U.S. DEPARTMENT OF COMMERCE
Ronald H. Brown, Secretary

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
D. James Baker, Administrator

NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE
Robert S. Winokur, Assistant Administrator

OCTOBER 1994 NUMBER 602 - Part I

Solar-Geophysical Data prompt reports

Data for September, August 1994, and Late Data

International Standard Serial Number: 0038-0911
Library of Congress Catalog Number: 79-640375 //r81

NATIONAL GEOPHYSICAL DATA CENTER
Michael A. Chinnery, Director
Boulder, Colorado

Subscription information is on the inside back cover.

SOLAR-GEOPHYSICAL DATA

Number 602

(Issued in Two Parts)

Editor: Helen E. Coffey

Acting Chief: Herbert W. Kroehl
Solar-Terrestrial Physics Division

Staff: Christine D. Hanchett
Edward H. Erwin

Computer Consultant:
Daniel C. Wilkinson

CONTENTS

PART I (PROMPT REPORTS) Page

DETAILED INDEX FOR 1994 2
DATA FOR SEPTEMBER 1994 ..... 3- 33
DATA FOR AUGUST 1994 35-126
LATE DATA 127-130

ERRATA: Geomagnetic Indices Mar-Apr 94
Cosmic Ray Graph Haleakala 17-20 May 1994

PART II (COMPREHENSIVE REPORTS) Page

DETAILED INDEX FOR 1994 2
DATA FOR APRIL 1994 3-24
MISCELLANEOUS DATA 25-39

SOLRAD Daily X-ray Background Mar 68-Feb 73

DETAILED INDEX OF OBSERVATIONS PUBLISHED IN SOLAR-GEOPHYSICAL DATA

CODE	KIND OF OBSERVATION	FEB 94	MAR	APR	MAY	JUN	JUL	AUG	SEP
A.	SOLAR AND INTERPLANETARY EVENTS								
A.1	Sunspot Drawings	596A 47	597A 41	598A 41	599A 41	600A 43	601A 45	602A 50	
A.2aa	International Provisional Sunspot Numbers	595A 25	596A 28	597A 24	598A 25	599A 24	600A 25	601A 25	602A 24
A.2c	American Sunspot Numbers	595A 25	596A 28	597A 24	598A 25	599A 24	600A 25	601A 25	602A 24
A.3a	Mt. Wilson Magnetograms	596A 47	597A 41	598A 41	599A 41	600A 43	601A 45	602A 50	
A.3b	Sunspot Mag Class and Regions	596A 90	597A 88	598A 87	599A 88	600A 89	601A 92	602A 98	
A.3c	Kitt Peak Magnetograms	596A 47	597A 41	598A 41	599A 41	600A 43	601A 45	602A 50	
A.3d	Mean Solar Magnetic Field (Stanford)	595A 33	596A 37	597A 31	598A 31	599A 31	600A 33	601A 33	602A 31
A.3e	Stanford Magnetograms	596A 47	597A 41	598A 41	599A 41	600A 43	601A 45	602A 50	
A.4	H-alpha Filtergrams	596A 47	597A 41		599A 41	600A 43	601A 45	602A 50	
A.6c	Stanford Solar Mag Field Synoptic Maps	596A 40	597A 34	598A 34	599A 34	600A 36	601A 38	602A 36	
A.6d	Kitt Peak Solar Mag Field Synoptic Maps	596A 46	597A 40	598A 40	599A 40	600A 42	601A 44	602A 48	
A.6e	Mass Ejections (Proxy data) from the Sun	600B 21	601B 24	———					
A.6f	Active Prominences and Filaments	600B 22	601B 25	602B 19					
A.6g	Sac Peak Coronal Line Synoptic Maps	596A 42	597A 36	598A 36	599A 36	600A 38	601A 40	602A 40	
A.7h	Coronal Line Emission (Sac Peak)	596A 47	597A 41	598A 41	599A 41	600A 43	601A 45	602A 50	
A.8aa	2800 MHz- Solar Flux (Penticton)	595A 25	596A 28	597A 24	598A 25	599A 24	600A 25	601A 25	602A 24
A.8ac	2800 MHz- Adj. Solar Flux (Penticton)	595A 25	596A 28	597A 24	598A 25	599A 24	600A 25	601A 25	602A 24
A.8g	Adjusted Daily Solar Fluxes (Learmonth)	595A 25	596A 28	597A 24	598A 25	599A 24	600A 25	601A 25	602A 24
A.10g	Nancay Radioheliograph - 164 MHz	596A102	597A102	598A 98	599A100	600A102	601A112	602A114	
A.11g	Solar X-ray GOES (graphs/event table)	600B 14	601B 15	602B 12					
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	596A 75	597A 72	597A 72	598A 71	599A 72	600A 73	601A 76	602A 81
A.12e	Solar Particles (IMP H & J)	Dec 88-Oct 89 in 570B 92							
A.12g	Solar Particles (GOES-7)	595A 4	596A 4	597A 4	598A 4	599A 4	600A 4	601A 4	602A 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	595A 28	596A 31	597A 27	598A 28	599A 27	600A 28	601A 28	602A 27
C.1ba	H-alpha Flare Groups	600B 4	601B 4	602B 4					
C.1d	Flare Patrol Obsevations	———	———	———	———	———	———	———	
C.1d	Flare Patrol Obsevations	600B 9	601B 10	602B 8					
C.3	Radio Bursts Fixed Frequency	600B 11	601B 12	602B 10					
C.3	Radio Bursts Fixed Frequency Selected	595A 31	596A 35	597A —	598A 30	599A 29	600A 31	601A 32	602A 30
C.4f	Radio Bursts Spectral (Sagamore Hill)	596A 99	597A 98	598A 94	599A 95	600A 97	601A103	602A107	
C.4k	Radio Bursts Spectral (Learmonth)	596A 99	597A 98	598A 94	599A 95	600A 97	601A103	602A107	
C.4l	Radio Bursts Spectral (Palehua)	596A 99	597A 98	598A 94	599A 95	600A 97	601A103	602A107	
C.4m	Radio Bursts Spectral (Ondrejov)	596A 99	597A 98	598A 94	599A 95	600A 97	601A103	602A107	
C.4n	Radio Bursts Spectral (Potsdam)	596A 99	597A 98	598A 94	599A 95	600A 97	601A103	602A107	
C.4o	Radio Bursts Spectral (San Vito)	596A 99	597A 98	598A 94	599A 95	600A 97	601A103	602A107	
C.4p	Radio Bursts Spectral (IZMIRAN)	596A 99	597A 98	598A 94	599A 95	600A 97	601A103	602A107	
C.6	Sudden Ionospheric Disturbances	596A 97	597A 96	598A 92	599A 93	600A 95	601A101	602A104	
D.	GEOMAGNETIC EVENTS								
D.1a	Geomagnetic Indices	596A109	602A128	602A129	599A108	600A110	601A120	602A120	
D.1ba	27-day Chart of Kp Indices	596A111	598A109	598A109	599A110	600A112	601A122	602A122	
D.1cb	Monthly Mean aa Indices	596A112	597A113	598A110	599A111	601A123	601A123	602A123	
D.1d	Principal Magnetic Storms	596A113	597A115	598A112	599A113	600A115	601A125	602A125	
D.1f	Sudden Commencements/Flare Effects	596A114	597A116	598A113	599A114	600A116	601A126	602A126	
D.1g	Equatorial Indices Dst	May-Jul 93 in 592A144; Aug-Dec 93 in 597A119							
D.1i	Polar Cap (PC) Index	597A118	597A114	598A111	599A112	600A114	601A124	602A124	
F.	COSMIC RAYS								
F.1a	Cosmic Ray Neutron Cts (Deep River)	596A103	597A103	598A 99	599A101	600A103	601A113	602A115	
F.1b	Cosmic Ray Neutron Cts (Climax)	596A103	597A103	598A 99	599A101	600A113	601A113	602A115	
F.1h	Cosmic Ray Neutron Cts (Thule)	596A103	597A103	598A 99	599A101	600A103	601A113	602A115	
F.1i	Cosmic Ray Neutron Cts (Kiel)								
F.1j	Cosmic Ray Neutron Cts (Tokyo)	596A103	597A103	598A 99	599A101	600A103	601A113	602A115	
F.1n	Cosmic Ray Neutron Cts (Beijing)	596A103	597A103	598A 99	599A101	600A103	601A113	602A115	
F.1b	Cosmic Ray Neutron Cts (Haleakala)	596A103	597A103	598A 99	599A101	600A103	601A113	602A115	
H.	MISCELLANEOUS								
H.60	IUWDS Alert Periods	595A 18	596A 20	597A 19	598A 20	599A 19	600A 20	601A 20	602A 19

The entry "596A 47" under Feb 1994, for example, means that the sunspot drawings for Feb 1994 appear in SOLAR-GEOPHYSICAL DATA No. 596, Part I, and that they begin on page 47. "A" denotes Part I and "B", Part II. Blanks indicate data not yet received and dashes mark unavailable data.

CONTENTS

Prompt Reports Number 602 Part I

DATA FOR SEPTEMBER 1994

Page

SOLAR-TERRESTRIAL ENVIRONMENT 4-18
Plots of GOES satellite X-rays, Particles and Magnetometer data with ground-based Boulder Magnetometer and Deep River Neutron Monitor

IUWDS ALERT PERIODS (Advance and Worldwide) 19-21

SOLAR ACTIVITY INDICES
Daily Sunspot Numbers (12 Months) 22
Daily 2800 MHz Solar Flux (12 Months) 23
Daily Solar Indices (Sunspot Numbers and Solar Flux) 24

Smoothed Observed and Predicted Sunspot Numbers 25
Graph and Table of Monthly Mean Solar Radio Flux 1950-present 26

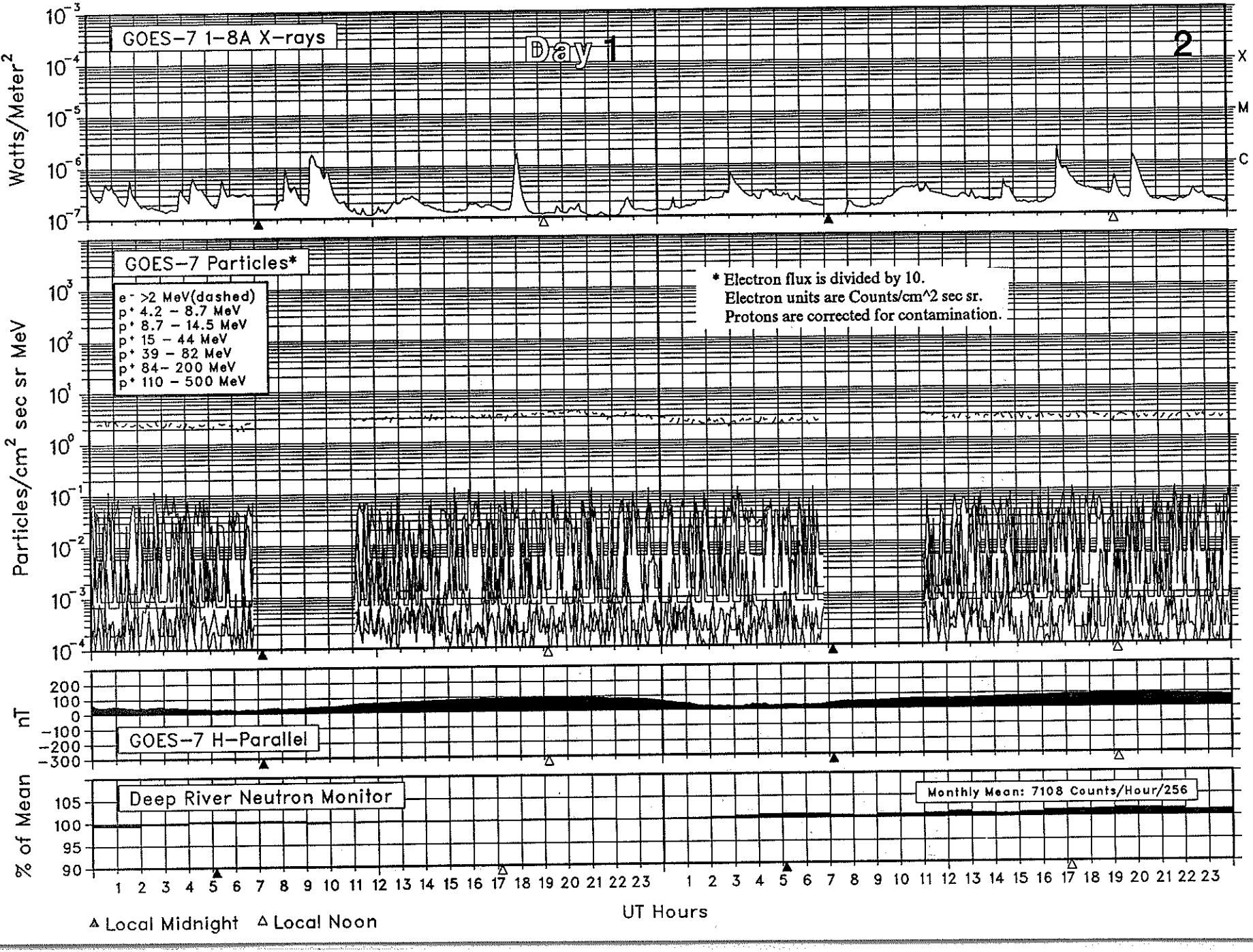
SOLAR FLARES
H-alpha Solar Flares 27-29
Intervals of No Flare Patrol (See 6-month late chart in Comprehensive Reports.)

SOLAR RADIO EMISSION
Selected Fixed Frequency Events 30
Selected Bursts (Unavailable at time of publication.)

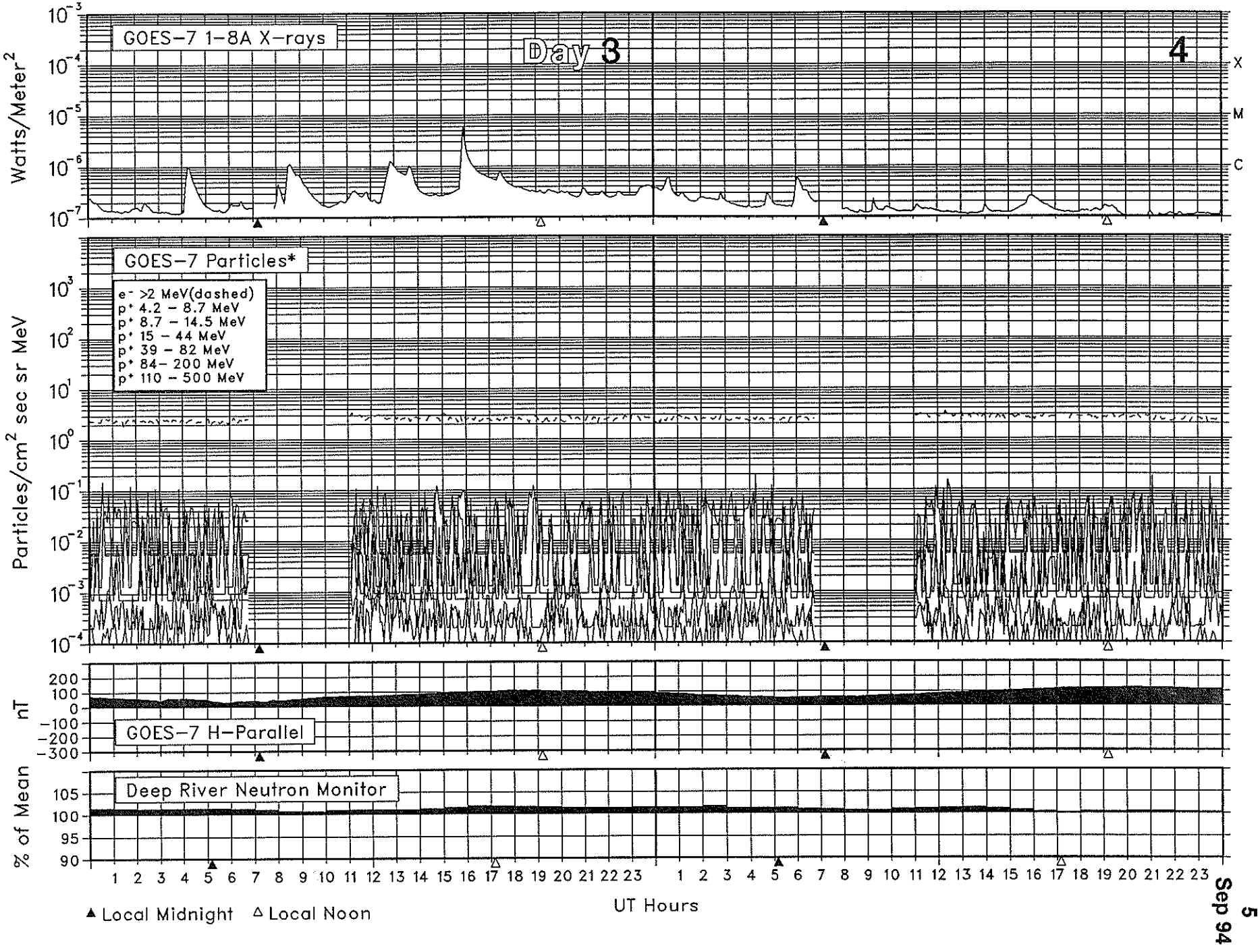
STANFORD MEAN SOLAR MAGNETIC FIELD Table 31
Graph 32

GOES-7 Daily Electron Fluence 33

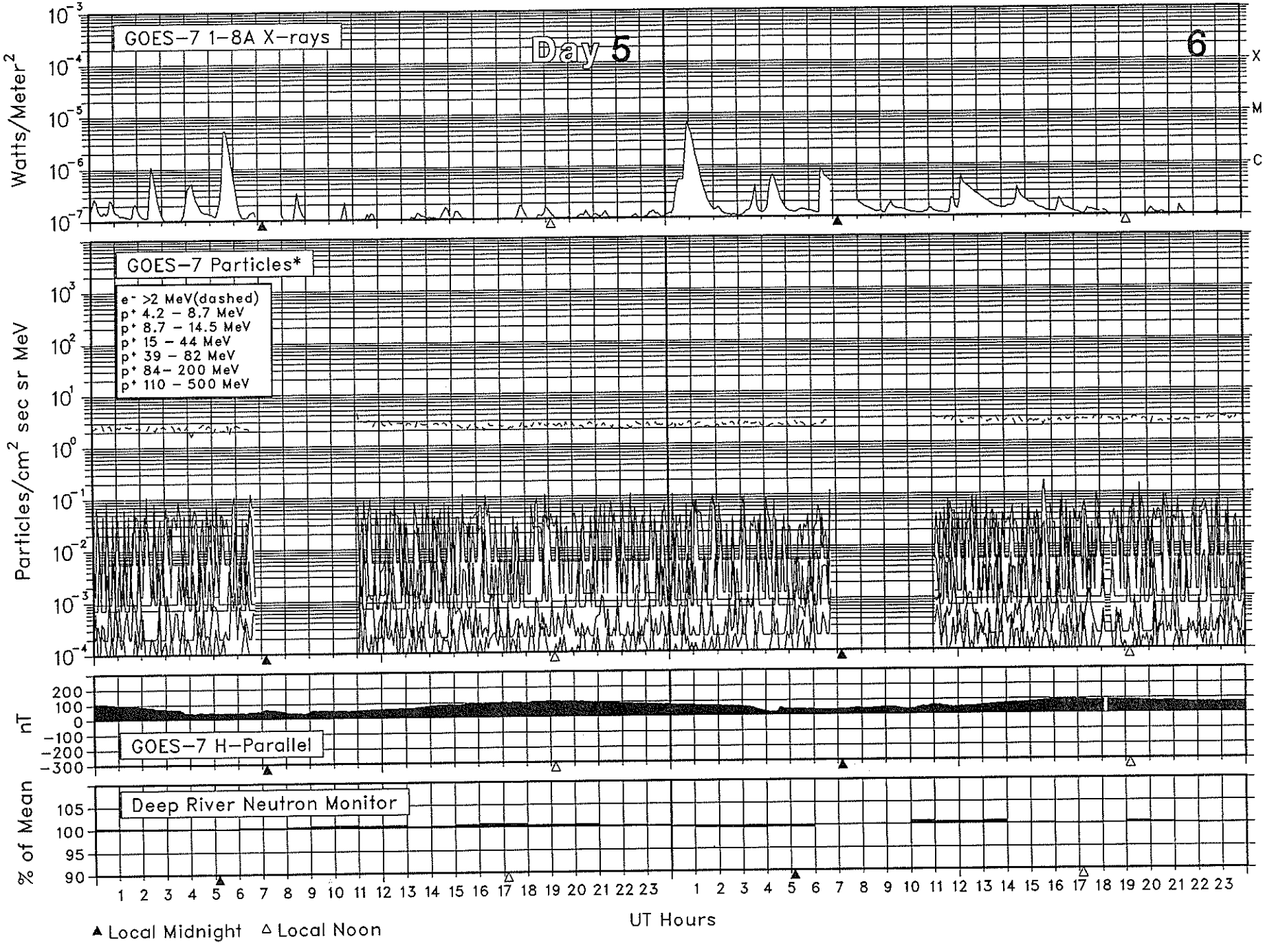
SOLAR-TERRESTRIAL ENVIRONMENT
September 1994



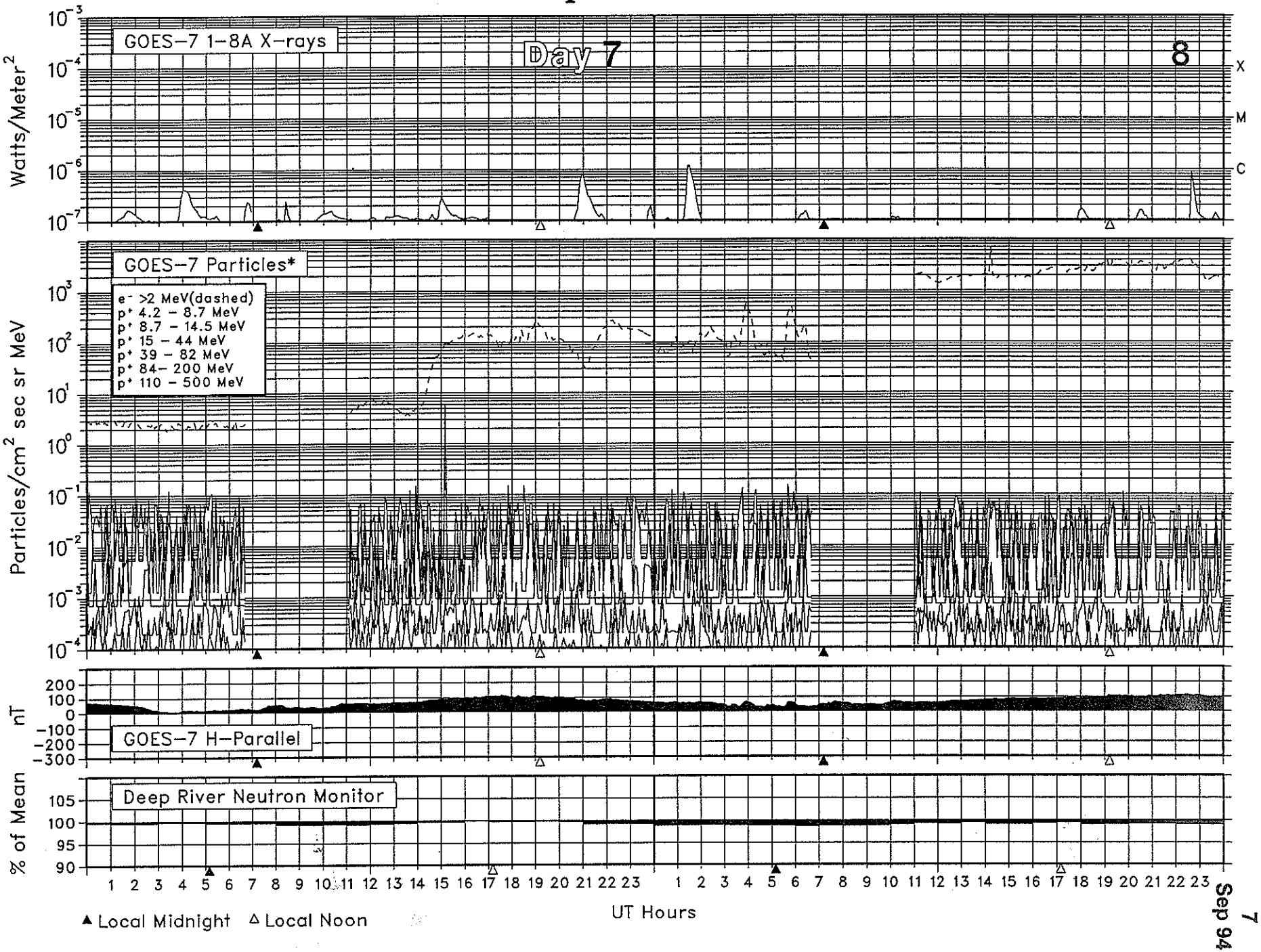
SOLAR-TERRESTRIAL ENVIRONMENT
September 1994



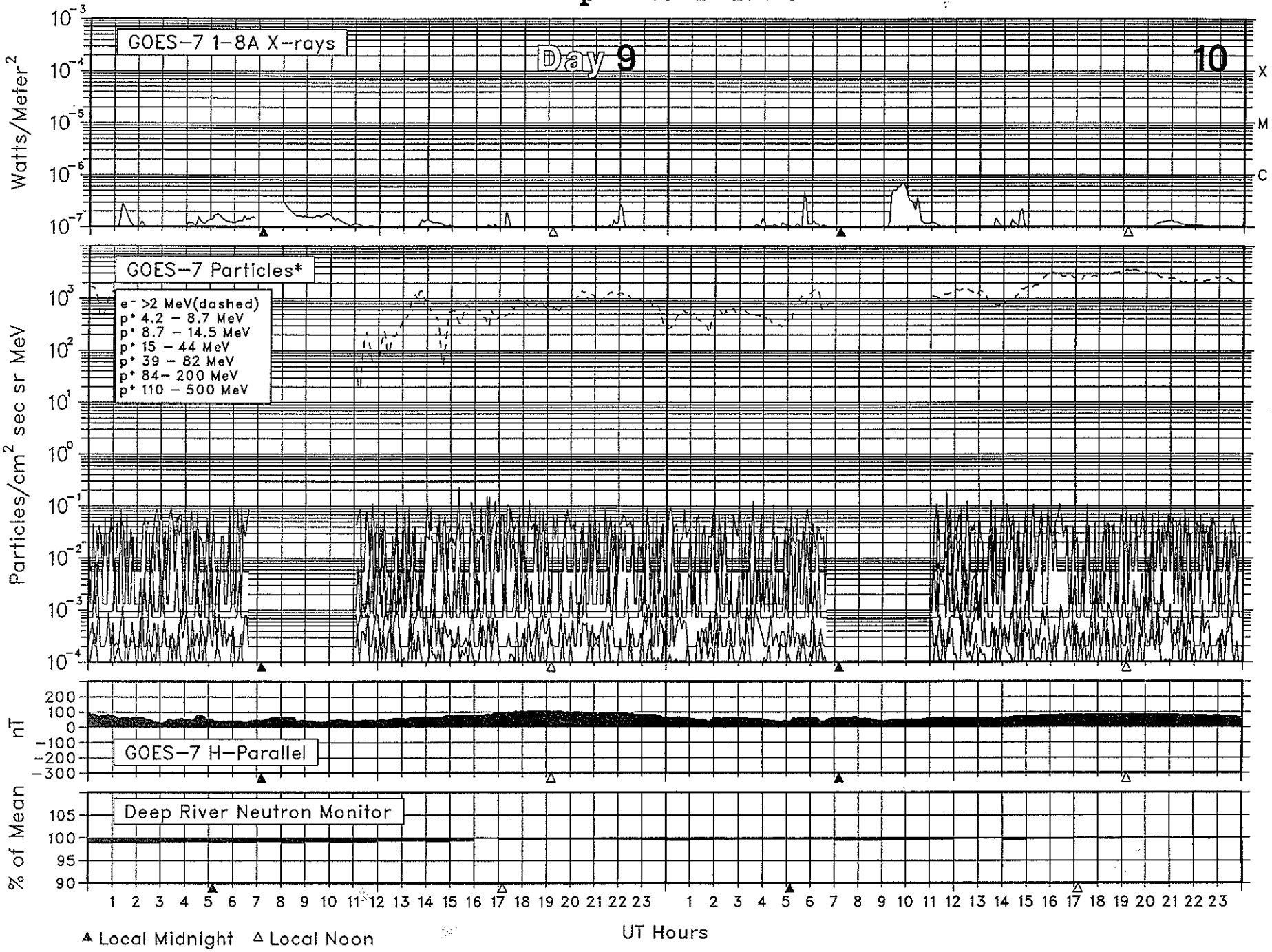
SOLAR-TERRESTRIAL ENVIRONMENT
September 1994



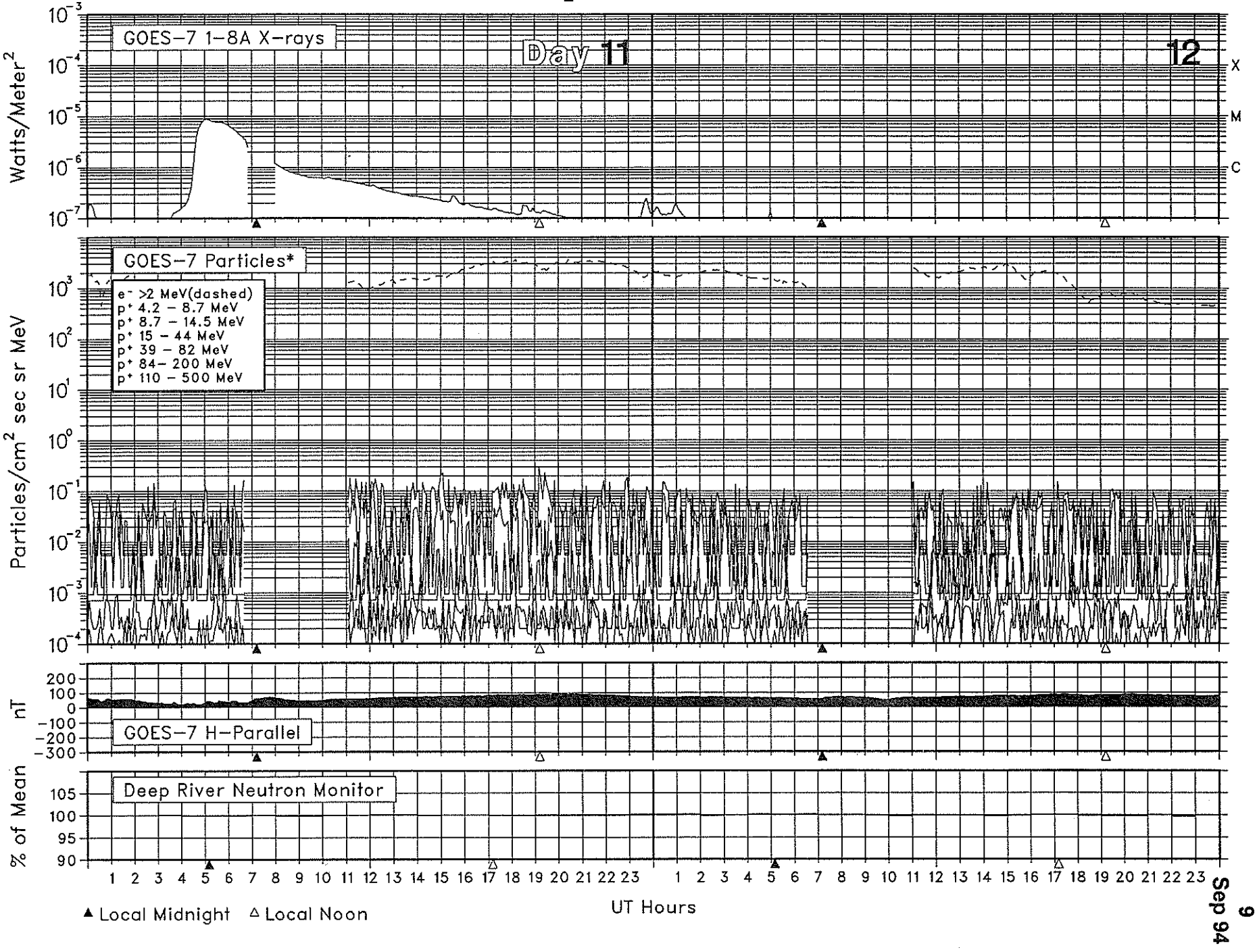
SOLAR-TERRESTRIAL ENVIRONMENT
September 1994



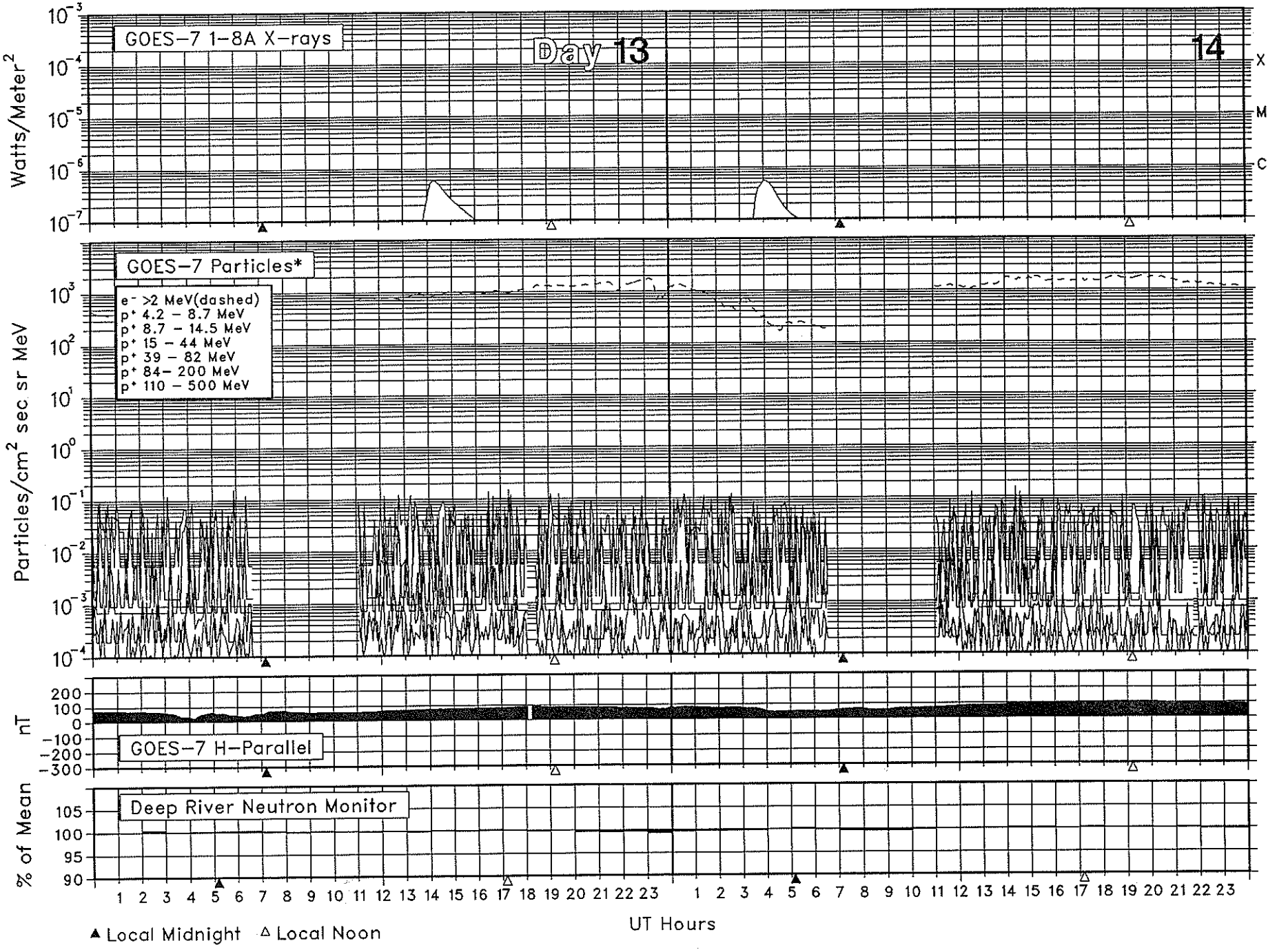
SOLAR-TERRESTRIAL ENVIRONMENT
September 1994



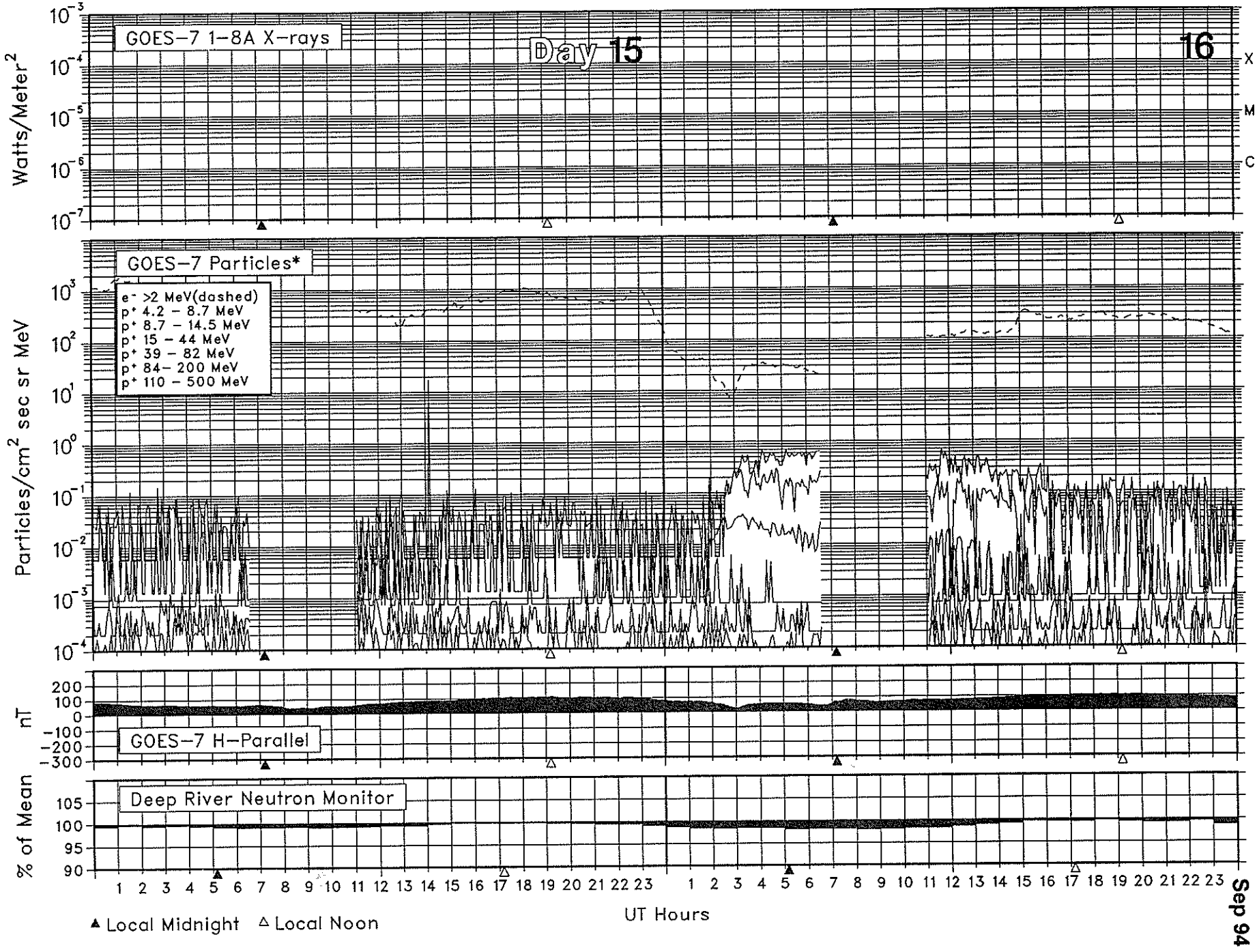
SOLAR-TERRESTRIAL ENVIRONMENT
September 1994



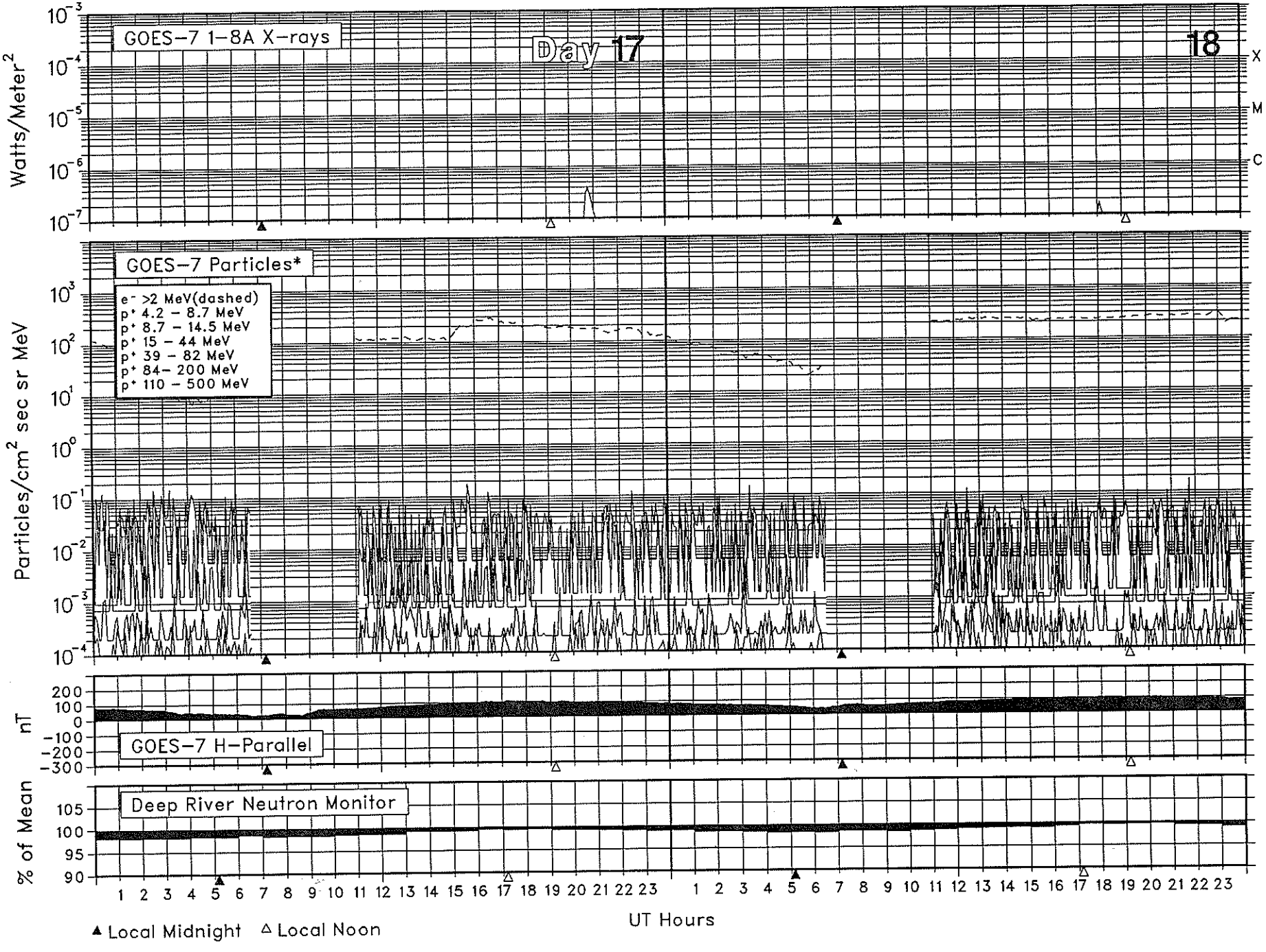
SOLAR-TERRESTRIAL ENVIRONMENT
September 1994



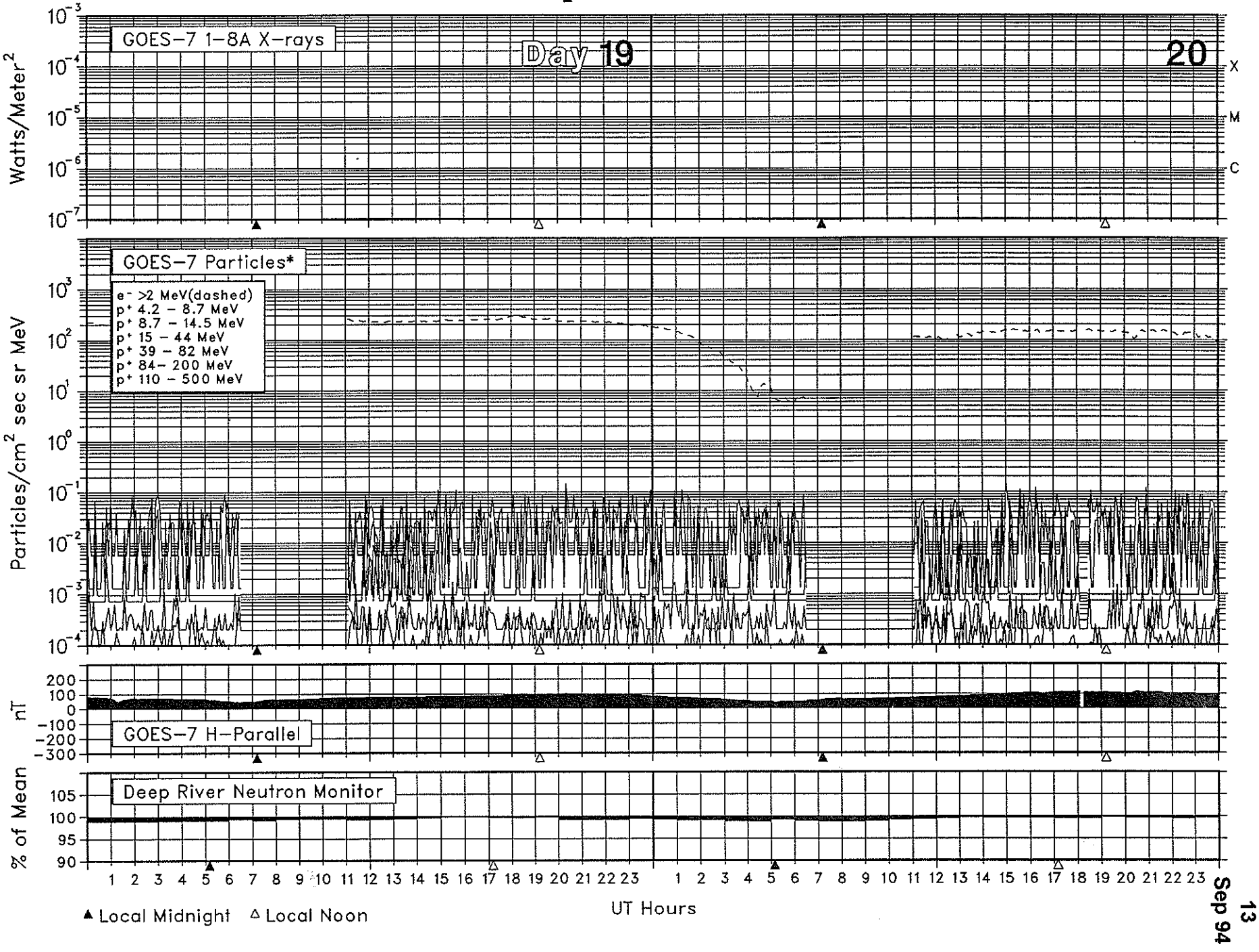
SOLAR-TERRESTRIAL ENVIRONMENT
September 1994



SOLAR-TERRESTRIAL ENVIRONMENT
September 1994

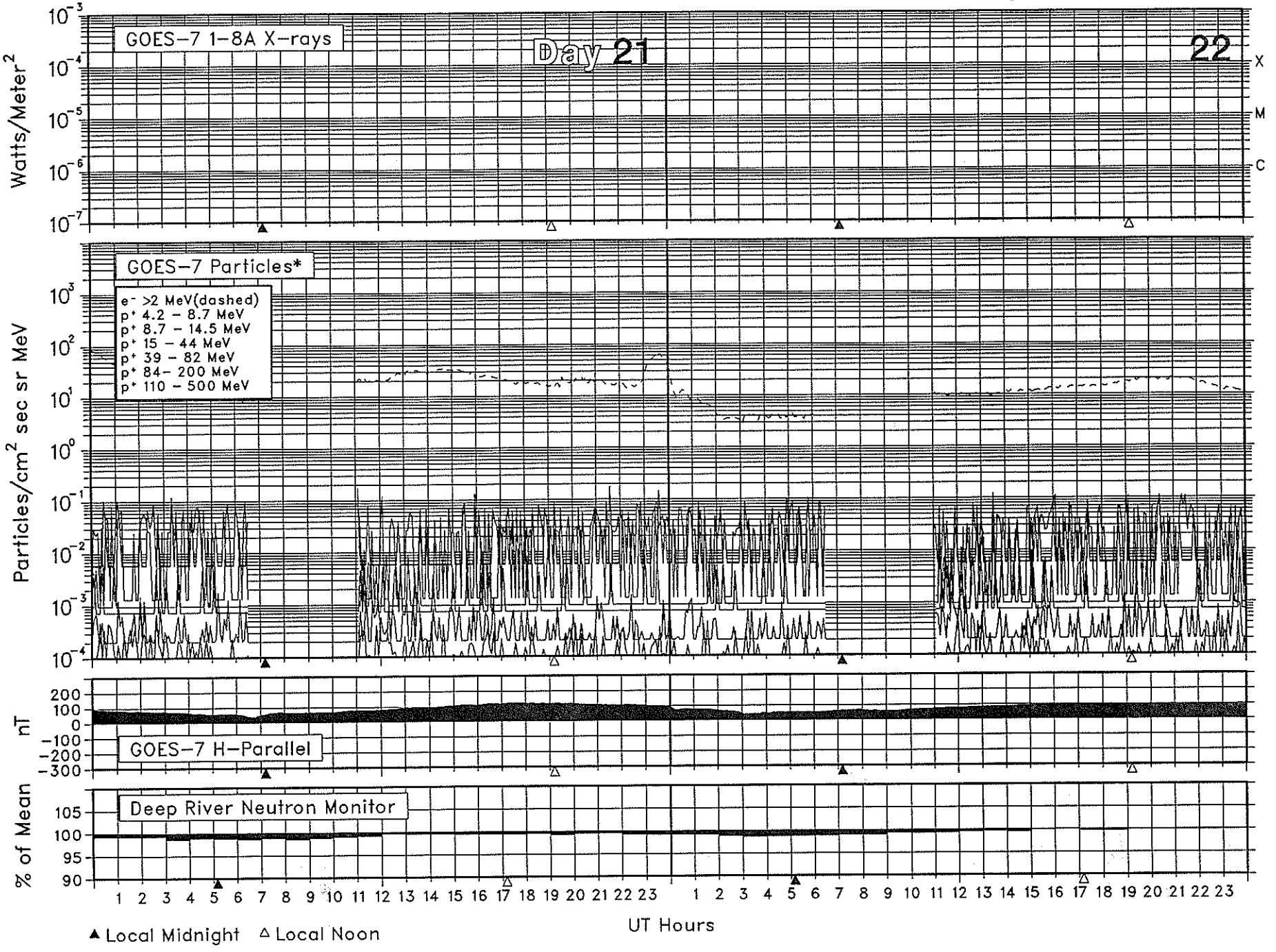


SOLAR-TERRESTRIAL ENVIRONMENT
September 1994



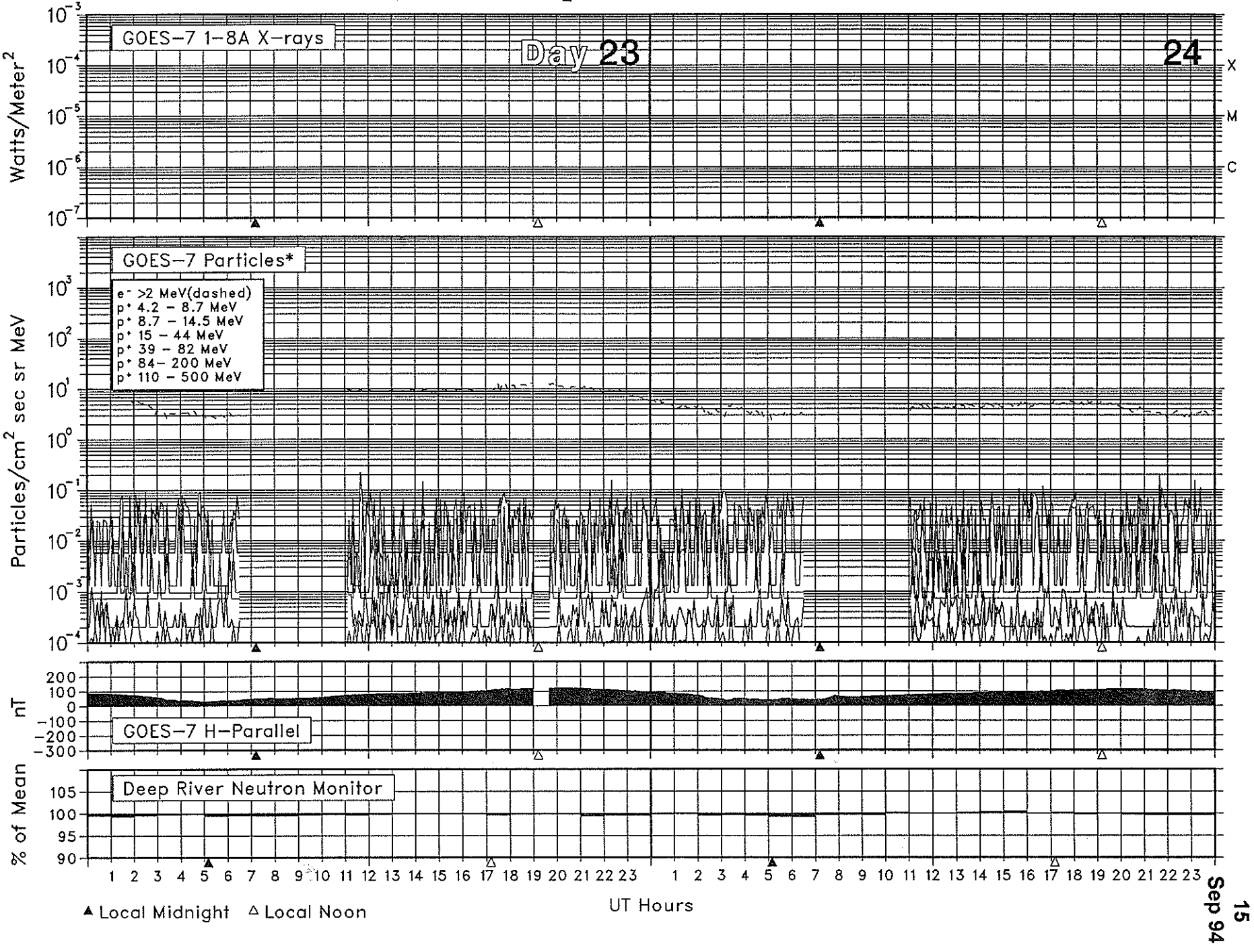
13 Sep 94

SOLAR-TERRESTRIAL ENVIRONMENT
September 1994

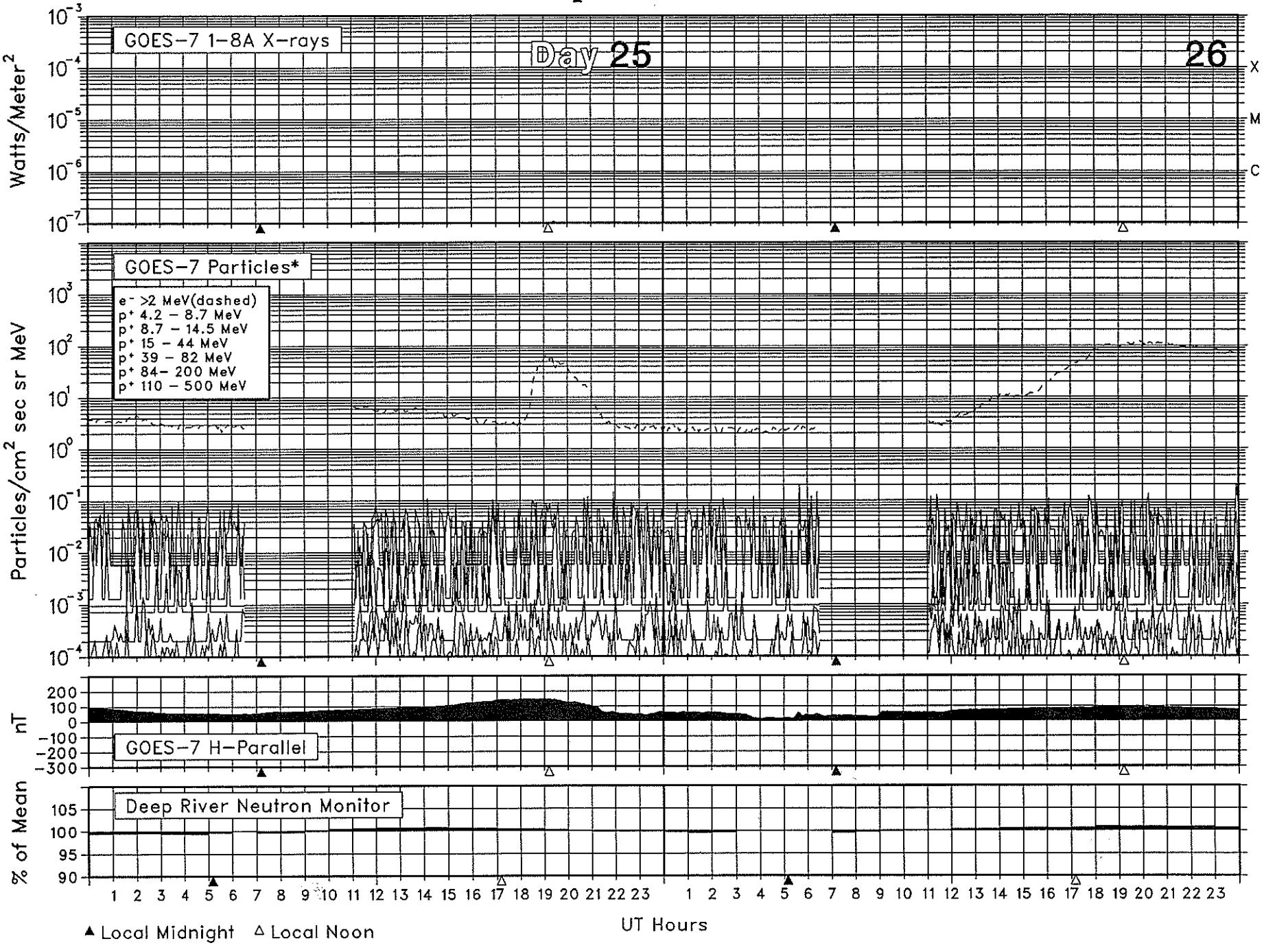


14 Sep 94

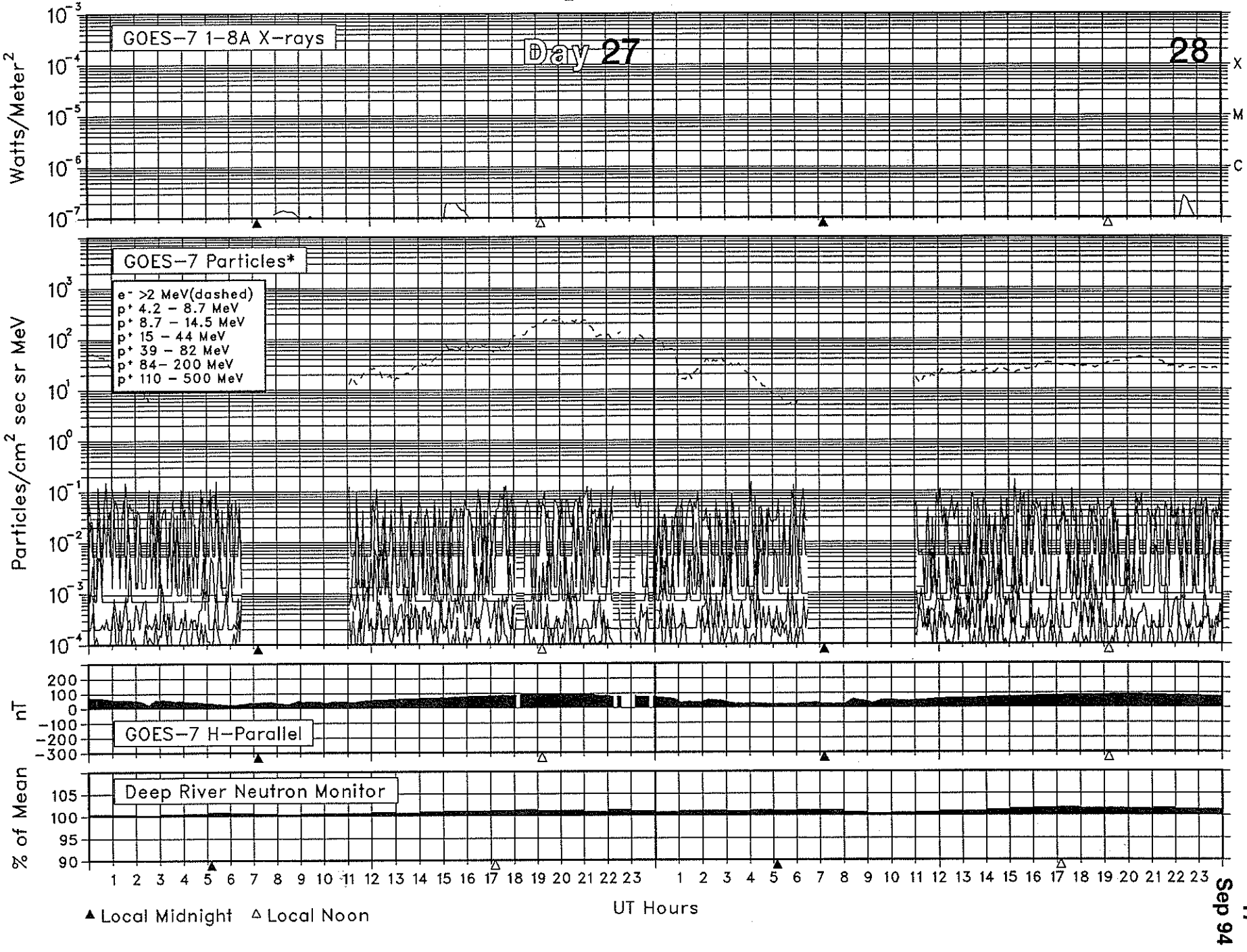
SOLAR-TERRESTRIAL ENVIRONMENT
September 1994



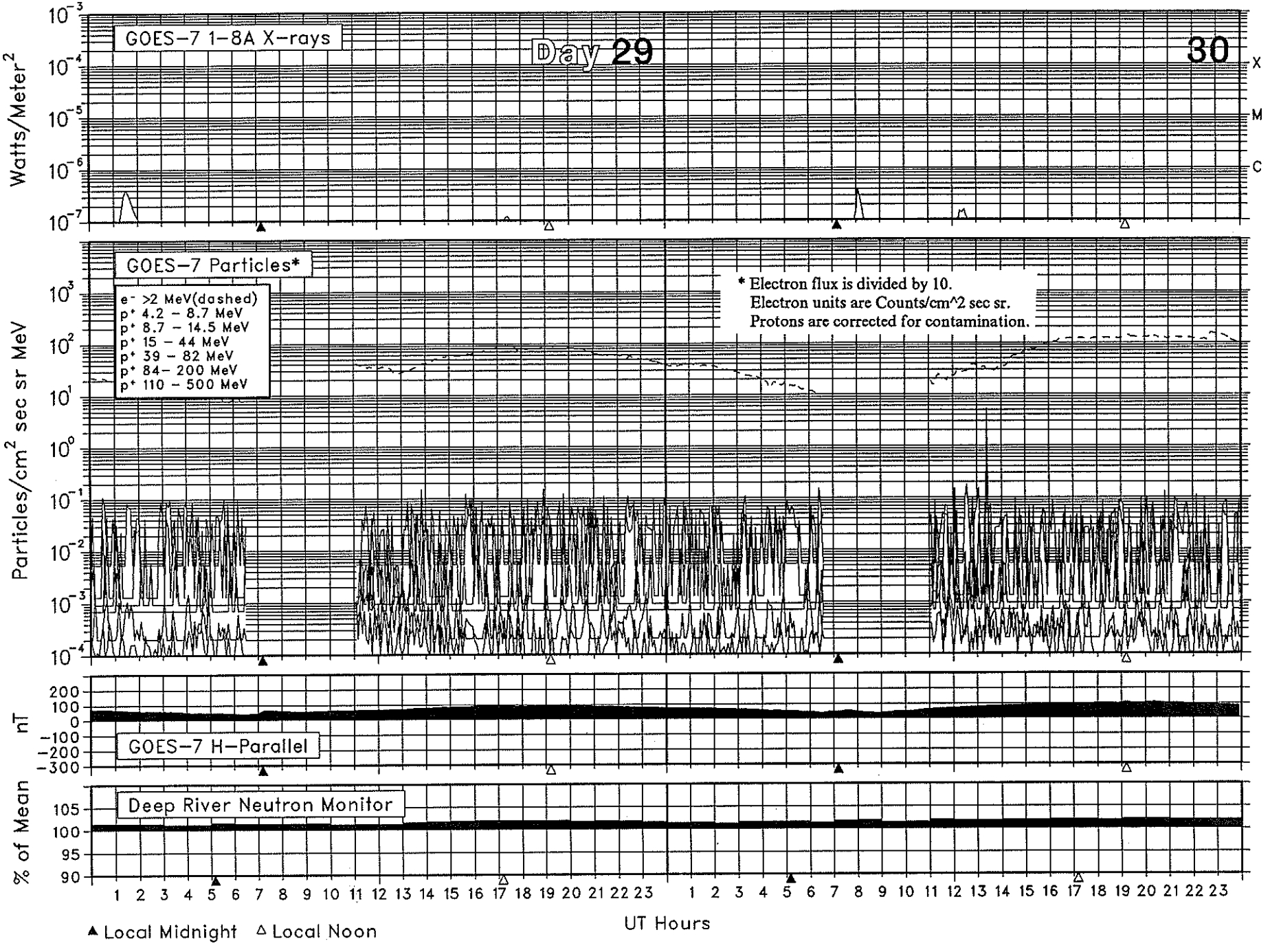
SOLAR-TERRESTRIAL ENVIRONMENT
September 1994



SOLAR-TERRESTRIAL ENVIRONMENT
September 1994



SOLAR-TERRESTRIAL ENVIRONMENT
September 1994



ALERT PERIODS

INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

Summary of the Geoalert Messages — SEPTEMBER 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]
213	01	31	014	075	8	S07	W63	0	0	0	01	Q	SOL: Quiet
							0	0	0		01	Q	MAG: Quiet
							0	0	0		01	Q	PROTON: Quiet
214	02	01	033	074	6	N03	W17	0	0	0	02	Q	SOL: Quiet
						S07	W77	0	0	0	02	Q	MAG: Quiet
						S05	W03	0	0	0	02	Q	PROTON: Quiet
215	03	02	024	075	3	S05	W16	0	0	0	03	Q	SOL: Quiet
						N06	E71	3	0	0	03	Q	MAG: Quiet
						S05	W03	0	0	0	03	Q	PROTON: Quiet
216	04	03	019	076	6	N06	E60	0	0	0	04	Q	SOL: Quiet
						N06	E71	3	0	0	04	Q	MAG: Quiet
						S05	W03	0	0	0	04	Q	PROTON: Quiet
217	05	04	021	075	2	N06	E46	0	0	0	05	Q	SOL: Quiet
						N06	E71	3	0	0	05	Q	MAG: Quiet
						S05	W03	0	0	0	05	Q	PROTON: Quiet
218	06	05	027	076	5	N06	E32	0	0	0	06	Q	SOL: Quiet
						N06	E71	3	0	0	06	Q	MAG: Quiet
						S05	W03	0	0	0	06	Q	PROTON: Quiet
219	07	06	029	075	3	N06	E18	4	0	0	07	Q	SOL: Quiet
						N06	E71	3	0	0	07	Q	MAG: Quiet
						S05	W03	0	0	0	07	Q	PROTON: Quiet
220	08	07	018	076	1	N05	E04	3	0	0	08	Q	SOL: Quiet
						N06	E71	3	0	0	08	Q	MAG: Quiet
						S05	W03	0	0	0	08	Q	PROTON: Quiet
221	09	08	018	074	2	N05	W10	0	0	0	09	Q	SOL: Quiet
						N06	E71	3	0	0	09	Q	MAG: Quiet
						S05	W03	0	0	0	09	Q	PROTON: Quiet
222	10	09	018	075	3	N05	W25	0	0	0	10	Q	SOL: Quiet
						N06	E71	3	0	0	10	Q	MAG: Active
						S05	W03	0	0	0	10	Q	PROTON: Quiet
223	11	10	033	078	12	N04	W38	0	0	0	11	Q	SOL: Quiet
						S13	W17	0	0	0	11	Q	MAG: Active
						S05	W03	0	0	0	11	Q	PROTON: Quiet
224	12	11	037	077	17	N04	W52	0	0	0	12	Q	SOL: Quiet
						S12	W31	0	0	0	12	Q	MAG: Active
						S05	E67	1	0	0	12	Q	PROTON: Quiet
225	13	12	058	081	14	N04	W67	0	0	0	13	Q	SOL: Quiet
						S07	E54	0	0	0	13	Q	MAG: Active
						S11	E16	6	0	0	13	E	PROTON: Quiet
226	14	13	059	084	22	N04	W81	0	0	0	14	Q	SOL: Eruptive
						S06	E40	0	0	0	14	Q	MAG: Active
						S11	E02	5	0	0	14	E	PROTON: Quiet
227	15	14	075	089	26	N06	W95	0	0	0	15	Q	SOL: Eruptive
						S05	E27	0	0	0	15	Q	MAG: Active
						S10	W11	7	1	0	15	E	PROTON: Quiet
						N10	E46	0	0	0	15	Q	

ALERT PERIODS

INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

Summary of the Geoalert Messages **SEPTEMBER 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]
228	16	15	061	081	13	S06 E13	0	0	0	16	Q	SOL: Eruptive
						S12 W24	5	1	0	16	E	MAG: Quiet
						N10 E32	0	0	0	16	Q	PROTON: Quiet
229	17	16	064	077	8	S06 W01	0	0	0	17	Q	SOL: Eruptive
						S11 W38	4	0	0	17	E	MAG: Active
						N09 E19	0	0	0	17	Q	PROTON: Quiet
						S13 E46	0	0	0	17	Q	
230	18	17	073	078	6	S06 W13	0	0	0	18	Q	SOL: Eruptive
						S12 W52	3	1	0	18	E	MAG: Quiet
						N09 E04	0	0	0	18	Q	PROTON: Quiet
						S12 E31	0	0	0	18	Q	
						S13 E42	0	0	0	18	Q	
231	19	18	062	077	6	S06 W27	0	0	0	19	Q	SOL: Eruptive
						S12 W66	3	1	0	19	E	MAG: Quiet
						S12 E20	1	0	0	19	Q	PROTON: Quiet
						S13 E28	0	0	0	19	Q	
232	20	19	065	075	3	S06 W41	0	0	0	20	Q	SOL: Eruptive
						S12 W77	2	1	0	20	E	MAG: Quiet
						S12 E06	0	0	0	20	E	PROTON: Quiet
						S13 E14	0	0	0	20	Q	
233	21	20	058	072	6	S06 W55	0	0	0	21	Q	SOL: Eruptive
						S13 W90	0	0	0	21	Q	MAG: Quiet
						S13 W08	2	0	0	21	E	PROTON: Quiet
						S13 E01	0	0	0	21	Q	
234	22	21	040	071	4	S08 W68	0	0	0	22	Q	SOL: Quiet
						S12 W22	0	0	0	22	Q	MAG: Quiet
						S14 W15	0	0	0	22	Q	PROTON: Quiet
235	23	22	012	071	4	S14 W36	0	0	0	23	Q	SOL: Quiet
						S12 W22	0	0	0	23	Q	MAG: Quiet
						S14 W15	0	0	0	23	Q	PROTON: Quiet
236	24	23	038	072	5	S14 W35	0	0	0	24	Q	SOL: Quiet
						N10 W47	0	0	0	24	Q	MAG: Quiet
						S07 E40	0	0	0	24	Q	PROTON: Quiet
237	25	24	050	072	4	S15 W48	0	0	0	25	Q	SOL: Quiet
						S14 W55	0	0	0	25	Q	MAG: Quiet
						N10 W60	0	0	0	25	Q	PROTON: Quiet
						S08 E26	0	0	0	25	Q	
238	26	25	015	071	12	S08 E12	0	0	0	26	Q	SOL: Quiet
						S14 W55	0	0	0	26	Q	MAG: Quiet
						N10 W60	0	0	0	26	Q	PROTON: Quiet
239	27	26	018	072	7	S08 W02	1	0	0	27	Q	SOL: Quiet
						S14 W55	0	0	0	27	Q	MAG: Quiet
						N10 W60	0	0	0	27	Q	PROTON: Quiet
240	28	27	014	071	6	S08 W14	0	0	0	28	Q	SOL: Quiet
						S14 W55	0	0	0	28	Q	MAG: Quiet
						N10 W60	0	0	0	28	Q	PROTON: Quiet
241	29	28	022	071	7	S09 W27	0	0	0	29	Q	SOL: Quiet
						N08 E76	0	0	0	29	Q	MAG: Quiet
						N10 W60	0	0	0	29	Q	PROTON: Quiet

ALERT PERIODS

INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

Summary of the Geoalert Messages — SEPTEMBER 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]
242	30	29	024	078	4	N07	E62	0	0	0	30	Q	SOL: Eruptive
						S22	E05	0	0	0	30	Q	MAG: Quiet
						N10	W60	0	0	0	30	Q	PROTON: Quiet
243	1	30	045	083	4	N07	E50	0	0	0	31	Q	SOL: Eruptive
						S23	W12	0	0	0	31	Q	MAG: Quiet
						S09	E71	9	2	0	31	A	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

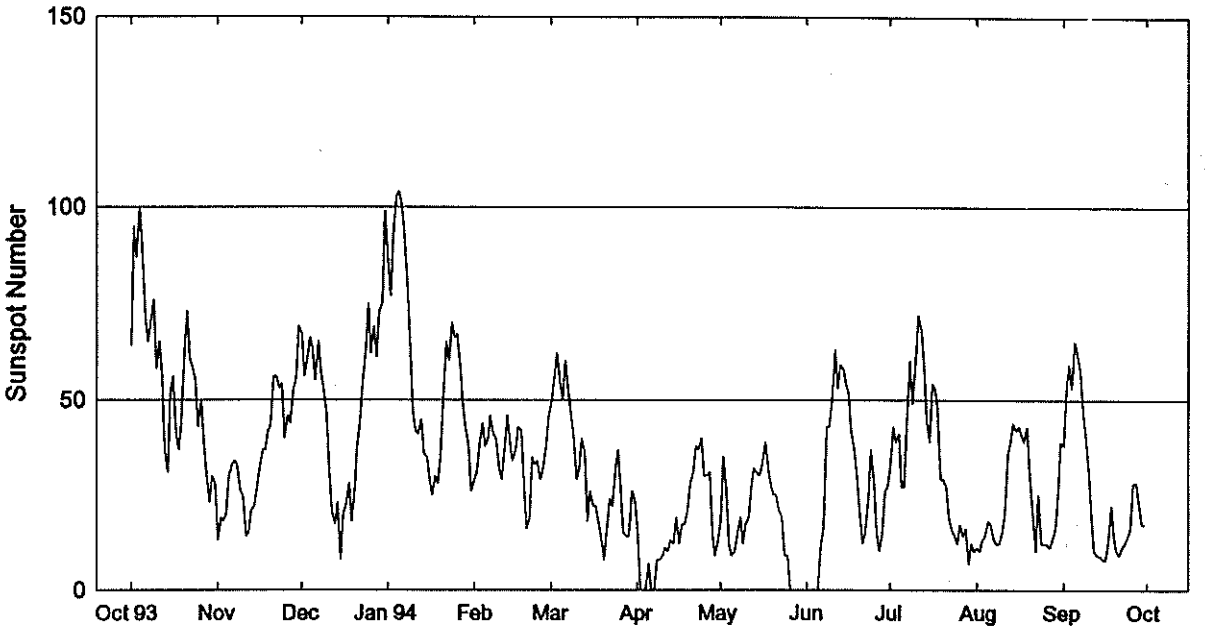
Proton Geoadvice

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

STRATWARM ALERTS

No Stratwarms Recoreded

International Relative Sunspot Numbers
Oct 1993 - Sep 1994

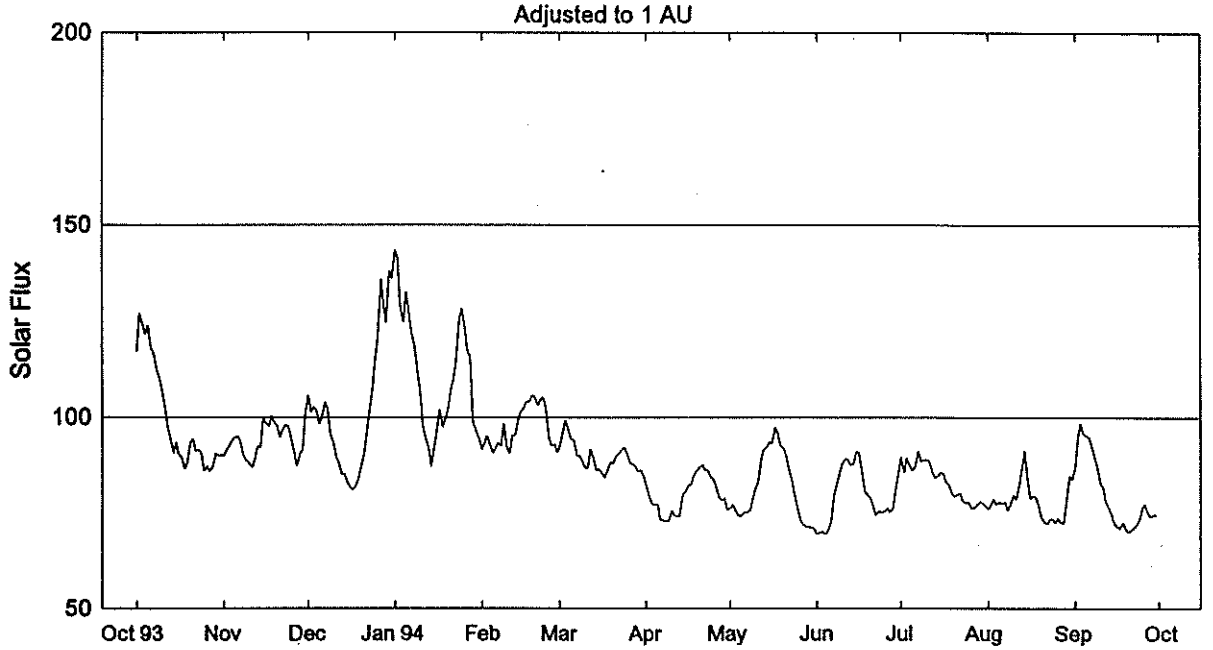


Day	Oct 93	Nov	Dec	Jan 94	Feb	Mar	Apr	May	Jun	Jul*	Aug*	Sep*
1	64	13	67	86	29	49	17	18	0	32	11	38
2	95	19	56	77	31	56	0	35	0	43	10	53
3	87	18	60	93	38	62	0	26	0	39	13	59
4	100	20	66	103	44	54	0	12	0	41	14	53
5	90	30	63	104	38	50	7	9	0	27	18	65
6	71	33	55	101	40	60	0	10	12	27	17	62
7	65	34	65	94	46	52	0	14	16	47	13	57
8	70	33	57	81	41	46	8	19	43	60	12	47
9	76	26	53	66	40	41	8	12	43	49	12	41
10	58	25	46	47	32	29	9	17	50	60	15	31
11	65	14	31	42	29	32	11	19	63	72	20	19
12	56	15	21	41	36	40	10	27	53	68	36	10
13	37	21	17	45	46	36	13	32	59	59	39	9
14	31	22	23	36	39	18	12	31	58	45	44	9
15	52	27	8	35	34	26	19	30	54	39	42	8
16	56	32	20	29	37	22	12	33	52	54	43	8
17	41	37	22	25	43	22	17	39	42	53	41	12
18	37	37	28	30	42	18	17	33	37	48	39	22
19	44	42	18	28	28	13	21	28	30	29	43	14
20	63	43	27	35	16	8	28	25	19	29	30	10
21	73	56	37	53	19	17	31	25	12	27	19	9
22	61	56	44	65	35	24	38	21	15	19	10	11
23	58	53	54	60	33	22	37	19	24	16	25	12
24	55	54	63	70	34	32	40	9	37	14	12	14
25	43	40	75	66	29	37	30	9	28	12	12	16
26	50	46	62	67	32	24	30	0	15	17	12	28
27	39	44	69	58	38	15	31	0	10	14	11	28
28	29	53	61	49	46	14	15	0	15	16	13	23
29	23	55	73	43		14	9	0	26	7	16	17
30	30	69	75	38		26	12	0	27	12	25	17
31	28		99	26		24		0		10	39	
Mean	56.4	35.6	48.9	57.8	35.5	31.7	16.1	17.8	28.0	35.0	22.8	26.7

