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OCTOBER 1996 NUMBER 626 - Part I

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Data for August, Spetember 1996 and Late Data

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NATIONAL GEOPHYSICAL DATA CENTER
Michael S. Loughridge, Director
Boulder, Colorado

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SOLAR-GEOPHYSICAL DATA

Number 626

(Issued in Two Parts)

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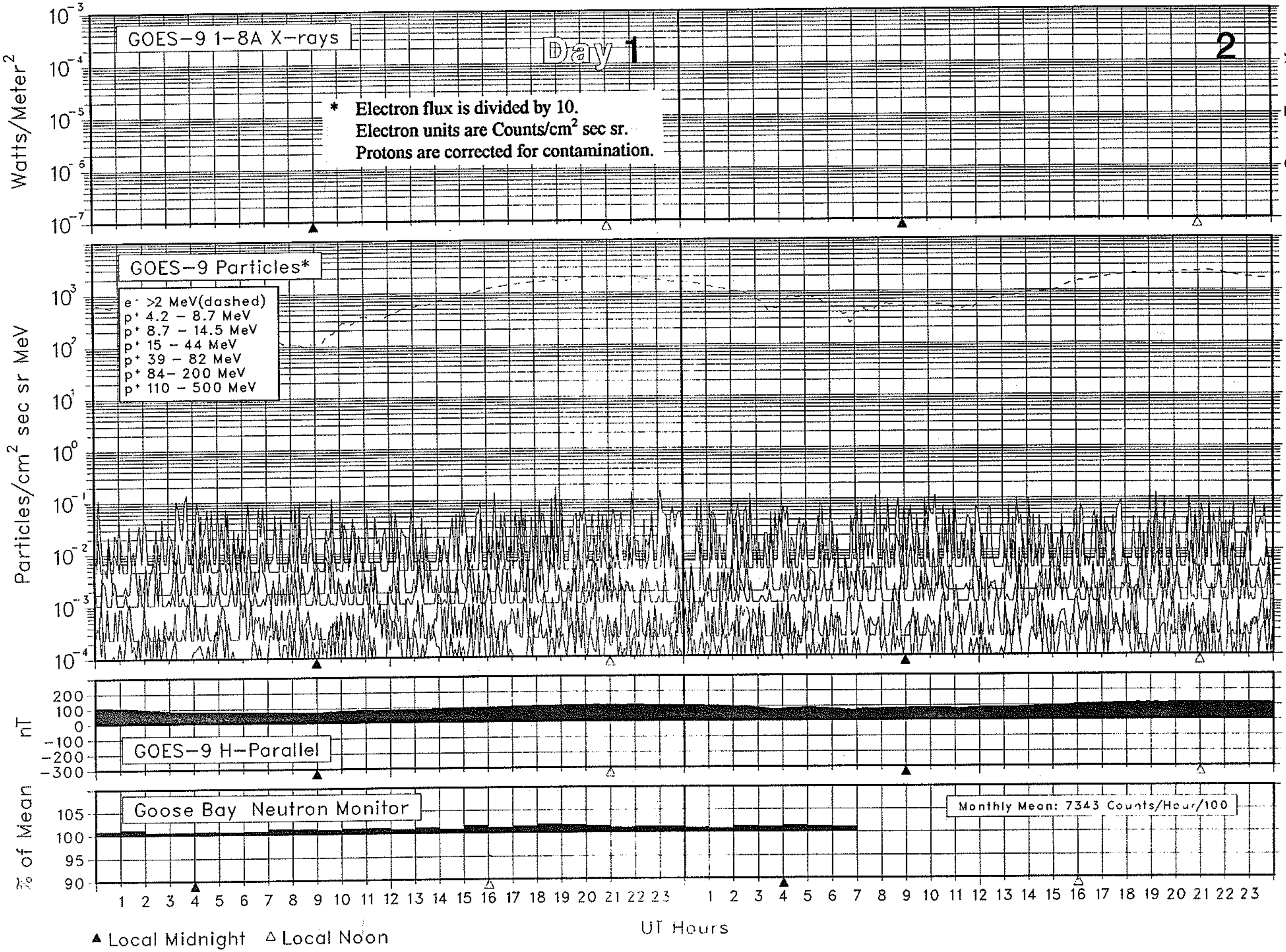

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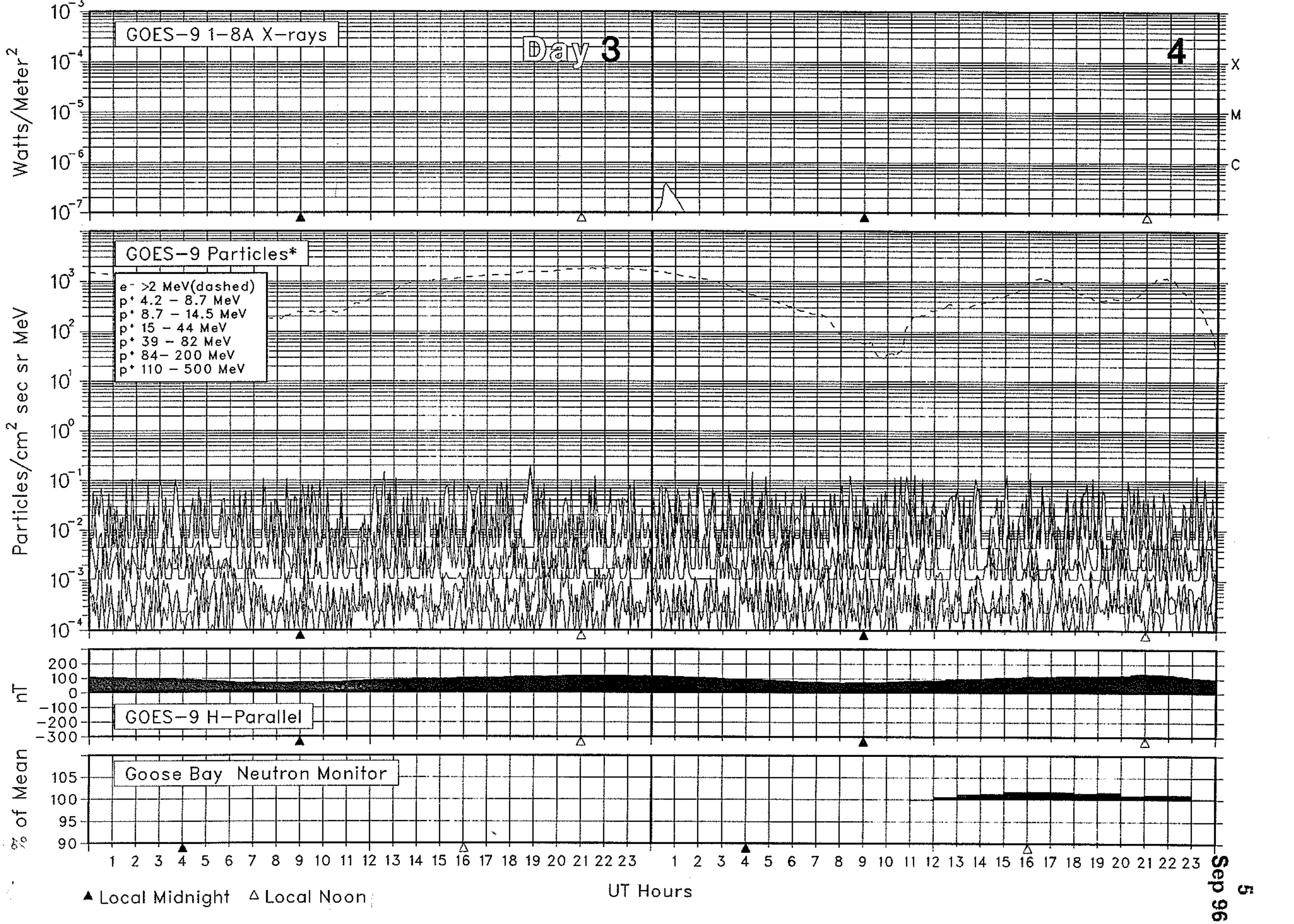
September 1996



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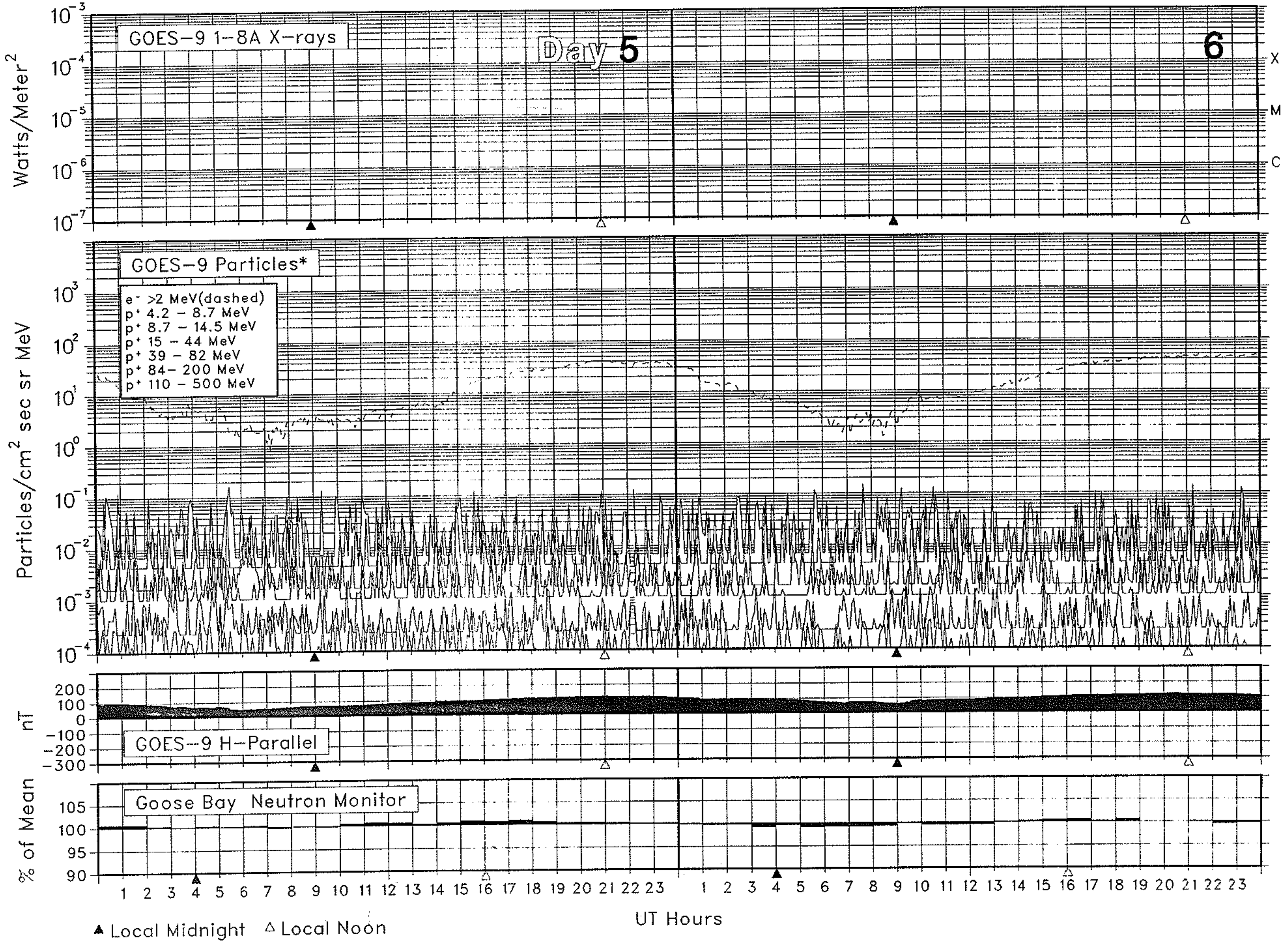

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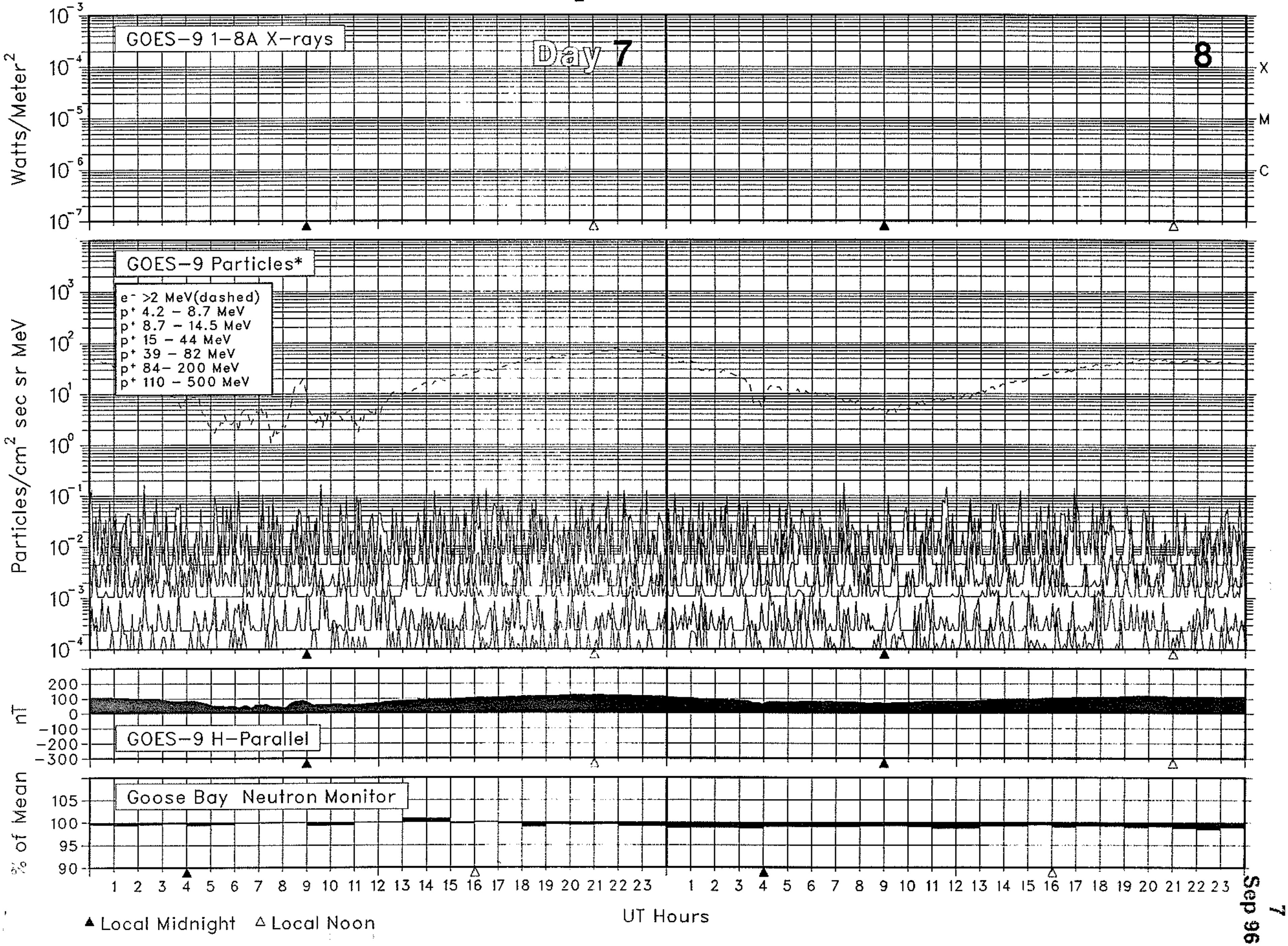

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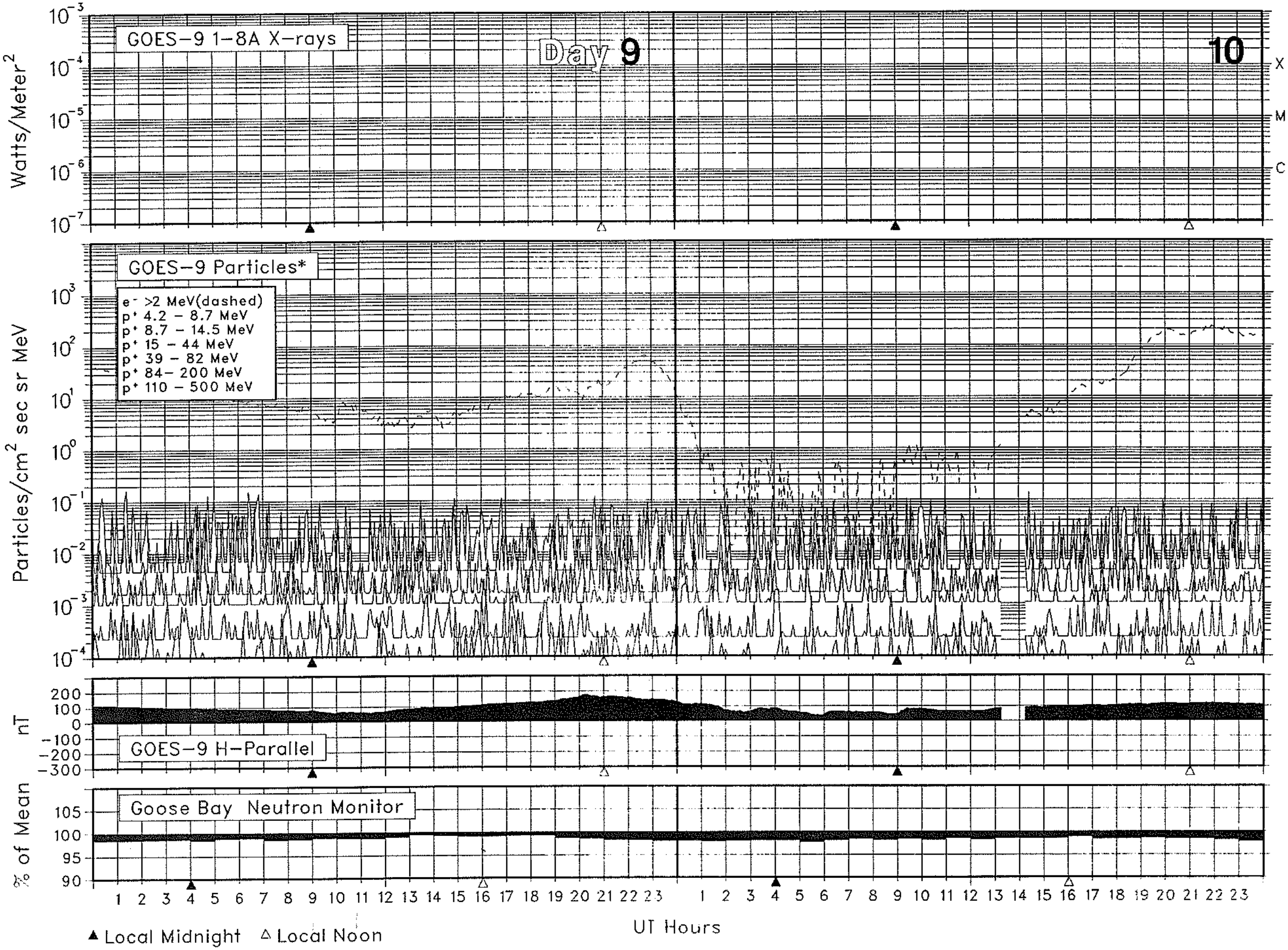

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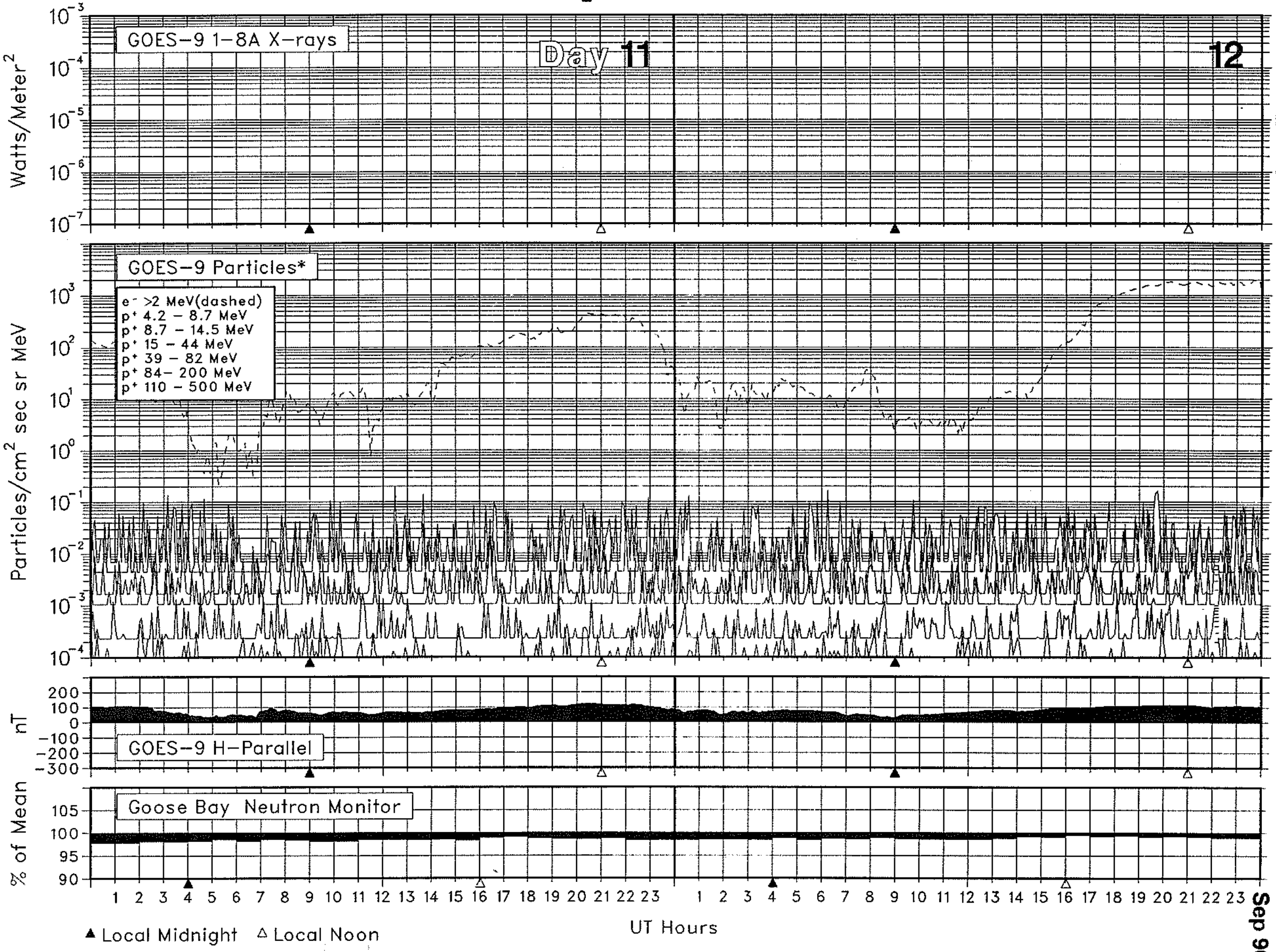

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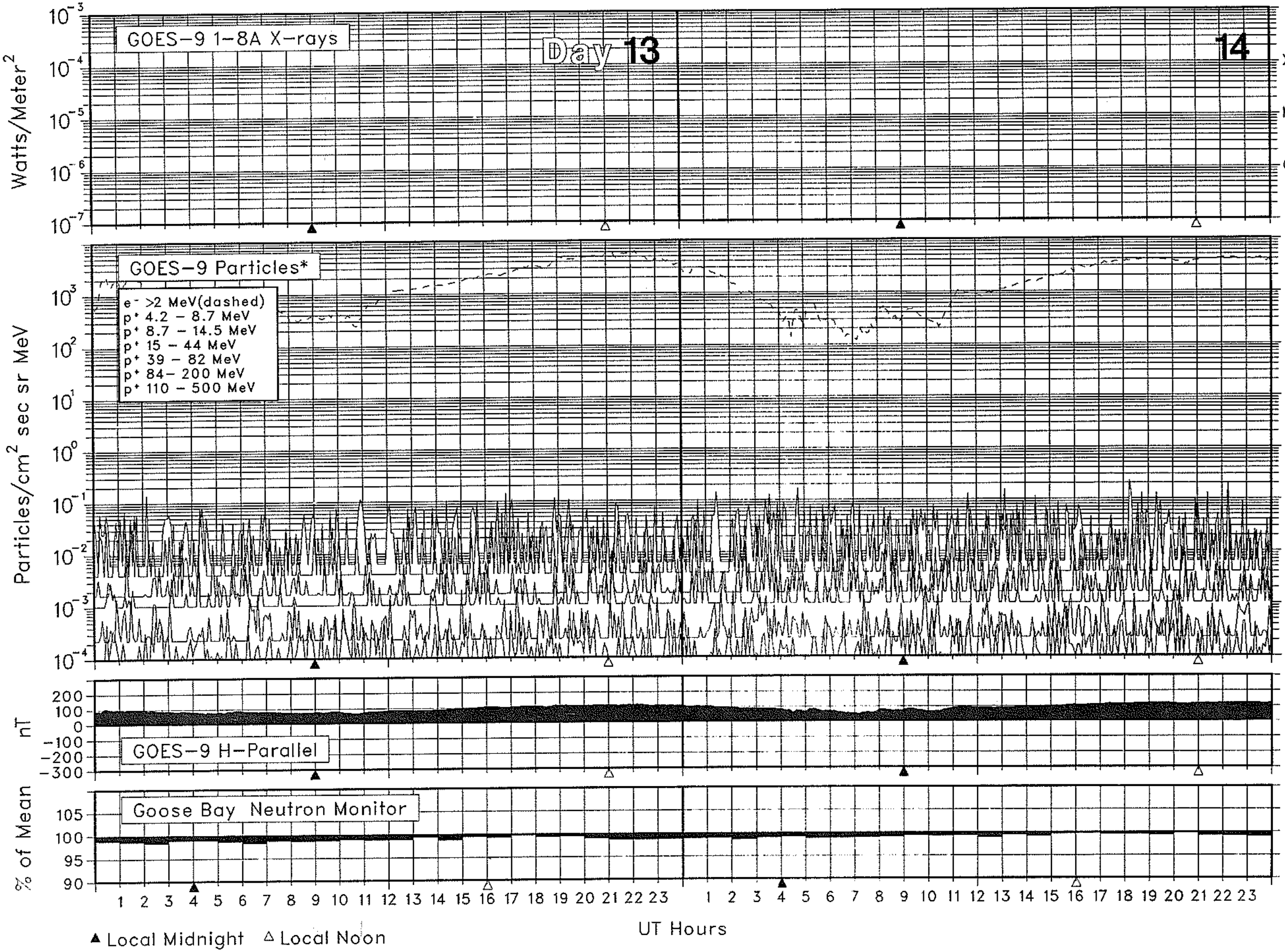

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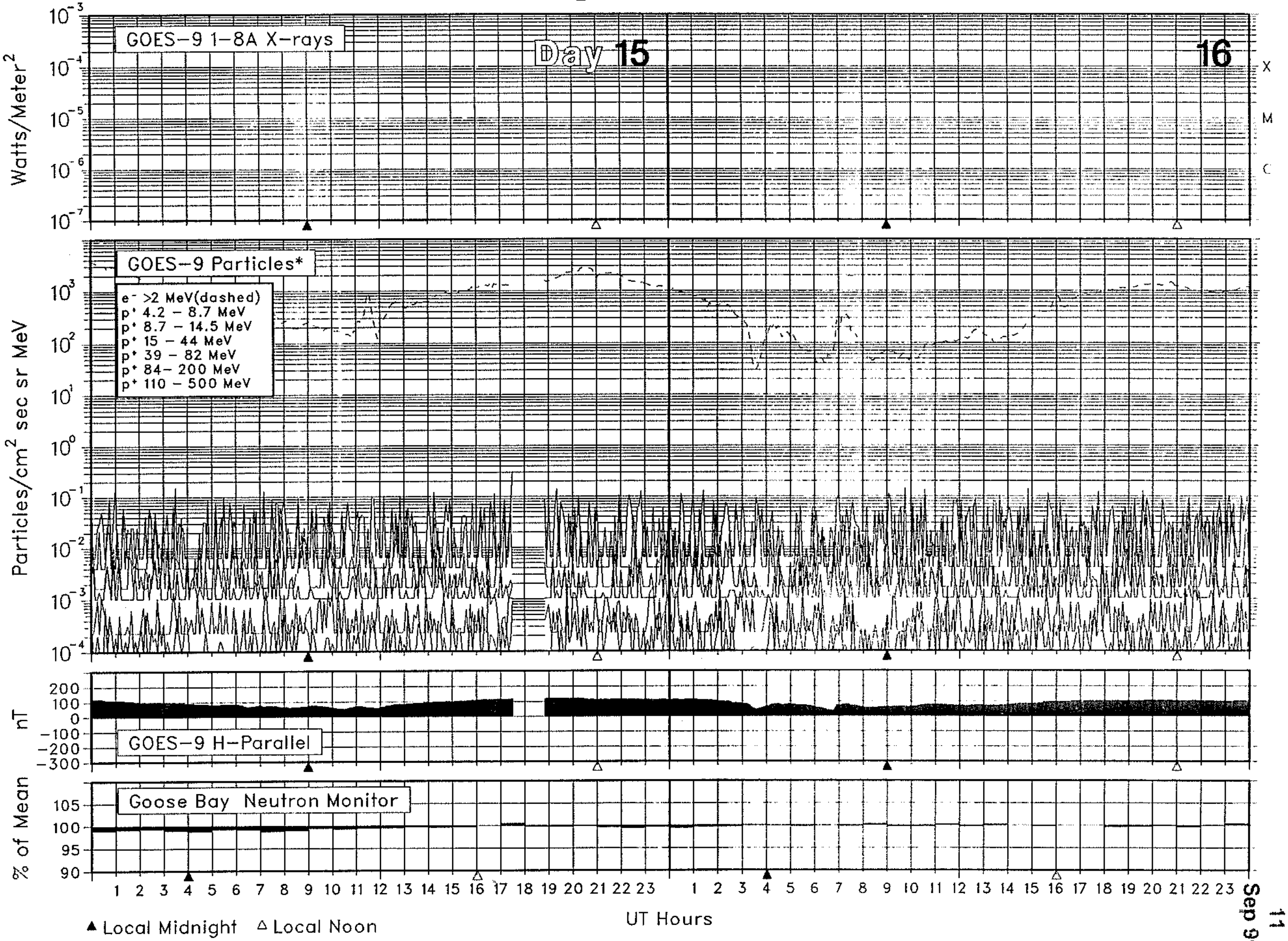

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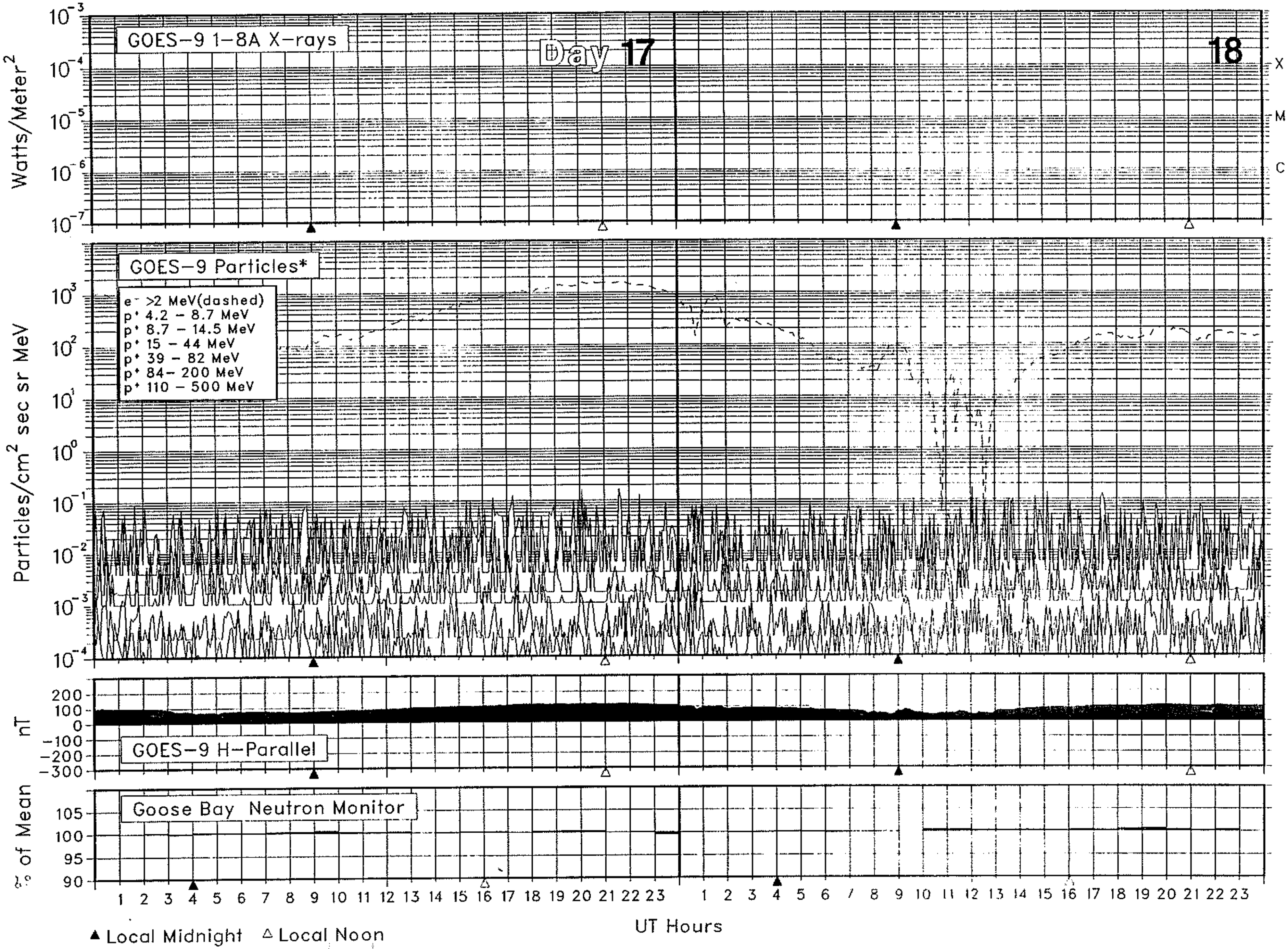

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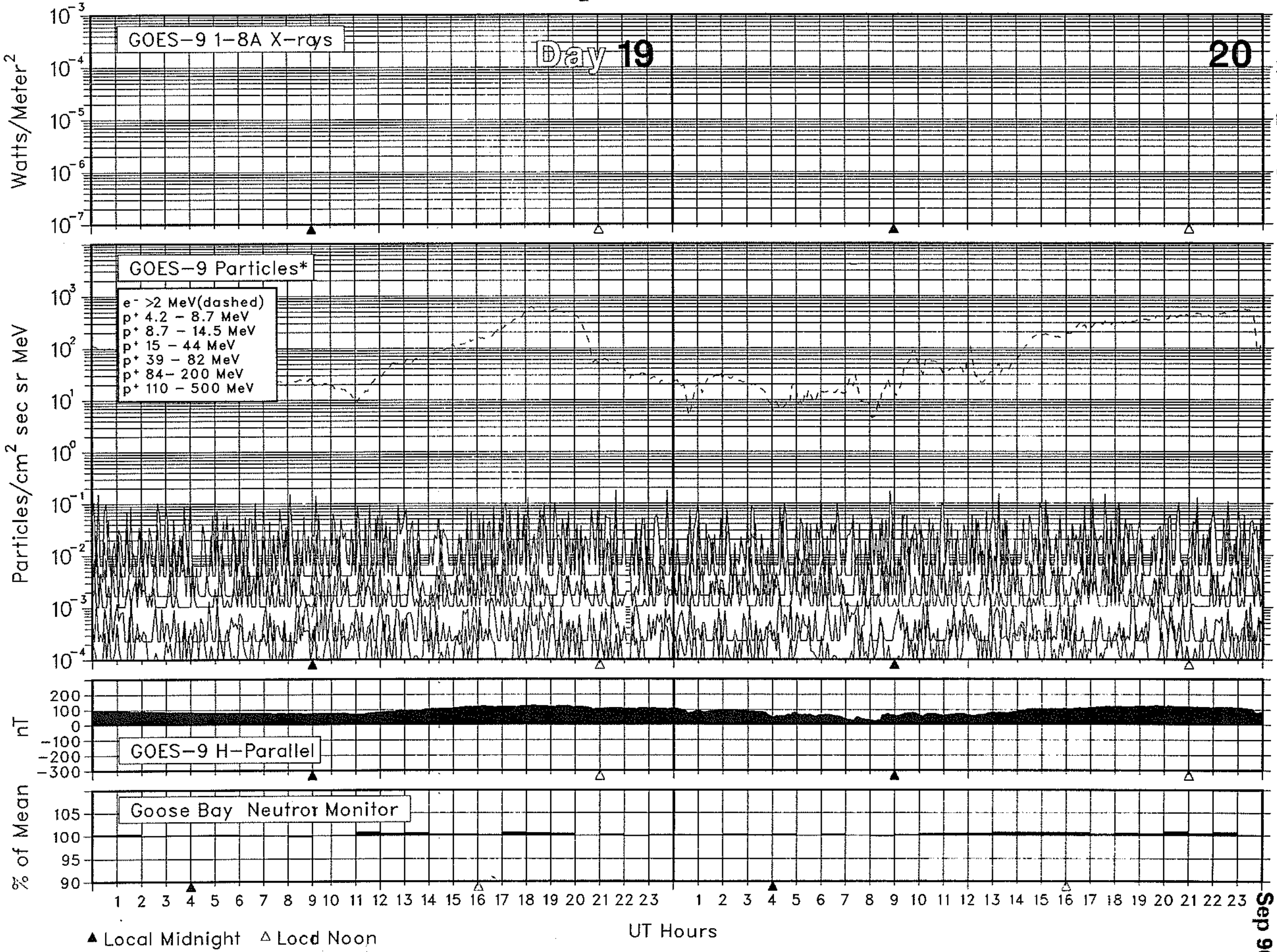

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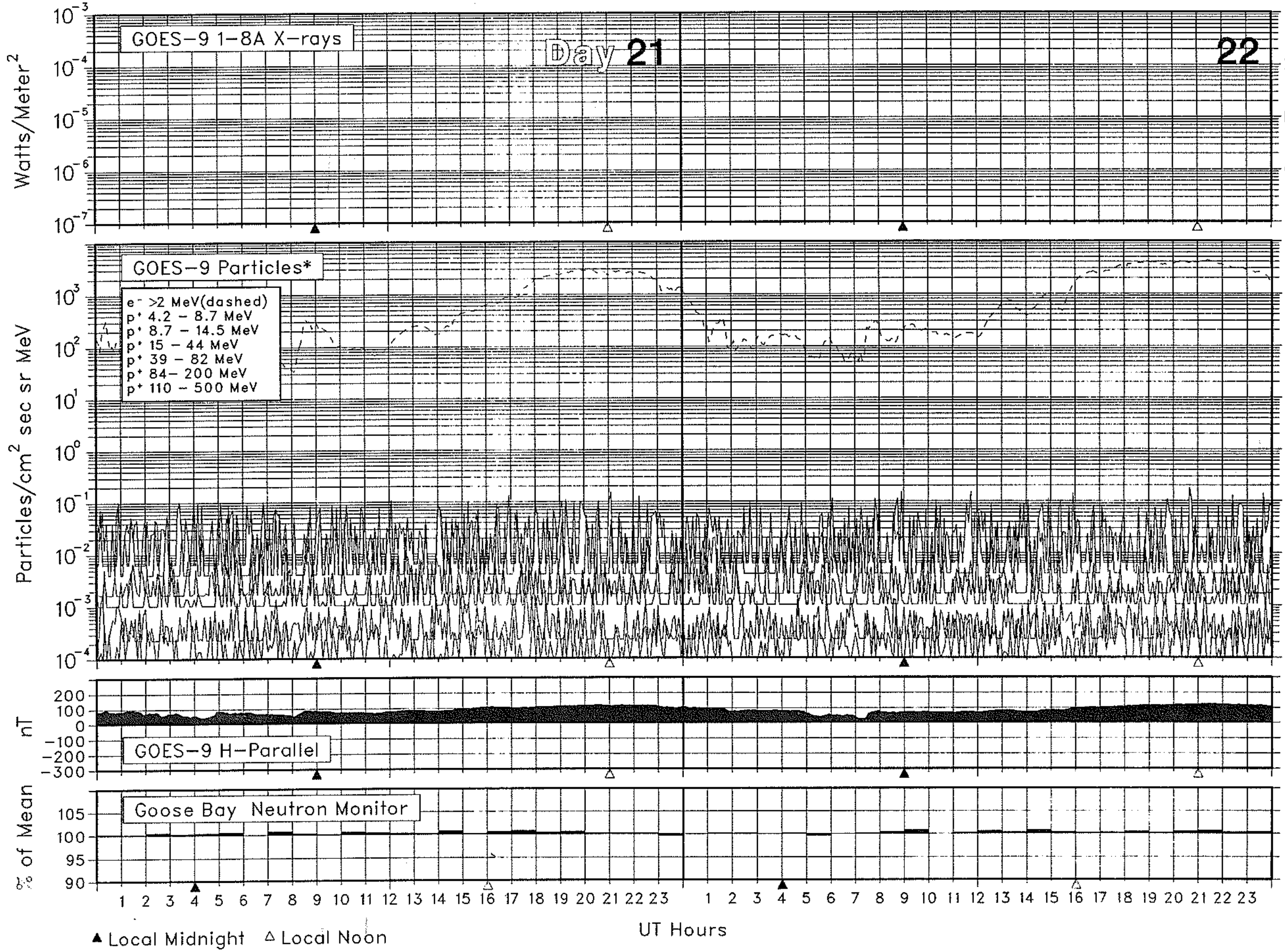

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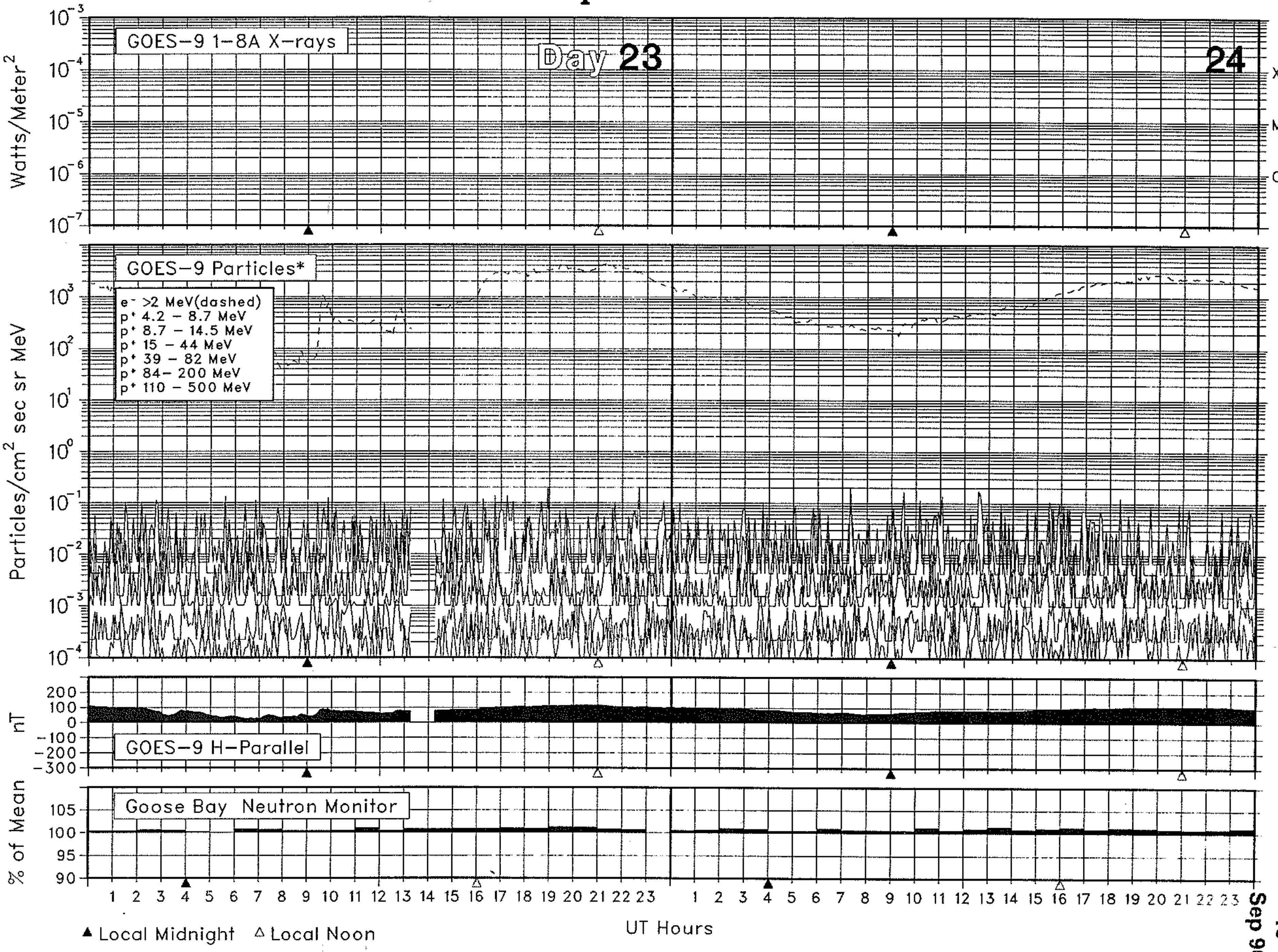

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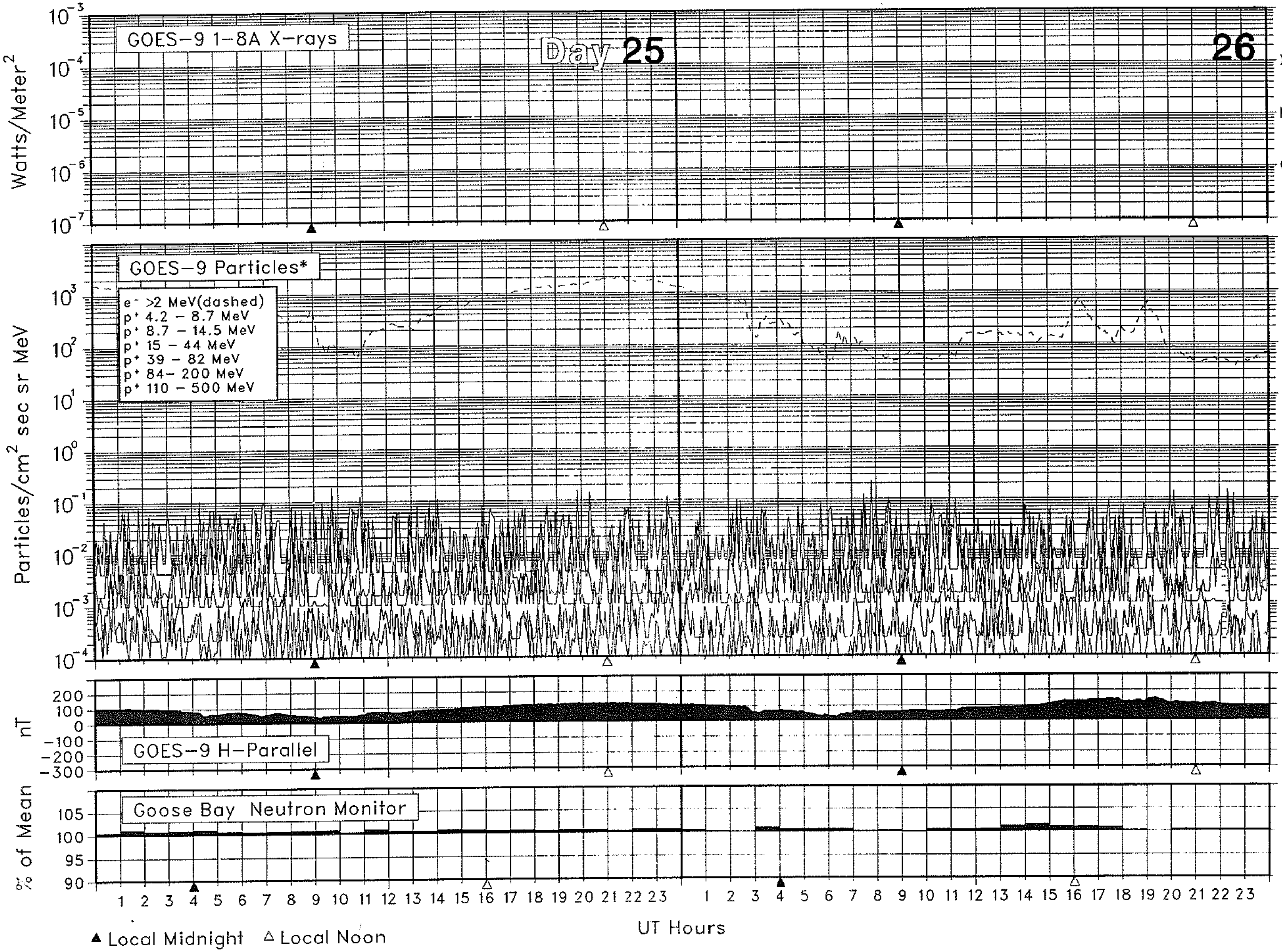

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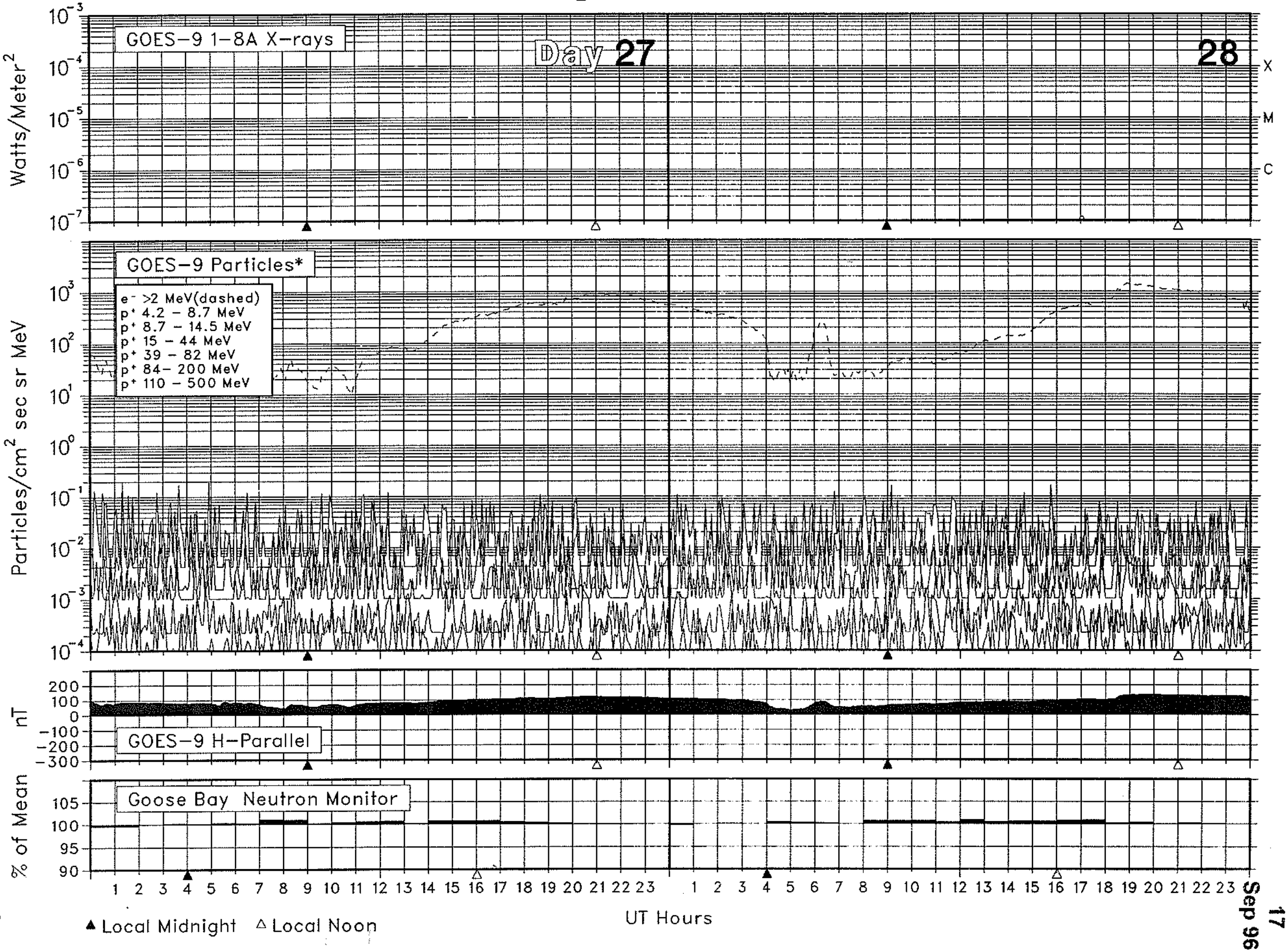

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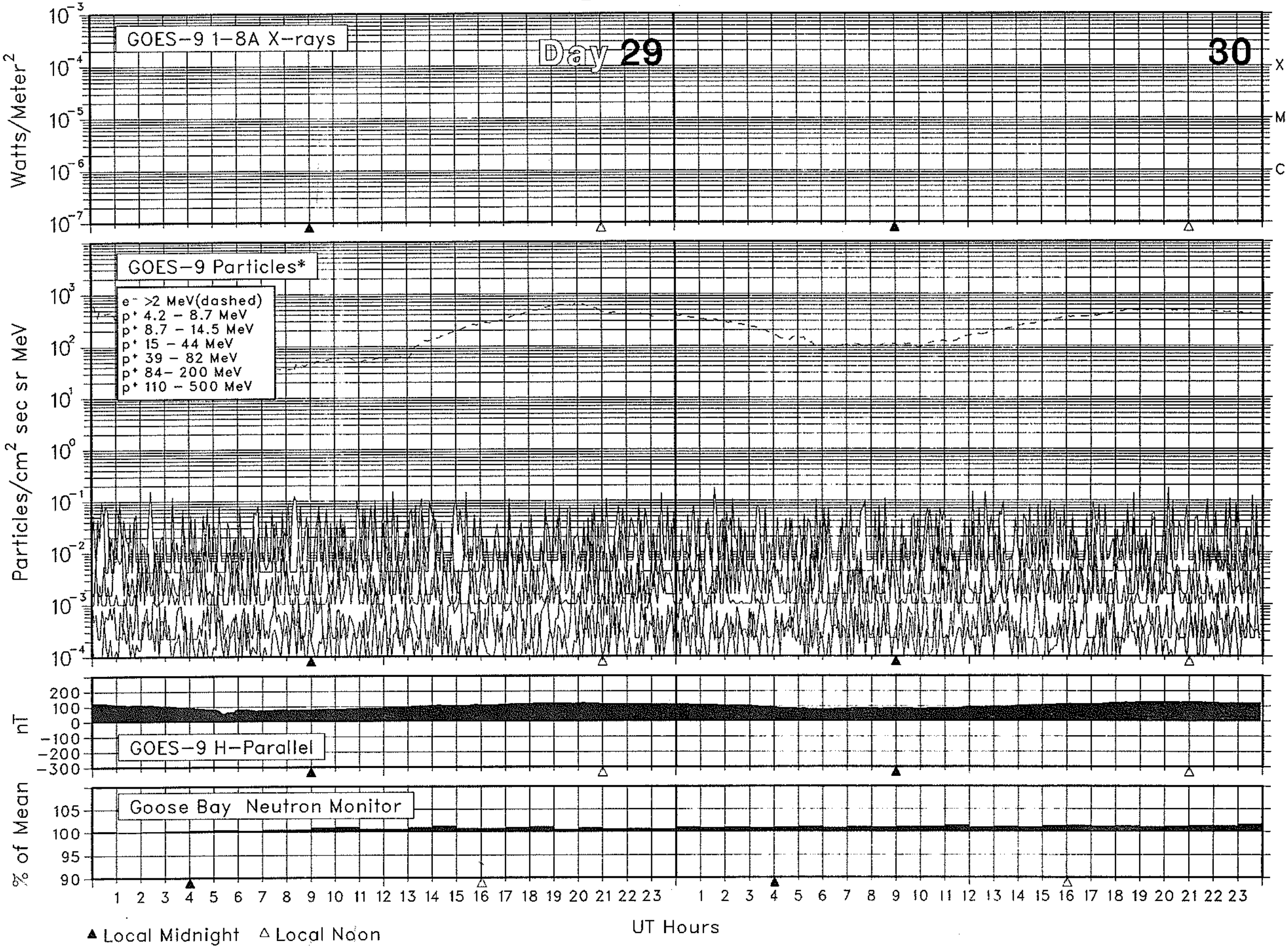


A L E R T   P E R I O D S
The International Space Environment Service

SEPTEMBER 1996

Julian Day	Date of Issue	Date of Obs	Wolf No.	10-cm Solar Flux	A-index	Location Lat	Location Long	Flares Optical	Flares M	Flares X	Date of Forecast	Region Forecast(1)	Geoadvice(1)
245	01	31	26	76	12	S13	W27	2	0	0	01	Q	SOL: Quiet
						N18	E46	0	0	0	01	Q	MAG: Quiet
								0	0	0	01		PRO: Quiet
246	02	01	11	74	4	S12	W43	0	0	0	02	Q	SOL: Quiet
								0	0	0	02		MAG: Quiet
								0	0	0	02		PRO: Quiet
247	03	02	13	72	5	S12	W56	0	0	0	03	Q	SOL: Quiet
								0	0	0	03		MAG: Quiet
								0	0	0	03		PRO: Quiet
248	04	03	11	71	2	S11	W70	0	0	0	04	Q	SOL: Quiet
								0	0	0	04		MAG: Quiet
								0	0	0	04		PRO: Quiet
249	05	04	11	71	5	S10	W81	0	0	0	05	Q	SOL: Quiet
								0	0	0	05		MAG: Quiet
								0	0	0	05		PRO: Quiet
250	06	05	0	70	7			0	0	0	06		SOL: Quiet
								0	0	0	06		MAG: Quiet
								0	0	0	06		PRO: Quiet
251	07	06	0	70	5			0	0	0	07		SOL: Quiet
								0	0	0	07		MAG: Quiet
								0	0	0	07		PRO: Quiet
252	08	07	15	70	8	S26	E01	0	0	0	08	Q	SOL: Quiet
								0	0	0	08		MAG: Quiet
								0	0	0	08		PRO: Quiet
253	09	08	15	68	6	S25	W13	0	0	0	09	Q	SOL: Quiet
								0	0	0	09		MAG: Quiet
								0	0	0	09		PRO: Quiet
254	10	09	0	68	8			0	0	0	10		SOL: Quiet
								0	0	0	10		MAG: Quiet
								0	0	0	10		PRO: Quiet
255	11	10	0	68	25			0	0	0	11		SOL: Quiet
								0	0	0	11		MAG: Active
								0	0	0	11		PRO: Quiet
256	12	11	0	68	17			0	0	0	12		SOL: Quiet
								0	0	0	12		MAG: Quiet
								0	0	0	12		PRO: Quiet
257	13	12	11	68	21	N29	E12	0	0	0	13	Q	SOL: Quiet
								0	0	0	13		MAG: Quiet
								0	0	0	13		PRO: Quiet
258	14	13	0	67	16			0	0	0	14		SOL: Quiet
								0	0	0	14		MAG: Quiet
								0	0	0	14		PRO: Quiet
259	15	14	0	67	10			0	0	0	15		SOL: Quiet
								0	0	0	15		MAG: Quiet
								0	0	0	15		PRO: Quiet
260	16	15	0	66	17			0	0	0	16		SOL: Quiet
								0	0	0	16		MAG: Active
								0	0	0	16		PRO: Quiet
261	17	16	0	68	20			0	0	0	17		SOL: Quiet
								0	0	0	17		MAG: Active
								0	0	0	17		PRO: Quiet

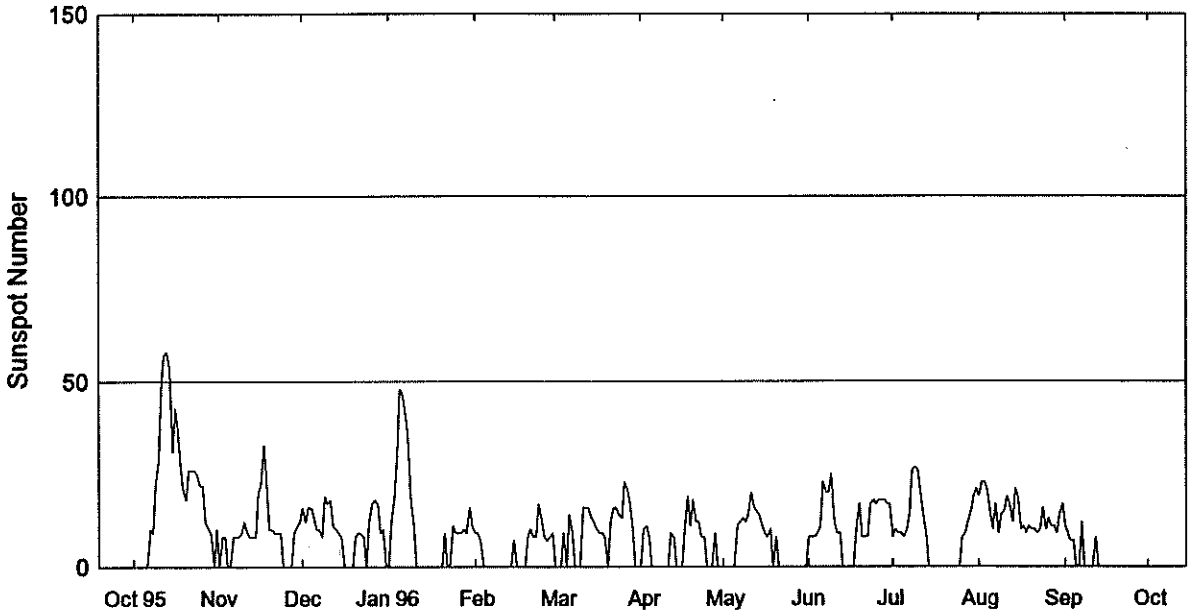
A L E R T   P E R I O D S
The International Space Environment Service

SEPTEMBER 1996

Julian Day	Date of Issue	Date of Obs	Wolf No.	10-cm Solar Flux	A-index	Location Lat	Location Long	Flares Optical	Flares M	Flares X	Date of Forecast	Region Forecast(1)	Geoadvice(1)
262	18	17	0	69	6			0	0	0	18		SOL: Quiet
								0	0	0	18		MAG: Quiet
								0	0	0	18		PRO: Quiet
263	19	18	0	69	19			0	0	0	19		SOL: Quiet
								0	0	0	19		MAG: Active
								0	0	0	19		PRO: Quiet
264	20	19	0	69	10			0	0	0	20		SOL: Quiet
								0	0	0	20		MAG: Quiet
								0	0	0	20		PRO: Quiet
265	21	20	0	69	29			0	0	0	21		SOL: Quiet
								0	0	0	21		MAG: Active
								0	0	0	21		PRO: Quiet
266	22	21	0	70	20			0	0	0	22		SOL: Quiet
								0	0	0	22		MAG: Active
								0	0	0	22		PRO: Quiet
267	23	22	0	69	16			0	0	0	23		SOL: Quiet
								0	0	0	23		MAG: Active
								0	0	0	23		PRO: Quiet
268	24	23	0	70	23			0	0	0	24		SOL: Quiet
								0	0	0	24		MAG: Active
								0	0	0	24		PRO: Quiet
269	25	24	0	70	8			0	0	0	25		SOL: Quiet
								0	0	0	25		MAG: Active
								0	0	0	25		PRO: Quiet
270	26	25	0	71	9			0	0	0	26		SOL: Quiet
								0	0	0	26		MAG: Active
								0	0	0	26		PRO: Quiet
271	27	26	0	70	22			0	0	0	27		SOL: Quiet
								0	0	0	27		MAG: Active
								0	0	0	27		PRO: Quiet
272	28	27	0	70	15			0	0	0	28		SOL: Quiet
								0	0	0	28		MAG: Active
								0	0	0	28		PRO: Quiet
273	29	28	0	71	15			0	0	0	29		SOL: Quiet
								0	0	0	29		MAG: Active
								0	0	0	29		PRO: Quiet
274	30	29	0	70	7			0	0	0	30		SOL: Quiet
								0	0	0	30		MAG: Quiet
								0	0	0	30		PRO: Quiet

STRATWARM ALERTS - NONE

International Relative Sunspot Numbers
Oct 1995 - Sep 1996

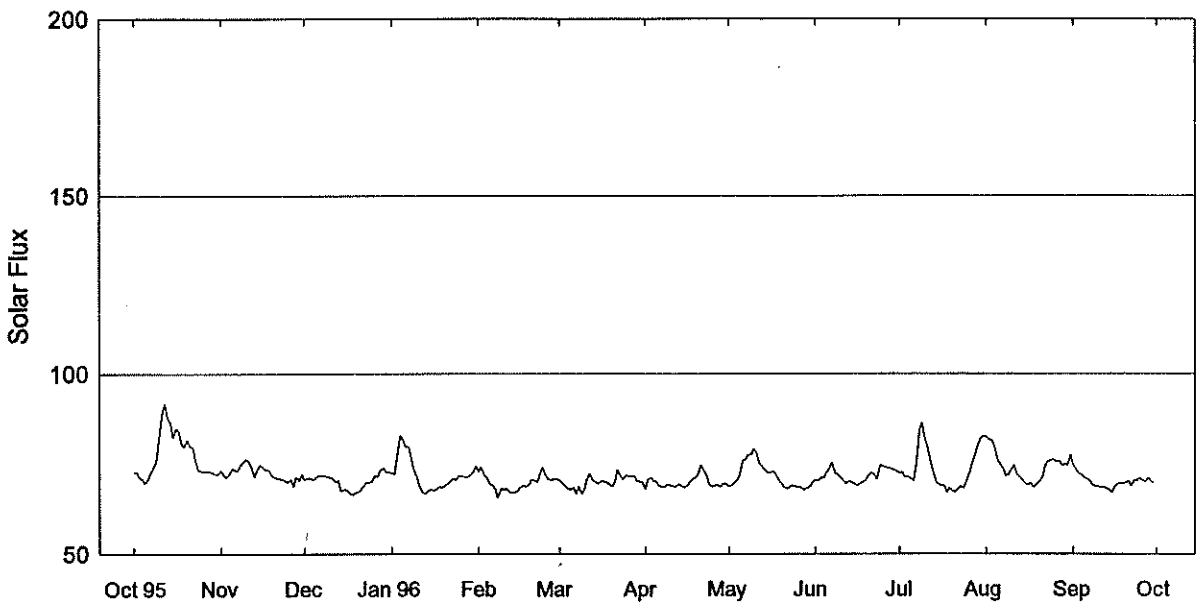


Day	Oct 95	Nov	Dec	Jan 96	Feb	Mar	Apr*	May*	Jun*	Jul*	Aug*	Sep*
1	0	0	16	0	9	0	0	0	8	8	19	11
2	0	8	12	12	9	0	10	0	8	10	23	9
3	0	8	16	19	7	0	11	0	8	9	23	7
4	0	0	16	30	0	9	8	0	9	9	21	7
5	0	0	14	48	0	0	0	0	11	8	14	0
6	0	8	10	47	0	14	0	11	23	10	10	0
7	10	8	10	41	0	9	0	12	20	14	17	12
8	9	8	8	35	0	0	0	13	20	26	9	0
9	22	9	19	19	0	0	0	12	25	27	14	0
10	29	12	17	11	0	0	0	14	12	26	15	0
11	48	9	18	0	0	16	0	20	9	20	19	0
12	57	8	11	0	0	16	9	16	9	13	17	8
13	58	8	10	0	0	16	8	15	0	9	12	0
14	54	8	9	0	0	13	0	14	0	0	21	0
15	31	20	8	0	7	12	0	11	0	0	19	0
16	43	22	0	0	0	10	0	9	0	0	10	0
17	37	33	0	0	0	9	10	8	0	0	11	0
18	28	23	0	0	0	9	19	10	10	0	9	0
19	21	10	0	0	0	8	11	0	17	0	11	0
20	18	10	8	0	8	0	18	8	8	0	10	0
21	26	9	9	9	10	12	12	0	8	0	10	0
22	26	9	9	0	8	16	12	0	8	0	9	0
23	26	9	8	0	8	16	8	0	17	0	10	0
24	25	0	0	11	17	14	8	0	18	0	16	0
25	22	0	12	9	13	13	0	0	17	0	10	0
26	22	0	17	9	8	23	0	0	18	8	13	0
27	12	0	18	9	7	21	0	0	18	9	11	0
28	10	9	17	10	8	18	9	0	18	12	11	0
29	9	11	9	9	9	10	0	0	17	15	9	0
30	0	12	10	16		0	0	0	17	19	14	0
31	10		0	11		0		0		21	17	
Mean	21.1	9.0	10.0	11.5	4.4	9.2	5.1	5.6	11.8	8.8	14.0	1.8

* = Provisional.

