

U.S. DEPARTMENT OF COMMERCE

William M. Daley, Secretary

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

D. James Baker, Administrator

NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE

Robert S. Winokur, Assistant Administrator

FEBRUARY 1998 NUMBER 642 - Part II

Solar-Geophysical Data comprehensive reports

Data for August 1997

International Standard Serial Number: 0038-0911

Library of Congress Catalog Number: 79-640375 //r81

NATIONAL GEOPHYSICAL DATA CENTER

Michael S. Loughridge, Director
Boulder, Colorado

Subscription information is on the inside back cover.

SOLAR-GEOPHYSICAL DATA

Number 642

(Issued in Two Parts)

Editor: Helen E. Coffey

Chief: Herbert W. Kroehl
Solar-Terrestrial Physics Division

Staff: Christine D. Hanchett
Edward H. Erwin

Computer Consultant:
Daniel C. Wilkinson

CONTENTS

PART I (PROMPT REPORTS)	Page
DETAILED INDEX FOR 1997-1998	2
DATA FOR JANUARY 1998	3- 36
DATA FOR DECEMBER 1997	37-131
LATE DATA	133-134
ERRATA: Geomagnetic Activity Indices Nov 97	
PART II (COMPREHENSIVE REPORTS)	Page
DETAILED INDEX FOR 1997-1998	2
DATA FOR AUGUST 1997	3- 29
MISCELLANEOUS	31- 40
UARS Total Solar Irradiance Oct 91-Dec 97	

DETAILED INDEX OF OBSERVATIONS PUBLISHED IN SOLAR-GEOPHYSICAL DATA

CODE	KIND OF OBSERVATION	JUN 97	JUL	AUG	SEP	OCT	NOV	DEC	JAN 98
A. SOLAR AND INTERPLANETARY									
A.1	Sunspot Drawings	636A 41	637A 41	638A 45	639A 41	640A 47	641A 44	642A 44	
A.2aa	International Provisional Sunspot Numbers	635A 24	636A 25	637A 24	638A 24	639A 24	640A 24	641A 25	642A 26
A.2c	American Sunspot Numbers	635A 24	636A 25	637A 24	638A 24	639A 24	640A 24	641A 25	642A 26
A.3a	Mt. Wilson Magnetograms	636A 41	637A 41	638A 45	639A 41	640A 47	641A 44	642A 44	
A.3b	Sunspot Mag Class and Regions	636A 89	637A 88	638A 92	639A 89	640A 94	641A 89	642A 94	
A.3c	Kitt Peak Magnetograms	636A 41	637A 41	638A 45	639A 41	640A 47	641A 44	642A 44	
A.3d	Mean Solar Magnetic Field (Stanford)	635A 28	636A 32	637A 32	638A 36	639A 32	640A 37	641A 33	642A 35
A.3e	Stanford Magnetograms	636A 41	637A 41	638A 45	639A 41	640A 47	641A 44	642A 44	
A.4	H-alpha Filtergrams	636A 41	637A 41	638A 45	639A 41	640A 47	641A 44	642A 44	
A.5d	Photometric Ca II Faculae (San Fernando)	May 88-Dec 91 in 630B 37; Jan 92-Dec 96 in 631B 22							
A.6c	Stanford Solar Mag Field Synoptic Maps	636A 36	637A 36	638A 40	639A 36	640A 42	641A 38	642A 38	
A.6d	Kitt Peak Solar Mag Field Synoptic Maps	636A 40	637A 40	638A 44	639A 40	640A 46	641A 43	642A 43	
A.6f	Active Prominences and Filaments	640B 17	641B 19	642B 21					
A.6g	Sac Peak Coronal Line Synoptic Maps	636A 38	637A 38	638A 42	639A 38	640A 44	641A 40	642A 40	
A.6h	Photometric White Light (San Fernando)	Aug 95-Jun 96 in 624B 24; Jul-Dec 96 630B 32							
A.7h	Coronal Line Emission (Sac Peak)	636A 41	637A 41	638A 45	639A 41	640A 47	641A 44	642A 44	
A.8aa	2800 MHz- Solar Flux (Penticton)	635A 24	636A 25	637A 24	638A 24	639A 24	640A 24	641A 25	642A 26
A.8ac	2800 MHz- Adj. Solar Flux (Penticton)	635A 24	636A 25	637A 24	638A 24	639A 24	640A 24	641A 25	642A 26
A.8g	Adjusted Daily Solar Fluxes (Learmonth)	635A 24	636A 25	637A 24	638A 24	639A 24	640A 24	641A 25	642A 26
A.10g	Nancay Radioheliograph - 164&327 MHz	636A 99	637A 97	638A107	639A119	640A106	641A112	642A113	
A.11g	Solar X-ray GOES (graphs/event table)	640B 10	641B 11	642B 13					
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.11n	Solar YOHKOH Soft X-ray Images	636A 71	637A 72	638A 76	639A 71	640A 78	641A 74	642A 75	
A.11o	Solar UV SUSIM (UARS)	Oct 91-Jan 97 in 629B 30							
A.12g	Solar Particles (GOES-7)	635A 4	636A 4	637A 4	638A 4	639A 4	640A 4	641A 4	642A 4
A.12h	Interplanetary Particles (SAMPEX)	Jul 95-Dec 96 in 632B 22; Jan-Feb 97 in 633B 28							
A.13e	Solar Plasma (IMP-8)	640B 21	641B 24	642B 27					
A.16c	ERBS, NOAA-9 & -10 Solar Irradiance	ERBS Jan-Dec 96 in 632B 64; Jan-Oct 97 in 639B 58							
A.16d	UARS Solar Irradiance	Oct 91-Dec 97 in 642B 32							
A.17c	Inferred Interplanetary Mag Field	1984-1988 data in 542A168; 1989-Jan 94 in 611A118							
A.17	IMP-8 Interplanetary Mag Field	641B 28	641B 25	642B 28					
C. SOLAR FLARE-ASSOCIATED EVENTS									
C.1a	H-alpha Flares	635A 27	636A 28	637A 27	638A 27	639A 29	640A 27	641A 28	642A 29
C.1ba	H-alpha Flare Groups	640B 4	641B 4	642B 4					
C.1d	Flare Patrol Observations	640B 6	641B 7	642B 9					
C.1h	H-alpha Flare Index (ImpxDur)	Jan 86-Oct 96 in 635B 24; Jan 76-Dec 85 in 639B 26							
C.3	Radio Bursts Fixed Frequency	640B 8	641B 9	642B 11					
C.3	Radio Bursts Fixed Frequency Selected		636A 30	637A 30	638A 34	639A 30	640A 35	641A 32	642A 33
C.4	Radio Bursts Spectral	636A 95	637A 93	638A101	639A100	640A101	641A 99	642A104	
C.6	Sudden Ionospheric Disturbances	636A 94	637A 92	638A100	639A 98	640A100	641A 95	642A103	
D. GEOMAGNETIC EVENTS									
D.1a	Geomagnetic Indices	636A108	637A106	638A117	639A130	640A115	642A134	642A122	
D.1ba	27-day Chart of Kp Indices	636A110	637A108	638A119	639A132	640A117	641A121	642A124	
D.1cb	Monthly Mean aa Indices	637A109	637A109	638A120	639A134	640A118	641A122	642A125	
D.1d	Principal Magnetic Storms	636A114	637A112	638A123	639A137	640A122	641A126	642A130	
D.1f	Sudden Commencements/Flare Effects	636A115	637A113	638A124	639A138	640A124	641A127	642A131	
D.1g	Equatorial Indices Dst				639A136	640A121	641A125	642A129	
D.1i	Polar Cap (PC) Index	636A113	637A111	638A122	639A135	640A120	641A124	642A128	
F. COSMIC RAYS									
F.1b	Cosmic Ray Neutron Cts (Climax)	636A100	637A 98	638A109	639A122	640A107	641A114	642A114	
F.1h	Cosmic Ray Neutron Cts (Thule)	636A100							
F.1i	Cosmic Ray Neutron Cts (Kiel)	636A100	637A 98	638A109	639A122	640A107	641A114	642A114	
F.1n	Cosmic Ray Neutron Cts (Beijing)	636A100	637A 98	638A109	639A122	640A107	641A114	642A114	
F.1m	Cosmic Ray Neutron Cts (Haleakala)	636A100	637A 98	638A109	639A122	640A107	641A114	642A114	
F.1o	Cosmic Ray Neutron Cts (Moscow)	636A100	637A 98	638A109	639A122	640A107	641A114	642A114	
F.1p	Cosmic Ray Neutron Cts (Calgary)	636A100	637A 98	638A109	639A122	640A107	641A114	642A114	
F.1r	Cosmic Ray Neutron Cts (Goose Bay)	636A100	637A 98	638A109	639A122	640A107	641A114	642A114	
H. MISCELLANEOUS									
H.60	ISES Alert Periods	635A 19	636A 20	637A 20	638A 19	639A 20	640A 19	641A 20	642A 20

The entry "636 41" under Jun 97, for example, means that the sunspot drawings for Jun 1997 appear in SOLAR-GEOPHYSICAL DATA No. 636, Part I, and that they begin on page 41. "A" denotes Part I and "B", Part II. Blanks indicate data not yet received and dashes mark unavailable data.

CONTENTS

Comprehensive Reports

Number 642 Part II

DATA FOR AUGUST 1997

	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.....	11-12
SOLAR X-RAY RADIATION FROM GOES SATELLITE	
Graphs	13-18
Preliminary Event List	19
Preliminary Daily Average Background	20
ACTIVE PROMINENCES AND FILAMENTS	21-25
SOLAR IRRADIANCE Earth Radiation Budget Satellite (ERBS)	26
IMP-8 SOLAR WIND Plot	27
IMP-8 INTERPLANETARY MAGNETIC FIELD Plot	28-29

4
Aug 97

H α SOLAR FLARES

AUGUST 1997

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	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)	
			01 1029		1039	No Flare	Patrol										
			01 1052		1053	No Flare	Patrol										
			01 2146		2154	No Flare	Patrol										
			01 2204		2400	No Flare	Patrol										
			02 0000		0046	No Flare	Patrol										
			02 0133		0159	No Flare	Patrol										
			02 0734		0739	No Flare	Patrol										
			02 0907		0914	No Flare	Patrol										
			02 1857		1911	No Flare	Patrol										
			02 2211		2307	No Flare	Patrol										
			02 2319		2324	No Flare	Patrol										
			02 2331		2337	No Flare	Patrol										
			02 2359		2400	No Flare	Patrol										
			03 0000		0006	No Flare	Patrol										
0001	HOLL	03	0020	0023	0034	S21 E45	8068	08	6.5	14	SF	3	E		23		FH
0002	LEAR	03	0303	0307	0309	S25 E42	8068	08	6.4	6	SF	3	E		48		
0003		03	1103	1103	1108	S22 E40	8068	08	6.5	5	SF				15		
	RAMY	03	1058E	1100U	1104	S21 E39	8068	08	6.4	6D	SF	2	E		15		
	KANZ	03	1103	1103	1111	S22 E41	8068	08	6.6	8	SF	2	C				
			03 2231		2235	No Flare	Patrol										
			03 2240		2257	No Flare	Patrol										
			03 2316		2349	No Flare	Patrol										
			04 0101		0412	No Flare	Patrol										
			04 1942		2013	No Flare	Patrol										
			04 2057		2102	No Flare	Patrol										
			04 2126		2224	No Flare	Patrol										
			04 2244		2306	No Flare	Patrol										
			04 2321		2328	No Flare	Patrol										
			05 0101		0348	No Flare	Patrol										
			05 1717		2126	No Flare	Patrol										
			05 2224		2332	No Flare	Patrol										
0004	SVTO	06	0603	0605	0614	N20 W38	8069	08	3.3	11	SF B	4.9	3	E		16	
			06 2325		2400	No Flare	Patrol										
			07 0000		0000	No Flare	Patrol										
0005	SVTO	07	0924	0924	0933	N19 W55	8069	08	3.2	9	SF		3	E		14	
0006	SVTO	07	1035	1035	1046	N19 W56	8069	08	3.2	11	SF		3	E		13	
0007		07	11171	11211	1125	N19 W55	8069	08	3.3	8	SF					11	
	SVTO	07	1117	1121	1123	N19 W56	8069	08	3.2	6	SF		3	E		11	
	KANZ	07	1118	1122	1127	N19 W54	8069	08	3.3	9	SF		2	C			
0008		07	11351	11381	1147	N19 W56	8069	08	3.2	12	SF B	1.1				20	
	KANZ	07	1135	1139	1148D	N19 W55	8069	08	3.3	13D	SF		2	C			
	SVTO	07	1136	1138	1147	N19 W57	8069	08	3.1	11	SF B	1.1	3	E		20	
0009		07	12591	1303	1315	N18 W56	8069	08	3.3	16	SF B	2.1				17	
	KANZ	07	1259	1303	1315	N18 W55	8069	08	3.3	16	SF		2	C			
	RAMY	07	1300	1303	1315	N19 W57	8069	08	3.2	15	SF B	2.1	4	E		17	
0010	SVTO	07	1428	1428U	1437D	N19 W57	8069	08	3.2	9D	SF		3	E		37	
0011	SVTO	07	1447	1453	1459	N19 W58	8069	08	3.2	12	SF		3	E		20	
0012	RAMY	07	1723	1724	1730	N19 W58	8069	08	3.3	7	SF		4	E		10	F
			07 2107		2111	No Flare	Patrol										
			07 2211		2214	No Flare	Patrol										
			07 2240		2309	No Flare	Patrol										
0013		08	1249	1252	1259	N19 W72	8069	08	3.0	10	SF B	1.8				16	
	RAMY	08	1249	1252	1259	N19 W71	8069	08	3.1	10	SF B	1.8	3	E		21	
	SVTO	08	1258E	1259U	1303D	N19 W73	8069	08	3.0	5D	SF B	1.8	3	E		10	

6
Aug 97H α SOLAR FLARES

AUGUST 1997

Grp #	Sta	Start Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement		Remarks	
															Time (UT)	Apparent (10-6 Disk)		Corr (Sq Deg)
0035	RAMY	13	1838	1843	1850	N26	W03	8071	08	13.5	12	SF	2	E	14		F	
		13	2236		2314	No Flare Patrol												
0036	LEAR	14	0129	0132	0147	N26	W04	8071	08	13.7	18	SF C	1.0	3	E	30		F
		17	1810		1852	No Flare Patrol												
		17	1942		1950	No Flare Patrol												
		17	2150		2233	No Flare Patrol												
		18	2235		2314	No Flare Patrol												
		19	0953		1208	No Flare Patrol												
		19	2028		2038	No Flare Patrol												
		19	2050		2117	No Flare Patrol												
		19	2128		2159	No Flare Patrol												
		19	2320		2322	No Flare Patrol												
		20	0022		0031	No Flare Patrol												
		20	1901		2116	No Flare Patrol												
		20	2256		2305	No Flare Patrol												
		21	0037		0107	No Flare Patrol												
		21	0150		0202	No Flare Patrol												
0037	LEAR	21	0433	0433	0438	N29	W34	8074	08	18.5	5	SF B	3.6	3	E	17		
		21	2044		2216	No Flare Patrol												
		21	2232		2311	No Flare Patrol												
		22	1506		1632	No Flare Patrol												
		22	1857		1916	No Flare Patrol												
		23	0951		1024	No Flare Patrol												
		23	1034		1049	No Flare Patrol												
		23	2256		2304	No Flare Patrol												
0038	KANZ	24	0915	0919	0935	N30	W73		08	18.6	20	SF		2	C			
0039	KANZ	24	0915	0915	0927	S24	E83	8078A	08	30.8	12	SF		2	C			
0040	KANZ	24	0939	0951	0959	N29	W71		08	18.8	20	SF		2	C			
0041	KANZ	24	1129	1129	1133	S24	E83	8078A	08	30.9	4	SF		2	C			
0042	HOLL	24	1834	1835	1838	S23	E72	8077	08	30.3	4	SF B	2.4	3	E	31		
		24	2224		2334	No Flare Patrol												
		24	2346		2400	No Flare Patrol												
		25	0000		0354	No Flare Patrol												
0043	HOLL	25	1407E	1408U	1413D	N30	E82	8076	09	1.0	6D	SF		3	E	23		
0044	HOLL	25	1519	1522	1534	N30	E82	8076	09	1.1	15	SF C	1.2	3	E	57		
0045		25	1519	1522	1538	N28	E69	8076	08	31.0	19	SF C	1.2			69		
	SVTO	25	1519	1522	1533	N29	E69	8076	08	31.0	14	SF C	1.2	3	E	50		
	RAMY	25	1519	1523	1543	N28	E69	8076	08	31.0	24	SF C	1.2	3	E	88		
0046	RAMY	25	1639	1655	1714	N27	E69	8076	08	31.1	35	SF C	1.2	3	E	28		F
0047	HOLL	25	1702	1702	1709	N28	E80	8076	09	1.0	7	SF C	1.2	3	E	19		F
		25	1940		2035	No Flare Patrol												
		25	2233		2239	No Flare Patrol												
0048	LEAR	26	0054	0054	0101	N21	E57	8076	08	30.4	7	SF C	4.0	3	E	41		
		26	0406		0439	No Flare Patrol												
0049	SVTO	26	0531E	0532U	0614	N26	E55	8076	08	30.5	43D	SF C	4.5	2	E	28		F
0050	HOLL	26	2010	2013	2042	N29	E54	8076	08	31.1	32	SF B	8.8	3	E	66		H
0051	HOLL	26	2308	2310	2316	N29	E53	8076	08	31.1	8	SF		3	E	31		

H α SOLAR FLARES

7
Aug 97

AUGUST 1997

Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/	CMP	Dur	Imp	Obs	Area Measurement			Remarks		
							USAF Region					Mo	Day	Time (UT)		Apparent (10-6 Disk)	Corr (Sq Deg)
		27 0944		0948			No Flare Patrol										
		27 1042		1100			No Flare Patrol										
		27 1105		1109			No Flare Patrol										
0052	RAMY	27 1514	1517	1523	S23	E38	8077	08	30.6	9	SF	3	E		12		
0053	KANZ	28 0937	0942	0949	S24	E28	8077	08	30.6	12	SF	2	C				
0054	SVTO	28 1053	1054	1059	N30	E36	8076	08	31.3	6	SF	3	E		19		
0055		28 1121	1124	1132	N26	E32	8076	08	30.9	11	SF				20		
	RAMY	28 1121	1124	1133	N27	E32	8076	08	31.0	12	SF	3	E		25		
	SVTO	28 1122	1124	1131	N26	E31	8076	08	30.9	9	SF	3	E		15		
0056	KANZ	28 1145	1148	1157	S24	E27	8077	08	30.6	12	SF	2	C				
0057	HOLL	28 1618	1619	1623	N27	E31	8076	08	31.1	5	SF	3	E		25		
0058	MITK	29 0426	0428	0431	N30	E26	8076	08	31.2	5	SN		C	0428		0.8	
0059	SVTO	29 0617	0619	0625	N29	E25	8076	08	31.2	8	SF B	3.1	3	E		16	
0060	SVTO	29 0921	0925U	0945D	N31	E24	8076	08	31.3	24D	SF B	6.7	3	E		24	F
		29 0949		1001			No Flare Patrol										
0061	RAMY	29 1513	1513	1517	N31	E22	8076	08	31.4	4	SF	3	E		22	F	
0062		29 1727	1729	1748	N28	E18	8076	08	31.1	21	SF C	1.0			30	F	
	RAMY	29 1727	1729	1754	N30	E20	8076	08	31.3	27	SF C	1.0	4	E	35	F	
	HOLL	29 1728	1729	1741	N27	E17	8076	08	31.0	13	SF C	1.0	3	E	24		
		29 2113		2316			No Flare Patrol										
0063	HOLL	29 2314E	2317U	2447	N30	E17	8076	08	31.3	93D	SF M	1.4	3	E		61	
		29 2322		2351			No Flare Patrol										
0064		30 0723	0725	0732	N28	E11	8076	08	31.2	9	SF B	5.7			50	F	
	LEAR	30 0723	0725	0733	N24	E10	8076	08	31.1	10	SF B	5.7	3	E	28		
	SVTO	30 0723	0725U	0734D	N30	E11	8076	08	31.2	11D	SF		3	E	71	F	
	KANZ	30 0723	0727	0731	N30	E13	8076	08	31.3	8	SF		1	C			
0065	SVTO	30 1115	1121	1133	N23	E03	8076	08	30.7	18	SF C	1.9	3	E		18	F
0066	SVTO	30 1144	1146	1158	N23	E04	8076	08	30.8	14	SF		3	E		28	
0067	SVTO	30 1509	1525	1536	N28	E05	8076	08	31.0	27	SF		3	E		13	
		30 1915		1935			No Flare Patrol										
0068	RAMY	31 1129	1133	1138	N29	W05	8076	08	31.1	9	SF C	2.7	3	E		26	
0069	SVTO	31 1350	1351	1358	N27	W14	8076	08	30.5	8	SF		3	E		38	
0070		31 1449	1449	1452	N28	W06	8076	08	31.1	3	SF				12		
	SVTO	31 1449	1449	1452	N28	W07	8076	08	31.1	3	SF		3	E	12		
	RAMY	31 1449	1449	1452	N29	W06	8076	08	31.1	3	SF		4	E	12		
0071		31 1504	1504	1510	N28	W07	8076	08	31.1	6	SF				10		
	SVTO	31 1504	1504	1513	N28	W07	8076	08	31.1	9	SF		3	E	11		
	RAMY	31 1504	1505	1508	N29	W07	8076	08	31.1	4	SF		4	E	10		
0072	RAMY	31 1652	1656	1705	N27	W11	8076	08	30.8	13	SF		4	E		21	
0073	HOLL	31 1910	1914	1920	N29	W10	8076	08	31.0	10	SF C	1.2	3	E		39	F
0074	HOLL	31 1924	1925	1931	N29	W12	8076	08	30.9	7	SF		3	E		19	F

