

DECEMBER 2002 NUMBER 700 - Part II



Solar-Geophysical Data comprehensive reports

Data for June 2002 and Miscellaneous
Explanation of Data Reports Issued as Number 515 (Supplement) July 1987

NEW DATA:

**ACE Solar Wind, Interplanetary Magnetic Field and
Particles -- Monthly Plots**

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NATIONAL OCEANIC AND
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NATIONAL ENVIRONMENTAL SATELLITE,
DATA, AND INFORMATION SERVICE

NATIONAL GEOPHYSICAL
DATA CENTER

BOULDER,
COLORADO



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Data for June 2002 and Late Data

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SOLAR-GEOPHYSICAL DATA

Number 700

(Issued in Two Parts)

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CONTENTS

PART I (PROMPT REPORTS)	Page
DETAILED INDEX FOR 2002	2
DATA FOR NOVEMBER 2002	3- 41
DATA FOR OCTOBER 2002	43-158

PART II (COMPREHENSIVE REPORTS)	Page
DETAILED INDEX FOR 2002	2
DATA FOR JUNE 2002	3-37
NEW DATA:	
ACE SOLAR WIND, INTERPLANETARY MAGNETIC FIELD AND PARTICLES	
-- MONTHLY PLOTS	

DETAILED INDEX OF OBSERVATIONS PUBLISHED IN SOLAR-GEOPHYSICAL DATA

CODE	KIND OF OBSERVATION	APR 02	MAY	JUN	JUL	AUG	SEP	OCT	NOV
A. SOLAR AND INTERPLANETARY									
A.1	Sunspot Drawings	694A 52	695A 44	696A 60	697A 58	698A 50	699A 52	700A 50	
A.2aa	International Sunspot Numbers	693A 27	694A 28	695A 26	696A 27	697A 27	698A 27	699A 27	700A 27
A.2c	American Sunspot Numbers	693A 27	694A 28	695A 26	696A 27	697A 27	698A 27	699A 27	700A 27
A.3a	Mt. Wilson Magnetograms	694A 52	695A 44	696A 60	697A 58	698A 50	699A 52	700A 50	
A.3b	Sunspot Mag Class and Regions	694A 91	695A 86	696A100	697A 98	698A 91	699A 91	700A 90	
A.3c	Kitt Peak Magnetograms	694A 52	695A 44	696A 60	697A 58	698A 50	699A 52	700A 50	
A.3d	Mean Solar Magnetic Field (Stanford)	693A 41	694A 41	695A 35	696A 43	697A 49	698A 41	699A 41	700A 39
A.3e	Stanford Magnetograms	694A 52	695A 44	696A 60	697A 58	698A 50	699A 52	700A 50	
A.4	H-alpha Filtergrams	694A 52	695A 44	696A 60	697A 58	698A 50	699A 52	700A 50	
A.5d	PhotometricCa II Faculae(SanFernando)	Jan 92-Dec 96 in 631B 22; 1997-1998 in 663B 66							
A.6c	Stanford Solar Mag Field Synoptic Maps	694A 46	695A 38	696A 48	697A 52	698A 44	699A 46	700A 44	
A.6d	Kitt Peak Solar Mag Field Synoptic Map								
A.6f	Active Prominences and Filaments	698B 48	699B 45	700B 33					
A.6g	Sac Peak Coronal Line Synoptic Maps	694A 48	695A 40	696A 50	697A 54	698A 46	699A48	700A 46	
A.6h	Photometric White Light (San Fernando)	Jul-Dec 96 630B 32; 1997-1998 in 663B 51							
A.7h	Coronal Line Emission (Sac Peak)	694A 52	695A 44	696A 60	697A 58	698A 50	699A 52	700A 50	
A.7j	Coronal Hole Daily Maps (NSO/KP)	694A 82	695A 75	696A 90	697A 89	698A 81	699A 82	700A 81	
A.7k	Coronal Index (Slovak Academy)	1939-1996 in 644B 28							
A.7m	Coronal Mass Ejections (CSPSW)								
A.8aa	2800 MHz- Solar Flux (Penticton)	693A 27	694A 28	695A 26	696A 27	697A 27	698A 27	699A 27	700A 27
A.8ac	2800 MHz- Adj. Solar Flux (Penticton)	693A 27	694A 28	695A 26	696A 27	697A 27	698A 27	699A 27	700A 27
A.8g	Adjusted Daily Solar Fluxes (Sagamore)	693A 27	694A 28	695A 26	696A 27	697A 27	698A 27	699A 27	700A 27
A.10g	Nancay Radioheliograph -164&327 MHz	694A147	695A143	696A152	697A153	698A151	699A149	700A138	
A.10h	Nobeyama Radioheliograph -17 GHz	694A 86	695A 80	696A 95	697A 92	698A 85	699A 86	700A 84	
A.11g	Solar X-ray GOES (graphs/event table)	698B 40	699B 36	700B 25					
A.11k	Solar UV NOAA-9	May 86-Dec 88 in 566B 84							
A.11l	Solar UV NIMBUS7	Nov 78-Oct 84 in 542B 82							
A.11m	Solar UV SOLSTICE (UARS)	Oct 91-Sep 94 in 607B 46							
A.11o	Solar UV SUSIM (UARS)	Oct 91-Jan 97 in 629B 30							
A.11p	Solar UV Mg II Daily Index	698B 49	699B 47	700B 34					
A.12g	Solar Particles (GOES-7)	693A 4	694A 4	695A 4	696A 4	697A 4	698A 4	699A 4	700A 4
A.12i	Interplanetary Particles (ACE)		699B 50	700B 37					
A.13g	Solar Plasma (ACE)		699B 49	700B 34					
A.16c	ERBS, NOAA-9 & -10 Solar Irradiance	ERBS Oct 84-Jun 00 in 671B 36							
A.16d	UARS Solar Irradiance	Oct 91-May 2001 684B 26 - Complete Mission							
A.16e	VIRGO/SOHO Solar Irradiance	Jan 96-Sep 00 in 678B 46							
A.17c	Inferred Interplanetary Mag Field	1984-1988 data in 542A168; 1989-Jan 94 in 611A118							
A.17d	ACE Interplanetary Mag Field		699B 48	700B 35					
C. SOLAR FLARE-ASSOCIATED EVENTS									
C.1a	H-alpha Flares	693A 30	694A 31	695A 29	696A 30	697A 30	698A 30	699A 30	700A 30
C.1ba	H-alpha Flare Groups	698B 4	699B 4	700B 4					
C.1d	Flare Patrol Observations	698B 16	699B 16	700B 9					
C.1h	H-alpha Flare Index (ImpxDur)	Jan 76-Dec 85 in 639B 26; Jan 86-Oct 96 in 635B 24; Jan 96-Dec 98 in 665B 63							
C.3	Radio Bursts Fixed Frequency	698B 18	699B 18	700B 11					
C.3	Radio Bursts Fixed Frequency Selected	693A 38	694A 39	695A 33	696A 40	697A 43	698A 38	699A 39	700A 38
C.4	Radio Bursts Spectral	694A117	695A122	696A126	697A125	698A120	699A120	700A114	
C.6	Sudden Ionospheric Disturbances	694A114	695A119	696A125	697A121	698A115	699A118	700A112	
D. GEOMAGNETIC EVENTS									
D.1a	Geomagnetic Indices	694A158	695A154	696A159	697A160	698A162	699A160	700A149	
D.1ba	27-day Chart of Kp Indices	694A160	695A156	696A161	697A162	698A164	699A162	700A151	
D.1cb	Monthly Mean aa Indices	694A161	695A157	696A162	697A163	698A165	699A163	700A152	
D.1d	Principal Magnetic Storms	694A166	695A162	696A167	697A168	698A170	699A168	700A157	
D.1f	Sudden Commencements/Flare Effects	694A167	695A163	696A168	697A169	698A171	699A169	700A158	
D.1g	Equatorial Indices Dst	694A163	695A159	696A164	697A165	698A167	699A165	700A154	
D.1l	Polar Cap (PC) Index	694A164	695A160	696A165	697A166	698A168	699A166	700A155	
F. COSMIC RAYS									
F.1b	Cosmic Ray Neutron Cts (Climax)	694A150	695A146	696A154	697A155	698A154	699A152	700A141	
F.1h	Cosmic Ray Neutron Cts (Thule)	694A150	695A146	696A154	697A155	698A154	699A152	700A141	
F.1i	Cosmic Ray Neutron Cts (Kiel)	694A150	695A146	696A154	697A155	698A154	699A152	700A141	
F.1n	Cosmic Ray Neutron Cts (Beijing)	694A150	695A146	696A154	697A155	698A154	699A152	700A141	
F.1m	Cosmic Ray Neutron Cts (Haleakala)	694A150	695A146	696A154	697A155	698A154	699A152	700A141	
F.1o	Cosmic Ray Neutron Cts (Moscow)	694A150	695A146	696A154		698A154	699A152	700A141	
F.1p	Cosmic Ray Neutron Cts (Calgary)	694A150	695A146	696A154	697A155	698A154	699A152	700A141	
H. MISCELLANEOUS									
H.60	ISES Alert Periods	693A 19	694A 20	695A 19	696A 20	697A 20	698A 19	699A 20	700A 19

The entry "694A 52" under Apr 02, for example, means that the sunspot drawings for Apr 02 appear in SOLAR-GEOPHYSICAL DATA No. 694, Part I, and that they begin on page 52. "A" denotes Part I and "B", Part II. Blanks indicate data not yet received and dashes mark unavailable data.

CONTENTS

Comprehensive Reports

Number 700 Part II

DATA FOR JUNE 2002

	Page
SOLAR FLARES	
H-alpha Solar Flare Groups	4- 8
Intervals of No Flare Patrol Observation	9
Number of Solar Flares January 1965-present	10
SOLAR RADIO BURSTS AT FIXED FREQUENCIES	11-24
SOLAR X-RAY RADIATION FROM GOES SATELLITE	
Graphs	25-29
Preliminary Event List	30-31
Preliminary Daily Average Background	32
ACTIVE PROMINENCES AND FILAMENTS	33
SOLAR ULTRAVIOLET DAILY DATA FROM NOAA SATELLITE	
NOAA Mg II Daily Index Version 9.1	34
SOLAR CORONAL MASS EJECTIONS from SOHO/LASCO SATELLITE	
Table of Events (Data unavailable at this time.)	
INTERPLANETARY ENVIRONMENT HOURLY AVERAGE PLOTS	
FROM ADVANCED COMPOSITION EXPLORER (ACE) SATELLITE	
Interplanetary Magnetic Field -- MAG	35
Solar Wind Plasma -- SWEPAM	36
Solar Energetic Particles -- EPAM/SIS (Ions, Electrons, and Carbon)	37
IMP-8 SOLAR WIND Plot (Data unavailable at this time.)	

H α SOLAR FLARES

5
Jun 02

JUNE 2002

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
0020	KANZ	03	0657	0658	0659	S21	E24	9978	06	5.1	2	SF		2	E					
0021	KANZ	03	0722	0722	0728	S16	E06	9973	06	3.8	6	SF		2	E					
0022		03	0725	07271	0738	N20	E00	9975	06	3.3	13	1F					105			
	SVTO	03	0725	0727	0735	N20	E01	9975	06	3.4	10	1F		3	E		105			
	KANZ	03	0725	0728	0741	N21	W00	9975	06	3.3	16	1F		2	E					
0023	KANZ	03	0908	0908	0911	S21	E25	9978	06	5.3	3	SF		2	E					
0024	SVTO	03	1036E	1036U	1048D	S34	W72	9977	05	28.8	12D	SF		2	E			26		
		03	1146		1152	No Flare Patrol														
0025	KANZ	03	1220	1223	1235	N24	E06	9975	06	4.0	15	SF		2	E					
		03	1330		1357	No Flare Patrol														
0026		03	1443	1443	1457	S20	W80	9977	05	28.6	14	SF						28		
	SVTO	03	1443	1443	1505	S19	W81	9977	05	28.5	22	SF		3	E			27		
	HOLL	03	1445E	1445U	1449	S20	W80	9977	05	28.6	4D	SF		3	E			29		
0027	HOLL	03	1548	1548U	1615D	S13	E06	9973	06	4.1	27D	SF		3	E			18		
0028	HOLL	03	1713	1714	1721	S21	E21	9978	06	5.3	8	SF		3	E			46		
		03	2203		2228	No Flare Patrol														
		03	2313		2337	No Flare Patrol														
		03	2345		2347	No Flare Patrol														
0029	HOLL	03	2357	2359	2408	S19	E22	9978	06	5.7	11	SF		3	E			14		FH
		04	0523		0543	No Flare Patrol														
		04	0550		0706	No Flare Patrol														
0030	KANZ	04	0716E	0733	0738D	N17	E36	9985	06	7.0	22D	SF		2	E					
		04	0739		1105	No Flare Patrol														
		04	1147		1152	No Flare Patrol														
0031	KANZ	04	1155	1200	1205	N21	W16	9975	06	3.3	10	SF		2	E					
		04	1215		1233	No Flare Patrol														
0032		04	12485	1253	1310	N24	W09	9975	06	3.8	22	SF						30		F
	KANZ	04	1248	1253	1311	N24	W10	9975	06	3.8	23	SF		2	E					
	HOLL	04	1253	1253	1309	N24	W09	9975	06	3.8	16	SF		3	E			34		F
	SVTO	04	1253E	1253U	1309D	N25	W09	9975	06	3.8	16D	SF		2	E			25		
0033		04	1302	1303	1312	S16	W10	9973	06	3.8	10	SF						25		F
	HOLL	04	1302	1303	1310	S18	W09	9973	06	3.8	8	SF		3	E			25		F
	KANZ	04	1309E		1313	S15	W11	9973	06	3.7	4D	SF		2	E					
0034	HOLL	04	1613	1618	1628	S21	E07	9978	06	5.2	15	SF		3	E			25		F
0035	HOLL	04	1808	1808	1814	N22	W17	9975	06	3.4	6	SF		3	E			21		
		05	0054		0146	No Flare Patrol														
		05	0237		1211	No Flare Patrol														
		05	2101		2106	No Flare Patrol														
		05	2151		2223	No Flare Patrol														
0036	HOLL	05	2234	2235	2241	S21	W06	9978	06	5.5	7	SF		3	E			24		
		06	0805		0926	No Flare Patrol														
		06	0936		0953	No Flare Patrol														
0037	HOLL	06	1625	1626	1628	S17	E29	9987	06	8.9	3	SF		3	E			17		F

H α SOLAR FLARES

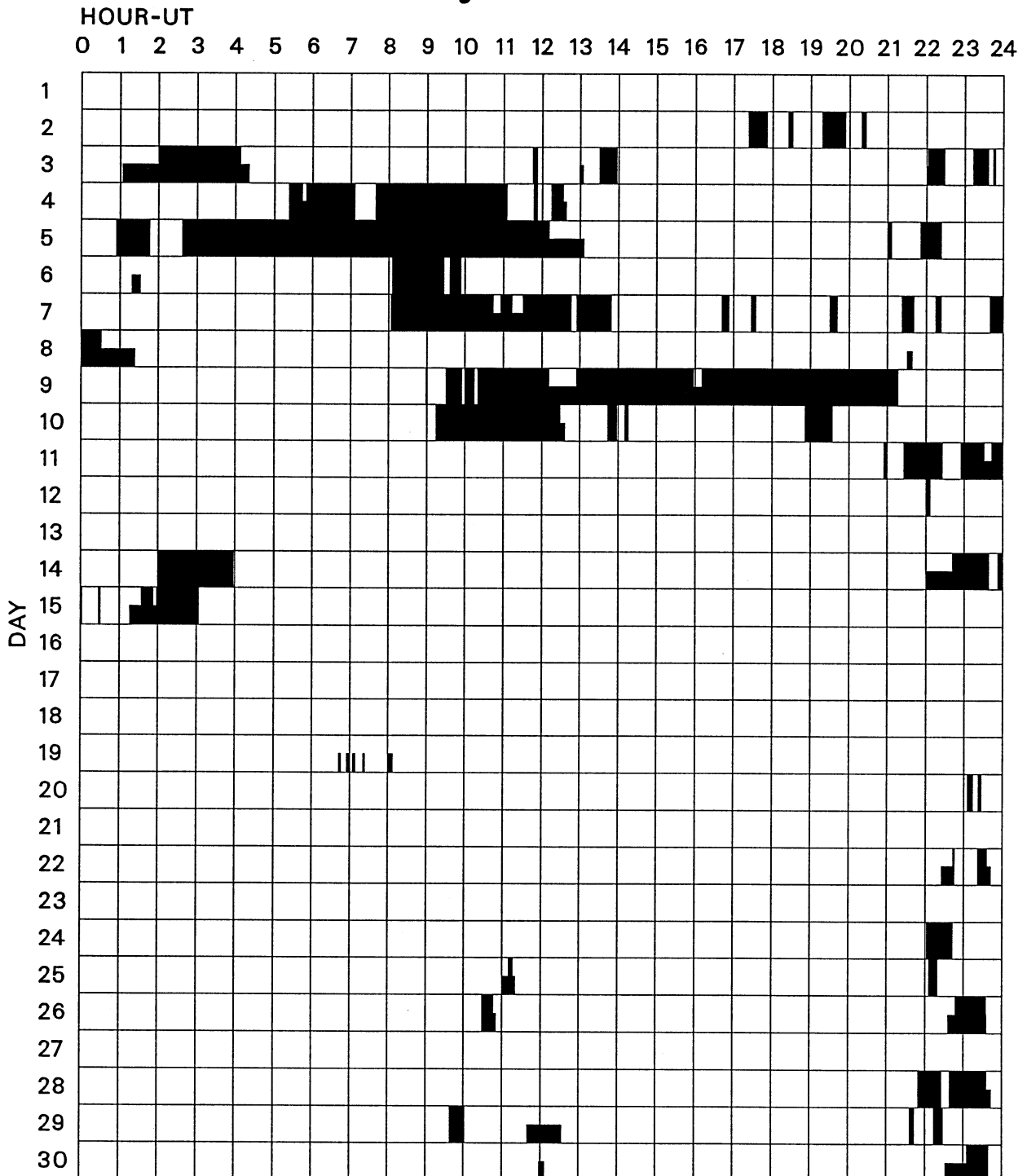
7
Jun 02

JUNE 2002

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
			11 2055		2059			No Flare Patrol												
			11 2126		2226			No Flare Patrol												
			11 2255		2331			No Flare Patrol												
			11 2343		2400			No Flare Patrol												
0052	RAMY	12	1439	1440	1442	N16	W70	9985	06	7.3	3	SF		3	E				17	
0053	HOLL	12	2117	2122	2126	S24	E05	9991	06	13.3	9	SF		3	E				18	
			12 2200		2207			No Flare Patrol												
0054	KANZ	13	0644	0645	0647	S24	E00	9991	06	13.3	3	SF		2	E					
0055		13	07096	0716	0719	S22	E02	9991	06	13.4	10	SF							30	F
	KANZ	13	0709	0716	0719	S19	E02	9991	06	13.4	10	SF		2	E					
	LEAR	13	0715	0716	0719	S25	E01	9991	06	13.4	4	SF		3	E				30	F
0056		13	11283	11316	1140	S14	W68	9987	06	8.3	12	SF							15	
	SVTO	13	1128	1137	1143	S13	W69	9987	06	8.3	15	SF		3	E				20	
	RAMY	13	1131	1131	1137	S15	W67	9987	06	8.4	6	SF		3	E				10	
0057	HOLL	13	2117	2125	2128	N19	E82	10001	06	20.1	11	SF		4	E				16	
0058	HOLL	13	2206	2211	2225	N19	E81	10001	06	20.1	19	SF		3	E				20	
0059	HOLL	14	0004E	0004	0018	N19	E81	10001	06	20.2	14D	SF		3	E				37	
			14 0200		0357			No Flare Patrol												
0060	RAMY	14	1135	1201	1259	N21	E75	10001	06	20.2	84	SF		3	E				10	H
0061	RAMY	14	2137	2137	2143	N21	E71	10001	06	20.3	6	SF		3	E				19	
			14 2242		2338			No Flare Patrol												
			14 2353		2400			No Flare Patrol												
			15 0000		0001			No Flare Patrol												
			15 0028		0030			No Flare Patrol												
			15 0134		0152			No Flare Patrol												
			15 0158		0303			No Flare Patrol												
0062	KANZ	15	0902	0905U	0908	N22	E64	10001	06	20.3	6	SF		2	E					
0063	RAMY	15	1829	1830	1841	N18	E40		06	18.8	12	SF		3	E				16	
0064		15	2057	2057	2116	N00	E66	10003	06	20.8	19	SF							22	
	HOLL	15	2057E	2057U	2105D	S01	E67	10003	06	20.9	8D	SF		3	E				17	
	RAMY	15	2057	2057	2116	N01	E66	10003	06	20.8	19	SF		3	E				27	
0065	LEAR	15	2357	2359	2401	S01	E65	10003	06	20.8	4	SF		1	E				24	
0066	RAMY	16	1651	1653	1656	S23	W46	9991	06	13.1	5	SF		3	E				20	FH
0067	HOLL	16	2120	2125	2132	S23	W49	9991	06	13.1	12	SF		3	E				27	FH
0068	RAMY	17	1519	1521	1525	S25	W55	9991	06	13.4	6	SF		3	E				20	F
0069	HOLL	17	2001	2005	2019	S22	W59	9991	06	13.3	18	SF		3	E				14	FH
0070		18	14362	1438	1447	N18	E02		06	18.8	11	SF							12	FH
	KANZ	18	1436	1438U	1447	N17	E02		06	18.8	11	SF		2	E					
	RAMY	18	1438	1438	1447	N18	E03		06	18.8	9	SF		3	E				12	FH
0071	KANZ	20	1142	1145	1150	N11	W02	10007	06	20.3	8	SF		2	E					
			20 2306		2314			No Flare Patrol												
			20 2323		2327			No Flare Patrol												
0072	KANZ	21	0905	0905	0908	N20	W12	10001	06	20.5	3	SF		2	E					

