JULY 1994 NUMBER 599 - Part I

Solar-Geophysical Data prompt reports

Data for June, May 1994, and Late Data
Explanation of Data Reports Issued as Number 515 (Supplement) July 1987

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JULY 1994 NUMBER 599 - Part I

Solar-Geophysical Data prompt reports

Data for June, May 1994, and Late Data

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SOLAR-GEOPHYSICAL DATA

Number 599

(Issued in Two Parts)

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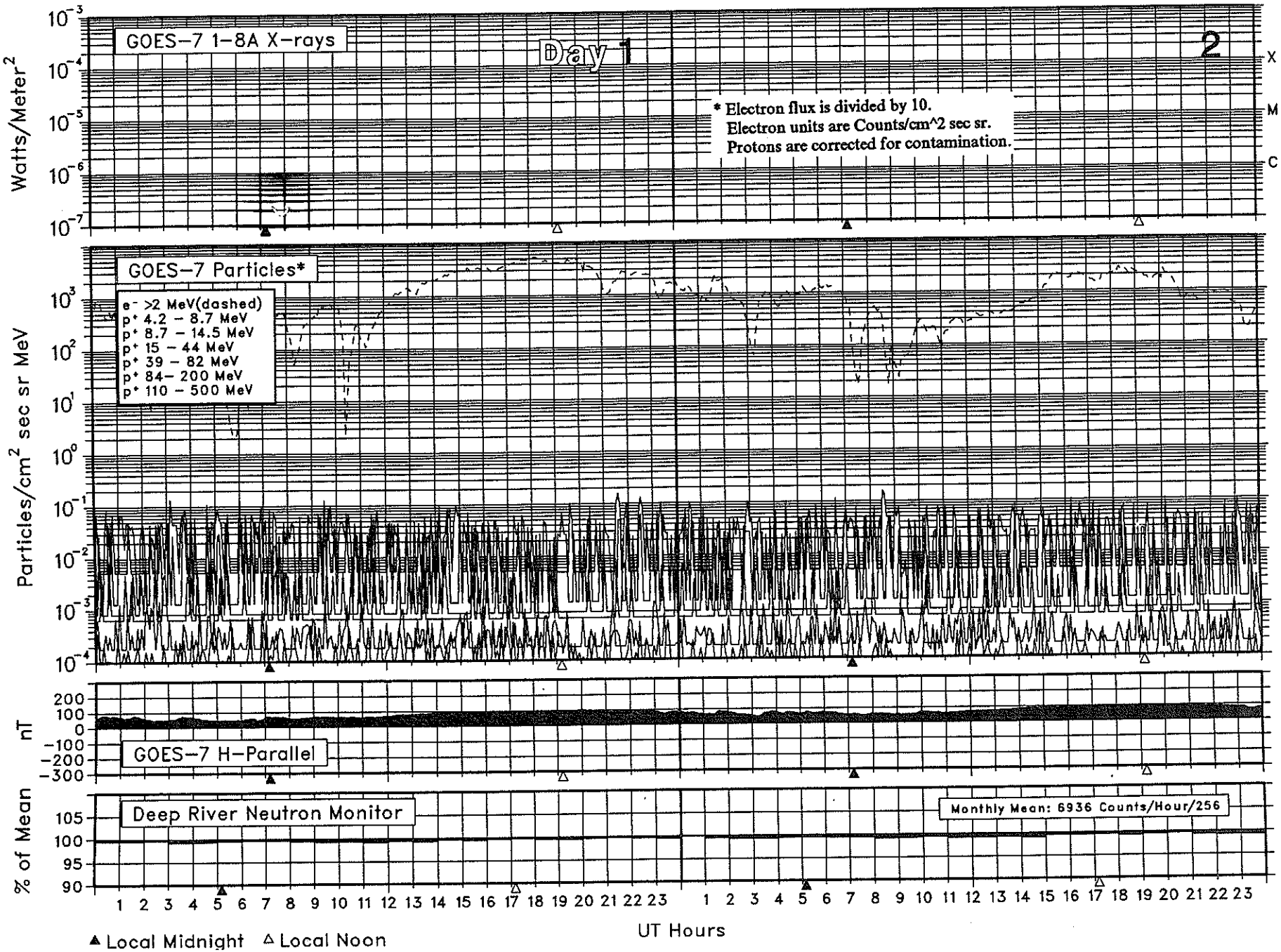
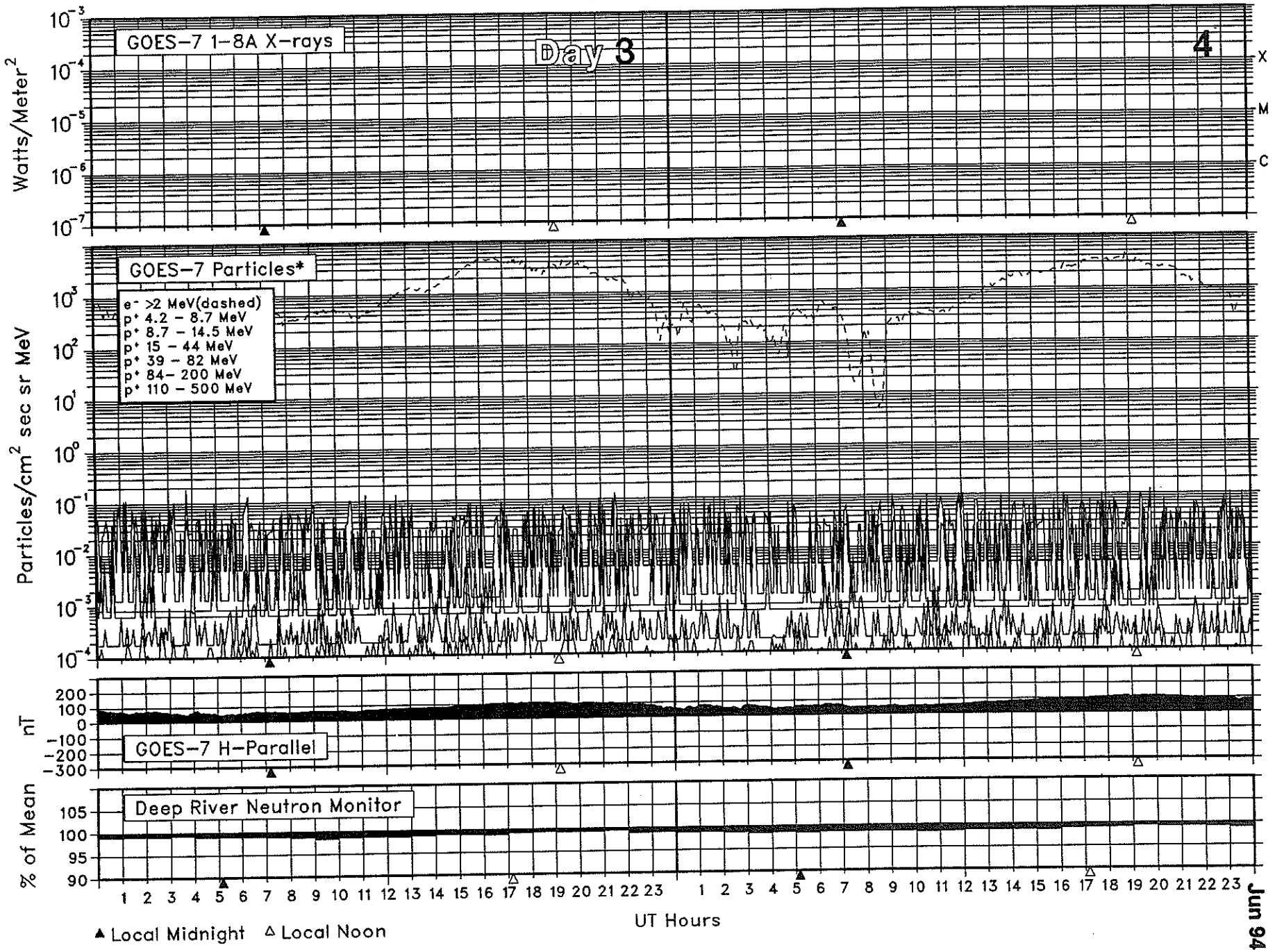


SOLAR-TERRESTRIAL ENVIRONMENT

June 1994



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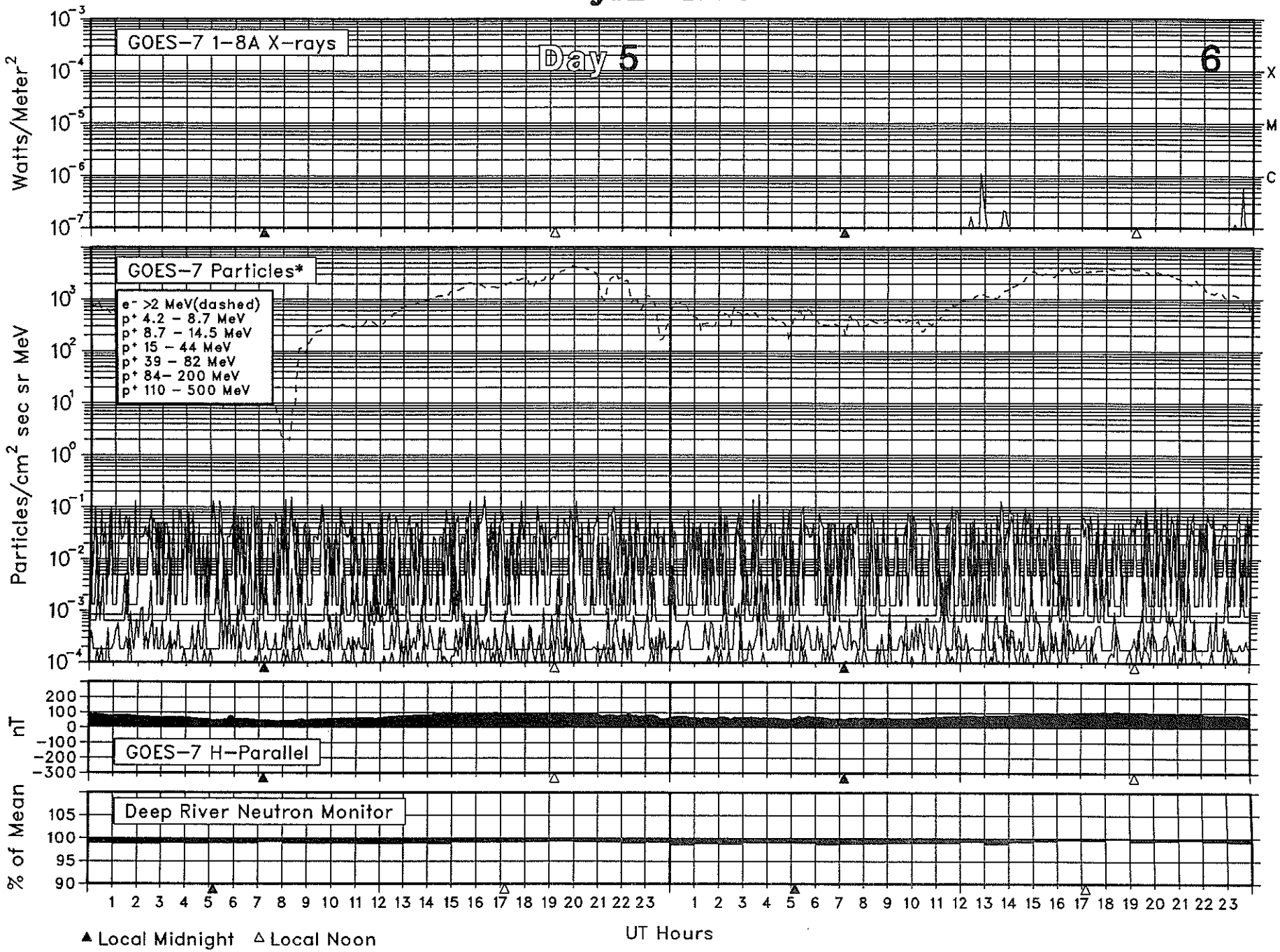

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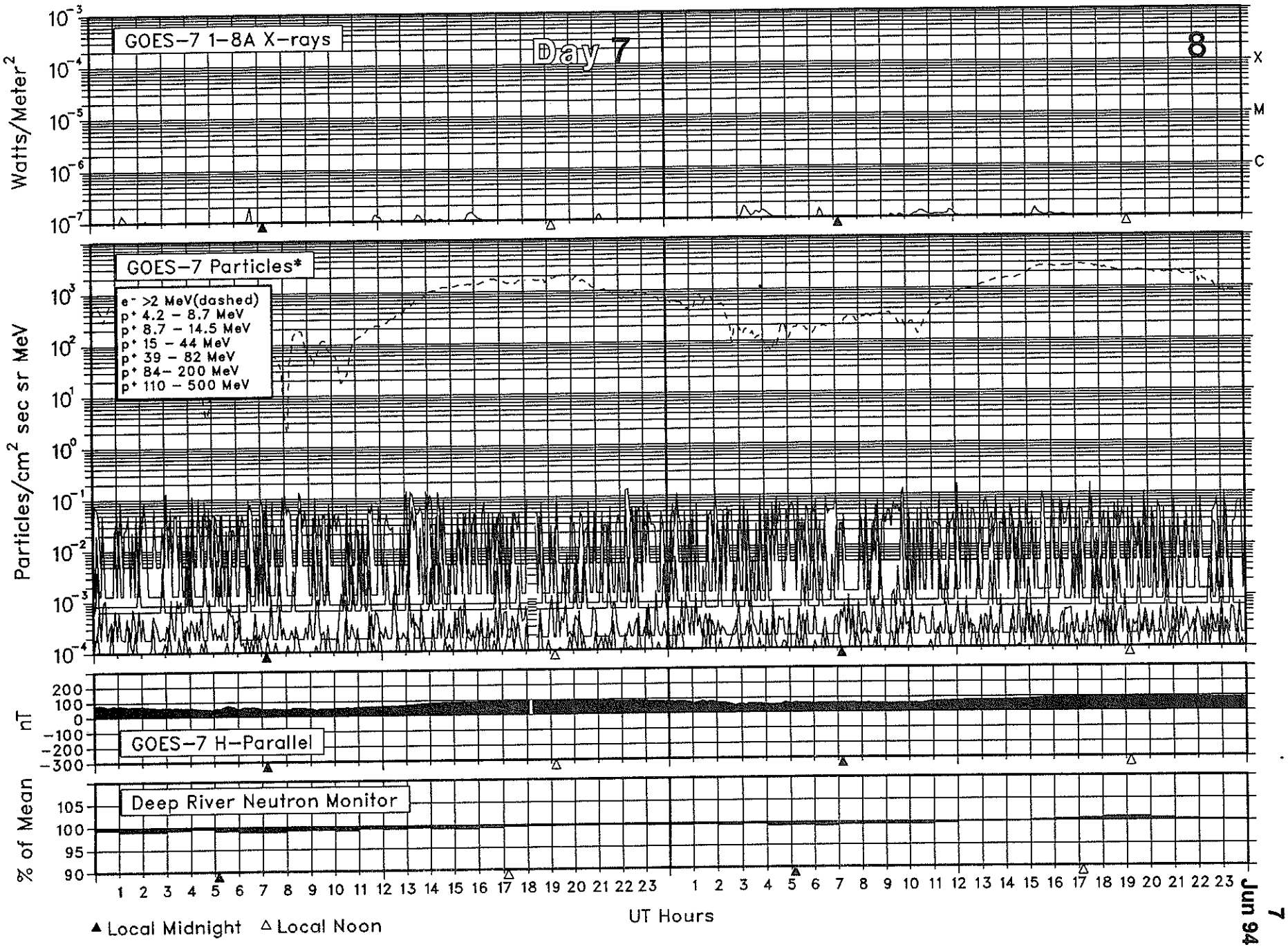

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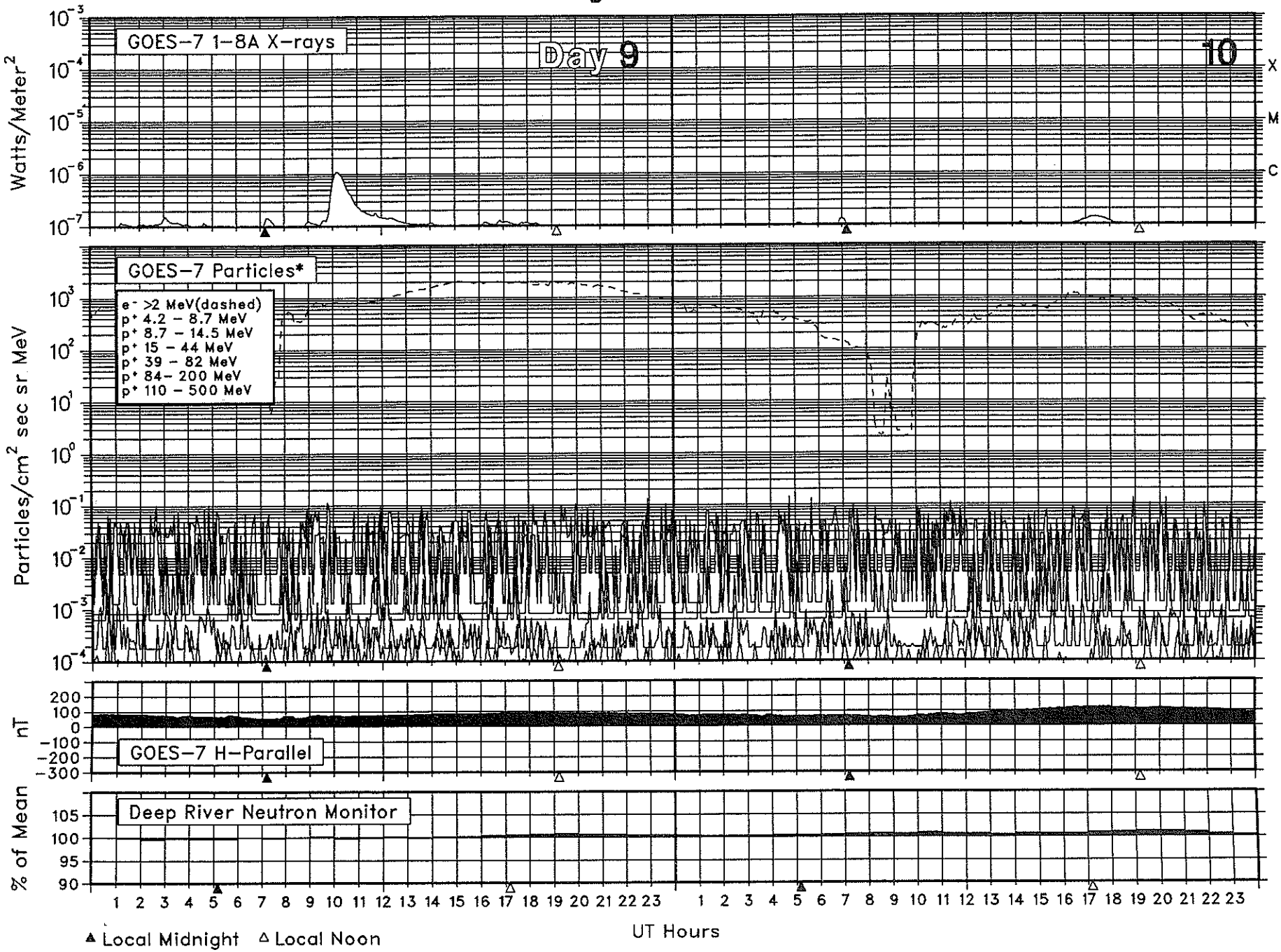

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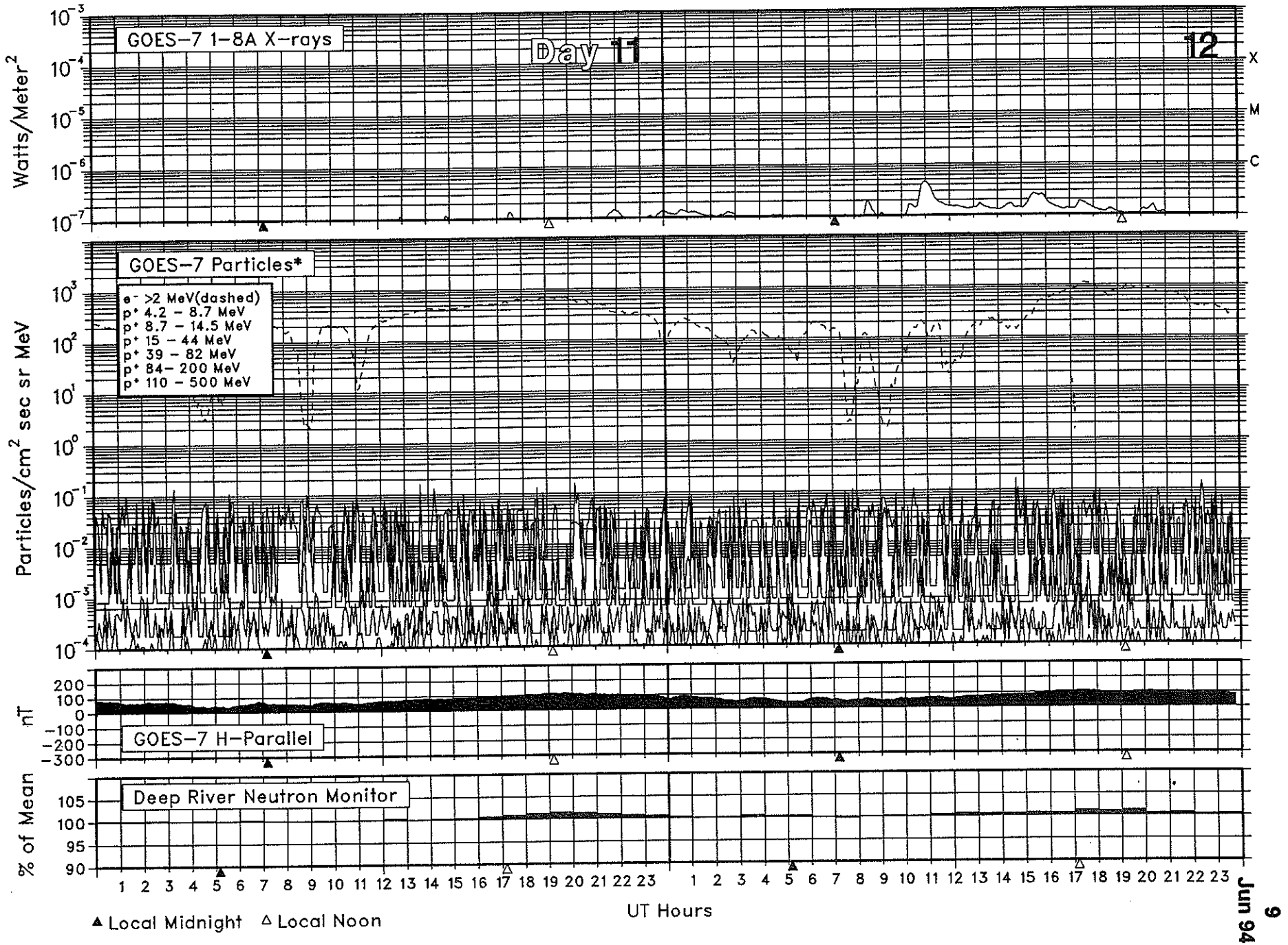

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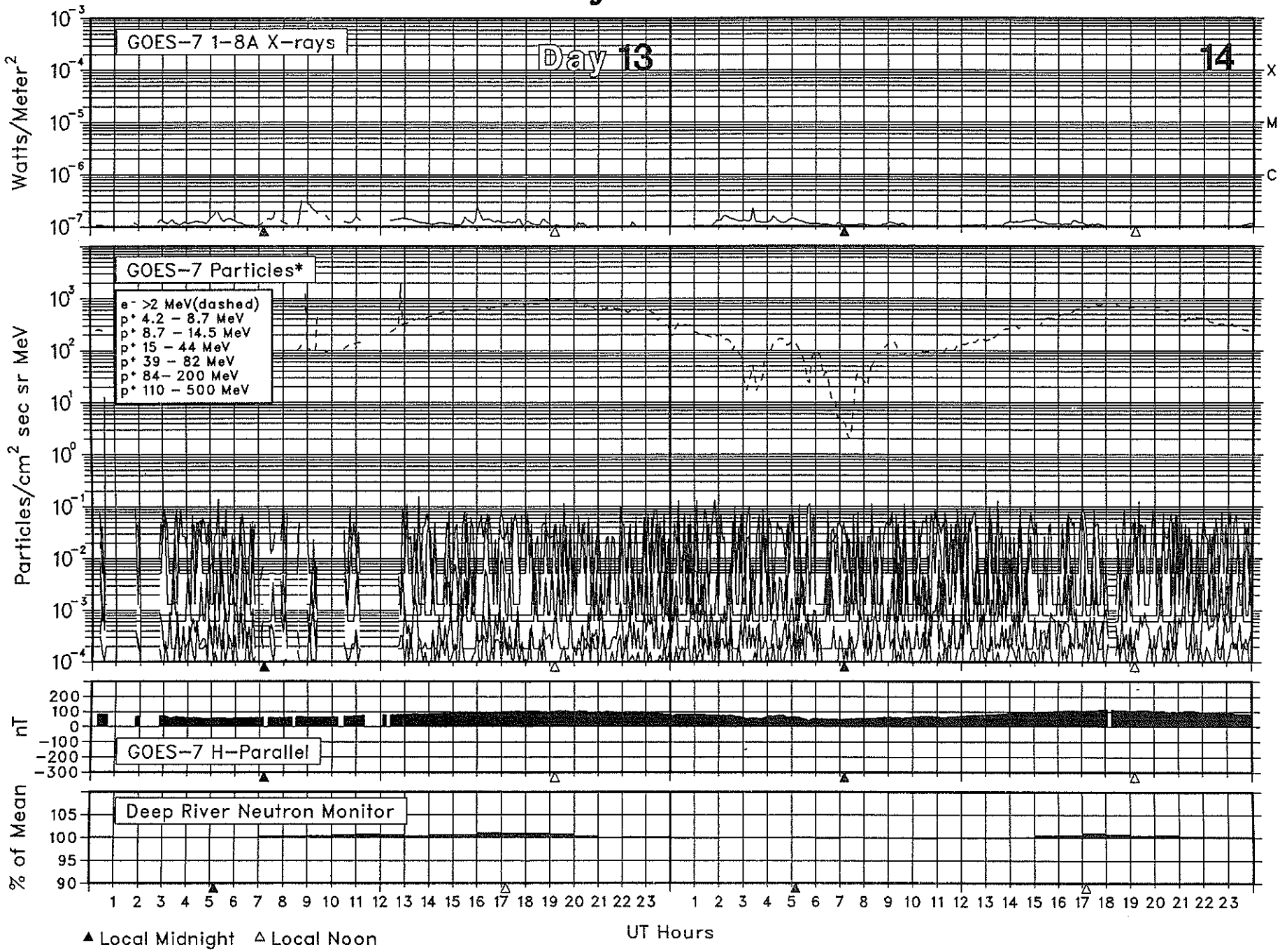

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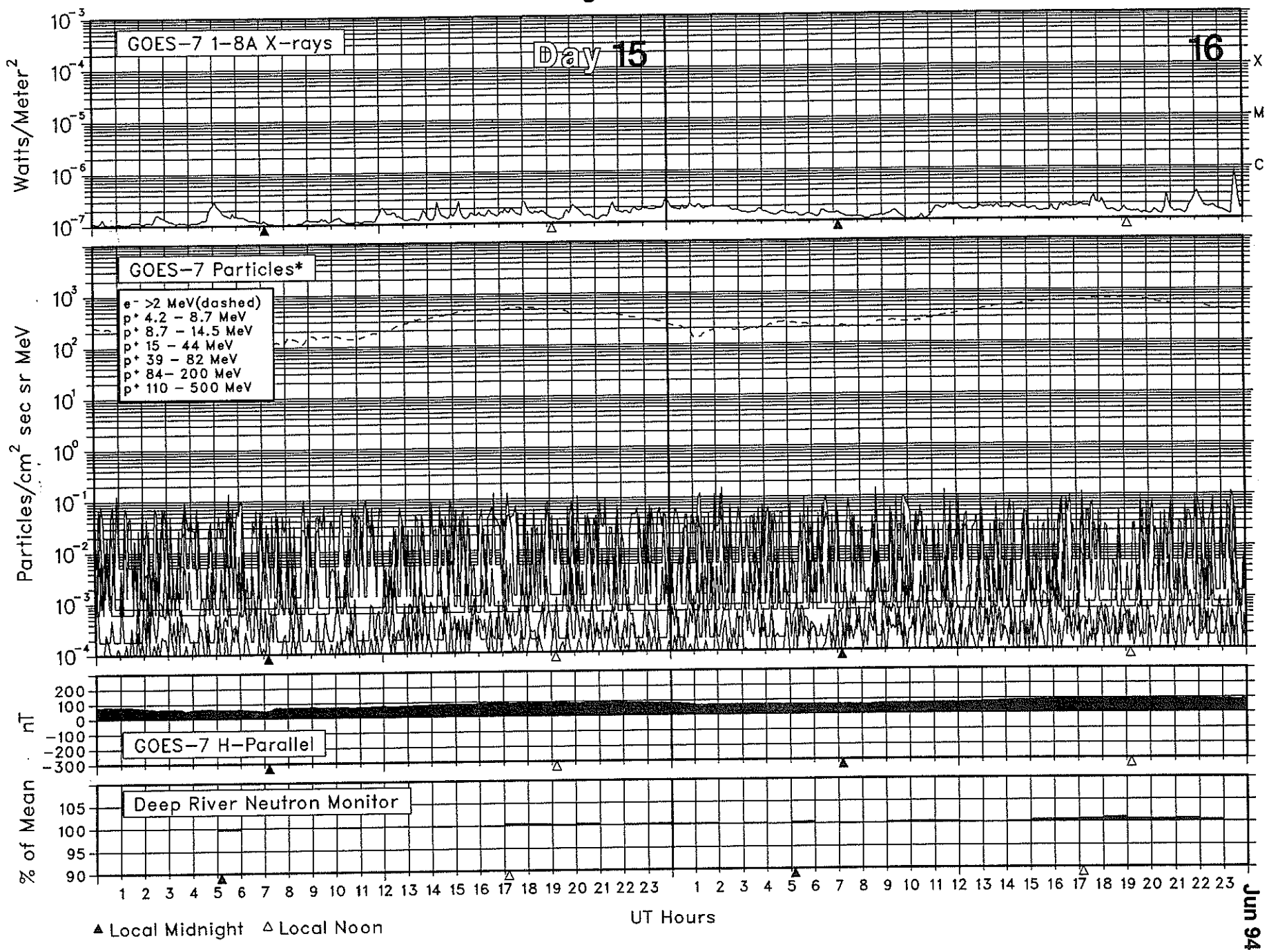
June 1994



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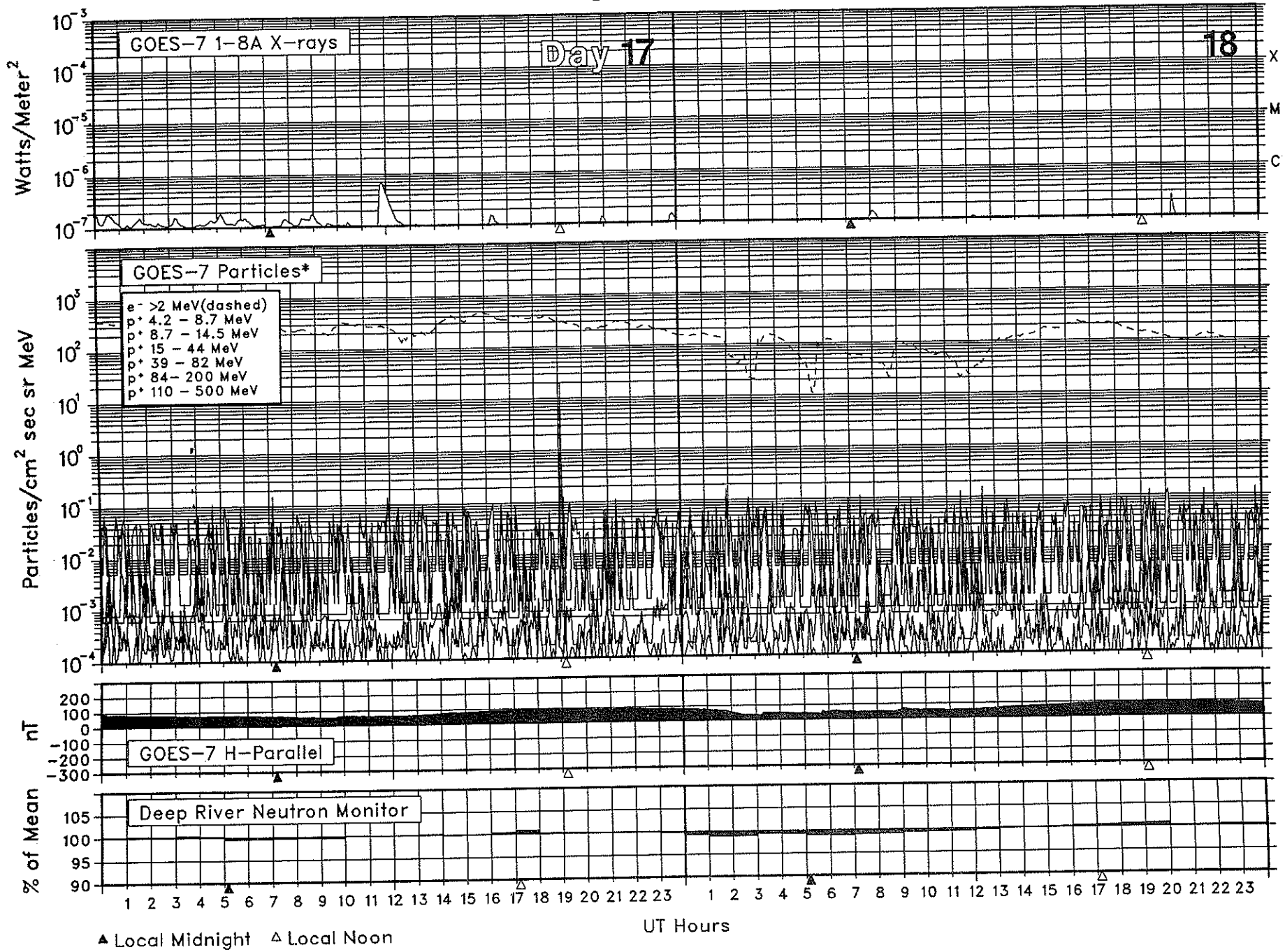

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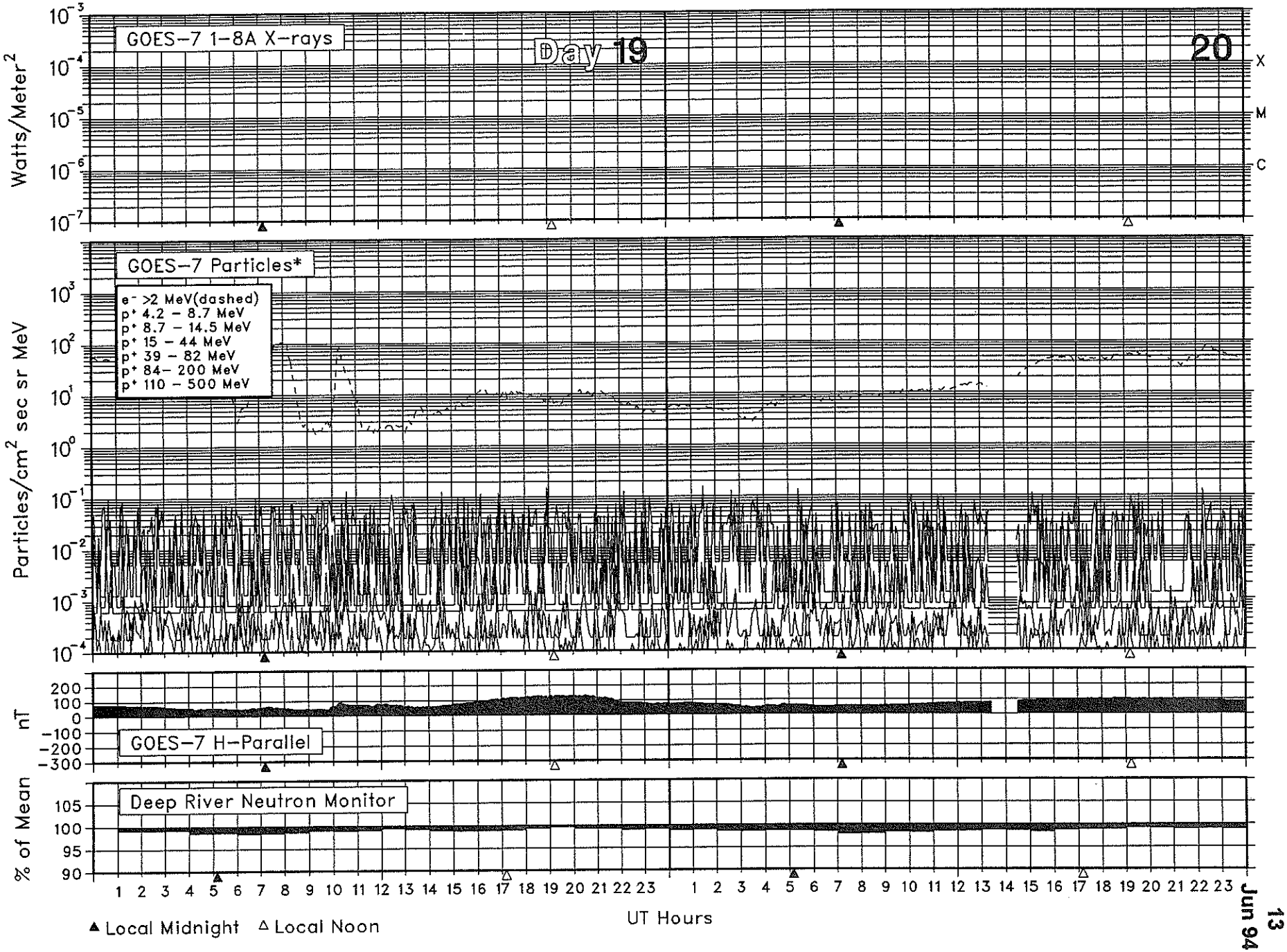

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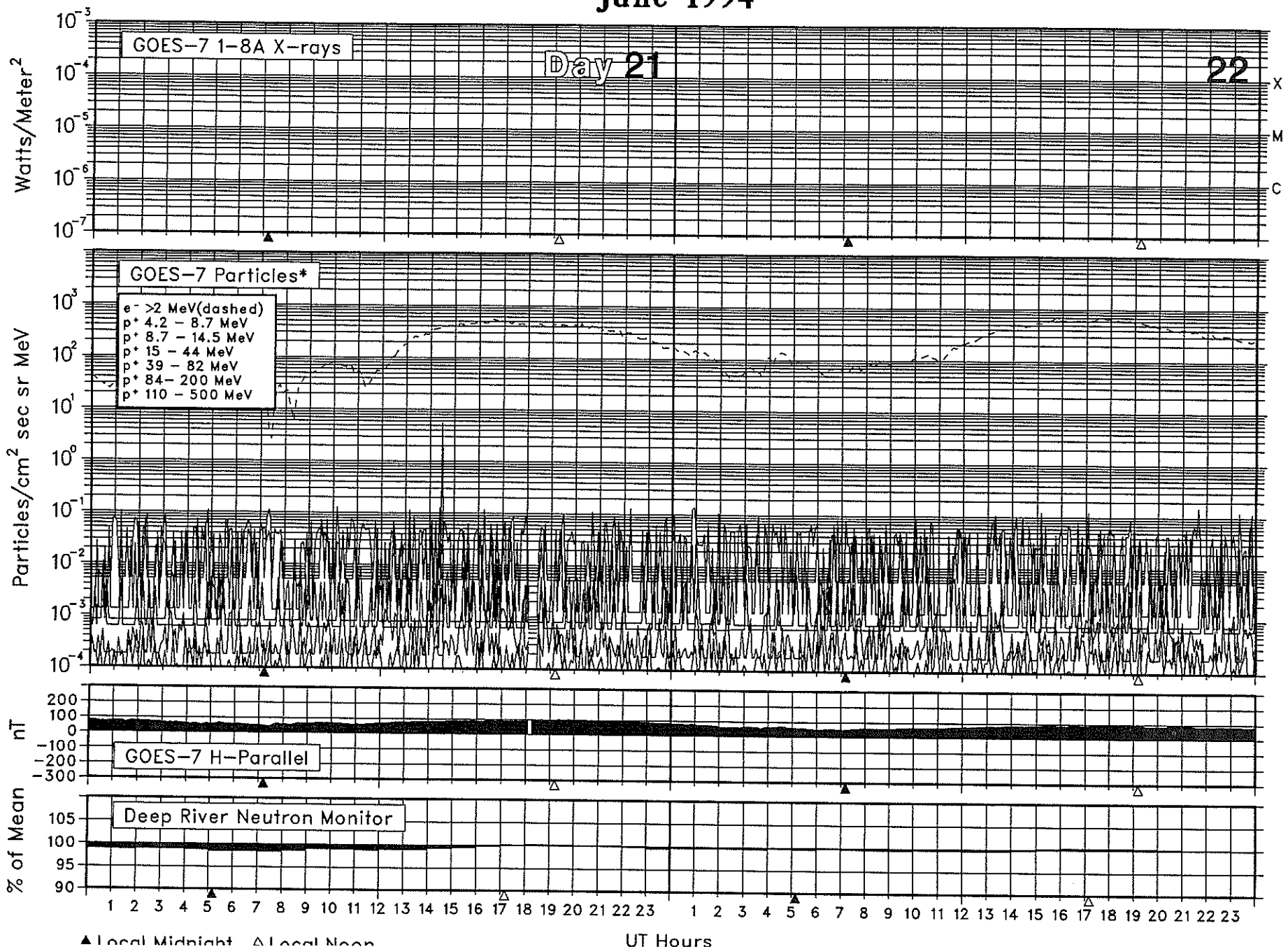

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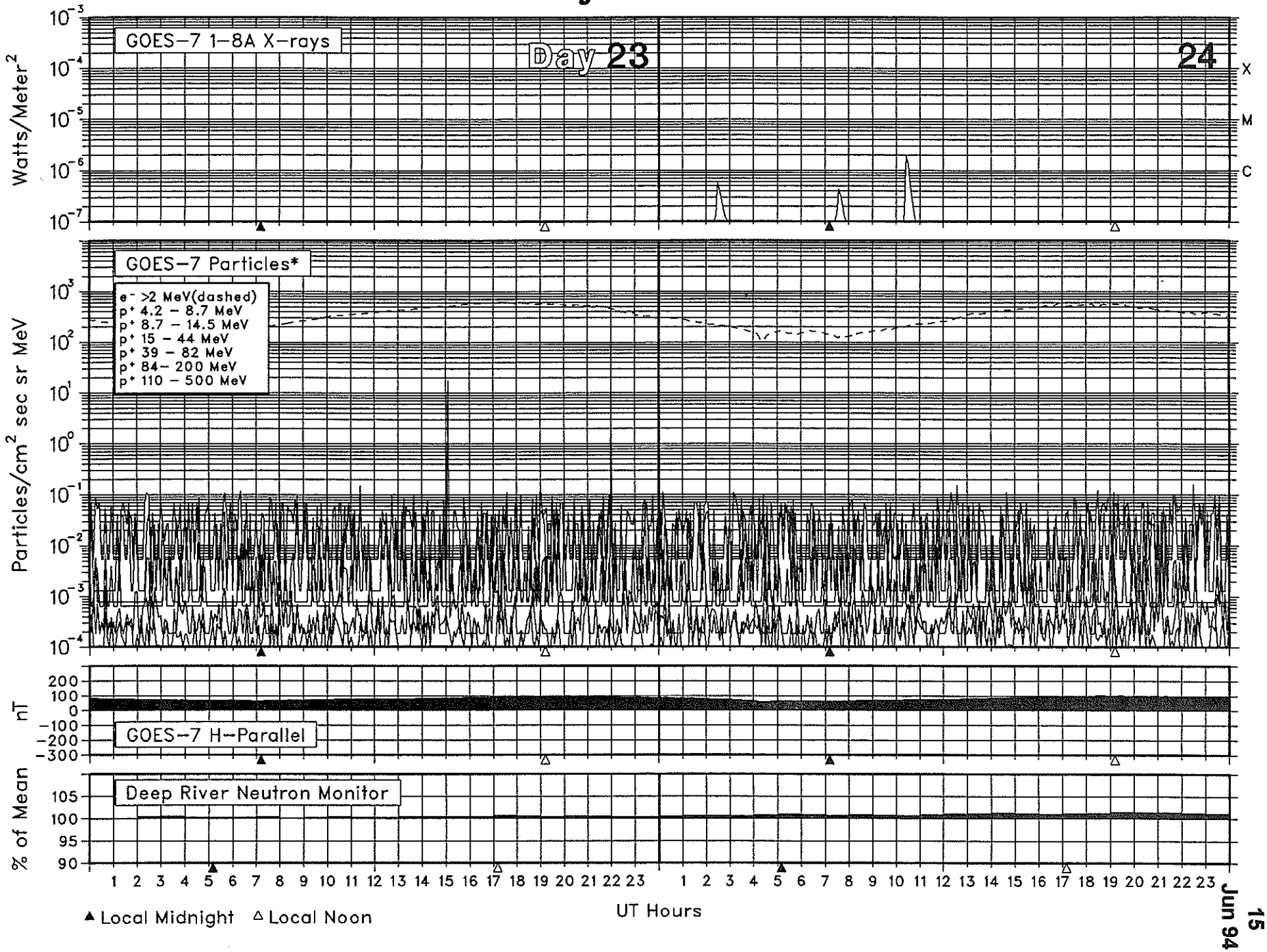

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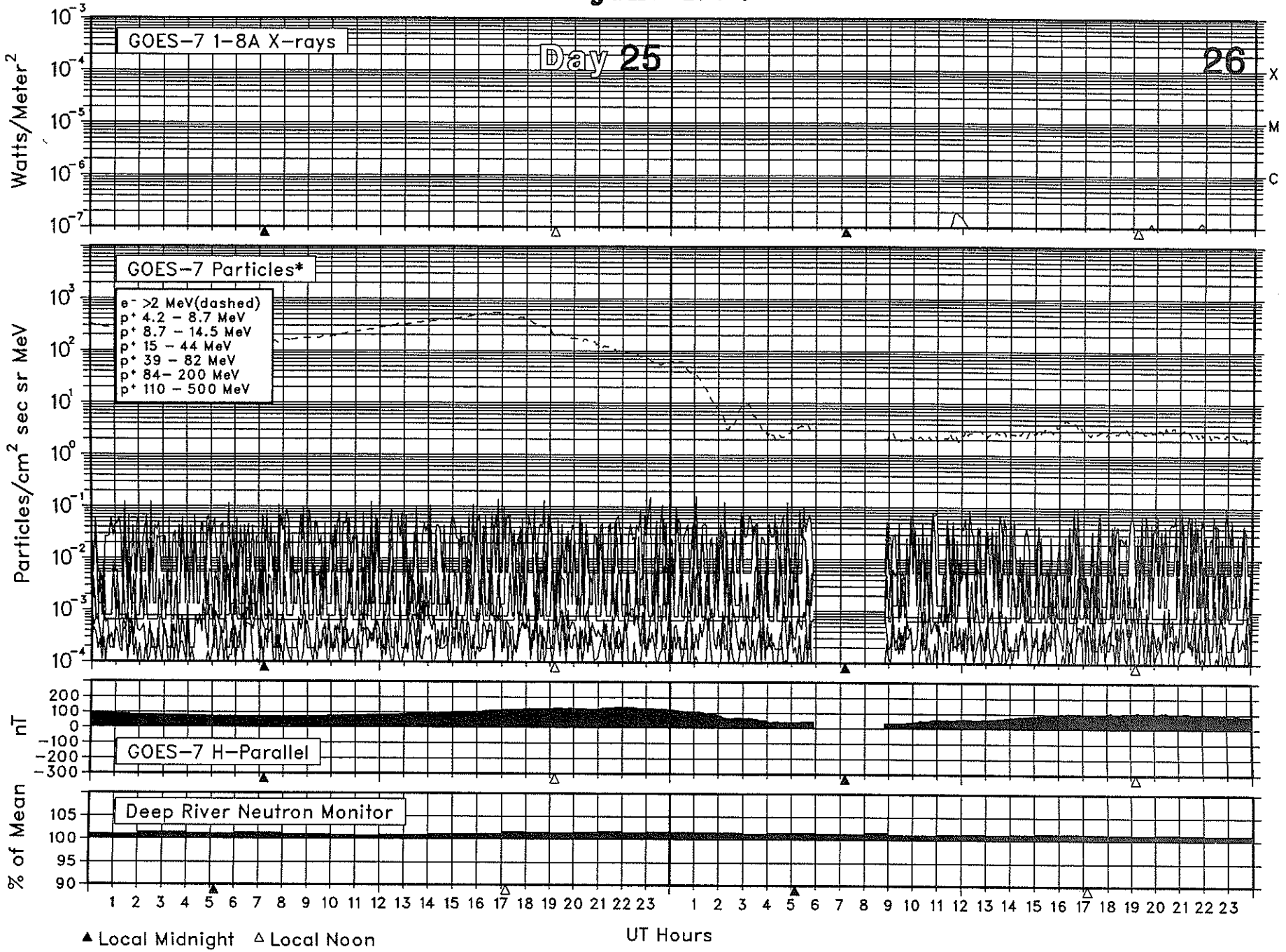

▲ Local Midnight △ Local Noon

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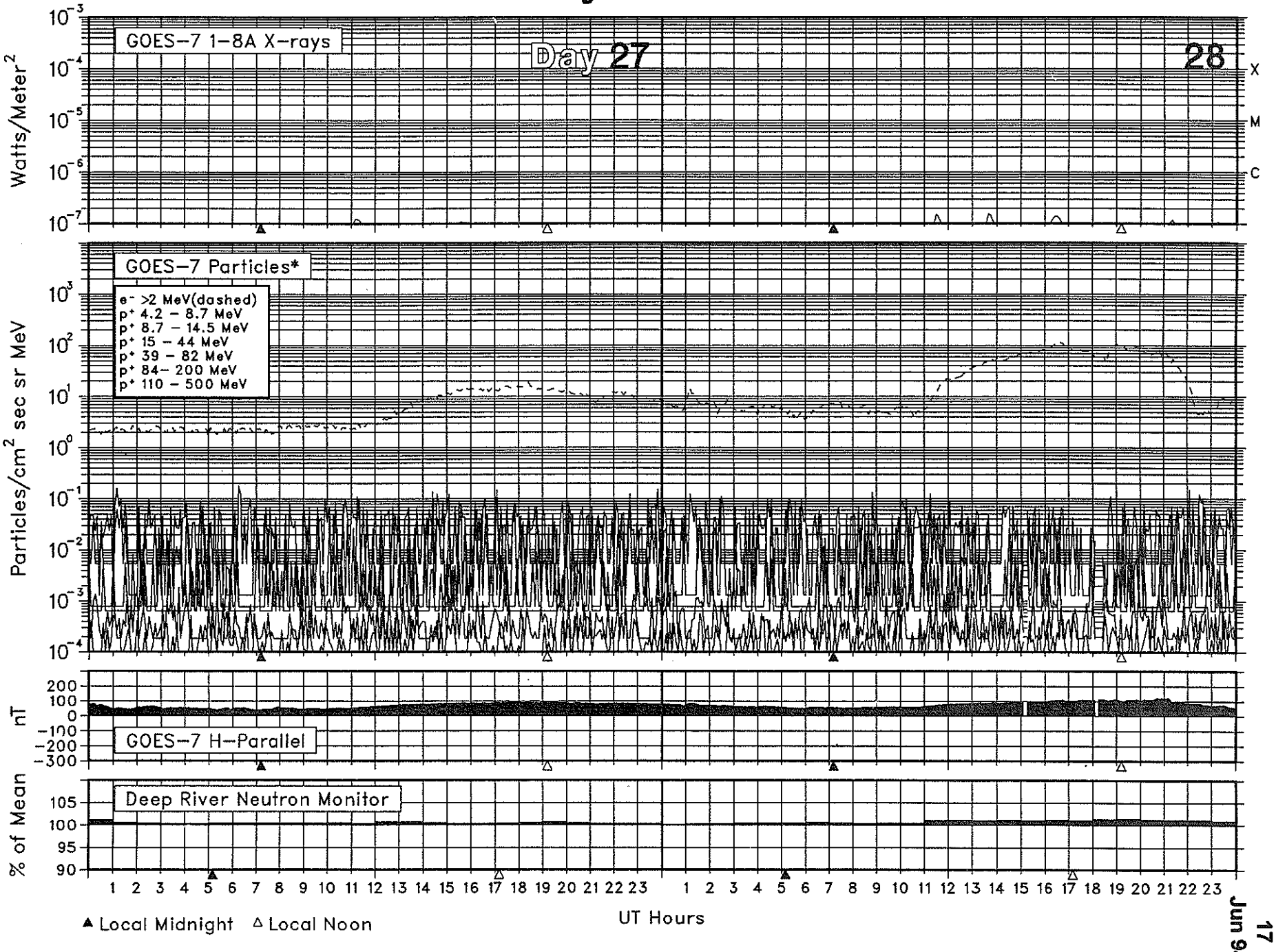

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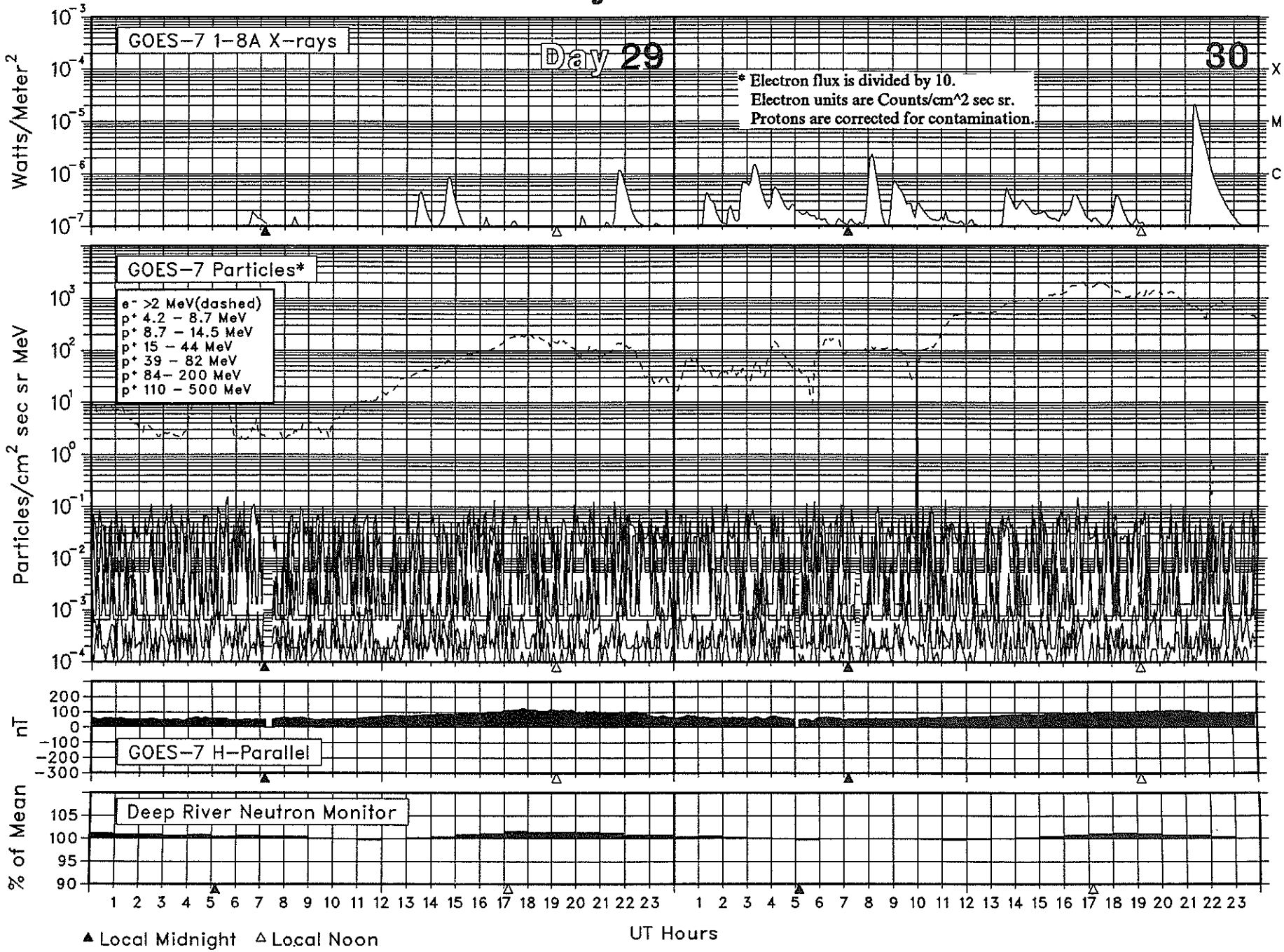


ALERT PERIODS

INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

Summary of the Geoalert Messages — JUNE 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]
152	01	31	000	069	29		0	0	0	0	01	Q	SOL: Quiet
							0	0	0	0	01	Q	MAG: Minor
							0	0	0	0	01	Q	PROTON: Quiet
153	02	01	000	068	20		0	0	0	0	02	Q	SOL: Quiet
							0	0	0	0	02	Q	MAG: Minor
							0	0	0	0	02	Q	PROTON: Quiet
154	03	02	000	068	21		0	0	0	0	03	Q	SOL: Quiet
							0	0	0	0	03	Q	MAG: Active
							0	0	0	0	03	Q	PROTON: Quiet
155	04	03	000	068	16		0	0	0	0	04	Q	SOL: Quiet
							0	0	0	0	04	Q	MAG: Active
							0	0	0	0	04	Q	PROTON: Quiet
156	05	04	000	068	16		0	0	0	0	05	Q	SOL: Quiet
							0	0	0	0	05	Q	MAG: Active
							0	0	0	0	05	Q	PROTON: Quiet
157	06	05	000	068	21		0	0	0	0	06	Q	SOL: Quiet
							0	0	0	0	06	Q	MAG: Active
							0	0	0	0	06	Q	PROTON: Quiet
158	07	06	014	071	18	S16	W57	4	0	0	07	Q	SOL: Quiet
							0	0	0	0	07	Q	MAG: Quiet
							0	0	0	0	07	Q	PROTON: Quiet
159	08	07	039	077	13	S16	W69	3	0	0	08	Q	SOL: Quiet
						S06	E77	0	0	0	08	Q	MAG: Quiet
						N04	E80	0	0	0	08	Q	PROTON: Quiet
160	09	08	062	080	8	S16	W81	0	0	0	09	Q	SOL: Quiet
						S10	E62	0	0	0	09	Q	MAG: Quiet
						N09	E66	0	0	0	09	Q	PROTON: Quiet
						S09	W27	0	0	0	09	Q	
161	10	09	062	083	7	S11	E48	3	0	0	10	Q	SOL: Quiet
						N08	E53	0	0	0	10	Q	MAG: Active
						S09	W41	0	0	0	10	Q	PROTON: Quiet
						N04	E06	0	0	0	10	Q	
162	11	10	070	085	16	S11	E36	0	0	0	11	Q	SOL: Quiet
						N08	E40	0	0	0	11	Q	MAG: Active
						S09	W54	0	0	0	11	Q	PROTON: Quiet
						N04	W07	0	0	0	11	Q	
163	12	11	080	086	15	S10	E22	0	0	0	12	Q	SOL: Quiet
						N08	E27	1	0	0	12	Q	MAG: Active
						S09	W67	0	0	0	12	Q	PROTON: Quiet
						N05	W21	0	0	0	12	Q	
						N13	E03	0	0	0	12	Q	
164	13	12	089	086	22	S10	E09	1	0	0	13	Q	SOL: Quiet
						N08	E14	0	0	0	13	Q	MAG: Active
						S09	W81	0	0	0	13	Q	PROTON: Quiet
						N05	W34	0	0	0	13	Q	
						N12	W12	0	0	0	13	Q	
						S13	E76	0	0	0	13	Q	

ALERT PERIODS

INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

Summary of the Geoalert Messages — JUNE 1994

Julian Day	Date of Issue	Date of Obser-vation	Wolf No.	10-cm Solar Flux	A-index	Location °Lat °Long	Flares Total	M	X	Date of Forecast	Region Forecast [1]	Geoadvice[1]
165	14	13	073	085	13	S09 W05	0	0	0	14	Q	SOL: Quiet
						N08 E01	0	0	0	14	Q	MAG: Active
						N05 W47	0	0	0	14	Q	PROTON: Quiet
						N12 W29	0	0	0	14	Q	
						S12 E64	0	0	0	14	Q	
166	15	14	088	085	14	S09 W19	0	0	0	15	Q	SOL: Quiet
						N09 W12	0	0	0	15	Q	MAG: Quiet
						N05 W60	0	0	0	15	Q	PROTON: Quiet
						N12 W42	1	0	0	15	Q	
						S13 E51	0	0	0	15	Q	
167	16	15	086	088	8	S10 W33	1	0	0	16	Q	SOL: Quiet
						N09 W27	0	0	0	16	Q	MAG: Quiet
						N04 W75	0	0	0	16	Q	PROTON: Quiet
						N11 W54	3	0	0	16	Q	
						S13 E38	1	0	0	16	Q	
168	17	16	080	088	3	S10 W46	1	0	0	17	Q	SOL: Quiet
						N08 W39	0	0	0	17	Q	MAG: Quiet
						N11 W67	2	0	0	17	Q	PROTON: Quiet
						S13 E24	0	0	0	17	Q	
						S11 E63	0	0	0	17	Q	
169	18	17	053	084	9	S11 W60	1	0	0	18	Q	SOL: Quiet
						N08 W54	0	0	0	18	Q	MAG: Quiet
						N12 W81	1	0	0	18	Q	PROTON: Quiet
						S14 E10	0	0	0	18	Q	
170	19	18	049	078	13	N09 W66	0	0	0	19	Q	SOL: Quiet
						N12 W89	0	0	0	19	Q	MAG: Quiet
						S14 W03	1	0	0	19	Q	PROTON: Quiet
						S13 E58	0	0	0	19	Q	
171	20	19	060	077	20	N09 W80	0	0	0	20	Q	SOL: Quiet
						S12 W15	0	0	0	20	Q	MAG: Active
						S11 E15	0	0	0	20	Q	PROTON: Quiet
						S12 E43	1	0	0	20	Q	
						S09 W29	0	0	0	20	Q	
172	21	20	025	076	12	S12 E31	0	0	0	21	Q	SOL: Quiet
						S07 E22	0	0	0	21	Q	MAG: Quiet
						S11 E15	0	0	0	21	Q	PROTON: Quiet
173	22	21	038	074	11	S16 W06	0	0	0	22	Q	SOL: Quiet
						S11 E20	0	0	0	22	Q	MAG: Quiet
						S11 E16	0	0	0	22	Q	PROTON: Quiet
174	23	22	020	072	4	S17 W20	0	0	0	23	Q	SOL: Quiet
						S11 E20	0	0	0	23	Q	MAG: Quiet
						S11 E16	0	0	0	23	Q	PROTON: Quiet
175	24	23	035	073	1	S17 W33	0	0	0	24	Q	SOL: Quiet
						S12 W09	0	0	0	24	Q	MAG: Quiet
						S11 E16	0	0	0	24	Q	PROTON: Quiet
176	25	24	045	073	2	S18 W46	1	0	0	25	Q	SOL: Quiet
						S12 W21	0	0	0	25	Q	MAG: Quiet
						S13 W41	0	0	0	25	Q	PROTON: Quiet

ALERT PERIODS

INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

Summary of the Geoalert Messages — JUNE 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]
177	26	25	054	073	0	S16	W58	0	0	0	26	Q	SOL: Quiet
						S12	W35	0	0	0	26	Q	MAG: Quiet
						S12	W56	0	0	0	26	Q	PROTON: Quiet
						N04	W12	0	0	0	26	Q	
178	27	26	027	074	17	S13	W69	0	0	0	27	Q	SOL: Quiet
						N04	W24	0	0	0	27	Q	MAG: Active
						S12	W56	0	0	0	27	Q	PROTON: Quiet
179	28	27	023	073	24	N05	W37	0	0	0	28	Q	SOL: Quiet
						S08	E67	0	0	0	28	Q	MAG: Active
						S12	W56	0	0	0	28	Q	PROTON: Quiet
180	29	28	025	074	11	S08	E54	0	0	0	29	Q	SOL: Quiet
						S09	E67	0	0	0	29	Q	MAG: Active
						S12	W56	0	0	0	29	Q	PROTON: Quiet
181	30	29	032	079	19	S09	E42	5	0	0	30	Q	SOL: Quiet
						S10	E54	0	0	0	30	Q	MAG: Active
						S12	W56	0	0	0	30	Q	PROTON: Quiet

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

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

Magnetic Geoadvice

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

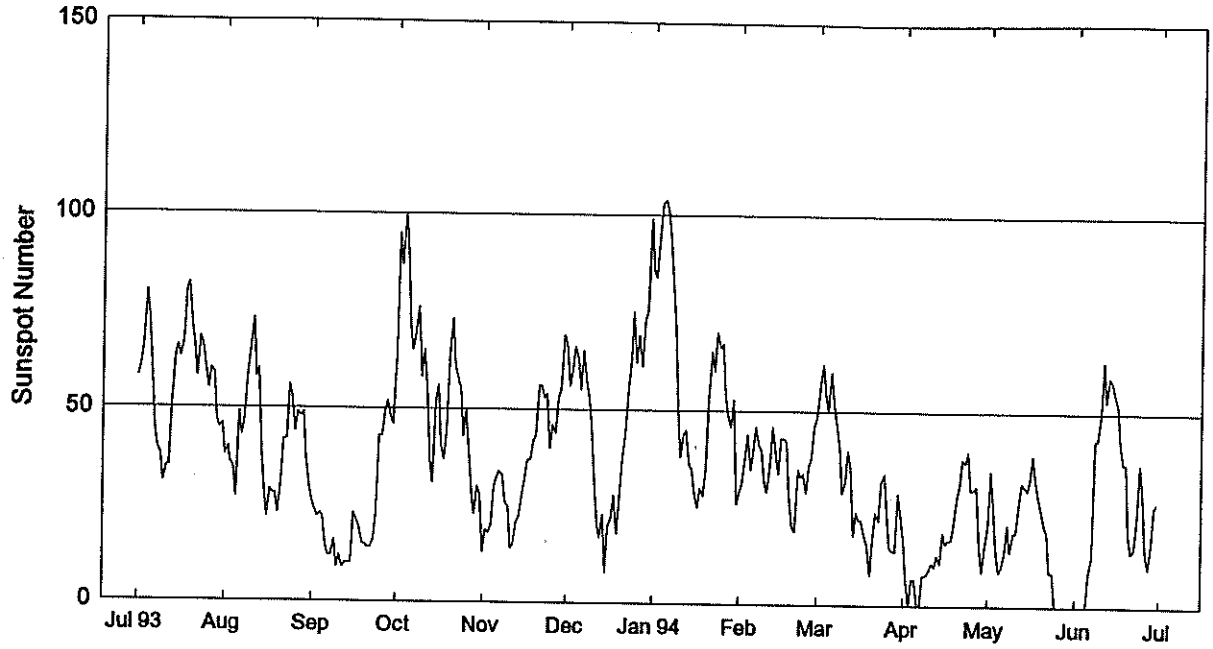
Proton Geoadvice

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

STRATWARM ALERTS

No Stratwarms Recorded

International Relative Sunspot Numbers
Jul 1993 - Jun 1994

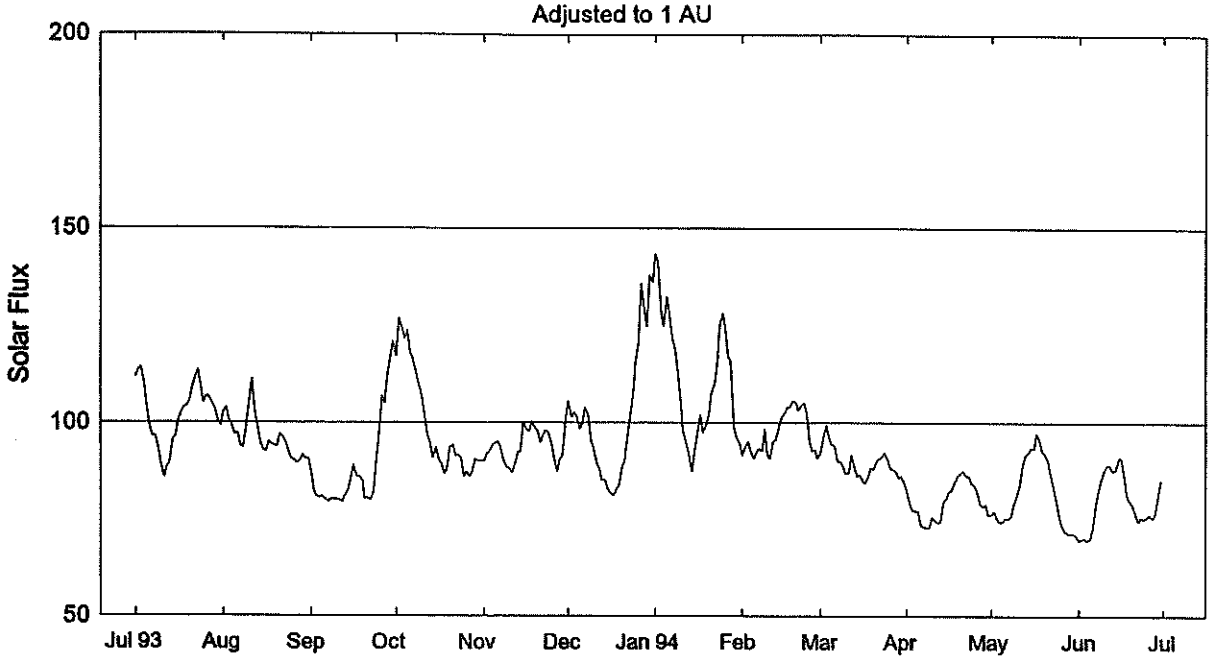


Day	Jul 93	Aug	Sep	Oct	Nov	Dec	Jan 94*	Feb*	Mar*	Apr*	May*	Jun*
1	58	38	26	64	13	67	86	29	49	17	21	0
2	61	40	24	95	19	56	84	31	56	7	35	0
3	66	36	22	87	18	60	95	38	62	0	26	0
4	80	35	23	100	20	66	103	44	54	7	15	0
5	73	27	22	90	30	63	104	35	50	7	9	0
6	58	49	14	71	33	55	101	40	60	0	10	9
7	45	43	12	65	34	65	94	46	52	0	14	13
8	40	47	12	70	33	57	81	41	46	8	21	43
9	38	59	16	76	26	53	71	40	41	8	14	43
10	31	65	9	58	25	46	51	32	29	9	19	50
11	35	73	12	65	14	31	38	29	32	11	19	63
12	35	58	9	56	15	21	44	36	40	10	27	53
13	51	60	10	37	21	17	45	46	36	13	31	59
14	63	39	10	31	22	23	36	39	18	11	21	58
15	66	29	10	52	27	8	35	34	24	19	30	54
16	63	22	23	56	32	20	29	43	22	16	33	52
17	67	29	21	41	37	22	25	43	22	17	39	42
18	80	28	19	37	37	28	30	42	18	17	33	37
19	82	28	15	44	42	18	28	28	16	21	28	37
20	71	23	15	63	43	27	35	20	8	28	25	19
21	66	31	14	73	56	37	53	19	17	31	25	14
22	58	42	14	61	56	44	65	35	24	38	21	15
23	68	42	16	58	53	54	60	33	22	37	19	22
24	66	56	23	55	54	63	70	34	32	40	9	37
25	61	53	43	43	40	75	66	29	34	30	9	29
26	55	44	43	50	46	62	67	36	24	30	0	15
27	60	49	49	39	44	69	54	38	15	31	0	10
28	59	48	52	29	53	61	49	46	14	15	0	15
29	47	49	48	23	55	73	46		14	9	0	26
30	45	37	46	30	69	75	53		29	15	0	27
31	46	30		28		99	26		24		0	
Mean	57.9	42.2	22.4	56.4	35.6	48.9	58.8	35.9	31.7	16.7	18.2	28.1

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

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

Adjusted to 1 AU



Day	Jul 93	Aug	Sep	Oct	Nov	Dec	Jan 94	Feb	Mar	Apr	May	Jun
1	111.8	102.8	87.1	117.1	90.0	105.6	143.4	91.7	92.4	82.4	76.3	69.6
2	113.6	103.7	82.6	126.9	91.8	101.3	141.4	93.5	96.3	79.3	77.1	69.9
3	114.2	100.8	80.9	124.8	92.4	102.6	128.7	95.1	99.2	77.4	75.6	70.3
4	110.1	98.9	80.5	121.5	94.1	101.6	124.6	92.7	96.3	77.2	74.4	69.5
5	103.9	97.0	81.0	123.7	94.8	98.3	132.4	90.6	94.2	77.2	74.4	70.3
6	98.4	97.1	80.2	118.0	94.9	99.9	127.7	92.2	94.1	73.3	75.3	72.7
7	96.5	93.8	79.6	116.6	93.5	103.8	122.1	93.3	90.0	73.0	75.2	79.4
8	96.4	93.4	80.2	113.1	90.2	101.9	118.9	92.6	89.9	72.9	75.8	82.9
9	93.2	99.1	80.1	110.1	88.7	95.4	113.1	98.3	88.7	72.9	78.8	85.5
10	89.0	104.5	80.1	107.1	88.2	93.2	106.5	91.8	86.8	75.7	81.4	88.0
11	85.8	111.2	79.8	102.3	87.0	89.7	97.8	90.7	87.0	74.6	83.6	89.1
12	88.7	103.2	79.5	97.3	88.9	88.1	94.6	95.1	91.7	74.2	89.2	89.0
13	89.5	99.2	81.1	94.5	92.2	85.1	91.9	95.4	89.1	74.3	91.4	87.7
14	95.7	94.6	82.6	90.8	92.3	85.1	87.3	98.9	86.2	79.9	92.1	88.0
15	96.3	92.8	85.6	93.5	99.9	82.8	92.6	101.3	86.5	80.6	93.4	91.0
16	100.3	92.4	89.0	90.3	98.2	81.9	97.0	102.3	85.3	82.3	93.3	90.8
17	102.6	95.1	85.9	89.4	97.7	81.1	102.0	103.9	84.3	82.5	97.2	86.6
18	103.7	94.3	86.0	86.7	100.2	82.4	97.5	103.9	85.9	84.9	95.8	80.9
19	104.1	93.9	85.0	88.1	98.7	84.2	99.5	105.6	88.3	86.2	92.7	79.8
20	105.6	93.8	80.3	93.5	98.0	88.1	101.6	105.2	87.9	87.0	91.9	78.9
21	108.9	97.0	80.6	94.2	94.8	89.9	107.3	103.1	90.0	87.6	89.9	76.8
22	111.2	96.2	79.8	91.3	96.8	96.6	109.5	104.4	90.5	86.3	86.7	74.6
23	113.3	94.8	82.0+	91.4	97.9	101.6	114.6	105.1	91.2	86.1	83.6	75.5
24	109.8	92.5	90.0+	90.6	97.5	107.5	125.1	102.9	92.1	84.3	79.9	75.2
25	105.1	90.6	96.5	86.0	94.7	115.2	128.1	94.8	90.4	83.8	76.1	75.5
26	106.8	90.2	106.8	87.4	90.8	120.5	123.9	92.6	88.1	82.0	73.4	76.3
27	106.4	89.4	104.9	86.0	87.3	135.8	116.8	93.0	88.0	79.0	72.1	75.4
28	104.6	90.2	111.7	87.3	90.7	129.2	115.7	90.8	87.3	78.4	71.4	76.4
29	103.5	91.7	116.8	90.5	91.2	124.4	98.9		85.8	78.9	71.4	81.4
30	100.8	90.7	120.9	90.0	100.8	138.0	96.1		86.1	76.0	71.3	85.4
31	99.1	90.6		90.1		136.2	94.7		84.9		71.1	
Mean	102.2	96.0	87.9	99.7	93.8	101.5	111.3	97.2	89.5	79.7	81.7	79.7

+ = suspect values due to software problems.

