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Data for July, June 1994, and Late Data

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SOLAR-GEOPHYSICAL DATA

Number 600

(Issued in Two Parts)

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CONTENTS

DETAILED INDEX OF OBSERVATIONS PUBLISHED IN SOLAR-GEOPHYSICAL DATA

CODE	KIND OF OBSERVATION	DEC 93	JAN 94	FEB	MAR	APR	MAY	JUN	JUL
A.	SOLAR AND INTERPLANETARY EVENTS								
A.1	Sunspot Drawings	594A 49	595A 43	596A 47	597A 41	598A 41	599A 41	600A 43	
A.2aa	International Provisional Sunspot Numbers	593A 26	594A 27	595A 25	596A 28	597A 24	598A 25	599A 24	600A 25
A.2c	American Sunspot Numbers	593A 26	594A 27	595A 25	596A 28	597A 24	598A 25	599A 24	600A 25
A.3a	Mt. Wilson Magnetograms	594A 49	595A 43	596A 47	597A 41	598A 41	599A 41	600A 43	
A.3b	Sunspot Mag Class and Regions	594A 96	595A 90	596A 90	597A 88	598A 87	599A 88	600A 89	
A.3c	Kitt Peak Magnetograms	594A 49	595A 43	596A 47	597A 41	598A 41	599A 41	600A 43	
A.3d	Mean Solar Magnetic Field (Stanford)	593A 37	594A 39	595A 33	596A 37	597A 31	598A 31	599A 31	600A 33
A.3e	Stanford Magnetograms	594A 49	595A 43	596A 47	597A 41	598A 41	599A 41	600A 43	
A.4	H-alpha Filtergrams	594A 49	595A 43	596A 47	597A 41		599A 41	600A 43	
A.6c	Stanford Solar Mag Field Synoptic Maps	594A 42	595A 36	596A 40	597A 34	598A 34	599A 34	600A 36	
A.6d	Kitt Peak Solar Mag Field Synoptic Maps	594A 48	595A 42	596A 46	597A 40	598A 40	599A 40	600A 42	
A.6e	Mass Ejections (Proxy data) from the Sun	598B 37	599B 38	600B 21					
A.6f	Active Prominences and Filaments	598B 38	599B 39	600B 22					
A.6g	Sac Peak Coronal Line Synoptic Maps	594A 44	595A 38	596A 42	597A 36	598A 36	599A 36	600A 38	
A.7h	Coronal Line Emission (Sac Peak)	594A 49	595A 43	596A 47	597A 41	598A 41	599A 41	600A 43	
A.8aa	2800 MHz- Solar Flux (Penticton)	593A 26	594A 27	595A 25	596A 28	597A 24	598A 25	599A 24	600A 25
A.8ac	2800 MHz- Adj. Solar Flux (Penticton)	593A 26	594A 27	595A 25	596A 28	597A 24	598A 25	599A 24	600A 25
A.8g	Adjusted Daily Solar Fluxes (Learmonth)	593A 26	594A 27	595A 25	596A 28	597A 24	598A 25	599A 24	600A 25
A.10g	Nancay Radioheliograph - 164 MHz	594A114	595A116	596A102	597A102	598A 98	599A100	600A102	
A.11g	Solar X-ray GOES (graphs/event table)	598B 27	599B 28	600B 14					
A.11k	Solar UV NOAA-9	May 86-Dec 88 in 566B 84							
A.11l	Solar UV NIMBUS7	Nov 78-Dec 93 in 599A 67							
A.11n	Solar YOHKOH Soft X-ray Images	594A 80	595A 74	596A 75	597A 72	597A 72	598A 71	599A 72	600A 73
A.12e	Solar Particles (IMP H & J)	Dec 88-Oct 89 in 570B 92							
A.12g	Solar Particles (GOES-7)	593A 4	594A 4	595A 4	596A 4	597A 4	598A 4	599A 4	600A 4
A.12h	Interplanetary Particles (SAMPEX)	Jul-Dec 92 in 595B 36; Jan-Jun 93 in 596B 56							
A.13e	Solar Plasma (IMP-H & J)	Feb-Sep 93 in 596B 48; Oct 93 in 596B 46; Nov 93 in 597B 39							
A.16b	NIMBUS Solar Irradiance	Nov 78-Dec 93 in 599B 67 -- Final Data							
A.16c	ERBS, NOAA-9 & -10 Solar Irradiance	1989 in 551B 78; ERBS Oct 84-Jul 93 in 593B 43							
A.16d	UARS Solar Irradiance	1991 in 599B 63; 1992 in 599B 64							
A.17c	Inferred Interplanetary Mag Field	1984-1988 data in 542A168; 1989 in 548A154							
C.	SOLAR FLARE-ASSOCIATED EVENTS								
C.1a	H-alpha Flares	593A 29	594A 30	595A 28	596A 31	597A 27	598A 28	599A 27	600A 28
C.1ba	H-alpha Flare Groups	598B 4	599B 4	600B 4					
C.1d	Flare Patrol Obsevations	———	———	———	———	———	———	———	———
C.1d	Flare Patrol Obsevations	598B 16	599A 14	600B 9					
C.3	Radio Bursts Fixed Frequency	598B 18	599A 16	600B 11					
C.3	Radio Bursts Fixed Frequency Selected	593A 36	594A 37	595A 31	596A 35	597A —	598A 30	599A 29	600A 31
C.4f	Radio Bursts Spectral (Sagamore Hill)	594A109	595A105	596A 99	597A 98	598A 94	599A 95	600A 97	
C.4k	Radio Bursts Spectral (Learmonth)	594A109	595A105	596A 99	597A 98	598A 94	599A 95	600A 97	
C.4l	Radio Bursts Spectral (Palehua)	594A109	595A105	596A 99	597A 98	598A 94	599A 95	600A 97	
C.4m	Radio Bursts Spectral (Ondrejov)	594A109	595A105	596A 99	597A 98	598A 94	599A 95	600A 97	
C.4n	Radio Bursts Spectral (Potsdam)	594A109	595A105	596A 99	597A 98	598A 94	599A 95	600A 97	
C.4o	Radio Bursts Spectral (San Vito)	594A109	595A105	596A 99	597A 98	598A 94	599A 95	600A 97	
C.4p	Radio Bursts Spectral (IZMIRAN)	594A109	595A105	596A 99	597A 98	598A 94	599A 95	600A 97	
C.6	Sudden Ionospheric Disturbances	594A105	595A101	596A 97	597A 96	598A 92	599A 93	600A 95	
D.	GEOMAGNETIC EVENTS								
D.1a	Geomagnetic Indices	594A120	595A123	596A109	597A110	598A107	599A108	600A110	
D.1ba	27-day Chart of Kp Indices	594A122	595A125	596A111	598A109	598A109	599A110	600A112	
D.1cb	Monthly Mean aa Indices	594A123	595A126	596A112	597A113	598A110	599A111		
D.1d	Principal Magnetic Storms	594A125	595A128	596A113	597A115	598A112	599A113	600A115	
D.1f	Sudden Commencements/Flare Effects		595A129	596A114	597A116	598A113	599A114	600A116	
D.1g	Equatorial Indices Dst	May-Jul 93 in 592A144; Aug-Dec 93 in 597A119							
D.1i	Polar Cap (PC) Index	594A124	595A127	597A118	597A114	598A111	599A112	600A114	
F.	COSMIC RAYS								
F.1a	Cosmic Ray Neutron Cts (Deep River)	594A115	595A117	596A103	597A103	598A 99	599A101	600A103	
F.1b	Cosmic Ray Neutron Cts (Climax)	594A115	595A117	596A103	597A103	598A 99	599A101	600A113	
F.1h	Cosmic Ray Neutron Cts (Thule)	594A115	595A117	596A103	597A103	598A 99	599A101	600A103	
F.1i	Cosmic Ray Neutron Cts (Kiel)								
F.1j	Cosmic Ray Neutron Cts (Tokyo)	594A115	595A117	596A103	597A103	598A 99	599A101	600A103	
F.1n	Cosmic Ray Neutron Cts (Beijing)	594A115	595A117	596A103	597A103	598A 99	599A101	600A103	
F.1b	Cosmic Ray Neutron Cts (Haleakala)	594A115	595A117	596A103	597A103	598A 99	599A101	600A103	
H.	MISCELLANEOUS								
H.60	IUWDS Alert Periods	593A 20	594A 20	595A 18	596A 20	597A 19	598A 20	599A 19	600A 20

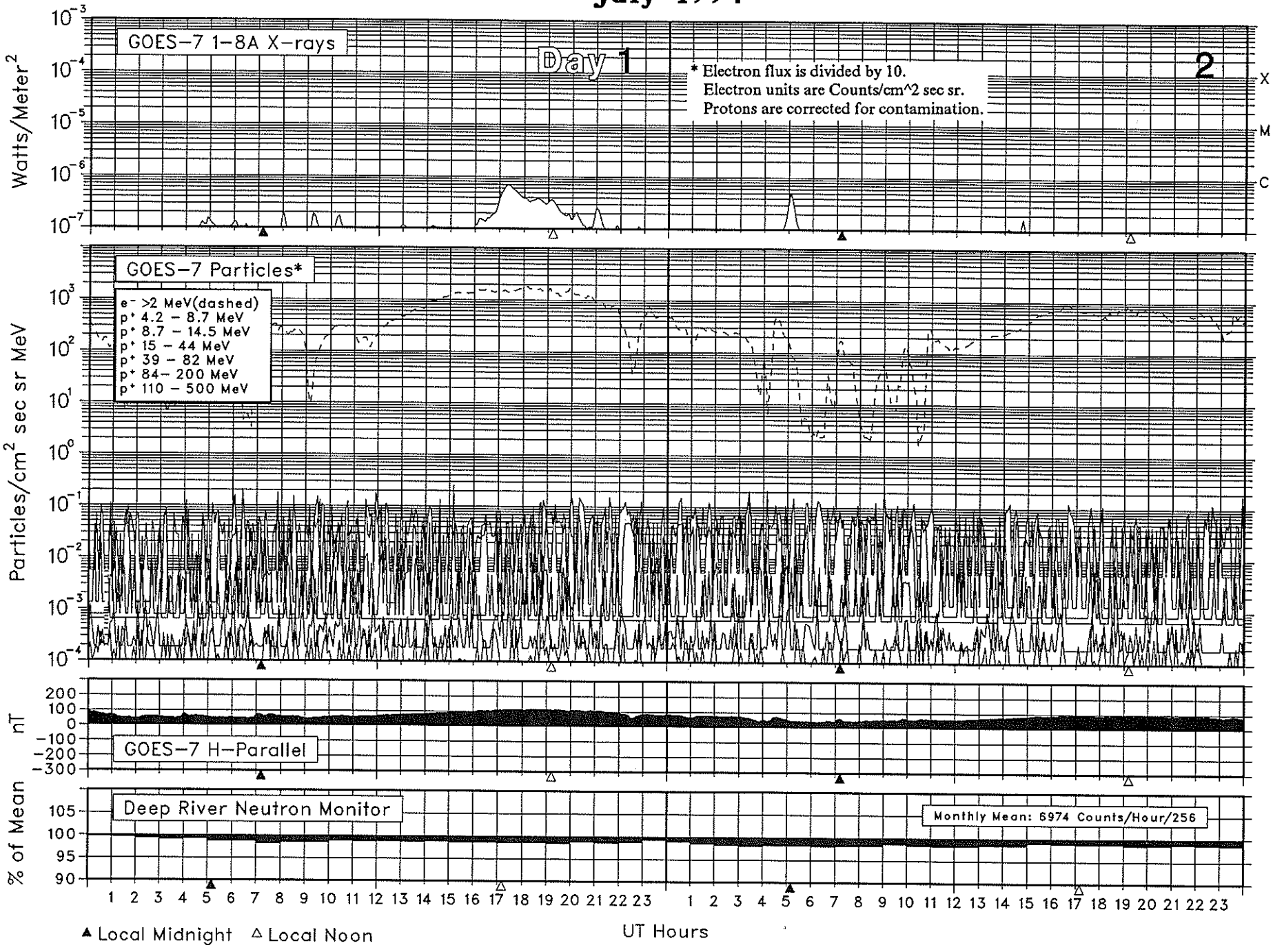
The entry "594A 49" under Dec 1993, for example, means that the sunspot drawings for Dec 1993 appear in SOLAR-GEOPHYSICAL DATA No. 594, Part I, and that they begin on page 49. "A" denotes Part I and "B", Part II. Blanks indicate data not yet received and dashes mark unavailable data.

CONTENTS

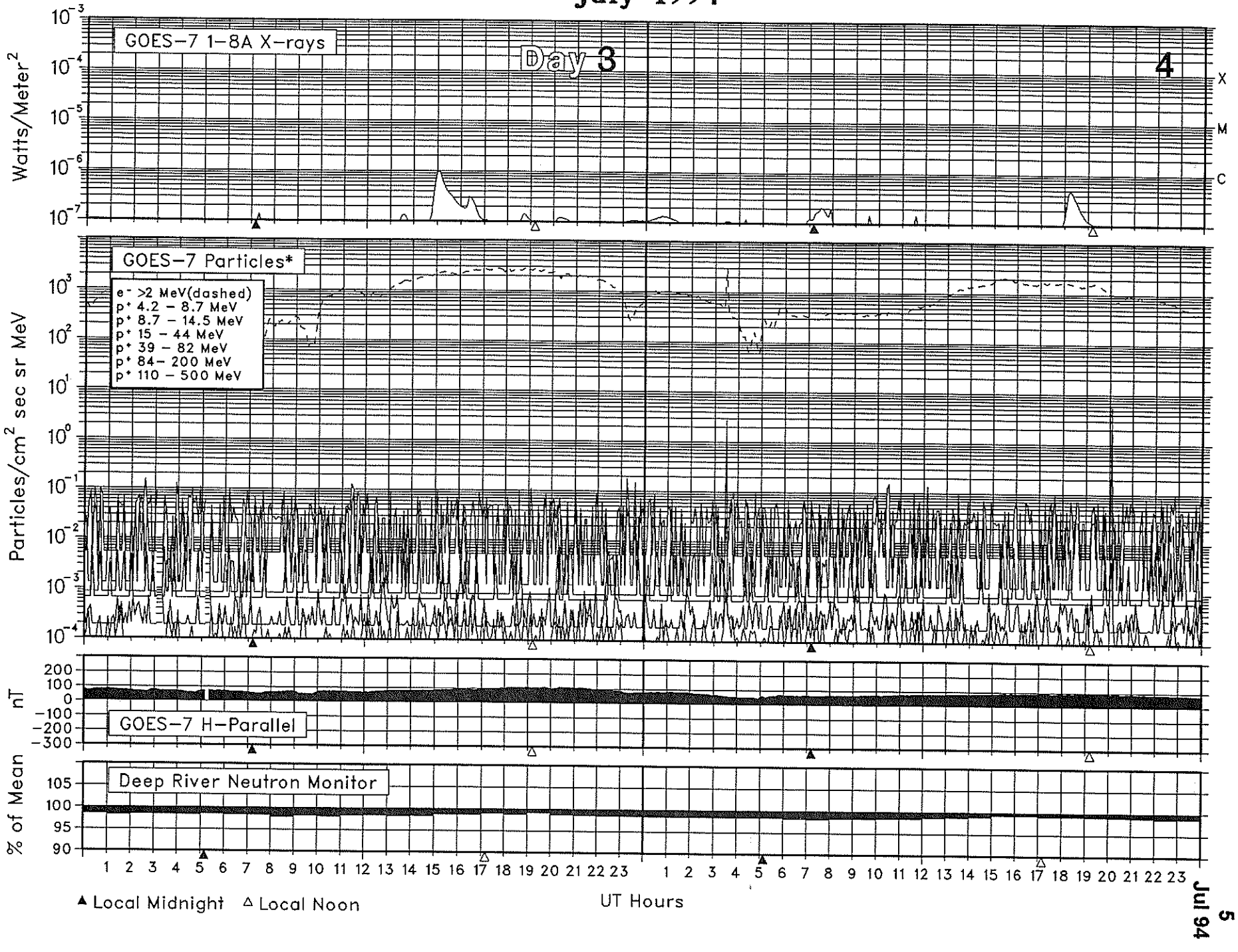
Prompt Reports Number 600 Part I

DATA FOR JULY 1994

SOLAR-TERRESTRIAL ENVIRONMENT
July 1994



SOLAR-TERRESTRIAL ENVIRONMENT
July 1994



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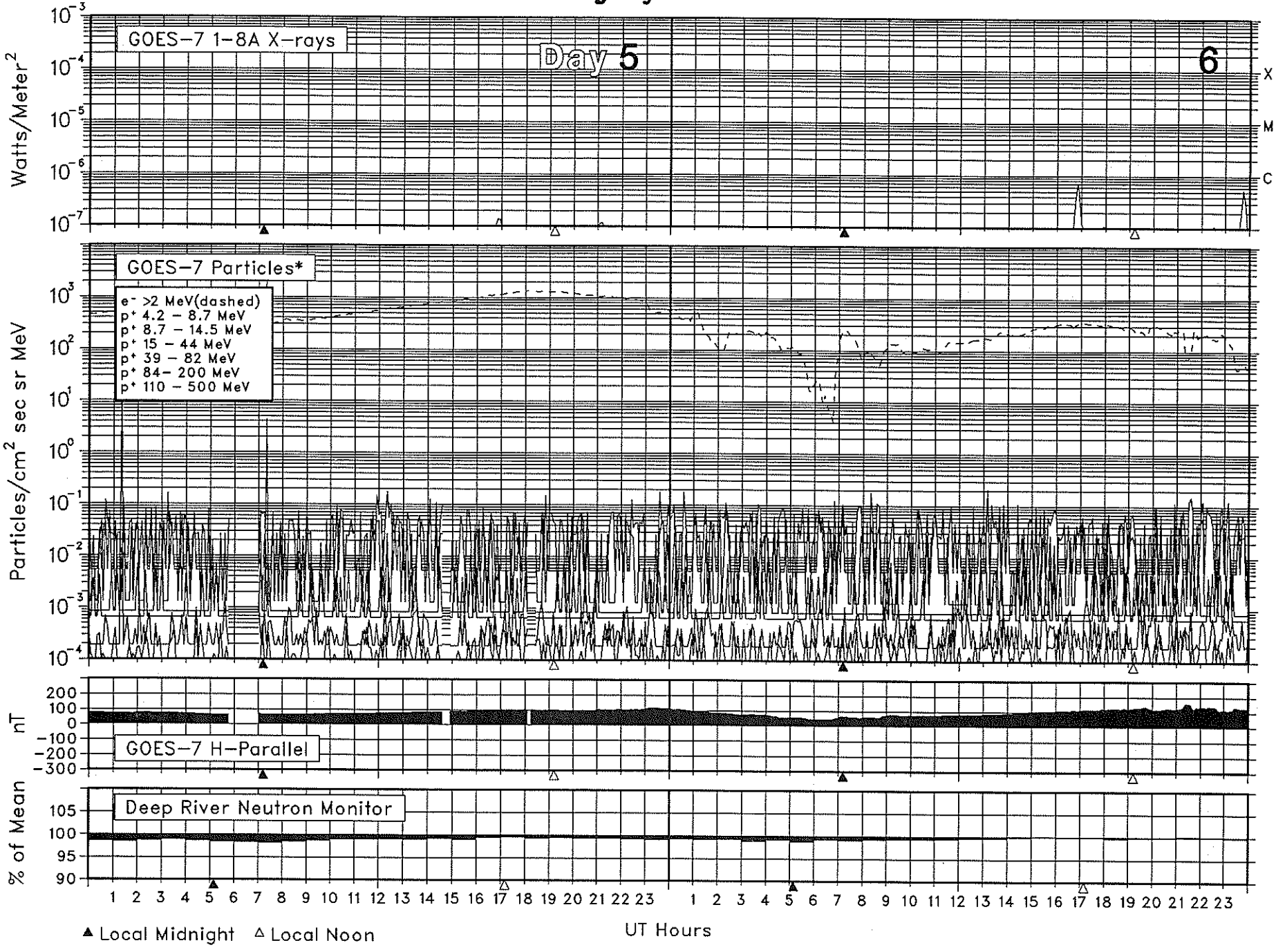
July 1994



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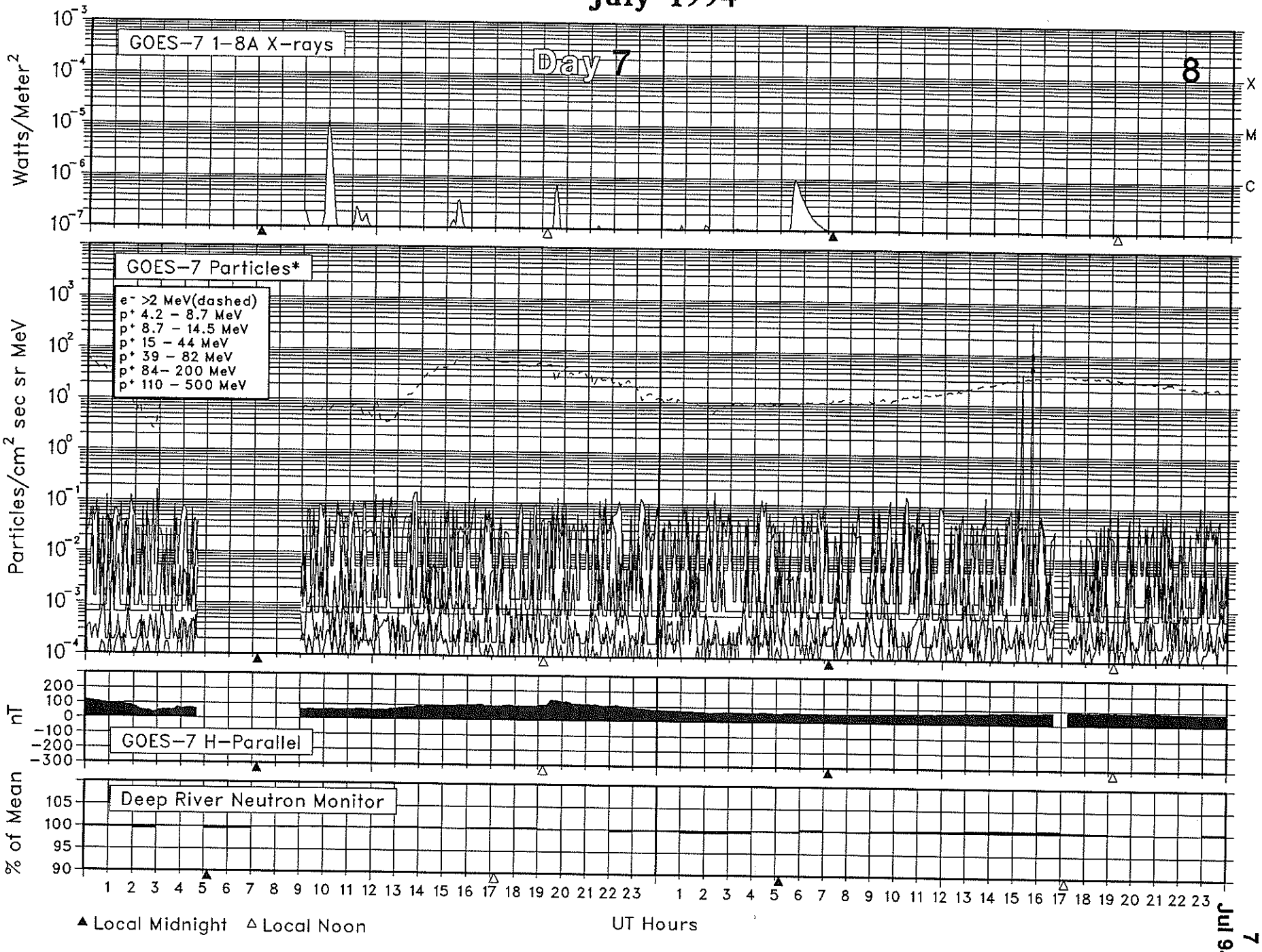
July 1994



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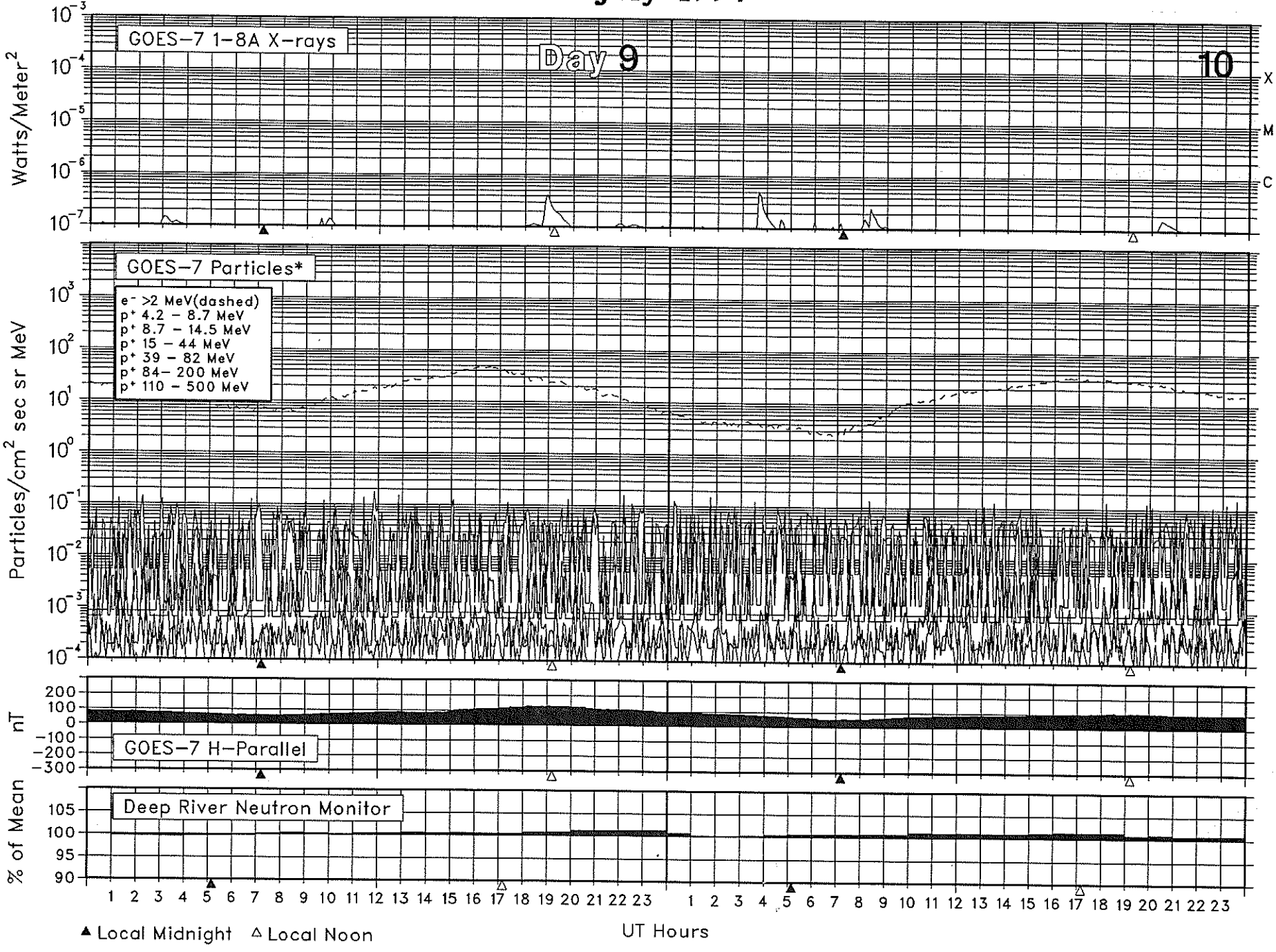
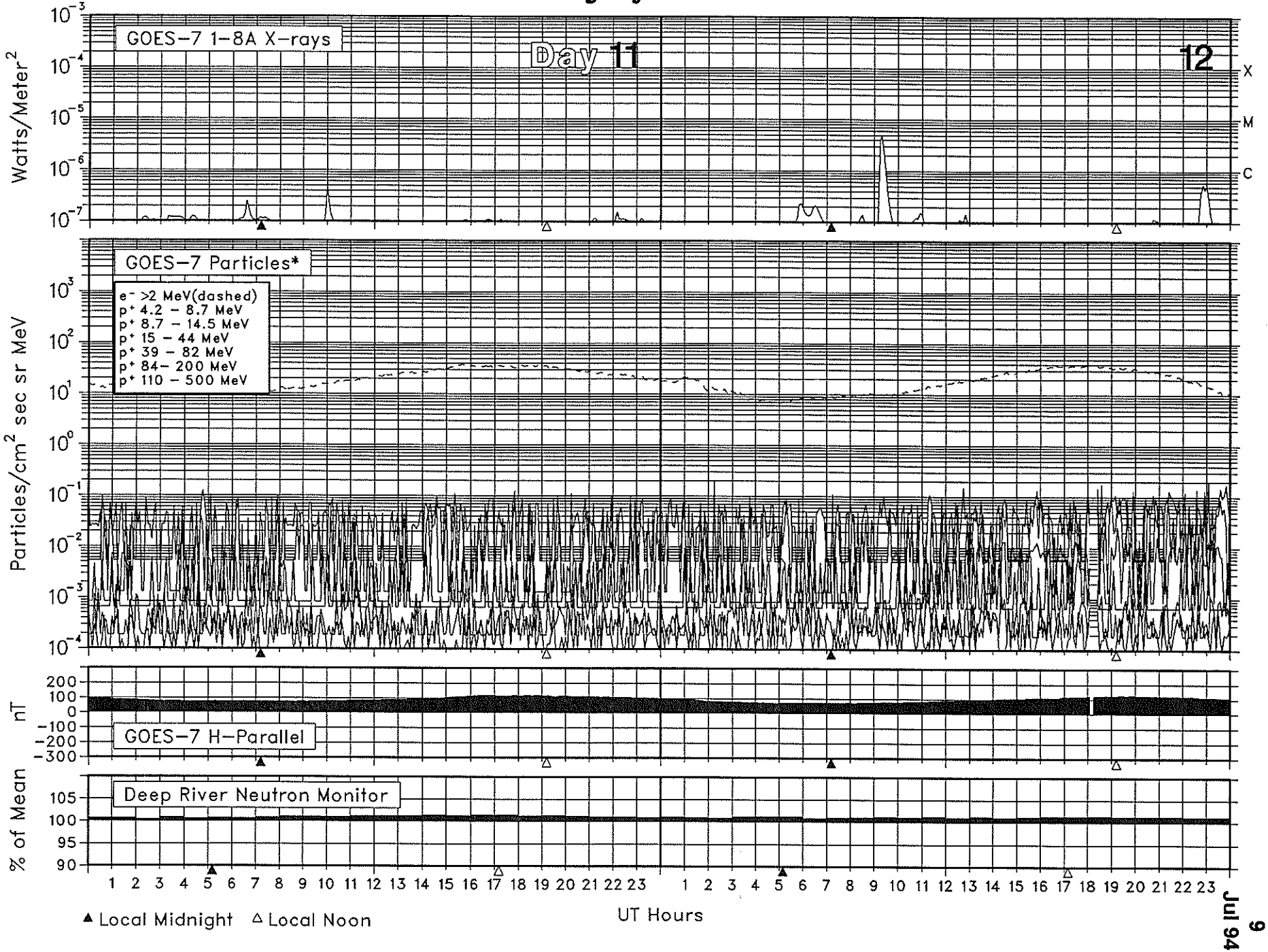
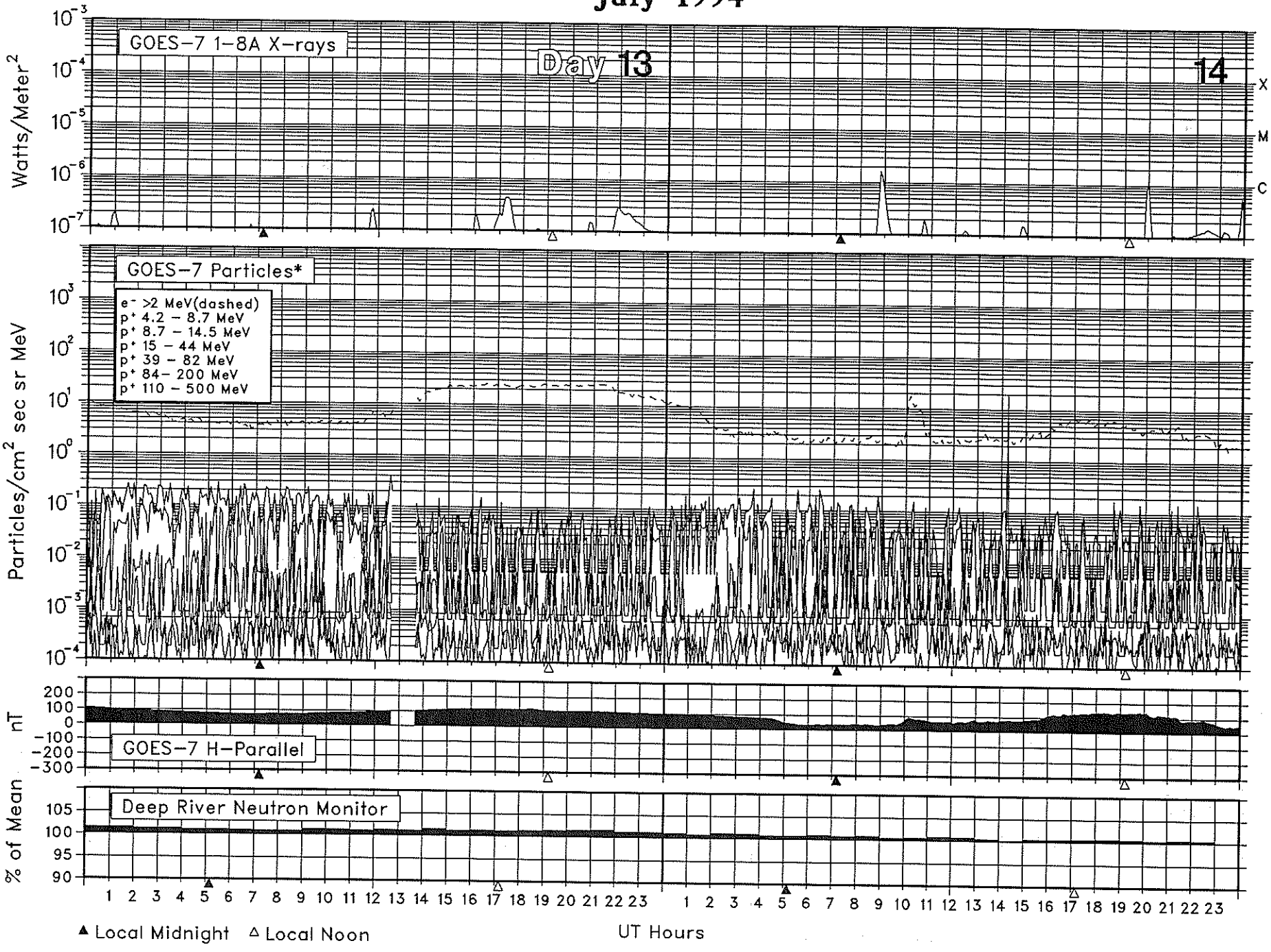
July 1994



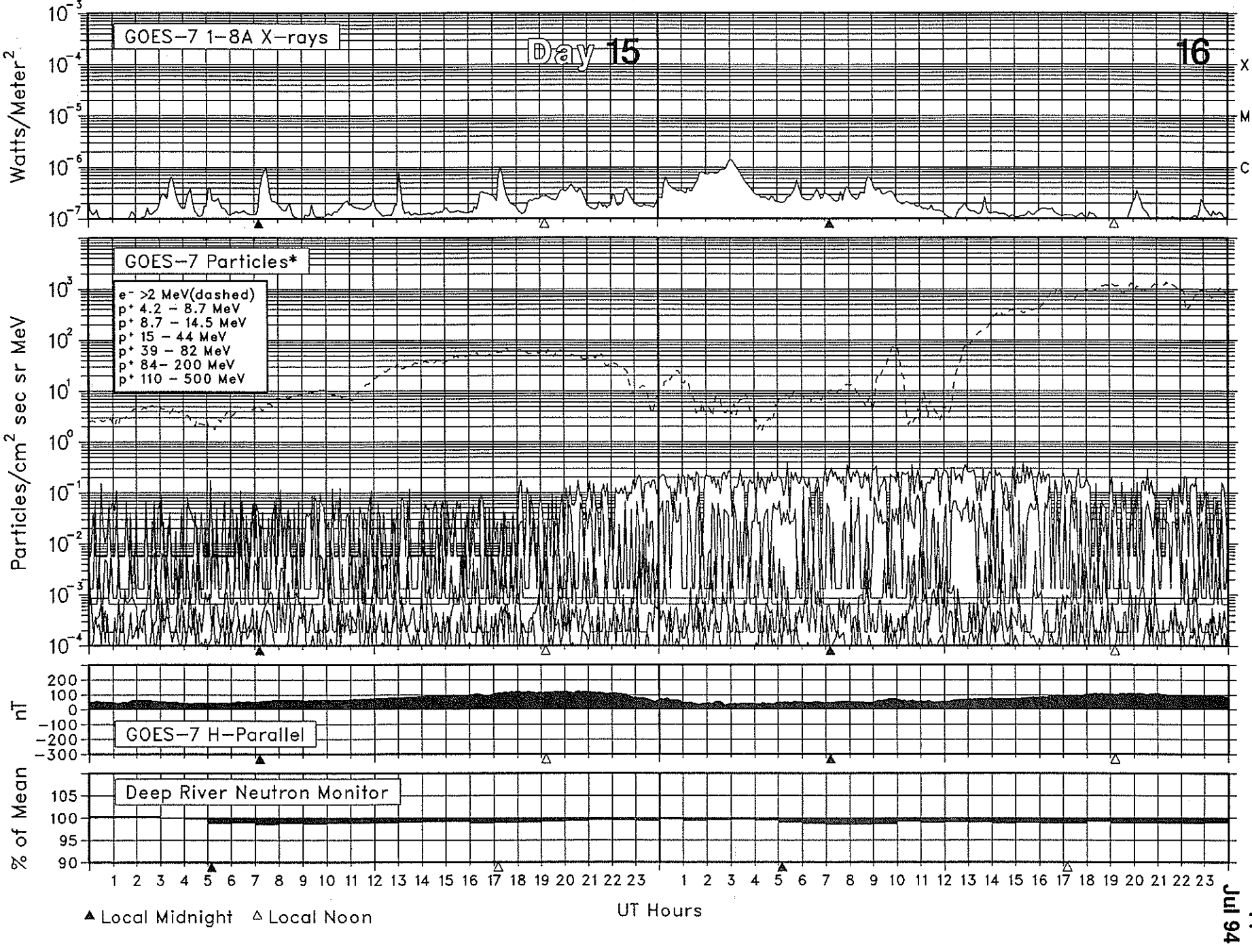
SOLAR-TERRESTRIAL ENVIRONMENT
July 1994



SOLAR-TERRESTRIAL ENVIRONMENT
July 1994

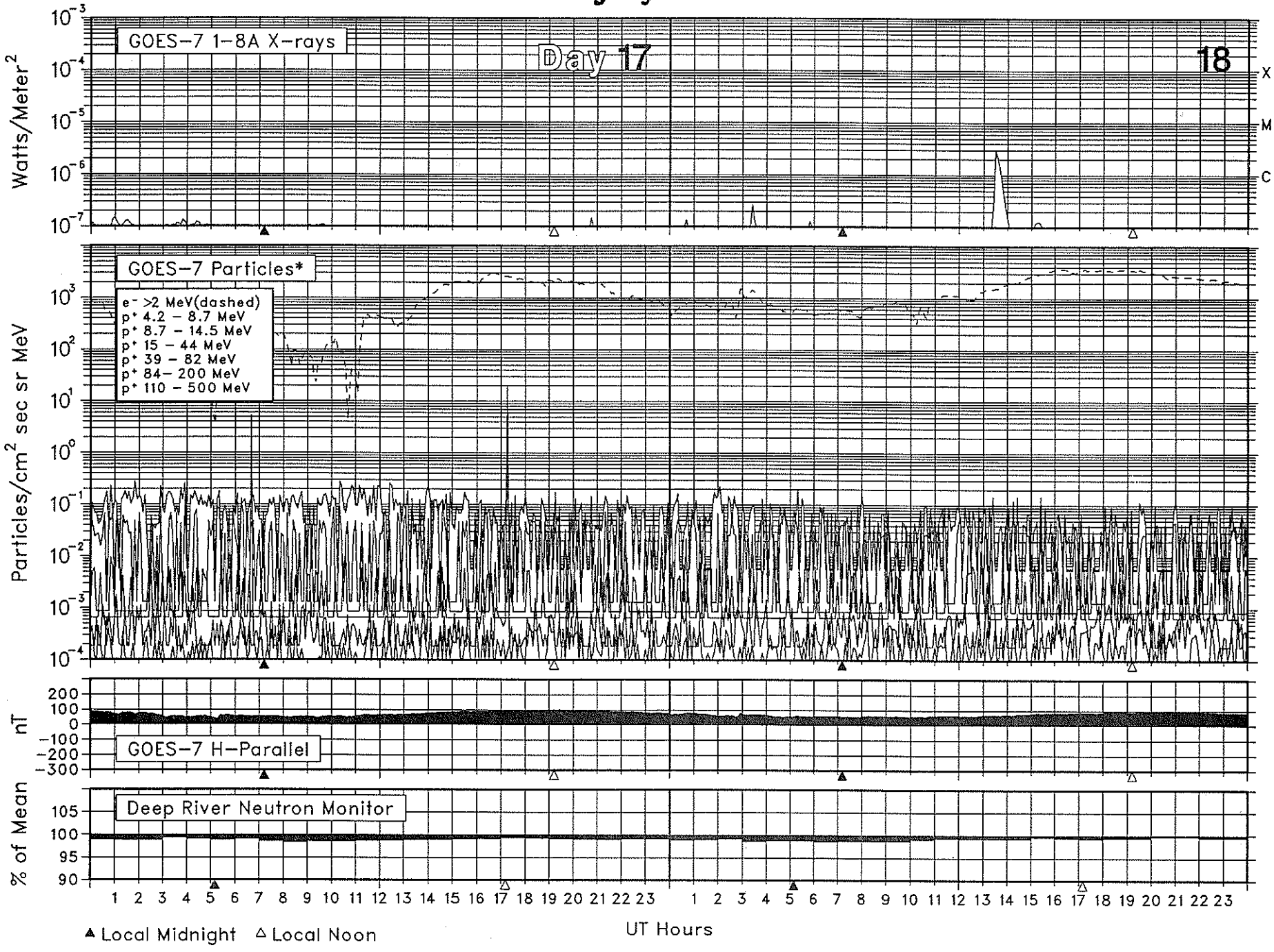


SOLAR-TERRESTRIAL ENVIRONMENT
July 1994



11 Jul 94

SOLAR-TERRESTRIAL ENVIRONMENT
July 1994



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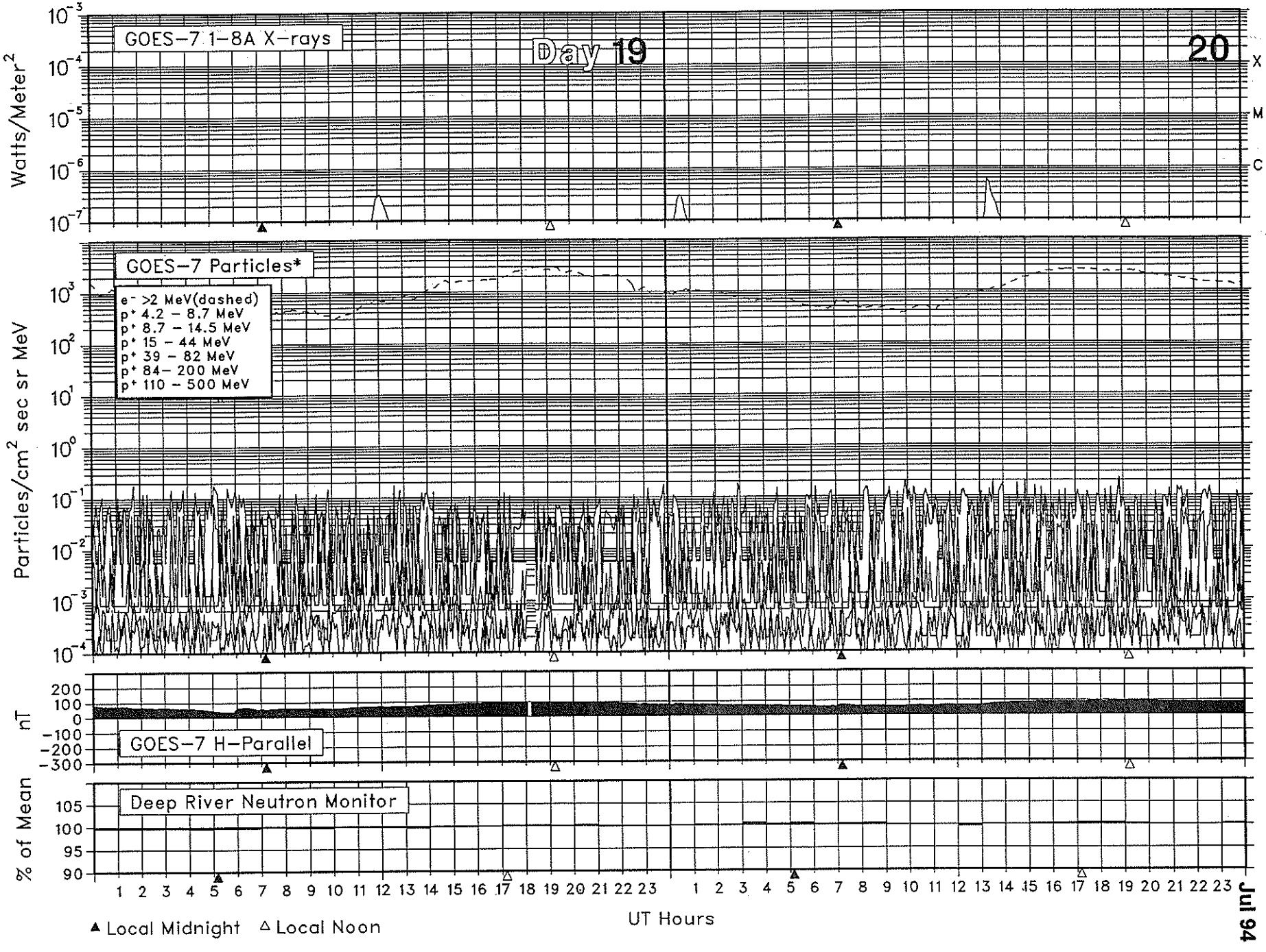

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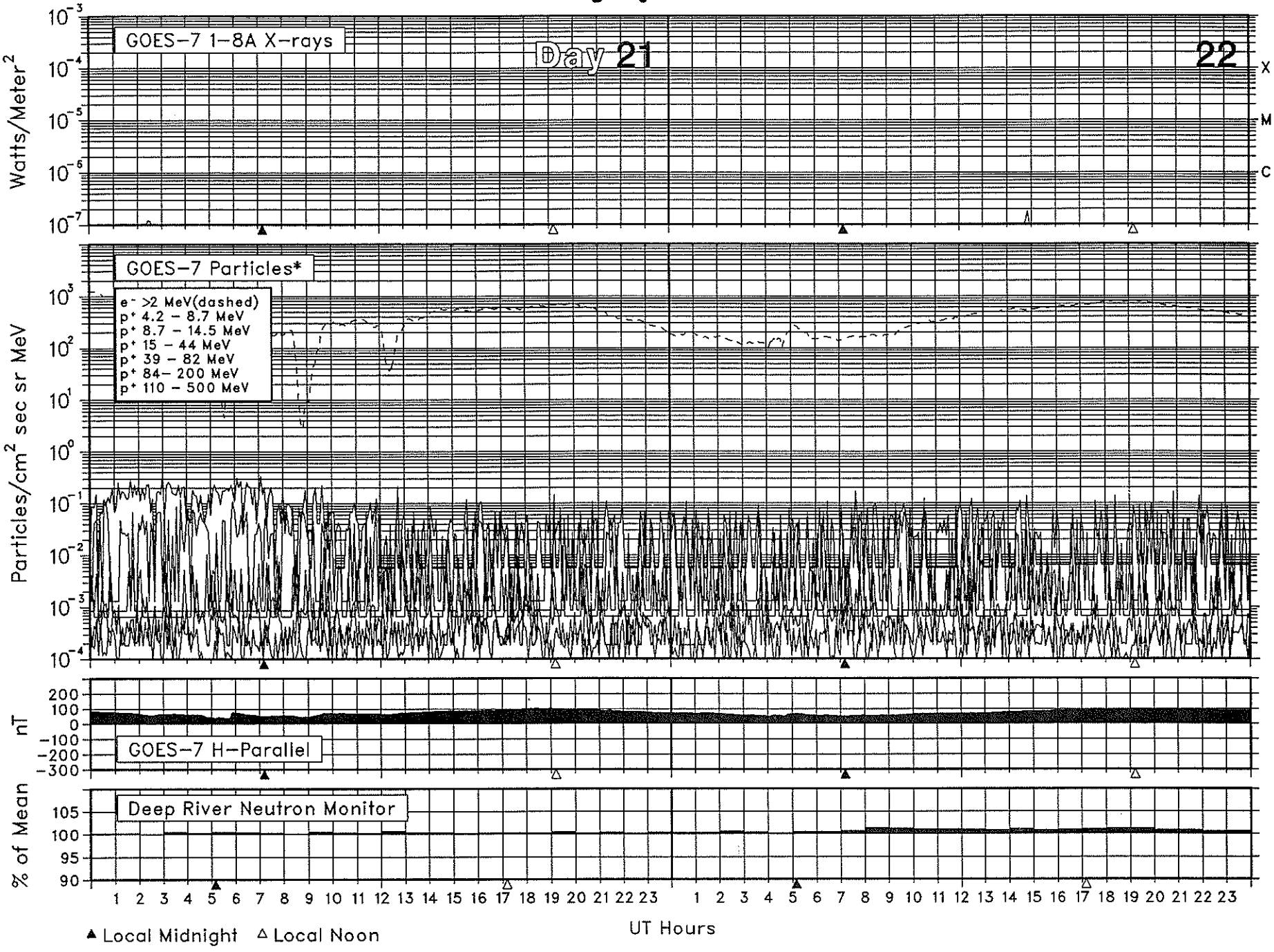

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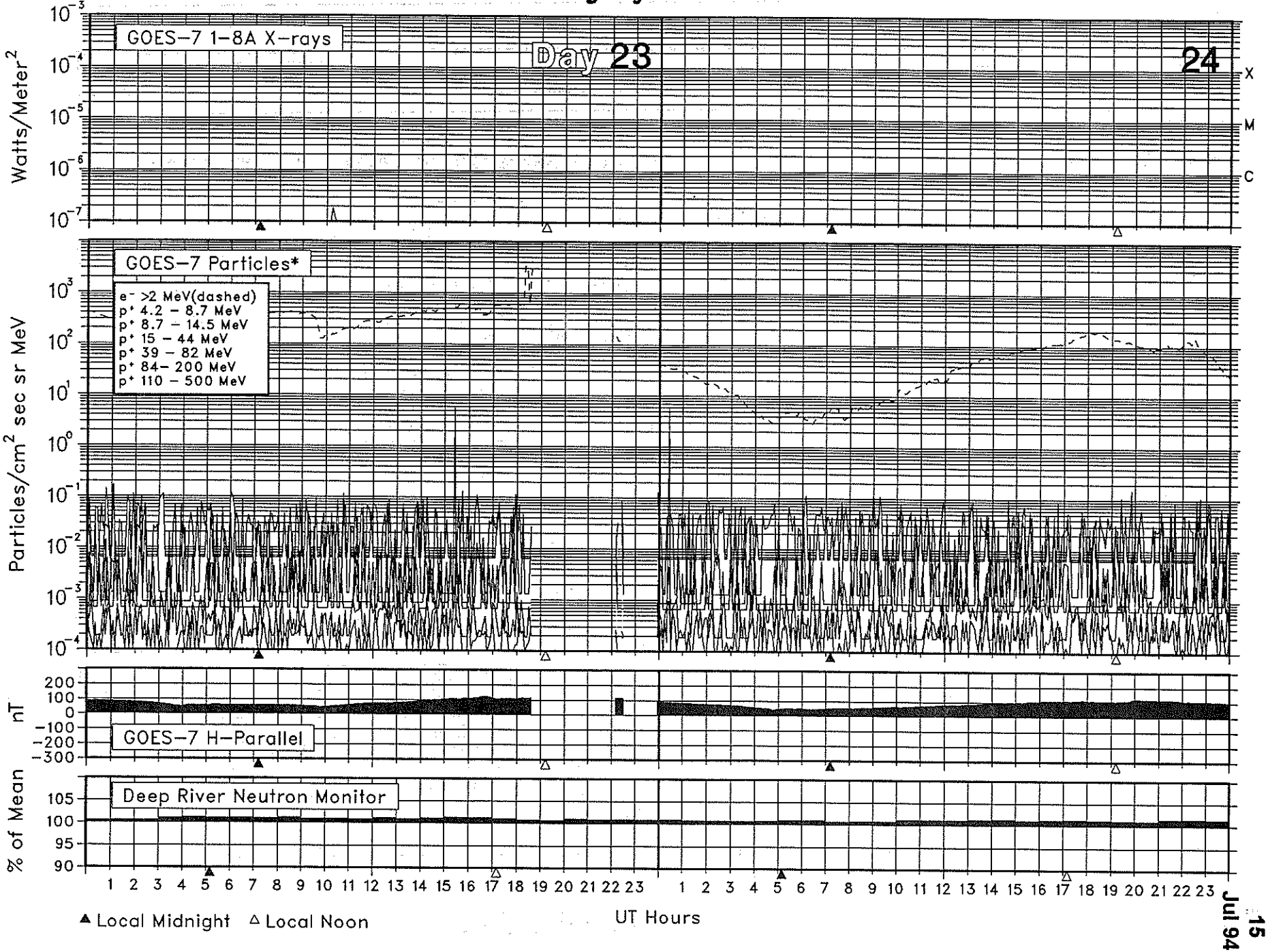
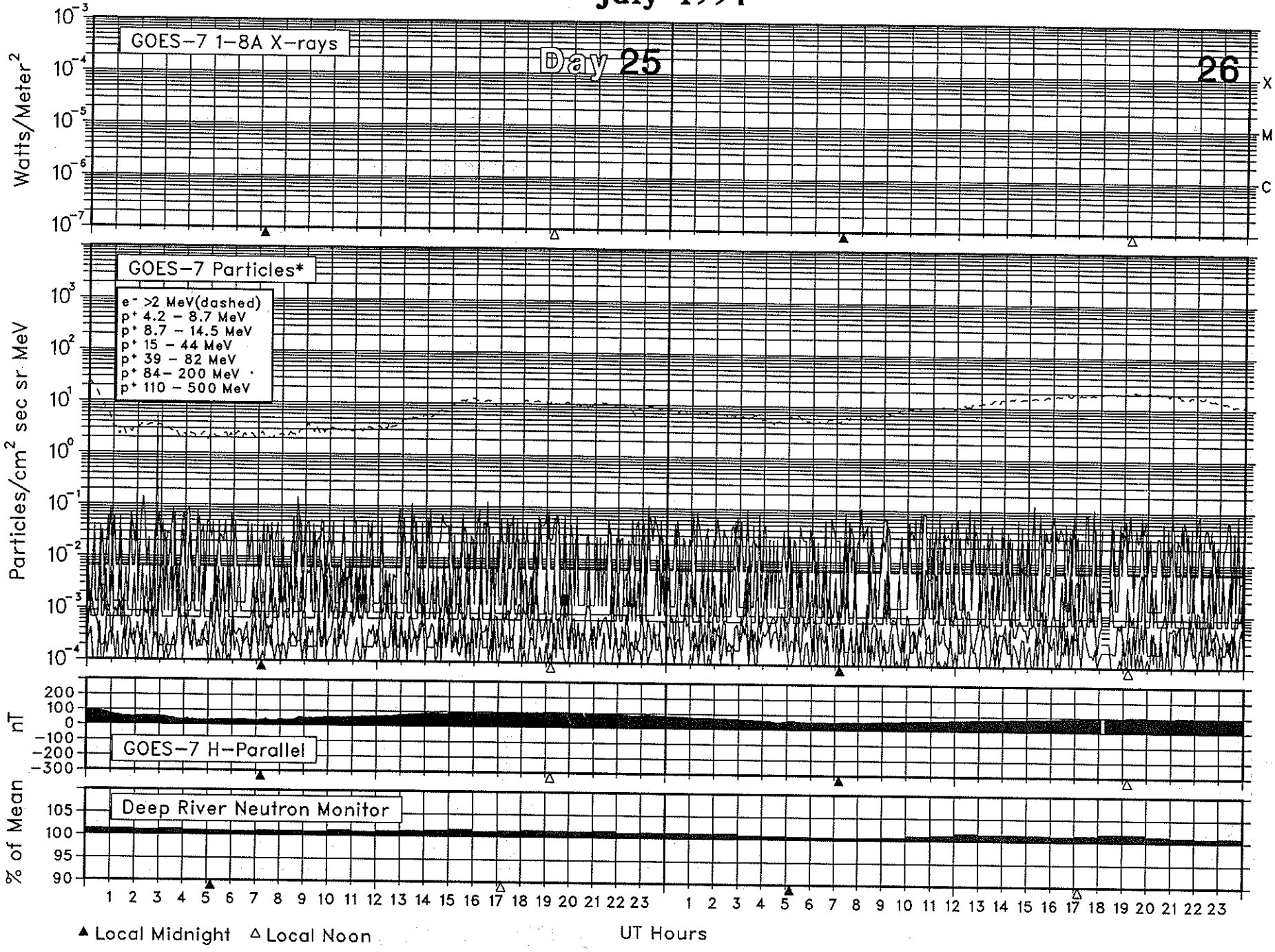
July 1994



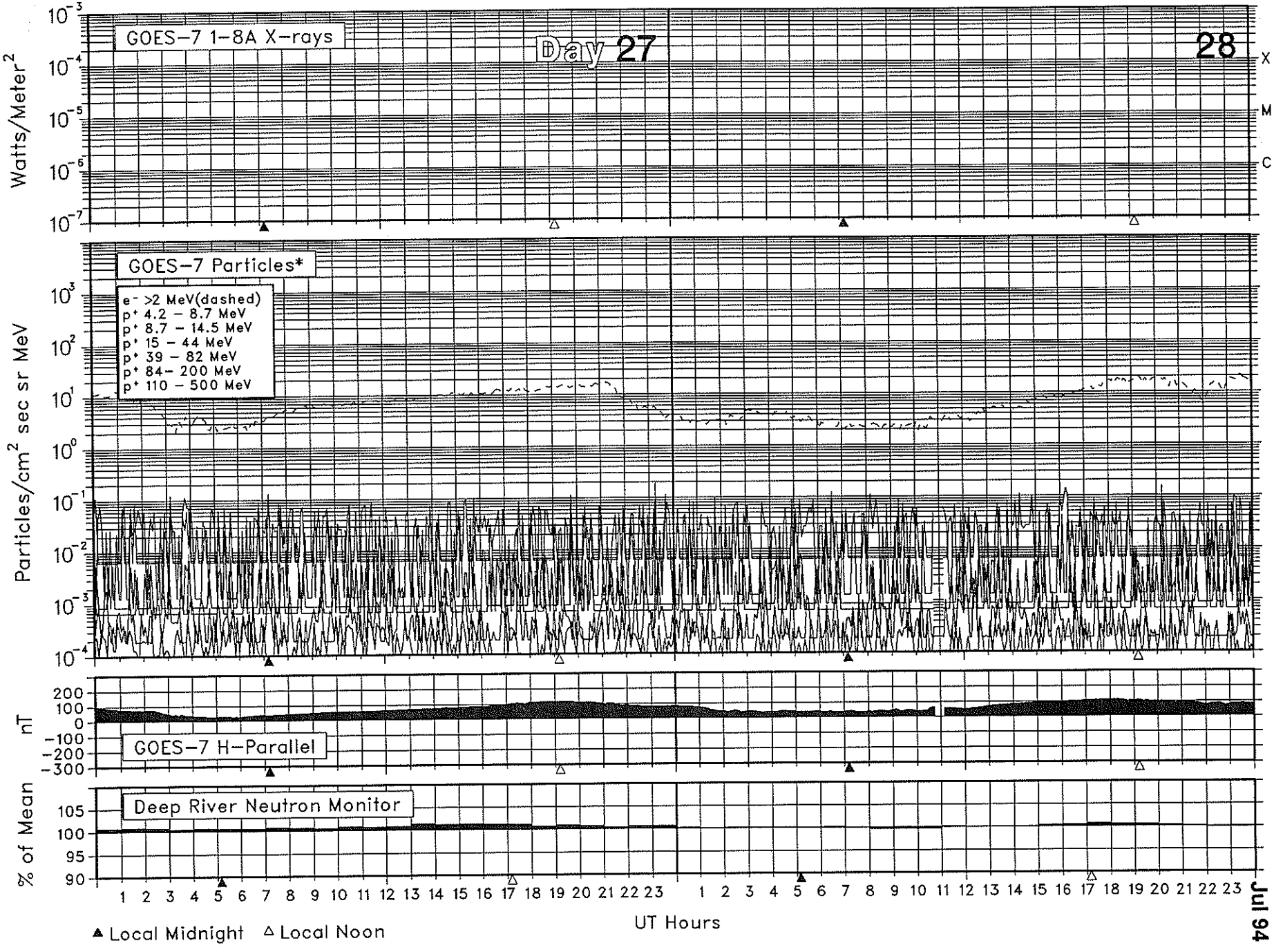
15 Jul 94

SOLAR-TERRESTRIAL ENVIRONMENT
July 1994

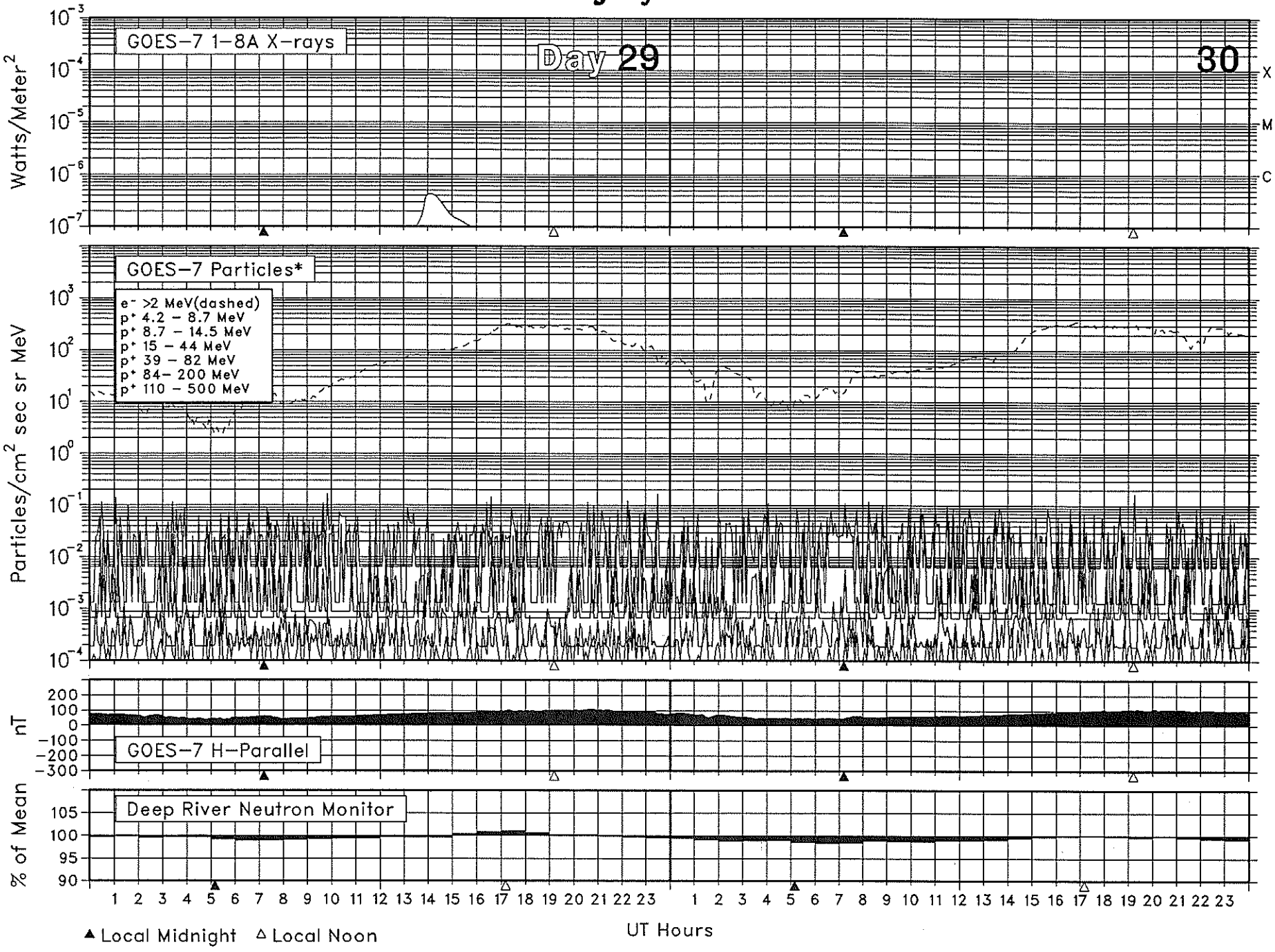
16 Jul 94



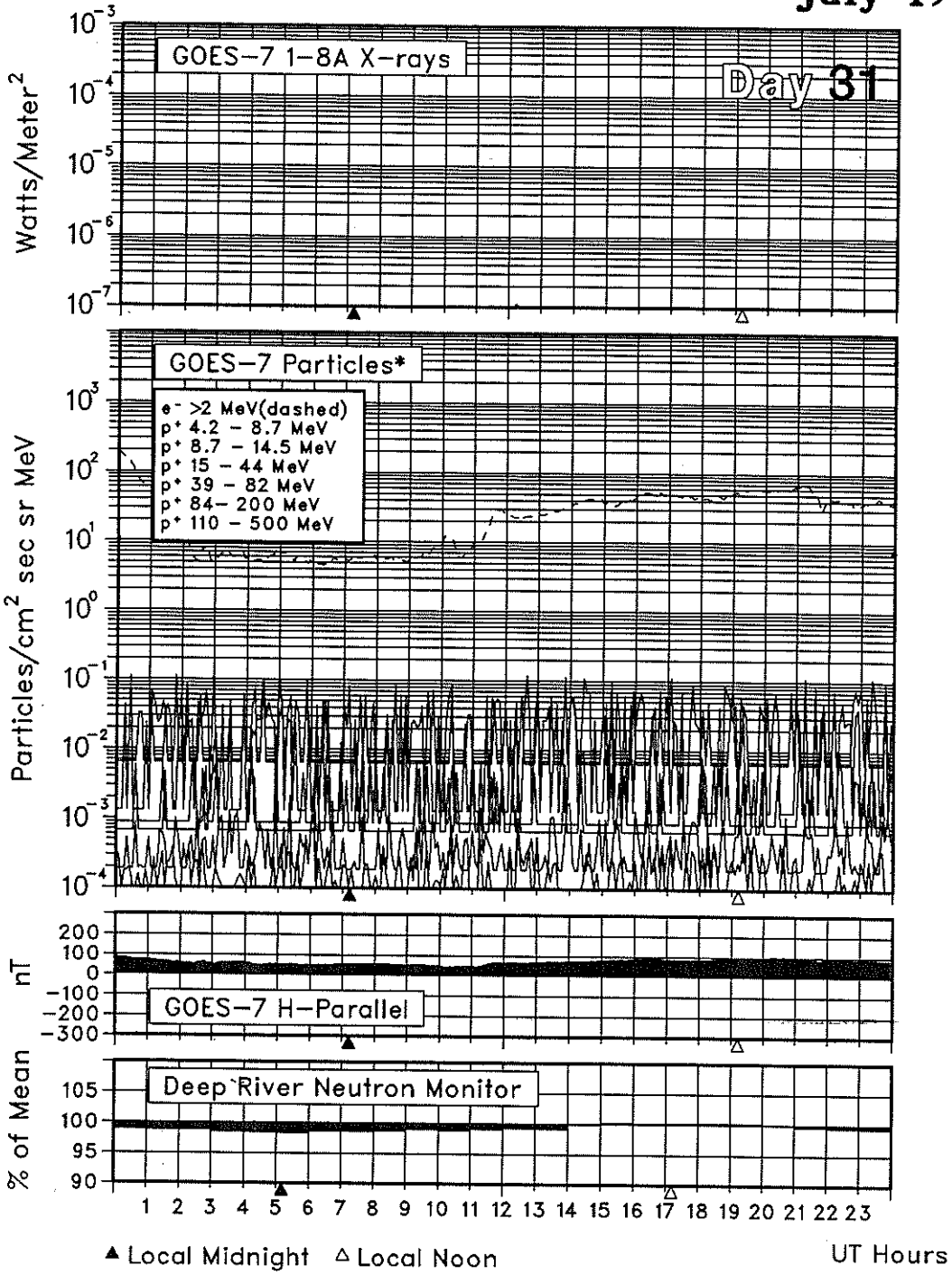
SOLAR-TERRESTRIAL ENVIRONMENT
July 1994



SOLAR-TERRESTRIAL ENVIRONMENT
July 1994



SOLAR-TERRESTRIAL ENVIRONMENT
July 1994



* Electron flux is divided by 10.
Electron units are Counts/cm^2 sec sr.
Protons are corrected for contamination.

