0548D	N20	E19		03	21.7	29D	1N			C	0548	322	4.0	E
	MITK	20	0550E	0606	0648D	N20	E13	5416	03	21.2	58D	1B			C	0606	250	3.0	EH
	LEAR	20	0553	0610	0632	N20	E16	5416	03	21.5	39	SF		3	E		55		FH
	SVTO	20	0616E	0616U	0616D	N22	E17	5416	03	21.6	39D	SF		2	E		85		F
0432	LEAR	20	0657	0658	0712	S18	W68	5406	03	15.1	15	SF		3	E		21		

Hα SOLAR FLARES

MARCH 1989

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
0433	KHAR	20	0810E	0810U	0818	N24	E17	5416	03	21.6	8D	SF		2	V	0810			DL
0434	KHAR	20	0822	0823	0826	S37	E90		03	27.6	4	SF		2	P	0823			DH
0435	KHAR	20	0835	0836	0844	S37	E86		03	27.3	9	SF		2	V	0836			DH
0436	KHAR	20	0945	0948	1001	N19	W54	5407	03	16.3	16	SF		2	V	0948			DH
0437		20	1014	1015	1033	S16	W24	5403	03	18.6	19	SN	C 5.0				94		DH
	SVTO	20	1014	1015	1033	S16	W26	5403	03	18.4	19	SN	C 5.0	3	E		94		H
	KHAR	20	1023E		1033	S15	W23	5403	03	18.7	10D	SF		2	V	1023			DH
0438		20	1033	1100	1148	N17	W50	5407	03	16.6	75	1F					96		F
	SVTO	20	1033	1100	1145	N17	W51	5407	03	16.6	72	SF		3	E		82		F
	RAMY	20	1103E	1118U	1152	N17	W49	5407	03	16.7	49D	1F		2	E		110		F
0439	KHAR	20	1036		1145	S21	W52	5406	03	16.4	69	1N		2	P	1043			EH
0440	RAMY	20	1231	1236	1240	N17	E12	5409	03	21.4	9	SF		3	E		12		
0441	RAMY	20	1252	1258	1303	S13	W24	5403	03	18.7	11	SF		3	E		13		
0442		20	14181	14273	1449	S14	E00	5418	03	20.6	31	SF					42		F
	RAMY	20	1418	1427	1458	S15	E00	5418	03	20.6	40	SF		3	E		36		
	HOLL	20	1419	1430	1440	S14	E01	5418	03	20.7	21	SF		2	E		49		F
0443	HOLL	20	1427	1440	1522	S26	E81	5417	03	26.9	55	SF	M 1.2	2	E		68		FH
0444	HOLL	20	1454	1501	1506	N24	W51	5413	03	16.7	12	SF		2	E		18		
0445	RAMY	20	1540E	1543U	1552D	N33	W90	5397	03	13.5	12D	SN		3	E				HY
0446	HOLL	20	1541	1547	1615	S27	E87	5417	03	27.4	34	SF	M 2.4	2	E		89		F
0447	HOLL	20	1558	1607	1617	S14	E00	5418	03	20.7	19	SF		3	E		27		
0448	RAMY	20	1610E	1613U	1620D	N33	W90	5397	03	13.5	10D	SF		3	E				HY
		20	1637		1648	No Flare Patrol													
0449	PALE	20	1728	1741	1749	S14	E00	5418	03	20.7	21	SF		3	E		43		F
0450	PALE	20	1731	1738	1740	S25	E76	5417	03	26.6	9	SF		3	E		20		
0451	PALE	20	1902	1902	1910	S20	W13	5414	03	19.8	8	SF		3	E		13		
0452		20	1924	1924	1936	N18	E12	5409	03	21.7	12	SF					36		EF
	RAMY	20	1924	1924	1933	N18	E12	5409	03	21.7	9	SF		3	E		36		
	PALE	20	1924	1924	1938	N18	E13	5409	03	21.8	14	SF		3	E		36		FE
0453		20	1954*	20089	2036	N17	E15	5409	03	22.0	42	SF					37		FK
	RAMY	20	1954	2004U	2037D	N16	E12	5409	03	21.7	43D	SF		2	E		35		F
	PALE	20	2008	2008	2036	N18	E16	5409	03	22.0	28	SF		3	E		28		F
	PALE	20	2008	2017	2036	N18	E16	5409	03	22.0	28	SF			E		49		K
0454		20	2038	2235	2403D	S25	E76	5417	03	26.7	205D	2N	M 3.1				214		EFK
	PALE	20	2038	2052U	2403D	S25	E76	5417	03	26.7	205D	2N	M 3.1	3	E		309		FE
	PALE	20	2038	2235	2403D	S25	E76	5417	03	26.7	205D	2N			E		118		K
		20	2136		2140	No Flare Patrol													
0455	PALE	20	2258	2258	2322	N16	E07	5409	03	21.5	24	SF		3	E		19		F
0456	PALE	21	0026	0026	0037	N23	W53	5413	03	16.9	11	SF		3	E		15		
0457	PURP	21	0055	0106	0156	S23	E65	5417	03	26.0	61	2N			C	0106	419	10.2	
0458		21	0126*	01364	0144	N18	E08	5409	03	21.7	18	SN					34	0.4	E
	PURP	21	0126	0136	0142	N18	E08	5409	03	21.7	16	SN			C	0136	34	0.4	E
	PALE	21	0137	0140	0146	N19	E09	5409	03	21.7	9	SF		3	E		33		

Hα SOLAR FLARES

MARCH 1989

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	Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0459	PALE	21	0207	0222	0228	N34	W24	5404	03	19.2	21	SF			3	E		37		
0460	LEAR	21	0330	0333	0350	S27	E76	5417	03	27.1	20	SF			3	E		25		
0461		21	0402*	0407*	0516	N18	E03	5409	03	21.4	74	SN						149	4.5	EFT
	LEAR	21	0402	0407	0438	N16	E04	5409	03	21.5	36	SF			3	E		48		F
	MITK	21	0404	0541	0604D	N18	E04	5409	03	21.5	120D	SN				C	0541			E
	TACH	21	0456E	0551U	0607D	N20	E02	5409	03	21.3	71D	1B			2	C	0551	388	4.5	ET
	LEAR	21	0541	0542	0553	N16	E03	5409	03	21.5	12	SF			3	E		12		F
0462	LEAR	21	0533	0534	0548	S28	E75	5417	03	27.1	15	SF			3	E		17		
0463		21	0625	0634	0721	N17	E02	5409	03	21.4	56	1N	M	1.4				262	3.7	F
	LEAR	21	0625	0634	0721	N16	E03	5409	03	21.5	56	SN	M	1.4	3	E		87		F
	ATHN	21	0635E	0640U	0640D	N18	E03	5409	03	21.5	5D	1N			1	V	0640	350	3.9	
	HTPR	21	0650E		0650D	N18	E01	5409	03	21.4	5D	1B				C	0650	350	3.5	F
0464	LEAR	21	0722	0731	0756	N17	E02	5409	03	21.4	34	SF			3	E		19		
0465	LEAR	21	0739	0742	0811	S29	E77	5417	03	27.3	32	1F	C	5.1	3	E		208		
0466	KHAR	21	0812E		0825U	N25	W62	5413	03	16.5	13U	SF			2	P	0814	80	1.8	D
0467	KHAR	21	0812E		0830	S27	E73	5417	03	27.0	18D	1N			2	P	0814	250		H
0468		21	08569	09063	0933	N17	E02	5409	03	21.5	37	SN	C	9.0				123	1.7	EFILO
	KHAR	21	0856	0906	0940	N17	E03	5409	03	21.6	44	1N			2	P	0910	220	2.5	ELO
	LEAR	21	0858	0909	0938	N17	E01	5409	03	21.4	40	SF	C	9.0	3	E		66		F
	ISTA	21	0904	0908	0922	N16	E04	5409	03	21.7	18	SN				P				E
	KAND	21	0905	0909	0931D	N17	W01	5409	03	21.3	26D	SB				P	0909	83	0.9	EFI
0469	KHAR	21	1045		1055	N25	W62	5413	03	16.6	10	SF			2	V	1046			L
0470	KHAR	21	1054	1054	1100	N16	E26	5420A	03	23.4	6	SF			2	V	1054			D
0471		21	1056	1056	1104	N16	E02	5409	03	21.6	8	SF	C	4.6				29		DF
	KHAR	21	1056	1056	1102	N17	E01	5409	03	21.5	6	SF			2	V	1056			D
	RAMY	21	1056E	1057U	1106	N16	E03	5409	03	21.7	10D	SF	C	4.6	1	E		29		F
0472	KHAR	21	1126		1147	N25	W62	5413	03	16.7	21	SF			2	V	1126			D
0473	HTPR	21	1358E		1515D	N21	W06	5416	03	21.1	77D	1B				C	1434	280	2.8	EI
0474		21	1418*	1501*	1618	N19	W03	5409	03	21.4	120	1N	C	8.7				80		EFK
	RAMY	21	1418	1501	1613	N18	W03	5409	03	21.4	115	SF			3	E		59		F
	RAMY	21	1418	1529	1613	N18	W03	5409	03	21.4	115	SF				E		51		K
	HOLL	21	1435	1501	1622	N20	W03	5409	03	21.4	107	1N	C	8.7	3	E		115		FE
	HOLL	21	1435	1529	1622	N20	W03	5409	03	21.4	107	1N				E		97		K
0475		21	14311	14342	1449	N12	E16	5411	03	22.8	18	SF						102	2.2	EF
	HTPR	21	1431	1436	1453	N14	E18	5411	03	23.0	22	1N				C	1436	220	2.2	E
	RAMY	21	1432	1434	1446	N11	E16	5411	03	22.8	14	SF			3	E		40		F
	HOLL	21	1434E	1434U	1447	N12	E15	5411	03	22.7	13D	SF			3	E		47		F
0476		21	14403	14442	1456	S20	W20	5414	03	20.1	16	SN						40	0.7	EF
	HTPR	21	1440	1444	1500	S20	W20	5414	03	20.1	20	SN				C	1444	70	0.7	E
	RAMY	21	1443	1446	1453	S19	W21	5414	03	20.0	10	SF			3	E		11		F
0477		21	15482	1603	1638	N23	W64	5413	03	16.7	50	1F						86		F
	HOLL	21	1548	1603	1652	N23	W65	5413	03	16.6	64	1F			3	E		128		F
	RAMY	21	1550	1603	1625	N23	W62	5413	03	16.9	35	SF			4	E		43		F
0478	RAMY	21	1727	1727	1731	S21	E68	5417	03	26.9	4	SF			3	E		19		
0479	RAMY	21	1738	1740	1757	S18	W23	5414	03	20.0	19	SF			3	E		13		
0480	RAMY	21	1743	1751	1759	S26	E70	5417	03	27.2	16	SF			3	E		31		
0481	RAMY	21	1839E	1843U	1850	N19	E04	5409	03	22.1	11D	SF			2	E		16		F

Hα S O L A R F L A R E S

MARCH 1989

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	Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0482		21	1929	1929	1943	N20	W66	5407	03	16.8	14	SF						32		F
	HOLL	21	1929	1929	1943	N19	W67	5407	03	16.7	14	SF			3	E		33		
	RAMY	21	1930E	1930U	1945D	N20	W66	5407	03	16.8	15D	SF			2	E		30		F
0483	HOLL	21	1935	1936	1949	N17	W04	5409	03	21.5	14	SF			3	E		12		
0484		21	2024	20262	2041	S18	W43	5403	03	18.6	17	SF						16		
	RAMY	21	2024	2026	2034D	S18	W43	5403	03	18.6	10D	SF			3	E		17		
	PALE	21	2024	2028	2041	S17	W43	5403	03	18.6	17	SF			3	E		14		
0485	HOLL	21	2030	2031	2034	S18	W25	5414	03	19.9	4	SF			3	E		10		
0486		21	20552	20583	2107	N20	W06	5416	03	21.4	12	SF						28		F
	HOLL	21	2055	2101	2114	N20	W06	5416	03	21.4	19	SF			3	E		21		
	PALE	21	2057	2058	2100	N21	W05	5416	03	21.5	3	SF			3	E		35		F
0487	PALE	21	2105	2111	2113	S26	E70	5417	03	27.3	8	SF			3	E		15		
0488	HOLL	21	2246	2246	2253	S28	E69	5417	03	27.3	7	SF			3	E		11		
0489	HOLL	21	2338	2339	2348	S16	W42	5403	03	18.8	10	SF			3	E		27		
0490		22	00137	0026*	0140	S16	E26	5420D	03	24.0	87	1F						196	3.2	BGHJKU
	VORO	22	0013	0032	0123	S13	E26	5420D	03	24.0	70	1F			2	C	0032	314	3.5	HJUG
	HOLL	22	0020	0026	0109D	S17	E25	5420D	03	23.9	49D	1F			2	E		130		
	HOLL	22	0020	0109	0109D	S17	E25	5420D	03	23.9	49D	1F				E		20		K
	PURP	22	0102E	0104	0133	S17	E27	5420D	03	24.1	31D	1N				C	0104	389	4.6	
	YUNN	22	0111E	0122U	0203	S14	E26	5420D	03	24.0	52D	SN				P	0122	129	1.5	BG
0491		22	0237*	02533	0322	N12	W05	5409	03	21.7	45	SN						78	1.3	EFIJT
	YUNN	22	0237	0253	0328	N12	W05	5409	03	21.7	51	SN				C		80	0.9	F
	VORO	22	0244	0256	0321D	N13	W04	5409	03	21.8	37D	SN			2	C	0256	152	1.7	EIJT
	PALE	22	0248	0254	0314	N12	W05	5409	03	21.7	26	SF			2	E		47		F
	MITK	22	0249	0253	0329	N12	W07	5409	03	21.6	40	SN				C	0253			E
	LEAR	22	0250	0256	0315	N13	W05	5409	03	21.7	25	SF			3	E		32		F
0492		22	02581	02591	0312	S17	W40	5403	03	19.1	14	1F						124	2.3	FIJTU
	LEAR	22	0258	0259	0309	S17	W40	5403	03	19.1	11	SF			3	E		31		F
	VORO	22	0259	0300	0314	S17	W40	5403	03	19.1	15	1F			2	C	0300	179	2.4	IJTU
	YUNN	22	0301E	0301U	0313	S16	W40	5403	03	19.1	12D	1N				P	0301	161	2.2	F
0493	LEAR	22	0513	0513	0519	N17	W08	5409	03	21.6	6	SF	C	5.6	3	E		30		F
0494	ABST	22	0652E	0656	0728	N15	W11	5409	03	21.4	36D	SN				P	0656	157	1.6	E
0495		22	0656*	0704*	0746	N21	W13	5416	03	21.3	50	SF						111	2.6	EFK
	ABST	22	0652E	0729	0756	N21	W15	5416	03	21.1	64D	1N				P	0729	218	2.6	EK
	LEAR	22	0656	0729	0747	N20	W13	5416	03	21.3	51	SF			3	E		58		F
	SVTO	22	0703	0704	0743	N21	W13	5416	03	21.3	40	SF			3	E		56		F
	KANZ	22	0721	0726	0737	N22	W12	5416	03	21.4	16	SF			1					
0496		22	07462	07471	0755	S28	E61	5417	03	27.1	9	SF						23		F
	SVTO	22	0746	0747	0753	S26	E62	5417	03	27.1	7	SF			3	E		22		F
	LEAR	22	0746	0747	0756	S28	E62	5417	03	27.2	10	SF			3	E		24		
	KANZ	22	0748	0748	0755	S29	E59	5417	03	26.9	7	SF			1					
0497		22	0917*	0932*	1108	N17	W07	5409	03	21.8	111	SN						147	1.8	DEFIJT
	KANZ	22	0917		0946D	N19	W05	5409	03	22.0	29D	1F			1					
	LEAR	22	0920	0949	1008D	N18	W05	5409	03	22.0	48D	SF			3	E		44		F
	SVTO	22	0920	1025	1108	N18	W06	5409	03	21.9	108	1N			3	E		182		F
	KANZ	22	0930		0946D	N16	W08	5409	03	21.8	16D	SF			1					
	CATA	22	0932E	0932	0935D	N18	W04	5409	03	22.1	3D	1B			2	P	0932	281	3.2	T
	HTPR	22	0955E		0957D	N17	W10	5409	03	21.6	2D	SB				C	0957	160	1.6	EI
	HURB	22	1016E	1017	1031D	N16	W06	5409	03	22.0	15D	1F								DJ
	ATHN	22	1024E	1033U	1033D	N18	W08	5409	03	21.8	9D	SB			3	V	1033	127	1.4	
	ATHN	22	1024E	1033U	1033D	N13	W12	5409	03	21.5	9D	SB			3	V	1033	64	0.7	
	HTPR	22	1043E		1111D	N17	W10	5409	03	21.7	28D	1B				C	1045	220	2.2	EI
	RAMY	22	1044E	1046U	1108	N17	W05	5409	03	22.1	24D	SF			1	E		97		F

Hα SOLAR FLARES

MARCH 1989

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	Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0498	ISTA	22	0923E		1001D	N21	W10	5416	03	21.6	38D	1N				P				F
0499		22	0949	0932*	1042	N13	W03	5411	03	22.2	53	SN						75	1.2	FKT
	CATA	22	0932E	0932	0935D	N14	W07	5411	03	21.9	3D	SB			2	P	0932	112	1.2	T
	SVTO	22	0949	1009	1042	N12	W02	5411	03	22.2	53	SF				E		38		K
	SVTO	22	0949	1025	1042	N12	W02	5411	03	22.2	53	SF			3	E		38		F
	CATA	22	1022E	1022	1029D	N13	W01	5411	03	22.3	7D	SN			2	P	1022	112	1.2	T
0500		22	1113	1115	1122	N17	W11	5409	03	21.6	9	SN	M	1.2				94	1.3	D
	SVTO	22	1113	1115	1122	N17	W12	5409	03	21.5	9	SN	M	1.2	3	E		76		
	HURB	22	1114E	1115	1124D	N17	W11	5409	03	21.6	10D	SF								D
	ATHN	22	1115E	1120U	1120D	N17	W11	5409	03	21.6	5D	SB			3	V	1120	111	1.3	
0501		22	1114	1116	1125	N20	W16	5416	03	21.2	11	1B	M	1.2				163	2.2	EH
	HTPR	22	1114E		1127	N20	W19	5416	03	21.0	13D	1B				C	1115	220	2.2	E
	RAMY	22	1114	1116	1123	N20	W14	5416	03	21.4	9	1N	M	1.2	3	E		106		EH
0502	HTPR	22	1150	1210	1211	N20	W20	5416	03	21.0	21	SN				C	1210	120	1.2	E
0503		22	1412	1412	1428	S26	E58	5417	03	27.1	16	SF						13		
	RAMY	22	1412	1412	1423	S26	E59	5417	03	27.2	11	SF			3	E		13		
	KANZ	22	1412	1412	1434	S25	E57	5417	03	27.0	22	SF			2					
0504	RAMY	22	1435	1437	1500	S27	E59	5417	03	27.2	25	SF			3	E		12		F
0505		22	14391	14391	1445	N17	W14	5409	03	21.5	6	SF						32	0.3	F
	HTPR	22	1439	1439	1444	N17	W13	5409	03	21.6	5	SF				C	1439	30	0.3	
	SVTO	22	1439	1439	1444	N17	W14	5409	03	21.5	5	SF			3	E		29		
	RAMY	22	1439	1440	1447	N17	W14	5409	03	21.5	8	SF			3	E		38		F
	KANZ	22	1440	1440	1443D	N17	W14	5409	03	21.5	3D	SF			2					
0506		22	14554	14591	1511	N18	W14	5409	03	21.5	16	SF						24		F
	RAMY	22	1455	1459	1512	N17	W14	5409	03	21.5	17	SF			3	E		26		F
	HOLL	22	1459	1500	1510	N18	W15	5409	03	21.5	11	SF			3	E		21		
0507		22	15289	1528*	1546	N17	W15	5409	03	21.5	18	SF						18		F
	RAMY	22	1528	1528	1534	N17	W15	5409	03	21.5	6	SF			3	E		20		F
	RAMY	22	1537	1539	1557	N17	W15	5409	03	21.5	20	SF			3	E		17		
0508		22	1709	1712*	1751	N20	W18	5416	03	21.3	42	SF	C	3.9				70		FK
	HOLL	22	1709	1712	1751	N20	W18	5416	03	21.3	42	SF				E		72		K
	HOLL	22	1709	1724	1751	N20	W18	5416	03	21.3	42	SF	C	3.9	3	E		68		F
0509		22	1800	1813*	1842	S27	E57	5417	03	27.2	42	SN						24		FK
	HOLL	22	1800	1813	1842	S27	E57	5417	03	27.2	42	SN				E		28		K
	HOLL	22	1800	1834	1842	S27	E57	5417	03	27.2	42	SF			3	E		20		F
0510		22	1853*	1854*	1929	N18	W16	5409	03	21.6	36	1F	C	5.6				88		F
	HOLL	22	1853	1854	1859	N19	W14	5409	03	21.7	6	SF			3	E		15		
	HOLL	22	1903	1916	1946	N17	W17	5409	03	21.5	43	1F	C	5.6	3	E		127		
	PALE	22	1924	1924	1942	N17	W16	5409	03	21.6	18	1F			3	E		123		F
0511		22	1949	19517	2040	N14	W17	5409	03	21.5	51	1B	M	1.0				168		F
	PALE	22	1949	1951	2031	N17	W17	5409	03	21.5	42	1N	M	1.0	3	E		211		F
	HOLL	22	1949	1958	2042	N12	W18	5409	03	21.5	53	1B	M	1.0	3	E		169		
	RAMY	22	1957E	1957U	2047	N12	W17	5409	03	21.5	50D	1B	M	1.0	1	E		124		F
0512	PALE	22	2020	2026	2030	S26	E56	5417	03	27.2	10	SF			3	E		20		
0513	HOLL	22	2058	2101	2110	S21	E56	5417	03	27.2	12	SF			3	E		20		
0514		23	0531*	05396	0549	N16	W25	5409	03	21.3	18	SF						91	1.4	DEF
	LEAR	23	0531	0539	0551	N13	W25	5409	03	21.3	20	SF			3	E		55		F
	ABST	23	0538	0539	0543	N18	W26	5409	03	21.2	5	SF				C	0539	131	1.6	D
	ABST	23	0543	0545	0553	N16	W24	5409	03	21.4	10	SF				C	0543	87	1.1	E
0515	ABST	23	0804	0805	0806D	N15	W25	5409	03	21.4	2D	SF				P	0805	70	1.0	D
0516	HTPR	23	0858	0907	0955	N11	W24	5409	03	21.6	57	SN				C	0907	80	0.9	E

Hα SOLAR FLARES

MARCH 1989

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
0517	HTPR	23	1121	1140	1150	N25	W90	5413	03	16.5	29	SN				C	1140	30		
0518	RAMY	23	1147	1147	1152	S16	W57	5403	03	19.2	5	SF			3	E		25		
0519		23	1154	11551	1204	S21	W35	5415	03	20.8	10	SN						66	1.2	E
	RAMY	23	1154	1155	1203	S20	W35	5415	03	20.8	9	SF			3	E		32		
	HTPR	23	1154	1156	1205	S22	W35	5415	03	20.8	11	SB				C	1156	100	1.2	E
0520		23	13012	13032	1314	S21	W48	5414	03	19.9	13	SN						15	0.3	
	HTPR	23	1301	1305	1317	S23	W50	5414	03	19.7	16	SN				C	1305	20	0.3	
	RAMY	23	1303	1303	1310	S19	W47	5414	03	19.9	7	SF			3	E		10		
0521		23	13392	13422	1358	S22	W50	5414	03	19.7	19	SN						28	0.6	
	HTPR	23	1339	1342	1404	S23	W50	5414	03	19.7	25	SN				C	1342	40	0.6	
	HOLL	23	1341	1344	1353	S21	W49	5414	03	19.8	12	SF			3	E		17		
0522		23	13468	14066	1448	N13	W28	5409	03	21.5	62	1N	C	9.8				215	1.7	EF
	HTPR	23	1346		1423D	N13	W30	5409	03	21.3	37D	SB				C	1403	150	1.7	EF
	RAMY	23	1348	1406	1500	N12	W27	5409	03	21.5	72	1N	C	9.8	4	E		185		FE
	HOLL	23	1354	1406	1441	N13	W28	5409	03	21.5	47	2B	C	9.8	2	E		303		
	SVTO	23	1354	1412	1443	N13	W29	5409	03	21.4	49	1F			3	E		222		F
0523		23	16085	1614	1626	N14	W06	5420A	03	23.2	18	SF						30		
	HOLL	23	1608	1614	1629	N14	W06	5420A	03	23.2	21	SF			3	E		42		
	RAMY	23	1613	1614	1624	N13	W06	5420A	03	23.2	11	SF			3	E		19		
0524	RAMY	23	1620E	1622U	1640	N17	W28	5409	03	21.5	20D	SF			2	E		16		
0525	HOLL	23	1621	1621	1628	N19	W36	5409	03	20.9	7	SF			3	E		17		
0526	RAMY	23	1922E	1923U	1936D	S27	E45	5417	03	27.3	14D	SF			2	E		25		
0527		23	1925E	1937	2201D	N18	W28	5409	03	21.7	156D	3B	X	1.5				611		FKUY
	RAMY	23	1925E	1937	2126D	N18	W28	5409	03	21.7	121D	3B	X	1.5		E		418		K
	RAMY	23	1925E	1948U	2126D	N18	W28	5409	03	21.7	121D	3B	X	1.5	2	E		790		UY
	PALE	23	1946E	1947U	2201D	N17	W28	5409	03	21.7	135D	3B	X	1.5	3	E		624		YF
		23	2127		2147	No Flare Patrol														
0528	VORO	23	2351	2353	2358	N17	W18	5420	03	22.6	7	SF			2	C	2353	63	0.7	DIJT
0529	PALE	23	2358	2359	2403	S27	E44	5417	03	27.4	5	SF			3	E		36		
		24	0113		0121	No Flare Patrol														
0530		24	02242	02282	0238	N15	W30	5409	03	21.8	14	SN						27	0.4	H
	YUNN	24	0224	0228	0238	N15	W30	5409	03	21.8	14	SN				C		32	0.4	
	PALE	24	0226	0230	0238	N15	W31	5409	03	21.7	12	SF			3	E		22		H
0531		24	03303	0333	0336	N14	W31	5409	03	21.8	6	SN						55	1.2	
	YUNN	24	0330	0333	0337	N14	W31	5409	03	21.8	7	SN				C		96	1.2	
	PALE	24	0333	0333	0336	N15	W31	5409	03	21.8	3	SF			3	E		14		
0532	PALE	24	0346E	0346U	0358	N33	E61		03	29.0	12D	SF			3	E		32		F
		24	0437		0631	No Flare Patrol														
0533		24	0722	0724	0722	N16	W40	5409	03	21.3	12	SN						62	0.8	DEI
	HTPR	24	0639E		0716	N19	W42	5409	03	21.1	37D	SF				C	0700	100	1.3	EI
	YUNN	24	0722	0724	0728	N14	W38	5409	03	21.4	6	SN				C		24	0.3	DE
0534	YUNN	24	0702	0706	0724	S24	E36	5417	03	27.1	22	SN				C		16	0.2	D
0535	HTPR	24	0757	0800	0803	N14	W35	5409	03	21.7	6	SF				C	0800	30	0.4	
0536		24	08421	08433	0852	N14	W34	5409	03	21.8	10	SN						50	0.6	E
	HTPR	24	0842	0846	0855	N14	W35	5409	03	21.7	13	SN				C	0846	50	0.6	E
	KANZ	24	0843	0843	0849	N14	W34	5409	03	21.8	6	SF			2					

Hα SOLAR FLARES

MARCH 1989

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
0537	HTPR	24	1011	1013	1018	N14	W36	5409	03	21.7	7	SF				C	1013	20	0.3	
0538	KANZ	24	1159	1159	1202	N23	W43	5416	03	21.2	3	SF			2					
0539		24	12152	12212	1300	N12	W41	5409	03	21.4	45	SN						55	1.1	
	HTPR	24	1215	1222	1300	N11	W44	5409	03	21.2	45	SB				C	1222	80	1.1	
	RAMY	24	1216	1223	1259	N12	W40	5409	03	21.5	43	SF			3	E		30		
	KANZ	24	1217	1221	1300	N12	W40	5409	03	21.5	43	SF			2					
0540	KANZ	24	1344	1344	1359	N15	W46	5409	03	21.1	15	SF			2					
0541	KANZ	24	1453	1457	1505	N13	W38	5411	03	21.7	12	SF			2					
0542		24	1523	1529	1535	N21	W45	5416	03	21.2	12	SF						22		
	KANZ	24	1523	1529	1533	N22	W45	5416	03	21.2	10	SF			2					
	RAMY	24	1523	1529	1536	N21	W45	5416	03	21.2	13	SF			3	E		23		
	HOLL	24	1523	1529	1536	N21	W44	5416	03	21.3	13	SF			3	E		22		
0543	HOLL	24	1602	1611	1742	N15	W28	5420	03	22.5	100	SF			3	E		95		
0544	RAMY	24	1752	1757	1812	N21	W46	5416	03	21.2	20	SF			4	E		23		F
0545	HOLL	24	1812	1814	1820	N12	W21	5420	03	23.2	8	SF			3	E		16		
0546		24	1813	1814	1830	N12	W30	5411	03	22.5	17	SF						16		
	HOLL	24	1813	1814	1824	N12	W30	5411	03	22.5	11	SF			3	E		18		
	RAMY	24	1813	1814	1837	N12	W30	5411	03	22.5	24	SF			3	E		14		
0547	RAMY	24	1912	1912	1919	N13	W21	5420	03	23.2	7	SF			3	E		26		F
0548	RAMY	24	1932	1939	1952	N21	W48	5416	03	21.1	20	SF			3	E		34		F
0549	HOLL	24	1933	1933	1937	N17	W43	5409	03	21.5	4	SF			3	E		14		
		24	2011		2015	No Flare Patrol														
0550		24	2027E	2029U	2057D	N14	W43	5409	03	21.6	30D	2B	M	1.2				204		F
	RAMY	24	2027E	2029U	2050D	N11	W42	5409	03	21.7	23D	2B	M	1.2	2	E		257		F
	PALE	24	2028E	2029U	2053D	N17	W44	5409	03	21.5	25D	2B	M	1.2	3	E		265		F
	HOLL	24	2040E	2046U	2057D	N13	W43	5409	03	21.6	17D	SN			3	E		89		
		24	2058		2224	No Flare Patrol														
0551	PALE	24	2238E	2240U	2252	N24	W40	5416	03	21.8	14D	SF	C	2.7	3	E		16		
0552	VORO	24	2319	2324	2342	N16	W46	5409	03	21.5	23	SN			2	C	2324	90	1.5	EIJT
0553		25	01241	01261	0130	N20	W49	5416	03	21.3	6	SF						43	1.1	DIJT
	VORO	25	0124	0127	0130	N21	W48	5416	03	21.4	6	SF			2	C	0127	63	1.1	DIJT
	LEAR	25	0125	0126	0131	N20	W50	5416	03	21.2	6	SF			3	E		23		
0554	YUNN	25	0239	0245	0300	N21	W50	5416	03	21.3	21	SN				C		80	1.5	E
0555	YUNN	25	0355	0357	0411	N14	W25	5420A	03	23.3	16	SN				C		32	0.4	E
0556		25	04143	0419	0425	N22	W51	5416	03	21.2	11	SN						30	0.6	
	YUNN	25	0414	0418U	0418D	N22	W50	5416	03	21.3	4D	SN				P	0418	32	0.6	
	LEAR	25	0417	0419	0425	N22	W52	5416	03	21.2	8	SF			3	E		28		
0557	TACH	25	0414	0418	0434	N13	W57	5409	03	20.9	20	SN			1	C	0418	60	1.3	E
0558	LEAR	25	0749	0750	0757	N16	W52	5409	03	21.4	8	SF			3	E		22		
0559	KANZ	25	1247	1250	1256	S26	E19	5417	03	27.0	9	SF			2					E

Hα SOLAR FLARES

MARCH 1989

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
0560		25	1531*	1534*	1606	N13	W56	5409	03	21.4	35	SF	C 6.5				65		FS
	HOLL	25	1531	1535	1610	N13	W56	5409	03	21.4	39	SN	C 6.5	4	E		84		FS
	RAMY	25	1532	1534	1603	N12	W57	5409	03	21.3	31	SF	C 6.5	3	E		34		F
	KANZ	25	1532	1535	1556D	N12	W55	5409	03	21.5	24D	SF		2					
	SVTO	25	1533	1549	1604D	N11	W57	5409	03	21.3	31D	SF		2	E		77		F
	KANZ	25	1543	1547	1556D	N17	W53	5409	03	21.6	13D	SF		2					
0561	KANZ	25	1608E	1608U	1621	S20	E31	5421	03	28.0	13D	SF		2					
0562	RAMY	25	1940	1951	2000	N21	W62	5416	03	21.1	20	SF		3	E		26		
0563	RAMY	25	2008	2011	2015	N20	W62	5416	03	21.1	7	SF		3	E		36		
0564	HOLL	25	2139	2142	2222	N21	W63	5416	03	21.1	43	SF	C 1.5	3	E		65		
0565		25	22504	22573	2310	N14	W57	5409	03	21.6	20	SF					60	1.9	DIJT
	VORO	25	2250	2300	2317	N14	W57	5409	03	21.6	27	SF		2	C	2300	99	1.9	DIJT
	HOLL	25	2254	2257	2302	N14	W57	5409	03	21.6	8	SF		3	E		21		
0566		26	00429	00521	0112	N21	W64	5409	03	21.1	30	SF	C 3.9				74		DIJT
	VORO	26	0042	0053	0122	N21	W65	5409	03	21.0	40	1N		2	C	0053	108		DIJT
	LEAR	26	0048	0052	0110	N20	W64	5409	03	21.1	22	SF	C 3.9	3	E		76		
	HOLL	26	0051	0052	0104	N21	W63	5409	03	21.2	13	SF	C 3.9	3	E		39		
0567		26	01271	01301	0152	S25	E13	5417	03	27.1	25	SN					110	2.1	EFIT
	VORO	26	0127	0131	0157	S26	E14	5417	03	27.1	30	1N		3	C	0131	188	2.1	EIT
	MITK	26	0128	0130	0149	S23	E12	5417	03	27.0	21	SN			C	0130			E
	LEAR	26	0128	0130	0151	S25	E13	5417	03	27.1	23	SF		3	E		31		F
0568		26	0130	01303	0144	N14	W57	5409	03	21.7	14	1F	C 3.9				76	2.2	EHIJT
	LEAR	26	0130	0130	0139	N13	W57	5409	03	21.8	9	SF	C 3.9	3	E		35		H
	VORO	26	0130	0133	0150	N14	W57	5409	03	21.7	20	1F		3	C	0133	116	2.2	EIJT
0569	YUNN	26	0338	0343	0351	N12	W55	5411	03	22.0	13	SN			C		24	0.5	
0570	TACH	26	0440	0445	0508	N21	W60	5409	03	21.6	28	SB		2	C	0445	71	1.7	D
0571		26	05117	05221	0540	S28	E11	5417	03	27.1	29	SN					116	1.3	E
	YUNN	26	0511	0523	0540	S30	E10	5417	03	27.0	29	SN			C		64	0.7	E
	TACH	26	0516	0523	0541	S25	E12	5417	03	27.1	25	SB		2	C	0523	102	1.2	E
	ABST	26	0518	0522	0530D	S29	E12	5417	03	27.2	12D	SF			P	0522	183	2.0	E
0572		26	0602	0606	0618	S27	E10	5417	03	27.0	16	SF	C 1.8				38		H
	SVTO	26	0602	0606	0616	S27	E11	5417	03	27.1	14	SF	C 1.8	2	E		53		
	LEAR	26	0602	0606	0619	S27	E10	5417	03	27.0	17	SF	C 1.8	3	E		22		H
0573		26	08562	08562	0911	N20	W62	5409	03	21.6	15	SF	C 2.1				21		E
	ISTA	26	0856		0913	N21	W61	5409	03	21.7	17	SN			P				E
	LEAR	26	0856	0856	0907	N20	W64	5409	03	21.5	11	SF	C 2.1	3	E		16		
	SVTO	26	0857	0857	0913	N18	W63	5409	03	21.6	16	SF		3	E		26		
	KANZ	26	0858	0858	0910	N21	W62	5409	03	21.6	12	SF		2					
0574	SVTO	26	1027	1028	1032	S26	E08	5417	03	27.0	5	SF		3	E		25		F
0575		26	1211*	1212*	1416	N14	W67	5409	03	21.4	125	2B	M 6.6				247		EFHK
	RAMY	26	1211	1212	1533D	N15	W69	5409	03	21.3	202D	2B			E		40		K
	RAMY	26	1211	1310	1533D	N15	W69	5409	03	21.3	202D	2B	M 6.6	3	E		388		FH
	SVTO	26	1303E	1315	1341	N11	W66	5409	03	21.6	38D	2N	M 6.6	3	E		313		FE
	KANZ	26	1306	1314	1452	N13	W63	5409	03	21.8	106	2N		2					FK
0576		26	1342	1406	1454	N12	W70	5409	03	21.3	72	1N					110		EF
	SVTO	26	1342	1406	1450	N12	W70	5409	03	21.3	68	1F		3	E		128		F
	HOLL	26	1418E	1420U	1459	N13	W69	5409	03	21.4	41D	SN		3	E		92		FE
		26	2120		2132	No Flare Patrol													
		26	2211		2230	No Flare Patrol													

Hα SOLAR FLARES

MARCH 1989

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
0577	PALE	26	2241	2241	2250	S22	E02	5417	03	27.1	9	SF		3	E		13		
0578	PALE	26	2300	2300	2319	S27	E01	5417	03	27.0	19	SF		3	E		16		
		26	2329		2348	No Flare Patrol													
0579	PALE	27	0009	0012	0024	S28	E02	5417	03	27.2	15	SF	C 2.5	3	E		24		F
0580		27	02176	02221	0243	S26	E00	5417	03	27.1	26	SF	C 3.6				24		F
	PALE	27	0217	0222	0246	S26	E00	5417	03	27.1	29	SF	C 3.6	3	E		24		
	LEAR	27	0223	0223	0240	S26	E00	5417	03	27.1	17	SF	C 3.6	3	E		24		F
0581		27	03069	0307*	0342	S27	W01	5417	03	27.0	36	1B	M 3.5				237	3.9	EFKUZ
	PALE	27	0306	0307	0345	S26	W01	5417	03	27.0	39	1B	M 3.5		E		180		K
	PALE	27	0306	0315	0345	S26	W01	5417	03	27.0	39	1B	M 3.5	3	E		182		F
	URUM	27	0312	0316	0330	S27	W01	5417	03	27.0	18	2B			C		482	5.3	U
	LEAR	27	0313	0317	0342	S28	E00	5417	03	27.1	29	1F	M 3.5	3	E		112		F
	TACH	27	0315	0319	0348	S26	E00	5417	03	27.1	33	1B		3	C	0319	230	2.5	EZ
0582		27	08513	08531	0902	S18	E10	5421	03	28.1	11	SF					17		H
	KANZ	27	0851	0853	0907	S17	E10	5421	03	28.1	16	SF		2					
	SVTO	27	0854	0854	0858	S18	E11	5421	03	28.2	4	SF		3	E		17		H
0583	KANZ	27	1024	1042	1103	N14	W75	5409	03	21.8	39	SF		2					
0584		27	11172	1121	1135	N12	W77	5409	03	21.7	18	SF	C 2.3				69		D
	SVTO	27	1117	1121	1134	N12	W77	5409	03	21.7	17	SF	C 2.3	3	E		71		
	RAMY	27	1117	1121	1135	N12	W78	5409	03	21.6	18	SF	C 2.3	2	E		74		
	KAND	27	1119	1121	1135	N13	W76	5409	03	21.7	16	SN			P	1121	62		D
0585		27	1140*	11511	1203	N16	W78	5409	03	21.6	23	SF					68		F
	RAMY	27	1140	1149U	1204	N18	W80	5409	03	21.4	24	SF		3	E		85		F
	SVTO	27	1149	1151	1204	N15	W77	5409	03	21.7	15	SF		3	E		50		F
	KANZ	27	1152	1152	1202	N16	W76	5409	03	21.7	10	SF		2					
0586		27	12092	12112	1237	N13	W77	5409	03	21.7	28	SF					52		EF
	KAND	27	1209	1212	1240	N14	W77	5409	03	21.7	31	SN			P	1212	62		E
	KANZ	27	1210	1213	1239	N14	W75	5409	03	21.8	29	SF		2					
	SVTO	27	1211	1211	1233	N12	W78	5409	03	21.6	22	SF		3	E		42		F
0587		27	14463	14472	1516	S26	W07	5417	03	27.1	30	SF	C 5.8				60		F
	SVTO	27	1446	1447	1510	S26	W06	5417	03	27.1	24	SF	C 5.8	3	E		49		F
	RAMY	27	1446	1447	1531D	S28	W07	5417	03	27.1	45D	SF	C 5.8	3	E		72		F
	KANZ	27	1449	1449	1521	S24	W08	5417	03	27.0	32	SF		2					
0588	RAMY	27	1539	1541	1549	S28	W06	5417	03	27.2	10	SF		3	E		15		
0589		27	1626	16261	1630	N14	W85	5409	03	21.3	4	SF	C 2.9				92		
	KANZ	27	1626	1626	1630	N14	W85	5409	03	21.3	4	SN		2					
	RAMY	27	1626	1627	1630	N14	W88	5409	03	21.0	4	1F	C 2.9	3	E		109		
	SVTO	27	1626	1627	1631	N15	W81	5409	03	21.5	5	SF	C 2.9	3	E		76		
0590	PALE	27	1728	1731	1739	N13	W77	5411	03	21.9	11	SF	C 5.5	3	E		23		
0591	RAMY	27	1729	1732	1739	N14	W82	5409	03	21.5	10	SF	C 5.5	3	E		57		F
0592	PALE	27	1740	1752	1814	S31	W09	5417	03	27.0	34	SF	C 2.8	3	E		56		F
0593	PALE	27	1901	1903	1913	N14	W80	5409	03	21.7	12	SF		3	E		90		F
0594	PALE	27	1903	1906	1917	S29	W08	5417	03	27.2	14	SF	C 2.4	3	E		40		F
		27	1927		1934	No Flare Patrol													
0595		27	1930E	1935U	2002	N14	W86	5409	03	21.3	32D	1F	C 4.9				90		
	RAMY	27	1930E	1935U	1953D	N14	W90	5409	03	21.0	23D	1F		2	E		127		
	RAMY	27	1943E	1947U	2002	N15	W83	5409	03	21.5	19D	SF	C 4.9	2	E		53		

Hα SOLAR FLARES

MARCH 1989

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
0596	RAMY	27	2047E	2047U	2053D	S26	W10	5417	03	27.1	6D	SF	C 8.3	1	E		65		F
0597	RAMY	27	2054E	2102U	2116	N15	W84	5409	03	21.5	22D	SF	C 3.4	2	E		55		
		27	2117		2237	No Flare Patrol													
0598	VORO	27	2304	2307	2321	S25	W12	5417	03	27.0	17	SF		2	C	2307	72	0.8	DIJT
0599		28	0007E	0012	0032	S25	W14	5417	03	26.9	25D	1F	C 4.3				126	2.5	EFIJT
	HOLL	28	0007E	0010U	0056D	S26	W14	5417	03	26.9	49D	SF	C 4.3	2	E		28		F
	VORO	28	0011E	0012	0032	S24	W13	5417	03	27.0	21D	1F		2	C	0012	224	2.5	EIJT
0600		28	0055	0101*	0122	S26	W13	5417	03	27.0	27	SB					142	1.6	EIJT
	VORO	28	0055	0101	0121	S27	W12	5417	03	27.1	26	SN		2	C	0101	170	1.9	EIJT
	PURP	28	0107E	0111	0124	S24	W14	5417	03	27.0	17D	SB		2	C	0111	114	1.3	E
0601	LEAR	28	0318	0326	0334	S27	W13	5417	03	27.1	16	SF		3	E		29		F
0602		28	0612*	0600*	0710	S26	E06		03	28.7	58	1F	C 2.3				183	2.6	EFG
	LEAR	28	0559E	0600	0637	S26	E06		03	28.7	38D	SF	C 2.3	3	E		34		F
	ABST	28	0559E	0603U	0604D	S25	E06		03	28.7	5D	1F			P	0603	218	2.4	E
	SVTO	28	0612	0620	0651	S24	E08		03	28.9	39	SF		3	E		65		F
	BUCA	28	0620E	0625U	0735	S25	E06		03	28.7	75D	1F			C	0625	215	2.3	EG
	KANZ	28	0623E	0634	0721	S25	E05		03	28.6	58D	SF		2					E
	YUNN	28	0628E	0628U	0721	S25	E06		03	28.7	53D	1N			P	0628	418	4.6	G
	CATA	28	0632E	0635	0720D	S26	E05		03	28.7	48D	1N		2	P	0635	309	3.4	
	ISTA	28	0637E		0701	S31	E09		03	29.0	24D	2N			P				GF
	YUNN	28	0706	0715	0725	S24	E07		03	28.8	19	SF			P		24	0.3	G
0603		28	07387	07464	0758	S28	W16	5417	03	27.1	20	SN	C 9.3				33	0.5	DE
	YUNN	28	0738	0746	0759	S28	W16	5417	03	27.1	21	SN			P		40	0.5	E
	KANZ	28	0738	0748	0757	S28	W16	5417	03	27.1	19	SF		2					
	LEAR	28	0744	0748	0755	S29	W16	5417	03	27.1	11	SF	C 9.3	3	E		16		
	KAND	28	0745	0750	0800	S29	W16	5417	03	27.1	15	SN			P	0750	42	0.5	D
0604		28	07589	08013	0817	N15	W15	5419	03	27.2	19	SF					44	0.6	DGU
	BUCA	28	0758	0801	0819	N15	W16	5419	03	27.1	21	SF			C	0801	54	0.6	D
	YUNN	28	0759	0802	0820	N15	W15	5419	03	27.2	21	SN			P		64	0.7	G
	KANZ	28	0800	0803	0816	N16	W16	5419	03	27.1	16	SF		2					
	SVTO	28	0803	0804	0814	N12	W17	5419	03	27.0	11	SF		3	E		13		
	ISTA	28	0807		0816	N18	W11	5419	03	27.5	9	SF			P				GU
0605	HTPR	28	1018	1030	1036	S26	W18	5417	03	27.0	18	SF			C	1030	40	0.4	E
0606	HTPR	28	1025	1030	1045	N12	W90	5409	03	21.6	20	SB			C	1030	60		
0607	KANZ	28	1026	1026	1026	S30	W10	5417	03	27.6	20	SF		2					
0608	HTPR	28	1123	1128	1138	S28	W14	5417	03	27.4	15	SF			C	1128	80	0.9	E
0609		28	1221*	1245*	1353	S27	W18	5417	03	27.1	92	SF	C 5.1				126	2.5	EFIK
	HTPR	28	1221	1259	1345	S28	W14	5417	03	27.4	84	1N			C	1259	230	2.5	EI
	SVTO	28	1232	1249	1355	S26	W19	5417	03	27.0	83	SF	C 5.1		E		64		K
	SVTO	28	1232	1308	1355	S26	W19	5417	03	27.0	83	SF	C 5.1	3	E		85		F
	KANZ	28	1234	1245	1355	S25	W20	5417	03	27.0	81	SF		2					
	KANZ	28	1237	1311	1357	S28	W17	5417	03	27.2	80	SF		2					
0610	HTPR	28	1405	1407	1415	S15	W15	5421	03	27.4	10	SF			C	1407	50	0.5	E
0611	HTPR	28	1434	1447	1508	S15	W15	5421	03	27.5	34	SF			C	1447	40	0.4	E
0612		28	14462	14481	1502	S26	W19	5417	03	27.1	16	SF					10		F
	KANZ	28	1446	1449	1501D	S26	W20	5417	03	27.1	15D	SF		2					
	RAMY	28	1448	1448	1502	S27	W18	5417	03	27.2	14	SF		3	E		10		F
0613	HTPR	28	1538		1540D	S15	W16	5421	03	27.4	2D	SN			C	1540	150	1.5	E

Hα SOLAR FLARES

MARCH 1989

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0614		28	1547	1550	1556	S28	W19	5417	03	27.2	9	SF					30		F
	RAMY	28	1547	1550	1558	S28	W18	5417	03	27.2	11	SF		3	E		30		F
	KANZ	28	1551E	1551U	1555	S28	W20	5417	03	27.1	4D	SF		2					
0615	RAMY	28	1745	1747	1759	S27	W20	5417	03	27.2	14	SF		3	E		21		
0616	RAMY	28	1911	1912	1922	S19	W09	5421	03	28.1	11	SF		3	E		24		
0617	HOLL	28	1925	1934	1943	N17	W88	5409	03	22.1	18	1N M	1.5	3	E		165		EF
0618	HOLL	28	2320	2340	2343	S09	W58	5424	03	24.6	23	SF		3	E		14		
0619		29	02481	0250*	0315	S25	W26	5417	03	27.1	27	SN					74	1.0	EFK
	YUNN	29	0246E	0246U	0252	S26	W26	5417	03	27.1	6D	SN			P	0246	48	0.6	E
	MITK	29	0248	0308	0318	S25	W25	5417	03	27.2	30	SN			C	0308			E
	PURP	29	0249	0250	0322	S24	W27	5417	03	27.0	33	SB			C	0250	128	1.5	K
	PALE	29	0305E	0307	0328	S26	W26	5417	03	27.1	23D	SF		3	E		47		F
0620	SVTO	29	0653	0710	0712	S18	E86	5428	04	4.8	19	SF C	2.8	3	E		13		
0621		29	0704	07065	0732	S27	W28	5417	03	27.1	28	SF					69	1.6	EFI
	LEAR	29	0704	0706	0728	S28	W28	5417	03	27.1	24	SF		3	E		34		F
	SVTO	29	0704	0711	0726	S26	W29	5417	03	27.0	22	SF		3	E		23		F
	KANZ	29	0711E	0711U	0741	S26	W29	5417	03	27.0	30D	SF		2					
	HTPR	29	0731E		0822D	S27	W27	5417	03	27.2	51D	SF			C	0732	150	1.6	EI
0622	HTPR	29	0731E		0808D	S20	E90	5428	04	5.2	37D	1N			C	0743	130		
0623	HTPR	29	0821E		0822D	S20	E90	5428	04	5.2	1D	1N			C	0822	130		
0624	HTPR	29	0838E		0920	S20	E90	5428	04	5.2	42D	1N			C	0838	130		
0625	HTPR	29	1045	1048	1120	S23	W37	5417	03	26.6	35	SN			C	1048	40	0.5	
0626	SVTO	29	1121	1121	1128	S16	E88	5428	04	5.1	7	SF C	2.3	3	E		12		
0627		29	1416	14184	1446	N20	E00	5422	03	29.6	30	SF					42		F
	SVTO	29	1416	1418	1450	N21	E01	5422	03	29.7	34	SF		3	E		30		F
	HOLL	29	1416	1422	1442	N20	E00	5422	03	29.6	26	SF		2	E		54		
0628	HOLL	29	1744	1746	1752	S23	E90	5428	04	5.7	8	SF C	4.3	3	E		18		
0629	HOLL	29	1850	1913	1925	S19	E81	5428	04	5.0	35	SF		3	E		22		
0630		29	1900	19011	1906	S24	W40	5417	03	26.7	6	SF C	1.5				22		
	HOLL	29	1900	1901	1909	S24	W40	5417	03	26.7	9	SF C	1.5	3	E		33		
	PALE	29	1900	1902	1904	S24	W39	5417	03	26.8	4	SF C	1.5	3	E		10		
0631	HOLL	29	2250	2251	2255	S19	E80	5428	04	5.0	5	SF		3	E		32		
0632		30	00119	0024*	0038	S20	E74	5428	04	4.7	27	SF					14		
	PALE	30	0011	0024	0033	S21	E70	5428	04	4.4	22	SF		3	E		14		
	HOLL	30	0020	0037	0042	S19	E77	5428	04	4.9	22	SF		3	E		13		
0633	PALE	30	0254	0254	0303	S19	E69	5428	04	4.4	9	SF		3	E		53		
0634	LEAR	30	0500	0504	0509	S18	E77	5428	04	5.1	9	SF		3	E		34		
0635		30	0637	0621*	0650	S19	E78	5428	04	5.2	13	1F					69		D
	ABST	30	0617E	0621	0656	S20	E80	5428	04	5.4	39D	1F			P	0621	79		D
	LEAR	30	0637	0638	0643	S18	E77	5428	04	5.1	6	SF		3	E		59		
0636		30	07133	07182	0732	S23	E69	5428	04	4.6	19	SN					72		DEHT
	ISTA	30	0713		0747	S25	E70	5428	04	4.7	34	1B			P				E
	KAND	30	0715	0718	0725	S25	E67	5428	04	4.5	10	SN			P	0718	62		DT
	KANZ	30	0716	0719	0729	S24	E66	5428	04	4.4	13	SF		2					
	KHAR	30	0718E		0728	S23	E67	5428	04	4.5	10D	SN		2	P	0723	60		
	KHAR	30	0718E		0735	S16	E78	5428	04	5.2	17D	1N		2	P	0723	110		H
	CATA	30	0720E	0720	0730	S25	E68	5428	04	4.6	10D	SB		1	P	0720	56		

Hα SOLAR FLARES

MARCH 1989

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0637	KHAR	30	0812E		0818D	S23	E85	5432	04	5.9	6D	SN		2	V	0812			CH
0638	KAND	30	0855E	0901	0913	N16	E51	5427A	04	3.2	18D	SN			P	0901	42	0.8	E
0639		30	12591	13002	1309	S22	E77	5428	04	5.4	10	SF	C 6.8				33		
	RAMY	30	1259	1302	1307	S23	E78	5428	04	5.5	8	SF	C 6.8	4	E		33		
	KANZ	30	1300	1300	1311	S22	E76	5428	04	5.4	11	SF		2					
0640	HOLL	30	1546	1548	1554	S18	E71	5428	04	5.1	8	SF		3	E		14		
0641	HOLL	30	1612	1620	1630	S18	E70	5428	04	5.0	18	SF		3	E		26		
0642		30	18253	18271	1833	S22	E78	5428	04	5.8	8	SF	C 4.3				23		
	PALE	30	1825	1827	1835	S23	E78	5428	04	5.8	10	SF	C 4.3	3	E		15		
	RAMY	30	1827	1827U	1836D	S22	E78	5428	04	5.8	9D	SF	C 4.3	2	E		27		
	HOLL	30	1828	1828	1831	S22	E77	5428	04	5.7	3	SF	C 4.3	3	E		26		
0643	HOLL	30	2308	2309	2320	S27	E24	5430	04	1.8	12	SF		3	E		23		
		31	0332		0335	No Flare Patrol													
		31	0410		0455	No Flare Patrol													
0644	LEAR	31	0458	0459	0510	S23	E71	5428	04	5.7	12	SF	C 6.4	3	E		93		
0645		31	06467	06531	0719	N17	E37	5427A	04	3.1	33	SN					57	1.6	F
	YUNN	31	0646	0653	0727	N17	E37	5427A	04	3.1	41	SB			C		113	1.6	F
	SVTO	31	0650	0653	0724	N17	E38	5427A	04	3.2	34	SF		3	E		41		
	KANZ	31	0651	0653	0721	N17	E37	5427A	04	3.1	30	SF		2					
	LEAR	31	0653	0654	0704	N16	E36	5427A	04	3.0	11	SF		3	E		16		
0646	ISTA	31	0651		0720	S19	W36	5421	03	28.5	29	1B			P				F
0647	ISTA	31	0841		0844	N28	W51		03	27.4	3	SF			P				D
0648		31	1210*	1226	1232	S24	E64	5428	04	5.4	22	1F	C 2.0				72	2.4	E
	HTPR	31	1210		1233D	S23	E63	5428	04	5.4	23D	1F			C	1222	120	2.4	E
	RAMY	31	1225	1226	1232	S24	E64	5428	04	5.5	7	SF	C 2.0	3	E		24		
0649		31	13521	13531	1400	S17	E62	5428	04	5.3	8	SF					39		
	SVTO	31	1352	1353	1402	S18	E63	5428	04	5.4	10	SF		3	E		22		
	HOLL	31	1353	1354	1359	S16	E62	5428	04	5.3	6	SF		3	E		56		
0650		31	16092	16161	1624	S20	E55	5428	04	4.9	15	SN	C 1.9				49		
	RAMY	31	1609	1617	1626	S21	E53	5428	04	4.7	17	SF	C 1.9	3	E		43		
	HOLL	31	1611	1616	1623	S18	E57	5428	04	5.0	12	SN		3	E		55		
0651	RAMY	31	1711E	1711U	1722D	N09	E73		04	6.2	11D	SF		2	E		15		
0652		31	18441	18461	1908	N17	E30	5427	04	3.1	24	SF					31		F
	PALE	31	1844	1846	1907	N19	E31	5427	04	3.1	23	SF		3	E		23		
	HOLL	31	1844	1847	1909	N17	E31	5427	04	3.1	25	SF		3	E		32		F
	RAMY	31	1845	1851U	1903D	N14	E28	5427	04	2.9	18D	SF		2	E		39		
0653	HOLL	31	1855	1858	1905	S20	E55	5428	04	5.0	10	SF		3	E		30		
0654		31	19264	1934	1945	S18	E53	5428	04	4.8	19	SN	C 1.9				72		
	HOLL	31	1926	1934	1946	S16	E54	5428	04	4.9	20	SF	C 1.9	3	E		87		
	PALE	31	1930	1934	1944	S20	E52	5428	04	4.8	14	SN		3	E		56		
0655		31	1837*	2015	2044	S20	E52	5428	04	4.7	127	SF	C 1.5				28		H
	RAMY	31	1837	2018U	2042D	S21	E50	5428	04	4.6	125D	SF		2	E		30		
	HOLL	31	2005	2015	2044	S20	E54	5428	04	5.0	39	SF	C 1.5	3	E		27		H
0656	HOLL	31	2119	2127	2138	S19	E55	5428	04	5.1	19	SF		3	E		30		
0657	HOLL	31	2302	2308	2348	N17	E29	5427	04	3.2	46	SF		3	E		29		F

Hα SOLAR FLARES

MARCH 1989

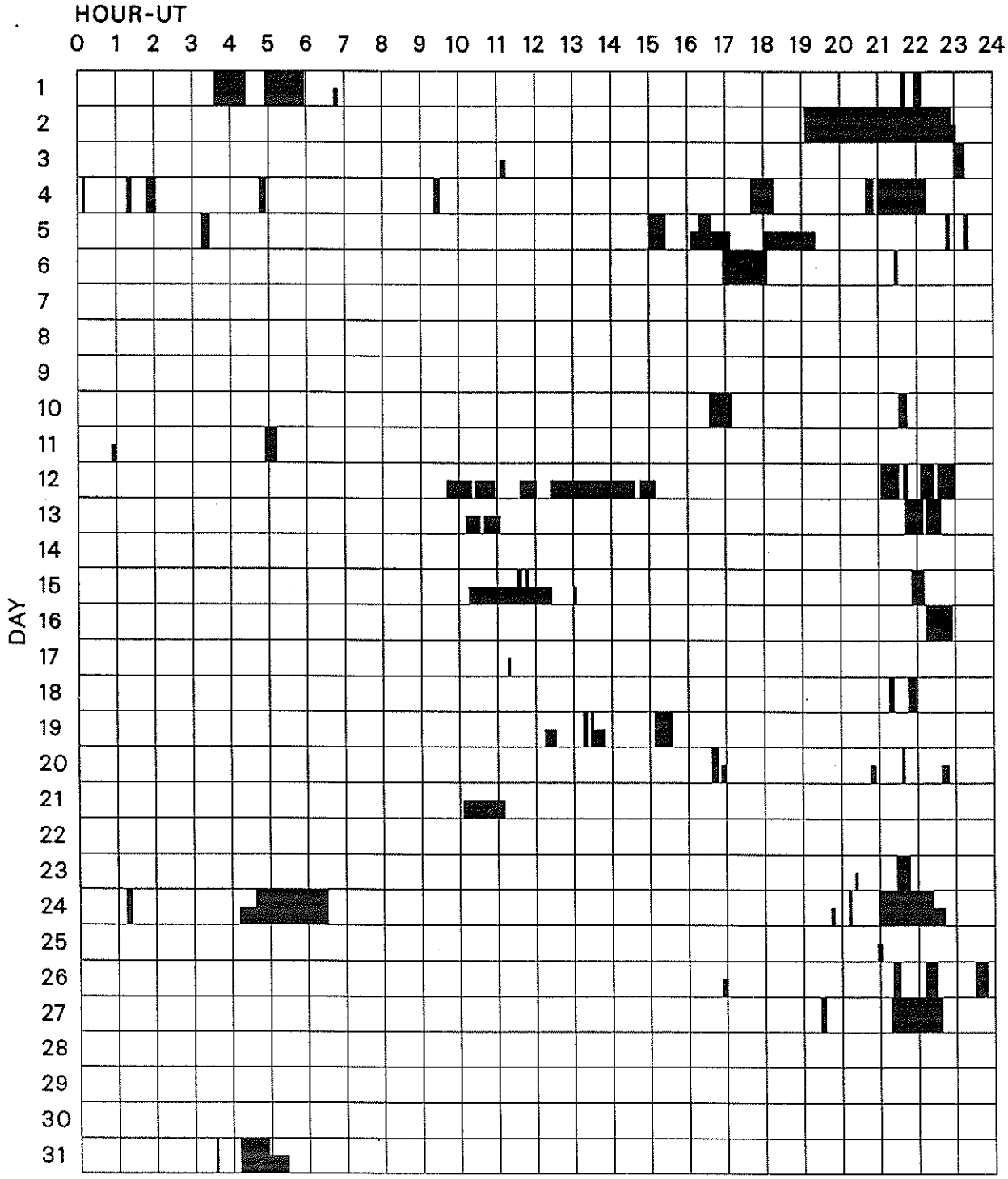
Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp	Opt	Xray	See	Obs Type	Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0658		31	2327	2330*	2505	S18	E56	5428	04	5.2	98	SF						46		FHK
	HOLL	31	2327	2330	2505	S18	E56	5428	04	5.2	98	SF				E		28		K
	HOLL	31	2327	2436	2505	S18	E56	5428	04	5.2	98	SF			3	E		63		FH

"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

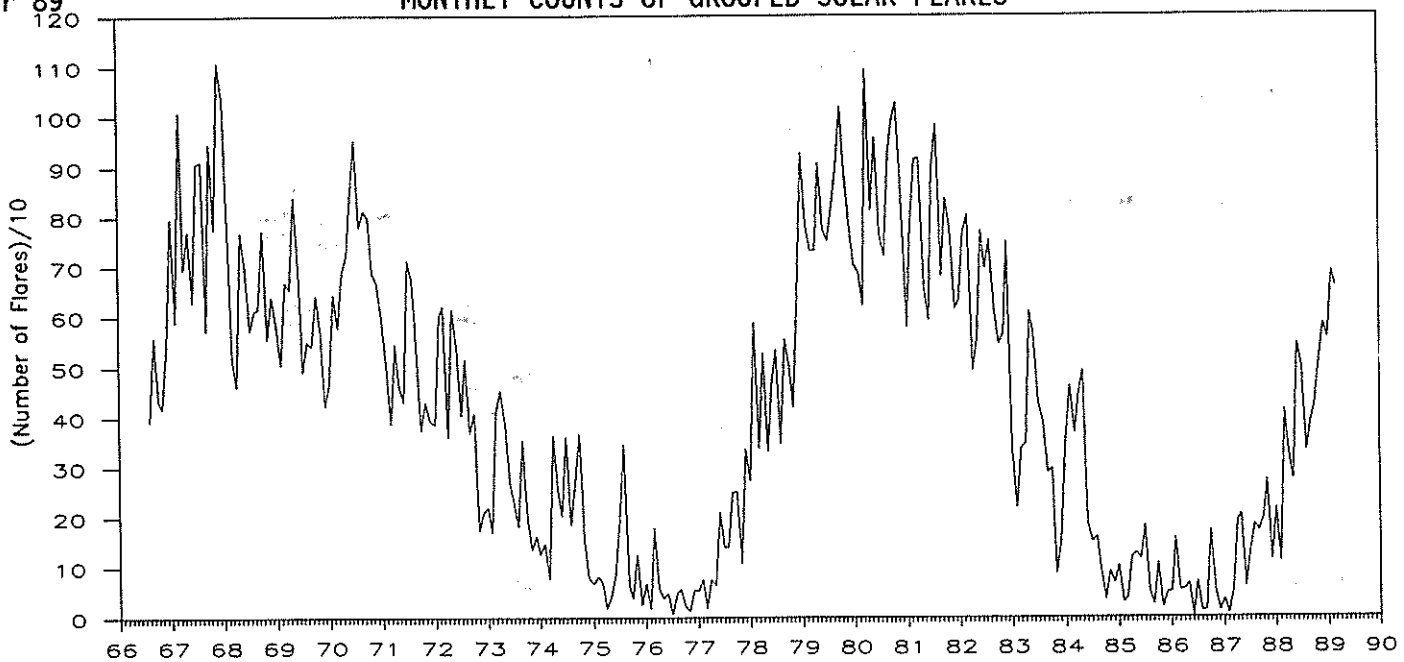
MARCH 1989



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	Haute Provence	Kandilli	Mitaka	San Vito
Athens	Holloman	Kanzelhoehe	Palehua	Tashkent
Bucharest	Hurbanovo	Kharkov	Purple Mt.	Urumqi
Catania	Istanbul	Learmonth	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	544	499	331	390	421	508	584	4618
1989	689	539	658										1886

*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.

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

Outstanding Occurrences

MARCH 1989

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	245	LEAR	43	NS	0245.0	0548.0	471.0	140.0			QL=1 ST=2 TYP=1
	100	HIRA	43	NS	0250.0	0600.0	320.0D	620.0	240.0		
	410	LEAR	43	NS	0316.0	0418.0	440.0	23.0			QL=1 ST=2 TYP=1
	221	ABST	43	NS	0500.0		240.0		51.0		
	245	SVTO	43	NS	0543.0	0554.0	636.0D	68.0			QL=1 ST=2 TYP=1
	204	IZMI	43	NS	0600.0		360.0	20.0			
	234	POTS	43	NS	0639.0	0653.0	151.0	28.0			
	127	TORN	44	NS	0700.0E		480.0D		20.0		V=2
	260	ONDR	44	NS	0710.0E	1315.5	480.0D	33.0			
	245	LEAR	43	NS	2237.0	0510.0	718.0	30.0			QL=1 ST=2 TYP=1
	410	PALE	8	S	0116.0E	0116.0	1.0D	190.0			QL=1 ST=2 TYP=3
	500	HIRA	23	GRF	0300.0	0340.0	300.0	36.0	11.0		MR
	650	GORK	22	GRF	0448.0E	0505.5	210.0D	17.0			
	9300	KISV	45	C	0609.5	0610.0		7.0			
	9300	KISV	45	C	0609.5	0612.3	4.7	11.0			
	15000	KISV	2	S/F	0609.6	0610.0	1.0	8.0			
	9100	GORK	22	GRF	0609.8	0612.3	6.7	11.0			
	5900	KISV	45	C	0609.9	0610.2		7.0			
	5900	KISV	45	C	0609.9	0612.3	4.5	10.0			
	2950	GORK	21	GRF	0609.9	0614.5	21.8	3.1			
	245	SVTO	8	S	0610.0E	0610.0	U	110.0			QL=1 ST=2 TYP=3
	3100	CRIM	45	C	0610.0	0610.2	3.0	9.5	3.0		
	2950	GORK	45	C	0610.0	0610.2	3.2	11.0			
	3100	CRIM	45	C	0610.0	0612.4		5.3			
	2950	GORK	45	C	0610.0	0612.4		4.4			
	2950	GORK	21	GRF	0634.1	0638.0	307.0	6.9			
	2695	SVTO	8	S	0645.0E	0646.0	1.0D	140.0			QL=1 ST=2 TYP=3
	810	KRAK	41	F	0908.2	0911.0	2.8	6.0	3.0		
	5900	KISV	23	GRF	1012.7	1022.7	33.7	3.0			
	5900	KISV	2	S/F	1012.8	1013.6	2.1	5.0			
	2950	GORK	1	S	1013.1	1013.6	1.3	1.8	0.9		
	9300	KISV	2	S/F	1013.1	1013.6	1.3	4.0			
	9100	GORK	1	S	1013.2	1013.8	2.1	4.3			
	810	KRAK	8	S	1203.5	1203.7	0.5	12.0			
	810	KRAK	8	S	1203.5	1203.7	0.5	12.0			
	9100	GORK	22	GRF	1204.2	1206.2	37.6	13.0			
	5900	KISV	23	GRF	1204.2	1219.3	46.5	6.0			
	5900	KISV	46	C	1204.8	1206.2	10.5	9.0			
	5900	KISV	46	C	1204.8	1214.3		4.0			
	5900	KISV	46	C	1204.8	1209.6		8.0			
	2950	GORK	22	GRF	1204.8	1209.6	55.0D	6.0			
	9300	KISV	46	C	1205.0	1206.2	6.5	8.0			
	9300	KISV	23	GRF	1205.0	1214.3	21.0	4.0			
	9300	KISV	46	C	1205.0	1205.7		8.0			
	9300	KISV	46	C	1205.0	1209.8		8.0			
	650	GORK	46	C	1211.4	1212.4	5.0	250.0			
	650	GORK	46	C	1211.4	1214.7		34.0			
	650	GORK	46	C	1211.4	1213.8		26.0			
	650	GORK	4	S/F	1230.3	1231.4	5.2	14.0			
	536	ONDR	42	SER	1232.0	1234.1	58.0	24.0			
	810	KRAK	8	S	1346.0	1346.2	0.4	16.0			
	810	KRAK	8	S	1346.0	1346.2	0.4	16.0			
	4995	LEAR	4	S/F	2358.0E	0000.0	5.0D	45.0			QL=1 ST=2 TYP=3
02	100	GORK	44	NS	0445.0E		120.0D		5.0		
	200	GORK	44	NS	0445.0E		224.0D		5.0		
	221	ABST	43	NS	0500.0		240.0		16.0		
	204	IZMI	43	NS	0600.0		360.0	10.0			
	260	ONDR	44	NS	0710.0E	1241.8	480.0D	170.0			
	127	TORN	43	NS	0904.0		208.0		2.0		V=1
	245	SVTO	43	NS	1130.0	1608.0	290.0D	55.0			QL=1 ST=2 TYP=1
	245	SGMR	44	NS	1610.0E	2101.0	363.0D	62.0			QL=1 ST=2 TYP=1
	200	HIRA	44	NS	2100.0E	2207.0	680.0D	11.0	7.0		WR
	15400	PALE	8	S	0000.0E	0001.0	1.0D	52.0			QL=1 ST=2 TYP=3
	8800	PALE	8	S	0000.0E	0000.0	2.0D	84.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0330.0E	0330.0	U	160.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	0330.0E	0330.0	U	200.0			QL=1 ST=2 TYP=3
	950	GORK	2	S/F	0458.2	0459.4	5.5	7.0			
	650	GORK	1	S	0458.6	0459.6	1.4	7.0			

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

MARCH 1989

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	2950	GORK	21	GRF	0613.8	0921.0	340.0D	18.0			
	2695	LEAR	8	S	0614.0E	0615.0	1.0D	15.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0614.0E	0614.0	1.0D	30.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0614.0E	0614.0	1.0D	110.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0614.0E	0614.0	1.0D	36.0			QL=1 ST=2 TYP=3
	3100	CRIM	29	PBI	0614.0	0616.0	37.0	4.0	1.3		
	3100	CRIM	1	S	0614.0	0614.9	2.0	15.0	5.0		
	2950	GORK	3	S	0614.2	0615.0	2.2	21.0			
	9300	KISV	29	PBI	0614.2	0616.2	11.0	6.0			
	5900	KISV	23	GRF	0614.3	0640.1	66.0	11.0			
	950	GORK	2	S/F	0614.3	0614.4	0.7	4.0			
	5900	KISV	4	S/F	0614.3	0614.9	3.7	34.0			
	9100	GORK	2	S/F	0614.5	0615.0	3.2	29.0			
	9300	KISV	4	S/F	0614.5	0615.0	1.7	35.0			
	15000	KISV	2	S/F	0614.6	0614.9	1.1	10.0			
	950	GORK	2	S/F	0616.3	0616.5	1.2	4.0			
	100	GORK	8	S	0744.3	0744.9	1.5	40.0			
	3100	CRIM	21	GRF	0810.9	0912.0	89.0	9.2	3.0		
	5900	KISV	2	S/F	0811.6	0812.1	1.0	13.0			
	9100	GORK	1	S	0811.8	0812.1	0.6	12.0			
	15000	KISV	2	S/F	0811.8	0812.1	1.0	5.0			
	9100	GORK	29	PBI	0811.8	0812.4	11.0	4.0			
	3100	CRIM	1	S	0811.9	0812.1	2.0	8.0	3.0		
	9300	KISV	2	S/F	0811.9	0812.1	1.0	15.0			
	2950	GORK	3	S	0811.9	0812.2	2.4	8.7			
	3013	IZMI	5	S	0811.9	0812.2	3.0	15.0	7.0		
	5900	KISV	23	GRF	0853.5	0925.7	66.5	12.0			
	3100	CRIM	1	S	0855.0	0855.5	1.0	5.0	2.0		
	9300	KISV	2	S/F	0855.0	0855.5	9.5	9.0			
	5900	KISV	2	S/F	0855.1	0855.4	2.1	8.0			
	15000	KISV	23	GRF	0855.2	0955.0	60.0	45.0			
	9100	GORK	22	GRF	0855.2	0911.2	18.9	11.0			
	2950	GORK	3	S	0855.2	0855.7	2.0	7.0			
	9500	POTS	21	GRF	0905.0	0911.2	25.0	14.0			
	9300	KISV	22	GRF	0905.5	0911.0	13.0	18.0			
	3013	IZMI	41	F	0907.0	0911.0	8.0	19.0			
	2695	LEAR	8	S	0907.0E	0909.0	2.0D	18.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0907.0E	0907.0	2.0D	50.0			QL=1 ST=3 TYP=3
	3000	POTS	4	S/F	0907.0U	0911.0	8.0U	24.0			
	3100	CRIM	45	C	0907.0	0907.5	5.0	8.3	7.0		
	1470	POTS	22	GRF	0907.0	0910.5	13.0U	19.0			
	3100	CRIM	45	C	0907.0	0910.9		20.6			
	2950	GORK	4	S/F	0907.1	0911.0	5.2	30.0			
	950	GORK	46	C	0907.1	0910.0		18.0			
	950	GORK	46	C	0907.1	0910.6		18.0			
	950	GORK	46	C	0907.1	0908.8		9.0			
	950	GORK	46	C	0907.1	0907.8	7.4	9.0			
	5900	KISV	45	C	0907.2	0907.5		11.0			
	5900	KISV	45	C	0907.2	0910.9	11.6	23.0			
	15000	KISV	2	S/F	0907.3	0907.5	0.6	7.0			
	650	GORK	46	C	0907.5	0909.4		9.0			
	600	HUMN	41	F	0907.5	0908.5	6.0	13.0	4.0		
	650	GORK	46	C	0907.5	0908.7	6.6	14.0			
	650	GORK	46	C	0907.5	0912.7		7.0			
	430	KRAK	4	S/F	0907.5	0908.7	2.5	250.0D	9.0		
	810	KRAK	41	F	0908.2	0911.0	2.8	6.0	3.0		
	8800	LEAR	8	S	0910.0E	0911.0	1.0D	13.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0910.0E	0911.0	1.0D	30.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0910.0E	0910.0	U	18.0			QL=1 ST=2 TYP=3
	15000	KISV	2	S/F	0910.5	0911.1	1.7	6.0			
	600	HUMN	1	S	1023.3	1023.5	0.5	22.0	8.0		
	600	HUMN	2	S/F	1025.0	1025.5	1.5	5.0	3.0		
	810	KRAK	8	S	1039.8	1039.8	0.4	126.0			
	430	KRAK	42	SER	1140.0	1157.7	23.5	15.0			
	810	KRAK	42	SER	1145.5	1151.5	6.2	17.0			
	536	ONDR	42	SER	1441.0	1449.8	22.5	230.0			
	245	SGMR	8	S	1601.0E	1601.0	U	200.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	1601.0E	1601.0	U	120.0			QL=1 ST=2 TYP=3
	245	SGMR	8	S	1608.0E	1608.0	1.0D	77.0			QL=1 ST=2 TYP=3

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

MARCH 1989

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	2800	OTTA	1	S	1737.9	1738.6	2.7	8.2	4.0		
	2800	OTTA	32	ABS	1819.5	1847.0	68.0	-3.7	2.0		
	2800	OTTA	22	GRF	1934.0	1936.0	54.0	13.2	4.0		
03	200	GORK	44	NS	0443.0E		230.0D		5.0		
	221	ABST	43	NS	0500.0		240.0		33.0		
	204	IZMI	43	NS	0600.0		360.0	20.0			
	260	ONDR	44	NS	0720.0E	0805.6	480.0D	70.0			
	127	TORN	43	NS	0928.0		212.0		6.0		V=1
	245	SVTO	44	NS	0958.0E	1554.0	842.0D	66.0			QL=1 ST=1 TYP=1
	100	GORK	43	NS	1000.0		120.0		5.0		
	245	SGMR	44	NS	1137.0E	2044.0	637.0D	270.0			QL=1 ST=2 TYP=1
	200	HIRA	44	NS	2100.0E	0145.0	240.0D	33.0	9.0		MR
	200	HIRA	46	C	0036.3	0038.0	5.4	75.0	14.0		O
	100	GORK	8	S	0558.4	0559.1	13.0	45.0			
	2950	GORK	21	GRF	0610.5	0928.5	420.0D	10.0			
	9300	KISV	2	S/F	0705.2	0707.7	6.5	10.0			
	5900	KISV	2	S/F	0705.3	0707.5	6.7	11.0			
	5900	KISV	23	GRF	0705.3	0734.7	42.7	6.0			
	650	GORK	46	C	0705.5	0715.0		9.6			
	650	GORK	46	C	0705.5	0710.1	15.5	6.5			
	950	GORK	46	C	0705.8	0715.0		9.0			
	950	GORK	46	C	0705.8	0709.0	15.0	11.0			
	3100	CRIM	3	S	0706.0	0708.0	6.0	22.0	7.0		
	2695	LEAR	4	S/F	0706.0E	0708.0	4.0D	37.0			QL=1 ST=2 TYP=3
	1415	LEAR	4	S/F	0706.0E	0708.0	5.0D	30.0			QL=1 ST=2 TYP=3
	2950	GORK	3	S	0706.0	0707.9	6.8	26.0			
	9100	GORK	2	S/F	0706.1	0707.8	4.2	8.5			
	430	KRAK	42	SER	0801.7	0810.6	11.7	8.0			
	650	GORK	4	S/F	0804.8E	0805.6	2.0D	26.0			
	245	LEAR	8	S	0805.0E	0805.0	1.0D	64.0			QL=1 ST=2 TYP=3
	600	HUMN	41	F	0805.0	0805.5	2.0	15.0	7.0		
	950	GORK	4	S/F	0805.0	0805.7	2.5	15.0			
	810	KRAK	2	S/F	0805.2	0806.1	1.5	22.0	5.0		
	100	GORK	8	S	0805.6	0805.7	0.6	44.0			
	950	GORK	21	GRF	0812.3	0839.0	41.0	3.0			
	600	HUMN	2	S/F	0822.5	0823.5	3.0	15.0	8.0		
	810	KRAK	1	S	0822.5	0823.5	1.5	3.0	2.0		
	650	GORK	46	C	0822.6	0832.6		24.0			
	650	GORK	46	C	0822.6	0823.8	17.0	24.0			
	430	KRAK	2	S/F	0823.0	0824.3	4.0	18.0	9.0		
	100	GORK	46	C	0825.6	0845.2		46.0			
	100	GORK	46	C	0825.6	0837.5		35.0			
	100	GORK	46	C	0825.6	0828.9	23.8	43.0			
	9100	GORK	20	GRF	0827.8	0851.8	24.0	7.6			
	810	KRAK	41	F	0829.7	0832.6	4.0	9.0	3.0		
	950	GORK	4	S/F	0829.8	0830.1	2.3	9.5			
	600	HUMN	2	S/F	0831.5	0832.5	2.5	18.0	5.0		
	430	KRAK	7	C	0831.5	0832.7	2.5	26.0	14.0		
	950	GORK	46	C	0831.6	0833.1		7.0			
	950	GORK	46	C	0831.6	0832.6	2.7	8.0			
	204	IZMI	41	F	0844.0	0845.5	3.0	300.0			
	127	TORN	7	C	0844.2	0845.2	2.2	770.0	380.0		
	200	GORK	4	S/F	0845.0	0845.4	3.0	11.0			
	3100	CRIM	1	S	0921.2	0922.0	3.0	10.0	3.0		
	3000	POTS	3	S	0921.3	0922.0	3.7	15.0			
	2950	GORK	3	S	0921.4	0922.1	3.2	13.0			
	5900	KISV	2	S/F	0921.4	0922.2	3.2	6.0			
	1470	POTS	3	S	0921.5	0923.0	2.5	7.0			
	950	GORK	4	S/F	0921.6	0922.3	5.3	9.5			
	650	GORK	4	S/F	0921.6	0922.4	1.6	25.0			
	650	GORK	29	PBI	0921.6	0925.8	7.7	4.5			
	810	KRAK	1	S	0922.0	0922.5	1.1	10.0	5.0		
	600	HUMN	1	S	0922.0	0922.6	1.5	22.0	14.0		
	9300	KISV	2	S/F	0928.0	0929.0	4.7	5.0			
	5900	KISV	2	S/F	0928.1	0928.9	4.2	4.0			
	100	GORK	4	S/F	0929.8	0933.6	3.8	240.0			
	100	GORK	3	S	1009.1	1009.6	0.9	42.0			
	100	GORK	46	C	1020.8	1021.1	1.6	40.0			

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

MARCH 1989

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	1020.8	1021.4		40.0			
	536	ONDR	42	SER	1134.6	1141.7	7.5	124.0			
	410	SGMR	8	S	1418.0E	1418.0	U	98.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	1418.0E	1418.0	U	300.0			QL=1 ST=2 TYP=3
	245	SGMR	8	S	1554.0E	1554.0	1.0D	99.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	2033.0E	2034.0	2.0D	220.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	2033.0E	2034.0	2.0D	60.0			QL=1 ST=2 TYP=3
04	245	LEAR	44	NS	0125.0E	0159.0	126.0D	43.0			QL=1 ST=2 TYP=1
	200	GORK	44	NS	0445.0E		277.0D		5.0		
	221	ABST	43	NS	0500.0		240.0		18.0		
	260	ONDR	44	NS	0730.0E	1256.3	460.0D	204.0			
	127	TORN	43	NS	0929.0		180.0		2.0		V=0
	204	IZMI	43	NS	0935.0		145.0	10.0			
	245	SVTO	44	NS	1232.0E	1258.0	97.0D	34.0			QL=1 ST=2 TYP=1
	500	HIRA	21	GRF	0027.0	0142.0	143.0	37.0	12.0		MR
	2695	LEAR	4	S/F	0454.0E	0455.0	3.0D	30.0			QL=1 ST=2 TYP=3
	950	GORK	29	PBI	0454.2	0458.5	40.5	5.0			
	950	GORK	5	S	0454.2	0456.7	4.2	13.0			
	2950	GORK	45	C	0454.4	0456.3		27.0			
	2950	GORK	45	C	0454.4	0455.6	8.9	30.0			
	1415	LEAR	8	S	0455.0E	0456.0	2.0D	24.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0455.0E	0455.0	1.0D	21.0			QL=1 ST=2 TYP=3
	9100	GORK	20	GRF	0455.2	0501.3	14.5	8.6			
	650	GORK	2	S/F	0455.4	0455.5	1.7	7.0			
	9300	KISV	2	S/F	0520.8	0521.5	1.3	4.0			
	5900	KISV	2	S/F	0521.3	0521.6	1.6	3.0			
	9300	KISV	22	GRF	0523.8	0525.6	19.2	5.0			
	5900	KISV	45	C	0525.1	0525.5	1.7	4.0			
	5900	KISV	45	C	0525.1	0525.7		4.0			
	245	LEAR	8	S	0804.0E	0804.0	2.0D	73.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0804.0E	0804.0	1.0D	79.0			QL=1 ST=2 TYP=3
	204	IZMI	8	S	0804.8	0804.9	0.2	180.0	100.0		
	430	KRAK	42	SER	0931.5	1009.5	80.5	60.0			
	600	HUMN	27	RF	0937.0	1010.0	68.0	7.0	3.0		
	650	GORK	22	GRF	0949.8	1001.9	26.2	6.0			
	536	ONDR	41	F	1000.0	1006.3	90.0	9.0			
	430	KRAK	42	SER	1013.3	1027.7	29.5	25.0			
	810	KRAK	8	S	1223.3	1223.3	0.1	6.0			
	245	SGMR	8	S	1246.0E	1246.0	1.0D	400.0			QL=1 ST=3 TYP=3
	245	SVTO	8	S	1246.0E	1246.0	1.0D	270.0			QL=1 ST=2 TYP=3
	234	POTS	42	SER	1246.6	1256.4	11.0	380.0			
	430	KRAK	42	SER	1252.3	1255.9	31.0	100.0			
	245	SGMR	49	GB	1256.0E	1256.0	U	1600.0			QL=1 ST=2 TYP=6
	430	KRAK	2	S/F	1337.2	1337.8	2.0	17.0	6.0		
	536	ONDR	42	SER	1455.8	1458.4	3.5	28.0			
	410	SGMR	8	S	1508.0E	1508.0	U	78.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	1508.0E	1508.0	U	210.0			QL=1 ST=2 TYP=3
	600	HUMN	2	S/F	1537.0	1537.2	1.0	8.0	4.0		
	245	SGMR	49	GB	1553.0E	1554.0	2.0D	1300.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	1553.0E	1553.0	1.0D	840.0			QL=1 ST=2 TYP=6
	600	HUMN	1	S	1610.5	1611.0	1.0	52.0	12.0		
	410	SGMR	8	S	1633.0E	1633.0	1.0D	180.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1907.0E	1907.0	1.0D	900.0			QL=1 ST=3 TYP=6
	245	PALE	49	GB	2007.0E	2007.0	1.0D	900.0			QL=1 ST=3 TYP=6
	245	SGMR	49	GB	2007.0E	2008.0	1.0D	1200.0			QL=1 ST=2 TYP=6
	245	SGMR	8	S	2016.0E	2016.0	U	500.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	2211.0E	2212.0	2.0D	250.0			QL=1 ST=2 TYP=3
	245	SGMR	8	S	2211.0E	2212.0	1.0D	170.0			QL=1 ST=2 TYP=3
05	100	GORK	43	NS	0446.6		444.0		5.0		
	221	ABST	43	NS	0500.0		240.0		15.0		
	245	SVTO	43	NS	0537.0	0703.0	646.0D	88.0			QL=1 ST=2 TYP=1
	410	SVTO	43	NS	0537.0	0710.0	646.0D	61.0			QL=1 ST=2 TYP=1
	260	ONDR	44	NS	0750.0E	0834.5	460.0D				
	430	KRAK	44	NS	0800.0E	0833.8U	360.0D	40.0D			
	127	TORN	43	NS	0926.0	0939.1	206.0	180.0	2.0		V=0
	200	HIRA	44	NS	2100.0E	2236.0	690.0D	49.0	26.0		O
	245	LEAR	44	NS	2239.0E	0014.0	713.0D	140.0			QL=1 ST=2 TYP=1

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
05	100	HIRA	43	NS	2246.0	0042.0	198.0	80.0	37.0		
	245	LEAR	8	S	0252.0E	0253.0	1.0D	52.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	0252.0E	0253.0	1.0D	60.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0446.0E	0447.0	2.0D	230.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0447.0E	0447.0	U	85.0			QL=1 ST=2 TYP=3
	100	GORK	46	C	0502.2	0503.0	3.2	37.0			
	100	GORK	46	C	0502.2	0504.8		20.0			
	100	GORK	41	F	0523.7	0542.1		36.0			
	100	GORK	41	F	0523.7	0524.5	40.8	37.0			
	100	GORK	41	F	0523.7	0600.6		37.0			
	100	GORK	41	F	0523.7	0537.8		36.0			
	100	GORK	41	F	0523.7	0554.8		38.0			
	100	GORK	41	F	0523.7	0546.9		37.0			
	100	GORK	41	F	0523.7	0602.9		37.0			
	650	GORK	21	GRF	0545.0U	1051.0U	315.0D	9.0			
	245	LEAR	8	S	0546.0E	0546.0	2.0D	51.0			QL=1 ST=2 TYP=3
	2950	GORK	21	GRF	0558.6	1145.0	360.0D	21.0			
	15000	KISV	23	GRF	0615.2	0623.0	21.2	5.0			
	5900	KISV	23	GRF	0617.7	0619.5	18.1	4.0			
	9300	KISV	2	S/F	0618.6	0619.5	3.7	7.0			
	100	GORK	46	C	0620.7	0621.1	2.8	37.0			
	100	GORK	46	C	0620.7	0623.2		34.0			
	9100	GORK	21	GRF	0624.2	0639.5	32.8	8.6			
	9100	GORK	1	S	0624.9	0625.2	1.9	12.0			
	9300	KISV	2	S/F	0626.5	0628.2	5.1	15.0			
	9300	KISV	23	GRF	0626.5	0633.5	19.1	8.0			
	15000	KISV	45	C	0627.5	0628.2	5.5	10.0			
	15000	KISV	45	C	0627.5	0628.6		7.0			
	5900	KISV	2	S/F	0628.0	0628.2	1.6	3.0			
	500	HIRA	42	SER	0654.1	0655.6	4.6	230.0			O
	410	LEAR	8	S	0655.0E	0655.0	2.0D	67.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0655.0E	0655.0	1.0D	130.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0655.0E	0655.0	1.0D	140.0			QL=1 ST=2 TYP=3
	234	POTS	4	S/F	0655.6	0655.8	0.7	275.0			
	410	SVTO	8	S	0656.0E	0657.0	1.0D	71.0			QL=1 ST=2 TYP=3
	100	GORK	46	C	0716.1	0716.4	2.3	33.0			
	100	GORK	46	C	0716.1	0717.9		37.0			
	100	GORK	46	C	0731.2	0731.6	2.9	37.0			
	100	GORK	46	C	0731.2	0733.8			20.0		
	9500	POTS	20	GRF	0740.0	0812.5	50.0	16.0			
	5900	KISV	23	GRF	0742.0	0956.2	315.0	24.0			
	9300	KISV	23	GRF	0742.5	1212.2	315.0	24.0			
	9300	KISV	2	S/F	0742.5	0744.4	3.5	5.0			
	9100	GORK	20	GRF	0743.5	0744.3	8.3	6.0			
	100	GORK	8	S	0749.1	0749.2	0.3	36.0D			
	15000	KISV	46	C	0753.1	0754.0	6.4	21.0			
	15000	KISV	46	C	0753.1	0757.0		11.0			
	15000	KISV	23	GRF	0753.1	1204.6	303.1	20.0			
	15000	KISV	46	C	0753.1	0754.7		15.0			
	9100	GORK	21	GRF	0753.4	0919.8	246.0D	47.0			
	9300	KISV	2	S/F	0753.6	0756.9	9.3	18.0			
	5900	KISV	2	S/F	0755.1	0756.7	3.4	5.0			
	9100	GORK	1	S	0756.3	0756.9	1.6	14.5			
	9500	POTS	3	S	0756.5	0757.0	2.0	20.0			
	9300	KISV	2	S/F	0810.1	0814.6	8.2	26.0			
	5900	KISV	2	S/F	0812.2	0814.5	7.4	21.0			
	9100	GORK	2	S/F	0813.2	0814.4	2.4	21.0			
	9500	POTS	3	S	0813.3	0814.6	5.7	32.0			
	15000	KISV	2	S/F	0813.4	0814.6	2.1	8.0			
	100	GORK	46	C	0824.3	0825.5	1.8	110.0			
	600	HUMN	27	RF	0825.0	0903.0	94.0	6.0	2.0		
	234	POTS	41	F	0832.4	0834.2	4.4	110.0			
	8800	LEAR	8	S	0833.0E	0834.0	1.0D	45.0			QL=1 ST=2 TYP=3
	245	LEAR	4	S/F	0833.0E	0833.0	3.0D	420.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0833.0E	0834.0	2.0D	94.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0833.0E	0833.0	1.0D	420.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	0833.0E	0834.0	1.0D	120.0			QL=1 ST=2 TYP=3
	610	SVTO	8	S	0833.0E	0833.0	1.0D	90.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0833.0E	0834.0	1.0D	470.0			QL=1 ST=2 TYP=3

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
05	410	SVTO	49	GB	0833.0E	0833.0	1.0D	520.0			QL=1 ST=2 TYP=6
	536	ONDR	41	F	0833.0	0833.7	150.0	213.0			
	15000	KISV	4	S/F	0833.1	0834.0	7.5	80.0			
	9300	KISV	4	S/F	0833.1	0834.2	7.5	53.0			
	810	KRAK	2	S/F	0833.1	0833.4	1.2	14.0	6.0		
	950	GORK	4	S/F	0833.5	0834.0	1.3	8.0			
	204	IZMI	41	F	0833.5	0842.0	10.0	72.0			
	950	GORK	29	PBI	0833.5	0834.8	12.4	2.0			
	9100	GORK	4	S/F	0833.6	0834.2	6.5	56.0			
	5900	KISV	2	S/F	0833.7	0834.3	3.3	12.0			
	650	GORK	4	S/F	0833.7	0833.9	1.1	90.0			
	2950	GORK	3	S	0833.8	0834.3	1.6	4.8			
	600	HUMN	1	S	0834.0	0834.1	1.0	54.0	12.0		
	3100	CRIM	1	S	0834.0	0834.4	1.0	3.5	1.0		
	100	GORK	46	C	0836.1	0837.1		1600.0			
	100	GORK	46	C	0836.1	0836.2	1.2	430.0			
	245	LEAR	8	S	0838.0E	0838.0	1.0D	60.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0838.0E	0838.0	1.0D	65.0			QL=1 ST=2 TYP=3
	33	UPIC	42	SER	0850.5		118.1				
	100	GORK	46	C	0850.6	0852.1		215.0			
	100	GORK	46	C	0850.6	0850.7	1.7	750.0			
	9500	POTS	29	PBI	0905.0	0912.9	65.0	103.0			
	9300	KISV	45	C	0905.6	0912.3	18.4	125.0			
	9300	KISV	45	C	0905.6	0915.6		50.0			
	5900	KISV	45	C	0906.0	0912.1	17.0	105.0			
	5900	KISV	45	C	0906.0	0915.7		34.0			
	4995	SVTO	4	S/F	0909.0E	0912.0	4.0D	85.0			QL=1 ST=2 TYP=5
	8400	BERN	4	S/F	0909.0	0913.0	14.0	192.0			
	11800	BERN	4	S/F	0909.0	0913.0	14.0	140.0			
	3200	BERN	4	S/F	0909.0	0913.0	14.0	37.0			
	5200	BERN	4	S/F	0909.0	0913.0	14.0	85.0			
	4995	LEAR	4	S/F	0909.0E	0912.0	12.0D	80.0			QL=1 ST=2 TYP=3
	9100	GORK	4	S/F	0909.2	0912.2	10.2	110.0			
	15000	KISV	46	C	0909.5	0912.3	7.5	48.0			
	15000	KISV	46	C	0909.5	0912.7		45.0			
	15000	KISV	46	C	0909.5	0915.7		12.0			
	2950	GORK	3	S	0909.6	0912.7	5.3	26.0			
	3100	CRIM	45	C	0909.7	0912.2	5.0	23.0	9.0		
	3100	CRIM	45	C	0909.7	0912.7		26.0			
	3013	IZMI	5	S	0909.8	0912.7	5.0	27.0	17.0		
	2695	LEAR	4	S/F	0910.0E	0912.0	3.0D	36.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0910.0E	0912.0	7.0D	89.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0911.0E	0912.0	2.0D	43.0			QL=1 ST=2 TYP=3
	1470	POTS	40	F	0911.5	0912.2	2.5	11.0			
	3000	POTS	29	PBI	0912.0	0912.7	48.0U	35.0			
	15000	KISV	2	S/F	0930.3	0931.6	2.0	7.0			
	950	GORK	2	S/F	0930.7	0931.5	2.2	4.0			
	5900	KISV	2	S/F	0930.7	0931.5	2.1	9.0			
	9100	GORK	1	S	0930.7	0931.6	2.2	14.0			
	2950	GORK	2	S/F	0930.8	0931.5	2.7	4.2	2.0		
	9300	KISV	2	S/F	0930.8	0931.5	2.0	12.0			
	650	GORK	4	S/F	0930.9	0931.5	1.9	15.0			
	3100	CRIM	1	S	0930.9	0931.6	2.0	3.0	1.0		
	810	KRAK	1	S	0935.3	0936.0	1.2	7.0	2.0		
	100	GORK	46	C	0937.1	0939.0	2.5	430.0			
	127	TORN	8	S	1003.3	1004.0U	2.0	840.0	420.0		
	200	GORK	4	S/F	1003.3	1003.9	1.8	25.0			
	100	GORK	3	S	1003.4	1003.9	1.1	4200.0			
	204	IZMI	45	C	1003.5	1004.0	2.0	1600.0	1000.0		
	600	HUMN	27	RF	1008.0	1051.1	59.0	12.0	5.0		
	650	GORK	4	S/F	1022.4	1022.7	1.8	8.0			
	5900	KISV	2	S/F	1022.8	1023.4	1.9	4.0			
	3013	IZMI	41	F	1031.8	1038.6	12.5	10.0			
	600	HUMN	1	S	1032.0	1033.0	3.0	20.0	8.0		
	8400	BERN	46	C	1032.0	1038.2	17.0	54.0			
	5200	BERN	46	C	1032.0	1038.2	17.0	29.0			
	19600	BERN	46	C	1032.0	1038.2	17.0	23.0			
	3200	BERN	46	C	1032.0	1038.2	17.0	15.0			
	11800	BERN	46	C	1032.0	1038.2	17.0	49.0			

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
05	9500	POTS	3	S	1032.0	1033.4	2.5	22.0			
	810	KRAK	2	S/F	1032.0	1032.9	1.5	12.0	4.0		
	950	GORK	21	GRF	1032.2	1040.2	15.0	4.0			
	9100	GORK	1	S	1032.2	1033.4	2.2	20.0			
	9300	KISV	46	C	1032.2	1033.4		21.0			
	5900	KISV	46	C	1032.2	1033.4		16.0			
	9300	KISV	46	C	1032.2	1041.4		50.0			
	5900	KISV	46	C	1032.2	1038.4	19.8	31.0			
	9300	KISV	46	C	1032.2	1038.4	24.1	51.0			
	5900	KISV	46	C	1032.2	1041.5		2.4			
	650	GORK	4	S/F	1032.2	1032.8	1.4	20.0			
	15000	KISV	46	C	1032.3	1041.2		24.0			
	2950	GORK	3	S	1032.3	1033.3	2.1	4.8	2.0		
	3000	POTS	3	S	1032.3	1033.3	2.2	9.0			
	15000	KISV	46	C	1032.3	1038.5		20.0			
	15000	KISV	46	C	1032.3	1038.5	13.0	40.0			
	950	GORK	2	S/F	1032.4	1032.7	1.2	3.6			
	600	HUMN	2	S/F	1036.0	1038.0	8.0	25.0	5.0		
	9100	GORK	46	C	1036.4	1038.3	7.0	42.0			
	9100	GORK	46	C	1036.4	1041.7		34.0			
	810	KRAK	7	C	1036.8	1037.6	3.5	23.0	7.0		
	15400	SVTO	8	S	1037.0E	1038.0	1.0D	50.0			QL=1 ST=2 TYP=3
	9500	POTS	42	SER	1037.0	1038.5	6.0U	17.0			
	9500	POTS	42	SER	1037.0	1041.5		17.0			
	650	GORK	4	S/F	1037.3	1038.5	3.8	35.0			
	950	GORK	4	S/F	1037.5	1038.3	1.9	14.0			
	1470	POTS	3	S	1037.5	1038.3	2.5	7.0			
	3000	POTS	3	S	1037.5	1038.4	2.5	11.0			
	3100	CRIM	1	S	1037.5	1038.5	5.0	7.0	2.0		
	2950	GORK	4	S/F	1037.5	1038.5	5.8	9.5			
	9500	POTS	21	GRF	1125.0	1204.5	150.0	27.0			
	9300	KISV	45	C	1134.7	1141.4	16.3	12.0			
	9300	KISV	45	C	1134.7	1137.9		9.0			
	100	GORK	4	S/F	1140.0	1141.0	1.2	110.0			
	536	ONDR	42	SER	1151.9	1153.0	3.0	135.0			
	5900	KISV	2	S/F	1202.2	1204.4	7.4	13.0			
	9300	KISV	2	S/F	1202.3	1204.4	9.1	18.0			
	410	SGMR	8	S	1251.0E	1252.0	1.0D	65.0			QL=/ ST=2 TYP=3
	9500	POTS	3	S	1418.3	1419.9	5.7	18.0			
	234	POTS	8	S	1426.3	1426.6	0.9	100.0			
	410	SGMR	8	S	1631.0E	1631.0	U	360.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	1631.0E	1631.0	U	77.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1631.0E	1631.0	U	2100.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	1807.0E	1807.0	U	540.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1807.0E	1807.0	U	640.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	1820.0E	1820.0	1.0D	140.0			QL=1 ST=3 TYP=3
	245	PALE	49	GB	1820.0E	1820.0	1.0D	990.0			QL=1 ST=2 TYP=6
	410	SGMR	8	S	1820.0E	1820.0	U	370.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1820.0E	1820.0	1.0D	1600.0			QL=1 ST=2 TYP=6
	2800	OTTA	4	S/F	1820.5	1833.2	20.0	32.5	13.0		
	410	PALE	8	S	1825.0E	1826.0	2.0D	74.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	1826.0E	1826.0	U	180.0			QL=1 ST=2 TYP=3
	15400	SGMR	4	S/F	1830.0E	1831.0	3.0D	79.0			QL=1 ST=2 TYP=3
	8800	SGMR	4	S/F	1830.0E	1833.0	3.0D	75.0			QL=1 ST=2 TYP=3
	245	SGMR	8	S	1833.0E	1833.0	U	92.0			QL=1 ST=2 TYP=3
	4995	SGMR	8	S	1833.0E	1833.0	U	59.0			QL=1 ST=2 TYP=3
	4995	PALE	4	S/F	1912.0E	1914.0	3.0D	75.0			QL=1 ST=2 TYP=3
	8800	PALE	8	S	1912.0E	1913.0	2.0D	220.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	1912.6	1915.7	13.5	15.2	6.0		
	8800	SGMR	8	S	1913.0E	1913.0	1.0D	120.0			QL=1 ST=2 TYP=3
	4995	SGMR	8	S	1913.0E	1913.0	2.0D	120.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	1913.0E	1913.0	U	81.0			QL=1 ST=2 TYP=3
	610	PALE	4	S/F	1914.0E	1915.0	6.0D	310.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	1914.0E	1915.0	3.0D	700.0			QL=1 ST=2 TYP=6
	245	PALE	4	S/F	1915.0E	1918.0	3.0D	120.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	1915.0E	1915.0	U	290.0			QL=1 ST=2 TYP=3
	410	SGMR	49	GB	1915.0E	1915.0	1.0D	860.0			QL=1 ST=2 TYP=6
	8800	SGMR	4	S/F	1918.0E	1918.0	6.0D	94.0			QL=1 ST=2 TYP=3
	15400	SGMR	4	S/F	1918.0E	1918.0	6.0D	79.0			QL=1 ST=2 TYP=3