Penticton 2800 MHz (10.7cm) Solar Flux
Oct 1995 - Sep 1996

Adjusted to 1 AU



Day	Oct 95	Nov	Dec	Jan 96	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	72.8	73.3	70.7	72.6	72.9	70.6	68.1	68.9	70.4	72.4	82.8	74.8
2	72.7	72.1	71.2	72.3	74.2	69.8	70.6	69.0	70.2	72.8	81.9	73.6
3	71.1	71.4	71.2	78.2	71.9	69.0	71.1	69.5	71.2	71.3	81.6	72.4
4	70.8	72.0	70.7	83.1	71.4	68.1	70.2	70.6	71.2	71.5	79.9	72.0
5	69.8	73.9	71.4	82.1	69.4	68.0	70.0	72.0	72.8	71.0	76.2	71.4
6	70.9	73.5	71.8	79.9	69.2	68.4	68.8	76.0	73.8	70.5	75.1	70.8
7	72.8	73.2*	71.9	79.8	68.2	66.8	68.6	76.3	75.4	74.3	73.7	70.5
8	74.1	74.8	71.8	76.7	65.7	68.8	68.6	77.5	72.4	84.3	71.7	69.2
9	76.0	75.7	71.6	73.4	68.1	66.6	69.3	77.7	72.0	86.5	72.1	68.8
10	82.1	76.5	71.3	71.4	68.0	68.2	69.1	79.1	71.1	82.5	73.6	68.9
11	89.1	75.9	71.1	69.1	68.2	70.9	68.8	78.0	70.2	79.6	74.8	68.5
12	91.8	74.6	70.0	67.2	67.3	72.4	68.7	75.1	69.5	76.2	72.0	68.6
13	87.5	71.5	70.4	66.7	67.0	70.5	69.3	74.3	70.3	72.5	71.4	68.1
14	86.7	73.4	67.6	67.4	67.2	70.0	69.1	73.4	69.8	70.0	70.5	67.9
15	82.5	75.0	68.0	67.9	67.4	69.6	68.5	72.5	69.5	69.3	69.3	67.1
16	85.0	74.2	67.7	67.6	68.5	70.3	68.8	72.6	69.0	69.1	69.3	68.7
17	84.1	73.4	67.1	68.2	69.0	70.0	69.9	72.9	69.6	69.0	69.5	69.6
18	80.9	73.4	66.4	68.7	68.6	70.0	70.8	72.0	69.9	67.0	68.4	69.6
19	79.8	72.2	67.0	68.5	69.4	69.4	71.2	70.4	70.7	68.3	69.3	69.8
20	81.8	71.5	67.3	69.1	70.6	68.8	72.3	69.6	71.9	67.5	70.1	69.7
21	80.3	71.1	67.8	69.5	70.4	69.9	74.8	68.5	72.6	67.2	71.3	70.3
22	79.7	71.0	68.9	70.0	70.1	73.4	73.2	68.1	72.0	68.2	74.5	69.1
23	75.9	70.9	69.9	71.0	72.3	71.6	71.9	68.9	70.9	68.9	75.8	70.4
24	73.5	70.4	69.9	70.7	74.1	70.9	69.5	69.0	74.7	68.3	76.2	70.4
25	73.1	69.9	70.1	71.7	71.8	72.1	68.7	68.7	74.3	70.4	76.3	71.2
26	73.0	70.8	71.7	71.5	70.9	71.6	69.1	68.7	74.2	72.4	75.8	70.4
27	73.1	68.9	71.5	71.6	70.7	71.6	69.2	68.4	73.8	75.6	75.9	70.1
28	72.9	71.5	73.4	71.4	70.8	71.7	68.6	67.8	73.8	77.8	74.7	71.2
29	72.8	70.4	73.9	71.8	70.9	70.3	69.5	68.3	73.3	80.3	75.0	70.3
30	72.3	72.3	72.8	72.5		70.1	69.6	68.4	73.1	82.3	74.7	69.7
31	72.2		72.7	74.5		70.0		69.9		82.7	77.6	
Mean	77.5	72.6	70.3	72.1	69.8	70.0	69.9	71.7	71.8	73.5	74.2	70.1

* = Average of the 1800 and 2200UT readings. 2000UT reading not available.

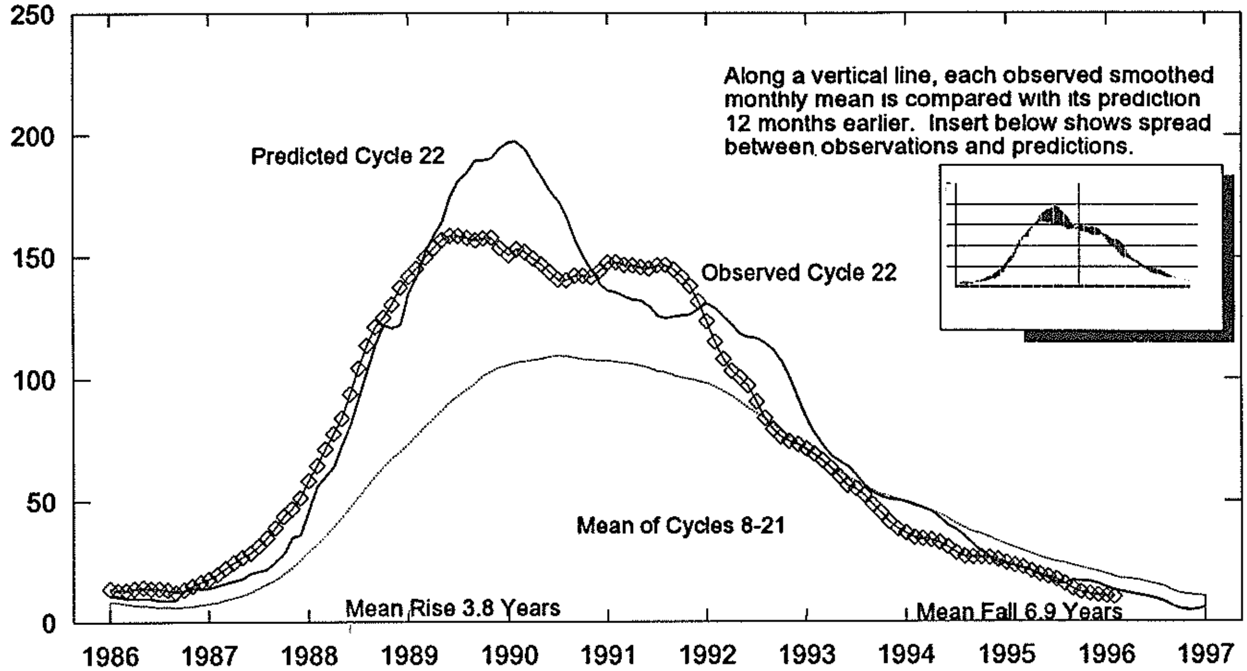
DAILY SOLAR INDICES

September 1996

Day	Day of Year	Bartels Cycle Day	Sunspot Numbers Int	Sunspot Numbers 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	245	5	11	7	73.5	555	210	129	74.8	76	65	37	24	12
2	246	6	9	8	72.3	--	209	129	73.6	73	61	36	25	12
3	247	7	7	7	71.2	--	208	127	72.4	74	60	35	25	12
4	248	8	7	7	70.8	--	208	127	72.0	71	57	35	24	12
5	249	9	0	0	70.3	--	208	127	71.4	72	57	34	24	10
6	250	10	0	0	69.7	--	209	126	70.8	72	56	34	23	11
7	251	11	12	9	69.5	--	209	127	70.5	73	56	34	23	11
8	252	12	0	8	68.2	--	208	125	69.2	70	54	32	22	10
9	253	13	0	0	67.9	--	208	125	68.8	69	53	32	22	9
10	254	14	0	0	68.0	--	202	122	68.9	68	52	31	22	10
11	255	15	0	0	67.6	550	204	122	68.5	69	52	32	22	10
12	256	16	8	7	67.8	559	205	123	68.6	68	52	32	22	10
13	257	17	0	0	67.3	553	207	123	68.1	68	52	32	22	10
14	258	18	0	0	67.1	548	203	123	67.9	70	51	31	21	10
15	259	19	0	0	66.4	517	207	122	67.1	67	52	43	22	10
16	260	20	0	0	68.0	547	208	124	68.7	70	54	33	22	10
17	261	21	0	0	69.0	552	207	124	69.6	69	54	32	23	11
18	262	22	0	0	68.9	550	208	124	69.6	69	54	33	23	11
19	263	23	0	0	69.2	503	208	123	69.8	71	54	34	24	11
20	264	24	0	0	69.2	537	206	123	69.7	70	55	34	25	12
21	265	25	0	0	69.8	526	209	124	70.3	68	55	33	23	12
22	266	26	0	0	68.6	515	209	124	69.1	70	55	34	23	11
23	267	27	0	0	69.9	523	203	123	70.4	69	55	34	24	11
24	268	1	0	0	70.0	522	205	123	70.4	69	56	35	23	11
25	269	2	0	0	70.8	515	206	124	71.2	71	57	36	24	11
26	270	3	0	0	70.0	521	210	125	70.4	71	57	36	24	11
27	271	4	0	0	69.8	522	209	124	70.1	70	56	35	24	11
28	272	5	0	0	71.0	515	206	122	71.2	70	56	35	24	12
29	273	6	0	0	70.1	513	205	123	70.3	71	56	34	25	12
30	274	7	0	0	69.5	522	207	122	69.7	70	54	35	25	12
MEAN			1.8	1.8	69.4	531	207	124	70.1	70	55	34	23	10

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

Cycle 22 Smoothed Sunspot Numbers: Observed and Predicted



Smoothed Sunspot Numbers (observed and Predicted) for Parts of Solar Cycles 22 and 23

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg
1989	142	145	150	154	157	158	158	158	157	157	158	154	154
1990	151	153	152	149	147	144	141	140	142	142	142	144	146
1991	148	148	147	146	146	145	146	147	145	142	138	132	144
1992	124	115	108	103	100	97	91	84	80	76	74	73	94
1993	71	69	67	64	60	56	55	52	48	45	41	38	56
1994	37	35	34	34	33	31	29	27	27	27	26	26	31
1995	24	23	22	21	19	18	17	16	13	12	11	11	17
1996	11	10	10	9	9	9	8	8	7	7	6	6	8
( )				(2)	(4)	(5)	(5)	(6)	(7)	(8)	(8)	(8)	(4)
1997	7	7	8	8	9	10	11	12	13	13	15	16	11
( )	(8)	(8)	(8)	(9)	(10)	(12)	(13)	(15)	(16)	(18)	(20)	(22)	(13)

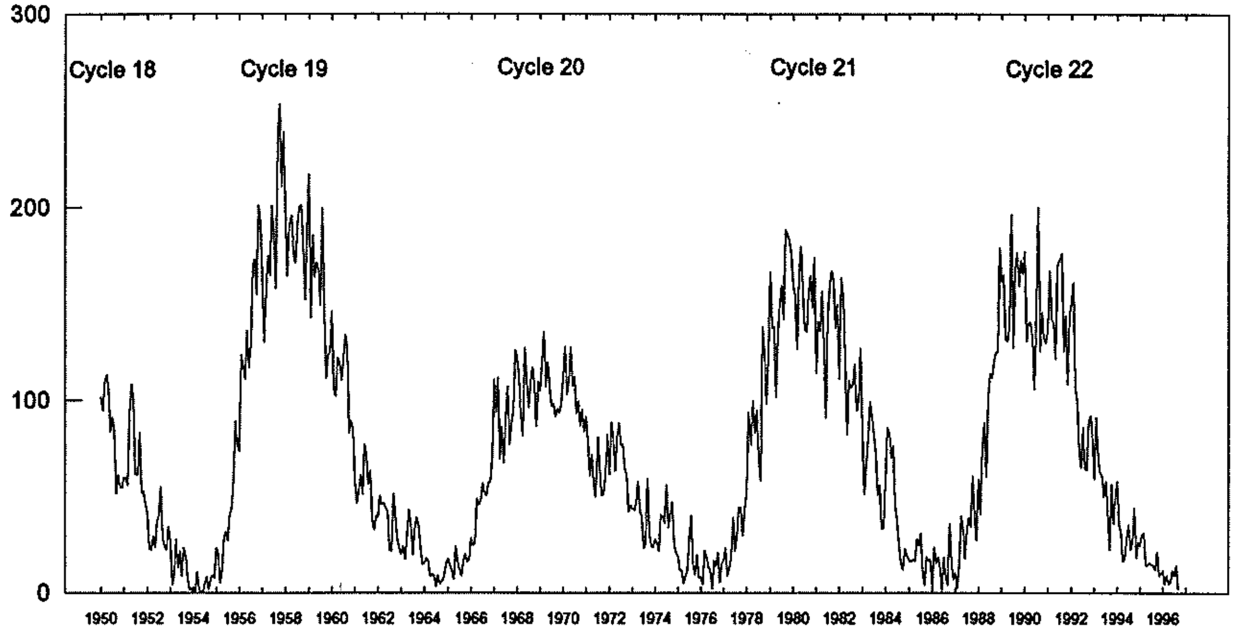
Solar Cycle 22 — Min, Max, and Predictions

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

Observed and Predicted Numbers. For the end of Cycle 21, and the rise and decline of Cycle 22, the table above lists observed smoothed sunspot numbers up to the one that includes the most recent monthly mean. We based these smoothed values on final monthly means through Jun 1995 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 Mar 1997 prediction. There exists a 90% chance that in Mar 1997, the actual smoothed number will fall somewhere between 0 and 16.

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.

Mean Monthly Sunspot Numbers
Jan 1950 - Sep 1996



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean	
1950	101.6	94.8	109.7	113.4	106.2	83.6	91.0	85.2	51.3	61.4	54.8	54.1	83.9	
1951	59.9	59.9	55.9	92.9	108.5	100.6	61.5	61.0	83.1	51.6	52.4	45.8	69.4	
1952	40.7	22.7	22.0	29.1	23.4	36.4	39.3	54.9	28.2	23.8	22.1	34.3	31.5	
1953	26.5	3.9	10.0	27.8	12.5	21.8	8.6	23.5	19.3	8.2	1.6	2.5	13.9	
1954	0.2	0.5	10.9	1.8	0.8	0.2	4.8	8.4	1.5	7.0	9.2	7.6	4.4	m
1955	23.1	20.8	4.9	11.3	28.9	31.7	26.7	40.7	42.7	58.5	89.2	76.9	38.0	
1956	73.6	124.0	118.4	110.7	136.6	116.6	129.1	169.6	173.2	155.3	201.3	192.1	141.7	
1957	165.0	130.2	157.4	175.2	164.6	200.7	187.2	158.0	235.8	253.8	210.9	239.4	190.2	M
1958	202.5	164.9	190.7	196.0	175.3	171.5	191.4	200.2	201.2	181.5	152.3	187.6	184.8	
1959	217.4	143.1	185.7	163.3	172.0	168.7	149.6	199.6	145.2	111.4	124.0	125.0	159.0	
1960	146.3	106.0	102.2	122.0	119.6	110.2	121.7	134.1	127.2	82.8	89.6	85.6	122.3	
1961	57.9	46.1	53.0	61.4	51.0	77.4	70.2	55.8	63.6	37.7	32.6	39.9	53.9	
1962	38.7	50.3	45.6	46.4	43.7	42.0	21.8	21.8	51.3	39.5	26.9	23.2	37.6	
1963	19.8	24.4	17.1	29.3	43.0	35.9	19.6	33.2	38.8	35.3	23.4	14.9	27.9	
1964	15.3	17.7	16.5	8.6	9.5	9.1	3.1	9.3	4.7	6.1	7.4	15.1	10.2	m
1965	17.5	14.2	11.7	6.8	24.1	15.9	11.9	8.9	16.8	20.1	15.8	17.0	15.1	
1966	28.2	24.4	25.3	48.7	45.3	47.7	56.7	51.2	50.2	57.2	57.2	70.4	47.0	
1967	110.9	93.6	111.8	69.5	86.5	67.3	91.5	107.2	76.8	88.2	94.3	126.4	93.8	
1968	121.8	111.9	92.2	81.2	127.2	110.3	96.1	109.3	117.2	107.7	86.0	109.8	105.9	M
1969	104.4	120.5	135.8	106.8	120.0	106.0	96.8	98.0	91.3	95.7	93.5	97.9	105.5	
1970	111.5	127.8	102.9	109.5	127.5	106.8	112.5	93.0	99.5	86.6	95.2	83.5	104.5	
1971	91.3	79.0	60.7	71.8	57.5	49.8	81.0	61.4	50.2	51.7	63.2	82.2	66.6	
1972	61.5	88.4	80.1	63.2	80.5	88.0	76.5	76.8	64.0	61.3	41.6	45.3	68.9	
1973	43.4	42.9	46.0	57.7	42.4	39.5	23.1	25.6	59.3	30.7	23.9	23.3	38.0	
1974	27.6	26.0	21.3	40.3	39.5	36.0	55.8	33.6	40.2	47.1	25.0	20.5	34.5	
1975	18.9	11.5	11.5	5.1	9.0	11.4	28.2	39.7	13.9	9.1	19.4	7.8	15.5	
1976	8.1	4.3	21.9	18.8	12.4	12.2	1.9	16.4	13.5	20.6	5.2	15.3	12.6	m
1977	16.4	23.1	8.7	12.9	18.6	38.5	21.4	30.1	44.0	43.8	29.1	43.2	27.5	
1978	51.9	93.6	76.5	99.7	82.7	95.1	70.4	58.1	138.2	125.1	97.9	122.7	92.5	
1979	166.6	137.5	138.0	101.5	134.4	149.5	159.4	142.2	188.4	186.2	183.3	176.3	155.4	M
1980	159.6	155.0	126.2	164.1	179.9	157.3	136.3	135.4	155.0	164.7	147.9	174.4	154.6	
1981	114.0	141.3	135.5	156.4	127.5	90.9	143.8	158.7	167.3	162.4	137.5	150.1	140.4	
1982	111.2	163.6	153.8	122.0	82.2	110.4	106.1	107.6	118.8	94.7	98.1	127.0	115.9	
1983	84.3	51.0	66.5	80.7	99.2	91.1	82.2	71.8	50.3	55.8	33.3	33.4	66.6	
1984	57.0	85.4	83.5	69.7	76.4	46.1	37.4	25.5	15.7	12.0	22.8	18.7	45.9	
1985	16.5	15.9	17.2	16.2	27.5	24.2	30.7	11.1	3.9	18.6	16.2	17.3	17.9	
1986	2.5	23.2	15.1	18.5	13.7	1.1	18.1	7.4	3.8	35.4	15.2	6.8	13.4	m
1987	10.4	2.4	14.7	39.6	33.0	17.4	33.0	38.7	33.9	60.6	39.9	27.1	29.4	
1988	59.0	40.0	76.2	88.0	60.1	101.8	113.8	111.6	120.1	125.1	125.1	179.2	100.2	
1989	161.3	165.1	131.4	130.6	138.5	196.2	126.9	168.9	176.7	159.4	173.0	165.5	157.6	M
1990	177.3	130.5	140.3	140.3	132.2	105.4	149.4	200.3	125.2	145.5	131.4	129.7	142.6	
1991	136.9	167.5	141.9	140.0	121.3	169.7	173.7	176.3	125.3	144.1	108.2	144.4	145.7	
1992	150.0	161.1	106.7	99.8	73.8	65.2	85.7	64.5	63.9	88.7	91.8	82.6	94.3	
1993	59.3	91.0	69.8	62.2	61.3	49.8	57.9	42.2	22.4	56.4	35.6	48.9	54.6	
1994	57.8	35.5	31.7	16.1	17.8	28.0	35.1	22.5	25.7	44.0	18.0	26.2	29.9	
1995	24.2	29.9	31.1	14.0	14.5	15.6	14.5	14.3	11.8	21.2	9.0	10.0	17.5	
1996	11.5	4.4	9.2	5.1	5.6	11.8	8.8	14.0	1.8				8.0	

Values are preliminary after Mar 1996. For the yearly means, each 'M' marks a sunspot cycle maximum and each 'm' a minimum.

Hα SOLAR FLARES

SEPTEMBER 1996

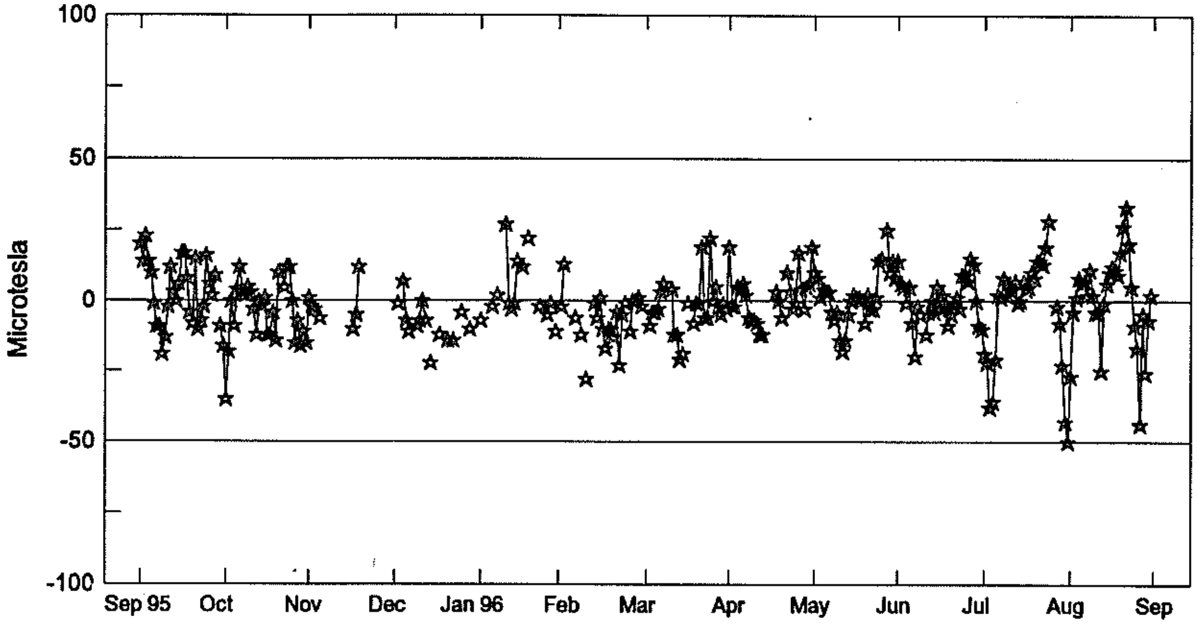
Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP No	CMP Day	Dur (Min)	Imp Opt	Imp Xray	See	Obs Type	Area Measurement Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
GOES	28	1659	1704	1708						9		B 1.6						

"Remarks"

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

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

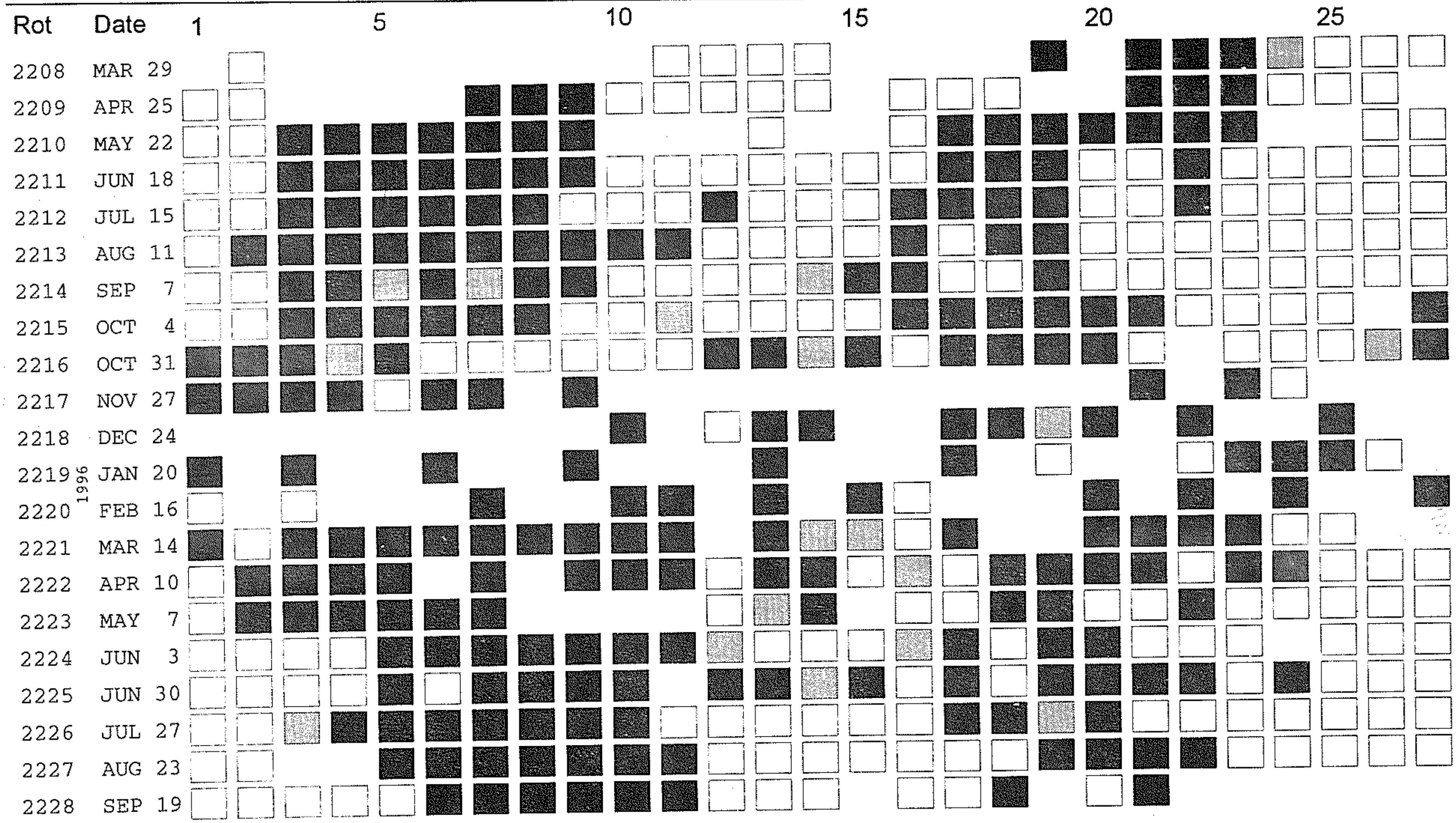
Stanford Mean Solar Magnetic Field (Microtesla)
"Sun-As-A-Star"



Day	Oct 95	Nov	Dec	Jan 96	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	20	-35	1	---	-7	-2	---	19	10	14	-19	-27
2	14	-18	-2	-1	---	13	-9	-2	8	6	-22	-4
3	23	0	-3	---	---	---	-4	-2	1	5	-38	1
4	14	-9	---	7	---	---	-4	5	4	-1	-36	8
5	10	4	6	-7	-2	---	-3	4	3	5	-21	6
6	-1	12	---	-11	---	-6	3	6	3	-8	2	7
7	-9	3	---	---	2	---	6	2	-4	-20	1	2
8	-9	2	---	---	---	-12	---	-6	-7	-2	8	11
9	-19	5	---	-9	---	---	---	-7	-4	-5	2	2
10	-13	3	---	-7	27	-28	4	-7	-14	---	4	-4
11	-2	-3	---	0	-1	---	-12	-8	-18	-12	4	-4
12	12	-12	---	-7	-3	---	-12	-12	-14	-4	7	-25
13	3	0	---	---	-1	-1	-21	-12	-5	0	-1	-1
14	0	-2	---	-22	14	-6	-19	---	0	-4	0	6
15	6	1	---	---	---	1	---	---	2	5	7	10
16	17	-12	---	---	12	-10	-1	---	1	-3	4	12
17	17	-12	-10	-12	---	-17	---	---	1	2	5	11
18	8	-4	---	---	22	-10	-8	3	0	-2	10	9
19	-4	-14	-5	---	---	-10	-1	0	-8	-9	8	17
20	-8	10	12	-14	---	-13	-1	-6	2	-5	14	26
21	15	---	---	---	---	-4	19	---	-3	-1	14	33
22	-10	5	---	-14	-2	-23	-6	10	-3	1	13	20
23	-7	12	---	---	---	-5	-6	3	1	-3	19	5
24	-2	12	---	---	---	-1	22	-3	14	9	28	-9
25	16	0	---	-4	-5	---	0	-1	15	9	---	-17
26	6	-15	---	---	-1	-11	5	17	---	7	---	-44
27	2	-7	---	---	---	0	-2	4	25	15	-2	-5
28	9	-16	---	-10	-11	0	-5	-3	10	13	-8	-26
29	---	-11	---	---	---	1	-1	5	14	0	-23	-7
30	-9	-15	---	---		-2	-3	6	8	-9	-43	2
31	-16		---	---		---		19		-10	-50	

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

STANFORD MEAN SOLAR MAGNETIC FIELD

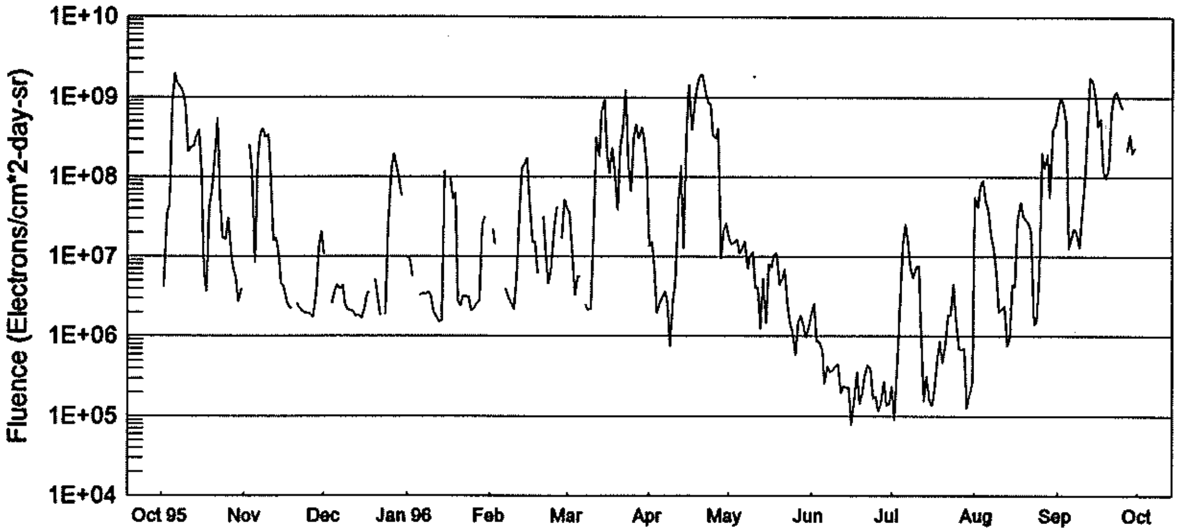


Mean Solar Magnetic Field Polarity: = field > 2 microT; = -2 microT ≤ field ≤ 2 microT

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

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

GOES Daily Electron Fluence
Oct 95 - Sep 96



Day	Oct 95	Nov	Dec	Jan 96	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	--	--	1.0E+07	9.7E+06	--	3.8E+07	1.3E+07	1.7E+07	1.9E+06	2.3E+05	5.6E+07	7.0E+08
2	4.2E+06	--	--	9.4E+06	2.1E+07	3.6E+07	1.5E+07	1.4E+07	2.5E+06	9.1E+04	4.2E+07	9.9E+08
3	3.4E+07	2.4E+08	--	5.6E+06	1.4E+07	9.9E+06	7.5E+06	1.4E+07	8.5E+05	5.1E+05	7.8E+07	8.3E+08
4	4.5E+07	1.1E+08	2.6E+06	--	--	3.2E+06	1.9E+06	1.6E+07	8.6E+05	1.8E+06	9.1E+07	4.8E+08
5	8.6E+08	8.3E+06	3.7E+06	--	--	5.7E+06	2.6E+06	1.1E+07	6.6E+05	1.4E+07	5.1E+07	1.2E+07
6	1.9E+09	1.7E+08	4.4E+06	3.3E+06	--	5.5E+06	3.1E+06	1.2E+07	2.5E+05	2.5E+07	3.9E+07	1.7E+07
7	1.4E+09	3.5E+08	3.8E+06	3.4E+06	3.8E+06	--	3.6E+06	1.5E+07	4.2E+05	1.5E+07	1.7E+07	2.2E+07
8	1.3E+09	4.0E+08	4.3E+06	3.3E+06	3.1E+06	2.4E+06	2.6E+06	7.1E+06	3.5E+05	6.9E+06	1.2E+07	2.0E+07
9	1.1E+09	3.1E+08	2.5E+06	3.5E+06	2.6E+06	2.1E+06	7.5E+05	1.0E+07	3.7E+05	5.4E+06	6.2E+06	1.2E+07
10	7.2E+08	3.3E+08	2.1E+06	3.2E+06	2.2E+06	2.2E+06	3.0E+06	1.1E+07	4.1E+05	7.4E+06	2.0E+06	3.6E+07
11	2.0E+08	1.3E+08	2.1E+06	2.0E+06	5.3E+06	2.0E+07	4.3E+06	4.0E+06	4.4E+05	7.6E+06	2.1E+06	8.5E+07
12	2.3E+08	1.5E+07	2.0E+06	1.7E+06	3.0E+07	3.1E+08	4.9E+07	4.1E+06	1.9E+05	9.6E+05	2.3E+06	3.8E+08
13	2.4E+08	1.6E+07	1.7E+06	1.4E+06	1.3E+08	1.8E+08	1.3E+08	1.2E+06	2.4E+05	1.5E+05	7.6E+05	1.7E+09
14	3.1E+08	1.1E+07	1.8E+06	1.5E+06	1.4E+08	6.6E+08	1.2E+07	5.2E+06	2.2E+05	3.1E+05	9.2E+05	1.6E+09
15	3.8E+08	4.6E+06	1.6E+06	1.2E+08	1.7E+08	9.2E+08	2.9E+08	1.4E+06	2.2E+05	1.5E+05	4.4E+06	9.7E+08
16	1.1E+08	4.2E+06	2.0E+06	--	3.9E+07	1.9E+08	1.4E+09	8.0E+06	7.7E+04	1.3E+05	4.2E+06	4.3E+08
17	6.6E+06	2.7E+06	3.3E+06	9.6E+07	1.5E+07	1.1E+08	3.9E+08	7.4E+06	1.7E+05	2.2E+05	3.0E+07	5.4E+08
18	3.6E+06	2.2E+06	3.6E+06	5.2E+07	1.5E+07	2.3E+08	8.2E+08	1.0E+07	3.6E+05	5.2E+05	4.8E+07	1.2E+08
19	4.0E+07	2.2E+06	--	6.3E+07	6.1E+06	1.2E+08	1.3E+09	1.1E+07	1.3E+05	8.5E+05	3.1E+07	9.6E+07
20	7.4E+07	--	5.2E+06	2.8E+06	--	3.8E+07	1.8E+09	4.5E+06	1.9E+05	4.7E+05	2.9E+07	1.2E+08
21	1.9E+08	2.5E+06	3.1E+06	2.4E+06	3.1E+07	2.4E+08	1.9E+09	5.2E+06	3.2E+05	8.5E+05	2.6E+07	6.5E+08
22	5.3E+08	2.2E+06	1.8E+06	3.1E+06	1.0E+07	3.7E+08	1.2E+09	6.8E+06	4.3E+05	1.8E+06	2.0E+07	1.1E+09
23	5.4E+07	2.0E+06	--	3.1E+06	4.5E+06	1.2E+09	8.6E+08	2.6E+06	3.9E+05	1.8E+06	1.3E+06	1.1E+09
24	1.7E+07	1.9E+06	1.8E+06	3.1E+06	6.8E+06	1.3E+08	8.3E+08	1.4E+06	1.6E+05	4.4E+06	1.5E+06	9.3E+08
25	1.6E+07	1.9E+06	2.4E+07	2.0E+06	2.2E+07	6.6E+07	3.3E+08	1.1E+06	1.7E+05	1.6E+06	5.9E+06	7.1E+08
26	3.0E+07	1.8E+06	1.2E+08	2.2E+06	4.2E+07	3.0E+08	3.0E+08	5.8E+05	1.1E+05	6.9E+05	1.9E+08	--
27	1.2E+07	1.7E+06	1.9E+08	2.5E+06	--	4.5E+08	4.1E+08	1.4E+06	1.4E+05	6.8E+05	1.2E+08	2.2E+08
28	6.8E+06	3.4E+06	1.3E+08	2.7E+06	1.6E+07	3.1E+08	9.5E+06	1.8E+06	2.7E+05	6.9E+05	1.9E+08	3.4E+08
29	5.5E+06	1.2E+07	9.2E+07	2.5E+07	5.1E+07	4.1E+08	2.1E+07	1.4E+06	1.3E+05	1.2E+05	5.6E+07	2.0E+08
30	2.7E+06	2.0E+07	5.7E+07	3.1E+07		3.3E+08	2.6E+07	9.7E+05	1.4E+05	1.8E+05	4.1E+08	2.3E+08
31	3.9E+06		--	--		1.2E+08		1.3E+06		2.5E+05	4.4E+08	

NOTE: The electron detector responds significantly to protons above 32 MeV; therefore, electron data are contaminated when a proton event is in progress. These days are indicated with '-999' in the table and are not plotted. '--' indicates data not available. GOES9 data begins April, 1996.

CONTENTS

Prompt Reports   Number 626   Part I

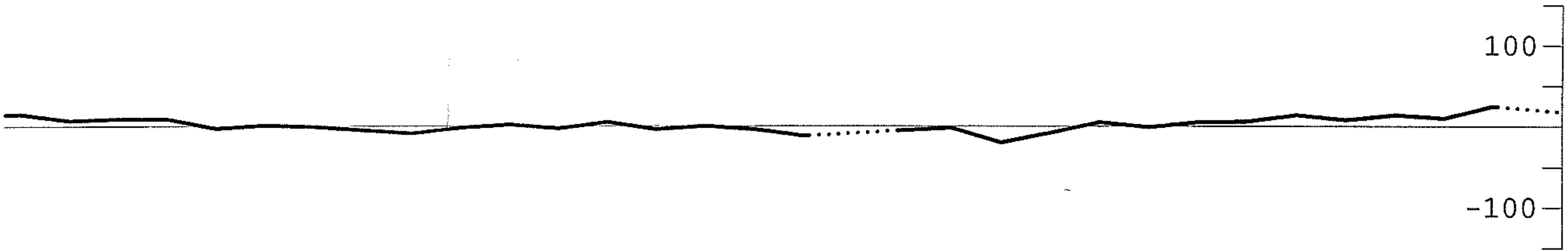
DATA FOR AUGUST 1996

SOLAR MAGNETIC FIELD SYNOPTIC CHART

CARRINGTON ROTATION NUMBER 1911
(28 June to 25 July 1996)

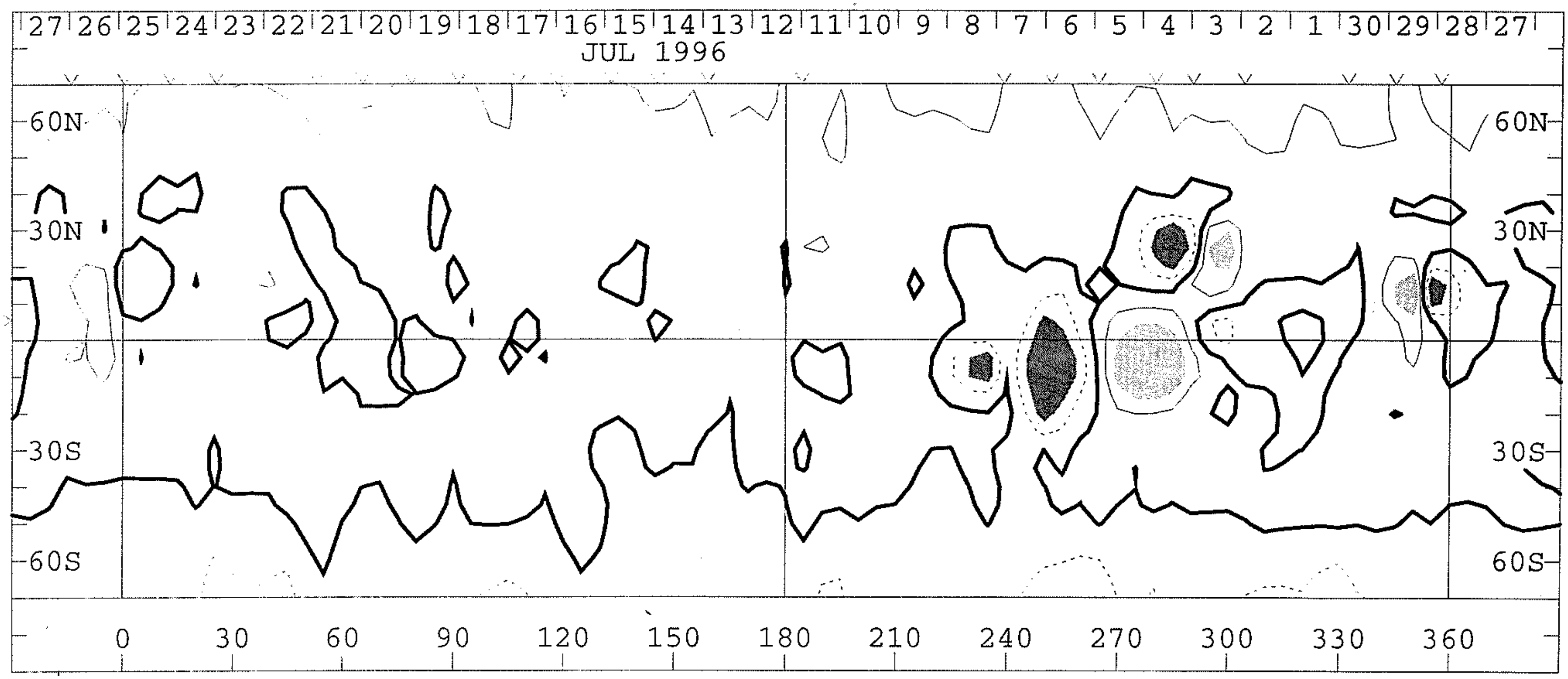
WILCOX SOLAR OBSERVATORY

Mean Field



Photospheric Magnetic Field

0, ±100, 500, 1000, 2000 MicroTesla

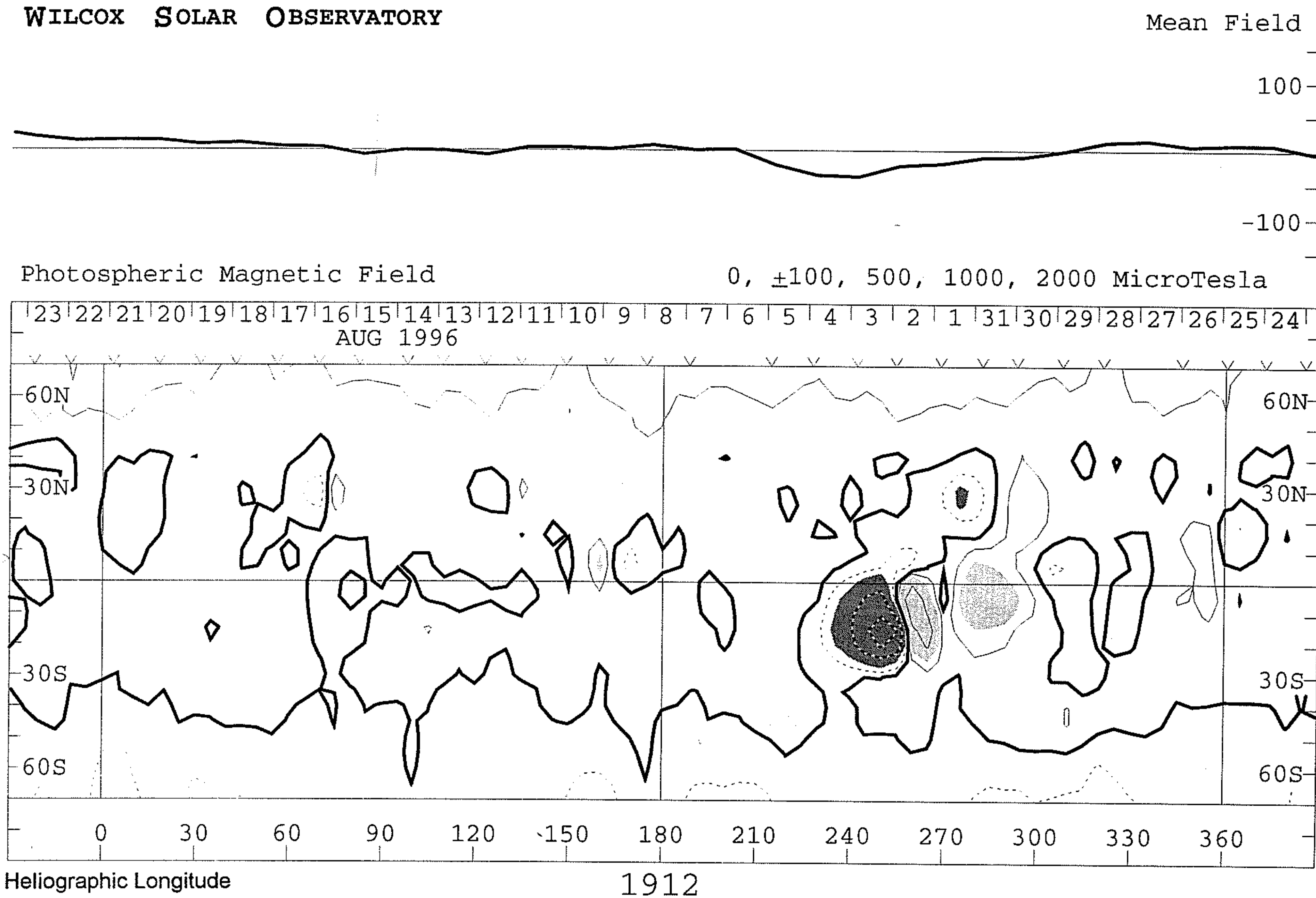


Heliographic Longitude

1911

SOLAR MAGNETIC FIELD SYNOPTIC CHART

CARRINGTON ROTATION NUMBER 1912
(25 July to 22 August 1996)



SOLAR MAGNETIC FIELD SYNOPTIC CHART

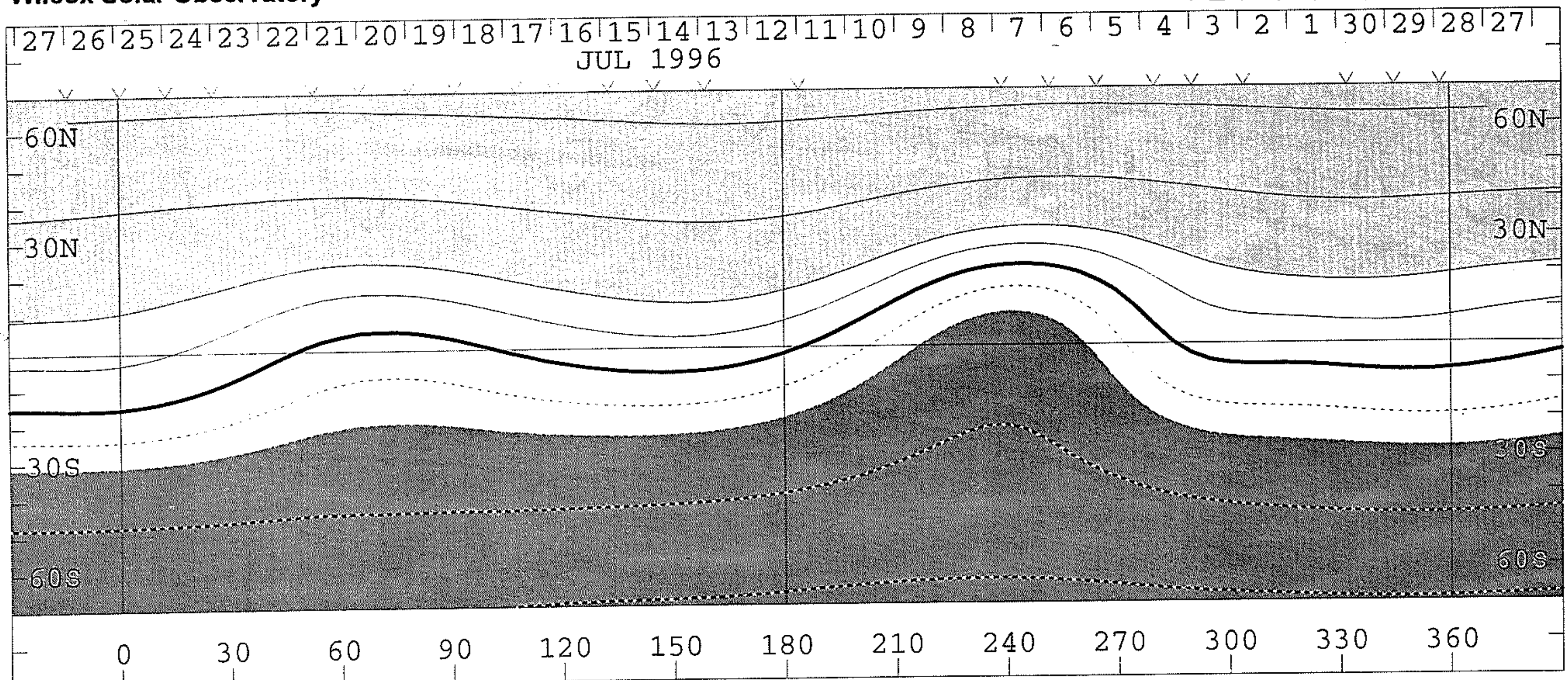
SOURCE SURFACE FIELD

CARRINGTON ROTATION NUMBER 1911

(28 June to 25 July 1996)

Wilcox Solar Observatory

0, ±1, 2, 5, 10, 20 microTesla



Heliographic Longitude

1911

SOLAR MAGNETIC FIELD SYNOPTIC CHART

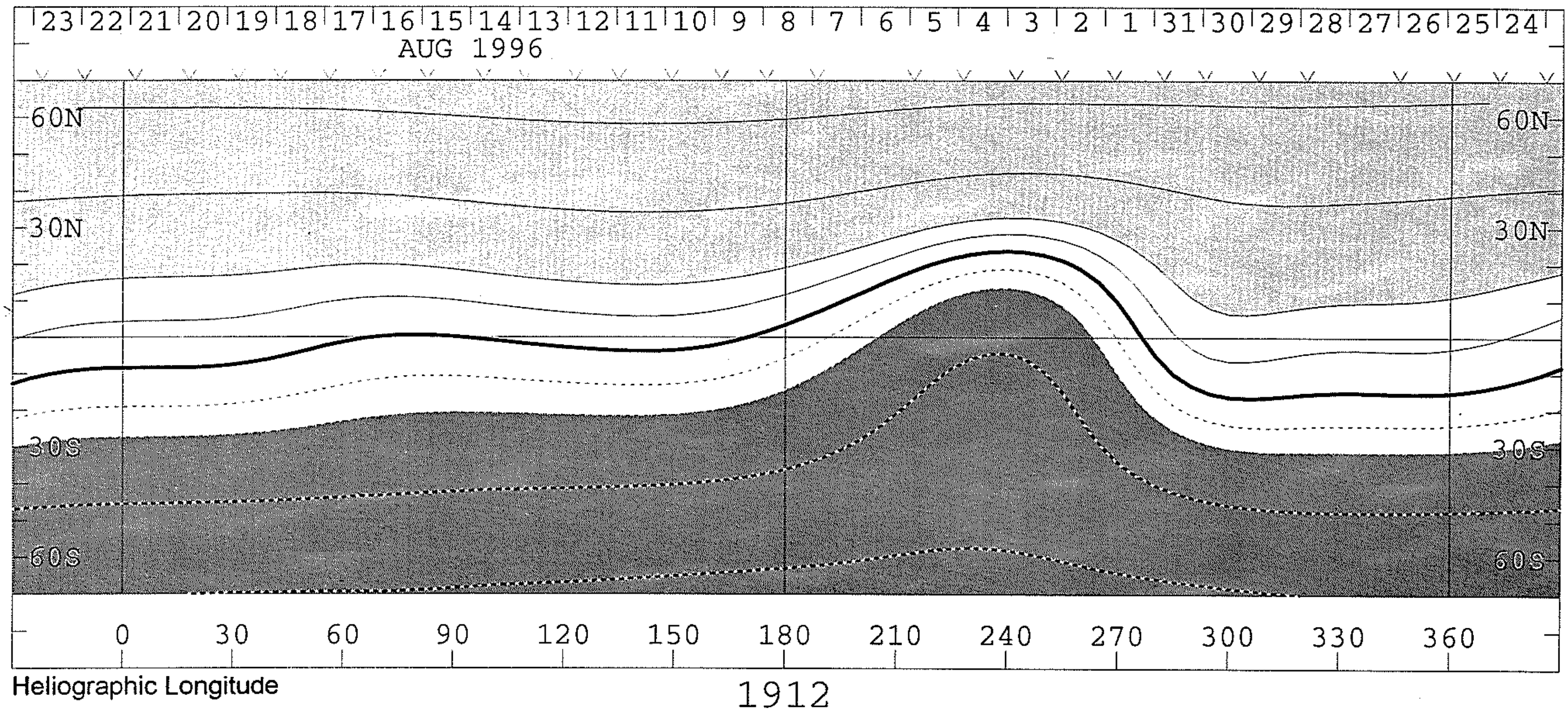
SOURCE SURFACE FIELD

CARRINGTON ROTATION NUMBER 1912

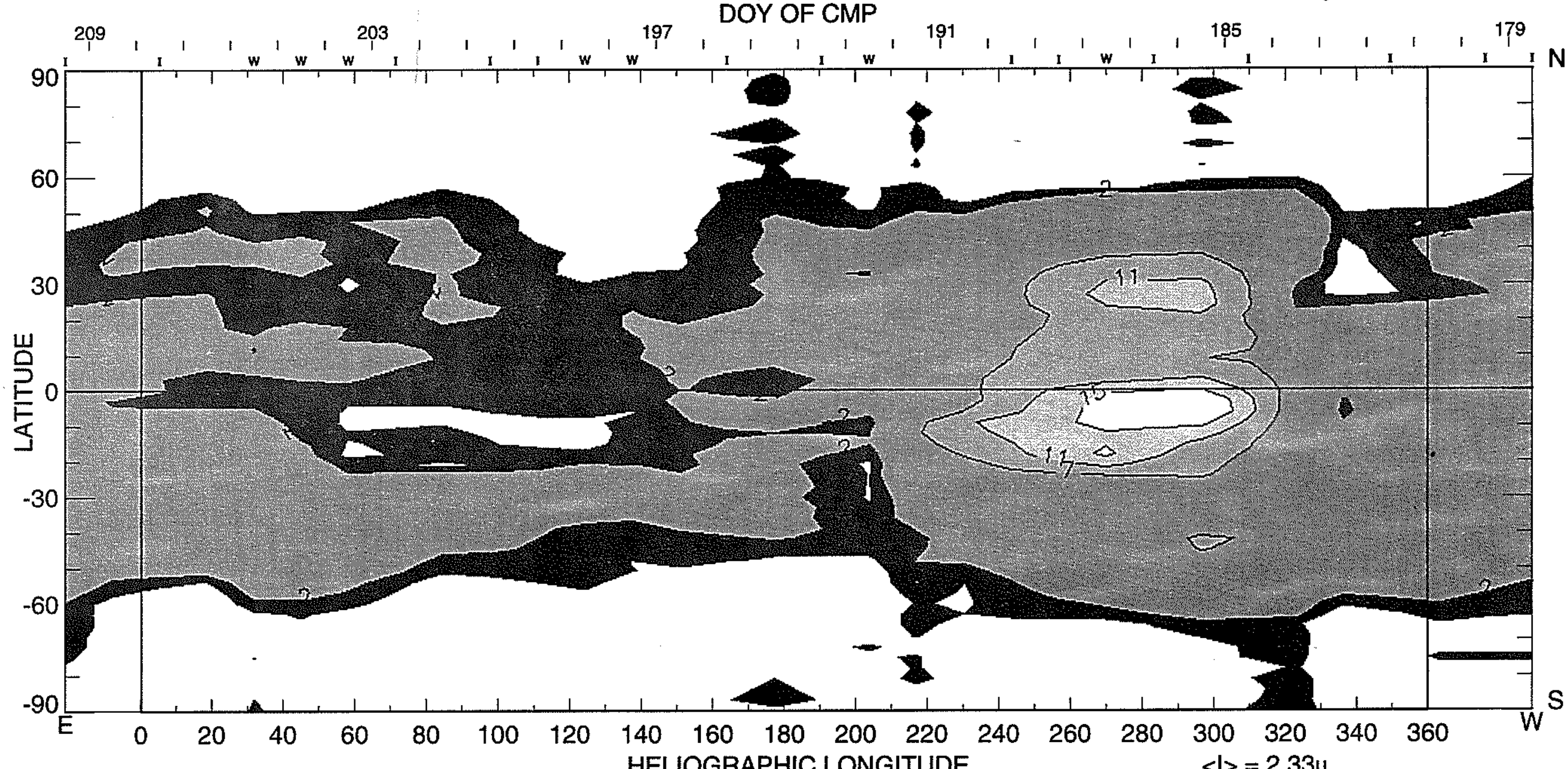
(25 July to 22 August 1996)

Wilcox Solar Observatory

0, ±1, 2, 5, 10, 20 microTesla



CARRINGTON ROTATION NUMBER 1911 ; NSO/SACRAMENTO PEAK FE XIV @ $R = 1.15R_o$

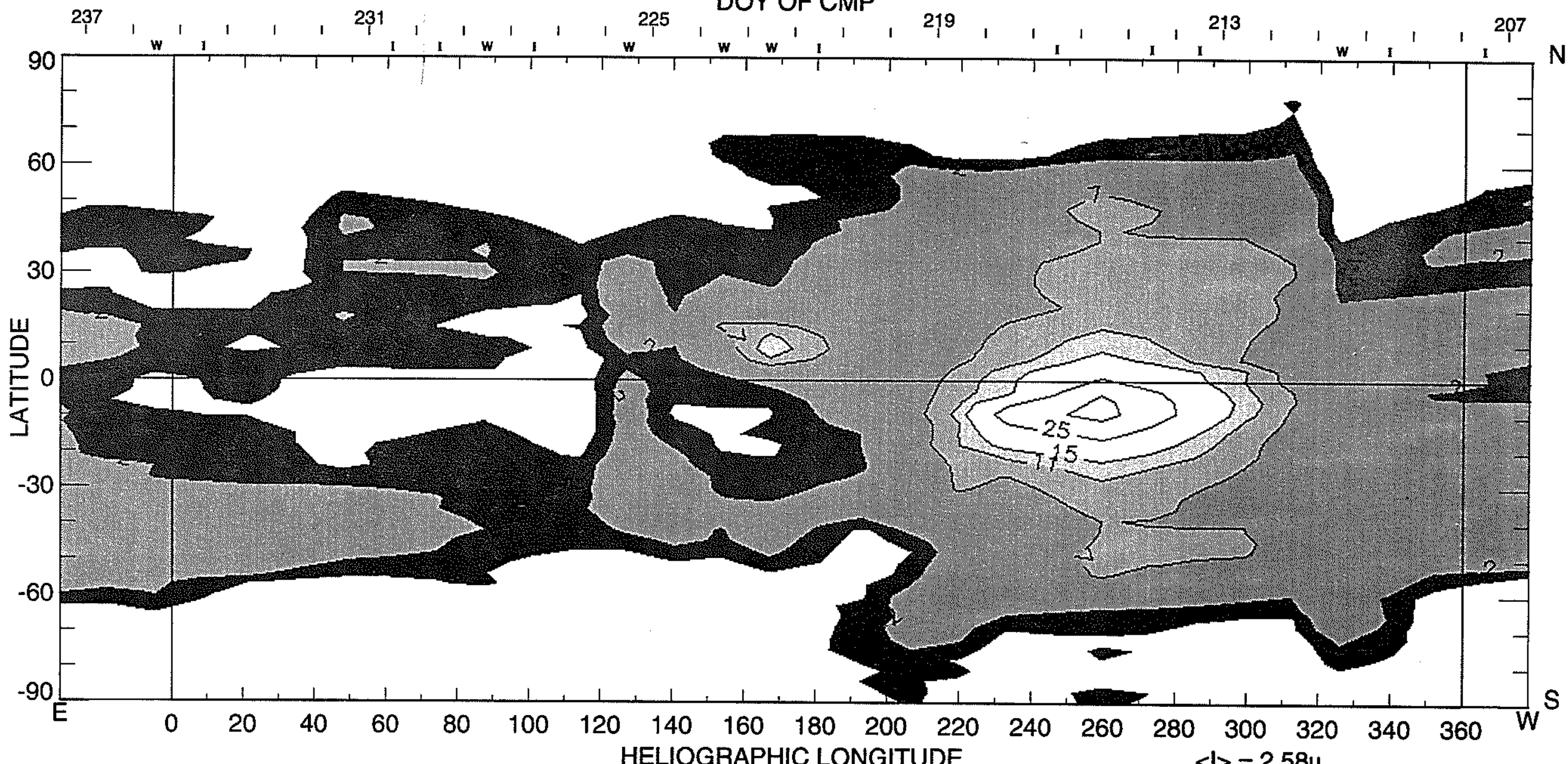


(19-Sep-96)

1996 E+W LIMB CONTOURS: 1, 2, 7, 11, 15, 25, 35, 45 MILLIONTHS OF I_o

CORONAL HOLES ARE SHOWN AS WHITE BORDERED BY BLACK

CARRINGTON ROTATION NUMBER 1912 ; NSO/SACRAMENTO PEAK FE XIV @ R = 1.15R_o



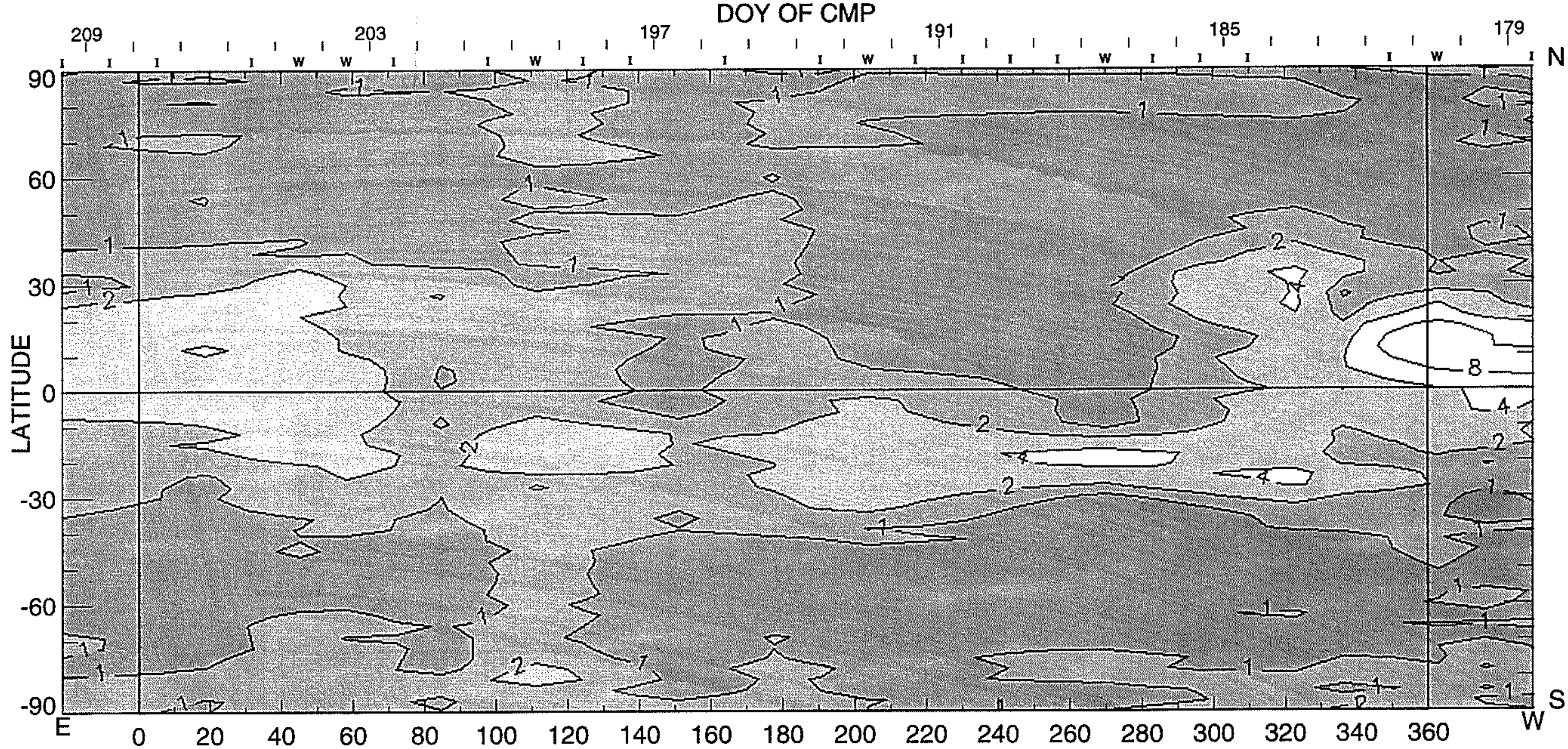
(20-Sep-96)

<I> = 2.58μ

1996 E+W LIMB CONTOURS: 1, 2, 7, 11, 15, 25, 35, 45 MILLIONTHS OF I_o

CORONAL HOLES ARE SHOWN AS WHITE BORDERED BY BLACK

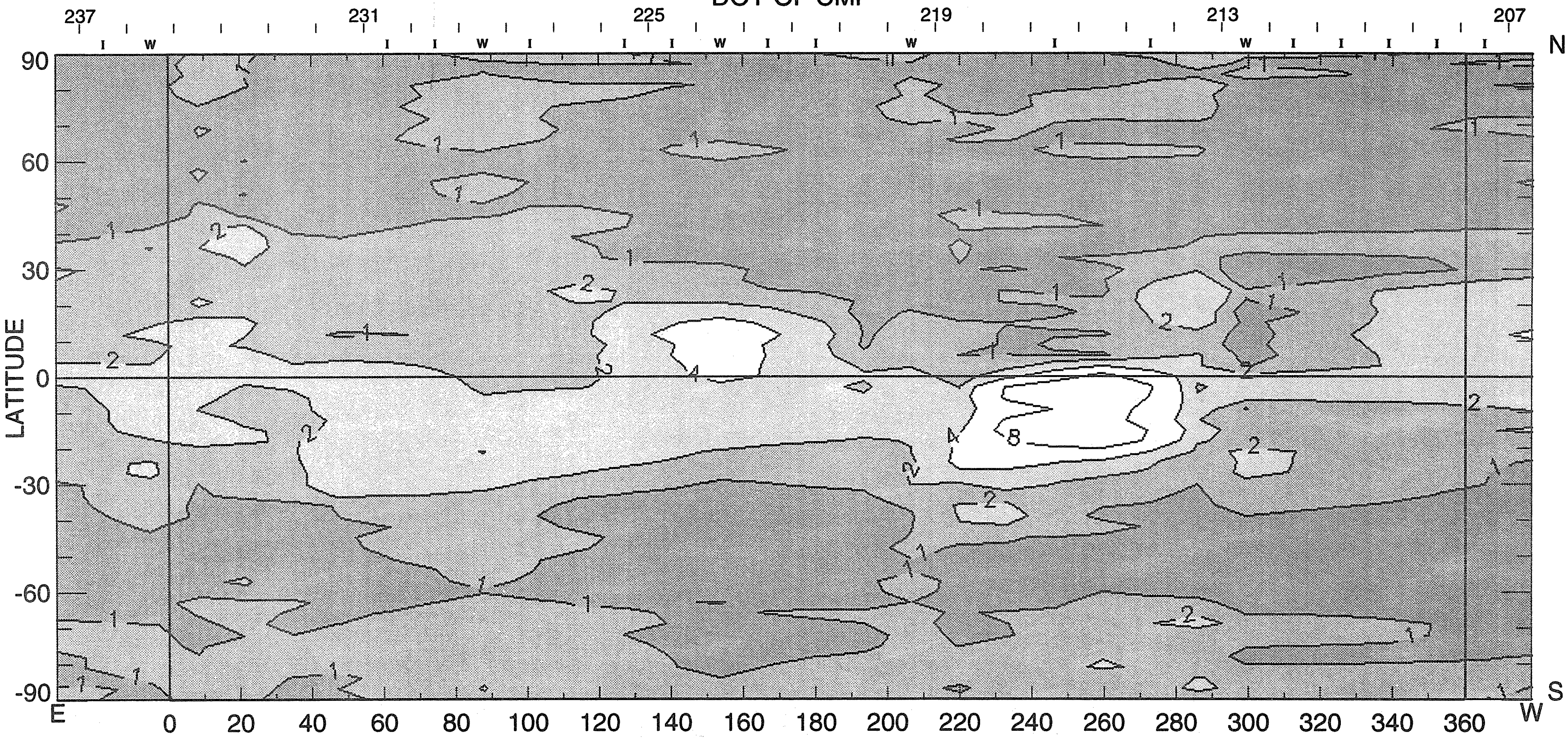
CARRINGTON ROTATION NUMBER 1911 ; NSO/SACRAMENTO PEAK FE X @ R = 1.15R_o



HELIOGRAPHIC LONGITUDE $\langle I \rangle = 1.31\mu$

(19-Sep-96) 1996 E+W LIMB CONTOURS: 1, 2, 4, 8, 16, 32, 48 MILLIONTHS OF I_o

CARRINGTON ROTATION NUMBER 1912 ; NSO/SACRAMENTO PEAK FE X @ R = 1.15R_o



(20-Sep-96)

1996 E+W LIMB CONTOURS: 1, 2, 4, 8, 16, 32, 48 MILLIONTHS OF I_o

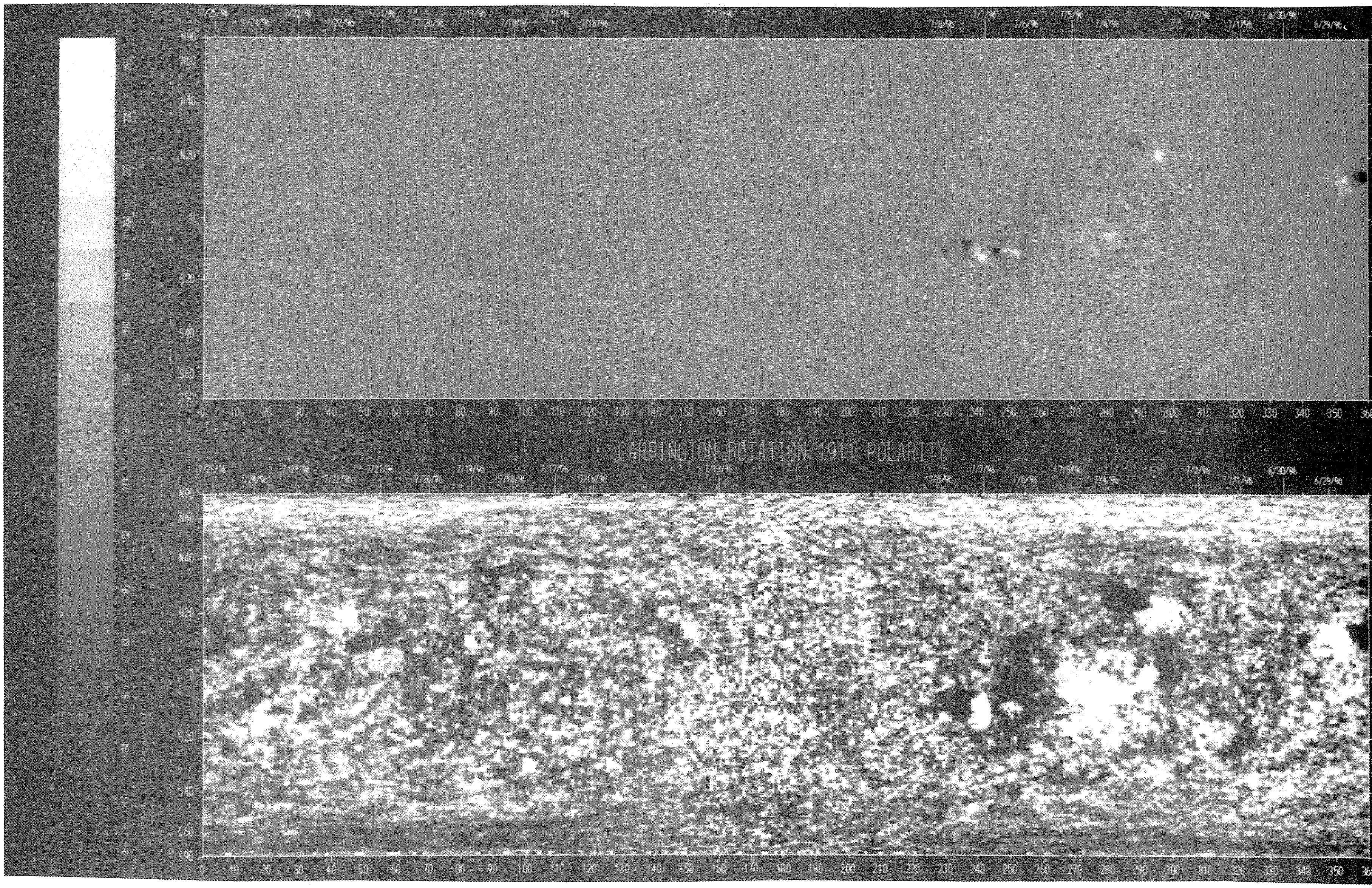
NOTE: No Ca XV emission observed at Sacramento Peak for rotations 1911 and 1912.