H α S O L A R F L A R E S

AUGUST 1997

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/		Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement		Remarks	
								USAF Region	CMP Mo Day						Time (UT)	Apparent (10-6 Disk)		Corr (Sq Deg)
0075	HOLL	31	2222	2223	2232	N30	W12	8076	08	31.0	10	SF	C	1.4	3	E	42	

"Remarks"

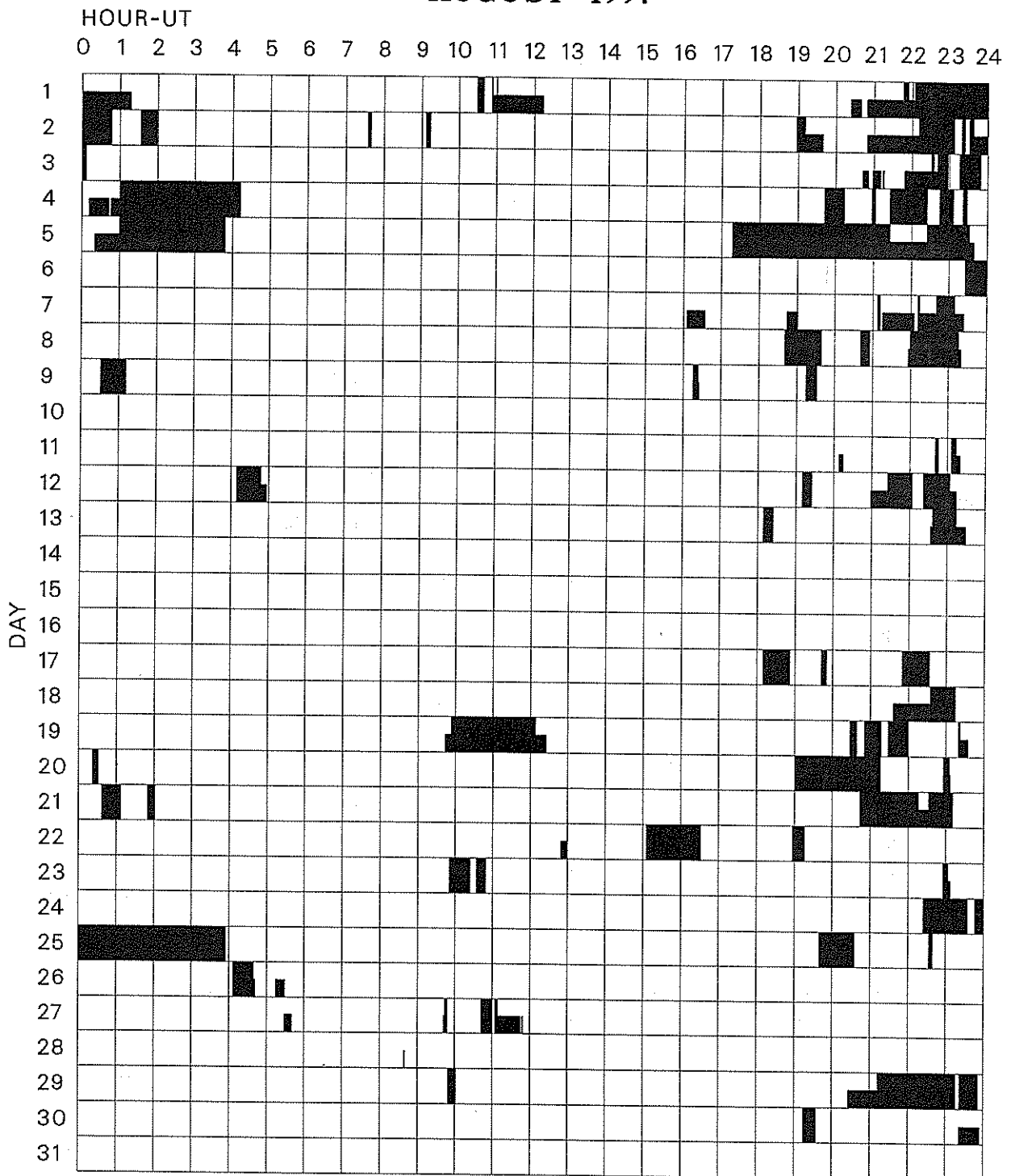
- | | |
|---|---|
| <p>A = Eruptive prominence whose base is less than 90 degrees from central meridian.
 B = Probably the end of a more important flare.
 C = Invisible 10 minutes before.
 D = Brilliant point.
 E = Two or more brilliant points.
 F = Several eruptive centers.
 G = No visible spots in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

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

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

9
Aug 97

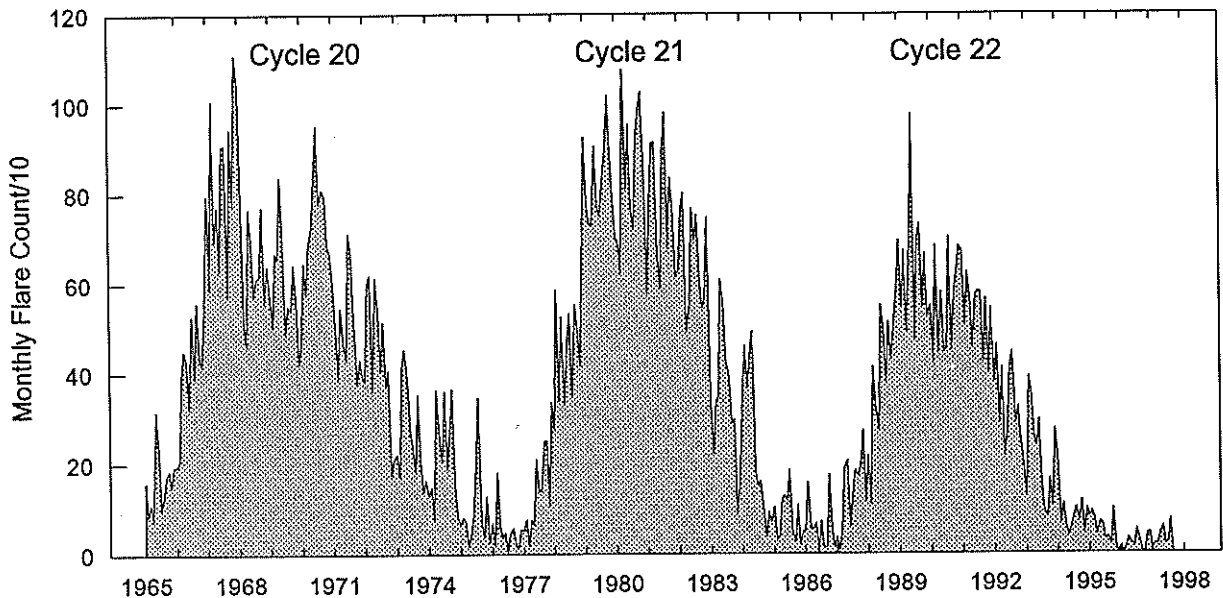
AUGUST 1997



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

Holloman	Kharkov	Mitaka	Ramy
Hurbanovo	Meudon	Learmonth	San Vito
Kanzelhoehe			Voroshilov

Monthly Counts of Grouped Solar Flares Jan 1965 - Aug 1997



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					269

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
Aug 97

AUGUST 1997

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
06	204	I2MI	43 NS	0600.0		360.0D		5.0		
	410	SVTO	20 GRF	1034.0	1035.0	15.0	54.0			QL=2 ST=2 TYP=2
12	245	LEAR	8 S	0453.0	0454.0	2.0	35.0			QL=4 ST=2 TYP=3
13	245	LEAR	8 S	0013.0	0013.0	U	43.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0013.0	0013.0	U	43.0			QL=4 ST=2 TYP=3
14	204	I2MI	25 R	1000.0	1007.0	60.0	50.0			
18	204	I2MI	41 F	1019.5	1020.0	2.0	35.0			
	245	SGMR	8 S	2102.0	2103.0	1.0	120.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2103.0	2103.0	U	110.0			QL=4 ST=2 TYP=3
19	204	I2MI	42 SER	0955.0	0959.0	5.0	20.0			
	204	I2MI	41 F	1111.0	1113.0	4.0	40.0			
21	204	I2MI	43 NS	0635.0		300.0D		5.0		
25	245	SGMR	43 NS	1536.0	1536.0	16.0	53.0			QL=4 ST=2 TYP=1
	245	SGMR	43 NS	1637.0	1655.0	38.0	75.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	1642.0	1642.0	29.0	71.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	1654.0	1655.0	12.0	69.0			QL=4 ST=3 TYP=1
26	204	I2MI	43 NS	0600.0		360.0D		5.0		
	15400	LEAR	8 S	0053.0	0053.0	1.0	63.0			QL=4 ST=2 TYP=3
	8800	LEAR	8 S	0053.0	0053.0	1.0	49.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	0053.0	0053.0	1.0	37.0			QL=4 ST=2 TYP=3
	15400	PALE	8 S	0053.0	0053.0	U	50.0			QL=4 ST=3 TYP=3
	8800	PALE	8 S	0053.0	0053.0	1.0	47.0			QL=4 ST=3 TYP=3
	4995	PALE	8 S	0053.0	0053.0	1.0	35.0			QL=4 ST=3 TYP=3
	05730	IRKU	45 C	0529.5	0532.2	4.5	6.0		U	
28	204	I2MI	45 C	1001.0U	1001.5U	1.0U	600.0			
29	245	SGMR	43 NS	1823.0	1939.0	177.0	160.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	1924.0	1939.0	56.0	210.0			QL=4 ST=2 TYP=1
	245	SGMR	43 NS	2233.0	2233.0	9.0	130.0			QL=2 ST=2 TYP=1
	05730	IRKU	21 GRF	0418.3	0428.7	104.7	5.0		U	
	3000	I2MI	5 S	0607.2	0607.3	1.0	10.0		5.0	
	05730	IRKU	20 GRF	0611.7	0613.6	18.3	4.0		U	
	245	PALE	4 S/F	1823.0	1830.0	9.0	85.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1830.0	1831.0	1.0	86.0			QL=4 ST=2 TYP=3
	245	PALE	4 S/F	1846.0	1847.0	3.0	71.0			QL=4 ST=3 TYP=3
	245	PALE	48 C	1914.0	1916.0	3.0	66.0			QL=4 ST=2 TYP=8
	245	PALE	8 S	1920.0	1921.0	2.0	74.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2118.0	2118.0	U	56.0			QL=4 ST=3 TYP=3
	245	SGMR	8 S	2222.0	2222.0	U	58.0			QL=2 ST=2 TYP=3
	410	LEAR	8 S	2321.0	2321.0	U	63.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	2321.0	2321.0	U	60.0			QL=4 ST=2 TYP=3
	15400	LEAR	8 S	2330.0	2331.0	1.0	43.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	2331.0	2331.0	U	87.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	2331.0	2331.0	1.0	94.0			QL=4 ST=2 TYP=3
	1415	LEAR	8 S	2331.0	2331.0	1.0	32.0			QL=4 ST=2 TYP=3
	8800	LEAR	8 S	2331.0	2331.0	U	71.0			QL=4 ST=2 TYP=3
410	LEAR	8 S	2331.0	2331.0	U	220.0			QL=4 ST=2 TYP=3	
410	PALE	8 S	2331.0	2331.0	1.0	390.0			QL=4 ST=2 TYP=3	
4995	PALE	8 S	2331.0	2331.0	U	85.0			QL=4 ST=2 TYP=3	
2695	PALE	8 S	2331.0	2331.0	U	130.0			QL=4 ST=2 TYP=3	
1415	PALE	8 S	2331.0	2331.0	U	35.0			QL=4 ST=2 TYP=3	
8800	PALE	8 S	2331.0	2331.0	U	54.0			QL=4 ST=2 TYP=3	
15400	PALE	8 S	2331.0	2331.0	U	23.0			QL=4 ST=2 TYP=3	
245	LEAR	8 S	2350.0	2350.0	U	130.0			QL=4 ST=2 TYP=3	
245	PALE	8 S	2350.0	2350.0	U	200.0			QL=4 ST=2 TYP=3	
30	245	LEAR	43 NS	0017.0	0031.0	197.0	310.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	0023.0	0031.0	29.0	330.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	0237.0	0237.0	6.0	110.0			QL=4 ST=2 TYP=1
	204	I2MI	43 NS	0600.0		180.0D		5.0		

12
Aug 97

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

AUGUST 1997

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak	Mean		
							(10 -22 W/m 2 Hz)			
30	245	LEAR	43 NS	2256.0	2311.0	99.0	170.0		QL=4	ST=2 TYP=1
		PALE	43 NS	2256.0	2311.0	99.0	180.0		QL=4	ST=2 TYP=1
	245	LEAR	8 S	0007.0	0008.0	2.0	260.0		QL=4	ST=2 TYP=3
		PALE	8 S	0007.0	0008.0	2.0	300.0		QL=4	ST=2 TYP=3
	410	PALE	8 S	0007.0	0008.0	2.0	64.0		QL=4	ST=2 TYP=3
		LEAR	8 S	0008.0	0008.0	1.0	39.0		QL=4	ST=2 TYP=3
	610	LEAR	8 S	0115.0	0115.0	2.0	18.0		QL=4	ST=2 TYP=3
	245	LEAR	8 S	0115.0	0115.0	2.0	26.0		QL=4	ST=2 TYP=3
	410	LEAR	8 S	0115.0	0115.0	2.0	51.0		QL=4	ST=2 TYP=3
	245	PALE	8 S	0154.0	0154.0	1.0	80.0		QL=4	ST=2 TYP=3
	245	SGMR	8 S	1522.0	1522.0	U	77.0		QL=4	ST=2 TYP=3
		SVTO	8 S	1522.0	1522.0	U	82.0		QL=2	ST=2 TYP=3
	245	SGMR	8 S	1755.0	1755.0	2.0	65.0		QL=4	ST=3 TYP=3
	245	SGMR	8 S	2209.0	2209.0	U	51.0		QL=4	ST=3 TYP=3
245	PALE	4 S/F	2230.0	2230.0	6.0	76.0		QL=4	ST=2 TYP=3	
	SGMR	8 S	2232.0	2232.0	U	63.0		QL=4	ST=3 TYP=3	
31	204	IZMI	44 NS	0600.0E		360.0D		40.0		
	245	LEAR	8 S	0148.0	0149.0	1.0	53.0		QL=4	ST=2 TYP=3
		PALE	8 S	0149.0	0149.0	U	59.0		QL=4	ST=2 TYP=3
	245	PALE	8 S	0219.0	0219.0	1.0	61.0		QL=4	ST=2 TYP=3
	204	IZMI	45 C	0822.0	0823.0	1.5	1000.0			
	245	SGMR	8 S	1351.0	1351.0	U	130.0		QL=4	ST=2 TYP=3
	245	SVTO	8 S	1351.0	1351.0	1.0	130.0		QL=2	ST=2 TYP=3

Reports are received routinely from the following observatories:

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

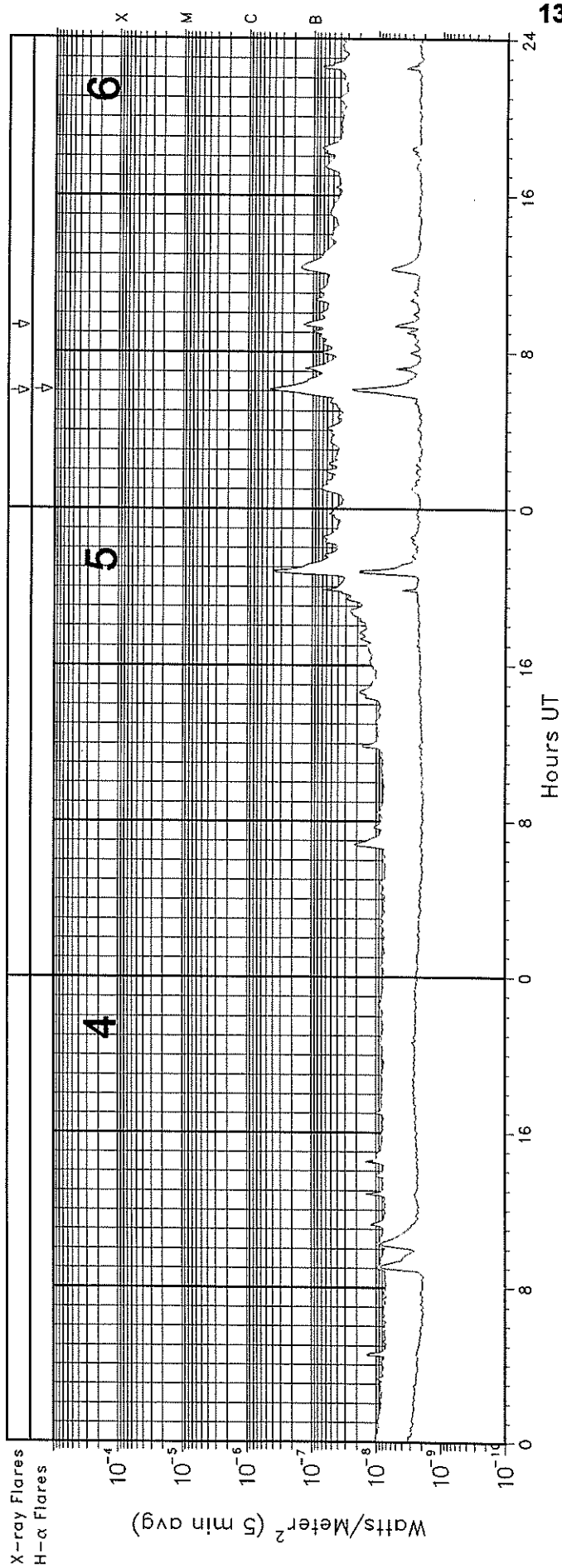
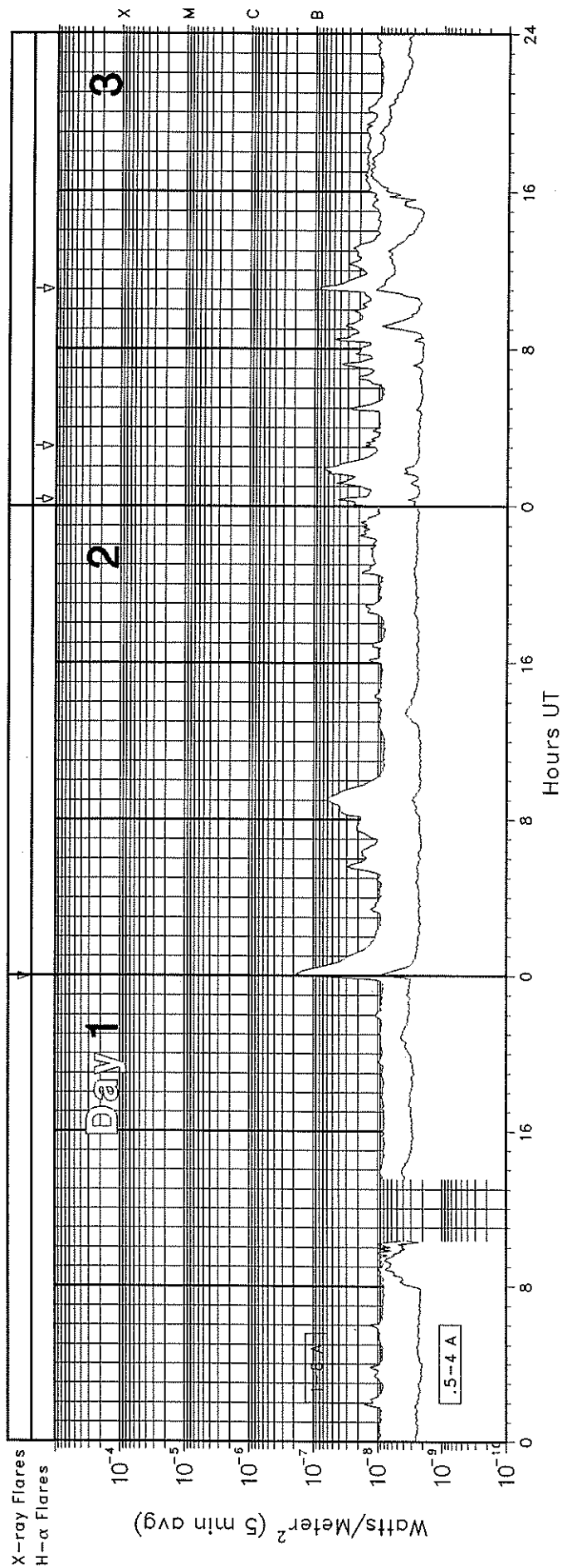
Explanation of Type Code:

1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple 3F	28 Precursor	41 Group of Bursts	47 Great Burst
6 Minor	23 Simple 3AF	29 Post Burst Increase	42 Series of Bursts	48 Major
1A Simple 1A	4A Simple 2AF	24PF Post Rise F	27F Rise and Fall F	
3A Simple 2A	40 Rise Only	16A Fall A	27AF Rise and Fall AF	
21A Simple 3A GRF	40F Rise Only F	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; Penticton, Canada 2800 MHz; Hiraiso, Japan 500 and 200 MHz; and Toyokawa, Japan 9400, 3750, 2000 and 1000 MHz.