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
05	2800	OTTA	22	GRF	2046.0	2133.0	90.0D	32.9	6.0		
	245	PALE	4	S/F	2049.0E	2050.0	3.0D	250.0			QL=1 ST=3 TYP=3
	245	SGMR	4	S/F	2049.0E	2050.0	4.0D	240.0			QL=1 ST=2 TYP=3
	100	HIRA	42	SER	2110.6	2115.2U	10.0	1000.0D			
	410	PALE	8	S	2113.0E	2114.0	2.0D	270.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	2113.0E	2114.0	2.0D	2800.0			QL=1 ST=2 TYP=6
	200	HIRA	42	SER	2113.7	2119.4	11.2	510.0			O
	410	SGMR	8	S	2114.0E	2114.0	U	140.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	2114.0E	2114.0	U	2400.0			QL=1 ST=2 TYP=6
	500	HIRA	42	SER	2114.2	2133.7	20.0	405.0			O
	410	PALE	4	S/F	2117.0E	2118.0	6.0D	120.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	2118.0E	2118.0	1.0D	450.0			QL=1 ST=2 TYP=3
	610	PALE	8	S	2132.0E	2133.0	2.0D	120.0			QL=1 ST=3 TYP=3
	245	PALE	4	S/F	2132.0E	2133.0	3.0D	150.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	2133.0E	2133.0	1.0D	330.0			QL=1 ST=2 TYP=3
	245	SGMR	8	S	2133.0E	2133.0	U	160.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	2133.0E	2133.0	U	170.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	2356.0E	2357.0	1.0D	62.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	2356.0E	2357.0	1.0D	460.0			QL=1 ST=2 TYP=3
06	200	GORK	44	NS	0445.0E		75.0D		5.0		
	100	GORK	44	NS	0448.0E		452.0D		5.0		
	221	ABST	43	NS	0500.0		240.0		19.0		
	245	SVTO	44	NS	0526.0E	1157.0	1114.0D	120.0			QL=1 ST=1 TYP=1
	245	SVTO	43	NS	0536.0	1345.0	495.0D	160.0			QL=1 ST=2 TYP=1
	410	SVTO	43	NS	0536.0	0647.0	495.0D	83.0			QL=1 ST=2 TYP=1
	204	IZMI	43	NS	0600.0		360.0	30.0			
	600	HUMN	44	NS	0700.0E		600.0D				
	127	TORN	44	NS	0700.0E	1315.9	480.0D	1400.0	30.0		V=2
	260	ONDR	44	NS	0710.0E	1410.0	500.0D				
	430	KRAK	43	NS	1036.5	1339.0	202.5	230.0D	33.0		
	410	SGMR	44	NS	1132.0E	1716.0	646.0D	170.0			QL=1 ST=2 TYP=1
	245	SGMR	44	NS	1132.0E	1715.0	646.0D	300.0			QL=1 ST=2 TYP=1
	200	HIRA	44	NS	2100.0E	2200.0	690.0D	24.0	16.0		O
	245	LEAR	43	NS	2239.0	0741.0	712.0D	440.0			QL=1 ST=2 TYP=1
	8800	LEAR	4	S/F	0034.0E	0035.0	5.0D	40.0			QL=1 ST=2 TYP=3
	4995	LEAR	4	S/F	0034.0E	0035.0	5.0D	18.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0035.0E	0035.0	2.0D	63.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	0053.0E	0053.0	5.0D	200.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0053.0E	0053.0	1.0D	42.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0117.0E	0118.0	1.0D	290.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	0117.0E	0118.0	1.0D	170.0			QL=1 ST=3 TYP=3
	410	LEAR	8	S	0118.0E	0118.0	U	390.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	0118.0E	0118.0	U	630.0			QL=1 ST=3 TYP=6
	4995	LEAR	20	GRF	0311.0E	0318.0	13.0D	30.0			QL=1 ST=2 TYP=2
	15400	LEAR	4	S/F	0314.0E	0318.0	7.0D	51.0			QL=1 ST=2 TYP=5
	8800	LEAR	8	S	0318.0E	0318.0	U	24.0			QL=1 ST=2 TYP=3
	650	GORK	23	GRF	0448.0E	0700.0	132.0D	25.0			
	410	LEAR	8	S	0457.0E	0457.0	1.0D	64.0			QL=1 ST=2 TYP=3
	15000	KISV	23	GRF	0501.1	0652.5	148.9	41.0			
	9300	KISV	45	C	0502.2	0507.0		12.0			
	9300	KISV	23	GRF	0502.2	0648.2	148.9	30.0			
	9300	KISV	45	C	0502.2	0505.7	7.4	13.0			
	15000	KISV	45	C	0502.3	0508.5		7.0			
	15000	KISV	45	C	0502.3	0505.8	7.4	11.0			
	5900	KISV	23	GRF	0502.4	0725.5	157.6	25.0			
	950	GORK	3	S	0512.0	0512.5	7.4	3.0			
	5900	KISV	2	S/F	0512.0	0512.9	3.2	7.0			
	9300	KISV	45	C	0512.2	0513.4		6.0			
	9300	KISV	45	C	0512.2	0512.7	3.6	6.0			
	15000	KISV	2	S/F	0512.2	0512.8	1.8	6.0			
	650	GORK	4	S/F	0512.4	0512.6	0.7	9.0			
	9100	GORK	23	GRF	0522.7	0632.7	457.0D	65.0			
	15000	KISV	2	S/F	0530.1	0530.7	1.0	4.0			
	9300	KISV	2	S/F	0536.2	0536.7	1.5	4.0			
	15000	KISV	2	S/F	0536.3	0536.7	0.9	3.0			
	2950	GORK	21	GRF	0536.4	0946.0	450.0D	26.0			
	5900	KISV	28	PRE	0549.8	0551.8	4.0	10.0			
	9300	KISV	28	PRE	0550.0	0554.5	7.5	21.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
06	500	HIRA	21	GRF	0550.0	0617.5	135.0	80.0	20.0		O
	100	GORK	46	C	0550.3	0551.1		370.0			
	100	GORK	46	C	0550.3	0550.5	1.0	490.0			
	950	GORK	23	GRF	0550.5	0622.7	60.5	6.0			
	15000	KISV	2	S/F	0550.7	0551.7	2.6	10.0			
	3100	CRIM	1	S	0551.0	0551.4	3.0	2.5	0.9		
	15000	KISV	28	PRE	0553.8	0554.7	3.1	6.0			
	5900	KISV	4	S/F	0553.8	0600.7	9.9	122.0			
	15000	KISV	4	S/F	0556.8	0601.3	5.0	80.0			
	4995	LEAR	4	S/F	0557.0E	0600.0	29.0D	77.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0557.0E	0600.0	29.0D	160.0			QL=1 ST=2 TYP=3
	9300	KISV	46	C	0557.5	0601.0		94.0D			
	9300	KISV	46	C	0557.5	0610.5		94.0D			
	9300	KISV	46	C	0557.5	0620.6		80.0			
	9300	KISV	46	C	0557.5	0617.7	28.9	116.0			
	15400	LEAR	4	S/F	0558.0E	0600.0	31.0D	140.0			QL=1 ST=2 TYP=3
	100	GORK	4	S/F	0558.1	0600.7	3.2	270.0			
	9100	GORK	4	S/F	0558.6	0600.7	5.9	159.0			
	410	LEAR	49	GB	0559.0E	0600.0	2.0D	540.0			QL=1 ST=2 TYP=6
	410	SVTO	49	GB	0559.0E	0600.0	2.0D	520.0			QL=1 ST=2 TYP=6
	245	LEAR	8	S	0600.0E	0600.0	U	210.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0600.0E	0600.0	1.0D	23.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0600.0E	0600.0	1.0D	42.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0600.0E	0600.0	1.0D	19.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	0600.0E	0600.0	2.0D	130.0			QL=1 ST=2 TYP=5
	4995	SVTO	8	S	0600.0E	0600.0	1.0D	73.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0600.0E	0600.0	1.0D	230.0			QL=1 ST=2 TYP=3
	3100	CRIM	42	SER	0600.0	0601.0	13.0	30.0	11.0		
	3100	CRIM	42	SER	0600.0	0609.6		25.0			
	3100	CRIM	42	SER	0600.0	0617.8		33.0			
	950	GORK	4	S/F	0600.1	0601.1	2.3	30.0			
	200	HIRA	46	C	0600.3	0600.7	1.3	640.0			O
	500	HIRA	46	C	0600.4	0600.6	1.2	550.0			O
	204	IZMI	5	S	0600.4	0600.6	0.8	500.0	300.0		
	2950	GORK	3	S	0600.5	0601.0	1.0	8.0			
	5900	KISV	4	S/F	0606.4	0610.3	8.3	53.0			
	3013	IZMI	42	SER	0606.5	0617.6	30.0	31.0			
	9100	GORK	46	C	0606.6	0610.3	17.7	88.0			
	9100	GORK	46	C	0606.6	0620.7		48.0			
	9100	GORK	46	C	0606.6	0617.7		80.0			
	2950	GORK	4	S/F	0606.7	0610.0	5.5	12.0D			
	8800	SVTO	4	S/F	0607.0E	0617.0	1073.0D	150.0			QL=1 ST=3 TYP=5
	950	GORK	4	S/F	0607.1	0610.3	5.7	10.0			
	15000	KISV	4	S/F	0608.9	0610.3	3.1	65.0			
	5900	KISV	45	C	0616.3	0617.7	4.9	40.0			
	2950	GORK	3	S	0616.3	0617.8	2.5	36.0	18.0		
	5900	KISV	45	C	0616.3	0620.8		14.0			
	15000	KISV	45	C	0616.3	0617.8	5.3	60.0			
	950	GORK	4	S/F	0616.8	0618.2	3.5	13.0			
	2950	GORK	3	S	0620.3	0620.6	0.6	7.7	3.5		
	200	HIRA	46	C	0626.4	0627.9	5.9	73.0	28.0		O
	9300	KISV	45	C	0627.2	0628.0	8.8	24.0			
	9300	KISV	45	C	0627.2	0632.7		16.0			
	100	GORK	41	F	0627.4	0629.0	5.0	220.0			
	100	GORK	41	F	0627.4	0634.8		380.0			
	15000	KISV	2	S/F	0629.0	0629.8	1.5	9.0			
	15000	KISV	2	S/F	0631.2	0632.8	2.4	16.0			
	5900	KISV	2	S/F	0631.3	0632.7	3.0	8.0			
	650	GORK	23	GRF	0640.0E	0640.5	317.0D	33.0			
	15000	KISV	2	S/F	0640.6	0645.0	6.4	9.0			
	5900	KISV	2	S/F	0643.6	0644.6	2.4	5.0			
	15000	KISV	2	S/F	0649.5	0649.9	0.6	6.0			
	200	HIRA	41	F	0650.8	0654.3	10.6	64.0			O
	100	GORK	8	S	0654.2	0654.8	0.7	8000.0			
	100	GORK	8	S	0708.8	0709.1	0.5	370.0			
	536	ONDR	41	F	0730.0	1407.0	470.0				
	9300	KISV	2	S/F	0742.5	0743.1	2.0	4.0			
	5900	KISV	2	S/F	0742.9	0743.3	0.9	4.0			
	9300	KISV	2	S/F	0754.0	0754.5	2.5	5.0			

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
06	15000	KISV	2	S/F	0809.6	0809.8	1.2	6.0			
	950	GORK	2	S/F	0837.7	0838.2	1.0	5.7			
	9300	KISV	4	S/F	0854.8	0856.5	7.8	66.0			
	5900	KISV	4	S/F	0855.7	0857.0	5.9	185.0			
	9100	GORK	3	S	0855.8	0856.4	2.3	58.0			
	8800	LEAR	8	S	0856.0E	0856.0	U	49.0			QL=1 ST=2 TYP=3
	15000	KISV	4	S/F	0856.0	0856.6	6.0	53.0			
	245	SVTO	8	S	0925.0E	0925.0	1.0D	98.0			QL=1 ST=2 TYP=3
	9500	POTS	21	GRF	0945.0	1003.5	50.0	9.0			
	15000	KISV	2	S/F	0953.1	0954.9	2.0	11.0			
	9500	POTS	3	S	0956.5	0957.2	3.5	21.0			
	5900	KISV	2	S/F	0956.6	0957.0	1.8	5.0			
	9300	KISV	2	S/F	0956.6	0957.1	5.0	19.0			
	5900	KISV	23	GRF	0956.6	1000.1	9.5	4.0			
	9300	KISV	23	GRF	0956.6	1013.6	22.7	9.0			
	15000	KISV	2	S/F	0956.6	0956.9	3.3	27.0			
	9100	GORK	1	S	0956.7	0957.0	1.3	17.5			
	15000	KISV	23	GRF	1002.3	1005.5	13.0	7.0			
	9300	KISV	2	S/F	1003.1	1004.1	2.9	5.0			
	15000	KISV	2	S/F	1003.2	1003.4	1.5	10.0			
	9500	POTS	3	S	1009.5	1010.7	27.0	27.0			
	9300	KISV	2	S/F	1010.0	1010.7	2.6	21.0			
	9100	GORK	1	S	1010.1	1010.6	1.8	22.0			
	15000	KISV	2	S/F	1010.1	1010.6	1.8	32.0			
	5900	KISV	2	S/F	1010.2	1010.7	4.3	7.0			
	410	LEAR	8	S	1013.0E	1013.0	U	200.0			QL=1 ST=2 TYP=3
	100	GORK	41	F	1013.2	1015.1		40.0D			
	100	GORK	41	F	1013.2	1013.4	7.5	40.0D			
	100	GORK	41	F	1013.2	1019.9		40.0D			
	100	GORK	3	S	1057.3	1058.1	1.1	38.0			
	600	HUMN	24	R	1104.0	1315.0	170.0D	9.0			
	9300	KISV	23	GRF	1105.8	1141.5		10.0			
	9300	KISV	23	GRF	1105.8	1117.5	50.4	11.0			
	5900	KISV	23	GRF	1110.7	1117.6	40.5	7.0			
	15000	KISV	22	GRF	1111.8	1117.8	19.0	11.0			
	100	GORK	41	F	1133.7	1142.8		370.0			
	100	GORK	41	F	1133.7	1133.9	9.3	240.0			
	950	GORK	46	C	1133.8	1135.0	9.1	36.0			
	950	GORK	46	C	1133.8	1141.3		8.0			
	950	GORK	46	C	1133.8	1138.9		19.0			
	1470	POTS	4	S/F	1134.0	1134.8	3.0	17.0			
	810	KRAK	42	SER	1134.0	1134.9	7.5	27.0			
	650	GORK	41	F	1134.4	1141.1		24.0			
	650	GORK	41	F	1134.4	1138.5		27.0			
	650	GORK	41	F	1134.4	1134.6	7.1	128.0			
	200	GORK	4	S/F	1140.4	1142.8	3.0	40.0D			
	204	IZMI	41	F	1140.5	1143.0	3.0	3000.0			
	245	SGMR	49	GB	1141.0E	1142.0	2.0D	1700.0			QL=1 ST=2 TYP=6
	234	POTS	4	S/F	1141.2	1143.2	2.2	2200.0			
	245	SVTO	49	GB	1142.0E	1142.0	1.0D	1600.0			QL=1 ST=2 TYP=6
	245	SVTO	8	S	1210.0E	1211.0	2.0D	310.0			QL=1 ST=2 TYP=5
	245	SGMR	8	S	1211.0E	1211.0	1.0D	380.0			QL=1 ST=2 TYP=3
	5900	KISV	23	GRF	1218.7	1232.4	27.4	8.0			
	5900	KISV	23	GRF	1218.7	1226.6		7.0			
	9300	KISV	2	S/F	1219.3	1221.9	4.6	7.0			
	15000	KISV	23	GRF	1227.9	1233.0		18.0			
	15000	KISV	23	GRF	1227.9	1232.0	11.5	18.0			
	9300	KISV	23	GRF	1230.0	1236.0		9.0			
	9300	KISV	23	GRF	1230.0	1232.4	13.5	11.0			
	245	SGMR	49	GB	1231.0E	1231.0	1.0D	730.0			QL=1 ST=2 TYP=6
	245	SVTO	8	S	1231.0E	1231.0	1.0D	490.0			QL=1 ST=2 TYP=3
	15000	KISV	2	S/F	1255.5	1255.9	1.0	6.0			
	245	SGMR	49	GB	1315.0E	1315.0	1.0D	800.0			QL=1 ST=2 TYP=6
	245	SVTO	8	S	1315.0E	1315.0	1.0D	460.0			QL=1 ST=2 TYP=3
	9500	POTS	47	GB	1315.0	1359.0U	195.0D	6900.0D			
	1470	POTS	47	GB	1315.0	1357.5U	195.0D	3260.0D			
	33	UPIC	42	SER	1315.2		70.4				
	810	KRAK	42	SER	1315.5	1339.2	24.0	32.0			
	410	SGMR	8	S	1320.0E	1320.0	1.0D	400.0			QL=1 ST=2 TYP=3

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
06	245	SGMR	4	S/F	1320.0E	1321.0	3.0D	300.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	1320.0E	1320.0	1.0D	490.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	1320.0E	1321.0	1.0D	180.0			QL=1 ST=2 TYP=3
	3000	POTS	47	GB	1325.0	1358.0U	152.0D	1700.0D			
	610	SGMR	8	S	1339.0E	1339.0	U	110.0			QL=1 ST=2 TYP=3
	245	SVTO	49	GB	1351.0E	1402.0	153.0D				QL=1 ST=2 TYP=7
	8800	SVTO	49	GB	1353.0E	1403.0	151.0D	14000.0			QL=1 ST=2 TYP=7
	15400	SVTO	49	GB	1354.0E	1405.0	150.0D	33000.0			QL=1 ST=2 TYP=7
	4995	SGMR	49	GB	1354.0E	1425.0	606.0D	24000.0			QL=1 ST=3 TYP=7
	8800	SGMR	49	GB	1354.0E	1405.0	606.0D	20000.0			QL=1 ST=3 TYP=7
	15400	SGMR	49	GB	1354.0E	1405.0	606.0D	38000.0			QL=1 ST=3 TYP=7
	3200	BERN	47	GB	1355.0	1405.0	100.0	8870.0			
	5200	BERN	47	GB	1355.0	1405.0	100.0	15900.0			
	50000	BERN	47	GB	1355.0	1405.0	100.0	34300.0			
	35000	BERN	47	GB	1355.0	1405.0	100.0	48700.0			
	19600	BERN	47	GB	1355.0	1405.0	100.0	19700.0			
	11800	BERN	47	GB	1355.0	1405.0	100.0	8300.0			
	8400	BERN	47	GB	1355.0	1405.0	100.0	15200.0			
	2800	OTTA	47	GB	1356.0	1446.0	410.0	18180.0	5400.0		
	2695	SVTO	49	GB	1356.0E	1427.0	148.0D	7800.0			QL=1 ST=2 TYP=7
	1415	SGMR	49	GB	1356.0E	1405.0	604.0D	3500.0			QL=1 ST=3 TYP=7
	2695	SGMR	49	GB	1356.0E	1402.0	604.0D	7400.0			QL=1 ST=3 TYP=7
	1415	SVTO	49	GB	1357.0E	1420.0	603.0D	75000.0			QL=1 ST=1 TYP=7
	810	KRAK	49	GB	1357.5		79.0D	630.0D	240.0D		
	610	SGMR	49	GB	1358.0E	1405.0	602.0D	5500.0			QL=1 ST=3 TYP=7
	234	POTS	49	GB	1358.0	1402.0U	167.0D	250000.0D			
	430	KRAK	49	GB	1359.0		76.0D	230.0D	220.0D		
	410	SVTO	49	GB	1359.0E	1406.0	145.0D	3500.0			QL=1 ST=2 TYP=7
	600	HUMN	47	GB	1359.0	1405.0	210.0D	720.0			
	410	SGMR	49	GB	1359.0E	1406.0	601.0D	4400.0			QL=1 ST=3 TYP=7
	127	TORN	27	RF	1400.9		60.0		250.0		
	127	TORN	49	GB	1400.9	1404.0D	11.0	4200.0D	1200.0D		
	245	SGMR	49	GB	1401.0E	1402.0	599.0D				QL=1 ST=3 TYP=7
	30	POTS	49	GB	1404.5	1413.0	11.0				
	245	SGMR	49	GB	1647.0E	1648.0	2.0D	980.0			QL=1 ST=2 TYP=6
	245	PALE	4	S/F	1705.0E	1715.0	10.0D	390.0			QL=1 ST=2 TYP=3
	2695	PALE	4	S/F	1705.0E	1719.0	15.0D	120.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1740.0E	1740.0	8.0D	2400.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1740.0E	1740.0	1.0D	3100.0			QL=1 ST=2 TYP=6
	245	SGMR	8	S	1744.0E	1744.0	2.0D	400.0			QL=1 ST=2 TYP=3
	2800	OTTA	29	PBI	1806.0	1806.0	300.0	74.2	37.0		
	245	PALE	49	GB	1807.0E	1807.0	1.0D	9700.0			QL=1 ST=2 TYP=6
	410	PALE	49	GB	1807.0E	1807.0	1.0D	920.0			QL=1 ST=2 TYP=6
	610	PALE	49	GB	1808.0E	1808.0	U	860.0			QL=1 ST=2 TYP=6
	610	SGMR	49	GB	1808.0E	1808.0	U	870.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1837.0E	1837.0	1.0D	750.0			QL=1 ST=2 TYP=6
	4995	SGMR	8	S	1843.0E	1843.0	U	52.0			QL=1 ST=3 TYP=3
	610	SGMR	8	S	1843.0E	1843.0	1.0D	140.0			QL=1 ST=3 TYP=3
	15400	SGMR	8	S	1843.0E	1843.0	U	53.0			QL=1 ST=3 TYP=3
	8800	SGMR	8	S	1843.0E	1843.0	U	57.0			QL=1 ST=3 TYP=3
	200	HIRA	42	SER	2156.7	2239.6	57.0	275.0			O
	100	HIRA	42	SER	2350.8	2402.4	15.8	340.0			
	500	HIRA	42	SER	2356.0	2409.2	14.0	67.0			O
07	410	LEAR	43	NS	0145.0	0851.0	526.0D	150.0			QL=1 ST=2 TYP=1
	200	GORK	44	NS	0439.0E		270.0D		5.0		
	221	ABST	43	NS	0500.0		240.0		30.0		
	410	SVTO	44	NS	0534.0E	0605.0	652.0D	91.0			QL=1 ST=2 TYP=1
	245	SVTO	44	NS	0534.0E	0740.0	1106.0D	510.0			QL=1 ST=3 TYP=1
	234	POTS	44	NS	0550.0E	0607.0	573.0D	33.0			
	204	IZMI	43	NS	0600.0		360.0	55.0			
	33	UPIC	43	NS	0624.0		576.0D				
	600	HUMN	44	NS	0700.0E		460.0D				
	260	ONDR	44	NS	0700.0E		520.0D				
	127	TORN	44	NS	0700.0E	1159.7	480.0D		10.0		V=2
	430	KRAK	44	NS	0818.5E	1321.2	362.5D	240.0D	14.0		
	430	KRAK	44	NS	0818.5E	0854.2	362.5D	240.0D	14.0		
	430	KRAK	44	NS	0818.5E	1109.7	362.5D	240.0	14.0		
	200	GORK	44	NS	0933.0E		60.0D		5.0		

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
07	410	SGMR	43	NS	1130.0	1746.0	750.0	230.0			QL=1 ST=3 TYP=1
	245	SGMR	44	NS	1130.0E	1942.0	750.0D	900.0			QL=1 ST=3 TYP=1
	245	PALE	44	NS	1937.0E	1953.0	525.0D	260.0			QL=1 ST=2 TYP=1
	200	HIRA	44	NS	2100.0E	0738.0	700.0D	70.0	26.0		WL
	245	LEAR	43	NS	2239.0	0529.0	711.0D	470.0			QL=1 ST=2 TYP=1
	410	LEAR	43	NS	2239.0	2242.0	711.0D	160.0			QL=1 ST=2 TYP=1
	245	LEAR	49	GB	0000.0E	0002.0	2.0D	1800.0			QL=1 ST=2 TYP=6
	200	HIRA	42	SER	0000.7	0002.0	61.0	450.0			O
	245	PALE	49	GB	0001.0E	0001.0	1.0D	1400.0			QL=1 ST=2 TYP=6
	8800	PALE	4	S/F	0001.0E	0003.0	13.0D	140.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	0002.0E	0003.0	7.0D	84.0			QL=1 ST=2 TYP=3
	4995	LEAR	4	S/F	0002.0E	0003.0	7.0D	79.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0003.0E	0003.0	U	16.0			QL=1 ST=2 TYP=3
	4995	PALE	8	S	0003.0E	0003.0	1.0D	73.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	0008.0E	0008.0	1.0D	300.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0009.0E	0009.0	U	380.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	0024.0E	0024.0	1.0D	88.0			QL=1 ST=2 TYP=3
	500	HIRA	46	C	0052.5	0053.0	10.0	180.0			O
	100	HIRA	46	C	0101.1	0101.5	2.6	860.0			
	245	LEAR	8	S	0109.0E	0109.0	1.0D	69.0			QL=1 ST=2 TYP=3
	200	HIRA	46	C	0136.3	0152.1	38.3	124.0	21.0		O
	410	PALE	8	S	0154.0E	0154.0	U	73.0			QL=1 ST=2 TYP=3
	245	PALE	4	S/F	0213.0E	0214.0	3.0D	140.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0214.0E	0216.0	2.0D	110.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0222.0E	0222.0	U	200.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0239.0E	0239.0	U	110.0			QL=1 ST=2 TYP=3
	100	HIRA	42	SER	0256.8	0301.3	6.2	970.0			
	15400	LEAR	8	S	0301.0E	0301.0	U	63.0			QL=1 ST=2 TYP=3
	100	HIRA	41	F	0329.0	0329.7	4.0	1000.0D			
	100	GORK	8	S	0519.7	0519.8	1.1	700.0			
	2950	GORK	21	GRF	0533.2	0613.0	300.0D	24.0			
	9100	GORK	23	GRF	0534.5	0608.9	350.0D	50.0			
	15000	KISV	23	GRF	0541.7	0633.3	92.6	19.0			
	9300	KISV	23	GRF	0542.1	0630.2	133.5	41.0			
	5900	KISV	23	GRF	0543.2	0632.2	120.0	30.0			
	5900	KISV	46	C	0544.0	0546.5		15.0			
	5900	KISV	46	C	0544.0	0551.6	11.0	30.0			
	5900	KISV	46	C	0544.0	0550.7		28.0			
	5900	KISV	46	C	0544.0	0547.7		18.0			
	950	GORK	23	GRF	0545.0	0606.0	34.0	6.0			
	9100	GORK	22	GRF	0545.2	0550.8	8.7	29.0			
	650	GORK	47	GB	0545.2	0557.9	28.9	9100.0			
	9300	KISV	46	C	0545.3	0546.5		18.0			
	9300	KISV	46	C	0545.3	0551.6	9.1	34.0			
	9300	KISV	46	C	0545.3	0547.7		21.0			
	500	HIRA	41	F	0545.5	0549.9	6.5	320.0			O
	15000	KISV	45	C	0546.0	0546.4		5.0			
	15000	KISV	45	C	0546.0	0547.5	2.4	6.0			
	410	LEAR	8	S	0547.0E	0548.0	2.0D	390.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	0548.0E	0548.0	1.0D	360.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0549.0E	0551.0	2.0D	35.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0549.0E	0550.0	2.0D	39.0			QL=1 ST=2 TYP=3
	15000	KISV	45	C	0549.5	0553.3		9.0			
	15000	KISV	45	C	0549.5	0551.6	4.8	14.0			
	3100	CRIM	3	S	0550.2	0550.8	1.0	44.0	10.0		
	950	GORK	46	C	0550.3	0551.5		23.0			
	2950	GORK	4	S/F	0550.3	0550.8	0.9	33.0			
	950	GORK	46	C	0550.3	0550.9	4.1	17.0			
	410	SVTO	8	S	0551.0E	0551.0	1.0D	200.0			QL=1 ST=2 TYP=3
	100	GORK	46	C	0551.1	0553.1		520.0			
	100	GORK	46	C	0551.1	0552.2	2.2	130.0			
	15000	KISV	47	GB	0555.3	0557.7	9.5	1489.0D			
	200	HIRA	45	C	0556.4	0556.9	1.3	775.0			O
	3100	CRIM	3	S	0557.0	0558.0	3.0	190.6	93.0		
	4995	LEAR	49	GB	0557.0E	0557.0	1.0D	510.0			QL=1 ST=2 TYP=6
	8800	LEAR	49	GB	0557.0E	0557.0	1.0D	950.0			QL=1 ST=2 TYP=6
	2695	LEAR	8	S	0557.0E	0557.0	1.0D	320.0			QL=1 ST=2 TYP=3
	1415	LEAR	49	GB	0557.0E	0557.0	3.0D	2300.0			QL=1 ST=2 TYP=6
	245	LEAR	49	GB	0557.0E	0557.0	1.0D	1600.0			QL=1 ST=2 TYP=6

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
07	15400	LEAR	49	GB	0557.0E	0557.0	4.0D	2400.0			QL=1 ST=2 TYP=6
	410	LEAR	49	GB	0557.0E	0557.0	4.0D	6600.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	0557.0E	0557.0	1.0D	1600.0			QL=1 ST=2 TYP=6
	2695	SVTO	8	S	0557.0E	0557.0	1.0D	280.0			QL=1 ST=2 TYP=3
	15400	SVTO	49	GB	0557.0E	0557.0	1.0D	1900.0			QL=1 ST=2 TYP=6
	410	SVTO	49	GB	0557.0E	0557.0	1.0D	16000.0			QL=1 ST=2 TYP=6
	1415	SVTO	49	GB	0557.0E	0557.0	1.0D	1600.0			QL=1 ST=2 TYP=6
	8800	SVTO	8	S	0557.0E	0557.0	1.0D	370.0			QL=1 ST=2 TYP=3
	4995	SVTO	8	S	0557.0E	0557.0	1.0D	320.0			QL=1 ST=2 TYP=3
	3100	CRIM	30	PBI	0557.0	0600.0	50.0	12.3	4.0		
	610	LEAR	49	GB	0557.0E	0557.0	1083.0D	9400.0			QL=1 ST=1 TYP=6
	950	GORK	47	GB	0557.0	0558.1	5.4	6400.0			
	500	HIRA	29	PBI	0557.0	0600.3	18.0	15.0			O
	500	HIRA	46	C	0557.0	0557.5	3.0	6100.0	1500.0		O
	9100	GORK	4	S/F	0557.0	0557.8	5.4	1250.0			
	9300	KISV	47	GB	0557.0	0557.8	7.8	969.0			
	234	POTS	4	S/F	0557.1	0557.8	1.2	3000.0			
	5900	KISV	47	GB	0557.2	0557.9	6.7	615.0			
	2950	GORK	3	S	0557.3U	0557.9	2.0D	288.0			
	200	GORK	8	S	0557.6	0557.8	0.3	420.0			
	3100	CRIM	1	S	0606.0	0609.0	5.0	10.3	3.0		
	15000	KISV	2	S/F	0606.1	0608.9	5.3	10.0			
	9300	KISV	2	S/F	0606.3	0608.9	5.8	16.0			
	2950	GORK	4	S/F	0606.5	0609.3	5.2	17.0			
	5900	KISV	2	S/F	0607.2	0608.8	5.3	11.0			
	950	GORK	46	C	0607.2	0607.9	2.2	30.0			
	950	GORK	46	C	0607.2	0608.9		60.0			
	9300	KISV	2	S/F	0615.3	0615.8	2.4	9.0			
	15000	KISV	2	S/F	0615.3	0615.8	1.9	8.0			
	9300	KISV	2	S/F	0619.9	0622.4	6.7	10.0			
	5900	KISV	45	C	0621.7	0623.4	9.9	7.0			
	5900	KISV	45	C	0621.7	0628.5		5.0			
	9300	KISV	2	S/F	0628.0	0628.6	1.7	5.0			
	650	GORK	23	GRF	0632.0	0710.6	181.0	5.0			
	9300	KISV	2	S/F	0638.8	0641.3	5.0	7.0			
	245	SVTO	8	S	0654.0E	0654.0	2.0D	220.0			QL=1 ST=2 TYP=3
	3013	IZMI	5	S	0707.2	0709.0	8.0	10.0	5.0		
	9300	KISV	2	S/F	0712.3	0712.5	1.5	7.0			
	9300	KISV	2	S/F	0718.4	0718.9	2.0	4.0			
	9300	KISV	2	S/F	0721.8	0722.3	1.0	5.0			
	200	GORK	41	F	0724.0	0733.3	22.0	200.0			
	950	GORK	2	S/F	0724.6	0726.0	4.1	4.0			
	650	GORK	1	S	0725.4	0726.1	2.0	4.0	2.0		
	234	POTS	4	S/F	0730.0	0730.8	1.5	400.0			
	9300	KISV	2	S/F	0738.2	0739.7	1.7	6.0			
	5900	KISV	23	GRF	0807.7	0817.2	19.0	7.0			
	5900	KISV	2	S/F	0811.4	0811.9	1.2	3.0			
	650	GORK	8	S	0814.3	0814.5	0.3	8.0			
	9300	KISV	23	GRF	0815.0	0822.1	15.0	7.0			
	9300	KISV	2	S/F	0819.2	0820.9	2.1	5.0			
	536	ONDR	41	F	0830.0	1152.5	400.0	154.0			
	410	SVTO	8	S	0851.0E	0851.0	1.0D	87.0			QL=1 ST=2 TYP=3
	100	GORK	41	F	0851.4	0913.1		3500.0			
	100	GORK	41	F	0851.4	0858.1	69.6	390.0			
	100	GORK	41	F	0851.4	0936.4		450.0			
	100	GORK	41	F	0851.4	0911.5		2000.0			
	100	GORK	41	F	0851.4	0956.9		200.0			
	650	GORK	1	S	0851.5	0851.7	3.2	2.0			
	650	GORK	22	GRF	0905.0	0914.0	13.5	5.5			
	5900	KISV	2	S/F	0908.1	0913.5	8.2	4.0			
	15000	KISV	46	C	0910.2	0913.1	4.1	36.0			
	15000	KISV	46	C	0910.2	0910.3		5.0			
	15000	KISV	46	C	0910.2	0911.6		5.0			
	15000	KISV	46	C	0910.2	0913.7		6.0			
	950	GORK	46	C	0910.4	0914.0		5.0			
	950	GORK	46	C	0910.4	0912.0	9.0	3.0			
	9300	KISV	2	S/F	0910.7	0913.2	3.2	12.0			
	410	LEAR	4	S/F	0914.0E	0917.0	3.0D	290.0			QL=1 ST=2 TYP=5
	410	SVTO	8	S	0917.0E	0917.0	1.0D	170.0			QL=1 ST=2 TYP=3

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

MARCH 1989

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
07	5900	KISV	23 GRF	0928.4	0942.3	40.0	7.0			
	9300	KISV	23 GRF	0929.9	0942.5	34.8	10.0			
	15000	KISV	23 GRF	0938.0	0942.3	16.0	5.0			
	15000	KISV	2 S/F	0938.6	0939.0	1.8	7.0			
	9300	KISV	2 S/F	0938.6	0938.9	2.1	3.0			
	950	GORK	46 C	0943.6	0945.5	4.0	15.5			
	950	GORK	46 C	0943.6	0946.7		21.0			
	810	KRAK	42 SER	0945.0	0946.0	1.8	70.0			
	650	GORK	4 S/F	0945.0	0946.4	1.9	33.0			
	5900	KISV	46 C	0948.9	0953.2	6.8	7.0			
	5900	KISV	46 C	0948.9	0952.3		3.0			
	5900	KISV	46 C	0948.9	0949.4		3.0			
	410	LEAR	8 S	0951.0E	0952.0	1.0D	420.0			QL=1 ST=2 TYP=3
	245	LEAR	8 S	0951.0E	0952.0	1.0D	240.0			QL=1 ST=2 TYP=3
	410	SVTO	8 S	0951.0E	0951.0	1.0D	170.0			QL=1 ST=2 TYP=3
	245	SVTO	8 S	0951.0E	0952.0	1.0D	280.0			QL=1 ST=2 TYP=3
	650	GORK	8 S	0952.0	0952.2	0.5	25.0			
	9300	KISV	2 S/F	0952.9	0953.2	2.0	4.0			
	15000	KISV	45 C	0955.4	0957.1	3.3	5.0			
	15000	KISV	45 C	0955.6E	0955.6		2.0			
	9300	KISV	2 S/F	0956.7	0957.1	3.3	4.0			
	650	GORK	2 S/F	1004.3	1004.5	0.3	10.0			
	245	SVTO	4 S/F	1005.0E	1007.0	3.0D	180.0			QL=1 ST=2 TYP=5
	650	GORK	46 C	1007.4	1008.0	3.2	6.0			
	650	GORK	46 C	1007.4	1009.4		5.0			
	650	GORK	20 GRF	1028.0U	1054.1	47.0D	3.5			
	15000	KISV	2 S/F	1030.0	1030.3	0.6	4.0			
	5900	KISV	23 GRF	1033.1	1039.5	14.5	4.0			
	9300	KISV	23 GRF	1033.4	1038.8	23.4	9.0			
	5900	KISV	2 S/F	1035.9	1036.4	1.5	2.0			
	9300	KISV	2 S/F	1036.0	1036.4	1.4	7.0			
	9300	KISV	2 S/F	1051.5	1052.1	2.4	5.0			
	15000	KISV	2 S/F	1051.6	1052.1	3.3	5.0			
	5900	KISV	23 GRF	1128.0	1129.2	11.8	3.0			
	5900	KISV	2 S/F	1137.1	1137.4	1.4	2.0			
	245	SVTO	8 S	1141.0E	1142.0	1.0D	230.0			QL=1 ST=2 TYP=3
	9300	KISV	23 GRF	1142.6	1218.2	69.0	27.0			
	5900	KISV	46 C	1142.9	1147.2		8.0			
	5900	KISV	46 C	1142.9	1145.8		10.0			
	5900	KISV	46 C	1142.9	1144.8	9.8	18.0			
	5900	KISV	46 C	1142.9	1143.9		8.0			
	9300	KISV	46 C	1143.1	1147.3		14.0			
	9300	KISV	46 C	1143.1	1146.5		13.0			
	9300	KISV	46 C	1143.1	1148.6		8.0			
	9300	KISV	46 C	1143.1	1143.9		8.0			
	9300	KISV	46 C	1143.1	1144.9	8.3	18.0			
	9300	KISV	46 C	1143.1	1145.9		12.0			
	15000	KISV	46 C	1143.2	1147.2	8.2	24.0			
	15000	KISV	46 C	1143.2	1146.5		19.0			
	15000	KISV	46 C	1143.2	1144.8		14.0			
	245	SVTO	4 S/F	1144.0E	1150.0	13.0D	460.0			QL=1 ST=2 TYP=3
	410	SVTO	4 S/F	1146.0E	1150.0	8.0D	280.0			QL=1 ST=2 TYP=3
	245	SGMR	49 GB	1147.0E	1150.0	5.0D	580.0			QL=1 ST=2 TYP=6
	9300	KISV	2 S/F	1153.6	1154.1	1.4	5.0			
	15000	KISV	2 S/F	1158.5	1159.0	1.0	7.0			
	9300	KISV	2 S/F	1201.2	1201.5	1.0	7.0			
	5900	KISV	1 S	1201.3	1201.5	0.8	7.0			
	9300	KISV	2 S/F	1203.8	1205.3	4.9	18.0			
	15000	KISV	2 S/F	1204.7	1205.3	3.0	25.0			
	5900	KISV	23 GRF	1209.3	1218.2	21.7	16.0			
	15000	KISV	2 S/F	1210.8	1211.2	1.3	7.0			
	9300	KISV	2 S/F	1210.9	1211.3	0.8	6.0			
	15000	KISV	23 GRF	1212.5	1218.1	19.8	15.0			
	5900	KISV	2 S/F	1212.7	1214.1	2.5	5.0			
	245	SVTO	8 S	1213.0E	1213.0	1.0D	220.0			QL=1 ST=2 TYP=3
	9300	KISV	2 S/F	1213.3	1214.2	1.9	6.0			
	15000	KISV	2 S/F	1213.3	1213.6	1.4	4.0			
	245	SVTO	49 GB	1237.0E	1239.0	3.0D	900.0			QL=1 ST=2 TYP=6
	234	POTS	4 S/F	1237.5	1238.1	0.9	330.0			

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
07	245	SGMR	49	GB	1238.0E	1239.0	1.0D	1300.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1250.0E	1250.0	1.0D	600.0			QL=1 ST=2 TYP=6
	234	POTS	42	SER	1301.5	1320.5	26.0	275000.0			
	30	POTS	42	SER	1308.0	1315.8	18.0	10000.0			
	3000	POTS	45	C	1316.5	1319.1	29.0	195.0			
	2800	OTTA	4	S/F	1317.0	1319.2	11.0	235.2	70.0		
	8800	SGMR	49	GB	1317.0E	1319.0	9.0D	1200.0			QL=1 ST=2 TYP=7
	4995	SGMR	49	GB	1317.0E	1319.0	7.0D	430.0			QL=1 ST=2 TYP=7
	4995	SVTO	49	GB	1317.0E	1319.0	7.0D	370.0			QL=1 ST=2 TYP=7
	8800	SVTO	49	GB	1317.0E	1319.0	9.0D	1000.0			QL=1 ST=2 TYP=7
	15400	SVTO	49	GB	1317.0E	1319.0	8.0D	2500.0			QL=1 ST=2 TYP=7
	15400	SGMR	49	GB	1317.0E	1319.0	643.0D	2300.0			QL=1 ST=1 TYP=7
	9500	POTS	45	C	1317.0	1319.1	27.0	850.0			
	1470	POTS	45	C	1317.5	1319.0	23.0	100.0			
	50000	BERN	47	GB	1317.5	1319.1	3.0	2670.0			
	5200	BERN	47	GB	1317.5	1319.1	3.0	250.0			
	19600	BERN	47	GB	1317.5	1319.1	3.0	1790.0			
	8400	BERN	47	GB	1317.5	1319.1	3.0	870.0			
	3200	BERN	47	GB	1317.5	1319.1	3.0	161.0			
	11800	BERN	47	GB	1317.5	1319.1	3.0	1660.0			
	35000	BERN	47	GB	1317.5	1319.1	3.0	2200.0			
	810	KRAK	45	C	1317.8	1319.2	10.0	33.0	7.0		
	610	SGMR	49	GB	1318.0E	1320.0	3.0D	130.0			QL=1 ST=2 TYP=7
	2695	SGMR	49	GB	1318.0E	1319.0	2.0D	210.0			QL=1 ST=2 TYP=7
	1415	SGMR	49	GB	1318.0E	1319.0	1.0D	100.0			QL=1 ST=2 TYP=7
	1415	SVTO	49	GB	1318.0E	1319.0	1.0D	86.0			QL=1 ST=2 TYP=7
	2695	SVTO	49	GB	1318.0E	1319.0	2.0D	210.0			QL=1 ST=2 TYP=7
	600	HUMN	4	S/F	1318.0	1324.5	13.0	180.0	12.0		
	410	SGMR	49	GB	1319.0E	1320.0	7.0D	540.0			QL=1 ST=2 TYP=7
	245	SGMR	49	GB	1319.0E	1320.0	7.0D	52000.0			QL=1 ST=2 TYP=7
	245	SVTO	49	GB	1319.0E	1320.0	7.0D	33000.0			QL=1 ST=2 TYP=7
	127	TORN	42	SER	1319.0	1320.0U	15.0	2600.0	230.0		
	410	SVTO	49	GB	1320.0E	1320.0	6.0D	580.0			QL=1 ST=2 TYP=7
	245	SVTO	8	S	1356.0E	1357.0	1.0D	120.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	1356.0E	1357.0	1.0D	63.0			QL=1 ST=2 TYP=3
	8800	SGMR	49	GB	1451.0E	1454.0	5.0D	1300.0			QL=1 ST=2 TYP=6
	15400	SGMR	49	GB	1451.0E	1454.0	6.0D	2000.0			QL=1 ST=2 TYP=7
	15400	SVTO	49	GB	1451.0E	1454.0	5.0D	1800.0			QL=1 ST=2 TYP=7
	33	UPIC	49	GB	1451.8		5.7				
	2800	OTTA	4	S/F	1452.0	1455.4	10.0	191.6	57.0		
	8800	SVTO	49	GB	1452.0E	1454.0	4.0D	1100.0			QL=1 ST=2 TYP=6
	3000	POTS	45	C	1452.0	1455.0	18.0	168.0			
	9500	POTS	45	C	1452.0	1454.5	18.0	850.0			
	1470	POTS	45	C	1452.0	1454.5	18.0	180.0			
	600	HUMN	3	S	1452.0	1455.5	20.0	60.0	12.0		
	127	TORN	47	GB	1452.2	1454.0U	6.0	10000.0D	5000.0D		
	4995	SGMR	4	S/F	1453.0E	1454.0	3.0D	310.0			QL=1 ST=2 TYP=3
	2695	SGMR	4	S/F	1453.0E	1455.0	3.0D	180.0			QL=1 ST=2 TYP=3
	4995	SVTO	4	S/F	1453.0E	1454.0	3.0D	270.0			QL=1 ST=2 TYP=3
	1415	SVTO	4	S/F	1453.0E	1454.0	4.0D	150.0			QL=1 ST=2 TYP=3
	410	SGMR	4	S/F	1454.0E	1455.0	3.0D	79.0			QL=1 ST=2 TYP=3
	245	SGMR	4	S/F	1454.0E	1455.0	3.0D	130.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	1653.0	1653.6	2.7	8.9	4.0		
	15400	SGMR	8	S	1653.0E	1653.0	1.0D	84.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	1659.0E	1701.0	2.0D	110.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	1659.8	1700.3	1.5	11.9	5.0		
	2800	OTTA	4	S/F	1702.3	1702.8	1.3	65.5	26.0		
	245	PALE	49	GB	1707.0E	1708.0	2.0D	950.0			QL=1 ST=2 TYP=6
	410	SGMR	4	S/F	1707.0E	1709.0	3.0D	55.0			QL=1 ST=2 TYP=3
	2800	OTTA	22	GRF	1707.6	1709.7	5.4	10.8	5.0		
	410	PALE	8	S	1708.0E	1709.0	1.0D	90.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	1708.0E	1708.0	U	72.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1708.0E	1709.0	1.0D	1000.0			QL=1 ST=2 TYP=6
	15400	SGMR	8	S	1708.0E	1709.0	2.0D	120.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	1708.0E	1709.0	2.0D	110.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	1734.0E	1735.0	1.0D	130.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1809.0E	1809.0	U	720.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	1817.0E	1823.0	7.0D	4100.0			QL=1 ST=2 TYP=7
	245	SGMR	49	GB	1823.0E	1823.0	1.0D	4400.0			QL=1 ST=2 TYP=6

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
07	245	PALE	4	S/F	1828.0E	1828.0	3.0D	420.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	1831.0E	1831.0	U	84.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1914.0E	1916.0	3.0D	870.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	1915.0E	1916.0	1.0D	540.0			QL=1 ST=2 TYP=6
	245	PALE	8	S	1925.0E	1926.0	1.0D	170.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	1931.0E	1931.0	U	160.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1942.0E	1942.0	U	720.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	2005.0E	2006.0	1.0D	720.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2006.0E	2006.0	U	850.0			QL=1 ST=2 TYP=6
	15400	PALE	49	GB	2104.0E	2105.0	3.0D	1100.0			QL=1 ST=2 TYP=6
	8800	PALE	4	S/F	2104.0E	2105.0	5.0D	440.0			QL=1 ST=2 TYP=3
	15400	SGMR	49	GB	2104.0E	2105.0	5.0D	1200.0			QL=1 ST=2 TYP=6
	8800	SGMR	49	GB	2104.0E	2105.0	9.0D	530.0			QL=1 ST=2 TYP=6
	4995	SGMR	8	S	2105.0E	2105.0	1.0D	76.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	2121.0E	2121.0	U	58.0			QL=1 ST=2 TYP=3
	200	HIRA	42	SER	2137.6	2144.4	7.3	1300.0			O
	100	HIRA	42	SER	2141.6		3.0	1000.0D			
	15400	PALE	49	GB	2222.0E	2223.0	3.0D	730.0			QL=1 ST=2 TYP=6
	500	HIRA	42	SER	2222.8	2245.4	41.0	85.0			WL
	100	HIRA	41	F	2229.0		18.7	1000.0D			
	15400	PALE	4	S/F	2230.0E	2232.0	3.0D	140.0			QL=1 ST=2 TYP=3
	2695	PALE	8	S	2230.0E	2230.0	1.0D	100.0			QL=1 ST=2 TYP=3
	8800	PALE	4	S/F	2230.0E	2232.0	6.0D	140.0			QL=1 ST=2 TYP=3
	2695	PENT	4	S/F	2231.1	2231.4	2.5	110.5	44.0		
	200	HIRA	48	C	2234.4	2240.6		170.0			WL
	200	HIRA	48	C	2234.4	2235.8	17.8	5400.0	378.0		O
	245	PALE	49	GB	2235.0E	2235.0	2.0D	3400.0			QL=1 ST=2 TYP=6
	2695	PENT	4	S/F	2235.6	2235.9	2.0	22.7	6.0		
	8800	PALE	8	S	2239.0E	2239.0	U	55.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	2239.0E	2239.0	2.0D	340.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	2241.0E	2241.0	2.0D	180.0			QL=1 ST=2 TYP=3
	610	LEAR	4	S/F	2244.0E	2245.0	3.0D	77.0			QL=1 ST=2 TYP=3
	15400	PALE	8	S	2244.0E	2245.0	1.0D	330.0			QL=1 ST=2 TYP=3
	4995	PALE	8	S	2244.0E	2245.0	1.0D	130.0			QL=1 ST=2 TYP=3
	610	PALE	8	S	2244.0E	2245.0	1.0D	100.0			QL=1 ST=2 TYP=3
	2695	PENT	4	S/F	2245.0	2245.6	6.0	79.3	23.0		
	15400	LEAR	8	S	2245.0E	2245.0	U	93.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	2245.0E	2245.0	U	140.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	2245.0E	2245.0	U	39.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	2245.0E	2245.0	2.0D	72.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	2245.0E	2245.0	U	44.0			QL=1 ST=2 TYP=3
	1415	PALE	8	S	2245.0E	2245.0	U	63.0			QL=1 ST=2 TYP=3
	2695	PALE	8	S	2245.0E	2245.0	U	81.0			QL=1 ST=2 TYP=3
	8800	PALE	4	S/F	2247.0E	2247.0	5.0D	70.0			QL=1 ST=2 TYP=3
	410	PALE	4	S/F	2248.0E	2248.0	4.0D	100.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	2248.0E	2250.0	3.0D	1700.0			QL=1 ST=2 TYP=6
	410	LEAR	8	S	2250.0E	2251.0	1.0D	88.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	2250.0E	2251.0	1.0D	850.0			QL=1 ST=2 TYP=6
	200	HIRA	8	S	2250.4	2250.4	0.7	3800.0			O
	610	LEAR	8	S	2251.0E	2251.0	2.0D	33.0			QL=1 ST=2 TYP=3
08	200	GORK	44	NS	0421.0E		420.0D		10.0		
	100	GORK	44	NS	0430.0E		450.0D		15.0		
	221	ABST	43	NS	0500.0		240.0		270.0		
	410	SVTO	44	NS	0532.0E	0617.0	655.0D	71.0			QL=1 ST=2 TYP=1
	245	SVTO	44	NS	0532.0E	0959.0	655.0D	570.0			QL=1 ST=2 TYP=1
	234	POTS	44	NS	0550.0E	0552.0	592.0D	55.0			
	204	IZMI	43	NS	0600.0		360.0	200.0			
	127	TORN	44	NS	0700.0E		480.0D		35.0		V=2
	600	HUMN	44	NS	0700.0E		600.0D				
	260	ONDR	44	NS	0700.0E	0812.2	520.0D				
	430	KRAK	44	NS	0818.0E	1239.0	364.0D	110.0	14.0		
	430	KRAK	44	NS	0818.0E	1314.0	364.0D	80.0			
	245	SGMR	44	NS	1128.0E	1622.0	652.0D	990.0			QL=1 ST=2 TYP=1
	410	SGMR	44	NS	1128.0E	2159.0	652.0D	150.0			QL=1 ST=2 TYP=1
	245	PALE	44	NS	1703.0E	0241.0	679.0D	350.0			QL=1 ST=2 TYP=1
	200	HIRA	44	NS	2100.0E	0546.0	700.0D	49.0	28.0		O
	245	LEAR	44	NS	2240.0E	0330.0	709.0D	290.0			QL=1 ST=2 TYP=1
	410	LEAR	44	NS	2240.0E	2328.0	709.0D	460.0			QL=1 ST=2 TYP=1

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
08	410	PALE	44	NS	2241.0E	0127.0	314.0D	120.0			QL=1 ST=2 TYP=1
	200	HIRA	42	SER	0037.0	0046.9	109.0	290.0			O
	8800	LEAR	4	S/F	0116.0E	0117.0	3.0D	120.0			QL=1 ST=2 TYP=3
	15400	LEAR	49	GB	0116.0E	0117.0	3.0D	560.0			QL=1 ST=2 TYP=6
	15400	PALE	49	GB	0116.0E	0117.0	1.0D	500.0			QL=1 ST=2 TYP=6
	500	HIRA	42	SER	0116.6	0127.0	10.7	120.0			O
	1415	LEAR	8	S	0117.0E	0117.0	1.0D	58.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0117.0E	0117.0	1.0D	34.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0117.0E	0117.0	U	42.0			QL=1 ST=2 TYP=3
	8800	PALE	8	S	0117.0E	0117.0	U	92.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0126.0E	0127.0	2.0D	210.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0126.0E	0127.0	2.0D	45.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0126.0E	0127.0	2.0D	52.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	0212.0E	0213.0	3.0D	58.0			QL=1 ST=2 TYP=3
	1415	PALE	8	S	0212.0E	0213.0	2.0D	59.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0213.0E	0213.0	1.0D	26.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0213.0E	0214.0	1.0D	32.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0213.0E	0213.0	1.0D	81.0			QL=1 ST=2 TYP=3
	200	HIRA	42	SER	0246.9	0304.6	79.0	1600.0			O
	8800	LEAR	4	S/F	0303.0E	0305.0	5.0D	150.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	0303.0E	0305.0	7.0D	200.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0304.0E	0304.0	2.0D	470.0			QL=1 ST=2 TYP=3
	4995	LEAR	4	S/F	0304.0E	0305.0	4.0D	52.0			QL=1 ST=2 TYP=3
	8800	PALE	8	S	0304.0E	0304.0	2.0D	93.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0304.0E	0304.0	U	740.0			QL=1 ST=2 TYP=6
	100	HIRA	48	C	0304.0	0304.4	3.6	8000.0			WL
	500	HIRA	27	RF	0304.4	0307.0	68.0	13.0	4.0		O
	2695	LEAR	8	S	0305.0E	0306.0	2.0D	25.0			QL=1 ST=2 TYP=3
	1415	LEAR	4	S/F	0305.0E	0306.0	5.0D	64.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0310.0E	0310.0	2.0D	290.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0310.0E	0311.0	3.0D	68.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	0310.0E	0311.0	4.0D	110.0			QL=1 ST=2 TYP=3
	15400	PALE	8	S	0310.0E	0310.0	1.0D	82.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	0310.0E	0310.0	U	380.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0324.0E	0325.0	1.0D	26.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0324.0E	0325.0	1.0D	53.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	0326.0E	0326.0	1.0D	210.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0333.0E	0333.0	1.0D	250.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	0333.0E	0333.0	U	300.0			QL=1 ST=2 TYP=3
	650	GORK	23	GRF	0442.0E	0959.2	318.0D	6.0			
	950	GORK	23	GRF	0448.0	0500.0	24.0	8.0			
	200	HIRA	42	SER	0448.2	0523.5	65.0	4500.0			O
	9100	GORK	23	GRF	0449.0		401.0D				
	200	GORK	8	S	0452.7	0453.0	0.3	330.0D			
	9300	KISV	23	GRF	0454.5	0509.7	74.0	20.0			
	9300	KISV	23	GRF	0454.5	0530.8		19.0			
	4995	LEAR	8	S	0455.0E	0456.0	2.0D	47.0			QL=1 ST=2 TYP=3
	5900	KISV	46	C	0455.5	0457.0	6.9	25.0			
	5900	KISV	46	C	0455.5	0459.2		9.0			
	500	HIRA	46	C	0455.5	0456.5	4.0	59.0			O
	5900	KISV	23	GRF	0455.5	0507.5	98.6	15.0			
	5900	KISV	46	C	0455.5	0457.8		7.0			
	650	GORK	4	S/F	0455.7	0456.7	3.0	35.0			
	2950	GORK	4	S/F	0455.7	0456.9	1.2				
	950	GORK	4	S/F	0455.8	0456.7	3.8	19.0			
	8800	LEAR	8	S	0456.0E	0456.0	U	20.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0456.0E	0456.0	1.0D	18.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0456.0E	0456.0	2.0D	44.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0456.0E	0456.0	1.0D	88.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0456.0E	0456.0	2.0D	18.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0456.0E	0456.0	1.0D	20.0			QL=1 ST=2 TYP=3
	15000	KISV	23	GRF	0503.0	0529.7	36.8	15.0			
	9100	GORK	2	S/F	0503.2	0504.6	2.7	30.0			
	9300	KISV	2	S/F	0503.5	0504.6	4.2	26.0			
	15000	KISV	2	S/F	0503.7	0504.5	1.6	18.0			
	8800	LEAR	4	S/F	0504.0E	0504.0	3.0D	36.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0504.0E	0504.0	1.0D	15.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0504.0E	0504.0	1.0D	2500.0			QL=1 ST=2 TYP=6
	15400	LEAR	8	S	0504.0E	0504.0	1.0D	32.0			QL=1 ST=2 TYP=3

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
08	410	LEAR	8	S	0504.0E	0504.0	U	38.0			QL=1 ST=2 TYP=3
	650	GORK	46	C	0504.0	0507.5		16.0			
	650	GORK	46	C	0504.0	0504.7	4.0	11.0			
	5900	KISV	2	S/F	0504.2	0504.6	0.7	5.0			
	15000	KISV	2	S/F	0512.5	0513.1	1.6	8.0			
	100	GORK	41	F	0513.1	0524.4		24000.0			
	100	GORK	41	F	0513.1	0513.4	17.0	1500.0			
	100	GORK	41	F	0513.1	0523.6		18500.0			
	100	GORK	41	F	0513.1	0522.7		13000.0			
	15000	KISV	2	S/F	0517.0	0517.2	0.5	5.0			
	245	LEAR	49	GB	0519.0E	0519.0	1.0D	1800.0			QL=1 ST=2 TYP=6
	100	HIRA	42	SER	0521.0	0523.9	8.3	11000.0			O
	9300	KISV	45	C	0521.6	0522.1	3.0	23.0			
	9300	KISV	45	C	0521.6	0523.4		6.0			
	5900	KISV	2	S/F	0521.7	0522.1	0.6	5.0			
	15000	KISV	2	S/F	0522.2	0522.5	0.6	15.0			
	245	LEAR	49	GB	0523.0E	0524.0	2.0D	11000.0			QL=1 ST=2 TYP=6
	200	GORK	4	S/F	0523.5	0524.0	0.9	4900.0			
	15000	KISV	2	S/F	0523.6	0524.6	1.3	24.0			
	5900	KISV	2	S/F	0523.9	0524.6	1.1	3.0			
	15400	LEAR	8	S	0524.0E	0524.0	U	29.0			QL=1 ST=2 TYP=3
	650	GORK	46	C	0524.0	0527.1		15.0			
	650	GORK	46	C	0524.0	0524.7	6.0	12.5			
	950	GORK	2	S/F	0524.0	0524.7	1.8	9.5			
	650	GORK	46	C	0524.0	0529.7		23.0			
	15000	KISV	2	S/F	0526.3	0526.9	1.1	4.0			
	5900	KISV	2	S/F	0527.7	0528.2	1.2	2.0			
	15000	KISV	2	S/F	0528.2	0528.6	1.2	6.0			
	15000	KISV	2	S/F	0530.7	0532.1	2.8	7.0			
	5900	KISV	2	S/F	0531.7	0531.8	1.0	4.0			
	100	GORK	41	F	0538.8	0542.6		480.0			
	100	GORK	41	F	0538.8	0541.6		1300.0			
	100	GORK	41	F	0538.8	0540.8	5.0	960.0			
	9300	KISV	2	S/F	0541.5	0541.7	2.6	5.0			
	5900	KISV	2	S/F	0541.6	0542.7	1.6	3.0			
	950	GORK	2	S/F	0543.7	0544.3	1.3	6.0			
	5900	KISV	2	S/F	0546.4	0546.8	1.5	2.0			
	100	GORK	4	S/F	0549.6	0550.2	0.9	480.0			
	9300	KISV	2	S/F	0555.9	0556.8	1.6	19.0			
	15000	KISV	2	S/F	0600.3	0601.0	1.6	14.0			
	9300	KISV	2	S/F	0600.3	0600.8	2.3	6.0			
	100	GORK	3	S	0602.3	0602.5	0.3	480.0			
	100	GORK	41	F	0610.6	0618.5	51.8	240.0			
	100	GORK	41	F	0610.6	0929.6		360.0			
	100	GORK	41	F	0610.6	0649.7		960.0			
	100	GORK	41	F	0610.6	0708.8		360.0			
	200	GORK	4	S/F	0627.5	0628.5	1.5	250.0D			
	500	HIRA	24	R	0641.8	0741.0	113.0D	11.0	4.0		O SUNSET
	9300	KISV	23	GRF	0648.4	0655.0	12.5	7.0			
	9300	KISV	2	S/F	0648.4	0648.8	1.1	6.0			
	15000	KISV	2	S/F	0648.5	0648.6	0.6	6.0			
	200	HIRA	42	SER	0704.6	0710.0	51.0	230.0			O
	100	GORK	41	F	0713.1	0717.0		480.0			
	100	GORK	41	F	0713.1	0714.2	8.4	480.0			
	15000	KISV	2	S/F	0719.4	0720.7	5.0	7.0			
	15000	KISV	2	S/F	0725.5	0726.1	1.8	5.0			
	245	SVTO	4	S/F	0727.0E	0749.0	29.0D	250.0			QL=1 ST=2 TYP=5
	100	GORK	4	S/F	0731.0	0731.2	0.9	120.0			
	9300	KISV	2	S/F	0731.0	0731.4	1.8	4.0			
	100	GORK	4	S/F	0731.0	0731.6		240.0			
	9300	KISV	2	S/F	0736.2	0736.8	1.3	6.0			
	9300	KISV	2	S/F	0740.9	0741.9	3.0	5.0			
	15000	KISV	2	S/F	0741.2	0741.9	2.5	5.0			
	5900	KISV	2	S/F	0745.4	0746.2	2.2	4.0			
	1470	POTS	21	GRF	0754.0	0833.2	66.0	18.0			
	9300	KISV	23	GRF	0754.2	0806.7	17.0	8.0			
	950	GORK	2	S/F	0754.7	0754.9	1.3	11.0			
	15000	KISV	2	S/F	0754.8	0755.8	2.5	14.0			
	650	GORK	8	S	0754.8	0754.9	0.3	26.0			

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

MARCH 1989

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	9500	POTS	46	C	0755.0	0832.6	90.0	280.0			
	9100	GORK	2	S/F	0759.7	0801.4	5.9	17.0			
	5900	KISV	2	S/F	0759.7	0801.9	4.9	8.0			
	9300	KISV	2	S/F	0800.0	0801.8	5.7	17.0			
	3000	POTS	21	GRF	0803.0	0840.8	57.0	30.0			
	15000	KISV	2	S/F	0803.9	0804.5	3.2	7.0			
	15000	KISV	2	S/F	0807.0	0807.5	2.1	21.0			
	9100	GORK	1	S	0808.0	0808.5	2.8	18.0			
	9300	KISV	2	S/F	0808.0	0808.6	3.4	16.0			
	245	SVTO	8	S	0810.0E	0810.0	1.0D	330.0			QL=1 ST=2 TYP=3
	100	GORK	41	F	0814.2	0819.0		600.0			
	100	GORK	41	F	0814.2	0818.3		720.0			
	100	GORK	41	F	0814.2	0814.4	5.0	240.0			
	100	GORK	41	F	0814.2	0815.5		360.0			
	9300	KISV	29	PBI	0817.6	0845.2	109.0	34.0			
	9300	KISV	46	C	0817.6	0837.5		210.0			
	5900	KISV	46	C	0817.6	0837.6		103.0			
	9300	KISV	46	C	0817.6	0832.6	27.5	408.0			
	9300	KISV	46	C	0817.6	0840.7		114.0			
	5900	KISV	46	C	0817.6	0840.7		73.0			
	5900	KISV	46	C	0817.6	0832.7	27.3	179.0			
	5900	KISV	29	PBI	0817.6	0844.8	130.4	29.0			
	15000	KISV	2	S/F	0819.0	0819.2	0.8	5.0			
	950	GORK	23	GRF	0820.3E	0833.0	44.0D	8.8			
	15000	KISV	45	C	0822.1	0837.5		159.0			
	15000	KISV	45	C	0822.1	0832.5	20.4	372.0			
	15000	KISV	29	PBI	0822.1	0842.5	108.3	54.0			
	9100	GORK	46	C	0825.0	0837.5		240.0			
	9100	GORK	46	C	0825.0	0832.7	20.0	515.0			
	8800	LEAR	4	S/F	0827.0E	0832.0	17.0D	340.0			QL=1 ST=2 TYP=3
	8800	SVTO	4	S/F	0827.0E	0832.0	16.0D	360.0			QL=1 ST=2 TYP=3
	3013	IZMI	45	C	0827.5	0832.8	25.0	65.0			
	15400	LEAR	4	S/F	0828.0E	0832.0	15.0D	380.0			QL=1 ST=2 TYP=3
	15400	SVTO	4	S/F	0828.0E	0832.0	16.0D	490.0			QL=1 ST=2 TYP=3
	2950	GORK	45	C	0828.2	0837.6		16.0			
	2950	GORK	45	C	0828.2	0832.6	15.7	43.0			
	2950	GORK	45	C	0828.2	0840.7		14.0			
	4995	LEAR	4	S/F	0829.0E	0832.0	14.0D	150.0			QL=1 ST=2 TYP=3
	2695	LEAR	4	S/F	0830.0E	0832.0	14.0D	64.0			QL=1 ST=2 TYP=3
	4995	SVTO	4	S/F	0830.0E	0832.0	11.0D	140.0			QL=1 ST=2 TYP=3
	2695	SVTO	8	S	0832.0E	0832.0	1.0D	53.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0834.0E	0835.0	2.0D	120.0			QL=1 ST=2 TYP=3
	950	GORK	4	S/F	0840.1	0840.5	1.5	64.0			
	810	KRAK	42	SER	0840.2	0840.2	1.0	12.0			
	100	GORK	4	S/F	0844.1	0844.3	0.6	480.0			
	950	GORK	2	S/F	0855.5	0856.5	2.0	16.0			
	5900	KISV	4	S/F	0855.8	0856.6	7.0	115.0			
	9100	GORK	4	S/F	0855.9	0856.5	3.0	166.0			
	9300	KISV	4	S/F	0855.9	0856.5	4.8	253.0			
	15000	KISV	4	S/F	0855.9	0856.5	3.2	291.0			
	810	KRAK	8	S	0856.0	0856.0	0.1	17.0			
	4995	LEAR	8	S	0856.0E	0856.0	U	79.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0856.0E	0856.0	U	240.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0856.0E	0856.0	U	190.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	0856.0E	0856.0	1.0D	270.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	0856.0E	0856.0	U	210.0			QL=1 ST=2 TYP=3
	650	GORK	2	S/F	0856.4	0856.5	1.1	13.5			
	9500	POTS	3	S	0856.5	0856.8	4.5	122.0			
	9100	GORK	1	S	0915.9	0916.5	1.8	8.4			
	15000	KISV	2	S/F	0916.3	0916.6	1.5	14.0			
	9300	KISV	2	S/F	0916.4	0916.6	1.0	8.0			
	9500	POTS	4	S/F	0930.0	0935.5	21.0	63.0			
	5900	KISV	4	S/F	0932.2	0935.6	9.7	28.0			
	9300	KISV	23	GRF	0932.5	0944.4	19.6	9.0			
	9300	KISV	4	S/F	0932.8	0935.5	9.3	73.0			
	15000	KISV	23	GRF	0932.9	0937.0	16.0	34.0			
	9100	GORK	4	S/F	0932.9	0935.5	6.6	76.0			
	15000	KISV	4	S/F	0932.9	0935.6	3.9	85.0			
	15400	LEAR	8	S	0935.0E	0935.0	1.0D	56.0			QL=1 ST=2 TYP=3

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

MARCH 1989

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	8800	SVTO	8	S	0935.0E	0935.0	1.0D	65.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	0935.0E	0935.0	1.0D	90.0			QL=1 ST=2 TYP=3
	15000	KISV	2	S/F	1003.7	1005.6	4.0	4.0			
	100	GORK	46	C	1008.4	1009.0		600.0			
	100	GORK	46	C	1008.4	1008.8	1.0	600.0			
	9300	KISV	45	C	1024.1	1027.4	7.8	14.0			
	9300	KISV	45	C	1024.1	1025.7		11.0			
	9100	GORK	2	S/F	1024.5	1030.2	5.7	11.0			
	15000	KISV	45	C	1024.7	1027.3	5.2	7.0			
	15000	KISV	45	C	1024.7	1025.8		6.0			
	15000	KISV	2	S/F	1049.0	1049.4	1.4	5.0			
	9300	KISV	2	S/F	1053.9	1054.8	2.0	5.0			
	15000	KISV	23	GRF	1103.1	1110.7	146.0	8.0			
	9300	KISV	2	S/F	1121.6	1122.1	2.0	5.0			
	15000	KISV	2	S/F	1132.0	1132.6	1.4	5.0			
	5900	KISV	2	S/F	1137.7	1138.8	5.7	7.0			
	9300	KISV	2	S/F	1138.3	1138.9	5.0	5.0			
	5900	KISV	2	S/F	1148.6	1149.6	2.6	3.0			
	9300	KISV	2	S/F	1156.3	1158.2	3.2	8.0			
	5900	KISV	2	S/F	1157.4	1158.1	1.7	5.0			
	9500	POTS	21	GRF	1203.0	1239.0	42.0	244.0			
	9300	KISV	2	S/F	1205.4	1209.3	8.0	9.0			
	15000	KISV	2	S/F	1206.6	1209.3	3.7	8.0			
	15000	KISV	46	C	1215.0	1229.1		8.0			
	15000	KISV	46	C	1215.0	1225.2		13.0			
	15000	KISV	46	C	1215.0	1224.2		19.0			
	15000	KISV	46	C	1215.0	1220.6		19.0			
	15000	KISV	46	C	1215.0	1222.7	15.3	20.0			
	9300	KISV	46	C	1215.6	1223.0	16.6	20.0			
	9300	KISV	46	C	1215.6	1220.7		17.0			
	9300	KISV	46	C	1215.6	1225.7		17.0			
	5900	KISV	46	C	1219.4	1223.1	7.3	5.0			
	5900	KISV	46	C	1219.4	1220.4		4.0			
	5900	KISV	46	C	1219.4	1225.6		4.0			
	9300	KISV	4	S/F	1235.8	1238.9	8.1	104.0D			
	536	ONDR	41	F	1237.0	1239.0	2.7	147.0			
	5900	KISV	4	S/F	1237.5	1238.8	4.0	52.0D			
	8800	SVTO	8	S	1238.0E	1238.0	1.0D	91.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	1238.0E	1239.0	1.0D	95.0			QL=1 ST=2 TYP=3
	810	KRAK	2	S/F	1238.7	1239.4	2.3	74.0	8.0		
	245	SVTO	8	S	1239.0E	1240.0	2.0D	110.0			QL=1 ST=2 TYP=3
	1470	POTS	3	S	1259.5	1259.9	1.5	8.0			
	4995	SGMR	8	S	1302.0E	1303.0	1.0D	67.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	1302.0E	1303.0	2.0D	180.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	1302.0E	1303.0	2.0D	110.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	1302.0E	1303.0	1.0D	110.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	1302.0E	1303.0	1.0D	170.0			QL=1 ST=2 TYP=3
	9500	POTS	21	GRF	1302.0	1344.5	68.0	26.0			
	536	ONDR	41	F	1308.7	1314.3	11.7	99.0			
	1470	POTS	4	S/F	1309.0	1313.9	21.0	31.0			
	600	HUMN	4	S/F	1309.5	1314.0	21.0	45.0	8.0		
	810	KRAK	45	C	1309.6	1314.0	9.0U	8.0			
	2800	OTTA	4	S/F	1309.7	1313.8	9.3	28.2	11.0		
	3000	POTS	4	S/F	1310.0	1313.5	10.0U	33.0			
	610	SGMR	4	S/F	1312.0E	1313.0	4.0D	69.0			QL=1 ST=2 TYP=3
	8800	SGMR	4	S/F	1312.0E	1313.0	4.0D	160.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	1313.0E	1313.0	1.0D	60.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	1313.0E	1313.0	1.0D	78.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	1313.0E	1313.0	1.0D	150.0			QL=1 ST=2 TYP=3
	4995	SVTO	8	S	1313.0E	1313.0	1.0D	160.0			QL=1 ST=2 TYP=3
	9500	POTS	4	S/F	1313.0	1313.4	5.0	118.0			
	1470	POTS	1	S	1336.5	1337.8	3.0	5.0			
	9500	POTS	45	C	1421.0	1447.2	54.0	526.0			
	1470	POTS	21	GRF	1423.0	1440.0	57.0	8.0			
	3000	POTS	21	GRF	1424.0	1437.0	51.0	10.0			
	4995	SGMR	8	S	1430.0E	1431.0	1.0D	50.0			QL=1 ST=2 TYP=3
	3000	POTS	4	S/F	1430.5	1431.0	4.5	26.0			
	1470	POTS	3	S	1431.0	1433.0	4.0	12.0			
	600	HUMN	41	F	1439.0	1442.0	7.5	210.0	12.0		

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
08	245	SGMR	49	GB	1441.0E	1442.0	1.0D	1800.0			QL=1 ST=2 TYP=6
	15400	SVTO	49	GB	1441.0E	1441.0	1.0D	1400.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	1441.0E	1442.0	1.0D	1400.0			QL=1 ST=2 TYP=6
	410	SGMR	8	S	1442.0E	1442.0	U	340.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	1442.0E	1442.0	U	170.0			QL=1 ST=2 TYP=3
	410	SVTO	4	S/F	1442.0E	1442.0	5.0D	320.0			QL=1 ST=2 TYP=3
	15400	SGMR	49	GB	1444.0E	1447.0	7.0D	1500.0			QL=1 ST=2 TYP=6
	410	SGMR	4	S/F	1445.0E	1446.0	4.0D	110.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1445.0E	1446.0	1.0D	1200.0			QL=1 ST=2 TYP=6
	127	TORN	49	GB	1445.7	1452.0U	16.5	3200.0D	270.0D		
	4995	SGMR	8	S	1446.0E	1447.0	2.0D	68.0			QL=1 ST=2 TYP=3
	8800	SVTO	4	S/F	1446.0E	1447.0	3.0D	410.0			QL=1 ST=2 TYP=3
	3000	POTS	3	S	1446.5	1447.5	3.5	42.0			
	1470	POTS	3	S	1446.5	1447.8	8.5	70.0			
	600	HUMN	3	S	1446.5	1447.8	13.0	50.0	20.0		
	8800	SGMR	4	S/F	1447.0E	1447.0	4.0D	210.0			QL=1 ST=2 TYP=3
	1415	SGMR	4	S/F	1447.0E	1447.0	3.0D	66.0			QL=1 ST=2 TYP=3
	610	SGMR	4	S/F	1447.0E	1447.0	4.0D	81.0			QL=1 ST=2 TYP=3
	2695	SGMR	8	S	1447.0E	1447.0	2.0D	49.0			QL=1 ST=2 TYP=3
	4995	SVTO	8	S	1447.0E	1447.0	U	68.0			QL=1 ST=2 TYP=3
	1415	SVTO	8	S	1447.0E	1447.0	1.0D	59.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	1711.0E	1711.0	1.0D	190.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	1714.0E	1714.0	U	140.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	1729.5	1731.1	7.6	20.2	8.0		
	410	PALE	8	S	1730.0E	1730.0	1.0D	110.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	1730.0E	1731.0	1.0D	78.0			QL=1 ST=2 TYP=3
	245	SGMR	8	S	1730.0E	1731.0	1.0D	58.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	1746.0E	1746.0	U	97.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	1746.7	1747.6	6.7	40.3	12.0		
	410	SGMR	4	S/F	1750.0E	1753.0	4.0D	400.0			QL=1 ST=3 TYP=3
	410	SGMR	8	S	1756.0E	1757.0	1.0D	80.0			QL=1 ST=3 TYP=3
	245	SGMR	49	GB	1756.0E	1756.0	2.0D	1800.0			QL=1 ST=3 TYP=6
	2800	OTTA	4	S/F	1851.2	1853.6	11.0	117.3	35.0		
	245	PALE	8	S	2111.0E	2111.0	U	300.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	2111.0E	2111.0	U	270.0			QL=1 ST=2 TYP=3
	15400	PALE	8	S	2124.0E	2125.0	1.0D	110.0			QL=1 ST=2 TYP=3
	8800	PALE	8	S	2124.0E	2125.0	1.0D	83.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	2125.0E	2125.0	1.0D	98.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	2125.0E	2125.0	U	89.0			QL=1 ST=2 TYP=3
	245	PALE	4	S/F	2139.0E	2142.0	4.0D	350.0			QL=1 ST=2 TYP=5
	100	HIRA	46	C	2140.9	2141.6	2.0	370.0			
	410	PALE	8	S	2226.0E	2226.0	U	73.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	2237.0E	2237.0	1.0D	110.0			QL=1 ST=2 TYP=3
09	100	HIRA	44	NS	0300.0E	0620.0	340.0D	120.0	57.0		
	100	GORK	44	NS	0439.0E		441.0D		12.0		
	200	GORK	44	NS	0440.0E		180.0D		10.0		
	221	ABST	43	NS	0500.0		240.0		36.0		
	245	SVTO	43	NS	0531.0	1420.0	657.0D	470.0			QL=1 ST=2 TYP=1
	410	SVTO	43	NS	0531.0	0903.0	657.0D	280.0			QL=1 ST=2 TYP=1
	234	POTS	44	NS	0550.0E	1536.0	625.0D	300.0			
	204	IZMI	43	NS	0600.0		360.0	70.0			
	33	UPIC	44	NS	0600.0E		600.0D				
	127	TORN	44	NS	0700.0E		480.0D		250.0		V=1
	260	ONDR	44	NS	0700.0E		520.0D				
	600	HUMN	44	NS	0700.0E		600.0D				
	430	KRAK	44	NS	0800.0E	0940.0	310.0D	220.0D			
	430	KRAK	44	NS	0800.0E	0918.5	310.0D	220.0D	14.0		
	610	SGMR	44	NS	1127.0E	1528.0	654.0D	120.0			QL=1 ST=2 TYP=1
	410	SGMR	44	NS	1127.0E	1337.0	654.0D	160.0			QL=1 ST=2 TYP=1
	245	SGMR	44	NS	1127.0E	2028.0	654.0D	1600.0			QL=1 ST=2 TYP=1
	245	PALE	44	NS	1702.0E	2059.0	418.0D	410.0			QL=1 ST=3 TYP=1
	200	HIRA	44	NS	2100.0E	0350.0	700.0D	100.0	54.0		ML
	100	HIRA	44	NS	2100.0E	2314.0	700.0D	27.0	10.0		
	245	LEAR	43	NS	2240.0	0945.0	708.0D	610.0			QL=1 ST=2 TYP=1
	100	HIRA	42	SER	0007.7	0009.2	52.0	450.0			
	245	PALE	8	S	0011.0E	0012.0	1.0D	100.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	0011.0E	0012.0	1.0D	88.0			QL=1 ST=2 TYP=3
	100	HIRA	42	SER	0041.4	0043.6	6.7	3700.0			O

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

MARCH 1989

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	PALE	4	S/F	0058.0E	0059.0	5.0D	340.0			QL=1 ST=2 TYP=3
	100	HIRA	8	S	0116.5	0117.2	0.9	3200.0			O
	100	HIRA	41	F	0146.2	0153.5	11.9	2800.0			WL
	200	HIRA	42	SER	0147.1	0151.5	10.6	1000.0			O
	245	LEAR	49	GB	0151.0E	0157.0	9.0D	2000.0			QL=1 ST=2 TYP=7
	610	LEAR	8	S	0152.0E	0152.0	U	37.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0152.0E	0152.0	U	33.0			QL=1 ST=2 TYP=3
	500	HIRA	42	SER	0152.0	0156.6	6.0	130.0			WL
	245	PALE	49	GB	0153.0E	0153.0	1.0D	1100.0			QL=1 ST=2 TYP=6
	410	LEAR	8	S	0155.0E	0156.0	2.0D	140.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	0155.0E	0155.0	1.0D	210.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	0159.0E	0200.0	1.0D	220.0			QL=1 ST=2 TYP=3
	100	HIRA	48	C	0237.0	0238.3	6.7	13200.0			WL
	1415	LEAR	4	S/F	0238.0E	0242.0	9.0D	72.0			QL=1 ST=2 TYP=3
	610	LEAR	4	S/F	0238.0E	0242.0	9.0D	55.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0238.0E	0238.0	1.0D	30.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	0238.0E	0241.0	9.0D	93.0			QL=1 ST=2 TYP=5
	8800	LEAR	8	S	0238.0E	0238.0	1.0D	59.0			QL=1 ST=2 TYP=3
	500	HIRA	46	C	0238.4	0242.0	15.5	50.0	14.0		WL
	2695	LEAR	4	S/F	0239.0E	0242.0	7.0D	24.0			QL=1 ST=2 TYP=3
	410	LEAR	4	S/F	0241.0E	0242.0	5.0D	97.0			QL=1 ST=2 TYP=3
	245	LEAR	4	S/F	0241.0E	0241.0	4.0D	470.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	0241.0E	0241.0	1.0D	150.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0241.0E	0241.0	U	550.0			QL=1 ST=2 TYP=6
	610	PALE	8	S	0241.0E	0241.0	1.0D	57.0			QL=1 ST=2 TYP=3
	1415	PALE	8	S	0241.0E	0241.0	1.0D	59.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	0256.0E	0256.0	U	400.0			QL=1 ST=2 TYP=3
	410	LEAR	49	GB	0301.0E	0311.0	13.0D	1100.0			QL=1 ST=2 TYP=7
	500	HIRA	42	SER	0302.5	0309.5	18.5	1200.0			O
	410	PALE	49	GB	0303.0E	0303.0	1.0D	520.0			QL=1 ST=2 TYP=6
	200	HIRA	42	SER	0304.6	0317.8	18.5	4300.0			O
	245	LEAR	49	GB	0305.0E	0317.0	13.0D	2100.0			QL=1 ST=2 TYP=7
	610	LEAR	49	GB	0305.0E	0309.0	11.0D	580.0			QL=1 ST=2 TYP=7
	610	PALE	49	GB	0308.0E	0308.0	1.0D	680.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0308.0E	0309.0	1.0D	660.0			QL=1 ST=2 TYP=6
	410	PALE	49	GB	0308.0E	0310.0	3.0D	1400.0			QL=1 ST=2 TYP=6
	15400	LEAR	4	S/F	0309.0E	0311.0	12.0D	150.0			QL=1 ST=2 TYP=3
	15400	PALE	8	S	0310.0E	0311.0	2.0D	120.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0310.0E	0312.0	13.0D	86.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0312.0E	0312.0	1.0D	53.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0312.0E	0313.0	1.0D	47.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0312.0E	0312.0	1.0D	33.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0317.0E	0317.0	1.0D	2500.0			QL=1 ST=2 TYP=6
	100	HIRA	42	SER	0317.5	0320.8	54.0	1900.0			O
	410	PALE	8	S	0321.0E	0321.0	U	110.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0321.0E	0321.0	U	860.0			QL=1 ST=2 TYP=6
	245	PALE	8	S	0329.0E	0330.0	1.0D	440.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0339.0E	0339.0	1.0D	630.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0339.0E	0339.0	U	1000.0			QL=1 ST=2 TYP=6
	500	HIRA	42	SER	0339.5	0410.0	35.0	165.0			ML
	610	LEAR	8	S	0340.0E	0341.0	1.0D	12.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0406.0E	0406.0	U	10000.0			QL=1 ST=2 TYP=6
	200	HIRA	8	S	0406.2	0406.6	0.5	13000.0			O
	245	PALE	49	GB	0409.0E	0409.0	1.0D	1100.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	0410.0E	0410.0	1.0D	110.0			QL=1 ST=2 TYP=3
	9100	GORK	2	S/F	0433.1	0433.4	1.8	17.6			
	650	GORK	23	GRF	0448.0E	0645.5	432.0D	13.0			
	5900	KISV	23	GRF	0451.2	0545.0		19.0			
	5900	KISV	23	GRF	0451.2	0501.2	82.2	26.0			
	9300	KISV	23	GRF	0451.2	0501.4	21.8	27.0			
	9100	GORK	23	GRF	0452.0	1017.3	488.0D	47.0			
	2950	GORK	4	S/F	0452.2	0500.0	10.3	9.0			
	950	GORK	23	GRF	0453.0	0515.3	62.4	12.5			
	100	GORK	41	F	0454.0	0501.1		2800.0			
	100	GORK	41	F	0454.0	0458.5		2000.0			
	100	GORK	41	F	0454.0	0454.7	7.7	2600.0			
	15000	KISV	2	S/F	0514.1	0514.3	0.7	7.0			
	9300	KISV	2	S/F	0516.2	0516.5	2.2	8.0			
	15000	KISV	2	S/F	0516.2	0516.5	2.3	11.0			

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

Outstanding Occurrences

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
09	950	GORK	46	C	0516.8	0524.7		51.0			
	950	GORK	46	C	0516.8	0527.8		18.0			
	950	GORK	46	C	0516.8	0522.8	25.0	26.0			
	245	LEAR	49	GB	0518.0E	0519.0	8.0D	1500.0			QL=1 ST=2 TYP=6
	200	HIRA	45	C	0518.5	0518.8	1.1	4900.0			O
	200	GORK	8	S	0518.7	0519.2	0.5	5500.0			
	410	LEAR	4	S/F	0522.0E	0524.0	5.0D	110.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0523.0E	0523.0	1.0D	20.0			QL=1 ST=2 TYP=3
	650	GORK	41	F	0523.6	0524.0	26.1	31.0			
	650	GORK	41	F	0523.6	0549.4		16.0			
	650	GORK	41	F	0523.6	0536.8		19.0			
	9300	KISV	23	GRF	0528.5	0546.5	32.8	20.0			
	15000	KISV	2	S/F	0529.6	0530.8	2.4	7.0			
	9300	KISV	2	S/F	0530.2	0530.7	1.2	16.0			
	5900	KISV	2	S/F	0530.4	0530.7	0.8	9.0			
	15000	KISV	23	GRF	0540.0	0548.6	18.0	7.0			
	15000	KISV	2	S/F	0541.6	0543.3	2.9	10.0			
	9300	KISV	2	S/F	0542.5	0543.3	3.0	15.0			
	100	GORK	4	S/F	0608.9	0609.3	1.1	960.0			
	100	GORK	46	C	0620.9	0626.0		1200.0			
	100	GORK	46	C	0620.9	0621.1	1.3	1500.0			
	15000	KISV	1	S	0620.9	0621.1	0.4	11.0			
	9300	KISV	2	S/F	0623.8	0625.0	3.1	11.0			
	5900	KISV	2	S/F	0625.8	0626.0	0.7	5.0			
	5900	KISV	2	S/F	0627.3	0627.7	0.9	4.0			
	9300	KISV	2	S/F	0627.4	0627.8	0.7	5.0			
	30	POTS	41	F	0635.4	0635.8	4.5	320.0			
	9300	KISV	22	GRF	0636.5	0651.1	34.0	16.0			
	200	HIRA	42	SER	0637.0	0637.9	9.7	4400.0			WR
	200	GORK	41	F	0637.6	0638.3	1.2	6400.0			
	200	GORK	41	F	0637.6	0641.4		570.0			
	234	POTS	4	S/F	0637.8	0638.4	1.1	3800.0			
	245	SVTO	49	GB	0638.0E	0638.0	1.0D	560.0			QL=1 ST=3 TYP=6
	204	IZMI	4	S/F	0638.0	0638.5	2.0	15000.0			
	100	GORK	8	S	0638.1	0638.3	0.6	1900.0			
	245	LEAR	8	S	0646.0E	0646.0	1.0D	110.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	0655.0E	0655.0	U	76.0			QL=1 ST=3 TYP=3
	245	LEAR	8	S	0659.0E	0701.0	2.0D	180.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0659.0E	0659.0	1.0D	120.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	0659.0E	0659.0	1.0D	310.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0659.0E	0701.0	2.0D	210.0			QL=1 ST=2 TYP=5
	5900	KISV	2	S/F	0703.0	0703.8	2.8	6.0			
	9300	KISV	2	S/F	0703.6	0703.7	2.3	8.0			
	9300	KISV	2	S/F	0710.3	0711.6	3.5	8.0			
	5900	KISV	2	S/F	0710.4	0711.3	7.3	9.0			
	100	GORK	3	S	0719.7	0720.0	0.6	600.0			
	9300	KISV	23	GRF	0725.0	0732.5	16.1	11.0			
	5900	KISV	2	S/F	0730.9	0733.4	5.1	3.0			
	9500	POTS	21	GRF	0741.0	0753.0	48.0	34.0			
	9300	KISV	46	C	0742.0	0744.5		69.0			
	9300	KISV	46	C	0742.0	0750.5		57.0			
	9300	KISV	46	C	0742.0	0750.8	16.0	92.0			
	9100	GORK	46	C	0742.4	0744.5	13.6	70.0			
	9100	GORK	46	C	0742.4	0750.8		96.0			
	950	GORK	23	GRF	0742.7	0839.0	117.0	8.8			
	15000	KISV	46	C	0742.7	0750.5		25.0			
	15000	KISV	46	C	0742.7	0744.6	17.5	56.0			
	15000	KISV	46	C	0742.7	0750.9		41.0			
	5900	KISV	46	C	0742.8	0750.4		26.0			
	5900	KISV	46	C	0742.8	0752.6		17.0			
	5900	KISV	46	C	0742.8	0750.7		23.0			
	5900	KISV	46	C	0742.8	0744.7	15.5	30.0			
	9500	POTS	3	S	0743.5	0744.8	2.2	65.0			
	15400	LEAR	8	S	0744.0E	0744.0	1.0D	64.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0744.0E	0744.0	1.0D	42.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0744.0E	0744.0	U	16.0			QL=1 ST=2 TYP=3
	100	GORK	8	S	0747.5	0747.9	1.1	1700.0			
	9500	POTS	4	S/F	0749.8	0751.0	1.7	72.0			
	15400	LEAR	8	S	0750.0E	0750.0	1.0D	35.0			QL=1 ST=2 TYP=3

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

MARCH 1989

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	8800	LEAR	8	S	0750.0E	0750.0	1.0D	45.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	0750.0E	0750.0	1.0D	79.0			QL=1 ST=2 TYP=3
	200	HIRA	41	F	0750.8	0752.1	7.3	520.0			ML
	410	LEAR	8	S	0751.0E	0751.0	1.0D	53.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	0751.0E	0752.0	1.0D	110.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0752.0E	0752.0	1.0D	240.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0752.0E	0752.0	1.0D	300.0			QL=1 ST=2 TYP=3
	9300	KISV	29	PBI	0802.0	0808.5	9.3	24.0			
	9300	KISV	4	S/F	0802.0	0805.7	6.5	57.0			
	5900	KISV	2	S/F	0802.8	0805.9	8.5	15.0			
	9100	GORK	2	S/F	0802.9	0805.6	7.4	49.0			
	15000	KISV	2	S/F	0802.9	0805.7	4.0	26.0			
	15000	KISV	29	PBI	0802.9	0806.9	8.6	9.0			
	9500	POTS	3	S	0803.0	0805.8	7.0	59.0			
	15000	KISV	2	S/F	0807.0	0807.2	0.6	9.0			
	9300	KISV	2	S/F	0807.1	0807.2	0.5	9.0			
	9300	KISV	4	S/F	0831.7	0833.3	6.0	94.0D			
	5900	KISV	4	S/F	0832.2	0833.4	3.7	66.0			
	9100	GORK	3	S	0832.3	0833.3	2.7	112.0			
	5200	BERN	4	S/F	0832.4	0833.3	2.0	25.0			
	3200	BERN	4	S/F	0832.4	0833.3	2.0	10.0			
	8400	BERN	4	S/F	0832.4	0833.3	2.0	73.0			
	19600	BERN	4	S/F	0832.4	0833.3	2.0	27.0			
	11800	BERN	4	S/F	0832.4	0833.3	2.0	75.0			
	15000	KISV	4	S/F	0832.5	0833.4	2.6	87.0			
	9500	POTS	3	S	0832.5	0833.5	2.5	93.0			
	1470	POTS	3	S	0832.5	0833.6	3.5	16.0			
	2950	GORK	1	S	0832.9	0833.5	1.1	11.0			
	3100	CRIM	1	S	0833.0	0835.0	2.5	8.6	3.0		
	410	LEAR	8	S	0833.0E	0833.0	1.0D	19.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0833.0E	0833.0	U	33.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0833.0E	0833.0	U	72.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	0833.0E	0833.0	U	88.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	0833.0E	0833.0	U	84.0			QL=1 ST=2 TYP=3
	100	GORK	8	S	0833.0	0833.5	1.1	10000.0			
	3013	IZMI	5	S	0833.0	0833.5	1.0	13.0	6.0		
	950	GORK	3	S	0833.0	0833.9	3.0	8.0			
	650	GORK	4	S/F	0833.3	0833.9	1.0	10.0			
	810	KRAK	1	S	0833.5	0834.0	1.3	8.0	3.0		
	15000	KISV	22	GRF	0900.0	1203.9	269.0	17.0			
	9500	POTS	21	GRF	0902.0	0907.0	8.0	25.0			
	1470	POTS	40	F	0902.0	0904.4	6.5	10.0			
	5900	KISV	45	C	0902.2	0904.4	20.5	12.0			
	5900	KISV	45	C	0902.2	0903.7		8.0			
	9300	KISV	45	C	0902.3	0903.7		24.0			
	650	GORK	46	C	0902.3	0905.8	9.7	18.0			
	650	GORK	46	C	0902.3	0908.8		13.5			
	9300	KISV	45	C	0902.3	0906.9	19.0	28.0			
	15000	KISV	45	C	0902.9	0903.6		10.0			
	15000	KISV	45	C	0902.9	0906.9	5.4	11.0			
	950	GORK	46	C	0903.0	0904.2	6.3	16.0			
	100	GORK	4	S/F	0903.0	0903.2	1.2	1000.0			
	950	GORK	46	C	0903.0	0907.7		15.0			
	950	GORK	46	C	0903.0	0908.7		16.0			
	950	GORK	46	C	0903.0	0905.8		13.0			
	410	SVTO	8	S	0913.0E	0913.0	1.0D	190.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0914.0E	0914.0	U	160.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0918.0E	0919.0	1.0D	190.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	0918.0E	0919.0	1.0D	320.0			QL=1 ST=2 TYP=3
	5900	KISV	28	PRE	0923.3	1000.0	36.7	14.0			
	9300	KISV	28	PRE	0924.0	0940.0	36.0	31.0			
	5900	KISV	46	C	0924.0	0940.4	30.4	16.0			
	5900	KISV	46	C	0924.0	0925.6		11.0			
	5900	KISV	46	C	0924.0	0929.6		14.0			
	950	GORK	2	S/F	0925.3	0925.5	1.0	15.0			
	2950	GORK	1	S	0925.4	0925.6	0.5	9.0			
	15000	KISV	2	S/F	0925.4	0925.6	0.3	15.0			
	3100	CRIM	1	S	0925.5	0925.6	1.0	8.6	3.0		
	30	POTS	42	SER	0932.1	1007.2	46.0	18000.0D			

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

Outstanding Occurrences

MARCH 1989

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	0935.0E	0940.0	6.0D	870.0			QL=1 ST=3 TYP=7
	9500	POTS	21	GRF	0935.0	0940.0	18.0	23.0			
	234	POTS	42	SER	0935.4	1007.4	72.0	1550.0			
	536	ONDR	40	F	0937.8	0943.8	6.0	76.0			
	15400	LEAR	8	S	0938.0E	0938.0	U	30.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0938.0E	0940.0	4.0D	680.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	0938.0E	0940.0	3.0D	870.0			QL=1 ST=3 TYP=7
	410	LEAR	4	S/F	0939.0E	0941.0	4.0D	93.0			QL=1 ST=2 TYP=5
	410	SVTO	8	S	0940.0E	0940.0	U	220.0			QL=1 ST=2 TYP=3
	9300	KISV	45	C	0955.9	0956.5	2.1	8.0			
	9300	KISV	45	C	0955.9	0956.8		7.0			
	245	LEAR	49	GB	0956.0E	0957.0	4.0D	1400.0			QL=1 ST=2 TYP=6
	204	IZMI	42	SER	0956.5	1008.0	16.0	6500.0			
	100	GORK	41	F	0956.8	1008.0		24500.0			
	100	GORK	41	F	0956.8	1004.4		7200.0			
	100	GORK	41	F	0956.8	0957.7	20.8	19000.0			
	245	SVTO	49	GB	0957.0E	0957.0	U	1200.0			QL=1 ST=2 TYP=6
	536	ONDR	47	GB	0958.4	1009.7	25.0	139.0			
	245	SVTO	49	GB	0959.0E	0959.0	1.0D	1100.0			QL=1 ST=2 TYP=6
	9500	POTS	45	C	0959.0	1007.7	56.0	1100.0			
	9300	KISV	29	PBI	1000.1	1019.2	63.4	28.0			
	5900	KISV	29	PBI	1000.1	1011.6	32.0	25.0			
	9100	GORK	47	GB	1000.1	1007.8		1200.0			
	9100	GORK	47	GB	1000.1	1004.8	16.4	650.0			
	5900	KISV	47	GB	1000.1	1007.8	11.4	511.0			
	9300	KISV	47	GB	1000.1	1007.8	19.0	1077.0			
	15000	KISV	2	S/F	1000.6	1001.3	2.0	20.0			
	15000	KISV	47	GB	1002.9	1007.8	18.6	2745.0			
	3100	CRIM	30	PBI	1003.0	1010.0	9.0	8.9	3.0		
	1415	LEAR	49	GB	1003.0E	1007.0	5.0D	110.0			QL=1 ST=2 TYP=7
	2695	LEAR	49	GB	1003.0E	1004.0	6.0D	110.0			QL=1 ST=2 TYP=7
	4995	LEAR	49	GB	1003.0E	1007.0	9.0D	250.0			QL=1 ST=2 TYP=7
	8800	LEAR	49	GB	1003.0E	1007.0	9.0D	810.0			QL=1 ST=2 TYP=7
	15400	LEAR	49	GB	1003.0E	1007.0	9.0D	1600.0			QL=1 ST=2 TYP=7
	8800	SVTO	49	GB	1003.0E	1007.0	10.0D	1100.0			QL=1 ST=2 TYP=7
	4995	SVTO	49	GB	1003.0E	1007.0	10.0D	310.0			QL=1 ST=2 TYP=7
	650	GORK	46	C	1003.0	1008.1		84.0			
	600	HUMN	45	C	1003.0	1008.5	15.0	150.0	10.0		
	3100	CRIM	45	C	1003.0	1004.6	7.0	96.8	32.0		
	3100	CRIM	45	C	1003.0	1007.6		93.5			
	950	GORK	46	C	1003.0	1007.6		70.0			
	650	GORK	46	C	1003.0	1009.6		84.0D			
	650	GORK	46	C	1003.0	1004.6	14.6	18.0			
	950	GORK	46	C	1003.0	1004.6	18.0	45.0			
	3000	POTS	45	C	1003.0	1004.7	37.0	143.0			
	3013	IZMI	45	C	1003.0	1004.8	10.0	134.0			
	1470	POTS	45	C	1003.0	1007.8	27.0	116.0			
	2950	GORK	45	C	1003.1	1004.1	9.5	138.0			
	2950	GORK	45	C	1003.1	1007.8		122.0			
	810	KRAK	3	S	1003.3	1005.0	3.0	27.0	13.0		
	1415	SVTO	49	GB	1004.0E	1007.0	6.0D	95.0			QL=1 ST=2 TYP=7
	245	SVTO	49	GB	1004.0E	1007.0	9.0D	5100.0			QL=1 ST=2 TYP=7
	2695	SVTO	49	GB	1004.0E	1004.0	11.0D	120.0			QL=1 ST=2 TYP=7
	810	KRAK	4	S/F	1006.5	1008.3	3.0	98.0	18.0		
	200	GORK	4	S/F	1006.9	1007.2	1.3	1300.0			
	410	LEAR	49	GB	1007.0E	1009.0	2.0D	61.0			QL=1 ST=2 TYP=7
	610	LEAR	49	GB	1007.0E	1009.0	2.0D	68.0			QL=1 ST=2 TYP=7
	410	SVTO	49	GB	1007.0E	1009.0	6.0D	92.0			QL=1 ST=2 TYP=7
	3100	CRIM	1	S	1011.8	1012.0	1.0	12.7	4.0		
	245	LEAR	49	GB	1014.0E	1017.0	5.0D	580.0			QL=1 ST=2 TYP=6
	8800	LEAR	8	S	1014.0E	1016.0	2.0D	42.0			QL=1 ST=2 TYP=3
	15000	KISV	45	C	1014.8	1015.1	0.5	9.0			
	245	SVTO	49	GB	1017.0E	1017.0	U	810.0			QL=1 ST=2 TYP=6
	15000	KISV	2	S/F	1022.2	1022.4	1.3	17.0			
	9300	KISV	2	S/F	1023.2	1024.9	3.5	5.0			
	4995	LEAR	8	S	1026.0E	1027.0	1.0D	53.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	1026.0E	1027.0	1.0D	48.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	1027.0E	1027.0	2.0D	40.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	1027.0E	1027.0	1.0D	34.0			QL=1 ST=2 TYP=3

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

MARCH 1989

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	9300	KISV	22	GRF	1027.4	1034.4	15.7	9.0			
	245	SVTO	49	GB	1030.0E	1031.0	1.0D	650.0			QL=1 ST=2 TYP=6
	9300	KISV	22	GRF	1045.6	1047.2		9.0			
	9300	KISV	22	GRF	1045.6	1057.4	13.3	10.0			
	5900	KISV	2	S/F	1046.8	1047.1	0.4	5.0			
	100	GORK	4	S/F	1055.7	1057.0	2.5	14500.0			
	5900	KISV	2	S/F	1056.8	1057.2	1.4	7.0			
	15000	KISV	2	S/F	1056.9	1057.3	1.5	11.0			
	9300	KISV	22	GRF	1102.6	1105.4	13.9	9.0			
	15000	KISV	2	S/F	1104.7	1105.0	0.8	7.0			
	810	KRAK	2	S/F	1114.3	1114.8	1.2	8.0	2.0		
	9300	KISV	22	GRF	1125.6	1136.0	22.7	16.0			
	5900	KISV	2	S/F	1134.2	1134.5	0.9	6.0			
	15000	KISV	2	S/F	1135.8	1135.9	3.8	25.0			
	100	GORK	4	S/F	1135.9	1136.6	1.5	5600.0			
	9300	KISV	22	GRF	1152.0	1212.3	38.0	22.0			
	5900	KISV	25	R	1154.0	1337.2	104.0	58.0			
	9500	POTS	21	GRF	1202.0	1214.5	28.0	16.0			
	15000	KISV	46	C	1210.1	1212.3		8.0			
	15000	KISV	46	C	1210.1	1210.6		9.0			
	15000	KISV	46	C	1210.1	1214.7	6.3	23.0			
	15000	KISV	46	C	1220.6	1221.0		17.0			
	15000	KISV	46	C	1220.6	1221.2	1.5	19.0			
	15000	KISV	46	C	1220.6	1221.3		17.0			
	5900	KISV	46	C	1220.7	1221.3	1.6	12.0			
	5900	KISV	45	C	1227.9	1229.7	2.3	14.0			
	9300	KISV	2	S/F	1229.0	1229.5	0.8	10.0			
	9300	KISV	28	PRE	1235.0	1301.3	26.8	17.0			
	245	SGMR	8	S	1240.0E	1240.0	U	260.0			QL=1 ST=2 TYP=3
	9300	KISV	46	C	1243.5	1252.0		9.0			
	9300	KISV	46	C	1243.5	1247.0	14.8	11.0			
	9300	KISV	46	C	1243.5	1256.7		10.0			
	15000	KISV	42	SER	1255.4	1258.0	3.5	11.0			
	15000	KISV	42	SER	1255.4	1257.2		7.0			
	15000	KISV	42	SER	1255.4	1255.8		8.0			
	245	SGMR	4	S/F	1256.0E	1256.0	3.0D	460.0			QL=1 ST=2 TYP=3
	245	SGMR	8	S	1258.0E	1258.0	1.0D	430.0			QL=1 ST=2 TYP=3
	15000	KISV	46	C	1300.9	1303.0		206.0			
	15000	KISV	46	C	1300.9	1306.6	25.3	243.0			
	15000	KISV	46	C	1300.9	1304.9		170.0			
	15400	SGMR	4	S/F	1301.0E	1306.0	13.0D	210.0			QL=1 ST=2 TYP=5
	1470	POTS	22	GRF	1301.0	1334.0	119.0	50.0			
	9500	POTS	21	GRF	1301.0	1337.0	129.0	54.0			
	3000	POTS	21	GRF	1301.0	1337.4	129.0	46.0			
	5900	KISV	45	C	1301.3	1303.0		26.0			
	5900	KISV	45	C	1301.3	1306.5	9.8	44.0			
	9300	KISV	46	C	1301.4	1303.1		84.0			
	9300	KISV	46	C	1301.4	1306.5	36.6	113.0			
	9500	POTS	4	S/F	1301.5	1306.5	8.5	98.0			
	1470	POTS	4	S/F	1301.5	1306.5	8.5	36.0			
	610	SGMR	49	GB	1302.0E	1305.0	8.0D	630.0			QL=1 ST=2 TYP=6
	1415	SGMR	4	S/F	1302.0E	1306.0	6.0D	43.0			QL=1 ST=2 TYP=5
	15400	SVTO	4	S/F	1302.0E	1306.0	5.0D	190.0			QL=1 ST=2 TYP=5
	8800	SGMR	4	S/F	1302.0E	1306.0	12.0D	95.0			QL=1 ST=2 TYP=5
	600	HUMN	4	S/F	1302.0	1305.5	9.0	240.0	70.0		
	810	KRAK	47	GB	1302.0	1305.5U	7.3	260.0D	95.0D		
	536	ONDR	47	GB	1302.3	1305.7	58.0	180.0			
	245	SGMR	4	S/F	1303.0E	1305.0	5.0D	220.0			QL=1 ST=2 TYP=3
	410	SGMR	4	S/F	1303.0E	1305.0	5.0D	85.0			QL=1 ST=2 TYP=3
	2695	SGMR	8	S	1305.0E	1307.0	2.0D	27.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	1306.0E	1306.0	U	84.0			QL=1 ST=2 TYP=3
	810	KRAK	46	C	1314.0	1321.5	47.5	56.0	9.0		
	2800	OTTA	22	GRF	1320.0	1337.0	480.0	43.5	21.0		
	3100	CRIM	2	S/F	1321.6	1323.3	2.5	8.9	3.0		
	245	SGMR	49	GB	1324.0E	1324.0	2.0D	930.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	1324.0E	1324.0	U	590.0			QL=1 ST=2 TYP=6
	15000	KISV	2	S/F	1324.4	1324.9	0.8	14.0			
	245	SGMR	49	GB	1326.0E	1330.0	5.0D	590.0			QL=1 ST=2 TYP=7
	3100	CRIM	23	GRF	1326.9	1337.2	30.0	24.2			