ALERT PERIODS

INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

Summary of the Geoalert Messages — JULY 1994

Julian Day	Date of Issue	Date of Obser-vation	Wolf No.	10-cm Solar Flux	A-index	Location °Lat	Location °Long	Flares Total	Flares M	Flares X	Date of Forecast	Region Forecast [1]	Geoadvice[1]
182	01	30	050	083	17	S08	E28	9	1	0	01	E	SOL: Eruptive
						S11	E40	2	0	0	01	Q	MAG: Active
						S16	W05	0	0	0	01	Q	PROTON: Quiet
183	02	01	057	087	21	S09	E14	0	0	0	02	E	SOL: Eruptive
						S10	E27	0	0	0	02	Q	MAG: Active
						S07	W26	0	0	0	02	Q	PROTON: Quiet
184	03	03	000	000	0	S09	E14	0	0	0	04	E	SOL: Eruptive
						S10	E27	0	0	0	03	Q	MAG: Active
						S07	W26	0	0	0	03	Q	PROTON: Quiet
185	04	03	061	086	15	S09	W12	3	0	0	04	E	SOL: Eruptive
						S10	W00	1	0	0	04	Q	MAG: Active
						N09	E01	0	0	0	04	Q	PROTON: Quiet
						N11	E62	0	0	0	04	Q	
186	05	04	057	085	6	S10	W25	0	0	0	05	E	SOL: Eruptive
						N08	W13	0	0	0	05	Q	MAG: Quiet
						N10	E48	0	0	0	05	Q	PROTON: Quiet
187	06	05	038	083	5	S10	W40	0	0	0	06	Q	SOL: Quiet
						N10	E35	1	0	0	06	Q	MAG: Quiet
						N10	E48	0	0	0	06	Q	PROTON: Quiet
188	07	06	051	084	12	S10	W52	0	0	0	07	Q	SOL: Quiet
						N10	E22	2	0	0	07	Q	MAG: Quiet
						S17	E34	0	0	0	07	Q	PROTON: Quiet
189	08	07	090	088	13	S09	W66	1	0	0	08	Q	SOL: Quiet
						N11	E10	6	1	0	08	E	MAG: Quiet
						S15	E21	0	0	0	08	Q	PROTON: Quiet
						S03	W23	0	0	0	08	Q	
						S09	E04	0	0	0	08	Q	
190	09	08	082	086	4	S09	W79	0	0	0	09	Q	SOL: Eruptive
						N11	W04	0	0	0	09	Q	MAG: Quiet
						S15	E08	0	0	0	09	Q	PROTON: Quiet
						S09	W10	1	0	0	09	Q	
191	10	09	072	086	3	N11	W18	1	0	0	10	E	SOL: Eruptive
						S15	W07	0	0	0	10	E	MAG: Quiet
						S08	W26	1	0	0	10	Q	PROTON: Quiet
192	11	10	092	086	1	N12	W31	0	0	0	11	Q	SOL: Eruptive
						S15	W20	0	0	0	11	Q	MAG: Quiet
						S08	W39	2	0	0	11	Q	PROTON: Quiet
						S16	W41	0	0	0	11	Q	
						S12	E56	0	0	0	11	Q	
193	13	12	084	083	1	N11	W58	2	0	0	13	E	SOL: Eruptive
						S16	W52	0	0	0	13	Q	MAG: Quiet
						S08	W71	0	0	0	13	E	PROTON: Quiet
						S16	W69	0	0	0	13	Q	
						S12	E27	0	0	0	13	Q	
						S12	E52	0	0	0	13	Q	

ALERT PERIODS

INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

Summary of the Geoalert Messages — JULY 1994

Julian Day	Date of Issue	Date of Obser-vation	Wolf No.	10-cm Solar Flux	A-index	Location °Lat °Long	Flares Total	Flares M	Flares X	Date of Forecast	Region Forecast [1]	Geoadvice[1]
195	14	13	081	081	1	N12 W71	2	0	0	14	E	SOL: Eruptive
						S16 W65	1	0	0	14	Q	MAG: Quiet
						S08 W83	1	0	0	14	Q	PROTON: Quiet
						S16 W83	0	0	0	14	Q	
						S12 E15	1	0	0	14	Q	
						S12 E39	1	0	0	14	Q	
196	15	14	090	082	19	N11 W83	2	0	0	15	E	SOL: Eruptive
						S14 W69	0	0	0	15	Q	MAG: Quiet
						S08 W94	0	0	0	15	Q	PROTON: Quiet
						S14 W00	0	0	0	15	Q	
						S12 E26	0	0	0	15	Q	
						N11 W07	0	0	0	15	Q	
						N07 W42	0	0	0	15	Q	
197	16	15	059	083	14	S12 W13	0	0	0	16	Q	SOL: Eruptive
						S13 E13	0	0	0	16	Q	MAG: Quiet
						N11 W20	1	0	0	16	Q	PROTON: Quiet
						S12 E59	0	0	0	16	Q	
198	17	16	076	082	26	S12 W27	0	0	0	17	Q	SOL: Eruptive
						S12 W01	0	0	0	17	Q	MAG: Active
						N11 W34	0	0	0	17	Q	PROTON: Quiet
						S13 E46	1	0	0	17	Q	
						N13 E75	1	0	0	17	Q	
199	18	17	073	080	14	S12 W41	0	0	0	18	Q	SOL: Eruptive
						S12 W16	0	0	0	18	Q	MAG: Quiet
						N12 W47	0	0	0	18	Q	PROTON: Quiet
						S12 E33	0	0	0	18	Q	
						N13 E62	0	0	0	18	Q	
200	19	18	079	080	10	S12 W55	0	0	0	19	Q	SOL: Eruptive
						S12 W30	0	0	0	19	Q	MAG: Quiet
						N13 W60	0	0	0	19	Q	PROTON: Quiet
						S12 E19	0	0	0	19	Q	
						N13 E49	0	0	0	19	Q	
						S12 E66	0	0	0	19	Q	
201	20	19	044	078	13	S12 E06	0	0	0	20	Q	SOL: Quiet
						N13 E37	0	0	0	20	Q	MAG: Quiet
						S12 E53	1	0	0	20	Q	PROTON: Quiet
202	21	20	039	077	6	S12 W06	0	0	0	21	Q	SOL: Quiet
						N13 E22	1	0	0	21	Q	MAG: Quiet
						S13 E39	1	0	0	21	Q	PROTON: Quiet
203	22	21	038	077	10	S12 W19	0	0	0	22	Q	SOL: Quiet
						N12 E08	2	0	0	22	Q	MAG: Quiet
						S13 E27	0	0	0	22	Q	PROTON: Quiet
204	23	22	029	078	4	N12 W05	0	0	0	23	Q	SOL: Quiet
						S15 E15	1	0	0	23	Q	MAG: Quiet
						S13 E27	0	0	0	23	Q	PROTON: Quiet
205	24	23	018	076	5	N13 W19	1	0	0	24	Q	SOL: Quiet
						S15 E15	1	0	0	24	Q	MAG: Quiet
						S13 E27	0	0	0	24	Q	PROTON: Quiet
206	25	24	020	075	5	N12 W32	0	0	0	25	Q	SOL: Quiet
						S15 E15	1	0	0	25	Q	MAG: Quiet
						S13 E27	0	0	0	25	Q	PROTON: Quiet

ALERT PERIODS

INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

Summary of the Geoalert Messages — JULY 1994

Julian Day	Date of Issue	Date of Obser-vation	Wolf No.	10-cm Solar Flux	A-index	Location °Lat	Location °Long	Flares Total	Flares M	Flares X	Date of Forecast	Region Forecast [1]	Geoadvice[1]
207	26	25	014	075	13	N12	W45	1	0	0	26	Q	SOL: Quiet
						S15	E15	1	0	0	26	Q	MAG: Quiet
						S13	E27	0	0	0	26	Q	PROTON: Quiet
208	27	26	022	074	5	N12	W59	0	0	0	27	Q	SOL: Quiet
						S14	W41	0	0	0	27	Q	MAG: Quiet
						S13	E27	0	0	0	27	Q	PROTON: Quiet
209	28	27	022	074	9	N11	W73	0	0	0	28	Q	SOL: Quiet
						S14	W56	0	0	0	28	Q	MAG: Quiet
						S13	E27	0	0	0	28	Q	PROTON: Quiet
210	29	28	025	075	17	N11	W86	0	0	0	29	Q	SOL: Quiet
						N04	E36	0	0	0	29	Q	MAG: Quiet
						S13	E27	0	0	0	29	Q	PROTON: Quiet
211	30	29	011	076	9	N04	E22	1	0	0	30	Q	SOL: Quiet
						N04	E36	0	0	0	30	Q	MAG: Quiet
						S13	E27	0	0	0	30	Q	PROTON: Quiet
212	31	30	025	075	8	N03	E10	0	0	0	31	Q	SOL: Quiet
						S06	W50	0	0	0	31	Q	MAG: Quiet
						S13	E27	0	0	0	31	Q	PROTON: Quiet

[1] **Region Forecast and Flare Geoadvice**

Q =Quiet (<50% probability of C-class flares)
E =Eruptive (C-class flares expected, probability >=50%)
A =Active (M-class flares expected, probability >=50%)
M =Major (X-class flares expected, probabiljty >=50%)
P =Proton (Proton flares exptected, probability >=50%)
Warning condition (activity levels expected to increase, but no numeric forecast given)
Nil (end of Alert period)
No forecast

Magnetic Geoadvice

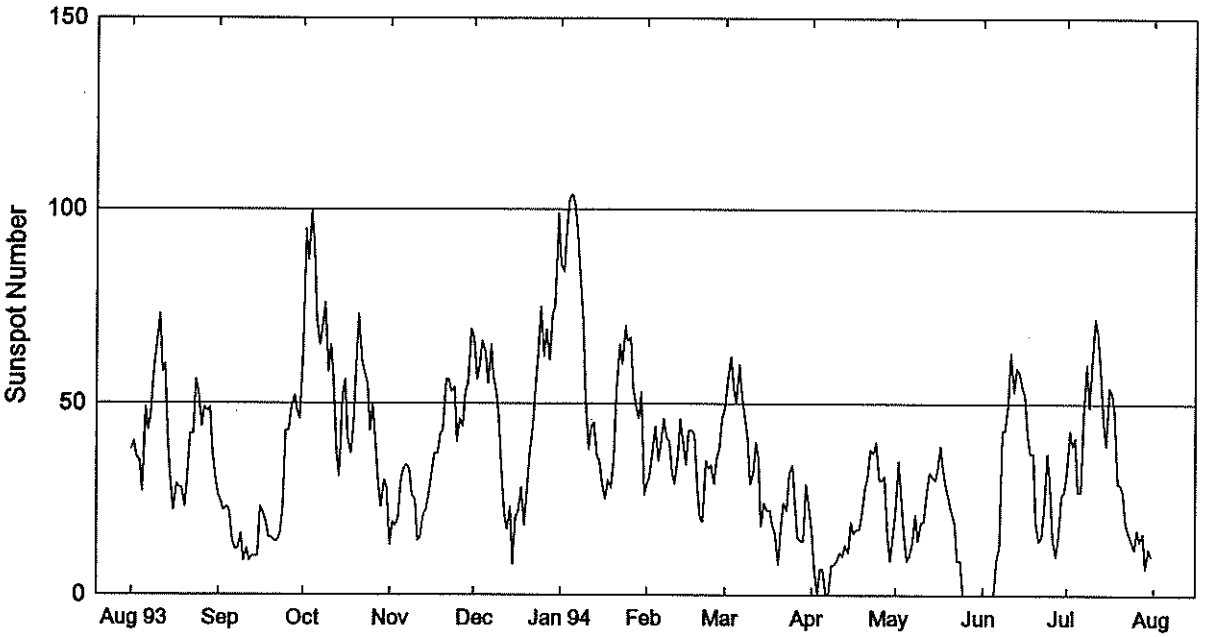
Quiet
Active conditions expected (A>=20 or K=4)
Minor storm expected (A>=30 or K=5)
Major magstorm expected (A>=50 or K>=6)
Severe magstorm expected (A>=100 or K>=7)
Magstorm in progress (A>=30 or K>=4)
Warning condition (activity levels expected to increase, but no numeric forecast given)
Nil (end of Alert period)
No forecast

Proton Geoadvice

Quiet
Proton event expected (10 pfu at >10 MeV)
Major proton event expected (100 pfu at >100 MeV)
Proton event in progress (>10 MeV)
Warning condition (activity levels expected to increase, but no numeric forecast given)
Nil (end of Alert period)
No forecast

NO STRATWARMS RECORED

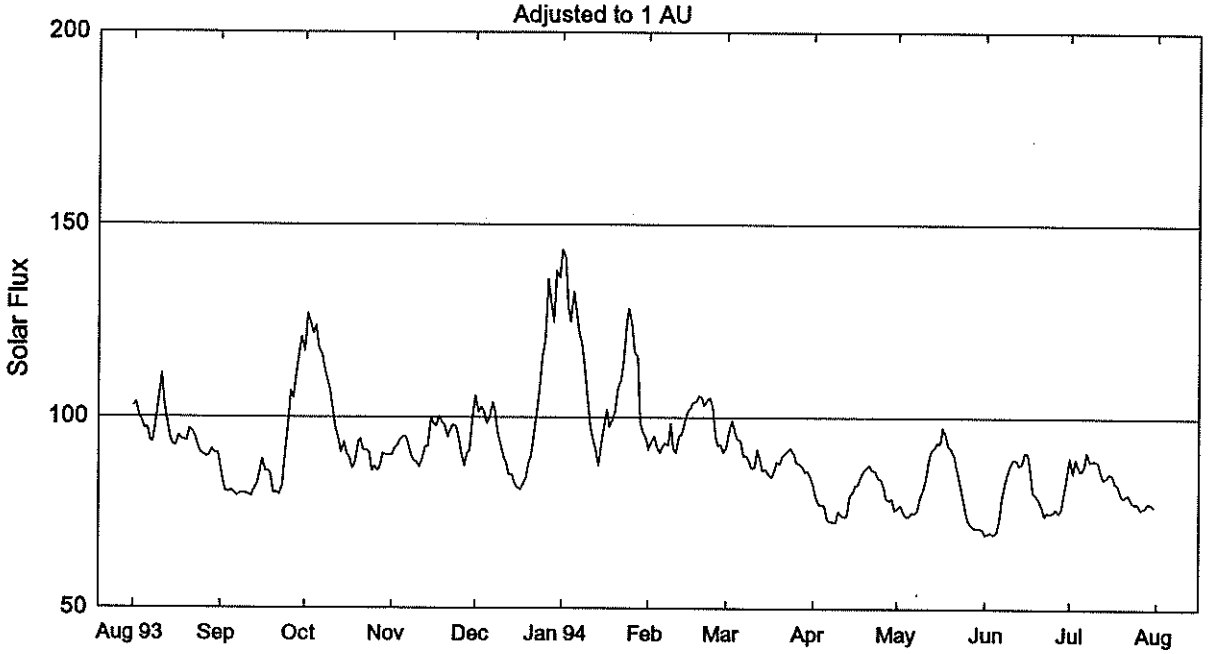
International Relative Sunspot Numbers
Aug 1993 - Jul 1994



Day	Aug	Sep	Oct	Nov	Dec	Jan 94*	Feb*	Mar*	Apr*	May*	Jun*	Jul*
1	38	26	64	13	67	86	29	49	17	21	0	32
2	40	24	95	19	56	84	31	56	7	35	0	43
3	36	22	87	18	60	95	38	62	0	26	0	39
4	35	23	100	20	66	103	44	54	7	15	0	41
5	27	22	90	30	63	104	35	50	7	9	0	27
6	49	14	71	33	55	101	40	60	0	10	9	27
7	43	12	65	34	65	94	46	52	0	14	13	47
8	47	12	70	33	57	81	41	46	8	21	43	60
9	59	16	76	26	53	71	40	41	8	14	43	49
10	65	9	58	25	46	51	32	29	9	19	50	60
11	73	12	65	14	31	38	29	32	11	19	63	72
12	58	9	56	15	21	44	36	40	10	27	53	68
13	60	10	37	21	17	45	46	36	13	31	59	59
14	39	10	31	22	23	36	39	18	11	21	58	45
15	29	10	52	27	8	35	34	24	19	30	54	39
16	22	23	56	32	20	29	43	22	16	33	52	54
17	29	21	41	37	22	25	43	22	17	39	42	53
18	28	19	37	37	28	30	42	18	17	33	37	48
19	28	15	44	42	18	28	28	16	21	28	37	29
20	23	15	63	43	27	35	20	8	28	25	19	29
21	31	14	73	56	37	53	19	17	31	25	14	27
22	42	14	61	56	44	65	35	24	38	21	15	19
23	42	16	58	53	54	60	33	22	37	19	22	16
24	56	23	55	54	63	70	34	32	40	9	37	14
25	53	43	43	40	75	66	29	34	30	9	29	12
26	44	43	50	46	62	67	36	24	30	0	15	17
27	49	49	39	44	69	54	38	15	31	0	10	14
28	48	52	29	53	61	49	46	14	15	0	15	16
29	49	48	23	55	73	46		14	9	0	26	7
30	37	46	30	69	75	53		29	15	0	27	12
31	30		28		99	26		24		0		10
Mean	42.2	22.4	56.4	35.6	48.9	58.8	35.9	31.7	16.7	18.2	28.1	35.0

* = Provisional. The definitive yearly mean sunspot number equals 54.6 for 1993.

Penticton 2800 MHz (10.7cm) Solar Flux
Aug 1993 - Jul 1994



Day	Aug 93	Sep	Oct	Nov	Dec	Jan 94	Feb	Mar	Apr	May	Jun	Jul
1	102.8	87.1	117.1	90.0	105.6	143.4	91.7	92.4	82.4	76.3	69.6	89.7
2	103.7	82.6	126.9	91.8	101.3	141.4	93.5	96.3	79.3	77.1	69.9	85.6
3	100.8	80.9	124.8	92.4	102.6	128.7	95.1	99.2	77.4	75.6	70.3	89.3
4	98.9	80.5	121.5	94.1	101.6	124.6	92.7	96.3	77.2	74.4	69.5	87.4
5	97.0	81.0	123.7	94.8	98.3	132.4	90.6	94.2	77.2	74.4	70.3	86.2
6	97.1	80.2	118.0	94.9	99.9	127.7	92.2	94.1	73.3	75.3	72.7	87.1
7	93.8	79.6	116.6	93.5	103.8	122.1	93.3	90.0	73.0	75.2	79.4	91.1
8	93.4	80.2	113.1	90.2	101.9	118.9	92.6	89.9	72.9	75.8	82.9	88.7
9	99.1	80.1	110.1	88.7	95.4	113.1	98.3	88.7	72.9	78.8	85.5	88.8
10	104.5	80.1	107.1	88.2	93.2	106.5	91.8	86.8	75.7	81.4	88.0	88.9
11	111.2	79.8	102.3	87.0	89.7	97.8	90.7	87.0	74.6	83.6	89.1	88.5
12	103.2	79.5	97.3	88.9	88.1	94.6	95.1	91.7	74.2	89.2	89.0	85.7
13	99.2	81.1	94.5	92.2	85.1	91.9	95.4	89.1	74.3	91.4	87.7	84.1
14	94.6	82.6	90.8	92.3	85.1	87.3	98.9	86.2	79.9	92.1	88.0	84.6
15	92.8	85.6	93.5	99.9	82.8	92.6	101.3	86.5	80.6	93.4	91.0	85.7
16	92.4	89.0	90.3	98.2	81.9	97.0	102.3	85.3	82.3	93.3	90.8	85.1
17	95.1	85.9	89.4	97.7	81.1	102.0	103.9	84.3	82.5	97.2	86.6	83.0
18	94.3	86.0	86.7	100.2	82.4	97.5	103.9	85.9	84.9	95.8	80.9	82.7
19	93.9	85.0	88.1	98.7	84.2	99.5	105.6	88.3	86.2	92.7	79.8	80.1
20	93.8	80.3	93.5	98.0	88.1	101.6	105.2	87.9	87.0	91.9	78.9	79.4
21	97.0	80.6	94.2	94.8	89.9	107.3	103.1	90.0	87.6	89.9	76.8	79.8
22	96.2	79.8	91.3	96.8	96.6	109.5	104.4	90.5	86.3	86.7	74.6	80.1
23	94.8	82.0+	91.4	97.9	101.6	114.6	105.1	91.2	86.1	83.6	75.5	78.2
24	92.5	90.0+	90.6	97.5	107.5	125.1	102.9	92.1	84.3	79.9	75.2	77.7
25	90.6	96.5	86.0	94.7	115.2	128.1	94.8	90.4	83.8	76.1	75.5	77.8
26	90.2	106.8	87.4	90.8	120.5	123.9	92.6	88.1	82.0	73.4	76.3	76.3
27	89.4	104.9	86.0	87.3	135.8	116.8	93.0	88.0	79.0	72.1	75.4	76.6
28	90.2	111.7	87.3	90.7	129.2	115.7	90.8	87.3	78.4	71.4	76.4	77.1
29	91.7	116.8	90.5	91.2	124.4	98.9		85.8	78.9	71.4	81.4	78.0
30	90.7	120.9	90.0	100.8	138.0	96.1		86.1	76.0	71.3	85.4	77.6
31	90.6		90.1		136.2	94.7		84.9		71.1		76.8
Mean	96.0	87.9	99.7	93.8	101.5	111.3	97.2	89.5	79.7	81.7	79.7	83.2

+ = suspect values due to software problems.

DAILY SOLAR INDICES

July 1994

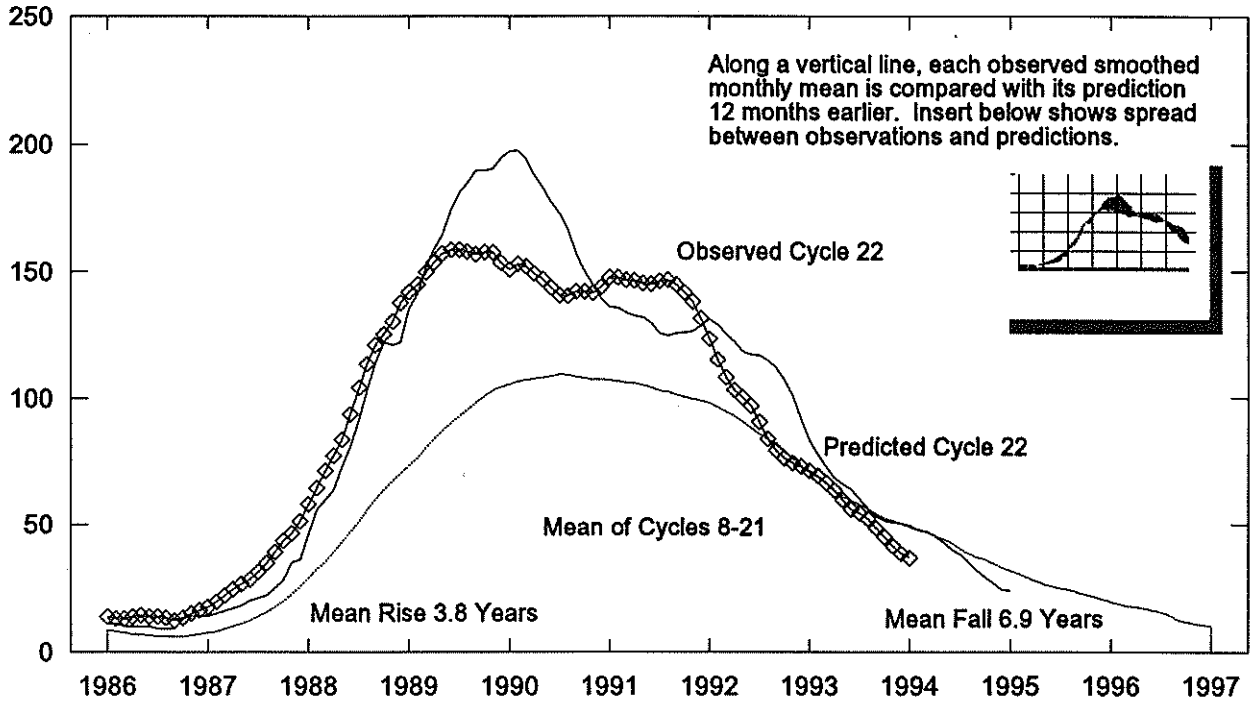
Day	Day of Year	Bartels Cycle Day	Sunspot Numbers Int	Amer	Obs Flux Penticton (2800)	Solar Flux Adjusted to 1 Astronomical Unit — LEAR (15400)	LEAR (8800)	LEAR (4995)	Pentic (2800)	LEAR (2695)	LEAR (1415)	LEAR (610)	LEAR (410)	LEAR (245)
1	182	22	32	34	86.7	543	215	136	89.7	83	58	40	22	20
2	183	23	43	41	82.8	528	219	136	85.6	84	60	42	23	24
3	184	24	39	34	86.4	528	217	137	89.3	85	63	45	25	29
4	185	25	41	34	84.6	551	218	137	87.4	86	62	44	23	13
5	186	26	27	28	83.4	542	223	136	86.2	85	62	43	22	13
6	187	27	27	31	84.2	531	218	136	87.1	82	63	45	23	14
7	188	1	47	57	88.1	534	217	136	91.1	85	64	45	24	14
8	189	2	60	58	85.8	537	221	139	88.7	87	67	47	27	16
9	190	3	49	49	85.9	550	220	135	88.8	86	65	47	24	13
10	191	4	60	61	86.0	502	221	136	88.9	85	64	46	24	--
11	192	5	72	72	85.6	530	220	139	88.5	87	65	45	23	14
12	193	6	68	67	82.9	528	208	135	85.7	84	64	42	22	13
13	194	7	59	58	81.4	536	220	134	84.1	82	61	43	23	13
14	195	8	45	55	81.9	513	211	131	84.6	81	62	44	22	13
15	196	9	39	35	83.0	546	207	132	85.7	83	62	42	22	12
16	197	10	54	46	82.4	538	223	139	85.1	81	62	43	22	12
17	198	11	53	47	80.3	545	222	135	83.0	80	59	42	28	13
18	199	12	48	43	80.1	537	219	131	82.7	79	57	41	21	12
19	200	13	29	26	77.6	540	219	132	80.1	78	57	41	21	12
20	201	14	29	25	76.9	535	196	124	79.4	76	56	40	21	12
21	202	15	27	24	77.3	525	216	131	79.8	78	55	38	20	11
22	203	16	19	15	77.6	521	209	129	80.1	75	55	40	21	11
23	204	17	16	14	75.8	532	220	131	78.2	78	56	39	22	11
24	205	18	14	15	75.3	522	215	130	77.7	75	55	39	21	12
25	206	19	12	11	75.5	540	219	129	77.8	76	55	40	21	11
26	207	20	17	13	74.0	540	215	128	76.3	74	56	40	21	11
27	208	21	14	11	74.3	527	217	128	76.6	74	55	39	20	11
28	209	22	16	12	74.8	527	213	127	77.1	75	55	41	21	11
29	210	23	7	7	75.7	529	214	129	78.0	73	56	41	22	12
30	211	24	12	12	75.3	511	218	128	77.6	76	57	44	22	11
31	212	25	10	12	74.5	522	213	128	76.8	75	56	43	22	11
MEAN			35.0	33.8	80.5	531	216	132	83.2	80	59	42	22	13

The International numbers shown above are preliminary values; the American numbers are final.

The observed and the adjusted Penticton fluxes tabulated here are the "Series C" daily values reported by the Dominion Radio Astrophysical Observatory, Penticton, British Columbia, Canada. Numbers in parentheses in the column headings denote frequencies in MHz.

Equipment problems produced any gaps in the Air Weather Service's Learmonth (LEAR) observations.

Cycle 22 Smoothed Sunspot Numbers: Observed and Predicted



Smoothed Sunspot Numbers (Observed and Predicted) for Parts of Solar Cycles 21 and 22

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
1987	18	20	22	24	26	28	31	35	39	44	47	51	32
1988	58	65	71	78	84	94	104	114	121	125	130	138	99
1989	142	145	150	154	157	158	158	158	157	157	158	154	154
1990	151	153	152	149	147	144	141	140	142	142	142	144	146
1991	148	148	147	146	146	145	146	147	145	142	138	132	144
1992	124	115	108	103	100	97	91	84	80	76	74	73	94
1993	71	69	67	64	60	56	55	52	49	45	41	39	56
1994	37	35	34	33	33	32	30	28	27	26	25	24	30
( )		(3)	(4)	(5)	(7)	(9)	(12)	(14)	(15)	(16)	(18)	(19)	(10)
1995	24	24	23	22	20	19	19	18	18	17	17	15	20
( )	(20)	(20)	(20)	(20)	(20)	(20)	(20)	(20)	(19)	(19)	(18)	(17)	(19)
1996	14	13	12	12	12	11	10	10	9	9	8	8	11
( )	(17)	(18)	(18)	(19)	(19)	(18)**	(17)	(17)	(16)	(16)	(15)	(14)	(17)

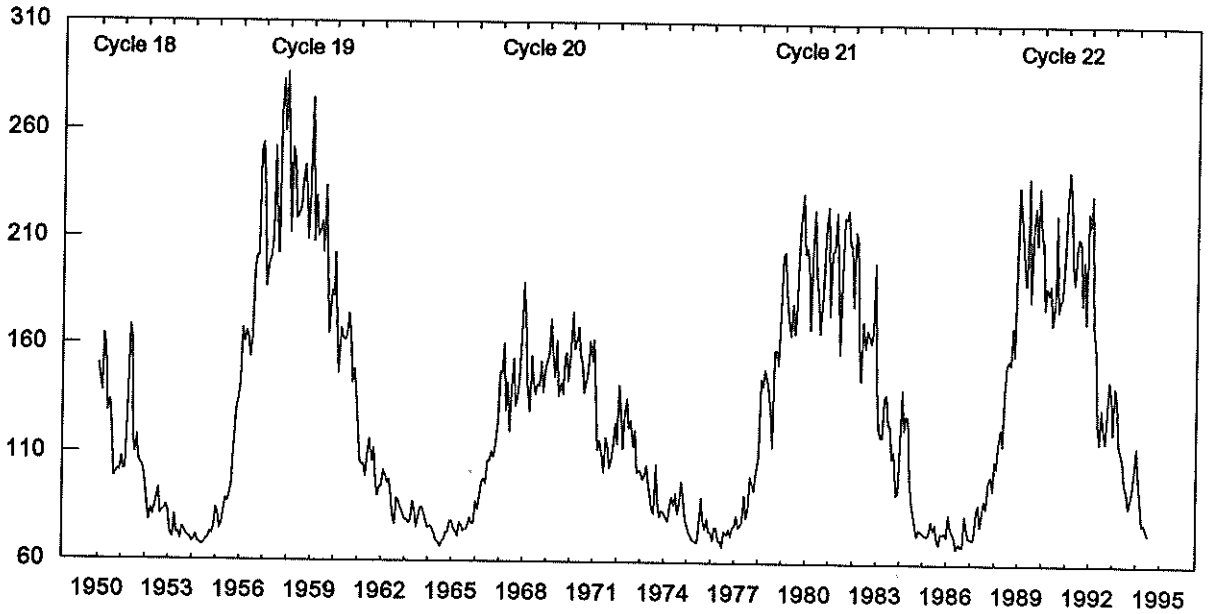
Solar Cycle 22 — Min, Max, and Predictions

September 1986 marks the minimum of Solar Cycle 21 and the onset of Cycle 22, which in turn, reached a maximum in July 1989.

Observed and Predicted Numbers. For the end of Cycle 21, and the rise and decline of Cycle 22, the table above lists observed smoothed sunspot numbers up to the one that includes the most recent monthly mean. We based these smoothed values on final monthly means through Dec 1993 and on provisional numbers thereafter. Table entries with numbers in parentheses below them denote predictions by the McNish-Lincoln method. (See page 9 in the Jul 1987 supplement to *Solar-Geophysical Data*.) Adding the number in parentheses to the predicted value generates the upper limit of the 90% confidence interval. Subtracting the number from the predicted value generates the lower limit. Consider, for example, the Jan 1995 prediction. There exists a 90% chance that in Jan 1995, the actual smoothed number will fall somewhere between 4 and 44.

Points to Ponder. The McNish-Lincoln prediction method generates useful estimates of smoothed, monthly mean sunspot numbers for no more than 12 months ahead. Beyond 12 months, the predictions regress toward the mean of all 14 cycles of observations used in the computation. Moreover, the method remains very sensitive to the date defining the onset of the current cycle, that is, to the date of the most recent sunspot minimum. The new cycle predictions tabulated above are based on the minimum value of 12.3 that occurred in Sep 1986.

Monthly Mean 2800 MHz Solar Flux (Observed)
Jan 1950 - Jul 1994



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
1950	150.7	143.3	137.8	164.3	157.1	128.7	134.1	120.9	98.6	99.9	101.9	101.1	128.2
1951	107.9	101.9	102.5	127.1	168.6	161.7	116.3	109.8	117.8	106.0	104.4	102.4	118.9
1952	95.4	86.2	78.5	84.0	80.9	84.8	88.8	93.3	81.5	82.8	83.4	85.7	85.4
1953	83.2	72.8	70.4	81.0	72.5	73.0	69.8	75.5	74.3	71.9	71.4	70.8	73.9
1954	68.7	69.2	71.9	68.7	68.0	67.3	67.7	69.9	70.1	73.2	72.6	75.5	70.2
1955	84.3	82.0	74.8	77.3	82.8	88.8	87.3	90.7	91.1	111.8	130.0	134.6	95.0
1956	141.2	167.2	160.6	165.9	163.4	154.0	162.8	193.8	200.9	201.6	250.4	253.7	184.6
1957	231.2	186.7	197.8	200.0	208.5	252.1	218.0	202.3	267.1	283.1	259.2	286.5	232.7
1958	251.5	212.2	251.5	245.9	218.6	220.5	224.1	237.0	243.5	228.0	209.2	238.2	231.7
1959	274.5	207.9	229.2	210.6	212.7	217.5	203.0	234.2	194.3	165.1	184.8	182.2	209.7
1960	202.6	170.9	146.8	167.6	162.7	161.9	163.9	174.4	164.5	142.3	148.9	138.1	162.0
1961	122.0	106.4	104.8	105.0	99.3	109.9	116.5	106.2	112.7	96.7	90.3	94.8	105.4
1962	94.9	102.2	100.3	96.2	97.9	91.0	80.7	77.3	89.5	87.8	84.9	82.0	90.4
1963	79.5	79.7	77.8	79.5	87.8	83.5	75.9	80.9	85.1	85.1	81.7	78.4	81.2
1964	75.4	76.8	75.9	72.6	69.5	69.0	67.0	69.3	70.2	73.4	73.7	78.8	72.6
1965	78.6	75.2	74.1	72.0	78.2	77.0	74.3	74.8	76.6	80.2	77.7	77.8	76.4
1966	87.9	84.2	90.3	97.2	98.5	96.3	106.7	106.6	110.9	108.6	113.3	124.6	102.1
1967	147.7	147.0	160.6	129.9	143.0	120.2	140.3	153.7	132.1	136.1	145.3	163.0	143.2
1968	189.1	173.2	142.6	129.5	154.9	142.3	137.2	142.2	141.0	152.5	138.5	148.4	149.3
1969	152.7	155.2	172.3	155.5	145.4	162.2	136.6	143.0	137.3	154.0	156.7	143.6	151.2
1970	158.3	175.4	158.4	162.0	168.4	154.9	152.0	138.2	143.2	148.3	162.0	152.8	156.2
1971	162.6	137.8	111.9	116.7	109.9	101.7	117.4	114.1	104.0	107.2	114.0	124.5	118.5
1972	114.8	141.8	128.5	112.9	129.6	135.4	122.0	125.7	113.6	121.1	101.6	102.9	120.8
1973	102.2	98.7	100.4	105.0	97.0	91.2	84.5	82.9	105.6	87.7	81.5	84.2	93.4
1974	83.1	80.9	79.2	86.1	90.6	86.3	92.5	83.0	87.8	97.6	90.3	81.1	86.5
1975	77.5	74.2	72.4	70.7	70.1	69.7	77.2	90.4	79.6	75.7	80.8	74.6	76.1
1976	74.7	70.5	76.7	76.3	70.6	70.6	67.5	74.8	73.1	75.9	72.9	76.7	73.4
1977	77.4	82.3	76.6	77.6	79.6	91.5	81.1	84.3	99.9	96.9	93.7	102.1	86.9
1978	109.6	145.4	141.8	149.4	146.5	142.2	131.1	114.0	157.9	158.2	151.5	175.5	143.6
1979	203.0	204.1	185.8	173.8	165.2	180.3	165.9	172.7	200.2	217.9	231.7	203.5	192.0
1980	206.2	200.0	168.1	207.9	224.0	193.2	184.8	166.2	183.9	204.2	218.1	225.8	198.5
1981	174.6	204.5	205.3	223.2	194.6	156.9	191.9	220.6	219.5	224.3	207.8	207.8	202.6
1982	179.0	214.2	210.5	161.8	144.7	171.9	159.6	167.9	165.3	161.9	167.4	199.4	175.3
1983	142.3	122.6	118.6	118.9	137.1	138.6	125.0	124.4	109.0	112.4	92.5	93.4	119.6
1984	116.1	140.6	122.0	128.7	128.3	100.3	89.3	83.7	78.1	73.5	76.3	75.9	101.1
1985	74.5	73.7	73.3	75.1	80.2	76.1	78.7	71.5	69.5	74.7	74.2	74.8	74.7
1986	73.2	83.6	77.0	75.1	72.6	67.6	70.2	68.4	68.7	83.0	77.1	72.6	74.1
1987	72.5	71.5	74.0	84.9	87.8	77.9	84.2	90.0	86.1	98.1	101.2	94.4	85.3
1988	108.0	105.0	114.9	122.7	115.2	139.4	152.7	154.2	152.5	169.8	156.2	199.8	141.0
1989	235.4	222.4	205.1	189.6	190.1	239.6	181.9	217.1	225.9	208.7	235.1	213.0	213.7
1990	210.1	178.3	188.8	185.3	189.7	170.9	180.7	222.6	177.4	182.0	184.3	204.9	189.6
1991	229.4	243.0	230.0	198.8	190.3	206.8	212.0	210.3	180.6	201.3	172.0	223.9	208.1
1992	217.6	232.1	171.3	158.5	125.4	116.7	132.2	122.1	116.8	130.8	145.2	139.1	150.7
1993	121.0	142.6	136.4	115.9	112.3	109.3	99.0	93.7	87.0	100.3	95.9	104.8	109.7
1994	115.0	99.6	90.4	79.1	79.9	77.3	74.5						88.0

Hα SOLAR FLARES

JULY 1994

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
GOES	01	0626	0630	0634						8		B 1.2						
GOES		0757	0802	0806						9		B 2.5						
GOES		0848	0918	0925						37		B 2.1						
GOES		1011	1022	1026						15		B 1.7						
GOES		1154	1158	1201						7		B 1.2						
GOES		1620	1724	1754						94		B 7.0						
GOES		1947	1950	1952						5		B 2.6						
GOES		2053	2103	2110						17		B 2.7						
SVTO	02	0501	0503	0513	S11	E06	7742	07	2.7	12	SF		2	E		27		FH
LEAR		0501	0505	0513	S12	E19	7742	07	3.6	12	SF	B 5.3	3	E		18		F
HOLL		1445	1445	1453	S11	E08	7742	07	3.2	8	SF	B 2.6	3	E		23		F
GOES	03	0155	0201	0204						9		B 1.2						
GOES		0220	0224	0226						6		B 1.1						
GOES		0634	0637	0639						5		B 1.0						
LEAR		0721	0722	0726	S07	W03	7742	07	3.1	5	SF		3	E		17		
SVTO		0721	0722	0726	S07	W02	7742	07	3.1	5	SF	B 1.5	3	E		17		
GOES		0729	0732	0734						5		B 1.2						
GOES		0750	0753	0755						5		B 1.1						
RAMY		1338	1338	1345	S11	E08	7743	07	4.2	7	SF		3	E		17		F
SVTO		1338	1342	1345	S10	E05	7743	07	3.9	7	SF	B 1.5	4	E		11		H
HOLL		1451	1502	1529	S08	W04	7742	07	3.3	38	SF	C 1.0	3	E		80		F
SVTO		1452	1502	1522	S09	W04	7742	07	3.3	30	SF		4	E		79		F
RAMY		1452	1503	1535	S09	W04	7742	07	3.3	43	SF		3	E		84		F
HOLL		1619	1629	1637	S12	W09	7742	07	3.0	18	SF	B 3.1	3	E		14		
GOES	04	0323	0327	0344						21		B 1.1						
GOES		0405	0416	0422						17		B 1.1						
GOES		0754	0756	0758						4		B 2.6						
GOES		0931	0937	0940						9		B 1.7						
GOES		1132	1135	1139						7		B 1.7						
GOES		1801	1815	1830						29		B 4.9						
GOES	05	1644	1654	1659						15		B 1.5						
HOLL		2107	2109	2114	N10	E34	7746	07	8.4	7	SF	B 1.4	3	E		12		
GOES	06	0438	0442	0444						6		B 1.0						
GOES		1059	1103	1106						7		B 1.1						
RAMY		1646	1647	1704	N09	E23	7746	07	8.4	18	SF	B 7.9	3	E		56		FH
HOLL		1647	1647	1703	N09	E23	7746	07	8.4	16	SF		3	E		38		F
GOES		1753	1757	1800						7		B 1.3						
GOES		2227	2230	2234						7		B 1.3						
LEAR		2342	2344	2359	N08	E22	7746	07	8.6	17	SF	B 5.6	3	E		35		F
HOLL		2343	2344	2357	N09	E19	7746	07	8.4	14	SF		3	E		34		F
GOES	07	0520	0524	0528						8		B 1.1						
GOES		0613	0617	0621						8		B 1.2						
GOES		0822	0829	0834						12		B 1.2						
LEAR		0857	0902	0913	N08	E17	7746	07	8.6	16	SF	B 2.3	3	E		11		
SVTO		0956	0958U	1025	N13	E19	7746	07	8.8	29	1N	M 1.3	3	E		113		
RAMY		1033E	1034U	1048	N09	E15	7746	07	8.6	15D	SF		3	E		12		F
SVTO		1108	1109	1118	S10	W57	7742	07	3.2	10	SF	B 2.7	3	E		31		
RAMY		1125	1133	1156	N11	E14	7746	07	8.5	31	SF	B 2.1	3	E		40		FH
GOES		1400	1403	1407						7		B 1.1						
GOES		1511	1515	1517						6		B 2.0						
RAMY		1522	1526	1545	N10	E10	7746	07	8.4	23	SF	B 4.1	3	E		22		F
SVTO		1529	1532	1541	N10	E10	7746	07	8.4	12	SF		3	E		11		F
HOLL		1931	1934	1947	N10	E11	7746	07	8.6	16	SF	B 8.2	3	E		13		F
GOES		2116	2122	2125						9		B 1.3						
PALE		2345E	2350	2401D	N09	E23	7646	07	9.7	16D	SN		3	E		32		F
GOES	08	0049	0053	0056						7		B 1.4						
GOES		0147	0151	0159						12		B 1.3						
LEAR		0537	0539	0542	S09	W01	7749	07	8.1	5	SF	C 1.0	3	E		10		H
GOES		0853	0856	0903						10		B 1.0						
GOES		1519	1524	1529						10		B 1.1						
GOES	09	0026	0031	0033						7		B 1.2						

Hα SOLAR FLARES

JULY 1994

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
SVTO	09	0933	0934	0940	N11	W13	7746	07	8.4	7	SF	B 1.6	2	E		23		F
HOLL		1848	1857	1905	S10	W25	7749	07	7.9	17	SF	B 4.5	3	E		33		
GOES	10	0119	0123	0125						6		B 1.3						
LEAR		0341	0342	0347	S07	W27	7749	07	8.1	6	SF	B 7.2	3	E		32		
PALE		0344E	0345U	0353D	S09	W31	7749	07	7.8	9D	SF		3	E		58		
PALE		0437E	0438U	0443D	S09	W32	7749	07	7.8	6D	SF	B 1.7	3	E		15		
GOES		0558	0601	0603						5		B 1.6						
GOES		0703	0706	0709						6		B 1.5						
GOES		0759	0804	0814						15		B 1.6						
GOES		0817	0822	0827						10		B 2.8						
GOES		1750	1753	1755						5		B 1.1						
GOES	11	0631	0637	0642						11		B 2.7						
SVTO		1001	1002	1003	S11	W48	7749	07	7.8	2	SF	B 6.4	3	E		23		
GOES		1546	1549	1551						5		B 1.4						
GOES		2207	2211	2214						7		B 1.7						
GOES	12	0547	0555	0604						17		B 2.4						
LEAR		0915	0917	0933	N12	W52	7746	07	8.5	18	SF	C 6.0	3	E		63		F
SVTO		0915	0917	0941D	N09	W53	7746	07	8.4	26D	1N		3	E		109		
GOES		1040	1058	1103						23		B 1.8						
GOES		1246	1250	1253						7		B 1.7						
GOES		1336	1340	1344						8		B 1.1						
GOES		1527	1530	1534						7		B 1.0						
HOLL		2245	2250	2303	N12	W61	7746	07	8.3	18	SF		3	E		44		
HOLL	13	0021	0021	0025	S12	E50	7753	07	16.8	4	SF	B 1.2	3	E		17		
GOES		0050	0101	0107						17		B 2.1						
PALE		0202E	0205	0209D	S13	W49	7747	07	9.4	7D	SF	B 1.2	3	E		15		
GOES		0731	0735	0737						6		B 1.1						
SVTO		1142	1144	1156	N10	W66	7746	07	8.5	14	SF	B 3.2	3	E		21		
GOES		1555	1603	1608						13		B 2.3						
RAMY		1645	1700	1715	N12	W68	7746	07	8.6	30	SF		3	E		79		H
HOLL		1647	1700	1716	N12	W69	7746	07	8.5	29	SF	B 4.4	3	E		68		H
PALE		1700E	1703U	1710D	N12	W66	7746	07	8.7	10D	SF		3	E		44		
HOLL		2045	2045	2048	S10	W82	7749	07	7.7	3	SF	B 1.7	3	E		17		
PALE		2046E	2049U	2051D	S09	W78	7749	07	8.0	5D	SF		3	E		17		
HOLL		2215	2217	2235	S12	E18	7751	07	15.3	20	SF	B 3.0	3	E		18		F
GOES	14	0428	0431	0433						5		B 1.0						
SVTO		0849	0856	0858	N10	W78	7746	07	8.5	9	SF	C 1.9	3	E		12		
GOES		1036	1042	1047						11		B 2.1						
GOES		1442	1449	1456						14		B 1.6						
RAMY		1902	1903	1911	N12	W84	7746	07	8.5	9	SF		3	E		12		
PALE		1957	1959	2010D	S12	E72		07	20.2	13D	SF		3	E		30		H
RAMY		1958	1959	2007	S13	E75		07	20.5	9	SF		3	E		26		H
HOLL		1958	2001	2007	S14	E77		07	20.6	9	SF	C 2.3	3	E		46		
HOLL		2355	2355	2355D	S14	E73		07	20.5	9D	SF	B 7.5	3	E		20		
PALE	15	0021E	0021U	0033D	N12	W80	7746	07	9.0	12D	SF	B 1.7	2	E		25		
GOES		0146	0149	0158						12		B 1.4						
GOES		0226	0230	0232						6		B 2.0						
PALE		0329E	0329U	0335D	S11	E70		07	20.4	6D	SF	B 7.0	2	E		11		
GOES		0409	0422	0424						15		B 4.7						
GOES		0453	0509	0513						20		B 5.7						
SVTO		0710	0711	0713	S11	E68		07	20.4	3	SF		3	E		14		
LEAR		0728	0732	0746	S17	E67		07	20.4	18	SF	C 1.1	3	E		26		H
GOES		0922	0926	0929						7		B 2.2						
GOES		1157	1200	1203						6		B 3.0						
RAMY		1251	1301	1323	N13	W90	7746	07	8.7	32	SF	B 9.1	3	E		52		
HOLL		1319	1329	1345	S13	E64		07	20.4	26	SF		3	E		44		H
GOES		1613	1616	1619						6		B 1.9						
GOES		1625	1636	1709						44		B 3.3						
RAMY		1716	1716	1725	N11	W16	7754	07	14.5	9	SF	C 1.1	3	E		12		F
GOES		1827	2021	2033						126		B 5.1						
GOES		2233	2239	2246						13		B 4.5						
GOES	16	0012	0023	0026						14		B 8.1						

Hα SOLAR FLARES

JULY 1994

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
GOES	16	0114	0117	0119						5		B 5.4						
GOES		0126	0152	0206						40		B 8.3						
GOES		0251	0304	0313						22		C 1.4						
GOES		0546	0551	0555						9		B 6.1						
GOES		0629	0643	0645						16		B 4.2						
GOES		0737	0740	0743						6		B 4.0						
GOES		0749	0758	0805						16		B 4.2						
LEAR		0849	0850	0902	S16	E53	7756	07	20.4	13	SF	B 6.9	3	E		32		F
SVTO		0850	0850	0901	S10	E55	7756	07	20.5	11	SF		3	E		23		
GOES		0916	0920	0922						6		B 5.5						
GOES		1143	1148	1206						23		B 1.6						
GOES		1235	1256	1304						29		B 2.0						
RAMY		1319	1345	1356	N11	E81		07	22.6	37	SF	B 3.0	3	E		16		F
SVTO		1342	1347	1350	N12	E75		07	22.2	8	SF		3	E		13		
HOLL		1629	1630	1632	N12	E73	7757	07	22.2	3	SF		3	E		16		
SVTO		1629	1634	1642	N15	E80	7757	07	22.7	13	SF		3	E		18		
RAMY		1629	1634	1643	N12	E81	7757	07	22.8	14	SF		3	E		23		
GOES		1950	2011	2020						30		B 3.7						
GOES		2251	2257	2302						11		B 2.6						
GOES		2324	2327	2329						5		B 1.6						
GOES	17	0055	0058	0102						7		B 1.8						
GOES		2042	2047	2051						9		B 1.7						
GOES	18	0036	0041	0046						10		B 1.4						
GOES		0322	0326	0330						8		B 3.2						
GOES		0547	0551	0554						7		B 1.4						
GOES		0804	0807	0809						5		B 1.1						
SVTO		1330	1331	1340	S10	E72		07	24.0	10	SF	C 3.2	2	E		14		F
GOES	19	1037	1045	1053						16		B 1.0						
GOES		1112	1116	1129						17		B 1.1						
SVTO		1151	1152	1221	S11	E59	7758	07	23.9	30	SF	B 3.2	3	E		19		F
RAMY		1153	1154	1214D	S13	E60	7758	07	24.0	21D	SF		2	E		18		F
HOLL	20	0027	0032	0057	S12	E52	7758	07	23.9	30	SF		3	E		27		
LEAR		0031	0034	0042	S13	E51	7758	07	23.9	11	SF	B 3.1	3	E		13		
GOES		0951	0954	0957						6		B 1.0						
HOLL		1323	1324	1356	N14	E29	7757	07	22.7	33	SF		3	E		55		F
RAMY		1324	1324	1357	N13	E29	7757	07	22.7	33	SF		3	E		55		FH
SVTO		1324	1325	1338	N15	E28	7757	07	22.7	14	SF	B 6.0	4	E		48		F
GOES	21	0214	0227	0237						23		B 1.2						
SVTO		0450	0452	0501	N13	E19	7757	07	22.6	11	SF	B 1.1	2	E		16		F
GOES		2013	2018	2021						8		B 1.1						
LEAR		2334	2338	2340	N12	E09	7757	07	22.7	6	SF		3	E		15		
RAMY	22	1448	1450	1456	S11	E17	7758	07	23.9	8	SF	B 2.2	3	E		14		F
GOES	23	0652	0656	0658						6		B 1.0						
SVTO		1016	1017	1020	N13	W10	7757	07	22.7	4	SF	B 2.5	3	E		37		
GOES	24	0350	0400	0414						24		B 1.0						
GOES		1335	1339	1342						7		B 1.2						
SVTO	25	1418	1418	1441	N12	W39	7757	07	22.6	23	SF		3	E		12		
GOES	29	1351	1409	1434						43		B 4.3						
HOLL		2023	2024	2031	N03	E24	7759	07	31.6	8	SF		3	E		16		F
GOES	31	1203	1215	1222						19		B 1.2						

S O L A R R A D I O E M I S S I O N
Selected Fixed Frequency Events

JULY 1994

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
02	2695	SVTO	8 S	0502.0	0502.0	U	27.0			QL=4 ST=2 TYP=3
06	2695	SGMR	8 S	1646.0	1646.0	U	54.0			QL=4 ST=2 TYP=3
	2695	SVTO	4 S/F	1646.0	1646.0	3.0	52.0			QL=4 ST=3 TYP=3
07	2695	SVTO	8 S	0957.0	0959.0	2.0	31.0			QL=4 ST=2 TYP=3
	8800	SVTO	8 S	0959.0	1000.0	U	26.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1000.0	1000.0	1.0	37.0			QL=2 ST=2 TYP=3
14	8800	SVTO	4 S/F	0921.0	0922.0	3.0	400.0			QL=4 ST=2 TYP=3
18	8800	SGMR	4 S/F	1329.0	1330.0	5.0	88.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	1329.0	1330.0	3.0	73.0			QL=4 ST=2 TYP=3

Reports are received routinely from the following observatories:
LEAR = Learmonth PALE = Palehua SGMR = Sagamore Hill SVTO = San Vito

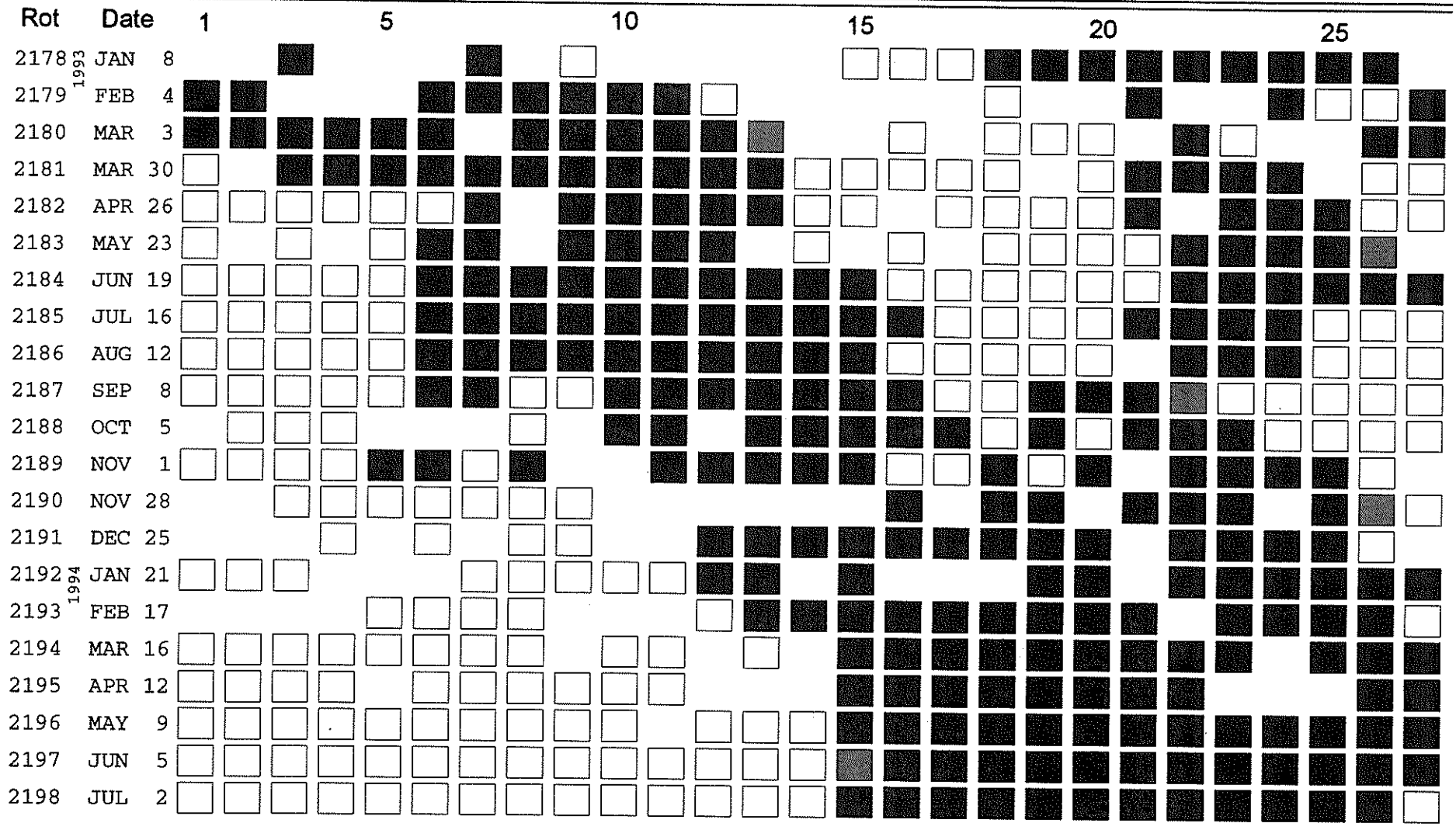
Explanation of Type Code:

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

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

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

STANFORD MEAN SOLAR MAGNETIC FIELD

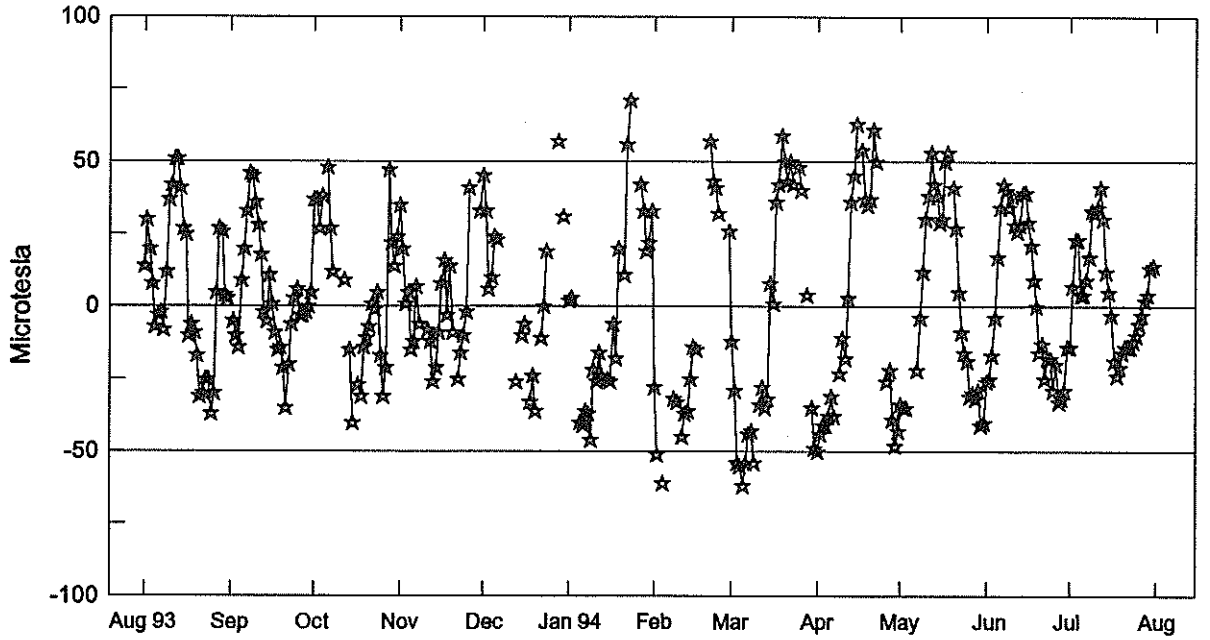


Mean Solar Magnetic Field Polarity: □ = field > 2 microT; ▒ = -2 microT ≤ field ≤ 2 microT

■ = field < -2 microT; No box = no data available

Observations are taken at 2000 UT. Rotation numbers given are the Bartels series, but the dates are not; these dates are five days earlier, to mark times of occurrence of phenomena on the Sun that affect the Earth during the given Bartels Rotation.

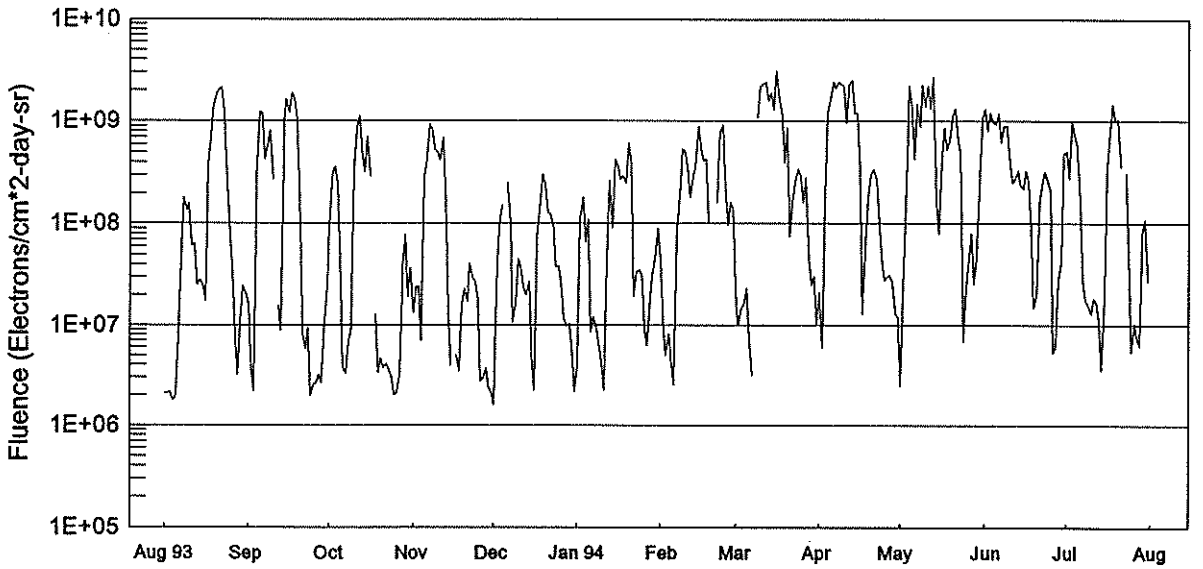
Stanford Mean Solar Magnetic Field (Microtesla)
"Sun-As-A-Star"



Day	Aug 93	Sep	Oct	Nov	Dec	Jan 94	Feb	Mar	Apr	May	Jun	Jul
1	14	---	37	35	45	2	-28	-12	-50	-34	-26	-14
2	30	-5	37	20	33	3	-51	-29	-44	-35	-25	7
3	20	-10	27	1	6	---	---	-54	-41	-35	-17	23
4	8	-14	38	5	10	---	-61	-55	-41	---	-4	23
5	-7	9	---	-15	24	-40	---	-62	-38	---	17	4
6	-3	20	48	-12	23	-41	---	-54	-31	---	34	4
7	-2	33	27	7	---	-36	---	-44	-38	-22	42	9
8	-8	46	12	-6	---	-37	-32	-43	---	-4	40	17
9	12	45	---	---	---	-46	-33	-54	-23	12	34	33
10	37	36	---	---	---	-22	---	---	-11	30	38	32
11	42	28	---	-8	---	-26	-45	-34	-18	38	28	34
12	51	18	9	-12	---	-16	-37	-28	3	53	26	41
13	51	-2	---	-26	-26	-24	-36	-35	36	42	28	30
14	41	-5	-15	-21	---	---	-25	-32	45	38	39	15
15	27	11	-40	-9	-10	-25	-14	8	63	29	39	5
16	25	1	---	8	-6	-26	-15	1	---	30	29	-3
17	-10	-9	-27	16	---	-6	---	36	54	50	21	-19
18	-6	-15	-31	-3	-33	-18	---	42	37	53	9	-24
19	-9	-14	-14	14	-24	20	---	59	35	---	0	-21
20	-17	-21	-11	-9	-36	---	---	50	37	41	-16	-16
21	-31	-35	-7	---	---	11	57	43	61	27	-13	-14
22	-30	-20	1	-25	-11	56	43	50	50	5	-25	-14
23	-25	-6	-1	-16	0	71	41	42	---	-9	-18	-14
24	-25	3	5	-10	19	---	32	---	---	-16	-18	-12
25	-37	6	-17	-2	---	---	---	48	---	-19	-29	-10
26	-30	-3	-31	41	---	---	---	40	-26	-31	-20	-6
27	5	-3	-21	---	---	42	---	---	-22	-30	-33	-3
28	27	-2	47	---	57	33	26	4	-39	-32	-32	2
29	26	0	22	---	---	19		---	-48	-29	-29	4
30	4	5	14	33	31	22		-35	-43	-41	-14	13
31	3		24		---	33		-49		-40		14

Note: --- Indicates no data available for the day.

GOES7 Daily Electron Fluence - 1994
Aug 93 - Jul 94



Day	Aug 93	Sep	Oct	Nov	Dec	Jan 94	Feb	Mar	Apr	May	Jun	Jul
1	2.1E+06	1.6E+07	9.6E+07	1.3E+07	1.6E+06	3.8E+06	4.5E+07	1.6E+07	2.1E+07	2.5E+06	1.3E+09	5.0E+08
2	2.1E+06	3.6E+06	3.1E+08	2.4E+07	4.1E+07	1.1E+08	1.1E+07	9.9E+06	5.9E+06	2.3E+07	8.1E+08	2.8E+08
3	2.2E+06	2.2E+06	3.6E+08	2.4E+07	1.1E+08	1.8E+08	5.0E+06	1.5E+07	1.9E+08	2.5E+08	1.2E+09	1.0E+09
4	1.8E+06	3.0E+08	2.4E+08	6.9E+06	1.5E+08	6.6E+07	8.1E+06	1.6E+07	1.2E+09	2.2E+09	9.6E+08	7.3E+08
5	1.9E+06	1.2E+09	4.4E+07	2.7E+08	--	1.1E+08	4.1E+06	2.3E+07	1.6E+09	1.4E+09	9.3E+08	6.1E+08
6	7.4E+06	1.2E+09	3.8E+06	3.9E+08	2.5E+08	8.5E+06	2.5E+06	7.5E+06	2.4E+09	4.3E+08	1.2E+09	1.7E+08
7	4.3E+07	4.3E+08	3.3E+06	9.3E+08	1.0E+08	1.2E+07	7.7E+07	3.1E+06	2.1E+09	1.5E+09	6.2E+08	2.7E+07
8	1.8E+08	5.8E+08	6.7E+06	8.2E+08	1.1E+07	9.2E+06	1.9E+08	--	2.4E+09	8.8E+08	9.0E+08	1.8E+07
9	1.4E+08	8.1E+08	8.9E+06	5.3E+08	1.6E+07	6.0E+06	5.3E+08	1.1E+09	2.3E+09	2.2E+09	9.0E+08	1.6E+07
10	1.6E+08	2.7E+08	3.2E+08	5.0E+08	4.5E+07	4.1E+06	5.1E+08	2.2E+09	2.2E+09	1.4E+09	4.2E+08	1.3E+07
11	6.1E+07	--	8.7E+08	4.2E+08	3.6E+07	2.2E+06	3.5E+08	2.3E+09	9.6E+08	2.2E+09	2.5E+08	1.8E+07
12	6.4E+07	1.6E+07	1.1E+09	6.9E+08	2.3E+07	4.3E+07	1.8E+08	2.4E+09	2.3E+09	1.3E+09	2.7E+08	1.7E+07
13	2.5E+07	8.9E+06	4.8E+08	1.7E+08	2.0E+07	2.6E+08	3.0E+08	1.6E+09	2.5E+09	2.7E+09	3.3E+08	1.1E+07
14	2.8E+07	1.1E+09	3.2E+08	1.5E+07	2.7E+07	9.1E+07	3.6E+08	1.9E+09	1.2E+09	1.6E+08	2.4E+08	3.5E+06
15	2.5E+07	1.6E+09	7.1E+08	3.9E+06	4.8E+06	4.2E+08	8.8E+08	1.3E+09	1.2E+09	8.0E+07	2.2E+08	2.0E+07
16	1.7E+07	1.2E+09	2.9E+08	--	2.2E+06	3.7E+08	5.4E+08	3.1E+09	3.6E+08	3.9E+08	3.3E+08	3.0E+08
17	3.9E+08	1.9E+09	--	5.0E+06	7.5E+07	2.7E+08	4.1E+08	1.6E+09	1.3E+07	8.6E+08	2.5E+08	7.9E+08
18	6.9E+08	1.7E+09	1.3E+07	3.5E+06	1.6E+08	2.9E+08	4.2E+08	1.2E+09	6.8E+07	5.3E+08	9.1E+07	1.5E+09
19	1.4E+09	1.0E+09	3.3E+06	1.5E+07	3.0E+08	2.5E+08	1.0E+08	4.0E+08	1.9E+08	6.7E+08	1.5E+07	9.9E+08
20	1.9E+09	1.7E+08	4.6E+06	2.3E+07	2.4E+08	6.1E+08	-999	8.6E+08	3.0E+08	1.1E+09	2.0E+07	1.0E+09
21	2.0E+09	7.9E+06	3.8E+06	1.7E+07	1.3E+08	3.9E+08	-999	7.5E+07	3.4E+08	1.3E+09	1.7E+08	3.6E+08
22	2.1E+09	5.7E+06	4.0E+06	4.0E+07	1.2E+08	1.9E+07	1.6E+08	1.6E+08	2.7E+08	6.8E+08	2.4E+08	--
23	1.2E+09	9.4E+06	3.5E+06	2.9E+07	9.3E+07	3.3E+07	7.9E+08	2.7E+08	1.3E+08	4.9E+08	3.2E+08	3.1E+08
24	3.1E+08	2.0E+06	3.0E+06	2.6E+07	3.8E+07	3.5E+07	9.1E+08	3.4E+08	4.4E+07	6.8E+06	2.7E+08	4.8E+07
25	8.0E+07	2.5E+06	2.0E+06	1.8E+07	3.8E+07	3.1E+07	2.2E+08	2.9E+08	2.8E+07	2.3E+07	2.1E+08	5.4E+06
26	3.2E+07	2.6E+06	2.1E+06	2.7E+06	2.5E+07	9.3E+06	9.6E+07	1.6E+08	3.0E+07	4.3E+07	5.3E+06	1.0E+07
27	8.2E+06	3.2E+06	3.3E+06	2.9E+06	1.1E+07	6.2E+06	1.6E+08	2.8E+08	3.1E+07	8.0E+07	5.8E+06	7.2E+06
28	3.2E+06	2.7E+06	4.0E+07	3.6E+06	9.9E+06	1.9E+07	1.4E+08	4.4E+07	2.7E+07	2.5E+07	2.8E+07	6.2E+06
29	1.1E+07	8.9E+06	7.7E+07	2.3E+06	1.0E+07	3.1E+07		2.5E+07	1.3E+07	4.4E+07	4.3E+07	8.1E+07
30	2.4E+07	2.5E+07	1.9E+07	2.1E+06	5.3E+06	4.9E+07		3.0E+07	1.2E+07	2.9E+08	4.8E+08	1.1E+08
31	2.0E+07		3.7E+07		2.2E+06	9.0E+07		--		1.1E+09		2.7E+07

NOTE: The electron detector responds significantly to protons above 32 MeV; therefore, electron data are contaminated when a proton event is in progress. These days are indicated with '-999' in the table and are not plotted. '--' indicates data not available.