GOES X-RAY DETECTOR

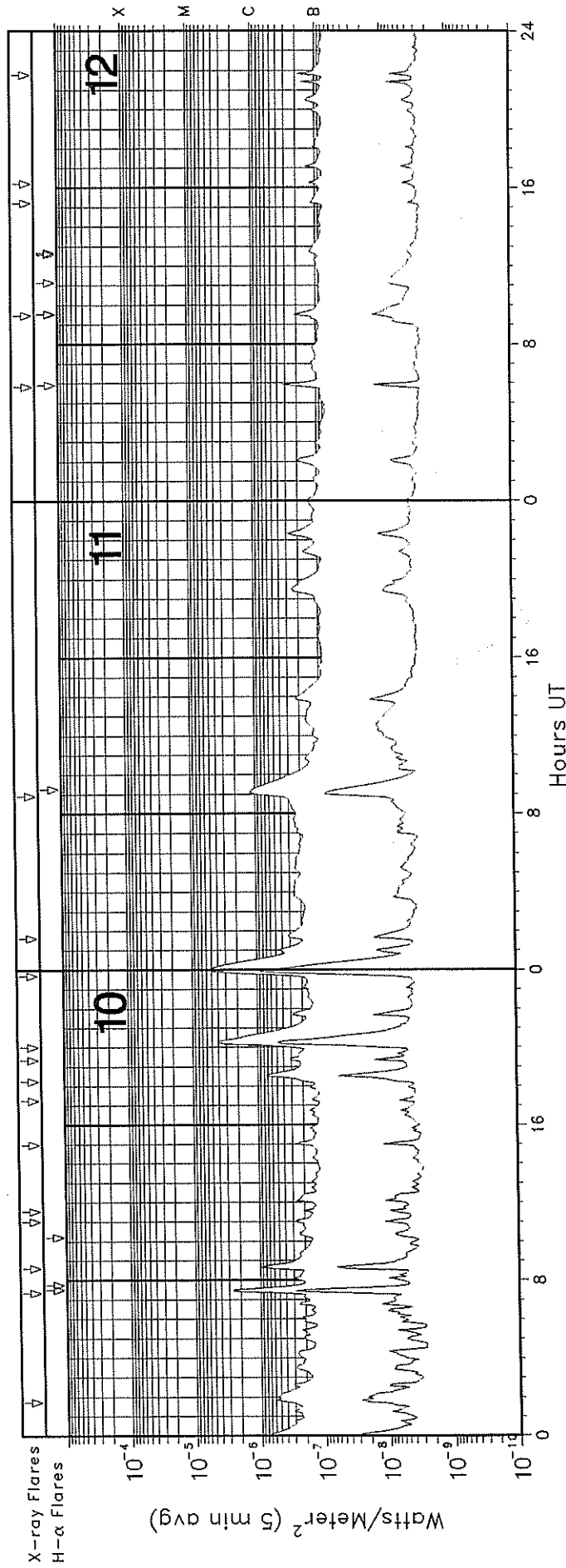
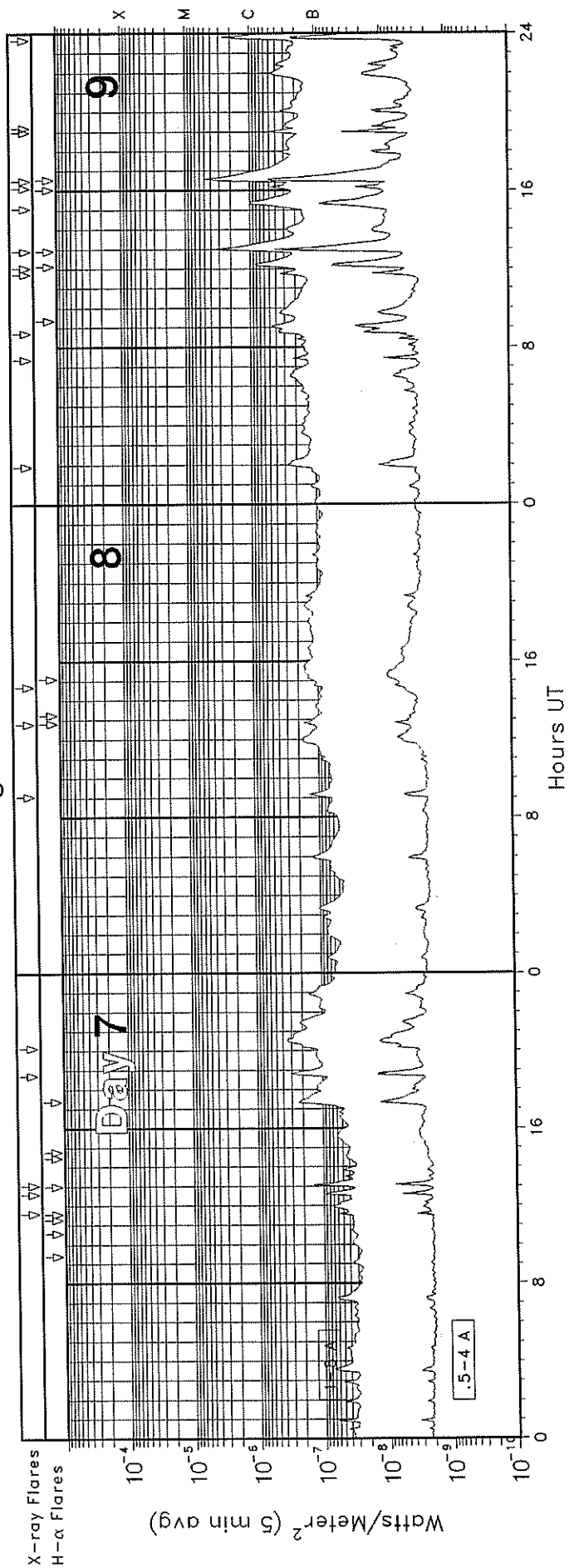
August 1997



14
Aug 97

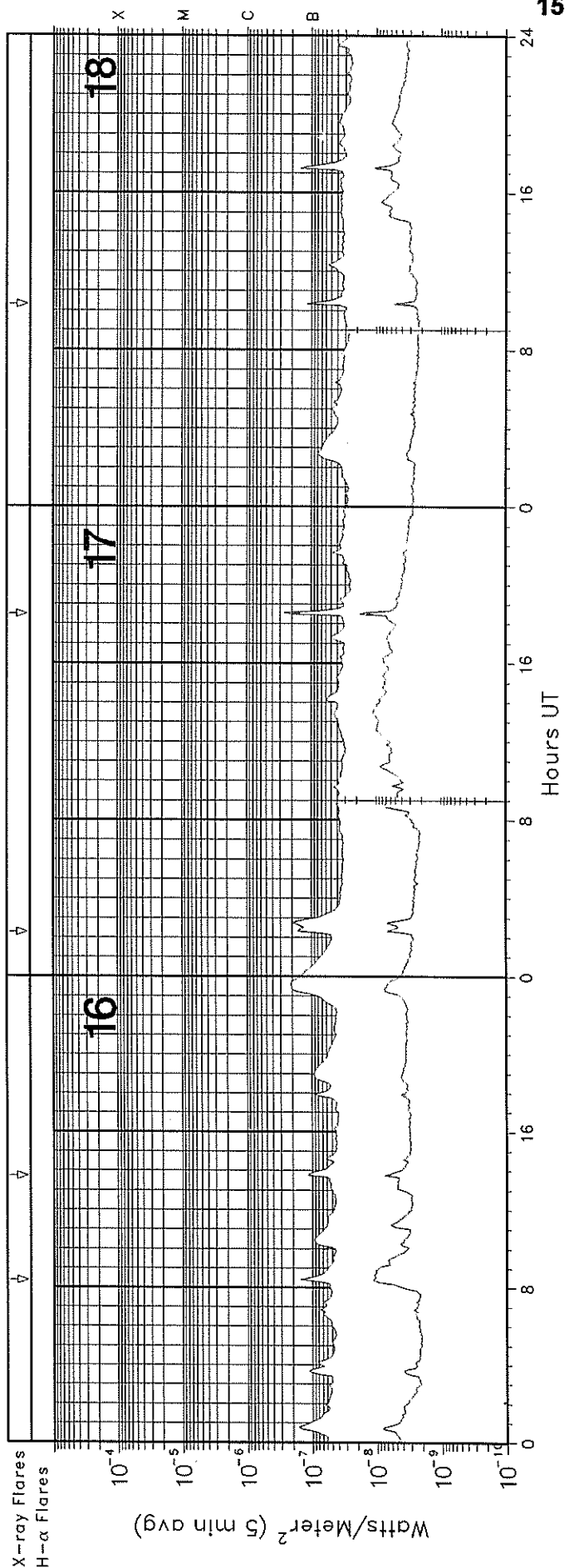
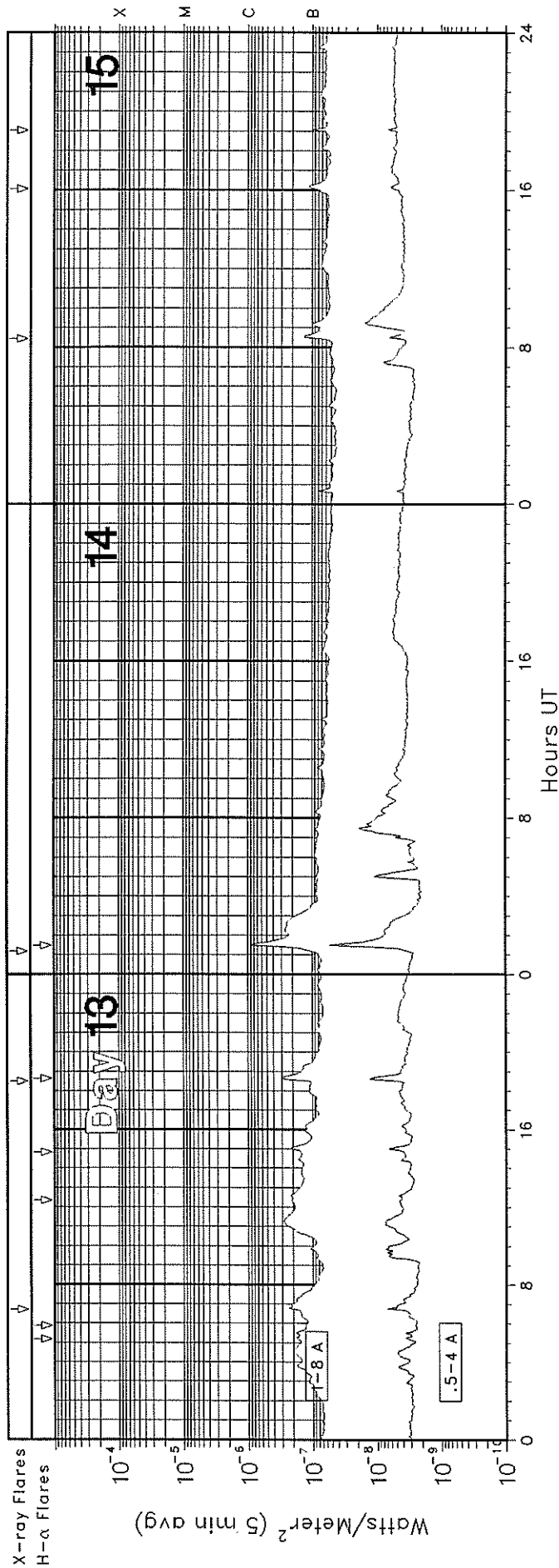
GOES X-RAY DETECTOR

August 1997



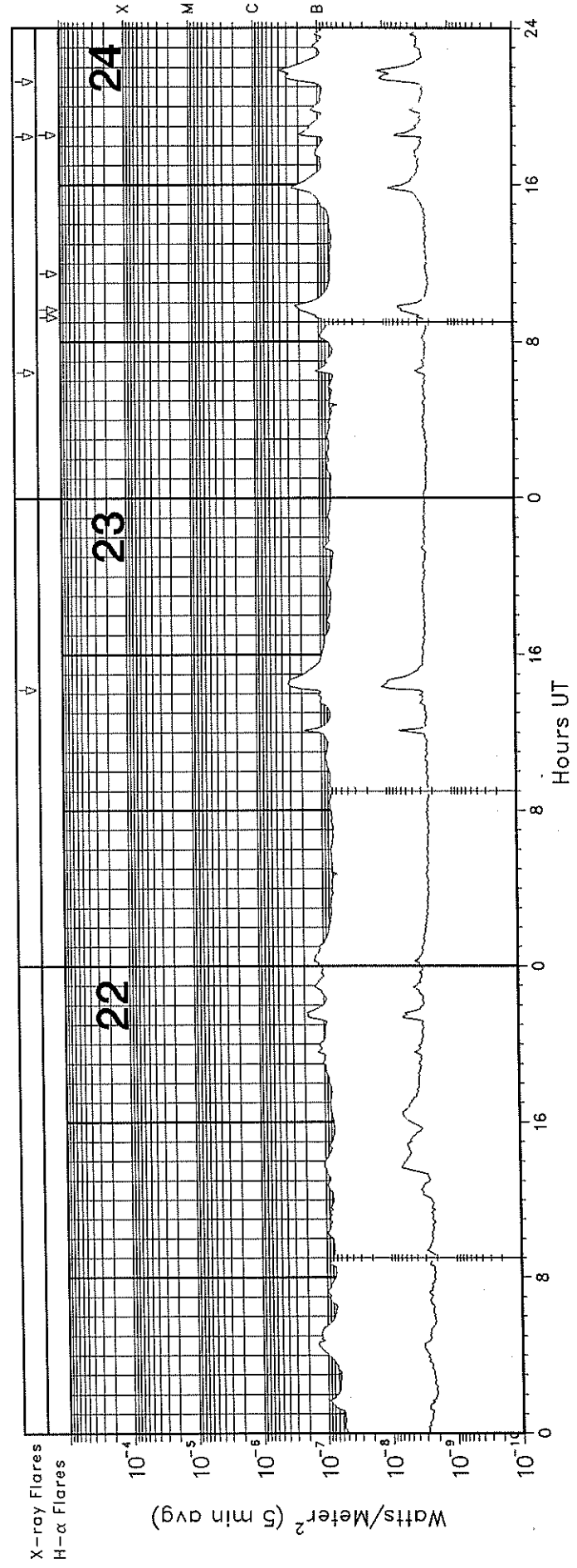
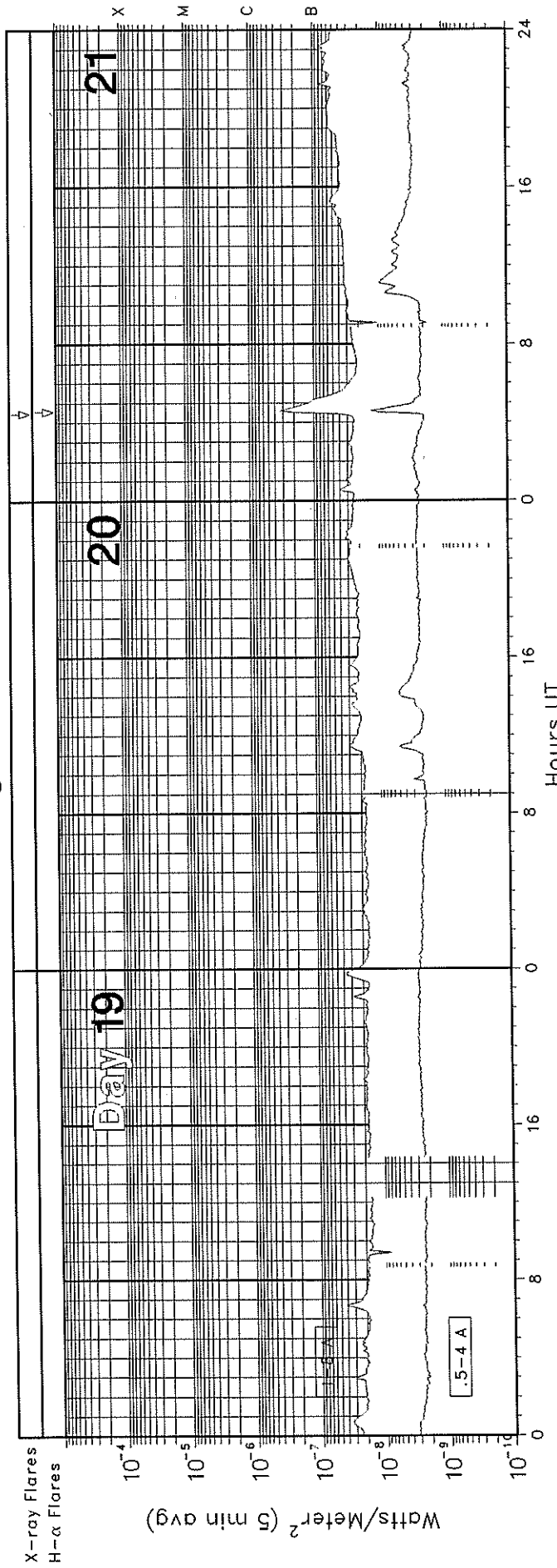
GOES X-RAY DETECTOR