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

Outstanding Occurrences

MARCH 1989

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	610	SGMR	4	S/F	1327.0E	1328.0	3.0D	130.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	1328.0E	1328.0	1.0D	76.0			QL=1 ST=2 TYP=3
	4995	SGMR	20	GRF	1332.0E	1337.0	5.0D	68.0			QL=1 ST=2 TYP=2
	8800	SGMR	8	S	1332.0E	1332.0	1.0D	59.0			QL=1 ST=2 TYP=3
	9300	KISV	2	S/F	1332.6	1333.1	0.8	18.0			
	2695	SGMR	8	S	1334.0E	1336.0	2.0D	56.0			QL=1 ST=2 TYP=3
	9300	KISV	2	S/F	1336.7	1336.9	0.7	17.0			
	410	SGMR	8	S	1337.0E	1338.0	1.0D	420.0			QL=1 ST=2 TYP=3
	410	SVTO	49	GB	1338.0E	1338.0	U	870.0			QL=1 ST=2 TYP=6
	2800	OTTA	3	S	1351.6	1353.0	8.0	14.0	7.0		
	3100	CRIM	1	S	1352.0	1353.0	3.0	7.6	2.0		
	3000	POTS	3	S	1352.0	1353.0	1.5	50.0			
	15400	SGMR	8	S	1352.0E	1352.0	1.0D	86.0			QL=1 ST=3 TYP=3
	8800	SGMR	8	S	1352.0E	1352.0	1.0D	100.0			QL=1 ST=3 TYP=3
	4995	SGMR	8	S	1352.0E	1352.0	1.0D	74.0			QL=1 ST=3 TYP=3
	8800	SVTO	8	S	1352.0E	1352.0	1.0D	70.0			QL=1 ST=2 TYP=3
	9500	POTS	3	S	1352.0	1352.6	3.0	103.0			
	610	SGMR	8	S	1354.0E	1354.0	U	59.0			QL=1 ST=3 TYP=3
	245	SVTO	49	GB	1442.0E	1443.0	2.0D	13000.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1450.0E	1451.0	1.0D	2100.0			QL=1 ST=3 TYP=6
	245	SVTO	49	GB	1450.0E	1451.0	1.0D	1700.0			QL=1 ST=2 TYP=6
	1470	POTS	4	S/F	1450.0	1452.2	7.0	49.0			
	9500	POTS	4	S/F	1450.0	1453.5	10.0	107.0			
	2800	OTTA	3	S	1451.0	1453.7	7.1	26.4	13.0		
	11800	BERN	4	S/F	1451.0	1452.3	5.0	102.0			
	19600	BERN	4	S/F	1451.0	1452.3	5.0	68.0			
	3200	BERN	4	S/F	1451.0	1453.4	5.0	29.0			
	5200	BERN	4	S/F	1451.0	1453.4	5.0	64.0			
	8400	BERN	4	S/F	1451.0	1453.4	5.0	90.0			
	3000	POTS	4	S/F	1451.0	1453.5	3.5	58.0			
	15400	SGMR	8	S	1452.0E	1452.0	1.0D	110.0			QL=1 ST=3 TYP=3
	8800	SGMR	8	S	1452.0E	1453.0	2.0D	110.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	1452.0E	1452.0	1.0D	61.0			QL=1 ST=2 TYP=3
	4995	SGMR	8	S	1453.0E	1453.0	1.0D	88.0			QL=1 ST=3 TYP=3
	4995	SVTO	8	S	1453.0E	1453.0	U	56.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	1456.0E	1456.0	1.0D	97.0			QL=1 ST=3 TYP=3
	19600	BERN	3	S	1456.4	1456.5	1.2	51.0			
	11800	BERN	3	S	1456.4	1456.5	1.2	64.0			
	8400	BERN	3	S	1456.4	1456.5	1.2	17.0			
	1470	POTS	40	F	1501.0	1530.9	54.0	78.0			
	9500	POTS	45	C	1517.0	1526.5	43.0	207.0			
	3000	POTS	45	C	1518.5	1529.4	42.0U	91.0			
	2800	OTTA	4	S/F	1519.4	1525.6	24.0	106.7	43.0		
	4995	SVTO	4	S/F	1522.0E	1523.0	9.0D	110.0			QL=1 ST=2 TYP=3
	8800	SVTO	4	S/F	1523.0E	1526.0	19.0D	170.0			QL=1 ST=2 TYP=3
	2695	SVTO	8	S	1524.0E	1524.0	1.0D	80.0			QL=1 ST=2 TYP=3
	15400	SVTO	4	S/F	1525.0E	1525.0	5.0D	240.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	1528.0E	1530.0	2.0D	310.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	1528.0E	1530.0	2.0D	340.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1528.0E	1546.0	20.0D	960.0			QL=1 ST=2 TYP=7
	600	HUMN	4	S/F	1529.0	1529.5	2.0	270.0	80.0		
	600	HUMN	4	S/F	1531.0	1531.3	1.0	210.0	60.0		
	245	SVTO	8	S	1535.0E	1536.0	1.0D	450.0			QL=1 ST=2 TYP=3
	245	SVTO	49	GB	1546.0E	1546.0	U	510.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	1608.0E	1608.0	U	520.0			QL=1 ST=2 TYP=6
	234	POTS	4	S/F	1610.5	1610.7	0.7	1375.0			
	2800	OTTA	3	S	1717.6	1718.8	3.2	57.5	23.0		
	4995	PALE	8	S	1718.0E	1718.0	U	65.0			QL=1 ST=2 TYP=3
	2695	PALE	8	S	1718.0E	1718.0	U	59.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	1743.0E	1744.0	1.0D	300.0			QL=1 ST=3 TYP=3
	15400	SGMR	8	S	1743.0E	1743.0	1.0D	62.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	1743.0E	1743.0	1.0D	67.0			QL=1 ST=2 TYP=3
	245	SGMR	8	S	1744.0E	1744.0	U	310.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	1755.0E	1755.0	U	76.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1816.0E	1816.0	1.0D	1100.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1816.0E	1817.0	1.0D	1000.0			QL=1 ST=2 TYP=6
	410	SGMR	8	S	1816.0E	1817.0	1.0D	60.0			QL=1 ST=2 TYP=3
	245	PALE	4	S/F	1818.0E	1818.0	1431.0D	120.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1846.0E	1847.0	1.0D	2100.0			QL=1 ST=2 TYP=6

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

MARCH 1989

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	PALE	49	GB	1847.0E	1847.0	U	1600.0			QL=1 ST=2 TYP=6
	245	PALE	8	S	1855.0E	1857.0	2.0D	340.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1857.0E	1900.0	4.0D	400.0			QL=1 ST=3 TYP=7
	410	SGMR	4	S/F	1858.0E	1858.0	3.0D	310.0			QL=1 ST=3 TYP=3
	410	PALE	8	S	1900.0E	1900.0	U	180.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	1900.0E	1900.0	1.0D	380.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	1908.0E	1908.0	U	340.0			QL=1 ST=2 TYP=3
	15400	PALE	49	GB	1909.0E	1924.0	22.0D	790.0			QL=1 ST=2 TYP=7
	4995	PALE	4	S/F	1921.0E	1924.0	7.0D	310.0			QL=1 ST=2 TYP=5
	8800	PALE	4	S/F	1923.0E	1924.0	4.0D	490.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	1924.0	1926.0	4.0	132.1	52.0		
	1415	PALE	8	S	1924.0E	1924.0	1.0D	72.0			QL=1 ST=2 TYP=3
	2695	PALE	8	S	1924.0E	1925.0	1.0D	220.0			QL=1 ST=2 TYP=3
	4995	SGMR	8	S	1924.0E	1925.0	1.0D	270.0			QL=1 ST=2 TYP=3
	1415	SGMR	8	S	1924.0E	1924.0	1.0D	88.0			QL=1 ST=2 TYP=3
	15400	SGMR	49	GB	1924.0E	1925.0	2.0D	640.0			QL=1 ST=2 TYP=6
	8800	SGMR	8	S	1924.0E	1925.0	2.0D	450.0			QL=1 ST=2 TYP=3
	2695	SGMR	8	S	1925.0E	1926.0	1.0D	200.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	1947.0E	1947.0	2.0D	290.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	2013.0E	2015.0	7.0D	780.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2016.0E	2016.0	2.0D	750.0			QL=1 ST=2 TYP=6
	410	PALE	49	GB	2018.0E	2019.0	2.0D	560.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	2025.0E	2028.0	10.0D	1500.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	2120.0E	2121.0	1.0D	300.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	2120.0E	2121.0	2.0D	160.0			QL=1 ST=2 TYP=3
	500	HIRA	46	C	2120.5	2122.5	2.7	35.0			WL
	245	PALE	49	GB	2131.0E	2132.0	1.0D	580.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2132.0E	2132.0	1.0D	600.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	2159.0E	2200.0	2.0D	1100.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2200.0E	2201.0	1.0D	1100.0			QL=1 ST=3 TYP=6
	500	HIRA	21	GRF	2216.5	2233.0	138.0	20.0	7.0		WL
	100	HIRA	42	SER	2227.7	2331.4	135.0	7200.0			ML
	200	HIRA	42	SER	2229.4	2229.6	10.6	2600.0			WL
	610	LEAR	4	S/F	2311.0E	2314.0	12.0D	38.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	2312.0E	2312.0	1.0D	37.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	2312.0E	2313.0	8.0D	180.0			QL=1 ST=2 TYP=5
	410	LEAR	8	S	2312.0E	2313.0	2.0D	62.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	2312.0E	2312.0	2.0D	57.0			QL=1 ST=2 TYP=3
	8800	PALE	4	S/F	2318.0E	2318.0	3.0D	78.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	2319.0E	2319.0	1.0D	560.0			QL=1 ST=2 TYP=6
	245	LEAR	8	S	2320.0E	2320.0	U	360.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	2331.0E	2331.0	1.0D	670.0			QL=1 ST=2 TYP=6
	15400	LEAR	8	S	2333.0E	2335.0	2.0D	85.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	2338.0E	2339.0	1.0D	98.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	2338.0E	2339.0	1.0D	600.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	2338.0E	2339.0	1.0D	940.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	2338.0E	2339.0	1.0D	150.0			QL=1 ST=3 TYP=3
	15400	LEAR	4	S/F	2347.0E	2347.0	3.0D	26.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	2349.0E	2350.0	1.0D	540.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	2349.0E	2349.0	1.0D	860.0			QL=1 ST=2 TYP=6
	245	LEAR	49	GB	2350.0E	2350.0	U	540.0			QL=1 ST=2 TYP=6
	410	LEAR	8	S	2350.0E	2350.0	U	51.0			QL=1 ST=2 TYP=3
10	100	GORK	44	NS	0424.0E		476.0D		9.0		
	221	ABST	43	NS	0500.0		240.0		225.0		
	410	SVTO	44	NS	0529.0E	0556.0	660.0D	330.0			QL=1 ST=2 TYP=1
	245	SVTO	44	NS	0529.0E	0556.0	660.0D	1100.0			QL=1 ST=2 TYP=1
	234	POTS	44	NS	0550.0E	1505.0	566.0D	220.0			
	204	IZMI	43	NS	0600.0		360.0	100.0			
	33	UPIC	43	NS	0633.0		502.8				
	127	TORN	44	NS	0700.0E		480.0D		370.0		V=2
	260	ONDR	44	NS	0700.0E		500.0D				
	600	HUMN	44	NS	0700.0E		600.0D				
	430	KRAK	44	NS	0809.0E	0822.5	217.0D	97.0	19.0		
	245	SGMR	43	NS	1125.0	2114.0	657.0D	770.0			QL=1 ST=2 TYP=1
	410	SGMR	43	NS	1821.0	1911.0	241.0D	92.0			QL=1 ST=2 TYP=1
	245	PALE	44	NS	1850.0E	2201.0	310.0D	830.0			QL=1 ST=3 TYP=1
	610	SGMR	43	NS	1911.0	1910.0	191.0D	90.0			QL=1 ST=2 TYP=1
	100	HIRA	44	NS	2055.0E	0217.0	700.0D	2700.0	1160.0		SL

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

MARCH 1989

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	500	HIRA	44	NS	2055.0E	0051.0	700.0D	228.0	64.0		ML
	200	HIRA	44	NS	2055.0E	0218.0	700.0D	930.0	404.0		SL
	610	LEAR	44	NS	2241.0E	0043.0	706.0D	150.0			QL=1 ST=2 TYP=1
	410	LEAR	44	NS	2241.0E	0204.0	706.0D	290.0			QL=1 ST=2 TYP=1
	245	LEAR	44	NS	2241.0E	0054.0	706.0D	930.0			QL=1 ST=2 TYP=1
	410	PALE	44	NS	2337.0E	0051.0	286.0D	190.0			QL=1 ST=2 TYP=1
	610	PALE	44	NS	2337.0E	0051.0	286.0D	87.0			QL=1 ST=2 TYP=1
	245	LEAR	49	GB	0016.0E	0022.0	8.0D	570.0			QL=1 ST=3 TYP=7
	245	PALE	49	GB	0022.0E	0022.0	2.0D	620.0			QL=1 ST=2 TYP=6
	245	LEAR	49	GB	0033.0E	0033.0	U	560.0			QL=1 ST=2 TYP=6
	610	LEAR	8	S	0037.0E	0037.0	1.0D	23.0			QL=1 ST=3 TYP=3
	15400	LEAR	8	S	0037.0E	0037.0	1.0D	100.0			QL=1 ST=2 TYP=3
	200	HIRA	42	SER	0039.6	0040.3	4.6	330.0			WL
	245	LEAR	49	GB	0101.0E	0101.0	1.0D	1100.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0101.0E	0101.0	U	1600.0			QL=1 ST=2 TYP=6
	200	HIRA	46	C	0101.2	0101.5	1.5	9400.0			WL
	100	HIRA	42	SER	0101.3	0101.4	18.5	7700.0			WL
	245	LEAR	49	GB	0107.0E	0108.0	1.0D	1500.0			QL=1 ST=2 TYP=6
	410	LEAR	8	S	0107.0E	0108.0	2.0D	420.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0107.0E	0107.0	2.0D	1800.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	0109.0E	0109.0	U	380.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0113.0E	0113.0	U	530.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0114.0E	0114.0	1.0D	2900.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	0114.0E	0114.0	1.0D	200.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0115.0E	0115.0	U	2400.0			QL=1 ST=2 TYP=6
	410	LEAR	8	S	0115.0E	0115.0	U	100.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0121.0E	0121.0	1.0D	180.0			QL=1 ST=2 TYP=3
	100	HIRA	42	SER	0134.0	0239.1	73.0	10000.0D			
	245	PALE	8	S	0137.0E	0137.0	1.0D	480.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0145.0E	0146.0	1.0D	2000.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0145.0E	0145.0	1.0D	2200.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0200.0E	0201.0	1.0D	5400.0			QL=1 ST=2 TYP=6
	200	HIRA	42	SER	0201.0	0414.9	145.0	7000.0			WL
	15400	LEAR	8	S	0202.0E	0202.0	U	14.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0202.0E	0203.0	3.0D	23.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0225.0E	0226.0	1.0D	880.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0231.0E	0232.0	1.0D	1000.0			QL=1 ST=2 TYP=6
	15400	PALE	8	S	0234.0E	0236.0	2.0D	190.0			QL=1 ST=2 TYP=3
	8800	PALE	4	S/F	0234.0E	0236.0	3.0D	140.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0235.0E	0236.0	6.0D	130.0			QL=1 ST=2 TYP=3
	4995	LEAR	4	S/F	0235.0E	0236.0	10.0D	55.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	0235.0E	0235.0	10.0D	240.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0236.0E	0239.0	6.0D	20000.0			QL=1 ST=2 TYP=6
	410	LEAR	8	S	0258.0E	0258.0	U	37.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0258.0E	0258.0	U	460.0			QL=1 ST=2 TYP=3
	100	HIRA	42	SER	0314.5	0315.2	76.0	7400.0			WL
	245	PALE	49	GB	0336.0E	0342.0	11.0D	1400.0			QL=1 ST=2 TYP=7
	410	LEAR	4	S/F	0342.0E	0344.0	3.0D	170.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0342.0E	0342.0	3.0D	950.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	0343.0E	0344.0	1.0D	250.0			QL=1 ST=2 TYP=3
	500	HIRA	46	C	0343.5	0344.5	1.1	175.0			WL
	610	LEAR	8	S	0344.0E	0344.0	1.0D	100.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0414.0E	0414.0	1.0D	870.0			QL=1 ST=2 TYP=6
	245	LEAR	49	GB	0415.0E	0415.0	U	580.0			QL=1 ST=2 TYP=6
	200	GORK	41	F	0424.2	0425.2	8.7	900.0			
	200	GORK	41	F	0424.2	0431.3		1600.0			
	200	GORK	41	F	0424.2	0428.8		800.0			
	950	GORK	23	GRF	0455.0	0521.0	129.0	11.0			
	9100	GORK	23	GRF	0456.9	1120.1	483.0D	140.0			
	650	GORK	22	GRF	0500.0E	1027.0	420.0D	60.0			
	9300	KISV	22	GRF	0520.0	0539.1	40.5	28.0			
	15000	KISV	22	GRF	0522.0	0529.7	427.0	45.0			
	15000	KISV	46	C	0534.0	0540.0		26.0			
	15000	KISV	46	C	0534.0	0537.3	12.0	35.0			
	15000	KISV	46	C	0534.0	0538.6		28.0			
	5900	KISV	20	GRF	0534.2	0535.9	11.8	8.0			
	950	GORK	8	S	0542.5	0542.6	0.3	13.5			
	15000	KISV	2	S/F	0547.7	0548.0	0.5	9.0			
	245	LEAR	49	GB	0556.0E	0556.0	U	910.0			QL=1 ST=2 TYP=6

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

MARCH 1989

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	100	GORK	4	S/F	0556.3	0556.4	0.5	1400.0			
	950	GORK	8	S	0557.2	0557.3	0.3	15.0			
	245	SVTO	49	GB	0559.0E	0603.0	5.0D	1100.0			QL=1 ST=2 TYP=7
	245	LEAR	49	GB	0603.0E	0603.0	1.0D	870.0			QL=1 ST=2 TYP=6
	9300	KISV	22	GRF	0604.0	0611.8	179.0	28.0			
	5900	KISV	25	R	0605.2	0611.9	415.0	21.0			
	100	GORK	4	S/F	0607.7	0608.5	2.0	4500.0			
	1415	LEAR	8	S	0612.0E	0613.0	1.0D	160.0			QL=1 ST=2 TYP=3
	1415	SVTO	8	S	0612.0E	0613.0	1.0D	100.0			QL=1 ST=2 TYP=3
	950	GORK	41	F	0620.6	0625.1		38.0			
	950	GORK	41	F	0620.6	0622.6		13.0			
	950	GORK	41	F	0620.6	0620.8	4.7	34.0			
	15000	KISV	46	C	0633.2	0640.0	16.5	97.0			
	15000	KISV	46	C	0633.2	0634.5		67.0			
	15000	KISV	46	C	0633.2	0641.8		58.0			
	15400	LEAR	8	S	0634.0E	0634.0	1.0D	63.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	0634.0E	0634.0	1.0D	89.0			QL=1 ST=2 TYP=3
	100	GORK	4	S/F	0634.0	0634.6	1.5	1250.0			
	9300	KISV	46	C	0637.4	0640.0	12.3	95.0			
	9300	KISV	46	C	0637.4	0645.5		37.0			
	9300	KISV	46	C	0637.4	0641.6		53.0			
	4995	LEAR	4	S/F	0639.0E	0640.0	3.0D	43.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0639.0E	0640.0	3.0D	81.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	0639.0E	0640.0	3.0D	69.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	0639.0E	0640.0	1.0D	91.0			QL=1 ST=2 TYP=3
	5900	KISV	46	C	0639.5	0647.1		6.0			
	5900	KISV	46	C	0639.5	0640.1	8.8	52.0			
	5900	KISV	46	C	0639.5	0642.5		16.0			
	5900	KISV	46	C	0639.5	0645.6		12.0			
	5900	KISV	46	C	0639.5	0641.8		27.0			
	3013	IZMI	42	SER	0639.6	0640.2	6.0	13.0			
	3100	CRIM	1	S	0639.7	0640.2	3.3	7.0	2.0		
	2950	GORK	4	S/F	0639.7	0640.2	4.8	9.3			
	9100	GORK	46	C	0639.8	0640.1	7.1	94.0			
	9100	GORK	46	C	0639.8	0641.6		49.0			
	100	HIRA	41	F	0646.9	0654.8	11.2	2300.0			ML
	200	GORK	41	F	0647.4	0703.5		7000.0			
	200	GORK	41	F	0647.4	0654.7		2000.0			
	200	GORK	41	F	0647.4	0652.7		2000.0			
	200	GORK	41	F	0647.4	0649.8	16.5	1800.0			
	15000	KISV	2	S/F	0653.7	0654.0	2.1	49.0			
	15400	SVTO	8	S	0654.0E	0654.0	U	62.0			QL=1 ST=2 TYP=3
	15000	KISV	2	S/F	0656.1	0656.5	0.9	14.0			
	100	GORK	46	C	0656.4	0657.0		3500.0			
	9300	KISV	22	GRF	0656.4	0656.6	19.9	9.0			
	100	GORK	46	C	0656.4	0656.7	1.7	4400.0			
	950	GORK	46	C	0657.7	0658.2	5.6	15.5			
	950	GORK	46	C	0657.7	0659.6		89.0			
	15000	KISV	2	S/F	0659.0	0659.4	3.0	20.0			
	5900	KISV	2	S/F	0659.1	0659.4	1.2	23.0			
	3100	CRIM	1	S	0659.2	0659.5	1.0	11.0	4.0		
	2950	GORK	1	S	0659.2	0659.5	1.6	13.0			
	3013	IZMI	5	S	0659.2	0659.5	1.0	9.0	5.0		
	9300	KISV	2	S/F	0659.2	0659.5	2.8	23.0			
	100	HIRA	48	C	0701.3	0702.0	4.8	8600.0	1040.0		WL
	200	HIRA	46	C	0702.0	0703.3	2.0	430.0			WL
	100	GORK	4	S/F	0702.5	0703.4	3.9	18500.0			
	204	IZMI	41	F	0703.0	0703.5	1.8	1600.0			
	9300	KISV	2	S/F	0704.8	0706.7	2.7	17.0			
	245	LEAR	49	GB	0706.0E	0706.0	1.0D	700.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	0706.0E	0706.0	6.0D	1100.0			QL=1 ST=2 TYP=7
	9300	KISV	46	C	0718.1	0719.4	3.9	14.0			
	5900	KISV	2	S/F	0718.3	0720.0	8.5	5.0			
	950	GORK	23	GRF	0727.0	0909.0	273.0D	9.5			
	9300	KISV	45	C	0727.8	0734.0	8.3	21.0			
	9300	KISV	45	C	0727.8	0828.0		10.0			
	5900	KISV	23	GRF	0727.8	0728.1		8.0			
	5900	KISV	23	GRF	0727.8	0733.9	11.4	30.0			
	2950	GORK	1	S	0732.0	0734.3	4.4	5.5	2.5		

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

MARCH 1989

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	9500	POTS	3	S	0733.5	0734.0	1.5	30.0			
	9100	GORK	1	S	0733.5	0734.1	1.9	46.0			
	15000	KISV	2	S/F	0733.6	0733.9	1.2	49.0			
	245	SVTO	8	S	0734.0E	0734.0	U	90.0			QL=1 ST=2 TYP=3
	536	ONDR	41	F	0740.0	1509.3	450.0	67.0			
	9300	KISV	4	S/F	0741.5	0749.3	14.2	102.0			
	9300	KISV	29	PBI	0741.5	0755.9	42.7	31.0			
	5900	KISV	4	S/F	0741.6	0749.2	18.4	88.0			
	15000	KISV	46	C	0741.7	0816.2		27.0			
	15000	KISV	46	C	0741.7	0812.4		29.0			
	15000	KISV	46	C	0741.7	0743.5		26.0			
	15000	KISV	46	C	0741.7	0803.6		27.0			
	15000	KISV	46	C	0741.7	0806.6		38.0			
	15000	KISV	46	C	0741.7	0747.6	39.9	62.0			
	9100	GORK	46	C	0741.8	0749.3		77.0			
	9100	GORK	46	C	0741.8	0743.7	13.0	48.0			
	8800	LEAR	4	S/F	0742.0E	0749.0	15.0D	70.0			QL=1 ST=2 TYP=3
	9500	POTS	21	GRF	0742.0	0807.0	63.0	89.0			
	4995	LEAR	4	S/F	0743.0E	0750.0	17.0D	56.0			QL=1 ST=2 TYP=3
	410	LEAR	4	S/F	0744.0E	0745.0	3.0D	52.0			QL=1 ST=2 TYP=3
	245	SVTO	4	S/F	0744.0E	0746.0	8.0D	200.0			QL=1 ST=2 TYP=3
	3000	POTS	40	F	0745.0	0808.4	45.0	41.0			
	2950	GORK	21	GRF	0745.0	0804.5	75.0	12.8			
	15400	LEAR	4	S/F	0747.0E	0748.0	8.0D	39.0			QL=1 ST=2 TYP=3
	8800	SVTO	4	S/F	0747.0E	0749.0	4.0D	85.0			QL=1 ST=2 TYP=3
	4995	LEAR	4	S/F	0800.0E	0808.0	20.0D	62.0			QL=1 ST=2 TYP=3
	1470	POTS	40	F	0800.0	0811.0	20.0	41.0			
	9300	KISV	46	C	0800.2	0811.0		82.0			
	9300	KISV	46	C	0800.2	0816.1		41.0			
	9300	KISV	46	C	0800.2	0818.6		36.0			
	9300	KISV	46	C	0800.2	0806.6	21.5	22.0			
	9100	GORK	46	C	0800.6	0811.0		80.0			
	9100	GORK	46	C	0800.6	0806.1	19.8	80.0			
	15400	LEAR	8	S	0801.0E	0802.0	2.0D	14.0			QL=1 ST=2 TYP=3
	950	GORK	46	C	0801.0	0811.1		27.0			
	950	GORK	46	C	0801.0	0808.1	12.2	59.0			
	3100	CRIM	45	C	0801.0	0808.3		22.0			
	3100	CRIM	45	C	0801.0	0806.4		22.0			
	5900	KISV	46	C	0801.0	0802.8		27.0			
	3100	CRIM	45	C	0801.0	0810.9		18.0			
	5900	KISV	46	C	0801.0	0810.9	12.5	46.0			
	3100	CRIM	45	C	0801.0	0802.9	20.0	11.0	7.0		
	8800	LEAR	4	S/F	0802.0E	0806.0	10.0D	67.0			QL=1 ST=2 TYP=5
	2950	GORK	1	S	0802.5	0803.0	0.8	9.2			
	3013	IZMI	40	F	0802.5	0808.4	18.0	17.0			
	2950	GORK	45	C	0805.9	0811.0		20.0			
	2950	GORK	45	C	0805.9	0808.3		26.0			
	2950	GORK	45	C	0805.9	0806.5	7.5	20.0			
	8800	SVTO	8	S	0806.0E	0806.0	2.0D	81.0			QL=1 ST=2 TYP=3
	4995	SVTO	8	S	0806.0E	0808.0	2.0D	55.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0807.0E	0808.0	1.0D	29.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0810.0E	0811.0	1.0D	44.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	0810.0E	0811.0	1.0D	76.0			QL=1 ST=2 TYP=3
	4995	SVTO	8	S	0810.0E	0811.0	1.0D	55.0			QL=1 ST=2 TYP=3
	810	KRAK	2	S/F	0810.3	0810.8	1.0	22.0	6.0		
	15000	KISV	2	S/F	0810.4	0810.9	1.2	56.0			
	950	GORK	46	C	0815.1	0816.3		7.0			
	950	GORK	46	C	0815.1	0815.3	2.5	4.0			
	5900	KISV	2	S/F	0815.7	0816.2	2.1	24.0			
	2950	GORK	1	S	0816.1	0816.3	0.7	7.3			
	5900	KISV	2	S/F	0817.7	0818.6	1.7	21.0			
	2950	GORK	1	S	0818.4	0818.6	0.9	3.6			
	4995	LEAR	8	S	0821.0E	0821.0	2.0D	23.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0822.0E	0822.0	2.0D	64.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0822.0E	0822.0	2.0D	160.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	0822.0E	0822.0	1.0D	64.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0822.0E	0822.0	2.0D	200.0			QL=1 ST=2 TYP=3
	100	GORK	46	C	0822.3	0822.4	1.6	3300.0			
	100	GORK	46	C	0822.3	0822.9		1400.0			

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

MARCH 1989

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	950	GORK	46	C	0822.6	0823.6		6.5			
	950	GORK	46	C	0822.6	0822.8	1.8	4.5			
	15000	KISV	2	S/F	0827.8	0828.9	3.8	13.0			
	245	SVTO	4	S/F	0828.0E	0835.0	13.0D	480.0			QL=1 ST=2 TYP=3
	100	GORK	46	C	0830.3	0843.0		3600.0			
	100	GORK	46	C	0830.3	0836.0	17.7	2900.0			
	100	GORK	46	C	0830.3	0846.1		2500.0			
	100	GORK	46	C	0830.3	0837.6		2250.0			
	950	GORK	8	S	0831.5	0831.9	0.6	14.0			
	410	SVTO	8	S	0834.0E	0836.0	2.0D	87.0			QL=1 ST=2 TYP=3
	5900	KISV	2	S/F	0836.6	0837.3	1.8	8.0			
	9300	KISV	2	S/F	0837.2	0837.3	0.5	4.0			
	5900	KISV	4	S/F	0849.5	0849.7	0.7	19.0			
	15000	KISV	2	S/F	0849.5	0849.8	0.6	13.0			
	9300	KISV	2	S/F	0849.5	0849.8	0.7	12.0			
	9300	KISV	22	GRF	0903.5	1010.0	236.5	20.0			
	15000	KISV	45	C	0904.8	0905.2		10.0			
	15000	KISV	45	C	0904.8	0906.4	2.3	12.0			
	9500	POTS	21	GRF	0905.0	0936.7	53.0	76.0			
	15000	KISV	45	C	0909.5	0916.5	9.8	30.0			
	15000	KISV	45	C	0909.5	0911.7		29.0			
	9300	KISV	28	PRE	0909.5	0913.9	4.5	23.0			
	5900	KISV	25	R	0909.7	0915.1		18.0			
	5900	KISV	25	R	0909.7	1047.5	230.3	30.0			
	9300	KISV	29	PBI	0913.9	0916.1	7.5	33.0			
	9300	KISV	4	S/F	0913.9	0914.9	2.1	55.0			
	9100	GORK	1	S	0914.0	0915.0	3.9	28.0			
	245	LEAR	49	GB	0925.0E	0925.0	U	600.0			QL=1 ST=2 TYP=6
	1470	POTS	40	F	0925.0	0937.1	20.0	11.0			
	2950	GORK	21	GRF	0928.0	0942.0	152.0	9.0			
	5900	KISV	46	C	0928.4	0939.3		49.0			
	5900	KISV	46	C	0928.4	0931.3	41.7	59.0			
	5900	KISV	46	C	0928.4	0936.5		55.0			
	9300	KISV	29	PBI	0928.5	0946.0	22.2	19.0			
	9300	KISV	46	C	0928.5	0931.3		61.0			
	9300	KISV	46	C	0928.5	0939.4		73.0			
	3100	CRIM	45	C	0928.5	0931.4	27.0	10.0	4.0		
	3100	CRIM	45	C	0928.5	0939.5		8.0			
	9300	KISV	46	C	0928.5	0936.5	17.5	74.0			
	3100	CRIM	45	C	0928.5	0936.6		11.0			
	9100	GORK	46	C	0928.7	0931.4	14.7	62.0			
	9100	GORK	46	C	0928.7	0939.5		62.0			
	9100	GORK	46	C	0928.7	0936.5		69.0			
	3000	POTS	21	GRF	0929.0	0936.5	31.0	21.0			
	15000	KISV	46	C	0929.2	0931.3		25.0			
	15000	KISV	46	C	0929.2	0939.4		28.0			
	3013	IZMI	41	F	0929.2	0931.5	11.0	13.0			
	15000	KISV	46	C	0929.2	0936.5	18.0	32.0			
	8800	SVTO	4	S/F	0930.0E	0931.0	3.0D	71.0			QL=1 ST=2 TYP=3
	2950	GORK	45	C	0931.0	1030.0	60.5	7.0			
	2950	GORK	45	C	0931.0	1039.5		5.4			
	2950	GORK	45	C	0931.0	1036.5		9.0			
	15400	LEAR	8	S	0938.0E	0939.0	2.0D	40.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0938.0E	0939.0	4.0D	46.0			QL=1 ST=2 TYP=3
	4995	LEAR	4	S/F	0939.0E	0939.0	3.0D	31.0			QL=1 ST=2 TYP=3
	9500	POTS	21	GRF	0939.5E	0939.5		76.0			
	245	LEAR	49	GB	0940.0E	0940.0	1.0D	590.0			QL=1 ST=2 TYP=6
	15000	KISV	2	S/F	0948.9	0949.1	0.7	9.0			
	15000	KISV	45	C	0952.9	0953.3	2.3	14.0			
	15000	KISV	2	S/F	0957.2	0957.7	1.5	10.0			
	5900	KISV	45	C	1011.0	1025.1	15.6	20.0			
	9300	KISV	22	GRF	1011.0	1029.2	127.0	45.0			
	5900	KISV	45	C	1011.0	1014.8		13.0			
	15000	KISV	2	S/F	1011.1	1012.3	8.8	24.0			
	9500	POTS	3	S	1014.5	1015.0	2.5	19.0			
	15000	KISV	2	S/F	1014.7	1014.8	0.4	6.0			
	15000	KISV	46	C	1021.5	1023.1		10.0			
	15000	KISV	46	C	1021.5	1025.1		21.0			
	15000	KISV	46	C	1021.5	1029.2	11.8	32.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

MARCH 1989

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	810	KRAK	41	F	1022.0	1023.0	9.0	15.0	5.0		
	950	GORK	46	C	1022.1	1023.1	5.5	15.0			
	950	GORK	46	C	1022.1	1025.5		11.0			
	9500	POTS	42	SER	1024.5	1029.3	11.0	30.0			
	5900	KISV	23	GRF	1027.4	1029.2	9.3	15.0			
	15400	SVTO	4	S/F	1030.0E	1038.0	8.0D	220.0			QL=1 ST=2 TYP=3
	100	GORK	8	S	1030.1	1030.2	0.3	5250.0			
	9500	POTS	4	S/F	1037.0	1038.3	8.0	121.0			
	15000	KISV	28	PRE	1037.0	1124.5	48.5	113.0			
	15000	KISV	4	S/F	1037.2	1038.1	1.6	276.0			
	9100	GORK	3	S	1037.2	1038.4	3.5	154.0			
	15000	KISV	29	PBI	1037.2	1038.9	8.3	41.0			
	9300	KISV	4	S/F	1037.4	1038.2	9.2	132.0			
	5900	KISV	21	GRF	1037.8	1038.2	7.9	25.0			
	8800	SVTO	8	S	1038.0E	1038.0	U	120.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	1038.0E	1038.0	U	220.0			QL=1 ST=2 TYP=3
	5900	KISV	45	C	1101.1	1126.5	57.5	155.0			
	9300	KISV	28	PRE	1101.3	1125.4	24.3	92.0			
	3000	POTS	42	SER	1106.0	1122.5	24.0	17.0			
	9500	POTS	45	C	1110.0U	1226.6	95.0D	232.0U			
	3013	IZMI	40	F	1112.2	1122.5	15.0	17.0			
	950	GORK	4	S/F	1112.7	1115.0	2.7	45.0			
	8800	SVTO	8	S	1113.0E	1114.0	2.0D	64.0			QL=1 ST=2 TYP=3
	3100	CRIM	42	SER	1113.6	1114.1	15.0	5.0	2.0		
	3100	CRIM	42	SER	1113.6	1115.2		6.0			
	3100	CRIM	42	SER	1113.6	1122.4		14.0			
	3100	CRIM	42	SER	1113.6	1127.5		9.0			
	2950	GORK	1	S	1113.7	1115.1	11.7	6.0			
	1470	POTS	40	F	1115.0	1122.6	15.0	690.0			
	15400	SVTO	4	S/F	1120.0E	1126.0	22.0D	250.0			QL=1 ST=2 TYP=3
	2950	GORK	1	S	1121.1	1121.5	0.9	18.0			
	4995	SVTO	8	S	1122.0E	1122.0	U	72.0			QL=1 ST=2 TYP=3
	9100	GORK	4	S/F	1122.1	1126.5	10.7	320.0			
	9300	KISV	4	S/F	1122.2	1122.4	0.8	49.0			
	9300	KISV	4	S/F	1123.0	1124.5	2.4	42.0			
	9300	KISV	29	PBI	1125.7	1133.3	27.1	99.0			
	9300	KISV	4	S/F	1125.7	1126.4	7.6	288.0			
	15000	KISV	45	C	1125.8	1126.5	3.1	221.0			
	15000	KISV	45	C	1125.8	1127.9		86.0			
	15000	KISV	29	PBI	1125.8	1128.9	41.0	43.0			
	2950	GORK	1	S	1126.3	1126.5	1.2	11.0			
	100	GORK	8	S	1135.3	1135.5	0.4	15400.0			
	15000	KISV	2	S/F	1153.9	1155.1	2.5	19.0			
	3000	POTS	3	S	1200.5	1203.0	13.0	17.0			
	3100	CRIM	1	S	1200.8	1203.3	9.2	11.0	4.0		
	1470	POTS	40	F	1201.0	1203.5	9.0	41.0			
	2950	GORK	4	S/F	1201.0	1202.8	10.6	16.0			
	9300	KISV	22	GRF	1201.1	1203.3	10.0	25.0			
	5900	KISV	46	C	1202.0E	1202.7	8.5U	29.0			
	810	KRAK	8	S	1203.5	1203.6	1.2	26.0			
	810	KRAK	8	S	1205.8	1205.9	0.5	15.0			
	245	SGMR	49	GB	1218.0E	1219.0	1.0D	1300.0			QL=1 ST=2 TYP=6
	9500	POTS	20	GRF	1301.0	1311.0	44.0	40.0			
	410	SGMR	8	S	1337.0E	1337.0	U	110.0			QL=1 ST=2 TYP=3
	234	POTS	41	F	1338.8	1348.3	16.0	350.0			
	245	SGMR	49	GB	1339.0E	1342.0	5.0D	1900.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	1341.0E	1342.0	3.0D	1300.0			QL=1 ST=2 TYP=6
	410	SVTO	8	S	1342.0E	1343.0	2.0D	150.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	1343.0E	1343.0	U	95.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1347.0E	1349.0	4.0D	810.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1352.0E	1352.0	1.0D	720.0			QL=1 ST=2 TYP=6
	2800	OTTA	4	S/F	1353.6	1359.5	33.0	36.6	11.0		
	810	KRAK	2	S/F	1358.0	1400.2	2.5	41.0	11.0		
	9500	POTS	4	S/F	1358.0	1359.5	7.0	21.0			
	1470	POTS	4	S/F	1358.0	1401.5	6.0	56.0			
	3000	POTS	4	S/F	1358.0	1359.5	3.0	36.0			
	4995	SGMR	8	S	1359.0E	1359.0	1.0D	95.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	1359.0E	1359.0	U	73.0			QL=1 ST=2 TYP=3
	4995	SVTO	8	S	1359.0E	1359.0	1.0D	83.0			QL=1 ST=2 TYP=3

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

MARCH 1989

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	127	TORN	27	RF	1428.5		29.0		1600.0D		
	9500	POTS	20	GRF	1430.0	1446.3	29.0	18.0			
	245	SVTO	49	GB	1446.0E	1508.0	48.0D	630.0			QL=1 ST=2 TYP=7
	245	SGMR	49	GB	1447.0E	1508.0	25.0D	1000.0			QL=1 ST=2 TYP=7
	410	SVTO	20	GRF	1448.0E	1506.0	39.0D	88.0			QL=1 ST=2 TYP=2
	8800	SVTO	49	GB	1505.0E	1526.0	36.0D	1200.0			QL=1 ST=2 TYP=7
	1415	SGMR	49	GB	1522.0E	1522.0	1.0D	780.0			QL=1 ST=2 TYP=6
	4995	SVTO	4	S/F	1522.0E	1526.0	8.0D	300.0			QL=1 ST=2 TYP=3
	1415	SVTO	49	GB	1522.0E	1522.0	1.0D	560.0			QL=1 ST=2 TYP=6
	8800	SGMR	49	GB	1522.0E	1526.0	10.0D	1300.0			QL=1 ST=2 TYP=6
	15400	SGMR	49	GB	1522.0E	1526.0	518.0D	2300.0			QL=1 ST=1 TYP=6
	2800	OTTA	4	S/F	1522.2	1526.7	11.0	67.0	20.0		
	4995	SGMR	4	S/F	1523.0E	1526.0	6.0D	330.0			QL=1 ST=2 TYP=3
	15400	SVTO	49	GB	1523.0E	1526.0	6.0D	1800.0			QL=1 ST=2 TYP=6
	11800	BERN	4	S/F	1523.0	1526.3	6.0	1480.0			
	35000	BERN	4	S/F	1523.0	1526.3	6.0	640.0			
	19600	BERN	4	S/F	1523.0	1526.3	6.0	1400.0			
	5200	BERN	4	S/F	1523.0	1526.3	6.0	230.0			
	8400	BERN	4	S/F	1523.0	1526.3	6.0	770.0			
	3200	BERN	4	S/F	1523.0	1526.3	6.0	101.0			
	50000	BERN	4	S/F	1523.0	1526.3	6.0	435.0			
	600	HUMN	2	S/F	1524.0	1525.0	1.5	30.0	8.0		
	2695	SGMR	8	S	1526.0E	1526.0	1.0D	68.0			QL=1 ST=2 TYP=3
	2695	SVTO	8	S	1526.0E	1526.0	1.0D	70.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	1556.7	1559.0	6.3	48.9	14.0		
	4995	SGMR	8	S	1558.0E	1558.0	1.0D	120.0			QL=1 ST=2 TYP=3
	600	HUMN	8	S	1640.5	1640.6	0.3	180.0	90.0		
	2800	OTTA	4	S/F	1644.0	1647.3	17.0D	35.5	11.0		
	410	SGMR	8	S	1645.0E	1647.0	2.0D	150.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1645.0E	1647.0	2.0D	1000.0			QL=1 ST=2 TYP=6
	600	HUMN	2	S/F	1645.0	1647.5	3.0	40.0	10.0		
	2800	OTTA	28	PRE	1710.0	1759.3	120.0	11.8	6.0		
	245	PALE	49	GB	1721.0E	1722.0	8.0D	19000.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1722.0E	1722.0	1.0D	23000.0			QL=1 ST=2 TYP=6
	8800	PALE	8	S	1735.0E	1735.0	U	130.0			QL=1 ST=2 TYP=3
	15400	PALE	8	S	1735.0E	1735.0	U	83.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	1735.0E	1735.0	U	140.0			QL=1 ST=2 TYP=3
	610	PALE	8	S	1740.0E	1740.0	U	88.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	1741.0E	1741.0	1.0D	1100.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	1741.0E	1742.0	5.0D	1400.0			QL=1 ST=2 TYP=6
	410	SGMR	49	GB	1742.0E	1742.0	2.0D	970.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	1751.0E	1752.0	3.0D	550.0			QL=1 ST=2 TYP=6
	2800	OTTA	47	GB	1759.4	2011.0	143.0	7608.0	2280.0		
	245	PALE	49	GB	1855.0E	1855.0	1.0D	6200.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1855.0E	1856.0	2.0D	8000.0			QL=1 ST=2 TYP=6
	8800	SGMR	49	GB	1858.0E	1903.0	121.0D	22000.0			QL=1 ST=2 TYP=7
	8800	PALE	49	GB	1858.0E	1934.0	135.0D	20000.0			QL=1 ST=2 TYP=7
	15400	PALE	49	GB	1858.0E	1912.0	142.0D	25000.0			QL=1 ST=2 TYP=7
	15400	SGMR	49	GB	1859.0E	1912.0	125.0D	25000.0			QL=1 ST=2 TYP=7
	4995	SGMR	49	GB	1859.0E	1943.0	130.0D	25000.0			QL=1 ST=2 TYP=7
	4995	PALE	49	GB	1859.0E	1943.0	141.0D	16000.0			QL=1 ST=2 TYP=7
	2695	PALE	49	GB	1859.0E	2011.0	141.0D	10000.0			QL=1 ST=2 TYP=7
	2695	SGMR	49	GB	1900.0E	2011.0	129.0D	12000.0			QL=1 ST=2 TYP=7
	1415	PALE	49	GB	1902.0E	2014.0	138.0D	3600.0			QL=1 ST=2 TYP=7
	1415	SGMR	49	GB	1903.0E	2013.0	126.0D	4100.0			QL=1 ST=2 TYP=7
	610	SGMR	49	GB	1909.0E	1934.0	120.0D	1300.0			QL=1 ST=2 TYP=7
	610	PALE	49	GB	1910.0E	1933.0	119.0D	1100.0			QL=1 ST=2 TYP=7
	410	PALE	49	GB	1910.0E	1928.0	130.0D	1100.0			QL=1 ST=2 TYP=7
	410	SGMR	49	GB	1911.0E	1929.0	118.0D	1000.0			QL=1 ST=2 TYP=7
	245	SGMR	49	GB	1914.0E	1920.0	16.0D	12000.0			QL=1 ST=2 TYP=7
	245	PALE	49	GB	1914.0E	1919.0	126.0D	9800.0			QL=1 ST=2 TYP=7
	2800	OTTA	29	PBI	2123.0	2123.0	240.0D	128.8	51.0		
	2800	OTTA	4	S/F	2133.5	2135.5	7.0	281.9	65.0		
	2695	SGMR	8	S	2135.0E	2135.0	2.0D	140.0			QL=1 ST=2 TYP=3
	4995	SGMR	8	S	2135.0E	2135.0	2.0D	230.0			QL=1 ST=2 TYP=3
	1415	SGMR	8	S	2135.0E	2135.0	2.0D	110.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	2143.0	2147.0	7.3	108.2	32.0		
11	200	GORK	44	NS	0445.0E		200.0D		70.0		

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

MARCH 1989

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	100	GORK	44	NS	0445.0E		435.0D		1600.0		
	221	ABST	43	NS	0500.0		240.0		150.0		
	245	SVTO	44	NS	0527.0E	1622.0	663.0D	750.0			QL=1 ST=2 TYP=1
	410	SVTO	44	NS	0527.0E	1627.0	663.0D	620.0			QL=1 ST=2 TYP=1
	204	IZMI	43	NS	0600.0		360.0	100.0			
	33	UPIC	44	NS	0600.0E		600.0D				
	260	ONDR	44	NS	0700.0E		520.0D				
	600	HUMN	44	NS	0730.0E		600.0D				
	430	KRAK	44	NS	0815.0E	1127.5	347.0D	230.0D	18.0		
	410	SGMR	43	NS	1123.0	1128.0	757.0	420.0			QL=1 ST=1 TYP=1
	245	SGMR	43	NS	1123.0	1636.0	757.0	1300.0			QL=1 ST=3 TYP=1
	610	SGMR	43	NS	1123.0	1126.0	757.0	80.0			QL=1 ST=1 TYP=1
	245	SGMR	44	NS	1126.0E	1128.0	2.0D	500.0			QL=1 ST=3 TYP=1
	410	SGMR	44	NS	1126.0E	1127.0	1.0D	420.0			QL=1 ST=3 TYP=1
	610	SGMR	44	NS	1126.0E	1126.0	U	80.0			QL=1 ST=3 TYP=1
	810	KRAK	43	NS	1319.0	1323.2	42.0D	19.0	5.0		
	410	SGMR	43	NS	1511.0	1626.0	529.0	470.0			QL=1 ST=3 TYP=1
	610	SGMR	43	NS	1511.0	1629.0	529.0	420.0			QL=1 ST=3 TYP=1
	610	PALE	44	NS	1700.0E	1738.0	684.0D				QL=1 ST=2 TYP=1
	410	PALE	44	NS	1700.0E	1748.0	684.0D				QL=1 ST=2 TYP=1
	245	PALE	44	NS	1700.0E	1918.0	684.0D				QL=1 ST=2 TYP=1
	500	HIRA	44	NS	2055.0E	2125.0	700.0D	128.0	50.0		ML
	200	HIRA	44	NS	2055.0E	2140.0	700.0D	1300.0	372.0		SL
	100	HIRA	44	NS	2055.0E	2330.0	700.0D	640.0	540.0		SL
	410	LEAR	44	NS	2241.0E	0702.0	705.0D	6000.0			QL=1 ST=2 TYP=1
	245	LEAR	44	NS	2241.0E	0228.0	705.0D	800.0			QL=1 ST=2 TYP=1
	100	HIRA	41	F	0012.5	0015.7	5.3	13000.0			O
	200	HIRA	41	F	0013.9	0015.4	4.0	8000.0			O
	245	LEAR	49	GB	0015.0E	0015.0	3.0D	4200.0			QL=1 ST=3 TYP=6
	410	LEAR	49	GB	0015.0E	0015.0	2.0D	510.0			QL=1 ST=3 TYP=6
	410	PALE	49	GB	0015.0E	0015.0	1.0D	620.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0015.0E	0015.0	1.0D	5300.0			QL=1 ST=3 TYP=6
	410	LEAR	8	S	0033.0E	0033.0	1.0D	250.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0033.0E	0033.0	1.0D	78.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0033.0E	0033.0	1.0D	170.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0033.0E	0034.0	1.0D	62.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0033.0E	0034.0	1.0D	73.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0034.0E	0034.0	U	51.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0149.0E	0153.0	4.0D	1400.0			QL=1 ST=2 TYP=6
	245	LEAR	49	GB	0152.0E	0153.0	5.0D	860.0			QL=1 ST=2 TYP=6
	410	LEAR	4	S/F	0152.0E	0154.0	5.0D	260.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	0153.0E	0154.0	1.0D	160.0			QL=1 ST=3 TYP=3
	8800	PALE	8	S	0208.0E	0209.0	2.0D	85.0			QL=1 ST=2 TYP=3
	15400	PALE	8	S	0209.0E	0209.0	U	74.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0302.0E	0303.0	3.0D	60.0			QL=1 ST=2 TYP=3
	2695	LEAR	4	S/F	0302.0E	0304.0	3.0D	44.0			QL=1 ST=2 TYP=3
	4995	LEAR	4	S/F	0302.0E	0303.0	3.0D	11.0			QL=1 ST=2 TYP=3
	1415	LEAR	4	S/F	0302.0E	0304.0	3.0D	32.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0303.0E	0303.0	1.0D	17.0			QL=1 ST=2 TYP=3
	200	HIRA	42	SER	0324.7	0331.0	14.5	9500.0			WL
	4995	LEAR	4	S/F	0330.0E	0331.0	4.0D	20.0			QL=1 ST=2 TYP=3
	15400	PALE	8	S	0330.0E	0331.0	1.0D	110.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0331.0E	0331.0	U	94.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0331.0E	0331.0	U	33.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0331.0E	0331.0	1.0D	240.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0331.0E	0331.0	1.0D	580.0			QL=1 ST=2 TYP=6
	610	LEAR	4	S/F	0331.0E	0331.0	3.0D	160.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	0331.0E	0331.0	U	280.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0331.0E	0331.0	U	830.0			QL=1 ST=2 TYP=6
	610	PALE	8	S	0331.0E	0331.0	U	150.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0338.0E	0339.0	1.0D	700.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0338.0E	0338.0	U	1100.0			QL=1 ST=2 TYP=6
	410	PALE	49	GB	0357.0E	0359.0	3.0D	760.0			QL=1 ST=2 TYP=6
	410	LEAR	8	S	0430.0E	0431.0	2.0D	260.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0430.0E	0431.0	1.0D	14.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0431.0E	0431.0	U	32.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0431.0E	0431.0	U	370.0			QL=1 ST=2 TYP=3
	650	GORK	23	GRF	0445.0E	0551.3	405.0D	47.0			
	950	GORK	23	GRF	0448.0E	0544.0	381.0D	30.0			

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

MARCH 1989

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	9100	GORK	23	GRF	0448.6		400.0D	400.0D			
	2950	GORK	2	S/F	0452.2	0453.3	3.9	6.5			
	2950	GORK	23	GRF	0501.3		390.0D				
	9300	KISV	47	GB	0502.3	0521.1	66.6	1350.0			
	5900	KISV	47	GB	0505.2	0521.1		794.0			
	5900	KISV	47	GB	0505.2	0518.3	61.0	805.0			
	15000	KISV	47	GB	0511.6	0521.0	42.5	1525.0			
	9100	GORK	47	GB	0512.0	0521.0		1480.0			
	4995	LEAR	4	S/F	0512.0E	0518.0	28.0D	480.0			QL=1 ST=2 TYP=3
	9100	GORK	47	GB	0512.0	0519.5	27.0	1300.0			
	1415	LEAR	4	S/F	0513.0E	0518.0	14.0D	61.0			QL=1 ST=2 TYP=3
	8800	LEAR	49	GB	0513.0E	0521.0	27.0D	1400.0			QL=1 ST=2 TYP=6
	950	GORK	46	C	0513.2	0518.7		60.0			
	950	GORK	46	C	0513.2	0516.8	23.0	60.0			
	3100	CRIM	3	S	0513.3	0518.4	9.5	130.0	43.0		
	3100	CRIM	29	PBI	0513.3	0522.8	21.0	52.0	17.0		
	2950	GORK	46	C	0514.0	0521.0		114.0			
	2950	GORK	46	C	0514.0	0530.0		47.0			
	2695	LEAR	4	S/F	0514.0E	0518.0	23.0D	150.0			QL=1 ST=2 TYP=3
	15400	LEAR	49	GB	0514.0E	0521.0	26.0D	1600.0			QL=1 ST=2 TYP=6
	2950	GORK	46	C	0514.0	0518.3	28.5	159.0			
	245	LEAR	49	GB	0520.0E	0520.0	U	3200.0			QL=1 ST=2 TYP=6
	410	SVTO	8	S	0528.0E	0528.0	2.0D	59.0			QL=1 ST=2 TYP=3
	4995	SVTO	4	S/F	0528.0E	0529.0	8.0D	220.0			QL=1 ST=2 TYP=3
	8800	SVTO	4	S/F	0528.0E	0529.0	29.0D	270.0			QL=1 ST=2 TYP=3
	245	SVTO	4	S/F	0528.0E	0542.0	41.0D	420.0			QL=1 ST=3 TYP=5
	2695	SVTO	4	S/F	0531.0E	0532.0	3.0D	90.0			QL=1 ST=2 TYP=3
	200	GORK	4	S/F	0542.2	0543.2	1.2	2000.0			
	15000	KISV	45	C	0600.2	0601.4		16.0			
	15000	KISV	45	C	0600.2	0603.7	7.3	25.0			
	9300	KISV	28	PRE	0613.5	0641.3	28.5	29.0			
	950	GORK	46	C	0621.2	0627.6		7.0			
	950	GORK	46	C	0621.2	0624.6	7.0	11.0			
	15000	KISV	2	S/F	0625.1	0625.2	0.4	18.0			
	15000	KISV	42	SER	0627.9	0629.0	1.7	9.0			
	15000	KISV	42	SER	0627.9	0628.0		5.0			
	5900	KISV	28	PRE	0630.7	0631.8	11.3	7.0			
	8800	LEAR	4	S/F	0637.0E	0645.0	19.0D	320.0			QL=1 ST=2 TYP=5
	9300	KISV	46	C	0639.3	0640.4		11.0			
	9300	KISV	46	C	0639.3	0639.5		9.0			
	9300	KISV	46	C	0639.3	0639.9	1.8	15.0			
	15400	LEAR	49	GB	0642.0E	0645.0	9.0D	970.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	0642.0E	0643.0	1.0D	540.0			QL=1 ST=2 TYP=6
	9300	KISV	4	S/F	0642.0	0646.0	17.2	326.0			
	4995	LEAR	4	S/F	0642.0E	0646.0	13.0D	91.0			QL=1 ST=2 TYP=3
	9300	KISV	29	PBI	0642.0	0659.2	56.6	46.0			
	5900	KISV	29	PBI	0642.0	0650.4	27.0	37.0			
	5900	KISV	45	C	0642.0	0646.7	8.3	139.0			
	5900	KISV	45	C	0642.0	0645.9		129.0			
	15000	KISV	47	GB	0642.3	0646.0	5.0	884.0			
	15000	KISV	29	PBI	0642.3	0647.3	9.0	131.0			
	410	SVTO	4	S/F	0643.0E	0644.0	4.0D	71.0			QL=1 ST=2 TYP=3
	9100	GORK	4	S/F	0644.0	0645.9	7.0	380.0			
	2695	LEAR	8	S	0645.0E	0646.0	2.0D	30.0			QL=1 ST=2 TYP=3
	9500	POTS	3	S	0645.0	0646.0	5.0	257.0U			
	15400	SVTO	49	GB	0645.0E	0646.0	1035.0D	920.0			QL=1 ST=1 TYP=6
	3000	POTS	3	S	0645.0	0646.7	3.5	28.0			
	8400	BERN	4	S/F	0645.1	0646.1	3.0	244.0			
	19600	BERN	4	S/F	0645.1	0646.1	3.0	830.0			
	35000	BERN	4	S/F	0645.1	0646.1	3.0	610.0			
	11800	BERN	4	S/F	0645.1	0646.1	3.0	550.0			
	5200	BERN	4	S/F	0645.1	0646.4	3.0	48.0			
	3200	BERN	4	S/F	0645.1	0646.4	3.0	30.0			
	2950	GORK	3	S	0645.1	0646.7	3.3	52.0			
	3013	IZMI	42	SER	0645.2	0646.8	30.0	36.0			
	3100	CRIM	3	S	0645.3	0646.8	5.0	27.0	8.0		
	650	GORK	8	S	0645.4	0645.7	0.4	90.0			
	950	GORK	8	S	0645.7	0645.8	0.5	42.0			
	15000	KISV	1	S	0647.9	0648.0	0.4	23.0			

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

MARCH 1989

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	9100	GORK	3	S	0653.8	0654.2	1.9	86.0			
	5900	KISV	2	S/F	0653.9	0654.3	1.0	25.0			
	2950	GORK	3	S	0654.0	0654.3	1.5	13.0			
	9300	KISV	2	S/F	0654.0	0654.3	1.2	26.0			
	9500	POTS	3	S	0654.0	0654.4	1.0	28.0			
	3000	POTS	3	S	0654.0	0654.4	2.0	13.0			
	200	GORK	4	S/F	0654.3	0654.8	0.6	1060.0			
	9300	KISV	23	GRF	0659.7	0708.5	18.0	65.0			
	950	GORK	4	S/F	0700.2	0703.0	6.5	81.0			
	5900	KISV	46	C	0700.2	0703.5		16.0			
	5900	KISV	46	C	0700.2	0708.5	17.0	74.0			
	650	GORK	4	S/F	0701.4	0703.3	7.2	86.0			
	2950	GORK	1	S	0701.5	0703.9	4.3	9.0			
	410	SVTO	4	S/F	0702.0E	0704.0	15.0D	110.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0705.0E	0705.0	1.0D	1400.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	0705.0E	0705.0	12.0D	1400.0			QL=1 ST=2 TYP=6
	100	GORK	8	S	0705.6	0705.8	0.5	13500.0			
	200	GORK	41	F	0705.6	0707.8		1200.0			
	200	GORK	41	F	0705.6	0705.8	8.0	4000.0			
	15400	LEAR	8	S	0707.0E	0708.0	2.0D	46.0			QL=1 ST=2 TYP=3
	410	LEAR	4	S/F	0707.0E	0707.0	7.0D	220.0			QL=1 ST=2 TYP=3
	4995	LEAR	4	S/F	0707.0E	0708.0	6.0D	51.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0707.0E	0708.0	3.0D	66.0			QL=1 ST=2 TYP=3
	9500	POTS	3	S	0707.2	0708.4	5.2	62.0			
	15000	KISV	4	S/F	0707.4	0708.5	4.0	65.0			
	9100	GORK	3	S	0707.5	0708.4	5.8	125.0			
	3000	POTS	3	S	0707.5	0708.5	3.5	17.0			
	2950	GORK	1	S	0707.7	0708.6	3.8	20.0			
	8800	SVTO	8	S	0708.0E	0708.0	1.0D	100.0			QL=1 ST=2 TYP=3
	4995	SVTO	8	S	0708.0E	0708.0	U	66.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	0708.0E	0708.0	U	60.0			QL=1 ST=2 TYP=3
	234	POTS	42	SER	0713.0	0725.6	17.0	880.0			
	15000	KISV	2	S/F	0719.7	0720.0	0.7	7.0			
	3000	POTS	42	SER	0723.0	0800.7	87.0	53.0			
	245	LEAR	49	GB	0724.0E	0725.0	1.0D	750.0			QL=1 ST=2 TYP=6
	410	LEAR	8	S	0724.0E	0725.0	1.0D	75.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	0724.0E	0725.0	1.0D	160.0			QL=1 ST=2 TYP=3
	1470	POTS	42	SER	0724.0	0844.8	86.0	70.0			
	30	POTS	4	S/F	0724.7	0725.5	1.9	14000.0D			
	200	GORK	4	S/F	0724.8	0725.8	2.1	2000.0			
	245	SVTO	49	GB	0725.0E	0725.0	1.0D	920.0			QL=1 ST=2 TYP=6
	100	GORK	8	S	0725.7	0725.8	0.2	5600.0			
	9300	KISV	4	S/F	0735.2	0740.9	8.8	53.0			
	9500	POTS	42	SER	0740.0	0842.0	70.0	245.0			
	15000	KISV	2	S/F	0740.3	0741.0	2.0	32.0			
	9100	GORK	1	S	0740.5	0741.0	2.2	50.0			
	9300	KISV	2	S/F	0745.4	0745.5	0.7	6.0			
	5900	KISV	2	S/F	0745.4	0745.6	1.0	6.0			
	5900	KISV	45	C	0752.4	0803.2		58.0			
	5900	KISV	45	C	0752.4	0800.7	28.3	126.0			
	15000	KISV	2	S/F	0752.5	0752.8	0.8	6.0			
	2950	GORK	45	C	0753.0	0757.0	22.0	17.0			
	2950	GORK	45	C	0753.0	0803.1		28.0			
	2950	GORK	45	C	0753.0	0800.6		48.0			
	3100	CRIM	45	C	0753.7	0803.1		22.0			
	3100	CRIM	45	C	0753.7	0757.1	17.3	15.0	13.0		
	3100	CRIM	45	C	0753.7	0800.6		38.0			
	3013	IZMI	40	F	0753.8	0800.5	17.0	41.0			
	9300	KISV	46	C	0756.2	0810.0		15.0			
	9300	KISV	46	C	0756.2	0803.1		45.0			
	9300	KISV	46	C	0756.2	0800.5	23.9	83.0			
	950	GORK	46	C	0758.3	0801.2	8.8	27.0			
	950	GORK	46	C	0758.3	0803.2		20.0			
	4995	LEAR	4	S/F	0759.0E	0800.0	4.0D	110.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0759.0E	0800.0	2.0D	37.0			QL=1 ST=2 TYP=3
	9100	GORK	46	C	0759.8	0803.0		32.0			
	9100	GORK	46	C	0759.8	0800.6	5.4	70.0			
	8800	LEAR	8	S	0800.0E	0800.0	U	84.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	0800.0E	0800.0	U	73.0			QL=1 ST=2 TYP=3

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

MARCH 1989

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	4995	SVTO	8	S	0800.0E	0800.0	1.0D	100.0			QL=1 ST=2 TYP=3
	15000	KISV	25	R	0800.1	1030.0	300.0	75.0			
	15000	KISV	25	R	0800.1	0800.6		19.0			
	245	LEAR	8	S	0809.0E	0810.0	1.0D	27.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0809.0E	0809.0	1.0D	17.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0809.0E	0810.0	1.0D	51.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0822.0E	0822.0	1.0D	78.0			QL=1 ST=2 TYP=3
	950	GORK	4	S/F	0822.0	0823.2	8.3	14.0			
	9300	KISV	47	GB	0825.6	0842.0		313.0			
	9300	KISV	47	GB	0825.6	0901.6	45.0	1717.0			
	9300	KISV	47	GB	0825.6	0827.8		61.0			
	8800	LEAR	8	S	0827.0E	0827.0	2.0D	38.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0827.0E	0827.0	2.0D	57.0			QL=1 ST=2 TYP=3
	15000	KISV	4	S/F	0827.6	0827.8	1.5	94.0			
	5900	KISV	2	S/F	0827.7	0827.8	0.4U	15.0			
	100	GORK	47	GB	0830.0	0839.1		3700.0			
	100	GORK	47	GB	0830.0	0831.6	9.9	23000.0			
	5900	KISV	4	S/F	0836.6	0842.0	13.0	193.0			
	15000	KISV	4	S/F	0836.6	0841.7	15.5	326.0			
	9100	GORK	4	S/F	0837.4	0842.0	9.2	316.0			
	8800	LEAR	4	S/F	0839.0E	0841.0	5.0D	230.0			QL=1 ST=2 TYP=3
	4995	LEAR	4	S/F	0839.0E	0841.0	5.0D	110.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	0839.0E	0841.0	5.0D	210.0			QL=1 ST=2 TYP=3
	2695	LEAR	4	S/F	0839.0E	0841.0	5.0D	25.0			QL=1 ST=2 TYP=3
	2950	GORK	4	S/F	0839.1	0842.0	10.8	28.0			
	3100	CRIM	45	C	0839.7	0840.7	5.0	11.0	7.0		
	3100	CRIM	45	C	0839.7	0841.9		21.0			
	3013	IZMI	5	S	0839.8	0842.0	7.0	32.0	25.0		
	245	LEAR	4	S/F	0840.0E	0841.0	3.0D	92.0			QL=1 ST=2 TYP=3
	8800	SVTO	4	S/F	0840.0E	0842.0	6.0D	280.0			QL=1 ST=2 TYP=3
	15400	SVTO	4	S/F	0841.0E	0842.0	5.0D	200.0			QL=1 ST=2 TYP=3
	4995	SVTO	4	S/F	0841.0E	0841.0	5.0D	110.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0841.0E	0841.0	1.0D	97.0			QL=1 ST=2 TYP=3
	950	GORK	4	S/F	0843.2	0844.8	3.5	80.0			
	810	KRAK	41	F	0843.3	0844.6	3.0	86.0	8.0		
	650	GORK	40	F	0843.3	0844.8	3.0	47.0			
	600	HUMN	2	S/F	0843.5	0845.0	3.0	45.0	10.0		
	1415	LEAR	8	S	0844.0E	0844.0	2.0D	85.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0848.0E	0850.0	2.0D	210.0			QL=1 ST=2 TYP=3
	9100	GORK	47	GB	0859.4	0901.5	9.0	1900.0			
	234	POTS	42	SER	0859.5	0909.0	11.0	300.0			
	15000	KISV	47	GB	0859.6	0901.7	9.5	3348.0			
	30	POTS	42	SER	0859.7	0902.0	11.0	14000.0D			
	8800	LEAR	49	GB	0900.0E	0901.0	5.0D	1500.0			QL=1 ST=2 TYP=6
	9500	POTS	4	S/F	0900.0	0901.6	25.0	1750.0			
	200	GORK	4	S/F	0900.0	0901.8	6.5	160.0D			
	3100	CRIM	29	PBI	0900.4	0902.0	14.0	26.0	9.0		
	3100	CRIM	3	S	0900.4	0901.7	2.0	210.0	70.0		
	3013	IZMI	5	S	0900.5	0901.5	8.0	225.0	180.0		
	2950	GORK	4	S/F	0900.5	0900.6	7.1	265.0			
	950	GORK	46	C	0900.6	0901.7	5.4	82.0D			
	950	GORK	46	C	0900.6	0903.7		200.0			
	650	GORK	46	C	0900.9	0902.0	12.0	270.0			
	650	GORK	46	C	0900.9	0903.9		375.0			
	1415	LEAR	4	S/F	0901.0E	0901.0	3.0D	300.0			QL=1 ST=2 TYP=3
	245	LEAR	4	S/F	0901.0E	0903.0	4.0D	360.0			QL=1 ST=2 TYP=3
	410	LEAR	49	GB	0901.0E	0901.0	5.0D	780.0			QL=1 ST=2 TYP=6
	15400	SVTO	49	GB	0901.0E	0901.0	4.0D	2800.0			QL=1 ST=2 TYP=6
	1415	SVTO	8	S	0901.0E	0901.0	1.0D	220.0			QL=1 ST=2 TYP=3
	8800	SVTO	49	GB	0901.0E	0901.0	3.0D	1700.0			QL=1 ST=2 TYP=6
	410	SVTO	49	GB	0901.0E	0901.0	4.0D	660.0			QL=1 ST=2 TYP=6
	2695	SVTO	8	S	0901.0E	0901.0	1.0D	220.0			QL=1 ST=2 TYP=3
	245	SVTO	4	S/F	0901.0E	0903.0	4.0D	350.0			QL=1 ST=2 TYP=3
	4995	SVTO	49	GB	0901.0E	0901.0	1.0D	500.0			QL=1 ST=2 TYP=6
	600	HUMN	46	C	0901.0	0904.0	20.0	204.0	13.0		
	3000	POTS	4	S/F	0901.0	0901.6	7.0	209.0			
	1470	POTS	4	S/F	0901.0	0901.6	14.0	295.0			
	35000	BERN	47	GB	0901.1	0901.3	1.0	1090.0			
	5200	BERN	47	GB	0901.1	0901.3	1.0	640.0			

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

MARCH 1989

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	50000	BERN	47	GB	0901.1	0901.3	1.0	830.0			
	8400	BERN	47	GB	0901.1	0901.3	1.0	1130.0			
	19600	BERN	47	GB	0901.1	0901.3	1.0	2260.0			
	11800	BERN	47	GB	0901.1	0901.3	1.0	2070.0			
	3200	BERN	47	GB	0901.1	0901.4	1.0	188.0			
	5900	KISV	47	GB	0901.1U	0901.7	1.7U	679.0U			
	536	ONDR	47	GB	0902.0	0902.5	12.0	194.0			
	810	KRAK	42	SER	0905.0E	0909.0	7.3D	154.0			
	245	LEAR	49	GB	0907.0E	0909.0	2.0D	1500.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	0908.0E	0909.0	5.0D	1400.0			QL=1 ST=2 TYP=6
	15000	KISV	2	S/F	0908.4	0908.7	0.7	8.0			
	9300	KISV	23	GRF	0911.8	0913.7	23.8	22.0			
	15000	KISV	2	S/F	0928.0	0930.1	7.5	60.0			
	410	LEAR	4	S/F	0933.0E	0934.0	6.0D	90.0			QL=1 ST=2 TYP=3
	9300	KISV	45	C	0936.3	0943.4	30.9	101.0			
	9300	KISV	45	C	0936.3	0940.7		37.0			
	1470	POTS	40	F	0937.0	0953.8	18.0	26.0			
	3000	POTS	4	S/F	0937.5	0943.3	18.0	52.0			
	3013	IZMI	41	F	0939.0	0943.2	7.0		45.0		
	3100	CRIM	45	C	0939.0	0940.3	7.0	12.0			
	3100	CRIM	45	C	0939.0	0943.4		40.0			
	2950	GORK	45	C	0939.1	0943.1		50.0			
	2950	GORK	45	C	0939.1	0940.2	8.6	22.0			
	9100	GORK	4	S/F	0939.6	0943.2	8.3	94.0			
	15000	KISV	46	C	0940.0	0954.0		25.0			
	810	KRAK	4	S/F	0940.0	0940.3	1.0	246.0	24.0		
	9500	POTS	4	S/F	0940.0	0943.3	25.0	82.0			
	15000	KISV	46	C	0940.0	0946.4		38.0			
	15000	KISV	46	C	0940.0	0943.4	25.5	45.0			
	950	GORK	4	S/F	0940.0	0941.7	1.7	69.0			
	650	GORK	5	S	0940.1	0940.7	0.9	25.0			
	4995	LEAR	8	S	0942.0E	0943.0	2.0D	88.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0942.0E	0943.0	2.0D	38.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0942.0E	0943.0	2.0D	81.0			QL=1 ST=2 TYP=3
	4995	SVTO	8	S	0942.0E	0943.0	1.0D	96.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	0943.0E	0943.0	U	92.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0944.0E	0944.0	U	62.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0959.0E	0959.0	1.0D	89.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0959.0E	1000.0	2.0D	44.0			QL=1 ST=2 TYP=3
	950	GORK	4	S/F	0959.7	1000.2	3.8	31.0			
	810	KRAK	2	S/F	0959.7	1000.2	1.5	12.0	5.0		
	1470	POTS	4	S/F	1000.0	1000.8	4.0	40.0			
	100	GORK	41	F	1001.5	1001.6	0.6	20000.0			
	9300	KISV	46	C	1007.7	1014.4		19.0			
	9300	KISV	46	C	1007.7	1011.4		24.0			
	9300	KISV	46	C	1007.7	1018.5		11.0			
	9300	KISV	46	C	1007.7	1010.5		40.0			
	9300	KISV	46	C	1007.7	1009.9	18.3	40.0			
	15000	KISV	46	C	1008.0	1010.0	17.2	35.0			
	15000	KISV	46	C	1008.0	1011.4		26.0			
	15000	KISV	46	C	1008.0	1010.6		26.0			
	15000	KISV	46	C	1008.0	1010.8		26.0			
	15000	KISV	46	C	1008.0	1018.8		23.0			
	9100	GORK	4	S/F	1009.0	1009.9	3.6	35.0			
	410	LEAR	8	S	1014.0E	1014.0	2.0D	61.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	1014.0E	1014.0	2.0D	260.0			QL=1 ST=2 TYP=3
	15000	KISV	4	S/F	1043.5	1047.1	30.0	88.0			
	9300	KISV	46	C	1043.8	1054.0		40.0			
	9300	KISV	46	C	1043.8	1047.1	26.0	108.0			
	9300	KISV	46	C	1043.8	1055.2		65.0			
	9500	POTS	3	S	1046.5	1047.0	2.5	26.0			
	8800	SVTO	8	S	1053.0E	1054.0	1.0D	91.0			QL=1 ST=2 TYP=3
	9100	GORK	46	C	1053.4	1054.0	5.5	96.0			
	9100	GORK	46	C	1053.4	1055.2		46.0			
	9500	POTS	4	S/F	1053.5	1054.1	22.0	82.0			
	15000	KISV	1	S	1054.0	1054.0	0.2	15.0			
	9500	POTS	21	GRF	1121.0	1142.0	39.0	30.0			
	9300	KISV	46	C	1121.5	1128.1		33.0			
	9300	KISV	46	C	1121.5	1135.3		28.0			

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

MARCH 1989

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	9300	KISV	46	C	1121.5	1142.3	50.7	44.0			
	9300	KISV	46	C	1121.5	1139.7		38.0			
	9300	KISV	46	C	1121.5	1126.8		39.0			
	9300	KISV	46	C	1121.5	1123.9		14.0			
	100	GORK	41	F	1123.5	1124.0	4.7	4200.0			
	536	ONDR	42	SER	1123.5	1126.5	12.0	142.0			
	100	GORK	41	F	1123.5	1126.7		3500.0			
	100	GORK	41	F	1123.5	1127.9		6900.0			
	650	GORK	8	S	1124.0	1124.0	0.1	24.0			
	600	HUMN	2	S/F	1124.0	1127.0	6.0	150.0	30.0		
	650	GORK	46	C	1125.8	1126.7U	2.5	90.0			
	650	GORK	46	C	1125.8	1127.8		50.0			
	245	SVTO	8	S	1126.0E	1128.0	2.0D	490.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	1126.0E	1127.0	1.0D	310.0			QL=1 ST=2 TYP=3
	950	GORK	4	S/F	1126.0	1126.7	0.9	79.0			
	810	KRAK	4	S/F	1126.0	1126.8	2.2	330.0	23.0		
	15000	KISV	46	C	1126.1	1127.2		47.0			
	15000	KISV	46	C	1126.1	1126.3		18.0			
	15000	KISV	46	C	1126.1	1126.9	2.1	49.0			
	234	POTS	41	F	1126.5	1127.8	2.1	450.0			
	15000	KISV	46	C	1138.2	1149.0		27.0			
	15000	KISV	46	C	1138.2	1142.1	20.0	35.0			
	15000	KISV	46	C	1138.2	1141.6		32.0			
	15000	KISV	46	C	1138.2	1139.6		19.0			
	245	SGMR	49	GB	1202.0E	1202.0	U	1600.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	1202.0E	1202.0	U	1200.0			QL=1 ST=2 TYP=6
	9300	KISV	45	C	1203.4	1205.0	3.8	9.0			
	9300	KISV	45	C	1203.4	1206.0		9.0			
	15400	SGMR	8	S	1205.0E	1206.0	1.0D	92.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	1205.0E	1206.0	1.0D	91.0			QL=1 ST=2 TYP=3
	9300	KISV	23	GRF	1214.7	1226.0	39.5	84.0			
	9300	KISV	23	GRF	1214.7	1231.9		51.0			
	15000	KISV	4	S/F	1215.0	1223.4	15.0	63.0			
	9500	POTS	25	R	1217.0	1226.0	73.0	62.0			
	1470	POTS	40	F	1220.0	1230.0	20.0	62.0			
	3000	POTS	42	SER	1221.5	1231.5	39.0	26.0			
	15400	SGMR	8	S	1225.0E	1226.0	1.0D	56.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	1225.0E	1225.0	1.0D	65.0			QL=1 ST=2 TYP=3
	8800	SVTO	4	S/F	1225.0E	1226.0	3.0D	75.0			QL=1 ST=2 TYP=3
	1415	SGMR	8	S	1229.0E	1229.0	2.0D	79.0			QL=1 ST=2 TYP=3
	600	HUMN	24	R	1300.0	1700.0D	240.0D				
	1470	POTS	42	SER	1318.0	1322.0	17.0	19.0			
	2695	SGMR	8	S	1343.0E	1343.0	U	66.0			QL=1 ST=2 TYP=3
	234	POTS	41	F	1359.0	1405.3	7.5	660.0			
	40	POTS	41	F	1359.1	1404.9	9.0	6000.0			
	3000	POTS	40	F	1401.0	1407.5	14.0	21.0			
	536	ONDR	42	SER	1402.7	1405.1	8.0	168.0			
	9500	POTS	4	S/F	1403.0	1407.2	17.0	72.0			
	245	SVTO	49	GB	1404.0E	1405.0	2.0D	640.0			QL=1 ST=2 TYP=6
	11800	BERN	3	S	1404.0	1407.2	8.0	66.0			
	5200	BERN	3	S	1404.0	1407.2	8.0	51.0			
	3200	BERN	3	S	1404.0	1407.2	8.0	15.0			
	8400	BERN	3	S	1404.0	1407.2	8.0	95.0			
	600	HUMN	2	S/F	1405.0	1406.0	4.0	90.0	15.0		
	245	SGMR	49	GB	1405.0E	1405.0	1.0D	1200.0			QL=1 ST=3 TYP=6
	610	SGMR	8	S	1405.0E	1405.0	1.0D	120.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	1407.0E	1407.0	U	120.0			QL=1 ST=2 TYP=3
	4995	SGMR	8	S	1407.0E	1407.0	U	72.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	1407.0E	1407.0	U	82.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	1407.0E	1407.0	U	110.0			QL=1 ST=2 TYP=3
	4995	SVTO	8	S	1407.0E	1407.0	U	62.0			QL=1 ST=2 TYP=3
	2800	OTTA	32	ABS	1502.0	1605.0	95.0	-21.7	8.0		
	11800	BERN	4	S/F	1536.0	1538.0	4.0	33.0			
	3200	BERN	4	S/F	1536.0	1538.0	4.0	30.0			
	8400	BERN	4	S/F	1536.0	1538.0	4.0	38.0			
	5200	BERN	4	S/F	1536.0	1538.0	4.0	33.0			
	19600	BERN	4	S/F	1536.0	1538.0	4.0	48.0			
	245	SVTO	4	S/F	1536.0E	1539.0	6.0D	330.0			QL=1 ST=2 TYP=5
	2800	OTTA	4	S/F	1536.5	1538.2	4.4	42.3	12.0		

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

MARCH 1989

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	15400	SGMR	8	S	1537.0E	1537.0	1.0D	69.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	1537.0E	1537.0	1.0D	59.0			QL=1 ST=2 TYP=3
	610	SGMR	49	GB	1538.0E	1538.0	U	880.0			QL=1 ST=2 TYP=6
	410	SVTO	8	S	1538.0E	1538.0	U	200.0			QL=1 ST=2 TYP=3
	410	SGMR	49	GB	1546.0E	1547.0	2.0D	580.0			QL=1 ST=2 TYP=6
	245	SVTO	8	S	1546.0E	1546.0	1.0D	310.0			QL=1 ST=2 TYP=3
	410	SVTO	4	S/F	1546.0E	1547.0	5.0D	490.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1700.0E	1710.0	62.0D	2700.0			QL=1 ST=2 TYP=6
	2800	OTTA	4	S/F	1726.0	1741.0	27.0	32.3	9.0		
	2800	OTTA	28	PRE	1726.0	1933.0	127.0	37.6	18.0		
	1415	SGMR	4	S/F	1730.0E	1731.0	4.0D	110.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1825.0E	1826.0	1.0D	2200.0			QL=1 ST=2 TYP=6
	8800	PALE	4	S/F	1825.0E	1826.0	4.0D	120.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	1826.0E	1826.0	1.0D	100.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	1847.0E	1847.0	1.0D	9000.0			QL=1 ST=2 TYP=6
	610	PALE	8	S	1847.0E	1847.0	U	130.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1847.0E	1847.0	1.0D	1700.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1847.0E	1848.0	1.0D	2900.0			QL=1 ST=2 TYP=6
	410	SGMR	49	GB	1847.0E	1847.0	1.0D	6200.0			QL=1 ST=2 TYP=6
	610	SGMR	8	S	1847.0E	1847.0	1.0D	430.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1901.0E	1901.0	1.0D	910.0			QL=1 ST=2 TYP=6
	410	SGMR	49	GB	1901.0E	1901.0	1.0D	1900.0			QL=1 ST=2 TYP=6
	15400	PALE	49	GB	1931.0E	1935.0	19.0D	1200.0			QL=1 ST=2 TYP=6
	8800	PALE	49	GB	1933.0E	1935.0	3.0D	580.0			QL=1 ST=2 TYP=6
	4995	PALE	4	S/F	1933.0E	1935.0	13.0D	370.0			QL=1 ST=2 TYP=3
	8800	SGMR	49	GB	1933.0E	1935.0	14.0D	830.0			QL=1 ST=3 TYP=6
	2800	OTTA	4	S/F	1933.5	1936.4	14.0	281.4	84.0		
	410	PALE	49	GB	1934.0E	1935.0	3.0D	2500.0			QL=1 ST=2 TYP=6
	1415	PALE	4	S/F	1934.0E	1935.0	7.0D	220.0			QL=1 ST=2 TYP=3
	410	SGMR	49	GB	1934.0E	1935.0	7.0D	4200.0			QL=1 ST=3 TYP=6
	2695	PALE	20	GRF	1934.0E	1935.0	11.0D	210.0			QL=1 ST=2 TYP=2
	15400	SGMR	49	GB	1934.0E	1936.0	13.0D	1100.0			QL=1 ST=3 TYP=6
	4995	SGMR	49	GB	1934.0E	1935.0	13.0D	530.0			QL=1 ST=3 TYP=6
	610	SGMR	49	GB	1934.0E	1936.0	11.0D	1400.0			QL=1 ST=3 TYP=6
	245	SGMR	49	GB	1934.0E	1935.0	11.0D	18000.0			QL=1 ST=2 TYP=6
	2695	SGMR	4	S/F	1935.0E	1936.0	7.0D	220.0			QL=1 ST=3 TYP=3
	1415	SGMR	4	S/F	1935.0E	1936.0	6.0D	260.0			QL=1 ST=3 TYP=3
	2800	OTTA	29	PBI	1947.9	1947.9	132.0	58.3	29.0		
	8800	SGMR	8	S	1953.0E	1953.0	2.0D	120.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	1953.0E	1953.0	2.0D	82.0			QL=1 ST=2 TYP=3
	610	PALE	4	S/F	2011.0E	2023.0	13.0D	290.0			QL=1 ST=2 TYP=5
	410	PALE	49	GB	2012.0E	2018.0	10.0D	1100.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	2019.0E	2019.0	2.0D	690.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2019.0E	2020.0	1.0D	1200.0			QL=1 ST=2 TYP=6
	410	SGMR	49	GB	2021.0E	2021.0	2.0D	1500.0			QL=1 ST=2 TYP=6
	610	SGMR	8	S	2024.0E	2024.0	U	350.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	2025.0E	2029.0	4.0D	1600.0			QL=1 ST=2 TYP=7
	245	PALE	49	GB	2030.0E	2030.0	U	1100.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	2141.0E	2141.0	U	910.0			QL=1 ST=2 TYP=6
	410	PALE	49	GB	2143.0E	2143.0	1.0D	1200.0			QL=1 ST=2 TYP=6
	410	SGMR	49	GB	2143.0E	2143.0	3.0D	1300.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2144.0E	2144.0	2.0D	1900.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	2231.0E	2231.0	U	1800.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	2235.0E	2237.0	2.0D	330.0			QL=1 ST=2 TYP=3
	610	PALE	49	GB	2236.0E	2237.0	1.0D	2600.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	2237.0E	2237.0	U	840.0			QL=1 ST=2 TYP=6
	500	HIRA	46	C	2237.0	2237.5	1.5	720.0			ML
	245	LEAR	49	GB	2255.0E	2302.0	8.0D	4000.0			QL=1 ST=2 TYP=6
	610	LEAR	49	GB	2256.0E	2302.0	7.0D	2100.0			QL=1 ST=2 TYP=6
	4995	LEAR	4	S/F	2256.0E	2302.0	6.0D	24.0			QL=1 ST=2 TYP=3
	410	LEAR	49	GB	2256.0E	2302.0	7.0D	870.0			QL=1 ST=2 TYP=6
	1415	LEAR	4	S/F	2256.0E	2301.0	7.0D	22.0			QL=1 ST=2 TYP=3
	2695	LEAR	4	S/F	2256.0E	2300.0	4.0D	16.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	2259.0E	2302.0	4.0D	90.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	2259.0E	2302.0	4.0D	83.0			QL=1 ST=2 TYP=3
	610	PALE	49	GB	2301.0E	2301.0	U	820.0			QL=1 ST=2 TYP=6
	410	PALE	49	GB	2301.0E	2301.0	1.0D	980.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	2301.0E	2301.0	1.0D	4700.0			QL=1 ST=2 TYP=6
	245	LEAR	49	GB	2336.0E	2336.0	U	660.0			QL=1 ST=2 TYP=6

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

MARCH 1989

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	245	PALE	49	GB	2336.0E	2336.0	U	1600.0			QL=1 ST=2 TYP=6
	410	LEAR	8	S	2337.0E	2337.0	U	150.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	2337.0E	2337.0	U	130.0			QL=1 ST=2 TYP=3
	610	PALE	8	S	2353.0E	2354.0	1.0D	490.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	2354.0E	2354.0	U	480.0			QL=1 ST=2 TYP=3
	410	LEAR	4	S/F	2358.0E	2358.0	7.0D	200.0			QL=1 ST=2 TYP=3
	245	LEAR	4	S/F	2358.0E	2358.0	7.0D	380.0			QL=1 ST=2 TYP=3
12	200	GORK	44	NS	0457.0E		220.0D		160.0		
	100	GORK	44	NS	0457.0E		403.0D		1000.0		
	221	ABST	43	NS	0500.0		240.0		240.0		
	410	SVTO	44	NS	0526.0E	0846.0	665.0D	1400.0			QL=1 ST=2 TYP=1
	245	SVTO	44	NS	0526.0E	0620.0	665.0D	2000.0			QL=1 ST=2 TYP=1
	234	POTS	44	NS	0547.0E	1502.0	596.0D	600.0			
	204	IZMI	43	NS	0600.0		360.0	200.0			
	33	UPIC	44	NS	0600.0E		600.0D				
	260	ONDR	44	NS	0700.0E		530.0D				
	536	ONDR	44	NS	0730.0E		470.0D				
	600	HUMN	44	NS	0730.0E		600.0D				
	430	KRAK	44	NS	0800.0E	1356.0	365.0D	900.0			
	810	KRAK	44	NS	0800.0E	1127.0	365.0D	250.0D			
	430	KRAK	44	NS	0800.0E	1241.5	365.0D	6000.0	330.0		
	610	SGMR	44	NS	1121.0E	1913.0	664.0D	160.0			QL=1 ST=2 TYP=1
	410	SGMR	44	NS	1121.0E	2009.0	664.0D	590.0			QL=1 ST=2 TYP=1
	245	SGMR	44	NS	1121.0E	1912.0	664.0D	2700.0			QL=1 ST=2 TYP=1
	245	PALE	44	NS	1700.0E	1918.0	684.0D				QL=1 ST=2 TYP=1
	410	PALE	44	NS	1700.0E	1748.0	684.0D				QL=1 ST=2 TYP=1
	610	PALE	44	NS	1700.0E	1738.0	684.0D				QL=1 ST=2 TYP=1
	245	PALE	44	NS	1823.0E	0325.0	601.0D	1300.0			QL=1 ST=2 TYP=1
	200	HIRA	44	NS	2055.0E	0520.0	710.0D	700.0	240.0		SL
	100	HIRA	44	NS	2055.0E	0524.0	710.0D	890.0	620.0		SL
	410	PALE	44	NS	2151.0E	0324.0	393.0D	1200.0			QL=1 ST=2 TYP=1
	245	LEAR	44	NS	2241.0E	0507.0	704.0D	600.0			QL=1 ST=2 TYP=1
	245	LEAR	49	GB	0002.0E	0027.0	34.0D	27000.0			QL=1 ST=2 TYP=7
	410	LEAR	8	S	0005.0E	0005.0	U	170.0			QL=1 ST=2 TYP=3
	500	HIRA	48	C	0015.0	0028.5	18.5	9300.0	420.0		ML
	100	HIRA	48	C	0015.8		14.6				
	410	PALE	49	GB	0016.0E	0028.0	14.0D	5200.0			QL=1 ST=2 TYP=7
	610	PALE	49	GB	0016.0E	0018.0	14.0D	2800.0			QL=1 ST=2 TYP=7
	610	LEAR	49	GB	0016.0E	0019.0	20.0D	2800.0			QL=1 ST=2 TYP=7
	200	HIRA	48	C	0016.1	0028.4	14.0	13050.0	1740.0		O
	245	PALE	49	GB	0017.0E	0027.0	13.0D	36000.0			QL=1 ST=2 TYP=7
	4995	PALE	4	S/F	0018.0E	0021.0	4.0D	120.0			QL=1 ST=2 TYP=5
	2695	PALE	4	S/F	0018.0E	0019.0	4.0D	87.0			QL=1 ST=2 TYP=5
	8800	LEAR	49	GB	0018.0E	0030.0	18.0D	730.0			QL=1 ST=2 TYP=7
	4995	LEAR	4	S/F	0018.0E	0030.0	12.0D	290.0			QL=1 ST=2 TYP=5
	2695	LEAR	4	S/F	0018.0E	0030.0	12.0D	120.0			QL=1 ST=2 TYP=5
	8800	PALE	49	GB	0018.0E	0029.0	13.0D	580.0			QL=1 ST=3 TYP=6
	15400	LEAR	4	S/F	0019.0E	0019.0	1421.0D	73.0			QL=1 ST=1 TYP=3
	1415	PALE	49	GB	0021.0E	0029.0	9.0D	850.0			QL=1 ST=3 TYP=6
	15400	PALE	49	GB	0021.0E	0028.0	10.0D	1400.0			QL=1 ST=3 TYP=6
	410	LEAR	8	S	0043.0E	0043.0	U	250.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0045.0E	0047.0	7.0D	2600.0			QL=1 ST=2 TYP=6
	245	LEAR	49	GB	0046.0E	0047.0	2.0D	2100.0			QL=1 ST=2 TYP=6
	610	LEAR	8	S	0046.0E	0047.0	1.0D	160.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	0046.0E	0047.0	1.0D	750.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	0102.0E	0103.0	1.0D	390.0			QL=1 ST=2 TYP=3
	610	PALE	8	S	0104.0E	0104.0	U	64.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	0130.0E	0135.0	14.0D	870.0			QL=1 ST=2 TYP=7
	610	LEAR	4	S/F	0131.0E	0134.0	8.0D	150.0			QL=1 ST=2 TYP=5
	610	PALE	4	S/F	0131.0E	0134.0	4.0D	150.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0134.0E	0134.0	U	1000.0			QL=1 ST=2 TYP=6
	410	LEAR	49	GB	0156.0E	0157.0	1.0D	550.0			QL=1 ST=2 TYP=6
	410	PALE	49	GB	0156.0E	0156.0	1.0D	1500.0			QL=1 ST=2 TYP=6
	410	LEAR	49	GB	0202.0E	0207.0	6.0D	1500.0			QL=1 ST=2 TYP=6
	245	LEAR	49	GB	0203.0E	0204.0	3.0D	3200.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0203.0E	0204.0	2.0D	4100.0			QL=1 ST=2 TYP=6
	410	PALE	49	GB	0212.0E	0212.0	2.0D	820.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0213.0E	0214.0	1.0D	1700.0			QL=1 ST=2 TYP=6

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean	Int	Remarks
12	245	LEAR	49	GB	0214.0E	0214.0	1.0D	1400.0			QL=1 ST=2 TYP=6
	410	LEAR	8	S	0214.0E	0214.0	U	340.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0217.0E	0217.0	12.0D	3700.0			QL=1 ST=2 TYP=6
	245	LEAR	49	GB	0218.0E	0218.0	U	3400.0			QL=1 ST=2 TYP=6
	245	LEAR	49	GB	0221.0E	0221.0	U	740.0			QL=1 ST=2 TYP=6
	245	LEAR	49	GB	0224.0E	0225.0	2.0D	920.0			QL=1 ST=2 TYP=6
	610	LEAR	8	S	0241.0E	0242.0	2.0D	53.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0241.0E	0241.0	1.0D	270.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0242.0E	0242.0	U	170.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	0305.0E	0307.0	3.0D	630.0			QL=1 ST=2 TYP=6
	410	LEAR	49	GB	0308.0E	0308.0	U	930.0			QL=1 ST=2 TYP=6
	610	LEAR	8	S	0318.0E	0319.0	1.0D	78.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0318.0E	0319.0	1.0D	290.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0318.0E	0318.0	U	200.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	0318.0E	0318.0	1.0D	320.0			QL=1 ST=2 TYP=3
	610	PALE	8	S	0319.0E	0319.0	U	70.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0336.0E	0344.0	10.0D	1800.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0338.0E	0338.0	U	1500.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	0343.0E	0345.0	2.0D	290.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0344.0E	0344.0	1.0D	2100.0			QL=1 ST=2 TYP=6
	610	LEAR	4	S/F	0357.0E	0359.0	5.0D	120.0			QL=1 ST=2 TYP=3
	410	LEAR	49	GB	0357.0E	0359.0	2.0D	1000.0			QL=1 ST=2 TYP=6
	410	PALE	49	GB	0357.0E	0359.0	3.0D	760.0			QL=1 ST=2 TYP=6
	500	HIRA	46	C	0358.0	0359.0	2.1	1400.0			SL
	245	LEAR	49	GB	0416.0E	0418.0	2.0D	930.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0416.0E	0416.0	2.0D	1100.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0421.0E	0421.0	1.0D	1900.0			QL=1 ST=2 TYP=6
	245	LEAR	49	GB	0422.0E	0422.0	U	2300.0			QL=1 ST=2 TYP=6
	610	LEAR	8	S	0423.0E	0423.0	U	63.0			QL=1 ST=2 TYP=3
	500	HIRA	42	SER	0445.0	0542.5	75.0	2200.0			SL
	245	LEAR	49	GB	0448.0E	0448.0	4.0D	1400.0			QL=1 ST=3 TYP=6
	610	LEAR	4	S/F	0450.0E	0452.0	3.0D	230.0			QL=1 ST=2 TYP=3
	410	LEAR	49	GB	0452.0E	0452.0	1.0D	1000.0			QL=1 ST=2 TYP=6
	1415	LEAR	8	S	0452.0E	0452.0	U	67.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0456.0E	0457.0	2.0D	1900.0			QL=1 ST=2 TYP=6
	200	GORK	4	S/F	0456.2	0457.2	1.8	2400.0			
	650	GORK	23	GRF	0457.0E	0602.0	213.0D	60.0			
	950	GORK	23	GRF	0457.0E	0606.0U	165.0D	26.0			
	410	LEAR	4	S/F	0458.0E	0500.0	3.0D	410.0			QL=1 ST=2 TYP=3
	5900	KISV	22	GRF	0500.0	0702.5	484.0	25.0			
	15000	KISV	22	GRF	0500.0	0723.6	484.0	45.0			
	410	LEAR	8	S	0506.0E	0507.0	1.0D	250.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0507.0E	0509.0	2.0D	850.0			QL=1 ST=2 TYP=7
	200	HIRA	42	SER	0507.9	0509.2	36.3	3900.0			ML
	610	LEAR	8	S	0508.0E	0509.0	1.0D	56.0			QL=1 ST=2 TYP=3
	9100	GORK	23	GRF	0509.0E		320.0D				
	200	GORK	41	F	0509.0	0515.4		9000.0			
	200	GORK	41	F	0509.0	0509.4	7.7	4000.0			
	410	LEAR	49	GB	0511.0E	0515.0	9.0D	630.0			QL=1 ST=2 TYP=6
	610	LEAR	4	S/F	0512.0E	0515.0	4.0D	150.0			QL=1 ST=2 TYP=3
	650	GORK	41	F	0515.2	0553.2		250.0			
	650	GORK	41	F	0515.2	0550.3		200.0			
	650	GORK	41	F	0515.2	0522.5		94.0			
	650	GORK	41	F	0515.2	0537.5		340.0			
	650	GORK	41	F	0515.2	0542.6		760.0			
	650	GORK	41	F	0515.2	0515.6	44.8	120.0			
	650	GORK	41	F	0515.2	0605.8		110.0			
	15000	KISV	4	S/F	0517.4	0525.0	33.0	359.0			
	5900	KISV	4	S/F	0517.6	0525.0	34.0	171.0			
	9300	KISV	45	C	0520.5	0522.6		79.0			
	9300	KISV	45	C	0520.5	0524.9	41.0	295.0			
	9100	GORK	46	C	0521.1	0525.0		307.0			
	9100	GORK	46	C	0521.1	0522.7	10.3	80.0			
	610	LEAR	8	S	0522.0E	0522.0	U	110.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0522.0E	0522.0	U	360.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	0522.0E	0524.0	5.0D	310.0			QL=1 ST=2 TYP=5
	8800	LEAR	4	S/F	0522.0E	0525.0	3.0D	240.0			QL=1 ST=2 TYP=5
	4995	LEAR	8	S	0524.0E	0525.0	1.0D	82.0			QL=1 ST=2 TYP=3
	15000	KISV	2	S/F	0529.2	0529.7	1.4	26.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

MARCH 1989

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	LEAR	49	GB	0533.0E	0538.0	5.0D	2400.0			QL=1 ST=2 TYP=6
	15000	KISV	45	C	0533.0	0533.1		27.0			
	610	LEAR	4	S/F	0535.0E	0537.0	3.0D	290.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0536.0E	0536.0	U	28.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0536.0E	0536.0	3.0D	32.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0536.0E	0536.0	U	77.0			QL=1 ST=2 TYP=3
	410	SVTO	49	GB	0536.0E	0538.0	2.0D	2000.0			QL=1 ST=2 TYP=6
	3100	CRIM	42	SER	0536.0	0536.1	4.0	8.5			
	3100	CRIM	42	SER	0536.0	0536.4		34.2			
	2950	GORK	4	S/F	0536.0	0536.4	3.0	28.0			
	3100	CRIM	42	SER	0536.0	0536.7		20.7			
	9300	KISV	22	GRF	0536.0	0542.8	25.0	19.0			
	5900	KISV	45	C	0536.1	0536.6	1.6	12.0			
	610	LEAR	49	GB	0541.0E	0542.0	4.0D	630.0			QL=1 ST=2 TYP=6
	410	LEAR	49	GB	0541.0E	0543.0	6.0D	2600.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	0541.0E	0544.0	4.0D	1400.0			QL=1 ST=2 TYP=6
	410	SVTO	49	GB	0541.0E	0543.0	4.0D	2400.0			QL=1 ST=2 TYP=6
	4995	LEAR	8	S	0542.0E	0542.0	1.0D	27.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0542.0E	0544.0	2.0D	1300.0			QL=1 ST=2 TYP=6
	8800	LEAR	8	S	0542.0E	0542.0	1.0D	29.0			QL=1 ST=2 TYP=3
	2950	GORK	4	S/F	0542.6	0542.8	5.0	15.0			
	5900	KISV	46	C	0542.7	0542.8	1.8	16.0			
	200	GORK	8	S	0544.0	0544.2	0.9	5000.0			
	610	LEAR	4	S/F	0548.0E	0553.0	34.0D	230.0			QL=1 ST=2 TYP=5
	410	LEAR	49	GB	0550.0E	0553.0	7.0D	3000.0			QL=1 ST=2 TYP=7
	15400	LEAR	8	S	0552.0E	0552.0	U	38.0			QL=1 ST=2 TYP=3
	15000	KISV	45	C	0552.0	0552.5	2.0	42.0			
	200	HIRA	8	S	0552.5	0552.8	0.6	7600.0			O
	40	POTS	4	S/F	0552.9	0553.4	1.2	3000.0			
	234	POTS	42	SER	0552.9	0553.7	4.9	120000.0			
	245	LEAR	49	GB	0553.0E	0553.0	U	36000.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	0553.0E	0553.0	U	37000.0			QL=1 ST=2 TYP=6
	410	SVTO	49	GB	0553.0E	0553.0	U	3900.0			QL=1 ST=2 TYP=6
	200	GORK	47	GB	0553.1	0553.5	0.6	30000.0			
	100	GORK	8	S	0553.2	0553.5	1.2	24000.0			
	9300	KISV	23	GRF	0604.2	0607.3	43.0	42.0			
	8800	LEAR	8	S	0606.0E	0607.0	2.0D	35.0			QL=1 ST=2 TYP=3
	15000	KISV	2	S/F	0606.9	0607.3	1.6	23.0			
	950	GORK	40	F	0609.5	0615.1		37.0			
	950	GORK	40	F	0609.5	0623.6		15.0			
	950	GORK	40	F	0609.5	0613.8	14.6	17.0			
	200	HIRA	46	C	0619.8	0620.6	1.3	9300.0			SL
	410	LEAR	49	GB	0620.0E	0623.0	5.0D	520.0			QL=1 ST=2 TYP=6
	245	LEAR	49	GB	0620.0E	0620.0	1.0D	1600.0			QL=1 ST=2 TYP=6
	100	GORK	4	S/F	0620.0	0620.8	2.0	7600.0			
	200	GORK	45	C	0620.1	0620.9	1.9	11000.0			
	200	GORK	45	C	0620.1	0621.9		6400.0			
	234	POTS	4	S/F	0620.2	0621.0	1.3	1000.0			
	15000	KISV	45	C	0621.0	0621.7	1.6	16.0			
	2950	GORK	4	S/F	0622.0	0623.6	2.7	5.6			
	234	POTS	42	SER	0624.5	0634.1	10.0	1600.0			
	410	LEAR	49	GB	0637.0E	0639.0	6.0D	620.0			QL=1 ST=2 TYP=6
	245	LEAR	8	S	0639.0E	0639.0	1.0D	300.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0639.0E	0639.0	U	80.0			QL=1 ST=2 TYP=3
	500	HIRA	42	SER	0639.0	0702.0	59.0	790.0			SL
	650	GORK	41	F	0639.2	0652.2		245.0			
	650	GORK	41	F	0639.2	0639.4	76.2	93.0			
	650	GORK	41	F	0639.2	0642.8		83.0			
	650	GORK	41	F	0639.2	0727.8		205.0			
	9300	KISV	22	GRF	0649.3	0702.7	162.5	35.0			
	410	LEAR	49	GB	0651.0E	0652.0	1.0D	1700.0			QL=1 ST=2 TYP=6
	410	SVTO	49	GB	0651.0E	0652.0	2.0D	2100.0			QL=1 ST=2 TYP=6
	610	LEAR	8	S	0652.0E	0652.0	U	170.0			QL=1 ST=2 TYP=3
	245	LEAR	4	S/F	0653.0E	0700.0	16.0D	270.0			QL=1 ST=2 TYP=5
	245	SVTO	8	S	0654.0E	0655.0	1.0D	100.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0659.0E	0659.0	U	27.0			QL=1 ST=2 TYP=3
	245	SVTO	4	S/F	0659.0E	0700.0	14.0D	240.0			QL=1 ST=2 TYP=5
	410	SVTO	49	GB	0659.0E	0702.0	1021.0D	7500.0			QL=1 ST=2 TYP=6
	950	GORK	4	S/F	0659.8	0700.5	1.2	62.0			