CONTENTS

Prompt Reports

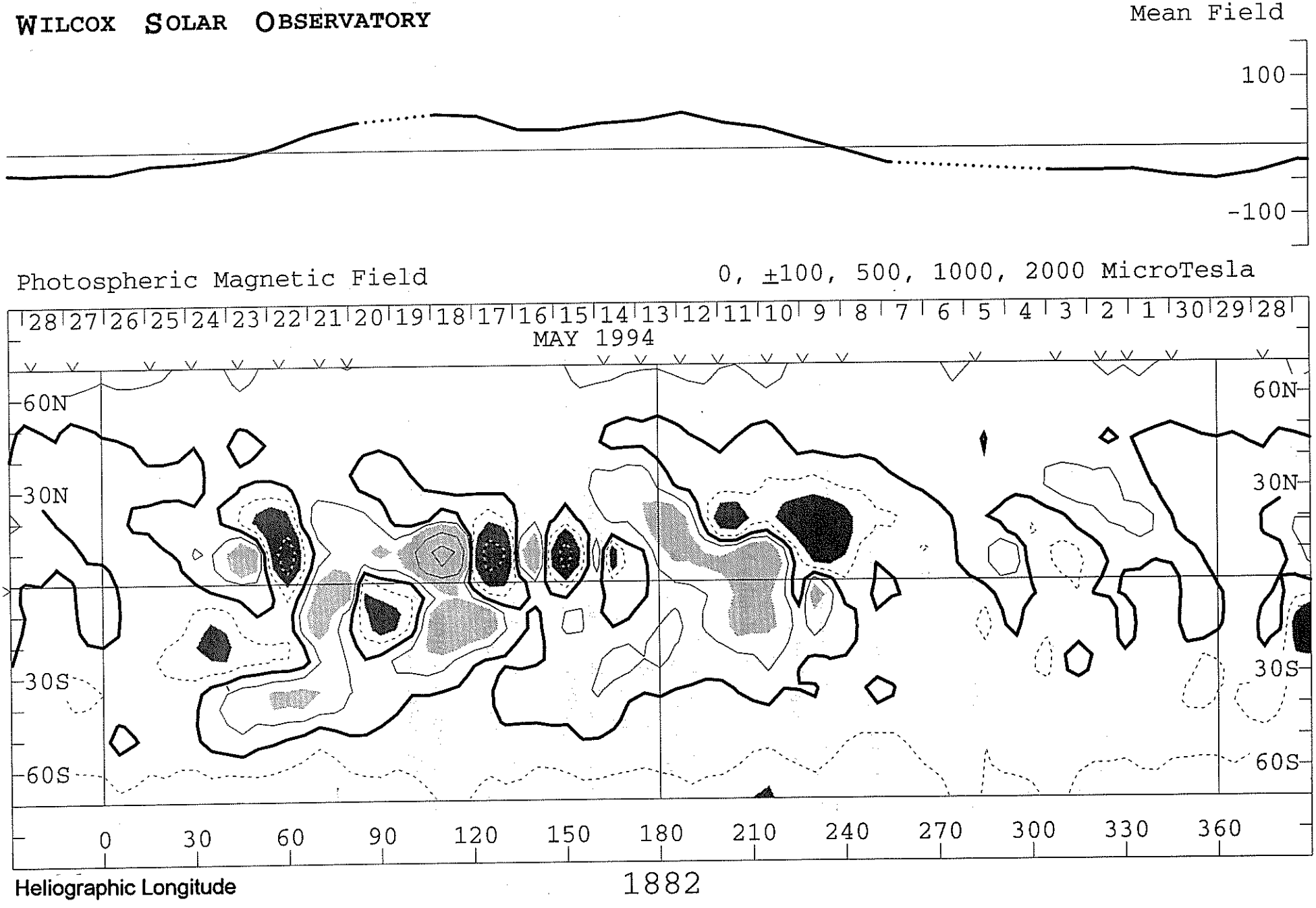
Number 600 Part I

DATA FOR JUNE 1994

SOLAR MAGNETIC FIELD SYNOPTIC CHART

CARRINGTON ROTATION NUMBER 1882
(29 April to 27 May 1994)

WILCOX SOLAR OBSERVATORY



SOLAR MAGNETIC FIELD SYNOPTIC CHART

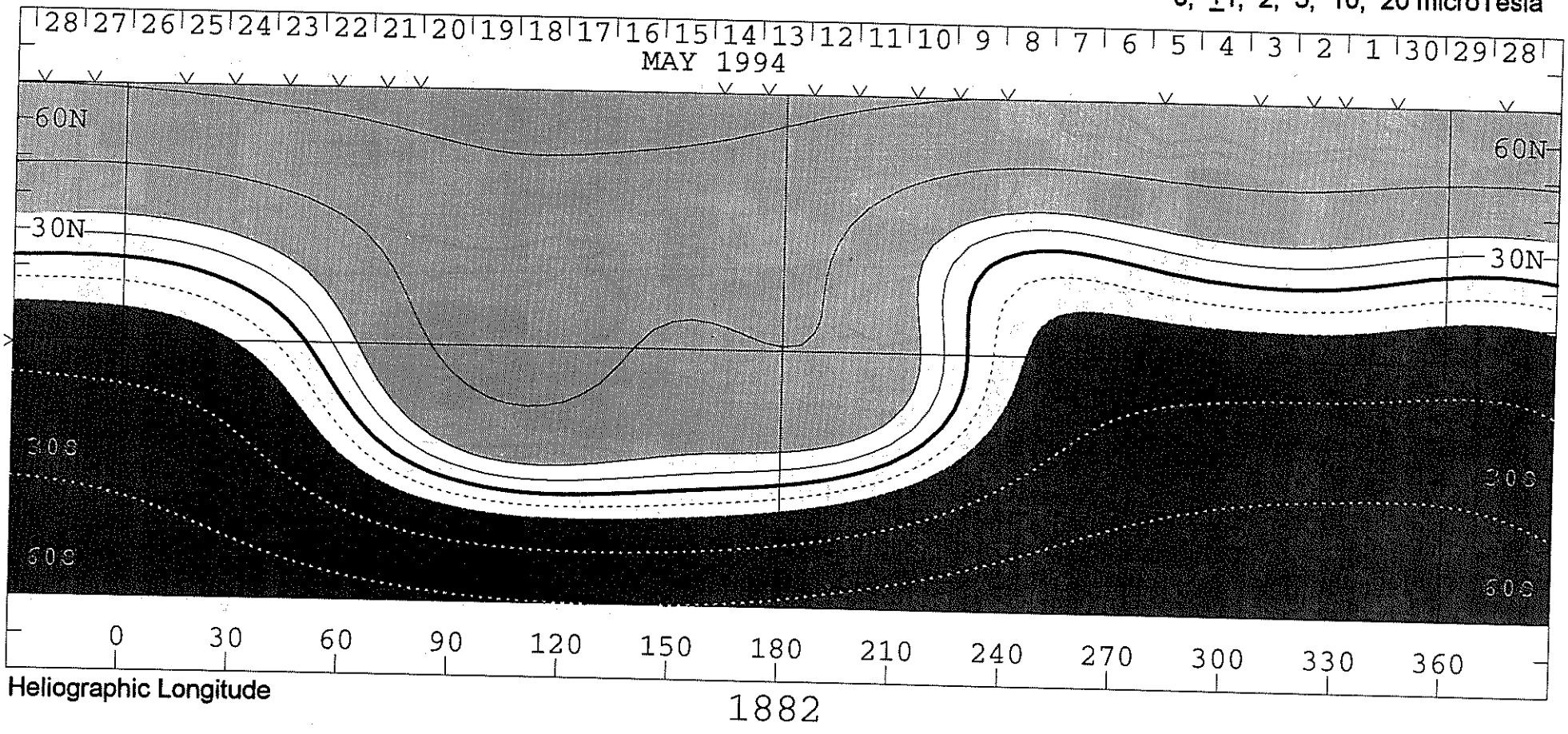
SOURCE SURFACE FIELD

CARRINGTON ROTATION NUMBER 1882

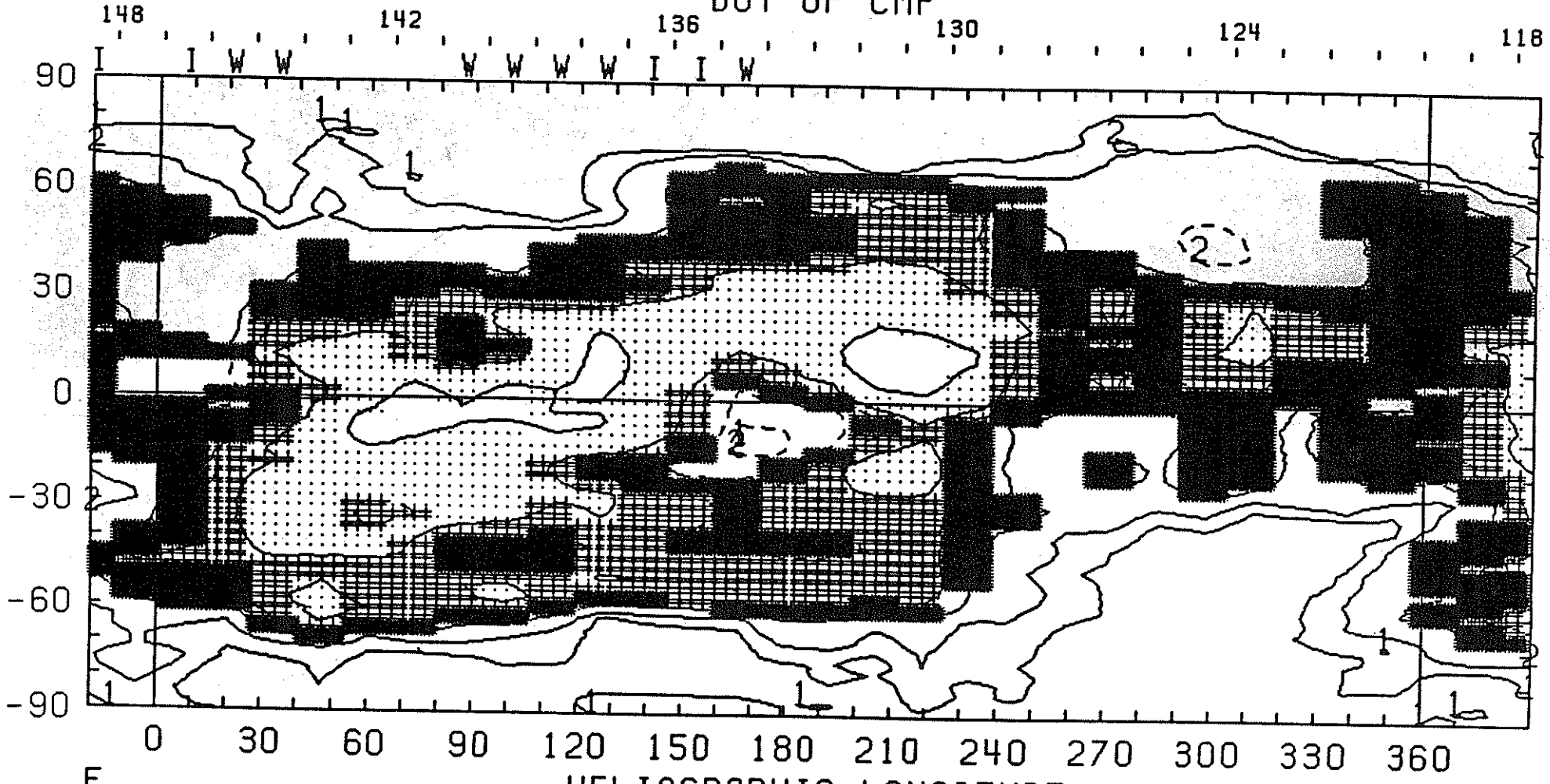
(29 April to 27 May 1994)

Wilcox Solar Observatory

0, ±1, 2, 5, 10, 20 microTesla



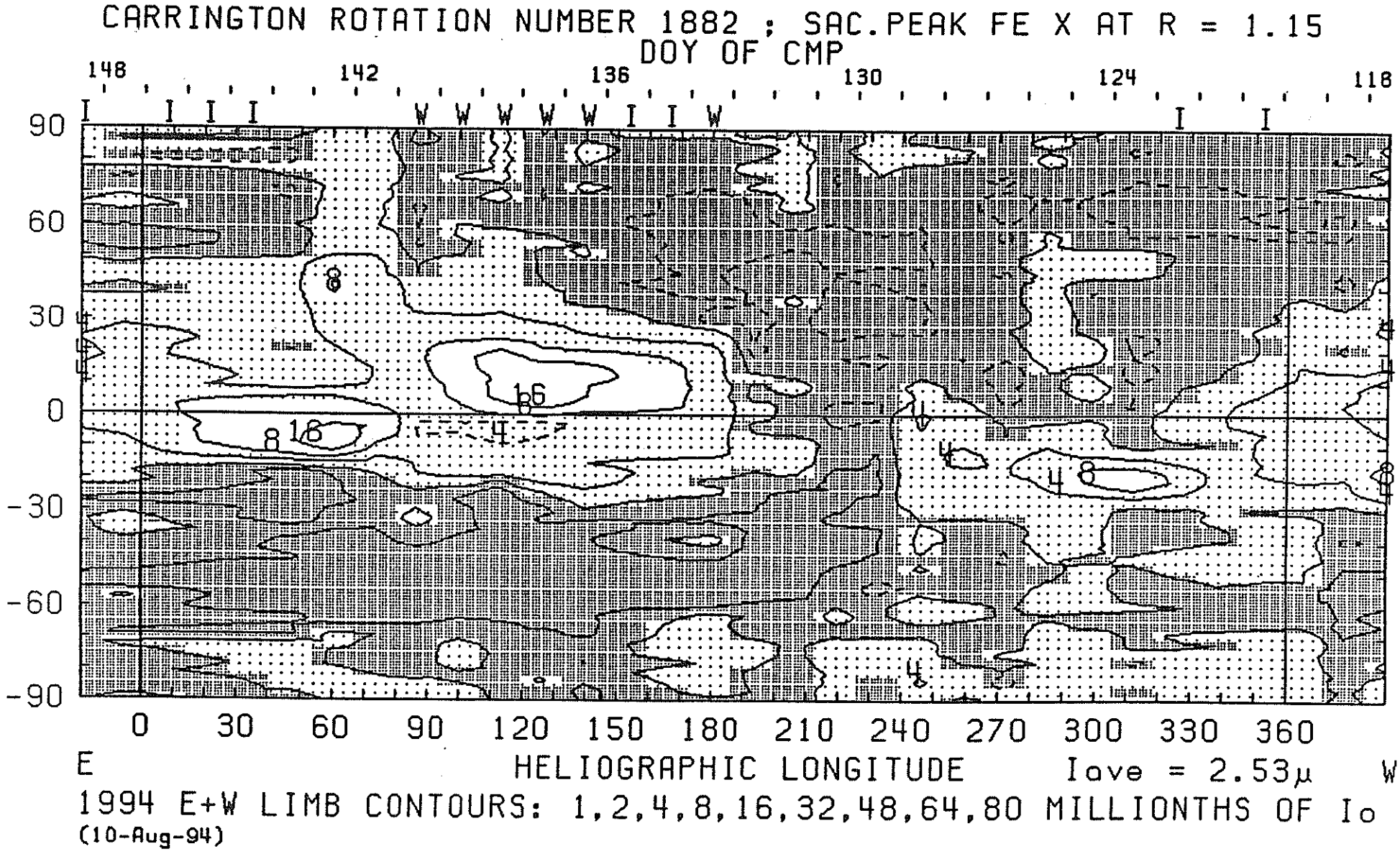
CARRINGTON ROTATION NUMBER 1882 ; SAC.PEAK FE XIV AT R = 1.15

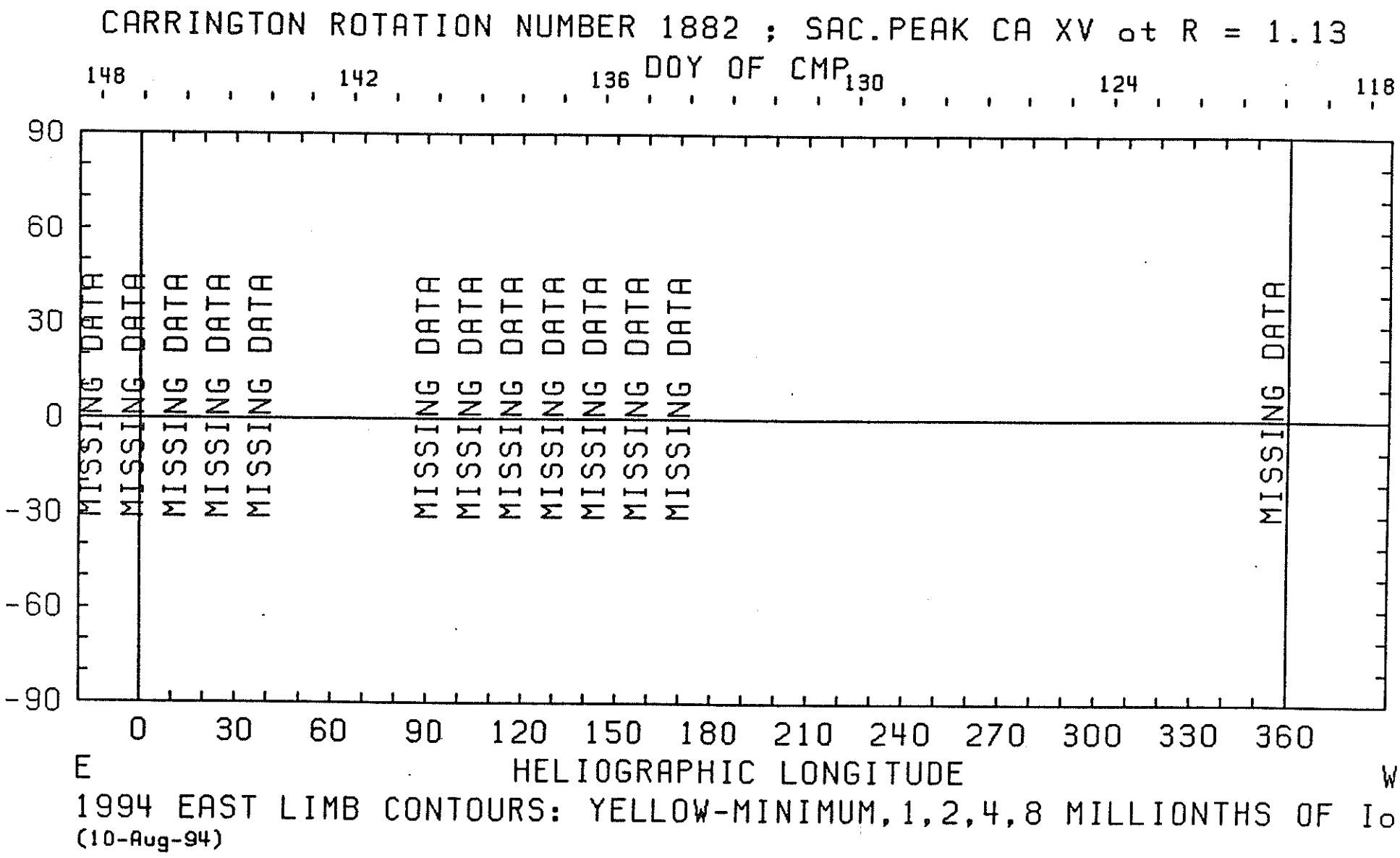


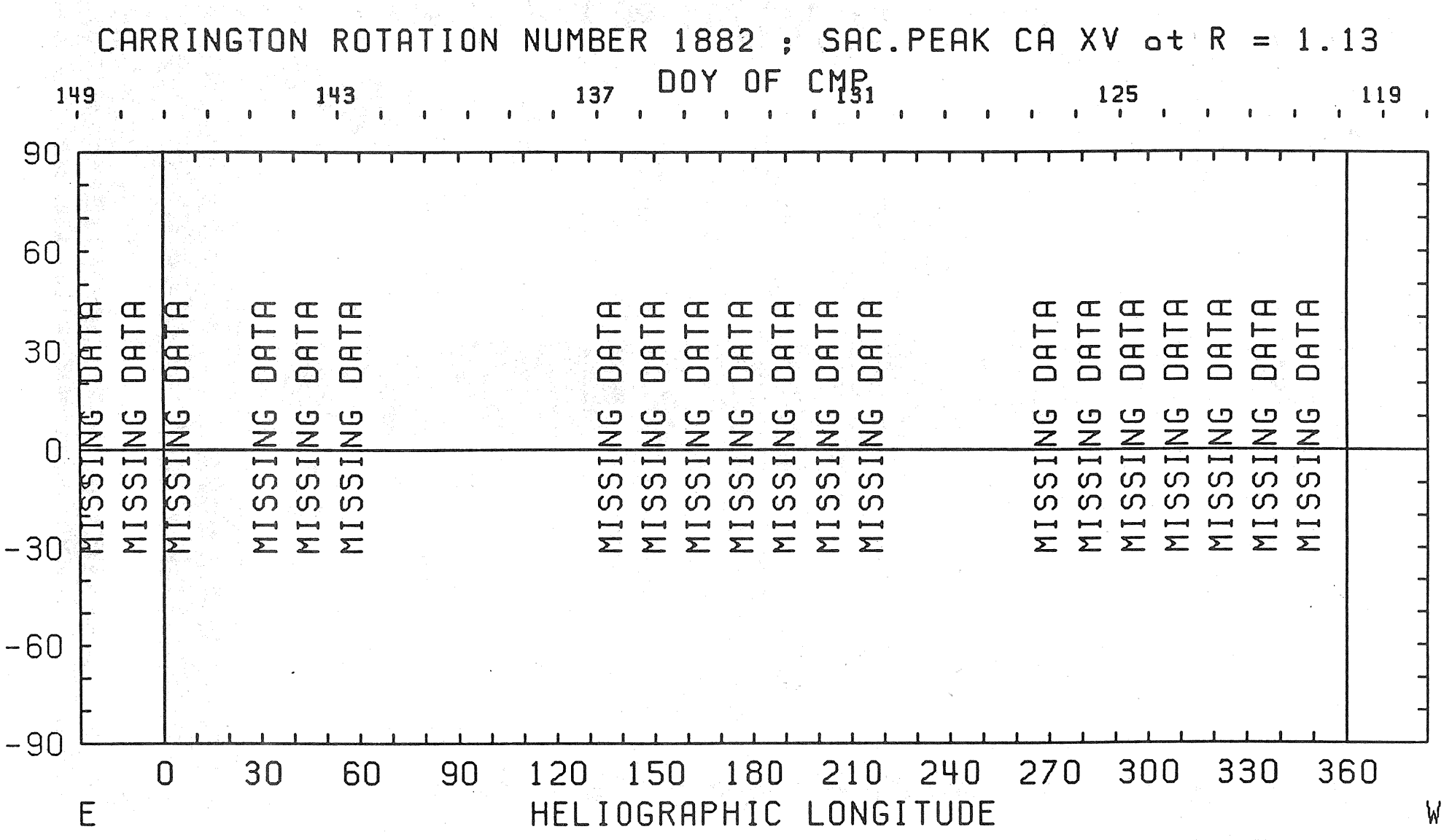
Iave = 5.14μ

1994 E+W LIMB CONTOURS: 1,2,4,7,10,20,30,40,50 MILLIONTHS OF Io

(10-Aug-94) CORONAL HOLES ARE SHOWN AS WHITE SURROUNDED BY BLACK


CARRINGTON ROTATION NUMBER 1882 ; SAC.PEAK FE X AT R = 1.15
DOY OF CMP
148
142
136
130
124
118
I I I I W W W W W I I W I I
90
60
30
0
-30
-60
-90
8
16
4
0 30 60 90 120 150 180 210 240 270 300 330 360
E
HELIOGRAPHIC LONGITUDE
Iave = 2.53μ
W
1994 E+W LIMB CONTOURS: 1,2,4,8,16,32,48,64,80 MILLIONTHS OF Io
(10-Aug-94)


CARRINGTON ROTATION NUMBER 1882 ; SAC.PEAK CA XV at R = 1.13
DOY OF CMP
148
142
136
130
124
118
90
60
30
0
-30
-60
-90
MISSING DATA
0
30
60
90
120
150
180
210
240
270
300
330
360
E
HELIOGRAPHIC LONGITUDE
W
1994 EAST LIMB CONTOURS: YELLOW-MINIMUM, 1, 2, 4, 8 MILLIONTHS OF Io
(10-Aug-94)


CARRINGTON ROTATION NUMBER 1882 ; SAC.PEAK CA XV at R = 1.13
DOY OF CMP
149
143
137
131
125
119
90
60
30
0
-30
-60
-90
MISSING DATA
0
30
60
90
120
150
180
210
240
270
300
330
360
E
HELIOGRAPHIC LONGITUDE
W
1994 WEST LIMB CONTOURS: YELLOW-MINIMUM,1,2,4,8 MILLIONTHS OF Io
(10-Aug-94)

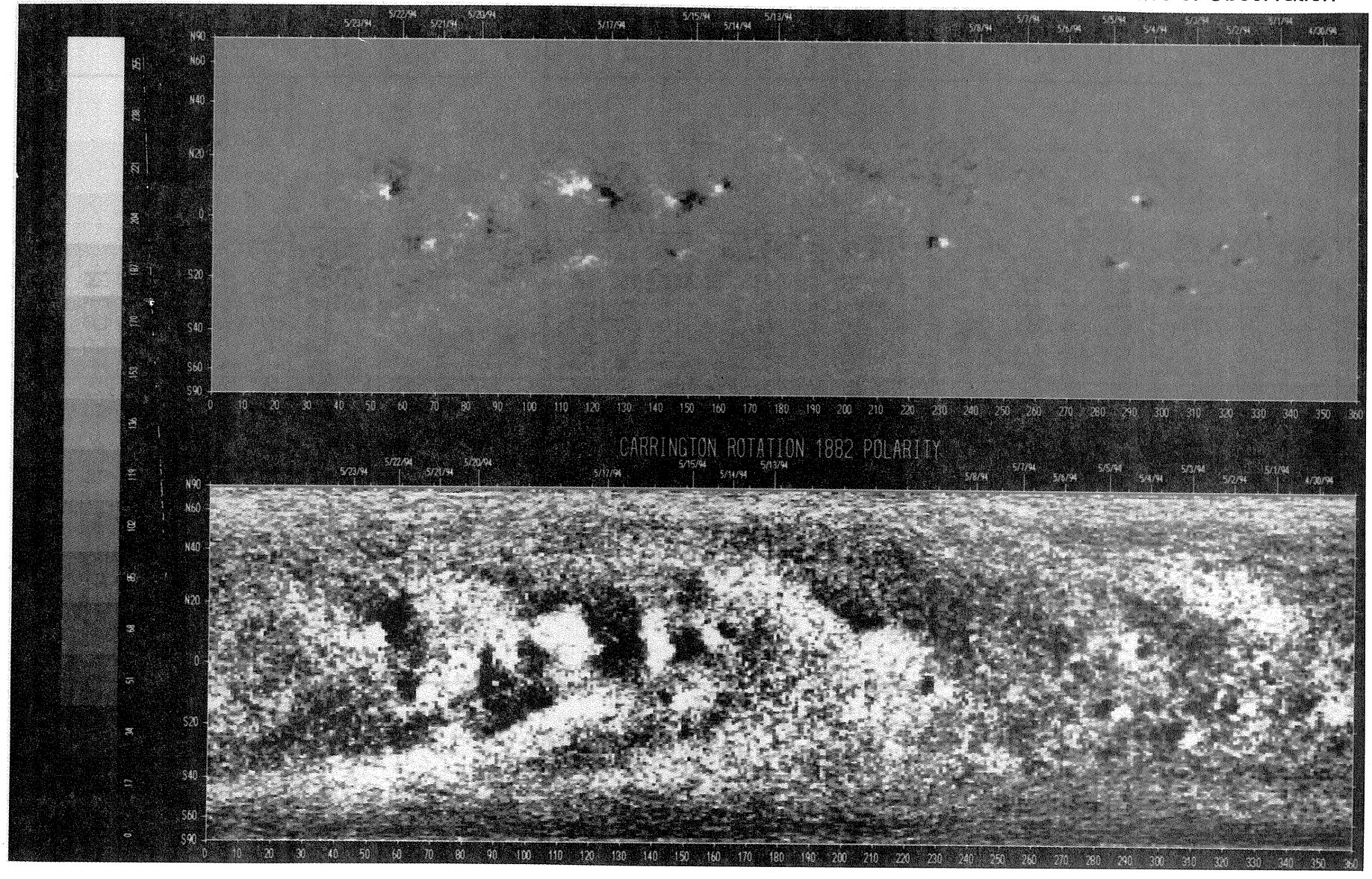
SOLAR MAGNETIC FIELD SYNOPTIC CHART

CARRINGTON ROTATION NUMBER 1882

(29 April to 27 May 1994)

National Solar Observatory/Kitt Peak

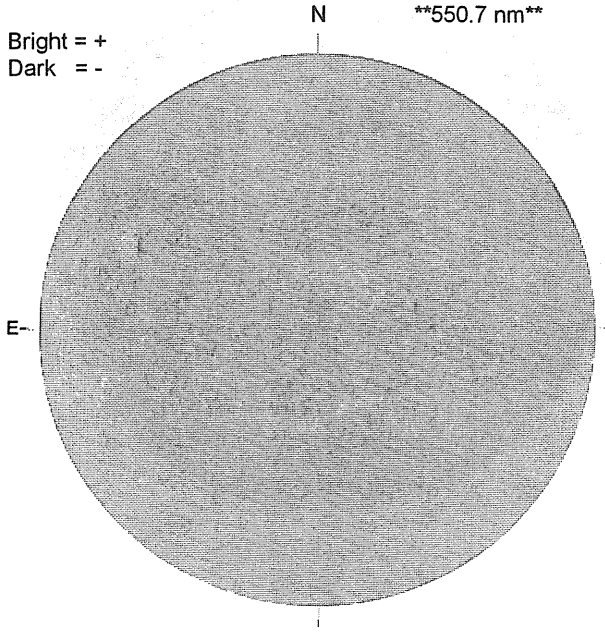
Dates of Observation



Heliographic Longitude

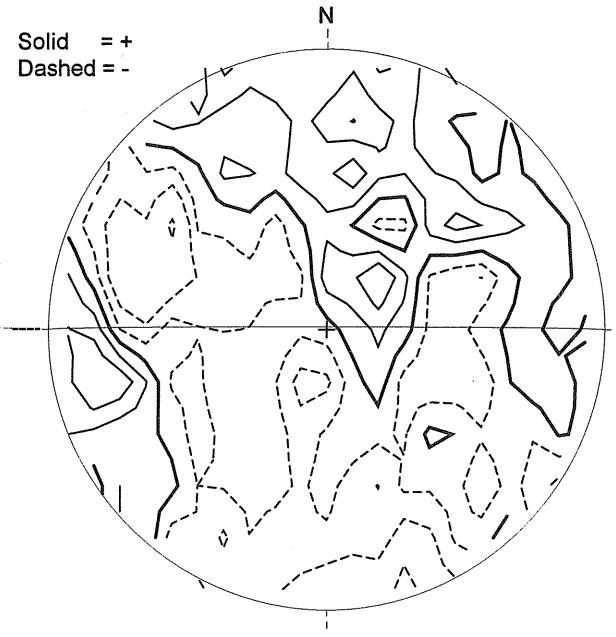
JUNE 1, 1994 (P=-15.54, Bo =-0.68, Lo = 294.91)

KITT PEAK MAGNETOGRAM



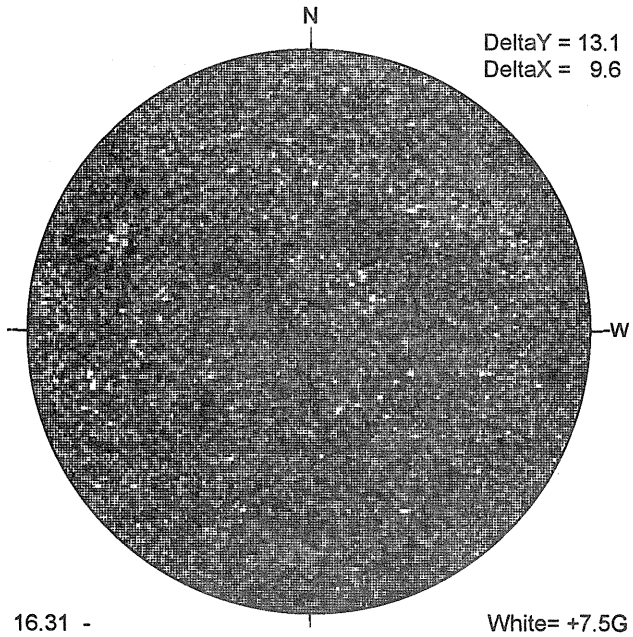
1400 UT

STANFORD MAGNETOGRAM



1918 UT

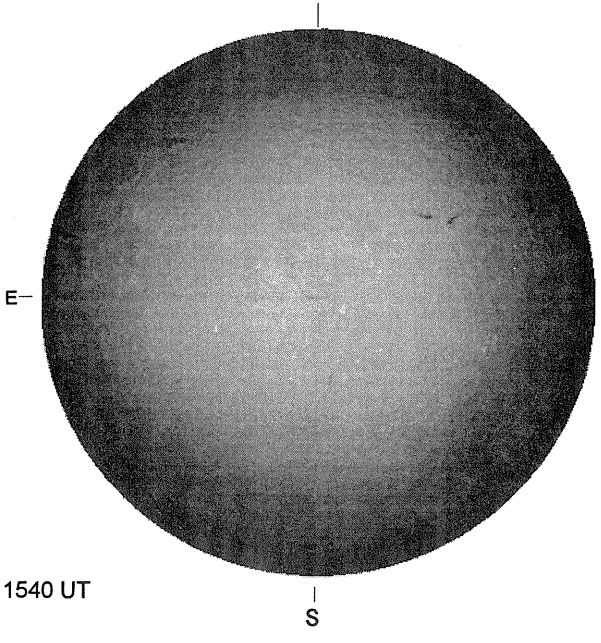
MT. WILSON MAGNETOGRAM



16.31 -
17.22 UT

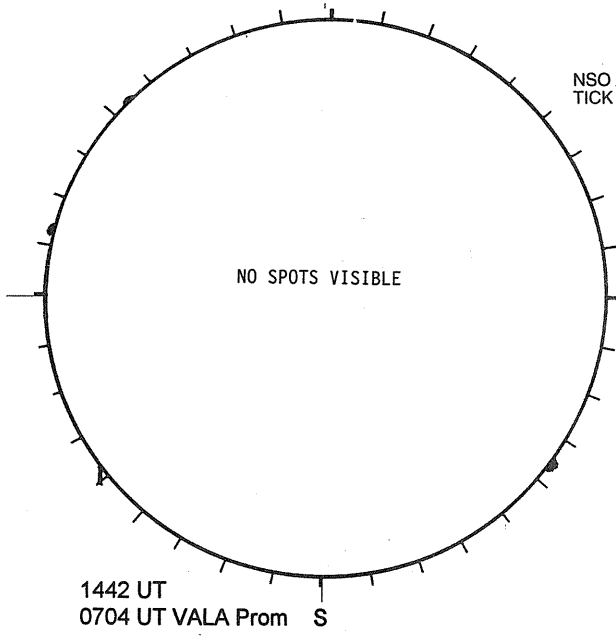
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



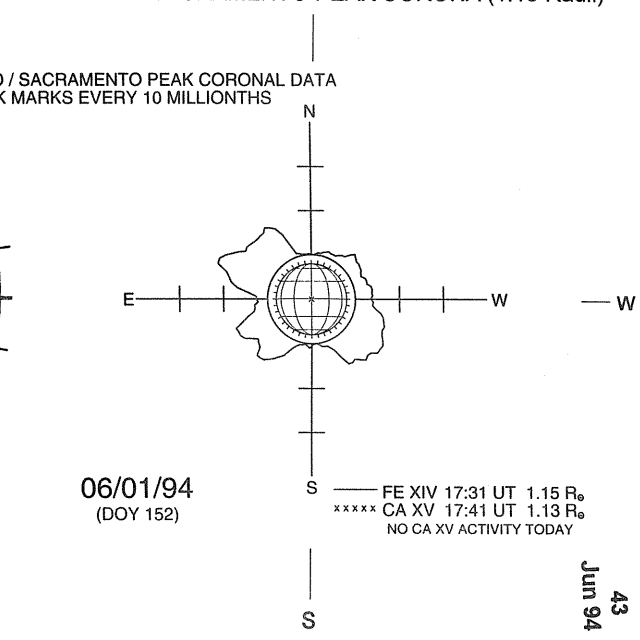
1540 UT

RAMEY SUNSPOT



1442 UT
0704 UT VALA Prom

SACRAMENTO PEAK CORONA (1.15 Radii)----



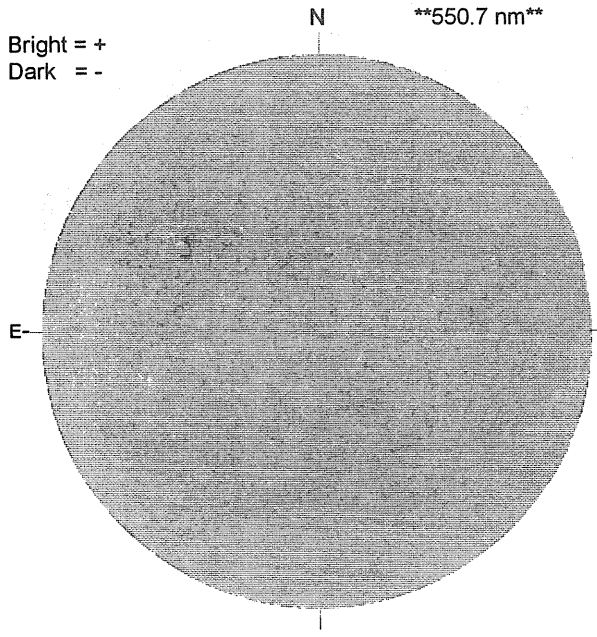
06/01/94
(DOY 152)

FE XIV 17:31 UT 1.15 $R_\odot$
xxxxx CA XV 17:41 UT 1.13 $R_\odot$
NO CA XV ACTIVITY TODAY

43
Jun 94

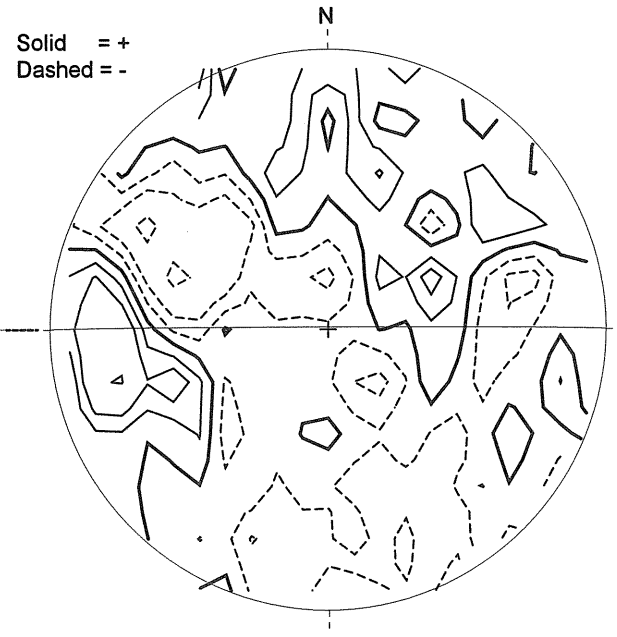
JUNE 2, 1994 (P=-15.16, Bo =-0.56, Lo = 281.68)

KITT PEAK MAGNETOGRAM



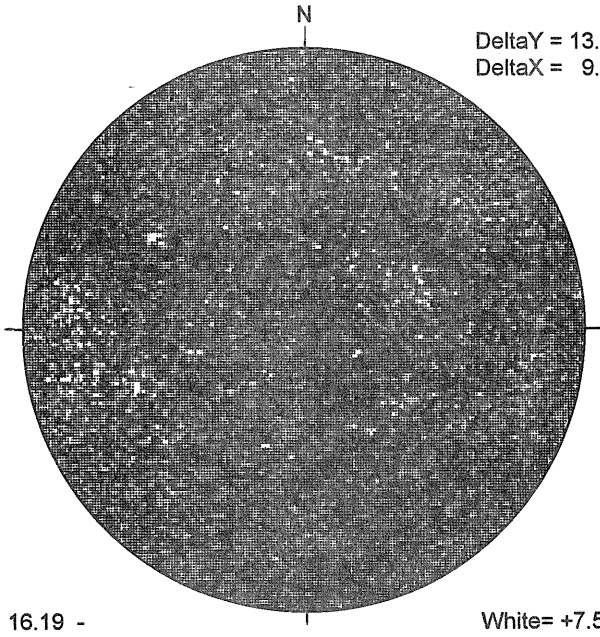
1346 UT

STANFORD MAGNETOGRAM



1741 UT

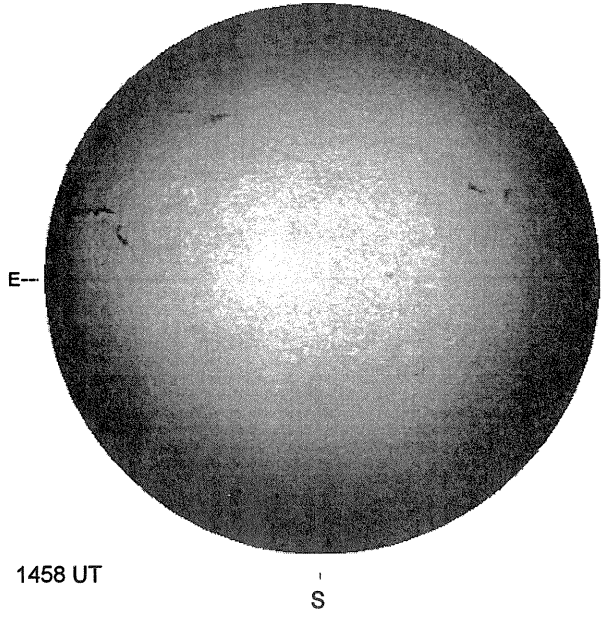
MT. WILSON MAGNETOGRAM



16.19 -
17.10 UT

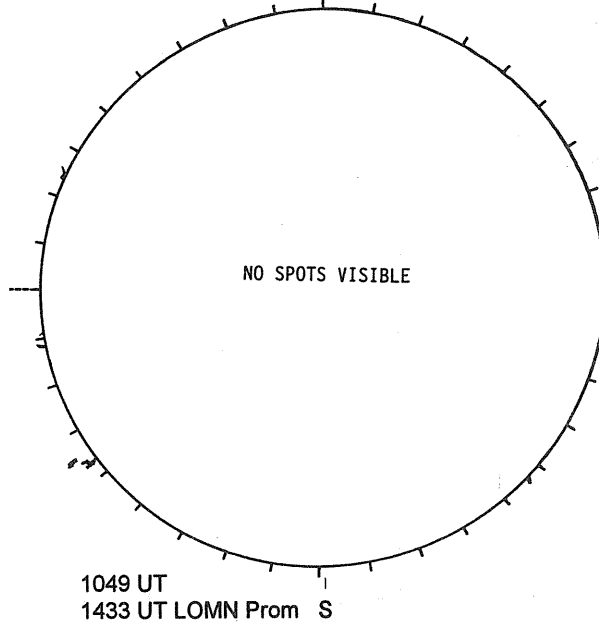
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



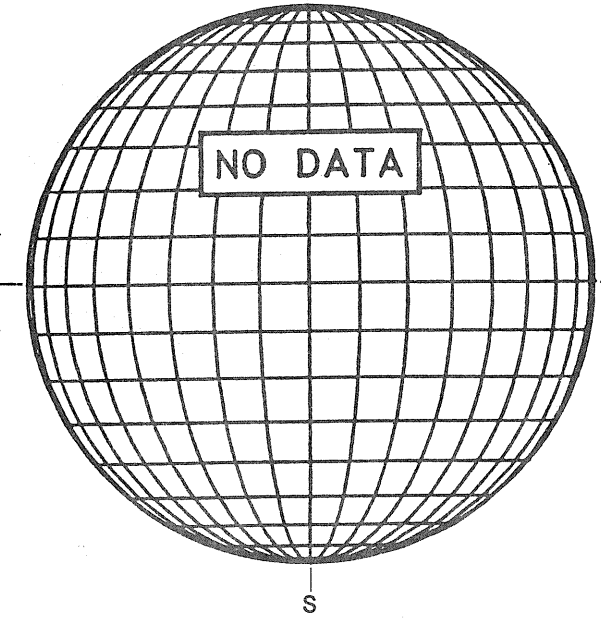
1458 UT

RAMEY SUNSPOT



1049 UT
1433 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----



JUNE 3, 1994 (P=-14.78, Bo =-0.44, Lo = 268.44)

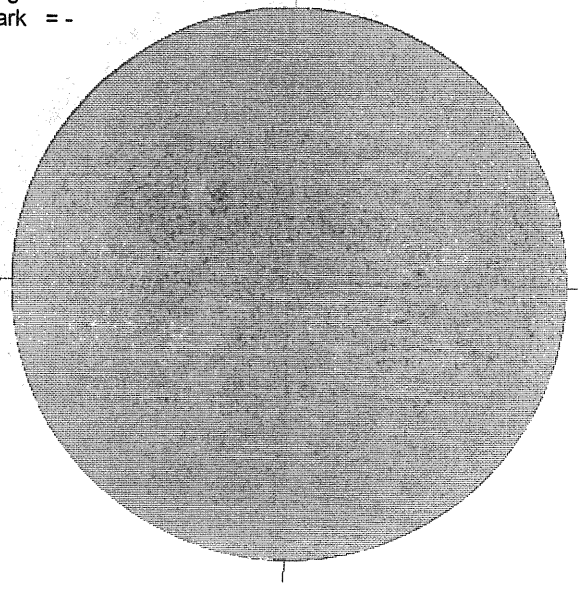
KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -

E--

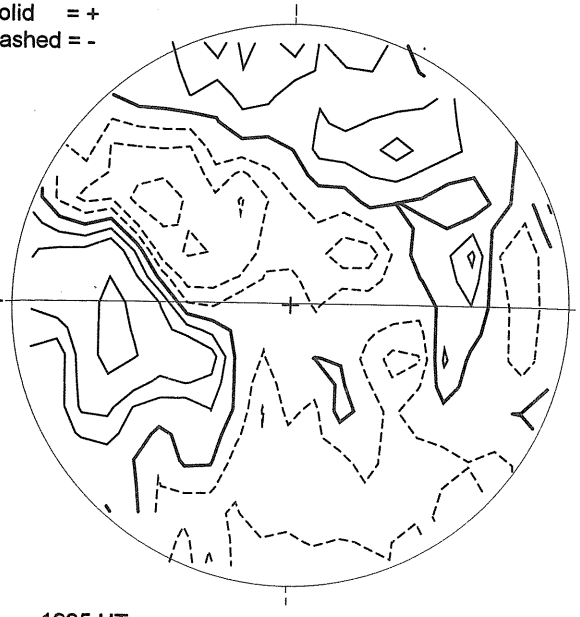


1404 UT

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

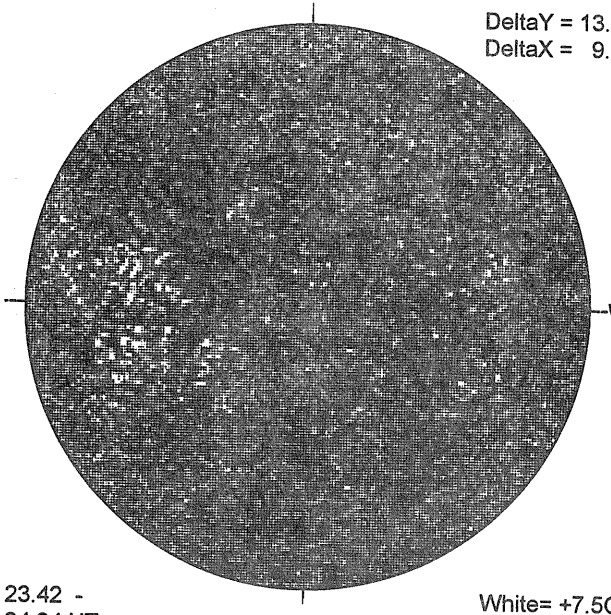


1925 UT

MT. WILSON MAGNETOGRAM

N

DeltaY = 13.1
DeltaX = 9.6



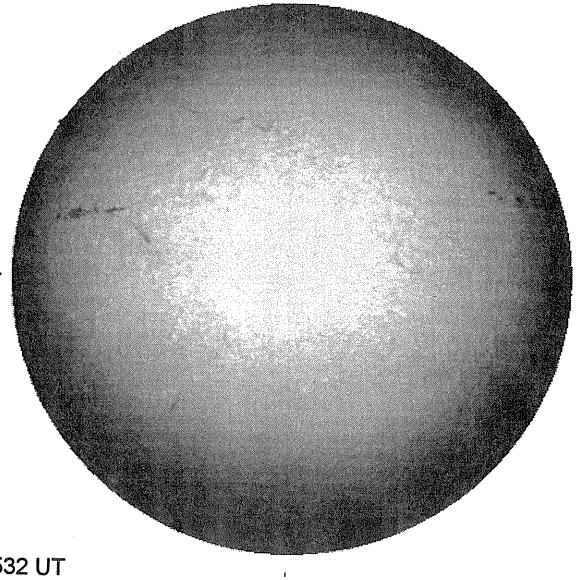
--W

23.42 -
24.34 UT

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

E--



1532 UT

S

RAMEY SUNSPOT

NO SPOTS VISIBLE

1206 UT
1013 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NO DATA

--W

S

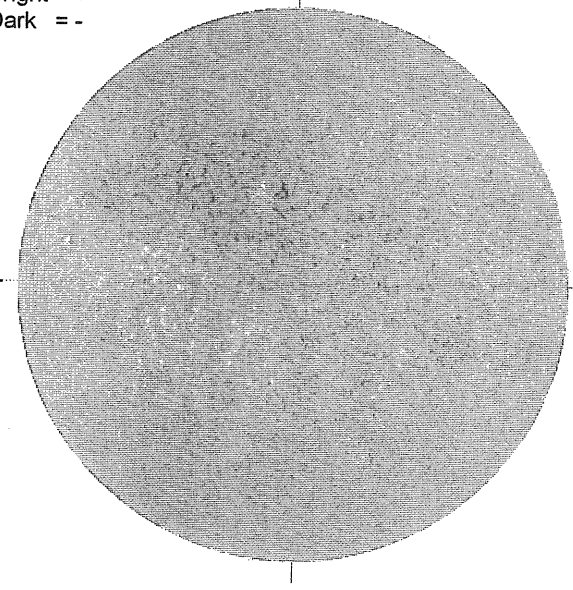
JUNE 4, 1994 (P=-14.40, Bo =-0.32, Lo = 255.21)

KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -

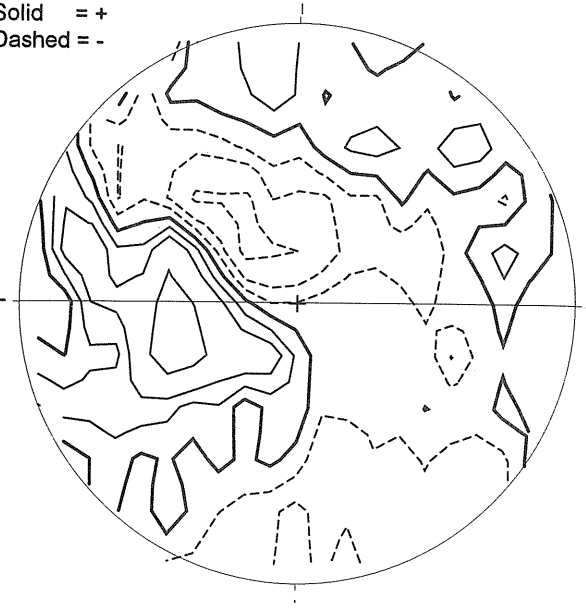


1405 UT

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

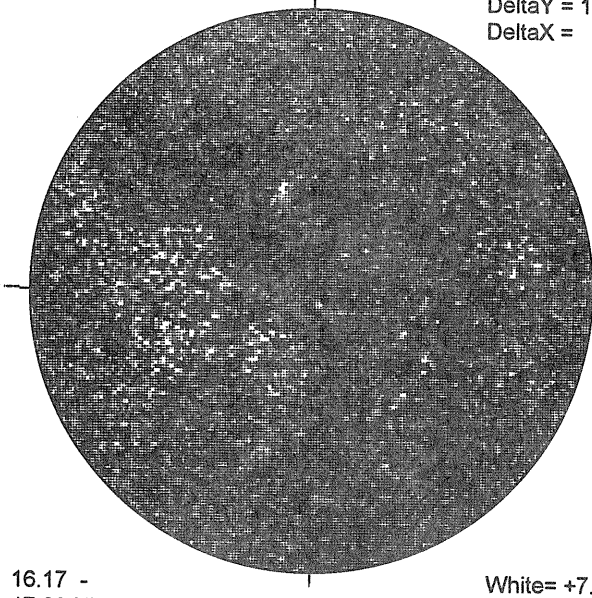


2015 UT

MT. WILSON MAGNETOGRAM

N

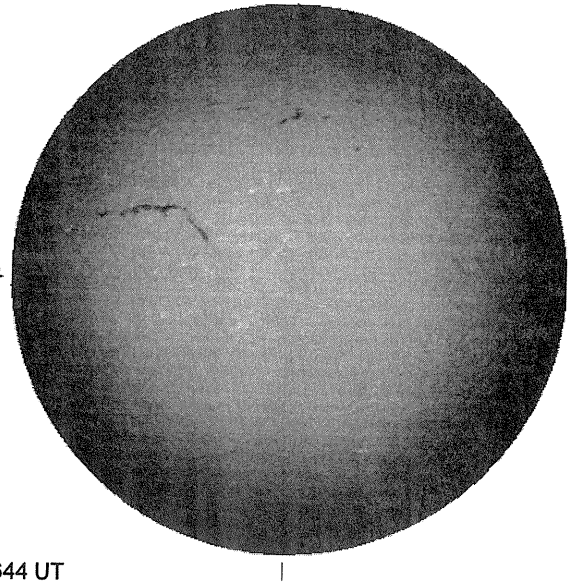
DeltaY = 13.1
DeltaX = 9.6



16.17 -
17.09 UT

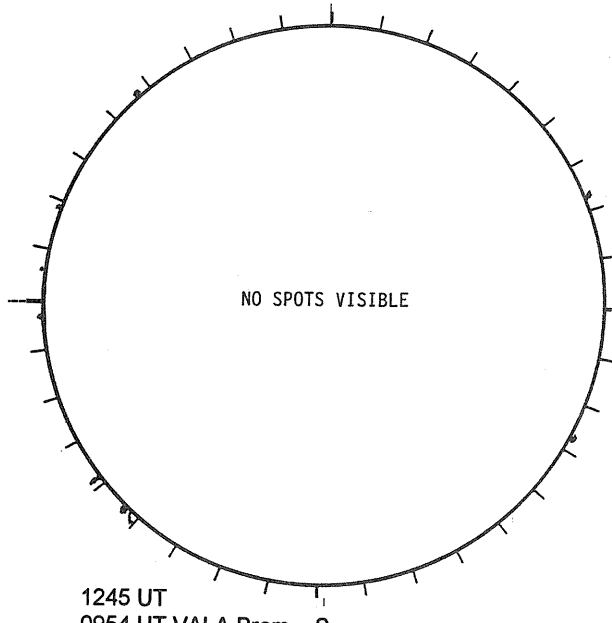
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



1644 UT

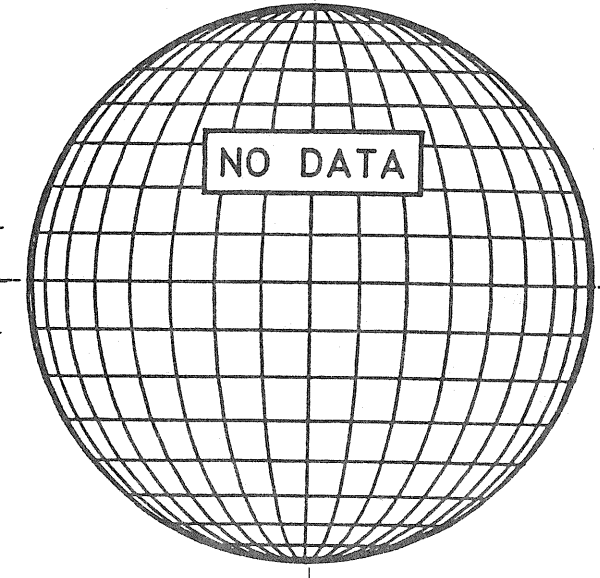
RAMEY SUNSPOT



1245 UT
0954 UT VALA Prom

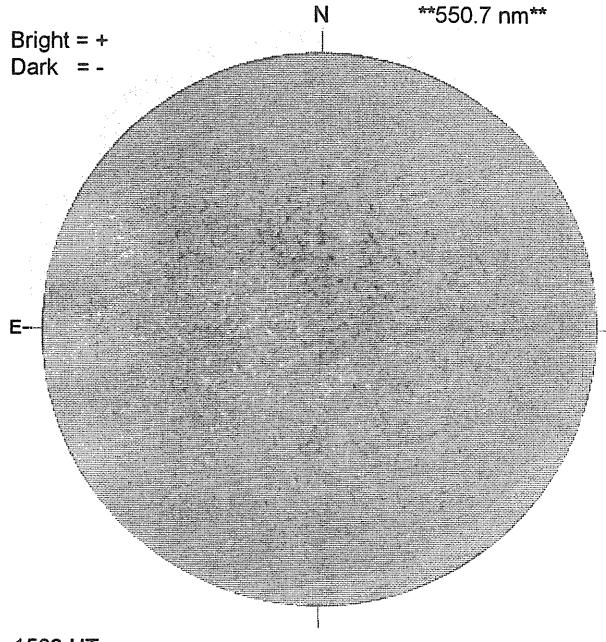
S

SACRAMENTO PEAK CORONA (1.15 Radii)----



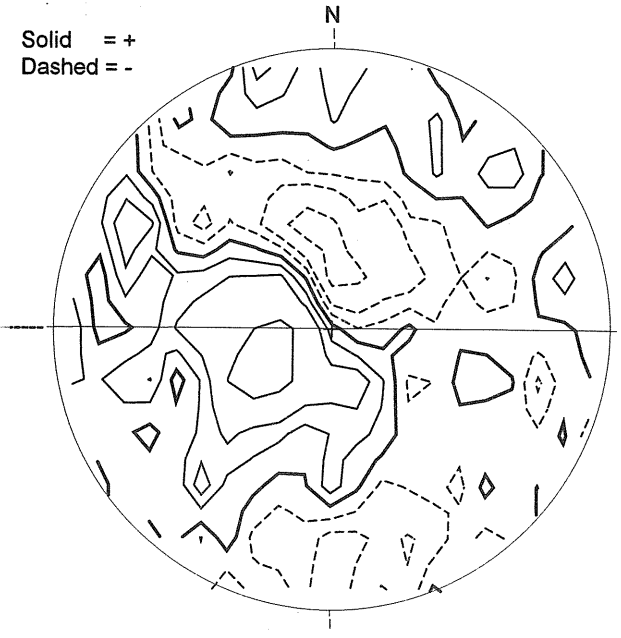
JUNE 5, 1994 (P=-14.01, Bo =-0.20, Lo = 241.98)

KITT PEAK MAGNETOGRAM



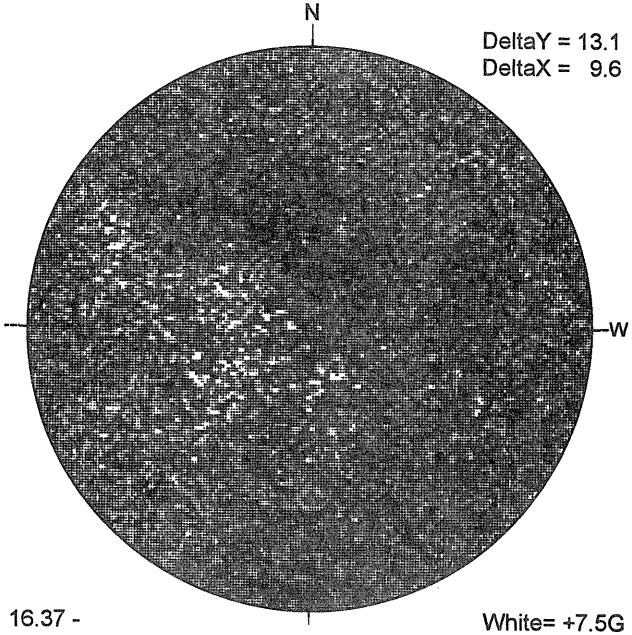
1503 UT

STANFORD MAGNETOGRAM



1710 UT

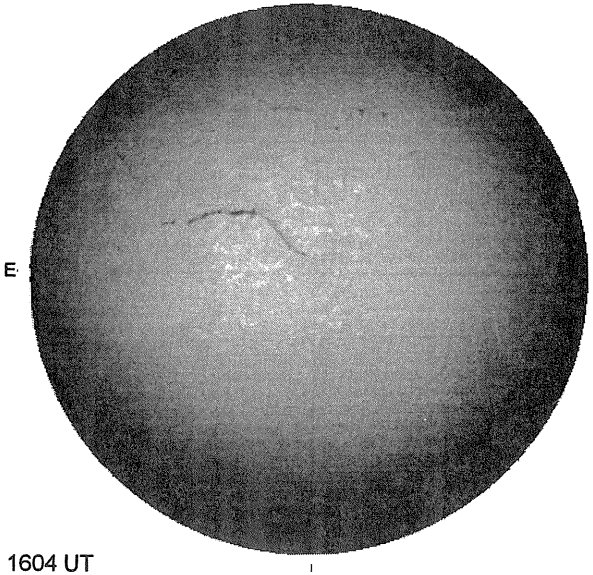
MT. WILSON MAGNETOGRAM



16.37 - 17.29 UT

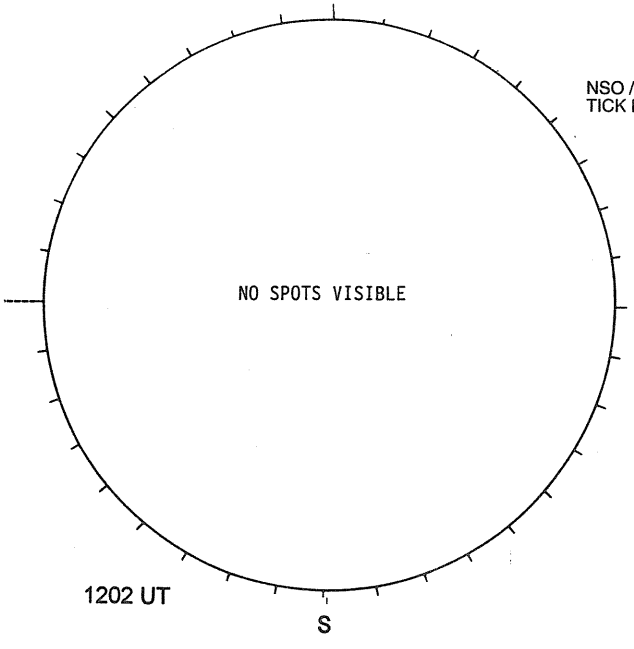
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



1604 UT

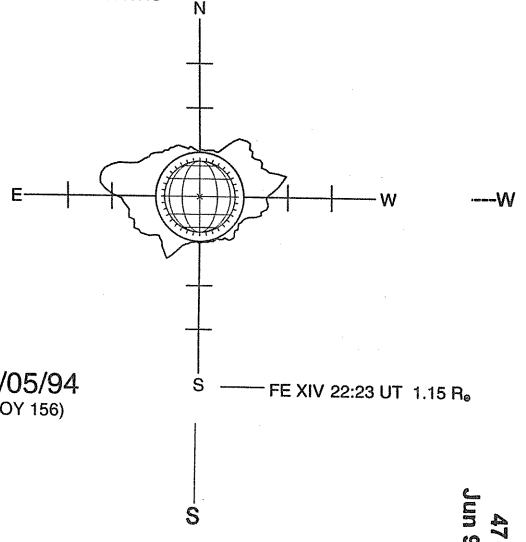
RAMEY SUNSPOT



1202 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



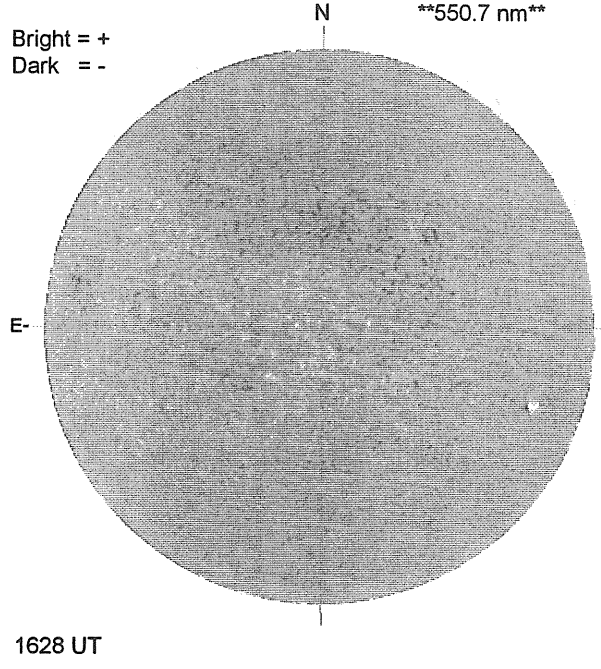
06/05/94
(DOY 156)

FE XIV 22:23 UT 1.15 $R_\odot$

47
Jun 94

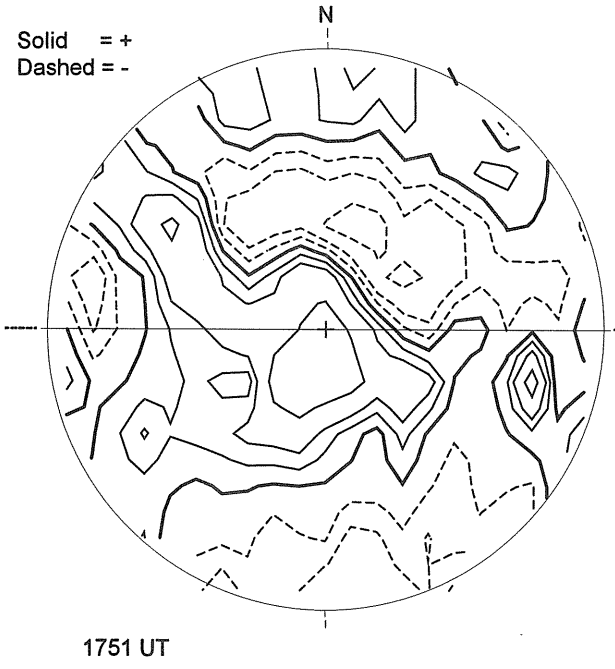
JUNE 6, 1994 (P=-13.62, Bo =-0.08, Lo = 228.74)

KITT PEAK MAGNETOGRAM



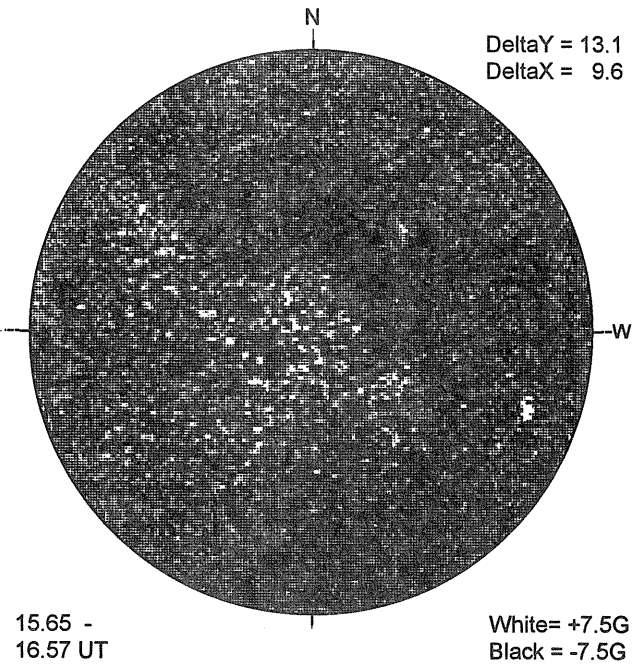
1628 UT

STANFORD MAGNETOGRAM



1751 UT

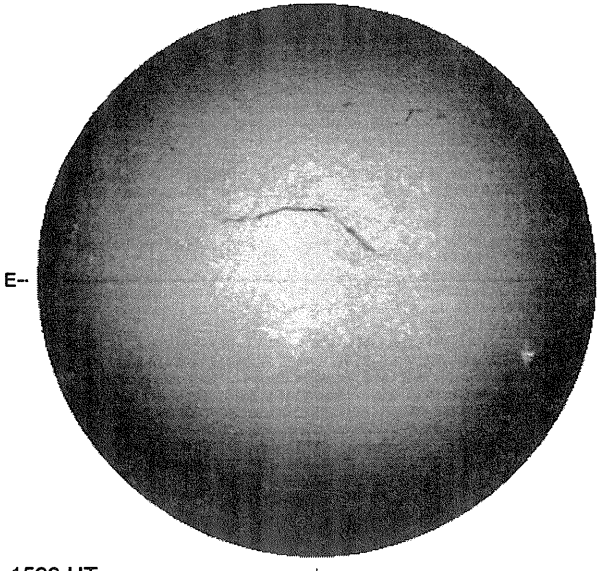
MT. WILSON MAGNETOGRAM



15.65 -
16.57 UT

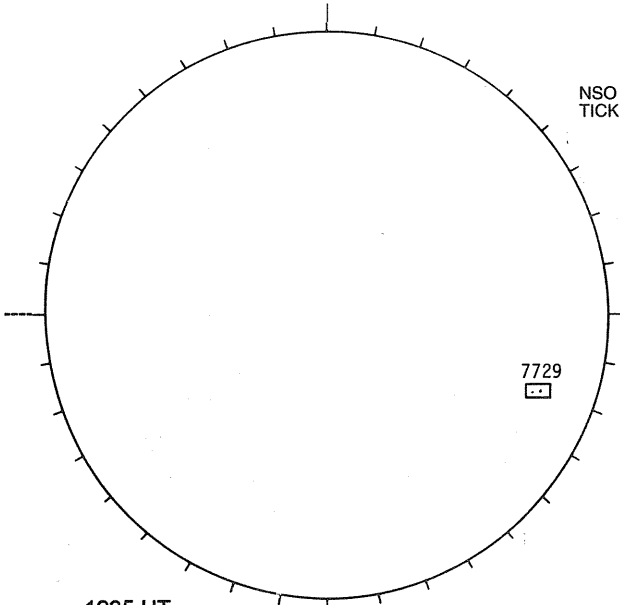
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



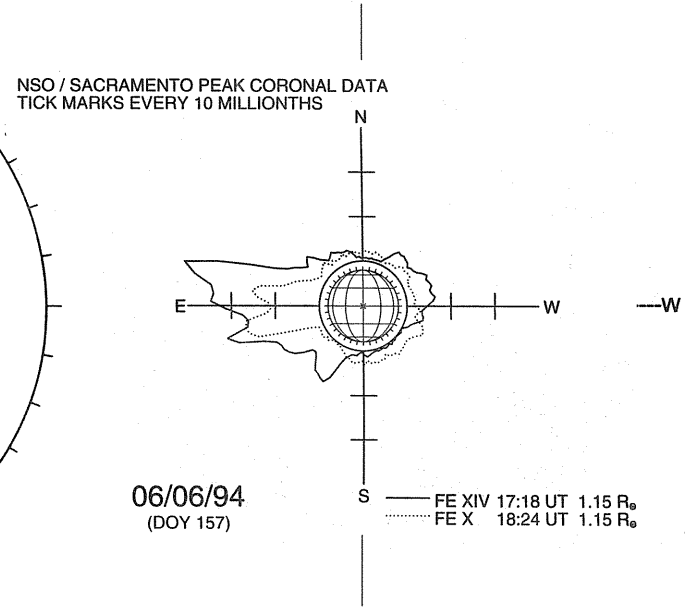
1523 UT

RAMEY SUNSPOT



1235 UT

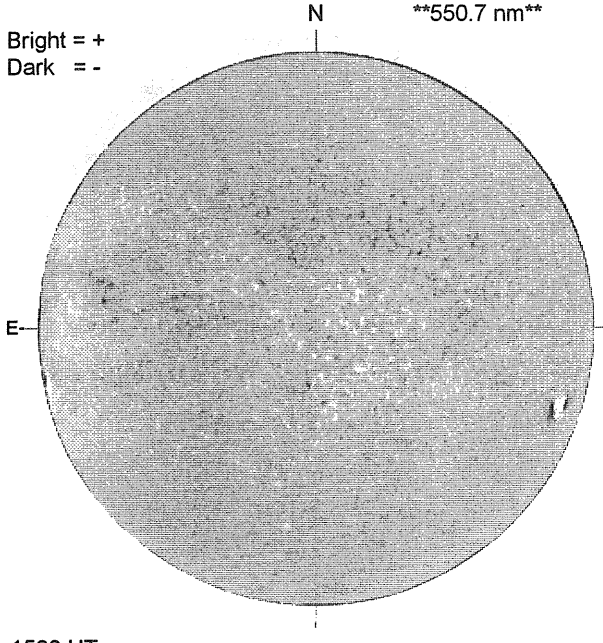
SACRAMENTO PEAK CORONA (1.15 Radii)



06/06/94
(DOY 157)

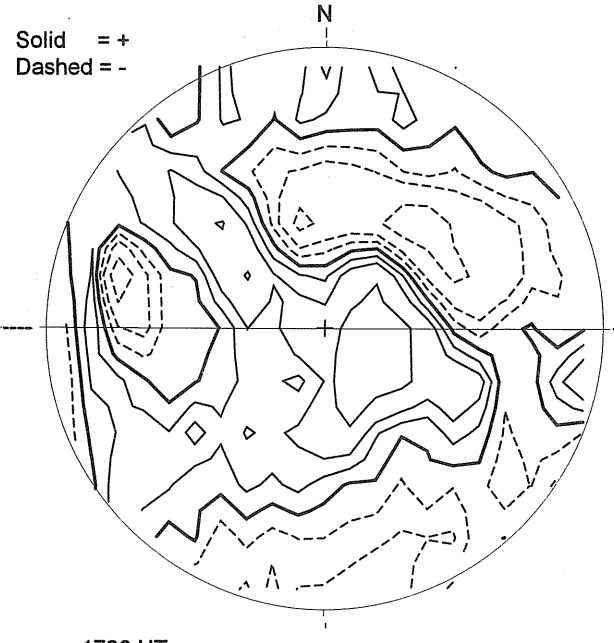
JUNE 7, 1994 (P=-13.22, Bo = 0.04, Lo = 215.51)

KITT PEAK MAGNETOGRAM



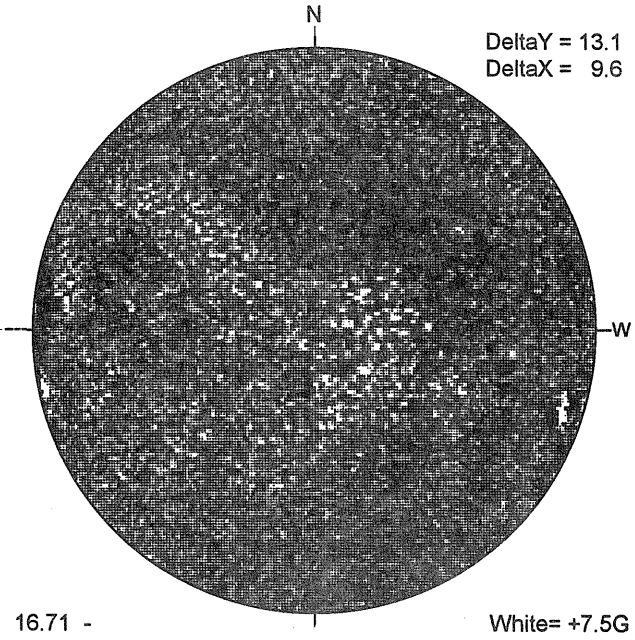
1500 UT

STANFORD MAGNETOGRAM



1736 UT

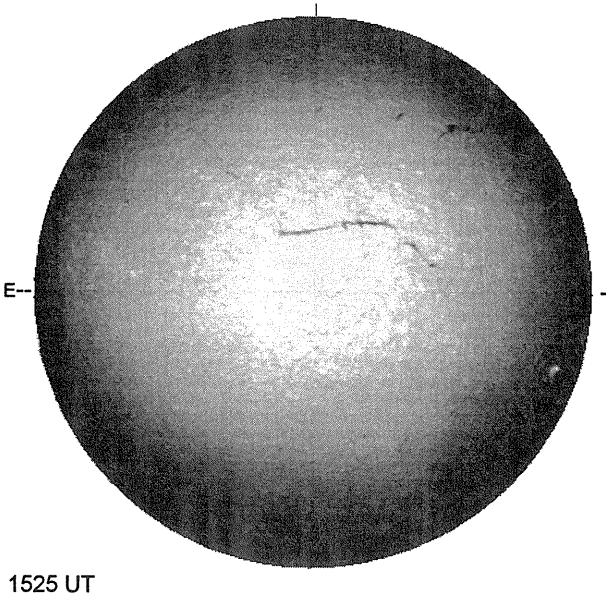
MT. WILSON MAGNETOGRAM



16.71 -
17.63 UT

White= +7.5G
Black = -7.5G

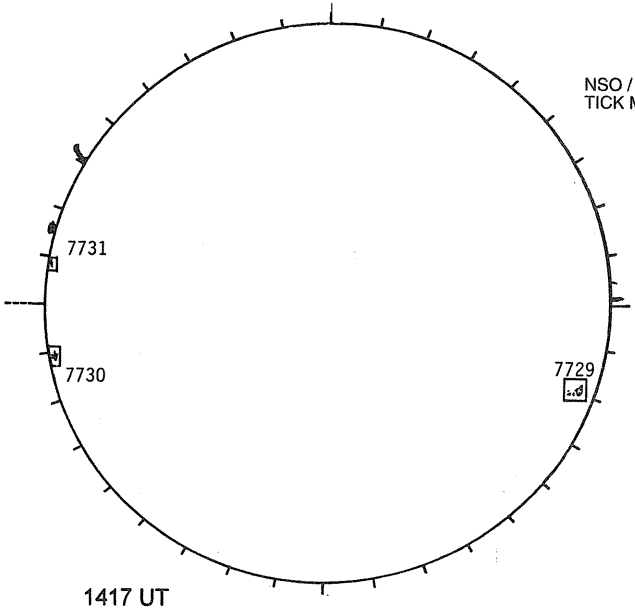
BIG BEAR H-ALPHA



1525 UT

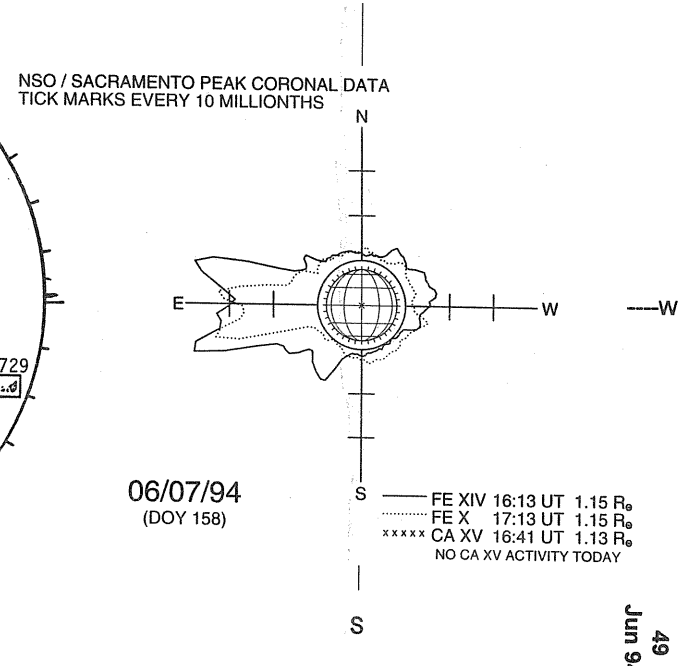
S

RAMEY SUNSPOT



1417 UT
1056 UT LOMN Prom S

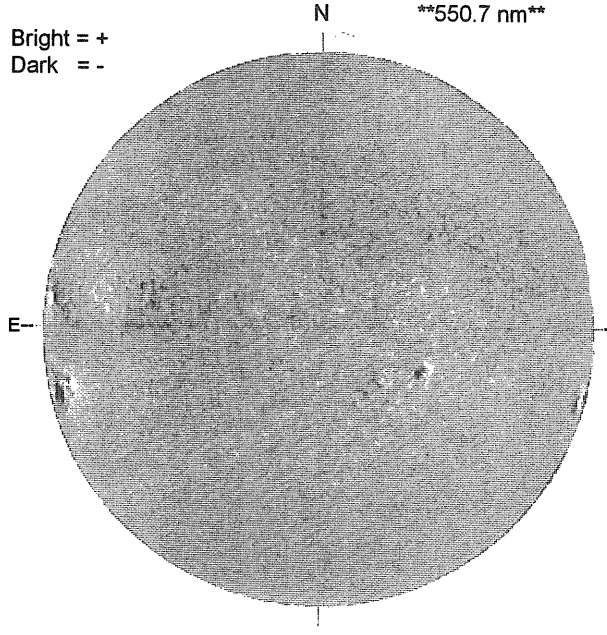
SACRAMENTO PEAK CORONA (1.15 Radii)----



S

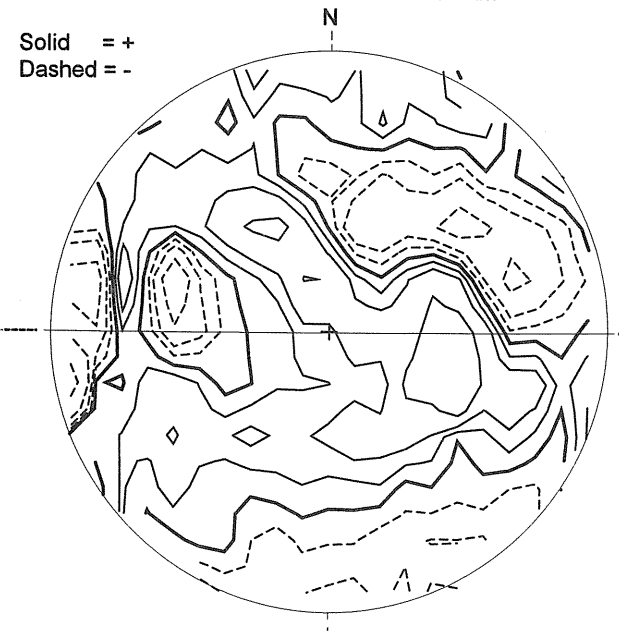
JUNE 8, 1994 (P=-12.82, Bo = 0.16, Lo = 202.27)

KITT PEAK MAGNETOGRAM



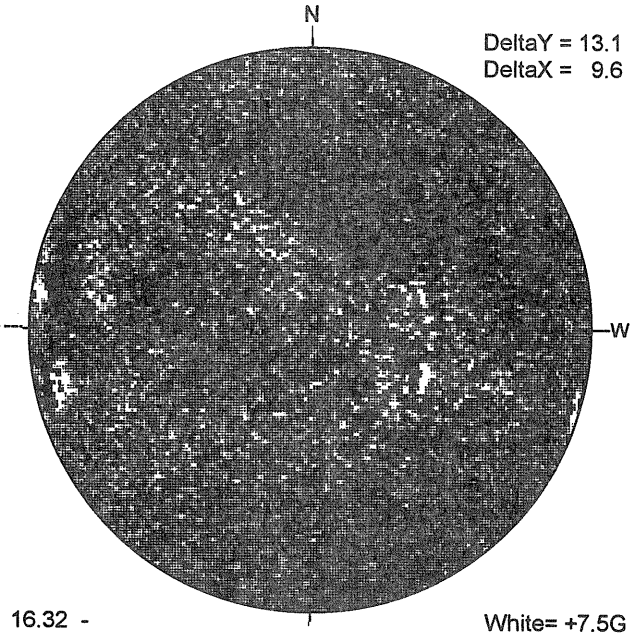
1525 UT

STANFORD MAGNETOGRAM



1651 UT

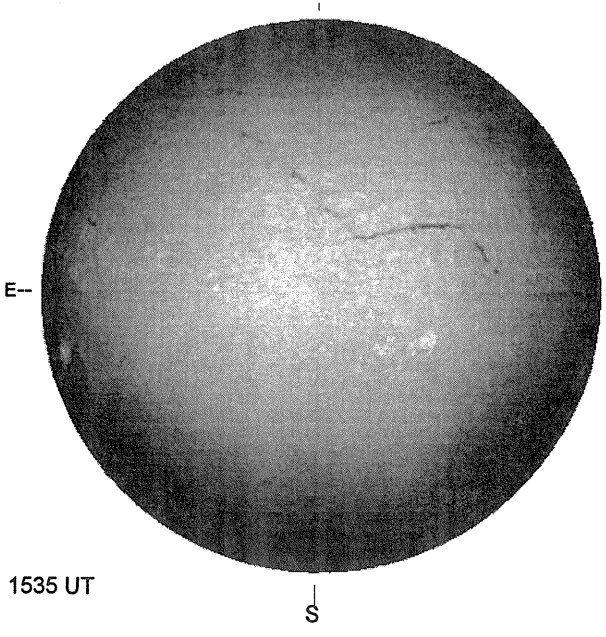
MT. WILSON MAGNETOGRAM



16.32 -
17.24 UT

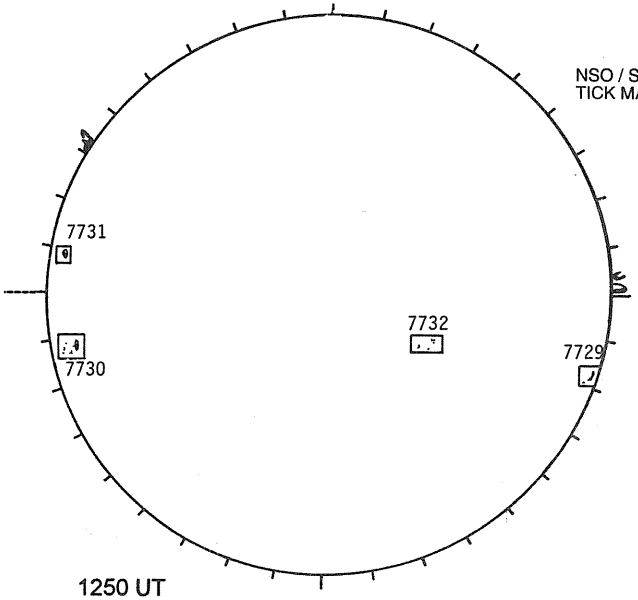
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