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

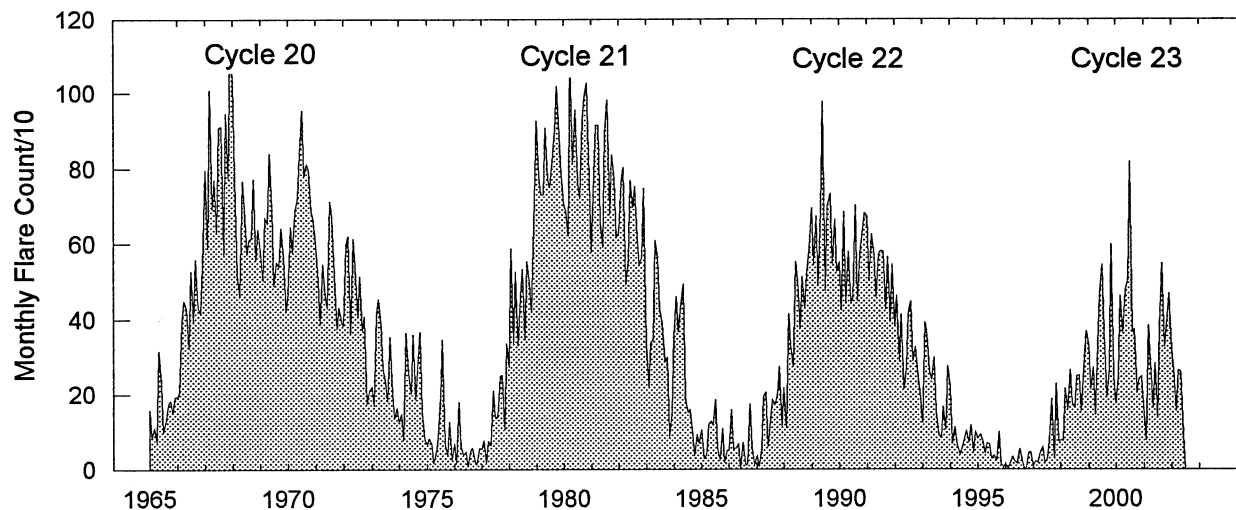
JUNE 2002



Times of no flare patrol, shown here as shaded areas, combine reports from the stations listed below. Portions of a panel completely shaded mark dates and times of no patrol of any kind (neither visual or cinematographic); portions of a panel with only the bottom half shaded mark times of only visual patrol.

Holloman	Learmonth	Ramey	San Vito
Mitaka	Voroshilov	Kanzelhoehe	

Monthly Counts of Grouped Solar Flares Jan 1965 - Jun 2002



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1965	158	85	110	74	315	231	99	127	173	184	150	193	1899
1966	194	205	390	449	429	323	528	391	558	432	417	543	4859
1967	796	589	1009	694	771	629	907	911	573	946	775	1109	9709
1968	1037	773	519	460	768	697	573	611	616	772	556	640	8022
1969	581	504	669	655	839	694	489	551	540	643	566	422	7153
1970	466	646	578	688	722	836	954	780	811	797	687	667	8632
1971	598	505	387	546	461	430	713	673	518	375	431	394	6031
1972	384	599	621	361	614	541	404	515	371	408	175	210	5203
1973	221	171	410	453	388	270	232	182	353	201	136	163	3180
1974	127	148	79	364	255	204	360	187	270	366	153	81	2594
1975	68	82	69	19	42	85	196	346	68	38	127	25	1165
1976	69	18	180	60	38	48	6	47	57	23	13	55	614
1977	54	77	18	76	64	210	140	140	250	252	107	336	1724
1978	274	588	338	526	330	460	533	346	554	499	418	648	5514
1979	926	781	731	731	907	772	750	821	901	1018	888	786	10012
1980	703	689	621	1092	811	956	763	720	924	988	1027	838	10132
1981	578	782	914	915	658	592	893	982	680	836	773	615	9218
1982	631	766	803	490	553	769	696	753	615	544	564	748	7932
1983	332	220	337	346	609	561	427	389	289	298	88	152	4048
1984	353	461	366	440	492	185	151	161	95	36	92	69	2901
1985	104	29	38	119	129	116	185	53	25	108	19	50	975
1986	51	158	54	56	68	3	71	12	14	174	56	13	730
1987	36	7	52	192	205	61	132	185	172	198	273	114	1627
1988	217	109	413	328	274	551	502	375	513	429	518	587	4816
1989	695	544	672	488	691	977	474	699	733	547	665	526	7711
1990	550	424	684	442	580	445	454	703	449	574	623	682	6610
1991	672	503	625	570	458	574	582	581	425	565	396	544	6495
1992	380	462	287	412	214	271	413	447	287	325	248	206	3952
1993	123	392	357	262	237	296	154	92	82	167	104	275	2541
1994	217	67	111	60	40	56	81	101	72	117	45	99	1066
1995	82	95	77	42	69	66	29	37	23	99	14	6	639
1996	14	3	15	34	21	16	54	31	3	0	44	45	280
1997	8	22	18	43	59	18	26	75	188	31	228	74	790
1998	78	76	216	161	264	177	164	248	249	155	268	367	2423
1999	330	212	271	145	330	466	544	368	192	264	598	243	3963
2000	175	248	462	362	473	505	818	364	372	208	241	246	4474
2001	147	77	383	284	164	282	137	376	549	325	405	468	3597
2002	318	261	155	263	259	91							1347

The term 'grouped' means observations of the same event by different sites were 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

11
Jun 02

JUNE 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 ⁻²² W/m ² Hz)	Mean (2 Hz)			
01	204	IZMI	43 NS	0600.0		360.0D		10.0			
	127	TORN	44 NS	0640.0E	1054.9	425.0D	50.0	14.0		V=1	
	235	CUBA	44 NS	1310.0E		520.0D		5.0			
	280	CUBA	44 NS	1310.0E		520.0D		14.0			
	2804	VORO	4 S/F	0351.0	0353.6	19.0	303.0				
	2800	HIRA	3 S	0352.0	0354.0	7.0	240.0				0
	4995	SVTO	48 C	0352.0	0354.0	6.0	270.0				QL=4 ST=2 TYP=8
	2695	SVTO	4 S/F	0352.0	0353.0	5.0	230.0				QL=4 ST=2 TYP=3
	500	HIRA	4 S/F	0352.0	0353.0	12.0	60.0				0
	4995	LEAR	48 C	0353.0	0354.0	5.0	320.0				QL=4 ST=2 TYP=8
	8800	LEAR	48 C	0353.0	0353.0	5.0	330.0				QL=4 ST=2 TYP=8
	15400	LEAR	48 C	0353.0	0353.0	5.0	180.0				QL=4 ST=2 TYP=8
	410	LEAR	8 S	0353.0	0354.0	1.0	220.0				QL=4 ST=2 TYP=3
	610	LEAR	4 S/F	0353.0	0354.0	3.0	70.0				QL=4 ST=2 TYP=3
	1415	LEAR	4 S/F	0353.0	0354.0	3.0	170.0				QL=4 ST=2 TYP=3
	2695	LEAR	4 S/F	0353.0	0354.0	4.0	260.0				QL=4 ST=2 TYP=3
	1415	PALE	48 C	0353.0	0354.0	5.0	170.0				QL=4 ST=2 TYP=8
	2695	PALE	48 C	0353.0	0354.0	3.0	180.0				QL=4 ST=2 TYP=8
	4995	PALE	48 C	0353.0	0356.0	5.0	150.0				QL=4 ST=2 TYP=8
	8800	SVTO	48 C	0353.0	0353.0	8.0	360.0				QL=4 ST=2 TYP=8
	15400	SVTO	48 C	0353.0	0353.0	7.0	170.0				QL=4 ST=2 TYP=8
	1415	SVTO	8 S	0353.0	0354.0	2.0	170.0				QL=4 ST=2 TYP=3
	610	PALE	46 C	0354.0	0354.0		24.0				QL=4 ST=2 TYP=8
	8800	PALE	48 C	0355.0	0356.0	3.0	150.0				QL=4 ST=2 TYP=8
	245	PALE	8 S	0356.0	0356.0	2.0	78.0				QL=4 ST=2 TYP=3
	410	PALE	8 S	0356.0	0356.0	1.0	220.0				QL=4 ST=2 TYP=3
	200	HIRA	47 GB	0357.0	0357.0	2.0	755.0				0
	33	UPIC	46 C	0359.0	0401.5	4.0					
	245	LEAR	48 C	0449.0	0449.0		53.0				QL=4 ST=2 TYP=8
	15400	SVTO	8 S	1047.0	1048.0	2.0	59.0				QL=4 ST=2 TYP=3
	3000	IZMI	22 GRF	1047.2	1048.5	5.0	38.0				
	2800	PENT	21 GRF	1443.0	1524.0	109.0U	16.0				
	2804	VORO	40 F	2241.8	2242.7	1.8	12.0				
	200	HIRA	8 S	2327.0	2327.0	1.0	70.0				0
	245	LEAR	8 S	2327.0	2327.0		190.0				QL=4 ST=2 TYP=3
	2800	PENT	29 PBI	2341.0	2347.0	21.0	269.0				
	2804	VORO	4 S/F	2344.0	2345.0	11.0	28.0				
	2840	PEKG	3 S	2344.0	2347.7	56.0	286.8				
	245	LEAR	48 C	2346.0	2349.0	6.0	4700.0				QL=4 ST=2 TYP=8
	8800	PALE	48 C	2346.0	2346.0	1.0	220.0				QL=4 ST=2 TYP=8
15400	PALE	48 C	2346.0	2346.0	1.0	140.0				QL=4 ST=2 TYP=8	
410	PALE	8 S	2346.0	2346.0	1.0	220.0				QL=4 ST=2 TYP=3	
610	PALE	8 S	2346.0	2346.0	1.0	50.0				QL=4 ST=2 TYP=3	
1415	PALE	8 S	2346.0	2347.0	2.0	240.0				QL=4 ST=2 TYP=3	
2695	PALE	8 S	2346.0	2347.0	1.0	210.0				QL=4 ST=2 TYP=3	
4995	PALE	8 S	2346.0	2347.0	1.0	280.0				QL=4 ST=2 TYP=3	
245	PALE	4 S/F	2346.0	2349.0	5.0	330.0				QL=4 ST=2 TYP=3	
2800	HIRA	3 S	2347.0	2347.0	6.0	245.0				0	
500	HIRA	4 S/F	2347.0	2347.0	1.0	190.0				0	
200	HIRA	47 GB	2347.0	2347.0	6.0	970.0				0	
410	LEAR	8 S	2347.0	2347.0	2.0	150.0				QL=4 ST=2 TYP=3	
610	LEAR	8 S	2347.0	2348.0	2.0	45.0				QL=4 ST=2 TYP=3	
1415	LEAR	8 S	2347.0	2347.0	2.0	230.0				QL=4 ST=2 TYP=3	
2695	LEAR	8 S	2347.0	2347.0	2.0	250.0				QL=4 ST=2 TYP=3	
4995	LEAR	8 S	2347.0	2347.0	2.0	290.0				QL=4 ST=2 TYP=3	
8800	LEAR	8 S	2347.0	2347.0	1.0	220.0				QL=4 ST=2 TYP=3	
15400	LEAR	8 S	2347.0	2347.0	2.0	96.0				QL=4 ST=2 TYP=3	
2804	VORO	31 ABS	2355.0	2410.0	27.5	3.8					
02	127	TORN	43 NS	0900.0		255.0		15.0		V=0	
	245	SGMR	43 NS	1215.0	1215.0	45.0	66.0			QL=4 ST=2 TYP=1	
	2840	PEKG	3 S	0424.0	0435.2	40.0	45.9				
	2800	HIRA	1 S	0433.0	0436.0	5.0	40.0			0	
	9100	GORK	46 C	0433.6	0435.2	5.1	39.0				
	9100	GORK	46 C	0433.6	0435.5		44.0				
	4995	LEAR	8 S	0434.0	0435.0	2.0	59.0				QL=4 ST=2 TYP=3
	8800	LEAR	8 S	0434.0	0435.0	1.0	48.0				QL=4 ST=2 TYP=3
	900	GORK	46 C	0434.2	0435.1	4.6	57.0				
	900	GORK	46 C	0434.2	0435.7		165.0				

12
Jun 02

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

JUNE 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m 2 Hz)	Mean			
02	610	LEAR	8 S	0435.0	0436.0	1.0	88.0			QL=4 ST=2 TYP=3	
	2695	LEAR	8 S	0435.0	0435.0	U	36.0			QL=4 ST=2 TYP=3	
	500	HIRA	7 C	0435.0	0444.0	10.0	15.0			0	
	600	GORK	46 C	0435.0	0444.3		37.0				
	600	GORK	46 C	0435.0	0436.4	10.6	40.0				
	600	GORK	46 C	0435.0	0444.8		35.0				
	9100	GORK	1 S	0445.1	0445.3	0.6	7.7				
	204	IZMI	41 F	0601.9	0602.1	1.2	36.0				
	200	HIRA	8 S	0602.0	0602.0	1.0	15.0			0	
	204	IZMI	41 F	0729.0	0729.2	0.3	17.0				
	127	TORN	42 SER	0900.0	0907.4	11.0	800.0	10.0			
	127	TORN	47 GB	0906.5	0907.4	2.3	800.0	180.0			
	204	IZMI	42 SER	0910.6	0910.8	2.5	28.0				
	204	IZMI	42 SER	0916.4	0916.6	1.4	51.0				
	2840	PEKG	3 S	1000.0	1014.9	54.0	88.7				
	3000	IZMI	46 C	1003.0	1014.6	28.4	63.0	19.0			
	2950	GORK	46 C	1006.4	1021.1		53.0				
	2950	GORK	46 C	1006.4	1014.6	25.8	73.0				
	600	GORK	46 C	1010.7	1014.6		66.0				
	600	GORK	46 C	1010.7	1013.6	22.3	86.0				
	900	GORK	46 C	1010.8	1013.2	20.4	100.0				
	900	GORK	46 C	1010.8	1014.7		180.0				
	2695	SVTO	4 S/F	1011.0	1014.0	6.0	44.0				QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	1011.0	1014.0	5.0	110.0				QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	1011.0	1014.0	5.0	89.0				QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1012.0	1014.0	2.0	66.0				QL=4 ST=2 TYP=3
	1415	SGMR	4 S/F	1012.0	1013.0	4.0	41.0				QL=4 ST=2 TYP=3
	15400	SVTO	4 S/F	1012.0	1014.0	5.0	47.0				QL=4 ST=2 TYP=3
	9100	GORK	7 C	1012.8	1014.1		13.0				
	9100	GORK	7 C	1012.8	1013.5	2.5	9.5				
	4995	SGMR	8 S	1013.0	1014.0	1.0	63.0				QL=4 ST=2 TYP=3
	2695	SGMR	4 S/F	1013.0	1014.0	4.0	61.0				QL=4 ST=2 TYP=3
	204	IZMI	46 C	1014.9	1021.3	18.5	54.0				
	127	TORN	49 GB	1018.1	1021.2	19.6	840.0	170.0			
	600	GORK	29 PBI	1033.0	1033.0	12.2	6.1				
	900	GORK	1 S	1044.4	1045.0	1.2	8.9				
	2950	GORK	1 S	1044.7	1044.9	0.4	4.1				
	900	GORK	4 S/F	1048.2	1052.8	7.2	13.0				
	9100	GORK	1 S	1049.2	1049.5	0.8	9.4				
	245	SGMR	48 C	1144.0	1147.0	4.0	2800.0				QL=4 ST=2 TYP=8
	15400	SGMR	48 C	1144.0	1144.0	1.0	71.0				QL=4 ST=2 TYP=8
	410	SGMR	49 GB	1144.0	1144.0	1.0	1800.0				QL=4 ST=2 TYP=6
	1415	SGMR	8 S	1144.0	1144.0	1.0	40.0				QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1144.0	1144.0	1.0	120.0				QL=4 ST=2 TYP=3
	4995	SGMR	8 S	1144.0	1144.0	1.0	190.0				QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1144.0	1144.0	1.0	200.0				QL=4 ST=2 TYP=3
	245	SVTO	48 C	1144.0	1147.0	4.0	1600.0				QL=4 ST=2 TYP=8
	410	SVTO	49 GB	1144.0	1144.0	1.0	2900.0				QL=4 ST=2 TYP=6
	610	SVTO	8 S	1144.0	1144.0	U	38.0				QL=4 ST=2 TYP=3
	1415	SVTO	8 S	1144.0	1144.0	1.0	45.0				QL=4 ST=2 TYP=3
2695	SVTO	8 S	1144.0	1144.0	1.0	110.0				QL=4 ST=2 TYP=3	
4995	SVTO	8 S	1144.0	1144.0	1.0	230.0				QL=4 ST=2 TYP=3	
8800	SVTO	8 S	1144.0	1144.0	1.0	240.0				QL=4 ST=2 TYP=3	
15400	SVTO	8 S	1144.0	1144.0	1.0	160.0				QL=4 ST=2 TYP=3	
3000	IZMI	45 C	1144.2	1144.6	1.7	156.0	5.0				
204	IZMI	46 C	1144.2	1144.8	1.6	831.0					
127	TORN	42 SER	1144.3	1144.8	7.9	400.0	110.0			DISTURBED	
204	IZMI	46 C	1147.2	1147.7	4.0	285.0					
245	SGMR	8 S	1150.0	1150.0	1.0	170.0				QL=4 ST=2 TYP=3	
245	SVTO	8 S	1150.0	1150.0	1.0	100.0				QL=4 ST=2 TYP=3	
204	IZMI	41 F	1154.8	1154.9	0.5	16.0					
15400	PALE	4 S/F	1628.0	1658.0	47.0	160.0				QL=4 ST=2 TYP=3	
2695	PALE	8 S	1653.0	1653.0	2.0	83.0				QL=4 ST=2 TYP=3	
1415	PALE	4 S/F	1653.0	1700.0	8.0	91.0				QL=4 ST=2 TYP=3	
15400	SVTO	4 S/F	1653.0	1655.0	5.0	25.0				QL=4 ST=2 TYP=3	
410	SGMR	8 S	1655.0	1655.0	U	490.0				QL=4 ST=3 TYP=3	
2695	SGMR	8 S	1655.0	1655.0	U	29.0				QL=4 ST=3 TYP=3	
4995	SGMR	8 S	1655.0	1655.0	U	24.0				QL=4 ST=3 TYP=3	
245	SVTO	49 GB	1655.0	1655.0	U	1300.0				QL=4 ST=2 TYP=6	