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

MARCH 1989

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	8800	LEAR	8	S	0701.0E	0702.0	2.0D	28.0			QL=1 ST=2 TYP=3
	234	POTS	46	C	0703.9	0704.6	28.0	88000.0			
	30	POTS	42	SER	0704.0	0704.5	18.0	12000.0D			
	100	GORK	47	GB	0721.0	0735.2		17500.0			
	100	GORK	47	GB	0721.0	0733.8	13.3	25000.0			
	245	LEAR	4	S/F	0725.0E	0727.0	5.0D	460.0			QL=1 ST=2 TYP=3
	200	GORK	4	S/F	0725.5	0727.2	3.2	5000.0			
	200	HIRA	42	SER	0725.5	0734.8	11.9	14500.0			ML
	100	HIRA	42	SER	0725.7	0735.0	11.8	6200.0			SL
	5900	KISV	4	S/F	0725.7	0736.7	29.0	169.0			
	950	GORK	4	S/F	0726.1	0727.6	2.9	67.0			
	610	LEAR	8	S	0727.0E	0727.0	1.0D	300.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0727.0E	0727.0	U	230.0			QL=1 ST=2 TYP=3
	650	GORK	41	F	0727.8	0737.2		450.0			
	9300	KISV	46	C	0730.3	0747.2		25.0			
	9300	KISV	46	C	0730.3	0732.7		27.0			
	9300	KISV	46	C	0730.3	0735.7		143.0			
	9300	KISV	46	C	0730.3	0750.7		29.0			
	9300	KISV	46	C	0730.3	0749.7		25.0			
	9300	KISV	46	C	0730.3	0736.7	22.1	144.0			
	9500	POTS	4	S/F	0731.0	0736.6	12.0	100.0			
	3000	POTS	40	F	0731.5	0736.7	11.0	34.0			
	9100	GORK	4	S/F	0731.7	0736.8	6.9	150.0			
	610	LEAR	4	S/F	0732.0E	0737.0	9.0D	360.0			QL=1 ST=2 TYP=5
	2950	GORK	45	C	0732.3	0735.5	8.2	28.0			
	2950	GORK	45	C	0732.3	0736.7		39.0			
	245	LEAR	49	GB	0733.0E	0735.0	5.0D	5900.0			QL=1 ST=2 TYP=7
	410	SVTO	4	S/F	0733.0E	0737.0	6.0D	490.0			QL=1 ST=2 TYP=3
	245	SVTO	49	GB	0733.0E	0735.0	6.0D	6100.0			QL=1 ST=2 TYP=6
	950	GORK	4	S/F	0733.3	0736.6	9.0	248.0			
	3100	CRIM	45	C	0733.6	0735.5		20.7			
	3100	CRIM	30	PBI	0733.6	0737.6	16.4	7.3	2.0		
	3100	CRIM	45	C	0733.6	0733.8	4.0	17.0	9.0		
	3100	CRIM	45	C	0733.6	0736.8		28.0			
	200	GORK	47	GB	0733.7	0735.2		30000.0			
	200	GORK	47	GB	0733.7	0733.8	1.5	30000.0			
	410	LEAR	49	GB	0734.0E	0736.0	5.0D	510.0			QL=1 ST=2 TYP=7
	3013	IZMI	5	S	0734.8	0736.8	4.0	30.0			
	8800	LEAR	4	S/F	0735.0E	0735.0	3.0D	140.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	0735.0E	0736.0	4.0D	40.0			QL=1 ST=2 TYP=3
	1415	LEAR	4	S/F	0735.0E	0735.0	3.0D	63.0			QL=1 ST=2 TYP=3
	4995	LEAR	4	S/F	0735.0E	0736.0	3.0D	130.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0735.0E	0735.0	2.0D	33.0			QL=1 ST=2 TYP=3
	4995	SVTO	4	S/F	0735.0E	0736.0	6.0D	120.0			QL=1 ST=2 TYP=3
	8800	SVTO	4	S/F	0735.0E	0735.0	6.0D	130.0			QL=1 ST=2 TYP=3
	1470	POTS	4	S/F	0735.0	0735.9	8.5	42.0			
	15000	KISV	46	C	0735.5	0736.7	1.8	37.0			
	15000	KISV	46	C	0735.5	0735.7		26.0			
	410	LEAR	49	GB	0744.0E	0749.0	11.0D	3400.0			QL=1 ST=2 TYP=6
	410	SVTO	49	GB	0744.0E	0749.0	12.0D	3500.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	0746.0E	0750.0	6.0D	560.0			QL=1 ST=2 TYP=7
	3000	POTS	40	F	0746.0	0750.7	7.0	8.0			
	9500	POTS	40	F	0746.5	0750.9	8.5	14.0			
	5900	KISV	46	C	0746.6	0747.1		10.0			
	5900	KISV	46	C	0746.6	0749.7	5.7	20.0			
	5900	KISV	46	C	0746.6	0750.8		20.0			
	1470	POTS	40	F	0747.0	0750.8	7.0	15.0			
	245	LEAR	4	S/F	0748.0E	0750.0	3.0D	450.0			QL=1 ST=2 TYP=3
	2950	GORK	28	PRE	0748.9	0749.6	2.2	9.0			
	610	LEAR	8	S	0749.0E	0749.0	2.0D	100.0			QL=1 ST=2 TYP=3
	950	GORK	4	S/F	0749.0	0750.6	3.8	108.0			
	3100	CRIM	42	SER	0749.0	0750.8		7.3			
	3100	CRIM	42	SER	0749.0	0749.8	2.0	8.5	3.0		
	245	LEAR	49	GB	0800.0E	0825.0	26.0D	8300.0			QL=1 ST=3 TYP=7
	15000	KISV	47	GB	0801.1	0820.4		1187.0			
	15000	KISV	47	GB	0801.1	0841.4		2344.0			
	15000	KISV	47	GB	0801.1	0833.6		918.0			
	15000	KISV	47	GB	0801.1	0839.7	91.0	3322.0			
	9300	KISV	47	GB	0801.6	0820.2		1138.0			

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

MARCH 1989

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	9300	KISV	47	GB	0801.6	0841.5		1624.0			
	9300	KISV	47	GB	0801.6	0833.6		849.0			
	9300	KISV	47	GB	0801.6	0839.8	80.5	2307.0			
	245	SVTO	49	GB	0803.0E	0825.0	23.0D	8600.0			QL=1 ST=2 TYP=7
	410	SVTO	49	GB	0803.0E	0808.0	20.0D	26000.0			QL=1 ST=2 TYP=7
	410	LEAR	49	GB	0803.0E	0808.0	67.0D	22000.0			QL=1 ST=2 TYP=7
	9500	POTS	46	C	0803.0	0839.0	102.0	2375.0			
	3000	POTS	46	C	0803.0	0840.0	117.0	600.0			
	950	GORK	40	F	0803.0	1124.1		14.0			
	950	GORK	40	F	0803.0	0807.2	207.0	45.0			
	950	GORK	40	F	0803.0	0841.3		167.0			
	950	GORK	40	F	0803.0	0820.7		263.0			
	1470	POTS	46	C	0803.0	0820.7	112.0	183.0			
	950	GORK	40	F	0803.0	0832.8		990.0			
	9100	GORK	47	GB	0803.8	0839.7	60.0	2400.0			
	3100	CRIM	46	C	0804.0	0835.0		94.1			
	2695	LEAR	4	S/F	0804.0E	0840.0	63.0D	300.0			QL=1 ST=3 TYP=3
	3100	CRIM	46	C	0804.0	0820.0	71.0	173.5	70.0		
	200	HIRA	48	C	0804.0	0825.1	22.0	23000.0U	1200.0U		O SUNSET
	3100	CRIM	46	C	0804.0	0856.3		79.4			
	3100	CRIM	46	C	0804.0	0836.6		90.4			
	200	HIRA	48	C	0804.0	0820.8		5100.0U			WR
	3013	IZMI	42	SER	0804.0	0839.8	65.0	313.0			
	3100	CRIM	46	C	0804.0	0847.9		132.0			
	3100	CRIM	46	C	0804.0	0839.9		201.6			
	5900	KISV	47	GB	0804.1	0820.3		640.0			
	5900	KISV	47	GB	0804.1	0841.4	79.0	824.0			
	5900	KISV	47	GB	0804.1	0833.5		616.0			
	5900	KISV	47	GB	0804.1	0836.8		375.0			
	200	GORK	41	F	0804.4	0820.5		16500.0			
	100	GORK	8	S	0804.4	0804.5	0.4	23000.0			
	200	GORK	41	F	0804.4	0825.5		11000.0			
	200	GORK	41	F	0804.4	0804.5	22.0	10500.0			
	500	HIRA	48	C	0804.5	0808.3	30.0D	4500.0U	590.0U		SL SUNSET
	610	LEAR	49	GB	0805.0E	0829.0	25.0D	2300.0			QL=1 ST=2 TYP=7
	650	GORK	47	GB	0805.8	0829.8	42.5	2200.0			
	600	HUMN	46	C	0806.0	0830.0	43.0	645.0	90.0		
	100	HIRA	48	C	0806.6	0819.8U	16.0	14000.0D			SUNSET
	1415	LEAR	4	S/F	0807.0E	0832.0	53.0D	260.0			QL=1 ST=3 TYP=3
	810	KRAK	46	C	0807.0	0814.0U	47.0	280.0D	70.0		
	100	GORK	47	GB	0812.0	0820.1	11.2	23000.0			
	4995	LEAR	49	GB	0814.0E	0839.0	47.0D	970.0			QL=1 ST=2 TYP=7
	8800	SVTO	49	GB	0814.0E	0839.0	46.0D	2200.0			QL=1 ST=2 TYP=7
	8800	LEAR	49	GB	0814.0E	0839.0	56.0D	2300.0			QL=1 ST=2 TYP=7
	15400	LEAR	49	GB	0815.0E	0840.0	53.0D	2500.0			QL=1 ST=3 TYP=7
	15400	SVTO	49	GB	0815.0E	0820.0	945.0D	930.0			QL=1 ST=1 TYP=7
	2695	SVTO	49	GB	0817.0E	0820.0	5.0D	230.0			QL=1 ST=2 TYP=7
	610	SVTO	49	GB	0818.0E	0822.0	5.0D	2000.0			QL=1 ST=2 TYP=7
	1415	SVTO	49	GB	0818.0E	0820.0	3.0D	170.0			QL=1 ST=2 TYP=7
	2950	GORK	47	GB	0834.0	0839.9	6.3	340.0			
	15000	KISV	2	S/F	0912.0	0912.3	0.7	15.0			
	100	GORK	3	S	0918.1	0918.5	1.0	20000.0			
	9300	KISV	22	GRF	0935.6	0938.2	11.5	19.0			
	5900	KISV	23	GRF	0935.7	0939.8	16.0	21.0			
	9300	KISV	23	GRF	0948.5	1015.5	61.3	44.0			
	100	GORK	8	S	0951.0	0951.3	0.6	19000.0			
	9500	POTS	3	S	1010.0	1015.5	9.0	28.0			
	5900	KISV	23	GRF	1010.3	1015.6	32.5	36.0			
	9100	GORK	1	S	1014.3	1015.5	4.9	22.0			
	15000	KISV	45	C	1014.7	1015.4	1.8	15.0			
	410	LEAR	49	GB	1016.0E	1017.0	2.0D	580.0			QL=1 ST=2 TYP=6
	410	SVTO	49	GB	1016.0E	1017.0	2.0D	730.0			QL=1 ST=2 TYP=6
	3000	POTS	3	S	1016.5	1018.0	2.5	6.0			
	245	LEAR	8	S	1017.0E	1017.0	U	160.0			QL=1 ST=2 TYP=3
	15000	KISV	2	S/F	1035.5	1035.6	0.3	9.0			
	9300	KISV	23	GRF	1053.0	1124.1	59.5	46.0			
	3000	POTS	22	GRF	1115.0	1122.5	35.0	20.0			
	410	SVTO	4	S/F	1120.0E	1124.0	4.0D	230.0			QL=1 ST=2 TYP=3
	9500	POTS	22	GRF	1120.0	1124.0	45.0	33.0			

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

MARCH 1989

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	1470	POTS	40	F	1120.0	1126.9	25.0	26.0			
	650	GORK	46	C	1120.3	1129.0		44.0			
	650	GORK	46	C	1120.3	1123.1	9.5	90.0			
	3100	CRIM	42	SER	1121.5	1124.0		7.5			
	3100	CRIM	42	SER	1121.5	1122.5	4.0	10.0	2.0		
	3100	CRIM	42	SER	1121.5	1124.6		6.2			
	2950	GORK	22	GRF	1121.9	1122.5	8.5D	14.8			
	5900	KISV	23	GRF	1122.1	1124.1	31.4	35.0			
	15000	KISV	46	C	1122.2	1124.1	12.3	30.0			
	15000	KISV	46	C	1122.2	1130.5		25.0			
	15000	KISV	46	C	1122.2	1128.5		20.0			
	15000	KISV	46	C	1122.2	1126.9		22.0			
	245	SVTO	49	GB	1123.0E	1128.0	5.0D	490.0			QL=1 ST=2 TYP=7
	5900	KISV	2	S/F	1128.1	1128.5	0.7	12.0			
	9300	KISV	2	S/F	1128.2	1128.5	0.7	23.0			
	3100	CRIM	1	S	1140.2	1141.2	2.0	3.7	1.0		
	410	SGMR	8	S	1147.0E	1147.0	2.0D	340.0			QL=1 ST=2 TYP=3
	15000	KISV	2	S/F	1147.8	1148.4	1.9	18.0			
	9300	KISV	2	S/F	1154.6	1154.7	0.5	4.0			
	410	SVTO	49	GB	1156.0E	1157.0	2.0D	2500.0			QL=1 ST=2 TYP=6
	410	SGMR	49	GB	1157.0E	1157.0	U	1500.0			QL=1 ST=2 TYP=6
	15000	KISV	45	C	1158.6	1159.0	2.0	19.0			
	9300	KISV	2	S/F	1158.7	1159.1	3.3	10.0			
	9500	POTS	21	GRF	1210.0	1243.0	110.0	82.0			
	9300	KISV	20	GRF	1213.5	1231.5	50.5	14.0			
	410	SVTO	49	GB	1214.0E	1214.0	U	1300.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	1214.0E	1214.0	U	600.0			QL=1 ST=2 TYP=6
	40	POTS	42	SER	1220.0	1229.5	36.0	4000.0			
	3000	POTS	4	S/F	1221.0	1243.2	44.0	73.0			
	410	SVTO	49	GB	1224.0E	1225.0	1.0D	2500.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	1224.0E	1225.0	2.0D	580.0			QL=1 ST=2 TYP=6
	1470	POTS	45	C	1224.0	1230.7	38.0	136.0			
	9300	KISV	2	S/F	1224.3	1225.1	2.9	44.0			
	234	POTS	42	SER	1224.5	1248.7	26.0	1000.0			
	5900	KISV	2	S/F	1224.6	1225.1	1.8	28.0			
	15000	KISV	2	S/F	1224.8	1225.1	1.6	17.0			
	245	SVTO	49	GB	1234.0E	1241.0	19.0D	3100.0			QL=1 ST=2 TYP=7
	410	SVTO	49	GB	1236.0E	1243.0	17.0D	35000.0			QL=1 ST=2 TYP=6
	410	SGMR	49	GB	1237.0E	1241.0	15.0D	28000.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1238.0E	1241.0	17.0D	4000.0			QL=1 ST=2 TYP=6
	5900	KISV	4	S/F	1238.6	1243.1	14.5	93.0			
	9300	KISV	46	C	1238.6	1243.1	14.5	69.0			
	9300	KISV	46	C	1238.6	1244.6		49.0			
	9300	KISV	46	C	1238.6	1246.9		49.0			
	600	HUMN	4	S/F	1239.0	1243.0	11.0	540.0	170.0		
	15000	KISV	2	S/F	1239.6	1242.9	9.7	40.0			
	1415	SGMR	4	S/F	1240.0E	1240.0	5.0D	220.0			QL=1 ST=2 TYP=3
	1415	SVTO	4	S/F	1240.0E	1240.0	8.0D	190.0			QL=1 ST=2 TYP=3
	810	KRAK	45	C	1240.0	1242.9	7.8	200.0D	53.0		
	8800	SGMR	8	S	1242.0E	1243.0	1.0D	61.0			QL=1 ST=2 TYP=3
	2695	SVTO	4	S/F	1242.0E	1243.0	6.0D	68.0			QL=1 ST=2 TYP=3
	4995	SVTO	4	S/F	1242.0E	1243.0	6.0D	110.0			QL=1 ST=2 TYP=3
	8800	SVTO	4	S/F	1242.0E	1243.0	6.0D	81.0			QL=1 ST=2 TYP=3
	4995	SGMR	4	S/F	1242.0E	1243.0	678.0D	100.0			QL=1 ST=1 TYP=3
	9300	KISV	45	C	1254.2	1255.1	10.0	35.0			
	5900	KISV	45	C	1254.2	1255.2	8.0	29.0			
	9300	KISV	45	C	1254.2	1257.5		34.0			
	15000	KISV	46	C	1254.4	1257.3	7.6	44.0			
	15000	KISV	46	C	1254.4	1256.4		41.0			
	15000	KISV	46	C	1254.4	1255.7		40.0			
	8800	SVTO	20	GRF	1312.0E	1319.0	7.0D	85.0			QL=1 ST=2 TYP=2
	15400	SVTO	4	S/F	1314.0E	1314.0	4.0D	62.0			QL=1 ST=2 TYP=3
	9500	POTS	21	GRF	1316.5E	1316.5		88.0			
	245	SVTO	8	S	1345.0E	1346.0	1.0D	110.0			QL=1 ST=2 TYP=3
	410	SVTO	49	GB	1345.0E	1357.0	13.0D	1800.0			QL=1 ST=2 TYP=7
	410	SGMR	49	GB	1347.0E	1355.0	14.0D	1700.0			QL=1 ST=2 TYP=7
	245	SGMR	49	GB	1358.0E	1359.0	1.0D	750.0			QL=1 ST=2 TYP=6
	410	SGMR	49	GB	1406.0E	1408.0	3.0D	2800.0			QL=1 ST=2 TYP=6
	410	SVTO	49	GB	1406.0E	1408.0	3.0D	2400.0			QL=1 ST=2 TYP=6

SOLAR RADIO EMISSION
Outstanding Occurrences

MARCH 1989

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	245	SGMR	49	GB	1441.0E	1442.0	5.0D	1000.0			QL=1 ST=2 TYP=6
	410	SVTO	4	S/F	1441.0E	1441.0	3.0D	280.0			QL=1 ST=2 TYP=3
	245	SVTO	4	S/F	1441.0E	1442.0	4.0D	430.0			QL=1 ST=2 TYP=3
	410	SGMR	20	GRF	1442.0E	1444.0	6.0D	120.0			QL=1 ST=2 TYP=2
	234	POTS	46	C	1449.3	1502.1	25.0	37000.0			
	1470	POTS	46	C	1450.0	1501.0	40.0	585.0			
	3000	POTS	46	C	1450.0	1502.3	40.0	1420.0			
	40	POTS	45	C	1450.0	1501.6	24.0	8600.0			
	9500	POTS	46	C	1450.0	1501.8	40.0	1400.0			
	410	SGMR	49	GB	1451.0E	1500.0	24.0D	15000.0			QL=1 ST=2 TYP=6
	2800	OTTA	4	S/F	1452.0	1502.0	23.0	593.8	175.0		
	1415	SGMR	8	S	1452.0E	1453.0	1.0D	200.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1453.0E	1501.0	22.0D	5200.0			QL=1 ST=2 TYP=7
	245	SVTO	49	GB	1453.0E	1501.0	21.0D	3600.0			QL=1 ST=2 TYP=7
	4995	SGMR	49	GB	1455.0E	1501.0	17.0D	1100.0			QL=1 ST=2 TYP=7
	8800	SGMR	49	GB	1455.0E	1501.0	15.0D	1200.0			QL=1 ST=2 TYP=6
	15400	SGMR	49	GB	1455.0E	1501.0	16.0D	910.0			QL=1 ST=2 TYP=7
	610	SGMR	49	GB	1455.0E	1508.0	20.0D	2900.0			QL=1 ST=2 TYP=7
	8800	SVTO	49	GB	1455.0E	1501.0	21.0D	1500.0			QL=1 ST=2 TYP=7
	1415	SVTO	49	GB	1455.0E	1500.0	20.0D	420.0			QL=1 ST=2 TYP=7
	4995	SVTO	49	GB	1455.0E	1501.0	21.0D	1000.0			QL=1 ST=2 TYP=7
	15400	SVTO	49	GB	1455.0E	1501.0	21.0D	930.0			QL=1 ST=2 TYP=7
	600	HUMN	46	C	1455.0	1508.5	30.0	740.0	190.0		
	2695	SGMR	49	GB	1456.0E	1502.0	15.0D	570.0			QL=1 ST=2 TYP=6
	2695	SVTO	49	GB	1456.0E	1502.0	19.0D	550.0			QL=1 ST=2 TYP=7
	610	SVTO	49	GB	1459.0E	1459.0	17.0D	2800.0			QL=1 ST=2 TYP=7
	2800	OTTA	29	PBI	1515.0	1515.0	49.0	19.5	9.0		
	410	SGMR	49	GB	1518.0E	1521.0	6.0D	1600.0			QL=1 ST=2 TYP=7
	410	SVTO	49	GB	1518.0E	1521.0	9.0D	2200.0			QL=1 ST=2 TYP=7
	245	SGMR	49	GB	1518.0E	1523.0	10.0D	990.0			QL=1 ST=2 TYP=7
	610	SGMR	4	S/F	1519.0E	1521.0	4.0D	350.0			QL=1 ST=2 TYP=5
	245	SVTO	4	S/F	1521.0E	1523.0	6.0D	490.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1531.0E	1538.0	12.0D	2300.0			QL=1 ST=2 TYP=7
	245	SVTO	49	GB	1531.0E	1538.0	10.0D	1900.0			QL=1 ST=2 TYP=7
	410	SGMR	49	GB	1533.0E	1534.0	2.0D	790.0			QL=1 ST=2 TYP=6
	410	SVTO	49	GB	1533.0E	1534.0	6.0D	1300.0			QL=1 ST=2 TYP=6
	610	SGMR	4	S/F	1537.0E	1540.0	6.0D	270.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1545.0E	1545.0	2.0D	1200.0			QL=1 ST=2 TYP=6
	4995	SVTO	4	S/F	1545.0E	1545.0	3.0D	60.0			QL=1 ST=2 TYP=3
	245	SVTO	49	GB	1545.0E	1545.0	3.0D	750.0			QL=1 ST=2 TYP=6
	8800	SVTO	4	S/F	1545.0E	1545.0	3.0D	83.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1602.0E	1605.0	4.0D	1400.0			QL=1 ST=2 TYP=6
	410	SVTO	4	S/F	1602.0E	1605.0	6.0D	280.0			QL=1 ST=2 TYP=5
	245	SVTO	49	GB	1602.0E	1605.0	6.0D	820.0			QL=1 ST=2 TYP=6
	410	SGMR	8	S	1605.0E	1605.0	1.0D	290.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	1607.0E	1608.0	1.0D	380.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	1611.0	1620.0	11.0	34.2	10.0		
	245	SGMR	49	GB	1611.0E	1611.0	3.0D	7300.0			QL=1 ST=2 TYP=6
	410	SGMR	49	GB	1611.0E	1611.0	3.0D	520.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	1611.0E	1611.0	2.0D	5300.0			QL=1 ST=2 TYP=6
	610	SGMR	8	S	1612.0E	1613.0	1.0D	110.0			QL=1 ST=2 TYP=3
	410	SGMR	49	GB	1615.0E	1615.0	1.0D	800.0			QL=1 ST=3 TYP=6
	410	SVTO	49	GB	1615.0E	1615.0	U	2000.0			QL=1 ST=2 TYP=6
	410	SGMR	49	GB	1618.0E	1619.0	2.0D	1700.0			QL=1 ST=2 TYP=6
	15400	SGMR	8	S	1619.0E	1619.0	U	90.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	1619.0E	1619.0	U	75.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1619.0E	1619.0	1.0D	7900.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	1619.0E	1619.0	1.0D	7000.0			QL=1 ST=2 TYP=6
	610	SGMR	8	S	1620.0E	1621.0	2.0D	220.0			QL=1 ST=2 TYP=3
	410	SGMR	4	S/F	1628.0E	1629.0	3.0D	440.0			QL=1 ST=2 TYP=3
	2800	OTTA	22	GRF	1638.0	1647.0	23.0D	28.9	8.0		
	8800	SGMR	8	S	1646.0E	1646.0	U	180.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	1730.0E	1731.0	1.0D	220.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1801.0E	1803.0	2.0D	810.0			QL=1 ST=2 TYP=6
	410	SGMR	8	S	1803.0E	1803.0	1.0D	280.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1812.0E	1813.0	2.0D	5600.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1835.0E	1936.0	61.0D	600.0			QL=1 ST=2 TYP=6
	2800	OTTA	22	GRF	1839.0	1937.0	110.0	46.8	14.0		
	410	PALE	49	GB	1839.0E	1839.0	1.0D	1100.0			QL=1 ST=3 TYP=6

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

Outstanding Occurrences

MARCH 1989

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	610	PALE	8	S	1839.0E	1839.0	2.0D	200.0			QL=1 ST=3 TYP=3
	410	PALE	49	GB	1843.0E	1850.0	14.0D	3000.0			QL=1 ST=3 TYP=7
	245	PALE	49	GB	1850.0E	1856.0	9.0D	57000.0			QL=1 ST=3 TYP=7
	245	SGMR	49	GB	1855.0E	1856.0	1.0D	45000.0			QL=1 ST=3 TYP=7
	410	SGMR	49	GB	1855.0E	1856.0	1.0D	1800.0			QL=1 ST=3 TYP=7
	610	SGMR	8	S	1855.0E	1856.0	1.0D	240.0			QL=1 ST=3 TYP=3
	8800	PALE	8	S	1931.0E	1932.0	1.0D	65.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	1932.0E	1936.0	5.0D	1800.0			QL=1 ST=2 TYP=7
	15400	PALE	8	S	1932.0E	1932.0	U	54.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1934.0E	1936.0	2.0D	970.0			QL=1 ST=2 TYP=7
	410	SGMR	49	GB	1934.0E	1936.0	2.0D	1400.0			QL=1 ST=2 TYP=6
	610	PALE	8	S	1935.0E	1936.0	2.0D	110.0			QL=1 ST=2 TYP=3
	4995	PALE	8	S	1935.0E	1936.0	1.0D	75.0			QL=1 ST=2 TYP=3
	2695	PALE	8	S	1936.0E	1936.0	U	54.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	1941.0E	1942.0	2.0D	64.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	1953.0E	1953.0	U	1400.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	1953.0E	1953.0	U	2600.0			QL=1 ST=2 TYP=7
	610	SGMR	8	S	1953.0E	1954.0	1.0D	40.0			QL=1 ST=3 TYP=3
	245	SGMR	49	GB	1953.0E	1953.0	U	3500.0			QL=1 ST=3 TYP=6
	410	SGMR	49	GB	1953.0E	1953.0	U	570.0			QL=1 ST=3 TYP=6
	245	PALE	49	GB	1957.0E	1957.0	U	1300.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	2001.0E	2001.0	U	70.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	2008.0E	2009.0	3.0D	640.0			QL=1 ST=2 TYP=6
	610	PALE	8	S	2010.0E	2010.0	U	63.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	2011.0E	2015.0	5.0D	2000.0			QL=1 ST=2 TYP=7
	410	PALE	49	GB	2018.0E	2028.0	18.0D	5000.0			QL=1 ST=2 TYP=7
	610	PALE	8	S	2019.0E	2019.0	1.0D	80.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	2023.0E	2023.0	U	890.0			QL=1 ST=2 TYP=6
	410	SGMR	49	GB	2028.0E	2028.0	5.0D	5100.0			QL=1 ST=2 TYP=6
	610	SGMR	8	S	2028.0E	2028.0	1.0D	310.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	2029.0	2037.0	80.0	338.0	135.0		
	8800	PALE	49	GB	2030.0E	2035.0	6.0D	1300.0			QL=1 ST=2 TYP=7
	4995	PALE	49	GB	2032.0E	2036.0	4.0D	800.0			QL=1 ST=2 TYP=6
	610	SGMR	8	S	2033.0E	2035.0	2.0D	280.0			QL=1 ST=3 TYP=3
	245	SGMR	49	GB	2033.0E	2035.0	5.0D	8400.0			QL=1 ST=3 TYP=7
	410	SGMR	49	GB	2033.0E	2037.0	14.0D	3400.0			QL=1 ST=3 TYP=7
	4995	SGMR	49	GB	2034.0E	2036.0	13.0D	710.0			QL=1 ST=3 TYP=6
	15400	PALE	8	S	2035.0E	2036.0	1.0D	390.0			QL=1 ST=2 TYP=3
	1415	PALE	8	S	2035.0E	2036.0	1.0D	440.0			QL=1 ST=2 TYP=3
	8800	SGMR	49	GB	2035.0E	2036.0	12.0D	500.0			QL=1 ST=3 TYP=6
	2695	SGMR	4	S/F	2035.0E	2036.0	12.0D	370.0			QL=1 ST=3 TYP=3
	1415	SGMR	4	S/F	2035.0E	2036.0	12.0D	420.0			QL=1 ST=3 TYP=3
	1415	PALE	4	S/F	2036.0E	2036.0	3.0D	390.0			QL=1 ST=2 TYP=3
	610	PALE	49	GB	2036.0E	2036.0	3.0D	510.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	2036.0E	2037.0	1.0D	3700.0			QL=1 ST=2 TYP=6
	2695	PALE	20	GRF	2036.0E	2036.0	13.0D	440.0			QL=1 ST=2 TYP=2
	4995	PALE	49	GB	2036.0E	2036.0	13.0D	670.0			QL=1 ST=2 TYP=6
	15400	PALE	20	GRF	2036.0E	2037.0	13.0D	300.0			QL=1 ST=2 TYP=2
	8800	PALE	49	GB	2036.0E	2038.0	13.0D	920.0			QL=1 ST=2 TYP=6
	410	PALE	49	GB	2036.0E	2047.0	13.0D	5600.0			QL=1 ST=2 TYP=7
	15400	SGMR	4	S/F	2036.0E	2036.0	11.0D	250.0			QL=1 ST=3 TYP=3
	245	SGMR	49	GB	2047.0E	2056.0	19.0D	6800.0			QL=1 ST=3 TYP=7
	410	SGMR	49	GB	2047.0E	2114.0	27.0D	11000.0			QL=1 ST=3 TYP=7
	15400	SGMR	4	S/F	2047.0E	2052.0	23.0D	340.0			QL=1 ST=3 TYP=5
	610	SGMR	4	S/F	2047.0E	2047.0	193.0D	130.0			QL=1 ST=3 TYP=3
	4995	SGMR	20	GRF	2047.0E	2101.0	193.0D	280.0			QL=1 ST=3 TYP=2
	8800	SGMR	49	GB	2047.0E	2052.0	193.0D	540.0			QL=1 ST=3 TYP=7
	410	PALE	49	GB	2049.0E	2104.0	19.0D	9400.0			QL=1 ST=2 TYP=7
	245	PALE	49	GB	2049.0E	2056.0	17.0D	5500.0			QL=1 ST=2 TYP=7
	8800	PALE	49	GB	2049.0E	2052.0	19.0D	760.0			QL=1 ST=2 TYP=7
	4995	PALE	20	GRF	2049.0E	2052.0	19.0D	410.0			QL=1 ST=2 TYP=2
	2695	PALE	20	GRF	2049.0E	2101.0	19.0D	300.0			QL=1 ST=2 TYP=2
	15400	PALE	49	GB	2049.0E	2052.0	19.0D	580.0			QL=1 ST=2 TYP=6
	610	PALE	49	GB	2049.0E	2055.0	19.0D	2300.0			QL=1 ST=2 TYP=6
	100	HIRA	48	C	2050.0E		11.0D	15000.0D			SUNRISE
	1415	PALE	4	S/F	2050.0E	2056.0	18.0D	360.0			QL=1 ST=2 TYP=5
	2695	SGMR	20	GRF	2050.0E	2101.0	20.0D	210.0			QL=1 ST=3 TYP=2
	500	HIRA	48	C	2050.0E	2115.0	37.0D	4200.0U	950.0U		SL SUNRISE
	1415	SGMR	4	S/F	2050.0E	2056.0	190.0D	340.0			QL=1 ST=3 TYP=5

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

MARCH 1989

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	200	HIRA	48	C	2050.0E	2115.8	30.0D	13000.0U	1070.0U		WL SUNRISE
	245	SGMR	49	GB	2106.0E	2116.0	15.0D	4000.0			QL=1 ST=2 TYP=6
	610	PALE	49	GB	2110.0E	2118.0	15.0D	13000.0			QL=1 ST=2 TYP=6
	4995	PALE	20	GRF	2110.0E	2116.0	11.0D	150.0			QL=1 ST=2 TYP=2
	410	PALE	49	GB	2110.0E	2115.0	12.0D	15000.0			QL=1 ST=2 TYP=7
	8800	PALE	4	S/F	2110.0E	2116.0	11.0D	450.0			QL=1 ST=2 TYP=5
	15400	PALE	49	GB	2110.0E	2116.0	15.0D	1700.0			QL=1 ST=2 TYP=7
	610	SGMR	49	GB	2110.0E	2117.0	11.0D	10000.0			QL=1 ST=2 TYP=7
	1415	SGMR	4	S/F	2110.0E	2115.0	10.0D	250.0			QL=1 ST=2 TYP=3
	410	SGMR	49	GB	2110.0E	2114.0	11.0D	11000.0			QL=1 ST=2 TYP=7
	1415	PALE	4	S/F	2112.0E	2113.0	8.0D	330.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	2115.0E	2116.0	3.0D	3200.0			QL=1 ST=2 TYP=6
	2695	PALE	8	S	2115.0E	2116.0	2.0D	180.0			QL=1 ST=2 TYP=3
	2695	SGMR	8	S	2115.0E	2115.0	2.0D	100.0			QL=1 ST=2 TYP=3
	15400	SGMR	49	GB	2115.0E	2116.0	9.0D	950.0			QL=1 ST=3 TYP=6
	4995	SGMR	4	S/F	2115.0E	2116.0	6.0D	80.0			QL=1 ST=2 TYP=3
	8800	SGMR	4	S/F	2115.0E	2116.0	7.0D	300.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	2211.0E	2211.0	1.0D	3200.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	2211.0E	2211.0	1.0D	140.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	2211.0E	2211.0	1.0D	2500.0			QL=1 ST=2 TYP=6
	500	HIRA	42	SER	2211.4	2215.0	24.5	130.0			O
	410	SGMR	8	S	2213.0E	2215.0	2.0D	100.0			QL=1 ST=2 TYP=3
	2695	PENT	4	S/F	2217.0	2218.0	14.0	60.9	24.0		
	15400	PALE	49	GB	2217.0E	2218.0	9.0D	1800.0			QL=1 ST=2 TYP=6
	410	PALE	4	S/F	2217.0E	2218.0	3.0D	270.0			QL=1 ST=2 TYP=3
	610	PALE	8	S	2217.0E	2218.0	2.0D	77.0			QL=1 ST=2 TYP=3
	15400	SGMR	4	S/F	2217.0E	2218.0	4.0D	240.0			QL=1 ST=2 TYP=3
	8800	SGMR	4	S/F	2217.0E	2218.0	4.0D	410.0			QL=1 ST=2 TYP=3
	4995	SGMR	4	S/F	2217.0E	2218.0	3.0D	290.0			QL=1 ST=2 TYP=3
	2695	SGMR	4	S/F	2217.0E	2219.0	4.0D	160.0			QL=1 ST=2 TYP=3
	610	SGMR	4	S/F	2217.0E	2218.0	3.0D	58.0			QL=1 ST=2 TYP=3
	410	SGMR	4	S/F	2217.0E	2218.0	3.0D	95.0			QL=1 ST=2 TYP=3
	1415	SGMR	8	S	2217.0E	2218.0	1.0D	120.0			QL=1 ST=2 TYP=3
	8800	PALE	49	GB	2217.0E	2218.0	11.0D	880.0			QL=1 ST=2 TYP=6
	2695	PALE	8	S	2218.0E	2218.0	1.0D	66.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	2255.0E	2257.0	8.0D	1400.0			QL=1 ST=2 TYP=6
	200	HIRA	46	C	2301.7	2302.8	2.1	170.0			SL
	100	HIRA	42	SER	2309.2	2319.9	13.2	7600.0			SL
	610	LEAR	8	S	2335.0E	2335.0	U	64.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	2336.0E	2336.0	U	240.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	2336.0E	2336.0	U	360.0			QL=1 ST=2 TYP=3
	410	LEAR	49	GB	2357.0E	2358.0	1.0D	1200.0			QL=1 ST=2 TYP=6
13	100	GORK	44	NS	0418.0E		462.0D		1400.0		
	200	GORK	44	NS	0433.0E		450.0D		70.0		
	410	LEAR	44	NS	0454.0E	0504.0	331.0D	120.0			QL=1 ST=2 TYP=1
	221	ABST	43	NS	0500.0		240.0		300.0		
	245	SVTO	44	NS	0524.0E	0532.0	668.0D	6800.0			QL=1 ST=2 TYP=1
	410	SVTO	44	NS	0524.0E	0550.0	668.0D	890.0			QL=1 ST=2 TYP=1
	204	IZMI	43	NS	0600.0		360.0	200.0			
	33	UPIC	44	NS	0600.0E		600.0D				
	234	POTS	44	NS	0600.0E	0705.0	560.0D	275.0			
	260	ONDR	44	NS	0700.0E		520.0D				
	430	KRAK	44	NS	0807.0E	0825.0	359.0D	1200.0	4.0		
	127	TORN	44	NS	1000.0E	1421.0	300.0D	25000.0	1300.0		V=1
	610	SGMR	44	NS	1120.0E	2113.0	666.0D	94.0			QL=1 ST=2 TYP=1
	410	SGMR	44	NS	1120.0E	1256.0	666.0D	270.0			QL=1 ST=2 TYP=1
	245	SGMR	44	NS	1120.0E	1444.0	666.0D	1100.0			QL=1 ST=2 TYP=1
	245	PALE	44	NS	1658.0E	1831.0	686.0D	1000.0			QL=1 ST=2 TYP=1
	100	HIRA	44	NS	2050.0E	0400.0	710.0D	1300.0	390.0		SL
	200	HIRA	44	NS	2050.0E	0400.0	710.0D	730.0	370.0		SL
	410	LEAR	43	NS	2242.0	2243.0	21.0D	220.0			QL=1 ST=2 TYP=1
	245	LEAR	43	NS	2242.0	0635.0	702.0	1000.0			QL=1 ST=2 TYP=1
	500	HIRA	46	C	0005.8	0006.7	1.3	1420.0			SL
	245	PALE	49	GB	0006.0E	0006.0	1434.0D	780.0			QL=1 ST=1 TYP=6
	8800	PALE	8	S	0025.0E	0027.0	2.0D	100.0			QL=1 ST=2 TYP=3
	410	LEAR	4	S/F	0037.0E	0044.0	8.0D	60.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0041.0E	0042.0	2.0D	130.0			QL=1 ST=2 TYP=3
	610	LEAR	4	S/F	0041.0E	0044.0	4.0D	29.0			QL=1 ST=2 TYP=3

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

MARCH 1989

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	245	PALE	49	GB	0045.0E	0046.0	1.0D	550.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	0046.0E	0046.0	U	110.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0056.0E	0056.0	1.0D	71.0			QL=1 ST=2 TYP=3
	100	HIRA	42	SER	0107.3	0128.8	47.0	8700.0			SL
	410	LEAR	49	GB	0110.0E	0110.0	U	4700.0			QL=1 ST=2 TYP=6
	610	LEAR	8	S	0110.0E	0110.0	U	35.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0110.0E	0110.0	U	7000.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0110.0E	0110.0	U	7800.0			QL=1 ST=2 TYP=6
	410	PALE	49	GB	0110.0E	0110.0	U	3800.0			QL=1 ST=2 TYP=6
	245	LEAR	8	S	0120.0E	0120.0	1.0D	240.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0120.0E	0120.0	U	88.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0121.0E	0121.0	1.0D	73.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0121.0E	0121.0	U	38.0			QL=1 ST=2 TYP=3
	200	HIRA	42	SER	0125.1	0146.9	33.7	840.0			WL
	245	LEAR	8	S	0127.0E	0127.0	U	260.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0127.0E	0127.0	U	160.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0131.0E	0134.0	11.0D	180.0			QL=1 ST=2 TYP=5
	8800	PALE	4	S/F	0133.0E	0134.0	12.0D	200.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0134.0E	0134.0	2.0D	60.0			QL=1 ST=2 TYP=3
	610	LEAR	49	GB	0145.0E	0147.0	7.0D	850.0			QL=1 ST=2 TYP=7
	410	LEAR	49	GB	0145.0E	0147.0	7.0D	1000.0			QL=1 ST=2 TYP=7
	245	LEAR	49	GB	0145.0E	0151.0	15.0D	1300.0			QL=1 ST=2 TYP=7
	410	PALE	49	GB	0146.0E	0147.0	1.0D	1100.0			QL=1 ST=3 TYP=6
	245	PALE	49	GB	0146.0E	0151.0	6.0D	1900.0			QL=1 ST=2 TYP=7
	610	PALE	49	GB	0146.0E	0147.0	2.0D	1300.0			QL=1 ST=2 TYP=6
	500	HIRA	42	SER	0146.0	0147.0	11.5	1320.0			WL
	245	PALE	49	GB	0156.0E	0156.0	3.0D	1100.0			QL=1 ST=2 TYP=6
	610	PALE	4	S/F	0156.0E	0156.0	5.0D	490.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	0156.0E	0156.0	5.0D	790.0			QL=1 ST=2 TYP=6
	410	LEAR	8	S	0213.0E	0214.0	1.0D	320.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0213.0E	0213.0	1.0D	210.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0228.0E	0230.0	2.0D	240.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0228.0E	0230.0	7.0D	43.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	0228.0E	0230.0	7.0D	51.0			QL=1 ST=2 TYP=3
	410	LEAR	4	S/F	0228.0E	0230.0	4.0D	39.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0250.0E	0251.0	1.0D	110.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0250.0E	0250.0	1.0D	130.0			QL=1 ST=2 TYP=3
	500	HIRA	46	C	0254.5	0325.2	71.0	825.0	40.0		SL
	500	HIRA	46	C	0254.5	0300.5		220.0			SL
	410	PALE	4	S/F	0256.0E	0258.0	5.0D	460.0			QL=1 ST=2 TYP=3
	410	LEAR	49	GB	0258.0E	0258.0	10.0D	540.0			QL=1 ST=2 TYP=6
	1415	LEAR	4	S/F	0258.0E	0300.0	11.0D	420.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0258.0E	0300.0	10.0D	760.0			QL=1 ST=2 TYP=6
	4995	LEAR	49	GB	0258.0E	0317.0	26.0D	580.0			QL=1 ST=2 TYP=7
	2695	LEAR	4	S/F	0258.0E	0314.0	26.0D	380.0			QL=1 ST=2 TYP=5
	610	LEAR	4	S/F	0259.0E	0301.0	9.0D	210.0			QL=1 ST=2 TYP=3
	1415	PALE	4	S/F	0259.0E	0300.0	6.0D	290.0			QL=1 ST=2 TYP=3
	610	PALE	8	S	0259.0E	0301.0	2.0D	220.0			QL=1 ST=2 TYP=3
	8800	LEAR	49	GB	0259.0E	0317.0	25.0D	1400.0			QL=1 ST=2 TYP=7
	15400	LEAR	49	GB	0259.0E	0317.0	25.0D	1100.0			QL=1 ST=2 TYP=7
	4995	PALE	49	GB	0259.0E	0317.0	33.0D	540.0			QL=1 ST=2 TYP=7
	2695	PALE	4	S/F	0259.0E	0314.0	33.0D	330.0			QL=1 ST=2 TYP=5
	8800	PALE	49	GB	0259.0E	0317.0	33.0D	1200.0			QL=1 ST=2 TYP=7
	200	HIRA	42	SER	0300.0	0331.0	43.6	5500.0			WL
	15400	PALE	8	S	0301.0E	0301.0	U	120.0			QL=1 ST=2 TYP=3
	410	LEAR	4	S/F	0312.0E	0318.0	8.0D	480.0			QL=1 ST=2 TYP=3
	245	LEAR	4	S/F	0312.0E	0317.0	6.0D	340.0			QL=1 ST=2 TYP=3
	610	LEAR	4	S/F	0312.0E	0317.0	8.0D	220.0			QL=1 ST=2 TYP=3
	1415	LEAR	4	S/F	0314.0E	0317.0	6.0D	170.0			QL=1 ST=2 TYP=3
	100	HIRA	42	SER	0324.0	0331.0	20.0	11000.0			WL
	610	LEAR	49	GB	0326.0E	0331.0	9.0D	700.0			QL=1 ST=2 TYP=7
	410	LEAR	49	GB	0326.0E	0327.0	15.0D	1100.0			QL=1 ST=2 TYP=7
	245	LEAR	49	GB	0326.0E	0331.0	15.0D	3700.0			QL=1 ST=2 TYP=6
	1415	LEAR	8	S	0327.0E	0327.0	1.0D	110.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0327.0E	0327.0	1.0D	340.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0330.0E	0331.0	2.0D	5500.0			QL=1 ST=2 TYP=7
	15400	LEAR	8	S	0331.0E	0331.0	1.0D	140.0			QL=1 ST=2 TYP=3
	610	PALE	8	S	0332.0E	0332.0	1.0D	190.0			QL=1 ST=2 TYP=3
	15400	PALE	4	S/F	0332.0E	0335.0	11.0D	210.0			QL=1 ST=2 TYP=5

SOLAR RADIO EMISSION
Outstanding Occurrences

MARCH 1989

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	2695	PALE	4	S/F	0332.0E	0335.0	11.0D	200.0			QL=1 ST=2 TYP=3
	8800	PALE	4	S/F	0332.0E	0335.0	12.0D	450.0			QL=1 ST=2 TYP=5
	4995	PALE	4	S/F	0332.0E	0335.0	12.0D	420.0			QL=1 ST=2 TYP=5
	410	PALE	4	S/F	0332.0E	0332.0	1228.0D	270.0			QL=1 ST=3 TYP=3
	4995	LEAR	8	S	0334.0E	0335.0	2.0D	310.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0334.0E	0335.0	2.0D	140.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0350.0E	0350.0	2.0D	350.0			QL=1 ST=2 TYP=3
	9100	GORK	23	GRF	0433.0E	1153.1	507.0D	170.0			
	650	GORK	23	GRF	0445.0E	0513.0	318.0D	13.0			
	245	LEAR	8	S	0446.0E	0448.0	2.0D	94.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0447.0E	0447.0	U	65.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0447.0E	0447.0	U	15.0			QL=1 ST=2 TYP=3
	950	GORK	23	GRF	0449.2	0509.0	240.0	17.0			
	9300	KISV	22	GRF	0500.0	0847.4	480.0	46.0			
	15000	KISV	22	GRF	0500.0	0912.6	480.0	51.0			
	5900	KISV	46	C	0502.7	0506.4		25.0			
	9300	KISV	45	C	0502.7	0506.4	20.2	33.0			
	5900	KISV	46	C	0502.7	0505.6		26.0			
	9300	KISV	45	C	0502.7	0504.6		32.0			
	5900	KISV	46	C	0502.7	0504.7	22.8	31.0			
	9100	GORK	46	C	0503.7	0506.3		25.0			
	9100	GORK	46	C	0503.7	0504.7	5.4	24.0			
	650	GORK	41	F	0526.4	0527.3	32.0	56.0			
	650	GORK	41	F	0526.4	0549.4		80.0			
	650	GORK	41	F	0526.4	0552.6		80.0			
	650	GORK	41	F	0526.4	0532.6		58.0			
	2950	GORK	21	GRF	0529.6	0656.0	450.0D	26.0			
	245	LEAR	49	GB	0531.0E	0532.0	2.0D	9000.0			QL=1 ST=2 TYP=6
	410	LEAR	4	S/F	0532.0E	0533.0	3.0D	66.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0532.0E	0532.0	U	17.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0532.0E	0532.0	1.0D	100.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0532.0E	0532.0	U	9.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0532.0E	0532.0	1.0D	24.0			QL=1 ST=2 TYP=3
	200	HIRA	42	SER	0532.0	0532.1	4.2	34000.0			O
	9300	KISV	2	S/F	0532.1	0532.6	2.7	33.0			
	950	GORK	2	S/F	0532.3	0532.5	1.3	28.0			
	15000	KISV	45	C	0532.4	0533.0		12.0			
	15000	KISV	45	C	0532.4	0532.6	0.8	21.0			
	5900	KISV	45	C	0532.4	0532.6	0.8	12.0			
	200	GORK	41	F	0532.5	0536.6		5000.0			
	100	GORK	8	S	0532.5	0532.6	0.8	20300.0			
	200	GORK	41	F	0532.5	0533.7		5400.0			
	200	GORK	41	F	0532.5	0532.7	4.4	29700.0			
	245	LEAR	49	GB	0536.0E	0536.0	U	1700.0			QL=1 ST=2 TYP=6
	9300	KISV	2	S/F	0537.5	0538.6	4.7	10.0			
	950	GORK	46	C	0544.1	0550.1		32.0			
	950	GORK	46	C	0544.1	0552.5		32.0			
	950	GORK	45	C	0544.1	0547.5	10.7	52.0			
	610	LEAR	4	S/F	0546.0E	0552.0	6.0D	81.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	0547.0E	0549.0	4.0D	32.0			QL=1 ST=2 TYP=3
	4995	LEAR	4	S/F	0547.0E	0549.0	7.0D	17.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0547.0E	0549.0	7.0D	55.0			QL=1 ST=2 TYP=3
	5900	KISV	22	GRF	0547.0	0552.6	121.0	21.0			
	9300	KISV	22	GRF	0547.0	0552.6	122.5	33.0			
	9100	GORK	4	S/F	0547.4	0549.5	6.3	57.0			
	5900	KISV	45	C	0549.0	0549.2	0.8	16.0			
	9300	KISV	45	C	0549.0	0549.6	1.4	36.0			
	15000	KISV	45	C	0549.1	0550.4		25.0			
	15000	KISV	45	C	0549.1	0549.5	4.4	38.0			
	410	LEAR	49	GB	0550.0E	0550.0	U	530.0			QL=1 ST=2 TYP=6
	15000	KISV	4	S/F	0601.5	0609.8	17.2	141.0			
	9300	KISV	45	C	0602.6	0606.0		64.0			
	9300	KISV	45	C	0602.6	0609.8	19.2	68.0			
	5900	KISV	46	C	0602.9	0628.4	30.1	84.0			
	5900	KISV	46	C	0602.9	0623.5		24.0			
	5900	KISV	46	C	0602.9	0605.9		49.0			
	245	LEAR	4	S/F	0603.0E	0605.0	17.0D	320.0			QL=1 ST=2 TYP=5
	8800	LEAR	4	S/F	0603.0E	0606.0	17.0D	81.0			QL=1 ST=2 TYP=3
	9100	GORK	46	C	0603.4	0606.1	9.5	54.0			

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

MARCH 1989

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	9100	GORK	46	C	0603.4	0609.9		49.0			
	200	HIRA	46	C	0603.6	0605.0	5.5	280.0	110.0		ML
	410	LEAR	8	S	0604.0E	0605.0	2.0D	60.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	0604.0E	0609.0	9.0D	66.0			QL=1 ST=2 TYP=3
	4995	LEAR	4	S/F	0604.0E	0606.0	16.0D	38.0			QL=1 ST=2 TYP=3
	100	HIRA	46	C	0604.1	0604.8	5.6	2700.0	640.0		WL
	9300	KISV	2	S/F	0617.4	0617.8	0.8	6.0			
	15400	LEAR	4	S/F	0618.0E	0628.0	15.0D	400.0			QL=1 ST=2 TYP=3
	15000	KISV	28	PRE	0618.7	0623.5	8.6	52.0			
	9300	KISV	45	C	0622.3	0623.5		29.0			
	9300	KISV	45	C	0622.3	0628.6	23.6	141.0			
	9100	GORK	3	S	0625.6	0630.0	4.4	220.0			
	8800	LEAR	8	S	0627.0E	0628.0	1.0D	250.0			QL=1 ST=2 TYP=3
	15400	SVTO	4	S/F	0627.0E	0628.0	4.0D	350.0			QL=1 ST=2 TYP=3
	15000	KISV	4	S/F	0627.3	0628.2	2.3	401.0			
	15000	KISV	29	PBI	0627.3	0629.7	22.5	148.0			
	4995	LEAR	8	S	0628.0E	0628.0	U	50.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	0628.0E	0628.0	U	120.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0636.0E	0636.0	U	260.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0636.0E	0636.0	U	60.0			QL=1 ST=2 TYP=3
	15000	KISV	2	S/F	0637.5	0638.8	5.8	39.0			
	9300	KISV	2	S/F	0638.7	0638.8	0.8	17.0			
	245	LEAR	4	S/F	0639.0E	0640.0	3.0D	240.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0640.0E	0640.0	2.0D	85.0			QL=1 ST=2 TYP=3
	30	POTS	4	S/F	0640.0	0640.6	1.5	600.0			
	234	POTS	4	S/F	0640.2	0640.5	0.8	440.0			
	100	GORK	47	GB	0645.0	0658.2		21400.0			
	100	GORK	47	GB	0645.0	0653.7	32.0	21240.0			
	100	HIRA	41	F	0646.5	0654.8	12.0	7300.0			SL
	3100	CRIM	21	GRF	0647.0	0655.9	34.0	12.2	4.0		
	200	GORK	41	F	0647.2	0650.2	12.0	1600.0			
	200	GORK	41	F	0647.2	0656.7		2200.0			
	410	LEAR	4	S/F	0650.0E	0656.0	8.0D	200.0			QL=1 ST=2 TYP=3
	610	LEAR	4	S/F	0651.0E	0652.0	6.0D	95.0			QL=1 ST=2 TYP=3
	500	HIRA	41	F	0651.5	0715.3	24.0	1600.0			O
	650	GORK	41	F	0651.8	0652.1	24.0	127.0			
	650	GORK	41	F	0651.8	0712.3		190.0			
	650	GORK	41	F	0651.8	0715.5		1440.0			
	650	GORK	41	F	0651.8	0702.7		40.0			
	650	GORK	41	F	0651.8	0656.9		80.0			
	5900	KISV	28	PRE	0652.0	0702.4	10.4	17.0			
	950	GORK	46	C	0652.3	0655.0		6.0			
	950	GORK	46	C	0652.3	0653.1	4.0	8.0			
	15000	KISV	2	S/F	0654.5	0655.9	4.0	14.0			
	15000	KISV	23	GRF	0700.0	0703.2	36.0	54.0			
	9300	KISV	46	C	0700.4	0711.0		54.0			
	9300	KISV	46	C	0700.4	0703.2	24.3	103.0			
	9300	KISV	46	C	0700.4	0704.4		85.0			
	15400	LEAR	4	S/F	0701.0E	0708.0	14.0D	64.0			QL=1 ST=2 TYP=5
	3000	POTS	42	SER	0701.0	0711.0	14.0	64.0			
	9100	GORK	46	C	0701.3	0703.1	11.5	180.0			
	9100	GORK	46	C	0701.3	0704.4		160.0			
	8800	LEAR	4	S/F	0702.0E	0703.0	7.0D	100.0			QL=1 ST=2 TYP=3
	2695	LEAR	4	S/F	0702.0E	0711.0	13.0D	68.0			QL=1 ST=2 TYP=3
	410	LEAR	49	GB	0702.0E	0715.0	13.0D	920.0			QL=1 ST=2 TYP=7
	1415	LEAR	4	S/F	0702.0E	0707.0	12.0D	49.0			QL=1 ST=2 TYP=3
	4995	LEAR	4	S/F	0702.0E	0703.0	12.0D	120.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0702.0E	0707.0	16.0D	1600.0			QL=1 ST=2 TYP=7
	3100	CRIM	45	C	0702.2	0711.0		37.8			
	3100	CRIM	45	C	0702.2	0703.0	12.0	22.0	12.0		
	3100	CRIM	45	C	0702.2	0704.4		17.0			
	2950	GORK	45	C	0702.3	0703.0	12.2	32.0			
	3013	IZMI	45	C	0702.3	0711.0	14.0	47.0			
	2950	GORK	45	C	0702.3	0710.9		65.0			
	5900	KISV	29	PBI	0702.4	0714.1	18.6	12.0			
	5900	KISV	46	C	0702.4	0703.2	11.5	110.0			
	5900	KISV	46	C	0702.4	0704.6		82.0			
	950	GORK	4	S/F	0702.4	0714.6	16.0	57.0			
	5900	KISV	46	C	0702.4	0710.9		58.0			

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

MARCH 1989

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	9500	POTS	29	PBI	0702.5	0703.1	33.0	70.0			
	1470	POTS	42	SER	0703.0U	0711.0	12.0U	26.0			
	200	GORK	41	F	0703.3	0710.0		1900.0			
	200	GORK	41	F	0703.3	0713.6		2000.0			
	200	GORK	41	F	0703.3	0707.7	12.6	2200.0			
	610	LEAR	4	S/F	0704.0E	0715.0	11.0D	570.0			QL=1 ST=3 TYP=3
	15000	KISV	45	C	0707.6	0708.1	2.0	48.0			
	600	HUMN	46	C	0710.0	0715.5	7.0	360.0	25.0		
	100	GORK	41	F	0717.0	0725.2		10900.0			
	100	GORK	41	F	0717.0	0717.2	8.3	6600.0			
	100	GORK	41	F	0717.0	0720.4		9100.0			
	15400	SVTO	8	S	0728.0E	0729.0	1.0D	75.0			QL=1 ST=2 TYP=3
	15000	KISV	2	S/F	0728.9	0729.5	3.0	60.0			
	200	GORK	4	S/F	0734.3	0735.1	1.7	3300.0			
	245	LEAR	49	GB	0740.0E	0740.0	1.0D	1100.0			QL=1 ST=3 TYP=7
	245	SVTO	49	GB	0740.0E	0740.0	9.0D	1000.0			QL=1 ST=2 TYP=7
	536	ONDR	41	F	0742.7	0754.5	23.5	111.0			
	5900	KISV	1	S	0745.1	0745.2	0.2	6.0			
	650	GORK	41	F	0745.6	0751.0		54.0			
	650	GORK	41	F	0745.6	0748.3		80.0			
	650	GORK	41	F	0745.6	0757.4		40.0			
	650	GORK	41	F	0745.6	0745.8	19.4	30.0			
	650	GORK	41	F	0745.6	0754.9		80.0			
	410	SVTO	8	S	0747.0E	0748.0	1.0D	170.0			QL=1 ST=2 TYP=3
	600	HUMN	41	F	0748.0	0758.0	17.0	50.0			
	950	GORK	4	S/F	0748.0	0748.2	1.0	43.0			
	600	HUMN	41	F	0752.0	0752.5	11.0	54.0			
	200	GORK	4	S/F	0754.6	0755.0	1.0	3300.0			
	410	LEAR	8	S	0756.0E	0757.0	2.0D	54.0			QL=1 ST=2 TYP=3
	30	POTS	4	S/F	0756.3	0757.1	1.9	3000.0			
	234	POTS	4	S/F	0756.4	0757.4	1.5	750.0			
	5900	KISV	2	S/F	0756.8	0757.3	1.4	11.0			
	610	LEAR	8	S	0757.0E	0757.0	U	28.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0757.0E	0757.0	U	35.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0757.0E	0757.0	U	26.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0757.0E	0757.0	U	1300.0			QL=1 ST=2 TYP=6
	950	GORK	2	S/F	0757.0	0757.5	1.4	16.0			
	9100	GORK	1	S	0757.1	0757.4	1.3	25.0			
	15000	KISV	2	S/F	0757.1	0757.4	1.8	18.0			
	9300	KISV	2	S/F	0757.1	0757.4	1.0	24.0			
	9300	KISV	2	S/F	0759.8	0800.5	7.5	22.0			
	15000	KISV	46	C	0759.9	0800.2	11.0	43.0			
	5900	KISV	21	GRF	0800.0	0800.6	20.3	16.0			
	9300	KISV	22	GRF	0808.4	0825.1	21.7	14.0			
	15000	KISV	22	GRF	0821.3	0852.3	51.0	52.0			
	410	LEAR	49	GB	0822.0E	0825.0	3.0D	970.0			QL=1 ST=2 TYP=6
	5900	KISV	45	C	0824.9	0825.0	0.3	3.0			
	245	LEAR	49	GB	0825.0E	0825.0	U	2200.0			QL=1 ST=2 TYP=6
	234	POTS	8	S	0825.1	0825.1	0.5	1900.0			
	30	POTS	8	S	0825.1	0825.3	0.6	8000.0			
	5900	KISV	45	C	0829.3	0829.5	0.7	5.0			
	5900	KISV	22	GRF	0830.7	0847.5	32.3	19.0			
	410	LEAR	8	S	0831.0E	0831.0	1.0D	120.0			QL=1 ST=2 TYP=3
	9300	KISV	2	S/F	0831.4	0832.1	1.1	13.0			
	5900	KISV	2	S/F	0831.5	0832.1	1.0	12.0			
	15000	KISV	2	S/F	0831.8	0832.0	0.4	9.0			
	245	LEAR	49	GB	0832.0E	0832.0	U	690.0			QL=1 ST=2 TYP=6
	600	HUMN	40	F	0832.0	0844.0	23.0	6.0			
	9500	POTS	21	GRF	0900.0	0927.0	95.0	30.0			
	600	HUMN	27	RF	0901.0	0907.0	16.0	16.0	6.0		
	536	ONDR	42	SER	0901.0	0946.4	60.0	131.0			
	5900	KISV	2	S/F	0904.3	0905.6	2.4	5.0			
	9300	KISV	2	S/F	0908.2	0909.4	4.4	18.0			
	5900	KISV	2	S/F	0908.3	0909.8	4.3	9.0			
	5900	KISV	23	GRF	0908.3	0920.8	29.2	19.0			
	15000	KISV	45	C	0913.0	0915.6	19.1	29.0			
	15000	KISV	45	C	0913.0	0920.8		23.0			
	9300	KISV	23	GRF	0914.7	0920.8	172.0	23.0			
	950	GORK	2	S/F	0916.9	0917.4	1.1	33.0			

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

MARCH 1989

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	410	SVTO	8	S	0917.0E	0917.0	1.0D	260.0			QL=1 ST=2 TYP=3
	600	HUMN	40	F	0917.0	0944.0	41.0	12.0			
	810	KRAK	42	SER	0917.0	0917.5	4.5	26.0			
	5900	KISV	45	C	0924.0	0927.0	7.5	21.0			
	5900	KISV	45	C	0924.0	0930.2		10.0			
	15000	KISV	2	S/F	0925.6	0927.0	4.8	10.0			
	9300	KISV	2	S/F	0925.8	0927.4	6.6	25.0			
	15000	KISV	45	C	0933.8	0942.9		125.0			
	15000	KISV	45	C	0933.8	0943.9	21.5	155.0			
	9300	KISV	2	S/F	0933.9	0934.8	3.7	16.0			
	5900	KISV	2	S/F	0934.3	0935.2	2.0	8.0			
	9500	POTS	3	S	0940.0	0944.0	10.0	72.0			
	9300	KISV	2	S/F	0940.0	0940.6	1.2	16.0			
	9300	KISV	45	C	0940.0	0946.7		43.0			
	9300	KISV	45	C	0940.0	0943.9	11.4	79.0			
	5900	KISV	46	C	0940.1	0944.2		19.0			
	5900	KISV	2	S/F	0940.1	0940.6	1.5	8.0			
	5900	KISV	46	C	0940.1	0946.8	10.7	22.0			
	5900	KISV	46	C	0940.1	0947.9		21.0			
	410	LEAR	4	S/F	0941.0E	0946.0	8.0D	290.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	0941.0E	0943.0	3.0D	100.0			QL=1 ST=2 TYP=3
	9100	GORK	4	S/F	0941.6	0943.8	12.3	180.0			
	8800	LEAR	4	S/F	0942.0E	0943.0	4.0D	100.0			QL=1 ST=2 TYP=3
	15400	SVTO	4	S/F	0942.0E	0943.0	7.0D	110.0			QL=1 ST=2 TYP=3
	950	GORK	3	S	0942.9	0943.9	2.8	5.0			
	245	LEAR	49	GB	0943.0E	0947.0	6.0D	11000.0			QL=1 ST=2 TYP=6
	8800	SVTO	4	S/F	0943.0E	0943.0	6.0D	72.0			QL=1 ST=2 TYP=3
	245	SVTO	49	GB	0943.0E	0947.0	6.0D	11000.0			QL=1 ST=3 TYP=6
	810	KRAK	1	S	0943.5	0944.0	1.0	6.0	2.0		
	200	GORK	41	F	0943.8	0944.1	6.0	260.0D			
	200	GORK	41	F	0943.8	0947.6		660.0D			
	410	SVTO	8	S	0946.0E	0948.0	2.0D	280.0			QL=1 ST=2 TYP=3
	30	POTS	41	F	0946.5	0946.7	1.7	18000.0			
	100	GORK	8	S	0946.6	0946.7	0.4	20000.0			
	234	POTS	42	SER	0946.6	0947.9	1.9	750.0			
	15000	KISV	2	S/F	0949.7	0950.1	1.8	32.0			
	5900	KISV	2	S/F	0955.4	0955.6	1.3	27.0			
	5900	KISV	23	GRF	0959.0	1000.6	11.3	11.0			
	9100	GORK	3	S	1001.3	1001.6	1.2	60.0			
	9300	KISV	3	S	1001.4	1001.6	1.2	59.0			
	15000	KISV	2	S/F	1006.1	1006.6	1.0	36.0			
	15000	KISV	23	GRF	1021.5	1025.5	10.4	22.0			
	650	GORK	40	F	1028.3	1031.3		30.0			
	650	GORK	40	F	1028.3	1029.4	4.0	4.0			
	245	SVTO	49	GB	1029.0E	1031.0	2.0D	1400.0			QL=1 ST=2 TYP=6
	234	POTS	41	F	1029.6	1031.4	2.6	600.0			
	30	POTS	41	F	1030.0	1031.4	3.5	8000.0			
	100	GORK	41	F	1031.2	1038.1		6600.0			
	15000	KISV	2	S/F	1031.2	1031.4	0.7	15.0			
	9300	KISV	2	S/F	1031.2	1031.4	0.4	12.0			
	100	GORK	41	F	1031.2	1031.4	10.2	6240.0			
	810	KRAK	8	S	1031.3	1031.5	0.6	101.0			
	200	GORK	4	S/F	1031.3	1031.6	0.5	250.0D			
	5900	KISV	23	GRF	1040.0	1113.5	127.2	34.0			
	15000	KISV	45	C	1048.0	1055.6		25.0			
	15000	KISV	45	C	1048.0	1050.6	10.7	75.0D			
	5900	KISV	2	S/F	1048.1	1050.6	7.3	18.0			
	9300	KISV	2	S/F	1049.6	1050.6	4.2	21.0			
	15400	SVTO	8	S	1050.0E	1050.0	U	75.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	1051.0E	1052.0	1.0D	120.0			QL=1 ST=2 TYP=3
	15000	KISV	23	GRF	1100.9	1207.1	97.0	48.0			
	3100	CRIM	29	PBI	1101.2	1107.5	10.0	6.0	2.0		
	650	GORK	46	C	1101.3	1107.4		15.0			
	9300	KISV	23	GRF	1102.3	1119.9	28.3	21.0			
	15000	KISV	46	C	1105.5	1126.2		47.0			
	15000	KISV	46	C	1105.5	1112.4		48.0			
	15000	KISV	46	C	1105.5	1107.5		42.0			
	15000	KISV	46	C	1105.5	1119.9	27.5	67.0			
	600	HUMN	2	S/F	1106.0	1107.0	3.0	20.0	6.0		

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

MARCH 1989

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	9500	POTS	3	S	1106.0	1107.0	4.0	47.0			
	245	SVTO	4	S/F	1106.0E	1108.0	6.0D	470.0			QL=1 ST=2 TYP=3
	3000	POTS	4	S/F	1106.0	1107.5	4.0	24.0			
	3013	IZMI	5	S	1106.0	1107.6	3.5	24.0	18.0		
	5900	KISV	4	S/F	1106.1	1107.5	5.4	81.0			
	3100	CRIM	1	S	1106.2	1107.5	4.0	22.0	7.0		
	9100	GORK	3	S	1106.2	1107.5	4.4	62.0			
	650	GORK	46	C	1106.3	1106.7	3.8	20.0			
	950	GORK	4	S/F	1106.3	1106.7	2.3	49.0			
	9300	KISV	4	S/F	1106.4	1107.5	3.9	56.0			
	2950	GORK	3	S	1106.5	1107.5	3.9	22.0			
	1470	POTS	3	S	1106.5	1106.9	3.0	12.0			
	410	SVTO	8	S	1107.0E	1108.0	1.0D	140.0			QL=1 ST=2 TYP=3
	4995	SVTO	8	S	1107.0E	1107.0	U	64.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	1112.0E	1112.0	U	61.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	1119.0E	1119.0	1.0D	71.0			QL=1 ST=2 TYP=3
	15000	KISV	46	C	1137.8	1153.3	26.2	442.0			
	15000	KISV	46	C	1137.8	1149.8		325.0			
	15000	KISV	46	C	1137.8	1140.8		53.0			
	9500	POTS	21	GRF	1138.0	1153.5	72.0	93.0			
	9300	KISV	23	GRF	1138.9	1157.9	60.0	51.0			
	3000	POTS	21	GRF	1139.0	1212.4	71.0	25.0			
	15400	SVTO	8	S	1140.0E	1140.0	U	61.0			QL=1 ST=2 TYP=3
	8400	BERN	4	S/F	1140.0	1154.0	23.0	55.0			
	5200	BERN	4	S/F	1140.0	1154.0	23.0	37.0			
	3200	BERN	4	S/F	1140.0	1154.0	23.0	18.0			
	11800	BERN	4	S/F	1140.0	1154.0	23.0	88.0			
	536	ONDR	47	GB	1140.0	1153.5	16.0	131.0			
	600	HUMN	46	C	1142.0	1148.0	15.0	124.0	17.0		
	3100	CRIM	21	GRF	1142.0	1154.0	94.0	17.0	5.0		
	5900	KISV	45	C	1142.3	1154.1		57.0			
	5900	KISV	45	C	1142.3	1147.2	36.7	73.0			
	650	GORK	46	C	1142.5	1153.5		74.0			
	430	KRAK	4	S/F	1142.5	1143.7	2.0	90.0	13.0		
	650	GORK	46	C	1142.5	1147.7	14.1	165.0			
	950	GORK	46	C	1142.7	1146.1	14.6	44.0			
	950	GORK	46	C	1142.7	1147.3		70.0			
	3013	IZMI	40	F	1144.0	1148.2	6.0	17.0			
	9300	KISV	46	C	1144.2	1147.2	13.2	61.0			
	9300	KISV	46	C	1144.2	1146.3		54.0			
	9300	KISV	46	C	1144.2	1153.4		53.0			
	810	KRAK	45	C	1144.5	1147.5	5.0	88.0	16.0		
	430	KRAK	45	C	1144.5	1146.6	5.0	210.0	70.0		
	410	SGMR	8	S	1145.0E	1146.0	2.0D	180.0			QL=1 ST=2 TYP=3
	1470	POTS	4	S/F	1145.0	1147.5	5.0	32.0			
	2950	GORK	2	S/F	1145.9	1147.2	3.5	7.3			
	610	SGMR	8	S	1147.0E	1147.0	U	140.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	1147.0E	1147.0	U	360.0			QL=1 ST=2 TYP=3
	810	KRAK	41	F	1149.5	1153.6	7.0	12.0	5.0		
	430	KRAK	45	C	1149.5	1153.8	6.0	328.0	90.0		
	410	SGMR	4	S/F	1152.0E	1154.0	3.0D	300.0			QL=1 ST=3 TYP=3
	2950	GORK	1	S	1152.5	1154.0	4.4	6.4			
	5900	KISV	45	C	1205.5	1217.4		14.0			
	5900	KISV	45	C	1205.5	1212.4	13.0	19.0			
	810	KRAK	42	SER	1208.0	1209.0	1.2	10.0			
	600	HUMN	2	S/F	1209.0	1209.6	1.0	12.0	6.0		
	810	KRAK	2	S/F	1210.5	1211.6	2.5	10.0	3.0		
	15000	KISV	2	S/F	1210.7	1211.4	4.2	23.0			
	2950	GORK	45	C	1210.9	1212.3		18.4			
	3100	CRIM	1	S	1210.9	1212.4	4.0	14.9	5.0		
	2950	GORK	45	C	1210.9	1211.7	3.8	12.8			
	600	HUMN	2	S/F	1211.0	1213.0	3.0	15.0	8.0		
	1470	POTS	4	S/F	1211.0	1211.6	9.0	27.0			
	9300	KISV	2	S/F	1216.6	1217.4	2.2	16.0			
	600	HUMN	2	S/F	1217.0	1218.0	1.5	20.0	4.0		
	15000	KISV	2	S/F	1221.1	1221.7	2.4	28.0			
	245	SGMR	49	GB	1222.0E	1225.0	3.0D				QL=1 ST=2 TYP=6
	15000	KISV	45	C	1223.3	1231.5		74.0			
	15000	KISV	45	C	1223.3	1228.6	10.3	84.0			

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

Outstanding Occurrences

MARCH 1989

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	9300	KISV	2	S/F	1224.0	1228.2	5.5	16.0			
	30	POTS	4	S/F	1224.2	1225.1	1.9	41000.0D			
	234	POTS	4	S/F	1224.2	1225.2	1.9	120000.0			
	15000	KISV	2	S/F	1224.9	1225.1	1.2	21.0			
	245	SVTO	49	GB	1225.0E	1225.0	U	78000.0			QL=1 ST=2 TYP=6
	410	SVTO	49	GB	1225.0E	1225.0	U	780.0			QL=1 ST=2 TYP=6
	600	HUMN	2	S/F	1225.0	1225.5	2.0	54.0	5.0		
	245	SGMR	49	GB	1227.0E	1228.0	1.0D	760.0			QL=1 ST=2 TYP=6
	410	SGMR	8	S	1231.0E	1232.0	1.0D	300.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1231.0E	1235.0	7.0D	1400.0			QL=1 ST=2 TYP=7
	600	HUMN	2	S/F	1231.5	1232.5	2.0	15.0	3.0		
	5900	KISV	2	S/F	1234.8	1238.1	6.9	16.0			
	15000	KISV	2	S/F	1240.0	1240.9	4.1	23.0			
	245	SGMR	49	GB	1245.0E	1245.0	1.0D	900.0			QL=1 ST=2 TYP=6
	15000	KISV	2	S/F	1246.9	1248.1	2.0	28.0			
	15000	KISV	2	S/F	1251.0	1251.6	1.9	21.0			
	600	HUMN	2	S/F	1253.0	1258.0	10.0	5.0	2.0		
	9500	POTS	21	GRF	1300.0	1311.8	75.0	119.0			
	8800	SVTO	20	GRF	1310.0E	1311.0	9.0D	140.0			QL=1 ST=2 TYP=2
	15400	SVTO	20	GRF	1310.0E	1312.0	9.0D	220.0			QL=1 ST=2 TYP=2
	8800	SGMR	20	GRF	1311.0E	1311.0	6.0D	120.0			QL=1 ST=2 TYP=2
	15400	SGMR	4	S/F	1311.0E	1312.0	4.0D	150.0			QL=1 ST=2 TYP=3
	245	SVTO	49	GB	1314.0E	1315.0	1.0D	1300.0			QL=1 ST=2 TYP=6
	234	POTS	4	S/F	1314.7	1314.9	0.7	770.0			
	30	POTS	4	S/F	1314.8	1315.4	0.9	2600.0			
	245	SGMR	49	GB	1315.0E	1315.0	U	1800.0			QL=1 ST=2 TYP=6
	30	POTS	42	SER	1341.6	1350.8	12.0	4000.0			
	600	HUMN	41	F	1343.0	1345.0	2.5	7.0	2.0		
	245	SGMR	49	GB	1343.0E	1345.0	2.0D	14000.0			QL=1 ST=3 TYP=6
	410	SVTO	8	S	1343.0E	1344.0	1.0D	460.0			QL=1 ST=2 TYP=3
	245	SVTO	49	GB	1343.0E	1345.0	2.0D	11000.0			QL=1 ST=2 TYP=6
	810	KRAK	2	S/F	1343.0	1343.3	11.0	10.0	2.0		
	234	POTS	42	SER	1343.3	1344.7	8.6	28000.0			
	600	HUMN	2	S/F	1411.0	1412.0	2.0	14.0	3.0		
	245	SGMR	49	GB	1415.0E	1415.0	1.0D	1300.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	1415.0E	1415.0	1.0D	840.0			QL=1 ST=2 TYP=6
	234	POTS	4	S/F	1415.1	1415.4	1.7	190.0			
	245	SVTO	4	S/F	1424.0E	1427.0	9.0D	460.0			QL=1 ST=2 TYP=3
	9500	POTS	20	GRF	1425.0	1500.0	40.0D	69.0			
	245	SGMR	49	GB	1426.0E	1427.0	5.0D	710.0			QL=1 ST=2 TYP=6
	410	SVTO	8	S	1427.0E	1427.0	U	76.0			QL=1 ST=2 TYP=3
	600	HUMN	41	F	1437.0	1440.0	8.0	28.0	5.0		
	536	ONDR	42	SER	1440.0	1515.4	55.5	243.0			
	600	HUMN	41	F	1456.0	1457.0	1.5	53.0	19.0		
	245	SGMR	49	GB	1456.0E	1457.0	1.0D	1300.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	1456.0E	1456.0	1.0D	930.0			QL=1 ST=2 TYP=6
	2800	OTTA	22	GRF	1458.0	1549.0	91.0	16.4	5.0		
	245	SGMR	49	GB	1507.0E	1507.0	1.0D	1200.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	1507.0E	1507.0	5.0D	1100.0			QL=1 ST=2 TYP=6
	8800	SGMR	8	S	1509.0E	1509.0	U	52.0			QL=1 ST=2 TYP=3
	410	SGMR	49	GB	1514.0E	1515.0	1.0D	2200.0			QL=1 ST=2 TYP=6
	600	HUMN	41	F	1515.0	1516.0	7.0	57.0			
	245	SGMR	49	GB	1515.0E	1515.0	1.0D	23000.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	1515.0E	1515.0	U	16000.0			QL=1 ST=2 TYP=6
	610	SVTO	8	S	1515.0E	1515.0	U	230.0			QL=1 ST=2 TYP=3
	410	SVTO	49	GB	1515.0E	1515.0	U	2200.0			QL=1 ST=2 TYP=6
	234	POTS	4	S/F	1515.2	1515.5	0.9	25000.0			
	30	POTS	4	S/F	1515.4	1515.6	0.8	5000.0			
	410	SGMR	4	S/F	1517.0E	1517.0	3.0D	160.0			QL=1 ST=2 TYP=3
	245	SVTO	49	GB	1517.0E	1518.0	2.0D	650.0			QL=1 ST=2 TYP=6
	410	SVTO	4	S/F	1517.0E	1522.0	6.0D	290.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1518.0E	1518.0	U	1100.0			QL=1 ST=2 TYP=6
	610	SVTO	8	S	1522.0E	1522.0	1.0D	150.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	1629.0E	1630.0	1.0D	310.0			QL=1 ST=3 TYP=3
	245	SGMR	49	GB	1629.0E	1630.0	1.0D	12000.0			QL=1 ST=3 TYP=6
	610	SGMR	8	S	1629.0E	1629.0	1.0D	130.0			QL=1 ST=3 TYP=3
	245	SVTO	49	GB	1629.0E	1629.0	3.0D	9200.0			QL=1 ST=2 TYP=6
	600	HUMN	2	S/F	1629.0	1629.5	1.5	60.0	25.0		
	2800	OTTA	22	GRF	1724.0	1826.0	120.0	27.5	8.0		

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

MARCH 1989

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	8800	PALE	4	S/F	1735.0E	1736.0	5.0D	240.0			QL=1 ST=2 TYP=3
	15400	PALE	4	S/F	1735.0E	1736.0	4.0D	140.0			QL=1 ST=2 TYP=3
	8800	SGMR	4	S/F	1735.0E	1736.0	4.0D	240.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	1736.0E	1736.0	1.0D	100.0			QL=1 ST=2 TYP=3
	8800	SGMR	4	S/F	1816.0E	1818.0	6.0D	110.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	1827.0E	1827.0	1.0D	150.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1830.0E	1831.0	1.0D	1900.0			QL=1 ST=2 TYP=6
	410	SGMR	8	S	1830.0E	1831.0	2.0D	85.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1831.0E	1831.0	U	2600.0			QL=1 ST=2 TYP=6
	8800	SGMR	8	S	1837.0E	1838.0	2.0D	61.0			QL=1 ST=2 TYP=3
	610	PALE	8	S	1838.0E	1838.0	1.0D	200.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	1838.0E	1838.0	2.0D	170.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	1838.0E	1838.0	1.0D	160.0			QL=1 ST=2 TYP=3
	245	SGMR	4	S/F	1838.0E	1838.0	4.0D	490.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	1840.0E	1840.0	2.0D	160.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1845.0E	1845.0	3.0D	600.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	2018.0E	2019.0	1.0D	330.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	2018.0E	2019.0	1.0D	380.0			QL=1 ST=2 TYP=3
	2800	OTTA	22	GRF	2040.0	2118.0	85.0	29.0	9.0		
	410	PALE	8	S	2045.0E	2046.0	1.0D	240.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	2045.0E	2046.0	1.0D	190.0			QL=1 ST=3 TYP=3
	245	SGMR	49	GB	2046.0E	2047.0	2.0D	700.0			QL=1 ST=3 TYP=6
	8800	SGMR	4	S/F	2051.0E	2053.0	4.0D	80.0			QL=1 ST=3 TYP=3
	245	SGMR	49	GB	2105.0E	2107.0	6.0D	1300.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	2106.0E	2110.0	4.0D	1200.0			QL=1 ST=2 TYP=7
	500	HIRA	42	SER	2107.5	2113.0	11.5	205.0			SL
	410	PALE	8	S	2108.0E	2110.0	2.0D	100.0			QL=1 ST=2 TYP=3
	410	SGMR	4	S/F	2108.0E	2110.0	3.0D	150.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	2112.0E	2113.0	3.0D	630.0			QL=1 ST=2 TYP=6
	410	SGMR	49	GB	2112.0E	2113.0	3.0D	830.0			QL=1 ST=2 TYP=6
	610	PALE	8	S	2113.0E	2113.0	U	100.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	2113.0E	2113.0	2.0D	1300.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2113.0E	2113.0	2.0D	1300.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2115.0E	2117.0	3.0D	1000.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	2117.0E	2118.0	1.0D	140.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	2117.0E	2117.0	1.0D	87.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	2132.0E	2135.0	4.0D	3100.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	2134.0E	2135.0	2.0D	2500.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	2135.0E	2135.0	U	60.0			QL=1 ST=2 TYP=3
	100	HIRA	42	SER	2221.8	2303.4	57.0	8000.0D			SL
	410	PALE	4	S/F	2228.0E	2231.0	3.0D	200.0			QL=1 ST=2 TYP=5
	500	HIRA	42	SER	2228.3	2303.5	49.0	630.0			SL
	200	HIRA	42	SER	2228.5	2303.6	50.0	10750.0			SL
	245	PALE	49	GB	2229.0E	2229.0	U	910.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	2240.0E	2241.0	1.0D	61.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	2240.0E	2240.0	4.0D	1300.0			QL=1 ST=2 TYP=6
	245	LEAR	49	GB	2301.0E	2303.0	4.0D	6400.0			QL=1 ST=2 TYP=6
	610	LEAR	4	S/F	2302.0E	2303.0	3.0D	200.0			QL=1 ST=2 TYP=3
	410	LEAR	49	GB	2302.0E	2303.0	1.0D	1200.0			QL=1 ST=2 TYP=6
	2695	LEAR	8	S	2303.0E	2304.0	1.0D	150.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	2303.0E	2304.0	2.0D	180.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	2303.0E	2304.0	1.0D	350.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	2303.0E	2304.0	1.0D	200.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	2303.0E	2304.0	1.0D	250.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	2313.0E	2313.0	2.0D	21000.0			QL=1 ST=2 TYP=6
	200	HIRA	8	S	2313.5	2313.6	0.4	45000.0			O
	610	LEAR	8	S	2314.0E	2315.0	1.0D	44.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	2358.0E	2358.0	U	950.0			QL=1 ST=3 TYP=6
14	410	LEAR	43	NS	0110.0	0321.0	554.0	440.0			QL=1 ST=2 TYP=1
	410	PALE	44	NS	0114.0E	0317.0	190.0D	110.0			QL=1 ST=2 TYP=1
	200	GORK	44	NS	0415.0E		210.0D		25.0		
	100	GORK	44	NS	0415.0E		465.0D		1100.0		
	221	ABST	43	NS	0500.0		240.0		28.0		
	245	SVTO	43	NS	0523.0	0911.0	670.0D	2300.0			QL=1 ST=2 TYP=1
	410	SVTO	43	NS	0523.0	0638.0	670.0D	570.0			QL=1 ST=2 TYP=1
	204	IZMI	43	NS	0600.0		360.0	170.0			
	33	UPIC	44	NS	0600.0E		600.0D				
	234	POTS	44	NS	0600.0E	1603.0	605.0D	250.0			

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

MARCH 1989

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	260	ONDR	44	NS	0640.0E		540.0D				
	127	TORN	44	NS	0700.0E		520.0D		1900.0		V=0
	600	HUMN	44	NS	0700.0E		600.0D				
	430	KRAK	44	NS	0834.5E	0850.0	328.0D	360.0	20.0		
	410	SGMR	43	NS	1118.0	1804.0	669.0D	220.0			QL=1 ST=2 TYP=1
	245	SGMR	44	NS	1118.0E	1841.0	762.0D	1500.0			QL=1 ST=3 TYP=1
	610	SGMR	43	NS	1247.0	1900.0	580.0D	62.0			QL=1 ST=2 TYP=1
	100	HIRA	44	NS	2050.0E	0700.0	710.0D	980.0	650.0		
	200	HIRA	44	NS	2050.0E	0200.0	710.0D	400.0	316.0		SL
	245	LEAR	44	NS	2242.0E	0142.0	701.0D	860.0			QL=1 ST=2 TYP=1
	410	LEAR	44	NS	2242.0E	1015.0	701.0D	470.0			QL=1 ST=2 TYP=1
	8800	LEAR	8	S	0001.0E	0003.0	2.0D	75.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0001.0E	0003.0	2.0D	33.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0001.0E	0003.0	2.0D	17.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0002.0E	0002.0	U	120.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0013.0E	0013.0	1.0D	81.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0013.0E	0013.0	1.0D	29.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0013.0E	0014.0	1.0D	64.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	0013.0E	0014.0	1.0D	100.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0038.0E	0038.0	1.0D	52.0			QL=1 ST=2 TYP=3
	610	PALE	8	S	0038.0E	0038.0	1.0D	68.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0056.0E	0057.0	2.0D	33.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0056.0E	0057.0	2.0D	120.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0056.0E	0056.0	2.0D	49.0			QL=1 ST=2 TYP=3
	8800	PALE	4	S/F	0056.0E	0057.0	4.0D	120.0			QL=1 ST=2 TYP=3
	500	HIRA	21	GRF	0203.0	0254.0	168.0	160.0	35.0		ML
	1415	PALE	4	S/F	0219.0E	0225.0	8.0D	120.0			QL=1 ST=3 TYP=3
	200	HIRA	41	F	0221.8	0222.7	3.2	4100.0			WL
	100	HIRA	41	F	0221.8	0222.8	3.8	5500.0			WL
	15400	LEAR	4	S/F	0222.0E	0224.0	5.0D	32.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0222.0E	0223.0	2.0D	3500.0			QL=1 ST=2 TYP=6
	610	LEAR	8	S	0223.0E	0225.0	2.0D	36.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0223.0E	0223.0	2.0D	4600.0			QL=1 ST=3 TYP=6
	1415	LEAR	8	S	0224.0E	0225.0	1.0D	160.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0225.0E	0225.0	U	51.0			QL=1 ST=2 TYP=3
	4995	LEAR	49	GB	0233.0E	0233.0	U	53000.0			QL=1 ST=3 TYP=6
	410	LEAR	4	S/F	0233.0E	0239.0	26.0D	110.0			QL=1 ST=3 TYP=5
	4995	PALE	4	S/F	0236.0E	0254.0	29.0D	280.0			QL=1 ST=2 TYP=5
	8800	PALE	20	GRF	0236.0E	0250.0	23.0D	290.0			QL=1 ST=2 TYP=2
	245	LEAR	49	GB	0238.0E	0254.0	22.0D	610.0			QL=1 ST=3 TYP=7
	610	LEAR	4	S/F	0238.0E	0253.0	25.0D	70.0			QL=1 ST=3 TYP=3
	8800	LEAR	4	S/F	0238.0E	0250.0	27.0D	160.0			QL=1 ST=3 TYP=5
	15400	LEAR	4	S/F	0238.0E	0250.0	27.0D	150.0			QL=1 ST=3 TYP=5
	245	PALE	49	GB	0239.0E	0254.0	21.0D	1200.0			QL=1 ST=2 TYP=7
	410	PALE	20	GRF	0241.0E	0254.0	15.0D	140.0			QL=1 ST=2 TYP=2
	2695	LEAR	4	S/F	0247.0E	0254.0	18.0D	81.0			QL=1 ST=3 TYP=3
	2695	PALE	20	GRF	0247.0E	0254.0	18.0D	120.0			QL=1 ST=2 TYP=2
	1415	LEAR	4	S/F	0253.0E	0254.0	3.0D	73.0			QL=1 ST=3 TYP=3
	15400	PALE	4	S/F	0253.0E	0254.0	3.0D	96.0			QL=1 ST=2 TYP=3
	1415	PALE	8	S	0254.0E	0254.0	1.0D	79.0			QL=1 ST=2 TYP=3
	610	PALE	8	S	0254.0E	0254.0	U	57.0			QL=1 ST=2 TYP=3
	245	PALE	4	S/F	0305.0E	0308.0	3.0D	450.0			QL=1 ST=2 TYP=3
	4995	PALE	4	S/F	0305.0E	0312.0	9.0D	160.0			QL=1 ST=2 TYP=5
	2695	PALE	8	S	0305.0E	0306.0	1.0D	53.0			QL=1 ST=2 TYP=3
	245	LEAR	4	S/F	0309.0E	0309.0	6.0D	220.0			QL=1 ST=2 TYP=3
	500	HIRA	46	C	0309.8	0311.8	3.5	410.0	215.0		SL
	410	LEAR	49	GB	0310.0E	0312.0	3.0D	580.0			QL=1 ST=2 TYP=6
	610	LEAR	4	S/F	0310.0E	0312.0	3.0D	150.0			QL=1 ST=2 TYP=3
	1415	LEAR	4	S/F	0310.0E	0312.0	3.0D	73.0			QL=1 ST=2 TYP=3
	610	PALE	4	S/F	0310.0E	0312.0	3.0D	210.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	0310.0E	0312.0	3.0D	620.0			QL=1 ST=2 TYP=6
	2695	LEAR	8	S	0311.0E	0312.0	2.0D	100.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0311.0E	0312.0	1.0D	28.0			QL=1 ST=2 TYP=3
	1415	PALE	8	S	0312.0E	0312.0	U	73.0			QL=1 ST=2 TYP=3
	8800	PALE	8	S	0312.0E	0312.0	U	62.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	0321.0E	0321.0	1.0D	530.0			QL=1 ST=3 TYP=6
	650	GORK	23	GRF	0442.0E	0615.0	438.0D	17.0			
	950	GORK	21	GRF	0454.0	0533.0	75.0	9.0			
	950	GORK	46	C	0500.5	0502.0		8.6			

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

MARCH 1989

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	950	GORK	46	C	0500.5	0500.7	3.2	6.5			
	9300	KISV	2	S/F	0505.3	0505.7	1.5	8.0			
	5900	KISV	2	S/F	0505.5	0505.8	1.8	6.0			
	15000	KISV	2	S/F	0506.9	0507.5	1.9	13.0			
	2950	GORK	23	GRF	0515.0	0912.0	470.0D	42.0			
	5900	KISV	45	C	0523.5	0527.5		29.0			
	5900	KISV	45	C	0523.5	0541.8	30.5	40.0			
	9300	KISV	23	GRF	0523.8	0534.6	28.3	27.0			
	9100	GORK	23	GRF	0524.0			460.0D			
	8800	LEAR	4	S/F	0524.0E	0527.0	8.0D	67.0			QL=1 ST=3 TYP=3
	15000	KISV	2	S/F	0524.0	0526.5	5.6	10.0			
	9100	GORK	3	S	0524.2	0527.4	6.7	59.0			
	9300	KISV	4	S/F	0524.2	0527.4	8.6	62.0			
	15000	KISV	2	S/F	0533.9	0534.9	4.1	10.0			
	9300	KISV	2	S/F	0539.5	0541.8	5.9	32.0			
	9100	GORK	2	S/F	0540.0	0541.8	3.8	27.0			
	15000	KISV	2	S/F	0541.6	0542.5	3.5	7.0			
	410	LEAR	4	S/F	0548.0E	0549.0	3.0D	180.0			QL=1 ST=2 TYP=3
	650	GORK	46	C	0549.0	0551.0		40.0			
	245	LEAR	8	S	0549.0E	0549.0	2.0D	300.0			QL=1 ST=2 TYP=3
	650	GORK	46	C	0549.0	0549.4	2.2	45.0			
	950	GORK	8	S	0550.6	0550.9	0.5	38.0			
	15000	KISV	2	S/F	0551.4	0551.8	1.6	6.0			
	5900	KISV	46	C	0602.4	0607.1		42.0			
	5900	KISV	46	C	0602.4	0644.3		93.0			
	5900	KISV	46	C	0602.4	0637.5	95.6	115.0			
	5900	KISV	46	C	0602.4	0622.7		34.0			
	9300	KISV	46	C	0604.5	0631.0		108.0			
	9300	KISV	46	C	0604.5	0607.1		58.0			
	9300	KISV	46	C	0604.5	0621.1		107.0			
	9300	KISV	46	C	0604.5	0643.3		151.0			
	9300	KISV	46	C	0604.5	0637.5	77.5	185.0			
	3100	CRIM	20	GRF	0605.0	0638.0	85.0	12.2	4.0		
	15000	KISV	46	C	0605.8	0631.0		67.0			
	15000	KISV	46	C	0605.8	0643.0		54.0			
	15000	KISV	46	C	0605.8	0621.1		57.0			
	15000	KISV	46	C	0605.8	0608.2		31.0			
	15000	KISV	46	C	0605.8	0634.4	76.0	69.0			
	8800	LEAR	4	S/F	0606.0E	0607.0	5.0D	51.0			QL=1 ST=2 TYP=3
	9100	GORK	2	S/F	0606.2	0607.1	5.0	39.0			
	8800	SVTO	8	S	0607.0E	0607.0	U	58.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0617.0E	0618.0	1.0D	19.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0617.0E	0631.0	19.0D	99.0			QL=1 ST=2 TYP=5
	9100	GORK	3	S	0619.5	0622.0	6.1	57.0			
	15400	LEAR	4	S/F	0620.0E	0630.0	16.0D	53.0			QL=1 ST=2 TYP=3
	950	GORK	8	S	0621.0	0621.2	0.5	11.0			
	500	HIRA	42	SER	0632.5	0638.0	6.0	220.0			SL
	950	GORK	2	S/F	0632.8	0633.7	1.5	8.6			
	9100	GORK	4	S/F	0635.4	0637.5	11.4	190.0			
	4995	LEAR	4	S/F	0636.0E	0637.0	6.0D	72.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0636.0E	0637.0	6.0D	170.0			QL=1 ST=2 TYP=3
	8800	SVTO	4	S/F	0636.0E	0637.0	5.0D	100.0			QL=1 ST=2 TYP=3
	3013	IZMI	5	S	0636.5	0637.6	6.0	14.0	7.0		
	410	LEAR	49	GB	0637.0E	0638.0	2.0D	590.0			QL=1 ST=2 TYP=6
	610	LEAR	8	S	0638.0E	0638.0	1.0D	240.0			QL=1 ST=2 TYP=3
	650	GORK	4	S/F	0638.0	0638.6	1.0	170.0			
	950	GORK	2	S/F	0638.1	0638.6	0.8	8.5			
	15000	KISV	22	GRF	0701.4	0704.1	13.3	25.0			
	15000	KISV	2	S/F	0711.0	0712.5	3.1	10.0			
	950	GORK	21	GRF	0727.0	0848.0	130.0	10.0			
	15000	KISV	2	S/F	0741.6	0742.0	2.5	6.0			
	9100	GORK	2	S/F	0744.8	0747.1	3.4	23.0			
	15000	KISV	45	C	0744.8	0746.5	7.0	24.0			
	15000	KISV	45	C	0744.8	0749.6		13.0			
	9500	POTS	42	SER	0745.0	0757.5	49.0	55.0			
	9300	KISV	45	C	0745.7	0749.6		13.0			
	9300	KISV	23	GRF	0745.7	0802.6	43.7	24.0			
	9300	KISV	45	C	0745.7	0746.7	5.9	17.0			
	5900	KISV	23	GRF	0748.1	0752.4	15.4	5.0			

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

MARCH 1989

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	5900	KISV	2	S/F	0748.1	0749.5	3.1	10.0			
	15000	KISV	45	C	0755.4	0800.2		21.0			
	15000	KISV	45	C	0755.4	0757.2	11.7	35.0			
	9100	GORK	46	C	0756.5	0800.2		35.0			
	9100	GORK	46	C	0756.5	0757.4	7.8	53.0			
	9300	KISV	4	S/F	0756.6	0757.4	5.7	54.0			
	5900	KISV	45	C	0756.9	0800.3		7.0			
	5900	KISV	45	C	0756.9	0757.4	4.6	13.0			
	8800	SVTO	8	S	0757.0E	0757.0	U	58.0			QL=1 ST=2 TYP=3
	536	ONDR	41	F	0800.0E	0920.9	440.0D	138.0			
	15000	KISV	2	S/F	0802.9	0803.4	1.1	11.0			
	15000	KISV	2	S/F	0805.0	0805.1	0.6	15.0			
	15000	KISV	45	C	0814.6	0823.5		20.0			
	15000	KISV	45	C	0814.6	0815.5	11.8	42.0			
	9300	KISV	45	C	0815.4	0820.5	10.9	54.0			
	9300	KISV	45	C	0815.4	0823.6		29.0			
	5900	KISV	45	C	0818.2	0820.2	10.3	39.0			
	5900	KISV	45	C	0818.2	0823.5		20.0			
	9100	GORK	46	C	0818.7	0820.3	5.4	43.0			
	9100	GORK	46	C	0818.7	0823.5		20.0			
	8800	SVTO	8	S	0820.0E	0820.0	U	63.0			QL=1 ST=2 TYP=3
	3100	CRIM	21	GRF	0820.0	0903.0	90.0	15.0	5.0		
	410	LEAR	8	S	0821.0E	0822.0	2.0D	170.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0822.0E	0823.0	1.0D	3200.0			QL=1 ST=2 TYP=6
	410	SVTO	8	S	0822.0E	0822.0	1.0D	230.0			QL=1 ST=2 TYP=3
	245	SVTO	49	GB	0822.0E	0823.0	2.0D	3300.0			QL=1 ST=2 TYP=6
	950	GORK	46	C	0822.1	0822.5	3.2	2.0			
	950	GORK	46	C	0822.1	0832.8		2.5			
	30	POTS	4	S/F	0822.2	0822.5	2.4	1100.0			
	234	POTS	41	F	0822.2	0823.8	2.9	1400.0			
	204	IZMI	41	F	0822.3	0824.0	2.0	4500.0			
	100	GORK	4	S/F	0822.3	0822.8	2.3	4000.0D			
	200	HIRA	8	S	0823.0	0823.4	0.5	6200.0			O
	100	HIRA	8	S	0823.8	0823.8	0.9	9300.0			WL
	9300	KISV	23	GRF	0829.2	0911.8	77.0	70.0			
	9300	KISV	2	S/F	0829.5	0829.9	1.7	48.0			
	100	GORK	8	S	0831.4	0832.2	1.1	18480.0			
	8800	LEAR	8	S	0835.0E	0835.0	1.0D	59.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0835.0E	0835.0	1.0D	31.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0835.0E	0835.0	1.0D	34.0			QL=1 ST=2 TYP=3
	9500	POTS	22	GRF	0835.0	0925.6	100.0	104.0			
	5900	KISV	2	S/F	0835.4	0836.0	3.0	32.0			
	5900	KISV	46	C	0835.4	0916.1		87.0			
	5900	KISV	46	C	0835.4	0925.4		37.0			
	5900	KISV	46	C	0835.4	0919.6	68.8	104.0			
	5900	KISV	46	C	0835.4	0905.9		18.0			
	9100	GORK	3	S	0835.5	0835.8	1.6	48.0			
	15000	KISV	2	S/F	0835.6	0835.9	2.5	30.0			
	15000	KISV	2	S/F	0838.9	0843.1	7.6	17.0			
	9300	KISV	2	S/F	0839.8	0842.4	5.7	20.0			
	245	SVTO	49	GB	0846.0E	0847.0	2.0D	510.0			QL=1 ST=2 TYP=7
	9300	KISV	46	C	0848.0	0854.3		30.0			
	9300	KISV	46	C	0848.0	0856.4	10.8	45.0			
	9300	KISV	46	C	0848.0	0855.7		30.0			
	245	LEAR	8	S	0849.0E	0851.0	2.0D	140.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0849.0E	0850.0	1.0D	89.0			QL=1 ST=2 TYP=3
	15000	KISV	2	S/F	0849.2	0849.8	1.3	7.0			
	610	LEAR	8	S	0850.0E	0850.0	U	40.0			QL=1 ST=2 TYP=3
	3000	POTS	25	R	0850.0U	0919.5	55.0U	36.0			
	5900	KISV	45	C	0850.3	0854.0		27.0			
	5900	KISV	45	C	0850.3	0856.4	10.6	40.0			
	600	HUMN	2	S/F	0850.4	0850.8	1.0	45.0	12.0		
	810	KRAK	42	SER	0854.0	0954.0	65.5	210.0D			
	950	GORK	8	S	0855.8	0855.9	0.2	62.0			
	15000	KISV	2	S/F	0855.9	0856.5	1.8	24.0			
	100	GORK	41	F	0857.8	0904.3	19.0	4200.0			
	100	GORK	41	F	0857.8	0914.6		5040.0			
	15000	KISV	2	S/F	0858.3	0858.8	1.5	9.0			
	3100	CRIM	45	C	0903.0	0920.0		17.6			