SOLAR MAGNETIC FIELD SYNOPTIC CHART

CARRINGTON ROTATION NUMBER 1911
(28 June to 25 July 1996)

National Solar Observatory/Kitt Peak

Dates of Observation



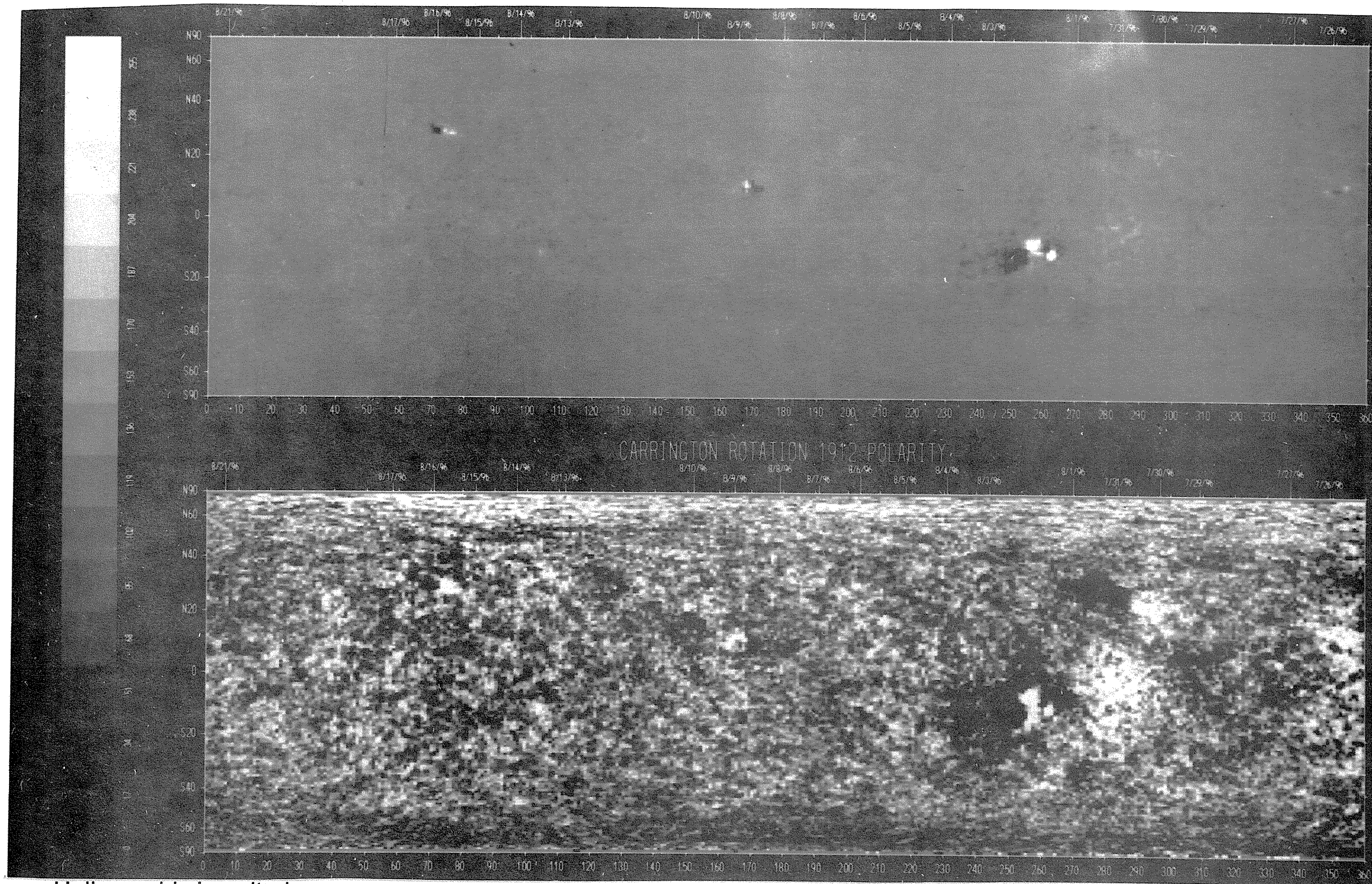
Heliographic Longitude

SOLAR MAGNETIC FIELD SYNOPTIC CHART

CARRINGTON ROTATION NUMBER 1912
(25 July to 22 August 1996)

National Solar Observatory/Kitt Peak

Dates of Observation



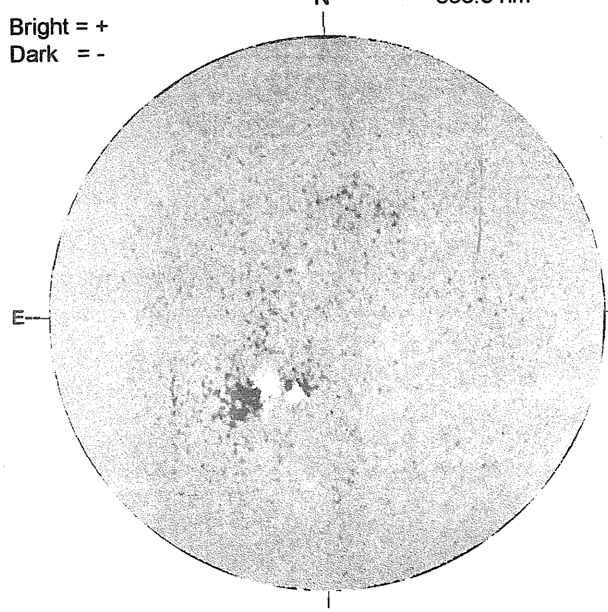
Heliographic Longitude

AUGUST 1, 1996 (P= 10.93, Bo = 5.79 , Lo = 279.33)

KITT PEAK MAGNETOGRAM

868.8 nm

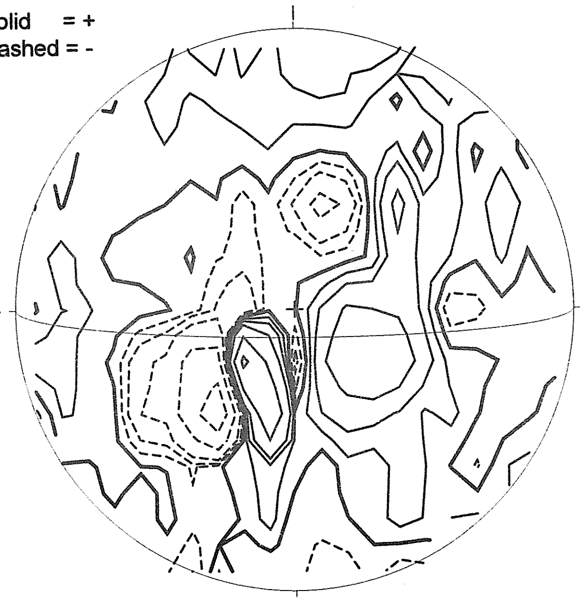
Bright = +
Dark = -



1705 UT

STANFORD MAGNETOGRAM

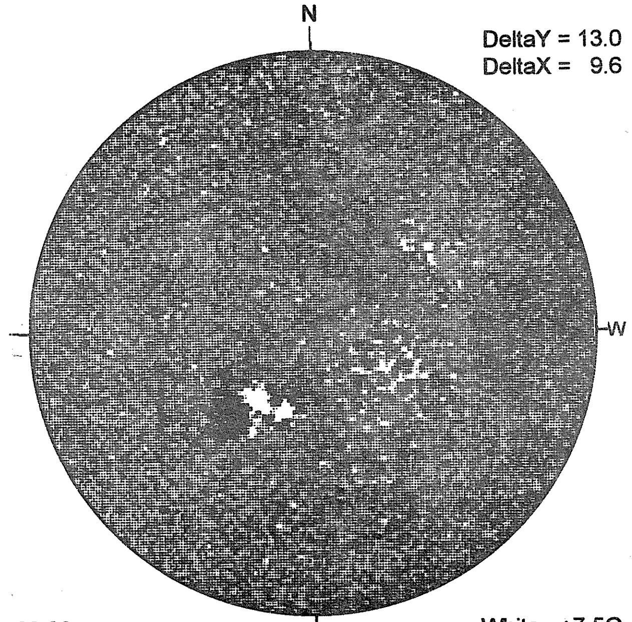
Solid = +
Dashed = -



1920 UT

MT. WILSON MAGNETOGRAM

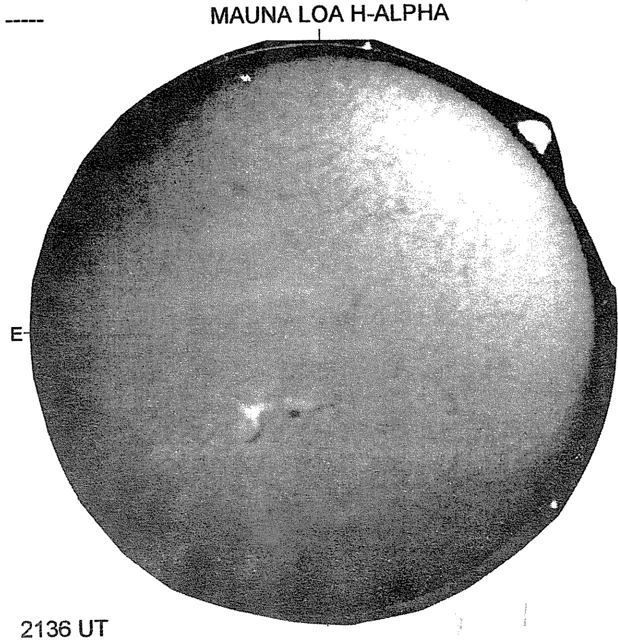
DeltaY = 13.0
DeltaX = 9.6



White= +7.5G
Black = -7.5G

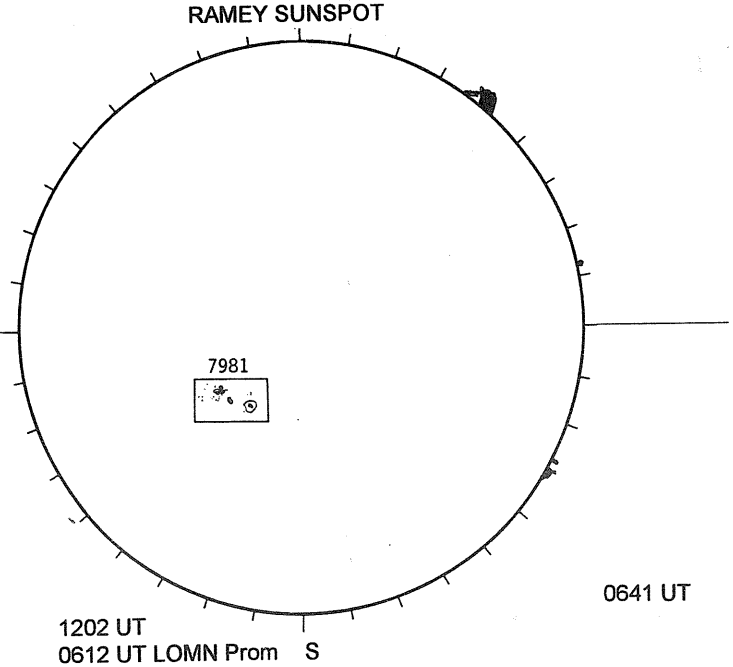
20.39 -
21.32 UT

MAUNA LOA H-ALPHA



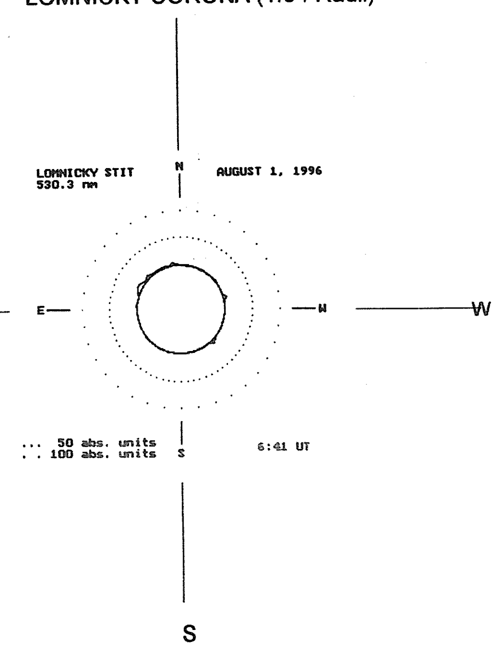
2136 UT
2106 UT Prom

RAMEY SUNSPOT



1202 UT
0612 UT LOMN Prom

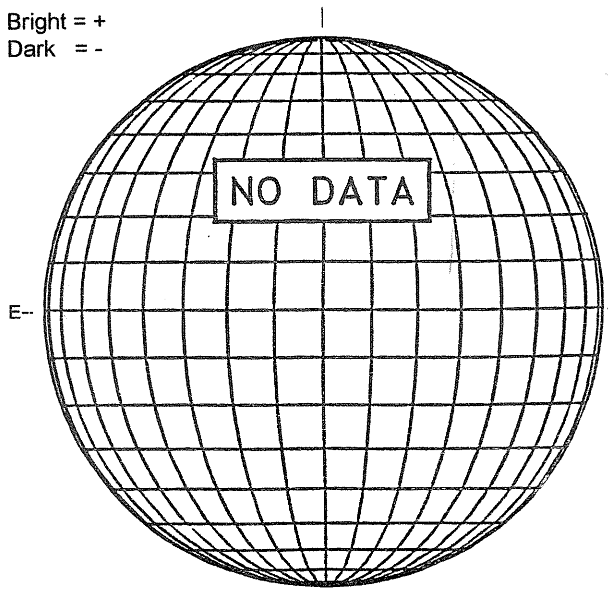
LOMNICKY CORONA (1.04 Radii)----



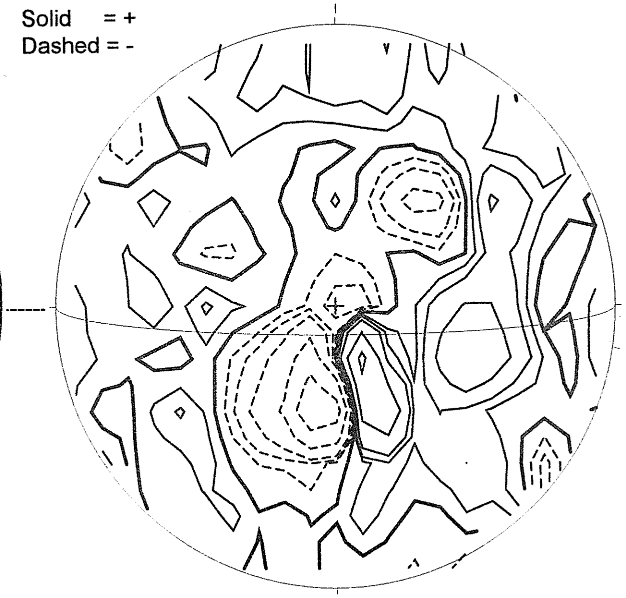
0641 UT

AUGUST 2, 1996 (P= 11.32 , Bo = 5.87, Lo = 266.10)

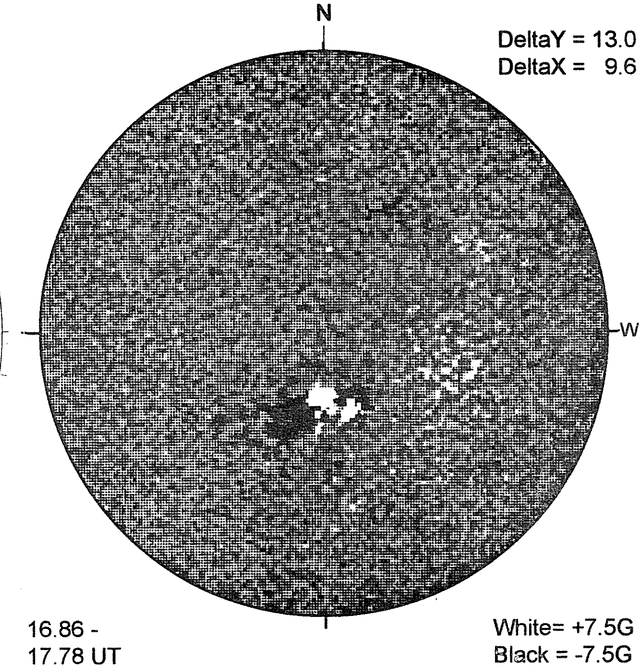
KITT PEAK MAGNETOGRAM



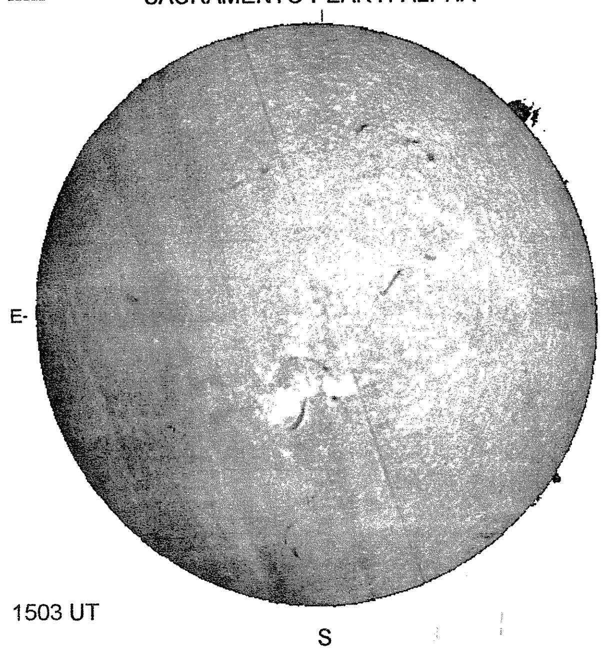
STANFORD MAGNETOGRAM



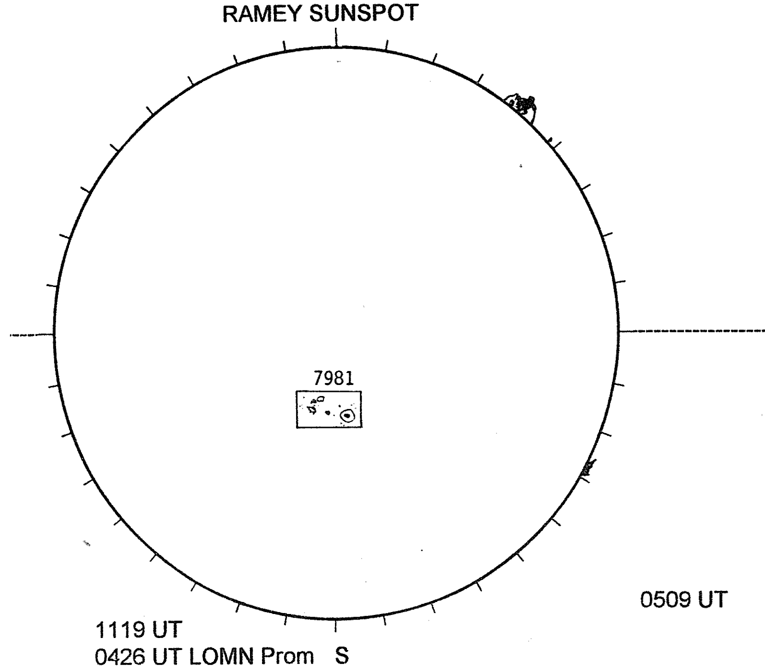
MT. WILSON MAGNETOGRAM



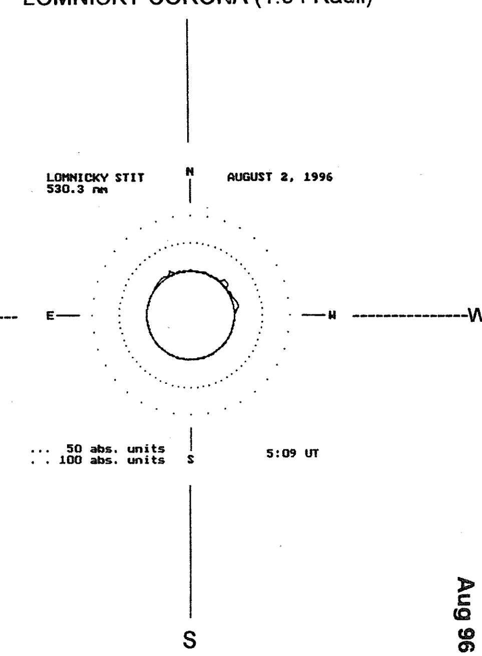
SACRAMENTO PEAK H-ALPHA



RAMEY SUNSPOT



LOMNICKY CORONA (1.04 Radii)----

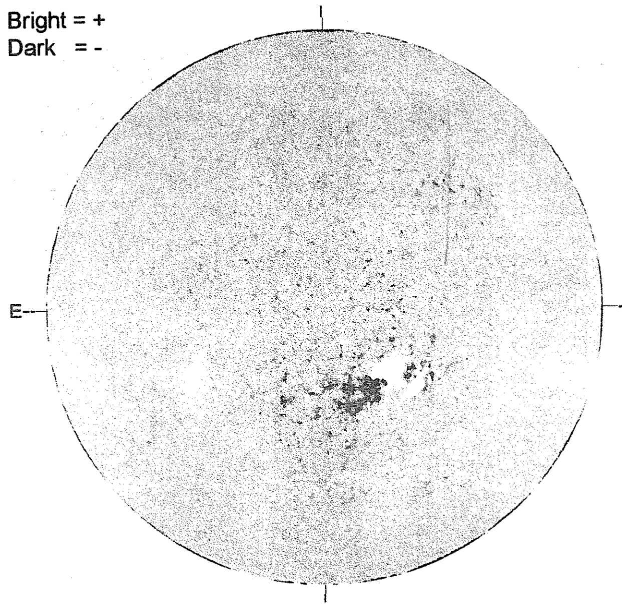


AUGUST 3, 1996 (P= 11.71 , Bo = 5.94 , Lo = 252.88)

KITT PEAK MAGNETOGRAM

868.8 nm

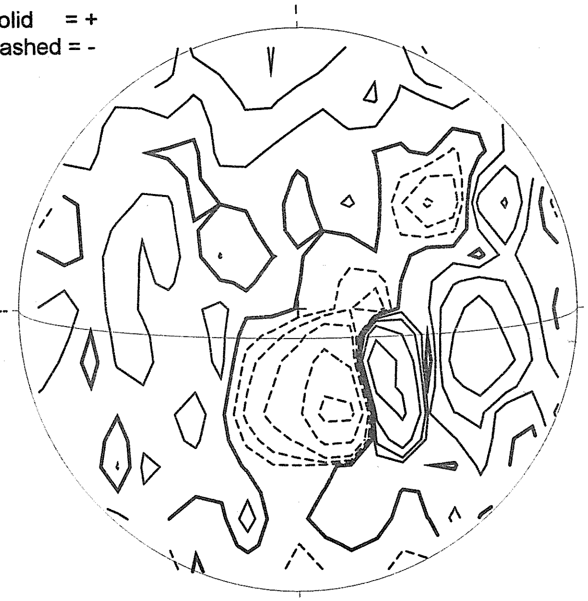
Bright = +
Dark = -



1611 UT

STANFORD MAGNETOGRAM

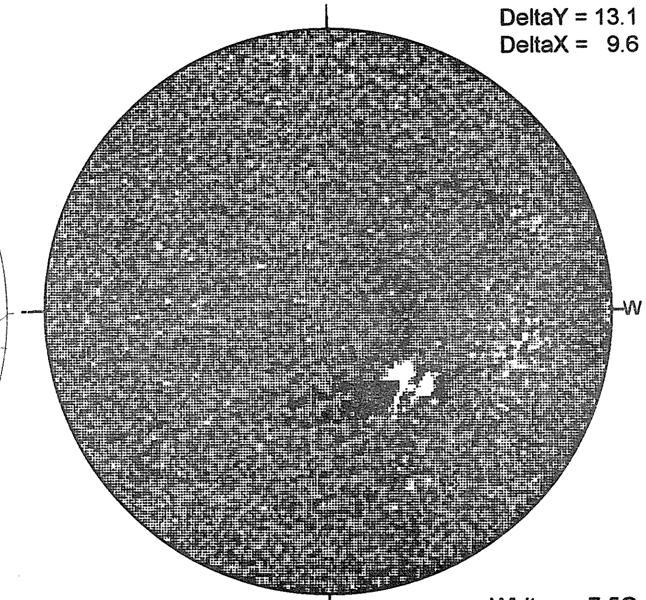
Solid = +
Dashed = -



1941 UT

MT. WILSON MAGNETOGRAM

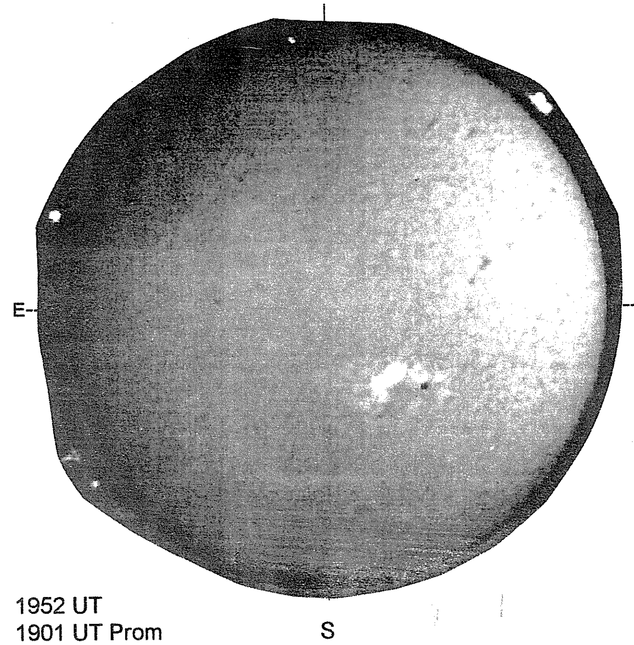
DeltaY = 13.1
DeltaX = 9.6



21.03 -
21.95 UT

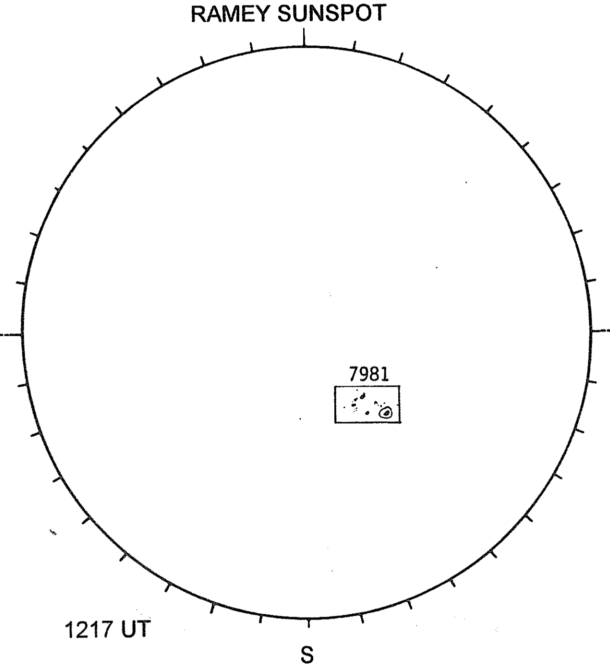
White = +7.5G
Black = -7.5G

MAUNA LOA H-ALPHA



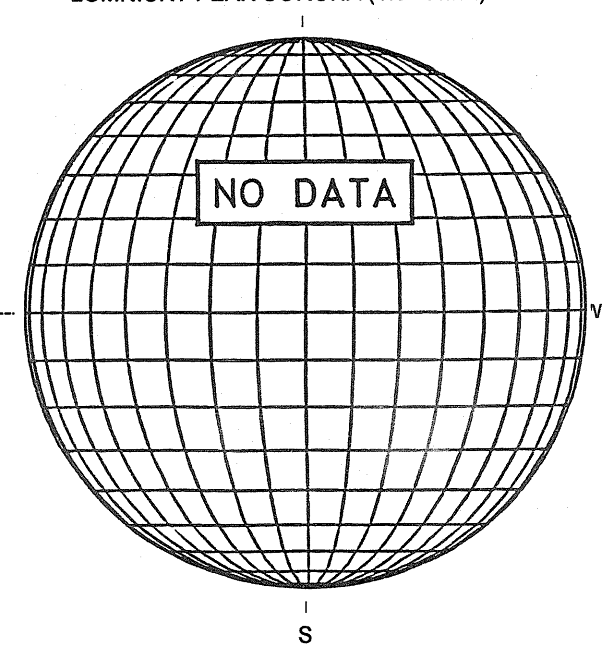
1952 UT
1901 UT Prom

RAMEY SUNSPOT



1217 UT

LOMNICKY PEAK CORONA (1.04 Radii)----

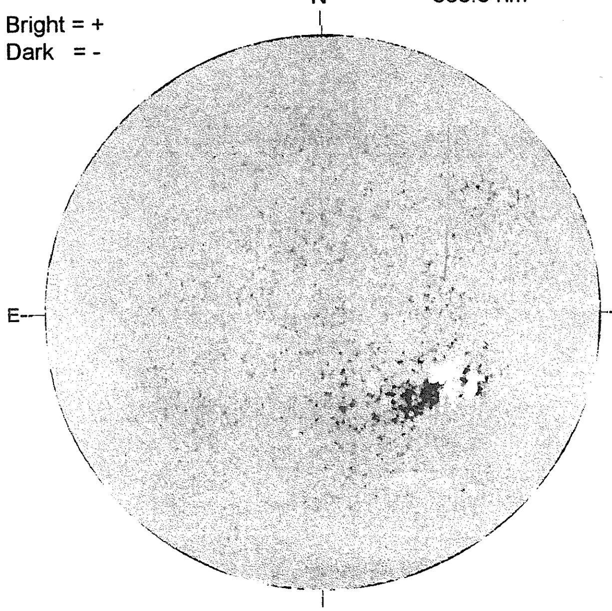


AUGUST 4, 1996 (P= 12.10 , Bo = 6.00 Lo = 239.65)

KITT PEAK MAGNETOGRAM

868.8 nm

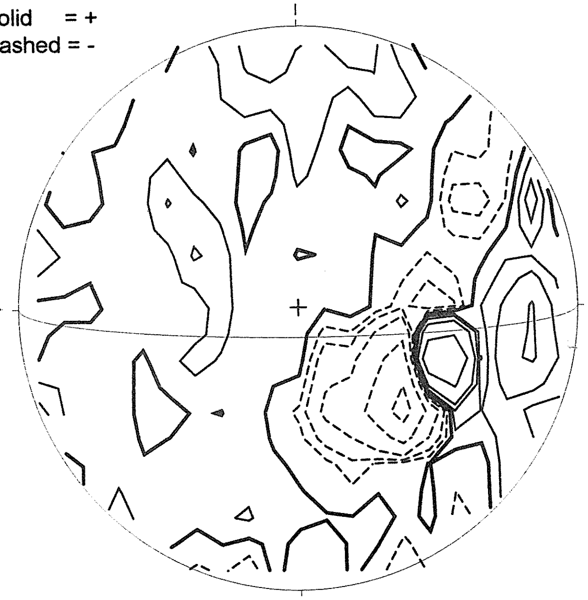
Bright = +
Dark   = -



1536 UT

STANFORD MAGNETOGRAM

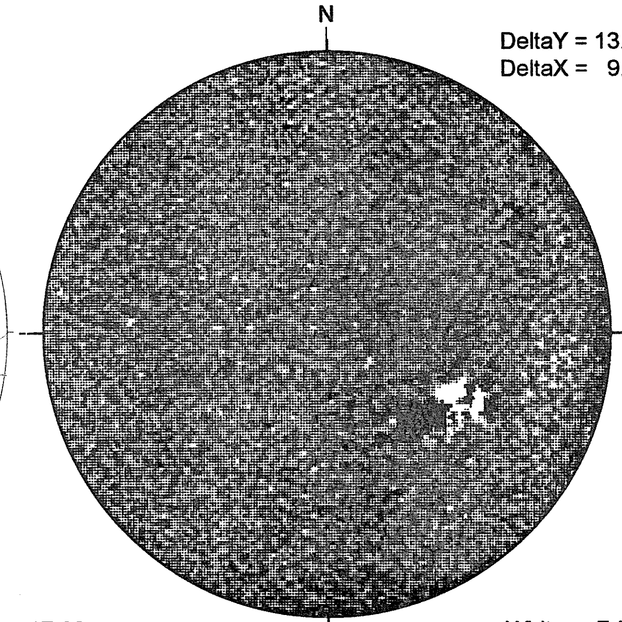
Solid   = +
Dashed = -



2124 UT

MT. WILSON MAGNETOGRAM

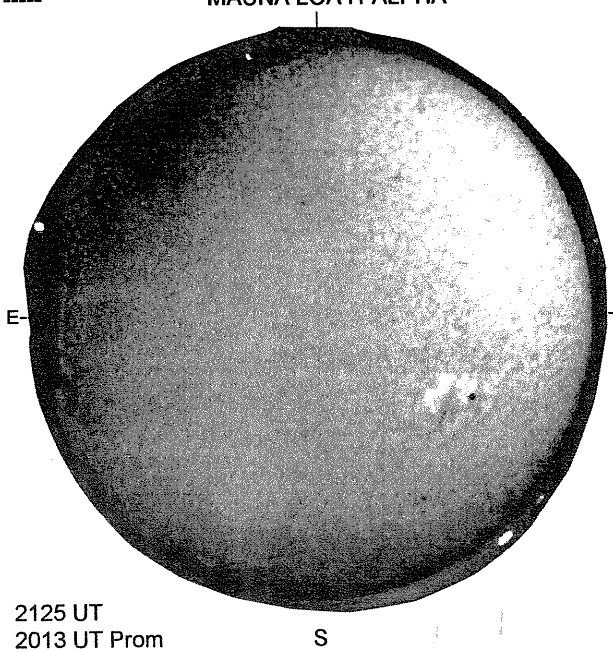
DeltaY = 13.0
DeltaX = 9.6



17.68 -
18.60 UT

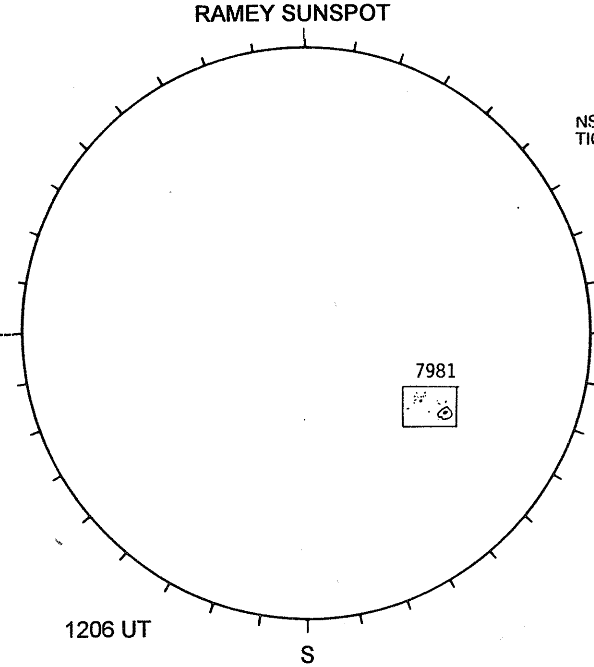
White= +7.5G
Black = -7.5G

MAUNA LOA H-ALPHA



2125 UT
2013 UT Prom

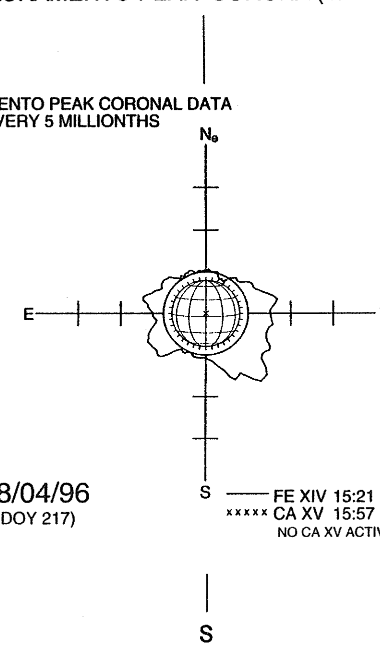
RAMEY SUNSPOT



1206 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



--------W

08/04/96
(DOY 217)

—— FE XIV 15:21 UT 1.15 $R_\odot$
xxxxx CA XV 15:57 UT 1.15 $R_\odot$
NO CA XV ACTIVITY TODAY

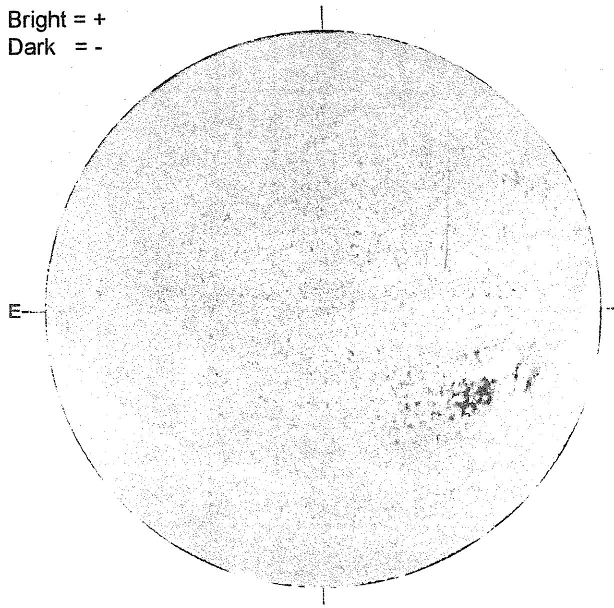
S

AUGUST 5, 1996 (P= 12.49 , Bo = 6.07 , Lo = 226.43)

KITT PEAK MAGNETOGRAM

868.8 nm

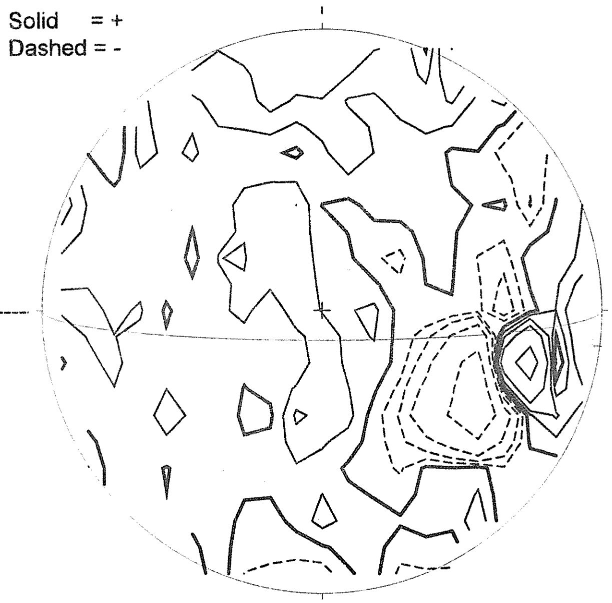
Bright = +
Dark = -



1539 UT

STANFORD MAGNETOGRAM

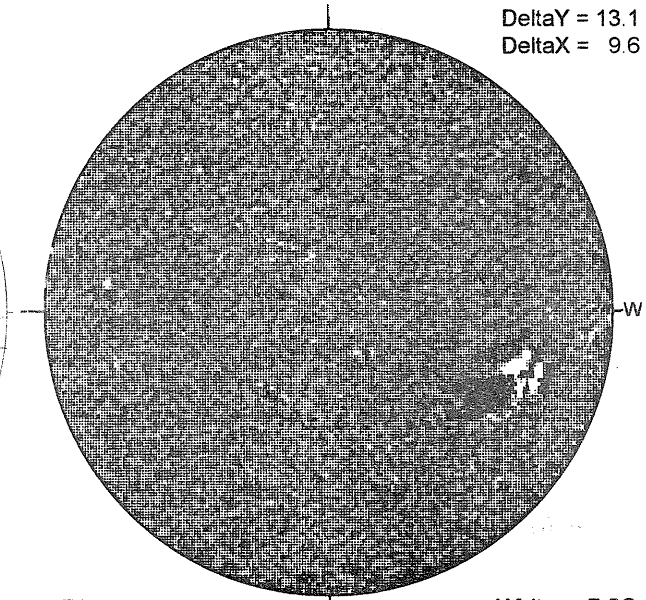
Solid = +
Dashed = -



2138 UT

MT. WILSON MAGNETOGRAM

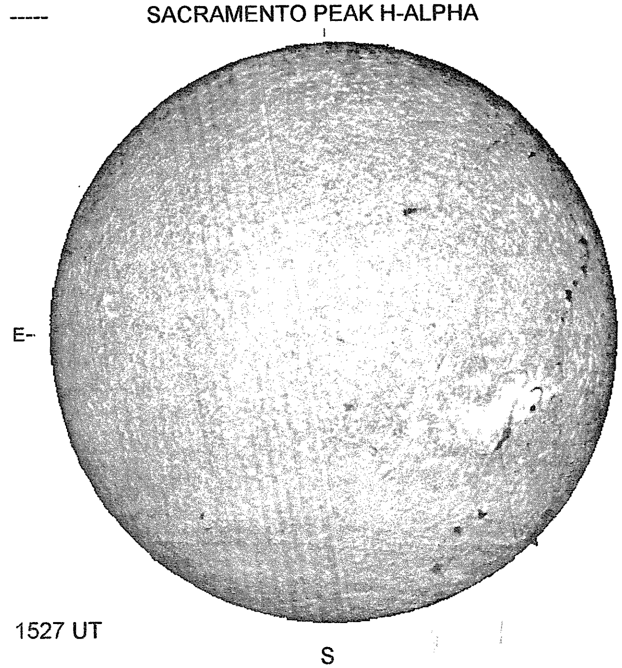
DeltaY = 13.1
DeltaX = 9.6



20.71 -
21.64 UT

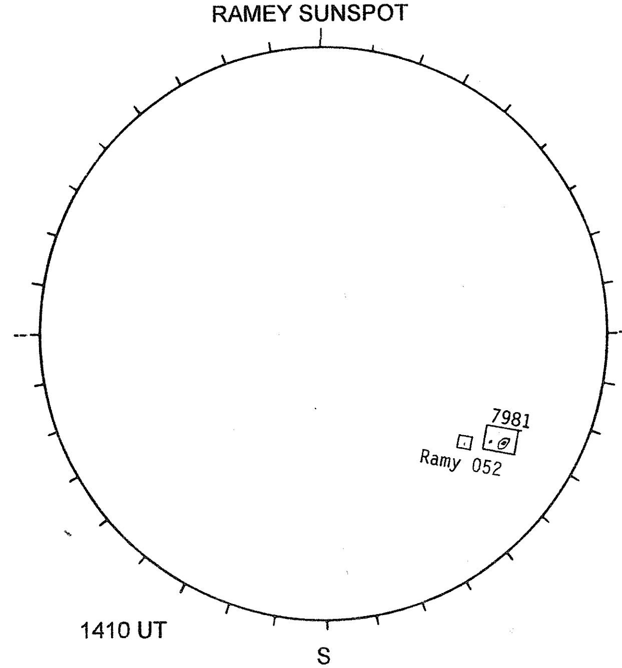
White= +7.5G
Black = -7.5G

SACRAMENTO PEAK H-ALPHA



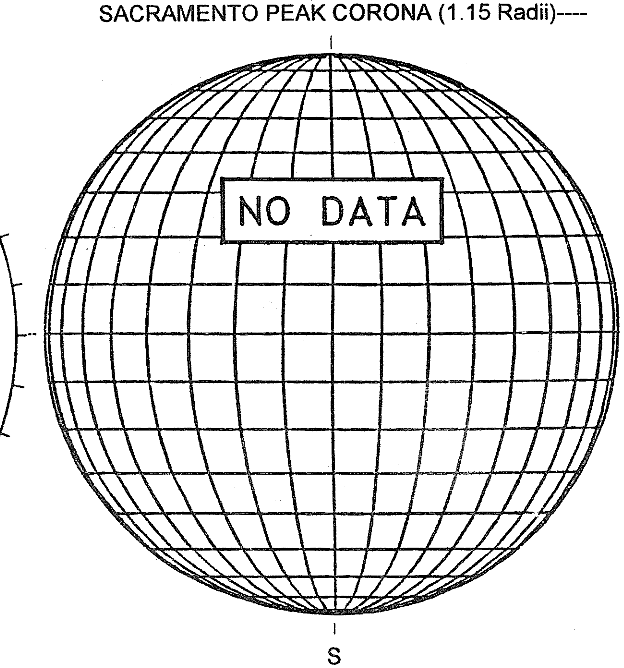
1527 UT

RAMEY SUNSPOT



1410 UT

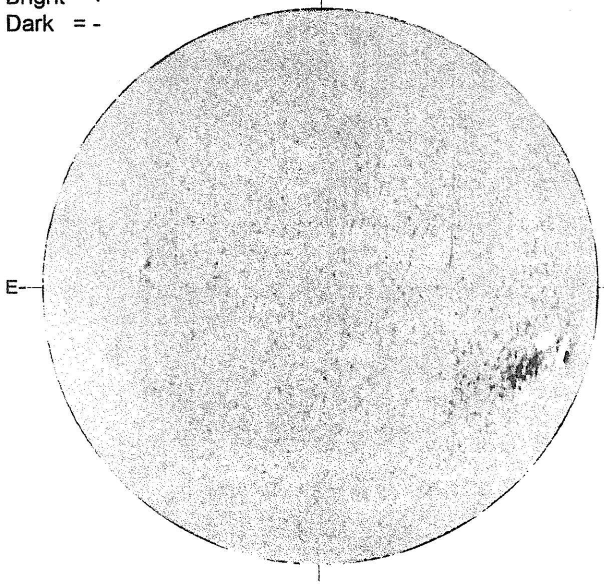
SACRAMENTO PEAK CORONA (1.15 Radii)----



AUGUST 6, 1996 (P= 12.87 , Bo = 6.14 , Lo = 213.20)

KITT PEAK MAGNETOGRAM **868.8 nm**

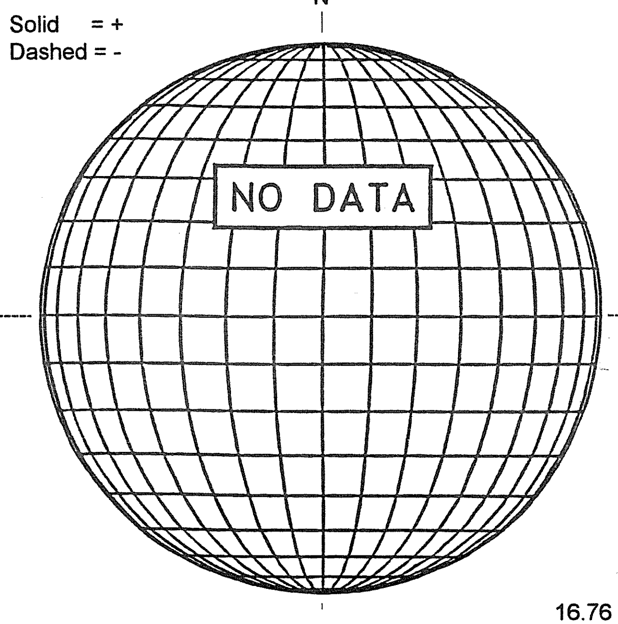
Bright = +
Dark = -



1603 UT

STANFORD MAGNETOGRAM

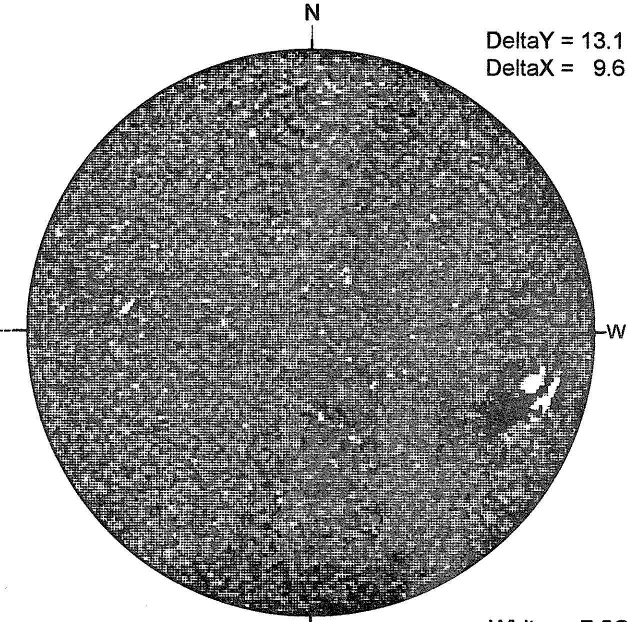
Solid = +
Dashed = -



16.76 -
17.68 UT

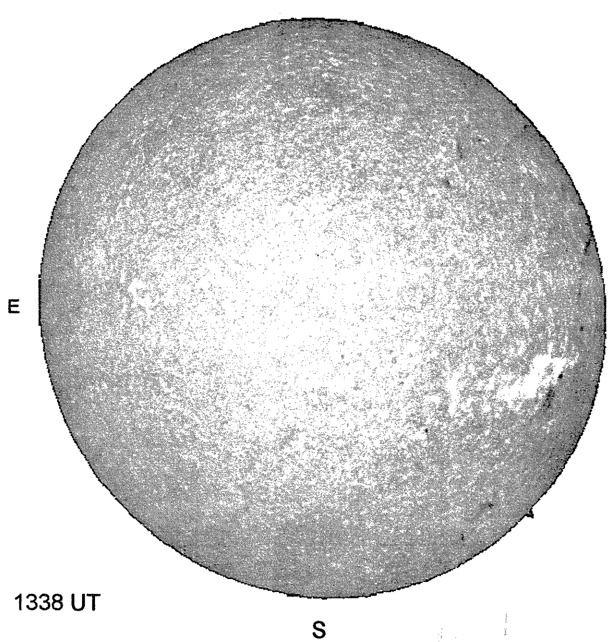
MT. WILSON MAGNETOGRAM

DeltaY = 13.1
DeltaX = 9.6



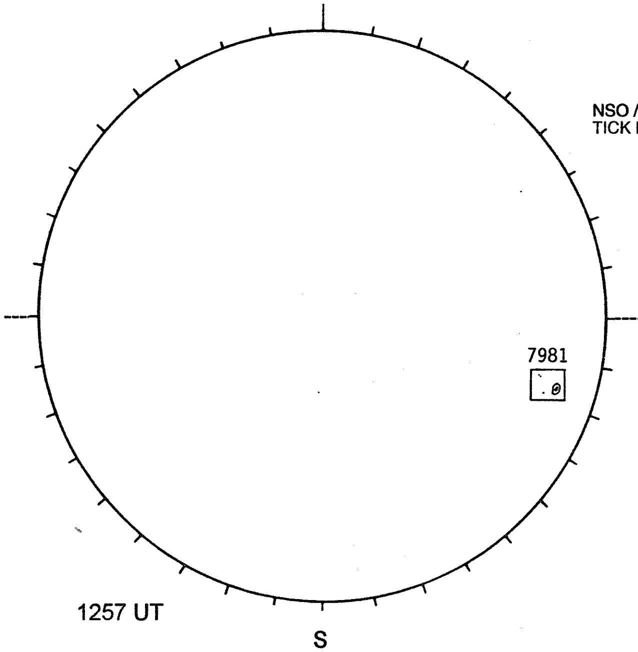
White= +7.5G
Black = -7.5G

----- SACRAMENTO PEAK H-ALPHA



1338 UT

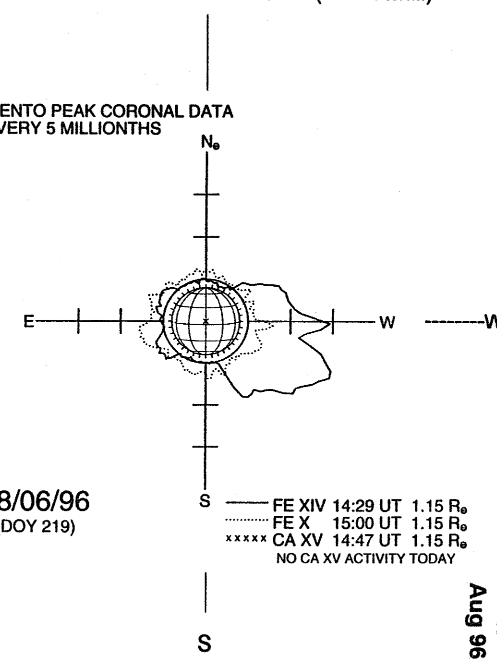
RAMEY SUNSPOT



1257 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



08/06/96
(DOY 219)

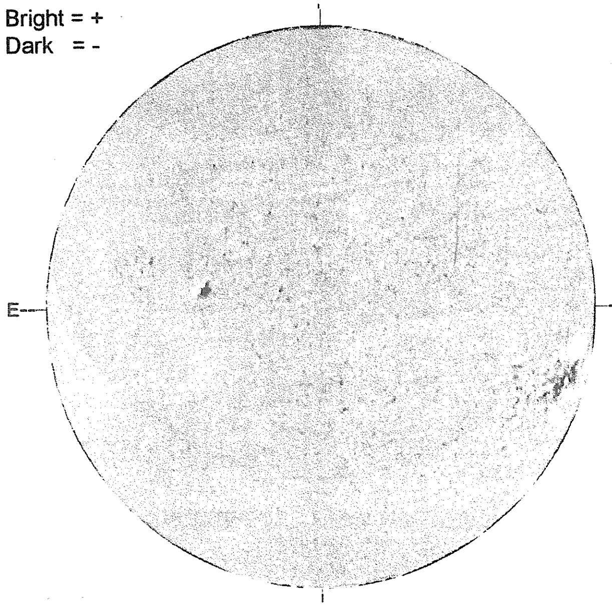
—— FE XIV 14:29 UT 1.15 $R_\odot$
········ FE X 15:00 UT 1.15 $R_\odot$
xxxxx CA XV 14:47 UT 1.15 $R_\odot$
NO CA XV ACTIVITY TODAY

AUGUST 7, 1996 (P= 13.24 , Bo = 6.20 Lo = 199.98)

KITT PEAK MAGNETOGRAM

N **868.8 nm**

Bright = +
Dark = -

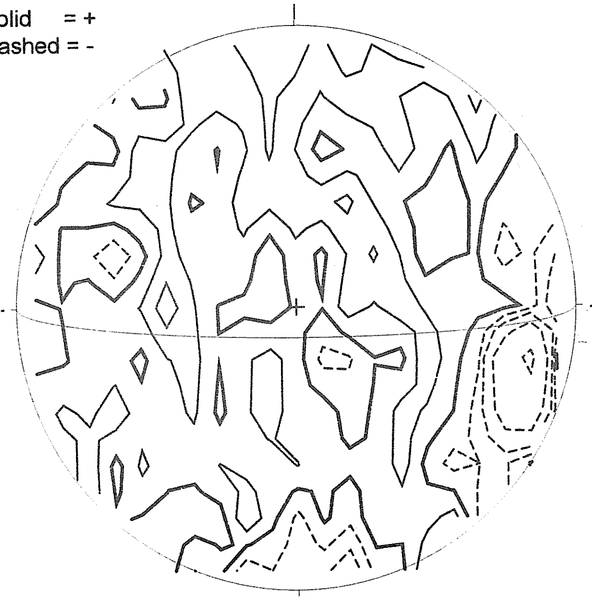


1706 UT

STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

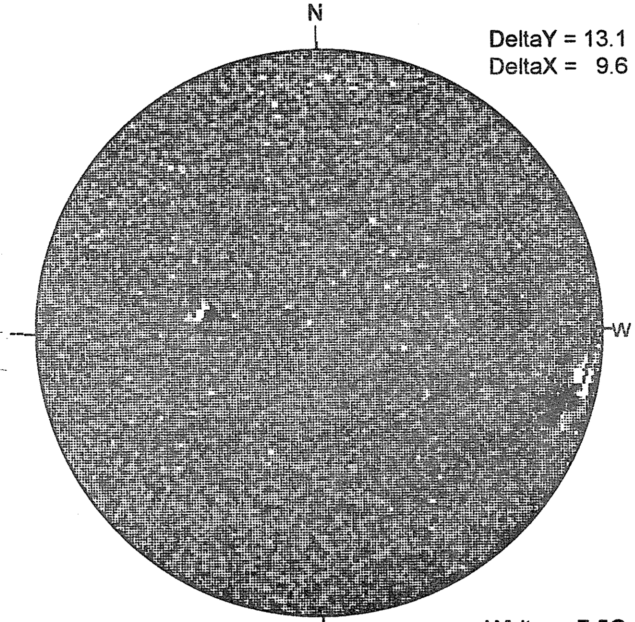


2125 UT

MT. WILSON MAGNETOGRAM

N

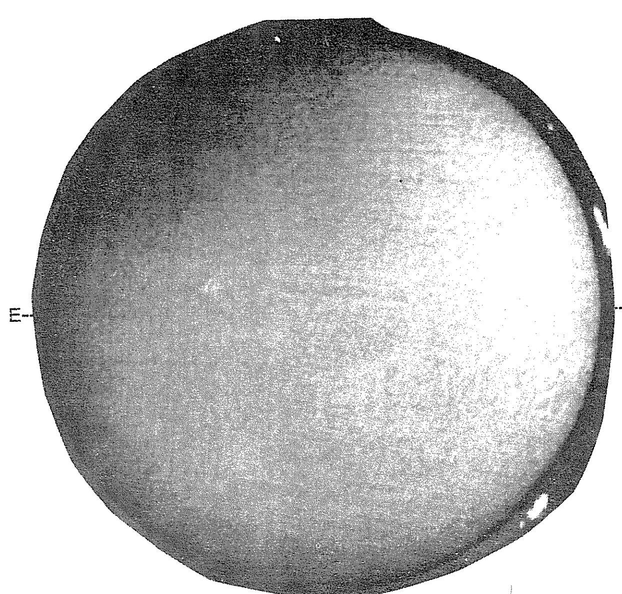
DeltaY = 13.1
DeltaX = 9.6



20.41 -
21.33 UT

White= +7.5G
Black = -7.5G

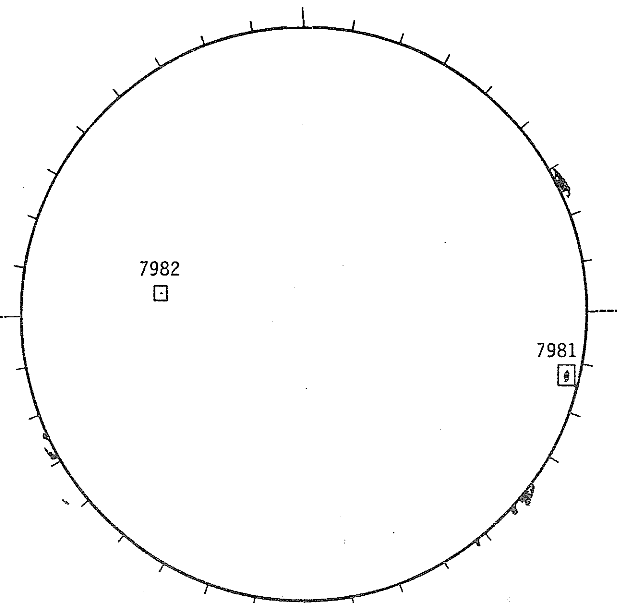
MAUNA LOA H-ALPHA



2033 UT
1822 UT Prom

S

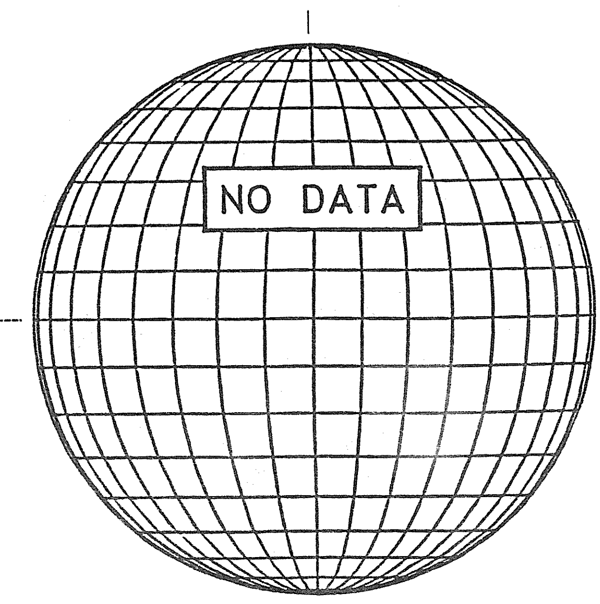
RAMEY SUNSPOT



1332 UT
0544 UT LOMN Prom

S

SACRAMENTO PEAK CORONA (1.15 Radii)----



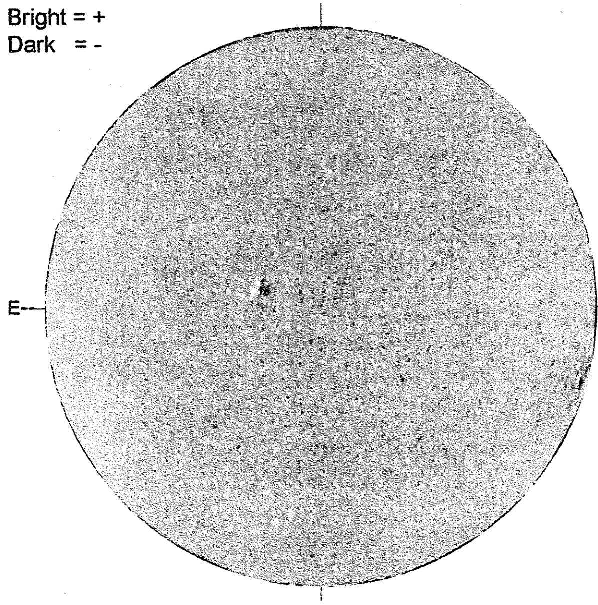
S

AUGUST 8, 1996 (P= 13.61 , Bo = 6.26 , Lo = 186.76)