DAILY SOLAR INDICES

June 1994

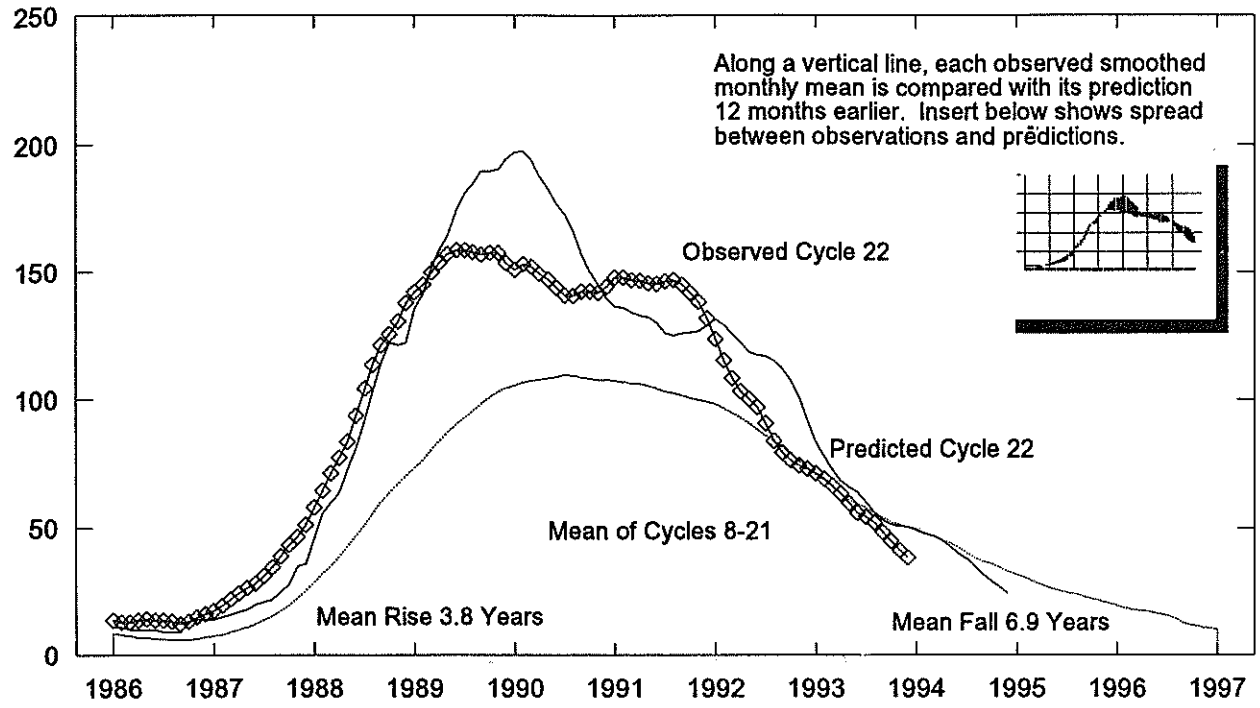
Day	Day of Year	Bartels Cycle Day	Sunspot Numbers Int	Amer	Obs Flux Penticton (2800)	Solar Flux Adjusted to 1 Astronomical Unit — LEAR (15400)	LEAR (8800)	LEAR (4995)	Pentic (2800)	LEAR (2695)	LEAR (1415)	LEAR (610)	LEAR (410)	LEAR (245)
1	152	19	0	0	67.6	444	187	112	69.6	67	49	34	19	13
2	153	20	0	0	67.9	498	201	118	69.9	66	47	37	20	12
3	154	21	0	0	68.3	518	197	118	70.3	65	37	37	20	13
4	155	22	0	0	67.6	496	208	119	69.5	66	48	38	21	11
5	156	23	0	0	68.3	529	206	120	70.3	67	49	38	21	12
6	157	24	9	7	70.6	494	209	122	72.7	69	50	38	21	14
7	158	25	13	22	77.1	536	214	129	79.4	74	54	40	23	--
8	159	26	43	43	80.4	533	213	130	82.9	76	56	42	27	--
9	160	27	43	44	83.0	534	216	131	85.5	79	59	40	22	13
10	161	1	50	50	85.4	541	217	133	88.0	82	61	42	23	14
11	162	2	63	56	86.4	557	216	135	89.1	86	63	43	23	16
12	163	3	53	53	86.3	542	219	133	89.0	87	64	45	26	22
13	164	4	59	46	85.0	542	215	133	87.7	85	65	47	25	36
14	165	5	58	58	85.3	--	212	135	88.0	84	65	45	24	15
15	166	6	54	54	88.2	518	213	135	91.0	82	64	42	23	13
16	167	7	52	51	87.9	546	221	138	90.8	88	66	45	24	17
17	168	8	42	42	83.9	543	219	138	86.6	86	66	43	23	16
18	169	9	37	36	78.4	460	217	132	80.9	82	62	43	23	15
19	170	10	37	32	77.3	550	217	131	79.8	79	60	41	20	10
20	171	11	19	16	76.4	549	212	128	78.9	75	58	39	13	6
21	172	12	14	12	74.4	--	214	126	76.8	74	56	41	22	12
22	173	13	15	16	72.2	529	215	125	74.6	72	54	40	21	13
23	174	14	22	24	73.1	525	212	124	75.5	70	52	39	21	12
24	175	15	37	34	72.8	529	211	124	75.2	73	52	39	21	13
25	176	16	29	25	73.1	542	214	125	75.5	72	53	39	21	12
26	177	17	15	14	73.9	534	214	125	76.3	71	53	39	21	12
27	178	18	10	12	73.0	527	215	126	75.4	73	53	39	21	12
28	179	19	15	14	73.9	509	205	125	76.4	68	51	34	19	11
29	180	20	26	23	78.8	521	214	128	81.4	72	52	37	20	12
30	181	21	27	27	82.6	528	199	132	85.4	80	57	39	21	13
MEAN			28.1	27.0	77.3	524	211	127	79.7	75	55	40	21	13

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

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

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

Cycle 22 Smoothed Sunspot Numbers: Observed and Predicted



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

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
1987	18	20	22	24	26	28	31	35	39	44	47	51	32
1988	58	65	71	78	84	94	104	114	121	125	130	138	99
1989	142	145	150	154	157	158	158	158	157	157	158	154	154
1990	151	153	152	149	147	144	141	140	142	142	142	144	146
1991	148	148	147	146	146	145	146	147	145	142	138	132	144
1992	124	115	108	103	100	97	91	84	80	76	74	73	94
1993	71	69	67	64	60	56	55	52	49	45	41	39	56
1994	37	35	34	33	32	32	30	28	27	26	25	24	30
( )	(2)	(4)	(5)	(6)	(8)	(10)	(13)	(15)	(16)	(17)	(19)	(20)	(11)
1995	24	24	23	22	20	19	19	18	18	18	17	16	20
( )	(20)	(20)	(21)	(21)	(21)	(20)	(20)	(20)	(20)	(19)	(18)	(18)	(20)

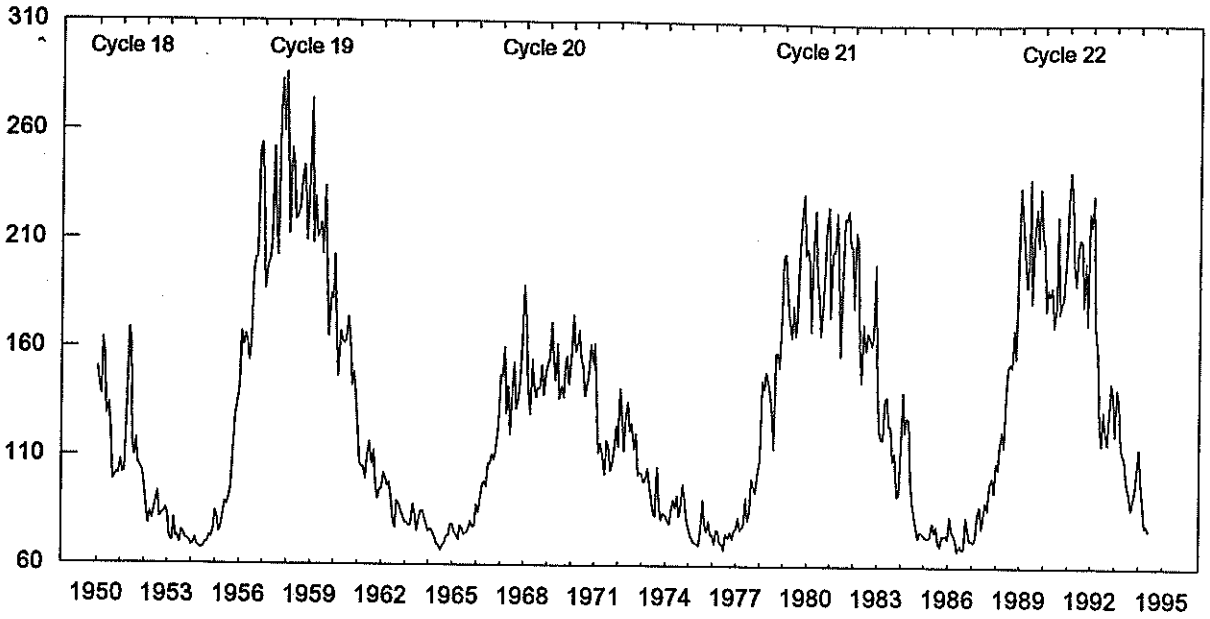
Solar Cycle 22 | Min, Max, and Predictions

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

Observed and Predicted Numbers. For the end of Cycle 21, and the rise and decline of Cycle 22, the table above lists observed smoothed sunspot numbers up to the one that includes the most recent monthly mean. We based these smoothed values on final monthly means through Dec 1993 and on provisional numbers thereafter. Table entries with numbers in parentheses below them denote predictions by the McNish-Lincoln method. (See page 9 in the Jul 1987 supplement to *Solar-Geophysical Data.*) Adding the number in parentheses to the predicted value generates the upper limit of the 90% confidence interval. Subtracting the number from the predicted value generates the lower limit. Consider, for example, the Dec 1994 prediction. There exists a 90% chance that in Dec 1994, the actual smoothed number will fall somewhere between 4 and 44.

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

Monthly Mean 2800 MHz Solar Flux (Observed)
Jan 1950 - Jun 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							90.2

Hα SOLAR FLARES

JUNE 1994

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
GOES	03	1544	1548	1557						13		B 1.0						
SVTO	06	1209	1210	1214	S15	W50		06	2.7	5	SF		3	E		15		
GOES		1223	1228	1231						8		B 2.0						
SVTO		1251	1253	1310	S16	W52		06	2.6	19	SF		3	E		48		FH
RAMY		1252	1300	1319	S16	W50		06	2.7	27	SF	C 2.3	3	E		27		H
HOLL		1256E	1311	1330	S15	W52		06	2.6	34D	SF		3	E		23		FH
GOES		1340	1350	1354						14		B 2.5						
SVTO		1626	1628	1632	S16	W54	7729	06	2.6	6	SF		3	E		17		
HOLL		1630	1630	1635	S15	W55	7729	06	2.5	5	SF		3	E		14		F
HOLL		2226	2229	2241	S15	W57	7729	06	2.6	15	SF		3	E		18		
GOES		2307	2315	2317						10		B 1.6						
LEAR	07	0155	0155	0209	S15	W59	7729	06	2.6	14	SF		3	E		90		FH
GOES		0218	0222	0226						8		B 1.2						
LEAR		0642	0643	0645	S13	W64	7729	06	2.4	3	SF	B 2.8	3	E		14		
GOES		1149	1154	1209						20		B 1.4						
RAMY		1425	1501	1508	S16	W65	7729	06	2.7	43	SF		3	E		18		
GOES		2108	2114	2124						16		B 1.3						
GOES	08	0622	0627	0633						11		B 1.5						
GOES	09	0710	0717	0733						23		B 1.4						
SVTO		1007	1014	1037	S14	E67	7730	06	14.5	30	SF	C 1.1	3	E		48		UF
SVTO		1145	1145	1148	S12	E53	7730	06	13.5	3	SF		3	E		12		
SVTO		1403	1403	1406	S12	E52	7730	06	13.5	3	SF		3	E		18		H
LEAR	10	0306	0307	0317	S16	E51	7730	06	14.0	11	SF		3	E		36		
LEAR		0307	0313	0319	S04	W43	7732	06	6.9	12	SF		3	E		51		
HOLL	11	1733	1734	1737	N08	E29	7731	06	13.9	4	SF	B 1.8	3	E		14		H
PALE		1734E	1742U	1751D	N08	E29	7731	06	13.9	17D	SF		3	E		12		H
GOES	12	0829	0836	0844						15		B 2.1						
GOES		1016	1020	1036						20		B 1.9						
RAMY		1049	1054	1118	S13	E27	7730	06	14.5	29	SF	B 4.6	3	E		33		F
GOES		1517	1553	1631						74		B 2.7						
GOES	13	0737	0741	0743						6		B 2.4						
GOES		0839	0856	0859						20		B 4.4						
GOES		1527	1531	1537						10		B 1.6						
GOES		1557	1601	1608						11		B 2.5						
GOES		1741	1744	1747						6		B 1.7						
GOES	14	0322	0327	0329						7		B 2.7						
GOES		2159	2202	2204						5		B 1.2						
HOLL		2250	2250	2253	N12	W37	7734	06	12.2	3	SF		3	E		16		
HOLL	15	1311	1315	1318	N13	W49	7734	06	11.8	7	SF		3	E		29		
GOES		1346	1354	1359						13		B 2.1						
GOES		1423	1426	1428						5		B 3.2						
HOLL		1510	1515	1531	S14	E44	7735	06	18.9	21	SF		3	E		15		
HOLL		1522	1522	1526	N12	W48	7734	06	12.0	4	SF	B 3.4	3	E		22		
HOLL		1730	1734	1741	S12	W27	7730	06	13.7	11	SF		3	E		17		F
HOLL		1802	1802	1809	N12	W48	7734	06	12.1	7	SF	B 3.6	3	E		18		
GOES		2001	2006	2015						14		B 2.3						
HOLL	16	0041	0041	0044	S11	W30	7730	06	13.8	3	SF		3	E		20		
PALE		0042E	0042U	0045D	S11	W29	7730	06	13.8	3D	SF		2	E		18		
HOLL		1748	1749	1753	N12	W66	7734	06	11.8	5	SF		3	E		13		
RAMY		1749	1749	1755	N11	W65	7734	06	11.8	6	SF	B 4.1	3	E		15		
GOES		2046	2051	2055						9		B 3.4						
GOES		2200	2204	2211						11		B 3.7						
LEAR		2240E	2240U	2348D	N13	W67	7734	06	11.9	68D	SF		2	E		28		
PALE		2338E	2340U	2346D	N13	W69	7734	06	11.8	8D	SF		2	E		36		
HOLL		2339	2340	2350	N12	W70	7734	06	11.7	11	SF	C 1.0	3	E		50		
LEAR		2340E	2340U	2348D	N13	W67	7734	06	11.9	8D	SF		2	E		28		
LEAR	17	0006	0007	0016	S12	W42	7730	06	13.8	10	SF	B 2.5	3	E		16		

Hα SOLAR FLARES

JUNE 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
GOES	17	0315	0319	0322						7		B 1.8						
SVTO		1145	1147	1153	N13	W72	7734	06	12.0	8	SF	B 8.4	3	E		31		
RAMY		1145	1149	1154	N11	W72	7734	06	12.1	9	SF		3	E		15		
GOES		1620	1624	1627						7		B 1.7						
GOES		2051	2055	2107						16		B 1.4						
GOES		2343	2350	0000						17		B 1.5						
GOES	18	1211	1217	1228						17		B 1.2						
RAMY		2025	2026	2032	S13	W01	7735	06	18.8	7	SF	B 3.1	3	E		20		F
GOES	19	0355	0359	0404						9		B 1.1						
GOES		2249	2252	2255						6		B 1.1						
HOLL		2257	2257	2303	S14	E47	7737	06	23.5	6	SF		3	E		15		F
GOES	24	0225	0232	0240						15		B 6.1						
SVTO		0737	0737	0746	S13	W33	7736	06	21.8	9	SF	B 4.4	3	E		13		
SVTO		1026	1027	1039	S13	W35		06	21.8	13	SF	C 2.9	3	E		47		
GOES	25	0117	0120	0123						6		B 1.0						
GOES		1042	1046	1054						12		B 1.1						
GOES		1138	1141	1145						7		B 1.0						
GOES	26	1130	1146	1213						43		B 1.9						
GOES	27	1535	1538	1542						7		B 1.3						
GOES		2131	2133	2135						4		B 1.3						
GOES	28	1127	1134	1141						14		B 1.6						
GOES		1335	1343	1351						16		B 1.6						
GOES		2017	2020	2022						5		B 1.1						
GOES	29	0635	0642	0655						20		B 1.9						
GOES		0819	0825	0831						12		B 1.6						
SVTO		1324	1330	1404D	S11	E46	7742	07	3.0	40D	SF		2	E		27		
HOLL		1336	1338	1341	S10	E47	7742	07	3.1	5	SF	B 4.8	3	E		12		
HOLL		1437	1440	1503	S11	E46	7742	07	3.1	26	SF	B 9.1	3	E		16		
SVTO		1438	1440	1504D	S11	E46	7742	07	3.1	26D	SF		2	E		18		F
RAMY		1618	1619	1622	S11	E47	7742	07	3.2	4	SF	B 2.0	3	E		13		F
HOLL		2018	2019U	2023	S11	E44	7742	07	3.1	5	SF	B 1.6	3	E		15		
GOES		2114	2118	2123						9		B 1.3						
HOLL		2144E	2149	2216	S13	E43	7742	07	3.2	32D	SF	C 1.2	3	E		36		
LEAR	30	0118	0118	0141	S13	E39	7742	07	3.0	23	SF	B 4.5	3	E		11		
GOES		0214	0219	0226						12		B 2.7						
LEAR		0246	0251	0309	S13	E38	7742	07	3.0	23	SF	C 1.5	3	E		22		
LEAR		0407	0410	0423	S14	E53	7743	07	4.2	16	SF	B 5.6	3	E		11		
LEAR		0428	0429	0439	S12	E49	7743	07	3.9	11	SF		3	E		20		
SVTO		0800	0811	0831	S10	E35	7742	07	3.0	31	SF	C 2.4	4	E		44		F
LEAR		0804	0808	0834	S12	E35	7742	07	3.0	30	SF		3	E		45		F
SVTO		0901	0902	0918	S10	E35	7742	07	3.0	17	SF	B 7.4	4	E		15		FH
GOES		0958	1004	1015						17		B 2.8						
GOES		1109	1112	1115						6		B 2.3						
HOLL		1337	1341	1421	S11	E31	7742	07	2.9	44	SF	B 5.8	3	E		46		F
RAMY		1338	1339	1422	S10	E32	7742	07	3.0	44	SF		3	E		21		F
SVTO		1339	1346	1403	S11	E32	7742	07	3.0	24	SF		3	E		14		FH
RAMY		1558	1559	1604	S11	E36	7742	07	3.4	6	SF		3	E		11		H
RAMY		1621	1624	1648	S11	E31	7742	07	3.0	27	SF	B 4.1	3	E		11		F
HOLL		1806	1815	1829	S12	E31	7742	07	3.1	23	SF	B 3.9	3	E		25		
HOLL		2118	2122	2212	S12	E27	7742	07	2.9	54	1B	M 2.5	3	E		223		FH

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

JUNE 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
24	8800	SGMR	8 S	1025.0	1026.0	1.0	32.0			QL=4 ST=2 TYP=3
	8800	SVTO	8 S	1025.0	1026.0	2.0	32.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	1025.0	1026.0	1.0	13.0			QL=4 ST=2 TYP=3
30	8800	LEAR	8 S	0858.0	0858.0	1.0	38.0			QL=4 ST=2 TYP=3
	8800	SVTO	8 S	0858.0	0858.0	1.0	54.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	0900.0	0900.0	1.0	29.0			QL=4 ST=2 TYP=3
	2695	PALE	4 S/F	2118.0	2122.0	13.0	350.0			QL=4 ST=2 TYP=3
	2695	SGMR	4 S/F	2118.0	2120.0	13.0	350.0			QL=4 ST=2 TYP=3
	8800	PALE	49 GB	2119.0	2122.0	11.0	1700.0			QL=4 ST=2 TYP=6
	8800	SGMR	49 GB	2119.0	2122.0	12.0	1800.0			QL=4 ST=2 TYP=6

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

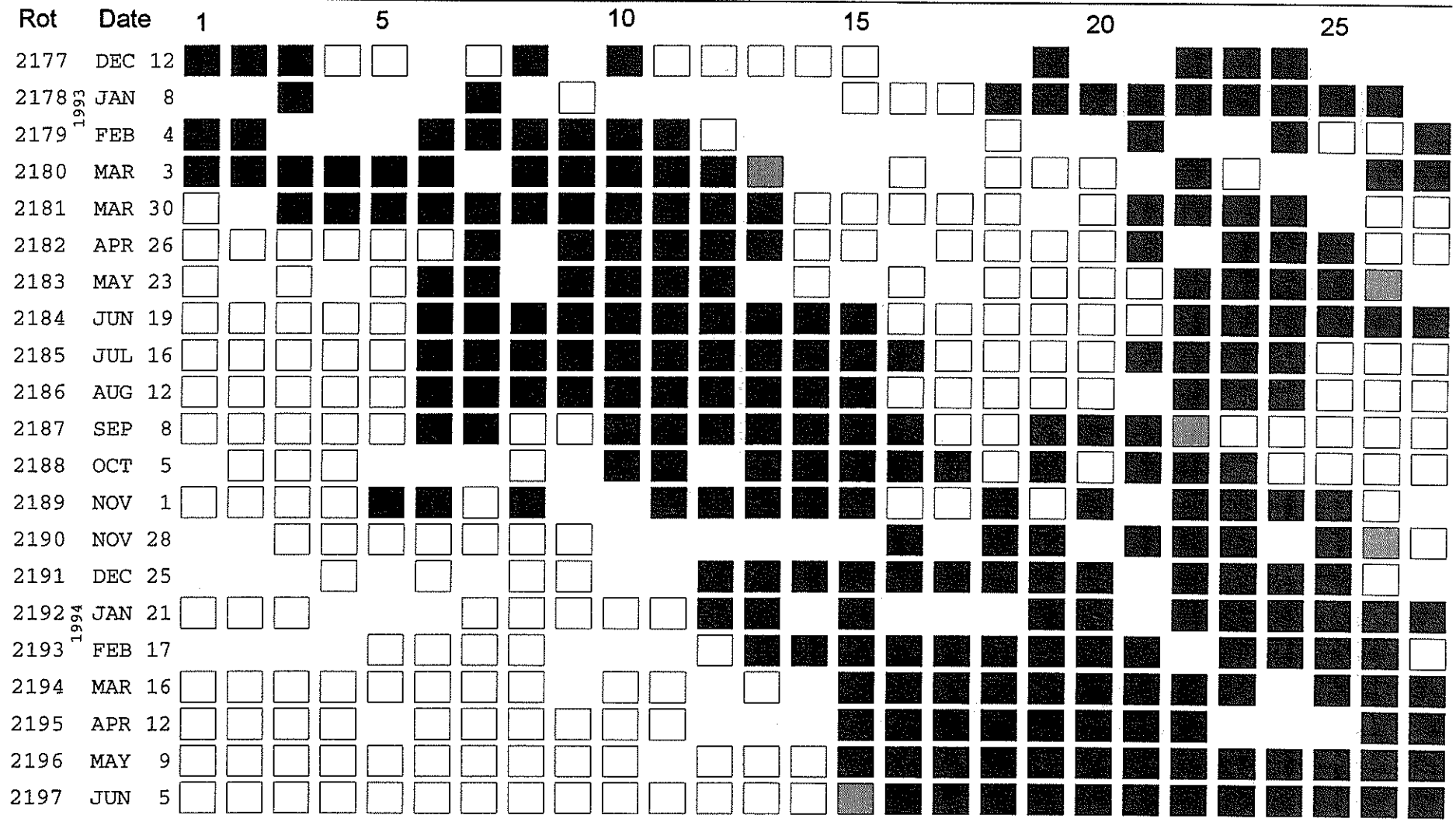
Explanation of Type Code:

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

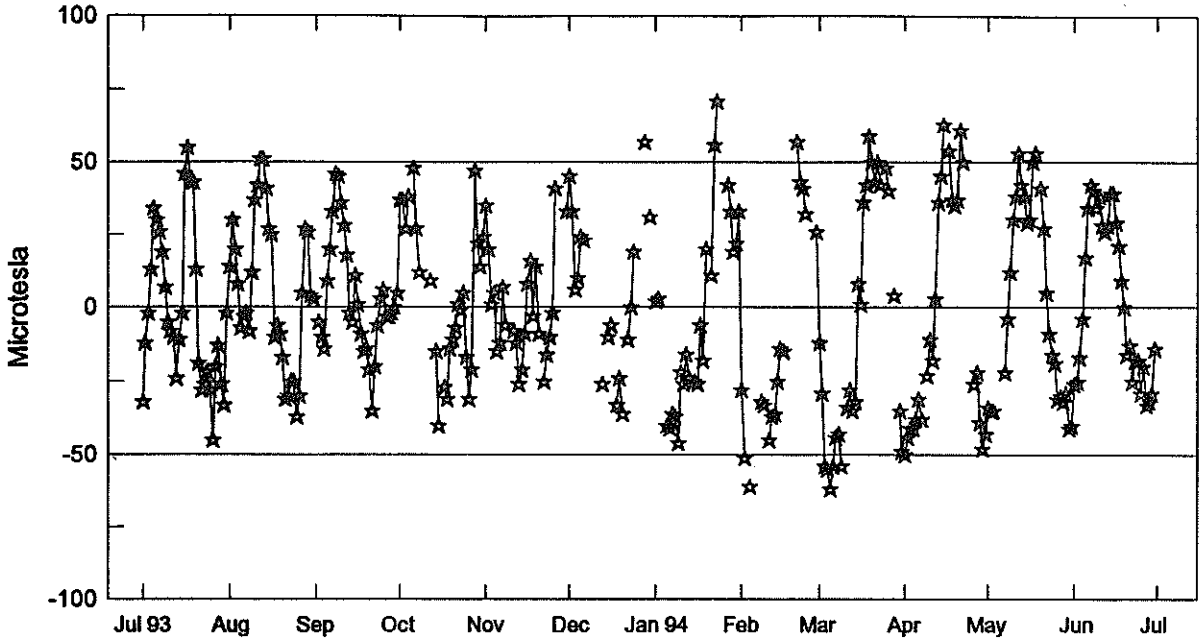


Mean Solar Magnetic Field Polarity: = field > 2 microT; = -2 microT ≤ field ≤ 2 microT

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

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

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



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

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

CONTENTS

Prompt Reports — Number 599 Part I

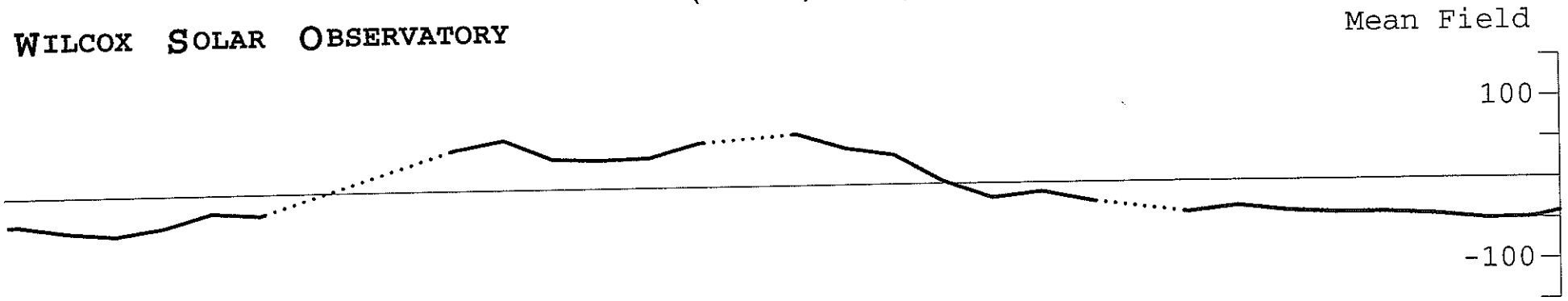
DATA FOR MAY 1994

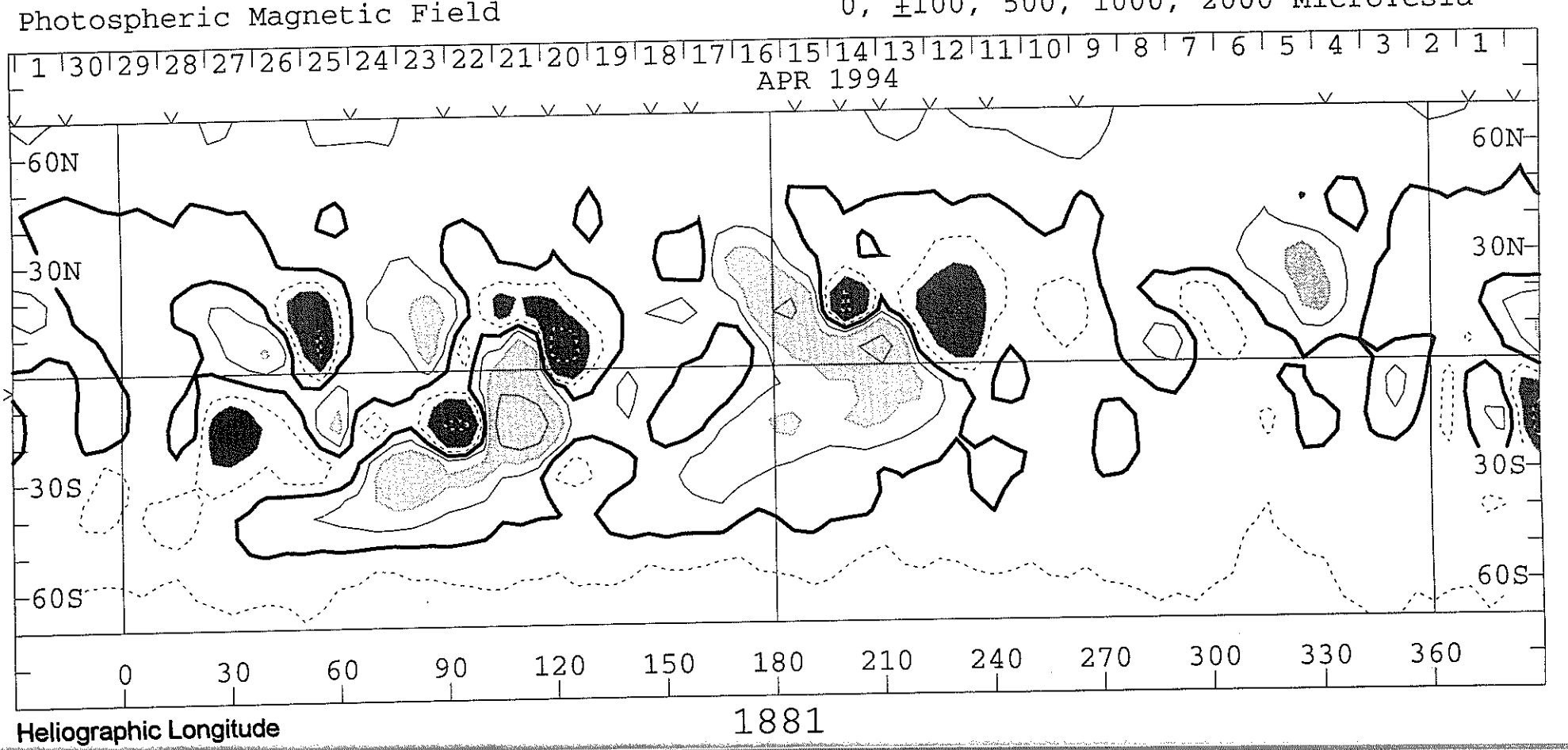
SOLAR MAGNETIC FIELD SYNOPTIC CHART

CARRINGTON ROTATION NUMBER 1881

(2 to 29 April 1994)

WILCOX SOLAR OBSERVATORY





SOLAR MAGNETIC FIELD SYNOPTIC CHART

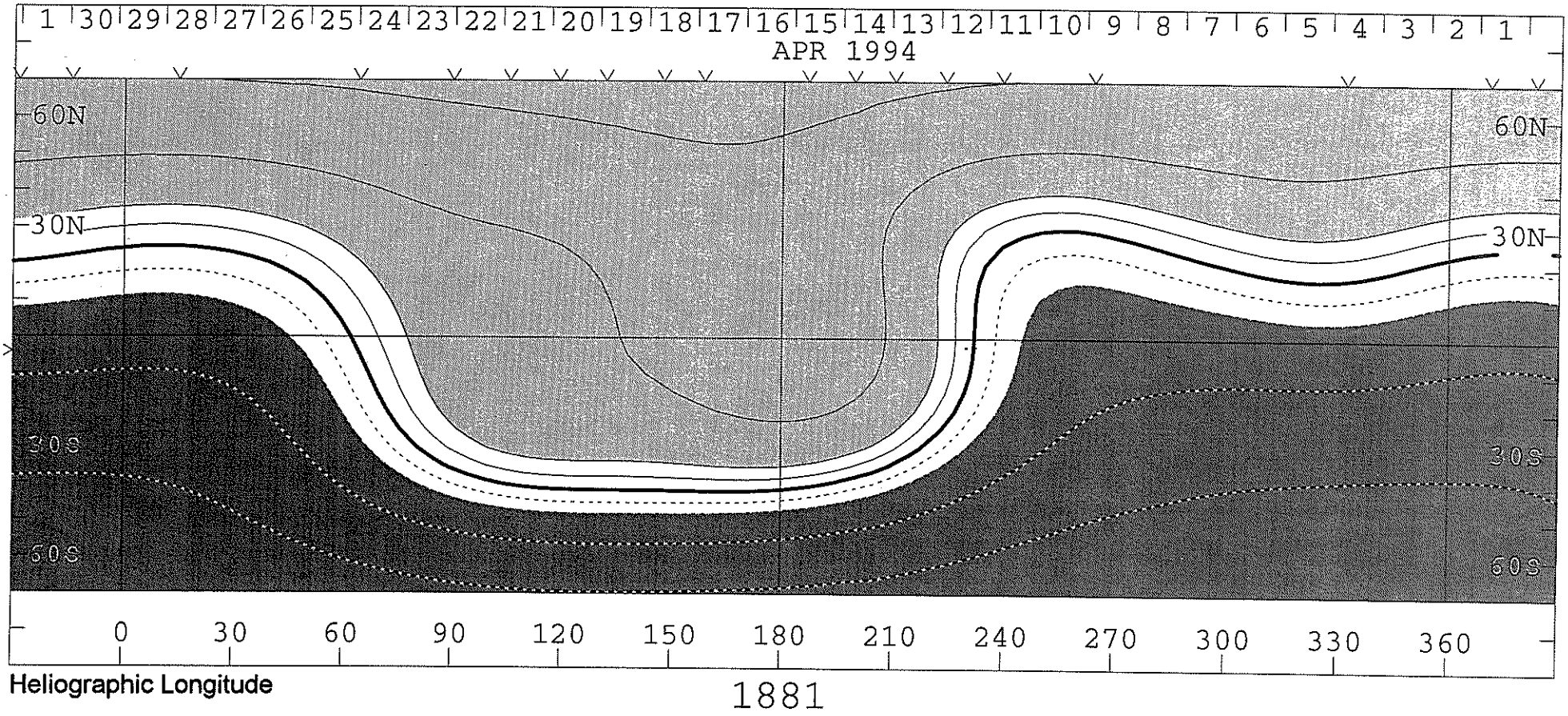
SOURCE SURFACE FIELD

CARRINGTON ROTATION NUMBER 1881

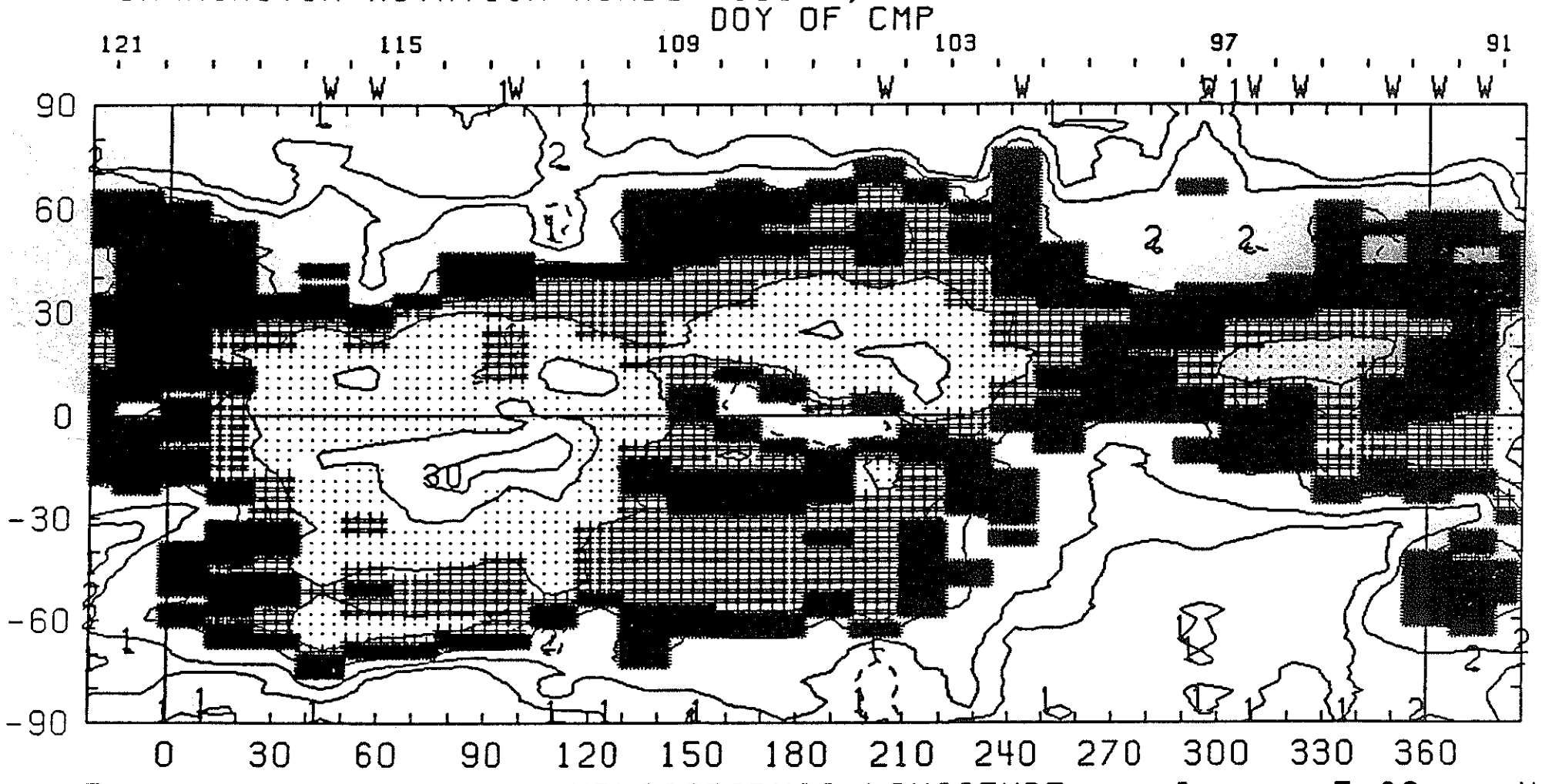
(2 April to 29 1994)

Wilcox Solar Observatory

0, ±1, 2, 5, 10, 20 microTesla

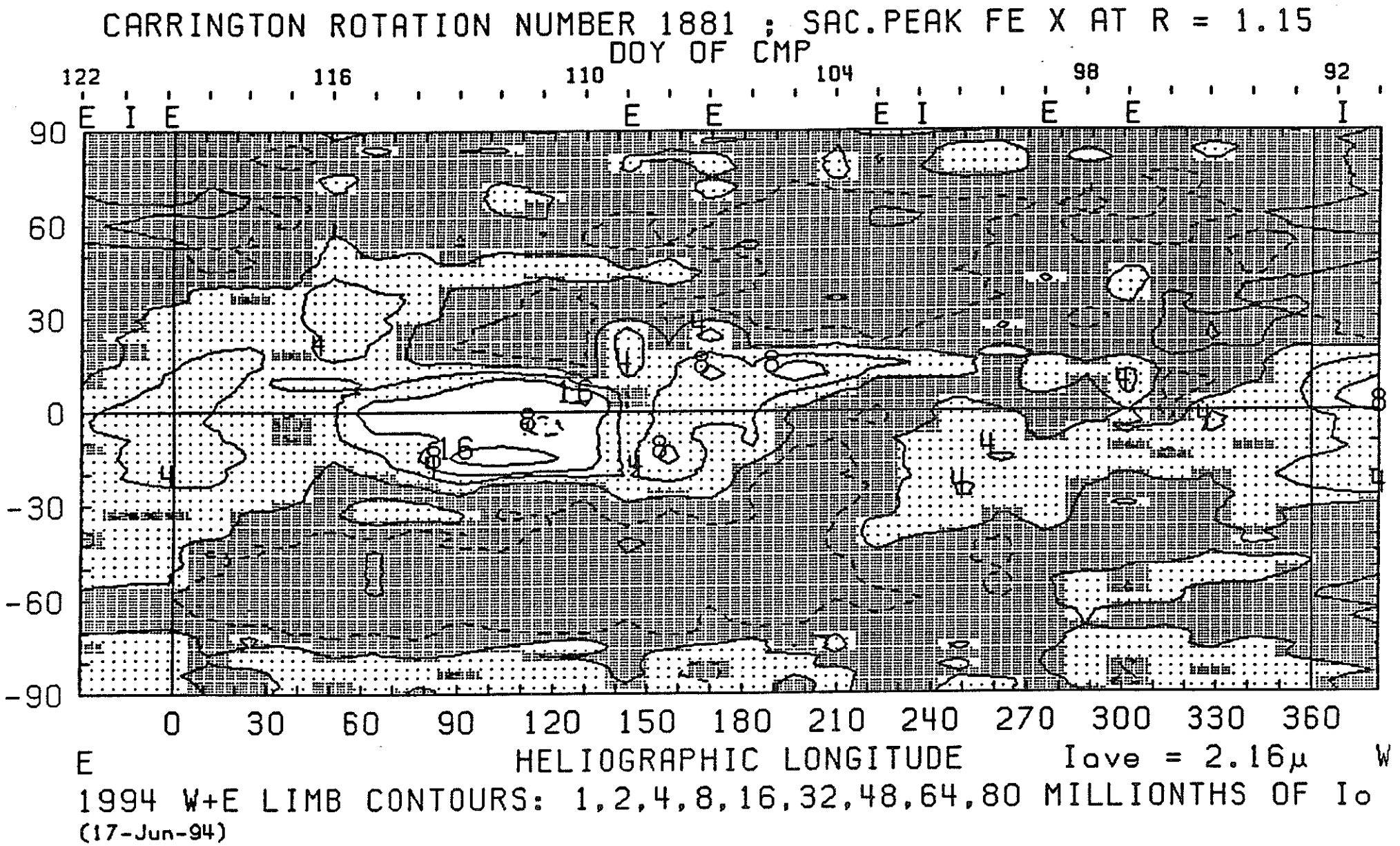


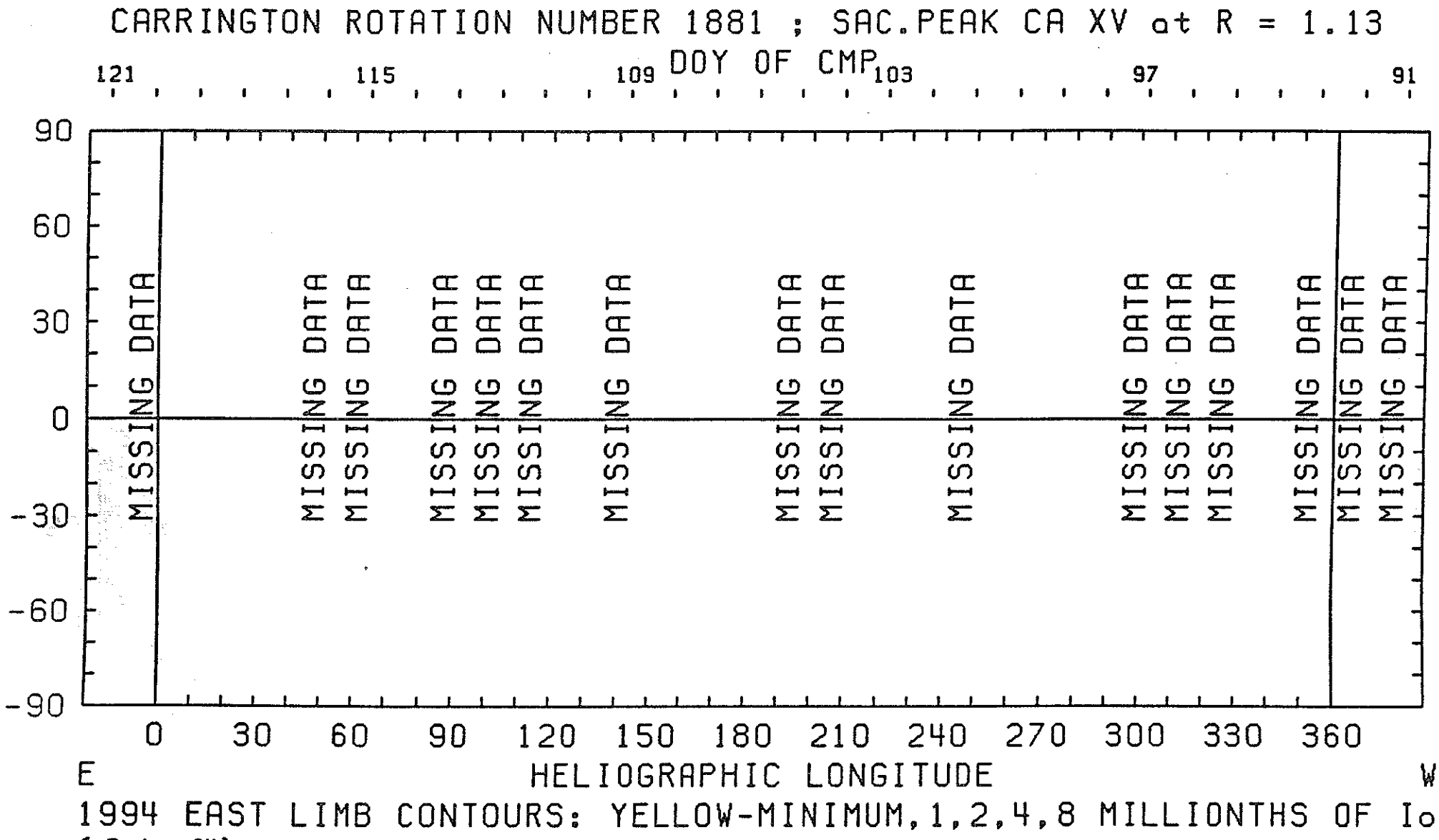
CARRINGTON ROTATION NUMBER 1881 ; SAC.PEAK FE XIV AT R = 1.15

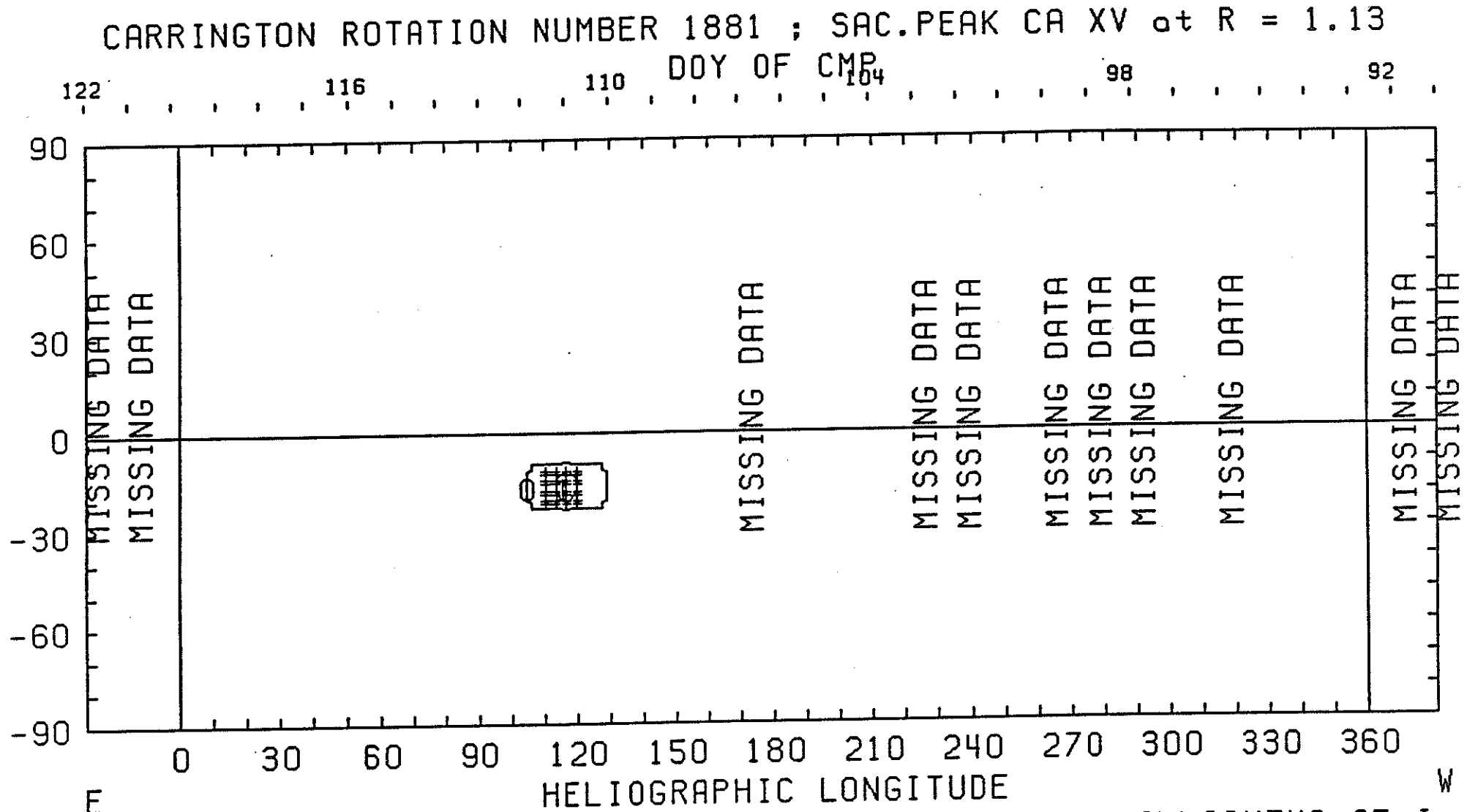


1994 E+W LIMB CONTOURS: 1,2,4,7,10,20,30,40,50 MILLIONTHS OF Io

(17-Jun-94) CORONAL HOLES ARE SHOWN AS WHITE SURROUNDED BY BLACK


CARRINGTON ROTATION NUMBER 1881 ; SAC.PEAK FE X AT R = 1.15
DOY OF CMP
122
116
110
104
98
92
E I E
E E
E I
E E
I
90
60
30
0
-30
-60
-90
0 30 60 90 120 150 180 210 240 270 300 330 360
E
HELIOGRAPHIC LONGITUDE
Iave = 2.16μ
W
1994 W+E LIMB CONTOURS: 1,2,4,8,16,32,48,64,80 MILLIONTHS OF Io
(17-Jun-94)


CARRINGTON ROTATION NUMBER 1881 ; SAC.PEAK CA XV at R = 1.13
DOY OF CMP
121
115
109
103
97
91
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
(7-Jun-94)


CARRINGTON ROTATION NUMBER 1881 ; SAC.PEAK CA XV at R = 1.13
DOY OF CMP
122
116
110
104
98
92
90
60
30
0
-30
-60
-90
MISSING DATA
MISSING DATA
MISSING DATA
MISSING DATA
MISSING DATA
MISSING DATA
MISSING DATA
MISSING DATA
MISSING DATA
MISSING DATA
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
(7-Jun-94)

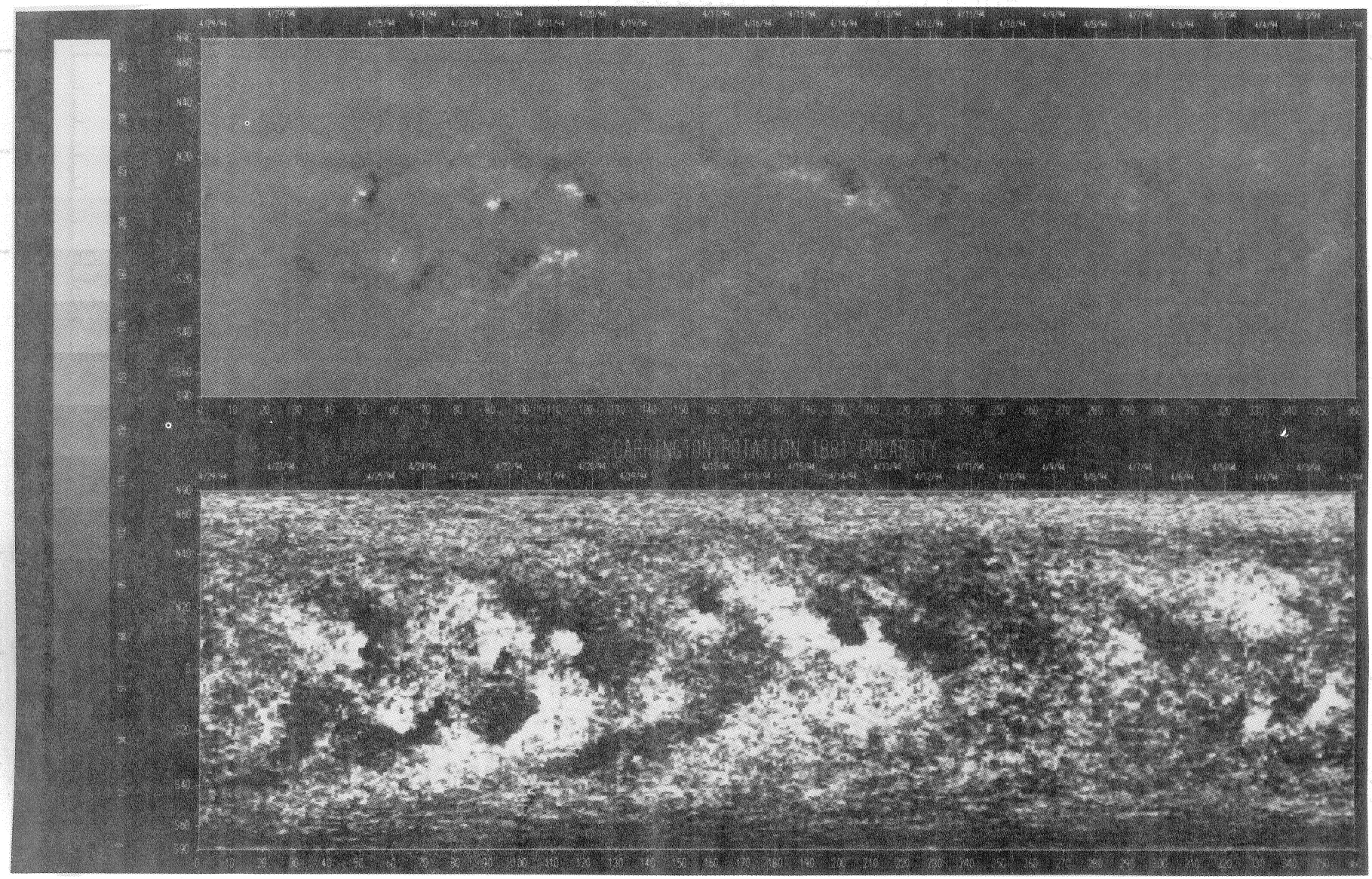
SOLAR MAGNETIC FIELD SYNOPTIC CHART

CARRINGTON ROTATION NUMBER 1881

(2 to 29 April 1994)

National Solar Observatory/Kitt Peak

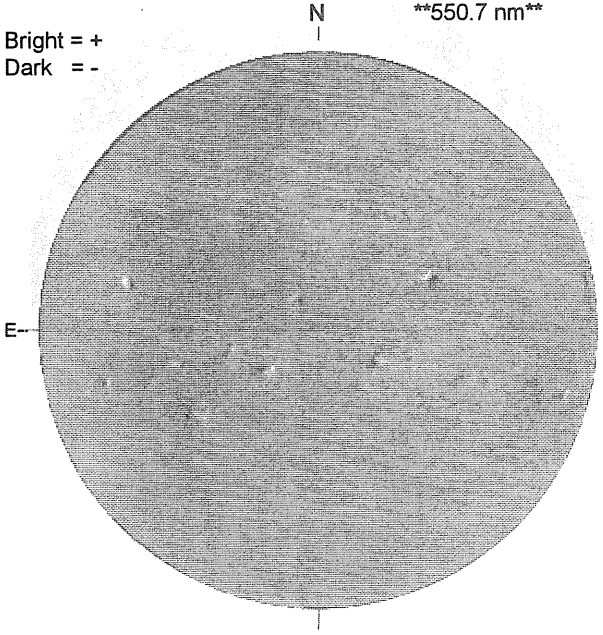
Dates of Observation



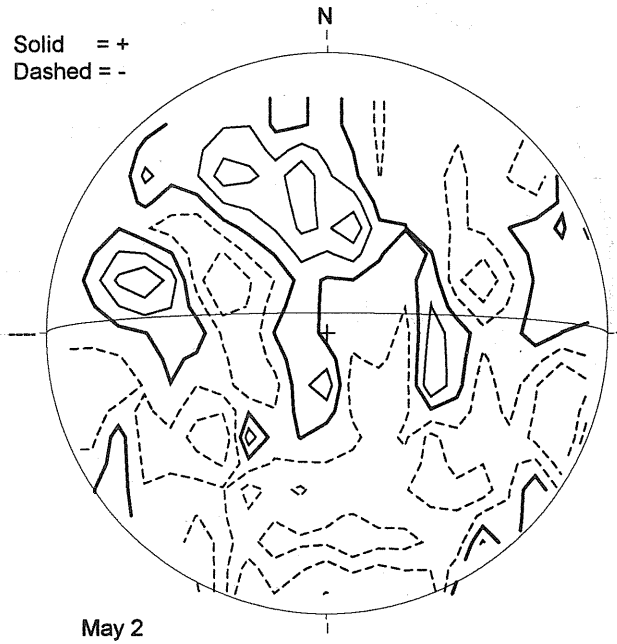
Heliographic Longitude

MAY 1, 1994 (P=-24.20, Bo =-4.18, Lo = 344.91)