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

Penticton 2800 MHz (10.7cm) Solar Flux
Oct 1993 - Sep 1994

Adjusted to 1 AU



Day	Oct 93	Nov	Dec	Jan 94	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	117.1	90.0	105.6	143.4	91.7	92.4	82.4	76.3	69.6	89.7	76.2	87.3
2	126.9	91.8	101.3	141.4	93.5	96.3	79.3	77.1	69.9	85.6	77.2	94.9
3	124.8	92.4	102.6	128.7	95.1	99.2	77.4	75.6	70.3	89.3	78.7	98.2
4	121.5	94.1	101.6	124.6	92.7	96.3	77.2	74.4	69.5	87.4	77.4	95.8
5	123.7	94.8	98.3	132.4	90.6	94.2	77.2	74.4	70.3	86.2	77.8	95.1
6	118.0	94.9	99.9	127.7	92.2	94.1	73.3	75.3	72.7	87.1	77.5	95.0
7	116.6	93.5	103.8	122.1	93.3	90.0	73.0	75.2	79.4	91.1	77.9	92.1
8	113.1	90.2	101.9	118.9	92.6	89.9	72.9	75.8	82.9	88.7	75.9	89.6
9	110.1	88.7	95.4	113.1	98.3	88.7	72.9	78.8	85.5	88.8	77.4	87.3
10	107.1	88.2	93.2	106.5	91.8	86.8	75.7	81.4	88.0	88.9	79.7	82.8
11	102.3	87.0	89.7	97.8	90.7	87.0	74.6	83.6	89.1	88.5	78.7	82.0
12	97.3	88.9	88.1	94.6	95.1	91.7	74.2	89.2	89.0	85.7	82.9	78.2
13	94.5	92.2	85.1	91.9	95.4	89.1	74.3	91.4	87.7	84.1	86.7	76.5
14	90.8	92.3	85.1	87.3	98.9	86.2	79.9	92.1	88.0	84.6	91.2	74.8
15	93.5	99.9	82.8	92.6	101.3	86.5	80.6	93.4	91.0	85.7	83.5	72.3
16	90.3	98.2	81.9	97.0	102.3	85.3	82.3	93.3	90.8	85.1	78.8	71.6
17	89.4	97.7	81.1	102.0	103.9	84.3	82.5	97.2	86.6	83.0	79.5	71.0
18	86.7	100.2	82.4	97.5	103.9	85.9	84.9	95.8	80.9	82.7	79.3	72.5
19	88.1	98.7	84.2	99.5	105.6	88.3	86.2	92.7	79.8	80.1	77.1	70.8
20	93.5	98.0	88.1	101.6	105.2	87.9	87.0	91.9	78.9	79.4	74.0	70.3
21	94.2	94.8	89.9	107.3	103.1	90.0	87.6	89.9	76.8	79.8	72.7	70.4
22	91.3	96.8	96.6	109.5	104.4	90.5	86.3	86.7	74.6	80.1	72.2	71.2
23	91.4	97.9	101.6	114.6	105.1	91.2	86.1	83.6	75.5	78.2	73.5	71.8
24	90.6	97.5	107.5	125.1	102.9	92.1	84.3	79.9	75.2	77.7	73.5	73.3
25	86.0	94.7	115.2	128.1	94.8	90.4	83.8	76.1	75.5	77.8	72.5	76.6
26	87.4	90.8	120.5	123.9	92.6	88.1	82.0	73.4	76.3	76.3	73.7	77.4
27	86.0	87.3	135.8	116.8	93.0	88.0	79.0	72.1	75.4	76.6	72.5	75.0
28	87.3	90.7	129.2	115.7	90.8	87.3	78.4	71.4	76.4	77.1	72.5	74.2
29	90.5	91.2	124.4	98.9		85.8	78.9	71.4	81.4	78.0	79.1	74.7
30	90.0	100.8	138.0	96.1		86.1	76.0	71.3	85.4	77.6	84.7	74.7
31	90.1		136.2	94.7		84.9		71.1		76.8	83.8	
Mean	99.7	93.8	101.5	111.3	97.2	89.5	79.7	81.7	79.7	83.2	78.0	79.9

DAILY SOLAR INDICES

September 1994

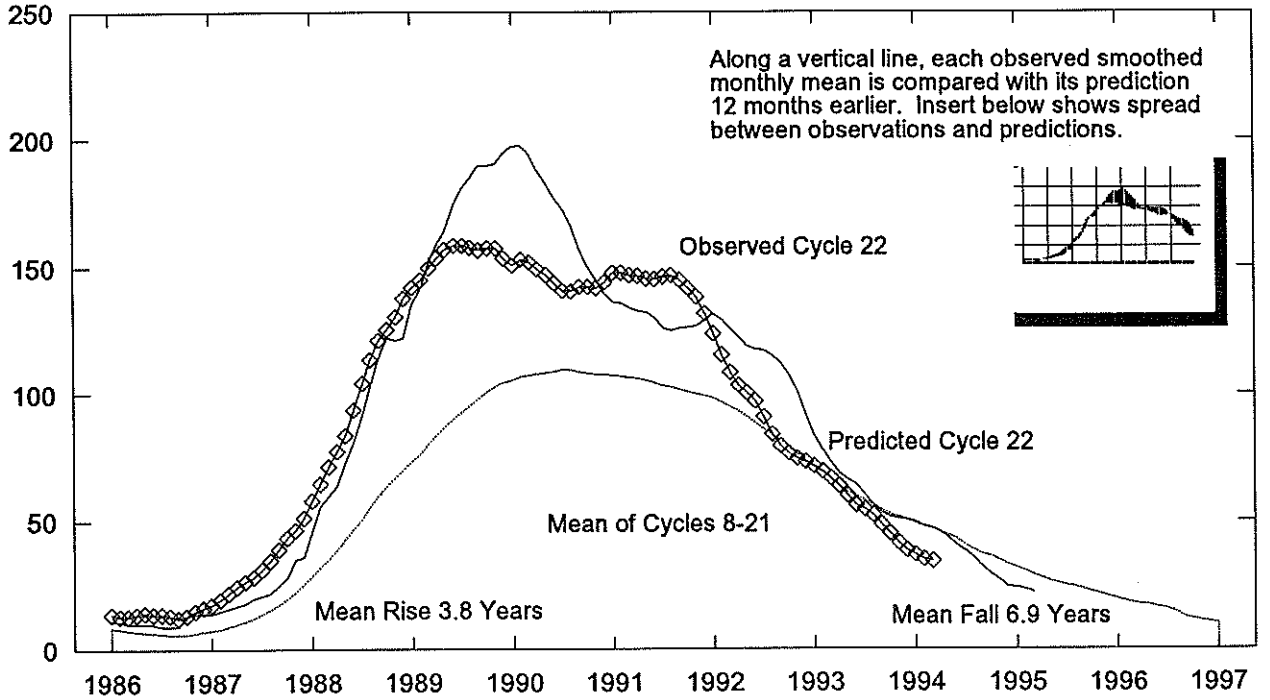
Day	Day of Year	Bartels Cycle Day	Sunspot Numbers Int	Amer	Obs Flux Penticton (2800)	Solar Flux Adjusted to 1 Astronomical Unit — LEAR (15400)	LEAR (8800)	LEAR (4995)	Pentic (2800)	LEAR (2695)	LEAR (1415)	LEAR (610)	LEAR (410)	LEAR (245)
1	244	3	38	42	85.8	531	219	138	87.3	81	58	42	22	21
2	245	4	53	50	93.3	512	222	141	94.9	87	62	42	24	26
3	246	5	59	58	96.5	511	225	143	98.2	91	63	44	24	17
4	247	6	53	58	94.2	532	227	144	95.8	92	67	45	23	20
5	248	7	65	63	93.6	524	226	143	95.1	90	67	45	24	25
6	249	8	62	60	93.6	521	204	143	95.0	92	69	43	24	27
7	250	9	57	56	90.8	522	228	143	92.1	91	70	43	23	22
8	251	10	47	49	88.3	520	226	139	89.6	86	69	39	21	14
9	252	11	41	45	86.1	524	226	139	87.3	85	66	40	20	17
10	253	12	31	31	81.7	524	218	136	82.8	84	65	43	21	12
11	254	13	19	15	81.0	521	221	134	82.0	79	62	42	21	13
12	255	14	10	10	77.2	520	221	133	78.2	78	60	41	20	15
13	256	15	9	10	75.5	528	217	130	76.5	75	56	38	20	10
14	257	16	9	10	74.0	527	217	127	74.8	73	53	40	20	11
15	258	17	8	9	71.5	522	214	126	72.3	71	52	35	20	11
16	259	18	8	9	70.8	515	214	124	71.6	69	50	38	22	11
17	260	19	12	13	70.3	523	213	123	71.0	68	50	38	19	11
18	261	20	22	22	71.9	515	211	122	72.5	69	49	38	20	12
19	262	21	14	15	70.2	517	214	123	70.8	68	50	38	21	11
20	263	22	10	0	69.8	519	213	122	70.3	68	49	37	20	12
21	264	23	9	0	69.9	521	212	122	70.4	67	50	38	20	11
22	265	24	11	10	70.7	517	214	123	71.2	67	49	37	34	11
23	266	25	12	13	71.4	524	213	122	71.8	69	50	39	21	12
24	267	26	14	14	72.8	508	211	123	73.3	67	51	38	20	12
25	268	27	16	20	76.2	508	212	125	76.6	70	52	39	21	11
26	269	1	28	26	77.0	529	217	127	77.4	75	54	40	22	11
27	270	2	28	28	74.7	523	215	126	75.0	71	52	38	22	10
28	271	3	23	22	74.0	521	213	125	74.2	72	53	41	22	11
29	272	4	17	12	74.4	528	218	125	74.7	71	52	35	21	12
30	273	5	17	18	74.5	524	218	126	74.7	72	53	42	22	14
MEAN			26.7	26.3	79.0	521	217	130	79.9	76	56	39	21	14

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	48	45	41	38	56
1994	37	35	34	33	33	32	30	28	27	26	25	24	30
( )				(3)	(5)	(7)	(10)	(12)	(13)	(15)	(16)	(18)	(11)
1995	24	23	22	21	20	19	18	18	18	17	16	15	19
( )	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(18)	(18)	(17)	(16)	(18)
1996	14	13	12	11	11	10	10	9	9	8	8	8	10
( )	(16)	(17)	(17)	(18)	(18)	(17)	(16)	(15)	(15)	(15)	(15)	(14)	(16)

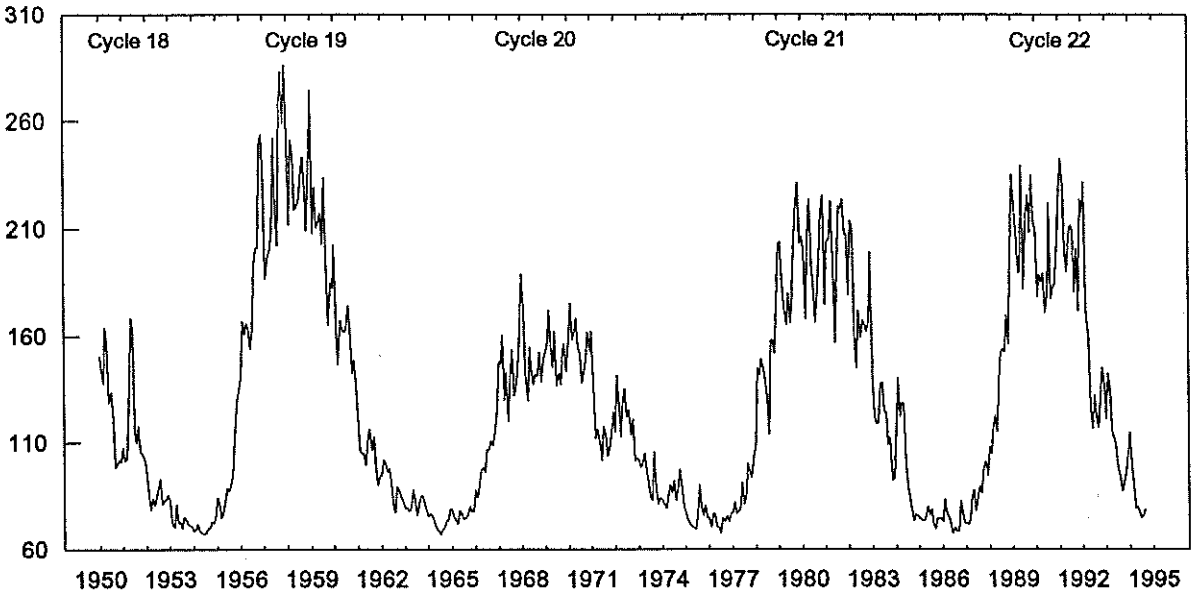
Solar Cycle 22 — Min, Max, and Predictions

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 Jun 1994, 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 March 1995 prediction. There exists a 90% chance that in March 1995, the actual smoothed number will fall somewhere between 3 and 41.

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 - Sep 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	76.1	79.0				85.7

Hα SOLAR FLARES

SEPTEMBER 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	01	0040	0045	0053						13		B 5.4						
GOES		0057	0100	0103						6		B 5.9						
GOES		0141	0147	0150						9		B 6.5						
GOES		0349	0353	0400						11		B 5.1						
GOES		0418	0425	0428						10		B 8.7						
GOES		0529	0540	0546						17		B 7.2						
SVTO		0734	0734	0738	S07	E58	7773	09	5.6	4	SF		3	E		20		
LEAR		0821	0821	0827	S11	E55	7773	09	5.5	6	SF		3	E		16		
SVTO		0821	0822	0833	S08	E58	7773	09	5.7	12	SF	C 1.5	3	E		32		
LEAR		0926	0928	0936	S11	E55	7773	09	5.5	10	SF		3	E		21		
SVTO		0926	0928	0952	S06	E55	7773	09	5.5	26	SF	C 2.1	3	E		42		F
GOES		1005	1009	1013						8		B 9.9						
RAMY		1135	1139	1200	S09	E56	7773	09	5.7	25	SF		3	E		62		F
RAMY		1206	1216	1219	S07	E54	7773	09	5.5	13	SF	B 1.8	3	E		65		F
PALE		1804	1804U	1816D	N09	E53	7773	09	5.7	12D	SF	C 2.2	4	E		29		F
GOES		1943	1946	1953						10		B 1.7						
GOES		2036	2040	2042						6		B 2.3						
GOES		2240	2244	2247						7		B 2.7						
GOES	02	0036	0040	0042						6		B 3.2						
GOES		0302	0308	0312						10		B 8.5						
GOES		0423	0427	0448						25		B 3.2						
GOES		1314	1318	1320						6		B 3.5						
GOES		1433	1436	1442						9		B 5.1						
GOES		1647	1652	1655						8		C 2.7						
GOES		1910	1915	1920						10		B 6.4						
GOES		1958	2002	2006						8		C 2.2						
GOES		2358	2408	2413						15		B 2.5						
GOES	03	0220	0225	0228						8		B 2.3						
GOES		0411	0414	0425						14		C 1.4						
LEAR		0809	0811	0812	S12	E81	7776	09	9.4	3	SF	B 8.1	3	E		18		
GOES		0823	0835	0853						30		C 1.1						
LEAR		0857	0858	0903	S07	E26	7773	09	5.3	6	SF		3	E		17		
RAMY		1146	1148	1152	S07	E27	7773	09	5.5	6	SF	B 3.6	3	E		15		
GOES		1240	1253	1311						31		C 1.3						
GOES		1335	1340	1348						13		C 1.0						
HOLL		1553	1554	1607	S09	E76	7776	09	9.4	14	SF	C 6.8	3	E		23		
RAMY		1605E	1605U	1609	S07	E78	7776	09	9.5	4D	SF		3	E		21		
GOES		1725	1729	1734						9		B 9.3						
LEAR	04	0117	0117	0120	S09	E17	7773	09	5.3	3	SF		3	E		14		
GOES		0248	0251	0253						5		B 4.5						
GOES		0442	0447	0457						15		B 2.9						
SVTO		0603	0604	0609	S08	E71	7776	09	9.6	6	SF	B 6.3	3	E		18		
GOES		0917	0922	0925						8		B 2.6						
RAMY		1401	1402	1406	S07	E65	7776	09	9.4	5	SF	B 1.8	3	E		24		F
GOES		2059	2103	2106						7		B 1.4						
GOES	05	0001	0013	0018						17		B 3.1						
PALE		0052E	0053U	0101D	S08	E06	7773	09	5.5	9D	SF	B 3.0	3	E		18		
GOES		0149	0155	0159						10		B 2.4						
LEAR		0232	0236	0245	S10	E07	7773	09	5.6	13	SF	C 1.1	3	E		55		F
PALE		0234E	0235U	0245D	S10	E10	7773	09	5.8	11D	SF		3	E		50		F
PALE		0412E	0412U	0418D	S10	E11	7773	09	6.0	6D	SF	B 5.6	3	E		11		
LEAR		0531	0535	0608	S09	E04	7773	09	5.5	37	1F	C 6.0	3	E		135		F
LEAR		0838	0839	0845	S08	E03	7773	09	5.6	7	SF	B 4.5	3	E		38		F
GOES		1037	1040	1042						5		B 3.4						
GOES		1146	1149	1151						5		B 1.9						
HOLL		1448	1452	1456	S09	E00	7773	09	5.6	8	SF		3	E		13		F
RAMY		1451	1452	1457	S09	E01	7773	09	5.7	6	SF	B 1.8	3	E		23		F
SVTO		1453	1453	1507	S07	E00	7773	09	5.6	14	SF		3	E		11		F
GOES		1515	1518	1521						6		B 1.6						
GOES		1753	1756	1803						10		B 1.8						
LEAR	06	0032	0057	0130	S08	W08	7773	09	5.4	58	1F	C 7.8	3	E		172		F
LEAR		0346	0347	0350	S08	W08	7773	09	5.5	4	SF	B 2.9	3	E		21		
LEAR		0422	0432	0446	S08	W18	7773	09	4.8	24	SF	B 6.7	3	E		17		

Hα SOLAR FLARES

SEPTEMBER 1994

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
SVTO	06	0631	0633	0644	S07	E46	7776	09	9.7	13	SF		3	E		48		F
LEAR		0632	0632	0643	S07	E41	7776	09	9.3	11	SF	C 1.5	3	E		44		
GOES		0921	0925	0929						8		B 2.1						
SVTO		1158	1200	1202	S09	W18	7773	09	5.1	4	SF	B 3.3	3	E		27		F
RAMY		1158	1201	1204	S06	W18	7773	09	5.1	6	SF		3	E		25		
SVTO		1220	1221	1226	S07	E43	7776	09	9.7	6	SF	B 7.2	3	E		24		F
RAMY		1229	1229	1231	S08	E42	7776	09	9.7	2	SF		3	E		20		
GOES		1436	1441	1446						10		B 3.9						
GOES		1620	1624	1633						13		B 2.2						
GOES		2123	2128	2131						8		B 1.6						
LEAR	07	0356	0400	0409	S07	W31	7773	09	4.8	13	SF	B 4.5	3	E		12		
GOES		0638	0647	0657						19		B 2.4						
GOES		0823	0827	0830						7		B 3.4						
RAMY		1456	1459	1513	S10	E19	7776	09	9.0	17	SF	B 2.8	3	E		18		
SVTO		1457	1458	1502	S10	E19	7776	09	9.0	5	SF		3	E		28		F
RAMY		1658	1658	1702	N10	W19	7774	09	6.3	4	SF		3	E		14		
HOLL		2051	2058	2113D	N14	E13	7775	09	8.8	22D	SF	B 8.4	2	E		33		
LEAR		2346	2348	2357	S05	W35	7773	09	5.4	11	SF	B 2.1	3	E		41		
LEAR	08	0018	0018	0031	S10	E18	7776	09	9.4	13	SF		3	E		12		
LEAR		0028	0034	0038	S05	W36	7773	09	5.3	10	SF		3	E		33		
GOES		0118	0129	0138						20		C 1.3						
GOES		2237	2242	2246						9		C 1.1						
GOES	09	0114	0121	0133						19		B 3.0						
GOES		0428	0431	0434						6		B 1.7						
GOES		1342	1345	1348						6		B 1.5						
GOES		1713	1718	1721						8		B 2.8						
GOES		1813	1816	1818						5		B 1.0						
GOES		2128	2136	2139						11		B 1.1						
GOES		2142	2145	2152						10		B 1.5						
GOES		2158	2204	2207						9		B 3.9						
GOES	10	0354	0358	0401						7		B 1.7						
GOES		0537	0543	0546						9		B 7.0						
SVTO		0922	0926	0938	N08	W53	7774	09	6.4	16	SF		3	E		27		UF
SVTO		0945	0954	1003	N08	W55	7774	09	6.3	18	SF	B 7.3	3	E		23		UF
GOES		1025	1028	1030						5		B 5.7						
SVTO		1340	1344	1347	S12	W68	7773	09	5.4	7	SF		3	E		39		
HOLL		1341	1343	1348	S05	W68	7773	09	5.5	7	SF		3	E		36		
GOES		1418	1422	1425						7		B 1.5						
GOES		1439	1444	1448						9		B 2.9						
GOES	11	0004	0009	0016						12		B 2.0						
SVTO		0450E	0554	0659	S13	W73	7773	09	5.7	129D	SF	C 8.7	3	E		78		YF
SVTO		1536	1539	1547	S13	W35	7776	09	9.0	11	SF	B 2.8	3	E		16		H
GOES		1828	1840	1843						15		B 2.0						
GOES		2334	2349	2352						18		B 2.6						
PALE	12	0010E	0012U	0020D	S10	W90	7773	09	5.2	10D	SF		3	E		33		
GOES		0054	0102	0105						11		B 2.0						
GOES		0457	0501	0504						7		B 1.4						
GOES	13	1340	1419	1455						75		B 5.9						
GOES	14	0336	0406	0435						59		B 5.6						
RAMY	17	1154	1157	1205	N18	E17	7779	09	18.8	11	SF	B 1.0	3	E		18		
RAMY		2039E	2046	2104	N17	E13	7779	09	18.8	25D	SN		2	E		29		F
HOLL		2040	2043	2108	N17	E13	7779	09	18.8	28	SF	B 4.0	3	E		45		F
RAMY	18	1805	1809	1822	N17	E00	7779	09	18.7	17	SF		3	E		15		F
HOLL		1808	1808	1815	N17	E01	7779	09	18.8	7	SF	B 2.1	3	E		11		
HOLL	25	1927	1927	1932	N04	W32		09	23.4	5	SN	B 1.3	3	E		17		H
GOES	27	0754	0823	0859						65		B 1.4						

Hα SOLAR FLARES

SEPTEMBER 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	27	0925	0929	0932						7		B 1.3						
RAMY		1510	1513	1524	S09	W55	7781	09	23.5	14	SF	B 2.0	3	E		16		
HOLL		1845	1846	1856	S06	W59	7781	09	23.4	11	SF	B 1.1	3	E		11		
GOES	28	2217	2228	2239						22		B 2.6						
GOES	29	0117	0132	0146						29		B 4.0						
GOES		1124	1127	1130						6		B 1.0						
GOES	30	0759	0807	0814						15		B 4.0						
GOES		1215	1230	1239						24		B 1.6						
GOES		1358	1401	1406						8		B 1.0						
GOES		1711	1714	1720						9		B 1.2						

"Remarks"

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

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

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

SEPTEMBER 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	PALE	8	S	0405.0	0406.0	1.0	7.0			QL=4 ST=2 TYP=3
05	2695	LEAR	8	S	0534.0	0534.0	1.0	31.0			QL=4 ST=3 TYP=3
10	2695	SVTO	8	S	1026.0	1026.0	1.0	13.0			QL=4 ST=2 TYP=3
	8800	SVTO	8	S	1026.0	1026.0	1.0	10.0			QL=4 ST=2 TYP=3
11	2695	LEAR	8	S	0436.0	0437.0	1.0	21.0			QL=4 ST=2 TYP=3
	2695	LEAR	20	GRF	0459.0	0502.0	5.0	31.0			QL=4 ST=2 TYP=2
17	8800	SVTO	8	S	0614.0	0614.0	U	150.0			QL=4 ST=2 TYP=3
20	2695	SVTO	49	GB	0817.0	0818.0	1.0	1900.0			QL=4 ST=2 TYP=6

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

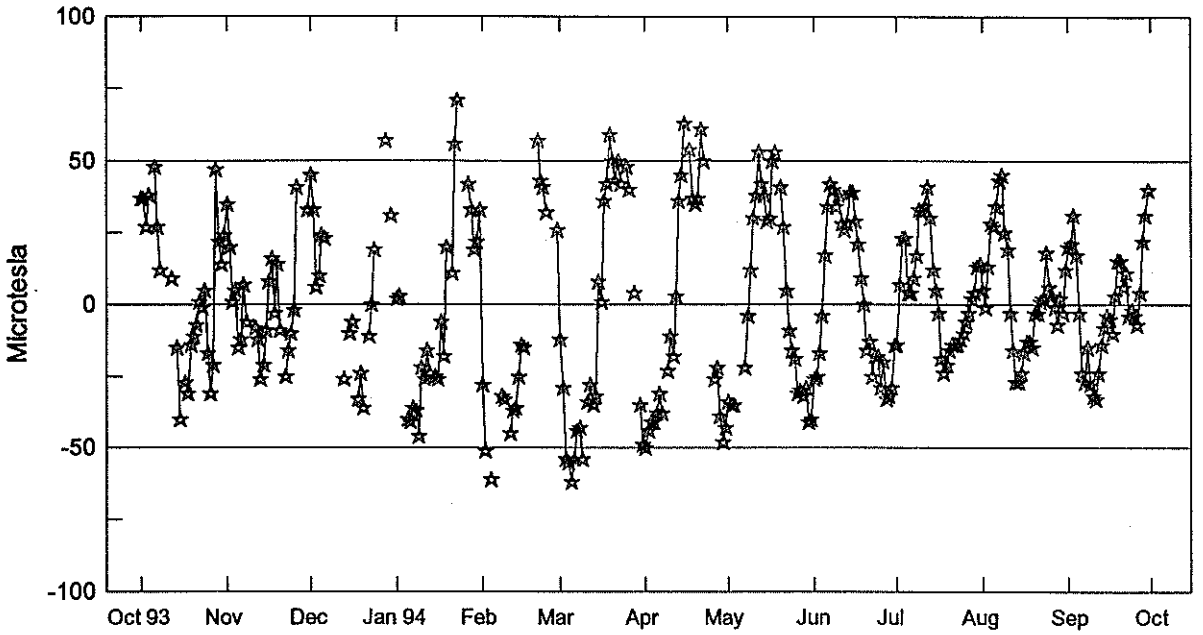
Explanation of Type Code:

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

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

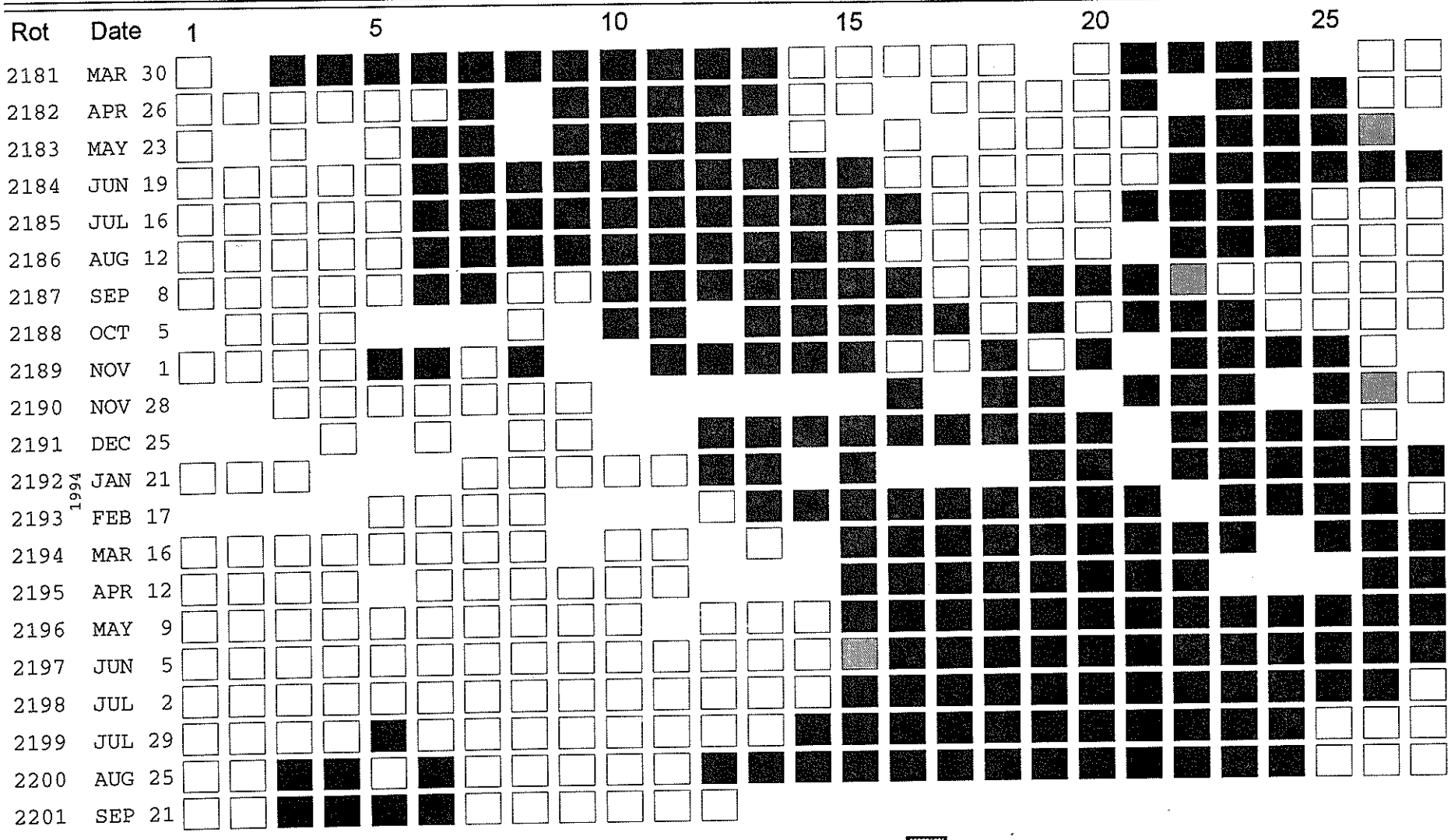
Stanford Mean Solar Magnetic Field (Microtesla)
"Sun-As-A-Star"



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

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

STANFORD MEAN SOLAR MAGNETIC FIELD

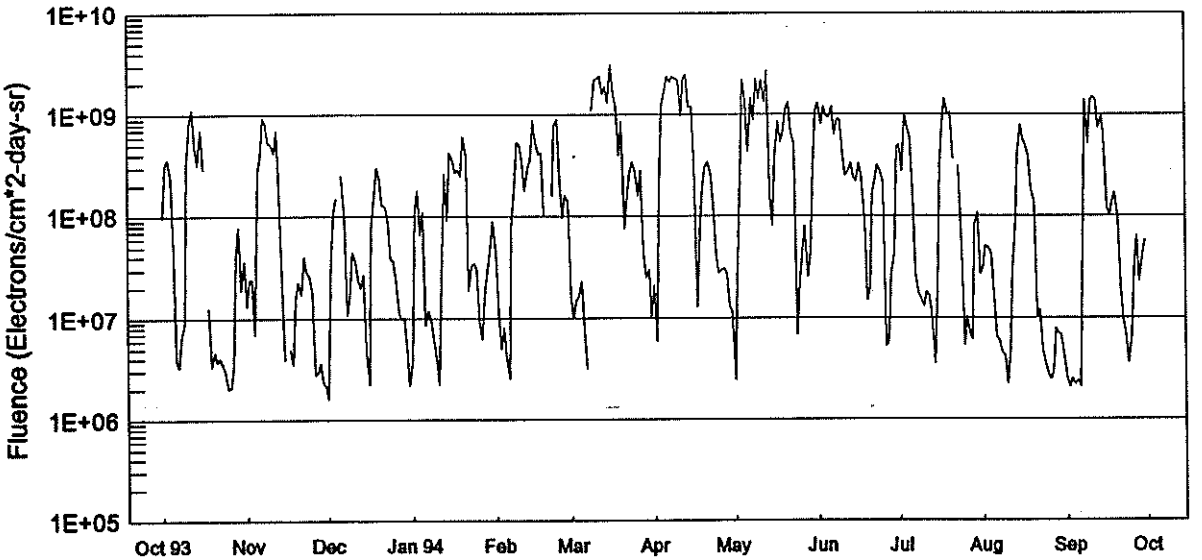


Mean Solar Magnetic Field Polarity: = field > 2 microT; = -2 microT ≤ field ≤ 2 microT

= 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.

GOES7 Daily Electron Fluence
Oct 93 - Sep 94



Day	Oct 93	Nov	Dec	Jan 94	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	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	3.0E+07	2.5E+06
2	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	5.1E+07	2.1E+06
3	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	4.9E+07	2.5E+06
4	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	4.3E+07	2.2E+06
5	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	1.6E+07	2.4E+06
6	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	6.4E+06	2.1E+06
7	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	6.1E+06	5.4E+07
8	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	4.6E+06	1.4E+09
9	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	4.2E+06	5.2E+08
10	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	2.2E+06	1.4E+09
11	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	4.6E+06	1.5E+09
12	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	3.0E+07	1.4E+09
13	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	9.1E+07	7.4E+08
14	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	3.9E+08	9.6E+08
15	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	8.0E+08	6.3E+08
16	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	5.6E+08	1.2E+08
17	–	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	4.9E+08	1.0E+08
18	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	3.8E+08	1.4E+08
19	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	1.8E+08	1.7E+08
20	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	1.4E+08	9.3E+07
21	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	1.0E+07	2.0E+07
22	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	–	1.2E+07	9.6E+06
23	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	4.9E+06	7.0E+06
24	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	3.7E+06	3.6E+06
25	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	2.7E+06	6.8E+06
26	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	2.4E+06	3.0E+07
27	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	2.9E+06	6.4E+07
28	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	7.9E+06	2.3E+07
29	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	6.9E+06	3.7E+07
30	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	6.8E+06	5.9E+07
31	3.7E+07		2.2E+06	9.0E+07		–		1.1E+09		2.7E+07	3.9E+06	

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 602 Part I

DATA FOR AUGUST 1994

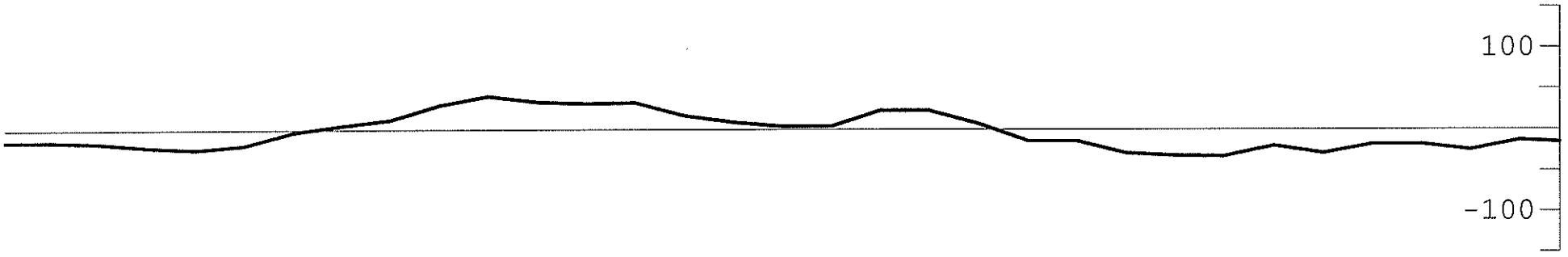
	Page
SOLAR ACTIVE REGIONS	
Solar Synoptic Charts	36- 49
Daily Activity Solar Maps	50- 80
YOHKOH Daily Soft X-ray Images	81- 97
Sunspot Groups	98-103
SUDDEN IONOSPHERIC DISTURBANCES	104-106
SOLAR RADIO SPECTRAL OBSERVATIONS	107-113
SOLAR RADIOHELIOGRAPH - 164 MHz - NANCAY	114
COSMIC RAY MEASUREMENTS BY NEUTRON MONITOR	
Daily Counting Rates	115
Chart of Variations	116-118
Graph and Table of Monthly Mean Moscow Data Jan 1958-Aug 1994	119
GEOMAGNETIC INDICES	
Geomagnetic Activity Indices	120
Daily Average Ap	121
Chart of Kp by 27-day Rotation	122
Table of monthly aa index (1950 to present)	123
Polar Cap (PC) Geomagnetic Index (Plot of 15-min values)	124
Provisional Values of Hourly Equatorial Dst (Unavailable at time of publication.)	
Principal Magnetic Storms	125
Sudden Commencements/Solar Flare Effects	126

SOLAR MAGNETIC FIELD SYNOPTIC CHART

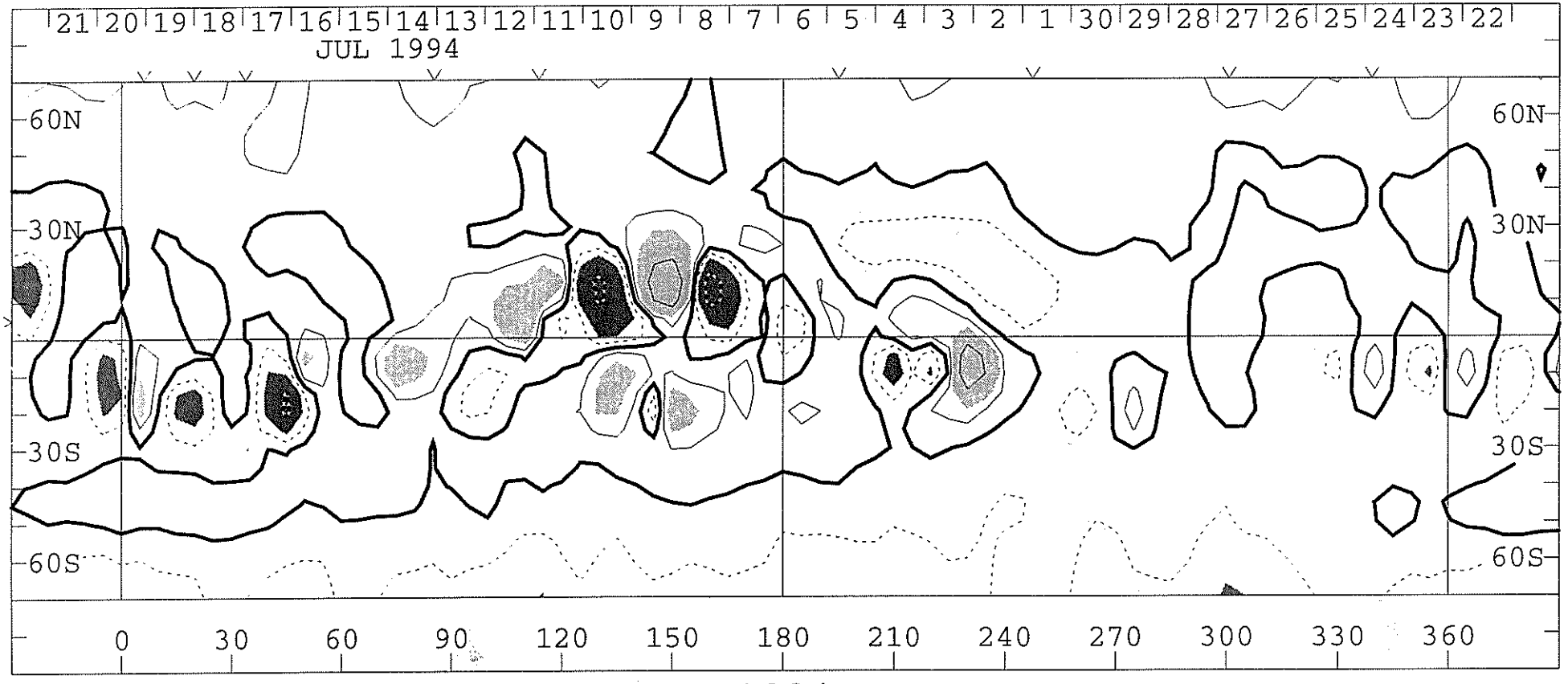
CARRINGTON ROTATION NUMBER 1884

(23 June to 20 July 1994)

WILCOX SOLAR OBSERVATORY



Photospheric Magnetic Field 0, ±100, 500, 1000, 2000 MicroTesla



Heliographic Longitude

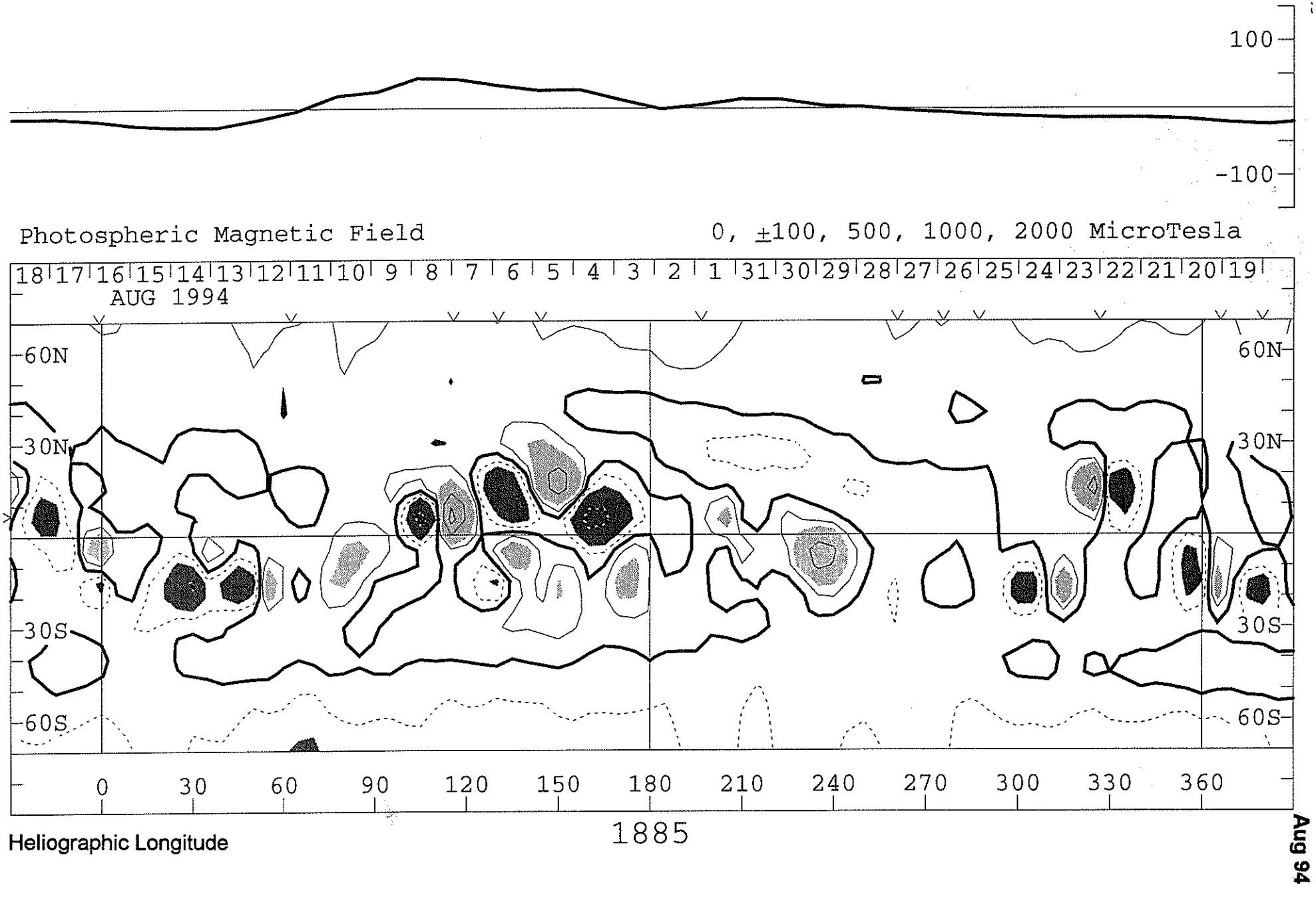
1884

SOLAR MAGNETIC FIELD SYNOPTIC CHART

CARRINGTON ROTATION NUMBER 1885

(20 July to 16 August 1994)

WILCOX SOLAR OBSERVATORY

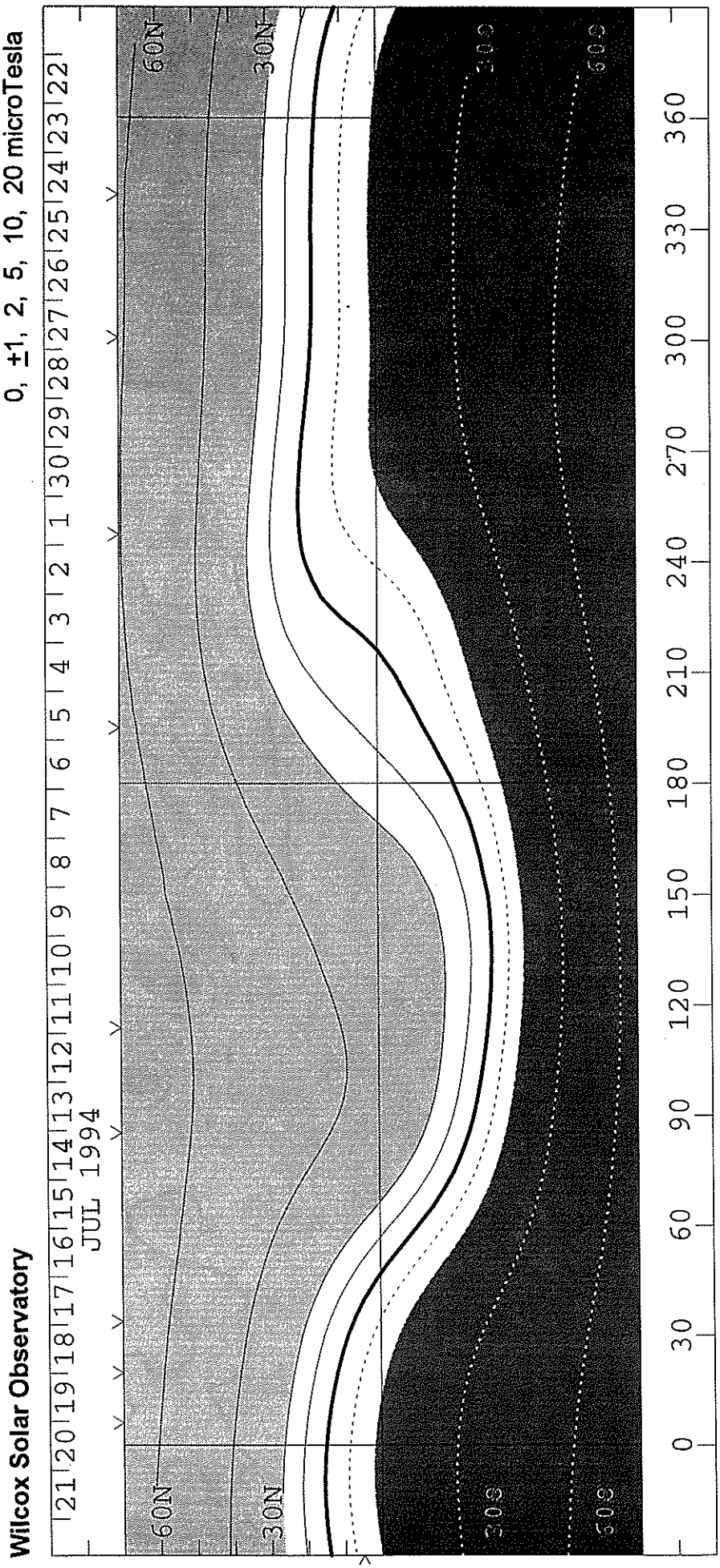


37
Aug 94

SOLAR MAGNETIC FIELD SYNOPTIC CHART

SOURCE SURFACE FIELD

CARRINGTON ROTATION NUMBER 1884
(23 June to 20 July 1994)



SOLAR MAGNETIC FIELD SYNOPTIC CHART

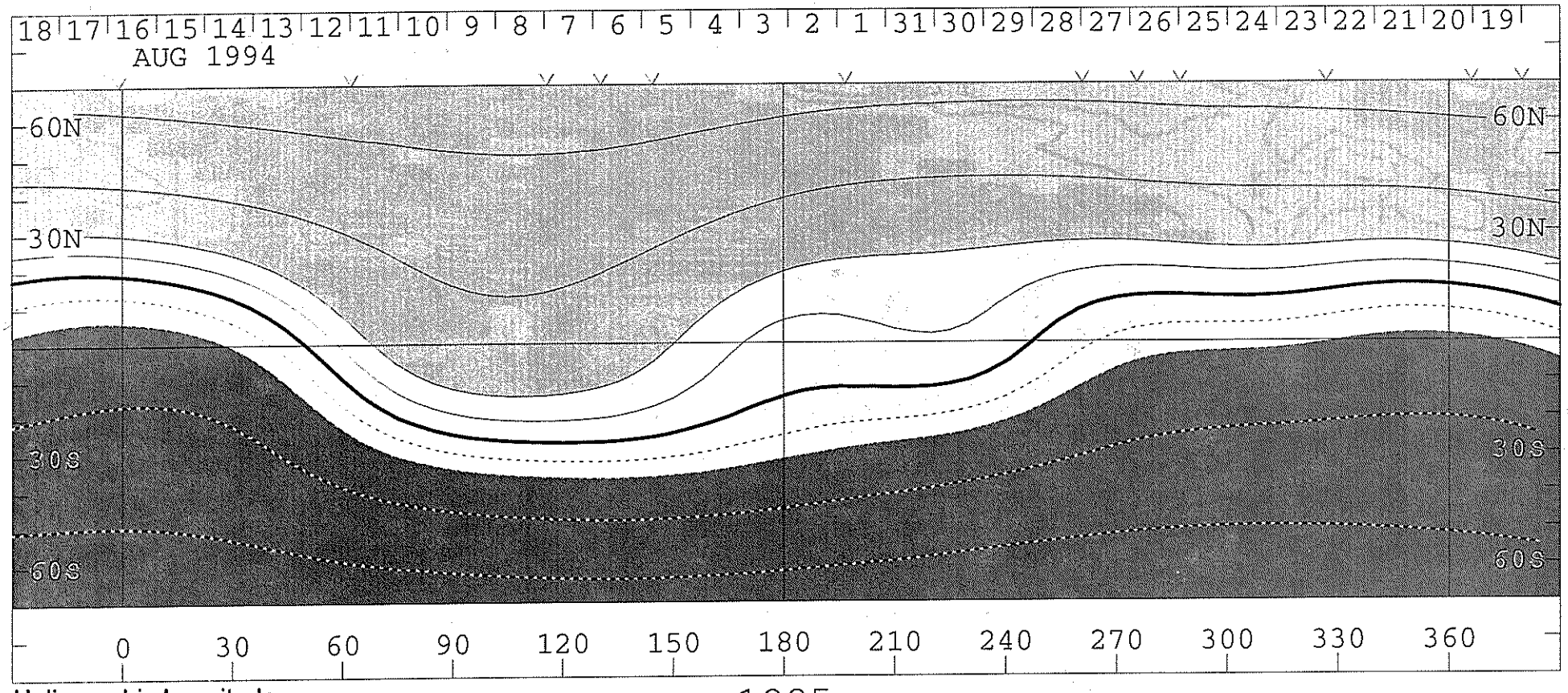
SOURCE SURFACE FIELD

CARRINGTON ROTATION NUMBER 1885

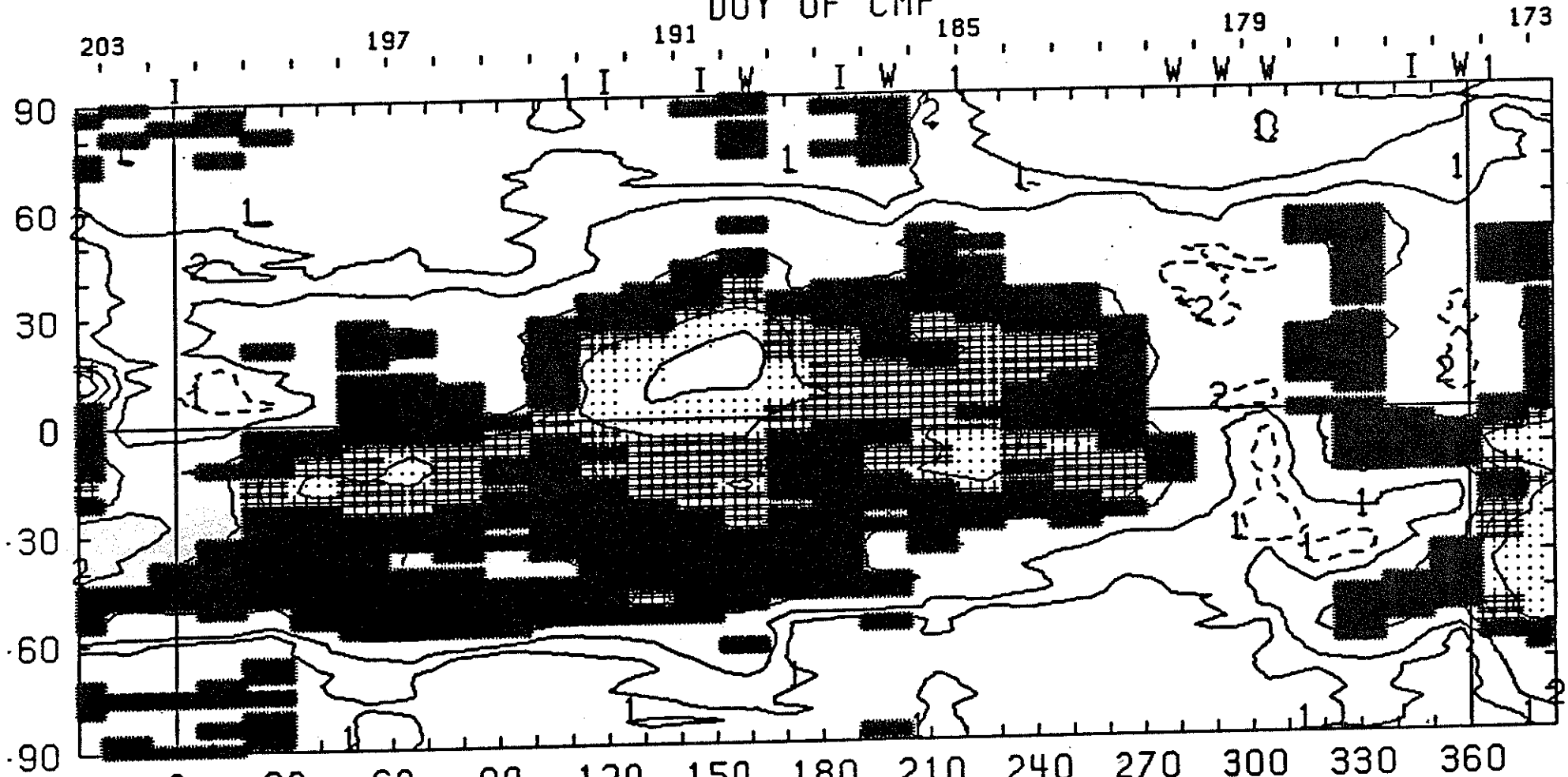
(20 July to 16 August 1994)

Wilcox Solar Observatory

0, ±1, 2, 5, 10, 20 microTesla

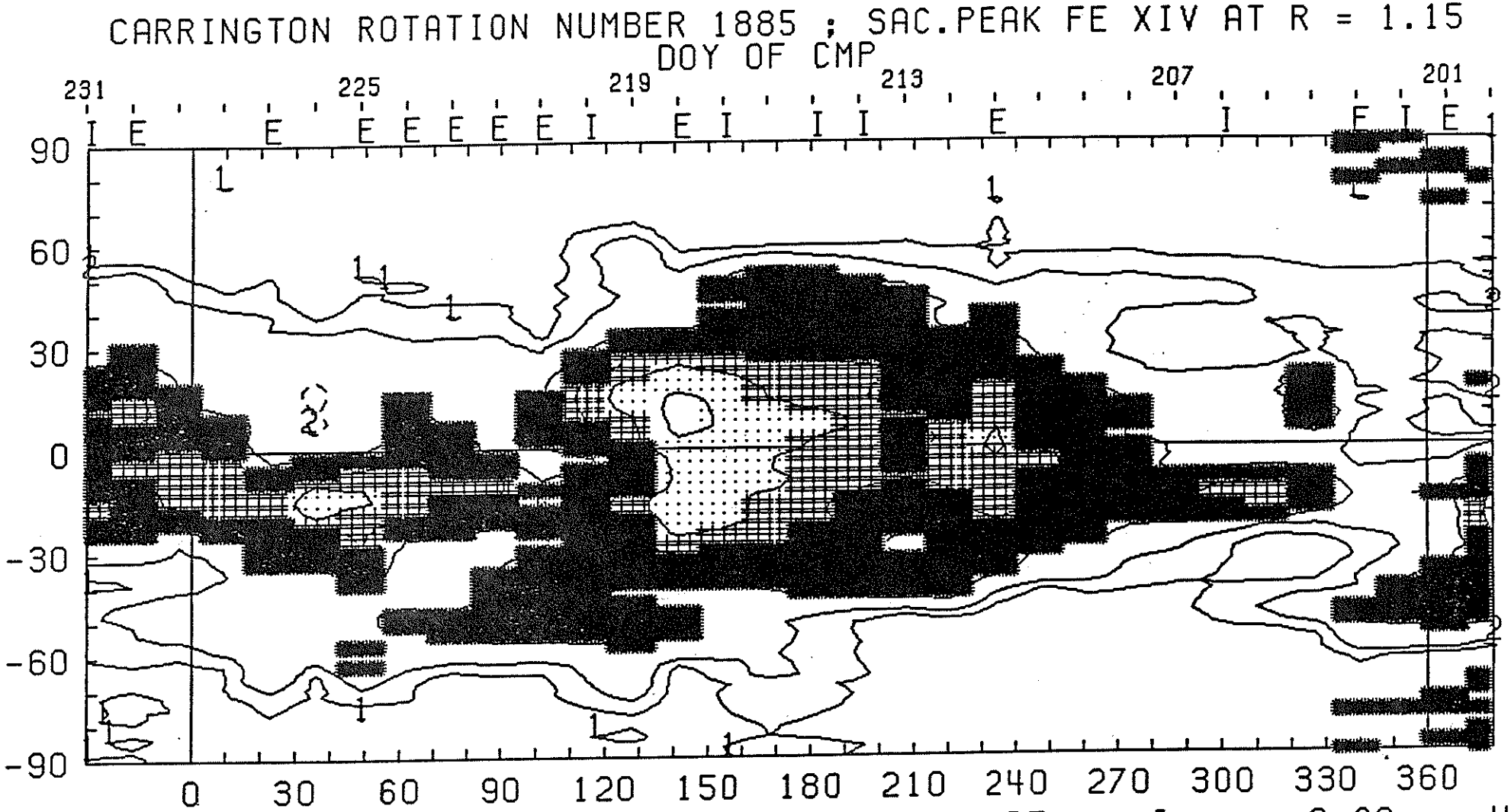


CARRINGTON ROTATION NUMBER 1884 ; SAC.PEAK FE XIV AT R = 1.15

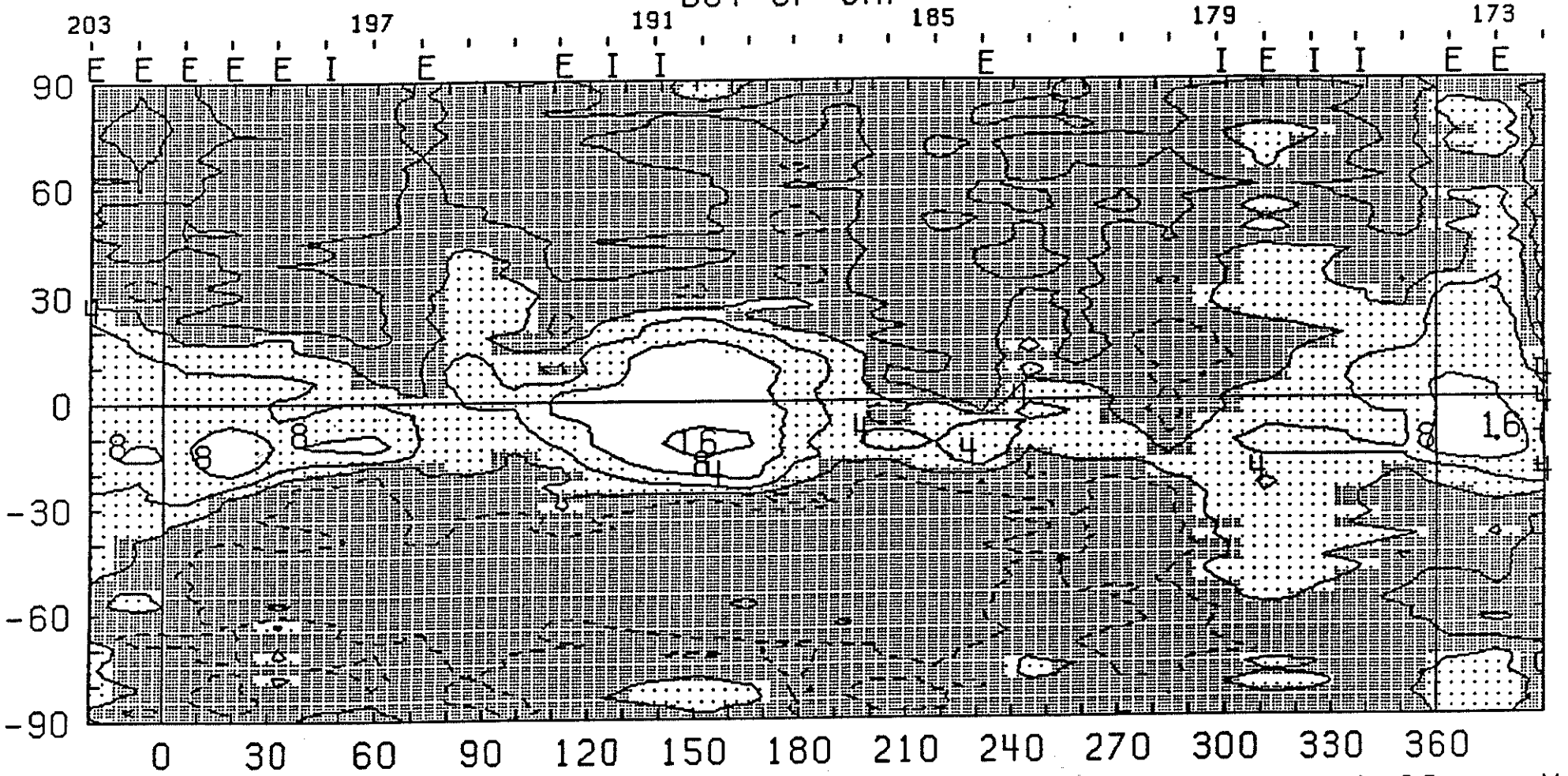


1994 E+W LIMB CONTOURS: 1,2,4,7,10,20,30,40,50 MILLIONTHS OF Io

(12-Oct-94) CORONAL HOLES ARE SHOWN AS WHITE SURROUNDED BY BLACK

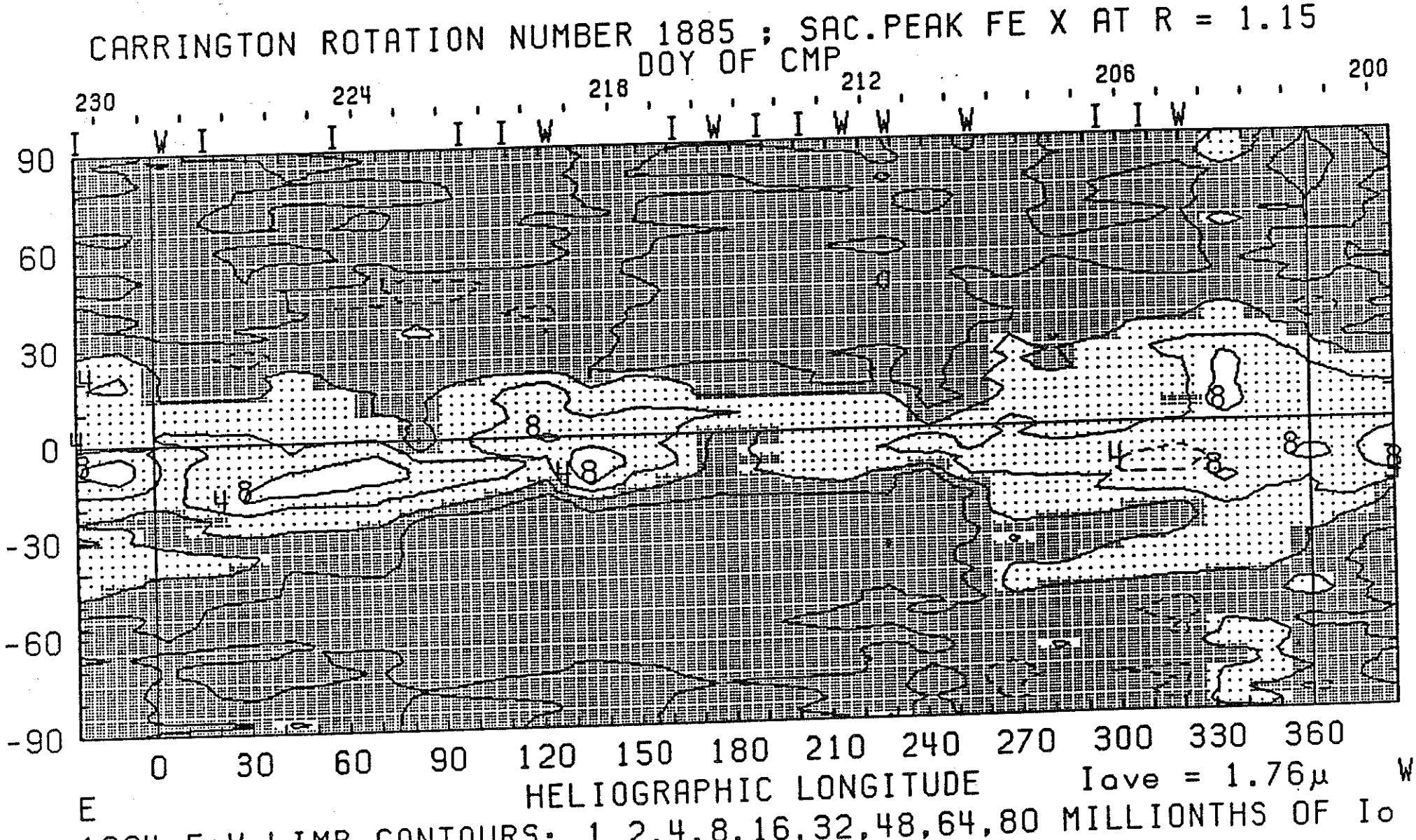

CARRINGTON ROTATION NUMBER 1885 ; SAC.PEAK FE XIV AT R = 1.15
DOY OF CMP
231
225
219
213
207
201
90
60
30
0
-30
-60
-90
0
30
60
90
120
150
180
210
240
270
300
330
360
E
HELIOGRAPHIC LONGITUDE
Iave = 2.89μ
W
1994 W+E LIMB CONTOURS: 1,2,4,7,10,20,30,40,50 MILLIONTHS OF Io
(18-Oct-94) CORONAL HOLES ARE SHOWN AS WHITE SURROUNDED BY BLACK

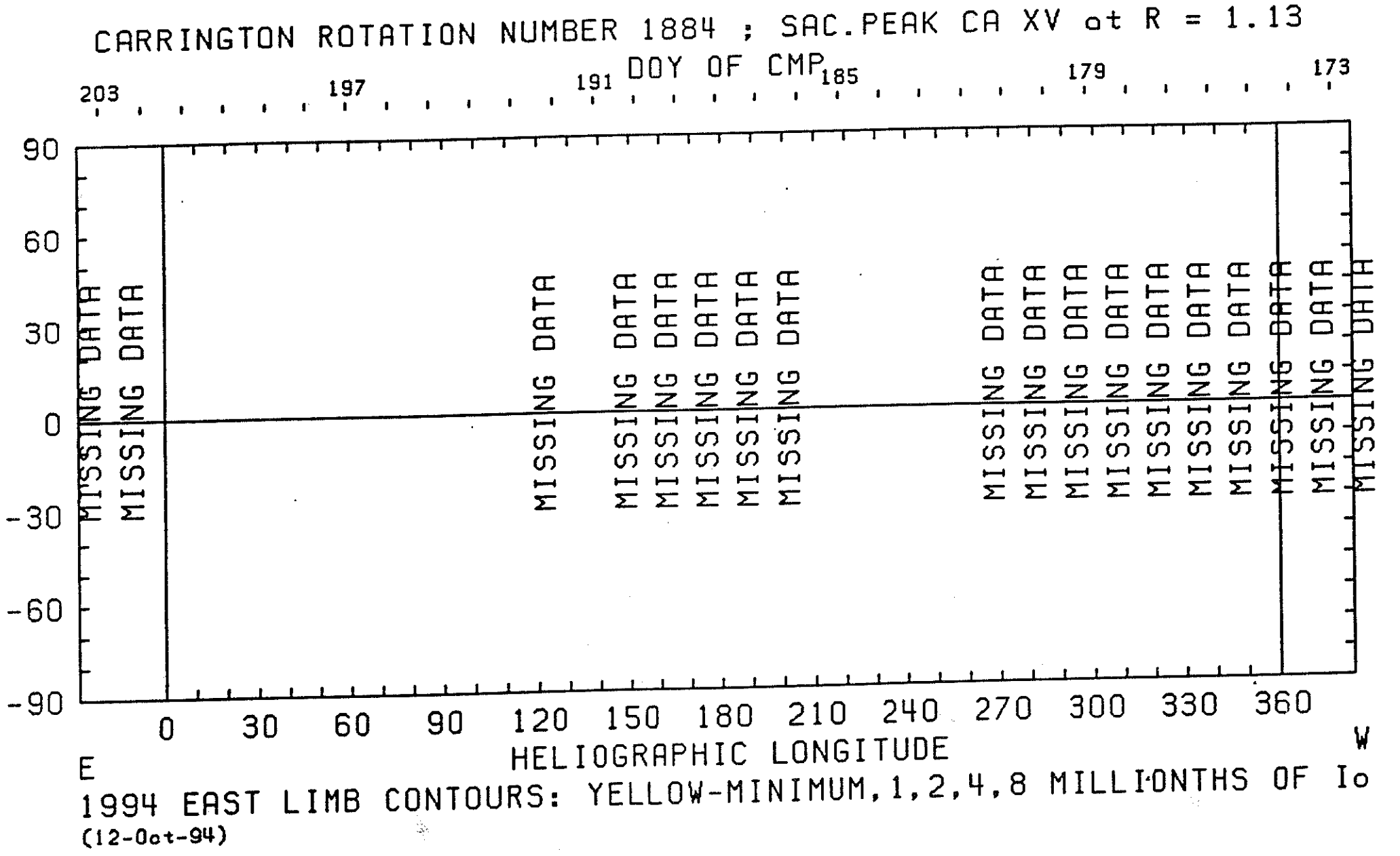
CARRINGTON ROTATION NUMBER 1884 ; SAC.PEAK FE X AT R = 1.15

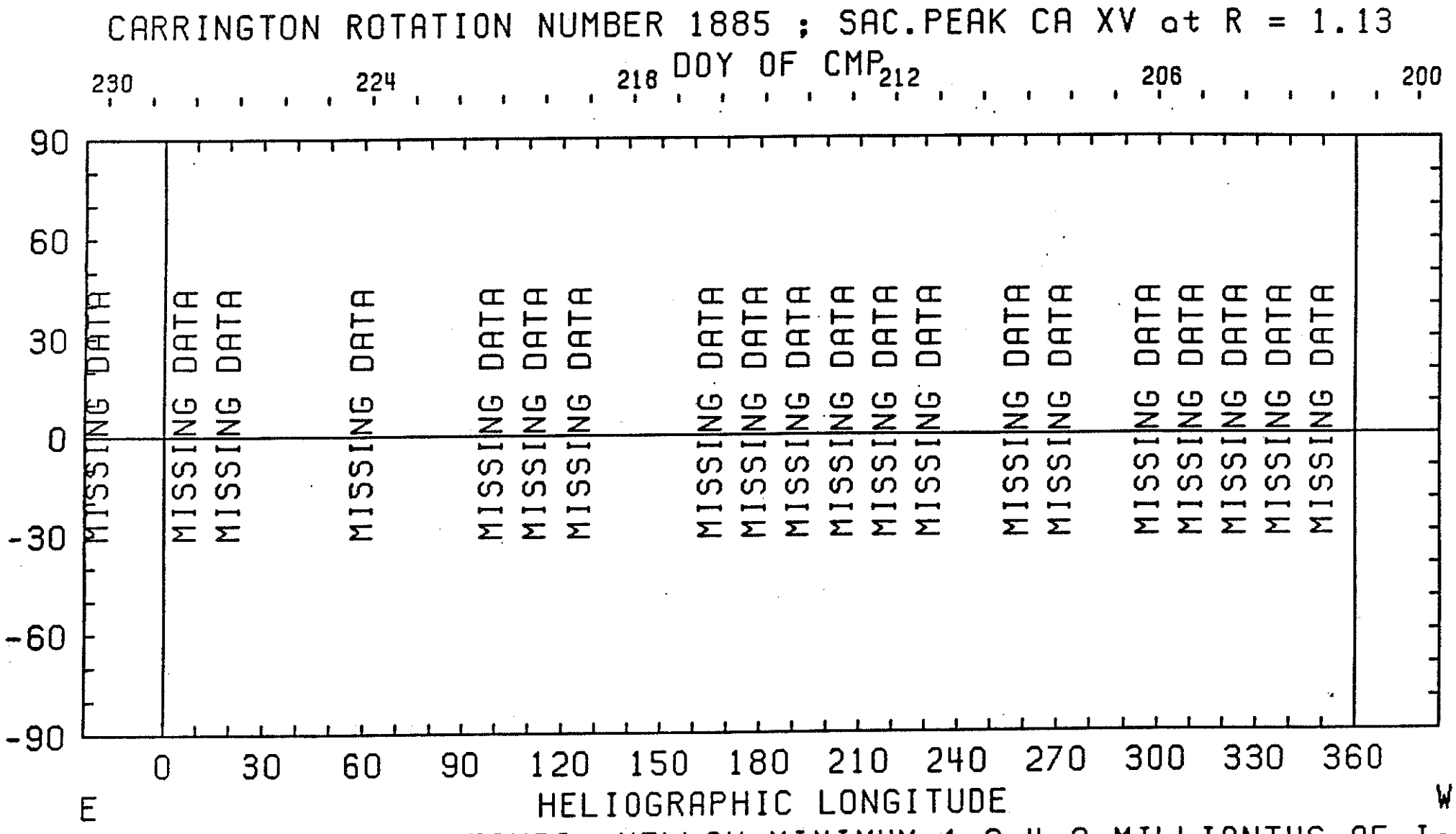


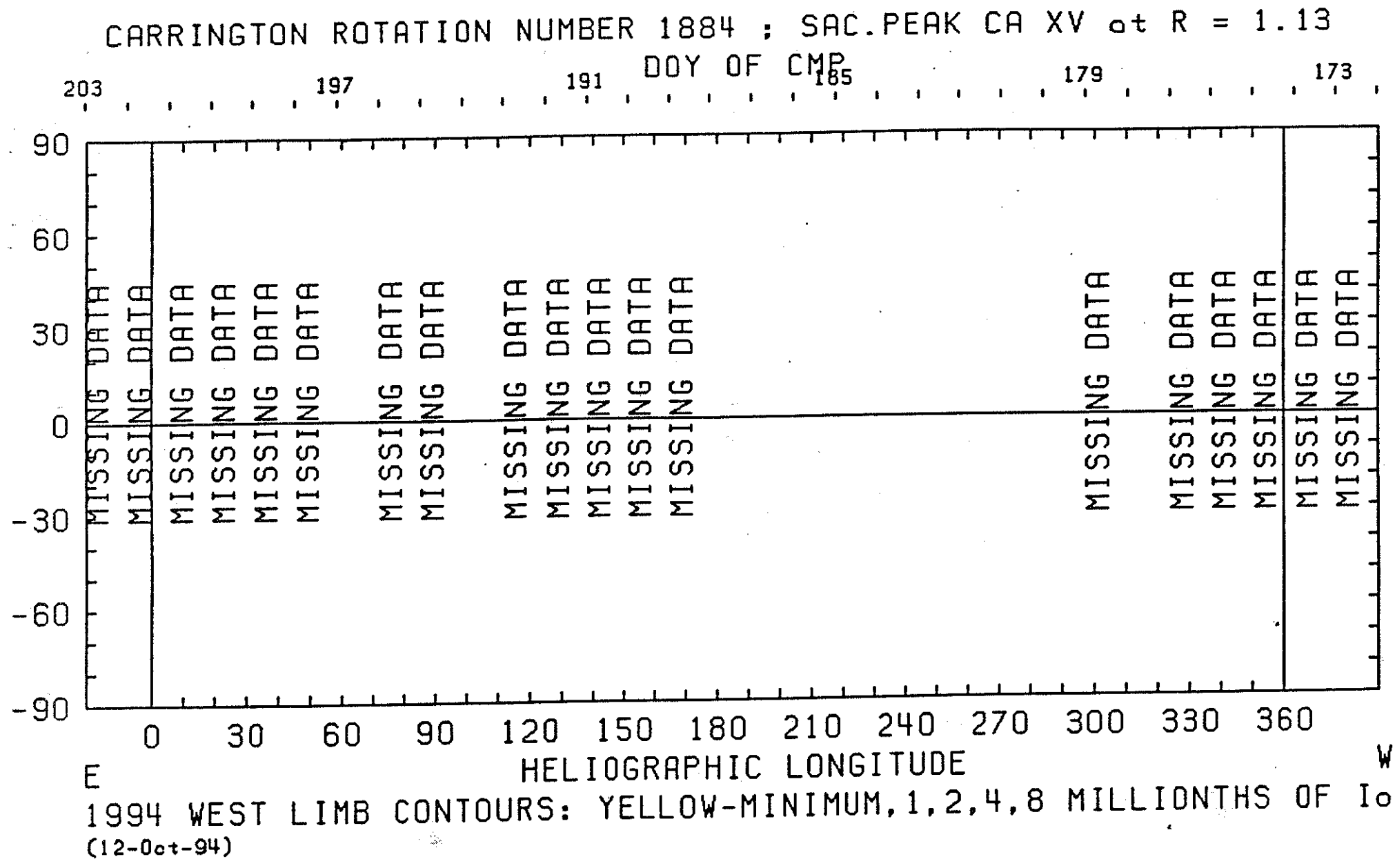
1994 W+E LIMB CONTOURS: 1,2,4,8,16,32,48,64,80 MILLIONTHS OF Io