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

13
Jun 02

JUNE 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m 2 Hz)	Mean			
02	410	SVTO	8 S	1655.0	1655.0	2.0	390.0			QL=4 ST=2 TYP=3	
	2695	SVTO	8 S	1655.0	1655.0	1.0	40.0			QL=4 ST=2 TYP=3	
	245	SGMR	49 GB	1655.0	1655.0	425.0	1700.0			QL=4 ST=3 TYP=6	
	245	PALE	8 S	1656.0	1656.0	1.0	230.0			QL=4 ST=2 TYP=3	
	410	PALE	8 S	1656.0	1656.0	1.0	240.0			QL=4 ST=2 TYP=3	
	245	SGMR	8 S	1658.0	1658.0	1.0	420.0			QL=4 ST=2 TYP=3	
	410	SGMR	8 S	1658.0	1659.0	1.0	200.0			QL=4 ST=2 TYP=3	
	245	SVTO	8 S	1658.0	1659.0	1.0	100.0			QL=4 ST=2 TYP=3	
	410	SVTO	8 S	1658.0	1658.0	1.0	280.0			QL=4 ST=2 TYP=3	
	245	SGMR	8 S	1852.0	1852.0	1.0	160.0			QL=4 ST=2 TYP=3	
	410	SGMR	8 S	1852.0	1852.0	1.0	32.0			QL=4 ST=2 TYP=3	
	245	SGMR	49 GB	1854.0	1854.0	1.0	920.0			QL=4 ST=2 TYP=6	
	410	SGMR	8 S	1854.0	1854.0	U	24.0			QL=4 ST=2 TYP=3	
	2800	PENT	29 PBI	2030.0	2041.0	122.0U	477.0				
	2800	HIRA	4 S/F	2034.0	2042.0	19.0	405.0				0
	1415	PALE	49 GB	2034.0	2038.0	15.0	5500.0				QL=4 ST=2 TYP=6
	2695	PALE	49 GB	2034.0	2039.0	13.0	530.0				QL=4 ST=2 TYP=6
	610	PALE	49 GB	2035.0	2038.0	5.0	680.0				QL=4 ST=2 TYP=6
	4995	PALE	49 GB	2035.0	2039.0	11.0	530.0				QL=4 ST=2 TYP=6
	15400	PALE	4 S/F	2035.0	2039.0	14.0	420.0				QL=4 ST=2 TYP=3
	410	PALE	4 S/F	2036.0	2037.0	5.0	100.0				QL=4 ST=2 TYP=3
	8800	PALE	4 S/F	2036.0	2039.0	7.0	240.0				QL=4 ST=2 TYP=3
	500	HIRA	4 S/F	2036.0	2041.0	11.0	190.0				0
	4995	SGMR	49 GB	2036.0	2041.0	16.0	600.0				QL=4 ST=2 TYP=6
	2695	SGMR	4 S/F	2036.0	2041.0	14.0	450.0				QL=4 ST=2 TYP=3
	8800	SGMR	4 S/F	2036.0	2041.0	28.0	440.0				QL=4 ST=2 TYP=3
	610	SGMR	49 GB	2037.0	2040.0	8.0	630.0				QL=4 ST=2 TYP=6
	1415	SGMR	49 GB	2037.0	2040.0	15.0	4100.0				QL=4 ST=2 TYP=6
	15400	SGMR	4 S/F	2038.0	2041.0	12.0	170.0				QL=4 ST=2 TYP=3
	200	HIRA	8 S	2101.0	2101.0	1.0	955.0				WR
	245	SGMR	49 GB	2101.0	2101.0	U	1200.0				QL=4 ST=2 TYP=6
	410	SGMR	49 GB	2101.0	2101.0	U	790.0				QL=4 ST=2 TYP=6
	610	SGMR	8 S	2123.0	2123.0	U	79.0				QL=4 ST=2 TYP=3
610	SGMR	48 C	2128.0	2129.0	5.0	120.0				QL=4 ST=2 TYP=8	
2840	PEKG	1 S	2259.0	2302.5	6.0	3.1					
2804	VORO	1 S	2301.8	2302.4	1.6	3.5					
03	127	TORN	43 NS	0903.0		307.0		9.0		V=1	
	245	SVTO	8 S	0438.0	0438.0	U	84.0			QL=4 ST=2 TYP=3	
	200	HIRA	8 S	0439.0	0439.0	1.0	25.0			0	
	245	SVTO	8 S	0439.0	0439.0	U	140.0			QL=2 ST=2 TYP=3	
	245	SVTO	8 S	0505.0	0507.0	2.0	75.0			QL=4 ST=2 TYP=3	
	410	SVTO	8 S	0505.0	0507.0	2.0	110.0			QL=4 ST=2 TYP=3	
	245	SVTO	8 S	0510.0	0510.0	U	110.0			QL=4 ST=2 TYP=3	
	410	SVTO	8 S	0510.0	0510.0	U	87.0			QL=4 ST=2 TYP=3	
	204	IZMI	41 F	0637.1	0637.7	0.9	70.0				
	200	HIRA	8 S	0638.0	0638.0	1.0	35.0				0
	600	GORK	41 F	0651.8	0653.0		5.3				
	600	GORK	41 F	0651.8	0652.5	1.4	6.1				
	900	GORK	46 C	0656.0	0658.0		18.0				
	900	GORK	46 C	0656.0	0657.6		20.0				
	900	GORK	46 C	0656.0	0656.9	2.9	33.0				
	600	GORK	46 C	0656.1	0658.0		11.0				
	600	GORK	46 C	0656.1	0657.7	6.7	19.0				
	200	HIRA	8 S	0657.0	0657.0	1.0	35.0				0
	500	HIRA	8 S	0657.0	0657.0	1.0	20.0				0
	245	SVTO	8 S	0657.0	0657.0	U	160.0				QL=4 ST=2 TYP=3
	204	IZMI	41 F	0657.2	0657.5	1.0	67.0				
	204	IZMI	41 F	0708.8	0710.5	2.2	46.0				
	2840	PEKG	1 S	0718.0	0724.8	9.0	9.4				
	204	IZMI	42 SER	0721.1	0726.0	6.9	373.0				
	200	HIRA	7 C	0724.0	0726.0	5.0	30.0				0
	500	HIRA	4 S/F	0724.0	0728.0	6.0	20.0				0
	33	UPIC	46 C	0724.0	0724.5	3.0					
127	TORN	49 GB	0724.2	0724.5	15.5	4100.0	310.0				
245	SVTO	8 S	0726.0	0726.0	U	55.0				QL=4 ST=2 TYP=3	
600	GORK	41 F	0726.7	0727.4		5.6					
600	GORK	41 F	0726.7	0726.9	1.5	10.0					
204	IZMI	42 SER	0730.6	0730.8	3.2	44.0					

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

JUNE 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m 2 Hz)	Mean			
03	245	SVTO	8 S	0818.0	0818.0	U	97.0			QL=4 ST=2 TYP=3	
	500	HIRA	4 S/F	0850.0	0853.0	5.0	110.0			0	
	245	SVTO	8 S	0903.0	0903.0	U	80.0			QL=4 ST=2 TYP=3	
	2840	PEKG	3 S	0929.0	0932.6	10.0	9.5				
	3000	IZMI	7 C	0932.4	0932.7	0.8	12.0	2.5			
	127	TORN	42 SER	1018.0	1020.4	12.0	1300.0	20.0			
	33	UPIC	46 C	1020.5	1021.0	1.5					
	127	TORN	4 S/F	1051.4	1052.0	1.1	390.0	200.0			
	33	UPIC	45 C	1051.5	1052.0	1.5					
	204	IZMI	7 C	1109.2	1109.2	0.2	8.0				
	127	TORN	48 C	1235.0	1236.1	2.0	270.0	50.0			
	2800	PENT	41 F	1428.0	1443.0	19.0	32.0				
	33	UPIC	46 C	1432.0	1432.5	3.0					
	4995	SGMR	8 S	1442.0	1443.0	1.0	39.0				QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1442.0	1442.0	1.0	39.0				QL=4 ST=2 TYP=3
	15400	SGMR	8 S	1442.0	1442.0	1.0	25.0				QL=4 ST=2 TYP=3
	9500	CUBA	2 S/F	1442.8	1442.9	1.1	23.0	11.0			
	2695	SGMR	8 S	1443.0	1443.0	U	56.0				QL=4 ST=2 TYP=3
	2695	SVTO	8 S	1443.0	1443.0	U	57.0				QL=4 ST=2 TYP=3
	245	SGMR	8 S	1449.0	1449.0	U	400.0				QL=4 ST=2 TYP=3
	410	SGMR	8 S	1449.0	1449.0	U	400.0				QL=4 ST=2 TYP=3
	610	SGMR	8 S	1449.0	1449.0	U	60.0				QL=4 ST=2 TYP=3
	410	SVTO	49 GB	1449.0	1449.0	U	500.0				QL=4 ST=3 TYP=6
	245	SVTO	8 S	1449.0	1449.0	U	230.0				QL=4 ST=2 TYP=3
	610	SVTO	8 S	1449.0	1449.0	U	51.0				QL=4 ST=2 TYP=3
	2800	PENT	1 S	1535.0	1547.0	25.0	5.0				
	245	SGMR	48 C	1548.0	1548.0	U	57.0				QL=4 ST=2 TYP=8
	33	UPIC	45 C	1601.0	1601.5	1.0					
	245	SGMR	8 S	2138.0	2138.0	U	74.0				QL=4 ST=2 TYP=3
	2804	VORO	20 GRF	2337.5	2349.0	12.5	3.8				
04	204	IZMI	43 NS	0600.0		170.0U		10.0			
	127	TORN	44 NS	0630.0E	0940.2	250.0D	280.0	14.0		V=2	
	204	IZMI	44 NS	0850.0E		190.0D		80.0			
	245	SGMR	43 NS	1052.0	1608.0	325.0	750.0			QL=4 ST=2 TYP=1	
	245	SVTO	43 NS	1054.0	1057.0	326.0	460.0			QL=2 ST=2 TYP=1	
	235	CUBA	44 NS	1330.0E		500.0D		6.0			
	2840	PEKG	5 S	0237.0	0240.0	7.0	17.5				
	2804	VORO	2 S/F	0238.8	0239.9	1.4	50.0				
	245	LEAR	8 S	0737.0	0737.0	U	65.0				QL=4 ST=2 TYP=3
	245	SVTO	8 S	0842.0	0842.0	1.0	53.0				QL=4 ST=2 TYP=3
	410	SVTO	8 S	0843.0	0844.0	1.0	44.0				QL=4 ST=2 TYP=3
	1415	SVTO	8 S	0844.0	0844.0	2.0	49.0				QL=4 ST=2 TYP=3
	2695	SVTO	8 S	0845.0	0845.0	U	57.0				QL=4 ST=2 TYP=3
	245	LEAR	4 S/F	0918.0	0920.0	3.0	170.0				QL=4 ST=2 TYP=3
	245	SVTO	8 S	0919.0	0919.0	U	79.0				QL=4 ST=2 TYP=3
	245	SVTO	8 S	0930.0	0930.0	1.0	71.0				QL=4 ST=2 TYP=3
	33	UPIC	8 S	0937.0	0937.5	1.5					
	245	SVTO	8 S	0946.0	0946.0	U	57.0				QL=4 ST=2 TYP=3
	245	SVTO	8 S	0958.0	0958.0	U	75.0				QL=4 ST=2 TYP=3
	127	TORN	4 S/F	1005.1	1006.6	1.8	360.0	120.0			
	127	TORN	46 C	1032.5	1033.8	3.6	90.0	30.0			
	204	IZMI	46 C	1056.8	1057.7	1.6	1559.0				
	33	UPIC	46 C	1153.0	1153.5	3.0					
	2800	PENT	29 PBI	1603.0	1609.0	29.0U	30.0				
	410	SVTO	4 S/F	1607.0	1608.0	6.0	60.0				QL=4 ST=2 TYP=3
	245	SGMR	8 S	1608.0	1608.0	U	750.0				QL=4 ST=2 TYP=3
	410	SGMR	8 S	1608.0	1608.0	U	50.0				QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1608.0	1609.0	1.0	41.0				QL=4 ST=2 TYP=3
	245	SVTO	49 GB	1608.0	1608.0	U	500.0				QL=4 ST=3 TYP=6
	9500	CUBA	1 S	1609.4	1610.0	1.6	8.0	4.0			
245	PALE	4 S/F	1701.0	1703.0	3.0	120.0				QL=4 ST=2 TYP=3	
245	SGMR	8 S	1702.0	1703.0	1.0	97.0				QL=4 ST=2 TYP=3	
245	SVTO	8 S	1702.0	1703.0	2.0	59.0				QL=4 ST=2 TYP=3	
245	PALE	8 S	1807.0	1808.0	1.0	31.0				QL=4 ST=2 TYP=3	
410	PALE	8 S	1807.0	1807.0	U	89.0				QL=4 ST=2 TYP=3	
410	SGMR	8 S	1807.0	1807.0	U	86.0				QL=4 ST=2 TYP=3	
05	127	TORN	43 NS	0904.0		216.0		10.0		V=1	

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

15
Jun 02

JUNE 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
05	235	CUBA	44 NS	1320.0E		510.0D		5.0		
	500	HIRA	7 C	0122.0	0122.0	4.0	50.0			WL
	245	LEAR	49 GB	0122.0	0123.0	2.0	620.0			QL=4 ST=2 TYP=6
	500	HIRA	8 S	0212.0	0213.0	2.0	55.0			0
	500	HIRA	8 S	0441.0	0441.0	1.0	20.0			0
	245	LEAR	8 S	0441.0	0441.0	U	120.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0441.0	0441.0	U	51.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0441.0	0441.0	U	130.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	0441.0	0441.0	U	93.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0441.0	0441.0	U	69.0			QL=4 ST=2 TYP=3
	33	UPIC	45 C	0544.0	0545.5	2.0				
	500	HIRA	8 S	0545.0	0545.0	1.0	10.0			0
	900	GORK	20 GRF	0903.7	0924.3	35.3	13.0			
	600	GORK	4 S/F	0919.3	0921.9	26.8	11.0			
	2950	GORK	20 GRF	0937.0	0955.5	83.0D	8.9			
	127	TORN	7 C	1034.0	1034.8	1.0	60.0	30.0		
	127	TORN	4 S/F	1119.4	1119.8	1.0	330.0	170.0		
	245	PALE	46 C	1852.0	1852.0	U	34.0			QL=4 ST=2 TYP=8
	2840	PEKG	3 S	2230.0	2234.2	13.0	14.1			
	2804	VORO	2 S/F	2233.1	2234.4	3.1	8.7			
06	127	TORN	43 NS	1000.0		266.0		7.0		V=0
	235	CUBA	44 NS	1400.0E		470.0D		5.0		
	2840	PEKG	1 S	0041.0	0045.5	8.0	8.8			
	200	HIRA	7 C	0043.0	0044.0	3.0	35.0			WR
	2840	PEKG	20 GRF	0532.0	0536.5	12.0	5.3			
	600	GORK	4 S/F	0702.8	0703.0	0.4	32.0			
	900	GORK	2 S/F	0743.4	0743.5	0.3	16.0			
	900	GORK	2 S/F	0929.5	0929.8	1.0	9.5			
	600	GORK	4 S/F	1040.9	1041.1	0.5	26.0			
	33	UPIC	4 S/F	1700.0	1701.0	2.0				
	245	PALE	8 S	1701.0	1701.0	U	190.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1701.0	1701.0	U	150.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1701.0	1701.0	U	25.0			QL=4 ST=2 TYP=3
	1415	PALE	8 S	1703.0	1703.0	U	56.0			QL=4 ST=2 TYP=3
	9500	CUBA	2 S/F	2059.6	2106.5	6.9	20.0	10.0		
07	127	TORN	43 NS	0910.0		300.0		9.0		V=1
	235	CUBA	44 NS	1330.0E		500.0D		5.0		
	280	CUBA	44 NS	1330.0E		500.0D		11.0		
	2840	PEKG	1 S	0218.0	0220.5	9.0	2.7			
	410	LEAR	8 S	0222.0	0222.0	U	88.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	0223.0	0223.0	1.0	25.0			0
	900	GORK	2 S/F	0355.2	0355.9	1.7	5.4			
	2840	PEKG	5 S	0359.0	0401.8	5.0	47.2			
	610	LEAR	8 S	0401.0	0401.0	U	200.0			QL=4 ST=2 TYP=3
	9100	GORK	7 C	0401.3	0401.7	1.0	15.0			
	9100	GORK	7 C	0401.3	0401.9		13.0			
	900	GORK	7 C	0401.7	0402.0		13.0			
	900	GORK	7 C	0401.7	0401.8	0.8	17.0			
	600	GORK	4 S/F	0401.7	0401.9	0.4	130.0			
	2800	HIRA	8 S	0402.0	0402.0	1.0	35.0			0
	2840	PEKG	3 S	0408.0	0414.2	16.0	39.2			
	2800	HIRA	4 S/F	0412.0	0414.0	3.0	40.0			0
	900	GORK	46 C	0412.9	0414.3		46.0			
	900	GORK	46 C	0412.9	0413.4	1.9	27.0			
	500	HIRA	8 S	0413.0	0414.0	1.0	35.0			0
	200	HIRA	8 S	0413.0	0413.0	2.0	135.0			0
	245	LEAR	8 S	0413.0	0413.0	1.0	110.0			QL=4 ST=2 TYP=3
	9100	GORK	7 C	0413.0	0414.2		11.0			
	9100	GORK	7 C	0413.0	0413.4	1.6	5.7			
	600	GORK	46 C	0413.1	0414.4		46.0			
	600	GORK	46 C	0413.1	0413.9	1.9	30.0			
	410	LEAR	8 S	0414.0	0414.0	U	59.0			QL=4 ST=2 TYP=3
	900	GORK	46 C	0415.7	0416.1		110.0			
900	GORK	46 C	0415.7	0415.9	0.8	85.0				
204	IZMI	42 SER	0618.8	0623.1	5.4	45.0				
204	IZMI	41 F	0623.8	0623.9	0.3	68.0				
900	GORK	8 S	0642.8	0642.9	0.2	13.0				

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

JUNE 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
07	600	GORK	7 C	0643.8	0644.0	0.5	4.5			
	600	GORK	7 C	0643.8	0644.1		5.4			
	2840	PEKG	1 S	0941.0	0944.3	9.0	3.8			
08	127	TORN	43 NS	0805.0		335.0		10.0		V=0
	235	CUBA	44 NS	1310.0E		520.0D		6.0		
	280	CUBA	44 NS	1310.0E		520.0D		12.0		
	245	SGMR	43 NS	1413.0	1440.0	193.0	200.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	1435.0	1440.0	26.0	110.0			QL=2 ST=2 TYP=1
	245	SGMR	43 NS	2059.0	2112.0	41.0	190.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	2104.0	2130.0	176.0	240.0			QL=4 ST=1 TYP=1
	245	LEAR	8 S	0109.0	0109.0		U	53.0		QL=4 ST=2 TYP=3
	410	LEAR	8 S	0135.0	0135.0		U	68.0		QL=4 ST=2 TYP=3
	245	LEAR	8 S	0152.0	0153.0	1.0	150.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0806.9	0811.8	10.3	78.0			
	245	SVTO	8 S	0811.0	0811.0		U	65.0		QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0921.8	0925.4	56.2	74.0			
	204	IZMI	42 SER	1105.2	1114.9	10.3	68.0			
	245	SGMR	8 S	1210.0	1210.0		U	85.0		QL=4 ST=2 TYP=3
	245	SVTO	8 S	1210.0	1210.0		U	53.0		QL=4 ST=3 TYP=3
	245	SGMR	48 C	1413.0	1416.0	9.0	110.0			QL=4 ST=2 TYP=8
	245	SVTO	8 S	1415.0	1416.0	1.0	64.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1658.0	1659.0	1.0	60.0			QL=4 ST=2 TYP=3
	245	LEAR	48 C	2357.0	2357.0		U	71.0		QL=4 ST=2 TYP=8
09	127	TORN	43 NS	0859.0		91.0		6.0		V=1
	235	CUBA	44 NS	1330.0E		330.0D		5.0		
	280	CUBA	44 NS	1330.0E		330.0D		15.0		
	245	PALE	48 C	0408.0	0408.0		U	54.0		QL=4 ST=2 TYP=8
	410	PALE	8 S	0409.0	0409.0		U	88.0		QL=4 ST=2 TYP=3
	500	HIRA	8 S	0413.0	0414.0	1.0	120.0			0
	245	LEAR	46 C	0413.0	0413.0		U	44.0		QL=4 ST=2 TYP=8
	410	LEAR	8 S	0413.0	0413.0		U	79.0		QL=4 ST=2 TYP=3
	600	GORK	40 F	0426.0	0428.3	32.5	13.0			
	500	HIRA	7 C	0428.0	0429.0	3.0	30.0			0
	245	LEAR	8 S	0653.0	0653.0		U	51.0		QL=4 ST=2 TYP=3
	600	GORK	41 F	0715.4	0730.8		13.0			
	600	GORK	41 F	0715.4	0716.9	16.9	22.0			
	600	GORK	4 S/F	0811.5	0812.4	1.5	14.0			
	2840	PEKG	20 GRF	0926.0	0930.0	16.0	5.8			
	3000	IZMI	20 GRF	0927.1	0929.9	4.0	10.0	3.6		
	204	IZMI	42 SER	0936.9	1007.2	39.6	20.0			
	127	TORN	48 C	1006.5	1008.0	4.1	100.0	30.0		
	600	GORK	46 C	1007.3	1007.7	3.4	19.0			
	600	GORK	46 C	1007.3	1009.7		32.0			
	3000	IZMI	20 GRF	1007.7	1008.8	3.0	5.0	2.5		
	900	GORK	41 F	1007.9	1008.6	2.6	6.7			
	900	GORK	41 F	1007.9	1009.7		23.0			
	245	SVTO	8 S	1008.0	1008.0	2.0	55.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1038.0	1039.0	1.0	55.0			QL=4 ST=2 TYP=3
	410	SVTO	4 S/F	1106.0	1110.0	15.0	100.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1120.0	1121.0	1.0	53.0			QL=4 ST=3 TYP=3
	410	SVTO	8 S	1120.0	1121.0	1.0	72.0			QL=4 ST=3 TYP=3
	410	SGMR	8 S	1121.0	1121.0		U	290.0		QL=4 ST=2 TYP=3
	245	SVTO	8 S	1121.0	1121.0		U	49.0		QL=4 ST=2 TYP=3
	245	SGMR	49 GB	1429.0	1430.0	1.0	590.0			QL=4 ST=2 TYP=6
	410	SGMR	49 GB	1429.0	1429.0	1.0	580.0			QL=4 ST=2 TYP=6
410	SVTO	49 GB	1429.0	1429.0	3.0	1100.0			QL=4 ST=2 TYP=6	
245	SVTO	8 S	1429.0	1430.0	1.0	350.0			QL=4 ST=2 TYP=3	
410	SGMR	8 S	1432.0	1433.0	2.0	100.0			QL=4 ST=2 TYP=3	
410	SVTO	8 S	1432.0	1433.0	2.0	170.0			QL=4 ST=2 TYP=3	
410	SVTO	8 S	1626.0	1626.0		U	83.0		QL=4 ST=2 TYP=3	
245	PALE	8 S	1919.0	1919.0		U	100.0		QL=4 ST=2 TYP=3	
245	SGMR	8 S	1919.0	1919.0		U	70.0		QL=4 ST=2 TYP=3	
245	PALE	48 C	2051.0	2051.0	1.0	72.0			QL=4 ST=2 TYP=8	
245	SGMR	48 C	2051.0	2051.0		U	50.0		QL=4 ST=2 TYP=8	
245	PALE	48 C	2054.0	2054.0		U	86.0		QL=4 ST=2 TYP=8	
245	SGMR	48 C	2054.0	2054.0		U	55.0		QL=4 ST=2 TYP=8	
245	SGMR	8 S	2130.0	2130.0		U	63.0		QL=4 ST=2 TYP=3	