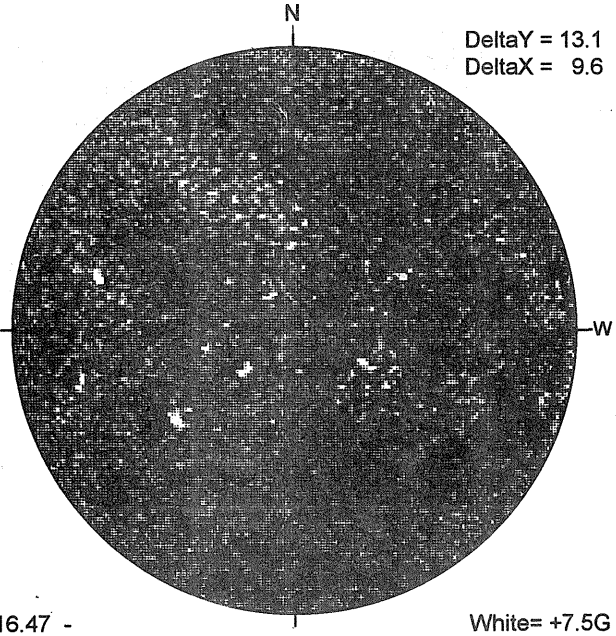
KITT PEAK MAGNETOGRAM



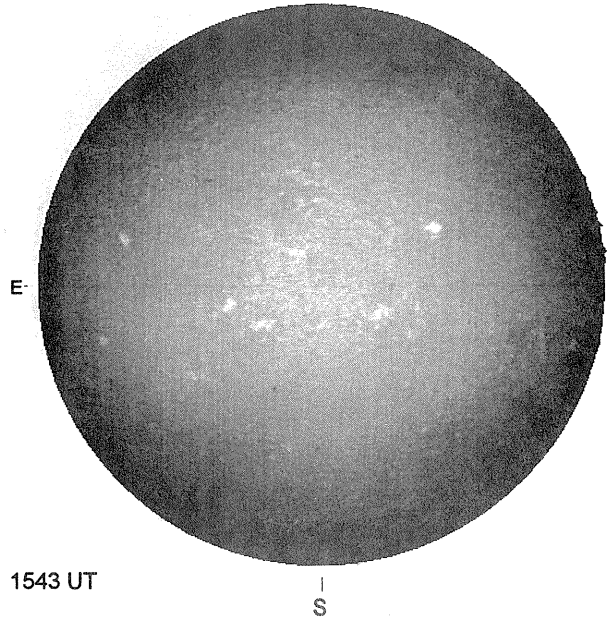
STANFORD MAGNETOGRAM



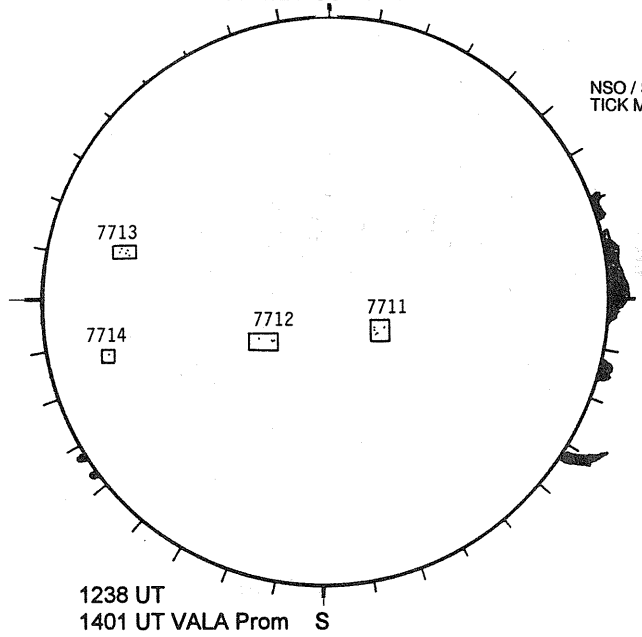
MT. WILSON MAGNETOGRAM



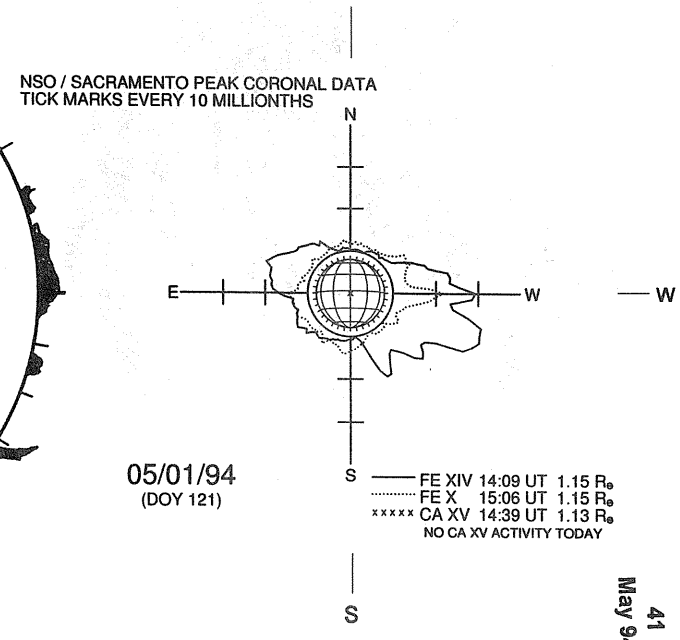
BIG BEAR H-ALPHA



RAMEY SUNSPOT



SACRAMENTO PEAK CORONA (1.15 Radii)----

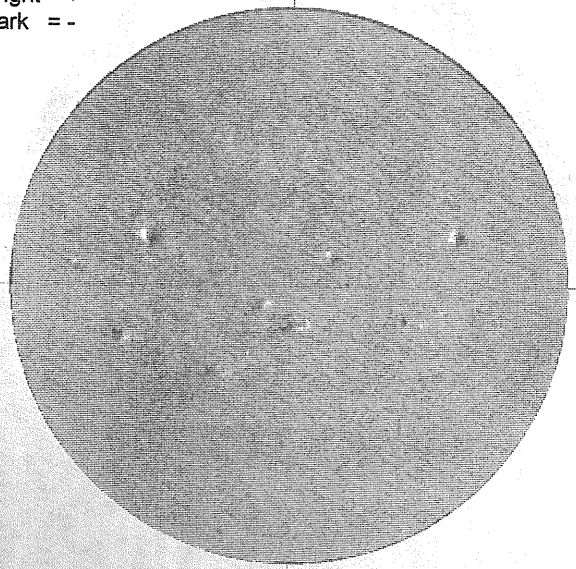


MAY 2, 1994 (P=-24.02, Bo =-4.08, Lo = 331.70)

KITT PEAK MAGNETOGRAM

N **550.7 nm**

Bright = +
Dark = -

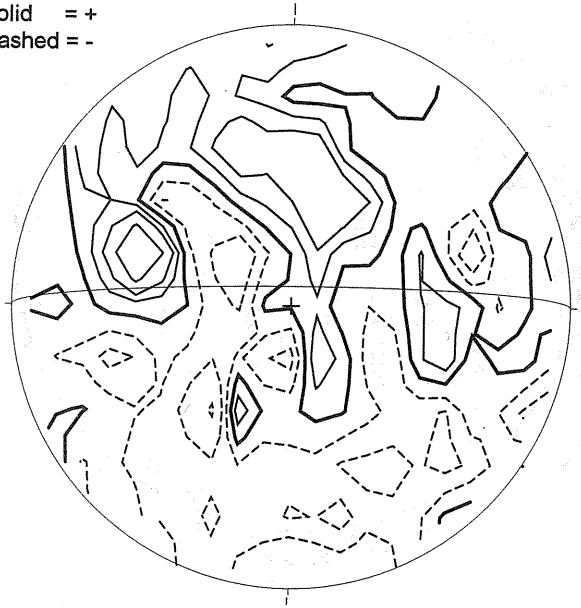


1507 UT

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

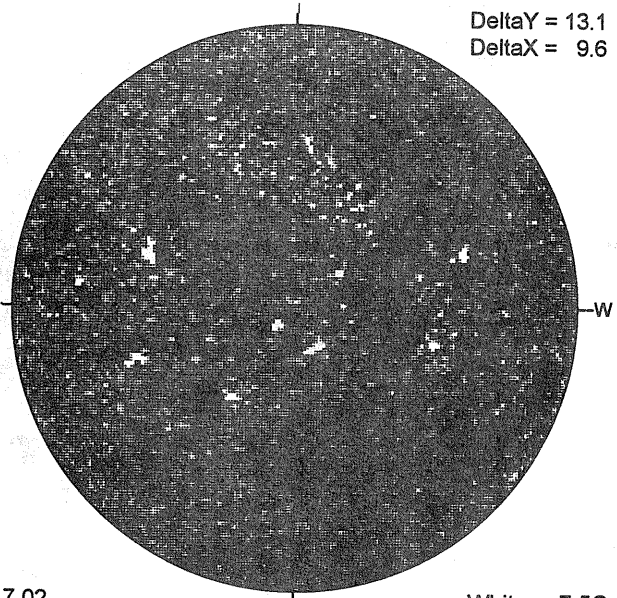


1618 UT

MT. WILSON MAGNETOGRAM

N

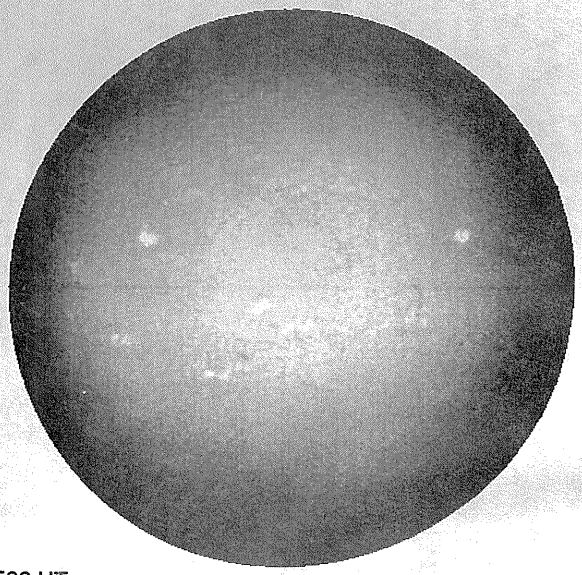
DeltaY = 13.1
DeltaX = 9.6



17.02 -
17.95 UT

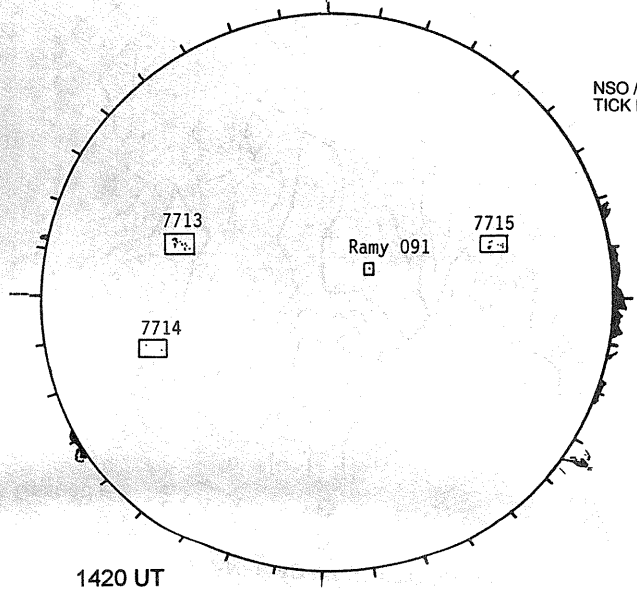
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



1506 UT

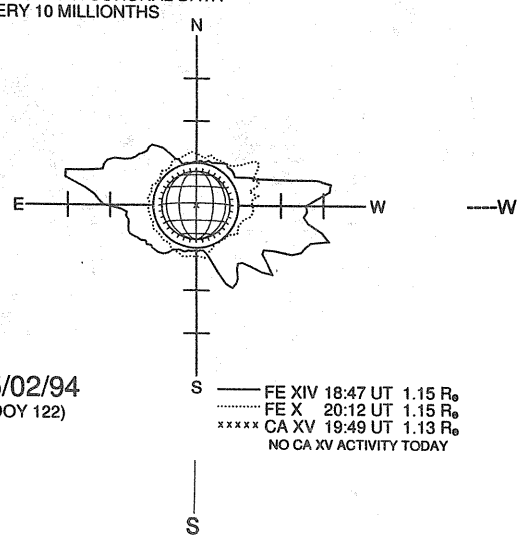
RAMEY SUNSPOT



1420 UT
0647 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



05/02/94
(DOY 122)

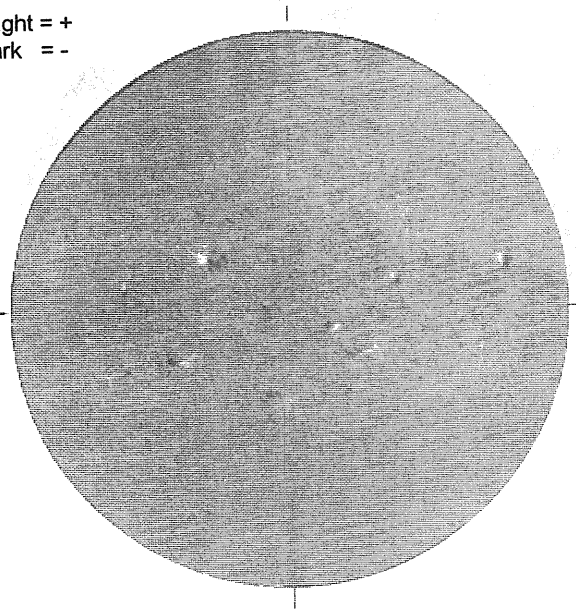
FE XIV 18:47 UT 1.15 $R_\odot$
FE X 20:12 UT 1.15 $R_\odot$
xxxxx CA XV 19:49 UT 1.13 $R_\odot$
NO CA XV ACTIVITY TODAY

MAY 3, 1994 (P=-23.83, Bo =-3.98, Lo = 318.48)

KITT PEAK MAGNETOGRAM

550.7 nm

Bright = +
Dark = -



1502 UT

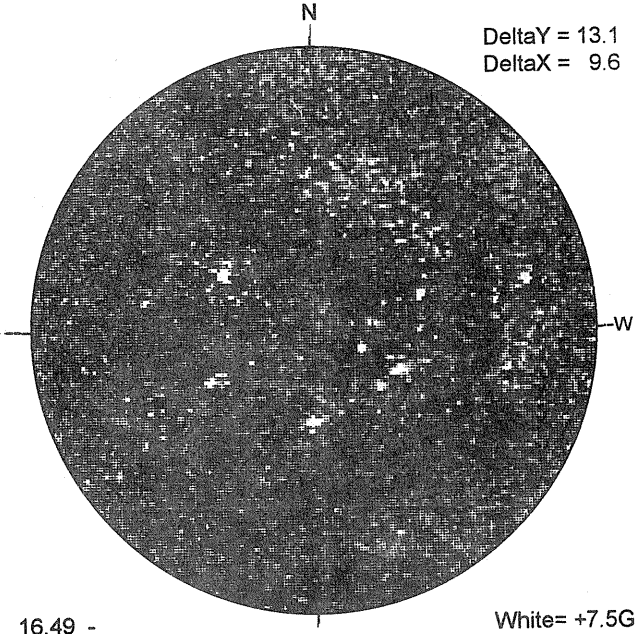
STANFORD MAGNETOGRAM

Solid = +
Dashed = -

1825 UT

MT. WILSON MAGNETOGRAM

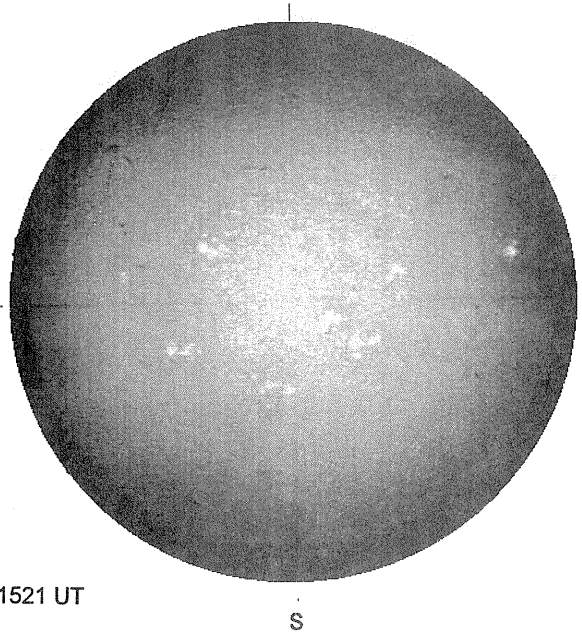
DeltaY = 13.1
DeltaX = 9.6



16.49 -
17.42 UT

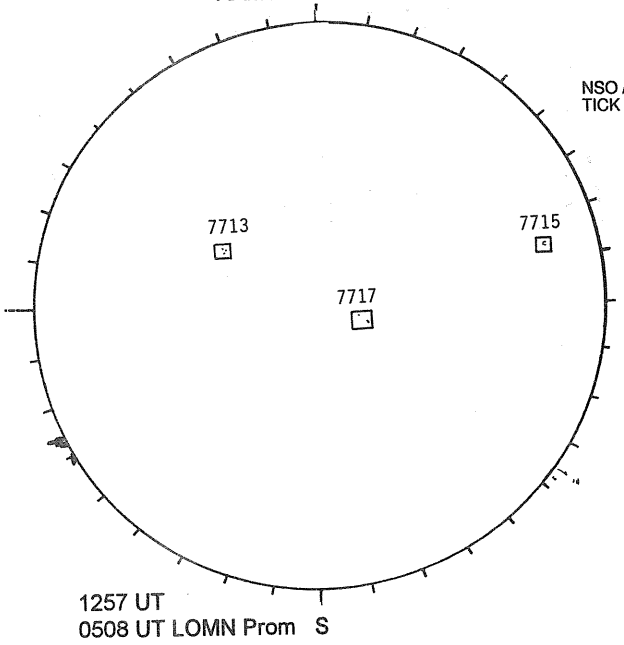
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



1521 UT

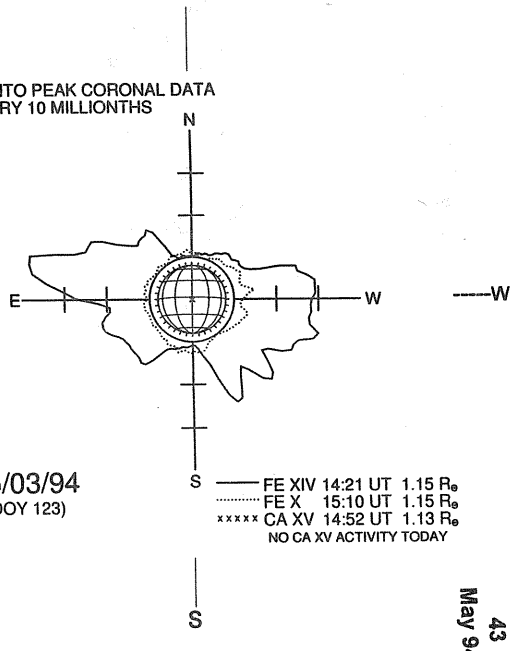
RAMEY SUNSPOT



1257 UT
0508 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



05/03/94
(DOY 123)

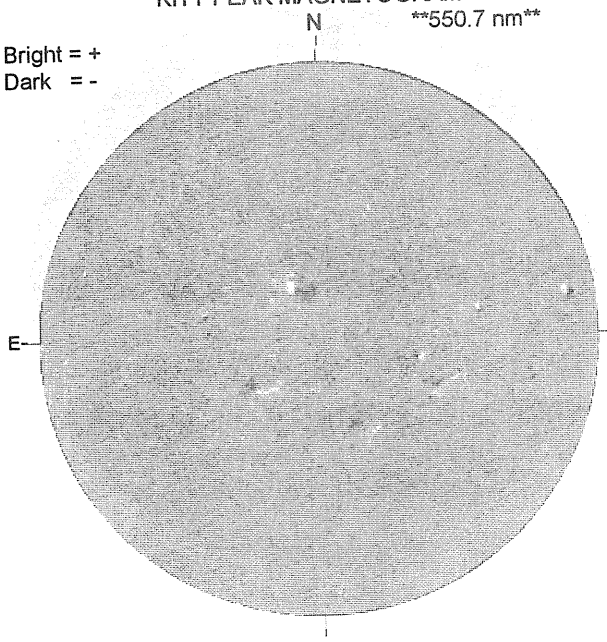
FE XIV 14:21 UT 1.15 R_e
FE X 15:10 UT 1.15 R_e
xxxxx CA XV 14:52 UT 1.13 R_e
NO CA XV ACTIVITY TODAY

MAY 4, 1994 (P=-23.64, Bo =-3.88, Lo = 305.26)

KITT PEAK MAGNETOGRAM

550.7 nm

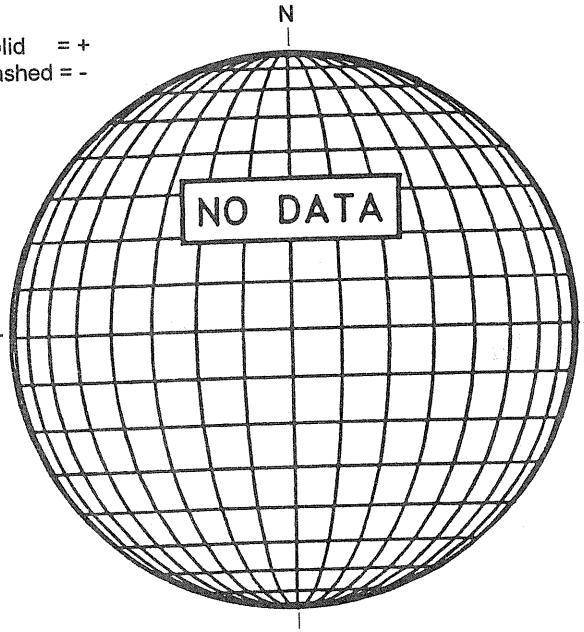
Bright = +
Dark = -



1415 UT

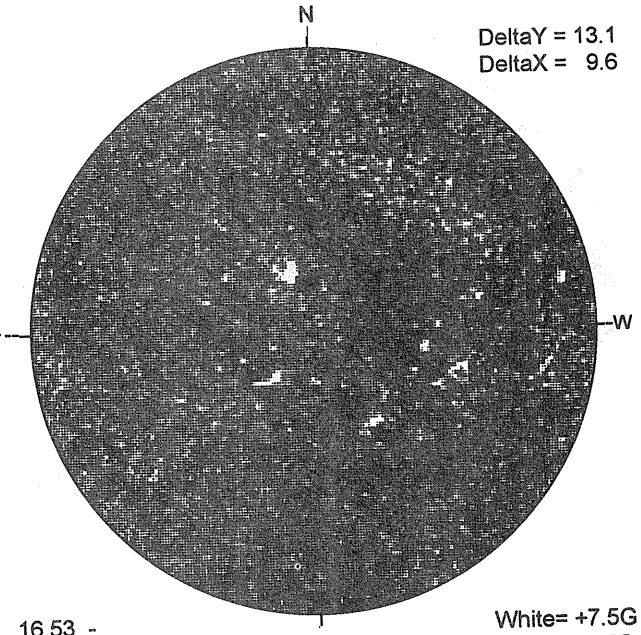
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

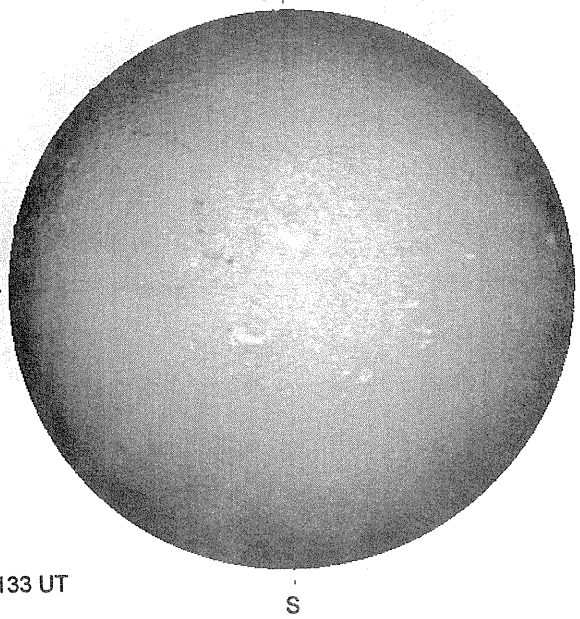
DeltaY = 13.1
DeltaX = 9.6



16.53 -
17.45 UT

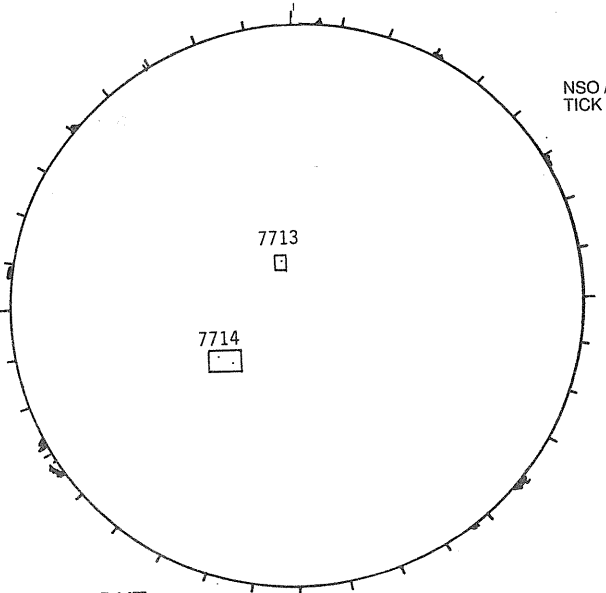
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



2133 UT

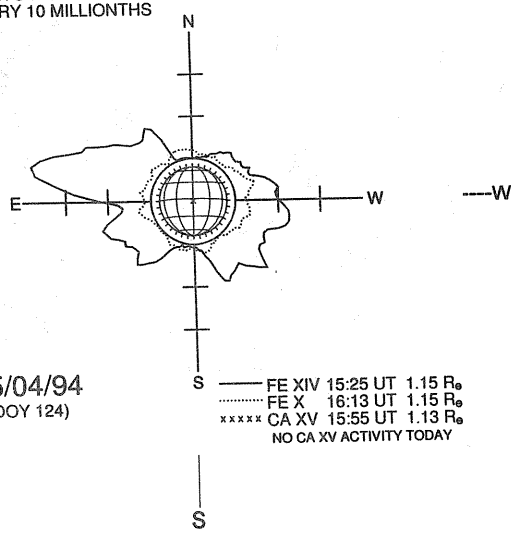
RAMEY SUNSPOT



1215 UT
0530 UT LOMN Prom

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



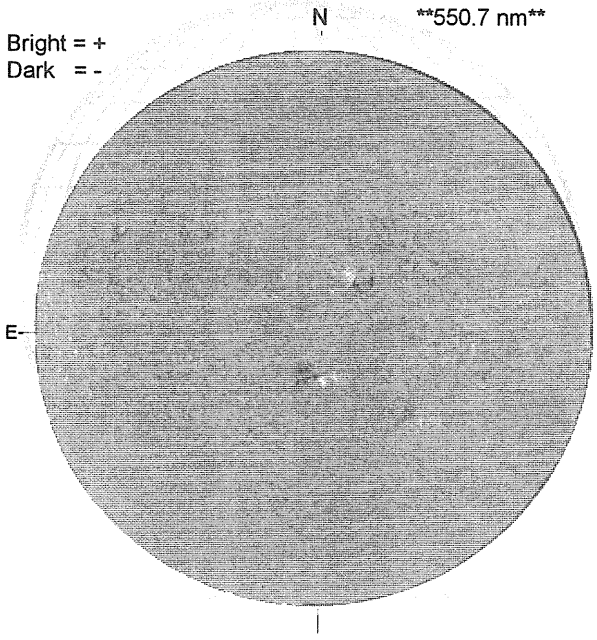
----W

05/04/94
(DOY 124)

FE XIV 15:25 UT 1.15 $R_\odot$
FE X 16:13 UT 1.15 $R_\odot$
CA XV 15:55 UT 1.13 $R_\odot$
NO CA XV ACTIVITY TODAY

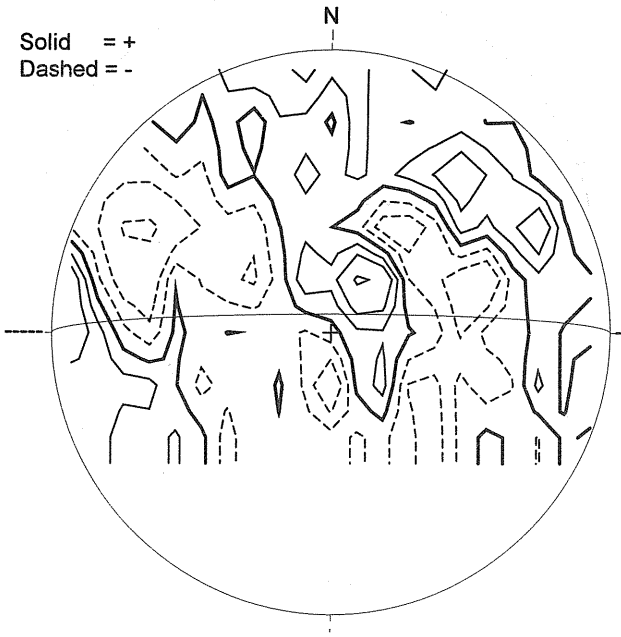
MAY 5, 1994 (P=-23.44, Bo =-3.77, Lo = 292.04)

KITT PEAK MAGNETOGRAM



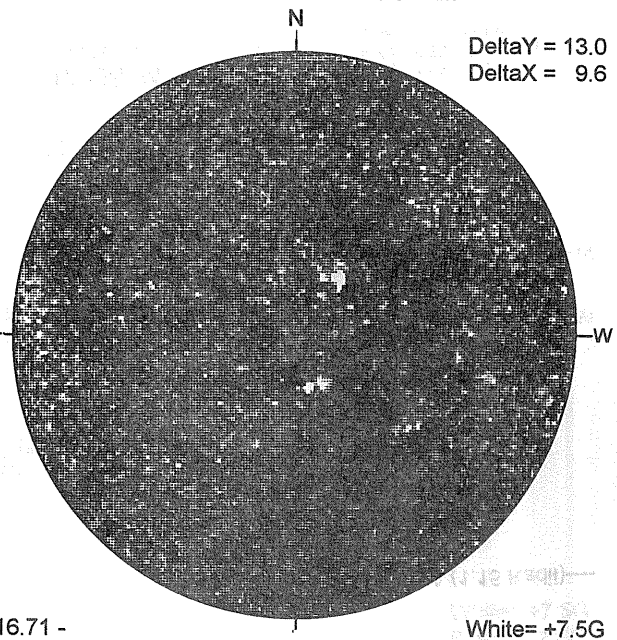
1417 UT

STANFORD MAGNETOGRAM



1720 UT

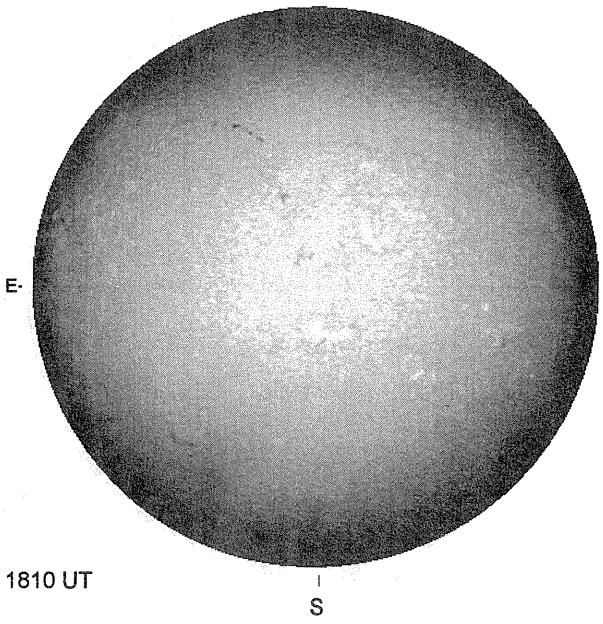
MT. WILSON MAGNETOGRAM



16.71 -
17.64 UT

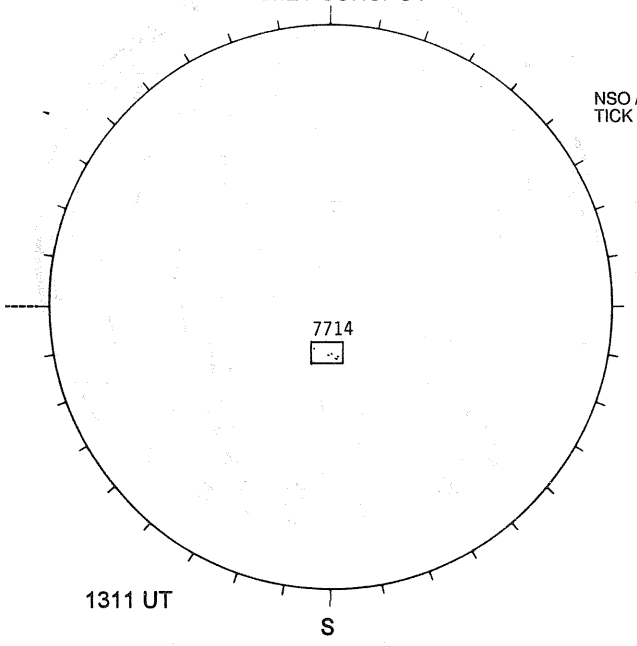
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



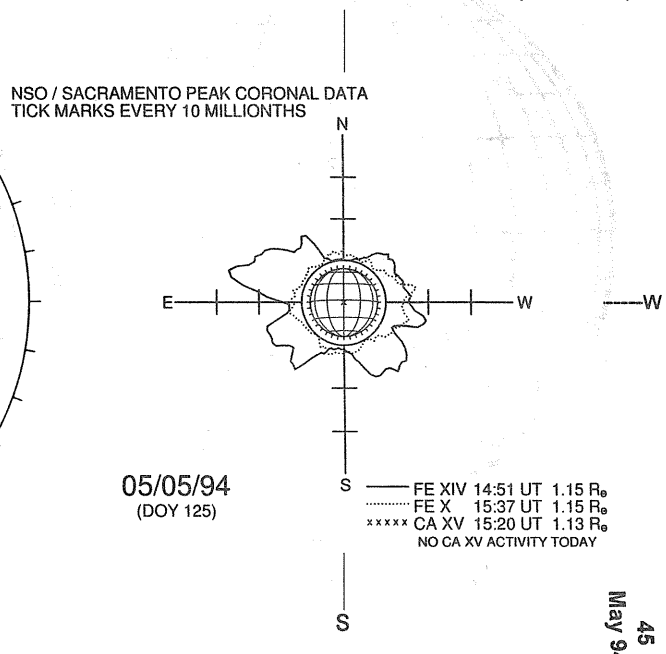
1810 UT

RAMEY SUNSPOT



1311 UT

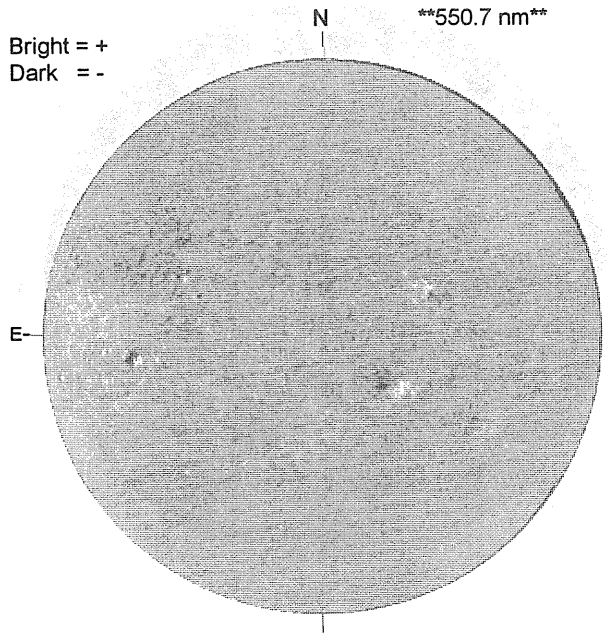
SACRAMENTO PEAK CORONA (1.15 Radii)



05/05/94
(DOY 125)

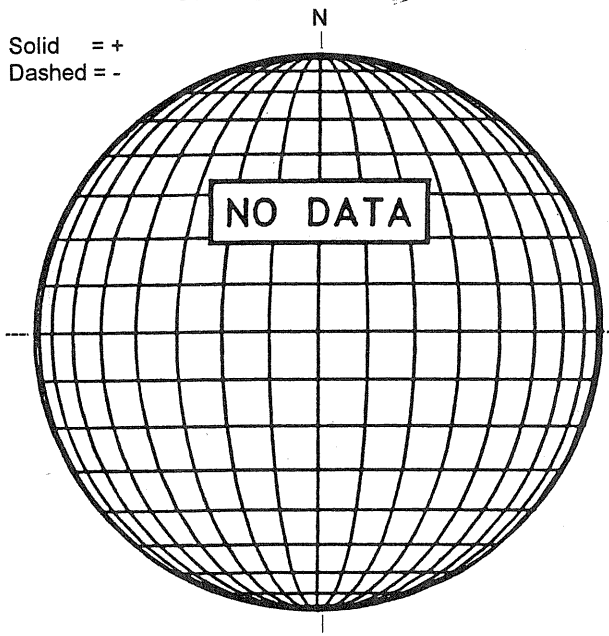
MAY 6, 1994 (P=-23.23, Bo =-3.67, Lo = 278.82)

KITT PEAK MAGNETOGRAM

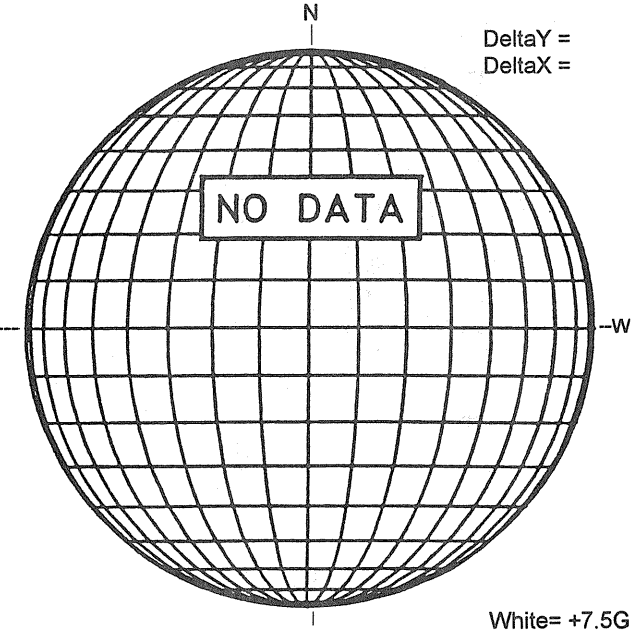


1614 UT

STANFORD MAGNETOGRAM

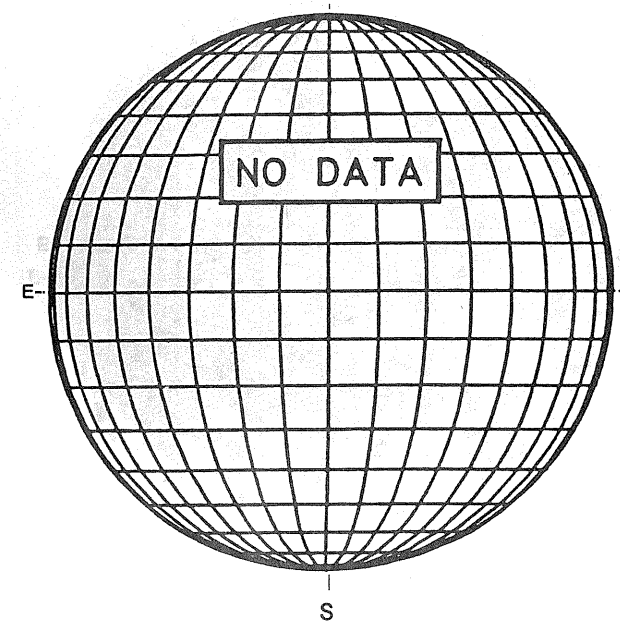


MT. WILSON MAGNETOGRAM

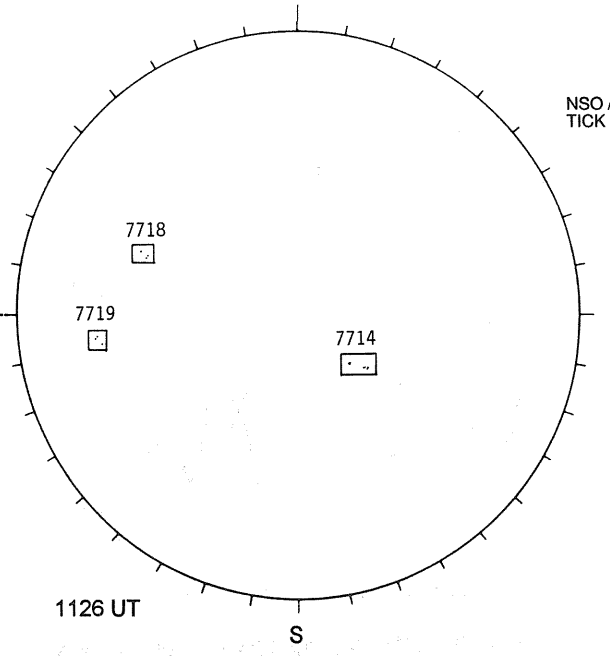


White= +7.5G
Black = -7.5G

----- SACRAMENTO PEAK H-ALPHA



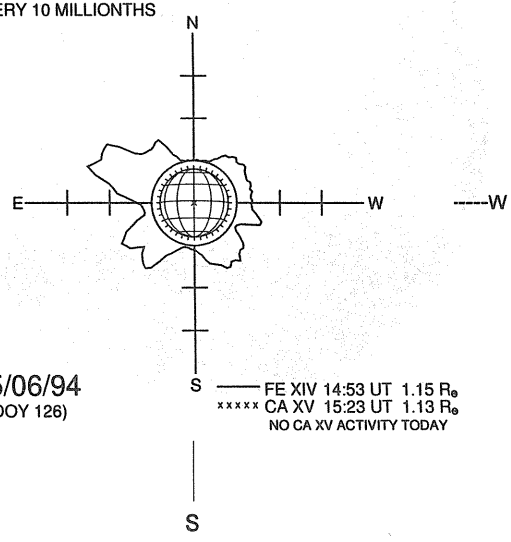
RAMEY SUNSPOT



1126 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



05/06/94
(DOY 126)

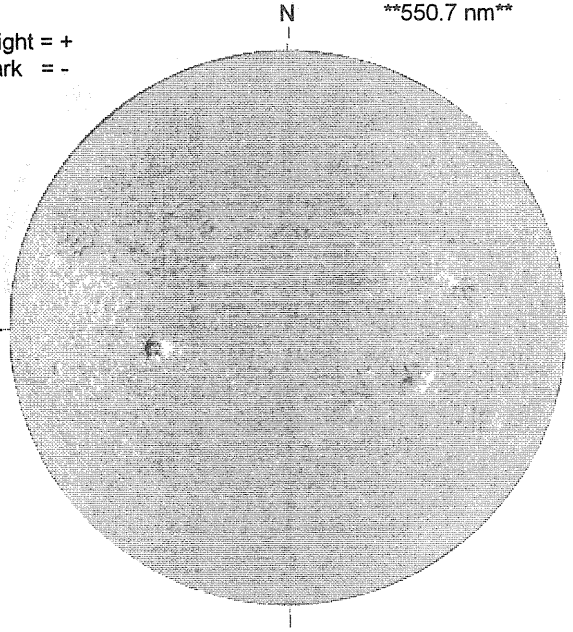
—— FE XIV 14:53 UT 1.15 $R_\odot$
xxxxx CA XV 15:23 UT 1.13 $R_\odot$
NO CA XV ACTIVITY TODAY

MAY 7, 1994 (P=-23.02, Bo =-3.56, Lo = 265.60)

KITT PEAK MAGNETOGRAM

550.7 nm

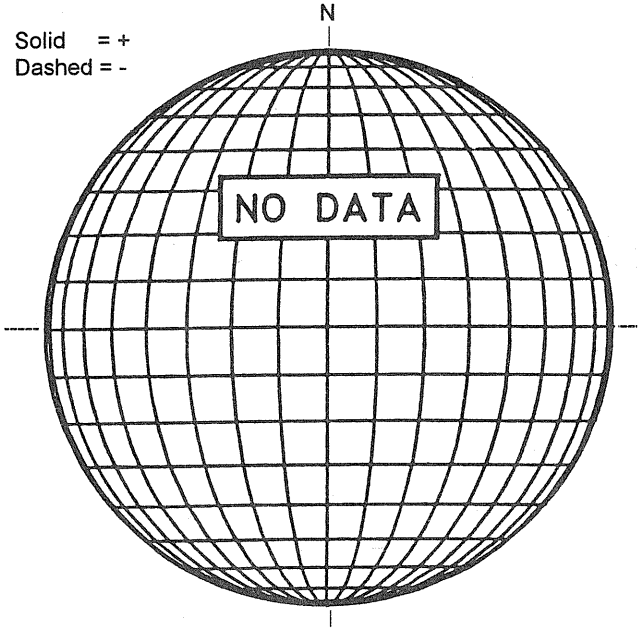
Bright = +
Dark = -



1511 UT

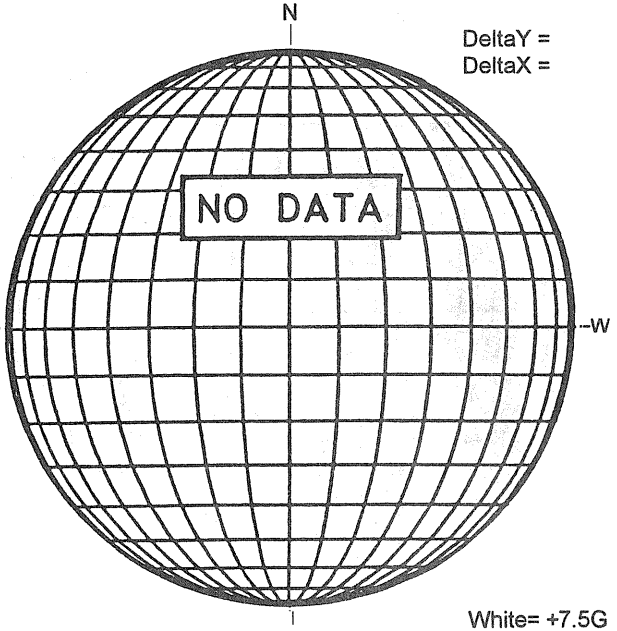
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



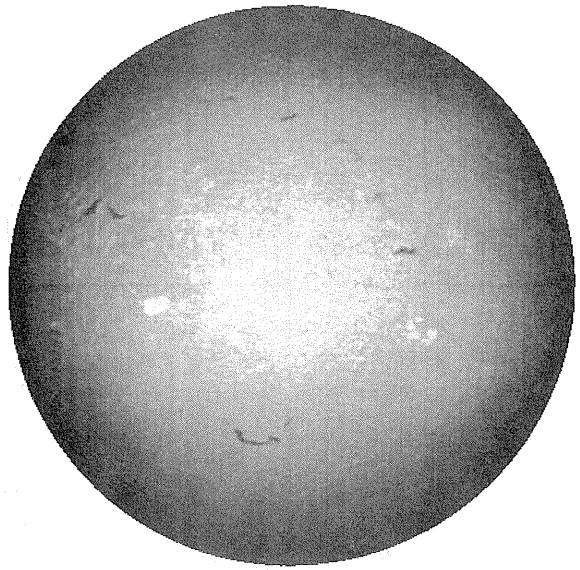
MT. WILSON MAGNETOGRAM

DeltaY =
DeltaX =



White= +7.5G
Black = -7.5G

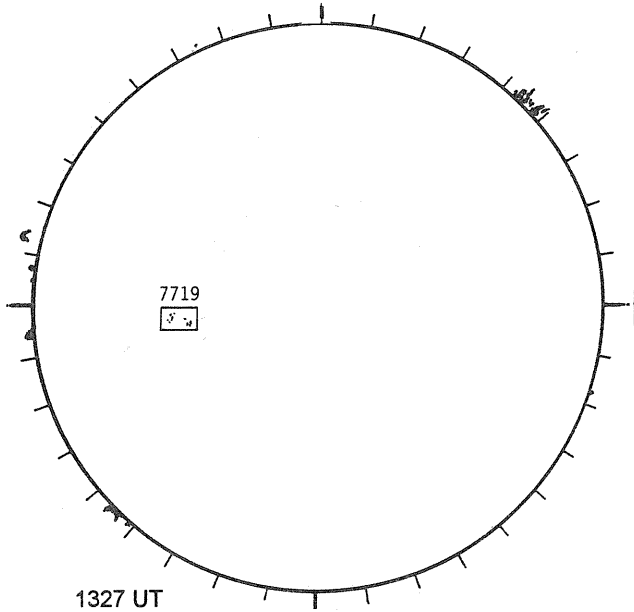
BIG BEAR H-ALPHA



1545 UT

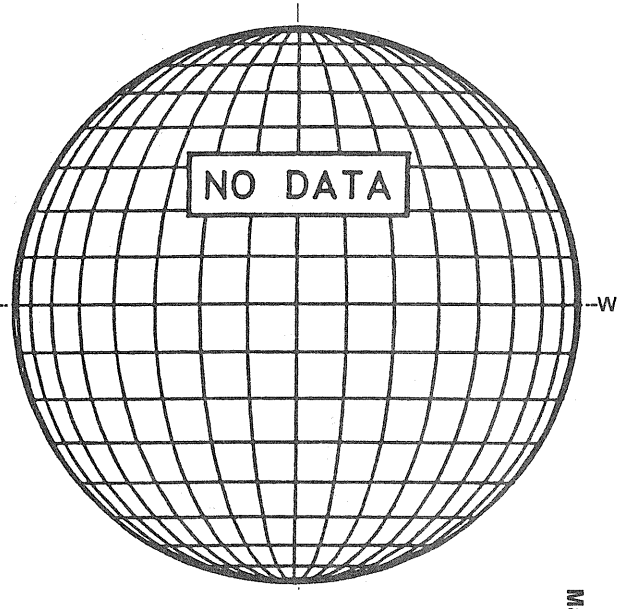
S

RAMEY SUNSPOT



1327 UT
0721 UT VALA Prom S

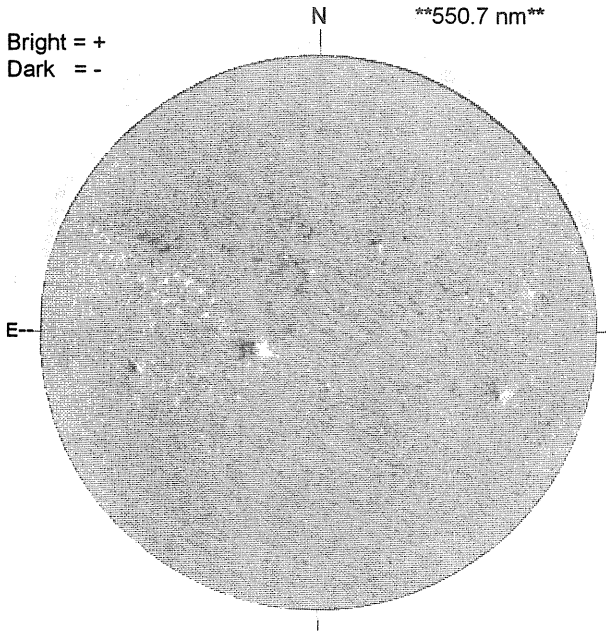
SACRAMENTO PEAK CORONA (1.15 Radii)----



S

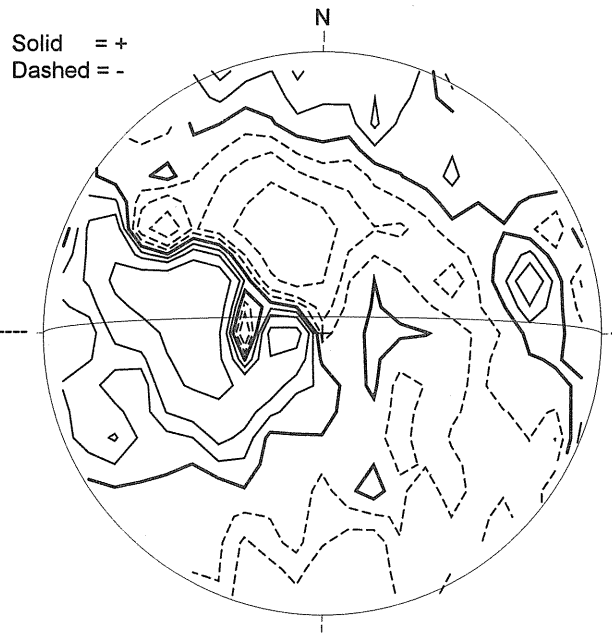
MAY 8, 1994 (P=-22.80, Bo =-3.45, Lo = 252.38)

KITT PEAK MAGNETOGRAM



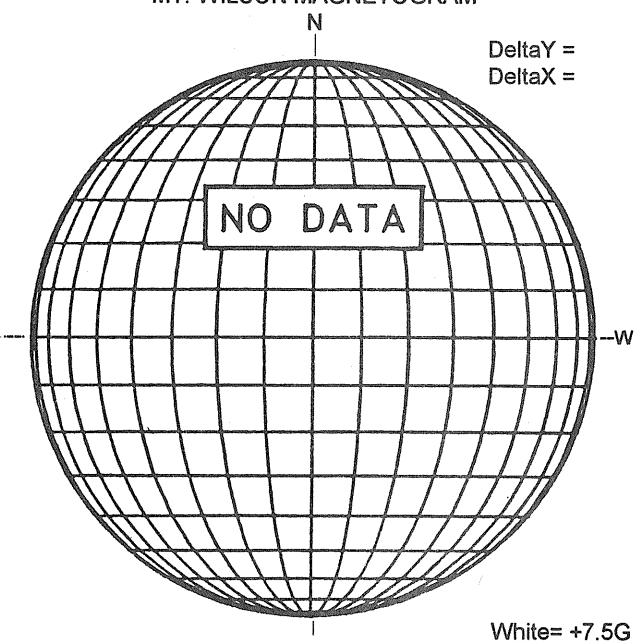
1842 UT

STANFORD MAGNETOGRAM



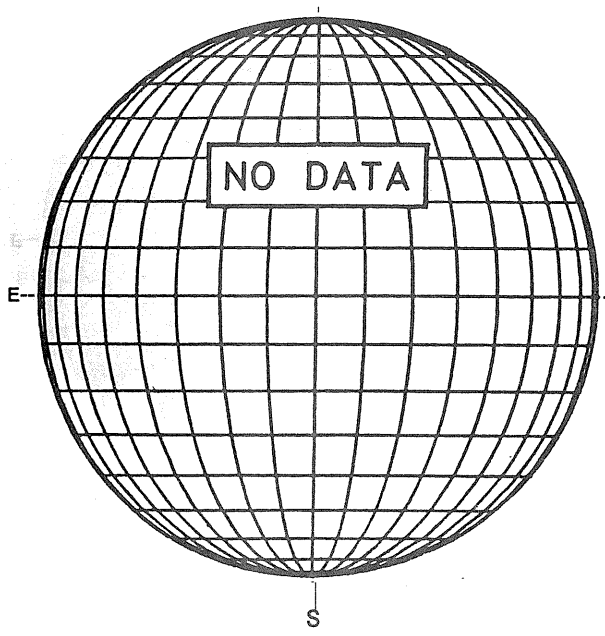
2303 UT

MT. WILSON MAGNETOGRAM

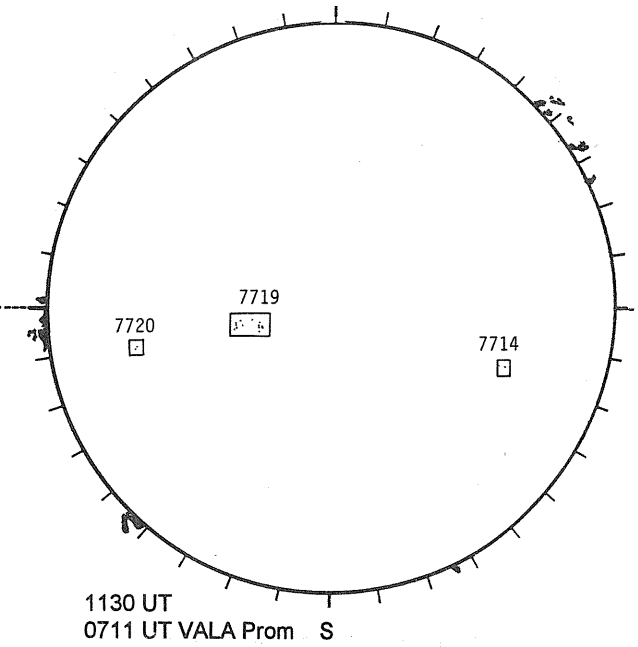


White= +7.5G
Black = -7.5G

----- SACRAMENTO PEAK H-ALPHA

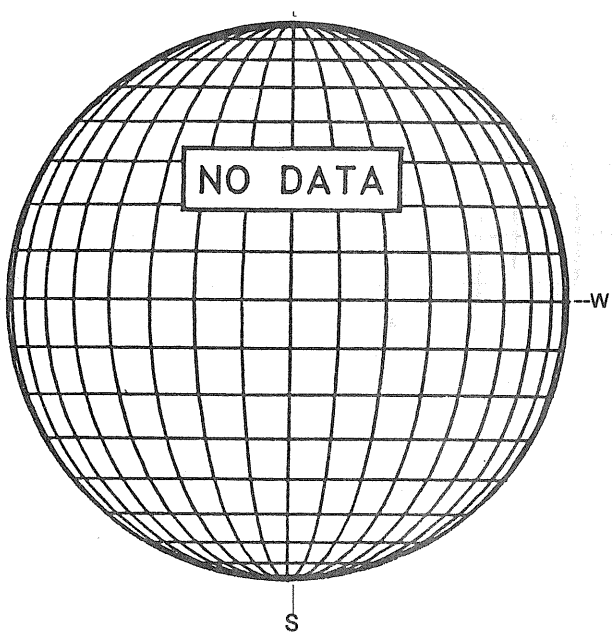


RAMEY SUNSPOT



1130 UT
0711 UT VALA Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----



MAY 9, 1994 (P=-22.57, Bo =-3.35, Lo = 239.16)

KITT PEAK MAGNETOGRAM

N

**550.7 nm

Bright = +
Dark = -

NO DATA

E--

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

2215 UT

MT. WILSON MAGNETOGRAM

N

DeltaY = 13.1
DeltaX = 9.6

W

16.59 UT
17.52 UT

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

E-

1527 UT

S

RAMEY SUNSPOT

7719

1334 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)

NO DATA

W

S

49
May 94

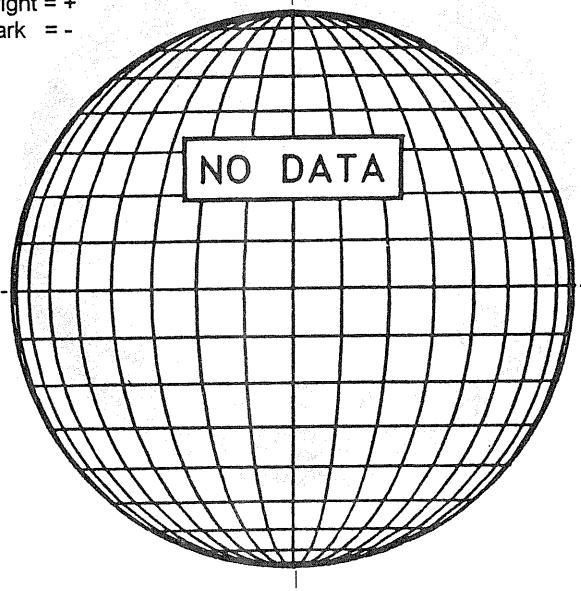
MAY 10, 1994 (P=-22.33, Bo =-3.24, Lo = 225.94)

KITT PEAK MAGNETOGRAM

N

550.7 nm

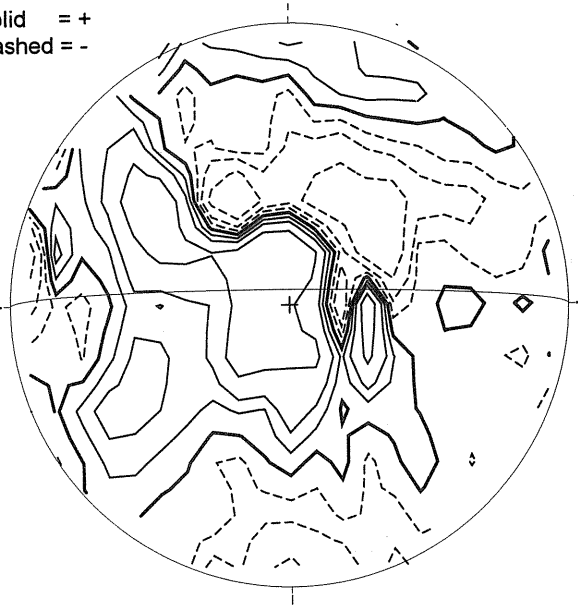
Bright = +
Dark = -



STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

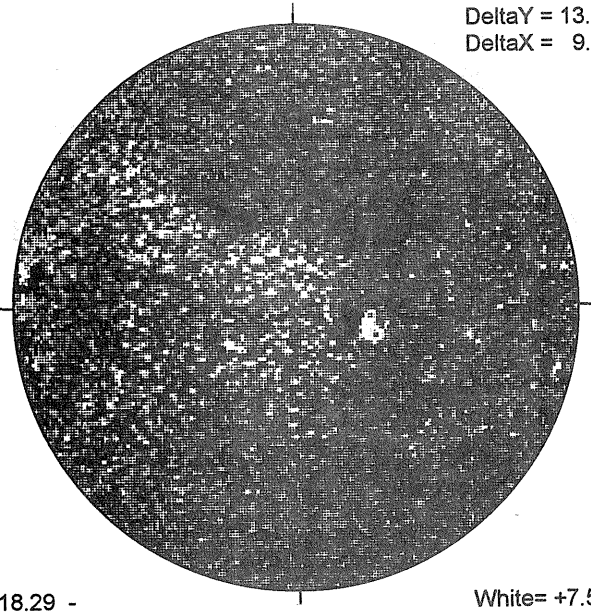


1907 UT

MT. WILSON MAGNETOGRAM

N

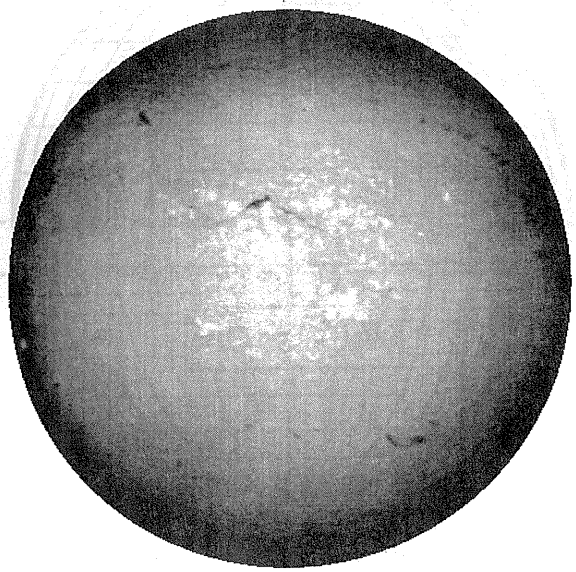
DeltaY = 13.1
DeltaX = 9.6



18.29 -
19.22 UT

White= +7.5G
Black = -7.5G

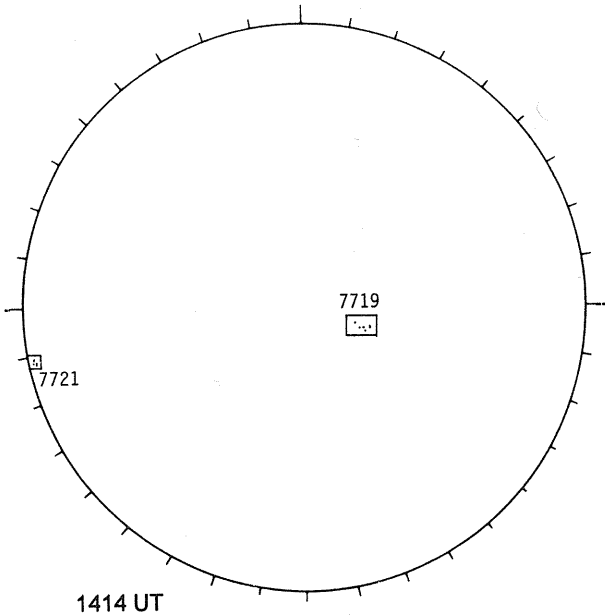
BIG BEAR H-ALPHA



1400 UT

S

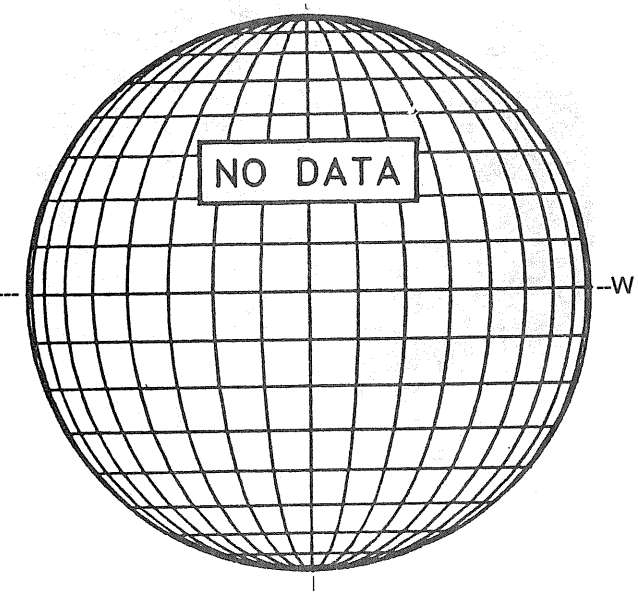
RAMEY SUNSPOT



1414 UT

S

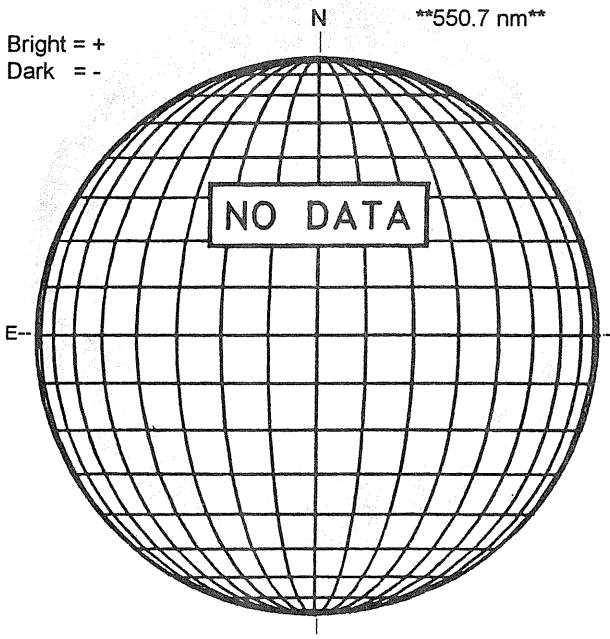
SACRAMENTO PEAK CORONA (1.15 Radii)----



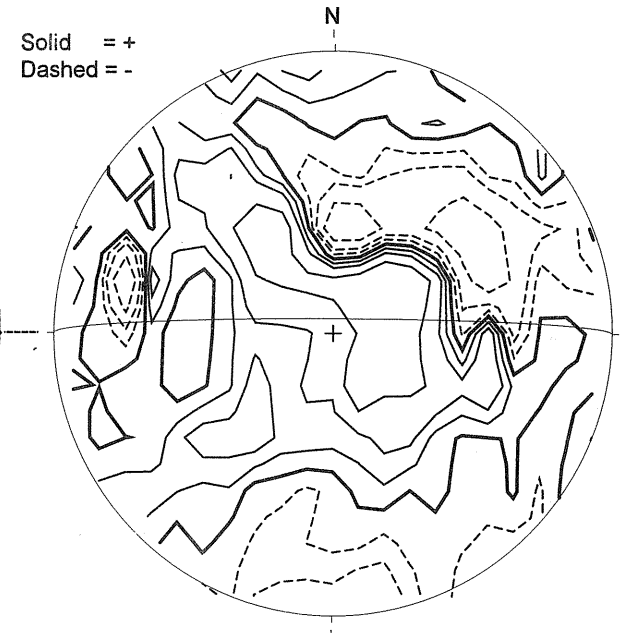
S

MAY 11, 1994 (P=-22.09 Bo =-3.13, Lo = 212.72)