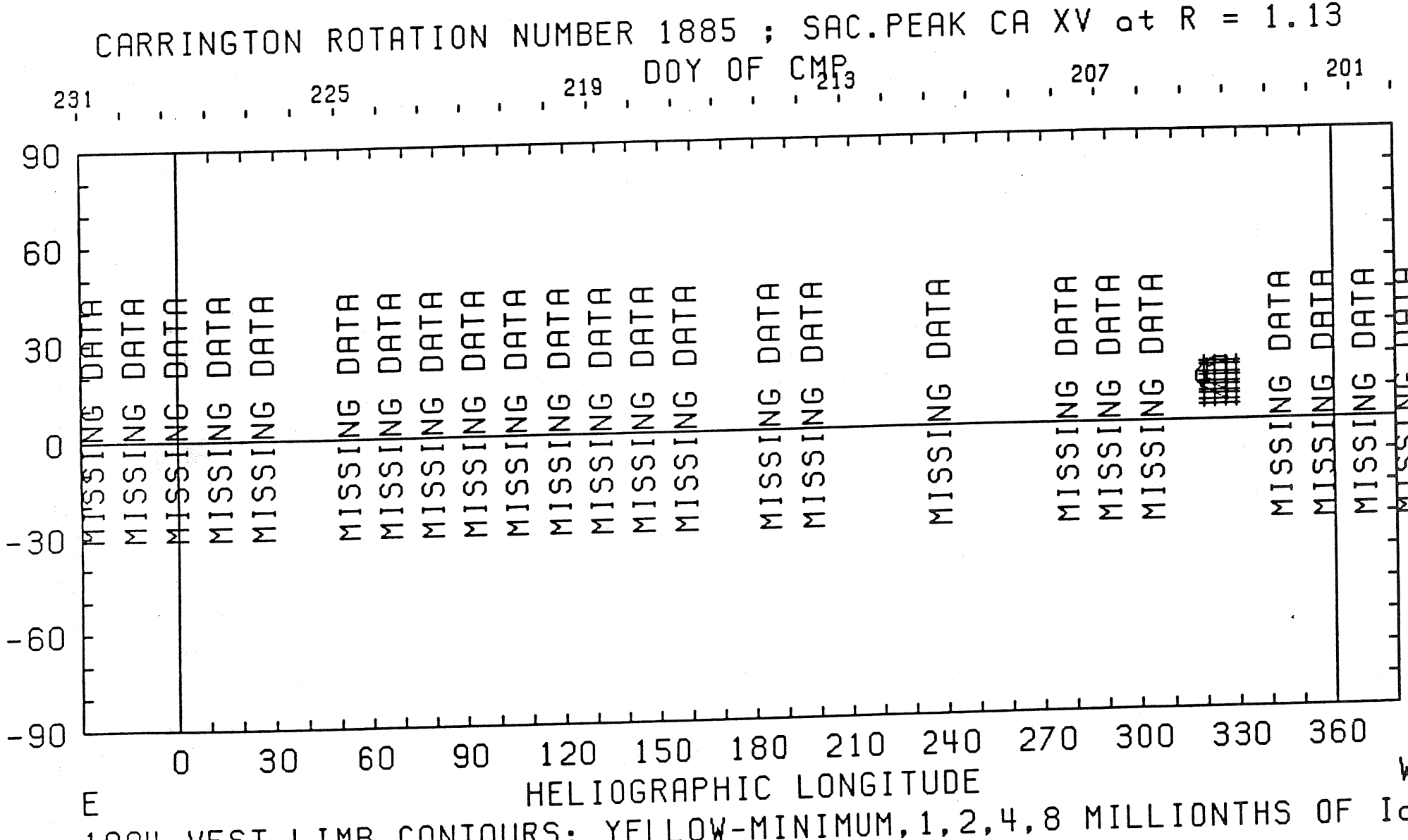
(18-Oct-94)


CARRINGTON ROTATION NUMBER 1885 ; SAC.PEAK FE X AT R = 1.15
DOY OF CMP
230
224
218
212
206
200
90
60
30
0
-30
-60
-90
0
30
60
90
120
150
180
210
240
270
300
330
360
E
HELIOGRAPHIC LONGITUDE
Iave = 1.76μ
W
1994 E+W LIMB CONTOURS: 1,2,4,8,16,32,48,64,80 MILLIONTHS OF Io
(19-Oct-94)


CARRINGTON ROTATION NUMBER 1884 ; SAC.PEAK CA XV at R = 1.13
DOY OF CMP
203
197
191
185
179
173
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
(12-Oct-94)


CARRINGTON ROTATION NUMBER 1885 ; SAC.PEAK CA XV at R = 1.13
DOY OF CMP
230
224
218
212
206
200
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
(12-Oct-94)


CARRINGTON ROTATION NUMBER 1884 ; SAC.PEAK CA XV at R = 1.13
DOY OF CMP
203
197
191
185
179
173
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
(12-Oct-94)


CARRINGTON ROTATION NUMBER 1885 ; SAC.PEAK CA XV at R = 1.13
DOY OF CMP
231
225
219
213
207
201
90
60
30
0
-30
-60
-90
MISSING DATA
0
30
60
90
120
150
180
210
240
270
300
330
360
E
W
HELIOGRAPHIC LONGITUDE
1994 WEST LIMB CONTOURS: YELLOW-MINIMUM,1,2,4,8 MILLIONTHS OF Io
(12-Oct-94)

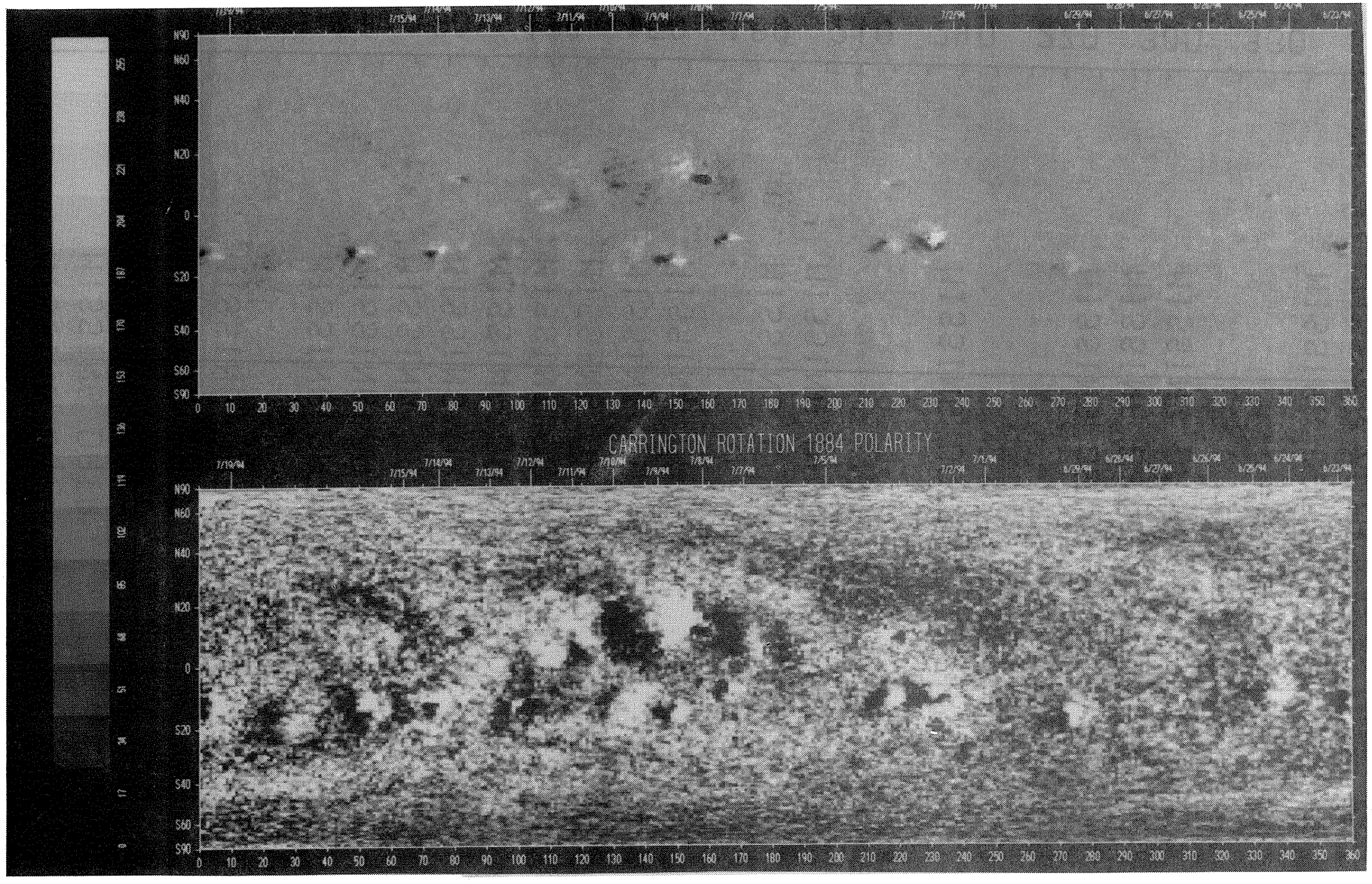
SOLAR MAGNETIC FIELD SYNOPTIC CHART

CARRINGTON ROTATION NUMBER 1884

(23 June to 20 July 1994)

National Solar Observatory/Kitt Peak

Dates of Observation



Heliographic Longitude

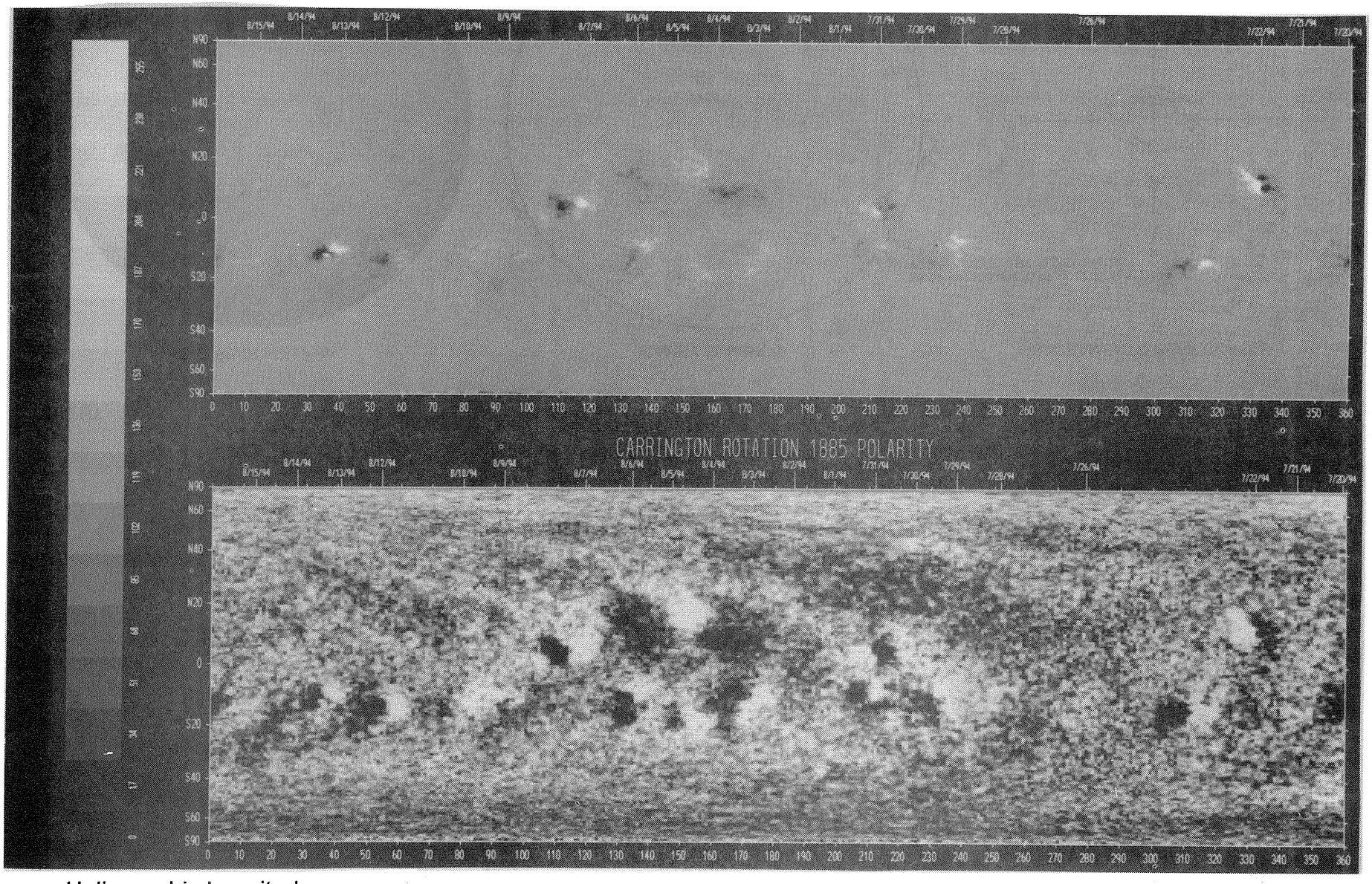
SOLAR MAGNETIC FIELD SYNOPTIC CHART

CARRINGTON ROTATION NUMBER 1885

(20 July to 16 August 1994)

National Solar Observatory/Kitt Peak

Dates of Observation



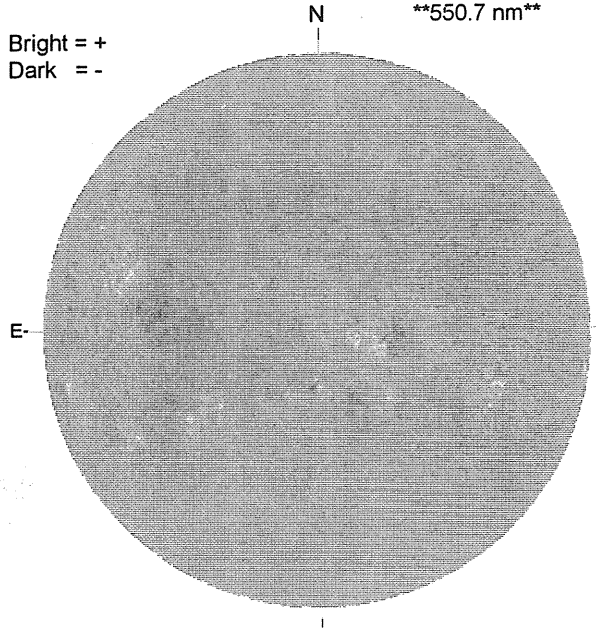
Heliographic Longitude

AUGUST 1, 1994 (P= 10.72, Bo = 5.77, Lo = 207.64)

KITT PEAK MAGNETOGRAM

550.7 nm

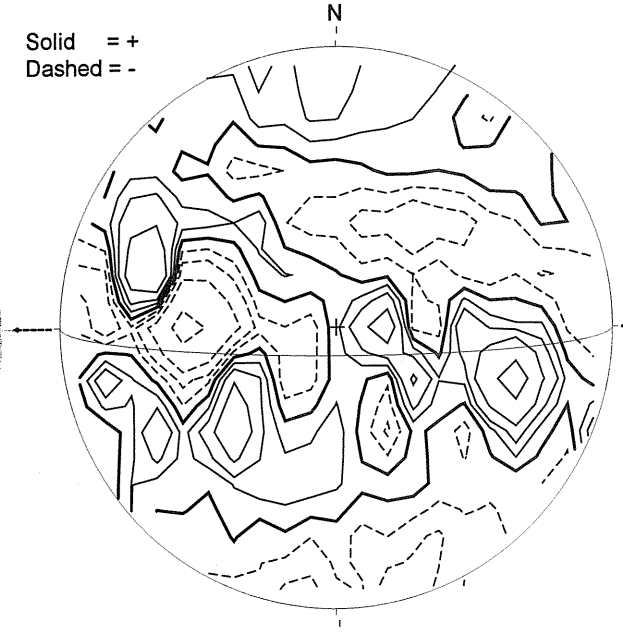
Bright = +
Dark = -



1615 UT

STANFORD MAGNETOGRAM

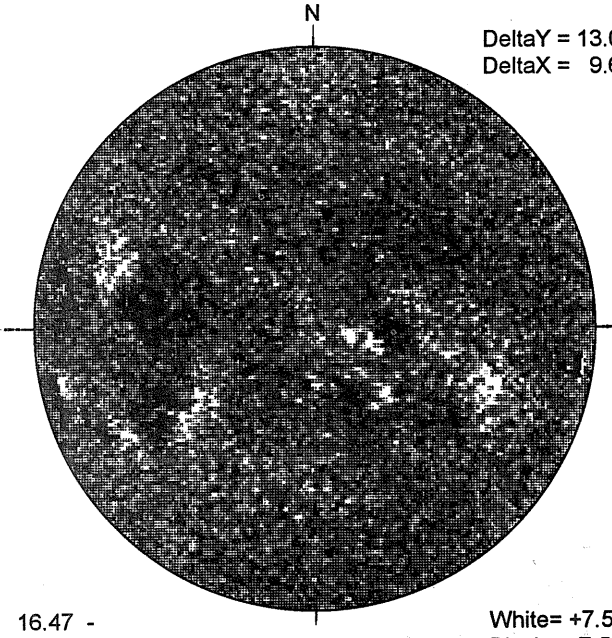
Solid = +
Dashed = -



1957 UT

MT. WILSON MAGNETOGRAM

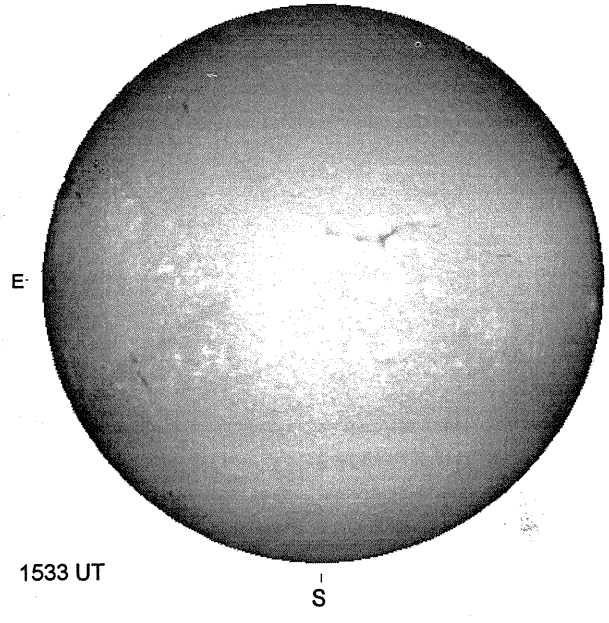
DeltaY = 13.0
DeltaX = 9.6



16.47 -
17.39 UT

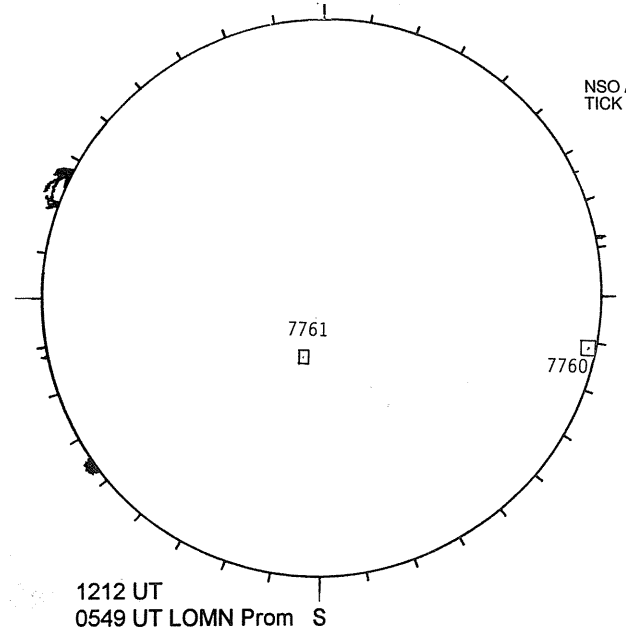
White= +7.5G
Black = -7.5G

----- BIG BEAR H-ALPHA



1533 UT

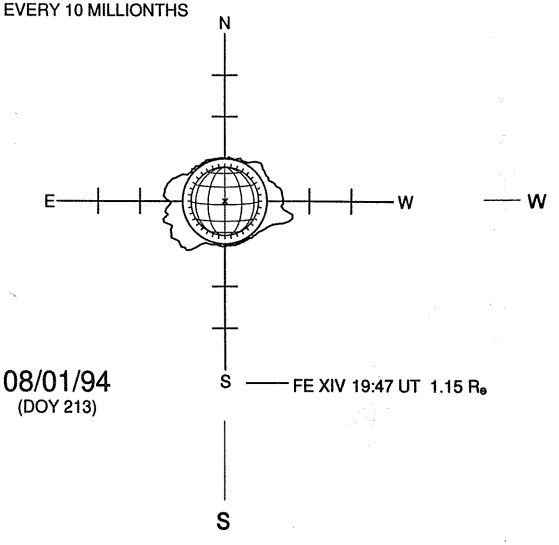
RAMEY SUNSPOT



1212 UT
0549 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



08/01/94
(DOY 213)

FE XIV 19:47 UT 1.15 $R_\odot$

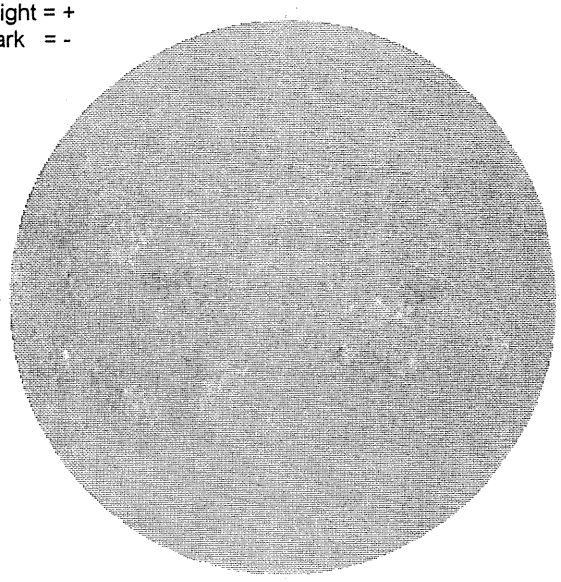
AUGUST 2, 1994 (P= 11.12, Bo = 5.85, Lo = 194.42)

KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -



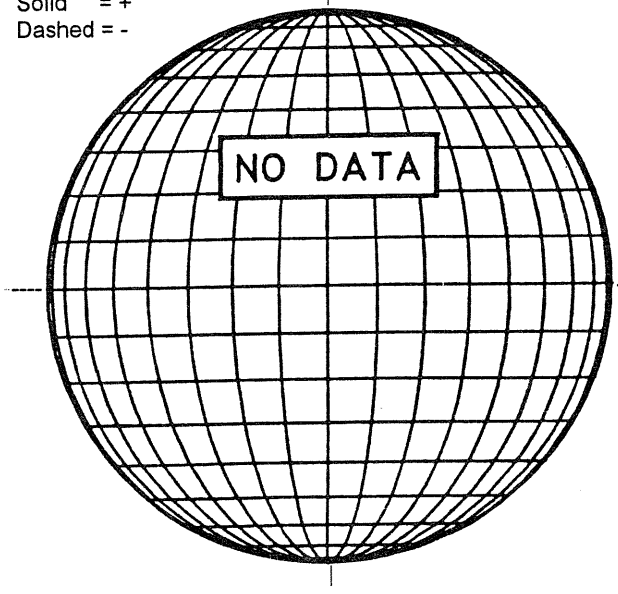
E

1516 UT

STANFORD MAGNETOGRAM

N

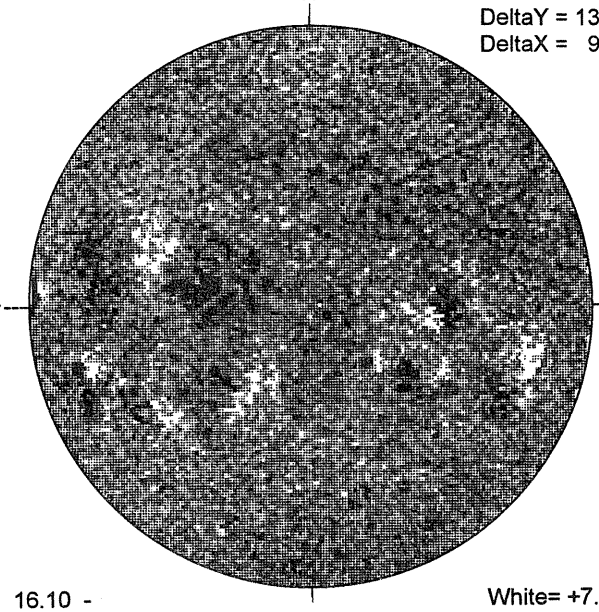
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

N

DeltaY = 13.0
DeltaX = 9.6

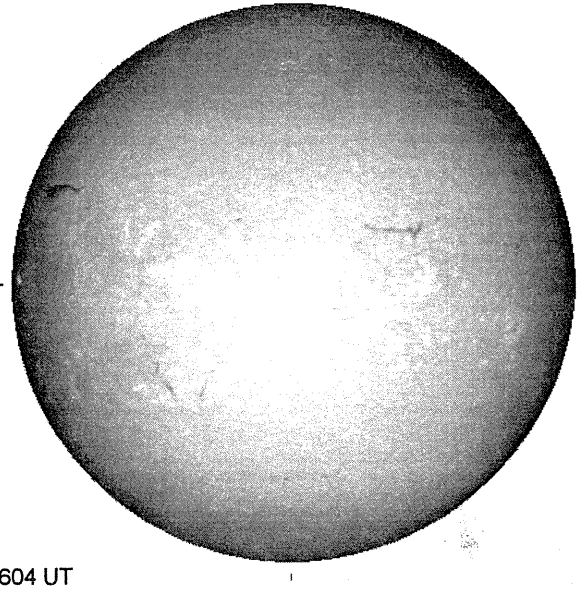


W

16.10 -
17.02 UT

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

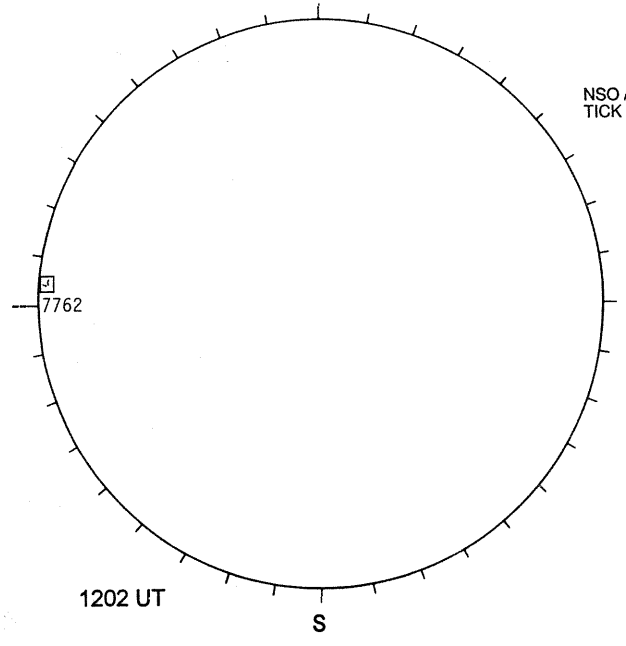


E--

1604 UT

S

RAMEY SUNSPOT

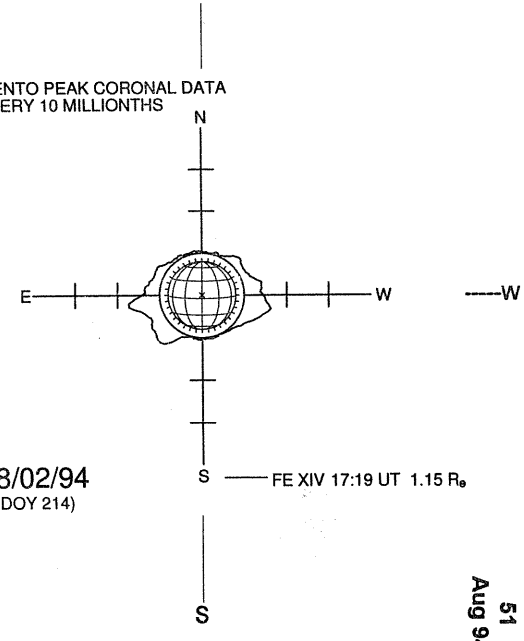


1202 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



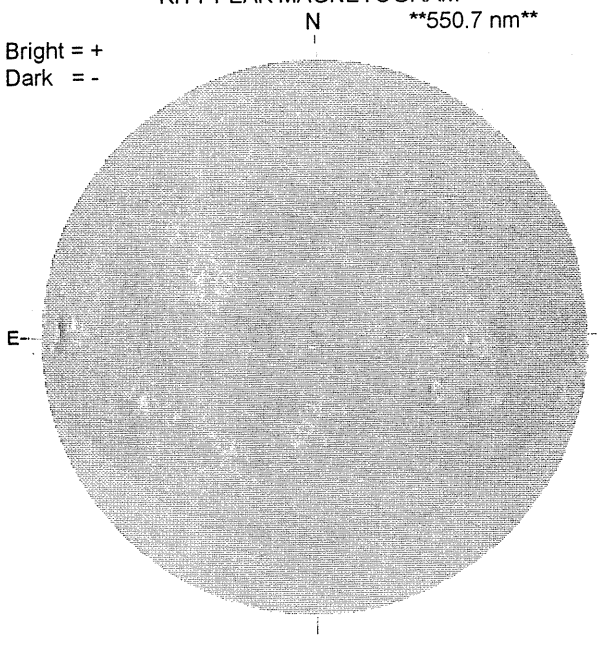
08/02/94
(DOY 214)

FE XIV 17:19 UT 1.15 $R_\odot$

S

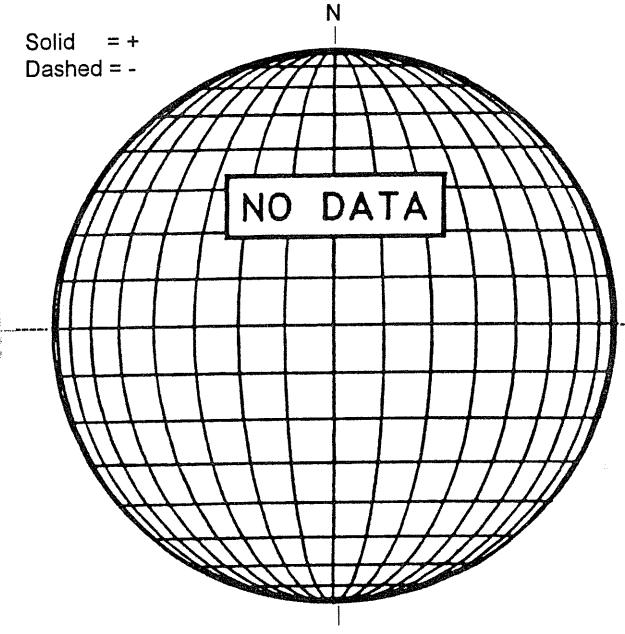
AUGUST 3, 1994 (P= 11.51, Bo = 5.92, Lo = 181.19)

KITT PEAK MAGNETOGRAM

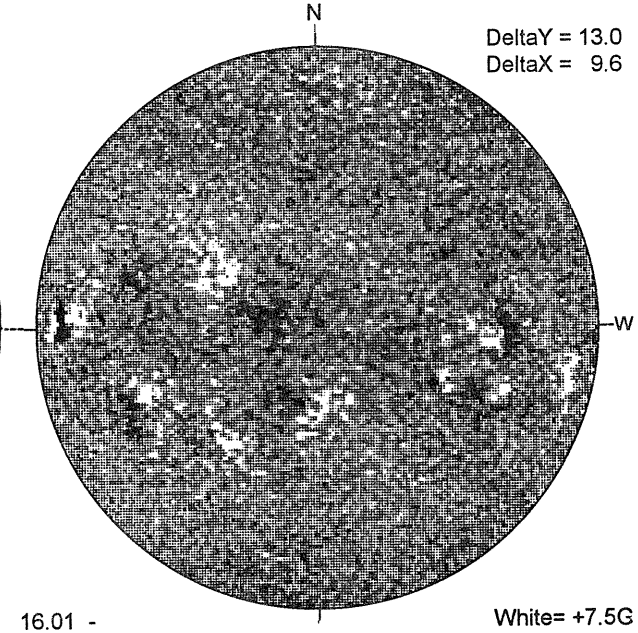


1406 UT

STANFORD MAGNETOGRAM



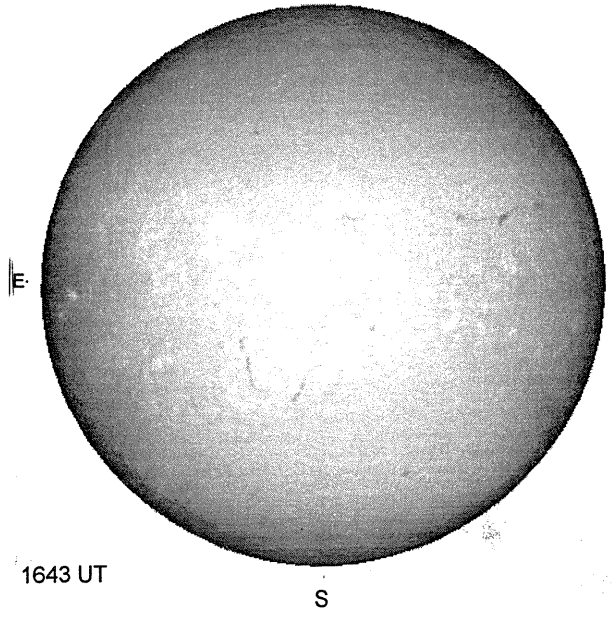
MT. WILSON MAGNETOGRAM



16.01 -
16.93 UT

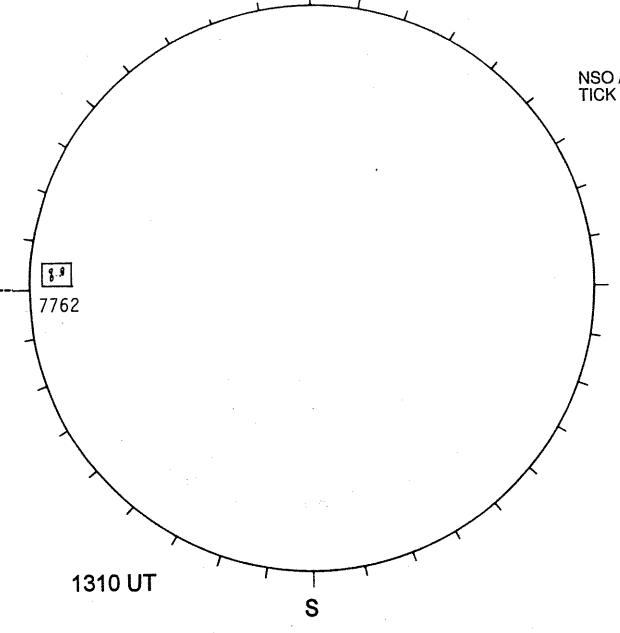
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



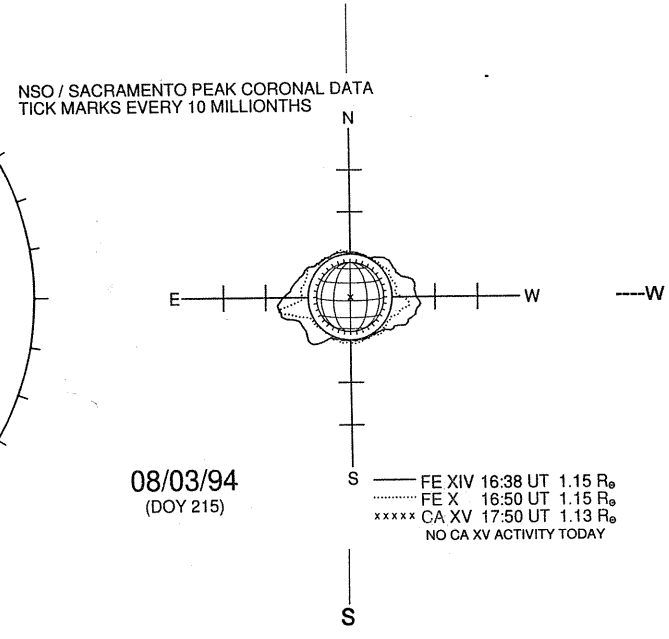
1643 UT

RAMEY SUNSPOT



1310 UT

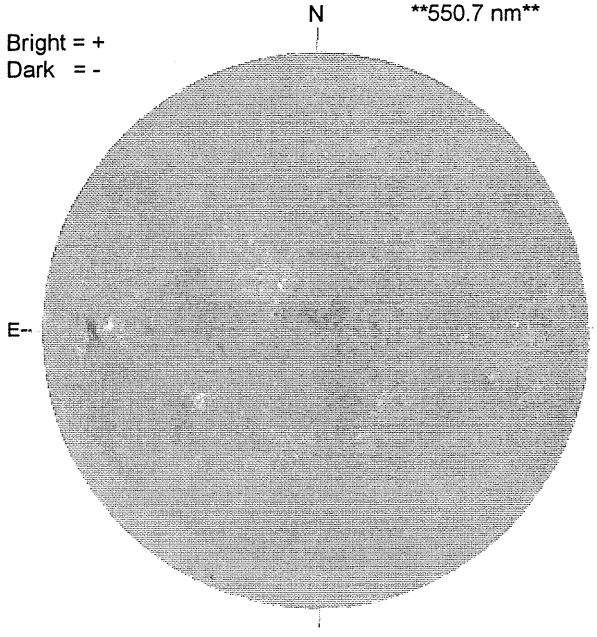
SACRAMENTO PEAK CORONA (1.15 Radii)----



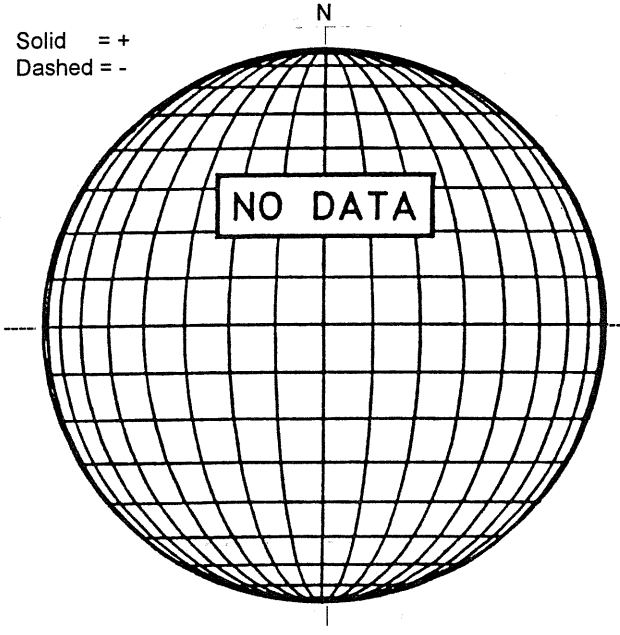
08/03/94
(DOY 215)

AUGUST 4, 1994 (P= 11.90, Bo = 5.99, Lo = 167.97)

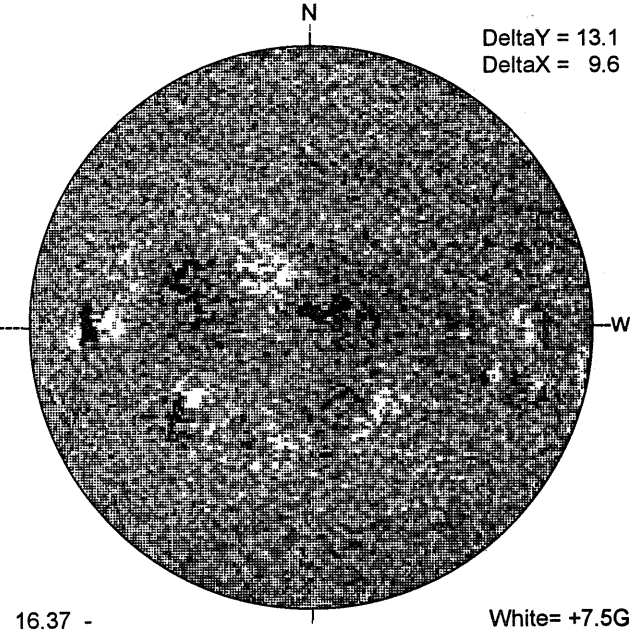
KITT PEAK MAGNETOGRAM



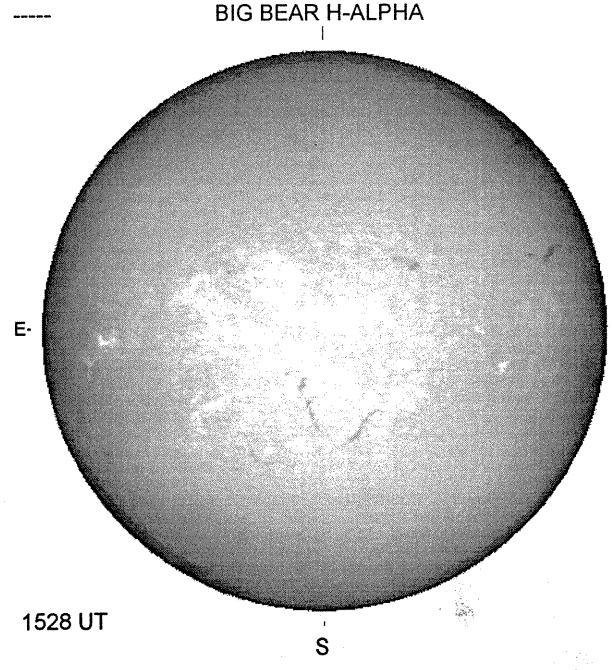
STANFORD MAGNETOGRAM



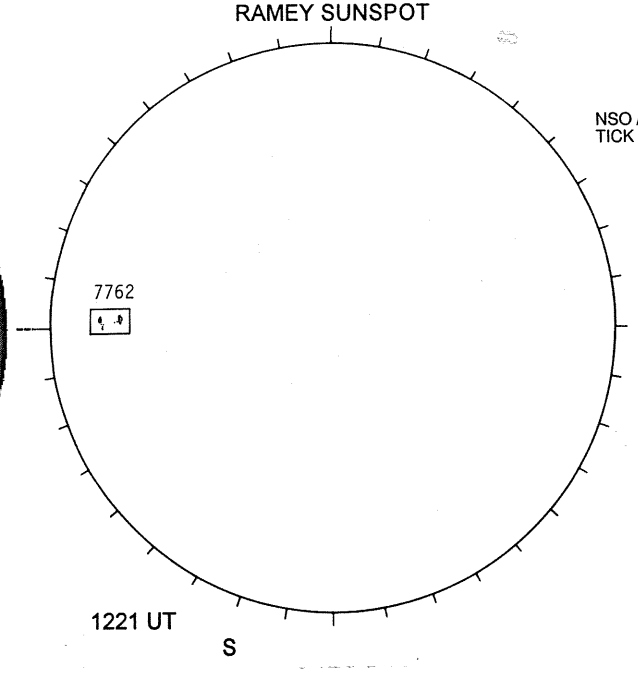
MT. WILSON MAGNETOGRAM



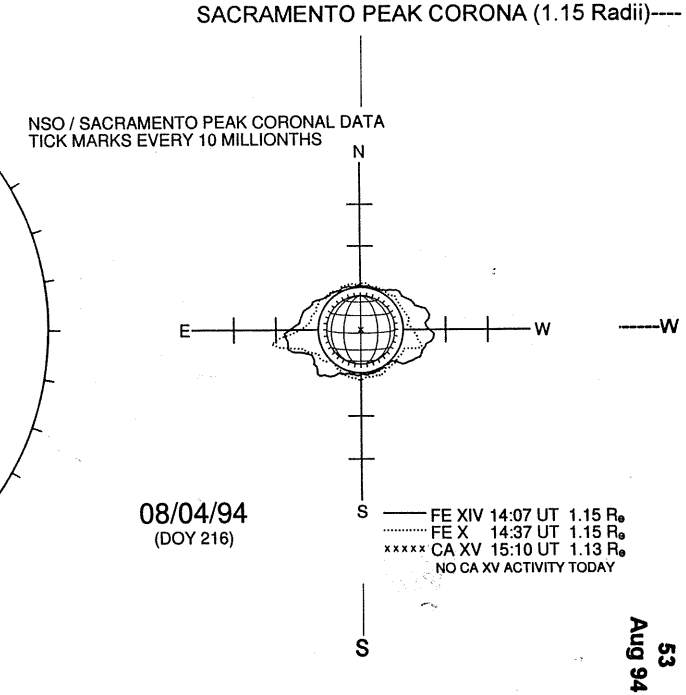
BIG BEAR H-ALPHA



RAMEY SUNSPOT



SACRAMENTO PEAK CORONA (1.15 Radii)----



AUGUST 5, 1994 (P= 12.29, Bo = 6.05, Lo = 154.74)

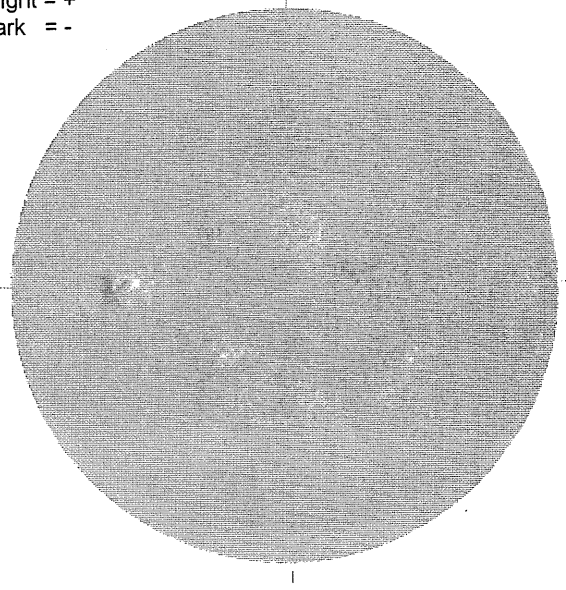
KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -

E



1444 UT

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

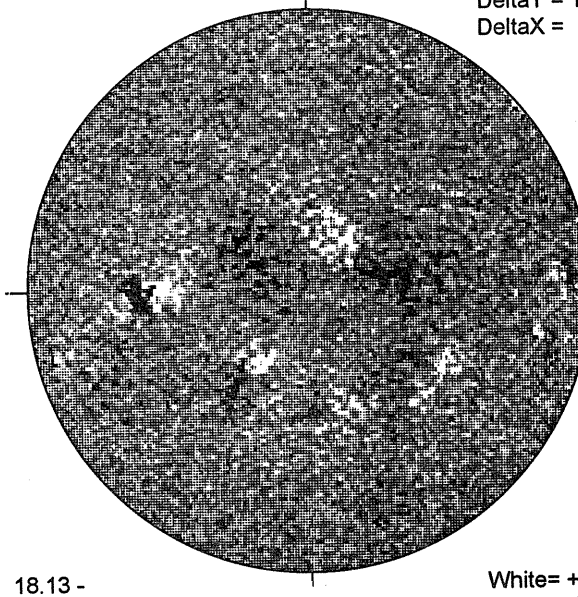
1852 UT

MT. WILSON MAGNETOGRAM

N

DeltaY = 13.1
DeltaX = 9.6

W

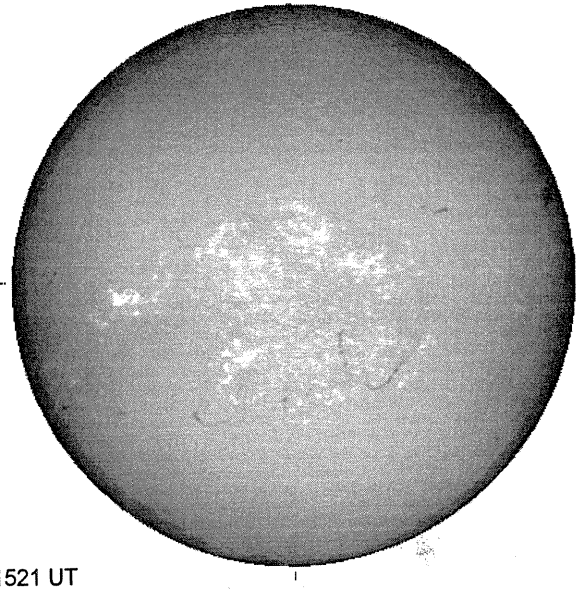


18.13 -
19.05 UT

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

E

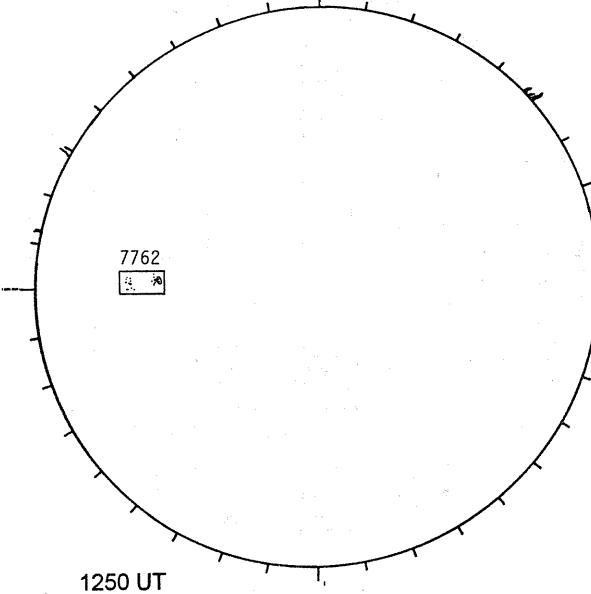


1521 UT

S

RAMEY SUNSPOT

7762

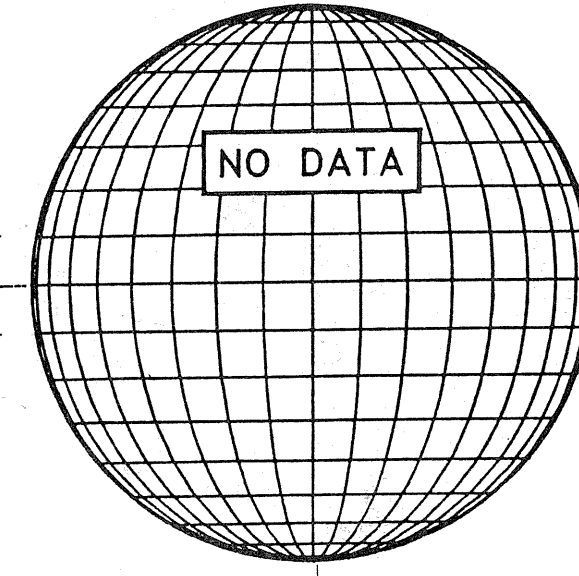


1250 UT
0434 UT LOMN Prom S

LOMNICKY PEAK CORONA (1.04 Radii)----

NO DATA

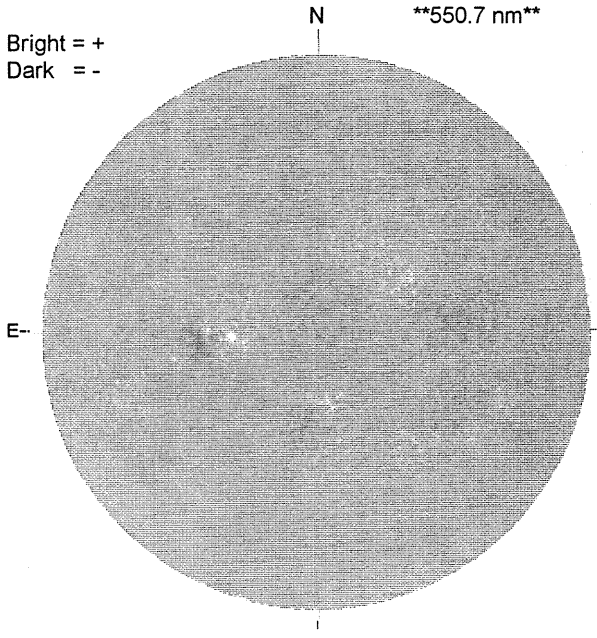
W



S

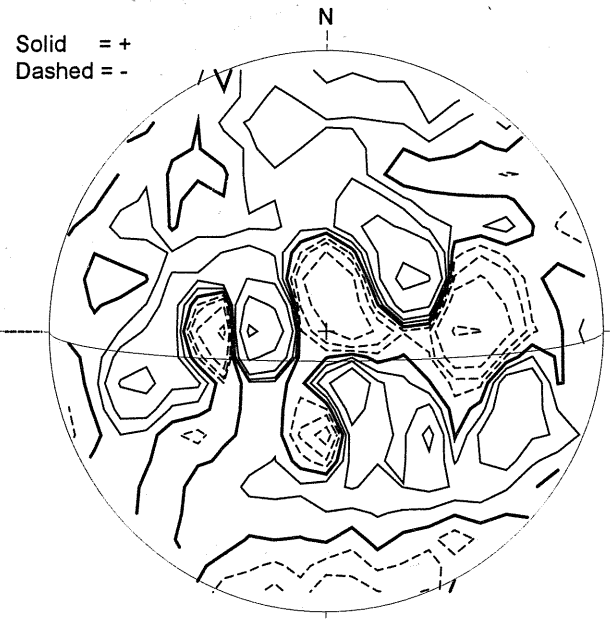
AUGUST 6, 1994 (P= 12.67, Bo = 6.12, Lo = 141.52)

KITT PEAK MAGNETOGRAM



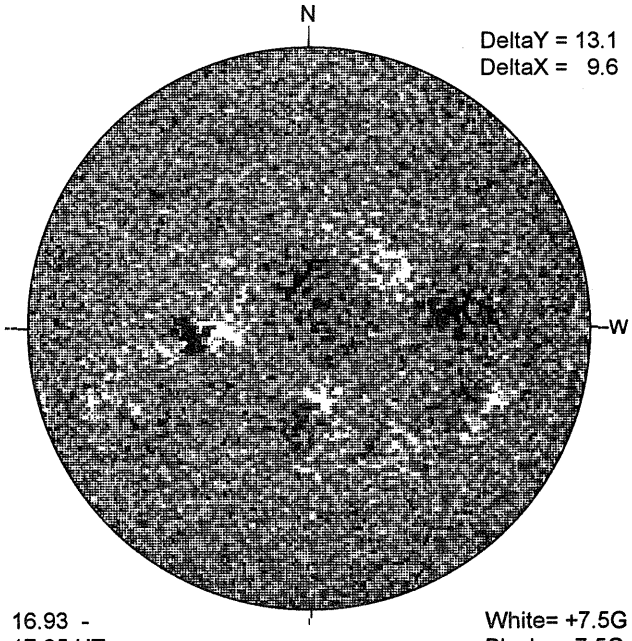
1435 UT

STANFORD MAGNETOGRAM



2016 UT

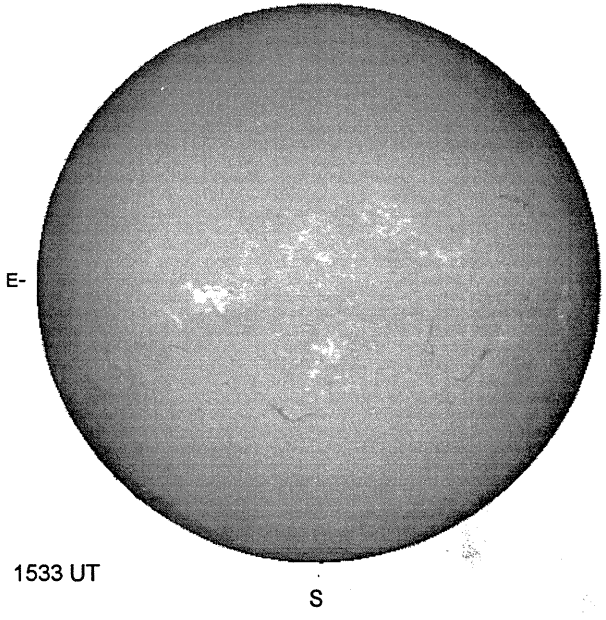
MT. WILSON MAGNETOGRAM



16.93 -
17.85 UT

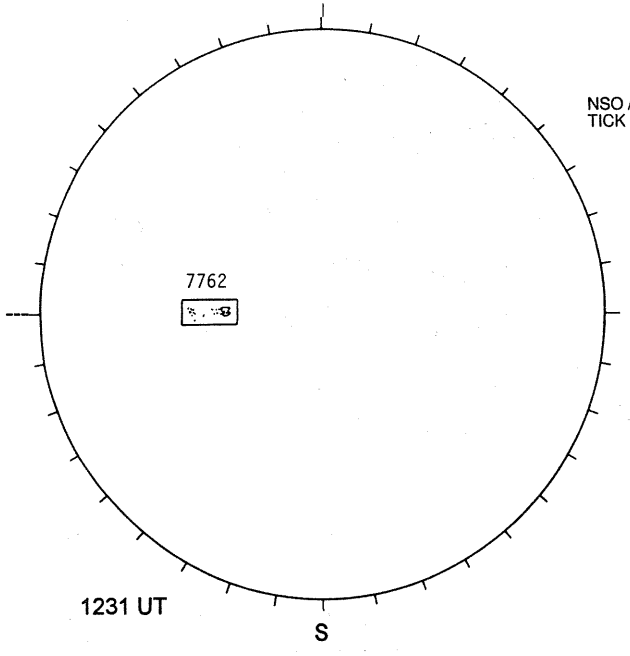
White= +7.5G
Black = -7.5G

----- BIG BEAR H-ALPHA



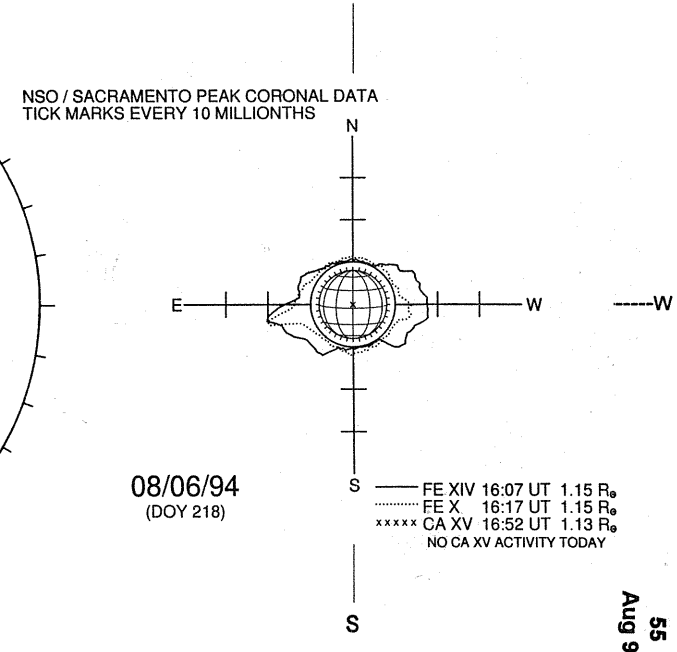
1533 UT

RAMEY SUNSPOT



1231 UT

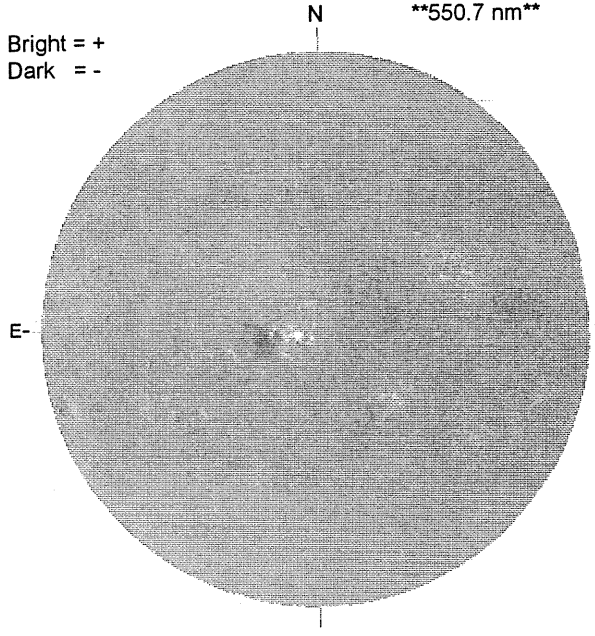
SACRAMENTO PEAK CORONA (1.15 Radii)----



55
Aug 94

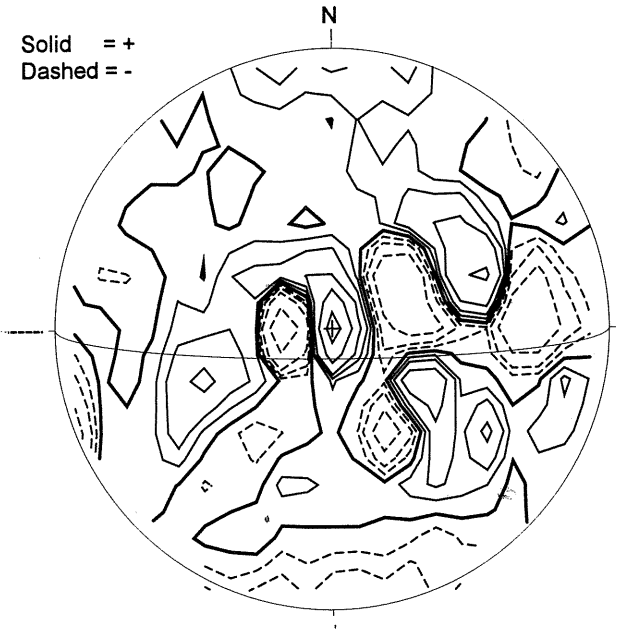
AUGUST 7, 1994 (P= 13.05, Bo = 6.18, Lo = 128.30)

KITT PEAK MAGNETOGRAM



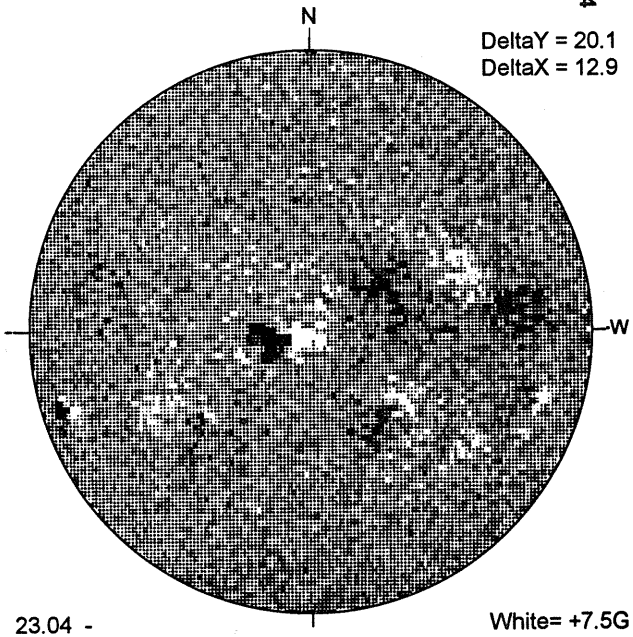
1633 UT

STANFORD MAGNETOGRAM



2244 UT

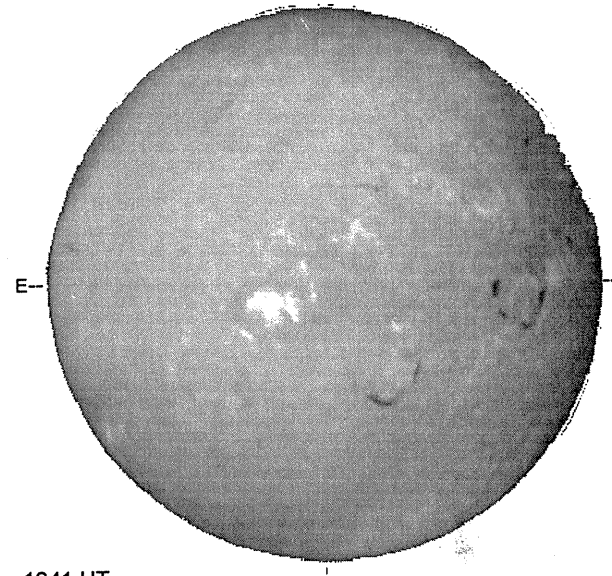
MT. WILSON MAGNETOGRAM



23.04 -
23.45 UT

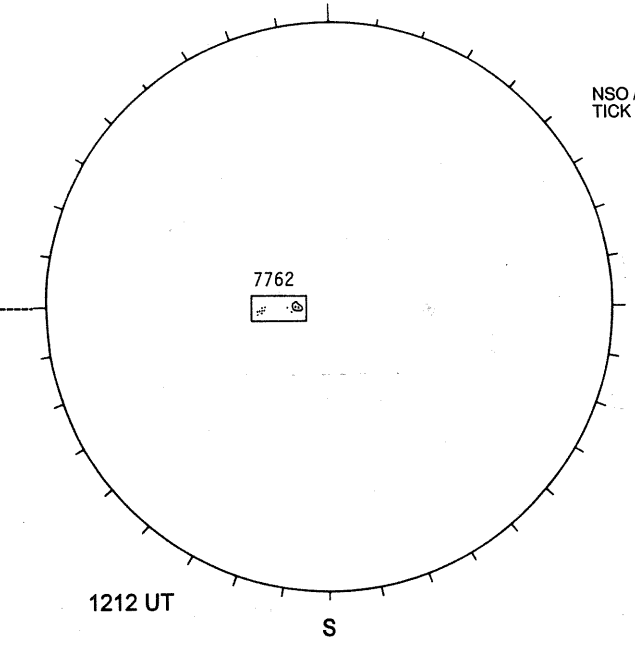
White= +7.5G
Black = -7.5G

SACRAMENTO PEAK H-ALPHA



1341 UT

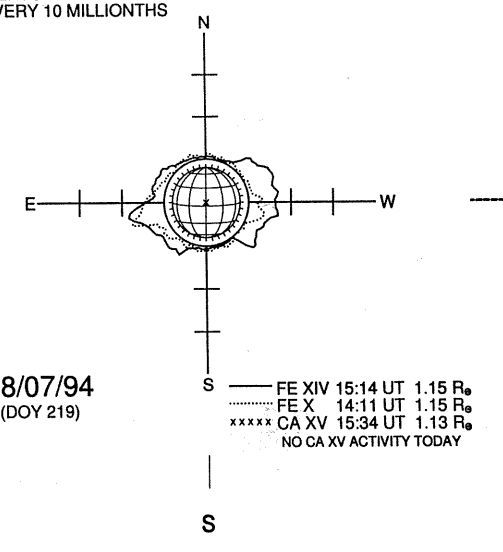
RAMEY SUNSPOT



1212 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS

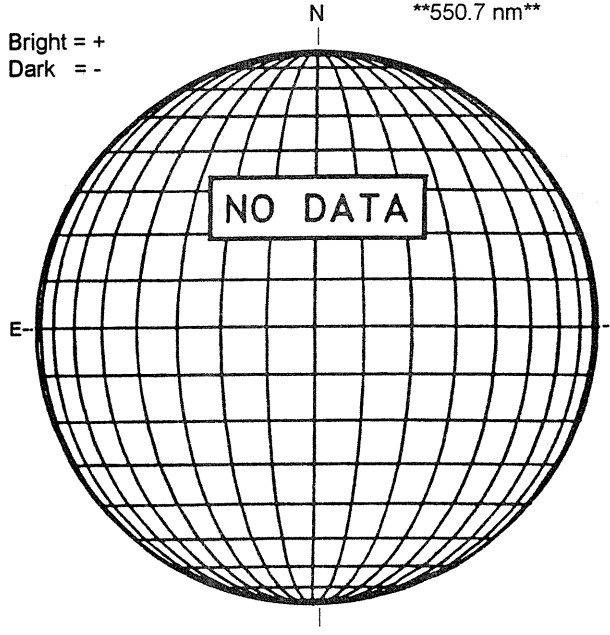


08/07/94
(DOY 219)

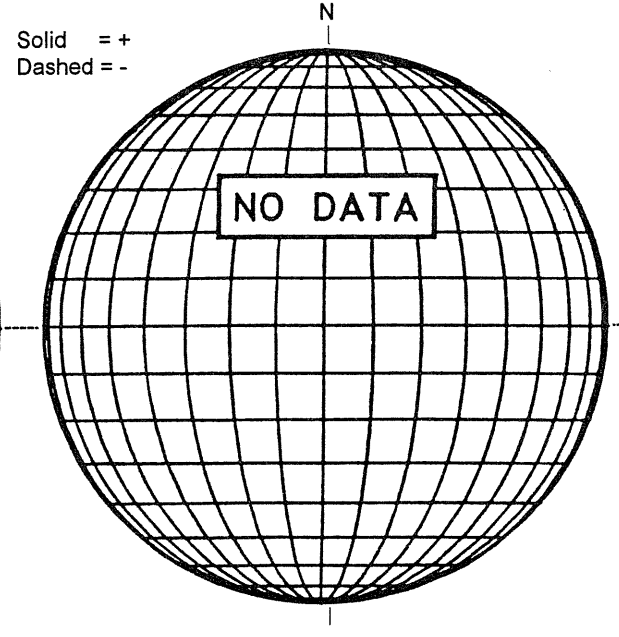
FE XIV 15:14 UT 1.15 R_e
FE X 14:11 UT 1.15 R_e
CA XV 15:34 UT 1.13 R_e
NO CA XV ACTIVITY TODAY

AUGUST 8, 1994 (P= 13.42, Bo = 6.25, Lo = 115.08)

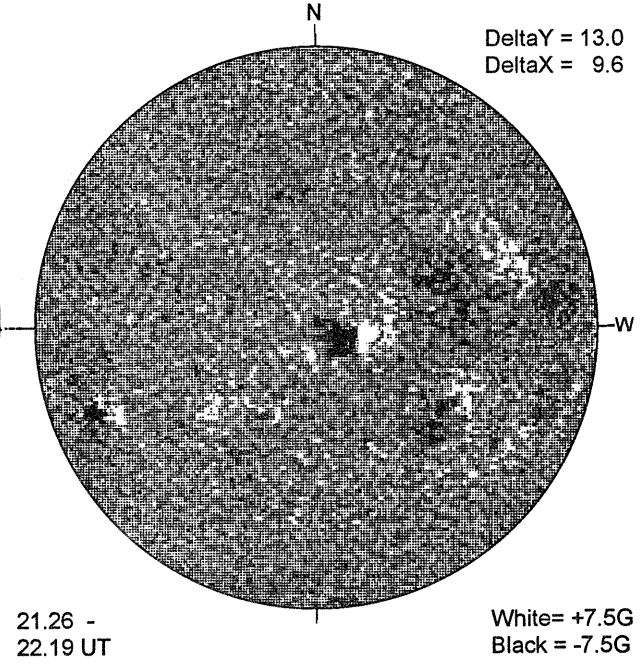
KITT PEAK MAGNETOGRAM



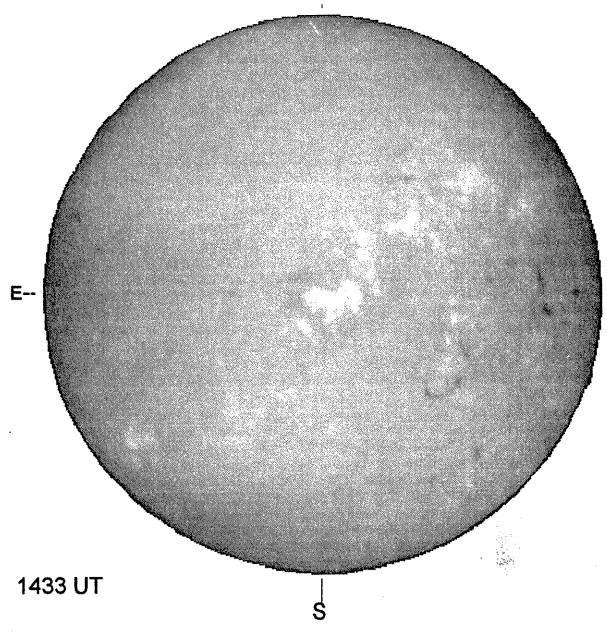
STANFORD MAGNETOGRAM



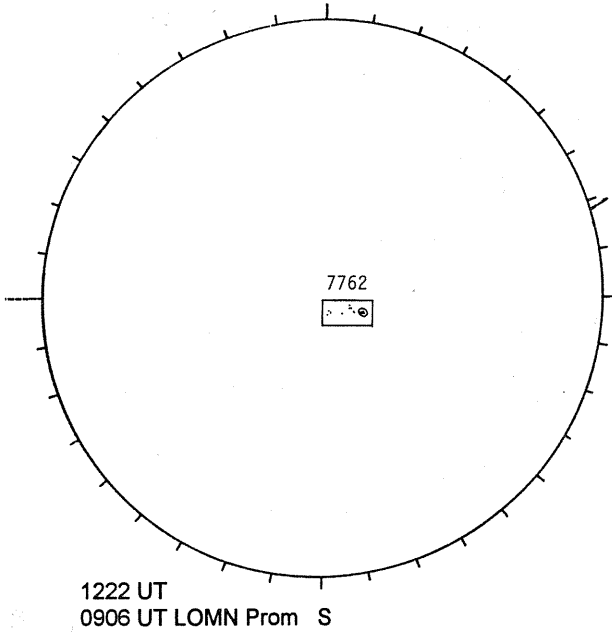
MT. WILSON MAGNETOGRAM



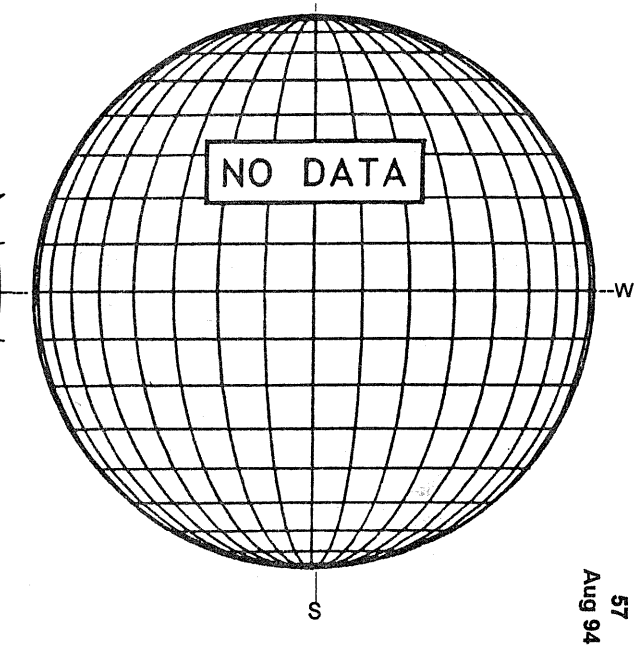
SACRAMENTO PEAK H-ALPHA



RAMEY SUNSPOT



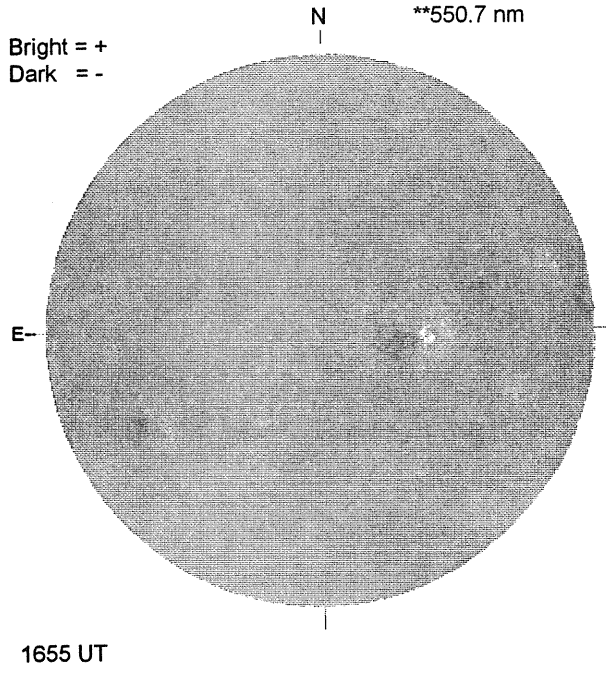
SACRAMENTO PEAK CORONA (1.15 Radii)----



57
Aug 94

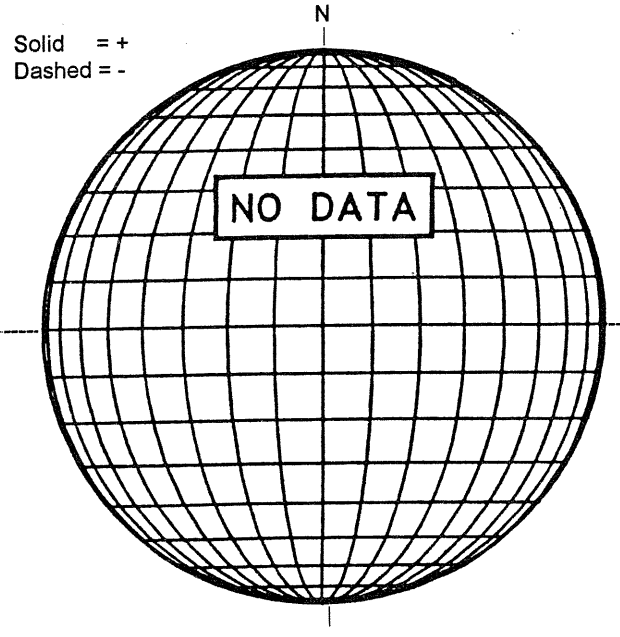
AUGUST 9, 1994 (P= 13.79, Bo = 6.31, Lo = 101.85)