KITT PEAK MAGNETOGRAM

868.8 nm

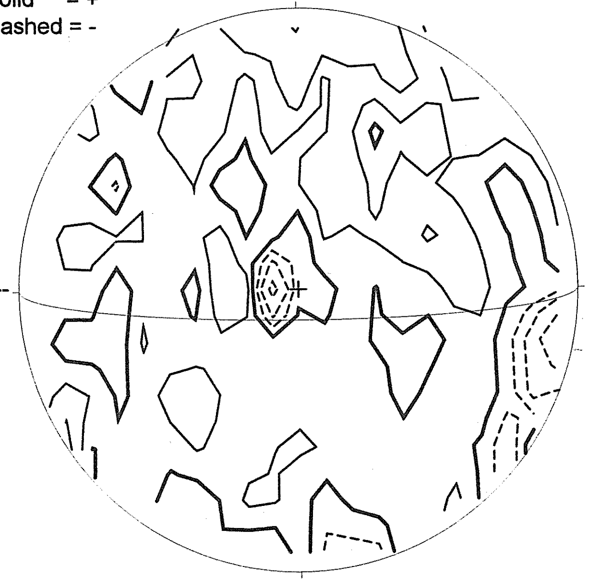
Bright = +
Dark = -



1453 UT

STANFORD MAGNETOGRAM

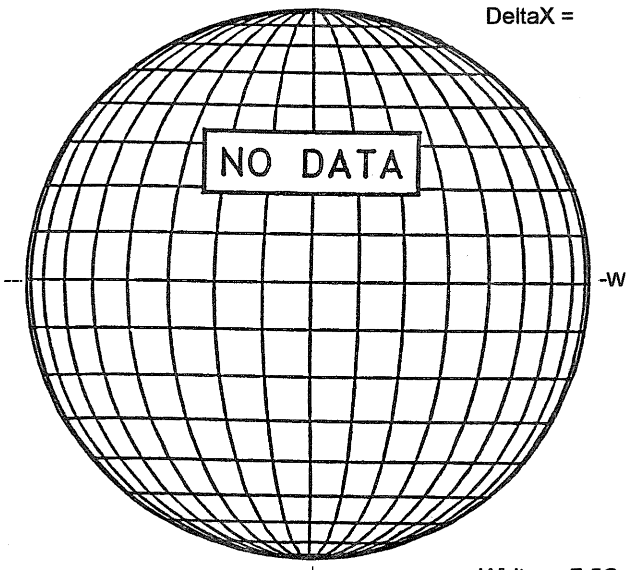
Solid = +
Dashed = -



2222 UT

MT. WILSON MAGNETOGRAM

DeltaY =
DeltaX =

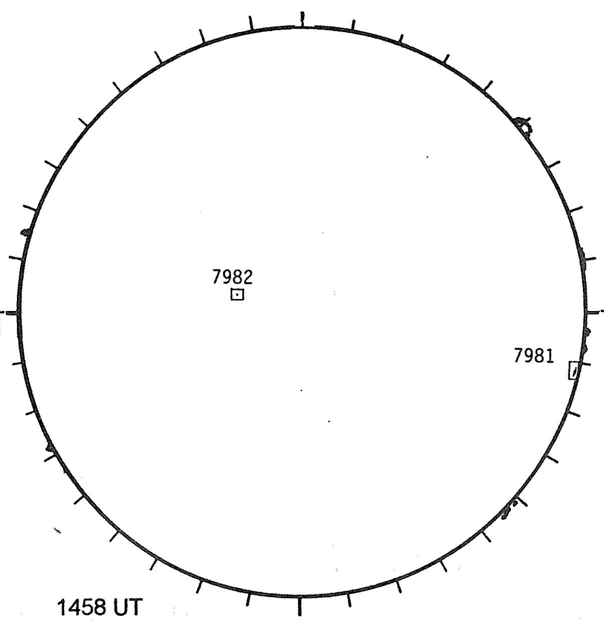


White= +7.5G
Black = -7.5G

MAUNA LOA H-ALPHA

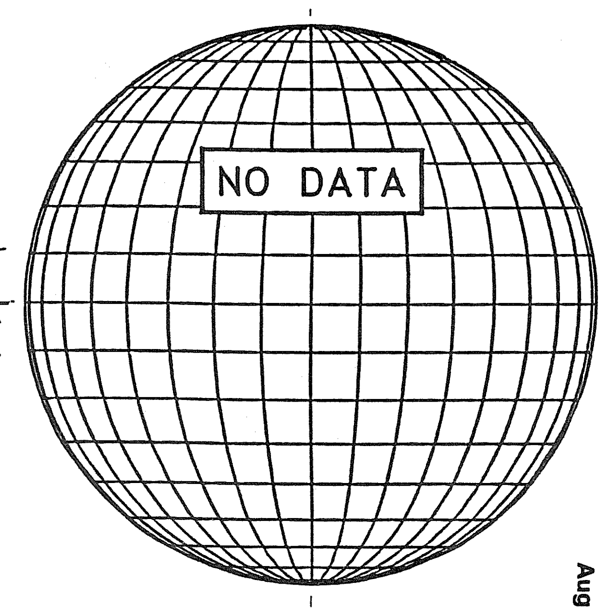
2013 UT
2042 UT Prom

RAMEY SUNSPOT



1458 UT
1318 UT VALA Prom

LOMNICKY PEAK CORONA (1.04 Radii)----

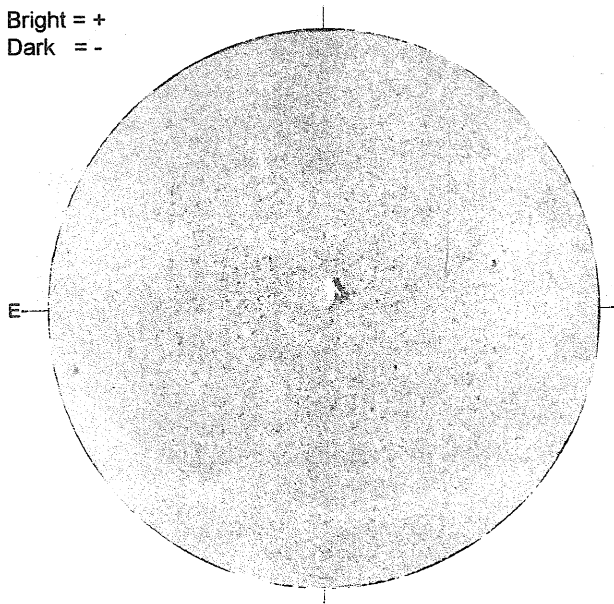


AUGUST 9, 1996 (P= 13.98 Bo = 6.32, Lo = 173.54)

KITT PEAK MAGNETOGRAM

**868.8 nm

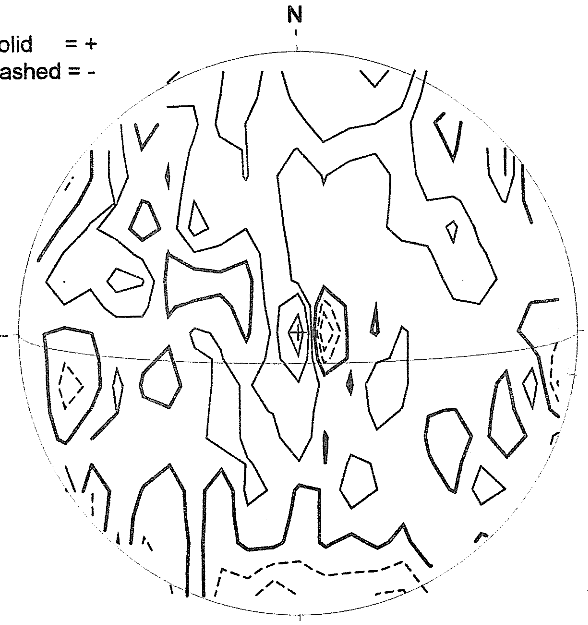
Bright = +
Dark = -



1527 UT

STANFORD MAGNETOGRAM

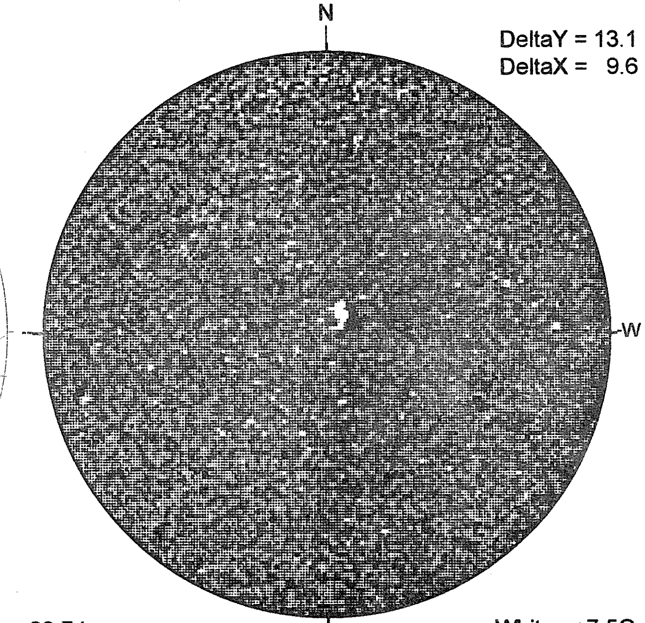
Solid = +
Dashed = -



2017 UT

MT. WILSON MAGNETOGRAM

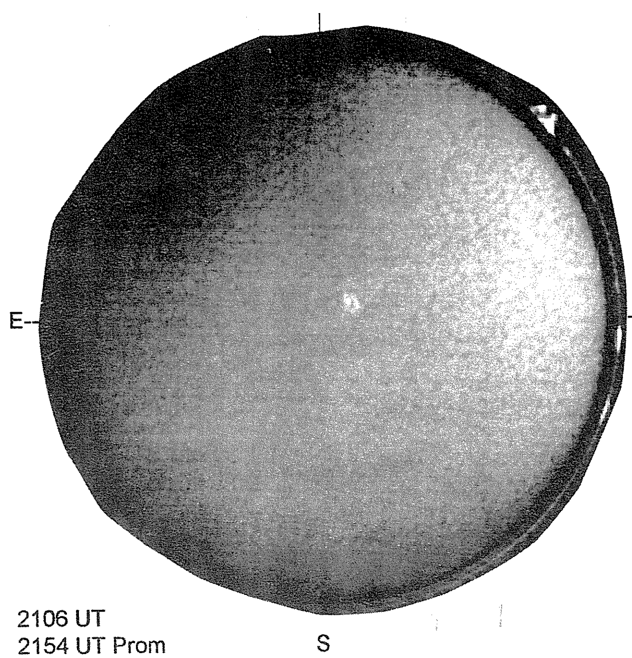
DeltaY = 13.1
DeltaX = 9.6



20.74 -
21.66 UT

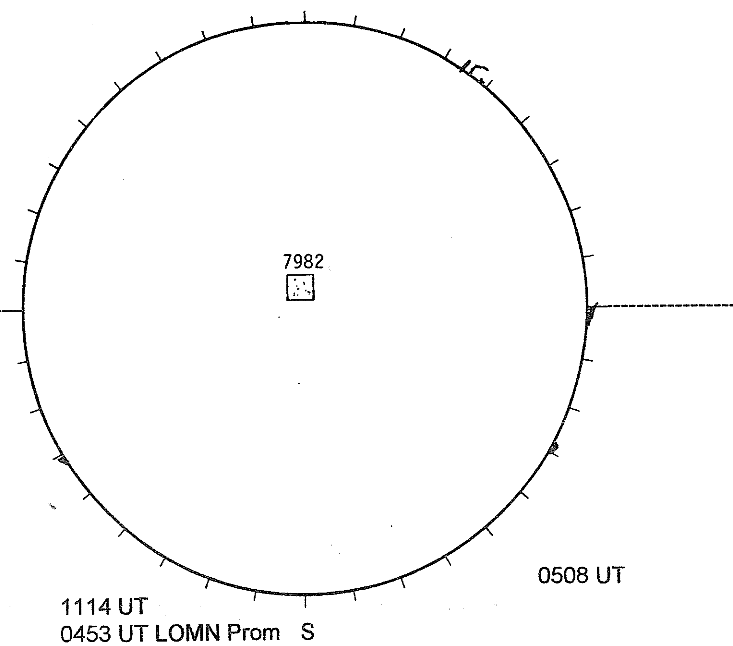
White= +7.5G
Black = -7.5G

----- MAUNA LOA H-ALPHA



2106 UT
2154 UT Prom

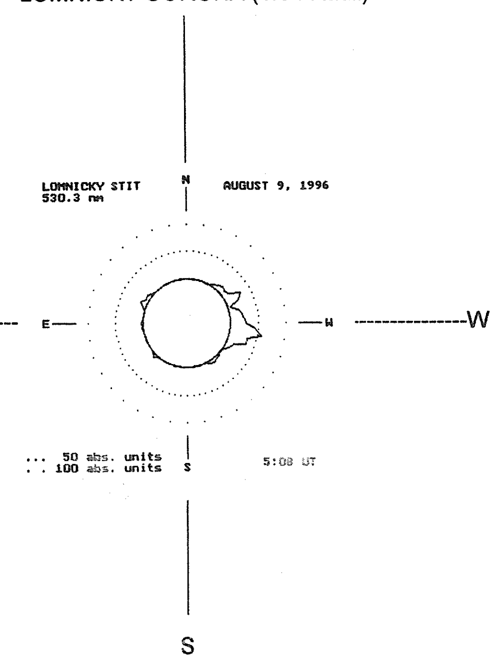
RAMEY SUNSPOT



1114 UT
0453 UT LOMN Prom

0508 UT

LOMNICKY CORONA (1.04 Radii)----

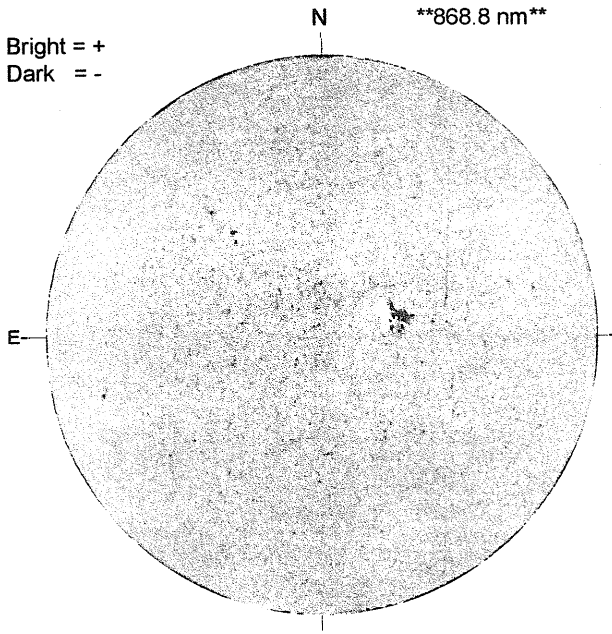


AUGUST 10, 1996 (P= 14.34 , Bo = 6.38, Lo = 160.32)

KITT PEAK MAGNETOGRAM

868.8 nm

Bright = +
Dark = -



1543 UT

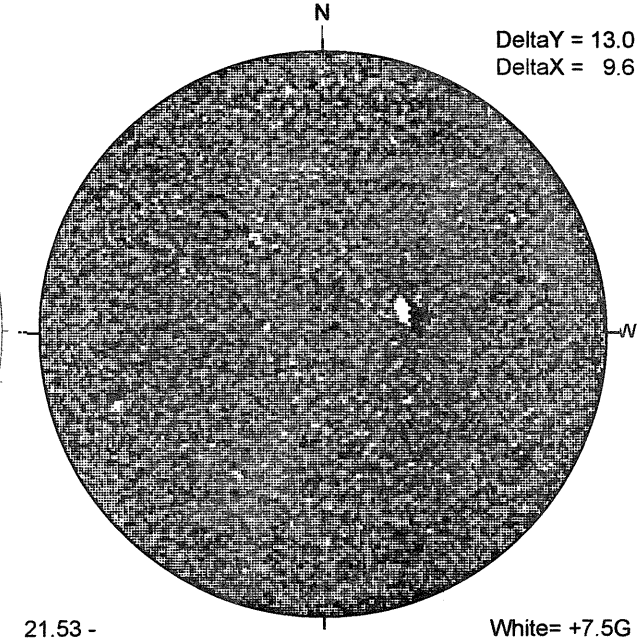
STANFORD MAGNETOGRAM

Solid = +
Dashed = -

2046 UT

MT. WILSON MAGNETOGRAM

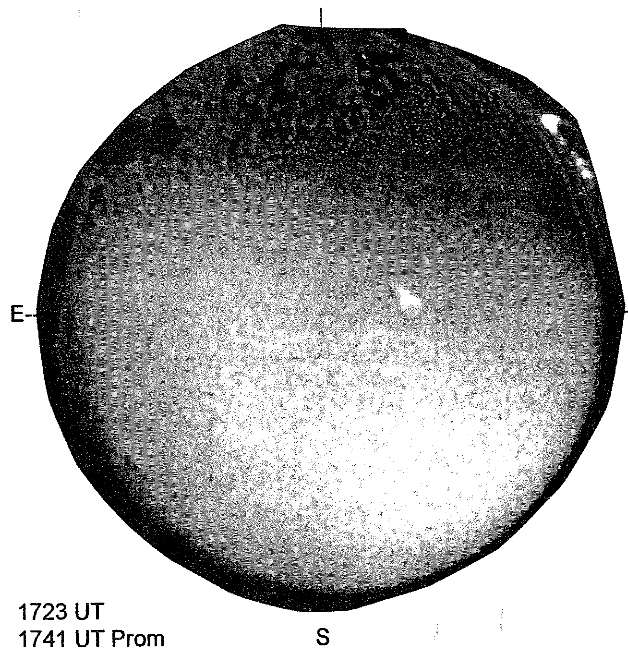
DeltaY = 13.0
DeltaX = 9.6



21.53 -
22.46 UT

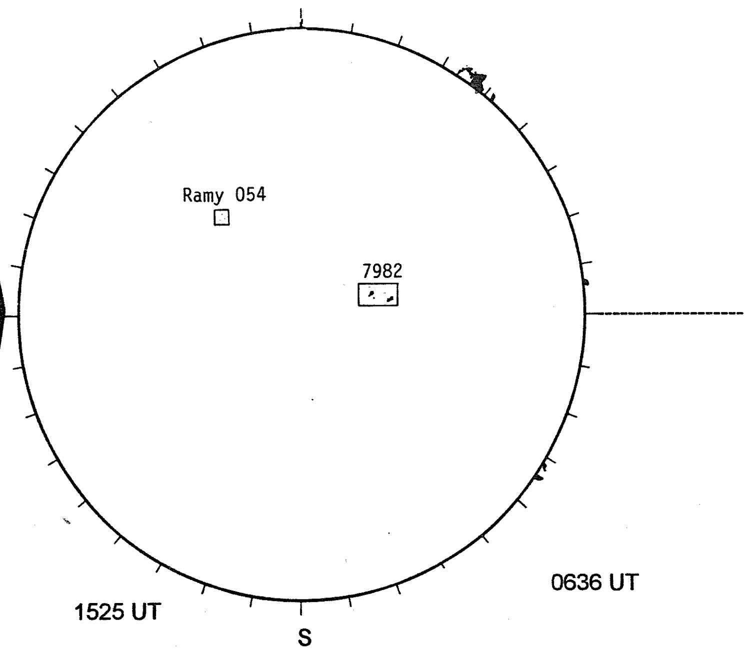
White= +7.5G
Black = -7.5G

MAUNA LOA H-ALPHA



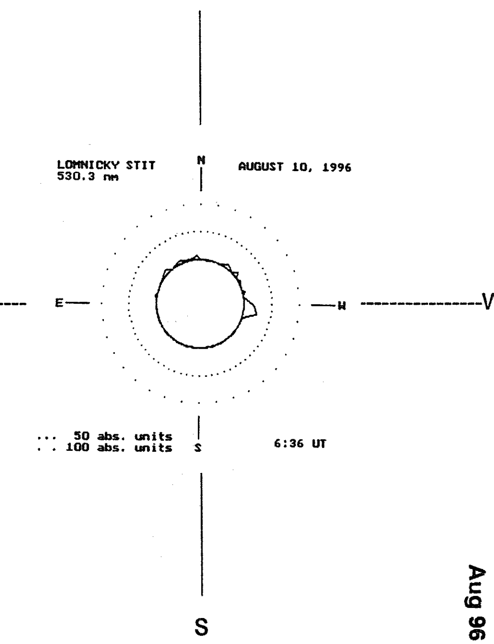
1723 UT
1741 UT Prom

RAMEY SUNSPOT



1525 UT

LOMNICKY CORONA (1.04 Radii)----



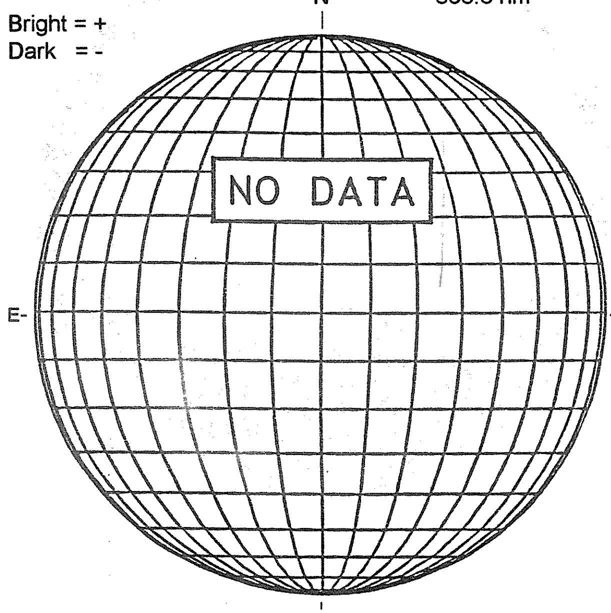
0636 UT

AUGUST 11, 1996 (P= 14.70, Bo = 6.44, Lo = 147.10)

KITT PEAK MAGNETOGRAM

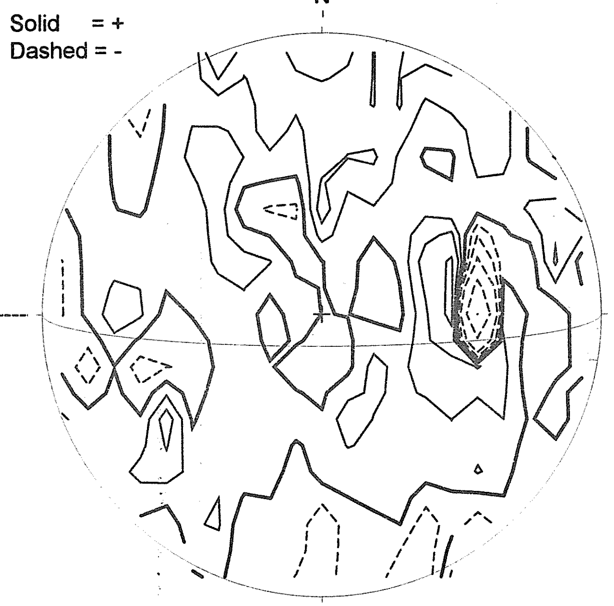
868.8 nm

Bright = +
Dark = -



STANFORD MAGNETOGRAM

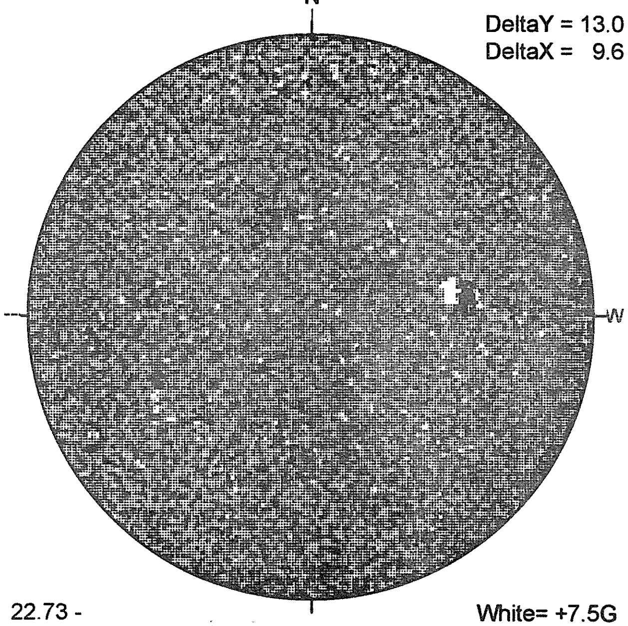
Solid = +
Dashed = -



2252 UT

MT. WILSON MAGNETOGRAM

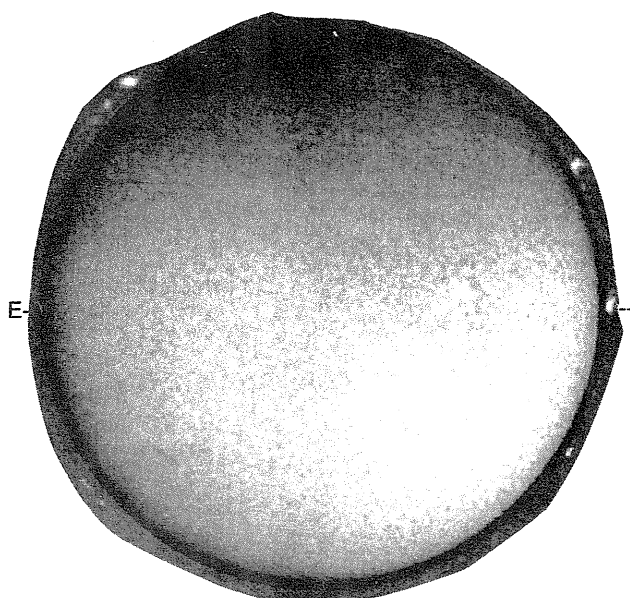
DeltaY = 13.0
DeltaX = 9.6



22.73 -
23.65 UT

White= +7.5G
Black = -7.5G

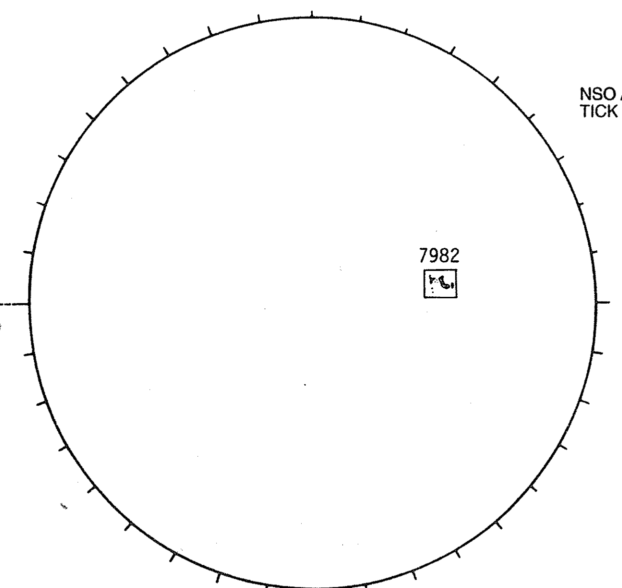
MAUNA LOA H-ALPHA



1833 UT
2033 UT Prom

S

RAMEY SUNSPOT

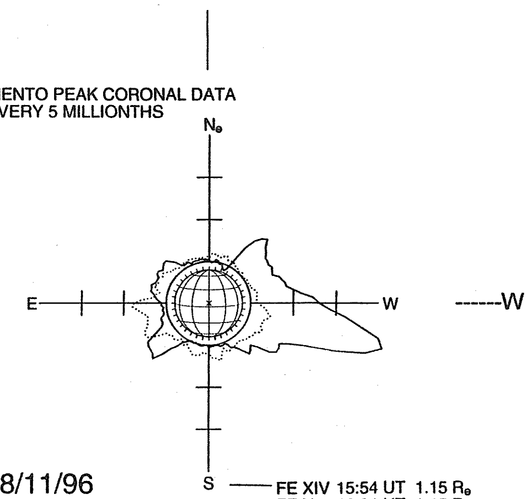


1230 UT
0626 UT LOMN Prom

S

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



08/11/96
(DOY 224)

—— FE XIV 15:54 UT 1.15 $R_\odot$
······ FE X 16:04 UT 1.15 $R_\odot$
xxxxx CA XV 16:44 UT 1.15 $R_\odot$
NO CA XV ACTIVITY TODAY

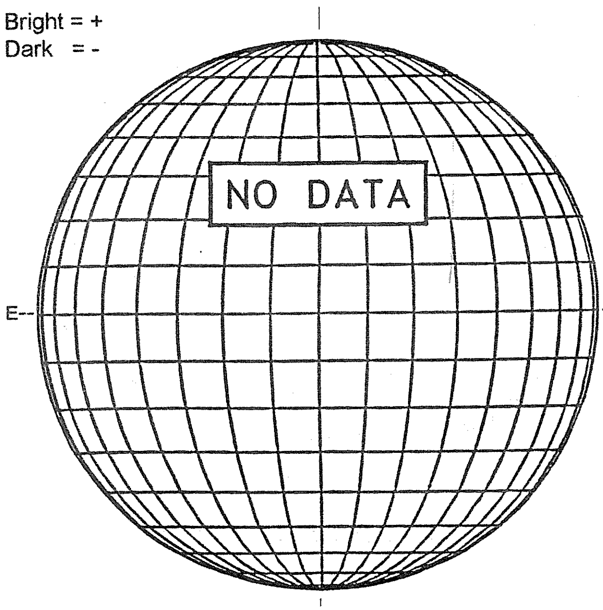
S

AUGUST 12, 1996 (P= 15.06, Bo = 6.49, Lo = 133.88)

KITT PEAK MAGNETOGRAM

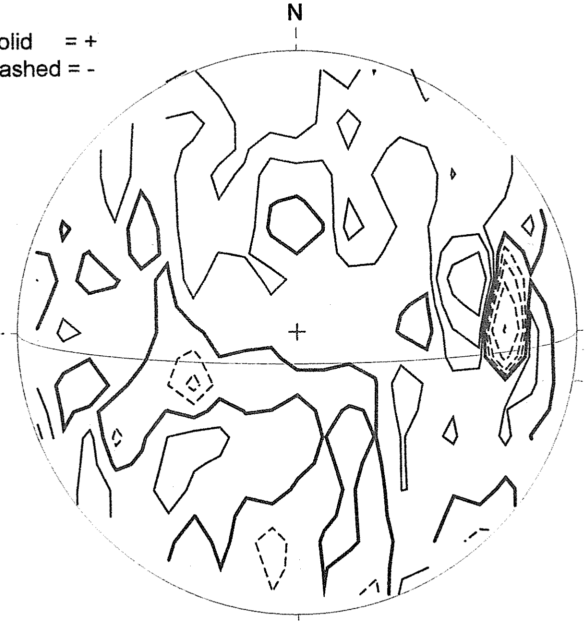
868.8 nm

Bright = +
Dark = -



STANFORD MAGNETOGRAM

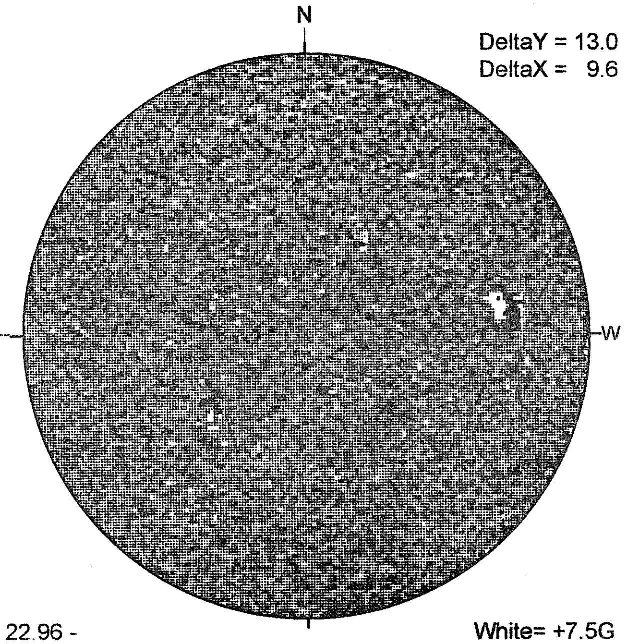
Solid = +
Dashed = -



2010 UT

MT. WILSON MAGNETOGRAM

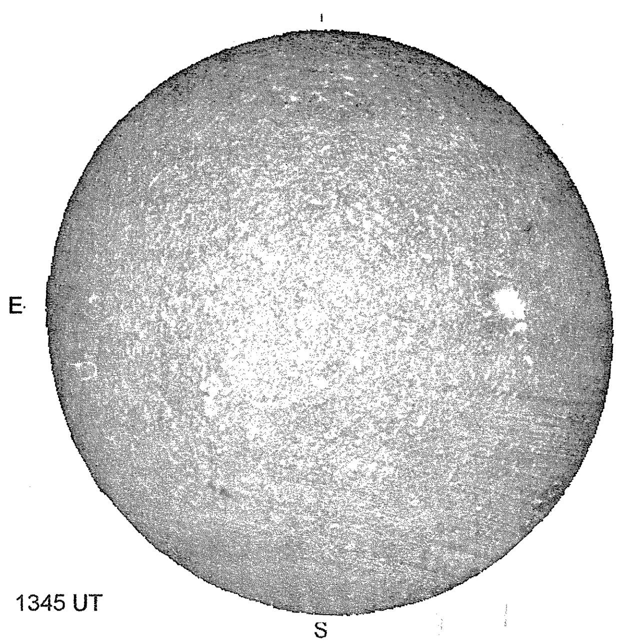
DeltaY = 13.0
DeltaX = 9.6



22.96 -
23.89 UT

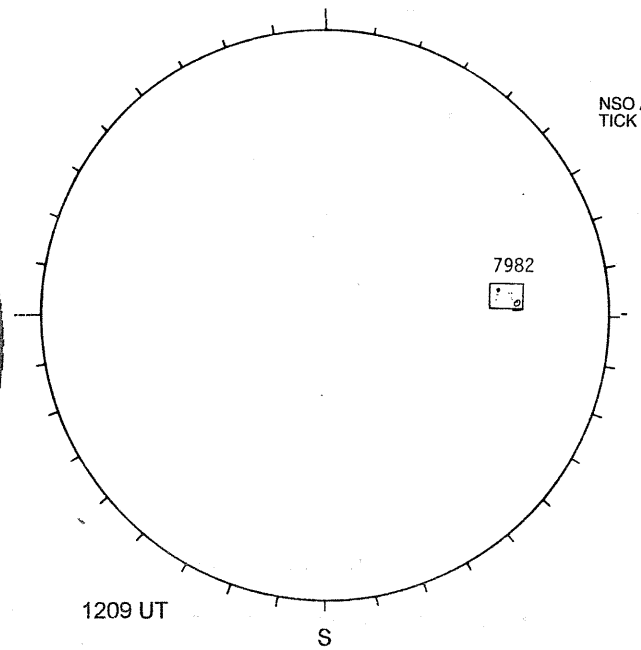
White= +7.5G
Black = -7.5G

---- SACRAMENTO PEAK H-ALPHA



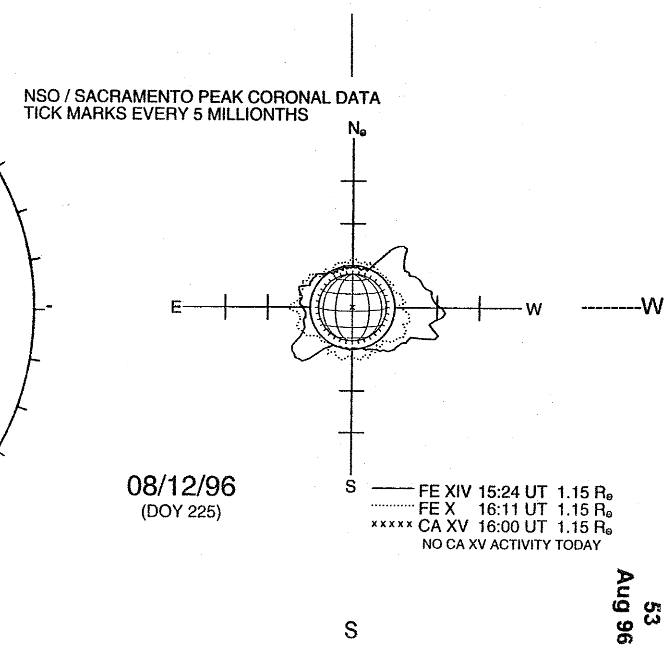
1345 UT

RAMEY SUNSPOT



1209 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----

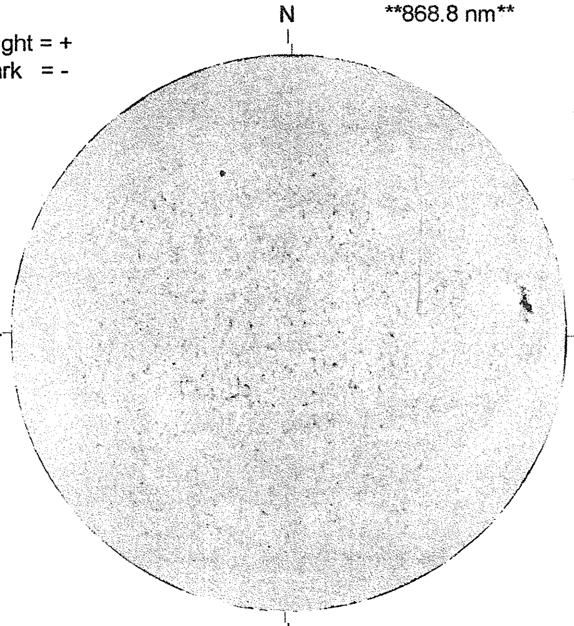


08/12/96
(DOY 225)

AUGUST 13, 1996 (P= 15.41, Bo = 6.54, Lo = 120.66)

KITT PEAK MAGNETOGRAM
868.8 nm

Bright = +
Dark = -



1557 UT

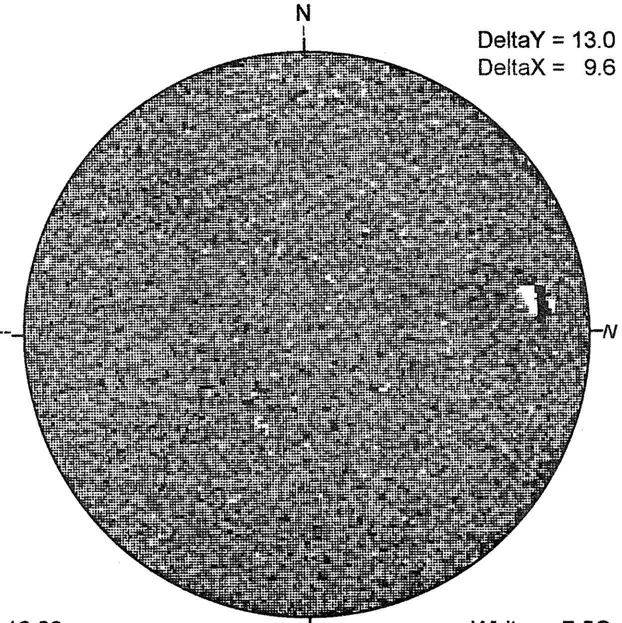
STANFORD MAGNETOGRAM

Solid = +
Dashed = -

2057 UT

MT. WILSON MAGNETOGRAM

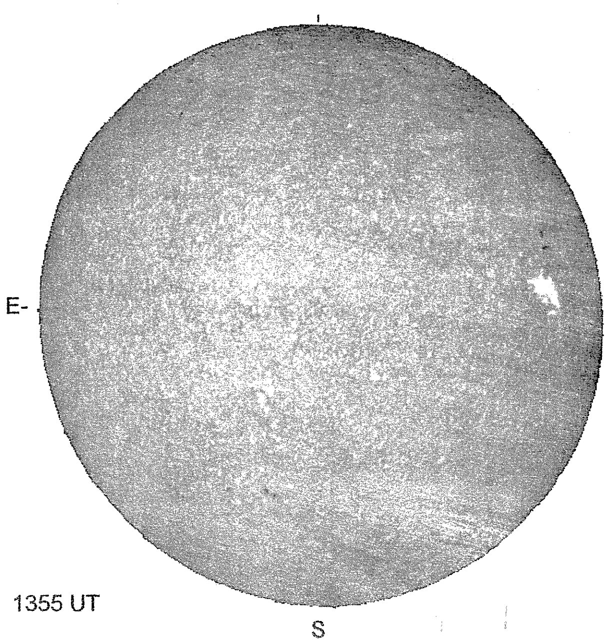
DeltaY = 13.0
DeltaX = 9.6



16.80 -
17.72 UT

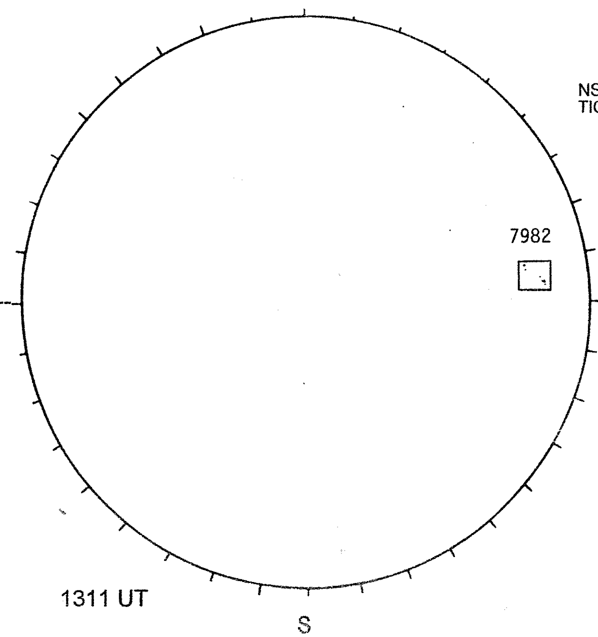
White= +7.5G
Black = -7.5G

----- SACRAMENTO PEAK H-ALPHA



1355 UT

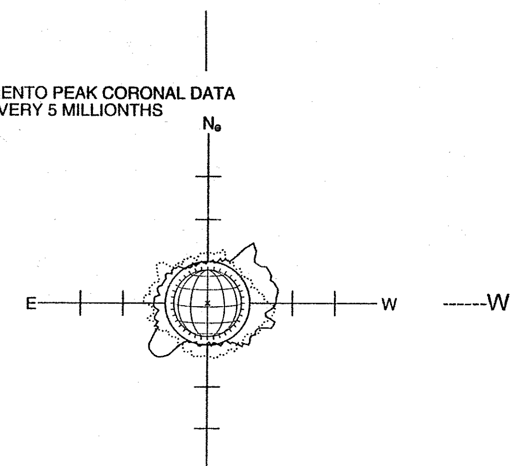
RAMEY SUNSPOT



1311 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



08/13/96
(DOY 226)

FE XIV 14:26 UT 1.15 $R_\odot$
FE X 15:15 UT 1.15 $R_\odot$
CA XV 15:04 UT 1.15 $R_\odot$
NO CA XV ACTIVITY TODAY

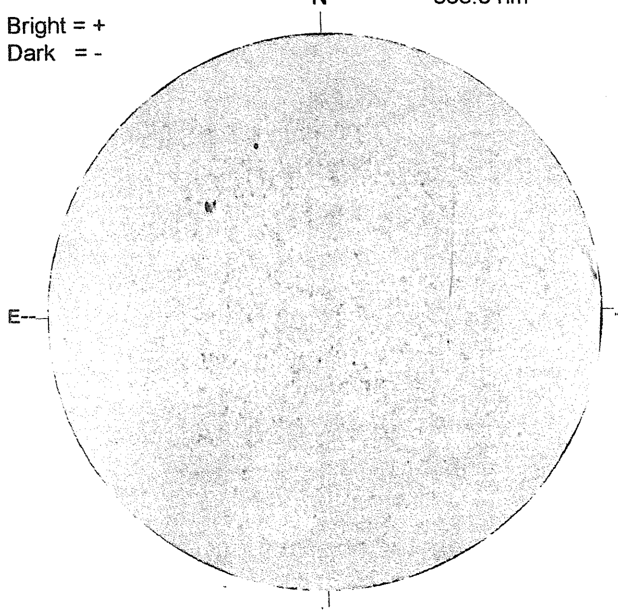
S

AUGUST 14, 1996 (P= 15.75, Bo = 6.59, Lo= 107.44)

KITT PEAK MAGNETOGRAM

868.8 nm

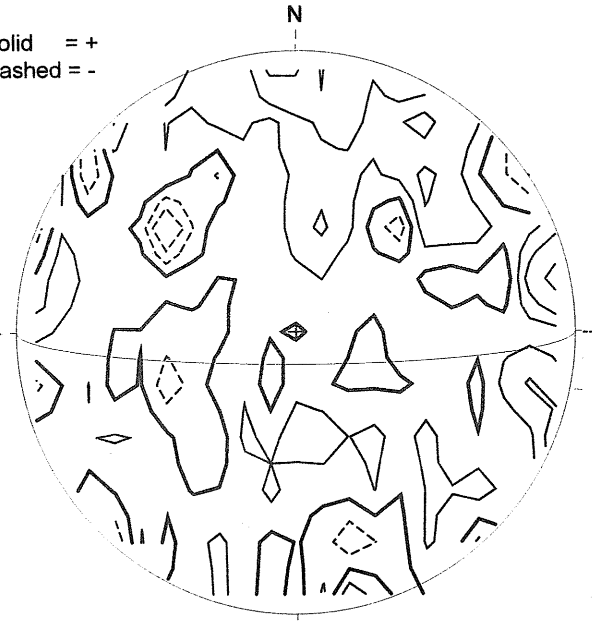
Bright = +
Dark = -



1819 UT

STANFORD MAGNETOGRAM

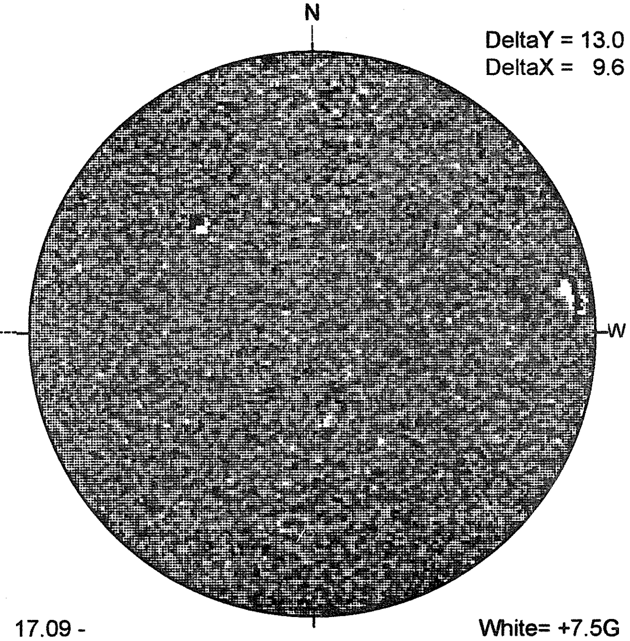
Solid = +
Dashed = -



1735 UT

MT. WILSON MAGNETOGRAM

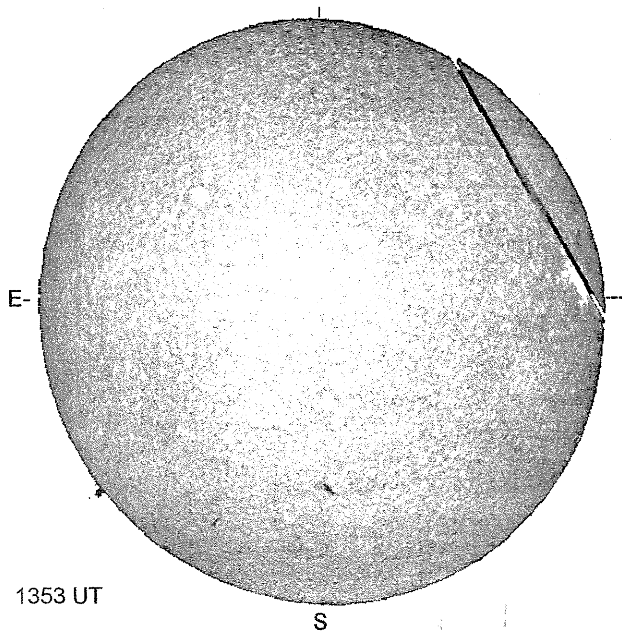
DeltaY = 13.0
DeltaX = 9.6



17.09 -
18.02 UT

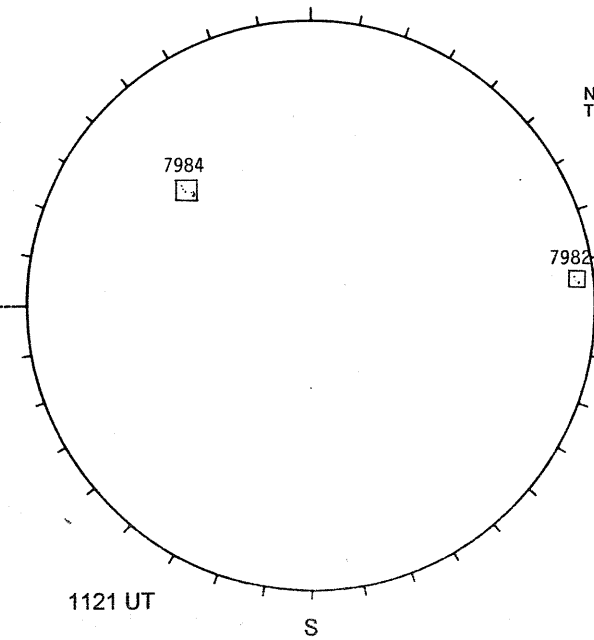
White= +7.5G
Black = -7.5G

SACRAMENTO PEAK H-ALPHA



1353 UT

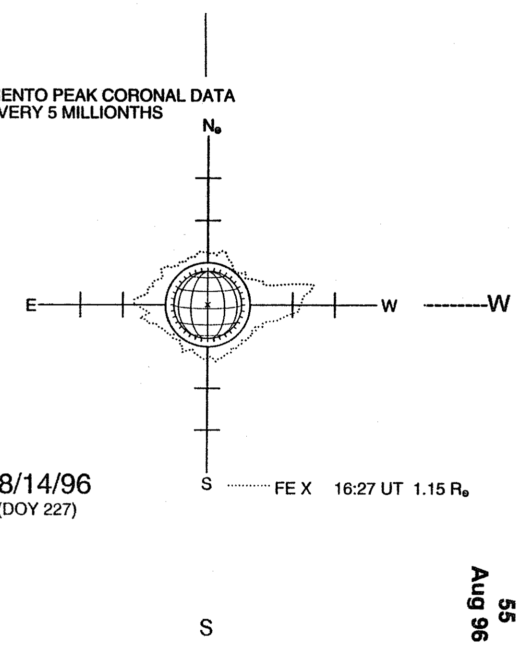
RAMEY SUNSPOT



1121 UT

SACRAMENTO PEAK CORONA (1.15 Radii)

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



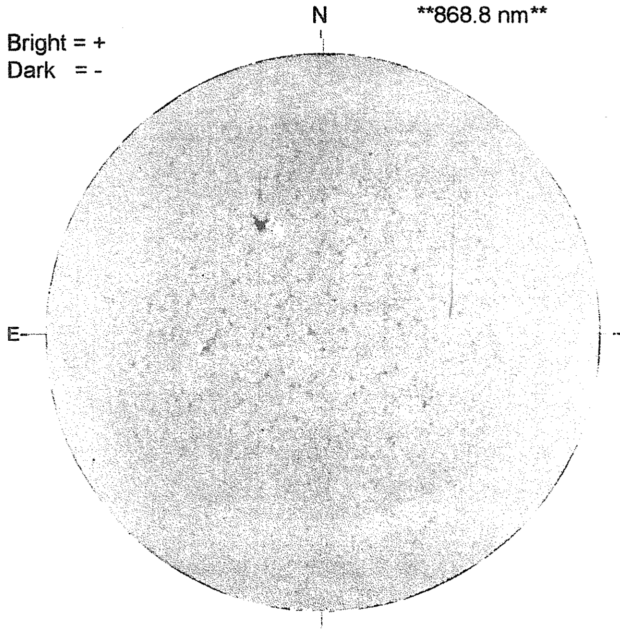
08/14/96
(DOY 227)

AUGUST 15, 1996 (P= 16.09, Bo = 6.64, Lo = 94.22)

KITT PEAK MAGNETOGRAM

868.8 nm

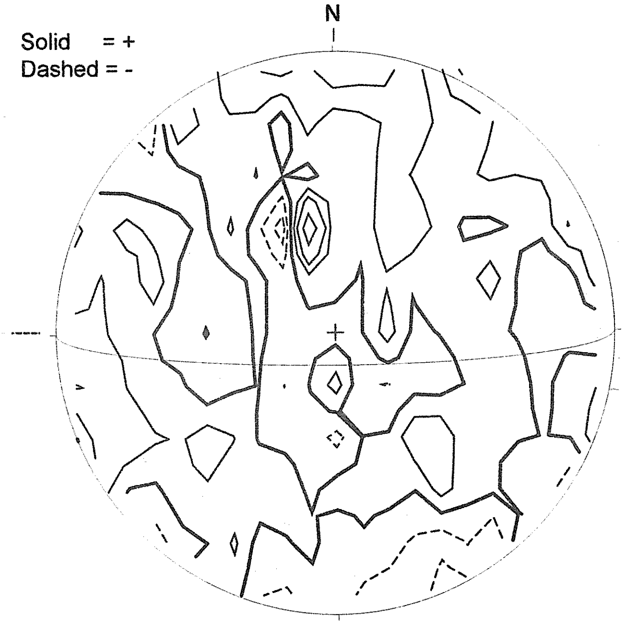
Bright = +
Dark = -



1817 UT

STANFORD MAGNETOGRAM

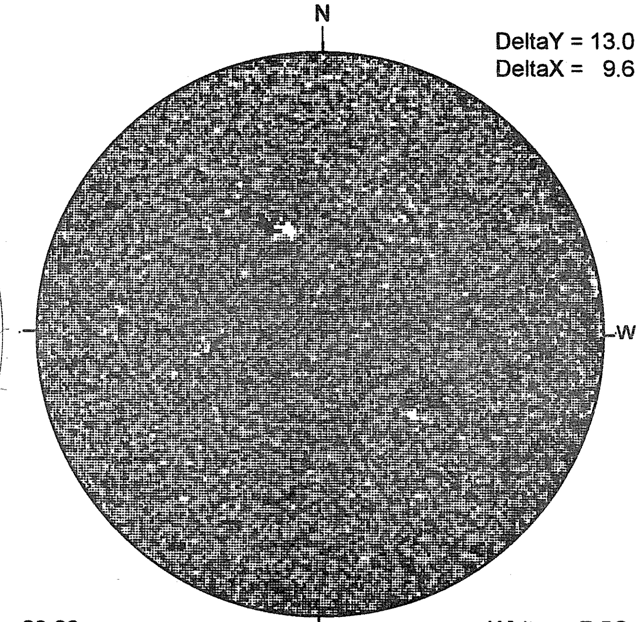
Solid = +
Dashed = -



2123 UT

MT. WILSON MAGNETOGRAM

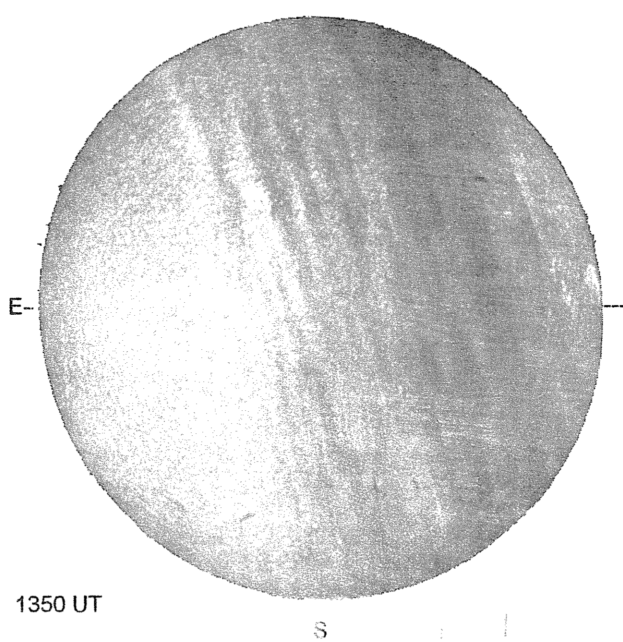
DeltaY = 13.0
DeltaX = 9.6



23.60 -
24.53 UT

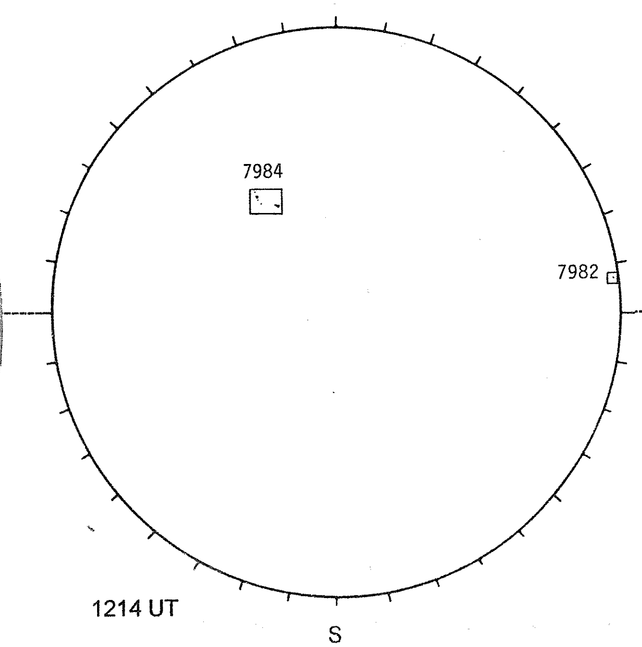
White= +7.5G
Black = -7.5G

SACRAMENTO PEAK H-ALPHA



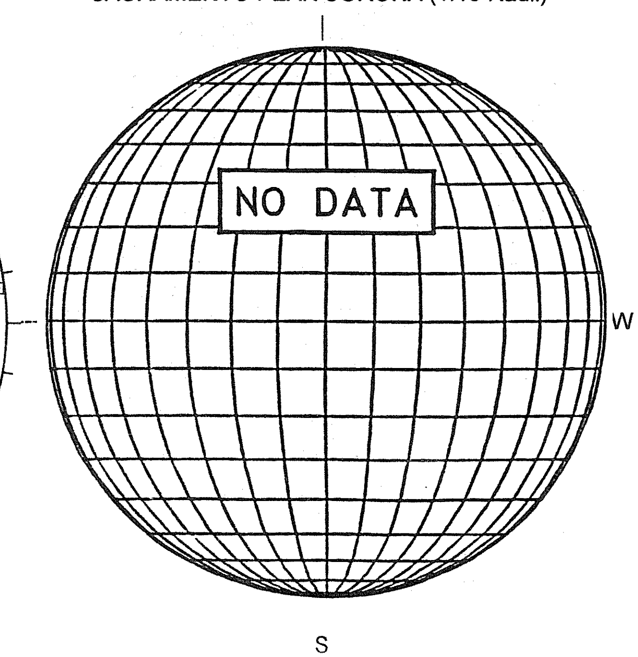
1350 UT

RAMEY SUNSPOT



1214 UT

SACRAMENTO PEAK CORONA (1.15 Radii)

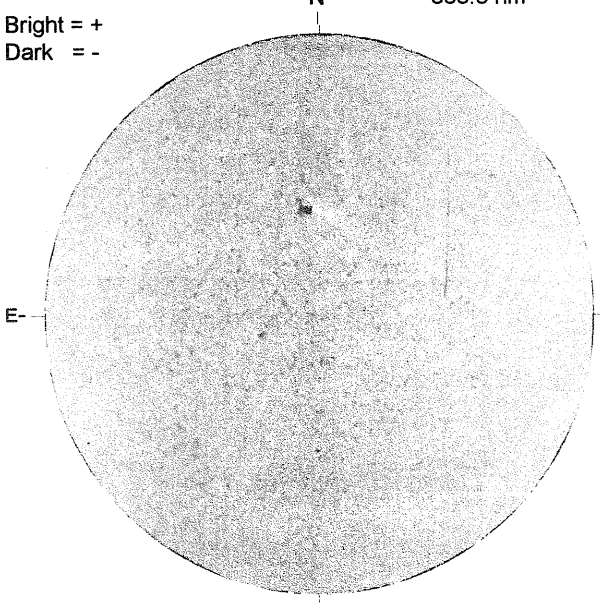


AUGUST 16, 1996 (P= 16.43, Bo = 6.69, Lo = 81.00)

KITT PEAK MAGNETOGRAM

868.8 nm

Bright = +
Dark = -



1815 UT

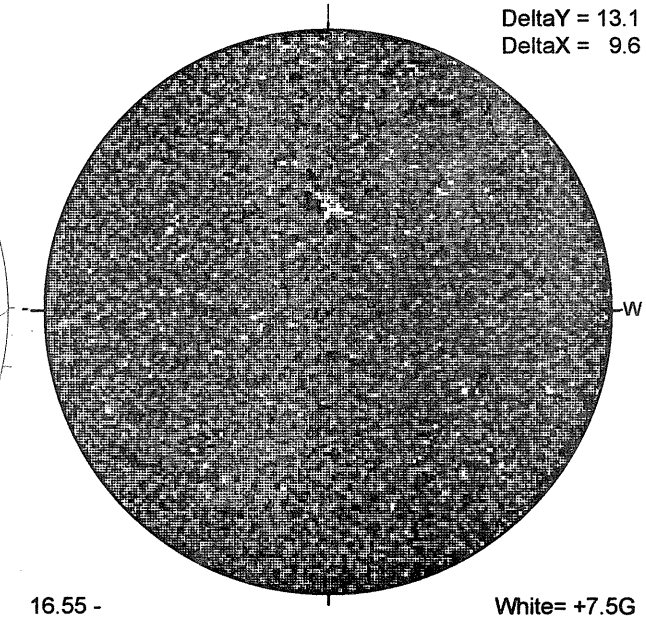
STANFORD MAGNETOGRAM

Solid = +
Dashed = -

2107 UT

MT. WILSON MAGNETOGRAM

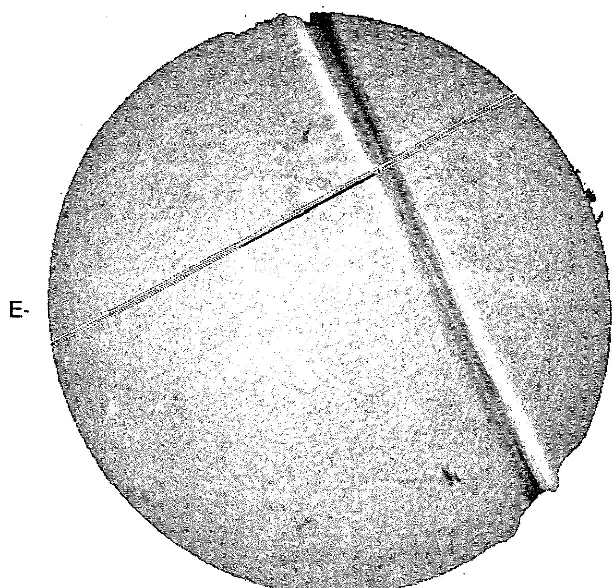
DeltaY = 13.1
DeltaX = 9.6



16.55 -
17.47 UT

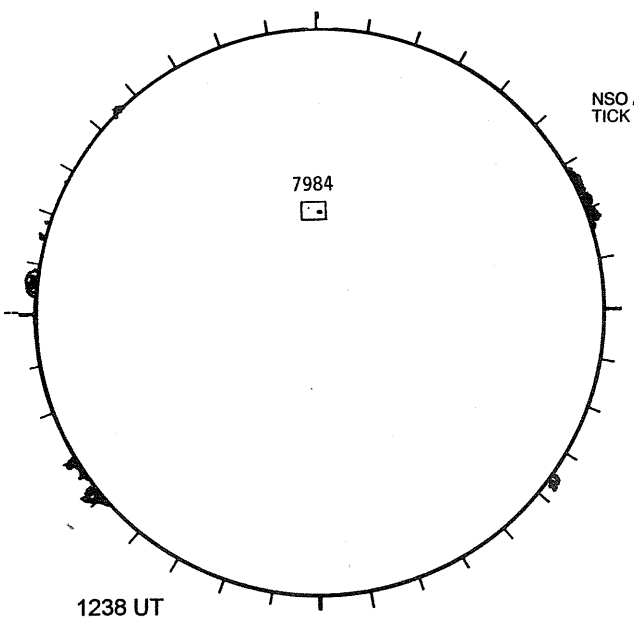
White= +7.5G
Black = -7.5G

SACRAMENTO PEAK LOA H-ALPHA



1402 UT

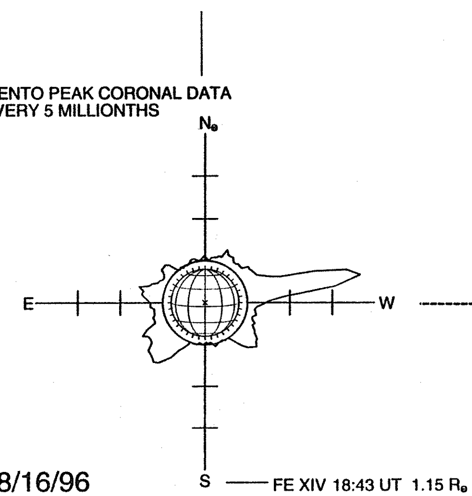
RAMEY SUNSPOT



1238 UT
0741 UT VALA Prom

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



08/16/96
(DOY 229)

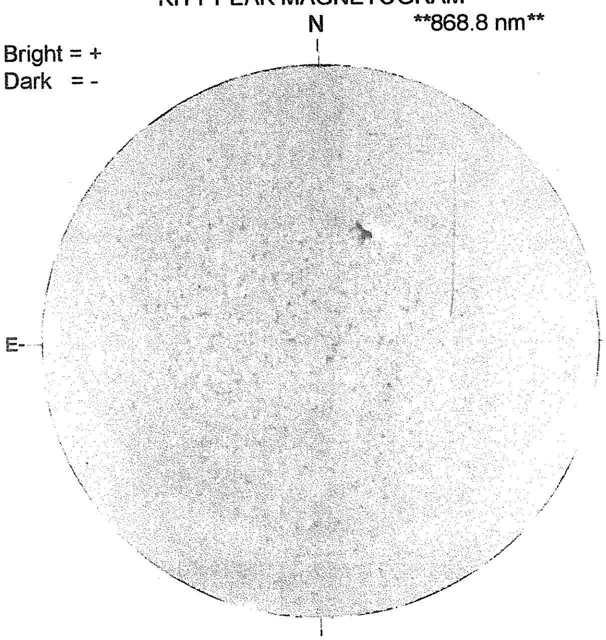
S

AUGUST 17, 1996 (P= 16.76, Bo = 6.74, Lo = 67.78)