KITT PEAK MAGNETOGRAM

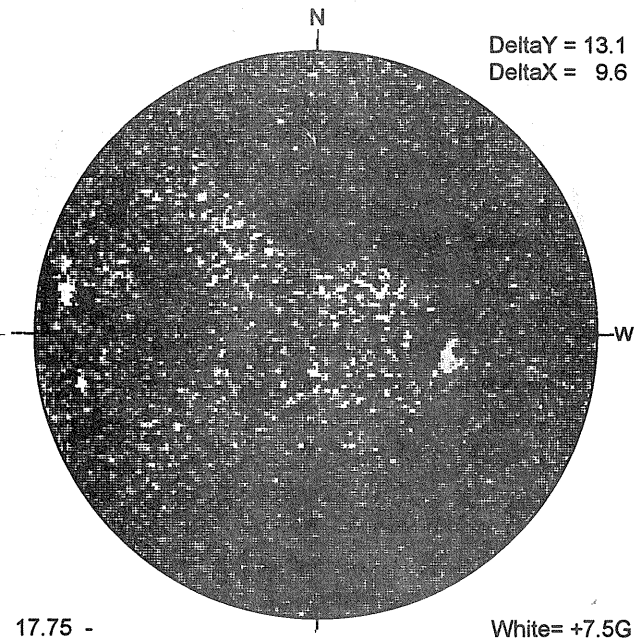


STANFORD MAGNETOGRAM



2349 UT

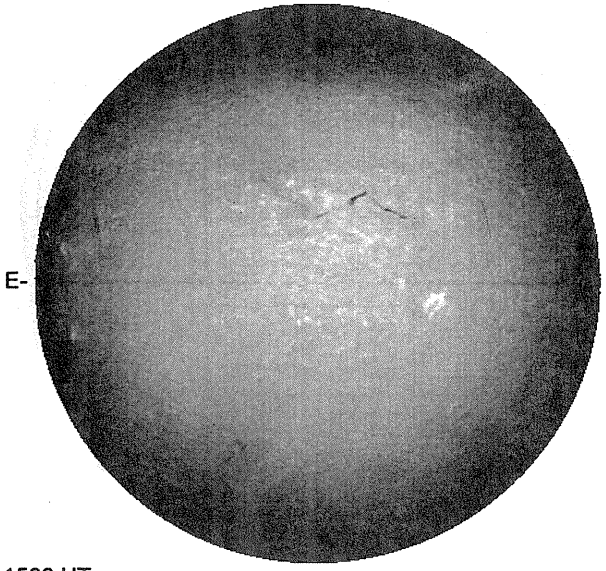
MT. WILSON MAGNETOGRAM



17.75 -
18.67 UT

White= +7.5G
Black = -7.5G

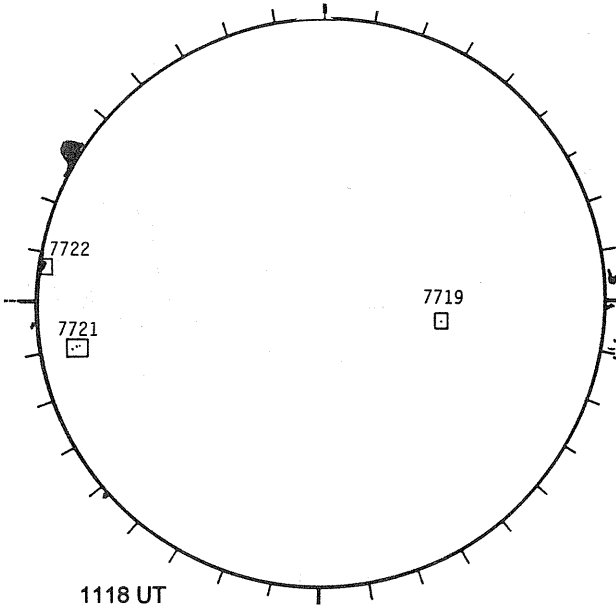
BIG BEAR H-ALPHA



1500 UT

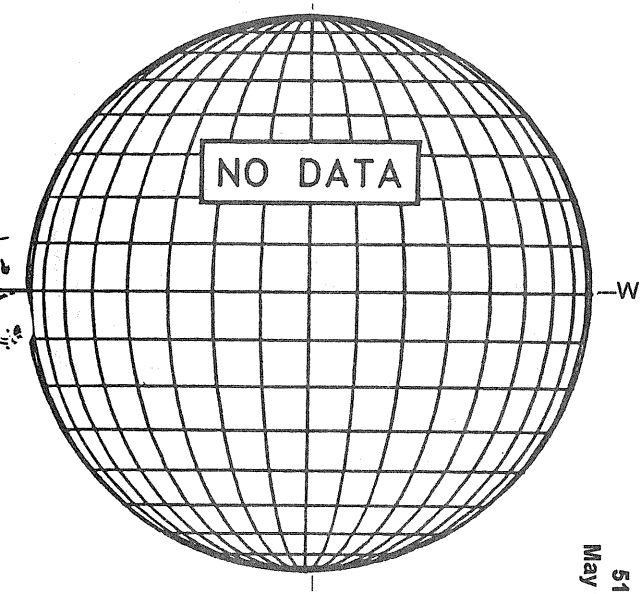
S

RAMEY SUNSPOT



1118 UT
0925 UT VALA Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----



S

51
May 94

MAY 12, 1994 (P=-21.84, Bo =-3.02, Lo = 199.50)

KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -

NO DATA

E-

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

2157 UT

MT. WILSON MAGNETOGRAM

N

DeltaY = 13.1
DeltaX = 9.6

W

16.64 -
17.56 UT

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

E-

1536 UT

S

RAMEY SUNSPOT

7722
7723
7721

1133 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)----

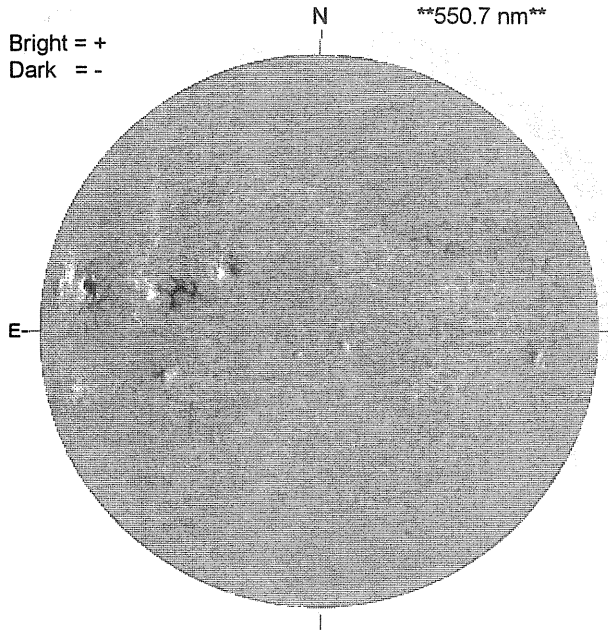
NO DATA

W

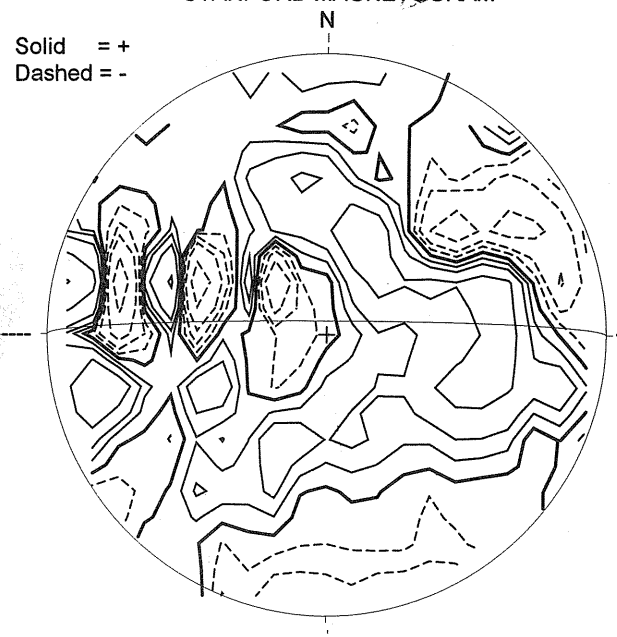
S

MAY 13, 1994 (P=-21.58, Bo =-2.91, Lo = 186.27)

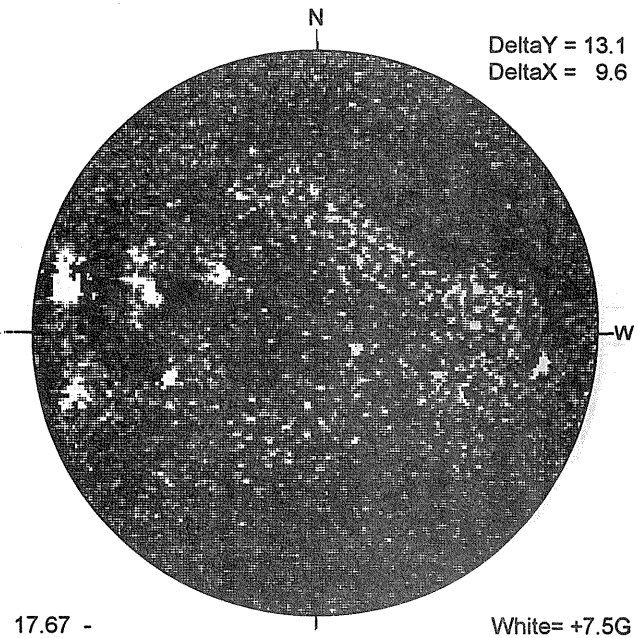
KITT PEAK MAGNETOGRAM



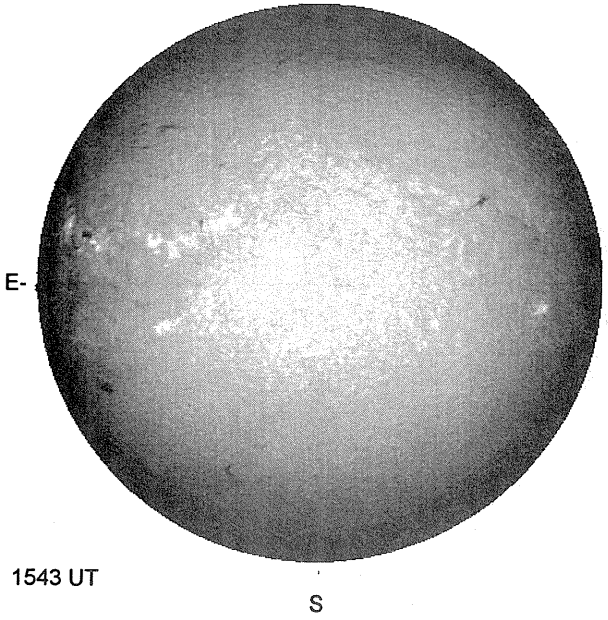
STANFORD MAGNETOGRAM



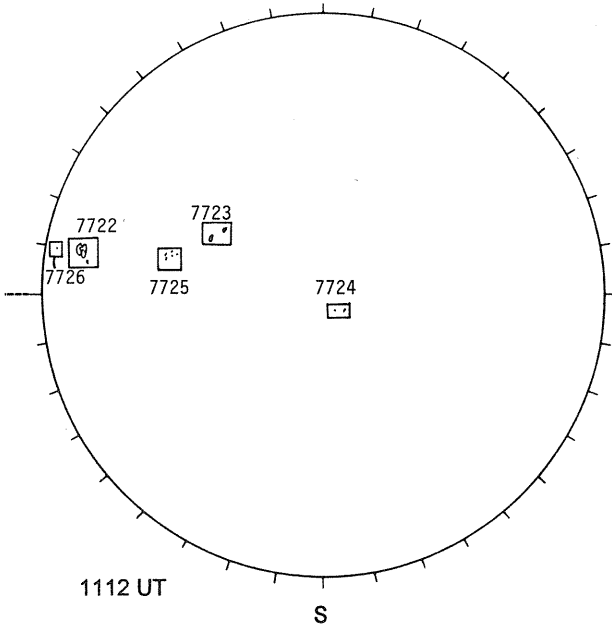
MT. WILSON MAGNETOGRAM



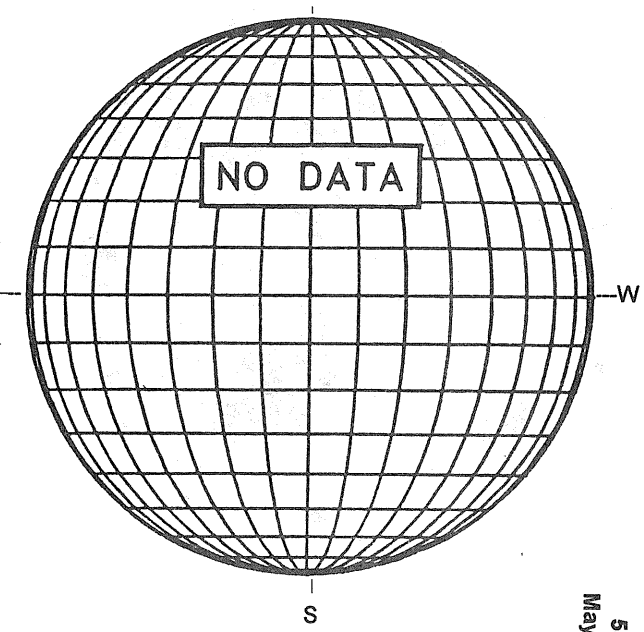
BIG BEAR H-ALPHA



RAMEY SUNSPOT



SACRAMENTO PEAK CORONA (1.15 Radii)

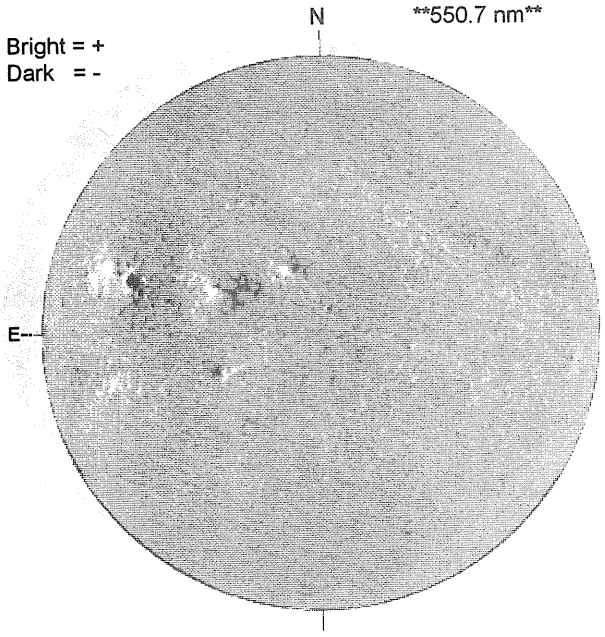


MAY 14, 1994 (P=-21.32, Bo =-2.79, Lo = 173.05)

KITT PEAK MAGNETOGRAM

550.7 nm

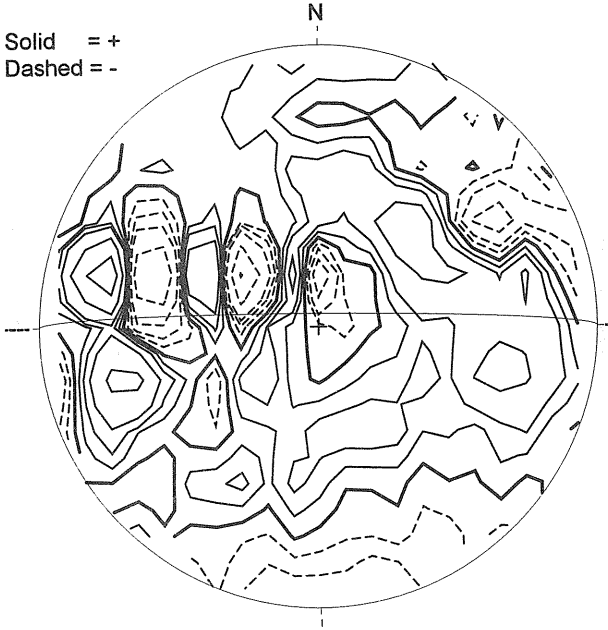
Bright = +
Dark = -



1417 UT

STANFORD MAGNETOGRAM

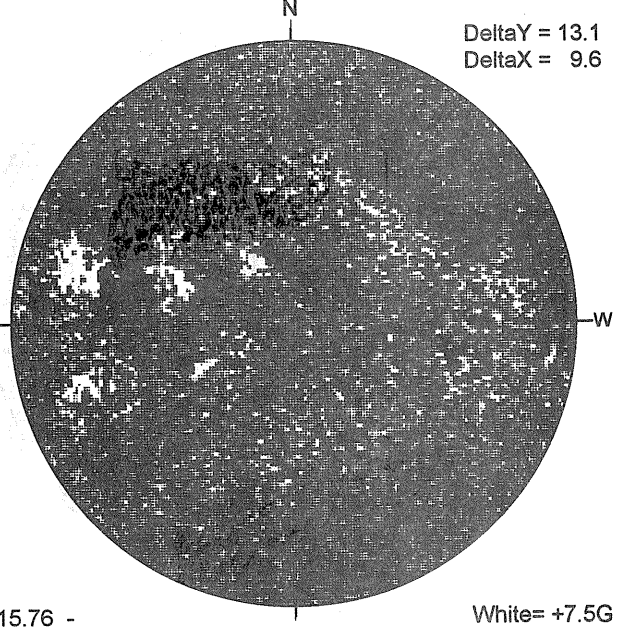
Solid = +
Dashed = -



1831 UT

MT. WILSON MAGNETOGRAM

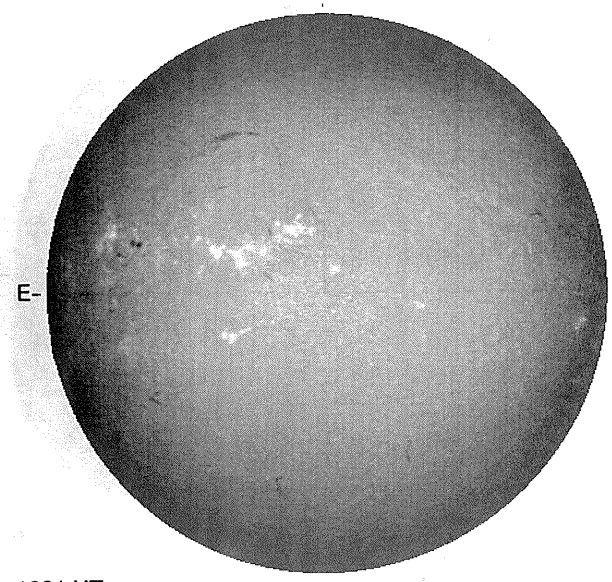
DeltaY = 13.1
DeltaX = 9.6



15.76 -
16.69 UT

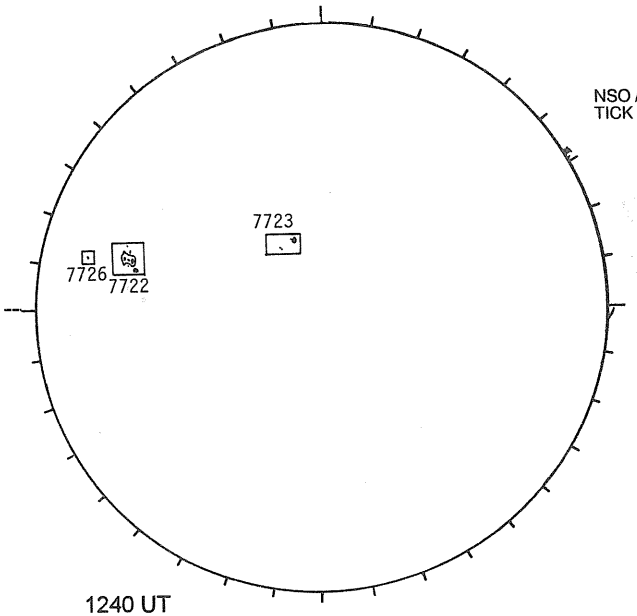
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



1601 UT

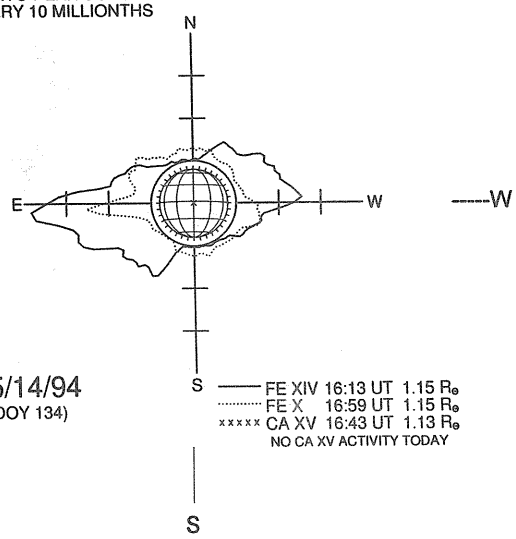
RAMEY SUNSPOT



1240 UT
0524 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS

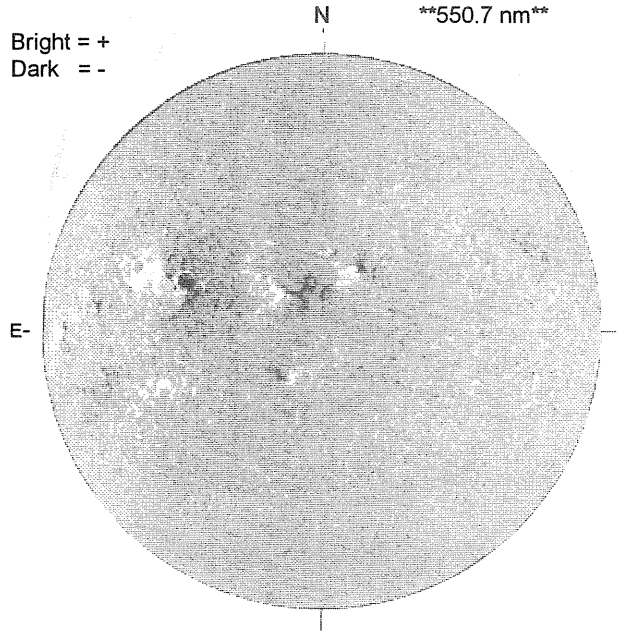


05/14/94
(DOY 134)

FE XIV 16:13 UT 1.15 $R_\odot$
FE X 16:59 UT 1.15 $R_\odot$
CA XV 16:43 UT 1.13 $R_\odot$
NO CA XV ACTIVITY TODAY

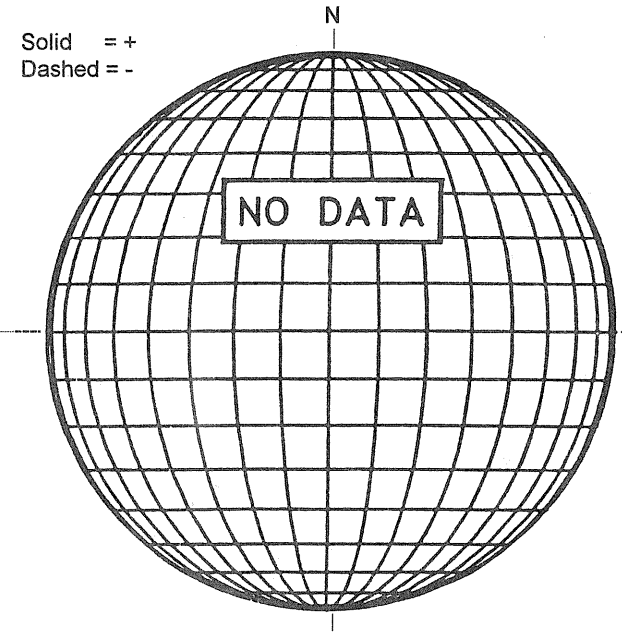
MAY 15, 1994 (P=-21.05, Bo =-2.68, Lo = 159.82)

KITT PEAK MAGNETOGRAM

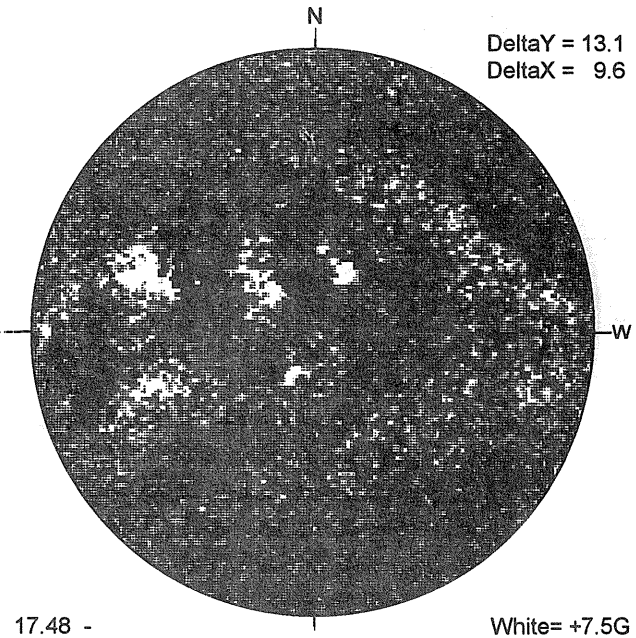


1501 UT

STANFORD MAGNETOGRAM



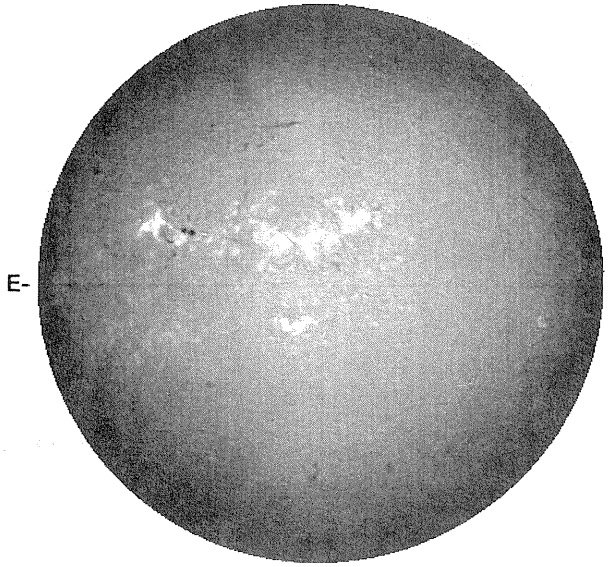
MT. WILSON MAGNETOGRAM



17.48 -
18.40 UT

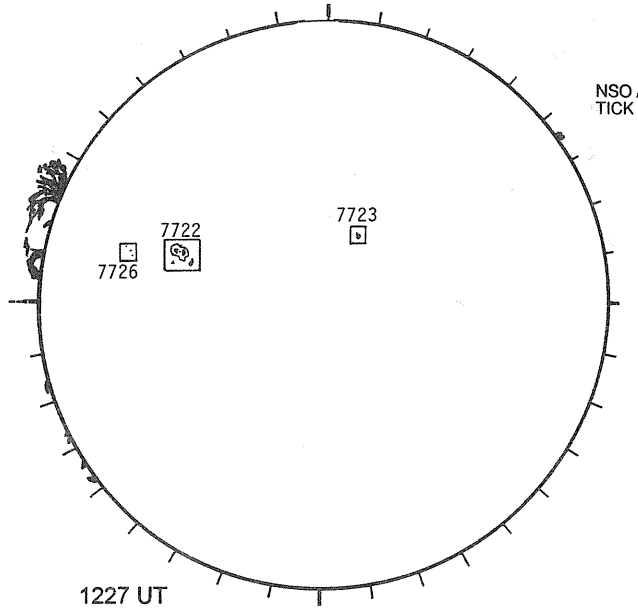
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



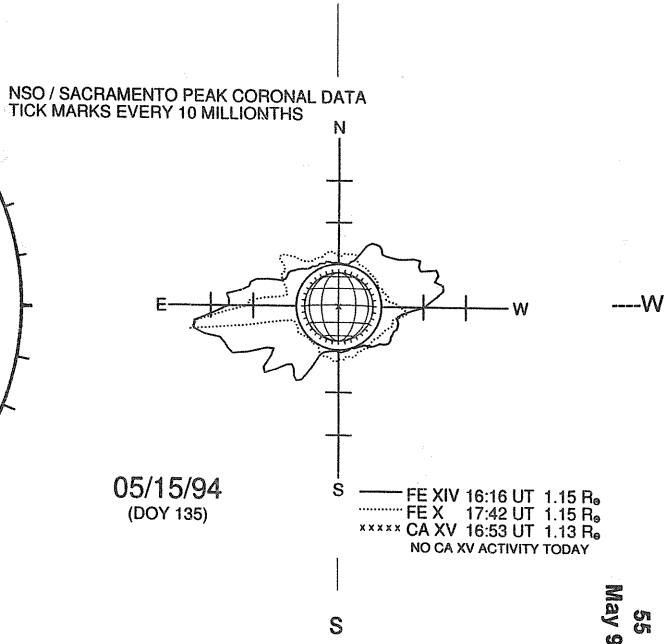
1823 UT

RAMEY SUNSPOT



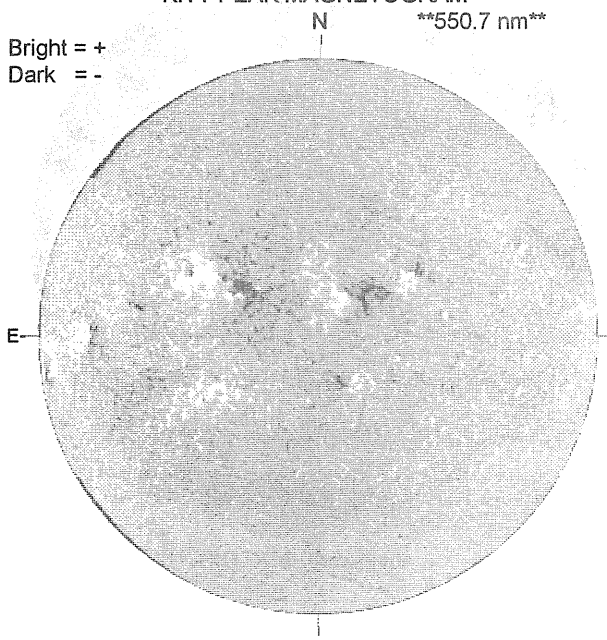
1227 UT
0641 UT VALA Prom

SACRAMENTO PEAK CORONA (1.15 Radii)----



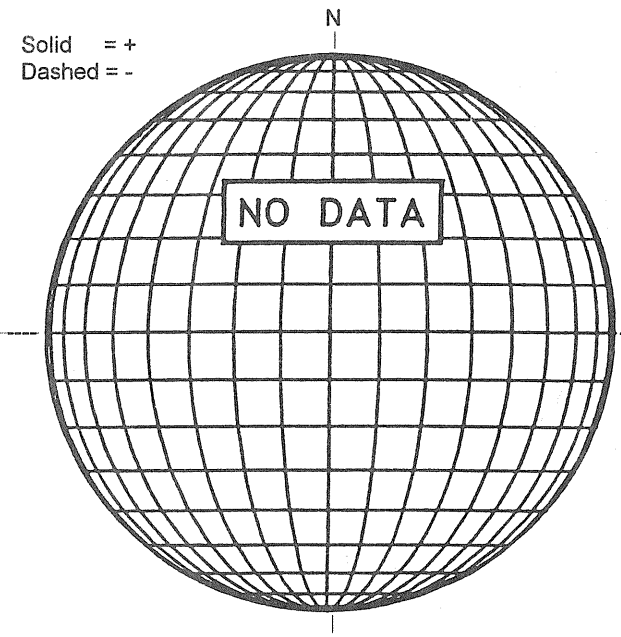
MAY 16, 1994 (P=-20.78, Bo =-2.57, Lo = 146.60)

KITT PEAK MAGNETOGRAM

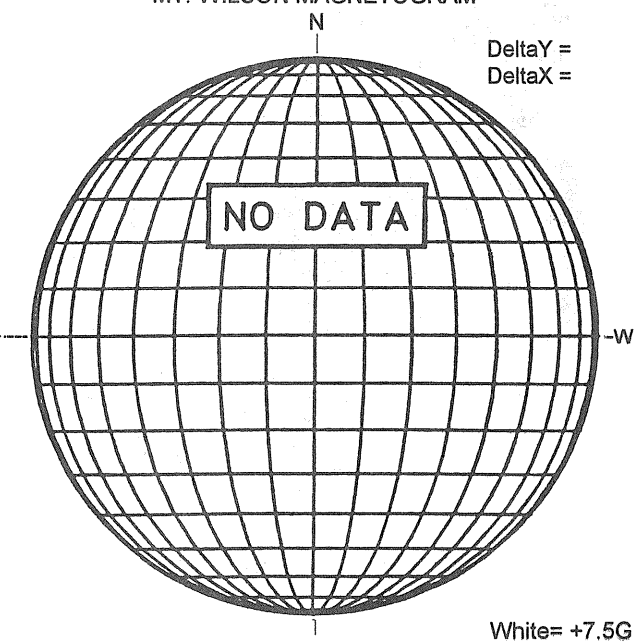


1507 UT

STANFORD MAGNETOGRAM

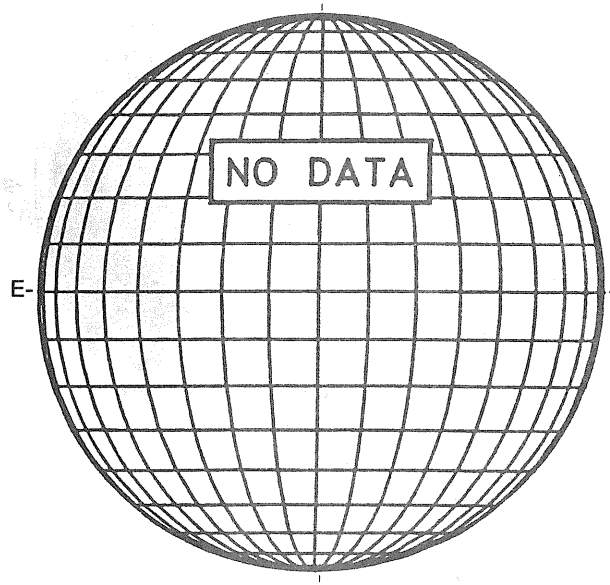


MT. WILSON MAGNETOGRAM

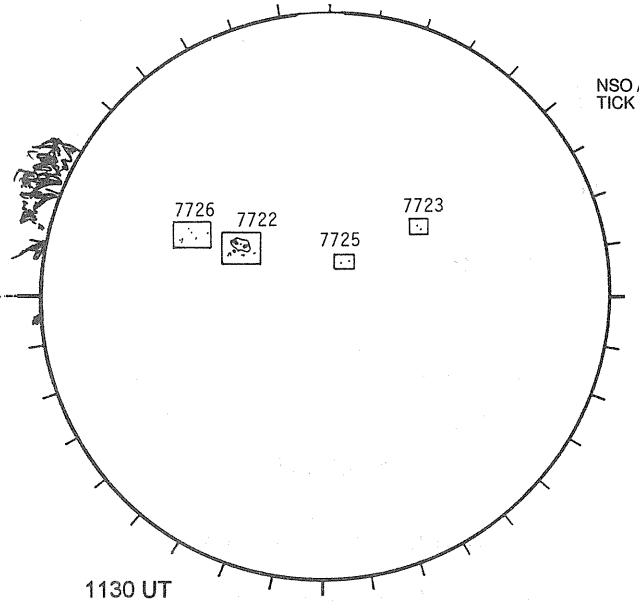


White= +7.5G
Black = -7.5G

SACRAMENTO PEAK H-ALPHA



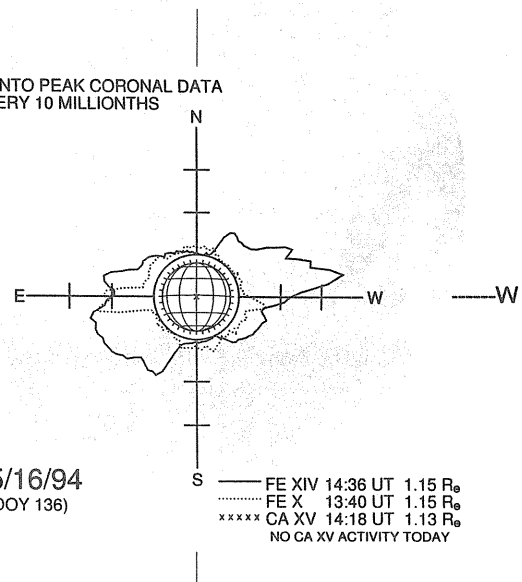
RAMEY SUNSPOT



1130 UT
0720 UT VALA Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS

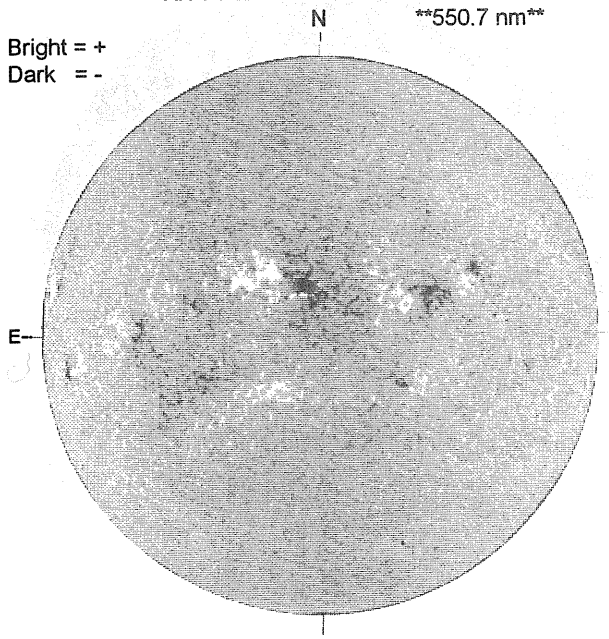


05/16/94
(DOY 136)

FE XIV 14:36 UT 1.15 R_e
FE X 13:40 UT 1.15 R_e
xxxxx CA XV 14:18 UT 1.13 R_e
NO CA XV ACTIVITY TODAY

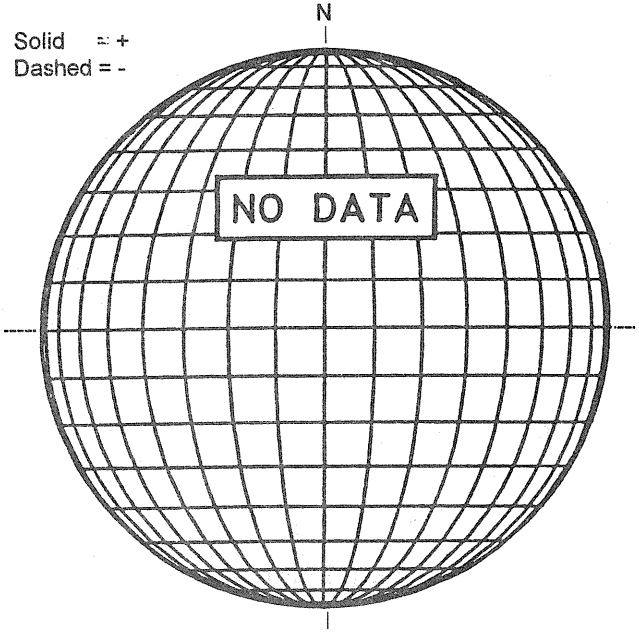
MAY 17, 1994 (P=-20.49, Bo =-2.45, Lo = 133.37)

KITT PEAK MAGNETOGRAM

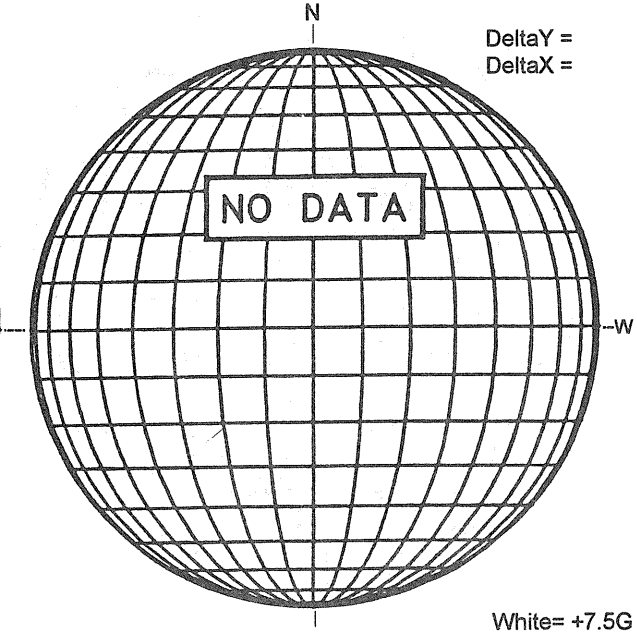


1547 UT

STANFORD MAGNETOGRAM

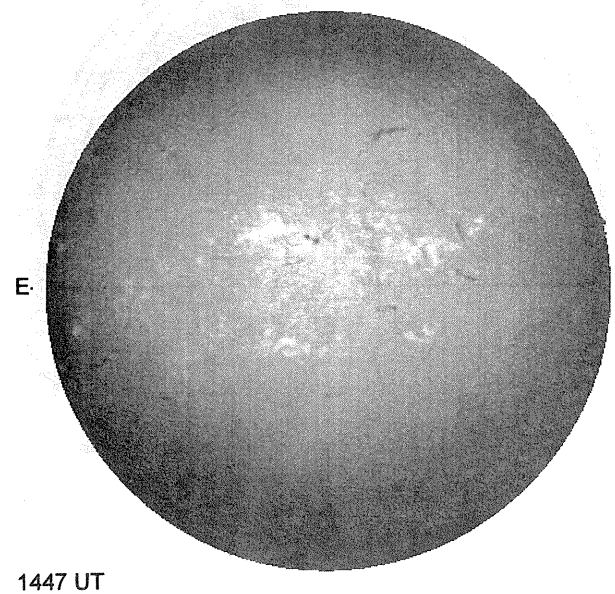


MT. WILSON MAGNETOGRAM



White= +7.5G
Black = -7.5G

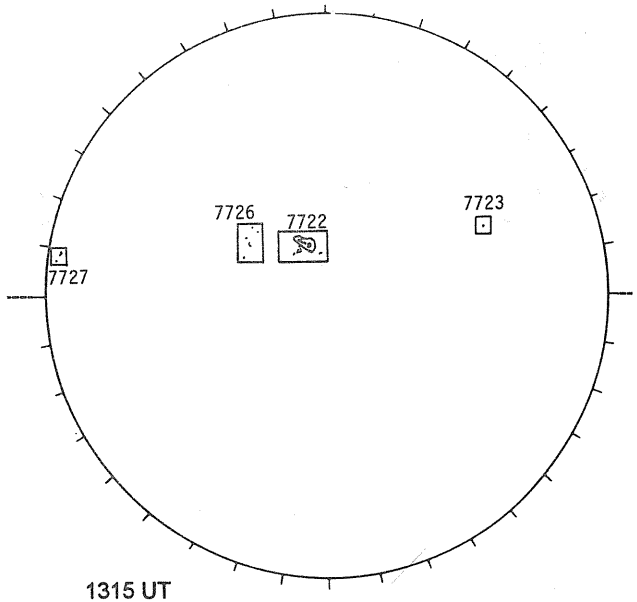
BIG BEAR H-ALPHA



1447 UT

S

RAMEY SUNSPOT



1315 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)----

S

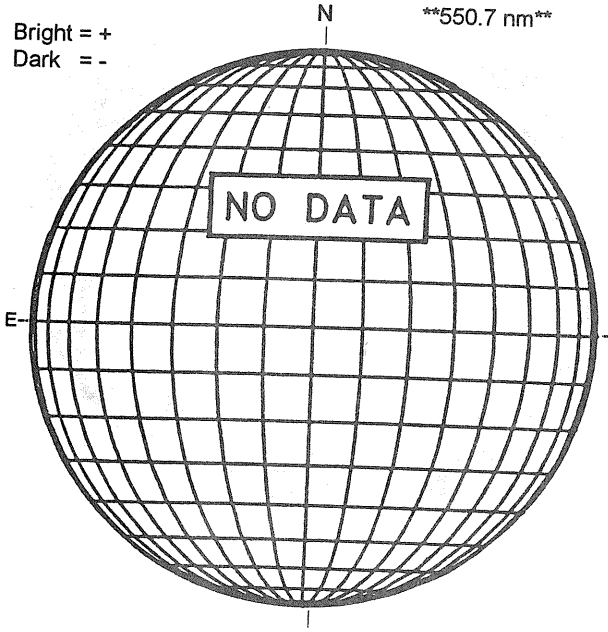
57
May 94

MAY 18, 1994 (P=-20.21, Bo =-2.34, Lo = 120.14)

KITT PEAK MAGNETOGRAM

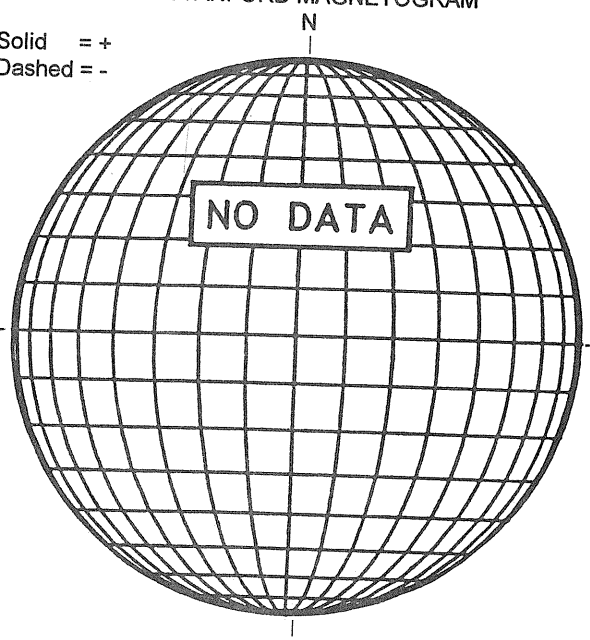
Bright = +
Dark = -

550.7 nm



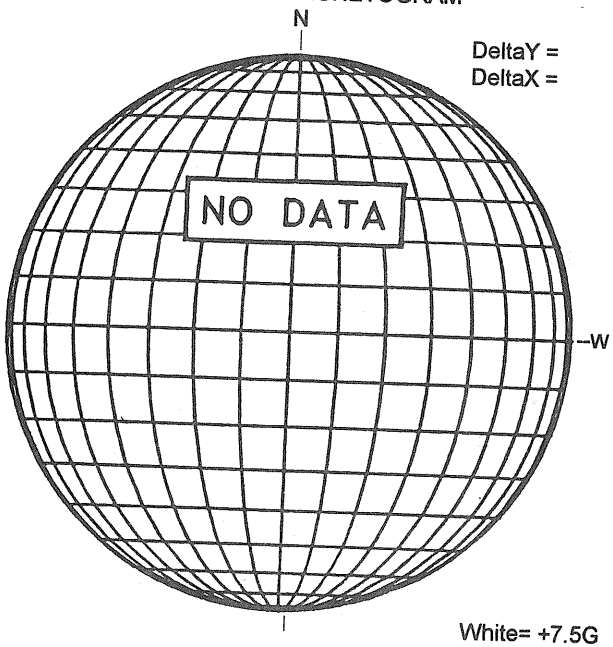
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



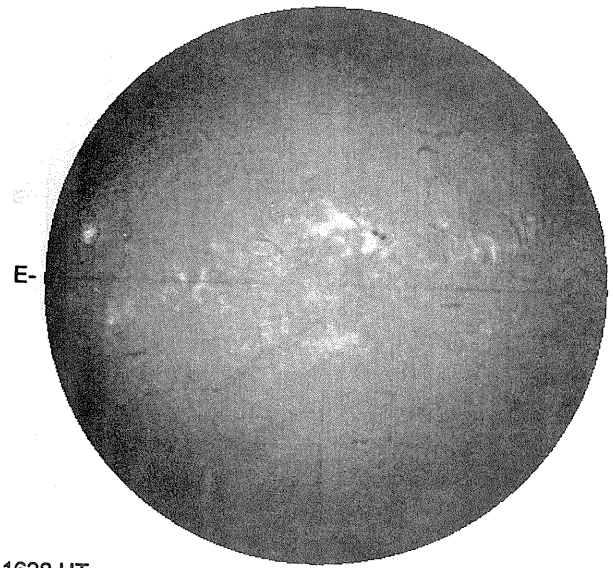
MT. WILSON MAGNETOGRAM

DeltaY =
DeltaX =



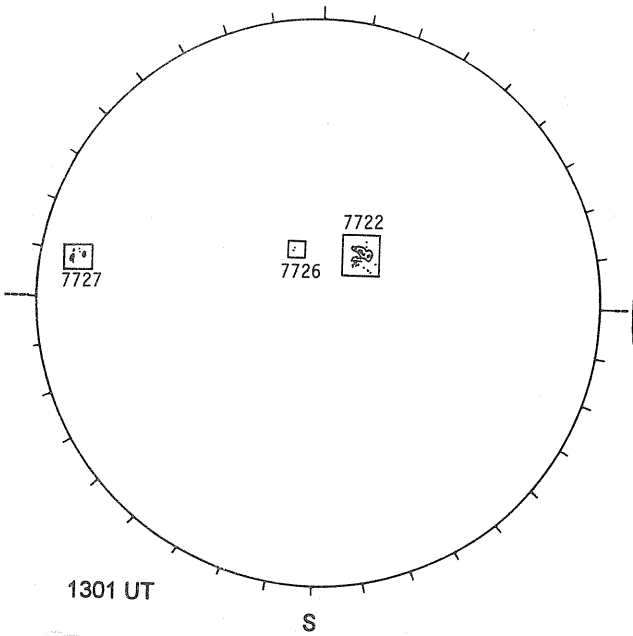
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



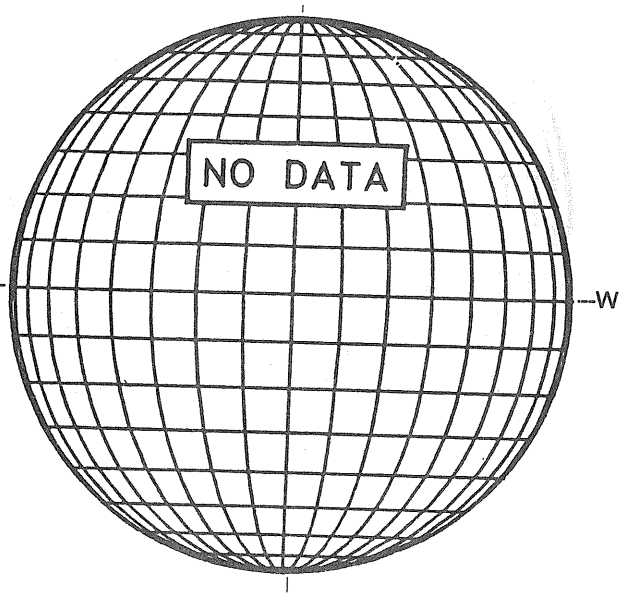
1628 UT

RAMEY SUNSPOT



1301 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----

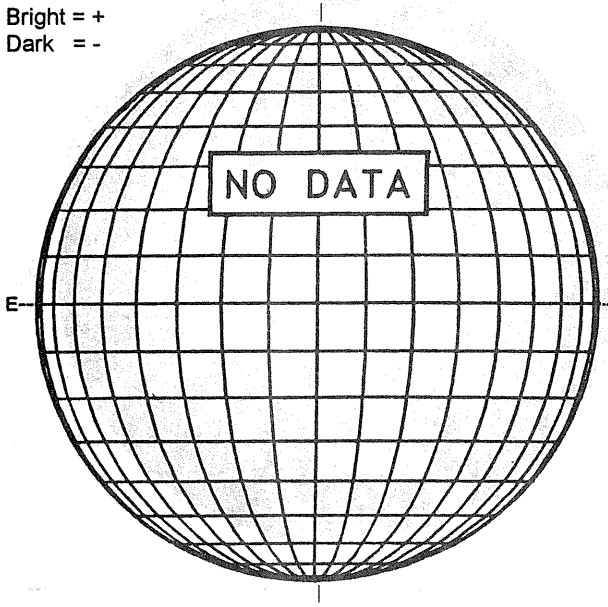


MAY 19, 1994 (P=-19.91, Bo =-2.22, Lo = 106.92)

KITT PEAK MAGNETOGRAM

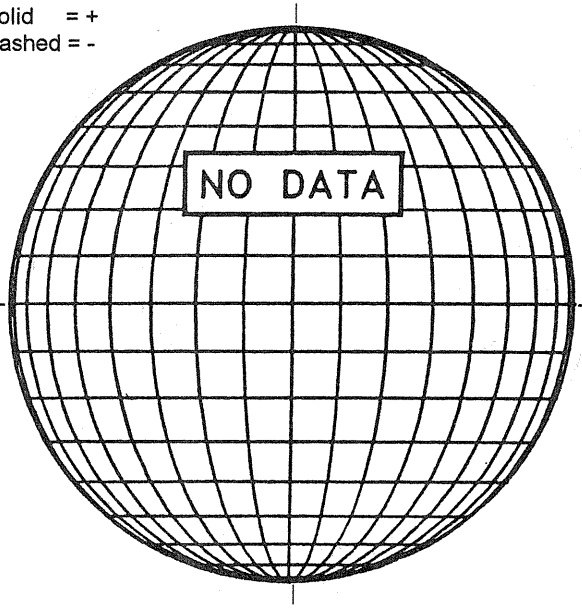
550.7 nm

Bright = +
Dark = -



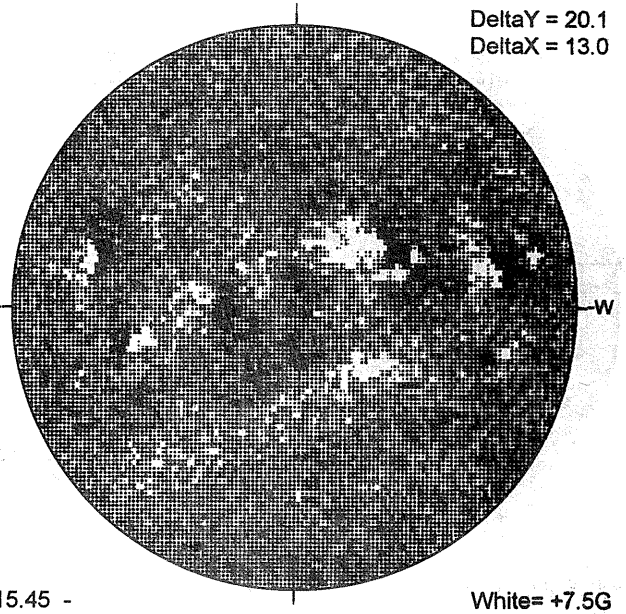
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

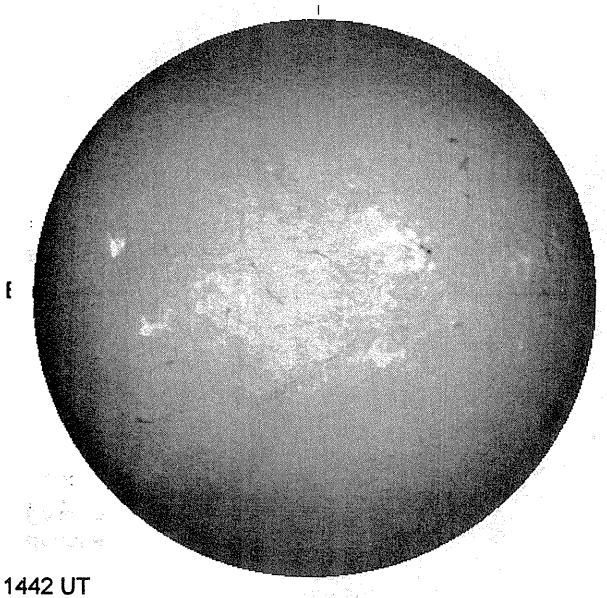
DeltaY = 20.1
DeltaX = 13.0



15.45 -
15.85 UT

White= +7.5G
Black = -7.5G

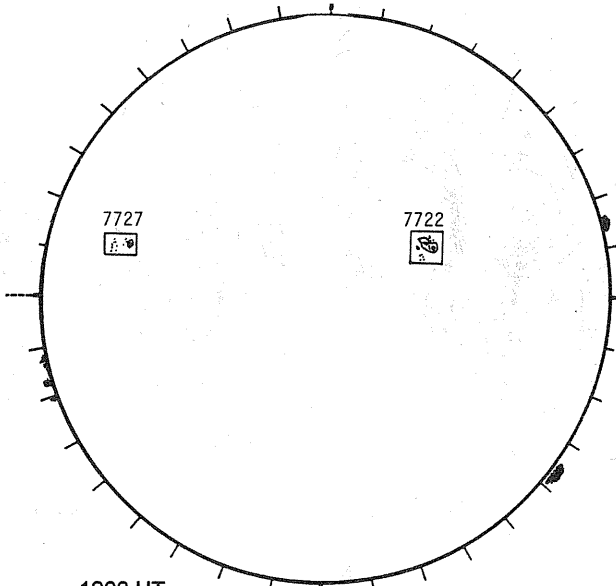
BIG BEAR H-ALPHA



1442 UT

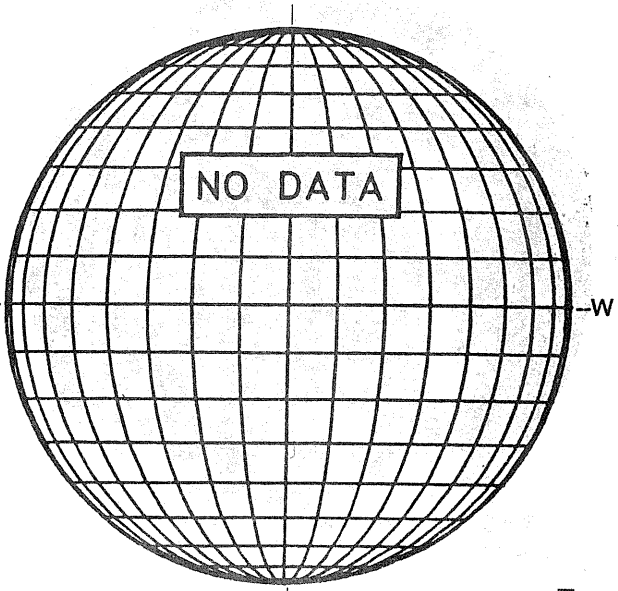
S

RAMEY SUNSPOT



1200 UT
0839 UT VALA Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)



S

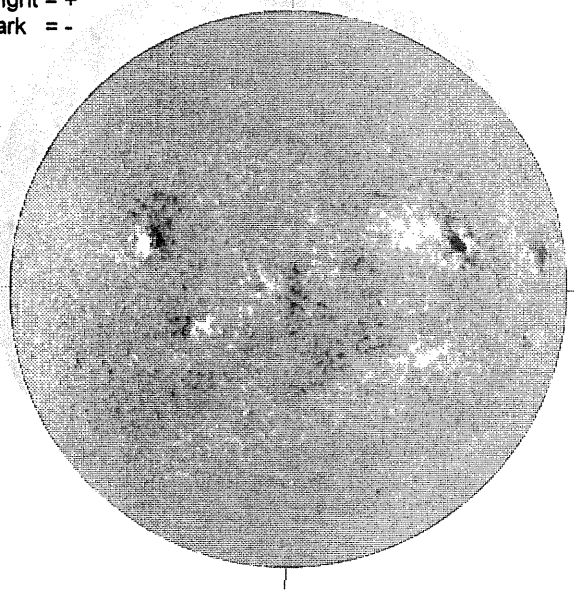
MAY 20, 1994 (P=-19.61, Bo =-2.11, Lo = 93.69)

KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -

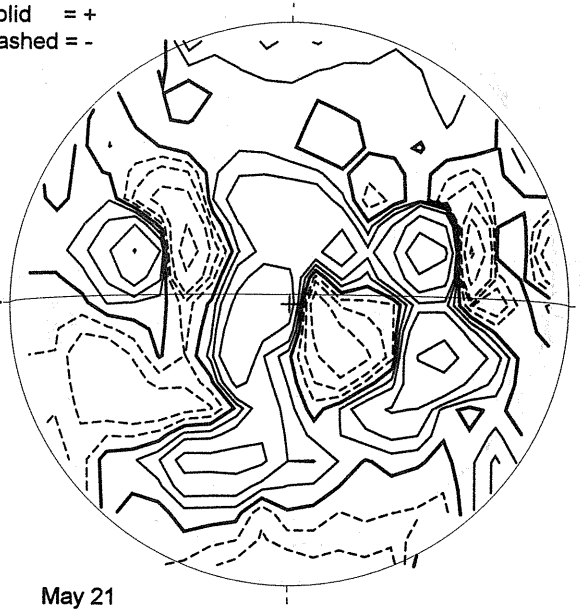


1712 UT

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

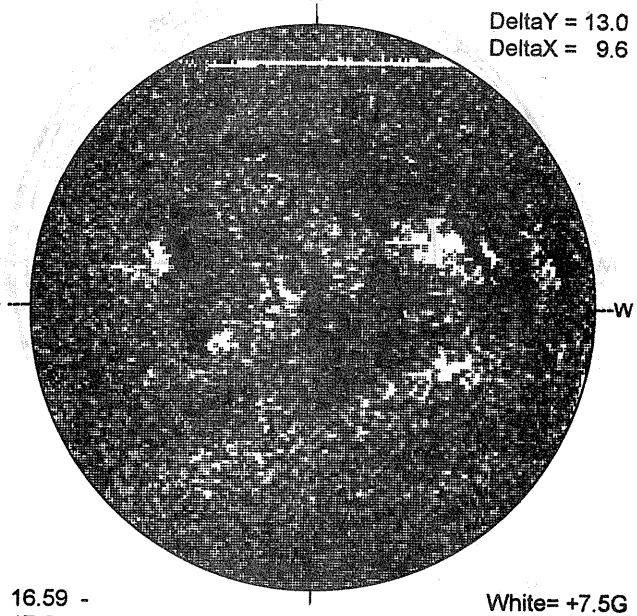


May 21
0055 UT

MT. WILSON MAGNETOGRAM

N

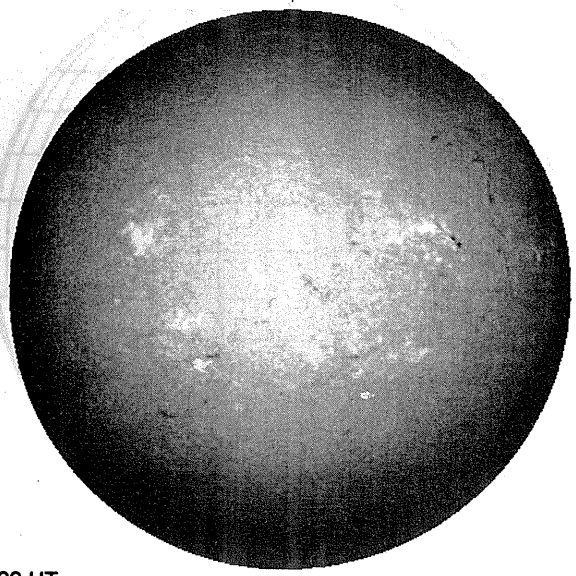
DeltaY = 13.0
DeltaX = 9.6



16.59 -
17.52 UT

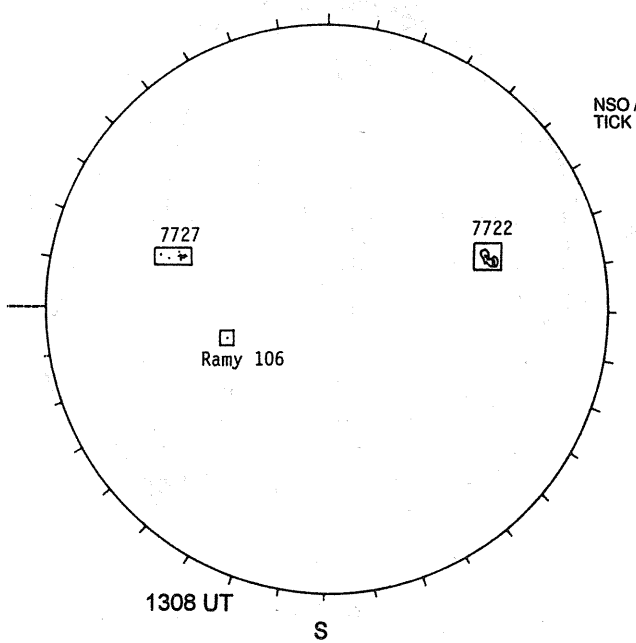
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



1522 UT

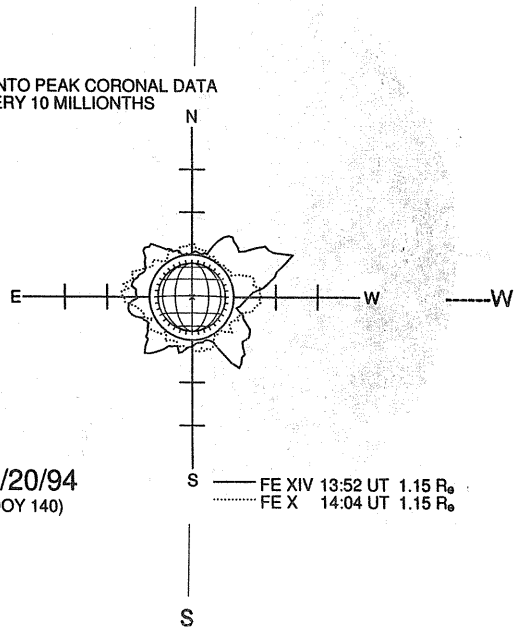
RAMEY SUNSPOT



1308 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



05/20/94
(DOY 140)

FE XIV 13:52 UT 1.15 $R_\odot$
FE X 14:04 UT 1.15 $R_\odot$

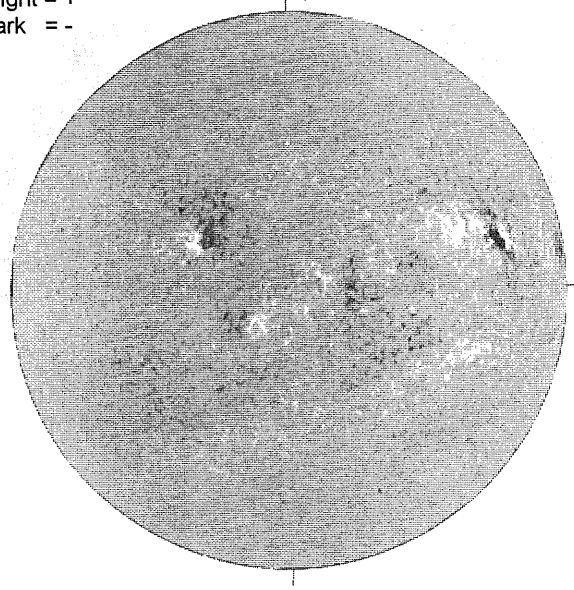
S S S

MAY 21, 1994 (P=-19.30, Bo =-1.99, Lo = 80.46)