KITT PEAK MAGNETOGRAM

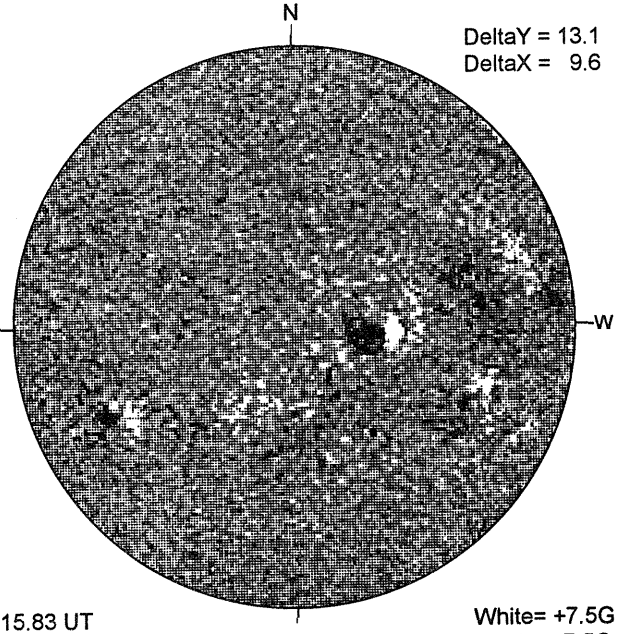


1655 UT

STANFORD MAGNETOGRAM



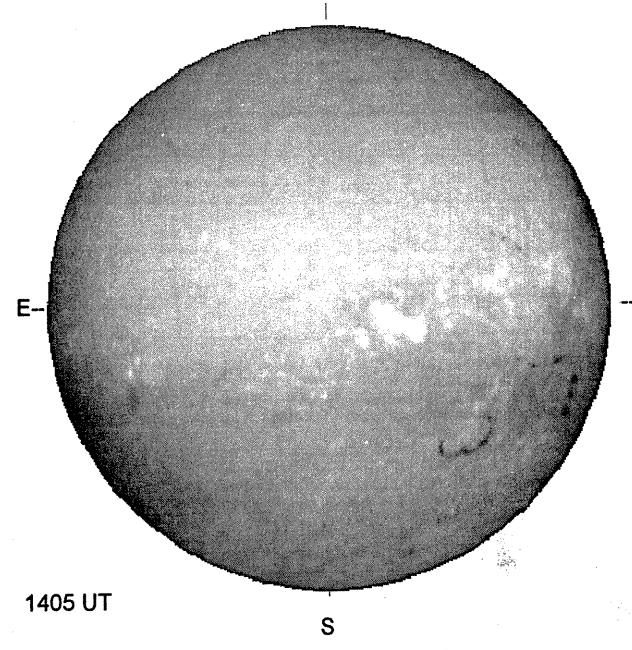
MT. WILSON MAGNETOGRAM



15.83 UT
16.75 UT

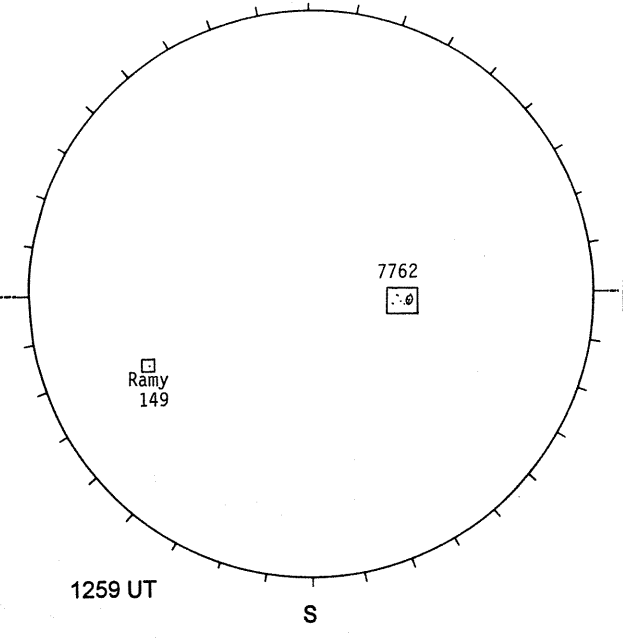
White= +7.5G
Black = -7.5G

----- SACRAMENTO PEAK H-ALPHA



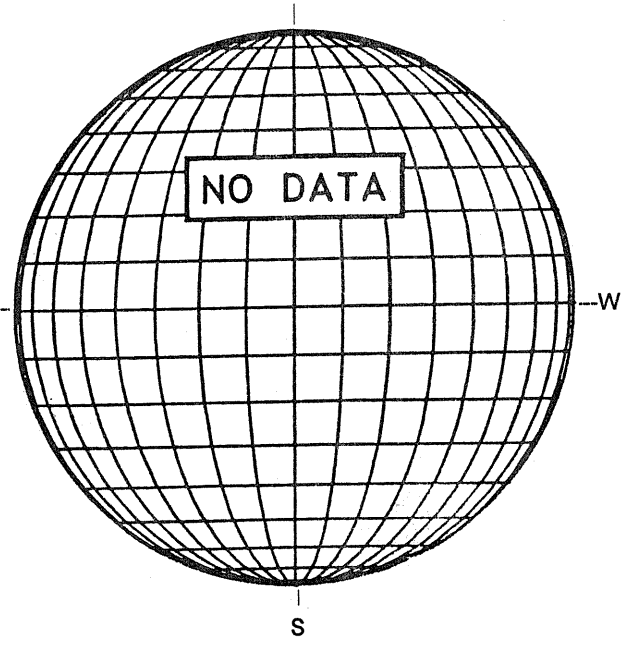
1405 UT

RAMEY SUNSPOT



1259 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----



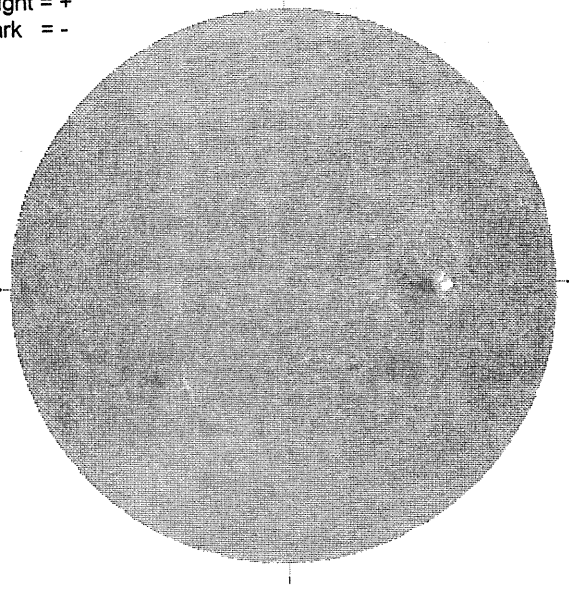
AUGUST 10, 1994 (P= 14.16, Bo = 6.37, Lo = 88.63)

KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -



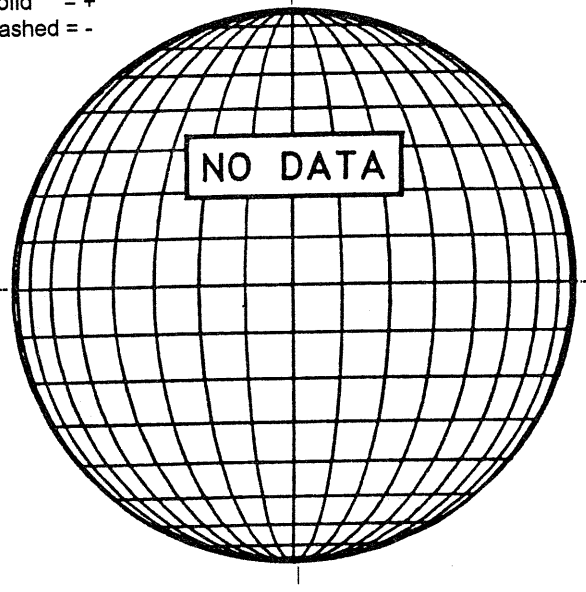
E

1456 UT

STANFORD MAGNETOGRAM

N

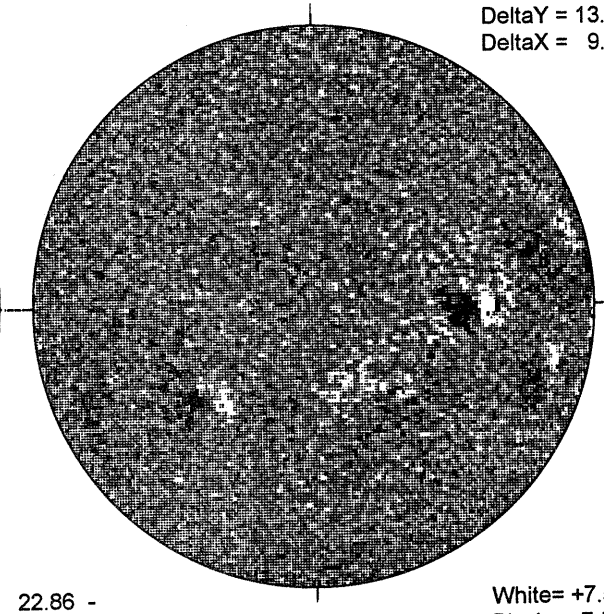
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

N

DeltaY = 13.1
DeltaX = 9.6

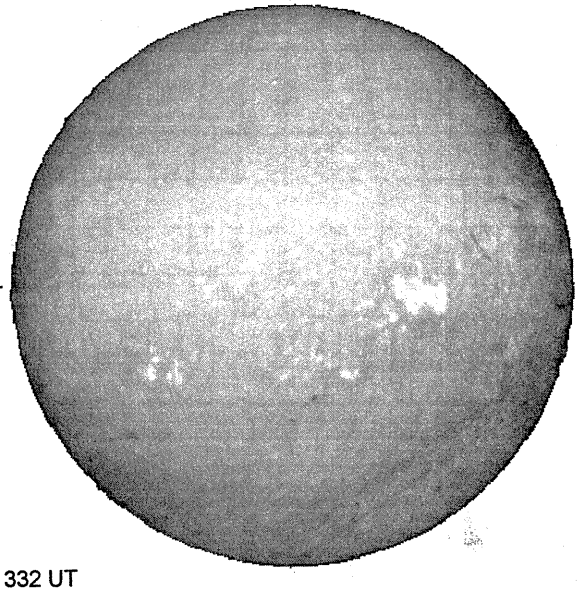


W

22.86 -
23.79 UT

White= +7.5G
Black = -7.5G

SACRAMENTO PEAK H-ALPHA

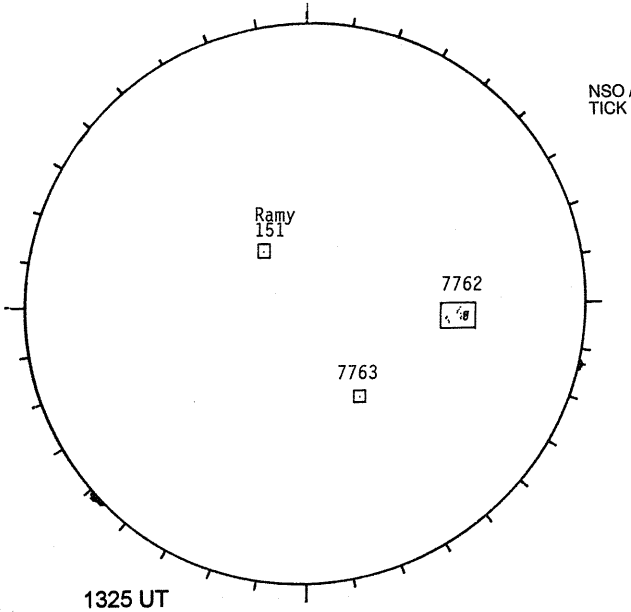


E

1332 UT

S

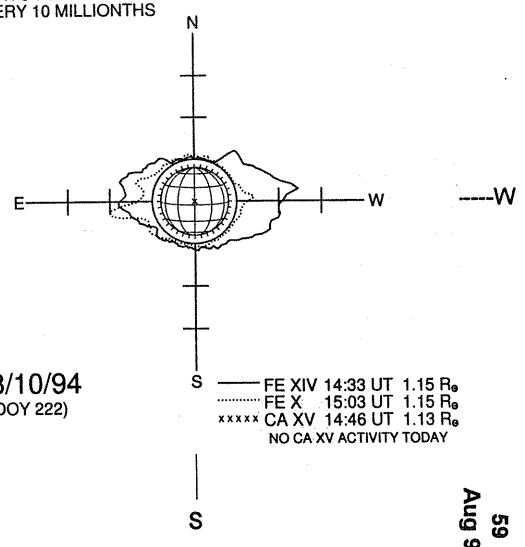
RAMEY SUNSPOT



1325 UT
0455 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



----W

08/10/94
(DOY 222)

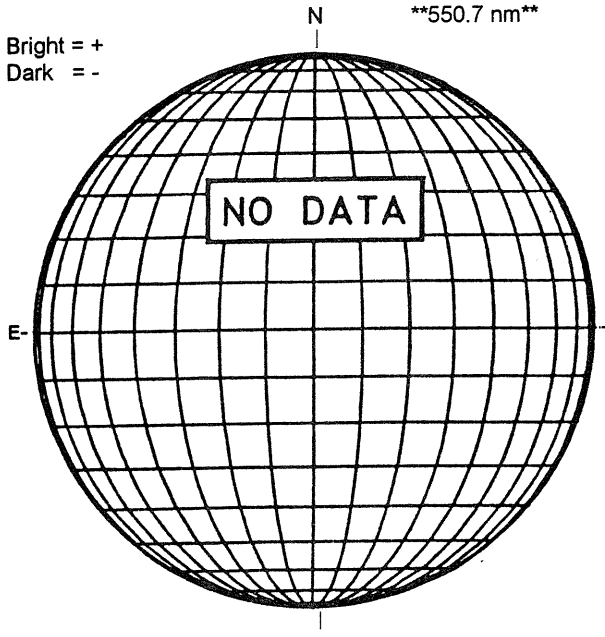
FE XIV 14:33 UT 1.15 $R_\odot$
FE X 15:03 UT 1.15 $R_\odot$
xxxxx CA XV 14:46 UT 1.13 $R_\odot$
NO CA XV ACTIVITY TODAY

S

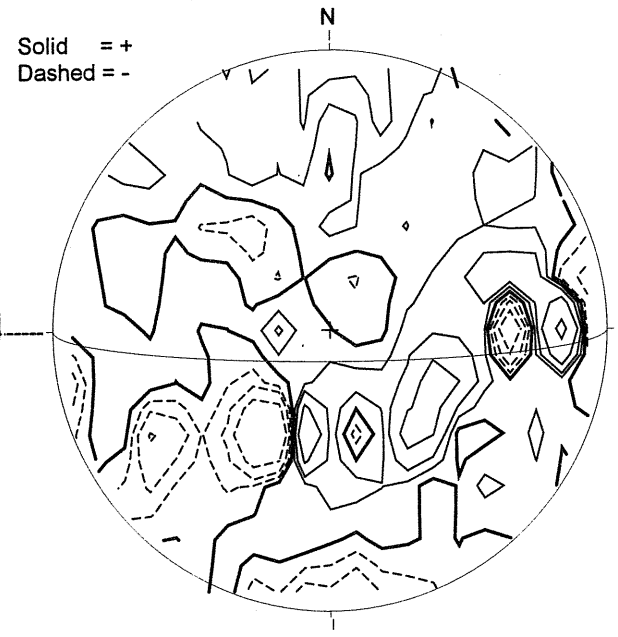
59
Aug 94

AUGUST 11, 1994 (P= 14.52 Bo = 6.42, Lo = 75.41)

KITT PEAK MAGNETOGRAM

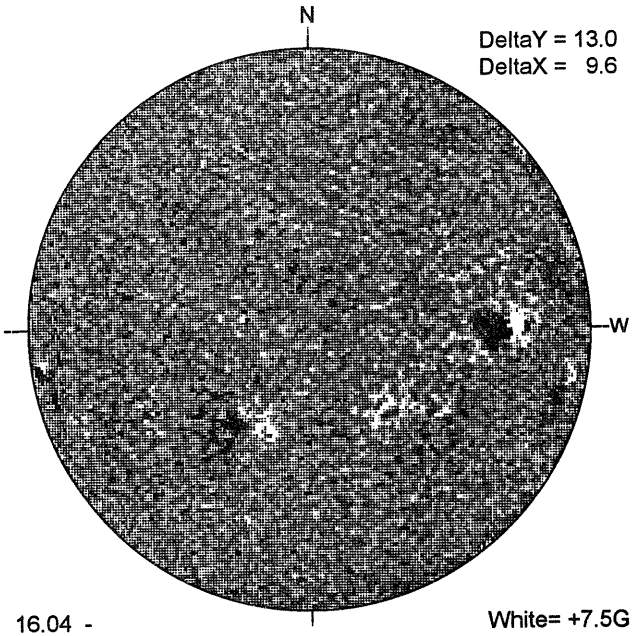


STANFORD MAGNETOGRAM



2332 UT

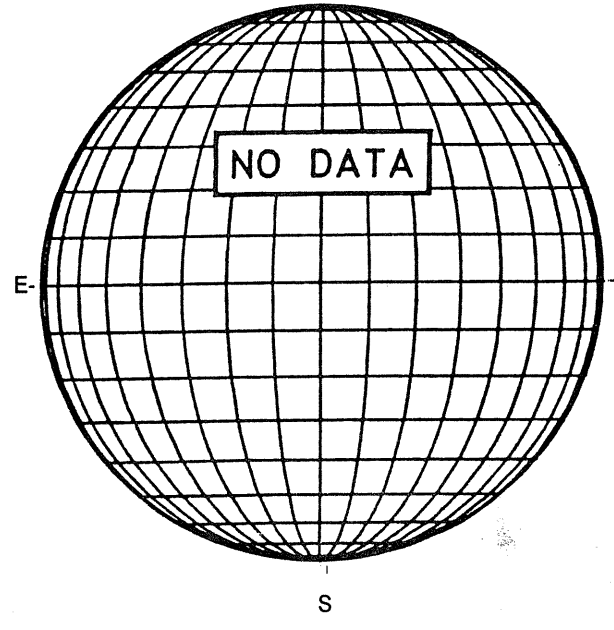
MT. WILSON MAGNETOGRAM



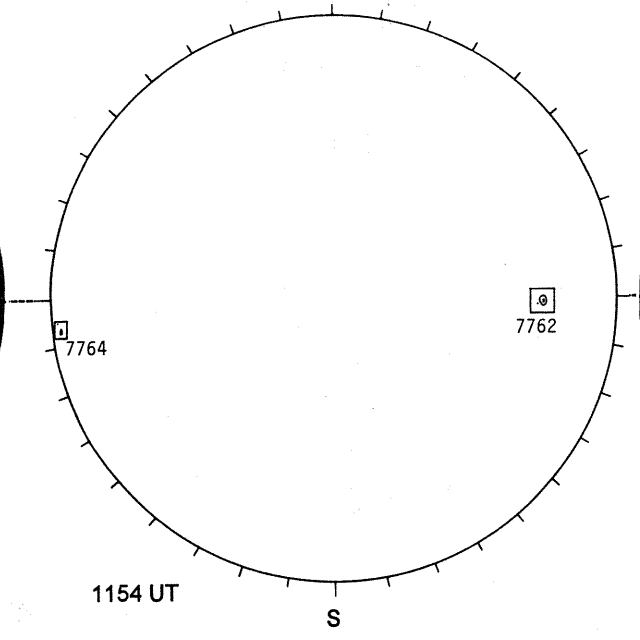
16.04 -
16.96 UT

White= +7.5G
Black = -7.5G

----- SACRAMENTO PEAK H-ALPHA

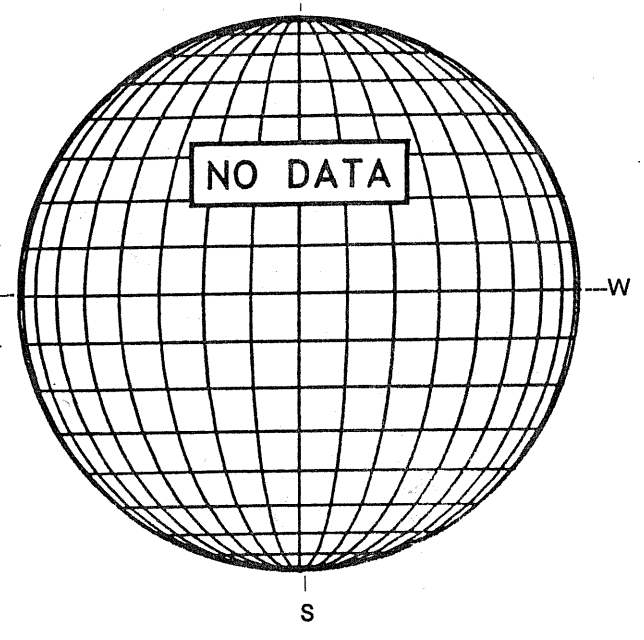


RAMEY SUNSPOT



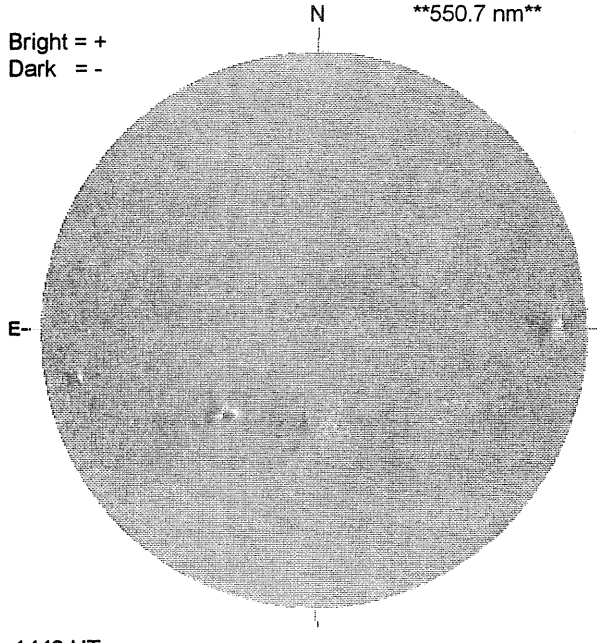
1154 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----



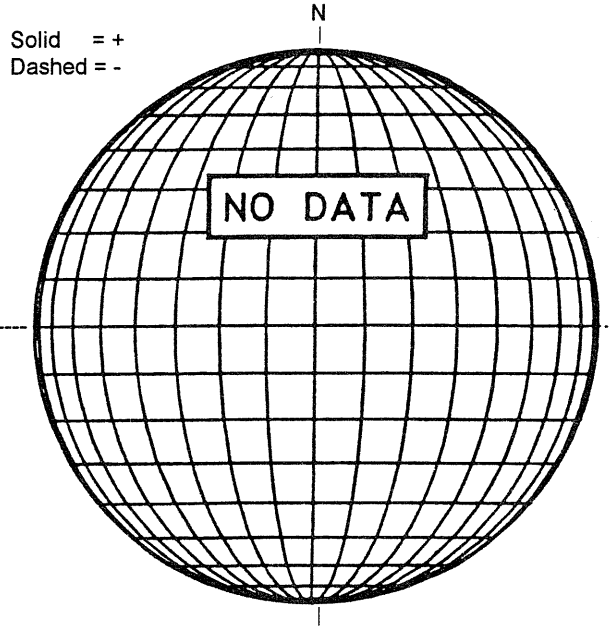
AUGUST 12, 1994 (P= 14.87, Bo = 6.48, Lo = 62.19)

KITT PEAK MAGNETOGRAM

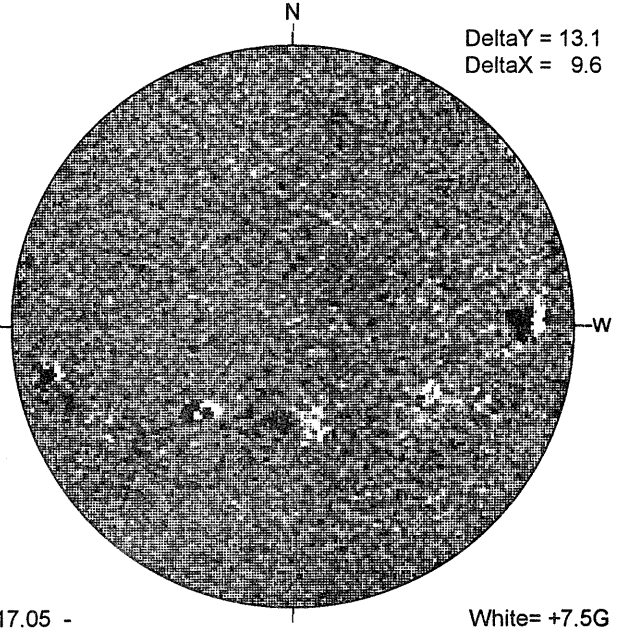


1442 UT

STANFORD MAGNETOGRAM



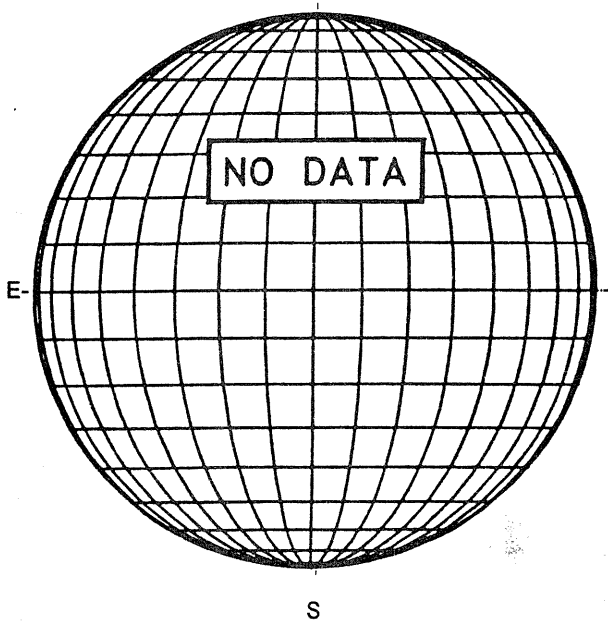
MT. WILSON MAGNETOGRAM



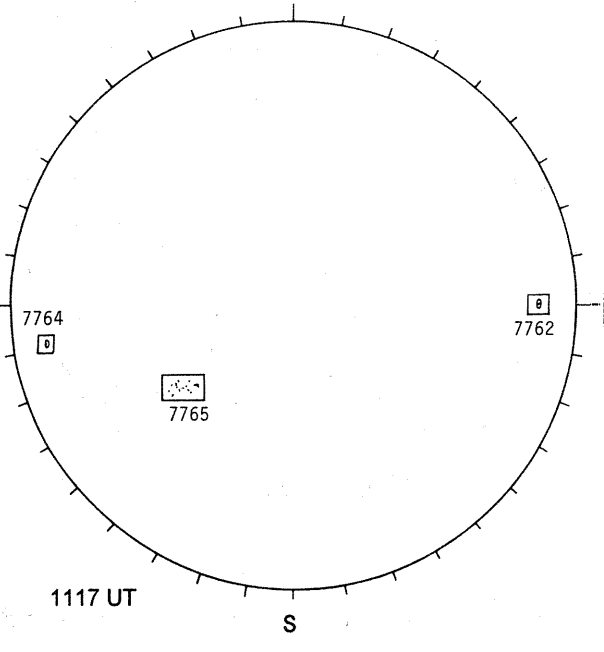
17.05 -
17.97 UT

White= +7.5G
Black = -7.5G

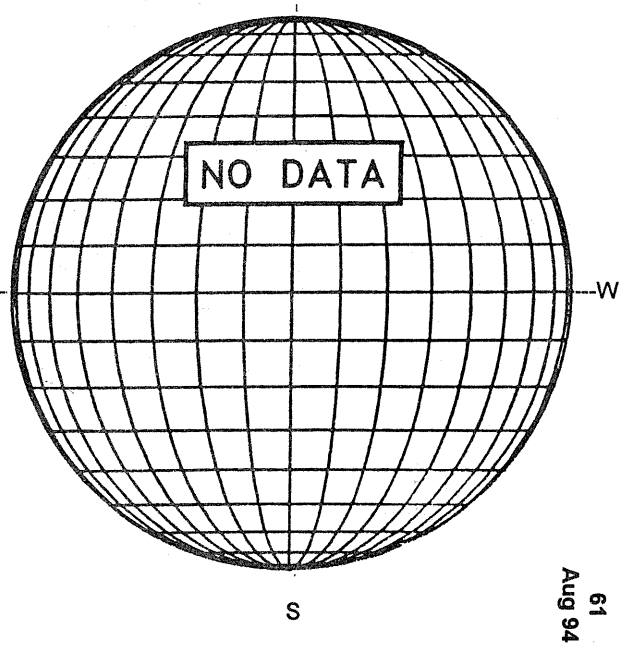
----- SACRAMENTO PEAK H-ALPHA



RAMEY SUNSPOT



SACRAMENTO PEAK CORONA (1.15 Radii)----

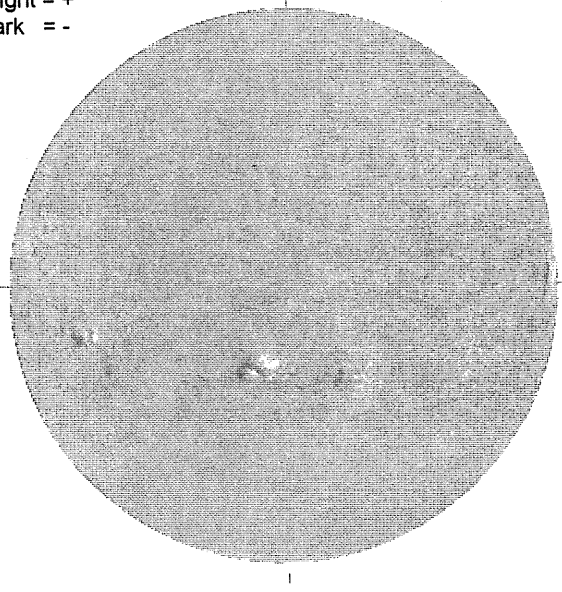


61
Aug 94

AUGUST 13, 1994 (P= 15.23, Bo = 6.53, Lo = 48.97)

KITT PEAK MAGNETOGRAM

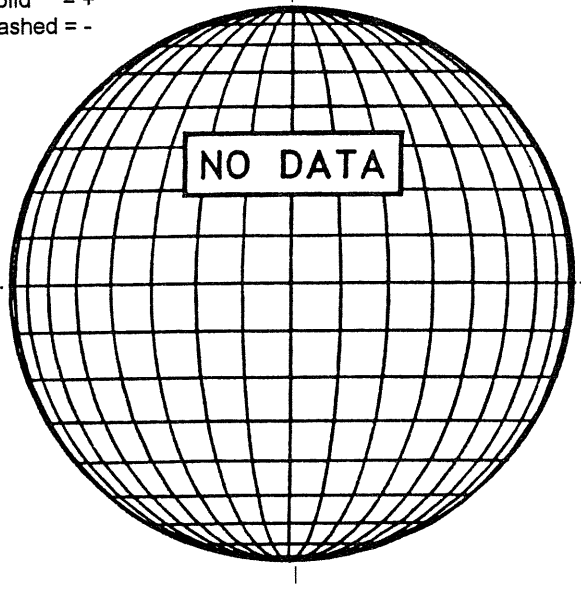
N
550.7 nm
Bright = +
Dark = -
E-



1450 UT

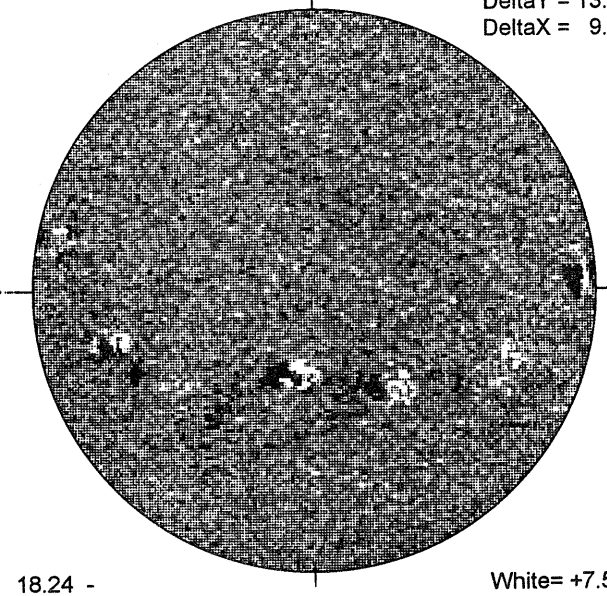
STANFORD MAGNETOGRAM

N
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

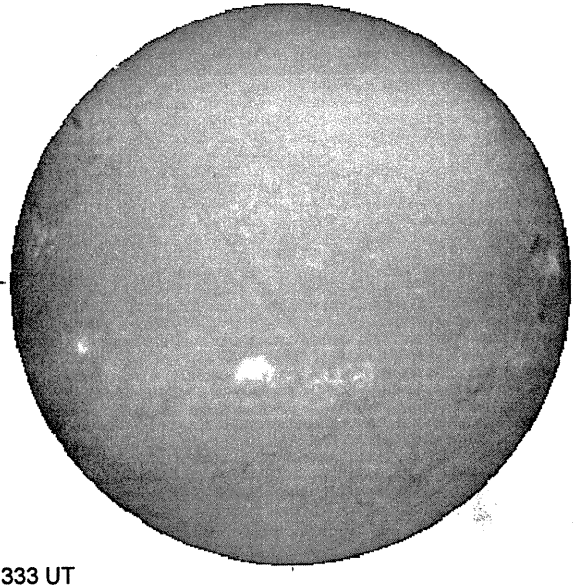
N
DeltaY = 13.1
DeltaX = 9.6
-W



18.24 -
19.16 UT

White= +7.5G
Black = -7.5G

SACRAMENTO PEAK H-ALPHA

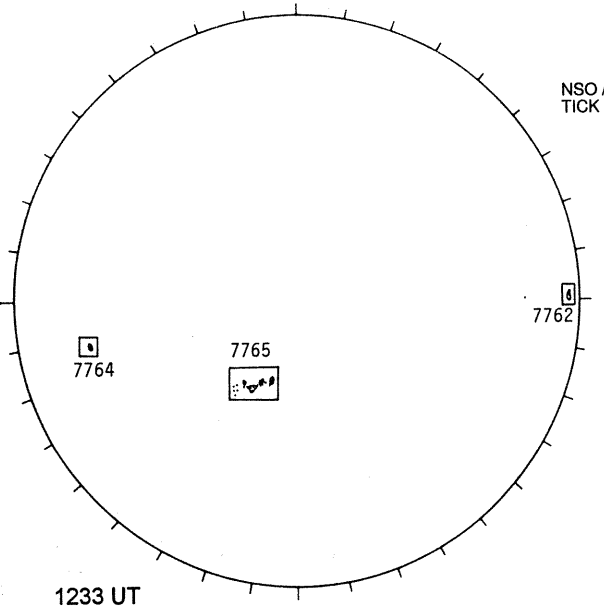


E-

1333 UT

S

RAMEY SUNSPOT

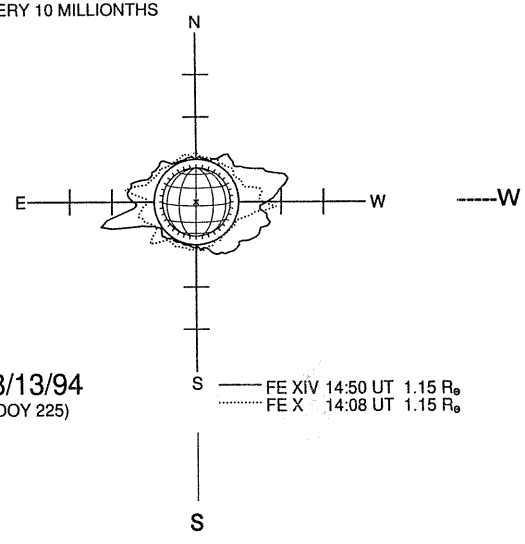


1233 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



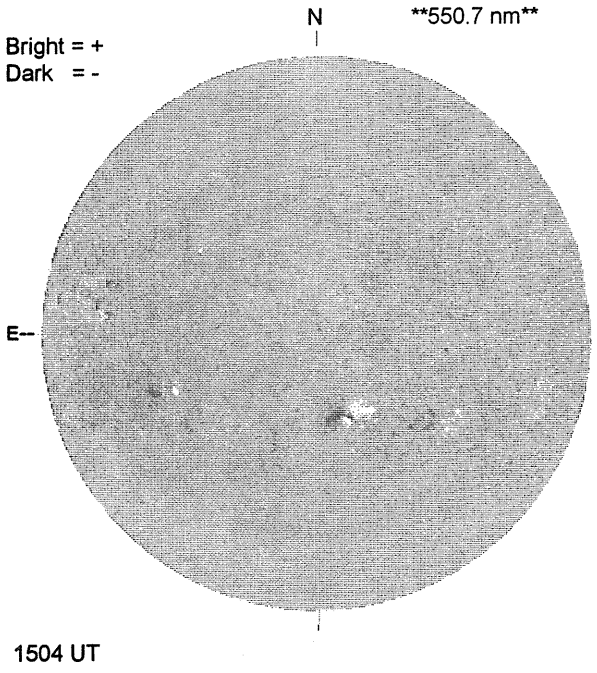
08/13/94
(DOY 225)

FE XIV 14:50 UT 1.15 $R_\odot$
FE X 14:08 UT 1.15 $R_\odot$

S

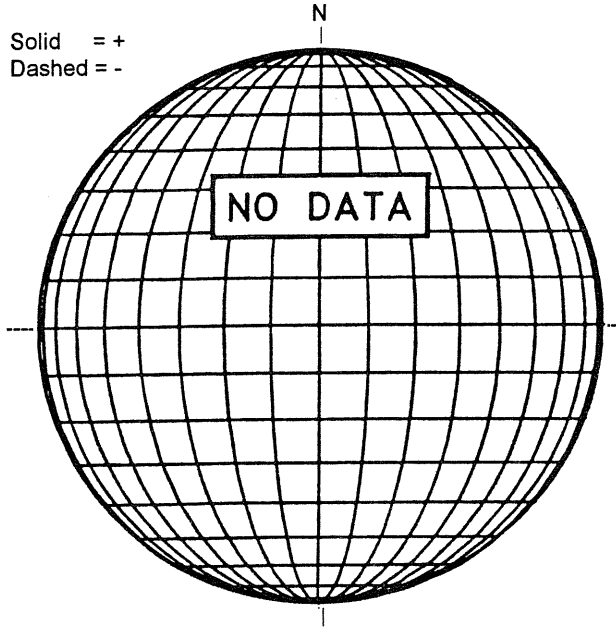
AUGUST 14, 1994 (P= 15.58, Bo = 6.59, Lo = 35.75)

KITT PEAK MAGNETOGRAM

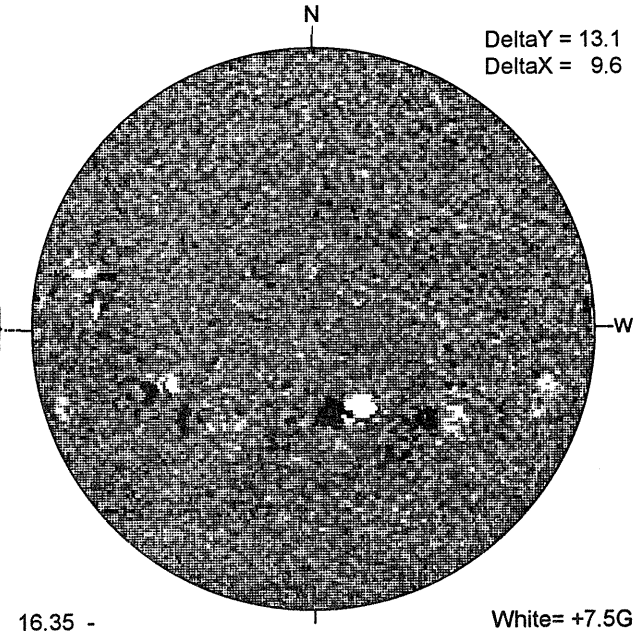


1504 UT

STANFORD MAGNETOGRAM



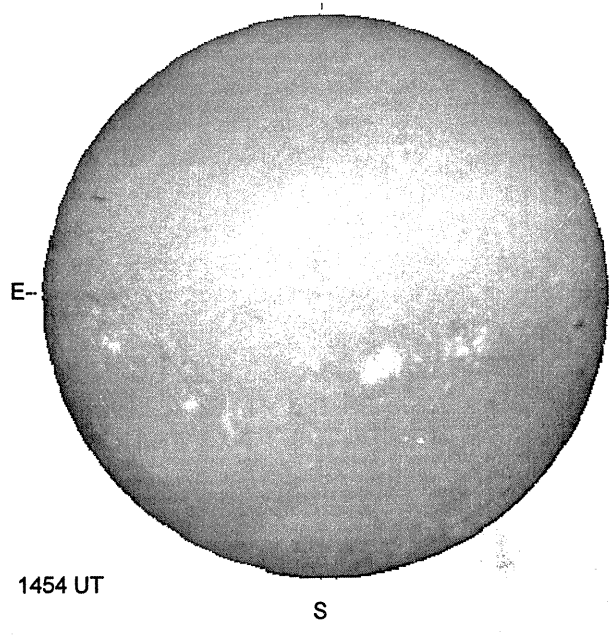
MT. WILSON MAGNETOGRAM



16.35 -
17.27 UT

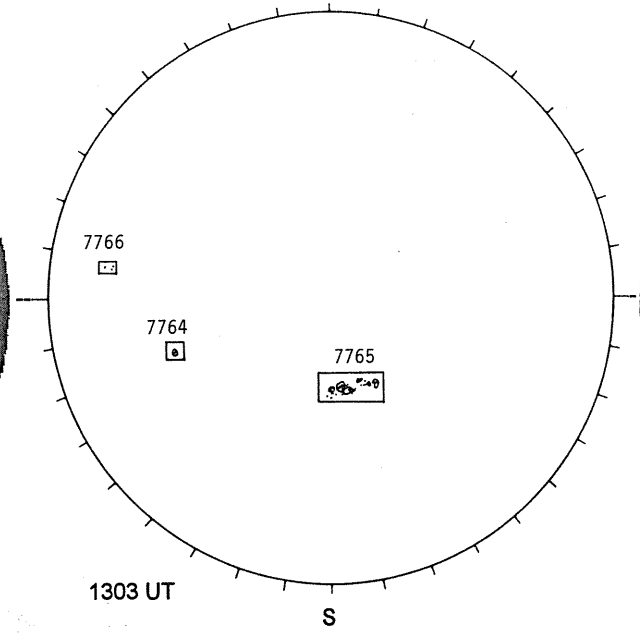
White= +7.5G
Black = -7.5G

----- SACRAMENTO PEAK H-ALPHA



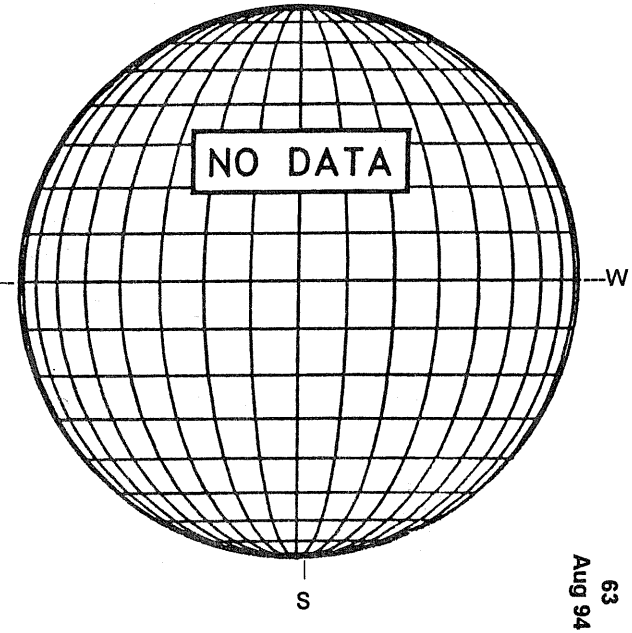
1454 UT

RAMEY SUNSPOT



1303 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----



63
Aug 94

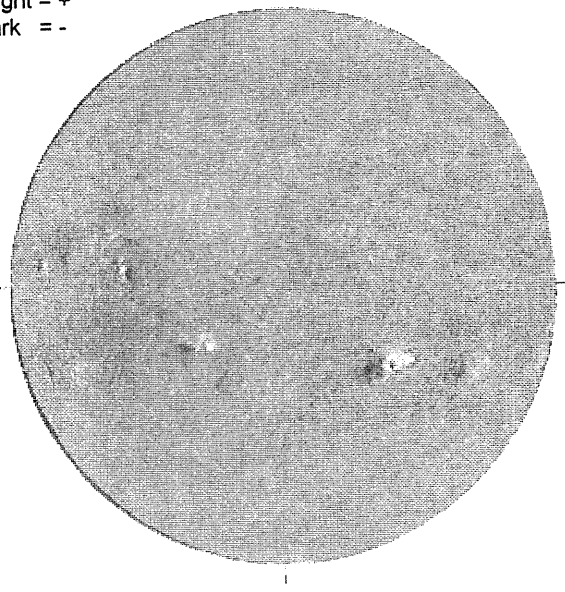
AUGUST 15, 1994 (P= 15.92, Bo = 6.64, Lo = 22.53)

KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -



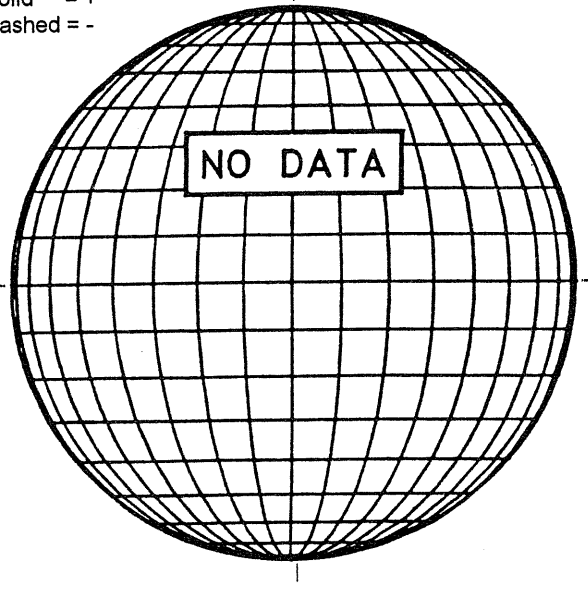
E--

1534 UT

STANFORD MAGNETOGRAM

N

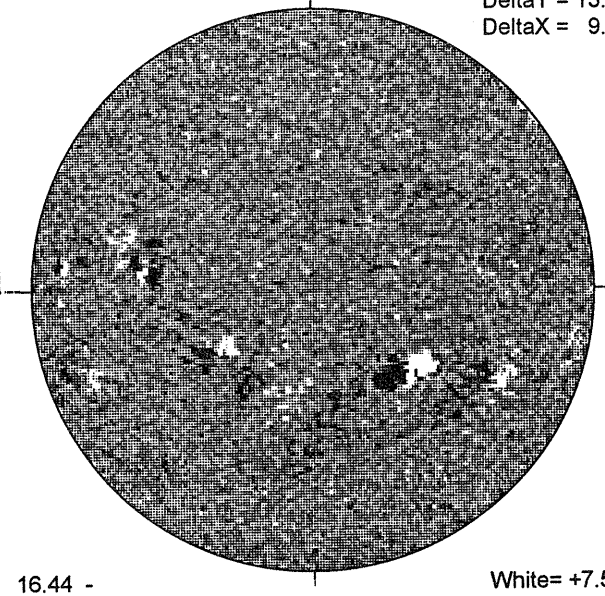
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

N

DeltaY = 13.0
DeltaX = 9.6



--W

16.44 -
17.37 UT

White= +7.5G
Black = -7.5G

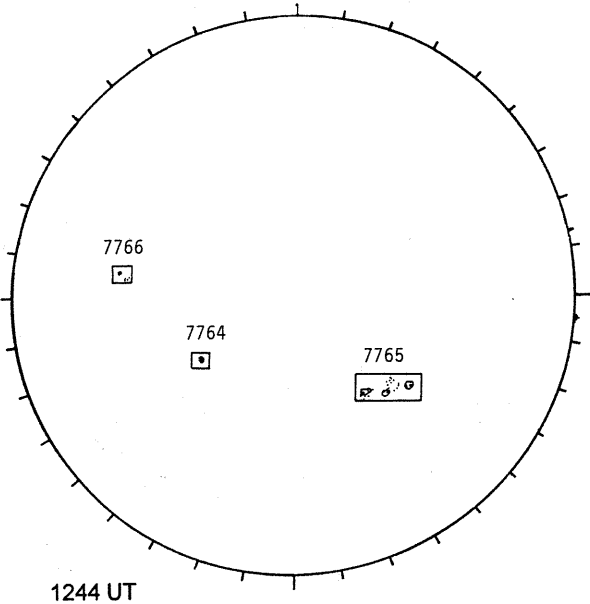
BIG BEAR H-ALPHA

E-

2029 UT

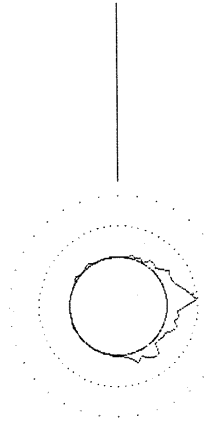
S

RAMEY SUNSPOT



1244 UT
0851 UT LOMN Prom S

LOMNICKY PEAK CORONA (1.04 Radii)----



----------W

530.3 nm 0950 UT
... 50 abs. units
. . 100 abs. units

S

AUGUST 16, 1994 (P= 16.26, Bo = 6.68, Lo = 9.32)

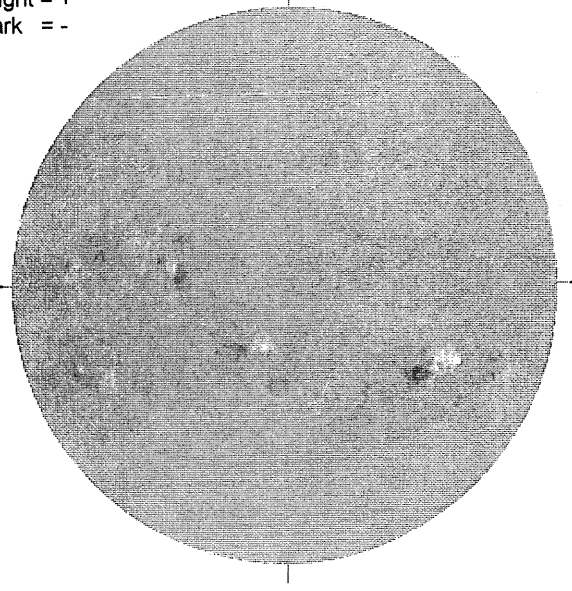
KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -

E--

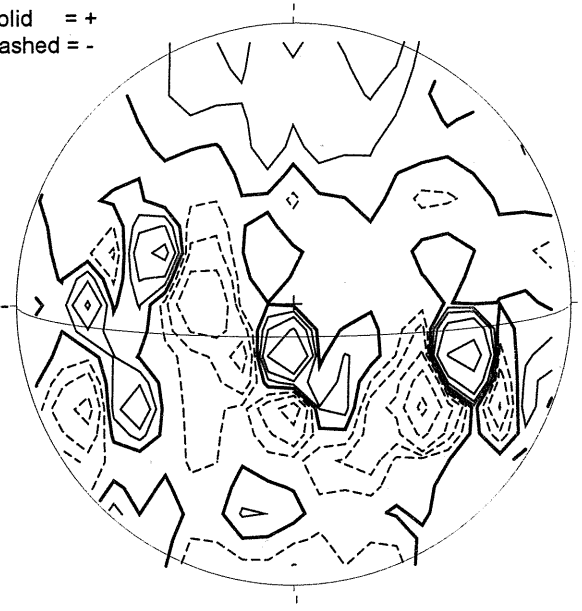


1415 UT

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

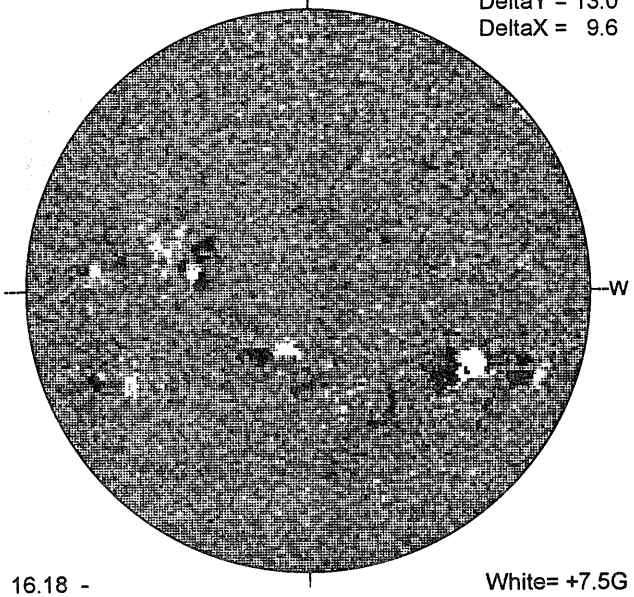


1833 UT

MT. WILSON MAGNETOGRAM

N

DeltaY = 13.0
DeltaX = 9.6

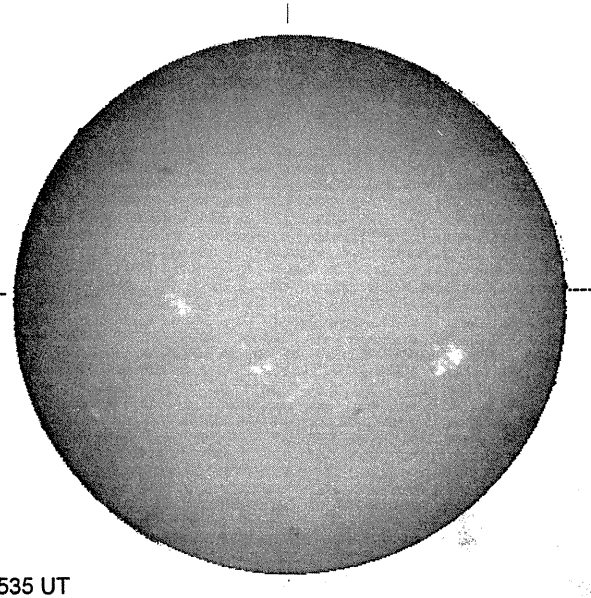


--W

16.18 -
17.10 UT

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

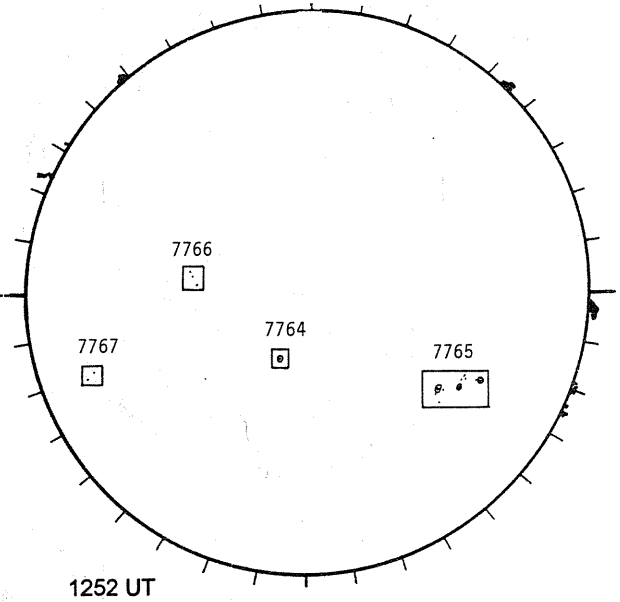


E--

1535 UT

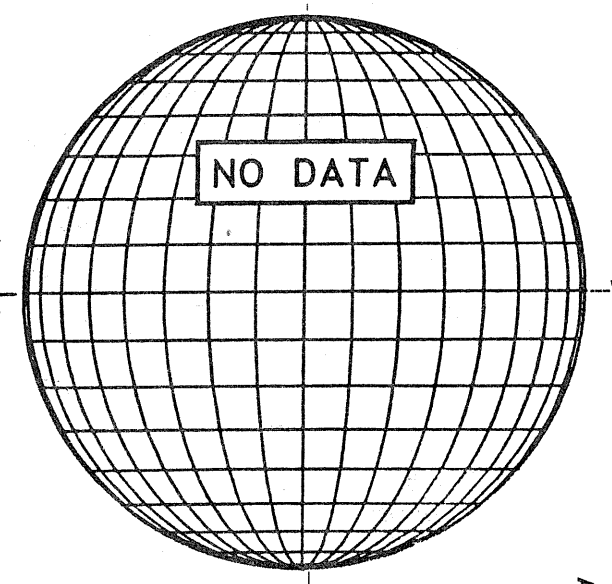
S

RAMEY SUNSPOT



1252 UT
0840 UT VALA Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----



--W

S

65
Aug 94

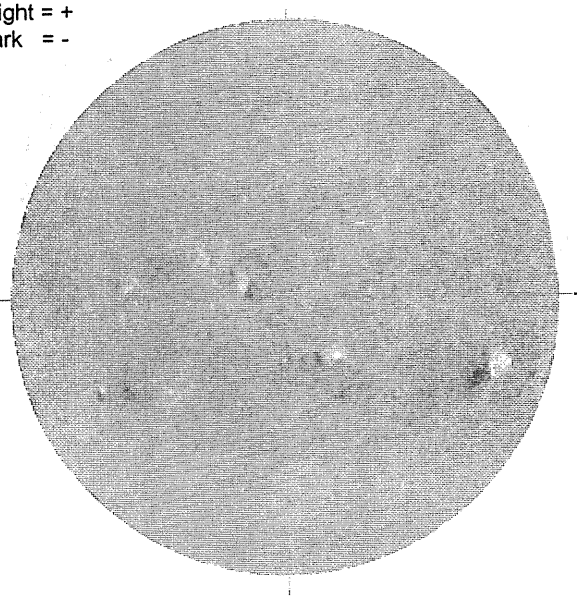
AUGUST 17, 1994 (P= 16.59, Bo = 6.73, Lo = 356.10)

KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -



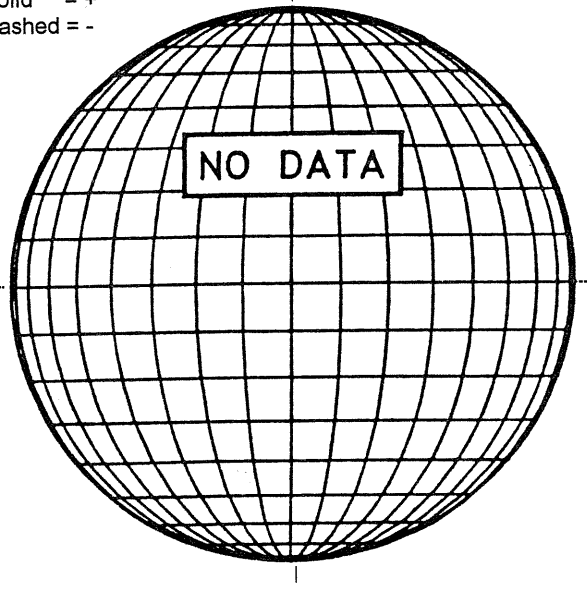
E

1720 UT

STANFORD MAGNETOGRAM

N

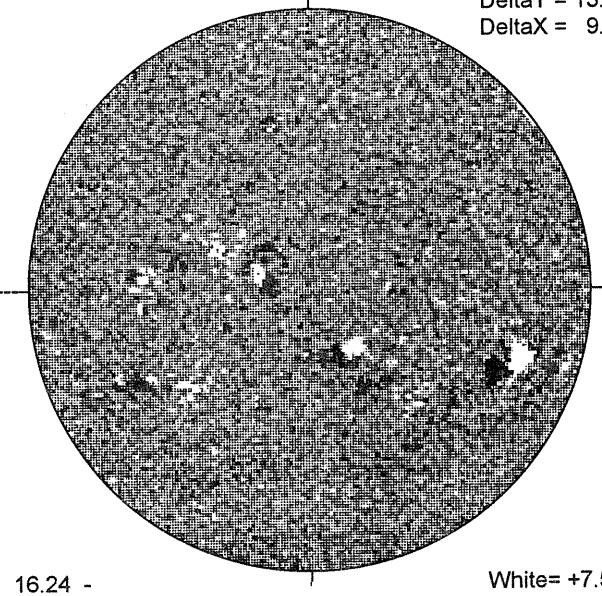
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

N

DeltaY = 13.1
DeltaX = 9.6

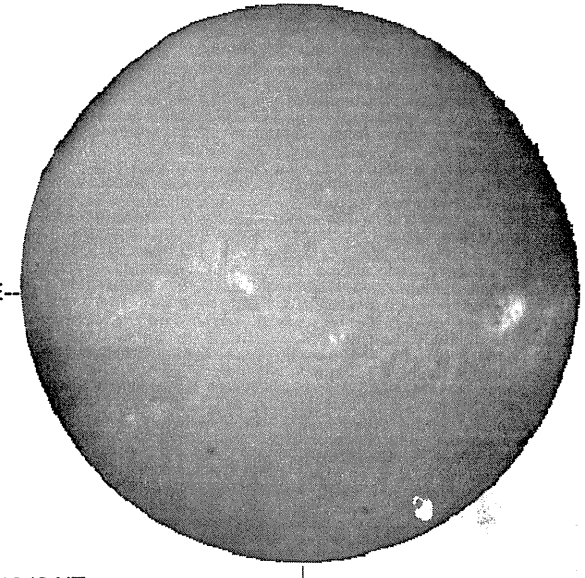


W

16.24 -
17.16 UT

White= +7.5G
Black = -7.5G

SACRAMENTO PEAK H-ALPHA

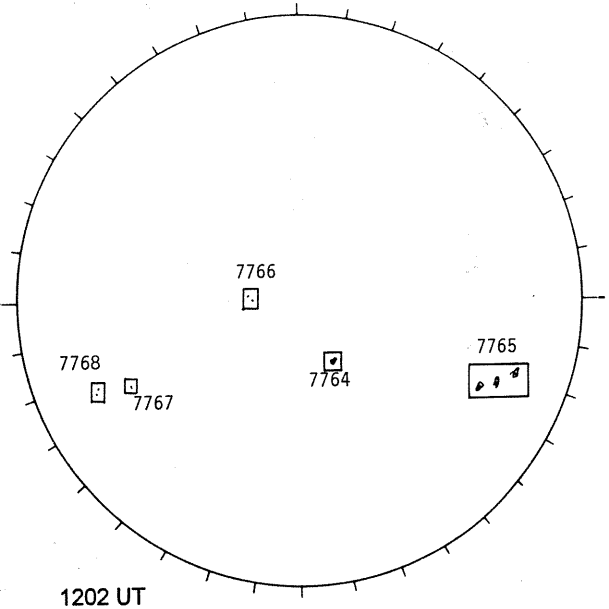


E

1342 UT

S

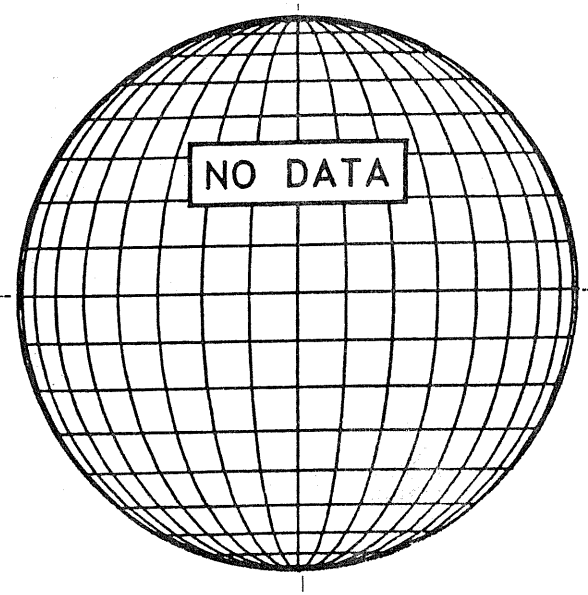
RAMEY SUNSPOT



1202 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)----

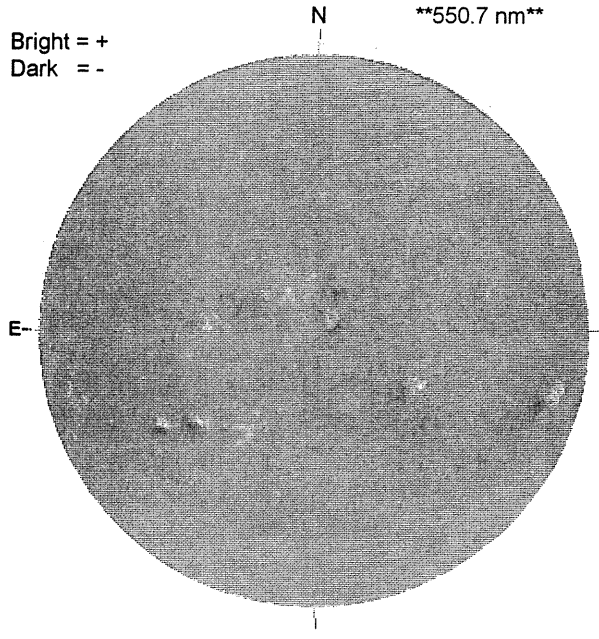


W

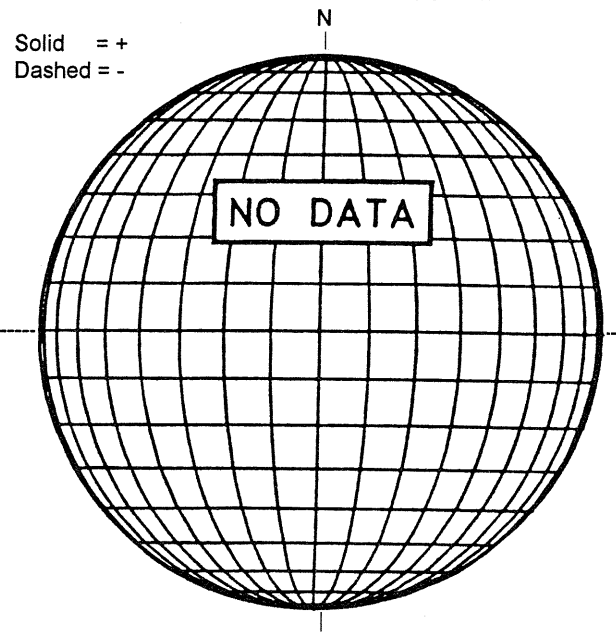
S

AUGUST 18, 1994 (P= 16.92, Bo = 6.77, Lo = 342.88)

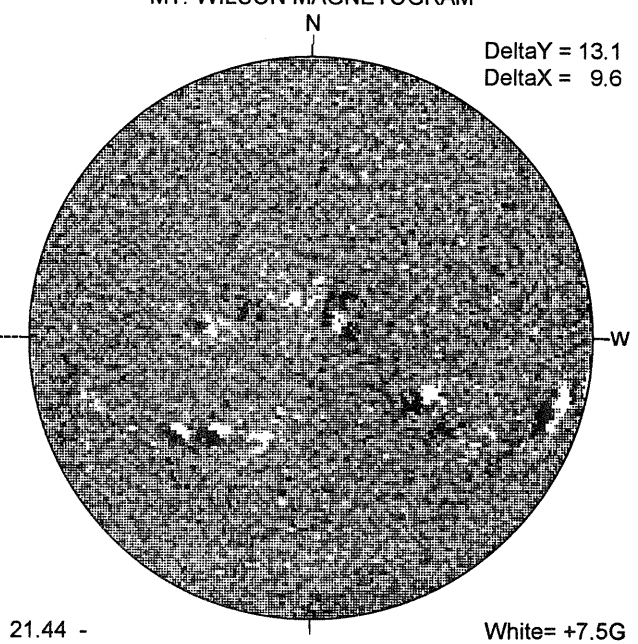
KITT PEAK MAGNETOGRAM



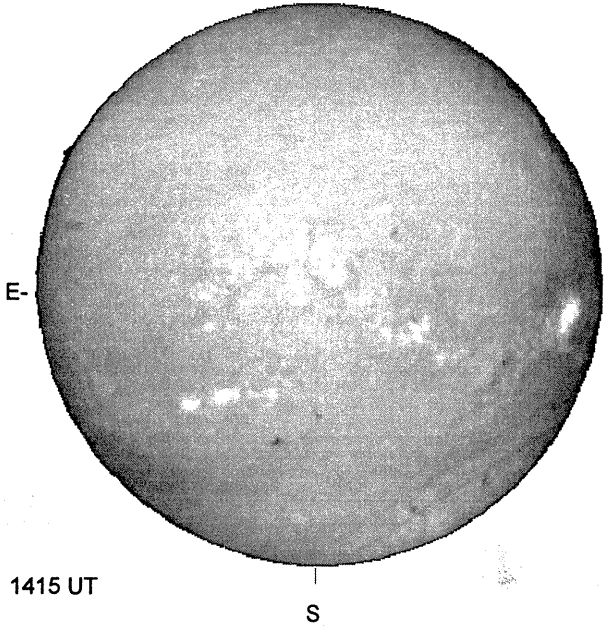
STANFORD MAGNETOGRAM



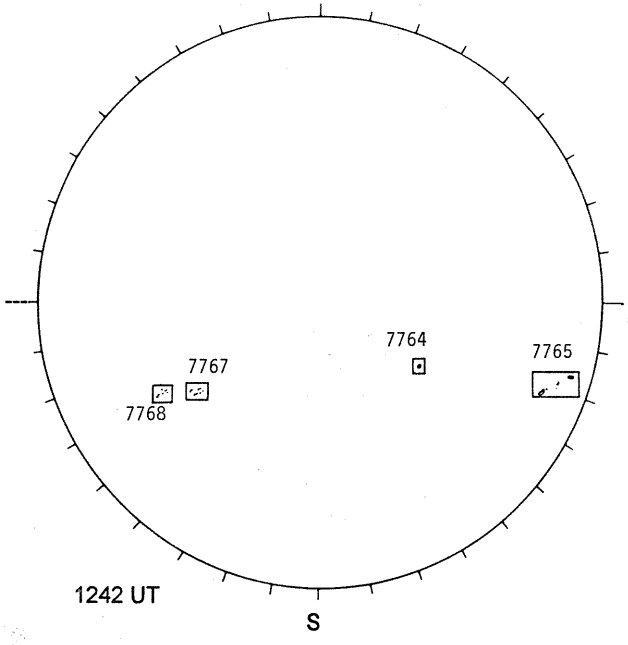
MT. WILSON MAGNETOGRAM



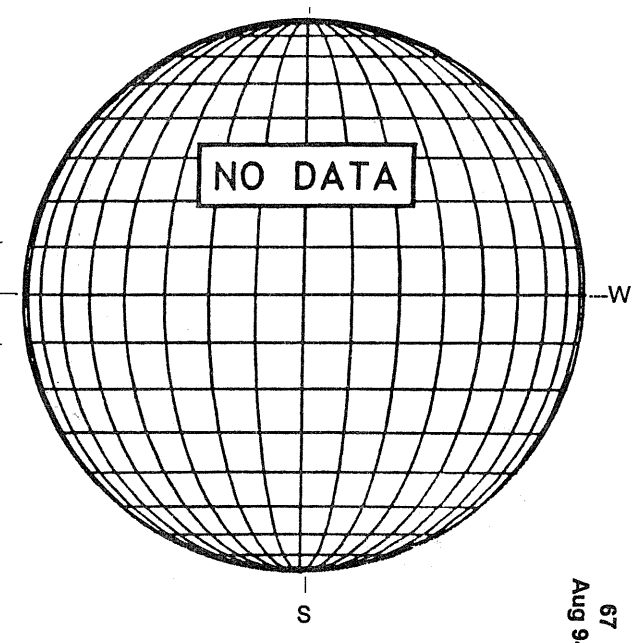
SACRAMENTO PEAK H-ALPHA



RAMEY SUNSPOT



SACRAMENTO PEAK CORONA (1.15 Radii)----



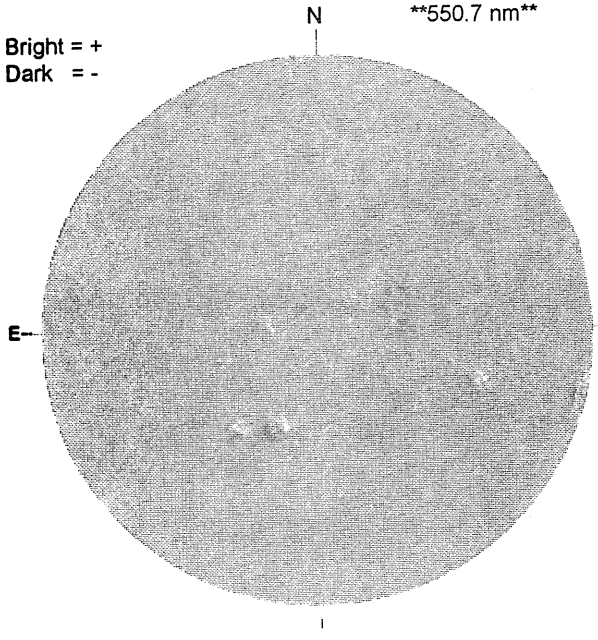
67
Aug 94

AUGUST 19, 1994 (P= 17.25, Bo = 6.82, Lo = 329.66)

KITT PEAK MAGNETOGRAM

550.7 nm

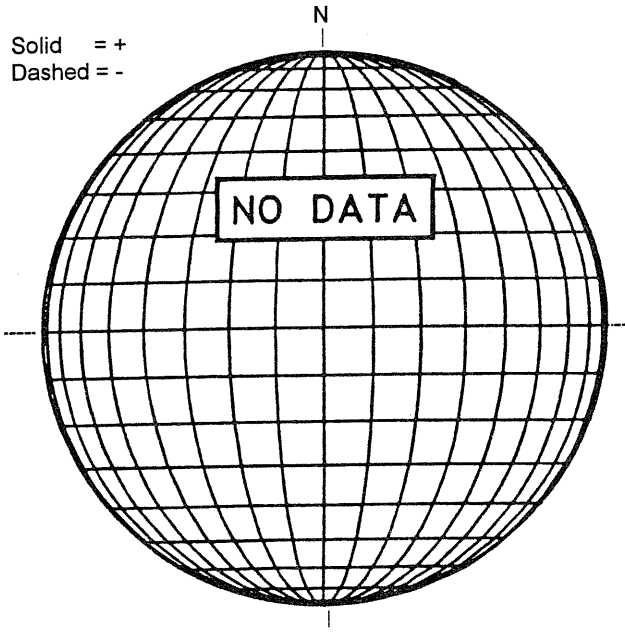
Bright = +
Dark = -



1601 UT

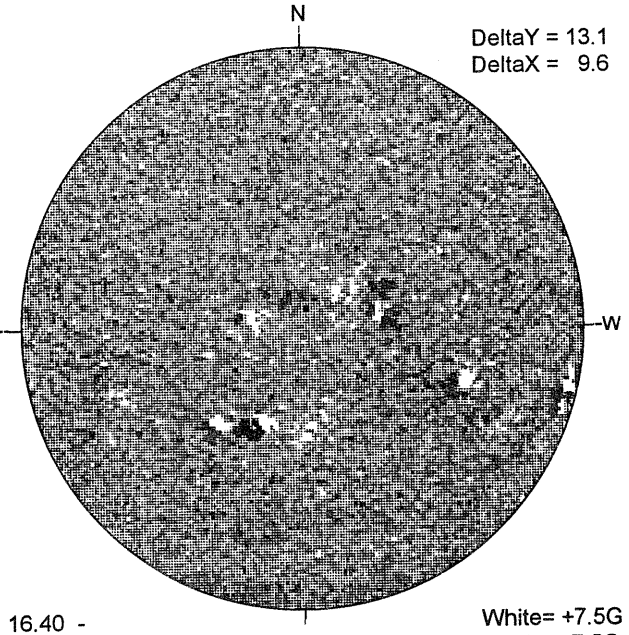
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

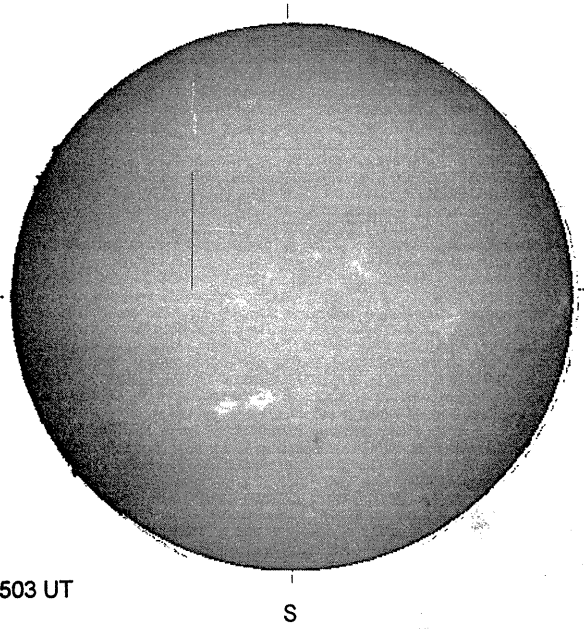
DeltaY = 13.1
DeltaX = 9.6



16.40 -
17.33 UT

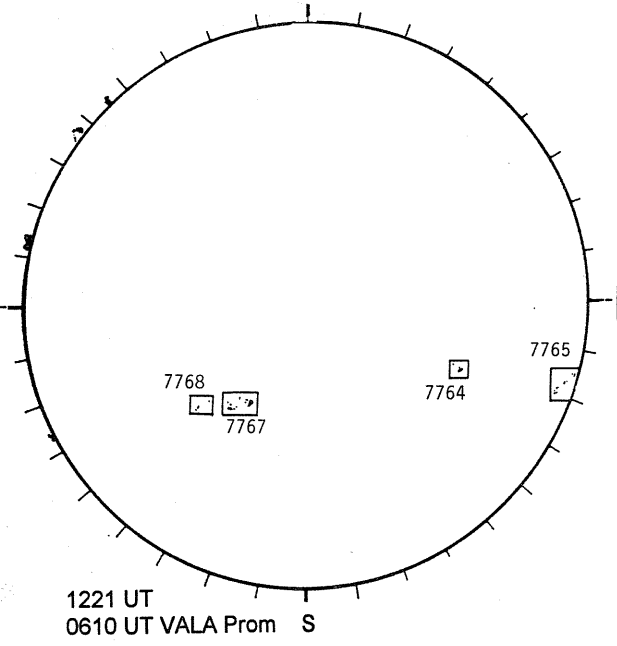
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