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

MARCH 1989

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	3100	CRIM	45	C	0903.0	0913.2		10.0			
	3100	CRIM	45	C	0903.0	0905.6	19.0	7.5	6.0		
	9300	KISV	2	S/F	0903.5	0904.4	5.4	26.0			
	15000	KISV	2	S/F	0906.7	0907.5	1.8	8.0			
	950	GORK	46	C	0909.5	0921.3		12.0			
	950	GORK	46	C	0909.5	0914.8	17.0	25.0			
	245	LEAR	49	GB	0911.0E	0911.0	5.0D	1900.0			QL=1 ST=2 TYP=6
	1415	LEAR	8	S	0911.0E	0911.0	U	27.0			QL=1 ST=2 TYP=3
	4995	LEAR	4	S/F	0911.0E	0916.0	6.0D	56.0			QL=1 ST=2 TYP=5
	15000	KISV	46	C	0911.1	0915.1		16.0			
	15000	KISV	46	C	0911.1	0919.4	11.3	31.0			
	15000	KISV	46	C	0911.1	0911.7		13.0			
	234	POTS	4	S/F	0911.2	0911.6	0.7	1500.0			
	30	POTS	4	S/F	0911.6	0911.8	1.0	5000.0			
	2695	LEAR	8	S	0913.0E	0913.0	U	23.0			QL=1 ST=2 TYP=3
	650	GORK	41	F	0913.5	0939.2		20.0			
	650	GORK	41	F	0913.5	0921.2		90.0			
	650	GORK	41	F	0913.5	0915.3	46.5	15.5			
	650	GORK	41	F	0913.5	0930.6		50.0			
	650	GORK	41	F	0913.5	0946.6		75.0			
	9300	KISV	2	S/F	0914.3	0916.1	3.8	62.0			
	9100	GORK	46	C	0914.8	0925.4		147.0			
	9100	GORK	46	C	0914.8	0919.6	20.1	126.0			
	9100	GORK	46	C	0914.8	0927.9		130.0			
	8800	LEAR	8	S	0915.0E	0916.0	1.0D	79.0			QL=1 ST=2 TYP=3
	8800	SVTO	4	S/F	0915.0E	0921.0	6.0D	81.0			QL=1 ST=2 TYP=5
	9300	KISV	2	S/F	0918.8	0919.5	2.8	55.0			
	600	HUMN	46	C	0919.0	0922.0	5.6	36.0	7.0		
	410	SVTO	8	S	0919.0E	0921.0	2.0D	470.0			QL=1 ST=2 TYP=3
	4995	SVTO	8	S	0919.0E	0919.0	2.0D	70.0			QL=1 ST=2 TYP=3
	9100	GORK	2	S/F	0919.0	0919.7	2.7	14.5			
	3013	IZMI	40	F	0919.0	0919.8	3.0	14.0	10.0		
	410	LEAR	8	S	0920.0E	0921.0	1.0D	240.0			QL=1 ST=2 TYP=3
	245	SVTO	49	GB	0920.0E	0921.0	2.0D	1000.0			QL=1 ST=2 TYP=6
	610	LEAR	8	S	0921.0E	0921.0	U	46.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	0924.0E	0925.0	6.0D	310.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0924.0E	0925.0	7.0D	100.0			QL=1 ST=2 TYP=3
	9300	KISV	46	C	0924.8	0928.0		100.0			
	15000	KISV	45	C	0924.8	0926.1		135.0			
	9300	KISV	46	C	0924.8	0925.4	12.2	117.0			
	9300	KISV	46	C	0924.8	0956.5		45.0			
	9300	KISV	46	C	0924.8	0930.6		56.0			
	15000	KISV	45	C	0924.8	0927.9	10.1	144.0			
	15400	SVTO	4	S/F	0925.0E	0925.0	3.0D	340.0			QL=1 ST=2 TYP=5
	8800	SVTO	4	S/F	0925.0E	0925.0	3.0D	90.0			QL=1 ST=2 TYP=5
	600	HUMN	46	C	0930.0	0931.0	2.0	42.0	10.0		
	600	HUMN	2	S/F	0938.0	0940.0	5.0	20.0	5.0		
	245	LEAR	4	S/F	0938.0E	0939.0	4.0D	490.0			QL=1 ST=2 TYP=3
	410	LEAR	4	S/F	0938.0E	0939.0	4.0D	120.0			QL=1 ST=2 TYP=3
	245	SVTO	49	GB	0938.0E	0939.0	4.0D	1000.0			QL=1 ST=2 TYP=6
	610	LEAR	8	S	0939.0E	0939.0	1.0D	15.0			QL=1 ST=2 TYP=3
	950	GORK	41	F	0944.0	0956.0		15.0			
	950	GORK	41	F	0944.0	0948.3	12.4	16.0			
	950	GORK	41	F	0944.0	0950.7		22.0			
	100	GORK	41	F	0946.4	0957.8		5040.0			
	100	GORK	41	F	0946.4	0946.8	11.7	6240.0			
	15000	KISV	2	S/F	0946.5	0947.1	1.7	9.0			
	9100	GORK	46	C	0951.9	0954.1	7.2	31.0			
	9100	GORK	46	C	0951.9	0956.6		37.0			
	15000	KISV	2	S/F	0952.3	0956.5	6.4	40.0			
	9300	KISV	45	C	0952.4	0954.1	9.5	35.0			
	234	POTS	41	F	0952.7	0956.3	4.3	900.0			
	410	LEAR	4	S/F	0953.0E	0954.0	5.0D	100.0			QL=1 ST=2 TYP=3
	200	GORK	8	S	0955.7	0956.2	0.8	3800.0D			
	15400	LEAR	8	S	0956.0E	0956.0	U	27.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0958.0E	0959.0	1.0D	350.0			QL=1 ST=2 TYP=3
	15000	KISV	29	PBI	0958.7E	0958.7	11.5D	16.0			
	610	LEAR	8	S	0959.0E	0959.0	1.0D	110.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	1009.0E	1012.0	10.0D	880.0			QL=1 ST=2 TYP=7

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

MARCH 1989

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	600	HUMN	40	F	1011.0	1018.0	44.0	14.0	5.0		
	15400	LEAR	8	S	1012.0E	1012.0	U	39.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	1012.0E	1012.0	U	27.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	1012.0E	1012.0	U	12.0			QL=1 ST=2 TYP=3
	15000	KISV	2	S/F	1012.1	1012.5	0.4	14.0			
	950	GORK	41	F	1012.2	1038.0		31.0			
	950	GORK	41	F	1012.2	1012.3	27.0	13.5			
	950	GORK	41	F	1012.2	1029.5		20.0			
	15000	KISV	2	S/F	1019.7	1020.2	1.8	7.0			
	600	HUMN	1	S	1029.0	1030.0	1.0	46.0	20.0		
	650	GORK	8	S	1029.2	1029.4	0.6	80.0			
	15000	KISV	2	S/F	1032.6	1033.1	2.9	11.0			
	15000	KISV	2	S/F	1036.8	1037.0	1.8	10.0			
	810	KRAK	42	SER	1037.0	1108.0	31.0	34.0			
	9300	KISV	2	S/F	1044.0	1045.1	6.3	20.0			
	100	GORK	41	F	1054.7	1102.0		5500.0			
	100	GORK	41	F	1054.7	1055.7	9.4	6840.0			
	950	GORK	2	S/F	1107.5	1107.8	0.9	10.0			
	9500	POTS	20	GRF	1110.0	1114.5	50.0	35.0			
	9300	KISV	22	GRF	1111.5	1115.0	13.0	39.0			
	5900	KISV	22	GRF	1112.8	1116.3	16.6	29.0			
	950	GORK	46	C	1117.0	1120.1		3.7			
	950	GORK	46	C	1117.0	1117.3	4.2	3.7			
	600	HUMN	2	S/F	1117.0	1120.5	5.0	47.0	7.0		
	650	GORK	4	S/F	1117.2	1120.1	3.8	44.0			
	5900	KISV	2	S/F	1130.6	1131.7	8.7	16.0			
	9300	KISV	2	S/F	1130.7	1131.9	4.3	16.0			
	15000	KISV	2	S/F	1146.9	1147.3	2.0	8.0			
	100	GORK	3	S	1149.5	1149.8	0.6	7680.0			
	9300	KISV	2	S/F	1221.4	1221.9	4.7	15.0			
	5900	KISV	2	S/F	1221.6	1221.9	5.6	17.0			
	5900	KISV	2	S/F	1233.4	1235.1	6.5	9.0			
	3000	POTS	21	GRF	1245.0	1309.1	27.0	19.0			
	600	HUMN	1	S	1249.0	1249.4	1.0	45.0	20.0		
	1470	POTS	42	SER	1250.0	1254.4	22.0	8.0			
	410	SGMR	8	S	1253.0E	1253.0	2.0D	230.0			QL=1 ST=2 TYP=3
	600	HUMN	2	S/F	1254.0	1254.3	1.4	41.0	10.0		
	8800	SGMR	8	S	1259.0E	1300.0	2.0D	110.0			QL=1 ST=3 TYP=3
	15400	SGMR	8	S	1259.0E	1300.0	2.0D	50.0			QL=1 ST=3 TYP=3
	9100	GORK	4	S/F	1259.7	1300.1	2.4	90.0			
	8800	SVTO	8	S	1300.0E	1300.0	U	79.0			QL=1 ST=2 TYP=3
	9500	POTS	42	SER	1300.0	1300.2	24.0	73.0			
	600	HUMN	41	F	1304.0	1309.0	28.0	25.0	5.0		
	15400	SGMR	8	S	1308.0E	1308.0	2.0D	55.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	1308.0E	1308.0	2.0D	210.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	1308.0E	1308.0	2.0D	80.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	1308.0E	1309.0	2.0D	230.0			QL=1 ST=2 TYP=3
	810	KRAK	42	SER	1308.5	1330.0	50.0	37.0			
	9500	POTS	20	GRF	1345.0	1400.0	33.0	26.0			
	2800	OTTA	22	GRF	1347.0	1351.0	13.0D	18.3	9.0		
	3000	POTS	4	S/F	1347.0	1351.0	13.0U	20.0			
	1470	POTS	21	GRF	1348.0	1404.6	37.0	20.0			
	1470	POTS	40	F	1350.5	1351.1	1.9	58.0			
	600	HUMN	2	S/F	1358.0	1358.2	2.0	48.0	15.0		
	600	HUMN	2	S/F	1401.0	1406.0	8.0	16.0	4.0		
	9500	POTS	29	PBI	1422.0	1426.1	63.0	167.0			
	8800	SGMR	4	S/F	1424.0E	1426.0	8.0D	220.0			QL=1 ST=2 TYP=3
	8800	SVTO	4	S/F	1424.0E	1426.0	8.0D	180.0			QL=1 ST=2 TYP=3
	5200	BERN	46	C	1424.0	1426.1	11.0	75.0			
	8400	BERN	46	C	1424.0	1426.1	11.0	112.0			
	11800	BERN	46	C	1424.0	1426.1	11.0	80.0			
	3200	BERN	46	C	1424.0	1430.2	11.0	24.0			
	4995	SGMR	4	S/F	1425.0E	1426.0	7.0D	140.0			QL=1 ST=2 TYP=3
	4995	SVTO	4	S/F	1425.0E	1426.0	6.0D	110.0			QL=1 ST=2 TYP=3
	2800	OTTA	22	GRF	1426.0	1431.0	42.0	21.0	10.0		
	3000	POTS	29	PBI	1431.0E	1431.0		24.0			
	8800	SGMR	4	S/F	1438.0E	1441.0	9.0D	61.0			QL=1 ST=2 TYP=3
	4995	SGMR	4	S/F	1438.0E	1440.0	9.0D	57.0			QL=1 ST=2 TYP=3
	410	SGMR	4	S/F	1536.0E	1537.0	3.0D	150.0			QL=1 ST=2 TYP=3

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

MARCH 1989

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	600	HUMN	46	C	1536.0	1537.7	3.8	84.0	6.0		
	610	SGMR	8	S	1537.0E	1537.0	2.0D	220.0			QL=1 ST=2 TYP=3
	2800	OTTA	22	GRF	1545.0	1550.0	49.0	10.8	5.0		
	4995	SGMR	8	S	1546.0E	1546.0	1.0D	53.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	1552.0E	1552.0	1.0D	130.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	1552.0E	1552.0	1.0D	110.0			QL=1 ST=2 TYP=3
	19600	BERN	3	S	1552.3	1552.5	1.0	45.0			
	11800	BERN	3	S	1552.3	1552.5	1.0	91.0			
	8400	BERN	3	S	1552.3	1552.5	1.0	71.0			
	5200	BERN	3	S	1552.3	1552.5	1.0	18.0			
	3200	BERN	3	S	1552.3	1552.5	1.0	5.0			
	410	SGMR	8	S	1555.0E	1555.0	1.0D	180.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1555.0E	1555.0	1.0D	2900.0			QL=1 ST=2 TYP=6
	410	SVTO	8	S	1555.0E	1555.0	1.0D	220.0			QL=1 ST=2 TYP=3
	245	SVTO	49	GB	1555.0E	1555.0	1.0D	2300.0			QL=1 ST=2 TYP=6
	30	POTS	42	SER	1555.2	1558.9	4.8	1200.0			
	234	POTS	42	SER	1555.3	1555.7	3.8	2000.0			
	600	HUMN	2	S/F	1558.0	1559.0	1.5	37.0	9.0		
	245	SGMR	49	GB	1558.0E	1558.0	U	1500.0			QL=1 ST=2 TYP=6
	410	SGMR	8	S	1558.0E	1558.0	1.0D	250.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	1558.0E	1558.0	1.0D	90.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	1601.0E	1601.0	2.0D	440.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	1601.0E	1601.0	U	350.0			QL=1 ST=2 TYP=3
	2800	OTTA	46	C	1634.0	1657.0	29.0	608.0	182.0		
	2800	OTTA	46	C	1634.0	1724.0	75.0	656.0	195.0		
	8800	SGMR	4	S/F	1641.0E	1646.0	10.0D	460.0			QL=1 ST=2 TYP=3
	600	HUMN	48	C	1642.0		50.0D				
	4995	SGMR	4	S/F	1642.0E	1651.0	10.0D	300.0			QL=1 ST=2 TYP=5
	1415	SGMR	8	S	1646.0E	1647.0	2.0D	120.0			QL=1 ST=2 TYP=3
	8800	SGMR	49	GB	1651.0E	1657.0	13.0D	2300.0			QL=1 ST=2 TYP=6
	1415	SGMR	4	S/F	1651.0E	1656.0	13.0D	140.0			QL=1 ST=2 TYP=5
	4995	SGMR	49	GB	1651.0E	1657.0	13.0D	1400.0			QL=1 ST=2 TYP=6
	2695	SGMR	49	GB	1651.0E	1656.0	13.0D	640.0			QL=1 ST=2 TYP=6
	410	PALE	49	GB	1654.0E	1724.0	51.0D	69000.0			QL=1 ST=2 TYP=7
	15400	SGMR	49	GB	1655.0E	1657.0	9.0D	1500.0			QL=1 ST=2 TYP=6
	410	SGMR	49	GB	1655.0E	1655.0	9.0D	580.0			QL=1 ST=2 TYP=6
	610	SGMR	4	S/F	1655.0E	1658.0	9.0D	380.0			QL=1 ST=2 TYP=3
	610	PALE	49	GB	1655.0E	1724.0	41.0D	34000.0			QL=1 ST=2 TYP=7
	2695	PALE	49	GB	1657.0E	1724.0	44.0D	720.0			QL=1 ST=2 TYP=7
	4995	PALE	49	GB	1657.0E	1724.0	48.0D	2100.0			QL=1 ST=2 TYP=7
	245	PALE	49	GB	1659.0E	1728.0	46.0D	43000.0			QL=1 ST=2 TYP=7
	1415	PALE	49	GB	1701.0E	1724.0	33.0D	11000.0			QL=1 ST=2 TYP=7
	2800	OTTA	46	C	1703.0	1710.0	11.0	285.0	114.0		
	15400	SGMR	4	S/F	1704.0E	1705.0	9.0D	240.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1704.0E	1707.0	11.0D	6600.0			QL=1 ST=2 TYP=6
	410	SGMR	49	GB	1704.0E	1707.0	11.0D	5600.0			QL=1 ST=2 TYP=6
	610	SGMR	49	GB	1704.0E	1707.0	11.0D	880.0			QL=1 ST=2 TYP=6
	4995	SGMR	49	GB	1704.0E	1705.0	11.0D	680.0			QL=1 ST=2 TYP=6
	8800	SGMR	49	GB	1704.0E	1705.0	11.0D	690.0			QL=1 ST=2 TYP=6
	1415	SGMR	4	S/F	1704.0E	1712.0	11.0D	290.0			QL=1 ST=2 TYP=5
	2695	SGMR	4	S/F	1704.0E	1708.0	11.0D	300.0			QL=1 ST=2 TYP=5
	15400	PALE	49	GB	1708.0E	1724.0	32.0D	1700.0			QL=1 ST=2 TYP=7
	8800	PALE	49	GB	1711.0E	1724.0	32.0D	2900.0			QL=1 ST=2 TYP=7
	2800	OTTA	46	C	1714.0	1724.0	35.0	656.0	197.0		
	610	SGMR	49	GB	1715.0E	1724.0	18.0D	29000.0			QL=1 ST=2 TYP=7
	245	SGMR	49	GB	1715.0E	1728.0	21.0D	51000.0			QL=1 ST=2 TYP=7
	410	SGMR	49	GB	1715.0E	1724.0	21.0D	74000.0			QL=1 ST=2 TYP=7
	15400	SGMR	49	GB	1715.0E	1724.0	21.0D	2200.0			QL=1 ST=2 TYP=7
	8800	SGMR	49	GB	1715.0E	1724.0	21.0D	4000.0			QL=1 ST=2 TYP=7
	4995	SGMR	49	GB	1715.0E	1724.0	21.0D	2400.0			QL=1 ST=2 TYP=7
	2695	SGMR	49	GB	1715.0E	1724.0	21.0D	730.0			QL=1 ST=2 TYP=7
	1415	SGMR	49	GB	1715.0E	1724.0	21.0D	13000.0			QL=1 ST=2 TYP=7
	15400	SGMR	4	S/F	1736.0E	1736.0	4.0D	210.0			QL=1 ST=2 TYP=3
	2695	SGMR	4	S/F	1736.0E	1736.0	4.0D	130.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1736.0E	1746.0	17.0D	2400.0			QL=1 ST=2 TYP=7
	8800	SGMR	20	GRF	1736.0E	1736.0	17.0D	410.0			QL=1 ST=2 TYP=2
	4995	SGMR	4	S/F	1736.0E	1736.0	12.0D	310.0			QL=1 ST=2 TYP=3
	410	SGMR	4	S/F	1736.0E	1747.0	17.0D	280.0			QL=1 ST=2 TYP=5
	245	PALE	49	GB	1745.0E	1746.0	9.0D	2400.0			QL=1 ST=2 TYP=7

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

MARCH 1989

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	2800	OTTA	29	PBI	1749.0	1749.0	90.0	32.3	16.0		
	1415	SGMR	8	S	1757.0E	1757.0	U	60.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	1811.0E	1812.0	1.0D	740.0			QL=1 ST=2 TYP=6
	410	SGMR	49	GB	1811.0E	1812.0	1.0D	870.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	1812.0E	1812.0	7.0D	1100.0			QL=1 ST=2 TYP=6
	610	PALE	8	S	1812.0E	1812.0	U	100.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	1813.0E	1814.0	1.0D	80.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1841.0E	1841.0	1.0D	1800.0			QL=1 ST=2 TYP=6
	410	SGMR	8	S	1858.0E	1858.0	U	360.0			QL=1 ST=2 TYP=3
	2800	OTTA	22	GRF	1935.0	1946.0	50.0	12.4	6.0		
	8800	PALE	4	S/F	1935.0E	1940.0	10.0D	100.0			QL=1 ST=2 TYP=5
	15400	PALE	4	S/F	1935.0E	1940.0	17.0D	120.0			QL=1 ST=2 TYP=5
	8800	SGMR	20	GRF	1935.0E	1940.0	10.0D	110.0			QL=1 ST=2 TYP=2
	15400	SGMR	4	S/F	1936.0E	1940.0	8.0D	94.0			QL=1 ST=2 TYP=5
	4995	SGMR	4	S/F	1939.0E	1940.0	3.0D	60.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1941.0E	1945.0	6.0D	2900.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1943.0E	1945.0	4.0D	3500.0			QL=1 ST=3 TYP=6
	2800	OTTA	4	S/F	2029.0	2030.0	5.0	167.6	83.0		
	2695	PALE	8	S	2029.0E	2029.0	2.0D	120.0			QL=1 ST=2 TYP=3
	15400	PALE	8	S	2029.0E	2029.0	2.0D	370.0			QL=1 ST=2 TYP=3
	8800	PALE	49	GB	2029.0E	2029.0	9.0D	600.0			QL=1 ST=2 TYP=6
	8800	SGMR	49	GB	2029.0E	2029.0	7.0D	660.0			QL=1 ST=2 TYP=6
	4995	SGMR	49	GB	2029.0E	2029.0	7.0D	710.0			QL=1 ST=2 TYP=6
	2695	SGMR	8	S	2029.0E	2029.0	2.0D	120.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	2029.0E	2029.0	1.0D	330.0			QL=1 ST=2 TYP=3
	4995	PALE	49	GB	2029.0E	2029.0	11.0D	660.0			QL=1 ST=2 TYP=6
	2800	OTTA	29	PBI	2034.0	2034.0	94.0	27.0	13.0		
	2800	OTTA	4	S/F	2035.0	2036.0	5.0	16.7	6.0		
	4995	SGMR	4	S/F	2036.0E	2037.0	3.0D	72.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	2036.0E	2037.0	2.0D	72.0			QL=1 ST=2 TYP=3
	8800	SGMR	20	GRF	2046.0E	2052.0	9.0D	140.0			QL=1 ST=2 TYP=2
	4995	SGMR	20	GRF	2046.0E	2052.0	6.0D	73.0			QL=1 ST=2 TYP=2
	2800	OTTA	20	GRF	2054.0	2103.0	66.0	8.1	4.0		
15	200	GORK	44	NS	0421.0E		200.0D		25.0		
	100	GORK	44	NS	0421.0E		459.0D		800.0		
	221	ABST	43	NS	0500.0		240.0		165.0		
	245	SVTO	44	NS	0521.0E	1128.0	673.0D	1100.0			QL=1 ST=2 TYP=1
	410	SVTO	44	NS	0521.0E	1131.0U	673.0D	650.0			QL=1 ST=2 TYP=1
	204	IZMI	43	NS	0600.0		360.0	170.0			
	234	POTS	44	NS	0600.0E	1458.0	548.0D	190.0U			
	127	TORN	44	NS	0620.0E		560.0D		1600.0		V=1
	260	ONDR	44	NS	0700.0E		520.0D				
	600	HUMN	44	NS	0700.0E		600.0D	72.0			
	430	KRAK	44	NS	0800.5E	1121.0	360.0D	220.0	70.0D		
	410	SGMR	43	NS	1116.0	1151.0	672.0D	250.0			QL=1 ST=2 TYP=1
	610	SGMR	43	NS	1116.0	1514.0	672.0D	110.0			QL=1 ST=2 TYP=1
	245	SGMR	43	NS	1116.0	1207.0	672.0D	930.0			QL=1 ST=2 TYP=1
	410	PALE	44	NS	1657.0E	1739.0	688.0D	90.0			QL=1 ST=2 TYP=1
	245	PALE	44	NS	1657.0E	0025.0	688.0D	710.0			QL=1 ST=2 TYP=1
	100	HIRA	44	NS	2050.0E	0236.0	710.0D	580.0	45.0		SL
	200	HIRA	44	NS	2050.0E	0019.0	710.0D	920.0	390.0		SL
	410	LEAR	8	S	0022.0E	0023.0	1.0D	140.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0022.0E	0022.0	U	1800.0			QL=1 ST=2 TYP=6
	610	LEAR	8	S	0022.0E	0022.0	U	92.0			QL=1 ST=2 TYP=3
	610	PALE	8	S	0022.0E	0022.0	U	120.0			QL=1 ST=3 TYP=3
	245	PALE	49	GB	0022.0E	0022.0	U	2700.0			QL=1 ST=3 TYP=6
	100	HIRA	8	S	0150.2	0150.8	0.8	11900.0			WL
	610	LEAR	8	S	0151.0E	0151.0	U	47.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0151.0E	0151.0	2.0D	600.0			QL=1 ST=2 TYP=6
	100	HIRA	42	SER	0210.9	0211.9	38.0	250.0			SL
	8800	PALE	8	S	0318.0E	0318.0	1.0D	76.0			QL=1 ST=3 TYP=3
	100	HIRA	42	SER	0340.0	0431.7	198.0	3400.0			SL
	500	HIRA	42	SER	0347.0	0355.6	13.7	350.0			SL
	610	PALE	8	S	0355.0E	0355.0	1.0D	220.0			QL=1 ST=2 TYP=3
	100	GORK	4	S/F	0427.8	0428.0	0.9	7100.0			
	650	GORK	23	GRF	0430.0E	1100.0	450.0D	44.0			
	9100	GORK	23	GRF	0436.0E		504.0D				
	8800	LEAR	8	S	0445.0E	0446.0	1.0D	74.0			QL=1 ST=2 TYP=3

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
15	15400	LEAR	8	S	0445.0E	0446.0	1.0D	110.0			QL=1 ST=2 TYP=3
	9100	GORK	4	S/F	0445.0	0445.9	4.1	125.0			
	245	LEAR	49	GB	0446.0E	0446.0	U	1200.0			QL=1 ST=2 TYP=6
	200	GORK	8	S	0446.2	0446.3	0.3	1800.0			
	5900	KISV	2	S/F	0455.9	0456.6	1.1	16.0			
	9300	KISV	2	S/F	0456.2	0456.5	0.7	27.0			
	9100	GORK	2	S/F	0456.3	0456.5	0.8	40.0			
	15000	KISV	2	S/F	0456.4	0456.7	0.7	14.0			
	15000	KISV	23	GRF	0457.4	0501.0	21.3	17.0			
	9300	KISV	2	S/F	0457.5	0459.2	5.6	12.0			
	5900	KISV	2	S/F	0458.7	0459.2	1.8	8.0			
	15000	KISV	2	S/F	0504.0	0505.0	3.0	11.0			
	100	GORK	41	F	0508.6	0701.2		7450.0			
	100	GORK	41	F	0508.6	0553.4		6700.0			
	100	GORK	41	F	0508.6	0538.6		8750.0			
	100	GORK	41	F	0508.6	0621.7		7000.0			
	100	GORK	41	F	0508.6	0608.9		8400.0			
	100	GORK	41	F	0508.6	0508.9	114.0	7000.0			
	15000	KISV	46	C	0520.9	0522.1	10.8	19.0			
	15000	KISV	46	C	0520.9	0522.6		8.0			
	15000	KISV	46	C	0520.9	0525.7		14.0			
	9300	KISV	2	S/F	0525.7	0526.2	1.5	16.0			
	15000	KISV	3	S	0528.8	0529.7	2.0	86.0D			
	15400	LEAR	8	S	0529.0E	0529.0	1.0D	140.0			QL=1 ST=2 TYP=3
	9300	KISV	2	S/F	0529.6	0529.8	0.8	12.0			
	15000	KISV	2	S/F	0603.4	0603.8	1.2	6.0			
	5900	KISV	2	S/F	0614.8	0615.7	4.0	5.0			
	15000	KISV	2	S/F	0617.9	0618.5	1.1	8.0			
	15000	KISV	23	GRF	0621.3	0653.4	230.0	147.0			
	15000	KISV	2	S/F	0621.3	0622.5	3.3	16.0			
	5900	KISV	46	C	0622.2	0640.6		149.0			
	5900	KISV	46	C	0622.2	0636.7		133.0			
	5900	KISV	46	C	0622.2	0629.7	248.0	150.0			
	9300	KISV	23	GRF	0622.3	0705.9	242.0	99.0			
	8800	LEAR	49	GB	0625.0E	0648.0	45.0D	2400.0			QL=1 ST=3 TYP=7
	9100	GORK	47	GB	0625.2	0648.0	33.5	2400.0			
	9300	KISV	46	C	0625.3	0648.0U	39.7	344.0D			
	9300	KISV	46	C	0625.3	0638.3		147.0			
	9300	KISV	46	C	0625.3	0629.6		200.0			
	9300	KISV	46	C	0625.3	0640.6		154.0			
	15000	KISV	2	S/F	0625.9	0627.9	8.0	52.0			
	8800	SVTO	4	S/F	0626.0E	0629.0	15.0D	210.0			QL=1 ST=2 TYP=3
	15400	SVTO	4	S/F	0627.0E	0627.0	14.0D	58.0			QL=1 ST=2 TYP=3
	4995	LEAR	49	GB	0627.0E	0648.0	43.0D	1800.0			QL=1 ST=3 TYP=7
	15400	LEAR	49	GB	0627.0E	0647.0	43.0D	1300.0			QL=1 ST=3 TYP=6
	4995	SVTO	4	S/F	0628.0E	0629.0	13.0D	72.0			QL=1 ST=2 TYP=3
	2950	GORK	21	GRF	0628.0	0832.0	273.0	117.0			
	3100	CRIM	28	PRE	0638.0	0644.0	6.0	16.0	5.0		
	5900	KISV	47	GB	0642.2	0648.0	9.5	2170.0			
	5900	KISV	29	PBI	0642.2	0651.7	16.2	415.0			
	3013	IZMI	47	GB	0642.5	0647.6	22.0	785.0	390.0		
	15000	KISV	2	S/F	0642.5	0643.7	2.4	17.0			
	4995	SVTO	49	GB	0643.0E	0648.0	32.0D	1600.0			QL=1 ST=2 TYP=6
	3100	CRIM	3	S	0644.0	0648.2	13.6	410.0	140.0		
	3100	CRIM	30	PBI	0644.0	0657.6	180.0	66.0			
	15000	KISV	47	GB	0645.0	0647.0	8.0	1432.0			
	8800	SVTO	49	GB	0645.0E	0648.0	14.0D	2000.0			QL=1 ST=2 TYP=6
	2695	LEAR	49	GB	0645.0E	0648.0	25.0D	620.0			QL=1 ST=3 TYP=6
	2950	GORK	47	GB	0645.0	0648.2	12.7	800.0			
	15400	SVTO	49	GB	0646.0E	0648.0	14.0D	1300.0			QL=1 ST=2 TYP=6
	2695	SVTO	49	GB	0646.0E	0648.0	29.0D	580.0			QL=1 ST=2 TYP=6
	1415	LEAR	4	S/F	0647.0E	0650.0	6.0D	57.0			QL=1 ST=3 TYP=3
	33	UPIC	42	SER	0654.8	0703.4	93.2				
	650	GORK	8	S	0710.9	0710.9	0.1	115.0			
	950	GORK	46	C	0716.8	0720.5		9.0			
	950	GORK	46	C	0716.8	0719.5	12.0	17.0			
	650	GORK	46	C	0717.1	0717.3	4.7	163.0			
	650	GORK	46	C	0717.1	0719.8		55.0			
	15000	KISV	23	GRF	0720.0	0729.3	16.0	14.0			

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
15	15000	KISV	2	S/F	0723.5	0724.0	1.7	39.0			
	5900	KISV	45	C	0724.3	0728.5		25.0			
	5900	KISV	45	C	0724.3	0726.7	6.2	32.0			
	15400	LEAR	8	S	0738.0E	0738.0	1.0D	65.0			QL=1 ST=2 TYP=3
	9100	GORK	1	S	0738.5	0738.9	1.4	30.0			
	9500	POTS	3	S	0738.5	0738.9	1.5	25.0			
	9300	KISV	1	S	0738.6	0738.9	0.9	31.0			
	536	ONDR	41	F	0740.0E		460.0D				
	100	GORK	47	GB	0747.3	0748.1	1.6	22300.0			
	3100	CRIM	20	GRF	0750.0	0757.0	13.0	10.0	4.0		
	15000	KISV	2	S/F	0752.0	0752.7	2.8	9.0			
	950	GORK	3	S	0756.5	0757.0	1.9	3.0			
	100	GORK	41	F	0759.6	0819.7		5750.0			
	100	GORK	41	F	0759.6	0801.7	117.0	5600.0			
	100	GORK	41	F	0759.6	0909.9		8300.0			
	100	GORK	41	F	0759.6	0937.9		5900.0			
	15000	KISV	23	GRF	0805.9	0827.3	36.0	47.0			
	9500	POTS	21	GRF	0810.0	0828.0	175.0	55.0			
	3000	POTS	21	GRF	0810.0	0832.2	160.0U	36.0			
	1470	POTS	22	GRF	0810.0	0832.5	190.0	20.0			
	15400	LEAR	8	S	0812.0E	0812.0	1.0D	54.0			QL=1 ST=2 TYP=3
	9100	GORK	1	S	0812.5	0812.8	2.3	43.0			
	15000	KISV	2	S/F	0812.5	0812.9	2.4	50.0			
	9500	POTS	3	S	0812.5	0812.9	1.5	34.0			
	3000	POTS	3	S	0812.5	0812.9	1.0	10.0			
	5900	KISV	1	S	0812.6	0812.9	1.3	32.0			
	950	GORK	21	GRF	0812.7	0836.0	68.0	15.0			
	3100	CRIM	1	S	0812.7	0812.9	1.0	10.0	3.0		
	2950	GORK	1	S	0812.7	0812.9	0.6	12.8			
	3013	IZMI	5	S	0812.8	0813.0	1.0	11.0	5.0		
	9300	KISV	2	S/F	0813.6	0813.9	1.3	38.0			
	9300	KISV	23	GRF	0816.3	0829.1	46.5	60.0			
	3100	CRIM	20	GRF	0817.0	0832.0	59.0	32.0	12.0		
	9100	GORK	3	S	0817.9	0819.9	5.0	258.0			
	9500	POTS	3	S	0818.0	0819.9	5.5	164.0			
	5900	KISV	23	GRF	0818.3	0827.6	24.2	55.0			
	9300	KISV	4	S/F	0818.7	0819.8	4.5	135.0			
	15000	KISV	4	S/F	0818.8	0819.8	4.9	433.0			
	15400	LEAR	4	S/F	0819.0E	0819.0	4.0D	340.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	0819.0E	0819.0	2.0D	150.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0819.0E	0819.0	16.0D	140.0			QL=1 ST=2 TYP=3
	5900	KISV	2	S/F	0819.3	0819.9	2.6	27.0			
	4995	LEAR	20	GRF	0823.0E	0829.0	17.0D	80.0			QL=1 ST=2 TYP=2
	4995	SVTO	4	S/F	0825.0E	0829.0	9.0D	77.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0827.0E	0829.0	2.0D	30.0			QL=1 ST=2 TYP=3
	650	GORK	4	S/F	0833.8	0834.4	0.9	260.0			
	15000	KISV	23	GRF	0857.2	0908.8	14.7	8.0			
	15000	KISV	2	S/F	0858.7	0858.9	2.5	8.0			
	950	GORK	4	S/F	0909.0E	0909.0	1.0D	22.0			
	15000	KISV	2	S/F	0935.1	0935.3	2.3	9.0			
	15000	KISV	2	S/F	0943.7	0944.0	0.8	4.0			
	15000	KISV	2	S/F	0950.5	0951.6	1.6	4.0			
	950	GORK	41	F	0951.0	0954.0		15.0			
	810	KRAK	8	S	0951.0	0951.0	0.6	24.0			
	650	GORK	4	S/F	0951.0	0951.2	0.6	70.0			
	950	GORK	41	F	0951.0	0951.3	12.0	12.0			
	950	GORK	41	F	0951.0	1001.5		24.0			
	234	POTS	8	S	0953.7	0953.8	0.5	300.0			
	650	GORK	8	S	0953.7	0953.9	0.3	155.0			
	9300	KISV	45	C	1001.9	1007.0	9.7	25.0			
	9300	KISV	45	C	1001.9	1003.9		17.0			
	15000	KISV	2	S/F	1002.4	1004.0	2.0	6.0			
	15000	KISV	2	S/F	1005.5	1006.9	3.3	8.0			
	100	GORK	41	F	1026.3	1112.0		3950.0			
	100	GORK	41	F	1026.3	1036.3	78.0	8900.0			
	100	GORK	41	F	1026.3	1058.8		4700.0			
	100	GORK	41	F	1026.3	1046.9		5000.0			
	15000	KISV	45	C	1030.7	1032.7		10.0			
	15000	KISV	45	C	1030.7	1034.9	5.2	11.0			

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
15	9500	POTS	3	S	1034.0	1034.9	1.5	27.0			
	9100	GORK	3	S	1037.3	1037.8	1.8	46.0			
	9300	KISV	2	S/F	1045.5	1046.5	3.4	14.0			
	15000	KISV	2	S/F	1053.3	1053.5	0.7	5.0			
	950	GORK	4	S/F	1136.2	1136.4	1.1	72.0			
	2950	GORK	21	GRF	1136.3	1209.0	90.0D	29.0			
	15000	KISV	2	S/F	1137.1	1137.3	1.5	7.0			
	5900	KISV	45	C	1152.5	1159.6		78.0			
	5900	KISV	45	C	1152.5	1207.6	54.0	73.0			
	9300	KISV	23	GRF	1156.3	1220.6	43.7	47.0			
	9300	KISV	23	GRF	1156.3	1205.7		34.0			
	4995	SVTO	4	S/F	1200.0E	1215.0	21.0D	280.0			QL=1 ST=2 TYP=5
	15000	KISV	4	S/F	1213.2	1215.8	4.6	126.0			
	9100	GORK	4	S/F	1213.8U	1215.8	5.0D	220.0			
	9500	POTS	4	S/F	1214.0	1215.6	26.0	214.0			
	9300	KISV	4	S/F	1214.1	1215.7	4.7	235.0			
	5900	KISV	4	S/F	1214.3	1215.7	7.0	300.0			
	1470	POTS	8	S	1214.5	1214.6	0.9	24.0			
	15400	SGMR	8	S	1215.0E	1215.0	1.0D	150.0			QL=1 ST=2 TYP=3
	4995	SGMR	8	S	1215.0E	1215.0	1.0D	230.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	1215.0E	1215.0	1.0D	270.0			QL=1 ST=2 TYP=3
	2695	SVTO	4	S/F	1215.0E	1215.0	6.0D	150.0			QL=1 ST=2 TYP=3
	8800	SVTO	4	S/F	1215.0E	1215.0	6.0D	280.0			QL=1 ST=2 TYP=3
	15400	SVTO	4	S/F	1215.0E	1215.0	6.0D	190.0			QL=1 ST=2 TYP=3
	2695	SGMR	4	S/F	1215.0E	1215.0	705.0D	130.0			QL=1 ST=1 TYP=3
	8400	BERN	4	S/F	1215.2	1215.4	1.5	184.0			
	3200	BERN	4	S/F	1215.2	1215.4	1.5	123.0			
	19600	BERN	4	S/F	1215.2	1215.4	1.5	82.0			
	5200	BERN	4	S/F	1215.2	1215.4	1.5	196.0			
	3000	POTS	3	S	1215.2	1215.8	15.0	119.0			
	2950	GORK	3	S	1215.3	1215.8	5.5	152.0			
	11800	BERN	4	S/F	1215.4	1215.4	1.5	217.0			
	1470	POTS	4	S/F	1215.5	1215.7	15.0	33.0			
	9300	KISV	2	S/F	1223.5	1224.1	3.1	19.0			
	430	KRAK	8	S	1321.5	1321.5	0.5	380.0			
	810	KRAK	8	S	1321.5	1321.5	0.5	58.0			
	9500	POTS	42	SER	1325.0	1334.0	30.0	82.0			
	8800	SGMR	4	S/F	1331.0E	1333.0	4.0D	97.0			QL=1 ST=2 TYP=5
	4995	SGMR	8	S	1331.0E	1331.0	U	59.0			QL=1 ST=2 TYP=3
	8800	SVTO	4	S/F	1331.0E	1333.0	6.0D	100.0			QL=1 ST=2 TYP=5
	3200	BERN	46	C	1331.0	1333.1	5.0	25.0			
	3000	POTS	42	SER	1331.0	1333.1	9.0	34.0			
	8400	BERN	46	C	1331.0	1331.4	5.0	60.0			
	11800	BERN	46	C	1331.0	1333.5	5.0	30.0			
	5200	BERN	46	C	1331.0	1333.5	5.0	40.0			
	234	POTS	42	SER	1331.8	1341.6	11.0	2600.0			
	245	SGMR	49	GB	1332.0E	1332.0	1.0D	1200.0			QL=1 ST=2 TYP=6
	40	POTS	41	F	1332.5	1332.9	2.3	900.0			
	4995	SVTO	4	S/F	1333.0E	1334.0	4.0D	65.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	1334.0E	1335.0	1.0D	57.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1341.0E	1341.0	1.0D	6800.0			QL=1 ST=2 TYP=6
	610	SGMR	8	S	1341.0E	1341.0	1.0D	190.0			QL=1 ST=2 TYP=3
	410	SGMR	49	GB	1341.0E	1341.0	1.0D	860.0			QL=1 ST=2 TYP=6
	410	SVTO	49	GB	1341.0E	1341.0	1.0D	800.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	1341.0E	1341.0	1.0D	5400.0			QL=1 ST=2 TYP=6
	9500	POTS	3	S	1428.0	1429.5	5.0	30.0			
	234	POTS	4	S/F	1455.3	1455.9	1.1	650.0			
	245	SGMR	49	GB	1502.0E	1504.0	3.0D	1100.0			QL=1 ST=2 TYP=6
	610	SGMR	49	GB	1508.0E	1508.0	1.0D	600.0			QL=1 ST=2 TYP=6
	245	SGMR	8	S	1508.0E	1508.0	U	260.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1545.0E	1545.0	U	610.0			QL=1 ST=2 TYP=6
	245	SGMR	8	S	1621.0E	1622.0	2.0D	150.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	1622.0E	1623.0	1.0D	84.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	1622.0E	1623.0	1.0D	120.0			QL=1 ST=2 TYP=3
	2800	OTTA	3	S	1648.5	1652.3	13.0	2476.0	742.0		
	410	SGMR	8	S	1650.0E	1651.0	2.0D	140.0			QL=1 ST=2 TYP=3
	15400	SGMR	49	GB	1650.0E	1651.0	13.0D	5100.0			QL=1 ST=2 TYP=6
	8800	SGMR	49	GB	1650.0E	1651.0	21.0D	6100.0			QL=1 ST=2 TYP=6
	4995	SGMR	49	GB	1650.0E	1652.0	21.0D	5400.0			QL=1 ST=2 TYP=6

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
15	1415	SGMR	4	S/F	1651.0E	1652.0	8.0D	460.0			QL=1 ST=2 TYP=3
	2695	SGMR	49	GB	1651.0E	1652.0	20.0D	2400.0			QL=1 ST=2 TYP=6
	1415	PALE	4	S/F	1657.0E	1701.0	4.0D	55.0			QL=1 ST=2 TYP=3
	2695	PALE	4	S/F	1657.0E	1659.0	4.0D	130.0			QL=1 ST=2 TYP=3
	15400	PALE	20	GRF	1657.0E	1705.0	8.0D	170.0			QL=1 ST=2 TYP=2
	8800	PALE	4	S/F	1657.0E	1700.0	9.0D	320.0			QL=1 ST=2 TYP=5
	4995	PALE	20	GRF	1657.0E	1700.0	11.0D	260.0			QL=1 ST=2 TYP=2
	2800	OTTA	29	PBI	1703.5	1703.5	167.0	81.2	40.0		
	2695	PENT	3	S	2001.9	2002.3	8.0	117.2	35.0		
	4995	PALE	8	S	2002.0E	2002.0	U	110.0			QL=1 ST=2 TYP=3
	8800	PALE	8	S	2002.0E	2002.0	1.0D	260.0			QL=1 ST=2 TYP=3
	15400	PALE	8	S	2002.0E	2002.0	U	290.0			QL=1 ST=2 TYP=3
	2695	PALE	8	S	2002.0E	2002.0	1.0D	110.0			QL=1 ST=2 TYP=3
	4995	SGMR	8	S	2002.0E	2002.0	U	120.0			QL=1 ST=2 TYP=3
	2695	SGMR	8	S	2002.0E	2002.0	1.0D	110.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	2002.0E	2002.0	1.0D	290.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	2002.0E	2002.0	U	290.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	2214.0E	2215.0	1.0D	720.0			QL=1 ST=2 TYP=6
	245	PALE	8	S	2331.0E	2331.0	1.0D	460.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	2340.0E	2340.0	U	480.0			QL=1 ST=2 TYP=3
16	410	LEAR	44	NS	0021.0E	0029.0	602.0D	260.0			QL=1 ST=2 TYP=1
	200	GORK	44	NS	0414.0E		240.0D		150.0		
	100	GORK	43	NS	0414.5		465.0		700.0		
	221	ABST	43	NS	0500.0		240.0		43.0		
	410	SVTO	44	NS	0519.0E	0531.0	677.0D	35.0			QL=1 ST=2 TYP=1
	245	SVTO	44	NS	0519.0E	0814.0	677.0D	560.0			QL=1 ST=2 TYP=1
	204	IZMI	43	NS	0600.0		360.0	300.0			
	234	POTS	44	NS	0600.0E	0613.0	551.0D	130.0			
	127	TORN	44	NS	0620.0E		560.0D		450.0		V=2
	260	ONDR	44	NS	0640.0E		550.0D				
	600	HUMN	44	NS	0700.0E		600.0D				
	430	KRAK	44	NS	0803.0E	0940.5	361.0D	110.0	20.0		
	410	SGMR	43	NS	1115.0	1553.0	675.0D	130.0			QL=1 ST=2 TYP=1
	245	SGMR	43	NS	1115.0	1320.0	675.0D	1000.0			QL=1 ST=2 TYP=1
	245	PALE	44	NS	1730.0E	0120.0	655.0D	360.0			QL=1 ST=2 TYP=1
	100	HIRA	44	NS	2050.0E	0228.0	710.0D	140.0	26.0		
	200	HIRA	44	NS	2050.0E	0211.0	710.0D	130.0	48.0		SL
	245	LEAR	44	NS	2242.0E	0527.0	701.0D	760.0			QL=1 ST=2 TYP=1
	245	LEAR	44	NS	2243.0E	2259.0	699.0D	390.0			QL=1 ST=2 TYP=1
	245	PALE	49	GB	0004.0E	0004.0	U	560.0			QL=1 ST=2 TYP=6
	610	LEAR	8	S	0008.0E	0008.0	1.0D	84.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0013.0E	0020.0	21.0D	1900.0			QL=1 ST=2 TYP=7
	245	PALE	49	GB	0019.0E	0020.0	3.0D	2300.0			QL=1 ST=2 TYP=6
	410	PALE	4	S/F	0019.0E	0021.0	3.0D	140.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0020.0E	0021.0	2.0D	47.0			QL=1 ST=2 TYP=3
	410	LEAR	4	S/F	0020.0E	0028.0	12.0D	210.0			QL=1 ST=2 TYP=5
	245	PALE	49	GB	0145.0E	0145.0	U	600.0			QL=1 ST=2 TYP=6
	4995	LEAR	49	GB	0155.0E	0202.0	22.0D	500.0			QL=1 ST=2 TYP=7
	2695	LEAR	20	GRF	0155.0E	0204.0	22.0D	430.0			QL=1 ST=2 TYP=2
	8800	LEAR	20	GRF	0156.0E	0203.0	21.0D	230.0			QL=1 ST=2 TYP=2
	1415	LEAR	20	GRF	0156.0E	0208.0	21.0D	240.0			QL=1 ST=2 TYP=2
	4995	PALE	20	GRF	0156.0E	0204.0	23.0D	440.0			QL=1 ST=2 TYP=2
	2695	PALE	20	GRF	0156.0E	0204.0	26.0D	390.0			QL=1 ST=2 TYP=2
	15400	LEAR	4	S/F	0157.0E	0158.0	12.0D	58.0			QL=1 ST=2 TYP=3
	8800	PALE	20	GRF	0157.0E	0204.0	12.0D	190.0			QL=1 ST=2 TYP=2
	1415	PALE	20	GRF	0158.0E	0208.0	19.0D	180.0			QL=1 ST=2 TYP=2
	15400	PALE	8	S	0203.0E	0204.0	1.0D	61.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	0211.0E	0211.0	U	440.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0311.0E	0311.0	U	520.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0352.0E	0354.0	7.0D	960.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0413.0E	0417.0	6.0D	1100.0			QL=1 ST=2 TYP=7
	15400	PALE	8	S	0413.0E	0413.0	1.0D	250.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0430.0E	0430.0	2.0D	630.0			QL=1 ST=2 TYP=6
	9100	GORK	23	GRF	0434.0E		506.0D				
	200	GORK	41	F	0443.2	0506.2		1600.0			
	200	GORK	41	F	0443.2	0443.5	24.0	3300.0			
	200	GORK	41	F	0443.2	0453.6		4000.0			
	2950	GORK	20	GRF	0445.0E	0454.0	54.0D	11.5			

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

MARCH 1989

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	650	GORK	23	GRF	0445.0E	0640.7	435.0D	24.0			
	100	GORK	4	S/F	0445.4	0448.4	3.0	1800.0			
	950	GORK	21	GRF	0448.0	0533.0	337.0	18.0			
	15000	KISV	4	S/F	0448.9	0449.6	2.9	60.0			
	5900	KISV	23	GRF	0450.7	0459.9	67.2	16.0			
	9300	KISV	23	GRF	0452.3	0500.0	17.3	22.0			
	9300	KISV	45	C	0453.2	0455.3		18.0			
	9300	KISV	45	C	0453.2	0453.7	5.2	20.0			
	15000	KISV	45	C	0453.4	0455.1	5.1	30.0			
	15000	KISV	45	C	0453.4	0453.7		20.0			
	100	GORK	4	S/F	0456.4	0456.9	1.0	1440.0			
	15000	KISV	45	C	0459.2	0502.0		13.0			
	15000	KISV	45	C	0459.2	0500.0	7.2	15.0			
	5900	KISV	2	S/F	0507.2	0507.5	2.8	8.0			
	9300	KISV	2	S/F	0507.2	0507.5	1.6	14.0			
	5900	KISV	2	S/F	0512.5	0512.9	3.2	5.0			
	200	GORK	41	F	0517.1	0517.2	10.5	2600.0			
	200	GORK	41	F	0517.1	0527.3		4300.0			
	9300	KISV	4	S/F	0518.1	0518.9	6.0	54.0			
	9100	GORK	4	S/F	0518.2	0519.0	4.1	59.0			
	100	GORK	8	S	0521.3	0521.5	0.3	3400.0			
	5900	KISV	2	S/F	0531.5	0532.3	3.2	7.0			
	9300	KISV	2	S/F	0531.9	0532.1	3.2	10.0			
	2950	GORK	21	GRF	0539.3	1003.0	455.0	31.0			
	5900	KISV	2	S/F	0544.9	0546.4	5.1	7.0			
	15000	KISV	2	S/F	0547.4	0547.8	3.1	45.0			
	100	GORK	41	F	0600.4	0607.0	48.0	1300.0			
	100	GORK	41	F	0600.4	0647.4		1440.0			
	100	GORK	41	F	0600.4	0622.5		1200.0			
	100	GORK	41	F	0600.4	0624.6		6100.0			
	245	SVTO	8	S	0609.0E	0611.0	2.0D	450.0			QL=1 ST=2 TYP=3
	9300	KISV	46	C	0609.7	0616.1		32.0			
	9300	KISV	46	C	0609.7	0611.6	9.3	72.0			
	9300	KISV	46	C	0609.7	0613.6		39.0			
	8800	LEAR	4	S/F	0610.0E	0611.0	3.0D	58.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0610.0E	0611.0	2.0D	67.0			QL=1 ST=2 TYP=3
	2950	GORK	45	C	0610.1	0611.7	9.0	19.0			
	3100	CRIM	21	GRF	0610.2	0612.0	50.0	8.0	3.0		
	15000	KISV	4	S/F	0610.2	0611.6	4.6	95.0			
	9100	GORK	46	C	0610.4	0616.2		30.0			
	9100	GORK	46	C	0610.4	0611.6	8.3	72.0			
	5900	KISV	45	C	0610.4	0611.7	14.5	33.0			
	5900	KISV	45	C	0610.4	0616.9		28.0			
	2950	GORK	45	C	0610.7	0616.2		13.3			
	410	LEAR	8	S	0611.0E	0612.0	1.0D	24.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0611.0E	0611.0	U	230.0			QL=1 ST=2 TYP=3
	410	SVTO	4	S/F	0611.0E	0612.0	3.0D	64.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	0611.0E	0611.0	1.0D	92.0			QL=1 ST=2 TYP=3
	950	GORK	2	S/F	0611.2	0612.3	2.3	11.0			
	3100	CRIM	1	S	0614.9	0617.1	3.6	7.0	2.0		
	5900	KISV	22	GRF	0641.3	0643.6	14.0	18.0			
	9300	KISV	2	S/F	0643.8	0644.6	2.7	14.0			
	9100	GORK	1	S	0644.1	0644.5	2.0	14.0			
	15000	KISV	2	S/F	0644.1	0644.5	2.1	14.0			
	9300	KISV	2	S/F	0648.7	0649.0	1.5	7.0			
	5900	KISV	2	S/F	0702.2	0704.6	5.9	8.0			
	5900	KISV	3	S	0714.4	0715.0	1.3	48.0			
	9100	GORK	1	S	0714.8	0715.0	1.0	40.0			
	2950	GORK	1	S	0714.8	0715.0	0.3	7.5			
	15000	KISV	1	S	0714.8	0715.0	0.7	14.0			
	9300	KISV	1	S	0714.8	0715.0	1.1	33.0			
	9500	POTS	42	SER	0715.0	0715.0	14.0	18.0			
	15000	KISV	2	S/F	0719.8	0720.4	2.2	56.0			
	9100	GORK	1	S	0720.0	0721.0	1.7	18.0			
	100	GORK	4	S/F	0720.2	0720.4	0.6	2040.0			
	5900	KISV	2	S/F	0720.3	0721.0	1.8	10.0			
	9300	KISV	2	S/F	0720.9	0721.8	2.2	16.0			
	15000	KISV	45	C	0733.7	0735.0	5.2	27.0			
	15000	KISV	45	C	0733.7	0737.3		13.0			

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

MARCH 1989

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	15000	KISV	2	S/F	0740.8	0741.6	2.2	11.0			
	245	LEAR	49	GB	0745.0E	0745.0	8.0D	910.0			QL=1 ST=2 TYP=6
	410	LEAR	8	S	0747.0E	0747.0	1.0D	68.0			QL=1 ST=2 TYP=3
	245	SVTO	49	GB	0748.0E	0750.0	5.0D	650.0			QL=1 ST=2 TYP=6
	15000	KISV	45	C	0748.8	0750.3		10.0			
	15000	KISV	45	C	0748.8	0749.7	2.5	11.0			
	5900	KISV	23	GRF	0758.8	0810.4	23.6	9.0			
	9500	POTS	20	GRF	0759.0	0853.5	83.0	23.0			
	9300	KISV	22	GRF	0759.6	0801.8	10.9	18.0			
	536	ONDR	41	F	0800.0E	1133.0	235.0D	84.0			
	5900	KISV	2	S/F	0800.2	0802.0	5.6	7.0			
	15000	KISV	2	S/F	0807.8	0808.5	2.3	13.0			
	15000	KISV	45	C	0822.1	0825.0	8.2	18.0			
	15000	KISV	45	C	0822.1	0823.5		15.0			
	100	GORK	4	S/F	0826.6	0827.4	1.2	2640.0			
	245	SVTO	49	GB	0829.0E	0832.0	10.0D	4700.0			QL=1 ST=2 TYP=6
	245	LEAR	49	GB	0830.0E	0832.0	4.0D	4300.0			QL=1 ST=2 TYP=6
	410	SVTO	8	S	0832.0E	0832.0	U	81.0			QL=1 ST=2 TYP=3
	9100	GORK	2	S/F	0843.1	0844.5	4.3	40.0			
	9300	KISV	4	S/F	0843.1	0844.5	3.9	43.0			
	5900	KISV	2	S/F	0843.1	0844.6	4.0	10.0			
	9300	KISV	23	GRF	0843.1	0853.7	16.0	24.0			
	15000	KISV	2	S/F	0843.4	0845.1	3.9	60.0			
	810	KRAK	42	SER	0845.5	1128.6	220.8	26.0			
	5900	KISV	23	GRF	0847.4	0853.7	10.5	13.0			
	100	GORK	4	S/F	0848.8	0849.6	1.3	1800.0			
	245	SVTO	4	S/F	0849.0E	0849.0	3.0D	120.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	0849.0E	0850.0	2.0D	67.0			QL=1 ST=2 TYP=3
	15000	KISV	2	S/F	0851.6	0853.7	4.6	20.0			
	15000	KISV	46	C	0859.2	0900.3		8.0			
	15000	KISV	46	C	0859.2	0903.3	4.6	13.0			
	15000	KISV	46	C	0859.2	0901.5		11.0			
	200	GORK	46	C	0902.5	0903.2	6.6	4400.0			
	200	GORK	46	C	0902.5	0908.6		2100.0			
	5900	KISV	2	S/F	0932.8	0936.7	7.6	8.0			
	9300	KISV	2	S/F	0933.1	0935.8	8.7	8.0			
	950	GORK	46	C	0936.6	0937.0	3.2	7.5			
	950	GORK	46	C	0936.6	0937.6		17.0			
	650	GORK	46	C	0936.8	0942.8		35.0			
	650	GORK	46	C	0936.8	0936.9	7.4	27.0			
	950	GORK	2	S/F	0940.1	0942.7	3.6	3.5			
	100	GORK	4	S/F	0940.3	0940.7	0.8	2800.0			
	15000	KISV	47	GB	0946.8	0953.0	11.7	571.0			
	5900	KISV	47	GB	0948.0	0954.3	15.0	438.0			
	9300	KISV	47	GB	0948.0	0953.8	14.0	685.0			
	9100	GORK	46	C	0948.2	0954.3		695.0			
	9100	GORK	46	C	0948.2	0952.8	17.3	635.0			
	4995	LEAR	4	S/F	0949.0E	0953.0	8.0D	300.0			QL=1 ST=2 TYP=3
	8800	LEAR	49	GB	0949.0E	0954.0	12.0D	670.0			QL=1 ST=2 TYP=6
	15400	LEAR	4	S/F	0950.0E	0953.0	8.0D	480.0			QL=1 ST=2 TYP=3
	3100	CRIM	30	PBI	0950.0	0957.0	137.0	33.0	11.0		
	8800	SVTO	49	GB	0950.0E	0954.0	850.0D	570.0			QL=1 ST=1 TYP=6
	2950	GORK	4	S/F	0950.0	0954.3	10.3	159.0			
	9500	POTS	4	S/F	0950.0	0954.3	40.0	470.0			
	3013	IZMI	20	GRF	0950.0	0954.4	20.0	143.0			
	3000	POTS	4	S/F	0950.0	0954.4	25.0	130.0U			
	3100	CRIM	45	C	0950.0	0954.5		102.0			
	3100	CRIM	45	C	0950.0	0953.9	5.2	100.0	34.0		
	4995	SVTO	4	S/F	0951.0E	0954.0	849.0D	290.0			QL=1 ST=1 TYP=3
	1470	POTS	4	S/F	0951.0	0954.9	8.0	112.0			
	2695	LEAR	4	S/F	0952.0E	0953.0	8.0D	150.0			QL=1 ST=2 TYP=3
	2695	SVTO	4	S/F	0952.0E	0954.0	848.0D	130.0			QL=1 ST=1 TYP=3
	11800	BERN	4	S/F	0952.0	0954.2	5.0	286.0			
	5200	BERN	4	S/F	0952.0	0954.2	5.0	154.0			
	3200	BERN	4	S/F	0952.0	0954.2	5.0	88.0			
	19600	BERN	4	S/F	0952.0	0952.5	5.0	308.0			
	1415	LEAR	8	S	0954.0E	0954.0	1.0D	89.0			QL=1 ST=2 TYP=3
	9300	KISV	4	S/F	1003.3	1003.9	12.7	127.0			
	5900	KISV	4	S/F	1003.6	1004.0	1.4	42.0			

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

MARCH 1989

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	650	GORK	4	S/F	1007.6	1009.1	2.7	17.0			
	600	HUMN	2	S/F	1008.0	1009.4	5.0	15.0	4.0		
	100	GORK	4	S/F	1011.7	1016.0	5.0	1080.0			
	15000	KISV	46	C	1025.2	1026.3		10.0			
	15000	KISV	46	C	1025.2	1025.6	3.5	23.0			
	15000	KISV	46	C	1025.2	1027.7		7.0			
	5900	KISV	2	S/F	1025.9	1026.3	0.9	7.0			
	15000	KISV	45	C	1036.0	1039.1		19.0			
	15000	KISV	45	C	1036.0	1046.3	18.0	46.0			
	9100	GORK	2	S/F	1038.2	1039.2	3.8	16.6			
	9300	KISV	45	C	1038.4	1039.3	4.2	14.0			
	9300	KISV	45	C	1038.4	1040.4		12.0			
	100	GORK	47	GB	1039.0	1041.1	3.0	10900.0			
	950	GORK	46	C	1039.6	1040.0	1.8	10.5			
	950	GORK	46	C	1039.6	1041.2		10.5			
	3100	CRIM	1	S	1039.7	1040.4	1.0	6.0	2.0		
	2950	GORK	1	S	1039.8	1040.2	1.0	9.1	4.5		
	5900	KISV	1	S	1039.9	1040.2	0.9	14.0			
	245	SVTO	49	GB	1040.0E	1041.0	9.0D	1400.0			QL=1 ST=2 TYP=6
	3013	IZMI	5	S	1040.0	1040.4	0.8	11.0	5.0		
	650	GORK	4	S/F	1040.9	1041.0	0.7	150.0			
	410	SVTO	49	GB	1041.0E	1041.0	U	620.0			QL=1 ST=2 TYP=6
	15400	SVTO	8	S	1046.0E	1046.0	U	53.0			QL=1 ST=2 TYP=3
	3100	CRIM	20	GRF	1050.0	1058.6	27.0	6.0	2.0		
	100	GORK	46	C	1054.0	1056.0	3.6	1100.0			
	15000	KISV	23	GRF	1100.7	1116.1	17.5	237.0			
	15000	KISV	23	GRF	1100.7	1103.4		46.0			
	5900	KISV	4	S/F	1101.7	1102.9	4.3	45.0			
	9300	KISV	4	S/F	1101.8	1103.3	4.2	58.0			
	9500	POTS	21	GRF	1102.0	1221.2	188.0	18.0			
	9500	POTS	3	S	1102.0	1103.3	3.5	44.0			
	9100	GORK	3	S	1102.5	1103.4	3.4	45.0			
	100	GORK	4	S/F	1109.6	1109.9	0.6	1600.0			
	245	SVTO	49	GB	1113.0E	1113.0	1.0D	880.0			QL=1 ST=2 TYP=6
	9300	KISV	4	S/F	1114.0	1116.1	7.5	103.0			
	9100	GORK	3	S	1115.0	1116.0	3.5	76.0			
	8800	SVTO	8	S	1115.0E	1116.0	1.0D	91.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	1115.0E	1116.0	2.0D	200.0			QL=1 ST=2 TYP=3
	9500	POTS	3	S	1115.0	1116.1	5.0	91.0			
	5900	KISV	2	S/F	1115.2	1116.0	2.8	14.0			
	410	SVTO	4	S/F	1118.0E	1121.0	3.0D	87.0			QL=1 ST=2 TYP=5
	245	SGMR	49	GB	1122.0E	1122.0	U	520.0			QL=1 ST=3 TYP=6
	950	GORK	2	S/F	1132.8	1133.3	7.3	18.0			
	650	GORK	4	S/F	1132.9	1133.5	1.8	35.0			
	600	HUMN	2	S/F	1133.0	1134.0	2.5	23.0	6.0		
	15000	KISV	2	S/F	1139.2	1139.4	0.6	7.0			
	810	KRAK	2	S/F	1139.7	1140.5	1.0	49.0	21.0		
	15000	KISV	2	S/F	1209.0	1209.3	1.0	5.0			
	15000	KISV	2	S/F	1213.8	1214.0	1.2	8.0			
	9100	GORK	46	C	1217.0	1221.1		24.0			
	9100	GORK	46	C	1217.0	1218.7	8.3	17.0			
	9300	KISV	45	C	1217.8	1221.3	7.0	19.0			
	9300	KISV	45	C	1217.8	1218.6		15.0			
	15000	KISV	45	C	1218.0	1219.2		10.0			
	15000	KISV	45	C	1218.0	1218.7	2.4	12.0			
	9300	KISV	2	S/F	1253.1	1254.3	6.1	17.0			
	15000	KISV	4	S/F	1253.5	1254.5	3.4	138.0			
	15400	SGMR	8	S	1254.0E	1254.0	U	110.0			QL=1 ST=2 TYP=3
	600	HUMN	1	S	1345.0	1345.4	1.4	20.0	8.0		
	600	HUMN	1	S	1351.0	1352.0	2.3	34.0	5.0		
	810	KRAK	8	S	1352.0	1352.2	0.7	14.0			
	600	HUMN	2	S/F	1409.0	1413.0	9.0	19.0	3.0		
	245	SVTO	4	S/F	1409.0E	1411.0	6.0D	120.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	1412.0E	1412.0	1.0D	210.0			QL=1 ST=2 TYP=3
	245	SVTO	49	GB	1429.0E	1429.0	4.0D	680.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1429.0E	1429.0	571.0D	1000.0			QL=1 ST=3 TYP=6
	9500	POTS	20	GRF	1432.0	1436.8	13.0	24.0			
	245	SVTO	8	S	1452.0E	1452.0	1.0D	170.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	1456.0E	1456.0	1.0D	250.0			QL=1 ST=2 TYP=3

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

MARCH 1989

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	600	HUMN	47	GB	1520.0	1526.0	93.0	425.0	69.0		
	15400	SGMR	49	GB	1523.0E	1525.0	20.0D	34000.0			QL=1 ST=2 TYP=7
	410	SGMR	49	GB	1523.0E	1524.0	30.0D	1900.0			QL=1 ST=2 TYP=7
	1415	SGMR	49	GB	1523.0E	1525.0	30.0D	3900.0			QL=1 ST=2 TYP=7
	610	SGMR	49	GB	1523.0E	1525.0	30.0D	1400.0			QL=1 ST=2 TYP=7
	8800	SGMR	49	GB	1523.0E	1525.0	30.0D	31000.0			QL=1 ST=2 TYP=7
	4995	SGMR	49	GB	1523.0E	1525.0	30.0D	20000.0			QL=1 ST=2 TYP=7
	2695	SGMR	49	GB	1523.0E	1525.0	30.0D	9300.0			QL=1 ST=2 TYP=7
	1415	SVTO	49	GB	1523.0E	1525.0	39.0D	3400.0			QL=1 ST=2 TYP=7
	8800	SVTO	49	GB	1523.0E	1525.0	32.0D	23000.0			QL=1 ST=2 TYP=7
	4995	SVTO	49	GB	1523.0E	1525.0	39.0D	12000.0			QL=1 ST=2 TYP=7
	2695	SVTO	49	GB	1523.0E	1525.0	44.0D	7800.0			QL=1 ST=2 TYP=7
	2800	OTTA	47	GB	1523.3	1526.0	21.2	7015.0	2104.0		
	8400	BERN	47	GB	1523.4	1525.2	4.5	15200.0			
	19600	BERN	47	GB	1523.4	1525.2	4.5	17700.0			
	11800	BERN	47	GB	1523.4	1525.2	4.5	8050.0			
	35000	BERN	47	GB	1523.4	1525.2	4.5	19500.0			
	50000	BERN	47	GB	1523.4	1525.2	4.5	14950.0			
	5200	BERN	47	GB	1523.4	1525.4	4.5	7400.0			
	3200	BERN	47	GB	1523.4	1525.4	4.5	2760.0			
	245	SVTO	49	GB	1524.0E	1525.0	9.0D	7100.0			QL=1 ST=2 TYP=7
	245	SGMR	49	GB	1524.0E	1525.0	10.0D	8100.0			QL=1 ST=2 TYP=7
	2800	OTTA	29	PBI	1544.5	1544.5	520.0	131.0	65.0		
	15400	SGMR	4	S/F	1553.0E	1554.0	3.0D	200.0			QL=1 ST=2 TYP=3
	8800	SGMR	4	S/F	1553.0E	1554.0	3.0D	290.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	1553.0	1554.5	3.0	59.3	17.0		
	4995	SGMR	8	S	1554.0E	1554.0	2.0D	210.0			QL=1 ST=2 TYP=3
	2695	SGMR	8	S	1554.0E	1554.0	2.0D	140.0			QL=1 ST=2 TYP=3
	1415	SGMR	8	S	1554.0E	1554.0	U	110.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1603.0E	1604.0	1.0D	790.0			QL=1 ST=2 TYP=6
	8800	SGMR	8	S	1613.0E	1613.0	U	66.0			QL=1 ST=2 TYP=3
	245	SGMR	8	S	1734.0E	1735.0	1.0D	300.0			QL=1 ST=3 TYP=3
	245	SGMR	8	S	1735.0E	1735.0	U	300.0			QL=1 ST=2 TYP=3
	610	PALE	8	S	1752.0E	1753.0	1.0D	220.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	1752.0E	1753.0	1.0D	11000.0			QL=1 ST=2 TYP=6
	15400	PALE	8	S	1752.0E	1753.0	2.0D	250.0			QL=1 ST=2 TYP=3
	8800	PALE	8	S	1752.0E	1753.0	2.0D	190.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	1752.0E	1753.0	2.0D	200.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	1752.0E	1752.0	1.0D	260.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	1752.0E	1753.0	2.0D	290.0			QL=1 ST=2 TYP=3
	410	SGMR	49	GB	1752.0E	1753.0	1.0D	5500.0			QL=1 ST=2 TYP=6
	2800	OTTA	3	S	1752.2	1754.0	2.0	42.4	17.0		
	4995	PALE	8	S	1753.0E	1753.0	U	54.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1753.0E	1753.0	U	1000.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1753.0E	1753.0	U	990.0			QL=1 ST=2 TYP=6
	2800	OTTA	3	S	1853.5	1854.1	1.3	25.4	7.0		
	15400	SGMR	8	S	1854.0E	1854.0	U	77.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	1914.0E	1914.0	1.0D	130.0			QL=1 ST=2 TYP=3
	8800	SGMR	4	S/F	1914.0E	1914.0	16.0D	140.0			QL=1 ST=2 TYP=3
	4995	SGMR	20	GRF	1914.0E	1922.0	14.0D	82.0			QL=1 ST=2 TYP=2
	2800	OTTA	20	GRF	1914.1	1923.3	57.0	22.5	11.0		
	245	PALE	8	S	2022.0E	2023.0	1.0D	490.0			QL=1 ST=2 TYP=3
	15400	SGMR	4	S/F	2039.0E	2041.0	7.0D	240.0			QL=1 ST=2 TYP=3
	8800	SGMR	20	GRF	2039.0E	2041.0	10.0D	260.0			QL=1 ST=2 TYP=2
	2800	OTTA	4	S/F	2039.6	2039.8	1.2	91.3	45.0		
	4995	SGMR	4	S/F	2040.0E	2042.0	9.0D	120.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	2040.8	2042.1	6.8	64.9	19.0		
	2695	PALE	8	S	2041.0E	2041.0	1.0D	67.0			QL=1 ST=2 TYP=3
	2695	SGMR	8	S	2041.0E	2042.0	1.0D	58.0			QL=1 ST=2 TYP=3
	2800	OTTA	20	GRF	2047.6	2052.3	110.0	87.3	35.0		
	8800	SGMR	20	GRF	2049.0E	2051.0	7.0D	79.0			QL=1 ST=3 TYP=2
	4995	SGMR	20	GRF	2049.0E	2054.0	17.0D	130.0			QL=1 ST=3 TYP=2
	2695	SGMR	20	GRF	2051.0E	2052.0	7.0D	78.0			QL=1 ST=3 TYP=2
	2800	OTTA	4	S/F	2202.0	2207.0	13.6	52.9	16.0		
	2695	PALE	8	S	2206.0E	2207.0	1.0D	51.0			QL=1 ST=2 TYP=3
	100	HIRA	42	SER	2208.0	2215.8	73.0	570.0			
	2695	PENT	4	S/F	2245.0	2247.1	4.6	18.0	7.0		
	2695	PENT	4	S/F	2314.5	2316.5	5.1	53.4	16.0		

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
17	200	GORK	44	NS	0412.0E		180.0D		15.0		
	100	GORK	44	NS	0415.0E		465.0D		6.0		
	221	ABST	43	NS	0500.0		240.0		40.0		
	245	SVTO	44	NS	0518.0E	0743.0	679.0D	170.0			QL=1 ST=2 TYP=1
	410	SVTO	44	NS	0518.0E	0524.0	679.0D	38.0			QL=1 ST=2 TYP=1
	204	IZMI	43	NS	0600.0		360.0	80.0			
	127	TORN	44	NS	0620.0E	1405.0	560.0D	500.0	25.0		V=2
	260	ONDR	44	NS	0700.0E		510.0D				
	33	UPIC	43	NS	0715.0	1157.6U	382.3				
	245	SGMR	43	NS	1113.0	1823.0	678.0D	510.0			QL=1 ST=2 TYP=1
	410	SGMR	43	NS	1113.0	1753.0	678.0D	110.0			QL=1 ST=2 TYP=1
	245	PALE	44	NS	1655.0E	1712.0	691.0D	95.0			QL=1 ST=3 TYP=1
	610	LEAR	4	S/F	0109.0E	0110.0	4.0D	100.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0110.0E	0110.0	1.0D	110.0			QL=1 ST=2 TYP=3
	100	HIRA	42	SER	0111.9	0155.0U	86.0	2000.0			O
	200	HIRA	42	SER	0122.6	0124.3	13.9	1700.0			ML
	245	LEAR	49	GB	0131.0E	0131.0	1.0D	540.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0131.0E	0131.0	1.0D	780.0			QL=1 ST=2 TYP=6
	500	HIRA	42	SER	0209.2	0245.2	36.2	1100.0			WL
	4995	LEAR	8	S	0216.0E	0216.0	2.0D	37.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0216.0E	0216.0	2.0D	37.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0216.0E	0216.0	2.0D	49.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0216.0E	0216.0	2.0D	30.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0216.0E	0216.0	2.0D	250.0			QL=1 ST=2 TYP=3
	610	LEAR	49	GB	0216.0E	0216.0	U	630.0			QL=1 ST=2 TYP=6
	410	PALE	49	GB	0216.0E	0216.0	1.0D	530.0			QL=1 ST=2 TYP=6
	610	PALE	49	GB	0216.0E	0216.0	1304.0D	930.0			QL=1 ST=1 TYP=6
	410	LEAR	49	GB	0235.0E	0236.0	1.0D	4300.0			QL=1 ST=2 TYP=6
	8800	LEAR	8	S	0236.0E	0236.0	2.0D	67.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0236.0E	0236.0	U	42.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0236.0E	0236.0	U	75.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0236.0E	0236.0	U	43.0			QL=1 ST=2 TYP=3
	610	LEAR	49	GB	0236.0E	0236.0	U	590.0			QL=1 ST=2 TYP=6
	15400	LEAR	8	S	0236.0E	0236.0	U	59.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	0236.0E	0236.0	U	4900.0			QL=1 ST=2 TYP=6
	15400	PALE	8	S	0236.0E	0236.0	U	70.0			QL=1 ST=2 TYP=3
	2695	PALE	8	S	0236.0E	0236.0	U	57.0			QL=1 ST=2 TYP=3
	610	PALE	49	GB	0236.0E	0236.0	U	790.0			QL=1 ST=2 TYP=6
	8800	PALE	8	S	0241.0E	0242.0	1.0D	68.0			QL=1 ST=2 TYP=3
	4995	LEAR	4	S/F	0242.0E	0245.0	5.0D	240.0			QL=1 ST=2 TYP=5
	8800	LEAR	4	S/F	0242.0E	0245.0	4.0D	110.0			QL=1 ST=2 TYP=5
	2695	LEAR	8	S	0244.0E	0245.0	2.0D	240.0			QL=1 ST=2 TYP=3
	610	LEAR	49	GB	0245.0E	0245.0	U	750.0			QL=1 ST=2 TYP=6
	15400	LEAR	8	S	0245.0E	0245.0	1.0D	76.0			QL=1 ST=2 TYP=3
	410	LEAR	49	GB	0245.0E	0245.0	U	850.0			QL=1 ST=2 TYP=6
	1415	LEAR	8	S	0245.0E	0245.0	1.0D	130.0			QL=1 ST=2 TYP=3
	15400	PALE	8	S	0245.0E	0245.0	U	97.0			QL=1 ST=2 TYP=3
	8800	PALE	8	S	0245.0E	0245.0	U	100.0			QL=1 ST=2 TYP=3
	4995	PALE	8	S	0245.0E	0245.0	1.0D	210.0			QL=1 ST=2 TYP=3
	2695	PALE	8	S	0245.0E	0245.0	1.0D	190.0			QL=1 ST=2 TYP=3
	1415	PALE	8	S	0245.0E	0245.0	1.0D	77.0			QL=1 ST=2 TYP=3
	610	PALE	49	GB	0245.0E	0245.0	U	1300.0			QL=1 ST=2 TYP=6
	410	PALE	49	GB	0245.0E	0245.0	U	920.0			QL=1 ST=2 TYP=6
	8800	LEAR	8	S	0257.0E	0257.0	U	58.0			QL=1 ST=2 TYP=3
	4995	LEAR	4	S/F	0330.0E	0331.0	4.0D	220.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0331.0E	0331.0	1.0D	35.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0331.0E	0331.0	1.0D	90.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0331.0E	0331.0	2.0D	250.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0331.0E	0331.0	1.0D	84.0			QL=1 ST=2 TYP=3
	8800	PALE	8	S	0331.0E	0331.0	2.0D	140.0			QL=1 ST=2 TYP=3
	2695	PALE	8	S	0331.0E	0331.0	1.0D	67.0			QL=1 ST=2 TYP=3
	15400	PALE	8	S	0331.0E	0331.0	1.0D	110.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0335.0E	0337.0	5.0D	120.0			QL=1 ST=2 TYP=3
	8800	PALE	4	S/F	0335.0E	0337.0	5.0D	160.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	0336.0E	0337.0	3.0D	170.0			QL=1 ST=2 TYP=3
	15400	PALE	8	S	0336.0E	0337.0	2.0D	200.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0337.0E	0337.0	1.0D	33.0			QL=1 ST=2 TYP=3
	9100	GORK	23	GRF	0448.0E		492.0D				
	100	GORK	4	S/F	0500.0	0502.2	4.3	380.0			

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
17	5900	KISV	2	S/F	0500.7	0502.0	2.5	5.0			
	9300	KISV	2	S/F	0501.2	0501.8	1.4	8.0			
	5900	KISV	2	S/F	0516.2	0516.8	2.1	6.0			
	9100	GORK	2	S/F	0521.4	0522.1	3.5	22.0			
	9300	KISV	2	S/F	0521.6	0522.3	4.2	16.0			
	15000	KISV	2	S/F	0521.7	0522.3	5.8	34.0			
	5900	KISV	45	C	0524.4	0532.2		78.0			
	5900	KISV	45	C	0524.4	0530.8	15.8	241.0			
	650	GORK	22	GRF	0527.6	0530.5	9.8	6.0			
	9300	KISV	45	C	0527.8	0532.2		64.0			
	9100	GORK	4	S/F	0527.8	0530.7	6.9	224.0			
	9300	KISV	45	C	0527.8	0530.9	9.9	187.0			
	9300	KISV	2	S/F	0528.0	0528.3	1.1	15.0			
	2950	GORK	4	S/F	0528.3	0530.7	6.2	61.0			
	3100	CRIM	1	S	0529.0	0530.8	3.5	41.6	14.0		
	950	GORK	46	C	0530.0	0532.0		9.0			
	15400	LEAR	8	S	0530.0E	0530.0	2.0D	81.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0530.0E	0530.0	3.0D	190.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0530.0E	0530.0	1.0D	51.0			QL=1 ST=2 TYP=3
	4995	LEAR	8	S	0530.0E	0530.0	2.0D	160.0			QL=1 ST=2 TYP=3
	4995	SVTO	8	S	0530.0E	0530.0	1.0D	120.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	0530.0E	0530.0	1.0D	100.0			QL=1 ST=2 TYP=3
	950	GORK	46	C	0530.0	0530.5	4.9	9.0			
	15000	KISV	4	S/F	0530.4	0531.0	5.3	70.0			
	100	GORK	4	S/F	0532.0	0532.4	1.5	820.0			
	9100	GORK	2	S/F	0542.7	0543.7	2.4	28.0			
	5900	KISV	2	S/F	0542.9	0544.0	4.0	11.0			
	9300	KISV	2	S/F	0542.9	0543.9	1.4	30.0			
	15000	KISV	2	S/F	0543.0	0543.7	2.1	22.0			
	9300	KISV	4	S/F	0555.6	0557.6	6.3	123.0			
	15000	KISV	23	GRF	0555.8	0604.2	15.0	14.0			
	610	LEAR	8	S	0556.0E	0556.0	1.0D	300.0			QL=1 ST=2 TYP=3
	5900	KISV	4	S/F	0556.0	0557.9	4.1	35.0			
	650	GORK	8	S	0556.8	0556.9	0.3	1300.0			
	15400	LEAR	8	S	0557.0E	0557.0	U	100.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0557.0E	0557.0	U	97.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	0557.0E	0557.0	U	99.0			QL=1 ST=2 TYP=3
	950	GORK	4	S/F	0557.0	0557.2	0.7	33.0			
	9100	GORK	4	S/F	0557.0	0557.4	3.6	138.0			
	2950	GORK	2	S/F	0557.0	0557.8	1.9	9.2			
	15000	KISV	4	S/F	0557.2	0557.6	3.0	102.0			
	950	GORK	21	GRF	0615.0E	0625.0	170.0D	10.0			
	950	GORK	8	S	0622.8	0622.9	0.3	55.0			
	5900	KISV	22	GRF	0646.9	0649.5	20.0	7.0			
	15000	KISV	47	GB	0708.0	0717.0	22.5	1677.0			
	5900	KISV	47	GB	0708.1	0717.0	53.6	1635.0D			
	2950	GORK	21	GRF	0709.7	0730.0	159.0	31.0			
	9100	GORK	47	GB	0714.7	0716.9	15.3	2090.0			
	9300	KISV	47	GB	0714.9	0717.0	84.2	2041.0			
	15400	SVTO	49	GB	0715.0E	0716.0	5.0D	1800.0			QL=1 ST=2 TYP=6
	2695	LEAR	49	GB	0715.0E	0716.0	10.0D	630.0			QL=1 ST=2 TYP=6
	4995	LEAR	49	GB	0715.0E	0716.0	10.0D	1500.0			QL=1 ST=2 TYP=6
	3000	POTS	45	C	0715.0	0717.0	46.0	1330.0			
	9500	POTS	45	C	0715.0	0717.0	45.0	1050.0			
	650	GORK	46	C	0715.4	0716.0	1.9	290.0			
	650	GORK	29	PBI	0715.4	0717.2	13.3	19.0			
	650	GORK	46	C	0715.4	0716.7		410.0			
	3100	CRIM	3	S	0715.5	0717.0	10.5	405.0	135.0		
	3013	IZMI	47	GB	0715.5	0717.0	20.0	615.0	500.0		
	3100	CRIM	30	PBI	0715.5	0726.0	74.0	33.0	11.0		
	1470	POTS	45	C	0715.5	0717.2	20.0	315.0			
	950	GORK	46	C	0715.5	0716.5		82.0D			
	950	GORK	46	C	0715.5	0715.9	4.3	85.0			
	2950	GORK	47	GB	0715.6	0716.9	14.1	704.0			
	410	LEAR	8	S	0716.0E	0716.0	1.0D	480.0			QL=1 ST=2 TYP=3
	1415	LEAR	4	S/F	0716.0E	0716.0	4.0D	290.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0716.0E	0716.0	1.0D	360.0			QL=1 ST=2 TYP=3
	610	SVTO	8	S	0716.0E	0716.0	1.0D	300.0			QL=1 ST=2 TYP=3
	245	SVTO	4	S/F	0716.0E	0717.0	3.0D	100.0			QL=1 ST=2 TYP=3

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
17	410	SVTO	8	S	0716.0E	0717.0	1.0D	360.0			QL=1 ST=2 TYP=3
	2695	SVTO	49	GB	0716.0E	0717.0	5.0D	600.0			QL=1 ST=2 TYP=6
	1415	SVTO	4	S/F	0716.0E	0716.0	3.0D	230.0			QL=1 ST=2 TYP=3
	4995	SVTO	49	GB	0716.0E	0717.0	10.0D	1400.0			QL=1 ST=2 TYP=6
	8800	SVTO	49	GB	0716.0E	0716.0	10.0D	1900.0			QL=1 ST=2 TYP=6
	3200	BERN	47	GB	0716.0	0716.5	2.0	460.0			
	19600	BERN	47	GB	0716.0	0716.5	2.0	137.0			
	11800	BERN	47	GB	0716.0	0716.5	2.0	642.0			
	8400	BERN	47	GB	0716.0	0716.5	2.0	990.0			
	5200	BERN	47	GB	0716.0	0716.5	2.0	1070.0			
	500	HIRA	46	C	0716.0	0716.8	10.0	334.0	7.0		WL
	600	HUMN	2	S/F	0716.6	0717.0	3.7	52.0	5.0		
	100	GORK	4	S/F	0719.3	0719.9	1.5	470.0			
	245	LEAR	8	S	0723.0E	0723.0	U	93.0			QL=1 ST=2 TYP=3
	9100	GORK	2	S/F	0732.7	0735.2	6.5	39.0			
	5900	KISV	2	S/F	0732.8	0735.3	8.7	23.0			
	9300	KISV	2	S/F	0732.9	0735.3	6.2	38.0			
	15000	KISV	2	S/F	0734.3	0735.3	3.0	7.0			
	245	LEAR	8	S	0738.0E	0738.0	U	160.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0738.0E	0738.0	U	140.0			QL=1 ST=2 TYP=3
	5900	KISV	22	GRF	0747.1	0748.6	10.0	8.0			
	9300	KISV	2	S/F	0748.0	0748.6	3.0	14.0			
	15000	KISV	2	S/F	0748.2	0748.7	2.3	7.0			
	5900	KISV	45	C	0804.5	0807.2	5.1	82.0			
	3013	IZMI	41	F	0804.5	0806.5	5.0	35.0			
	5900	KISV	45	C	0804.5	0806.7		48.0			
	100	GORK	41	F	0805.6	0814.2		320.0			
	100	GORK	41	F	0805.6	0810.3		470.0			
	100	GORK	41	F	0805.6	0807.3	12.3	280.0			
	4995	LEAR	8	S	0806.0E	0806.0	1.0D	85.0			QL=1 ST=2 TYP=3
	4995	SVTO	8	S	0806.0E	0806.0	1.0D	74.0			QL=1 ST=2 TYP=3
	2950	GORK	45	C	0806.0	0807.1		27.0			
	9100	GORK	46	C	0806.0	0807.2		70.0			
	3000	POTS	4	S/F	0806.0	0807.4	4.0	29.0			
	9100	GORK	46	C	0806.0	0806.5	3.7	82.0			
	2950	GORK	45	C	0806.0	0806.5	1.8	27.0			
	8400	BERN	4	S/F	0806.2	0807.1	1.5	62.0			
	5200	BERN	4	S/F	0806.2	0807.1	1.5	65.0			
	3200	BERN	4	S/F	0806.2	0807.1	1.5	23.0			
	950	GORK	46	C	0806.2	0806.5	1.7	65.0			
	950	GORK	46	C	0806.2	0806.7		4.0			
	9300	KISV	45	C	0806.3	0807.1		55.0			
	15000	KISV	45	C	0806.3	0807.2	3.4	18.0			
	9300	KISV	45	C	0806.3	0806.5	3.6	70.0			
	15000	KISV	45	C	0806.3	0806.5		18.0			
	1470	POTS	4	S/F	0806.4	0806.5	3.6	15.0			
	9500	POTS	4	S/F	0806.5	0806.6	4.5	47.0			
	650	GORK	4	S/F	0806.8E	0810.8	5.4D	60.0			
	245	LEAR	4	S/F	0807.0E	0810.0	4.0D	210.0			QL=1 ST=2 TYP=5
	410	LEAR	8	S	0810.0E	0810.0	1.0D	84.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	0810.0E	0810.0	1.0D	80.0			QL=1 ST=2 TYP=3
	600	HUMN	2	S/F	0810.7	0811.0	1.3	19.0	7.0		
	3100	CRIM	45	C	0816.2	0817.1		26.7			
	3100	CRIM	45	C	0816.2	0816.4	1.5	24.0	9.0		
	5900	KISV	2	S/F	0826.0	0826.6	1.2	5.0			
	810	KRAK	8	S	0834.5	0834.5	0.5	12.0			
	650	GORK	8	S	0834.8	0835.0	0.4	14.0			
	15000	KISV	2	S/F	0836.7	0837.1	1.8	6.0			
	15000	KISV	2	S/F	0847.8	0848.3	3.6	20.0			
	650	GORK	23	GRF	0848.7	0900.0	39.2	4.5			
	950	GORK	46	C	0850.7	0854.0		220.0			
	950	GORK	46	C	0850.7	0852.3	15.3	74.0			
	950	GORK	46	C	0850.7	0852.7		200.0			
	1415	LEAR	4	S/F	0851.0E	0852.0	3.0D	310.0			QL=1 ST=2 TYP=3
	1415	SVTO	8	S	0851.0E	0852.0	2.0D	230.0			QL=1 ST=2 TYP=3
	810	KRAK	45	C	0851.5	0854.3	6.0	75.0	24.0		
	650	GORK	4	S/F	0851.5	0853.9	7.7	26.0			
	1470	POTS	4	S/F	0851.9	0852.5	12.0	155.0			
	100	GORK	4	S/F	0852.2	0853.2	4.1	390.0			

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
17	650	GORK	2	S/F	0904.5	0905.6	1.7	9.0			
	950	GORK	46	C	0905.0	0906.0		11.0			
	950	GORK	46	C	0905.0	0905.5	1.6	10.0			
	5900	KISV	22	GRF	0918.7	0920.2	11.5	17.0			
	15000	KISV	2	S/F	0948.9	0952.0	6.1	14.0			
	100	GORK	41	F	1004.6	1006.0	27.0	40.0D			
	100	GORK	41	F	1004.6	1020.4		590.0			
	100	GORK	41	F	1004.6	1031.6		115.0			
	5900	KISV	2	S/F	1019.8	1020.4	1.0	6.0			
	950	GORK	8	S	1027.8	1028.0	0.3	63.0			
	9300	KISV	2	S/F	1041.4	1044.6	8.6	19.0			
	9500	POTS	29	PBI	1101.0	1108.5	51.0	199.0			
	5900	KISV	2	S/F	1101.2	1101.8	3.1	8.0			
	9300	KISV	2	S/F	1101.3	1101.7	2.9	25.0			
	5900	KISV	4	S/F	1104.4	1108.4	7.6	177.0			
	9100	GORK	4	S/F	1104.7	1108.4	9.6	236.0			
	9300	KISV	23	GRF	1104.8	1116.2	29.2	64.0			
	9300	KISV	1	S	1106.2	1106.3	0.8	29.0			
	15400	SVTO	8	S	1107.0E	1108.0	1.0D	110.0			QL=1 ST=2 TYP=3
	4995	SVTO	4	S/F	1107.0E	1108.0	6.0D	140.0			QL=1 ST=2 TYP=3
	8800	SVTO	4	S/F	1107.0E	1108.0	6.0D	180.0			QL=1 ST=2 TYP=3
	2695	SVTO	8	S	1107.0E	1107.0	1.0D	67.0			QL=1 ST=2 TYP=3
	5200	BERN	46	C	1107.3	1108.2	2.0	98.0			
	11800	BERN	46	C	1107.3	1108.2	2.0	58.0			
	8400	BERN	46	C	1107.3	1108.2	2.0	112.0			
	3200	BERN	46	C	1107.3	1107.4	2.0	59.0			
	9300	KISV	4	S/F	1107.4	1108.7	7.8	245.0			
	950	GORK	4	S/F	1107.5	1108.0	2.0	42.0			
	1470	POTS	4	S/F	1107.5	1108.0	5.5	20.0			
	2950	GORK	30	PBI	1107.5	1109.3	95.0	31.0			
	3100	CRIM	29	PBI	1107.5	1109.5	13.0	10.0	3.0		
	3013	IZMI	5	S	1107.5	1107.5	17.5	64.0	30.0		
	3100	CRIM	1	S	1107.5	1107.8	2.0	48.0	16.0		
	2950	GORK	4	S/F	1107.5	1107.8	1.7	77.0			
	3000	POTS	29	PBI	1107.5	1107.8	33.0	68.0			
	15000	KISV	4	S/F	1107.6	1108.5	7.2	162.0			
	410	SVTO	8	S	1108.0E	1108.0	U	130.0			QL=1 ST=2 TYP=3
	245	SVTO	49	GB	1108.0E	1108.0	U	660.0			QL=1 ST=2 TYP=6
	245	SVTO	8	S	1122.0E	1123.0	1.0D	200.0			QL=1 ST=2 TYP=3
	100	GORK	41	F	1134.5	1146.3		350.0			
	100	GORK	41	F	1134.5	1157.5		590.0			
	100	GORK	41	F	1134.5	1201.7		700.0			
	100	GORK	41	F	1134.5	1134.9U	28.0	40.0D			
	5900	KISV	45	C	1149.0	1149.4	4.0	10.0			
	5900	KISV	45	C	1149.0	1150.9		6.0			
	2950	GORK	1	S	1149.1	1149.2	1.2	8.5			
	3013	IZMI	5	S	1149.1	1149.3	1.0	8.0	4.0		
	3000	POTS	4	S/F	1157.0	1158.0	3.0	36.0			
	9500	POTS	4	S/F	1157.0	1158.0	5.0	69.0			
	1470	POTS	3	S	1157.0	1158.1	3.0	8.0			
	9100	GORK	4	S/F	1157.2	1158.1	5.0	112.0			
	5900	KISV	45	C	1157.2	1159.2	6.2	10.0			
	9300	KISV	4	S/F	1157.2	1158.2	3.5	104.0			
	5900	KISV	45	C	1157.2	1201.5		10.0			
	950	GORK	2	S/F	1157.2	1157.7	0.8	7.0			
	3013	IZMI	5	S	1157.3	1158.2	2.5	36.0	25.0		
	2950	GORK	4	S/F	1157.3	1158.6	1.8	44.0			
	15000	KISV	2	S/F	1157.4	1158.4	2.4	38.0			
	4995	SVTO	8	S	1158.0E	1158.0	U	100.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	1158.0E	1158.0	1.0D	170.0			QL=1 ST=2 TYP=3
	2950	GORK	1	S	1201.2	1201.5	0.5	5.1			
	600	HUMN	2	S/F	1211.0	1211.5	1.4	40.0	8.0		
	5900	KISV	23	GRF	1240.5	1241.2	10.7	8.0			
	5900	KISV	45	C	1245.9	1247.2		7.0			
	5900	KISV	45	C	1245.9	1246.5	1.9	11.0			
	9300	KISV	1	S	1248.8	1249.1	0.5	30.0			
	245	SVTO	8	S	1317.0E	1317.0	1.0D	110.0			QL=1 ST=2 TYP=3
	536	ONDR	45	C	1358.5	1403.4	5.0	20.0			
	9500	POTS	20	GRF	1415.0	1417.2	6.0	16.0			

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
17	8800	SGMR	4	S/F	1650.0E	1650.0	430.0D	65.0			QL=1 ST=3 TYP=3
	15400	SGMR	4	S/F	1650.0E	1650.0	430.0D	82.0			QL=1 ST=3 TYP=3
	15400	SGMR	8	S	1657.0E	1657.0	U	55.0			QL=1 ST=2 TYP=3
	15400	PALE	49	GB	1721.0E	1735.0	49.0D	20000.0			QL=1 ST=2 TYP=7
	4995	SGMR	49	GB	1731.0E	1738.0	389.0D	12000.0			QL=1 ST=1 TYP=7
	2800	OTTA	47	GB	1734.0	1739.0	17.2	3921.0	1176.0		
	4995	PALE	49	GB	1734.0E	1738.0	7.0D	6500.0			QL=1 ST=2 TYP=7
	8800	PALE	49	GB	1734.0E	1735.0	6.0D	7500.0			QL=1 ST=2 TYP=7
	2695	PALE	49	GB	1734.0E	1738.0	8.0D	2500.0			QL=1 ST=2 TYP=7
	2695	SGMR	49	GB	1734.0E	1738.0	386.0D	3100.0			QL=1 ST=1 TYP=7
	245	PALE	49	GB	1735.0E	1736.0	8.0D	3900.0			QL=1 ST=2 TYP=7
	410	PALE	49	GB	1735.0E	1737.0	14.0D	760.0			QL=1 ST=2 TYP=7
	1415	PALE	49	GB	1735.0E	1739.0	17.0D	1200.0			QL=1 ST=2 TYP=7
	245	SGMR	49	GB	1735.0E	1736.0	15.0D	3300.0			QL=1 ST=2 TYP=7
	610	SGMR	49	GB	1735.0E	1737.0	14.0D	510.0			QL=1 ST=2 TYP=7
	410	SGMR	49	GB	1735.0E	1737.0	13.0D	760.0			QL=1 ST=2 TYP=7
	1415	SGMR	49	GB	1735.0E	1739.0	18.0D	1500.0			QL=1 ST=2 TYP=7
	2800	OTTA	29	PBI	1751.2	1751.2	85.0	71.5	35.0		
	2800	OTTA	5	S	1807.8	1808.1	0.8	40.4	20.0		
	245	PALE	8	S	1810.0E	1810.0	1.0D	450.0			QL=1 ST=3 TYP=3
	2800	OTTA	22	GRF	1810.3	1814.3	9.7	17.4	8.0		
	245	PALE	49	GB	1822.0E	1823.0	2.0D	620.0			QL=1 ST=2 TYP=6
	4995	SGMR	4	S/F	1822.0E	1823.0	4.0D	160.0			QL=1 ST=2 TYP=3
	2695	SGMR	4	S/F	1822.0E	1823.0	3.0D	65.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	1822.0E	1823.0	1.0D	50.0			QL=1 ST=2 TYP=3
	8800	SGMR	4	S/F	1822.0E	1823.0	4.0D	75.0			QL=1 ST=2 TYP=3
	245	SGMR	8	S	1822.0E	1823.0	2.0D	490.0			QL=1 ST=2 TYP=3
	2800	OTTA	3	S	1822.6	1823.7	3.6	66.4	26.0		
	15400	PALE	8	S	1823.0E	1823.0	U	62.0			QL=1 ST=2 TYP=3
	8800	PALE	8	S	1823.0E	1823.0	U	61.0			QL=1 ST=2 TYP=3
	4995	PALE	8	S	1823.0E	1823.0	1.0D	120.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	1823.0E	1823.0	U	67.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	1857.9	1859.4	5.1	19.9	6.0		
	2800	OTTA	4	S/F	1906.7	1907.7	2.3	35.8	10.0		
	2800	OTTA	4	S/F	2008.7	2013.1	8.5	93.0	28.0		
	4995	SGMR	4	S/F	2010.0E	2013.0	4.0D	150.0			QL=1 ST=2 TYP=3
	15400	PALE	8	S	2011.0E	2012.0	2.0D	66.0			QL=1 ST=2 TYP=3
	8800	PALE	4	S/F	2011.0E	2011.0	3.0D	100.0			QL=1 ST=2 TYP=3
	4995	PALE	4	S/F	2011.0E	2013.0	3.0D	120.0			QL=1 ST=2 TYP=3
	8800	SGMR	4	S/F	2011.0E	2011.0	3.0D	130.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	2011.0E	2011.0	1.0D	55.0			QL=1 ST=2 TYP=3
	2695	SGMR	4	S/F	2011.0E	2013.0	3.0D	88.0			QL=1 ST=2 TYP=3
	2695	PALE	8	S	2012.0E	2013.0	2.0D	75.0			QL=1 ST=2 TYP=3
	1415	PALE	8	S	2012.0E	2013.0	1.0D	82.0			QL=1 ST=2 TYP=3
	1415	SGMR	8	S	2012.0E	2013.0	2.0D	100.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	2109.0E	2109.0	1.0D	18000.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2109.0E	2109.0	1.0D	15000.0			QL=1 ST=2 TYP=6
	8800	LEAR	4	S/F	2308.0E	2311.0	9.0D	180.0			QL=1 ST=2 TYP=3
	15400	LEAR	4	S/F	2308.0E	2311.0	4.0D	48.0			QL=1 ST=2 TYP=3
	2695	PENT	3	S	2310.0	2312.0	5.1	65.4	19.0		
	4995	LEAR	4	S/F	2310.0E	2311.0	7.0D	230.0			QL=1 ST=2 TYP=3
	2695	LEAR	4	S/F	2310.0E	2311.0	4.0D	73.0			QL=1 ST=2 TYP=3
18	221	ABST	43	NS	0500.0		240.0		36.0		
	260	ONDR	44	NS	0640.0E	0932.5	550.0D				
	127	TORN	43	NS	0824.0		268.0		11.0		V=1
	245	SGMR	44	NS	1111.0E	2054.0	681.0D	87.0			QL=1 ST=2 TYP=1
	200	HIRA	44	NS	2045.0E	2300.0	520.0D	24.0	13.0		ML
	100	HIRA	48	C	0203.6	0205.3	31.0	9000.0			WL
	610	LEAR	8	S	0204.0E	0205.0	2.0D	160.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0204.0E	0205.0	2.0D	120.0			QL=1 ST=2 TYP=3
	245	LEAR	49	GB	0204.0E	0205.0	2.0D	4400.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	0204.0E	0205.0	2.0D	120.0			QL=1 ST=2 TYP=3
	200	HIRA	48	C	0204.0	0205.3	23.1	11000.0	140.0		O
	500	HIRA	46	C	0204.2	0206.0	21.5	170.0	47.0		ML
	500	HIRA	46	C	0204.2	0211.5		50.0			WL
	4995	LEAR	8	S	0205.0E	0205.0	U	26.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0205.0E	0205.0	U	66.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0205.0E	0205.0	U	36.0			QL=1 ST=2 TYP=3

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

MARCH 1989

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	15400	LEAR	8	S	0205.0E	0205.0	U	78.0			QL=1 ST=2 TYP=3
	1415	LEAR	8	S	0205.0E	0206.0	1.0D	41.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0205.0E	0205.0	U	5300.0			QL=1 ST=2 TYP=6
	610	PALE	8	S	0205.0E	0205.0	1.0D	200.0			QL=1 ST=2 TYP=3
	15400	PALE	8	S	0205.0E	0205.0	U	72.0			QL=1 ST=2 TYP=3
	8800	PALE	8	S	0205.0E	0205.0	U	73.0			QL=1 ST=2 TYP=3
	410	LEAR	4	S/F	0208.0E	0211.0	6.0D	60.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0209.0E	0211.0	2.0D	39.0			QL=1 ST=2 TYP=3
	245	LEAR	4	S/F	0209.0E	0209.0	5.0D	140.0			QL=1 ST=2 TYP=3
	1415	LEAR	4	S/F	0210.0E	0214.0	4.0D	110.0			QL=1 ST=2 TYP=5
	500	HIRA	46	C	0323.8	0324.1	1.2	186.0			SL
	500	HIRA	42	SER	0350.5	0350.7	8.5	35.0			ML
	9100	GORK	21	GRF	0455.0E	0736.4	394.0D	23.0			
	15000	KISV	2	S/F	0524.0	0524.3	0.6	5.0			
	200	GORK	4	S/F	0552.5	0553.3	1.2	17.0			
	9100	GORK	1	S	0642.9	0645.5	2.6	11.0			
	650	GORK	22	GRF	0651.5	0654.7	9.9	3.0			
	9300	KISV	45	C	0706.3	0707.0		19.0			
	9300	KISV	45	C	0706.3	0706.7	1.3	12.0			
	9100	GORK	1	S	0706.4	0706.7	0.9	11.0			
	9500	POTS	1	S	0706.5	0707.2	1.5	9.0			
	650	GORK	2	S/F	0722.6	0722.7	1.5	7.0			
	15000	KISV	2	S/F	0723.0	0723.2	1.8	3.0			
	15000	KISV	2	S/F	0726.1	0726.3	0.5	3.0			
	100	GORK	4	S/F	0733.9	0734.2	0.5	570.0			
	9500	POTS	3	S	0737.5	0738.0	2.5	16.0			
	9100	GORK	2	S/F	0737.5	0737.9	2.5	16.0			
	9300	KISV	2	S/F	0737.7	0738.0	3.1	16.0			
	15000	KISV	2	S/F	0737.8	0738.0	0.6	4.0			
	9500	POTS	42	SER	0751.0	0759.0	10.0	13.0			
	100	GORK	41	F	0751.0	0801.1		33.0			
	100	GORK	41	F	0751.0	0754.5	12.0	27.0			
	100	GORK	41	F	0751.0	0756.6		39.0			
	610	LEAR	8	S	0757.0E	0758.0	2.0D	56.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0757.0E	0759.0	2.0D	26.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0757.0E	0759.0	2.0D	180.0			QL=1 ST=2 TYP=3
	200	HIRA	8	S	0757.4	0757.7	0.3	2500.0			O
	536	ONDR	41	F	0757.9	0932.2	167.0	69.0			
	204	IZMI	8	S	0758.0	0759.0	2.2	2500.0	2000.0		
	9100	GORK	2	S/F	0758.0	0758.9	2.2	16.0			
	15000	KISV	2	S/F	0758.2	0758.8	2.8	9.0			
	5900	KISV	2	S/F	0758.7	0758.9	2.3	6.0			
	9300	KISV	2	S/F	0758.9	0759.1	0.9	18.0			
	245	SVTO	8	S	0759.0E	0759.0	U	210.0			QL=1 ST=2 TYP=3
	234	POTS	8	S	0759.0	0759.1	0.6	1300.0			
	650	GORK	8	S	0813.2	0813.4	0.4	17.0			
	9100	GORK	3	S	0814.5	0815.5	3.3	42.0			
	5900	KISV	2	S/F	0814.7	0815.7	5.3	26.0			
	9500	POTS	3	S	0815.3	0815.5	3.7	38.0			
	9300	KISV	2	S/F	0815.3	0815.6	5.7	37.0			
	15000	KISV	2	S/F	0815.3	0815.7	4.0	20.0			
	100	GORK	41	F	0816.1	0825.2		350.0			
	100	GORK	41	F	0816.1	0820.4		39.0			
	100	GORK	41	F	0816.1	0817.8	10.4	39.0			
	100	GORK	41	F	0836.9	0840.1		30.0			
	100	GORK	41	F	0836.9	0853.2		20.0			
	100	GORK	41	F	0836.9	0838.5	17.9	31.0			
	15000	KISV	2	S/F	0845.3	0846.2	2.7	11.0			
	15000	KISV	2	S/F	0850.1	0850.4	1.6	9.0			
	15000	KISV	2	S/F	0903.3	0903.7	1.1	5.0			
	430	KRAK	42	SER	0904.5	0905.3	37.0	61.0			
	15000	KISV	2	S/F	0906.8	0907.1	0.9	7.0			
	600	HUMN	42	SER	0909.0	0921.0	16.0	10.0			
	100	GORK	41	F	0909.0	0923.8		39.0			
	100	GORK	41	F	0909.0	0909.8	18.0	900.0			
	204	IZMI	5	S	0909.5	0909.7	0.6	80.0	45.0		
	9500	POTS	1	S	0909.5	0909.9	1.5	9.0			
	9300	KISV	2	S/F	0909.6	0909.9	3.4	8.0			
	15000	KISV	2	S/F	0911.1	0911.4	0.9	5.0			