KITT PEAK MAGNETOGRAM

N **550.7 nm**

Bright = +
Dark = -



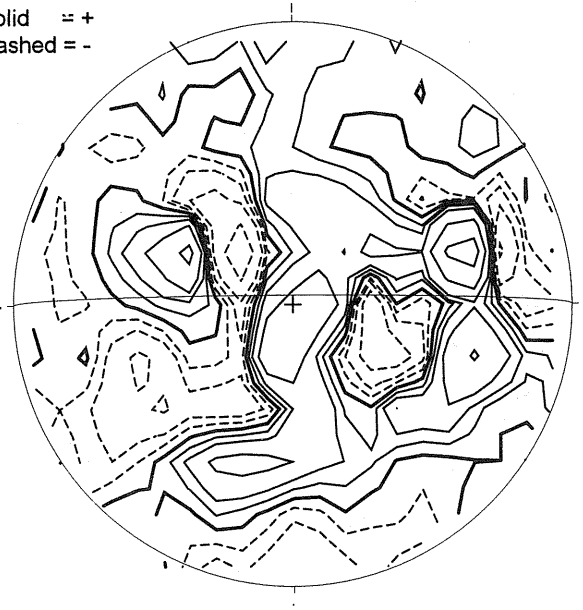
E-

1437 UT

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

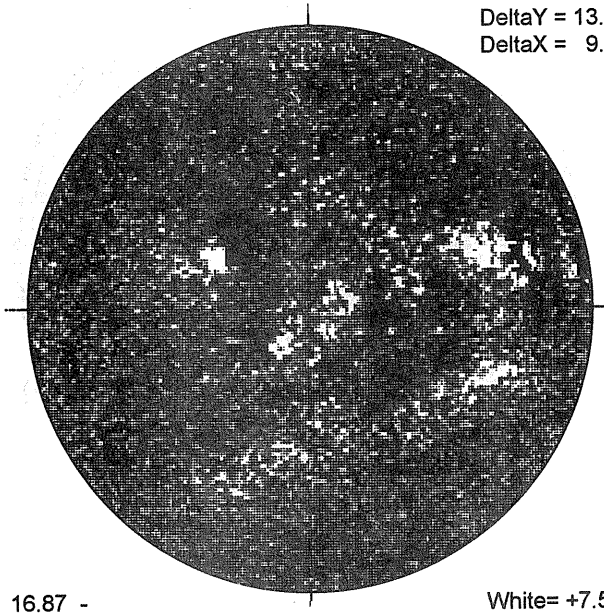


1713 UT

MT. WILSON MAGNETOGRAM

N

DeltaY = 13.0
DeltaX = 9.6



-W

16.87 -
17.79 UT

White= +7.5G
Black = -7.5G

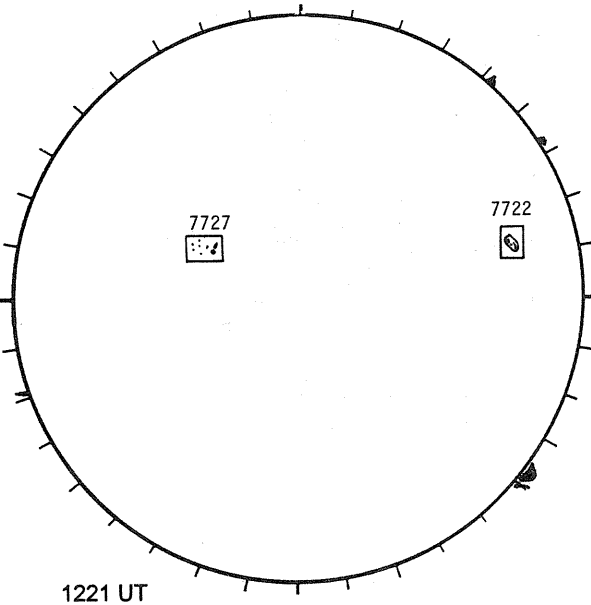
BIG BEAR H-ALPHA

E-

1553 UT

S

RAMEY SUNSPOT



1221 UT
0829 UT VALA Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)

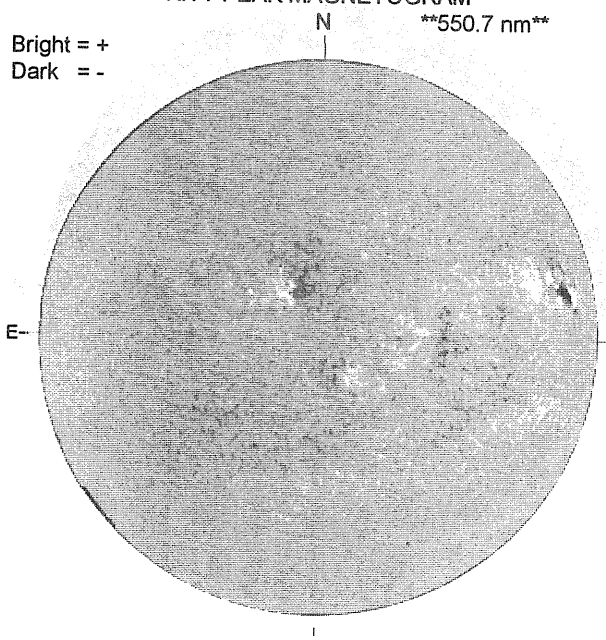
-W

S

61
May 94

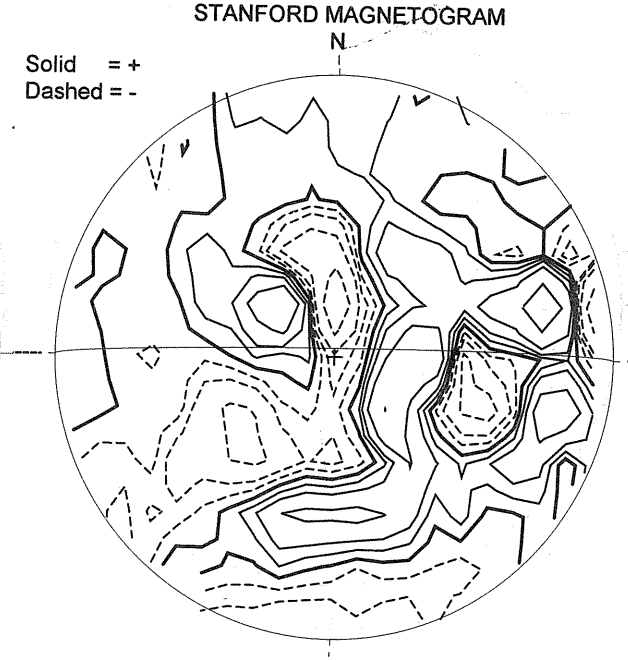
MAY 22, 1994 (P=-18.99, Bo =-1.87, Lo = 67.23)

KITT PEAK MAGNETOGRAM



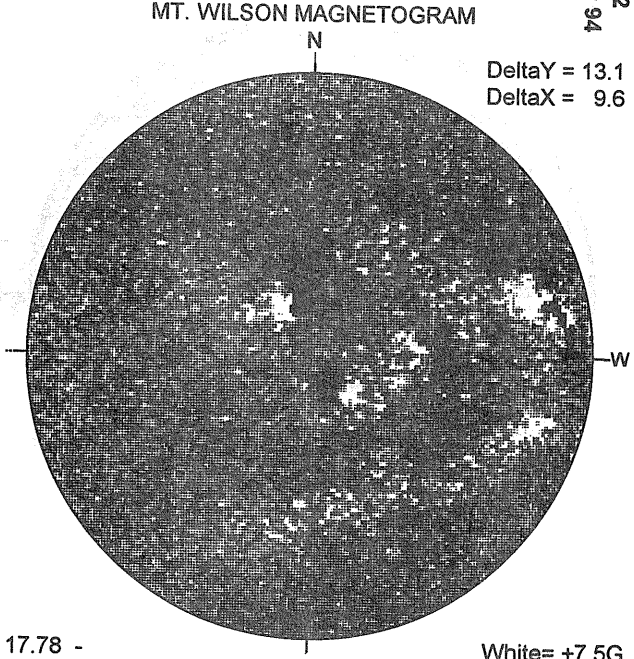
1413 UT

STANFORD MAGNETOGRAM



1705 UT

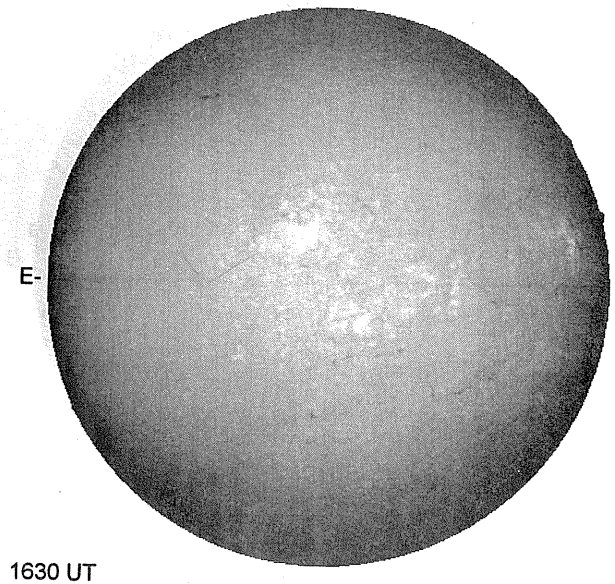
MT. WILSON MAGNETOGRAM



17.78 -
18.70 UT

White= +7.5G
Black = -7.5G

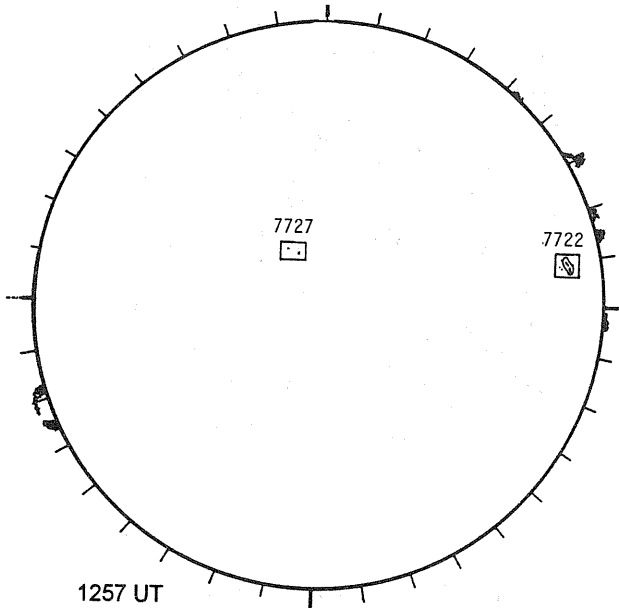
BIG BEAR H-ALPHA



1630 UT

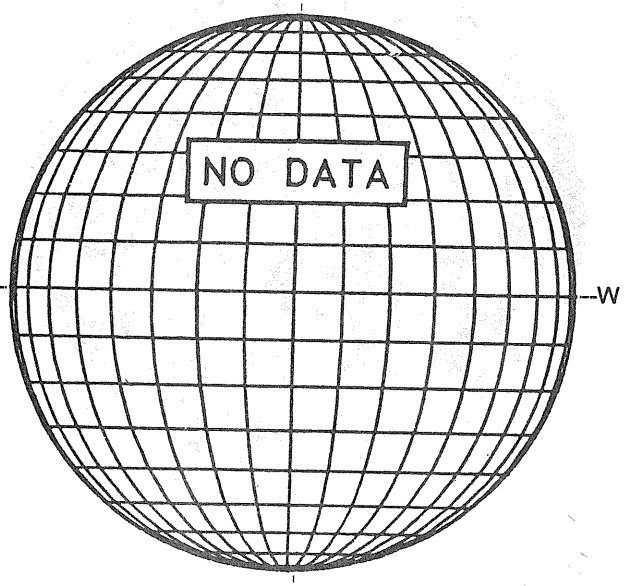
S

RAMEY SUNSPOT



1257 UT
1230 UT VALA Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----



S

S

1230 UT VALA Prom S

S

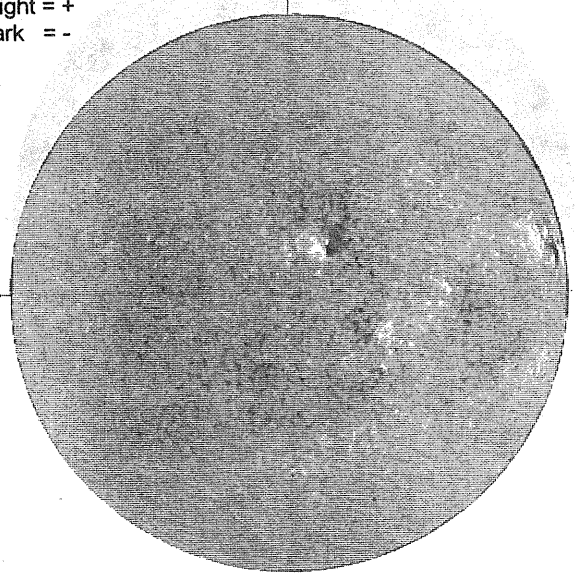
MAY 23, 1994 (P=-18.67, Bo =-1.75, Lo = 54.00)

KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -

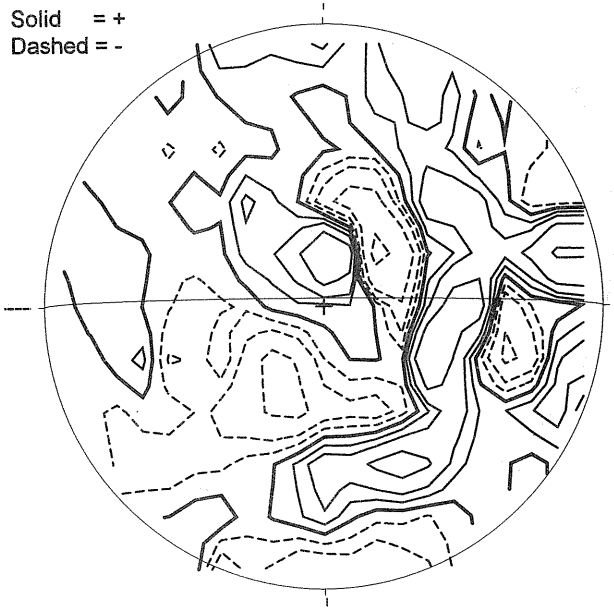


1602 UT

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

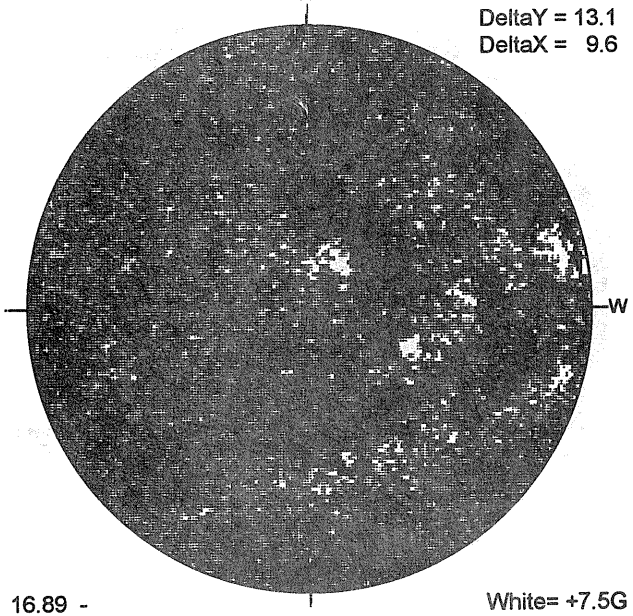


1723 UT

MT. WILSON MAGNETOGRAM

N

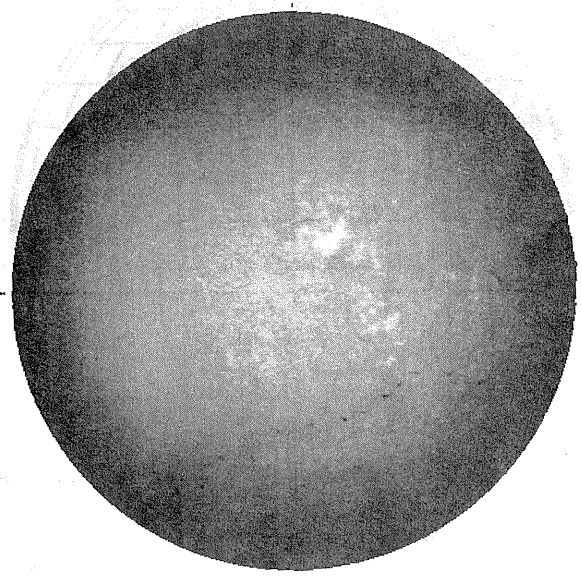
DeltaY = 13.1
DeltaX = 9.6



16.89 -
17.81 UT

White= +7.5G
Black = -7.5G

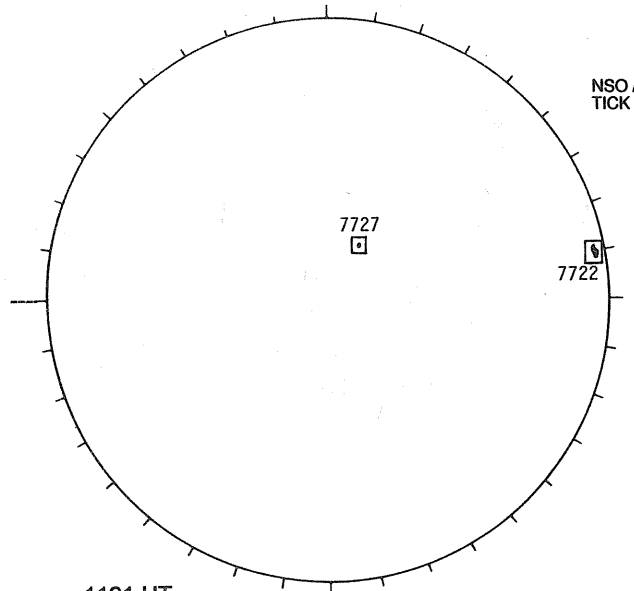
BIG BEAR H-ALPHA



1513 UT

S

RAMEY SUNSPOT

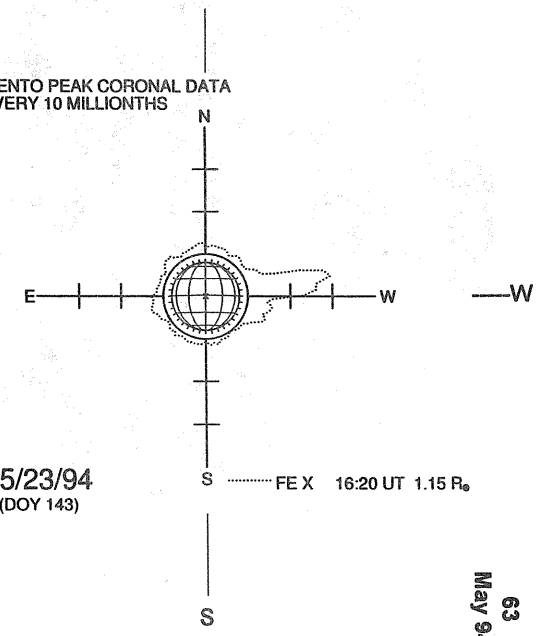


1121 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



05/23/94
(DOY 143)

FE X 16:20 UT 1.15 $R_\odot$

S

63
May 94

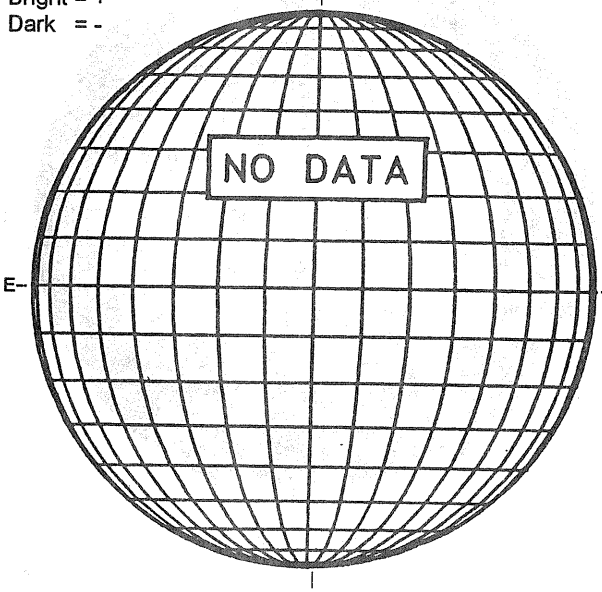
MAY 24, 1994 (P=-18.34, Bo =-1.64, Lo = 40.77)

KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -



STANFORD MAGNETOGRAM

N

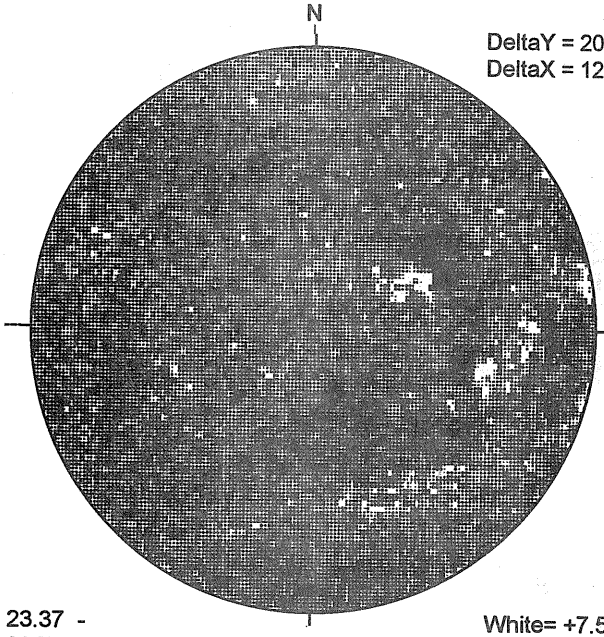
Solid = +
Dashed = -

2041 UT

MT. WILSON MAGNETOGRAM

N

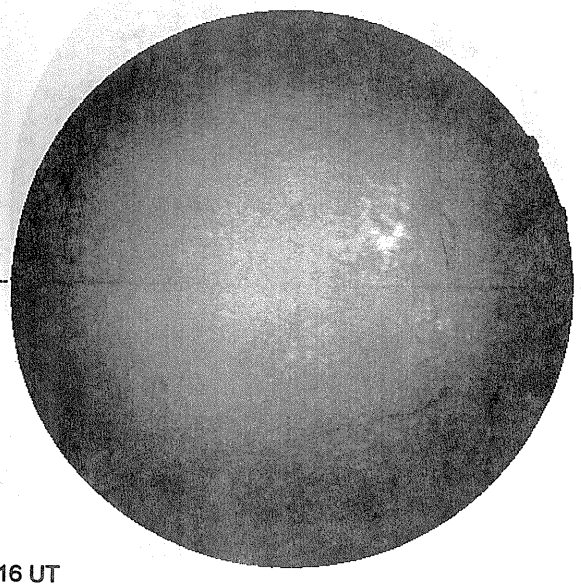
DeltaY = 20.0
DeltaX = 12.9



23.37 -
23.77 UT

White= +7.5G
Black = -7.5G

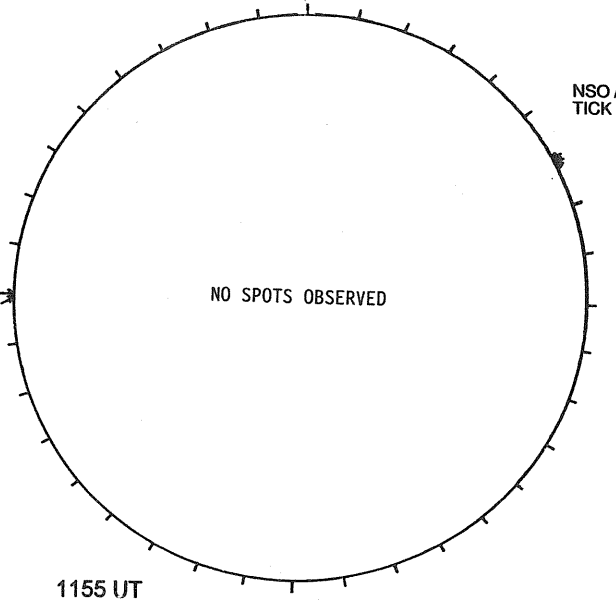
BIG BEAR H-ALPHA



1516 UT

S

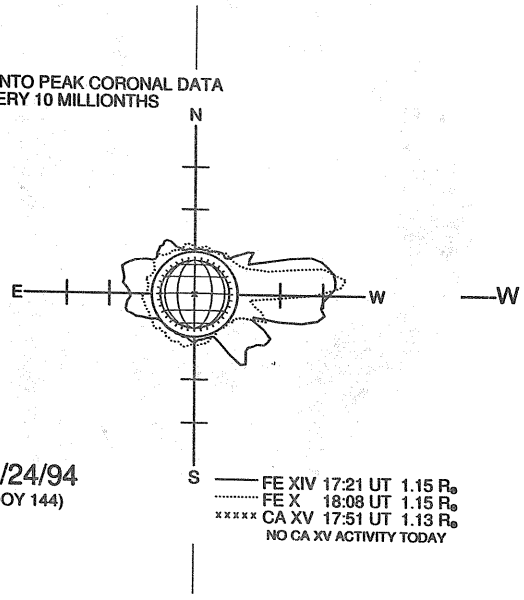
RAMEY SUNSPOT



1155 UT
1320 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS

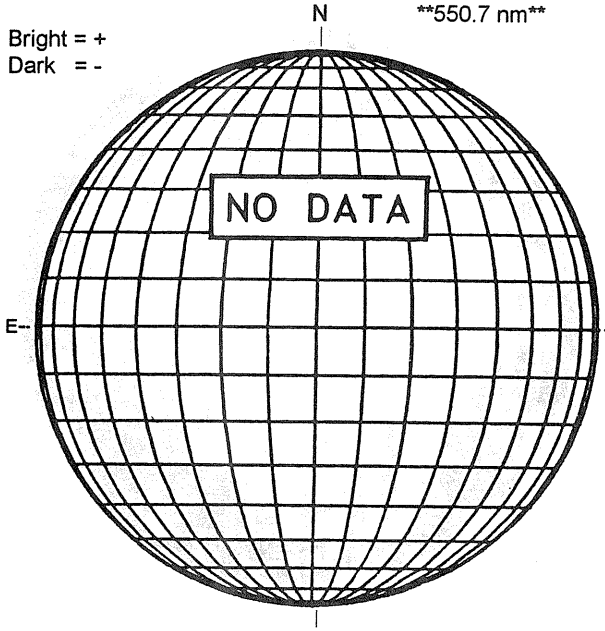


05/24/94
(DOY 144)

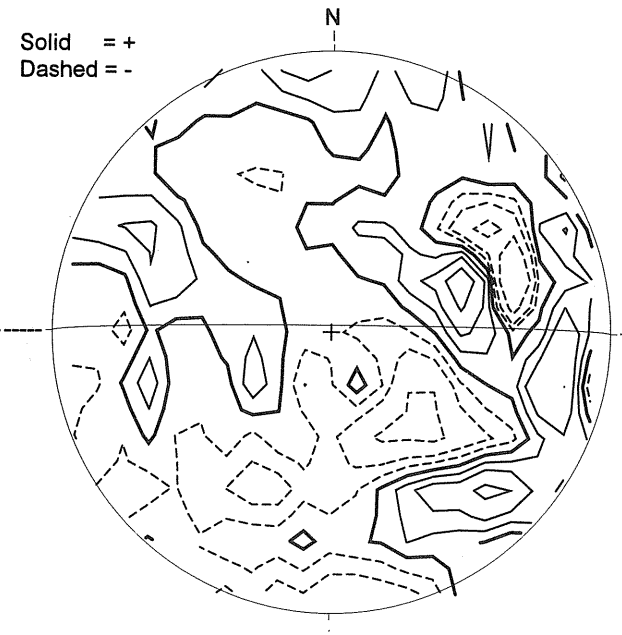
FE XIV 17:21 UT 1.15 $R_\odot$
FE X 18:08 UT 1.15 $R_\odot$
CA XV 17:51 UT 1.13 $R_\odot$
NO CA XV ACTIVITY TODAY

1320 UT LOMN Prom S
MAY 25, 1994 (P=-18.01, Bo =-1.52, Lo = 27.54)

KITT PEAK MAGNETOGRAM

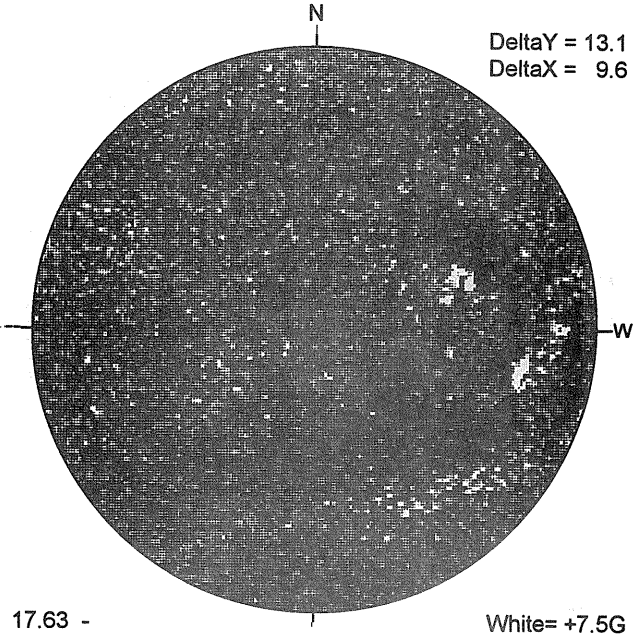


STANFORD MAGNETOGRAM



2106 UT

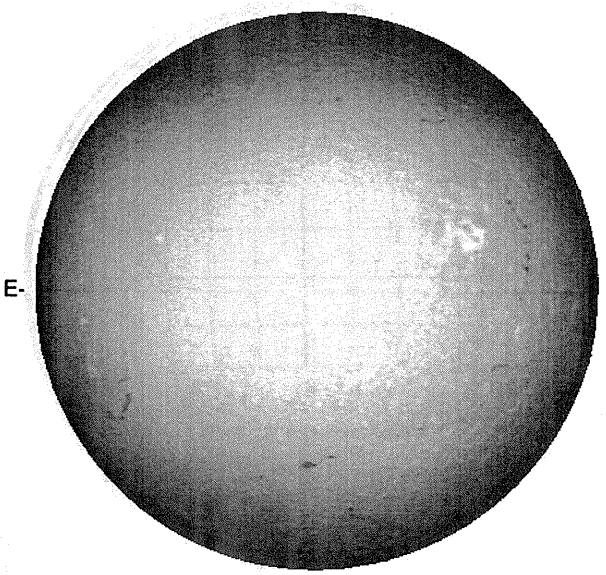
MT. WILSON MAGNETOGRAM



17.63 -
18.55 UT

White= +7.5G
Black = -7.5G

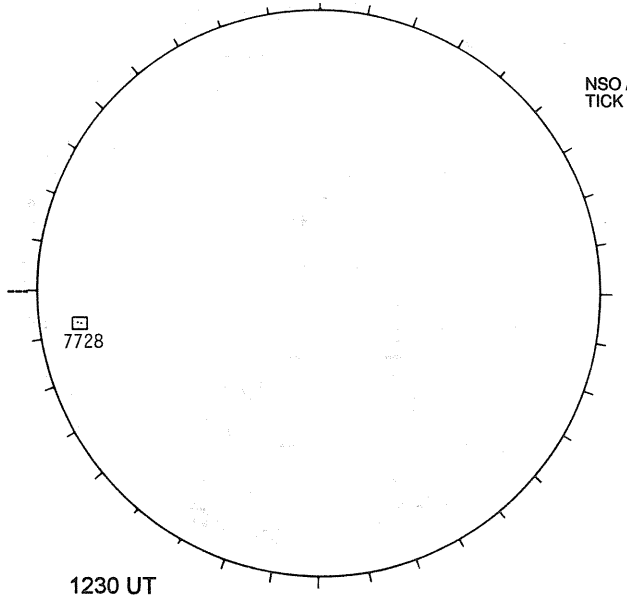
BIG BEAR H-ALPHA



1506 UT

S

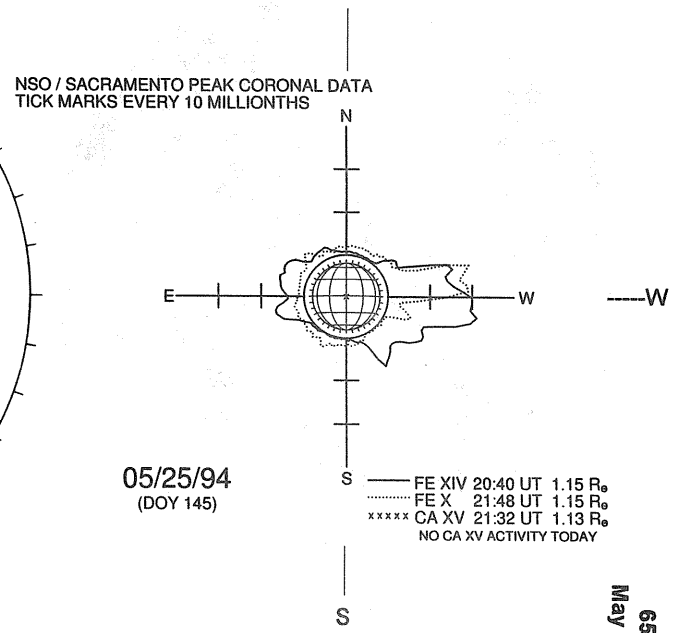
RAMEY SUNSPOT



1230 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)----



S

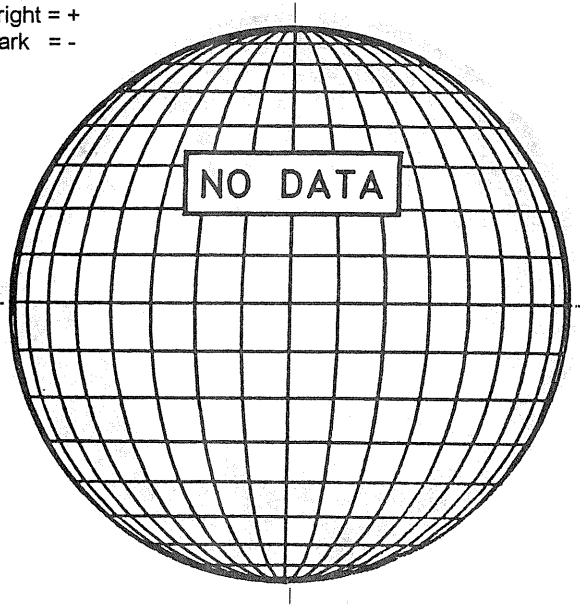
65
May 94

MAY 26, 1994 (P=-17.67, Bo =-1.40, Lo = 14.31)

KITT PEAK MAGNETOGRAM

Bright = +
Dark = -

N **550.7 nm**

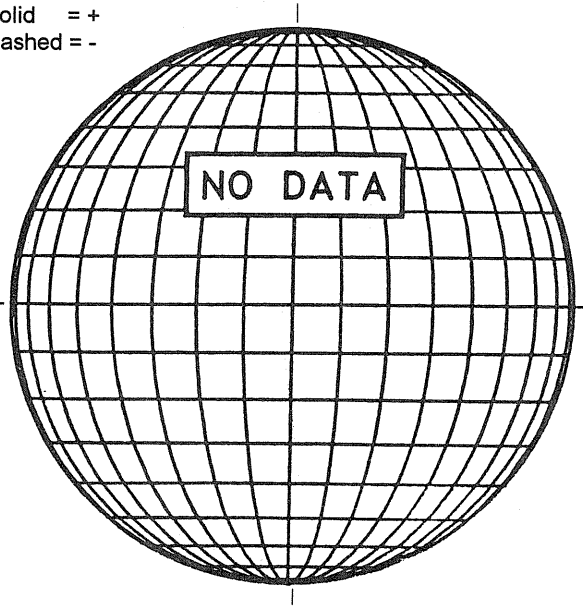


E--

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

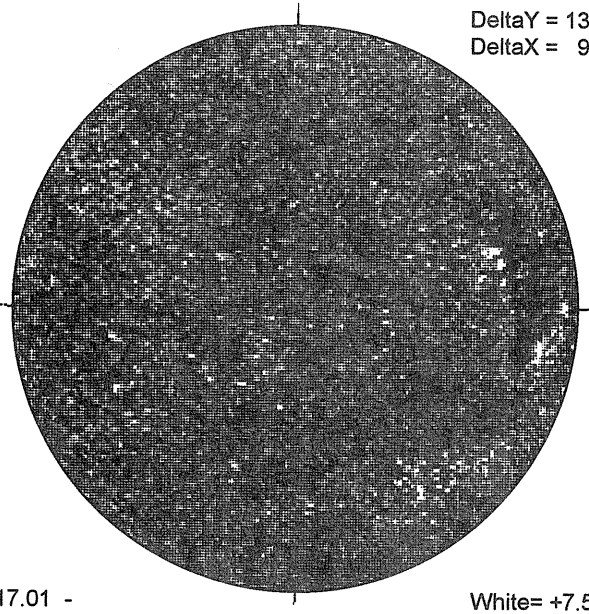
N



MT. WILSON MAGNETOGRAM

N

DeltaY = 13.0
DeltaX = 9.6

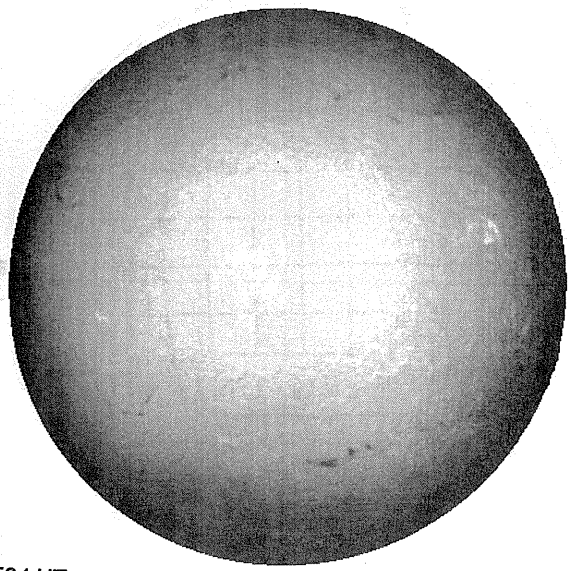


W

17.01 -
17.93 UT

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

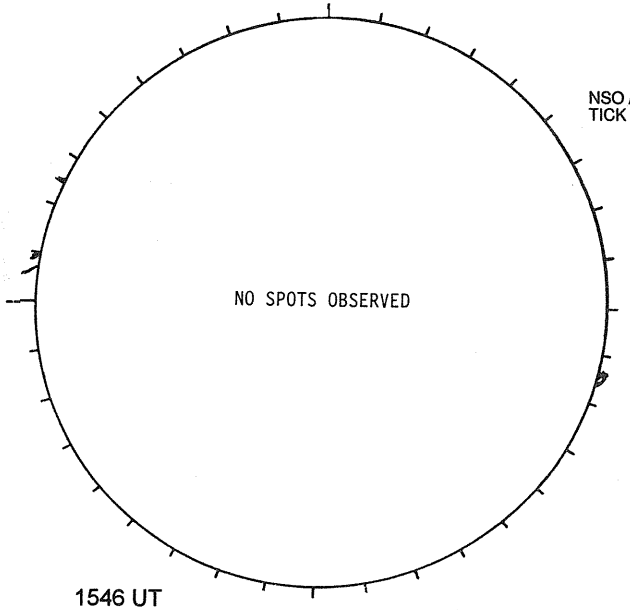


E-

1534 UT

S

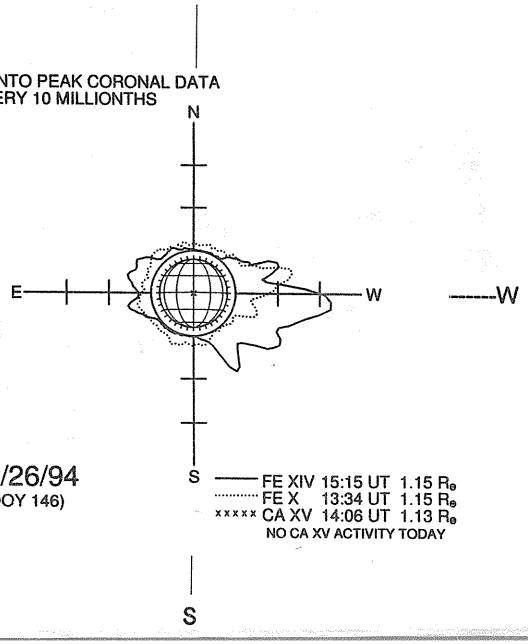
RAMEY SUNSPOT



1546 UT
0543 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



05/26/94
(DOY 146)

FE XIV 15:15 UT 1.15 $R_\odot$
FE X 13:34 UT 1.15 $R_\odot$
CA XV 14:06 UT 1.13 $R_\odot$
NO CA XV ACTIVITY TODAY

0545 UT LOMN From S

S

MAY 27, 1994 (P=-17.33, Bo =-1.28, Lo = 1.08)

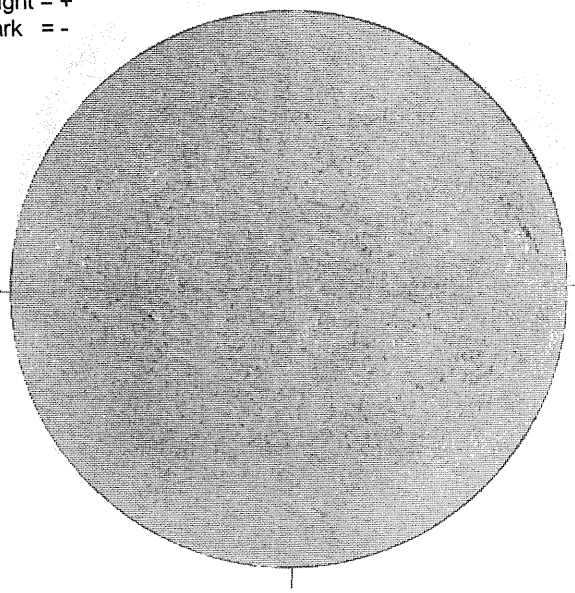
KITT PEAK MAGNETOGRAM

N

550.7 nm

Bright = +
Dark = -

E--

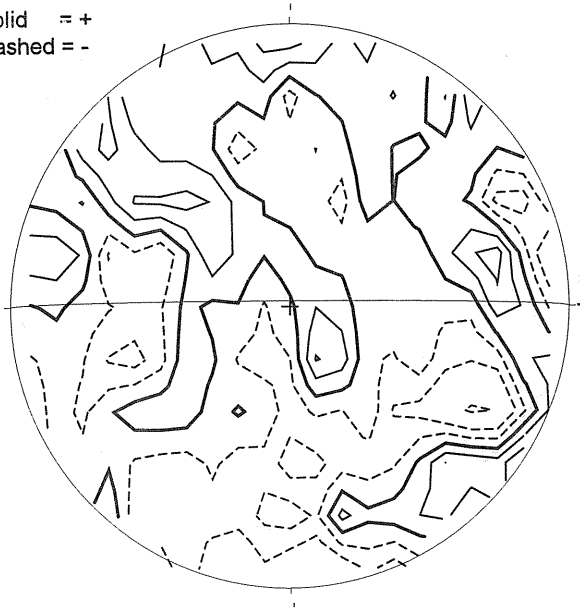


1410 UT

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

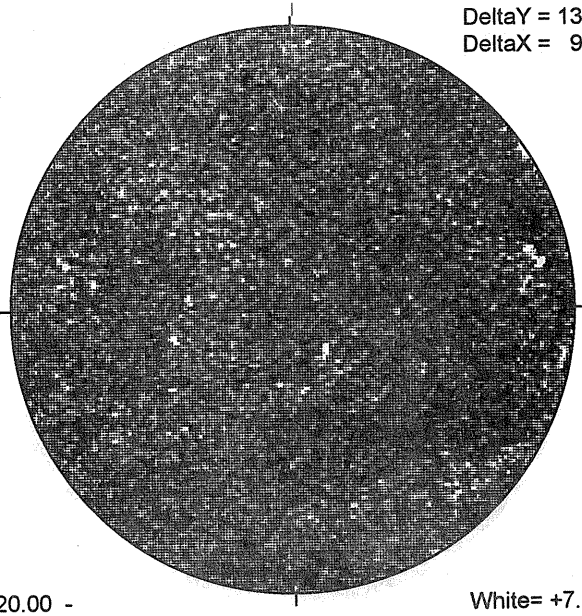


1843 UT

MT. WILSON MAGNETOGRAM

N

DeltaY = 13.0
DeltaX = 9.6



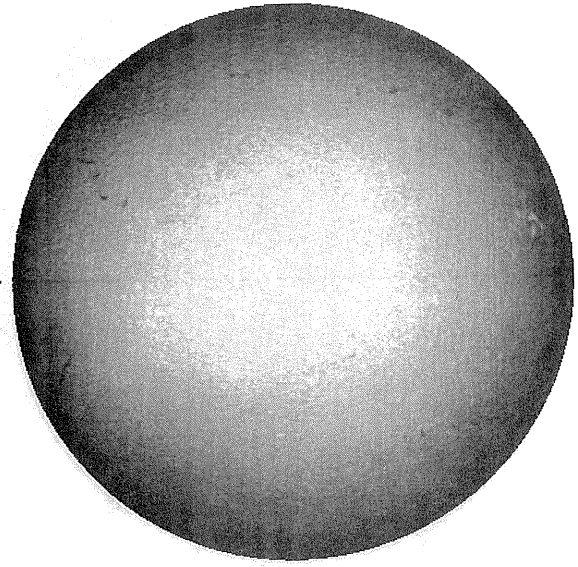
-W

20.00 -
20.93 UT

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

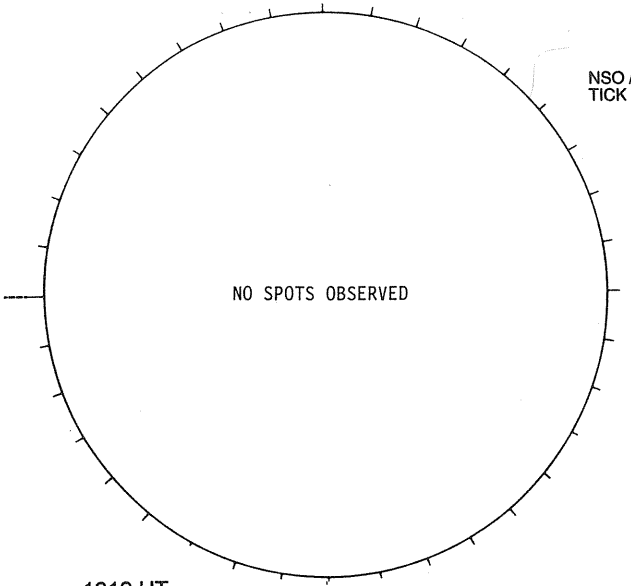
E·



1525 UT

S

RAMEY SUNSPOT



1312 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS

N

E

W

-----W

S

05/27/94
(DOY 147)

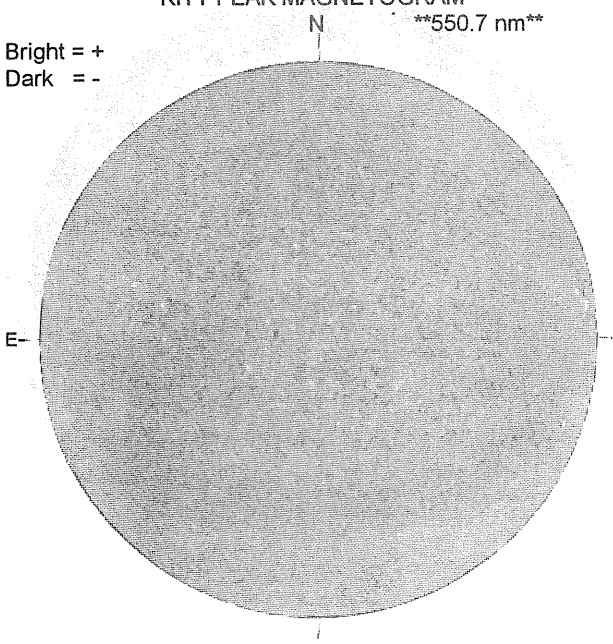
FE XIV 13:30 UT 1.15 $R_\odot$
FE X 14:17 UT 1.15 $R_\odot$
xxxxx CA XV 14:00 UT 1.13 $R_\odot$
NO CA XV ACTIVITY TODAY

S

67
May 94

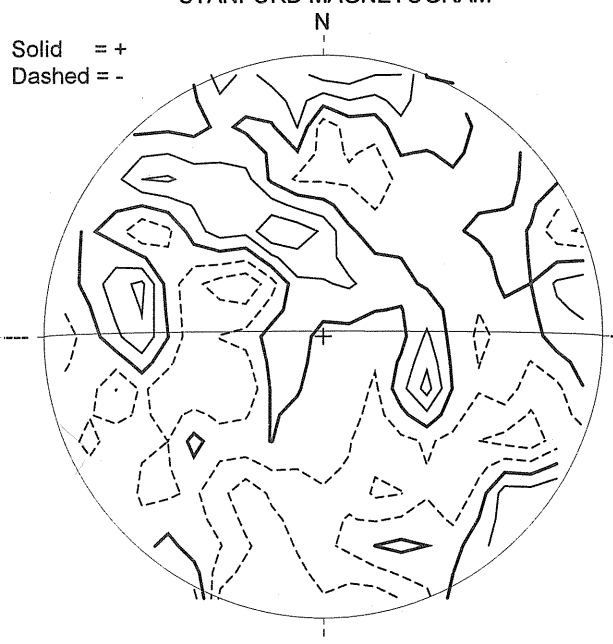
MAY 28, 1994 (P=-16.98, Bo =-1.16, Lo = 347.84)

KITT PEAK MAGNETOGRAM



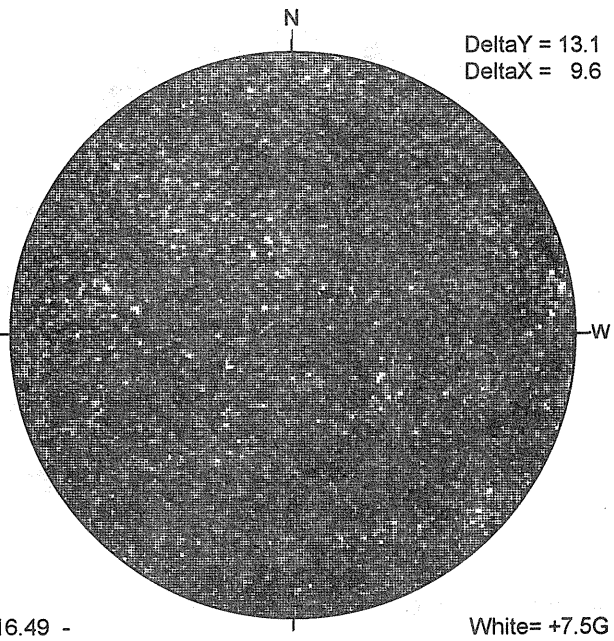
1445 UT

STANFORD MAGNETOGRAM



1914 UT

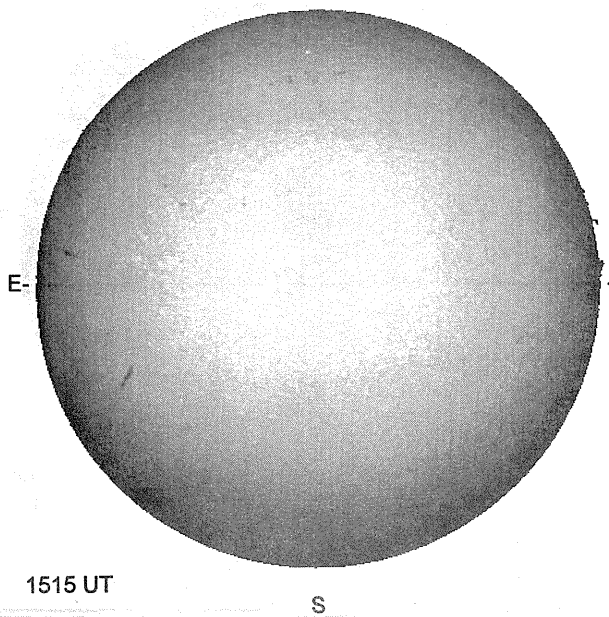
MT. WILSON MAGNETOGRAM



16.49 -
17.42 UT

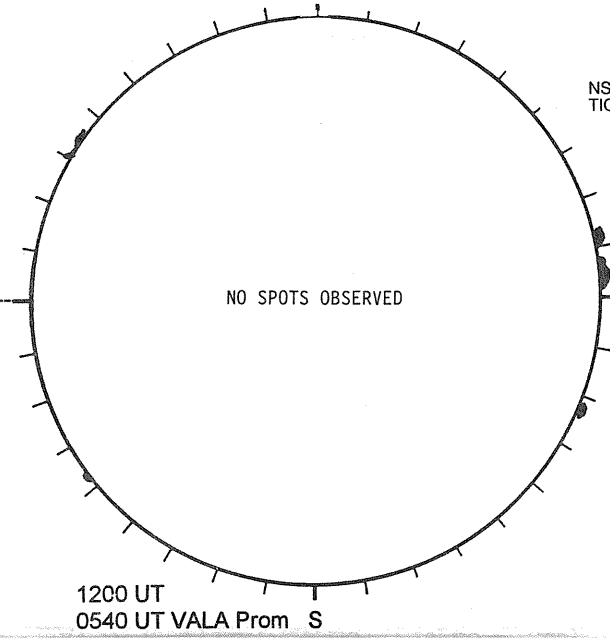
White= +7.5G
Black = -7.5G

----- BIG BEAR H-ALPHA



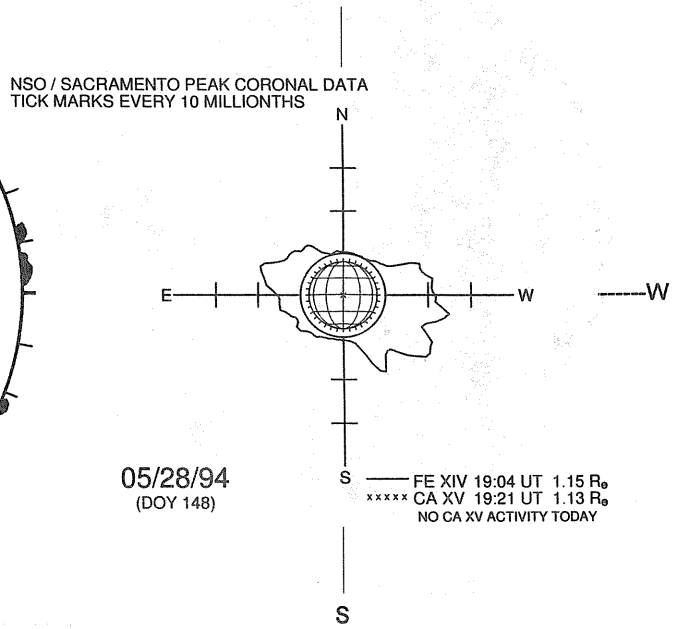
1515 UT

RAMEY SUNSPOT



1200 UT
0540 UT VALA Prom S

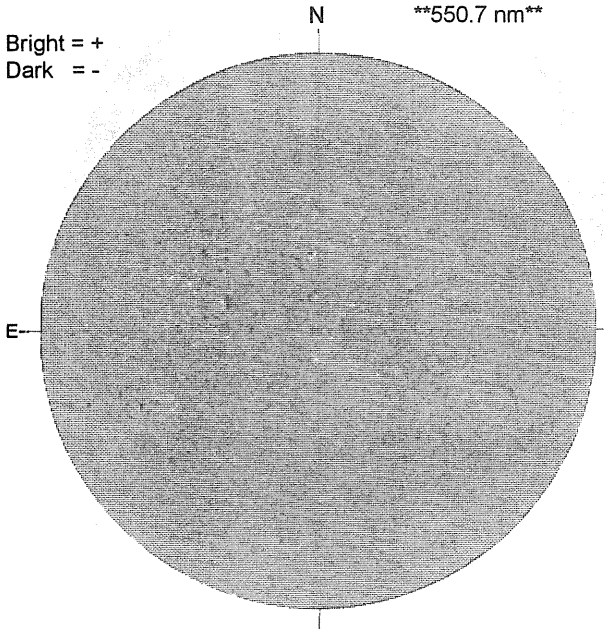
SACRAMENTO PEAK CORONA (1.15 Radii)----



1515 UT S 0540 UT VALA Prom S S

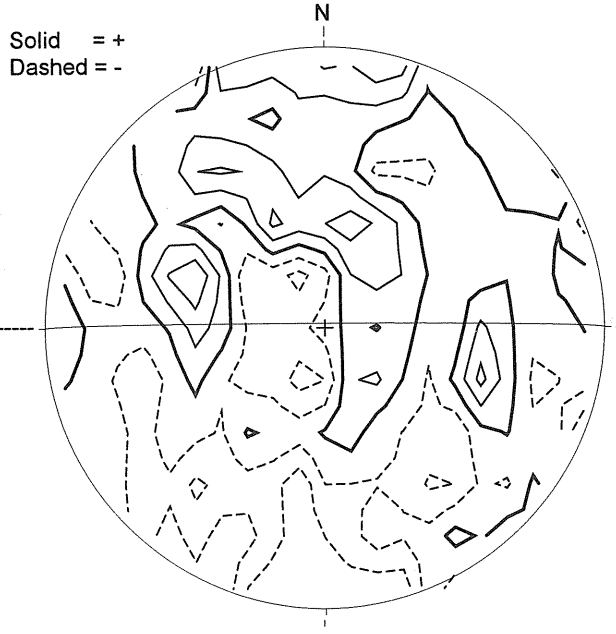
MAY 29, 1994 (P=-16.63, Bo =-1.04, Lo = 334.61)

KITT PEAK MAGNETOGRAM



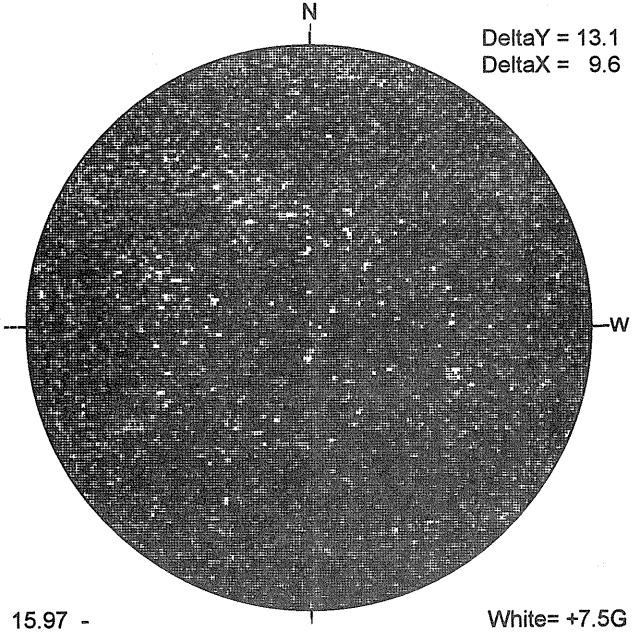
1516 UT

STANFORD MAGNETOGRAM



2010 UT

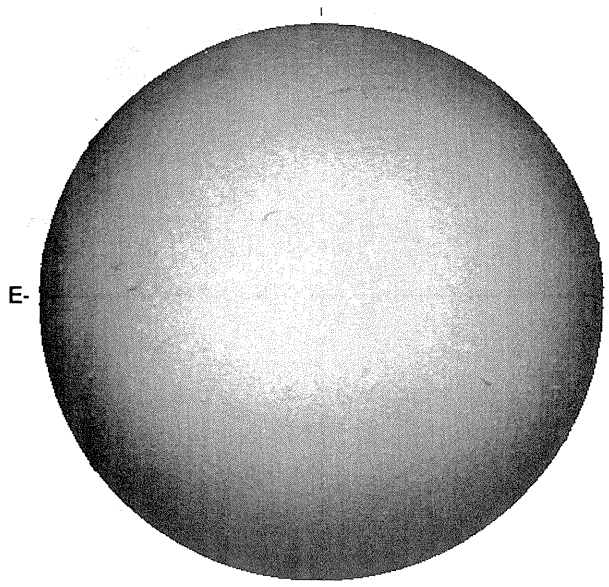
MT. WILSON MAGNETOGRAM



15.97 -
16.89 UT

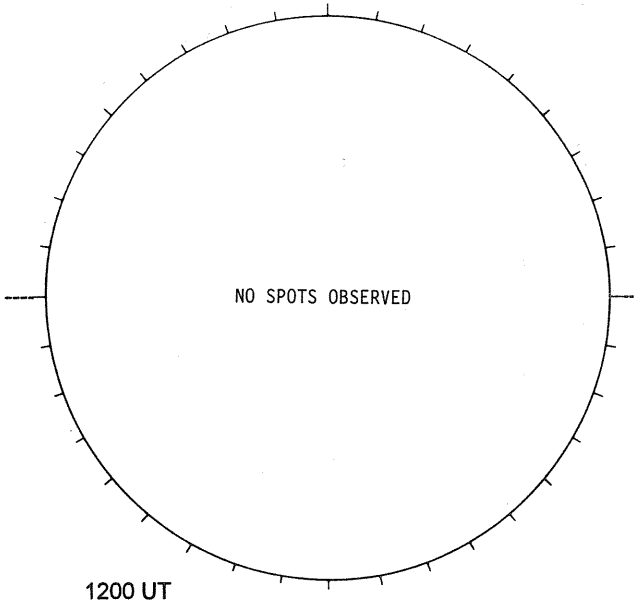
White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA



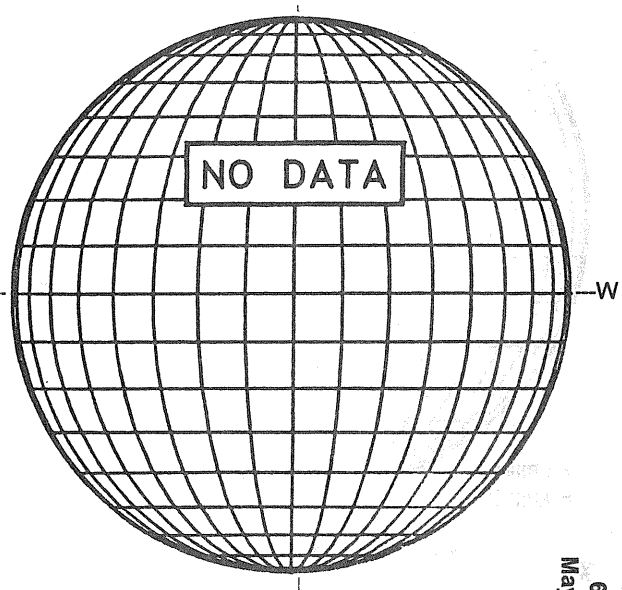
1639 UT

RAMEY SUNSPOT



1200 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



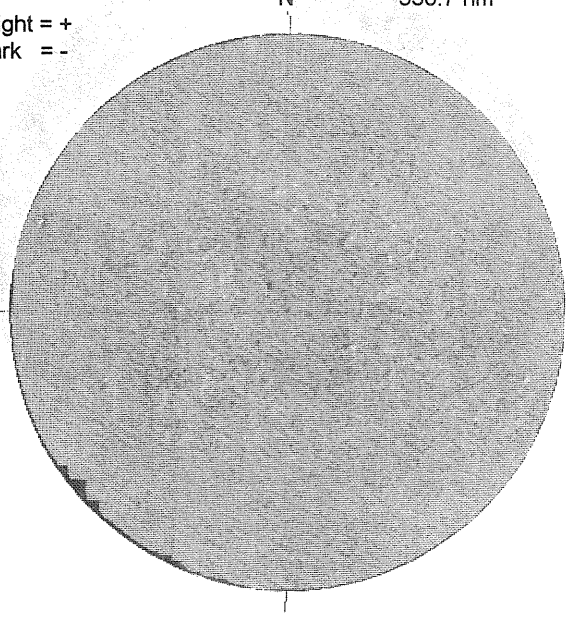
69
May 94

MAY 30, 1994 (P=-16.27, Bo =-0.92, Lo = 321.38)

KITT PEAK MAGNETOGRAM

N **550.7 nm**

Bright = +
Dark = -



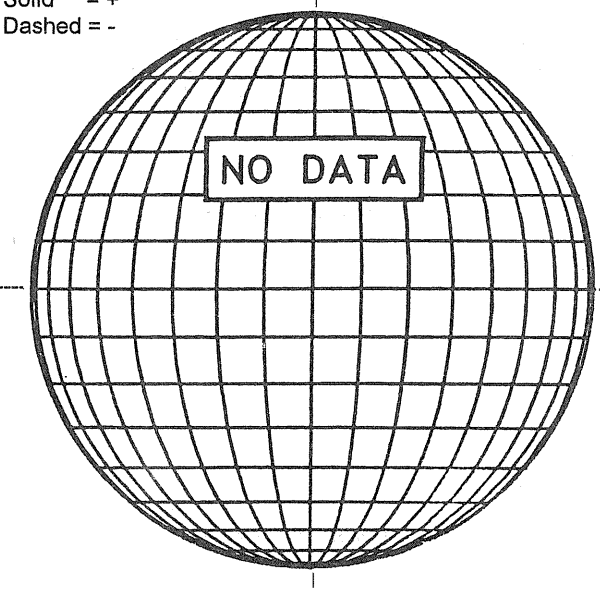
E--

1725 UT

STANFORD MAGNETOGRAM

N

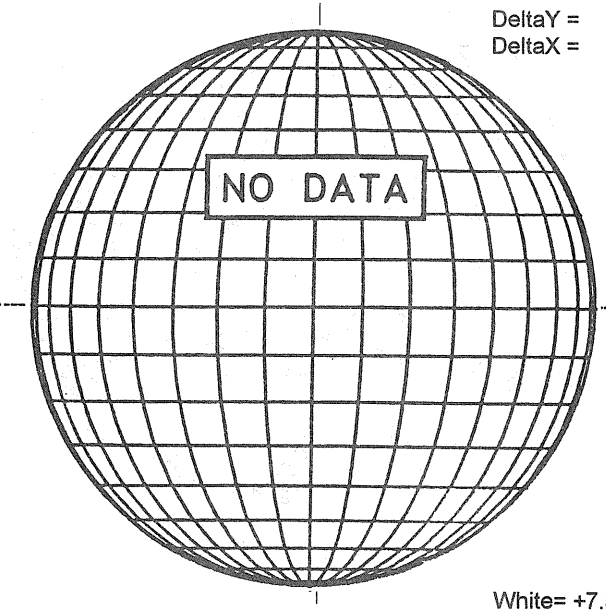
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

N

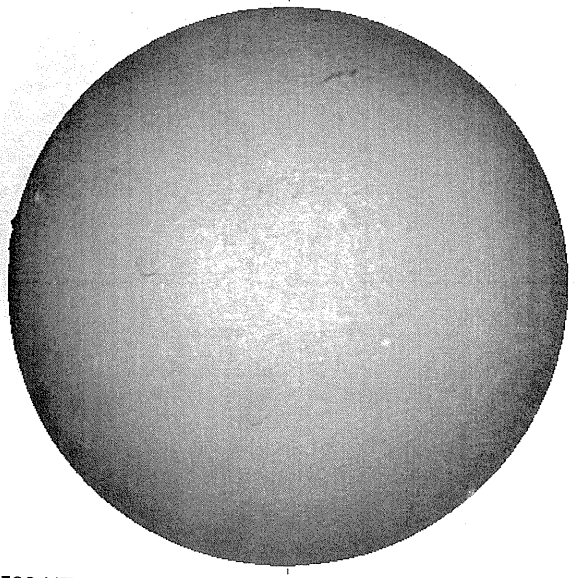
DeltaY =
DeltaX =



---W

White= +7.5G
Black = -7.5G

BIG BEAR H-ALPHA

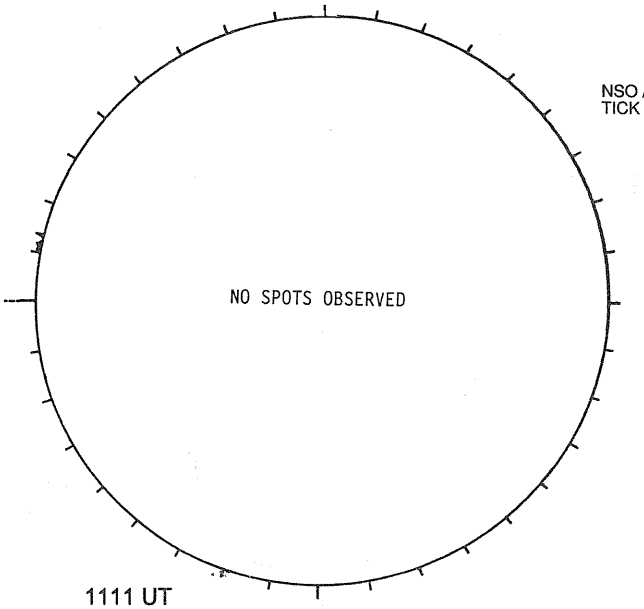


E

S

1522 UT

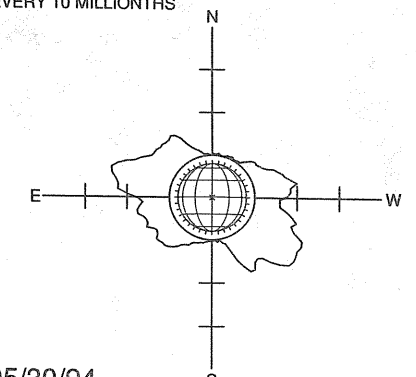
RAMEY SUNSPOT



1111 UT
1209 UT LOMN Prom S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 10 MILLIONTHS



-----W

05/30/94
(DOY 150)