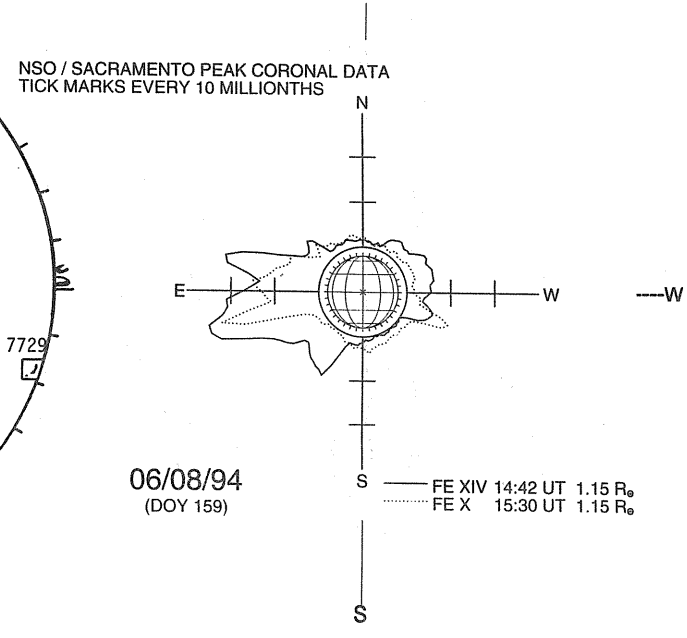
1535 UT

RAMEY SUNSPOT



1250 UT
0508 UT LOMN Prom S

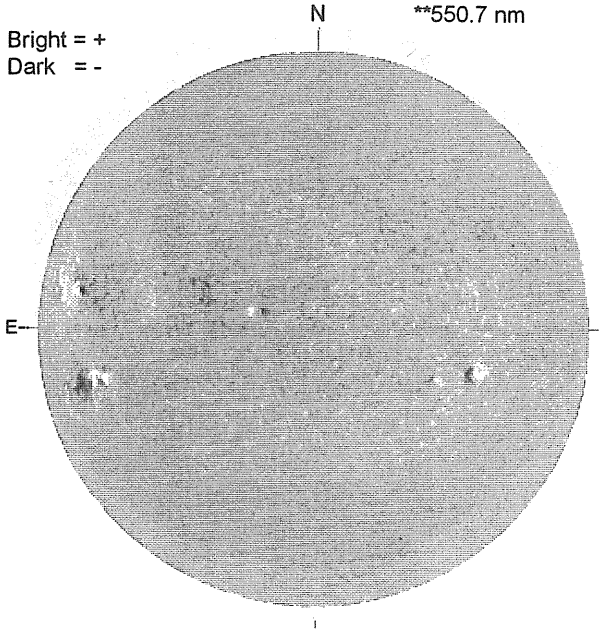
SACRAMENTO PEAK CORONA (1.15 Radii)



06/08/94
(DOY 159)

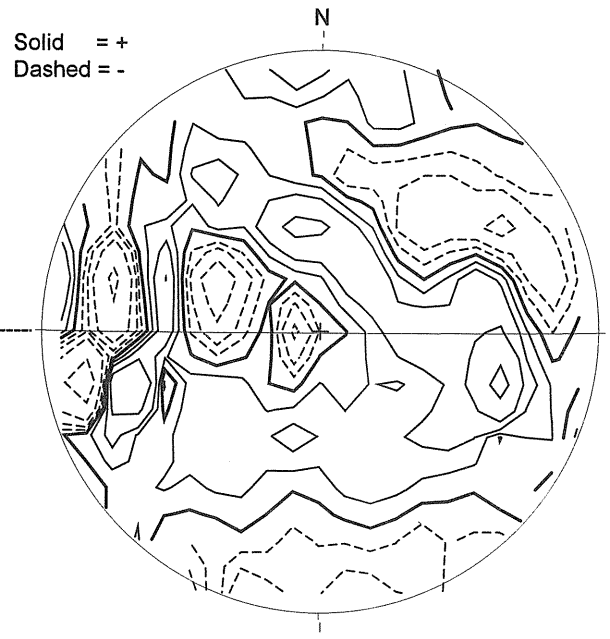
JUNE 9, 1994 (P=-12.42, Bo = 0.28, Lo = 189.04)

KITT PEAK MAGNETOGRAM



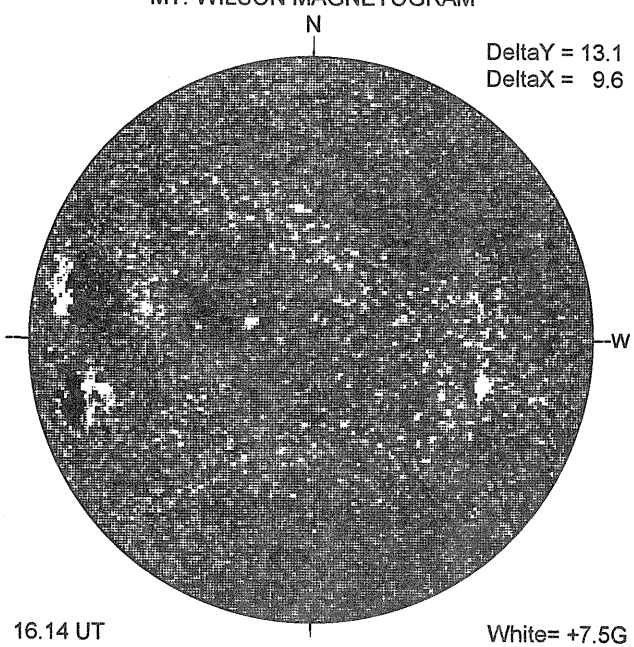
1355 UT

STANFORD MAGNETOGRAM



1705 UT

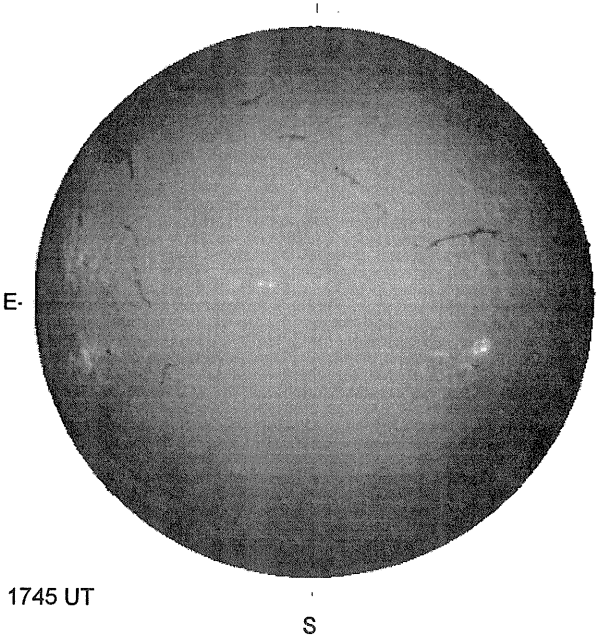
MT. WILSON MAGNETOGRAM



16.14 UT
17.06 UT

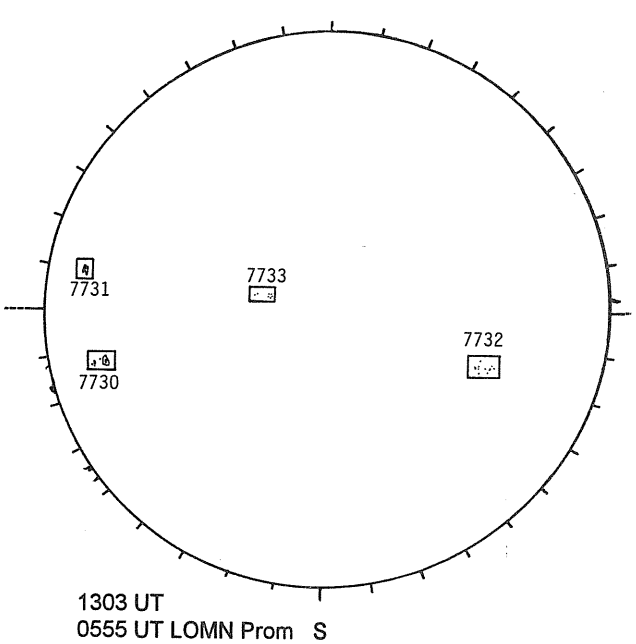
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



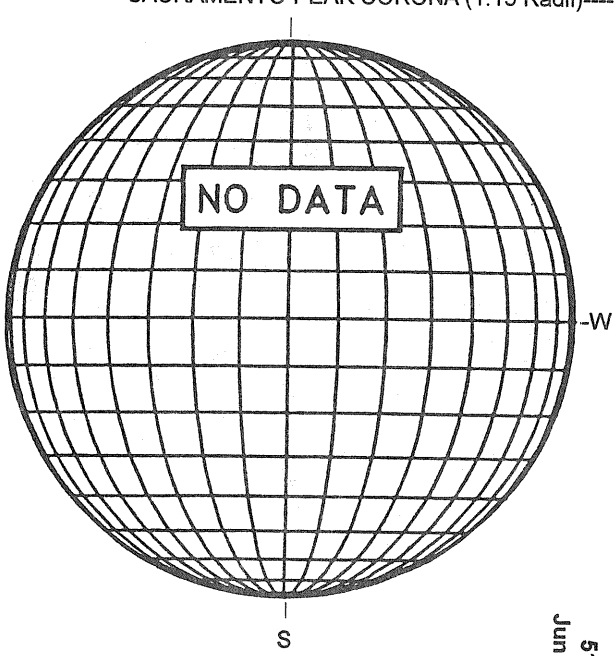
1745 UT

RAMEY SUNSPOT



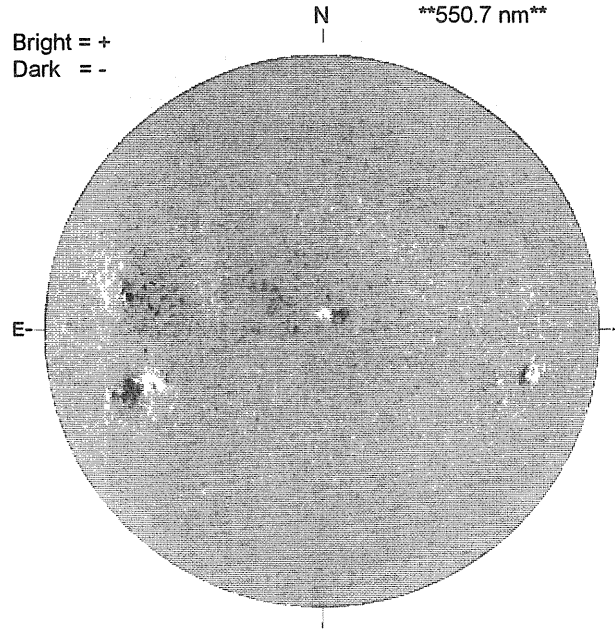
1303 UT
0555 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----



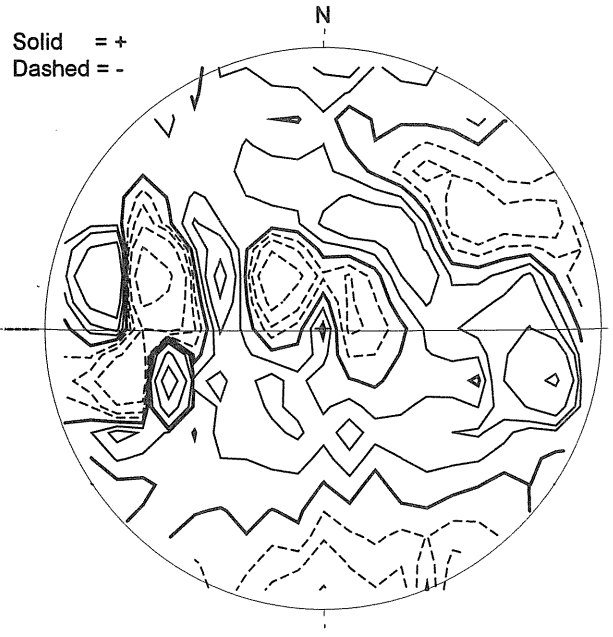
JUNE 10, 1994 (P=-12.01, Bo = 0.41, Lo = 175.80)

KITT PEAK MAGNETOGRAM



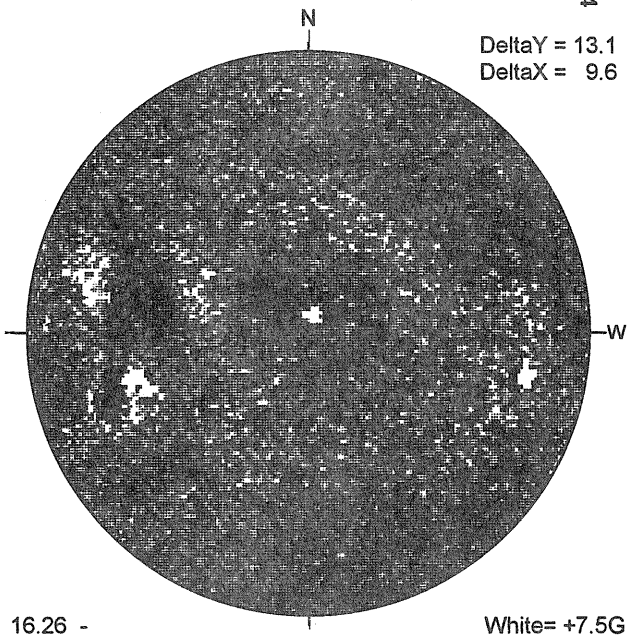
1420 UT

STANFORD MAGNETOGRAM



1656 UT

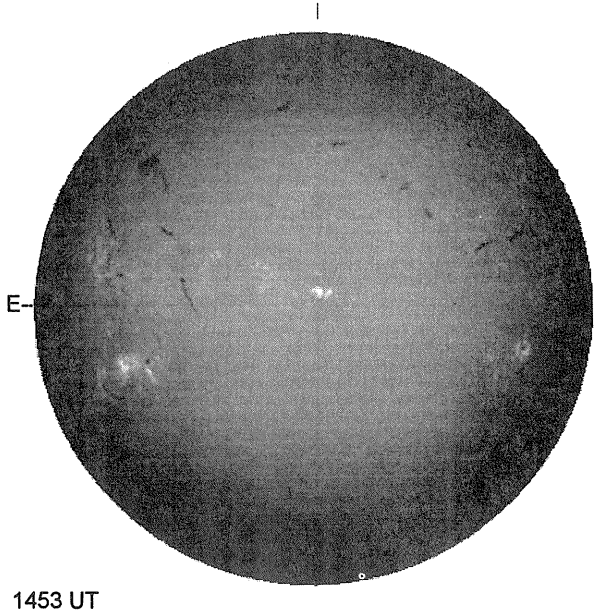
MT. WILSON MAGNETOGRAM



16.26 -
17.18 UT

White= +7.5G
Black = -7.5G

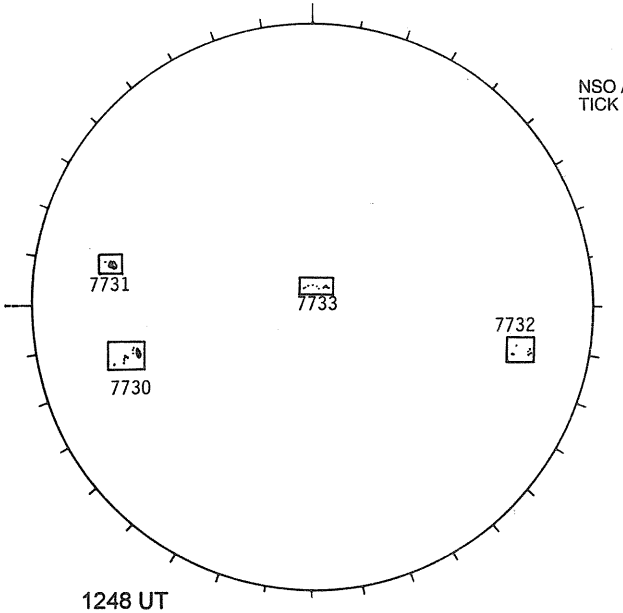
BIG BEAR H-ALPHA



1453 UT

S

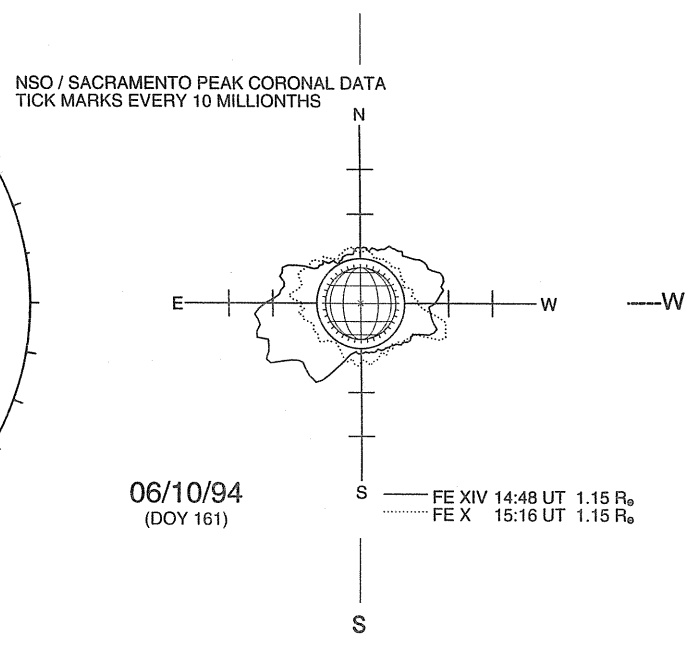
RAMEY SUNSPOT



1248 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)



06/10/94
(DOY 161)

S

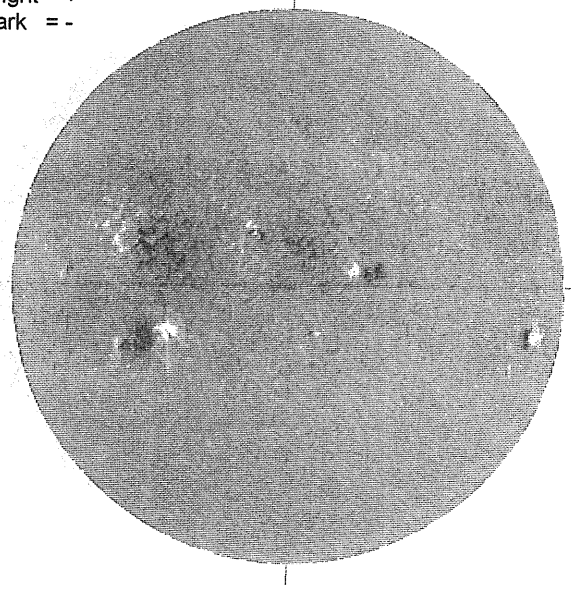
JUNE 11, 1994 (P=-11.59 Bo = 0.53, Lo = 162.57)

KITT PEAK MAGNETOGRAM

N **550.7 nm**

Bright = +
Dark = -

E--

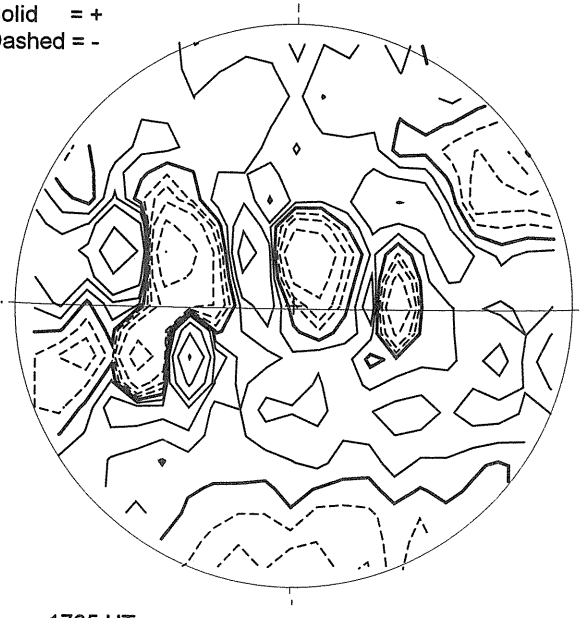


1405 UT

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

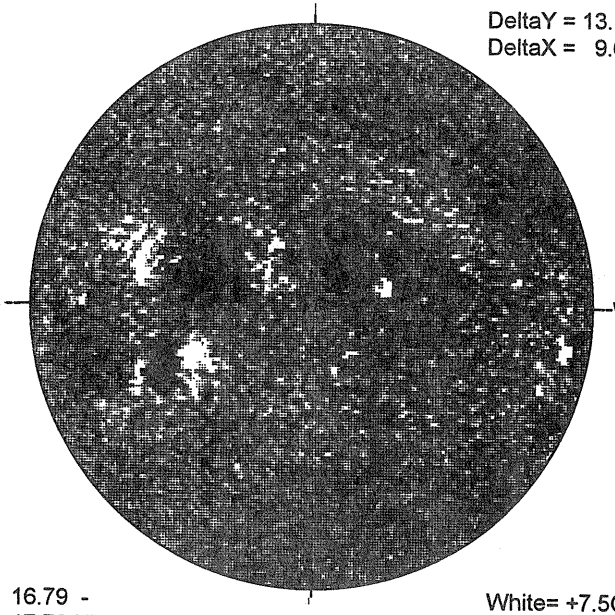


1705 UT

MT. WILSON MAGNETOGRAM

N

DeltaY = 13.1
DeltaX = 9.6



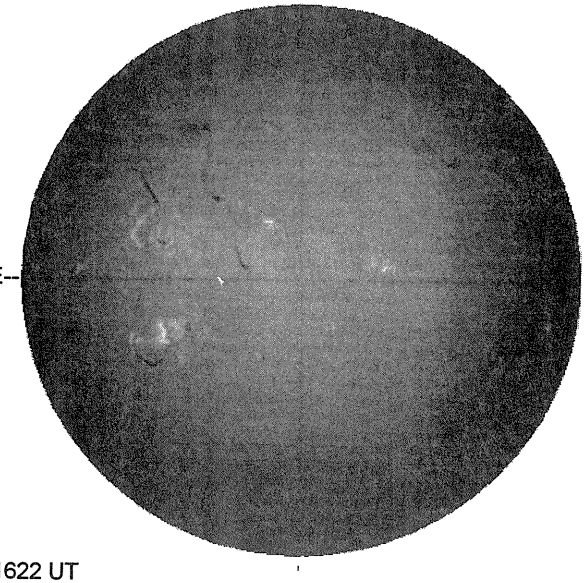
W

16.79 -
17.70 UT

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

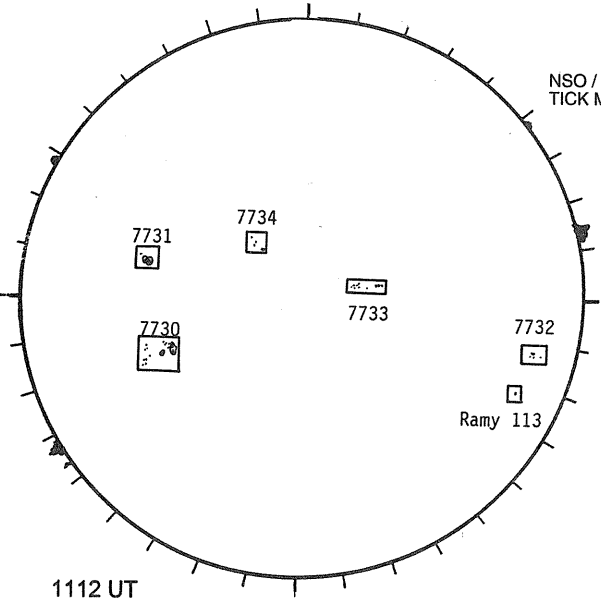
E--



1622 UT

S

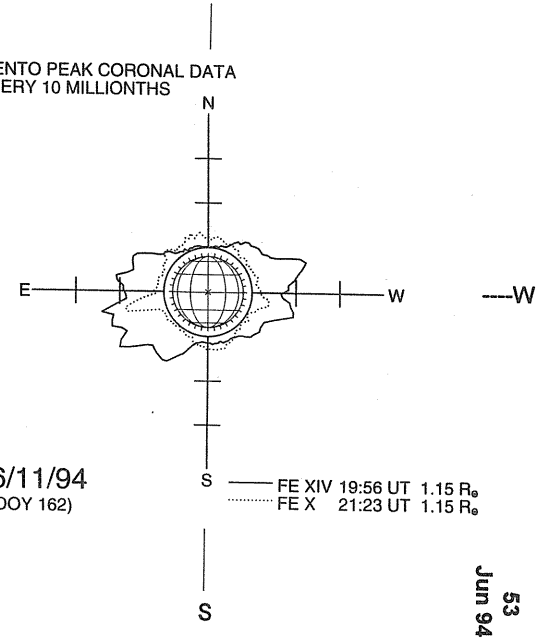
RAMEY SUNSPOT



1112 UT
0947 UT VALA Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



06/11/94
(DOY 162)

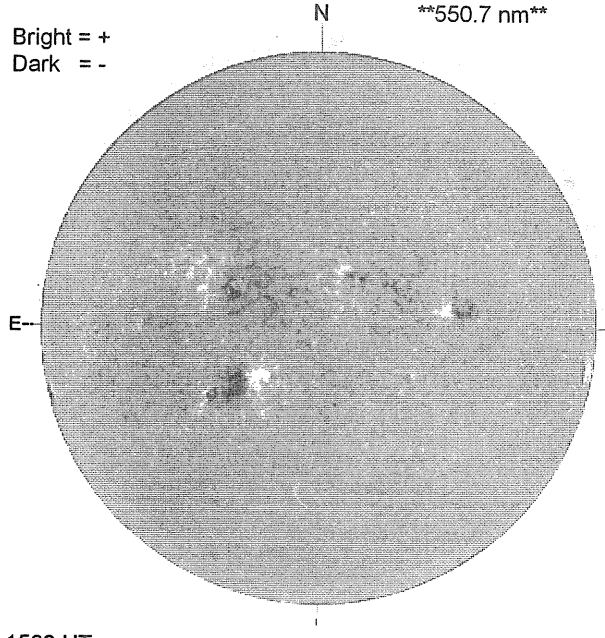
FE XIV 19:56 UT 1.15 $R_\odot$
FE X 21:23 UT 1.15 $R_\odot$

S

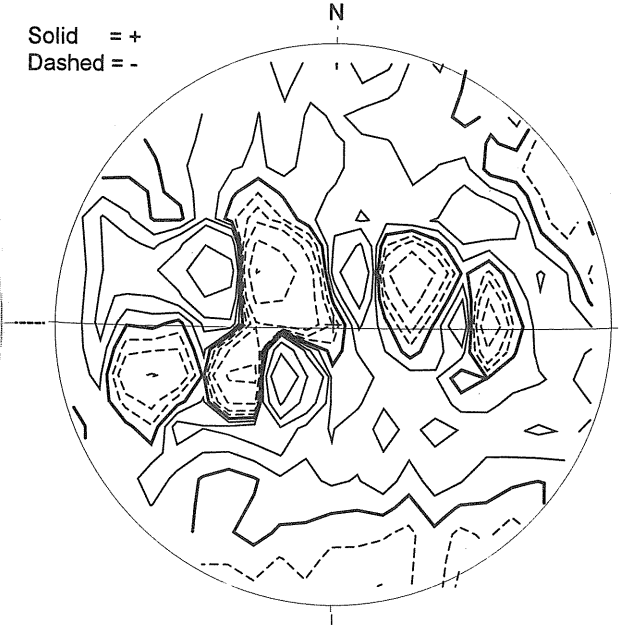
53
Jun 94

JUNE 12, 1994 (P=-11.18, Bo = 0.65, Lo = 149.33)

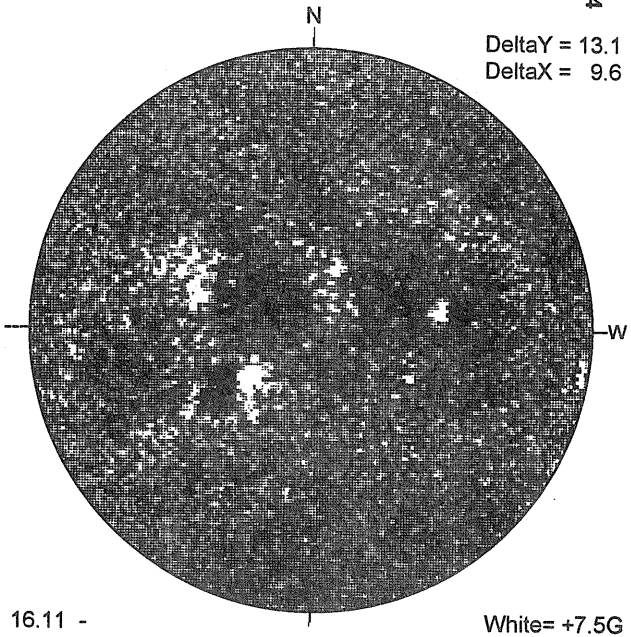
KITT PEAK MAGNETOGRAM



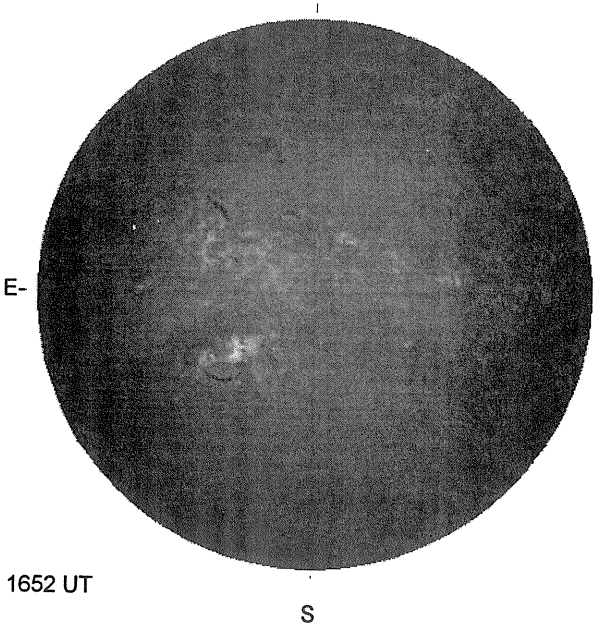
STANFORD MAGNETOGRAM



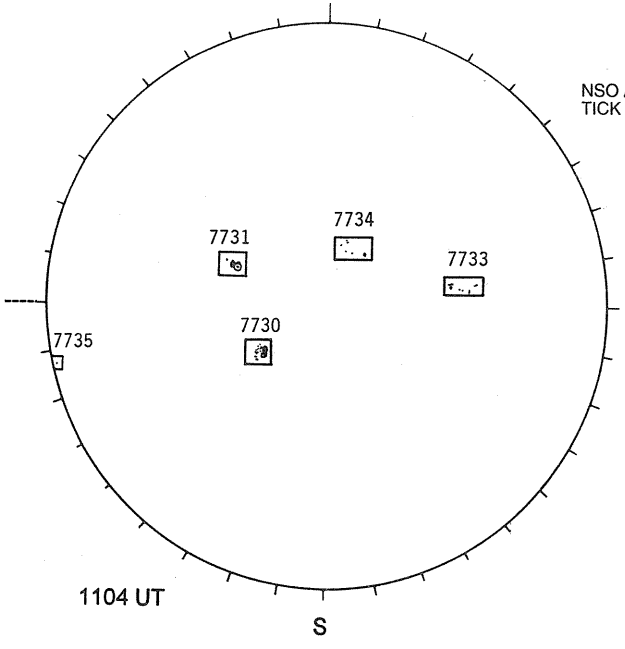
MT. WILSON MAGNETOGRAM



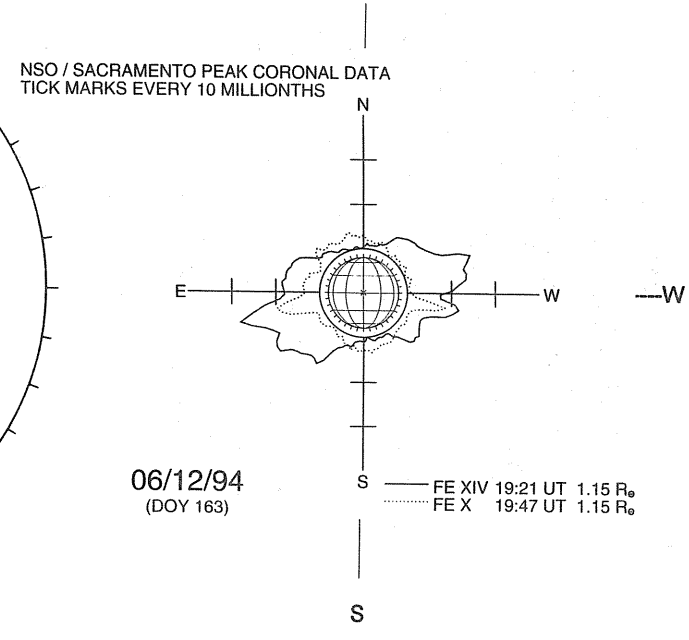
BIG BEAR H-ALPHA



RAMEY SUNSPOT

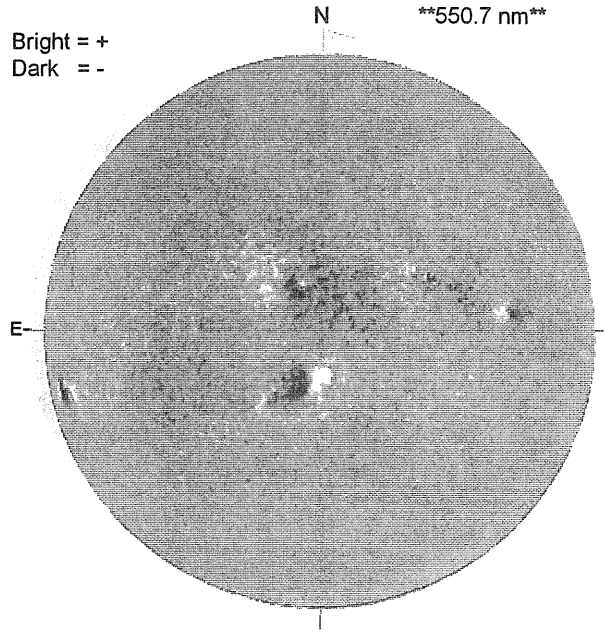


SACRAMENTO PEAK CORONA (1.15 Radii)----



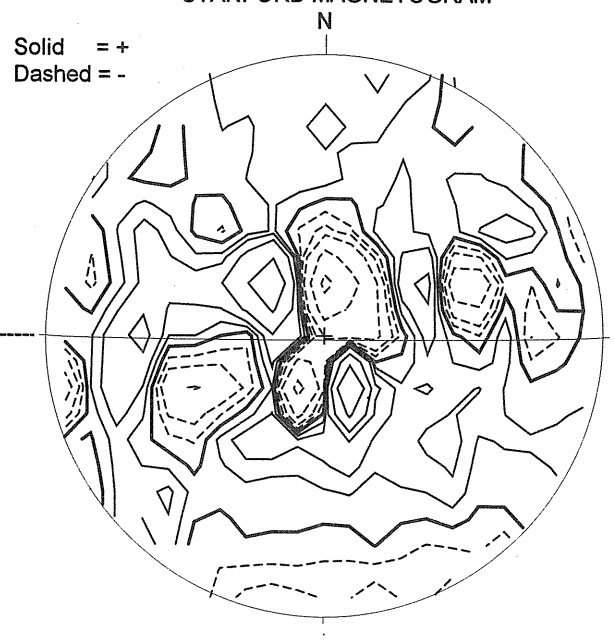
JUNE 13, 1994 (P=-10.76, Bo = 0.77, Lo = 136.09)

KITT PEAK MAGNETOGRAM



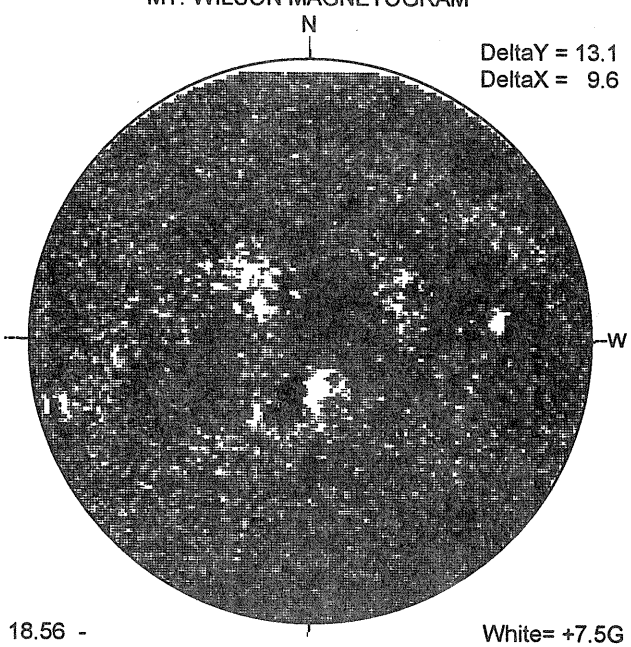
1516 UT

STANFORD MAGNETOGRAM



2113 UT

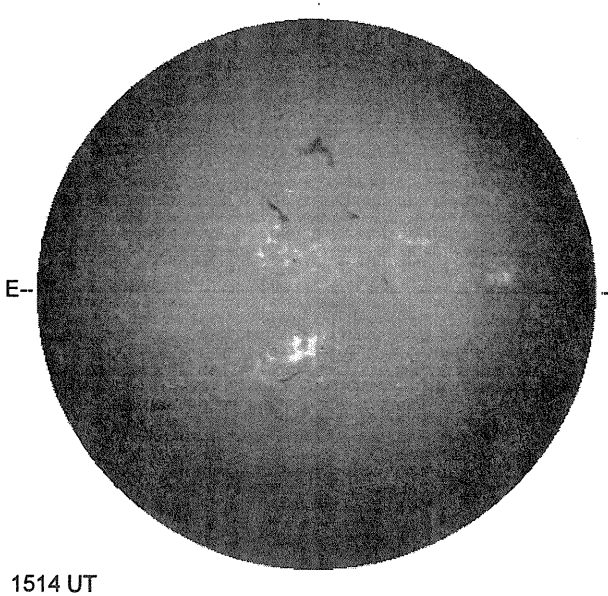
MT. WILSON MAGNETOGRAM



18.56 -
19.47 UT

White= +7.5G
Black = -7.5G

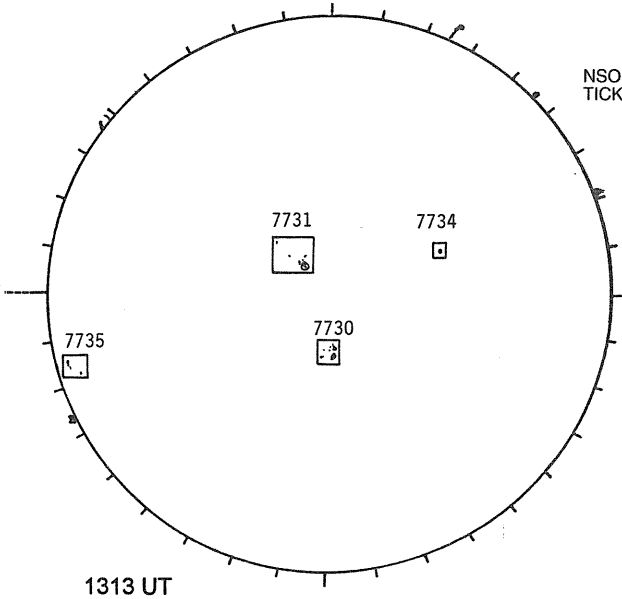
----- BIG BEAR H-ALPHA



1514 UT

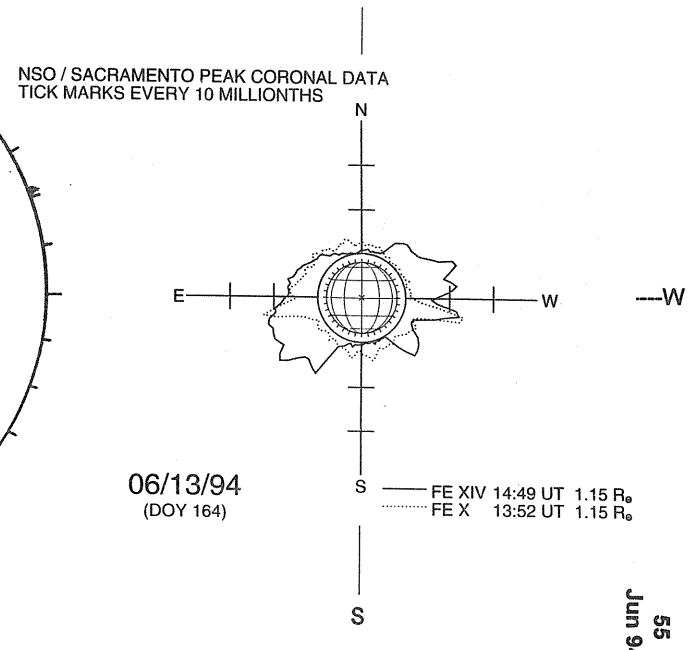
S

RAMEY SUNSPOT



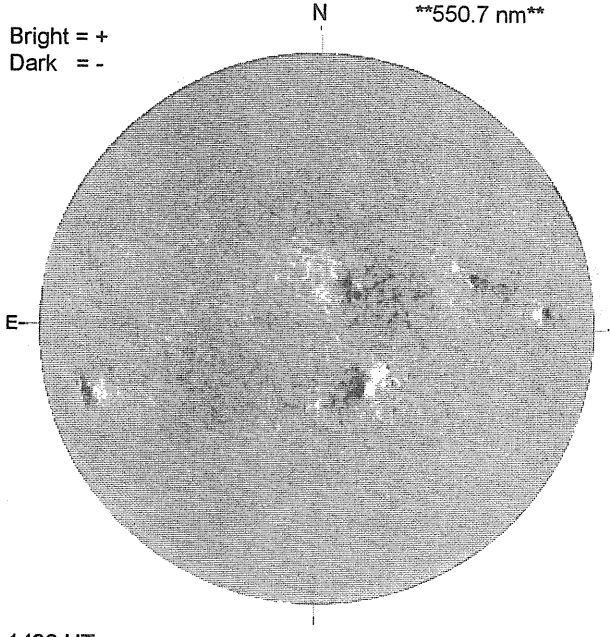
1313 UT
0543 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

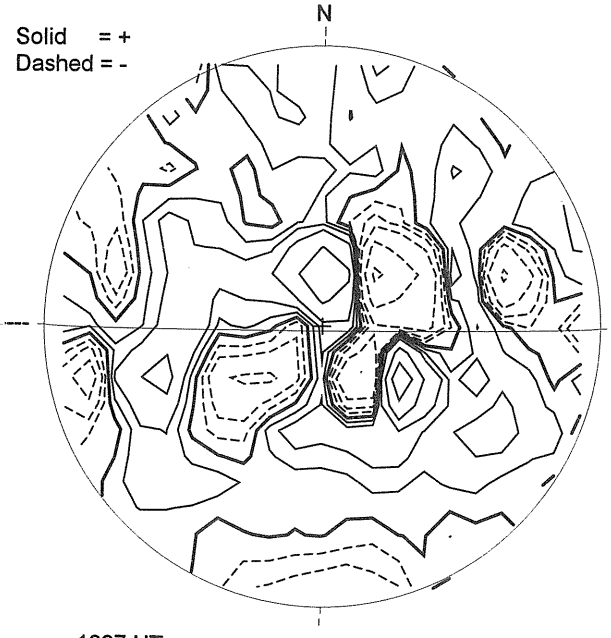


JUNE 14, 1994 (P=-10.34, Bo = 0.89, Lo = 122.86)

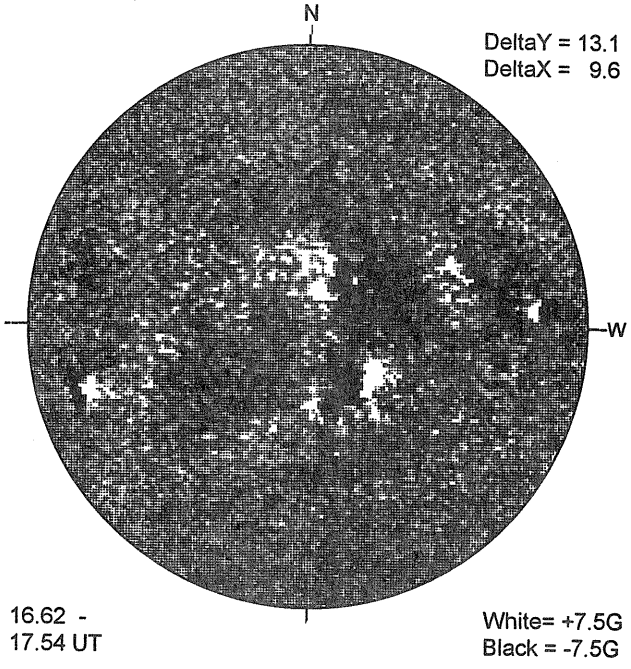
KITT PEAK MAGNETOGRAM



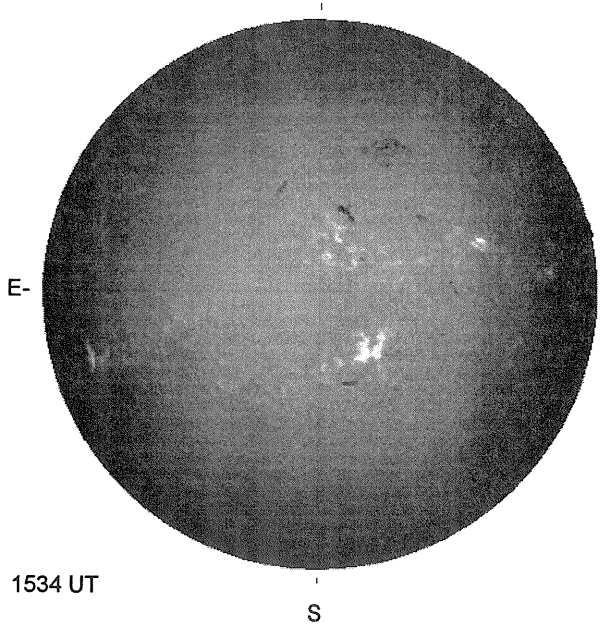
STANFORD MAGNETOGRAM



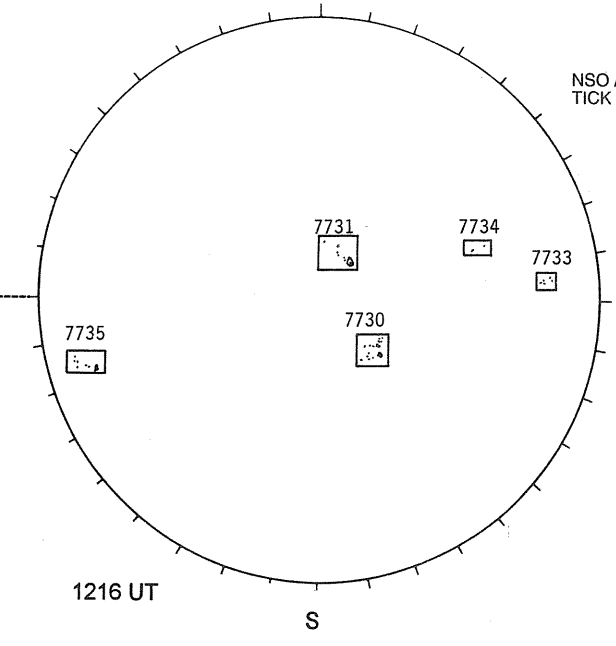
MT. WILSON MAGNETOGRAM



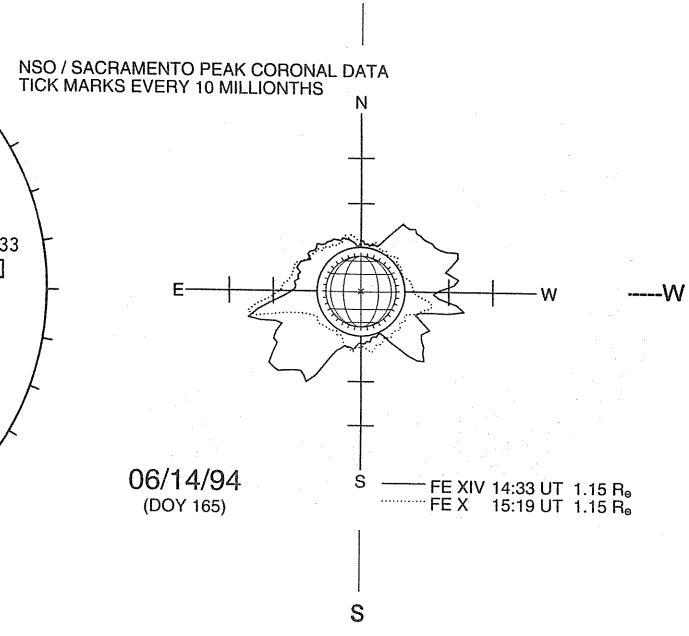
BIG BEAR H-ALPHA



RAMEY SUNSPOT



SACRAMENTO PEAK CORONA (1.15 Radii)

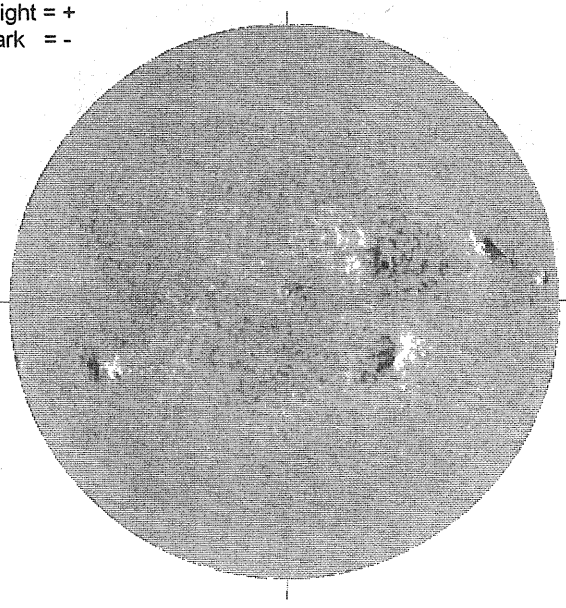


JUNE 15, 1994 (P=-9.91, Bo = 1.01, Lo = 109.62)

KITT PEAK MAGNETOGRAM

N **550.7 nm**

Bright = +
Dark = -

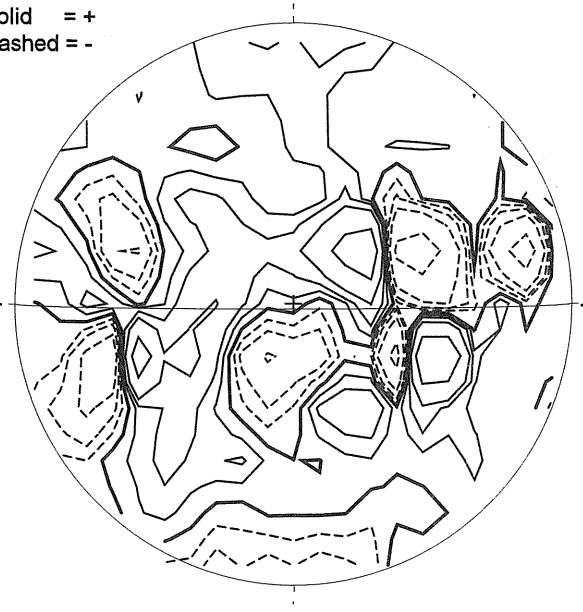


1430 UT

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

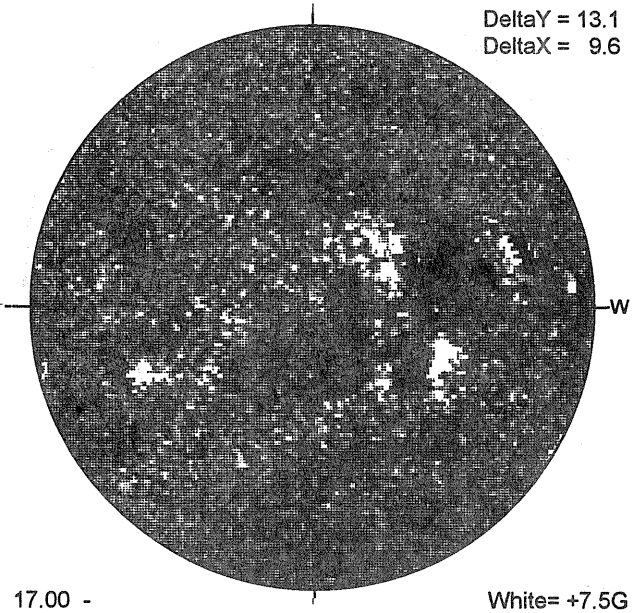


1941 UT

MT. WILSON MAGNETOGRAM

N

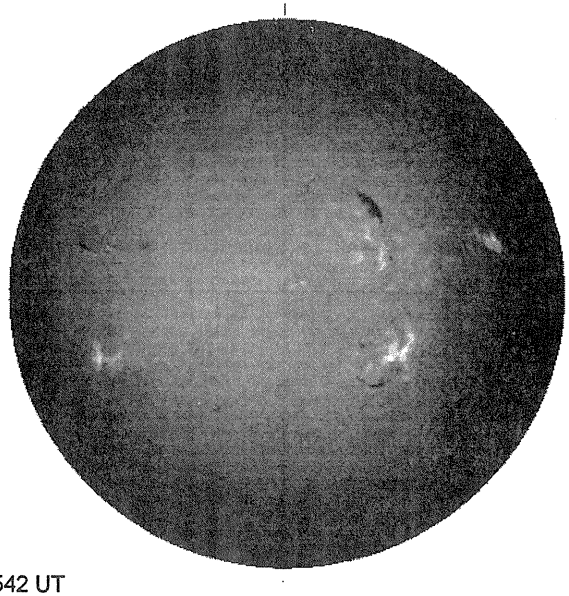
DeltaY = 13.1
DeltaX = 9.6



17.00 -
17.92 UT

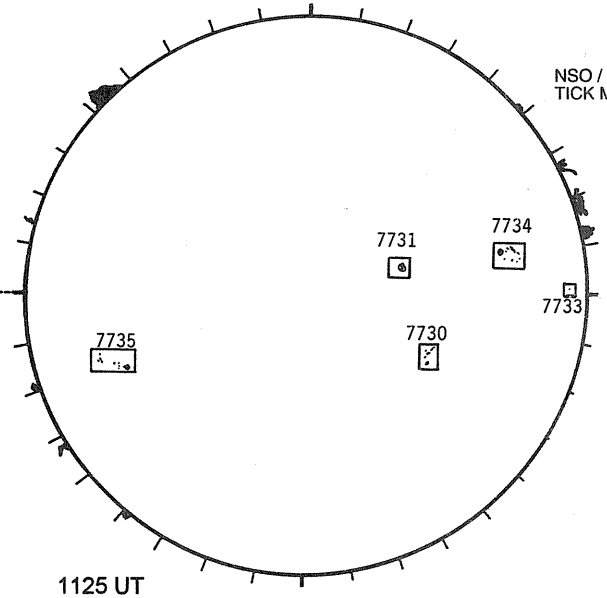
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



1542 UT

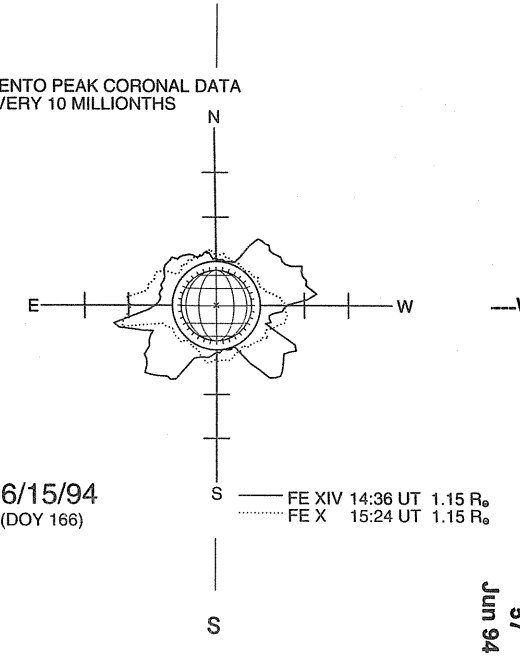
RAMEY SUNSPOT



1125 UT
0646 UT VALA Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



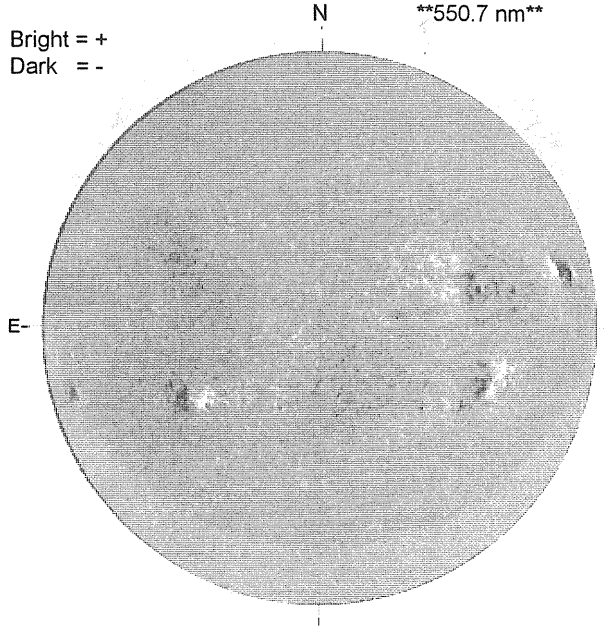
06/15/94
(DOY 166)

FE XIV 14:36 UT 1.15 $R_\odot$
FE X 15:24 UT 1.15 $R_\odot$

57
Jun 94

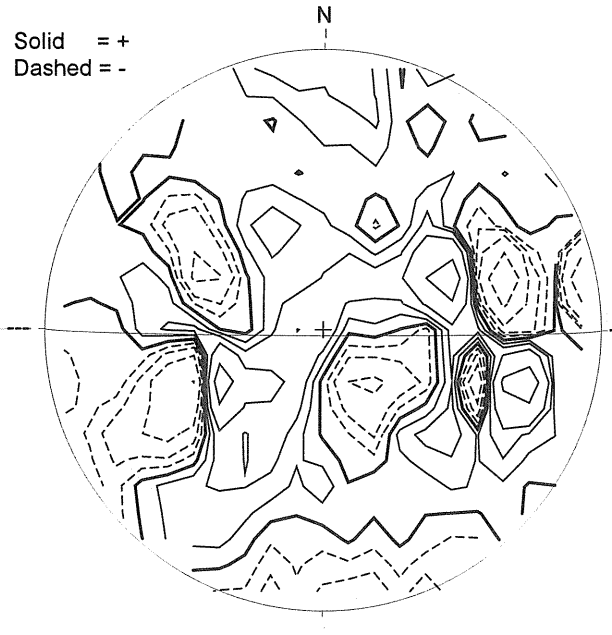
JUNE 16, 1994 (P= -9.48, Bo = 1.13, Lo = 96.38)

KITT PEAK MAGNETOGRAM



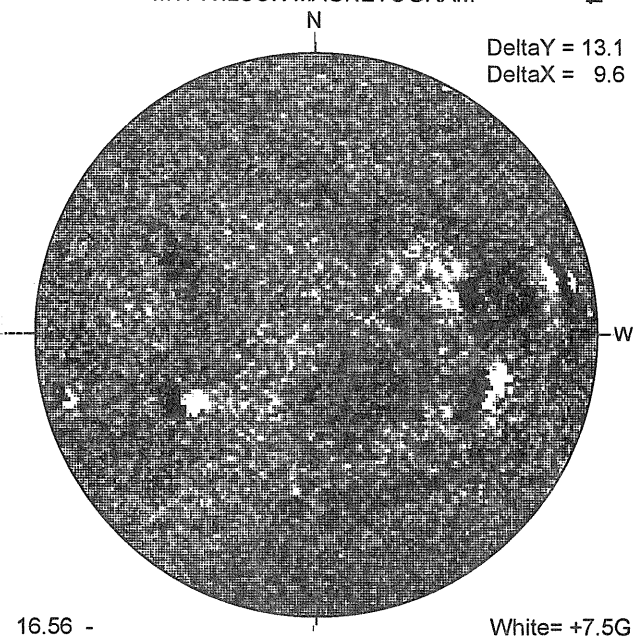
1353 UT

STANFORD MAGNETOGRAM



2044 UT

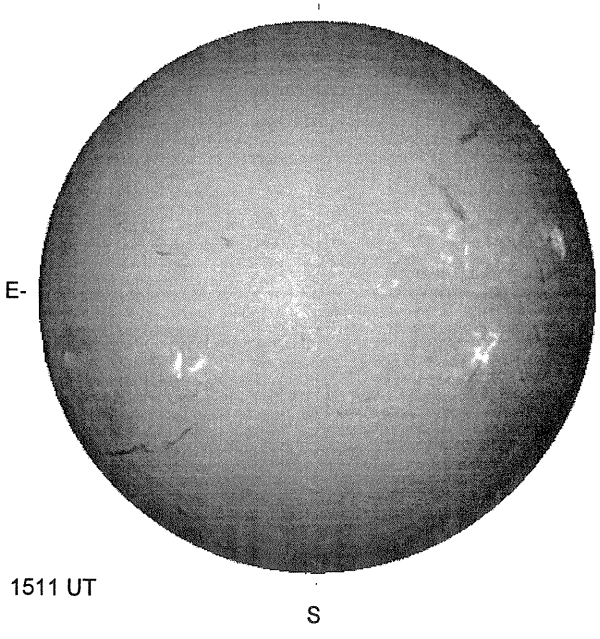
MT. WILSON MAGNETOGRAM



16.56 -
17.48 UT

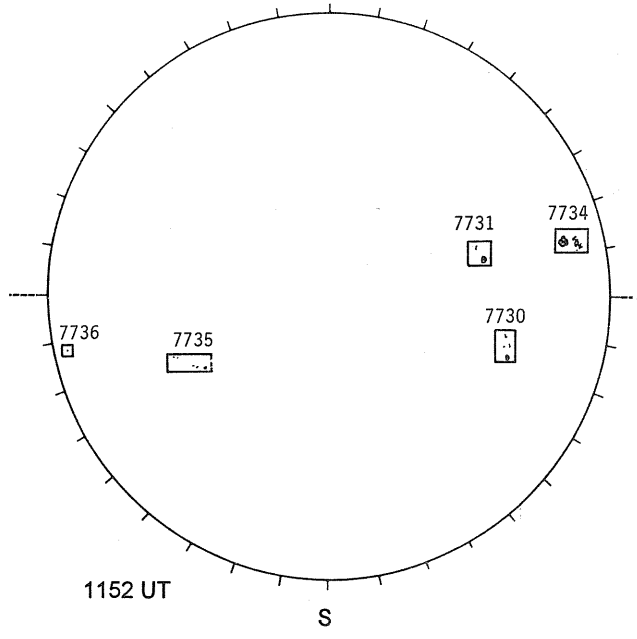
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



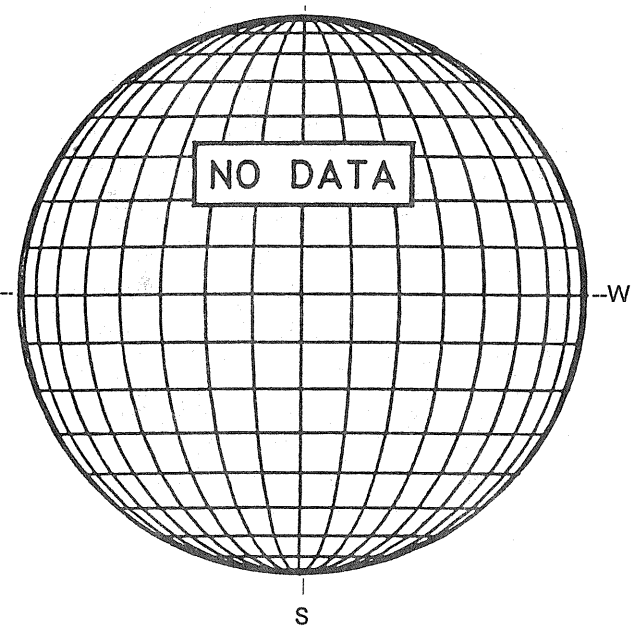
1511 UT

RAMEY SUNSPOT



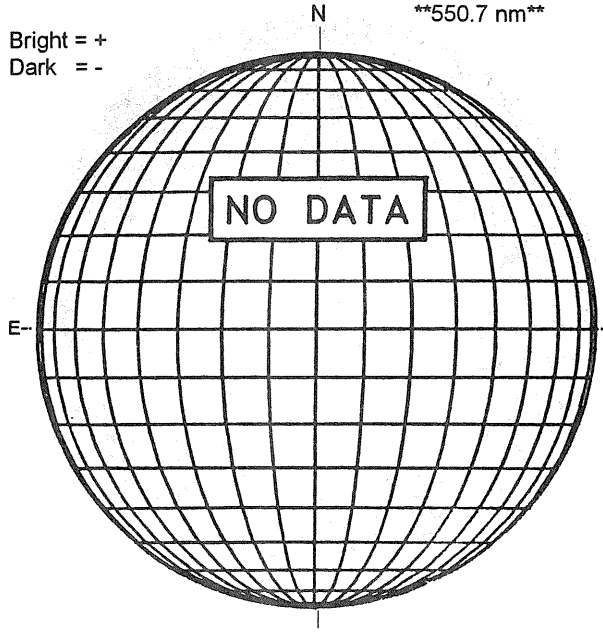
1152 UT

SACRAMENTO PEAK CORONA (1.15 Radii)

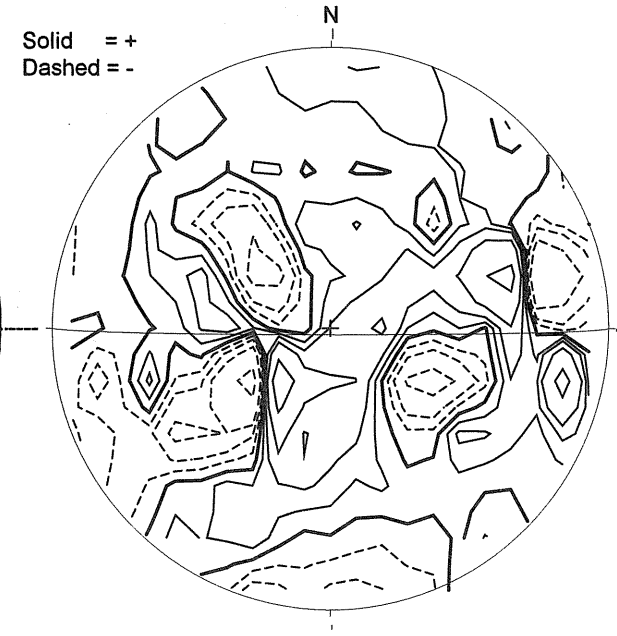


JUNE 17, 1994 (P= -9.05, Bo = 1.24, Lo = 83.15)

KITT PEAK MAGNETOGRAM

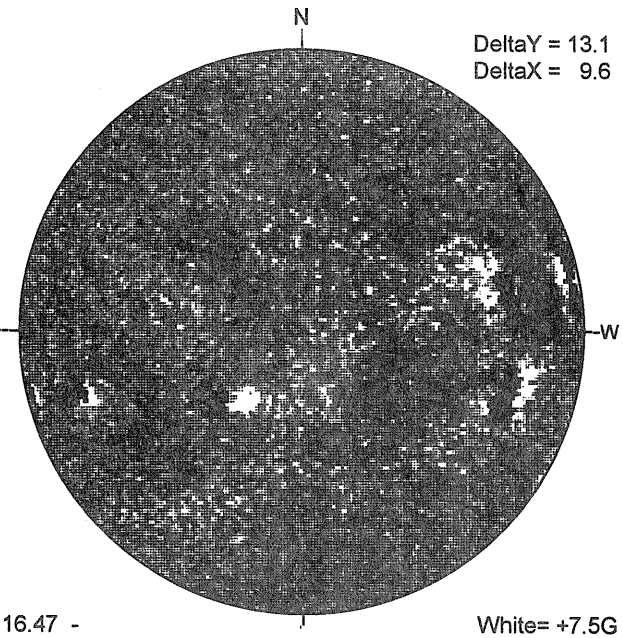


STANFORD MAGNETOGRAM



1844 UT

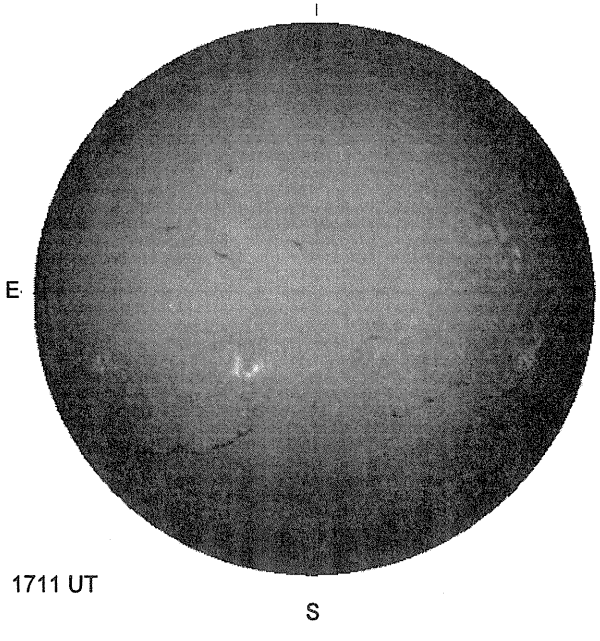
MT. WILSON MAGNETOGRAM



16.47 -
17.39 UT

White= +7.5G
Black = -7.5G

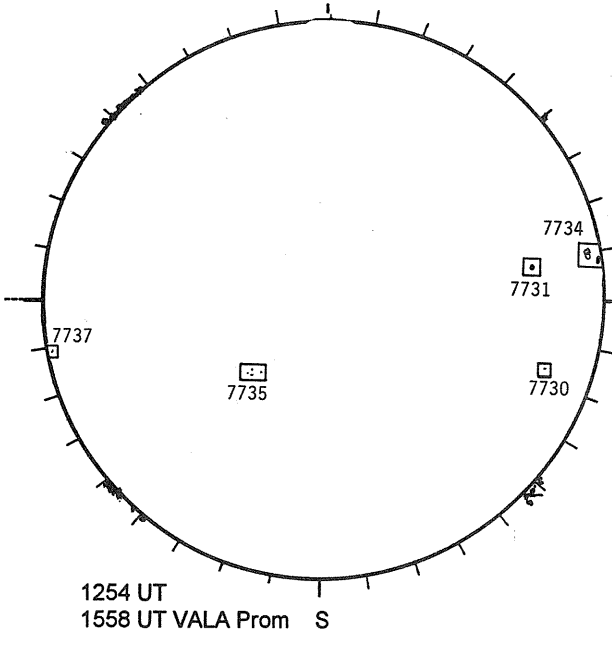
BIG BEAR H-ALPHA



1711 UT

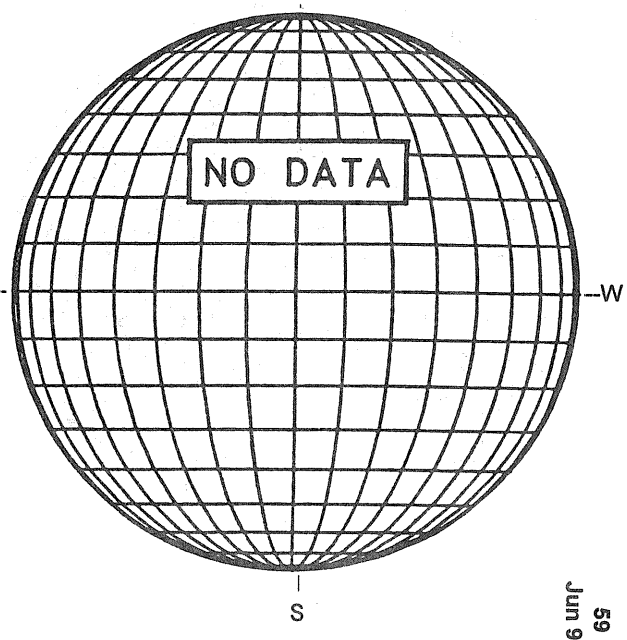
S

RAMEY SUNSPOT



1254 UT
1558 UT VALA Prom S

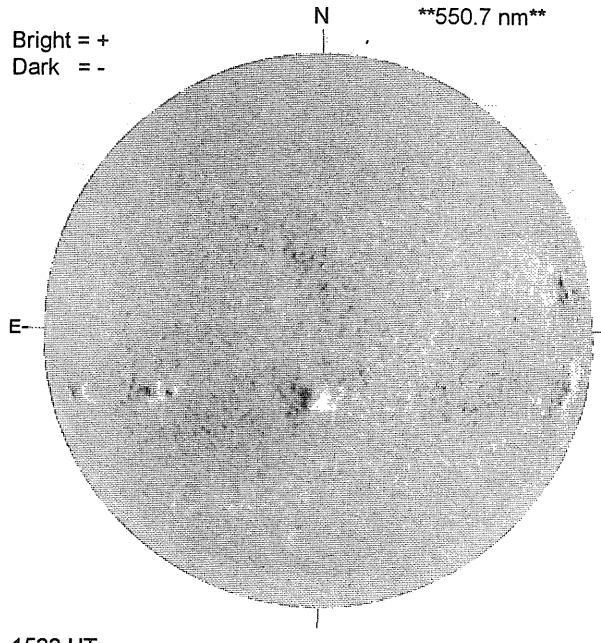
SACRAMENTO PEAK CORONA (1.15 Radii)



S

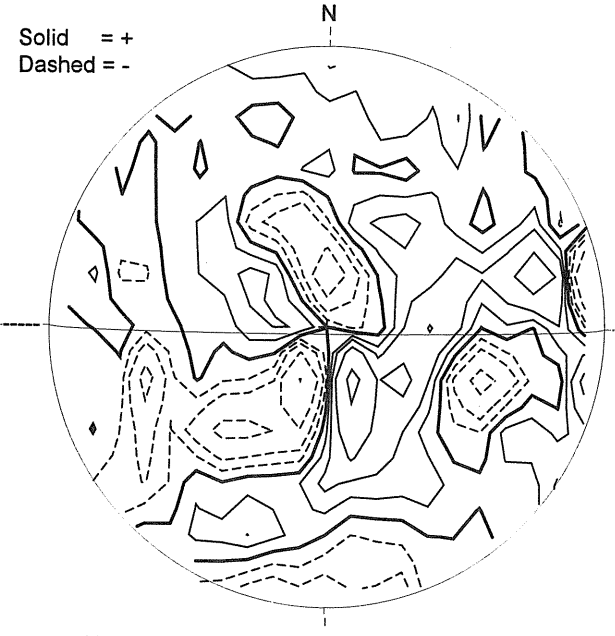
JUNE 18, 1994 (P= -8.62, Bo = 1.36, Lo = 69.91)