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

MARCH 1989

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	15000	KISV	2	S/F	0920.2	0920.5	1.3	9.0			
	15000	KISV	2	S/F	0924.8	0926.8	3.4	8.0			
	2695	LEAR	8	S	0931.0E	0932.0	2.0D	46.0			QL=1 ST=3 TYP=3
	1415	LEAR	8	S	0931.0E	0932.0	2.0D	42.0			QL=1 ST=3 TYP=3
	15400	LEAR	8	S	0931.0E	0932.0	2.0D	100.0			QL=1 ST=3 TYP=3
	8800	LEAR	8	S	0931.0E	0932.0	2.0D	99.0			QL=1 ST=3 TYP=3
	245	LEAR	8	S	0931.0E	0932.0	2.0D	370.0			QL=1 ST=2 TYP=3
	9500	POTS	3	S	0931.5	0932.4	3.5	88.0			
	3000	POTS	3	S	0931.5	0932.5	2.5	30.0			
	9100	GORK	3	S	0931.7	0932.5	4.3	113.0			
	5900	KISV	4	S/F	0931.8	0932.6	5.1	38.0			
	15000	KISV	4	S/F	0931.8	0932.7	4.4	73.0			
	4995	LEAR	8	S	0932.0E	0932.0	1.0D	39.0			QL=1 ST=3 TYP=3
	610	LEAR	8	S	0932.0E	0932.0	1.0D	51.0			QL=1 ST=3 TYP=3
	15400	SVTO	8	S	0932.0E	0932.0	U	94.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	0932.0E	0932.0	U	86.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0932.0E	0932.0	1.0D	460.0			QL=1 ST=2 TYP=3
	600	HUMN	8	S	0932.0	0932.4	1.0	57.0	25.0		
	200	GORK	4	S/F	0932.0	0932.6	0.9	1600.0			
	9300	KISV	4	S/F	0932.0	0932.6	6.0	109.0			
	650	GORK	4	S/F	0932.1	0932.4	0.5	160.0			
	234	POTS	4	S/F	0932.2	0932.5	1.9	160.0			
	950	GORK	3	S	0932.2	0932.7	4.0	13.5			
	1470	POTS	3	S	0932.2	0932.7	6.8	30.0			
	100	GORK	47	GB	0932.3	0932.5	1.1	21000.0			
	2950	GORK	3	S	0932.3	0932.6	2.5	38.0			
	3013	IZMI	5	S	0932.3	0932.6	2.0	30.0	15.0		
	204	IZMI	42	SER	0932.4	0932.8	41.0	900.0			
	810	KRAK	2	S/F	0932.5	0932.7	1.5	15.0	3.0		
	9500	POTS	20	GRF	0944.0	0948.0	6.0	17.0			
	9300	KISV	22	GRF	0944.4	0948.0	10.8	23.0			
	5900	KISV	2	S/F	0944.7	0947.8	6.2	7.0			
	9100	GORK	2	S/F	0945.9	0948.0	4.0	18.0			
	3000	POTS	20	GRF	0946.0	0948.0	7.0	7.0			
	3100	CRIM	1	S	0947.2	0948.0	1.5	2.6	1.0		
	2950	GORK	1	S	0947.3	0948.0	1.3	4.0	2.0		
	15000	KISV	45	C	0958.0	0959.3		10.0			
	15000	KISV	45	C	0958.0	0958.8	3.7	14.0			
	4995	LEAR	8	S	1008.0E	1009.0	2.0D	63.0			QL=1 ST=2 TYP=3
	245	LEAR	4	S/F	1008.0E	1009.0	3.0D	88.0			QL=1 ST=2 TYP=3
	650	GORK	4	S/F	1008.1	1010.2	3.6	24.0			
	3000	POTS	3	S	1008.6	1009.7	4.6	21.0			
	2950	GORK	3	S	1008.7	1009.4	1.6	25.0			
	2950	GORK	29	PBI	1008.7	1010.6	38.0	11.0			
	245	SVTO	8	S	1009.0E	1009.0	1.0D	110.0			QL=1 ST=2 TYP=3
	600	HUMN	2	S/F	1009.0	1010.4	2.7	20.0	5.0		
	1470	POTS	3	S	1009.0	1009.5	4.0	9.0			
	3100	CRIM	1	S	1009.0	1009.6	3.0	13.4	4.0		
	9500	POTS	3	S	1009.0	1009.6	4.0	19.0			
	100	GORK	41	F	1009.0	1009.7	18.0	39.0			
	100	GORK	41	F	1009.0	1018.8		36.0			
	100	GORK	41	F	1009.0	1024.8		39.0			
	9300	KISV	2	S/F	1009.0	1009.8	5.0	23.0			
	3013	IZMI	5	S	1009.1	1009.8	2.5	30.0	15.0		
	950	GORK	4	S/F	1009.2	1010.2	2.8	23.0			
	9100	GORK	2	S/F	1009.2	1009.7	2.7	17.0			
	5900	KISV	4	S/F	1009.2	1009.8	5.5	43.0			
	430	KRAK	7	C	1009.3	1011.3	3.0	39.0	7.0		
	810	KRAK	7	C	1009.5	1010.3	2.2	15.0	3.0		
	15000	KISV	46	C	1009.5	1016.4		8.0			
	15000	KISV	46	C	1009.5	1010.4		13.0			
	15000	KISV	46	C	1009.5	1013.7	14.5	16.0			
	650	GORK	5	S	1041.7	1041.9	0.3	4.6			
	204	IZMI	41	F	1041.9	1042.0	2.0	400.0			
	100	GORK	4	S/F	1042.0	1043.4	1.6	1500.0			
	650	GORK	5	S	1043.1	1043.2	0.3	7.5			
	9300	KISV	2	S/F	1044.4	1046.3	6.3	15.0			
	9300	KISV	2	S/F	1123.5	1126.1	5.7	10.0			
	15000	KISV	45	C	1127.6	1128.5	1.6	8.0			

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

MARCH 1989

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	15000	KISV	45	C	1127.6	1127.9		7.0			
	5900	KISV	2	S/F	1134.6	1134.9	1.4	6.0			
	15000	KISV	47	GB	1240.6	1243.0	8.1	997.0			
	9300	KISV	47	GB	1240.6	1242.8	18.4	448.0D			
	9500	POTS	45	C	1241.0	1242.8	29.0	600.0			
	5900	KISV	47	GB	1241.6	1244.1	17.8	254.0			
	5200	BERN	47	GB	1242.0	1244.0	3.5	188.0			
	15400	SGMR	49	GB	1242.0E	1242.0	2.0D	780.0			QL=1 ST=2 TYP=6
	8800	SGMR	49	GB	1242.0E	1242.0	4.0D	560.0			QL=1 ST=2 TYP=6
	8800	SVTO	49	GB	1242.0E	1246.0	4.0D	560.0			QL=1 ST=2 TYP=7
	15400	SVTO	49	GB	1242.0E	1242.0	2.0D	990.0			QL=1 ST=2 TYP=6
	3200	BERN	47	GB	1242.0	1244.2	3.5	32.0			
	19600	BERN	47	GB	1242.0	1242.5	3.5	432.0			
	8400	BERN	47	GB	1242.0	1242.5	3.5	300.0			
	11800	BERN	47	GB	1242.0	1242.5	3.5	520.0			
	3000	POTS	29	PBI	1242.7	1244.4	28.0	30.0			
	4995	SGMR	8	S	1243.0E	1244.0	2.0D	240.0			QL=1 ST=2 TYP=3
	4995	SVTO	49	GB	1243.0E	1246.0	3.0D	220.0			QL=1 ST=2 TYP=7
	600	HUMN	40	F	1308.5	1343.0	39.0	13.0	1.0		
	430	KRAK	8	S	1328.5	1329.0	0.5	19.0			
	1470	POTS	40	F	1339.5	1343.4	4.5	88.0			
	245	SVTO	8	S	1342.0E	1342.0	1.0D	65.0			QL=1 ST=2 TYP=3
	3000	POTS	40	F	1342.5	1342.6	5.5	12.0			
	430	KRAK	41	F	1342.7	1343.1	1.5	22.0	3.0		
	810	KRAK	41	F	1342.8	1343.0	1.0	3.0	3.0		
	1415	SGMR	8	S	1343.0E	1343.0	1.0D	95.0			QL=1 ST=2 TYP=3
	1415	SVTO	8	S	1343.0E	1343.0	1.0D	88.0			QL=1 ST=2 TYP=3
	30	POTS	41	F	1343.2	1347.8	12.0	11000.0			
	9500	POTS	3	S	1358.5	1358.6	1.5	18.0			
	600	HUMN	2	S/F	1445.4	1445.5	0.7	57.0	14.0		
	600	HUMN	2	S/F	1514.7	1516.9	4.3	16.0	3.0		
	1415	SGMR	8	S	1516.0E	1516.0	1.0D	81.0			QL=1 ST=2 TYP=3
	1415	SVTO	8	S	1516.0E	1516.0	U	69.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	1629.0E	1630.0	1.0D	67.0			QL=1 ST=2 TYP=3
	600	HUMN	2	S/F	1654.5	1655.5	1.6	35.0	9.0		
	15400	SGMR	4	S/F	1732.0E	1733.0	3.0D	380.0			QL=1 ST=2 TYP=3
	4995	SGMR	49	GB	1732.0E	1733.0	5.0D	610.0			QL=1 ST=2 TYP=6
	8800	SGMR	49	GB	1732.0E	1733.0	7.0D	950.0			QL=1 ST=2 TYP=6
	2695	SGMR	8	S	1732.0E	1733.0	2.0D	35.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	1733.0	1758.5	65.0	188.4	56.0		
	8800	SGMR	4	S/F	1740.0E	1750.0	380.0D	230.0			QL=1 ST=3 TYP=5
	4995	SGMR	4	S/F	1740.0E	1750.0	380.0D	400.0			QL=1 ST=3 TYP=5
	15400	SGMR	4	S/F	1744.0E	1746.0	376.0D	69.0			QL=1 ST=3 TYP=3
	2695	SGMR	4	S/F	1747.0E	1750.0	373.0D	130.0			QL=1 ST=3 TYP=5
	245	PALE	49	GB	2011.0E	2011.0	U	810.0			QL=1 ST=3 TYP=6
	245	SGMR	49	GB	2011.0E	2011.0	U	810.0			QL=1 ST=2 TYP=6
	2800	OTTA	4	S/F	2026.5	2032.0	15.0	435.0	130.0		
	610	PALE	4	S/F	2028.0E	2032.0	7.0D	430.0			QL=1 ST=2 TYP=5
	610	SGMR	4	S/F	2028.0E	2032.0	7.0D	360.0			QL=1 ST=2 TYP=5
	2695	SGMR	4	S/F	2028.0E	2031.0	6.0D	440.0			QL=1 ST=2 TYP=3
	4995	SGMR	4	S/F	2028.0E	2031.0	6.0D	430.0			QL=1 ST=2 TYP=3
	2695	PALE	4	S/F	2029.0E	2031.0	5.0D	380.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	2029.0E	2032.0	6.0D	14000.0			QL=1 ST=2 TYP=6
	8800	SGMR	4	S/F	2029.0E	2031.0	4.0D	250.0			QL=1 ST=2 TYP=3
	1415	SGMR	4	S/F	2029.0E	2031.0	3.0D	160.0			QL=1 ST=2 TYP=3
	410	SGMR	49	GB	2029.0E	2032.0	6.0D	1100.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2029.0E	2032.0	6.0D	12000.0			QL=1 ST=2 TYP=6
	15400	PALE	4	S/F	2030.0E	2031.0	3.0D	130.0			QL=1 ST=2 TYP=3
	8800	PALE	4	S/F	2030.0E	2031.0	3.0D	220.0			QL=1 ST=2 TYP=3
	4995	PALE	4	S/F	2030.0E	2031.0	3.0D	330.0			QL=1 ST=2 TYP=3
	1415	PALE	8	S	2030.0E	2031.0	2.0D	140.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	2030.0E	2032.0	5.0D	880.0			QL=1 ST=2 TYP=6
	15400	SGMR	4	S/F	2030.0E	2031.0	3.0D	97.0			QL=1 ST=2 TYP=3
	8800	PALE	49	GB	2155.0E	2156.0	5.0D	780.0			QL=1 ST=2 TYP=6
	4995	PALE	4	S/F	2155.0E	2156.0	5.0D	350.0			QL=1 ST=2 TYP=3
	15400	PALE	4	S/F	2155.0E	2156.0	3.0D	420.0			QL=1 ST=2 TYP=3
	4995	SGMR	4	S/F	2155.0E	2156.0	5.0D	410.0			QL=1 ST=2 TYP=3
	8800	SGMR	49	GB	2155.0E	2156.0	4.0D	760.0			QL=1 ST=2 TYP=6
	15400	SGMR	8	S	2156.0E	2156.0	1.0D	280.0			QL=1 ST=2 TYP=3

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

MARCH 1989

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	100	GORK	44	NS	0430.0E		450.0D		5.0		
	127	TORN	43	NS	0828.0		325.0		10.0		V=0
	260	ONDR	43	NS	0920.0	0958.4	38.4				
	245	LEAR	4	S/F	0123.0E	0127.0	4.0D	91.0			QL=1 ST=2 TYP=5
	8800	LEAR	8	S	0135.0E	0135.0	U	55.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	0222.0E	0222.0	U	110.0			QL=1 ST=2 TYP=3
	500	HIRA	46	C	0429.8	0431.8	3.5	7.0			WL
	9100	GORK	21	GRF	0439.0E	0749.0	411.0D	38.0			
	5900	KISV	2	S/F	0504.1	0505.3	1.9	4.0			
	200	GORK	8	S	0629.5	0629.9	0.5	20.0			
	200	GORK	4	S/F	0639.3	0642.4	4.0	14.0			
	5900	KISV	4	S/F	0701.6	0704.1	7.4	34.0			
	9300	KISV	2	S/F	0703.4	0704.0	4.3	23.0			
	9500	POTS	3	S	0703.5	0704.0	3.0	14.0			
	9100	GORK	2	S/F	0703.6	0703.9	2.4	17.0			
	2950	GORK	20	GRF	0703.9	0710.1	14.0	5.6			
	5900	KISV	22	GRF	0738.0	0749.0	28.4	16.0			
	9300	KISV	22	GRF	0739.1	0748.9	26.9	19.0			
	3000	POTS	3	S	0827.5	0829.2	3.0	21.0			
	9500	POTS	3	S	0827.5	0828.9	2.5	15.0			
	5900	KISV	2	S/F	0827.8	0829.2	4.9	22.0			
	9100	GORK	1	S	0827.8	0828.8	3.1	15.0			
	3013	IZMI	5	S	0828.0	0829.0	3.0	19.0	10.0		
	3100	CRIM	1	S	0828.0	0829.1	3.0	13.0	5.0		
	1470	POTS	1	S	0828.0	0829.4	2.0	6.0			
	9300	KISV	2	S/F	0828.0	0828.8	4.8	16.0			
	2950	GORK	3	S	0828.1	0828.8	3.0	18.7	9.0		
	15000	KISV	2	S/F	0828.2	0828.5	1.8	6.0			
	15000	KISV	2	S/F	0856.0	0856.3	1.3	10.0			
	5900	KISV	2	S/F	0900.8	0905.0	8.0	9.0			
	9300	KISV	2	S/F	0934.7	0935.0	1.3	8.0			
	5900	KISV	2	S/F	0934.8	0935.2	1.7	10.0			
	1470	POTS	40	F	0940.0	0942.5	10.0	8.0			
	5900	KISV	23	GRF	0940.7	0942.4	23.8	28.0			
	3013	IZMI	5	S	0941.0	0942.5	1.5	12.0	6.0		
	650	GORK	4	S/F	0941.1	0942.4	2.6	90.0			
	2950	GORK	2	S/F	0941.9	0942.6	1.0	22.0			
	610	LEAR	8	S	0942.0E	0942.0	2.0D	69.0			QL=1 ST=2 TYP=3
	100	GORK	41	F	0942.0	0943.3	33.0	38.0			
	100	GORK	41	F	0942.0	0949.6		38.0			
	950	GORK	22	GRF	0942.1	0949.7	11.0	3.0			
	3000	POTS	8	S	0942.2	0942.5	0.8	20.0			
	3100	CRIM	1	S	0942.2	0942.6	1.0	24.0	8.0		
	536	ONDR	41	F	0942.3	0942.6	1.0	192.0			
	430	KRAK	8	S	0942.5	0942.5	0.3	59.0			
	430	KRAK	41	F	0948.5	0949.0	2.3	7.0	2.0		
	15000	KISV	2	S/F	1008.8	1009.3	1.3	5.0			
	9300	KISV	2	S/F	1011.0	1011.5	1.5	4.0			
	5900	KISV	2	S/F	1011.0	1011.6	3.3	6.0			
	15000	KISV	2	S/F	1035.2	1035.4	0.6	5.0			
	9300	KISV	2	S/F	1042.0	1042.9	2.4	7.0			
	430	KRAK	8	S	1049.3	1049.3	0.2	29.0			
	9300	KISV	2	S/F	1058.0	1058.3	4.3	6.0			
	5900	KISV	2	S/F	1103.2	1106.2	6.9	9.0			
	5900	KISV	22	GRF	1124.2	1126.7	16.8	9.0			
	9300	KISV	2	S/F	1125.2	1127.1	4.0	6.0			
	9300	KISV	2	S/F	1228.2	1229.1	4.0	8.0			
	5900	KISV	2	S/F	1228.3	1229.2	3.9	15.0			
	15000	KISV	20	GRF	1233.5	1241.7	14.5	10.0			
	9300	KISV	45	C	1234.4	1238.2	7.6	14.0			
	9300	KISV	45	C	1234.4	1237.2		12.0			
	5900	KISV	45	C	1235.5	1237.2	5.6	18.0			
	5900	KISV	45	C	1235.5	1238.2		17.0			
	3000	POTS	29	PBI	1315.0	1316.9	20.0	52.0			
	2800	OTTA	3	S	1316.1	1316.7	3.8	41.8	12.0		
	2800	OTTA	28	PRE	1732.0	1839.0	68.0	26.6	13.0		
	2800	OTTA	4	S/F	1840.5	1851.5	34.0	266.7	133.0		
	4995	SGMR	4	S/F	1841.0E	1850.0	17.0D	450.0			QL=1 ST=2 TYP=5
	8800	SGMR	4	S/F	1841.0E	1850.0	17.0D	360.0			QL=1 ST=2 TYP=5

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

MARCH 1989

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	15400	SGMR	4	S/F	1842.0E	1850.0	16.0D	200.0			QL=1 ST=2 TYP=3
	2695	SGMR	4	S/F	1842.0E	1851.0	16.0D	240.0			QL=1 ST=2 TYP=3
	2695	PALE	4	S/F	1843.0E	1850.0	23.0D	230.0			QL=1 ST=2 TYP=5
	4995	PALE	4	S/F	1843.0E	1850.0	22.0D	290.0			QL=1 ST=2 TYP=5
	15400	PALE	20	GRF	1846.0E	1849.0	19.0D	200.0			QL=1 ST=2 TYP=2
	8800	PALE	4	S/F	1847.0E	1850.0	15.0D	230.0			QL=1 ST=2 TYP=3
	15400	SGMR	4	S/F	1858.0E	1858.0	7.0D	140.0			QL=1 ST=2 TYP=3
	8800	SGMR	20	GRF	1858.0E	1858.0	11.0D	260.0			QL=1 ST=2 TYP=2
	2695	SGMR	4	S/F	1858.0E	1859.0	10.0D	200.0			QL=1 ST=2 TYP=3
	4995	SGMR	4	S/F	1858.0E	1858.0	14.0D	350.0			QL=1 ST=2 TYP=3
	15400	PALE	4	S/F	1914.0E	1917.0	5.0D	260.0			QL=1 ST=2 TYP=3
	15400	SGMR	4	S/F	1914.0E	1917.0	5.0D	220.0			QL=1 ST=2 TYP=3
	2800	OTTA	29	PBI	1915.0	1915.0	152.0	41.1	20.0		
	8800	SGMR	4	S/F	1916.0E	1917.0	3.0D	88.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	1933.0	1957.5	81.0	70.2	21.0		
	2695	SGMR	4	S/F	1945.0E	1957.0	15.0D	55.0			QL=1 ST=2 TYP=3
	2695	PALE	20	GRF	1952.0E	1958.0	10.0D	72.0			QL=1 ST=2 TYP=2
	245	PALE	49	GB	2012.0E	2013.0	2.0D	920.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2013.0E	2013.0	1.0D	1100.0			QL=1 ST=2 TYP=6
	500	HIRA	41	F	2328.8	2335.6	8.0	6.0			O
	2695	PENT	4	S/F	2329.0	2332.5	27.0	155.0	46.0		
	15400	LEAR	4	S/F	2329.0E	2330.0	5.0D	120.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	2329.0E	2330.0	6.0D	120.0			QL=1 ST=2 TYP=3
	15400	PALE	4	S/F	2329.0E	2330.0	6.0D	160.0			QL=1 ST=2 TYP=3
	8800	PALE	4	S/F	2329.0E	2330.0	7.0D	160.0			QL=1 ST=2 TYP=3
	2695	LEAR	4	S/F	2330.0E	2331.0	4.0D	85.0			QL=1 ST=2 TYP=3
	4995	PALE	4	S/F	2330.0E	2331.0	5.0D	170.0			QL=1 ST=2 TYP=3
	2695	PALE	4	S/F	2330.0E	2331.0	4.0D	100.0			QL=1 ST=2 TYP=3
	8800	PALE	8	S	2340.0E	2340.0	1.0D	78.0			QL=1 ST=2 TYP=3
	4995	PALE	8	S	2340.0E	2340.0	1.0D	62.0			QL=1 ST=2 TYP=3
20	260	ONDR	44	NS	0640.0E	1017.8	550.0D	1.0			
	127	TORN	43	NS	0826.0	1128.1	434.0	190.0	8.0		V=0
	8800	LEAR	4	S/F	0359.0E	0400.0	3.0D	160.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0359.0E	0400.0	2.0D	120.0			QL=1 ST=2 TYP=3
	4995	LEAR	4	S/F	0359.0E	0400.0	6.0D	120.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0400.0E	0401.0	2.0D	96.0			QL=1 ST=2 TYP=3
	15400	PALE	8	S	0400.0E	0400.0	1.0D	80.0			QL=1 ST=2 TYP=3
	8800	PALE	8	S	0400.0E	0400.0	1.0D	140.0			QL=1 ST=2 TYP=3
	2695	PALE	8	S	0400.0E	0401.0	1.0D	83.0			QL=1 ST=2 TYP=3
	4995	PALE	8	S	0400.0E	0401.0	1.0D	71.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0432.0E	0433.0	1.0D	50.0			QL=1 ST=2 TYP=3
	9300	KISV	2	S/F	0453.2	0455.7	7.8	8.0			
	9100	GORK	1	S	0453.4	0456.8	4.3	7.8			
	5900	KISV	2	S/F	0454.3	0455.8	7.3	12.0			
	9100	GORK	23	GRF	0515.8E	0607.9	465.0D	18.0			
	100	GORK	41	F	0519.3	0531.2		270.0			
	100	GORK	41	F	0519.3	0520.2	12.4	29.0			
	5900	KISV	23	GRF	0520.9	0544.7	39.1	19.0			
	9300	KISV	2	S/F	0521.4	0525.0	6.8	5.0			
	221	ABST	45	C	0526.0	0529.0	4.0	11.0			
	650	GORK	4	S/F	0527.7	0528.5	4.0	12.5			
	950	GORK	2	S/F	0528.7	0529.0	0.5	6.5			
	9300	KISV	23	GRF	0540.9	0609.0	55.1	14.0			
	9300	KISV	2	S/F	0540.9	0541.5	1.8	5.0			
	5900	KISV	2	S/F	0541.2	0541.4	1.5	11.0			
	15000	KISV	22	GRF	0541.2	0544.6	18.8	5.0			
	9300	KISV	2	S/F	0655.3	0658.4	7.2	6.0			
	5900	KISV	2	S/F	0659.4	0700.3	2.7	5.0			
	5900	KISV	2	S/F	0712.0	0712.4	1.5	5.0			
	2950	GORK	1	S	0718.1	0718.8	1.6	3.8	1.9		
	5900	KISV	2	S/F	0718.4	0718.8	1.4	5.0			
	650	GORK	6	S	0730.0	0730.5	0.9	2.5			
	950	GORK	2	S/F	0730.5	0731.0	0.7	2.0			
	9300	KISV	2	S/F	0757.0	0757.5	1.7	4.0			
	5900	KISV	2	S/F	0759.7	0801.1	2.9	6.0			
	5900	KISV	2	S/F	0811.2	0813.0	8.4	9.0			
	5900	KISV	2	S/F	0834.0	0834.9	5.0	7.0			
	9300	KISV	2	S/F	0834.6	0834.9	8.0	5.0			

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

MARCH 1989

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
20	9300	KISV	23	GRF	0844.9	0854.2	16.1	9.0			
	5900	KISV	4	S/F	0845.8	0848.3	6.6	31.0			
	5900	KISV	23	GRF	0845.8	0853.3	13.0	17.0			
	9100	GORK	2	S/F	0846.7	0848.0	2.8	27.0			
	9300	KISV	2	S/F	0847.0	0848.3	7.0	32.0			
	15000	KISV	2	S/F	0847.2	0848.3	2.5	21.0			
	127	TORN	47	GB	0916.0U	0919.0U	9.0D	1500.0	80.0		DISTURBED
	2950	GORK	1	S	0929.0	0930.7	1.7	3.8	1.9		
	100	GORK	2	S/F	0958.7	0958.8	0.5	1100.0			
	810	KRAK	8	S	1006.2	1006.3	0.3	12.0			
	204	IZMI	42	SER	1010.8	1012.5	9.5	300.0			
	33	UPIC	49	GB	1011.0		10.0				
	5900	KISV	45	C	1011.5	1013.0		5.0			
	9300	KISV	22	GRF	1011.5	1015.0	17.5	7.0			
	5900	KISV	45	C	1011.5	1018.4	12.7	7.0			
	950	GORK	46	C	1012.0	1013.0	3.7	5.8			
	2950	GORK	22	GRF	1012.0	1013.0	15.0	7.4			
	950	GORK	46	C	1012.0	1014.3		14.5			
	536	ONDR	42	SER	1012.0	1013.3	15.0	150.0			
	600	HUMN	1	S	1012.3	1013.6	3.2	11.0	2.0		
	650	GORK	2	S/F	1012.5	1013.2	2.0	9.0			
	1470	POTS	4	S/F	1012.5	1014.5	3.0	43.0			
	15000	KISV	22	GRF	1012.5	1015.9	11.4	6.0			
	810	KRAK	41	F	1012.7	1013.2	2.0	3.0	1.0		
	430	KRAK	8	S	1012.7	1013.5	1.0	67.0			
	100	GORK	4	S/F	1014.0	1015.4	8.1	2400.0			
	5900	KISV	23	GRF	1101.2	1107.3	21.6	5.0			
	9300	KISV	2	S/F	1107.2	1108.1	5.0	9.0			
	9100	GORK	1	S	1107.4	1108.0	1.5	8.5			
	9500	POTS	1	S	1107.5	1108.0	3.0	9.0			
	3013	IZMI	5	S	1111.5	1113.0	2.0	4.0	2.0		
	5900	KISV	46	C	1133.8	1145.1		29.0			
	5900	KISV	46	C	1133.8	1146.4		19.0			
	5900	KISV	46	C	1133.8	1150.4	22.5	67.0			
	2950	GORK	1	S	1133.9	1135.0	2.3	5.4			
	3100	CRIM	45	C	1134.0	1150.2		15.0			
	3100	CRIM	45	C	1134.0	1145.3	23.0	10.0	5.0		
	5900	KISV	2	S/F	1137.5	1139.5	3.5	6.0			
	2950	GORK	1	S	1138.0	1139.0	2.2	3.6			
	9300	KISV	2	S/F	1138.0	1139.4	3.0	5.0			
	536	ONDR	47	GB	1140.0	1153.5	16.0	231.0			
	950	GORK	3	S	1142.2	1144.2	9.7	7.5			
	2950	GORK	22	GRF	1142.8	1150.2	15.2	16.4			
	3013	IZMI	40	F	1144.2	1150.2	8.0	14.0	7.0		
	9300	KISV	45	C	1144.3	1146.0		10.0			
	9300	KISV	45	C	1144.3	1145.1	2.6	12.0			
	9500	POTS	4	S/F	1144.5	1150.4	11.0	46.0			
	1470	POTS	4	S/F	1144.5	1150.4	15.0	11.0			
	3000	POTS	3	S	1145.0	1150.2	13.0	13.0			
	15000	KISV	1	S	1145.9	1146.0	0.4	6.0			
	9300	KISV	4	S/F	1147.4	1150.3	7.2	59.0			
	8800	SVTO	4	S/F	1148.0E	1150.0	6.0D	52.0			QL=1 ST=2 TYP=3
	9100	GORK	4	S/F	1148.4	1150.4	5.8	53.0			
	15000	KISV	45	C	1148.8	1150.3		11.0			
	15000	KISV	45	C	1148.8	1151.9	5.2	12.0			
	650	GORK	5	S	1149.0	1150.4	4.3	3.0			
	810	KRAK	1	S	1149.3	1150.0	2.5	5.0	2.0		
	8800	SGMR	8	S	1150.0E	1150.0	U	63.0			QL=1 ST=2 TYP=3
	5900	KISV	45	C	1228.3	1232.0	14.1	19.0			
	5900	KISV	45	C	1228.9	1231.0		17.0			
	9300	KISV	46	C	1229.4	1234.1	10.5	17.0			
	9300	KISV	46	C	1229.4	1231.7		15.0			
	9300	KISV	46	C	1229.4	1230.9		15.0			
	600	HUMN	2	S/F	1230.0	1231.0	3.9	13.0	2.0		
	9100	GORK	46	C	1230.5	1234.0		10.0			
	2950	GORK	2	S/F	1230.5	1231.1	4.9	8.9			
	3100	CRIM	45	C	1230.5	1231.3	2.5	8.0	3.0		
	3100	CRIM	45	C	1230.5	1232.3		8.0			
	9100	GORK	46	C	1230.5	1231.8	4.8	10.0			

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

MARCH 1989

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
20	15000	KISV	2	S/F	1233.0	1234.0	2.1	9.0			
	9500	POTS	1	S	1305.5	1306.2	2.5	10.0			
	410	SGMR	8	S	1343.0E	1343.0	1.0D	100.0			QL=1 ST=2 TYP=3
	410	SGMR	4	S/F	1346.0E	1347.0	3.0D	110.0			QL=1 ST=2 TYP=3
	9500	POTS	45	C	1346.0	1351.0	27.0	575.0			
	1470	POTS	4	S/F	1346.5	1350.6	19.0	42.0			
	3000	POTS	45	C	1347.0	1351.5	23.0	546.0			
	3100	CRIM	3	S	1347.6	1351.3	16.0	210.0	70.0		
	2800	OTTA	3	S	1347.7	1351.7	17.7	333.6	100.0		
	19600	BERN	47	GB	1348.0	1351.0	6.0	221.0			
	600	HUMN	2	S/F	1348.0	1352.0	6.0	12.0	3.0		
	15400	SGMR	49	GB	1348.0E	1351.0	9.0D	710.0			QL=1 ST=2 TYP=6
	15400	SVTO	49	GB	1348.0E	1351.0	9.0D	690.0			QL=1 ST=2 TYP=6
	4995	SGMR	49	GB	1348.0E	1351.0	10.0D	630.0			QL=1 ST=2 TYP=6
	8800	SGMR	49	GB	1348.0E	1351.0	10.0D	810.0			QL=1 ST=2 TYP=6
	4995	SVTO	49	GB	1348.0E	1351.0	10.0D	580.0			QL=1 ST=2 TYP=6
	8800	SVTO	49	GB	1348.0E	1351.0	10.0D	790.0			QL=1 ST=2 TYP=6
	11800	BERN	47	GB	1348.0	1351.1	6.0	476.0			
	8400	BERN	47	GB	1348.0	1351.2	6.0	544.0			
	3200	BERN	47	GB	1348.0	1351.3	6.0	323.0			
	5200	BERN	47	GB	1348.0	1351.3	6.0	510.0			
	810	KRAK	41	F	1348.0E	1351.5	5.0D	13.0	5.0		
	2695	SGMR	4	S/F	1349.0E	1351.0	7.0D	290.0			QL=1 ST=2 TYP=3
	2695	SVTO	4	S/F	1349.0E	1351.0	7.0D	290.0			QL=1 ST=2 TYP=3
	9500	POTS	45	C	1417.0	1422.5	23.0	358.0			
	600	HUMN	1	S	1418.9	1419.3	1.2	15.0	2.0		
	8800	SGMR	49	GB	1420.0E	1422.0	7.0D	760.0			QL=1 ST=2 TYP=6
	15400	SGMR	49	GB	1420.0E	1421.0	7.0D	1800.0			QL=1 ST=2 TYP=6
	4995	SGMR	4	S/F	1420.0E	1421.0	4.0D	230.0			QL=1 ST=2 TYP=3
	15400	SVTO	49	GB	1420.0E	1422.0	8.0D	1700.0			QL=1 ST=2 TYP=6
	4995	SVTO	4	S/F	1420.0E	1421.0	4.0D	230.0			QL=1 ST=2 TYP=3
	8800	SVTO	49	GB	1420.0E	1422.0	9.0D	760.0			QL=1 ST=2 TYP=6
	19600	BERN	47	GB	1420.3	1422.0	7.0	800.0			
	8400	BERN	47	GB	1420.3	1422.0	7.0	425.0			
	35000	BERN	47	GB	1420.3	1422.0	7.0	595.0			
	11800	BERN	47	GB	1420.3	1422.0	7.0	612.0			
	3200	BERN	47	GB	1420.3	1422.0	7.0	85.0			
	5200	BERN	47	GB	1420.3	1422.0	7.0	204.0			
	1470	POTS	4	S/F	1420.5	1421.6	4.5	36.0			
	3000	POTS	4	S/F	1420.5	1421.9	8.5	88.0			
	600	HUMN	4	S/F	1420.8	1422.2	3.7	134.0	37.0		
	410	SGMR	8	S	1421.0E	1421.0	1.0D	73.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	1421.0E	1421.0	2.0D	250.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	1421.0E	1421.0	1.0D	57.0			QL=1 ST=2 TYP=3
	2695	SVTO	8	S	1421.0E	1421.0	2.0D	95.0			QL=1 ST=2 TYP=3
	610	SVTO	8	S	1421.0E	1421.0	1.0D	280.0			QL=1 ST=2 TYP=3
	4995	SGMR	8	S	1426.0E	1427.0	1.0D	73.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	1426.0E	1427.0	2.0D	310.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	1426.0E	1427.0	2.0D	320.0			QL=1 ST=2 TYP=3
	234	POTS	8	S	1444.6	1444.7	0.4	220.0			
	245	SGMR	8	S	1605.0E	1605.0	U	71.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	1605.0E	1605.0	U	57.0			QL=1 ST=2 TYP=3
	15400	PALE	8	S	1923.0E	1923.0	U	160.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	1923.0E	1923.0	U	150.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	1923.0E	1923.0	1.0D	83.0			QL=1 ST=2 TYP=3
	2800	OTTA	22	GRF	1924.0	1955.0	50.0	10.4	3.0		
	2800	OTTA	20	GRF	2028.0	2122.0	120.0D	31.8	16.0		
	2800	OTTA	3	S	2042.0	2049.0	14.0	39.8	12.0		
	100	HIRA	46	C	2043.0E	2049.1		180.0			
	100	HIRA	46	C	2043.0E	2119.8	61.0D	320.0	74.0		SUNRISE
	1415	SGMR	20	GRF	2046.0E	2048.0	6.0D	120.0			QL=1 ST=3 TYP=2
	1415	PALE	4	S/F	2046.0E	2048.0	194.0D	97.0			QL=1 ST=1 TYP=3
	2695	SGMR	20	GRF	2047.0E	2048.0	2.0D	67.0			QL=1 ST=3 TYP=2
	2695	PALE	20	GRF	2048.0E	2048.0	U	53.0			QL=1 ST=2 TYP=2
	200	HIRA	46	C	2103.3	2109.1	23.0U	24.0	8.0U		O
	8800	SGMR	20	GRF	2115.0E	2116.0	1.0D	57.0			QL=1 ST=3 TYP=2
	245	SGMR	8	S	2140.0E	2141.0	2.0D	53.0			QL=1 ST=2 TYP=3
	500	HIRA	46	C	2342.3	2347.5	6.5	8.0			O

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

MARCH 1989

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	100	GORK	44	NS	0420.4E		479.0D		10.0		
	200	GORK	44	NS	0421.0E		240.0D		5.0		
	204	IZMI	43	NS	0600.0		360.0	40.0			
	127	TORN	44	NS	0620.0E		560.0D		240.0		V=1
	260	ONDR	44	NS	0620.0E	0633.5	570.0D	102.0			
	245	SGMR	43	NS	1254.0	1854.0	581.0D	200.0			QL=1 ST=2 TYP=1
	245	PALE	44	NS	1900.0E	0353.0	567.0D	520.0			QL=1 ST=2 TYP=1
	200	HIRA	44	NS	2040.0E	0618.0	720.0D	150.0	82.0		SR
	245	LEAR	44	NS	2245.0E	0703.0	692.0D	270.0			QL=1 ST=2 TYP=1
	410	PALE	4	S/F	0116.0E	0116.0	4.0D	440.0			QL=1 ST=2 TYP=3
	410	PALE	4	S/F	0122.0E	0123.0	4.0D	420.0			QL=1 ST=2 TYP=3
	410	PALE	4	S/F	0128.0E	0131.0	4.0D	180.0			QL=1 ST=2 TYP=3
	500	HIRA	46	C	0400.9	0405.0	7.0	33.0	12.0		WR
	200	HIRA	41	F	0401.1	0404.2	6.7	130.0			O
	410	PALE	4	S/F	0402.0E	0403.0	4.0D	140.0			QL=1 ST=2 TYP=5
	500	HIRA	46	C	0415.0	0502.0	67.0	58.0	5.0		MR
	9100	GORK	23	GRF	0440.0E		500.0D				
	650	GORK	41	F	0450.0	0520.0		10.0			
	650	GORK	41	F	0450.0	0455.0	8.1	49.0			
	650	GORK	41	F	0450.0	0502.4		30.0			
	410	LEAR	4	S/F	0500.0E	0502.0	5.0D	32.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0500.0E	0502.0	2.0D	21.0			QL=1 ST=2 TYP=3
	245	LEAR	4	S/F	0500.0E	0502.0	5.0D	16.0			QL=1 ST=2 TYP=3
	950	GORK	2	S/F	0500.1	0502.3	4.2	6.6			
	8800	LEAR	4	S/F	0501.0E	0502.0	4.0D	51.0			QL=1 ST=2 TYP=3
	5900	KISV	4	S/F	0501.2	0502.1	6.7	51.0			
	9100	GORK	4	S/F	0501.2	0502.2	1.8	53.0			
	15000	KISV	2	S/F	0501.6	0502.1	2.0	13.0			
	9300	KISV	4	S/F	0501.6	0502.2	3.4	67.0			
	2950	GORK	1	S	0501.9	0502.2	1.0	4.8	2.4		
	5900	KISV	2	S/F	0517.3	0520.4	3.8	7.0			
	9300	KISV	2	S/F	0525.0	0527.1	7.1	13.0			
	9300	KISV	22	GRF	0538.3	0544.7	10.6	9.0			
	500	HIRA	46	C	0538.8	0541.0	6.5	25.0			WR
	650	GORK	4	S/F	0538.9	0541.4	6.9	30.0			
	245	LEAR	8	S	0539.0E	0541.0	2.0D	74.0			QL=1 ST=2 TYP=3
	9300	KISV	4	S/F	0539.8	0541.2	4.7	116.0D			
	410	LEAR	8	S	0540.0E	0541.0	1.0D	16.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0540.0E	0541.0	1.0D	26.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0540.0E	0541.0	2.0D	130.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0540.0E	0541.0	1.0D	33.0			QL=1 ST=2 TYP=3
	4995	SVTO	8	S	0540.0E	0541.0	1.0D	140.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0540.0E	0541.0	2.0D	70.0			QL=1 ST=3 TYP=3
	3100	CRIM	3	S	0540.2	0541.1	2.0	26.7	9.0		
	200	HIRA	46	C	0540.3	0540.6	1.8	290.0			O
	9100	GORK	4	S/F	0540.5	0541.2	3.2	134.0			
	950	GORK	5	S	0540.5	0541.3	5.0	24.0			
	2950	GORK	1	S	0540.6	0541.1	2.8	41.0	20.0		
	200	GORK	4	S/F	0540.6	0541.1	1.3	25.0			
	100	GORK	8	S	0540.9	0541.0	0.6	4300.0			
	1415	LEAR	8	S	0541.0E	0541.0	U	19.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	0541.0E	0541.0	U	110.0			QL=1 ST=2 TYP=3
	100	GORK	4	S/F	0620.0	0620.1	2.0	390.0			
	245	LEAR	4	S/F	0621.0E	0623.0	3.0D	68.0			QL=1 ST=2 TYP=3
	2950	GORK	23	GRF	0621.0	0908.0	400.0D	18.4			
	245	SVTO	8	S	0622.0E	0623.0	2.0D	62.0			QL=1 ST=2 TYP=3
	3100	CRIM	21	GRF	0623.0	0636.2	58.0	9.3	3.0		
	3013	IZMI	42	SER	0623.2	0634.3	17.0	80.0			
	950	GORK	1	S	0623.3	0624.0	1.6	2.0			
	650	GORK	2	S/F	0623.3	0624.1	2.7	7.5			
	8800	LEAR	4	S/F	0632.0E	0634.0	4.0D	160.0			QL=1 ST=2 TYP=3
	9100	GORK	4	S/F	0632.2	0634.1	5.9	162.0			
	500	HIRA	46	C	0632.2	0634.1	12.5	135.0	32.0		MR
	950	GORK	4	S/F	0632.2	0634.4	9.6	63.0			
	200	HIRA	46	C	0632.3	0633.1	5.3	4100.0			O
	650	GORK	4	S/F	0632.3	0634.5	8.6	100.0			
	234	POTS	4	S/F	0632.3	0633.6	5.0	415.0			
	3100	CRIM	3	S	0632.4	0634.2	4.0	49.5	16.0		
	2950	GORK	3	S	0632.4	0634.3	3.0	70.0			

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

MARCH 1989

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	1415	LEAR	8	S	0633.0E	0634.0	2.0D	63.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0633.0E	0633.0	2.0D	360.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0633.0E	0634.0	2.0D	120.0			QL=1 ST=2 TYP=3
	610	LEAR	8	S	0633.0E	0634.0	2.0D	92.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0633.0E	0634.0	2.0D	69.0			QL=1 ST=2 TYP=3
	15400	LEAR	8	S	0633.0E	0634.0	1.0D	95.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	0633.0E	0634.0	2.0D	130.0			QL=1 ST=2 TYP=3
	2695	SVTO	4	S/F	0633.0E	0634.0	1047.0D	72.0			QL=1 ST=1 TYP=3
	15400	SVTO	4	S/F	0633.0E	0634.0	1047.0D	98.0			QL=1 ST=1 TYP=3
	8400	BERN	46	C	0633.0	0634.1	2.5	110.0			
	11800	BERN	46	C	0633.0	0634.1	2.5	88.0			
	5200	BERN	46	C	0633.0	0634.1	2.5	132.0			
	3200	BERN	46	C	0633.0	0634.1	2.5	59.0			
	30	POTS	4	S/F	0633.4	0634.0	2.9	6000.0			
	100	GORK	47	GB	0633.4	0633.7	2.0	23000.0			
	200	GORK	8	S	0633.6	0633.7	0.5	6400.0			
	33	UPIC	46	C	0633.6	0633.7	2.1				
	600	HUMN	2	S/F	0633.7	0634.8	3.1	59.0	18.0		
	204	IZMI	4	S/F	0633.8	0634.1	1.5	2500.0	300.0		
	650	GORK	5	S	0707.0	0707.1	1.8	2.4			
	650	GORK	46	C	0723.4	0735.1		45.0			
	650	GORK	46	C	0723.4	0730.3		8.0			
	650	GORK	46	C	0723.4	0726.6	21.5	30.0			
	500	HIRA	42	SER	0723.4	0726.7	17.0	145.0			MR
	950	GORK	22	GRF	0729.1	0735.0	12.2	7.7			
	2950	GORK	1	S	0729.1	0730.3	1.4	7.5	3.5		
	600	HUMN	46	C	0729.5	0735.5	13.1	21.0	5.0		
	9300	KISV	2	S/F	0729.8	0730.3	0.9	8.0			
	5900	KISV	2	S/F	0729.8	0730.3	1.7	12.0			
	3100	CRIM	1	S	0729.9	0730.3	1.5	5.3	2.0		
	5900	KISV	2	S/F	0733.3	0733.8	2.0	6.0			
	5900	KISV	2	S/F	0738.6	0739.3	4.9	7.0			
	2950	GORK	1	S	0738.7	0739.2	1.2	3.8	1.9		
	950	GORK	22	GRF	0751.0E	0837.5	72.0D	9.0			
	430	KRAK	42	SER	0800.0E	1331.8	360.0D	80.0			
	600	HUMN	40	F	0825.0	0902.0	45.0	6.0	1.0		
	650	GORK	22	GRF	0826.0	0838.3	42.5	14.0			
	810	KRAK	8	S	0826.8	0827.0	0.5	9.0			
	5900	KISV	23	GRF	0827.0	0837.9	19.0	9.0			
	5900	KISV	45	C	0842.4	0843.6		14.0			
	5900	KISV	45	C	0842.4	0842.7	2.4	15.0			
	9300	KISV	45	C	0842.6	0843.7	1.8	11.0			
	9300	KISV	45	C	0842.6	0842.9		8.0			
	5900	KISV	45	C	0853.7	0918.3		26.0			
	5900	KISV	45	C	0853.7	0907.7	40.7	40.0			
	9300	KISV	23	GRF	0855.4	0914.5	41.0	25.0			
	3000	POTS	20	GRF	0900.0	0907.7	40.0	7.0			
	810	KRAK	41	F	0900.4	0901.3	1.3	7.0	3.0		
	9500	POTS	22	GRF	0905.0	0907.5	50.0	28.0			
	9300	KISV	4	S/F	0905.8	0907.7	7.2	33.0			
	9100	GORK	2	S/F	0906.0	0907.7	3.3	22.0			
	9300	KISV	2	S/F	0917.7	0918.1	3.7	14.0			
	245	LEAR	8	S	0943.0E	0943.0	U	52.0			QL=1 ST=2 TYP=3
	650	GORK	46	C	0953.0	1002.4		24.0			
	650	GORK	46	C	0953.0	0955.6	10.6	8.0			
	536	ONDR	41	F	1000.0	1002.2	6.0	108.0			
	950	GORK	2	S/F	1000.0	1002.3	3.2	4.0			
	430	KRAK	4	S/F	1000.0	1002.3	3.3	64.0	11.0		
	5900	KISV	45	C	1000.2	1002.4		21.0			
	5900	KISV	45	C	1000.2	1010.6	24.7	25.0			
	3013	IZMI	5	S	1001.0	1002.2	2.0	12.0			
	3100	CRIM	1	S	1001.0	1002.4	3.0	9.6	3.0		
	3000	POTS	21	GRF	1001.0	1002.5	29.0	12.0			
	600	HUMN	2	S/F	1001.0	1002.8	3.1	31.0	5.0		
	9300	KISV	23	GRF	1001.7	1015.1	22.7	14.0			
	100	GORK	4	S/F	1001.8	1002.2	2.0	460.0			
	2950	GORK	1	S	1001.9	1002.3	1.6	9.1	4.5		
	3100	CRIM	1	S	1007.0	1008.0	3.0	5.5	2.0		
	9300	KISV	4	S/F	1009.9	1010.6	4.0	77.0			

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

MARCH 1989

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	15400	LEAR	8	S	1010.0E	1010.0	U	47.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	1010.0E	1010.0	U	84.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	1010.0E	1010.0	1.0D	70.0			QL=1 ST=2 TYP=3
	9100	GORK	3	S	1010.0	1010.6	2.4	65.0			
	9500	POTS	3	S	1010.0	1010.8	10.0	60.0			
	15000	KISV	2	S/F	1010.1	1010.6	3.1	33.0			
	5900	KISV	2	S/F	1014.7	1015.7	1.5	4.0			
	9300	KISV	2	S/F	1018.0	1018.4	1.1	8.0			
	5900	KISV	2	S/F	1018.1	1018.4	1.4	5.0			
	650	GORK	6	S	1020.1	1020.4	0.5	1.5			
	9500	POTS	29	PBI	1026.5	1027.4	6.5D	18.0			
	9300	KISV	45	C	1026.7	1030.1		18.0			
	9300	KISV	45	C	1026.7	1027.2	8.9	29.0			
	5900	KISV	46	C	1026.7	1039.3		9.0			
	5900	KISV	46	C	1026.7	1027.3	15.3	23.0			
	5900	KISV	46	C	1026.7	1030.5		13.0			
	810	KRAK	8	S	1026.8	1027.0	0.5	13.0			
	9300	KISV	23	GRF	1049.8	1059.1	15.0	13.0			
	9300	KISV	4	S/F	1054.0	1056.1	4.3	62.0			
	9100	GORK	4	S/F	1054.1	1056.1	4.4	54.0			
	5900	KISV	2	S/F	1055.0	1056.3	3.2	19.0			
	15000	KISV	2	S/F	1055.3	1056.2	3.2	29.0			
	100	GORK	8	S	1100.1	1100.3	0.3	580.0			
	650	GORK	40	F	1124.4	1131.6	16.4	11.0			
	810	KRAK	8	S	1131.5	1132.0	0.5	23.0			
	5900	KISV	2	S/F	1133.6	1134.0	0.8	3.0			
	810	KRAK	8	S	1137.5	1138.0	0.5	11.0			
	3100	CRIM	1	S	1200.2	1203.0	7.0	6.9	2.0		
	5900	KISV	23	GRF	1200.7	1208.0	14.6	4.0			
	5900	KISV	2	S/F	1201.6	1202.6	3.4	10.0			
	9300	KISV	2	S/F	1201.6	1202.9	2.8	7.0			
	600	HUMN	1	S	1202.0	1202.8	2.6	10.0	3.0		
	5900	KISV	22	GRF	1217.7	1226.4	239.0	7.0			
	245	SGMR	8	S	1226.0E	1226.0	2.0D	120.0			QL=1 ST=2 TYP=3
	5900	KISV	2	S/F	1258.9	1259.5	1.5	6.0			
	9300	KISV	2	S/F	1259.2	1259.5	0.9	12.0			
	536	ONDR	41	F	1330.0	1334.0	4.0	65.0			
	600	HUMN	1	S	1335.0	1335.5	1.3	22.0	5.0		
	2800	OTTA	22	GRF	1419.0	1540.0	200.0	19.6	9.0		
	8800	SGMR	20	GRF	1459.0E	1501.0	3.0D	140.0			QL=1 ST=2 TYP=2
	9500	POTS	3	S	1459.0	1501.4	4.6	92.0			
	4995	SGMR	20	GRF	1500.0E	1501.0	2.0D	110.0			QL=1 ST=2 TYP=2
	4995	SVTO	8	S	1500.0E	1501.0	2.0D	87.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	1501.0E	1501.0	U	71.0			QL=1 ST=2 TYP=3
	600	HUMN	46	C	1523.0	1530.2	8.6	24.0	5.0		
	600	HUMN	41	F	1538.2	1538.7	2.5	7.0	2.0		
	2695	PALE	8	S	1658.0E	1658.0	U	55.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1753.0E	1753.0	367.0D	1300.0			QL=1 ST=1 TYP=6
	2800	OTTA	22	GRF	1825.0	1944.0	225.0	34.3	10.0		
	245	PALE	8	S	2130.0E	2130.0	1.0D	230.0			QL=1 ST=3 TYP=3
	245	SGMR	8	S	2130.0E	2130.0	1.0D	270.0			QL=1 ST=2 TYP=3
22	200	GORK	44	NS	0436.0E		180.0D		15.0		
	100	GORK	44	NS	0436.0E		464.0D		10.0		
	221	ABST	43	NS	0500.0		240.0		90.0		
	245	SVTO	44	NS	0513.0E	0721.0	689.0D	200.0			QL=1 ST=2 TYP=1
	204	IZMI	43	NS	0600.0		360.0	100.0			
	260	ONDR	44	NS	0620.0E	0731.0	540.0D				
	127	TORN	44	NS	0620.0E	1400.5	560.0D	1500.0	150.0		V=1
	430	KRAK	44	NS	0804.0E	1207.8	356.0D	59.0	2.0		
	410	SVTO	44	NS	1029.0E	1033.0	373.0D	89.0			QL=1 ST=2 TYP=1
	245	SGMR	43	NS	1104.0	1146.0	693.0D	210.0			QL=1 ST=2 TYP=1
	245	PALE	44	NS	1650.0E	1901.0	697.0D	180.0			QL=1 ST=2 TYP=1
	200	HIRA	44	NS	2040.0E	2109.0	720.0D	60.0U	25.0U		MR SUNRISE
	245	LEAR	43	NS	2245.0	2329.0	47.0D	99.0			QL=1 ST=2 TYP=1
	245	PALE	8	S	0039.0E	0039.0	U	350.0			QL=1 ST=3 TYP=3
	500	HIRA	46	C	0042.1	0043.0	2.3	30.0			MR
	245	PALE	4	S/F	0105.0E	0106.0	3.0D	480.0			QL=1 ST=2 TYP=3
	200	HIRA	46	C	0124.0	0124.2	0.9	740.0			SR

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

MARCH 1989

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	410	PALE	4	S/F	0233.0E	0234.0	3.0D	130.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0234.0E	0234.0	U	93.0			QL=1 ST=3 TYP=3
	245	PALE	8	S	0234.0E	0234.0	U	300.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0344.0E	0345.0	1.0D	580.0			QL=1 ST=2 TYP=6
	5900	KISV	29	PBI	0501.1	0515.7	46.3	75.0			
	5900	KISV	47	GB	0504.1	0513.3	9.5	459.0			
	9300	KISV	4	S/F	0510.5	0513.0U	7.0	130.0D			
	9300	KISV	29	PBI	0510.5	0517.5	24.0	14.0			
	9100	GORK	4	S/F	0510.6	0513.2	5.2	635.0			
	9100	GORK	29	PBI	0510.6	0515.8	20.7	25.0			
	4995	LEAR	4	S/F	0511.0E	0513.0	7.0D	310.0			QL=1 ST=2 TYP=3
	8800	LEAR	4	S/F	0511.0E	0513.0	8.0D	320.0			QL=1 ST=2 TYP=3
	15000	KISV	4	S/F	0511.4	0513.2	3.0	181.0			
	15000	KISV	29	PBI	0511.4	0514.4	22.8	42.0			
	15400	LEAR	4	S/F	0512.0E	0513.0	4.0D	150.0			QL=1 ST=2 TYP=3
	2695	LEAR	8	S	0512.0E	0513.0	2.0D	24.0			QL=1 ST=2 TYP=3
	3100	CRIM	3	S	0512.0	0513.5	3.0	26.4	8.0		
	2950	GORK	29	PBI	0512.2	0515.0	180.0	17.0			
	2950	GORK	3	S	0512.2	0513.7	3.0	48.0	24.0		
	245	LEAR	8	S	0526.0E	0527.0	2.0D	320.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0527.0E	0527.0	1.0D	360.0			QL=1 ST=2 TYP=3
	5900	KISV	2	S/F	0618.5	0619.4	6.4	6.0			
	9300	KISV	2	S/F	0618.6	0619.4	4.5	7.0			
	950	GORK	45	C	0619.2	0619.4	4.6	4.0			
	650	GORK	2	S/F	0619.2	0619.4	3.2	4.0			
	950	GORK	45	C	0619.2	0621.8		3.0			
	234	POTS	4	S/F	0621.0	0621.6	1.4	715.0			
	5900	KISV	23	GRF	0639.9	0655.3	33.0	6.0			
	5900	KISV	46	C	0640.3	0641.5	8.1	13.0			
	5900	KISV	46	C	0640.3	0645.8		5.0			
	5900	KISV	46	C	0640.3	0642.9		7.0			
	9300	KISV	2	S/F	0640.4	0641.4	6.7	12.0			
	9100	GORK	1	S	0640.9	0641.4	2.5	8.5			
	9300	KISV	2	S/F	0651.4	0651.8	1.1	13.0			
	5900	KISV	2	S/F	0651.4	0651.9	3.6	16.0			
	9300	KISV	23	GRF	0651.4	0704.9	21.6	9.0			
	9100	GORK	1	S	0651.5	0651.8	1.0	12.0			
	9500	POTS	42	SER	0651.5	0651.8	21.0	11.0			
	5900	KISV	2	S/F	0701.5	0705.0	7.5	6.0			
	245	SVTO	8	S	0703.0E	0703.0	1.0D	270.0			QL=1 ST=2 TYP=3
	9300	KISV	2	S/F	0718.2	0719.1	2.6	8.0			
	5900	KISV	2	S/F	0718.6	0719.4	1.8	4.0			
	5900	KISV	23	GRF	0718.6	0728.7	16.8	6.0			
	5900	KISV	45	C	0741.0	0747.1	11.7	12.0			
	9300	KISV	45	C	0741.1	0742.1		9.0			
	9300	KISV	45	C	0741.1	0747.1	10.4	18.0			
	9100	GORK	2	S/F	0745.7	0747.0	2.7	13.6			
	9500	POTS	3	S	0746.5	0747.2	2.5	11.0			
	5900	KISV	2	S/F	0807.4	0807.8	1.6	3.0			
	9300	KISV	22	GRF	0814.9	0820.4	10.6	8.0			
	9300	KISV	2	S/F	0815.4	0817.3	2.4	11.0			
	9100	GORK	1	S	0816.3	0817.2	2.4	9.3			
	5900	KISV	23	GRF	0816.4	0820.2	18.0	6.0			
	9500	POTS	3	S	0816.5	0817.0	7.5	12.0			
	15000	KISV	2	S/F	0816.5	0816.9	1.3	4.0			
	245	SVTO	4	S/F	0820.0E	0824.0	5.0D	380.0			QL=1 ST=2 TYP=3
	245	LEAR	4	S/F	0822.0E	0824.0	3.0D	370.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0824.0E	0824.0	1.0D	380.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0825.0E	0825.0	U	270.0			QL=1 ST=2 TYP=3
	9300	KISV	23	GRF	0836.2	0845.0	23.2	8.0			
	9100	GORK	1	S	0836.4	0836.9	2.2	9.2			
	9300	KISV	2	S/F	0836.4	0836.9	1.6	12.0			
	5900	KISV	23	GRF	0836.7	0846.4	26.0	10.0			
	5900	KISV	2	S/F	0840.5	0842.0	5.4	28.0			
	9300	KISV	2	S/F	0840.7	0842.1	4.7	32.0			
	9100	GORK	2	S/F	0840.8	0842.2	3.9	32.0			
	15000	KISV	2	S/F	0841.1	0842.0	2.4	23.0			
	3100	CRIM	1	S	0842.0	0842.5	1.0	2.7	1.0		
	245	SVTO	8	S	0846.0E	0847.0	1.0D	150.0			QL=1 ST=2 TYP=3

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

MARCH 1989

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	3000	POTS	21	GRF	0900.0	1023.0	120.0	38.0			
	536	ONDR	41	F	0900.0	1011.5	170.0	35.0			
	1470	POTS	20	GRF	0912.0	1023.0	108.0	20.0			
	2950	GORK	21	GRF	0914.5	1015.0	220.0D	27.0			
	9300	KISV	23	GRF	0919.8	0931.0	24.8	9.0			
	9300	KISV	23	GRF	0919.8	0938.2		8.0			
	950	GORK	22	GRF	0921.0	0931.1	19.0	4.0			
	5900	KISV	45	C	0921.4	0928.0		11.0			
	5900	KISV	45	C	0921.4	0931.0	15.1	13.0			
	15000	KISV	23	GRF	0921.8	1039.8	117.0	22.0			
	650	GORK	22	GRF	0922.5	0930.5	18.9	6.0			
	9500	POTS	21	GRF	0923.0	1048.0	107.0	28.0			
	100	GORK	4	S/F	0923.2	0924.0	2.0	590.0			
	3100	CRIM	1	S	0930.0	0931.0	3.0	3.0	1.0		
	245	SVTO	8	S	0941.0E	0942.0	1.0D	160.0			QL=1 ST=2 TYP=3
	234	POTS	4	S/F	0953.5	0954.1	1.3	150.0			
	245	LEAR	49	GB	0959.0E	0959.0	2.0D	510.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	0959.0E	0959.0	1.0D	590.0			QL=1 ST=2 TYP=6
	9300	KISV	23	GRF	1003.6	1033.6	67.0	25.0			
	5900	KISV	23	GRF	1004.4	1033.6	57.2	15.0			
	5900	KISV	2	S/F	1005.1	1005.9	3.0	10.0			
	950	GORK	23	GRF	1009.0	1023.6	27.4	4.0			
	9300	KISV	2	S/F	1010.0	1011.7	3.8	9.0			
	9100	GORK	23	GRF	1010.1	1031.7	74.0	22.0			
	410	LEAR	8	S	1011.0E	1011.0	1.0D	160.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	1011.0E	1011.0	1.0D	150.0			QL=1 ST=2 TYP=3
	650	GORK	4	S/F	1011.3	1011.4	0.6	75.0			
	810	KRAK	8	S	1011.4	1011.4	0.4	57.0			
	430	KRAK	8	S	1011.4	1011.8	0.5	185.0			
	600	HUMN	2	S/F	1011.6	1011.7	0.8	17.0	9.0		
	3013	IZMI	40	F	1020.0	1026.3	11.0	27.0			
	9300	KISV	2	S/F	1020.2	1020.6	2.0	8.0			
	5900	KISV	45	C	1024.6	1026.0	8.3	94.0			
	5900	KISV	45	C	1024.6	1029.1		52.0			
	3000	POTS	3	S	1025.0	1026.0	3.0	48.0			
	245	SVTO	8	S	1025.0E	1025.0	U	250.0			QL=1 ST=2 TYP=3
	9500	POTS	3	S	1025.0	1026.1	2.5	67.0			
	3100	CRIM	1	S	1025.1	1026.2	2.0	12.0	4.0		
	8400	BERN	4	S/F	1025.2	1026.0	2.0	35.0			
	3200	BERN	4	S/F	1025.2	1026.0	2.0	17.0			
	5200	BERN	4	S/F	1025.2	1026.0	2.0	52.0			
	9100	GORK	46	C	1025.2	1026.0	6.5	56.0			
	15000	KISV	2	S/F	1025.2	1026.0	1.3	14.0			
	9100	GORK	46	C	1025.2	1029.1		64.0			
	9300	KISV	45	C	1025.2	1029.1		48.0			
	9300	KISV	45	C	1025.2	1026.1	7.9	72.0			
	2950	GORK	3	S	1025.5	1026.1	2.8	20.0			
	4995	SVTO	8	S	1026.0E	1026.0	U	65.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	1026.0E	1026.0	U	64.0			QL=1 ST=2 TYP=3
	9500	POTS	3	S	1028.0	1029.1	2.0	53.0			
	650	GORK	46	C	1028.2	1029.4	5.3	8.0			
	650	GORK	46	C	1028.2	1030.9		6.0			
	15000	KISV	2	S/F	1028.8	1029.2	1.0	6.0			
	600	HUMN	2	S/F	1028.9	1029.9	3.7	5.0	2.0		
	810	KRAK	1	S	1030.7	1030.8	1.0	9.0	3.0		
	950	GORK	2	S/F	1030.8	1031.1	0.9	10.0			
	5900	KISV	2	S/F	1038.6	1039.9	2.8	16.0			
	9300	KISV	2	S/F	1038.9	1040.0	2.8	9.0			
	2950	GORK	1	S	1039.5	1039.8	1.3	5.4	2.5		
	5900	KISV	2	S/F	1046.8	1047.9	1.9	9.0			
	9300	KISV	2	S/F	1047.0	1047.9	4.8	14.0			
	100	GORK	8	S	1054.6	1055.2	1.6	420.0			
	9300	KISV	2	S/F	1058.0	1100.0	6.3	13.0			
	5900	KISV	4	S/F	1110.1	1114.2	8.1	49.0			
	9300	KISV	4	S/F	1111.8	1114.2	6.5	40.0			
	9100	GORK	4	S/F	1113.1	1114.3	3.0	29.0			
	3013	IZMI	5	S	1114.0	1114.4	2.0	15.0	8.0		
	3100	CRIM	1	S	1114.0	1114.5	1.0	9.0	3.0		
	15000	KISV	2	S/F	1114.2	1114.5	2.4	7.0			

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

MARCH 1989

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	650	GORK	2	S/F	1145.7	1147.8	4.3	7.0			
	950	GORK	2	S/F	1145.8	1149.2	3.8	4.0			
	600	HUMN	2	S/F	1146.4	1148.3	2.7	6.0	1.0		
	1470	POTS	4	S/F	1146.5	1147.2	2.0	12.0			
	3000	POTS	1	S	1148.0	1148.2	1.0	5.0			
	810	KRAK	8	S	1148.7	1148.9	0.5	6.0			
	9300	KISV	2	S/F	1149.8	1150.1	1.0	8.0			
	9100	GORK	1	S	1149.9	1150.1	1.0	8.0			
	9500	POTS	1	S	1150.0	1150.4	0.8	5.0			
	5900	KISV	2	S/F	1220.9	1221.6	4.1	6.0			
	9300	KISV	2	S/F	1220.9	1221.6	4.1	5.0			
	5900	KISV	2	S/F	1233.4	1234.1	1.6	10.0			
	9300	KISV	2	S/F	1233.6	1234.1	1.1	11.0			
	234	POTS	41	F	1326.0	1326.6	1.5	550.0			
	600	HUMN	2	S/F	1435.1	1436.1	1.2	9.0	4.0		
	9500	POTS	3	S	1438.0	1439.5	4.5	21.0			
	245	PALE	49	GB	1817.0E	1817.0	U	1300.0			QL=1 ST=3 TYP=6
	245	SGMR	49	GB	1817.0E	1817.0	U	1200.0			QL=1 ST=2 TYP=6
	245	SGMR	8	S	1901.0E	1901.0	1.0D	170.0			QL=1 ST=2 TYP=3
	2800	OTTA	20	GRF	1912.0	1915.0	35.0D	4.8	2.0		
	2800	OTTA	3	S	1947.0	1949.0	8.5	133.0	40.0		
	4995	PALE	8	S	1948.0E	1948.0	2.0D	190.0			QL=1 ST=2 TYP=3
	610	PALE	4	S/F	1948.0E	1949.0	4.0D	390.0			QL=1 ST=2 TYP=3
	2695	PALE	8	S	1948.0E	1948.0	2.0D	120.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1948.0E	1949.0	1.0D	610.0			QL=1 ST=2 TYP=6
	8800	PALE	8	S	1948.0E	1948.0	2.0D	130.0			QL=1 ST=2 TYP=3
	1415	PALE	4	S/F	1948.0E	1949.0	3.0D	65.0			QL=1 ST=2 TYP=3
	410	PALE	49	GB	1948.0E	1949.0	3.0D	520.0			QL=1 ST=2 TYP=6
	15400	PALE	8	S	1948.0E	1948.0	1.0D	78.0			QL=1 ST=2 TYP=3
	410	SGMR	49	GB	1948.0E	1949.0	4.0D	550.0			QL=1 ST=2 TYP=6
	8800	SGMR	4	S/F	1948.0E	1948.0	3.0D	170.0			QL=1 ST=2 TYP=3
	2695	SGMR	8	S	1948.0E	1948.0	2.0D	120.0			QL=1 ST=2 TYP=3
	610	SGMR	4	S/F	1948.0E	1949.0	252.0D	370.0			QL=1 ST=1 TYP=3
	4995	SGMR	4	S/F	1948.0E	1948.0	252.0D	240.0			QL=1 ST=1 TYP=3
	15400	SGMR	4	S/F	1948.0E	1948.0	252.0D	64.0			QL=1 ST=1 TYP=3
	245	PALE	8	S	1951.0E	1953.0	2.0D	490.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	1951.0E	1952.0	2.0D	150.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	1952.0E	1953.0	1.0D	80.0			QL=1 ST=2 TYP=3
	610	PALE	8	S	1952.0E	1952.0	2.0D	140.0			QL=1 ST=2 TYP=3
	245	SGMR	8	S	1952.0E	1953.0	1.0D	490.0			QL=1 ST=2 TYP=3
	2800	OTTA	29	PBI	1955.5	1955.5	100.0	12.1	6.0		
	500	HIRA	42	SER	2146.3	2147.8	13.0	49.0			WR
	410	SGMR	8	S	2147.0E	2148.0	1.0D	59.0			QL=1 ST=2 TYP=3
	500	HIRA	42	SER	2247.5	2252.0	4.8	42.0			WR
23	100	GORK	44	NS	0430.0E		450.0D		5.0		
	200	GORK	44	NS	0433.0E		18.0D		10.0		
	221	ABST	43	NS	0500.0		120.0		13.0		
	204	IZMI	43	NS	0600.0		360.0	100.0			
	260	ONDR	44	NS	0640.0E		520.0D				
	430	KRAK	44	NS	0755.5E	1044.3	385.5D	140.0	1.0		
	127	TORN	43	NS	0822.0		438.0		30.0		V=1
	245	SVTO	43	NS	0828.0	0924.0	932.0	210.0			QL=1 ST=1 TYP=1
	245	SGMR	43	NS	1102.0	1631.0	696.0D	430.0			QL=1 ST=2 TYP=1
	410	SGMR	43	NS	1530.0	2128.0	428.0D	170.0			QL=1 ST=2 TYP=1
	245	PALE	44	NS	1649.0E	1707.0	699.0D	290.0			QL=1 ST=2 TYP=1
	100	HIRA	44	NS	2040.0E	2300.0	720.0D	160.0	53.0		
	200	HIRA	44	NS	2040.0E	2235.0	720.0D	170.0	65.0		WR
	410	PALE	44	NS	2127.0E	2257.0	421.0D	340.0			QL=1 ST=2 TYP=1
	610	LEAR	44	NS	2245.0E	0052.0	293.0D	530.0			QL=1 ST=2 TYP=1
	410	LEAR	44	NS	2245.0E	0127.0	326.0D	610.0			QL=1 ST=2 TYP=1
	245	LEAR	44	NS	2245.0E	0307.0	620.0D	210.0			QL=1 ST=2 TYP=1
	610	PALE	44	NS	2330.0E	0013.0	298.0D	420.0			QL=1 ST=2 TYP=1
	500	HIRA	42	SER	0112.3	0127.0	15.5	27.0			WR
	410	LEAR	8	S	0122.0E	0122.0	1.0D	65.0			QL=1 ST=2 TYP=3
	650	GORK	23	GRF	0503.7E	0507.7	13.3D	1.6			
	500	HIRA	42	SER	0503.8	0504.1	11.5	59.0			WR
	245	LEAR	8	S	0504.0E	0504.0	U	320.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0504.0E	0504.0	U	61.0			QL=1 ST=2 TYP=3

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

MARCH 1989

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	410	LEAR	8	S	0512.0E	0513.0	1.0D	60.0			QL=1 ST=2 TYP=3
	5900	KISV	2	S/F	0541.1	0542.6	9.0	26.0			
	9100	GORK	21	GRF	0541.7	0544.0	22.5	8.6			
	9300	KISV	2	S/F	0541.7	0542.6	8.0	30.0			
	9100	GORK	1	S	0542.3	0542.6	1.1	24.0			
	9300	KISV	2	S/F	0600.2	0602.0	3.3	7.0			
	5900	KISV	2	S/F	0601.2	0602.1	1.9	4.0			
	650	GORK	2	S/F	0601.9	0602.4	0.7	6.0			
	950	GORK	1	S	0602.0	0602.1	0.6	1.0			
	5900	KISV	45	C	0615.4	0621.4	9.6	6.0			
	5900	KISV	45	C	0615.4	0617.7		5.0			
	650	GORK	4	S/F	0636.3	0637.6	1.5	12.0			
	5900	KISV	2	S/F	0707.5	0708.4	2.8	8.0			
	9100	GORK	1	S	0707.9	0708.4	1.1	5.1			
	9300	KISV	2	S/F	0708.1	0708.3	0.6	6.0			
	650	GORK	4	S/F	0722.7	0723.2	1.0	12.0			
	950	GORK	2	S/F	0722.9	0723.1	1.5	3.0			
	650	GORK	46	C	0729.3	0729.4	5.8	4.0			
	650	GORK	46	C	0729.3	0733.5		8.0			
	9100	GORK	1	S	0823.6	0824.1	1.1	8.5			
	9100	GORK	1	S	0823.6	0824.1	1.1	8.5			
	5900	KISV	2	S/F	0823.6	0824.1	1.6	9.0			
	9300	KISV	2	S/F	0823.8	0824.1	1.5	12.0			
	536	ONDR	41	F	0840.0	0911.0	49.0	46.0			
	950	GORK	21	GRF	0849.9	0921.0	49.5	4.5			
	245	SVTO	49	GB	0851.0E	0853.0	2.0D	24000.0			QL=1 ST=2 TYP=6
	9300	KISV	46	C	0855.7	0859.0		5.0			
	9300	KISV	46	C	0855.7	0900.1		4.0			
	9300	KISV	46	C	0855.7	0901.7	8.0	7.0			
	650	GORK	46	C	0855.9	0911.0		27.0			
	650	GORK	46	C	0855.9	0903.1	19.9	13.5			
	245	SVTO	49	GB	0857.0E	0858.0	2.0D	16000.0			QL=1 ST=2 TYP=6
	100	GORK	8	S	0857.7	0857.8	0.3	235.0			
	9100	GORK	22	GRF	0858.2	0914.0	44.1	8.3			
	950	GORK	2	S/F	0859.8	0901.0	4.5	14.5			
	5900	KISV	22	GRF	0900.0	1150.5	234.0	12.0			
	600	HUMN	41	F	0901.6	0911.7	14.3	25.0	3.0		
	9300	KISV	2	S/F	0908.9	0910.3	6.0	5.0			
	245	LEAR	4	S/F	0909.0E	0913.0	4.0D	120.0			QL=1 ST=2 TYP=3
	810	KRAK	41	F	0909.2	0911.5	2.5	16.0	5.0		
	100	GORK	8	S	0913.3	0913.4	0.3	720.0			
	536	ONDR	42	SER	0930.0	1022.2	85.0	88.0			
	245	LEAR	8	S	0931.0E	0931.0	U	58.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	1007.0E	1007.0	U	450.0			QL=1 ST=2 TYP=3
	9300	KISV	2	S/F	1023.5	1024.3	2.3	6.0			
	5900	KISV	23	GRF	1023.6	1024.3	16.0	5.0			
	9100	GORK	1	S	1024.0	1024.3	1.3	4.0			
	810	KRAK	8	S	1034.5	1034.8	0.4	9.0			
	650	GORK	4	S/F	1045.9	1049.6	6.0	107.0			
	950	GORK	2	S/F	1049.1	1049.4	0.8	6.0			
	810	KRAK	8	S	1049.3	1049.5	0.2	24.0			
	600	HUMN	2	S/F	1049.8	1050.3	1.0	65.0	12.0		
	650	GORK	40	F	1129.1	1137.9	16.0	7.0			
	9300	KISV	2	S/F	1135.7	1136.1	1.4	3.0			
	5900	KISV	2	S/F	1135.7	1136.3	0.9	2.0			
	600	HUMN	2	S/F	1136.3	1138.0	2.6	10.0	2.0		
	9300	KISV	2	S/F	1150.2	1150.5	1.5	3.0			
	9300	KISV	2	S/F	1153.3	1153.6	4.6	4.0			
	5900	KISV	23	GRF	1217.7	1227.4	24.5	16.0			
	9300	KISV	29	PBI	1224.8	1229.0	7.2	4.0			
	9300	KISV	2	S/F	1224.8	1227.5	4.3	17.0			
	9100	GORK	2	S/F	1226.7	1227.4	3.5	11.0			
	9500	POTS	3	S	1226.7	1227.9	2.8	12.0			
	410	SGMR	8	S	1330.0E	1330.0	1.0D	82.0			QL=1 ST=2 TYP=3
	536	ONDR	47	GB	1346.6	1404.3	23.0	64.0			
	1470	POTS	42	SER	1347.0	1404.7	26.0	49.0			
	9500	POTS	22	GRF	1347.0	1404.9	33.0	76.0			
	600	HUMN	46	C	1347.2	1350.7	30.0	57.0	7.0		
	430	KRAK	46	C	1347.5	1402.0	27.5	200.0	16.0		

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

MARCH 1989

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	810	KRAK	46	C	1347.5	1409.0	28.5	89.0	6.0		
	2800	OTTA	4	S/F	1348.0	1405.0	33.0	66.4	19.0		
	3000	POTS	4	S/F	1355.0U	1405.0	25.0U	57.0			
	8800	SVTO	20	GRF	1400.0E	1404.0	7.0D	96.0			QL=1 ST=2 TYP=2
	8800	SVTO	20	GRF	1401.0E	1404.0	6.0D	96.0			QL=1 ST=2 TYP=2
	4995	SVTO	20	GRF	1401.0E	1404.0	6.0D	110.0			QL=1 ST=2 TYP=2
	4995	SGMR	4	S/F	1401.0E	1404.0	10.0D	120.0			QL=1 ST=2 TYP=3
	8800	SGMR	20	GRF	1401.0E	1404.0	10.0D	98.0			QL=1 ST=2 TYP=2
	2695	SGMR	4	S/F	1402.0E	1404.0	9.0D	60.0			QL=1 ST=2 TYP=3
	610	SGMR	4	S/F	1402.0E	1404.0	5.0D	69.0			QL=1 ST=2 TYP=3
	1415	SGMR	4	S/F	1402.0E	1404.0	3.0D	51.0			QL=1 ST=2 TYP=3
	410	SGMR	4	S/F	1402.0E	1404.0	4.0D	64.0			QL=1 ST=2 TYP=3
	15400	SGMR	4	S/F	1402.0E	1406.0	9.0D	360.0			QL=1 ST=2 TYP=3
	2695	SVTO	8	S	1402.0E	1404.0	2.0D	54.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	1402.0E	1402.0	U	150.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	1409.0E	1409.0	U	190.0			QL=1 ST=2 TYP=3
	2800	OTTA	29	PBI	1411.0	1411.0	97.0	18.3	8.0		
	245	SVTO	8	S	1421.0E	1421.0	1.0D	190.0			QL=1 ST=2 TYP=3
	234	POTS	4	S/F	1448.2	1448.9	1.5	275.0			
	245	SVTO	49	GB	1507.0E	1519.0	27.0D	720.0			QL=1 ST=2 TYP=7
	410	SGMR	8	S	1529.0E	1530.0	1.0D	56.0			QL=1 ST=2 TYP=3
	15400	SVTO	8	S	1632.0E	1633.0	2.0D	85.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	1758.0E	1759.0	1.0D	350.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	1758.0E	1759.0	1.0D	360.0			QL=1 ST=2 TYP=3
	2800	OTTA	47	GB	1913.0	1941.0	52.0	1741.0	522.0		
	245	PALE	49	GB	1924.0E	1925.0	2.0D	1600.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1924.0E	1925.0	2.0D	2300.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	1925.0E	1925.0	1.0D	89.0			QL=1 ST=2 TYP=3
	2695	PALE	49	GB	1928.0E	1941.0	62.0D	1600.0			QL=1 ST=2 TYP=7
	4995	PALE	49	GB	1928.0E	1940.0	71.0D	2700.0			QL=1 ST=2 TYP=6
	4995	SGMR	49	GB	1928.0E	1940.0	272.0D	2800.0			QL=1 ST=3 TYP=6
	2695	SGMR	49	GB	1928.0E	1941.0	272.0D	1600.0			QL=1 ST=3 TYP=6
	1415	PALE	49	GB	1929.0E	1951.0	31.0D	1800.0			QL=1 ST=2 TYP=7
	8800	PALE	49	GB	1929.0E	1940.0	71.0D	2500.0			QL=1 ST=2 TYP=6
	8800	SGMR	49	GB	1929.0E	1940.0	271.0D	2200.0			QL=1 ST=3 TYP=6
	1415	SGMR	49	GB	1929.0E	1951.0	271.0D	2100.0			QL=1 ST=3 TYP=7
	15400	PALE	49	GB	1931.0E	1940.0	71.0D	1100.0			QL=1 ST=2 TYP=6
	15400	SGMR	49	GB	1931.0E	1940.0	269.0D	1000.0			QL=1 ST=3 TYP=6
	610	PALE	49	GB	1932.0E	2003.0	58.0D	5300.0			QL=1 ST=2 TYP=7
	610	SGMR	49	GB	1932.0E	1940.0	268.0D	600.0			QL=1 ST=3 TYP=6
	410	PALE	4	S/F	1935.0E	1938.0	12.0D	210.0			QL=1 ST=2 TYP=3
	245	PALE	20	GRF	1940.0E	1946.0	8.0D	180.0			QL=1 ST=2 TYP=2
	2800	OTTA	29	PBI	2005.0	2005.0	175.0	91.5	45.0		
	410	SGMR	8	S	2025.0E	2026.0	1.0D	280.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	2025.0E	2025.0	1.0D	58.0			QL=1 ST=2 TYP=3
	15400	SGMR	8	S	2026.0E	2027.0	1.0D	55.0			QL=1 ST=2 TYP=3
	2695	SGMR	4	S/F	2026.0E	2028.0	9.0D	63.0			QL=1 ST=2 TYP=3
	610	SGMR	49	GB	2026.0E	2026.0	214.0D	820.0			QL=1 ST=3 TYP=6
	4995	SGMR	4	S/F	2026.0E	2027.0	214.0D	84.0			QL=1 ST=3 TYP=3
	410	SGMR	4	S/F	2026.0E	2026.0	214.0D	180.0			QL=1 ST=3 TYP=3
	1415	PALE	49	GB	2028.0E	2028.0	U	530.0			QL=1 ST=2 TYP=6
	1415	SGMR	49	GB	2028.0E	2028.0	U	620.0			QL=1 ST=2 TYP=6
	245	SGMR	4	S/F	2032.0E	2032.0	3.0D	160.0			QL=1 ST=2 TYP=3
	4995	SGMR	4	S/F	2037.0E	2037.0	3.0D	61.0			QL=1 ST=2 TYP=3
	2695	SGMR	8	S	2037.0E	2038.0	2.0D	56.0			QL=1 ST=2 TYP=3
	610	SGMR	4	S/F	2037.0E	2038.0	3.0D	130.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	2038.0E	2038.0	1.0D	67.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	2050.5	2056.5	9.5	83.2	25.0		
	2695	SGMR	4	S/F	2054.0E	2056.0	6.0D	130.0			QL=1 ST=2 TYP=3
	4995	SGMR	4	S/F	2054.0E	2056.0	6.0D	160.0			QL=1 ST=2 TYP=3
	8800	SGMR	4	S/F	2054.0E	2054.0	6.0D	160.0			QL=1 ST=2 TYP=3
	15400	SGMR	4	S/F	2054.0E	2056.0	6.0D	67.0			QL=1 ST=2 TYP=3
	2695	PALE	8	S	2055.0E	2056.0	2.0D	88.0			QL=1 ST=2 TYP=3
	4995	PALE	8	S	2055.0E	2056.0	2.0D	72.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	2056.0E	2056.0	1.0D	170.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	2056.0E	2057.0	2.0D	64.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	2056.0E	2056.0	1.0D	130.0			QL=1 ST=2 TYP=3
	100	HIRA	42	SER	2103.6	2111.0	32.0	15300.0			WR
	245	PALE	49	GB	2109.0E	2109.0	2.0D	7900.0			QL=1 ST=2 TYP=6

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

MARCH 1989

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	245	SGMR	49	GB	2109.0E	2109.0	2.0D	8500.0			QL=1 ST=2 TYP=6
	1415	SGMR	8	S	2109.0E	2109.0	1.0D	89.0			QL=1 ST=2 TYP=3
	200	HIRA	41	F	2109.2	2109.6	4.6	12000.0			WR
	610	SGMR	8	S	2110.0E	2110.0	U	130.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	2113.0E	2113.0	1.0D	540.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	2113.0E	2113.0	1.0D	230.0			QL=1 ST=2 TYP=3
	610	PALE	8	S	2113.0E	2113.0	U	130.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	2113.0E	2113.0	1.0D	240.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	2113.0E	2113.0	1.0D	610.0			QL=1 ST=2 TYP=6
	610	SGMR	8	S	2113.0E	2113.0	1.0D	150.0			QL=1 ST=2 TYP=3
	500	HIRA	48	C	2115.5	2256.0		350.0			WR
	500	HIRA	48	C	2115.5	2146.0		150.0			WR
	500	HIRA	48	C	2115.5	2448.0	465.0	1400.0	350.0		WR
	500	HIRA	48	C	2115.5	2121.8		340.0			WR
	200	HIRA	46	C	2118.3	2122.0	9.9	380.0	180.0		WR
	410	PALE	49	GB	2121.0E	2122.0	5.0D	1800.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	2121.0E	2126.0	5.0D	1200.0			QL=1 ST=2 TYP=7
	410	SGMR	49	GB	2121.0E	2122.0	7.0D	1200.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2121.0E	2126.0	7.0D	1600.0			QL=1 ST=2 TYP=7
	610	SGMR	4	S/F	2121.0E	2124.0	7.0D	140.0			QL=1 ST=2 TYP=5
	2800	OTTA	4	S/F	2121.5	2124.5	9.5	47.1	18.0		
	610	PALE	8	S	2123.0E	2124.0	1.0D	130.0			QL=1 ST=2 TYP=3
	1415	PALE	8	S	2123.0E	2124.0	2.0D	150.0			QL=1 ST=2 TYP=3
	1415	SGMR	8	S	2123.0E	2124.0	2.0D	150.0			QL=1 ST=2 TYP=3
	4995	PALE	8	S	2124.0E	2124.0	U	64.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	2133.0E	2133.0	1.0D	59.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	2134.0E	2134.0	2.0D	130.0			QL=1 ST=2 TYP=3
	610	SGMR	20	GRF	2136.0E	2146.0	26.0D	250.0			QL=1 ST=2 TYP=2
	245	PALE	49	GB	2139.0E	2140.0	2.0D	550.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2139.0E	2140.0	2.0D	610.0			QL=1 ST=2 TYP=6
	410	SGMR	20	GRF	2150.0E	2152.0	12.0D	150.0			QL=1 ST=2 TYP=2
	100	HIRA	46	C	2152.8	2206.0	23.0	630.0	200.0		SR
	245	SGMR	20	GRF	2202.0E	2204.0	8.0D	380.0			QL=1 ST=2 TYP=2
	410	SGMR	4	S/F	2202.0E	2205.0	5.0D	170.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	2203.0E	2203.0	1.0D	120.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	2210.0E	2211.0	2.0D	120.0			QL=1 ST=2 TYP=3
	245	SGMR	4	S/F	2210.0E	2214.0	8.0D	230.0			QL=1 ST=2 TYP=5
	410	SGMR	4	S/F	2215.0E	2219.0	5.0D	93.0			QL=1 ST=2 TYP=3
24	100	GORK	44	NS	0442.0E		438.0D		25.0		
	200	GORK	44	NS	0445.0E		180.0D		5.0		
	245	SVTO	44	NS	0506.0E	0800.0	1134.0D	330.0			QL=1 ST=1 TYP=1
	204	IZMI	43	NS	0600.0		360.0	30.0			
	127	TORN	44	NS	0620.0E	0957.2	560.0D	600.0	45.0		V=1
	260	ONDR	44	NS	0700.0E	0846.9	480.0D				
	410	LEAR	44	NS	0844.0E	0937.0	91.0D	100.0			QL=1 ST=2 TYP=1
	410	SVTO	44	NS	0844.0E	0843.0	916.0D	52.0			QL=1 ST=1 TYP=1
	245	SGMR	44	NS	1100.0E	2022.0	699.0D	160.0			QL=1 ST=2 TYP=1
	200	HIRA	44	NS	2035.0E	0315.0	720.0D	14.0	9.0		MR
	245	PALE	44	NS	2038.0E	2038.0	412.0D	190.0			QL=1 ST=2 TYP=1
	100	HIRA	46	C	0001.3	0002.8	2.1	970.0			O
	610	PALE	49	GB	0019.0E	0052.0	1421.0D	740.0			QL=1 ST=1 TYP=7
	610	PALE	49	GB	0051.0E	0052.0	11.0D	740.0			QL=1 ST=2 TYP=6
	100	HIRA	42	SER	0230.8	0232.3	3.4	480.0			O
	100	HIRA	46	C	0331.5	0333.3	2.0	2100.0			O
	200	HIRA	46	C	0331.8	0332.1	1.5	3100.0			O
	410	LEAR	49	GB	0332.0E	0332.0	U	840.0			QL=1 ST=2 TYP=6
	610	LEAR	8	S	0332.0E	0332.0	2.0D	210.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0332.0E	0332.0	1.0D	1400.0			QL=1 ST=2 TYP=6
	410	PALE	49	GB	0332.0E	0332.0	1.0D	1000.0			QL=1 ST=2 TYP=6
	600	GORK	23	GRF	0445.0E	0504.5	214.0D	14.0			
	950	GORK	40	F	0448.0E	0454.8	17.5D	17.0			
	245	LEAR	8	S	0514.0E	0514.0	U	130.0			QL=1 ST=2 TYP=3
	200	GORK	8	S	0516.2	0516.5	0.5	300.0			
	9300	KISV	2	S/F	0518.9	0520.0	2.6	9.0			
	5900	KISV	2	S/F	0519.0	0520.0	3.5	10.0			
	245	LEAR	8	S	0526.0E	0526.0	2.0D	130.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0526.0E	0526.0	1.0D	150.0			QL=1 ST=2 TYP=3
	950	GORK	1	S	0528.0	0529.3	1.7	5.0			

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

MARCH 1989

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	200	HIRA	46	C	0541.3	0548.4		66.0			MR
	200	HIRA	46	C	0541.3	0606.9	28.4	640.0	48.0		WR
	200	GORK	41	F	0607.0	0608.2		960.0			
	200	GORK	41	F	0607.0	0607.3	2.3	480.0			
	5900	KISV	20	GRF	0607.8	0619.8	22.0	4.0			
	5900	KISV	45	C	0636.9	0638.1	4.2	4.0			
	9300	KISV	45	C	0639.5	0640.7	1.6	5.0			
	245	LEAR	8	S	0657.0E	0658.0	1.0D	77.0			QL=1 ST=2 TYP=3
	200	HIRA	46	C	0710.2	0747.8	57.0	135.0	65.0		SR
	9300	KISV	22	GRF	0712.0	0721.0	13.0	5.0			
	5900	KISV	45	C	0712.4	0723.0		3.0			
	5900	KISV	45	C	0712.4	0721.0	14.7	4.0			
	5900	KISV	45	C	0712.4	0719.3		2.0			
	5900	KISV	45	C	0712.4	0713.6		3.0			
	5900	KISV	45	C	0712.4	0724.7		3.0			
	204	IZMI	40	F	0713.0	0800.0	61.0	900.0			
	430	KRAK	49	GB	0754.0E	0847.0	207.0D	260.0D	60.0		
	2950	GORK	1	S	0756.5	0757.7	1.9	3.7	1.8		
	5900	KISV	45	C	0757.4	0758.2		2.0			
	5900	KISV	45	C	0757.4	0757.6	1.0	2.0			
	100	GORK	4	S/F	0758.9	0759.1	1.2	1800.0			
	245	LEAR	8	S	0800.0E	0800.0	U	260.0			QL=1 ST=2 TYP=3
	9300	KISV	2	S/F	0803.0	0803.2	0.4	4.0			
	650	GORK	23	GRF	0824.4	0857.8	134.0	12.0			
	536	ONDR	27	RF	0830.0	0931.0	180.0	3.0			
	204	IZMI	41	F	0841.5	0842.1	6.0	4500.0			
	100	GORK	41	F	0842.0	0843.1	6.0	900.0			
	100	GORK	41	F	0842.0	0847.3		6600.0			
	245	SVTO	8	S	0845.0E	0847.0	2.0D	200.0			QL=1 ST=2 TYP=3
	410	LEAR	8	S	0846.0E	0847.0	1.0D	170.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	0846.0E	0846.0	1.0D	220.0			QL=1 ST=2 TYP=3
	234	POTS	4	S/F	0846.8	0847.4	0.7	150.0			
	245	LEAR	8	S	0847.0E	0847.0	U	140.0			QL=1 ST=2 TYP=3
	40	POTS	4	S/F	0847.0	0847.3	1.4	1500.0			
	950	GORK	1	S	0850.1	0850.3	0.5	13.0			
	650	GORK	8	S	0850.2	0850.4	0.3	19.0			
	5900	KISV	2	S/F	0854.4	0854.8	1.0	2.0			
	245	LEAR	8	S	0940.0E	0940.0	2.0D	55.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0940.0E	0940.0	1.0D	60.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	0940.0E	0940.0	1.0D	95.0			QL=1 ST=2 TYP=3
	100	GORK	8	S	0956.0	0956.5	1.0	2600.0			
	650	GORK	4	S/F	0956.6	0958.4	4.6	15.0			
	15000	KISV	2	S/F	1004.5	1005.2	2.2	11.0			
	9300	KISV	2	S/F	1004.7	1005.1	1.7	11.0			
	9100	GORK	1	S	1004.8	1005.2	1.4	10.6			
	950	GORK	1	S	1024.0	1024.5	0.9	4.5			
	810	KRAK	8	S	1024.0	1024.5	0.7	12.0			
	650	GORK	4	S/F	1024.2	1024.4	0.4	17.0			
	9300	KISV	1	S	1110.7	1110.9	0.4	3.0			
	810	KRAK	2	S/F	1159.3	1159.4	0.5	12.0	4.0		
	536	ONDR	41	F	1210.0	1218.5	17.0	3.0			
	9500	POTS	20	GRF	1210.0	1217.5	45.0	16.0			
	9300	KISV	23	GRF	1210.2	1221.6	45.8	14.0			
	600	HUMN	46	C	1210.5	1212.0	18.1	21.0	4.0		
	650	GORK	30	PBI	1210.6	1219.2	17.0	9.0			
	650	GORK	46	C	1210.6	1216.3		25.0			
	650	GORK	46	C	1210.6	1211.5	8.6	35.0			
	950	GORK	29	PBI	1210.7	1212.0	27.0	17.0			
	950	GORK	4	S/F	1210.7	1211.7	1.2	136.0			
	810	KRAK	2	S/F	1211.0	1212.0	1.5	48.0	24.0		
	2950	GORK	20	GRF	1211.0	1217.5	49.0D	12.9			
	9100	GORK	22	GRF	1214.4	1217.5	23.7	18.3			
	9300	KISV	2	S/F	1214.6	1217.3	4.6	17.0			
	3000	POTS	20	GRF	1215.0	1218.0	15.0U	13.0			
	1470	POTS	22	GRF	1215.0	1216.9	15.0	19.0			
	810	KRAK	41	F	1215.5	1216.5	4.0	10.0	4.0		
	245	SGMR	8	S	1220.0E	1221.0	1.0D	360.0			QL=1 ST=2 TYP=3
	234	POTS	4	S/F	1220.5	1220.7	0.8	150.0			
	650	GORK	2	S/F	1225.4	1225.7	2.2	8.0			

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

MARCH 1989

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	810	KRAK	42	SER	1232.5	1234.7	3.2	35.0			
	950	GORK	8	S	1238.3	1238.5	0.5	15.0			
	650	GORK	8	S	1238.3	1238.5	25.0	49.0			
	810	KRAK	2	S/F	1241.3	1241.5	0.8	10.0	3.0		
	810	KRAK	8	S	1246.5	1246.5	0.5	14.0			
	536	ONDR	41	F	1454.5	1500.8	17.0	168.0			
	600	HUMN	2	S/F	1455.7	1456.7	4.0	21.0	6.0		
	33	UPIC	46	C	1455.9	1456.1	2.8				
	245	SGMR	8	S	1456.0E	1457.0	1.0D	140.0			QL=1 ST=2 TYP=3
	600	HUMN	8	S	1533.4	1533.9	0.7	158.0	41.0		
	2800	OTTA	20	GRF	1539.0	1722.0	375.0	26.1	13.0		
	600	HUMN	41	F	1610.7	1611.6	3.5	13.0	1.0		
	600	HUMN	41	F	1704.4	1709.6	5.2	9.0	2.0		
	245	PALE	49	GB	2019.0E	2020.0	2.0D	600.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2019.0E	2020.0	2.0D	530.0			QL=1 ST=2 TYP=6
	2800	OTTA	3	S	2025.0	2029.0	12.0	238.0	72.0		
	410	PALE	49	GB	2025.0E	2027.0	5.0D	700.0			QL=1 ST=2 TYP=7
	610	PALE	4	S/F	2025.0E	2027.0	7.0D	150.0			QL=1 ST=2 TYP=5
	410	SGMR	49	GB	2025.0E	2025.0	3.0D	1600.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2025.0E	2031.0	8.0D	20000.0			QL=1 ST=2 TYP=7
	1415	PALE	4	S/F	2026.0E	2027.0	5.0D	160.0			QL=1 ST=2 TYP=3
	8800	PALE	4	S/F	2026.0E	2028.0	7.0D	420.0			QL=1 ST=2 TYP=3
	4995	PALE	4	S/F	2026.0E	2028.0	6.0D	440.0			QL=1 ST=2 TYP=3
	2695	PALE	4	S/F	2026.0E	2028.0	5.0D	230.0			QL=1 ST=2 TYP=3
	1415	SGMR	4	S/F	2026.0E	2027.0	4.0D	190.0			QL=1 ST=2 TYP=3
	4995	SGMR	49	GB	2026.0E	2028.0	5.0D	560.0			QL=1 ST=2 TYP=6
	2695	SGMR	4	S/F	2026.0E	2028.0	4.0D	220.0			QL=1 ST=2 TYP=3
	8800	SGMR	49	GB	2026.0E	2028.0	5.0D	510.0			QL=1 ST=2 TYP=6
	15400	PALE	4	S/F	2027.0E	2028.0	6.0D	260.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	2027.0E	2027.0	2.0D	130.0			QL=1 ST=2 TYP=3
	15400	SGMR	4	S/F	2027.0E	2028.0	4.0D	270.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	2029.0E	2031.0	6.0D	25000.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2033.0E	2034.0	3.0D	610.0			QL=1 ST=2 TYP=6
	100	HIRA	46	C	2036.0U	2039.0U	7.9D	1700.0U			O SUNRISE
	2800	OTTA	4	S/F	2047.0	2052.0	15.0	27.6	8.0		
	500	HIRA	46	C	2047.0U	2050.5	12.5U	65.0			O SUNRISE
	245	SGMR	8	S	2048.0E	2048.0	1.0D	110.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	2048.0E	2048.0	1.0D	94.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	2050.0E	2050.0	U	140.0			QL=1 ST=2 TYP=3
	245	SGMR	4	S/F	2050.0E	2053.0	4.0D	150.0			QL=1 ST=2 TYP=3
	200	HIRA	46	C	2050.0U	2052.7	56.0D	430.0U	52.0U		O SUNRISE
	245	PALE	49	GB	2056.0E	2058.0	3.0D	630.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2056.0E	2057.0	3.0D	500.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	2100.0E	2100.0	1.0D	1000.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2100.0E	2100.0	1.0D	810.0			QL=1 ST=3 TYP=6
	100	HIRA	27	RF	2100.0	2121.0	155.0	260.0	70.0		
25	200	GORK	44	NS	0433.0E		180.0D		5.0		
	204	IZMI	43	NS	0600.0		360.0	15.0			
	260	ONDR	44	NS	0640.0E	0917.9	520.0D				
	100	GORK	43	NS	0715.0		134.0		5.0		
	127	TORN	43	NS	0756.0		284.0D		35.0		V=1
	245	SGMR	44	NS	1059.0E	1534.0	701.0D	100.0			QL=1 ST=2 TYP=1
	245	PALE	44	NS	1725.0E	1954.0	425.0D	100.0			QL=1 ST=2 TYP=1
	200	HIRA	44	NS	2035.0E	2136.0	730.0D	27.0	13.0		MR
	100	GORK	3	S	0449.7	0449.8U	1.2	40.0D			
	5900	KISV	20	GRF	0525.9	0653.4	113.0	7.0			
	9300	KISV	45	C	0545.6	0549.4	6.5	2.0			
	5900	KISV	22	GRF	0548.6	0549.5		2.0			
	5900	KISV	22	GRF	0548.6	0557.9	14.0	3.0			
	9300	KISV	20	GRF	0557.0	0558.0	9.0	3.0			
	2950	GORK	21	GRF	0612.1	0957.0	300.0D	12.8			
	9300	KISV	1	S	0613.5	0615.3	3.4	3.0			
	5900	KISV	46	C	0613.8	0630.0		3.0			
	5900	KISV	46	C	0613.8	0615.3		3.0			
	5900	KISV	46	C	0613.8	0621.4	26.0	11.0			
	5900	KISV	46	C	0613.8	0632.5		5.0			
	5900	KISV	46	C	0613.8	0627.7		4.0			
	9300	KISV	23	GRF	0620.7	0621.3	20.3	9.0			