1503 UT

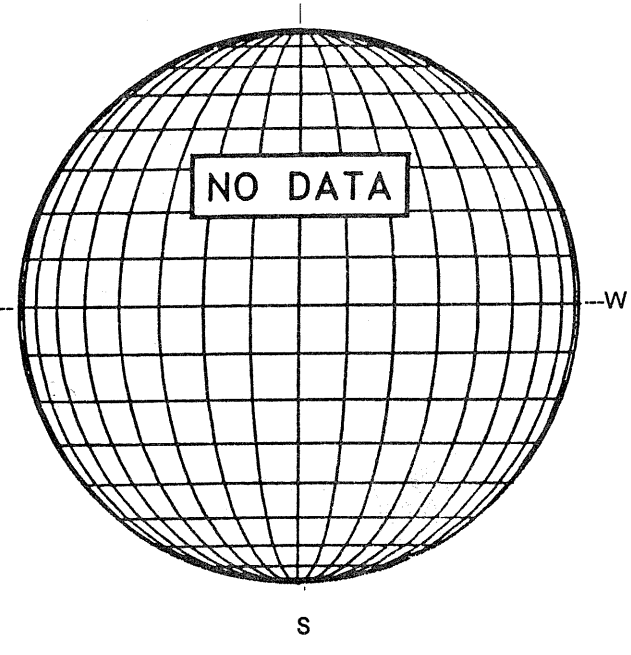
RAMEY SUNSPOT



1221 UT
0610 UT VALA Prom

S

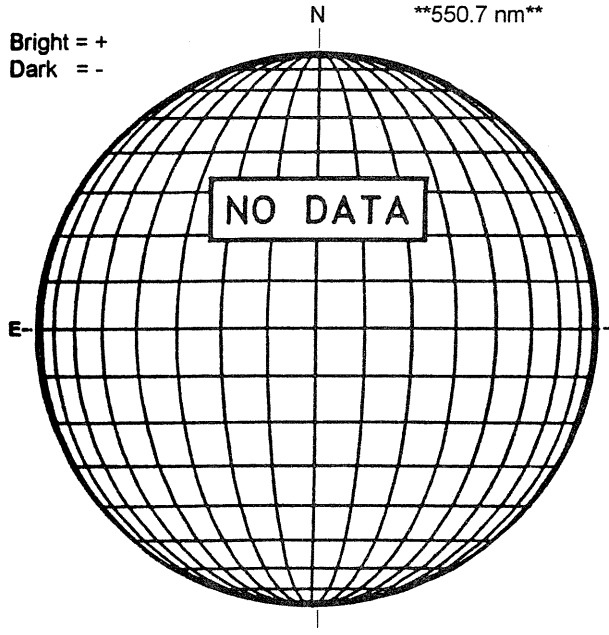
SACRAMENTO PEAK CORONA (1.15 Radii)----



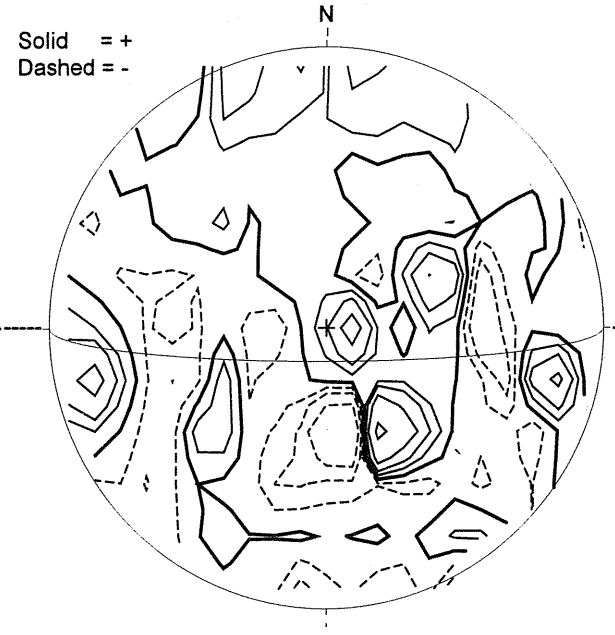
S

AUGUST 20, 1994 (P= 17.57, Bo = 6.86, Lo = 316.45)

KITT PEAK MAGNETOGRAM

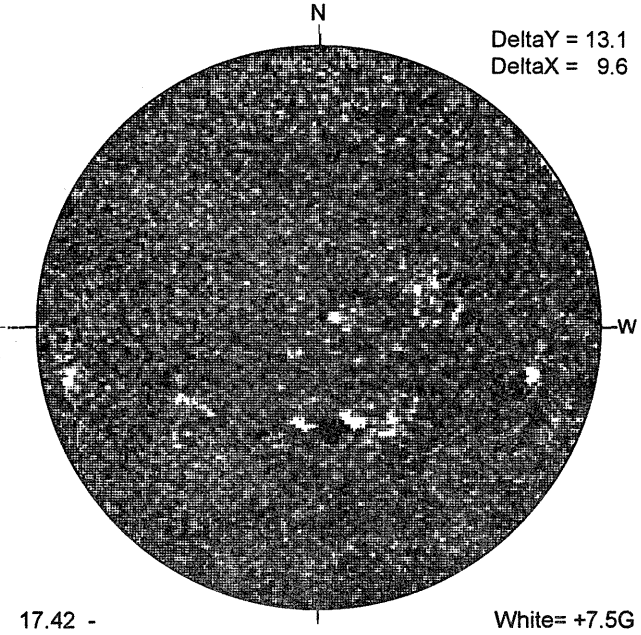


STANFORD MAGNETOGRAM



2050 UT

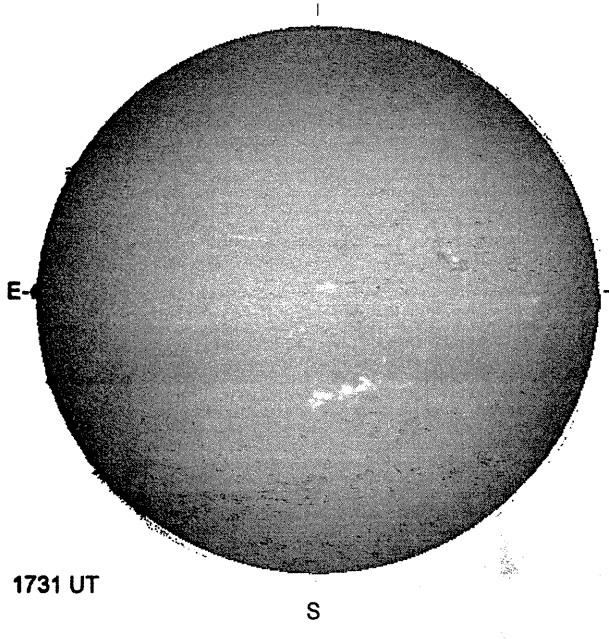
MT. WILSON MAGNETOGRAM



17.42 -
18.38 UT

White= +7.5G
Black = -7.5G

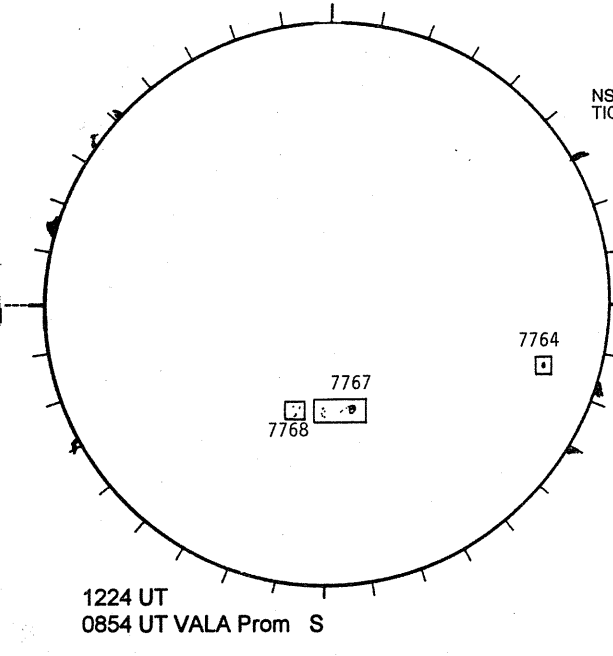
BIG BEAR H-ALPHA



1731 UT

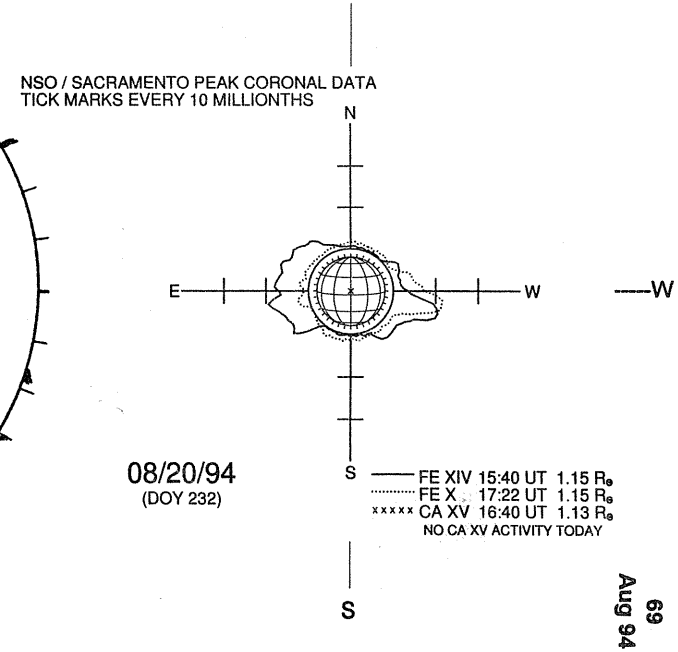
S

RAMEY SUNSPOT



1224 UT
0854 UT VALA Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----



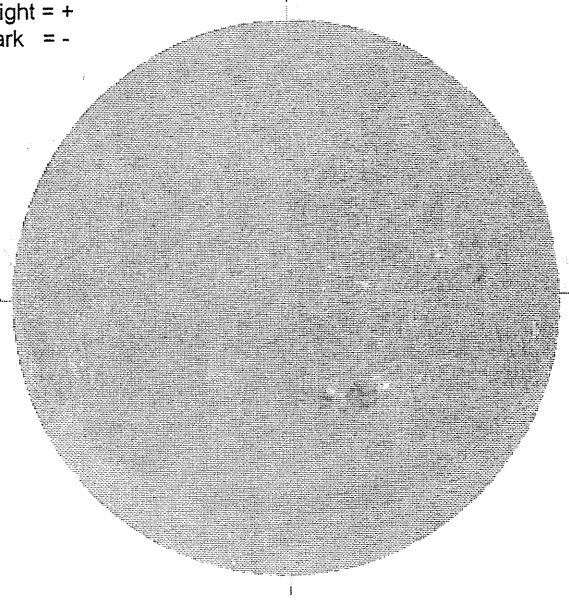
S

69
Aug 94

AUGUST 21, 1994 (P= 17.88, Bo = 6.90, Lo = 303.23)

KITT PEAK MAGNETOGRAM

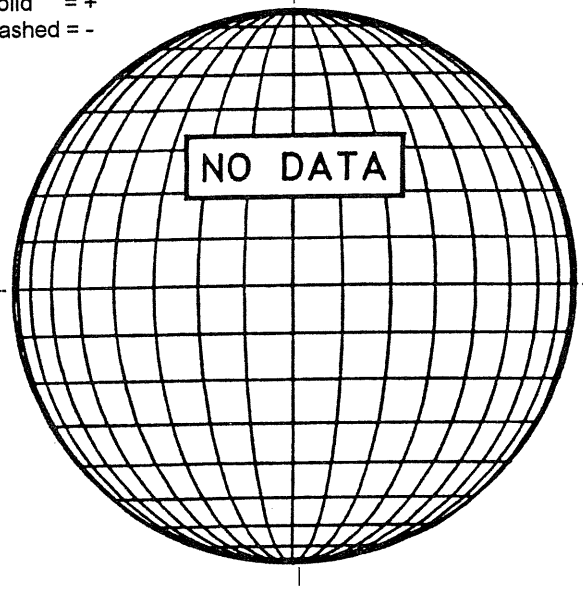
N
550.7 nm
Bright = +
Dark = -
E--



1545 UT

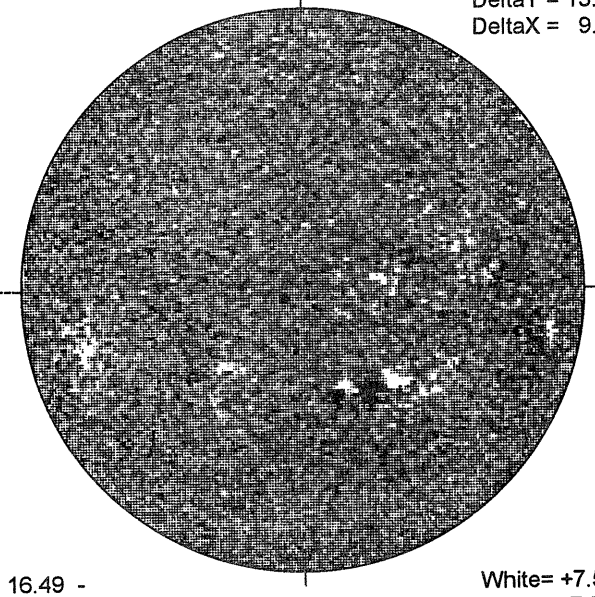
STANFORD MAGNETOGRAM

N
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

N
DeltaY = 13.1
DeltaX = 9.6

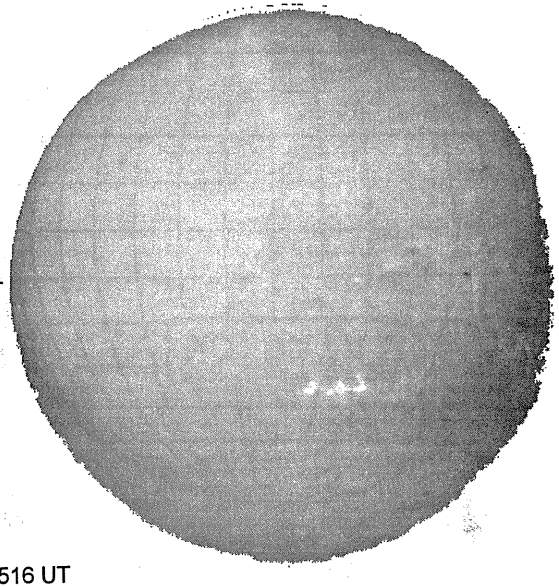


--W

16.49 -
17.42 UT

White= +7.5G
Black = -7.5G

SACRAMENTO PEAK H-ALPHA

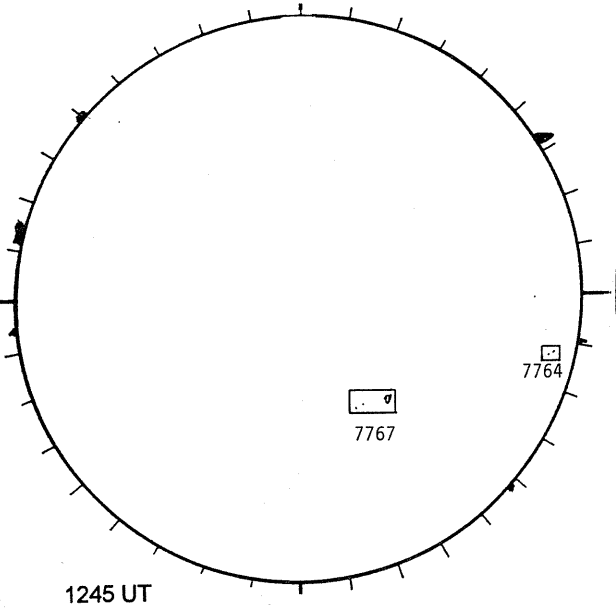


E--

1516 UT

S

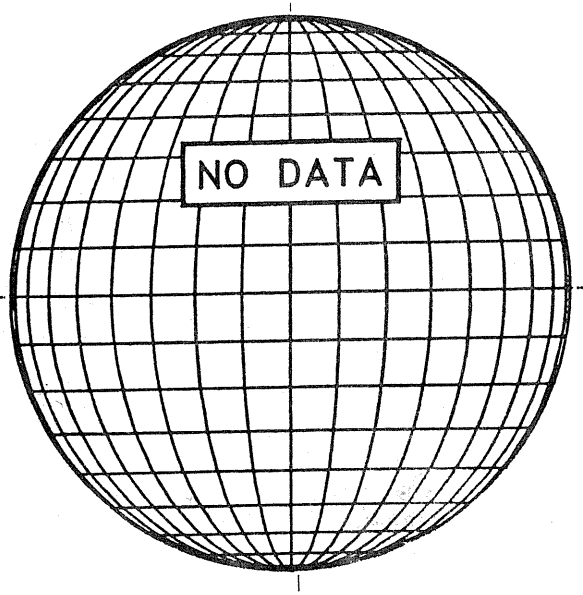
RAMEY SUNSPOT



1245 UT
0832 UT VALA Prom

S

SACRAMENTO PEAK CORONA (1.15 Radii)----



--W

S

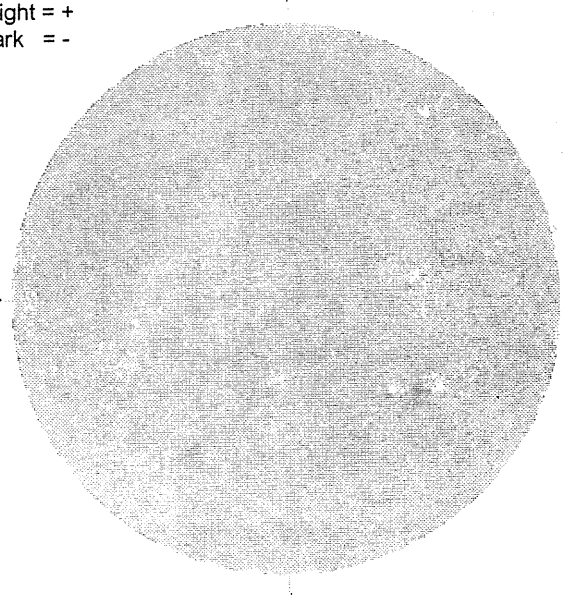
AUGUST 22, 1994 (P= 18.19, Bo = 6.93, Lo = 290.02)

KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -



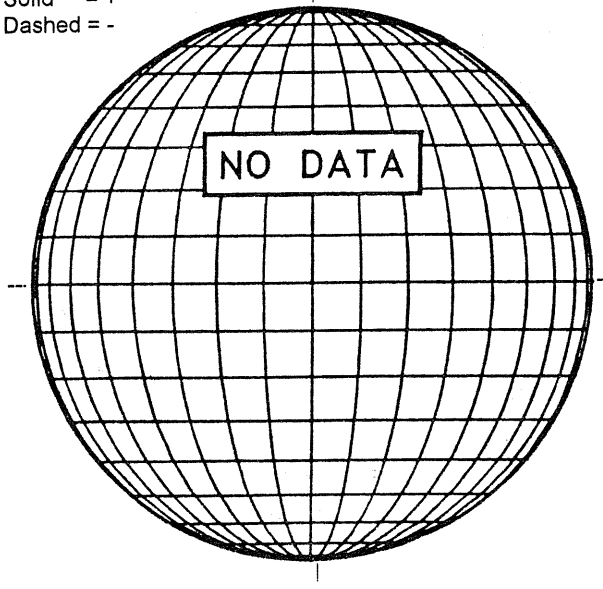
E--

1622 UT

STANFORD MAGNETOGRAM

N

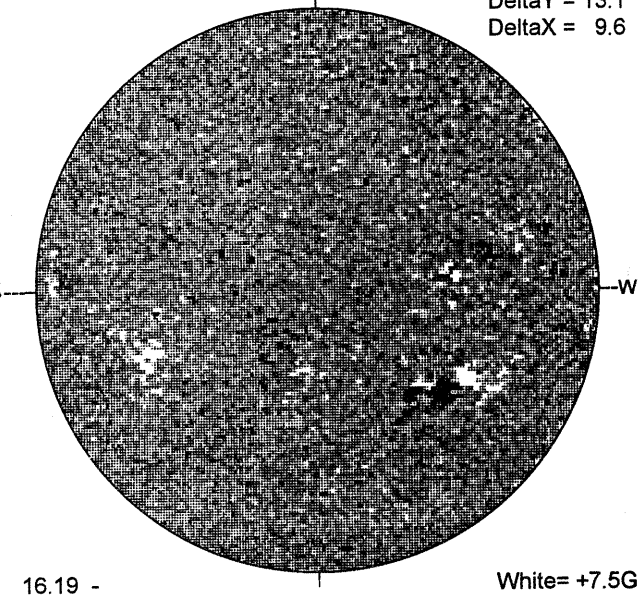
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

N

DeltaY = 13.1
DeltaX = 9.6

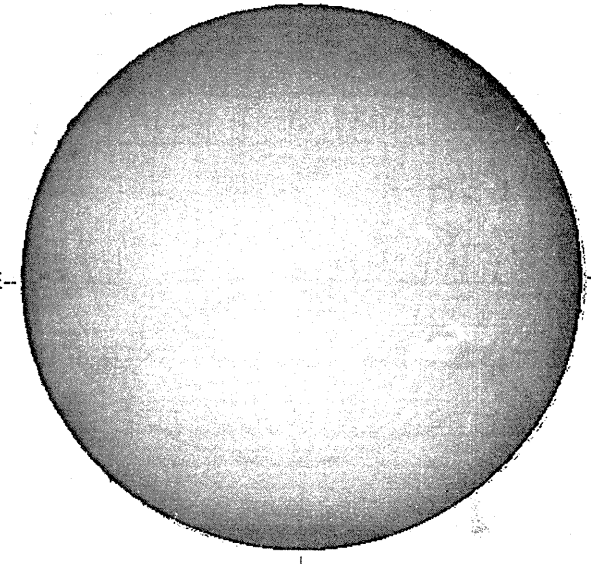


--W

16.19 -
17.12 UT

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

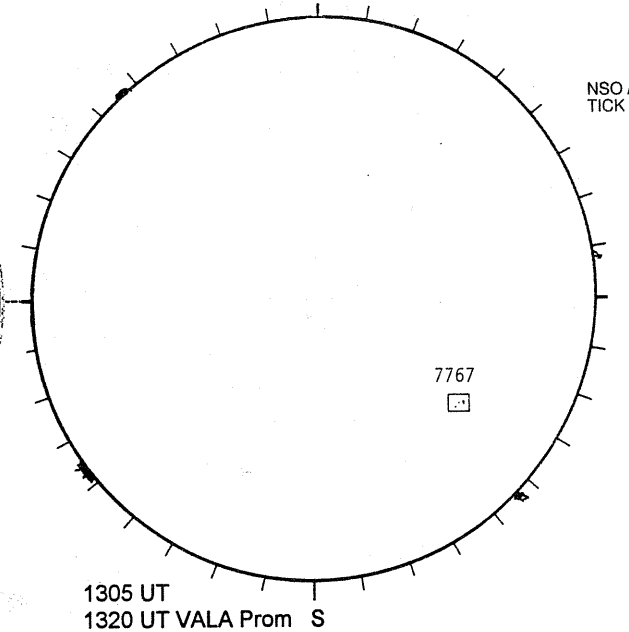


E--

1458 UT

S

RAMEY SUNSPOT



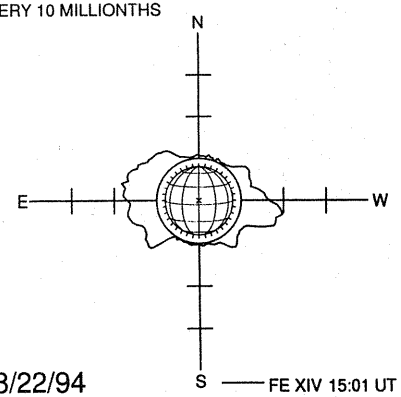
1305 UT
1320 UT VALA Prom

S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS

N



E

W

-----W

08/22/94
(DOY 234)

S

FE XIV 15:01 UT 1.15 $R_\odot$

S

71
Aug 94

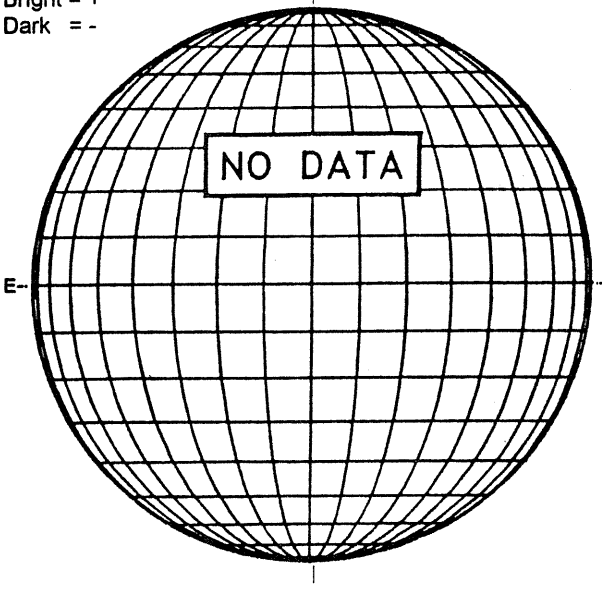
AUGUST 23, 1994 (P= 18.50, Bo = 6.97, Lo = 276.80)

KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -

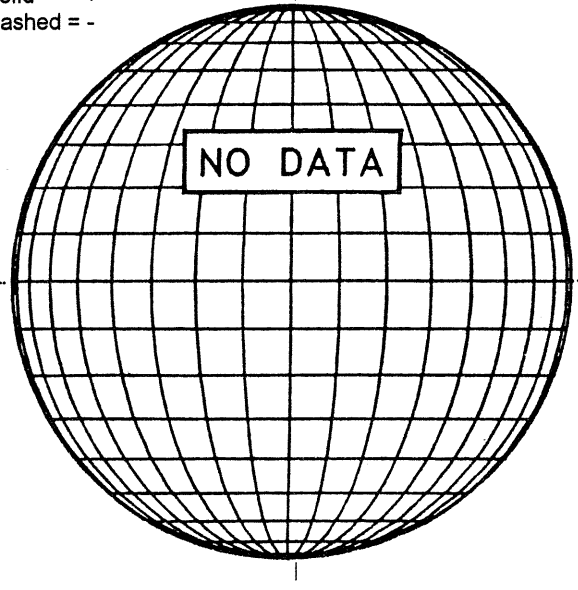


E-

STANFORD MAGNETOGRAM

N

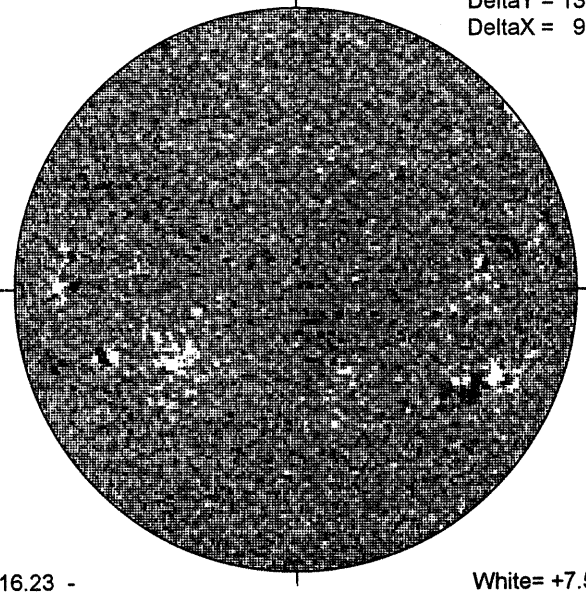
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

N

DeltaY = 13.1
DeltaX = 9.6

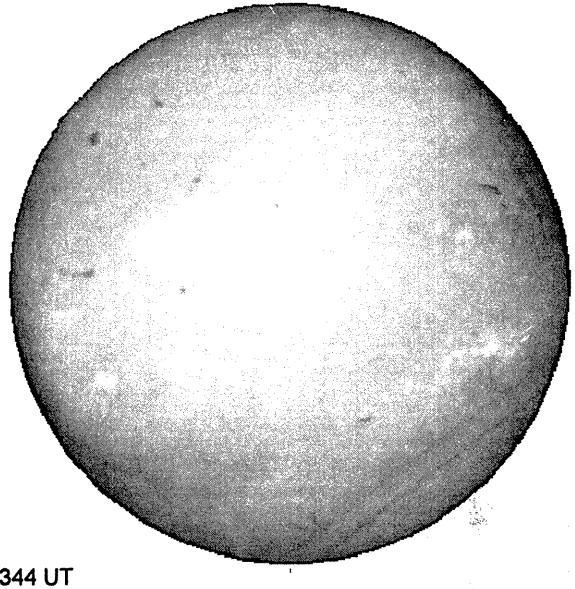


-W

16.23 -
17.15 UT

White= +7.5G
Black = -7.5G

SACRAMENTO PEAK H-ALPHA

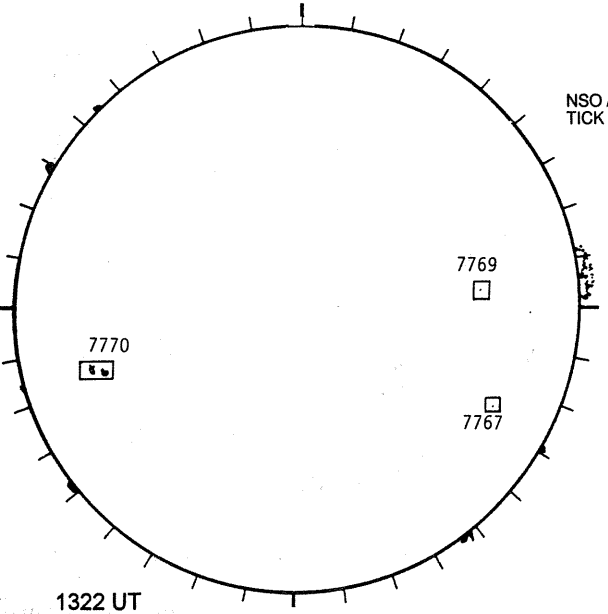


E-

1344 UT

S

RAMEY SUNSPOT

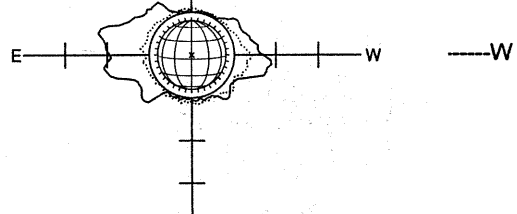


1322 UT
0650 UT VALA Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS

N



E W -----W

S

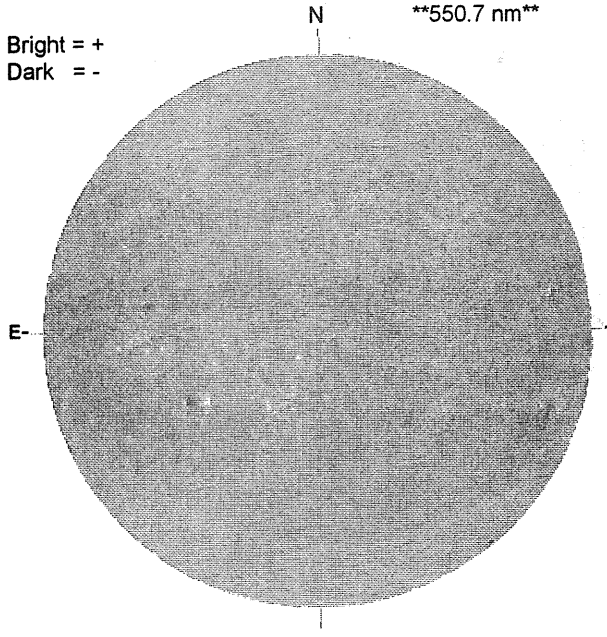
08/23/94
(DOY 235)

S

FE XIV 14:19 UT 1.15 $R_\odot$
FE X 15:10 UT 1.15 $R_\odot$

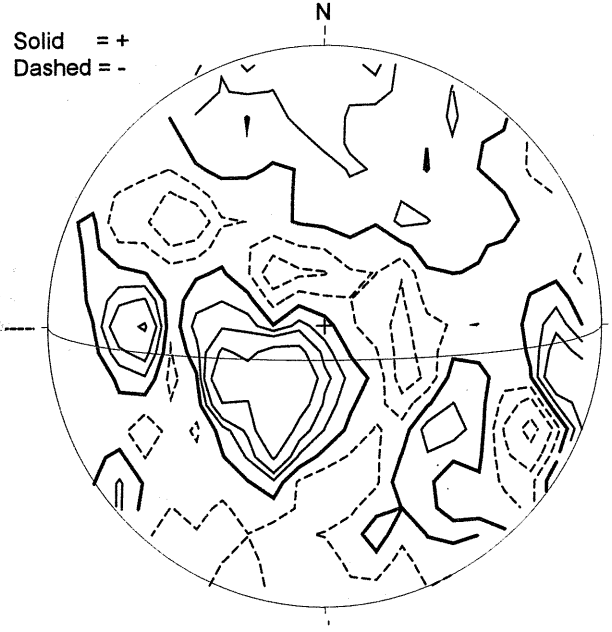
AUGUST 24, 1994 (P= 18.80, Bo = 7.00, Lo = 263.59)

KITT PEAK MAGNETOGRAM



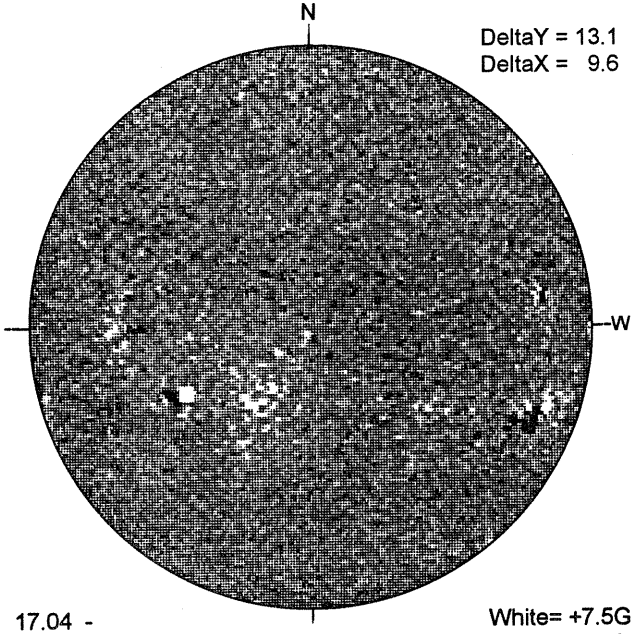
2002 UT

STANFORD MAGNETOGRAM



1943 UT

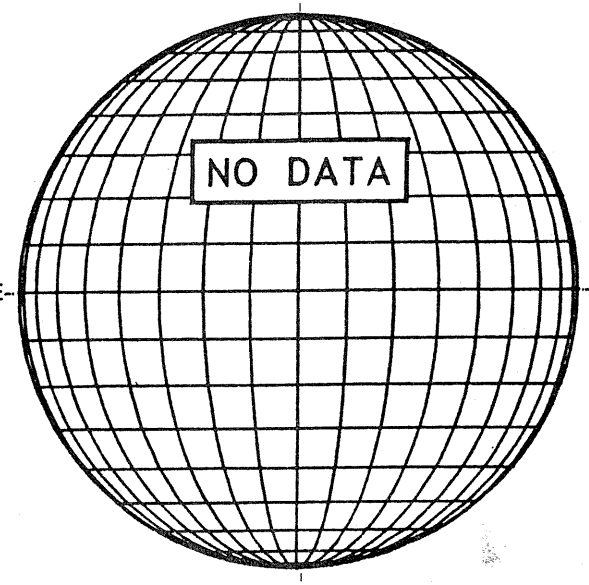
MT. WILSON MAGNETOGRAM



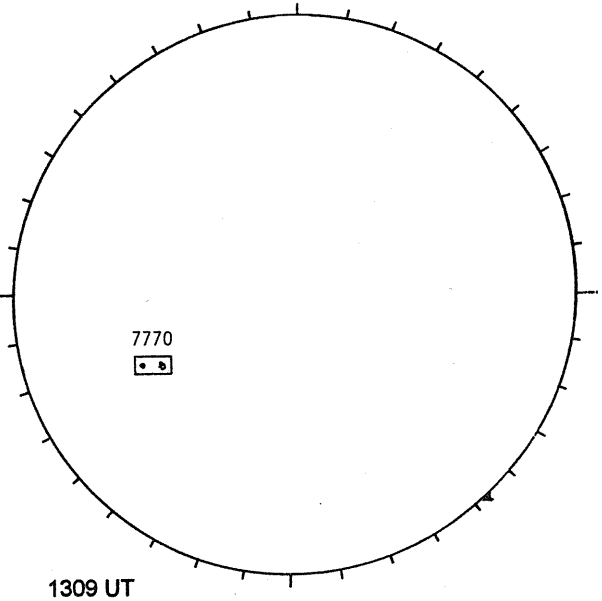
17.04 -
17.97 UT

White= +7.5G
Black = -7.5G

----- BIG BEAR H-ALPHA

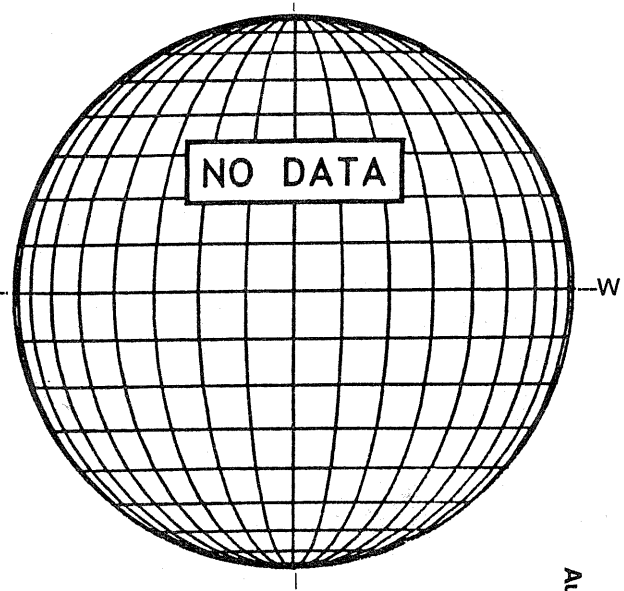


RAMEY SUNSPOT



1309 UT
0553 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----



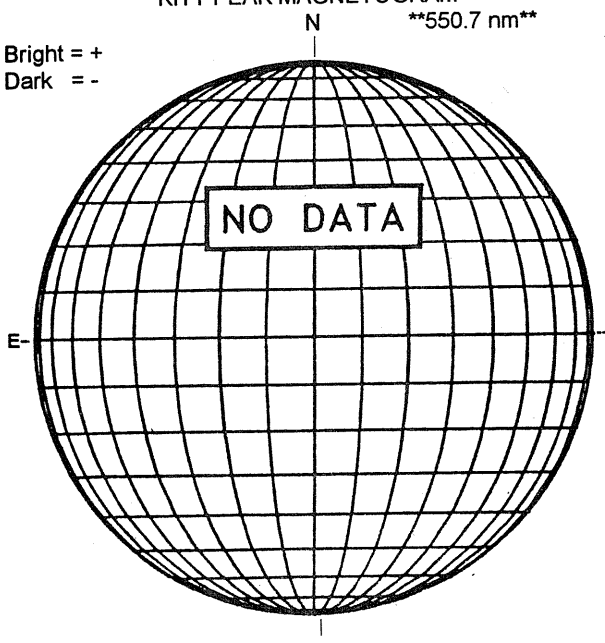
73
Aug 94

AUGUST 25, 1994 (P= 19.09, Bo = 7.03, Lo = 250.37)

KITT PEAK MAGNETOGRAM

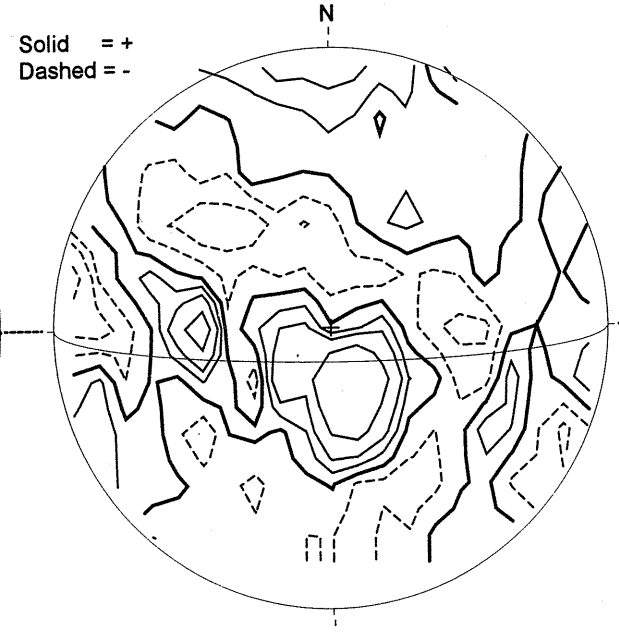
550.7 nm

Bright = +
Dark = -



STANFORD MAGNETOGRAM

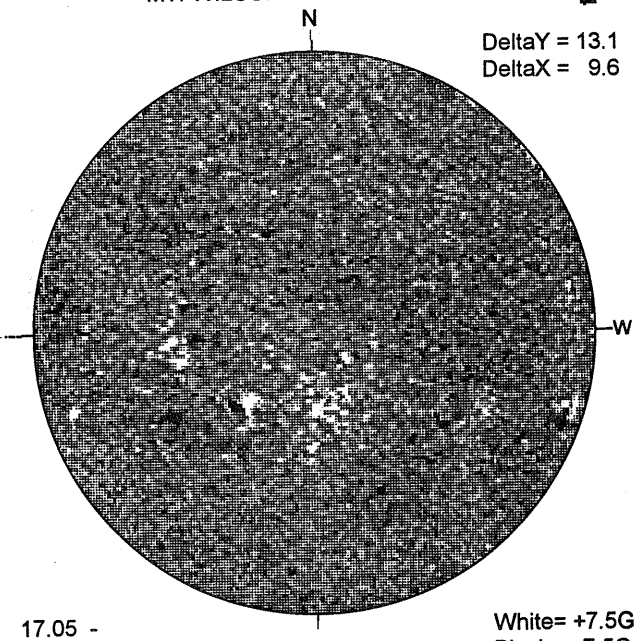
Solid = +
Dashed = -



2321 UT

MT. WILSON MAGNETOGRAM

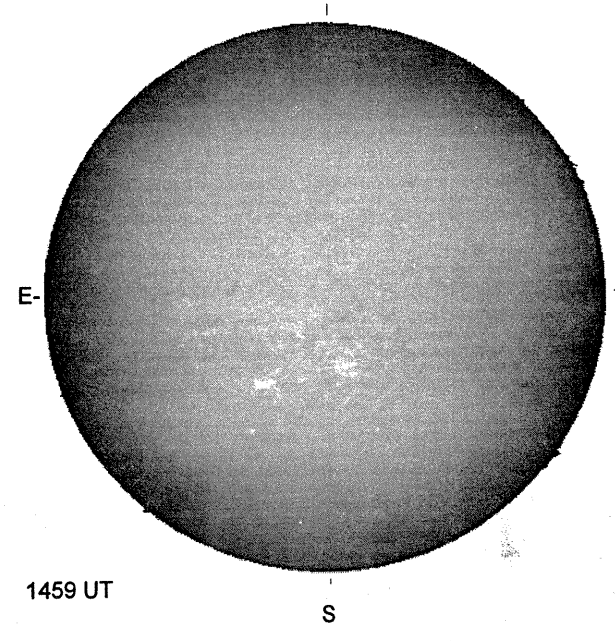
DeltaY = 13.1
DeltaX = 9.6



17.05 -
17.97 UT

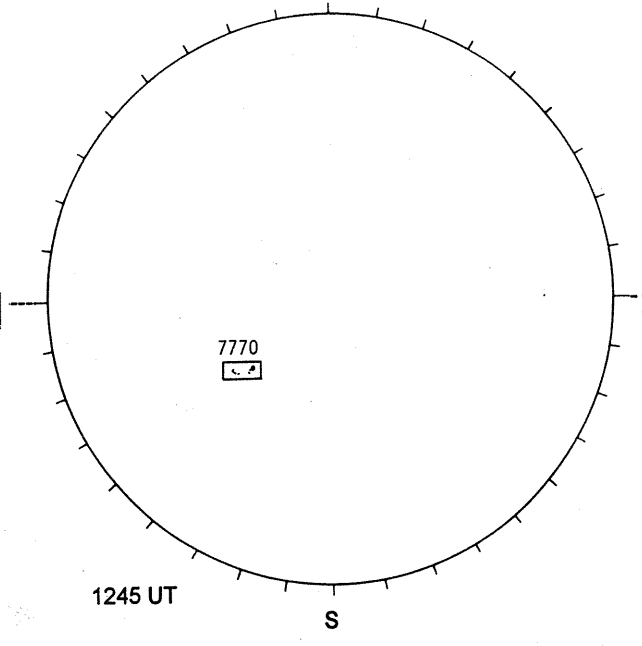
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



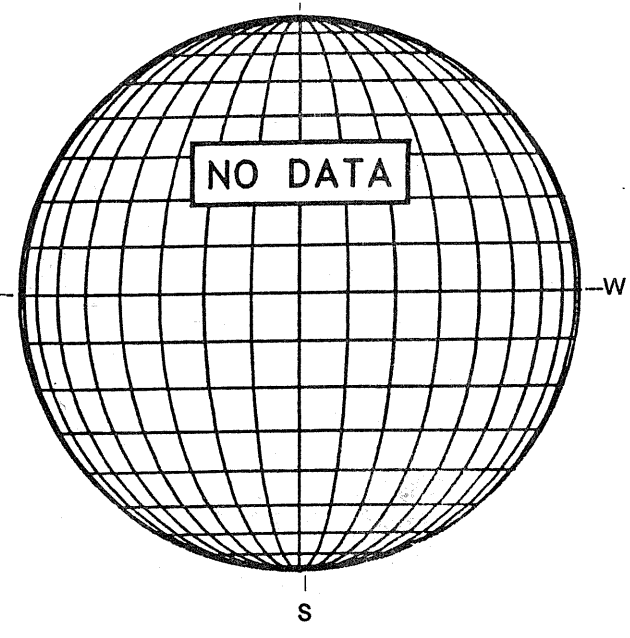
1459 UT

RAMEY SUNSPOT



1245 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----



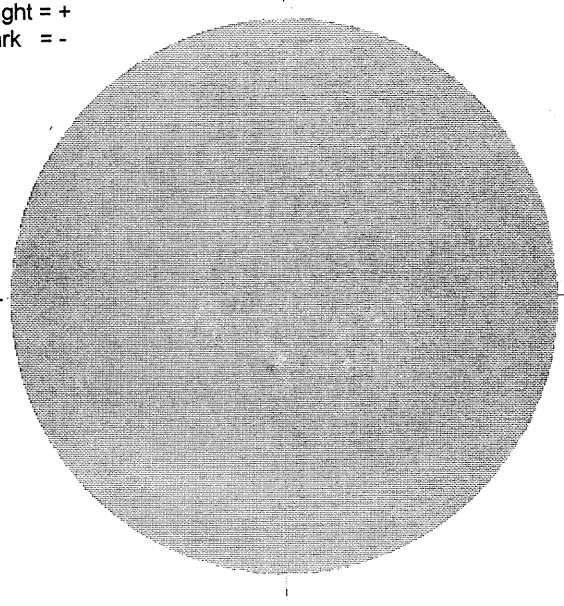
AUGUST 26, 1994 (P= 19.38, Bo = 7.06, Lo = 237.16)

KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -



E--

1558 UT

STANFORD MAGNETOGRAM

N

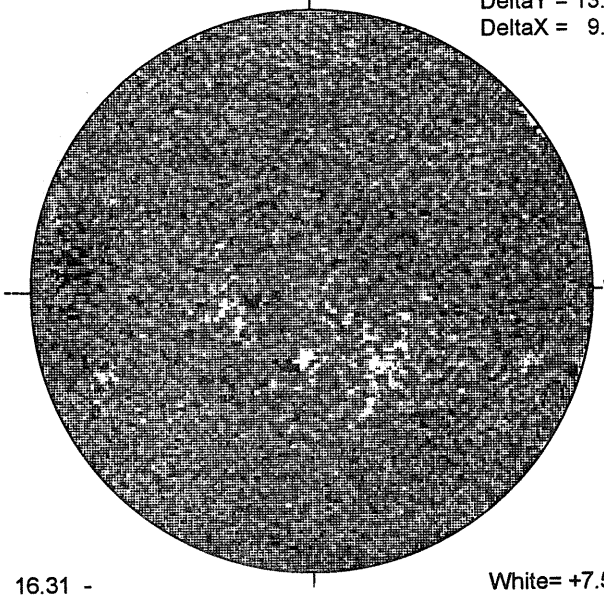
Solid = +
Dashed = -

2303 UT

MT. WILSON MAGNETOGRAM

N

DeltaY = 13.1
DeltaX = 9.6

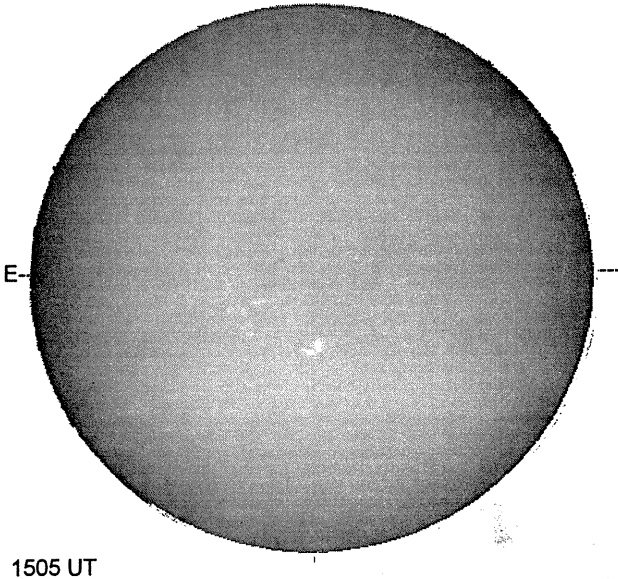


-W

16.31 -
17.23 UT

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

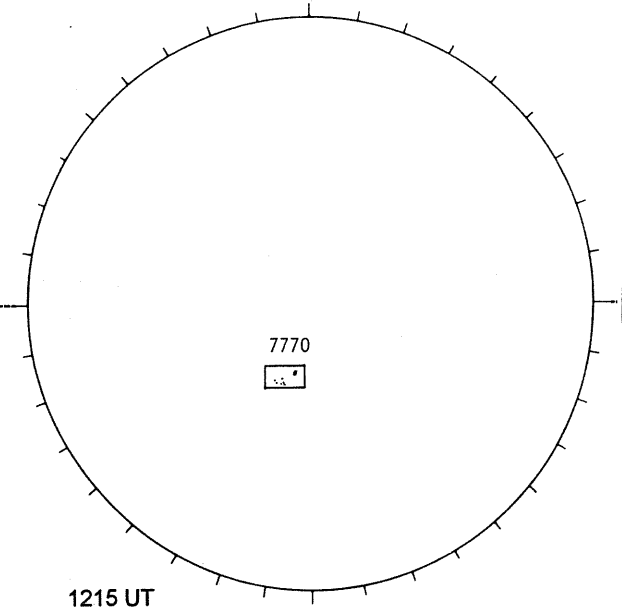


E--

1505 UT

S

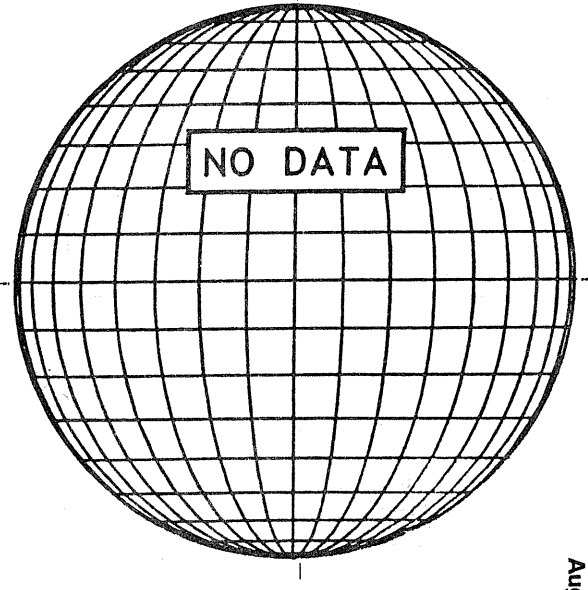
RAMEY SUNSPOT



1215 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)----



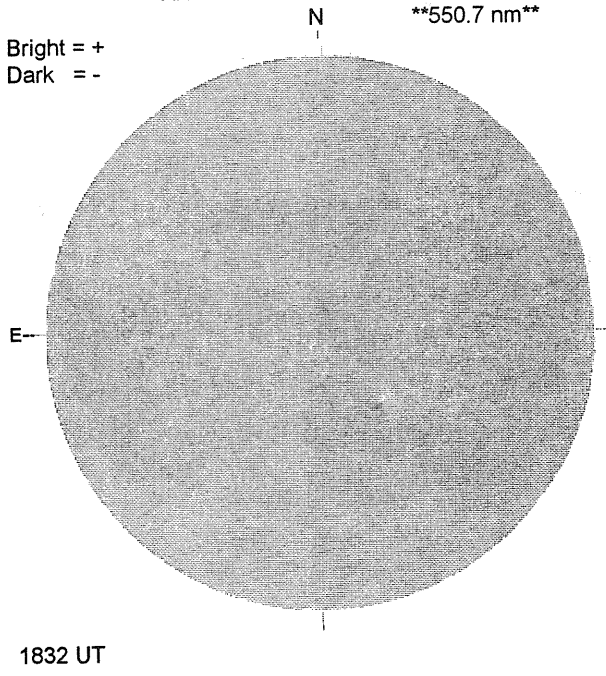
---W

S

75
Aug 94

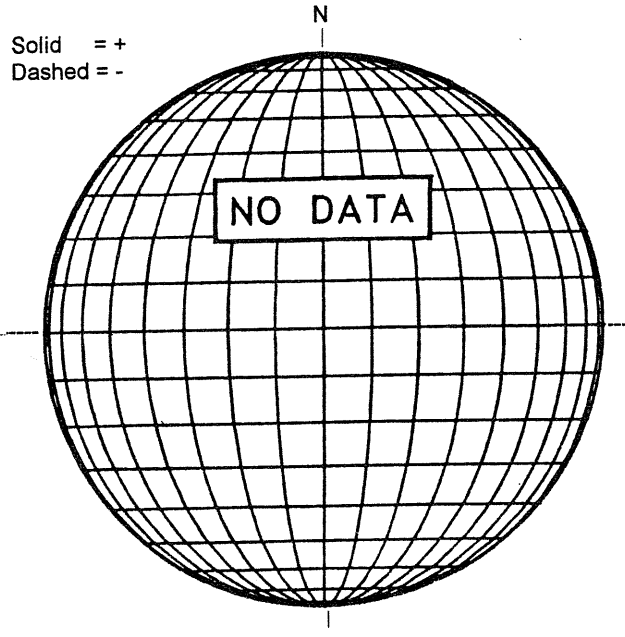
AUGUST 27, 1994 (P= 19.67, Bo = 7.09, Lo = 223.95)

KITT PEAK MAGNETOGRAM

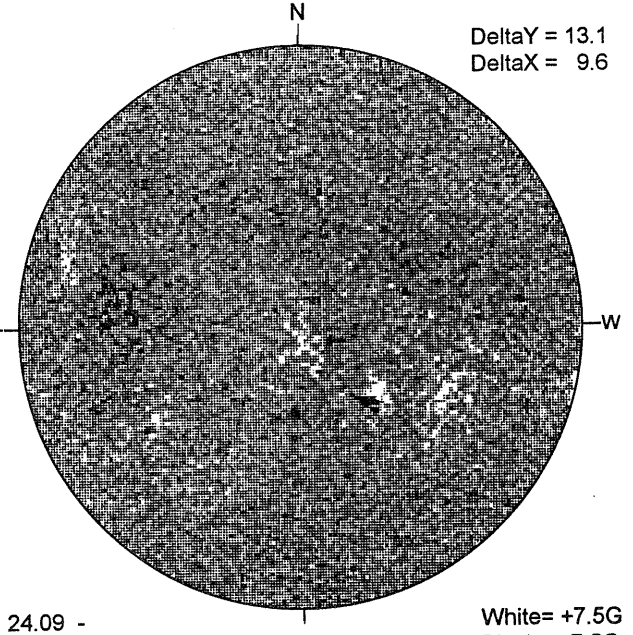


1832 UT

STANFORD MAGNETOGRAM



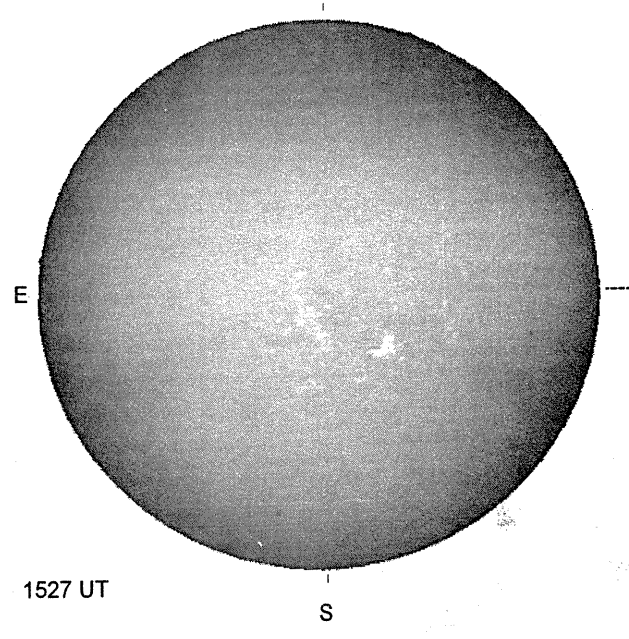
MT. WILSON MAGNETOGRAM



24.09 -
25.02 UT

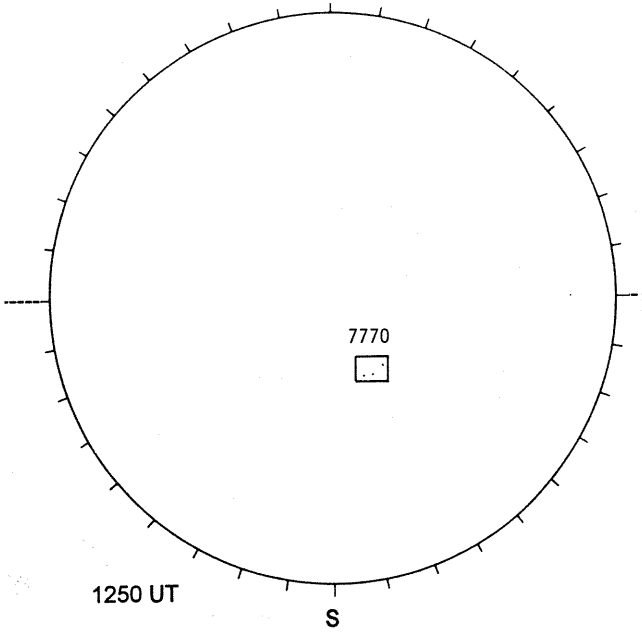
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



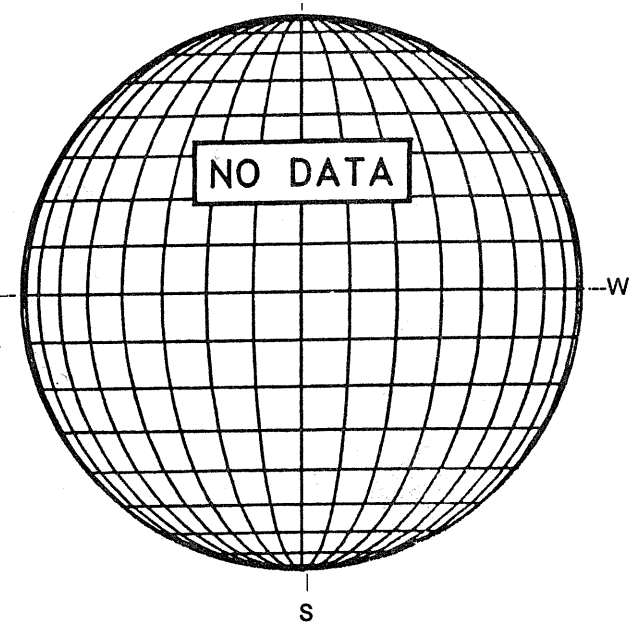
1527 UT

RAMEY SUNSPOT



1250 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----



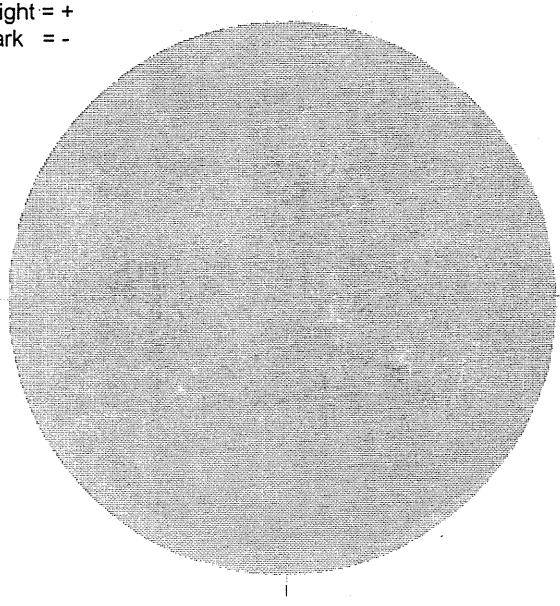
AUGUST 28, 1994 (P= 19.95, Bo = 7.11, Lo = 210.74)

KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -



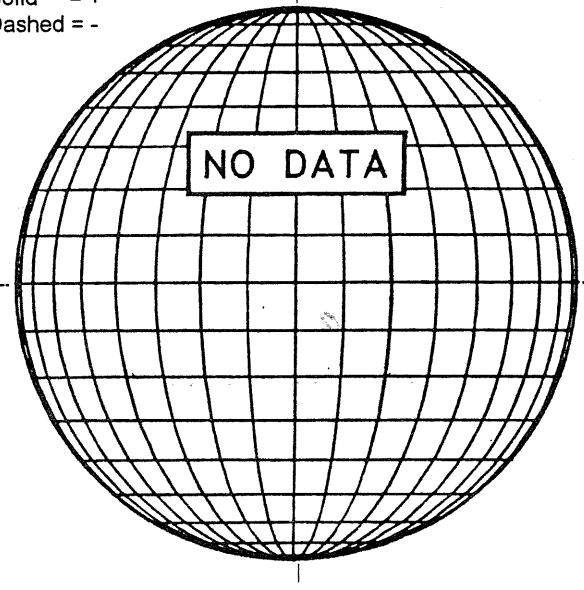
E-

1524 UT

STANFORD MAGNETOGRAM

N

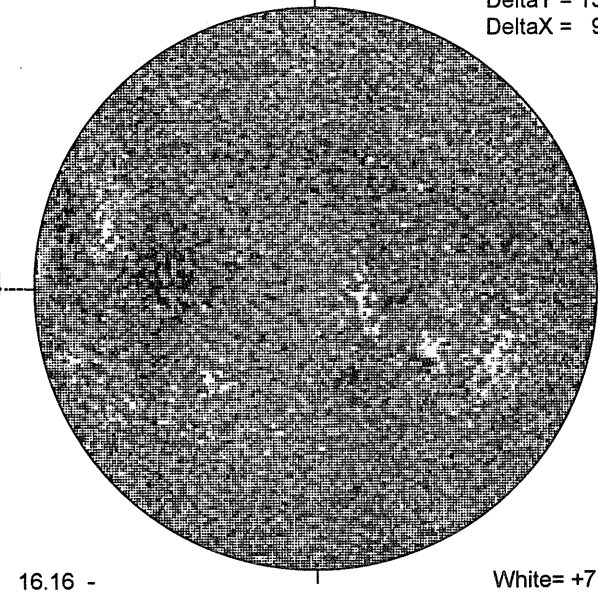
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

N

DeltaY = 13.1
DeltaX = 9.6

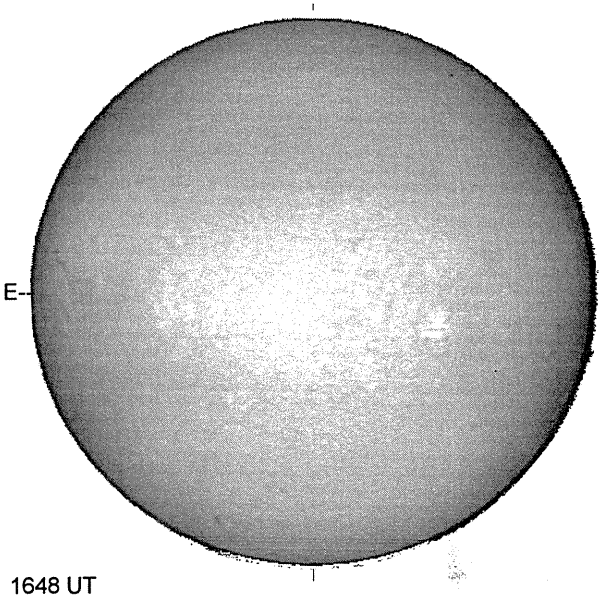


W

16.16 -
17.09 UT

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

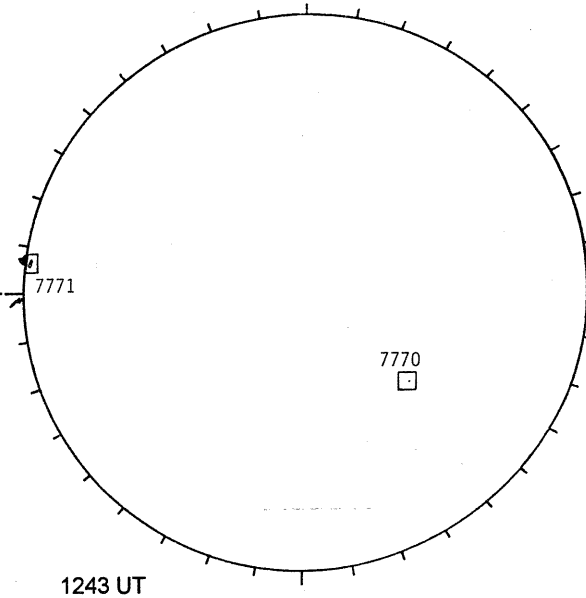


E-

1648 UT

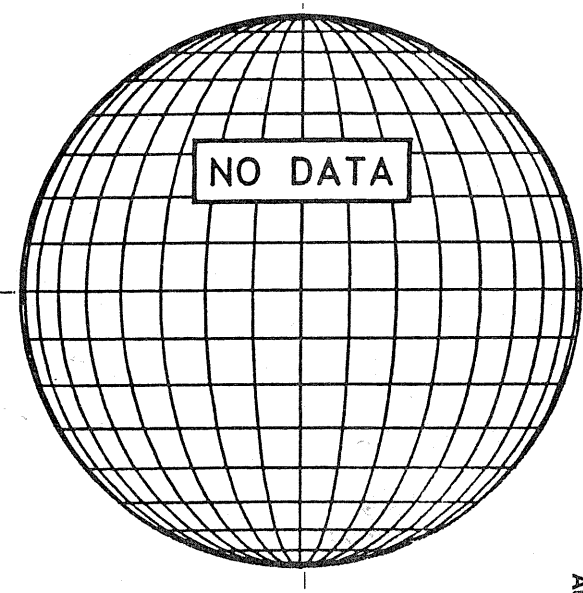
S

RAMEY SUNSPOT



1243 UT
0723 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----



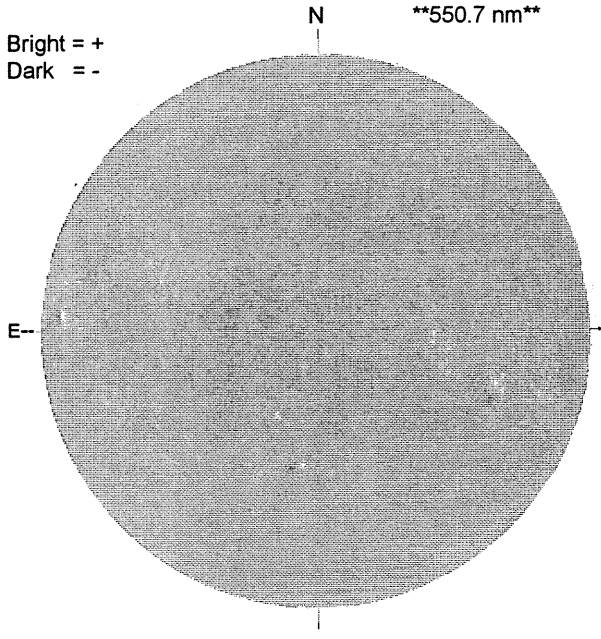
W

S

77
Aug 94

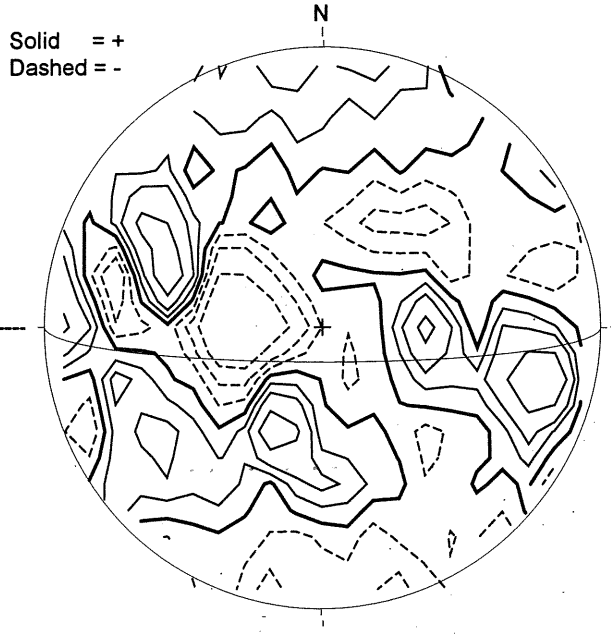
AUGUST 29, 1994 (P= 20.22, Bo = 7.14, Lo = 197.52)

KITT PEAK MAGNETOGRAM



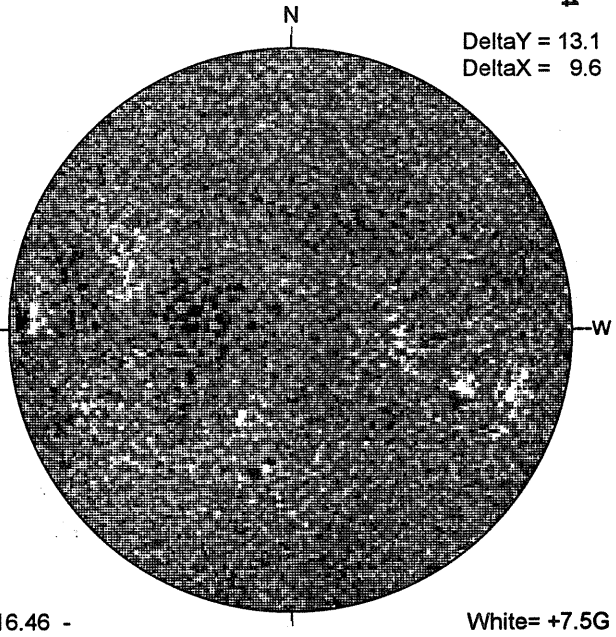
2019 UT

STANFORD MAGNETOGRAM



1836 UT

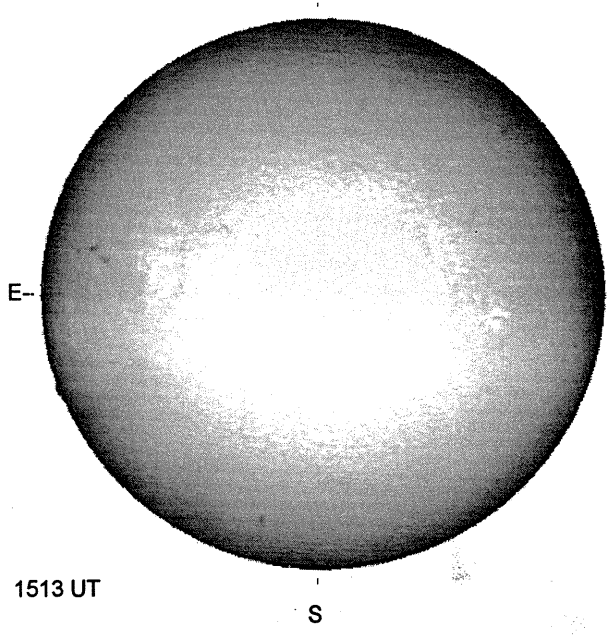
MT. WILSON MAGNETOGRAM



16.46 -
17.38 UT

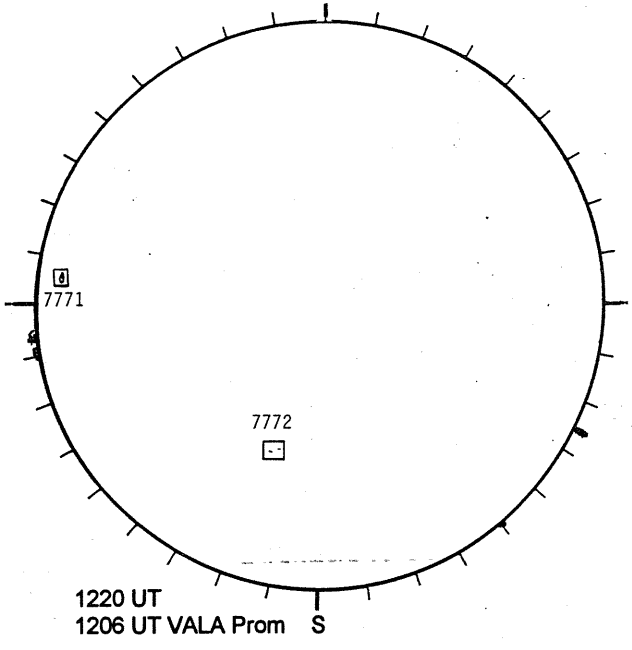
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



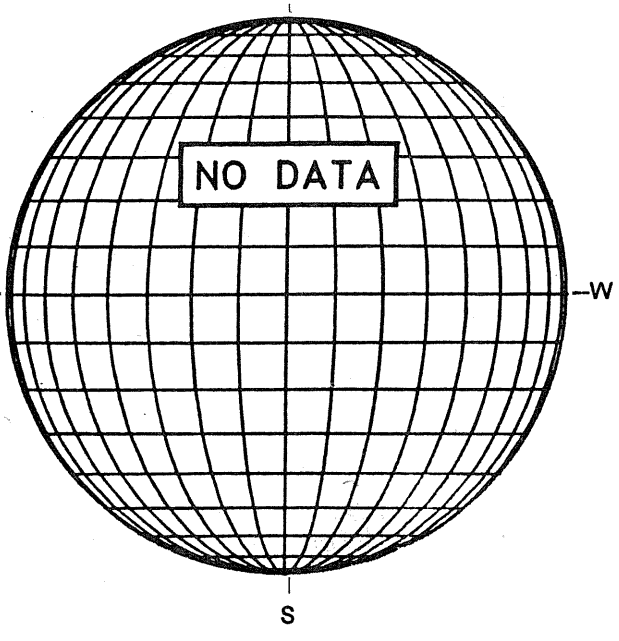
1513 UT

RAMEY SUNSPOT



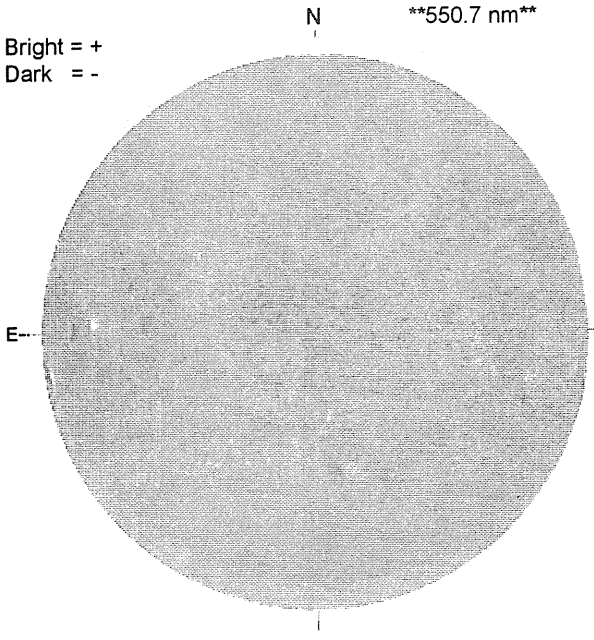
1220 UT
1206 UT VALA Prom

LOMNICKY PEAK CORONA (1.04 Radii)



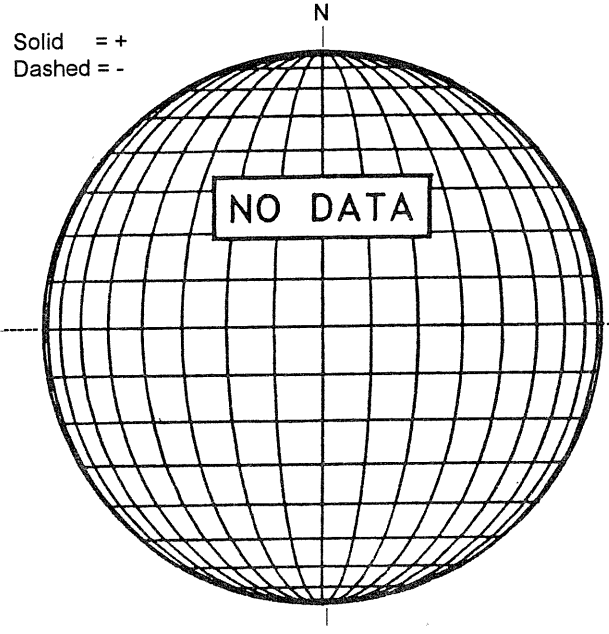
AUGUST 30, 1994 (P= 20.49, Bo = 7.16, Lo = 184.31)