KITT PEAK MAGNETOGRAM



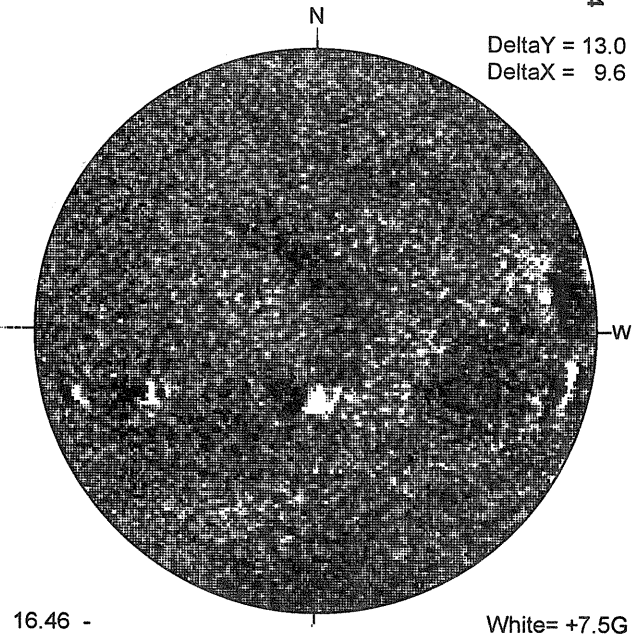
1533 UT

STANFORD MAGNETOGRAM



1934 UT

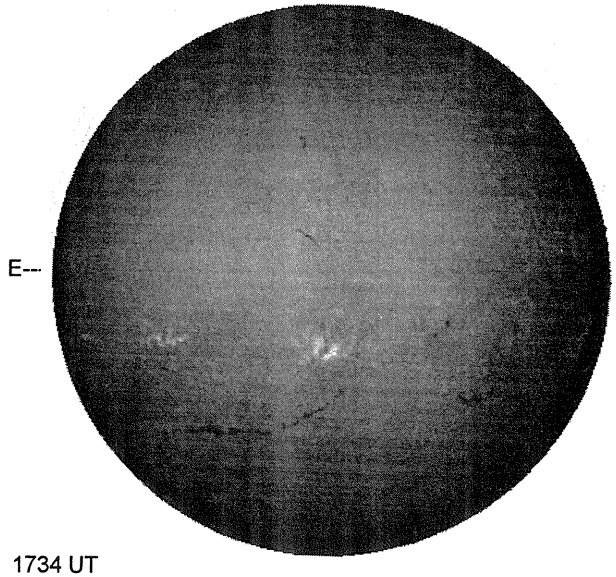
MT. WILSON MAGNETOGRAM



16.46 -
17.39 UT

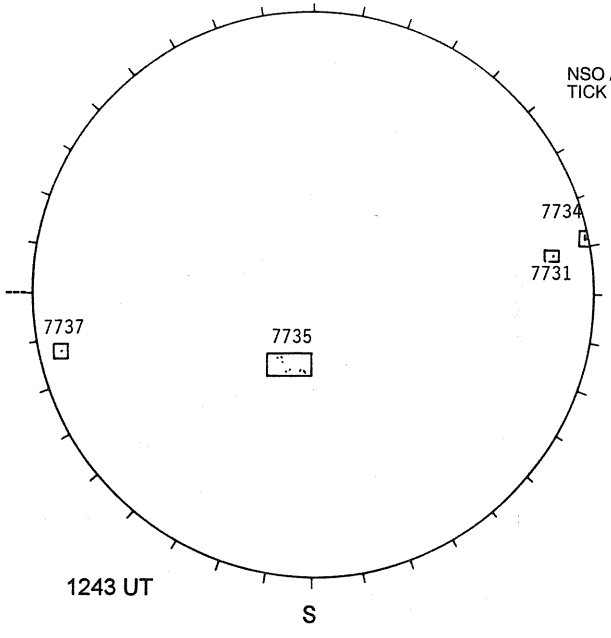
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



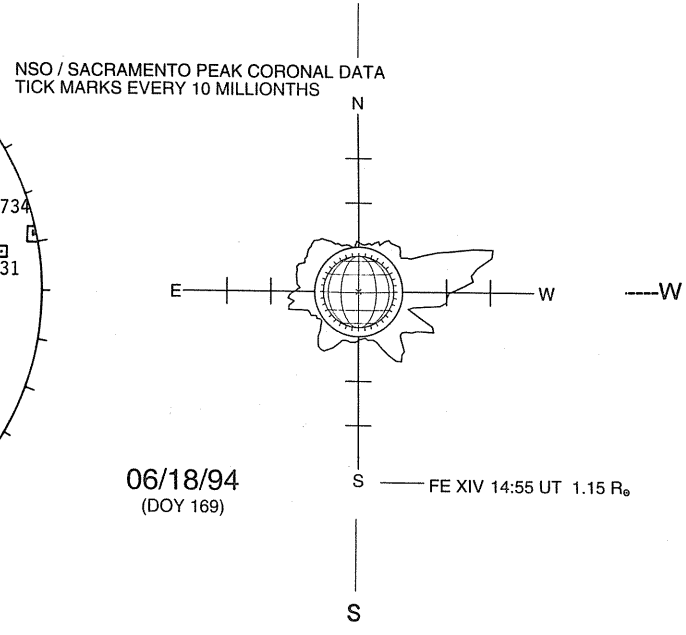
1734 UT

RAMEY SUNSPOT



1243 UT

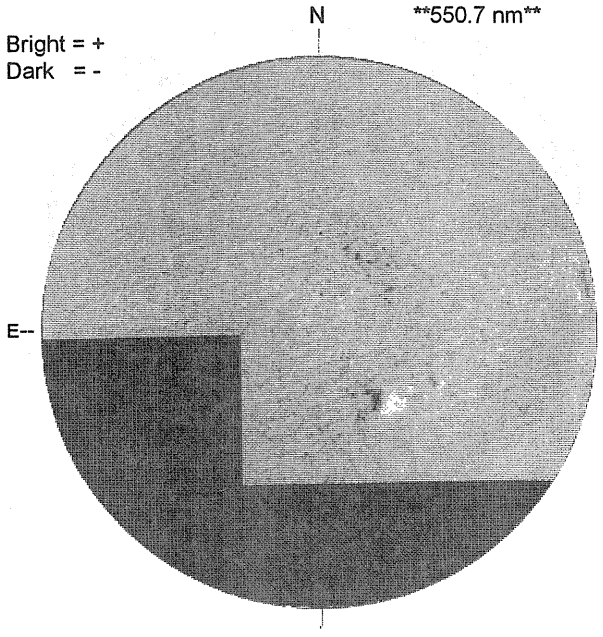
SACRAMENTO PEAK CORONA (1.15 Radii)----



06/18/94
(DOY 169)

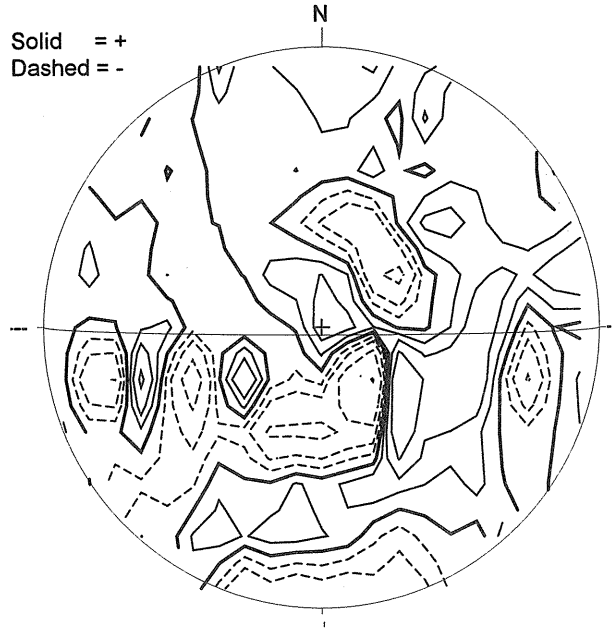
JUNE 19, 1994 (P= -8.18, Bo = 1.48, Lo = 56.67)

KITT PEAK MAGNETOGRAM



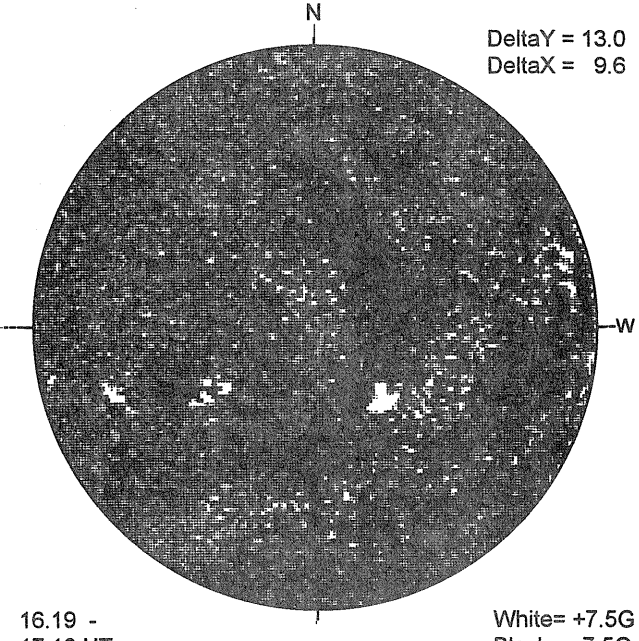
1758 UT

STANFORD MAGNETOGRAM



2132 UT

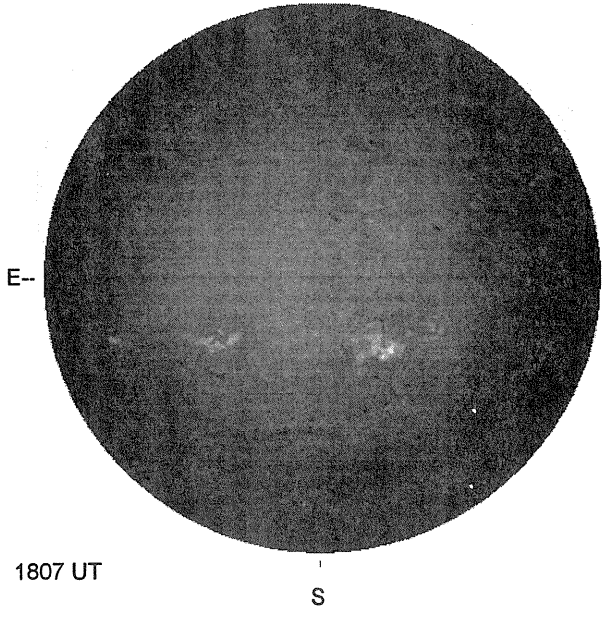
MT. WILSON MAGNETOGRAM



16.19 -
17.10 UT

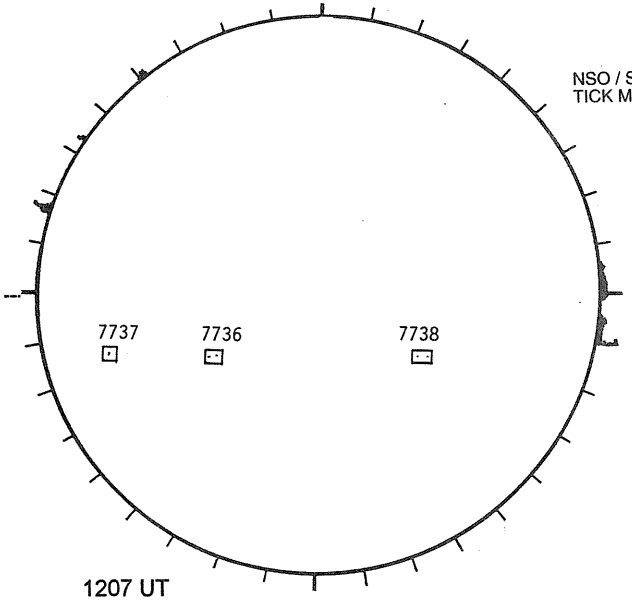
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



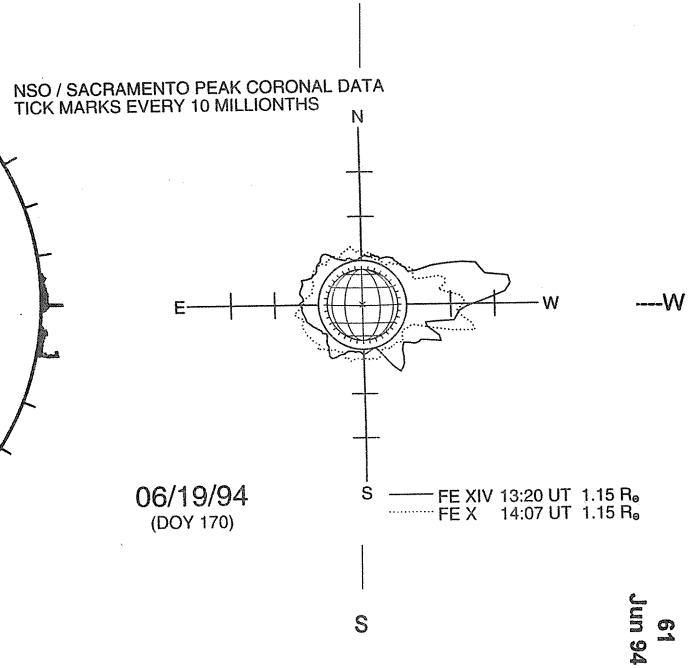
1807 UT

RAMEY SUNSPOT



1207 UT
1253 UT VALA Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

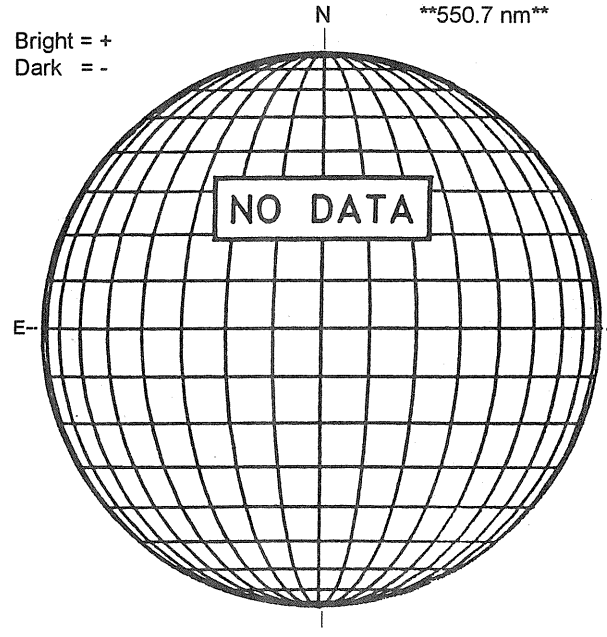


06/19/94
(DOY 170)

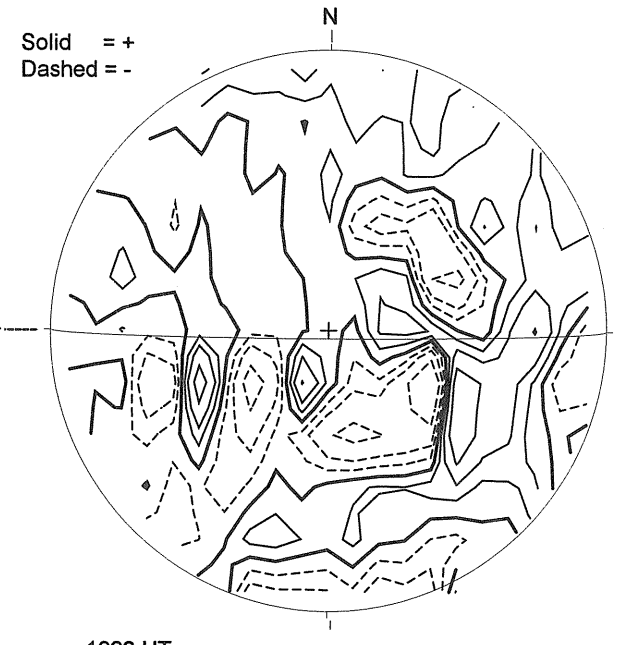
61
Jun 94

JUNE 20, 1994 (P= -7.74, Bo = 1.60, Lo = 43.44)

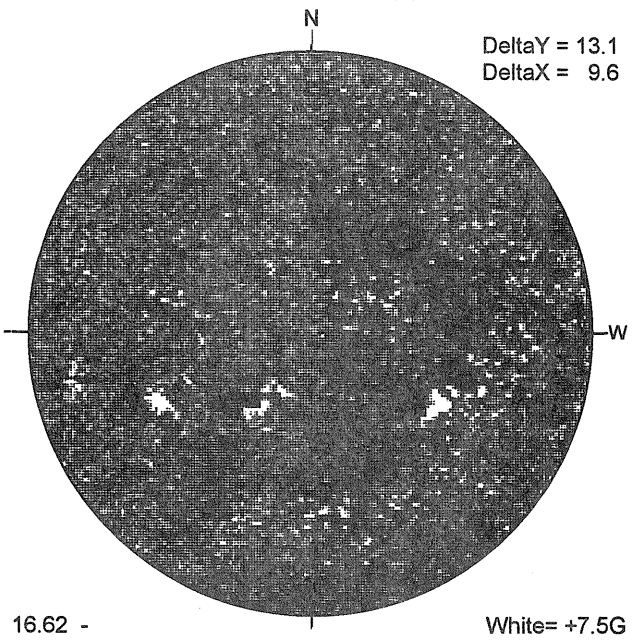
KITT PEAK MAGNETOGRAM



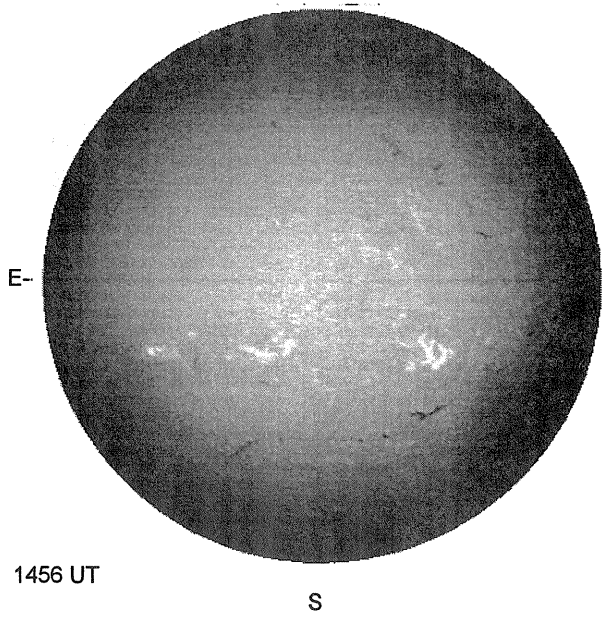
STANFORD MAGNETOGRAM



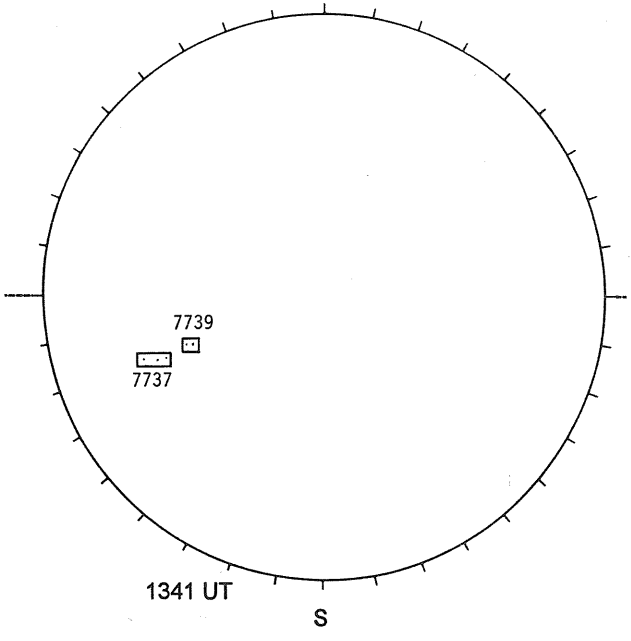
MT. WILSON MAGNETOGRAM



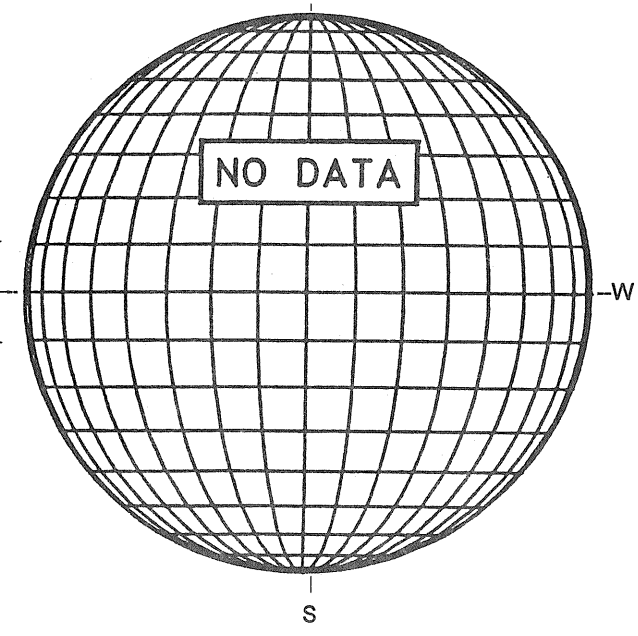
BIG BEAR H-ALPHA



RAMEY SUNSPOT



SACRAMENTO PEAK CORONA (1.15 Radii)



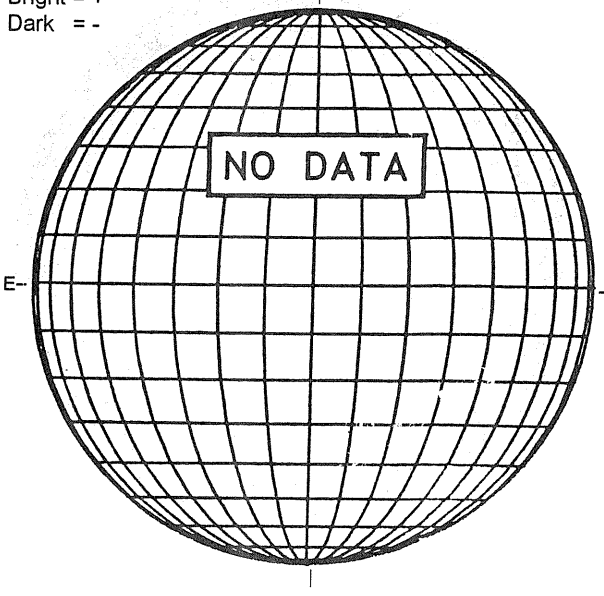
JUNE 21, 1994 (P= -7.30, Bo = 1.72, Lo = 30.20)

KITT PEAK MAGNETOGRAM

N

550.7 nm

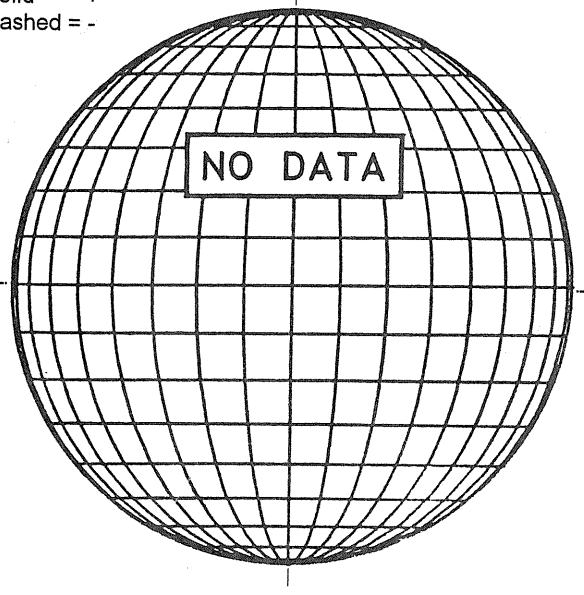
Bright = +
Dark = -



STANFORD MAGNETOGRAM

N

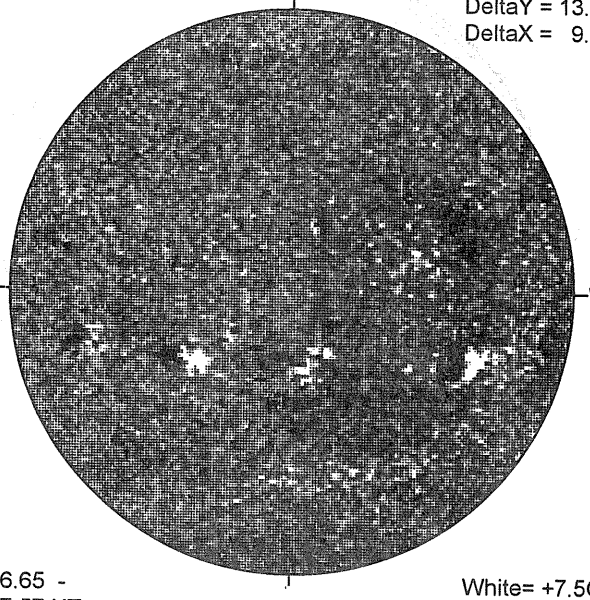
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

N

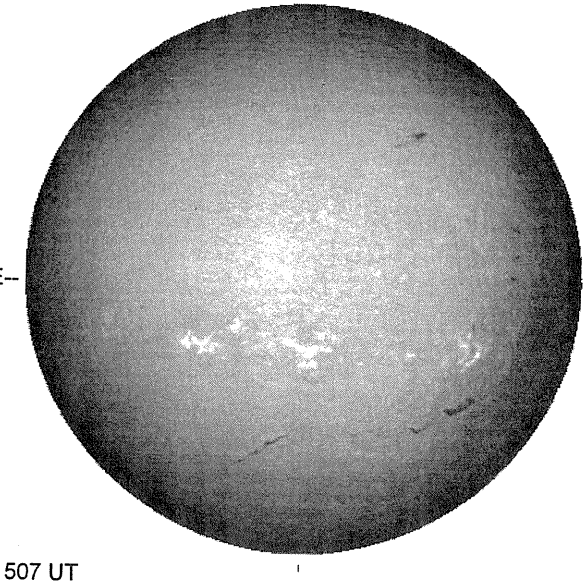
DeltaY = 13.0
DeltaX = 9.6



16.65 -
17.57 UT

White= +7.5G
Black = -7.5G

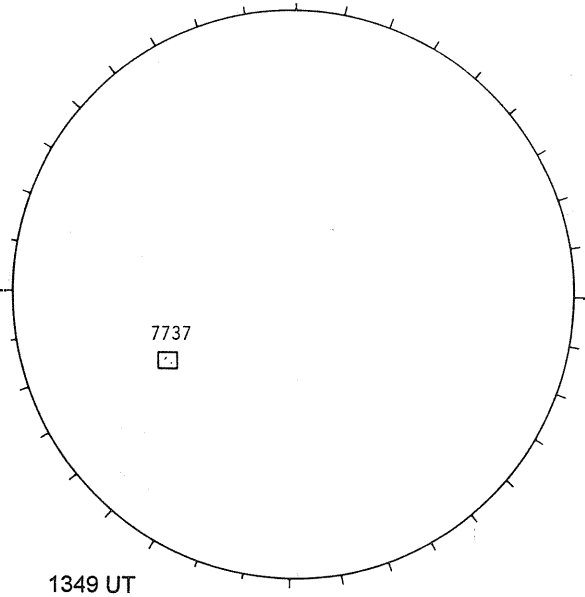
BIG BEAR H-ALPHA



1507 UT

S

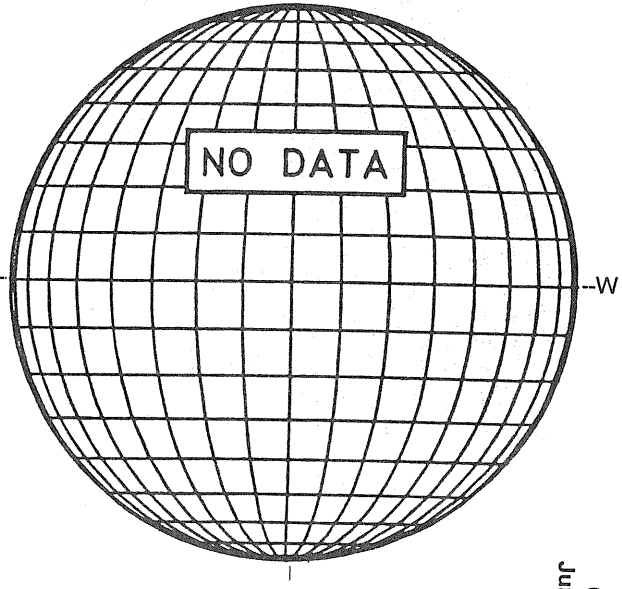
RAMEY SUNSPOT



1349 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)----



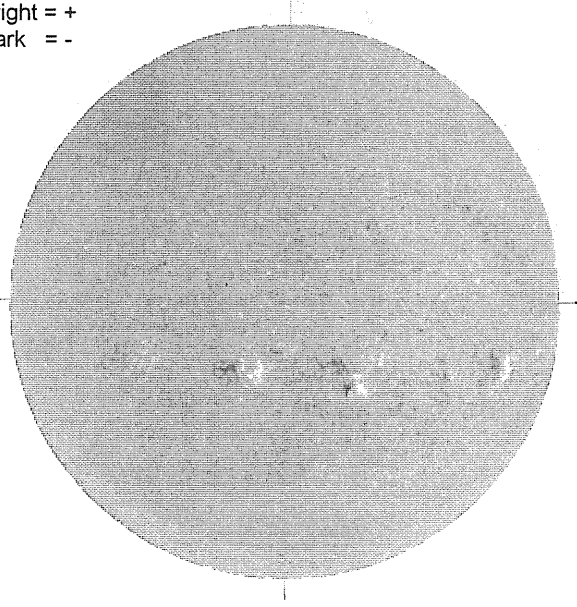
S

JUNE 22, 1994 (P= -6.86, Bo = 1.83, Lo = 16.96)

KITT PEAK MAGNETOGRAM

N **550.7 nm**

Bright = +
Dark = -



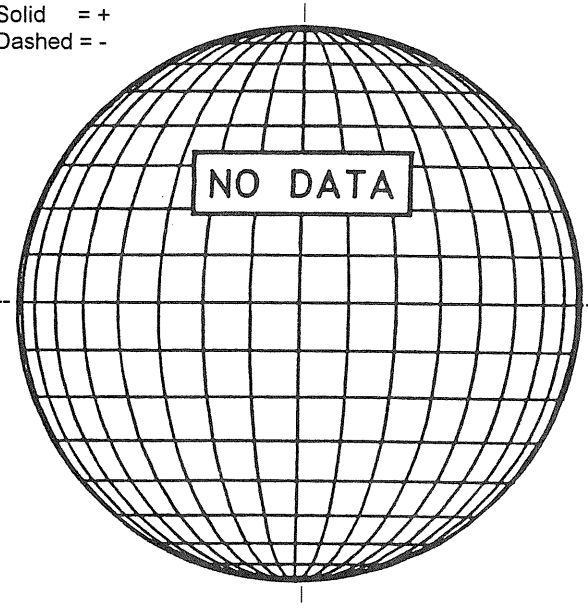
E

1342 UT

STANFORD MAGNETOGRAM

N

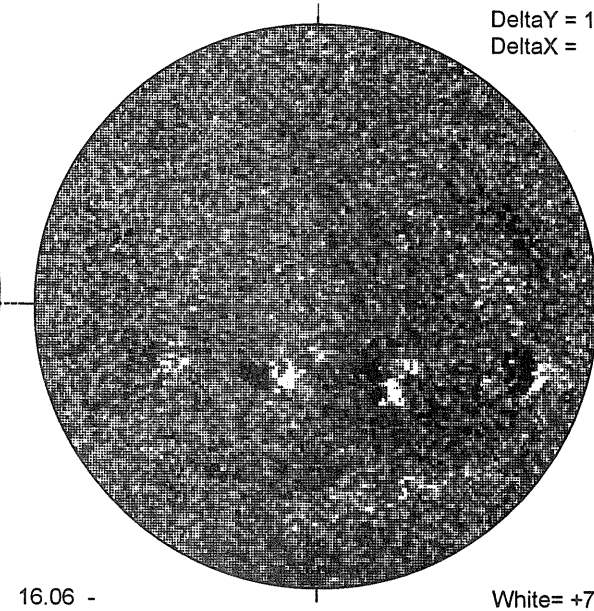
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

N

DeltaY = 13.1
DeltaX = 9.6

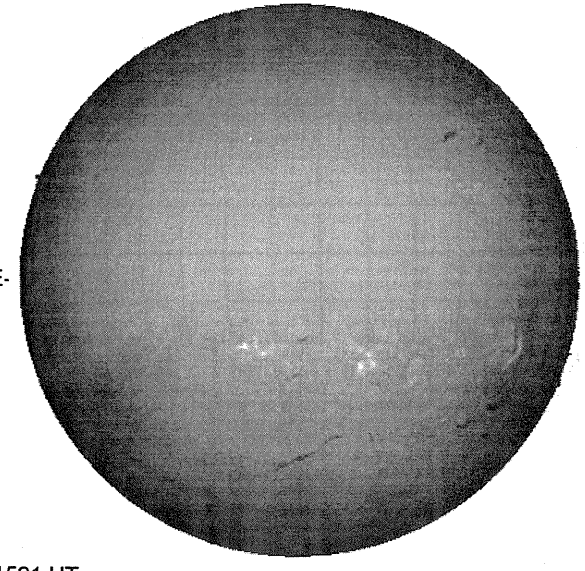


W

16.06 -
16.97 UT

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

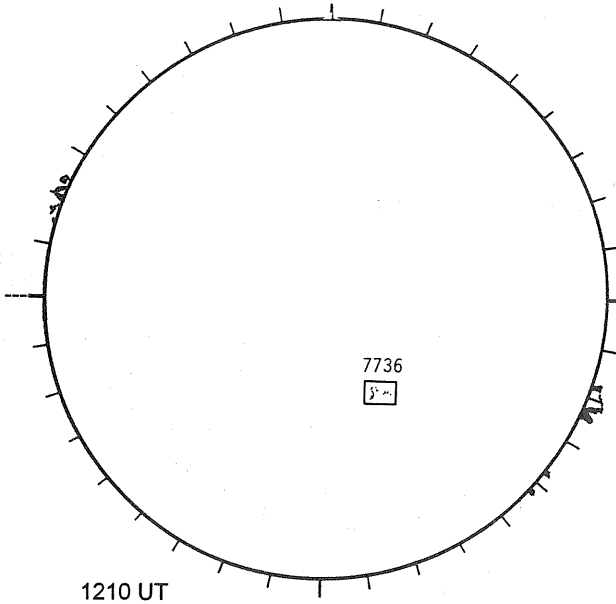


E

1521 UT

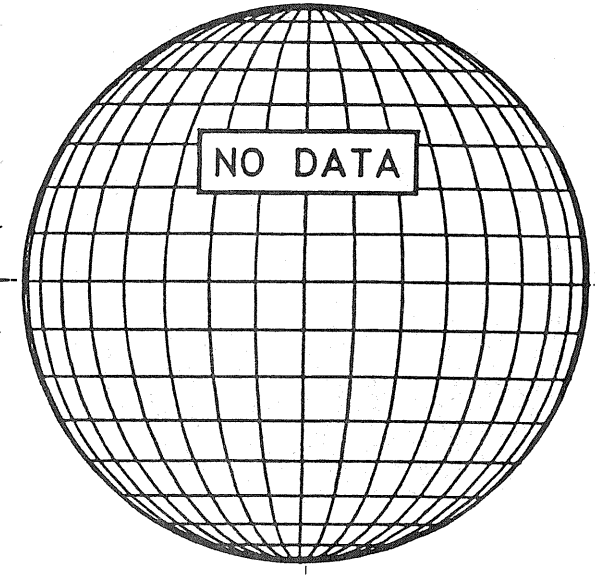
S

RAMEY SUNSPOT



1210 UT
1310 UT VALA Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

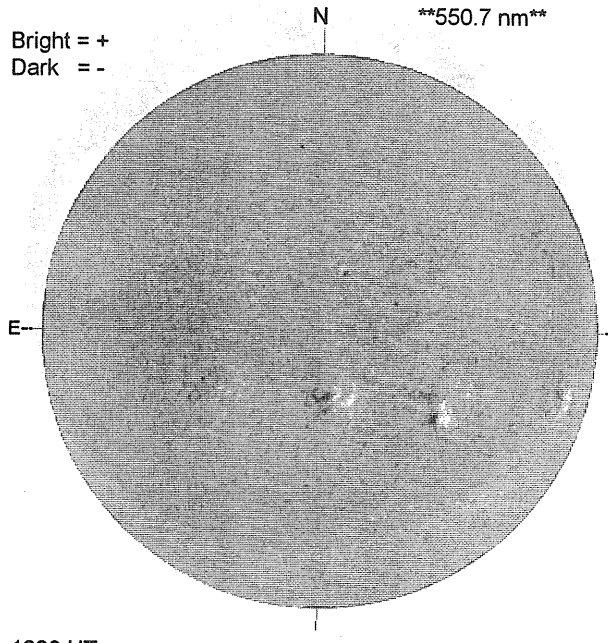


W

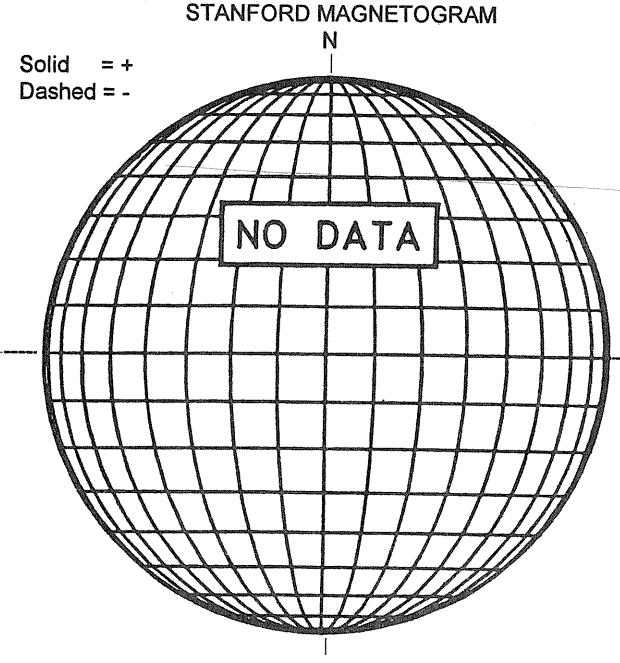
S

JUNE 23, 1994 (P= -6.41, Bo = 1.95, Lo = 3.73)

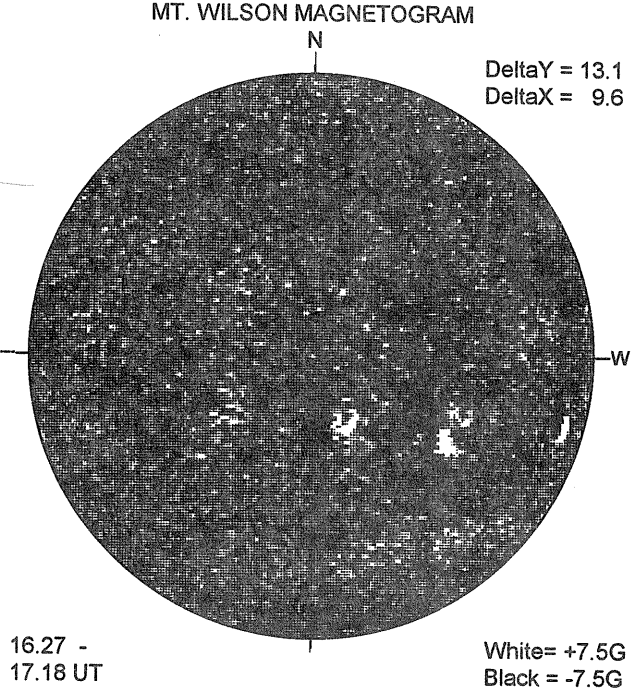
KITT PEAK MAGNETOGRAM



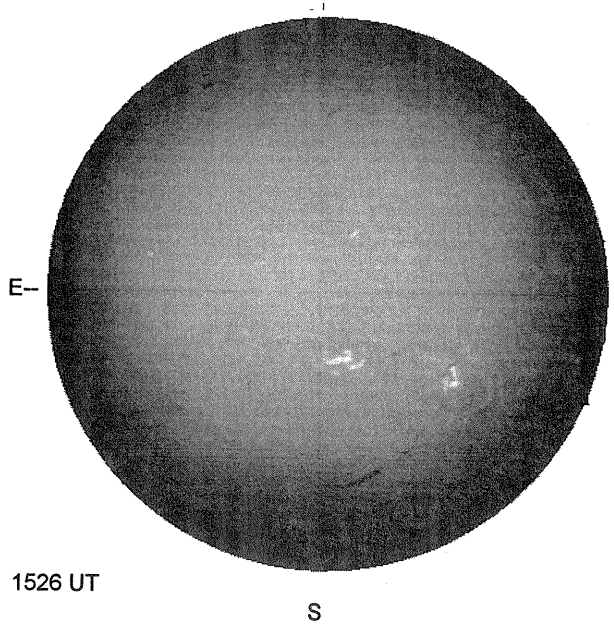
STANFORD MAGNETOGRAM



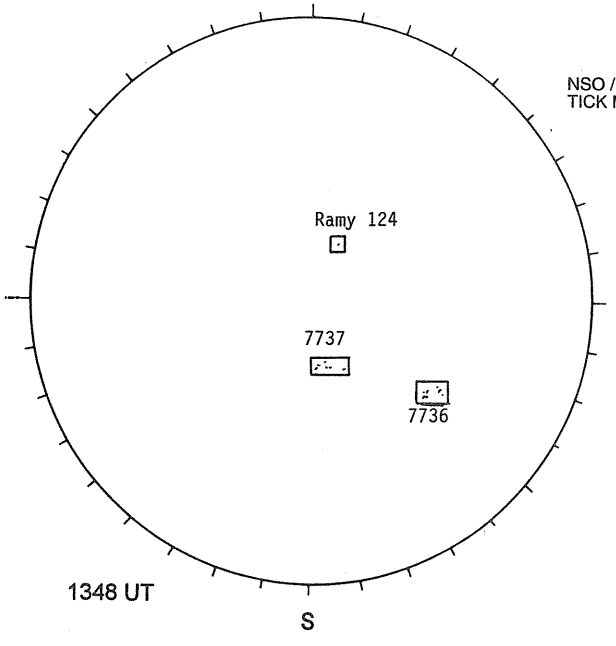
MT. WILSON MAGNETOGRAM



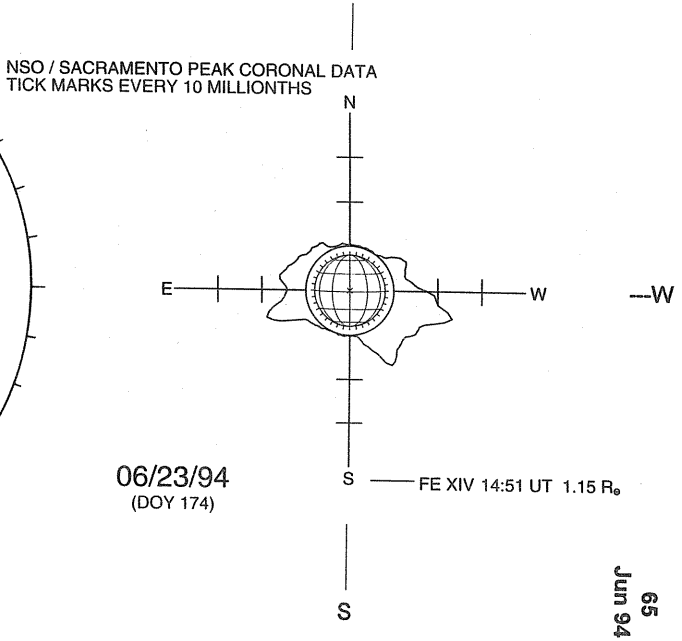
BIG BEAR H-ALPHA



RAMEY SUNSPOT



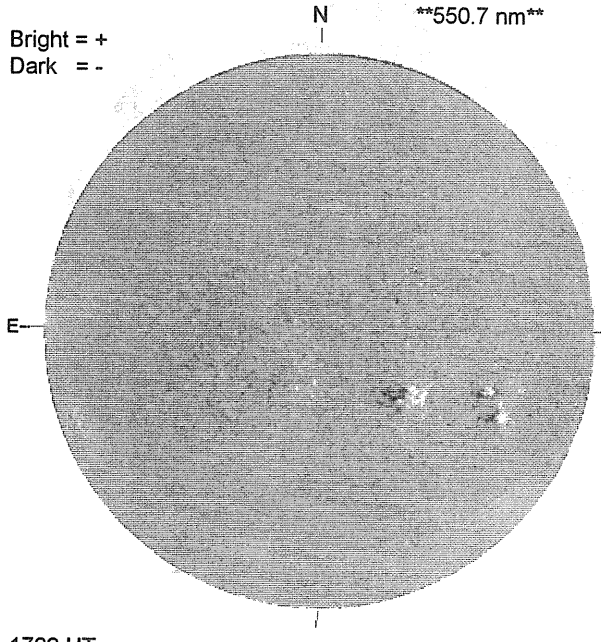
SACRAMENTO PEAK CORONA (1.15 Radii)



65
Jun 94

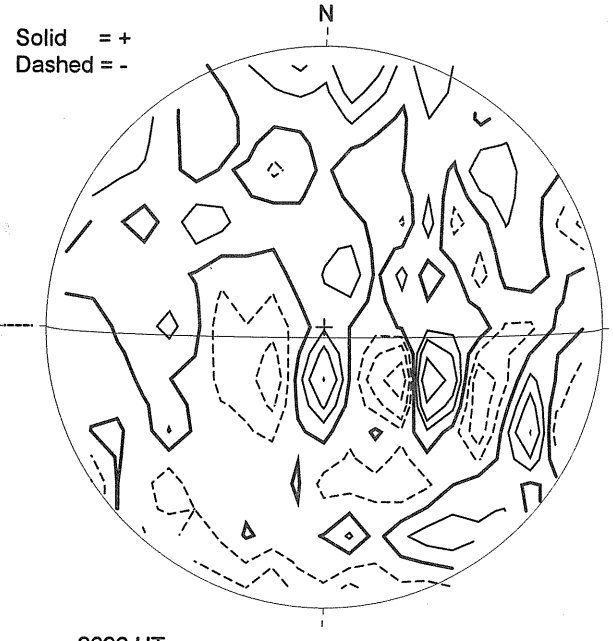
JUNE 24, 1994 (P= -5.97, Bo = 2.06, Lo = 350.49)

KITT PEAK MAGNETOGRAM



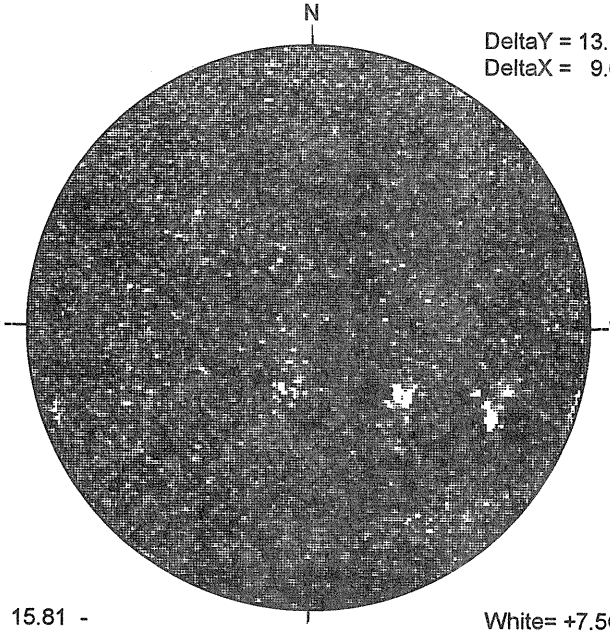
1702 UT

STANFORD MAGNETOGRAM



2026 UT

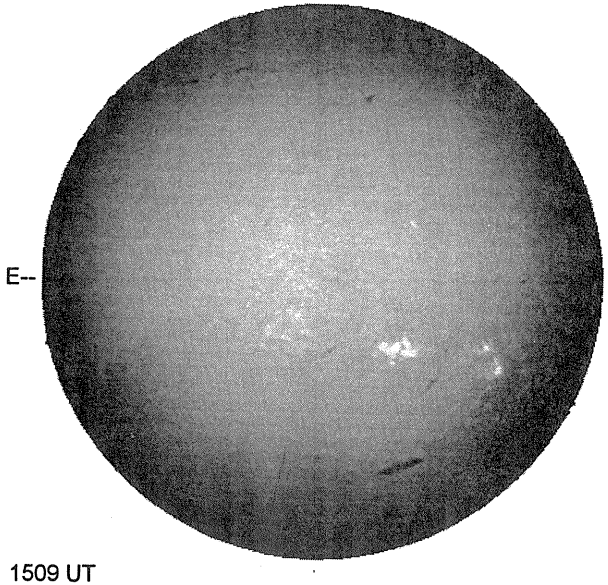
MT. WILSON MAGNETOGRAM



15.81 -
16.73 UT

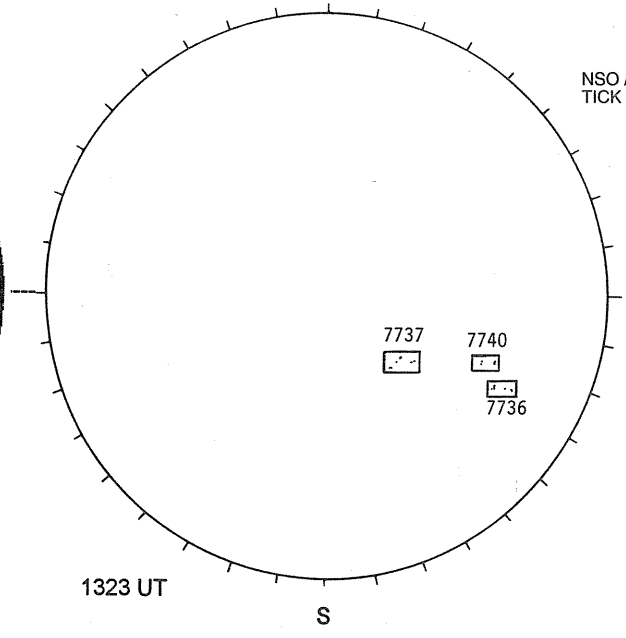
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



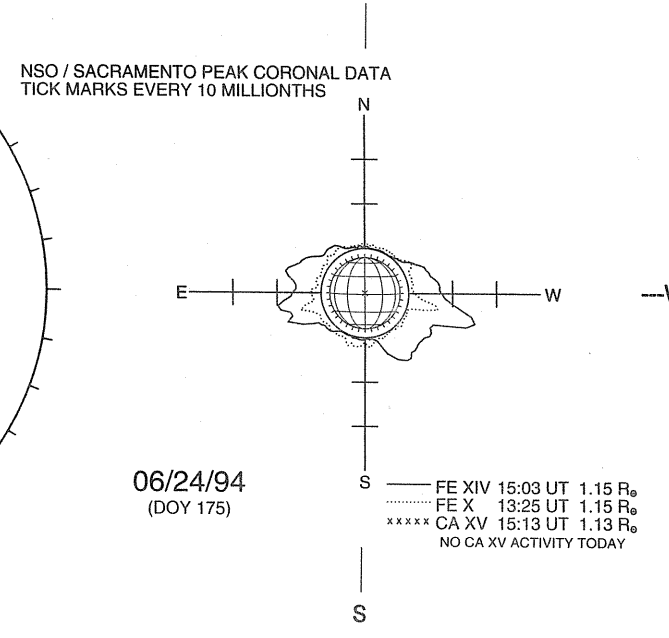
1509 UT

RAMEY SUNSPOT



1323 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----

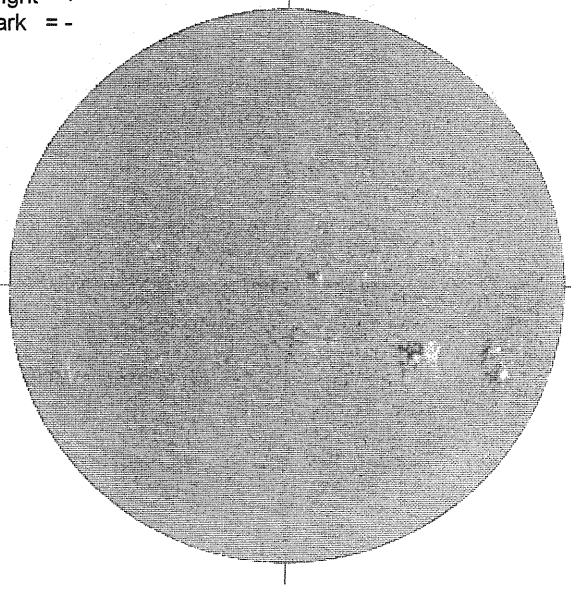


JUNE 25, 1994 (P= -5.52, Bo = 2.18, Lo = 337.25)

KITT PEAK MAGNETOGRAM

N **550.7 nm**

Bright = +
Dark = -



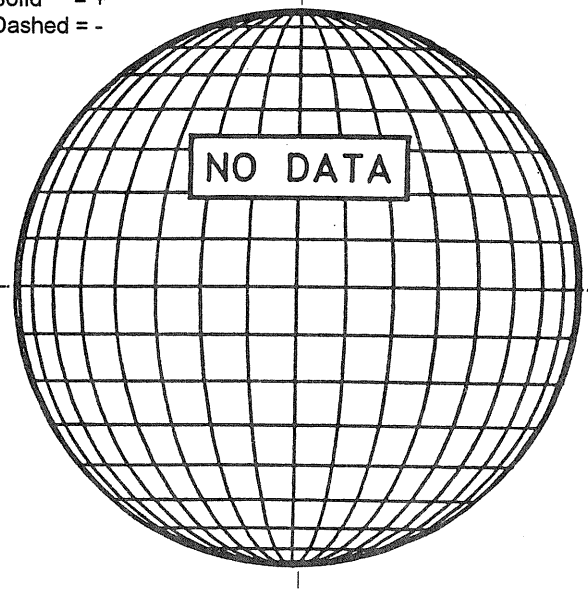
E--

1352 UT

STANFORD MAGNETOGRAM

N

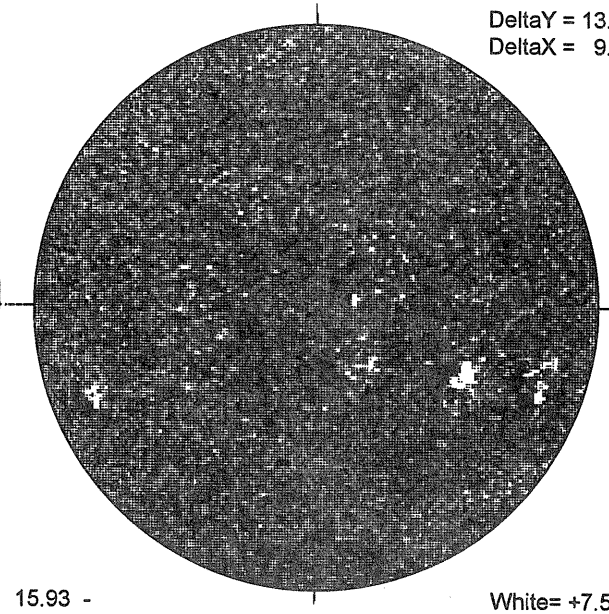
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

N

DeltaY = 13.1
DeltaX = 9.6

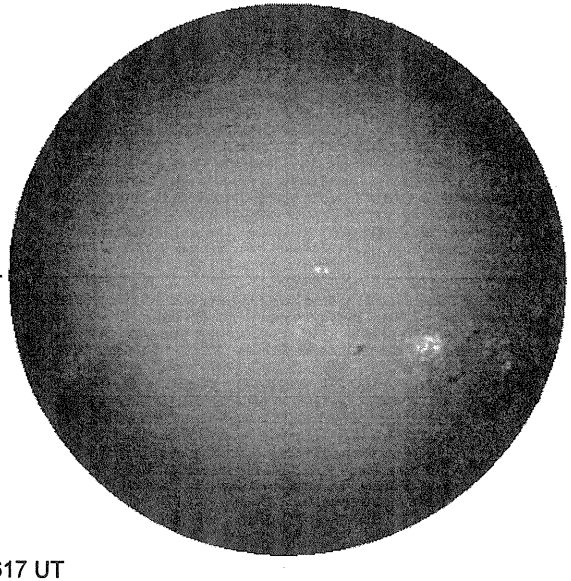


--W

15.93 -
16.85 UT

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

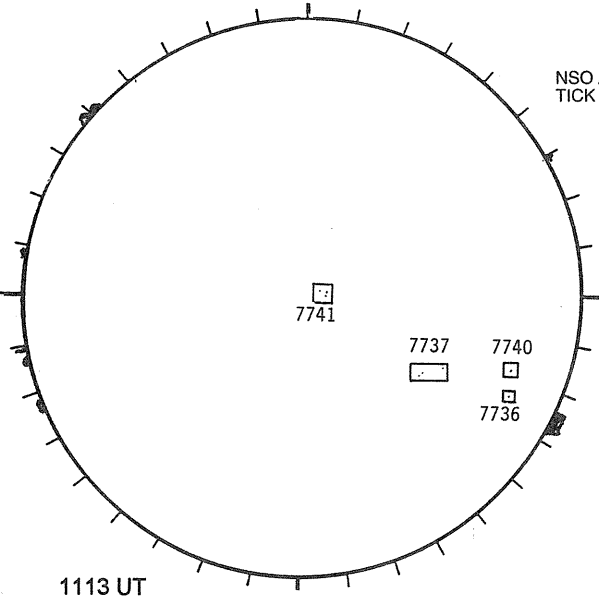


E--

1617 UT

S

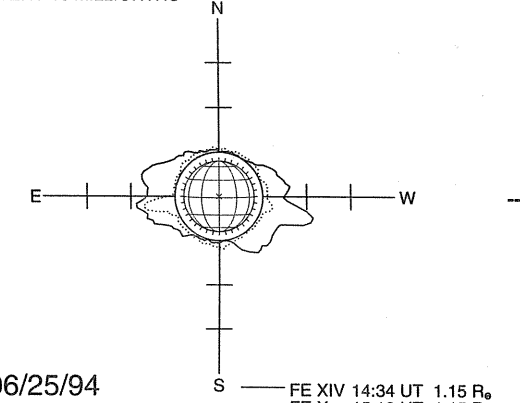
RAMEY SUNSPOT



1113 UT
0630 UT VALA Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



--W

06/25/94
(DOY 176)

S

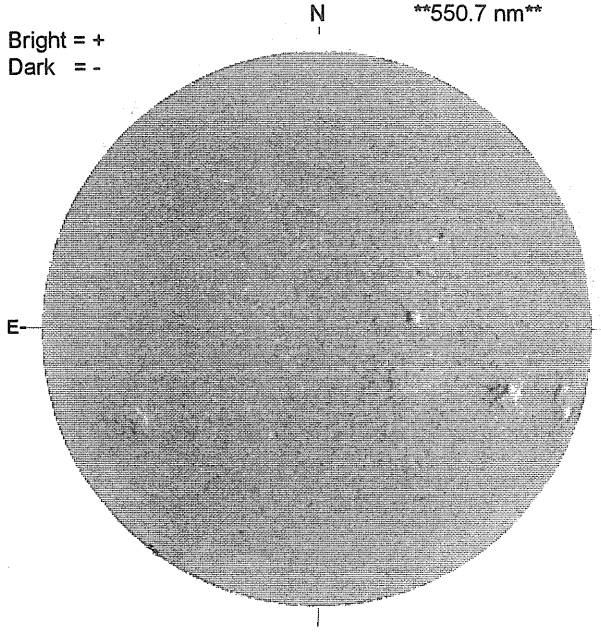
FE XIV 14:34 UT 1.15 R_e
FE X 15:19 UT 1.15 R_e
xxxxx CA XV 15:08 UT 1.13 R_e
NO CA XV ACTIVITY TODAY

S

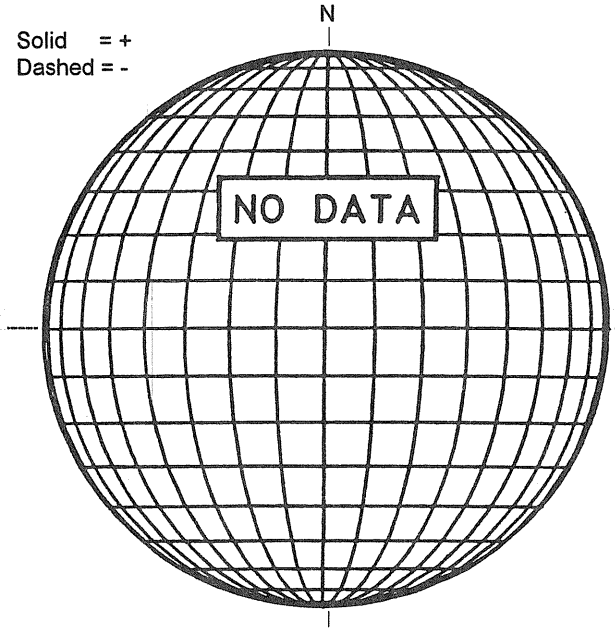
67
Jun 94

JUNE 26, 1994 (P= -5.07, Bo = 2.29, Lo = 324.01)

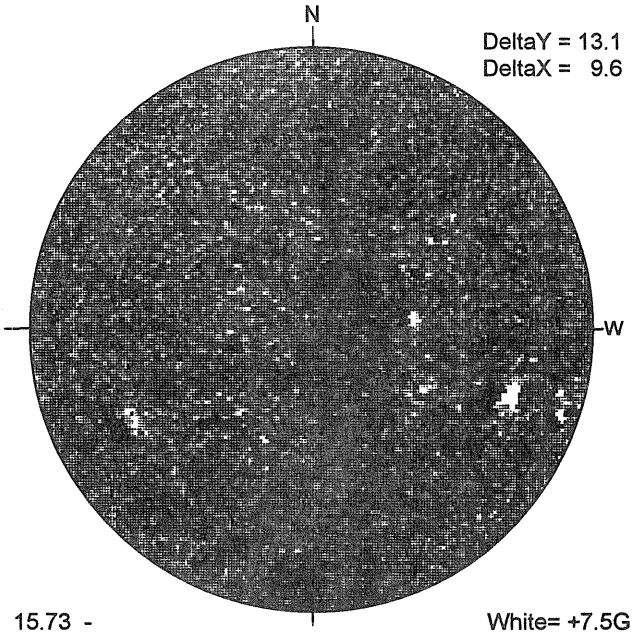
KITT PEAK MAGNETOGRAM



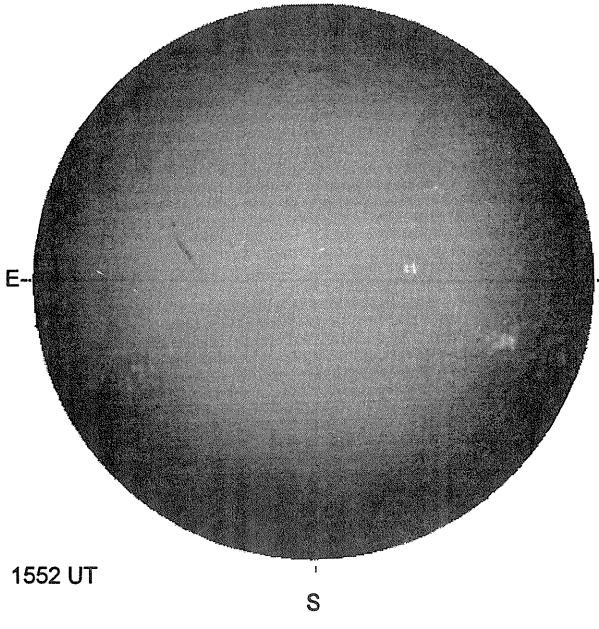
STANFORD MAGNETOGRAM



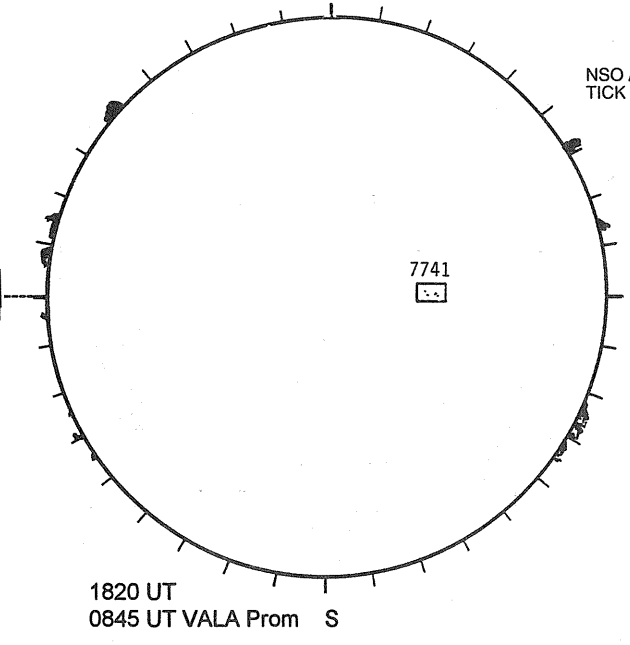
MT. WILSON MAGNETOGRAM



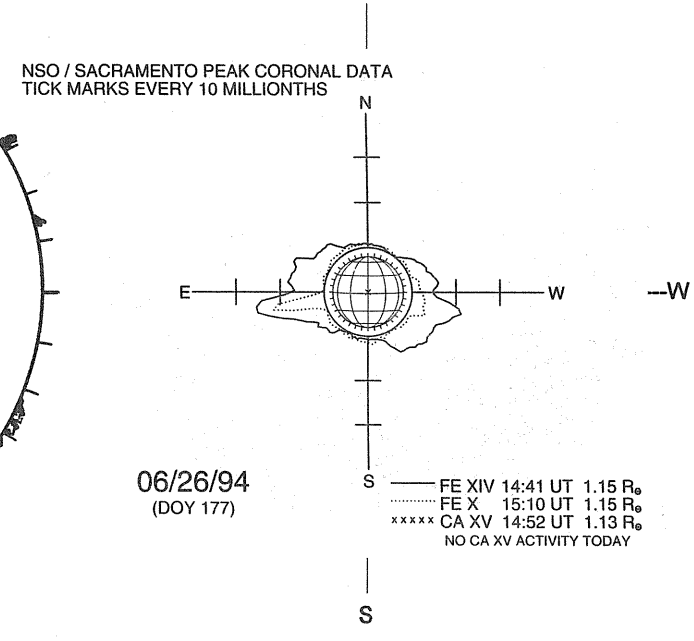
BIG BEAR H-ALPHA



RAMEY SUNSPOT

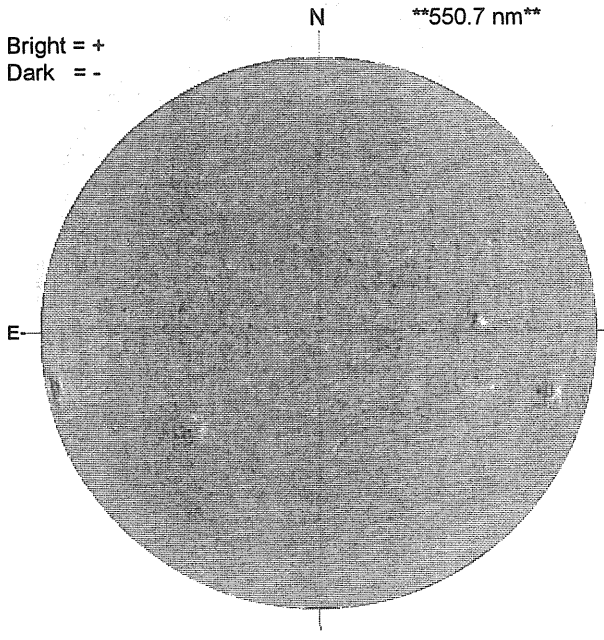


SACRAMENTO PEAK CORONA (1.15 Radii)----



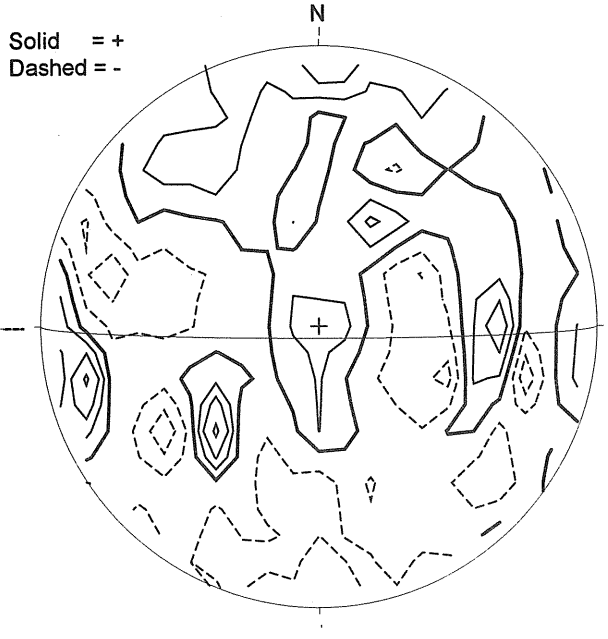
JUNE 27, 1994 (P= -4.62, Bo = 2.41, Lo = 310.78)

KITT PEAK MAGNETOGRAM



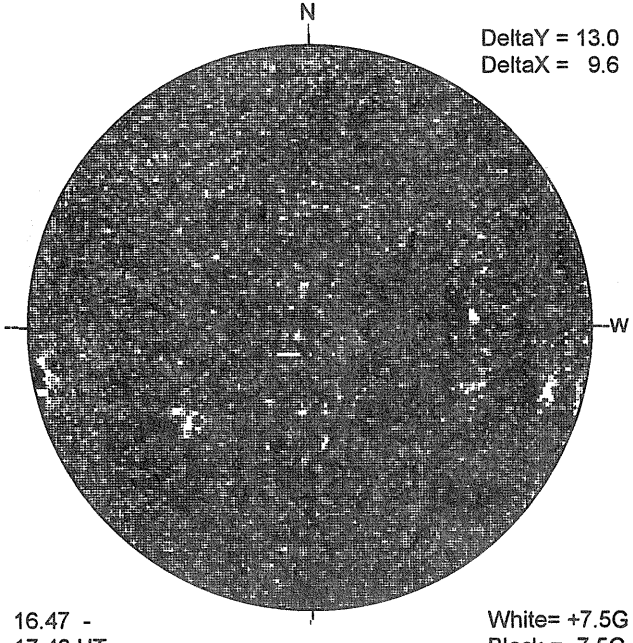
1654 UT

STANFORD MAGNETOGRAM



1808 UT

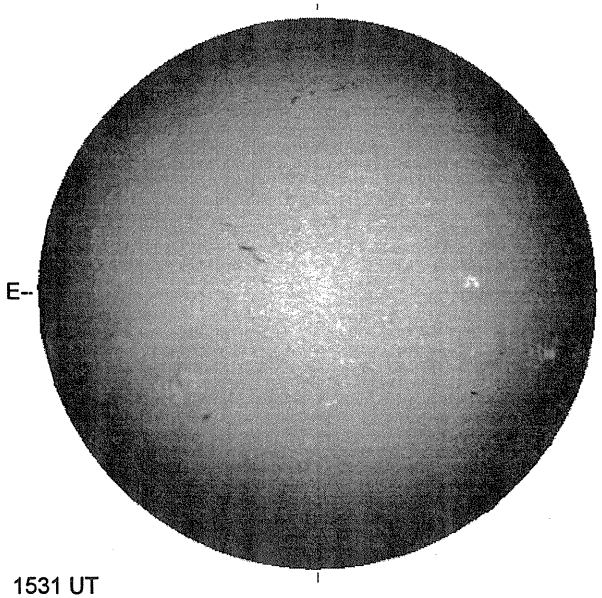
MT. WILSON MAGNETOGRAM



16.47 -
17.40 UT

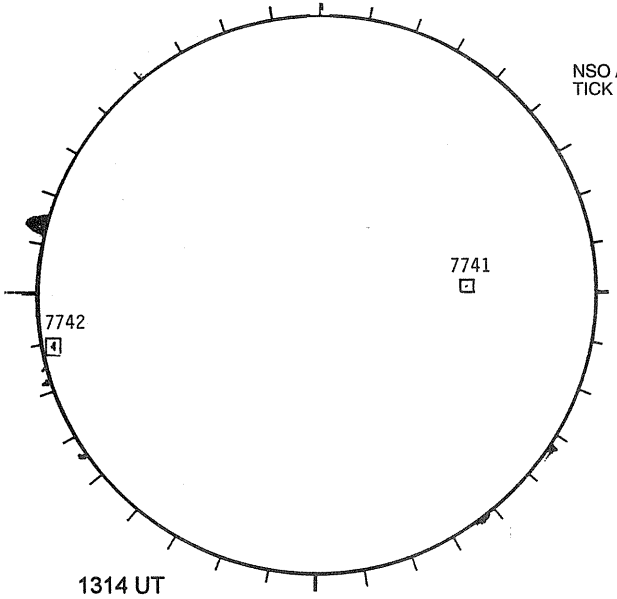
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



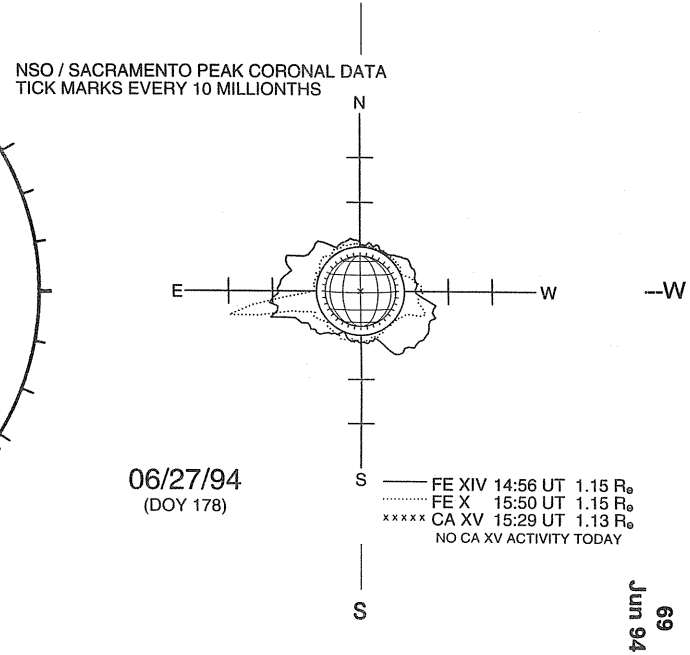
1531 UT

RAMEY SUNSPOT



1314 UT
0927 UT VALA Prom

SACRAMENTO PEAK CORONA (1.15 Radii)



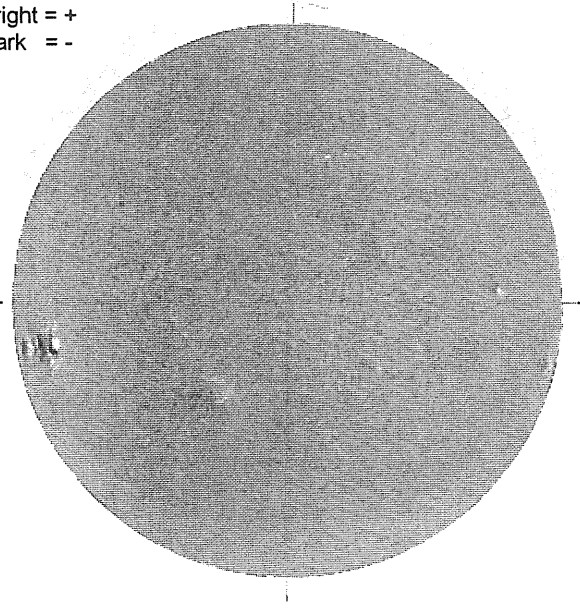
JUNE 28, 1994 (P= -4.17, Bo = 2.52, Lo = 297.54)

KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -



E--

1612 UT

STANFORD MAGNETOGRAM

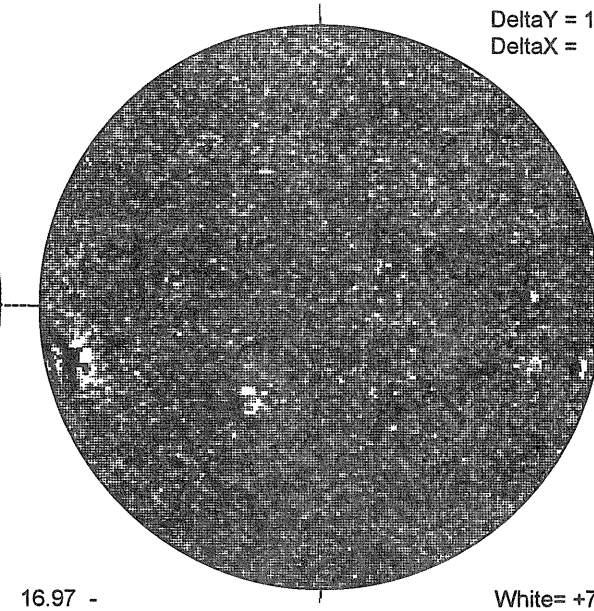
N

Solid = +
Dashed = -

MT. WILSON MAGNETOGRAM

N

DeltaY = 13.0
DeltaX = 9.6

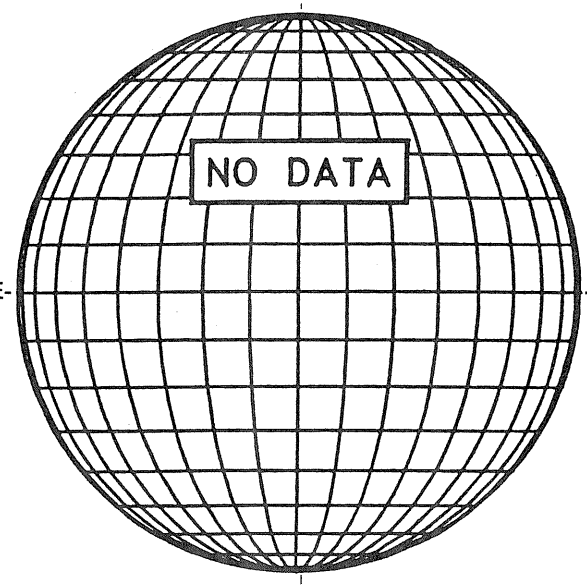


--W

16.97 -
17.89 UT

White= +7.5G
Black = -7.5G

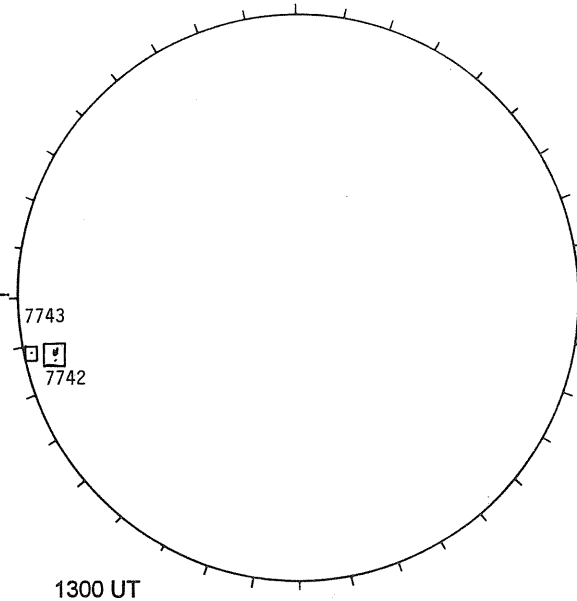
BIG BEAR H-ALPHA



E-

S

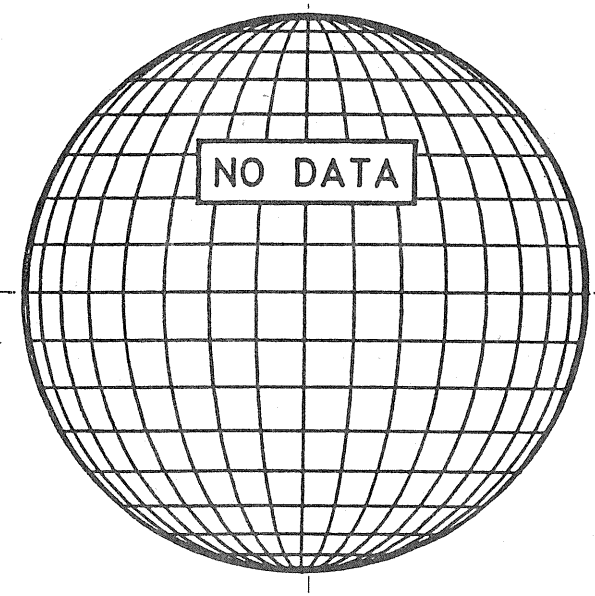
RAMEY SUNSPOT



1300 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)----



--W

S

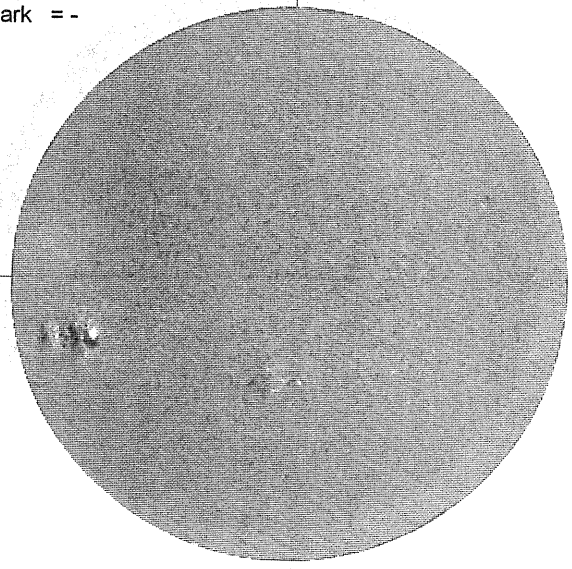
JUNE 29, 1994 (P= -3.71, Bo = 2.63, Lo = 284.30)

KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -



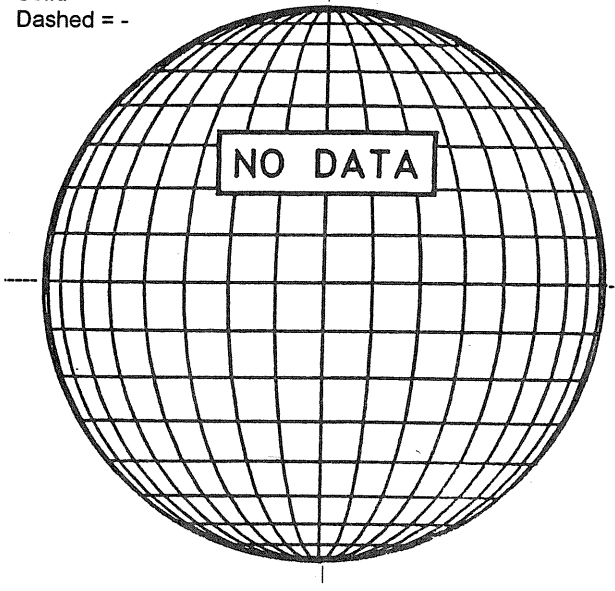
E

1518 UT

STANFORD MAGNETOGRAM

N

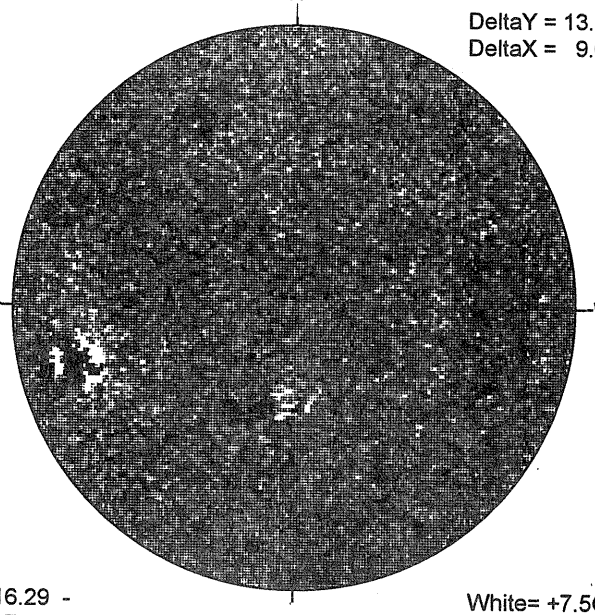
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

N

DeltaY = 13.0
DeltaX = 9.6

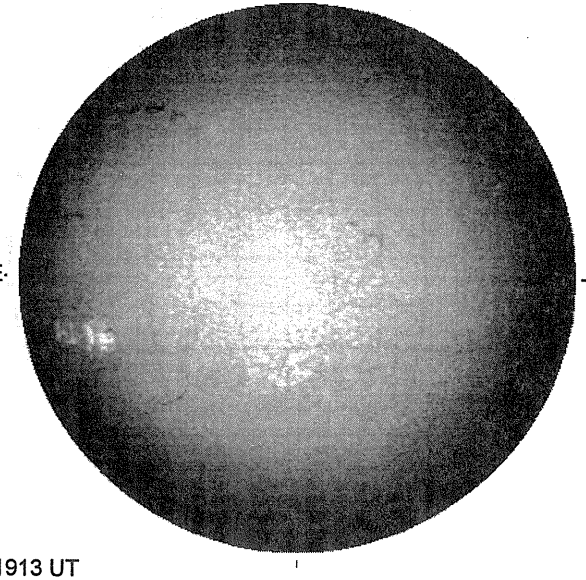


W

16.29 -
17.21 UT

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

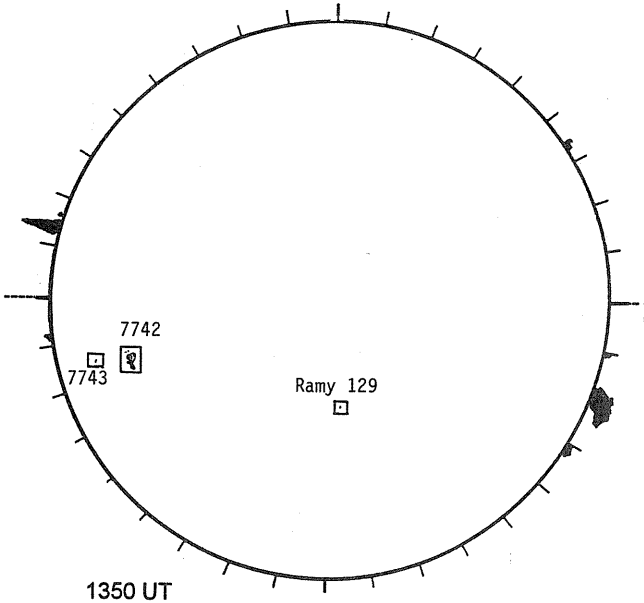


E

1913 UT

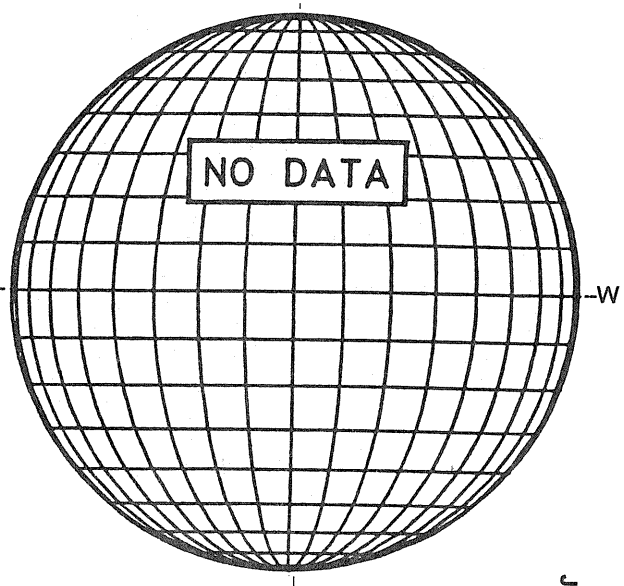
S

RAMEY SUNSPOT



1350 UT
0638 UT VALA Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----



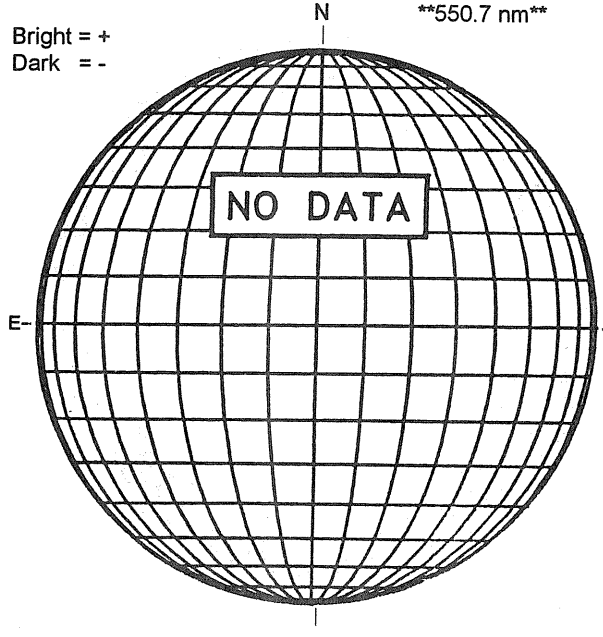
W

S

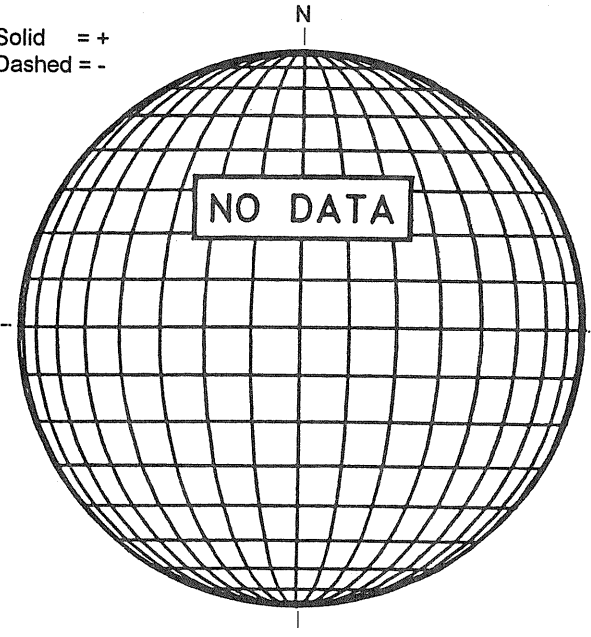
71
Jun 94

JUNE 30, 1994 (P= -3.26, Bo = 2.75, Lo = 271.07)

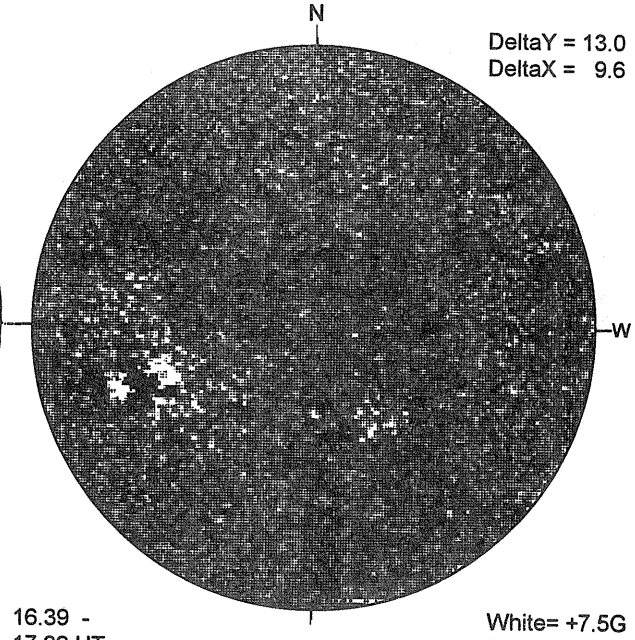
KITT PEAK MAGNETOGRAM



STANFORD MAGNETOGRAM



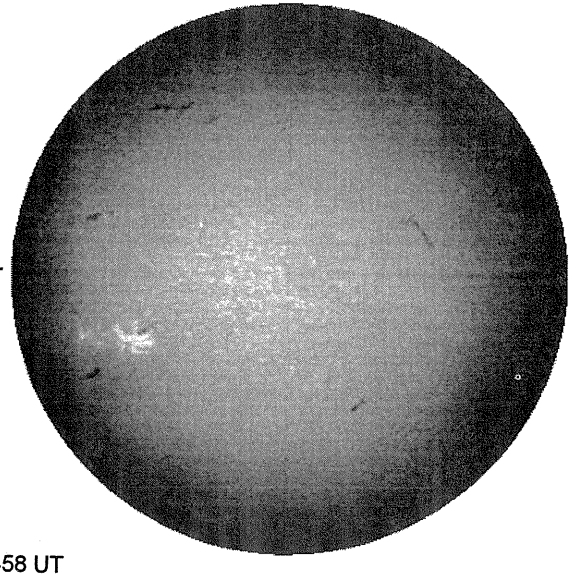
MT. WILSON MAGNETOGRAM



16.39 -
17.32 UT

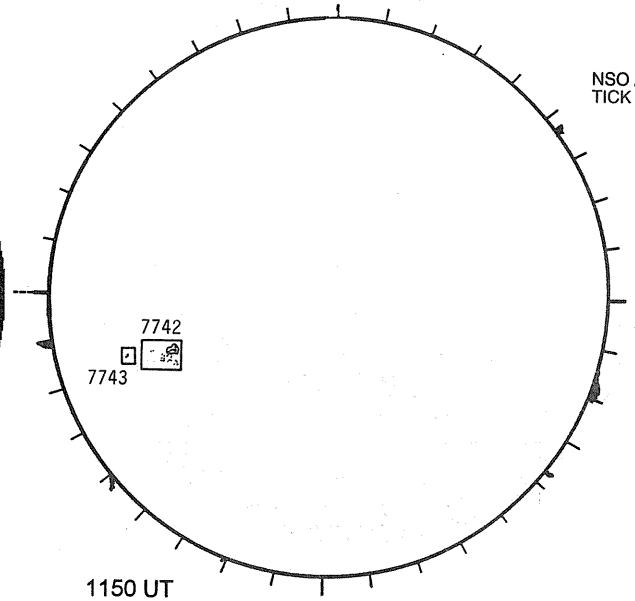
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



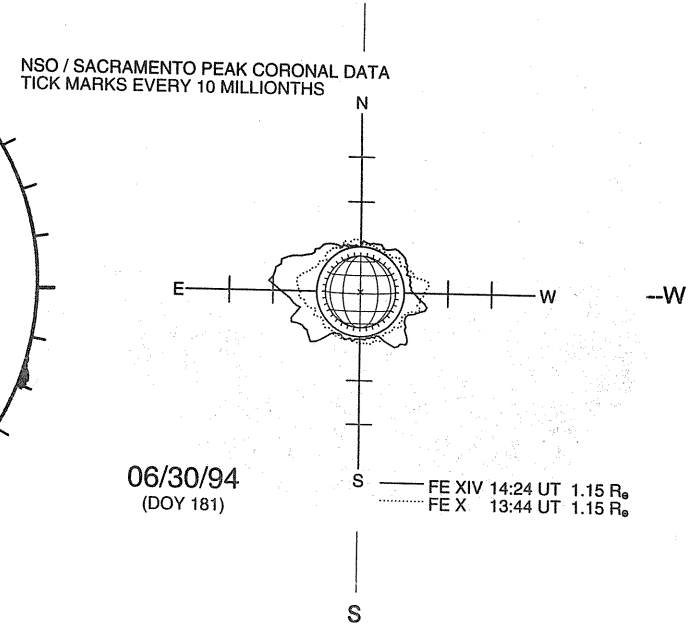
1458 UT

RAMEY SUNSPOT



1150 UT
0718 UT VALA Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)



06/30/94
(DOY 181)

DAILY SOFT X-RAY IMAGES FROM YOHKOH

The YOHKOH ("sunbeam") mission is a Japanese program designed to answer many questions in solar flare and coronal physics that have been raised by the highly successful Hinotori and SMM missions. It includes the United States and the United Kingdom as participating partners. The Japanese Institute for Space and Astronautical Sciences (ISAS) provided overall program management, the launch vehicle, the spacecraft, and two science instruments -- a Hard X-ray Telescope, one of the primary mission instruments, and a Wide Band Spectrometer. The other primary instrument, a Soft X-ray Telescope, was prepared by the Lockheed Palo Alto Research Laboratory, under NASA support, in collaboration with the National Astronomical Observatory of Japan and the University of Tokyo. The U.K., in collaboration with the E. O. Hulburt Center for Space Research, provided a Bragg Crystal Spectrometer. The NASA Deep Space Network cooperates in tracking Yohkoh.

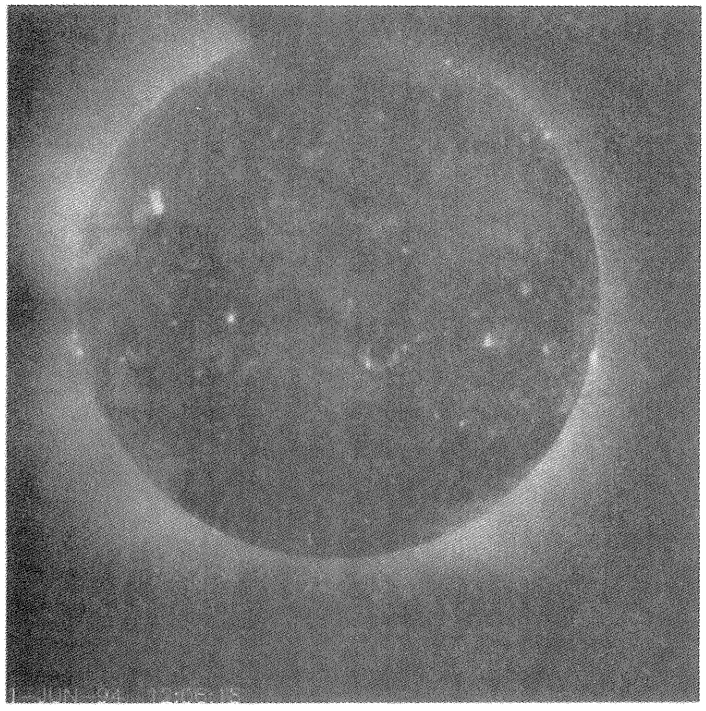
The Soft X-ray Telescope (SXT) uses low-scatter grazing incidence optics to form direct images on a CCD detector. It employs a Nariai-Werner design which differs from the more commonly used Wolter Type 1 in that both mirror segments have been made hyperbolic in order to gain better off-axis performance at the expense of a slight loss of on-axis resolution. The optical system includes an entrance aperture filter, the X-ray mirror, a filter wheel assembly, a rotating shutter, and the CCD camera. A detailed description of the SXT has been published in Tsuneta, et al., **Solar Physics, Vol. 136**, pp. 37-67, 1991.

ISAS bears full responsibility for YOHKOH operations. U.S. and U.K. investigators in residence at ISAS participate in mission operations and scientific analyses. With the approval of Professor Y. Ogawara, Yohkoh Program Manager, and the YOHKOH Science Committee, the Lockheed Palo Alto Research Laboratory is kindly providing daily digital SXT images for publication in SGD. The digital images are 512x512 (5" pixels) or 256x256 (10" pixels) in size. They combine two exposures differing by a factor of 35 in duration and are printed with a logarithmic intensity scale to cope with the great range in intensity of the X-ray corona. The brightest features are typically more than 100,000 times brighter than the faintest. The mean wavelength of the pictures is about 20 angstroms. We display these images of the solar corona in soft X-rays in both positive and negative forms. They are printed on a dye sublimation printer at NGDC.

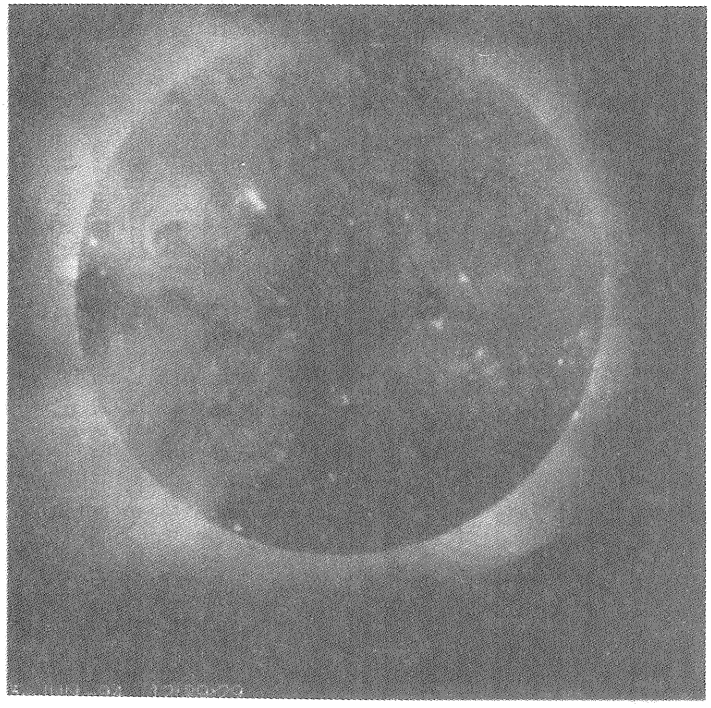
Editor's Note: YOHKOH SXT images for September 1991 through August 1992 are available through the NASA SolarDAC. Contact Joe Gurman for access information [gurman@uvsp.gsfc.nasa.gov, jgurman@solar, or uvsp::gurman. Telephone: (301)286-4767]. The YOHKOH team continues to invite collaborations in their analysis and are willing to assist those who wish to utilize the data in order to ensure the correct interpretation of the experimental results. Contact S. Tsuneta, ISAS, Yohkoh Operation Center, 3-1-1 Yoshinodai, Sagamihara, 229 Japan [tsuneta@sxt2.mtk.ioa.s.u-tokyo.ac.jp].

YOHKOH SOFT X-RAY TELESCOPE IMAGES

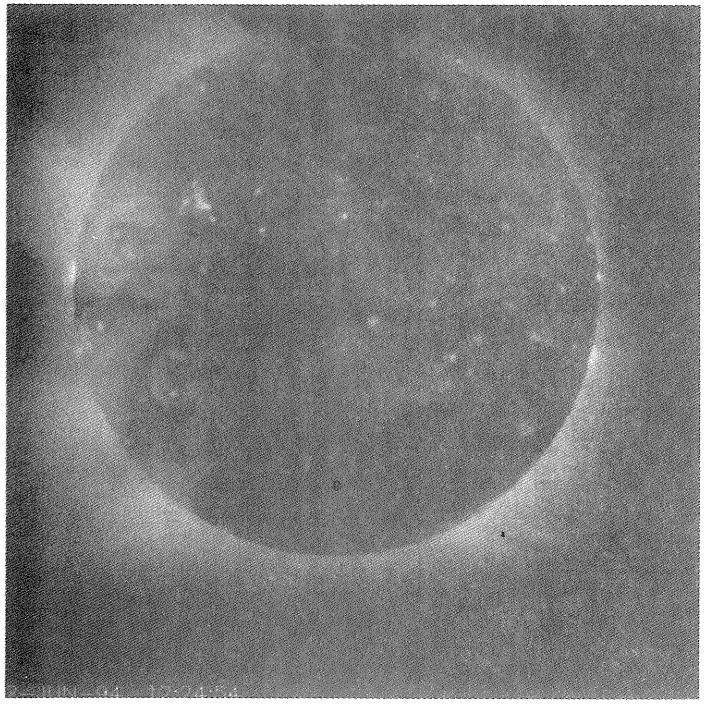
June 1994



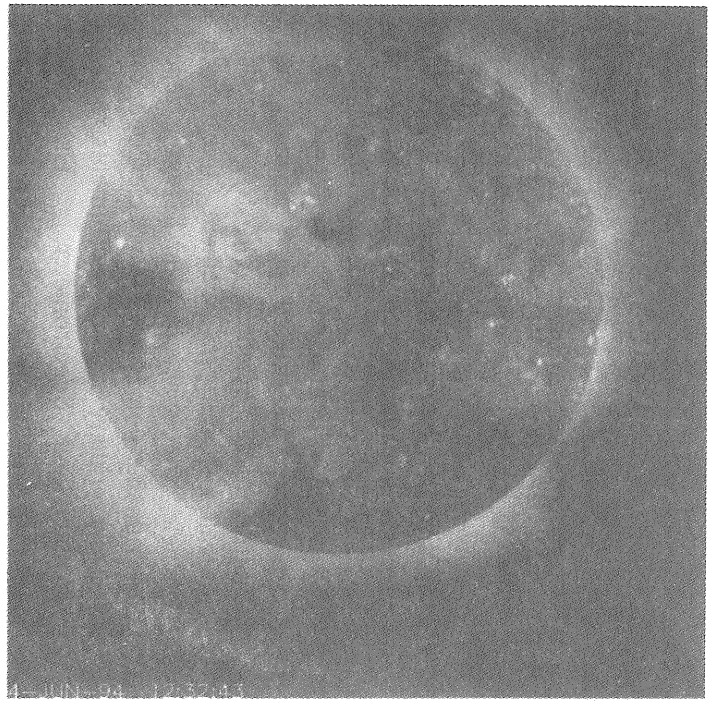
Day 1
12:06:18 UT



Day 3
12:29:29 UT



Day 2
12:24:54 UT

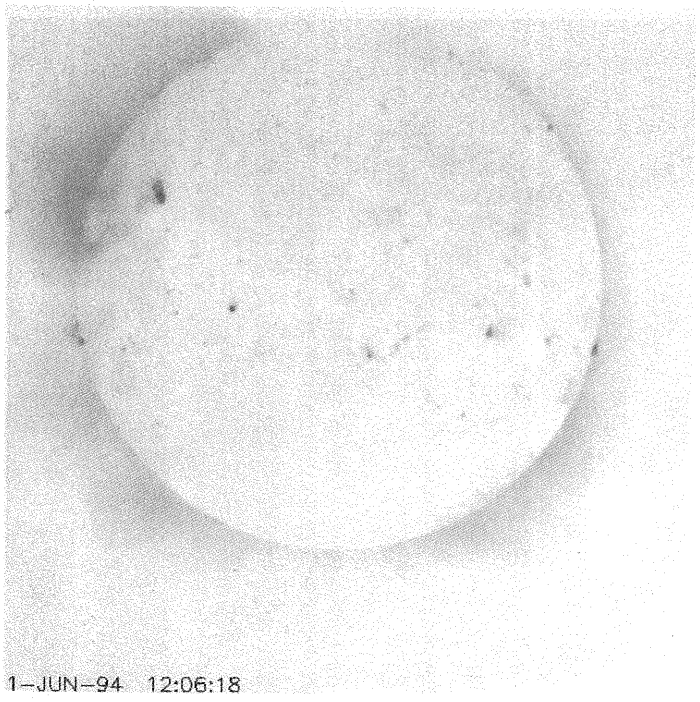


Day 4
12:32:43 UT

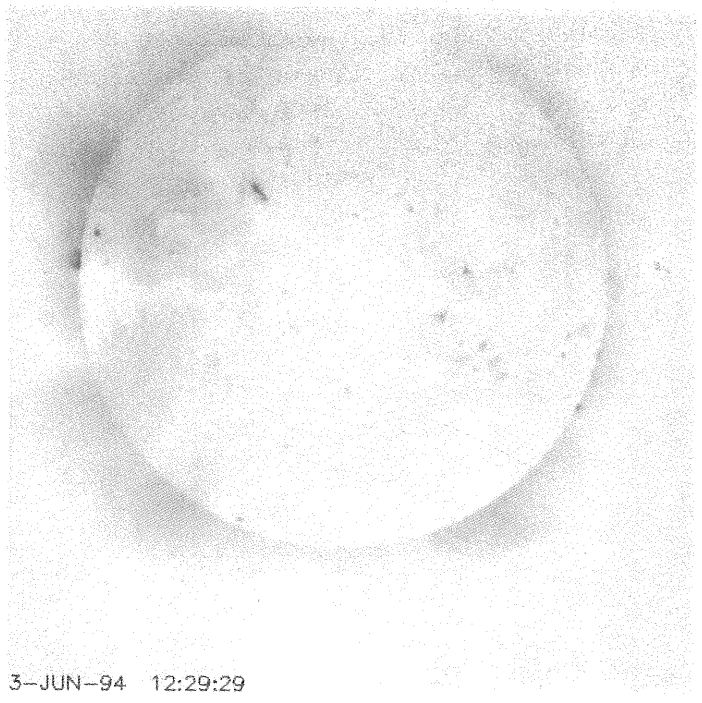
YOHKOH SOFT X-RAY TELESCOPE IMAGES

June 1994

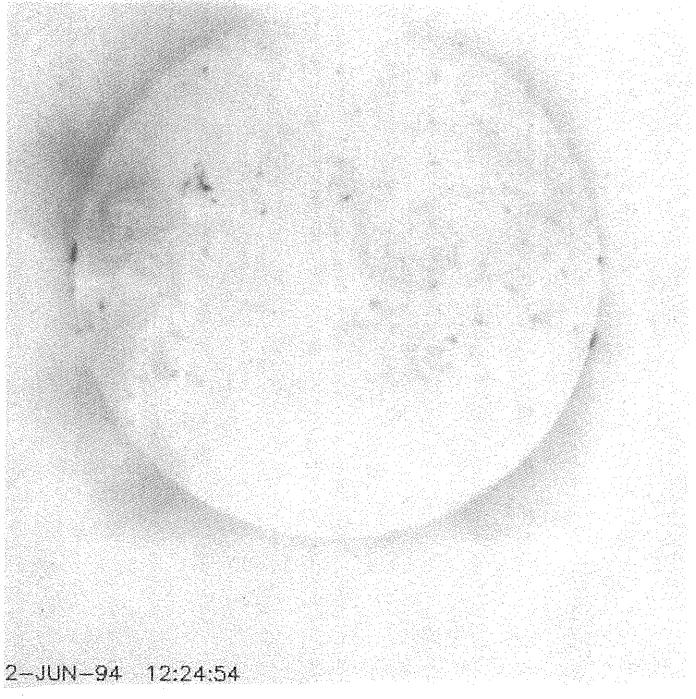
Day 1
12:06:18 UT



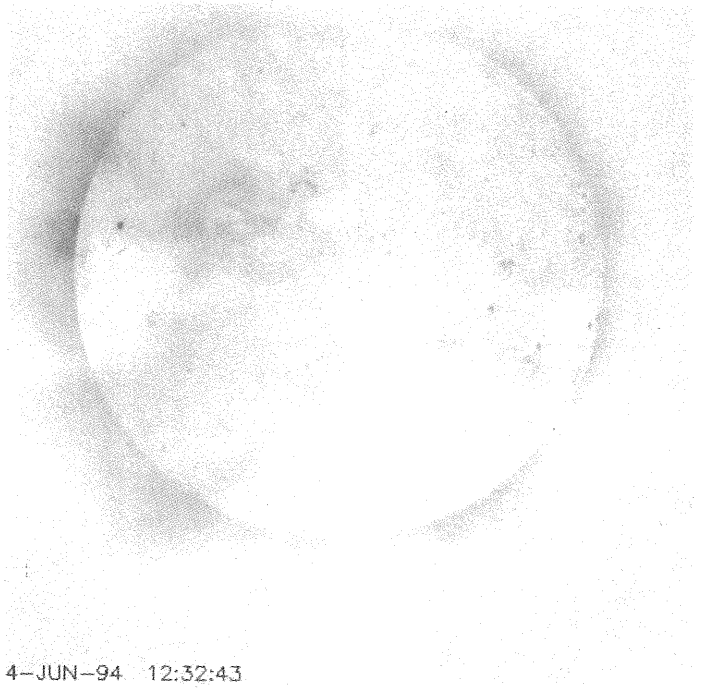
Day 3
12:29:29 UT



Day 2
12:24:54 UT

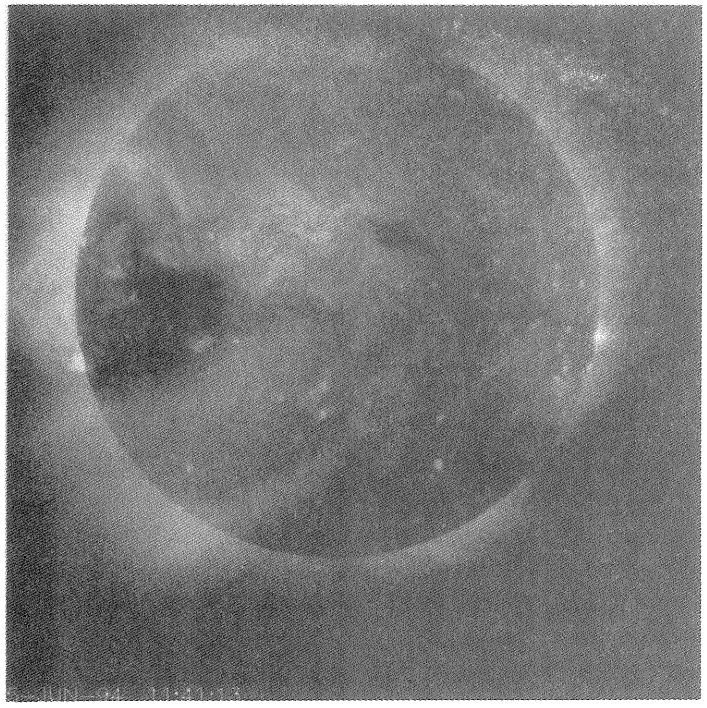


Day 4
12:32:43 UT

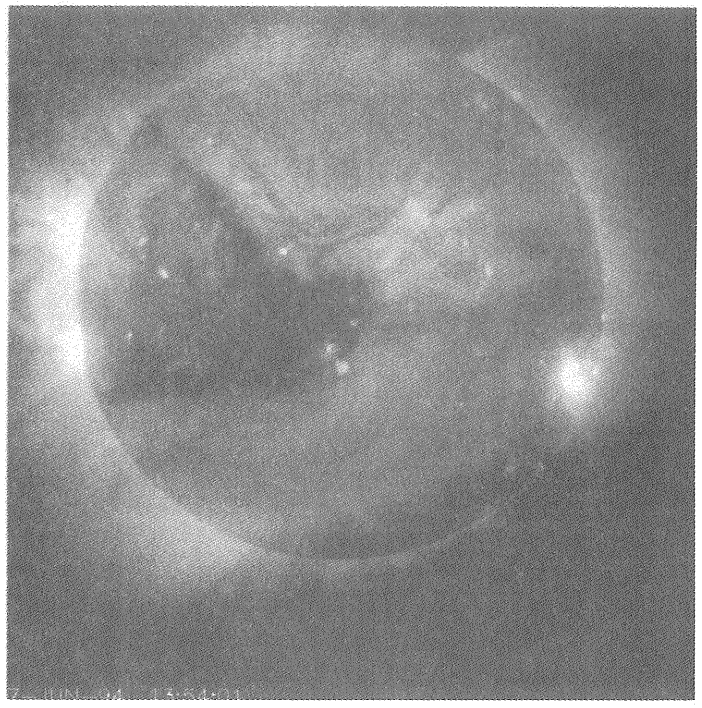


YOHKOH SOFT X-RAY TELESCOPE IMAGES

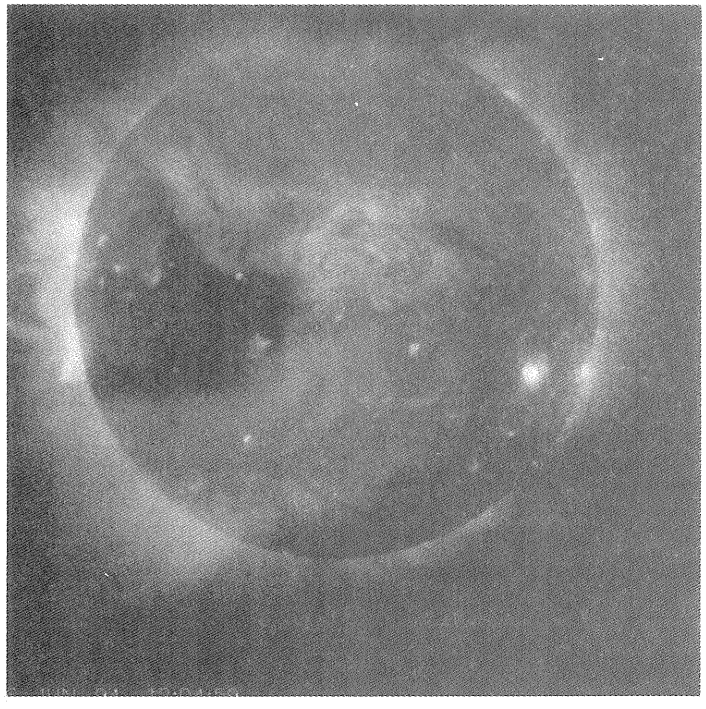
June 1994



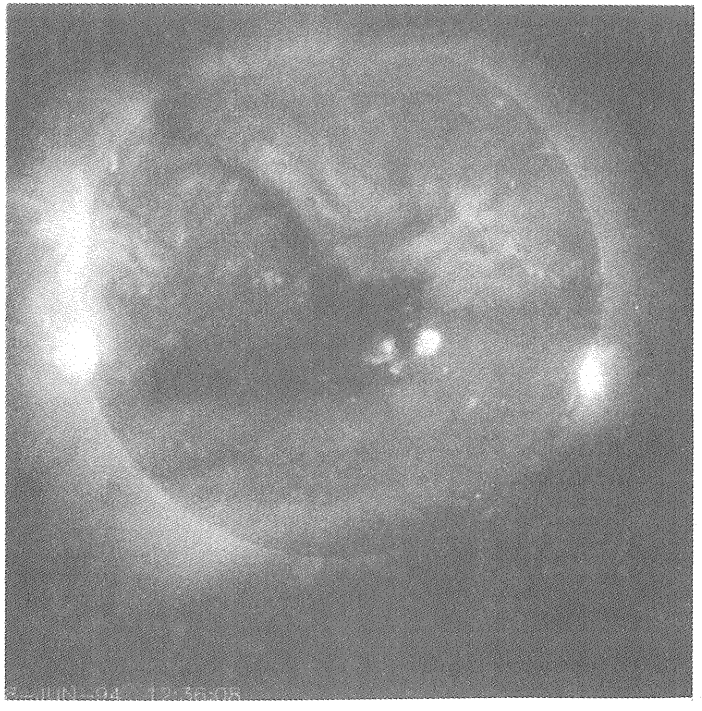
Day 5
11:41:13 UT



Day 7
13:54:01 UT



Day 6
12:04:59 UT

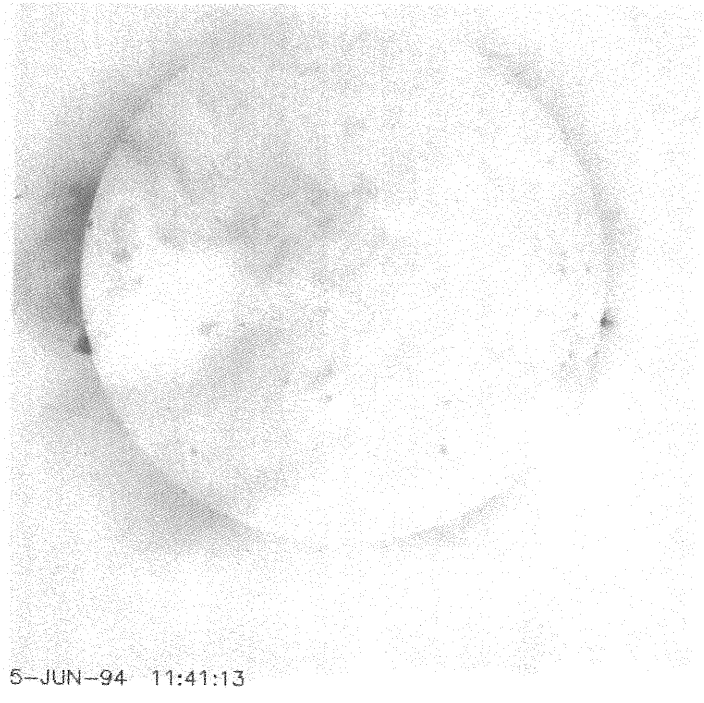


Day 8
12:36:08 UT

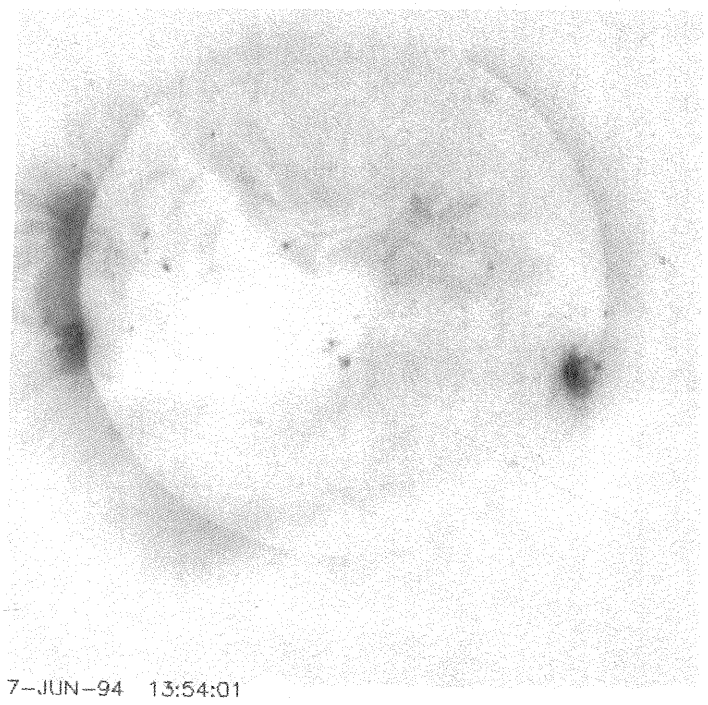
YOHKOH SOFT X-RAY TELESCOPE IMAGES

June 1994

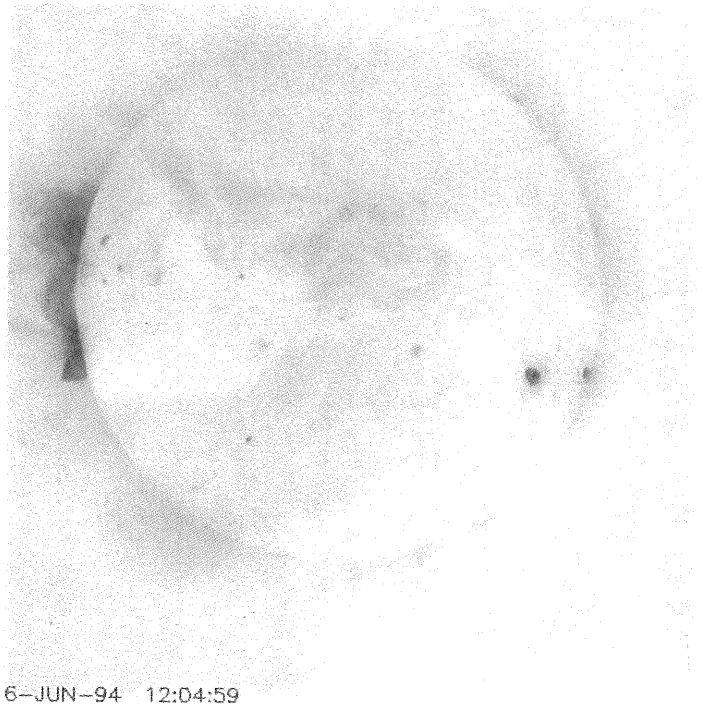
Day 5
11:41:13 UT



Day 7
13:54:01 UT



Day 6
12:04:59 UT

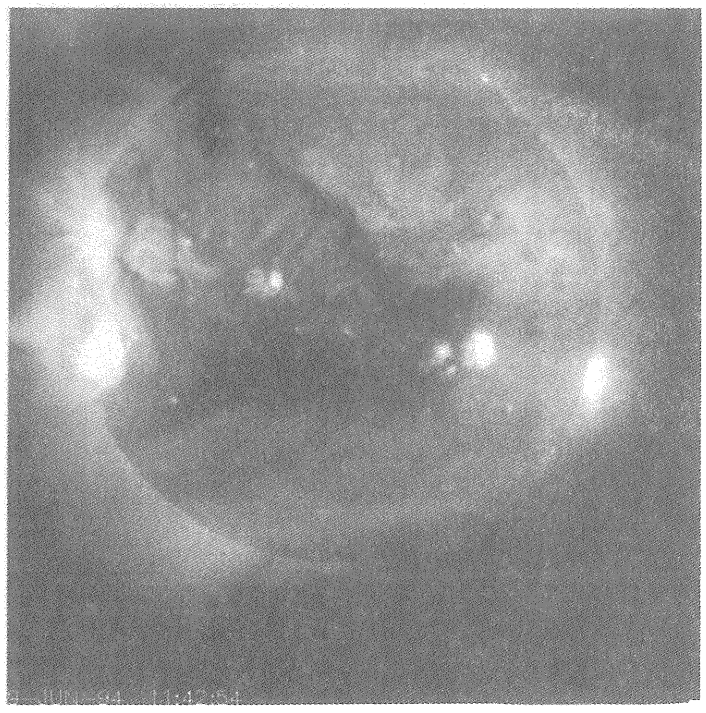


Day 8
12:36:08 UT

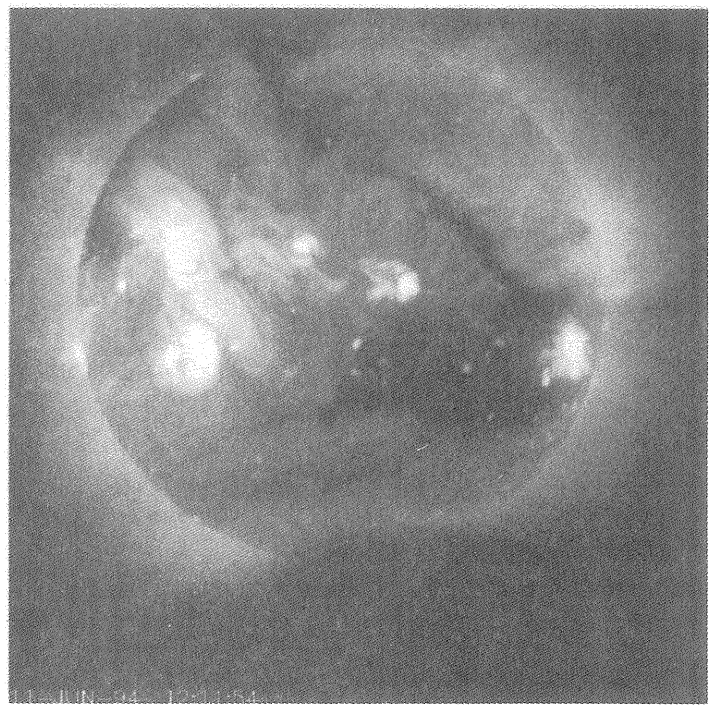
77
Jun 94

YOHKOH SOFT X-RAY TELESCOPE IMAGES

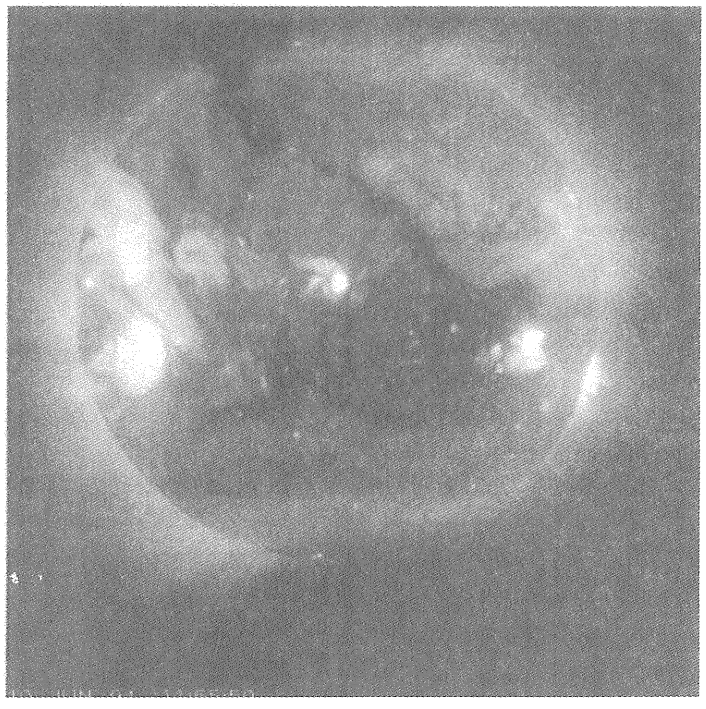
June 1994



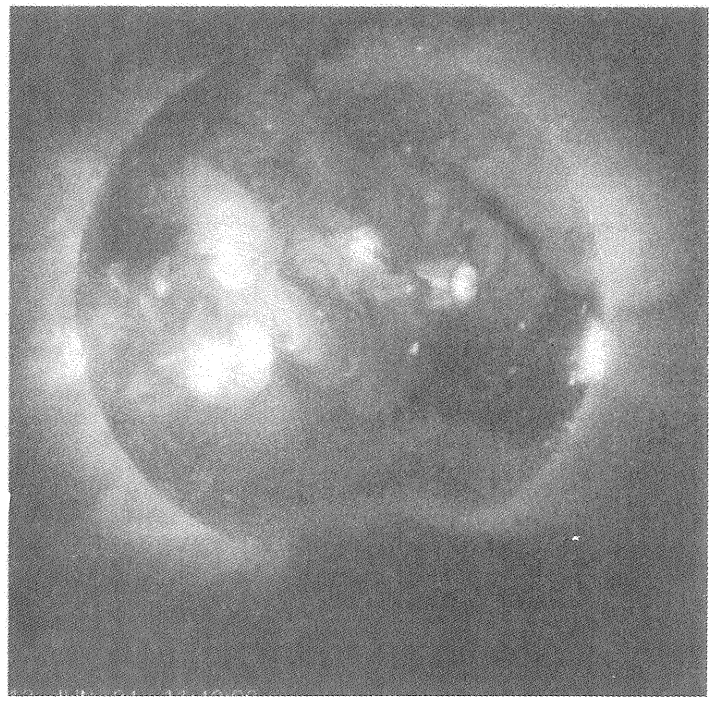
Day 9
11:42:54 UT



Day 11
12:11:54 UT



Day 10
11:55:50 UT

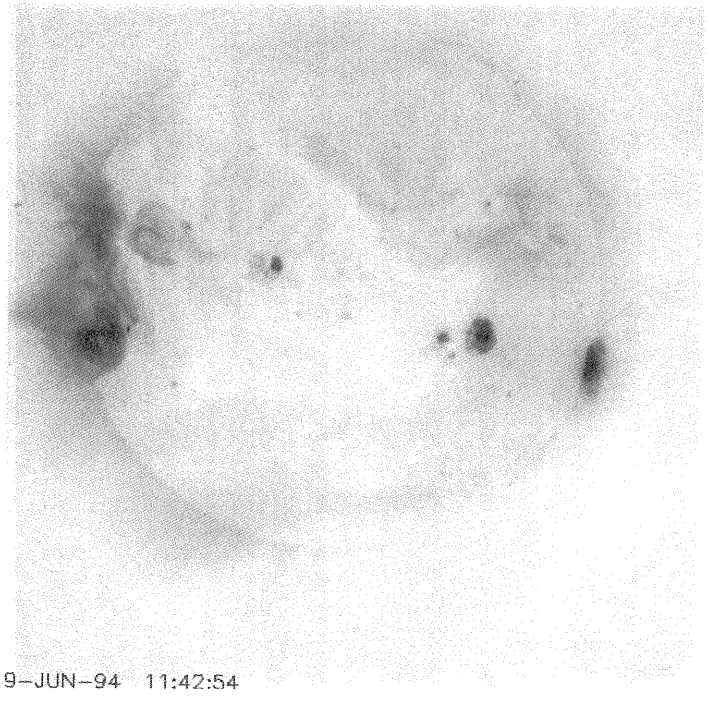


Day 12
11:49:00 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

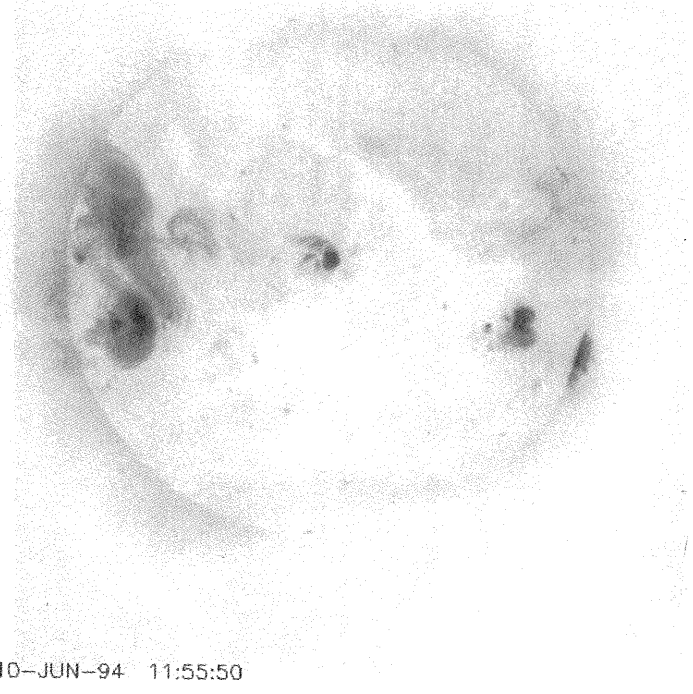
June 1994

Day 9
11:42:54 UT

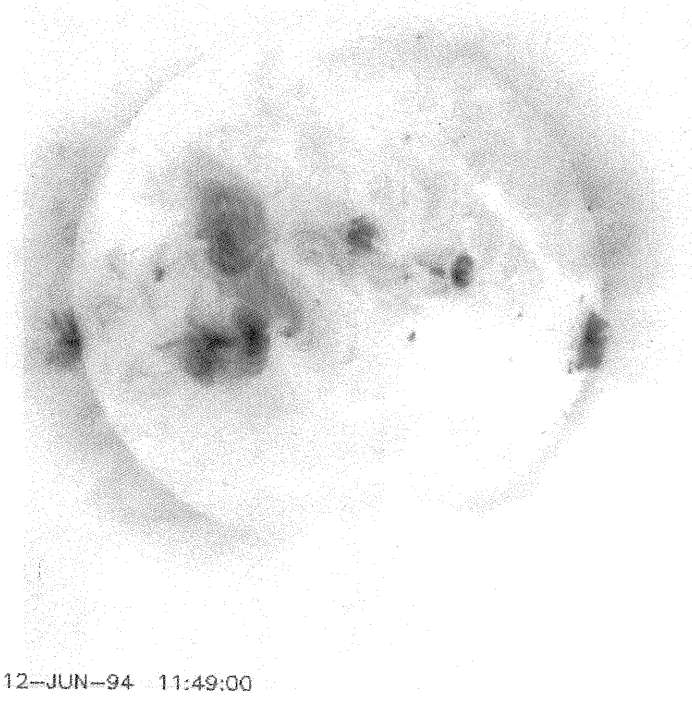


Day 11
12:11:54 UT

Day 10
11:55:50 UT

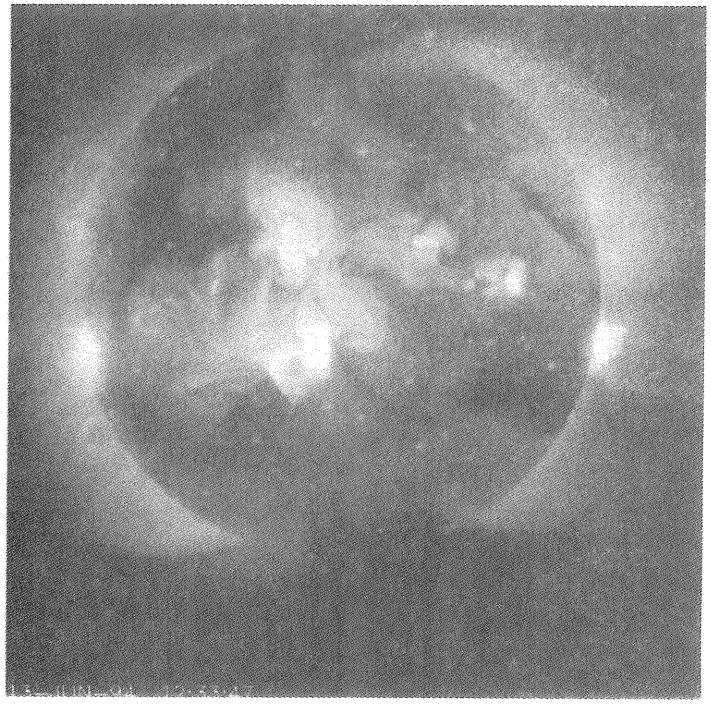


Day 12
11:49:00 UT

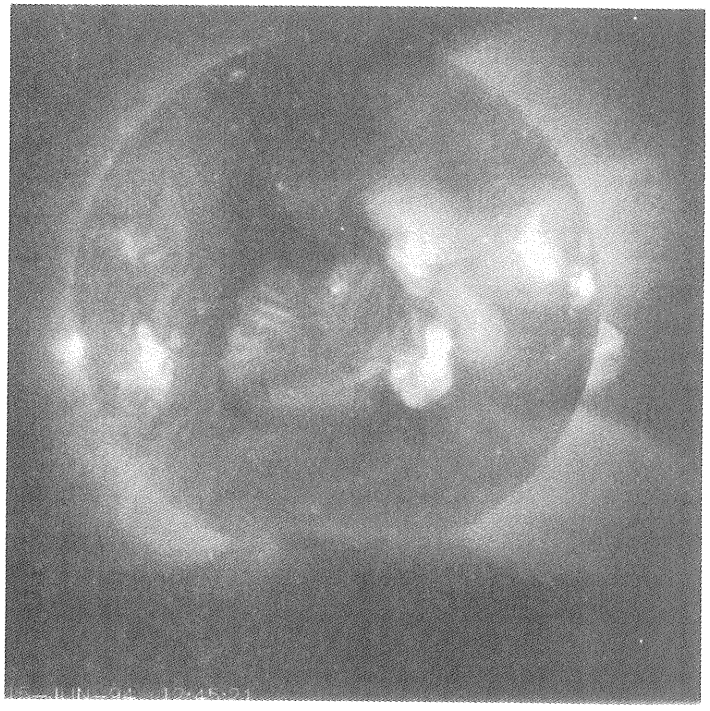


YOHKOH SOFT X-RAY TELESCOPE IMAGES

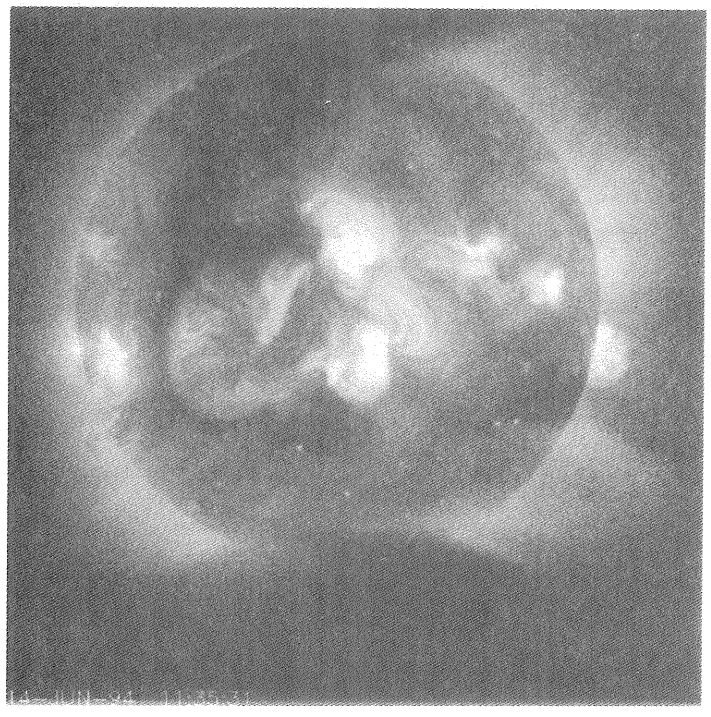
June 1994



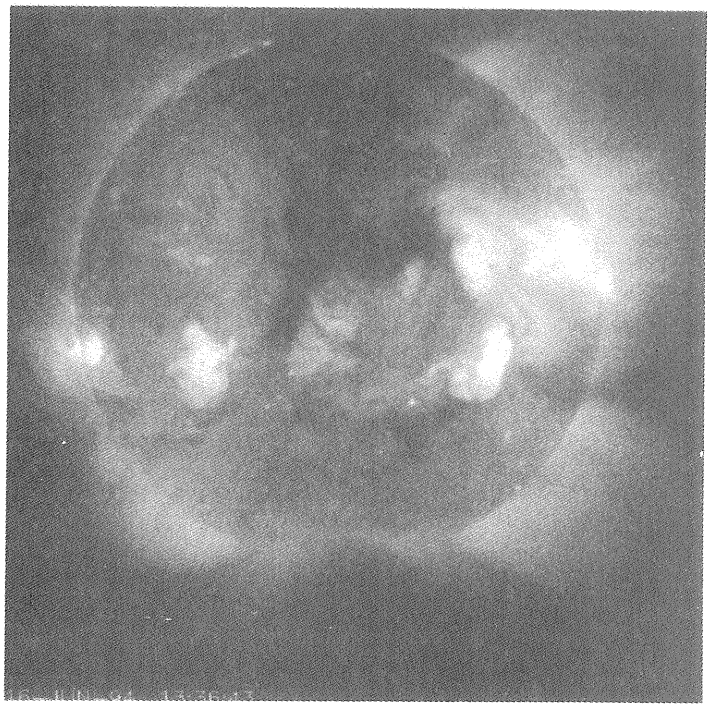
Day 13
12:33:47 UT



Day 15
12:45:21 UT



Day 14
11:35:31 UT

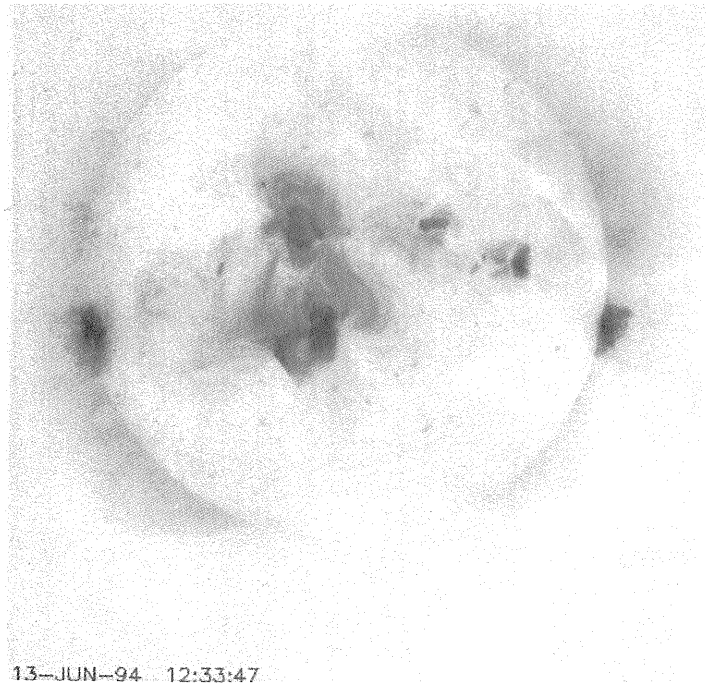


Day 16
13:36:43 UT

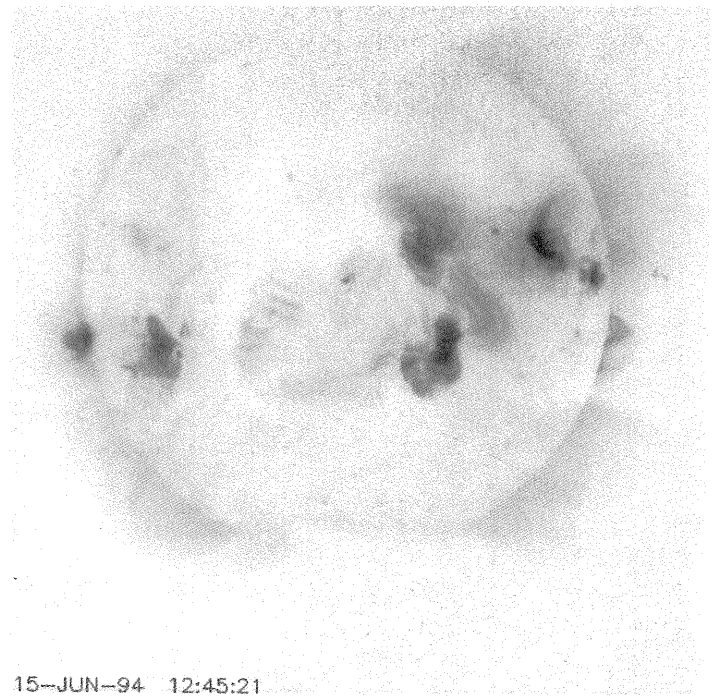
YOHKOH SOFT X-RAY TELESCOPE IMAGES

June 1994

Day 13
12:33:47 UT

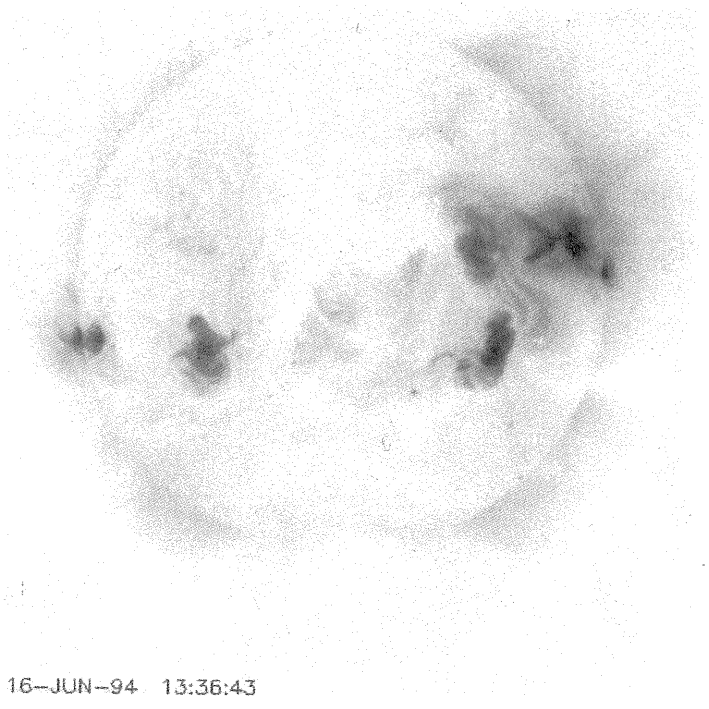


Day 15
12:45:21 UT



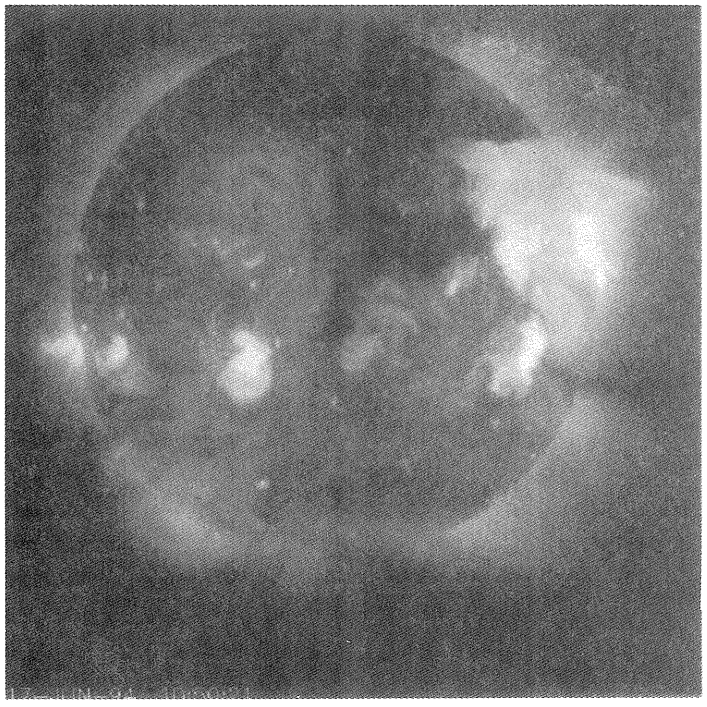
Day 14
11:35:31 UT

Day 16
13:36:43 UT

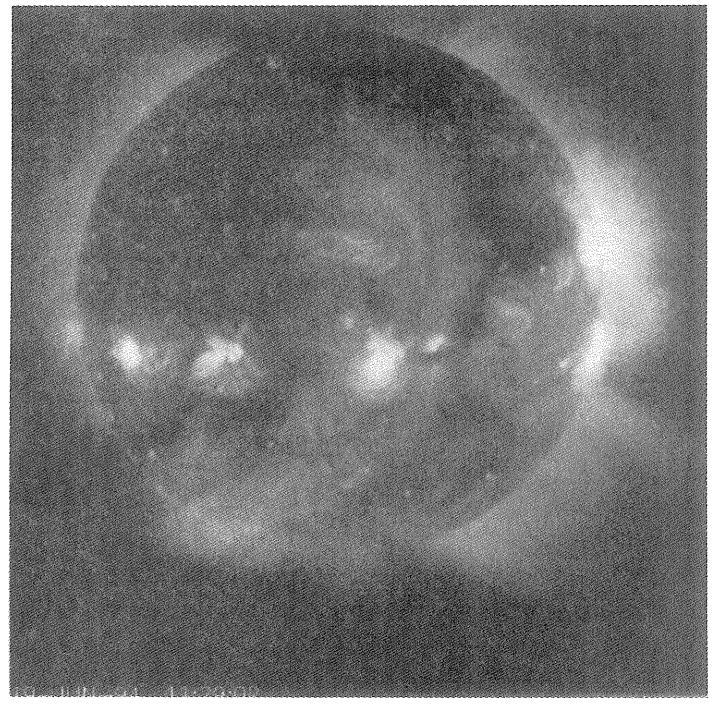


YOHKOH SOFT X-RAY TELESCOPE IMAGES

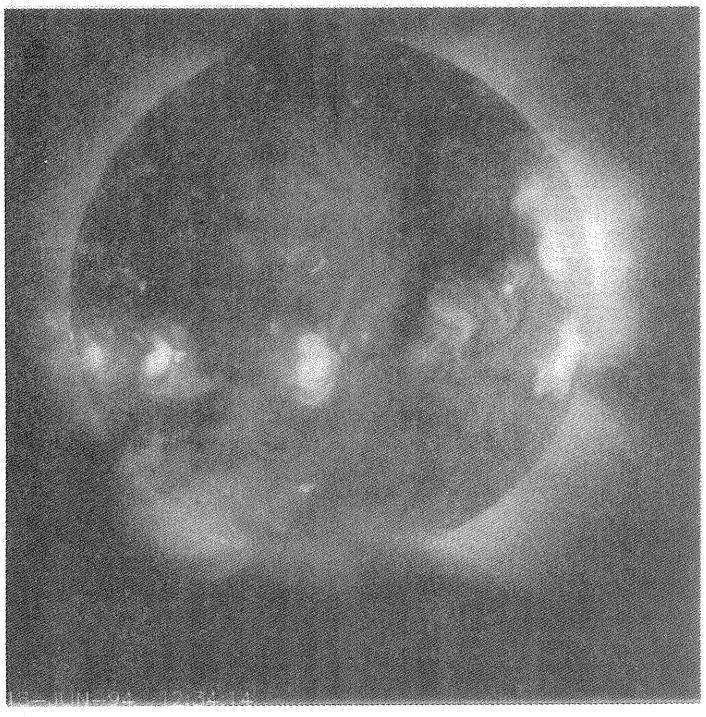
June 1994



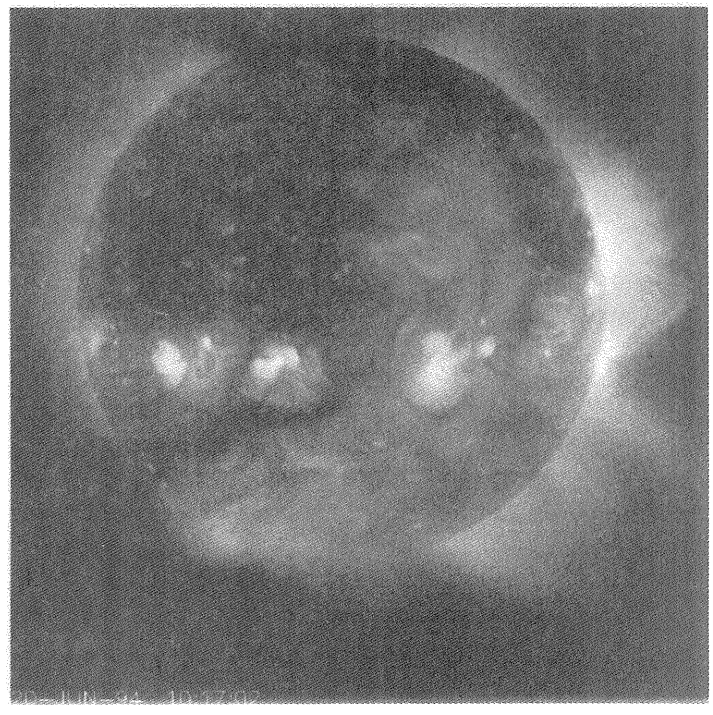
Day 17
10:50:21 UT



Day 19
11:29:02 UT



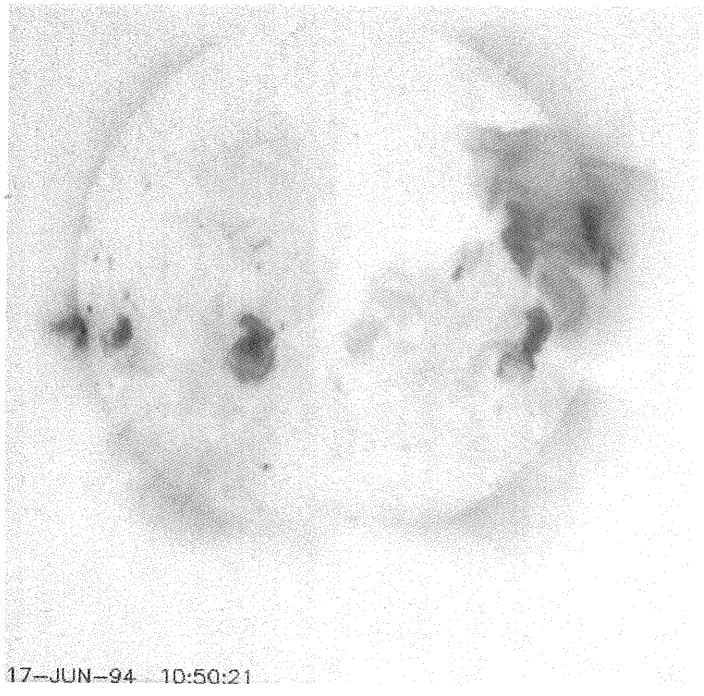
Day 18
12:34:14 UT



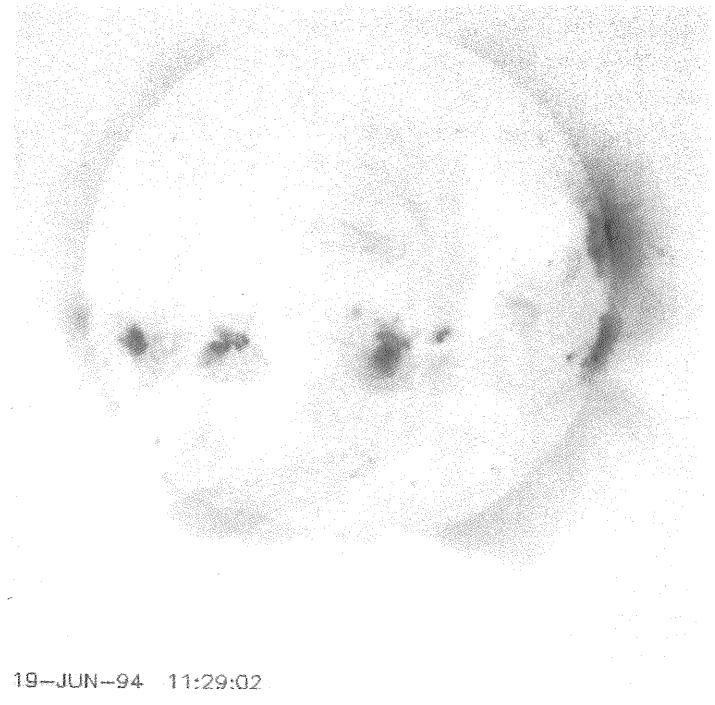
Day 20
10:17:02 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