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

MARCH 1989

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	9300	KISV	23	GRF	0620.7	0632.4		5.0			
	9300	KISV	23	GRF	0620.7	0627.8		6.0			
	9100	GORK	1	S	0621.1	0621.5	1.8	5.1			
	100	GORK	41	F	0625.8	0651.2U		40.0D			
	100	GORK	41	F	0625.8	0630.5U	34.0	40.0D			
	100	GORK	41	F	0625.8	0644.7U		40.0D			
	650	GORK	2	S/F	0631.9	0632.0	1.2	3.0			
	9100	GORK	1	S	0644.8	0646.3	3.0	3.4			
	9300	KISV	46	C	0708.4	0709.0		2.0			
	9300	KISV	46	C	0708.4	0709.4	2.8	3.0			
	950	GORK	41	F	0708.7	0709.1	6.3	6.0			
	950	GORK	41	F	0708.7	0712.8		11.0			
	950	GORK	41	F	0708.7	0709.9		7.5			
	650	GORK	46	C	0709.0	0710.0	1.7	17.0			
	650	GORK	46	C	0709.0	0710.5		14.0			
	650	GORK	2	S/F	0712.0	0713.2	2.5	5.5			
	9300	KISV	22	GRF	0730.2	0736.0	33.2	3.0			
	5900	KISV	23	GRF	0748.8	0749.3	19.0	4.0			
	9100	GORK	1	S	0748.9	0749.3	2.0	5.1			
	9300	KISV	2	S/F	0748.9	0749.3	1.6	6.0			
	9300	KISV	46	C	0810.8	0830.2		8.0			
	9300	KISV	46	C	0810.8	0843.3		6.0			
	9300	KISV	46	C	0810.8	0811.8		8.0			
	9300	KISV	46	C	0810.8	0833.8		10.0			
	9300	KISV	46	C	0810.8	0836.8	41.3	11.0			
	5900	KISV	23	GRF	0811.2	0811.8	13.5	9.0			
	950	GORK	4	S/F	0811.4	0812.2	1.3	20.0			
	650	GORK	46	C	0811.4	0812.4		20.0			
	650	GORK	46	C	0811.4	0811.9	1.1	19.0			
	1470	POTS	4	S/F	0811.5	0812.2	1.5	14.0			
	9100	GORK	1	S	0811.5	0811.9	4.3	8.5			
	2950	GORK	1	S	0811.6	0812.0	1.4	3.7	1.8		
	810	KRAK	8	S	0811.6	0811.8	1.0	51.0	4.0		
	3013	IZMI	1	S	0811.8	0812.2	1.5	7.0	4.0		
	650	GORK	40	F	0816.6	0818.0	1.9	6.0			
	3013	IZMI	27	RF	0818.2	0820.0	37.0	7.0			
	204	IZMI	45	C	0822.2	0836.0	30.0	42.0	20.0		
	5900	KISV	22	GRF	0824.8	0851.7	58.0	6.0			
	5900	KISV	46	C	0829.1	0831.0		4.0			
	5900	KISV	46	C	0829.1	0841.2		6.0			
	5900	KISV	46	C	0829.1	0830.2		5.0			
	5900	KISV	46	C	0829.1	0845.3		4.0			
	5900	KISV	46	C	0829.1	0843.3		7.0			
	5900	KISV	46	C	0829.1	0836.7	19.8	8.0			
	9100	GORK	22	GRF	0829.4	0836.9	14.5	6.8			
	100	GORK	22	GRF	0845.0	0856.4	42.0	260.0			
	430	KRAK	8	S	0855.0	0855.0	0.2	25.0			
	9300	KISV	22	GRF	0900.5	0901.2	13.2	2.0			
	245	LEAR	4	S/F	0917.0E	0920.0	5.0D	86.0			QL=1 ST=2 TYP=5
	245	SVTO	4	S/F	0917.0E	0920.0	6.0D	97.0			QL=1 ST=2 TYP=5
	204	IZMI	47	GB	0917.5	0917.7	35.5	260.0	45.0		
	5900	KISV	28	PRE	0929.2	0932.0	2.8	1.0			
	9500	POTS	20	GRF	0930.0	0933.5	15.0	7.0			
	950	GORK	46	C	0931.0	0934.2		11.5			
	950	GORK	46	C	0931.0	0932.4	6.6	64.0			
	15000	KISV	22	GRF	0932.0	0934.0		6.0			
	15000	KISV	22	GRF	0932.0	0933.1	12.6	6.0			
	5900	KISV	46	C	0932.0	0933.1	12.0	15.0			
	650	GORK	28	PRE	0932.0	0932.2	0.6	14.0			
	2950	GORK	1	S	0932.0	0932.3	2.7	12.8	6.0		
	3013	IZMI	5	S	0932.0	0932.4	6.0	9.0	5.0		
	5900	KISV	46	C	0932.0	0933.5		14.0			
	1470	POTS	3	S	0932.0	0932.5	2.0	9.0			
	3000	POTS	3	S	0932.0	0932.5	3.0	11.0			
	9300	KISV	45	C	0932.0	0933.5	15.2	12.0			
	9300	KISV	45	C	0932.0	0932.6		11.0			
	5900	KISV	46	C	0932.0	0932.6		14.0			
	15000	KISV	22	GRF	0932.0	0932.6		6.0			
	9100	GORK	2	S/F	0932.0	0933.7	6.0	12.0			

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

MARCH 1989

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	3100	CRIM	1	S	0932.1	0932.4	1.3	10.0	3.0		
	810	KRAK	8	S	0932.2	0932.5	0.5	180.0			
	430	KRAK	2	S/F	0932.3	0932.5	1.0	30.0	3.0		
	650	GORK	4	S/F	0933.2	0935.3	4.7	125.0			
	810	KRAK	4	S/F	0933.3	0935.5	4.5	180.0	70.0		
	536	ONDR	42	SER	1034.0	1050.9	64.0	131.0			
	810	KRAK	8	S	1124.8	1124.8	0.2	33.0			
	5900	KISV	2	S/F	1205.4	1206.0	2.0	2.0			
	5900	KISV	2	S/F	1227.3	1228.9	3.2	3.0			
	5900	KISV	45	C	1244.2	1246.2	3.1	4.0			
	600	HUMN	8	S	1254.3	1254.5	0.4	57.0	25.0		
	5900	KISV	2	S/F	1258.3	1258.9	1.0	4.0			
	600	HUMN	46	C	1305.3	1310.0	23.0	240.0	20.0		
	430	KRAK	8	S	1314.3	1314.5	0.3	50.0			
	600	HUMN	2	S/F	1349.0	1350.0	1.5	11.0	5.0		
	600	HUMN	4	S/F	1403.0	1406.0	4.5	107.0	19.0		
	2800	OTTA	22	GRF	1526.0	1548.0	134.0	33.9	7.0		
	245	SGMR	4	S/F	1526.0E	1527.0	5.0D	460.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	1527.0E	1527.0	1.0D	360.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1546.0E	1546.0	U	520.0			QL=1 ST=2 TYP=6
	245	SVTO	8	S	1546.0E	1546.0	U	430.0			QL=1 ST=2 TYP=3
	4995	SGMR	8	S	1547.0E	1547.0	2.0D	86.0			QL=1 ST=2 TYP=3
	8800	SGMR	8	S	1547.0E	1547.0	2.0D	120.0			QL=1 ST=2 TYP=3
	4995	SVTO	8	S	1547.0E	1547.0	1.0D	93.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	1547.0E	1547.0	1.0D	130.0			QL=1 ST=2 TYP=3
	8400	BERN	4	S/F	1547.1	1547.5	2.5	102.0			
	3200	BERN	4	S/F	1547.1	1547.5	2.5	27.0			
	11800	BERN	4	S/F	1547.1	1547.5	2.5	59.0			
	5200	BERN	4	S/F	1547.1	1547.5	2.5	93.0			
	410	SVTO	8	S	1554.0E	1555.0	1.0D	280.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	1615.0E	1615.0	1.0D	240.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	1615.0E	1615.0	U	52.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	1928.0E	1928.0	1.0D	100.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	1948.0E	1948.0	1.0D	120.0			QL=1 ST=2 TYP=3
26	200	GORK	44	NS	0433.0E		180.0D		5.0		
	204	IZMI	43	NS	0600.0		360.0	15.0			
	260	ONDR	44	NS	0650.0E		510.0D				
	127	TORN	43	NS	0720.0	0831.0	320.0D		6.0		V=1
	100	GORK	43	NS	0725.0		98.0		10.0		
	245	SGMR	43	NS	1057.0	1846.0	704.0D	63.0			QL=1 ST=2 TYP=1
	500	HIRA	42	SER	0129.7	0130.1	10.0	157.0			O
	410	LEAR	49	GB	0334.0E	0336.0	3.0D	1300.0			QL=1 ST=3 TYP=6
	610	LEAR	4	S/F	0334.0E	0336.0	3.0D	73.0			QL=1 ST=3 TYP=3
	500	HIRA	41	F	0335.8	0336.9	6.0	1100.0			O
	610	LEAR	8	S	0336.0E	0337.0	1.0D	52.0			QL=1 ST=2 TYP=3
	410	LEAR	49	GB	0336.0E	0336.0	1.0D	1300.0			QL=1 ST=2 TYP=6
	245	LEAR	49	GB	0336.0E	0337.0	2.0D	1500.0			QL=1 ST=3 TYP=6
	410	PALE	49	GB	0336.0E	0336.0	1.0D	2500.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	0336.0E	0337.0	2.0D	1800.0			QL=1 ST=3 TYP=6
	410	LEAR	8	S	0339.0E	0339.0	2.0D	200.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0339.0E	0339.0	2.0D	380.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	0339.0E	0339.0	2.0D	290.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	0339.0E	0339.0	2.0D	540.0			QL=1 ST=2 TYP=6
	9300	KISV	23	GRF	0508.4	0519.1	35.0	6.0			
	9300	KISV	23	GRF	0508.4	0531.2		5.0			
	5900	KISV	21	GRF	0517.6	0519.1	64.5	15.0			
	5900	KISV	2	S/F	0530.8	0531.1	6.3	2.0			
	9100	GORK	2	S/F	0555.8	0556.3	3.8	26.5			
	5900	KISV	2	S/F	0557.4	0558.8	3.1	4.0			
	9300	KISV	2	S/F	0604.3	0605.5	5.6	4.0			
	2950	GORK	1	S	0604.8	0605.6	2.8	5.2			
	5900	KISV	2	S/F	0605.3	0605.6	1.1	3.0			
	5900	KISV	20	GRF	0703.5	0717.3	27.0	5.0			
	5900	KISV	2	S/F	0729.0	0729.5	1.6	2.0			
	5900	KISV	2	S/F	0737.4	0738.4	3.5	2.0			
	204	IZMI	41	F	0820.0	0820.4	1.5	180.0			
	5900	KISV	2	S/F	0824.8	0825.2	2.6	5.0			
	5900	KISV	28	PRE	0841.3	0857.7	16.4	4.0			

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

MARCH 1989

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	5900	KISV	4	S/F	0854.9	0856.4	2.8	67.0			
	5900	KISV	29	PBI	0854.9	0857.7	10.0	14.0			
	9300	KISV	4	S/F	0855.2	0856.3	2.5	34.0			
	9300	KISV	29	PBI	0855.2	0857.7	7.0	2.0			
	2950	GORK	21	GRF	0855.7	0900.5	14.7	2.3			
	2950	GORK	1	S	0856.0	0856.4	0.9	4.0	2.0		
	15000	KISV	2	S/F	0856.1	0856.6	0.7	2.0			
	9300	KISV	45	C	0900.2	0901.4	2.8	2.0			
	5900	KISV	2	S/F	0907.6	0908.9	3.0	3.0			
	3100	CRIM	1	S	0956.0	0956.4	1.0	5.2	2.0		
	5900	KISV	2	S/F	1014.7	1014.9	1.0	1.0			
	5900	KISV	20	GRF	1025.0	1027.1	48.0	2.0			
	2950	GORK	21	GRF	1025.3	1026.6	66.0D	3.4			
	2950	GORK	1	S	1123.2	1123.9	2.0	2.3			
	5900	KISV	22	GRF	1123.5	1135.8	21.0	4.0			
	245	SGMR	8	S	1141.0E	1141.0	2.0D	350.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	1141.0E	1141.0	1.0D	300.0			QL=1 ST=2 TYP=3
	9300	KISV	2	S/F	1200.0	1213.1	23.8	22.0			
	9500	POTS	20	GRF	1201.0	1213.0	49.0	18.0			
	3000	POTS	20	GRF	1201.0	1213.0	54.0	35.0			
	1470	POTS	20	GRF	1201.0	1213.0	54.0	22.0			
	5900	KISV	4	S/F	1202.8	1213.0	19.0	35.0			
	5900	KISV	29	PBI	1202.8	1221.8	38.2	10.0			
	430	KRAK	2	S/F	1205.2	1205.8	1.5	10.0	2.0		
	430	KRAK	2	S/F	1208.2	1208.9	1.2	13.0	2.0		
	430	KRAK	46	C	1241.1	1255.4	19.5	73.0			
	245	SGMR	8	S	1243.0E	1244.0	2.0D	130.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	1243.0E	1244.0	1.0D	110.0			QL=1 ST=2 TYP=3
	9300	KISV	2	S/F	1247.3	1247.8	1.3	5.0			
	5900	KISV	2	S/F	1247.6	1247.9	0.8	3.0			
	245	SGMR	8	S	1250.0E	1250.0	2.0D	200.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1253.0E	1253.0	1.0D	540.0			QL=1 ST=2 TYP=6
	245	SVTO	8	S	1253.0E	1253.0	2.0D	430.0			QL=1 ST=2 TYP=3
	245	SGMR	8	S	1255.0E	1255.0	U	120.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	1255.0E	1255.0	U	240.0			QL=1 ST=2 TYP=3
	810	KRAK	8	S	1255.0	1255.1	0.3	218.0			
	5900	KISV	2	S/F	1257.0	1258.9	2.8	3.0			
	536	ONDR	46	C	1304.5	1309.4	26.0	234.0			
	410	SGMR	49	GB	1305.0E	1310.0	7.0D	3200.0			QL=1 ST=2 TYP=6
	410	SVTO	49	GB	1305.0E	1310.0	8.0D	6100.0			QL=1 ST=2 TYP=7
	245	SGMR	49	GB	1305.0E	1311.0	11.0D	4800.0			QL=1 ST=2 TYP=7
	1470	POTS	45	C	1305.0	1309.5	25.0	306.0			
	3000	POTS	45	C	1305.0	1309.5	35.0	455.0			
	234	POTS	45	C	1305.6	1310.6	15.0	1600.0			
	1415	SGMR	4	S/F	1306.0E	1309.0	6.0D	290.0			QL=1 ST=2 TYP=3
	610	SGMR	4	S/F	1306.0E	1309.0	7.0D	480.0			QL=1 ST=2 TYP=3
	245	SVTO	49	GB	1306.0E	1311.0	13.0D	4200.0			QL=1 ST=2 TYP=7
	4995	SGMR	4	S/F	1308.0E	1309.0	4.0D	390.0			QL=1 ST=2 TYP=3
	2695	SGMR	4	S/F	1308.0E	1309.0	4.0D	290.0			QL=1 ST=2 TYP=3
	2695	SVTO	4	S/F	1308.0E	1309.0	4.0D	300.0			QL=1 ST=2 TYP=3
	1415	SVTO	4	S/F	1308.0E	1309.0	4.0D	260.0			QL=1 ST=2 TYP=3
	4995	SVTO	4	S/F	1308.0E	1309.0	652.0D	390.0			QL=1 ST=1 TYP=3
	2800	OTTA	3	S	1308.5	1310.0	13.0	382.0	115.0		
	9500	POTS	45	C	1308.5	1310.1	22.0	347.0			
	8800	SGMR	4	S/F	1309.0E	1309.0	3.0D	410.0			QL=1 ST=2 TYP=3
	15400	SGMR	4	S/F	1309.0E	1309.0	4.0D	250.0			QL=1 ST=2 TYP=3
	15400	SVTO	4	S/F	1309.0E	1309.0	7.0D	300.0			QL=1 ST=2 TYP=3
	30	POTS	45	C	1309.4	1322.7	20.0	12000.0D			
	33	UPIC	48	C	1309.5		16.0				
	245	SGMR	49	GB	1316.0E	1316.0	3.0D	1200.0			QL=1 ST=2 TYP=6
	9500	POTS	40	F	1400.0	1404.2	9.0	50.0			
	536	ONDR	42	SER	1400.0	1405.4	7.5	188.0			
	3000	POTS	40	F	1401.0	1404.2	9.0	8.0			
	1470	POTS	40	F	1401.0	1403.5	8.0	7.0			
	30	POTS	4	S/F	1401.6	1404.8	6.9	7000.0			
	33	UPIC	46	C	1402.5	1404.5	5.0				
	234	POTS	41	F	1402.6	1405.0	5.0	150.0			
	410	SGMR	4	S/F	1403.0E	1405.0	3.0D	220.0			QL=1 ST=2 TYP=5
	610	SGMR	4	S/F	1403.0E	1405.0	3.0D	160.0			QL=1 ST=2 TYP=3

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

MARCH 1989

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	245	SGMR	4	S/F	1403.0E	1405.0	3.0D	380.0			QL=1 ST=2 TYP=5
	410	SVTO	4	S/F	1403.0E	1405.0	3.0D	230.0			QL=1 ST=2 TYP=5
	245	SVTO	4	S/F	1403.0E	1405.0	3.0D	300.0			QL=1 ST=2 TYP=5
	8800	SGMR	8	S	1404.0E	1404.0	U	75.0			QL=1 ST=2 TYP=3
	8800	SVTO	8	S	1404.0E	1404.0	U	110.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	1948.0E	1948.0	U	310.0			QL=1 ST=2 TYP=3
	245	SGMR	8	S	1948.0E	1948.0	U	300.0			QL=1 ST=2 TYP=3
27	260	ONDR	44	NS	0640.0E		520.0D				
	127	TORN	43	NS	0800.0		260.0D		7.0		V=0
	245	LEAR	49	GB	0456.0E	0458.0	2.0D	860.0			QL=1 ST=3 TYP=6
	245	LEAR	49	GB	0458.0E	0458.0	U	860.0			QL=1 ST=2 TYP=6
	5900	KISV	2	S/F	0537.1	0537.7	0.8	2.0			
	610	SVTO	20	GRF	0539.0E	0548.0	14.0D	77.0			QL=1 ST=2 TYP=2
	245	LEAR	4	S/F	0543.0E	0546.0	3.0D	37.0			QL=1 ST=2 TYP=3
	410	LEAR	4	S/F	0544.0E	0546.0	3.0D	71.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	0544.0E	0546.0	2.0D	63.0			QL=1 ST=2 TYP=5
	245	SVTO	8	S	0546.0E	0546.0	U	300.0			QL=1 ST=2 TYP=3
	5900	KISV	2	S/F	0604.6	0604.9	0.7	1.0			
	9300	KISV	22	GRF	0633.2	0641.1	10.0	4.0			
	9300	KISV	2	S/F	0645.5	0646.4	2.2	2.0			
	9300	KISV	2	S/F	0651.7	0651.9	0.4	5.0			
	9100	GORK	1	S	0651.8	0651.9	0.8	5.1			
	2950	GORK	20	GRF	0712.9	0721.5	30.7	3.1			
	9300	KISV	20	GRF	0720.0	0726.7	11.0	4.0			
	5900	KISV	26	FAL	0725.1	0726.1	1.2	4.0			
	9300	KISV	20	GRF	0757.2	0804.0	21.0	7.0			
	536	ONDR	42	SER	0844.5	0852.4	31.0	74.0			
	430	KRAK	42	SER	0845.5	0907.0	23.5	70.0			
	650	GORK	4	S/F	0851.9	0852.4	0.6	20.0			
	2950	GORK	1	S	0852.1	0852.3	0.5	4.9	2.4		
	600	HUMN	1	S	0852.5	0852.8	0.5	25.0	10.0		
	5900	KISV	45	C	0856.3	0857.3	7.9	6.0			
	5900	KISV	45	C	0856.3	0900.4		5.0			
	9300	KISV	22	GRF	0856.9	0858.9	12.7	5.0			
	2950	GORK	2	S/F	0858.9	0859.9	2.4	9.1			
	950	GORK	1	S	0859.7	0859.9	1.7	3.5			
	650	GORK	4	S/F	0859.7	0859.9	0.9	9.5			
	245	LEAR	8	S	0900.0E	0900.0	U	66.0			QL=1 ST=2 TYP=3
	204	IZMI	41	F	0906.0	0906.5	2.0	480.0			
	410	LEAR	8	S	0907.0E	0907.0	U	68.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0907.0E	0907.0	U	220.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	0907.0E	0907.0	U	63.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	0907.0E	0907.0	U	250.0			QL=1 ST=2 TYP=3
	410	SVTO	49	GB	1014.0E	1015.0	2.0D	760.0			QL=1 ST=2 TYP=6
	430	KRAK	42	SER	1014.0	1015.0	10.5	130.0D			
	536	ONDR	4	S/F	1014.0	1014.9	2.5	109.0			
	5900	KISV	2	S/F	1014.2	1015.3	1.6	3.0			
	650	GORK	46	C	1014.3	1015.0		11.0			
	650	GORK	46	C	1014.3	1014.5	1.3	20.0			
	950	GORK	2	S/F	1014.4	1015.4	1.6	24.0			
	2950	GORK	1	S	1014.9	1015.2	1.2	2.9	1.4		
	600	HUMN	2	S/F	1015.0	1015.8	1.5	20.0	5.0		
	5900	KISV	2	S/F	1019.3	1022.5	6.2	4.0			
	410	SVTO	8	S	1033.0E	1033.0	U	240.0			QL=1 ST=2 TYP=3
	5900	KISV	29	PBI	1040.8	1052.3	16.0	7.0			
	5900	KISV	2	S/F	1042.8	1047.7	9.5	21.0			
	9300	KISV	2	S/F	1045.1	1047.3	5.0	8.0			
	9100	GORK	22	GRF	1045.3	1144.8	78.0D	18.0			
	536	ONDR	42	SER	1114.8	1119.8	6.0	49.0			
	5900	KISV	45	C	1115.5	1120.2	8.1	11.0			
	5900	KISV	45	C	1115.5	1117.4		5.0			
	950	GORK	2	S/F	1116.6	1117.0	1.9	10.0			
	100	GORK	8	S	1117.6	1117.7	0.2	115.0			
	650	GORK	4	S/F	1118.5	1119.9	2.7	20.0			
	410	SGMR	8	S	1119.0E	1119.0	2.0D	610.0			QL=1 ST=2 TYP=3
	410	SVTO	8	S	1119.0E	1119.0	1.0D	450.0			QL=1 ST=2 TYP=3
	600	HUMN	2	S/F	1119.0	1120.5	3.0	14.0	5.0		
	1470	POTS	3	S	1119.5	1120.0	3.5	8.0			

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

MARCH 1989

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	3000	POTS	1	S	1119.5	1120.5	2.0	6.0			
	9300	KISV	2	S/F	1119.7	1120.1	1.0	5.0			
	245	SGMR	8	S	1120.0E	1120.0	1.0D	620.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	1120.0E	1120.0	U	410.0			QL=1 ST=2 TYP=3
	2950	GORK	21	GRF	1145.0	1251.0	75.0D	5.1			
	5900	KISV	2	S/F	1147.4	1151.5	8.0	8.0			
	9300	KISV	2	S/F	1147.5	1150.0	5.6	6.0			
	245	SGMR	8	S	1149.0E	1150.0	2.0D	800.0			QL=1 ST=2 TYP=3
	245	SVTO	49	GB	1149.0E	1150.0	1.0D	630.0			QL=1 ST=3 TYP=6
	234	POTS	41	F	1149.5	1150.0	2.3	330.0			
	100	GORK	8	S	1149.8	1150.2	0.6	170.0			
	204	IZMI	41	F	1150.0	1150.4	2.0	9000.0			
	5900	KISV	2	S/F	1206.6	1209.0	5.8	4.0			
	410	SVTO	49	GB	1208.0E	1208.0	1.0D	500.0			QL=1 ST=2 TYP=6
	810	KRAK	4	S/F	1208.2	1208.8	4.0	67.0	12.0		
	600	HUMN	2	S/F	1209.0	1209.2	3.5	28.0	4.0		
	245	SGMR	49	GB	1210.0E	1210.0	U	600.0			QL=1 ST=2 TYP=6
	245	SVTO	8	S	1210.0E	1210.0	1.0D	490.0			QL=1 ST=2 TYP=3
	1470	POTS	3	S	1210.0	1210.5	2.0	8.0			
	3100	CRIM	1	S	1210.1	1210.5	1.0	3.0	1.0		
	3000	POTS	1	S	1210.5	1210.8	1.0	4.0			
	2950	GORK	1	S	1219.8	1220.5	0.8	8.0			
	5900	KISV	22	GRF	1237.7	1239.1	11.7	3.0			
	245	SGMR	8	S	1314.0E	1314.0	1.0D	160.0			QL=1 ST=2 TYP=3
	245	SVTO	8	S	1314.0E	1314.0	1.0D	130.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	1317.0E	1317.0	1.0D	360.0			QL=1 ST=2 TYP=3
	536	ONDR	8	S	1325.9	1326.2	0.8	173.0			
	9500	POTS	3	S	1445.0	1446.2	5.0	43.0			
	3000	POTS	3	S	1445.0	1446.7	5.0	22.0			
	2800	OTTA	3	S	1446.0	1447.0	23.0	18.9	4.0		
	245	PALE	49	GB	1730.0E	1731.0	2.0D	2400.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1730.0E	1731.0	2.0D	1900.0			QL=1 ST=2 TYP=6
	610	PALE	8	S	1731.0E	1731.0	1.0D	130.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	1731.0E	1731.0	1.0D	490.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	1731.0E	1731.0	1.0D	420.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	1731.0E	1731.0	U	140.0			QL=1 ST=3 TYP=3
	245	PALE	49	GB	1734.0E	1734.0	1.0D	1500.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	1734.0E	1734.0	1.0D	130.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1734.0E	1734.0	1.0D	1200.0			QL=1 ST=3 TYP=6
	410	PALE	8	S	1902.0E	1903.0	1.0D	250.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1902.0E	1903.0	1.0D	1200.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	1902.0E	1903.0	1.0D	1200.0			QL=1 ST=2 TYP=6
	410	SGMR	8	S	1902.0E	1902.0	1.0D	77.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	1909.0E	1909.0	1.0D	4600.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	1909.0E	1909.0	1.0D	340.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1909.0E	1909.0	1.0D	5600.0			QL=1 ST=2 TYP=6
	245	PALE	49	GB	1916.0E	1916.0	1.0D	4700.0			QL=1 ST=2 TYP=6
	410	PALE	8	S	1916.0E	1916.0	U	90.0			QL=1 ST=2 TYP=3
	245	SGMR	49	GB	1916.0E	1916.0	1.0D	4400.0			QL=1 ST=2 TYP=6
	245	PALE	8	S	1943.0E	1944.0	1.0D	410.0			QL=1 ST=2 TYP=3
	245	SGMR	8	S	1943.0E	1944.0	1.0D	470.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	2035.5	2036.5	17.0	16.3	3.0		
	245	PALE	49	GB	2059.0E	2059.0	3.0D	1000.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2059.0E	2059.0	3.0D	1300.0			QL=1 ST=2 TYP=6
	200	HIRA	41	F	2059.7	2101.7	3.5	350.0			O
	200	HIRA	8	S	2222.6.	2222.7	0.7	6400.0			O
	500	HIRA	42	SER	2222.9	2223.0	5.1	55.0			O
	410	PALE	8	S	2223.0E	2223.0	U	290.0			QL=1 ST=2 TYP=3
	245	PALE	49	GB	2223.0E	2223.0	U	680.0			QL=1 ST=2 TYP=6
	410	SGMR	49	GB	2223.0E	2224.0	1.0D	1700.0			QL=1 ST=2 TYP=6
	245	PALE	8	S	2227.0E	2227.0	1.0D	110.0			QL=1 ST=2 TYP=3
	410	PALE	8	S	2227.0E	2227.0	1.0D	56.0			QL=1 ST=2 TYP=3
	200	HIRA	8	S	2237.9	2238.0	0.5	1300.0			O
	245	PALE	49	GB	2238.0E	2238.0	U	1100.0			QL=1 ST=2 TYP=6
	245	SGMR	49	GB	2238.0E	2238.0	U	730.0			QL=1 ST=2 TYP=6
	1415	LEAR	8	S	2315.0E	2315.0	U	57.0			QL=1 ST=2 TYP=3
	200	HIRA	46	C	2316.9	2317.5	1.0	2100.0			O
	245	LEAR	8	S	2317.0E	2317.0	1.0D	270.0			QL=1 ST=2 TYP=3

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

MARCH 1989

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	260	ONDR	44	NS	0640.0E		520.0D				
	245	SGMR	43	NS	1743.0	2117.0	300.0D	69.0			QL=1 ST=2 TYP=1
	2695	LEAR	8	S	0318.0E	0318.0	U	33.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0318.0E	0318.0	U	25.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0417.0E	0417.0	1.0D	86.0			QL=1 ST=2 TYP=3
	245	PALE	8	S	0417.0E	0417.0	1.0D	150.0			QL=1 ST=2 TYP=3
	2950	GORK	21	GRF	0549.2	0752.5	300.0	10.7			
	245	SVTO	8	S	0644.0E	0645.0	1.0D	53.0			QL=1 ST=2 TYP=3
	200	HIRA	8	S	0715.6	0716.2	0.9	840.0			O
	200	GORK	8	S	0715.8	0716.4	1.4	140.0			
	245	SVTO	8	S	0716.0E	0716.0	U	400.0			QL=1 ST=2 TYP=3
	100	GORK	8	S	0716.1	0716.5	0.9	1800.0			
	234	POTS	4	S/F	0716.1	0716.6	1.0	190.0			
	204	IZMI	5	S	0716.2	0716.5	1.0	650.0	500.0		
	9100	GORK	20	GRF	0749.1	0815.1	58.4	8.3			
	410	LEAR	8	S	0814.0E	0815.0	1.0D	50.0			QL=1 ST=2 TYP=3
	810	KRAK	8	S	0901.0	0901.1	0.3	9.0			
	536	ONDR	42	SER	1001.0	1001.5	40.8	97.0			
	9300	KISV	23	GRF	1020.9	1024.0	15.6	6.0			
	430	KRAK	46	C	1022.0	1031.2	27.5	30.0	2.0		
	5900	KISV	23	GRF	1022.0	1024.5	17.5	4.0			
	9100	GORK	21	GRF	1022.1	1037.1	47.5	9.0			
	5900	KISV	2	S/F	1028.8	1029.1	1.1	2.0			
	9300	KISV	2	S/F	1028.8	1029.3	1.1	3.0			
	950	GORK	23	GRF	1029.0	1035.4	23.5	3.0			
	127	TORN	49	GB	1029.0	1034.5	13.0	1500.0	100.0		
	600	HUMN	27	RF	1029.0	1032.5	29.0	6.0	2.0		
	127	TORN	27	RF	1029.0	1054.8	45.0	200.0	10.0		
	204	IZMI	41	F	1030.0	1035.0	15.0	4000.0			
	9500	POTS	3	S	1030.5	1031.5	3.5	41.0			
	1470	POTS	4	S/F	1030.5	1031.5	7.5	16.0			
	650	GORK	45	C	1030.6	1032.0	6.9	6.5			
	9100	GORK	4	S/F	1030.6	1031.4	2.8	50.0			
	9300	KISV	4	S/F	1030.6	1031.4	3.4	47.0			
	5900	KISV	2	S/F	1030.6	1031.4	3.3	22.0			
	650	GORK	45	C	1030.6	1035.5		3.5			
	810	KRAK	27	RF	1030.7	1032.5	6.0	6.0	3.0		
	2950	GORK	4	S/F	1030.7	1031.6	3.5	12.1			
	950	GORK	5	S	1030.8	1032.3	3.6	8.0			
	3100	CRIM	1	S	1030.8	1031.5	4.0	9.0	3.0		
	234	POTS	41	F	1030.8	1033.8	6.8	825.0			
	15000	KISV	2	S/F	1030.9	1031.4	3.0	39.0			
	3000	POTS	3	S	1031.0	1032.0	4.0	11.0			
	245	SVTO	49	GB	1031.0E	1031.0	1.0D	510.0			QL=1 ST=2 TYP=6
	100	GORK	41	F	1031.0	1031.3	14.0	490.0			
	100	GORK	41	F	1031.0	1038.5		4600.0			
	100	GORK	41	F	1031.0	1034.7		1300.0			
	3013	IZMI	5	S	1031.6	1032.0	3.5	11.0	5.0		
	33	UPIC	46	C	1031.6	1032.6	3.9				
	245	SVTO	49	GB	1033.0E	1034.0	3.0D	6100.0			QL=1 ST=2 TYP=6
	200	GORK	4	S/F	1034.0	1034.7	2.2	760.0			
	15000	KISV	2	S/F	1041.6	1043.2	2.8	9.0			
	33	UPIC	45	C	1042.0	1042.1	1.2				
	9100	GORK	1	S	1042.5	1043.2	1.2	7.4			
	100	GORK	46	C	1048.9	1049.1	1.1	1700.0			
	100	GORK	46	C	1048.9	1049.4		1600.0			
	2950	GORK	20	GRF	1125.8	1132.0	22.5	1.7			
	5900	KISV	23	GRF	1232.0	1233.6	26.0	11.0			
	9300	KISV	23	GRF	1232.2	1233.2	17.9	14.0			
	610	SGMR	8	S	1252.0E	1253.0	1.0D	54.0			QL=1 ST=2 TYP=3
	2800	OTTA	4	S/F	1925.0	1929.0	26.0	62.1	18.0		
	2695	PALE	8	S	1927.0E	1928.0	2.0D	58.0			QL=1 ST=2 TYP=3
	2695	SGMR	4	S/F	1927.0E	1927.0	3.0D	60.0			QL=1 ST=2 TYP=3
	2800	OTTA	24	R	1951.0	1951.0	360.0D	7.5	4.0		
	200	HIRA	42	SER	2116.6	2117.2	3.0	115.0			O
	200	HIRA	46	C	2219.8	2220.5	2.0	84.0			O
	245	PALE	8	S	2220.0E	2220.0	1.0D	67.0			QL=1 ST=2 TYP=3
29	200	GORK	44	NS	0418.0E		170.0D		5.0		

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
29	260	ONDR	44	NS	0640.0E	1259.7	520.0D	193.0			
	200	HIRA	44	NS	2030.0E	0423.0	740.0D	35.0	10.0		O
	4995	LEAR	8	S	0246.0E	0247.0	1.0D	36.0			QL=1 ST=2 TYP=3
	8800	LEAR	8	S	0246.0E	0247.0	1.0D	70.0			QL=1 ST=2 TYP=3
	650	GORK	5	S	0518.7	0519.1	0.6	7.0			
	650	GORK	8	S	0601.4	0601.5	0.3	20.0			
	2950	GORK	20	GRF	0659.3	0704.1	15.8	4.2			
	204	IZMI	5	S	0933.0	0933.5	0.9	150.0	70.0		
	536	ONDR	41	F	1022.0	1025.5	66.0	39.0			
	950	GORK	2	S/F	1033.3	1034.3	3.7	1.5			
	810	KRAK	8	S	1038.0	1038.0	0.2	6.0			
	245	SGMR	49	GB	1259.0E	1300.0	1.0D	820.0			QL=1 ST=2 TYP=6
	245	SVTO	49	GB	1259.0E	1300.0	1.0D	560.0			QL=1 ST=2 TYP=6
	234	POTS	4	S/F	1259.7	1300.0	1.8	300.0			
	410	PALE	8	S	1859.0E	1859.0	1.0D	150.0			QL=1 ST=2 TYP=3
	410	SGMR	4	S/F	1859.0E	1859.0	301.0D	190.0			QL=1 ST=1 TYP=3
	245	LEAR	8	S	2332.0E	2332.0	2.0D	60.0			QL=1 ST=2 TYP=3
30	245	LEAR	44	NS	0007.0E	0007.0	602.0D	120.0			QL=1 ST=2 TYP=1
	245	PALE	44	NS	0354.0E	0416.0	35.0D	120.0			QL=1 ST=2 TYP=1
	200	GORK	44	NS	0418.0E		180.0D		10.0		
	245	SVTO	44	NS	0456.0E	0631.0	714.0D	120.0			QL=1 ST=2 TYP=1
	221	ABST	43	NS	0500.0		240.0		37.0		
	204	IZMI	43	NS	0600.0		360.0	40.0			
	260	ONDR	44	NS	0640.0E	0909.8	520.0D	78.0			
	430	KRAK	44	NS	0711.5E	1301.5	360.0D	100.0D	2.0		
	127	TORN	43	NS	0755.0		497.0		13.0		V=1
	245	SGMR	44	NS	1135.0E	1157.0	49.0D	77.0			QL=1 ST=3 TYP=1
	245	SGMR	44	NS	1135.0E	1157.0	745.0D	77.0			QL=1 ST=3 TYP=1
	245	SGMR	44	NS	1318.0E	1325.0	642.0D	100.0			QL=1 ST=3 TYP=1
	200	HIRA	44	NS	2027.0E	0500.0	770.0D	43.0	22.0		WL
	245	PALE	8	S	0007.0E	0007.0	1.0D	200.0			QL=1 ST=2 TYP=3
	500	HIRA	27	RF	0344.0	0410.0	95.0	8.0	4.0		O
	500	HIRA	42	SER	0349.8	0350.0	17.0	180.0			O
	610	LEAR	8	S	0405.0E	0406.0	2.0D	61.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	0405.0E	0406.0	1.0D	54.0			QL=1 ST=2 TYP=3
	610	PALE	8	S	0406.0E	0406.0	U	85.0			QL=1 ST=2 TYP=3
	650	GORK	21	GRF	0740.1	0754.6	54.9	5.0			
	9100	GORK	1	S	0810.2	0811.1	3.5	4.8			
	9300	KISV	2	S/F	0810.2	0810.9	2.2	4.0			
	5900	KISV	2	S/F	0810.4	0810.9	2.3	4.0			
	2950	GORK	45	C	0810.5	0811.4		4.7			
	2950	GORK	45	C	0810.5	0810.9	1.4	5.9			
	810	KRAK	8	S	0813.0	0813.4	0.4	31.0			
	100	GORK	41	F	0815.0	0816.0		450.0			
	100	GORK	41	F	0815.0	0815.3	13.0	380.0			
	100	GORK	41	F	0815.0	0827.9		130.0			
	950	GORK	45	C	0824.0	0828.1		2.0			
	950	GORK	45	C	0824.0	0825.2	6.0	4.0			
	650	GORK	46	C	0824.0	0825.2	5.3	6.5			
	650	GORK	46	C	0824.0	0828.9		4.5			
	810	KRAK	8	S	0825.0	0825.0	0.2	15.0			
	810	KRAK	8	S	0832.5	0832.5	0.3	12.0			
	536	ONDR	42	SER	1300.6	1301.2	3.0	126.0			
	1415	SGMR	8	S	1301.0E	1301.0	U	80.0			QL=1 ST=2 TYP=3
	410	SGMR	8	S	1301.0E	1301.0	U	170.0			QL=1 ST=2 TYP=3
	610	SGMR	8	S	1301.0E	1301.0	U	160.0			QL=1 ST=2 TYP=3
	4995	SGMR	8	S	1301.0E	1301.0	U	80.0			QL=1 ST=2 TYP=3
	810	KRAK	8	S	1301.2	1301.3	0.7	107.0			
	245	PALE	8	S	1811.0E	1811.0	U	370.0			QL=1 ST=2 TYP=3
	245	LEAR	8	S	2355.0E	2356.0	2.0D	100.0			QL=1 ST=2 TYP=3
31	245	LEAR	44	NS	0001.0E	0043.0	1439.0D	120.0			QL=1 ST=1 TYP=1
	245	LEAR	44	NS	0001.0E	0001.0	1439.0D	94.0			QL=1 ST=1 TYP=1
	200	GORK	44	NS	0415.0E		180.0D		10.0		
	245	SVTO	44	NS	0455.0E	0455.0	1145.0D	84.0			QL=1 ST=3 TYP=1
	221	ABST	43	NS	0500.0		240.0		33.0		
	410	SVTO	44	NS	0549.0E	0558.0	12.0D	64.0			QL=1 ST=2 TYP=1
	204	IZMI	43	NS	0600.0		360.0	30.0			

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

MARCH 1989

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
31	260	ONDR	44	NS	0640.0E	1337.5	520.0D	60.0			
	430	KRAK	44	NS	0707.0E	1222.5	434.5D	14.0	2.0		
	127	TORN	43	NS	0946.0		414.0		7.0		V=1
	245	SGMR	44	NS	1105.0E	1340.0	702.0D	180.0			QL=1 ST=2 TYP=1
	410	SVTO	44	NS	1119.0E	1127.0	30.0D	60.0			QL=1 ST=2 TYP=1
	234	POTS	43	NS	1307.5	1420.0	117.0D	16.0			
	200	HIRA	44	NS	2027.0E		770.0D		22.0U		WL
	245	LEAR	43	NS	2248.0	0826.0	679.0D	320.0			QL=1 ST=2 TYP=1
	245	PALE	44	NS	2340.0E	0119.0	290.0D	240.0			QL=1 ST=2 TYP=1
	200	HIRA	8	S	0020.5	0020.7	0.8	475.0			ML
	650	GORK	22	GRF	0421.0E	0456.5	211.7D	12.0			
	200	GORK	41	F	0440.6	0443.5		230.0			
	200	GORK	41	F	0440.6	0440.7	3.6	145.0			
	500	HIRA	46	C	0454.3	0457.5	4.4	37.0			WL
	9100	GORK	22	GRF	0456.6	0506.0	15.3	11.5			
	2950	GORK	1	S	0458.0	0458.4	2.0	9.6	4.5		
	3100	CRIM	1	S	0458.2	0458.4	1.0	7.0	2.0		
	5900	KISV	2	S/F	0627.5	0627.8	1.2	4.0			
	9300	KISV	2	S/F	0627.5	0627.8	1.8	5.0			
	245	LEAR	4	S/F	0648.0E	0650.0	3.0D	62.0			QL=1 ST=2 TYP=3
	200	GORK	46	C	0648.0	0649.2	5.0	175.0			
	200	GORK	46	C	0648.0	0651.7		150.0			
	100	HIRA	41	F	0648.2	0648.8	4.1	260.0			
	100	GORK	46	C	0648.8	0649.5	3.2	370.0			
	100	GORK	46	C	0648.8	0651.7		310.0			
	3100	CRIM	1	S	0650.8	0651.5	3.0	5.0	2.0		
	2950	GORK	1	S	0651.2	0651.5	1.2	3.8	1.9		
	245	SGMR	8	S	1114.0E	1114.0	U	200.0			QL=1 ST=2 TYP=3
	536	ONDR	42	SER	1221.7	1222.6	1.5	52.0			

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

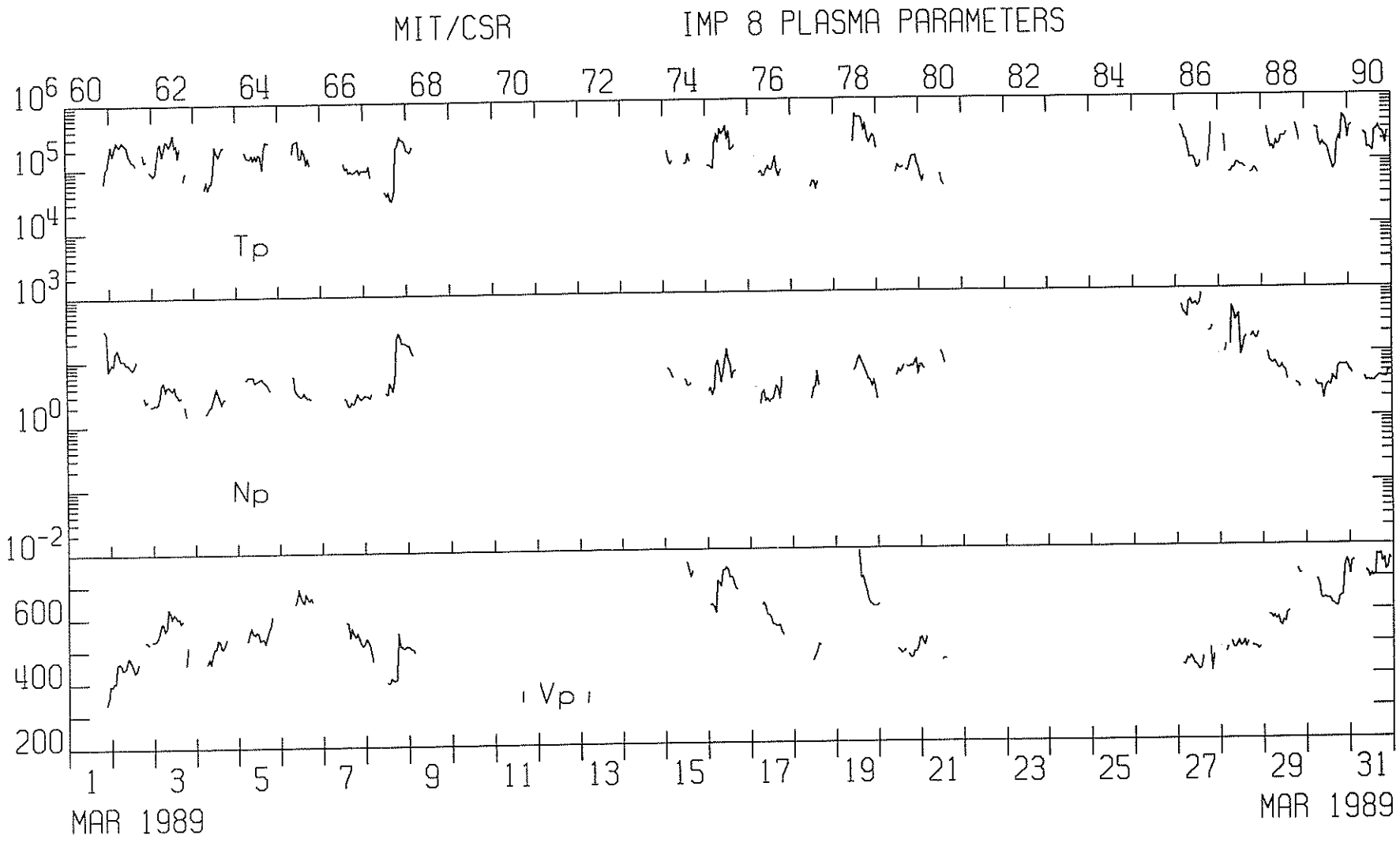
Explanation of Type Code:

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	40 Rise Only	16A Fall A	27AF Rise and Fall AF
21A Simple 3A GRF	40F Rise Only F	260 Fall Only	31A Post Burst Decrease A
2A Simple 1AF	4P Post Rise	26F Fall F	32A Absorption A

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.

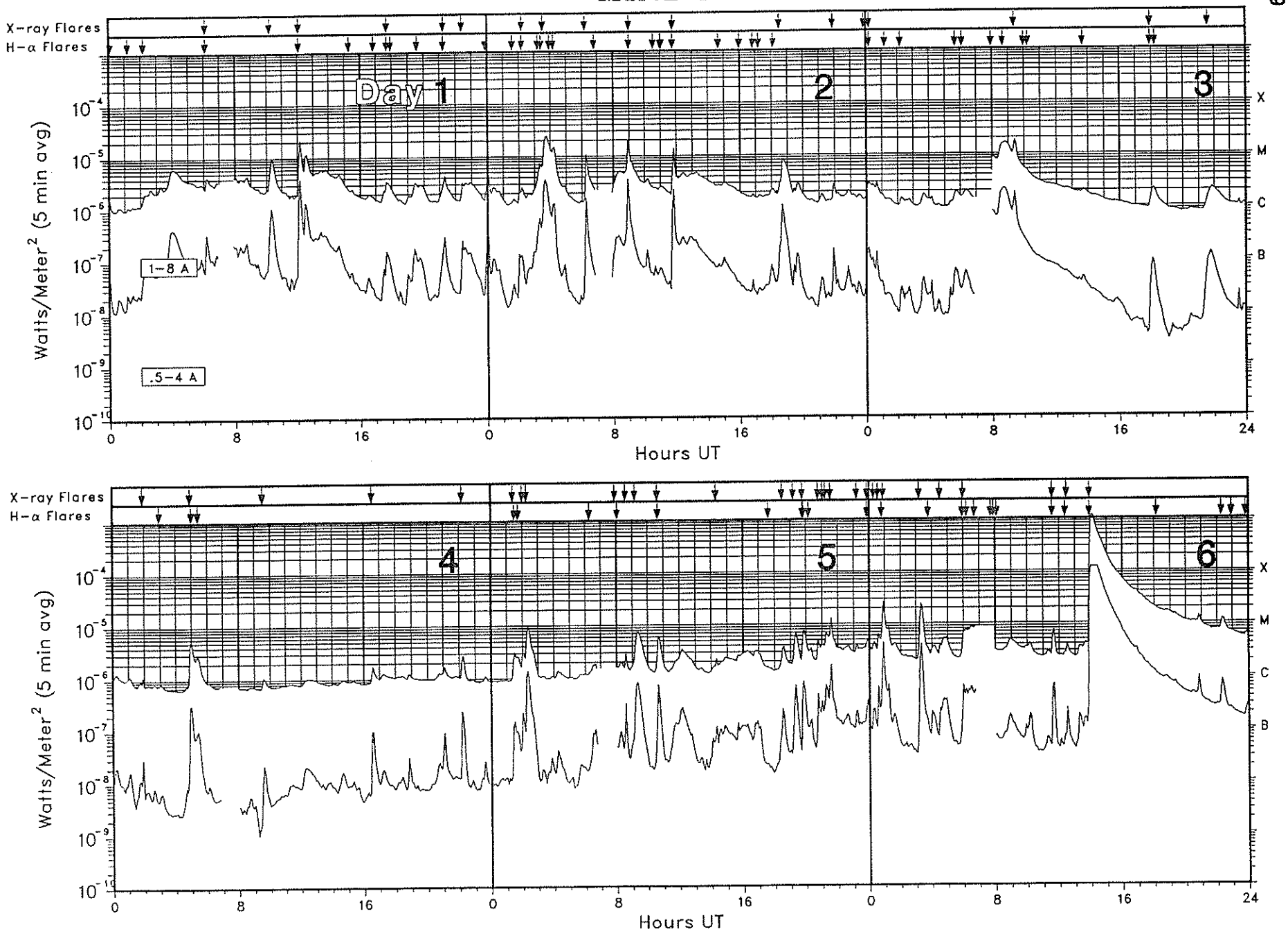
IMP 8 SOLAR WIND PLASMA
MARCH 1989



IMP 8 MIT PRELIMINARY ONE-HOUR AVERAGES

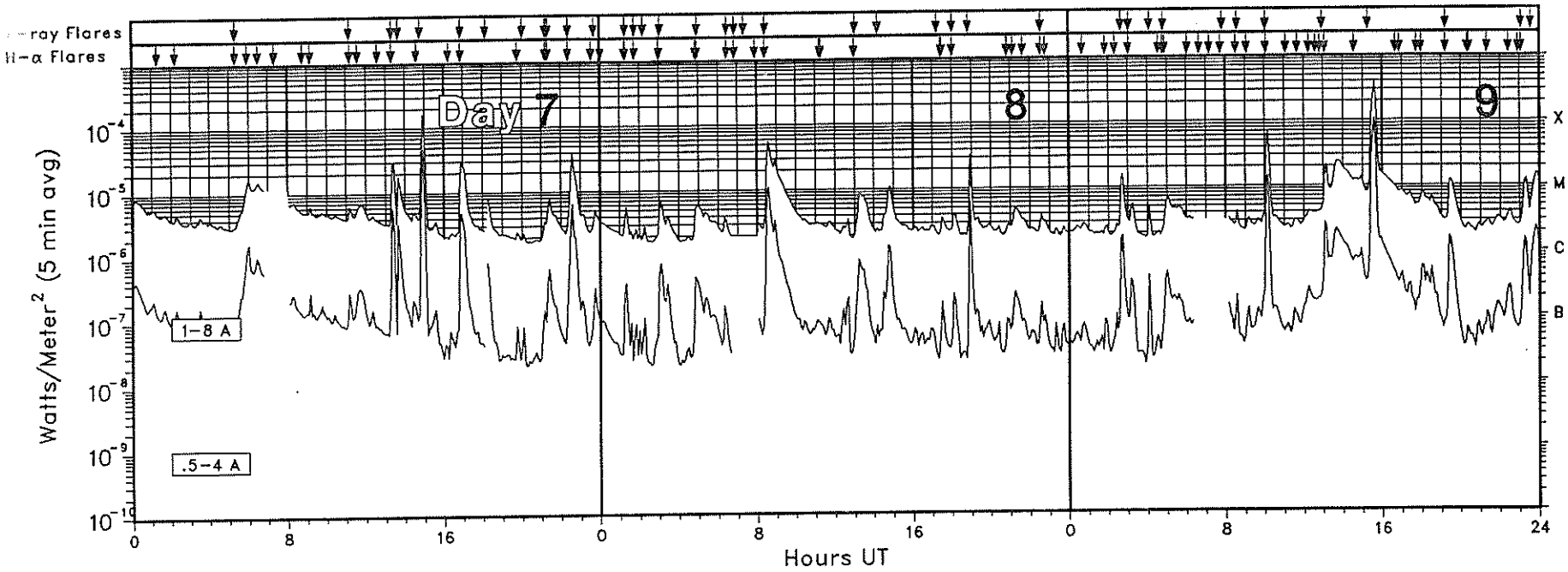
GOES-7 X-RAY DETECTOR

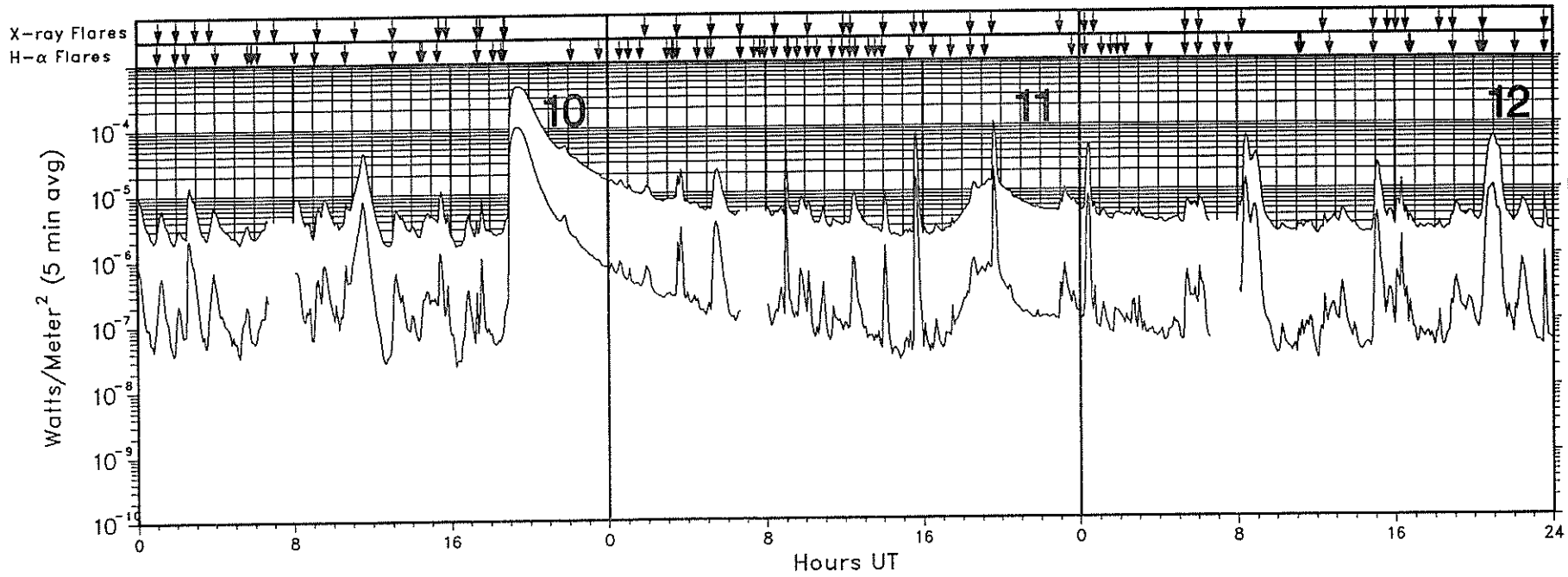
March 1989



GOES-7 X-RAY DETECTOR

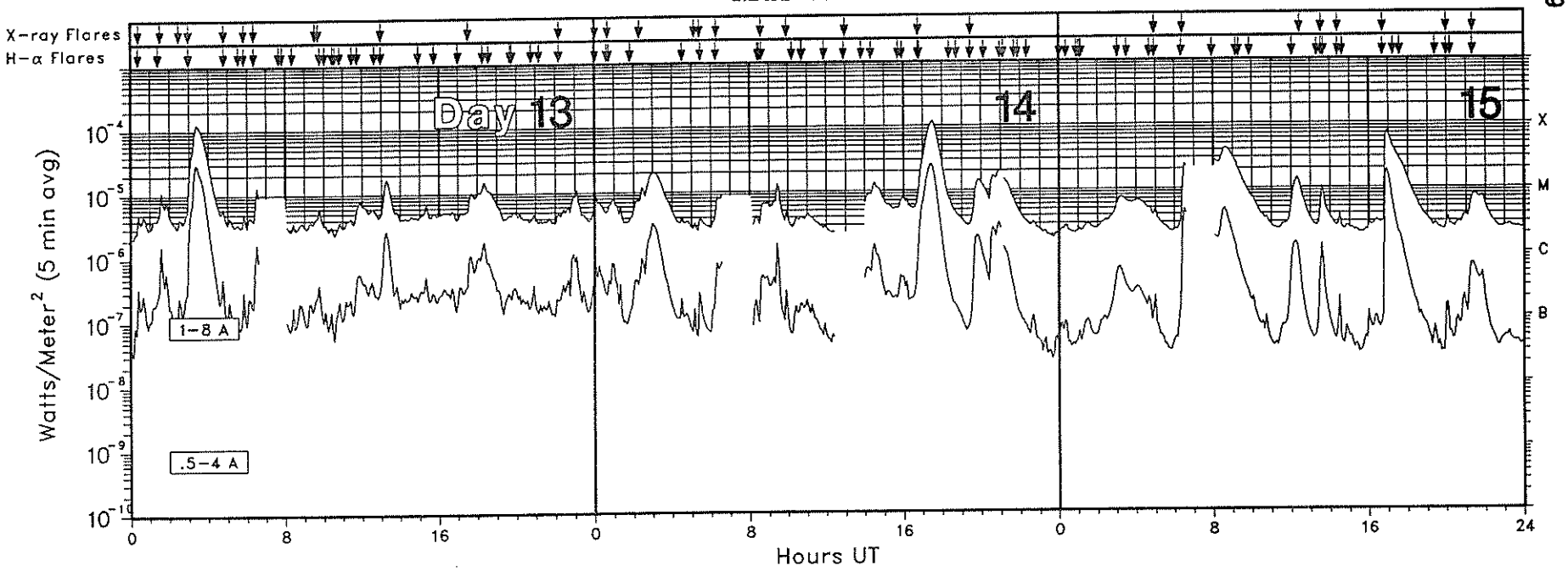
March 1989

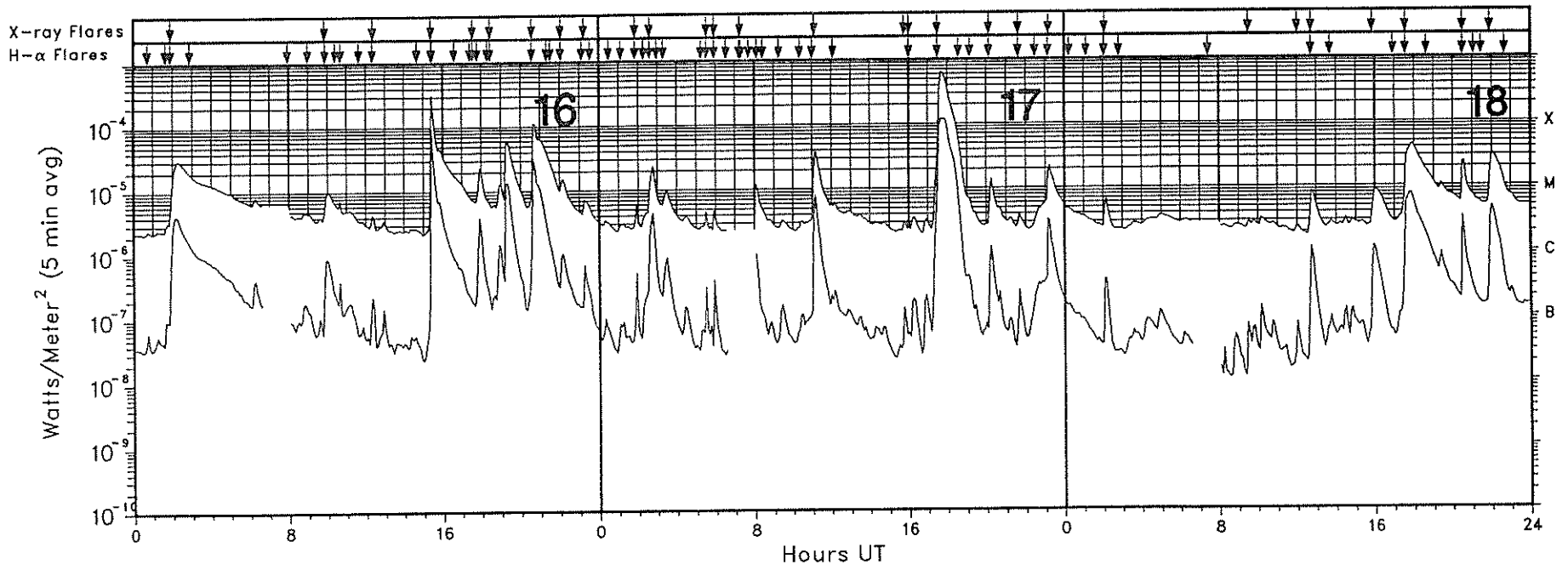




GOES-7 X-RAY DETECTOR

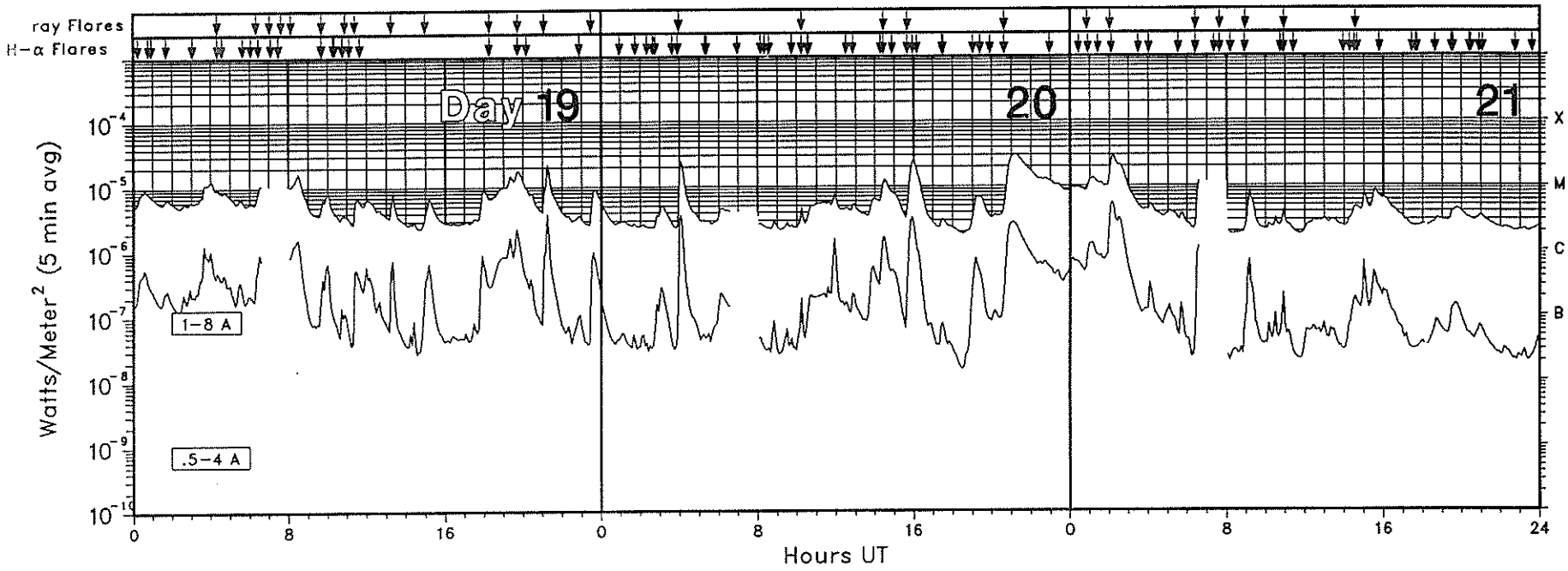
March 1989

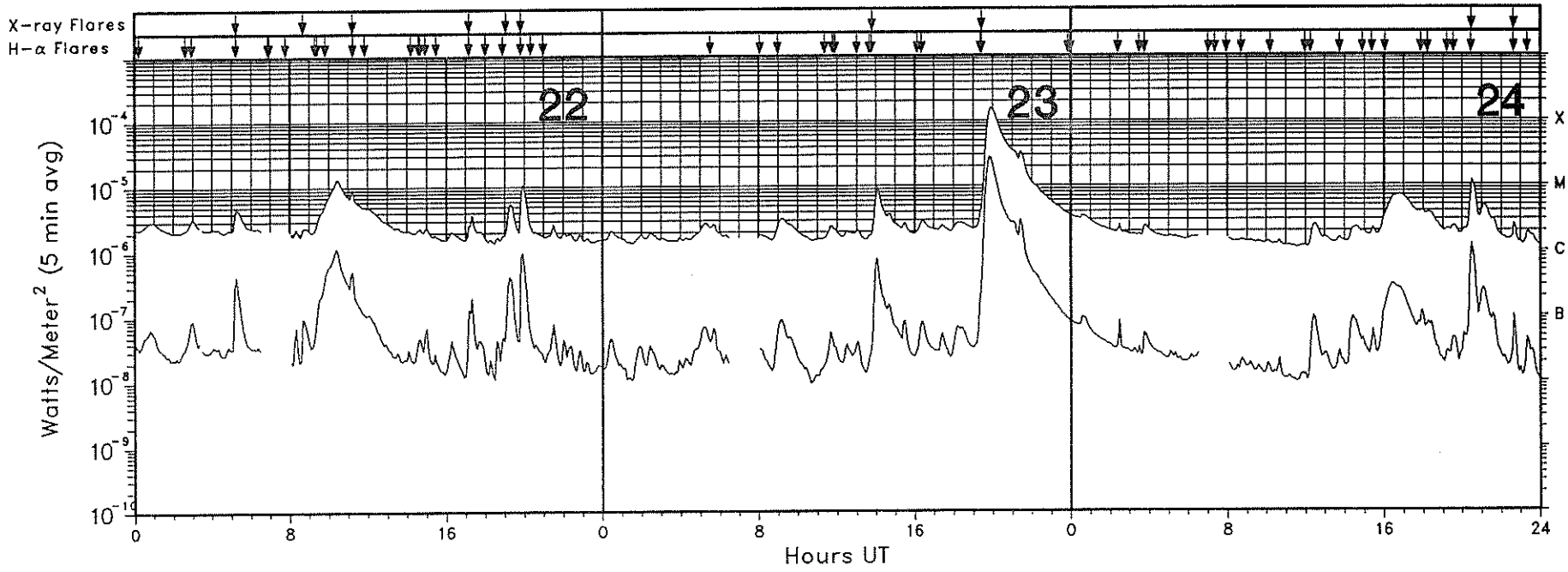




GOES-7 X-RAY DETECTOR

March 1989



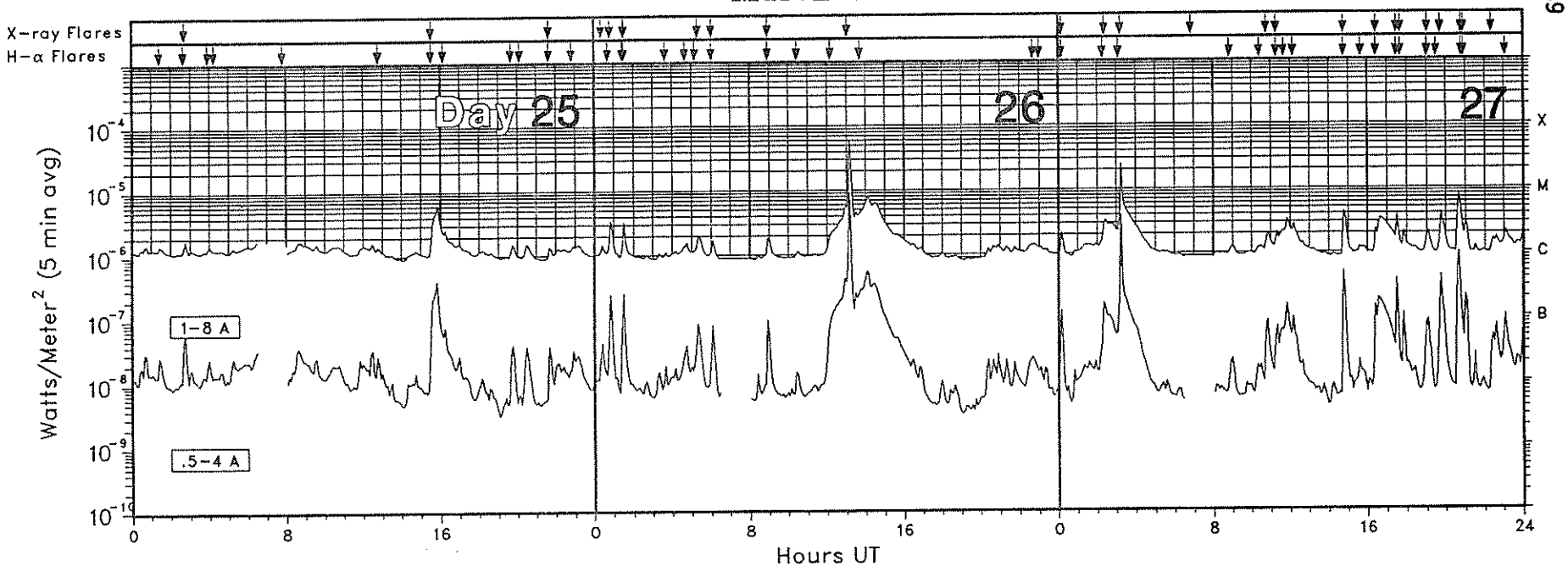


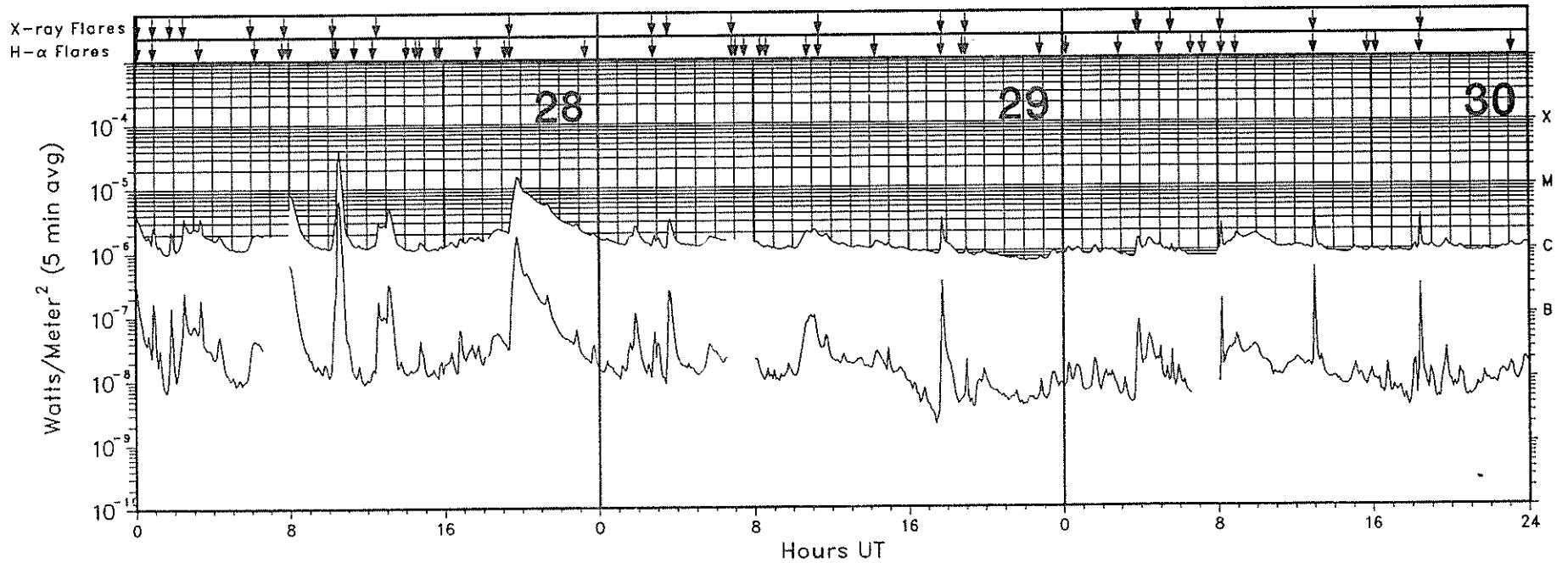
151
Mar 89

GOES-7 X-RAY DETECTOR

March 1989

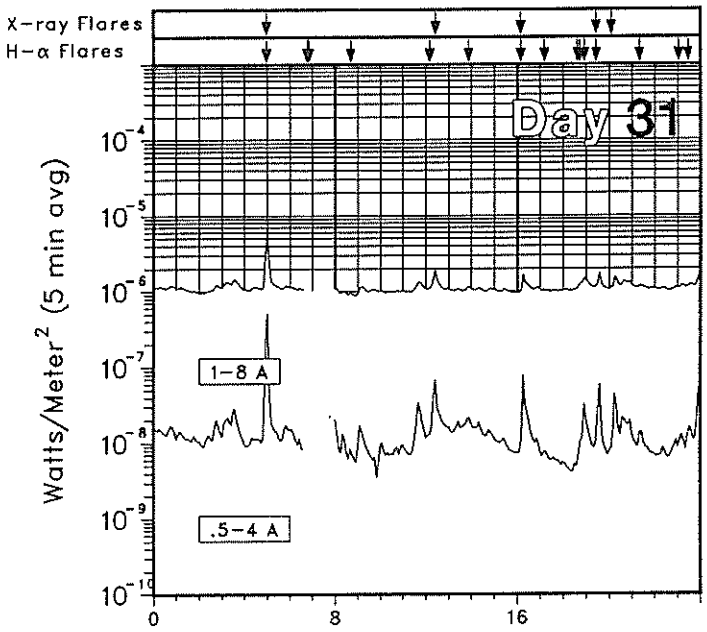
152
Mar 89





GOES-7 X-RAY DETECTOR

March 1989



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

March 1989

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/ USAF Region
01	0607E	0614	0624D	N12	W70	SF	C5.2	5378
01	1012	1023	1038				M1.0	
01	1205E	1236	1248D	N12	W78	SF	M2.3	5378
01	1741	1745U	1841D	N11	W09	SF	C3.8	5377
01	2114E	2117	2128	N12	W83	SF	C4.9	5378
01	2224	2228	2232				C3.7	
02	2352E	0004	0014D	N12	W88	SN	C5.8	5378
02	0211E	0212	0219D	N15	W81	SF	C2.7	5378
02	0331	0348	0411				M2.4	
02	0612	0619	0628				M1.2	
02	0900E	0911	0935D	N18	W07	1N	M2.4	5383
02	1147E	1148	1155D	N10	W89	SF	M1.7	5378
02	1830	1847	1904				C8.5	
02	2153E	2157	2219D	N18	W16	SN	C3.3	5383
03	0011E	0031	0041D	N21	E31	SF	C3.0	5385
03	0922	0929	1009				M1.8	
03	1755E	1802	1824D	N12	W39	SF	C2.1	5377
03	2135	2138	2140				C2.1	
04	0154	0158	0200				C1.3	
04	0455		0510	S22	E33	1B	C5.9	5388
04	0932	0939	0948				C1.1	
04	1631	1636	1643				C1.8	
04	2210	2216	2222				C3.2	
05	0123E	0130	0202D	S18	W49	SB	C3.3	5379
05	0159	0205	0213				C3.2	
05	0215	0222	0234				M1.0	
05	0754	0820	0830				C2.2	
05	0834	0837	0840				C3.7	
05	0910	0923	0939				C7.7	
05	1036	1044	1052				C6.9	
05	1418	1421	1425				C2.5	
05	1828	1836	1842				C4.0	
05	1911	1924	1931				C7.5	
05	1945E	1954	2004D	S33	E73	SF	C7.6	5394
05	2045E	2048	2120D	N26	E90	SN	C5.8	5395
05	2101	2105	2107				C5.4	
05	2112	2117	2129				C7.3	
05	2132	2136	2148				M1.5	
05	2312	2316	2319				C4.8	
05	2352E	2356	0012D	S20	W61	SF	C5.2	5379
06	0017E	0020	0035D	N27	E90	1N	C5.1	5395
06	0034	0039	0043				C7.1	
06	0054E	0118	0123D	N29	E78	2N	M3.0	5395
06	0311	0323	0338				M2.5	
06	0430	0433	0435				C4.6	
06	0558	0633	0658				C9.7	
06	1134	1142	1146				C8.2	
06	1228E	1232	1240D	N31	E74	1B	C4.9	5395
06	1354E	1410	1624	N35	E69	3B	X15.0	5395
07	0519E	0558	0655D	N29	E69	1F	M2.0	5395
07	1109	1114	1119				C6.5	
07	1319E	1327	1348D	N31	E65	1B	M4.1	5395
07	1340	1344	1409				M2.4	
07	1447E	1454	1545D	N32	E65	2B	X1.8	5395
07	1653E	1703	1724D	N29	E63	1N	M3.8	5395
07	1809	1820	1825				C8.9	
07	2003	2006	2010				C2.5	
07	2113E	2115	2125D	S19	W87	SF	C3.6	5379
07	2120	2123U	2151	N32	E71	SF	C9.2	
07	2223E	2232	2254D	N30	E59	2B	M4.2	5395
07	2342	2349	2354				C5.3	
08	0117E	0123	0134D	N28	E59	SN	C5.7	5395
08	0146E	0150	0154D	N30	E61	SF	C3.5	5395
08	0212E	0214	0222D	N29	E61	SF	C2.9	5395
08	0303E	0303	0309D	N32	E61	SF	C7.6	5395
08	0456E	0504	0516D	N28	E52	SF	C7.6	5395
08	0628E	0631	0636D	N30	E57	SF	C4.1	5395
08	0651E	0659	0707D	N30	E58	1F	C5.4	5395
08	0720	0725	0729				C4.6	
08	0826E	0857	0924D	N31	E52	1B	M5.7	5395
08	1303E	1316	1711	N29	E48	1N	C9.0	5395
08	1413E	1442	1649D	N28	E48	2B	M1.2	5395
08	1714	1716U	1735D	N30	E47	SF	C3.7	5395
08	1801E	1804U	1804	N30	E49	1F	C4.4	5395
08	1850	1857	1908				M4.6	
08	2234E	2236	2249D	S15	E68	SF	C4.1	5398
09	0239E	0243	0259D	N30	E49	2N	M1.8	5395
09	0303E	0313U	0410	N29	E47	1B	C5.8	5395
09	0406E	0407	0414D	N31	E41	SN	C7.1	5395
09	0449E	0452	0515E	N30	E41	SF	C6.9	5395
09	0750	0753	0758				C4.4	
09	0836E	0839	0842D	N34	E60	SF	C4.4	5397
09	1003	1011	1024				M7.6	
09	1256E	1307	1501	N27	E40	1N	M2.4	5395
09	1515E	1532	1634D	N30	E38	4B	X4.0	5395
09	1913E	1925	1958D	N34	E36	1B	M1.2	5395
09	2304E	2324	0041D	N31	E32	1B	M1.3	5395
09	2334	2354	0023				M1.6	
10	0107E	0109	0117D	N27	E32	SF	C6.4	5395
10	0201	0211	0220				C3.2	
10	0300E	0304	0310D	N34	E31	SF	M1.4	5395
10	0345E	0406	0428D	N31	E30	SF	C7.5	5395
10	0610E	0646	0656D	N30	E33	SF	C9.5	5395
10	0703E	0704	0717D	N29	E27	SF	C4.9	5395
10	0915E	0916	0940D	N30	E24	SF	C9.3	5395
10	1109	1139U	1225D	N34	E29	2B	M4.5	5395
10	1304E	1310	1418D	N28	E25	SF	C6.2	5395
10	1525E	1527	1546D	N32	E27	SF	M1.1	5395
10	1548	1551	1556				C5.9	
10	1723E	1723	1727D	N31	E22	SF	C4.9	5395
10	1732E	1736	1759D	N32	E24	SN	M1.1	5395
10	1844E	1851	2001D	S17	E42	SF	C5.0	5398
10	1848E	1912U	2158	N31	E22	3B	X4.5	5395
11	0154E	0155U	0201	N28	E17	SF	M1.6	5395
11	0330E	0343	0406D	N27	E18	1N	M2.0	5395
11	0514E	0531	0615D	N31	E21	1N	M2.3	5395
11	0642E	0642	0650D	N30	E19	SF	M1.2	5395
11	0829E	0905	0944D	N29	E16	2B	M9.7	5395
11	1010	1011U	1023D	N29	E14	SN	C8.3	5395
11	1158	1201	1203				C4.0	
11	1220E	1228	1300D	N32	E14	SN	C9.9	5395
11	1402E	1405	1436	N30	E11	SF	M1.0	5395
11	1535E	1538	1601D	N28	E13	2B	X1.2	5395
11	1604	1607	1610				C3.1	
11	1827E	1837	1856D	N31	E10	1N	M1.2	5395
11	1933E	1940	2016D	N27	E10	2B	X1.3	5395
11	2300	2303	2305				C8.6	
12	0016E	0029	0043D	N28	E09	2B	M7.3	5395
12	0044	0047	0049				C7.6	
12	0523E	0530	0544D	N32	E01	SF	C7.5	5395
12	0605E	0618	0633D	N29	E07	SN	C8.5	5395
12	0816	0828	0925				M6.7	
12	1223	1227	1232				C4.5	
12	1456E	1503	1536D	N29	W00	SB	M2.5	5395

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

March 1989

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/ USAF Region
12	1538	1550	1555				C4.7	
12	1603	1624	1629				M1.8	
12	1632	1637	1640				C5.4	
12	1816	1820	1822				C3.6	
12	1857E	1908	1934D	N27	W06	2B	C6.0	5395
12	2028E	2040	2103	N30	W02	2N	M6.3	5395
12	2335E	2337	2343D	N28	W04	1N	M1.4	5395
13	0024E	0025	0050D	N39	E01	1F	C5.9	5395
13	0132E	0135	0159D	N27	W08	1N	M1.4	5395
13	0229	0232	0242				C4.3	
13	0259E	0320	0417D	N28	W02	3N	X1.2	5395
13	0448E	0449	0452D	N31	W04	SF	C8.0	5395
13	0550E	0552	0556D	N28	W09	SF	C5.7	5395
13	0621E	0630	0637D	N33	W08	SN	M1.4	5395
13	0933	0936	0938				C5.2	
13	0942E	0947	0956D	N32	W11	SF	C7.0	5395
13	1259E	1315	1452D	N32	W14	1N	M1.7	5395
13	1731E	1737	1854D	N32	W16	SN	M1.5	5395
13	2212E	2213	2241D	S16	E65	SF	C5.4	5403
13	2211E	2241	2323	N31	W13	SN	M1.2	5395
14	0002	0006	0011				C9.4	
14	0041E	0047	0111D	N34	W13	SF	C9.5	5395
14	0219E	0311	0345D	N27	W22	1F	M2.0	5395
14	0509E	0511	0521D	N34	W19	SF	C3.7	5395
14	0526E	0528	0537D	N34	W20	SF	C4.3	5395
14	0618E	0622	0711D	N31	W21	SF	C9.3	5395
14	0835E	0857	0921D	N30	W21	SF	M1.6	5395
14	0956E	0959	1007D	N30	W21	SF	C5.2	5395
14	1259E	1303	1335D	N29	W20	1N	C6.6	5395
14	1646E	1726	2148D	N33	W21	2B	X1.1	5395
14	1928E	2036	2149D	N32	W27	SN	M1.4	5395
15	0457E	0501	0520D	N33	W25	1F	C5.8	5395
15	0624E	0650	0948D	N34	W35	1F	M4.8	5395
15	1227E	1234	1239D	N34	W37	SF	M1.4	5395
15	1333E	1337	1347D	N31	W38	SN	M1.1	5395
15	1424E	1425	1431D	N31	E44	SF	C4.5	5404
15	1643E	1653	1839D	N31	W40	2B	M8.4	5395
15	1959E	2001	2004D	S16	E43	SF	C3.7	5403
15	2121E	2124	2127D	N29	W47	SF	C8.0	5395
16	0154E	0203	0315D	N28	W48	1F	M3.1	5395
16	0951	1006	1039				M1.0	
16	1222	1225U	1229	N29	W55	SF	C6.2	5395
16	1524E	1526	1645D	N36	W47	2B	X3.6	5395
16	1732E	1738	1917	N31	W59	3B	M2.4	5395
16	1826E	1915	2030D	N31	W55	1N	M6.5	5395
16	2035E	2040	2131D	N29	W60	1B	X1.4	5395
16	2203E	2212	2214	N19	W05	1N	M1.6	5407
16	2314	2319	2325				C8.2	
17	0150E	0157	0202D	N27	W57	SF	C7.6	5395
17	0235E	0238	0408D	N31	W72	3N	M2.5	5395
17	0532E	0532	0536D	N27	W60	SF	C6.6	5395
17	0556E	0558	0606D	N34	W59	1N	C7.5	5395
17	0715E	0719	0751D	N32	W59	2B	M6.8	5395
17	1107E	1109	1131	N32	W59	2N	M4.1	5395
17	1546	1550	1552				C4.0	
17	1601E	1622	1630D	N34	W60	SF	C3.9	5395
17	1729E	1737	1932D	N33	W60	2B	X6.5	5395
17	2007E	2014	2133D	S13	E14	2B	M1.4	5403
17	2137E	2139	2146D	N34	W64	SF	C4.4	5395
17	2311E	2312	2330D	N37	W64	SF	M2.4	5395
18	0205E	0209	0235D	S15	E06	SN	C7.6	5403
18	0931	0935	0938				C3.3	
18	1200	1203	1207				C2.8	
18	1243E	1244	1259D	N36	W85	SF	C9.2	5395
18	1550	1605	1630				C8.7	
18	1733E	1734	1747D	N37	W74	SF	M4.4	5395
18	2030	2034	2038D	N36	W74	SF	M3.3	5395
18	2154	2205	2300				M3.1	
19	0420E	0421	0430D	N18	E32	SF	M1.4	5409
19	0620	0631	0655				M1.2	
19	0702	0708	0735				M1.6	
19	0738E	0739	0745D	N33	W85	SF	M1.3	5395
19	0809	0833	0850				M1.7	
19	0943	1003	1010				C8.6	
19	1054E	1055	1101D	N31	W90	SF	C4.5	5395
19	1124	1201	1227				C7.4	
19	1315	1321	1326				C9.5	
19	1459	1513	1541				C6.9	
19	1816E	1819	1829D	N18	W41	SF	C9.2	5407
19	1944E	1959	2004D	N16	E24	SF	M1.7	5409
19	2104	2119	2154				M2.4	
19	2329	2342	0005				C9.2	
20	0358E	0401	0409	S25	E90	SN	M2.5	5417
20	1014E	1015	1033D	S16	W26	SN	C5.0	5403
20	1427E	1440	1522D	S26	E81	SF	M1.2	5417
20	1541E	1547	1615D	S27	E87	SF	M2.4	5417
20	2038E	2052U	0003	S25	E76	2N	M3.1	5417
21	0051	0110	0148				M1.3	
21	0202	0214	0334				M2.9	
21	0625E	0634	0721D	N16	E03	SN	M1.4	5409
21	0739E	0742	0811D	S29	E77	1F	C5.1	5417
21	0858E	0909	0938D	N17	E01	SF	C9.0	5409
21	1056	1105U	1106D	N16	E03	SF	C4.6	5409
21	1435E	1501	1622D	N20	W03	1N	C8.7	5409
22	0513E	0513	0519D	N17	W08	SF	C5.6	5409
22	0840	0843	0901				C2.7	
22	1113E	1115	1122D	N17	W12	SN	M1.2	5409
22	1709E	1724	1751D	N20	W18	SF	C3.9	5409
22	1903E	1916	1946D	N17	W17	1F	C5.6	5409
22	1949E	1951	2031D	N17	W17	1N	M1.0	5409
23	1348E	1406	1500D	N12	W27	1N	C9.8	5409
23	1925	1948U	2126	N18	W28	3B	X1.5	5409
24	2028	2029U	2053	N17	W44	2B	M1.2	5409
24	2238	2240U	2252D	N24	W40	SF	C2.7	5409
25	0242	0245	0250				C2.0	
25	1531E	1535	1610D	N13	W56	SN	C6.5	5409
25	2139E	2142	2222D	N21	W63	SF	C1.5	5409
26	0022	0026	0031				C1.5	
26	0048E	0052	0110D	N20	W64	SF	C3.9	5409
26	0130E	0130	0139D	N13	W57	SF	C3.9	5409
26	0519	0525	0531				C2.0	
26	0602E	0606	0619D	S27	E10	SF	C1.8	5417
26	0856E	0856	0907D	N20	W64	SF	C2.1	5409
26	1303	1315	1341D	N11	W66	2N	M6.6	5409
27	0009E	0012	0024D	S28	E02	SF	C2.5	5417
27	0223E	0223	0240D	S26	W00	SF	C3.6	5417

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

March 1989

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/ USAF Region
27	0313E	0317	0342D	S28	W00	1F	M3.5	5417
27	0651	0654	0658				C1.5	
27	1046	1052	1101				C2.0	
27	1117E	1121	1134D	N12	W77	SF	C2.3	5409
27	1446E	1447	1531	S28	W07	SF	C5.8	5417
27	1626E	1627	1630D	N14	W88	1F	C2.9	5409
27	1729E	1732	1739D	N14	W82	SF	C5.5	5409
27	1740E	1752	1814D	S31	W09	SF	C2.8	5417
27	1903E	1906	1917D	S29	W08	SF	C2.4	5417
27	1943	1947U	2002D	N15	W83	SF	C4.9	5409
27	2047	2047U	2053	S26	W10	SF	C8.3	5417
27	2054	2102U	2116D	N15	W84	SF	C3.4	5409
27	2221	2240	2243				C1.9	
28	0007	0010U	0056	S26	W14	SF	C4.3	5417
28	0055	0100	0103				C3.6	
28	0148	0153	0159				C2.3	
28	0228E	0234	0255D	N17	W85	1N	C4.7	5409
28	0559	0600	0637D	S26	E06	SF	C2.3	5421
28	0744E	0748	0755D	S29	W16	SF	C9.3	5417
28	1016	1037	1053				M4.4	
28	1232E	1308	1355D	S26	W19	SF	C5.1	5417
28	1925E	1934	1943D	N17	W88	1N	M1.5	5409
29	0246	0253	0257				C1.9	
29	0333	0341	0350				C3.4	
29	0653E	0710	0712D	S18	E86	SF	C2.8	5428
29	1121E	1121	1128D	S16	E88	SF	C2.3	5428
29	1744E	1746	1752D	S23	E90	SF	C4.3	5428
29	1900E	1902	1904D	S24	W39	SF	C1.5	5417
30	0350E	0353	0356	S26	E82	SN	C1.8	5428
30	0356	0400	0402				C2.0	
30	0534	0537	0540				C1.3	
30	0809	0812	0814				C3.9	
30	1259E	1302	1307D	S23	E78	SF	C6.8	5428
30	1828E	1828	1831D	S22	E77	SF	C4.3	5428
31	0458E	0459	0510D	S23	E71	SF	C6.4	5428
31	1225E	1226	1232D	S24	E64	SF	C2.0	5428
31	1609E	1617	1626D	S21	E53	SF	C1.9	5428
31	1926E	1934	1946D	S16	E54	SF	C1.9	5428
31	2005E	2015	2044D	S20	E54	SF	C1.5	5428

Preliminary GOES Satellite Data
Daily Average X-ray Background
April 1988 - March 1989

Day	1988 Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1989 Jan	Feb	Mar
1	B4.4	B1.9	B7.5	B8.4	B9.4	B6.9	C1.0	B5.7	B4.6	C1.7	C1.2	C1.3
2	B3.5	B2.6	B6.6	B7.1	B9.8	B6.5	C1.2	B6.1	B4.7	C2.1	C1.2	C1.3
3	B3.7	B3.7	B7.1	B9.7	C1.1	B6.9	C1.3	B5.2	B4.4	C2.2	C1.6	B9.8
4	B3.5	B5.1	B9.5	B6.3	B8.6	B6.7	C1.0	B5.0	B4.5	C2.0	C2.0	B7.0
5	B4.2	B4.1	B6.0	B6.4	B8.3	B6.4	B8.7	B4.6	B5.7	C1.9	C1.6	C1.3
6	B4.3	B2.9	B4.8	B6.5	B7.9	B6.1	C1.0	B5.8	B6.2	C2.4	C1.9	C2.7
7	B3.8	B3.1	B5.6	B6.8	B8.2	B6.9	B7.4	B5.5	B6.6	C4.7	C1.9	C2.5
8	B3.9	B2.5	B5.2	B7.0	C1.1	B5.5	B5.3	B5.5	B7.4	C4.6	C2.1	C1.9
9	B3.2	B1.8	B6.4	B7.7	C1.0	B4.8	B5.0	B9.2	B7.8	C3.4	C2.2	C2.1
10	B3.1	B1.6	B4.9	B9.1	C1.0	B3.2	B4.7	B9.8	C1.0	C2.5	C1.9	C2.5
11	B4.5	B1.6	B4.3	B7.7	B6.7	B2.7	B4.9	B9.8	C1.3	C3.1	C1.3	C2.8
12	B5.5	B1.5	B3.7	B4.9	B5.1	B2.8	B5.4	B6.3	C1.2	C2.3	C1.1	C2.3
13	B4.4	B1.4	B3.0	B5.3	B3.9	B2.4	B5.4	B8.9	C1.1	C5.0	C1.3	C3.0
14	B6.0	B1.3	B2.8	B5.0	B3.1	B2.3	B4.7	C1.3	C1.4	C3.8	C2.0	C2.4
15	B7.4	B1.1	B3.3	B4.7	B3.2	B2.6	B5.9	B7.9	C2.1	C2.9	C1.5	C2.1
16	B9.2	B1.3	B3.7	B5.5	B3.0	B3.0	B7.8	C1.4	C1.7	C3.1	C1.7	C2.5
17	B5.3	B2.0	B3.6	B4.8	B3.2	B3.6	C1.2	C1.0	C2.0	C2.1	C1.4	C2.3
18	B3.9	B3.2	B4.0	B6.7	B2.8	B5.3	B8.0	B8.1	C1.3	C2.8	C1.3	C2.1
19	B5.5	B2.9	B2.6	B9.2	B2.7	B4.8	B8.3	B8.4	C1.9	C2.0	C1.5	C2.6
20	B5.1	B3.2	B2.6	B4.5	B2.7	B6.9	B6.8	B6.6	C2.2	C2.3	C1.4	C2.3
21	B4.7	B4.1	B3.5	B6.5	B2.8	B7.2	B7.3	C1.1	C2.3	C2.7	C1.7	*
22	B3.1	B5.8	B4.6	B7.2	B2.7	C1.0	B8.2	B8.3	C1.8	C2.1	C2.2	C1.8
23	B2.2	B8.8	B9.8	B6.1	B7.4	B8.8	B8.0	B5.1	C2.3	C1.9	C1.5	C1.6
24	B2.6	B4.5	C1.2	B6.7	B7.7	B8.1	B6.6	B5.3	C2.1	C1.8	C1.4	C1.1
25	B2.0	B5.3	---	B7.7	B7.3	B8.5	B6.0	B5.7	C1.5	C1.4	C1.5	C1.0
26	B1.5	B3.8	C2.7	B8.0	B7.4	B6.2	B5.3	B7.2	C1.3	C1.3	C1.1	B8.9
27	B1.1	B3.7	C1.1	B8.9	B8.1	B7.3	B6.7	B7.5	C1.9	C1.3	B9.5	B9.9
28	B1.1	B5.0	C1.6	B9.4	B7.3	B6.0	B7.3	B4.2	C1.4	C1.1	C1.0	C1.1
29	B1.1	B7.2	C1.5	B9.9	B9.2	B6.0	B8.4	B4.3	B8.7	C1.1		C1.0
30	B1.6	B8.0	B8.1	B7.8	B9.4	B8.4	B8.0	B4.1	C1.0	C8.9		B8.8
31		B8.5		B9.4	B8.9		B6.7			C1.0		B9.6

MASS EJECTIONS FROM THE SUN

MARCH 1989

Sta	Day	Observed UT Start	Max	End	Location RA°	R/R$_o$	Freq or Wavelength	Kind of Event
ABST	Mar 02	0631 E	0657 U	0857 D	285	1.00	H-alpha	SP
ABST	Mar 03	0757 E	0829 U	0911 D	287	1.00	H-alpha	SP
VORO	Mar 05	0150	0154 U	0205	305	0.6	H-alpha	SP
VORO	Mar 06	0059	0122 U	0146	110	1	H-alpha	SP
ABST	Mar 06	0505	0507	0905 D	060	1.00	H-alpha	SP
SVTO	Mar 06	1403.0		1410.0			Meter	II
SGMR	Mar 06	1403.0		1414.0			Meter	II
SVTO	Mar 06	1403.0		1427 0			Meter	IV
SGMR	Mar 06	1407.0		1414.0			Meter	IV
WEIS	Mar 06	1413.0		1427.0			80- 30 MHz	II Herringbone
SGMR	Mar 06	1441.0		1457.0			Meter	II
WEIS	Mar 06	1442.1		1450.5			70- 35 MHz	II Herringbone
WEIS	Mar 06	1458		1536			1000-210 MHz	IV Decimetric
LEAR	Mar 07	0554.0		0615.0			Meter	II
SGMR	Mar 07	1336.0		1340.0			Meter	II
PALE	Mar 07	2230.0		2248.0			Meter	IV
VORO	Mar 07	2316 E	2323 U	2327	075	0.9	H-alpha	SP
VORO	Mar 07	2340	2354 U	2403	075	0.9	H-alpha	SP
VORO	Mar 07	2344	2347 U	2353	130	1	H-alpha	SP
VORO	Mar 08	0110	0122 U	0127 D	200	0.9	H-alpha	SP
VORO	Mar 08	0154	0200 U	0216	075	0.9	H-alpha	SP
SGMR	Mar 08	1436.0		1443.0			Meter	IV
VORO	Mar 09	0243	0251 U	0300 D	130	0.9	H-alpha	SP
SVTO	Mar 09	1003.0		1017.0			Meter	IV
PALE	Mar 10	1855.0		1901.0			Meter	IV
PALE	Mar 10	1918.0		2119.0			Meter	IV
PALE	Mar 10	1920.0		2119.0			Meter	II
VORO	Mar 11	0110	0122 U	0138	160	0.7	H-alpha	SP
VORO	Mar 11	0116	0119 U	0131	055	0.7	H-alpha	SP
VORO	Mar 11	0145	0149 U	0202	140	0.6	H-alpha	SP
VORO	Mar 11	0208	0214 U	0242	230	0.6	H-alpha	SP
LEAR	Mar 12	0016.0		0026.0			Meter	IV
PALE	Mar 12	0018.0		0030.0			Meter	IV
VORO	Mar 12	0038	0042 U	0103	150	0.6	H-alpha	SP
KHAR	Mar 12	0727 E	0928 U	1155 D	004-016	0.39-0.51	H-alpha	SP
SGMR	Mar 12	1120.0		1125.0			Meter	II
KHAR	Mar 13	0828	0925	1210 D	326-339	0.46-0.51	H-alpha	SP
KHAR	Mar 13	1035	1040	1102	105	1.00-1.02	H-alpha	S
VORO	Mar 17	0234	0237 U	0244 D	310	0.9	H-alpha	SP
ABST	Mar 17	0722	0732 U	0807 D	059	1.00	H-alpha	SP
SGMR	Mar 17	1731.0		1749.0			Meter	IV
PALE	Mar 17	1734.0		1758.0			Meter	IV
SGMR	Mar 17	1749.0		1807.0			Meter	II
PALE	Mar 17	1750.0		1756.0			Meter	II
SGMR	Mar 18	2026.0		2037.0			Meter	IV
ABST	Mar 19	0601 E	0619 U	0904 D	304	1.00	H-alpha	SP,A
ABST	Mar 19	0644 E	0836 U	0904 D	119	1.00	H-alpha	SP
KHAR	Mar 19	0940 E	0945 U	1000 D	241	0.22	H-alpha	S
KHAR	Mar 19	1023		1040 D	117	1.00-1.01	H-alpha	S
KHAR	Mar 19	1046	1055	1150 D	302-314	1.00-1.06	H-alpha	SP
KHAR	Mar 19	1048	1054	1134	117	1.00-1.02	H-alpha	S
KHAR	Mar 20	0810 E		0835	023-026	0.57-0.58	H-alpha	S
KHAR	Mar 20	0822	0830	0950	127-129	1.00-1.11	H-alpha	SP
KHAR	Mar 20	0912		0923	307-309	1.00-1.02	H-alpha	S
KHAR	Mar 20	0955	0957	1015	298	0.87	H-alpha	S
KHAR	Mar 20	1015 E	1023	1050	239-247	0.43-0.52	H-alpha	SP
KHAR	Mar 20	1037 E		1043 D	300	0.78	H-alpha	S

MASS EJECTIONS FROM THE SUN

MARCH 1989

Sta	Day	Observed UT Start	Max	End	Location RA^{o}	R/R_{o}	Freq or Wavelength	Kind of Event
PALE.	Mar 20	2045.0		2100.0			Meter	II
SGMR	Mar 20	2045.0		2400.0			Meter	II
KHAR	Mar 21	0812 E		0850	117-120	0.97	H-alpha	S
KHAR	Mar 21	1127		1142	308	1.00-1.01	H-alpha	S
SGMR	Mar 23	1922.0		1927.0			Meter	IV
PALE	Mar 23	1931.0		2005.0			Meter	IV
SGMR	Mar 23	1939.0		1950.0			Meter	II
PALE	Mar 23	1940.0		2005.0			Meter	II
PALE	Mar 24	2026.0		2034.0			Meter	IV
SGMR	Mar 24	2026.0		2037.0			Meter	IV
SGMR	Mar 24	2032.0		2400.0			Meter	II
PALE	Mar 24	2036.0		2042.0			Meter	II
WEIS	Mar 25	1550.7		1554.7			90- 30 MHz	II Herringbone
SVTO	Mar 26	1308.0		1326.0			Meter	IV
SGMR	Mar 26	1308.0		1327.0			Meter	II
SGMR	Mar 26	1308.0		1327.0			Meter	IV
WEIS	Mar 26	1309.7		1328.3			480- 30 MHz	II Herringbone
LEAR	Mar 28	0601.0		0610.0			Meter	II
SVTO	Mar 28	1031.0		1049.0			Meter	IV
WEIS	Mar 28	1033.9		1048.8			320- 40 MHz	II Herringbone
KHAR	Mar 30	0812 E		0818	D 103-108	1.00-1.06	H-alpha	S
KHAR	Mar 30	1035		1042	D 104-106	1.00-1.04	H-alpha	S
KHAR	Mar 31	0740 E		0800	D 101	1.00-1.03	H-alpha	S

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
- ABST = Abastumani
- KHAR = Kharkov
- LEAR = Learmonth
- PALE = Palehua
- SGMR = Sagamore Hill
- SVTO = San Vito
- VORO = Voroshilov
- WEIS = Weissenau