KITT PEAK MAGNETOGRAM

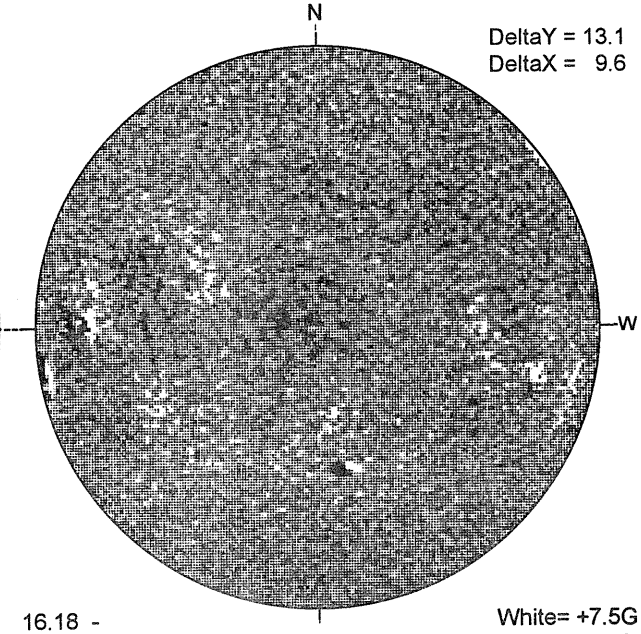


1427 UT

STANFORD MAGNETOGRAM



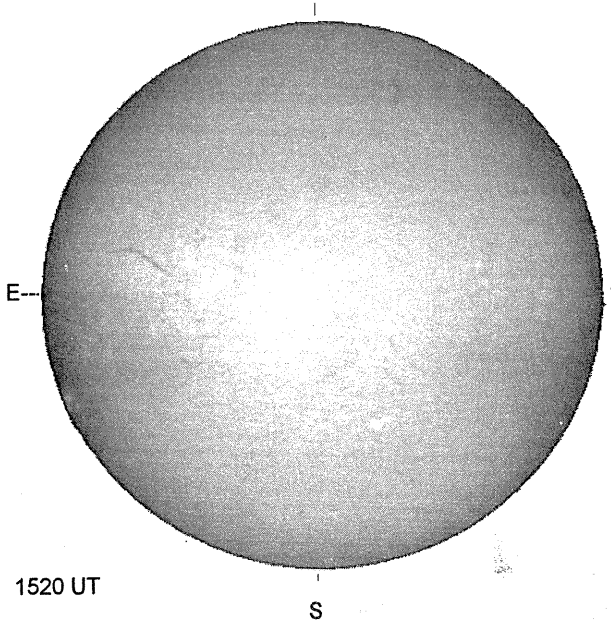
MT. WILSON MAGNETOGRAM



16.18 -
17.10 UT

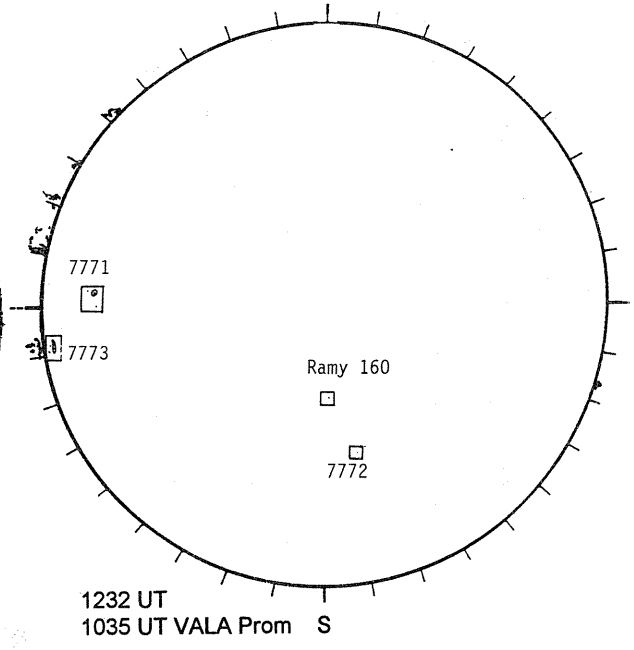
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



1520 UT

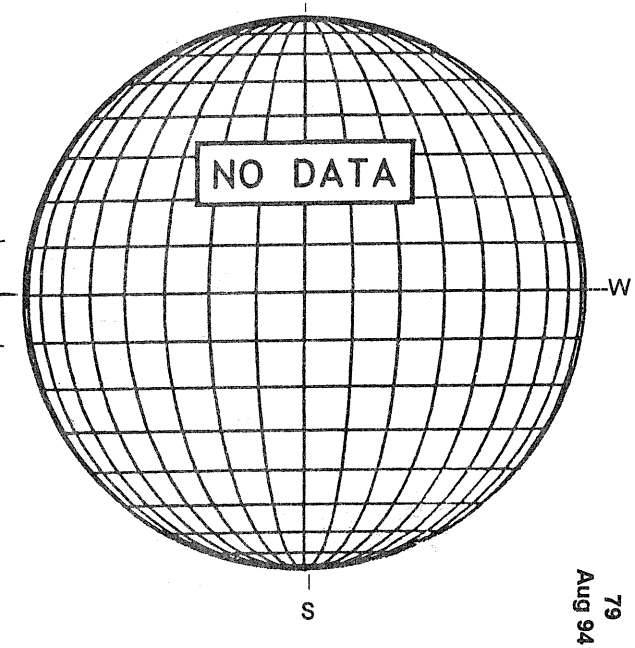
RAMEY SUNSPOT



1232 UT
1035 UT VALA Prom

S

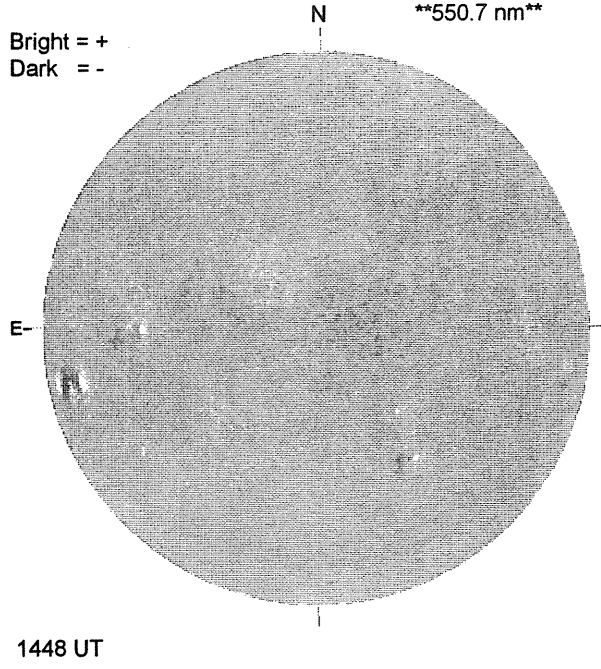
SACRAMENTO PEAK CORONA (1.15 Radii)----



79
Aug 94

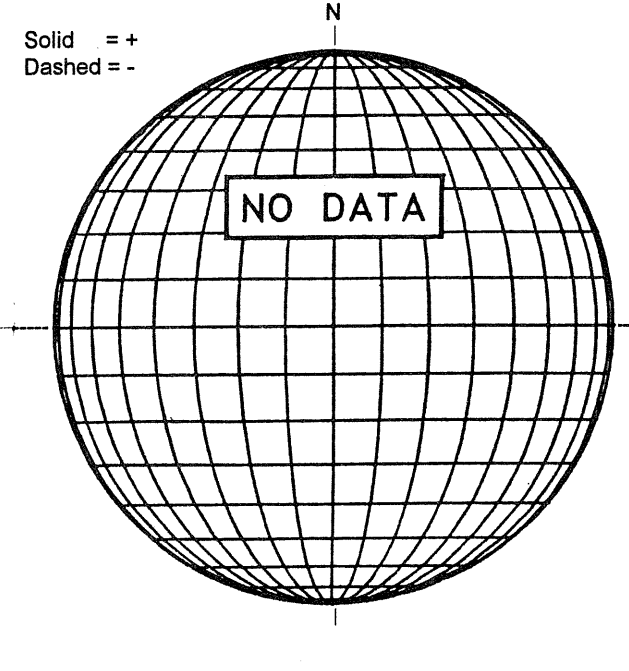
AUGUST 31, 1994 (P= 20.75, Bo = 7.17, Lo = 171.10)

KITT PEAK MAGNETOGRAM

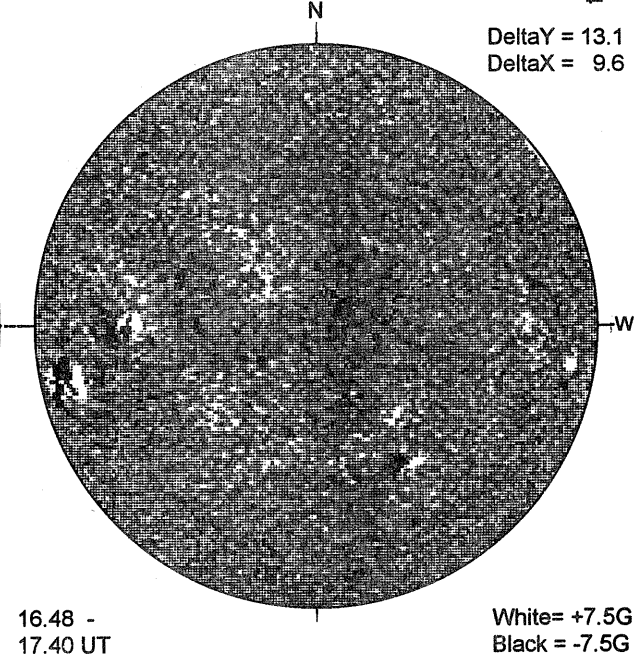


1448 UT

STANFORD MAGNETOGRAM



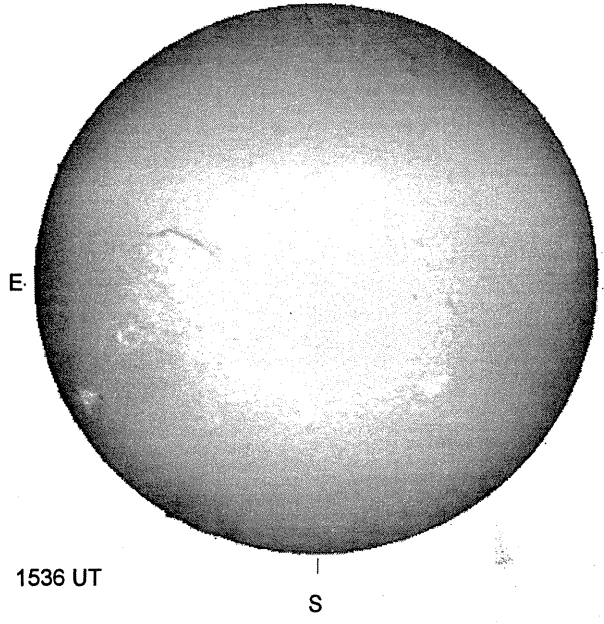
MT. WILSON MAGNETOGRAM



16.48 -
17.40 UT

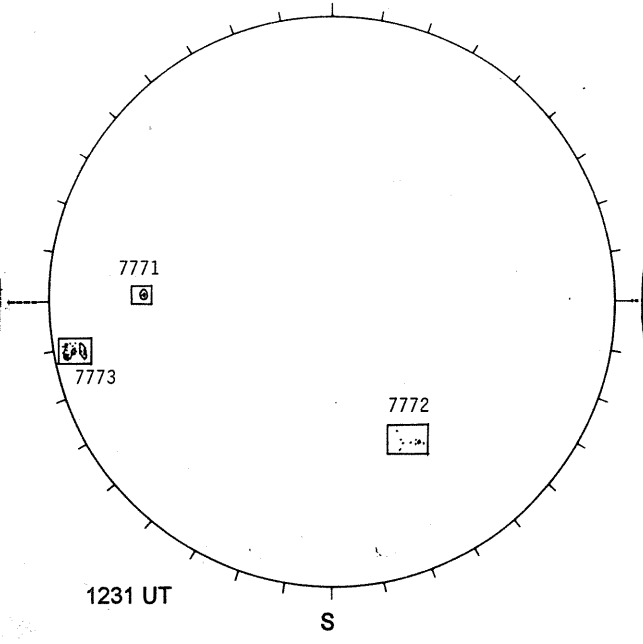
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



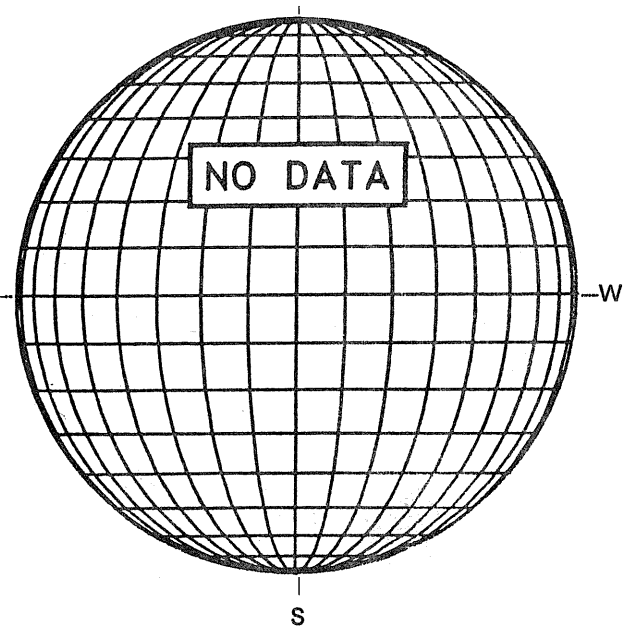
1536 UT

RAMEY SUNSPOT



1231 UT

LOMNICKY PEAK CORONA (1.04 Radii)----



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.

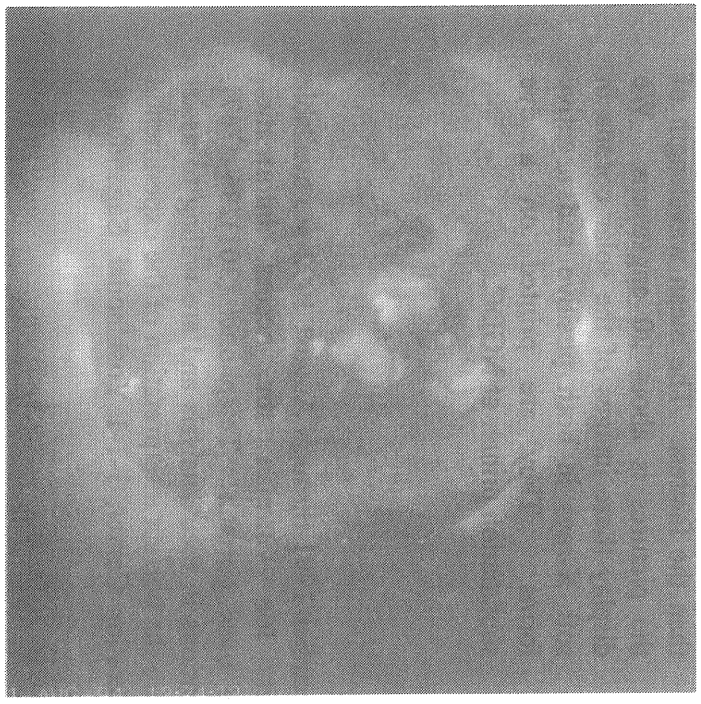
The Soft X-ray Telescope (SXT) uses low-scatter grazing incidence optics to form direct images on a CCD detector. It employs a Nariai-Werner design which differs from the more commonly used Wolter Type 1 in that both mirror segments have been made hyperbolic in order to gain better off-axis performance 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.

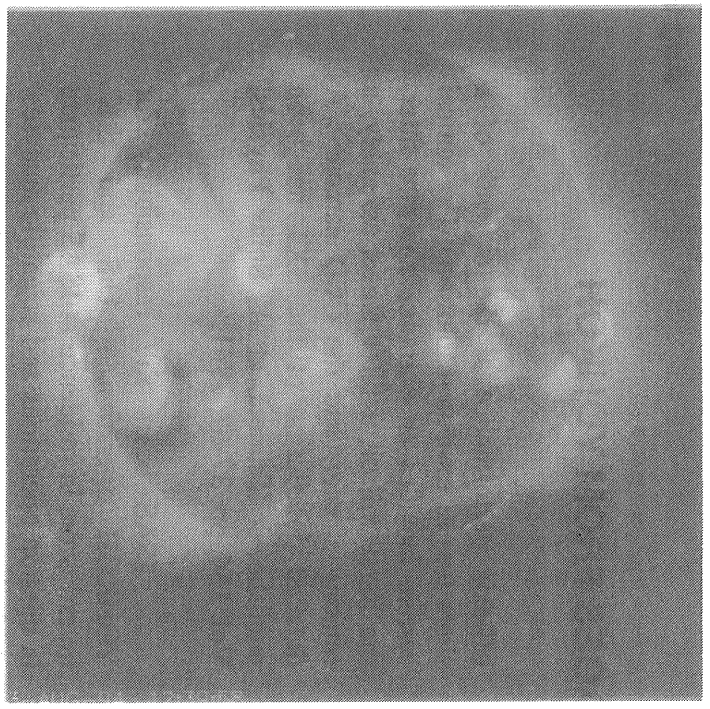
Editor's Note: YOHKOH SXT images for September 1991 through August 1992 are available through the NASA SolarDAC. Contact Joe Gurman for access information [gurman@uvsp.gsfc.nasa.gov, jgurman@solar, or uvsp::gurman. Telephone: (301)286-4767]. The YOHKOH team continues to invite collaborations in their 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

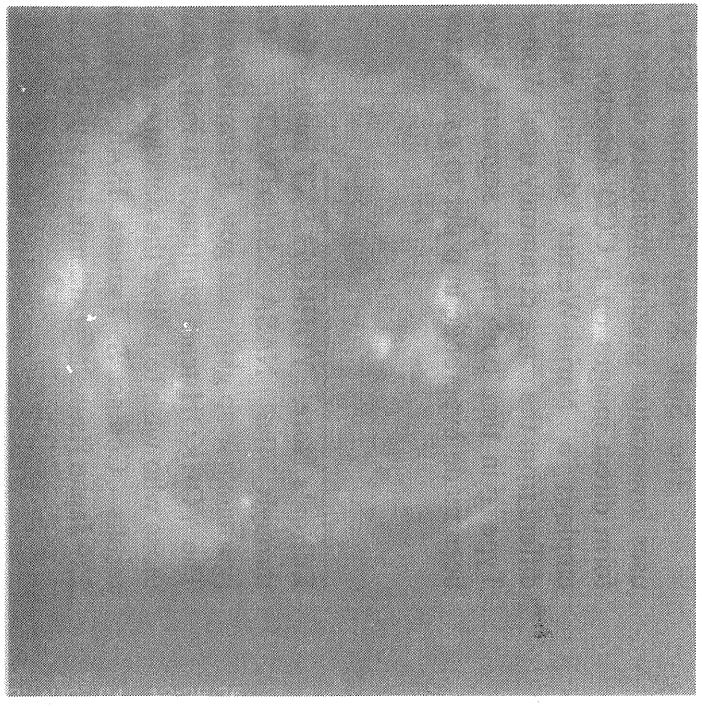
August 1994



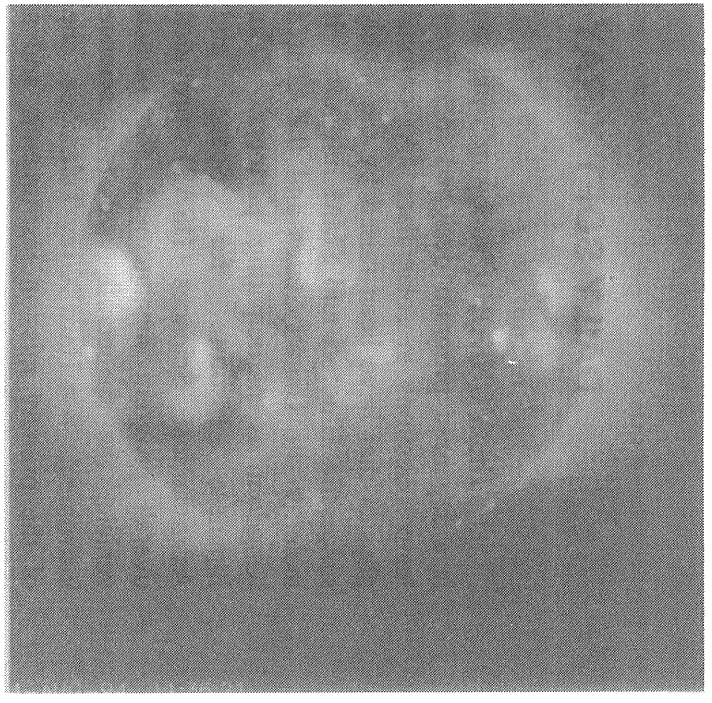
Day 1
12:24:12 UT



Day 3
12:39:58 UT



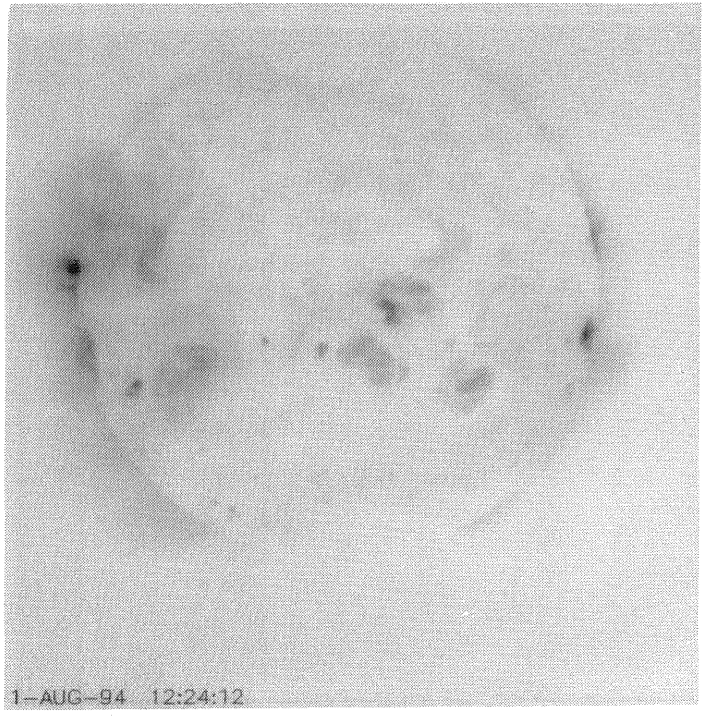
Day 2
12:26:26 UT



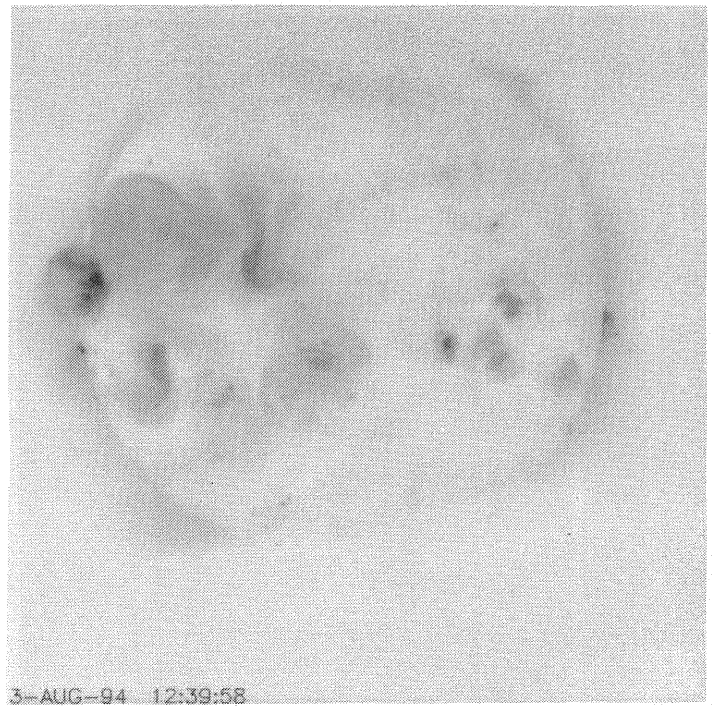
Day 4
11:36:21 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

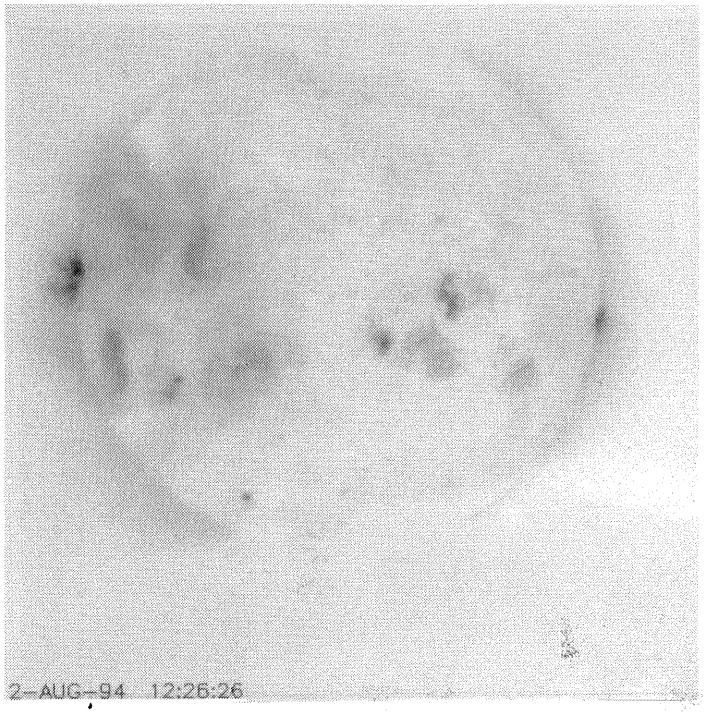
August 1994



Day 1
12:24:12 UT



Day 3
12:39:58 UT

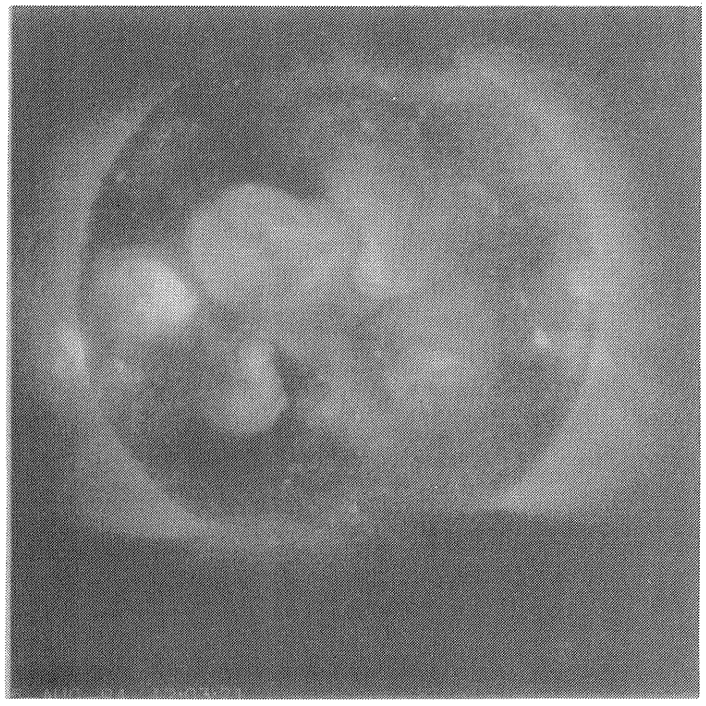


Day 2
12:26:26 UT

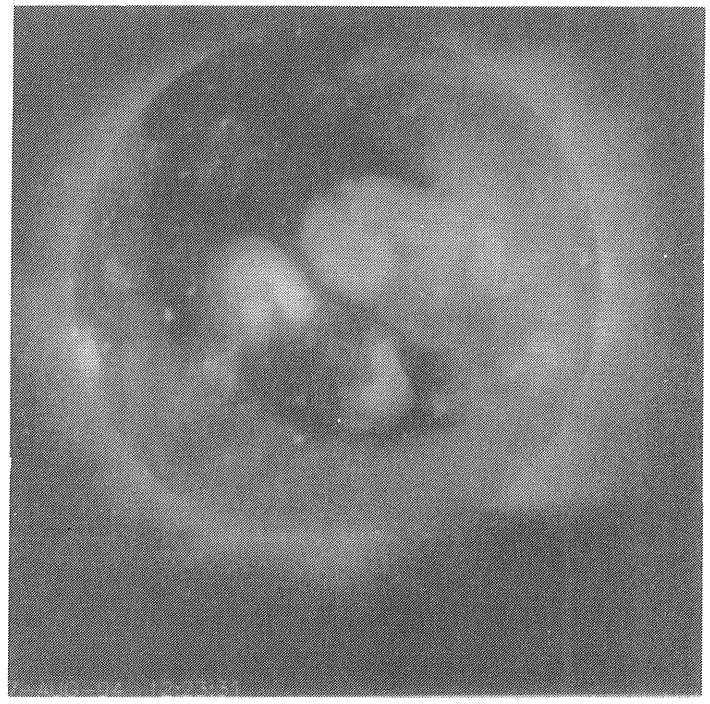
Day 4
11:36:21 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

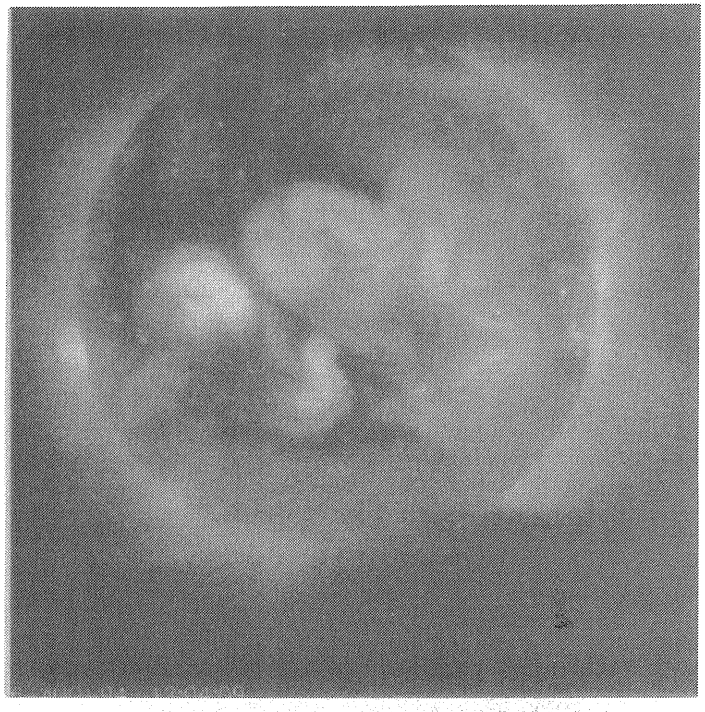
August 1994



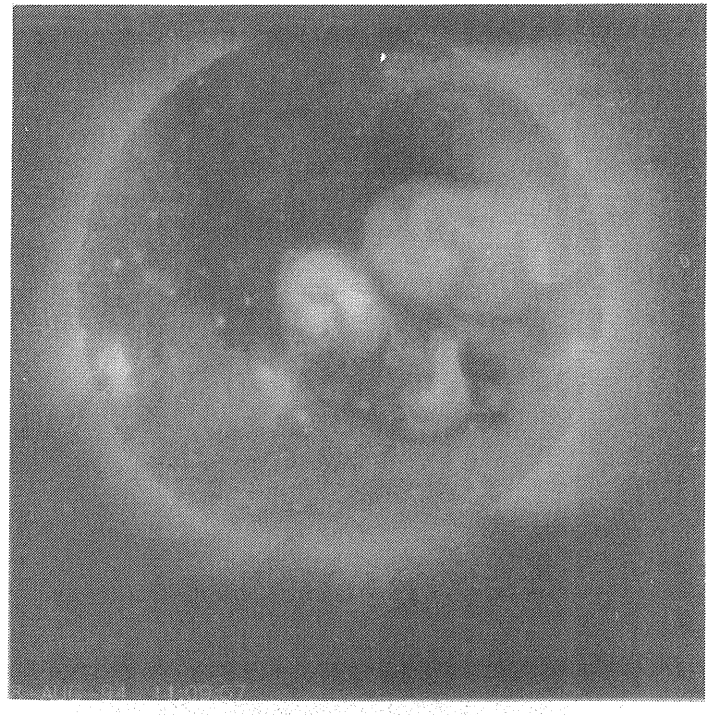
Day 5
12:03:21 UT



Day 7
12:23:31 UT



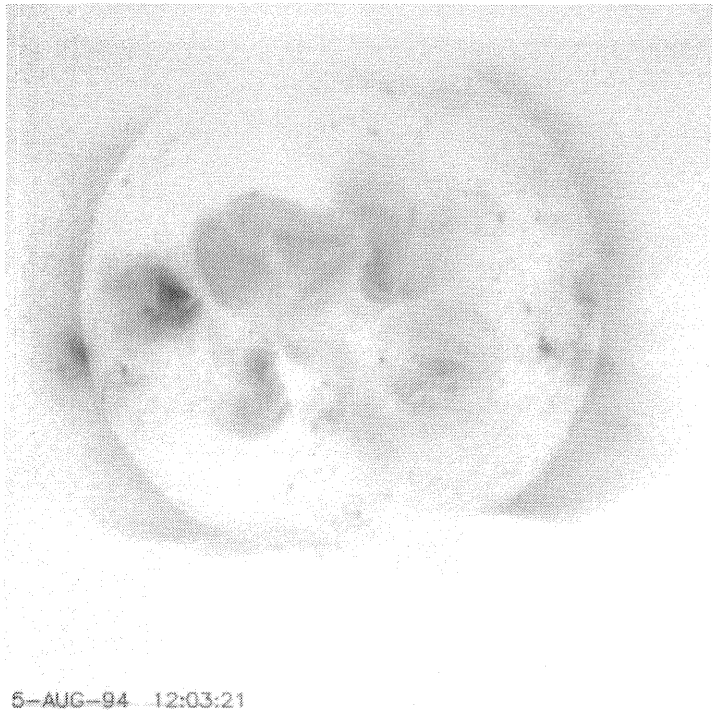
Day 6
12:04:09 UT



Day 8
11:09:57 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

August 1994



Day 5
12:03:21 UT

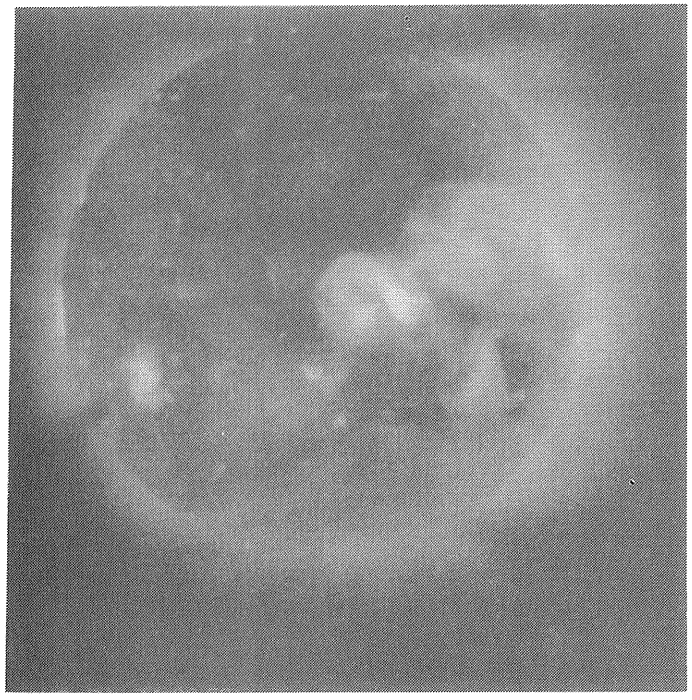
Day 7
12:23:31 UT

Day 6
12:04:09 UT

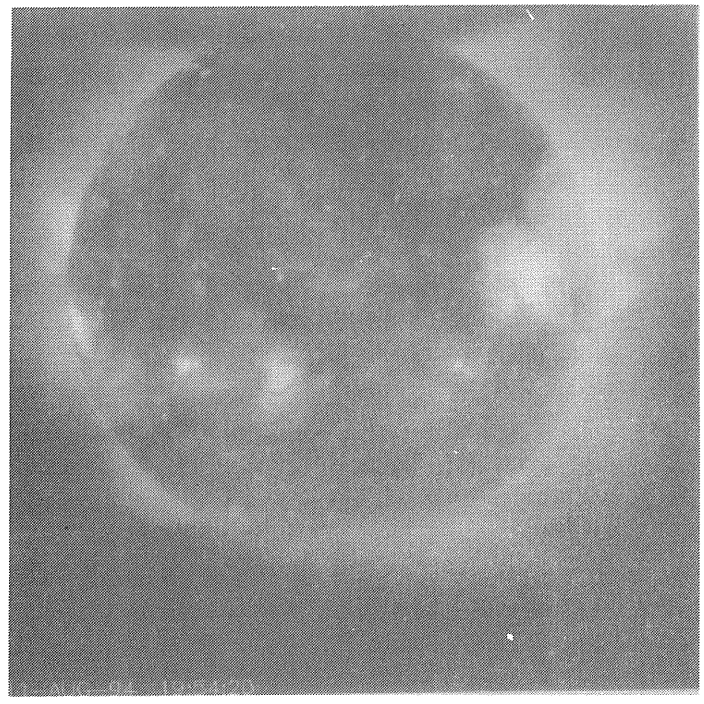
Day 8
11:09:57 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

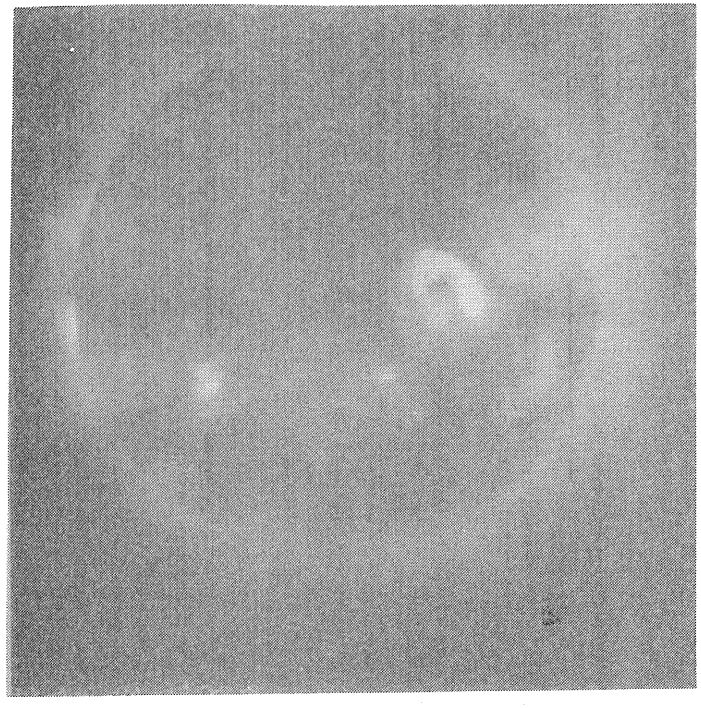
August 1994



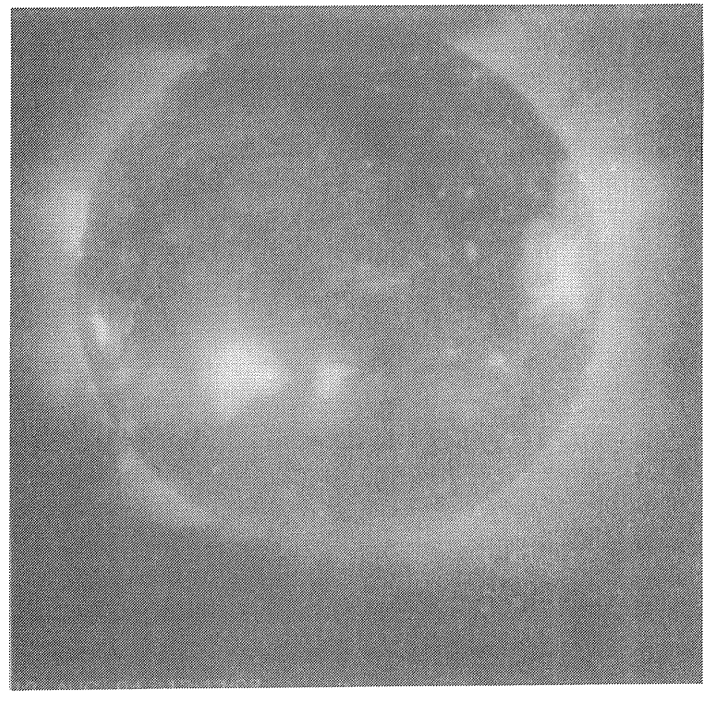
Day 9
11:22:50 UT



Day 11
19:54:20 UT



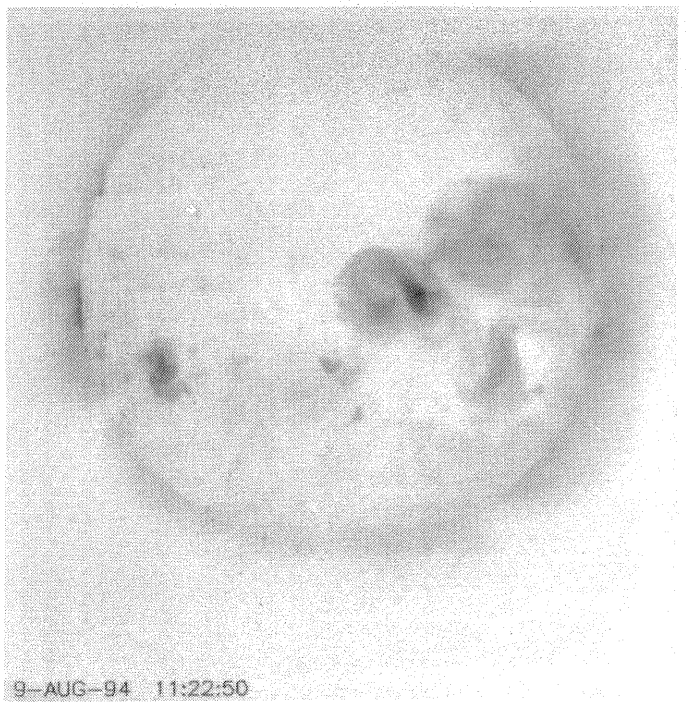
Day 10
12:04:38 UT



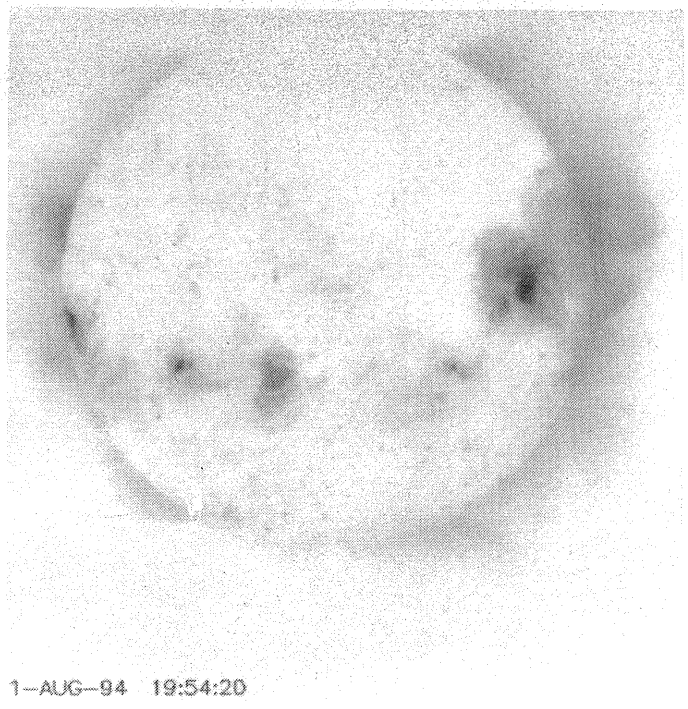
Day 12
12:12:08 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

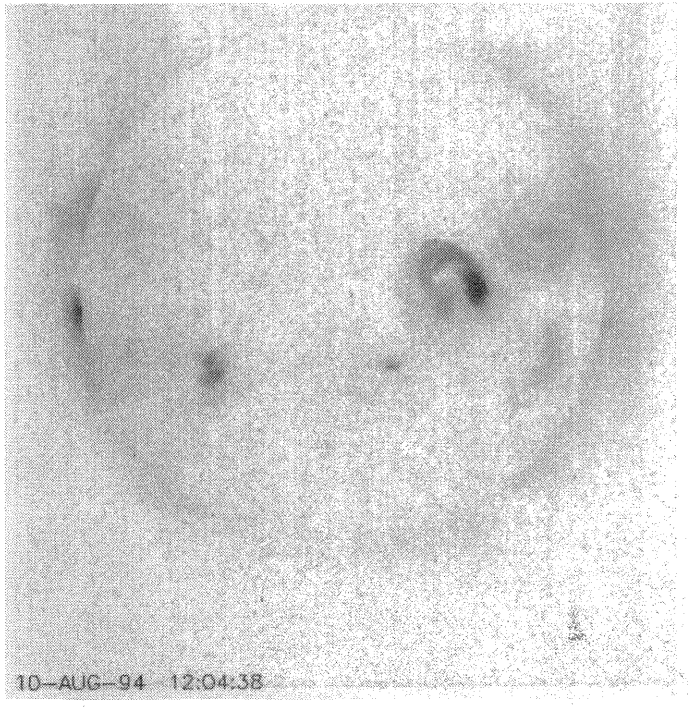
August 1994



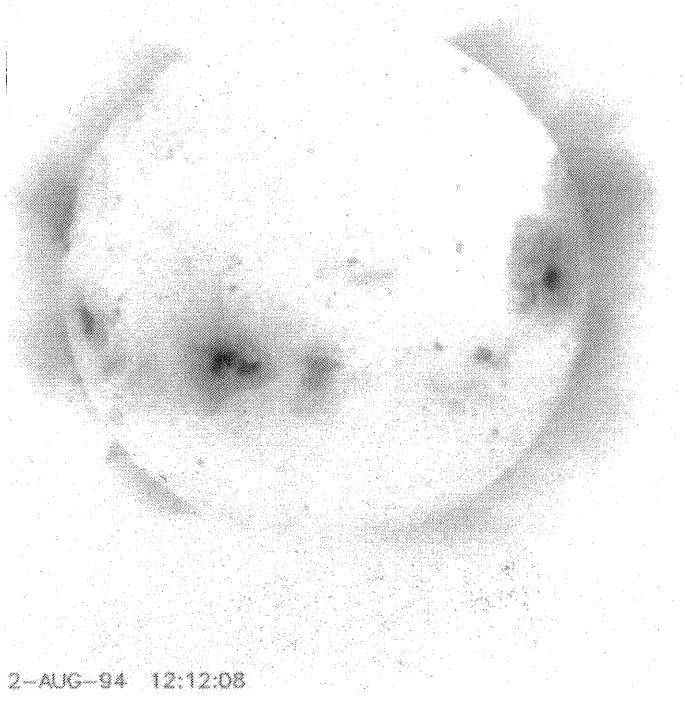
Day 9
11:22:50 UT



Day 11
19:54:20 UT



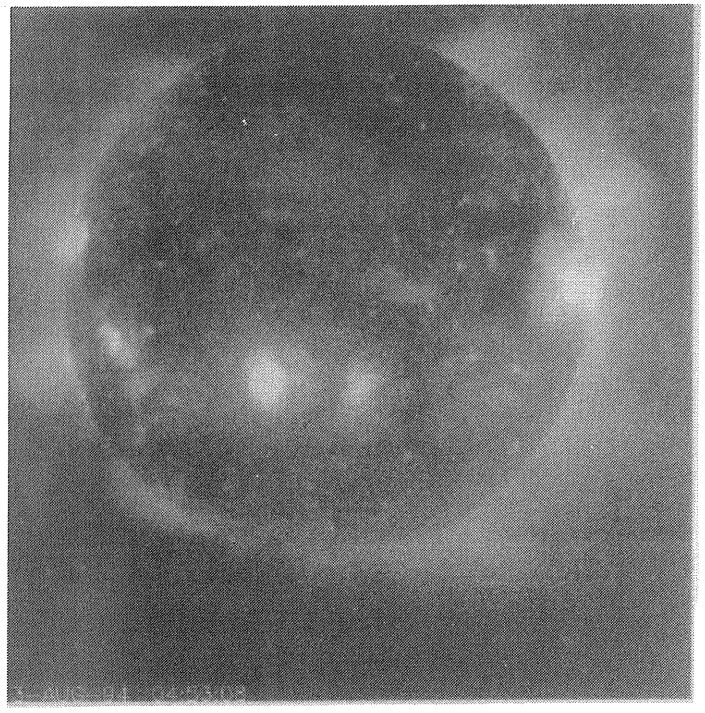
Day 10
12:04:38 UT



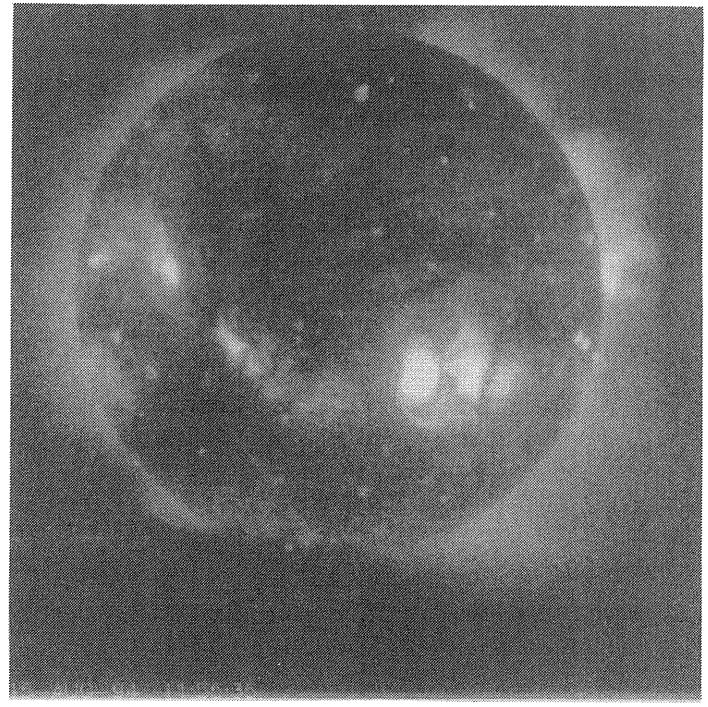
Day 12
12:12:08 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

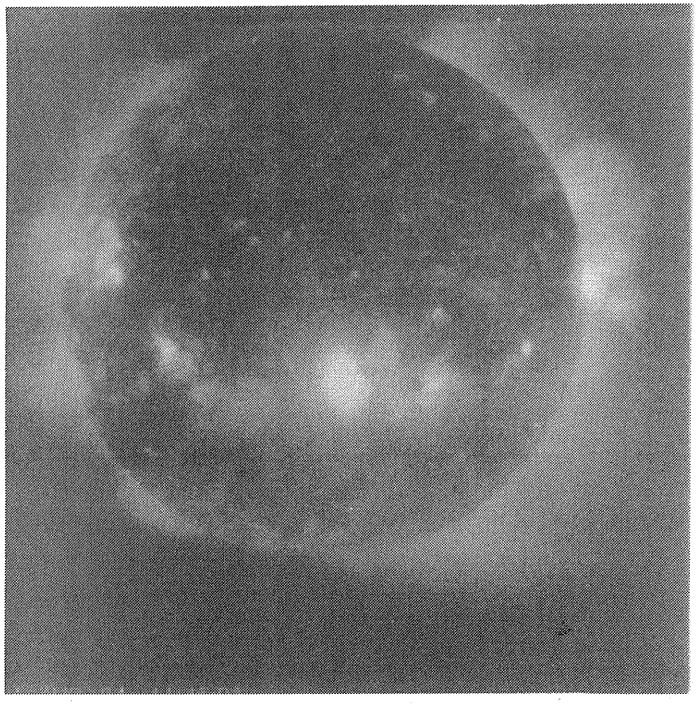
August 1994



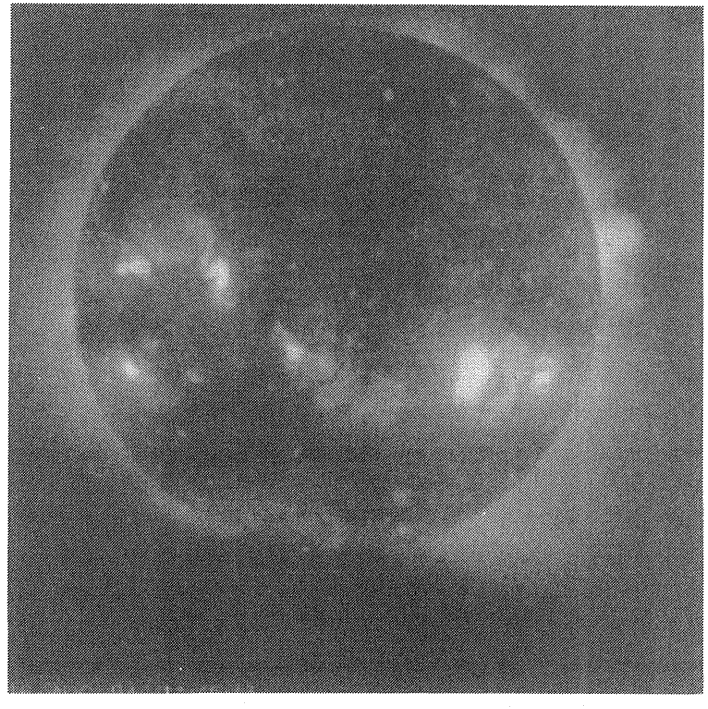
Day 13
04:53:08 UT



Day 15
11:55:35 UT



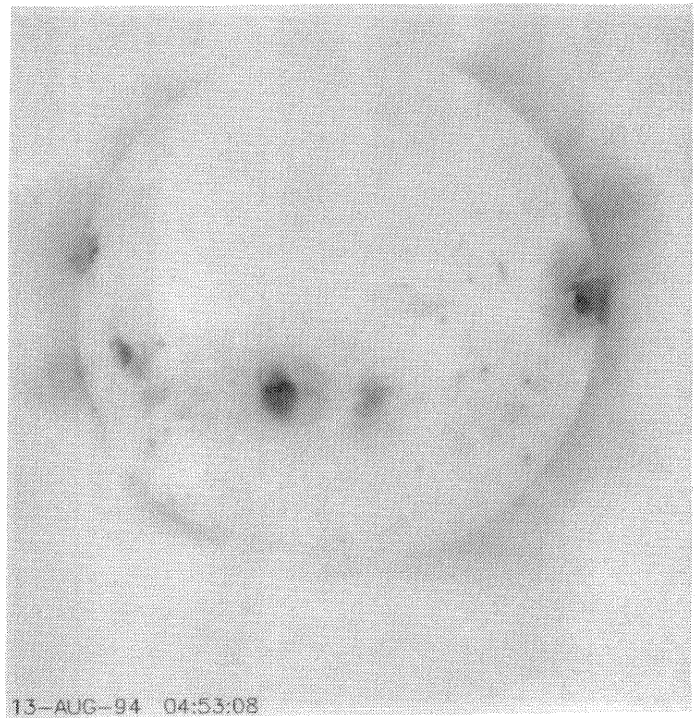
Day 14
11:45:01 UT



Day 16
11:45:43 UT

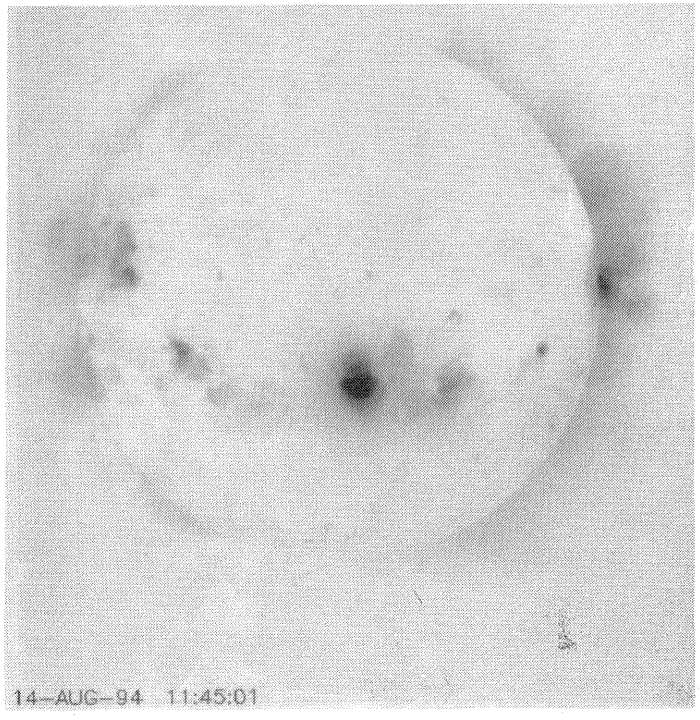
YOHKOH SOFT X-RAY TELESCOPE IMAGES

August 1994

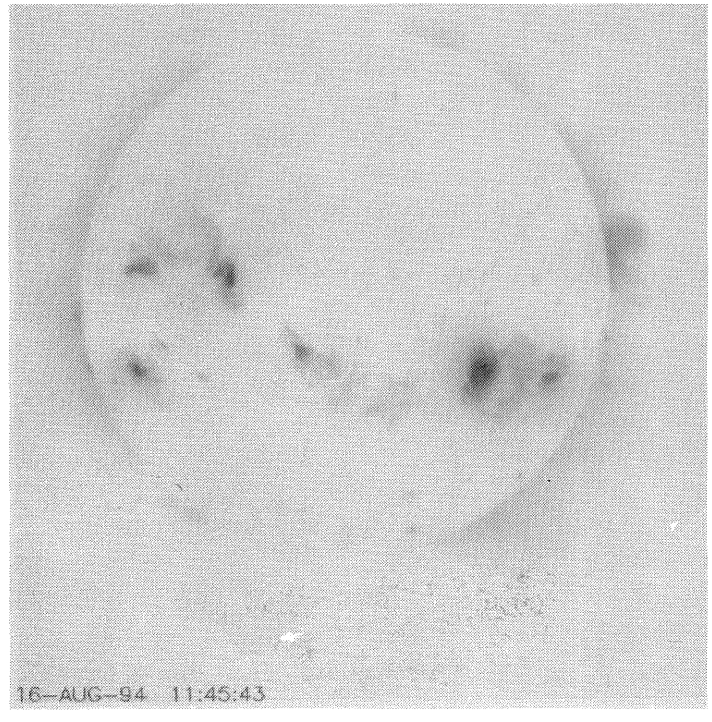


Day 13
04:53:08 UT

Day 15
11:55:35 UT



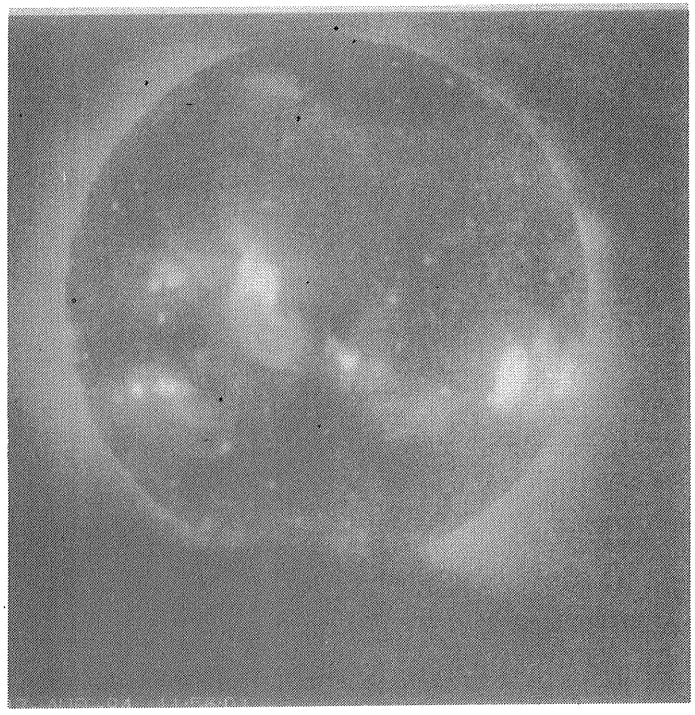
Day 14
11:45:01 UT



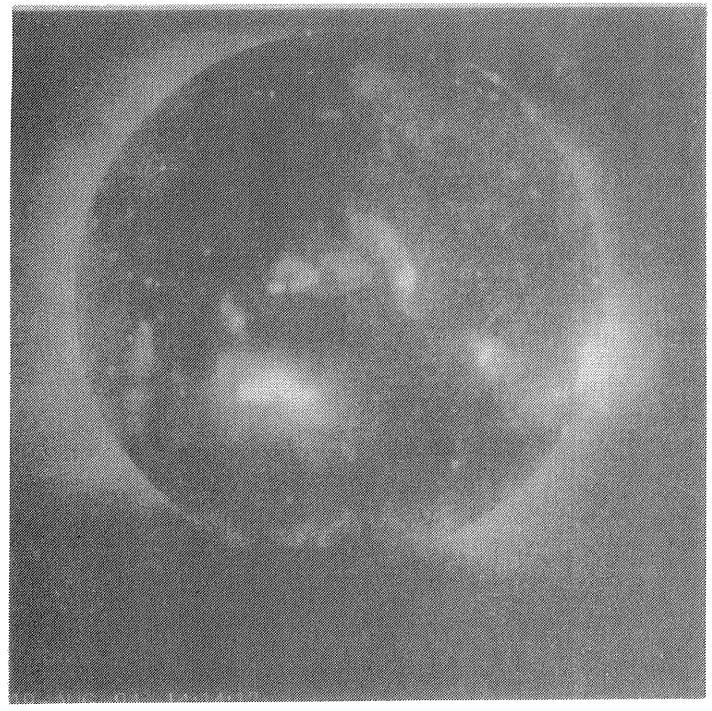
Day 16
11:45:43 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

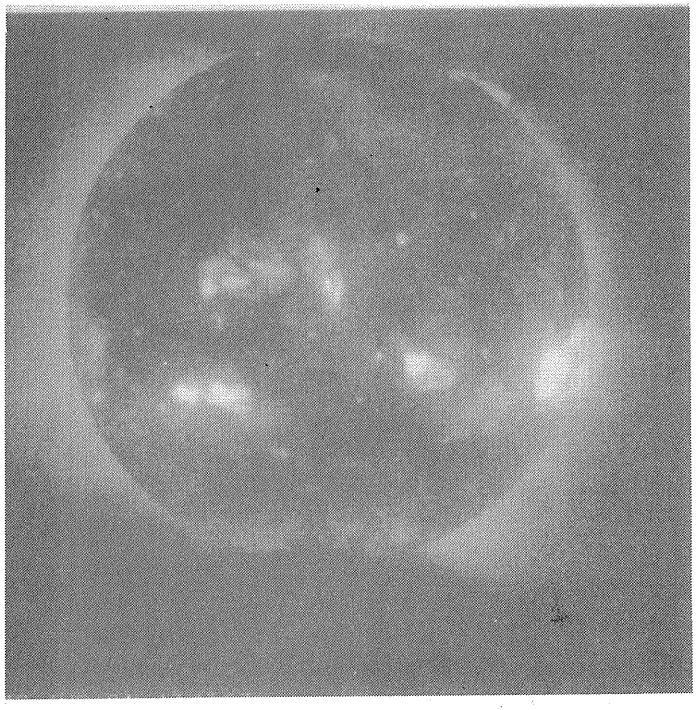
August 1994



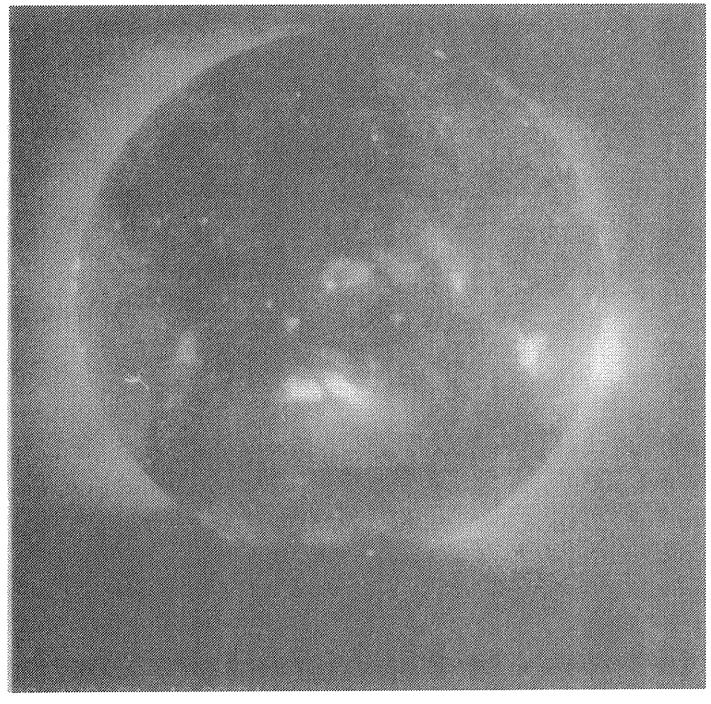
Day 17
11:56:01 UT



Day 19
14:14:12 UT



Day 18
13:43:57 UT

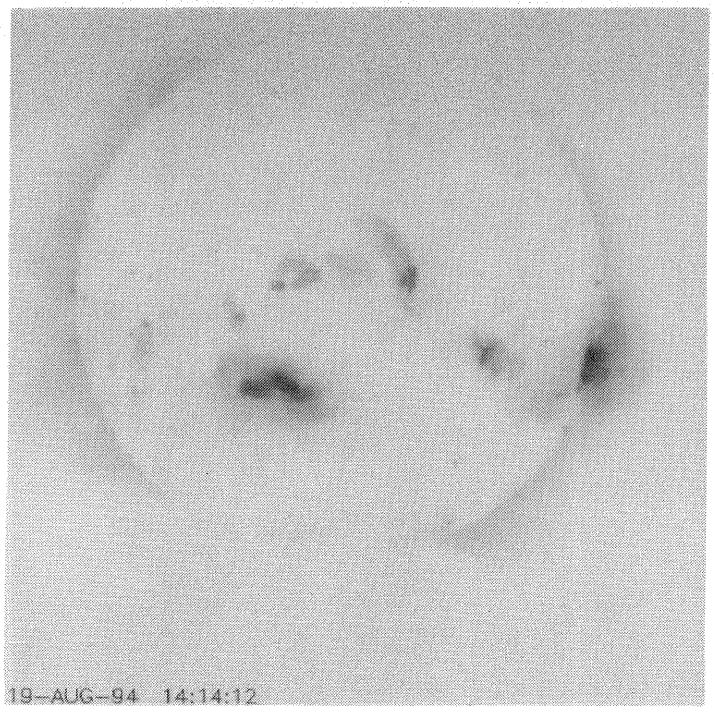


Day 20
10:22:24 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

August 1994

Day 17
11:56:01 UT



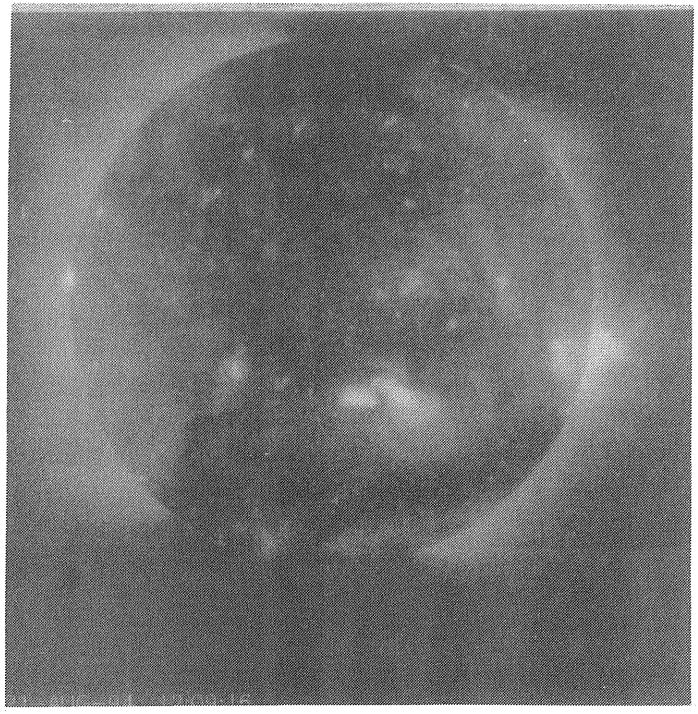
Day 19
14:14:12 UT

Day 18
13:43:57 UT

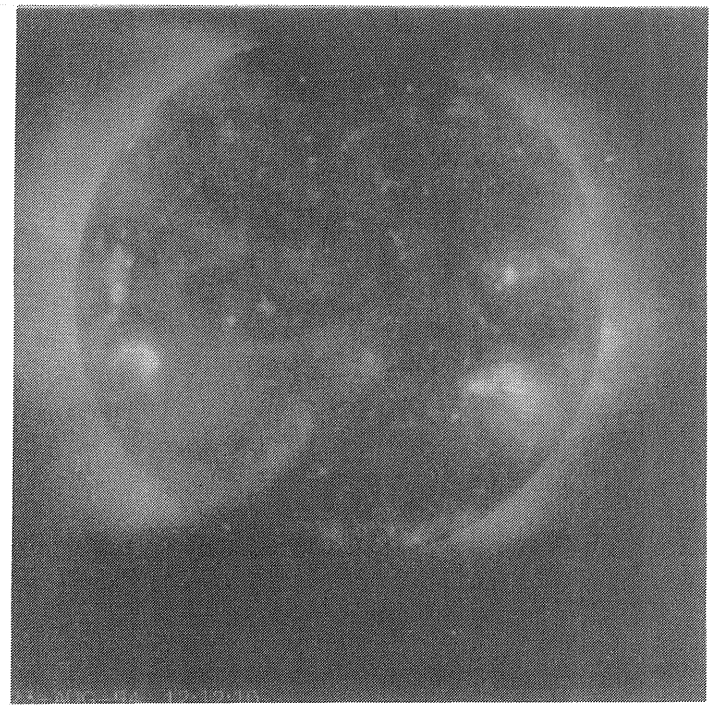
Day 20
10:22:24 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