FE XIV 14:22 UT 1.15 R_s

S

1522 UT

S

1209 UT LOMN Prom S

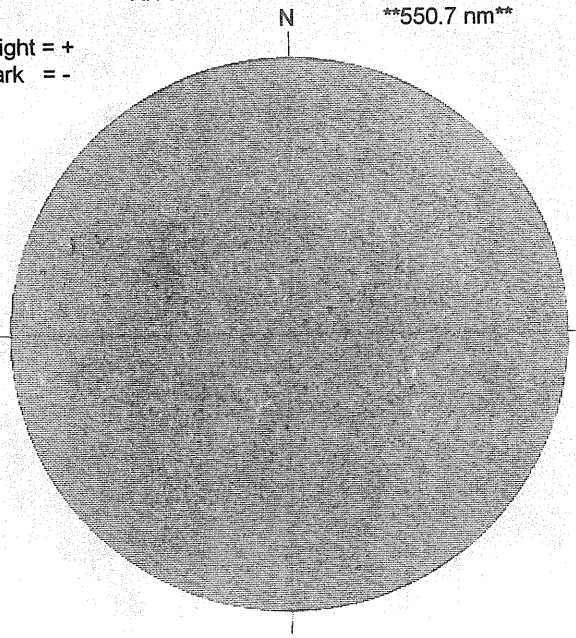
S

MAY 31, 1994 (P=-15.91, Bo =-0.80, Lo = 308.15)

KITT PEAK MAGNETOGRAM

550.7 nm

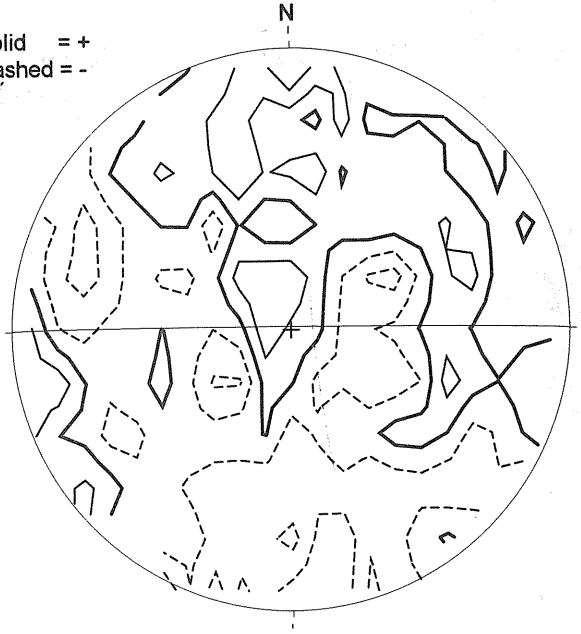
Bright = +
Dark = -



1557 UT

STANFORD MAGNETOGRAM

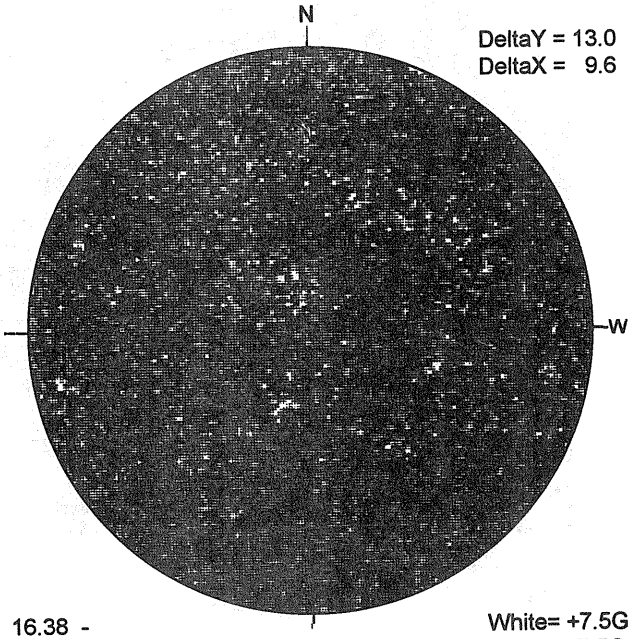
Solid = +
Dashed = -



2105 UT

MT. WILSON MAGNETOGRAM

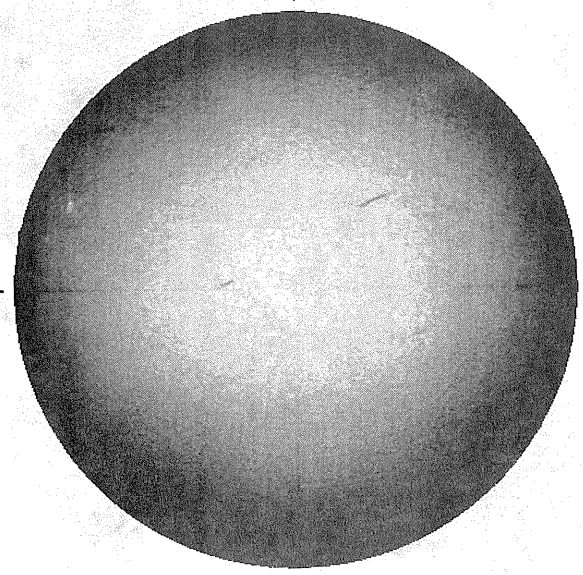
DeltaY = 13.0
DeltaX = 9.6



16.38 -
17.30 UT

White= +7.5G
Black = -7.5G

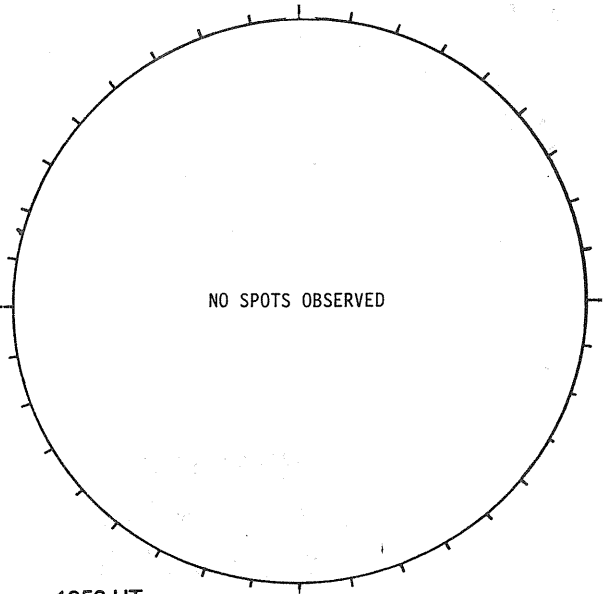
BIG BEAR H-ALPHA



1533 UT

S

RAMEY SUNSPOT



1250 UT
0713 UT LOMN Prom S

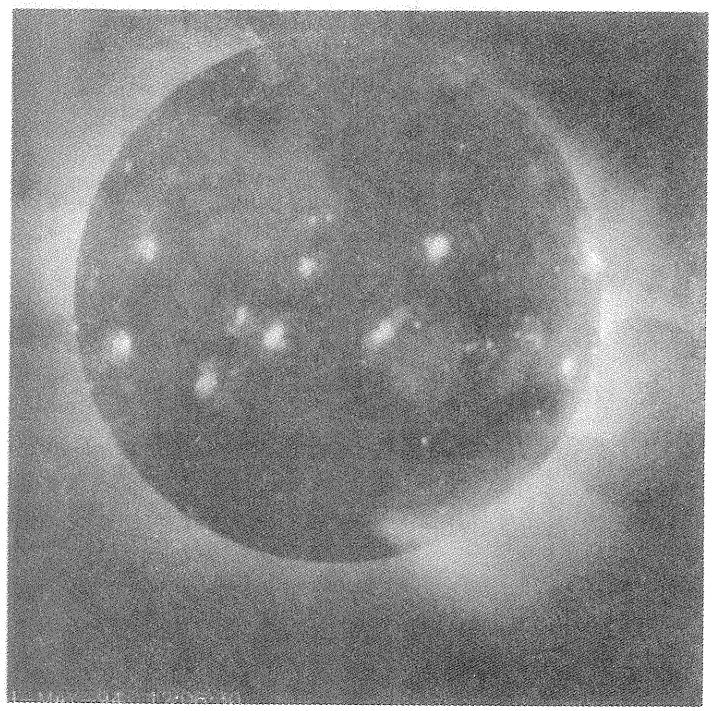
SACRAMENTO PEAK CORONA (1.15 Radii)

S

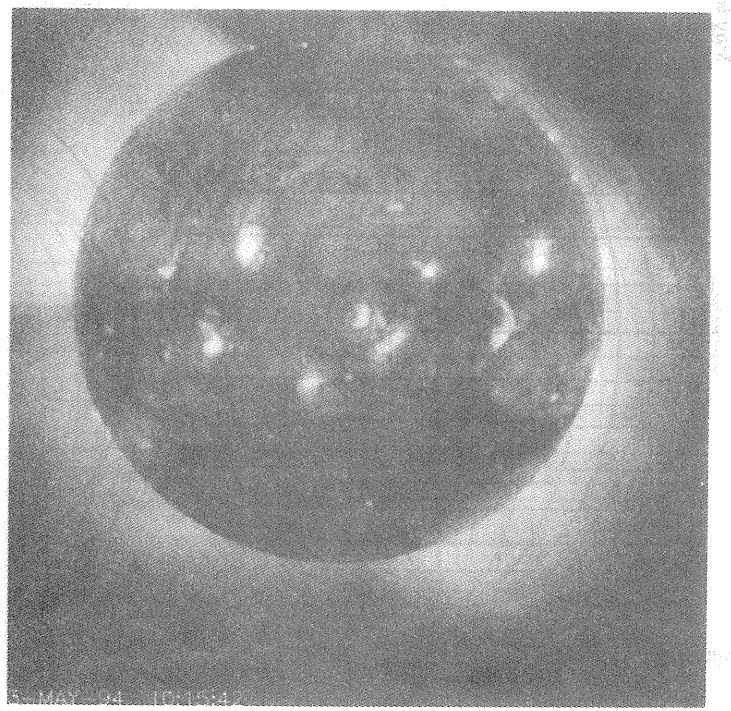
71
May 94

YOHKOH SOFT X-RAY TELESCOPE IMAGES

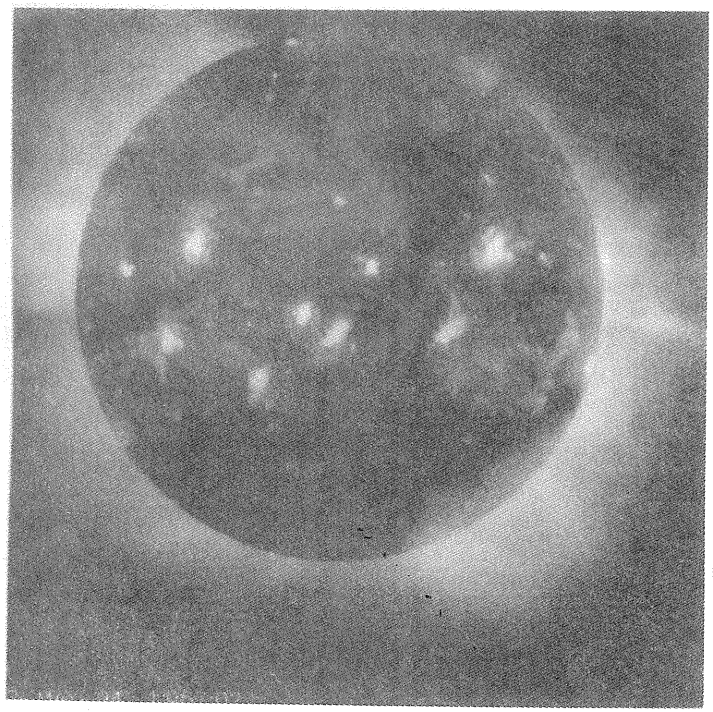
May 1994



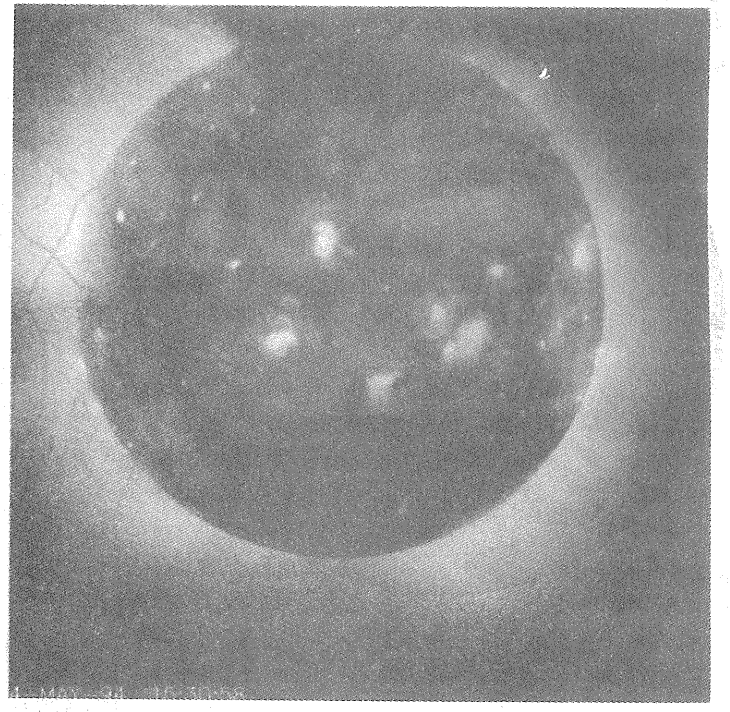
Day 1
12:06:30 UT



Day 3
10:15:42 UT



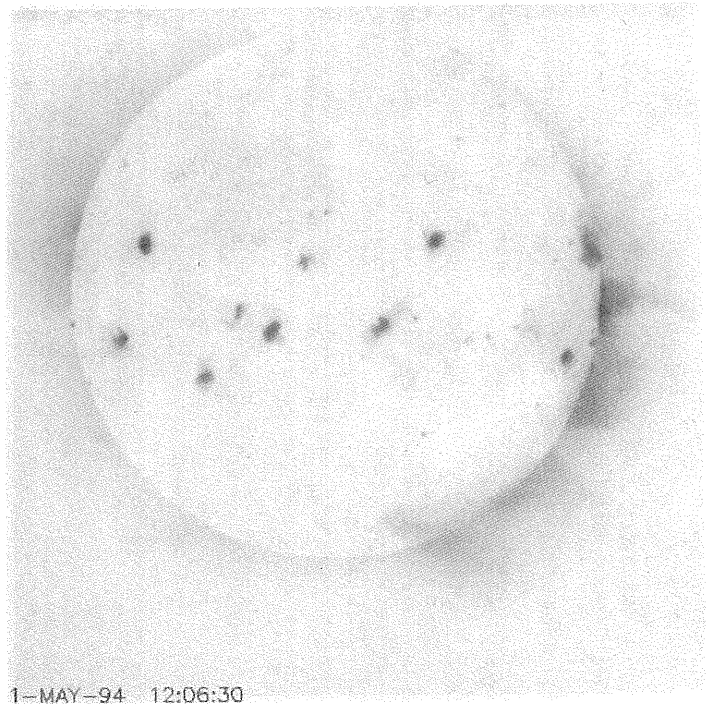
Day 2
11:57:02 UT



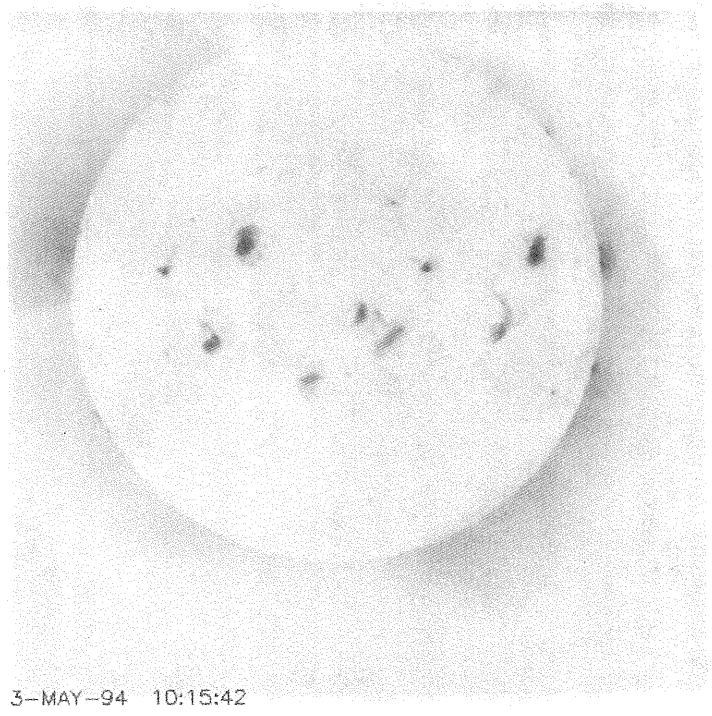
Day 4
15:30:58 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

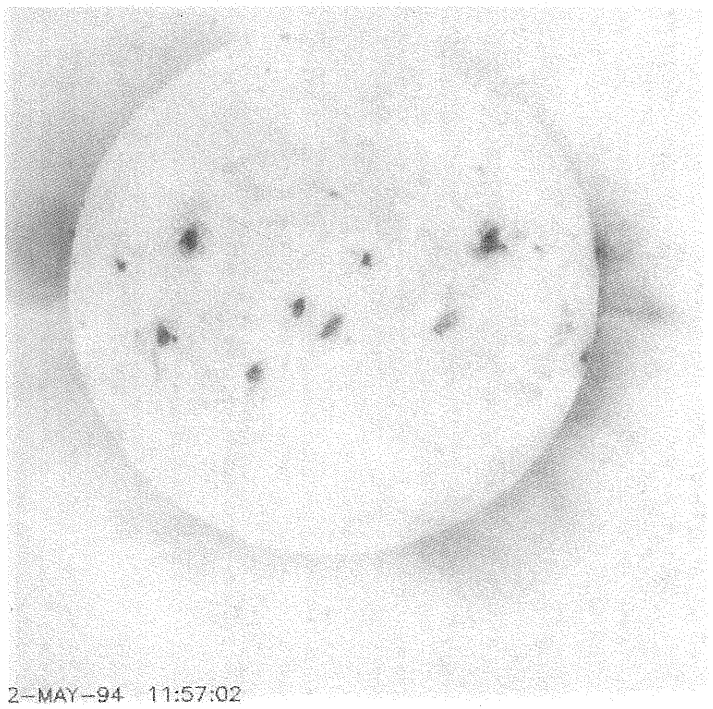
May 1994



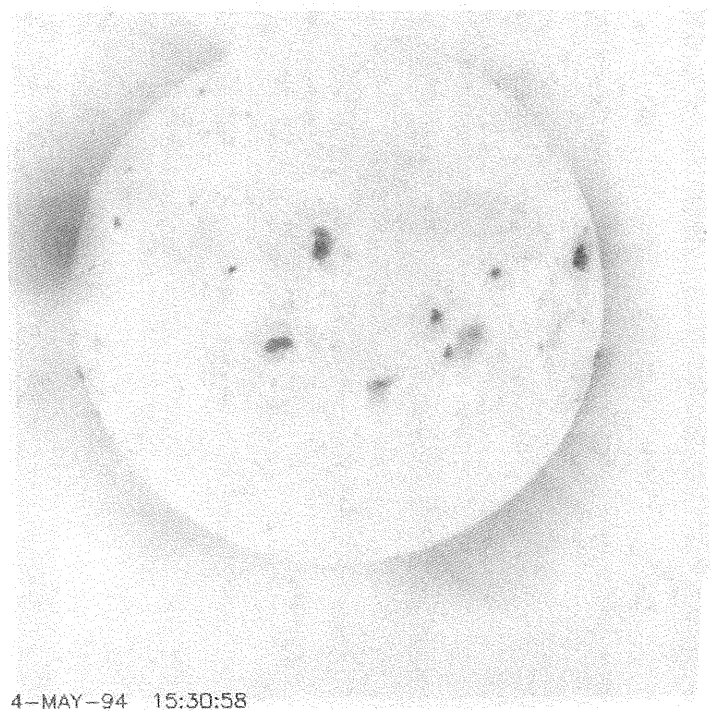
Day 1
12:06:30 UT



Day 3
10:15:42 UT



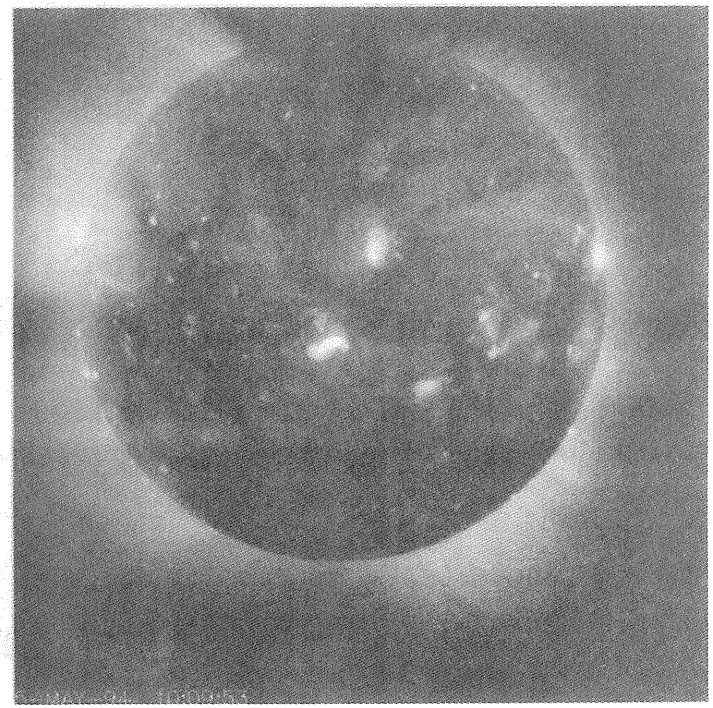
Day 2
11:57:02 UT



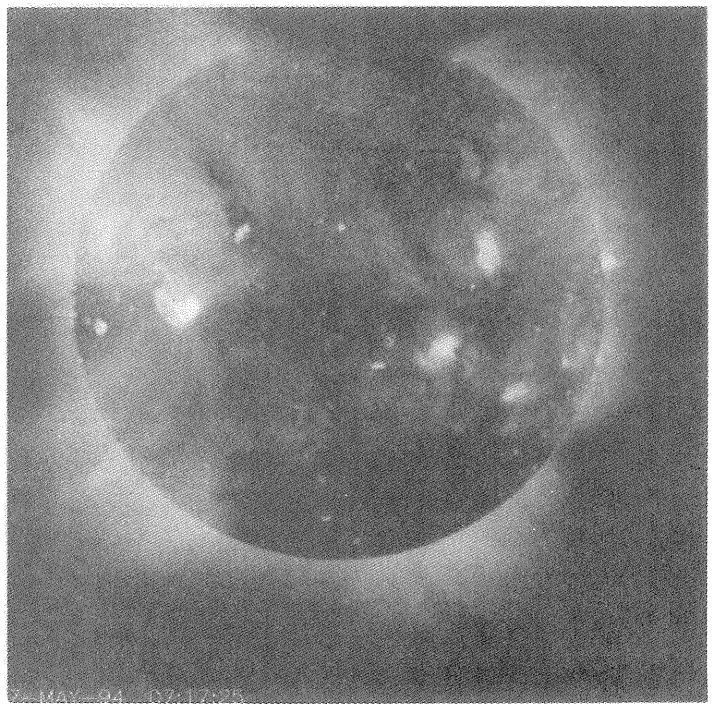
Day 4
15:30:58 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

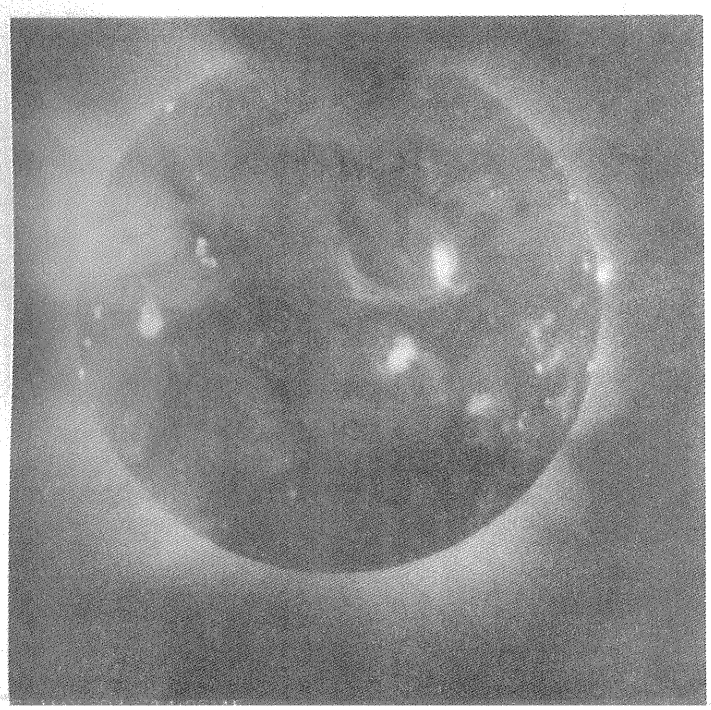
May 1994



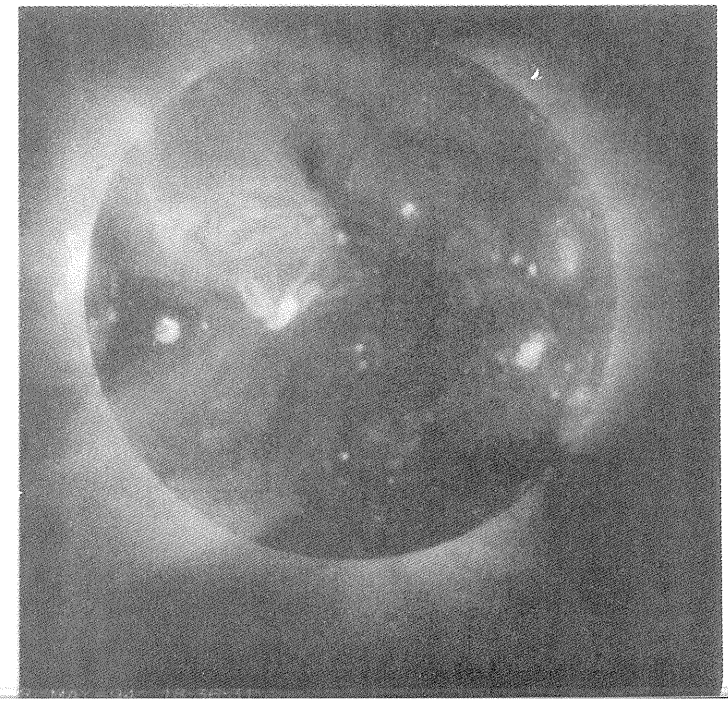
Day 5
10:09:53 UT



Day 7
07:17:25 UT



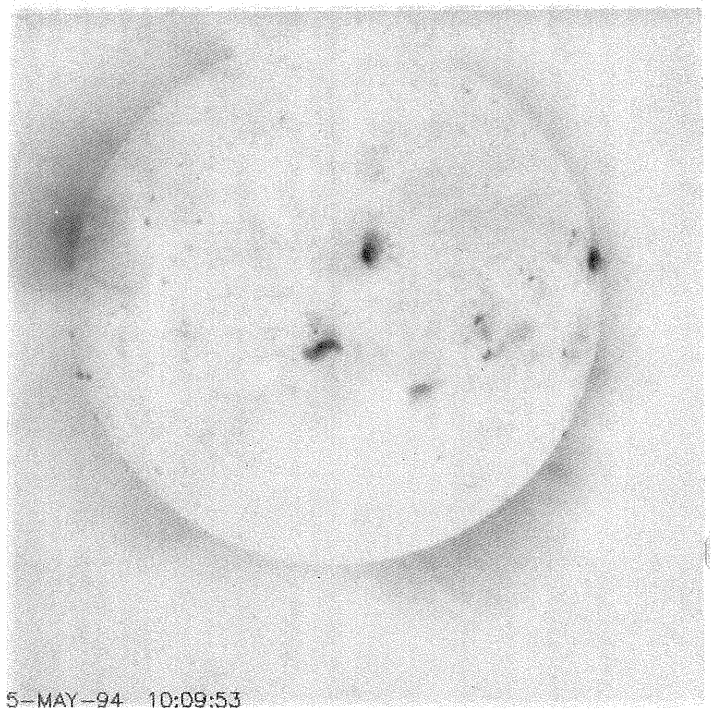
Day 6
14:25:45 UT



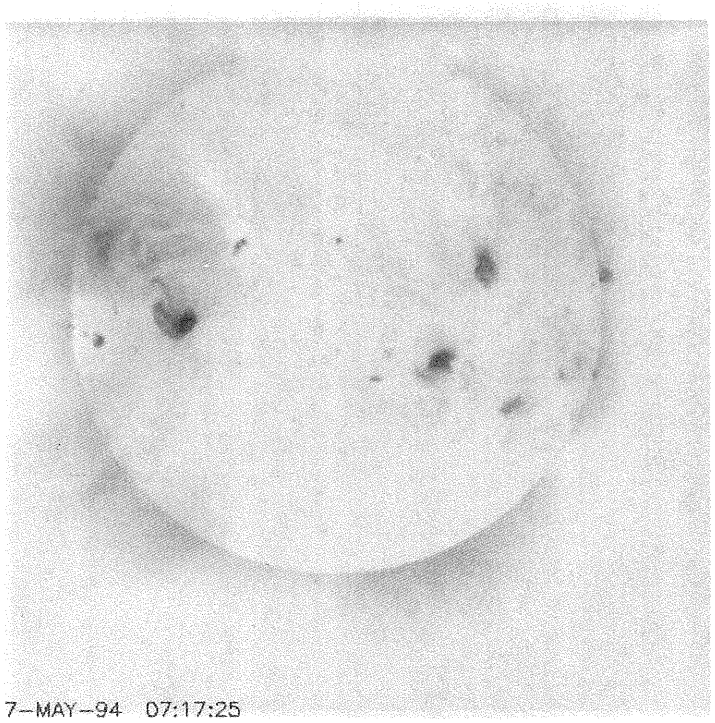
Day 8
18:36:31 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

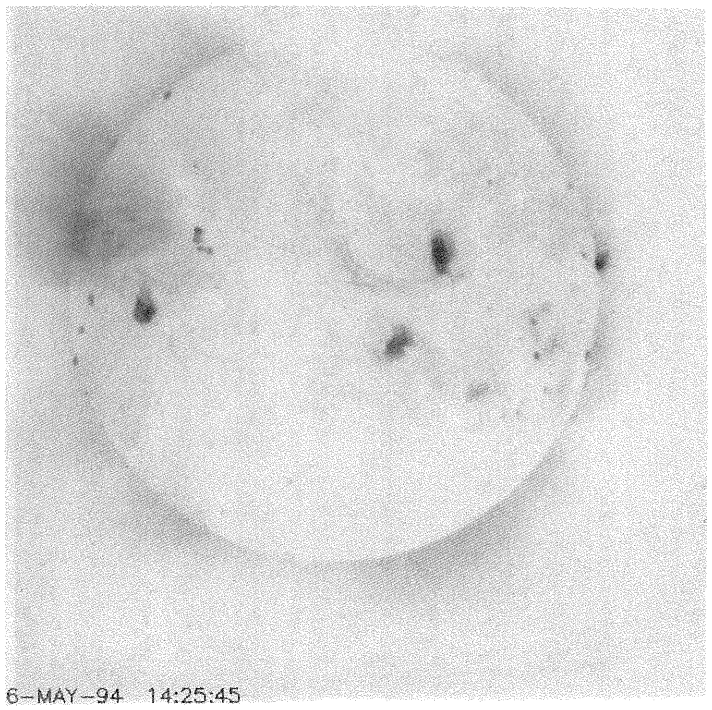
May 1994



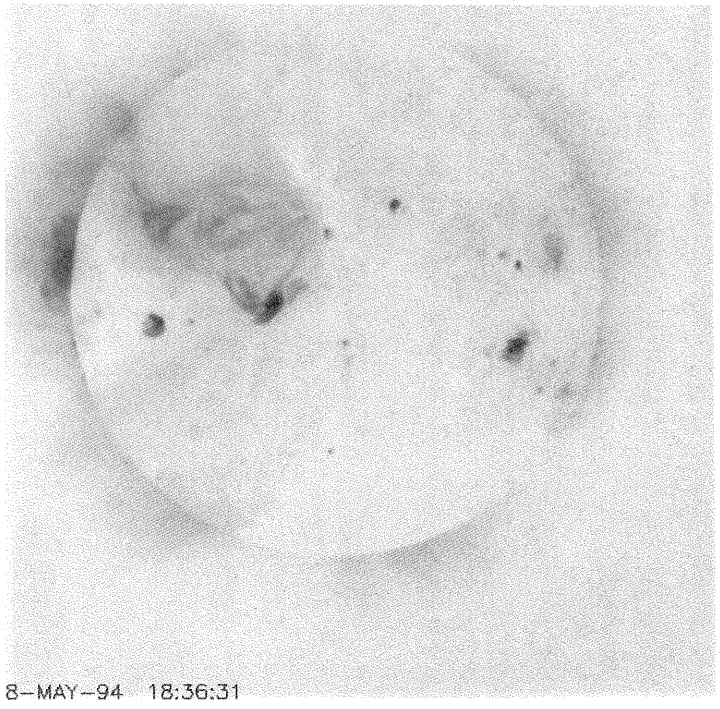
Day 5
10:09:53 UT



Day 7
07:17:25 UT



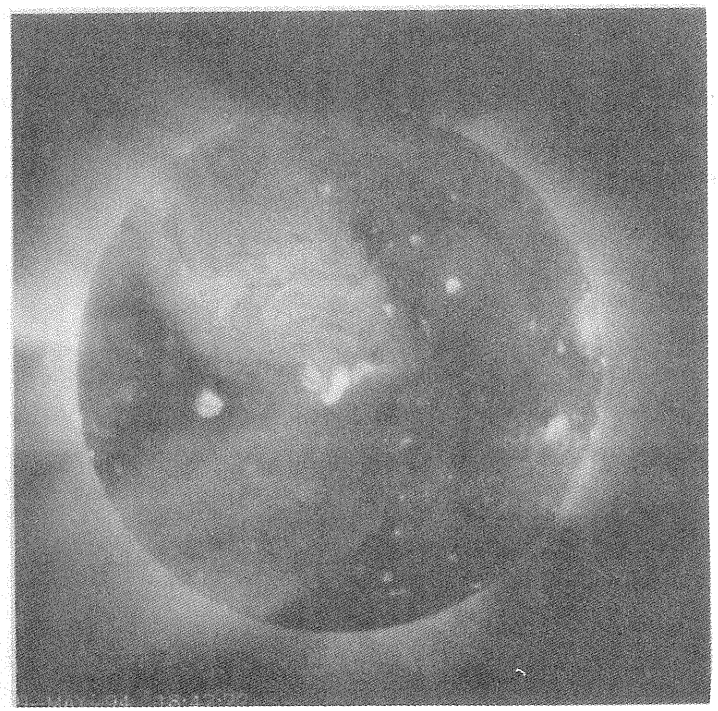
Day 6
14:25:45 UT



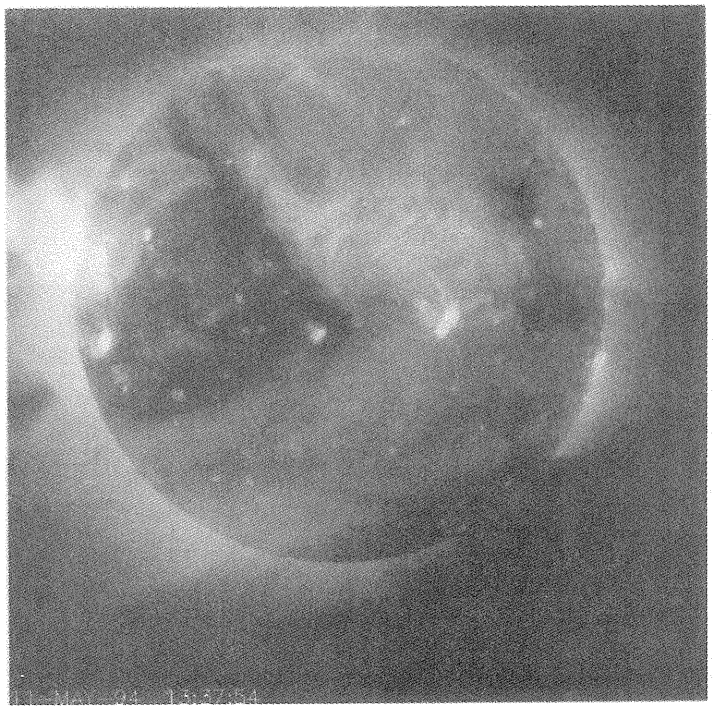
Day 8
18:36:31 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

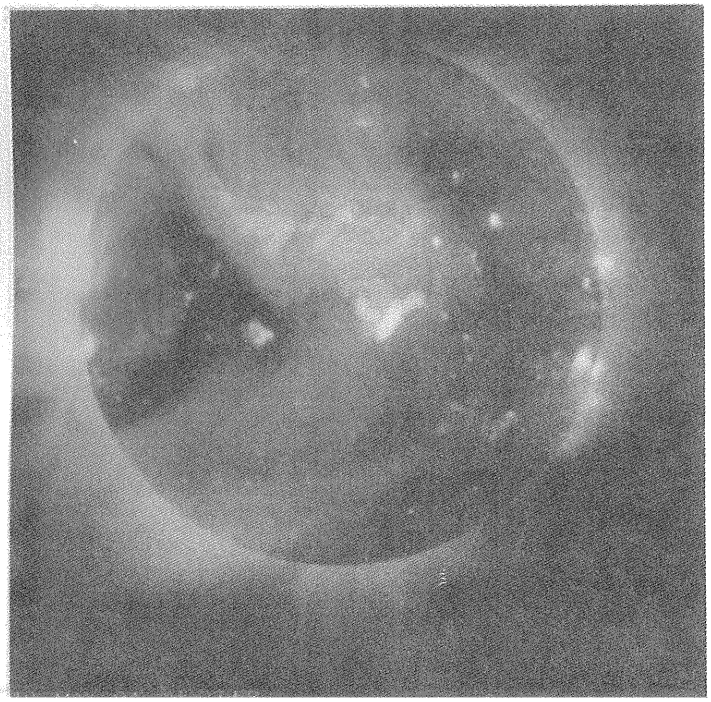
May 1994



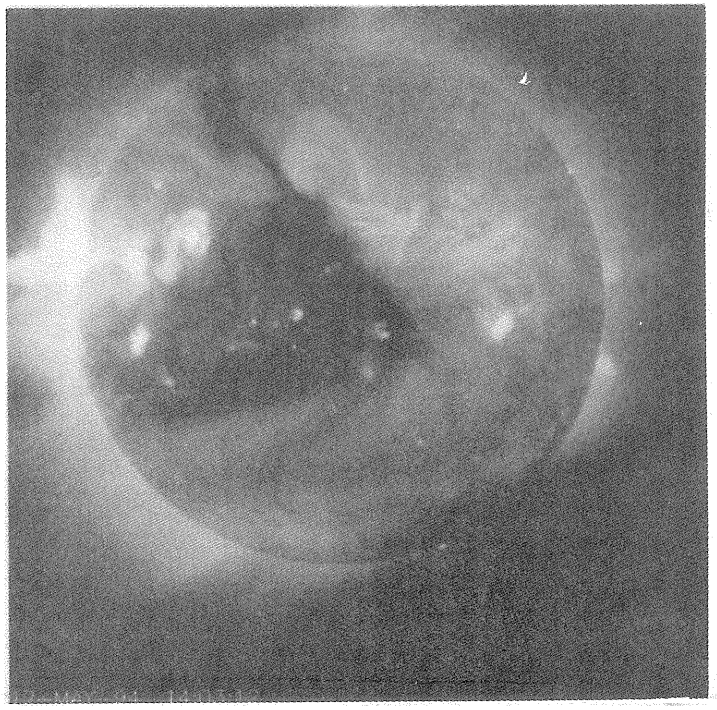
Day 9
18:42:22 UT



Day 11
13:37:54 UT



Day 10
15:03:58 UT

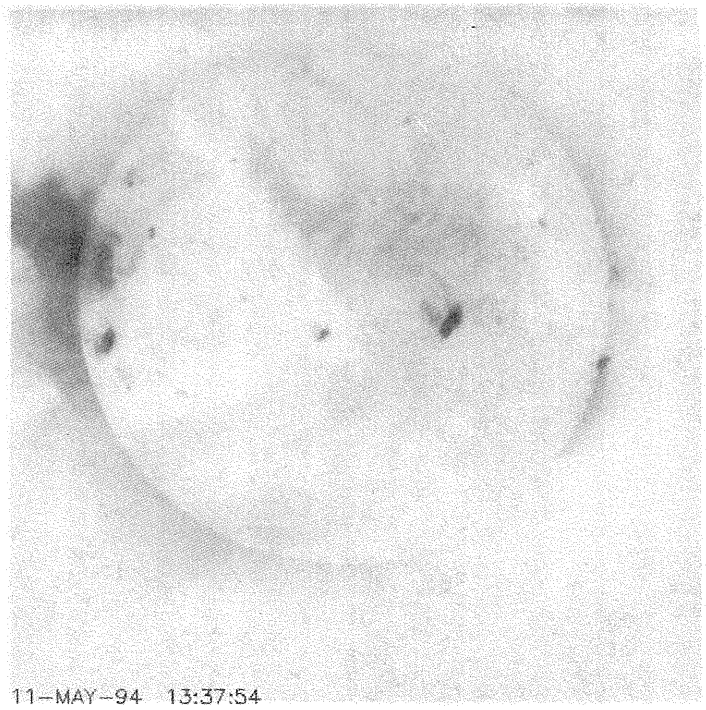


Day 12
14:03:12 UT

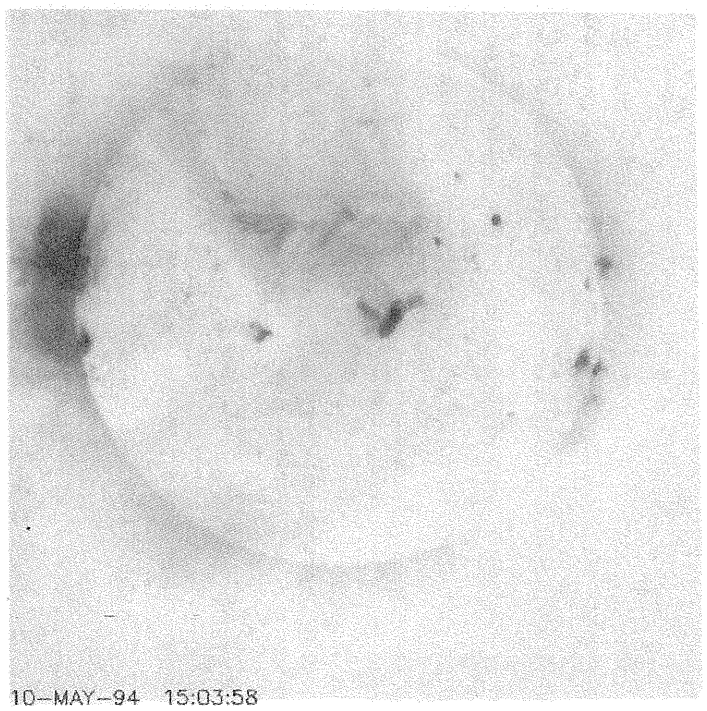
YOHKOH SOFT X-RAY TELESCOPE IMAGES

May 1994

Day 9
18:42:22 UT



Day 11
13:37:54 UT

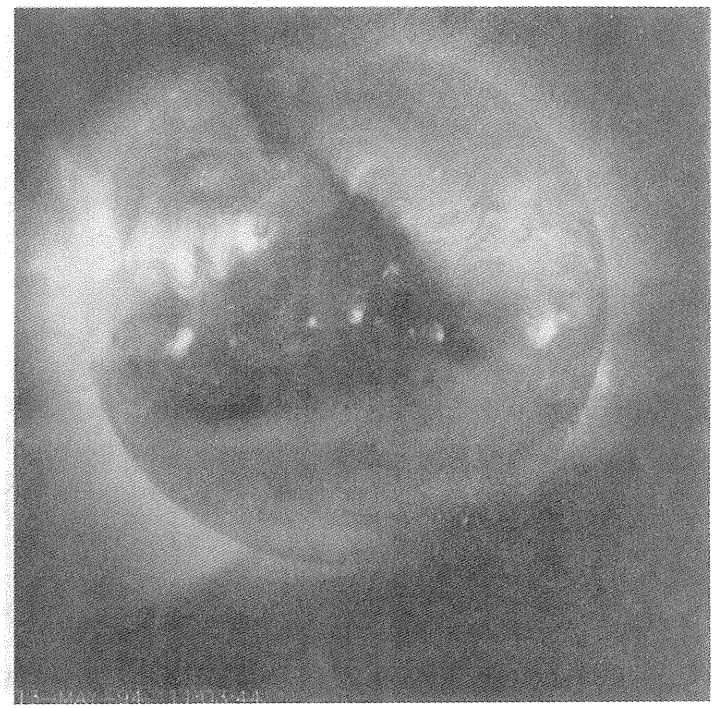


Day 10
15:03:58 UT

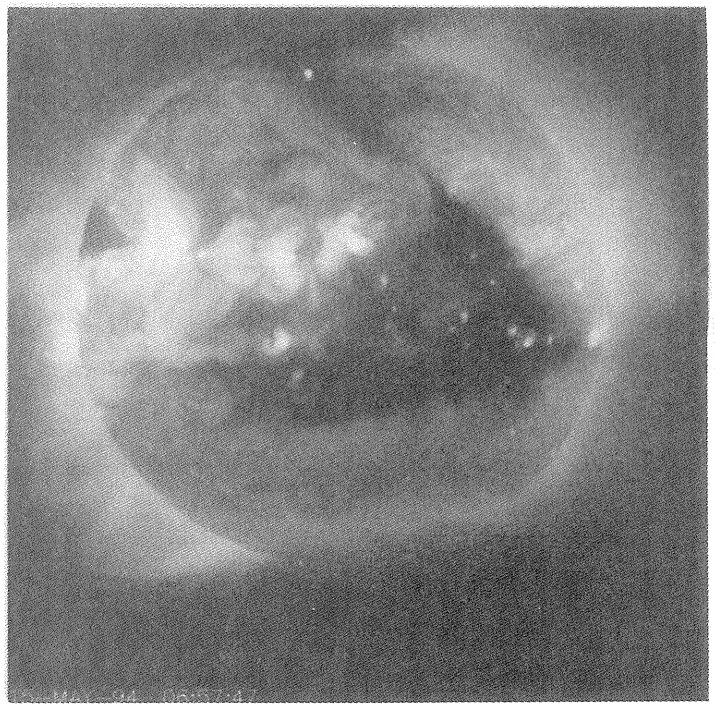
Day 12
14:03:12 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

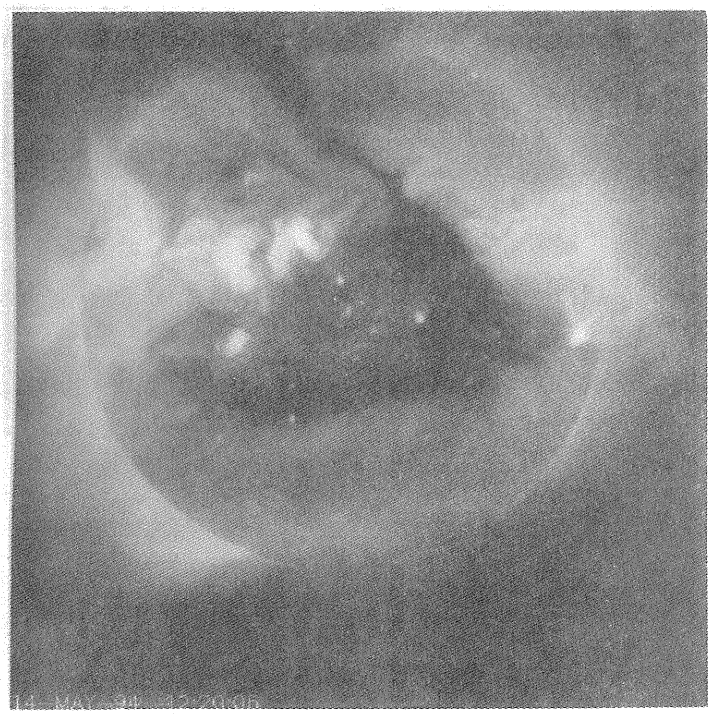
May 1994



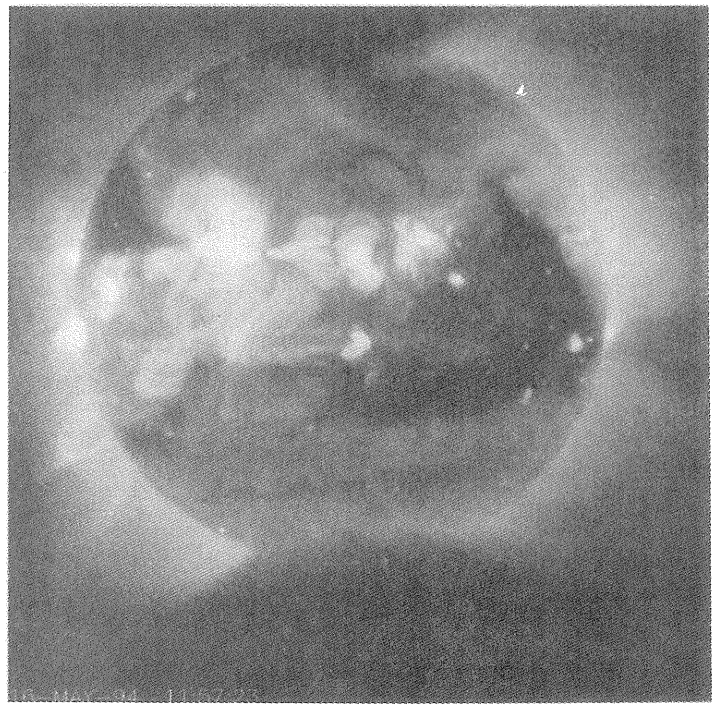
Day 13
11:03:44 UT



Day 15
06:57:47 UT



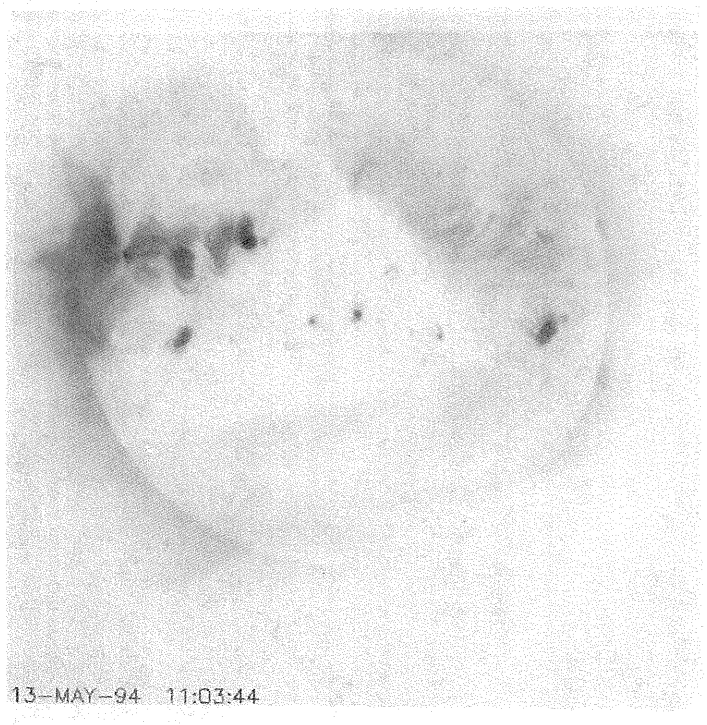
Day 14
12:20:06 UT



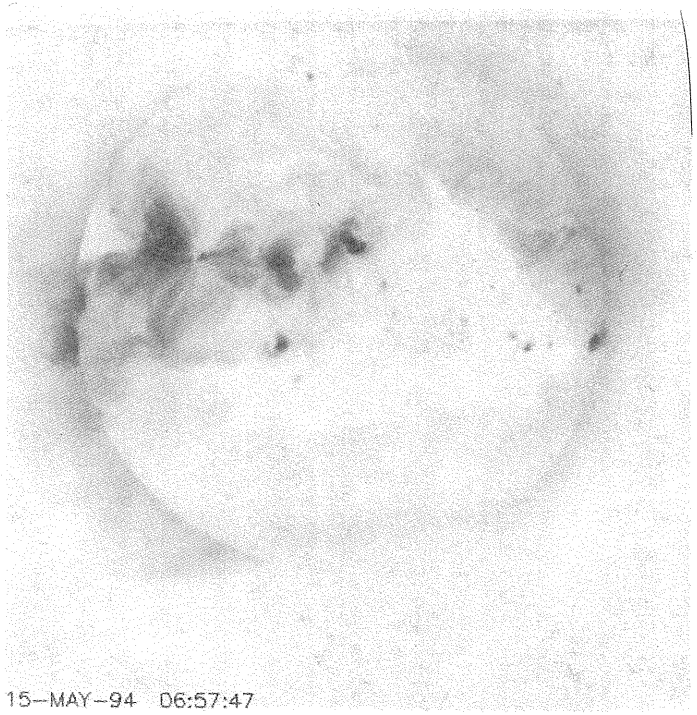
Day 16
11:57:23 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

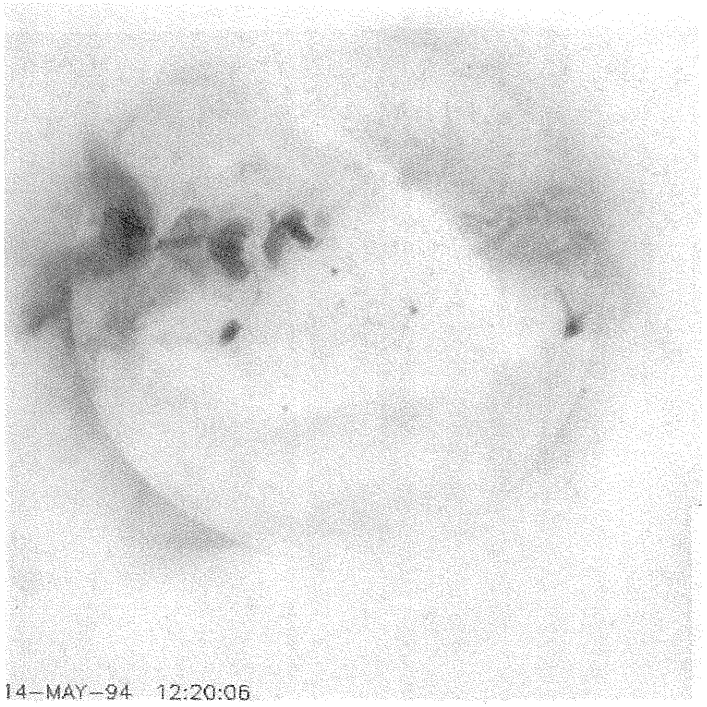
May 1994



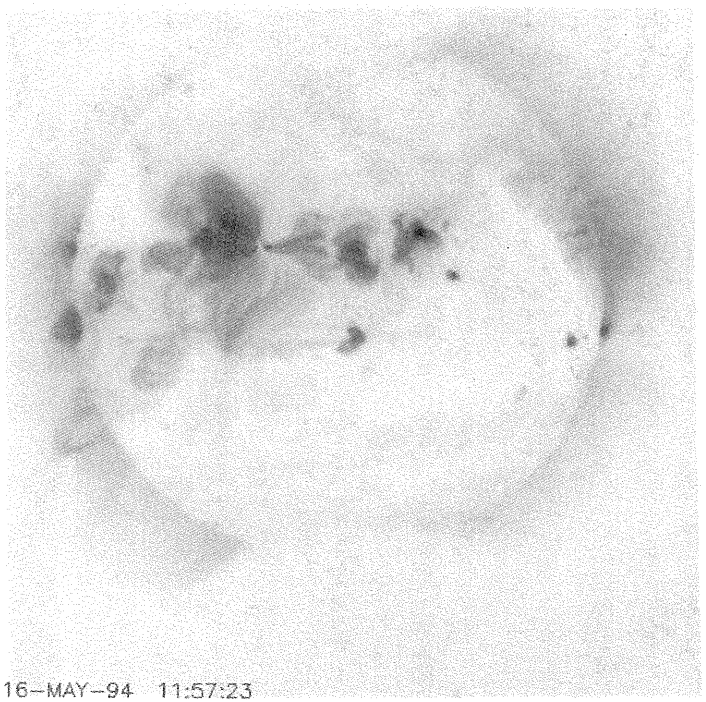
Day 13
11:03:44 UT



Day 15
06:57:47 UT



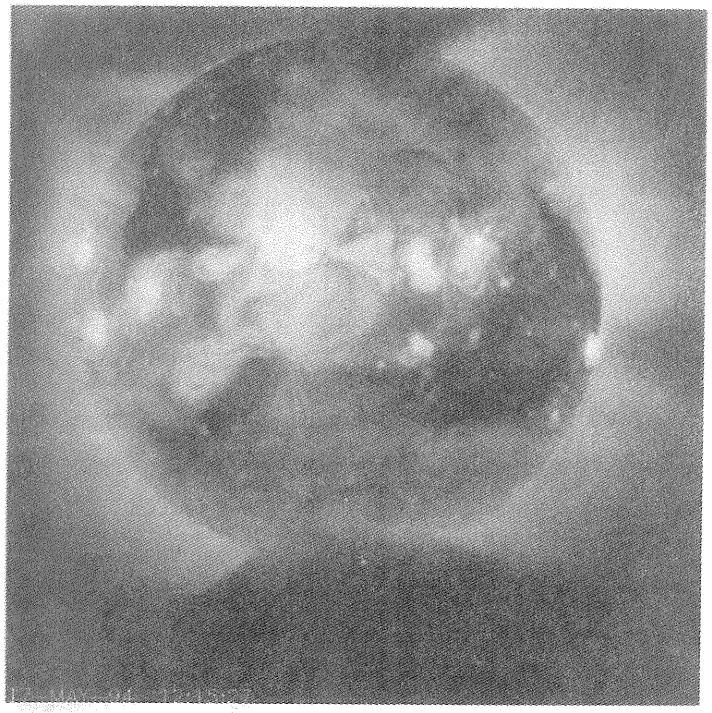
Day 14
12:20:06 UT



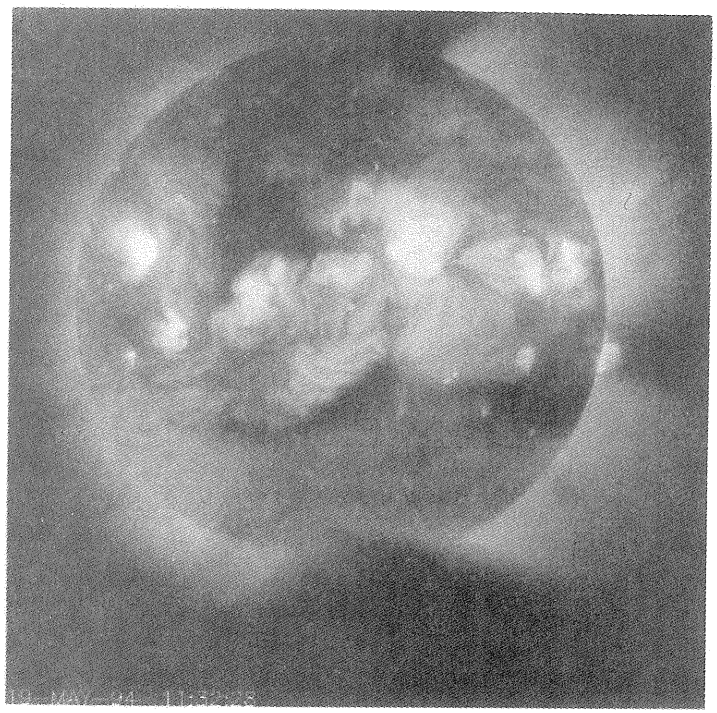
Day 16
11:57:23 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

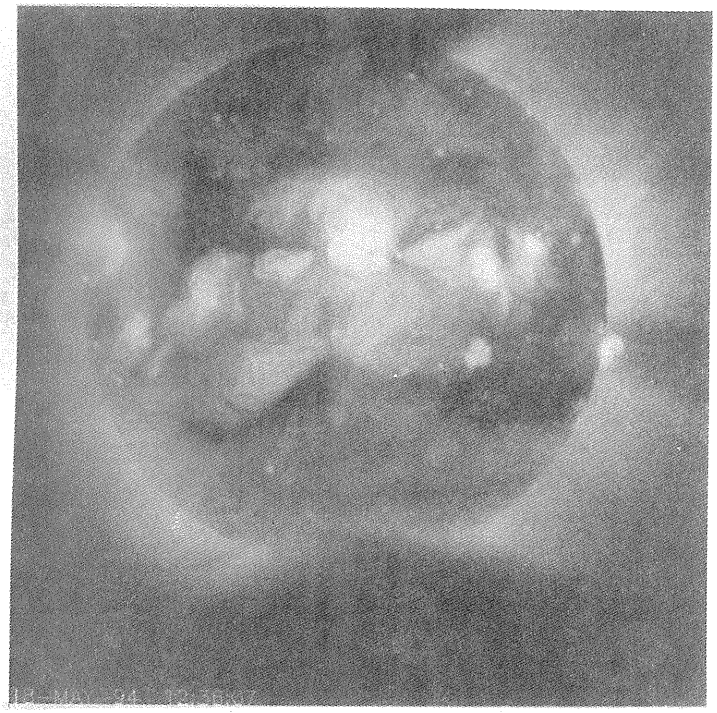
May 1994



Day 17
12:15:27 UT



Day 19
11:32:28 UT



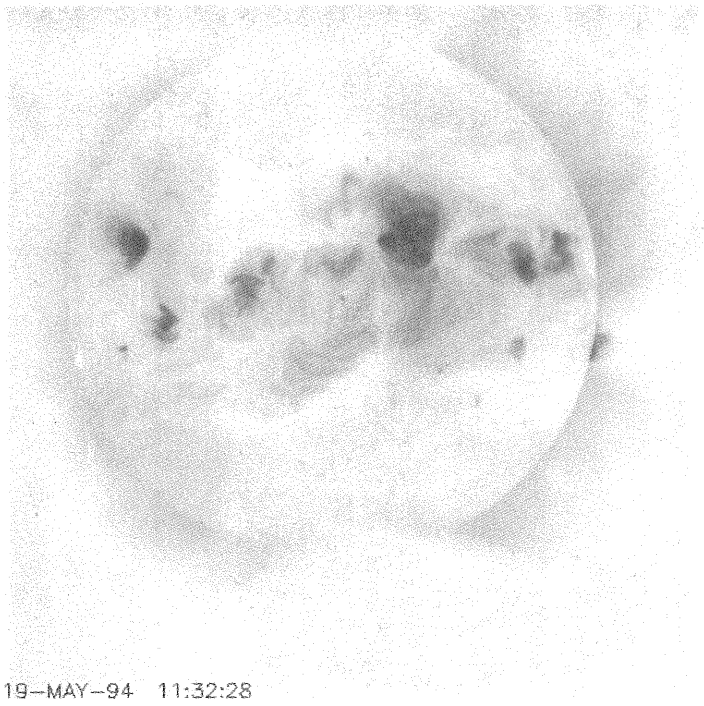
Day 18
12:36:07 UT

Day 20
11:51:10 UT

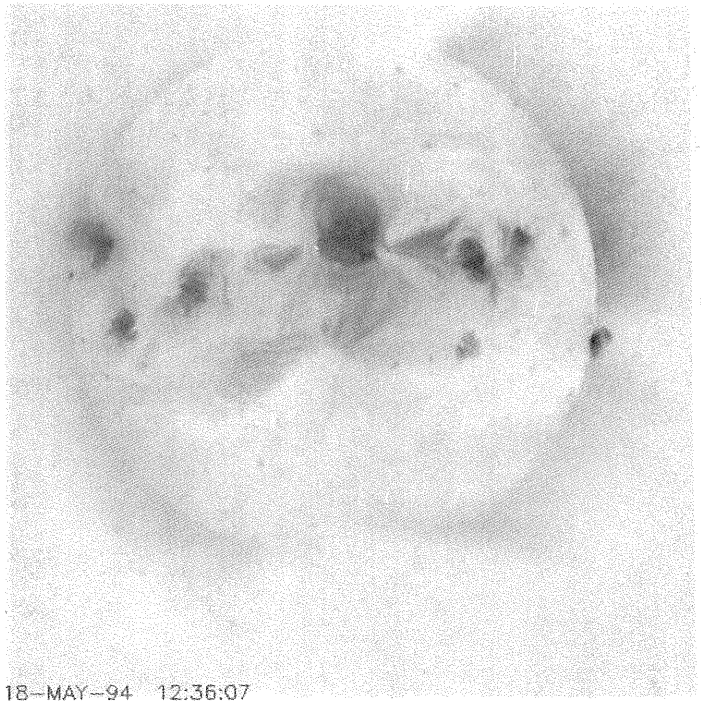
YOHKOH SOFT X-RAY TELESCOPE IMAGES

May 1994

Day 17
12:15:27 UT



Day 19
11:32:28 UT

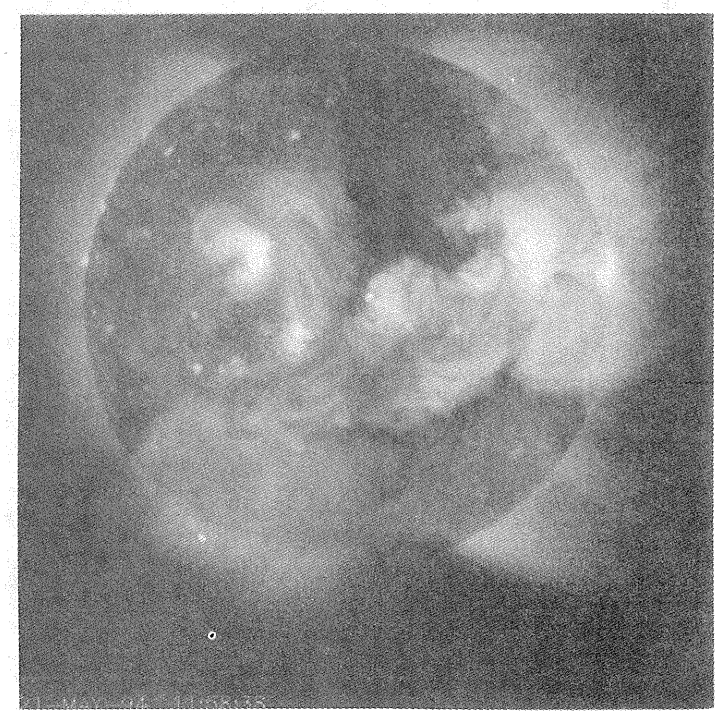


Day 18
12:36:07 UT

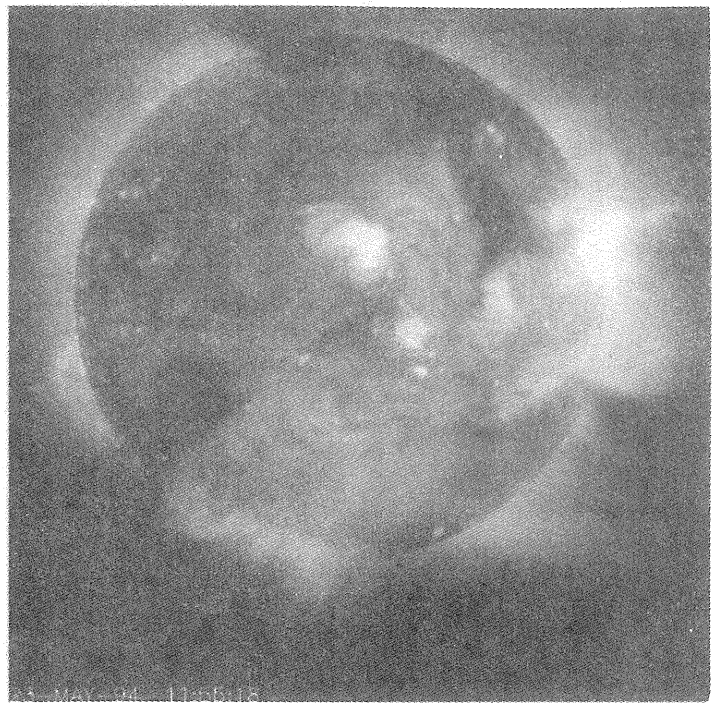
Day 20
11:51:10 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