ACTIVE PROMINENCES AND FILAMENTS

MARCH 1989

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	0136	0259D	S28	E90	03	8.1	1				C	VORO		
01	ADF	0202	0259D	N07	W47	02	26.7	1				C	VORO		
01	APR	0212	0259D	S38	W90	02	22.9	1				C	VORO		
01	ASR	0744E	1020D	N32	W80	02	23.1			9	6	E	LEAR	5376	
01	AFS	0820E	1020D	N22	E49	03	5.1		03	9	9	E	LEAR		
01	BSL	0900E	0910	N53	E90	03	9.1	1-				C	CATA		
01	ASR	0927E	1020D	N15	W82	02	23.3			9	9	E	LEAR	5373	
01	ASR	0939	1020D	N12	W80	02	23.5			9	9	E	LEAR	5378	
01	BSL	1132E	1138D	N12	W90	02	23.8	1				C	CATA		
01	ASR	1200E	1530D	N16	W90	02	22.8			9	9	E	RAMY	5373	
01	AFS	1202E	2105D	N17	E02	03	1.6		03	9	9	E	RAMY	5383	
01	DSD	1215	2105D	N12	W74	02	24.0		07	9	9	E	RAMY	5378	Flare Associated
01	AFS	1240E	2105D	N22	E49	03	5.3		02	9	9	E	RAMY	5385	
01	ADF	1447E	2105D	N17	E06	03	2.1	1	06	9	9	E	RAMY	5383	
01	LPS	1522	2016D	N15	W78	02	23.8			9	9	E	RAMY	5378	
01	SSB	1650		199	W58	03	10.3			0	0	E	HOLL		
01	AFS	1705E	0052D	N17	W01	03	1.6		02	9	9	E	HOLL	5383	
01	AFS	1705E	2230D	S20	E50	03	5.5		02	9	9	E	HOLL		
01	DSD	1725E	1900D	N18	E02	03	1.9		04	9	9	E	HOLL	5383	
01	ASR	1853E	0052D	N12	W80	02	23.8			9	9	E	HOLL	5378	
01	AFS	2215E	0052D	N22	E43	03	5.2		03	9	9	E	HOLL	5385	
01	APR	2317	0300D	N28	E90	03	9.0	1				C	VORO		
01	AFS	2321E	1024D	N23	E43	03	5.3		02	9	9	E	LEAR	5385	
01	AFS	2322E	0520D	S20	E47	03	5.6		02	8	6	E	LEAR	5387	
01	ASR	2323E	1024D	N11	W90	02	23.3			9	9	E	LEAR	5378	
01	AFS	2330E	1024D	N18	W07	03	1.4		03	9	9	E	LEAR	5383	
02	BSL	0420	0450	N23	W90	02	23.3			9	9	E	LEAR	5378	
02	BSL	0631E	0857D	N15	W90	02	24.5	1				C	ABST		
02	BSL	0631E	0857D	S09	E90	03	9.0	1				C	ABST		
02	ASR	0720E	0926D	N11	W90	02	23.6			9	9	E	SVTO	5378	
02	SDF	0833	0910	N17	W04	03	2.0	1				C	CATA		
02	BSL	0934E	0940	N15	W90	02	24.7	1-				C	CATA		
02	BSL	0955	1053D	N16	W90	02	24.7	2				C	CATA		
02	AFS	1019E	1620D	N18	W11	03	1.6		04	9	9	E	SVTO	5383	
02	AFS	1019E	1620D	N24	E36	03	5.2		03	9	9	E	SVTO	5385	
02	APR	1029E	1620D	S16	W90	02	23.7	1		9	9	E	SVTO		
02	APR	1029E	1620D	S44	W90	02	23.1	1		8	9	E	SVTO		
02	BSL	1103E	1211	N14	W90	02	24.7	1				C	CATA		
02	ASR	1131E	1905D	N14	W90	02	23.8			9	9	E	RAMY	5378	
02	BSL	1149E	1157	N53	E90	03	10.2	1-				C	CATA		
02	BSL	1157	1225	N12	W90	02	24.8	2				C	CATA		
02	ADF	1222E	1905D	S26	W32	02	28.0	1	05	9	9	E	RAMY	5375	
02	SSB	1327		192	W31	03	9.8			0	0	E	RAMY		199 W68
02	AFS	1530E	1635D	N23	E33	03	5.2		03	9	9	E	HOLL	5385	
02	APR	1550E	1635D	N19	E83	03	9.0			9	9	E	HOLL		
02	SSB	1606		206	W76	03	3.2			0	0	E	HOLL		
02	AFS	2315E	1030D	N21	E28	03	5.1		02	9	9	E	LEAR	5385	
02	ASR	2316E	0645D	N15	W83	02	24.8			9	9	E	LEAR	5378	
03	SSB	0041		199	W75	03	12.1			0	0	E	LEAR		
03	DSD	0216E	1030D	N21	E32	03	5.5		02	9	9	E	LEAR	5385	
03	ADF	0217E	0650D	S23	W20	03	1.5	1	04	9	9	E	LEAR	5379	
03	APR	0529E	0825D	S40	W90	02	25.0	1				C	ABST		
03	ADF	0638E	1531D	S20	W24	03	1.4	1	09	9	9	E	SVTO	5379	
03	BSL	0753	0802	S79	E90	03	11.7	1-				C	CATA		
03	EPL	0757E	0911D	N13	W90	02	25.6	2				C	ABST		
03	BSL	0757E	0828D	N13	W90	02	24.6			9	9	E	SVTO	5378	
03	BSL	0757E	0840D	N13	W90	02	24.6			9	9	E	SVTO	5378	
03	BSL	0800E	0829D	N17	W90	02	24.6			9	9	E	LEAR	5378	
03	ASR	0800E	1030D	N13	W90	02	24.6			9	9	E	LEAR	5378	
03	EPL	0810E	0840D	S02	W90	02	25.7					V	ATHN		
03	AFS	0817E	1531D	S36	E67	03	8.7		03	9	9	E	SVTO		
03	AFS	0826E	1531D	S22	E60	03	8.0		02	9	9	E	SVTO	5388	
03	BSL	0854E	0858D	N20	W90	02	25.6	2				C	CATA		
03	BSL	1044	1105D	S08	E90	03	10.2	2				C	CATA		
03	BSL	1119E	1140D	N10	W90	02	25.8	2				C	CATA		
03	CRN	1139E	1842D	N11	W90	02	24.8		08	9	9	E	RAMY	5378	
03	APR	1139E	2043D	N11	W90	02	24.8	1		9	9	E	RAMY	5378	
03	AFS	1226E	2043D	N18	W25	03	1.6		03	9	9	E	RAMY	5383	

ACTIVE PROMINENCES AND FILAMENTS

MARCH 1989

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
03	ADF	1226E	2043D	N20	W20	03	2.0	1	08	9	9	E	RAMY	5383	
03	SSB	1430		149	W32	03	7.5			0	0	E	RAMY		
03	DSD	2030E	2120	N21	E19	03	5.3		04	9	9	E	HOLL	5385	
03	AFS	2034E	2258D	N17	W30	03	1.6		02	5	7	E	HOLL	5383	
04	BSL	0635E	0859D	N40	E90	03	11.6	1				C	ABST		
04	APR	0711E	0859D	N24	E90	03	11.2	1				C	ABST		
04	ASR	0720E	0830D	N29	E89	03	11.3			9	9	E	LEAR		
04	BSL	0808E	0859D	N16	E90	03	11.2	1				C	ABST		
04	BSL	0808E	0859D	S30	E90	03	11.4	1				C	ABST		
04	BSL	0837E	0859D	S55	E90	03	12.1	1				C	ABST		
04	AFS	0850E	1009D	N22	E12	03	5.3		02	9	9	E	LEAR	5385	
04	BSL	1001	1016	S12	W90	02	26.7	1-				C	CATA		
04	BSL	1039E	1106	N30	W90	02	26.5	1				C	CATA		
04	AFS	1206E	1502D	N17	W37	03	1.7		03	9	9	E	SVTO	5383	
04	ADF	1234E	1502D	N10	W49	02	28.8	1	05	9	9	E	SVTO	5377	
04	ADF	1252E	1502D	S20	W43	03	1.2	1	06	9	9	E	SVTO	5379	
04	ADF	1420E	2058D	S18	W44	03	1.2	1	03	9	9	E	RAMY	5379	
04	SDF	1502E	0710D	S26	W25	03	2.7		08	0	0	E	SVTO		
04	APR	1520E	1521D	N25	E87	03	11.4	1		9	9	E	RAMY		
04	ADF	1550E	1739D	S11	W55	02	28.5	1	09	9	9	E	RAMY	5381	
04	ASR	2230E	2326D	N26	E87	03	11.7			9	9	E	HOLL		
05	APR	0000	0300D	S08	E90	03	11.7	1				C	VORO		
05	APR	0012	0300D	N42	W90	02	26.7	1				C	VORO		
05	APR	0045	0300D	S27	E90	03	12.0	1				C	VORO		
05	DSD	0150	0205	N30	E09	03	5.8	1				C	VORO		
05	APR	0210	0300D	N43	E90	03	12.5	1				C	VORO		
05	ASR	0340E	1005D	N25	E90	03	12.1			9	9	E	LEAR		
05	APR	0612E	0856D	N27	E90	03	12.3	1		9	9	E	SVTO		
05	ASR	0612E	1618D	N31	E90	03	12.3			9	9	E	SVTO		
05	BSL	0631E	0908D	N28	E90	03	12.3	1				C	ABST		
05	BSL	0631E	0908D	N40	W90	02	27.0	1				C	ABST		
05	BSL	0631E	0908D	S23	E90	03	12.2	1				C	ABST		
05	BSL	0707E	0908D	S13	E90	03	12.1	1				C	ABST		
05	BSL	0743E	0755	N33	E90	03	12.5	1-				C	CATA		
05	BSL	0805	0820	N32	E90	03	12.5	1-				C	CATA		
05	BSL	0828	0832D	N32	E90	03	12.5	1-				C	CATA		
05	BSL	0828	0832D	S79	W90	02	26.1	1-				C	CATA		
05	BSL	0828E	0832D	S83	E90	03	13.7	1-				C	CATA		
05	AFS	0837E	1618D	S22	E33	03	7.9		02	7	7	E	SVTO	5388	
05	DSD	0841E	0922D	S10	E58	03	9.7		02	9	9	E	SVTO	5390	
05	BSL	0855	0945D	S27	E90	03	12.4	1				C	CATA		
05	EPL	1042	1220D	S05	E90	03	12.2	2				C	CATA		
05	BSL	1048	1056	S12	E90	03	12.2	1-				C	CATA		
05	ASR	1110E	1618D	S32	E90	03	12.6			9	9	E	SVTO		
05	ASR	1145E	2018D	N27	E90	03	12.5			9	9	E	RAMY		
05	ASR	1148E	2018D	S34	E90	03	12.7			9	9	E	RAMY		
05	ADF	1200E	2018D	S21	W53	03	1.4	1	07	9	9	E	RAMY	5379	
05	SPY	1654E	1740D	N28	E90	03	12.7			9	9	E	HOLL		
05	ASR	1732E	2155D	S33	E90	03	12.9			9	9	E	HOLL		
05	ASR	1741E	0058D	N28	E90	03	12.8			9	9	E	HOLL		
05	SPY	1956	2029D	N28	E90	03	12.9			9	9	E	HOLL		
05	DSD	2000E	0058D	N10	W68	02	28.7		07	9	6	E	HOLL	5377	
05	BSL	2050	2153D	N28	E90	03	12.9			9	9	E	HOLL		
05	APR	2206E	0058D	N00	E90	03	12.6			9	9	E	HOLL		
05	ASR	2331E	1024D	N35	E85	03	12.8			9	9	E	LEAR	5395	
05	BSL	2342	2352	N29	E90	03	13.0	1				C	VORO		
05	BSL	2357	0015	S18	E90	03	12.8	1				C	VORO		
06	BSL	0008	0020	N29	E90	03	13.1	1				C	VORO		
06	BSL	0023	0050D	N28	E90	03	13.0	1				C	VORO		
06	APR	0045	0300D	S11	E90	03	12.8	1				C	VORO		
06	BSL	0059	0146	N32	E90	03	13.2	1				C	VORO		
06	BSL	0125E	0142D	N29	E80	03	12.3			9	9	E	LEAR		Flare Associated
06	APR	0125	0300D	S10	W90	02	28.4	1				C	VORO		
06	AFS	0201E	1024D	S24	W90	02	27.2		02	9	9	E	LEAR	5375	
06	BSL	0238	0250	N29	E90	03	13.2	1				C	VORO		
06	ASR	0456E	1024D	S24	W90	02	27.3			9	9	E	LEAR	5375	
06	BSL	0505E	0905D	N30	E90	03	13.3	1				C	ABST		

ACTIVE PROMINENCES AND FILAMENTS

MARCH 1989

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
06	BSL	0507E	0905D	S02	E90	03	12.9	1				C	ABST		
06	BSL	0507E	0905D	S23	E90	03	13.1	1				C	ABST		
06	BSL	0507E	0905D	S35	E90	03	13.4	1				C	ABST		
06	ASR	0617E	1624D	N30	E90	03	13.3			9	9	E	SVTO	5395	
06	AFS	0738E	1624D	N26	E53	03	10.4		03	9	9	E	SVTO	5392	
06	EPL	0830E	0915D	N25	E90	03	13.3	1-				C	CATA		
06	BSL	0830E	0915D	N35	E90	03	13.5	1-				C	CATA		
06	BSL	0830E	0915D	S07	E90	03	13.1	1-				C	CATA		
06	BSL	0844E	0858D	S16	E90	03	13.2	1-				C	CATA		
06	BSL	0844E	0915D	N32	E90	03	13.5	1				C	CATA		
06	BSL	0906	0915D	N59	E90	03	14.3	1-				C	CATA		
06	EPL	0906	0915D	S20	E90	03	13.3	2				C	CATA		
06	EPL	1003E	1041D	N26	E90	03	13.4	1				C	CATA		
06	BSL	1020E	1041D	N32	E90	03	13.5	2				C	CATA		
06	BSL	1035E	1041D	N30	E90	03	13.5	1				C	CATA		
06	BSL	1055	1131D	N32	E90	03	13.6	1				C	CATA		
06	ASR	1225E	1655D	N29	E77	03	12.5			9	9	E	RAMY	5395	Flare Associated
06	LPS	1423	1624D	N36	E72	03	12.4			9	9	E	SVTO	5395	
06	ASR	1515E	1624D	S17	E90	03	13.5			9	9	E	SVTO		
06	BSL	1600E	1654D	N28	E85	03	13.3			9	9	E	RAMY	5395	Flare Associated
06	LPS	1600E	1655D	N30	E74	03	12.5			9	9	E	RAMY	5395	Flare Associated
06	BSL	1600	1624D	N33	E90	03	13.8			9	9	E	SVTO	5395	
06	LPS	1807E	0100D	N33	E71	03	12.4	1		9	9	E	HOLL	5395	
06	AFS	1915E	0100D	N20	W22	03	5.1		02	9	8	E	HOLL	5385	
06	LPS	1934E	1952D	N30	E85	03	13.5			9	9	E	PALE	5395	
06	ASR	2307E	1011D	N32	E74	03	12.8			9	9	E	LEAR	5395	
06	BSL	2308	2328	N30	E90	03	14.0	1				C	VORO		
06	BSL	2336	2347	N30	E90	03	14.1	1				C	VORO		
06	AFS	2338E	0315D	S09	E35	03	9.6		03	9	8	E	LEAR	5390	
06	APR	2349	0300D	N54	W90	02	28.3	1				C	VORO		
07	APR	0006	0300	S65	E90	03	15.0	1				C	VORO		
07	BSL	0008	0015D	S21	E90	03	13.9	1				C	VORO		
07	ASR	0018	0036	N29	E90	03	14.1	1				C	VORO		
07	BSL	0057	0119	N30	E90	03	14.1	1				C	VORO		
07	ASR	0106	0300D	N30	E90	03	14.1	1				C	VORO		
07	LPS	0237E	1011D	N33	E67	03	12.4			9	8	E	LEAR	5395	
07	ASR	0516E	1011D	S17	E90	03	14.0			9	9	E	LEAR		
07	BSL	0527E	0609D	N34	E90	03	14.4	1				C	ABST		
07	LPS	0604E	1611D	N34	E70	03	12.8			9	9	E	SVTO	5395	
07	BSL	0609E	0609D	S60	E90	03	15.2	1				C	ABST		
07	LPS	0758E	1011D	S18	E90	03	14.2			9	9	E	LEAR		
07	LPS	0758E	1402D	S16	E90	03	14.1			9	9	E	SVTO		Flare Associated
07	BSL	0802	0840	N31	E90	03	14.4	1				C	CATA		
07	BSL	0821	0905	N22	W90	02	29.4	1				C	CATA		
07	ASR	0824E	1011D	N21	W89	02	28.5			9	9	E	LEAR	5383	
07	BSL	0900E	0915D	N31	E90	03	14.5	1				C	CATA		
07	ASR	0931E	1611D	N34	E90	03	14.6			9	9	E	SVTO	5395	
07	BSL	0934	1015	N32	E90	03	14.5			9	9	E	SVTO	5395	Flare Associated
07	BSL	0950E	0950D	N30	E90	03	14.5	1				C	CATA		
07	BSL	1001E	1105D	N27	E90	03	14.4	2				C	CATA		
07	BSL	1115E	1125D	N33	E90	03	14.6	1				C	CATA		
07	LPS	1120E	1913D	N38	E80	03	13.9			9	9	E	RAMY	5395	
07	ASR	1120E	2128D	N31	E90	03	14.6			9	9	E	RAMY		
07	LPS	1122E	1552D	S22	E90	03	14.4			9	9	E	RAMY		
07	DSD	1201E	1311	N30	E63	03	12.4		15	9	9	E	SVTO	5395	Flare Associated
07	DSD	1210E	1615D	N30	E65	03	12.6		19	9	9	E	RAMY	5395	Flare Associated
07	DSD	1245E	1615D	N22	W32	03	5.1		02	9	9	E	RAMY	5385	
07	ASR	1253E	1615D	S18	E84	03	13.9			9	9	E	RAMY		
07	LPS	1349E	1913D	N38	E79	03	14.0			9	9	E	HOLL	5395	
07	AFS	1404E	0025D	N25	E37	03	10.4		02	9	9	E	HOLL	5392	
07	DSD	1404E	0028D	N43	E62	03	12.7		04	9	9	E	HOLL	5395	
07	LPS	1426	1509	N34	E90	03	14.8			9	9	E	SVTO		Flare Associated
07	ASR	1440E	1509	N32	E75	03	13.5			9	9	E	HOLL		
07	BSD	1500	1550D	N31	E63	03	12.6		19	9	9	E	SVTO	5395	Flare Associated
07	BSL	1502	1559	N29	E63	03	12.6			9	9	E	HOLL	5395	Flare Associated
07	ASR	1533	1600	N21	E85	03	14.2			9	9	E	HOLL	5379	
07	ASR	1540	1754	N31	E75	03	13.6			9	9	E	HOLL		
07	DSD	1700	1756D	N30	E59	03	12.3		07	9	9	E	HOLL	5395	Flare Associated
07	DSD	1700	1835D	N30	E61	03	12.5		08	9	9	E	RAMY	5395	Flare Associated

ACTIVE PROMINENCES AND FILAMENTS

MARCH 1989

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
07	AFS	1745E	0306D	N26	E36	03	10.5		02	9	9	E	PALE	5392	Flare Associated
07	DSD	1745E	2122D	N32	E64	03	12.8		08	9	9	E	PALE	5395	Flare Associated
07	ADF	1808E	2207D	N26	E35	03	10.5	1	05	9	9	E	RAMY	5392	
07	ASR	1812E	0306D	N32	E73	03	13.5			9	9	E	PALE		
07	ASR	1900E	1947D	N39	W80	03	1.3			9	9	E	HOLL	5380	
07	AFS	1930E	0306D	S22	W30	03	5.5		02	9	9	E	PALE	5387	
07	ASR	1937E	2042D	S19	W83	03	1.5			9	9	E	HOLL	5379	
07	ADF	1943E	0306D	S33	W64	03	2.7	1	09	9	9	E	PALE	5394	
07	AFS	1954E	0059D	N32	E75	03	13.8		02	9	9	E	HOLL		
07	ASR	2005E	0306D	S20	W81	03	1.6			8	8	E	PALE	5379	
07	SDF	2207E	1120D	S41	E19	03	9.5		19	0	0	E	RAMY	5396	
07	BSD	2257E	2342D	N29	E60	03	12.7		06	9	9	E	HOLL	5395	Flare Associated
07	DSD	2259E	0028D	N28	E57	03	12.4		10	9	9	E	HOLL	5395	Flare Associated
07	DSD	2316E	0306D	N31	E86	03	14.7		20	9	9	E	PALE	5395	
07	DSD	2316E	2327	N31	E63	03	12.9	1				C	VORO		
07	DSD	2340	0003	N31	E63	03	12.9	1				C	VORO		
07	BSL	2344	2353	N33	E90	03	15.1	1				C	VORO		
07	APR	2347	0300	S48	W90	02	29.4	1				C	VORO		
08	ASR	0030E	1014D	N45	W74	03	1.9			9	9	E	LEAR	5380	
08	APR	0040	0300D	S08	E90	03	14.8	1				C	VORO		
08	DSD	0119	0127	N31	E60	03	12.8	1				C	VORO		
08	DSD	0154	0216	N31	E63	03	13.0	1				C	VORO		
08	DSD	0202	0302D	N31	E57	03	12.6		05	9	9	E	LEAR	5395	
08	ASR	0230E	1014D	S18	W90	03	1.2			9	9	E	LEAR	5379	
08	DSD	0353E	0641D	N30	E56	03	12.6		03	9	9	E	LEAR	5395	
08	ASR	0452	1014D	N33	E74	03	14.1			9	9	E	LEAR		
08	BSD	0701E	0730D	N30	E58	03	12.8		18	9	9	E	LEAR	5395	
08	BSD	0701	0707	N32	E56	03	12.7		22	9	9	E	SVTO	5395	Flare Associated
08	APR	0735E	1014D	N42	W90	02	28.9	1		9	9	E	LEAR	5380	
08	ADF	0829E	1014D	N26	E46	03	11.9	1	06	9	9	E	LEAR		
08	ADF	0829E	1014D	S31	E34	03	11.0	1	14	9	9	E	LEAR		
08	BSL	0912E	0912D	S16	W90	03	1.5	1-				C	CATA		
08	DSD	1110E	1145D	N32	E49	03	12.3		07	9	9	E	SVTO	5395	
08	SDF	1145E	0915D	N36	W38	03	5.4		09	0	0	E	SVTO		
08	ADF	1340E	2051D	S37	E56	03	13.1	1	12	9	9	E	RAMY	5394	
08	ADF	1341E	2051D	S51	E60	03	13.7	1	50	9	9	E	RAMY		
08	ASR	1345E	1447D	N29	E90	03	15.6			9	9	E	HOLL		
08	BSL	1355E	1446D	N28	E90	03	15.6			9	9	E	RAMY		Flare Associated
08	BSL	1405	1446D	N29	E90	03	15.6			9	9	E	HOLL		
08	MDP	1410E	1659D	S18	W90	03	1.7	1		6	6	E	HOLL		
08	DSD	1420	1451D	S09	E15	03	9.7		02	9	9	E	HOLL	5390	Flare Associated
08	DSD	1508E	1710D	N27	E47	03	12.3		16	9	9	E	RAMY	5395	Flare Associated
08	DSD	1509E	1659D	N29	E48	03	12.4		15	9	9	E	HOLL	5395	Flare Associated
08	DSD	1745E	0100D	N31	E49	03	12.6		11	9	9	E	HOLL	5395	
08	AFS	2033E	0100D	N10	E15	03	10.0		02	9	9	E	HOLL		
08	SDF	2051E	1120D	N42	W19	03	7.3		19	0	0	E	RAMY		
08	AFS	2105E	0410D	N10	E15	03	10.0		02	9	9	E	PALE		
08	CAP	2110	0100D	N17	W90	03	2.0		02	9	9	E	HOLL		
08	DSD	2124E	0100D	N29	E45	03	12.4		04	9	9	E	HOLL	5395	
08	ADF	2140E	0100D	S35	E48	03	12.7	1	07	9	9	E	HOLL	5394	
08	AFS	2315E	1008D	N11	E14	03	10.0		02	9	9	E	LEAR		
08	ADF	2320E	1008D	S19	E61	03	13.6	1	10	9	9	E	LEAR	5398	
08	AFS	2320E	1008D	S34	E51	03	13.0		02	9	9	E	LEAR	5394	
08	DSD	2332	0033	N36	E50	03	13.0	1				C	VORO		
08	AFS	2340E	1008D	N24	E20	03	10.5	1	02	9	9	E	LEAR	5392	
09	DSD	0243	0300D	N36	E51	03	13.2	1				C	VORO		
09	DSD	0250	0300D	N31	E55	03	13.4		16	9	9	E	PALE	5395	Flare Associated
09	SDF	0915E	0608D	S45	E35	03	12.3		15	0	0	E	SVTO		
09	DSD	1135E	1943D	N26	E35	03	12.2		07	9	9	E	RAMY	5395	
09	AFS	1252E	1943D	N24	E12	03	10.5		03	8	8	E	RAMY	5392	
09	AFS	1305E	1943D	S37	E43	03	13.0		03	9	9	E	RAMY	5394	
09	DSD	1339E	1943D	S21	E62	03	14.3		11	9	9	E	RAMY	5398	Flare Associated
09	DSD	1400E	1822D	S19	E53	03	13.6		10	9	9	E	HOLL	5398	Flare Associated
09	DSD	1532E	0100D	N30	E36	03	12.5		34	9	9	E	HOLL	5395	Flare Associated
09	BSD	1540E	1706D	N28	E42	03	12.9		10	9	9	E	HOLL	5395	Flare Associated
09	ADF	1822E	0100D	S22	E57	03	14.1	1	20	9	9	E	HOLL	5398	
09	ASR	1834E	1943D	N11	E88	03	16.4			9	9	E	RAMY		
09	DSD	1839E	0040D	N34	E35	03	12.6		10	9	9	E	HOLL	5395	

ACTIVE PROMINENCES AND FILAMENTS

MARCH 1989

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
09	ADF	2336E	1010D	S35	E36	03	12.9	1	09	9	9	E	LEAR	5394	
09	BSD	2345E	0040D	N29	E32	03	12.5		09	9	9	E	HOLL	5395	Flare Associated
10	DSD	0138E	0645D	N29	E31	03	12.5		10	9	9	E	LEAR	5395	
10	ADF	0610E	0612D	N31	E27	03	12.4	1	06	9	9	E	SVTO		
10	AFS	0615E	0617D	N30	E37	03	13.2		02	9	9	E	SVTO	5395	
10	AFS	0630E	1600D	S16	E48	03	13.9		03	9	9	E	SVTO	5398	
10	ADF	0630E	1600D	S23	E52	03	14.3	1	18	9	9	E	SVTO	5398	
10	ADF	0647E	1600D	S33	E26	03	12.3	1	07	9	9	E	SVTO	5394	
10	AFS	0647E	1600D	S34	E34	03	13.0		03	9	9	E	SVTO	5394	
10	DSD	0652E	0752D	N34	E39	03	13.4		08	9	9	E	SVTO	5395	
10	ADF	0701E	1010D	N29	E29	03	12.6	1	06	8	9	E	LEAR	5395	
10	AFS	0808E	1600D	N11	W06	03	9.9		02	9	9	E	SVTO	5399	
10	DSD	0900E	1600D	S30	E26	03	12.4		15	9	9	E	SVTO	5395	
10	DSD	1111E	1240D	N36	E30	03	12.9		05	9	9	E	RAMY	5395	Flare Associated
10	DSD	1117E	2208D	N25	E28	03	12.6		03	9	9	E	RAMY	5395	Flare Associated
10	DSD	1141E	1520D	N27	E25	03	12.4		05	9	9	E	RAMY	5395	Flare Associated
10	DSD	1141E	2209D	N28	E24	03	12.4		06	9	9	E	RAMY	5395	Flare Associated
10	ADF	1335E	2209D	S26	E49	03	14.4	1	20	9	9	E	RAMY	5398	
10	DSD	1521E	1522D	N38	E28	03	12.9		08	9	9	E	RAMY	5395	Flare Associated
10	SDF	1600E	1043D	S02	W02	03	10.5		10	0	0	E	SVTO		
10	SSB	1732		441	W58	03	7.1			0	0	E	HOLL		
10	LPS	1947E	0100D	N36	E24	03	12.7			9	9	E	HOLL	5395	Flare Associated
10	DSD	1951E	0100D	N28	E21	03	12.5		20	9	9	E	HOLL	5395	Flare Associated
10	DSD	1951E	0413D	N22	E24	03	12.7		08	9	9	E	PALE	5395	Flare Associated
10	AFS	1951E	0413D	N28	E19	03	12.3		03	9	9	E	PALE	5395	Flare Associated
10	LPS	1952E	0309D	N38	E24	03	12.8			9	9	E	PALE	5395	Flare Associated
10	BSD	2201E	2350D	N29	E22	03	12.6		10	9	9	E	HOLL	5395	Flare Associated
10	SDF	2340E	0007D	S01	W12	03	10.1		10	0	0	E	LEAR		
11	DSD	0030E	0325D	N25	E20	03	12.6		04	9	9	E	LEAR	5395	
11	BSD	0110E	0325D	N25	E12	03	12.0		07	9	9	E	LEAR	5395	
11	DSD	0113	0138	N30	E20	03	12.6	1				C	VORO		
11	DSD	0116	0131	N31	E19	03	12.5	1				C	VORO		
11	DSD	0145	0202	N30	E20	03	12.6	1				C	VORO		
11	DSD	0208	0243	N29	E18	03	12.5	1				C	VORO		
11	DSD	0410E	0951D	N29	E16	03	12.4		08	9	9	E	LEAR	5395	Flare Associated
11	DSD	0712E	1622D	N30	E14	03	12.4		12	9	9	E	SVTO	5395	
11	ADF	0747E	1143D	N28	E10	03	12.1	1	17	9	9	E	SVTO	5395	
11	ASR	0758E	1037D	N25	W90	03	4.3			9	9	E	SVTO	5385	
11	EPL	0848E	0855D	N35	W90	03	4.2	2				C	CATA		
11	BSL	0850	0859	N31	W90	03	4.3			9	9	E	SVTO	5385	
11	DSD	0905	1622D	N29	E16	03	12.6		28	9	9	E	SVTO	5395	
11	ADF	0915E	1622D	S29	E13	03	12.4	1	11	9	9	E	SVTO	5394	
11	ADF	1130E	2127D	S27	E34	03	14.1	1	17	9	9	E	RAMY	5398	
11	SDF	1143E	1143D	N28	E10	03	12.3		17	0	0	E	SVTO	5395	
11	AFS	1200E	1622D	S15	E33	03	14.0		05	9	9	E	SVTO	5398	
11	ADF	1200E	1622D	S17	E24	03	13.3	1	05	9	9	E	SVTO	5398	
11	DSD	1259E	1345D	N30	E09	03	12.2		12	9	9	E	RAMY	5395	Flare Associated
11	DSD	1404E	0044D	N29	E13	03	12.6		29	9	9	E	HOLL	5395	Flare Associated
11	AFS	1409E	1714D	S35	E14	03	12.7		02	9	9	E	RAMY	5394	
11	ADF	1422E	1719D	N09	W22	03	9.9	1	04	9	9	E	RAMY	5399	
11	AFS	1528E	0044D	S19	E31	03	14.0	1	04	9	9	E	HOLL	5398	
11	SDF	1617E	1617D	S43	E02	03	11.8		20	0	0	E	RAMY		
11	DSD	1832E	2049D	N29	E11	03	12.6		08	9	9	E	PALE	5395	Flare Associated
11	ADF	1919E	0044D	S25	E30	03	14.1	2	09	9	9	E	HOLL	5398	
11	APR	2016E	0044D	N27	W90	03	4.8			9	9	E	HOLL	5385	
11	AFS	2048E	2049D	S34	E15	03	13.1		02	9	9	E	PALE	5394	
11	AFS	2254	0300D	N30	E03	03	12.2	1				C	VORO		
11	DSD	2312E	0914D	N30	E06	03	12.4		14	9	9	E	LEAR	5395	
12	ADF	0032	0300	N50	E15	03	13.3	1				C	VORO		
12	DSD	0038	0103	N32	E07	03	12.6	1				C	VORO		
12	APR	0145E	0402D	N28	W90	03	5.0	1		9	9	E	LEAR	5385	
12	EPL	0401E	0459D	N33	W90	03	5.0			9	9	E	LEAR	5385	
12	ASR	0614E	0914D	N21	W87	03	5.6			9	9	E	LEAR	5385	
12	DSD	0614E	1605D	N28	W03	03	12.0		12	9	9	E	SVTO	5395	
12	ASR	0620E	1605D	N15	W90	03	5.4			9	9	E	SVTO	5385	
12	DSD	0727E	1155D	N27	E01	03	12.4	2				V	KHAR		
12	BSL	0740E	0751D	S20	E90	03	19.2	1				C	CATA		

ACTIVE PROMINENCES AND FILAMENTS

MARCH 1989

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
12	EPL	0803E	0815	S20	E90	03	19.2	2				C	CATA		
12	DSD	0830	0840D	N36	E02	03	12.5	2				C	CATA		
12	BSL	0901E	0910	S23	E90	03	19.3	1				C	CATA		
12	ADF	1012	1155D	N36	E05	03	12.8	1				V	KHAR		
12	DSD	1203E	1225D	N27	W01	03	12.4	1				C	CATA		
12	AFS	1358E	1605D	N34	E18	03	14.0		02	9	9	E	SVTO	5397	
12	DSD	1510E	2031D	N28	W02	03	12.5		07	9	9	E	HOLL	5395	Flare Associated
12	ASR	1514E	1518	S21	E84	03	19.1			9	9	E	SVTO		
12	BSL	1518	1533	S21	E88	03	19.4			9	9	E	SVTO		
12	SDF	2031E	1350D	S02	W04	03	12.5		10	0	0	E	HOLL		
12	SDF	2031E	1350D	S42	W10	03	12.0		09	0	0	E	HOLL		
13	DSD	0003E	1010D	N31	W02	03	12.8		04	9	9	E	LEAR	5395	
13	BSL	0659E	0905D	N02	E90	03	20.0	1				C	ABST		
13	BSL	0659E	0905D	N34	E90	03	20.5	1				C	ABST		
13	ADF	0726E	1601D	N36	W10	03	12.5	1	06	8	8	E	SVTO	5395	
13	ADF	0802	0830	N37	W09	03	12.6	1				V	KHAR		
13	BSL	0823E	0905D	N32	W90	03	6.2	1				C	ABST		
13	DSD	0828	1210D	N28	W16	03	12.1	3				V	KHAR		
13	ADF	0900E	1010D	N25	W28	03	11.2	1	08	9	9	E	LEAR	5392	
13	ADF	1023E	1050	N37	W09	03	12.7	1				V	KHAR		
13	ADF	1030E	1601D	N22	W36	03	10.7	1	06	8	9	E	SVTO	5392	
13	BSL	1035	1102	S15	E90	03	20.2	1				V	KHAR		
13	AFS	1127E	1601D	N13	E30	03	15.7		05	9	9	E	SVTO	5400	
13	AFS	1149E	1957D	N11	E30	03	15.7		03	9	9	E	RAMY	5400	
13	DSD	1149E	1957D	N26	W14	03	12.4		12	9	9	E	RAMY	5395	Flare Associated
13	DSD	1149E	1957D	N30	W14	03	12.4		04	9	9	E	RAMY	5395	Flare Associated
13	DSD	1247	1755D	S18	E72	03	19.0		06	9	9	E	RAMY	5403	Flare Associated
13	DSD	1257E	1957D	N37	W10	03	12.7		06	9	9	E	RAMY	5395	Flare Associated
13	ADF	1340E	1957D	N25	W32	03	11.1	1	08	9	9	E	RAMY	5392	
13	DSD	1518E	1601D	N33	W22	03	11.9		05	9	9	E	SVTO	5395	Flare Associated
13	DSD	1600E	0020D	N28	W14	03	12.6		05	9	9	E	HOLL	5395	
13	DSD	1725E	0428D	N29	W13	03	12.7		04	9	9	E	PALE	5395	
13	DSD	1725E	0428D	S16	E03	03	13.9		02	9	9	E	PALE	5398	
13	AFS	1730E	0428D	N19	E37	03	16.5		02	9	9	E	PALE		
13	AFS	2007E	0428D	N16	W36	03	11.1		02	9	9	E	PALE		
13	DSD	2320E	0935	N28	W17	03	12.6		04	9	9	E	LEAR	5395	
13	AFS	2321E	1002D	N18	E33	03	16.5		02	9	9	E	LEAR		
14	DSD	0630E	1615D	N27	W26	03	12.2		04	9	9	E	SVTO	5395	
14	ADF	0740E	0815D	S00	E02	03	14.5					V	ATHN		
14	ADF	0740E	0815D	S60	W01	03	14.2					V	ATHN		
14	BSL	0840E	0851D	N15	E90	03	21.2	2				C	CATA		
14	AFS	0841E	1615D	S18	E18	03	15.7		01	9	9	E	SVTO		
14	BSL	0901E	0930	N16	E90	03	21.2	2				C	CATA		
14	ADF	1008	1125D	N28	W27	03	12.3	1				V	KHAR		
14	ADF	1012	1100	S12	E59	03	18.9	1				V	KHAR		
14	DSD	1235E	2152D	N26	W24	03	12.6		04	9	9	E	RAMY	5395	
14	DSD	1310	1451D	N27	W24	03	12.7		04	9	9	E	SVTO	5395	Flare Associated
14	DSD	1315E	1435D	N28	W20	03	13.0		04	9	9	E	RAMY	5395	Flare Associated
14	DSD	1602E	0020D	N28	W14	03	13.6		05	9	9	E	HOLL	5395	
14	DSD	1610E	1650D	N27	W32	03	12.2		10	9	9	E	RAMY	5395	Flare Associated
14	DSD	1725E	0428D	N29	W13	03	13.7		04	9	9	E	PALE	5395	
14	DSD	1725E	0428D	S16	E03	03	14.9		02	9	9	E	PALE	5398	
14	AFS	1730E	0428D	N19	E37	03	17.5		02	9	9	E	PALE		
14	AFS	2007E	0428D	N16	W36	03	12.1		02	9	9	E	PALE		
14	DSD	2112E	0102D	N27	W28	03	12.7		03	9	9	E	HOLL	5395	
14	DSD	2112E	0102D	N27	W34	03	12.2		05	9	9	E	HOLL	5395	
14	DSD	2112E	2155D	N31	W30	03	12.5		04	9	9	E	HOLL	5395	
14	DSD	2218E	0430D	N24	W37	03	12.1		03	9	9	E	PALE	5395	
14	APR	2358	0300D	S40	E90	03	22.3	1				C	VORO		
15	DSD	0001E	1015D	N31	W25	03	13.0		04	9	9	E	LEAR	5395	
15	ADF	0001E	1015D	N33	W30	03	12.6	1	11	9	9	E	LEAR	5395	
15	ADF	0005E	0530D	S09	E50	03	18.7	1	06	9	9	E	LEAR	5403	
15	AFS	0007E	1015D	N17	E23	03	16.7		02	7	7	E	LEAR	4507	
15	APR	0029	0300D	N33	W90	03	7.9	1				C	VORO		
15	DSD	0619E	1452D	N30	W34	03	12.6		04	8	8	E	SVTO	5395	
15	ADF	0830E	1245D	S70	W25	03	13.1					V	ATHN		
15	ADF	0835E	1245D	S06	W12	03	14.4					V	ATHN		

ACTIVE PROMINENCES AND FILAMENTS

MARCH 1989

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
15	APR	0840E	1245D	S35	E90	03	22.5					V	ATHN		
15	APR	0845E	1245D	N30	W90	03	8.3					V	ATHN		
15	DSD	1115E	2046D	N24	W36	03	12.7		09	9	9	E	RAMY	5395	
15	ASR	1430E	1513D	N17	E80	03	21.7			8	9	E	RAMY		Flare Associated
15	ADF	1442E	2046D	S17	W22	03	13.9	1	04	9	9	E	RAMY	5398	
15	ADF	1455E	2046D	N14	E07	03	16.1	1	08	9	9	E	RAMY	5400	
15	AFS	1457E	2046D	N18	E11	03	16.5		03	9	9	E	RAMY	5407	
15	AFS	1633E	0103D	N17	E10	03	16.4		03	5	8	E	HOLL	5407	
15	DSD	1636E	0103D	N27	W40	03	12.6		04	9	9	E	HOLL	5395	
15	ADF	1640E	0103D	S21	E49	03	19.4	1	07	9	9	E	HOLL	5403	
15	DSD	1720E	1830D	N26	W47	03	12.1		04	9	9	E	RAMY	5395	Flare Associated
15	SSB	2145		359	W44	03	11.0			0	0	E	HOLL		
15	DSD	2330E	1013D	N27	W38	03	13.0		04	9	9	E	LEAR	5395	
15	AFS	2331E	1013D	N17	E08	03	16.6		02	9	9	E	LEAR	5407	
15	AFS	2331E	1013D	N28	E34	03	18.6		02	7	7	E	LEAR	5404	
15	ADF	2332E	1013D	S23	E54	03	20.1	1	12	9	9	E	LEAR	5403	
16	ASR	0225E	1013D	N16	E90	03	22.9			9	9	E	LEAR	5409	
16	ADF	0610E	1245D	S06	W30	03	14.0					V	ATHN		
16	BSL	0840	0921D	N14	E90	03	23.2	1-				C	CATA		
16	ASR	0845E	1013D	N13	E82	03	22.5			9	9	E	LEAR		
16	BSL	0851	0901	N08	E90	03	23.1	1-				C	CATA		
16	BSL	0901	0910	N28	E90	03	23.4	1-				C	CATA		
16	BSL	0940E	1016D	N15	E90	03	23.2	1-				C	CATA		
16	BSL	1026E	1052D	N14	E90	03	23.2	1				C	CATA		
16	ASR	1101E	1520D	N17	E90	03	23.3			9	9	E	SVTO		
16	AFS	1102E	1520D	N17	W01	03	16.4		03	9	9	E	SVTO	5407	
16	DSD	1103E	1520D	N27	W48	03	12.7		07	9	9	E	SVTO	5395	
16	ADF	1104E	1520D	S14	W16	03	15.2	1	32	9	9	E	SVTO		
16	BSL	1118	1139	N15	E90	03	23.3	1-				C	CATA		
16	BSL	1127	1139	N13	E90	03	23.3	1-				C	CATA		
16	BSL	1127	1139	N77	E90	03	24.8	1-				C	CATA		
16	AFS	1236E	2141D	N17	E00	03	16.5		03	9	9	E	RAMY	5407	
16	BSL	1245	1245D	N40	W90	03	9.2	1				C	CATA		
16	ADF	1300E	2141D	S16	W15	03	15.4	1	21	9	9	E	RAMY		
16	SSB	1410		330	W25	03	14.3			0	0	E	HOLL		
16	SSB	1411		333	W28	03	14.0			0	0	E	HOLL		
16	SSB	1415		354	W49	03	12.0			0	0	E	HOLL		
16	DSD	1417E	1630D	N28	W49	03	12.8		04	9	9	E	HOLL	5395	
16	BSD	1527E	1541D	N32	W52	03	12.5		26	9	9	E	RAMY	5395	Flare Associated
16	DSD	1528	1632D	N34	W49	03	12.7		03	9	9	E	HOLL	5395	Flare Associated
16	BSD	1530E	1634D	N34	W40	03	13.4		26	9	9	E	HOLL	5395	Flare Associated
16	AFS	1633E	0103D	N17	E10	03	17.4		03	5	8	E	HOLL	5407	
16	DSD	1636E	0103D	N27	W40	03	13.6		04	9	9	E	HOLL	5395	
16	ADF	1640E	0103D	S21	E49	03	20.4	1	07	9	9	E	HOLL	5403	
16	BSD	1756	1954D	N32	W52	03	12.6		20	9	9	E	HOLL	5395	Flare Associated
16	BSD	1756E	1756D	N32	W52	03	12.6		20	9	9	E	RAMY	5395	Flare Associated
16	BSD	1756E	2016D	N37	W70	03	11.1		34	9	9	E	RAMY	5395	Flare Associated
16	AFS	1832E	0212D	N17	W04	03	16.5		03	9	8	E	PALE	5407	
16	BSL	1939E	2005D	N35	W62	03	11.8			9	9	E	PALE	5395	Flare Associated
16	DSD	2327E	1017D	N28	W53	03	12.8		02	9	9	E	LEAR	5395	
16	ASR	2329E	0700D	N25	W90	03	10.0			9	9	E	LEAR	5402	
16	ADF	2331E	1017D	S10	W26	03	15.0	2	15	9	9	E	LEAR		
17	BSD	0234E	0244D	N36	W61	03	12.2	1				C	VORO		
17	BSD	0240	0359	N35	W57	03	12.5		13	9	9	E	LEAR	5395	Flare Associated
17	ASR	0241	0359	N37	W90	03	9.9			9	9	E	LEAR	5395	Flare Associated
17	BSD	0332	0359	N32	W57	03	12.6		15	9	9	E	LEAR	5395	Flare Associated
17	APR	0539E	0807D	S36	E90	03	24.5	1				C	ABST		
17	APR	0619E	0807D	S60	W90	03	9.3	1				C	ABST		
17	SSB	0707		318	W27	03	15.9			0	0	E	SVTO		314 W23
17	BSD	0719	0745	N32	W59	03	12.6		11	9	9	E	LEAR	5395	Flare Associated
17	BSL	0722	0807D	N39	W90	03	10.0	1				C	ABST		
17	EPL	0840E	0916	N37	E90	03	24.6	2				C	CATA		
17	EPL	0910	0950D	N36	W90	03	10.1	1				C	CATA		
17	BSL	0937	0942	N65	W90	03	9.3	1-				C	CATA		
17	APR	1000E	1245D	N32	W90	03	10.3					V	ATHN		
17	ADF	1000E	1245D	S65	W35	03	14.3					V	ATHN		
17	DSD	1156E	2025D	N27	W61	03	12.7		04	9	9	E	RAMY	5395	
17	DSD	1156E	2025D	N35	W63	03	12.4		06	9	9	E	RAMY	5395	

ACTIVE PROMINENCES AND FILAMENTS

MARCH 1989

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	APR	1235E	1442D	N36	W90	03	10.3	1		9	9	E	SVTO	5402	
17	SDF	1250E	1036D	S42	E57	03	22.2	1				C	CATA		
17	ADF	1332E	1620D	N37	E36	03	20.5	1	30	9	9	E	SVTO	5304	
17	ADF	1342E	1620D	S12	W34	03	15.0	1	15	9	9	E	SVTO		
17	ADF	1348E	1620D	S22	W53	03	13.5	1	05	9	9	E	SVTO	5398	
17	SSB	1545		337	W46	03	14.6			0	0	E	HOLL		
17	ADF	1600E	0055D	S11	E34	03	20.2	1	23	9	9	E	HOLL		
17	DSD	1732	1948D	N31	W59	03	13.1		10	9	9	E	RAMY	5395	Flare Associated
17	LPS	1748E	2059D	N33	W61	03	12.9			9	9	E	RAMY	5395	Flare Associated
17	ADF	1750E	2147D	S13	W37	03	14.9	1	21	9	9	E	RAMY		
17	LPS	1754E	1941D	N33	W62	03	12.8			9	9	E	PALE	5395	Flare Associated
17	LPS	1756E	2050D	N33	W60	03	13.0			9	9	E	HOLL	5395	Flare Associated
17	DSD	1818E	1930D	N31	W63	03	12.8		13	9	9	E	HOLL	5395	Flare Associated
17	DSD	1850E	2014D	S13	E13	03	18.8		03	9	9	E	RAMY	5403	Flare Associated
17	BSD	1928E	2248D	N33	W66	03	12.6		07	9	9	E	HOLL	5395	
17	DSD	2014E	2248D	S11	E13	03	18.8		05	9	9	E	HOLL	5403	Flare Associated
17	ASR	2335E	0100D	N23	W87	03	11.3			9	9	E	LEAR	5392	
17	ADF	2336	0300D	N04	W22	03	16.3	1				C	VORO		
17	BSL	2336	2350	N22	W90	03	11.1	1				C	VORO		
18	APR	0010	0300D	S55	E90	03	25.8	1				C	VORO		
18	APR	0010	0300D	S59	W90	03	10.1	1				C	VORO		
18	BSL	0037	0116	N34	W90	03	10.8	1				C	VORO		
18	APR	0040	0300D	N08	W90	03	11.3	1				C	VORO		
18	AFS	0045E	1010D	N32	E14	03	19.1		03	9	9	E	LEAR	5404	
18	BSD	0106E	0215D	N33	W73	03	12.2		07	9	9	E	LEAR	5395	
18	BSD	0428E	1010D	N37	W66	03	12.9		12	9	9	E	LEAR	5395	
18	BSL	0529E	0552D	N42	W90	03	10.8	1				C	ABST		
18	APR	0529E	0900D	S30	E90	03	25.3	1				C	ABST		
18	BSL	0552E	0900D	S70	E90	03	26.4	1				C	ABST		
18	APR	0619E	0900D	N10	W90	03	11.5	1				C	ABST		
18	BSL	0927	0940	N34	W90	03	11.2	1-				C	CATA		
18	ADF	1016E	1530D	S22	E15	03	19.6	1	09	9	9	E	SVTO	5403	
18	ADF	1028E	1530D	N30	E04	03	18.7	1	03	9	9	E	SVTO	5404	
18	ADF	1028E	1530D	N33	E06	03	18.9	1	03	9	9	E	SVTO	5404	
18	ADF	1053E	1530D	S11	W49	03	14.8	1	20	9	9	E	SVTO		
18	ADF	1640E	0106D	S14	W51	03	14.8	1	21	9	9	E	HOLL		
18	ASR	1710E	2053D	S30	E90	03	25.8			9	9	E	RAMY		
18	ADF	1713E	0237D	S10	W50	03	15.0	1	16	9	9	E	PALE		
18	ASR	1713E	0237D	S18	E90	03	25.6			9	9	E	PALE		
18	APR	1730E	2053D	N25	W78	03	12.7	1		9	9	E	RAMY	5395	
18	SSB	1733		337	W60	03	15.5			0	0	E	PALE		
18	DSD	1738E	0030D	S22	E11	03	19.6		06	9	9	E	HOLL	5403	Flare Associated
18	ASR	1746E	0237D	N35	W78	03	12.5			8	8	E	PALE	5395	
18	LPS	1754E	1941D	N33	W62	03	13.8			9	9	E	PALE	5395	Flare Associated
18	DSD	1758E	0237D	S14	W04	03	18.4		03	9	9	E	PALE	5403	
18	ASR	1820E	0030D	S27	E90	03	25.8			9	9	E	HOLL		
18	LPS	1846E	0212D	S26	E90	03	25.8			9	9	E	PALE		
18	LPS	1942E	2053D	S26	E90	03	25.8			9	9	E	RAMY		
18	LPS	2032E	0030D	S27	E90	03	25.9			9	9	E	HOLL		
18	ADF	2227	0300D	S15	W54	03	14.8	1				C	VORO		
18	AFS	2307E	0237D	N14	W46	03	15.5		01	9	9	E	PALE	5400	
18	ASR	2330E	1010D	N32	W90	03	11.8			9	9	E	LEAR	5395	
18	AFS	2333E	0538D	N31	E01	03	19.1		04	9	9	E	LEAR	5404	
18	APR	2340	0300	N24	W90	03	12.0	1				C	VORO		
19	APR	0025	0300D	N39	E90	03	26.3	1				C	VORO		
19	SDF	0030E	0036D	S20	W28	03	16.9		48	0	0	E	LEAR		
19	SPY	0032E	0106D	N30	W90	03	11.9			9	9	E	HOLL	5395	
19	SDF	0106E	1332D	N28	E69	03	24.4		10	0	0	E	HOLL		
19	SDF	0106E	1332D	S14	W50	03	15.3		13	0	0	E	HOLL		
19	SDF	0106E	1332D	S45	E60	03	24.0		15	0	0	E	HOLL		
19	BSL	0112E	0150D	N30	W90	03	12.0			9	9	E	LEAR	5395	
19	SPY	0115E	0244D	N30	W90	03	12.0			9	9	E	PALE	5395	
19	BSL	0122	0147D	N38	W90	03	11.8	1				C	VORO		
19	AFS	0231E	1010D	N13	W50	03	15.3		03	9	9	E	LEAR	5400	
19	BSL	0239	0301D	N34	W90	03	11.9	1				C	VORO		
19	ASR	0307E	1010D	S28	E90	03	26.2			9	9	E	LEAR		
19	BSL	0514E	1010D	N90	W29	03	16.5			9	9	E	LEAR	5395	
19	EPL	0601E	0904D	N33	W90	03	12.1	2				C	ABST		

ACTIVE PROMINENCES AND FILAMENTS

MARCH 1989

Day	Event Type	Start (UT)	End (UT)	Lat	CMP	Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
19	APR	0601E	0904D	S43	E90	03	26.7	2				C	ABST		
19	APR	0605E	1240D	N29	W90	03	12.2					V	ATHN		
19	APR	0619E	0904D	S37	E90	03	26.5	1				C	ABST		
19	APR	0619E	0904D	S62	E90	03	27.2	1				C	ABST		
19	APR	0644E	0904D	S19	E90	03	26.1	1				C	ABST		
19	ADF	0715E	1240D	S15	W55	03	15.1					V	ATHN		
19	ADF	0720E	1240D	S01	W70	03	14.1					V	ATHN		
19	APR	0730E	1240D	S39	E90	03	26.6					V	ATHN		
19	APR	0751E	0904D	N23	W90	03	12.4	1				C	ABST		
19	BSL	0904E	1434D	N28	W90	03	12.3			9	9	E	SVTO	5395	
19	DSD	0940E	1002D	S12	W12	03	18.5	1				V	KHAR		
19	ASR	0940E	1434D	S25	E90	03	26.4			9	9	E	SVTO		
19	BSL	1023	1040D	S27	E90	03	26.4	1				V	KHAR		
19	BSL	1046	1152D	N36	W90	03	12.2	2				V	KHAR		
19	BSL	1048E	1150D	S27	E90	03	26.5	1				V	KHAR		
19	APR	1100	1434D	N31	W90	03	12.3	1		9	9	E	SVTO	5395	Flare Associated
19	APR	1132E	2014D	N21	W90	03	12.6	1		9	9	E	RAMY	5395	
19	ASR	1132E	2014D	N31	W79	03	13.2			9	9	E	RAMY	5395	
19	ASR	1132E	2014D	S27	E90	03	26.5			9	9	E	RAMY		
19	ADF	1255E	2014D	S03	W66	03	14.6	1	16	9	9	E	RAMY		
19	SSB	1313		345	W79	03	15.4			0	0	E	RAMY		
19	SSB	1415		341	W75	03	15.8			0	0	E	HOLL		
19	ADF	1423E	1538D	N02	W90	03	12.9	2	22	8	5	E	HOLL		
19	SDF	1423E	1546	N02	W90	03	12.9		22	0	0	E	HOLL		
19	APR	1427E	0023D	N34	W90	03	12.4			9	9	E	HOLL	5395	
19	ASR	1427E	0024D	N28	W90	03	12.6			9	9	E	HOLL	5396	
19	SDF	1434E	0901D	S01	W80	03	13.6		18	0	0	E	SVTO		
19	AFS	1443E	0040D	S18	E04	03	19.9	1	03	9	9	E	HOLL		
19	APR	1451E	0024D	S03	W90	03	12.9			9	9	E	HOLL		
19	EPL	1538E	1546	S03	W90	03	12.9			9	9	E	HOLL		
19	ASR	1610E	1940D	S27	E90	03	26.7			9	9	E	HOLL		
19	ADF	1819E	0040D	N16	W45	03	16.3	2	20	9	9	E	HOLL	5413	
19	LPS	1913E	0040D	S25	E90	03	26.8			9	9	E	HOLL		
19	LPS	2326E	0102D	S23	E90	03	26.9			9	5	E	LEAR		
19	AFS	2340E	1012D	S18	W02	03	19.8		03	9	7	E	LEAR	5414	
19	ASR	2343	1012D	N33	W90	03	12.8			9	8	E	LEAR	5395	
20	BSL	0010	0042	S28	E90	03	27.0	1				C	VORO		
20	SDF	0021E	0021D	S10	W50	03	16.2		19	0	0	E	PALE		
20	SDF	0021E	0021D	S15	W34	03	17.4		10	0	0	E	PALE		
20	APR	0032	0300D	S38	E90	03	27.3	1				C	VORO		
20	BSL	0115	0130	S28	E90	03	27.1	1				C	VORO		
20	APR	0115	0300D	N40	E90	03	27.4	1				C	VORO		
20	ADF	0122E	1012D	S23	W05	03	19.7	1	09	9	9	E	LEAR	5414	
20	APR	0151	0300D	N19	W90	03	13.2	1				C	VORO		
20	BSL	0245	0300D	S28	E90	03	27.1	1				C	VORO		
20	ADF	0318E	0409D	S19	E00	03	20.1	1	14	9	9	E	PALE	5414	
20	DSD	0553	1012D	N19	E15	03	21.4		12	9	9	E	LEAR	5416	
20	ASR	0615	1012D	S17	W90	03	13.4			9	9	E	LEAR	5398	
20	ASR	0654E	0655D	S18	W90	03	13.4			9	9	E	SVTO	5398	
20	DSD	0724E	1413D	N03	W10	03	19.6		04	9	9	E	SVTO	5403	
20	AFS	0728E	1413D	N11	E30	03	22.6		03	8	8	E	SVTO	5411	
20	ADF	0733E	1413D	N17	E20	03	21.8	1	05	9	9	E	SVTO	5409	
20	ADF	0743E	1413D	S20	W70	03	15.0	1	03	9	9	E	SVTO	5406	
20	AFS	0758E	1413D	S21	E06	03	20.8		03	9	9	E	SVTO	5415	
20	DSD	0810E	0835D	N24	E16	03	21.6	1				V	KHAR		
20	BSL	0822	0955D	S37	E90	03	27.6	2				V	KHAR		
20	BSL	0832E	0834D	S33	E90	03	27.5	1				C	ABST		
20	EPL	0855E	0910	S14	E90	03	27.2	1				V	KHAR		
20	BSL	0912	0923	N36	W90	03	13.1	1				V	KHAR		
20	DSD	0955	1015	N20	W56	03	16.1	1				V	KHAR		
20	DSD	1015E	1050	S16	W25	03	18.5	2				V	KHAR		
20	DSD	1020E	1413D	S18	W27	03	18.4		02	9	9	E	SVTO	5403	
20	DSD	1037E	1047D	N18	W46	03	16.9	1				V	KHAR		
20	APR	1259E	2158D	N19	W90	03	13.7	1		9	9	E	RAMY		
20	ASR	1259E	2158D	N33	W90	03	13.4			9	9	E	RAMY	5395	
20	ADF	1259E	2158D	S13	W18	03	19.2	1	09	9	9	E	RAMY	5403	
20	AFS	1415E	2027D	S19	W08	03	20.0		03	9	9	E	HOLL	5414	
20	ASR	1427E	0024D	N28	W90	03	13.6			9	9	E	HOLL	5396	
20	ASR	1445E	2027D	N36	W90	03	13.4			9	9	E	HOLL	5395	

ACTIVE PROMINENCES AND FILAMENTS

MARCH 1989

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	SSB	1452		284	W32	03	27.3			0	0	E	HOLL		
20	AFS	1505E	2027D	S14	E00	03	20.6		02	9	9	E	HOLL		
20	CRN	1520E	2019D	N33	W90	03	13.5		04	9	9	E	HOLL	5395	
20	LPS	1520	1805D	N32	W90	03	13.5			9	9	E	RAMY	5395	
20	AFS	1702E	0430D	S12	E28	03	22.8		02	8	8	E	PALE		
20	CRN	1702E	1940D	N30	W90	03	13.6		04	9	9	E	PALE	5395	
20	ASR	1702E	1940D	N33	W90	03	13.6			9	9	E	PALE	5395	
20	AFS	1702E	2242D	S14	E00	03	20.7		02	9	9	E	PALE	5418	
20	AFS	2001E	0430D	S25	E84	03	27.3		03	9	9	E	PALE	5417	
20	DSD	2100E	0430D	S24	E86	03	27.5		04	9	9	E	PALE	5417	Flare Associated
20	AFS	2240E	0430D	N25	W52	03	16.9		01	9	9	E	PALE	5413	
20	ADF	2325E	1004D	N16	E13	03	22.0	1	04	9	9	E	LEAR	5409	
20	ADF	2334E	1004D	S21	E01	03	21.0	1	09	9	9	E	LEAR	5410	
21	AFS	0158E	1004D	N06	E16	03	22.3		02	9	9	E	LEAR	5409	
21	AFS	0241E	1004D	S18	W20	03	19.6		02	9	9	E	LEAR	5414	
21	ASR	0256E	1004D	N15	W90	03	14.3			9	9	E	LEAR	5408	
21	AFS	0256E	1004D	N23	W58	03	16.6		01	9	9	E	LEAR	5413	
21	DSD	0812E	0850	S27	E75	03	27.2	1				V	KHAR		
21	ADF	0900	0930	N17	E07	03	21.9	1				V	KHAR		
21	ADF	0948E	1054D	N16	E28	03	23.5	2				V	KHAR		
21	ADF	1045E	1055D	N19	W57	03	17.1	1				V	KHAR		
21	BSL	1127E	1142D	N37	W90	03	14.2	1				V	KHAR		
21	DSD	1145E	1545D	N23	W64	03	16.5		04	9	9	E	RAMY	5413	
21	AFS	1145E	2217D	N24	W62	03	16.7		03	9	9	E	RAMY	5413	
21	APR	1240E	1546D	S21	W80	03	15.4	1		9	9	E	RAMY	5406	
21	AFS	1435E	2217D	N20	W03	03	21.4		03	9	9	E	RAMY	5409	
21	DSD	1456E	1655D	S16	W23	03	19.9		04	9	9	E	HOLL	5414	
21	AFS	1459E	0109D	N24	W66	03	16.5		02	9	9	E	HOLL	5413	
21	SSB	1504		314	W76	03	20.3			0	0	E	HOLL		
21	ADF	1553E	2130D	S10	W42	03	18.5	1	04	9	9	E	RAMY	5403	
21	DSD	2045E	0109D	N18	W03	03	21.6		02	9	9	E	HOLL	5409	
21	SDF	2212E	1044D	N03	W14	03	20.9		08	0	0	E	RAMY		
21	AFS	2258E	1008D	S19	W28	03	19.8		02	9	9	E	LEAR	5414	
21	AFS	2300E	0529D	N23	W67	03	16.8		02	9	9	E	LEAR	5413	
21	AFS	2306E	1008D	N17	W05	03	21.6		04	9	9	E	LEAR	5409	
21	ADF	2306E	1008D	N19	W01	03	21.9	1	06	9	9	E	LEAR	5409	
22	ADF	0010	0300D	S15	E29	03	24.2	1				C	VORO		
22	APR	0112	0300D	N28	W90	03	15.0	1				C	VORO		
22	ADF	0220E	0805D	S16	E28	03	24.2	1	10	9	9	E	LEAR	5412	
22	AFS	0240E	0540D	S21	W18	03	20.7		02	9	9	E	LEAR	5415	
22	BSL	0559E	0846D	N29	W90	03	15.2	1				C	ABST		
22	APR	0559E	0846D	S64	E90	03	30.3	1				C	ABST		
22	ADF	0628E	1421D	N09	E04	03	22.6	1	04	9	9	E	SVTO	5411	
22	BSL	0951E	1010	N33	E90	03	29.5	1-				C	CATA		
22	BSL	1010	1010D	N39	W90	03	15.1	2				C	CATA		
22	ADF	1016E	1600D	S14	W50	03	18.6	1	07	9	9	E	SVTO	5403	
22	BSL	1022E	1029D	N39	W90	03	15.1	3				C	CATA		
22	ASR	1130E	1600D	N22	E90	03	29.4			9	9	E	SVTO	5419	
22	ADF	1137E	1600D	N12	E16	03	23.7	1	33	9	9	E	SVTO	5412	
22	ADF	1421E	2210D	S14	W45	03	19.2	1	11	9	9	E	RAMY	5403	
22	SSB	1445		286	W60	03	30.2			0	0	E	HOLL		
22	AFS	1459E	0109D	N24	W66	03	17.5		02	9	9	E	HOLL	5413	
22	ADF	1809E	0431D	S13	W47	03	19.2		08	9	9	E	PALE	5403	
22	ADF	1809E	0431D	S15	E18	03	24.1		12	9	9	E	PALE	5412	
22	ADF	1809E	0431D	S20	W21	03	21.2		04	9	7	E	PALE	5415	
22	ASR	1809E	0431D	S20	W90	03	15.9			9	9	E	PALE	5406	
22	DSD	2045E	0109D	N18	W03	03	22.6		02	9	9	E	HOLL	5409	
22	AFS	2045E	2332D	N13	W19	03	21.4		02	9	9	E	HOLL	5409	
22	AFS	2300E	0529D	N23	W67	03	17.8		02	9	9	E	LEAR	5413	
22	APR	2300	0300D	S20	W90	03	16.1	1				C	VORO		
22	DSD	2308E	0305	S26	E56	03	27.3		03	8	8	E	LEAR	5417	
22	AFS	2308E	0537D	S25	E52	03	27.0		02	9	9	E	LEAR	5417	
22	AFS	2310E	0538D	S20	W28	03	20.8		02	7	7	E	LEAR	5415	
22	ASR	2313E	0854D	N26	W87	03	16.2			9	9	E	LEAR	5413	
22	AFS	2315E	0854D	N14	E03	03	23.2		02	9	9	E	LEAR	5411	
22	DSD	2317E	0837D	N14	W18	03	21.6		05	9	9	E	LEAR	5409	
22	ADF	2317E	0854D	N14	W17	03	21.7	1	05	9	9	E	LEAR	5409	
22	AFS	2317E	0854D	N15	W20	03	21.4		02	9	9	E	LEAR	5409	

ACTIVE PROMINENCES AND FILAMENTS

MARCH 1989

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	APR	2325	0300D	N41	W90	03	15.6	1				C	VORO		
23	APR	0004	0300D	N04	W90	03	16.3	1				C	VORO		
23	BSL	0526E	0905D	N07	W90	03	16.5	1				C	ABST		
23	APR	0546E	0905D	N32	W90	03	16.1	1				C	ABST		
23	APR	0620E	0905D	S20	W90	03	16.4	1				C	ABST		
23	BSL	0645E	0905D	S19	E90	03	30.1	1				C	ABST		
23	BSL	0710E	0905D	S35	E90	03	30.5	1				C	ABST		
23	APR	0849E	0912	S25	W90	03	16.4	1		9	9	E	SVTO		
23	EPL	0912E	0931D	S25	W90	03	16.4	1		9	9	E	SVTO		
23	AFS	1130E	1645D	N16	W29	03	21.3		02	9	9	E	RAMY	5409	
23	ADF	1130E	2126D	N07	W24	03	21.7	1	06	9	9	E	RAMY	5409	
23	ADF	1130E	1603D	N18	W30	03	21.2	1	13	9	9	E	SVTO	5409	
23	AFS	1420E	0111D	N14	W05	03	23.2		02	9	9	E	HOLL		
23	ASR	1432E	1457D	N23	W90	03	16.7			9	9	E	HOLL	5413	
23	ASR	1659E	0111D	N19	W90	03	16.8			9	9	E	HOLL	5413	
23	ADF	1818E	1819D	N14	W26	03	21.8		02	9	9	E	PALE	5409	
23	AFS	1818E	2238D	N21	W30	03	21.5		02	9	9	E	PALE	5409	
23	AFS	1825E	0436D	N15	W05	03	23.4		03	9	9	E	PALE	5420	
23	LPS	2012E	2014D	N20	W30	03	21.5			9	9	E	PALE	5409	Flare Associated
23	DSD	2305E	0436D	S27	E44	03	27.4		03	9	9	E	PALE	5417	
23	AFS	2310E	0538D	S20	W28	03	21.8		02	7	7	E	LEAR	5415	
24	DSD	0226	0436D	N15	W30	03	21.8		02	9	9	E	PALE	5409	Flare Associated
24	AFS	0253E	0436D	N14	E39	03	27.1		01	9	9	E	PALE		
24	DSD	0858E	0925D	N17	W32	03	21.9		04	9	9	E	LEAR	5409	
24	EPL	0905E	0945	N27	E90	03	31.4	1-				C	CATA		
24	ADF	1120E	2050D	N13	W38	03	21.6	1	05	9	9	E	RAMY	5409	
24	ADF	1710E	0053D	S23	E19	03	26.2	1	23	9	9	E	HOLL		
24	SSB	1755		229	W31	03	27.0			0	0	E	RAMY		252 W54
24	AFS	2240E	1003D	N19	E52	03	28.9		04	9	9	E	LEAR	5422	
24	APR	2320	0151D	S63	E90	04	2.0	1				C	VORO		
24	APR	2326	0151D	N13	W90	03	18.2	1				C	VORO		
25	APR	0032	0151D	S28	E90	04	1.0	1				C	VORO		
25	ASR	0100E	1003D	S90	W14	03	23.7			9	9	E	LEAR	5403	
25	AFS	0133E	1003D	N14	W48	03	21.4		04	9	9	E	LEAR	5409	
25	ADF	0602E	1629D	S24	E23	03	27.0	1	04	9	9	E	SVTO	5417	
25	AFS	0618E	1629D	N20	W55	03	21.0		03	9	9	E	SVTO	5409	
25	ADF	0619E	1629D	N17	W49	03	21.5	1	07	9	9	E	SVTO	5409	
25	ADF	0650E	1629D	S12	W24	03	23.5	1	20	9	9	E	SVTO	5412	
25	BSL	1016	1031	N82	E90	04	2.8	1-				C	CATA		
25	ADF	1240E	2053D	S35	E09	03	26.2	1	12	9	9	E	RAMY	5423	
25	AFS	1303E	1629D	S11	W08	03	24.9		03	9	9	E	SVTO		
25	ADF	1515E	1531D	N08	W57	03	21.4	2	07	9	9	E	HOLL	5409	
25	SDF	1515E	1610D	N08	W57	03	21.4		07	0	0	E	HOLL	5409	
25	AFS	1515E	2150D	N22	W58	03	21.2	1	03	9	9	E	HOLL	5409	
25	ADF	1517E	0104D	S21	W06	03	25.2	2	16	9	9	E	HOLL	5412	
25	ADF	1520E	0104D	S23	E25	03	27.6	1	14	9	9	E	HOLL	5417	
25	AFS	1524E	0018D	S11	W10	03	24.9	1	02	9	9	E	HOLL		
25	ASR	1526E	2104D	S14	W90	03	18.8			9	9	E	HOLL	5403	
25	EPL	1545	1630D	N36	W90	03	18.4			9	9	E	RAMY	5404	
25	EPL	1553E	1601D	N35	W90	03	18.5			9	9	E	SVTO	5404	
25	ADF	1604E	2053D	S22	W22	03	24.0	1	08	9	9	E	RAMY	5417	
25	AFS	1711E	2350D	S11	W11	03	24.9		02	9	9	E	PALE		
25	SSB	1719		202	W17	03	25.9			0	0	E	HOLL		228 W43
25	APR	2236	0207D	N12	W90	03	19.2	1				C	VORO		
25	ADF	2339E	1005D	N13	W57	03	21.7	2	04	9	9	E	LEAR	5409	
25	ASR	2340E	1005D	S15	W90	03	19.2			9	9	E	LEAR	5414	
26	APR	0003	0207D	S45	W90	03	18.5	1				C	VORO		
26	DSD	0130	0311D	N12	W58	03	21.7		04	9	9	E	LEAR	5409	
26	BSL	0508E	0521D	S21	W90	03	19.3	1				C	ABST		
26	DSD	0607	0630	S27	E11	03	27.1		03	9	9	E	LEAR	5417	Flare Associated
26	DSD	0616E	0628	S27	E11	03	27.1		02	6	7	E	SVTO	5417	Flare Associated
26	BSL	0735E	0800D	S15	W90	03	19.5					P	BUCA		
26	BSL	0739E	0755	S15	W90	03	19.5	1-				C	CATA		
26	ASR	0750E	1652D	S17	W90	03	19.5			9	9	E	SVTO	5414	
26	BSL	0850	0850D	S15	W90	03	19.5	1-				C	CATA		
26	ADF	1128E	2210D	S24	W22	03	24.8	1	18	0	0	E	RAMY	5412	

ACTIVE PROMINENCES AND FILAMENTS

MARCH 1989

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
26	AFS	1131E	1652D	N15	E07	03 27.0		02	6	7	E	SVTO		
26	ADF	1135E	1608D	S35	E06	03 27.0	1	05	8	9	E	SVTO	5417	
26	DSD	1309	1533D	N12	W69	03 21.3		08	9	9	E	RAMY	5409	Flare Associated
26	BSD	1312	1403	N11	W68	03 21.4		20	9	9	E	SVTO	5409	Flare Associated
26	DSD	1324E	2026D	N15	W69	03 21.3		08	9	9	E	HOLL	5409	Flare Associated
26	BSL	1352E	1533D	N14	W70	03 21.3			9	9	E	RAMY	5409	Flare Associated
26	BSL	1403E	1455	N15	W67	03 21.5			9	9	E	SVTO	5409	Flare Associated
26	BSL	1418E	1504D	N16	W65	03 21.7			9	9	E	HOLL	5409	Flare Associated
26	SDF	1652E	0525D	N07	E22	03 28.3		06	0	0	E	SVTO		
26	ADF	1830E	0352D	N09	W57	03 22.5		03	9	9	E	PALE	5411	
26	ADF	1830E	0352D	N17	W59	03 22.3		07	9	9	E	PALE	5409	
26	ADF	1830E	0352D	S18	W32	03 24.3		12	9	9	E	PALE	5412	
26	ADF	1830E	0352D	S19	E03	03 27.0		07	9	9	E	PALE	5417	
26	AFS	1917E	0352D	N16	E04	03 27.1		01	9	9	E	PALE	5425	
26	ADF	1917E	1919	N14	E05	03 27.2	1	04	9	9	E	PALE		
27	ASR	0115E	0911D	S13	W90	03 20.3			9	9	E	LEAR	5414	
27	ASR	0401E	0911D	N23	W85	03 20.6			9	8	E	LEAR	5409	
27	AFS	0550E	0911D	S18	E12	03 28.1		02	9	9	E	LEAR	5421	
27	BSD	0605E	0730D	N14	W77	03 21.4		03	9	9	E	SVTO	5409	
27	AFS	0605E	1654D	N16	E60	03 31.8		01	8	8	E	SVTO		
27	AFS	0605E	1654D	S18	E11	03 28.1		01	9	9	E	SVTO	5421	
27	BSL	0725	0746	N22	W90	03 20.4	1-				C	CATA		
27	ASR	0732E	1654D	N21	W90	03 20.4			9	9	E	SVTO	5409	
27	ASR	0732E	1654D	S21	W90	03 20.4			9	9	E	SVTO	5415	
27	ASR	0806E	1152D	N22	E90	04 3.2			9	9	E	SVTO		
27	DSD	0900E	0926D	S17	E11	03 28.2		04	9	9	E	SVTO	5421	Flare Associated
27	DSD	0906E	0911D	S17	E10	03 28.1		03	9	9	E	LEAR	5421	
27	ASR	1109E	2116D	N19	W89	03 20.7			9	9	E	RAMY	5409	
27	ADF	1118E	2116D	S21	W42	03 24.2	1	08	9	9	E	RAMY	5412	
27	ASR	1355E	1654D	N22	E90	04 3.5			9	9	E	SVTO		
27	ASR	1627	2045D	N07	W90	03 20.9			9	9	E	RAMY	5409	Flare Associated
27	AFS	1705E	0429D	N15	E55	03 31.9		02	9	9	E	PALE		
27	ASR	1715E	0429D	N13	W90	03 20.9			9	9	E	PALE	5409	
27	SSB	2057		210	W53	03 28.7			0	0	E	RAMY		
27	SDF	2116E	1450D	S33	W11	03 27.0		08	0	0	E	RAMY		
27	SDF	2116E	1450D	S45	E21	03 29.6		30	0	0	E	RAMY		
27	BSL	2238	2304	N13	W90	03 21.1	1				C	VORO		
27	BSL	2315	2353	N13	W90	03 21.2	1				C	VORO		
27	APR	2342	0230D	N33	W90	03 20.8	1				C	VORO		
28	ADF	0010	0230D	S62	E50	04 1.4	1				C	VORO		
28	BSL	0016	0032	N55	W90	03 20.2	1				C	VORO		
28	BSL	0017	0042	S08	E90	04 3.7	1				C	VORO		
28	ASR	0031E	0708D	N17	W90	03 21.2			9	9	E	LEAR	5409	
28	AFS	0223E	1006D	S17	W01	03 28.0		02	9	9	E	LEAR	5421	
28	ADF	0224E	0811D	S34	W15	03 26.9	2	12	9	9	E	LEAR	5417	
28	ASR	0235	1006D	N13	W90	03 21.3			9	9	E	LEAR	5409	
28	AFS	0617E	1653D	S11	W47	03 24.7		03	9	9	E	SVTO	5424	
28	DSD	0622E	1653D	S18	W04	03 28.0		03	9	9	E	SVTO	5421	
28	BSL	0650	0705	S25	E90	04 4.2	1				C	CATA		
28	BSL	0710	0720	N18	W90	03 21.4	1-				C	CATA		
28	BSL	0715	0720	S14	W90	03 21.5	1-				C	CATA		
28	BSL	0753E	0800	N17	W90	03 21.5	1-				C	CATA		
28	BSL	0753E	0806D	N10	W90	03 21.6	1				C	CATA		
28	ASR	0754E	0846D	N14	W90	03 21.5	1				P	BUCA		
28	BSL	0825	0854	S25	E90	04 4.3	1				C	CATA		
28	APR	0827E	0855D	N13	W89	03 21.6	1		9	9	E	SVTO	5411	
28	BSL	0831	0850	S21	E90	04 4.2	1-				C	CATA		
28	BSL	0900	0958D	N16	W90	03 21.5	1				C	CATA		
28	ASR	0903E	1110D	N13	W89	03 21.7			9	9	E	SVTO	5411	
28	BSL	0945	0958D	S24	E90	04 4.3	1				C	CATA		
28	SDF	0958E	0640D	S35	W25	03 26.4	1				C	CATA		
28	EPL	1047E	1145D	S01	W90	03 21.7					V	ATHN		
28	ASR	1124E	1653D	N13	W89	03 21.7			9	9	E	SVTO	5411	
28	AFS	1201E	1653D	N22	E74	04 3.2		03	9	9	E	SVTO		
28	ASR	1424E	2216D	N20	W90	03 21.7			9	9	E	RAMY	5409	
28	ASR	1424E	2224D	N15	W90	03 21.8			9	9	E	RAMY	5411	
28	ASR	1446E	2224D	S19	E90	04 4.5			9	9	E	RAMY		
28	ASR	1500E	0115D	S19	E90	04 4.5			9	9	E	HOLL		

ACTIVE PROMINENCES AND FILAMENTS

MARCH 1989

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	APR	1807E	2053D	N19	W88	03	22.0	2		9	9	E	HOLL	5411	
28	ASR	1836E	2001D	S14	W90	03	22.0			9	9	E	RAMY	5412	
28	APR	1900E	2338D	N12	W90	03	22.0	3		9	9	E	PALE	5409	
28	AFS	1913E	0115D	S19	W09	03	28.1		02	9	9	E	HOLL	5421	
28	APR	1932E	1945	N15	W90	03	22.0	2		9	9	E	RAMY	5411	
28	EPL	1945	2032D	N16	W90	03	22.0	3		9	9	E	RAMY	5411	Flare Associated
28	EPL	1950E	1952D	N19	W90	03	21.9			9	9	E	PALE	5409	
28	DSD	2053E	2259D	S10	W55	03	24.7		03	9	9	E	HOLL	5424	
28	DSD	2110E	2224D	S10	W51	03	25.0		03	9	9	E	RAMY	5424	
28	ASR	2243E	0434D	S17	E90	04	4.8			9	9	E	PALE		
28	ASR	2310E	1001D	S20	E90	04	4.8			9	9	E	LEAR		
28	AFS	2311E	1001D	S09	W57	03	24.7		02	9	9	E	LEAR	5424	
28	DSD	2312E	0410D	N14	W26	03	27.0		03	9	9	E	LEAR	5425	
28	ADF	2340E	0535D	N15	E19	03	30.4	2	04	9	9	E	LEAR	5422	
28	ADF	2341E	0538D	S21	W44	03	25.6	2	16	9	9	E	LEAR	5412	
29	APR	0017	0203D	S16	E90	04	4.8	1				C	VORO		
29	AFS	0542E	1612D	S26	W29	03	27.0		03	9	9	E	SVTO	5417	
29	ADF	0559E	1612D	N15	W30	03	27.0	1	04	9	9	E	SVTO	5425	
29	AFS	0608E	1612D	S11	W62	03	24.6		03	9	9	E	SVTO	5424	
29	ADF	0610E	0830D	N17	E30	03	31.5	2	05	8	9	E	LEAR	5425	
29	ADF	0618E	1612D	S18	W13	03	28.3	1	06	9	9	E	SVTO	5421	
29	ADF	0624E	1612D	S17	E82	04	4.5	1	08	9	9	E	SVTO		
29	ASR	0625E	0800D	S20	E90	04	5.1					P	BUCA		
29	DSD	0629E	1612D	S25	W35	03	26.5		03	9	9	E	SVTO	5417	
29	ASR	0632E	1612D	S18	E89	04	5.0			9	9	E	SVTO		
29	BSL	0704E	0705D	S22	E90	04	5.2	1-				C	CATA		
29	BSL	0723E	0806	S21	E90	04	5.2	1-				C	CATA		
29	ASR	0815E	1001D	N14	W88	03	22.7			9	9	E	LEAR		
29	BSL	0915	0955	N13	W90	03	22.6	1				C	CATA		
29	DSD	1055	1112	S22	W37	03	26.6	1				C	CATA		
29	ADF	1106E	1612D	N45	E34	04	1.3	1	06	9	9	E	SVTO		
29	AFS	1106E	1612D	N48	E35	04	1.4		03	9	9	E	SVTO		
29	BSL	1112	1115	S38	W90	03	22.2	1-				C	CATA		
29	AFS	1134E	2139D	S26	W32	03	27.0		03	9	9	E	RAMY	5417	
29	ASR	1136E	2223D	S20	E78	04	4.4			9	9	E	RAMY	5428	
29	SDF	1140E	0642D	N45	E25	03	31.6	1				C	CATA		
29	SSB	1235		194	W59	04	6.8			0	0	E	RAMY		
29	AFS	1758E	2229D	S34	W25	03	27.7		02	9	9	E	HOLL	5417	
29	ASR	1818E	0429D	S18	E90	04	5.6			9	9	E	PALE	5428	
30	ASR	0006E	0941D	S17	E90	04	5.8			9	9	E	LEAR	5428	
30	BSL	0104E	0135D	N30	E90	04	6.1			9	9	E	LEAR		
30	ASR	0135E	0941D	N36	E90	04	6.3			9	9	E	LEAR		
30	AFS	0220E	0941D	S28	W37	03	27.2		03	9	9	E	LEAR	5417	
30	AFS	0230E	0941D	N17	E78	04	5.0		03	8	9	E	LEAR	5428	
30	ADF	0728	0738	S16	E82	04	5.5	1				V	KHAR		
30	BSL	0757E	0808D	N10	W90	03	23.6	1-				C	CATA		
30	BSL	0812E	0818D	S24	E90	04	6.3	2				V	KHAR		
30	BSL	0834E	0834D	S24	E90	04	6.3	1				C	CATA		
30	BSL	0854	0855D	N13	W90	03	23.6	1-				C	CATA		
30	BSL	0907E	0921D	N15	W90	03	23.6	2				C	CATA		
30	BSL	0913E	0921D	S31	E90	04	6.5	1				C	CATA		
30	BSL	0934E	1005	N11	E90	04	6.2	1-				C	CATA		
30	ADF	0948E	1025D	S16	E80	04	5.5	1				V	KHAR		
30	BSL	1033E	1043	S23	E90	04	6.4	1-				C	CATA		
30	BSL	1035	1042D	S23	E90	04	6.4	1				V	KHAR		
30	AFS	1116E	1640D	S16	E73	04	5.0		01	9	9	E	SVTO	5428	
30	DSD	1119E	1344D	S28	W43	03	27.1		02	9	9	E	SVTO	5417	
30	BSL	1140	1145D	S25	E90	04	6.4	1-				C	CATA		
30	BSD	1140E	1300D	S21	E80	04	5.6		03	9	9	E	SVTO	5428	
30	SDF	1145E	0730D	S42	W13	03	29.4	1				C	CATA		
30	ADF	1236E	1456D	S19	W46	03	27.0	1	03	9	9	E	RAMY	5417	
30	DSD	1248E	1731D	S20	E74	04	5.2		04	9	9	E	RAMY	5428	
30	AFS	1248E	2121D	S19	E72	04	5.0		03	9	9	E	RAMY	5428	
30	BSD	1300	1300D	S22	E79	04	5.6		10	9	9	E	RAMY	5428	Flare Associated
30	AFS	1300E	1642D	N21	E46	04	3.1		01	9	9	E	SVTO	5427	
30	BSD	1302	1430D	S19	E80	04	5.6		13	9	9	E	SVTO	5428	Flare Associated
30	SSB	1415		154	W33	04	3.9			0	0	E	RAMY		
30	AFS	1600E	2018D	N19	E46	04	3.2		02	9	9	E	HOLL	5427	

ACTIVE PROMINENCES AND FILAMENTS

MARCH 1989

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
30	AFS	1617E	2121D	N19	E46	04	3.2		02	8	6	E	RAMY	5427	
30	AFS	1640E	2245D	S20	E71	04	5.1		03	9	9	E	HOLL	5428	
30	AFS	1800E	0203D	N20	E46	04	3.3		02	9	9	E	PALE	5427	
30	AFS	1800E	0331D	S18	E72	04	5.2		02	9	9	E	PALE	5428	
30	AFS	2016E	0116D	S27	E25	04	1.8		04	9	9	E	HOLL		
30	DSD	2017E	0116D	N22	W13	03	29.8		05	9	9	E	HOLL	5422	
30	APR	2020E	2348D	N41	E90	04	7.2			9	9	E	HOLL		
30	AFS	2032E	2121D	S27	E25	04	1.8		02	9	9	E	RAMY		
30	AFS	2057E	2215D	S27	E25	04	1.8		02	9	9	E	PALE		
31	ASR	0035E	0115D	S30	E90	04	7.1			9	9	E	HOLL		
31	AFS	0240E	0952D	S28	E23	04	1.9		02	9	9	E	LEAR		
31	AFS	0543E	1605D	S29	W53	03	27.1		03	8	8	E	SVTO	5417	
31	AFS	0550E	1605D	S17	E64	04	5.1		03	9	9	E	SVTO	5428	
31	ASR	0551E	0830D	S22	E90	04	7.2			9	9	E	SVTO		
31	AFS	0557E	1605D	S26	E21	04	1.9		03	9	9	E	SVTO	5430	
31	AFS	0609E	1605D	N21	W19	03	29.8		03	9	9	E	SVTO	5422	
31	BSL	0740E	0800D	S11	E90	04	7.1	1				V	KHAR		
31	BSL	0741E	0750D	S18	E90	04	7.2	2				C	CATA		
31	BSL	0801E	0850	S18	E90	04	7.2	2				C	CATA		
31	ADF	0938E	0953D	S17	E65	04	5.3	1				V	KHAR		
31	BSL	1016E	1019	N13	E90	04	7.2	1-				C	CATA		
31	BSL	1016E	1030	S24	E90	04	7.4	1-				C	CATA		
31	BSL	1054	1109	N11	E90	04	7.2	1				C	CATA		
31	BSL	1054	1109	N23	E90	04	7.4	1-				C	CATA		
31	ADF	1204E	1605D	S22	W53	03	27.4	1	16	9	9	E	SVTO	5417	
31	ADF	1208E	2042D	N22	W26	03	29.5	1	04	9	9	E	RAMY	5422	
31	ADF	1208E	2042D	S18	W61	03	26.9	1	07	9	9	E	RAMY	5417	
31	ADF	1208E	2042D	S21	W54	03	27.4	1	07	9	9	E	RAMY	5417	
31	ADF	1216E	2006D	S22	E60	04	5.1	1	03	9	9	E	RAMY	5428	
31	AFS	1354E	2009D	S28	E15	04	1.7		02	9	9	E	RAMY	5430	
31	DSD	1358E	2042D	S21	E60	04	5.2		02	9	9	E	RAMY	5428	
31	ADF	1518E	2042D	S13	E48	04	4.2	1	08	9	9	E	RAMY	5428	
31	ASR	1554	1605D	S21	E90	04	7.6			9	9	E	SVTO		
31	DSD	1630E	2042D	N09	E72	04	6.1		03	9	9	E	RAMY		
31	AFS	1724E	0300D	N16	E31	04	3.1		02	9	9	E	PALE	5427	
31	AFS	1724E	0300D	N23	W24	03	29.9		01	9	9	E	PALE	5422	
31	ADF	1724E	0300D	S22	W60	03	27.1		15	9	9	E	PALE	5417	
31	ADF	1753E	0300D	S14	E57	04	5.0		03	9	9	E	PALE	5428	
31	AFS	1753E	0300D	S20	E56	04	5.0		02	9	9	E	PALE	5428	
31	AFS	1930E	0117D	N17	E30	04	3.1		02	9	9	E	HOLL	5427	
31	DSD	2008E	0117D	S20	E54	04	5.0		04	9	9	E	HOLL	5428	Flare Associated
31	SDF	2042E	1600D	N16	E43	04	4.1		09	0	0	E	RAMY		
31	ASR	2145E	2153D	S11	W90	03	25.1			9	9	E	HOLL	5424	
31	ASR	2330E	2340D	S21	E90	04	7.9			9	9	E	HOLL		
31	DSD	2350E	0940D	S20	E52	04	5.0		04	9	9	E	LEAR	5428	

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.

CONTENTS

Comprehensive Reports **MISCELLANEOUS DATA** Number 541 Part II

176
Late
Dec 88

CARTE SYNOPTIQUE
ACTIVE REGIONS
CARRINGTON ROTATION 1810

(12 December 1988 to 09 January 1989)

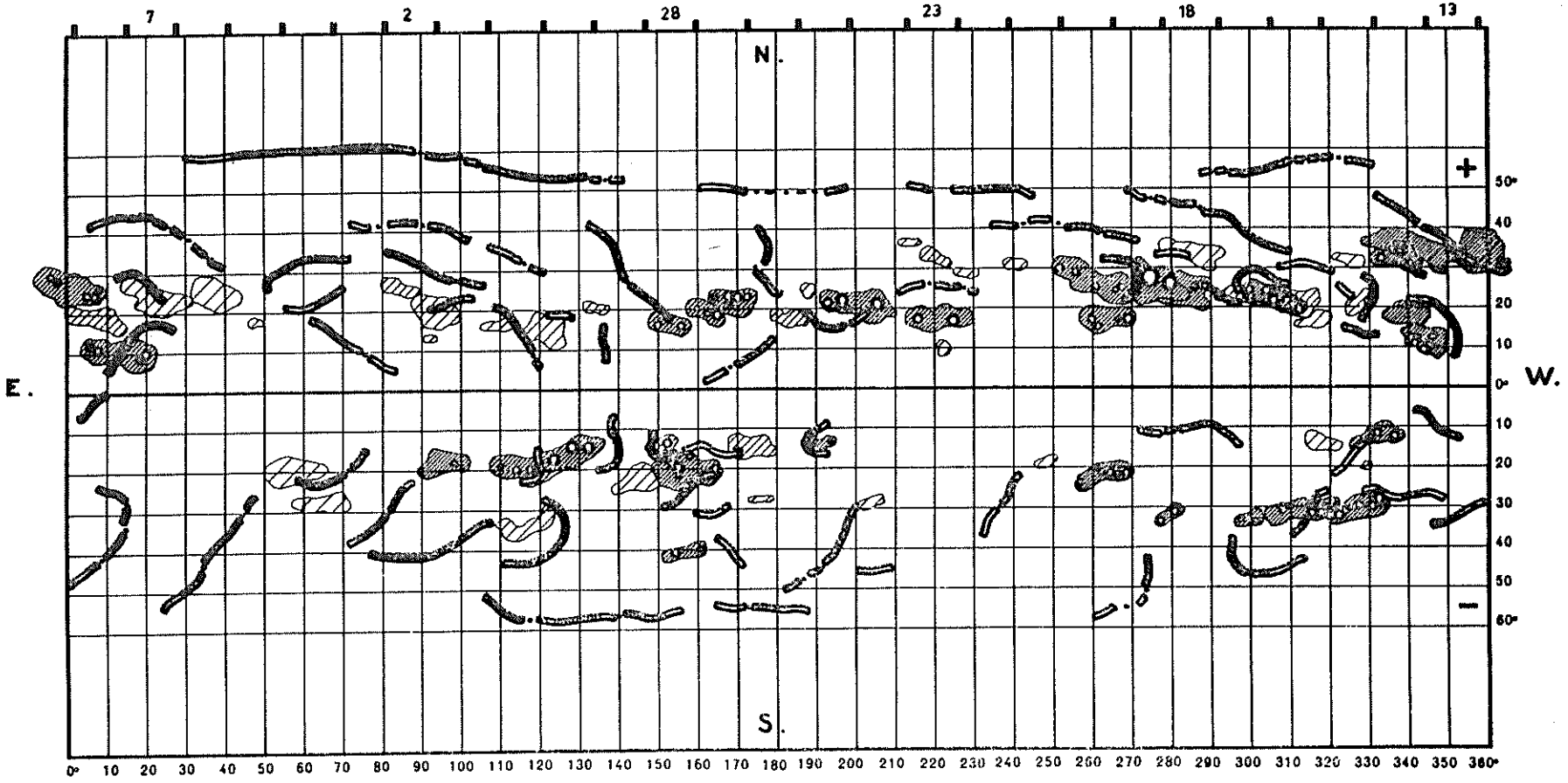
Region No.	Coordinates Lat.	Long.	Imp	Age at CMP (Days)	Spotless Region	Region No. in Rotation 1809	Activity at West Limb
1	34 N	348	1	>6	x	1808(53), 3	
2	12 N	344	3	>6			decreasing
3	10 N	343	3	-6			stable
4	18 N	339	1	>6	x		dispersed
5	31 N	336	3	+5			decreasing
6	12 S	331	3	>6			decreasing
7	20 N	327	1	+6	x		dispersed
8	30 S	326	4	>6			decreasing
9	14 S	318	1	>6	x	11	dispersed
10	17 N	316	1	>6	x		dispersed
11	31 S	313	4	>6			decreasing
12	22 N	307	4	+3			decreasing
13	24 N	306	1	>6	x	13	disappeared
14	35 S	299	2	-5			stable
15	24 N	283	1	>6	x		dispersed
16	32 S	279	2	-2			stable
17	26 N	276	6	>6			decreasing
18	17 N	264	4	+1			stable
19	21 S	263	3	+4			decreasing
20	26 N	260	5	>6			decreasing
21	19 S	248	1	>6	x		dispersed
22	29 N	228	1	0	x		dispersed
23	10 N	222	1	>6	x		disappeared
24	17 N	221	4	>6			decreasing
25	23 N	220	1	>6	x		dispersed
26	28 S	203	1	>6	x		dispersed
27	21 N	200	5	>6			decreasing
28	14 S	191	2	-1			decreasing
29	25 N	188	1	>6	x		dispersed
30	18 N	183	1	>6	x		dispersed
31	14 S	173	1	>6	x	30	decreasing
32	22 N	169	4	>6			stable
33	19 N	162	3	>6			stable
34	21 S	157	4	>6			decreasing
35	40 S	157	3	>6			decreasing
36	17 N	153	3	>6			stable
37	13 S	150	3	>6		33	decreasing
38	22 S	145	1	>6	x	33	dispersed
39	21 N	135	1	+2	x		dispersed
40	15 S	128	5	>6			decreasing
41	16 N	122	1	>6	x		dispersed
42	22 S	120	1	+1	x		decreasing
43	34 S	117	1	>6	x	35	dispersed
44	19 S	115	4	+1			stable
45	17 N	110	1	>6	x	37	dispersed
46	19 S	96	2	+6			increasing
47	20 N	94	1	>6	x	40	dispersed
48	13 N	92	1	+3	x		disappeared
49	27 N	85	1	+5	x		disappeared
50	24 N	23	1	>6	x	46	decreasing
51	10 N	13	4	>6			decreasing
52	20 N	8	1	>6	x	53	decreasing
53	27 N	2	4	>6			decreasing

CARTE SYNOPTIQUE

CARRINGTON ROTATION NUMBER 1810
(12 December 1988 to 9 January 1989)

Meudon Observatory

December 1988



Heliographic Longitude

177
Late
Dec 88

THE SOLAR UV CORE-TO-WING RATIO FOR THE MG II H & K LINES

Richard F. Donnelly
Air Resources Laboratory, NOAA ERL
Boulder, Colorado 80303, U. S. A.

Heath and Schlesinger (1986) studied the solar ultraviolet measurements from the Solar Backscatter Ultraviolet (SBUV) experiment on the NIMBUS7 satellite and showed that the core-to-wing ratio of the Mg II h & k lines [R(MgIIc/w)] was a good measure of the temporal variations of the solar UV flux, including long-term variations, because the ratio is relatively insensitive to drifts in instrument sensitivity. They defined the ratio as follows:

$$R(MgII,t) = \frac{4[F(C1,t) + F(C2,t) + F(C3,t)]}{3[F(LW1,t) + F(LW2,t) + F(SW1,t) + F(SW2,t)]} \quad (1)$$

where F(w,t) is the measured flux at wavelength w and time t. For NIMBUS7, LW1 = 283.4, LW2 = 283.2, C1 = 280.2, C2 = 280.0, C3 = 279.8, SW1 = 276.8 and SW1 = 276.6 nm. The bandpass of that instrument was 1.1 nm and the steps in wavelength were 0.2 nm. That bandwidth is so wide that the h & k lines are not resolved but blend together to form one large absorption line.

The SBUV/2 Monitor, based on the design of SBUV on NIMBUS7, is now operating on the NOAA9 satellite. The table of results on the next page has been derived from its discrete-wavelength mode, where the flux intensity at 12 wavelengths in the vicinity of the Mg II h & k lines is monitored daily. The bandpass is 1.14 nm and the wavelength step is 0.15 nm. The wavelength C2 is well centered at the minimum of the low resolution h and k line near 280 nm.

The results in the table have been normalized by dividing by the monthly mean of September 1986 [R(Sept86)], which had the lowest monthly value in the NIMBUS7 data, where NIMBUS7 data are currently available through October 29, 1986. Therefore, the monthly mean of September can be used to normalize both the NIMBUS7 and NOAA9 data. The values in the table were derived as follows:

$$\text{Percent Variation} = \frac{[R(MgIIc/w,t) - R(Sept86)]}{R(Sept86)} \times 100\% \quad (2)$$

A complete description of the NOAA9 measurements will be published in early 1989 (Donnelly et al., 1989). R(MgIIc/w,t) is useful for estimating the solar UV flux variations at other UV wavelengths and for chromospheric EUV wavelengths. To help place the results in the accompanying table in perspective, consider that the amplitude of the change in R(MgIIc/w,t) for solar cycle 21 from the NIMBUS7 measurements was about 10% for daily values.

Donnelly, R. F., J. Barrett, S. D. Bouwer, L. C. Puga, and D. E. Stevens, Solar UV Flux Measurements from the SBUV/2 Monitor on the NOAA9 Satellite, Part I. Mg II h & k Line Core-to-Wing Ratios for 1986 - 1987, to be published as a NOAA Tech. Memo., Air Resources Lab., NOAA ERL, Boulder, Colorado 80303, U. S. A.

Heath, D. F., and B. M. Schlesinger, The Mg 280-nm Doublet as a Monitor of Changes in Solar Ultraviolet Irradiance, J. Geophys. Res., 91, 8672, 1986

1986 SOLAR MG II CORE-TO-WING RATIO

Daily percent that the core-to-wing ratio for the combined h & k lines of Mg II near 280 nm exceed the monthly mean for September 1986, based on full-disk discrete-wavelength mode measurements from the Solar Backscatter Ultraviolet (SBUV/2) Monitor on the NOAA9 satellite. N/A indicates the results are not available. Discrete-wavelength mode measurements of the solar Mg II h & k lines started on May 27, 1986.

	Month						
Day	May 86	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1		N/A	-0.09	-0.12	0.09	0.36	1.11	0.32
2		0.10	-0.29	0.15	0.01	0.31	1.25	0.04
3		-0.04	-0.25	0.26	-0.26	0.61	1.00	0.04
4		0.16	-0.23	0.01	-0.03	0.36	0.72	-0.02
5		-0.20	-0.12	0.12	0.07	0.35	0.67	-0.27
6		0.08	-0.01	0.01	-0.07	0.62	0.49	-0.41
7		-0.09	0.08	0.13	N/A	0.57	0.27	-0.42
8		N/A	0.03	0.04	-0.07	0.48	0.02	-0.07
9		0.07	N/A	0.00	N/A	0.69	-0.10	N/A
10		0.06	0.31	0.04	-0.26	0.19	0.01	-0.41
11		-0.15	0.31	0.07	0.13	0.42	- 0.29	-0.13
12		0.23	0.37	-0.15	0.05	0.45	-0.13	-0.09
13		0.23	0.19	0.03	0.01	0.33	-0.14	-0.07
14		0.11	0.31	-0.13	0.26	-0.17	-0.13	0.10
15		0.40	0.17	-0.17	0.09	-0.15	-0.01	0.14
16		0.32	0.43	0.11	-0.10	0.09	0.19	0.05
17		0.50	0.51	-0.06	-0.36	-0.03	0.17	0.19
18		0.44	0.43	-0.18	-0.25	0.23	0.47	0.10
19		0.37	0.64	-0.03	0.05	0.39	0.33	0.04
20		0.20	0.46	-0.22	0.05	0.55	0.71	0.07
21		0.17	0.55	-0.08	-0.03	0.65	0.60	N/A
22		0.12	0.51	-0.56	-0.11	0.83	0.39	N/A
23		0.38	0.29	-0.34	-0.07	1.05	0.60	-0.08
24		0.11	0.35	-0.28	0.00	1.18	0.50	-0.06
25		0.06	0.13	-0.22	0.22	1.39	0.69	0.00
26		-0.11	0.17	-0.19	0.18	1.34	0.44	-0.08
27	1.00	-0.01	-0.19	-0.23	-0.01	1.49	0.57	-0.16
28	0.15	-0.04	N/A	-0.10	0.28	1.55	0.50	-0.09
29	0.88	0.02	0.07	0.00	0.16	1.12	0.34	-0.31
30	0.42	-0.09	N/A	0.01	0.14	1.49	-0.02	N/A
31	0.23		0.01	-0.01		1.25		-0.31

1987 SOLAR MG II CORE-TO-WING RATIO

	Month											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-0.21	N/A	0.06	0.15	0.38	-0.01	0.18	1.22	0.95	0.55	1.08	0.85
2	-0.33	-0.18	0.23	0.24	0.07	0.24	0.35	0.73	0.86	0.68	1.17	0.87
3	-0.39	-0.20	0.30	0.02	0.10	0.23	0.40	0.63	0.73	0.78	1.29	0.71
4	-0.28	-0.42	0.45	0.15	0.08	0.31	0.39	0.57	0.87	0.70	1.29	0.78
5	-0.22	-0.22	0.34	0.09	0.68	0.36	0.34	0.22	0.79	0.83	1.19	0.84
6	-0.39	-0.33	0.09	0.37	0.76	0.77	0.29	0.45	0.99	0.80	0.96	N/A
7	-0.33	-0.20	0.29	0.29	0.74	0.54	0.24	0.22	1.12	0.85	1.03	0.73
8	-0.12	-0.09	0.37	0.61	1.12	0.65	0.12	0.41	0.88	0.73	0.97	0.39
9	-0.31	0.01	-0.09	0.78	1.30	0.65	N/A	0.52	0.84	1.09	1.06	0.65
10	-0.22	-0.14	0.06	1.16	1.38	0.33	-0.07	N/A	0.97	0.80	1.07	0.69
11	-0.21	-0.10	0.05	1.13	1.45	0.45	N/A	N/A	1.12	0.86	0.88	0.50
12	-0.12	0.14	0.15	1.18	1.19	0.54	N/A	N/A	1.10	0.96	0.69	0.60
13	-0.20	0.05	0.03	1.37	1.08	0.65	4.00	N/A	1.20	1.01	0.69	0.62
14	-0.24	-0.14	0.26	1.77	0.82	0.32	0.12	N/A	1.09	1.24	0.75	0.55
15	-0.05	0.09	0.52	1.51	1.01	0.66	0.46	N/A	1.24	1.17	0.66	0.69
16	-0.03	0.14	0.27	1.63	0.86	0.37	0.65	N/A	1.19	1.38	0.74	1.17
17	-0.01	-0.08	0.21	1.43	0.85	0.89	0.41	N/A	1.11	1.17	0.76	1.17
18	0.25	0.40	0.29	1.10	0.97	0.80	0.63	N/A	0.93	N/A	0.80	1.21
19	0.34	0.36	0.47	0.89	1.02	1.02	N/A	N/A	1.11	N/A	0.93	1.07
20	0.27	0.11	0.49	0.44	0.86	1.00	0.83	N/A	0.93	0.92	0.78	1.23
21	0.37	0.16	0.51	0.25	1.01	0.93	1.38	N/A	0.70	0.76	1.01	1.39
22	0.32	0.14	0.52	0.44	1.01	0.89	1.39	N/A	0.62	0.29	1.03	1.12
23	0.51	0.11	0.65	0.27	1.02	0.57	1.58	N/A	0.28	0.05	1.45	1.11
24	0.43	N/A	0.45	0.31	0.81	0.55	1.82	N/A	0.49	0.06	1.41	0.90
25	0.13	0.08	0.57	0.40	0.78	N/A	1.69	N/A	0.39	0.06	1.42	0.92
26	-0.10	0.13	0.31	0.22	0.58	N/A	1.53	N/A	0.12	0.08	1.50	0.84
27	-0.25	0.31	0.24	0.14	0.20	0.34	1.72	N/A	0.18	0.64	1.26	0.81
28	-0.21	0.11	0.18	0.24	0.01	0.31	N/A	N/A	0.11	0.94	0.84	1.04
29	-0.11		0.27	0.14	0.04	0.28	1.41	N/A	0.29	0.97	0.99	1.20
30	-0.17		0.10	0.02	-0.10	0.38	1.30	N/A	0.39	1.22	1.08	1.39
31	-0.28		0.15		0.21		1.18	N/A		1.00		1.43

N/A = not available.

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."