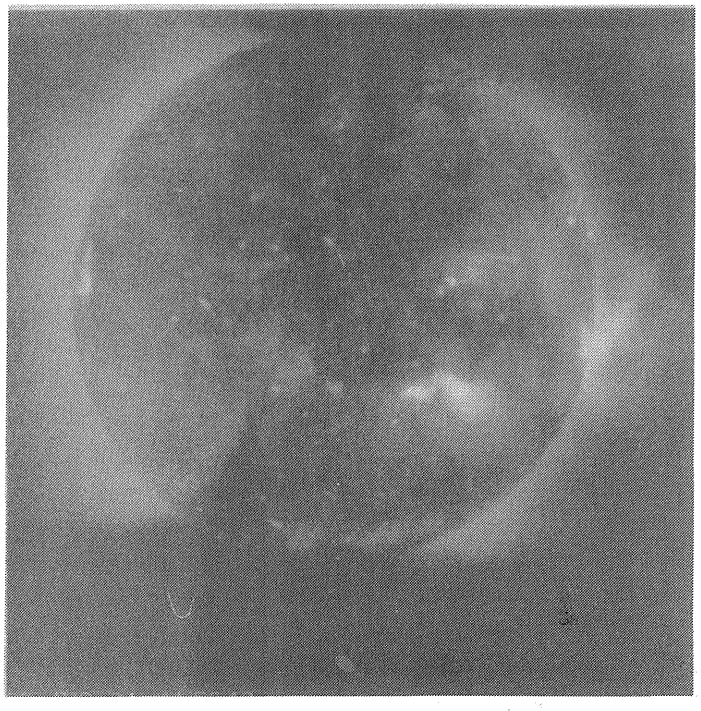
August 1994



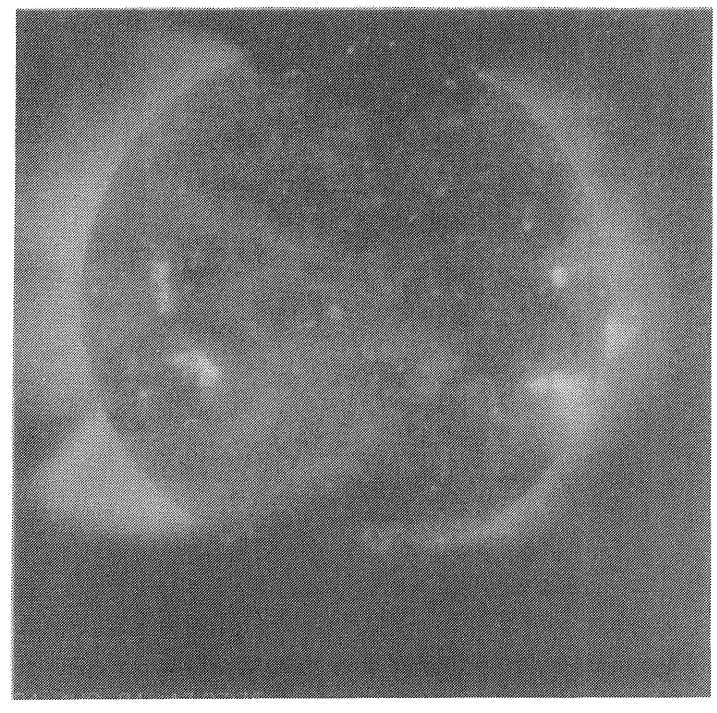
Day 21
12:09:16 UT



Day 23
12:12:10 UT



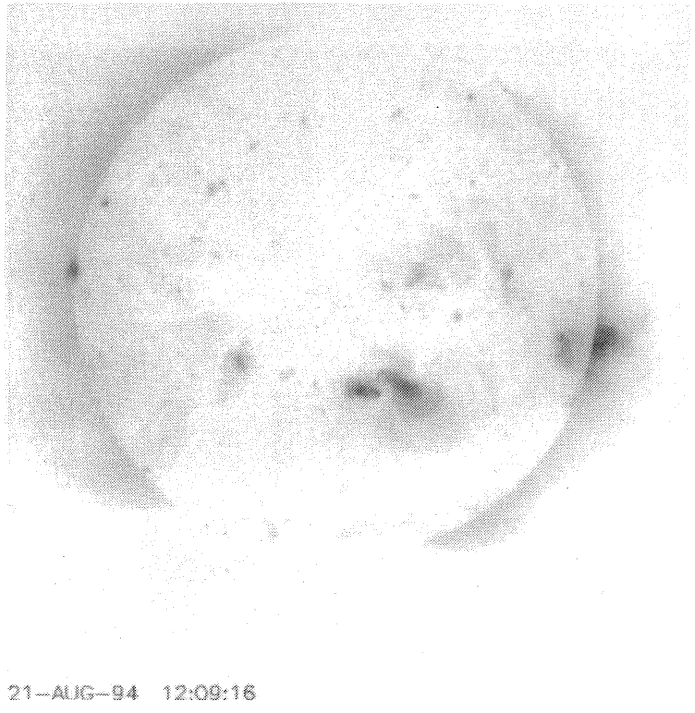
Day 22
11:56:12 UT



Day 24
13:07:35 UT

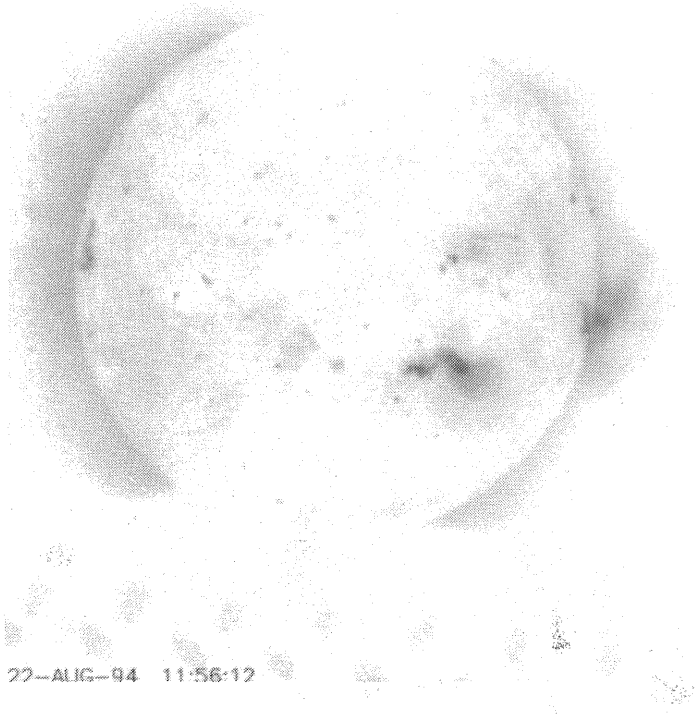
YOHKOH SOFT X-RAY TELESCOPE IMAGES

August 1994

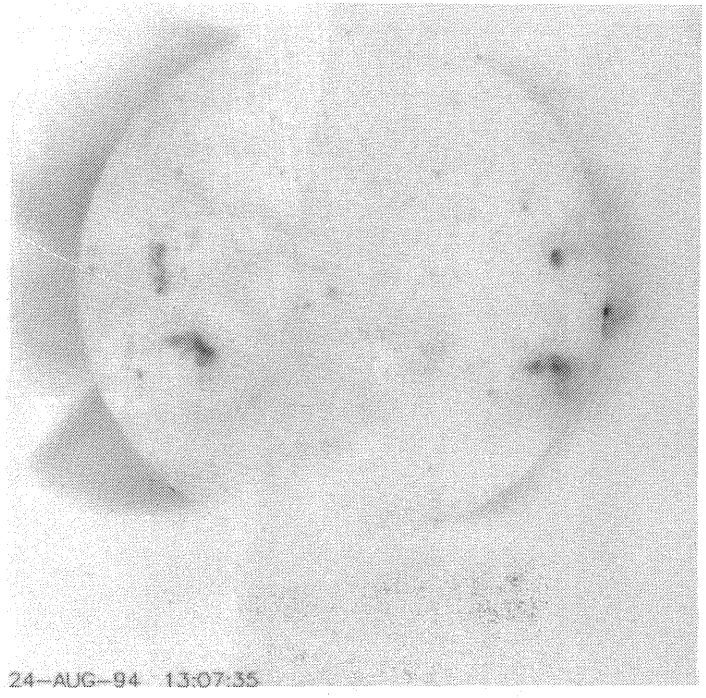


Day 21
12:09:16 UT

Day 23
12:12:10 UT



Day 22
11:56:12 UT

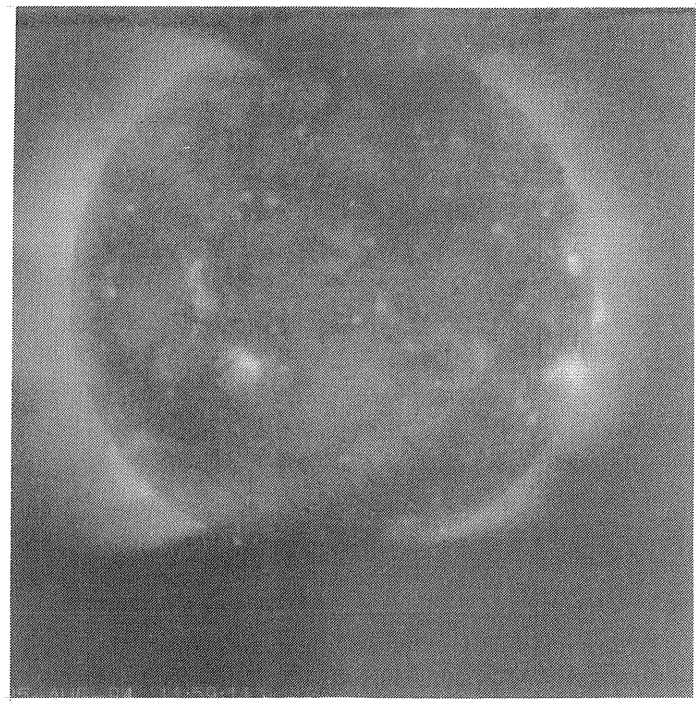


Day 24
13:07:35 UT

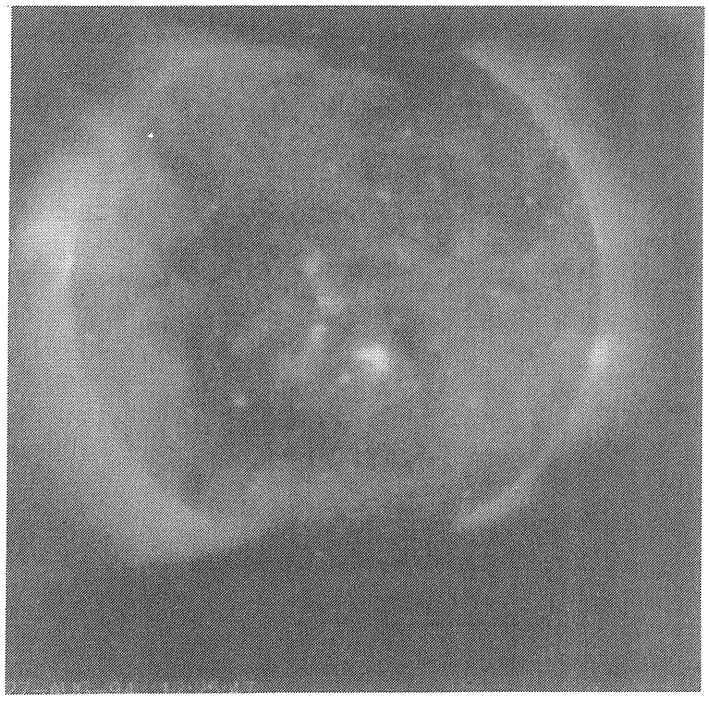
93
Aug 94

YOHKOH SOFT X-RAY TELESCOPE IMAGES

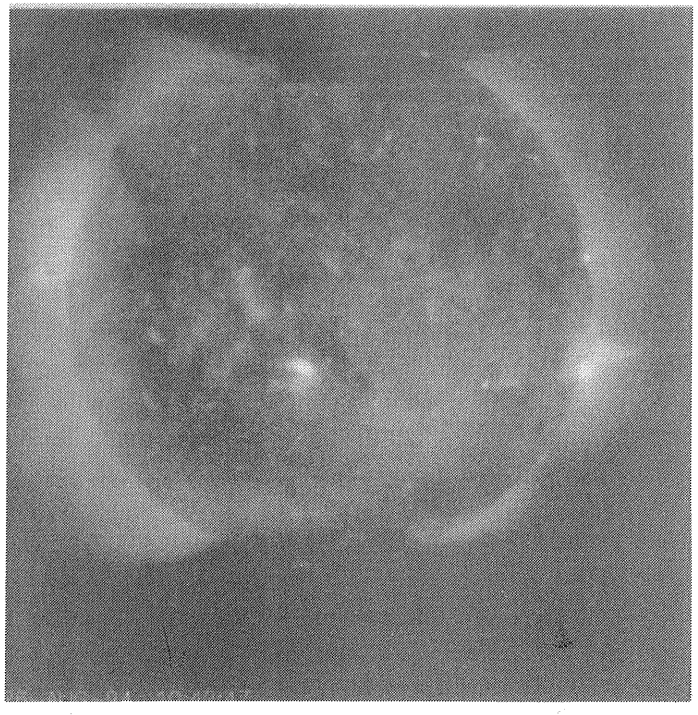
August 1994



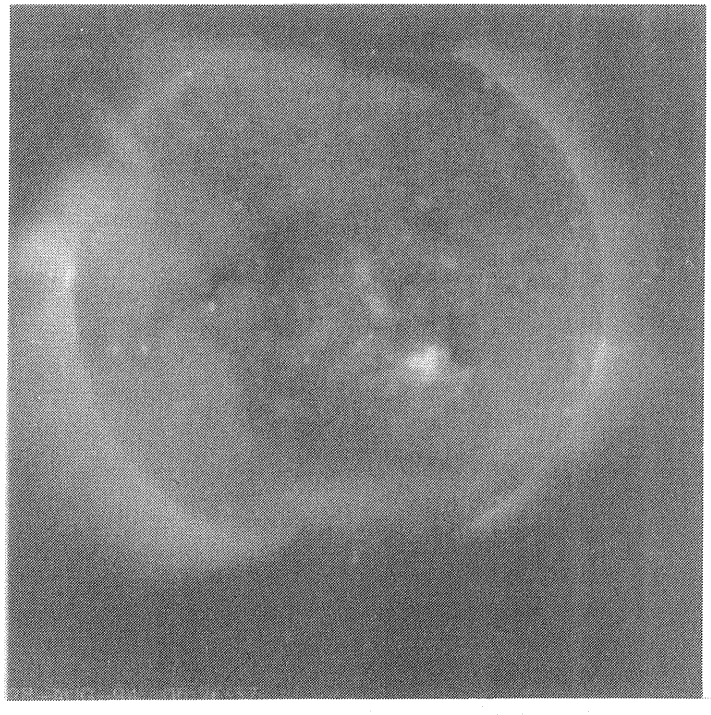
Day 25
11:59:11 UT



Day 27
12:25:47 UT



Day 26
10:42:47 UT

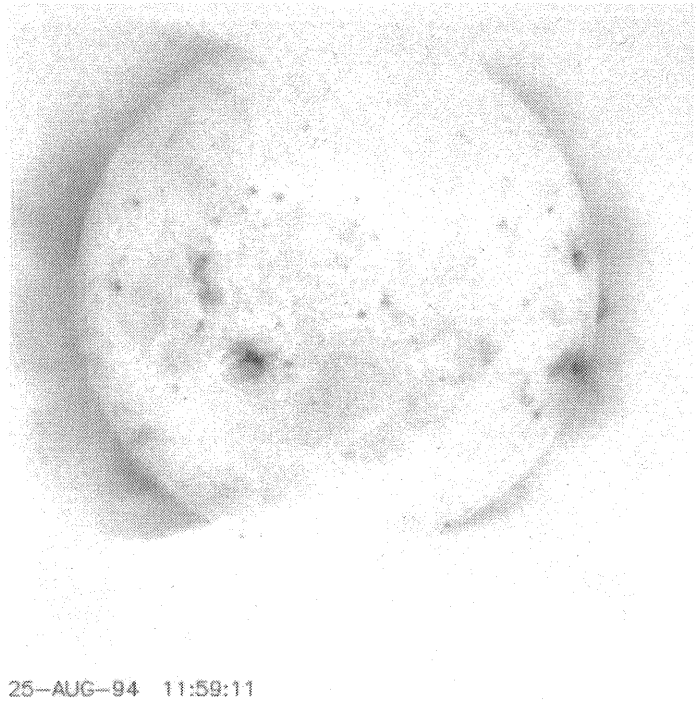


Day 28
06:26:37 UT

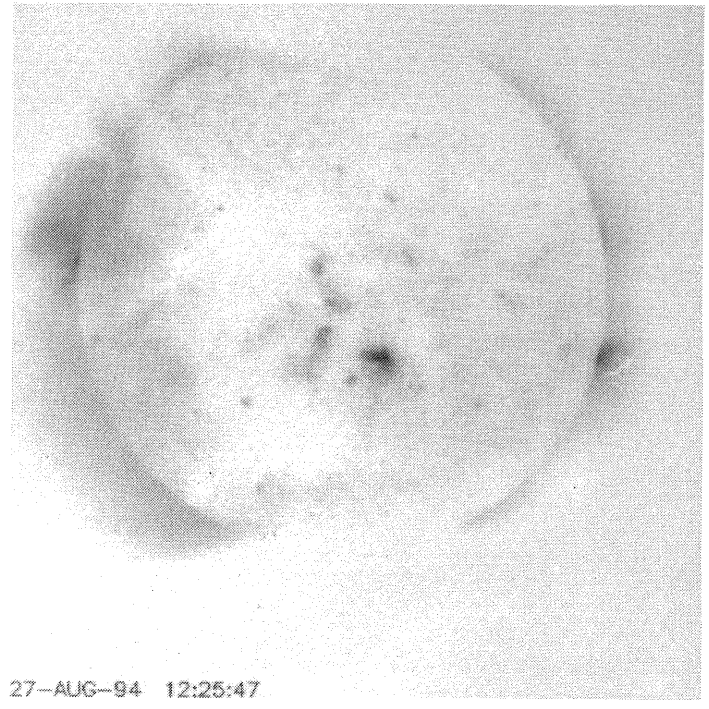
94
Aug 94

YOHKOH SOFT X-RAY TELESCOPE IMAGES

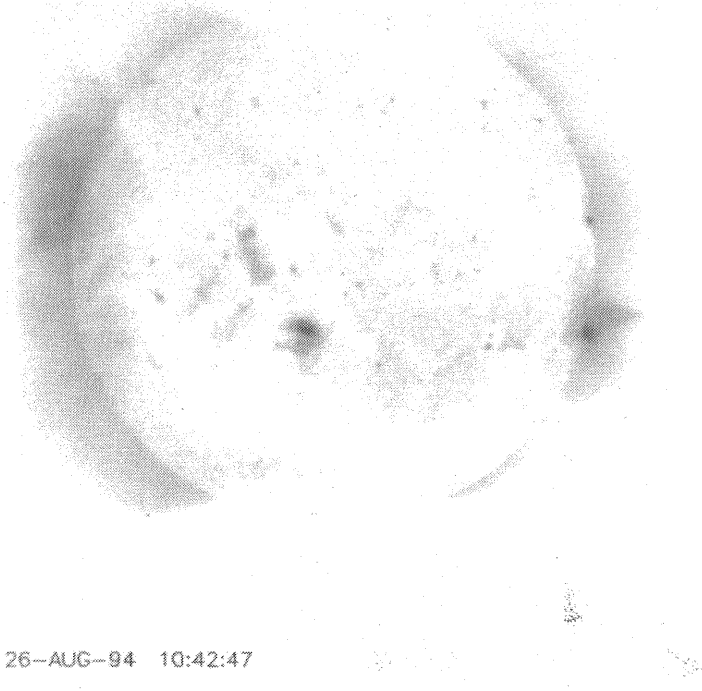
August 1994



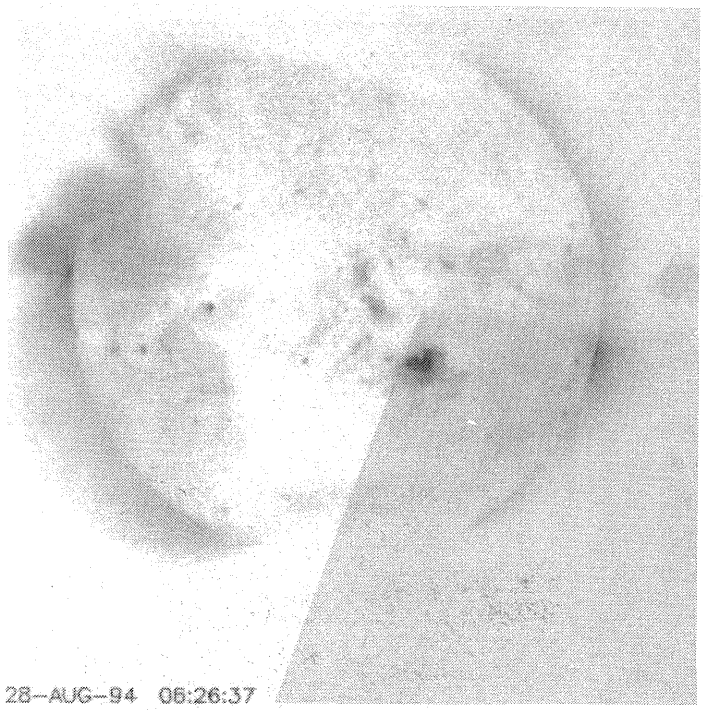
Day 25
11:59:11 UT



Day 27
12:25:47 UT



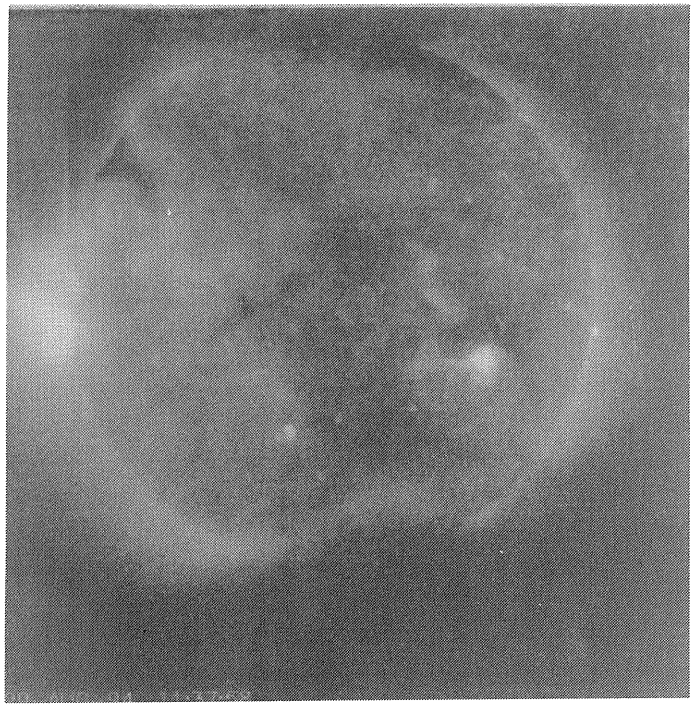
Day 26
10:42:47 UT



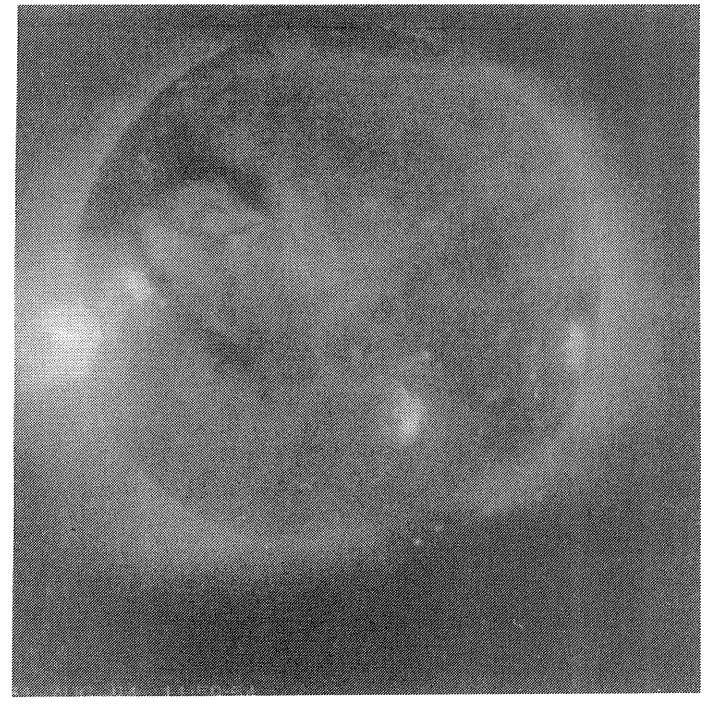
Day 28
06:26:37 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

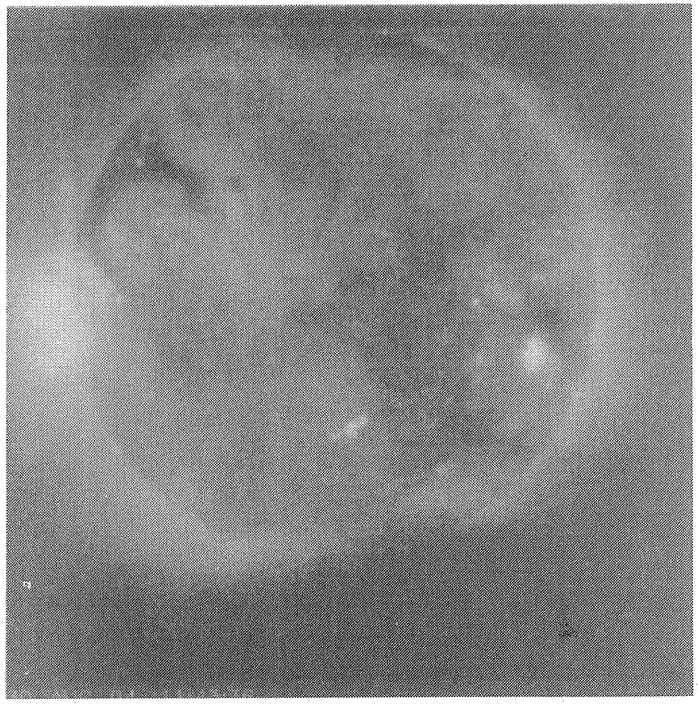
August 1994



Day 29
11:37:58 UT



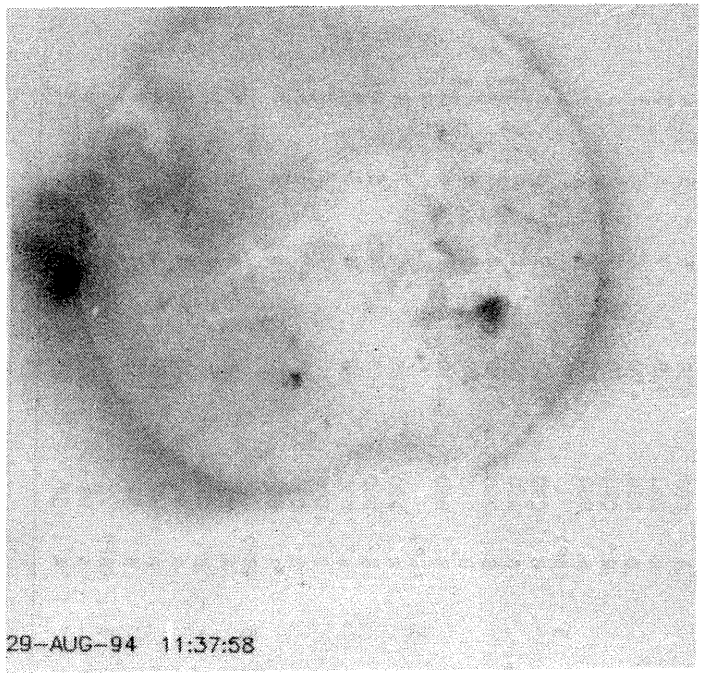
Day 31
11:59:54 UT



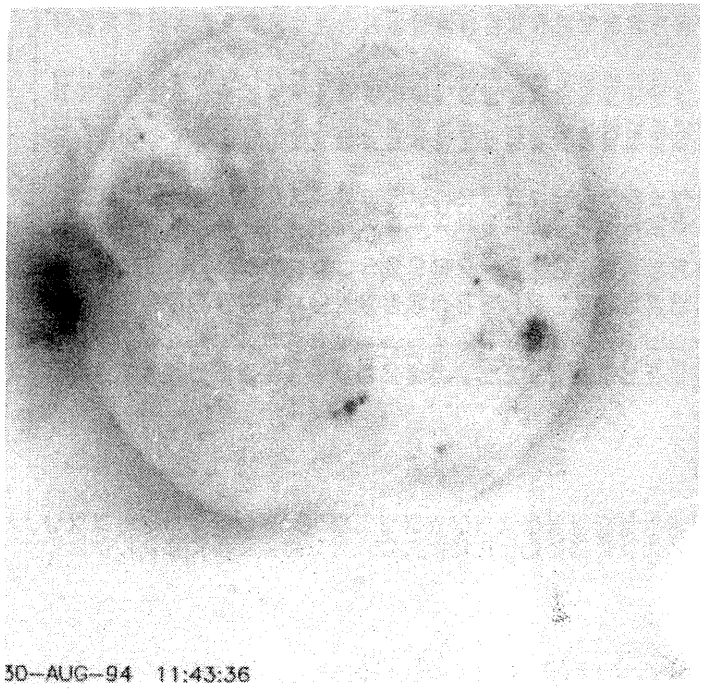
Day 30
11:43:36 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

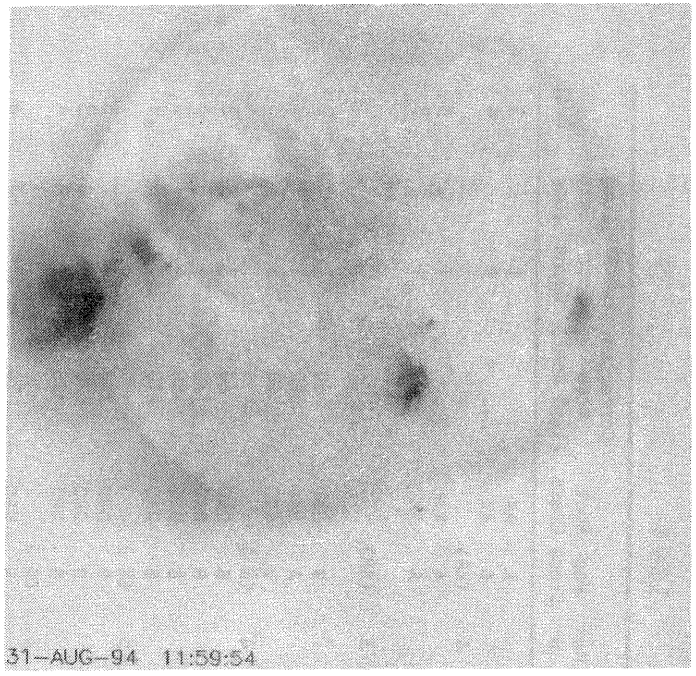
August 1994



Day 29
11:37:58 UT



Day 30
11:43:36 UT



Day 31
11:59:54 UT

97
Aug 94

SUNSPOT GROUPS
(Ordered by Central Meridian Passage Date)

AUGUST 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
7761		SVTO	08 01 0750	S05 E07	08 1.8		A	AX		1		3
7761		RAMY	08 01 1212	S06 E03	08 1.7		A	AX		1		4
7761	28154	MWIL	08 01 1430	S04 E02	08 1.7	4	(AP)					
7761		PALE	08 01 1915	S05 E00	08 1.8		A	AX		1		3
7761		PALE	08 02 1915	S05 W13	08 1.8		A	AX		1		3
7761A	28153	MWIL	07 31 1400	S15 E64	08 5.4	3	(AP)					
7762		SVTO	08 02 0800	N07 E80	08 8.3		B	CSO	30	2	7	2
7762		LEAR	08 02 0835	N05 E78	08 8.2		A	HA	20	1	1	2
7762		RAMY	08 02 1202	N05 E77	08 8.3		B	CSO	40	3	4	3
7762	28155	MWIL	08 02 1400	N05 E78	08 8.4	4	(B)					
7762		PALE	08 02 1915	N07 E75	08 8.4		B	DAO	60	3	5	3
7762		LEAR	08 03 0145	N06 E72	08 8.5		B	DAO	120	14	10	3
7762		SVTO	08 03 0724	N07 E69	08 8.5		B	DSO	180	4	7	3
7762		RAMY	08 03 1310	N06 E65	08 8.4		B	DAO	210	7	8	3
7762	28155	MWIL	08 03 1400	N05 E65	08 8.4	5	(B)					
7762		PALE	08 03 1825	N06 E62	08 8.4		B	DSO	120	11	7	3
7762		SVTO	08 04 0925	N07 E54	08 8.4		B	DAO	120	10	8	3
7762		RAMY	08 04 1221	N05 E52	08 8.4		B	DAO	120	13	8	4
7762	28155	MWIL	08 04 1400	N05 E50	08 8.3	4	(B)					
7762		PALE	08 04 1815	N06 E49	08 8.4		B	DSO	70	11	7	4
7762		SVTO	08 05 0700	N06 E42	08 8.4		B	DAO	90	16	8	3
7762		RAMY	08 05 1250	N06 E38	08 8.4		B	CAO	110	19	9	3
7762	28155	MWIL	08 05 1400	N05 E36	08 8.3	5	(BP)					
7762		HOLL	08 05 1625	N06 E36	08 8.4		B	CAO	90	16	9	3
7762		PALE	08 05 1815	N07 E35	08 8.4		B	CAO	100	16	8	4
7762		SVTO	08 06 0730	N05 E27	08 8.3		B	DRO	90	17	9	4
7762		RAMY	08 06 1231	N06 E23	08 8.2		B	CAO	120	24	11	4
7762		HOLL	08 06 1356	N06 E23	08 8.3		B	CAO	80	13	9	3
7762	28155	MWIL	08 06 1430	N05 E21	08 8.2	5	(BP)					
7762		PALE	08 06 1730	N06 E23	08 8.4		B	CAO	90	19	8	3
7762		LEAR	08 07 0030	N04 E18	08 8.4		B	DSO	150	12	10	3
7762		SVTO	08 07 0720	N05 E13	08 8.3		B	CAO	110	5	9	2
7762		RAMY	08 07 1212	N05 E11	08 8.3		B	CAO	140	13	10	4
7762	28155	MWIL	08 07 1400	N05 E07	08 8.1	5	(BP)					
7762		HOLL	08 07 1400	N06 E09	08 8.2		B	CAO	90	5	8	3
7762		PALE	08 07 1738	N05 E05	08 8.1		B	CSO	110	3	5	3
7762		LEAR	08 08 0012	N05 E03	08 8.2		B	CSO	90	5	6	3
7762		SVTO	08 08 0558	N05 E00	08 8.2		B	DSO	100	6	8	4
7762		RAMY	08 08 1222	N05 W04	08 8.2		B	CAO	140	14	9	4
7762	28155	MWIL	08 08 1410	N05 W07	08 8.1	5	(BP)					
7762		HOLL	08 08 1642	N05 W08	08 8.1		B	CSO	110	5	5	4
7762		PALE	08 08 1715	N05 W06	08 8.3		B	CSO	120	9	6	3
7762		LEAR	08 09 0130	N05 W13	08 8.1		B	CSO	90	8	5	3
7762		SVTO	08 09 0610	N05 W15	08 8.1		B	CSO	70	9	5	3
7762		RAMY	08 09 1259	N04 W19	08 8.1		B	DSO	70	7	5	3
7762	28155	MWIL	08 09 1400	N05 W20	08 8.1	5	(BP)					
7762		HOLL	08 09 1645	N05 W21	08 8.1		B	CSO	100	9	6	3
7762		PALE	08 09 1712	N05 W21	08 8.1		B	DSO	120	7	6	3
7762		LEAR	08 10 0600	N05 W28	08 8.1		B	DSO	110	8	6	3
7762		SVTO	08 10 0810	N04 W28	08 8.2		B	DSO	110	15	6	3
7762		RAMY	08 10 1325	N04 W32	08 8.2		B	DSO	110	12	6	3
7762	28155	MWIL	08 10 1415	N05 W33	08 8.1	5	(BP)					
7762		HOLL	08 10 1640	N04 W33	08 8.2		B	DSO	120	15	7	4
7762		PALE	08 10 1945	N04 W34	08 8.3		B	DSO	110	8	6	4
7762		LEAR	08 11 0123	N05 W42	08 7.9		B	DSO	80	4	6	2
7762		SVTO	08 11 0630	N04 W40	08 8.3		B	CAO	140	7	7	3
7762		RAMY	08 11 1154	N04 W45	08 8.1		B	CSO	120	5	6	4
7762		HOLL	08 11 1344	N03 W48	08 8.0		A	HS	90	4	2	3
7762	28155	MWIL	08 11 1400	N04 W47	08 8.1	5	(BP)					
7762		PALE	08 11 1710	N04 W48	08 8.1		A	HS	60	1	2	3
7762		LEAR	08 12 0120	N04 W52	08 8.2		B	CSO	70	7	5	2
7762		SVTO	08 12 0555	N04 W57	08 8.0		A	HA	70	1	2	3
7762		PALE	08 12 1020	N04 W61	08 7.9		A	HS	100	1	2	2
7762		RAMY	08 12 1117	N05 W59	08 8.0		A	HA	110	11	2	3
7762	28155	MWIL	08 12 1530	N05 W63	08 7.9	5	(AF)					
7762		HOLL	08 12 1543	N04 W64	08 7.9		A	HS	120	1	2	3
7762		LEAR	08 13 0030	N05 W68	08 7.9		A	HA	50	3	3	3

SUNSPOT GROUPS
(Ordered by Central Meridian Passage Date)

AUGUST 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
7762		SVTO	08	13	0606	N04	W70	08	8.0		A	HS	100	1	2	3
7762	28155	MWIL	08	13	1400	N05	W76	08	7.9	5	(AF)					
7762		HOLL	08	13	1450	N04	W77	08	7.9		A	HS	120	1	2	4
7762		PALE	08	13	2325	N03	W79	08	8.1		A	HS	30	1	1	3
7762		LEAR	08	14	0030	N05	W80	08	8.0		A	HS	70	2	2	3
7762		SVTO	08	14	0630	N06	W87	08	7.7		A	HS	60	1	9	3
7763		SVTO	08	10	0810	S13	W08	08	9.7		A	AX		1		3
7763		RAMY	08	10	1325	S12	W12	08	9.6		A	AX		1		3
7763		HOLL	08	10	1640	S12	W13	08	9.7		A	AX		1		4
7763		PALE	08	10	1945	S13	W12	08	9.9		A	AX	10	2	1	4
7763		PALE	08	11	1710	S12	W27	08	9.7		A	AX	10	2	2	3
7763A		RAMY	08	10	1325	N17	E09	08	11.2		A	AX		1		3
7763B		RAMY	08	09	1259	S09	E35	08	12.2		A	AX		1		3
7765		PALE	08	11	1710	S12	E35	08	14.3		A	AX	10	2	2	3
7765		LEAR	08	12	0500	S12	E24	08	14.0		B	BXO	20	16	6	3
7765		SVTO	08	12	0555	S11	E26	08	14.2		B	BXI	20	14	7	3
7765		PALE	08	12	1020	S12	E19	08	13.9		B	DSI	90	19	7	2
7765		RAMY	08	12	1117	S11	E23	08	14.2		B	DAI	50	17	7	3
7765	28158	MWIL	08	12	1530	S11	E20	08	14.1	5	(D)					
7765		HOLL	08	12	1543	S10	E21	08	14.2		BG	DAI	70	23	6	3
7765		LEAR	08	13	0030	S11	E15	08	14.1		BG	DAI	100	19	9	3
7765		SVTO	08	13	0606	S11	E12	08	14.1		BG	DAI	170	27	8	3
7765	28158	MWIL	08	13	1400	S11	E07	08	14.1	5	(BG)					
7765		HOLL	08	13	1450	S10	E07	08	14.1		BG	DAI	170	31	9	4
7765		PALE	08	13	2325	S10	E05	08	14.3		BG	DAC	190	37	10	3
7765		LEAR	08	14	0030	S10	E02	08	14.2		BG	DAI	160	24	10	3
7765		SVTO	08	14	0630	S10	W03	08	14.0		BG	DKC	320	27	10	3
7765		RAMY	08	14	1303	S11	W03	08	14.3		BG	EAC	350	29	11	3
7765	28158	MWIL	08	14	1400	S10	W06	08	14.1	5	(D)					
7765		HOLL	08	14	1730	S10	W07	08	14.2		BG	EAC	340	31	11	3
7765		PALE	08	14	1900	S11	W07	08	14.3		BG	DAI	230	23	10	3
7765		LEAR	08	15	0115	S12	W12	08	14.1		BG	EAI	240	22	12	3
7765		SVTO	08	15	1010	S10	W15	08	14.3		BG	EAI	170	24	12	2
7765		RAMY	08	15	1244	S12	W19	08	14.1		BG	EAC	280	28	12	3
7765	28158	MWIL	08	15	1400	S10	W19	08	14.1	5	(D)					
7765		LEAR	08	16	0045	S11	W25	08	14.1		BG	ESI	220	24	13	3
7765		SVTO	08	16	0655	S11	W28	08	14.2		B	EAO	170	15	12	2
7765		RAMY	08	16	1252	S12	W32	08	14.1		B	EAO	170	13	13	3
7765	28158	MWIL	08	16	1400	S11	W33	08	14.1	6	(B)					
7765		HOLL	08	16	1615	S11	W35	08	14.0		B	EAO	190	9	12	3
7765		PALE	08	16	1900	S12	W36	08	14.1		B	EAO	160	20	12	3
7765		LEAR	08	17	0218	S11	W40	08	14.1		BG	ESO	170	11	12	3
7765		SVTO	08	17	0708	S11	W43	08	14.1		B	EAO	90	9	12	1
7765		RAMY	08	17	1202	S12	W45	08	14.1		B	EAO	240	11	11	3
7765	28158	MWIL	08	17	1400	S11	W47	08	14.0	5	(D)					
7765		HOLL	08	17	1427	S12	W46	08	14.1		B	EAO	180	8	12	3
7765		PALE	08	17	1715	S12	W48	08	14.1		B	EAO	140	20	11	4
7765		LEAR	08	18	0210	S10	W55	08	13.9		B	FAI	200	16	17	3
7765		SVTO	08	18	0647	S12	W55	08	14.1		B	EAO	120	11	15	1
7765		RAMY	08	18	1242	S12	W58	08	14.1		B	EAO	80	7	13	3
7765	28158	MWIL	08	18	1400	S10	W60	08	14.1	5	(B)					
7765		HOLL	08	18	1805	S12	W62	08	14.1		B	EAO	140	8	13	2
7765		PALE	08	18	2040	S12	W65	08	14.0		B	EAO	150	8	15	3
7765		LEAR	08	19	0030	S11	W65	08	14.1		B	EAI	110	9	14	3
7765		SVTO	08	19	0815	S12	W68	08	14.2		B	EAO	130	8	16	3
7765		RAMY	08	19	1227	S12	W71	08	14.2		B	CAO	70	9	13	5
7765	28158	MWIL	08	19	1445	S10	W71	08	14.3	4	(B)					
7765		LEAR	08	20	0030	S12	W77	08	14.2		B	EAO	80	6	11	3
7765		SVTO	08	20	0535	S13	W80	08	14.2		A	AX	10	2	1	3
7764		SVTO	08	11	0630	S05	E77	08	17.0		A	HS	60	1	2	3
7764		RAMY	08	11	1154	S05	E73	08	16.9		A	HS	40	1	2	4
7764		HOLL	08	11	1344	S06	E72	08	17.0		A	HS	60	2	1	3
7764	28157	MWIL	08	11	1400	S05	E72	08	17.0	4	(AP)					
7764		PALE	08	11	1710	S05	E71	08	17.0		A	HA	60	1	1	3

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

AUGUST 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
7764		LEAR	08 12 0120	S05 E66	08 17.0		A	HS	40	1	1	2
7764		SVTO	08 12 0555	S06 E64	08 17.0		A	HS	20	1	1	3
7764		PALE	08 12 1020	S06 E58	08 16.8		A	HS	70	1	2	2
7764		RAMY	08 12 1117	S05 E60	08 16.9		A	HS	70	1	2	3
7764	28157	MWIL	08 12 1530	S06 E57	08 16.9	5	(AP)					
7764		HOLL	08 12 1543	S06 E58	08 17.0		A	HS	60	1	1	3
7764		LEAR	08 13 0030	S07 E53	08 17.0		A	HS	30	1	1	3
7764		SVTO	08 13 0606	S06 E50	08 17.0		A	HS	90	1	2	3
7764	28157	MWIL	08 13 1400	S06 E45	08 16.9	5	(AP)					
7764		HOLL	08 13 1450	S05 E45	08 17.0		A	HS	100	1	2	4
7764		PALE	08 13 2325	S06 E42	08 17.1		A	HS	40	1	2	3
7764		LEAR	08 14 0030	S06 E40	08 17.0		A	HS	50	1	1	3
7764		SVTO	08 14 0630	S05 E36	08 17.0		A	HS	50	1	2	3
7764		RAMY	08 14 1303	S05 E33	08 17.0		A	HS	50	1	2	3
7764	28157	MWIL	08 14 1400	S06 E32	08 17.0	5	(AP)					
7764		HOLL	08 14 1730	S06 E30	08 17.0		A	HS	70	1	1	3
7764		PALE	08 14 1900	S05 E30	08 17.0		A	HS	50	1	2	3
7764		LEAR	08 15 0115	S07 E24	08 16.8		A	HS	40	1	1	3
7764		SVTO	08 15 1010	S06 E22	08 17.1		A	HS	40	1	2	2
7764		RAMY	08 15 1244	S05 E19	08 16.9		A	HS	40	1	2	3
7764	28157	MWIL	08 15 1400	S06 E18	08 16.9	5	(BP)					
7764		LEAR	08 16 0045	S06 E12	08 16.9		A	HS	60	2	2	3
7764		SVTO	08 16 0655	S06 E09	08 17.0		A	HS	40	1	2	2
7764		RAMY	08 16 1252	S06 E07	08 17.1		A	HS	40	1	2	3
7764	28157	MWIL	08 16 1400	S06 E05	08 16.9	5	(AP)					
7764		HOLL	08 16 1615	S05 E04	08 17.0		B	CSO	60	2	3	3
7764		PALE	08 16 1900	S07 E04	08 17.1		B	BXO	50	2	3	3
7764		LEAR	08 17 0218	S05 W02	08 16.9		A	HS	40	1	1	3
7764		SVTO	08 17 0708	S06 W04	08 17.0		A	HS	30	1	2	1
7764		RAMY	08 17 1202	S06 W07	08 17.0		A	HS	60	1	1	3
7764	28157	MWIL	08 17 1400	S06 W08	08 17.0	5	(AP)					
7764		HOLL	08 17 1427	S06 W08	08 17.0		A	HS	40	2	2	3
7764		PALE	08 17 1715	S07 W08	08 17.1		A	HS	30	1	2	4
7764		LEAR	08 18 0210	S06 W16	08 16.9		A	HS	40	1	1	3
7764		SVTO	08 18 0647	S06 W17	08 17.0		A	HS	20	1	2	1
7764		RAMY	08 18 1242	S06 W21	08 16.9		A	HA	10	2	1	3
7764	28157	MWIL	08 18 1400	S05 W22	08 16.9	5	(AP)					
7764		HOLL	08 18 1805	S06 W24	08 16.9		A	HR	20	1	2	2
7764		PALE	08 18 2040	S05 W26	08 16.9		A	HS	20	1	2	3
7764		LEAR	08 19 0030	S06 W28	08 16.9		A	HS	10	1	1	3
7764		SVTO	08 19 0815	S07 W32	08 16.9		A	HS	20	1	2	3
7764		RAMY	08 19 1227	S06 W34	08 17.0		B	CAO	10	2	1	5
7764	28157	MWIL	08 19 1445	S05 W35	08 17.0	5	(B)					
7764		LEAR	08 20 0030	S06 W41	08 16.9		A	HS	10	7	1	3
7764		SVTO	08 20 0535	S05 W44	08 16.9		A	HR	10	1		3
7764		RAMY	08 20 1224	S07 W49	08 16.8		A	HR	20	1	1	3
7764	28157	MWIL	08 20 1430	S05 W49	08 16.9	4	(AP)					
7764		HOLL	08 20 1515	S06 W50	08 16.9		A	AX	20	3	2	4
7764		LEAR	08 21 0120	S05 W58	08 16.7		A	AX	80	1	8	3
7764		SVTO	08 21 0740	S06 W59	08 16.9		A	AX		2	2	3
7764		RAMY	08 21 1245	S07 W62	08 16.9		B	BXO	10	2	3	3
7764	28157	MWIL	08 21 1430	S05 W63	08 16.9	3	(AP)					
7764		HOLL	08 21 1553	S07 W63	08 16.9		A	AX	20	2	1	3
7766		SVTO	08 14 0630	N09 E56	08 18.5		A	AX		1		3
7766		RAMY	08 14 1303	N11 E52	08 18.4		B	CRO	30	3	3	3
7766	28159	MWIL	08 14 1400	N09 E52	08 18.5	5	(B)					
7766		HOLL	08 14 1730	N09 E49	08 18.4		B	DRO	20	3	4	3
7766		PALE	08 14 1900	N10 E49	08 18.5		B	CRO	30	2	4	3
7766		LEAR	08 15 0115	N08 E45	08 18.4		B	BXO	20	6	4	3
7766		SVTO	08 15 1010	N10 E41	08 18.5		B	CRO	20	5	3	2
7766		RAMY	08 15 1244	N11 E38	08 18.4		B	CAO	20	5	3	3
7766	28159	MWIL	08 15 1400	N09 E38	08 18.4	5	(B)					
7766		LEAR	08 16 0045	N09 E32	08 18.4		B	BXO	20	3	2	3
7766		SVTO	08 16 0655	N09 E28	08 18.4		B	BXO	10	4	4	2
7766		RAMY	08 16 1252	N10 E25	08 18.4		B	BXO	10	3	3	3
7766	28159	MWIL	08 16 1400	N09 E24	08 18.4	4	(B)					
7766		HOLL	08 16 1615	N08 E23	08 18.4		B	BXO	20	2	4	3
7766		PALE	08 16 1900	N08 E22	08 18.4		B	BXO	20	9	3	3

SUNSPOT GROUPS
(Ordered by Central Meridian Passage Date)

AUGUST 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
7766		LEAR	08	17	0218	N10	E18	08	18.4		B	BXO	30	7	2	3
7766		SVTO	08	17	0708	N09	E14	08	18.3		B	CRO	10	4	4	1
7766		RAMY	08	17	1202	N08	E10	08	18.2		B	BXO		2	2	3
7766	28159	MWIL	08	17	1400	N07	E09	08	18.2	4	(AP)					
7766		PALE	08	17	1715	N08	E08	08	18.3		A	AX	10	3	2	4
7766A		SVTO	08	20	0535	N02	W10	08	19.5		A	AX		1		3
7767		SVTO	08	16	0655	S12	E55	08	20.4		B	BXO	10	2	3	2
7767		RAMY	08	16	1252	S12	E52	08	20.4		B	BXO	10	2	3	3
7767	28160	MWIL	08	16	1400	S14	E50	08	20.4	4	(B)					
7767		HOLL	08	16	1615	S13	E50	08	20.4		B	BXO	20	2	4	3
7767		PALE	08	16	1900	S13	E48	08	20.4		B	BXO	20	2	3	3
7767		LEAR	08	17	0218	S12	E42	08	20.3		A	AX	10	1	1	3
7767		SVTO	08	17	0708	S12	E40	08	20.3		A	AX		1		1
7767		RAMY	08	17	1202	S11	E37	08	20.3		A	AX		1		3
7767	28160	MWIL	08	17	1400	S13	E35	08	20.2	4	(AP)					
7767		HOLL	08	17	1427	S12	E35	08	20.2		A	AX	10	2	1	3
7767		PALE	08	17	1715	S12	E36	08	20.4		A	AX	10	3	2	4
7767		LEAR	08	18	0210	S14	E33	08	20.6		A	BX	20	3	10	3
7767		SVTO	08	18	0647	S13	E29	08	20.5		A	AX		1		1
7767		RAMY	08	18	1242	S12	E26	08	20.5		B	BXO	20	8	3	3
7767	28160	MWIL	08	18	1400	S13	E25	08	20.5	4	(B)					
7767		HOLL	08	18	1805	S13	E22	08	20.4		B	CRO	30	8	3	2
7767		PALE	08	18	2040	S13	E22	08	20.5		B	DSO	40	5	4	3
7767		LEAR	08	19	0030	S12	E19	08	20.4		B	CRO	40	10	5	3
7767		SVTO	08	19	0815	S13	E15	08	20.5		B	DAO	40	6	5	3
7767		RAMY	08	19	1227	S12	E12	08	20.4		B	CAO	50	15	5	5
7767	28160	MWIL	08	19	1445	S13	E10	08	20.4	5	(B)					
7767		LEAR	08	20	0030	S12	E06	08	20.5		B	DAO	90	11	7	3
7767		SVTO	08	20	0535	S13	E02	08	20.4		B	DAO	30	9	7	3
7767		RAMY	08	20	1224	S13	W01	08	20.4		B	CAO	80	11	7	3
7767	28160	MWIL	08	20	1430	S13	W03	08	20.4	5	(BP)					
7767		HOLL	08	20	1515	S15	W04	08	20.3		B	DAO	70	9	7	4
7767		LEAR	08	21	0120	S15	W10	08	20.3		B	DSO	10	4	1	3
7767		SVTO	08	21	0740	S14	W12	08	20.4		B	CAO	50	6	8	3
7767		RAMY	08	21	1245	S14	W15	08	20.4		B	CAO	50	5	8	3
7767	28160	MWIL	08	21	1430	S14	W16	08	20.4	5	(BP)					
7767		HOLL	08	21	1553	S14	W17	08	20.4		B	CAO	40	4	9	3
7767		PALE	08	21	1725	S13	W21	08	20.1		A	HS	20	3	2	3
7767		LEAR	08	22	0018	S13	W25	08	20.1		A	HA	20	2	2	2
7767		SVTO	08	22	0815	S13	W25	08	20.4		B	CAO	30	3	7	3
7767		RAMY	08	22	1305	S14	W31	08	20.2		B	BXO	10	3	3	3
7767	28160	MWIL	08	22	1400	S13	W32	08	20.2	5	(B)					
7767		HOLL	08	22	1436	S14	W32	08	20.2		B	CSO	20	4	4	3
7767		LEAR	08	23	0005	S16	W37	08	20.2		A	AX		1	1	3
7767		SVTO	08	23	0835	S13	W42	08	20.2		A	AX	10	1	1	3
7767		RAMY	08	23	1322	S14	W45	08	20.1		A	AX		1		5
7767	28160	MWIL	08	23	1415	S12	W46	08	20.1	4	(AP)					
7767		HOLL	08	23	1443	S13	W46	08	20.1		A	AX		1		3
7767		LEAR	08	24	0040	S15	W50	08	20.2		A	AX		1		3
7767		LEAR	08	25	0050	S15	W63	08	20.3		A	AX		1		3
7769		LEAR	08	23	0005	N08	W34	08	20.4		A	AX		2	2	3
7769		RAMY	08	23	1322	N11	W41	08	20.5		A	AX		1		5
7769		HOLL	08	23	1443	N12	W41	08	20.5		A	AX		1		3
7769		LEAR	08	24	0040	N10	W47	08	20.5		A	AX		1		3
7768		RAMY	08	17	1202	S13	E47	08	21.0		B	BXO	10	2	1	3
7768	28161	MWIL	08	17	1400	S15	E46	08	21.1	4	(B)					
7768		HOLL	08	17	1427	S14	E46	08	21.1		B	BXO	10	4	3	3
7768		PALE	08	17	1715	S13	E47	08	21.3		A	AX	10	2	2	4
7768		SVTO	08	18	0647	S14	E37	08	21.1		B	BXO	10	3	3	1
7768		RAMY	08	18	1242	S12	E33	08	21.0		B	CRO	20	7	3	3
7768	28161	MWIL	08	18	1400	S14	E33	08	21.1	4	(B)					
7768		HOLL	08	18	1805	S13	E31	08	21.1		B	BXO	10	6	3	2
7768		PALE	08	18	2040	S14	E30	08	21.1		B	BXO	40	4	4	3
7768		LEAR	08	19	0030	S13	E27	08	21.0		B	BXO	20	4	3	3
7768		SVTO	08	19	0815	S13	E23	08	21.1		B	BXO	10	5	4	3

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

AUGUST 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
7768		RAMY	08 19 1227	S13 E21	08 21.1		B	BXO	10	4	4	5
7768	28161	MWIL	08 19 1445	S14 E19	08 21.0	4	(B)					
7768		LEAR	08 20 0030	S14 E14	08 21.1		B	BXO	10	3	4	3
7768		SVTO	08 20 0535	S12 E12	08 21.1		A	AX		1		3
7768		RAMY	08 20 1224	S13 E07	08 21.0		B	BXO	10	4	2	3
7768	28161	MWIL	08 20 1430	S13 E06	08 21.0	3	(AF)					
7768		HOLL	08 20 1515	S14 E05	08 21.0		B	BXO	10	3	2	4
7768		HOLL	08 21 1553	S13 W09	08 21.0		B	BXO	10	3	2	3
7768		PALE	08 21 1725	S15 W14	08 20.7		B	BXO	10	2	3	3
7768		SVTO	08 24 0647	S14 W46	08 20.8		B	BXO	10	3	2	3
7770		LEAR	08 23 0005	S06 E56	08 27.2		A	AX		1	1	3
7770		SVTO	08 23 0835	S08 E48	08 26.9		B	DAO	30	5	5	3
7770		RAMY	08 23 1322	S07 E44	08 26.8		B	DAO	60	7	5	5
7770	28163	MWIL	08 23 1415	S08 E44	08 26.9	5	(B)					
7770		HOLL	08 23 1443	S08 E44	08 26.9		B	DSO	80	6	4	3
7770		LEAR	08 24 0040	S08 E40	08 27.0		B	DAO	70	4	5	3
7770		SVTO	08 24 0647	S08 E35	08 26.9		B	DRO	50	5	6	3
7770		RAMY	08 24 1309	S07 E31	08 26.9		B	DAO	50	4	6	4
7770	28163	MWIL	08 24 1400	S07 E31	08 26.9	5	(B)					
7770		HOLL	08 24 1720	S08 E29	08 26.9		B	DAO	80	6	7	3
7770		LEAR	08 25 0050	S08 E25	08 26.9		B	DAO	50	4	5	3
7770		SVTO	08 25 0816	S07 E20	08 26.8		B	BXO	20	5	5	1
7770		RAMY	08 25 1245	S08 E18	08 26.9		B	DAO	40	8	6	4
7770	28163	MWIL	08 25 1415	S07 E16	08 26.8	5	(B)					
7770		HOLL	08 25 1608	S07 E16	08 26.9		B	CRO	30	4	6	4
7770		LEAR	08 26 0255	S08 E09	08 26.8		B	CRO	20	7	5	3
7770		SVTO	08 26 0656	S07 E08	08 26.9		B	BXO	20	7	5	4
7770		RAMY	08 26 1215	S08 E05	08 26.9		B	CRO	40	11	5	3
7770	28163	MWIL	08 26 1400	S07 E03	08 26.8	5	(B)					
7770		HOLL	08 26 1700	S08 E02	08 26.8		B	BXO	20	7	5	3
7770		LEAR	08 27 0010	S08 W01	08 26.9		B	BXO	10	5	5	3
7770		SVTO	08 27 0715	S08 W06	08 26.8		B	BXO	10	3	5	3
7770		RAMY	08 27 1250	S08 W08	08 26.9		B	BXO	10	3	5	4
7770	28163	MWIL	08 27 1515	S07 W11	08 26.8	4	(B)					
7770		HOLL	08 27 1607	S08 W11	08 26.8		B	BXO	10	6	4	4
7770		LEAR	08 28 0110	S08 W16	08 26.8		A	AX	10	2	2	2
7770		SVTO	08 28 0645	S09 W17	08 27.0		A	AX		1		3
7770		RAMY	08 28 1243	S09 W21	08 26.9		A	AX		1		4
7770	28163	MWIL	08 28 1415	S08 W23	08 26.9	4	(B)					
7770		HOLL	08 28 1440	S09 W23	08 26.9		A	AX		1		3
7770		PALE	08 28 1930	S10 W24	08 27.0		A	AX	10	2	2	3
7770		LEAR	08 29 0027	S09 W28	08 26.9		A	AX		1		3
7770A	28164	MWIL	08 26 1400	S02 E16	08 27.8	4	(AP)					
7770A		HOLL	08 26 1700	S03 E14	08 27.7		A	AX	10	3	2	3
7770B	28162	MWIL	08 22 1400	N05 E73	08 28.0	3	X					
7772		RAMY	08 29 1220	S22 E11	08 30.3		B	BXO	10	3	3	3
7772	28166	MWIL	08 29 1430	S23 E07	08 30.1	4	(B)					
7772		LEAR	08 30 0030	S22 E02	08 30.2		B	BXO	10	2	3	3
7772		SVTO	08 30 0735	S23 W04	08 30.0		A	AX		1		3
7772		RAMY	08 30 1232	S22 W08	08 29.9		A	AX		1		5
7772	28166	MWIL	08 30 1415	S23 W07	08 30.0	4	(AP)					
7772		PALE	08 30 1825	S23 W08	08 30.1		B	BXO	20	3	4	4
7772		HOLL	08 30 1950	S23 W09	08 30.1		B	BXO	10	4	5	2
7772		LEAR	08 31 0100	S23 W13	08 30.0		B	CRO	20	4	4	3
7772		SVTO	08 31 0550	S23 W13	08 30.2		B	CRO	20	7	6	3
7772		RAMY	08 31 1231	S23 W17	08 30.2		B	BXO	40	8	6	4
7772	28166	MWIL	08 31 1415	S23 W19	08 30.1	5	(B)					
7772		HOLL	08 31 1842	S23 W20	08 30.2		B	BXO	20	5	6	3
7772		LEAR	09 01 0052	S21 W29	08 29.9		A	HR	10	1	1	3
7772		SVTO	09 01 0540	S22 W29	08 30.1		A	HR	10	1	1	3
7772		RAMY	09 01 1319	S23 W34	08 30.0		A	AX	10	1	1	3
7772	28166	MWIL	09 01 1430	S23 W34	08 30.1	5	(B)					
7772		HOLL	09 01 1540	S23 W33	08 30.2		B	CSO	10	2	6	3
7772		PALE	09 01 1740	S23 W34	08 30.2		B	CRO	20	3	6	4
7772		LEAR	09 02 0032	S22 W42	08 29.9		A	HR	20	1	2	3

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

AUGUST 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
7772		SVTO	09	02	0655	S23	W43	08	30.1		A	HR	10	1	1	3
7772		RAMY	09	02	1244	S23	W48	08	29.9		A	AX	10	1	1	3
7772		HOLL	09	02	1422	S22	W49	08	29.9		A	AX		1		2
7772	28166	MWIL	09	02	1430	S22	W49	08	29.9	4	(AP)					
7772		PALE	09	02	1955	S23	W52	08	29.9		A	AXO	20	2	2	2
7772		RAMY	09	03	1223	S24	W60	08	30.0		A	AX	10	2	1	4
7772	28166	MWIL	09	03	1430	S22	W63	08	29.9	3	(AP)					
7772A		RAMY	08	30	1232	S11	W01	08	30.4		A	AX		1		5

Stations reporting:

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

SUDDEN IONOSPHERIC DISTURBANCES

AUGUST 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
01	1754	1806	1826	1	1		1				No flare		
02	0254	0259	0305	1-	1					1	0254	B1.2	
02	0553	0611	0705	1	1		1				No flare		
03	1002	1029	1051	1	1		1				No flare		
03	1048	1125	1146	2	1		1				*		
03	1145	1245	1323	2+	3		2				No flare		
05	1232	1249	1302	1	3		3				No flare		
06	1245	1246	1300	1-	1					1	1243	B7.1	7762
06	1342	1358U	1430	1	1		1				No flare		
06	1532	1552	1625	2+	3		2				No flare		
09	0610	0614	0659	1	1		1				No flare		
09	0835	0844	0855	1	1		1				No flare		
09	0935	1038	1108	1	1		1				1019	B1.1	
10	0801	0807U	0837	1	1		1				No flare		
10	1135	1202	1451	1	1		1				No flare		
12	0709	0712	0730	1	1					1	0710	B1.7	
12	1050	1121	1146	2-	3		4				1136	B8.2	
12	1157	1230	1311	2-	3		2				No flare		
12	1713	1720U	1758	2	1					1	No flare		
13	0611	0658U	0737	1	1		1				0555	B8.5	7765
13	0943	0950	1039	1	1		1				No flare		
13	1437	1444	1455	1-	1					1	1437	B3.0	
13	1724	1748	1845	2-	5			2		6	1723	C4.0	7765
13	2216	2222	2240	1-	5			1		1	2215	B8.1	
13	2340	2354	2442D	1	5			1		2	2341	C2.9	7765
14	0042	0047	0100D	1-	1			1			0045	C1.8	7765
14	0100E	0106	0117D	1-	1			1			0059	C1.4	
14	0117E	0122	0136	1-	5			1		1	0118	C1.6	7765
14	0157	0204	0228	1-	1			1			0154	C1.3	
14	0556	0612	0716	2	5		1	1		1	0559	C2.3	7765
14	1039	1055U	1140	1	1		1				No flare		
14	1150	1159	1230	1	1		1				No flare		
14	1736	1744	1744D	1	5	1	2	1		8	1734	M3.9	7765
14	1800	1803	1850	1+	5			1		1	1734	M3.9	7765
14	1946	1953	2017	1+	3					2	1944	C1.2	
15	0108	0121	0138	1-	1			1			0102	C1.1	7765
15	0656	0704	0741	1-	5			1		1	0639	B8.4	7765
15	1244	1304	1358	2+	5	1	2	3		6	1242	M1.2	7765
15	1502	1542	1647	1	1		1				No flare		
15	1720	1723	1750	1+	1					1	1720	B5.3	7765
15	1948	1954	2000U	1-	1					1	1947	B2.1	
16	0318	0330	0350	1-	1			1			0316	B8.0	7765
16	1245	1248	1251	1-	1					1	1245	B4.6	
16	1318	1321	1330U	1-	5			1		1	1318	C1.2	
16	1359	1405	1431	1	1		1				No flare		
16	1502	1512	1520	1-	1					1	1502	B1.1	
16	1759	1800	1815U	1-	1					1	1756	B4.1	7765
17	0103	0120	0148	2	1			1			0107E	M1.5	7765
17	1337	1347	1411	1	5		1	2		7	1339	C3.7	7765
17	1546	1557	1639	1	1		1				No flare		
17	2000	2005	2021	1-	5			3		5	1954	C2.0	7765
18	0302	0312	0410	2+	1			1			0302	M1.1	7765
18	1508	1516	1546	1-	5		2	3		11	1501	M1.3	
18	2045	2050	2116	1-	5			3		3	2045	C3.5	7765

* = no flare patrol.

SUDDEN IONOSPHERIC DISTURBANCES

AUGUST 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
19	0244	0301	0340	3-	1	*		1			0246	M1.6	7765
19	1354	1359	1426	1-	1			1			No flare		
20	1344	1346	1353	1-	1					1	1342	B1.1	
20	1632	1658	1726	1-	5		1	1			No flare		
21	0510	0515	0534	1-	1			1			0507	C1.5	
21	1803	1809	1824	1-	1			1			No flare		
22	0930	0933	0940	1-	5					2	0929	B1.9	
23	1427	1429	1515	1-	1			1			No flare		
24	1800	1805	1815	1-	1					1	1800	B2.4	
24	1806	1820	1848	1-	1			1			1800	B2.4	
26	1540	1557	1616	2	1		1				No flare		
26	1845	1901	1920	1-	1			1			1911	B1.3	7770
27	0913	0937	1030	1+	3		2				No flare		
29	0136	0146	0220	1-	1			1			0130	C1.2	
29	0414	0420	0436D	1-	1			1			0406	B7.2	
29	0436E	0446	0514	1-	1			1			0434	C1.1	
29	0532	0544	0630	1-	1			1			0531	B9.4	
29	0714	0731	0850	1+	5			1		1	0710	C1.0	
29	1237	1248	1307	1	5			2		5	1229	C7.0	
29	1341	1358	1441	1-	1			2		1	1340	C2.4	
29	1445	1510	1525	1-	1			1			No flare		
29	1710	1723	1740	1	5			2		6	1707	C5.3	
29	1739	1747	1838	1	5			2		4	1707	C5.3	
29	2234	2244	2248D	1-	1			1			2210	C5.3	
29	2248E	2318	2358	1-	5			1		1	2210	C5.3	
30	0150	0201	0214	1-	1			1			0137	C1.7	
30	0220	0245	0335	1+	1			1			No flare		
30	0541	0550	0620	1-	1			1			0539	C1.5	
30	0634	0646	0708	1-	1			1			0633	C1.8	
30	0820	0834	0940	2+	5	1	2	1		3	0823	M1.1	
30	1036	1042	1126	2-	5	1	2	1		2	1036	M1.4	
30	1147	1200	1218	1+	1					1	1156	C1.0	
30	1300	1305	1317	1-	1					1	1300	C1.0	
30	1448	1452	1515	1+	5			2		1	1449	C2.0	
30	1535	1554	1605	1-	5			2		1	1539		7773
30	1604	1617	1641	1-	5			2			1603	C2.7	7773
30	1704	1730	1730D	1-	1			1			1704		7773
30	1745	1803	1803D	1-	1			1			1740		7773
30	1842	1907	1907D	1-	1			1			No flare		
30	1932	1939	1954	1	5			2		3	1928	C6.2	7773
30	1948	1957	2105	1	5			2		2	No flare		
30	2121	2123	2132	1-	3					3	2118	C2.4	
30	2241	2305	2340	1-	5			1		1	2242	C2.7	
31	0058	0134	0253	1	1			1			0104	C5.1	7773
31	0614	0628	0650	1	1			1			0609	C1.8	7773
31	0710	0722	0745D	1-	1			1			0711	C2.8	7773
31	0745E	0802	0828	1-	1			1			0753	C1.7	
31	1233	1247	1340	1	5	1	2	3		6	1235	C3.1	7773
31	1406	1427	1453	1-	5			1		1	1419	B7.0	
31	1655	1704	1724	1-	5			2		2	1655	C1.5	7773
31	1824	1846	1915	1-	5			1		2	1831	B7.6	

* = no flare patrol.

SUDDEN IONOSPHERIC DISTURBANCES

OBSERVATORIES REPORTING FOR AUGUST 1994

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

Observations are not necessarily continuous.

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

AUGUST 1994

Day	OBSERVATION Start (UT)	End (UT)	Sta	EVENT Start (UT)	End (UT)	Spectral Class	Event Remarks	Int (1-3)	FREQUENCY Lower (MHz)	Upper (MHz)	Remarks
01	0000	0720	CULG								
	0000	0935	HIRA								
	0500	1200	IZMI								
	0621	1729	ONDR								
	0700	1500	POTS								
	2000	2400	HIRA								
	2104	2400	CULG								
02	0000	0720	CULG								
	0000	0935	HIRA								
	0445	1728	ONDR								
	0500	1200	IZMI								
	0700	1500	POTS								
	2000	2400	HIRA								
	2100	2400	CULG								
03	0000	0720	CULG								
	0000	0935	HIRA								
	0446	1725	ONDR								
	0500	1200	IZMI								
	0700	1500	POTS	0918.7	0918.9	III	B	1	50	90U	
			POTS	1232.1	1232.2	III	B	1	40X	70	
	2000	2400	HIRA								
	2100	2400	CULG								
04	0000	0935	HIRA								
	0000	0720	CULG	0249.0	0249.0	III	B	1	20	70	
	0447	1724	ONDR								
	0500	1200	IZMI								
	0700	1500	POTS								
			PALE	1922.0	1923.0	III		2	25	75	
			SGMR	1922.0	1923.0	III		2	30	80	
	2000	2400	HIRA	2227.5	2227.5	III	B	1	25	70	
	2100	2400	CULG	2229.0	2229.0	III	B	1	30	70X	
			CULG	2232.0	2232.0	III	B	1	18	85X	
			HIRA	2232.1	2232.1	III	B	1	25	80	
05	0000	0720	CULG	0159.0	0159.0	III	B	1	18	50	
	0000	0935	HIRA	0159.3	0159.3	III	B	1	25	50	
			CULG	0228.0	0228.0	III	B	1	20	75	
			HIRA	0228.4	0228.4	III	B	1	25	70	
	0448	1723	ONDR								
	0500	1200	IZMI								
			CULG	0635.0	0635.0	III	B	1	20	70	
	0745	1500	POTS	0826.1	0826.2	III	B	1	40X	70	
			POTS	0951.1	0951.3	III	G	1	110U	160	
			POTS	1034.5	1034.6	III	B	1	110U	220	
			POTS	1100.0	1110.3	I	S	1	275	350	
			POTS	1107.4	1107.6	III	G	1	110U	160	
			POTS	1213.1	1216.9	III	G	1	40X	90U	
			POTS	1435.2	1435.3	III	B	1	40X	60	
	2058	2400	CULG								
06	0000	0722	CULG	0052.0	0052.0	III	B	1	20	40	
			CULG	0221.0	0310.0	III	S	1	20	80	
			LEAR	0223.0	0836.0	III	N	2	30	46	
			CULG	0325.0	0335.0	III	G	1	18	40	
			CULG	0346.0	0350.0	III	G	1	20	40	
			CULG	0512.0	0512.0	III	B	1	20	50	
	0000	0935	HIRA	0512.1	0512.1	III	B	1	25	50	
			CULG	0550.0	0722.0D	III	S	1	20	70	
			HIRA	0550.0	0725.4	III	S	1	25	120	
	0500	1200	IZMI	0551.1	0850.9	III	N	1	45X	135	
			SVTO	0623.0	0806.0	III	N	2	35	78	
			HIRA	0636.1	0643.6	III	GG	2	25	45	
			CULG	0637.0	0643.0	III	G	2	20	45	
	0450	1722	ONDR	0952.3	0954.2	III	GG	1	270	280	
			IZMI	1139.8	1205.0D	III	N	1	45X	120	
			SGMR	1140.0	1420.0	III	N	1	30	75	

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

AUGUST 1994

Day	OBSERVATION Start (UT)	OBSERVATION End (UT)	Sta	EVENT Start (UT)	EVENT End (UT)	EVENT Spectral Class	EVENT Event Remarks	Int (1-3)	FREQUENCY Lower (MHz)	FREQUENCY Upper (MHz)	Remarks
06			SVTO	1140.0	1345.0	III	N	1	35	63	
			SVTO	1140.0	1409.0	III	N	2	36	63	
			SVTO	1140.0	1409.0	III	N	2	36	67	
			SGMR	1442.0	1545.0	III	N	1	30	60	
			SVTO	1516.0	1516.0	III		1	45	62	
			SGMR	1619.0	1620.0	III		1	30	45	
			SGMR	1728.0	1728.0	III		1	30	60	
			SGMR	1743.0	1743.0	III		1	30	50	
			SGMR	1820.0	1831.0	III	N	1	30	60	
	2056	2400	CULG	2117.0	2220.0	III	N	1	20	60	
07			LEAR	0007.0	0009.0	III		2	30	68	
			PALE	0007.0	0010.0	III		2	25	65	
	0000	0722	CULG	0007.0	0007.0	III	B	2	18	140	
	0000	0935	HIRA	0007.6	0007.6	III	B	2	25	140	
			HIRA	0008.8	0010.2	III	DP	1	25	80	
			CULG	0009.0	0010.0	III	G	1	18	80	
			CULG	0143.0	0144.0	III	G	2	18	90	
			LEAR	0143.0	0143.0	III		2	30	65	
			PALE	0143.0	0143.0	III		2	25	56	
			HIRA	0143.3	0143.6	III	DP	1	25	180	
			CULG	0346.0	0346.0	III	B	1	18	140	
			HIRA	0346.0	0346.0	III	B	1	25	200	
	0451	1720	ONDR								
			CULG	0514.0	0514.0	III	B	1	18	70	
			HIRA	0514.0	0514.0	III	B	1	25	80	
			LEAR	0514.0	0514.0	III		1	30	40	
			HIRA	0542.4	0547.2	III	G	1	25	100	
	0500	1200	IZMI	0542.7	0542.8	III		1	45X	75	
			CULG	0543.0	0547.0	III	G	1	20	90	
			LEAR	0544.0	0546.0	III		2	30	60	
			SVTO	0545.0	0546.0	III		1	35	59	
			IZMI	0545.1	0545.2	III		1	45X	75	
			IZMI	0953.5	0955.8	III	GG	1	45X	110	
			IZMI	1016.6	1016.7	III		1	45X	90U	
			IZMI	1136.6	1136.7	III		1	90U	135	
			SGMR	1301.0	1301.0	III		1	40U	60U	
			SVTO	1301.0	1301.0	III		1	36	53	
			SGMR	1452.0	1452.0	III		1	30	50	
			SGMR	1717.0	1732.0	III	N	2	30	65	
			PALE	1731.0	1732.0	III		1	25	60	
			PALE	1924.0	1935.0	III	N	2	25	75	
			SGMR	1924.0	1935.0	III	N	2	30	80	
	2056	2400	CULG	2126.0	2145.0	III	GG	1	20	60	
08	0000	0722	CULG	0058.0	0105.0	III	G	1	20	54	
			CULG	0122.0	0134.0	III	GG	1	20	68	
			CULG	0148.0	0214.0	III	GG	1	20	52	
			CULG	0231.0	0238.0	III	G	1	20	80	
			CULG	0338.0	0351.0	III	G	1	20	80	
	0452	1717	ONDR								
	0500	1200	IZMI								
			CULG	0644.0	0644.0	III	B	1	24	65	
	0700	1500	POTS	0712.5	1500 U	I	S	1	110U	170U	
			POTS	0728.0	0731.8	III	G	1	40X	60	
			POTS	0818.2	0824.4	III	G	1	40X	60	
			POTS	0920.7	0920.8	III	B	1	40X	60	
			POTS	1029.9	1030.8	III	G	1	40X	60	
			POTS	1134.1	1134.2	III	B	1	40X	60	
			SGMR	1838.0	1838.0	III		1	40	65	
			PALE	1911.0	1911.0	III		1	30	40	
			SGMR	1911.0	1911.0	III		1	35	45	
	2056	2400	CULG	2137.0	2137.0	III	B	1	30	65	
	2000	2400	HIRA	2137.5	2137.5	III	B	1	30	70	
			CULG	2245.0	2247.0	III	G	2	18	80	
			HIRA	2245.4	2247.6	III	G	1	25	80	
09	0000	0722	CULG	0308.0	0308.0	III	B	1	20	80	
	0453	1716	ONDR								

SOLAR RADIO EMISSION
Spectral Observations

AUGUST 1994

Day	OBSERVATION Start (UT)	OBSERVATION End (UT)	Sta	EVENT Start (UT)	EVENT End (UT)	EVENT Spectral Class	EVENT Event Remarks	Int (1-3)	FREQUENCY Lower (MHz)	FREQUENCY Upper (MHz)	Remarks
09			CULG	0623.0	0625.0	III	G	1	23	95	
			CULG	0703.0	0703.0	III	B	1	26	85	
	0700	1500	POTS	0703.4	0703.5	III	B	1	40X	170U	
			SVTO	0712.0	0714.0	III		2	35	83	
			CULG	0713.0	0714.0	III	B	2	18X	140	
			LEAR	0713.0	0714.0	III		2	30	50	
			POTS	0713.6	0713.9	III	G,U?	2	40X	250	
	0500	1200	IZMI	0713.6	0713.8	III		1	90U	135X	
	0000	0935	HIRA	0713.9	0713.9	III	B	1	25	140	
			POTS	0725.1	0725.3	III	G	1	40X	60	
			POTS	0748.7	0749.7	I	S	1	130	170U	
			PALE	2147.0	2147.0	III		1	25	56	
			SGMR	2147.0	2147.0	III		1	40	65	
	2056	2400	CULG	2147.0	2147.0	III	B	1	18	90	
	2000	2400	HIRA	2148.2	2148.2	III	B	1	25	120	
			CULG	2215.0	2215.0	III	B	1	20	85	
			PALE	2215.0	2215.0	III		1	25	52	
			HIRA	2215.9	2215.9	III	B	1	25	80	
10	0000	0725	CULG								
	0000	0930	HIRA								
	0455	1714	ONDR								
			SVTO	0636.0	0636.0	III		2	40	85	
	0700	1500	POTS	1032.6	1033.6	I	S	1	40X	225	
	0500	1200	IZMI	1032.9	1033.3	III	G	2	45X	135X	
			SVTO	1033.0	1033.0	III		1	37	63	
			POTS	1049.7	1500 U	III	S,C,DC,GG	1	40X	350	
			IZMI	1059.3	1200.0D	I	S	2	45X	180X	
			IZMI	1107.7	1107.8	III		2	45X	120	
			SVTO	1123.0	1732.0	III	N	2	35	85	
			SGMR	1131.0	1900.0	III	N	2	30	80	
	2000	2400	HIRA								
	2056	2400	CULG								
11	0000	0725	CULG								
	0000	0930	HIRA								
	0456	1710	ONDR								
	0500	1200	IZMI								
	0700	1500	POTS								
			SVTO	1603.0	1604.0	III		3	37	85	
			PALE	1642.0	1647.0	III		2	25	60	
			PALE	1647.0	1647.0	III		2	25	60	
			SGMR	1647.0	1648.0	V		2	30	80	
			SVTO	1647.0	1647.0	III		2	35	85	
	2055	2400	CULG	2100.0	2100.0	III	G	1	30	90	
			PALE	2105.0	2105.0	III		1	25	58	
			SGMR	2105.0	2105.0	III		1	30	75	
	2000	2400	HIRA	2105.4	2105.4	III	B	1	25	150	
			HIRA	2158.5	2158.5	III	B	1	30	70	
			CULG	2159.0	2159.0	III	B	1	35	70	
12	0000	0725	CULG								
	0000	0930	HIRA								
			PALE	0134.0	0135.0	III		1	25	75	
	0457	1709	ONDR								
	0700	1500	POTS	0832.2	0833.5	I	S	1	140	170U	
			POTS	0935.9	0937.9	III	G	1	40X	170U	
			SVTO	0937.0	0937.0	III		2	37	58	
			POTS	0940.5	0941.6	I	S	1	120	170U	
			POTS	1007 U	1500 U	I	S	1	120	400	
			POTS	1137.9	1138.4	III	G	2	40X	250	
			SGMR	1138.0	1138.0	III		1	30	65	
			SVTO	1138.0	1138.0	III		2	35	68	
	0500	1200	IZMI	1138.0	1138.1	III		2	45X	90U	
			POTS	1157.4	1157.5	UNCLF		2	160	280	
	2000	2400	HIRA								
	2050	2400	CULG								
13	0000	0930	HIRA								

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

AUGUST 1994

Day	OBSERVATION Start (UT)	End (UT)	Sta	EVENT Start (UT)	End (UT)	Spectral Class	Event Remarks	Int (1-3)	FREQUENCY Lower (MHz)	Upper (MHz)	Remarks
13	0458	1708	ONDR								
	0500	1200	IZMI								
			LEAR	0545.0	0546.0	III		1	30	55	
	0000	0727	CULG	0546.0	0546.0	III	B	1	20	50	
	2000	2400	HIRA								
	2050	2400	CULG								
14	0000	0727	CULG								
	0000	0930	HIRA								
	0500	1200	IZMI								
	0858	1706	ONDR								
			SGMR	1806.0	1846.0	III	N	1	35	70	
			PALE	1815.0	1850.0	III	N	1	25	60	
	2000	2400	HIRA								
	2047	2400	CULG								
15			LEAR	0031.0	0031.0	III		1	55	75	
	0000	0729	CULG	0031.0	0031.0	III	B	1	30	170	
	0000	0925	HIRA	0031.1	0031.1	III	B	1	25	270	
			CULG	0040.0	0041.0	III	B	2	18	300	
			LEAR	0040.0	0041.0	III		2	30	80	
			PALE	0040.0	0041.0	III		2	25	75	
			HIRA	0040.9	0041.2	III	B	2	25	300	
			CULG	0444.0	0444.0	III	B	1	25	65	
			POTS	0758.8	0758.9	III	B	1	110U	170U	
			POTS	0813.9	0814.1	III	B	1	40X	170U	
	0500	1200	IZMI	0813.9	0814.0	III		2	55	180X	
			LEAR	0841.0	0842.0	III		2	30	71	
			SVTO	0842.0	0844.0	III		2	35	85	
			IZMI	0842.3	0842.5	III	G	2	45X	180X	
			POTS	0842.3	0848.1	III	GG	2	40X	170U	
			IZMI	0844.0	0844.2	III	G	2	45X	180X	
			POTS	0904.0	0904.1	III	G	1	40X	170U	
	0700	1500	POTS	0920	1500 U	I	S,C,DC	1	110U	300	
			POTS	0928.8	0929.0	III	G	1	110U	170U	
			POTS	0956.5	0956.6	III	B	1	110U	170U	
	0707	1705	ONDR	1245.3	1249.0	DCIM		3	2300	4200	
			POTS	1245.8	1247.1	DCIM		1	650	800X	
			POTS	1257.8	1300.3	DCIM		1	400	800X	
			POTS	1307.4	1308.0	III	G	1	40X	80	
			PALE	1737.0	1738.0	III		1	25	70	
	2000	2400	HIRA								
	2047	2400	CULG								
16	0000	0729	CULG								
	0000	0925	HIRA								
	0500	1200	IZMI								
	0557	1705	ONDR								
	0700	1500	POTS	0700 E	1500 U	I	S,C,DC,RS	1	110U	350	
			POTS	1040.4	1040.5	III	B	1	110U	170U	
			SGMR	1620.0	1621.0	V		2	30	65	
	2000	2400	HIRA								
	2047	2400	CULG								
17	0000	0729	CULG								
	0000	0925	HIRA	0109.7	0109.7	III	B	1	65	500	
	0500	1200	IZMI								
	0538	1704	ONDR								
	0700	1500	POTS	1134	1500 U	I	S,RS	1	110U	350	
	2000	2400	HIRA								
	2047	2400	CULG								
18	0000	0729	CULG								
	0000	0920	HIRA								
	0500	1200	IZMI								
	0505	1702	ONDR								
	0700	1500	POTS								
	2000	2400	HIRA								
	2046	2400	CULG								

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

AUGUST 1994

Day	OBSERVATION Start (UT)	OBSERVATION End (UT)	Sta	EVENT Start (UT)	EVENT End (UT)	EVENT Spectral Class	EVENT Event Remarks	Int (1-3)	FREQUENCY Lower (MHz)	FREQUENCY Upper (MHz)	Remarks
19	0000	0920	HIRA								
	0500	1200	IZMI								
	0506	1659	ONDR								
	0000	0729	CULG	0540.0	0607.0	III	GG	1	18	73	
	0700	1500	POTS	1330	1500 U	I	S	1	110U	170U	
	2000	2400	HIRA								
	2046	2400	CULG								
20	0000	0730	CULG								
	0000	0920	HIRA								
	0500	1200	IZMI								
	0507	1657	ONDR								
	2000	2400	HIRA								
	2046	2400	CULG								
21	0000	0730	CULG								
	0000	0920	HIRA								
	0500	1200	IZMI								
	0509	1655	ONDR								
	2010	2400	HIRA								
	2045	2400	CULG								
22	0000	0730	CULG								
	0000	0920	HIRA								
	0510	1653	ONDR								
	0700	1500	POTS	0930.8	0933.5	III	GG,V	3	40X	230	
			SVTO	0931.0	0933.0	V		2	35U	85U	
	0500	1200	IZMI	0931.4	0933.0	III	GG	2	45X	180X	
	2010	2400	HIRA								
	2043	2400	CULG								
23	0000	0732	CULG								
	0000	0910	HIRA								
	0500	1200	IZMI								
	0511	1651	ONDR								
	0700	1500	POTS								
	2010	2400	HIRA								
	2040	2400	CULG								
24	0000	0732	CULG								
	0000	0910	HIRA								
	0500	1200	IZMI								
	0513	1650	ONDR								
	0700	1500	POTS								
			PALE	1829.0	1830.0	III		1	25	75	
	2010	2400	HIRA								
	2040	2400	CULG								
25	0000	0732	CULG								
	0000	0910	HIRA								
	0500	1200	IZMI								
	0514	1650	ONDR								
	0700	1500	POTS	1212.6	1212.8	III	G	1	40X	60	
	2010	2400	HIRA								
	2040	2400	CULG								
			PALE	2226.0	2227.0	III		1	25	75	
26			LEAR	0456.0	0456.0	III		2	30	41	
	0000	0732	CULG	0456.0	0500.0	III	G	1	22	41	
	0000	0910	HIRA	0456.4	0456.4	III	B	1	25	40	
	0500	1200	IZMI								
	0515	1646	ONDR								
			CULG	0609.0	0621.0	III	G	1	20	68	
			CULG	0711.0	0711.0	III	B	1	20	68	
			LEAR	0711.0	0712.0	III		2	30	56	
			SVTO	0711.0	0711.0	III		2	35	59	
			HIRA	0711.5	0711.5	III	B	1	25	75	
	0700	1500	POTS	0711.5	0711.8	III	B	2	40X	60	
			POTS	0729.6	0731.2	III	G	2	40X	60	

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

AUGUST 1994

Day	OBSERVATION Start (UT)	OBSERVATION End (UT)	Sta	EVENT Start (UT)	EVENT End (UT)	EVENT Spectral Class	EVENT Event Remarks	Int (1-3)	FREQUENCY Lower (MHz)	FREQUENCY Upper (MHz)	Remarks
26			LEAR	0730.0	0730.0	III		1	30	40	
			SVTO	0730.0	0731.0	III		2	35	55	
			POTS	0827.7	0827.8	III	B	1	40X	80	
			LEAR	0834.0	0834.0	III		2	30	42	
			SVTO	0834.0	0835.0	III		2	35	49	
			POTS	0834.4	0835.5	III	G	2	40X	140	
			SGMR	1203.0	1210.0	III		2	30	80	
			SVTO	1203.0	1210.0	III		2	35	63	
			POTS	1203.1	1210.0	III	G,V,U?	2	40X	170	
	2015	2400	HIRA								
	2040	2400	CULG								
27	0000	0732	CULG								
	0000	0910	HIRA								
	0500	1200	IZMI								
	0517	1644	ONDR								
	2015	2400	HIRA								
	2040	2400	CULG								
28	0000	0732	CULG								
	0000	0910	HIRA								
	0500	1200	IZMI								
	0518	1642	ONDR								
	2015	2400	HIRA								
	2040	2400	CULG								
29	0000	0910	HIRA								
	0520	1640	ONDR								
			LEAR	0707.0	0708.0	III		1	30	50	
			SVTO	0707.0	0708.0	III		2	37	62	
	0700	1500	POTS	0707.8	0708.1	III	B	1	40X	70	
	0500	1200	IZMI	0707.9	0708.0	III		2	45X	85	
	0000	0732	CULG	0708.0	0708.0	III	B	1	20	80	
			POTS	0717.3	0718.0	III	G	1	40X	130	
			CULG	0718.0	0718.0	III	B	1	60	80	
			POTS	0951.3	0951.5	III	B	1	40X	60	
			POTS	1000	1400	I	S	1	120	225	
			IZMI	1027.4	1027.5	III		1	95U	135	
			POTS	1027.4	1027.6	III	B	1	40X	160	
			SVTO	1514.0	1514.0	III		2	74	85	
	2015	2400	HIRA								
	2034	2400	CULG	2057.0	2057.0	III	B	1	40	70	
30	0000	0733	CULG								
	0000	0900	HIRA								
	0521	1638	ONDR								
	0700	1500	POTS	0700 E	1500 U	I	S,RS	1	120	350	
			POTS	0941.6	0941.8	III	G	1	40X	140	
			POTS	1108.1	1111.9	III	G	2	40	375	
			SGMR	1111.0	1111.0	III		1	30	60	
			SVTO	1111.0	1111.0	III		2	38	55	
	0500	1200	IZMI	1111.4	1111.6	III	G	1	45X	165	
			PALE	2144.0	2144.0	III		1	25	45	
	2015	2400	HIRA	2144.0	2150.0	CONT		1	50	300	
			CULG	2145.0	2215.0	CONT		1	30	60	
	2034	2400	CULG	2145.0	2145.0	III	B	1	20	40	
			CULG	2204.0	2221.0	I	S	1	120	180	
			HIRA	2226.6	2230.3	III	G	1	500	1300	
31			LEAR	0333.0	0334.0	III		1	30	58	
	0000	0733	CULG	0334.0	0334.0	III	B	1	18	90	
	0000	0900	HIRA	0334.2	0334.2	III	B	1	25	95	
	0522	1636	ONDR								
			CULG	0555.0	0556.0	III	G	1	30	90	
			LEAR	0555.0	0556.0	III		1	30	63	
			SVTO	0555.0	0556.0	III		2	38U	61U	
	0500	1200	IZMI	0555.5	0556.9	III	GG	2	45X	135	
	0700	1500	POTS	0700 E	1500 U	I	S	2	120	400	
			LEAR	0709.0	0710.0	III		3	30	80	

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

AUGUST 1994

OBSERVATION Start Day (UT)	End (UT)	Sta	EVENT Start (UT)	End (UT)	Spectral Class	Event Remarks	Int (1-3)	FREQUENCY Lower (MHz)	Upper (MHz)	Remarks
31		POTS	0709.0	0711.0	III	G,V,C,DCIM	3	40	800	
		SVTO	0709.0	0710.0	III		3	36	85	
		IZMI	0709.2	0709.6	III	G	2	45X	110	
		HIRA	0709.4	0711.0	V	B	3	25	90	
		IZMI	0709.6	0709.9	V		2	60	85	
		CULG	0710.0	0711.0	V	B	3	18	90	
		IZMI	0802.8	0803.1	III	G	1	95U	145	
		IZMI	0819.1	1032.5	I	N	1	95U	180X	
		POTS	0828.4	0828.7	III	B	1	40X	70	
		SGMR	1559.0	1600.0	V		2	30	70	
		SVTO	1559.0	1559.0	III		1	35	75	
		SGMR	1720.0	1720.0	V		1	30	50	
2015	2400	HIRA								
2034	2400	CULG								

Event Remarks:

B	= Single burst	N	= Intermittent activity in this period
C	= Underlyling continuum (particularly with Type I)	MOV	= Moving (Type IV)
		MWB	= Meter wave burst
DC	= Drifting chains	RS	= Reverse slope burst
DP	= Drifting pairs	S	= Storm in the sense of intermittent but apparently connected actively
FN	= Fundamental emission (Type II)		
FS	= Fine structures (Type IV) (includes fiber, pulsations, zebra)	SH	= Secondary harmonic emission
		STA	= Stationary (Type IV)
G	= Small group of bursts (<10)	U	= U-shaped burst of Type III
GG	= Large group of bursts (>10)	UE	= Uncertain emission (Type II)
H	= Herringbone	W	= Weak
HARM	= Harmonic		

Frequency qualifiers:

X	= Extends beyond instrument range	U	= Uncertain frequency

Remarks:

SWF	= Associated short wave fade observed
FLA	= Associated flare observed (class optional)
ESS	= Estimated shock speed in km/s (Type II)

Stations Reporting: CULG = Culgoora, HIRA = Hiraiso, IZMI = Izmiran, LEAR = Learmonth, ONDR = Ondrejov, PALE = Palehua, POTS = Potsdam, SGMR = Sagamore Hill, SVTO = San Vito

NOTE:

Until recently, most radiospectrographs spanned only a narrow range of wavelengths. Most radio bursts would exceed this range and so only the broad wavelength range into which they fell could be stated with certainty. Several new radiospectrographs (e.g. Culgoora) cover wide wavelength ranges. This makes it feasible and desirable to record the actual wavelength (or frequency) of each burst. The high resolution of some new instruments also makes it possible to report more detailed information about radio bursts. This might prove particularly useful for bursts associated with terrestrial disturbances (e.g. Type II bursts). For these reasons, a new format for archiving radiospectrograph observations was developed. The new format began with spectral data for July, 1994.