August 1997



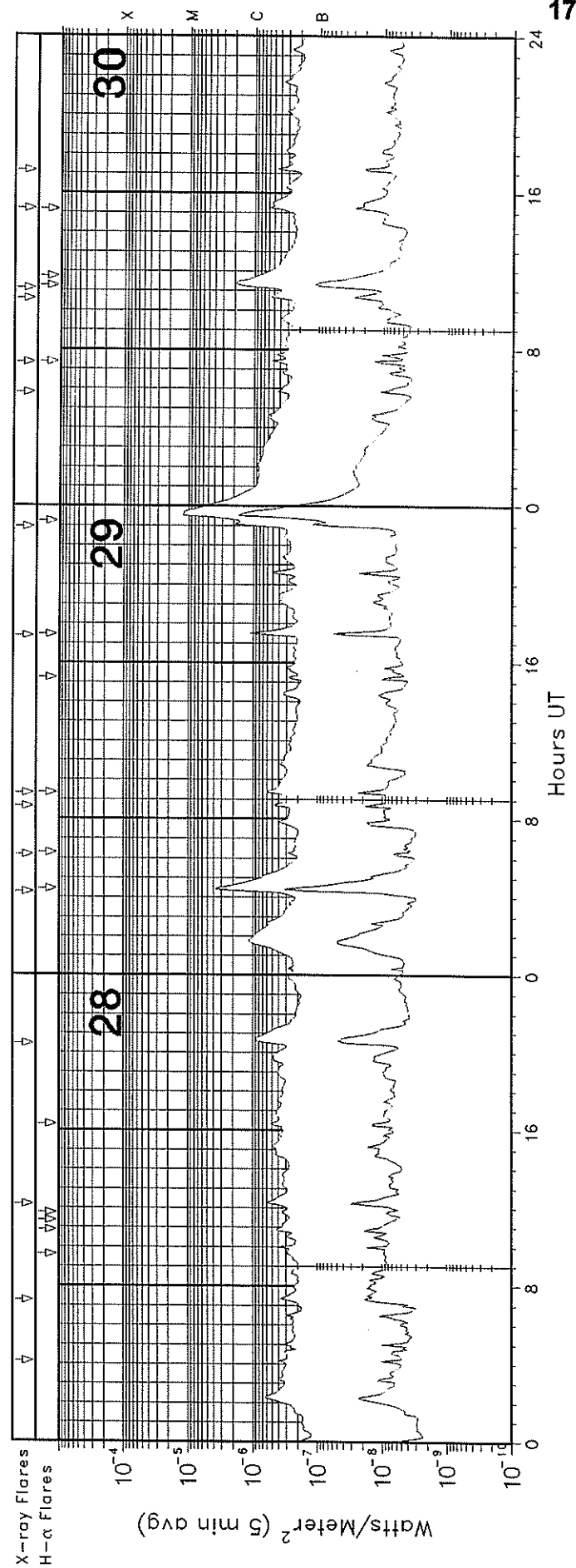
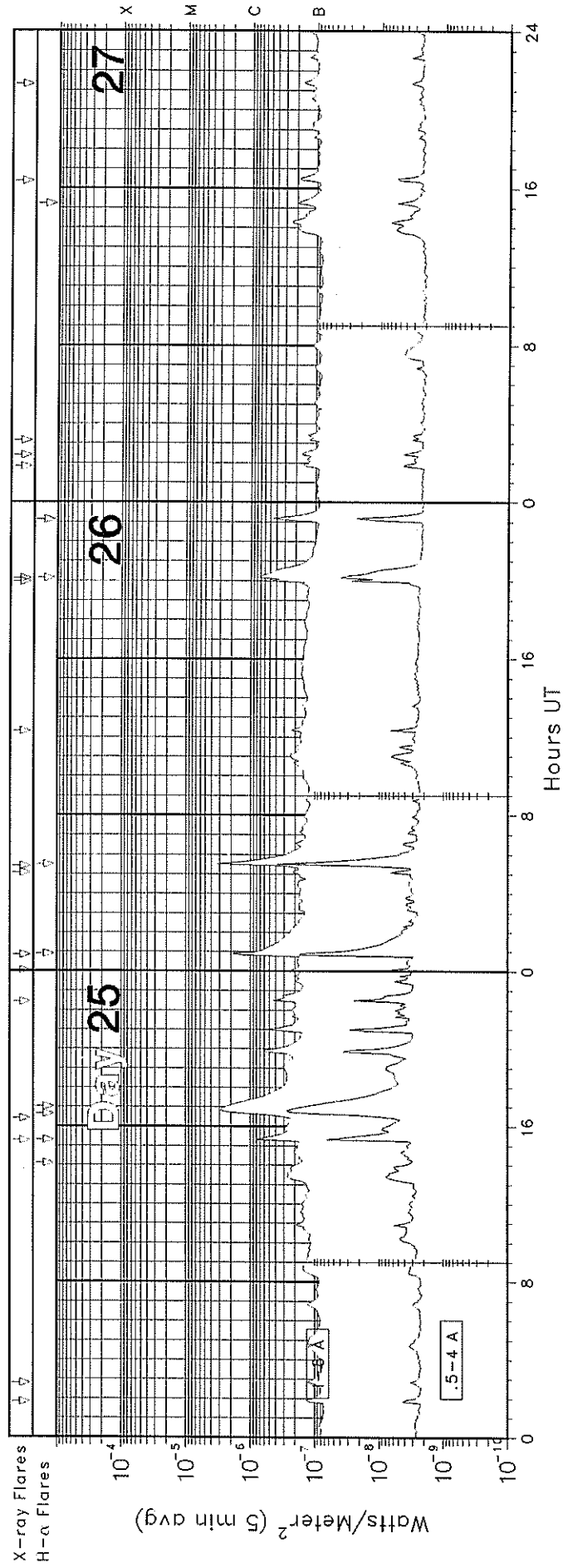
GOES X-RAY DETECTOR

August 1997



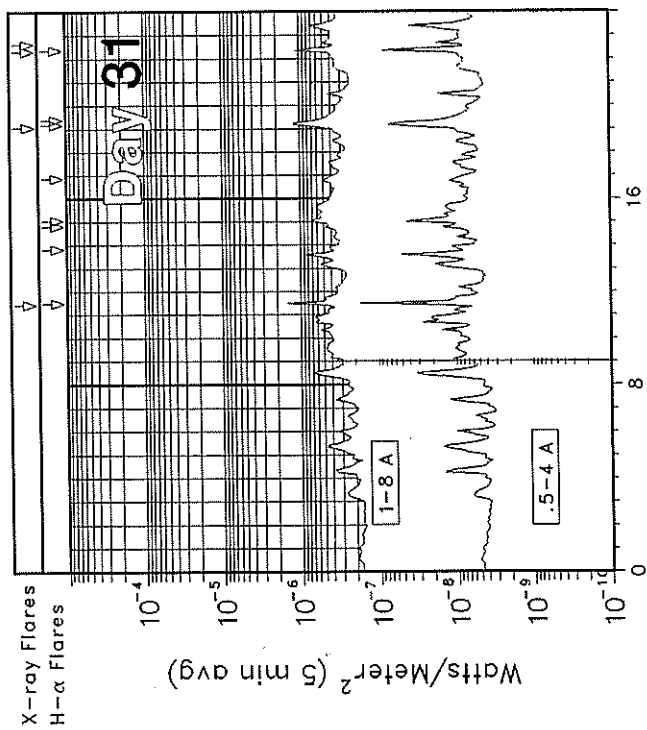
GOES X-RAY DETECTOR

August 1997



GOES X-RAY DETECTOR

August 1997



GOES SOLAR X-RAY FLARES
Preliminary Listing

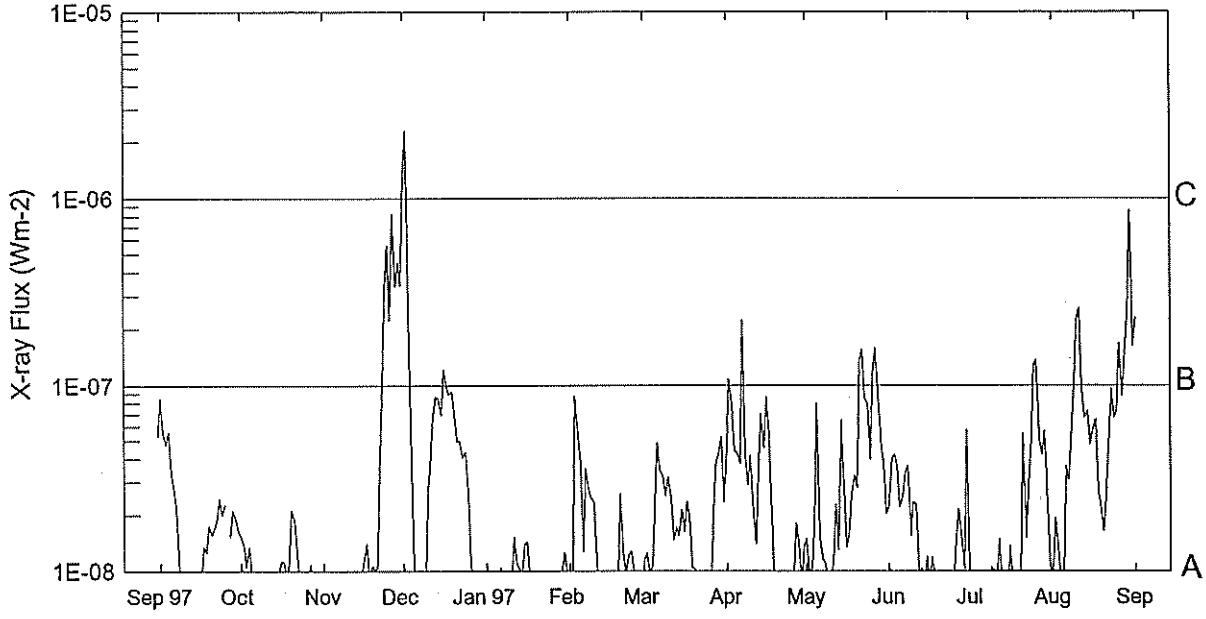
19
Aug 97

August 1997

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
01	2358	0006	0020				B1.8		1.9E-04
06	0559	0606	0612	N20	W38	SF	B4.9	8069	3.0E-04
06	0919	0925	0934				B1.4		1.1E-04
07	1136	1139	1141	N19	W57	SF	B1.1	8069	1.8E-05
07	1235	1238	1241				B1.4		3.8E-05
07	1302	1306	1308	N19	W57		B2.1	8069	4.6E-05
07	1843	1851	1858				B2.8		2.0E-04
07	2008	2037	2100				B3.5		8.2E-04
08	0905	0909	0914				B1.7		6.9E-05
08	1247	1251	1255	N19	W71	SF	B1.8	8069	7.5E-05
08	1442	1445	1447				B1.2		2.9E-05
09	0154	0201	0217				B2.6		2.9E-04
09	0722	0727	0731				B2.1		9.2E-05
09	0843	0905	0912				B5.2		6.5E-04
09	1144	1148	1150				B5.2		1.2E-04
09	1204	1213	1222	N19	W86	SF	C1.0	8069	6.7E-04
09	1254	1302	1306				C3.7		1.4E-03
09	1505	1524	1532				C1.1		1.0E-03
09	1607	1613	1615	N20	W82		B4.9	8069	1.8E-04
09	1630	1634	1638	N19	W85	SF	C8.5	8069	2.1E-03
09	1900	1904	1906				B9.4		1.9E-04
09	1913	1917	1923				B3.3		1.7E-04
09	2341	2350	2355				C3.2		1.4E-03
10	0144	0150	0215				B6.1		9.5E-04
10	0720	0729	0735				C3.0		1.6E-03
10	0836	0842	0849				C1.0		6.4E-04
10	1101	1104	1106				B2.9		8.0E-05
10	1132	1135	1137				B2.6		6.2E-05
10	1459	1504	1507				B3.4		1.2E-04
10	1715	1718	1723				B1.6		7.1E-05
10	1815	1833	1842				B8.6		7.6E-04
10	1920	1924	1927				B3.5		1.2E-04
10	2000	2019	2028				C4.6		4.2E-03
10	2342	0003	0019				C5.5		7.7E-03
11	0138	0145	0159				B3.2		3.7E-04
11	0854	0909	0929	N22	E02	SF	C1.1	8072	2.0E-03
12	0549	0555	0601	N28	E80	SF	B3.6	8074	1.8E-04
12	0927	0932	0937	N25	E16	SF	B2.3	8073	1.1E-04
12	1513	1516	1531				B1.2		1.2E-04
12	1612	1616	1619				B1.3		5.0E-05
12	2146	2151	2154				B1.8		6.1E-05
13	0642	0647	0706				B2.1		2.7E-04
13	1831	1839	1851	N26	W03	SF	B3.3	8071	3.0E-04
14	0112	0132	0141	N26	W04	SF	C1.0	8071	7.3E-04
15	0827	0834	0843				B1.4		1.1E-04
15	1605	1611	1619				B1.1		8.9E-05
15	1903	1906	1909				B1.2		3.4E-05
16	0821	0826	0830				B1.4		6.4E-05
16	1343	1348	1358				B1.2		9.6E-05
17	0216	0224	0231				B1.8		1.3E-04
17	1829	1834	1838				B3.9		1.3E-04
18	1019	1023	1027				B1.1		4.6E-05
21	0428	0435	0446	N29	W34	SF	B3.6	8074	2.7E-04
23	1413	1434	1456				B3.1		7.2E-04
24	0626	0632	0642				B1.1		9.8E-05
24	1829	1834	1843	S23	E72	SF	B2.4		1.5E-04
24	2116	2151	2203				B3.5		7.4E-04
25	0149	0154	0158				B1.7		7.1E-05
25	0248	0251	0254				B1.2		3.9E-05
25	1518	1522	1525	N28	E69	SF	C1.2	8076	2.9E-04
25	1625	1715	1729	N27	E69	SF	C1.2	8076	5.4E-03
25	2226	2231	2237				B4.2		2.1E-04
26	0003	0007	0009				B2.6		7.8E-05
26	0051	0054	0056	N21	E57	SF	C4.0	8076	6.6E-04
26	0505	0508	0512				B2.2		8.3E-05
26	0526	0532	0535	N26	E55	SF	C4.5	8076	1.2E-03
26	1218	1222	1227				B2.3		1.2E-04
26	1958	2001	2005				B5.3		1.6E-04
26	2008	2013	2019	N29	E54	SF	B8.8	8076	4.5E-04
27	0150	0155	0158				B1.8		7.6E-05
27	0224	0227	0229				B1.7		4.3E-05
27	0308	0311	0313				B1.4		3.6E-05
27	1623	1630	1638				B1.9		1.5E-04
27	2119	2124	2129				B1.5		8.3E-05
28	0408	0411	0413				B4.3		1.2E-04
28	0715	0720	0728				B3.5		2.3E-04
28	1211	1215	1225				B6.2		4.1E-04
28	2028	2045	2100				B9.3		1.5E-03
29	0417	0428	0438				C4.0		3.3E-03
29	0611	0615	0619	N29	E25	SF	B3.1	8076	1.3E-04
29	0839	0844	0849				B5.2		2.7E-04
29	0918	0924	0930	N31	E24	SF	B6.7	8076	4.1E-04
29	1723	1730	1738	N30	E20	SF	C1.0	8076	6.2E-04
29	2256	2332	2354	N30	E17	SF	M1.4		2.0E-02
30	0548	0552	0555				B4.2		1.6E-04
30	0720	0725	0728	N24	E10	SF	B5.7	8076	2.1E-04
30	1035	1042	1059				B5.5		6.9E-04
30	1107	1125	1132	N23	E03	SF	C1.9	8076	2.2E-03
30	1511	1516	1520	N28	E05		B6.3	8076	2.8E-04
30	1709	1715	1720				B5.1		2.7E-04
31	1126	1131	1133	N29	W05	SF	C2.7	8076	5.0E-04
31	1904	1915	1920	N29	W10	SF	C1.2	8076	8.5E-04
31	2218	2223	2226	N30	W12	SF	C1.4	8076	4.8E-04
31	2237	2241	2247				B4.5		2.4E-04

*****EDITOR'S NOTE: Only GOES X-ray times now appear in this table, beginning with the July 1997 data. These data are from the NOAA Space Environment Center on-line archives (see <http://www.sec.noaa.gov>).

Preliminary GOES Satellite Daily X-Ray Background Sep 96 - Aug 97



Day	Sep 97	Oct	Nov	Dec	Jan 97	Feb	Mar	Apr	May	Jun	Jul	Aug
1	A8.5	A1.5	<A1.0	C1.3	<A1.0	<A1.0	A1.1	A4.6	A1.4	A2.2	<A1.0	<A1.0
2	A5.5	A1.3	<A1.0	C2.3	<A1.0	<A1.0	A1.2	B1.0	<A1.0	A4.0	<A1.0	A1.9
3	A4.7	A1.0	<A1.0	B2.4	<A1.0	A8.7	<A1.0	A7.9	A1.0	A4.2	<A1.0	A1.3
4	A5.5	A1.3	<A1.0	A3.7	<A1.0	A5.9	A1.0	A4.3	A1.8	A3.6	<A1.0	<A1.0
5	A3.2	<A1.0	<A1.0	<A1.0	<A1.0	A3.8	A2.3	A4.3	A7.9	A2.2	<A1.0	<A1.0
6	A2.7	<A1.0	<A1.0	<A1.0	A1.0	A1.2	A4.9	A3.8	A1.5	A2.5	<A1.0	A3.6
7	A2.1	<A1.0	<A1.0	<A1.0	<A1.0	A3.5	A3.4	B2.2	A1.1	A3.3	<A1.0	A3.0
8	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A2.7	A3.2	A4.1	A1.1	A3.6	<A1.0	A5.2
9	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A2.4	A2.5	A2.8	<A1.0	A1.5	A1.0	A8.8
10	<A1.0	<A1.0	<A1.0	A2.7	<A1.0	A2.3	A3.2	A4.1	<A1.0	A2.3	A1.0	B2.3
11	<A1.0	<A1.0	<A1.0	A3.6	A1.5	A1.1	A2.4	A2.0	A1.1	A2.2	<A1.0	B2.5
12	<A1.0	<A1.0	<A1.0	A6.7	A1.0	<A1.0	A1.4	A1.4	A2.2	<A1.0	A1.4	A9.5
13	<A1.0	<A1.0	<A1.0	A8.5	A1.0	<A1.0	A1.7	A3.2	A1.2	A1.0	<A1.0	A6.6
14	<A1.0	<A1.0	<A1.0	A8.5	<A1.0	<A1.0	A1.5	A6.9	A6.4	<A1.0	<A1.0	A7.2
15	<A1.0	<A1.0	<A1.0	A6.8	A1.4	<A1.0	A2.1	A4.5	A3.3	A1.2	<A1.0	A4.7
16	<A1.0	A1.1	A1.1	B1.2	A1.4	<A1.0	A1.6	A8.6	A1.3	<A1.0	A1.3	A5.7
17	A1.3	A1.1	A1.3	B1.0	<A1.0	<A1.0	A2.3	A5.5	A1.5	A1.1	<A1.0	A6.5
18	A1.2	<A1.0	<A1.0	B8.9	<A1.0	<A1.0	A1.9	A1.9	A2.5	<A1.0	<A1.0	A2.7
19	A1.7	A1.1	A1.0	A9.2	<A1.0	<A1.0	A1.0	<A1.0	A3.2	<A1.0	A1.0	A2.1
20	A1.5	A2.1	A1.0	A6.7	<A1.0	A2.5	A1.0	<A1.0	A2.7	<A1.0	<A1.0	A1.6
21	A1.7	A1.8	A1.0	A4.9	<A1.0	A1.2	<A1.0	<A1.0	B1.3	<A1.0	A5.5	A2.4
22	A1.8	A1.2	A3.3	A4.9	<A1.0	<A1.0	<A1.0	<A1.0	B1.5	<A1.0	A1.5	A5.5
23	A2.4	<A1.0	B1.0	A4.0	<A1.0	A1.2	<A1.0	<A1.0	A8.5	<A1.0	A2.6	A9.5
24	A1.9	<A1.0	B3.3	A4.3	<A1.0	A1.2	<A1.0	<A1.0	A7.8	<A1.0	A5.0	A6.6
25	A2.2	<A1.0	B5.5	A2.6	<A1.0	A1.0	<A1.0	<A1.0	A3.9	<A1.0	B1.2	A7.2
26	---	<A1.0	B2.2	A1.0	<A1.0	<A1.0	<A1.0	<A1.0	B1.1	A1.4	B1.3	B1.6
27	A1.5	A1.0	B8.2	<A1.0	<A1.0	<A1.0	A2.0	A1.8	B1.5	A2.1	A5.0	A8.7
28	A2.1	<A1.0	B3.3	<A1.0	<A1.0	<A1.0	A3.7	A1.4	A8.4	A1.4	A4.2	B1.4
29	A1.8	<A1.0	B4.5	<A1.0	<A1.0		A4.3	<A1.0	A4.8	A1.0	A5.6	B2.3
30	A1.6	<A1.0	B3.4	<A1.0	A1.2		A5.2	A1.3	A3.6	A5.7	A2.7	B8.6
31		<A1.0		<A1.0	<A1.0		A2.3		A2.0		A1.1	B1.6