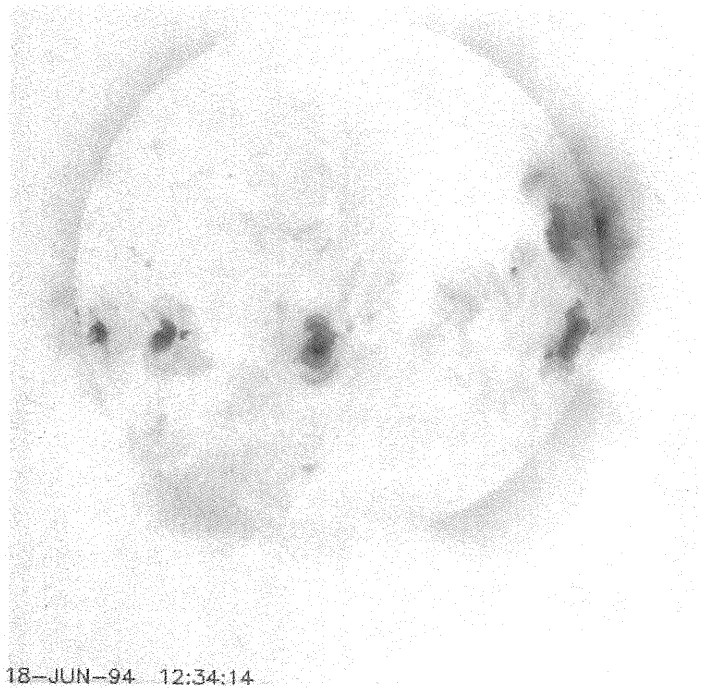
June 1994



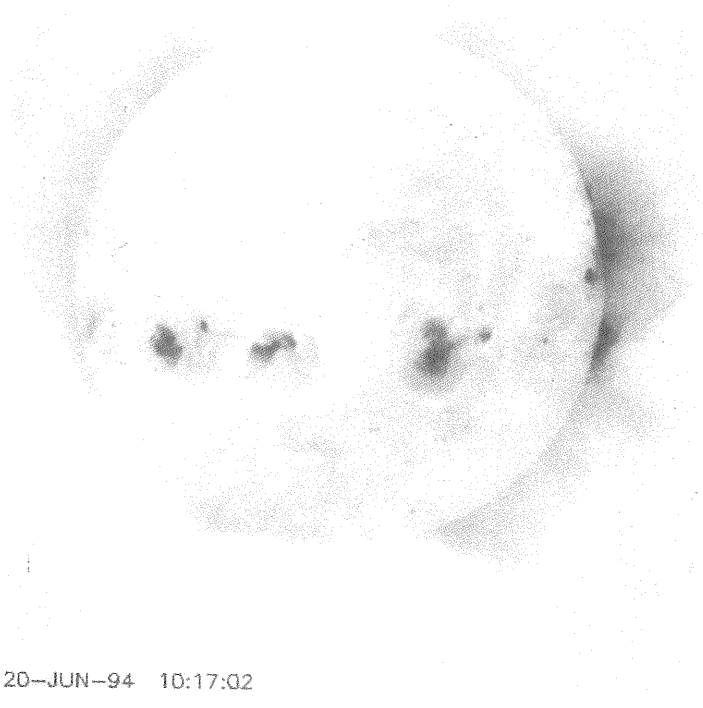
Day 17
10:50:21 UT



Day 19
11:29:02 UT



Day 18
12:34:14 UT

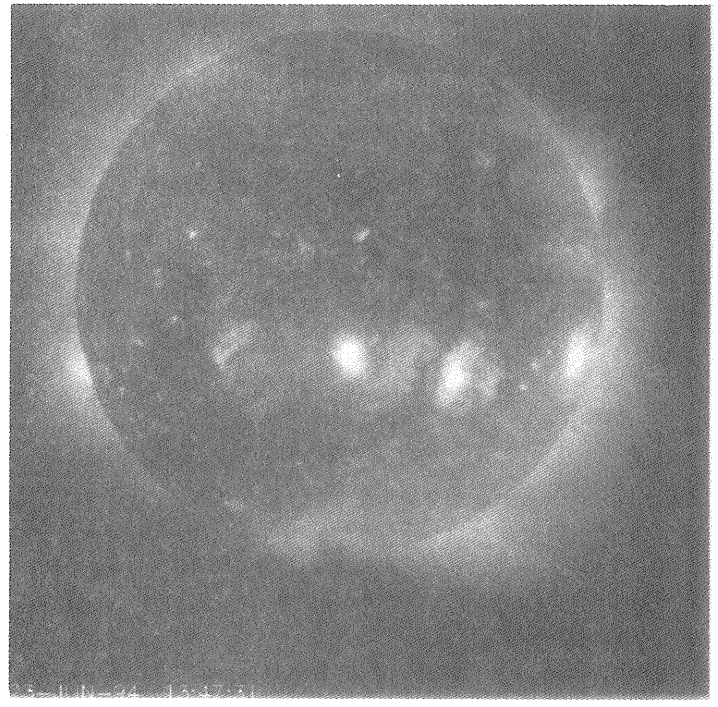


Day 20
10:17:02 UT

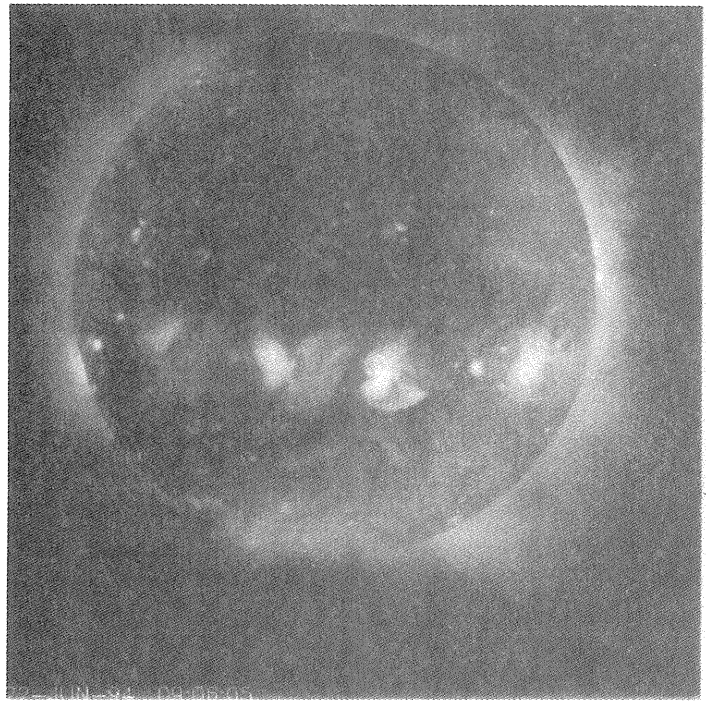
YOHKOH SOFT X-RAY TELESCOPE IMAGES

June 1994

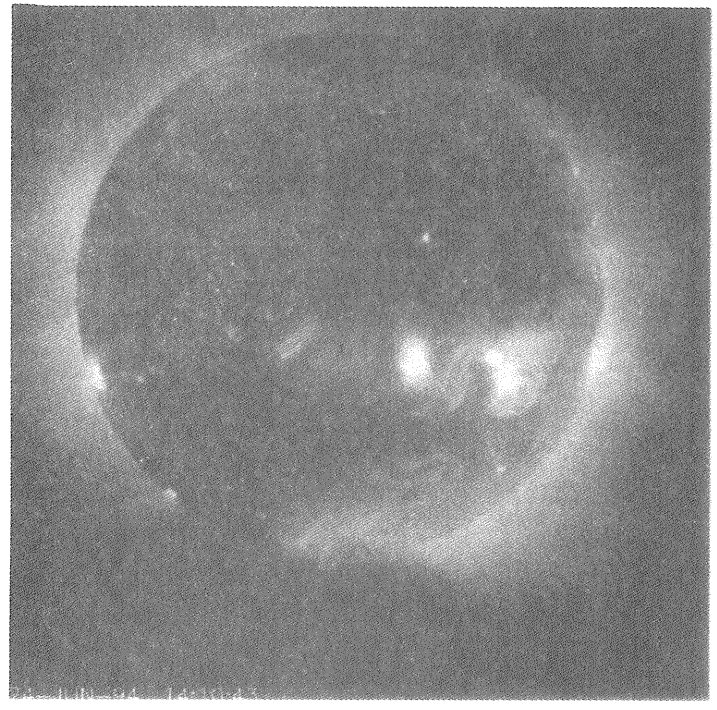
Day 21
13:19:40 UT



Day 23
13:47:31 UT



Day 22
09:06:05 UT



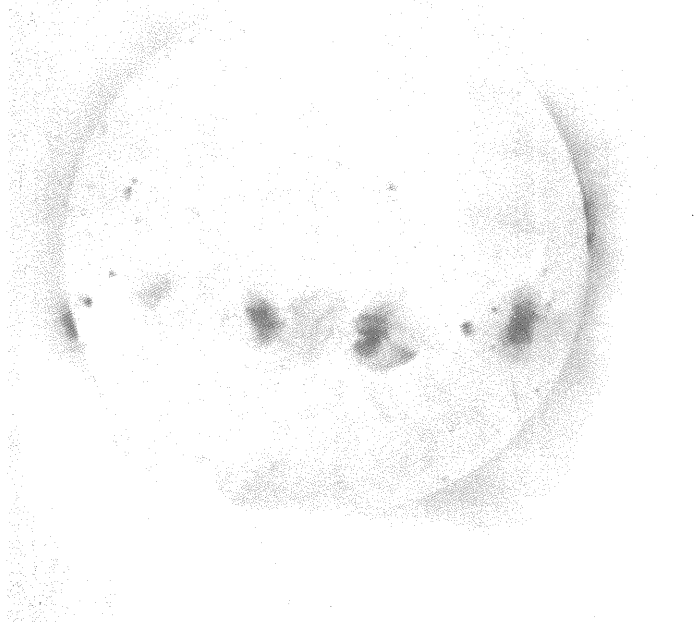
Day 24
14:10:43 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

June 1994

Day 21
13:19:40 UT

Day 23
13:47:31 UT

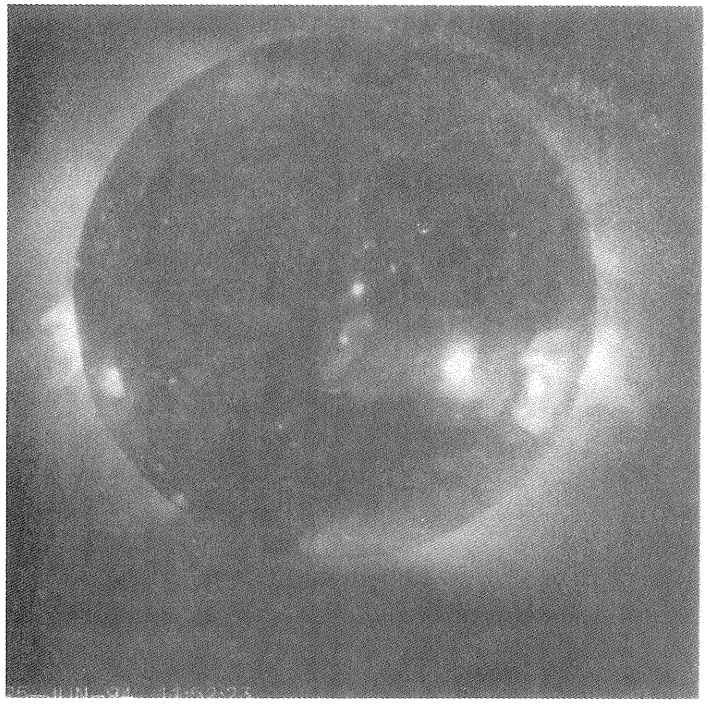


Day 22
09:06:05 UT

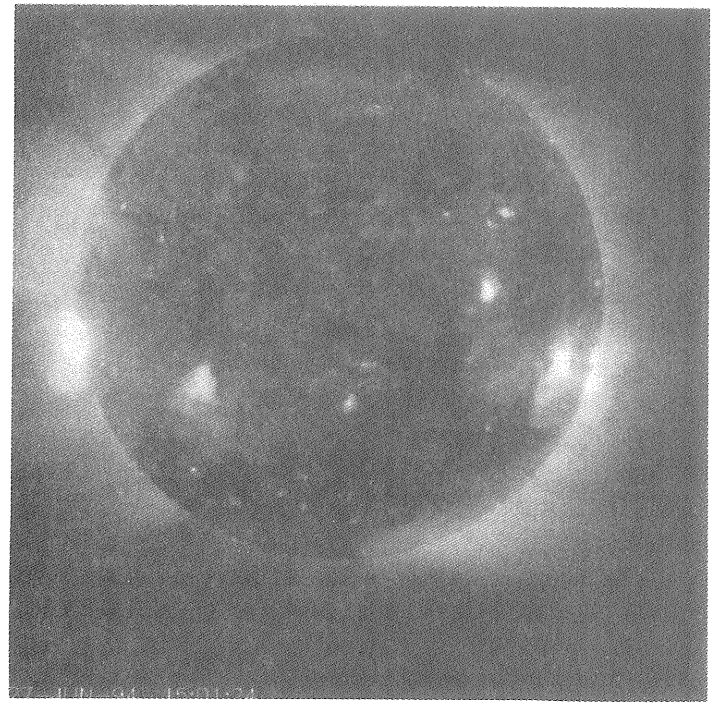
Day 24
14:10:43 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

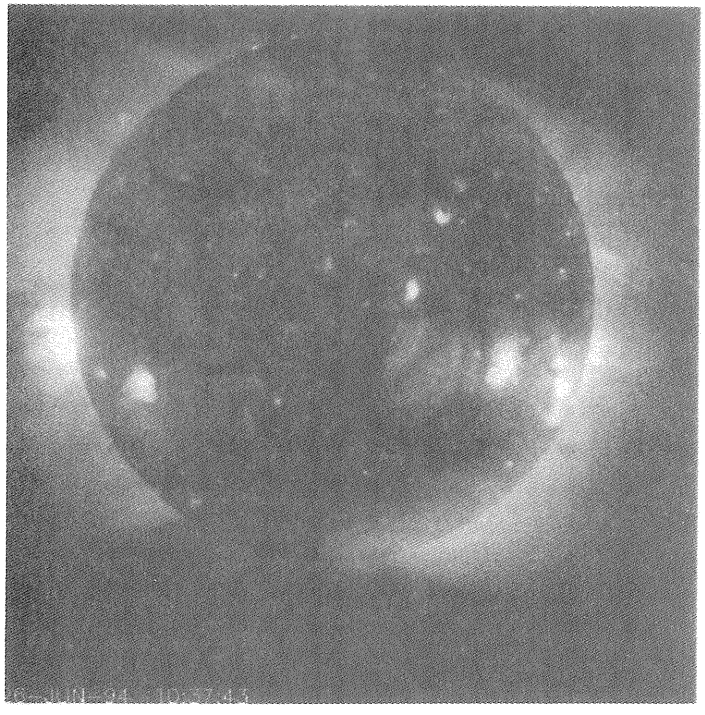
June 1994



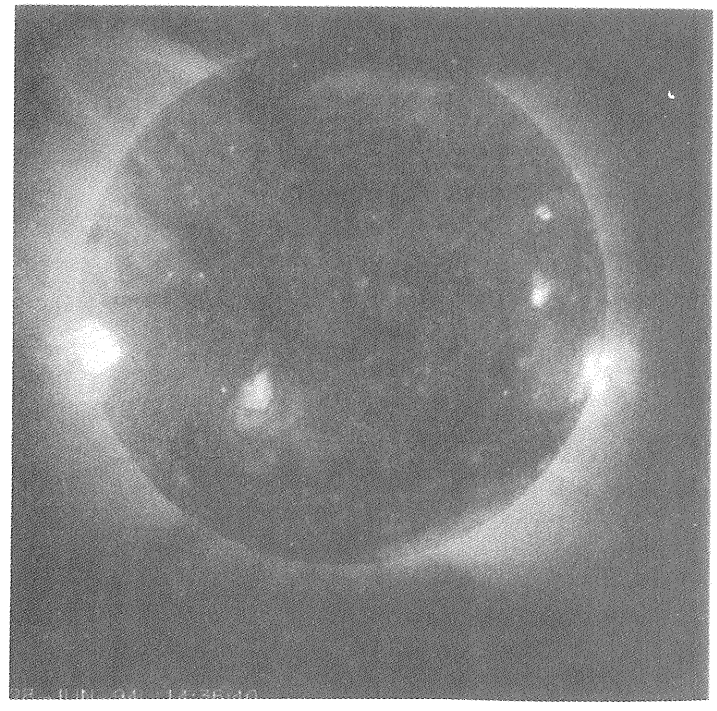
Day 25
11:52:23 UT



Day 27
15:01:24 UT



Day 26
10:37:43 UT



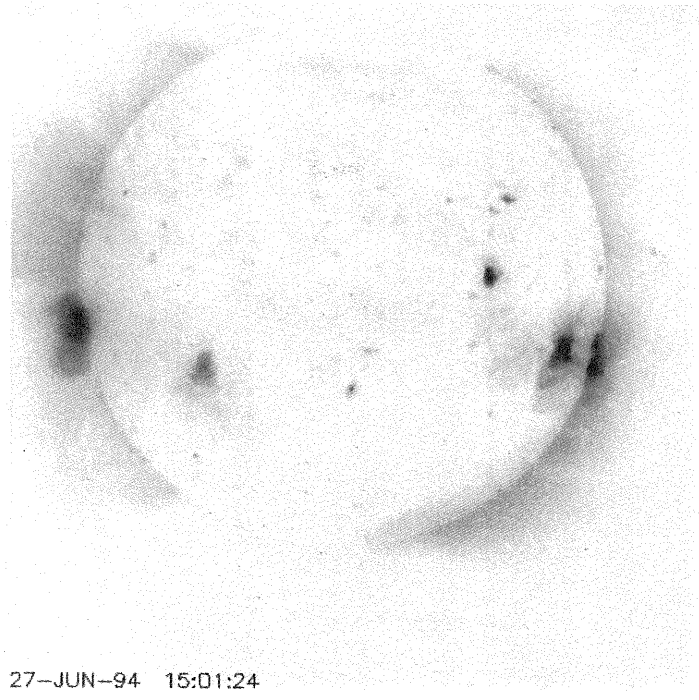
Day 28
14:36:40 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

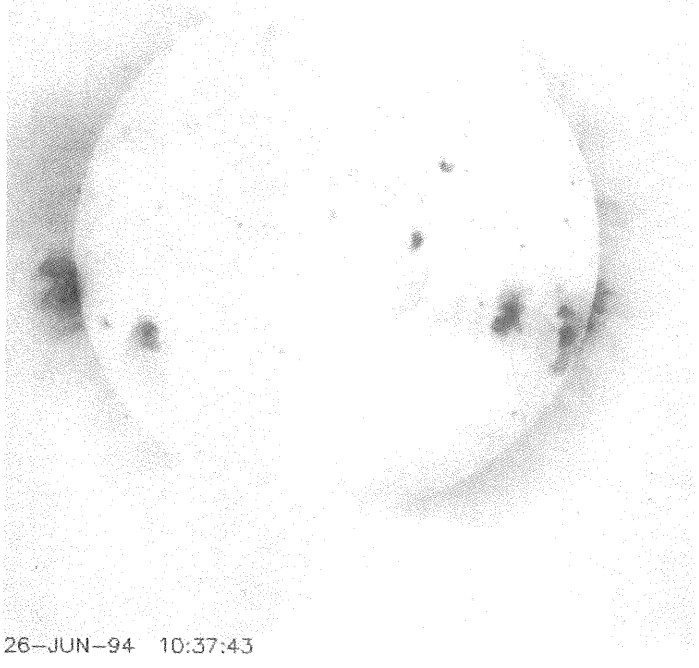
June 1994

Day 25
11:52:23 UT

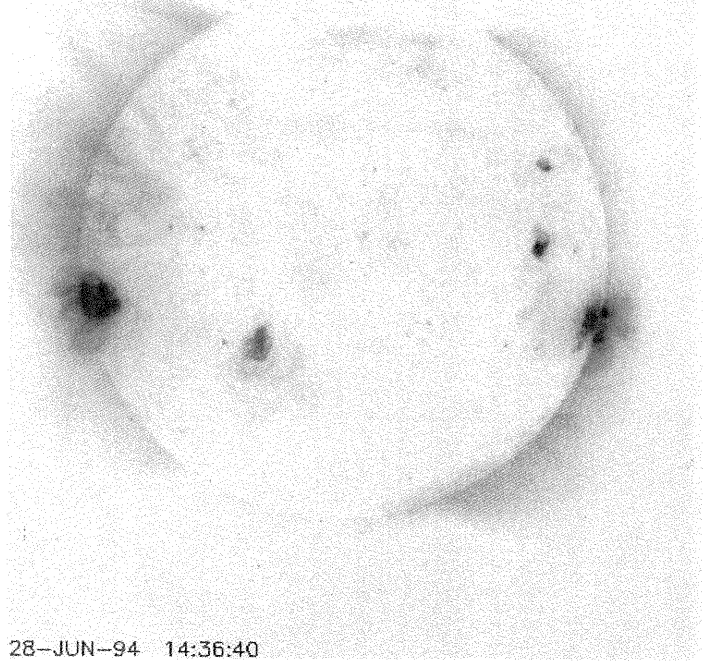
Day 27
15:01:24 UT



Day 26
10:37:43 UT

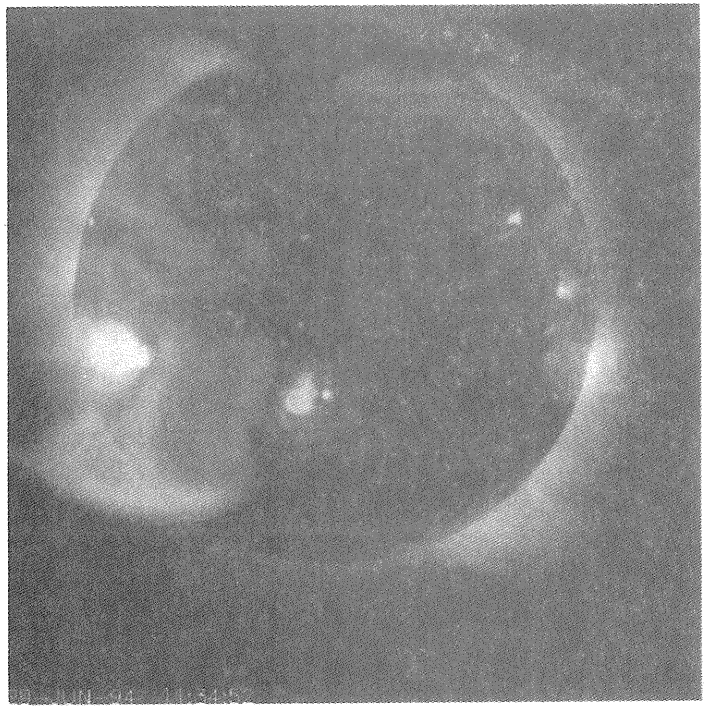


Day 28
14:36:40 UT

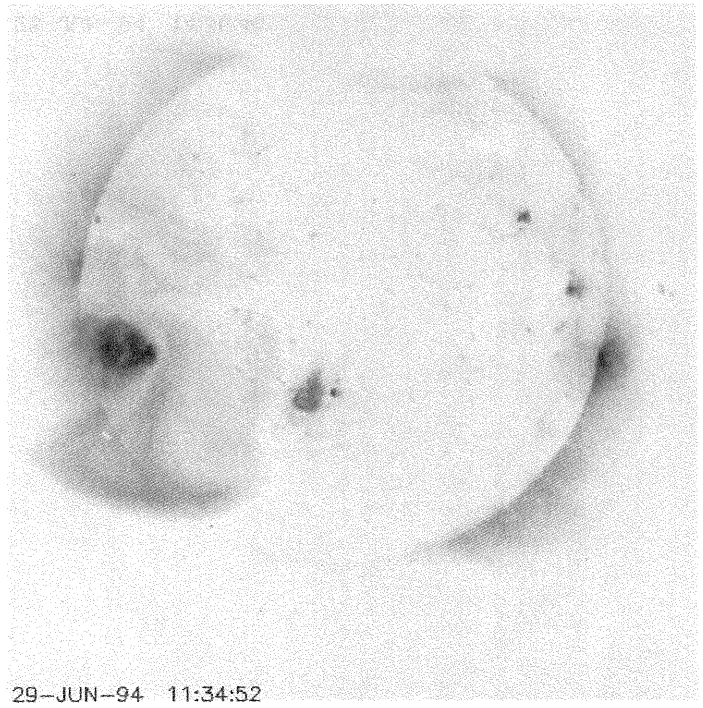


YOHKOH SOFT X-RAY TELESCOPE IMAGES

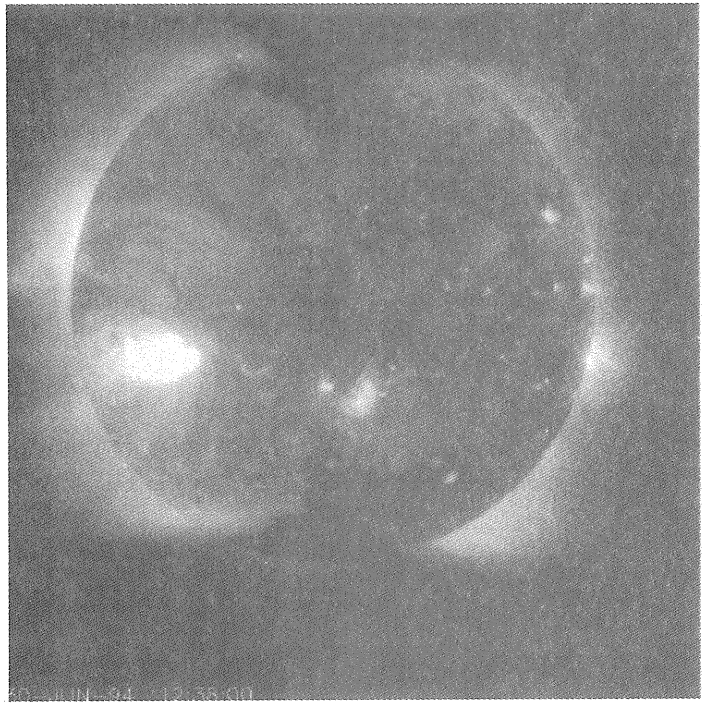
June 1994



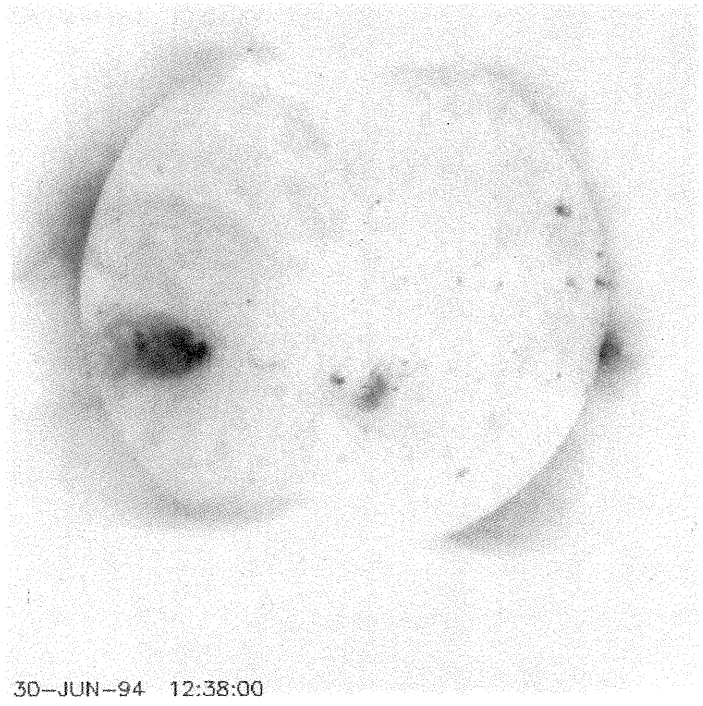
Day 29
11:34:52 UT



Day 29
11:34:52 UT



Day 30
12:38:00 UT



Day 30
12:38:00 UT

S U N S P O T G R O U P S
(Ordered by Central Meridian Passage Date)

JUNE 1994

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Mo	Day	Time (UT)	Lat	CMD	CMP Mo	Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
7729		RAMY	06	06	1235	S16	W50	06	2.7		B	BXO	10	3	3	4
7729		HOLL	06	06	1405	S16	W52	06	2.6		B	BXO	20	4	5	3
7729	28110	MWIL	06	06	1645	S16	W53	06	2.7	4	(B)					
7729		PALE	06	06	1735	S17	W54	06	2.6		B	BXO	260	4	4	2
7729		LEAR	06	07	0040	S17	W55	06	2.8		B	BXO	90	10	6	3
7729		SVTO	06	07	0446	S15	W61	06	2.6		B	CAO	50	4	7	3
7729	28110	MWIL	06	07	1400	S16	W64	06	2.7	5	(B)					
7729		RAMY	06	07	1417	S15	W65	06	2.7		B	DAO	130	6	7	3
7729		HOLL	06	07	1640	S17	W64	06	2.8		B	DAO	140	7	7	3
7729		PALE	06	07	1715	S16	W65	06	2.8		B	DAO	90	3	6	2
7729		LEAR	06	08	0115	S16	W67	06	3.0		B	DAO	150	3	6	3
7729		SVTO	06	08	0805	S16	W75	06	2.6		B	DAO	150	3	9	3
7729		RAMY	06	08	1250	S16	W75	06	2.8		B	DAO	130	8	8	3
7729	28110	MWIL	06	08	1400	S16	W79	06	2.6	4	(B)					
7729		HOLL	06	08	1417	S18	W75	06	2.9		B	DAO	120	6	7	3
7729		PALE	06	08	1805	S15	W80	06	2.7		B	DRO	60	4	6	3
7732		LEAR	06	08	0115	S08	W16	06	6.8		A	AX		1	1	3
7732		SVTO	06	08	0805	S09	W18	06	7.0		B	CSO	30	5	3	3
7732		RAMY	06	08	1250	S09	W21	06	6.9		B	BXO	10	6	4	3
7732	28114	MWIL	06	08	1400	S09	W22	06	6.9	5	(B)					
7732		HOLL	06	08	1417	S09	W22	06	6.9		B	BXO	20	6	4	3
7732		PALE	06	08	1805	S09	W24	06	6.9		B	BXO	30	5	4	3
7732		LEAR	06	09	0033	S09	W28	06	6.9		B	BXO	20	3	5	2
7732		SVTO	06	09	0510	S09	W32	06	6.8		B	BXO	20	8	5	3
7732		RAMY	06	09	1303	S10	W35	06	6.9		B	CRO	30	12	5	3
7732	28114	MWIL	06	09	1345	S10	W35	06	6.9	5	(B)					
7732		HOLL	06	09	1417	S09	W35	06	7.0		B	DRO	40	5	5	3
7732		PALE	06	09	1845	S09	W38	06	6.9		B	CRO	30	8	4	3
7732		LEAR	06	10	0030	S07	W42	06	6.9		B	CRO	40	7	5	/
7732		SVTO	06	10	0700	S10	W44	06	7.0		B	BXO	60	6	6	3
7732		RAMY	06	10	1248	S09	W49	06	6.8		B	BXO	20	8	6	3
7732	28114	MWIL	06	10	1400	S09	W49	06	6.9	4	(B)					
7732		HOLL	06	10	1655	S10	W51	06	6.9		B	BXO	30	7	6	3
7732		PALE	06	10	1815	S09	W52	06	6.8		B	CRO	30	8	6	3
7732		LEAR	06	11	0220	S08	W56	06	6.9		B	CRO	40	8	6	3
7732	28114	MWIL	06	11	1400	S09	W62	06	6.9	4	(B)					
7732		HOLL	06	11	1742	S09	W65	06	6.8		B	BXO	40	3	6	2
7732		PALE	06	11	1830	S09	W63	06	7.0		B	BXO	20	3	5	3
7732		LEAR	06	12	0037	S09	W68	06	6.9		B	BXO	10	2	5	3
7732A	28111	MWIL	06	07	1400	S16	W01	06	7.5	4	(B)					
7733		LEAR	06	09	0033	N04	E19	06	10.4		A	AX		1		2
7733		SVTO	06	09	0510	N05	E16	06	10.4		B	BXO		3	1	3
7733		RAMY	06	09	1303	N04	E13	06	10.5		B	BXO	10	7	4	3
7733	28115	MWIL	06	09	1345	N04	E12	06	10.5	5	(B)					
7733		HOLL	06	09	1417	N06	E12	06	10.5		B	CRO	20	7	5	3
7733		PALE	06	09	1845	N03	E09	06	10.4		B	DRO	30	5	4	3
7733		SVTO	06	10	0700	N04	E03	06	10.5		B	BXO	60	5	6	3
7733		RAMY	06	10	1248	N05	W01	06	10.4		B	CRO	20	11	5	3
7733	28115	MWIL	06	10	1400	N05	W02	06	10.4	5	(B)					
7733		HOLL	06	10	1655	N03	W04	06	10.4		B	CRO	60	11	6	3
7733		PALE	06	10	1815	N03	W04	06	10.5		B	CRO	40	9	6	3
7733		LEAR	06	11	0220	N05	W09	06	10.4		B	BXO	20	6	6	3
7733	28115	MWIL	06	11	1400	N05	W16	06	10.4	4	(B)					
7733		HOLL	06	11	1742	N05	W18	06	10.4		B	DRO	40	6	7	2
7733		PALE	06	11	1830	N04	W17	06	10.5		B	BXO	30	10	6	3
7733		LEAR	06	12	0037	N04	W22	06	10.4		B	BXO	20	8	7	3
7733		RAMY	06	12	1104	N05	W28	06	10.4		B	CRO	20	8	7	3
7733	28115	MWIL	06	12	1400	N05	W28	06	10.5	4	(B)					
7733		HOLL	06	12	1555	N04	W29	06	10.5		B	CAO	30	3	4	3
7733		PALE	06	12	1745	N05	W29	06	10.6		B	BXO	20	4	4	3
7733		LEAR	06	13	0331	N05	W36	06	10.4		B	BXO		2	4	3
7733	28115	MWIL	06	13	1415	N05	W44	06	10.3	4	(AP)					
7733		RAMY	06	14	1216	N05	W54	06	10.5		B	BXO	20	5	4	5
7733	28115	MWIL	06	14	1430	N05	W56	06	10.4	4	(B)					
7733		HOLL	06	14	1442	N05	W55	06	10.5		B	BXO	20	4	4	3
7733		RAMY	06	15	1125	N04	W68	06	10.4		A	AX		1		4

SUNSPOT GROUPS
(Ordered by Central Meridian Passage Date)

JUNE 1994

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Time Mo Day (UT)	Lat CMD	CMP Mo Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
7734		PALE	06 10 1815	N11 E19	06 12.2		A	AX		2	1	3
7734		LEAR	06 11 0220	N13 E14	06 12.1		B	CAO	20	3	2	3
7734	28116	MWIL	06 11 1400	N12 E08	06 12.2	4	(B)					
7734		HOLL	06 11 1742	N13 E05	06 12.1		B	CRO	30	4	5	2
7734		PALE	06 11 1830	N12 E07	06 12.3		B	CRO	20	7	4	3
7734		LEAR	06 12 0037	N11 E01	06 12.1		B	CRO	20	5	4	3
7734		RAMY	06 12 1104	N12 W05	06 12.1		B	CRO	20	6	6	3
7734	28116	MWIL	06 12 1400	N12 W07	06 12.0	5	(B)					
7734		HOLL	06 12 1555	N12 W08	06 12.1		B	CRO	20	2	6	3
7734		PALE	06 12 1745	N12 W11	06 11.9		A	AX	10	1	1	3
7734		LEAR	06 13 0331	N11 W17	06 11.9		A	HS	10	1	1	3
7734		RAMY	06 13 1313	N12 W23	06 11.8		A	HA	10	1	1	3
7734	28116	MWIL	06 13 1415	N12 W24	06 11.8	4	(AP)					
7734		HOLL	06 13 1627	N12 W25	06 11.8		A	HS	20	2	2	4
7734		PALE	06 13 1810	N11 W26	06 11.8		A	HS	30	2	3	2
7734		LEAR	06 14 0030	N12 W31	06 11.7		A	AX	10	1	1	3
7734		RAMY	06 14 1216	N12 W35	06 11.9		B	BXO		2	3	5
7734	28116	MWIL	06 14 1430	N12 W36	06 11.9	5	(B)					
7734		HOLL	06 14 1442	N12 W36	06 11.9		B	DRO	40	7	6	3
7734		RAMY	06 15 1125	N11 W47	06 11.9		B	CRI	100	20	7	4
7734	28116	MWIL	06 15 1415	N12 W47	06 12.0	5	(B)					
7734		HOLL	06 15 1442	N12 W49	06 11.9		B	DAI	80	11	6	3
7734		PALE	06 15 1700	N12 W48	06 12.1		B	DAI	110	12	5	3
7734		LEAR	06 16 0050	N10 W55	06 11.9		B	DSO	120	11	9	3
7734		RAMY	06 16 1152	N12 W61	06 11.9		B	DAO	300	17	10	4
7734	28116	MWIL	06 16 1415	N12 W61	06 12.0	5	(B)					
7734		SVTO	06 16 1500	N12 W61	06 12.0		B	DAO	100	6	8	3
7734		PALE	06 16 2115	N12 W63	06 12.1		B	DAO	230	7	9	2
7734		LEAR	06 17 0048	N13 W69	06 11.8		B	DAO	240	8	10	3
7734		SVTO	06 17 0702	N11 W71	06 11.9		B	DAO	340	4	8	3
7734		RAMY	06 17 1254	N11 W74	06 12.0		B	DAO	280	2	10	3
7734	28116	MWIL	06 17 1430	N12 W74	06 12.0	5	(B)					
7734		HOLL	06 17 1630	N12 W78	06 11.8		B	DAO	250	2	10	3
7734		PALE	06 17 1800	N11 W76	06 12.0		B	DAO	180	3	7	3
7734		LEAR	06 18 0045	N13 W79	06 12.1		B	CAO	120	2	4	3
7734		SVTO	06 18 0705	N11 W79	06 12.3		A	HA	90	1	3	3
7734		RAMY	06 18 1243	N13 W82	06 12.3		A	HS	40	1	2	3
7734	28116	MWIL	06 18 1415	N12 W88	06 12.0	5	AF					
7730	28112	MWIL	06 07 1400	S10 E80	06 13.6	5	AP					
7730		RAMY	06 07 1417	S11 E80	06 13.6		B	CAO	120	3	4	3
7730		HOLL	06 07 1640	S09 E79	06 13.6		A	HK	150	2	3	3
7730		PALE	06 07 1715	S10 E78	06 13.6		A	HS	90	1	2	2
7730		LEAR	06 08 0115	S10 E72	06 13.5		A	HS	120	1	2	3
7730		SVTO	06 08 0805	S10 E71	06 13.7		B	CKO	180	8	6	3
7730		RAMY	06 08 1250	S12 E68	06 13.6		B	CAO	200	10	9	3
7730	28112	MWIL	06 08 1400	S10 E66	06 13.5	5	(BP)					
7730		HOLL	06 08 1417	S07 E66	06 13.5		B	CAI	120	8	6	3
7730		PALE	06 08 1805	S10 E65	06 13.6		A	HS	50	7	8	3
7730		LEAR	06 09 0033	S10 E57	06 13.3		B	CAO	110	3	5	2
7730		SVTO	06 09 0510	S11 E61	06 13.8		B	CAO	120	10	9	3
7730		RAMY	06 09 1303	S12 E54	06 13.6		B	DAO	120	6	6	3
7730	28112	MWIL	06 09 1345	S10 E52	06 13.5	5	(BP)					
7730		HOLL	06 09 1417	S11 E53	06 13.6		B	DSO	180	5	6	3
7730		PALE	06 09 1845	S12 E51	06 13.6		B	DAO	120	4	4	3
7730		LEAR	06 10 0030	S13 E45	06 13.4		B	CAO	100	6	6	/
7730		SVTO	06 10 0700	S12 E45	06 13.7		B	CAO	150	10	8	3
7730		RAMY	06 10 1248	S10 E40	06 13.5		B	DAO	120	12	6	3
7730	28112	MWIL	06 10 1400	S10 E40	06 13.6	5	(BP)					
7730		HOLL	06 10 1655	S11 E40	06 13.7		B	CAO	140	11	8	3
7730		PALE	06 10 1815	S12 E40	06 13.8		B	CAO	120	10	7	3
7730		LEAR	06 11 0220	S10 E35	06 13.7		B	CAO	40	7	8	3
7730	28112	MWIL	06 11 1400	S10 E27	06 13.6	5	(BP)					
7730		HOLL	06 11 1742	S09 E24	06 13.5		B	DAO	120	8	4	2
7730		PALE	06 11 1830	S10 E25	06 13.6		B	DAO	100	11	3	3
7730		LEAR	06 12 0037	S11 E20	06 13.5		B	DAI	90	7	3	3
7730		RAMY	06 12 1104	S08 E14	06 13.5		B	CAO	110	18	3	3
7730	28112	MWIL	06 12 1400	S10 E14	06 13.6	5	(BP)					

S U N S P O T G R O U P S
(Ordered by Central Meridian Passage Date)

JUNE 1994

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Mo	Day	Time (UT)	Lat	CMD	CMP Mo	Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
7730		HOLL	06	12	1555	S11	E14	06	13.7		BG	CAO	100	11	10	3
7730		PALE	06	12	1745	S09	E12	06	13.6		B	DAO	90	12	3	3
7730		LEAR	06	13	0013	S10	E06	06	13.4		B	DSO	40	8	4	3
7730		RAMY	06	13	1313	S09	E02	06	13.7		B	CAO	50	9	4	3
7730	28112	MWIL	06	13	1415	S09	W01	06	13.5	5	(BP)					
7730		HOLL	06	13	1627	S09	W01	06	13.6		BG	CAI	70	14	4	4
7730		PALE	06	13	1810	S09	W03	06	13.5		BG	CAO	50	6	3	2
7730		LEAR	06	14	0030	S09	W07	06	13.5		B	DAO	60	8	4	3
7730		RAMY	06	14	1216	S09	W12	06	13.6		B	CSO	50	7	6	5
7730	28112	MWIL	06	14	1430	S08	W14	06	13.5	5	(B)					
7730		HOLL	06	14	1442	S08	W13	06	13.6		B	CSO	50	10	6	3
7730		RAMY	06	15	1125	S10	W26	06	13.5		B	BXO	40	7	5	4
7730	28112	MWIL	06	15	1415	S10	W27	06	13.6	5	(AP)					
7730		HOLL	06	15	1442	S09	W28	06	13.5		A	HS	30	5	3	3
7730		PALE	06	15	1700	S09	W28	06	13.6		B	CSO	70	8	3	3
7730		LEAR	06	16	0050	S11	W34	06	13.5		B	DSO	50	5	6	3
7730		RAMY	06	16	1152	S09	W39	06	13.6		B	CRO	30	6	4	4
7730	28112	MWIL	06	16	1415	S10	W41	06	13.5	5	(BP)					
7730		SVTO	06	16	1500	S09	W41	06	13.5		A	HR	10	4	5	3
7730		PALE	06	16	2115	S10	W45	06	13.5		B	CAO	40	4	3	2
7730		LEAR	06	17	0048	S10	W48	06	13.4		B	CRO	30	2	3	3
7730		SVTO	06	17	0702	S12	W50	06	13.5		A	HR		1		3
7730		RAMY	06	17	1254	S12	W53	06	13.5		A	AX		1		3
7730	28112	MWIL	06	17	1430	S11	W55	06	13.5	4	(AP)					
7731	28113	MWIL	06	07	1400	N09	E85	06	14.0	5	AP					
7731		RAMY	06	07	1417	N08	E86	06	14.0		A	HS	60	1	2	3
7731		HOLL	06	07	1640	N08	E88	06	14.3		A	HK	60	1	3	3
7731		PALE	06	07	1715	N08	E85	06	14.1		A	HS	60	1	2	2
7731		LEAR	06	08	0115	N09	E79	06	14.0		A	HA	90	1	1	3
7731		SVTO	06	08	0805	N08	E73	06	13.8		A	HS	110	2	4	3
7731		RAMY	06	08	1250	N08	E70	06	13.8		A	HA	110	2	3	3
7731	28113	MWIL	06	08	1400	N09	E71	06	13.9	5	(AP)					
7731		HOLL	06	08	1417	N12	E71	06	13.9		A	HK	170	2	3	3
7731		PALE	06	08	1805	N07	E70	06	14.0		B	CSO	100	2	3	3
7731		LEAR	06	09	0033	N08	E67	06	14.0		A	HA	130	2	5	2
7731		SVTO	06	09	0510	N08	E62	06	13.9		B	CAO	130	2	4	3
7731		RAMY	06	09	1303	N07	E58	06	13.9		A	HA	80	2	2	3
7731	28113	MWIL	06	09	1345	N09	E59	06	14.0	5	(BP)					
7731		HOLL	06	09	1417	N09	E57	06	13.9		A	HS	110	2	2	3
7731		PALE	06	09	1845	N07	E57	06	14.0		B	CAO	100	5	3	3
7731		LEAR	06	10	0030	N06	E52	06	13.9		B	CAO	90	3	4	/
7731		SVTO	06	10	0700	N08	E49	06	14.0		B	CAO	170	3	4	3
7731		RAMY	06	10	1248	N09	E46	06	14.0		B	CAO	90	3	3	3
7731	28113	MWIL	06	10	1400	N08	E46	06	14.0	5	(AP)					
7731		HOLL	06	10	1655	N08	E44	06	14.0		A	HA	110	2	2	3
7731		PALE	06	10	1815	N08	E44	06	14.0		B	CAO	100	4	4	3
7731		LEAR	06	11	0220	N08	E38	06	13.9		B	DAO	100	2	2	3
7731	28113	MWIL	06	11	1400	N08	E32	06	14.0	5	(AP)					
7731		HOLL	06	11	1742	N09	E30	06	14.0		B	CAO	80	3	3	2
7731		PALE	06	11	1830	N08	E31	06	14.1		B	DAO	80	4	3	3
7731		LEAR	06	12	0037	N07	E26	06	14.0		B	DAO	60	3	3	3
7731		RAMY	06	12	1104	N08	E21	06	14.0		B	DAO	80	4	3	3
7731	28113	MWIL	06	12	1400	N08	E19	06	14.0	5	(AP)					
7731		HOLL	06	12	1555	N08	E18	06	14.0		B	CSO	100	3	4	3
7731		PALE	06	12	1745	N08	E17	06	14.0		B	DAO	70	3	3	3
7731		LEAR	06	13	0331	N08	E11	06	14.0		B	DSO	50	2	2	3
7731		RAMY	06	13	1313	N10	E08	06	14.1		BG	CAO	80	6	8	3
7731	28113	MWIL	06	13	1415	N08	E06	06	14.0	5	(G)					
7731		HOLL	06	13	1627	N08	E04	06	14.0		B	DSO	90	6	3	4
7731		PALE	06	13	1810	N08	E03	06	14.0		B	DSO	80	5	3	2
7731		LEAR	06	14	0030	N09	W02	06	13.9		B	DSO	90	4	4	3
7731		RAMY	06	14	1216	N10	W03	06	14.3		B	CAI	60	19	7	5
7731	28113	MWIL	06	14	1430	N08	W08	06	14.0	5	(AP)					
7731		HOLL	06	14	1442	N09	W08	06	14.0		B	CSO	60	5	3	3
7731		RAMY	06	15	1125	N08	W20	06	14.0		A	HS	780	2	2	4
7731	28113	MWIL	06	15	1415	N08	W22	06	13.9	5	(AP)					
7731		HOLL	06	15	1442	N10	W21	06	14.0		A	HS	50	4	4	3
7731		PALE	06	15	1700	N08	W23	06	14.0		B	CSO	50	5	3	3

SUNSPOT GROUPS
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JUNE 1994

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Time Mo	Day	(UT)	Lat	CMD	CMP Mo	Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
7731		LEAR	06	16	0050	N07	W28	06	13.9		A	HS	50	1	1	3
7731		RAMY	06	16	1152	N10	W33	06	14.0		B	CSO	80	3	3	4
7731	28113	MWIL	06	16	1415	N08	W35	06	14.0	5	(AP)					
7731		SVTO	06	16	1500	N07	W31	06	14.3		B	CAO	10	6	6	3
7731		PALE	06	16	2115	N08	W38	06	14.0		B	CSO	60	5	4	2
7731		LEAR	06	17	0048	N09	W42	06	13.9		A	HS	40	1	2	3
7731		SVTO	06	17	0702	N08	W44	06	14.0		A	HA	50	1	1	3
7731		RAMY	06	17	1254	N08	W48	06	13.9		B	HS	30	1	1	3
7731	28113	MWIL	06	17	1430	N08	W48	06	14.0	5	(AP)					
7731		HOLL	06	17	1630	N08	W49	06	14.0		A	HR	30	1	2	3
7731		PALE	06	17	1800	N08	W50	06	14.0		A	HA	40	2	1	3
7731		LEAR	06	18	0045	N10	W53	06	14.0		A	HR	10	1	1	3
7731		SVTO	06	18	0705	N08	W56	06	14.1		A	HS	30	1	2	3
7731		RAMY	06	18	1243	N08	W60	06	14.0		A	HR	10	1	1	3
7731	28113	MWIL	06	18	1415	N08	W61	06	14.0	5	(AP)					
7731		SVTO	06	19	0558	N08	W69	06	14.1		A	AX		1		3
7731		HOLL	06	19	1244	N08	W75	06	13.9		A	AX	10	1	1	4
7731	28113	MWIL	06	19	1400	N08	W75	06	14.0	4	(AP)					
7731B		PALE	06	12	1745	S13	E17	06	14.0		A	AX	10	1	1	3
7731A	28122	MWIL	06	20	1430	N04	W71	06	15.3	4	(B)					
7731C		RAMY	06	19	1207	S09	W22	06	17.8		A	AX		2	2	3
7731C		HOLL	06	19	1244	S09	W23	06	17.8		B	BXO	10	2	3	4
7731C	28121	MWIL	06	19	1400	S09	W23	06	17.8	3	(B)					
7735		RAMY	06	12	1104	S13	E83	06	18.7		A	AX		1		3
7735	28117	MWIL	06	12	1400	S13	E80	06	18.6	4	AP					
7735		HOLL	06	12	1555	S13	E81	06	18.8			AX	30	1	1	3
7735		PALE	06	12	1745	S13	E78	06	18.6		A	AX	30	2	2	3
7735		LEAR	06	13	0331	S12	E76	06	18.9		B	BXO	10	4	8	3
7735		RAMY	06	13	1313	S13	E69	06	18.7		B	DAO	60	4	7	3
7735	28117	MWIL	06	13	1415	S13	E69	06	18.8	5	(B)					
7735		HOLL	06	13	1627	S12	E68	06	18.8		B	ESO	120	6	12	4
7735		PALE	06	13	1810	S13	E65	06	18.7		B	DSO	140	4	8	2
7735		LEAR	06	14	0030	S13	E62	06	18.7		B	DAO	120	6	9	3
7735		RAMY	06	14	1216	S13	E59	06	19.0		B	CAO	40	8	9	5
7735	28117	MWIL	06	14	1430	S13	E55	06	18.7	5	(B)					
7735		HOLL	06	14	1442	S12	E55	06	18.7		B	CSI	60	9	9	3
7735		RAMY	06	15	1125	S13	E45	06	18.9		B	CAO	40	12	10	4
7735	28117	MWIL	06	15	1415	S13	E43	06	18.8	5	(B)					
7735		HOLL	06	15	1442	S12	E43	06	18.8		B	CSO	30	6	8	3
7735		PALE	06	15	1700	S12	E48	06	19.3		B	CSO	50	8	8	3
7735		LEAR	06	16	0050	S15	E38	06	18.9		B	CSO	40	9	10	3
7735		RAMY	06	16	1152	S13	E30	06	18.7		B	CRO	30	6	8	4
7735	28117	MWIL	06	16	1415	S13	E28	06	18.7	5	(B)					
7735		SVTO	06	16	1500	S12	E35	06	19.3		B	CRO	20	7	7	3
7735		PALE	06	16	2115	S12	E27	06	18.9		B	CRO	40	9	9	2
7735		LEAR	06	17	0048	S14	E19	06	18.5		B	CRO	30	7	5	3
7735		SVTO	06	17	0702	S14	E20	06	18.8		B	CRO	30	9	8	3
7735		RAMY	06	17	1254	S14	E15	06	18.7		B	CRO	20	4	3	3
7735	28117	MWIL	06	17	1430	S14	E15	06	18.7	4	(B)					
7735		HOLL	06	17	1630	S14	E15	06	18.8		B	CRO	30	6	7	3
7735		PALE	06	17	1800	S14	E14	06	18.8		B	CSO	20	8	6	3
7735		LEAR	06	18	0045	S15	E07	06	18.6		B	CSO	30	4	3	3
7735		SVTO	06	18	0705	S13	E08	06	18.9		B	BXO	20	6	6	3
7735		RAMY	06	18	1243	S13	E04	06	18.8		B	BXO	10	7	6	3
7735	28117	MWIL	06	18	1415	S12	E06	06	19.0	4	(B)					
7735		SVTO	06	19	0558	S12	W05	06	18.9		B	BXO	10	3	2	3
7735	28117	MWIL	06	19	1400	S15	W14	06	18.5	4	(AP)					
7735A	28124	MWIL	06	21	1430	S14	W23	06	19.9	4	(B)					
7736	28120	MWIL	06	18	1415	S12	E34	06	21.1	4	(B)					
7736		SVTO	06	19	0558	S11	E26	06	21.2		B	CRO	20	3	3	3
7736		RAMY	06	19	1207	S11	E22	06	21.2		B	BXO		2	2	3
7736		HOLL	06	19	1244	S11	E21	06	21.1		B	BXO	10	2	2	4
7736	28120	MWIL	06	19	1400	S11	E22	06	21.2	4	(B)					

SUNSPOT GROUPS
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JUNE 1994

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Mo	Day	Time (UT)	Lat	CMD	CMP Mo	Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
7736		HOLL	06	21	1626	S16	W02	06	21.5		B	BXO		4	3	3
7736		LEAR	06	22	0030	S18	W07	06	21.5		B	BXO	10	2	4	2
7736		SVTO	06	22	0619	S16	W10	06	21.5		B	BXO	40	11	5	3
7736		RAMY	06	22	1210	S17	W12	06	21.6		B	BXO	40	14	5	3
7736	28125	MWIL	06	22	1400	S16	W14	06	21.5	4	(B)					
7736		LEAR	06	23	0030	S16	W20	06	21.5		B	BXO	20	5	6	3
7736		SVTO	06	23	0548	S16	W22	06	21.6		B	BXO	40	9	6	3
7736		RAMY	06	23	1348	S17	W28	06	21.4		B	CRO	30	8	5	3
7736	28126	MWIL	06	23	1400	S12	W30	06	21.3	4	(B)					
7736		HOLL	06	23	1540	S17	W28	06	21.5		B	DAO	40	10	6	3
7736		RAMY	06	24	1323	S18	W40	06	21.5		B	CAO	40	5	5	3
7736	28125	MWIL	06	24	1345	S17	W40	06	21.5	4	(B)					
7736		SVTO	06	24	1600	S18	W42	06	21.5		B	CRO	30	6	5	3
7736		LEAR	06	25	0215	S15	W47	06	21.5		B	BXO	20	3	4	3
7736		SVTO	06	25	0533	S17	W50	06	21.4		B	BXO	20	2	4	3
7736		RAMY	06	25	1113	S16	W51	06	21.6		A	AX		1		5
7736	28125	MWIL	06	25	1400	S17	W52	06	21.6	4	(AF)					
7736		HOLL	06	25	1558	S17	W53	06	21.6		A	AX	20	1	1	4
7736		SVTO	06	26	0626	S18	W65	06	21.3		B	BXO	10	2	4	3
7740		PALE	06	15	1700	S11	E80	06	21.7		A	AX		1		3
7740		RAMY	06	16	1152	S11	E70	06	21.8		A	AX		1		4
7740	28118	MWIL	06	16	1415	S12	E69	06	21.8	3	(AP)					
7740		RAMY	06	24	1323	S12	W36	06	21.8		B	CRO	20	3	4	3
7740	28127	MWIL	06	24	1345	S12	W36	06	21.9	5	(B)					
7740		SVTO	06	24	1600	S13	W37	06	21.9		B	BXO	10	3	4	3
7740		LEAR	06	25	0215	S11	W43	06	21.8		B	BXO	20	3	5	3
7740		SVTO	06	25	0533	S12	W45	06	21.8		B	BXO	10	2	4	3
7740		RAMY	06	25	1113	S12	W50	06	21.7		A	AX	10	2		5
7740	28127	MWIL	06	25	1400	S11	W52	06	21.7	4	(AP)					
7740		LEAR	06	26	0030	S12	W55	06	21.9		B	BXO	10	3	3	3
7740		SVTO	06	26	0626	S13	W60	06	21.7		B	BXO	20	4	7	3
7739		RAMY	06	20	1341	S08	E28	06	22.7		B	BXO	10	2	2	2
7739		HOLL	06	20	1407	S07	E27	06	22.6		B	BXO	10	2	3	3
7739	28123	MWIL	06	20	1430	S08	E28	06	22.7	4	(B)					
7739		SVTO	06	21	1115	S09	E19	06	22.9		B	BXO		2	3	3
7739A		RAMY	06	23	1348	N14	W06	06	23.1		A	AX		1		3
7737		RAMY	06	17	1254	S12	E77	06	23.3		A	AX		1		3
7737	28119	MWIL	06	17	1430	S12	E76	06	23.3	4	(AP)					
7737		HOLL	06	17	1630	S12	E75	06	23.3		A	AX	10	1		3
7737		PALE	06	17	1800	S12	E73	06	23.2		A	AX	10	1		3
7737		SVTO	06	18	0705	S11	E70	06	23.6		B	CRO	20	2	4	3
7737		RAMY	06	18	1243	S12	E64	06	23.3		A	HR	10	1	1	3
7737	28119	MWIL	06	18	1415	S12	E62	06	23.3	5	(AP)					
7737		SVTO	06	19	0558	S11	E55	06	23.4		B	BXO	20	3	4	3
7737		RAMY	06	19	1207	S12	E49	06	23.2		A	AX		1	1	3
7737		HOLL	06	19	1244	S12	E48	06	23.1		A	AX	10	1		4
7737	28119	MWIL	06	19	1400	S12	E48	06	23.2	5	(AP)					
7737		LEAR	06	20	0145	S12	E45	06	23.5		B	BXO	10	3	6	3
7737		RAMY	06	20	1341	S12	E37	06	23.3		B	BXO	10	3	6	2
7737		HOLL	06	20	1407	S12	E35	06	23.2		B	BXO	10	2	3	3
7737	28119	MWIL	06	20	1430	S12	E37	06	23.4	4	(B)					
7737		LEAR	06	21	0042	S10	E32	06	23.4		B	BXO		2	2	3
7737		SVTO	06	21	1115	S12	E27	06	23.5		B	BXO	10	3	3	3
7737		RAMY	06	21	1349	S12	E27	06	23.6		B	BXO		2	2	3
7737	28119	MWIL	06	21	1430	S12	E24	06	23.4	4	(B)					
7737		SVTO	06	23	0548	S11	E03	06	23.5		A	AX		1		3
7737		RAMY	06	23	1348	S12	W05	06	23.2		B	CRO	20	5	6	3
7737	28119	MWIL	06	23	1400	S11	W04	06	23.3	4	(B)					
7737		HOLL	06	23	1540	S12	W04	06	23.3		B	CRO	20	8	4	3
7737		RAMY	06	24	1323	S12	W16	06	23.3		B	CAO	20	6	6	3
7737	28119	MWIL	06	24	1345	S11	W17	06	23.3	5	(B)					
7737		SVTO	06	24	1600	S12	W16	06	23.5		B	BXO	20	6	5	3
7737		LEAR	06	25	0215	S12	W25	06	23.2		B	CRO	30	6	6	3
7737		SVTO	06	25	0533	S12	W25	06	23.3		B	BXO	20	5	6	3
7737		RAMY	06	25	1113	S11	W28	06	23.4		B	BXO	10	3	5	5

S U N S P O T G R O U P S
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JUNE 1994

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7737	28119	MWIL	06 25 1400	S12 W30	06 23.3	4	(B)					
7737		HOLL	06 25 1558	S12 W31	06 23.3		B	BXO	20	6	7	4
7737		LEAR	06 26 0030	S11 W35	06 23.4		B	BXO	10	3	3	3
7741		SVTO	06 25 0533	N03 W03	06 25.0		B	AX		2		3
7741		RAMY	06 25 1113	N04 W04	06 25.2		B	BXO	10	3	2	5
7741		HOLL	06 25 1558	N05 W08	06 25.1		B	BXO	10	4	3	4
7741	28128	MWIL	06 26 1400	N04 W19	06 25.2	3	(B)					
7741		HOLL	06 26 1403	N04 W19	06 25.2		B	BXO	10	2	3	3
7741		RAMY	06 26 1820	N04 W22	06 25.1		B	BXO	10	4	3	3
7741		LEAR	06 27 0040	N05 W25	06 25.1		B	BXO	10	2	4	3
7741		SVTO	06 27 0520	N04 W27	06 25.2		A	AX		1		3
7741		RAMY	06 27 1314	N05 W31	06 25.2		A	AX		1		3
7741	28128	MWIL	06 27 1400	N05 W32	06 25.2	3	(AP)					
7741A		RAMY	06 29 1350	S17 W02	06 29.4		A	AX		1		3
7741A	28131	MWIL	06 29 1400	S18 W02	06 29.4	4	(AP)					
7741B		HOLL	06 30 1733	S01 W16	06 29.5		A	AX	10	1	1	3
7744		LEAR	07 01 0213	S07 W14	06 30.0		A	AX		1	1	3
7741C	28132	MWIL	06 30 1400	S17 W00	06 30.6	4	(AP)					

Stations reporting:

BOUL = Boulder
CULG = Culgoora
HOLL = Holloman
LEAR = Learmonth
MWIL = Mt. Wilson
PALE = Palehua
RAMY = Ramey
SVTO = San Vito

SUDDEN IONOSPHERIC DISTURBANCES

JUNE 1994

Day	Start (UT)	Max (UT)	End (UT)	Imp	Wide Spread Index	Number of Station Reports by Type SWF	SEA	SPA	LF-SPA	SES	Flare (UT)	X-ray Class	NOAA Region
04	1619	1628	1711	1	1		1				No flare		
06	1209	1210	1215	1-	1					1	1209		
06	1223	1226	1234	1-	1					2	1223	B2.0	
06	1251	1255	1318	1	5		1			8	1252	C2.3	
06	1343	1350	1400	1-	1					1	1340	B2.5	
06	1430	1441	1523	1	1		1				No flare		
07	0535	0543	0809	1	1		1				No flare		
07	0642	0644	0656	1-	1					2	0642	B2.8	7729
07	2108	2113	2125	1-	1					1	2108	B1.3	
09	1007	1013	1030	1	1					1	1007	C1.1	7730
09	1156	1206U	1317	1	1		1				No flare		
11	0319	0325	0336	1	1		1				No flare		
11	0934	0950	1003	1	1		1				*		
12	1051	1053	1115	1	1					1	1049	B4.6	7730
13	0904	0927	1003	1	1		1				No flare		
13	1527	1530	1540	1-	1					1	1527	B1.6	
13	1742	1745	1749	1-	1					1	1741	B1.7	
14	0755	0808	0841	1	1		1				No flare		
14	1600	1615	1711	1	1		1				No flare		
14	2200	2202	2218	1-	1					1	2159	B1.2	
15	1345	1347	1400	1-	1					1	1346	B2.1	
15	1521	1522	1536	1-	1					1	1522	B3.4	7734
15	1800	1802	1813	1-	1					1	1802	B3.6	7734
15	2001	2006	2013	1-	1					1	2001	B2.3	
16	0748	0750	0756	1	1		1				No flare		
16	0844	0927	0947	1	1		1				*		
16	2200	2204	2213	1-	1					1	2200	B3.7	
17	1145	1146	1156	1-	5					2	1145	B8.4	7734
17	1620	1622	1628	1-	1					1	1620	B1.7	
17	1834	1847	1925	1	1		1				No flare		
18	1214	1217	1229	1-	1					1	1211	B1.2	
18	1740	1752	1816	1	1		1				No flare		
24	1025	1027	1039	1-	1					1	1026	C2.9	
24	1548	1552	1605	1	1		1				No flare		
24	1824	1833U	1854	1	1		1				No flare		
26	1129	1134	1202	2	1					2	1130	B1.9	
27	1533	1536	1554	1	1					1	1535	B1.3	
27	2131	2133	2142	1-	1					2	2131	B1.3	
28	0700	0750	0808	1	1		1				No flare		
28	1003	1009	1041	1	1		1				No flare		
29	1315	1321	1345	1+	1					1	1336	B4.8	7742
29	1434	1440	1508	2-	3					3	1437	B9.1	7742
29	1615	1618	1624	1-	1					1	1618	B2.0	7742
29	2139	2146	2208	1+	3					4	2144E	C1.2	7742
30	0249	0302	0314D	1-	1			1			0246	C1.5	7742
30	0314E	0327	0347	1-	3	1		1			No flare		
30	0759	0814	0900	2	5			1		1	0800	C2.4	7742
30	0901	0910	0935	1	1		1				0901	B7.4	
30	1335	1342	1356	1-	5					3	1337	B5.8	7742
30	1618	1626	1645	1+	1					2	1621	B4.1	7742
30	2118	2126	2257	2+	5	1		1		7	2118	M2.5	7742

* = no flare patrol.

SUDDEN IONOSPHERIC DISTURBANCES

JUNE 1994

OBSERVATORIES REPORTING FOR JUNE 1994

Amherst, New Hampshire, USA	SES	LaCrescenta, California, USA	SES
Boksburg, Rep of S. Africa	SES	Madison, Wisconsin, USA	SES
Cambridge, England, UK	SES	Manahawkin, New Jersey, USA	SES
Cranford, New Jersey, USA	SES	McDonough, Georgia, USA	SES
Durham, New Hampshire, USA	SES	Nampa, Idaho, USA	SES
Fort Wayne, Indiana, USA	SES	Nerja, Spain	SES
Gettysburg, Pennsylvania, USA	SES	Panska Ves, Czech Republic	SES, SEA, SWF
Hiraiso, Japan	SWF	Parma, OH, USA	SES
Houston, Texas, USA	SES	Rochester, New Hampshire, USA	SES
Hudson, Ohio, USA	SES	Tucson, Arizona, USA	SES
Inubo, Japan	SPA	Upice, Slovakia	SEA
Itapetinga, Brazil	SPA, SES	Wellington, Ohio, USA	SES
Koniz, Switzerland	SES	Windsor Locks, Connecticut, USA	SES

Observations are not necessarily continuous.