KITT PEAK MAGNETOGRAM

868.8 nm

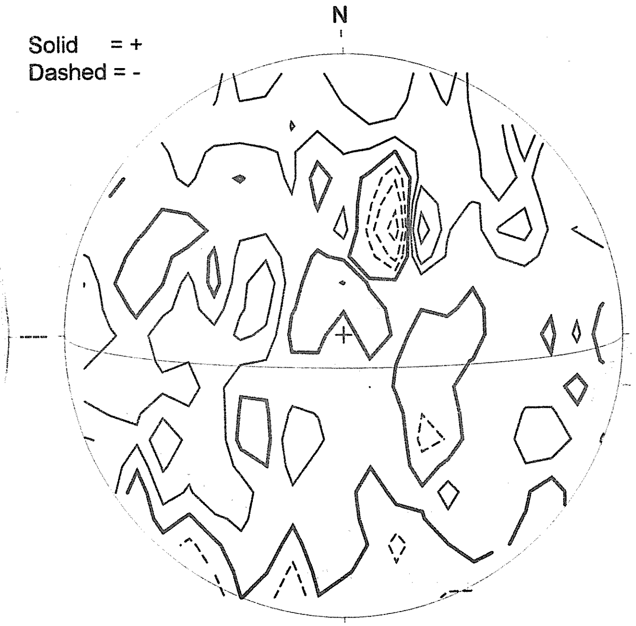
Bright = +
Dark = -



1748 UT

STANFORD MAGNETOGRAM

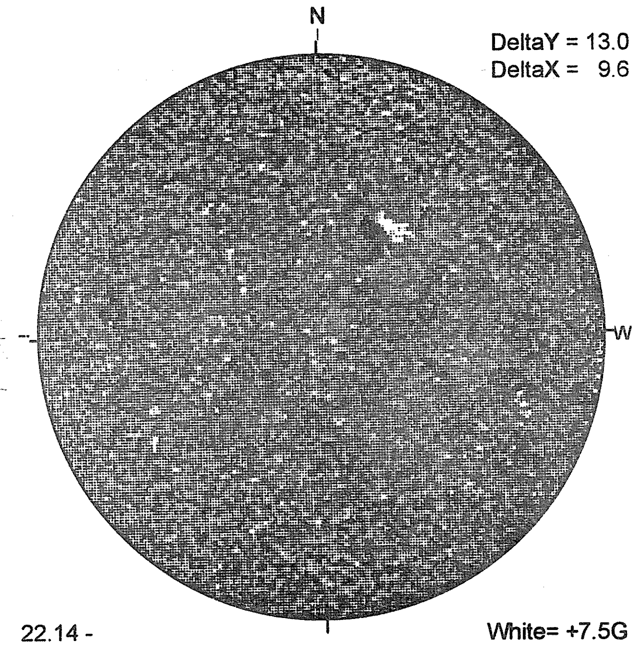
Solid = +
Dashed = -



2133 UT

MT. WILSON MAGNETOGRAM

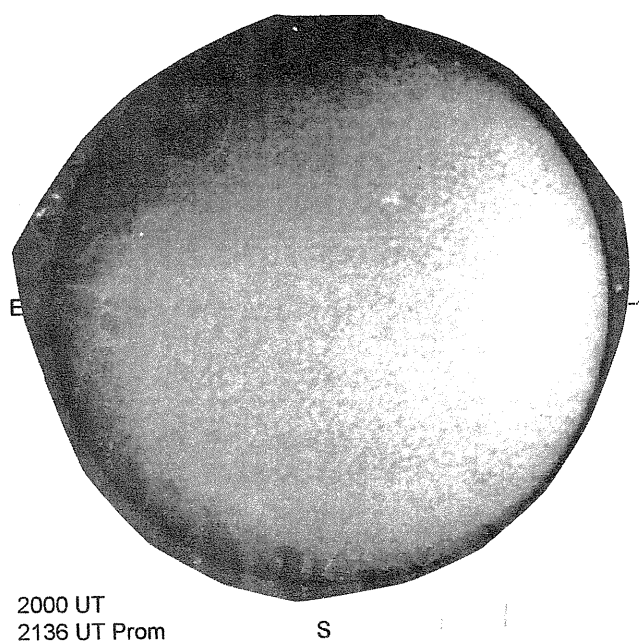
DeltaY = 13.0
DeltaX = 9.6



22.14 -
23.07 UT

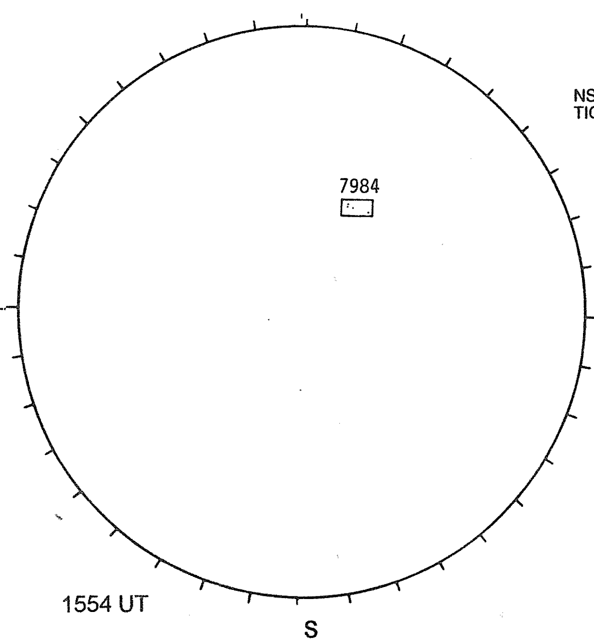
White= +7.5G
Black = -7.5G

MAUNA LOA H-ALPHA



2000 UT
2136 UT Prom

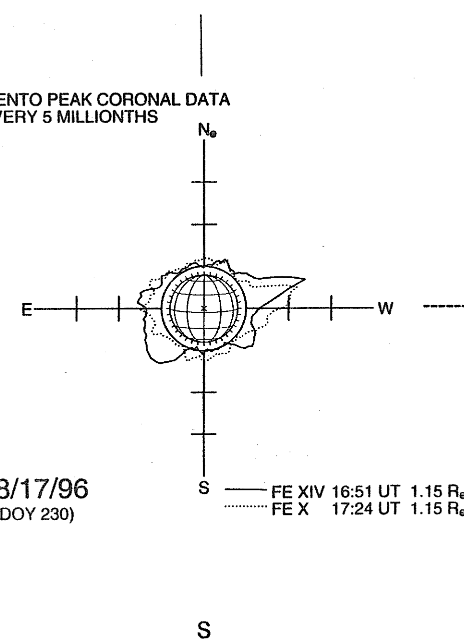
RAMEY SUNSPOT



1554 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



--------W

08/17/96
(DOY 230)

S

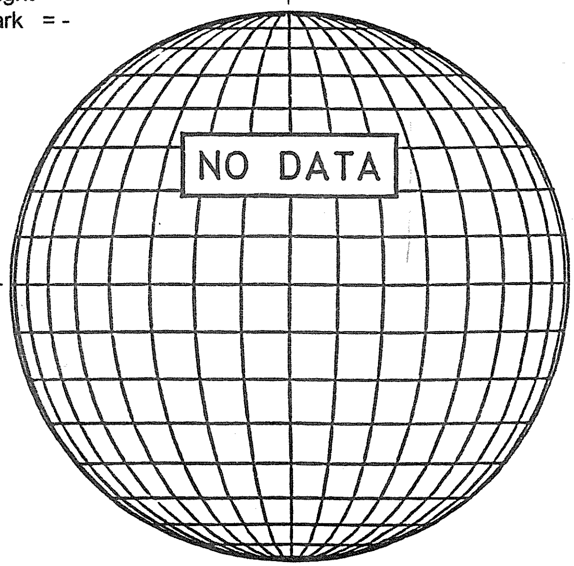
AUGUST 18, 1996 (P= 17.09, Bo = 6.78, Lo = 54.57)

KITT PEAK MAGNETOGRAM

N **868.8 nm**

Bright = +
Dark = -

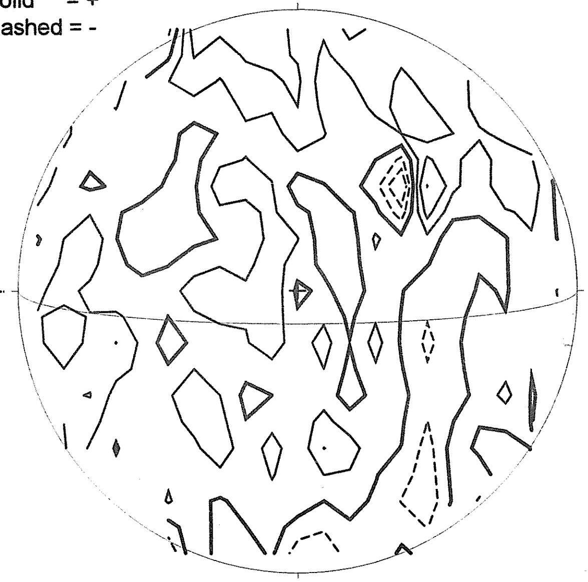
E--



STANFORD MAGNETOGRAM

N

Solid = +
Dashed = -

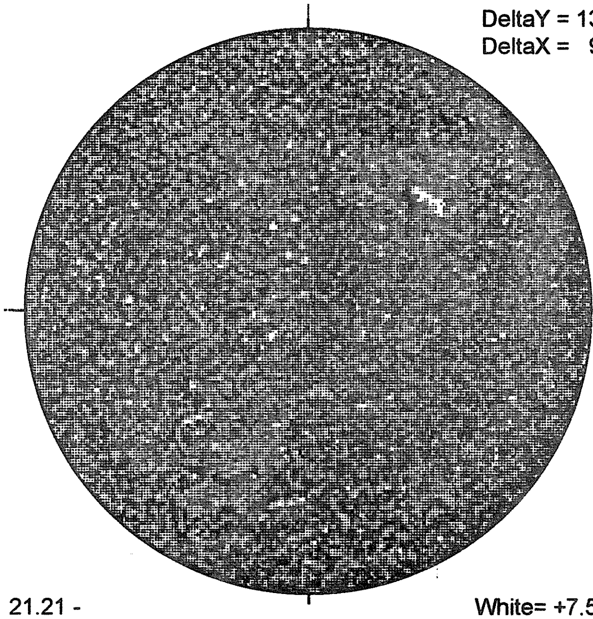


2135 UT

MT. WILSON MAGNETOGRAM

N

DeltaY = 13.0
DeltaX = 9.6



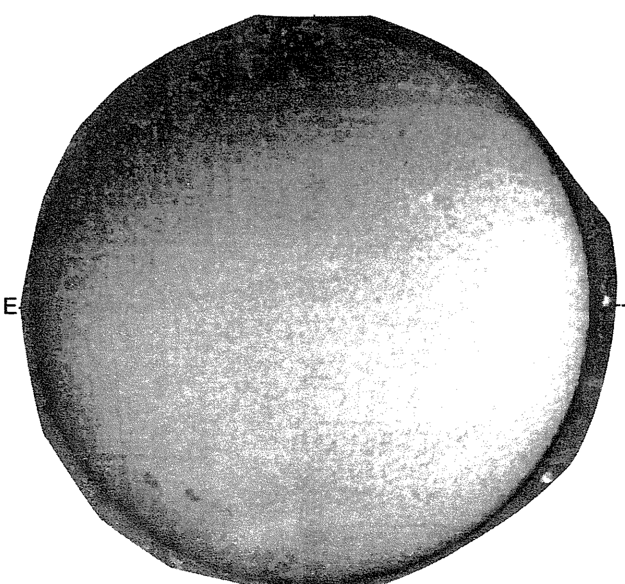
-W

21.21 -
22.14 UT

White= +7.5G
Black = -7.5G

MAUNA LOA H-ALPHA

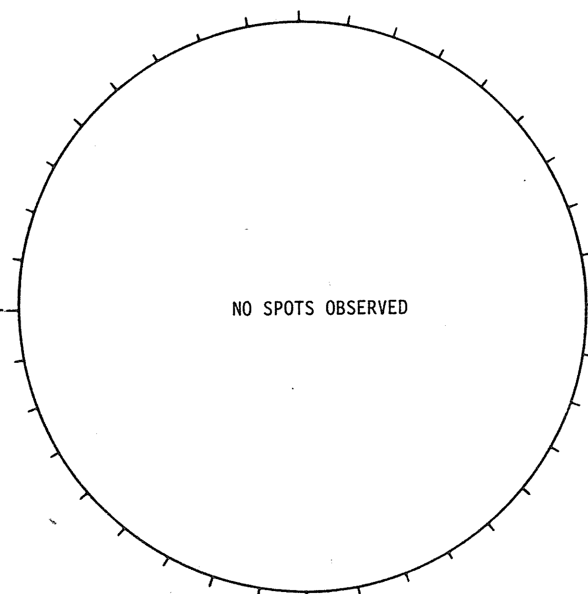
E



1954 UT
2106 UT Prom

S

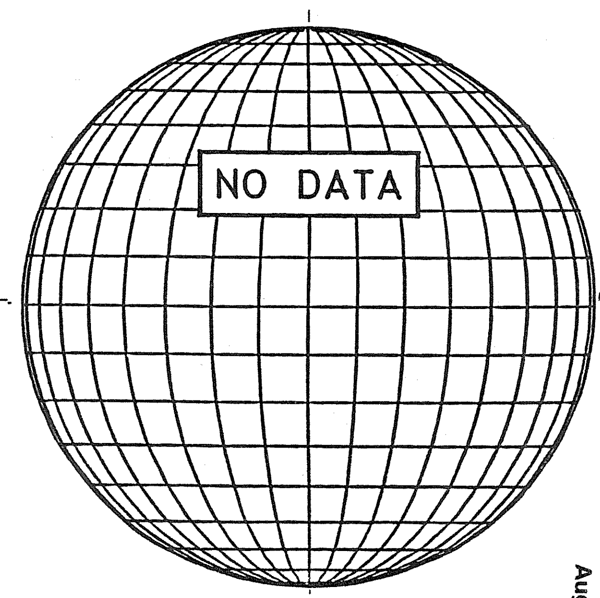
RAMEY SUNSPOT



1501 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)----



W

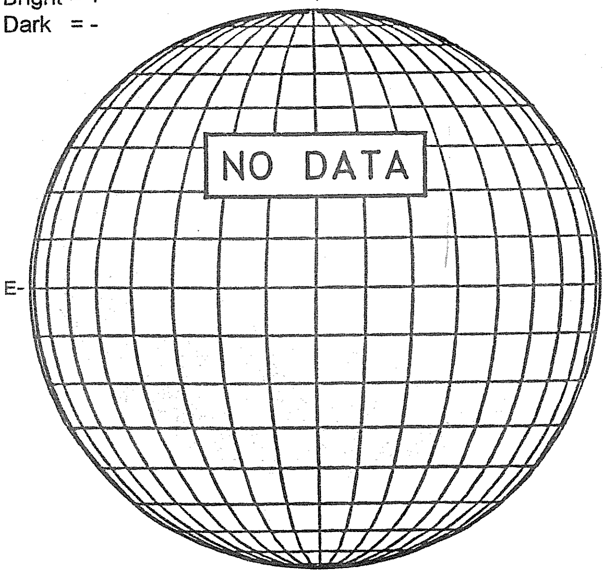
S

AUGUST 19, 1996 (P= 17.41, Bo = 6.82, Lo = 41.35)

KITT PEAK MAGNETOGRAM

868.8 nm

Bright = +
Dark = -



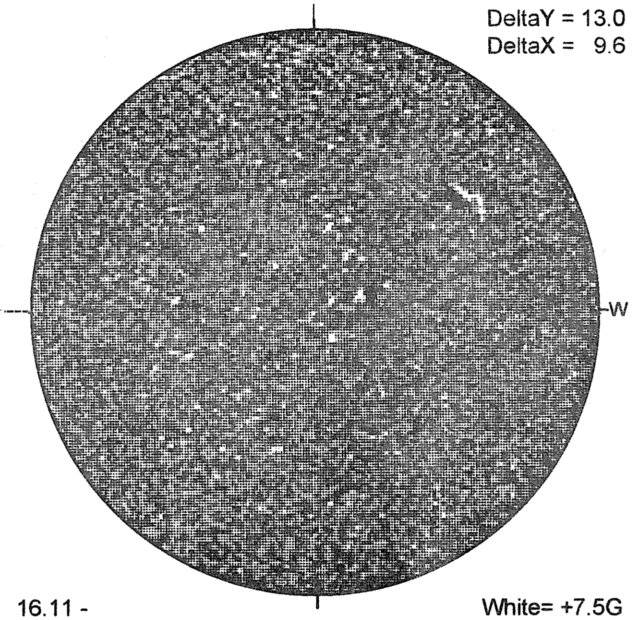
STANFORD MAGNETOGRAM

Solid = +
Dashed = -

1828 UT

MT. WILSON MAGNETOGRAM

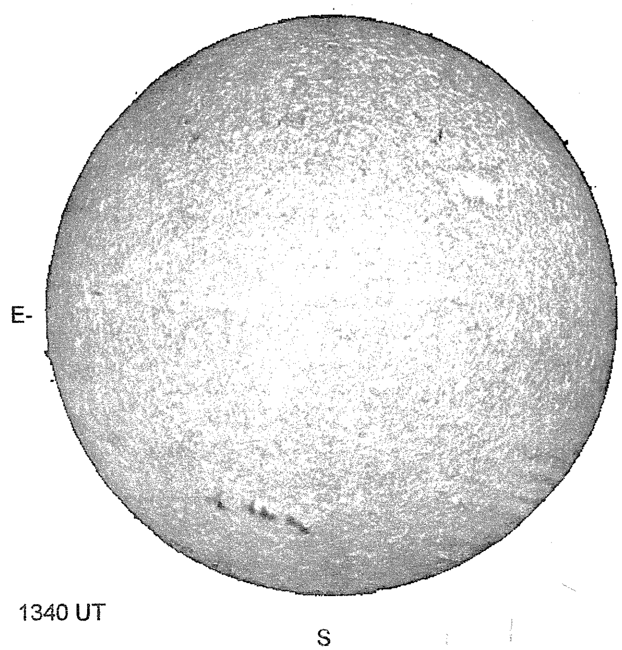
DeltaY = 13.0
DeltaX = 9.6



16.11 -
17.04 UT

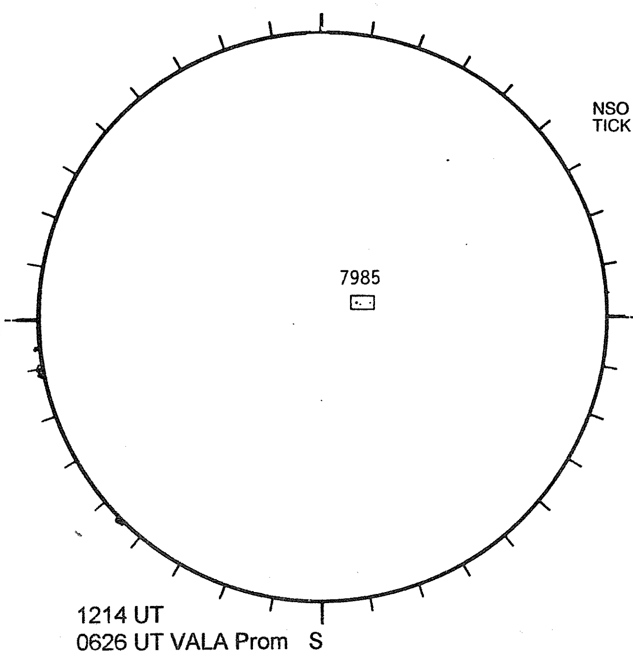
White= +7.5G
Black = -7.5G

----- SACRAMENTO PEAK H-ALPHA



1340 UT

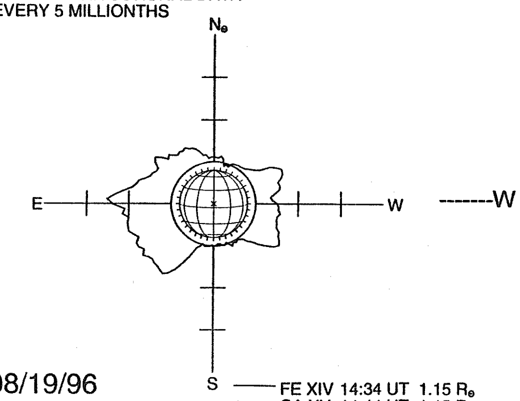
RAMEY SUNSPOT



1214 UT
0626 UT VALA Prom

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



08/19/96
(DOY 232)

—— FE XIV 14:34 UT 1.15 R☉
xxxxx CA XV 14:44 UT 1.15 R☉
NO CA XV ACTIVITY TODAY

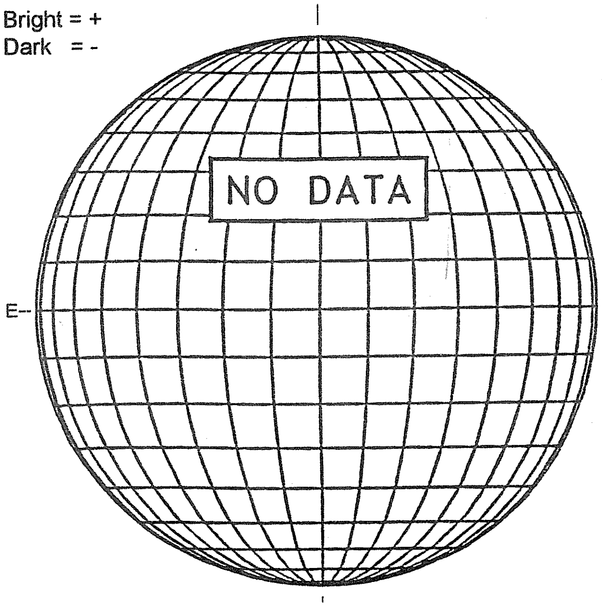
S

AUGUST 20, 1996 (P= 17.73, Bo = 6.86, Lo = 28.14)

KITT PEAK MAGNETOGRAM

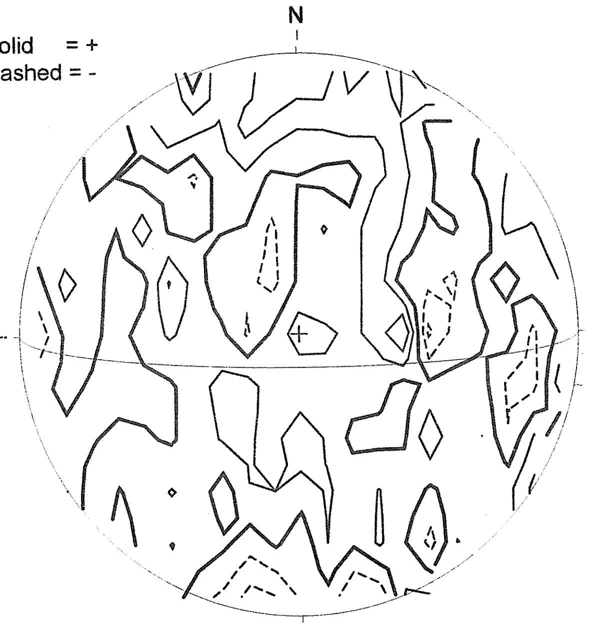
868.8 nm

Bright = +
Dark = -



STANFORD MAGNETOGRAM

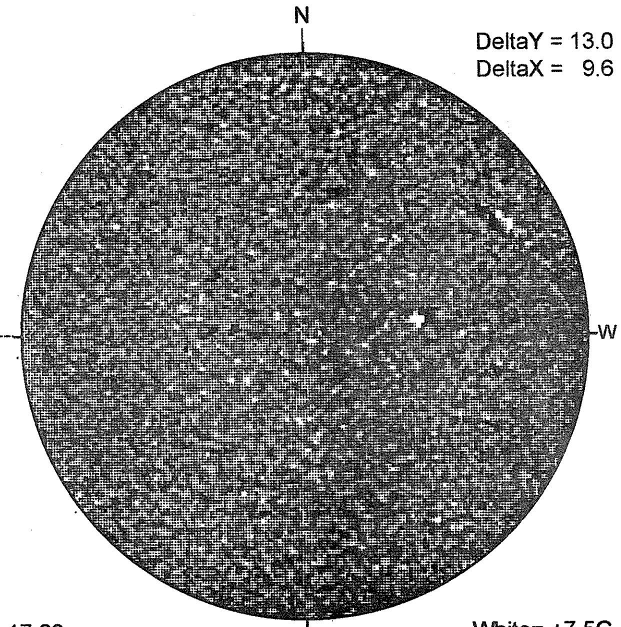
Solid = +
Dashed = -



1839 UT

MT. WILSON MAGNETOGRAM

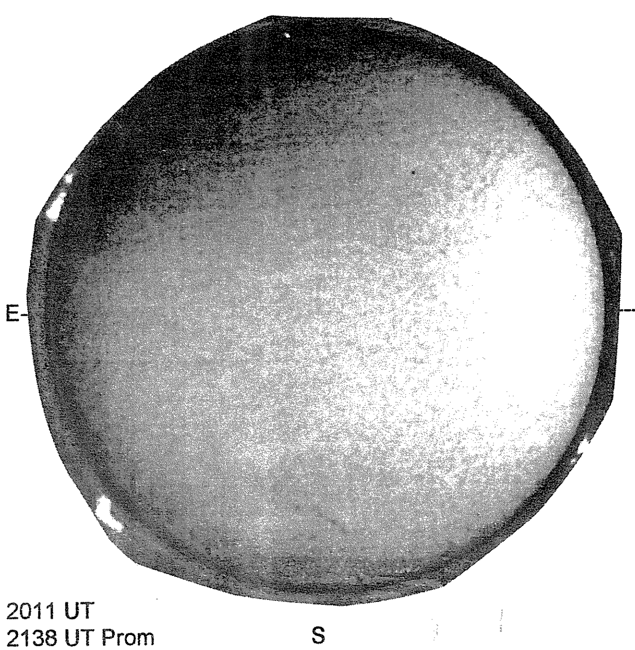
DeltaY = 13.0
DeltaX = 9.6



17.83 -
18.75 UT

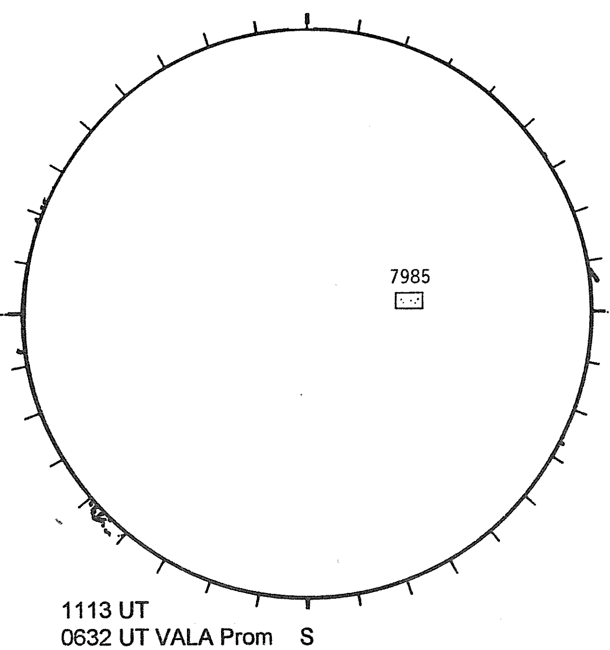
White= +7.5G
Black = -7.5G

MAUNA LOA H-ALPHA



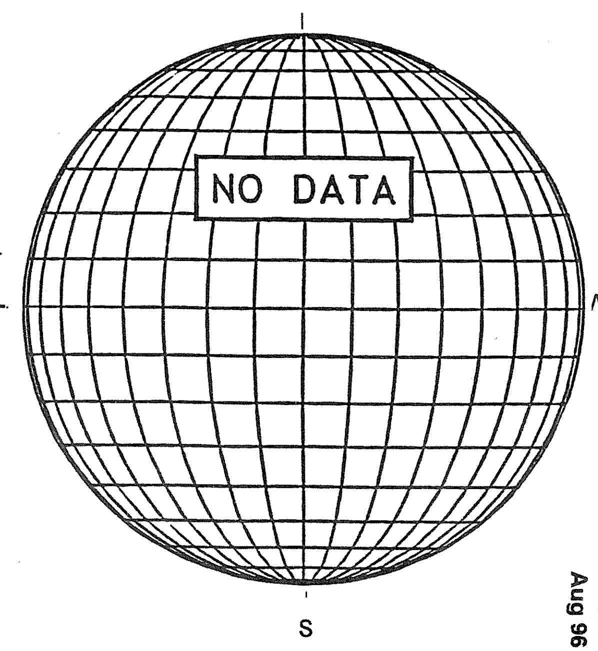
2011 UT
2138 UT Prom

RAMEY SUNSPOT



1113 UT
0632 UT VALA Prom

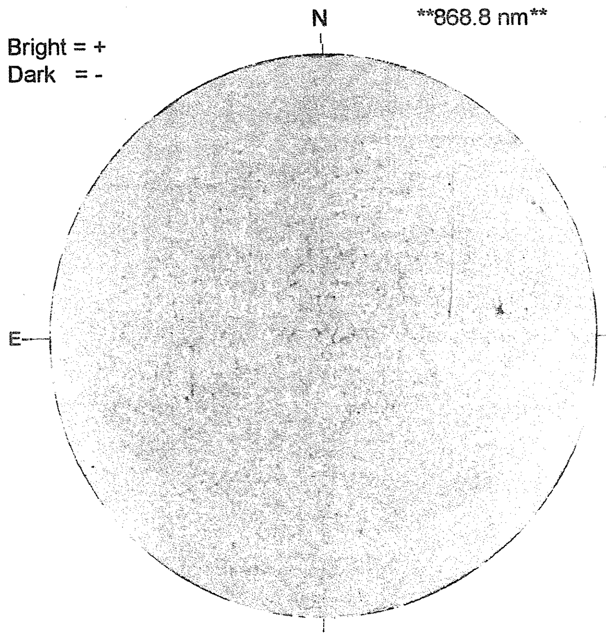
SACRAMENTO PEAK CORONA (1.15 Radii)----



AUGUST 21, 1996 (P= 18.04, Bo = 6.90, Lo = 14.92)

KITT PEAK MAGNETOGRAM **868.8 nm**

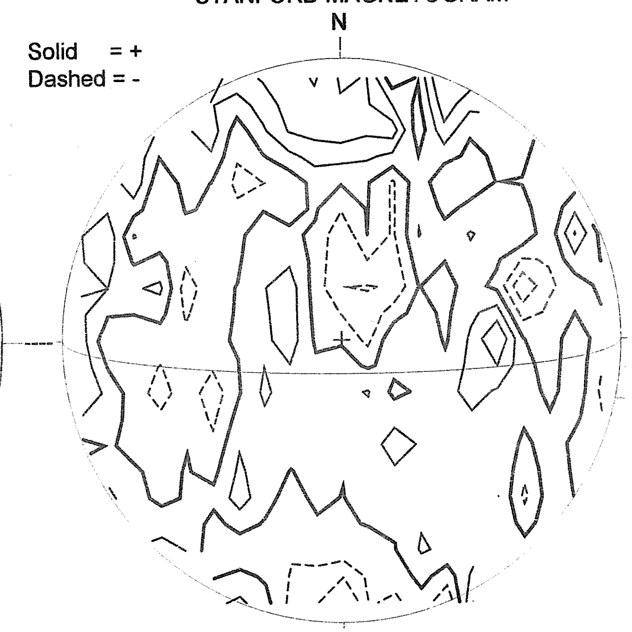
Bright = +
Dark = -



1629 UT

STANFORD MAGNETOGRAM

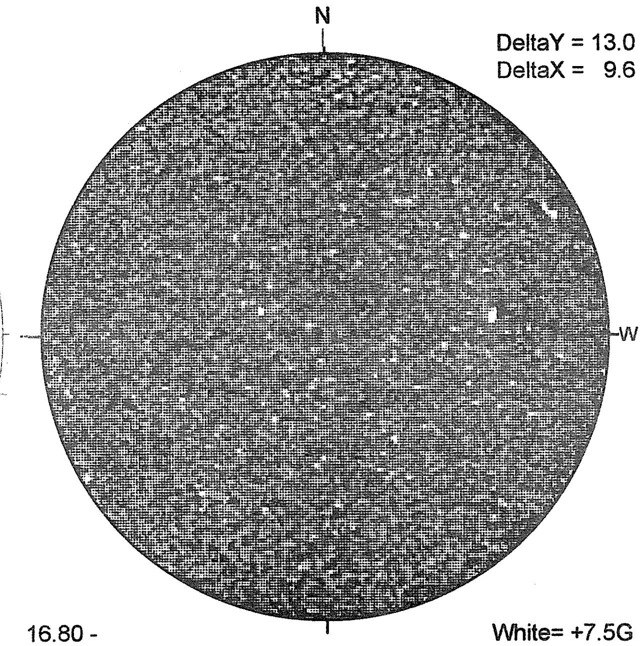
Solid = +
Dashed = -



2124 UT

MT. WILSON MAGNETOGRAM

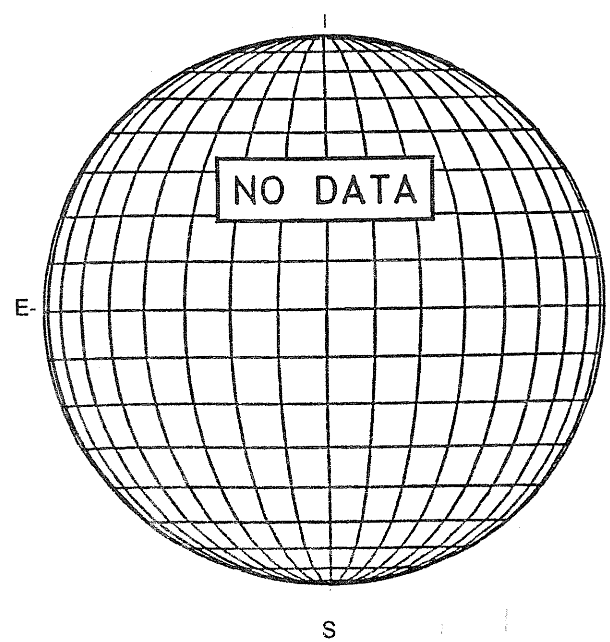
DeltaY = 13.0
DeltaX = 9.6



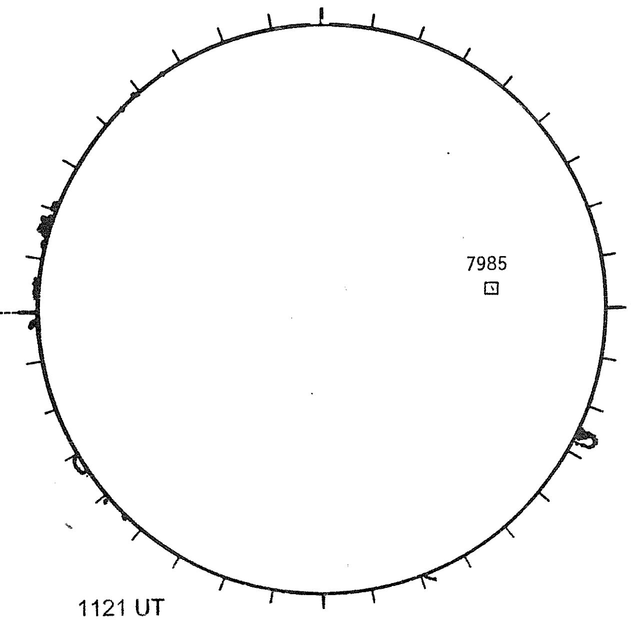
16.80 -
17.72 UT

White= +7.5G
Black = -7.5G

MAUNA LOA H-ALPHA

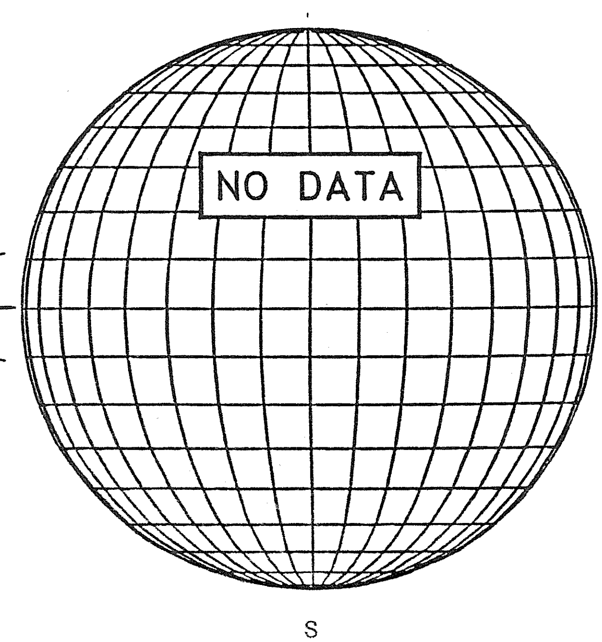


RAMEY SUNSPOT



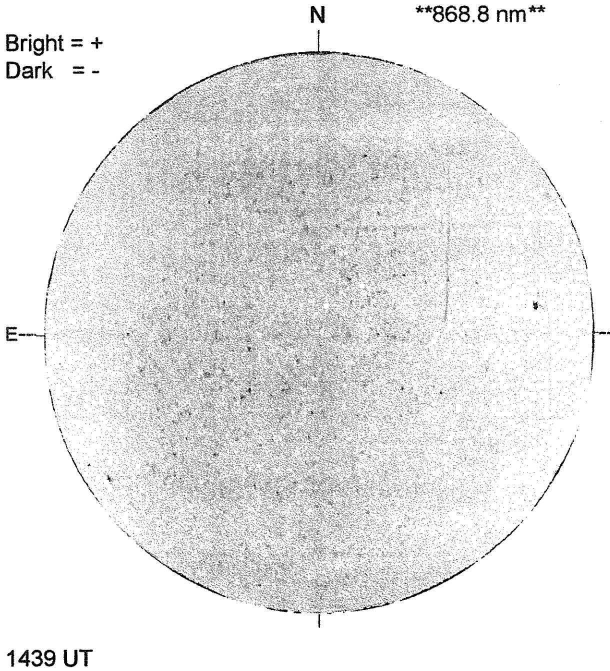
1121 UT
0837 UT VALA Prom

SACRAMENTO PEAK CORONA (1.15 Radii)----

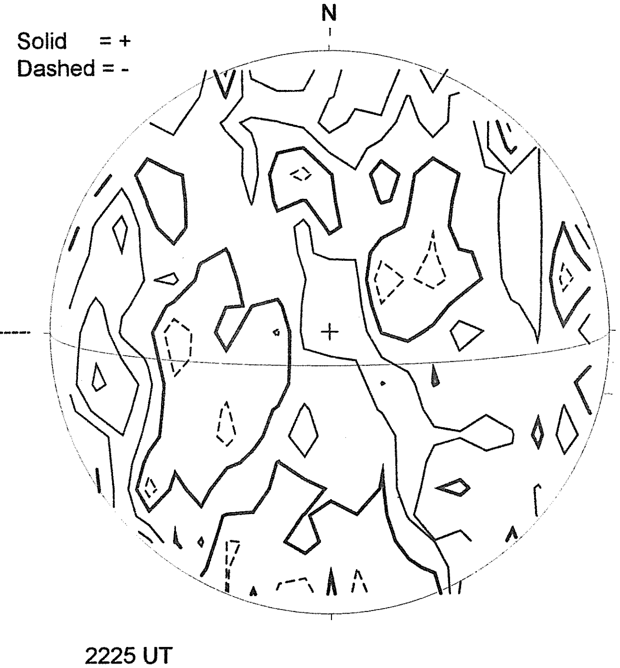


AUGUST 22, 1996 (P= 18.35, Bo = 6.93, Lo = 1.71)

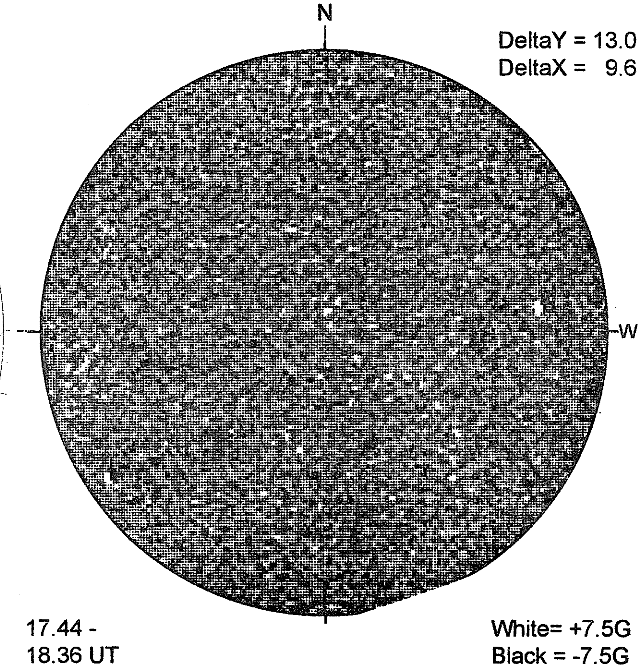
KITT PEAK MAGNETOGRAM



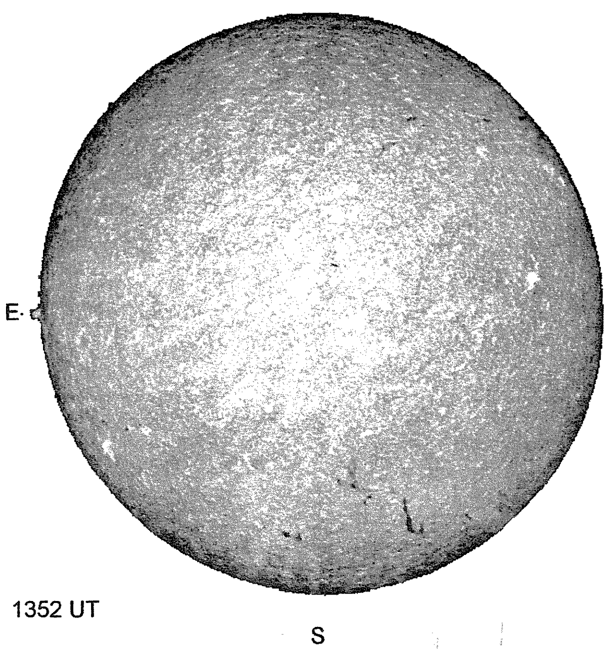
STANFORD MAGNETOGRAM



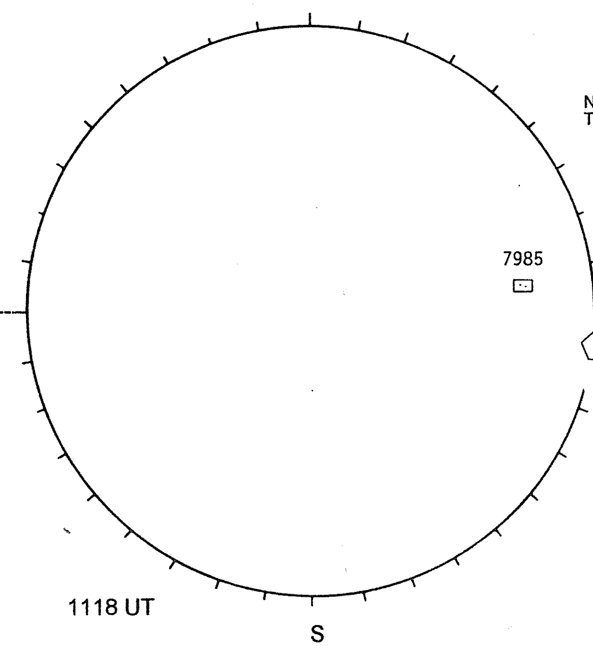
MT. WILSON MAGNETOGRAM



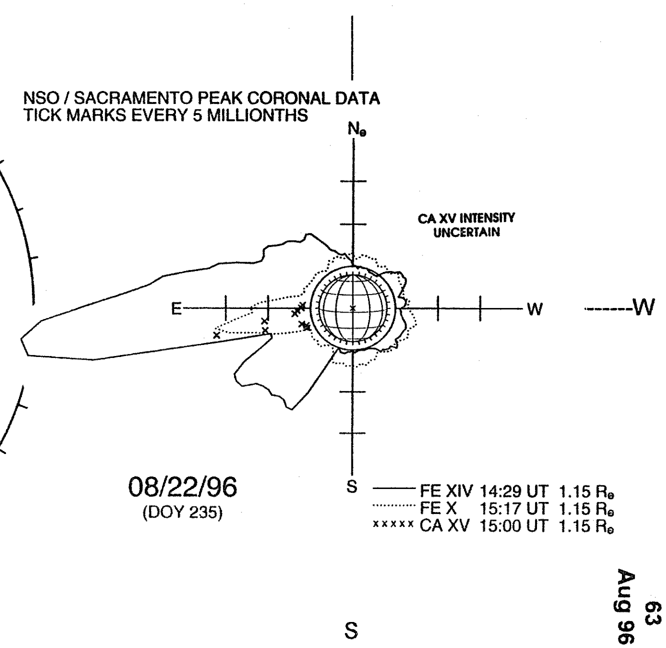
SACRAMENTO PEAK H-ALPHA



RAMEY SUNSPOT



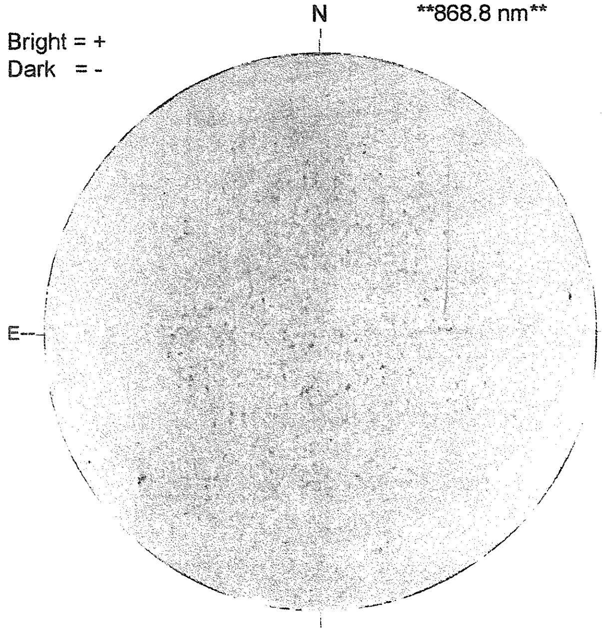
SACRAMENTO PEAK CORONA (1.15 Radii)



AUGUST 23, 1996 (P= 18.65, Bo = 6.97, Lo = 348.49)

KITT PEAK MAGNETOGRAM
868.8 nm

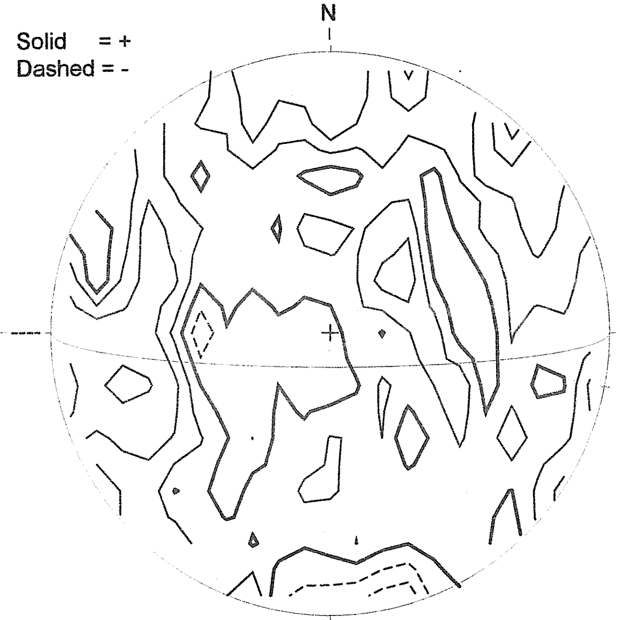
Bright = +
Dark = -



1454 UT

STANFORD MAGNETOGRAM

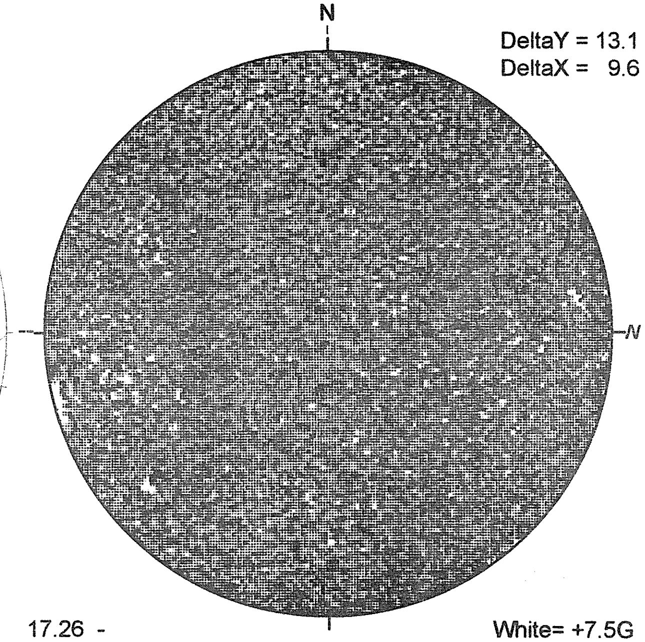
Solid = +
Dashed = -



1932 UT

MT. WILSON MAGNETOGRAM

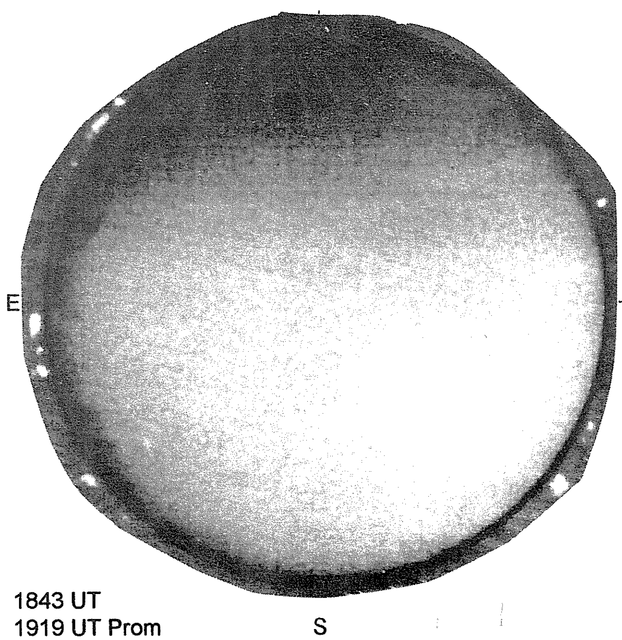
DeltaY = 13.1
DeltaX = 9.6



17.26 -
18.18 UT

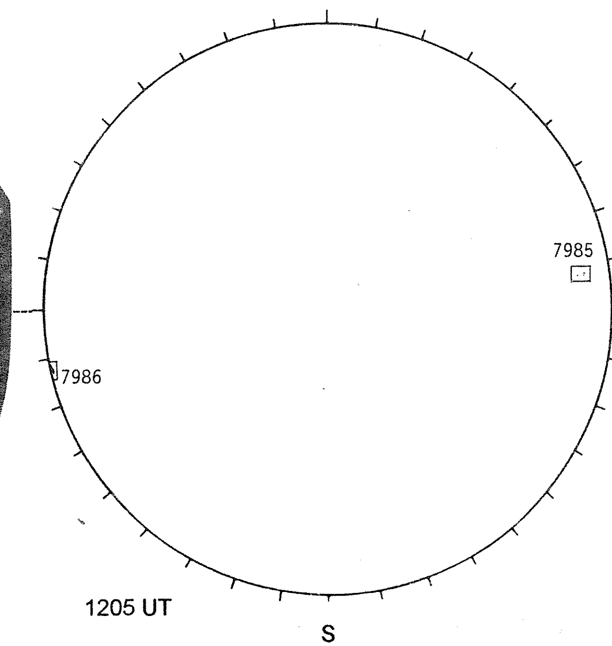
White= +7.5G
Black = -7.5G

MAUNA LOA H-ALPHA



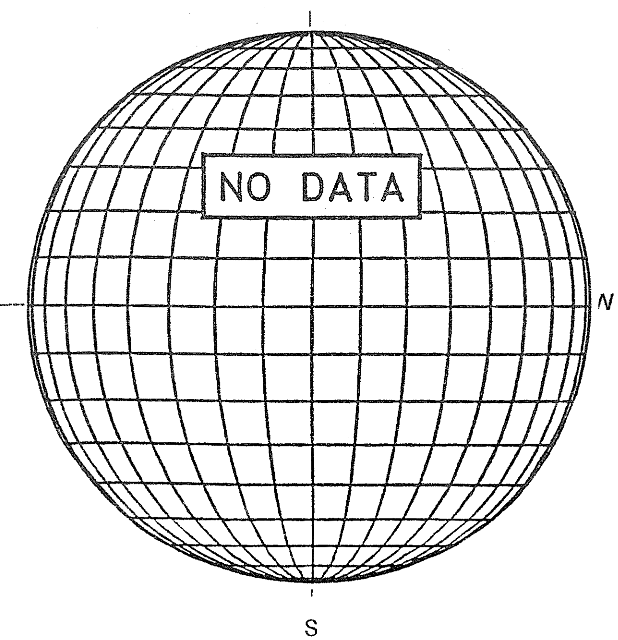
1843 UT
1919 UT Prom

RAMEY SUNSPOT



1205 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----

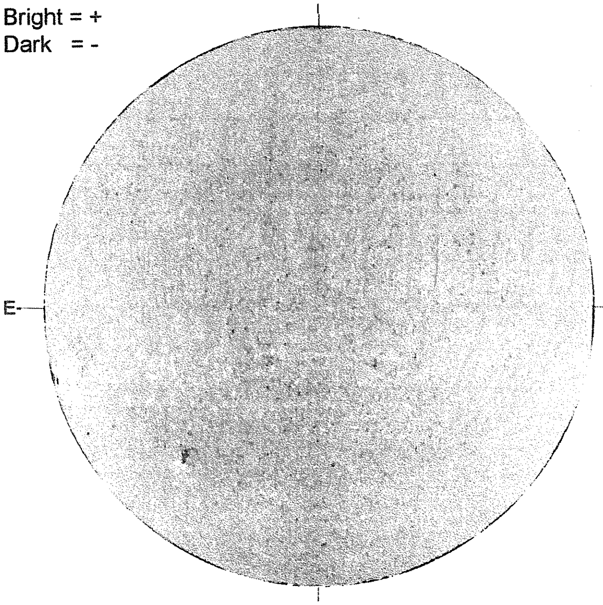


AUGUST 24, 1996 (P= 18.95, Bo = 7.00 Lo = 335.28)

KITT PEAK MAGNETOGRAM

868.8 nm

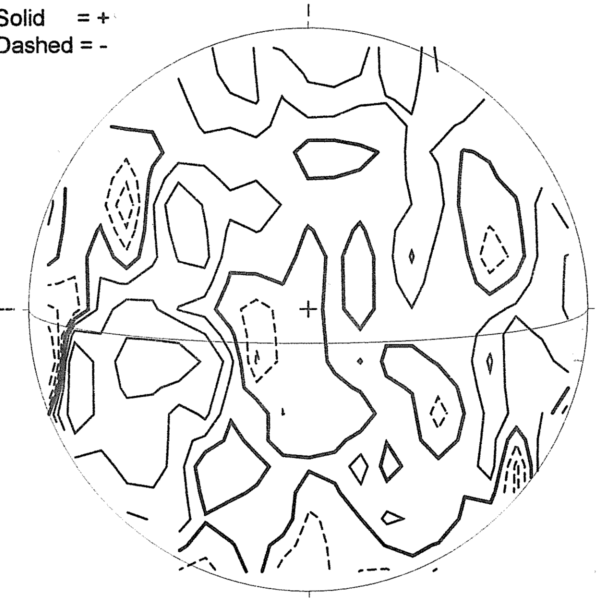
Bright = +
Dark = -



1445 UT

STANFORD MAGNETOGRAM

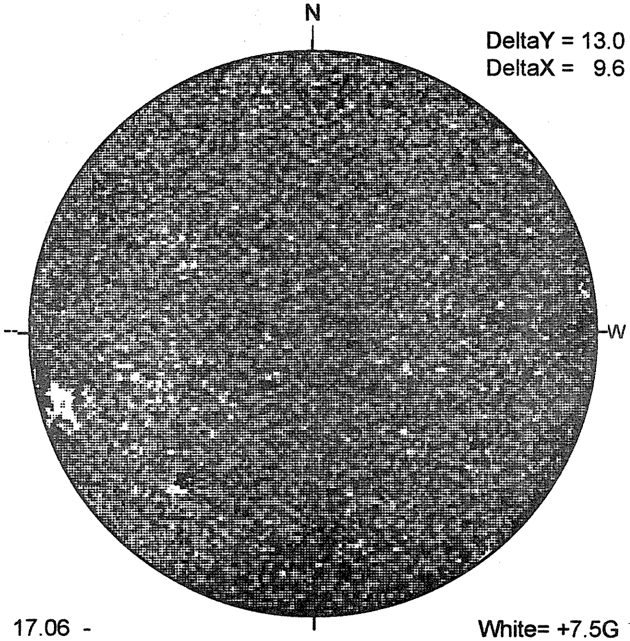
Solid = +
Dashed = -



2107 UT

MT. WILSON MAGNETOGRAM

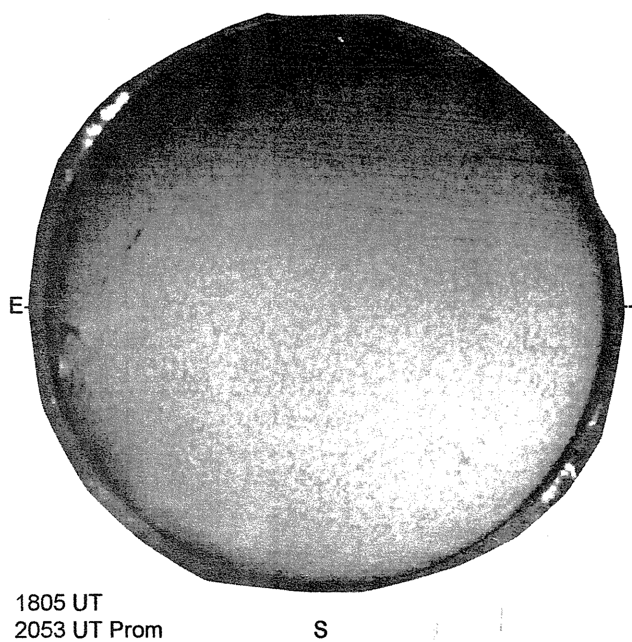
DeltaY = 13.0
DeltaX = 9.6



17.06 -
17.99 UT

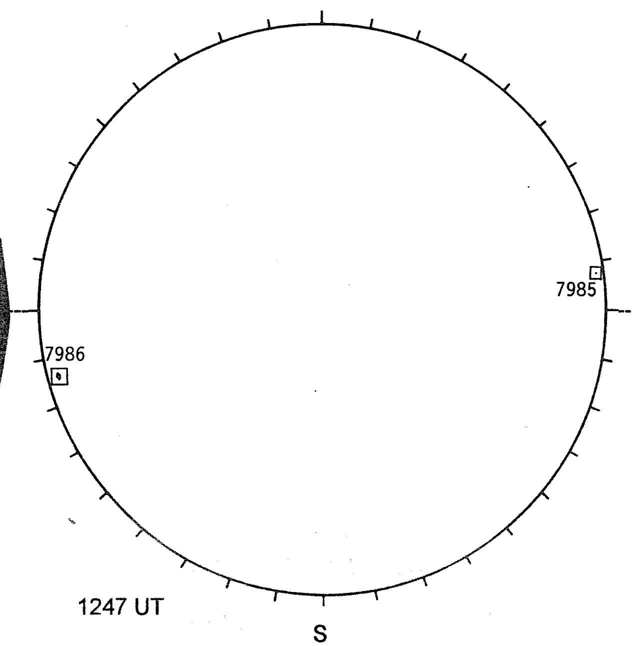
White= +7.5G
Black = -7.5G

MAUNA LOA H-ALPHA



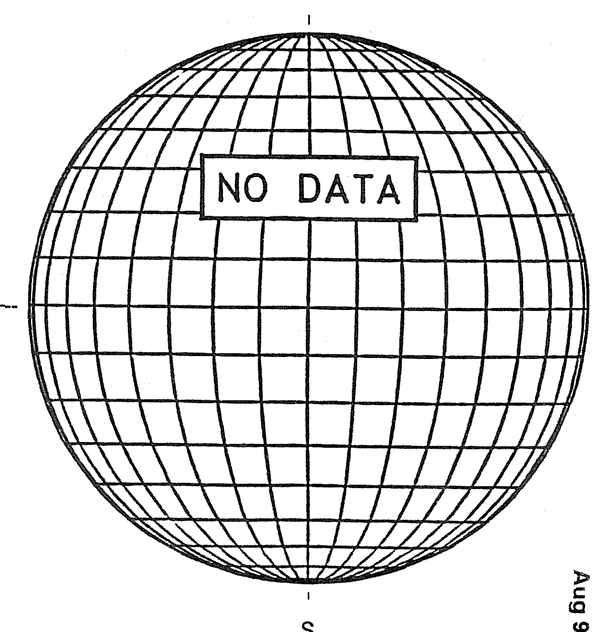
1805 UT
2053 UT Prom

RAMEY SUNSPOT



1247 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----

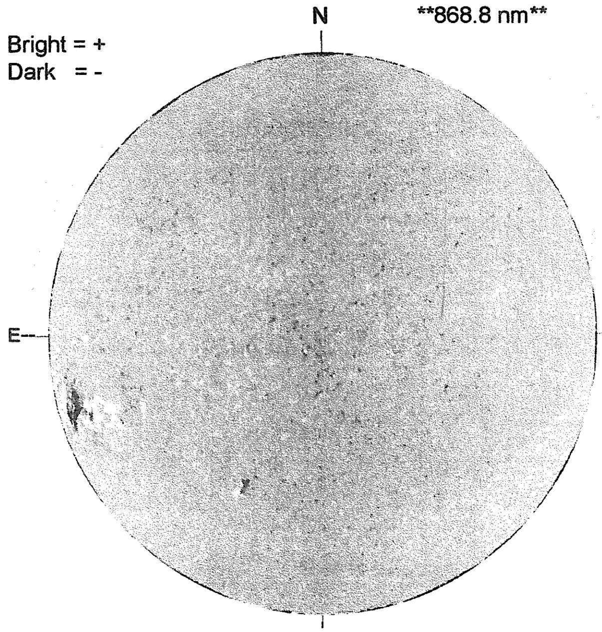


AUGUST 25, 1996 (P= 19.24, Bo = 7.03, Lo = 322.06)

KITT PEAK MAGNETOGRAM

868.8 nm

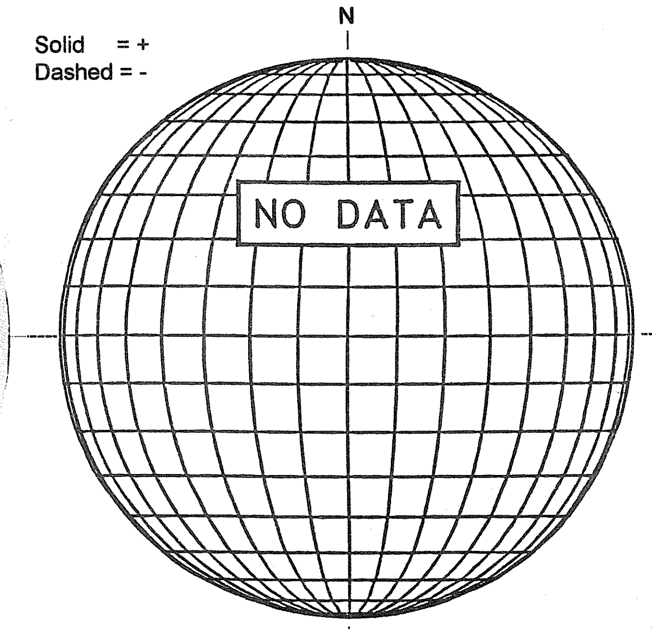
Bright = +
Dark = -



1507 UT

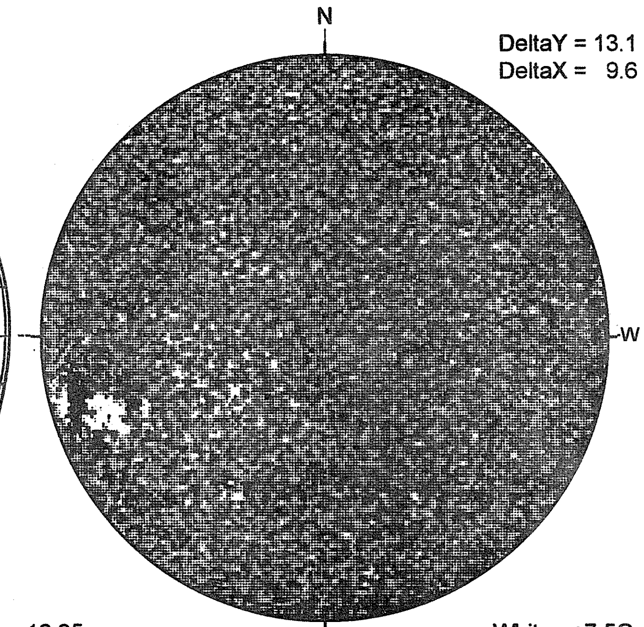
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

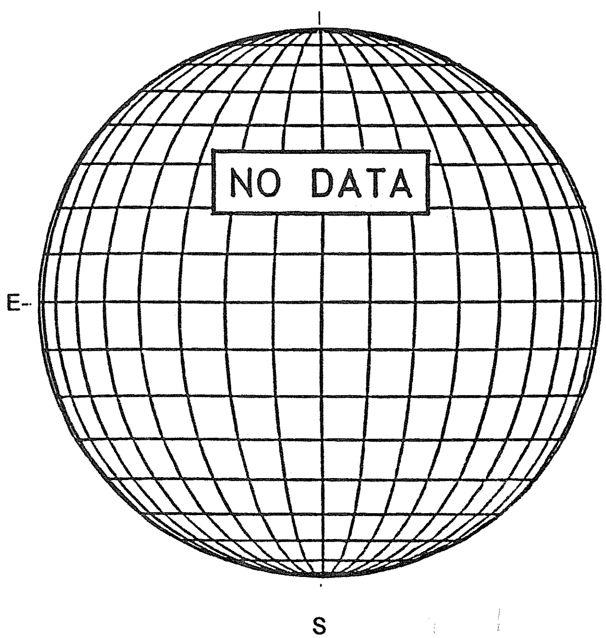
DeltaY = 13.1
DeltaX = 9.6



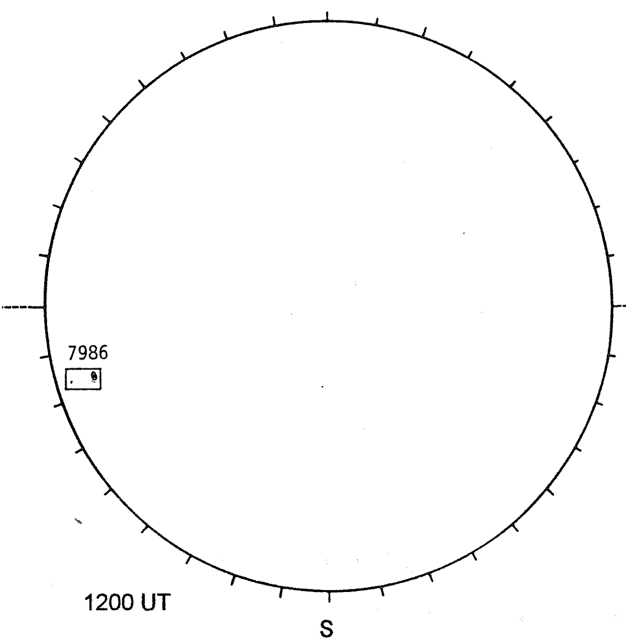
16.35 -
17.27 UT

White= +7.5G
Black = -7.5G

SACRAMENTO PEAK H-ALPHA

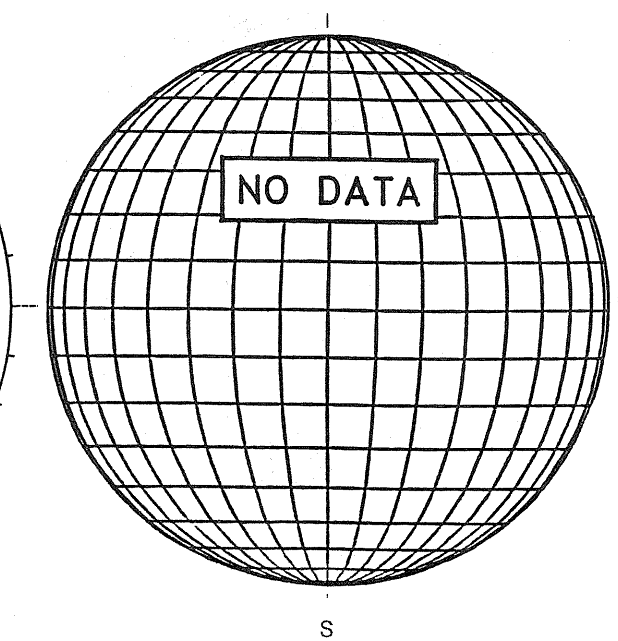


RAMEY SUNSPOT



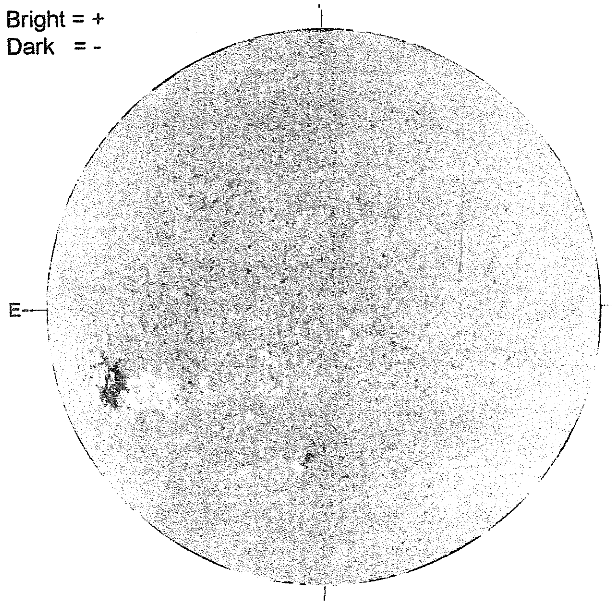
1200 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----