ACTIVE PROMINENCES AND FILAMENTS

21
Aug 97

AUGUST 1997

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
01	ASR	0450E	0934D	N08	E90	08	7.9			9	9	E	SVTO		
01	ADF	0934E	1630	N27	W48	07	28.7	1	12	9	9	E	SVTO	8064	
01	ASR	1204E	1233D	N07	E90	08	8.2			9	9	E	RAMY		
01	AFS	1750E	2203	N19	E23	08	3.5		01	4	4	E	RAMY		
02	DSD	0020	0103	S22	E46	08	5.5		03	9	9	E	HOLL		Flare Associated
02	ADF	0900E	1731	N39	W57	07	28.8	2	19	7	7	E	SVTO	8064	
02	DSD	0930E	1200D	N06	E71	08	7.7		02	9	9	E	SVTO	8067	
02	DSD	1745E	2210	S22	E48	08	6.4		01	9	9	E	RAMY		
02	DSF	2210U	1031U	N09	E56	08	7.1	2	10	0	0	E	RAMY		
02	AFS	2308E	0103	S22	E44	08	6.3		02	9	9	E	HOLL		
02	DSD	2308E	0103	S22	E45	08	6.4		04	9	9	E	HOLL		
02	DSD	2342E	0454	S25	E47	08	6.6		03	9	9	E	LEAR		
03	AFS	0122E	0454	S25	E42	08	6.3		02	9	9	E	LEAR		
03	ADF	0440E	0840D	S22	E43	08	6.5	2	04	9	9	E	SVTO	8068	
03	AFS	0440E	1750	S22	E42	08	6.4		02	9	9	E	SVTO	8068	
03	DSD	0500E	0642D	S23	E43	08	6.5		02	9	9	E	SVTO	8068	
03	AFS	1035E	2239	S22	E42	08	6.7		01	9	9	E	RAMY	8068	
03	ADF	1500E	1635D	N06	E54	08	7.7	2	03	9	9	E	SVTO	8067	
03	AFS	1531E	2315	S21	E38	08	6.5		01	9	9	E	HOLL	8068	
03	DSD	2228E	2239	S17	E31	08	6.3		02	9	9	E	RAMY	8068	
03	DSD	2342E	0454	S25	E47	08	7.6		03	9	9	E	LEAR		
04	AFS	0501E	0846D	S21	E29	08	6.4		02	7	8	E	SVTO	8068	
04	APR	1109E	1330D	N25	W90	07	28.6	1		9	9	E	RAMY	8064	
04	ASR	1110E	1134D	N25	W90	07	28.6			9	9	E	RAMY	8064	
04	APR	1144E	1400D	N29	W90	07	28.5	1		9	9	E	SVTO	8064	
04	AFS	1405E	1744	S21	E25	08	6.5		02	5	5	E	RAMY	8068	
04	AFS	1539E	1745	S23	E23	08	6.4		02	7	7	E	SVTO	8068	
05	AFS	0025E	0940	S22	E14	08	6.1		02	6	5	E	LEAR	8068	
05	AFS	0505E	1358D	S19	E17	08	6.5		02	9	9	E	SVTO	8068	
05	AFS	1251E	2223	N20	W29	08	3.3		01	9	9	E	RAMY	8069	
05	AFS	1315E	1712	N20	W31	08	3.2		02	9	9	E	SVTO	8069	
05	ADF	1336E	1630D	N35	W64	07	31.4		08	9	9	E	RAMY	8066	
06	AFS	0005E	0945	N24	W33	08	3.4		02	9	9	E	LEAR	8069	
06	AFS	0140E	0945	S24	E50	08	9.9		02	9	9	E	LEAR	8070	
06	AFS	0528E	1703	N21	W41	08	3.1		03	9	9	E	SVTO	8069	
06	ADF	0530E	1156D	S20	E48	08	9.9	1	04	9	9	E	SVTO	8070	
06	AFS	0705E	1703	S20	E47	08	9.9		02	9	9	E	SVTO	8070	
06	ADF	0718E	0945	S24	E48	08	10.0		05	5	9	E	LEAR	8070	
06	AFS	1102E	2228	N21	W40	08	3.4		02	8	9	E	RAMY	8069	
06	AFS	1122E	1416D	S19	E14	08	7.5		01	9	9	E	RAMY		
06	AFS	1128E	2228	S19	E47	08	10.1		01	9	8	E	RAMY	8070	
06	AFS	1253E	2324	N18	W43	08	3.3		02	9	9	E	HOLL	8069	
06	AFS	1253E	2324	S19	E43	08	9.8		01	8	7	E	HOLL	8070	
06	AFS	1612E	1915D	S20	W03	08	6.4		02	3	4	E	RAMY	8068	
06	DSD	1710E	1823D	N23	W42	08	3.5		02	9	7	E	RAMY	8069	
06	DSD	1711E	1838D	S19	E41	08	9.8		02	6	7	E	RAMY	8070	
06	DSD	1908E	2020D	N22	W45	08	3.3		03	8	5	E	RAMY	8069	
07	AFS	0010E	0950	N25	W47	08	3.4		02	8	9	E	LEAR	8069	
07	AFS	0010E	0950	S21	E34	08	9.6		02	9	9	E	LEAR	8070	
07	AFS	0615E	1654	N18	W54	08	3.1		02	9	9	E	SVTO	8069	
07	AFS	0615E	1654	N20	W54	08	3.1		02	9	9	E	SVTO	8069	
07	AFS	0623E	1654	S19	E34	08	9.9		02	9	9	E	SVTO	8070	
07	AFS	0700E	0950	N24	W68	08	2.0		02	9	9	E	LEAR	8069	
07	AFS	1037E	2239	N20	W53	08	3.4		02	6	7	E	RAMY	8069	
07	DSD	1037E	2239	N20	W55	08	3.2		03	9	9	E	RAMY	8069	
07	AFS	1045E	2239	S18	E32	08	9.9		02	9	9	E	RAMY	8070	
07	AFS	1120E	2158	N19	W69	08	2.2		01	9	9	E	RAMY	8069	
07	AFS	1128E	1815D	S19	E19	08	8.9		02	9	9	E	RAMY	8070	
07	DSD	1135E	1347D	S20	E16	08	8.7		02	9	9	E	RAMY	8070	
07	AFS	1239E	2210	N19	W55	08	3.3		02	9	9	E	HOLL	8069	
07	AFS	1239E	2210	S18	E31	08	9.9		01	7	7	E	HOLL	8070	
07	AFS	1310E	2158	N25	E68	08	12.8		01	4	4	E	RAMY	8071	
07	DSD	2345E	0700D	N24	W63	08	3.1		02	9	9	E	LEAR	8069	
07	AFS	2345E	0950	S21	E21	08	9.6		01	9	9	E	LEAR	8070	

22
Aug 97

ACTIVE PROMINENCES AND FILAMENTS

AUGUST 1997

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
08	AFS	0615E	1712	N19	W19	08 6.8		02	9	9	E	SVTO	8070	
08	AFS	0615E	1712	N19	W68	08 3.1		02	9	9	E	SVTO	8069	
08	AFS	0615E	1712	S19	E19	08 9.7		02	9	9	E	SVTO	8070	
08	AFS	1120E	2158	N19	W69	08 3.2		01	9	9	E	RAMY	8069	
08	AFS	1128E	1815D	S19	E19	08 9.9		02	9	9	E	RAMY	8070	
08	DSD	1135E	1347D	S20	E16	08 9.7		02	9	9	E	RAMY	8070	
08	AFS	1150E	1712	N25	E68	08 13.8		02	9	9	E	SVTO	8071	
08	AFS	1210E	1712	N20	W51	08 4.6		01	9	9	E	SVTO		
08	AFS	1310E	2158	N25	E68	08 13.8		01	4	4	E	RAMY	8071	
08	DSD	1354E	1830D	N18	W69	08 3.3		02	9	9	E	HOLL	8069	
08	AFS	1419	2155	S18	E15	08 9.7		03	4	3	E	HOLL	8070	
08	DSF	1658U	0601U	N27	E38	08 11.7		09	0	0	E	SVTO		
08	DSD	1840E	2155	N18	W73	08 3.2		03	8	7	E	HOLL	8069	
08	DSD	1930E	2155	S30	E64	08 13.8		01	9	9	E	HOLL	8071	
09	ASR	0450E	1628	N19	W78	08 3.2			9	9	E	SVTO	8069	
09	AFS	0550E	1040D	N21	E32	08 11.7		02	9	9	E	SVTO	8072	
09	APR	0850E	1220D	N22	W90	08 2.4	1		9	9	E	SVTO	8069	
09	ADF	0850E	1628	N16	W83	08 3.1	1	03	9	9	E	SVTO	8069	
09	AFS	0920E	1628	N25	E56	08 13.7		02	9	9	E	SVTO	8071	
09	DSF	0950U	0014U	S47	W32	08 6.7	1	19	0	0	E	LEAR		
09	BSD	1035E	1716D	N19	W75	08 3.7		02	9	9	E	RAMY	8069	
09	AFS	1047E	1724	S18	E05	08 9.8		02	7	8	E	RAMY	8070	
09	ASR	1050E	1724	N20	W90	08 2.6			9	9	E	RAMY	8069	
09	ADF	1145E	1628	S22	W46	08 5.9	1	04	7	7	E	SVTO	8068	
09	ASR	1241E	0122	N18	W90	08 2.7			9	9	E	HOLL	8069	
09	AFS	1241E	0122	N23	E28	08 11.7		01	9	9	E	HOLL	8072	
09	DSF	1534U	0452U	S49	W37	08 6.5		20	0	0	E	SVTO		
09	DSF	1724U	1037U	S47	W35	08 6.8	2	14	0	0	E	RAMY		
10	ASR	0014E	0921	N26	W86	08 3.3			9	9	E	LEAR	8069	
10	ASR	0502E	1735	N19	W90	08 3.3			9	9	E	SVTO	8069	
10	AFS	0507E	1500D	N25	E45	08 13.7		02	9	9	E	SVTO	8071	
10	DSD	0822E	1022D	N25	E20	08 11.9		02	9	9	E	SVTO	8072	
10	ASR	1037E	2114	N21	W90	08 3.5			9	9	E	RAMY	8069	
10	DSD	1046E	1416D	N25	E25	08 12.4		02	9	9	E	RAMY	8071	
10	AFS	1050E	1450D	N25	E41	08 13.6		01	9	9	E	RAMY	8071	
10	AFS	1051E	2239	S20	W22	08 8.8		01	9	9	E	RAMY	8070	
10	AFS	1112E	2239	N25	E27	08 12.5		01	9	9	E	RAMY	8071	
10	ADF	1305E	1942D	S23	W10	08 9.8	1	07	7	7	E	RAMY	8070	
10	ASR	1335E	0138	N90	W29	08 7.8			5	5	E	HOLL	8069	
10	ASR	1536E	2239	N27	E90	08 17.7			6	6	E	RAMY	8074	
10	ASR	1623E	1724D	N34	E90	08 17.8			7	9	E	RAMY		
10	ADF	2044E	2239	S23	W27	08 8.8		06	9	9	E	RAMY	8070	
11	AFS	0436E	0937	N22	E32	08 13.6		02	9	9	E	LEAR	8071	
11	ADF	0535E	1500D	N26	E32	08 13.7	1	04	9	9	E	SVTO	8071	
11	AFS	0535E	1740	N25	E31	08 13.6		02	9	9	E	SVTO	8071	
11	AFS	0630E	1740	S19	W20	08 9.7		02	9	9	E	SVTO	8070	
11	AFS	0640E	1158D	N26	E38	08 14.2		01	7	7	E	SVTO	8071	
11	ASR	0900E	1050D	N23	E90	08 18.3			7	8	E	SVTO	8074	
11	AFS	0910E	1740	N22	E02	08 11.5		02	9	9	E	SVTO	8072	
11	DSD	1046E	1416D	N25	E25	08 13.4		02	9	9	E	RAMY	8071	
11	AFS	1051E	2239	S20	W22	08 9.8		01	9	9	E	RAMY	8970	
11	AFS	1112E	2239	N25	E27	08 13.5		01	9	9	E	RAMY	8071	
11	AFS	1242E	0056	N25	E26	08 13.5		01	5	4	E	HOLL	8071	
11	AFS	1242E	0056	S20	W21	08 9.9		01	7	8	E	HOLL	8070	
11	ADF	1415	0056	S21	W22	08 9.9	1	05	9	7	E	HOLL	8070	
11	ASR	1536E	2239	N27	E90	08 18.7			6	6	E	RAMY	8074	
11	ASR	1623E	1724D	N34	E90	08 18.8			7	9	E	RAMY		
11	ASR	1940	0056	N27	E90	08 18.8			4	7	E	HOLL	8074	
11	ASR	2005E	0056	N34	E90	08 19.0			6	7	E	HOLL		
11	ADF	2044E	2239	S23	W27	08 9.8	1	06	9	9	E	RAMY	8070	
11	ADF	2146	0056	N29	E23	08 13.7	1	04	9	9	E	HOLL	8071	
11	AFS	2340E	0940	N23	E22	08 13.7		02	7	9	E	LEAR	8071	
12	ASR	0155E	0600D	N21	E90	08 19.0	1		5	4	E	LEAR	8074	
12	AFS	0512E	1730	S20	W33	08 9.7		01	8	7	E	SVTO	8070	
12	AFS	0542E	1730	N26	E16	08 13.5		02	9	9	E	SVTO	8071	

ACTIVE PROMINENCES AND FILAMENTS

23
Aug 97

AUGUST 1997

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
12	AFS	0928E	1730	N25	E17	08 13.7		01	9	9	E	SVTO	8071	
12	AFS	1044E	2124	N25	E14	08 13.5		01	9	9	E	RAMY	8071	
12	AFS	1129E	2124	S19	W34	08 9.9		01	9	9	E	RAMY	8070	
12	ASR	1156E	1610D	N28	E90	08 19.5			9	9	E	RAMY	8074	
12	AFS	1242E	2221	N25	E13	08 13.5		01	8	9	E	HOLL	8071	
12	ADF	1242E	2221	S23	W31	08 10.1	1	06	6	6	E	HOLL	8070	
12	ADF	1352E	2124	S24	W37	08 9.7	1	11	7	8	E	RAMY	8070	
12	ADF	1417E	1730	S25	W40	08 9.5	1	10	7	8	E	SVTO	8070	
12	AFS	1703E	2221	S21	W39	08 9.7		02	9	9	E	HOLL	8070	
12	ASR	2004E	2124	N25	E90	08 19.8			9	9	E	RAMY		
12	ADF	2004E	2124	N35	E16	08 14.1	1	11	5	9	E	RAMY	8071	
12	AFS	2340E	0940	N23	E22	08 14.7		02	7	9	E	LEAR	8071	
13	ADF	0115E	0940	N25	E12	08 14.0	1	05	7	4	E	LEAR	8071	
13	AFS	0115E	0940	S17	W48	08 9.4		02	9	9	E	LEAR	8070	
13	ADF	0134E	0940	N24	E64	08 18.0	1	02	9	9	E	LEAR	8074	
13	AFS	0511E	1715	S21	W46	08 9.7		03	9	9	E	SVTO	8070	
13	AFS	0548E	1031D	N25	E13	08 14.2		02	9	9	E	SVTO		
13	AFS	0600E	0940	N25	E15	08 14.4		04	5	5	E	LEAR	8071	
13	ADF	0610E	1715	N24	E04	08 13.6	1	08	9	9	E	SVTO	8071	
13	ADF	0610E	1715	N28	E06	08 13.7	1	05	9	9	E	SVTO	8071	
13	AFS	0901E	1715	S19	W13	08 12.4		01	6	5	E	SVTO		
13	AFS	0905E	1035D	N17	E60	08 17.9		03	9	9	E	SVTO	8073	
13	ADF	0910E	1531D	N30	E60	08 18.1	1	04	7	8	E	SVTO	8074	
13	AFS	0920E	1715	S22	W51	08 9.5		03	9	9	E	SVTO	8070	
13	DSD	1035E	1436D	S19	W51	08 9.5		02	9	9	E	RAMY	8070	
13	AFS	1035E	2235	S19	W50	08 9.6		02	9	9	E	RAMY	8070	
13	DSD	1222E	1348D	S21	W56	08 9.2		02	9	9	E	SVTO	8070	
13	DSD	1232E	1435D	N26	E56	08 17.9		03	9	9	E	RAMY	8074	
13	AFS	1425E	0055	N25	W01	08 13.5		01	6	6	E	HOLL	8071	
13	DSD	1435E	1544D	N24	E57	08 18.0		01	9	9	E	RAMY	8074	
13	AFS	1450E	0055	S21	W50	08 9.8		01	9	7	E	HOLL	8070	
13	ADF	1450E	1902D	N24	E00	08 13.6	1	07	7	5	E	HOLL	8071	
13	AFS	1615E	2235	N15	E56	08 17.9		01	9	9	E	RAMY	8073	
13	DSD	1655E	2134D	N15	E55	08 17.9		04	9	9	E	RAMY	8073	
13	AFS	1835E	2115D	N26	W03	08 13.5		01	5	5	E	RAMY	8071	
14	ADF	0125E	0949	N12	E51	08 17.9	1	05	9	9	E	LEAR	8073	
14	ADF	0200E	0949	N25	W04	08 13.8	1	07	9	9	E	LEAR	8071	
14	DSD	0549E	0813D	N22	E31	08 16.6		02	9	9	E	LEAR		
14	AFS	0640E	1720	S21	W63	08 9.4		02	9	9	E	SVTO	8070	
14	ADF	0720E	1230D	N16	E46	08 17.8	1	09	9	9	E	SVTO	8073	
14	ADF	0725E	1720	N33	W11	08 13.4	1	15	9	9	E	SVTO	8071	
14	ADF	0730E	1130D	N23	W01	08 14.2	2	04	9	9	E	SVTO		
14	AFS	1026E	2205	S20	W57	08 10.1		01	4	4	E	RAMY	8070	
14	ADF	1030E	1154D	N26	W11	08 13.6	1	08	9	9	E	RAMY	8071	
14	DSD	1035E	1102D	N23	W15	08 13.3		01	9	9	E	SVTO	8071	
14	DSD	1040E	2205	N25	W14	08 13.3		01	9	9	E	RAMY	8071	
14	ADF	1536E	2331	N14	W27	08 12.6		02	7	8	E	HOLL	8071	
15	AFS	0025E	0918	S15	W72	08 9.6		03	9	9	E	LEAR	8070	
15	ADF	0035E	0918	N12	E40	08 18.0	1	11	7	4	E	LEAR	8073	
15	ADF	0035E	0918	N22	W13	08 14.0	1	14	9	9	E	LEAR	8071	
15	AFS	0530E	1728	S22	W71	08 9.8		05	9	9	E	SVTO	8070	
15	AFS	0540E	0918	N23	E40	08 18.3		02	8	5	E	LEAR	8074	
15	AFS	0930E	1030D	N28	E53	08 19.5		01	9	9	E	SVTO	8075	
15	ASR	1311E	1707D	S23	E87	08 22.2			9	9	E	SVTO	8070	
15	ASR	1311E	1707D	S23	E90	08 22.5			9	9	E	SVTO	8070	
15	ADF	1355E	0127	N24	W26	08 13.6	1	03	9	9	E	HOLL	8071	
15	ADF	2050	0127	N14	E29	08 18.0	1	09	9	9	E	HOLL	8073	
16	AFS	0010E	0950	N23	E32	08 18.5		04	6	5	E	LEAR	8074	
16	ADF	0010E	0950	N27	W31	08 13.6		07	8	6	E	LEAR	8071	
16	ADF	0030E	0950	N05	E35	08 18.6		08	7	5	E	LEAR	8073	
16	DSD	0338	0450	N26	E49	08 19.9		03	0	0	E	LEAR	8075	
16	DSF	0429U	0512	N13	E27	08 18.2	2	05	0	0	E	LEAR	8073	
16	ADF	0520E	0830D	N21	E17	08 17.5	1	03	9	9	E	SVTO	8073	
16	ADF	1010E	1715	N32	W40	08 13.2	2	15	9	9	E	SVTO	8071	
16	AFS	1030E	1315D	N31	W26	08 14.4		01	9	9	E	SVTO		
16	ADF	1215E	1926	S25	W39	08 13.5	1	07	9	9	E	RAMY	8071	