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

17
Jun 02

JUNE 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
09	500	HIRA	8 S	2244.0	2244.0	1.0	20.0		0	
	410	PALE	49 GB	2246.0	2246.0	U	960.0			QL=4 ST=2 TYP=6
	245	PALE	8 S	2246.0	2246.0	U	770.0			QL=4 ST=2 TYP=3
	410	SGMR	49 GB	2246.0	2246.0	U	670.0			QL=4 ST=2 TYP=6
	245	SGMR	8 S	2246.0	2246.0	U	480.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	2320.0	2320.0	U	55.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2320.0	2320.0	U	70.0			QL=4 ST=2 TYP=3
10	245	SVTO	43 NS	0558.0	0639.0	183.0	150.0			QL=2 ST=2 TYP=1
	245	LEAR	43 NS	0559.0	0622.0	76.0	210.0			QL=4 ST=2 TYP=1
	204	IZMI	43 NS	0600.0		360.00		25.0		
	410	SVTO	43 NS	0618.0	0639.0	26.0	120.0			QL=2 ST=3 TYP=1
	245	LEAR	43 NS	0725.0	0749.0	90.0	200.0			QL=4 ST=2 TYP=1
	127	TORN	44 NS	0950.0E		150.00		8.0		V=0
	245	SGMR	43 NS		1133.0	123.0	600.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	1133.0	1136.0	66.0	290.0			QL=2 ST=2 TYP=1
	235	CUBA	44 NS	1410.0E		320.00		4.0		
	280	CUBA	44 NS	1410.0E		320.00		12.0		
	245	SGMR	43 NS		1654.0	36.0	54.0			QL=4 ST=2 TYP=1
	245	SGMR	43 NS	2008.0	2047.0	156.0	290.0			QL=4 ST=2 TYP=1
	410	SGMR	43 NS	2008.0	2008.0	156.0	74.0			QL=4 ST=2 TYP=1
	245	LEAR	8 S	0058.0	0058.0	U	220.0			QL=4 ST=2 TYP=3
	410	LEAR	48 C	0130.0	0130.0	U	55.0			QL=4 ST=2 TYP=8
	245	LEAR	8 S	0131.0	0131.0	U	41.0			QL=4 ST=2 TYP=3
	2840	PEKG	20 GRF	0157.0	0202.8	19.0	15.0			
	500	HIRA	8 S	0203.0	0203.0	1.0	40.0			0
	245	LEAR	48 C	0216.0	0216.0	U	62.0			QL=4 ST=2 TYP=8
	245	LEAR	49 GB	0238.0	0238.0	1.0	550.0			QL=4 ST=2 TYP=6
	410	LEAR	8 S	0238.0	0238.0	1.0	230.0			QL=4 ST=2 TYP=3
	500	HIRA	8 S	0239.0	0239.0	1.0	10.0			0
	600	GORK	40 F	0348.2	0350.2	2.7	6.4			
	410	LEAR	8 S	0408.0	0408.0	1.0	58.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0410.0	0410.0	U	1000.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0421.0	0421.0	U	64.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	0421.0	0421.0	U	75.0			QL=4 ST=2 TYP=3
	500	HIRA	4 S/F	0516.0	0521.0	6.0	45.0			0
	2840	PEKG	3 S	0521.0	0526.1	14.0	15.9			
	500	HIRA	8 S	0525.0	0526.0	1.0	290.0			0
	245	LEAR	48 C	0525.0	0525.0	2.0	120.0			QL=4 ST=2 TYP=8
	410	LEAR	8 S	0525.0	0525.0	2.0	340.0			QL=4 ST=2 TYP=3
	610	LEAR	8 S	0525.0	0525.0	1.0	58.0			QL=4 ST=2 TYP=3
	410	SVTO	49 GB	0525.0	0525.0	2.0	530.0			QL=4 ST=2 TYP=6
	245	SVTO	8 S	0525.0	0525.0	2.0	89.0			QL=4 ST=2 TYP=3
	610	SVTO	8 S	0525.0	0525.0	1.0	61.0			QL=4 ST=2 TYP=3
	15400	SVTO	8 S	0525.0	0525.0	U	23.0			QL=4 ST=2 TYP=3
	600	GORK	46 C	0525.5	0526.1		80.0			
	600	GORK	46 C	0525.5	0525.9	1.8	120.0			
	900	GORK	46 C	0525.6	0526.2	0.7	45.0			
	900	GORK	46 C	0525.6	0526.6		135.0			
	2950	GORK	4 S/F	0525.6	0525.9	0.6	7.6			
	500	HIRA	8 S	0534.0	0534.0	1.0	15.0			0
600	GORK	23 GRF	0550.0	0626.3		23.0				
600	GORK	23 GRF	0550.0	0558.6	18.9	17.0				
600	GORK	40 F	0613.0	0634.1	66.0	20.0				
2840	PEKG	3 S	0627.0	0632.6	12.0	15.5				
2950	GORK	7 C	0632.3	0632.6	0.7	14.0				
2950	GORK	7 C	0632.3	0632.7		14.0				
3000	IZMI	7 C	0632.6	0632.7	0.4	18.0	5.9			
410	LEAR	49 GB	0633.0	0634.0	1.0	540.0			QL=4 ST=2 TYP=6	
410	SVTO	49 GB	0633.0	0634.0	1.0	640.0			QL=2 ST=2 TYP=6	
500	HIRA	8 S	0634.0	0634.0	1.0	230.0			0	
2840	PEKG	3 S	0707.0	0712.4	10.0	11.5				
410	LEAR	8 S	0710.0	0711.0	2.0	210.0			QL=4 ST=2 TYP=3	
500	HIRA	8 S	0711.0	0712.0	1.0	35.0			0	
410	SVTO	8 S	0711.0	0711.0	1.0	230.0			QL=2 ST=2 TYP=3	
2950	GORK	2 S/F	0711.6	0712.4	1.1	6.3				
410	SVTO	8 S	0716.0	0716.0	2.0	100.0			QL=2 ST=3 TYP=3	
410	SVTO	8 S	0755.0	0755.0	1.0	65.0			QL=4 ST=3 TYP=3	
204	IZMI	42 SER	0901.9	0902.2	0.7	191.0				

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

JUNE 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
10	245	LEAR	48 C	0920.0	0920.0	2.0	100.0			QL=4 ST=2 TYP=8
	410	SVTO	8 S	0954.0	0954.0	U	70.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1005.0	1005.0	2.0	73.0			QL=2 ST=2 TYP=3
	600	GORK	40 F	1009.0	1034.9	32.0	18.0			
	410	SVTO	8 S	1014.0	1014.0	U	78.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1105.0	1105.0	2.0	57.0			QL=4 ST=2 TYP=3
	410	SVTO	48 C	1105.0	1105.0	2.0	60.0			QL=4 ST=2 TYP=8
	245	SVTO	48 C	1108.0	1108.0	1.0	110.0			QL=4 ST=2 TYP=8
	410	SGMR	8 S	1127.0	1129.0	2.0	82.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1139.0	1139.0	U	51.0			QL=2 ST=2 TYP=3
	3000	IZMI	22 GRF	1154.9	1155.7	1.8	31.0	9.7		
	245	SVTO	4 S/F	1402.0	1403.0	3.0	94.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1403.0	1403.0	1.0	140.0			QL=4 ST=2 TYP=3
	245	SGMR	48 C	1555.0	1555.0	U	69.0			QL=4 ST=2 TYP=8
	245	SGMR	8 S	1600.0	1600.0	1.0	88.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1600.0	1600.0	1.0	52.0			QL=4 ST=2 TYP=3
	245	SGMR	48 C	1646.0	1646.0	U	54.0			QL=4 ST=2 TYP=8
9500	CUBA	1 S	1811.3	1812.0	1.2	16.0	8.0			
245	SGMR	8 S	1829.0	1829.0	U	100.0			QL=4 ST=2 TYP=3	
410	PALE	8 S	2008.0	2008.0	1.0	66.0			QL=4 ST=2 TYP=3	
11	245	SVTO	43 NS	0437.0	0641.0U	236.0	100.0			QL=2 ST=2 TYP=1
	204	IZMI	44 NS	0600.0E		180.0D		50.0		
	127	TORN	44 NS	0630.0E		440.0D		40.0		V=3
	204	IZMI	44 NS	0900.0E		180.0D		10.0		
	235	CUBA	44 NS	1340.0E		320.0D		11.0		
	280	CUBA	44 NS	1340.0E		320.0D		20.0		
	245	SGMR	43 NS	1425.0	1449.0	24.0	93.0			QL=4 ST=2 TYP=1
	410	SVTO	43 NS	1519.0	1519.0	51.0	78.0			QL=2 ST=2 TYP=1
	410	SGMR	43 NS	1536.0	1536.0	29.0	84.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	1646.0	1829.0	661.0	220.0			QL=4 ST=2 TYP=1
	245	SGMR	43 NS	1655.0	1733.0	277.0	210.0			QL=4 ST=2 TYP=1
	410	SGMR	43 NS	2108.0	2134.0	26.0	65.0			QL=4 ST=2 TYP=1
	2840	PEKG	20 GRF	0254.0	0259.3	12.0	5.8			
	2840	PEKG	3 S	0402.0	0408.6	14.0	18.0			
	900	GORK	41 F	0534.9	0535.3	1.1	33.0			
	900	GORK	41 F	0534.9	0535.8		16.0			
	600	GORK	40 F	0537.0	0538.2	1.6	5.1			
	600	GORK	23 GRF	0630.8	0655.3		10.0			
	600	GORK	23 GRF	0630.8	0635.7	35.2	4.3			
	600	GORK	7 C	0631.9	0632.2	0.9	13.0			
	600	GORK	7 C	0631.9	0632.5		3.4			
	500	HIRA	8 S	0632.0	0632.0	1.0	40.0			
	900	GORK	7 C	0632.2	0632.3	0.6	7.9			
	900	GORK	7 C	0632.2	0632.6		19.0			
	204	IZMI	41 F	0653.1	0654.0	1.7	398.0			
	204	IZMI	41 F	0746.9	0747.3	1.1	207.0			
	204	IZMI	42 SER	0953.5	0954.4	1.4	44.0			
	204	IZMI	41 F	1132.0	1133.7	2.4	35.0			
245	SVTO	8 S	1423.0	1423.0	U	55.0			QL=4 ST=3 TYP=3	
245	SVTO	4 S/F	1446.0	1449.0	8.0	86.0			QL=4 ST=2 TYP=3	
2800	PENT	29 PBI	1454.0	1511.0	95.0U	5.0				
245	PALE	48 C	1727.0	1733.0	7.0	250.0			QL=4 ST=2 TYP=8	
410	PALE	48 C	2114.0	2114.0	U	55.0			QL=4 ST=2 TYP=8	
410	PALE	48 C	2132.0	2133.0	1.0	120.0			QL=4 ST=2 TYP=8	
12	245	LEAR	43 NS	0021.0	0322.0	548.0	340.0			QL=4 ST=3 TYP=1
	245	SVTO	43 NS	0434.0	0931.0	636.0	310.0			QL=2 ST=2 TYP=1
	204	IZMI	44 NS	0600.0E		360.0D		80.0		
	127	TORN	44 NS	0630.0E		410.0D		10.0		V=1, DISTURBED
	245	SGMR	43 NS	1054.0	1140.0	257.0	350.0			QL=4 ST=2 TYP=1
	280	CUBA	44 NS	1400.0E		240.0D		14.0		
	245	SGMR	43 NS	1733.0	1801.0	127.0	82.0			QL=4 ST=2 TYP=1
	410	LEAR	48 C	0137.0	0138.0	4.0	84.0			QL=4 ST=2 TYP=8
	2840	PEKG	1 S	0158.0	0200.3	7.0	4.2			
	245	LEAR	8 S	0200.0	0200.0	U	400.0			QL=2 ST=2 TYP=3
	2840	PEKG	45 C	0218.0	0222.3	15.0	14.6			
	2804	VORO	40 F	0221.2	0222.5	5.0	14.1			
	410	LEAR	8 S	0520.0	0520.0	U	51.0			QL=4 ST=2 TYP=3

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

19
Jun 02

JUNE 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
12	245	SVTO	49 GB	0548.0	0649.0	62.0	570.0			QL=4 ST=3 TYP=6
	204	IZMI	42 SER	0632.2	0632.7	4.0	134.0			
	2840	PEKG	1 S	0647.0	0649.9	7.0	7.7			
	245	SVTO	49 GB	0648.0	0649.0	2.0	570.0			QL=4 ST=3 TYP=6
	245	LEAR	8 S	0649.0	0649.0	U	720.0			QL=2 ST=2 TYP=3
	204	IZMI	46 C	0649.1	0649.6	1.2	173.0			
	127	TORN	7 C	0649.3	0649.4	1.3	330.0	150.0		
	9100	GORK	2 S/F	0649.5	0649.7	0.8	19.0			
	900	GORK	2 S/F	0649.6	0649.9	1.7	11.0			
	600	GORK	41 F	0649.8	0651.1		4.5			
	600	GORK	41 F	0649.8	0649.9	1.6	4.5			
	33	UPIC	8 S	0650.0	0650.5	1.5				
	127	TORN	7 C	1027.9	1028.6	1.3	60.0	30.0		
	204	IZMI	42 SER	1031.3	1033.0	2.7	159.0			
	410	SVTO	8 S	1048.0	1048.0	U	70.0			QL=2 ST=2 TYP=3
	245	SVTO	8 S	1622.0	1622.0	U	74.0			QL=4 ST=3 TYP=3
	245	PALE	8 S	1728.0	1728.0	U	46.0			QL=4 ST=2 TYP=3
	2800	PENT	8 S	2106.0	2116.0	20.0	57.0			
	2800	HIRA	8 S	2115.0	2117.0	4.0	55.0			0
	8800	PALE	48 C	2115.0	2115.0	U	67.0			QL=4 ST=3 TYP=8
	15400	PALE	48 C	2115.0	2115.0	U	55.0			QL=4 ST=3 TYP=8
	245	PALE	8 S	2115.0	2115.0	U	380.0			QL=4 ST=3 TYP=3
	410	PALE	8 S	2115.0	2115.0	U	210.0			QL=4 ST=3 TYP=3
	4995	PALE	8 S	2115.0	2115.0	U	62.0			QL=4 ST=3 TYP=3
	500	HIRA	8 S	2116.0	2117.0	2.0	20.0			0
	245	SGMR	8 S	2116.0	2116.0	1.0	250.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2116.0	2116.0	1.0	170.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	2116.0	2116.0	1.0	22.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	2116.0	2116.0	1.0	51.0			QL=4 ST=2 TYP=3
	4995	SGMR	8 S	2116.0	2116.0	1.0	90.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	2116.0	2116.0	1.0	85.0			QL=4 ST=2 TYP=3
	15400	SGMR	8 S	2116.0	2116.0	U	26.0			QL=4 ST=2 TYP=3
2840	PEKG	20 GRF	2315.0	2319.3	10.0	7.3				
2804	VORO	3 S	2316.8	2319.4	5.0	6.4				
13	245	PALE	43 NS	0155.0	0236.0	163.0	230.0			QL=4 ST=2 TYP=1
	245	LEAR	43 NS	0229.0	0235.0	73.0	160.0			QL=4 ST=2 TYP=1
	127	TORN	44 NS	0810.0E		300.0D		12.0		V=1, ATM. STORM
	245	SGMR	43 NS	1053.0	1105.0	32.0	330.0			QL=4 ST=2 TYP=1
	410	SGMR	43 NS	1225.0	1228.0	7.0	58.0			QL=4 ST=2 TYP=1
	235	CUBA	44 NS	1400.0E		470.0D		9.0		
	280	CUBA	44 NS	1400.0E		470.0D		18.0		
	245	SGMR	43 NS	1525.0	1742.0	140.0	130.0			QL=4 ST=2 TYP=1
	245	SGMR	43 NS	1937.0	2106.0	116.0	170.0			QL=4 ST=2 TYP=1
	245	SGMR	43 NS	2218.0	2230.0	28.0	160.0			QL=4 ST=2 TYP=1
	245	LEAR	48 C	0011.0	0014.0	4.0	92.0			QL=4 ST=2 TYP=8
	2840	PEKG	1 S	0017.0	0020.2	8.0	3.6			
	245	LEAR	8 S	0021.0	0022.0	1.0	80.0			QL=4 ST=2 TYP=3
	245	LEAR	4 S/F	0036.0	0038.0	3.0	100.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0142.0	0142.0	U	67.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0156.0	0156.0	U	75.0			QL=4 ST=2 TYP=3
	245	LEAR	48 C	0200.0	0204.0	4.0	240.0			QL=4 ST=2 TYP=8
	245	LEAR	8 S	0206.0	0208.0	2.0	180.0			QL=4 ST=2 TYP=3
	245	LEAR	48 C	0214.0	0215.0	2.0	100.0			QL=4 ST=2 TYP=8
	500	HIRA	8 S	0412.0	0412.0	1.0	10.0			0
	245	LEAR	48 C	0515.0	0520.0	5.0	66.0			QL=4 ST=3 TYP=8
	245	SVTO	48 C	0517.0	0520.0	3.0	56.0			QL=4 ST=3 TYP=8
	204	IZMI	42 SER	0600.0E	0608.2	26.8D	40.0			
	245	SVTO	8 S	0625.0	0625.0	1.0	52.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	0708.5	0708.6	0.2	84.0			
	204	IZMI	42 SER	0738.1	0750.4	30.2	38.0			
	245	SVTO	8 S	0745.0	0745.0	U	51.0			QL=4 ST=2 TYP=3
	245	LEAR	48 C	0836.0	0837.0	1.0	130.0			QL=4 ST=2 TYP=8
	245	SVTO	8 S	0836.0	0836.0	2.0	95.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1006.0	1006.0	U	61.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1032.0	1032.0	U	67.0			QL=4 ST=2 TYP=3
245	SVTO	8 S	1035.0	1036.0	1.0	61.0			QL=4 ST=2 TYP=3	
204	IZMI	42 SER	1035.8	1043.4	23.2	54.0				
245	SVTO	8 S	1124.0	1124.0	U	70.0			QL=4 ST=2 TYP=3	