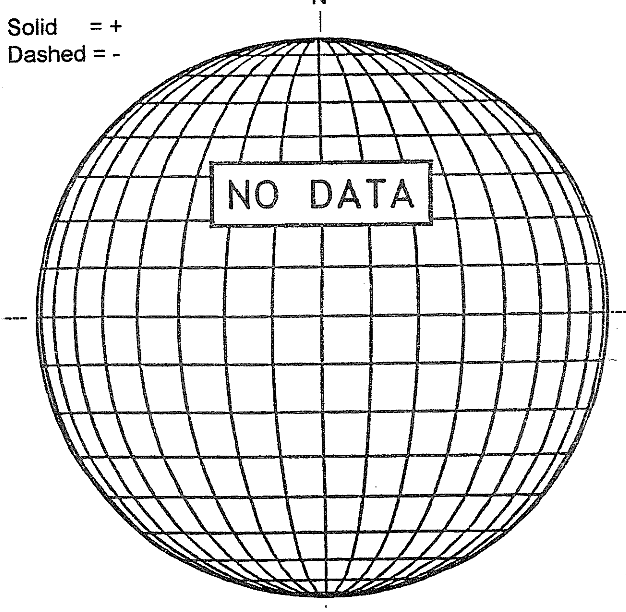


AUGUST 26, 1996 (P= 19.53, Bo = 7.06, Lo = 308.85)

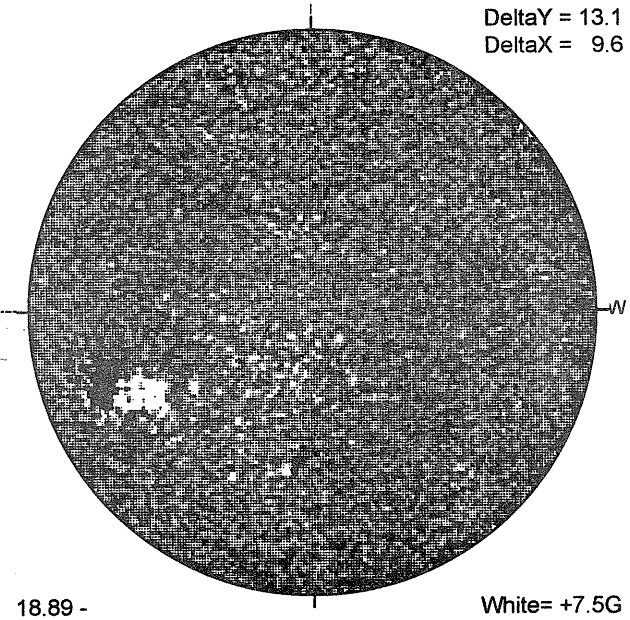
KITT PEAK MAGNETOGRAM



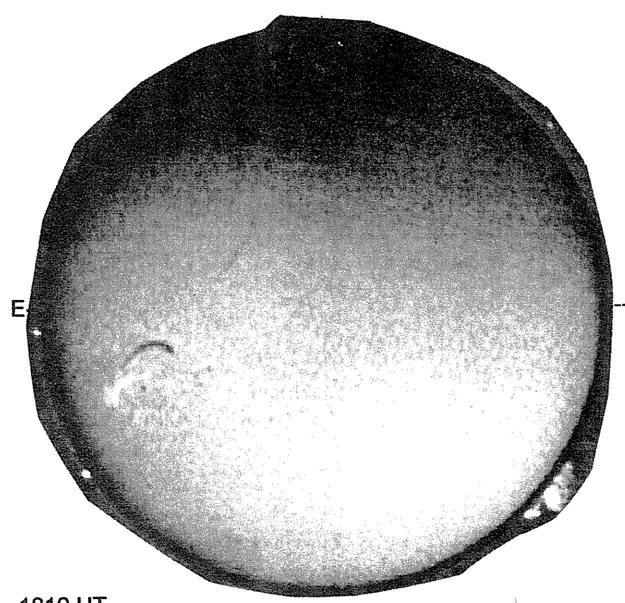
STANFORD MAGNETOGRAM



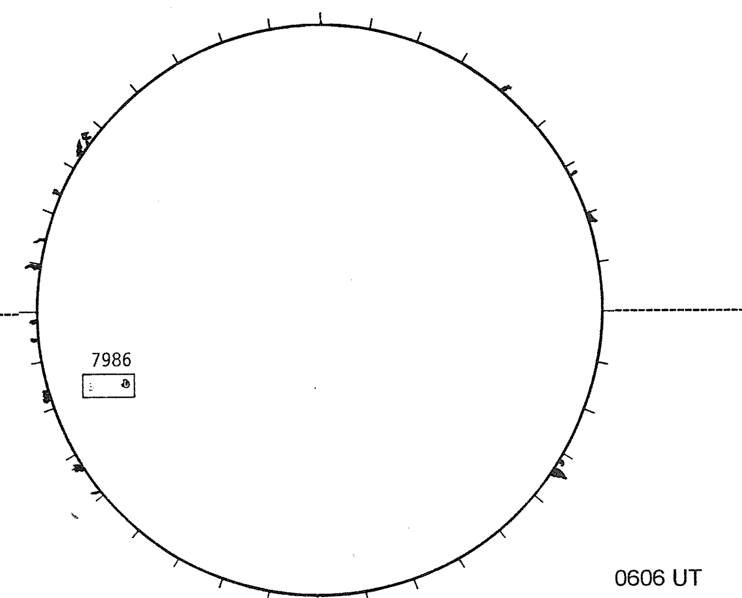
MT. WILSON MAGNETOGRAM



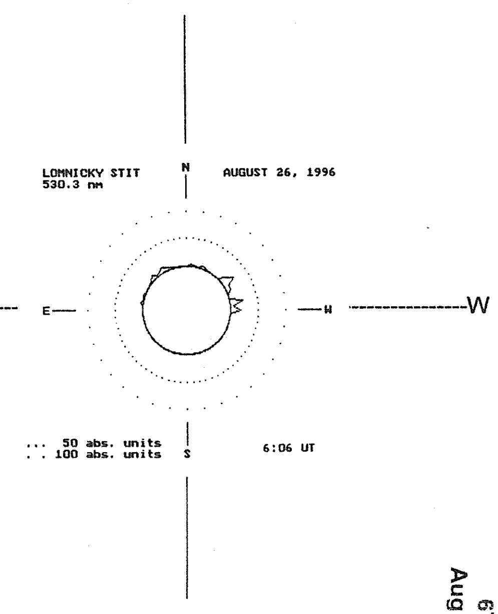
MAUNA LOA H-ALPHA



RAMEY SUNSPOT



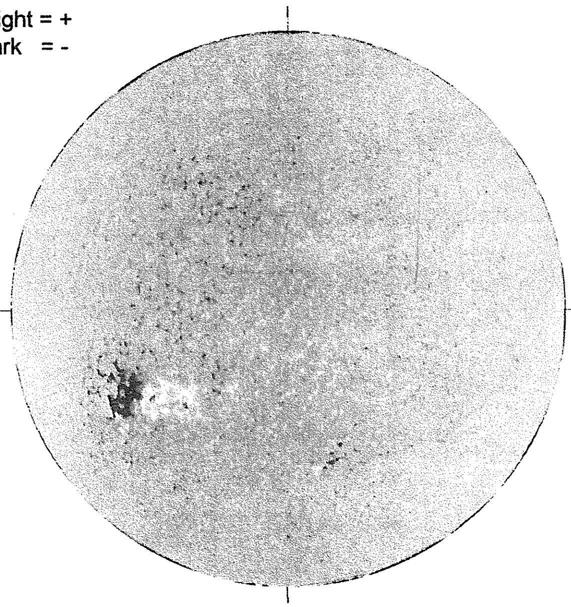
LOMNICKY CORONA (1.04 Radii)----



AUGUST 27, 1996 (P= 19.81, Bo = 7.08, Lo = 295.64)

KITT PEAK MAGNETOGRAM
868.8 nm

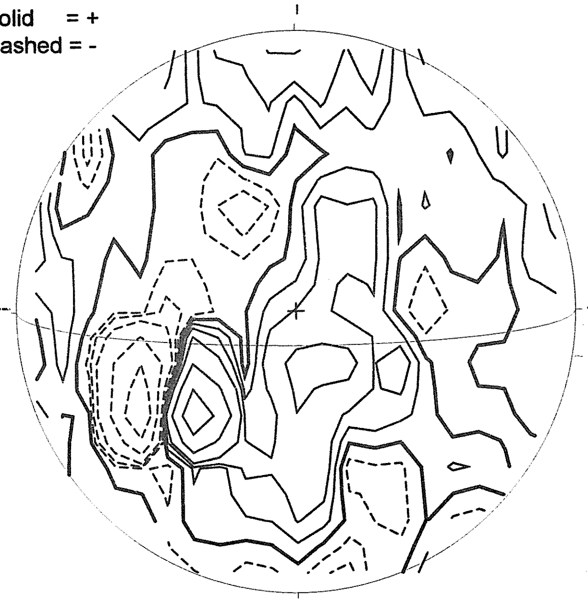
Bright = +
Dark = -



1442 UT

STANFORD MAGNETOGRAM

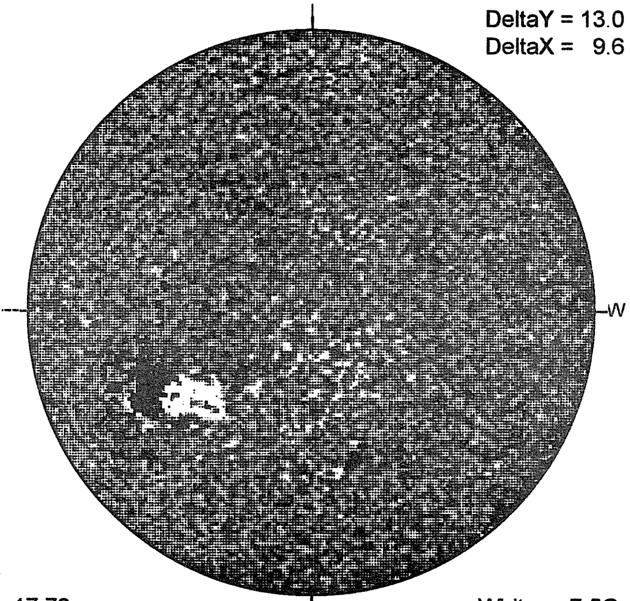
Solid = +
Dashed = -



2214 UT

MT. WILSON MAGNETOGRAM

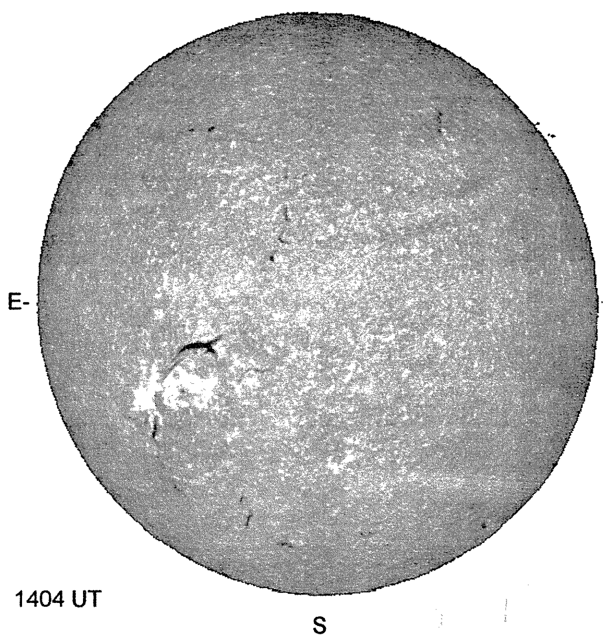
DeltaY = 13.0
DeltaX = 9.6



17.79 -
18.72 UT

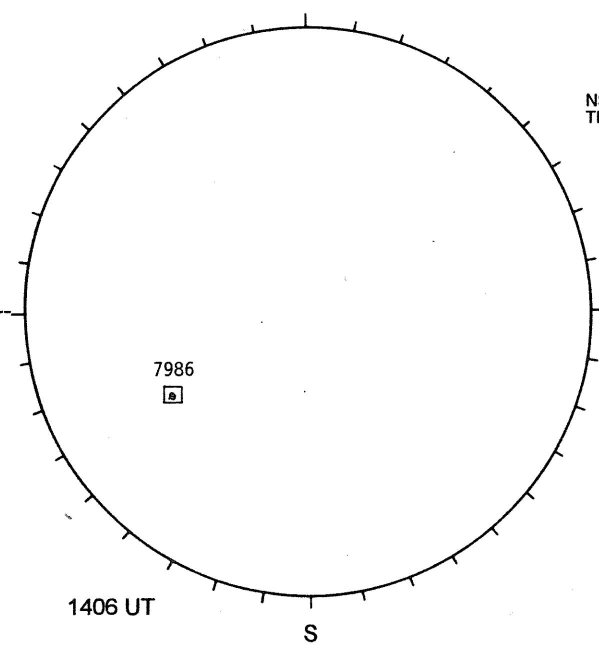
White= +7.5G
Black = -7.5G

SACRAMENTO PEAK H-ALPHA



1404 UT

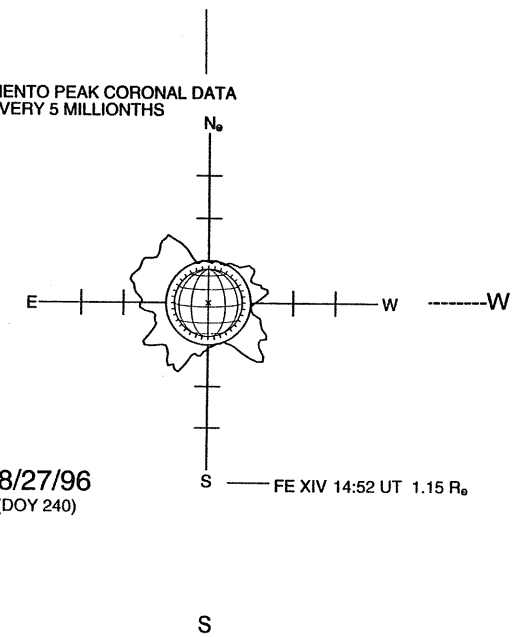
RAMEY SUNSPOT



1406 UT

SACRAMENTO PEAK CORONA (1.15 Radii)

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



FE XIV 14:52 UT 1.15 R

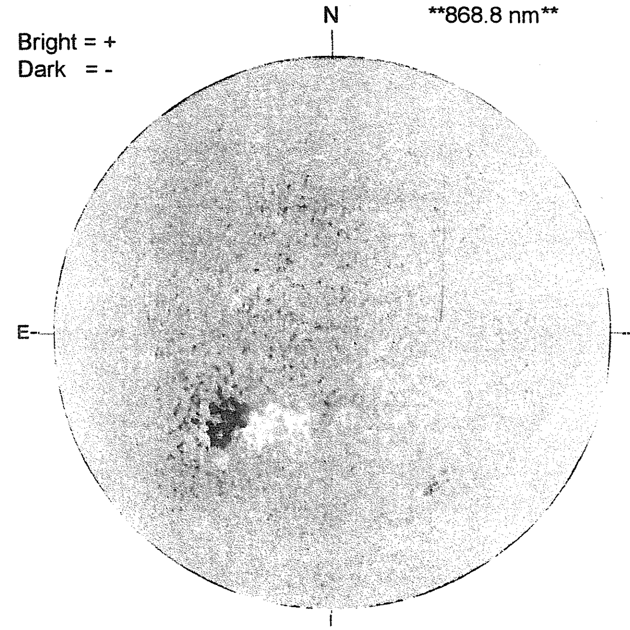
08/27/96
(DOY 240)

AUGUST 28, 1996 (P= 20.09, Bo = 7.11, Lo = 282.43)

KITT PEAK MAGNETOGRAM

868.8 nm

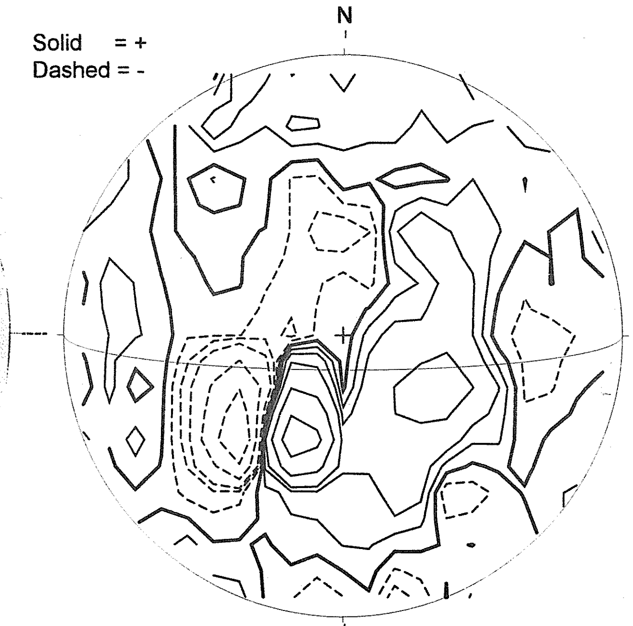
Bright = +
Dark = -



1832 UT

STANFORD MAGNETOGRAM

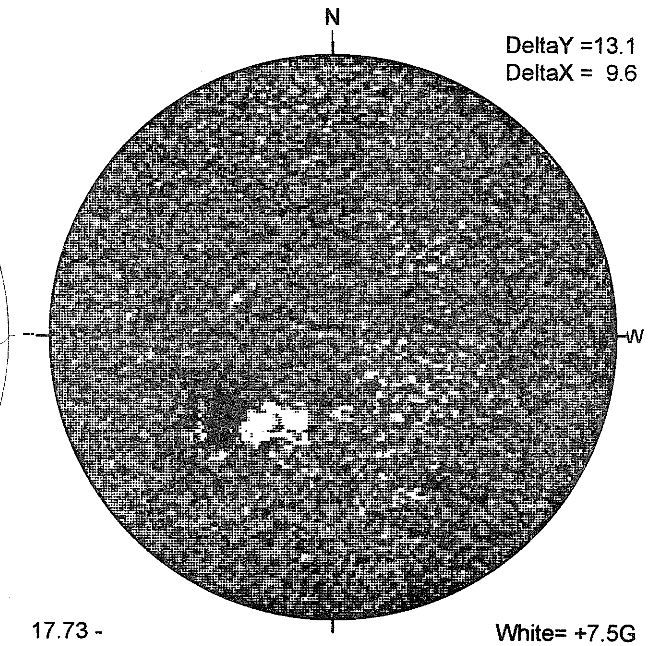
Solid = +
Dashed = -



2043 UT

MT. WILSON MAGNETOGRAM

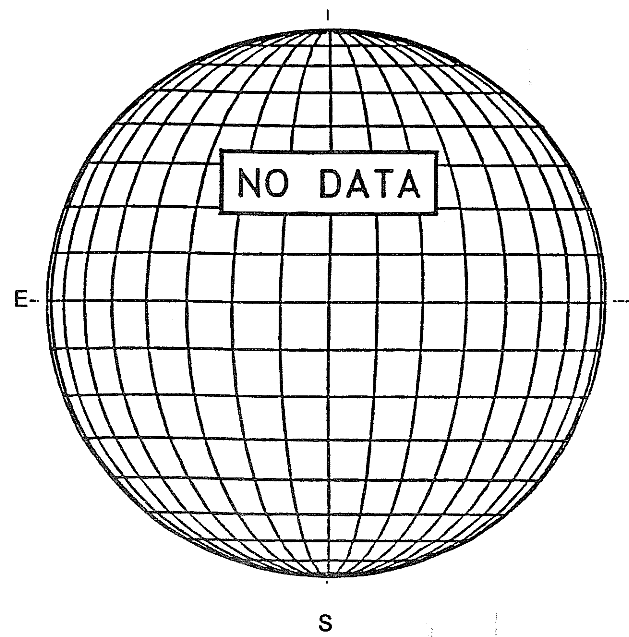
DeltaY =13.1
DeltaX = 9.6



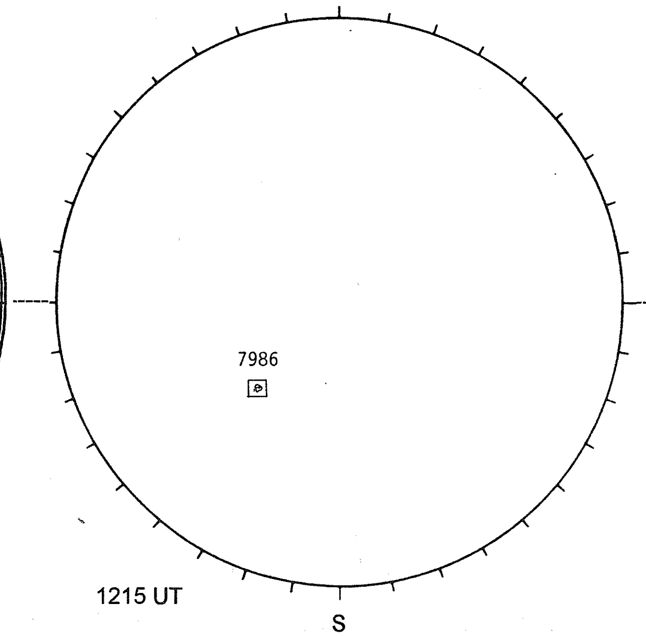
17.73 -
18.65 UT

White= +7.5G
Black = -7.5G

---- MAUNA LOA H-ALPHA

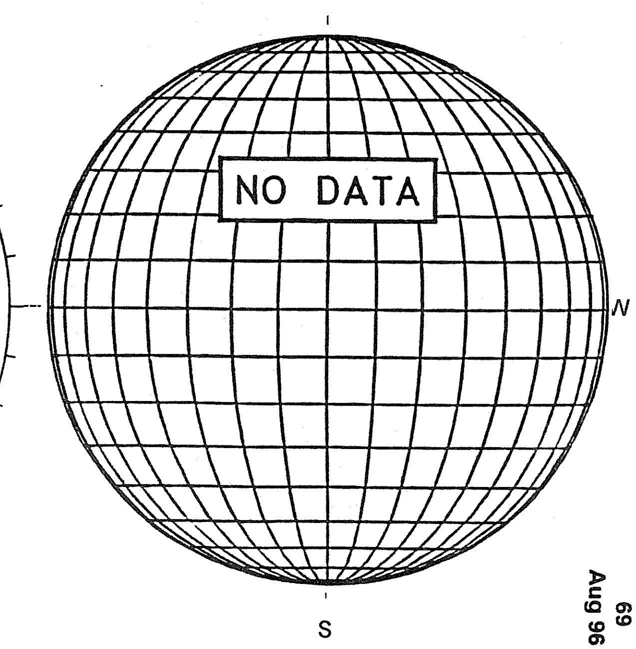


RAMEY SUNSPOT



1215 UT

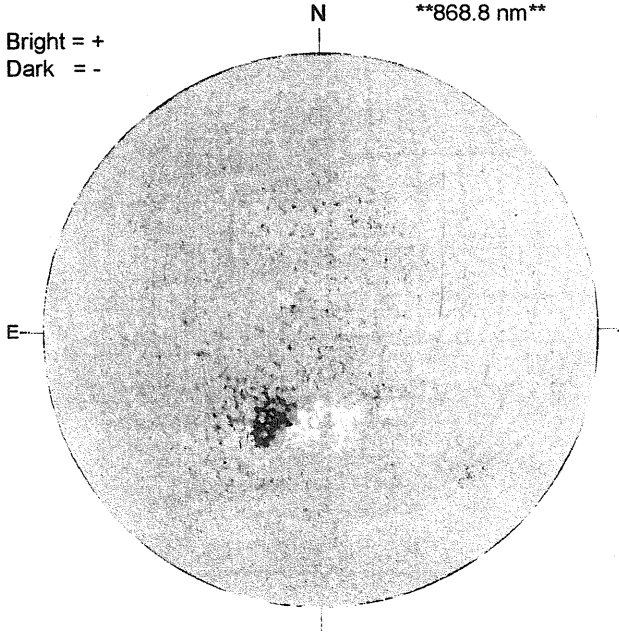
SACRAMENTO PEAK CORONA (1.15 Radii)----



AUGUST 29, 1996 (P= 20.36, Bo = 7.13, Lo = 269.22)

KITT PEAK MAGNETOGRAM
868.8 nm

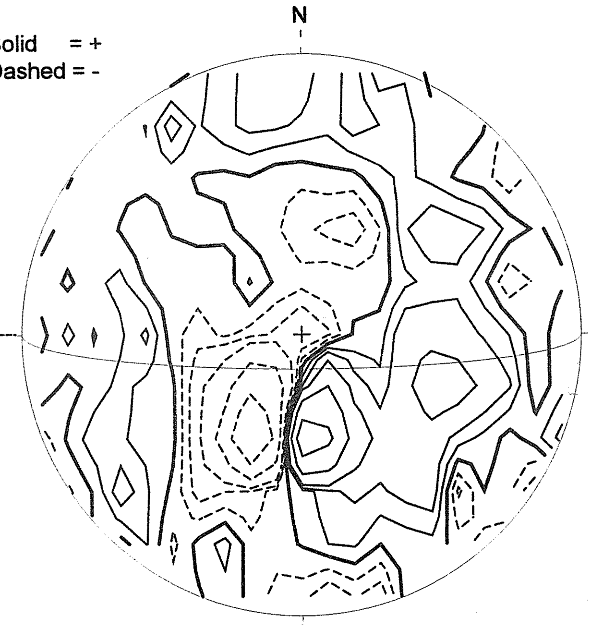
Bright = +
Dark = -



1635 UT

STANFORD MAGNETOGRAM

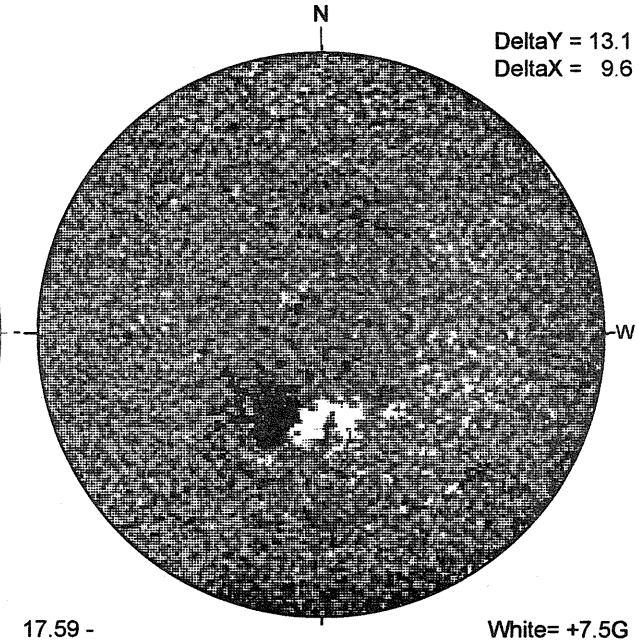
Solid = +
Dashed = -



1942 UT

MT. WILSON MAGNETOGRAM

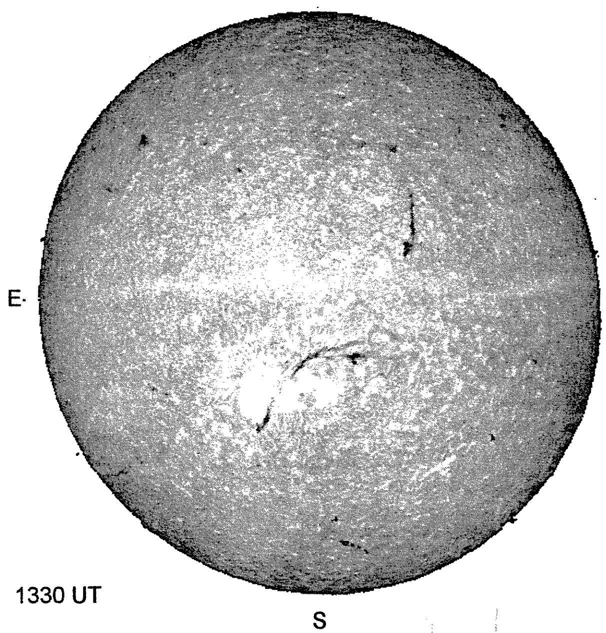
DeltaY = 13.1
DeltaX = 9.6



17.59 -
18.52 UT

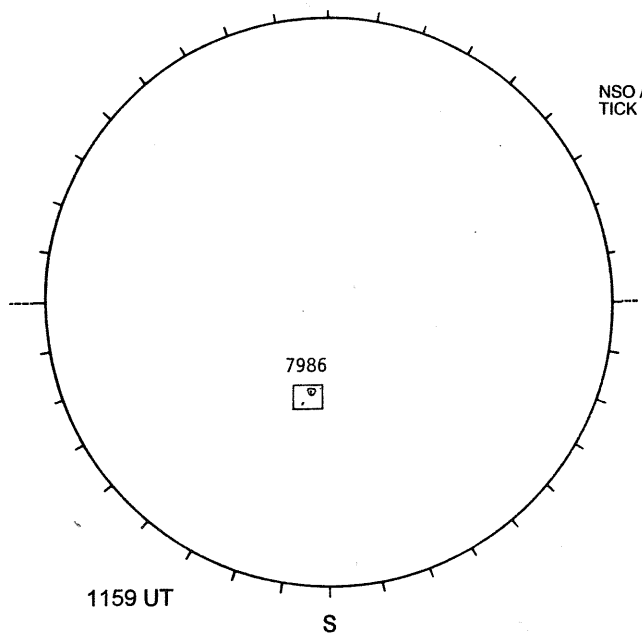
White= +7.5G
Black = -7.5G

----- SACRAMENTO PEAK H-ALPHA



1330 UT

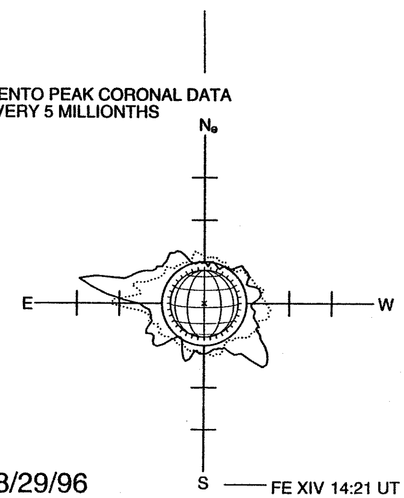
RAMEY SUNSPOT



1159 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----

NSO / SACRAMENTO PEAK CORONAL DATA
TICK MARKS EVERY 5 MILLIONTHS



-------W

08/29/96
(DOY 242)

——— FE XIV 14:21 UT 1.15 $R_\odot$
.... FE X 14:51 UT 1.15 $R_\odot$
xxxxx CA XV 14:34 UT 1.15 $R_\odot$
NO CA XV ACTIVITY TODAY

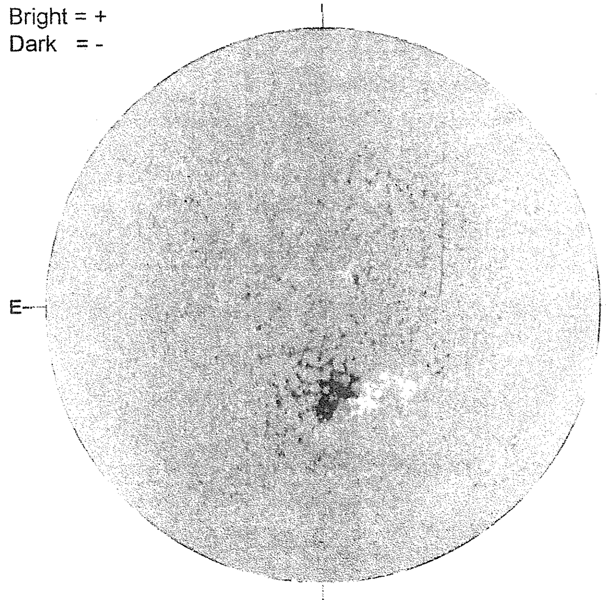
S

AUGUST 30, 1996 (P= 20.62, Bo = 7.15, Lo = 256.00)

KITT PEAK MAGNETOGRAM

868.8 nm

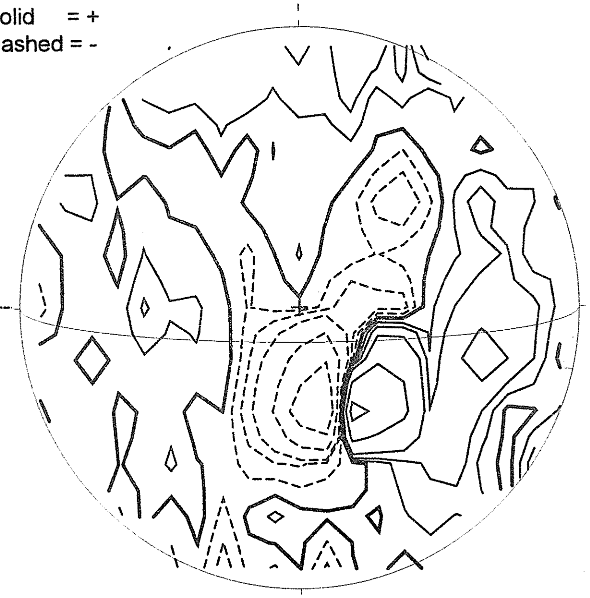
Bright = +
Dark = -



1447 UT

STANFORD MAGNETOGRAM

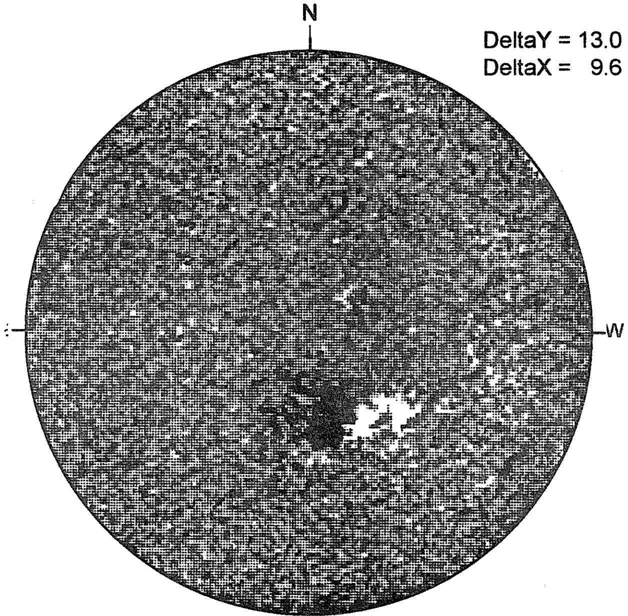
Solid = +
Dashed = -



2006 UT

MT. WILSON MAGNETOGRAM

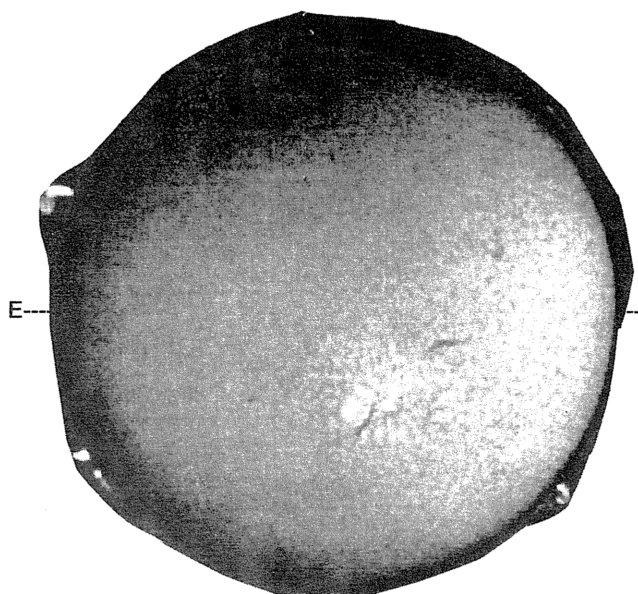
DeltaY = 13.0
DeltaX = 9.6



18.96 -
19.89 UT

White= +7.5G
Black = -7.5G

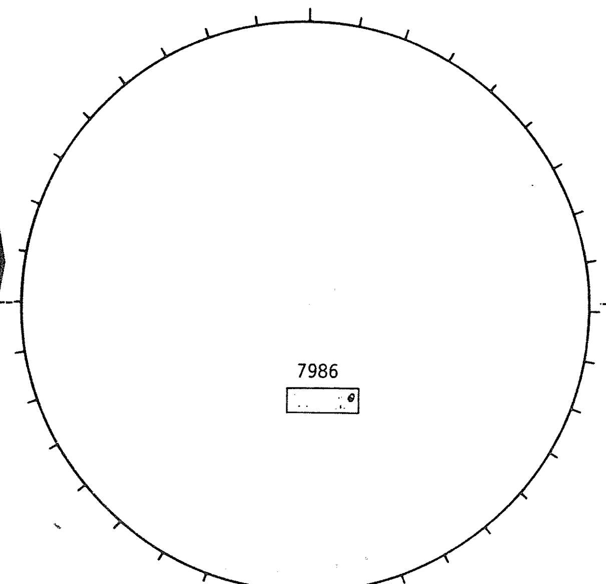
MAUNA LOA H-ALPHA



1929 UT
1847 UT Prom

S

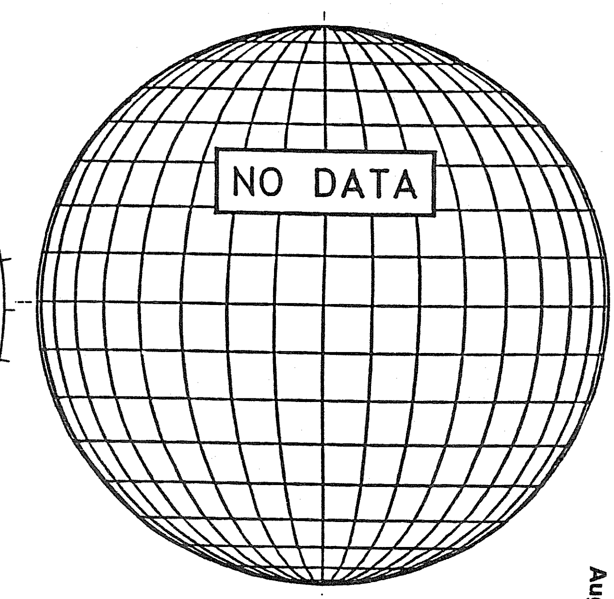
RAMEY SUNSPOT



1200 UT

S

SACRAMENTO PEAK CORONA (1.15 Radii)----

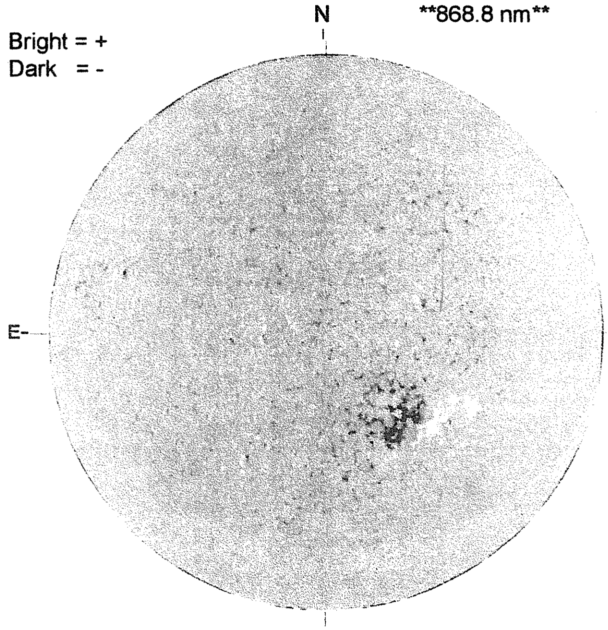


S

AUGUST 31, 1996 (P= 20.88, Bo = 7.17, Lo = 242.79)

KITT PEAK MAGNETOGRAM **868.8 nm**

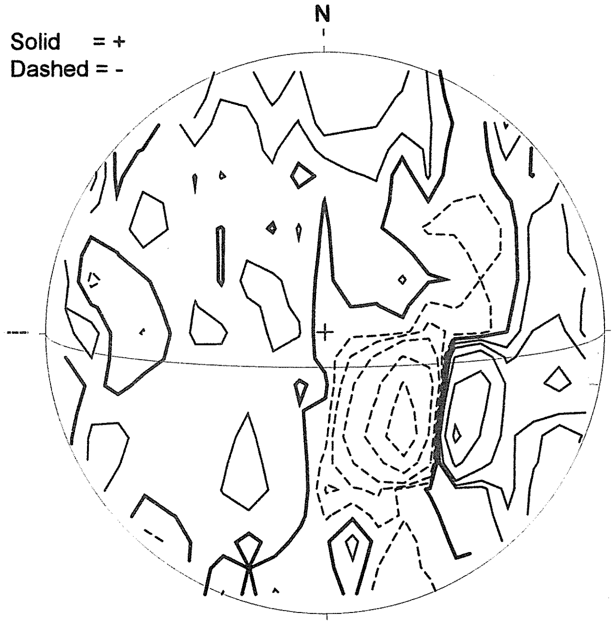
Bright = +
Dark = -



1457 UT

STANFORD MAGNETOGRAM

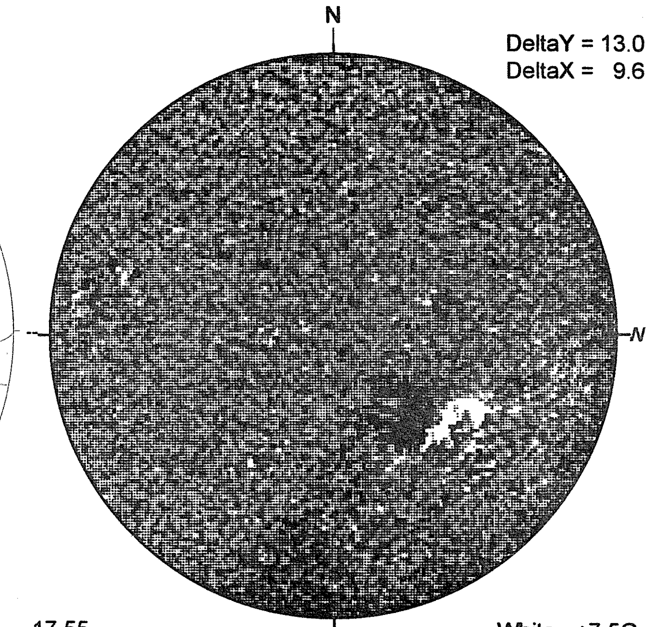
Solid = +
Dashed = -



2211 UT

MT. WILSON MAGNETOGRAM

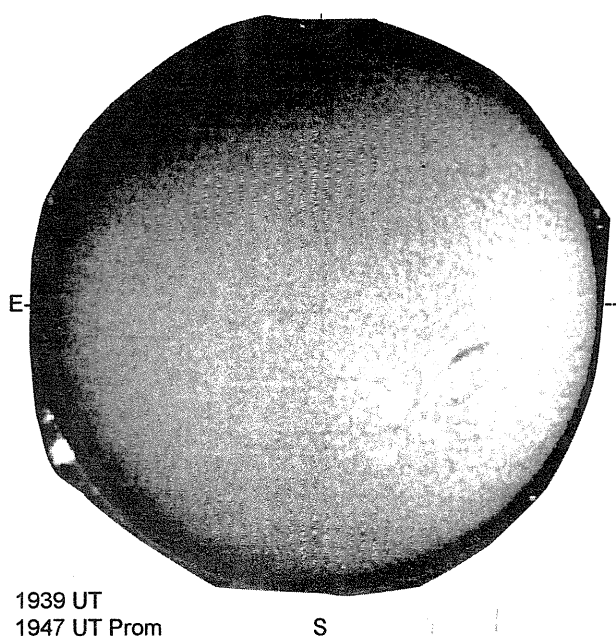
DeltaY = 13.0
DeltaX = 9.6



17.55 -
18.48 UT

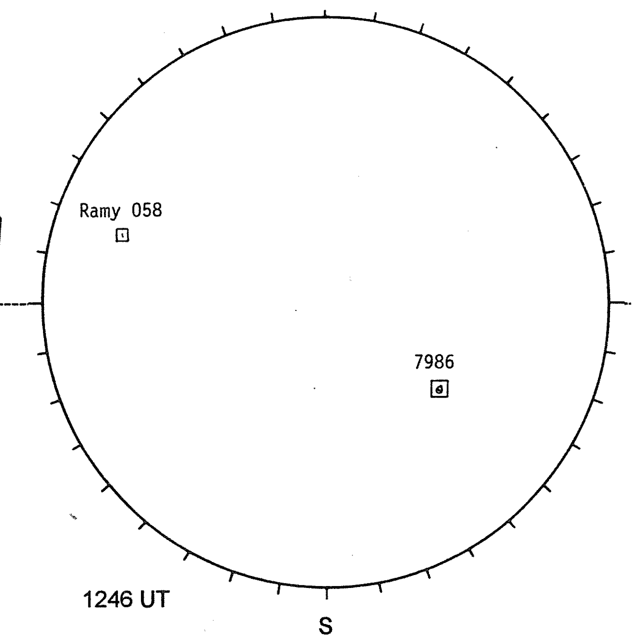
White= +7.5G
Black = -7.5G

----- MAUNA LOA H-ALPHA



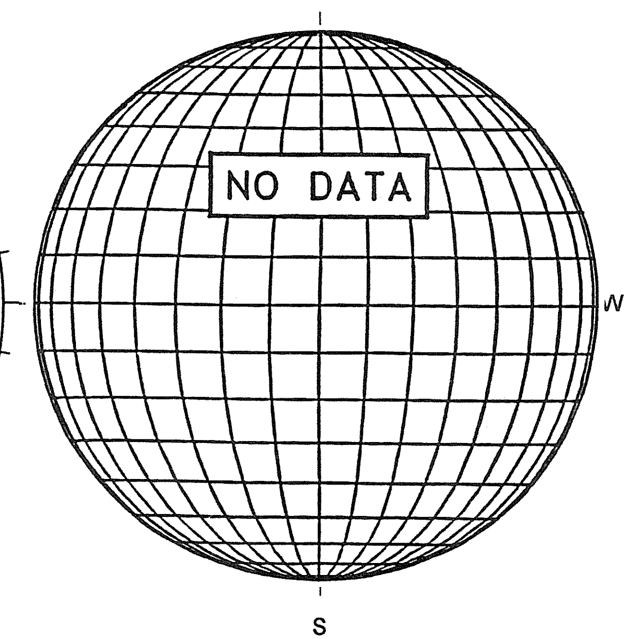
1939 UT
1947 UT Prom

RAMEY SUNSPOT



1246 UT

SACRAMENTO PEAK CORONA (1.15 Radii)----



DAILY SOFT X-RAY IMAGES FROM YOHKOH

SXT daily images are on-line via ftp at the Hiraiso Communications Research Laboratory in Japan and at the Solar Data Analysis Center at GSFC. The following document explains everything.

Daily YOHKOH/SXT Images by FTP

This document explains the service which provides access to the daily Yohkoh Soft X-ray Telescope (SXT) full-disk images stored at Hiraiso Solar Terrestrial Research Center, C.R.L. Before using this service, please read this document.

1. Purpose and Rules

This service is provided by CRL under the following agreement with the Yohkoh Team (Project Manager: Yoshiaki Ogawara, ISAS; Project Scientist: Yutaka Uchida, Univ. Tokyo). Those who wish to use the data in a way not explicitly permitted below are requested to contact the Yohkoh Team.

i) The main purpose of this data service is to encourage broad scientific use of the Yohkoh data and observing capability through collaboration with the Yohkoh Team. Both observational and theoretical collaborations are welcome. Scientists outside the Yohkoh Team are requested to obtain specific permission when they write scientific papers based upon data from this service.

ii) Solar images from this service may b published or presented for purposes of illustration without special permission. In such cases the following acknowledgment is appropriate:

The solar X-ray image is from the Yohkoh mission of ISAS, Japan. The X-ray telescope was prepared by the Lockheed Palo Alto Research Laboratory, the National As tronomical Observatory of Japan, and the University of Tokyo with the support of NASA and ISAS.

iii) This data service is also intended to contribute to improving solar activity prediction, to assist other solar observers in their choice of targets, and for public education and information. Use of the images for these purposes is unrestricted.

2. Instrument

A full description of the SXT may be found in the book "The YOHKOH (SOLAR-A) Mission" (Z. Svestka and Y. Uchida, eds.), Kluwer Academic Publishers, 1991; or in the paper, "The Soft X-ray Telescope for the Solar-A Mission" (Tsuneta, et al. Solar Physics, vol. 136, pp. 37-67, 1991.

3. Description of Data

The stored SXT images data are taken through an Al/Mg composite filter with a mean wavelength of about 20 A for normal coronal temperatures. The images are composites of a short and a long exposure with a pixel size of 4.9 arcsec. Background has been removed and all images are normalized to an exposure time of one second. The 8-bit numbers give the logarithm of the signal byte- scaled so that an actual signal of 10^6 equals 255. To recover the actual signal in data numbers, use the relation

data_number = 10^((6*NN)/255)

where NN is the datum in the stored image. Conversion to intensity depends upon temperature but is of the order of 5 x 10^20 ergs, at the Sun, per data_number.

The file format is the usual FITS format. The file names are in the style

sf_fits930515.151807,

where sf means SXT FFI image ,"930515" means 15-May-93, and "151807" means 15:18:07 UT.

4. How to connect and transfer data

Those who wish to access these data are requested to send an application to the manager of this data service via e-mail. At least, the following items should be included in an application;

* Full name
* Institution
* Postal Address
* e-mail address
* your host machine and OS
* software for SXT data processing and display
* expected frequency of data transfer

The format of the application is free. This information is necessary to deliver additional information and service in future, and helpful to update data service for more convenience. The application should be sent to the following address via e-mail;

akioka@planet.crl.go.jp
or akioka@planet.hi.crl.go.jp.

The data server is the usual anonymous ftp server program of UNIX. The IP address is 133.243.32.7. Therefore, a typical example for data access is ...

```
% ftp 133.243.32.7
name: anonymous
password : (your e-mail address)
ftp> cd sxt
ftp> binary
ftp> get <file name>
%
```

When you have logged in with the anonymous ftp account, you will find a directory named sxt. In this directory, you will find available sxt images and some documents which all users should read.

5. Practical Limitations

The domestic network in Japan is very crowded. Therefore, to assure continuation of this service we request potential users to follow the following limitations;

i) Please avoid to access during office hours in Japan (23:30 - 08:00 UT). Our advice is to access between 13:00 UT and 24:00 UT.

ii) Please do not try to transfer more than two images at once. We request the users not to obatain more than a few images per day. If you need more images, please contact the manager for special arrangements.

If the above rules are consistently violated, there is a possibility that we will have to terminate this service or apply more severe limitations, so please cooperate fully until we have more experience with the effect of this service upon the network.

If you have some request or comment, please feel free to send e-mail to one of the following persons:

Yutaka Uchida, Project Scientist, Yohkoh
Department of Astronomy, University of Tokyo
e-mail: uchida@dept.astron.s.u-tokyo.ac.jp

Maki Akioka, Manager, CRL Data Service
Hiraiso Solar Terrestrial Research Center
Communications Research Laboratory
e-mail: akioka@planet.hi.crl.go.jp

Received Aug. 25, 1993 from acton@sxt4.oscs.montana.edu

Submitted by L. Acton for the Yohkoh Team

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Solar DAC Node Name Changes

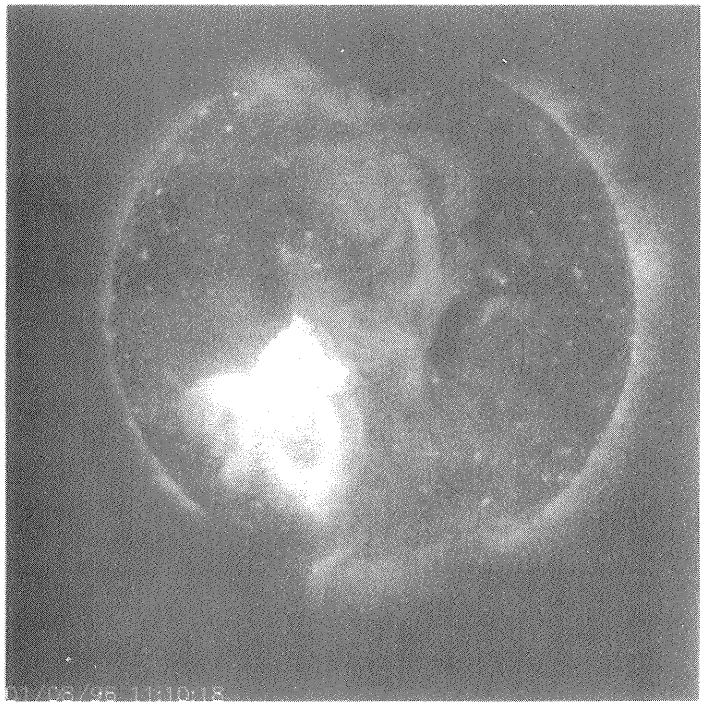
The NASA Goddard Solar Data Analysis Center (SDAC) nodes most familiar to the community will be undergoing some major changes in August and September, 1993. Nodes NEWMAX (newmax.gsfc.nasa.gov) and ISIS (isis.gsfc.nasa.gov) are being retired, and their functions combined on a single server, which will be known as SDAC (sdac.gsfc.nasa.gov). SDAC's IP (Internet) address will be 128.183.57.156, and its NSI/DECnet address will be 15.526.

Users of the BATSE solar flare database and other services of ISIS and NEWMAX should watch for messages warning of the actual changeover dates. (SDAC is a DEC 4000 Model 610 AXP, so users should see noticeable improvements in response.)

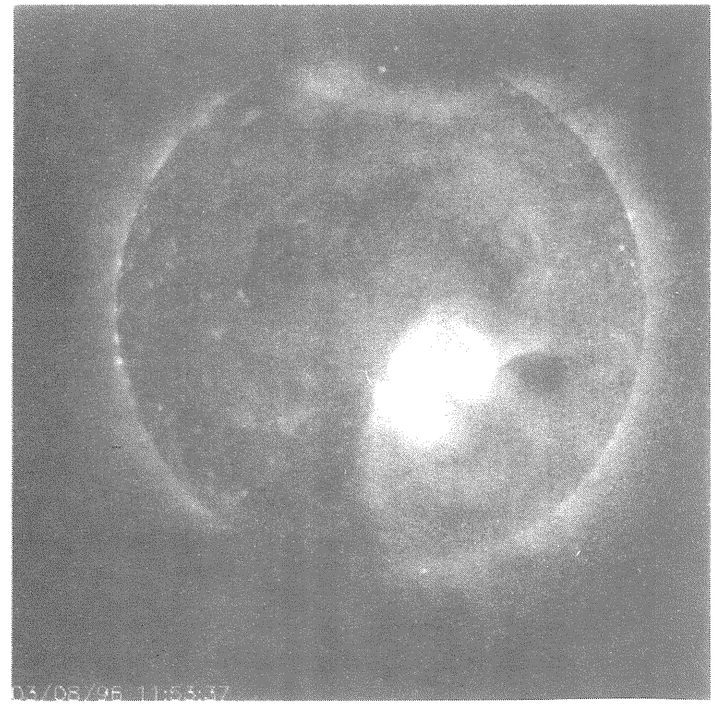
Received Aug. 10, 1993 from gurman@uvsp.gsfc.nasa.gov
--Joe Gurman