24
Aug 97

ACTIVE PROMINENCES AND FILAMENTS

AUGUST 1997

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
16	AFS	1731E	1926	S04	W11	08	15.9		01	9	9	E	RAMY		
16	DSD	1834E	1926	N29	E40	08	19.9		01	9	9	E	RAMY	8075	
17	AFS	0035E	0800D	N25	E19	08	18.5		03	7	6	E	LEAR	8074	
17	ADF	1356E	1640D	N26	W53	08	13.5	1	05	8	8	E	RAMY	8071	
17	ADF	1410E	1700	N24	W55	08	13.3	1	11	7	7	E	SVTO	8071	
17	ASR	1555E	1700	S31	W86	08	10.9			9	9	E	SVTO	8070	
17	DSF	1647U	1121U	S10	W15	08	16.6	2	04	0	0	E	RAMY		
18	ADF	0430E	0951	N29	W60	08	13.5	1	05	4	6	E	LEAR	8071	
18	ASR	0518	0951	N28	W90	08	11.2			7	6	E	LEAR	8072	
18	AFS	0735E	1135D	S09	W19	08	16.9		01	9	9	E	SVTO		
18	AFS	0935E	1215D	N14	W09	08	17.7		01	9	9	E	SVTO	8073	
18	AFS	1236E	1725D	S08	W23	08	16.8		01	9	9	E	RAMY		
18	DSF	2135U	1212U	N24	W72	08	13.3	2	05	0	0	E	RAMY	8071	
19	ADF	1232E	1422	N26	W16	08	18.3	1	05	9	9	E	SVTO	8074	
19	ADF	1241E	2002	N28	W14	08	18.4	1	03	9	9	E	RAMY	8024	
19	DSD	1639E	1918D	N20	W21	08	18.1		02	9	9	E	RAMY	8073	
19	ASR	1920	2310D	N90	E36	08	23.2			0	0	E	HOLL		
20	DSD	1432E	1728D	N21	W38	08	17.7		02	9	9	E	RAMY	8073	
21	ADF	0433	0540D	N33	W30	08	18.8	1	05	9	9	E	LEAR	8074	
22	ADF	0132E	0940D	N35	W19	08	20.5	1	10	9	9	E	LEAR	8075	
22	AFS	0140E	0530D	N30	W47	08	18.4		02	9	9	E	LEAR	8074	
22	ADF	0330E	0530D	N38	W14	08	21.0		09	7	9	E	LEAR	8074	
22	ASR	1057E	1234D	N56	W90	08	14.6			9	9	E	RAMY		
22	ADF	1110E	1505	N35	W47	08	18.7	1	09	9	9	E	RAMY	8074	
23	AFS	0140E	0530D	N30	W47	08	19.4		02	9	9	E	LEAR	8074	
23	ADF	0330E	0530D	N38	W14	08	22.0		09	7	9	E	LEAR	8074	
23	AFS	0639E	1538D	N14	W75	08	17.6		02	9	9	E	SVTO	8073	
23	ADF	0700E	0945	N35	W45	08	19.7		03	8	8	E	LEAR	8075	
24	ADF	0150E	0750D	N35	W56	08	19.6	1	04	9	9	E	LEAR	8075	
24	AFS	0521E	0625D	N25	W56	08	19.9		01	9	9	E	SVTO	8075	
24	AFS	0530E	1132D	N17	E79	08	30.2		02	9	9	E	SVTO		
24	AFS	0716E	0837D	N01	E01	08	24.4		01	9	9	E	SVTO		
24	ADF	0812E	1500D	N27	W60	08	19.7	1	01	9	9	E	SVTO	8075	
24	ADF	0924E	1018D	N40	E12	08	25.4	1	01	9	9	E	SVTO		
24	ADF	0930E	1014D	N03	E03	08	24.6	1	02	9	9	E	SVTO		
24	ASR	0940E	1139D	N13	W89	08	17.7			9	9	E	SVTO		
24	ASR	1054E	1411D	S23	E89	08	31.3			9	9	E	RAMY		
24	AFS	1118E	1630	S23	E77	08	30.4		01	9	9	E	SVTO		
24	ASR	1119E	1450D	S23	E88	08	31.2			9	9	E	SVTO		
24	ASR	1137E	1316D	N14	W90	08	17.7			8	9	E	RAMY	8073	
25	AFS	0750E	1700	S22	E67	08	30.5		02	7	8	E	SVTO	8077	
25	AFS	1130E	2209	N20	E63	08	30.3		01	5	5	E	RAMY	8076	
25	AFS	1410E	2209	S24	E64	08	30.5		01	5	5	E	RAMY	8077	
25	BSD	1412E	1502D	S23	E64	08	30.5		02	9	9	E	RAMY	8077	
25	DSD	1510	1548	S22	E60	08	30.2		01	0	0	E	HOLL	8077	
25	DSD	1803E	2209	N25	E67	08	30.9		02	9	9	E	RAMY	8076	
25	AFS	1915E	0129	N20	E60	08	30.4		02	6	7	E	HOLL	8076	
26	DSD	0450E	1025D	N31	E63	08	31.2		03	9	9	E	SVTO	8076	
26	AFS	0518E	1632	S22	E55	08	30.4		02	8	8	E	SVTO	8077	
26	ADF	0910E	1632	N25	E55	08	30.6	1	07	9	9	E	SVTO	8076	
26	AFS	1040E	1107	N19	E51	08	30.3		01	6	6	E	RAMY	8076	
26	AFS	1214E	1632	N29	E55	08	30.8		02	9	9	E	SVTO	8076	
26	AFS	1254E	0130	N20	E49	08	30.3		02	9	9	E	HOLL	8076	
26	DSD	1625E	2345D	N31	E57	08	31.2		05	9	3	E	HOLL	8076	
26	ADF	1900E	2345D	N32	E50	08	30.7	1	05	9	9	E	HOLL	8076	
26	DSD	2013	2320D	N29	E51	08	30.8		04	9	9	E	HOLL	8076	Flare Associated
27	AFS	0530E	0909	N28	E44	08	30.7		03	5	8	E	LEAR		
27	AFS	1154E	1800	N20	E37	08	30.3		01	7	6	E	RAMY	8078	
27	ADF	1527E	1756D	N12	W40	08	24.6	1	03	3	3	E	RAMY		

ACTIVE PROMINENCES AND FILAMENTS

25
Aug 97

AUGUST 1997

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
27	ADF	1538E	0128	N28	E45	08 31.2		04	9	9	E	HOLL	8076	
27	DSD	1602	1624	N16	E30	08 29.9		04	4	5	E	HOLL	8078	
27	DSD	1658E	1800	N27	E39	08 30.7		02	9	9	E	RAMY	8076	
27	AFS	1730E	0128	N27	E40	08 30.8		02	9	9	E	HOLL	8076	
27	DSD	1746	0128	N30	E42	08 31.0		04	9	9	E	HOLL	8076	
28	AFS	0517E	1650	N27	E35	08 30.9		02	9	9	E	SVTO	8076	
28	ADF	0520E	1650	N30	E39	08 31.3	1	07	9	9	E	SVTO	8076	
28	AFS	0529E	1650	N30	E37	08 31.1		03	9	9	E	SVTO	8076	
28	DSD	0950E	1650	N30	E33	08 31.0		06	9	9	E	SVTO	8076	
28	AFS	1037E	1906	N26	E32	08 30.9		02	7	6	E	RAMY	8076	
28	AFS	1037E	1906	N29	E34	08 31.1		03	5	6	E	RAMY	8076	
28	DSD	1310E	1906	N27	E33	08 31.1		01	9	9	E	RAMY	8076	
28	ADF	1315E	0125	N26	E29	08 30.8		04	7	9	E	HOLL	8076	
28	AFS	1315E	0125	N28	E30	08 30.9		01	9	9	E	HOLL	8076	
29	AFS	0512E	1417	N28	E20	08 30.8		03	9	9	E	SVTO	8076	
29	ADF	0514E	1417	N31	E27	08 31.3	1	06	9	9	E	SVTO	8076	
29	ADF	0515E	1417	N30	E25	08 31.2	1	02	9	9	E	SVTO	8076	
29	AFS	1029E	2112	N27	E18	08 30.8		03	9	9	E	RAMY	8076	
29	ADF	1238E	1654D	N26	E19	08 31.0	1	05	9	9	E	RAMY	8076	
29	ADF	1303E	0124	N26	E17	08 30.9	1	06	7	7	E	HOLL	8076	
29	AFS	1303E	0124	N27	E15	08 30.7		02	8	9	E	HOLL	8076	
29	ADF	1303E	0124	N31	E22	08 31.3	1	04	7	8	E	HOLL	8076	
29	AFS	1505E	0124	N18	W13	08 28.6		01	9	9	E	HOLL		
29	AFS	1530E	2112	N18	W12	08 28.7		01	7	7	E	RAMY		
29	ASR	1550E	0124	N37	E90	09 5.9			7	7	E	HOLL		
29	ASR	1730E	2112	N35	E90	09 5.9			6	6	E	RAMY		
29	AFS	2005E	2112	N36	E28	09 1.1		01	4	4	E	RAMY		
30	AFS	0500E	1710	N18	W20	08 28.7		02	9	9	E	SVTO	8080	
30	ASR	0501E	0630D	N35	E90	09 6.4			7	7	E	SVTO		
30	AFS	0756E	0951	N19	W22	08 28.6		01	8	8	E	LEAR		
30	ADF	0758E	0951	N28	E11	08 31.2	1	03	7	9	E	LEAR	8076	
30	ADF	0930E	1710	N10	E30	09 1.6	1	03	9	9	E	SVTO	8076	
30	AFS	1340E	2320	N19	W25	08 28.7		01	5	4	E	HOLL	8080	
30	ADF	1530E	2320	N24	E01	08 30.7	1	05	7	8	E	HOLL	8076	
31	ASR	0130E	0940	N29	E83	09 6.6			7	6	E	LEAR		
31	AFS	0558E	1650	N28	W07	08 30.7		02	9	9	E	SVTO	8076	
31	DSD	1006E	1650	N30	W02	08 31.3		04	9	9	E	SVTO	8076	
31	AFS	1041E	1939	N28	W09	08 30.7		01	6	5	E	RAMY	8076	
31	AFS	1101E	1939	N19	W37	08 28.6		01	4	3	E	RAMY	8080	
31	DSD	1135E	1229D	N25	W16	08 30.2		01	9	9	E	RAMY	8076	
31	DSD	1247E	1345D	N33	W06	08 31.0		03	9	9	E	RAMY	8076	
31	AFS	1350E	0033	N19	W38	08 28.7		01	4	5	E	HOLL	8080	
31	DSD	1400E	1430D	N28	W15	08 30.4		03	7	5	E	RAMY	8076	
31	AFS	1400E	1650	N17	W38	08 28.7		01	9	9	E	SVTO	8080	
31	AFS	1410E	0033	N27	W12	08 30.6		01	8	9	E	HOLL	8076	
31	ADF	1415E	0033	N25	W09	08 30.9	1	07	9	9	E	HOLL	8076	
31	BSD	1610E	1620D	N30	W15	08 30.5		02	0	0	E	HOLL	8076	
31	DSD	1630E	0033	N26	W15	08 30.5		02	9	9	E	HOLL	8076	
31	DSD	1655E	1939	N27	W12	08 30.8		01	9	9	E	RAMY	8076	

1997 SOLAR IRRADIANCE INSTANTANEOUS VALUES
EARTH RADIATION BUDGET EXPERIMENT

NASA LANGLEY RESEARCH CENTER

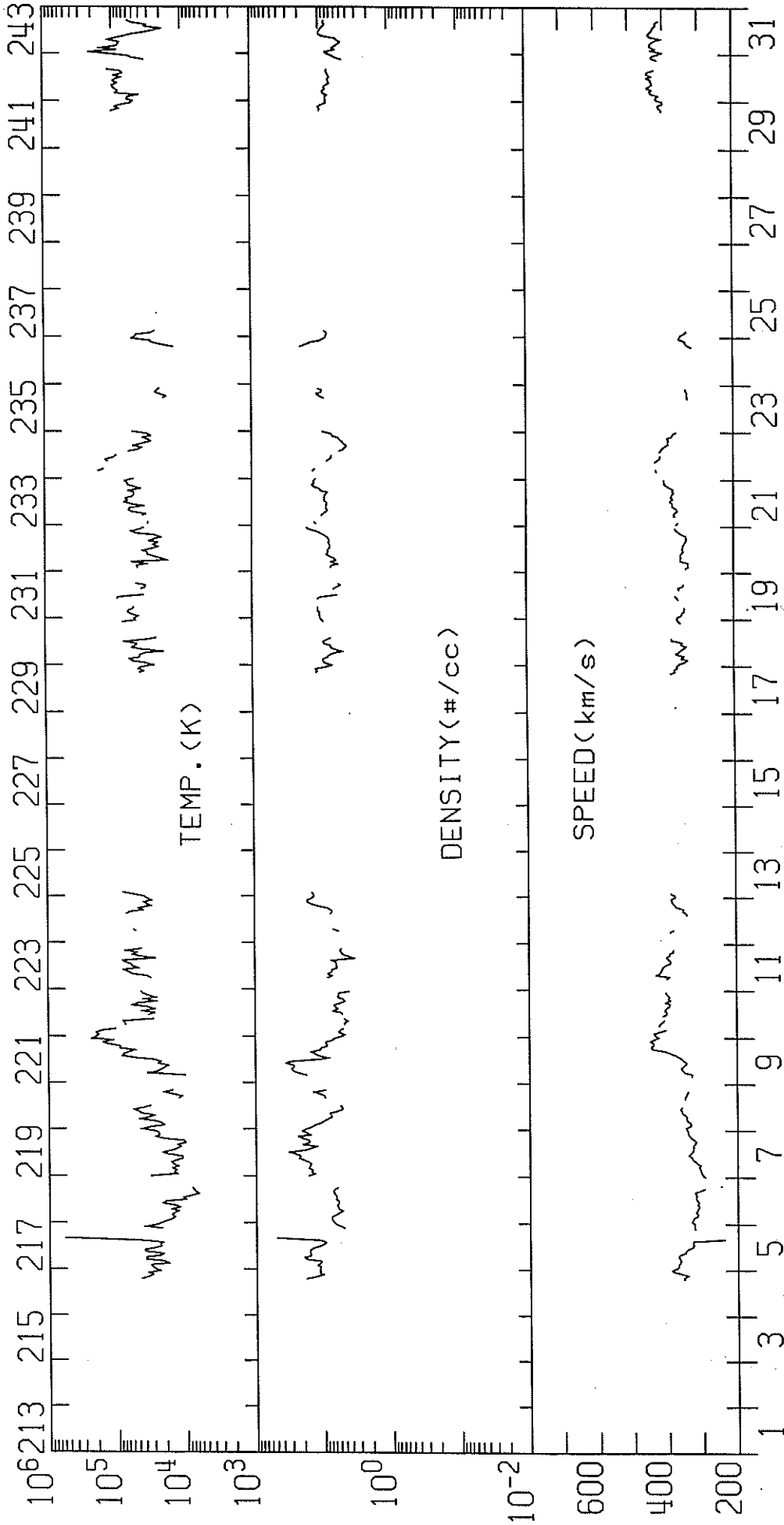
WATTS/m²

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1365.1											
2						1364.8	1365.1					
3												
4	1365.2						1365.7					
5						1364.7						
6												
7					1365.4							
8								1365.4		1365.3		
9				1365.0								
10								1365.2	1363.8			
11								1365.2				
12		1364.4	1365.7					1365.0				
13								1365.8				
14		1365.7						1365.4	1364.9			
15	1364.6											
16							1365.1	1365.4				
17	1365.1							1365.3	1364.9			
18			1365.2			1365.0		1365.7				
19					1364.7			1365.3				
20			1364.7					1365.3				
21					1364.9			1365.2				
22				1364.5				1365.3				
23								1365.2				
24				1365.1				1365.1	1365.1			
25									1365.4			
26		1365.1	1364.7									
27								1365.3				
28												
29												
30	1364.9						1365.1					
31												

* Solar Irradiance = Instantaneous values are cosine-corrected for any off-axis positioning of the sun in the telescope aperture.
All values are normalized to 1 astronomical unit.

IMP 8 SOLAR WIND PLASMA
AUGUST 1997

MIT/CSR IMP 8 PLASMA PARAMETERS



AUG 1997

AUG 1997

IMP 8

MIT

ONE-HOUR AVERAGES

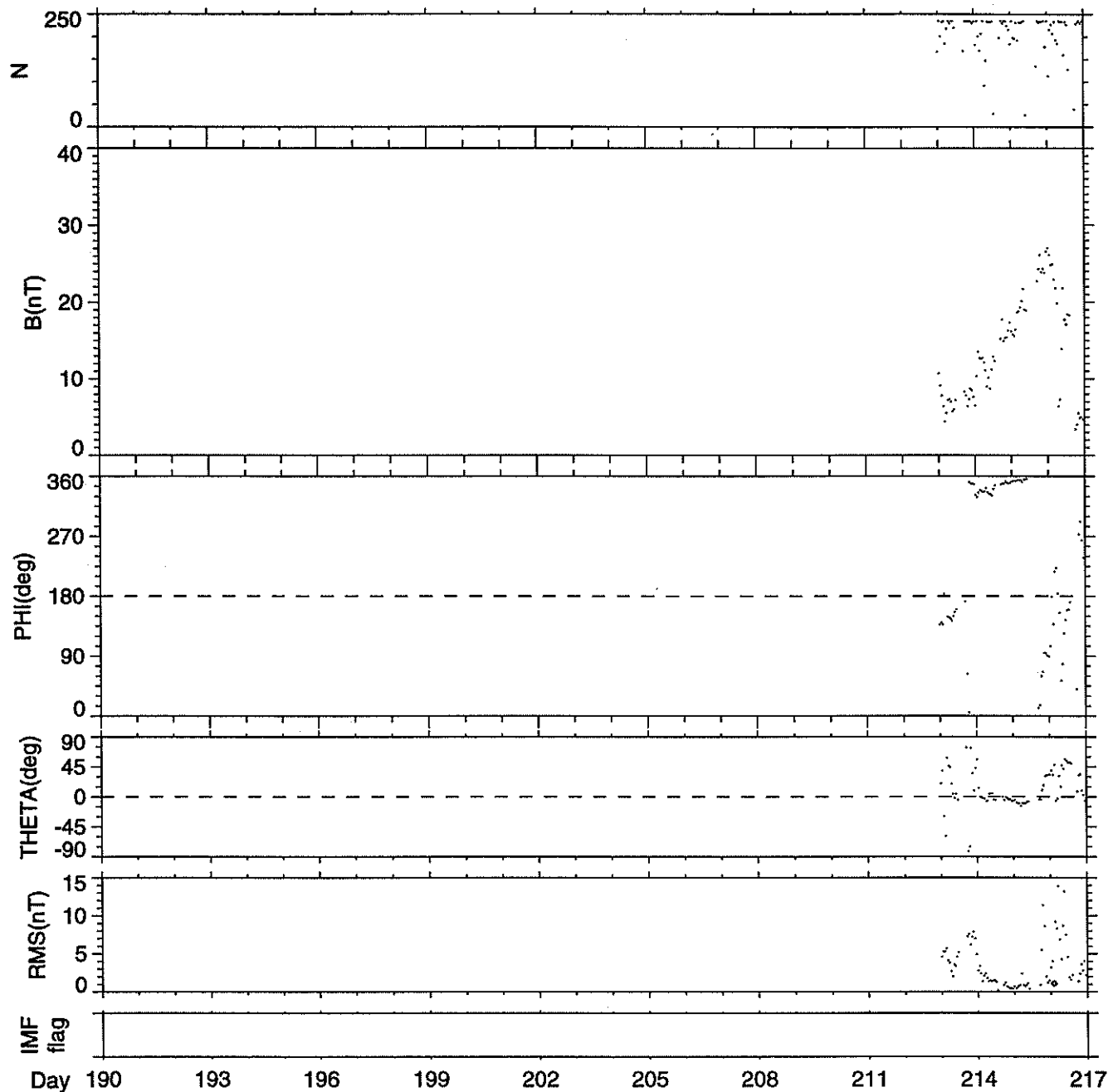
27
Aug 97

IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages

(c) DOY 213 - 217

August 1 1997 - August 5 1997



Generation Date : Fri Nov 21 14:03:52 1997

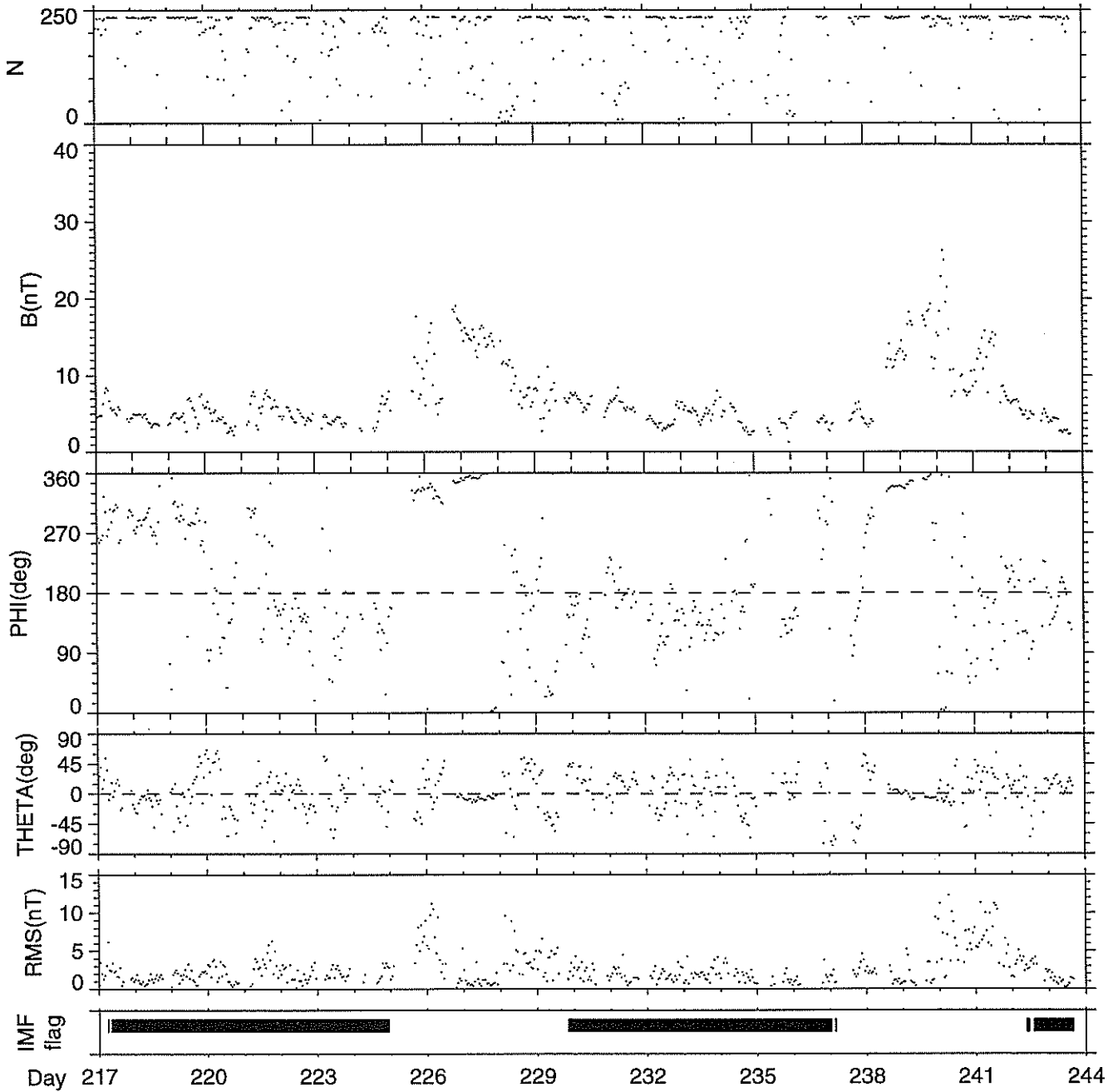
NOTE: The IMF "flag" (black boxes at the bottom of the plots) indicates where the interplanetary magnetic field regions are according to a dynamic model of the location of the bow shock. At all other times IMP-8 is in the magnetosphere.

IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages

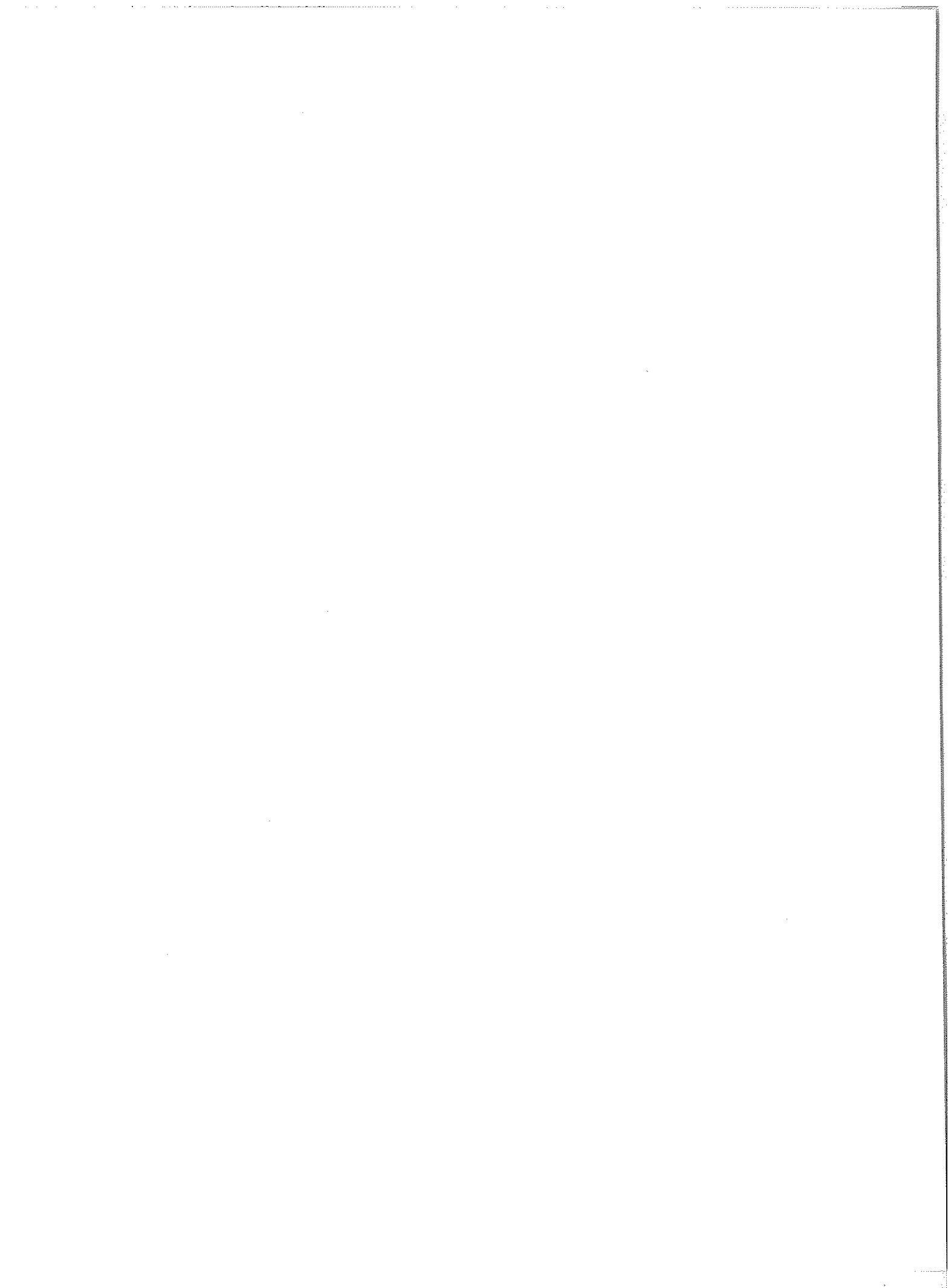
(c) DOY 217 - 243

August 5 1997 - August 31 1997



Generation Date : Fri Nov 21 14:03:54 1997

NOTE: The IMF "flag" (black boxes at the bottom of the plots) indicates where the interplanetary magnetic field regions are according to a dynamic model of the location of the bow shock. At all other times IMP-8 is in the magnetosphere.



CONTENTS

Comprehensive Reports

Number 642 Part II

MISCELLANEOUS DATA

Page

TOTAL SOLAR IRRADIANCE from UARS ACRIM II October 1991-December 1997
Upper Atmosphere Research Satellite (UARS) Active Cavity Radiometer
Irradiance Monitor Experiment (ACRIM II)

Descriptive Text and Graph	32-33
Tables for October 1991-December 1997	34-40

**Total Solar Irradiance (TSI) Results from the
Upper Atmosphere Research Satellite (UARS)
Active Cavity Radiometer Irradiance Monitor II Experiment
(ACRIM II)**

Dr. Richard C. Willson
Center for Climate Systems Research
Columbia University
2845 Windfall Ave., Altadena, CA, 91001
Phone: 818-398-9803 Fax: 818-398-6334
E-mail: acrim@primenet.com
ACRIM Web Homepage: <http://www.acrim.org>

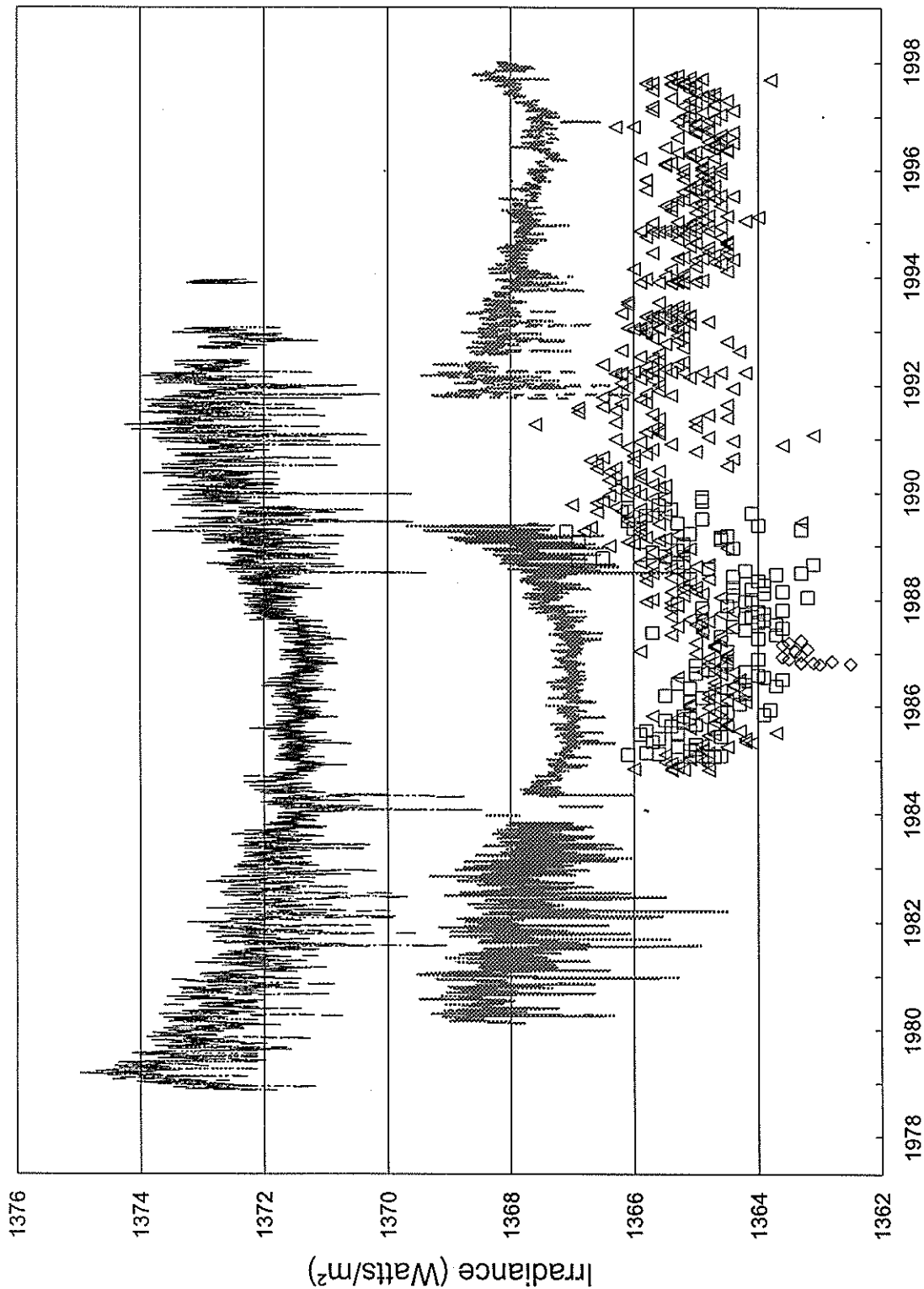
The second Active Cavity Radiometer Irradiance Monitor experiment (ACRIM II) was launched in September 1991 as part of the science payload of the Upper Atmosphere Research Satellite (UARS). The UARS/ACRIM II results are shown in Figure 1. The variations on solar rotational and active region time scales are clearly seen. The large, short-term decreases in the total solar irradiance (TSI) are caused by sunspots in magnetically active regions as they rotate through our view from Earth. The peaks of TSI preceding and following these sunspot 'dips' are caused by the faculae of solar active regions whose larger areal extent causes them to be seen first as the region rotates onto our side of the sun and last as they rotate over the opposite solar limb. The downward trend through the 1991-1997 period is similar in slope and amplitude to that observed by ACRIM I during the declining activity phase of solar cycle 21. From the peak of solar cycle 21 to its minimum the TSI decreased by about .08%. The rapid upturn in TSI following the minimum during 1996-97 is similar to the upturn from the solar cycle 21 minimum observed by ACRIM I.

The results of the ACRIM I and ACRIM II Active Cavity Radiometer Irradiance Monitor experiments have been related with high precision using overlapping observations of the Nimbus7/ERB. The composite ACRIM results resolve a multi-decadal, upward trend in total solar irradiance of 0.036 (+/- < 0.001) percent per decade between the minima of solar cycles 21 and 22. The trend follows the rising solar activity levels of recent decades and, if sustained, would add a significant solar forcing component to the 'greenhouse gas' forcing that is raising global temperatures and altering climate. Systematic variation of total solar irradiance near the rate found has been implicated as a causal factor in climate change on century to millennial time scales.

The tabulated results of the ACRIM II experiment appear in the following tables. The data can be accessed at the NGDC web site <http://www.ngdc.noaa.gov/stp>. TSI is reported on 'ACRIM II native scale' defined by operation of sensor 'B', the full-time monitoring sensor. Data published here are scaled to the ACRIM I database. Both scaled and native values are available on-line. The scaled factor is 1.001689. Results are reconciled to 1 A.U. and are fully corrected for sensor degradation.

Total Solar Irradiance

Satellites: Nimbus 7, SMM, ERBS, NOAA 9, NOAA 10, UARS



+ NIMBUS 7 SMM Δ ERBS □ NOAA 9 ◇ NOAA 10 · UARS

1991 DAILY MEAN SOLAR IRRADIANCE
 UARS (ACRIM-II) - 1997 Update

Units=W/m²

Jet Propulsion Lab	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1													1366.04
2													1366.17
3												1366.74	1366.11
4											1364.75	1366.65	1366.11
5											1365.24	1366.37	1365.96
6											1365.85	1366.25	1365.90
7											1366.36	1366.38	1365.75
8											1366.42	1366.45	1365.69
9											1366.79		1365.17
10											1366.77	1366.50	1364.96
11											1366.80	1366.05	1365.15
12											1366.53	1365.71	1365.35
13											1366.46	1365.83	1365.39
14											1366.38	1365.97	1365.26
15											1366.28	1366.19	1364.79
16											1366.44	1366.25	1365.26
17											1366.68	1366.30	1365.63
18											1366.86	1366.46	1365.98
19											1366.99	1366.47	1366.08
20											1366.87	1366.53	
21											1366.80	1366.46	1365.62
22											1366.69	1366.42	1365.18
23											1366.32	1366.33	1365.04
24											1365.63	1366.30	1364.81
25											1364.91	1366.29	1364.72
26												1366.15	1364.31
27											1363.88	1366.15	
28											1363.75	1366.13	1364.08
29											1363.94	1366.10	1364.20
30											1364.31	1366.08	1365.02
31											1364.92		1365.56

**1992 DAILY MEAN SOLAR IRRADIANCE
UARS (ACRIM-II) - 1997 Update**

Jet Propulsion Lab Units=W/m²

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1365.88	1365.21	1366.73	1365.59	1365.90	1366.24		1365.85	1366.10	1365.74	1365.88	1365.70
2	1365.99	1365.40	1367.14	1366.16	1366.07	1365.99		1365.85	1366.10	1365.90	1365.91	1365.93
3	1365.66	1365.33	1367.13	1366.31	1366.23			1365.95	1366.15	1365.98	1365.90	1366.12
4		1365.64	1366.95	1366.19	1366.25			1365.99	1366.13	1366.05	1365.74	1366.16
5	1365.14	1365.83	1366.93	1366.08	1366.23			1366.13	1365.97	1365.92	1365.69	1365.99
6	1364.97	1365.95	1366.78	1366.06	1366.18			1366.03	1365.82	1365.83	1365.62	1365.97
7	1365.01	1366.19		1366.13	1366.21			1365.82	1365.98	1365.88	1365.46	1365.95
8	1365.31	1366.32	1366.67	1366.18	1366.14			1365.95	1366.34	1366.01	1365.33	1366.11
9	1365.65	1366.24	1366.54	1366.24	1366.15			1366.14	1366.39	1366.17	1365.16	1366.06
10	1365.96	1365.76	1366.50	1366.30	1366.27				1366.29	1366.24	1365.17	1365.65
11	1366.27	1365.55	1366.58	1366.26	1366.47			1366.34	1366.23	1366.28	1365.46	1365.35
12	1366.55	1365.52	1366.68	1366.28	1366.66			1366.29	1366.16	1366.26	1365.67	1365.20
13	1366.59	1365.62	1366.57	1366.24	1366.82			1366.17		1366.30	1365.78	1365.34
14	1366.25	1365.64	1366.41	1366.23	1366.78			1365.82	1366.00	1366.27	1365.83	1365.64
15	1366.29	1365.60	1366.30	1366.32	1366.77			1365.66	1366.05	1366.18	1366.00	1366.09
16	1366.23	1365.77	1366.44	1366.37	1366.84			1365.38	1365.87	1366.12	1366.16	1366.48
17	1366.24	1366.03	1366.58	1366.19	1366.93			1365.14	1365.95	1366.04	1366.20	1366.44
18	1366.29		1366.74	1366.05	1366.94			1364.98		1365.95	1366.09	1366.31
19	1366.36	1366.57	1366.86	1366.22	1366.71			1364.71	1366.12	1365.58	1366.02	1366.24
20	1366.35	1366.69	1366.85	1366.21	1366.43			1364.74	1366.03	1365.15	1365.95	1366.19
21	1366.38	1366.45	1366.82	1366.28	1366.16			1365.16	1365.76	1364.88	1365.81	1366.22
22	1366.39	1366.03	1366.68	1366.09	1365.99		1366.27	1365.60	1365.95	1364.82	1365.77	1366.14
23		1365.67	1366.71	1366.12	1365.98		1366.06	1365.89	1365.81	1365.00	1365.73	1366.20
24	1366.16	1365.35	1366.62	1366.18	1366.05		1365.96	1365.99	1365.91	1365.09	1365.89	1366.21
25	1366.17	1365.01	1366.40	1366.23	1366.18		1365.91	1365.97	1365.86	1364.91	1365.97	1366.12
26	1365.98		1366.10	1366.24	1366.18		1365.95	1365.95	1366.02	1364.83	1366.03	1365.94
27	1365.57	1365.32	1365.65	1366.26	1366.32		1365.94	1365.88	1365.74	1364.84	1365.91	1365.84
28	1365.29	1365.71	1365.20	1366.39	1366.35		1365.77	1365.92	1365.54	1364.88	1365.73	1365.83
29	1365.18	1366.27	1364.65	1366.26	1366.33		1365.78	1366.09	1365.55	1365.06	1365.66	1366.00
30	1364.92		1364.71	1366.04	1366.33		1365.74	1366.14	1365.61	1365.36	1365.55	1365.99
31	1364.88		1365.07		1366.25		1365.73	1366.11		1365.66		1366.02