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

JUNE 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
13	3000	IZMI	5 S	1127.3	1127.8	0.8	11.0	6.0		
	410	SVTO	8 S	1217.0	1217.0	U	59.0			QL=4 ST=2 TYP=3
	8800	SGMR	49 GB	1245.0	1245.0	U	540.0			QL=4 ST=2 TYP=6
	245	SGMR	8 S	1458.0	1458.0	U	75.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1853.0	1853.0	U	56.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1921.0	1921.0	U	67.0			QL=4 ST=2 TYP=3
	200	HIRA	7 C	2020.0	2022.0	6.0	35.0			0
	410	SGMR	8 S	2050.0	2050.0	U	110.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2111.0	2111.0	U	76.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	2117.0	2117.0	1.0	15.0			0
245	LEAR	48 C	2350.0	2350.0	1.0	86.0			QL=4 ST=2 TYP=8	
14	245	LEAR	43 NS	0528.0	0611.0	126.0	110.0			QL=4 ST=2 TYP=1
	204	IZMI	43 NS	0600.0		360.0D		15.0		
	127	TORN	43 NS	0930.0		147.0		10.0		V=1
	280	CUBA	44 NS	1300.0E		420.0D		11.0		
	245	SGMR	43 NS	1910.0	2034.0	217.0	250.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	2008.0	2103.0	510.0	260.0			QL=4 ST=2 TYP=1
	245	LEAR	8 S	0040.0	0040.0	1.0	65.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0041.0	0041.0	U	67.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0046.0	0046.0	U	64.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0253.0	0254.0	1.0	57.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	0513.0	0518.0	7.0	110.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0518.0	0518.0	1.0	140.0			QL=4 ST=2 TYP=3
	204	IZMI	7 C	0550.0	0550.1	0.2	42.0			
	245	SVTO	8 S	0815.0	0815.0	U	220.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0920.0	0921.0	1.0	91.0			QL=4 ST=2 TYP=3
	245	LEAR	48 C	0925.0E	0925.0	4.0D	210.0			QL=4 ST=2 TYP=8
	204	IZMI	25 R	1002.0	1014.4	63.0	59.0			
245	SGMR	8 S	1628.0	1628.0	U	57.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	1835.0	1835.0	U	65.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	1855.0	1855.0	U	120.0			QL=4 ST=2 TYP=3	
15	245	LEAR	43 NS	0000.0	0415.0	450.0	150.0			QL=4 ST=2 TYP=1
	127	TORN	43 NS	0910.0		290.0		10.0		V=1
	235	CUBA	44 NS	1330.0E		270.0D		6.0		
	280	CUBA	44 NS	1330.0E		270.0D		15.0		
	410	LEAR	8 S	0600.0	0600.0	U	54.0			QL=4 ST=2 TYP=3
16	127	TORN	43 NS	0807.0		303.0		11.0		V=1
	2840	PEKG	3 S	0312.0E	0312.0	10.0D	7.6			
	2804	VORO	2 S/F	0409.4	0411.8	5.6	10.3			
	245	LEAR	8 S	0745.0	0745.0	U	53.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0753.0	0753.0	U	52.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1021.0	1021.0	U	210.0			QL=4 ST=2 TYP=3
	204	IZMI	46 C	1021.4	1021.8	0.8	458.0			
	245	SGMR	8 S	1515.0	1515.0	U	68.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1554.0	1554.0	U	69.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1554.0	1554.0	U	61.0			QL=4 ST=2 TYP=3
	2800	PENT	29 PBI	2051.0	2114.0	101.0U	10.0			
500	HIRA	8 S	2106.0	2107.0	1.0	20.0			0	
9500	CUBA	1 S	2114.0	2114.6	1.0	7.0	3.0			
200	HIRA	8 S	2235.0	2235.0	1.0	30.0			0	
17	127	TORN	43 NS	0900.0		260.0		12.0		V=1
	235	CUBA	44 NS	1320.0E		490.0D		5.0		
	280	CUBA	44 NS	1320.0E		490.0D		12.0		
	204	IZMI	7 C	0701.4	0701.6	0.3	21.0			
	204	IZMI	41 F	1024.2	1024.5	0.3	44.0			
	245	SGMR	8 S	1141.0	1141.0	U	79.0			QL=4 ST=2 TYP=3
	2800	PENT	29 PBI	1841.0	1907.0	51.0U	12.0			
	245	PALE	48 C	2004.0	2004.0	2.0	440.0			QL=4 ST=2 TYP=8
245	SGMR	8 S	2004.0	2004.0	U	260.0			QL=4 ST=2 TYP=3	
18	127	TORN	43 NS	0715.0		405.0		10.0		V=0
	2840	PEKG	1 S	0053.0	0056.6	7.0	4.8			
	245	LEAR	8 S	0107.0	0107.0	U	57.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1136.0	1136.0	U	140.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1136.0	1136.0	U	100.0			QL=4 ST=2 TYP=3

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

21
Jun 02

JUNE 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22	Mean W/m 2 Hz)		
18	200	HIRA	4 S/F	2052.0	2052.0	3.0	55.0			WL
	245	PALE	48 C	2052.0	2052.0	U	72.0			QL=4 ST=2 TYP=8
	245	SGMR	8 S	2052.0	2052.0	U	59.0			QL=4 ST=2 TYP=3
19	127	TORN	44 NS	0630.0E		210.0D		13.0		V=2,DISTURBED
	235	CUBA	44 NS	1305.0E		525.0D		6.0		
	280	CUBA	44 NS	1305.0E		525.0D		12.0		
	410	SVTO	8 S	0701.0	0701.0	2.0	87.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	0834.0	0834.0	1.0	235.0			WL
	245	LEAR	8 S	0834.0	0834.0	U	180.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0834.0	0834.0	U	120.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0834.0	0834.0	U	83.0			QL=4 ST=2 TYP=3
	204	IZMI	46 C	0834.6	0834.9	0.4	1646.0			
	204	IZMI	42 SER	0851.6	0854.4	3.8	110.0			
	245	LEAR	8 S	0852.0	0854.0	2.0	120.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0852.0	0854.0	2.0	72.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0902.8	0904.4	2.0	58.0			
	204	IZMI	42 SER	0913.7	0916.4	3.6	7.0			
	245	SVTO	8 S	0957.0	0958.0	2.0	75.0			QL=4 ST=2 TYP=3
	2840	PEKG	45 C	1000.0	1009.2	18.0	12.1			
	600	GORK	46 C	1003.2	1007.3		46.0			
	600	GORK	46 C	1003.2	1004.4	6.5	40.0			
	900	GORK	46 C	1003.4	1007.3		45.0			
	900	GORK	46 C	1003.4	1004.4	7.5	50.0			
	2950	GORK	46 C	1003.8	1007.4	9.9	11.0			
	2950	GORK	46 C	1003.8	1009.5		10.0			
	1415	SVTO	48 C	1004.0	1007.0	3.0	79.0			QL=4 ST=2 TYP=8
	9100	GORK	1 S	1004.2	1004.7	0.8	15.0			
	9100	GORK	45 C	1006.9	1008.4	6.1	37.0			
	9100	GORK	45 C	1006.9	1009.4		45.0			
	4995	SVTO	8 S	1007.0	1008.0	2.0	32.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	1007.0	1009.0	3.0	55.0			QL=4 ST=2 TYP=3
	9100	GORK	29 PBI	1013.0	1013.0	13.4	7.6			
	33	UPIC	8 S	1457.0	1457.5	1.0				
245	PALE	8 S	1632.0	1632.0	U	98.0			QL=4 ST=2 TYP=3	
200	HIRA	42 SER	2047.0	2054.0	11.0	10.0			WL	
245	PALE	8 S	2054.0	2054.0	1.0	430.0			QL=2 ST=2 TYP=3	
245	PALE	8 S	2108.0	2109.0	1.0	75.0			QL=4 ST=2 TYP=3	
2840	PEKG	1 S	2320.0	2324.1	9.0	7.9				
2804	VORO	2 S/F	2321.6	2323.8	4.8	8.7				
20	127	TORN	43 NS	0700.0		260.0U		9.0		V=1,ATM.STORM
	235	CUBA	44 NS	1300.0E		360.0D		6.0		
	280	CUBA	44 NS	1300.0E		360.0D		9.0		
	204	IZMI	42 SER	0727.0	0727.6	1.5	13.0			
	204	IZMI	42 SER	1027.6	1027.9	1.2	57.0			
	2800	PENT	20 GRF	1435.0	1527.0	100.0	5.0			
	2800	PENT	21 GRF	2148.0	2219.0	104.0U	3.0			
	200	HIRA	8 S	2331.0	2331.0	1.0	10.0			0
	500	HIRA	1 S	2333.0	2335.0	5.0	10.0			0
	21	127	TORN	44 NS	0830.0E		330.0D		9.0	
235		CUBA	44 NS	1305.0E		330.0D		6.0		
280		CUBA	44 NS	1305.0E		330.0D		12.0		
2840		PEKG	1 S	0427.0	0429.4	7.0	3.0			
245		PALE	8 S	2213.0	2213.0	U	100.0			QL=4 ST=2 TYP=3
22	127	TORN	43 NS	0833.0		127.0		8.0		V=1
	2840	PEKG	3 S	0134.0	0137.3	10.0	20.4			
	2804	VORO	46 C	0135.0	0137.2	8.1	14.1			
	2804	VORO	21 GRF	0217.5	0233.8	43.3	12.5			
	2840	PEKG	3 S	0225.0	0234.5	20.0	13.2			
	500	HIRA	8 S	0336.0	0336.0	1.0	30.0			0
	245	LEAR	8 S	0910.0	0910.0	1.0	55.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0910.0	0910.0	2.0	54.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0910.0	0911.0	2.0	55.0			QL=4 ST=2 TYP=3
	204	IZMI	42 SER	0910.6	0911.4	1.2	22.0			
	204	IZMI	41 F	1115.2	1115.5	2.9	15.0			
	2800	PENT	20 GRF	1333.0	1414.0	139.0	12.0			

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

JUNE 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
22	410	SVTO	48 C	1339.0	1342.0	3.0	77.0			QL=4 ST=2 TYP=8
	410	SGMR	48 C	1340.0	1340.0	2.0	69.0			QL=4 ST=2 TYP=8
	245	SGMR	8 S	1340.0	1340.0		42.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1730.0	1731.0	1.0	63.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1731.0	1731.0		37.0			QL=4 ST=2 TYP=3
23	127	TORN	43 NS	0910.0		220.0		9.0		V=0
	235	CUBA	44 NS	1315.0E		90.0D		6.0		
	280	CUBA	44 NS	1315.0E		90.0D		14.0		
	2804	VORO	20 GRF	0220.0	0312.5	145.0	26.7			
	4995	LEAR	20 GRF	0243.0	0309.0	82.0	41.0			QL=4 ST=2 TYP=2
	8800	LEAR	20 GRF	0246.0	0313.0	76.0	38.0			QL=4 ST=2 TYP=2
	15400	LEAR	20 GRF	0255.0	0302.0	28.0	25.0			QL=4 ST=2 TYP=2
	2695	LEAR	20 GRF	0256.0	0311.0	42.0	24.0			QL=4 ST=2 TYP=2
	900	GORK	20 GRF	0309.0U	0313.0	15.0D	17.0			
	600	GORK	20 GRF	0309.0U	0315.0	25.0D	11.0			
	9100	GORK	20 GRF	0312.0U	0312.0U	53.2D	17.0			
	2950	GORK	20 GRF	0312.0U	0316.1	85.8D	23.0			
	245	LEAR	48 C	0444.0	0444.0		72.0			QL=4 ST=2 TYP=8
	200	HIRA	8 S	0445.0	0447.0	2.0	20.0			0
	2840	PEKG	5 S	0819.0	0822.6	8.0	42.8			
	2950	GORK	21 GRF	0819.9	0821.3	6.9	3.9			
	410	SVTO	8 S	0820.0	0822.0	2.0	480.0			QL=4 ST=2 TYP=3
	600	GORK	46 C	0820.7	0822.2	5.4	100.0			
	600	GORK	46 C	0820.7	0822.5		29.0			
	410	LEAR	8 S	0821.0	0822.0	1.0	180.0			QL=4 ST=2 TYP=3
	900	GORK	46 C	0821.0	0821.3	3.9	4.9			
	900	GORK	46 C	0821.0	0822.5		25.0			
	900	GORK	46 C	0821.0	0822.7		20.0			
	2800	HIRA	8 S	0822.0	0822.0	1.0	30.0			
	500	HIRA	8 S	0822.0	0822.0	3.0	90.0			
	245	LEAR	8 S	0822.0	0822.0		71.0			QL=4 ST=2 TYP=3
	610	LEAR	8 S	0822.0	0822.0		37.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0822.0	0822.0		49.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	0822.0	0822.0		25.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	0822.0	0822.0		49.0			QL=4 ST=2 TYP=3
	2950	GORK	45 C	0822.2	0822.5	1.1	35.0			
	3000	IZMI	22 GRF	0822.2	0822.5	1.0	45.0	20.0		
9100	GORK	7 C	0822.2	0822.6	0.9	19.0				
2950	GORK	45 C	0822.2	0822.8		30.0				
9100	GORK	7 C	0822.2	0822.9		15.0				
2800	PENT	1 S	1414.0	1418.0	8.0	6.0				
2800	PENT	1 S	1817.0	1821.0	8.0	13.0				
24	127	TORN	44 NS	1000.0E		233.0D		7.0		V=0
	235	CUBA	44 NS	1310.0E		110.0D		6.0		
	280	CUBA	44 NS	1310.0E		110.0D		11.0		
	200	HIRA	8 S	0505.0	0506.0	1.0	115.0			0
	204	IZMI	41 F	0828.4	0828.6	0.4	10.0			
	204	IZMI	41 F	1138.5	1138.8	0.6	44.0			
	2800	PENT	24 R	1500.0	1604.0	92.0U	6.0			
	200	HIRA	8 S	2348.0	2350.0	3.0	10.0			0
	25	127	TORN	44 NS	1130.0E		180.0D		9.0	
235		CUBA	44 NS	1310.0E		170.0D		6.0		
280		CUBA	44 NS	1310.0E		170.0D		15.0		
200		HIRA	8 S	0346.0	0346.0	1.0	10.0			0
245		LEAR	8 S	0406.0	0407.0	1.0	60.0			QL=4 ST=2 TYP=3
200		HIRA	8 S	0407.0	0407.0	1.0	50.0			0
245		PALE	8 S	0407.0	0407.0		78.0			QL=4 ST=2 TYP=3
200		HIRA	8 S	0429.0	0429.0	1.0	15.0			0
245		LEAR	8 S	0543.0	0544.0	1.0	100.0			QL=4 ST=2 TYP=3
245		SVTO	8 S	0543.0	0543.0	1.0	73.0			QL=4 ST=2 TYP=3
204		IZMI	7 C	0602.1	0602.1	0.1	30.0			
200		HIRA	8 S	0610.0	0610.0	1.0	200.0			0
245		LEAR	8 S	0610.0	0610.0	1.0	190.0			QL=4 ST=2 TYP=3
245		SVTO	8 S	0610.0	0610.0	1.0	140.0			QL=4 ST=2 TYP=3
204		IZMI	46 C	0610.1	0610.8	3.6	396.0			
204	IZMI	42 SER	0644.9	0645.6	1.0	40.0				

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

23
Jun 02

JUNE 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
25	9100	GORK	8 S	0915.5	0915.7	0.3	39.0			
	204	IZMI	42 SER	1105.8	1105.9	1.0	20.0			
	245	PALE	8 S	1709.0	1709.0	1.0	260.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1709.0	1709.0	1.0	240.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1709.0	1709.0	1.0	130.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	2053.0	2053.0	1.0	15.0			0
	200	HIRA	8 S	2121.0	2121.0	1.0	20.0			0
	200	HIRA	8 S	2224.0	2224.0	1.0	15.0			0
	200	HIRA	8 S	2240.0	2241.0	1.0	10.0			0
	200	HIRA	8 S	2314.0	2314.0	4.0	40.0			0
26	235	CUBA	44 NS	1310.0E		320.0D		8.0		
	280	CUBA	44 NS	1310.0E		320.0D		15.0		
	245	SGMR	43 NS	1716.0	1719.0	333.0	840.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	1735.0	1853.0	119.0	150.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	2046.0	2124.0	361.0	420.0			QL=4 ST=2 TYP=1
	200	HIRA	8 S	0508.0	0508.0	1.0	20.0			0
	204	IZMI	41 F	0615.9	0616.5	0.8	23.0			
	200	HIRA	8 S	0616.0	0618.0	2.0	35.0			0
	204	IZMI	7 C	0642.6	0642.7	0.1	13.0			
	2840	PEKG	1 S	0721.0	0727.5	9.0	8.1			
	245	LEAR	8 S	0756.0	0756.0	U	58.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	0756.5	0756.6	0.4	59.0			
	200	HIRA	8 S	0757.0	0757.0	1.0	25.0			0
	204	IZMI	42 SER	0800.4	0800.5	0.3	41.0			
	245	SVTO	8 S	0841.0	0841.0	U	54.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1339.0	1339.0	1.0	54.0			QL=4 ST=2 TYP=3
	245	SGMR	49 GB	1521.0	1521.0	1.0	3200.0			QL=4 ST=2 TYP=6
	245	SGMR	8 S	1524.0	1524.0	U	140.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1636.0	1636.0	U	71.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1640.0	1640.0	2.0	150.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1640.0	1640.0	2.0	130.0			QL=4 ST=2 TYP=3
	245	PALE	49 GB	1644.0	1646.0	2.0	21000.0			QL=4 ST=2 TYP=6
	245	PALE	48 C	1655.0	1656.0	4.0	81.0			QL=4 ST=2 TYP=8
	245	SGMR	8 S	1656.0	1656.0	U	53.0			QL=4 ST=2 TYP=3
	245	PALE	48 C	1715.0	1719.0	5.0	1000.0			QL=4 ST=2 TYP=8
	200	HIRA	8 S	2004.0	2006.0	4.0	270.0			0
	410	PALE	48 C	2005.0	2009.0	4.0	350.0			QL=2 ST=2 TYP=8
	245	PALE	8 S	2005.0	2007.0	2.0	440.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2007.0	2007.0	2.0	61.0			QL=4 ST=2 TYP=3
	245	PALE	48 C	2040.0	2040.0	U	53.0			QL=4 ST=2 TYP=8
200	HIRA	8 S	2046.0	2046.0	1.0	20.0			0	
245	PALE	8 S	2046.0	2046.0	U	260.0			QL=4 ST=2 TYP=3	
200	HIRA	42 SER	2258.0	2301.0	9.0	275.0			0	
27	127	TORN	43 NS	0830.0		290.0		7.0		V=0, ATM. STORM
	235	CUBA	44 NS	1320.0E		510.0D		6.0		
	280	CUBA	44 NS	1320.0E		510.0D		14.0		
	245	SGMR	43 NS	1801.0	1801.0	4.0	82.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	1801.0	1801.0	56.0	100.0			QL=4 ST=2 TYP=1
	245	LEAR	43 NS	2321.0	0151.0	39.0	230.0			QL=4 ST=3 TYP=1
	245	LEAR	8 S	0006.0	0007.0	1.0	920.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0006.0	0007.0	1.0	990.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	0006.0	0007.0	1.0	76.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	0007.0	0007.0	1.0	225.0			0
	410	LEAR	8 S	0007.0	0007.0	U	40.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	0011.0	0011.0	1.0	295.0			WR
	245	LEAR	8 S	0011.0	0011.0	U	310.0			QL=4 ST=3 TYP=3
	245	PALE	8 S	0011.0	0011.0	U	380.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	0016.0	0016.0	1.0	35.0			WR
	245	LEAR	8 S	0016.0	0016.0	U	110.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0019.0	0019.0	U	97.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0039.0	0039.0	U	130.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0047.0	0047.0	U	210.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	0333.0	0333.0	1.0	10.0			0
	500	HIRA	8 S	0337.0	0339.0	3.0	10.0			0
	245	LEAR	8 S	0352.0	0352.0	U	58.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0450.0	0450.0	U	55.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0454.0	0454.0	1.0	110.0			QL=4 ST=2 TYP=3