SOLAR RADIO NOISE STORM AT 164 MHZ
FROM NANCAY RADIOHELIOGRAPH

August 1994

DAY	HELIOGRAPHIC POSITIONS MEAN VALUES* E-W	S-N	IMP**	OBSERVING TIME*** START (UT)	END (UT)
06/08/94	-0.23	-0.01	1	1100	1548D
07/08/94	-0.04	+0.11	1	0742E	1549D
08/08/94	+0.22	+0.08	1	0752E	1548D
10/08/94	+0.70	-0.17	3	1228E	1548D
12/08/94	+0.97	-0.27	1	1120E	1547D
12/08/94	-0.49	-0.27	1	0751E	1547D
13/08/94	-0.02	-0.26	1	0759E	1548D
15/08/94	+0.70	-0.33	1	0745E	1547D
15/08/94	+0.59	-0.56	1	1300	1547D
16/08/94	+0.68	-0.23	1	0751E	1547D
17/08/94	+0.93	-0.23	1	1300	1547D
29/08/94	-1.26	-0.09	1	0751E	1230
30/08/94	-1.40	-0.02	1	0751E	1547D
31/08/94	-1.30	-0.29	1	1307E	1549D

23, 24, 27 NO DATA
OTHER DAYS : NO DETECTABLE NOISE STORMS

---

* 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

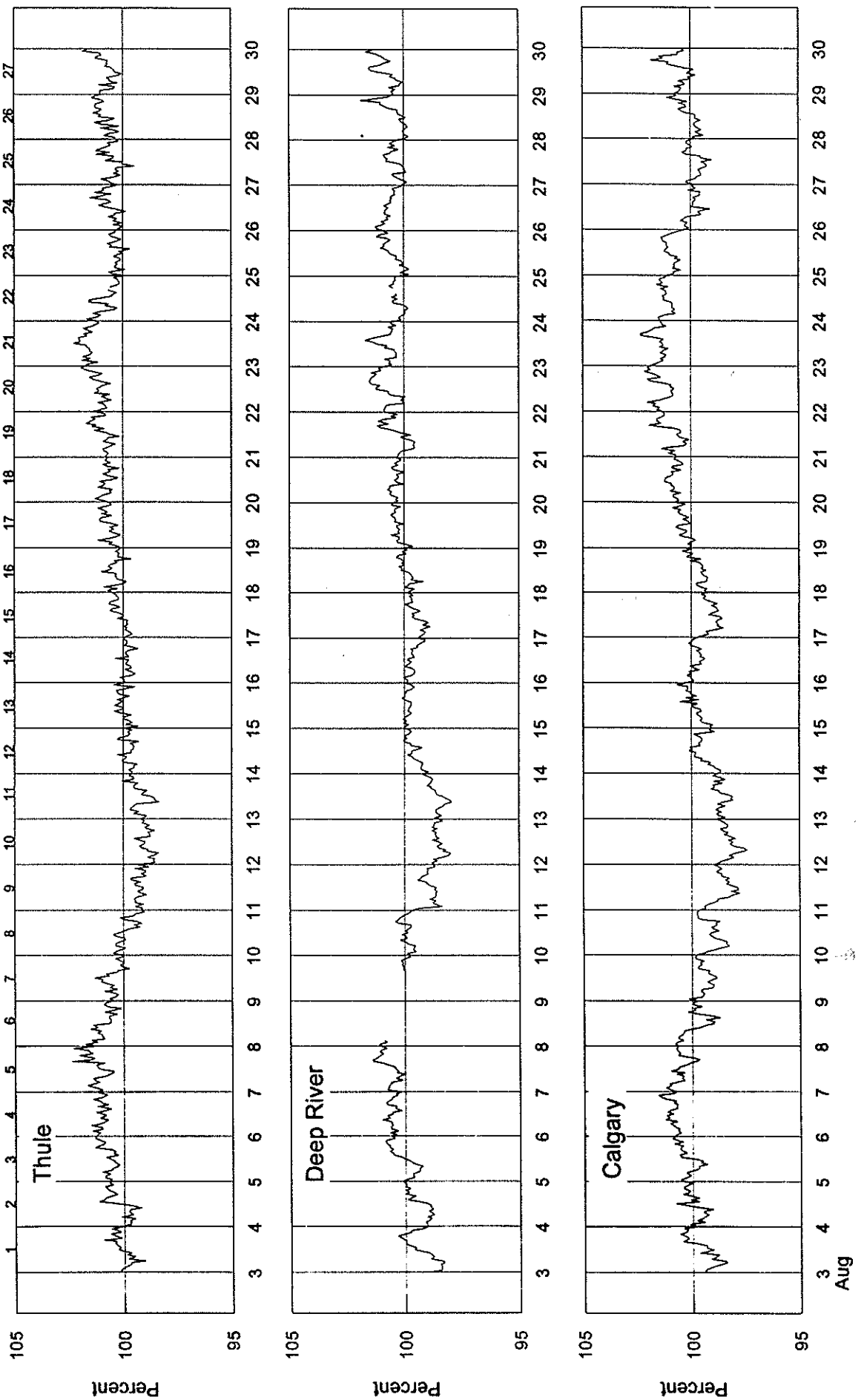
COSMIC RAY INDICES
(Neutron Monitor)
AUGUST 1994

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	4429	6943.2	3800.5	4037.4	1870.2	3486.6	3519.1
2	4455	6977.4	3825.5	4057.9	1871.7	3494.2	3531.7
3	4463	6987.4	3823.7	4064.1	1879.3	3501.2	3539.5
4	4467	6993.0	3837.5	4074.2	1882.2	3508.6	3541.0
5	4490	7044.4	3850.8	4082.6	1886.1	3508.2	3550.4
6	4505	7077.8	3877.8	4122.6	1897.7	3518.3	3552.3
7	4517	7086.7	3863.2	4129.0	1899.6	3520.5	3551.8
8	4500	7106.5	3838.5	4120.2	1900.0	3517.2	3549.8
9	4479	7040.4	3818.7	4095.3	1895.8	3510.1	3544.5
10	4455	7031.8	3805.8	4100.3	1887.3	3502.8	3539.8
11	4425	6961.1	3787.2	4056.5	1877.0	3486.9	3510.5
12	4410	6934.7	3774.7	4033.2	1869.6	3480.3	3491.2
13	4426	6937.3	3789.7	4032.4	1882.4	3483.0	3499.0
14	4447	7006.8	3819.5	4066.7	1901.6	3506.2	3520.3
15	4459	7027.6	3833.0	4080.9	1900.6	3504.6	3526.0
16	4450	7012.9	3834.3	4084.8	1892.5	3509.6	3529.0
17	4463	6998.0	3804.2	4075.6	1886.8	3506.4	3527.7
18	4475	7030.6	3826.7	4091.0	1889.3	3515.5	3524.6
19	4487	7056.5	3853.0	4105.1	1890.5	3521.4	3536.4
20	4492	7064.4	3872.0	4117.2	1894.1	3524.6	3530.9
21	4499	7054.5	3876.3	4118.9	1892.7	3531.3	3538.8
22	4507	7100.1	3896.3	4121.4	1901.4	3537.7	3539.6
23	4532	7087.9	3898.8	4129.0	1907.2	3536.7	3539.5
24	4493	7056.5	3886.0	4093.3	1895.3	3518.0	3519.8
25	4472	7070.0	3877.3	4096.7	1896.7	3514.7	3528.8
26	4484	7087.7	3837.0	4110.7	1896.8	3514.1	3527.6
27	4480	7062.3	3832.5	4099.8	1897.6	3507.8	3526.2
28	4498	7061.5	3842.0	4094.6	1896.3	3497.0	3519.8
29	4492	7090.6	3862.2	4097.2	1891.2	3497.5	3522.6
30	4529	7104.8	3859.0	4107.2	1895.0	3505.9	3524.0
31	4519	7068.3	3856.8	4090.7	1890.4	3506.3	3523.9
Mean	4477	7037.5	3840.7	4089.9	1890.8	3508.8	3529.9

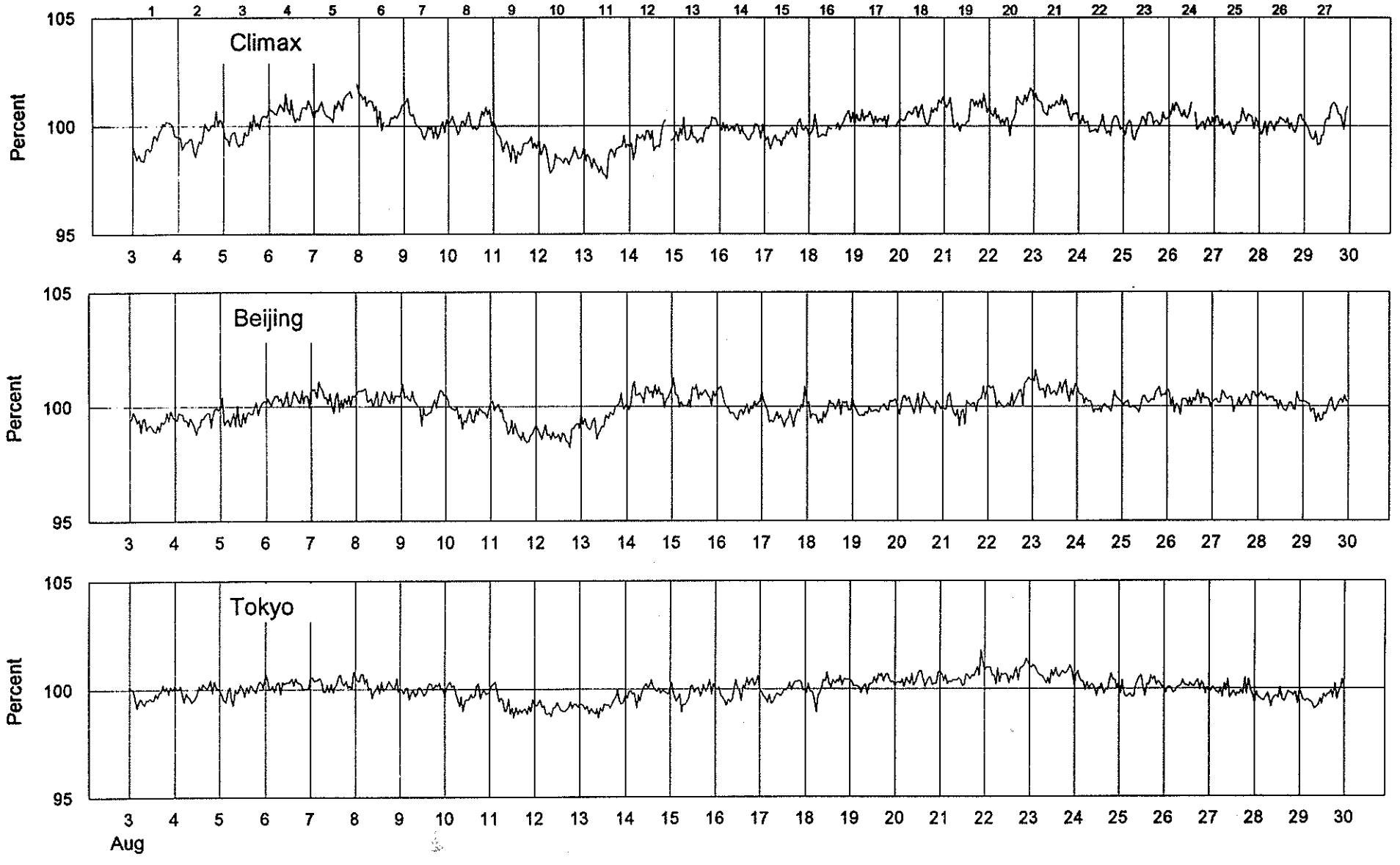
For less than 24-hour coverage, parentheses enclose the number of hours for which data are available. For Climax and Haleakala, parentheses enclose the number of section hours whenever the sum of both sections falls below 40 hours.

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

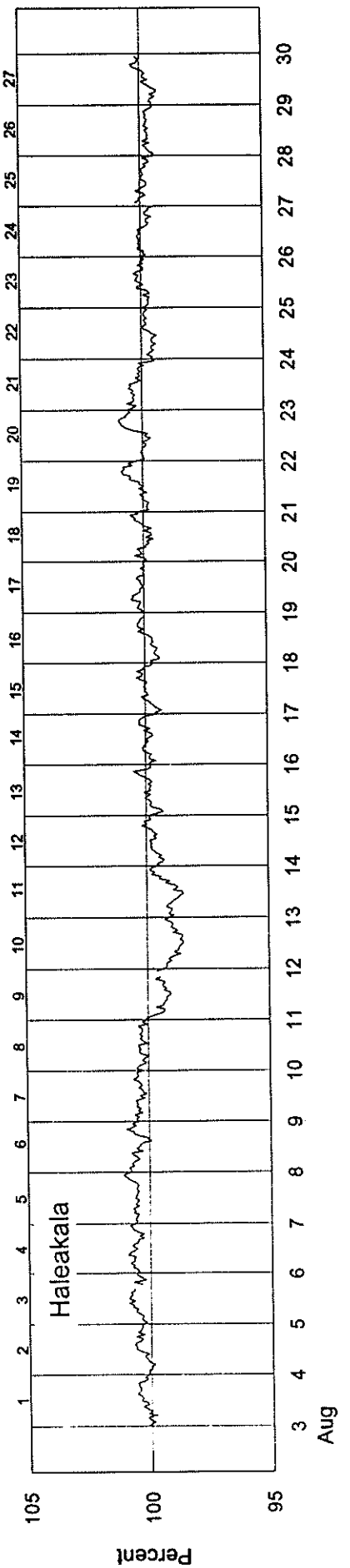
COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2199 - Beginning 3 Aug 94



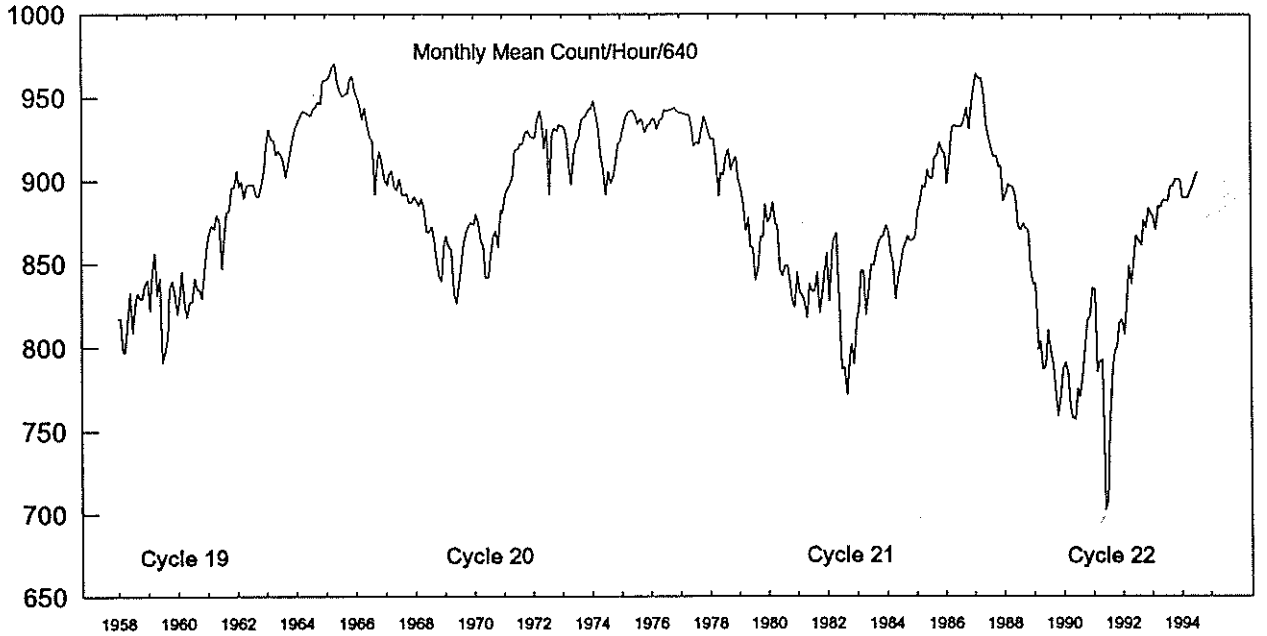
COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2199 - Beginning 3 Aug 94



COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2199 - Beginning 3 Aug 94



Moscow Neutron Monitor Pressure-Corrected Values
Jan 1958 - Aug 1994



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
1958	8171*	8175*	7973*	7971*	8145*	8330*	8087*	8266*	8324*	8291*	8294*	8378*	8200*
1959	8405	8223	8443	8565	8309	8416	7911	7972	8054	8351	8397	8325	8281
1960	8199	8313	8459	8264*	8178*	8272*	8272*	8417	8348	8348	8295	8464	8319*
1961	8619	8682	8731*	8708*	8791*	8759*	8472	8676	8808	8816	8957	8956	8748*
1962	9061	8959	8996	8891	8964*	8974	8977	8977	8908	8902	8973	9056	8940*
1963	9201	9308	9243	9239	9154	9180	9147	9109	9020	9110	9194	9259	9180
1964	9321	9353	9395	9416	9410	9396	9384	9425	9442	9473	9458	9594	9422
1965	9602	9608	9642	9685	9701	9586	9530	9505	9520	9525	9608	9630	9595
1966	9531	9502	9439	9367	9438	9336	9261	9242*	8916	9105*	9178	9094	9284*
1967	9006	8973	9038	9059	8956	8940	9015	8913	8911	8924	8860	8873	8956
1968	8904	8875*	8844*	8892*	8825*	8690*	8689	8725	8635*	8533*	8428	8394	8703*
1969	8628	8666	8606	8584	8334	8261	8378	8510	8612	8689	8731	8751	8562
1970	8735	8799	8749	8639	8608	8418	8420	8540	8656	8702	8596	8827	8641
1971	8805	8921	8952	8982	9028	9185	9190	9219	9215	9285	9302	9276	9113
1972	9260	9254	9367	9419	9364	9192	9311	8916	9275	9319	9298	9336	9275
1973	9333	9321	9258	9107	8975	9160	9233	9263	9368	9376	9392	9423	9267
1974	9431	9481	9390	9327	9153	9062	8916	9054	8983	9027	9092	9222	9178
1975	9238	9317	9361	9405	9415	9425	9395	9339	9370	9361	9285*	9330	9353*
1976	9339	9375	9370	9310	9363	9371	9423	9418	9423	9428	9440	9415	9380
1977	9405	9404	9401	9392	9399	9318	9209	9236	9216	9302	9384*	9341	9334*
1978	9279	9243	9254	9113	8907	9050	9035	9149	9189	9062	9118	9145	9216
1979	9012	8955	8860	8693	8778	8599	8592	8396	8470	8662	8661	8857	8740
1980	8752	8776	8871	8737	8732	8463	8430	8490	8491	8379	8259	8242	8552
1981	8451	8330	8311	8277	8176	8379	8332	8338	8452	8206	8289	8439	8332
1982	8565	8277	8565	8649	8686	8279	7870	7882	7712	7931	8023	7902	8195
1983	8150	8253	8460	8460	8194	8343	8498	8492	8575	8625	8658	8670	8448
1984	8736	8686	8574	8505	8286	8421	8476	8590	8632	8669	8641	8644	8575
1985	8671	8813	8878	8973	8958	9066	9018	9017	9140	9155	9233	9183	9009
1986	9162	8982	9125	9316	9339	9328	9326	9327	9368	9444	9312	9472	9292
1987	9553	9646	9619	9618	9505	9349	9268	9202	9149	9153	9085	9094	9353
1988	8885	8922	8979	8968	8961	8904	8724	8704	8745	8716	8699	8474	8807
1989	8381	8385	7985	8043	7868	7888	8102	7977	7897	7709	7592	7701	7961
1990	7871	7910	7846	7652	7574	7569	7755	7701	7864	8037	8168	8185	7844
1991	8356	8347	7850	7915	7926	7025	7082	7510	7863	7964	8008	8153	7833
1992	8169	8078	8247	8490	8378	8535	8670	8649	8614	8767	8717	8833	8512
1993	8804	8784	8705	8846	8842	8888	8884	8880	8968	8968	9010	9011	8882
1994	9001	8895	8899	8898	8942	8963	9013	9055					8958

Multiply table entries by 64 to obtain hourly counting rate. Moscow, Russia: N55, E37, Alt= 200 m, Cutoff Rigidity= 2.42GV.
NOTE: * Indicates data have been restored using the corresponding data of other cosmic ray stations.

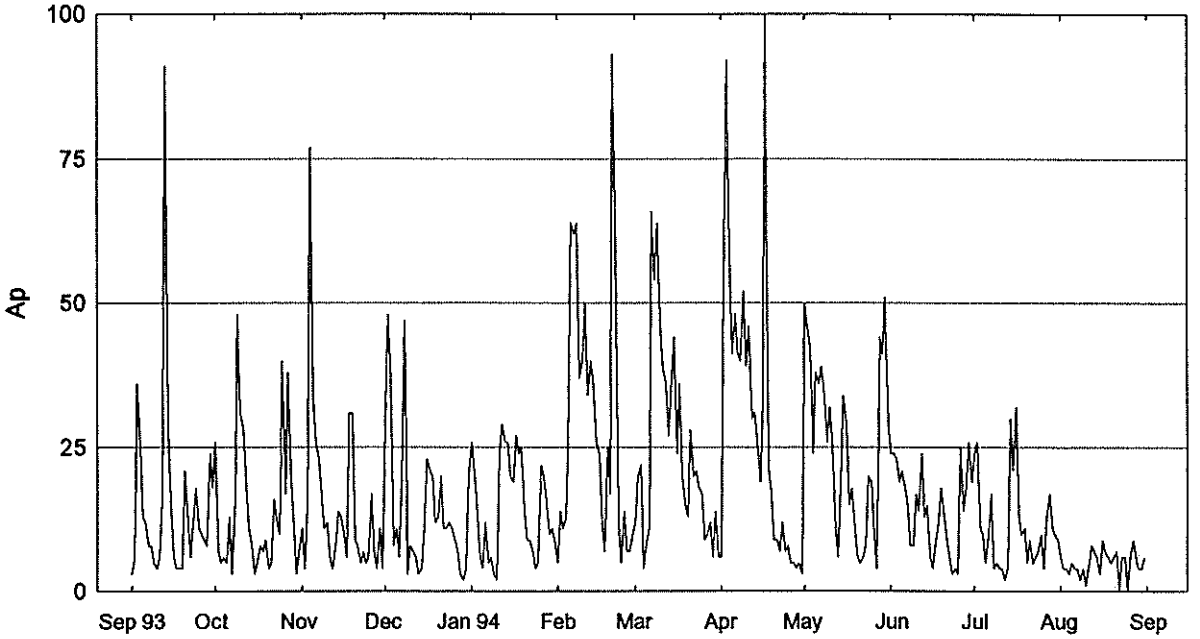
GEOMAGNETIC ACTIVITY INDICES

August 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- 2+ 2- 1	1 1 1+ 2-	13-	6	0.3	3- 2+ 2- 1o	1o 1o 2- 1+	12	17	9	15	10 C
2	Q3	2- 1- 0+ 1	0+ 1- 1- 1+	7-	4	0.1	2o 1- 1o 1+	0+ 0+ 0+ 1+	7	10	4	8	6 CC
3	Q7	1 1 1 1+	1- 1 1+ 1+	9-	4	0.1	1o 1+ 1+ 2-	0+ 1- 1+ 1+	8	11	5	8	7 CC
4	Q2	1 0+ 0+ 0+	1 1- 0+ 1-	5-	3	0.0	1o 0+ 1- 0+	1o 1- 0o 0+	4	8	4	5	7 CC
5		1+ 2 1+ 1+	1- 1 1+ 1-	10-	5	0.2	1+ 2+ 2- 2o	1- 1- 1o 1o	9	11	8	12	7 CC
6	Q6	1- 1+ 2- 1	1 1- 1- 1+	8+	4	0.1	1o 1+ 2o 2-	1o 0+ 1- 1o	8	11	6	8	9 CC
7	Q5	0+ 0+ 0+ 1-	2- 1+ 1- 2-	7	4	0.1	0+ 0+ 1o 0+	1+ 1+ 1- 1+	6	11	6	5	12 CC
8	Q1	1 0+ 0 0	0+ 1- 0+ 1-	3+	2	0.0	1- 0o 0+ 0o	0o 1- 1- 1-	3	6	2	4	4 CC
9	Q9	1- 1 1 0+	1- 1 2+ 2-	9-	4	0.2	1o 1+ 1+ 0+	1- 1+ 2o 1+	8	12	8	8	12 CC
10		2 1+ 3- 2	4- 3- 3 2+	20-	11	0.6	2+ 2o 3- 2o	4- 3- 3- 2+	22	29	19	16	32
11	D5*	3+ 3+ 2+ 3-	3- 3+ 3- 3	23+	14	0.8	3o 3- 3- 3o	3o 3- 2o 2+	24	40	19	31	28
12	D3*	4- 4- 3 3-	3 3- 4+ 3	26	18	1.0	3+ 3+ 3o 3-	3o 3o 4- 3-	33	36	28	31	33
13	D1	3+ 5- 4+ 3-	5- 4 4+ 3+	31+	27	1.2	3+ 4o 4+ 2+	4- 3+ 4- 3+	42	46	44	42	49
14	D2	4 4 5 4+	3- 3+ 4- 3+	30+	26	1.2	4- 4- 5- 4+	3+ 3+ 3+ 3o	45	53	48	61	40
15	D4*	4 2 2 2	3 2+ 3 3+	22-	13	0.8	4- 2- 2o 3o	3+ 2o 3- 3+	27	28	27	24	31
16		2+ 2- 1+ 2+	2- 1+ 3 3	17-	9	0.5	2+ 2o 1+ 3-	2o 1+ 2+ 3o	17	19	15	16	18
17		2- 2 3- 2-	2- 2 1+ 1	14	7	0.3	2- 2o 3- 2-	2- 2- 1o 1o	12	12	10	11	11 CC
18		1- 1+ 2- 2	2 2- 1 2-	12	6	0.2	1- 2- 2- 2+	2+ 2- 1+ 1+	12	12	15	11	15 CC
19	Q10	2- 1+ 2- 1-	1- 1+ 2- 1-	10-	5	0.2	1+ 1+ 2- 1o	1- 1+ 1+ 1o	8	10	8	8	10 CC
20		1 2 2+ 2-	1+ 1+ 2 2	14-	6	0.3	1o 3- 2+ 2-	1o 2o 2+ 2o	14	17	10	12	15 C
21		2+ 2- 0+ 0+	3 3 1 1-	12+	7	0.4	2+ 2o 0+ 1-	3o 3o 1+ 1-	14	17	19	9	27
22		2 1+ 1- 1+	2 2+ 2+ 4+	16+	10	0.5	2- 2- 1- 1+	2o 2o 2o 4-	16	24	15	10	30
23		3- 2+ 1 1	1 1 1+ 1-	11	6	0.3	3- 3- 1+ 2-	1o 1+ 1+ 1-	13	13	9	11	11 C
24		1- 1+ 1 1-	1 2+ 2+ 2+	12-	6	0.3	1+ 1+ 2- 1-	1- 2+ 1+ 2o	10	17	10	8	19 K
25		2 3- 2+ 3	3- 2+ 2+ 1-	18	10	0.5	2- 3o 3- 3+	3o 2+ 2- 1-	20	21	13	21	13
26		0+ 2- 2 2-	1- 1 2- 3-	12-	6	0.3	0+ 2- 2+ 2+	1- 1o 1o 2+	11	13	11	11	13 C
27		3+ 2 2+ 2-	1+ 2- 3- 2	17	9	0.5	3o 2+ 2+ 2-	1+ 2- 2+ 2-	17	19	11	17	13
28		2+ 3 2 2-	1- 1- 1+ 1-	12+	6	0.3	2o 3o 2+ 2-	0+ 0+ 1+ 1-	12	14	12	18	8 KC
29	Q8	1- 1- 2 1	1+ 1 0+ 2-	9-	4	0.1	1o 1o 2o 1+	2- 1+ 1- 1+	9	9	10	7	12 CC
30	Q4	1- 0+ 1 1	1 1+ 1- 1+	7+	4	0.1	1- 1- 1- 1+	1- 2- 1o 1+	7	10	7	7	10 CC
31		1 1- 0+ 1-	2+ 2 1 3-	11-	6	0.2	1o 1+ 1- 1o	2+ 2- 1o 3-	11	15	8	7	16 C
Mean					8	0.38			14.9	18.4	13.6		16.0

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	Sa	Prov Ri	Ra	Rs	IMF
1	3- 2+ 2o 1+	1+ 2- 2- 2-	13	3o 3- 2- 0+	1o 1- 1+ 1+	12	76.2	11	12	20	
2	2- 1o 1o 1+	1- 1o 1o 1+	8	2o 1- 1- 1+	0o 0o 0o 1+	5	77.2	10	12	21	
3	1o 1+ 1o 2-	1o 1+ 2- 2-	9	1o 1o 2- 2-	0o 0o 1- 1-	6	78.7	13	14	23	
4	1+ 1- 1o 1-	1+ 1o 0+ 1-	6	1- 0o 1- 0o	0+ 0+ 0o 0+	2	77.4	14	15	22	
5	1+ 3- 2o 2o	1o 1- 2- 1+	12	1o 2o 1+ 2-	1- 1- 0+ 1-	7	77.8	18	17	22	
6	1o 1+ 2+ 2-	1+ 1- 1o 1+	10	1- 1+ 2- 1+	1- 0o 0+ 1-	6	77.5	17	17	22	
7	0+ 0+ 1o 1-	2- 2- 1o 2-	7	0+ 0+ 1- 0o	1o 1o 0o 1o	4	77.9	13	13	22	
8	1- 0+ 1- 0+	0+ 1o 1o 1o	5	1- 0o 0o 0o	0o 0o 0o 0o	1	75.9	12	14	20	
9	1+ 1+ 1+ 0+	1o 1+ 2+ 1+	9	0+ 2- 2- 0o	0o 1- 1+ 1+	6	77.4	12	14	22	
10	2o 2- 3- 2+	4- 3o 3o 3-	25	2+ 2o 3- 2o	3+ 3- 2+ 2-	20	79.7	15	17	24	
11	3o 3- 2+ 3+	3+ 3+ 3- 3-	29	3o 2+ 3- 3-	3- 2o 1+ 2o	19	78.7	20	22	23	
12	3+ 3+ 3+ 3-	3o 3+ 4- 3o	35	3+ 3+ 3o 3-	3o 3o 4- 3-	31	82.9	36	39	28	
13	3+ 5- 4+ 3-	4o 4- 4- 3o	47	3+ 4- 4o 2o	3+ 3o 3+ 3+	38	86.7	39	47	32	
14	4- 4- 5- 4+	3+ 3+ 4- 3o	48	4- 4- 5- 4o	4- 3o 3- 3o	43	91.2	44	42	36	
15	3o 2- 2+ 3-	3o 2o 3- 3+	24	4o 2- 2o 3o	4- 2o 3- 4-	30	83.5	42	42	28	
16	2+ 2o 1+ 3-	2o 2- 3- 3-	17	3- 2o 2- 3-	2o 1o 2+ 3o	18	78.8	43	45	23	
17	2- 2o 3- 2-	2o 2o 1+ 1o	14	1+ 2o 2+ 2-	1+ 1+ 1o 1-	11	79.5	41	42	24	
18	1- 2- 2- 3-	2+ 2- 1+ 2-	14	1o 2- 1+ 2-	2+ 2- 1+ 1o	11	79.3	39	38	24	
19	2- 2- 2- 2-	1o 2- 1+ 1o	10	1+ 1o 2- 1-	0+ 1- 1o 1o	7	77.1	43	44	21	
20	1o 2+ 2+ 2o	1+ 2o 2+ 2o	15	1o 3- 2+ 1+	1- 2- 2o 2-	13	74.0	30	29	18	
21	2+ 2+ 0+ 1+	3o 3o 1+ 1o	16	2+ 2- 0o 0o	3o 3- 1o 0+	12	72.7	19	16	17	
22	2o 2- 1- 2-	2+ 3- 2+ 3+	18	1+ 1+ 1- 1+	1+ 1+ 1+ 4-	14	72.2	10	11	16	
23	3- 3- 1+ 2-	1o 2- 1+ 1-	12	3o 3o 2- 1+	1- 1+ 1o 1-	13	73.5	25	19	17	
24	1+ 2- 2- 1+	1o 3- 2o 2+	13	1+ 1o 2- 0+	0+ 2- 1o 2-	8	73.5	12	18	17	
25	2- 3o 3- 3+	3+ 3- 2o 1o	23	2- 3o 3- 3+	3- 2- 1+ 0o	18	72.5	12	13	16	
26	1- 2- 3- 3-	1- 1+ 2- 3-	14	0+ 2- 2- 2o	1o 0+ 0+ 2o	8	73.7	12	13	18	
27	3o 2+ 2o 2o	2o 2o 3- 2o	18	3+ 3- 2+ 2-	1o 1o 2o 2-	16	72.5	11	11	16	
28	2+ 3o 3- 2-	1- 1- 2- 1o	14	2o 3o 2o 2-	0+ 0o 1+ 0o	10	72.5	13	13	16	
29	1+ 1o 2+ 1+	2- 2- 1- 1+	10	1- 1+ 2- 1o	1+ 1o 0+ 1+	7	79.1	16	17	23	
30	1- 1- 1- 1+	1o 2- 1o 1+	7	1o 1- 1- 1+	0+ 1+ 1o 2-	7	84.7	25	26	29	
31	1+ 1+ 1o 1+	3- 2o 1+ 3o	14	1- 1o 1- 1-	2- 1+ 1- 2-	7	83.8	39	38	29	
Mean			16.6			13.2	78.0	22.8	23.5	22.2	

Daily Average Indices Ap
Sep 1993 - Aug 1994



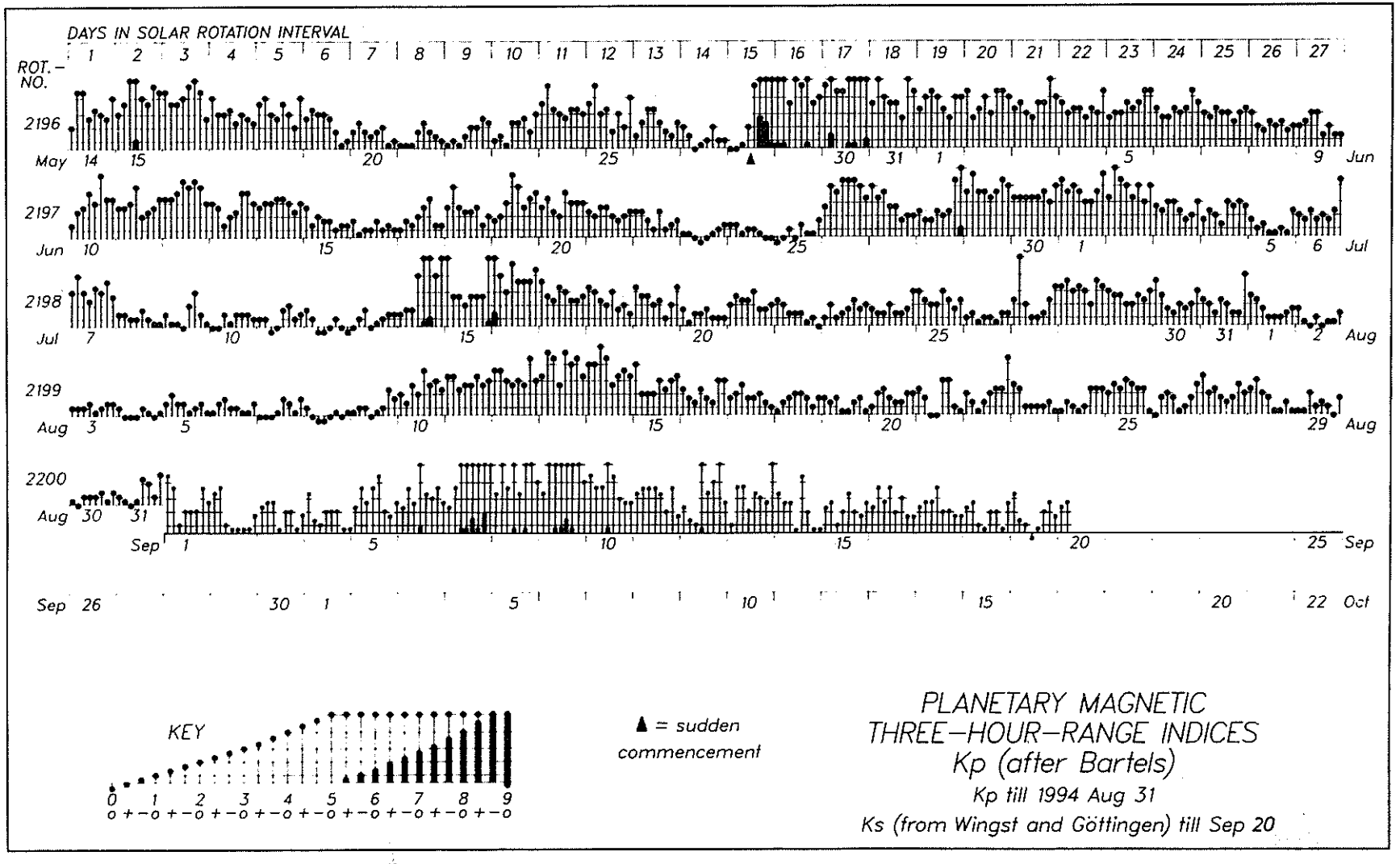
Day	Sep 93	Oct	Nov	Dec	Jan 94	Feb	Mar	Apr	May	Jun	Jul	Aug
1	3	26	11	29	26	5	12	6	50	24	24	6
2	6	7	4	48	21	14	20	53	46	24	26	4
3	36	5	15	37	15	11	22	92	42	23	11	4
4	25	6	77	8	6	13	4	59	24	19	10	3
5	13	5	34	11	4	32	8	41	38	21	5	5
6	12	13	26	6	12	64	11	48	36	18	10	4
7	8	3	23	20	5	62	66	41	39	15	17	4
8	8	16	17	47	6	64	54	40	35	8	4	2
9	5	48	11	3	3	37	64	52	26	8	5	4
10	4	31	12	8	2	40	47	39	32	17	4	1
11	6	28	6	7	24	50	39	46	25	14	4	4
12	16	18	4	6	29	34	36	30	11	24	2	8
13	91	11	8	3	26	40	27	31	6	13	4	7
14	28	8	14	4	26	36	35	26	19	15	30	6
15	16	3	13	11	20	26	44	19	34	6	21	3
16	6	5	10	23	19	24	24	33	29	4	32	9
17	4	8	6	21	27	12	36	100	15	8	13	7
18	4	7	31	20	24	7	20	21	18	12	10	6
19	4	9	31	12	25	25	15	17	11	18	11	5
20	21	4	9	13	14	17	13	9	6	14	5	6
21	14	5	8	20	9	93	28	9	5	9	9	7
22	6	16	5	11	9	60	20	7	6	6	5	0
23	12	12	7	11	7	12	21	12	8	3	6	6
24	18	10	5	12	4	5	18	7	20	4	7	6
25	11	40	6	11	5	14	17	8	19	3	10	0
26	10	17	17	9	22	7	9	5	10	25	4	6
27	9	38	7	7	20	7	10	5	4	14	13	9
28	8	21	4	3	16	10	12	4	44	18	17	6
29	24	11	11	2	10		6	5	41	26	11	4
30	18	3	4	4	11		14	3	51	19	10	4
31		7		20	9		6		29		9	6
Mean	15	14	15	14	15	29	24	29	25	14	11	8

NOTE: Data for March and April 1994 have been corrected.

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

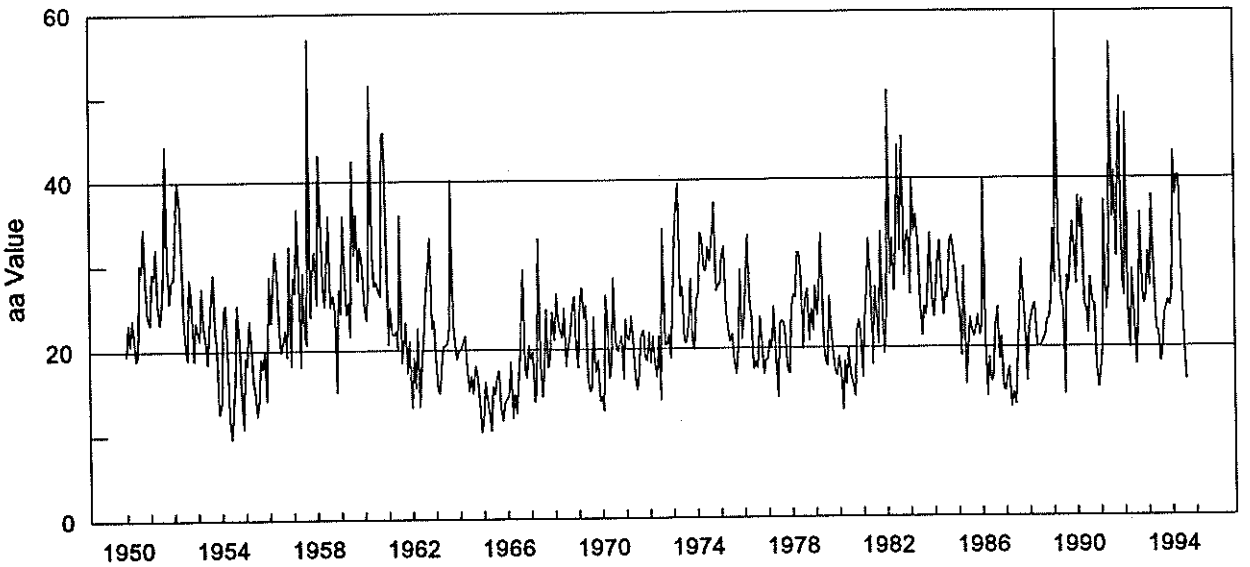
University of Gottingen

Kp through August 31, 1994



Please note aspect ratio change!

Monthly Mean aa Index Jan 1950 - Aug 1994



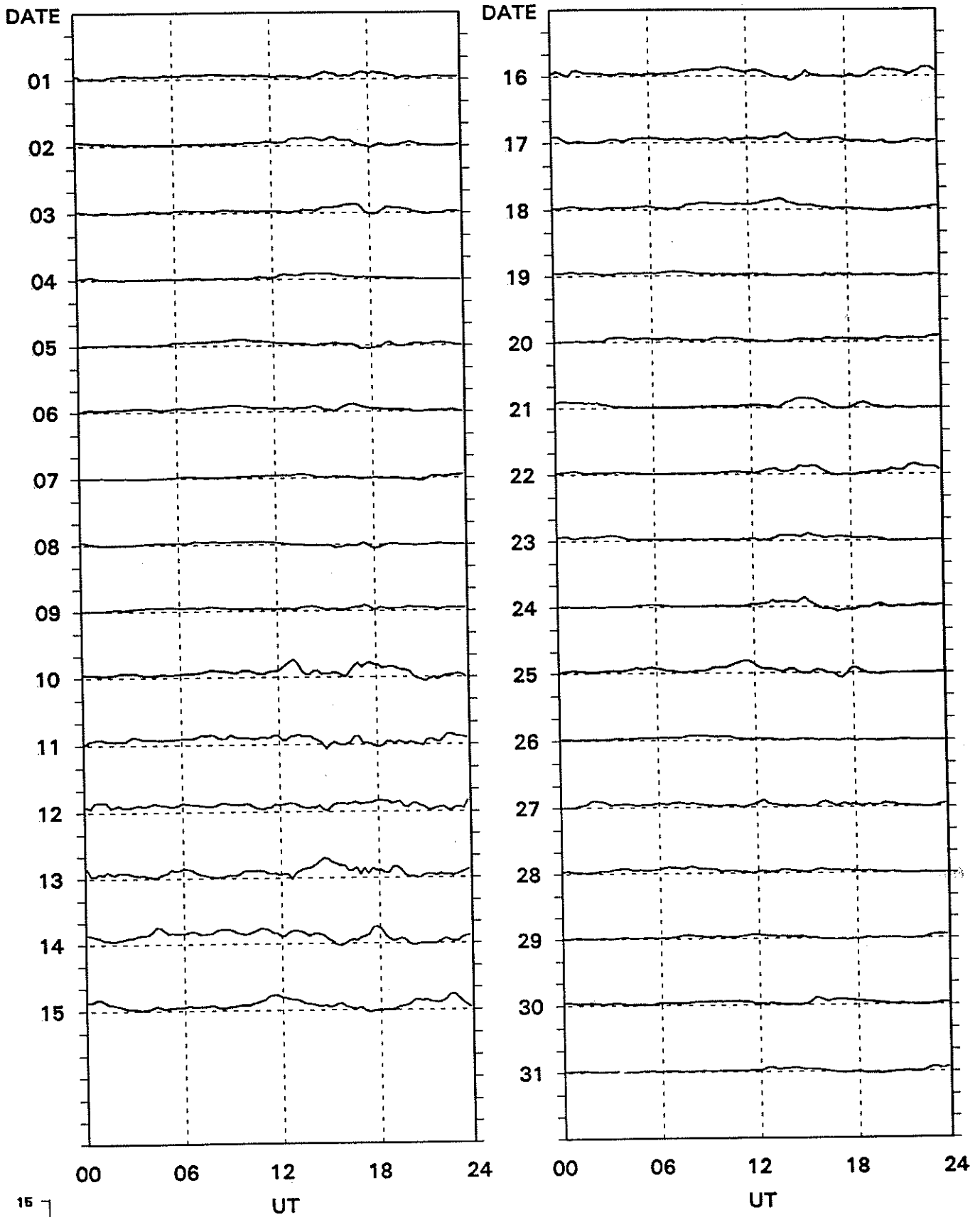
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
1950	19.5	23.2	20.6	23.8	21.7	19.0	19.5	30.2	29.3	34.5	28.0	24.0	24.4
1951	23.1	29.2	28.5	32.1	25.5	23.2	25.2	29.7	44.4	30.3	25.7	28.2	28.8
1952	28.5	34.3	40.1	38.0	33.1	23.8	20.7	19.0	28.5	26.4	18.9	23.4	27.9
1953	22.3	21.2	27.4	22.7	21.4	18.4	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	27.2	20.6	16.0					31.5

124
Aug 94

PC-INDEX

Thule

August, 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

AUGUST 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	10	0500	..	..	..	..		-	3	72	22	10	22
ABG	09.4N	10	0500	..	..	..	..	10(5)	4	4	81	31	10	22
TRD	01.1S	10	0500	..	..	..	..		-	2	139	40	10	22
AMS	46.8S	10	12--	..	..	..	..	12(7)	5	17	94	38	16	01
PAF	57.2S	10	12--	..	..	..	..	12(7) 13(6,7)	5	33	167	87	16	01
DRV	75.2S	10	2245	SC	- 12	- 2	16	14(3)	5	303	471	474	16	09
CZT	51.5S	11	21--	..	..	..	..	12(7)	5	24	72	32	17	00
FRD	49.4N	12	00--	..	..	..	..	14(7,8)	5	18	92	41	15	11
BJI	28.8N	12	08--	..	..	..	..	13(3)	6	11	91	29	13	21
UJJ	13.6N	12	0800	..	..	..	..		-	--	91	27	14	19
ABG	09.4N	12	0800	..	..	..	..	12(5,7)13(3,5,6,7)	5	4	102	45	14	19
HYB	07.6N	12	0800	..	..	..	..	13(3,5,6)	5	5	102	28	15	24
TRD	01.1S	12	0800	..	..	..	..		-	3	138	86	14	19
ETT	00.7S	13	0200	..	..	..	..		-	6	141	57	15	24
UJJ	13.6N	24	1000	..	..	..	..		-	5	67	28	25	21
ABG	09.4N	24	1000	..	..	..	..	25(4)	4	5	65	37	25	21
TRD	01.1S	24	1000	..	..	..	..		-	4	122	43	25	21
BJI	28.8N	25	06--	..	..	..	..	25(4)	5	4	78	45	25	20
GUA	04.3N	25	09--	..	..	..	..	25(4)	5	--	50	10	25	18

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

Stations reporting no storms recorded: HER, CAN, KRC

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

AUGUST 1994

Storm Sudden Commencements (SSC)

Day	Time	Quality: Station Group*
24	1752	A: LER* ESK* B: WNG* HAD* SPT C: BDV* COI* si: LER ESK HAD

Solar Flare Effects (sfe)

Day	Begin-End	Station(s)
01	0436-0442	MPO
05	0706-0712	MPO
07	1111-1120	BDV MPO
10	0533-0539	MPO
10	1413-1426	TEN
14	0456-0502	CLF MPO
18	0553-0557	MPO
24	0254-0257	MPO
24	1151-1155	MPO
24	1439-1459	TEN SSC: WNG*
24	1623-1627	MPO
25	0751-0755	MPO
25	0901-0909	NAG si: LER ESK HAD
26	0351-0354	MPO
26	0736-0742	MPO
29	0840-0851	NAG
29	0845-0851	MPO
30	1036-1042	MPO
31	0542-0548	MPO

REPORTING OBSERVATORIES (up to the 3rd of October):
SOD 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

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.

CONTENTS

Prompt Reports Number 602 Part I

LATE DATA

Page

ERRATA
GEOMAGNETIC ACTIVITY INDICES March-April 1994 128-129

COSMIC RAYS Graph Haleakala 17-20 May 1994 130

GEOMAGNETIC ACTIVITY INDICES

March 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	Q8A	4-	2	3+	2+	2-	2-	2	3+	20	12	0.7	3-	2o	3o	3-	2o	2o	2+	3o	21	27	18	26	19	
2		4	2+	2	3-	2+	2+	4	5+	25	20	1.0	3+	2+	2+	3o	3-	2+	3+	5-	33	37	30	25	41	
3		4-	5-	5	5-	3-	2-	2	2	26+	22	1.1	3+	4+	4o	5-	3-	2-	2+	2+	37	34	39	58	15	
4	Q1	1	1-	1+	2-	1-	0+	0+	1-	7-	4	0.1	2-	1+	2-	2o	1-	1-	1-	1o	8	9	10	12	7	CC
5	Q4A	2-	1-	1-	2-	1	1-	2	4+	13-	8	0.4	2-	1-	1+	2-	1o	1-	2o	4-	14	23	13	11	25	
6	Q7A	2+	3+	2+	2	1-	1+	3-	4-	18+	11	0.6	3-	3-	3-	2+	1o	2-	3o	4-	23	22	20	18	24	
7	D1	5+	4	4	6-	5	6+	6	7	43+	66	1.7	5-	4-	4-	5o	4+	6-	6-	6o	94	90	92	69	114	
8	D3	5	6-	6-	5	5-	5	5+	5+	42-	54	1.6	4+	4+	5o	4+	5-	4+	5-	4+	72	79	55	63	72	
9	D2	5-	5+	6+	5-	5-	6-	6+	6	44-	64	1.7	4o	5-	5o	4o	4+	5-	5+	5+	84	88	64	63	89	
10	D4	4+	4+	5	5-	5	5	5	6	39+	47	1.5	4o	3+	4+	4+	4+	4+	4+	5+	67	66	60	60	66	
11		4-	5-	5-	5-	5	5-	4+	5+	37	39	1.4	4-	4o	4o	4+	5-	4o	4-	5o	62	57	57	55	60	
12		5-	4	5+	4+	5-	4	5-	4+	36	36	1.4	4o	3+	4+	4+	5-	4-	4+	5-	62	66	66	60	72	
13		5-	5	3-	4-	3	3	3	5	30	27	1.2	4o	4o	3-	3+	3o	3+	3-	4+	40	40	33	36	37	
14		4+	5	4	3+	5-	5	5-	4+	35+	35	1.4	4o	4o	4o	3+	4o	4o	4+	4+	56	57	57	51	63	
15	D5	5-	6-	4+	5-	5+	5+	5-	4-	38+	44	1.5	4+	4+	4o	4+	5-	5-	4+	4-	65	60	62	58	64	
16		4	4-	4-	2+	4-	5	4-	4-	30-	24	1.2	4-	3-	3+	3-	3+	4+	3+	3+	39	45	33	31	47	
17		4	5	5+	5-	4	5-	4+	3+	35+	36	1.4	4o	4+	4+	4o	4-	4+	4o	3+	54	57	47	56	49	
18		4	5-	4-	2	3+	3	2-	4	26+	20	1.0	4o	4+	4-	2+	3+	3o	2-	4o	39	33	32	35	31	
19		4+	3+	3+	3+	2	2	2+	3-	23+	15	0.9	4-	3+	3+	3+	2o	2o	3-	3o	31	34	21	39	16	
20	Q10A	3+	3	2	2-	2-	3	4-	3	21+	13	0.7	3o	3-	2+	2+	2o	3-	3o	3o	24	25	21	17	29	
21		3	5	4-	3+	4-	5	4+	3+	31+	28	1.2	3o	5-	3+	3+	4-	4+	4o	3+	47	48	46	46	49	
22		5	3+	2	3	5-	3-	2+	3	26	20	1.0	5-	3-	2o	3o	4+	3-	2o	3o	35	34	34	34	35	
23		4-	5-	4-	3	4-	4-	3	2+	28-	21	1.1	3+	4o	3+	3-	4-	3+	2+	2o	33	36	29	31	34	
24		3+	3+	2+	5-	4-	3-	2	3	25	18	1.0	3-	3-	2o	4o	4-	3o	2+	3-	29	31	29	31	30	
25		4	2	2	2+	3+	4+	4-	3	25-	17	0.9	3+	1+	2+	3-	3+	4o	4o	3o	33	39	32	22	49	
26	Q5A	3	3-	2	3+	1+	2-	2-	1	17-	9	0.5	3-	3-	2o	3o	1o	2-	1+	1o	15	19	12	21	10	
27	Q6A	2-	1+	2-	1+	2	1+	3-	4+	16+	10	0.5	1+	1o	2-	2-	3-	2o	3o	4-	19	23	15	8	31	
28	Q9A	1+	3-	2	3-	3+	4-	3-	3-	21	12	0.7	1+	3-	2+	3-	3o	3o	2+	3-	23	23	23	17	29	
29	Q2	2+	2-	2	1+	1	1-	1+	2-	12	6	0.3	2+	2-	2o	1+	1o	1o	1+	2-	11	11	11	13	9	C
30		1+	1	1+	3+	4-	4-	4-	3+	21+	14	0.8	2-	2-	1+	3o	3+	3o	3+	3+	26	29	23	16	37	
31	Q3	3-	2+	1+	2	2-	1-	1-	0+	12-	6	0.3	2+	2+	2o	2o	2-	1o	1-	1-	12	11	11	14	8	C
Mean											24	0.99									39.0	40.5	35.4	37.9		

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	Final Sa	Ri	Ra	Rs	IMF
1	3o	2-	3+	3-	2+	2+	2+	3o	22	2o	2o	3o	3o	2-	2o	2+	3o	20	92.4	49	49	38	
2	3+	2+	2o	3o	3-	3-	4-	4+	33	3o	3-	3-	3o	3-	2o	3+	5-	32	96.3	56	59	42	
3	3o	4o	4o	5-	3o	2+	2o	2o	38	3+	4+	4-	5-	2o	1o	2+	2+	36	99.2	62	76	45	
4	1+	1+	1+	1+	1-	1-	0+	1o	7	2-	1o	2o	3-	1-	0+	1-	1-	9	96.3	54	58	42	
5	2-	1-	1o	2-	1o	1-	2+	4-	13	2o	1-	2o	2-	1o	1-	2-	4-	15	94.2	50	59	40	
6	3-	3-	3-	2+	1+	2-	3o	3+	22	3-	3-	3o	2o	0+	2-	3o	4o	23	94.1	60	71	40	
7	4+	3+	4-	5o	4+	6-	5+	6+	91	5o	4o	3+	5o	4+	6-	6-	6o	97	90.0	52	58	35	
8	4o	5-	5-	5-	5-	4+	5-	4+	72	5-	4+	5o	4o	4+	4o	5o	5-	73	89.9	46	48	35	
9	4o	5o	5+	4o	5-	5-	5o	5o	82	4-	4o	5o	4o	4+	5-	6-	6-	86	88.7	41	44	34	
10	4o	3+	4+	5-	5-	5-	4+	5o	67	4o	4-	5-	4+	4o	4o	4+	5+	67	86.8	29	36	32	
11	4-	4o	4o	4+	5-	4o	4-	5-	59	4-	4o	4+	4+	5-	4o	4-	5+	65	87.0	32	40	32	
12	4o	3+	5-	4+	5-	3+	4+	4+	62	4o	3+	4+	4+	4+	4-	5-	5-	61	91.7	40	48	37	
13	4o	4o	3-	3+	3o	3+	3-	4o	39	4o	4-	3-	4-	3-	3o	3-	5-	41	89.1	36	42	34	
14	4-	4o	4-	3+	4+	4o	4o	4o	52	4+	4+	4+	3+	4o	4-	4+	5-	59	86.2	18	22	31	
15	4+	4+	4o	4+	5-	5o	4o	3+	65	5-	5-	4o	4+	5-	5-	5-	4-	66	86.5	26	26	31	
16	4-	3o	3+	3-	3+	4o	3+	3+	37	4-	3-	3+	3o	4-	4+	4-	3+	40	85.3	22	26	30	
17	3+	4+	4+	4+	4o	4+	4-	3o	55	4+	4o	4o	4-	4-	4+	4o	4-	54	84.3	22	24	29	
18	4o	4o	4-	3-	3+	3-	2-	4-	37	4+	5-	4-	2o	4-	3o	2-	4o	41	85.9	18	19	31	
19	4-	3+	3o	3+	3-	2+	3o	3-	30	4o	3+	3+	3+	2-	2o	3-	3+	31	88.3	13	10	33	
20	3-	3-	2+	2o	2o	3-	3o	3-	22	3o	3-	2+	3-	2o	3o	3+	3o	26	87.9	8	11	33	
21	3o	4+	3+	3+	4-	5-	4o	3+	47	3o	5-	3o	4-	4-	4o	4o	3o	47	90.0	17	19	35	
22	4+	3-	2+	3o	4+	3-	3-	3o	34	5-	3-	2-	3o	4+	3o	2-	3o	35	90.5	24	29	36	
23	3+	4+	3+	3o	4-	3+	3-	2o	36	3o	3+	3o	3-	4-	3+	2o	2-	28	91.2	22	25	36	
24	3o	3-	2o	4o	4-	3o	2+	3o	31	3-	3-	2o	4-	4-	3o	2o	3-	27	92.1	32	34	37	
25	3+	1+	2+	3-	3+	4o	4-	3-	31	3o	1+	2o	3-	3o	4+	4+	3+	34	90.4	37	44	36	
26	3-	3-	3-	3o	1+	2-	2-	1o	18	3-	3-	1+	3o	1o	1+	1-	1+	14	88.1	24	28	33	
27	1+	1o	2o	2-	3-	2+	3o	4-	21	1+	1o	1+	1+	2+	1+	3-	4-	17	88.0	15	22	33	
28	2-	2+	2+	3-	3o	3+	3-	3-	22	1+	3o	3-	3o	3o	3o	2+	3-	23	87.3	14	19	32	
29	2+	2-	2+	2-	1o	1+	2-	2-	12	2+	2o	2o	1+	1o	0+	1+	1+	11	85.8	14	19	31	
30	2-	1+	2-	3o	4-	4-	4-	3+	29	2-	2o	1+	3o	3o	3-	3+	3o	23	86.1	26	31	31	
31	2+	2o	1+	2o	2-	1+	1o	1o	11	3-	3-	3-	2o	2-	0+	1-	0+	13	84.9	24	35	30	
Mean									38.6									39.2	89.5	31.7	36.5	34.7	

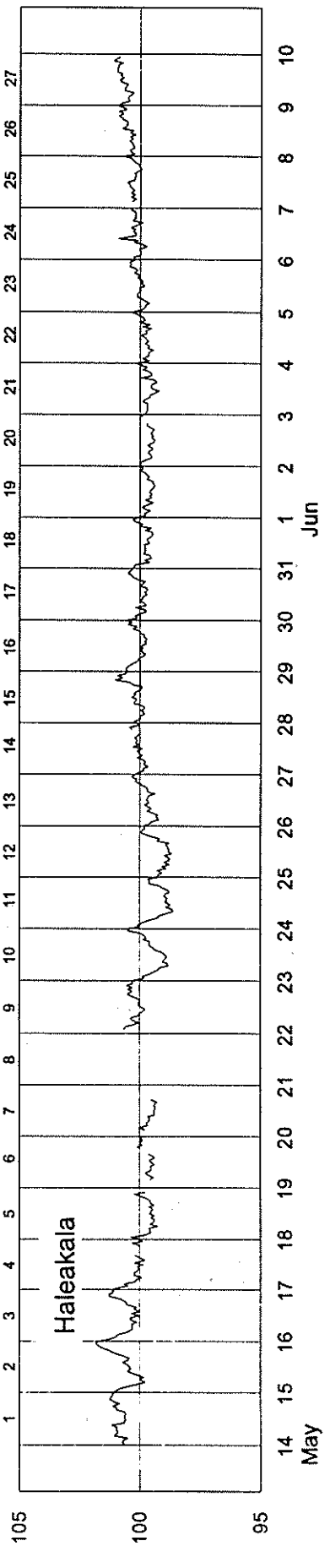
GEOMAGNETIC ACTIVITY INDICES

April 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	Q6	0+	2	2	1+	2+	2+	2	2-	14	6	0.3	1-	1+	2-	1+	2o	2+	2-	2-	12	15	19	12	22	
2	D5	4-	3	3+	5-	5	5+	7	6+	38+	53	1.6	3o	2o	3+	4o	5-	5-	6-	6-	69	68	53	35	86	
3	D1	6-	6+	7-	6	6-	5+	7-	7+	50-	92	1.9	5-	5o	6-	5o	5o	5-	5o	6-	99	104	92	91	105	
4	D3	7	6+	5	5-	5-	5-	5	4+	42-	59	1.7	6-	5-	5-	4o	3+	3+	4-	4-	63	76	51	77	51	
5		5-	4	4+	4+	5	5	4-	6	37	41	1.5	3+	4-	4o	4-	5-	4o	3o	5o	53	62	58	49	72	
6		5-	4+	5+	5+	5	5+	5	5	40	48	1.6	4-	4-	5-	5-	4+	4+	4+	4+	63	71	75	67	79	
7		5-	5+	5	5-	5-	5	4	4+	38-	41	1.5	4-	4-	4+	4-	4-	4-	3+	4-	49	64	51	58	57	
8		4+	5+	5+	4+	5-	4	5-	5-	37+	40	1.4	4-	5-	4+	4+	4o	3+	4+	4+	58	66	66	63	68	
9	D4	6	5	5-	6	5-	5	5	4+	41-	52	1.6	5-	4o	4+	5o	4o	4o	4+	4-	63	74	60	77	58	
10		5	5-	3+	4+	5-	5-	5	5	37-	39	1.4	4o	4-	3o	4o	4o	4-	4-	4o	47	62	54	56	60	
11		4+	6-	6-	5+	4-	4+	4+	5+	39-	46	1.5	4o	5o	5-	4o	4-	4o	4-	5-	64	66	75	81	60	
12		5-	4	4	3+	3+	4-	5	5-	33-	30	1.3	4-	3+	4-	3o	3o	3o	4+	4-	42	52	39	39	53	
13		3+	4	4+	3+	4	5+	5-	4+	33+	31	1.3	3o	3+	4o	3-	3o	4o	4+	4-	44	54	57	39	72	
14		5+	3+	3+	4-	4-	4	4-	4-	31-	26	1.2	4o	3-	3+	4-	3+	3+	3+	3+	39	40	43	40	42	
15		4-	4-	3-	3	3-	4-	4-	4-	27-	19	1.0	3o	3o	2+	3+	3o	3o	3+	3o	30	34	30	30	35	
16		3	5+	3+	2+	3	3+	6	5+	32-	33	1.3	3-	4o	3+	3-	3-	3-	5o	4+	43	55	34	26	63	
17	D2	7-	8+	8+	7	5-	3	3	3+	44+	100	1.9	6-	7-	7o	7-	4o	3-	3-	3o	122	107	87	159	35	
18		3+	4-	4-	4-	4-	3+	4	3+	29-	21	1.1	3-	3+	3o	3o	3o	3o	4-	3o	32	38	28	33	33	
19		5	3	3+	3+	2	2-	2+	3-	23+	17	0.9	4+	2+	3-	3o	2o	1+	2-	2o	24	27	28	38	17	
20	Q10A	2+	3-	3	3	2-	2-	1	1+	17-	9	0.5	2-	2+	3-	3o	2-	1+	1-	1o	14	14	16	19	11	
21		2	3	2+	1+	1+	1+	3-	3	17	9	0.5	2-	2+	2+	1+	1+	1+	2+	3-	14	17	11	13	15	C
22	Q8A	2+	2-	1+	2	3-	1+	1+	2+	15	7	0.4	2-	1o	2-	2o	3-	1+	1+	2o	12	17	12	11	18	
23		1-	1+	1-	3	3	2	3+	4+	18+	12	0.7	1-	1o	1+	3-	3o	2-	3o	4-	20	27	19	13	33	
24	Q7A	2	2	2	2	2	3-	1	1+	15	7	0.4	2-	2-	2+	2+	2-	2+	1o	1o	13	14	15	15	14	
25	Q9A	3-	3-	2	2	1	2-	2-	2+	16	8	0.4	2o	2+	3-	2-	1o	1+	1o	2-	13	19	13	21	11	
26	Q4	1+	1+	2	2-	2-	1+	1-	1-	11-	5	0.2	1-	1+	2o	2-	1+	1+	1-	1o	8	10	9	11	8	CC
27	Q3	1	2+	1	1+	2-	1	1	1	10+	5	0.2	1o	2-	1+	1+	2o	1o	1-	1o	9	10	9	9	10	CC
28	Q2	2	1+	0+	0+	2-	1-	1-	1-	8-	4	0.1	2-	1+	1-	0+	1+	0+	1-	1o	7	9	7	9	7	CC
29	Q5	1-	2	2	1+	0+	0+	1-	2+	10-	5	0.2	1-	1+	2+	2-	0+	1-	0+	2o	9	12	9	13	9	CC
30	Q1	0+	1	1	0+	0+	0+	1-	0+	4+	3	0.0	0+	1o	1-	0+	0+	1-	1o	0+	4	6	2	4	5	CK
Mean											29	0.99									38.0	43.0	37.5		40.2	

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	Sa	Final Ri	Ra	Rs	IMF
1	1-	1+	2-	1+	2+	3-	2o	2o	14	1o	1+	2-	2-	2-	2-	1+	2-	10	82.4	17	16	27	
2	3+	2+	4-	4+	5+	5-	6-	6o	81	3-	2o	3o	4o	4o	4o	6-	5o	57	79.3	0	5	24	
3	5o	5+	6-	5o	5o	5o	5+	6-	108	4o	5-	6-	5o	5o	4o	5o	5+	89	77.4	0	0	22	
4	6o	5-	5o	5-	4o	4-	4o	4o	75	5o	5-	4o	4-	3o	3-	3+	3+	52	77.2	0	2	21	
5	4o	4-	4-	4-	5-	4+	3+	5-	56	3-	4-	4+	3+	4+	4-	3-	5o	50	77.2	7	6	21	
6	4o	3+	5o	5-	5-	5-	4+	5-	72	4-	4-	4+	4+	4-	4o	4+	4-	54	73.3	0	3	17	
7	4+	4+	5-	4o	4o	4o	3+	4-	57	3o	3+	4+	3+	3+	4-	3+	4-	41	73.0	0	0	17	
8	4-	5-	4+	4+	4+	3+	4o	4+	61	3+	4+	4+	4+	4-	3o	4+	5-	55	72.9	8	8	17	
9	5o	4+	4+	5+	5-	4+	4+	4-	73	5-	3+	4+	5-	4-	4o	4o	3+	55	72.9	8	8	17	
10	4o	4o	3+	4+	4o	4o	4o	4o	52	4-	4-	3-	4-	4-	3+	3+	4-	42	75.7	9	10	20	
11	4+	5o	5-	5-	4o	4+	4-	5o	72	4-	5-	5-	4-	4-	4-	4-	5-	56	74.6	11	11	19	
12	4-	4o	4o	3o	3+	3+	4+	4-	47	3+	3o	4-	3-	3-	3-	5-	3+	36	74.2	10	11	18	
13	3-	3+	4+	3o	4-	4o	4+	4-	47	3o	3+	4o	3-	2+	4o	4o	4o	41	74.3	13	13	18	
14	4+	3o	3+	4-	4-	3+	3+	3+	43	4-	3-	3o	4-	3+	3o	3o	3+	34	79.9	12	15	24	
15	4-	3o	3-	3+	3+	3+	3+	3+	36	3-	3o	2o	3+	2+	2+	3o	3-	23	80.6	19	20	25	
16	3-	5-	3+	3-	3-	3-	5o	4+	46	3-	3+	3o	2+	3-	3-	5o	5-	40	82.3	12	15	27	
17	6o	7o	8-	7+	5-	3+	3o	4-	161	5o	6-	6+	6o	3+	2o	2o	3-	84	82.5	17	18	27	
18	3o	4-	3+	3o	3+	3+	4-	3o	37	2+	3o	3o	3-	3-	3-	3+	3-	26	84.9	17	17	30	
19	5-	2+	3o	3o	2+	2-	2+	3-	27	4+	2+	3-	3-	2o	1-	1+	1+	21	86.2	21	23	31	
20	2-	2+	3-	3o	2-	2-	1o	1+	16	1+	2o	2+	3-	2-	1+	0+	0+	11	87.0	28	29	32	
21	2-	3-	3-	1+	2-	2-	3-	3o	18	1+	2o	2o	1o	1o	1-	2-	2o	10	87.6	31	34	33	
22	2o	1o	2o	2+	3-	2-	1+	2+	15	1+	1o	1+	2o	3-	1-	1o	1+	10	86.3	38	40	31	
23	1o	1+	2-	3o	3+	2+	3+	4o	24	0o	1o	1-	3-	3-	1+	3-	3+	16	86.1	37	38	31	
24	2-	2o	2+	3-	2+	3-	1+	1+	16	1+	1o	2+	2o	1+	2-	1-	1-	10	84.3	40	40	29	
25	2o	2+	3-	2o	1+	2-	1+	3-	16	2-	2o	3-	2-	0+	1-	0+	1-	10	83.8	30	34	29	
26	1o	1+	2-	2-	2-	1+	1+	1+	10	0+	1o	2o	2-	1+	1o	0+	1-	7	82.0	30	33	27	
27	1+	2o	1+	2o	3-	2-	1o	1+	12	1-	2-	1o	1-	1+	0+	0+	0+	5	79.0	31	35	23	
28	2o	1+	0+	1-	2-	1-	1+	1+	8	2-	2-	1-	0+	1o	0o	0o	1-	5	78.4	15	21	23	
29	1o	2o	2+	2-	1-	1o	1-	2+	11	0+	1-	2+	2-	0+	0+	0o	1+	6	78.9	9	10	23	
30	1-	1+	1+	0+	1-	1-	1+	0+	6	0o	1-	0+	0o	0+	0+	0+	1-	2	76.0	12	17	20	
Mean									43.9									31.9	79.7	16.1	17.7	24.1	

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



Editor's Note: We received corrected data for the Haleakala graph for the time period 17-20 May, 1994. The daily averages published in SGD 599 Part 1, July 1994 issue, are correct.

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."