**1993 DAILY MEAN SOLAR IRRADIANCE
UARS (ACRIM-II) - 1997 Update**

Units= W/m^2

Jet Propulsion Lab	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1365.96	1365.88	1365.74	1365.86	1366.26	1365.79	1365.79	1365.79	1366.00	1365.82	1364.71	1365.42	1365.52
2	1365.99	1365.77	1365.74	1365.85	1366.23	1365.75	1365.87	1365.87	1366.12	1365.77	1364.50	1365.28	1365.65
3	1365.87	1365.78	1365.83	1365.86	1365.86	1365.73	1365.78	1365.78	1366.09	1365.74	1364.51	1365.12	1365.76
4	1365.75	1365.42	1365.73	1365.81	1366.27	1365.94	1365.94	1365.94	1366.01	1365.71	1364.70	1365.06	1365.82
5	1365.71	1365.07	1365.72	1365.79	1366.27	1365.88	1366.02	1366.02	1365.70	1365.70	1364.70	1365.12	1365.75
6	1365.70	1364.96	1365.68	1365.51	1366.10	1365.65	1366.05	1366.05	1365.72	1365.72	1364.93	1365.21	1365.62
7	1365.71	1364.70	1365.35	1365.53	1365.70	1365.70	1365.88	1365.88	1365.77	1365.77	1365.19	1365.35	1365.52
8	1365.88	1364.40	1365.00	1365.63	1365.34	1365.75	1365.73	1365.73	1365.80	1365.80	1365.48	1365.46	
9	1365.97	1364.49	1365.07	1365.70	1365.07	1365.81	1365.63	1365.63	1365.82	1365.82	1365.57	1365.59	1365.69
10	1366.06	1364.49	1365.26	1365.89	1364.95	1365.78	1365.57	1365.57	1365.63	1365.78	1365.63	1365.67	1365.85
11	1366.21	1364.82	1365.64	1365.99	1365.19	1365.86	1365.56	1365.56	1365.73	1365.74	1365.70	1365.70	1365.93
12	1366.19	1365.22	1365.93	1366.03	1365.59	1365.78	1365.62	1365.62	1365.82	1365.71	1365.69	1365.70	1365.78
13	1366.12	1365.64	1366.06	1366.03	1365.76	1365.70	1365.53	1365.53	1365.83	1365.68	1365.65	1365.60	1365.65
14	1366.01	1365.84	1366.08	1365.66	1366.05	1365.69	1365.50	1365.50	1365.81	1365.75	1365.67	1365.67	1365.51
15	1366.18	1366.12	1366.01	1365.98	1366.02	1365.73	1365.44	1365.44	1365.81	1365.84	1365.69	1365.43	
16	1366.12	1366.14	1365.92	1365.98	1365.98	1365.81	1365.59	1365.59	1365.79	1365.90	1365.73	1365.17	1365.43
17	1366.01	1365.95	1365.98	1365.92	1365.92	1365.83	1365.73	1365.73	1365.84	1365.99	1365.79	1365.09	1365.44
18	1366.04	1365.91	1365.97	1365.92	1365.92	1365.92	1365.77	1365.77	1365.87	1365.87	1365.84	1364.92	1365.39
19	1366.00	1365.99	1365.98	1365.99	1365.99	1366.01	1365.80	1365.80	1365.91	1365.91	1365.82	1364.79	1365.59
20	1366.06	1365.88	1365.93	1366.06	1366.06	1365.96	1365.76	1365.76	1365.94	1365.94	1365.70	1365.03	1365.59
21	1366.03	1365.85	1366.09	1365.55	1366.10	1365.99	1365.62	1365.62	1365.94	1365.94	1365.57	1365.25	1365.60
22	1365.96	1365.51	1365.95	1365.69	1366.04	1366.04	1365.78	1365.78	1365.88	1365.63	1365.55	1365.45	1365.51
23	1366.01	1365.36	1365.91	1365.82	1366.02	1366.06	1365.91	1365.91	1365.85	1365.70	1365.53	1365.56	1365.43
24	1366.02	1365.45	1365.95	1365.87	1366.08	1365.96	1366.09	1366.09	1365.83	1365.57	1365.59	1365.37	1365.28
25	1366.01	1365.80	1366.09	1366.13	1366.11	1366.00	1366.07	1366.07	1365.90	1365.49	1365.80	1365.33	1365.05
26	1365.96	1365.78	1366.18	1366.25	1366.06	1366.06	1366.14	1366.14	1365.92	1365.44	1365.70	1365.44	1364.92
27	1365.90	1365.76	1366.16	1366.37	1366.04	1366.11	1366.06	1366.06	1365.88	1365.44	1365.64	1365.64	1365.07
28	1366.00	1365.76	1365.95	1366.39	1365.84	1365.94	1366.04	1366.04	1365.88	1365.36	1365.63	1365.70	1365.30
29	1366.05	1366.27	1365.93	1366.40	1365.78	1365.87	1366.00	1366.00	1365.91	1365.28	1365.64	1365.65	1365.49
30	1365.97		1365.94	1366.30	1365.68	1365.74	1365.98	1365.98	1365.95	1365.00	1365.58	1365.65	1365.60
31	1365.91		1365.93	1365.59	1365.59	1366.00	1366.00	1366.00	1365.91	1365.53	1365.53	1365.51	1365.51

**1994 DAILY MEAN SOLAR IRRADIANCE
UARS (ACRIM-II) - 1997 Update**

Jet Propulsion Lab Units=W/m²

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1365.09	1365.89	1365.78	1365.67	1365.46	1365.45	1365.33	1365.69	1365.39	1365.52	1365.40	1365.53
2	1364.72	1365.84	1365.68	1365.71	1365.42	1365.47	1365.36	1365.78	1365.29	1365.49	1365.48	1365.50
3	1364.68	1365.80	1365.73	1365.59	1365.48	1365.52	1365.41	1365.76	1365.21	1365.50	1365.56	1365.49
4	1364.72	1365.68	1365.74	1365.57	1365.46	1365.50	1365.52	1365.67	1365.12	1365.43	1365.53	1365.45
5	1365.62	1365.64	1365.64	1365.47	1365.51	1365.51	1365.57	1365.60	1365.10	1365.43	1365.54	1365.44
6	1365.00	1365.47	1365.56	1365.43	1365.53	1365.55	1365.65	1365.60	1365.16	1365.44	1365.53	1365.53
7	1365.36	1365.36	1365.50	1365.46	1365.59	1365.59	1365.65	1365.61	1365.15	1365.44	1365.43	1365.51
8	1365.57	1365.41	1365.50	1365.50	1365.61	1365.67	1365.57	1365.61	1365.32	1365.47	1365.52	1365.49
9	1365.34	1365.35	1365.41	1365.55	1365.62	1365.70	1365.55	1365.57	1365.43	1365.45	1365.55	1365.45
10	1365.31	1365.24	1365.46	1365.57	1365.67	1365.69	1365.60	1365.54	1365.48	1365.46	1365.55	1365.32
11	1365.26	1365.22	1365.53	1365.61	1365.69	1365.65	1365.67	1365.58	1365.46	1365.48	1365.57	1365.13
12	1365.37	1365.39	1365.58	1365.57	1365.69	1365.61	1365.85	1365.54	1365.48	1365.35	1365.59	1364.74
13	1365.50	1365.61	1365.64	1365.57	1365.63	1365.67	1365.90	1365.39	1365.50	1365.32	1365.54	1364.92
14	1365.56	1365.72	1365.49	1365.59	1365.67	1365.78	1365.81	1365.23	1365.48	1365.26	1365.58	1364.83
15	1365.57	1365.73	1365.60	1365.64	1365.60	1365.82	1365.67	1365.35	1365.48	1365.23	1365.56	1365.05
16	1365.47	1365.66	1365.74	1365.74	1365.54	1365.81	1365.62	1365.39	1365.47	1365.17	1365.55	1365.11
17	1365.43	1365.55	1365.75	1365.75	1365.54	1365.85	1365.62	1365.48	1365.43	1365.20	1365.54	1365.32
18	1365.32	1365.47	1365.76	1365.76	1365.57	1365.79	1365.64	1365.56	1365.50	1365.25	1365.47	1365.49
19	1365.21	1365.43	1365.57	1365.65	1365.55	1365.77	1365.57	1365.52	1365.43	1365.59	1365.47	1365.49
20	1365.15	1365.64	1365.81	1365.72	1365.66	1365.67	1365.48	1365.48	1365.44	1365.45	1365.32	1365.44
21	1365.05	1365.88	1365.90	1365.57	1365.71	1365.64	1365.41	1365.54	1365.48	1365.44	1365.45	1365.42
22	1365.04	1366.01	1365.80	1365.63	1365.76	1365.56	1365.38	1365.56	1365.51	1365.51	1365.47	1365.36
23	1365.22	1366.03	1365.67	1365.67	1365.74	1365.56	1365.35	1365.53	1365.49	1365.53	1365.49	1365.31
24	1365.28	1366.04	1365.92	1365.67	1365.56	1365.53	1365.39	1365.49	1365.49	1365.53	1365.48	1365.39
25	1365.49	1365.96	1365.78	1365.69	1365.52	1365.50	1365.48	1365.52	1365.51	1365.51	1365.42	1365.43
26	1365.76	1365.93	1365.87	1365.55	1365.55	1365.53	1365.54	1365.52	1365.55	1365.60	1365.39	1365.50
27	1366.03	1365.74	1365.81	1365.68	1365.47	1365.52	1365.58	1365.58	1365.63	1365.63	1365.39	1365.56
28	1366.01	1365.75	1365.78	1365.66	1365.40	1365.55	1365.60	1365.60	1365.58	1365.55	1365.46	1365.56
29	1365.94	1366.27	1365.77	1365.63	1365.43	1365.53	1365.59	1365.58	1365.59	1365.46	1365.54	1365.44
30	1365.85	1365.70	1365.70	1365.59	1365.39	1365.37	1365.66	1365.60	1365.57	1365.36	1365.55	1365.39
31	1365.83	1365.76	1365.76	1365.59	1365.39	1365.70	1365.70	1365.52	1365.52	1365.35	1365.35	1365.36

1995 DAILY MEAN SOLAR IRRADIANCE
UARS (ACRIM-II) - 1997 Update

Units= W/m^2

Jet Propulsion Lab	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1365.26	1365.63	1365.27		1365.45	1365.26		1364.74	1365.19	1365.37	1365.26	1365.36	
2	1365.34	1365.45	1365.19		1365.41	1365.29			1365.33		1365.26	1365.34	
3	1365.43	1365.45	1365.12		1365.43	1365.37		1365.40	1365.34	1365.25	1365.24	1365.34	
4	1365.51	1365.37	1365.38		1365.45	1365.52	1365.33	1365.47	1365.32	1365.23	1365.20	1365.32	
5	1365.53	1365.33	1365.46		1365.42	1365.64	1365.29	1365.48	1365.34	1365.24	1365.11	1365.33	
6	1365.49	1365.41	1365.54		1365.46	1365.77	1365.31	1365.47	1365.32	1365.24	1365.32	1365.41	
7	1365.50	1365.48	1365.59	1365.31	1365.53	1365.78	1365.35	1365.52	1365.26	1365.22	1365.25		
8	1365.49	1365.48	1365.72	1365.32	1365.62	1365.74	1365.33	1365.45		1365.25	1365.31	1365.32	
9	1365.66	1365.56	1365.58	1365.35	1365.63	1365.67	1365.41	1365.41		1365.22	1365.22		
10	1365.48	1365.52	1365.45	1365.35	1365.66	1365.73	1365.45	1365.38		1365.19	1365.11	1365.32	
11	1365.49	1365.45	1365.39	1365.45	1365.62	1365.77	1365.44	1365.45		1365.08	1365.12	1365.40	
12	1365.50	1365.35	1365.33	1365.51	1365.58	1365.80		1365.49	1365.24	1365.01	1365.13	1365.25	
13	1365.56	1365.32	1365.39	1365.46	1365.52	1365.87		1365.42	1365.31		1365.14	1365.16	
14	1365.43	1365.33	1365.45	1365.34	1365.55	1365.76	1365.32	1365.40	1365.33		1365.19	1365.32	
15	1365.43	1365.47	1365.51	1365.23	1365.53	1365.51	1365.25	1365.38			1365.18	1365.27	
16	1365.32	1365.59	1365.57	1365.19			1365.28	1365.44	1365.25		1365.20	1365.19	
17	1365.20	1365.65	1365.57	1365.16		1365.29	1365.29	1365.51	1365.29		1365.16	1365.19	
18	1365.28	1365.67	1365.53			1365.30	1365.32	1365.60	1365.29		1365.27	1365.18	
19	1365.42	1365.51	1365.50			1365.33	1365.33	1365.65	1365.33		1365.24	1365.18	
20	1365.50	1365.44	1365.46			1365.34	1365.33	1365.66	1365.36	1365.11	1365.30	1365.23	
21	1365.55	1365.41	1365.41			1365.33	1365.30	1365.63	1365.42	1365.30	1365.27	1365.09	
22	1365.52	1365.49	1365.44	1365.65		1365.29	1365.20	1365.54	1365.47	1365.28	1365.23	1365.22	
23	1365.42	1365.61	1365.43	1365.55		1365.33	1365.33	1365.38	1365.45	1365.19	1365.31	1365.25	
24	1365.36	1365.65	1365.81	1365.53	1365.40	1365.32	1365.31	1365.20	1365.48	1365.23	1365.15	1365.26	
25	1365.30	1365.70	1365.85	1365.48	1365.43	1365.24	1365.30	1365.25	1365.46		1365.23	1365.15	
26	1365.36	1365.66	1365.85	1365.51	1365.44	1365.25	1365.29	1365.50	1365.46	1365.25	1365.23	1365.14	
27	1365.43	1365.55	1365.53	1365.52	1365.46	1365.27	1365.31	1365.46	1365.43	1365.32	1365.31		
28	1365.50	1365.40	1365.66	1365.47	1365.41	1365.30	1365.34	1365.49		1365.28	1365.36		
29	1365.52	1366.27	1365.50	1365.52	1365.46	1365.27	1365.38	1365.43	1365.45	1365.23	1365.36	1365.16	
30	1365.45			1365.49	1365.43			1365.39	1365.44	1365.25	1365.27	1365.21	
31	1365.56			1365.27	1365.27			1365.37		1365.17		1365.38	

**1996 DAILY MEAN SOLAR IRRADIANCE
UARS (ACRIM-II) - 1997 Update**

Units=W/m²

Jet Propulsion Lab	Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1365.18	1365.20	1364.97	1365.08	1365.52	1365.47	1364.90	1365.40	1365.16	1365.13			
2	1365.12	1365.22	1365.02	1365.24	1365.51	1365.46	1364.92	1365.34	1365.14	1365.07	1365.27		
3	1364.99	1365.11	1365.03	1365.21	1365.65	1365.43	1364.91	1364.98	1365.24	1365.06	1365.30		
4	1365.01	1364.99	1364.85	1365.22	1365.67	1365.40	1365.25	1365.19	1365.15	1364.99	1365.23		
5													
6	1365.11	1365.09	1364.94	1365.22	1365.55	1365.35	1365.31	1365.18	1365.11	1365.07	1365.31		
7	1365.09	1364.77	1365.02	1365.20	1365.49	1365.36	1365.34	1365.22	1365.10	1365.03	1365.17		
8	1365.09	1364.88	1364.99	1365.22	1365.52	1365.10	1365.34	1365.22	1365.18	1365.04	1365.15		
9		1364.93	1364.98	1365.44	1365.00	1365.19	1365.22	1365.22	1365.22	1365.07	1365.15		
10	1365.13	1364.92	1364.92	1365.16	1365.39	1365.08	1365.24	1365.23	1364.92	1365.06	1365.17		
11		1365.01	1364.89	1365.19	1365.38	1365.17	1365.28	1365.17	1365.11	1365.08	1365.22		
12		1364.83	1365.01	1365.21	1365.34	1365.31	1365.39	1365.18	1365.20	1365.18	1365.42		
13		1364.91	1365.03	1365.33	1365.28	1365.28	1365.51	1365.22	1365.07	1365.20	1365.42		
14		1364.94	1364.96	1365.31	1365.20	1365.20	1365.45	1365.24	1365.16	1365.17	1365.43		
15		1364.91	1365.05	1365.22	1365.22	1365.22	1365.38	1365.20	1365.15	1365.28	1365.29		
16		1365.05	1365.00	1365.28	1365.19	1365.21	1365.36	1365.18	1365.11	1365.21	1365.22		
17		1365.26	1365.12	1365.32	1365.19	1365.17	1365.32	1365.20	1365.34	1365.29	1365.25		
18		1365.22	1365.14	1365.30	1365.15	1365.17	1365.21	1365.29	1365.23	1365.29	1365.27		
19		1365.19	1365.14	1365.30	1365.18	1365.18	1365.17	1365.28	1365.30	1365.20	1365.27		
20		1365.24	1365.06	1365.07	1365.18	1365.16	1365.16	1365.30	1365.36	1365.29	1365.37		
21		1365.28	1365.07	1364.91	1365.18	1365.12	1365.16	1365.42	1365.28	1365.32	1365.34		
22		1365.27	1365.01	1365.03	1364.99	1365.16	1365.15	1365.49	1365.31	1365.22	1365.33		
23		1365.24	1364.99	1364.98	1365.13	1365.22	1365.51	1365.30	1365.30	1364.87	1365.03		
24		1365.17	1364.99	1365.02	1365.19	1365.33	1365.42	1365.33	1365.33	1364.56	1365.12		
25		1365.19	1365.04	1365.05	1365.15	1365.43	1365.46	1365.35	1365.35	1364.26	1364.98		
26		1365.05	1365.06	1365.06	1365.18	1365.43	1365.43	1365.43	1365.31	1364.24	1365.04		
27		1365.15	1365.04	1365.04	1365.26	1365.38	1365.39	1365.39	1364.54	1365.05	1365.05		
28	1365.08	1365.17	1365.07	1365.31	1365.35	1365.35	1365.35	1365.28	1364.66	1364.91	1364.99		
29	1365.21	1365.13	1365.02	1365.43	1365.31	1365.31	1365.37	1365.17	1364.98	1364.99	1364.89		
30	1365.17	1365.06	1364.98	1365.06	1365.30	1365.32	1365.36	1365.36	1365.17	1365.17	1364.89		
31	1365.17	1364.93	1364.93	1365.49	1364.95	1365.31	1365.31	1365.13	1365.13	1365.02	1365.02		

1997 DAILY MEAN SOLAR IRRADIANCE
UARS (ACRIM-II) - 1997 Update

Units=W/m²

Jet Propulsion Lab	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1365.12	1365.19	1365.39	1365.36	1365.68	1365.58	1365.60	1365.58	1365.58	1366.11	1365.93	1365.37
2	1365.04	1365.19	1365.36	1365.37	1365.61	1365.59	1365.60	1365.80	1365.80	1366.16	1365.91	1365.35
3	1365.11	1365.04		1365.43	1365.54	1365.56	1365.65	1366.19	1366.19	1366.07	1365.44	1365.37
4	1365.14	1365.14		1365.61	1365.61	1365.51	1365.55	1366.03	1366.03	1365.98	1365.51	1365.56
5	1365.08	1365.32		1365.58	1365.61	1365.53	1365.60	1365.88	1365.88	1366.22	1365.58	1365.65
6	1365.05	1365.31		1365.59	1365.62	1365.67	1365.55	1365.51	1365.68	1366.20	1365.80	1365.89
7	1365.03	1365.42		1365.44	1365.64	1365.70	1365.56	1365.60	1365.52	1366.25	1365.83	1365.78
8	1365.20	1365.40			1365.58	1365.70	1365.58	1365.51	1365.30	1366.30	1365.94	1365.79
9	1365.12	1365.44		1365.39	1365.60	1365.61	1365.58	1365.58	1365.10	1366.20	1365.93	1365.62
10	1365.25	1365.36		1365.26	1365.54	1365.59	1365.55	1365.55	1365.06	1366.31	1365.80	1365.55
11	1365.19	1365.44		1365.33	1365.59	1365.64	1365.59	1365.64	1365.24	1366.14	1365.72	1365.60
12	1365.21	1365.42		1365.45	1365.60	1365.70	1365.60	1365.58	1365.30	1366.18	1365.70	1365.54
13	1365.21	1365.39			1365.46	1365.61	1365.51	1365.69	1365.47	1366.14	1365.72	1365.67
14	1365.24	1365.24		1365.30	1365.64	1365.60	1365.52	1365.80	1365.68	1366.06	1365.75	1365.64
15	1365.18	1365.23		1365.28	1365.64	1365.70	1365.59	1365.75	1365.73	1366.01	1365.71	1365.70
16	1365.09	1365.16		1365.21	1365.45	1365.60	1365.59	1365.68		1365.98	1365.64	1365.61
17	1365.16	1365.23	1365.48		1365.64	1365.71	1365.60	1365.73	1365.78	1366.00	1365.52	1365.61
18	1365.17	1365.26	1365.41	1365.32	1365.65	1365.72	1365.70	1365.71	1365.81	1366.05	1365.41	1365.64
19	1365.16	1365.19	1365.19	1365.30	1365.56	1365.78	1365.65	1365.71	1365.76	1365.92	1365.41	1365.59
20	1364.94	1365.08		1365.25	1365.55	1365.62	1365.71	1365.74	1365.83		1365.41	1365.82
21	1365.18	1365.16			1365.45	1365.65	1365.79	1365.76	1365.83		1365.36	1365.88
22	1365.11	1365.23			1365.58	1365.62	1365.76	1365.78	1366.05		1365.30	1365.88
23	1365.00	1365.24			1365.67	1365.54	1365.73	1365.73	1365.87		1365.65	1365.69
24	1365.17	1365.29	1365.34		1365.71	1365.64	1365.79	1365.74	1365.81		1365.75	1365.72
25	1365.08	1365.27			1365.74	1365.58	1365.78	1365.90			1365.85	1365.72
26	1364.92	1365.32			1365.74	1365.67	1365.93	1365.94	1365.80		1365.71	1365.73
27	1365.10	1365.35			1365.68	1365.69	1365.88	1365.85	1365.88	1366.09		1365.77
28	1365.10	1365.30			1365.71	1365.72	1365.82	1365.76	1365.97	1366.06	1365.69	1365.76
29	1365.05	1365.13	1365.34		1365.77	1365.69	1365.82	1365.63	1366.04	1366.03	1365.48	1365.84
30	1365.16		1365.34		1365.81	1365.57	1365.88	1365.57	1366.07		1365.49	1365.84
31	1365.20		1365.36			1365.73	1365.50			1365.95		1365.92



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."