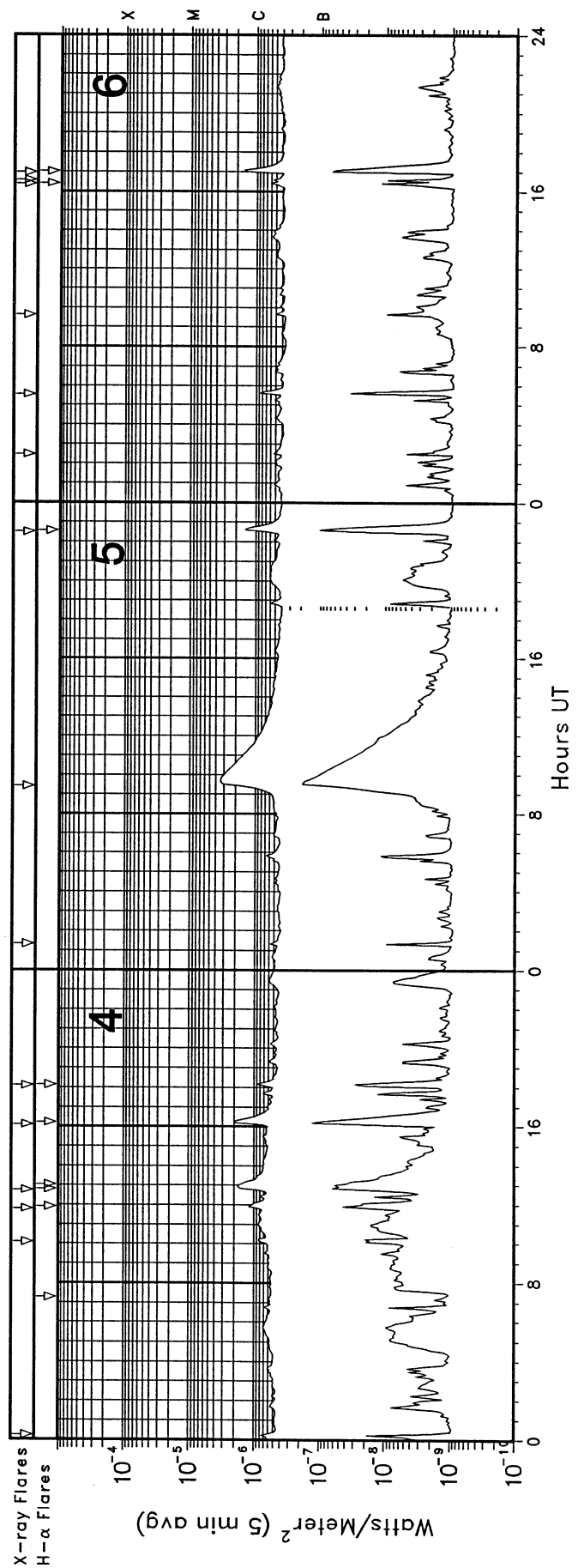
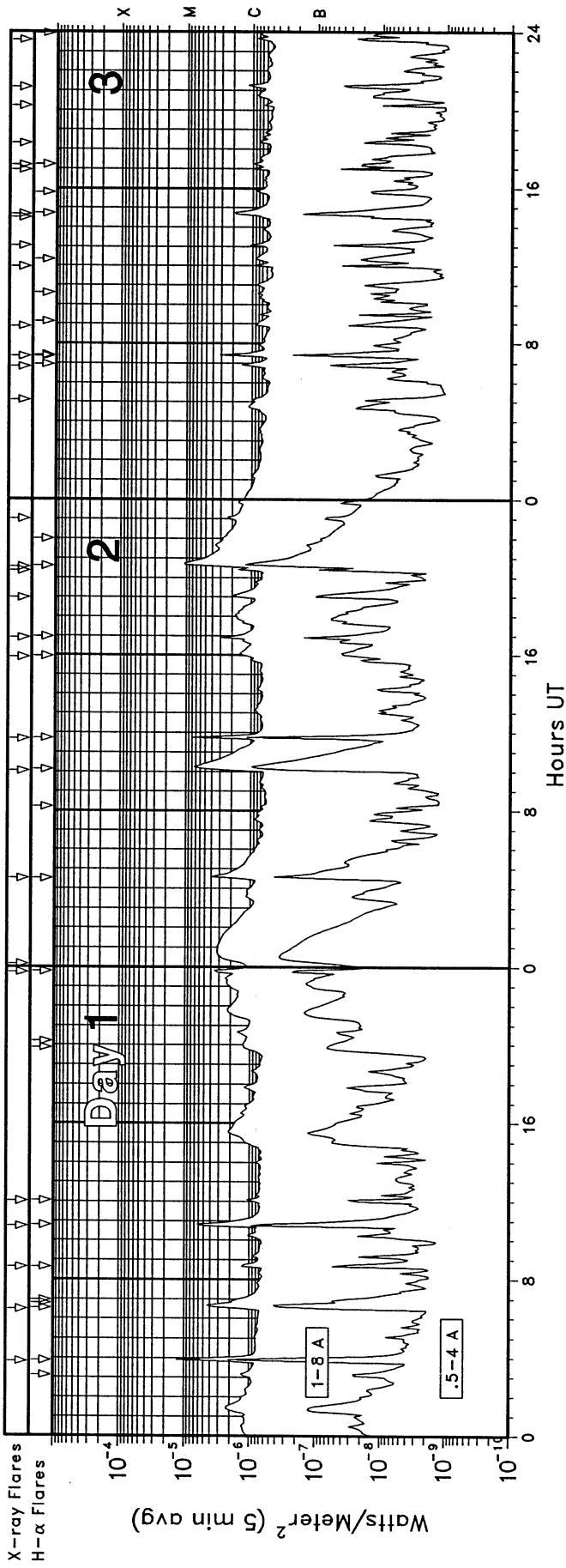
S O L A R R A D I O E M I S S I O N
Outstanding Occurrences

JUNE 2002

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 ⁻²² W/m ² Hz)	Mean			
27	204	IZMI	45 C	0747.5	0747.7	0.5	260.0				
	200	HIRA	8 S	0748.0	0748.0	1.0	100.0			0	
	204	IZMI	42 SER	0748.5	0750.1	2.1	47.0				
	204	IZMI	41 F	0753.8	0754.2	1.1	26.0				
	204	IZMI	42 SER	0847.4	0852.5	6.0	41.0				
	204	IZMI	7 C	0906.7	0906.9	0.3	31.0				
	204	IZMI	42 SER	0935.7	0937.4	2.2	21.0				
	2840	PEKG	20 GRF	1019.0	1022.5	19.0	5.3				
	204	IZMI	42 SER	1122.5	1124.4	3.2	162.0				
	245	SGMR	8 S	1222.0	1222.0	U	65.0			QL=4 ST=2 TYP=3	
	245	SVTO	8 S	1228.0	1228.0	U	64.0			QL=4 ST=2 TYP=3	
	245	SGMR	8 S	1252.0	1252.0	2.0	58.0			QL=4 ST=2 TYP=3	
	245	SVTO	8 S	1252.0	1252.0	U	53.0			QL=4 ST=2 TYP=3	
	245	PALE	49 GB	1914.0	1915.0	1.0	660.0			QL=2 ST=2 TYP=6	
	245	SGMR	8 S	1914.0	1914.0	2.0	370.0			QL=4 ST=2 TYP=3	
	245	SGMR	8 S	1919.0	1919.0	U	59.0			QL=4 ST=2 TYP=3	
	245	PALE	8 S	2006.0	2006.0	U	53.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	2039.0	2039.0	U	58.0			QL=4 ST=2 TYP=3		
200	HIRA	8 S	2202.0	2203.0	1.0	15.0			0		
28	127	TORN	43 NS	0830.0		90.00		9.0		V=1,DISTURBED	
	235	CUBA	44 NS	1310.0E		250.00		6.0			
	280	CUBA	44 NS	1310.0E		250.00		10.0			
	200	HIRA	8 S	0044.0	0045.0	1.0	150.0			0	
	245	LEAR	8 S	0044.0	0045.0	1.0	150.0			QL=4 ST=2 TYP=3	
	500	HIRA	8 S	0045.0	0045.0	1.0	30.0			0	
	200	HIRA	8 S	0103.0	0103.0	1.0	25.0			0	
	2840	PEKG	3 S	0213.0	0219.7	16.0	31.7				
	2804	VORO	21 GRF	0213.7	0219.4	19.0	6.5				
	2800	HIRA	4 S/F	0214.0	0220.0	7.0	25.0			0	
	2804	VORO	8 S	0219.4	0219.6	0.6	19.8				
	200	HIRA	8 S	0444.0	0445.0	2.0	65.0			0	
	245	LEAR	8 S	0444.0	0444.0	U	54.0			QL=4 ST=2 TYP=3	
	2840	PEKG	3 S	0618.0	0627.1	38.0	39.5				
	2800	HIRA	1 S	0625.0	0627.0	5.0	35.0			0	
	3000	IZMI	45 C	0625.4	0627.2	3.5	38.0	14.0			
	204	IZMI	42 SER	0709.3	0709.9	2.6	47.0				
200	HIRA	8 S	0710.0	0710.0	1.0	15.0			0		
204	IZMI	7 C	0734.5	0734.9	0.6	25.0					
29	127	TORN	43 NS	0927.0		223.0		7.0		V=1,DISTURBED	
	235	CUBA	44 NS	1310.0E		410.00		6.0			
	280	CUBA	44 NS	1310.0E		410.00		14.0			
	500	HIRA	8 S	0030.0	0030.0	1.0	50.0			0	
	610	LEAR	8 S	0030.0	0030.0	U	59.0			QL=4 ST=2 TYP=3	
	500	HIRA	42 SER	0413.0	0413.0	3.0	20.0			0	
	2840	PEKG	1 S	0923.0	0929.7	10.0	9.7				
	127	TORN	8 S	0927.0	0927.1	0.6	1000.0	500.0			
	410	SVTO	8 S	0929.0	0929.0	U	110.0			QL=4 ST=2 TYP=3	
	1415	SVTO	8 S	0929.0	0929.0	U	34.0			QL=4 ST=2 TYP=3	
	3000	IZMI	5 S	0929.6	0929.8	0.5	11.0	5.5			
	245	SVTO	8 S	0930.0	0930.0	U	100.0			QL=4 ST=2 TYP=3	
	204	IZMI	41 F	0930.6	0930.7	0.3	25.0				
	2800	PENT	20 GRF	1511.0	1551.0	67.0	11.0				
	245	SGMR	8 S	2155.0	2155.0	U	50.0			QL=4 ST=2 TYP=3	
	30	127	TORN	43 NS	0910.0		220.0		40.0		V=3
		245	LEAR	43 NS	0913.0	0913.0	20.0	160.0			QL=4 ST=2 TYP=1
245		LEAR	43 NS	0913.0	0913.0	20.0	160.0			QL=4 ST=3 TYP=1	
245		SVTO	43 NS	0913.0	0952.0	149.0	140.0			QL=2 ST=2 TYP=1	
204		IZMI	43 NS	0926.0		274.00		90.0			
245		SGMR	43 NS	1101.0	1102.0	53.0	89.0			QL=4 ST=2 TYP=1	
235		CUBA	44 NS	1320.0E		340.00		6.0			
280		CUBA	44 NS	1320.0E		340.00		14.0			
200		HIRA	8 S	0330.0	0330.0	1.0	60.0			0	
33		UPIC	46 C	1101.0	1102.0	4.0					
200	HIRA	8 S	2213.0	2213.0	1.0	10.0			0		

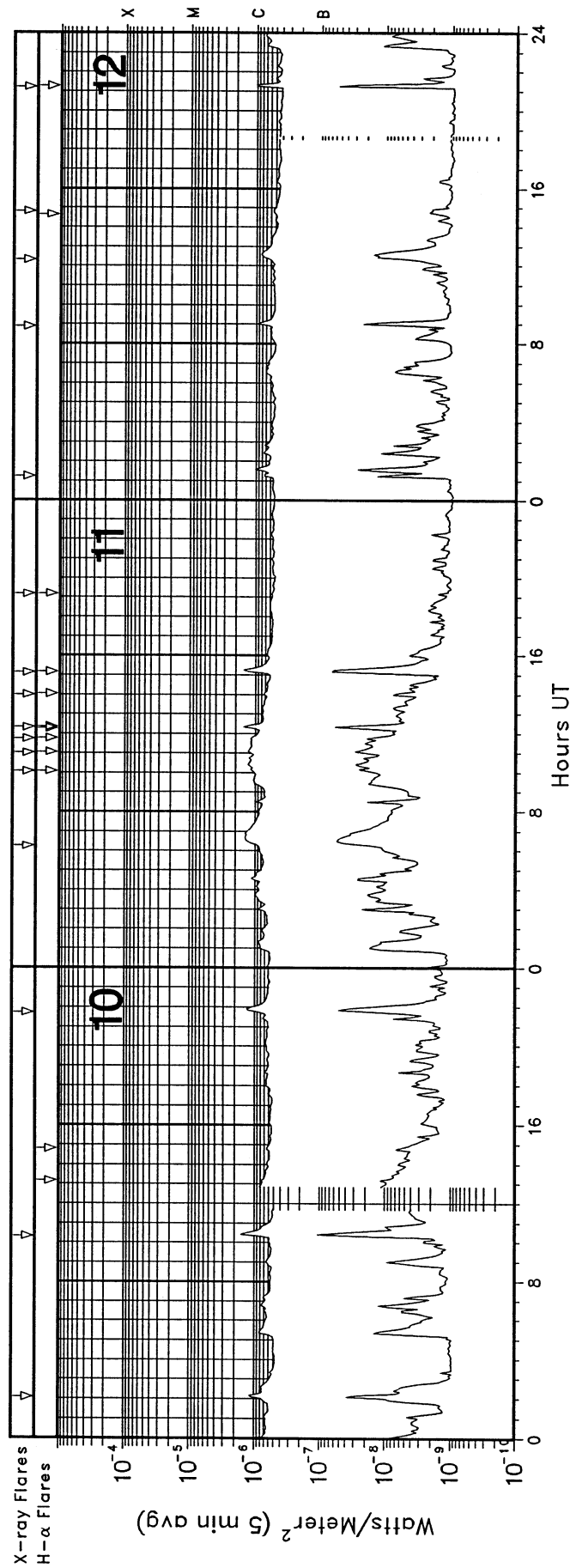
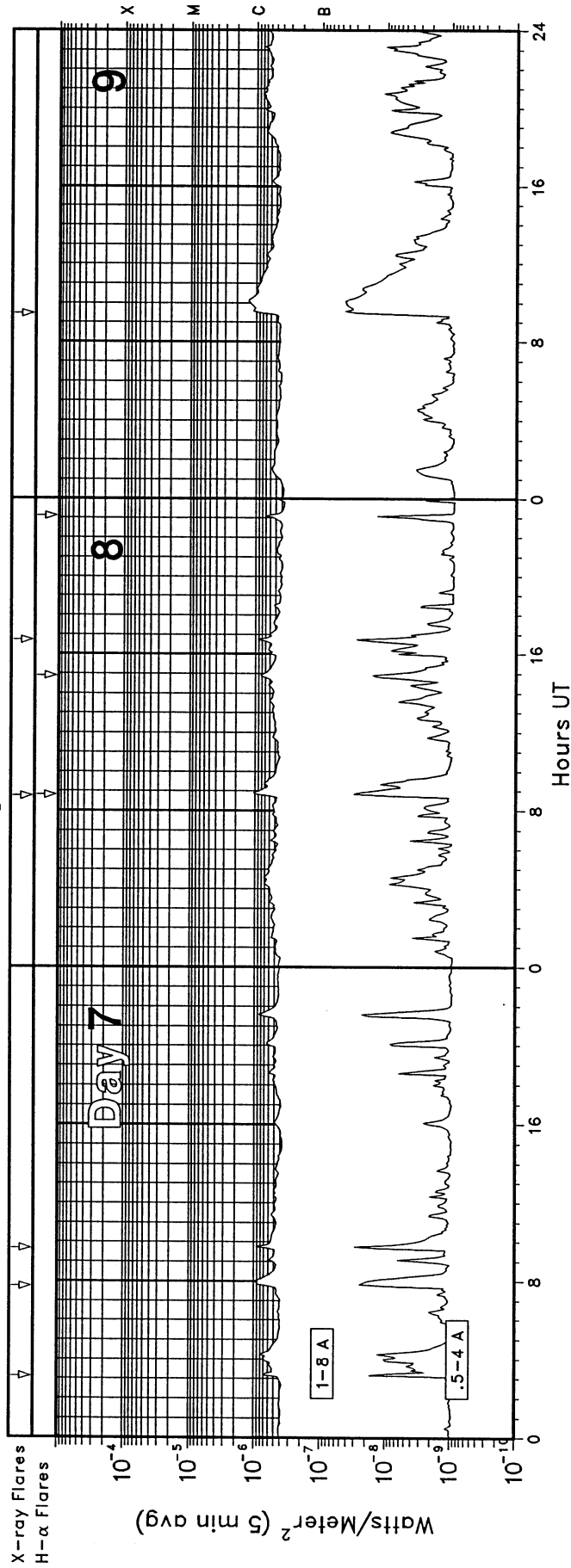
GOES X-RAY DETECTOR

June 2002



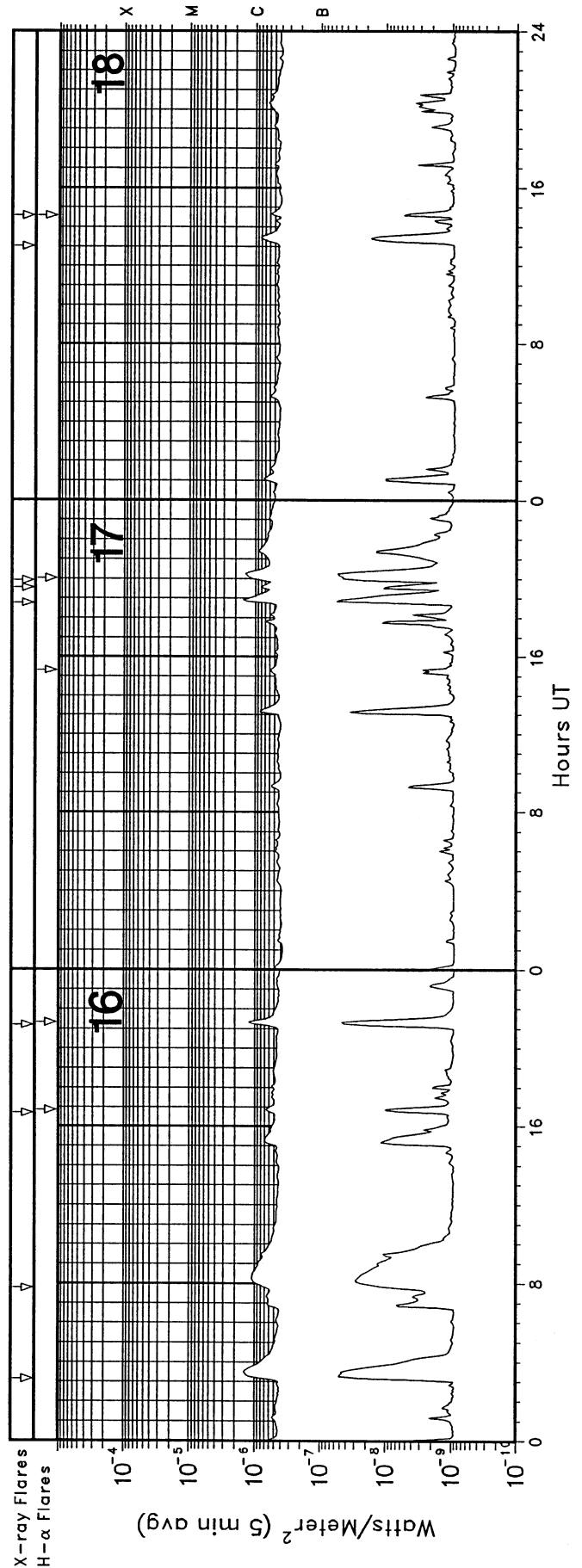
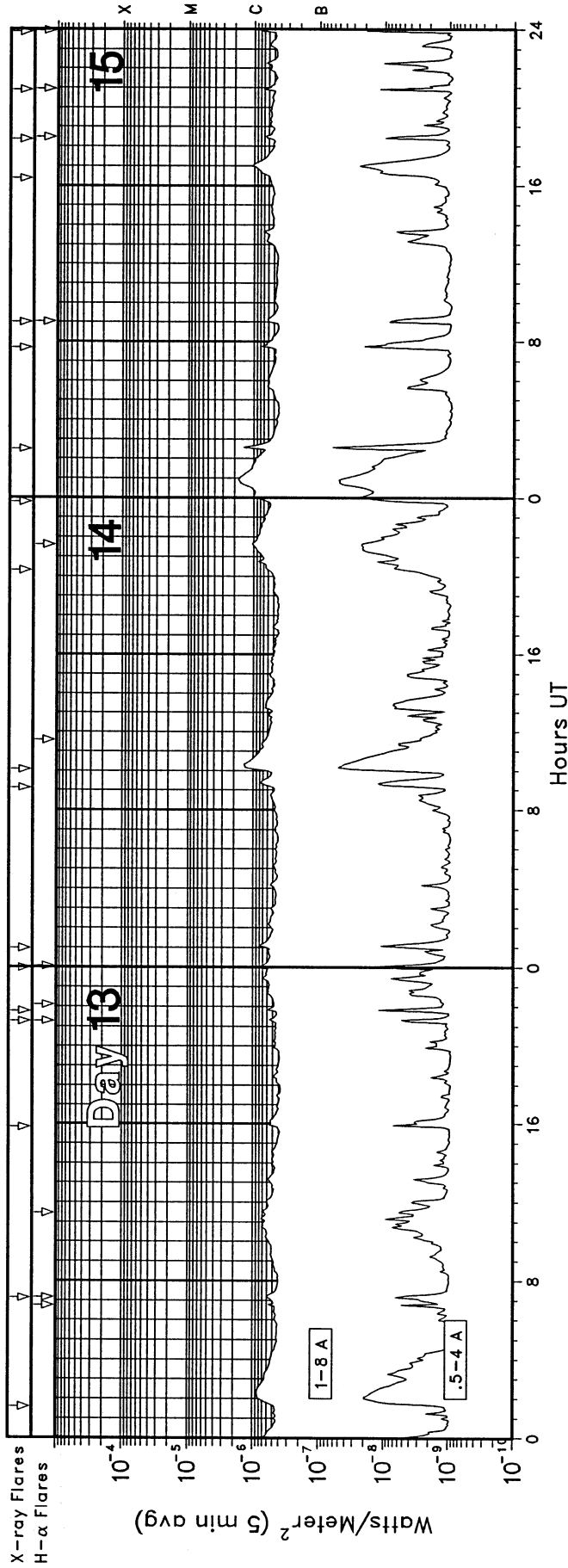
GOES X-RAY DETECTOR