YOHKOH SOFT X-RAY TELESCOPE IMAGES

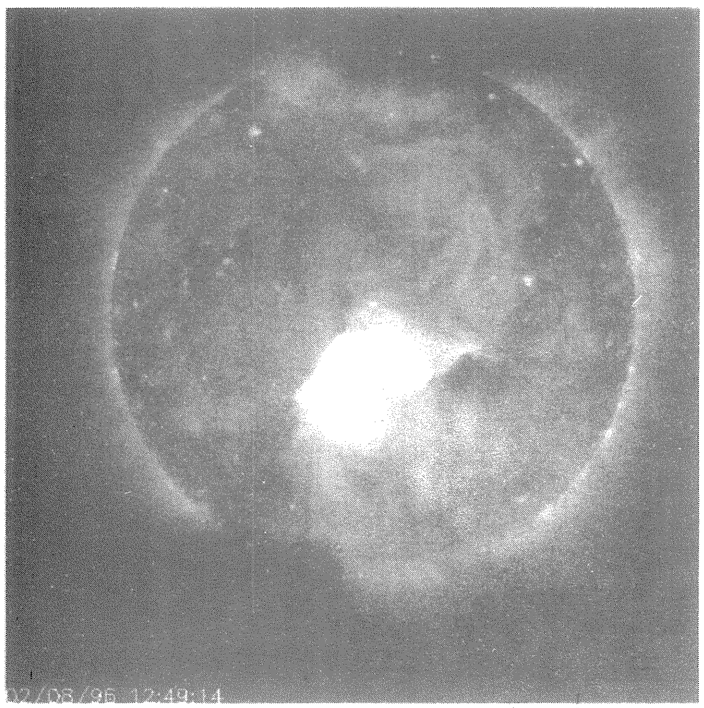
August 1996



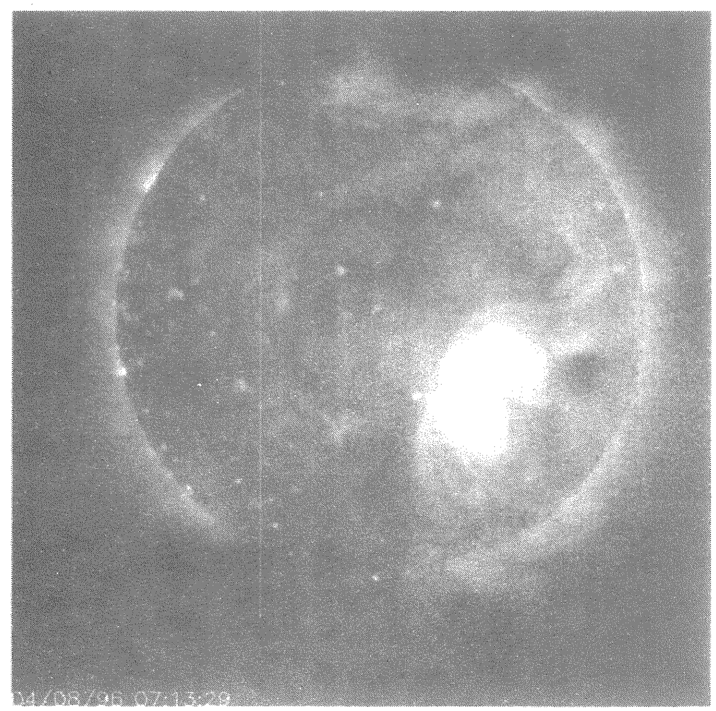
Day 1
11:10:18 UT



Day 3
11:53:37 UT



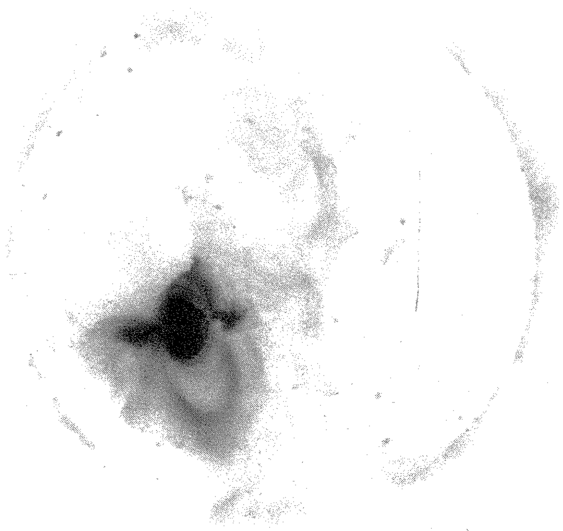
Day 2
12:49:14 UT



Day 4
07:13:29 UT

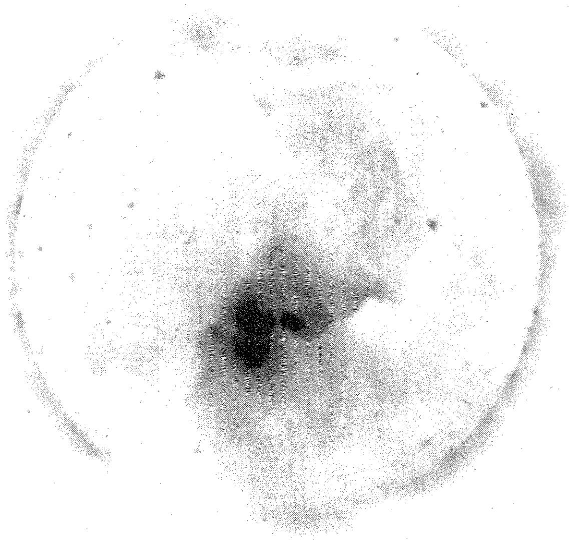
YOHKOH SOFT X-RAY TELESCOPE IMAGES

August 1996



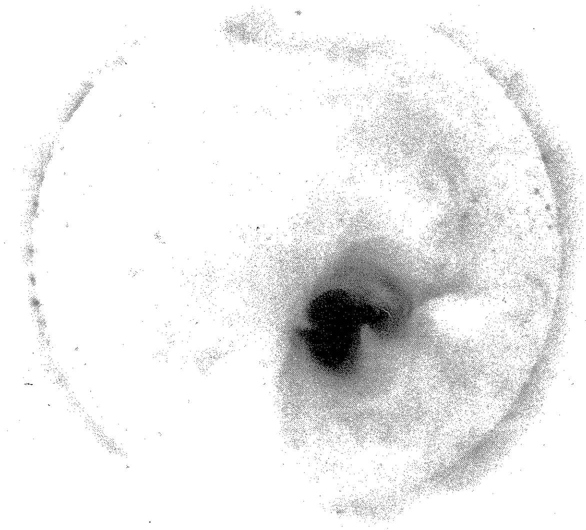
01/08/96 11:10:18

Day 1
11:10:18 UT



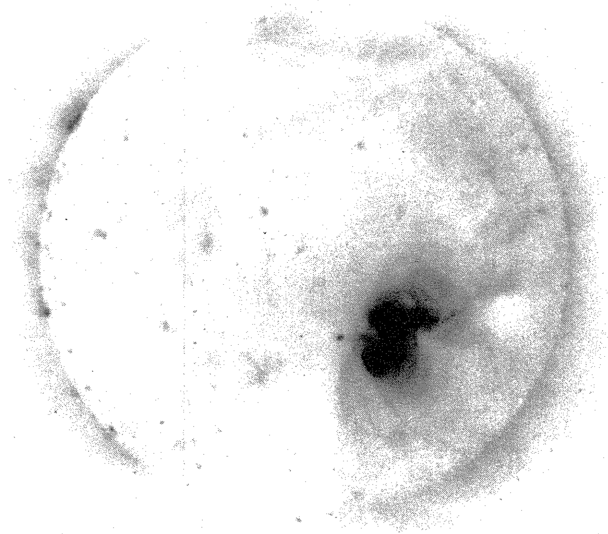
02/08/96 12:49:14

Day 2
12:49:14 UT



03/08/96 11:53:37

Day 3
11:53:37 UT

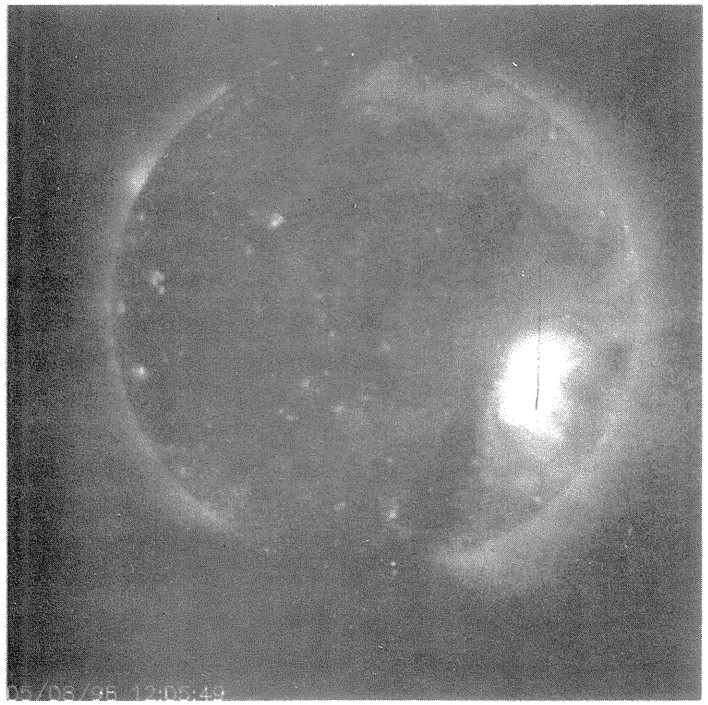


04/08/96 07:13:29

Day 4
07:13:29 UT

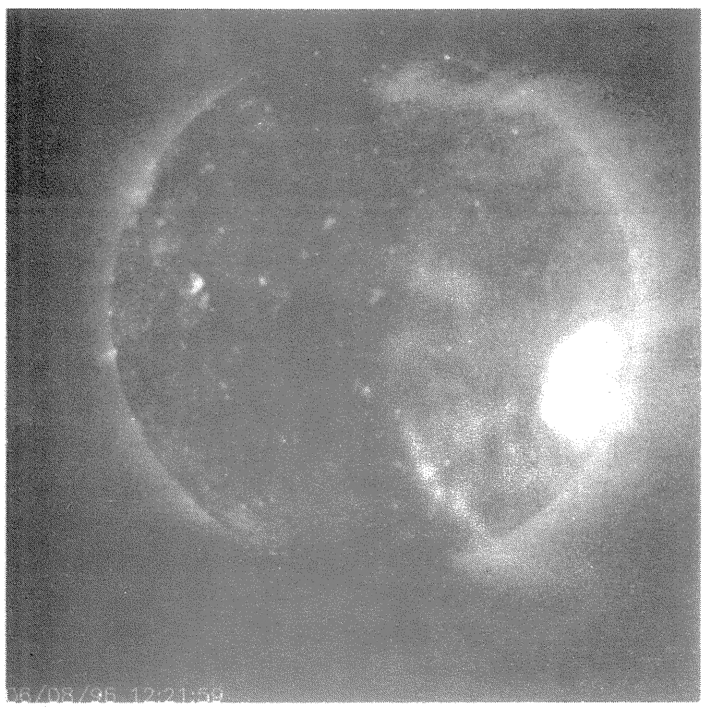
YOHKOH SOFT X-RAY TELESCOPE IMAGES

August 1996

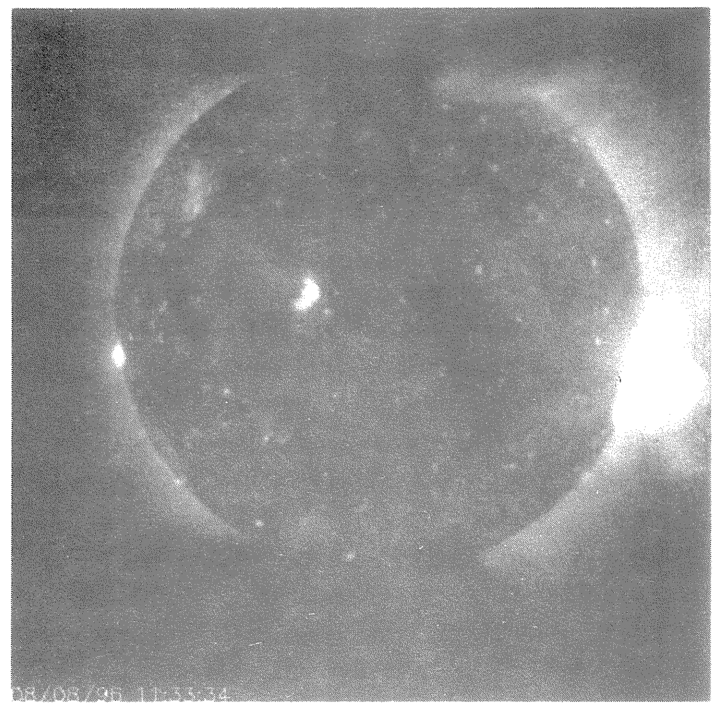


Day 5
12:05:49 UT

Day 7
11:26:46 UT



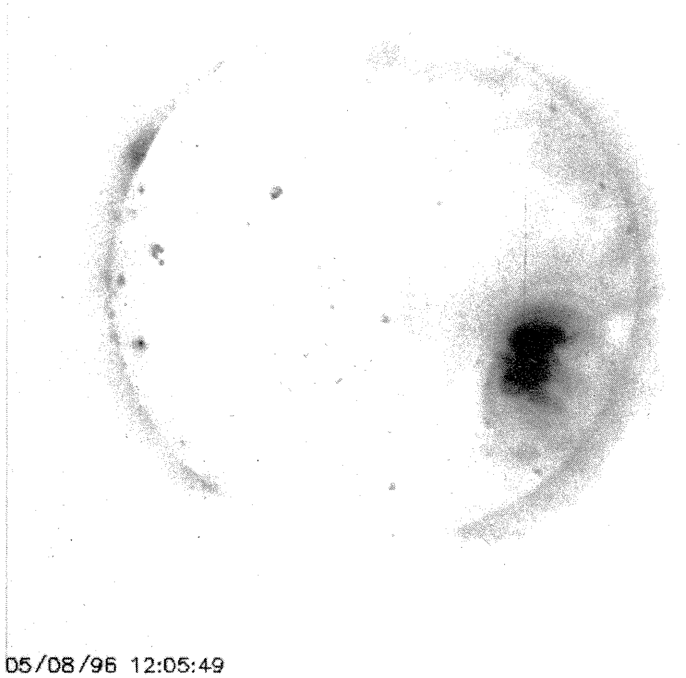
Day 6
12:21:59 UT



Day 8
11:33:34 UT

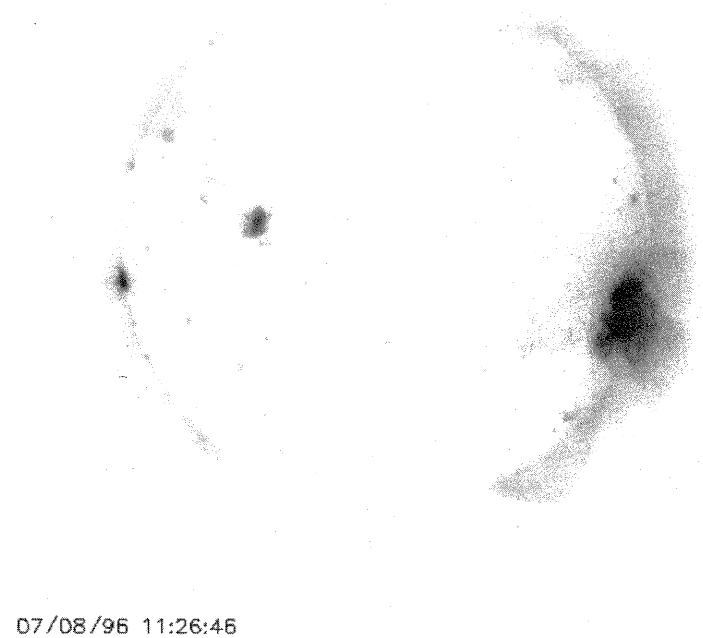
YOHKOH SOFT X-RAY TELESCOPE IMAGES

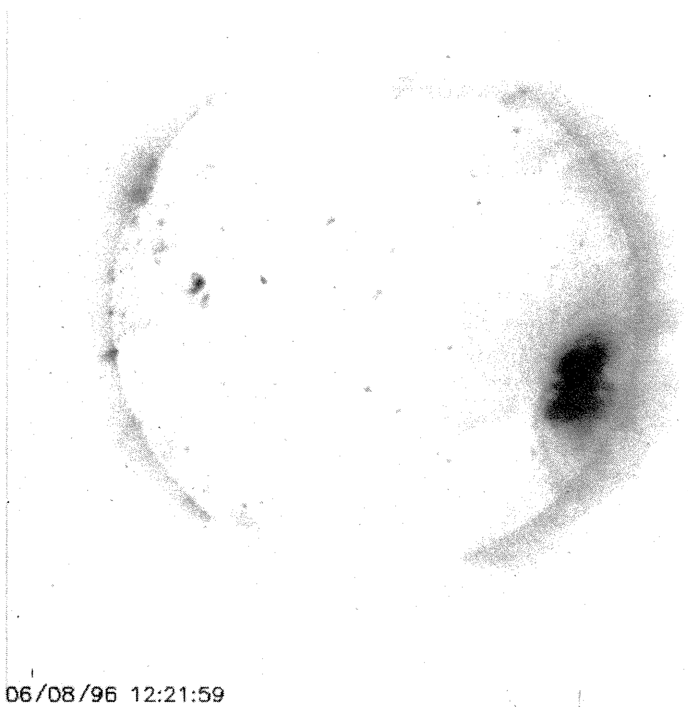
August 1996



Day 5
12:05:49 UT

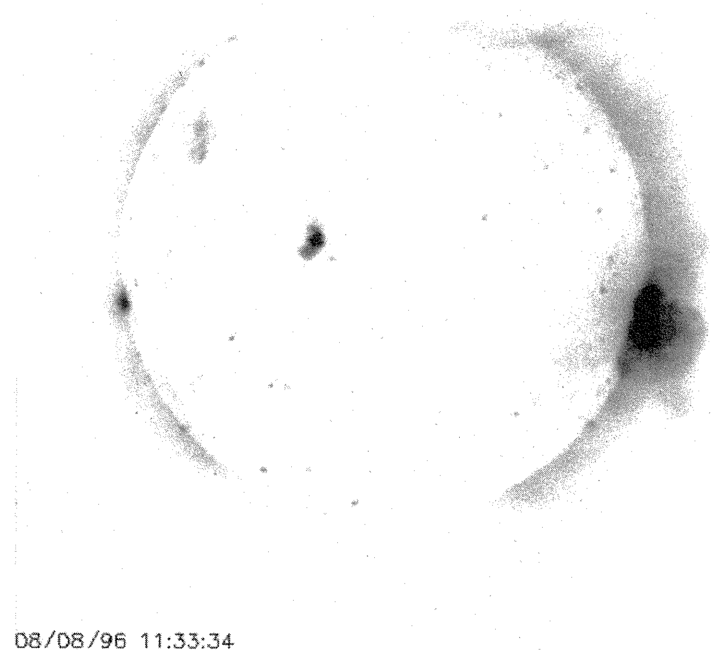
Day 7
11:26:46 UT





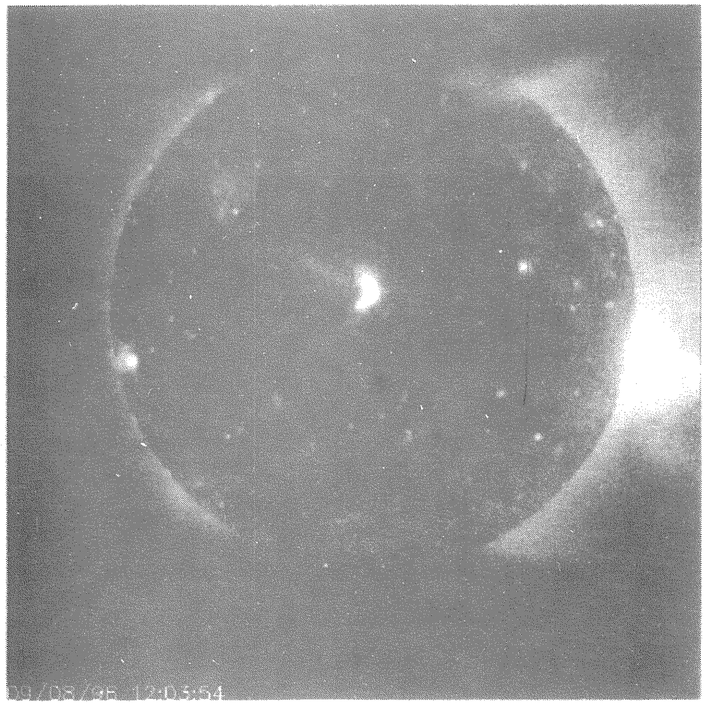
Day 6
12:21:59 UT

Day 8
11:33:34 UT

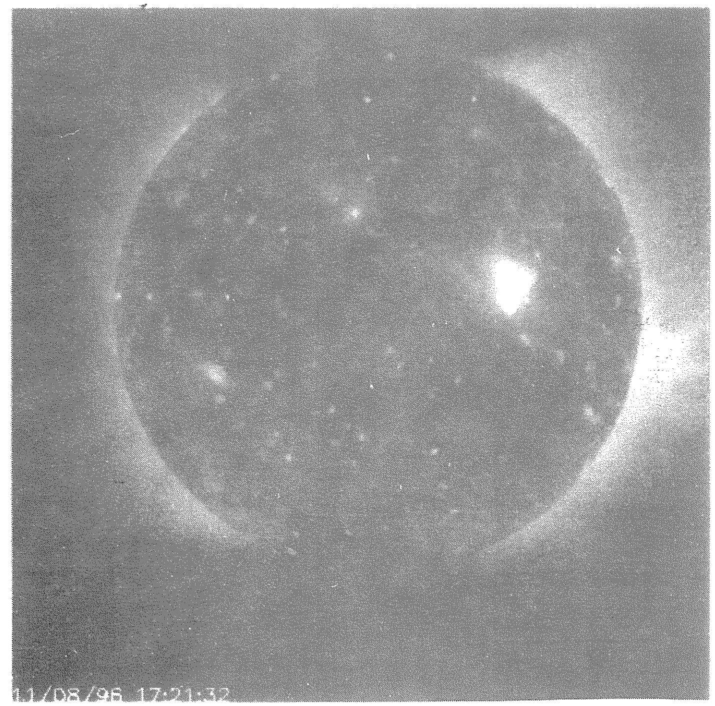


YOHKOH SOFT X-RAY TELESCOPE IMAGES

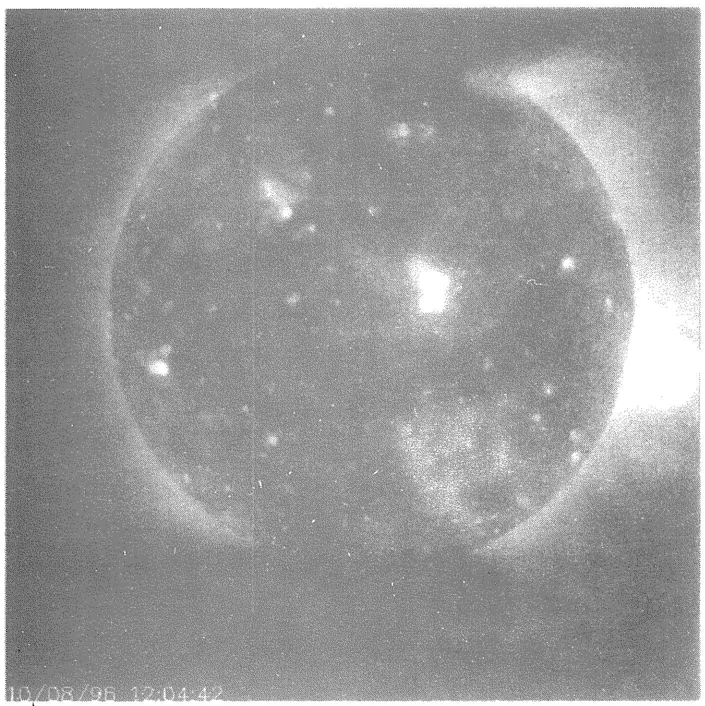
August 1996



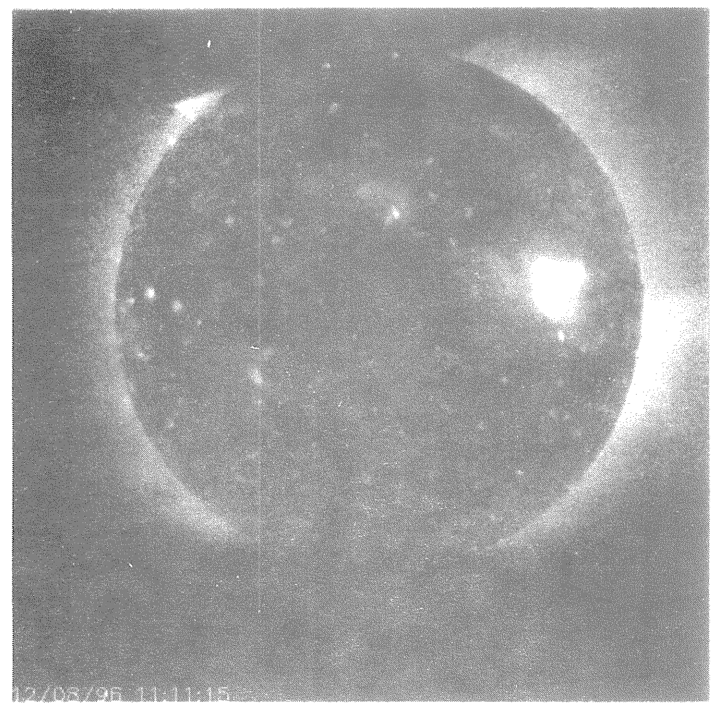
Day 9
12:03:54 UT



Day 11
17:21:32 UT



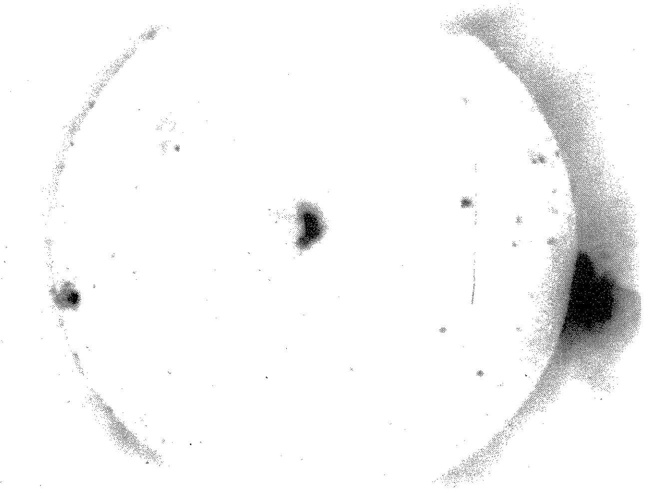
Day 10
12:04:42 UT



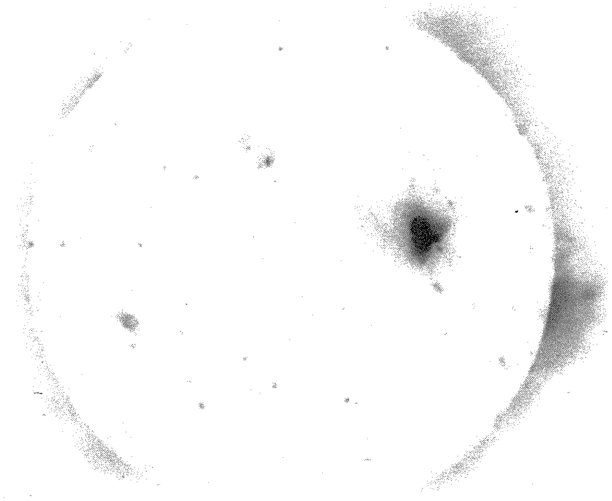
Day 12
11:11:15 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

August 1996



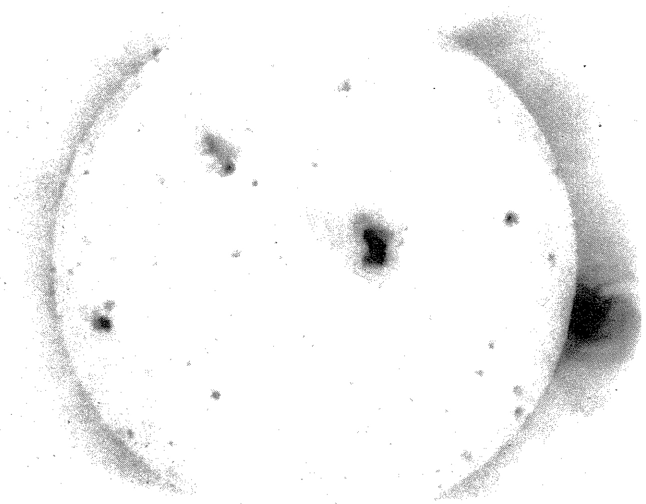
09/08/96 12:03:54



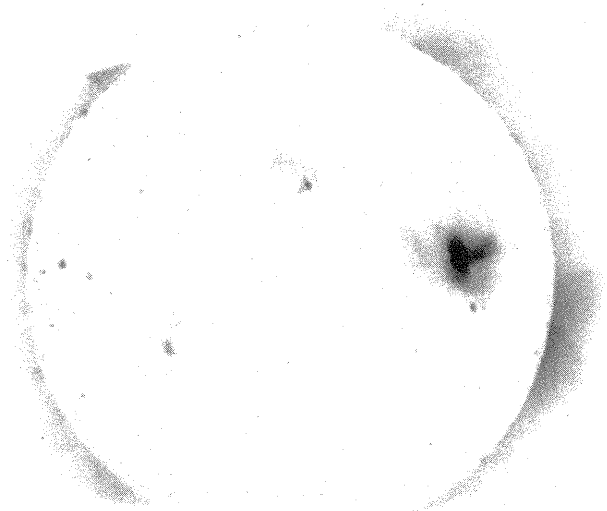
11/08/96 17:21:32

Day 9
12:03:54 UT

Day 11
17:21:32 UT



10/08/96 12:04:42



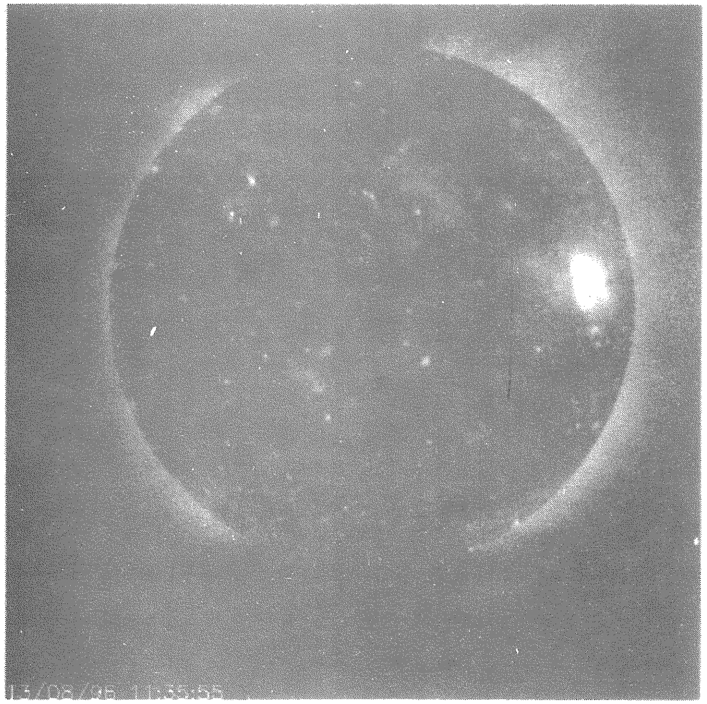
12/08/96 11:11:15

Day 10
12:04:42 UT

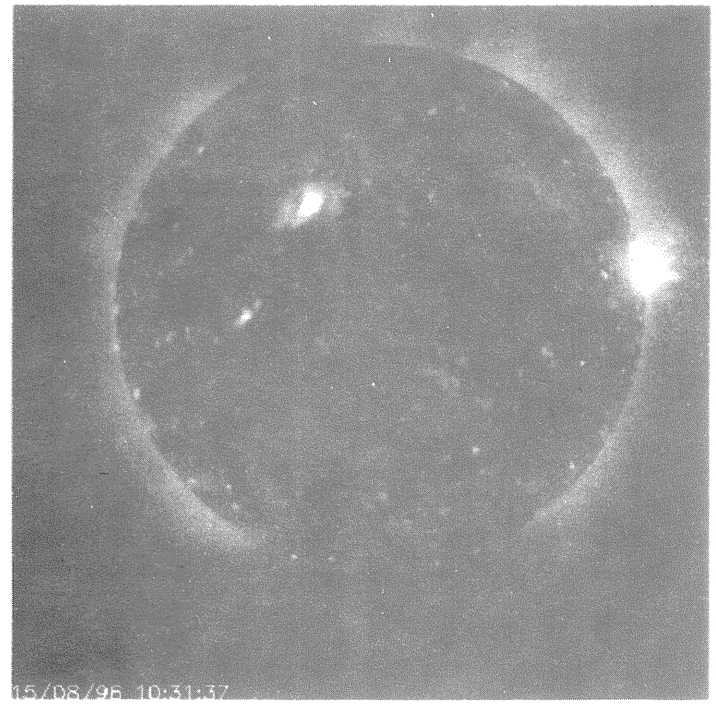
Day 12
11:11:15 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

August 1996

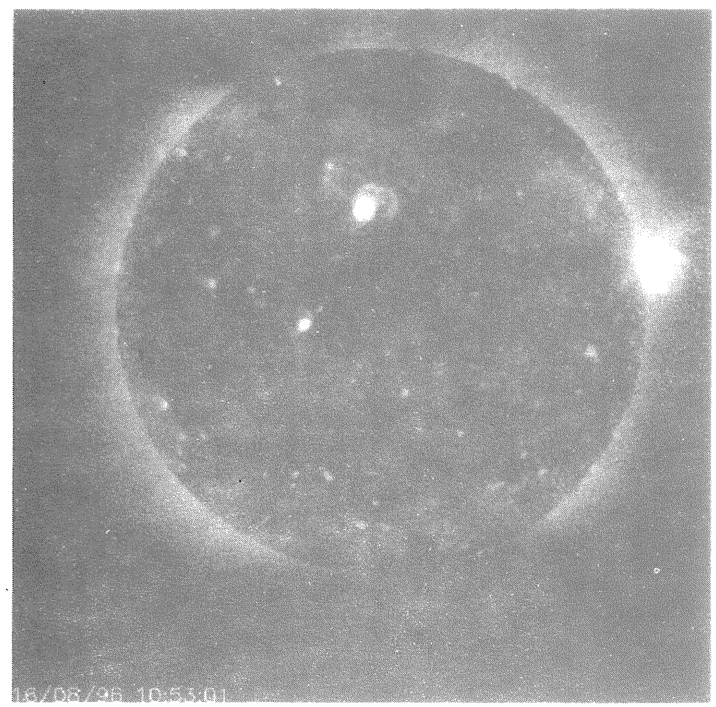


Day 13
11:35:55 UT



Day 15
10:31:37 UT

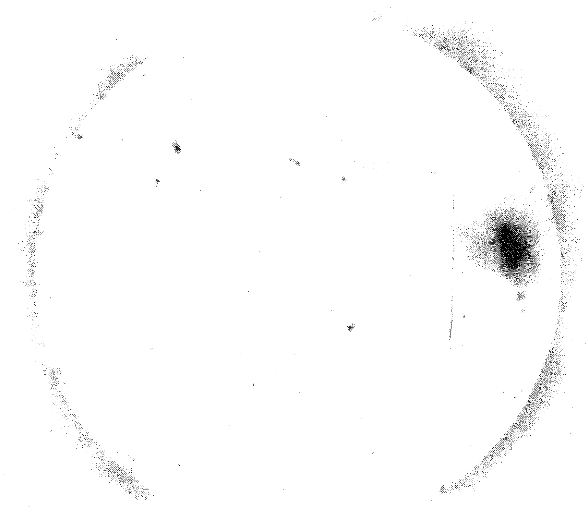
Day 14
11:37:49 UT



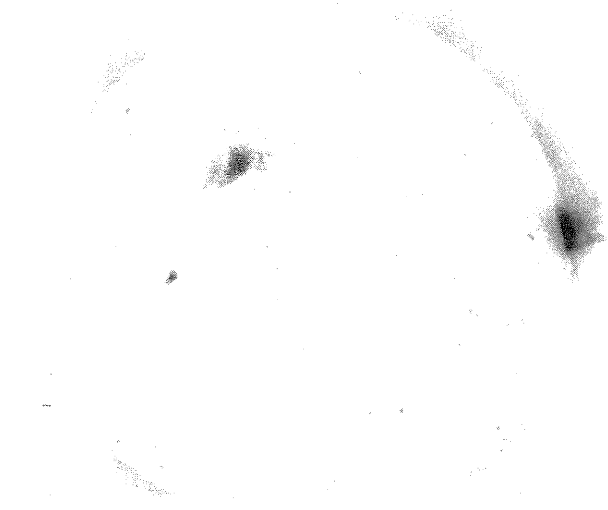
Day 16
10:53:01 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

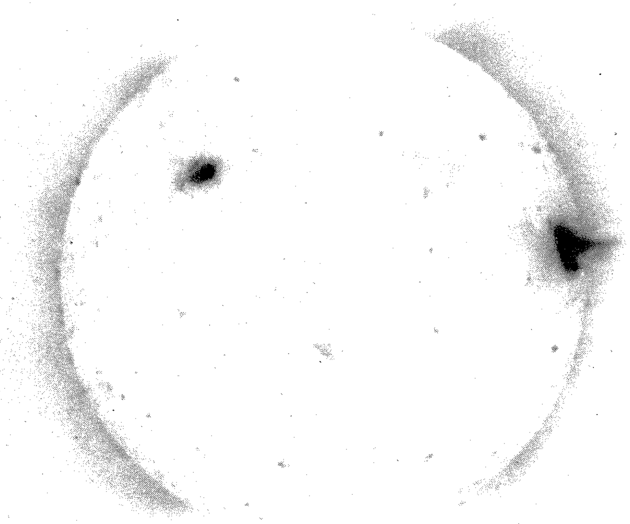
August 1996


13/08/96 11:35:55

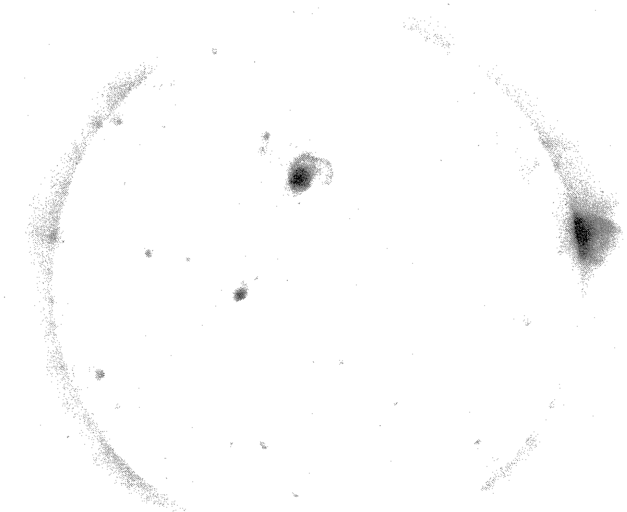
Day 13
11:35:55 UT


15/08/96 10:31:37

Day 15
10:31:37 UT


14/08/96 11:37:49

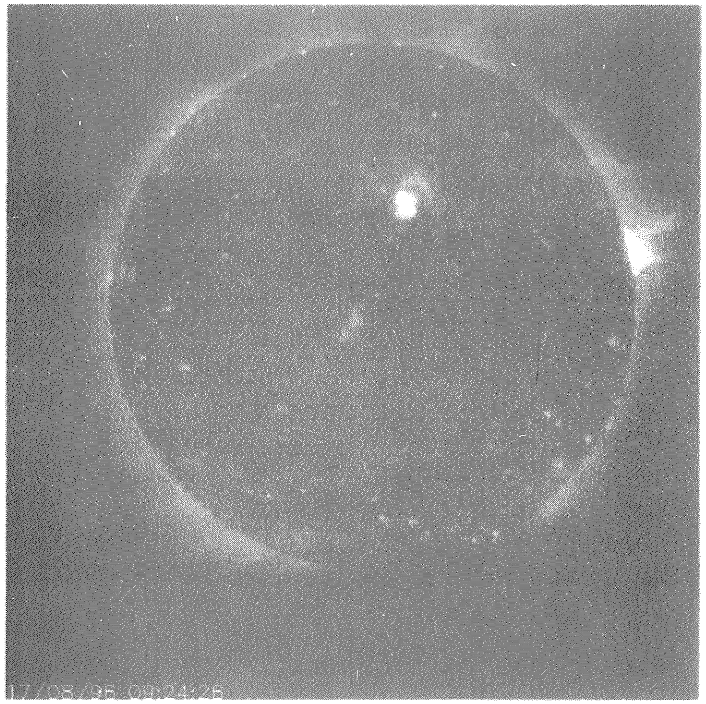
Day 14
11:37:49 UT


16/08/96 10:53:01

Day 16
10:53:01 UT

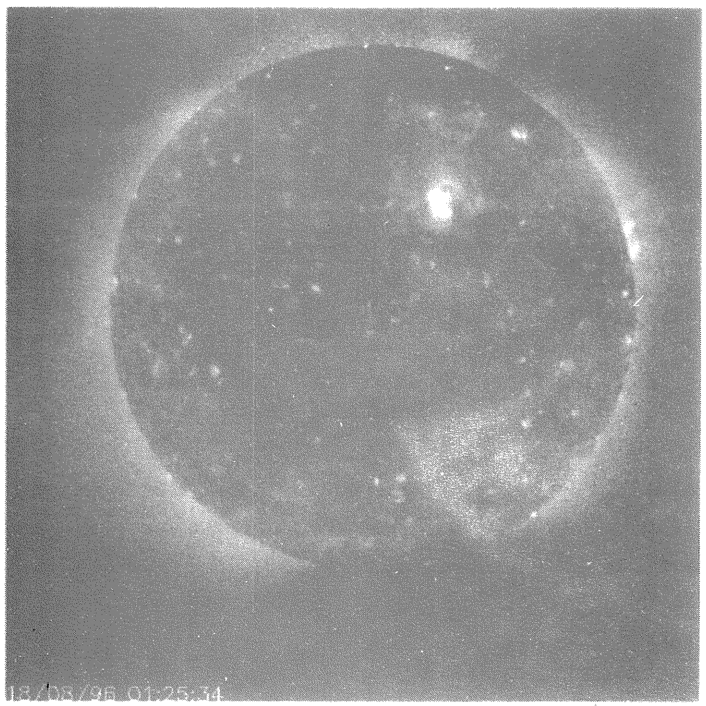
YOHKOH SOFT X-RAY TELESCOPE IMAGES

August 1996

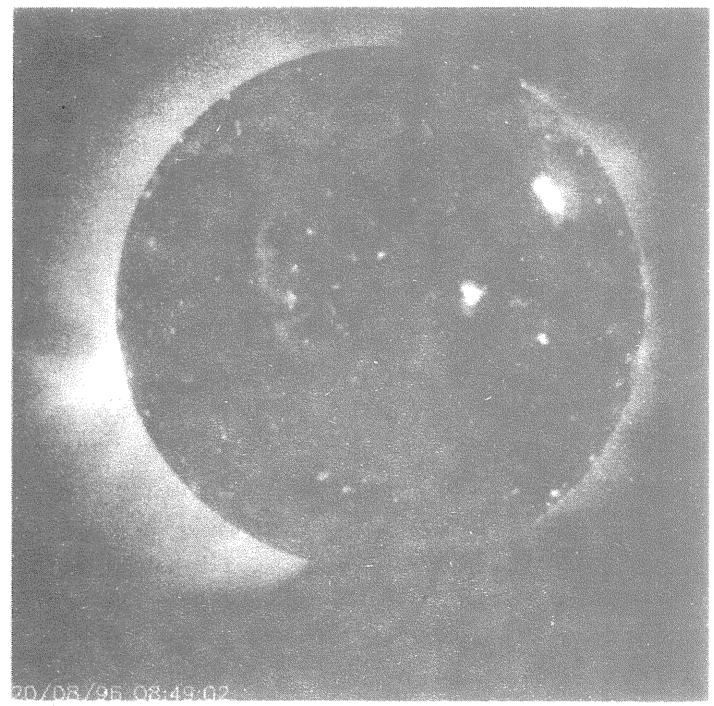


Day 17
09:24:26 UT

Day 19
10:09:16 UT



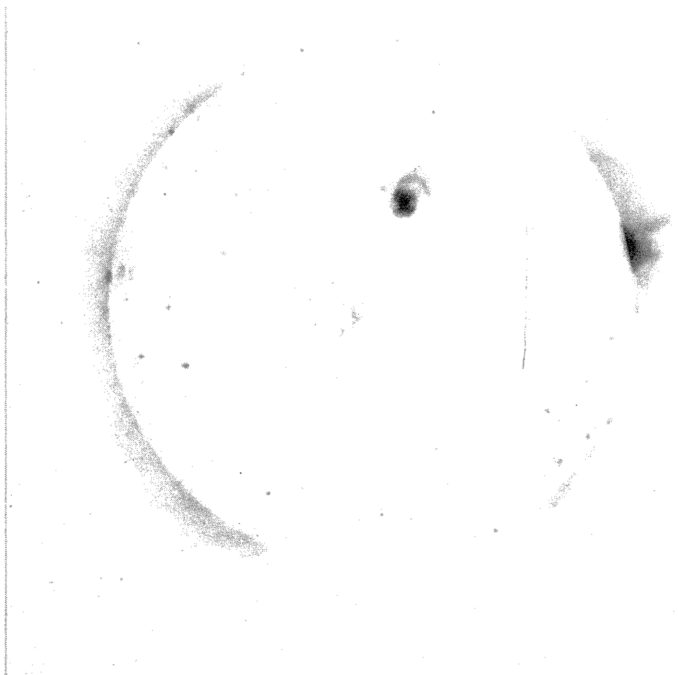
Day 18
01:25:34 UT



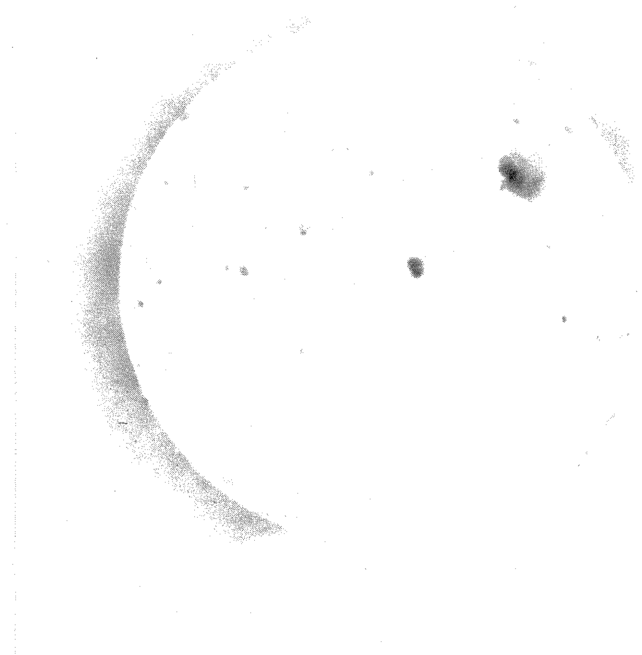
Day 20
08:49:02 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

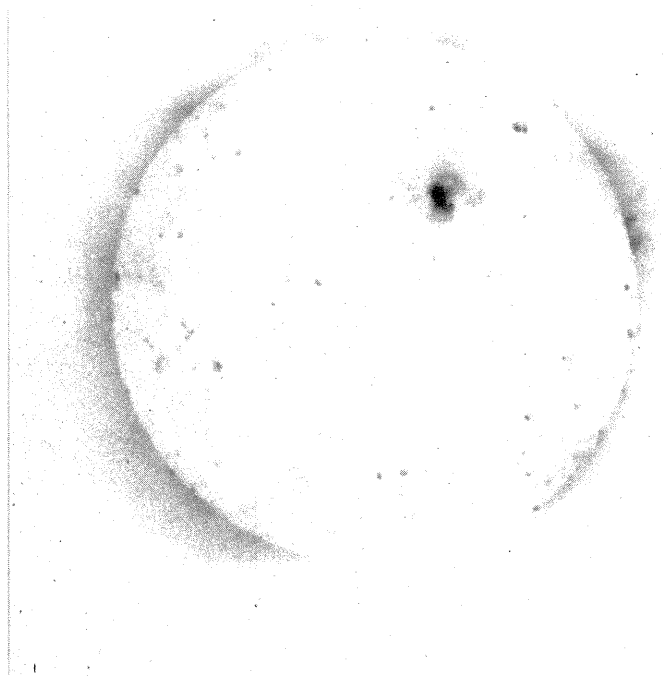
August 1996



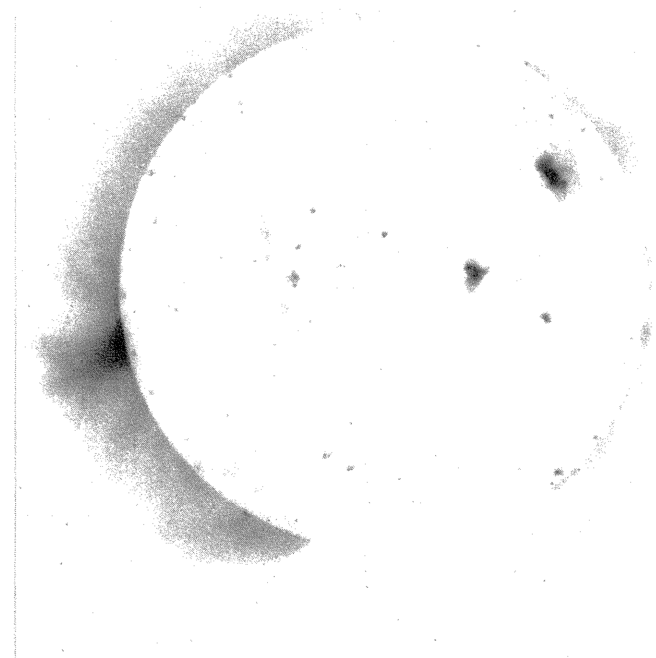
Day 17
09:24:26 UT



Day 19
10:09:16 UT



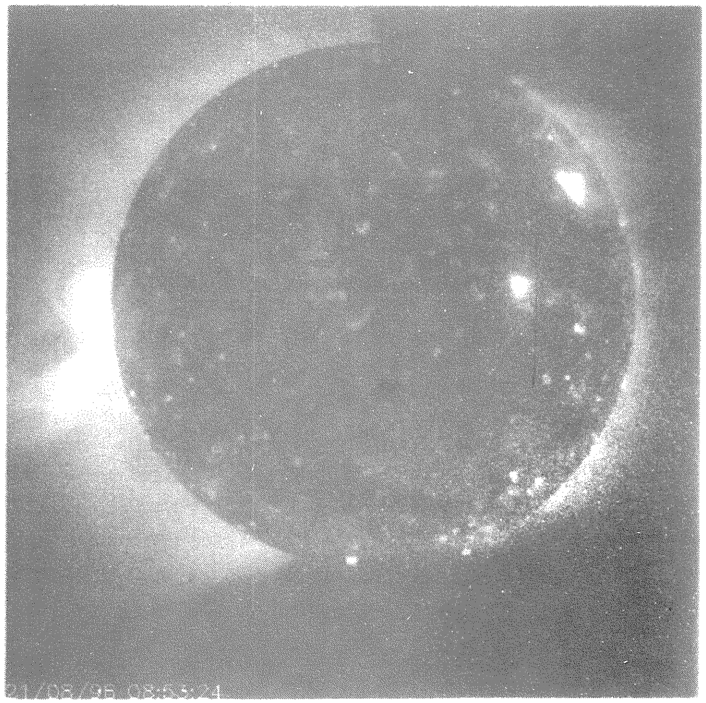
Day 18
01:25:34 UT



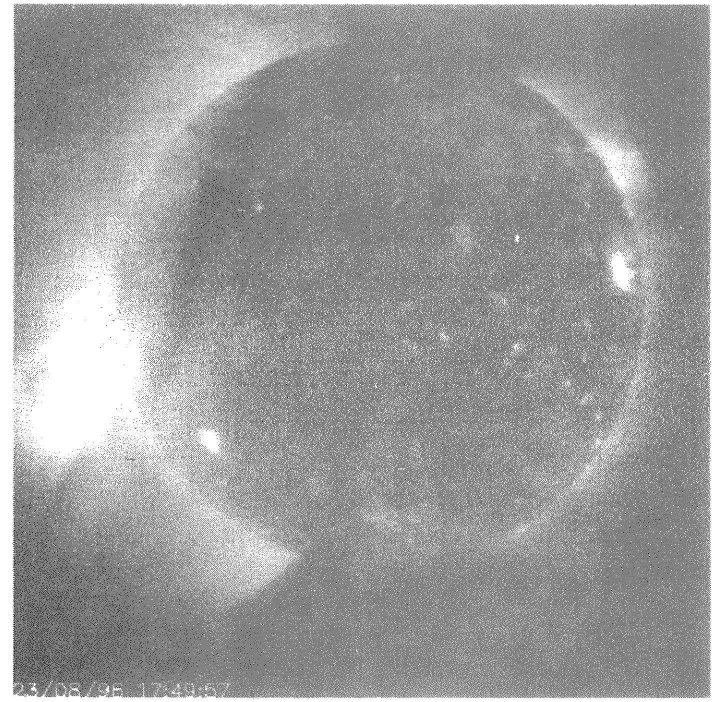
Day 20
08:49:02 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

August 1996

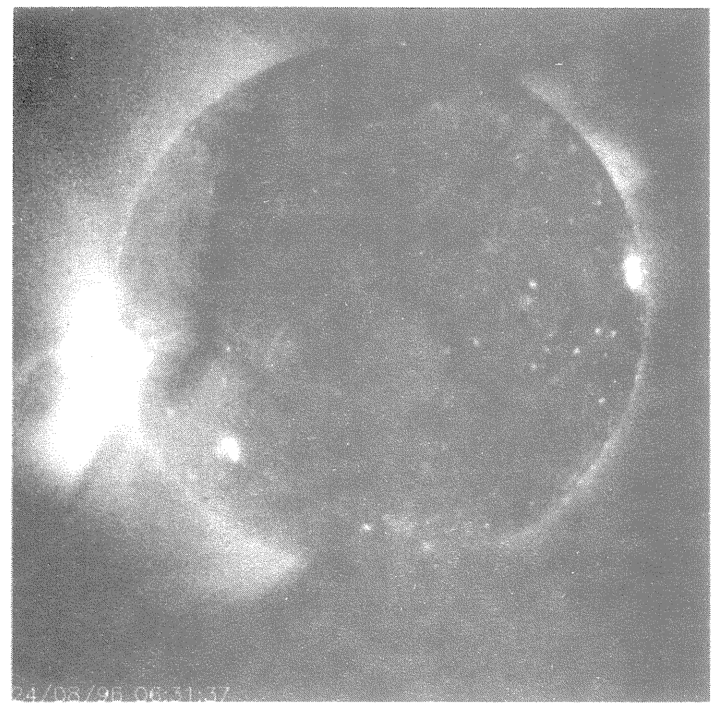


Day 21
08:53:24 UT



Day 23
17:49:57 UT

Day 22
07:34:27 UT

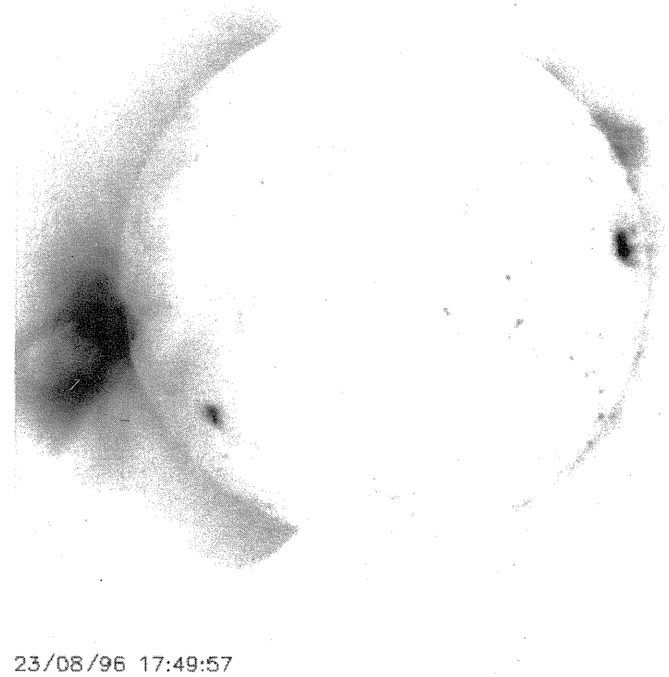


Day 24
06:31:37 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

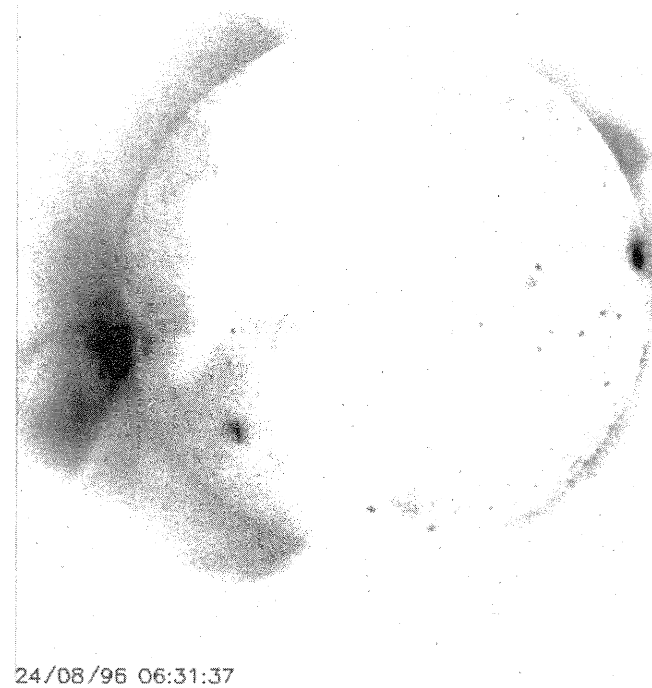
August 1996

Day 21
08:53:24 UT



Day 23
17:49:57 UT

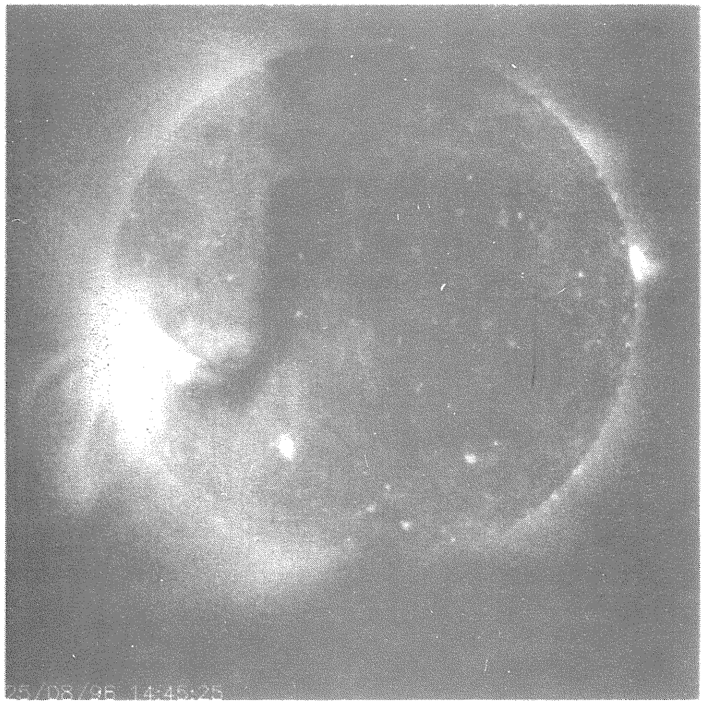
Day 22
07:34:27 UT



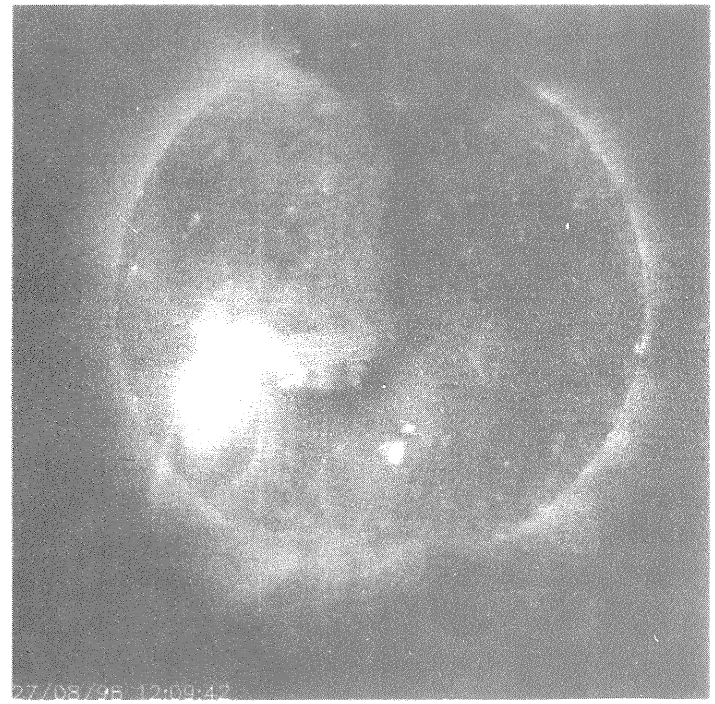
Day 24
06:31:37 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

August 1996



Day 25
14:45:25 UT



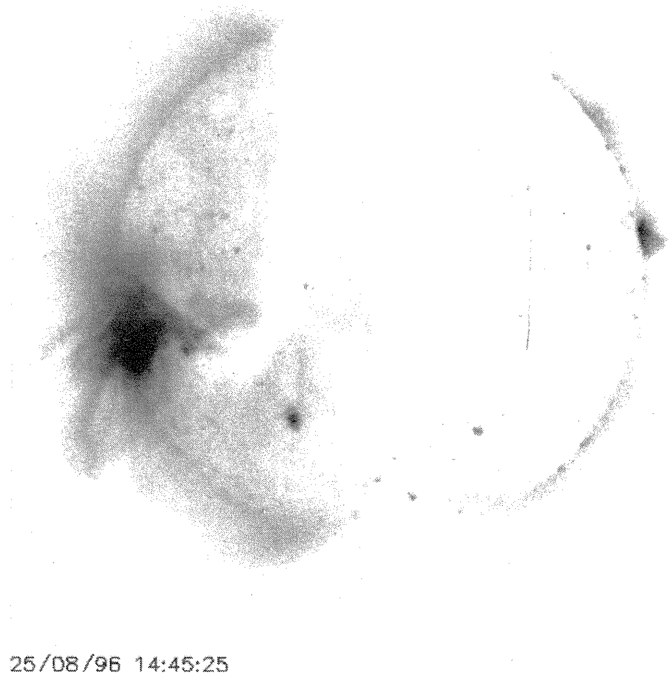
Day 27
12:09:42 UT

Day 26
13:35:14 UT

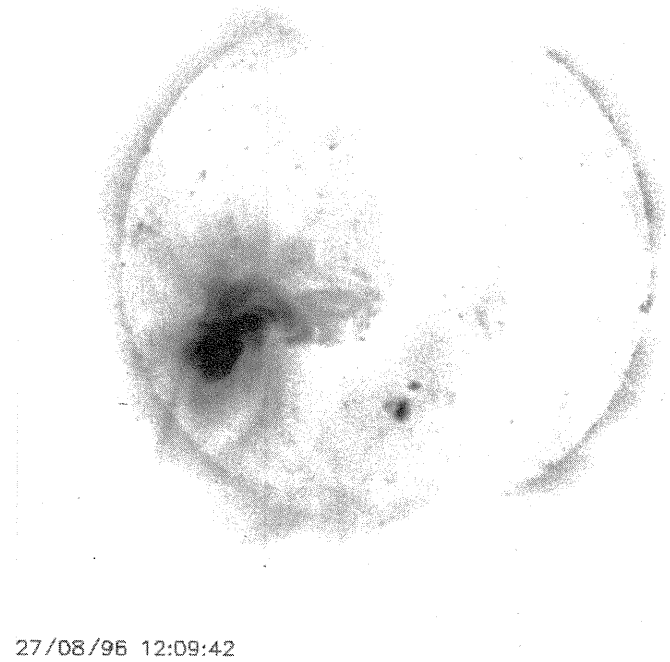
Day 28
14:14:44 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

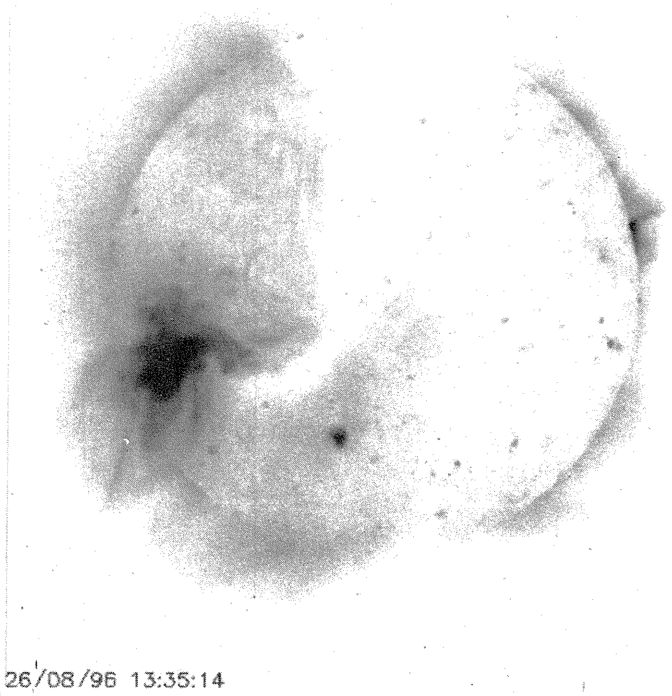
August 1996



Day 25
14:45:25 UT



Day 27
12:09:42 UT

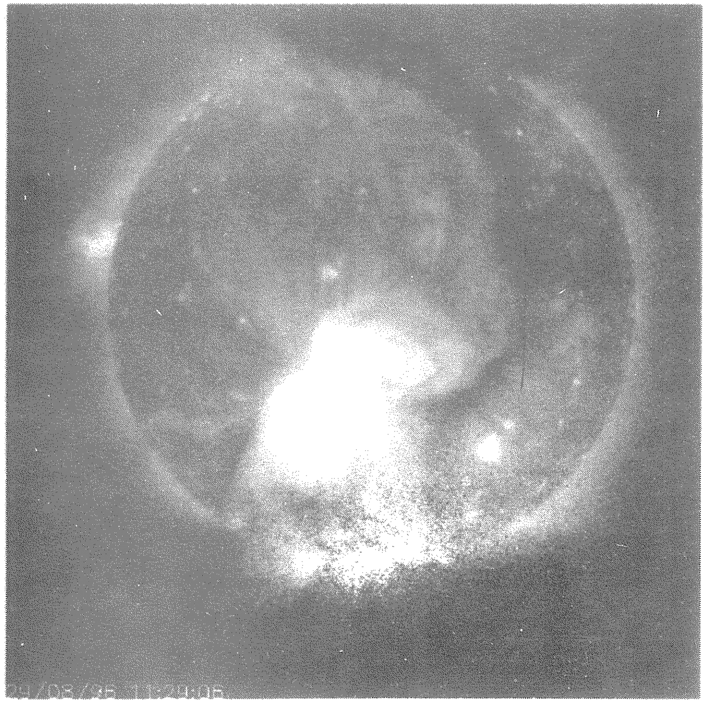


Day 26
13:35:14 UT

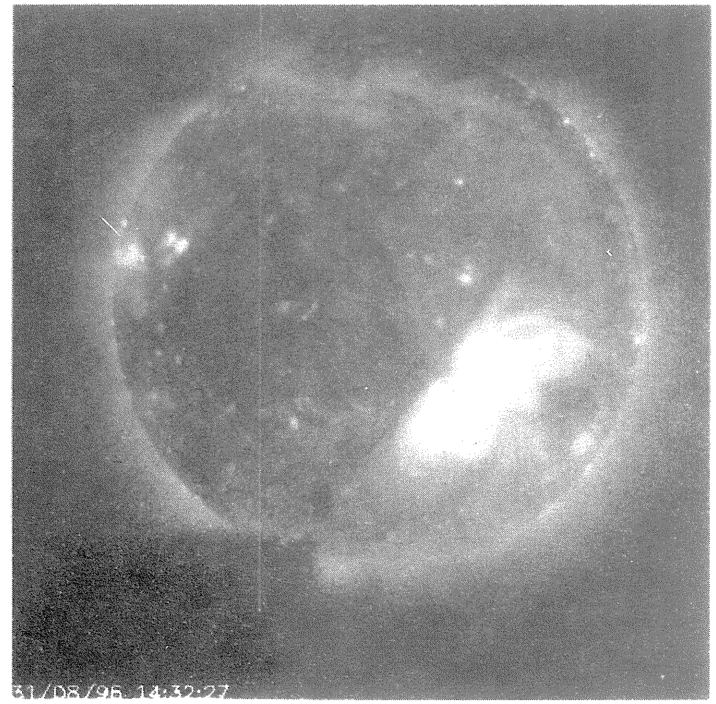
Day 28
14:14:44 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

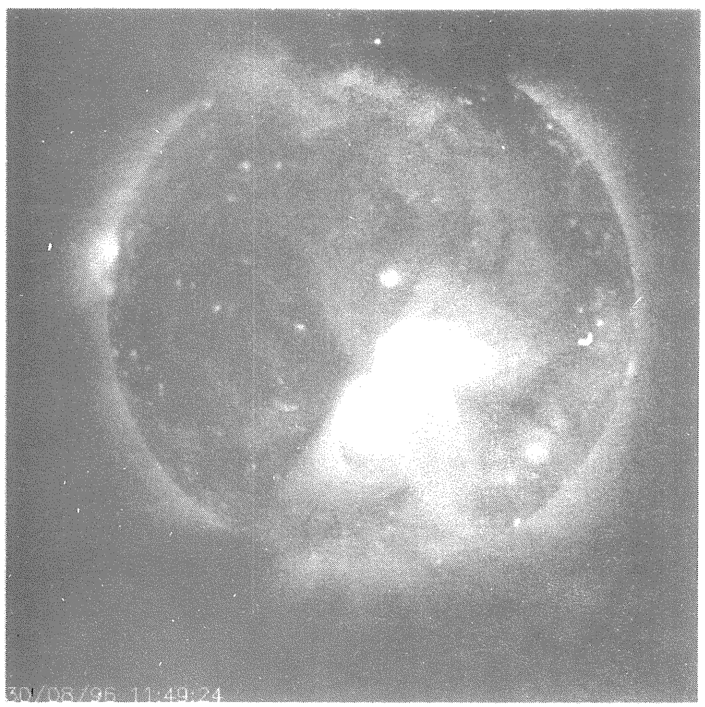
August 1996



Day 29
11:29:06 UT



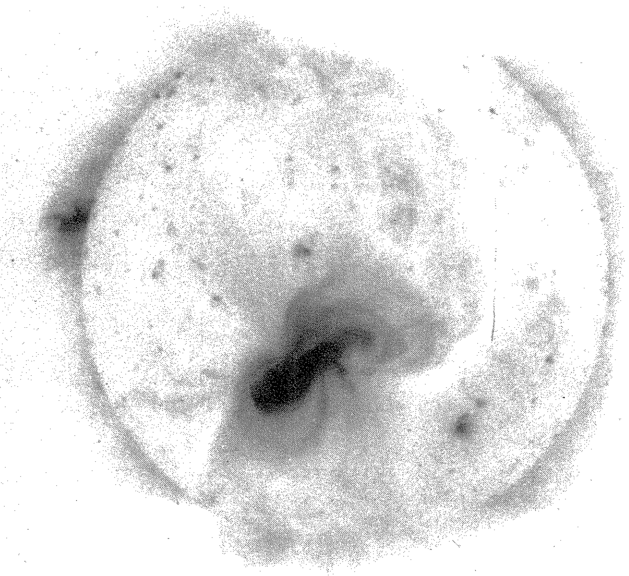
Day 31
14:32:27 UT



Day 30
11:49:24 UT

YOHKOH SOFT X-RAY TELESCOPE IMAGES

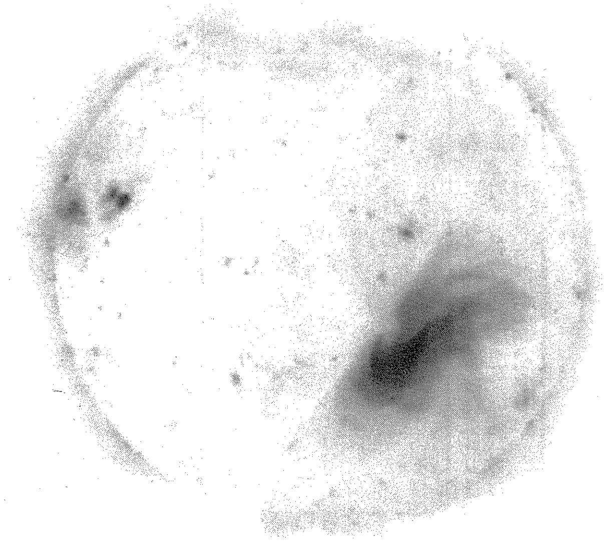
August 1996



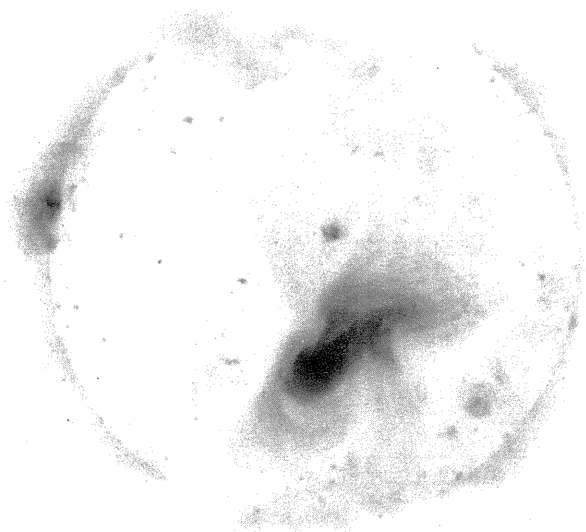
29/08/96 11:29:06

Day 29
11:29:06 UT

Day 31
14:32:27 UT



31/08/96 14:32:27



30/08/96 11:49:24

Day 30
11:49:24 UT

SUNSPOT GROUPS
(Ordered by Central Meridian Passage Date)

AUGUST 1996

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Mo	Day	Time (UT)	Lat	CMD	CMP Mo	CMP Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
7980	28369	MWIL	07	27	1730	S09	E74	08	2.3	5	(AP)					
7980	28369	MWIL	07	28	1430	S11	E61	08	2.2	5	(AP)					
7980	28369	MWIL	07	29	1445	S10	E50	08	2.4	5	(BP)					
7980	28369	MWIL	07	30	1430	S10	E36	08	2.3	5	(BP)					
7980	28369	MWIL	07	31	1445	S10	E23	08	2.3	5	(BG)					
7980	28369	MWIL	08	01	1430	S11	E09	08	2.3	5	(BP)					
7980	28369	MWIL	08	02	1430	S11	W04	08	2.3	5	(G)					
7980	28369	MWIL	08	03	1430	S10	W18	08	2.2	5	(BP)					
7980	28369	MWIL	08	04	1430	S10	W31	08	2.3	5	(BP)					
7980	28369	MWIL	08	05	1430	S10	W44	08	2.3	5	(BP)					
7980	28369	MWIL	08	06	1430	S10	W58	08	2.2	5	(AP)					
7980	28369	MWIL	08	07	1430	S10	W72	08	2.2	5	(AP)					
7980	28369	MWIL	08	08	1430	S10	W87	08	2.1	5	AP					
7981		SVTO	07	27	0700	S11	E79	08	2.2		A	HS	90	1	2	3
7981		LEAR	07	27	0750	S12	E78	08	2.2		A	HA	120	1	3	3
7981		KAND	07	27	1055	S11	E79	08	2.4			?		1	2	3
7981		RAMY	07	27	1242	S09	E79	08	2.4		B	DSO	250	3	10	5
7981	28370	MWIL	07	27	1730	S07	E79	08	2.6	5	(AP					
7981		PALE	07	27	1835	S10	E77	08	2.6		B	DSO	180	4	9	3
7981		HOLL	07	27	2146	S13	E76	08	2.6		B	DSO	480	3	10	3
7981		SVTO	07	28	0610	S10	E68	08	2.4		B	DAO	200	4	8	3
7981		KAND	07	28	1115	S10	E69	08	2.6			DSO		3	10	3
7981		RAMY	07	28	1220	S09	E66	08	2.5		B	DAO	300	7	10	4
7981		HOLL	07	28	1424	S13	E66	08	2.6		B	ESO	410	8	12	3
7981	28370	MWIL	07	28	1430	S09	E68	08	2.7	5	(BP)					
7981		PALE	07	28	1835	S13	E63	08	2.5		B	DSO	450	4	10	3
7981		LEAR	07	29	0030	S10	E58	08	2.4		BG	DSO	360	10	10	3
7981		SVTO	07	29	0715	S08	E55	08	2.4		B	DSO	290	6	9	2
7981		KAND	07	29	0715	S10	E58	08	2.7			EAO		7	12	3
7981		RAMY	07	29	1231	S09	E54	08	2.6		BG	ESC	320	12	12	4
7981	28370	MWIL	07	29	1445	S09	E57	08	2.9	5	(BP)					
7981		HOLL	07	29	1450	S11	E52	08	2.5		BG	ESI	420	11	11	3
7981		PALE	07	29	2117	S11	E49	08	2.6		B	DSO	440	7	10	2
7981		LEAR	07	30	0014	S12	E45	08	2.4		BG	DSO	330	12	9	3
7981		SVTO	07	30	0610	S08	E44	08	2.5		BG	DAO	390	20	10	3
7981		KAND	07	30	0740	S10	E44	08	2.6			DSO		11	10	4
7981		RAMY	07	30	1239	S09	E39	08	2.4		BG	EKI	400	13	11	2
7981	28370	MWIL	07	30	1430	S08	E42	08	2.7	5	(BP)					
7981		HOLL	07	30	1430	S10	E38	08	2.4		BG	EKI	490	25	12	3
7981		PALE	07	30	2220	S12	E35	08	2.6		BG	EKO	470	16	11	3
7981		LEAR	07	31	0120	S09	E33	08	2.5		BG	EAI	470	23	11	3
7981		KAND	07	31	0535	S10	E32	08	2.6			EHO		16	14	3
7981		SVTO	07	31	0652	S09	E30	08	2.5		BG	CAO	400	21	13	3
7981		RAMY	07	31	1234	S09	E28	08	2.6		BG	ESO	330	21	11	4
7981	28370	MWIL	07	31	1445	S08	E29	08	2.8	5	(BP)					
7981		HOLL	07	31	1458	S10	E27	08	2.6		BG	CSO	430	30	12	3
7981		LEAR	08	01	0110	S10	E21	08	2.6		BG	ESO	300	21	12	3
7981		KAND	08	01	0700	S09	E16	08	2.5			DSO		6	9	4
7981		SVTO	08	01	0705	S09	E18	08	2.6		BG	EAO	300	17	12	3
7981		RAMY	08	01	1202	S08	E16	08	2.7		BG	ESC	290	31	13	4
7981	28370	MWIL	08	01	1430	S09	E15	08	2.7	5	(BP)					
7981		HOLL	08	01	1742	S10	E13	08	2.7		BG	CSI	320	24	13	3
7981		PALE	08	01	1805	S10	E11	08	2.6		BG	ESI	300	13	11	3
7981		LEAR	08	02	0045	S10	E09	08	2.7		BG	ESO	280	28	11	3
7981		SVTO	08	02	0530	S09	E05	08	2.6		BG	EAO	350	23	11	3
7981		KAND	08	02	0945	S10	E02	08	2.5			DSO		13	10	3
7981		RAMY	08	02	1119	S09	E02	08	2.6		BG	ESI	330	27	12	4
7981	28370	MWIL	08	02	1430	S09	E02	08	2.7	4	(D)					
7981		PALE	08	02	1730	S09	W01	08	2.6		BG	ESO	310	17	12	3
7981		HOLL	08	02	2255	S09	W05	08	2.6		BG	ESI	290	19	12	2
7981		LEAR	08	03	0100	S10	W07	08	2.5		BG	ESO	260	13	11	3
7981		SVTO	08	03	0705	S08	W08	08	2.7		BG	EKO	370	20	12	3
7981		KAND	08	03	1145	S10	W13	08	2.5			DSO		11	9	3
7981		RAMY	08	03	1217	S09	W13	08	2.5		BG	ESI	240	24	12	4
7981	28370	MWIL	08	03	1430	S08	W13	08	2.6	4	(BP)					
7981		HOLL	08	03	1520	S10	W16	08	2.4		BG	ESI	310	26	11	3
7981		PALE	08	03	1745	S08	W16	08	2.5		BG	DSO	280	18	9	3
7981		LEAR	08	04	0045	S06	W21	08	2.4		BG	DSO	110	14	10	3