May 1994

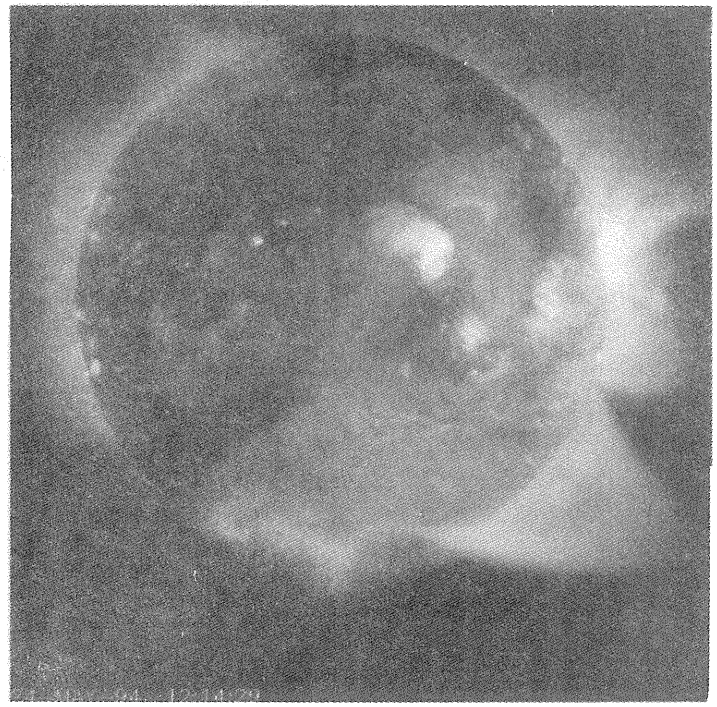


Day 21
11:58:38 UT



Day 23
11:55:18 UT

Day 22
18:06:44 UT



Day 24
12:14:29 UT

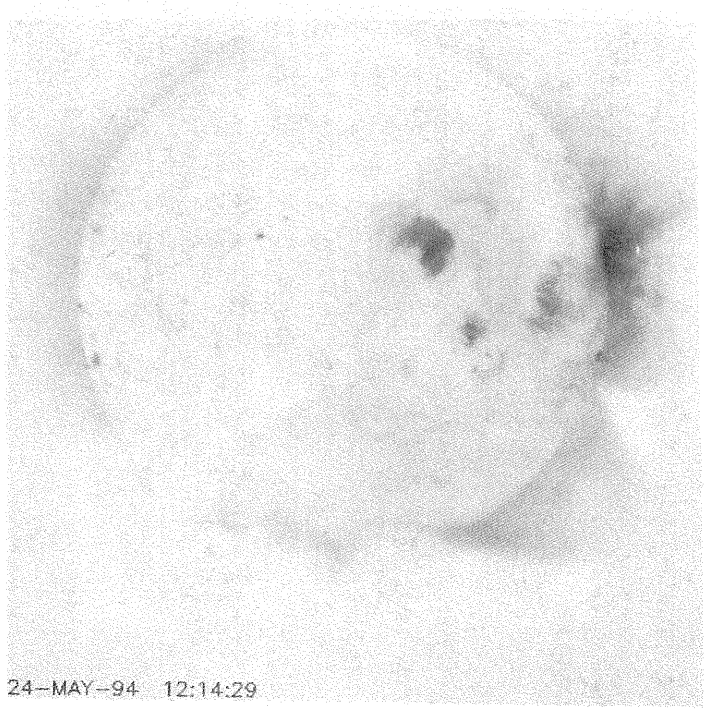
YOHKOH SOFT X-RAY TELESCOPE IMAGES

May 1994

Day 21
11:58:38 UT

Day 23
11:55:18 UT

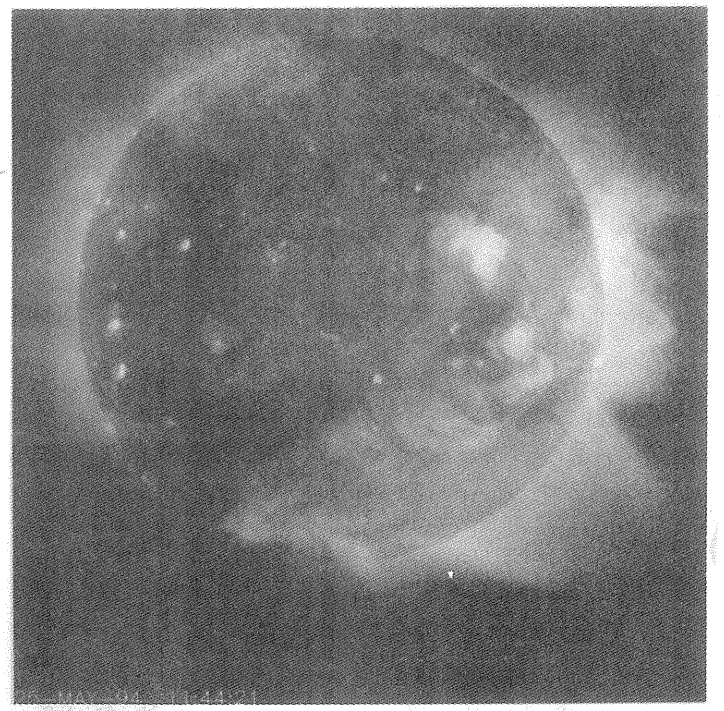
Day 22
18:06:44 UT



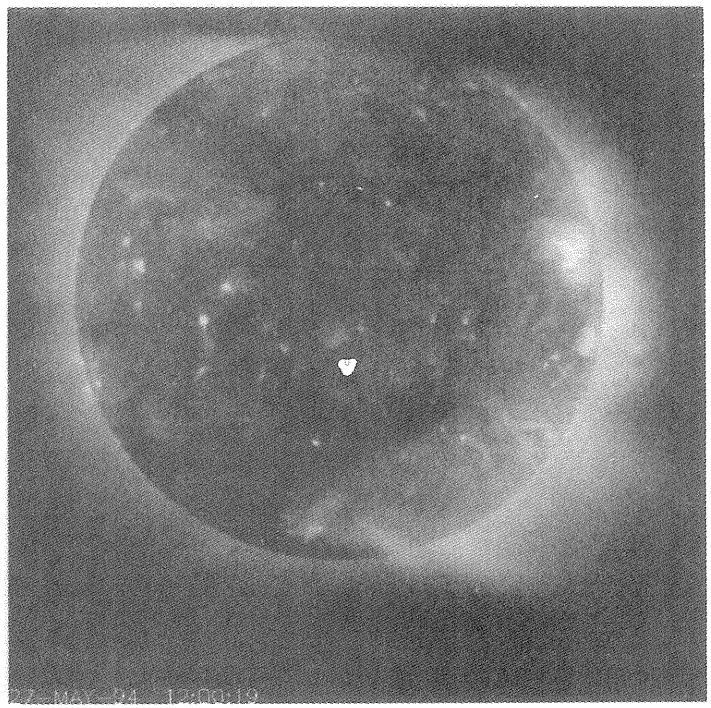
Day 24
12:14:29 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

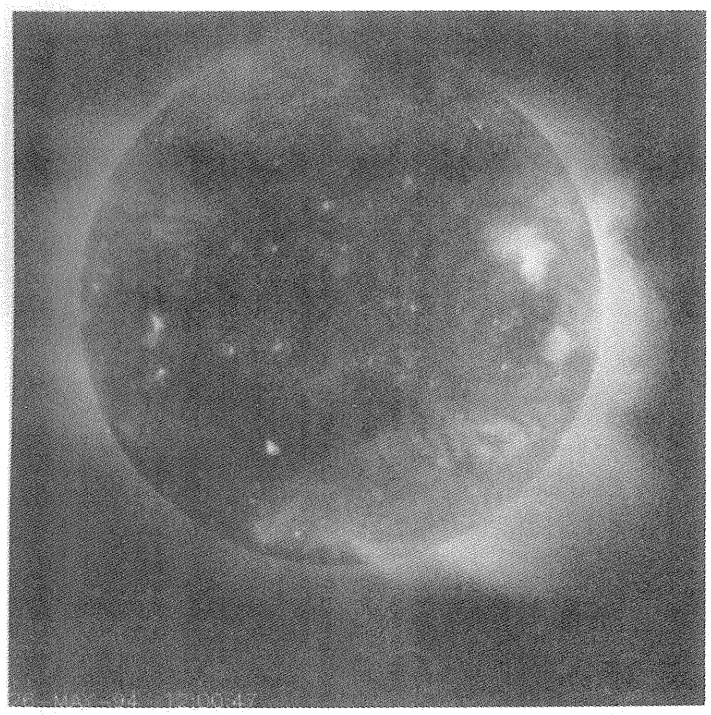
May 1994



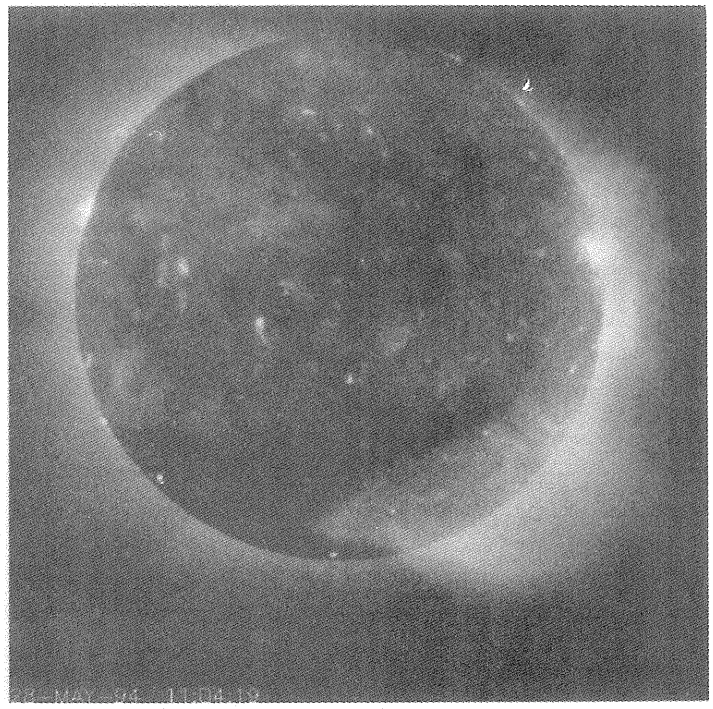
Day 25
11:44:21 UT



Day 27
12:00:19 UT



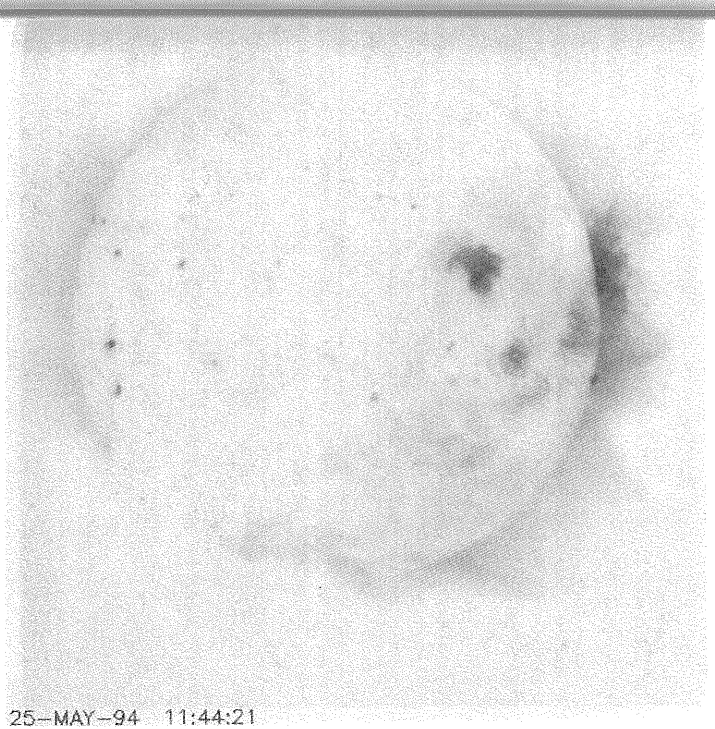
Day 26
12:00:47 UT



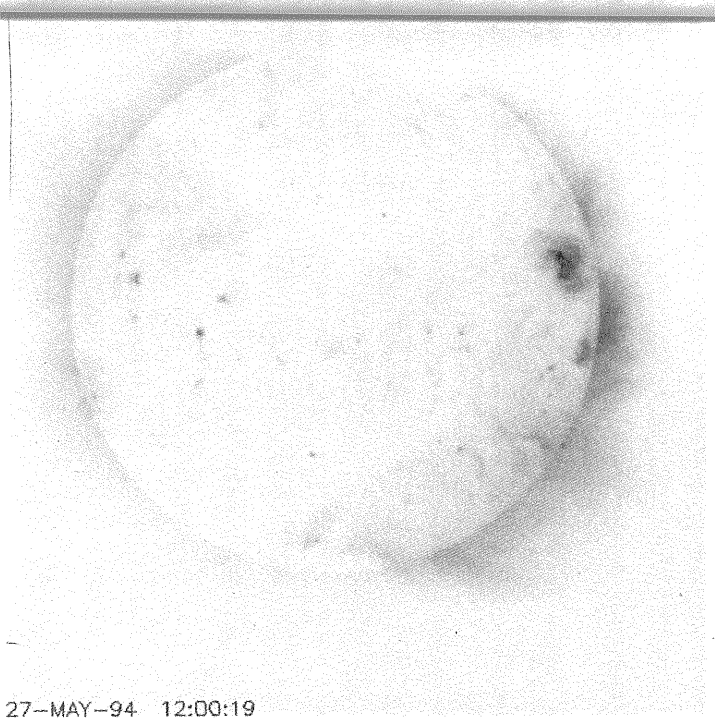
Day 28
11:04:19 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

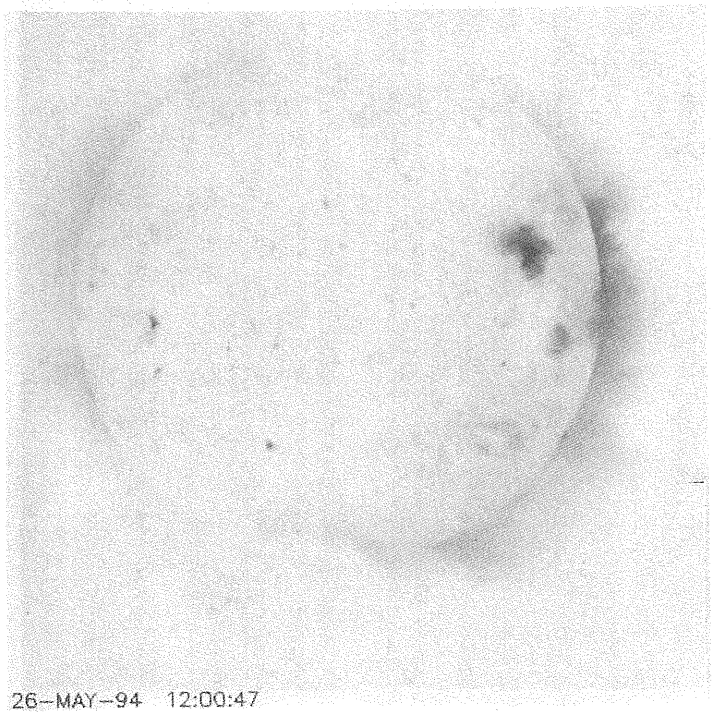
May 1994



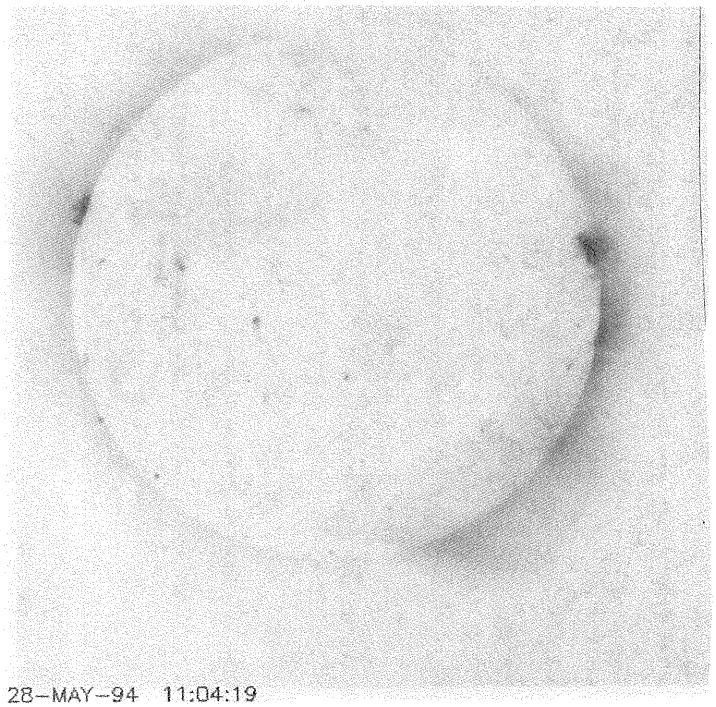
Day 25
11:44:21 UT



Day 27
12:00:19 UT



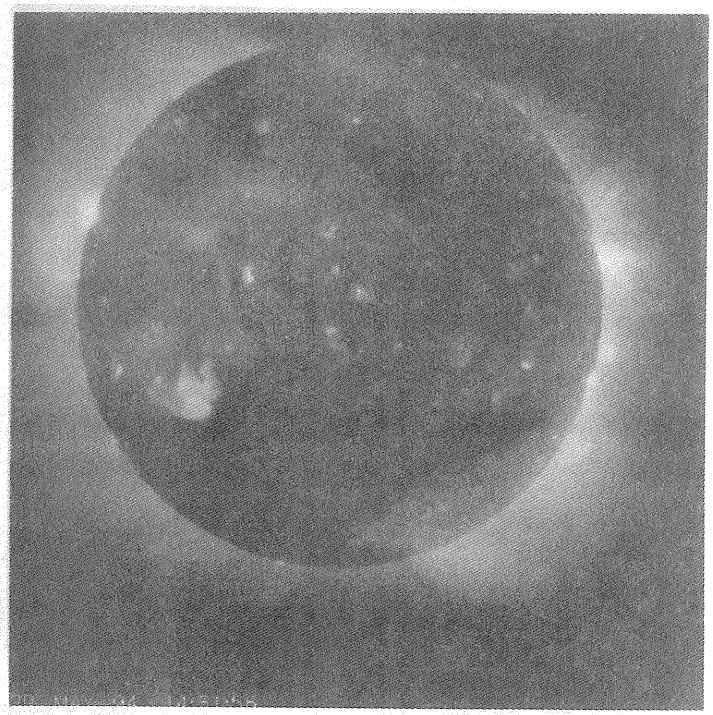
Day 26
12:00:47 UT



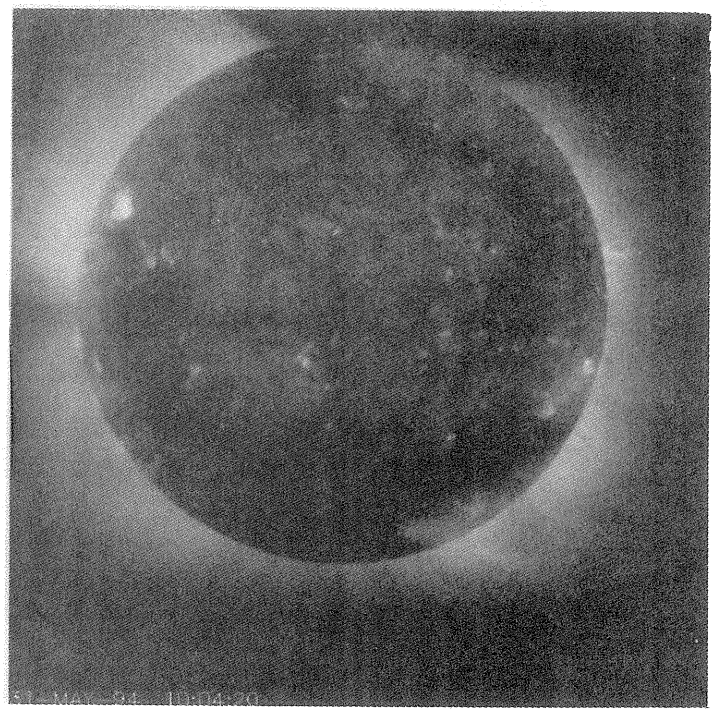
Day 28
11:04:19 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

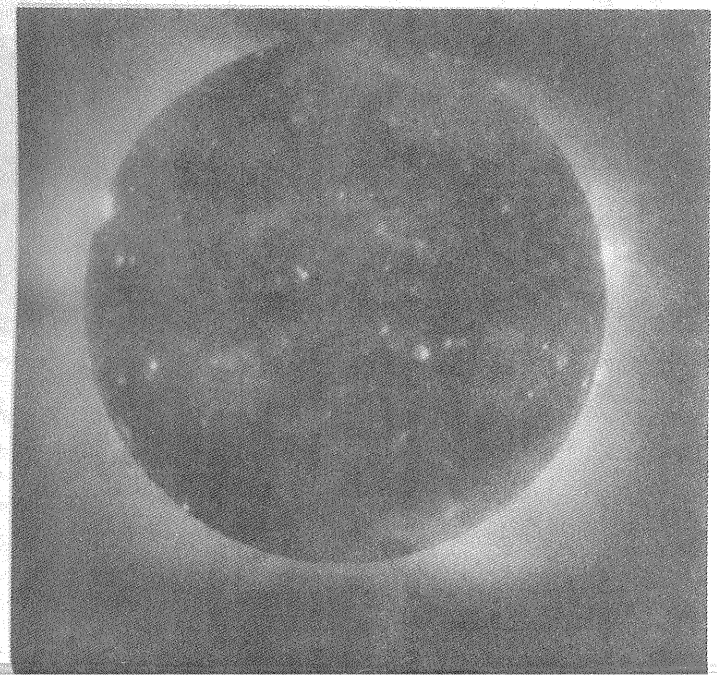
May 1994



Day 29
14:31:56 UT



Day 31
10:04:20 UT

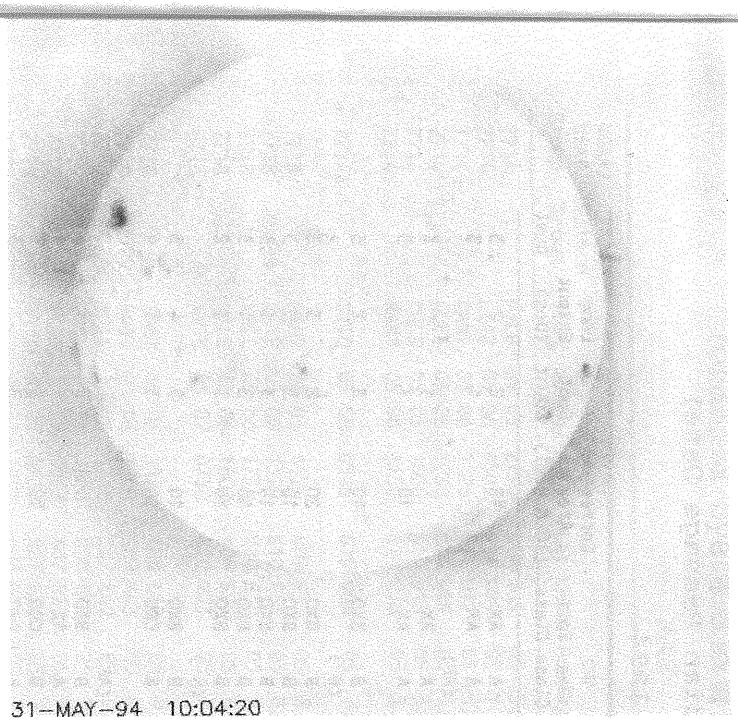


Day 30
09:45:04 UT

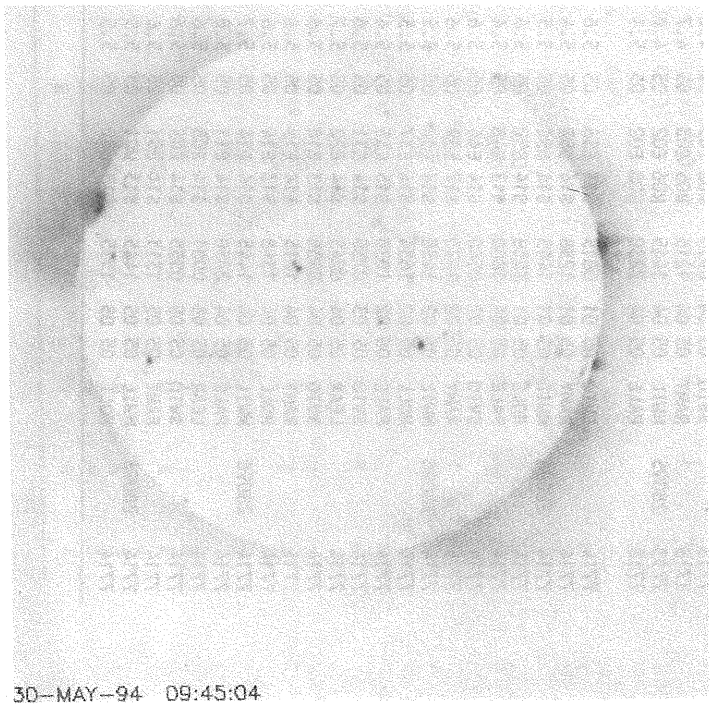
YOHKOH SOFT X-RAY TELESCOPE IMAGES

May 1994

Day 29
14:31:56 UT



Day 31
10:04:20 UT



Day 30
09:45:04 UT

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

MAY 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
7711A		LEAR	05	02	0015	N03	E00	05	2.0		A	AX	10	2	2	3
7711A		RAMY	05	02	1420	N02	W08	05	2.0		A	AX		1		3
7711A	28097	MWIL	05	02	1430	N02	W09	05	1.9	4	(AP)					
7711A		HOLL	05	02	1634	N02	W10	05	1.9		A	AX		1		4
7711A		PALE	05	02	1828	N02	W12	05	1.9		A	AX	10	1		3
7712		RAMY	04	30	1216	S13	E28	05	2.6		B	BXO	10	3	2	3
7712	28092	MWIL	04	30	1430	S11	E27	05	2.6	3	(B)					
7712		HOLL	04	30	1700	S12	E25	05	2.6		B	BXO	20	2	3	3
7712		PALE	04	30	1904	S12	E24	05	2.6		B	BXO	10	3	3	3
7712		LEAR	05	01	0040	S12	E20	05	2.5		B	BXO	10	3	3	3
7712		SVTO	05	01	0815	S12	E15	05	2.5		B	BXO	10	3	4	3
7712		RAMY	05	01	1238	S12	E13	05	2.5		B	BXO	10	3	3	2
7712	28092	MWIL	05	01	1445	S12	E12	05	2.5	4	(B)					
7712		LEAR	05	02	0015	S12	E07	05	2.5		B	BXO	10	5	4	3
7712		SVTO	05	02	0540	S11	E04	05	2.5		B	CRO	10	3	3	4
7712A	28094	MWIL	05	01	1445	S07	E18	05	3.0	4	(AP)					
7712A		SVTO	05	02	0540	S07	E11	05	3.1		B	BXO		2	3	4
7712A		LEAR	05	03	0610	S08	W04	05	2.9		A	AX		1	1	1
7712A		SVTO	05	03	0735	S07	W04	05	3.0		B	CRO	10	5	4	3
7712A		RAMY	05	03	1257	S07	W07	05	3.0		B	BXO		2	2	3
7712A		HOLL	05	03	1409	S07	W08	05	3.0		A	AX		2		3
7712A	28094	MWIL	05	03	1430	S07	W09	05	2.9	4	(AP)					
7713		SVTO	05	01	0815	N07	E48	05	4.9		A	AX		2	2	3
7713		RAMY	05	01	1238	N06	E46	05	5.0		B	BXO	10	5	3	2
7713	28095	MWIL	05	01	1445	N07	E47	05	5.1	4	(B)					
7713		HOLL	05	01	1538	N06	E45	05	5.0		A	AX	20	4	4	3
7713		PALE	05	01	1800	N07	E42	05	4.9		B	BXO	10	3	3	3
7713		LEAR	05	02	0015	N07	E38	05	4.8		B	BXO	20	6	4	3
7713		SVTO	05	02	0540	N07	E36	05	4.9		B	CRO	50	11	4	4
7713		RAMY	05	02	1420	N07	E32	05	5.0		B	BXO	30	14	5	3
7713	28095	MWIL	05	02	1430	N07	E32	05	5.0	5	(B)					
7713		HOLL	05	02	1634	N07	E30	05	4.9		B	DAI	50	18	6	4
7713		PALE	05	02	1828	N07	E29	05	4.9		B	CRO	20	12	5	3
7713		LEAR	05	03	0610	N07	E23	05	5.0		B	DSO	20	5	5	1
7713		SVTO	05	03	0735	N07	E23	05	5.0		B	DRO	20	14	5	3
7713		RAMY	05	03	1257	N07	E18	05	4.9		B	CRO	20	4	5	3
7713		HOLL	05	03	1409	N07	E17	05	4.9		B	CSO	20	4	6	3
7713	28095	MWIL	05	03	1430	N07	E17	05	4.9	5	(B)					
7713		LEAR	05	04	0045	N07	E13	05	5.0		B	BXO	10	4	5	3
7713		SVTO	05	04	0955	N06	E05	05	4.8		A	AX		1		4
7713		RAMY	05	04	1215	N05	E03	05	4.7		A	AX		1		4
7713	28095	MWIL	05	04	1445	N06	E02	05	4.8	4	(AP)					
7713		PALE	05	04	2230	N08	E02	05	5.1		A	AX	10	1	1	3
7714		SVTO	05	01	0815	S13	E56	05	5.6		B	BXO		2	2	3
7714		RAMY	05	01	1238	S14	E52	05	5.4		A	AX		1		2
7714	28096	MWIL	05	01	1445	S14	E51	05	5.5	4	(AP)					
7714		HOLL	05	01	1538	S14	E52	05	5.6		B	CRO		1		3
7714		PALE	05	01	1800	S13	E48	05	5.4		A	AX	10	1	1	3
7714		SVTO	05	02	0540	S14	E44	05	5.6		B	BXO	10	5	4	4
7714		RAMY	05	02	1420	S17	E39	05	5.6		B	BXO		2	4	3
7714	28096	MWIL	05	02	1430	S14	E39	05	5.5	4	(B)					
7714		HOLL	05	02	1634	S14	E37	05	5.5		B	BXO	10	4	5	4
7714		PALE	05	02	1828	S15	E35	05	5.4		B	BXO	10	2	3	3
7714		SVTO	05	03	0735	S14	E31	05	5.6		A	AX		1		3
7714		LEAR	05	04	0045	S14	E22	05	5.7		A	AX		2	2	3
7714		SVTO	05	04	0955	S13	E16	05	5.6		B	BXO	10	4	3	4
7714		RAMY	05	04	1215	S14	E15	05	5.6		B	BXO	10	2	4	4
7714		HOLL	05	04	1348	S13	E14	05	5.6		B	BXO	10	3	4	3
7714	28096	MWIL	05	04	1445	S14	E14	05	5.7	5	(B)					
7714		PALE	05	04	2230	S14	E11	05	5.8		B	BXO	20	3	4	3
7714		LEAR	05	05	0001	S14	E08	05	5.6		B	BXO	10	3	4	3
7714		SVTO	05	05	0555	S14	E05	05	5.6		B	BXO	10	3	4	3
7714		RAMY	05	05	1311	S14	E01	05	5.6		B	BXO	10	6	6	3
7714	28096	MWIL	05	05	1445	S13	W01	05	5.5	4	(B)					
7714		HOLL	05	05	1515	S13	W02	05	5.5		B	BXO	20	8	3	3

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

MAY 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
7714		PALE	05 05 2130	S14 W03	05 5.7		B	BXO	30	5	5	3
7714		LEAR	05 06 0503	S14 W09	05 5.5		B	BXO	20	6	4	3
7714		RAMY	05 06 1126	S14 W12	05 5.6		B	BXO	20	7	5	4
7714		HOLL	05 06 1730	S14 W15	05 5.6		B	BXO	10	2	5	3
7714		PALE	05 06 1800	S15 W18	05 5.4		A	AX	10	2	2	3
7714		RAMY	05 08 1130	S14 W38	05 5.6		A	AX		1		4
7714A		SVTO	05 08 0545	N15 W06	05 7.8		B	BXO		3	4	4
7718		RAMY	05 06 1126	N09 E33	05 8.9		B	BXO	10	3	2	4
7718	28098	MWIL	05 06 1500	N10 E31	05 8.9	4	(AP)					
7718		HOLL	05 06 1730	N10 E30	05 9.0		A	AX	10	2	2	3
7718		PALE	05 06 1800	N09 E29	05 8.9		A	AX	10	2	2	3
7718		SVTO	05 07 0730	N10 E23	05 9.0		A	AX		1		3
7719		RAMY	05 06 1126	S08 E45	05 9.8		B	BXO	10	3	2	4
7719	28099	MWIL	05 06 1500	S07 E43	05 9.8	4	(B)					
7719		HOLL	05 06 1730	S07 E42	05 9.9		B	BXO	30	10	5	3
7719		PALE	05 06 1800	S08 E42	05 9.9		B	BXO	20	12	5	3
7719		LEAR	05 07 0017	S07 E37	05 9.8		B	BXO	30	11	5	3
7719		SVTO	05 07 0730	S07 E34	05 9.8		B	DSO	40	12	6	3
7719		RAMY	05 07 1327	S06 E30	05 9.8		B	DRO	30	10	5	2
7719	28099	MWIL	05 07 1700	S07 E27	05 9.7	5	(B)					
7719		PALE	05 07 1841	S07 E27	05 9.8		B	CAO	50	17	6	3
7719		LEAR	05 08 0003	S07 E24	05 9.8		B	CSO	40	11	6	3
7719		SVTO	05 08 0545	S06 E21	05 9.8		B	DSO	20	10	6	4
7719		RAMY	05 08 1130	S07 E17	05 9.7		B	BXO	30	13	6	4
7719	28099	MWIL	05 08 1430	S06 E16	05 9.8	4	(B)					
7719		PALE	05 08 1923	S06 E13	05 9.8		B	DAO	30	5	6	2
7719		LEAR	05 09 0027	S06 E11	05 9.8		B	CSO	20	11	6	3
7719		RAMY	05 09 1334	S06 E02	05 9.7		B	BXO	20	6	6	3
7719		HOLL	05 09 1403	S07 E03	05 9.8		B	CSO	20	6	6	3
7719	28099	MWIL	05 09 1430	S06 E01	05 9.7	5	(BP)					
7719		LEAR	05 10 0030	S07 W05	05 9.6		B	CSO	20	9	6	3
7719		RAMY	05 10 1414	S06 W13	05 9.6		B	BXO	20	5	3	2
7719	28099	MWIL	05 10 1415	S07 W12	05 9.7	4	(B)					
7719		PALE	05 10 1830	S07 W15	05 9.6		B	BXO	20	3	4	4
7719		HOLL	05 11 0020	S06 W19	05 9.6		B	BX	10	2	1	2
7719		LEAR	05 11 0040	S07 W18	05 9.7		B	CRO	30	6	4	3
7719		SVTO	05 11 0550	S07 W21	05 9.7		B	BXO	10	2	2	3
7719		RAMY	05 11 1118	S07 W25	05 9.6		A	AX		1		4
7719	28099	MWIL	05 11 1430	S07 W24	05 9.8	4	(B)					
7719		PALE	05 11 1810	S08 W24	05 9.9		A	BXO	10	2	1	4
7719	28099	MWIL	05 12 1430	S07 W37	05 9.8	3	(AF)					
7719A	28101	MWIL	05 09 1430	N20 E22	05 11.3	4	(AP)					
7720		SVTO	05 07 0730	S08 E63	05 12.0		A	AX		1		3
7720		LEAR	05 08 0003	S10 E51	05 11.8		A	AX		2	1	3
7720		SVTO	05 08 0545	S09 E49	05 11.9		B	BXO	10	3	2	4
7720		RAMY	05 08 1130	S11 E45	05 11.9		B	BXO	10	2	1	4
7720	28100	MWIL	05 08 1430	S10 E43	05 11.8	4	(AP)					
7720		PALE	05 08 1923	S11 E40	05 11.8		A	AX	10	1	1	2
7720		LEAR	05 09 0027	S10 E38	05 11.9		A	AX		1	1	3
7720	28105	MWIL	05 13 1430	S11 W24	05 11.8	3	X					
7720		LEAR	05 16 0037	S08 W55	05 11.9		A	AX		1		4
7720		SVTO	05 17 0530	S09 W68	05 12.1		A	AX		2	1	4
7720A		SVTO	05 13 0905	S07 W02	05 13.2		B	BXO	10	2	2	1
7720A		RAMY	05 13 1112	S06 W03	05 13.2		B	BXO		2	3	4
7720B		SVTO	05 13 0905	S08 E09	05 14.0		A	AX		1		1
7723		SVTO	05 12 0630	N09 E39	05 15.2		A	AX		1		3
7723		RAMY	05 12 1133	N10 E35	05 15.1		B	BXO	40	9	3	4
7723	28104	MWIL	05 12 1430	N10 E34	05 15.1	4	(B)					
7723		HOLL	05 12 1520	N10 E32	05 15.0		B	CRO	40	8	5	2
7723		PALE	05 12 1715	N10 E33	05 15.2		B	DAO	50	9	4	3
7723		LEAR	05 13 0037	N10 E28	05 15.1		B	CSO	30	10	4	3

S U N S P O T G R O U P S
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MAY 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
7723		SVTO	05	13	0905	N10	E23	05	15.1		B	DSO	90	4	5	1
7723		RAMY	05	13	1112	N09	E22	05	15.1		B	DAO	40	7	4	4
7723	28104	MWIL	05	13	1430	N10	E20	05	15.1	5	(B)					
7723		HOLL	05	13	1504	N10	E20	05	15.1		B	DRO	40	5	5	3
7723		PALE	05	13	1936	N09	E18	05	15.2		B	DAO	30	5	4	2
7723		LEAR	05	14	0035	N10	E14	05	15.1		B	DRO	30	6	4	4
7723		SVTO	05	14	0703	N10	E12	05	15.2		B	DRO	20	6	3	3
7723		RAMY	05	14	1240	N11	E08	05	15.1		B	CAO	20	4	4	4
7723	28104	MWIL	05	14	1430	N10	E07	05	15.1	5	(B)					
7723		HOLL	05	14	1444	N11	E07	05	15.1		B	DSO	30	4	4	3
7723		PALE	05	14	1935	N10	E04	05	15.1		B	DSO	40	2	5	2
7723		LEAR	05	15	0030	N11	W02	05	14.9		B	CAO	40	4	5	3
7723		SVTO	05	15	0517	N11	W03	05	15.0		B	CRO	20	4	4	3
7723		RAMY	05	15	1227	N10	W05	05	15.1		B	CAO	20	5	3	3
7723	28104	MWIL	05	15	1430	N10	W07	05	15.1	4	(B)					
7723		HOLL	05	15	1810	N12	W09	05	15.1		A	HR	20	2	2	3
7723		PALE	05	15	1857	N10	W08	05	15.2		B	CRO	30	4	3	3
7723		LEAR	05	16	0037	N11	W13	05	15.0		A	HR	20	2	2	4
7723		SVTO	05	16	0602	N12	W16	05	15.0		A	HR		2	1	3
7723		RAMY	05	16	1130	N11	W18	05	15.1		A	AX		2	2	4
7723		HOLL	05	16	1500	N12	W21	05	15.0		A	HR	20	2	2	3
7723		PALE	05	16	2210	N11	W26	05	15.0		A	HS	10	2	2	3
7723		LEAR	05	17	0030	N13	W28	05	14.9		A	HR	10	2	2	3
7723		SVTO	05	17	0530	N12	W29	05	15.0		A	AX		2	1	4
7723		RAMY	05	17	1315	N12	W34	05	15.0		A	AX	10	1	1	3
7723		HOLL	05	17	1620	N13	W35	05	15.0		A	AX	10	1		3
7723		PALE	05	17	1719	N12	W36	05	15.0		A	AX		1		4
7723		LEAR	05	19	0018	N12	W54	05	14.9		A	AX		1		4
7721		RAMY	05	10	1414	S12	E75	05	16.2		B	BXO	20	3	4	2
7721	28102	MWIL	05	10	1415	S11	E74	05	16.2	3	(AP					
7721		PALE	05	10	1830	S12	E75	05	16.4		B	AXO	30	2	2	4
7721		LEAR	05	11	0040	S12	E70	05	16.3		B	BXO	20	3	3	3
7721		SVTO	05	11	0550	S11	E64	05	16.0		A	AX	10	2	2	3
7721		RAMY	05	11	1118	S11	E62	05	16.1		B	BXO	20	3	3	4
7721	28102	MWIL	05	11	1430	S11	E60	05	16.1	4	(B)					
7721		HOLL	05	11	1625	S12	E59	05	16.1		A	AX	20	2	1	2
7721		PALE	05	11	1810	S12	E58	05	16.1		A	BXO	10	2	2	4
7721		SVTO	05	12	0630	S12	E52	05	16.2		A	AX		1		3
7721		RAMY	05	12	1133	S12	E48	05	16.1		A	AX	10	2	1	4
7721	28102	MWIL	05	12	1430	S11	E47	05	16.1	4	(AP)					
7721		HOLL	05	12	1520	S12	E46	05	16.1		A	AX	10	1		2
7721		PALE	05	12	1715	S12	E47	05	16.2		A	AX	10	1	1	3
7721		LEAR	05	14	0035	S11	E29	05	16.2		A	AX		2	2	4
7721		PALE	05	14	1935	S12	E18	05	16.2		A	AX		1		2
7721		LEAR	05	15	0030	S12	E15	05	16.1		A	AX		1	1	3
7721		SVTO	05	15	0517	S12	E12	05	16.1		A	AX		1		3
7725	28106	MWIL	05	13	1430	N05	E33	05	16.1	4	(AP)					
7725		HOLL	05	14	1444	N06	E17	05	15.9		A	AX		2	1	3
7725		RAMY	05	16	1130	N04	W02	05	16.3		A	AX		1		4
7722		SVTO	05	11	0550	N05	E89	05	17.9		A	AX		1		3
7722		RAMY	05	11	1118	N07	E89	05	18.1		A	HS	50	1	2	4
7722	28103	MWIL	05	11	1430	N09	E85	05	18.0	4	(A					
7722		HOLL	05	11	1625	N07	E82	05	17.8		B	DHO	330	3	11	2
7722		PALE	05	11	1810	N07	E80	05	17.7		B	DHO	210	5	10	4
7722		LEAR	05	12	0050	N07	E79	05	17.9		B	DKO	250	3	10	3
7722		SVTO	05	12	0630	N08	E75	05	17.9		B	DAO	210	3	11	3
7722		RAMY	05	12	1133	N06	E70	05	17.7		B	DKO	410	4	4	4
7722	28103	MWIL	05	12	1430	N08	E70	05	17.8	5	(AP)					
7722		HOLL	05	12	1520	N07	E70	05	17.9		B	DSO	200	6	6	2
7722		PALE	05	12	1715	N08	E69	05	17.9		B	DKO	350	4	5	3
7722		LEAR	05	13	0037	N08	E65	05	17.9		BG	DKO	380	5	8	3
7722		SVTO	05	13	0905	N08	E60	05	17.9		B	DHO	400	3	8	1
7722		RAMY	05	13	1112	N07	E58	05	17.8		BD	DAI	330	4	4	4
7722	28103	MWIL	05	13	1430	N08	E57	05	17.9	6	(AP)					
7722		HOLL	05	13	1504	N08	E57	05	17.9		BD	DAC	380	5	7	3
7722		PALE	05	13	1936	N06	E55	05	17.9		B	DAO	270	4	5	2

S U N S P O T G R O U P S
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MAY 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
7722		LEAR	05	14	0035	N08	E51	05	17.8		B	DKO	330	4	5	4
7722		SVTO	05	14	0703	N07	E47	05	17.8		BD	DAO	270	5	5	3
7722		RAMY	05	14	1240	N08	E44	05	17.8		B	DKO	280	7	7	4
7722	28103	MWIL	05	14	1430	N08	E44	05	17.9	6	(BP)					
7722		HOLL	05	14	1444	N07	E45	05	18.0		B	CKI	360	14	7	3
7722		PALE	05	14	1935	N07	E40	05	17.8		B	DKI	300	7	4	2
7722		LEAR	05	15	0030	N08	E38	05	17.9		B	DKO	390	5	8	3
7722		SVTO	05	15	0517	N08	E35	05	17.8		B	DSO	250	6	6	3
7722		RAMY	05	15	1227	N07	E32	05	17.9		B	CKO	410	9	9	3
7722	28103	MWIL	05	15	1430	N08	E30	05	17.8	5	(BG)					
7722		HOLL	05	15	1810	N07	E28	05	17.8		B	DHO	330	8	6	3
7722		PALE	05	15	1857	N07	E28	05	17.9		B	DHO	320	9	5	3
7722		LEAR	05	16	0037	N08	E25	05	17.9		B	DKO	420	10	7	4
7722		SVTO	05	16	0602	N09	E22	05	17.9		A	HAO	320	11	6	3
7722		RAMY	05	16	1130	N07	E18	05	17.8		B	DKO	380	9	6	4
7722		HOLL	05	16	1500	N08	E16	05	17.8		B	DKO	400	10	6	3
7722		PALE	05	16	2210	N08	E12	05	17.8		B	DKO	400	6	5	3
7722		LEAR	05	17	0030	N08	E11	05	17.8		B	DKO	330	4	7	3
7722		SVTO	05	17	0530	N09	E09	05	17.9		A	HK	340	12	7	4
7722		RAMY	05	17	1315	N08	E05	05	17.9		B	DKO	370	10	7	3
7722		HOLL	05	17	1620	N08	E03	05	17.9		B	DKO	430	11	6	3
7722		PALE	05	17	1719	N08	E02	05	17.9		B	DKO	350	13	5	4
7722		SVTO	05	18	1025	N08	W07	05	17.9		A	HK	330	15	7	2
7722		RAMY	05	18	1301	N08	W08	05	17.9		B	DKI	430	28	7	3
7722		PALE	05	18	1720	N08	W10	05	18.0		B	CKO	380	13	5	3
7722		HOLL	05	18	1938	N07	W13	05	17.8		B	DKO	400	11	5	3
7722		LEAR	05	19	0018	N08	W16	05	17.8		B	DKO	310	15	6	4
7722		SVTO	05	19	0750	N08	W19	05	17.9		A	HK	350	12	6	3
7722		RAMY	05	19	1200	N08	W21	05	17.9		B	DKI	390	14	7	3
7722	28103	MWIL	05	19	1430	N08	W23	05	17.9	6	(BP)					
7722		HOLL	05	19	2022	N09	W26	05	17.9		A	HK	360	9	4	3
7722		PALE	05	19	2235	N08	W28	05	17.8		A	HK	370	5	3	2
7722		LEAR	05	20	0012	N09	W28	05	17.9		A	HK	320	7	5	3
7722		SVTO	05	20	0440	N09	W31	05	17.9		A	HK	330	5	5	3
7722	28103	MWIL	05	20	1430	N08	W36	05	17.9	6	(AP)					
7722		LEAR	05	21	0032	N09	W43	05	17.8		A	HK	310	8	6	2
7722		SVTO	05	21	0500	N09	W45	05	17.8		A	HK	430	7	6	3
7722		RAMY	05	21	1221	N09	W48	05	17.9		A	HK	330	4	5	2
7722	28103	MWIL	05	21	1445	N07	W49	05	17.9	6	(BP)					
7722		HOLL	05	21	1457	N09	W50	05	17.9		A	HK	270	6	5	2
7722		PALE	05	21	2000	N08	W52	05	17.9		B	CKO	340	7	5	3
7722		LEAR	05	22	0030	N08	W55	05	17.9		B	CKO	320	6	7	2
7722		SVTO	05	22	0750	N08	W59	05	17.9		A	HH	340	5	6	3
7722		RAMY	05	22	1257	N07	W61	05	18.0		B	CKO	280	7	6	3
7722	28103	MWIL	05	22	1430	N08	W62	05	17.9	5	(BP)					
7722		HOLL	05	22	1437	N08	W61	05	18.0		B	CKO	330	8	4	3
7722		LEAR	05	23	0030	N08	W65	05	18.1		B	CKO	300	5	7	3
7722		SVTO	05	23	0715	N08	W72	05	17.9		A	HK	270	3	4	3
7722		RAMY	05	23	1121	N08	W73	05	18.0		A	HK	290	2	4	3
7722	28103	MWIL	05	23	1430	N08	W78	05	17.7	5	(AP)					
7722		HOLL	05	23	1445	N08	W76	05	17.9		A	HH	240	2	5	3
7722		LEAR	05	24	0115	N08	W80	05	18.0		A	HK	250	1	3	3
7726		SVTO	05	13	0905	N09	E72	05	18.8		A	AX		2		1
7726		RAMY	05	13	1112	N08	E72	05	18.9		A	AX	10	2	1	4
7726	28107	MWIL	05	13	1430	N09	E70	05	18.8	4	(AF)					
7726		HOLL	05	13	1504	N09	E70	05	18.9		A	AX	10	1		3
7726		PALE	05	13	1936	N08	E69	05	19.0		A	AX	30	2	1	2
7726		LEAR	05	14	0035	N09	E64	05	18.8		A	AX		1	1	4
7726		SVTO	05	14	0703	N10	E62	05	18.9		A	AX		1		3
7726		RAMY	05	14	1240	N09	E58	05	18.9		A	AX	10	1	1	4
7726	28107	MWIL	05	14	1430	N09	E57	05	18.9	4	(AF)					
7726		HOLL	05	14	1444	N08	E57	05	18.9		A	AX		1		3
7726		PALE	05	14	1935	N09	E55	05	18.9		A	AX	10	1	1	2
7726		LEAR	05	15	0030	N10	E52	05	18.9		A	AX		1	1	3
7726		SVTO	05	15	0517	N09	E49	05	18.9		A	AX		1		3
7726		RAMY	05	15	1227	N08	E45	05	18.9		A	AX	10	3	3	3
7726	28107	MWIL	05	15	1430	N09	E44	05	18.9	4	(AF)					
7726		PALE	05	15	1857	N11	E40	05	18.8		A	AX		1		3

SUNSPOT GROUPS
(Ordered by Central Meridian Passage Date)

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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
7726		LEAR	05 16 0037	N11 E38	05 18.9		B	BXO	10	2	3	4
7726		SVTO	05 16 0602	N11 E34	05 18.8		A	AX	20	6	4	3
7726		RAMY	05 16 1130	N09 E30	05 18.7		A	AX	10	6	7	4
7726		HOLL	05 16 1500	N10 E29	05 18.8		A	AX	20	4	4	3
7726		PALE	05 16 2210	N12 E25	05 18.8		B	CSO	30	4	4	3
7726		LEAR	05 17 0030	N09 E25	05 18.9		B	BXO	20	5	5	3
7726		SVTO	05 17 0530	N10 E20	05 18.7		A	AX	80	12	10	4
7726		RAMY	05 17 1315	N08 E16	05 18.7		A	AX	10	7	7	3
7726		HOLL	05 17 1620	N10 E12	05 18.6		B	BXO	20	4	4	3
7726		PALE	05 17 1719	N10 E14	05 18.8		B	BXO	10	4	2	4
7726		SVTO	05 18 1025	N08 E05	05 18.8		A	AX		2	2	2
7726		RAMY	05 18 1301	N08 E05	05 18.9		A	AX	10	3	2	3
7726		PALE	05 18 1720	N09 E03	05 18.9		B	BXO	10	4	4	3
7726		HOLL	05 18 1938	N09 E01	05 18.9		B	BXO	20	3	2	3
7726		SVTO	05 19 0750	N11 W09	05 18.6		A	AX	10	4	2	3
7726	28107	MWIL	05 19 1430	N11 W11	05 18.8	4	(AF)					
7726A		SVTO	05 23 0715	S18 W16	05 22.1		A	AX		1		3
7726B		PALE	05 17 1719	S09 E64	05 22.5		A	AX		1		4
7727		SVTO	05 17 0530	N08 E78	05 23.1		A	AX		2		4
7727		RAMY	05 17 1315	N07 E74	05 23.1		B	CRO	40	3	3	3
7727		HOLL	05 17 1620	N08 E71	05 23.0		B	CRO	60	6	6	3
7727		PALE	05 17 1719	N07 E70	05 23.0		B	DAO	40	2	5	4
7727		SVTO	05 18 1025	N08 E62	05 23.1		B	DSO	80	7	8	2
7727		RAMY	05 18 1301	N07 E58	05 22.9		B	DSO	80	6	6	3
7727		PALE	05 18 1720	N08 E58	05 23.1		B	DAO	100	6	6	3
7727		HOLL	05 18 1938	N08 E56	05 23.0		B	CAO	100	8	7	3
7727		LEAR	05 19 0018	N07 E52	05 22.9		B	DAO	80	14	6	4
7727		SVTO	05 19 0750	N09 E49	05 23.0		B	DSO	110	13	8	3
7727		RAMY	05 19 1200	N08 E46	05 22.9		B	DSO	120	13	7	3
7727	28108	MWIL	05 19 1430	N09 E45	05 23.0	5	(B)					
7727		HOLL	05 19 2022	N09 E42	05 23.0		B	DSO	50	10	7	3
7727		PALE	05 19 2235	N08 E41	05 23.0		B	DSO	70	11	6	2
7727		LEAR	05 20 0012	N08 E40	05 23.0		B	CSO	50	10	8	3
7727		SVTO	05 20 0440	N09 E37	05 23.0		B	DSO	70	7	6	3
7727	28108	MWIL	05 20 1430	N08 E32	05 23.0	5	(B)					
7727		LEAR	05 21 0032	N09 E28	05 23.1		B	CSO	60	10	7	2
7727		SVTO	05 21 0500	N09 E24	05 23.0		B	DSO	50	9	6	3
7727		RAMY	05 21 1221	N08 E20	05 23.0		B	DAO	40	9	5	2
7727	28108	MWIL	05 21 1445	N08 E17	05 22.9	5	(B)					
7727		HOLL	05 21 1457	N08 E16	05 22.8		B	DSO	50	8	6	2
7727		PALE	05 21 2000	N08 E16	05 23.0		B	DSO	40	8	4	3
7727		LEAR	05 22 0030	N10 E12	05 22.9		B	CSO	30	6	5	2
7727		SVTO	05 22 0750	N08 E09	05 23.0		B	BXO	20	4	4	3
7727		RAMY	05 22 1257	N09 E06	05 23.0		B	CRO	10	2	4	3
7727	28108	MWIL	05 22 1430	N08 E05	05 23.0	5	(B)					
7727		HOLL	05 22 1437	N08 E05	05 23.0		B	CRI	20	6	5	3
7727		LEAR	05 23 0030	N09 W01	05 22.9		B	CRO	20	6	4	3
7727		SVTO	05 23 0715	N08 W05	05 22.9		B	BXO	10	5	4	3
7727		RAMY	05 23 1121	N09 W07	05 22.9		A	HR	10	1	1	3
7727	28108	MWIL	05 23 1430	N08 W07	05 23.1	4	(B)					
7727		HOLL	05 23 1445	N08 W07	05 23.1		B	CRO	20	4	5	3
7727		SVTO	05 24 1420	N08 W21	05 23.0		A	AX		2	2	1
7727	28108	MWIL	05 24 1430	N08 W21	05 23.0	4	(B)					
7727		HOLL	05 24 1555	N07 W22	05 23.0		A	AX		1		3
7727	28108	MWIL	05 25 1445	N08 W34	05 23.1	4	(B)					
7727A		PALE	05 21 2000	S15 E32	05 24.2		A	AX		1		3
7728		SVTO	05 25 1120	S08 E58	05 29.8		A	AX		2	2	3
7728		RAMY	05 25 1230	S07 E58	05 29.9		B	BXO	10	2	2	4
7728	28109	MWIL	05 25 1445	S07 E57	05 29.9	4	(B)					
7728		HOLL	05 25 1531	S07 E57	05 29.9		B	BXO	10	2	2	3
7728		PALE	05 25 1850	S07 E55	05 29.9		A	AX	20	2	2	3
7728		LEAR	05 26 0222	S07 E50	05 29.8		A	AX		1		3

SUDDEN IONOSPHERIC DISTURBANCES

MAY 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	1717	1720	1731	1-	1					1			
04	1020	1033	1134	1	1		1						
05	0633	0636	0652	1	1		1						
05	1504	1524	1612	1	1		1						
05	1622	1639	1734	1	1		1						
06	1526	1553	1641	1	1		1						
07	1257	1258	1306	1-	1					1			
07	1440	1441	1455	1-	1					1			
07	1656	1704	1740	1	1		1						
10	0610	0622	0643	2-	3		2						
10	0946	0950	0955	1	1		1						
10	1008	1018U	1036	1	1		1						
11	0929	1008	1024	2-	3		2						
11	1738	1743	1755U	1-	1					1			
12	0520	0530	0534	1-	5			1		1			
12	0544	0554	0600	1-	1					1			
12	0748	0754	0833	1	1		1						
12	1237	1238	1252	1-	5					2			
12	1459	1504	1524	1	3					3			
13	0549	0551	0624	1	1		1						
13	0921	0932	1039	1	1		1						
13	1022	1119	1206	2	3		3						
13	1207	1209	1216	1-	1					1			
14	0012	0018	0034	1-	5			1		1			
14	0631	0645U	0656	2	1		1						
14	0726	0745	0826	1	1		1						
14	0855	0857	0924	1	1		1						
14	1523	1553	1702	1	1		1						
15	0826	0836U	0847	1	1		1						
15	1727	1728	1740	1-	1					1			
16	0808	0820	0853	1	1		1						
16	1253	1256	1308	1-	1					1			
16	2201	2208	2215	1-	3					3			
16	2330	2333	2345	1-	1					1			
17	0000	0003	0012U	1-	1					1			
17	0609	0630	0707	2	1		1						
17	0612	0640	0712	2	3		2						
17	0710	0750	0821	2-	3		2						
17	0956	1011	1032	1	1		1						
17	1420	1440	1500	2	1		1						
18	0937	0954	1011	2	1		1						
18	1338	1343	1353	1-	1					1			
18	1400	1403	1415	1-	1					1			
18	1422	1429	1458	1	1		1						
18	1834	1836	1845	1-	1					1			
19	0936	0949	1008	1	1		1						
21	0735	0742	0800	1	1		1						
21	1306	1320	1406	1	1		1						
22	0804	0809	0832	1-	3		1			1			
23	1410	1434	1508	2	3		2						

* = no flare patrol.

SUDDEN IONOSPHERIC DISTURBANCES

MAY 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
24	0826	0829	0853	1	1		1						
25	0851	0901	0922	1+	3		3						

* = no flare patrol.

OBSERVATORIES REPORTING FOR MAY 1994

Amherst, New Hampshire, USA	SES	Madison, Wisconsin, USA	SES
Boksburg, Rep of S. Africa	SES	Manahawkin, New Jersey, USA	SES
Brazilian Antarctic Station	SPA, SES	McDonough, Georgia, USA	SES
Cambridge, England, UK	SES	Nampa, Idaho, USA	SES
Cranford, New Jersey, USA	SES	Nerja, Spain	SES
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
Hiraiso, Japan	SWF	Tucson, Arizona, USA	SES
Houston, Texas, USA	SES	Upice, Slovakia	SEA
Hudson, Ohio, USA	SES	Wellington, Ohio, USA	SES
Inubo, Japan	SPA	Windsor Locks, Connecticut, USA	SES
Itapetinga, Brazil	SPA, SES	Ziar nad Hronom, Slovakia	SEA
LaCrescenta, California, USA	SES	Zilina, Slovakia	SEA

Observations are not necessarily continuous.