June 2002

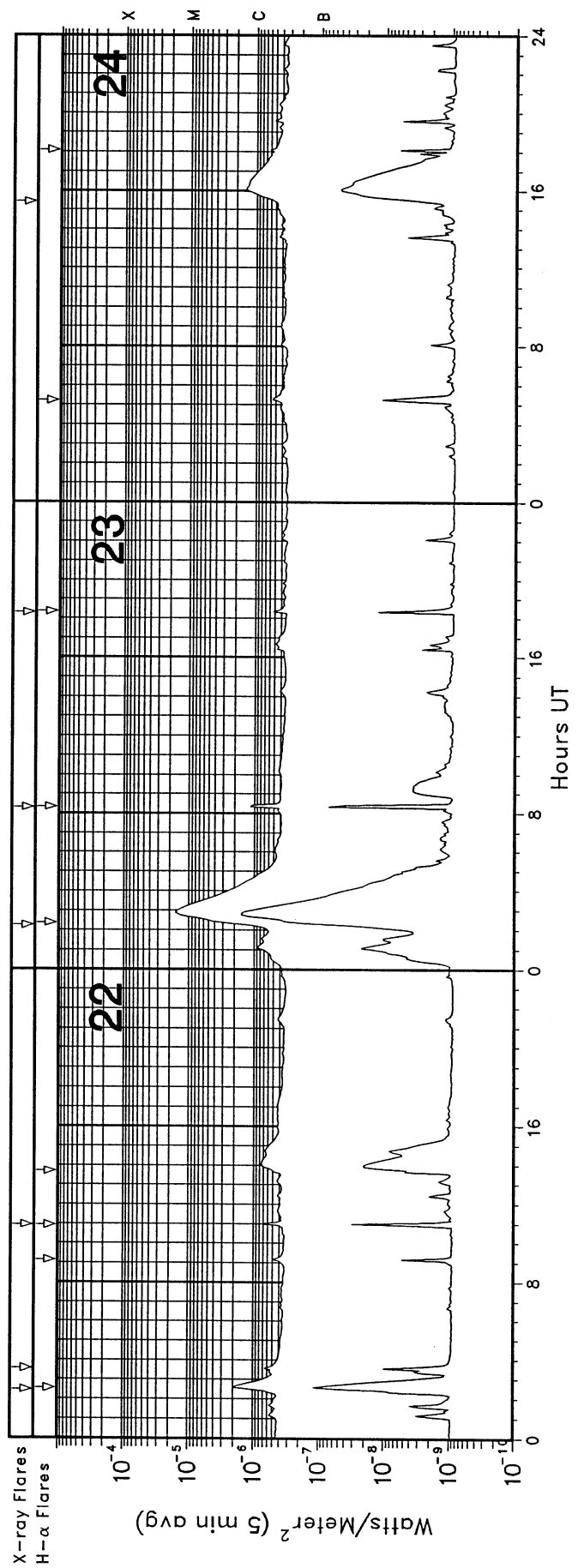
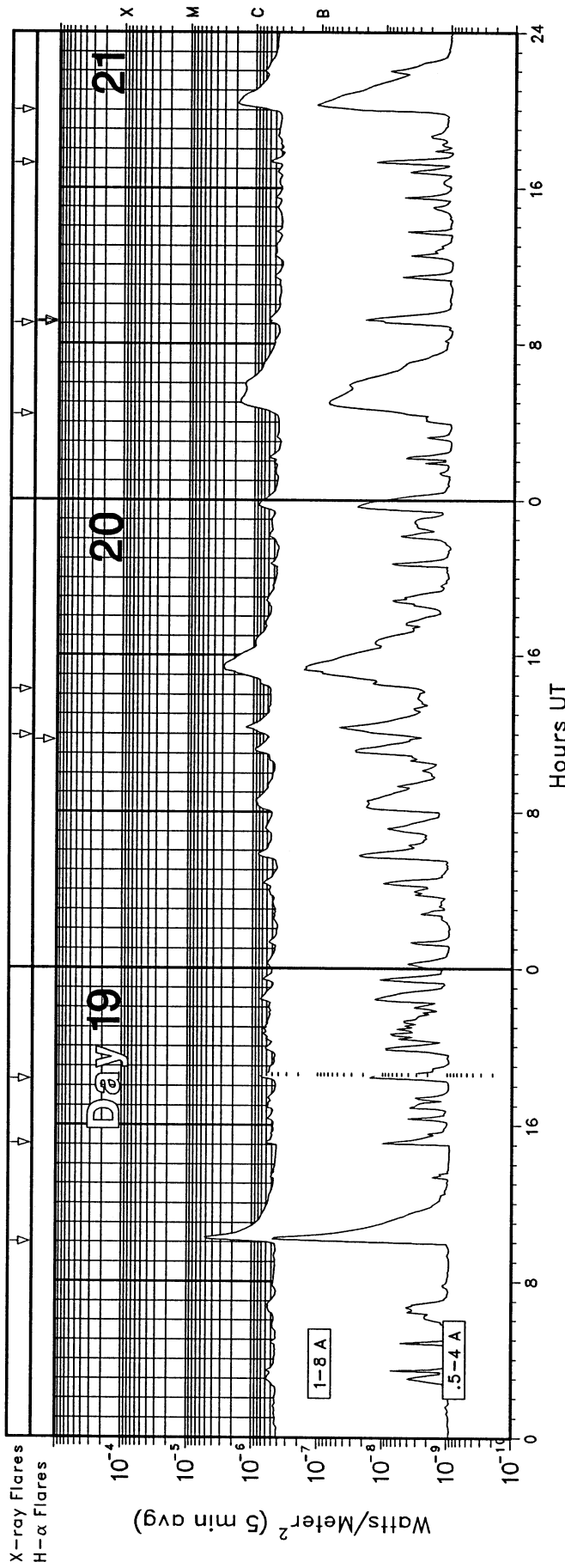


GOES X-RAY DETECTOR

June 2002

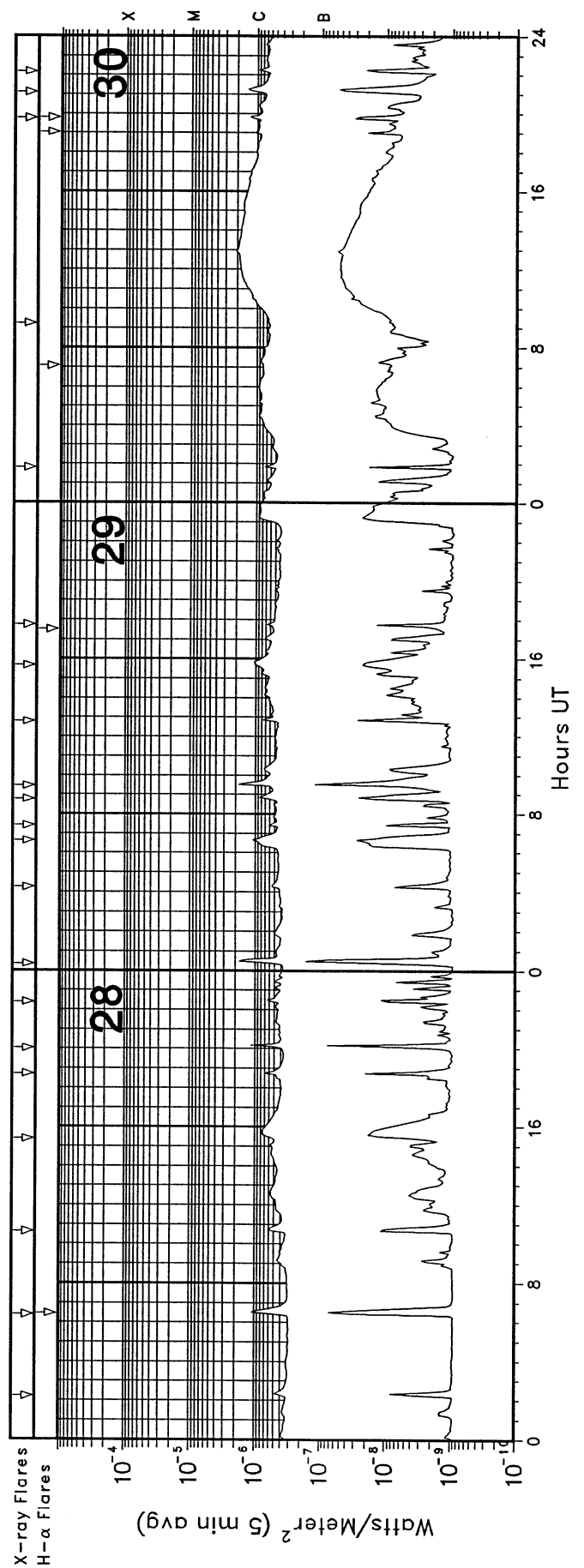
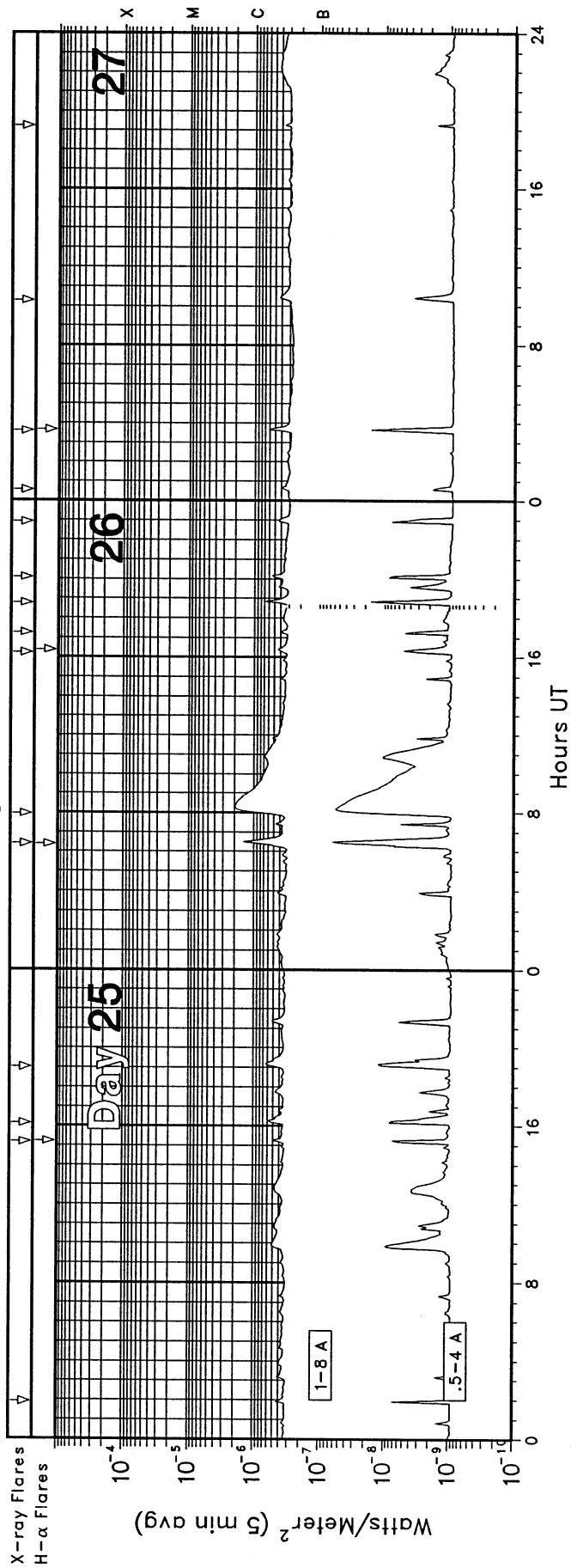


GOES X-RAY DETECTOR June 2002



GOES X-RAY DETECTOR

June 2002



GOES SOLAR X-RAY FLARES
 Preliminary Listing

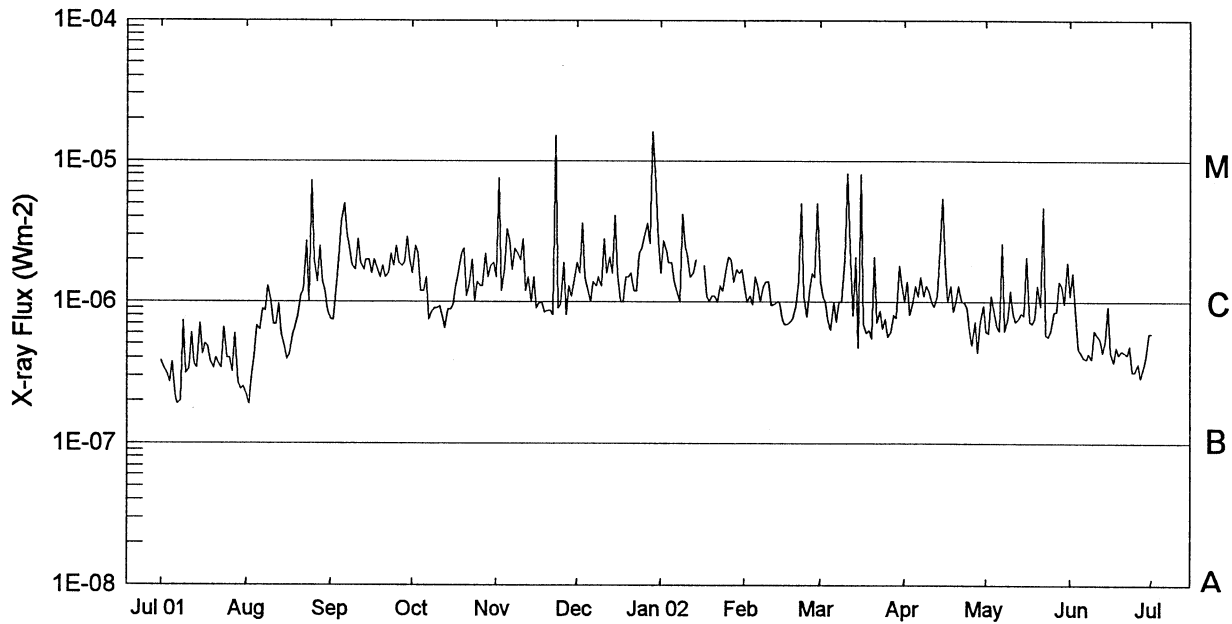
31
 Jun 02

June 2002

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/USAF	
								Region	Flux
23	0215	0255	0324	N13	W70	2F	M1.6	9997	4.1E-02
23	0819	0824	0827	N14	W08	1N	C1.910005		5.9E-04
23	1818	1822	1825	N12	W11	SF	B6.710005		2.1E-04
24	1525	1606	1659				C1.4		6.2E-03
25	0155	0159	0201				B6.1		1.6E-04
25	1511	1515	1519	S11	W09	SF	B5.610008		2.3E-04
25	1609	1614	1621				B6.5		3.9E-04
25	1902	1914	1919				B6.7		6.0E-04
26	0624	0631	0636	N24	E61	SF	C1.510000		8.2E-04
26	0757	0820	0904				C1.910000		6.3E-03
26	1614	1626	1632	N22	W86	SF	B4.410001		4.3E-04
26	1715	1719	1723				B4.3		1.9E-04
26	1846	1851	1856				B7.4		3.4E-04
26	2005	2009	2013				B6.1		2.6E-04
26	2255	2259	2302				B5.6		1.9E-04
27	0033	0040	0044				B4.1		2.4E-04
27	0336	0344	0347	N11	W65	SF	B6.610005		3.6E-04
27	1017	1029	1041				B4.2		5.5E-04
27	1914	1917	1921				B3.8		1.5E-04

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/USAF	
								Region	Flux
28	0213	0222	0229				B4.8		4.0E-04
28	0624	0633	0640	S11	W45	SF	C1.110008		8.1E-04
28	1038	1044	1057				B6.1		6.2E-04
28	1523	1547	1611				B7.6		2.0E-03
28	1844	1848	1850				B8.4		2.5E-04
28	2002	2011	2014				C1.3		5.1E-04
28	2224	2231	2234				B6.8		3.5E-04
29	0022	0034	0037				C2.6		1.1E-03
29	0414	0419	0424				B6.1		3.2E-04
29	0637	0640	0643				C1.2		3.9E-04
29	0724	0728	0732				B7.0		2.9E-04
29	0846	0851	0859				B9.0		6.0E-04
29	0927	0933	0937				C2.0		8.7E-04
29	1247	1253	1257				B8.4		4.2E-04
29	1540	1550	1559				C1.1		1.1E-03
29	1745	1748	1751				B7.5		2.4E-04
30	0149	0152	0155				B9.2		2.6E-04
30	0915	1257	1625				C2.1		3.8E-02T
30	1946	1949	1952	S19	W22	SF	C1.710017		4.9E-04
30	2107	2115	2124				C1.4		1.2E-03
30	2211	2215	2221				B9.6		5.3E-04