SOLAR RADIO EMISSION
Spectral Observations

JUNE 1994

Day	Observation Start (UT)	Observation End (UT)	Sta	Decimetric Band Start (UT)	Decimetric Band End (UT)	Decimetric Band Int (1-3)	Metric Band Start (UT)	Metric Band End (UT)	Metric Band Int (1-3)	Dekametric Band Start (UT)	Dekametric Band End (UT)	Dekametric Band Int (1-3)	Spectral Type
01	0500	1200	IZMI										
02	0500	1200	IZMI										
03	0500	1200	IZMI										
04			LEAR				0215.0	0216.0	1				III
	0500	1200	IZMI										
05	0500	1200	IZMI										
06	0500	1200	IZMI										
07			LEAR				0633.0	0634.0	1				III
			SVTO				0633.0	0634.0	3				III
	0500	1200	IZMI				0633.5	0634.5	2				IIIG,V
			IZMI				0639.2	0641.3	1				IIIG
			IZMI				1035.3	1035.8	1				IIIG
	0700	1500	POTS				1035.3	1036.0	1				IIIG
			POTS				1225.0	1225.1	1				UNCLF
			POTS				1233.7	1233.9	1				I,UNCLF
			POTS				1308.0	1316.0	1				I,S
08	0500	1200	IZMI										
			SVTO				0738.0	0738.0	1				III
	0700	1500	POTS				0738.2	0738.4	1				UNCLF
			POTS				0916.7	0916.9	1				IIIB
			POTS				1215.5	1215.6	1				UNCLF
			POTS				1419.4	1420.1	1				I,S
			POTS				1441.5	1442.7	1				I,S
09			LEAR				0508.0	0509.0	2				III
			SVTO				0508.0	0509.0	2				III
			LEAR				0643.0	0643.0	2				III
			SVTO				0643.0	0643.0	2				III
	0500	1200	IZMI				0644.5	0644.6	1				III
			SVTO				0749.0	0749.0	1				III
	0700	1500	POTS				0749.1	0749.4	1				IIIG
			POTS				0852.8	0855.2	2				IIIGG
			SVTO				0853.0	0856.0	2				III
			IZMI				0853.4	0856.1	2				IIIGG
			LEAR				0855.0	0856.0	1				III
			POTS				0957.0	0958.3	1				IIIGG
			POTS				1007.4	1009.8	1				IIIG,C
			POTS				1109.1	1109.5	1				IIIG
			SGMR				1119.0	1120.0	1				III
			SVTO				1119.0	1120.0	2				III
			IZMI				1119.6	1120.6	1				IIIG,V
			POTS				1119.6	1122.0	2				IIIGG
			IZMI				1121.3	1121.4	1				III
			SGMR				1134.0	1135.0	1				III
			SVTO				1134.0	1135.0	2				III
			POTS				1134.8	1135.2	2				IIIB
			IZMI				1134.9	1140.1	2				IIIG,V
			SGMR				1143.0	1147.0	3				V
			SVTO				1143.0	1146.0	3				V
			POTS				1143.6	1150.7	3				IIIGG,V,RS
			IZMI				1143.8	1144.2	2				IIIG,V
			IZMI				1145.8	1147.3	2				IIIGG,V
			SVTO				1250.0	1257.0	3				V
			POTS				1251.9	1257.6	2				IIIGG
			SGMR				1252.0	1257.0	2				V
			POTS				1317.6	1324.2	1				IIIG
			SGMR				1357.0	1407.0	2				V
			SVTO				1357.0	1407.0	3				V
			POTS				1357.8	1407.7	2				IIIGG
			POTS				1447.3	1447.4	1				IIIB
			SGMR				1513.0	1514.0	1				III
			SVTO				1513.0	1514.0	2				III

SOLAR RADIO EMISSION
Spectral Observations

JUNE 1994

Day	Observation Start (UT)	Observation End (UT)	Sta	Decimetric Band Start (UT)	Decimetric Band End (UT)	Decimetric Band Int (1-3)	Metric Band Start (UT)	Metric Band End (UT)	Metric Band Int (1-3)	Dekametric Band Start (UT)	Dekametric Band End (UT)	Dekametric Band Int (1-3)	Spectral Type
09			SGMR				1530.0	1533.0	1				III
			SVTO				1532.0	1532.0	2				III
			SGMR				1650.0	1651.0	1				V
			PALE				1738.0	1738.0	1				III
10	0700	1500	POTS				1126.9	1128.6	2				IIIG,I
			SVTO				1127.0	1128.0	3				III
	0500	1200	IZMI				1127.3	1127.9	2				IIIG
			POTS				1134.7	1134.9	1				IIIG
			POTS				1444.6	1451.4	1				IIIG
			PALE				1636.0	1636.0	1				III
			PALE				2125.0	2126.0	1				III
			SGMR				2125.0	2126.0	1				III
11	0500	1200	IZMI										
			SVTO				1205.0	1517.0	1				CONT
			SVTO				1509.0	1511.0	1				III
			SGMR				1511.0	1512.0	1				III
			PALE				1718.0	1720.0	1				III
			SGMR				1728.0	1729.0	1				III
			SGMR				1732.0	1733.0	1				III
			PALE				1825.0	1826.0	1				III
			PALE				1846.0	0456.0	1				CONT
12			LEAR				0005.0	0928.0	1				CONT
	0500	1200	IZMI				0500.0E	1200.0D	1				IS
			SVTO				0730.0	0931.0	1				CONT
			SVTO				1003.0	1003.0	2				III
			SVTO				1128.0	1639.0	1				CONT
			SGMR				1430.0	1900.0	1				CONT
			PALE				1921.0	1922.0	1				III
			SGMR				1921.0	1922.0	1				III
			PALE				1933.0	0233.0	1				CONT
			SGMR				1937.0	1939.0	1				V
13			LEAR				0035.0	0845.0	1				CONT
	0500	1200	IZMI				0640.0E	1200.0D	2				IS
			POTS				0700.0E	1500.0U	2				I,S(IIIG:INT:1)
			SVTO				0706.0	1430.0	1				CONT
			IZMI				0904.6	0905.3	1				IIIG
			IZMI				0924.5	1007.0	1				IIIN
			IZMI				1121.5	1123.7	1				IIIGG
			IZMI				1126.8	1126.9	2				III
			SGMR				1141.0	1147.0	2				III
			SVTO				1141.0	1147.0	2				III
			POTS				1141.4	1147.1	2				IIIGG
			SGMR				1230.0	1231.0	3				III
			SVTO				1230.0	1249.0	3				III
			POTS				1230.7	1239.7	3				IIIGG
			SGMR				1326.0	1326.0	1				III
			SGMR				1341.0	1356.0	2				S
			POTS				1347.8	1356.6	2				IIIG
			SGMR				1505.0	1750.0	1				CONT
			PALE				1742.0	1744.0	2				III
			SGMR				1742.0	1747.0	2				V
			PALE				1929.0	1934.0	2				III
			PALE				2336.0	2337.0	1				III
14			LEAR				0309.0	0309.0	2				III
			PALE				0309.0	0309.0	1				III
			LEAR				0324.0	0327.0	2				V
			PALE				0324.0	0325.0	1				III
	0700	1500	POTS				0700.0E	1500.0U	1				I,S
			SVTO				0746.0	0747.0	2				III
	0500	1200	IZMI				0746.8	1146.9	2				III
			POTS				0746.8	0754.0	2				IIIG
			LEAR				0747.0	0747.0	2				III
			SVTO				0932.0	0937.0	2				III
			POTS				0932.3	0938.4	1				IIIG

SOLAR RADIO EMISSION
Spectral Observations

JUNE 1994

Day	Observation Start (UT)	Observation End (UT)	Sta	Decimetric Band Start (UT)	Decimetric Band End (UT)	Decimetric Band Int (1–3)	Metric Band Start (UT)	Metric Band End (UT)	Metric Band Int (1–3)	Dekametric Band Start (UT)	Dekametric Band End (UT)	Dekametric Band Int (1–3)	Spectral Type
14			POTS				0947.9	0948.5	1				IIIG
			SVTO				0948.0	0948.0	2				III
			POTS				1044.1	1047.2	1				IIIG
			POTS				1145.9	1146.5	1				IIIG
			PALE				1706.0	1717.0	1				S
			PALE				2006.0	2008.0	1				III
			SGMR				2006.0	2008.0	1				III
			LEAR				2336.0	2337.0	1				III
15			LEAR				0147.0	0148.0	1				III
			LEAR				0237.0	0238.0	1				III
	0500	1200	IZMI										
			POTS				0700.0E	1500.0U	1				I,S,W
			POTS				1013.3	1013.5	1				IIIG
16			SVTO				0447.0	0450.0	2				III
	0500	1200	IZMI										
	0700	1157	POTS				0700.0E	1157.0U	1				I,S
17			LEAR				0207.0	0208.0	1				III
	0500	1200	IZMI				0455.0	0730.0	1				IN
	0700	1500	POTS				0700.0E	1500.0U	1				I,S,C
			POTS				1134.5	1134.7	1				IIIG
			POTS				1302.2	1302.7	2				IIIG
			SGMR				1347.0	1351.0	1				III
			SVTO				1347.0	1351.0	2				III
			POTS				1347.7	1351.1	1				IIIG
18	0500	1200	IZMI										
19	0500	1200	IZMI										
20	0500	1200	IZMI										
21	0500	1200	IZMI										
22	0500	1200	IZMI										
23	0500	1200	IZMI										
	0700	1500	POTS				1428.9	1430.0	2				IIIG,V
			SVTO				1429.0	1429.0	3				III
24	0700	1500	POTS				0731.3	0731.9	1				IIIG
			POTS				0742.1	0742.2	1				IIIB
			POTS				0904.2	0905.0	1				IIIG
			SGMR				1025.0	1026.0	2				III
			SVTO				1025.0	1028.0	3				V
			POTS				1025.4	1056.7	3				II HARM
			POTS				1025.4	1056.7	3				IIIGG,V
			POTS				1025.4	1056.7	3				IV U,P
			POTS				1025.4	1056.7	3				U,P
	0500	1200	IZMI				1025.8	1027.8	3				IIIG,V,V
			IZMI				1028.8	1030.0	1				I
			IZMI				1030.0	1034.5	2				IV
			IZMI				1030.3	1032.0	2				II HARM
			SGMR				1054.0	1054.0	1				III
			SVTO				1054.0	1055.0	2				V
			IZMI				1054.3	1054.5	2				IIIG
			IZMI				1056.5	1056.6	2				III
			IZMI				1125.8	1125.9	2				III
			POTS				1125.8	1126.1	1				IIIB
			POTS				1325.0	1325.2	1				IIIG
			POTS				1407.7	1407.8	1				IIIB
			SGMR				1417.0	1418.0	2				V
			SVTO				1417.0	1418.0	2				III
			POTS				1417.7	1418.1	2				IIIB
25	0500	1200	IZMI										

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

JUNE 1994

Day	Observation Start (UT)	Observation End (UT)	Sta	Decimetric Band Start (UT)	Decimetric Band End (UT)	Decimetric Band Int (1-3)	Metric Band Start (UT)	Metric Band End (UT)	Metric Band Int (1-3)	Dekametric Band Start (UT)	Dekametric Band End (UT)	Dekametric Band Int (1-3)	Spectral Type
26	0500	1200	IZMI				0722.2	0722.3	1				IIIG
			IZMI				0728.7	0728.9	1				IIIG
			IZMI				0729.5	0729.9	1				IIIG
			PALE				2134.0	2134.0	1				III
			SGMR				2134.0	2134.0	1				III
27	0500	1200	IZMI										
	0700	1500	POTS				0840.1	0840.2	1				IIIB
			POTS				1240.2	1240.3	1				IIIB
			SVTO				1617.0	1620.0	2				III
28	0500	1200	IZMI										
			SGMR				1333.0	1333.0	1				III
			SVTO				1333.0	1343.0	2				III
	0700	1500	POTS				1333.5	1334.0	1				IIIG
			POTS				1336.0	1336.9	1				RSG
			POTS				1450.0	1450.4	1				DCIM
			SVTO				1515.0	1515.0	2				III
			SVTO				1525.0	1525.0	2				III
			SGMR				1557.0	1558.0	1				III
			SVTO				1557.0	1558.0	2				III
			PALE				2024.0	2024.0	1				III
			PALE				2342.0	2343.0	1				III
29			LEAR				0404.0	0405.0	1				III
	0700	1345	POTS				0714.7	0714.8	1				IIIB
			POTS				0717.2	0717.9	1				IIIG
			LEAR				0723.0	0723.0	2				III
			SVTO				0723.0	0723.0	2				III
	0500	1200	IZMI				0723.3	0725.5	1				IIIG
			POTS				0723.4	0723.9	3				IIIG
			POTS				0816.9	0830.1	3				IIIGG
			SVTO				0819.0	0829.0	3				III
			IZMI				0819.1	0821.2	2				IIIGG
			LEAR				0820.0	0825.0	3				III
			IZMI				0821.4	0823.0	3				IIIGG
			IZMI				0823.0	0825.1	2				IIIGG
			IZMI				0828.4	0829.8	2				IIIG
			POTS				0935.1	0935.3	1				IIIB
			POTS				0946.4	0946.7	1				RS
			POTS				1015.5	1015.6	1				IIIG
			POTS				1018.6	1018.8	1				IIIG
			POTS				1049.8	1051.2	1				IIIG
			POTS				1102.1	1102.3	1				IIIG
			POTS				1103.7	1103.8	1				IIIB
			POTS				1225.5	1226.0	1				IIIG
			POTS				1237.1	1237.9	1				I,S
			POTS				1244.1	1345.0U	2				RS,IIIGG
			SGMR				1314.0	1318.0	1				III
			SVTO				1314.0	1314.0	2				III
			SGMR				1326.0	1332.0	2				V
			SVTO				1326.0	1331.0	2				V
			POTS	1327.8	1328.8	1							DCIM?
			SGMR				1353.0	1354.0	1				III
			SVTO				1353.0	1355.0	2				V
			SGMR				1403.0	1404.0	1				III
			SVTO				1403.0	1456.0	2				S
			SGMR				1417.0	1500.0	2				S
			SVTO				1423.0	1459.0	1				CONT
			SGMR				1521.0	1522.0	1				V
			SVTO				1521.0	1521.0	1				III
			SGMR				1606.0	1609.0	2				V
			SVTO				1606.0	1609.0	2				V
			PALE				1737.0	1737.0	2				III
			SGMR				1737.0	1737.0	2				III
			PALE				1858.0	1934.0	1				S
			SGMR				1858.0	1934.0	1				S
			PALE				2017.0	2031.0	1				S
			PALE				2115.0	2116.0	2				III

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

JUNE 1994

Observation Start (UT)	Observation End (UT)	Sta	Decimetric Band Start (UT)	Decimetric Band End (UT)	Decimetric Band Int (1-3)	Metric Band Start (UT)	Metric Band End (UT)	Metric Band Int (1-3)	Dekametric Band Start (UT)	Dekametric Band End (UT)	Dekametric Band Int (1-3)	Spectral Type
29		PALE				2146.0	0500.0	1				CONT
30		LEAR				0216.0	0219.0	3				V
		PALE				0242.0	0248.0	3				V
		PALE				0258.0	0300.0	2				III
		SVTO				0610.0	0617.0	2				III
	0500	1200 IZMI				0610.5	0610.6	2				III
		LEAR				0615.0	0616.0	1				III
	0700	1500 POTS				0700.0E	1500.0U	1				I,S,C,DC
		POTS				0715.2	0722.7	1				IIIG
		POTS				0739.2	0739.3	1				IIIB
		POTS				0754.8	0820.0	3				IIIGG,V,RSG
		IZMI				0755.1	0757.2	1				IIIGG
		IZMI				0757.5	0801.4	2				IIIGG,V
		SVTO				0758.0	0808.0	3				III
		LEAR				0759.0	0806.0	2				III
		LEAR				0759.0	0806.0	2				V
		IZMI				0802.7	0802.8	1				III
		IZMI				0803.5	0803.6	1				III
		IZMI				0804.0	0806.8	3				IIIGG,V
		IZMI				0807.1	0811.5	2				IIIGG
		SVTO				0831.0	0831.0	3				III
		POTS				0854.1	0925.0	3				IIIGG,V,RS,DCIM,U
		IZMI				0857.3	0957.4	1				IIIG
		LEAR				0858.0	0859.0	3				III
		SVTO				0858.0	0901.0	3				III
		IZMI				0858.1	0900.0	2				IIIGG,V
		IZMI				0900.0	0903.1	2				IIIGG
		IZMI				0919.1	0919.2	1				IIIG
		POTS				0957.3	1015.7	2				IIIGG,RS,U
		SVTO				1000.0	1001.0	2				III
		IZMI				1000.2	1001.4	2				IIIGG,RS
		IZMI				1002.8	1003.5	1				IIIG
		POTS				1055.1	1102.8	1				IIIGG
		IZMI				1102.6	1102.7	1				III
		POTS				1131.5	1136.7	1				IIIG
		POTS				1212.5	1212.6	1				IIIB
		SVTO				1307.0	1308.0	2				III
		POTS				1331.4	1338.9	2				IIIGG
		POTS	1337.5	1338.1	1							DCIM
		SVTO				1338.0	1338.0	2				III
		POTS				1346.0U	1500.0U	1				IIIGG,RS,U
		SGMR				1415.0	1419.0	1				III
		PALE				1806.0	1809.0	1				III
		SGMR				1806.0	1810.0	2				V
		PALE				2119.0	2123.0	3				III
		SGMR				2119.0	2129.0	3				III
		PALE				2124.0	2159.0	3				II 3000km/s
		SGMR				2129.0	2133.0	1				III

The symbols used under the column heading SPECTRAL TYPE have the following definitions:

B = Single burst
G = Small group (< 10) of bursts
GG = Large group (> 10) of burst
C = Underlying continuum (particularly with Type I)
S = Storm in the sense of intermittent but apparently connected activity
N = Intermittent activity in this period
U = U-shaped burst of Type III
SP = SPIKES
RS = Reverse slope burst
DP = Drifting pairs
DC = Drifting Chains
H = Herringbone
W = Weak
P = Pulsations
CONT = Continuum
UNCLF = Unclassified activity
DCIM = Fast drift

Stations Reporting:

IZMI = IZMIRAN LEAR = Learmonth ONDR = Ondrejov PALE = Palehua POTS = Potsdam
SGMR = Sagamore Hill SVTO = San Vito

SOLAR RADIO NOISE STORM AT 164 MHZ
FROM NANCAY RADIOHELIOGRAPH

June 1994

DAY	HELIOGRAPHIC POSITIONS MEAN VALUES*		IMP**	OBSERVING TIME***	
	E-W	S-N		START (UT)	END (UT)
07/06/94	+1.13	-0.27	1	0805E	1551D
08/06/94	+1.17	-0.18	1	0817E	1550D
11/06/94	-0.51	-0.23	1	1000	1551D
11/06/94	-0.35	-0.25	1	1400	1551D
12/06/94	-0.55	-0.04	2	0930	1551D
12/06/94	-0.37	-0.17	2	0751E	1551D
13/06/94	-0.19	-0.17	3	0749E	1551D
14/06/94	+0.01	-0.21	1	0751E	1551D
16/06/94	+1.11	+0.27	2	0751E	1551D
17/06/94	+1.18	+0.28	1	0751E	1551D
17/06/94	+1.24	+0.34	1	0751E	1551D

OTHER DAYS : NO DETECTABLE NOISE STORMS

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* POSITIVE E-W AND S-N COORDINATES CORRESPOND TO THE N-W SOLAR QUADRANT

** IMP 1: FLUX<5 SFU IMP 2: 5<FLUX<20 IMP 3: 20<FLUX<100 SFU
IMP 4: 100FLUX<300 SFU IMP 5: FLUX>300 SFU

*** E NOISE STORM IN PROGRESS AT THE BEGINNING OF THE NANCAY OBSERVATIONS
D NOISE STORM IN PROGRESS AT THE END OF THE NANCAY OBSERVATIONS

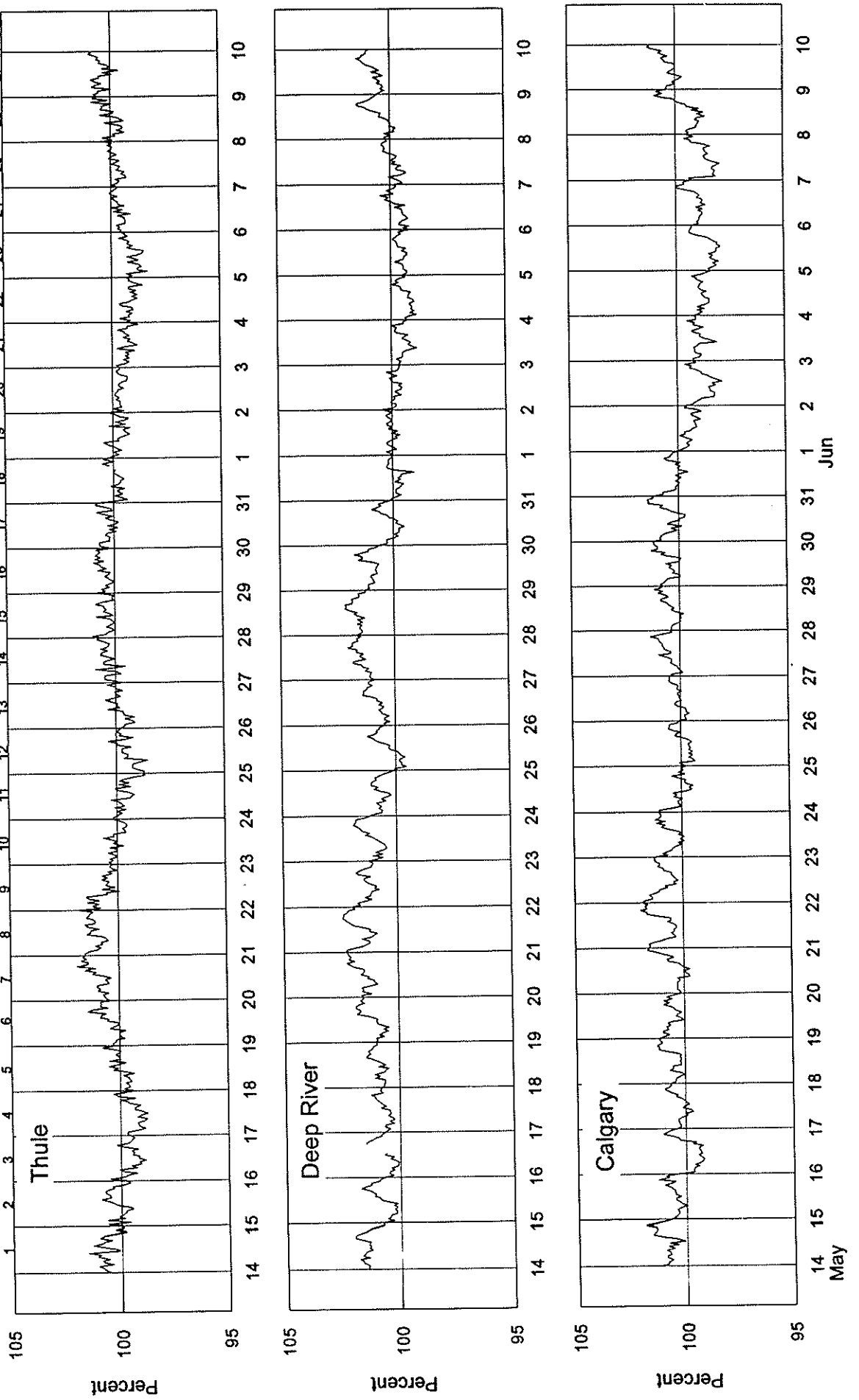
COSMIC RAY INDICES
(Neutron Monitor)
JUNE 1994

Day	THULE Average (cts/h)/100	DEEP RIVER Average (cts/h)/300	CALGARY Average (cts/h)/300	CLIMAX Average (cts/h)/100	BEIJING Average (cts/h) 256	TOKYO Average (cts/h)/256	HALEAKALA Average (cts/h)/1000
1	4376	6902.8	3761.7	4004.3	1933.9	3501.4	3502.2
2	4374	6890.1	3736.8	3987.5	1926.4	3502.4	3501.5
3	4358	6865.0	3746.5	3981.2	1923.0	3492.4	3501.5
4	4350	6852.1	3739.7	3979.8	1920.6	3485.0	3505.9
5	4345	6867.9	3726.8	3993.3	1920.0	3496.4	3515.8
6	4373	6877.1	3749.2	4004.9	1919.6	3503.9	3520.2
7	4378	6890.4	3732.5	4020.5	1921.5	3507.7	3523.0
8	4388	6930.8	3765.0	4032.7	1922.9	3507.8	3531.5
9	4409	6949.3	3796.0	4044.5	1928.2	3519.4	3539.2
10	4436	6984.7	3822.7	4055.8	1928.6	3519.4	3543.2
11	4433	6966.2	3810.3	4046.2	1922.3	3510.5	3531.6
12	4420	6965.7	3808.7	4049.4	1930.3	3514.7	3539.1
13	4435	6966.4	3819.2	4062.0	1934.0	3521.6	3545.6
14	4419	6949.5	3791.0	4066.4	1928.2	3526.5	3533.1
15	4437	6942.3	3801.5	4076.1	1923.9	3524.9	3535.9
16	4451	6961.3	3835.2	4083.7	1921.4	3529.9	3540.0
17	4424	6941.9	3821.0	4062.0	1907.9	3507.6	3527.8
18	4415	6917.5	3799.2	4054.0	1900.4	3495.7	3506.0
19	4377	6868.3	3762.8	3996.0	1887.0	3476.3	3478.4
20	4370	6840.5	3750.8	3967.1	1878.6	3477.2	3474.5
21	4393	6882.7	3777.2	3991.0	1887.0	3487.1	3487.3
22	4414	6930.9	3792.7	4016.1	1894.9	3497.2	3505.0
23	4440	6962.6	3821.7	4036.9	1900.3	3511.7	3521.7
24	4462	7007.4	3838.8	4063.2	1906.3	3522.2	3537.1
25	4464	7026.2	3850.8	4079.8	1917.5	3526.8	3531.3
26	4471	7032.2	3841.7	4094.8	1924.3	3517.0	3531.5
27	4449	6970.0	3809.3	4060.8	1908.2	3497.6	3524.7
28	4452	6993.6	3831.3	4062.7	1900.4	3509.0	3526.3
29	4454	6989.5	3828.8	4064.7	1901.0	3507.1	3516.7
30	4435	6959.1	3817.0	4055.7	1901.7	3498.0	3512.4
Mean	4413	6936.1	3792.9	4036.4	1914.0	3506.5	3519.7

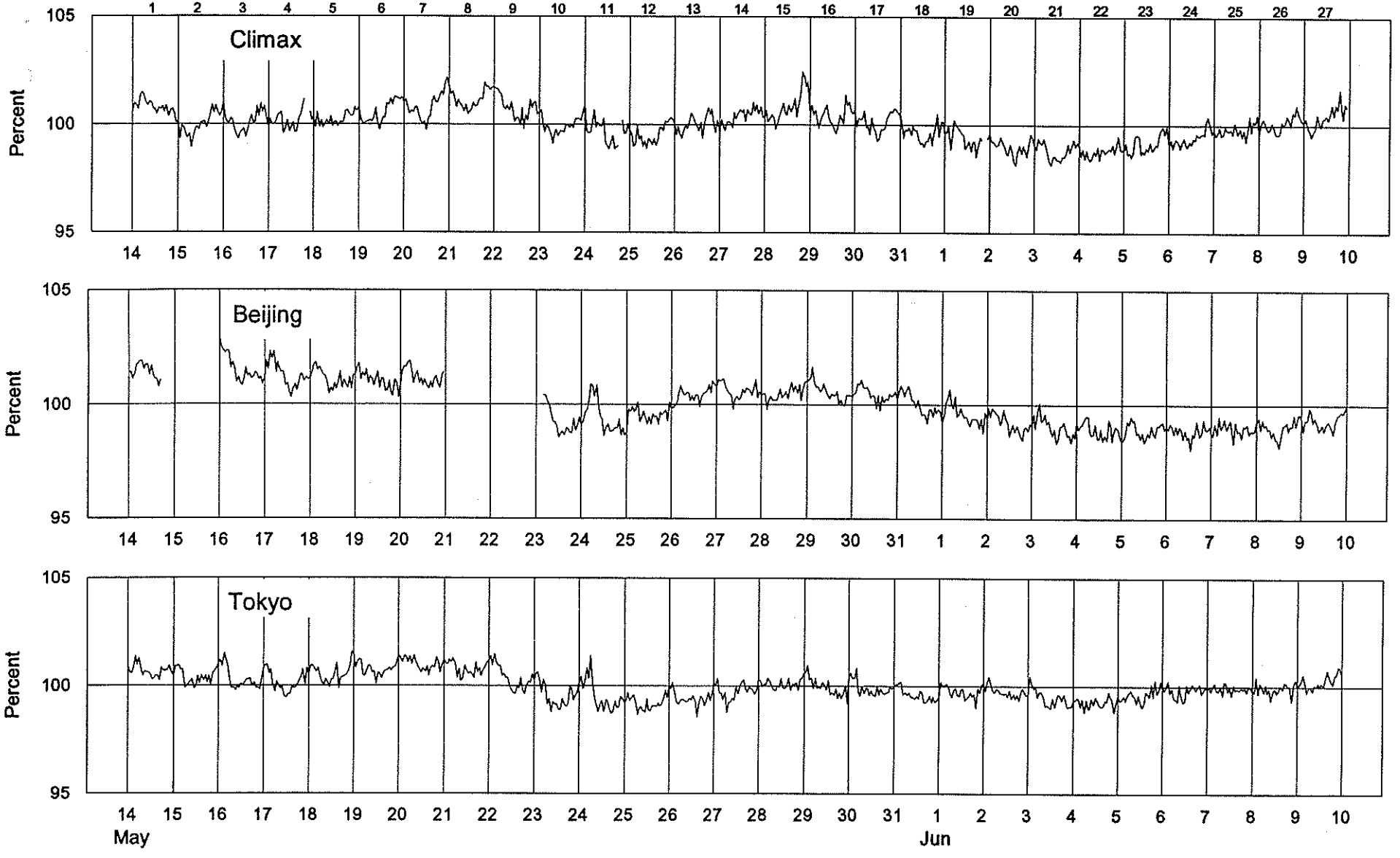
For less than 24-hour coverage, parentheses enclose the number of hours for which data are available. For Climax and Haleakala, parentheses enclose the number of section hours whenever the sum of both sections falls below 40 hours.

* = A&B includes only hours when both A&B sections are available.

COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2196 - Beginning 14 May 94

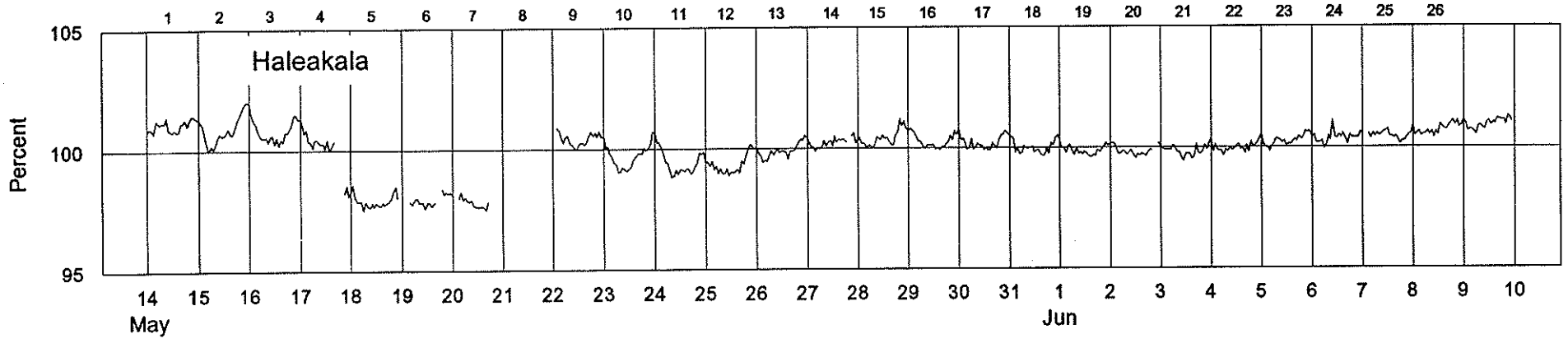


COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2196 - Beginning 14 May 94

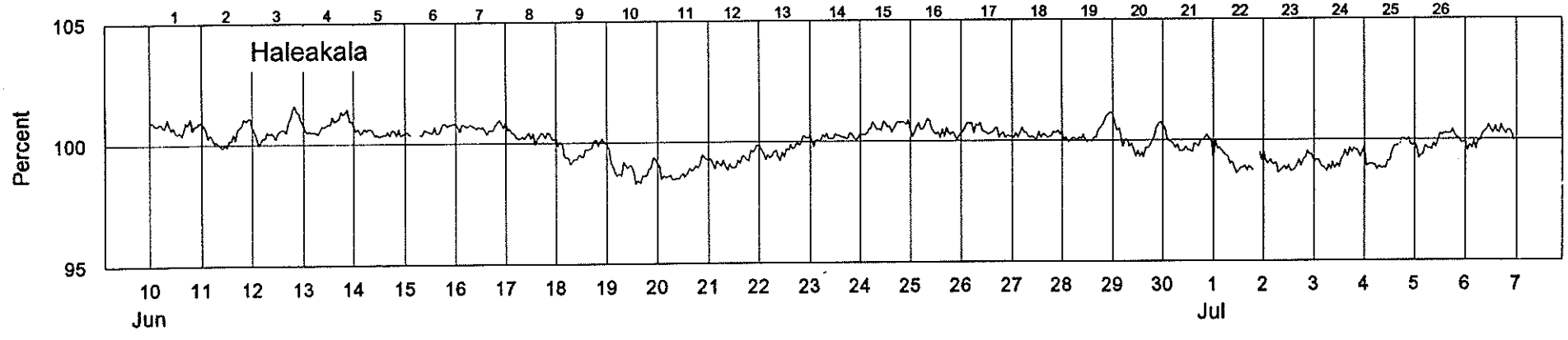


105
Jun 94

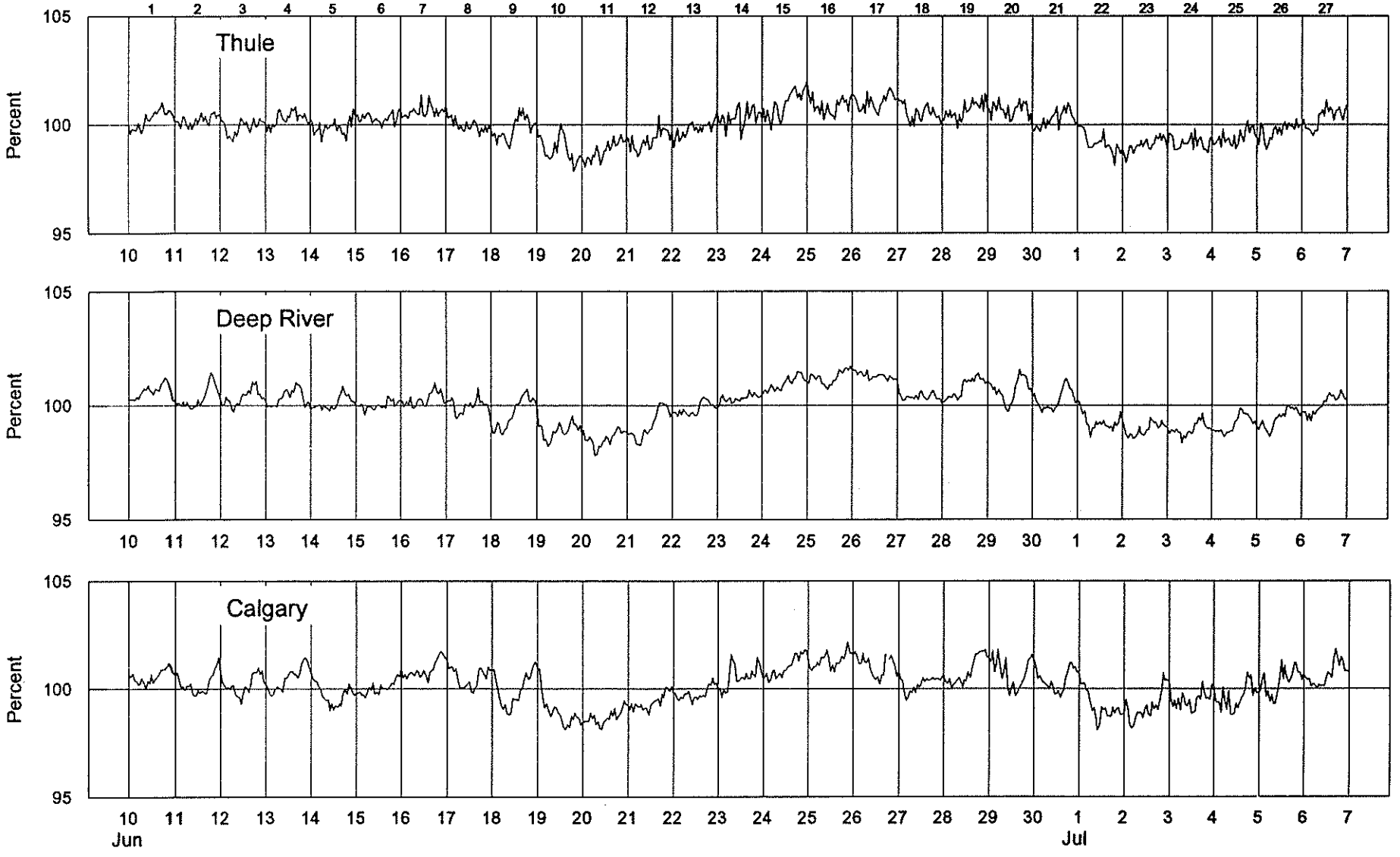
COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2196 - Beginning 14 May 94



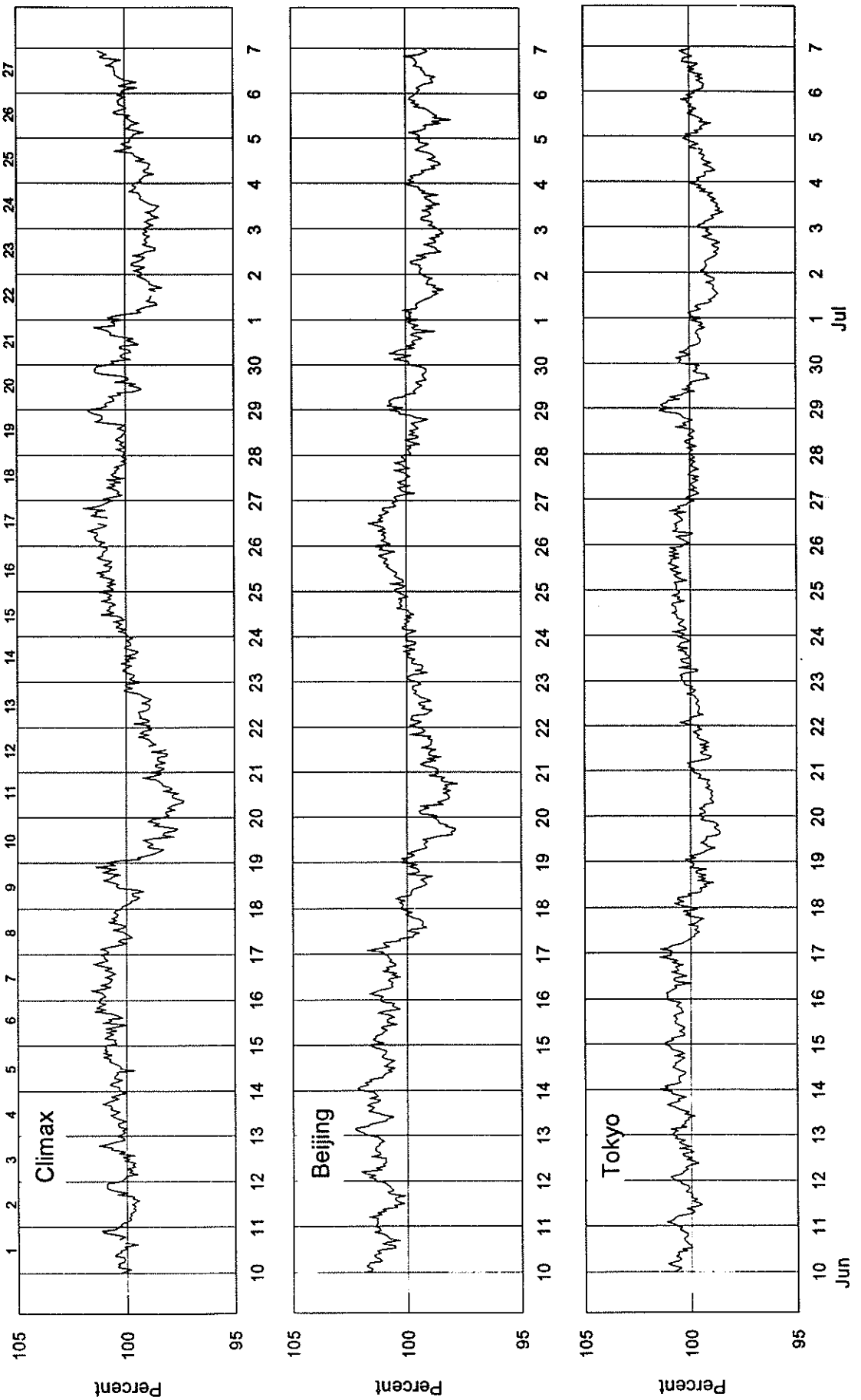
COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2197 - Beginning 10 Jun 94



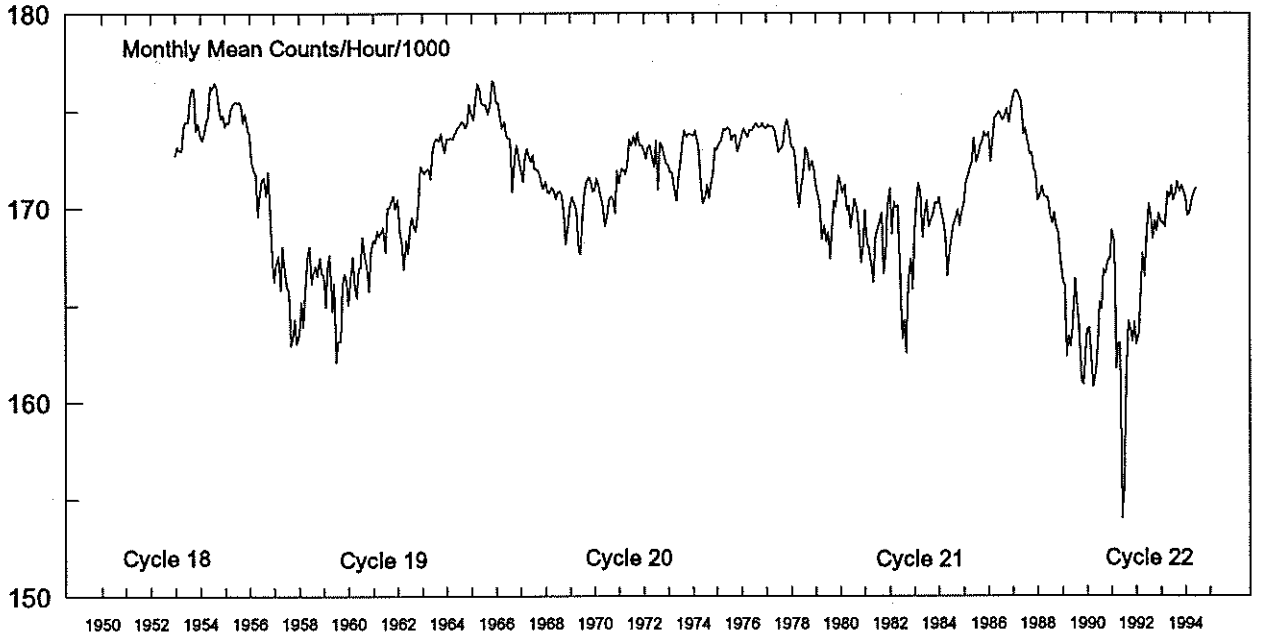
COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2197 - Beginning 10 Jun 94



COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2197 - Beginning 20 Jun 94



Huancayo* Neutron Monitor Pressure-Corrected/Adjusted Values
Jan 1953 - Jun 1994



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
1953	1727	1732	1730	1729	1742	1744	1744	1756	1762	1761	1740	1744	1743
1954	1737	1735	1738	1744	1747	1763	1761	1764	1762	1754	1746	1748	1750
1955	1742	1744	1744	1751	1754	1755	1754	1755	1753	1744	1749	1741	1749
1956	1738	1724	1719	1718	1696	1707	1715	1716	1706	1719	1697	1675	1711
1957	1663	1671	1675	1658	1680	1670	1659	1658	1630	1633	1643	1630	1656
1958	1635	1652	1639	1657	1677	1680	1661	1667	1670	1665	1675	1666	1662
1959	1666	1649	1671	1676	1647	1661	1621	1632	1632	1661	1666	1663	1654
1960	1650	1663	1675	1660	1654	1669	1669	1685	1674	1670	1657	1677	1667
1961	1684	1682	1688	1685	1688	1690	1677	1701	1700	1704	1706	1699	1692
1962	1704	1687	1683	1668	1683	1677	1690	1695	1690	1688	1703	1721	1691
1963	1720	1718	1720	1720	1715	1729	1734	1736	1734	1739	1732	1729	1727
1964	1735	1736	1736	1736	1739	1741	1742	1744	1744	1741	1743	1753	1741
1965	1748	1745	1756	1764	1762	1754	1753	1753	1748	1754	1765	1764	1755
1966	1754	1754	1747	1741	1744	1737	1736	1736	1708	1725	1732	1727	1737
1967	1721	1714	1726	1731	1727	1724	1727	1720	1720	1718	1713	1710	1721
1968	1714	1708	1708	1710	1710	1705	1708	1709	1706	1698	1681	1689	1704
1969	1702	1706	1702	1698	1678	1676	1695	1708	1714	1716	1714	1709	1701
1970	1709	1715	1712	1707	1701	1691	1695	1705	1706	1705	1697	1719	1705
1971	1712	1720	1720	1718	1722	1735	1732	1737	1732	1739	1732	1732	1728
1972	1730	1726	1731	1732	1728	1721	1734	1710	1733	1733	1726	1723	1727
1973	1723	1719	1718	1709	1704	1716	1723	1733	1740	1737	1738	1738	1725
1974	1730	1733	1734	1740	1740	1742	1740	1735	1737	1738	1729	1733	1736
1975	1737	1740	1736	1729	1713	1703	1704	1712	1705	1713	1718	1731	1720
1976	1738	1741	1739	1737	1740	1740	1742	1743	1742	1742	1744	1741	1741
1977	1741	1743	1742	1742	1740	1735	1729	1730	1732	1742	1745	1741	1739
1978	1731	1731	1726	1710	1700	1710	1717	1731	1729	1719	1724	1720	1721
1979	1711	1707	1702	1684	1691	1682	1688	1674	1689	1703	1700	1717	1696
1980	1713	1708	1712	1699	1701	1690	1698	1705	1699	1688	1672	1680	1697
1981	1699	1682	1680	1671	1662	1685	1690	1693	1697	1666	1675	1700	1683
1982	1710	1687	1703	1700	1702	1662	1632	1643	1625	1662	1674	1658	1671
1983	1688	1703	1713	1709	1685	1697	1704	1690	1694	1697	1703	1702	1699
1984	1705	1699	1693	1685	1665	1677	1684	1691	1695	1699	1691	1698	1690
1985	1703	1714	1716	1721	1723	1736	1724	1727	1732	1734	1739	1737	1725
1986	1739	1724	1734	1746	1748	1750	1748	1745	1747	1751	1744	1752	1744
1987	1757	1760	1760	1757	1754	1738	1741	1735	1728	1728	1721	1718	1741
1988	1704	1706	1711	1706	1705	1705	1696	1692	1698	1690	1688	1674	1698
1989	1663	1660	1624	1635	1629	1638	1664	1650	1640	1611	1609	1627	1637
1990	1638	1638	1623	1608	1616	1630	1651	1648	1668	1666	1673	1673	1644
1991	1689	1682	1617	1631	1630	1540	1555	1611	1642	1638	1632	1641	1626
1992	1630	1635	1659	1677	1665	1689	1702	1696	1684	1693	1688	1697	1676
1993	1692	1692	1690	1708	1705	1711	1704	1707	1714	1709	1712	1709	1705
1994	1705	1696	1697	1703	1708	1711							1703

Multiply table entries by 100 to obtain hourly counting rate for Huancayo, Peru: S12 W75, Alt=3400m, Cutoff Rigidity=12.92GV (1980). NOTE: Secular changes in the Earth's magnetic field resulted in a slow lowering of the geomagnetic cutoff rigidity at Huancayo over the 40 year period. This dataset was adjusted by applying a linear time-correction based on the calculated change in response to the change in the vertical cutoff. * Data from Jan 92 on are from the 18-NM64 at Haleakala, Hawaii: N20 W156, Alt=3030m, Cutoff Rigitity=12.91GV (1980). Multiply table entries by 2057.6 to obtain equivalent Haleakala counting rate.

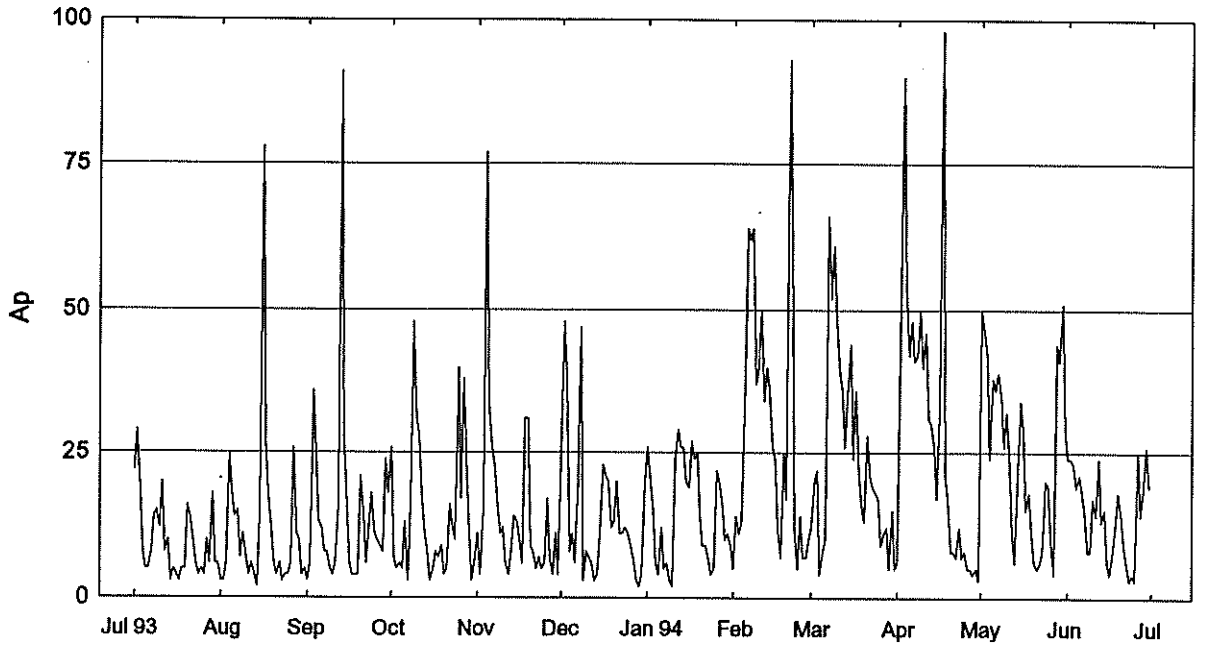
GEOMAGNETIC ACTIVITY INDICES

June 1994

Day		Kp Three-Hourly Indices 1	2	3	4	5	6	7	8	Sum	Ap	Cp	Km Three-Hourly Indices 1	2	3	4	5	6	7	8	aa Provisional Am	N	S	M
1		3+	4	4+	4	3+	3-	4	4	30-	24	1.1												
2	D3	4+	3-	3+	4	3	4+	4+	4	30	24	1.2												
3	D5	3+	4-	3	3-	4-	4-	5	4	29	23	1.1												
4		4-	3	3+	3+	3-	3+	3	4+	27-	19	1.0												
5		3-	3	3	4-	3+	4-	4+	4+	28	21	1.1												
6		3+	3-	3-	3+	3	3+	4+	4-	26+	18	1.0												
7		3	3-	3+	3	3	2+	3	3+	24-	15	0.8												
8	Q9A	3	2	2-	2+	2	2+	2-	2	17	8	0.4												
9	Q8A	2	2+	3	3	1+	2	1+	1+	16+	8	0.5												
10		1+	2+	3-	4-	3	5-	3+	3+	24+	17	0.9												
11		3-	3-	3	4	2	2+	3-	3+	23-	14	0.8												
12	D4	3+	3+	4-	4+	4	4+	4	3	30	24	1.2												
13		3	3-	1+	2	2+	4-	4-	3	22-	13	0.8												
14		3-	3	3	3+	3+	3	2+	3	24-	15	0.8												
15	Q5	3-	1+	2	2-	2-	1	1+	1+	13	6	0.3												
16	Q4	2-	1-	1	1	2-	1	1+	1	9+	4	0.2												
17	Q7A	1	2-	1+	2	3-	3+	1+	1+	15-	8	0.4												
18		3-	4	3-	2+	2+	3-	1+	2	20	12	0.7												
19		2-	2	3	5-	4	3-	3+	4-	25	18	1.0												
20		3-	3+	2+	2	4-	3	3	3	23	14	0.8												
21	Q10A	2+	2	3-	3-	2	2-	2	2+	18-	9	0.5												
22	Q6	2+	2+	2-	1	2+	1	1+	2-	14-	6	0.3												
23	Q1	1-	1-	0+	0	0+	1-	1	1+	5	3	0.0												
24	Q2	1+	1+	1-	1	1	1-	0+	0+	7-	4	0.1												
25	Q3	0	0+	1	0+	1+	1-	1-	2-	6	3	0.1												
26	D2	3-	4	4-	4+	4+	4+	4	3+	31-	25	1.2												
27		4	3+	4-	3-	3-	2-	2	2	22	14	0.8												
28		2+	2-	2-	2+	2	2+	4+	6-	22+	18	1.0												
29	D1	4-	5-	4-	4-	3+	4-	4+	4	31	26	1.2												
30		3+	3+	3+	3+	3+	4-	3	4	27+	19	1.0												
Mean											14	0.74												

Day	Kn Three-Hourly Indices 1	2	3	4	5	6	7	8	An	Ks Three-Hourly Indices 1	2	3	4	5	6	7	8	As	Prov Sa	Ri	Ra	Rs	IMF
1																			69.6	0	0	13	
2																			69.9	0	0	13	
3																			70.3	0	0	14	
4																			69.5	0	0	13	
5																			70.3	0	0	14	
6																			72.7	9	7	17	
7																			79.4	13	22	24	
8																			82.9	43	43	28	
9																			85.5	43	44	30	
10																			88.0	50	50	33	
11																			89.1	63	56	34	
12																			89.0	53	53	34	
13																			87.7	59	46	33	
14																			88.0	58	58	33	
15																			91.0	54	54	36	
16																			90.8	52	51	36	
17																			86.6	42	42	32	
18																			80.9	37	36	25	
19																			79.8	37	32	24	
20																			78.9	19	16	23	
21																			76.8	14	12	21	
22																			74.6	15	16	19	
23																			75.5	22	24	20	
24																			75.2	37	34	19	
25																			75.5	29	25	20	
26																			76.3	15	14	20	
27																			75.4	10	12	19	
28																			76.4	15	14	21	
29																			81.4	26	23	26	
30																			85.4	27	27	30	
Mean																			79.7	28.1	27.0	24.1	

Daily Average Indices Ap
Jul 1993 - Jun 1994



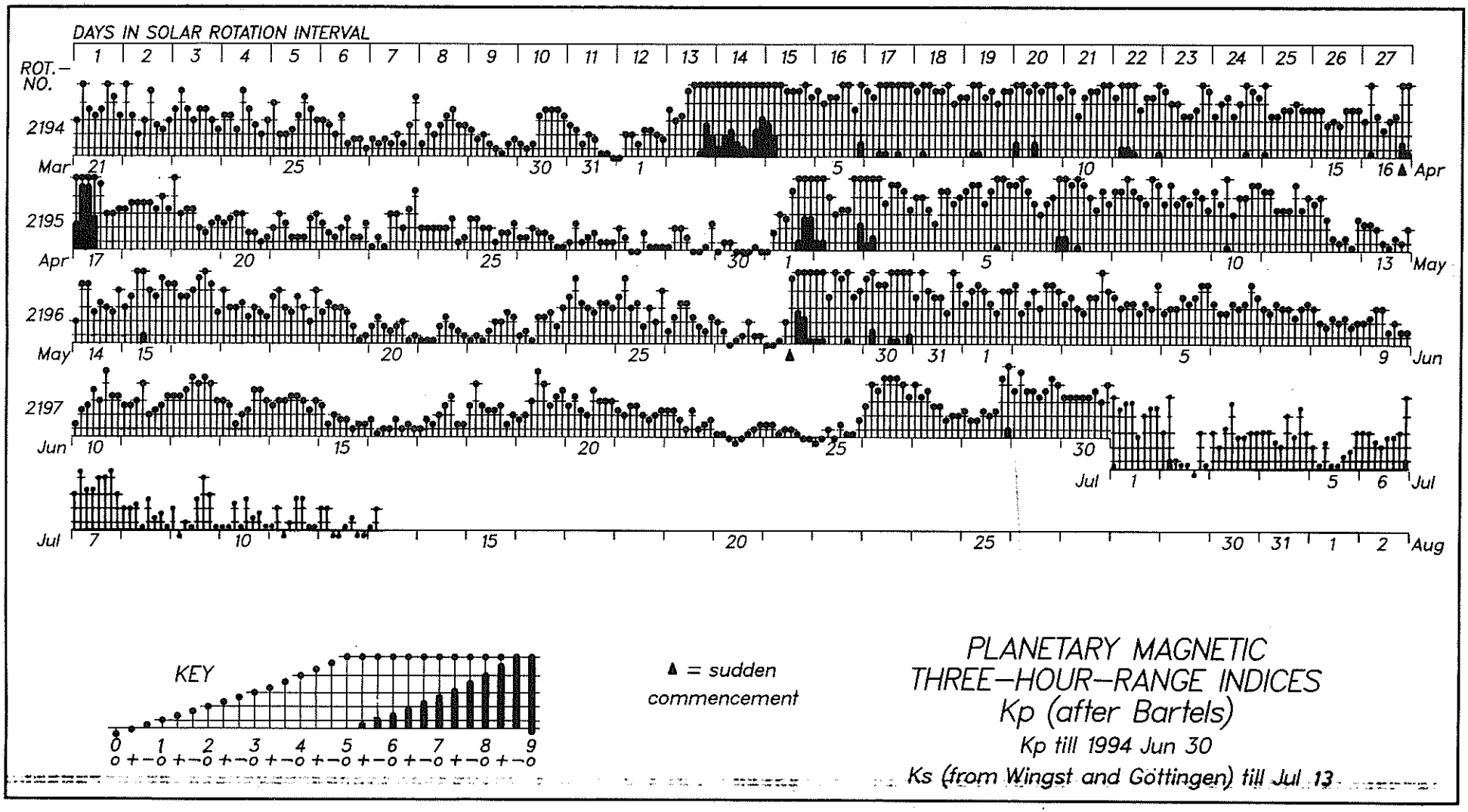
Day	Jul	Aug	Sep	Oct	Nov	Dec	Jan 94	Feb	Mar	Apr	May	Jun
1	22	3	3	26	11	29	26	5	12	6	50	24
2	29	3	6	7	4	48	21	14	20	53	46	24
3	21	6	36	5	15	37	15	11	22	90	42	23
4	8	25	25	6	77	8	6	13	4	54	24	19
5	5	18	13	5	34	11	4	32	8	42	38	21
6	5	14	12	13	26	6	12	64	10	48	36	18
7	8	15	8	3	23	20	5	62	66	41	39	15
8	14	7	8	16	17	47	6	64	52	42	35	8
9	15	11	5	48	11	3	3	37	61	50	26	8
10	12	7	4	31	12	8	2	40	48	40	32	17
11	20	4	6	28	6	7	24	50	39	46	25	14
12	8	6	16	18	4	6	29	34	36	31	11	24
13	10	4	91	11	8	3	26	40	26	30	6	13
14	3	2	28	8	14	4	26	36	35	26	19	15
15	5	14	16	3	13	11	20	26	44	17	34	6
16	4	78	6	5	10	23	19	24	24	32	29	4
17	3	27	4	8	6	21	27	12	36	98	15	8
18	5	18	4	7	31	20	24	7	21	21	18	12
19	5	12	4	9	31	12	25	25	16	17	11	18
20	16	6	21	4	9	13	14	17	13	8	6	14
21	14	4	14	5	8	20	9	93	28	8	5	9
22	10	6	6	16	5	11	9	60	21	7	6	6
23	6	3	12	12	7	11	7	12	19	12	8	3
24	4	4	18	10	5	12	4	5	18	7	20	4
25	5	4	11	40	6	11	5	14	17	8	19	3
26	4	6	10	17	17	9	22	7	9	5	10	25
27	10	26	9	38	7	7	20	7	11	5	4	14
28	6	11	8	21	4	3	16	10	12	4	44	18
29	18	10	24	11	11	2	10		5	5	41	26
30	6	4	18	3	4	4	11		15	3	51	19
31	6	5		7		20	9		5		29	
Mean	10	12	15	14	15	14	15	29	24	29	25	14

NOTE: Feb 94 data have been corrected.

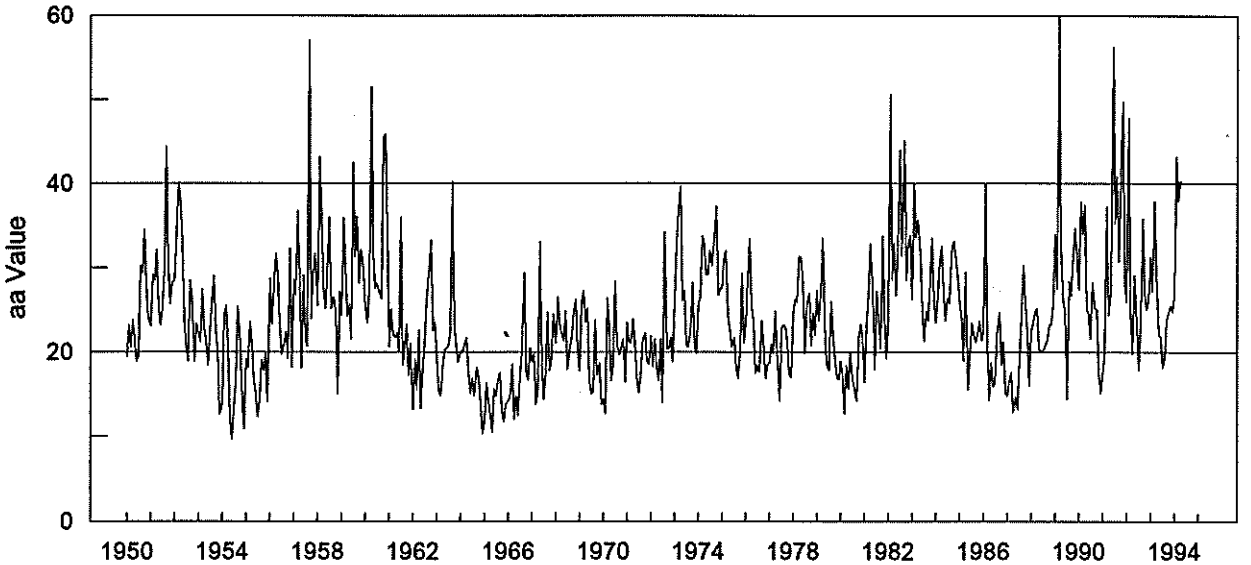
PLANETARY 3-HOUR-RANGE INDICES (Kp) BY 27-DAY SOLAR ROTATION INTERVAL

University of Gottingen

Kp through June 30, 1994



Monthly Mean aa Index Jan 1950 - May 1994

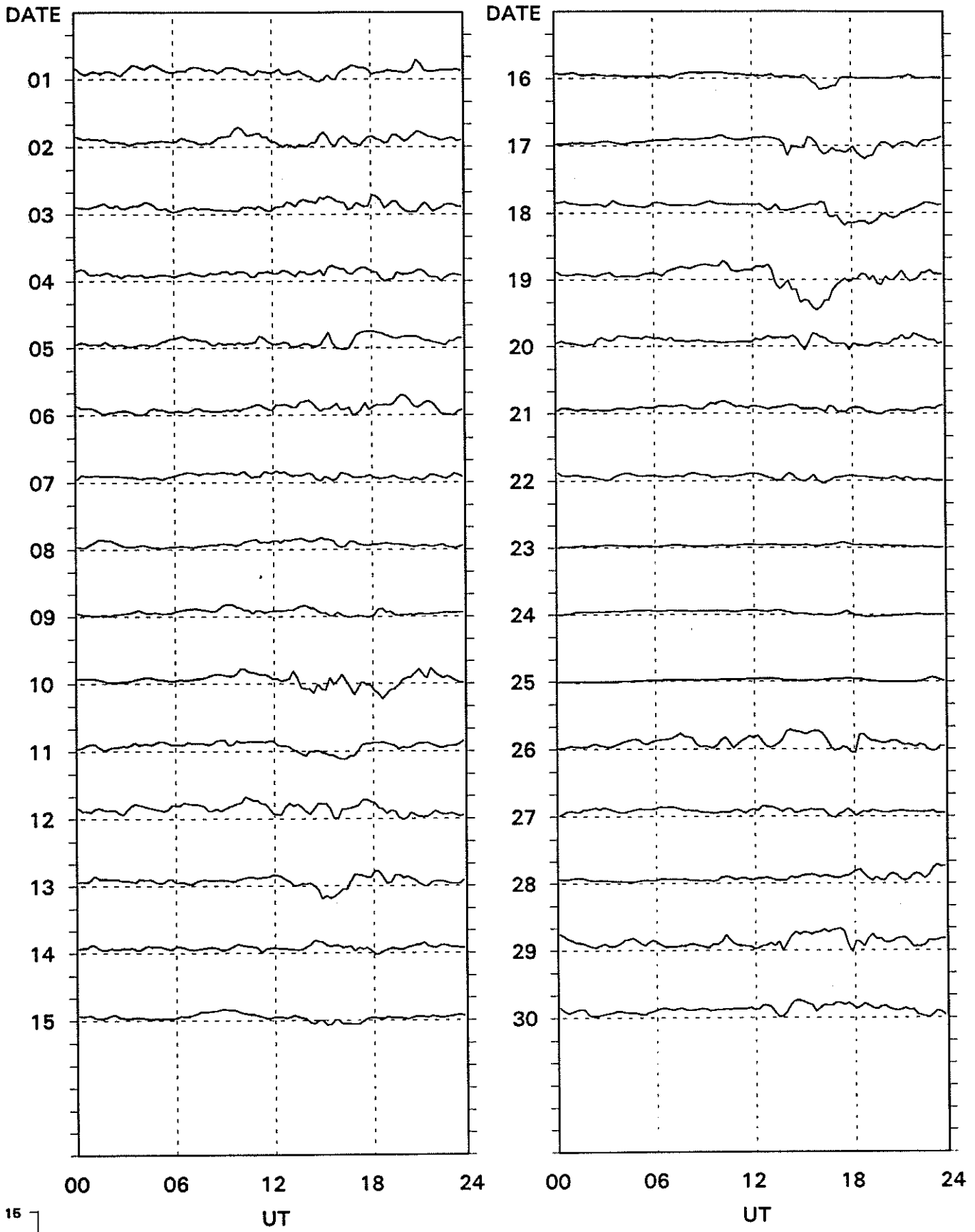


Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
1950	19.5	23.2	20.6	23.8	21.7	19.0	19.5	30.2	29.3	34.5	28.0	24.0	24.4
1951	23.1	29.2	28.5	32.1	25.5	23.2	25.2	29.7	44.4	30.3	25.7	28.2	28.8
1952	28.5	34.3	40.1	38.0	33.1	23.8	20.7	19.0	28.5	26.4	18.9	23.4	27.9
1953	22.3	21.2	27.4	22.7	21.4	18.4	22.5	26.1	29.0	22.4	20.2	12.6	22.2
1954	13.9	24.5	25.5	20.6	12.0	9.7	13.1	16.5	25.4	21.1	14.5	10.9	17.3
1955	19.3	18.2	23.6	21.1	16.7	15.1	12.3	14.3	19.1	17.8	19.9	14.1	17.6
1956	28.7	23.3	27.6	31.7	29.3	23.5	19.8	20.7	22.4	19.3	32.3	18.2	24.7
1957	28.7	26.8	36.7	28.8	18.1	29.1	21.7	20.7	57.0	24.0	29.5	31.7	29.4
1958	25.5	43.2	36.1	27.6	25.2	29.7	36.0	25.1	26.5	24.7	15.0	27.2	28.5
1959	24.3	35.9	29.9	24.2	25.7	21.6	42.5	31.2	36.1	28.2	32.1	30.8	30.2
1960	25.2	23.5	27.6	51.5	31.6	27.6	28.1	27.2	26.4	45.6	45.9	34.5	32.9
1961	20.6	25.1	22.0	21.8	22.3	20.1	36.0	18.5	20.7	23.3	17.3	21.1	22.4
1962	13.2	19.2	15.5	22.6	13.4	18.1	21.0	26.2	29.8	33.3	22.5	23.5	21.5
1963	19.3	15.3	14.9	18.2	20.4	20.5	20.8	22.5	40.2	23.5	20.7	18.9	21.3
1964	20.1	20.1	21.0	21.7	17.5	15.1	16.9	14.8	18.2	16.9	13.8	10.3	17.2
1965	11.8	16.3	14.3	12.6	10.5	15.7	14.7	16.8	17.5	13.1	11.7	13.8	14.1
1966	14.2	14.8	18.6	12.0	14.8	12.5	17.1	20.0	29.4	17.5	16.8	20.5	17.3
1967	18.9	19.8	13.8	15.5	33.1	18.6	14.4	17.5	24.7	17.8	18.9	24.5	19.8
1968	21.1	26.5	23.3	22.2	21.4	24.9	18.0	20.1	22.0	24.8	26.2	20.3	22.6
1969	17.8	25.8	27.3	23.6	25.2	16.7	15.0	15.3	23.8	17.2	18.7	13.8	20.0
1970	14.4	12.7	26.4	23.1	16.6	18.3	28.4	21.0	19.7	20.6	21.6	16.5	19.9
1971	23.5	21.2	21.1	23.9	21.1	17.0	15.2	17.1	21.4	22.2	18.8	18.6	20.1
1972	21.9	18.3	21.5	18.1	16.6	21.5	14.0	34.2	20.4	20.4	21.8	18.9	20.6
1973	26.1	32.7	36.9	39.6	26.1	27.3	20.9	20.6	22.8	28.2	20.7	19.9	26.8
1974	25.8	26.4	33.7	32.9	29.2	29.2	32.0	30.2	33.7	37.3	26.8	27.5	30.4
1975	27.6	31.1	32.0	24.3	22.7	20.7	21.7	18.1	16.9	20.2	29.3	21.1	23.8
1976	23.3	28.5	33.4	25.4	23.7	17.5	18.4	17.7	23.7	20.4	16.9	18.6	22.3
1977	18.7	21.0	19.9	24.9	20.1	14.2	22.9	23.2	23.0	20.9	17.3	17.0	20.3
1978	24.6	26.2	25.9	31.3	31.2	28.3	19.9	25.6	27.0	20.8	24.6	22.0	25.6
1979	27.3	23.7	26.9	33.5	21.0	18.3	17.9	26.0	22.0	19.3	17.1	16.8	22.5
1980	19.0	17.3	12.7	18.4	15.6	20.0	17.0	15.9	14.2	21.9	23.3	21.7	18.1
1981	16.5	23.1	26.6	32.8	26.9	18.0	27.2	24.0	20.4	33.7	24.1	19.3	24.4
1982	24.2	50.6	28.5	32.9	26.7	32.1	43.9	31.4	45.1	28.5	33.0	33.8	34.2
1983	26.2	40.0	33.6	35.7	31.6	24.9	21.3	24.9	23.7	28.3	33.5	26.0	29.1
1984	23.5	26.7	30.7	32.5	27.2	23.7	26.4	25.8	32.6	33.1	31.0	29.0	28.5
1985	25.7	24.1	19.0	29.5	15.6	19.9	23.4	22.0	21.2	22.2	23.7	21.4	22.3
1986	22.4	40.0	21.1	14.3	18.8	15.9	16.3	22.3	24.7	18.6	21.2	15.3	20.9
1987	14.8	16.6	17.6	12.9	14.7	13.2	19.3	24.3	30.3	25.8	22.4	16.0	19.0
1988	22.4	23.4	24.8	25.2	20.5	20.0	20.2	20.6	21.4	23.2	23.3	25.5	22.5
1989	33.9	27.5	60.1	32.8	25.7	24.9	14.4	28.4	26.7	31.4	34.7	31.4	31.0
1990	27.4	37.8	33.9	37.4	25.1	24.6	21.6	28.2	25.1	25.1	17.4	15.2	26.6
1991	17.2	20.1	37.3	24.3	27.3	56.2	35.2	40.8	30.7	44.1	49.7	28.0	34.2
1992	25.9	47.7	24.5	19.8	29.1	24.8	17.9	24.1	35.8	27.0	25.0	26.1	27.3
1993	31.2	27.1	37.9	29.2	22.1	21.8	18.2	19.2	23.8	24.6	25.5	24.8	25.5
1994	26.5	43.2	37.9	40.2	40.2								37.6

114
Jun 94

PC-INDEX

Thule **June, 1994**



Preliminary Values. 15-min. Values. Div. Geophys. D M I

P R I N C I P A L M A G N E T I C S T O R M S

JUNE 1994

Sta	Geomag Lat	Commencement Day	Time (UT)	Type	SC Amplitudes D (Min)	H (Gamma)	Z (Gamma)	Maximum 3-Hour K Index Day(3-Hour Periods)	K	Ranges D (Min)	H (Gamma)	Z (Gamma)	End Day	Hour (UT)
UJJ	13.6N	01	2000	..	..	..	..		-	5	77	22	03	20
ABG	09.4N	01	2000	..	..	..	..	01(4,8) 02(4)	4	5	73	35	03	20
HYB	07.6N	01	0400	..	..	..	..	02(4)	5	5	81	19	03	23
GUA	04.3N	01	07--	..	..	..	..	01(4)	5	--	50	10	01	17
TRD	01.1S	01	2000	..	..	..	..		-	4	114	77	03	20
GUA	04.3N	03	21--	..	..	..	..	03(8)	5	--	20	10	04	04
UJJ	13.6N	10	0700	..	..	..	..		-	5	92	23	11	12
ABG	09.4N	10	0700	..	..	..	..	03(6,7) 05(6,7)	4	5	93	29	11	12
HYB	07.6N	10	0500	..	..	..	..	12(4)	5	5	120	27	13	04
ETT	00.7S	10	0300	..	..	..	..		-	5	240	45	11	12
TRD	01.1S	10	0700	..	..	..	..		-	4	138	58	11	12
CZT	51.5S	10	05--	..	..	..	..	11(8) 12(1,6)	4	23	72	26	15	00
PAF	57.2S	10	05--	..	..	..	..	10(7) 11(8) 12(1,5,6) 13(6)	4	26	154	75	15	06
DRV	75.2S	12	1006	SC	-304	-272	- 64	12(4,6,7)	5	462	332	509	14	09
HYB	07.6N	19	0400	..	..	..	..	19(4,5)	4	5	90	17	21	22
GUA	04.3N	19	06--	..	..	..	..	19(5)	5	--	80	10	19	18
GUA	04.3N	19	22--	..	..	..	..	19(8)	5	--	40	30	20	08
PAF	57.2S	19	05--	..	..	..	..	19(4,5,7,8) 20(2,6,7,8)	3	14	88	66	21	03
FRD	49.4N	26	04--	..	..	..	..	26(6) 28(7) 29(2) 01(8) 02(2,3)	5	20	130	46	03	--
UJJ	13.6N	26	0400	..	..	..	..		-	8	100	43	27	15
ABG	09.4N	26	0400	..	..	..	..	12(4) 19(4)	5	7	124	41	27	15
HYB	07.6N	26	0000	..	..	..	..	26(4,6)	5	7	128	22	27	21
ETT	00.7S	26	0000	..	..	..	..		-	6	182	45	27	20
TRD	01.1S	26	0400	..	..	..	..		-	6	140	61	27	15
AMS	46.8S	26	02--	..	..	..	..	28(8)	5	21	99	41	03	00
CZT	51.5S	26	02--	..	..	..	..	26(7) 28(8) 30(7) 01(7)	5	33	92	64	04	21
PAF	57.2S	26	02--	..	..	..	..	26(7) 28(8) 01(7,8)	5	35	273	199	03	15
DRV	75.2S	26	0010	SC	- 8	14	18	27(5)	6	567	405	440	27	18
UJJ	13.6N	28	1800	..	..	..	..		-	7	75	45	29	22
ABG	09.4N	28	1800	..	..	..	..	26(4,6,7) 29(2)	4	6	82	51	29	22
GUA	04.3N	28	20--	..	..	..	..	28(8)	5	--	40	10	29	12
ETT	00.7S	28	0100	..	..	..	..		-	5	143	54	30	11
TRD	01.1S	28	1800	..	..	..	..		-	--	--	--	29	22
DRV	75.2S	29	1557	SC	8	4	18	30(4) 02(4)	6	594	509	587	04	12

Stations:

ABG = ALIBAG
AMS = MARTIN DE VIVIES
ANN = ANNAMALAINAGAR
BJI = BEIJING
CAN = CANBERRA
CMO = COLLEGE
CZT = PORT ALFRED
DRV = DUMONT D'URVILLE
ETT = ETAIYAPURAM
FRD = FREDERICKSBURG
GNA = GNANGARA
GUA = GUAM
HER = HERMANUS
HON = HONOLULU
HYB = HYDERABAD
JAI = JAIPUR
KRC = KARACHI
PAF = PORT AUX FRANCAIS
PMG = PORT MORESBY
SHL = SHILLONG
SIT = SITKA
TRD = TRIVANDRUM
UJJ = UJJAIN

No storms reported by stations BJI, CAN and HER.

MAGNETIC STORM SUDDEN COMMENCEMENTS AND SOLAR FLARE EFFECTS (PRELIMINARY REPORT ON RAPID MAGNETIC VARIATIONS)

JUNE 1994

Storm Sudden Commencements (SSC)

Day	Time	Quality: Station Group*
None		

Solar Flare Effects (sfe)

Day	Begin-End	Station(s)
01	0612-0618	MPO
02	0539-0546	MPO
02	0809-0815	MPO
02	0839-0844	MPO
03	0754-0800	MPO
06	2345-0051	MPO
07	0603-0609	MPO
07	1139-1145	MPO
09	0927-0936	BDV MPO
10	0557-0603	MPO (SSC: SPT)
14	0830-0836	MPO
14	1423-1427	MPO
25	0551-0610	CLF
25	0603-0612	BDV
27	0639-0645	MPO
28	2240-2249	QUE
29	0504-0509	MPO
30	1304-1311	QUE
30	2107-2130	MMB KAK KNY

REPORTING OBSERVATORIES (up to the 2nd of August):
SOD DOB NUR LER ESK WNG NGK HAD BDV CLF HRB NAG GCK MMB EBR COI BJI SPT FRD KAK KNY QUE TEN LNP HYB ETT MPO HER CNB AMS CZT PAF

Three-letter codes identify each observatory. Reporting stations have been grouped by the character of the observed event. The letter A means very remarkable; B means fair, but unmistakable; C means very poor, doubtful; and - means no quality figure given. The * means that the SSC, at least in one component, was preceded by a small reversed impulse. SSCs are given only when five or more stations report the event. SFEs include all reports. If an SFE is confirmed by solar or ionospheric events, the name of the station is underlined.

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."