SOLAR RADIO EMISSION
Spectral Observations

MAY 1994

Day	Observation Start (UT)	Observation End (UT)	Sta	Decimetric Band Start (UT)	Decimetric Band End (UT)	Decimetric Band Int (1-3)	Metric Band Start (UT)	Metric Band End (UT)	Metric Band Int (1-3)	Dekametric Band Start (UT)	Dekametric Band End (UT)	Dekametric Band Int (1-3)	Spectral Type
01	0500	1200	IZMI										
	0605	1706	ONDR										
			SVTO				0950.0	0951.0	1				III
02	0500	1200	IZMI										
	0544	1706	ONDR										
	0700	1500	POTS										
03	0500	1200	IZMI										
	0618	1706	ONDR										
	0700	1500	POTS										
04	0500	1200	IZMI										
	0700	1708	ONDR										
	0700	1500	POTS				1236.2	1236.3	1				UNCLF
05	0500	1200	IZMI										
	0700	1500	POTS										
	0758	1710	ONDR										
06	0442	1713	ONDR										
	0500	1200	IZMI										
	0700	1500	POTS										
07	0440	1713	ONDR										
	0500	1200	IZMI										
08	0439	1715	ONDR										
	0500	1200	IZMI										
09	0438	1716	ONDR										
	0500	1200	IZMI				0607.4	0607.7	2				IIIG
	0700	1500	POTS				0834.7	0835.4	1				IIIG
			POTS				0851.0	0851.2	1				IIIB
			POTS				0901.7	0907.7	1				IIIG
			SVTO				0904.0	0905.0	2				III
			POTS				0934.6	0935.2	1				UNCLF
			POTS				1005.2	1005.3	1				IIIB
			POTS				1109.9	1110.0	1				IIIB
			POTS				1140.1	1140.3	1				IIIB
			POTS				1200.6	1200.8	1				IIIB
			POTS				1213.9	1214.4	1				IIIG
			POTS				1247.9	1248.2	1				IIIG
			SVTO				1303.0	1304.0	1				III
			POTS				1303.8	1304.3	2				IIIG
			POTS				1338.6	1342.6	1				IIIG
			POTS				1432.4	1432.8	1				IIIG
10	0436	1716	ONDR										
	0500	1200	IZMI				1017.8	1017.9	1				IIIB
	0700	1500	POTS				1017.8	1017.9	1				IIIB
			SGMR				1042.0	1046.0	1				III
			IZMI				1139.0	1139.1	2				IIIB
			POTS				1139.2	1147.9	1				IIIGG
			IZMI				1147.8	1147.9	1				IIIG
			SVTO				1305.0	1310.0	1				III
			POTS				1305.3	1310.5	1				IIIG
			SGMR				1310.0	1310.0	1				III
			POTS				1340.7	1346.1	1				IIIG
			SGMR				1342.0	1346.0	1				III
			SVTO				1342.0	1346.0	2				III
			POTS				1447.6	1447.8	1				IIIG
			SVTO				1605.0	1606.0	3				III
			PALE				2113.0	2114.0	2				III
			SGMR				2113.0	2114.0	2				III
11	0435	1718	ONDR										
			LEAR				0443.0	0444.0	1				III
			SVTO				0443.0	0443.0	3				III

SOLAR RADIO EMISSION
Spectral Observations

MAY 1994

Observation Start (UT)	Observation End (UT)	Sta	Decimetric Band Start (UT)	Decimetric Band End (UT)	Decimetric Band Int (1-3)	Metric Band Start (UT)	Metric Band End (UT)	Metric Band Int (1-3)	Dekametric Band Start (UT)	Dekametric Band End (UT)	Dekametric Band Int (1-3)	Spectral Type
11 0500	1200	IZMI										
0700	1500	POTS				1009.6	1010.3	1				IIIG
		POTS				1111.4	1112.0	1				IS
		POTS				1145.8	1146.3	1				IIIG
		POTS				1210.2	1211.9	1				IIIG
		POTS				1212.1	1212.2	1				I
		POTS				1214.0	1219.9	2				IIIGG
		SVTO				1214.0	1214.0	2				III
		SGMR				1314.0	1314.0	1				III
		POTS				1326.7	1327.3	1				IIIG
		POTS				1348.8	1349.4	1				IIIG
		POTS				1412.0	1419.6	1				IIIGG
		SVTO				1534.0	1535.0	2				III
		SGMR				1535.0	1535.0	1				III
12 0434	1718	ONDR										
		LEAR				0502.0	0502.0	2				III
		SVTO				0502.0	0502.0	3				III
0500	1200	IZMI				0502.1	0502.2	2				IIIB
		SVTO				0518.0	0519.0	2				III
		LEAR				0519.0	0519.0	2				III
		SVTO				0519.0	0520.0	2				III
		IZMI				0519.6	0519.7	1				IIIB
		LEAR				0523.0	0524.0	3				III
		SVTO				0523.0	0524.0	3				III
		IZMI				0523.6	0524.2	3				IIIGV
		LEAR				0630.0	0631.0	3				III
		SVTO				0630.0	0631.0	3				III
		IZMI				0630.3	0631.1	2				IIIGV
		IZMI				0638.9	0639.4	1				IIIG
		LEAR				0653.0	0653.0	2				III
		SVTO				0653.0	0653.0	2				III
		IZMI				0653.4	0653.5	1				IIIB
		LEAR				0704.0	0704.0	1				III
		SVTO				0704.0	0704.0	2				III
		IZMI				0704.3	0704.4	2				IIIB
		LEAR				0725.0	0726.0	2				III
		SVTO				0725.0	0726.0	3				III
0700	1500	POTS				0725.2	0726.3	2				IIIG,I,S
		IZMI				0725.5	0726.0	2				IIIG
		POTS				0739.2	0739.5	1				IIIG
		POTS				0749.8	0754.9	2				IIIGG,V
		IZMI				0750.5	0754.7	3				IIIGV
		LEAR				0752.0	0754.0	2				III
		SVTO				0752.0	0754.0	3				III
		POTS	0754.0	0754.1	1							DCIM
		SVTO				0807.0	0808.0	2				III
		IZMI				0808.0	0808.1	1				IIIB
		LEAR				0808.0	0808.0	1				III
		POTS				0808.0	0808.4	1				IIIG
		SVTO				0818.0	0824.0	3				III
		LEAR				0819.0	0820.0	3				III
		SVTO				0819.0	0824.0	3				III
		IZMI				0819.3	0820.8	3				IIIGV
		POTS				0819.3	0820.9	2				IIIGG,V,DCIM
		POTS				0823.6	0824.5	1				IIIG
		POTS				0925.9	0926.3	1				IIIG
		SVTO				0955.0	0955.0	2				III
		POTS				0955.3	0955.8	2				IIIG,V,DCIM
		IZMI				0955.4	0955.7	3				IIIG
		POTS				1049.3	1049.4	1				IIIB
		POTS				1051.8	1052.3	1				UNCLF
		IZMI				1106.0	1106.2	2				IIIG
		POTS				1106.0	1106.3	1				IIIG
		IZMI				1128.0	1128.8	2				IIIG
		SVTO				1128.0	1129.0	2				III
		SVTO				1142.0	1146.0	2				III
		IZMI				1142.3	1143.2	1				IIIG
		SGMR				1145.0	1146.0	1				III

SOLAR RADIO EMISSION
Spectral Observations

MAY 1994

Day	Observation Start (UT)	Observation End (UT)	Sta	Decimetric Band Start (UT)	Decimetric Band End (UT)	Decimetric Band Int (1–3)	Metric Band Start (UT)	Metric Band End (UT)	Metric Band Int (1–3)	Dekametric Band Start (UT)	Dekametric Band End (UT)	Dekametric Band Int (1–3)	Spectral Type
12			IZMI				1145.1	1146.5	1				IIIG
			SGMR				1155.0	1156.0	1				III
			SVTO				1155.0	1156.0	3				III
			IZMI				1155.9	1156.4	2				IIIG,V
			SGMR				1219.0	1219.0	1				III
			SVTO				1219.0	1223.0	2				III
			SGMR				1232.0	1236.0	2				III
			SVTO				1232.0	1245.0	2				S
			SGMR				1242.0	1246.0	2				III
			SGMR				1403.0	1404.0	2				III
			SVTO				1403.0	1404.0	2				III
			SGMR				1426.0	1432.0	2				V
			SVTO				1426.0	1507.0	3				S
			SGMR				1440.0	1441.0	2				V
			SGMR				1452.0	1507.0	3				S
			SGMR				1539.0	1540.0	2				V
			SVTO				1539.0	1539.0	2				III
			SVTO				1643.0	1643.0	2				III
			SGMR				1845.0	1854.0	2				III
			PALE				1847.0	1853.0	2				III
13	0432	1721	ONDR										
			SVTO				0522.0	0522.0	1				III
			LEAR				0616.0	0617.0	1				III
			SVTO				0616.0	0616.0	2				III
	0500	1200	IZMI				0616.4	0616.7	2				IIIG
	0700	1500	POTS				0700.0E	1500.0U	1				I,S,C,DC,RS
			IZMI				0713.7	0715.5	2				IGG
			IZMI				0713.7	0715.5	2				IIIGG,V
			LEAR				0714.0	0715.0	2				III
			SVTO				0714.0	0715.0	2				III
			POTS				0714.3	0725.7	2				IIIGG,V
			IZMI				0720.0	0736.2	2				IS
			SVTO				0915.0	0915.0	2				III
			IZMI				0915.6	0915.6	2				IIIB
			POTS				0915.6	0915.8	1				IIIB
			POTS				1056.0	1059.3	1				IIIG,I
			POTS				1105.0	1105.1	2				IIIG
			IZMI				1105.1	1106.2	2				IIIG
			POTS				1207.0	1207.2	1				IIIB
			POTS				1314.8	1315.3	2				IIIG
			POTS				1451.8	1452.4	1				IIIG
			PALE				1947.0	1947.0	2				III
			SGMR				1949.0	1951.0	1				III
			SGMR				2102.0	2103.0	1				III
			PALE				2201.0	0000.0	1				CONT
			SGMR				2212.0	2223.0	1				CONT
14			LEAR				0007.0	0018.0	2				III
			PALE				0010.0	0019.0	2				V
	0431	1723	ONDR										
	0500	1200	IZMI				0502.4	0502.9	2				IIIG
			SVTO				0604.0	0604.0	2				III
			IZMI				0654.7	0655.1	2				IIIG
			SVTO				0752.0	0753.0	1				III
			IZMI				0752.8	0753.0	2				IIIG
			IZMI				0802.2	0802.8	2				IIIG
			SVTO				0839.0	0839.0	1				III
			IZMI				0839.4	0839.9	2				IIIG
			IZMI				0849.3	0849.5	2				IIIB
			SVTO				0916.0	0916.0	1				III
			IZMI				1114.2	1114.8	2				IIIG
			SGMR				1857.0	1858.0	2				V
			SGMR				1915.0	1923.0	1				III
15	0430	1723	ONDR										
	0500	1200	IZMI										
			PALE				1631.0	1711.0	1				S
			PALE				1739.0	1922.0	1				S

SOLAR RADIO EMISSION
Spectral Observations

MAY 1994

Day	Observation Start (UT)	Observation End (UT)	Sta	Decimetric Band Start (UT)	Decimetric Band End (UT)	Decimetric Band Int (1-3)	Metric Band Start (UT)	Metric Band End (UT)	Metric Band Int (1-3)	Dekametric Band Start (UT)	Dekametric Band End (UT)	Dekametric Band Int (1-3)	Spectral Type
16	0429	1723	ONDR										
			SVTO				0720.0	0721.0	2				III
	0700	1500	POTS				0720.7	0720.9	1				IIIG
			POTS				0836.2	0836.3	1				IIIB
			POTS				0936.8	0937.5	1				IIIG
			POTS				1041.0	1054.0	2				IIIGG,I,S
	0500	1200	IZMI				1048.8	1049.5	3				IIIG,V
			POTS				1114.4	1114.7	1				I,RS
			POTS				1207.7	1207.8	1				I
			POTS				1438.8	1440.8	2				IIIG
			SGMR				1439.0	1439.0	1				III
			SGMR				1647.0	1648.0	1				III
			PALE				2201.0	2204.0	1				III
			SGMR				2201.0	2204.0	1				III
			LEAR				2359.0	2359.0	1				III
17			LEAR				0011.0	0012.0	2				III
			LEAR				0018.0	0022.0	3				III
			PALE				0018.0	0022.0	2				V
	0427	1726	ONDR										
			LEAR				0544.0	0545.0	1				III
	0700	1500	POTS				0926.7	0934.5	1				IIIG
			POTS				0955.0	1004.0	2				IIIGG,RSG
	0500	1200	IZMI				0959.0	1000.0	2				IIIG
			SVTO				0959.0	0959.0	2				III
			SVTO				1003.0	1003.0	1				III
			POTS				1136.6	1138.3	1				IIIG
			POTS				1258.9	1159.0	1				IIIB
			POTS				1416.0	1500.0U	1				I,S
18			SVTO				0402.0	0402.0	3				III
	0426	1400	ONDR										
	0700	1500	POTS				0735.9	0736.1	1				UNCLF
			POTS				0758.3	0758.5	1				IIIG
			POTS				0808.2	0811.4	1				I,IIIG
	0500	1200	IZMI				0811.0	0811.3	2				IIIG
			SVTO				0811.0	0811.0	2				III
			POTS				0925.9	0926.0	1				IIIB
			IZMI				1120.0	1121.4	3				IIIG,V
			POTS				1120.0	1121.4	2				IIIGG
			SGMR				1120.0	1120.0	1				III
			SVTO				1120.0	1120.0	2				III
			POTS				1154.9	1206.2	2				II GG,I
			SGMR				1158.0	1206.0	2				III
			IZMI				1158.3	1159.2	2				IIIG
			SGMR				1233.0	1233.0	1				III
			POTS				1233.6	1233.8	1				IIIG
			SGMR				2131.0	2131.0	1				III
19	0500	1200	IZMI										
	0535	1400	ONDR										
	0700	1500	POTS				1047.4	1047.8	1				IIIG
			POTS				1248.4	1248.6	1				IIIB
			POTS				1303.1	1303.2	1				IIIB
20			LEAR				0300.0	0300.0	2				III
	0500	1200	IZMI										
	0541	1726	ONDR										
	0700	1500	POTS				0913.8	0913.9	1				IIIB
			POTS				1132.6	1132.7	1				IIIB
21	0500	1200	IZMI										
	0535	1400	ONDR										
			SGMR				1215.0	1218.0	2				III
			SVTO				1215.0	1219.0	2				III
			SGMR				1629.0	1634.0	2				V
			SVTO				1630.0	1630.0	1				III
22	0535	1711	ONDR										

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

MAY 1994

Day	Observation Start (UT)	Observation End (UT)	Sta	Decimetric Band Start (UT)	Decimetric Band End (UT)	Decimetric Band Int (1–3)	Metric Band Start (UT)	Metric Band End (UT)	Metric Band Int (1–3)	Dekametric Band Start (UT)	Dekametric Band End (UT)	Dekametric Band Int (1–3)	Spectral Type
22			LEAR				0657.0	0657.0	2				III
			SVTO				0657.0	0657.0	2				III
	0500	1200	IZMI				0657.4	0657.6	2				IIIG
23			LEAR				0135.0	0201.0	1				S
			PALE				0135.0	0136.0	1				III
			PALE				0159.0	0200.0	1				III
	0500	1200	IZMI										
	0535	1400	ONDR										
	0700	1500	POTS				0846.4	0850.0	1				I,S
24	0500	1200	IZMI										
	0421	1732	ONDR	0610.0	0807.0	1	0610.0	0807.0	1				IN
	0700	1500	POTS				0700.3	0700.4	1				UNCLF
			POTS				0706.0	0716.0	1				I,S
			POTS				0749.7	0749.8	1				IIIB
25	0420	1733	ONDR										
	0500	1200	IZMI										
	0700	1500	POTS										
26	0419	1733	ONDR										
	0500	1200	IZMI										
	0700	1500	POTS										
			PALE				2005.0	2005.0	2				III
27	0418	1736	ONDR										
	0500	1200	IZMI										
	0700	1500	POTS										
28	0418	1738	ONDR										
	0500	1200	IZMI										
29	0417	1738	ONDR										
	0500	1200	IZMI										
30	0416	1737	ONDR										
	0500	1200	IZMI										
	0700	1500	POTS										
31	0416	1741	ONDR										
	0500	1200	IZMI										
	0700	1500	POTS										
			PALE				2029.0	2030.0	1				III
			SGMR				2029.0	2030.0	1				III

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

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

Stations Reporting:

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

SOLAR RADIO NOISE STORM AT 164 MHZ
FROM NANCAY RADIOHELIOGRAPH

May 1994

DAY	HELIOGRAPHIC POSITIONS MEAN VALUES* E-W	S-N	IMP**	OBSERVING TIME*** START (UT)	END (UT)
13/05/94	-1.03	+0.19	1	0811E	1327
13/05/94	-0.92	+0.27	1	1206	1537D

1,14,15,16,22,26 NO DATA
OTHER DAYS : NO DETECTABLE NOISE STORMS

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

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

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

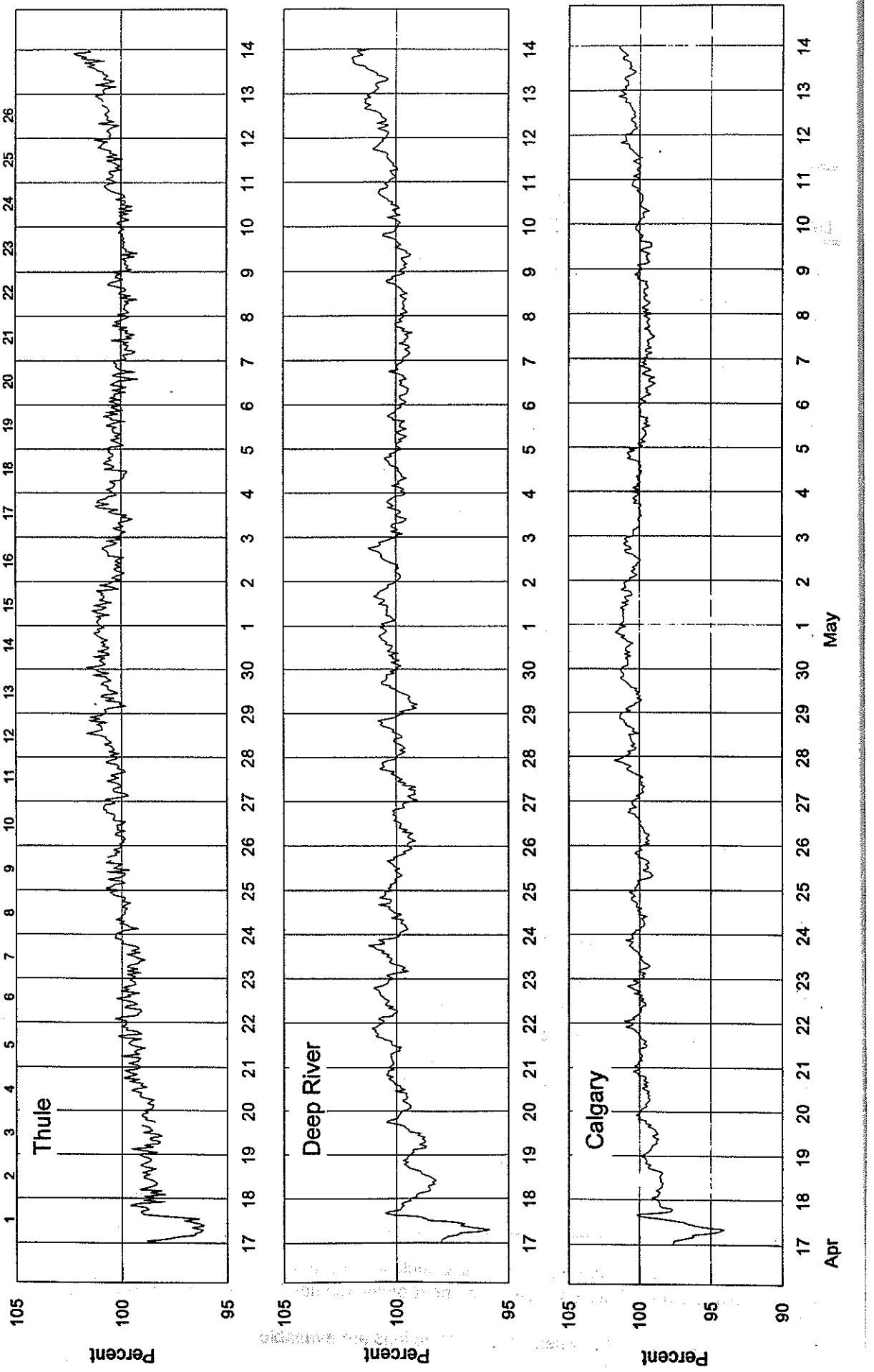
COSMIC RAY INDICES
(Neutron Monitor)
MAY 1994

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	4383	6948.3	3815.0	4032.0	1957.0	3519.2	3508.1
2	4358	6938.3	3796.3	4026.1	1972.3	3530.3	3522.5
3	4357	6914.5	3781.2	4017.5	1984.6	3520.9	3512.7
4	4358	6912.8	3785.0	3994.0	1979.7	3498.1	3502.4
5	4358	6906.2	3766.7	3985.5	1975.8	3513.7	3502.2
6	4348	6897.0	3756.8	3986.9	1968.5	3515.2	3505.5
7	4336	6889.1	3753.3	3982.9	1965.4	3513.7	3509.5
8	4341	6900.7	3764.5	3995.9	1956.9	3514.1	3513.5
9	4337	6903.8	3766.5	3988.7	1953.8	3515.5	3514.4
10	4346	6930.9	3774.5	4008.5	1964.5	3522.9	3524.5
11	4366	6940.9	3790.7	4015.7	1962.2	3521.2	3530.6
12	4373	6971.9	3800.5	4029.0	1961.2	3534.7	3537.0
13	4392	6997.4	3810.3	4049.4	1962.9	3534.7	3537.2
14	4417	7003.7	3821.0	4061.2	1970.1	3535.2	3544.3
15	4396	6952.9	3803.8	4028.4	----	3524.8	3537.5
16	4367	6941.1	3774.5	4033.8	1972.1	3522.0	3535.5
17	4359	6945.5	3793.0	4035.0	1966.8	3517.1	3517.4
18	4384	6964.3	3804.3	4037.9	1963.5	3529.6	3509.2
19	4407	6980.9	3808.0	4051.5	1962.4	3538.1	3506.0
20	4432	7011.7	3796.8	4062.3	1964.9	3546.5	3498.9
21	4437	7021.6	3822.5	4075.4	----	3538.7	----
22	4418	6990.8	3820.3	4060.5	----	3524.6	3521.7
23	4389	6976.9	3805.3	4026.1	1927.5	3496.0	3494.4
24	4374	6949.9	3786.8	4016.0	1931.0	3495.5	3487.6
25	4365	6919.1	3778.3	4010.2	1932.9	3482.2	3484.0
26	4380	6954.5	3785.8	4029.9	1949.8	3490.5	3503.3
27	4403	7001.2	3804.8	4044.0	1953.7	3501.7	3514.5
28	4403	7013.5	3799.8	4062.2	1951.1	3513.8	3521.3
29	4411	6971.2	3804.5	4045.8	1953.5	3510.1	3516.8
30	4400	6911.5	3804.5	4034.4	1950.8	3507.9	3514.2
31	4383	6890.6	3790.8	4015.1	1942.8	3497.2	3507.5
Mean	4380	6950.1	3792.5	4027.2	1959.2	3517.0	3514.5

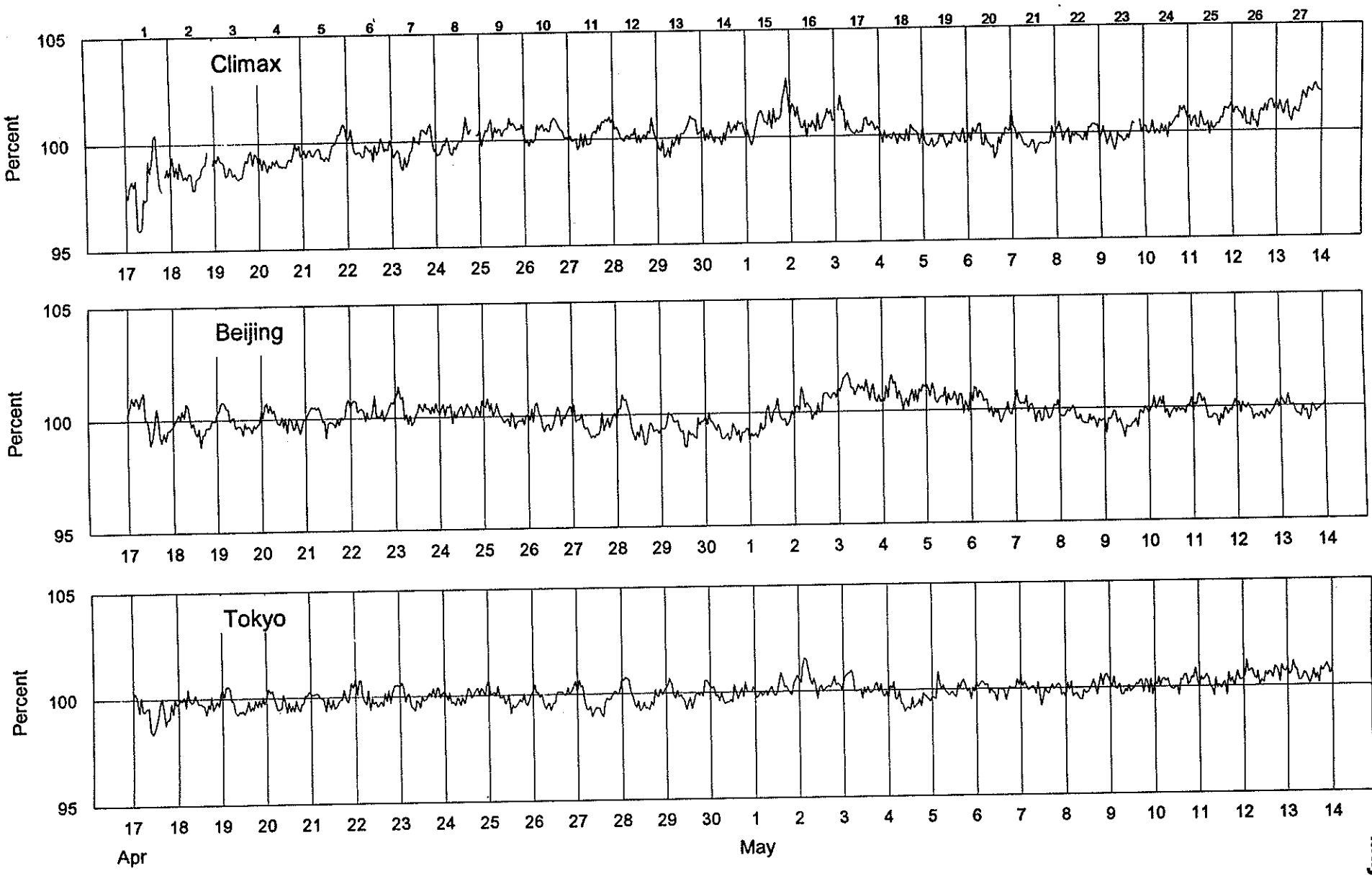
For less than 24-hour coverage, parentheses enclose the number of hours for which data are available. For Climax and Haleakala, parentheses enclose the number of section hours whenever the sum of both sections falls below 40 hours.

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

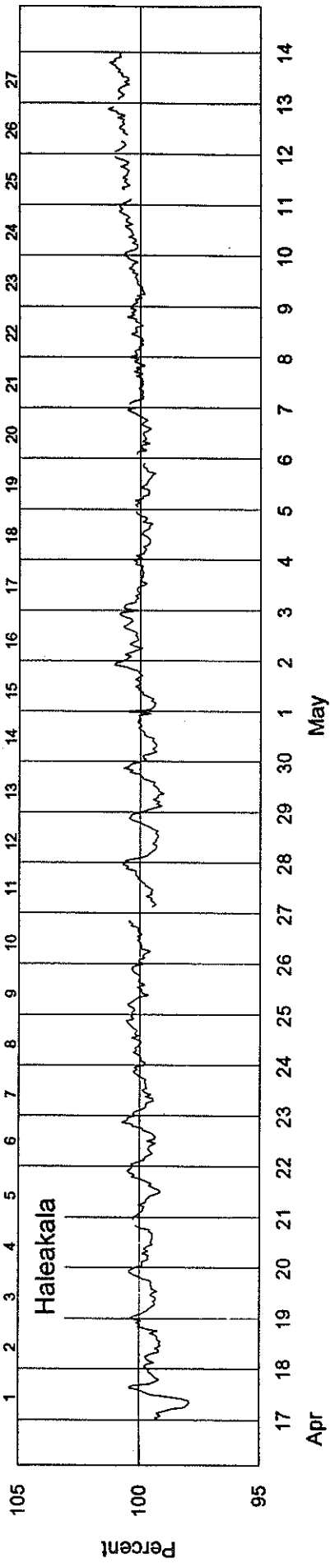
COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2195 - Beginning 17 Apr 94



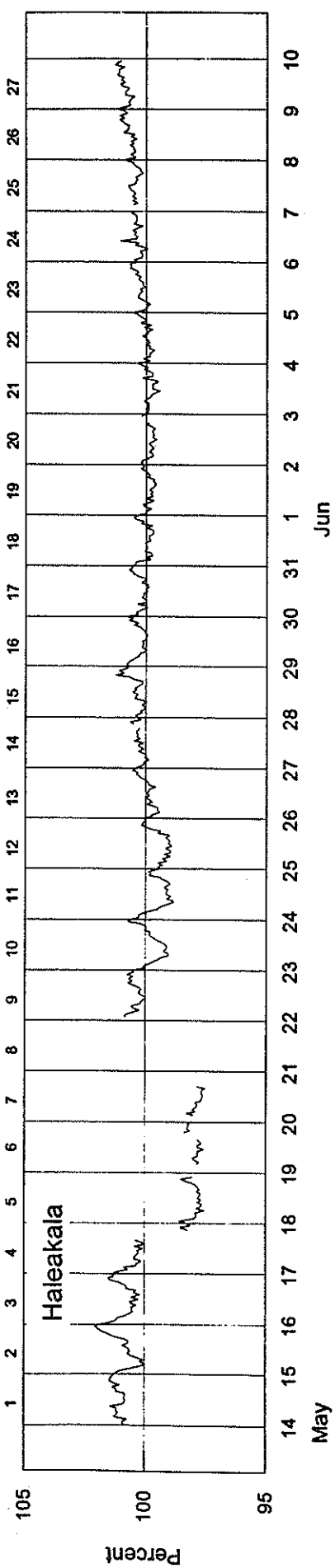
COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2195 - Beginning 17 Apr 94



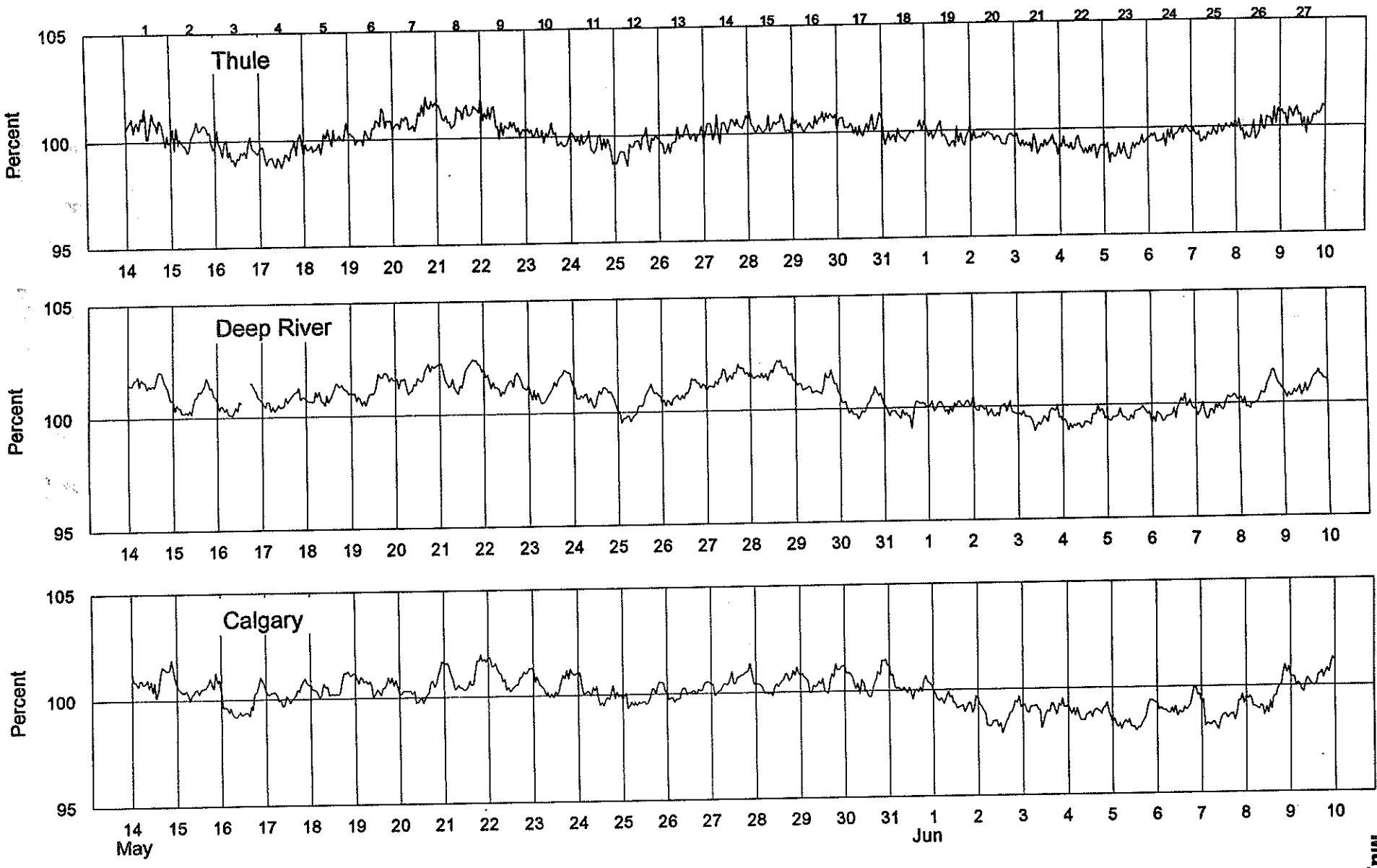
COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2195 - Beginning 17 Apr 94



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

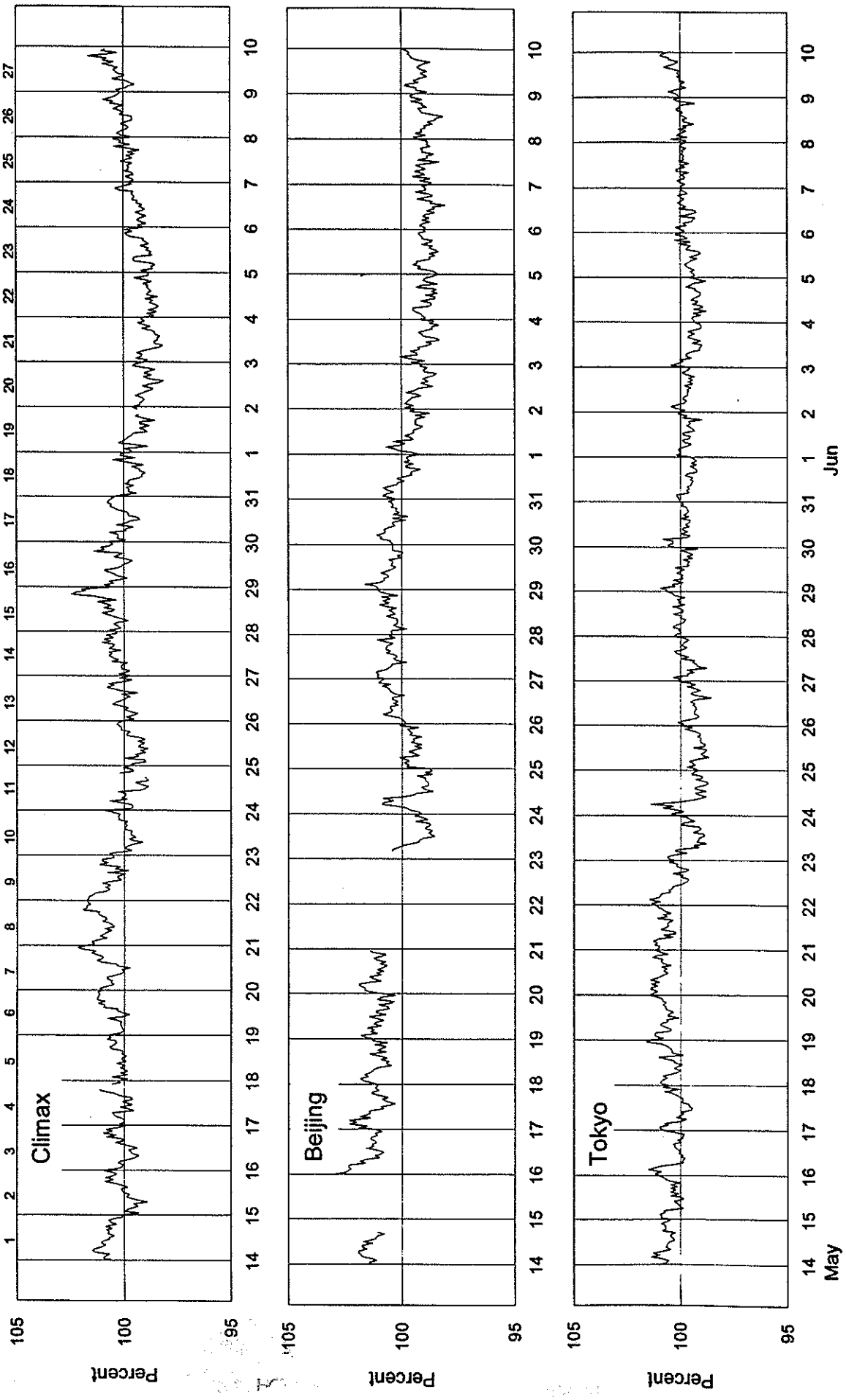


COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2196 - Beginning 14 May 94

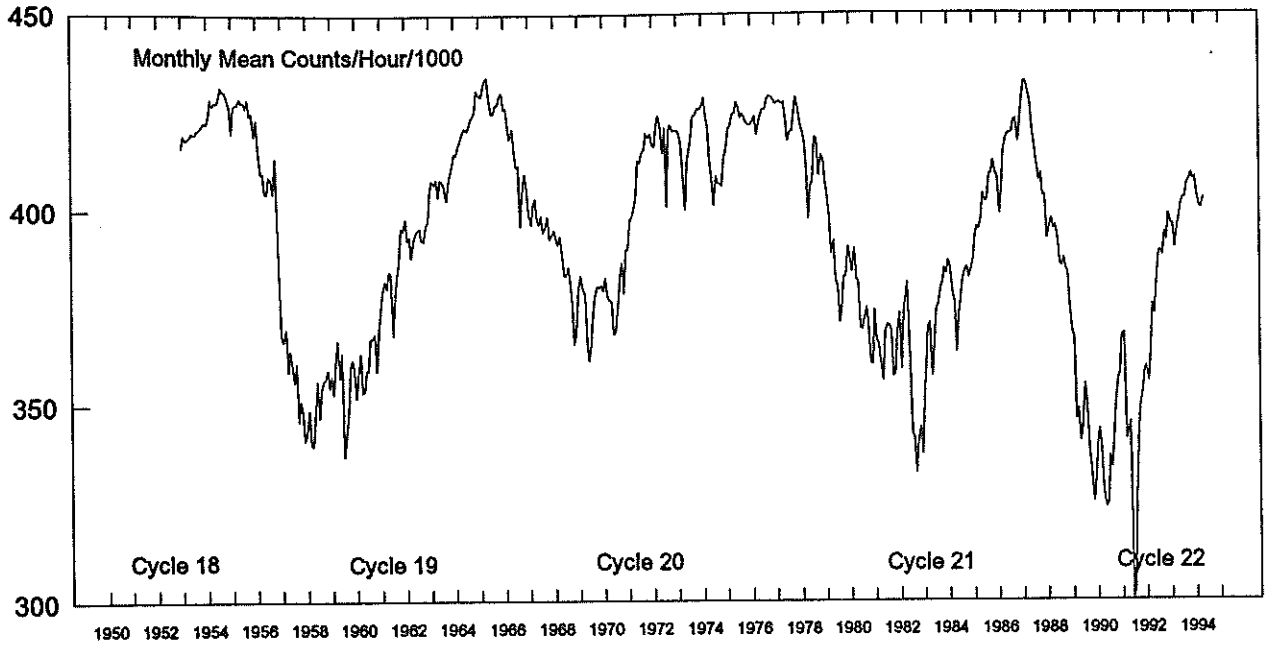


105
May 94

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



Climax Neutron Monitor Pressure-Corrected Values
Jan 1953 - May 1994



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
1953	4163	4193	4183	4187	4190	4200	4196	4205	4209	4213	4220	4226	4199
1954	4225	4246	4286	4269	4280	4277	4285	4317	4308	4306	4286	4269	4279
1955	4200	4267	4272	4273	4287	4278	4279	4264	4286	4244	4252	4193	4258
1956	4234	4160	4097	4097	4049	4045	4088	4083	4044	4135	3980	3799	4068
1957	3677	3660	3695	3585	3640	3603	3557	3606	3458	3509	3484	3410	3574
1958	3434	3485	3401	3396	3490	3560	3467	3537	3561	3564	3589	3542	3502
1959	3573	3526	3606	3664	3567	3633	3369	3420	3484	3597	3615	3587	3553
1960	3516	3573	3631	3531	3534	3589	3587	3670	3671	3682	3586	3681	3604
1961	3762	3801	3818	3800	3843	3838	3675	3784	3834	3870	3955	3949	3827
1962	3977	3922	3931	3878	3927	3941	3950	3953	3924	3919	3963	3971	3938
1963	4049	4074	4065	4077	4034	4075	4072	4060	4023	4066	4094	4112	4067
1964	4145	4139	4168	4181	4198	4208	4202	4213	4232	4240	4254	4307	4207
1965	4295	4290	4314	4335	4340	4288	4247	4246	4268	4271	4294	4300	4291
1966	4258	4262	4211	4180	4207	4146	4108	4112	3956	4055	4091	4053	4137
1967	3991	3960	4014	4025	3974	3960	3985	3940	3956	3980	3922	3933	3970
1968	3946	3925	3909	3932	3895	3830	3830	3853	3817	3761	3652	3685	3836
1969	3801	3831	3798	3783	3656	3610	3652	3730	3781	3803	3798	3807	3754
1970	3792	3824	3781	3765	3765	3679	3684	3755	3832	3862	3786	3895	3785
1971	3898	3976	3981	4003	4032	4124	4117	4145	4149	4193	4181	4192	4083
1972	4163	4158	4211	4239	4215	4141	4207	4005	4198	4214	4198	4198	4179
1973	4201	4193	4173	4075	3997	4119	4151	4180	4235	4240	4255	4253	4172
1974	4262	4283	4238	4207	4121	4077	4009	4083	4064	4064	4058	4131	4133
1975	4146	4206	4210	4239	4245	4271	4262	4231	4243	4231	4218	4214	4226
1976	4216	4223	4236	4188	4218	4244	4254	4253	4283	4287	4285	4280	4247
1977	4268	4272	4274	4267	4272	4231	4175	4194	4197	4245	4284	4260	4245
1978	4213	4198	4173	4107	3977	4058	4068	4183	4180	4085	4139	4128	4126
1979	4071	4035	3983	3888	3921	3815	3808	3710	3745	3829	3829	3905	3878
1980	3874	3842	3900	3820	3817	3697	3692	3719	3750	3687	3604	3604	3750
1981	3744	3663	3656	3601	3558	3683	3703	3702	3687	3570	3581	3682	3652
1982	3735	3590	3732	3773	3814	3606	3421	3415	3324	3402	3441	3372	3552
1983	3508	3600	3699	3708	3570	3656	3744	3752	3799	3814	3850	3834	3711
1984	3868	3850	3784	3760	3633	3727	3767	3818	3844	3851	3825	3844	3798
1985	3872	3937	3954	3948	3977	4039	4018	4026	4089	4090	4124	4091	4014
1986	4079	3988	4049	4148	4181	4191	4192	4193	4226	4229	4171	4226	4156
1987	4279	4324	4325	4294	4271	4203	4165	4120	4073	4089	4031	4035	4184
1988	3923	3949	3976	3948	3957	3934	3859	3852	3876	3846	3840	3752	3893
1989	3686	3673	3458	3485	3405	3437	3551	3494	3382	3311	3252	3309	3454
1990	3392	3434	3383	3278	3236	3244	3366	3337	3409	3497	3564	3577	3393
1991	3675	3680	3409	3428	3452	3005	3026	3253	3440	3508	3527	3585	3416
1992	3595	3557	3639	3757	3730	3830	3891	3892	3880	3941	3919	3988	3801
1993	3961	3959	3901	3955	3979	4012	4026	4027	4063	4073	4089	4073	4010
1994	4080	4030	4009	3999	4027								4029

Multiply table entries by 100 to obtain hourly counting rate. Climax, Colorado: N39, W106, Alt=3400 m, Cutoff Rigidity=2.99GV (1980).

NOTE: Data may differ from previously reported values due to subsequent cleanup of data and slight changes in the averaging algorithm.

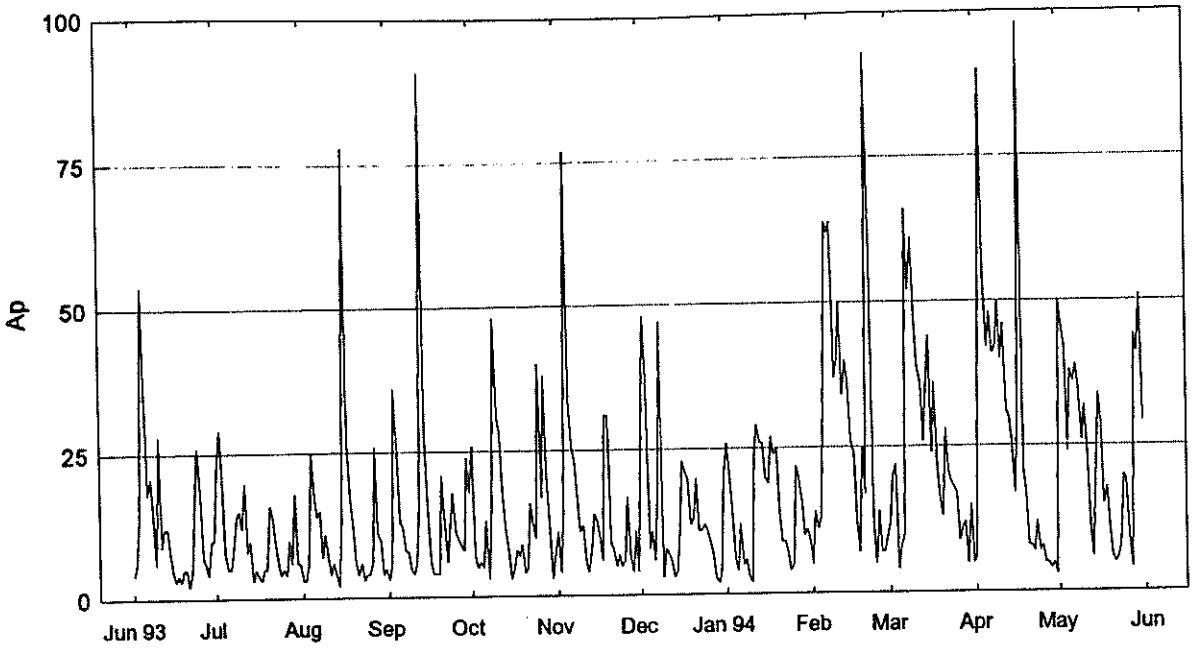
GEOMAGNETIC ACTIVITY INDICES

May 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	N	
1		0+ 2- 3 3-	4+ 6- 7 7	32-	50	1.6	1- 2o 3o 3o	3+ 4+ 6- 6-	56	67	44	20	91
2	D2	6- 6- 4 3	3+ 3+ 5 7-	37-	46	1.5	5- 5- 4- 3-	3- 3o 4+ 5o	55	68	49	58	60
3	D3	5+ 6 5 4-	5- 5- 4+ 3+	37	42	1.5	4+ 5- 4+ 4-	4+ 4- 4- 3+	54	68	55	69	54
4		4 4 3+ 2+	4+ 4+ 4- 4	30	24	1.2	3+ 3+ 3- 3-	4- 3+ 3o 3+	34	40	32	33	38
5	D5	4+ 5- 5- 4-	4+ 5+ 5 5-	37-	38	1.4	4- 4- 4o 3+	4+ 5- 4+ 4o	55	59	60	42	77
6		5- 5 4+ 4-	3 4- 4 6	34+	36	1.4	4- 4+ 4o 4-	3- 4- 3+ 5-	50	59	55	58	56
7		6 5- 5+ 5-	4 3+ 4+ 4-	36	39	1.4	4+ 4+ 4+ 4+	3+ 3o 4- 3o	52	59	60	77	42
8		4+ 4+ 5 4+	4 4- 5 5-	35+	35	1.4	4+ 4o 5- 4-	4- 4- 4+ 4-	55	58	51	58	52
9		4- 5- 4- 4	4- 4+ 4 3+	31+	26	1.2	4- 4+ 3o 4-	3+ 4- 3+ 3o	41	57	46	56	48
10		4+ 4- 5+ 3	4 4 5- 5-	34-	32	1.3	3+ 3+ 5- 3o	4- 3o 4- 4o	44	52	49	48	54
11		4+ 4+ 3+ 3+	3+ 5- 3+ 4	31-	25	1.2	4o 4- 3o 3o	3+ 4- 3- 4o	42	50	44	49	46
12	Q9A	4- 4 3- 1+	1 1+ 1- 3-	17+	11	0.6	4- 3+ 3- 2o	1+ 1+ 1- 2-	19	23	18	30	11
13	Q4	2+ 2+ 2 1	1- 1+ 1 2	13-	6	0.3	2- 2+ 2o 1+	1- 2- 1o 2-	11	14	10	15	9 C
14		2 4+ 4+ 3-	3+ 3 3- 4	26+	19	1.0	2o 4- 4- 3o	3o 2+ 2+ 3+	31	41	30	36	35
15		3 4- 5 6-	4 4- 5- 4+	34	34	1.3	3o 3o 4+ 4+	4o 3o 4o 4o	50	57	66	60	63
16		4+ 4- 4- 4	5- 5 4+ 3-	32+	29	1.3	4o 4- 4o 4-	4- 4o 3+ 3-	45	48	42	49	41
17	Q10A	4 3 3 3+	2+ 3 3- 2+	24-	15	0.8	3+ 3- 3- 3+	3- 3o 2o 2+	26	29	27	35	21
18		4- 4 3 3-	4- 3 2 4	26	18	1.0	3+ 4- 4- 3-	3o 3- 2o 3+	32	36	31	36	31
19	Q8A	3- 3+ 3 3	3- 2- 1- 1	18	11	0.6	2+ 3o 3o 3o	3- 2- 1- 1o	19	23	21	28	16
20	Q3	2- 2+ 2- 1+	2- 2 1- 1	12+	6	0.3	1+ 2+ 2- 2-	1+ 2+ 1- 1o	11	15	10	11	14 KK
21	Q2	1- 1- 1- 2-	2+ 2- 1+ 1	10	5	0.2	0+ 0+ 1- 2-	2o 2- 1+ 1o	8	16	6	7	15 CK
22	Q5	1- 1 1- 1+	2 2 3- 2+	13-	6	0.3	0+ 1o 1o 1+	2o 2o 2+ 2+	11	16	7	8	15 CK
23	Q6A	1 1+ 1- 2+	2+ 3- 2- 3	15	8	0.4	1- 1+ 1- 2+	2o 2o 2- 3-	13	21	11	12	20
24		4- 5- 3+ 3	3- 3+ 3+ 3	27	20	1.0	3o 4- 3+ 3+	3- 3- 2+ 3o	30	45	24	42	27
25		4- 5- 3 3+	2- 3 2 4	25+	19	1.0	3o 4o 3o 3o	2- 3- 1+ 3o	28	32	28	35	25
26	Q7A	1+ 2+ 3+ 3+	2+ 2- 1+ 2+	18	10	0.6	1+ 2+ 3+ 3+	2+ 2o 1o 2o	20	22	26	30	18
27	Q1	2 1+ 0+ 1-	1 2 1 1	9+	4	0.2	2o 1+ 0+ 1-	1o 2- 1o 1o	8	13	8	9	13 CK
28		0+ 0+ 1- 2	5- 7 7- 5+	27	44	1.5	0+ 0+ 1- 3-	4- 5+ 5+ 5-	48	65	54	8	112
29	D4	5+ 5+ 4- 5	5- 5+ 4- 4	37	41	1.5	5- 5- 4- 4+	4- 5- 3+ 4o	61	57	66	72	51
30	D1	5- 6 4+ 4+	5+ 5+ 5 6-	41-	51	1.6	4+ 5- 4+ 4-	4o 4o 4+ 5-	61	79	70	70	80
31		4- 5 4 4-	4- 3- 5 4+	32	29	1.3	3+ 4+ 4o 4-	3o 2+ 4o 4o	45	50	52	51	51
Mean					25	1.03			36.0	43.2	37.2	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	Prov Ri	Ra	Rs	INF
1	1o 2+ 3+ 3-	4- 4+ 5+ 6-	58	0+ 2o 3- 3+	3o 4+ 6- 6-	55	76.3	21	35	20	
2	5o 5o 4- 3o	3o 3+ 4o 5+	60	5- 5- 4- 3-	2o 3o 4+ 5-	50	77.1	35	37	21	
3	4+ 5- 4+ 4o	5- 4o 4- 3+	59	4o 4+ 4o 4-	4o 3+ 4- 3+	49	75.6	26	25	20	
4	3+ 3+ 3o 3o	4o 4o 3o 3+	38	3+ 3+ 3- 3-	3+ 3- 3o 3+	31	74.4	15	14	18	
5	4- 4o 4+ 4-	5- 5- 4+ 4o	61	3+ 3+ 4o 3+	4- 4+ 4+ 4o	50	74.4	9	11	18	
6	4- 4o 4o 4-	3- 4- 4- 5-	49	4o 4+ 4o 3+	3- 3+ 3+ 5o	51	75.3	10	18	19	
7	5- 4+ 4+ 5-	4o 3- 4- 3+	56	4o 4+ 4+ 4+	3o 3o 4- 3o	47	75.2	14	18	19	
8	4+ 4+ 5- 4o	4- 4o 4o 4o	59	4+ 4- 4+ 3+	4- 3+ 4+ 3+	50	75.8	21	21	20	
9	4- 4o 3+ 4-	4- 4o 3+ 3+	44	3+ 5- 3- 4-	3+ 3+ 3o 3o	39	78.8	14	14	23	
10	4- 4- 4+ 3o	4o 3+ 4- 4o	47	3o 3o 5- 3-	3o 3- 4- 4o	41	81.4	19	18	26	
11	4o 4- 3+ 3o	4- 4o 3- 4o	42	4+ 4- 3o 3+	3- 4- 3o 4+	42	83.6	19	21	28	
12	3+ 4- 3- 2o	1+ 2- 1o 2+	21	4o 3o 3- 2-	1+ 1- 0+ 1o	17	89.2	27	28	34	
13	2o 2+ 2o 1o	1- 2- 1+ 2o	12	1+ 2o 2o 1+	1- 1+ 1o 1+	9	91.4	32	36	37	
14	2o 4o 4- 3+	3+ 3- 3- 4-	34	2o 4- 4o 3o	3o 2- 2o 3o	28	92.1	31	37	37	
15	4- 3+ 4+ 5-	4+ 3o 4o 4o	53	3- 3o 4+ 4+	4o 3o 4o 4+	48	93.4	30	30	39	
16	4o 4- 4+ 4o	4+ 4+ 3+ 3-	52	4+ 4- 3+ 3o	3o 4- 3+ 3-	38	93.3	33	36	39	
17	3+ 3- 3o 3+	3- 3o 2+ 3-	28	3+ 3- 2+ 3+	3- 3o 2o 2-	23	97.2	39	38	43	
18	4- 4- 3+ 3o	3+ 3o 2+ 4-	36	3+ 4- 4- 3-	3- 2- 2- 3+	28	95.8	33	35	41	
19	3- 3+ 3o 4-	3o 2o 1o 1+	23	2+ 3o 3- 2o	3- 1+ 0+ 1-	15	92.7	28	31	38	
20	2- 3- 2o 2o	1+ 3- 1+ 1+	15	1o 2- 1+ 1+	1o 2- 0+ 1-	8	91.9	25	28	37	
21	1- 1- 1o 2o	3- 2o 2- 1+	11	0+ 0o 0+ 1o	2- 1o 1- 1-	5	89.8	25	26	35	
22	1o 1+ 1+ 2-	2+ 2+ 3o 3-	15	0o 0+ 1- 1o	2- 2- 1+ 2-	7	86.7	21	23	32	
23	1o 2- 1- 3-	3- 3- 2o 3o	17	0+ 1- 0+ 2o	1o 1+ 1+ 2+	8	83.6	19	18	28	
24	4- 4o 3o 4-	3o 3+ 3- 3+	37	3- 3o 3+ 3-	2+ 2o 2o 3-	23	79.9	9	9	24	
25	3+ 5- 3o 4-	2- 3o 2- 4-	36	3- 3+ 3o 2o	1+ 2+ 1o 3-	20	76.1	9	8	20	
26	2- 3- 3+ 3+	3- 2+ 1+ 2o	23	1o 2o 3+ 3+	2o 2- 1- 2-	17	73.4	0	1	17	
27	2o 1+ 1o 1o	1o 2+ 1+ 1o	10	2o 1o 0o 0+	1- 1+ 1- 1-	5	72.1	0	0	16	
28	1- 1- 1- 3-	4o 6o 5o 5-	52	0+ 0+ 1- 2+	3o 4+ 6- 5o	44	71.4	0	0	15	
29	5- 4+ 4- 4+	4o 5o 4- 4o	61	5o 5- 4o 4+	3+ 5- 3- 4+	60	71.4	0	0	15	
30	4o 5- 4o 4-	4+ 4o 4o 5-	63	4+ 5- 4+ 3+	3+ 4- 5- 5-	60	71.3	0	0	15	
31	3+ 4+ 4o 4-	3+ 3- 4- 4o	47	3+ 4+ 4o 4-	3o 2o 4o 4-	42	71.1	0	0	15	
Mean			39.3			32.6	81.7	18.2	19.9	26.2	

Daily Average Indices Ap
Jun 1993 - May 1994



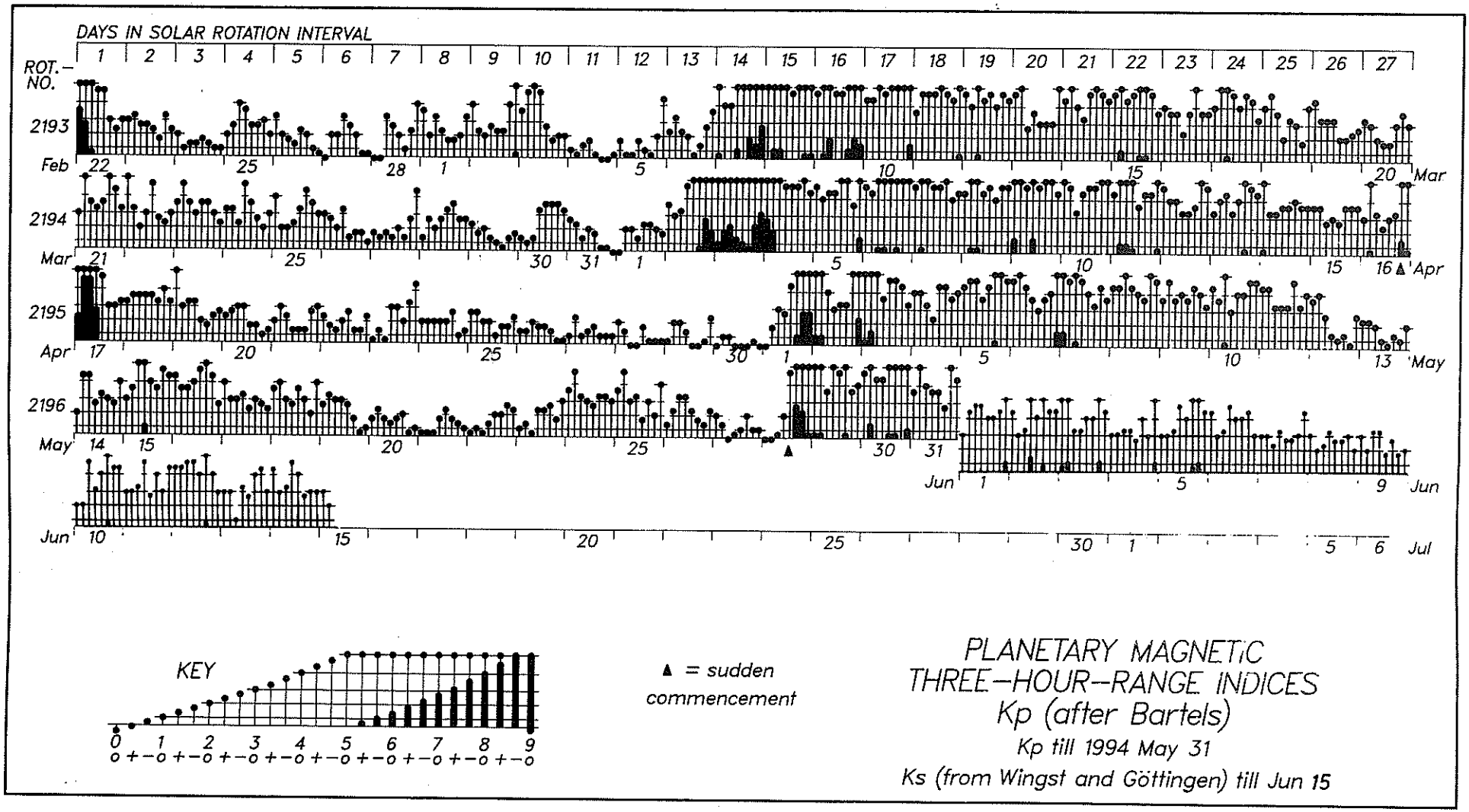
Day	Jun 93	Jul	Aug	Sep	Oct	Nov	Dec	Jan 94	Feb	Mar	Apr	May
1	4	22	3	3	26	11	29	26	5	12	6	50
2	6	29	3	6	7	4	48	21	14	20	53	46
3	14	21	6	36	5	15	37	15	11	22	90	42
4	54	8	25	25	6	77	8	6	13	4	54	24
5	36	5	18	13	5	34	11	4	32	8	42	38
6	18	5	14	12	13	26	6	12	64	10	48	36
7	21	8	15	8	3	23	20	5	62	66	41	39
8	14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

NOTE: Feb 94 data have been corrected.

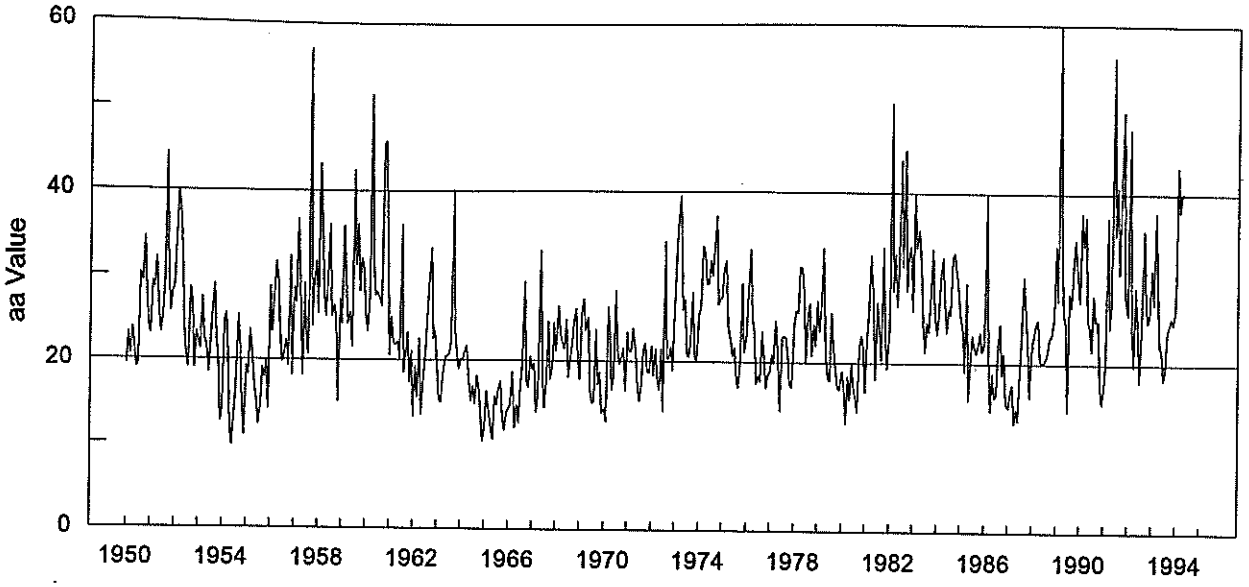
PLANETARY 3-HOUR-RANGE INDICES (Kp) BY 27-DAY SOLAR ROTATION INTERVAL

University of Gottingen

Kp through May 31, 1994



Monthly Mean aa Index Jan 1950 - May 1994



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

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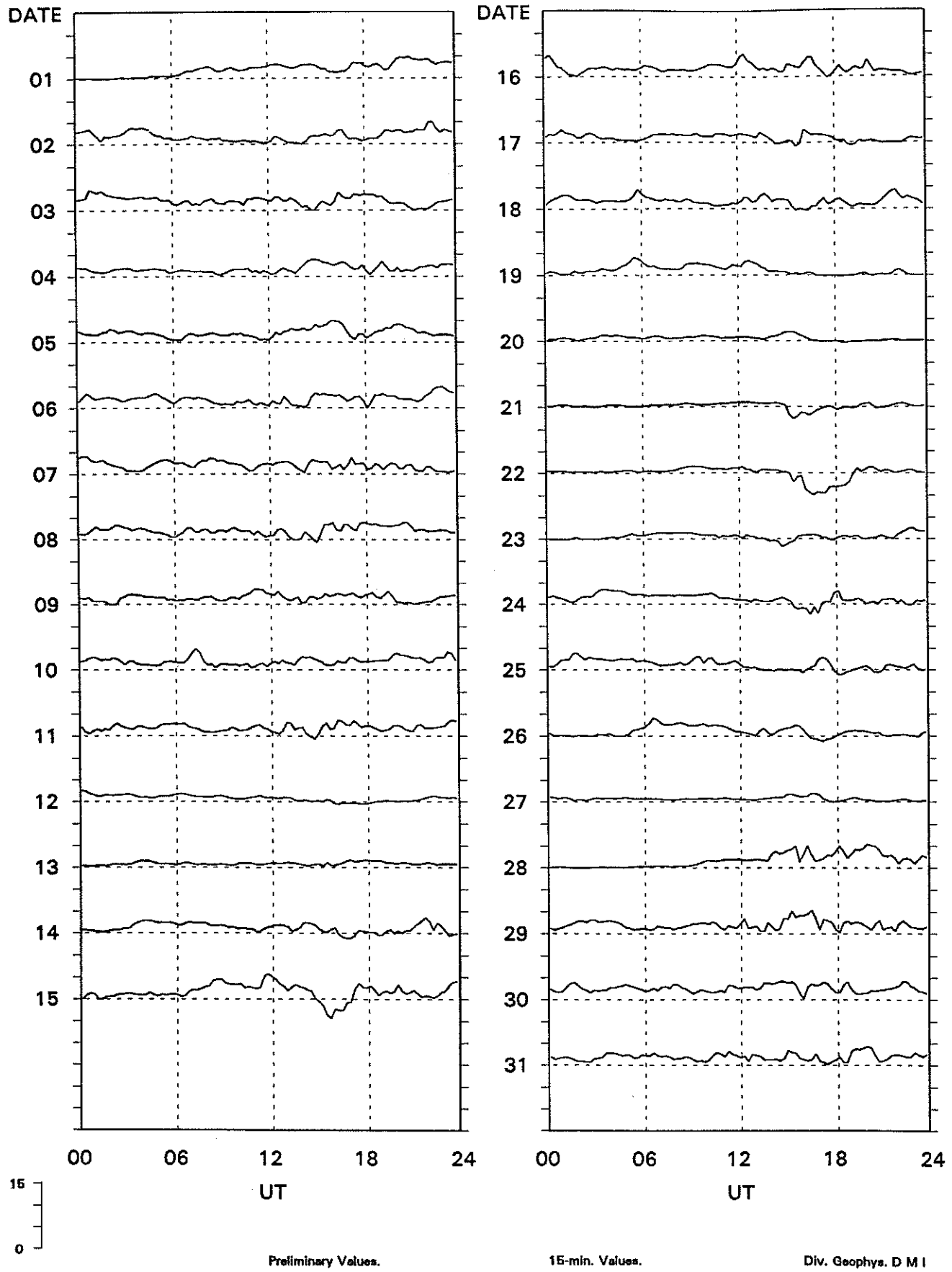
May 94

PC-INDEX

Thule

May, 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

MAY 1994

Sta	Geomag Lat	Commencement Time Day	(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 Hour Day	(UT)
BJI	28.8N	01	04--	..	..	..	..	01(8)	5	13	139	40	03	22
KRC	16.4N	01	0324	..	..	..	..	01(5,7)	6	31	139	60	02	22
UJJ	13.6N	01	0900	..	..	..	..		-	6	94	35	03	20
ABG	09.4N	01	0900	..	..	..	..	01(5,6,7) 02(7)	5	6	105	49	03	20
HYB	07.6N	01	0400	..	..	..	..	01(5)	6	6	182	27	03	22
GUA	04.3N	01	05--	..	..	..	..	01(3)	5	--	140	10	01	14
GUA	04.3N	01	18--	..	..	..	..	01(8)	6	--	80	20	02	13
ETT	00.7S	01	0400	..	..	..	..		-	6	237	67	03	21
TRD	01.1S	01	0900	..	..	..	..		-	5	147	88	03	20
HER	33.6S	01	15--	..	..	..	..	01(7,8)	6	58	117	168	04	06
AMS	46.8S	01	12--	..	..	..	..	01(7)	6	37	162	119	06	09
CZT	51.5S	01	15--	..	..	..	..	01(7)	7	56	278	186	06	06
PAF	57.2S	01	14--	..	..	..	..	01(7)	9	135	1132	439	12	09
GUA	04.3N	02	21--	..	..	..	..	03(1)	5	--	100	30	03	16
CAN	43.6S	02	21--	..	..	..	..	03(3,5) 05(5,6) 06(8) 07(3,4) 08(3) 10(3)	5	21	170	53	11	12
DRV	75.2S	03	0112	SC	64	72	-156	09(4)	6	747	533	1013	12	09
GUA	04.3N	05	13--	..	..	..	..	05(6)	5	--	40	10	05	19
GUA	04.3N	05	21--	..	..	..	..	06(1)	5	--	90	10	06	12
ETT	00.7S	05	0100	..	..	..	..		-	6	163	60	07	23
HER	33.6S	05	12--	..	..	..	..	05(7)	5	34	92	117	06	12
HER	33.6S	06	15--	..	..	..	..	06(8)08(1,7)10(3)11(1)	5	30	106	81	12	05
GUA	04.3N	07	04--	..	..	..	..	07(4)	5	--	60	10	07	16
GUA	04.3N	08	00--	..	..	..	..	08(1)	5	--	80	20	08	14
ETT	00.7S	08	0100	..	..	..	..		-	6	124	51	10	22
HYB	07.6N	14	0200	..	..	..	..	15(4)	6	6	140	31	16	22
ETT	00.7S	14	0200	..	..	..	..		-	8	186	70	16	21
BJI	28.8N	15	0643	SC	- 0.2	6	1	15(3)	6	9	102	23	16	24
KRC	16.4N	15	0340	..	..	..	..	15(3)	6	40	112	65	16	05
UJJ	13.6N	15	0800	..	..	..	..		-	6	98	20	16	21
ABG	09.4N	15	0800	..	..	..	..	15(3)	5	5	102	20	16	21
GUA	04.3N	15	03--	..	..	..	..	15(3)	5	--	110	20	15	15
TRD	01.1S	15	0800	..	..	..	..		-	3	129	84	16	21
AMS	46.8S	15	06--	..	..	..	..	15(7)	5	17	137	61	17	09
DRV	75.2S	15	1140	SC	-104	-144	176	15(4) 16(5)	6	603	593	657	19	18
BJI	28.8N	28	1357	SC	1.0	36	3	28(6)	6	13	119	37	30	24
KRC	16.4N	28	1403	SC	- 1.8	28	21	28(5,6,7) 29(2,3) 30(2,7)	5	99	106	47	30	23
UJJ	13.6N	28	1357	SC	- 0.4	23	- 7		-	7	96	27	29	20
ABG	09.4N	28	1357	SC	- 0.6	22	- 5	28(5,6)	5	7	93	47	29	20
HYB	07.6N	28	1357	SC	- 0.3	14	- 1	28(6)	6	7	103	26	31	21
GUA	04.3N	28	1357	..	..	..	..	28(6)	5	10	80	10	29	18
ETT	00.7S	28	1357	SC	- 0.7	17	17		-	7	134	70	30	20
TRD	01.1S	28	1357	SC	- 0.1	15	- 25		-	6	140	87	29	20
HER	33.6S	28	1357	SC	1	7	5	28(7)	6	37	132	153	31	07
CAN	43.6S	28	1356	SC	0.6	22	3	28(7)	6	30	155	56	31	15
AMS	46.8S	28	1358	SC	.5	2	- 2	28(7)	6	30	134	83	05	00
CZT	51.5S	28	1358	SC	1.5	- 4	4	28(7)	6	52	144	72	03	06
PAF	57.2S	28	1357	SC*	- 8	- 1	* - 4	28(7,8)	7	86	710	330	03	09
DRV	75.2S	28	1357	SC	- 8	- 16	20	03(5)	6	523	532	816	09	15
UJJ	13.6N	30	0400	..	..	..	..		-	6	67	32	31	21
ABG	09.4N	30	0400	..	..	..	..	30(7)	5	6	74	40	31	21
TRD	01.1S	30	0400	..	..	..	..		-	5	104	82	31	21

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

MAY 1994

Storm Sudden Commencements (SSC)			Solar Flare Effects (sfe)		
Day	Time	Quality: Station Group*	Day	Begin-End	Station(s)
28	1356	A: WNG* HRB* NAG* COI BJI SPT*	03	2015-2024	QUE
		QUE TEN MPO PAF*	13	0719-0729	BDV
		B: NUR NGK BDV* CLF* GCK MMB	14	1413-1432	TEN
		AQU* EBR* LNP ETT HER CNB	19	1105-1112	QUE
		AMS CZT DRV	20	1110-1118	BDV
		C: HTY HYB	24	0415-0418	MPO
			24	0618-0624	MPO

REPORTING OBSERVATORIES (up to the 1st of July):
SOD DOB NUR WNG NGK BDV CLF HRB NAG GCK MMB AQU EBR COI BJI SPT KAK HTY KNY QUE TEN LNP HYB ETT MPO HER CNB AMS CZT PAF DRV

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

WORLD DATA CENTER A
FOR
SOLAR-TERRESTRIAL PHYSICS

The ICSU Panel on WDCs has recommended that it would be appropriate courtesy to acknowledge in publications that data were obtained from the originating station or investigator through the intermediary of the WDCs. The following statement is suggested:

"Data used in this study were provided by WDC-A for Solar-Terrestrial Physics, NOAA E/GC2, 325 Broadway, Boulder Colorado 80303, USA."