Preliminary GOES Satellite Daily X-Ray Background Jul 2001 - Jun 2002



Day	Jul 01	Aug	Sep	Oct	Nov	Dec	Jan 02	Feb	Mar	Apr	May	Jun
1	B3.8	B2.2	B7.5	C1.6	C1.5	C1.9	C1.6	C1.3	C1.4	C1.0	C1.9	C1.1
2	B3.4	B1.9	B7.4	C2.5	C7.5	C1.6	C2.7	C1.0	C1.1	C1.4	C1.2	C1.6
3	B3.1	B3.0	C1.2	C2.2	C1.2	C3.6	C2.3	C1.1	B9.8	B8.1	C1.3	B9.0
4	B2.7	B4.1	C2.0	C1.2	C1.7	C1.5	C1.9	B9.6	B7.3	C1.0	C1.5	B4.6
5	B3.7	B6.8	C3.7	C1.2	C3.3	C1.2	C1.9	C1.5	B6.4	C1.3	B9.5	B4.4
6	B2.1	B6.4	C5.0	C1.5	C2.7	C1.0	C1.4	C1.3	B9.9	C1.1	B8.0	B4.0
7	B1.9	B8.9	C3.0	B7.5	C1.7	C1.4	C1.2	C1.0	B7.2	C1.5	B6.8	B3.9
8	B2.0	B8.7	C2.4	B8.4	C2.4	C1.3	C1.0	C1.3	C1.0	C1.1	B5.5	B4.3
9	B7.3	C1.3	C1.8	B9.1	C2.2	C1.5	C4.2	C1.4	C1.0	C1.3	B6.8	B3.9
10	B3.1	C1.0	C1.7	B9.0	C2.0	C1.3	C2.5	C1.4	C2.0	C1.2	B8.0	B6.2
11	B3.3	B6.9	C2.8	B9.3	C2.8	C2.8	C2.1	B9.5	C8.1	C1.0	B8.5	B5.8
12	B6.0	B6.9	C1.9	B8.0	C1.2	C1.6	C1.5	B9.6	C2.5	B9.3	B8.9	B5.4
13	B3.6	B9.7	C1.7	B6.5	C1.5	C2.1	C1.6	C1.0	B8.0	C1.1	B9.3	B4.4
14	B3.4	B5.9	C2.0	B8.9	C1.0	C1.6	C2.0	C1.0	C2.1	C2.4	C1.2	B5.2
15	B7.0	B4.8	C2.0	B8.9	C1.5	C4.1	*	B7.4	B4.7	C5.4	C1.1	B9.2
16	B4.3	B3.9	C1.6	B9.5	B9.1	C1.6	*	B6.9	C8.0	C1.9	C1.6	B4.4
17	B5.0	B4.3	C2.0	C1.3	B9.8	C1.0	C1.8	B6.9	B7.0	C1.0	C1.9	B3.7
18	B4.8	B5.9	C1.7	C1.6	B9.9	C1.0	C1.1	B7.2	B6.0	C1.3	C1.6	B4.7
19	B3.8	B6.5	C1.5	C2.2	B8.4	C1.5	C1.0	B7.6	B6.3	B8.6	C1.7	B4.2
20	B3.4	B8.1	C1.8	C2.4	B8.7	C1.5	C1.1	B9.5	B5.5	C1.0	C1.5	B4.5
21	B4.0	C1.1	C1.5	C1.1	B8.7	C1.6	C1.1	C1.4	C2.1	C1.3	C1.8	B4.4
22	B3.6	C1.2	C1.6	C1.3	B8.1	C1.2	C1.0	C5.0	B7.1	C1.0	C1.9	B4.2
23	B3.4	C2.7	C2.2	C2.0	M1.5	C1.2	C1.3	C1.1	B8.6	B9.9	C1.7	B4.8
24	B6.6	C1.0	C1.8	C1.0	B9.0	C2.2	C1.2	B7.8	B6.5	B9.2	C3.0	B3.2
25	B4.0	C7.2	C2.5	C1.4	B9.6	C2.4	C1.7	C1.2	B7.5	B5.9	C1.1	B3.2
26	B4.0	C2.0	C1.9	C1.3	C1.9	C2.9	C2.1	C1.6	B5.6	B4.9	C3.5	B3.6
27	B3.2	C1.4	C1.8	C1.3	B8.1	C3.6	C2.0	C1.5	B6.1	B7.2	B7.4	B2.9
28	B5.9	C2.5	C1.9	C2.2	C1.3	C2.6	C1.4	C5.0	B8.1	B4.4	C1.0	B3.3
29	B2.7	C1.4	C2.9	C1.5	C1.1	M1.6	C1.7		B7.7	B7.1	C2.3	B3.9
30	B2.4	C1.2	C2.0	C1.8	C1.4	C8.4	C1.6		C1.8	B9.4	C1.3	B5.9
31	B2.5	B8.7		C1.9		C2.7	C1.7		C1.4		C1.3	

NOTE: * = Data not available.

ACTIVE PROMINENCES AND FILAMENTS

33
Jun 02

JUNE 2002

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
05	APR	0834E	1317D	S16	E90			1	4			P	WROC		
10	DSF	0847U	0349U	N18	W07	06	9.8		13	0	0	E	SVTO		
10	DSF	0914U	2332U	N16	W07	06	9.8		11	0	0	E	LEAR		
10	DSF	2005U	1119U	S53	E35	06	13.8		19	0	0	E	RAMY		
10	DSF	2055U	2129U	N16	W15	06	9.7		06	0	0	E	HOLL		
10	DSF	2055U	2129U	N36	W28	06	8.6		12	0	0	E	HOLL		
11	APR	0834E	0931D	N11	E90			1	3			P	WROC		
11	BSL	1113	1127	N28	W90	06	4.4			0	0	E	SVTO		
11	EPL	1125	1130	N30	W90	06	4.4			6	5	E	RAMY		
13	DSF	0113U	1250U	S14	E18	06	14.4		05	0	0	E	HOLL	9991	
17	DSF	2240U	1211U	N14	E22	06	19.6		08	0	0	E	HOLL	0001	
21	DSF	1959U	1141U	N30	E24	06	23.7		12	0	0	E	RAMY		
24	DSF	0112U	1345U	N40	W06	06	23.6		13	0	0	E	HOLL		
26	EPL	0714	0808	N17	E90	07	3.1	3		9	9	E	LEAR		
26	BSL	0745	0800	N05	E90	07	3.0	3		9	9	E	LEAR		
29	DSF	1533U	0455U	S34	W13	06	28.6		12	0	0	E	SVTO		

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
 DSF = Disappearing Solar Filament

EPL = Eruptive Prominence on Limb
 LPS = Loops
 MDP = Mound Prominence
 SDF/DSF = 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.

ABST = Abastumani
 ATHN = Athens
 BUCA = Bucharest
 CATA = Catania

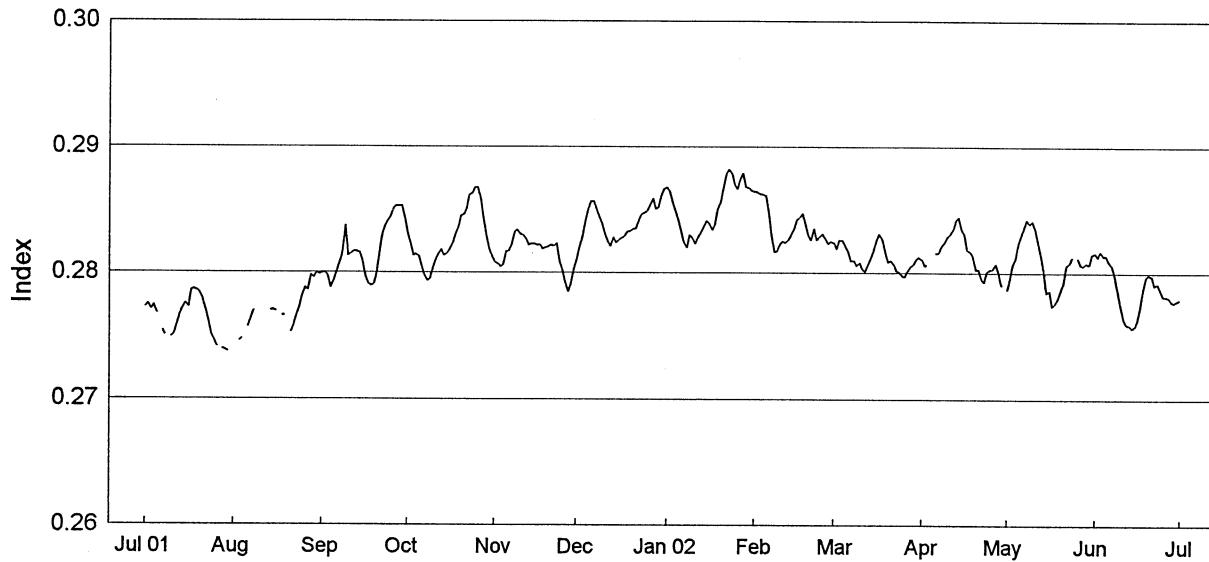
HOLL = Holloman
 KHAR = Kharkov
 LEAR = Learmonth
 PALE = Palehua

RAMY = Ramey
 SVTO = San Vito
 VORO = Voroshilov
 VALA = Valasske Mezirici
 WROC = Wroclaw

NOTE: The U.S. Air Force solar observing sites (HOLL, LEAR, RAMY, AND SVTO) have changed operational requirements and will only report the following: BSL, EPL, LPS, SPY, and DSF's.

NOAA Solar Ultraviolet (UV) MgII Core-to-Wing Index

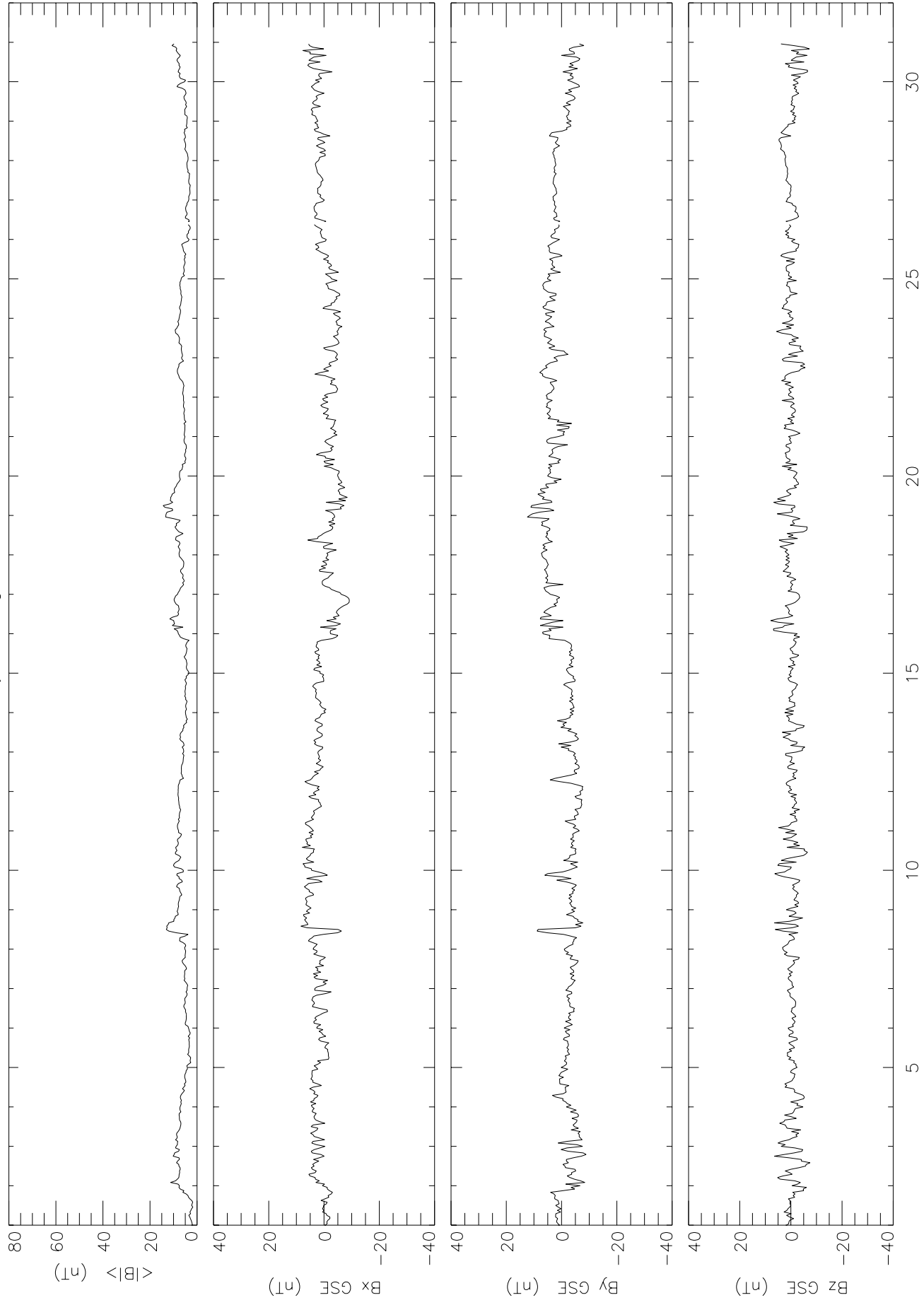
Jul 2001 - Jun 2002
Version 9.1



Day	Jul 01	Aug	Sep	Oct	Nov	Dec	Jan 02	Feb	Mar	Apr	May	Jun
1	0.2773	0.2738	0.2800	0.2831	0.2809	0.2821	0.2868	0.2865	0.2824	0.2811	0.2787	0.2816
2	0.2775	----	0.2800	0.2822	0.2807	0.2828	0.2865	0.2865	0.2819	0.2806	0.2795	0.2813
3	0.2771	0.2746	0.2797	0.2814	0.2805	0.2841	0.2855	0.2863	0.2826	0.2807	0.2806	0.2817
4	0.2774	0.2748	0.2788	0.2815	0.2806	0.2850	0.2849	0.2863	0.2826	----	0.2812	0.2814
5	0.2767	----	0.2794	0.2813	0.2817	0.2857	0.2841	0.2861	0.2822	----	0.2823	0.2814
6	----	0.2757	0.2800	0.2805	0.2817	0.2857	0.2833	0.2849	0.2817	0.2816	0.2829	0.2809
7	0.2754	0.2764	0.2808	0.2798	0.2821	0.2851	0.2824	0.2828	0.2810	0.2816	0.2836	0.2806
8	0.2750	0.2770	0.2815	0.2794	0.2832	0.2844	0.2820	0.2817	0.2810	0.2822	0.2842	0.2799
9	----	----	0.2837	0.2795	0.2834	0.2839	0.2830	0.2817	0.2806	0.2824	0.2839	0.2786
10	0.2749	----	0.2814	0.2804	0.2831	0.2832	0.2828	0.2823	0.2808	0.2829	0.2841	0.2776
11	0.2751	----	0.2815	0.2810	0.2830	0.2825	0.2823	0.2825	0.2803	0.2831	0.2834	0.2764
12	0.2759	----	0.2817	0.2815	0.2827	0.2821	0.2828	0.2824	0.2801	0.2835	0.2824	0.2760
13	0.2766	----	0.2817	0.2818	0.2822	0.2828	0.2832	0.2826	0.2807	0.2842	0.2813	0.2759
14	0.2772	0.2770	0.2816	0.2814	0.2823	0.2824	0.2836	0.2830	0.2812	0.2844	0.2801	0.2757
15	0.2776	0.2771	0.2810	0.2815	0.2823	0.2826	0.2841	0.2835	0.2817	0.2834	0.2785	0.2758
16	0.2773	0.2769	0.2797	0.2818	0.2822	0.2828	0.2839	0.2842	0.2826	0.2831	0.2786	0.2763
17	0.2786	----	0.2792	0.2823	0.2822	0.2829	0.2834	0.2844	0.2831	0.2819	0.2774	0.2773
18	0.2787	0.2766	0.2790	0.2830	0.2819	0.2833	0.2838	0.2847	0.2827	0.2817	0.2776	0.2788
19	0.2786	0.2766	0.2791	0.2836	0.2820	0.2833	0.2850	0.2840	0.2818	0.2814	0.2780	0.2797
20	0.2784	----	0.2798	0.2845	0.2821	0.2835	0.2856	0.2830	0.2809	0.2803	0.2786	0.2799
21	0.2780	0.2753	0.2816	0.2846	0.2822	0.2835	0.2867	0.2826	0.2810	0.2803	0.2793	0.2798
22	0.2771	0.2758	0.2830	0.2851	0.2821	0.2842	0.2879	0.2835	0.2807	0.2795	0.2806	0.2791
23	0.2763	0.2765	0.2836	0.2862	0.2823	0.2846	0.2882	0.2826	0.2802	0.2793	0.2808	0.2792
24	0.2751	0.2773	0.2841	0.2863	0.2808	0.2848	0.2879	0.2829	0.2801	0.2801	0.2813	0.2787
25	0.2747	0.2781	0.2844	0.2868	0.2802	0.2849	0.2870	0.2831	0.2798	0.2803	----	0.2782
26	0.2741	0.2788	0.2851	0.2868	0.2793	0.2853	0.2867	0.2827	0.2797	0.2803	0.2812	0.2782
27	----	0.2786	0.2853	0.2859	0.2785	0.2859	0.2875	0.2823	0.2802	0.2807	0.2807	0.2781
28	0.2740	0.2798	0.2853	0.2844	0.2791	0.2851	0.2879	0.2825	0.2805	0.2801	0.2806	0.2778
29	0.2739	0.2796	0.2853	0.2829	0.2803	0.2852	0.2869		0.2807	0.279	----	0.2777
30	0.2738	0.2800	0.2842	0.2819	0.2810	0.2861	0.2868		0.2811	0.2786	----	0.2779
31	----	0.2799		0.2813		0.2867	0.2866		0.2813	----	----	
Mean	0.2764	0.2771	0.2817	0.2827	0.2816	0.2841	0.2851	0.2836	0.2812	0.2814	0.2808	0.2787

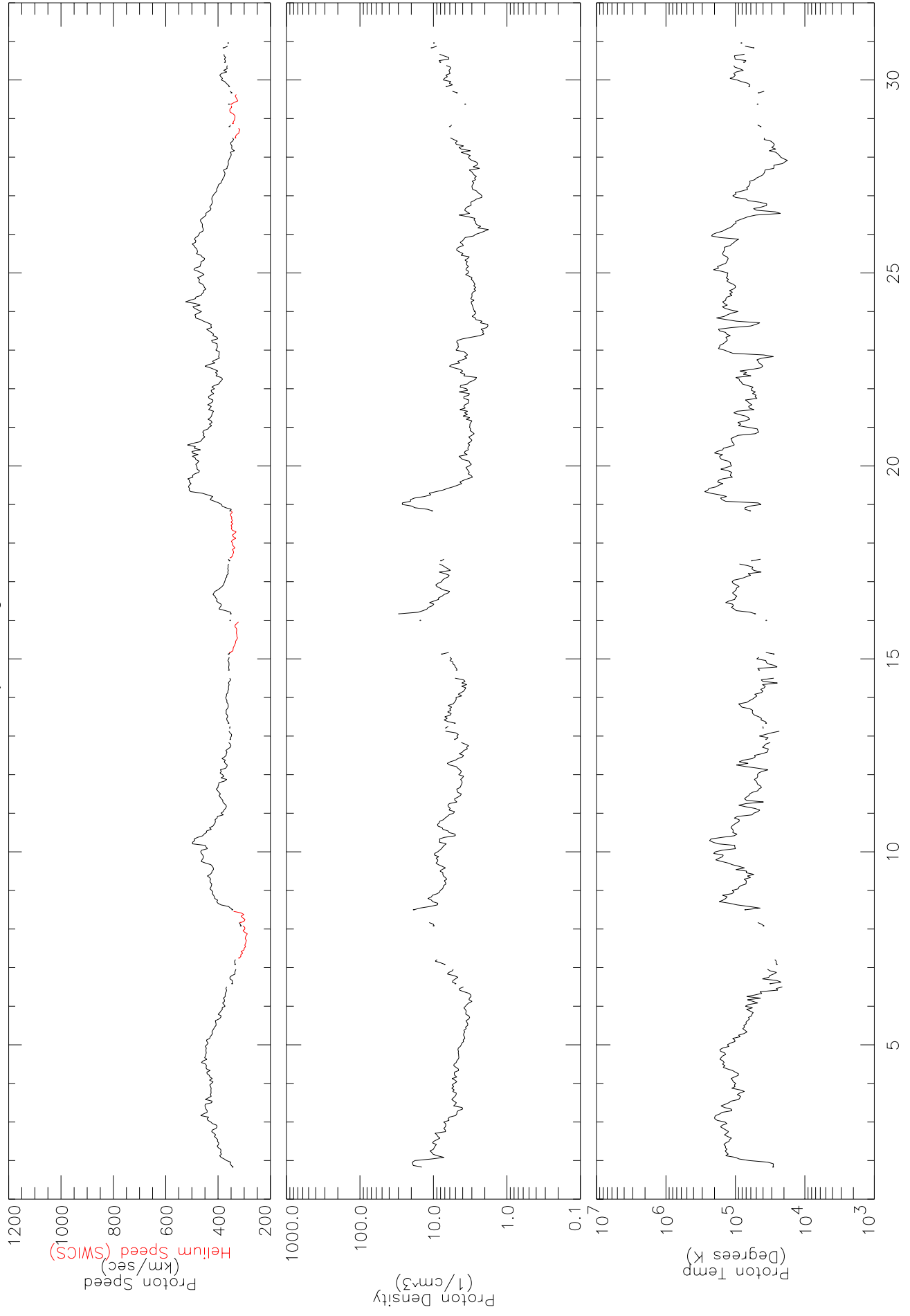
Data at: <http://www.sec.noaa.gov/ftpmenu/sbuw.html>

Interplanetary Magnetic Field
ACE LEVEL2 DATA Hourly Averages for JUNE 2002, from MAG



DAYS OF JUNE 2002

ACE LEVEL2 DATA Solar Wind Plasma Hourly Averages for JUNE 2002, from SWEPAM



Solar Energetic Particles
ACE LEVEL2 DATA Hourly Averages for JUNE 2002