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7981		SVTO	08	04	0730	S09	W23	08	2.6		BG	CHO	240	17	10	3
7981		KAND	08	04	0850	S10	W25	08	2.5			CSO		6	9	2
7981		RAMY	08	04	1206	S09	W26	08	2.5		BG	CSO	220	22	9	4
7981	28370	MWIL	08	04	1430	S08	W27	08	2.6	4	(BP)					
7981		HOLL	08	04	1541	S07	W27	08	2.6		BG	CSO	300	21	11	3
7981		PALE	08	04	2056	S07	W30	08	2.6		BG	CSO	270	15	10	3
7981		SVTO	08	05	0530	S09	W33	08	2.7		BG	CAO	240	20	12	4
7981		KAND	08	05	0650	S10	W37	08	2.5			CSO		4	6	2
7981		RAMY	08	05	1410	S12	W42	08	2.4		B	CSO	180	4	6	3
7981	28370	MWIL	08	05	1430	S10	W38	08	2.7	4	(B)					
7981		HOLL	08	05	1712	S08	W45	08	2.3		B	CAO	230	3	6	3
7981		PALE	08	05	2030	S07	W45	08	2.5		B	CSO	1800	4	8	3
7981		LEAR	08	06	0007	S10	W46	08	2.5		B	CSO	120	2	5	3
7981		SVTO	08	06	0705	S12	W52	08	2.4		B	CAO	160	2	5	3
7981		KAND	08	06	0725	S10	W51	08	2.5			CSO		2	5	3
7981		RAMY	08	06	1257	S09	W53	08	2.6		B	CSO	140	4	9	3
7981	28370	MWIL	08	06	1430	S08	W53	08	2.6	4	(AP)					
7981		HOLL	08	06	1455	S09	W56	08	2.4		A	CS	130	5	10	3
7981		SVTO	08	07	0523	S11	W62	08	2.5		B	CSO	150	4	5	5
7981		KAND	08	07	0655	S11	W67	08	2.2			HS		1	2	3
7981		RAMY	08	07	1332	S11	W69	08	2.4		A	HS	110	1	2	2
7981	28370	MWIL	08	07	1430	S11	W68	08	2.5	4	(AP)					
7981		PALE	08	07	1900	S11	W72	08	2.4		A	HS	120	1	2	3
7981		LEAR	08	08	0100	S09	W77	08	2.3		B	CSO	180	2	7	3
7981		SVTO	08	08	0545	S13	W78	08	2.3		A	HS	120	1	2	3
7981		KAND	08	08	0700	S11	W83	08	2.0			HS		1	2	3
7981		RAMY	08	08	1458	S11	W83	08	2.4		A	HS	50	1	2	3
7981A		SVTO	08	05	0530	S15	W24	08	3.4		A	AX		1		4
7981A		RAMY	08	05	1410	S13	W34	08	3.0		A	AX		1		3
7981B		SVTO	08	09	0515	N12	W32	08	6.8		A	AX		1		2
7982		SVTO	08	06	0705	N13	E43	08	9.5		A	AX		1		3
7982		KAND	08	06	0725	N10	E45	08	9.7			AX		1		3
7982		SVTO	08	07	0523	N12	E32	08	9.6		B	BXO	10	5	3	5
7982		RAMY	08	07	1332	N09	E30	08	9.8		A	AX	10	3	1	2
7982	28371	MWIL	08	07	1430	N09	E27	08	9.6	4	(B)					
7982		PALE	08	07	1900	N09	E25	08	9.7		B	BXO	10	4	4	3
7982		LEAR	08	08	0100	N09	E23	08	9.8		B	BXO		4	8	3
7982		RAMY	08	08	1458	N09	E13	08	9.6		A	AX		1		3
7982		PALE	08	08	1910	N08	E11	08	9.6		B	BXO	10	2	2	3
7982		LEAR	08	09	0045	N10	E08	08	9.6		B	BXO	10	5	4	3
7982		SVTO	08	09	0515	N10	E04	08	9.5		B	CRO	20	7	3	2
7982		KAND	08	09	0700	N10	E03	08	9.5			BXO		5	4	3
7982		RAMY	08	09	1114	N10	E01	08	9.5		B	BXO	30	13	4	4
7982	28371	MWIL	08	09	1430	N09	W01	08	9.5	4	(B)					
7982		PALE	08	09	1720	N10	W02	08	9.6		B	BXO	20	11	6	3
7982		HOLL	08	09	1847	N10	W02	08	9.6		B	BXO	30	10	6	3
7982		LEAR	08	10	0035	N10	W07	08	9.5		B	BXO	30	12	7	3
7982		SVTO	08	10	0730	N09	W11	08	9.5		B	DAO	30	10	5	3
7982		RAMY	08	10	1225	N09	W14	08	9.5		B	DSO	30	10	5	4
7982	28371	MWIL	08	10	1430	N09	W15	08	9.5	5	(B)					
7982		PALE	08	10	2341	N10	W20	08	9.5		B	BXO	60	17	9	3
7982		LEAR	08	11	0010	N10	W20	08	9.5		B	DAO	90	20	6	4
7982		SVTO	08	11	0520	N09	W24	08	9.4		BG	DSI	80	16	5	4
7982		KAND	08	11	0835	N10	W24	08	9.5			DAC		8	6	1
7982		RAMY	08	11	1230	N09	W27	08	9.5		B	DSI	70	20	6	4
7982	28371	MWIL	08	11	1445	N10	W27	08	9.6	5	(B)					
7982		HOLL	08	11	1545	N10	W30	08	9.4		B	DAI	120	24	6	3
7982		LEAR	08	12	0015	N11	W33	08	9.5		B	CRI	30	17	6	3
7982		KAND	08	12	0705	N09	W37	08	9.5			DAO		9	7	3
7982		SVTO	08	12	0810	N09	W38	08	9.5		B	DAI	90	11	7	1
7982		RAMY	08	12	1209	N09	W41	08	9.4		B	DAO	60	10	7	4
7982	28371	MWIL	08	12	1445	N11	W43	08	9.4	5	(B)					
7982		PALE	08	12	1747	N12	W44	08	9.4		B	DSO	70	13	8	3
7982		HOLL	08	12	1810	N10	W44	08	9.4		B	DAO	150	10	7	4
7982		LEAR	08	13	0145	N12	W47	08	9.5		B	DAO	60	5	6	2
7982		KAND	08	13	0715	N10	W51	08	9.5			DAO		3	7	2

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7982		SVTO	08	13	0834	N08	W52	08	9.4		B	DAO	60	5	8	3
7982		RAMY	08	13	1311	N09	W54	08	9.5		B	BXO	20	7	9	3
7982	28371	MWIL	08	13	1430	N11	W56	08	9.4	4	(B)					
7982		LEAR	08	14	0035	N12	W60	08	9.5		B	DAO	40	2	6	3
7982		SVTO	08	14	0550	N08	W63	08	9.5		B	CRO	30	4	9	4
7982		KAND	08	14	0710	N09	W68	08	9.2			AX		1	1	3
7982		RAMY	08	14	1121	N09	W67	08	9.4		B	BXO	30	5	9	4
7982	28371	MWIL	08	14	1430	N08	W72	08	9.2	4	(AP)					
7982		HOLL	08	14	1745	N08	W76	08	9.0		A	AX	20	1		4
7982		PALE	08	14	1903	N08	W75	08	9.2		A	AX	20	1		2
7982		LEAR	08	15	0014	N10	W77	08	9.2		A	AX	10	1	1	3
7982		SVTO	08	15	0605	N06	W84	08	9.0		A	AX	10	1	2	3
7982		RAMY	08	15	1214	N09	W80	08	9.5		A	AX	10	1		3
7982A	28372	MWIL	08	10	1430	N26	E19	08	12.1	4	(B)					
7982A		RAMY	08	10	1525	N26	E18	08	12.0		A	AX	10	3	2	4
7984		SVTO	08	14	0550	N31	E32	08	16.8		B	BXO	10	3	3	4
7984		KAND	08	14	0710	N29	E33	08	16.9			BXO		3	4	3
7984		RAMY	08	14	1121	N30	E30	08	16.8		B	BXO	30	9	4	4
7984	28373	MWIL	08	14	1430	N29	E29	08	16.9	4	(B)					
7984		HOLL	08	14	1745	N29	E27	08	16.8		B	BXO	20	6	5	4
7984		PALE	08	14	1903	N27	E28	08	17.0		B	BXO	30	5	5	2
7984		LEAR	08	15	0014	N28	E23	08	16.8		B	BXO	10	2	4	3
7984		SVTO	08	15	0605	N30	E18	08	16.7		B	BXO	30	8	6	3
7984		KAND	08	15	1050	N29	E17	08	16.8			CSO		4	6	2
7984		RAMY	08	15	1214	N29	E16	08	16.8		B	CRO	20	5	6	3
7984	28373	MWIL	08	15	1500	N29	E16	08	16.9	4	(B)					
7984		HOLL	08	15	1536	N29	E14	08	16.7		B	CRO	30	5	7	4
7984		PALE	08	15	1817	N29	E15	08	16.9		B	CRO	20	7	7	3
7984		LEAR	08	16	0035	N29	E08	08	16.6		B	CRO	20	3	5	3
7984		SVTO	08	16	0635	N29	E03	08	16.5		B	BXO	10	3	5	3
7984		KAND	08	16	0725	N29	E04	08	16.6			AX		2	1	3
7984	28373	MWIL	08	16	1430	N29	E01	08	16.7	4	(B)					
7984		PALE	08	16	2100	N29	W02	08	16.7		B	BXO	20	6	7	2
7984		SVTO	08	17	0545	N28	W08	08	16.6		B	BXO	10	5	5	3
7984		LEAR	08	17	0604	N29	W07	08	16.7		B	BXO	20	8	6	4
7984		KAND	08	17	0740	N29	W07	08	16.8			BXO		5	5	2
7984	28373	MWIL	08	17	1430	N29	W12	08	16.7	4	(B)					
7984		HOLL	08	17	1445	N29	W12	08	16.7		B	BXO	20	4	6	3
7984		RAMY	08	17	1554	N28	W13	08	16.6		B	BXO	10	4	5	1
7984		PALE	08	17	1955	N29	W12	08	16.9		B	BXO	10	3	2	2
7984		SVTO	08	18	0520	N28	W18	08	16.8		B	BXO	10	4	2	3
7984A		SVTO	08	15	0605	N06	E32	08	17.6		B	BXO	10	3	3	3
7984A		KAND	08	15	1050	N03	E32	08	17.8			AX		1		2
7985		SVTO	08	19	0545	N09	W05	08	18.9		B	BXO		3	2	3
7985		KAND	08	19	0640	N09	W05	08	18.9			AX		2	1	3
7985		RAMY	08	19	1214	N09	W09	08	18.8		B	BXO	10	3	3	4
7985	28374	MWIL	08	19	1445	N10	W08	08	19.0	4	(AF)					
7985		HOLL	08	19	1503	N10	W09	08	18.9		A	AX	10	2	1	4
7985		PALE	08	19	1745	N11	W09	08	19.1		A	AX	10	2	1	3
7985		SVTO	08	20	0525	N09	W18	08	18.9		B	BXO	10	3	4	4
7985		LEAR	08	20	0530	N10	W20	08	18.7		B	BXO	20	3	4	3
7985		RAMY	08	20	1113	N10	W21	08	18.9		B	BXO	10	4	4	5
7985		KAND	08	20	1355	N10	W22	08	18.9			BXO		2	3	3
7985	28374	MWIL	08	20	1430	N10	W24	08	18.8	4	(B)					
7985		HOLL	08	20	1731	N11	W27	08	18.7		A	AX	10	2	1	1
7985		PALE	08	20	1750	N13	W27	08	18.7		B	BXO	10	2	2	3
7985		LEAR	08	21	0233	N09	W32	08	18.7		B	BXO		3	2	3
7985		SVTO	08	21	0517	N10	W33	08	18.7		A	AX		1		3
7985		RAMY	08	21	1121	N10	W36	08	18.8		A	AX		2		4
7985		HOLL	08	21	1539	N11	W39	08	18.7		A	AX	10	2	1	4
7985		SVTO	08	22	1040	N09	W48	08	18.8		A	AX	10	3	2	2
7985	28374	MWIL	08	22	1415	N11	W49	08	18.9	4	(B)					
7985		HOLL	08	22	1618	N11	W51	08	18.8		B	BXO	20	2	3	4
7985		KAND	08	23	0705	N10	W58	08	18.9			BXO		2	3	3
7985		SVTO	08	23	0746	N11	W59	08	18.9		B	BXO		2	3	2

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7985		RAMY	08 23	1205	N10 W62	08 18.8		B	BXO	20	4	4	5
7985	28374	MWIL	08 23	1415	N11 W64	08 18.8	4	(B)					
7985		HOLL	08 23	1525	N12 W65	08 18.7		B	BXO	30	2	4	3
7985		PALE	08 23	2128	N15 W67	08 18.8		B	BXO	20	2	4	3
7985		LEAR	08 24	0030	N12 W71	08 18.7		A	AX	20	1	2	4
7985		SVTO	08 24	0615	N08 W73	08 18.8		A	AX		2	1	3
7985		KAND	08 24	0855	N09 W76	08 18.7			AX		1	1	3
7985		RAMY	08 24	1247	N09 W76	08 18.8		A	AX		1		4
7985	28374	MWIL	08 24	1430	N09 W78	08 18.8	4	(AP)					
7985		HOLL	08 24	1625	N10 W80	08 18.7		A	AX	10	1		3
7986		RAMY	08 23	1205	S12 E85	08 29.9		A	HS	40	1	2	5
7986		HOLL	08 23	1525	S13 E86	08 30.1		A	AX	60	1	1	3
7986		PALE	08 23	2128	S16 E79	08 29.9		A	AX	60	1	2	3
7986		LEAR	08 24	0030	S13 E75	08 29.7		A	HA	70	1	4	4
7986		SVTO	08 24	0615	S10 E76	08 30.0		A	HS	120	1	2	3
7986		KAND	08 24	0855	S12 E72	08 29.8			HS		1	2	3
7986		RAMY	08 24	1247	S11 E70	08 29.8		A	HS	70	1	2	4
7986	28375	MWIL	08 24	1430	S11 E69	08 29.8	5	(AP)					
7986		HOLL	08 24	1625	S13 E69	08 29.9		A	HS	70	1	2	3
7986		PALE	08 24	1733	S12 E67	08 29.8		A	HS	120	1	2	3
7986		LEAR	08 25	0145	S12 E63	08 29.8		A	HA	80	1	2	3
7986		SVTO	08 25	0545	S10 E61	08 29.8		A	HA	80	1	2	3
7986		KAND	08 25	0730	S12 E60	08 29.8			HA		4	2	4
7986		RAMY	08 25	1200	S12 E62	08 30.2		B	CSO	90	4	14	4
7986	28375	MWIL	08 25	1430	S12 E57	08 29.9	5	(BP)					
7986		HOLL	08 25	1530	S13 E63	08 30.4		BD	CSO	120	4	12	5
7986		PALE	08 25	1903	S10 E55	08 29.9		BD	CSO	130	5	12	3
7986		SVTO	08 26	0550	S09 E53	08 30.2		B	CAO	130	6	12	3
7986		KAND	08 26	0630	S12 E51	08 30.1			CSO		6	13	5
7986		RAMY	08 26	1223	S11 E50	08 30.3		B	CSO	110	7	14	4
7986	28375	MWIL	08 26	1430	S12 E45	08 30.0	5	(BP)					
7986		PALE	08 26	1725	S15 E45	08 30.1		BD	CSO	140	5	13	3
7986		HOLL	08 26	2145	S13 E45	08 30.3		B	CSO	750	4	12	2
7986		LEAR	08 27	0020	S14 E41	08 30.1		B	CSO	80	4	9	3
7986		TACH	08 27	0702	S11 E33	08 29.8			HSX	200	02	02	4
7986		SVTO	08 27	0725	S10 E34	08 29.9		B	CAO	50	2	2	3
7986		KAND	08 27	0750	S12 E35	08 30.0			CSO		7	19	4
7986		RAMY	08 27	1406	S11 E30	08 29.8		A	HS	50	2	1	3
7986	28375	MWIL	08 27	1430	S11 E31	08 29.9	5	(BP)					
7986		HOLL	08 27	1440	S13 E29	08 29.8		A	HS	50	4	2	3
7986		PALE	08 27	1738	S13 E27	08 29.8		A	HS	50	3	4	3
7986		LEAR	08 28	0020	S12 E23	08 29.7		A	HS	20	5	2	3
7986		TACH	08 28	0519	S11 E20	08 29.7			HSX	220	02	02	4
7986		SVTO	08 28	0705	S12 E21	08 29.9		A	HS	60	2	2	3
7986		KAND	08 28	0730	S12 E20	08 29.8			HS		3	2	3
7986		RAMY	08 28	1215	S11 E17	08 29.8		A	HS	50	3	2	4
7986	28375	MWIL	08 28	1430	S12 E18	08 30.0	5	(BP)					
7986		HOLL	08 28	1727	S13 E19	08 30.2		B	CSO	60	7	14	3
7986		PALE	08 28	1735	S13 E14	08 29.8		A	HS	50	3	3	3
7986		LEAR	08 29	0100	S11 E09	08 29.7		A	HX	40	1	1	3
7986		KAND	08 29	0645	S11 E07	08 29.8			HS		1	1	3
7986		SVTO	08 29	1025	S11 E05	08 29.8		A	HS	40	3	2	3
7986		RAMY	08 29	1159	S12 E05	08 29.9		A	HS	40	2	3	3
7986	28375	MWIL	08 29	1430	S12 E03	08 29.8	5	(BP)					
7986		HOLL	08 29	1554	S13 E08	08 30.3		B	CSO	100	11	13	5
7986		PALE	08 29	1724	S13 E07	08 30.2		B	CSO	70	7	13	3
7986		LEAR	08 30	0054	S12 E02	08 30.2		B	CSO	70	5	13	4
7986		TACH	08 30	0512	S10 W06	08 29.8			HSX	200	01	02	4
7986		SVTO	08 30	0752	S12 W01	08 30.2		B	CSO	50	5	13	2
7986		KAND	08 30	0900	S12 W01	08 30.3			CSO		5	13	3
7986		RAMY	08 30	1200	S12 W03	08 30.3		B	CSO	50	9	12	4
7986	28375	MWIL	08 30	1430	S12 W08	08 30.0	5	(BP)					
7986		HOLL	08 30	1735	S13 W08	08 30.1		B	CSO	70	5	11	2
7986		PALE	08 30	2045	S13 W12	08 29.9		B	CSO	40	2	6	2
7986		LEAR	08 31	0025	S13 W11	08 30.2		B	CSO	60	4	13	4
7986		KAND	08 31	0745	S12 W20	08 29.8			HS		1	1	2
7986		RAMY	08 31	1246	S12 W24	08 29.7		A	HS	40	1	1	3
7986	28375	MWIL	08 31	1420	S12 W24	08 29.8	5	(AP)					

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

AUGUST 1996

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
7986		LEAR	09 01	0240	S11	W26	08 30.2		B	CSO	70	3	13	3
7986		TACH	09 01	0608	S10	W33	08 29.9			HSX	110	01	02	4
7986		SVTO	09 01	0620	S14	W27	08 30.3		B	CSO	60	5	13	3
7986		KAND	09 01	0810	S12	W34	08 29.9			HS		1	1	2
7986		RAMY	09 01	1212	S12	W37	08 29.8		A	HS	30	1	1	3
7986	28375	MWIL	09 01	1415	S12	W38	08 29.8	5	(AP)					
7986		LEAR	09 02	0030	S11	W41	08 30.0		B	CSO	40	3	5	3
7986		TACH	09 02	0354	S11	W46	08 29.8			HR	50	01	01	3
7986		SVTO	09 02	0705	S12	W48	08 29.8		A	HA	20	1	1	3
7986		KAND	09 02	0805	S12	W48	08 29.8			HS		1	1	2
7986		RAMY	09 02	1213	S12	W51	08 29.8		A	HS	20	3	1	4
7986	28375	MWIL	09 02	1430	S12	W50	08 29.9	5	(AP)					
7986		HOLL	09 02	1430	S12	W51	08 29.9		A	HS	40	3	4	3
7986		PALE	09 02	1833	S12	W51	08 30.0		A	HS	20	3	2	3
7986		LEAR	09 03	0011	S11	W57	08 29.8		A	AX	20	1	1	3
7986		TACH	09 03	0440	S11	W60	08 29.8			AX	10	01	01	3
7986		KAND	09 03	0635	S12	W60	08 29.8			HR		1	1	3
7986		SVTO	09 03	0755	S11	W61	08 29.8		A	HR	10	1	1	3
7986		RAMY	09 03	1339	S12	W65	08 29.8		A	HR	10	1	1	2
7986	28375	MWIL	09 03	1430	S11	W65	08 29.8	4	(AP)					
7986		PALE	09 03	1740	S12	W67	08 29.8		A	AX	20	1		2
7986		LEAR	09 04	0015	S10	W68	08 30.0		A	AX		1	1	3
7986A		TACH	08 30	0512	S13	E04	08 30.5			AX	11	02	01	4
7986A		TACH	09 01	0608	S14	W22	08 30.7			AX	10	01	01	4

Stations reporting:

HOLL = Holloman
KAND = Kandilli
LEAR = Learmonth
MWIL = Mt. Wilson
PALE = Palehua
RAMY = Ramey
SVTO = San Vito
TACH = Tashkent

SUDDEN IONOSPHERIC DISTURBANCES
AUGUST 1996

Day	Start (UT)	Max (UT)	End (UT)	Imp	Wide Spread Index	SWF	SEA	SPA	LF-SPA	SES	Flare (UT)	X-ray Class	NOAA Region
02	1038	1050	1111	1	1		1				1036	B1.4	7981
03	0915	0929	0950	1	3		3				No flare		
03	1115	1141	1156	1	3		4				No flare		
03	1214	1230U	1253	1	1		1				1237	B4.8	7981
03	1322	1337	1358	1	1		1				No flare		
04	1213	1234U	1307	1	1		1				1209	B1.4	
04	1507	1525U	1614	1	1		1				No flare		
05	1325	1409	1512	1	1		1				1423	B5.5	7981
07	0606	0618U	0712	1	1		1				No flare		
07	2320	2323	2335	1-	1			1			2316	C1.0	
08	0737	1332	1357	2-	3		4				No flare		
08	1339	1402	1430	1	1		1				No flare		
10	1747	1757	1842	1	1		1				No flare		
11	1500	1513	1539	1	1		1				No flare		
15	0714	0755	0842	1	1		1				0705	B1.2	
18	1430	1450	1626	1	1		1				No flare		
18	1710	1724	1756	1	1		1				No flare		
21	1120	1152	1218	2-	3		3				No flare		
21	1405	1422	1444	1	1		1				1415	B1.4	
21	1608	1619	1650	1	1		1				No flare		
22	0742	0756	1000	3-	5		1	1		1	0734	C1.5	
23	0624	0634	0742	1	1		1				0714	C1.2	
23	0720	0724	0744	1-	1			1			0714	C1.2	
23	1131	1141	1159	1	1		1				1148	B3.3	
24	0810	0820	0857	1	1		1				No flare		
25	0920	0927	1005	1	1					1	No flare		
25	1030	1110	1145	1	1					1	No flare		
25	1222	1230	1243	1	1		1				1228	C4.0	7986
28	0803	0808	0832	1-	5		1	1			0800	B4.0	
28	1122	1129	1141	1	1		1				No flare		
29	0919	0933	1012	1	1		1				*		
29	1030	1036	1136	1	1		1				No flare		
29	1230	1250	1312	1	1		1				No flare		
29	1446	1504	1624	2	3		3				No flare		

* = no flare patrol.

OBSERVATORIES REPORTING FOR AUGUST 1996

Brazilian Antarctic Station	SPA	LaCrescenta, California, USA	SES
Cambridge, England, UK	SES	Nerja, Spain	SES
Cranford, New Jersey, USA	SES	Rimavska Sobota, Slovakia	SEA
Dodgeville, Wisconsin, USA	SES	Rochester, New Hampshire, USA	SES
Fort Wayne, Indiana, USA	SES	Sofia, Bulgaria	SES
Gettysburg, Pennsylvania, USA	SES	Spring Green, Wisconsin, USA	SES
Hiraiso, Japan	SWF	Tucson, Arizona, USA	SES
Houston, Texas, USA	SES	Upice, Czech Republic	SEA
Hudson, Ohio, USA	SES	Wellington, Ohio, USA	SES
Indianapolis, Indiana, USA	SES	Windsor Locks, Connecticut, USA	SES
Inubo, Japan	SPA	Ziar nad Hronom, Slovakia	SEA
Itapetinga, Brazil	SPA	Zilina, Slovakia	SEA
Koniz, Switzerland	SES		

Observations are not necessarily continuous.

SOLAR RADIO EMISSION
Spectral Observations

AUGUST 1996

Day	OBSERVATION Start (UT)	OBSERVATION End (UT)	Sta	EVENT Start (UT)	EVENT End (UT)	Spectral Class	Event Remarks	Int (1-3)	FREQUENCY Lower (MHz)	FREQUENCY Upper (MHz)	Remarks
01	0000	0723	CULG	0052.0	0257.0	I	S	1	60	170	
			CULG	0248.0	0250.0	III	G	1	28	300	
			LEAR	0248.0	0249.0	III		2	30	50	
			PALE	0248.0	0249.0	III		1	25	55	
	0000	0949	HIRA	0248.8	0249.7	III	G	1	25X	320	
	0417	1735	POTS	0417 E	1735 U	I	S,DC,C	3	110U	350	
	0444	1729	ONDR								
	0600	1200	IZMI	0700.0E	1200.0D	I	N	1	90U	150U	
			POTS	0912.4	0912.7	III	G	2	40X	300	
			POTS	0932.2	0933.9	DCIM		1	250	400	
			POTS	1042.7	1043.5	DCIM		1	300	450	
			POTS	1238.0	1248.5	III	GG	2	40X	300	
			POTS	1411.8	1412.0	III	G	1	110U	170U	
			POTS	1457.8	1458.0	III	B	1	40X	170U	
			POTS	1527.5	1529.0	III	G	1	110U	300	
			POTS	1551.7	1551.8	III	B	1	110U	300	
			SGMR	1746.0	1746.0	III		1	30	55	
			SGMR	1901.0	1902.0	III		1	30	57	
			PALE	1902.0	1902.0	III		1	25	60	
			PALE	2021.0	2023.0	III		2	25	68	
			SGMR	2021.0	2027.0	III		2	30	80	
	1943	2400	HIRA	2021.7	2022.2	III	B	2	25X	330	
			PALE	2049.0	2050.0	III		1	25	57	
			SGMR	2049.0	2049.0	III		1	30	60	
			SGMR	2228.0	2232.0	III		1	30	60	
			PALE	2229.0	2233.0	III		1	27	54	
	2054	2400	CULG	2229.0	2229.0	III	B	1	20U	180	
			HIRA	2229.6	2229.8	III	B	1	25X	250	
			HIRA	2232.7	2232.8	III	B	1	25X	190	
			CULG	2233.0	2233.0	III	B	1	20U	180	
			CULG	2245.0	2245.0	III	B	2	20	180	
			PALE	2245.0	2246.0	III		2	25	61	
			SGMR	2245.0	2245.0	III		1	30	60	
			HIRA	2245.2	2245.4	III	B	1	25X	330	
02			LEAR	0018.0	0019.0	III		2	30	75	
			PALE	0018.0	0020.0	V		2	25	75	
	0000	0723	CULG	0018.0	0020.0	III	G	2	20	260	
	0000	0948	HIRA	0018.5	0019.8	III	G	2	25X	300	
			POTS	0421	1737 U	III	N	1	40X	400	
	0418	1737	POTS	0421	1737 U	I	S,C,DC	2	40X	400	
			POTS	0534.6	0534.7	III	B	1	130	170U	
			POTS	0539.7	0539.8	III	B	1	110U	170U	
			POTS	0543.6	0543.7	III	B	1	110U	170U	
			POTS	0547.6	0554.9	III	GG	1	40X	170U	
	0600	1200	IZMI	0630.3	0630.4	III	B	1	45X	65	
	0600	1200	IZMI	0631.6	0631.7	III	B	1	45X	75	
	0600	1200	IZMI	0635.2	0635.6	III	G	1	45X	90U	
			POTS	0635.3	0637.6	III	G	2	40X	170U	
			POTS	0642.2	0642.7	III	G	2	110U	170U	
			POTS	0732.2	0732.3	III	B	2	110U	170U	
	0600	1200	IZMI	0754.3	0754.4	III	B	1	60	75	
			POTS	0756.0	0756.2	III	B	2	40X	170U	
	0600	1200	IZMI	0756.1	0756.2	III	B	1	45X	90	
	0600	1200	IZMI	0802.8	1130.0U	III	S	1	45X	135	
	0600	1200	IZMI	0805.5	1200.0D	I	S	2	45X	135	
			SVTO	0806.0	1110.0	III	N	2	35U	79U	
			POTS	0812.5	0812.6	III	G	2	40X	70	
			POTS	0813.3	1053	III	N	2	40X	90U	
	0446	1727	ONDR	1401.5	1402.0	III	B	1	2245	4400X	
			ONDR	1521.5	1523.5	III	G	1	2215	4430X	
			PALE	2033.0	2034.0	III		1	27	46	
			PALE	2052.0	2057.0	III		2	25	60	
			SGMR	2052.0	2056.0	III		1	30	72	
	2053	2400	CULG	2053.0	2100.0	III	G	2	20	260	
	1944	2400	HIRA	2053.2	2054.3	III	G	1	25X	300	
			HIRA	2056.8	2057.4	III	G	1	25X	200	
			CULG	2215.0	2215.0	III	B	1	60	90	
			CULG	2237.0	2241.0	III	G	1	35U	150	

SOLAR RADIO EMISSION
Spectral Observations

AUGUST 1996

Day	OBSERVATION Start (UT)	End (UT)	Sta	EVENT Start (UT)	End (UT)	Spectral Class	Event Remarks	Int (1-3)	FREQUENCY Lower (MHz)	Upper (MHz)	Remarks
02			CULG	2314.0	2314.0	III	B	1	60	160	
			CULG	2342.0	2342.0	III	B	1	30	180	
			CULG	2347.0	2347.0	III	B	2	20U	180	
			LEAR	2347.0	2347.0	III		1	30	70	
			PALE	2347.0	2347.0	III		2	25	67	
			HIRA	2347.1	2347.4	III	B	1	25X	330	
			CULG	2350.0	2350.0	III	B	1	60	180	
03			PALE	0003.0	0008.0	III		1	25	55	
	0000	0723	CULG	0004.0	0008.0	III	G	1	60	160	
			CULG	0026.0	0027.0	III	B	1	20	90	
			PALE	0026.0	0026.0	III		1	25	60	
	0000	0947	HIRA	0026.5	0026.7	III	B	1	25X	80	
			LEAR	0123.0	0124.0	III		1	30	45	
			PALE	0123.0	0124.0	III		1	25	56	
			HIRA	0123.7	0123.9	III	B	1	25X	190	
			CULG	0124.0	0143.0	III	GG	1	20	180	
			LEAR	0135.0	0142.0	III		2	30	75	
			PALE	0135.0	0142.0	III		2	25	75	
			HIRA	0135.3	0135.8	III	G	1	25X	400	
			HIRA	0141.3	0141.5	III	B	1	25X	470	
			CULG	0211.0	0216.0	III	G	1	30U	180	
			LEAR	0211.0	0215.0	III		1	30	80	
			PALE	0211.0	0215.0	III		1	25	75	
			HIRA	0211.2	0211.3	III	B	1	25X	300	
			CULG	0234.0	0337.0	I	S	1	80	180	
			CULG	0302.0	0304.0	III	G	1	60	180	
			LEAR	0303.0	0304.0	III		1	30	45	
			CULG	0358.0	0358.0	III	B	1	40	160	
			LEAR	0358.0	0404.0	III		2	30	80	
			PALE	0358.0	0403.0	III		1	25	75	
			HIRA	0358.7	0358.8	III	B	1	25X	230	
			CULG	0403.0	0404.0	III	G	2	20	260	
			HIRA	0403.0	0403.8	III	G	1	25X	360	
			CULG	0409.0	0409.0	III	B	1	30	120	
			LEAR	0409.0	0409.0	III		1	30	45	
			PALE	0409.0	0409.0	III		1	30	55	
			HIRA	0409.3	0409.4	III	B	1	25X	220	
			LEAR	0417.0	0418.0	III		1	30	80	
			POTS	0418 E	1737 U	III	N	1	40X	170U	
	0418	1737	POTS	0418 E	1737 U	I	S,C,DC	2	40X	400	
			POTS	0419.9	0420.0	III	B	2	40X	170U	
			LEAR	0420.0	0421.0	III		1	30	80	
			PALE	0420.0	0421.0	III		1	37	56	
			POTS	0420.6	0421.1	III	G	3	40X	170U	
			HIRA	0420.7	0420.9	III	B	1	25X	400	
			CULG	0421.0	0421.0	III	B	2	30	170	
			POTS	0427.5	0427.6	III	B	2	40X	170U	
			POTS	0429.5	0439.6	III	G	2	110X	170U	
	0447	1724	ONDR								
			POTS	0451.6	0452.2	III	G	2	40X	170U	
			HIRA	0451.7	0451.9	III	B	1	60	160	
			CULG	0452.0	0452.0	III	B	1	70	140	
			LEAR	0505.0	0505.0	III		1	30	42	
			POTS	0507.0	0507.2	III	B	2	40X	170U	
			LEAR	0536.0	0536.0	III		1	33	43	
			SVTO	0536.0	0536.0	III		2	35	59	
			POTS	0536.2	0539.3	III	G	2	40X	250	
			POTS	0553.8	0615.4	III	GG	3	40X	170U	
			LEAR	0557.0	0559.0	III		1	30	50	
			SVTO	0557.0	0559.0	III		2	35	85	
	0600	1200	IZMI	0557.7	0558.9	III	G	2	45X	90U	
			HIRA	0557.8	0558.7	III	G	1	25X	220	
			CULG	0558.0	0559.0	III	G	2	30U	180	
			LEAR	0604.0	0605.0	III		1	30	43	
			CULG	0612.0	0613.0	III	G	1	60U	180	
			LEAR	0612.0	0613.0	III		1	30	43	
			SVTO	0612.0	0613.0	III		2	35	51	
	0600	1200	IZMI	0612.1	0613.4	III	G	1	45X	120	

SOLAR RADIO EMISSION
Spectral Observations

AUGUST 1996

Day	Observation Start (UT)	Observation End (UT)	Sta	Event Start (UT)	Event End (UT)	Spectral Class	Event Remarks	Int (1-3)	Frequency Lower (MHz)	Frequency Upper (MHz)	Remarks
03			HIRA	0612.2	0612.9	III	G	1	50	210	
			SVTO	0624.0	0624.0	III		2	69U	79U	
			CULG	0636.0	0648.0	III	S	1	60	160	
			POTS	0636.5	0637.2	III	G	2	40X	250	
			POTS	0638.9	0645.2	III	G	2	40X	400	
	0600	1200	IZMI	0642.9	0643.0	III	B	1	55	70	
			SVTO	0644.0	0645.0	III		2	35	80	
	0600	1200	IZMI	0644.9	0645.1	III	B	2	45X	135	
			LEAR	0645.0	0645.0	III		1	30	50	
	0600	1200	IZMI	0647.4	1200.0D	I	S	1	45X	145U	
			CULG	0648.0E	0724.0D	III	S	2	60	160	
			SVTO	0654.0	0654.0	III		2	67U	79U	
			SVTO	0658.0	0741.0	III	N	2	50	85	
	0600	1200	IZMI	0658.8	1046.0	III	N	1	45X	145U	
	0600	1200	IZMI	0740.8	0741.0	III	B	2	55	70	
			POTS	0846.3	0846.5	III	B	2	40X	170U	
			POTS	0849.8	0850.1	III	G	2	40X	170U	
			POTS	0949.4	0950.7	III	G	3	40X	600	
	0600	1200	IZMI	0949.4	0950.6	III	GG	2	45X	180X	
			SVTO	0950.0	0950.0	III		3	36U	78U	
			POTS	0950.1	0950.4	V		3	40X	60	
	0600	1200	IZMI	0950.1	0950.4	V	G	2	45X	70	
			POTS	1042.7	1043.3	III	G	3	40X	170U	
	0600	1200	IZMI	1042.7	1043.5	III	G	2	45X	145	
			POTS	1220.5	1220.6	DCIM		2	300	450	
			PALE	1835.0	1835.0	III		1	25	65	
			SGMR	1835.0	1835.0	III		1	30	67	
			PALE	1945.0	1948.0	III		2	25	70	
			SGMR	1945.0	1948.0	III		2	30	70	
			PALE	1950.0	1953.0	III		2	25	70	
			SGMR	1950.0	1953.0	III		2	30	70	
	1945	2400	HIRA	1950.9	1953.1	III	G	1	25X	240	
			SGMR	2011.0	2338.0	III	N	1	30	80	
			PALE	2020.0	2336.0	III	N	1	25	60	
			HIRA	2020.4	2353.7	I	S	1	60	140	
			CULG	2050.0E	2400.0D	I	S	1	52	170	
	2050	2400	CULG	2050.0E	2346.0	CONT		1	25U	180U	
			LEAR	2347.0	2347.0	III		1	30	70	
04	0000	0946	HIRA								
	0000	0725	CULG	0000.0E	0005.0	I	S	1	52	170	
			SVTO	0425.0	0426.0	III		2	60U	83U	
	0418	1737	POTS	0451.9	0452.2	DCIM		3	450	800X	
			POTS	0514.4	0515.4	III	G	1	110U	170U	
			POTS	0517	0625	I	S	1	110U	250	
			POTS	0534.4	0535.1	III	G	1	110U	140	
			POTS	0538.2	0538.3	III	B	1	110U	170U	
			POTS	0542.0	0542.8	III	G	1	110U	170U	
			POTS	0708.4	0708.9	III	G	1	40X	225	
			SVTO	0724.0	0724.0	III		2	35	80	
			POTS	0732.2	0735.2	III	G	2	40X	250	
			SVTO	0734.0	0734.0	III		2	35	80	
	0600	1200	IZMI	0734.1	0734.3	III	G	2	45X	121	
			POTS	0734.2	0734.5	V		2	40X	50	
	0600	1200	IZMI	0734.9	0735.1	III	B	1	45X	90	
			LEAR	0735.0	0735.0	III		1	30	50	
			POTS	0751.3	0751.9	III	G	2	40X	225	
			POTS	0753.4	0754.8	III	G	1	110U	170U	
			POTS	0840.4	0840.6	III	B	1	40X	60	
			POTS	0847	1737 U	I	S,C,DC	2	110U	300	
			POTS	0900.7	0901.4	III	G	1	110U	160	
			POTS	0903.3	0904.2	III	G	1	130	160	
			POTS	0906.2	0907.9	III	GG	1	40X	150	
			POTS	0908.9	0909.0	III	G	2	200U	350	
			POTS	0950.0	0950.4	DCIM		2	450	600	
			SVTO	1002.0	1005.0	III		3	35	80	
			POTS	1002.3	1005.4	III	GG,RS	3	40X	400	
			POTS	1003.0	1003.5	V		3	40X	50	
			SGMR	1003.0	1004.0	III		1	35	45	

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Day	OBSERVATION Start (UT)	End (UT)	Sta	EVENT Start (UT)	End (UT)	Spectral Class	Event Remarks	Int (1-3)	FREQUENCY Lower (MHz)	Upper (MHz)	Remarks
04			POTS	1003.6	1003.8	V		2	40X	50	
			POTS	1004.4	1004.8	V		3	40X	55	
	0448	1725	ONDR	1007.0	1008.0	III	B	1	2000X	4215	
			POTS	1007.3	1007.6	III	G	1	110U	170U	
	0600	1200	IZMI	1012.3	1014.8	III	GG	2	45X	160	
	0600	1200	IZMI	1012.4	1015.1	V		2	45X	90	
			POTS	1018.1	1018.2	III	B	1	110U	170U	
			SGMR	1134.0	1135.0	III		2	30	80	
			POTS	1134.9	1135.8	III	GG	3	40X	400	
			SVTO	1135.0	1135.0	III		3	35	76	
	0600	1200	IZMI	1135.1	1135.7	III	G	2	45X	128	
			POTS	1135.4	1135.9	V		3	40X	55	
			POTS	1211.0	1211.2	III	G	1	300	400	
			SGMR	1405.0	1405.0	III		1	45	57	
			POTS	1405.9	1406.4	III	G	1	40X	250	
			SVTO	1406.0	1406.0	III		1	44U	50U	
			POTS	1406.4	1406.6	V		1	40X	50	
			POTS	1422.0	1423.3	DCIM		2	275	600	
			POTS	1504.3	1504.4	III	G	1	110U	140	
			POTS	1520.7	1521.1	III	G	1	40X	250	
			POTS	1723.3	1724.0	DCIM		2	275	600	
			PALE	1933.0	1933.0	III		1	25	55	
			SGMR	1933.0	1933.0	III		1	30	45	
	1946	2400	HIRA								
	2050	2400	CULG								
05	0000	0726	CULG								
	0000	0946	HIRA								
	0418	1737	POTS	0418 E	1737 U	I	S,W	1	110U	250	
			POTS	0502.1	0502.3	III	G	1	40X	60	
	0600	1200	IZMI								
			POTS	0714.6	0714.7	III	G	1	110U	160	
	0449	1723	ONDR	0752.5	0753.3	III	B W	1	2000X	3570	
			POTS	0816.4	0816.9	III	G	1	110U	150	
			POTS	0830.1	0830.2	III	B	1	110U	170U	
			ONDR	0858.1	0916.0	III	GG W	1	2020	4420X	
			ONDR	0919.4	1002.0	III	GG	1	2000X	4420X	
			POTS	0919.7	0920.5	DCIM		2	550	800X	
			POTS	1143.0	1145.4	III	G	1	110U	170U	
			POTS	1406.5	1406.7	III	G	1	110U	170U	
			POTS	1408.5	1408.7	III	G	1	110U	170U	
			POTS	1409.8	1409.9	III	G	1	110U	170U	
			ONDR	1422.5	1426.2	III	G	1	2000X	4420X	
			POTS	1423.7	1425.2	DCIM		2	500	750	
			POTS	1540.0	1540.1	III	B,W	1	110U	160	
			POTS	1608.6	1609.3U	III	G	1	200U	350	
			PALE	1639.0	1643.0	III		2	25	75	
	1946	2400	HIRA								
	2050	2400	CULG								
06	0000	0726	CULG								
	0000	0945	HIRA								
	0450	1720	ONDR								
	0600	1200	IZMI								
	0418	1737	POTS	0720.5	0720.6	III	G	1	110U	170U	
			POTS	0920.6	0920.7	III	B	1	110U	170U	
			POTS	1120	1121	I	S	1	200U	350	
			POTS	1435.9	1436.0	III	B	1	110U	170U	
			POTS	1437.3	1437.7	III	G	1	110U	250	
			POTS	1503.4	1503.6	III	G	1	110U	250	
			POTS	1529.0	1530.7	DCIM		2	200U	450	
	1947	2400	HIRA								
	2050	2400	CULG								
07	0000	0726	CULG								
	0000	0943	HIRA								
	0452	1719	ONDR								
	0418	1737	POTS	0500.9	0501.0	III	B	1	110U	170U	
			POTS	0507.1	0507.2	III	B	1	110U	170U	

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Day	OBSERVATION Start (UT)	OBSERVATION End (UT)	Sta	EVENT Start (UT)	EVENT End (UT)	Spectral Class	Event Remarks	Int (1-3)	FREQUENCY Lower (MHz)	FREQUENCY Upper (MHz)	Remarks
07	0600	1200	IZMI								
			POTS	0638.4	0638.5	III	B	1	110U	170U	
			POTS	1001	1004	I	S,W	1	225	350	
			POTS	1037	1054	I	S,W	1	200U	350	
	1948	2400	HIRA								
	2050	2400	CULG								
08	0000	0729	CULG								
	0000	0942	HIRA								
	0418	1737	POTS								
	0453	1717	ONDR								
	0600	1200	IZMI								
	1949	2400	HIRA								
	2049	2400	CULG								
09	0000	0729	CULG								
	0000	0941	HIRA								
	0418	1737	POTS	0418 E	0452	I	S,W	1	110U	170U	
	0454	1717	ONDR								
			POTS	0541.2	0551.9	III	G	2	110U	170U	
	0600	1200	IZMI								
			POTS	0658	0708	I	S,W	1	130	170U	
			POTS	0925.3	0925.6	III	B	1	110U	150	
			POTS	0935.5	0935.6	III	B	1	110U	170U	
	1950	2400	HIRA								
	2046	2400	CULG								
10	0000	0940	HIRA								
			LEAR	0450.0	0450.0	III		1	30	40	
	0000	0730	CULG	0450.0	0451.0	III	B	1	22U	42	
	0418	1737	POTS	0450.3	0450.8	III	B	1	40X	145	
	0455	1714	ONDR								
	0600	1200	IZMI								
			POTS	0632.6	0632.7	III	B	2	110U	160	
			POTS	0950.3	0950.5U	III	B	1	40X	60	
			POTS	1101.6	1101.9	III	B	2	40X	70	
			POTS	1709.9	1710.0	III	B	1	110U	140	
	1950	2400	HIRA								
	2045	2400	CULG								
11	0000	0730	CULG								
	0000	0939	HIRA								
	0434	1725	POTS	0446	0500	I	S,W	1	130	170U	
	0457	1714	ONDR								
	0600	1200	IZMI								
			POTS	0651	0705	I	S	1	130	170U	
	1951	2400	HIRA								
	2044	2400	CULG								
12	0000	0730	CULG								
	0000	0938	HIRA								
	0434	1725	POTS	0458	0500	I	S,W	1	130	160	
	0458	1712	ONDR								
			POTS	0535	1725 U	I	S	1	110U	350	
	0600	1200	IZMI								
			POTS	0727.7	0727.9	III	B	1	110U	225	
			POTS	0836.3	0836.7	III	G	1	110U	170U	
	1952	2400	HIRA								
	2044	2400	CULG								
13	0000	0731	CULG								
	0000	0937	HIRA								
	0459	1710	ONDR								
	0434	1725	POTS	0520.3	0520.5	III	B	1	40X	90U	
	0600	1200	IZMI								
			POTS	0959	1004	I	S	1	140	170U	
			POTS	1146.4	1146.5	UNCLF		1	130	150	
			POTS	1216.5	1217.0	I	S	1	140	170U	
			POTS	1458.8	1501.5U	II	UE	2	110U	170U	

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Day	Observation Start (UT)	Observation End (UT)	Sta	Event Start (UT)	Event End (UT)	Spectral Class	Event Remarks	Int (1-3)	Frequency Lower (MHz)	Frequency Upper (MHz)	Remarks
13			POTS	1458.8	1514	IV		1	60	400	
			POTS	1504.4	1513	II	F,H	3	90U	250	
			POTS	1506.7	1513	II	SH,H	3	110U	250	
	1953	2400	HIRA								
	2043	2400	CULG								
14	0000	0731	CULG								
	0000	0936	HIRA								
	0500	1708	ONDR								
	0600	1200	IZMI								
	0434	1725	POTS	1118.4	1118.6	III	G	1	110U	170U	
			POTS	1409.8	1410.7	III	GG	1	110U	170U	
			POTS	1704.7	1705.1	III	G	1	110U	150	
	1954	2400	HIRA								
	2043	2400	CULG								
15	0000	0732	CULG								
	0000	0935	HIRA								
	0434	1725	POTS								
	0600	1200	IZMI								
	0502	1706	ONDR	1558.3	1600.4	III	G	1	2000X	4430X	
	1954	2400	HIRA								
	2042	2400	CULG								
16	0000	0732	CULG								
	0000	0934	HIRA								
	0434	1725	POTS								
	0503	1704	ONDR								
	0600	1200	IZMI								
	1955	2400	HIRA								
	2042	2400	CULG								
17	0000	0734	CULG								
	0000	0932	HIRA								
	0434	1725	POTS								
	0504	1703	ONDR								
	0600	1200	IZMI								
	1956	2400	HIRA								
	2041	2400	CULG								
18	0000	0735	CULG								
	0000	0931	HIRA								
	0434	1725	POTS	0438.0	0438.1	III	B	1	40X	170U	
	0506	1701	ONDR								
	0600	1200	IZMI								
	1957	2400	HIRA								
	2041	2400	CULG								
19	0000	0735	CULG								
	0000	0929	HIRA								
	0507	1700	ONDR								
	0600	1200	IZMI								
	0434	1725	POTS	0929.0	0933.6	II	SH	2	110U	250	
			POTS	0929.5	0933.6	II	F	1	80	120	
			POTS	0932.1	0933.0	III	G	1	40X	170U	
	1958	2400	HIRA								
	2036	2400	CULG								
20	0000	0735	CULG								
	0000	0928	HIRA								
	0508	1658	ONDR								
	0600	1200	IZMI								
	0434	1725	POTS	0805.4	0806.3	III	G	2	50	170U	
			POTS	0954.3	0954.7	UNCLF		1	130	170U	
	1959	2400	HIRA								
	2036	2400	CULG								
21	0000	0736	CULG								
	0000	0927	HIRA								

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OBSERVATION Day	Start (UT)	End (UT)	Sta	EVENT Start (UT)	End (UT)	Spectral Class	Event Remarks	Int (1-3)	FREQUENCY Lower (MHz)	Upper (MHz)	Remarks
21	0449	1621	POTS								
	0510	1657	ONDR								
	0600	1200	IZMI								
	2000	2400	HIRA								
	2036	2400	CULG								
22	0449	1621	POTS	0625.1	0633.1	III	GG	2	40X	170U	
	0000	0736	CULG	0630.0	0630.0	III	G	1	130	180	
	0000	0926	HIRA	0630.2	0630.6	III	G	1	90	190	
			ONDR	0753.2	0756.3	III	G	2	2000X	4365	
	0511	1653	ONDR	0753.2	0756.1	III	G	2	1000X	2000X	
			POTS	0757.3	0757.5	UNCLF		1	150	170U	
			POTS	0758	0933	CONT		1	110U	170U	
	0600	1200	IZMI	0758.8	0800.0	III	GG, RS	2	45X	65	
	0600	1200	IZMI	0758.8	0809.0	II	HARM	2	45X	120	
			POTS	0758.9	0810	II	SH,H	3	40X	160	
			LEAR	0759.0	0810.0	II		2	30	80	ESS 0800
			SVTO	0759.0	0813.0	II		3	35	85	ESS 0900
			POTS	0759.1	0804	II	F,H	3	40X	70	
			HIRA	0759.5	0807.1	II	FN	1	50	90	ESS 0550
			HIRA	0801.2	0806.2	II	SH	1	70	110	ESS 0600
			LEAR	0804.0	0805.0	III		2	30U	80U	
			ONDR	0814.4	0835.3	CONT	FS	1	2000X	4395	
			POTS	0815	0824	DCIM		2	400	800X	
			ONDR	0817.4	0826.0	CONT		1	1000X	2000X	
			SVTO	0818.0	0857.0	IV		2	35U	70U	
			POTS	0845	1052	I	S	1	110U	170U	
			ONDR	0927.0	1023.4	CONT	FS	2	2000X	4400X	
			ONDR	0929.3	1018.5	CONT		2	1000X	2000X	
			SGMR	1203.0	1203.0	III		1	35	60	
			SVTO	1203.0	1203.0	III		1	35U	52U	
			POTS	1203.3	1203.9	III	G	1	40X	150	
			POTS	1301.4	1301.9	UNCLF		2	140	170U	
	2001	2400	HIRA								
	2036	2400	CULG								
23	0000	0736	CULG								
	0000	0924	HIRA								
	0512	1653	ONDR								
	0600	1200	IZMI								
	0449	1621	POTS	1606.5	1606.6	UNCLF		1	110U	170U	
	2002	2400	HIRA								
	2035	2400	CULG								
24	0000	0736	CULG								
	0000	0923	HIRA								
	0514	1649	ONDR								
	0449	1621	POTS	0545.8	0545.9	UNCLF		1	140	160	
	0600	1200	IZMI								
			POTS	0934.1	0934.2	UNCLF		1	140	150	
	2003	2400	HIRA								
	2035	2400	CULG								
25	0000	0735	CULG								
	0000	0921	HIRA								
	0600	1200	IZMI								
	0449	1621	POTS	0803.5	0803.8	UNCLF		1	140	155	
	0515	1647	ONDR	1234.0	1235.5	III	B W	1	2185	3170	
	2003	2400	HIRA								
	2035	2400	CULG								
26			LEAR	0202.0	0203.0	III		/	30	55	
			PALE	0202.0	0202.0	III		1	25	56	
	0000	0735	CULG	0202.0	0202.0	III	B	1	20U	140	
	0000	0920	HIRA	0202.4	0202.6	III	B	1	25X	200	
	0449	1621	POTS								
	0516	1645	ONDR								
	0600	1200	IZMI								
	2004	2400	HIRA								

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26	2035	2400	CULG								
27	0000	0735	CULG								
	0000	0919	HIRA								
	0449	1621	POTS								
	0518	1643	ONDR								
	0600	1200	IZMI								
	2004	2400	HIRA								
	2034	2400	CULG								
28	0000	0734	CULG								
	0449	1621	POTS	0533.0	0535.0	III	G	1	40X	170U	
			POTS	0636.3	0636.9	III	G	2	50	300	
			POTS	0802.6	0805.7	III	G,C,RS	3	110U	800X	
			ONDR	0803.1	0805.0	III	G	2	2000X	4420	
	0000	0917	HIRA	0803.1	0804.5	III	G	2	120	1600	
	0600	1200	IZMI	0803.2	0840.6	III	GG	2	110	180X	
	0519	1643	ONDR	0803.3	0804.2	III	G	2	1000X	2000X	
	2005	2400	HIRA								
	2034	2400	CULG								
29	0000	0734	CULG								
	0000	0916	HIRA								
	0520	1640	ONDR								
	0600	1200	IZMI								
	0449	1621	POTS	0927.5	0927.9	III	G	1	110U	160	
			POTS	1130.3	1136.7	III	GG	2	110U	170U	
	2006	2400	HIRA								
	2034	2400	CULG								
30	0000	0914	HIRA								
	0522	1639	ONDR								
			LEAR	0536.0	0544.0	III		/	30	55	
	0449	1621	POTS	0541.7	0544.3	III	G	2	40X	170U	
			SVTO	0544.0	0544.0	III		2	35	56	
	0000	0736	CULG	0544.0	0544.0	III	B	1	20U	180	
	0600	1200	IZMI								
	2007	2400	HIRA								
	2034	2400	CULG								
31	0000	0736	CULG								
	0000	0913	HIRA								
	0449	1621	POTS	0517	0518	I	S	1	130	150	
			POTS	0518.5	0519.3	III	G	2	110U	170U	
	0600	1200	IZMI								
			POTS	1104.1	1106.7	III	GG	2	110U	400	
			POTS	1449.4	1449.5	III	B	1	110U	170U	
			POTS	1456.9	1458.0	III	G	2	110U	170U	
	0523	1637	ONDR	1540.0	1542.3	III	G	1	2000X	3045	
	2008	2400	HIRA								
	2034	2400	CULG								

COSMIC RAY INDICES
(Neutron Monitor)
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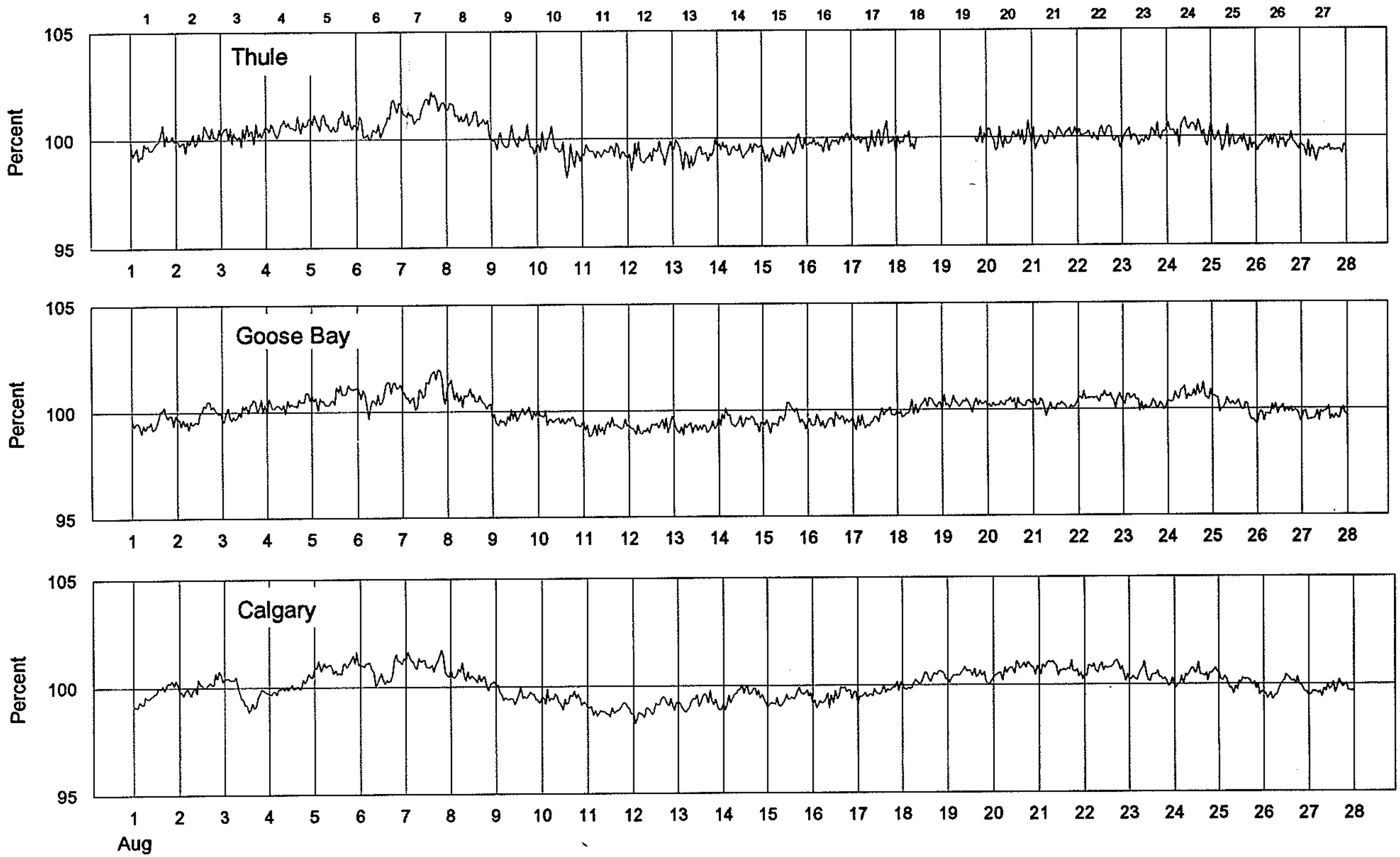
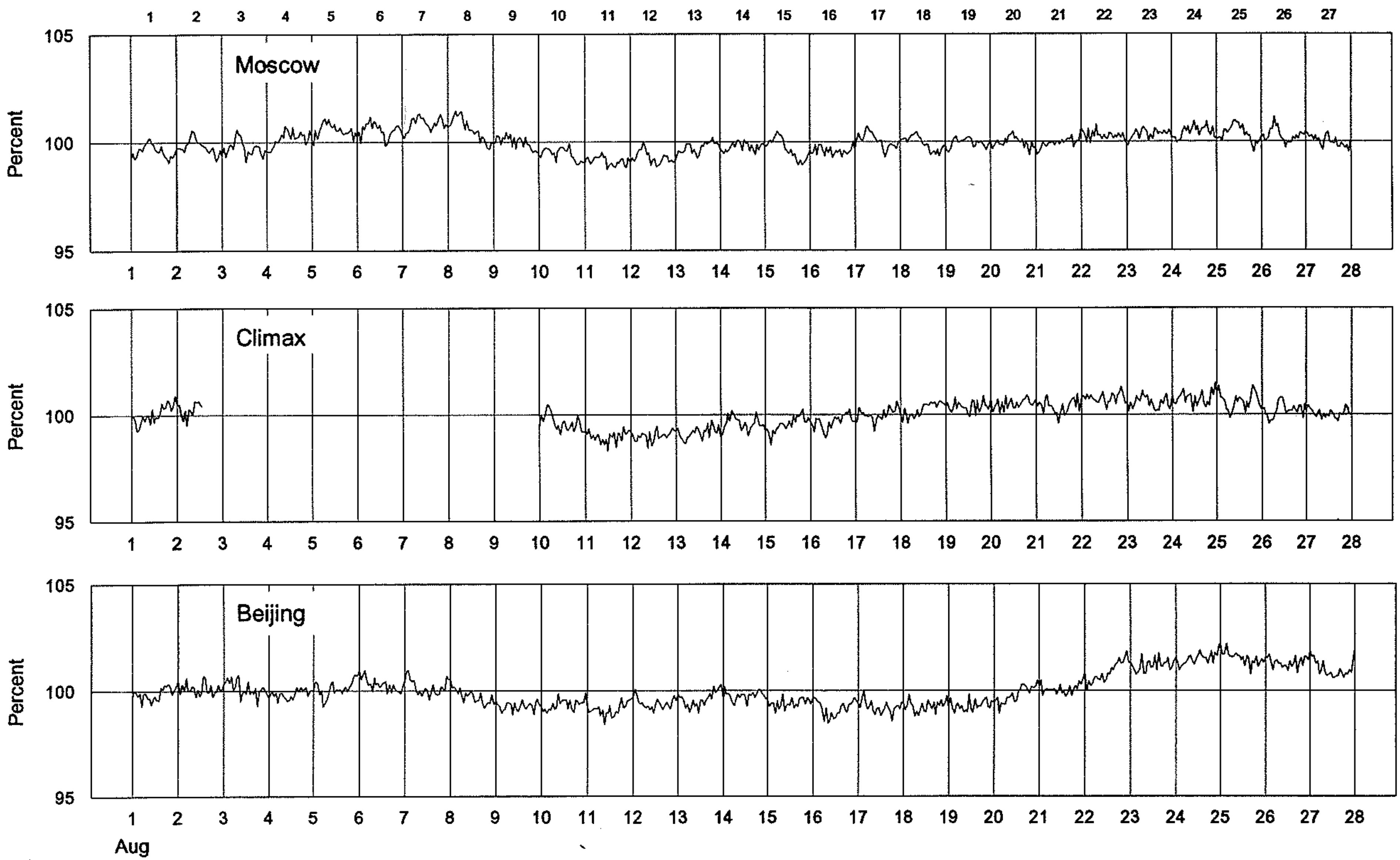
Day	THULE Average (cts/h)/100	GOOSE BAY Average (cts/h)/100	CALGARY Average (cts/h)/300	MOSCOW Average (cts/h)/64	CLIMAX Average (cts/h)/100	BEIJING Average (cts/h)/256	TOKYO Average (cts/h)/256	HALEAKALA Average (cts/h)/1000
1	4540	7339.7	3966.5	9264.6	4196.6	1915.1	No data	---
2	4553	7359.3	3980.2	9282.7	4205.8 (28)	1919.7	at time of	---
3	4563	7375.6	3966.5	9277.0	---	1920.1	publication	---
4	4578	7398.8	3978.0	9316.5	---	1914.8	---	3580.5
5	4586	7425.7	4015.8	9353.1	---	1919.5	---	3588.5
6	4584	7431.9	4007.3	9353.5	---	1923.5	---	3586.0
7	4617	7448.1	4020.3	9379.2	---	1920.9	---	3590.3
8	4597	7422.6	3993.7	9357.0	---	1912.8	---	3586.9
9	4548	7353.5	3959.2	9300.7	4144.0 (2)	1903.6	---	3565.5
10	4527	7340.9	3953.0	9249.3	4179.1	1904.9	---	3559.4
11	4523	7314.5	3932.2	9218.4	4150.9	1900.9	---	3543.2
12	4517	7314.3	3935.3	9233.5	4152.2	1906.0	---	3551.6
13	4518	7312.8	3945.3	9274.0	4159.1	1909.7	---	3557.1
14	4528	7335.6	3959.2	9278.8	4176.6	1912.7	---	3567.5
15	4526	7342.4	3953.3	9270.4	4174.7	1906.0	---	3568.6
16	4541	7333.0	3955.8	9261.3	4179.8	1901.6	---	3568.5
17	4549	7342.2	3964.7	9303.2	4194.1	1902.6	---	3577.8
18	4543	7380.0	3986.2	9293.6	4203.7	1903.6	---	3569.4
19	4552	7393.4	3994.2	9294.9	4209.6	1904.0	---	3579.7
20	4550	7392.5	4005.0	9297.8	4215.2	1913.7	---	3579.5
21	4554	7383.5	4006.0	9292.4	4209.5	1919.0	---	3572.9
22	4555	7412.0	4006.3	9327.9	4226.0	1934.2	---	3578.4
23	4552	7391.4	3990.8	9332.3	4217.6	1940.5	---	3581.0
24	4565	7420.9	3993.0	9342.3	4225.8	1946.3	---	3585.6
25	4543	7381.1	3978.0	9334.3	4220.6	1947.0	---	3584.5
26	4538	7359.5	3970.5	9325.2	4202.2	1942.7	---	3581.0
27	4522	7349.3	3967.0	9302.5	4196.8	1936.6	---	3577.9
28	4534	7354.5	3973.5	9301.1	4200.4	1942.6	---	3581.8
29	4520	7308.3	3943.2	9281.5	4194.0	1934.2	---	3573.8
30	4534	7344.7	3957.7	9305.0	4196.7	1933.9	---	3567.5
31	4563	7394.7	3991.7	9363.9	4227.4	1937.7		3578.1
Mean	4549	7369.6	3975.8	9302.2	4196.19	1920.3	---	3319.5

For less than 24-hour coverage, parentheses enclose the number of hours for which data are available. For Climax, parentheses enclose the number of section hours whenever the sum of both sections falls below 40 hours, and for Haleakala, whenever the sum of all three sections falls below 60 hours.

COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2226 - Beginning 1 Aug 96



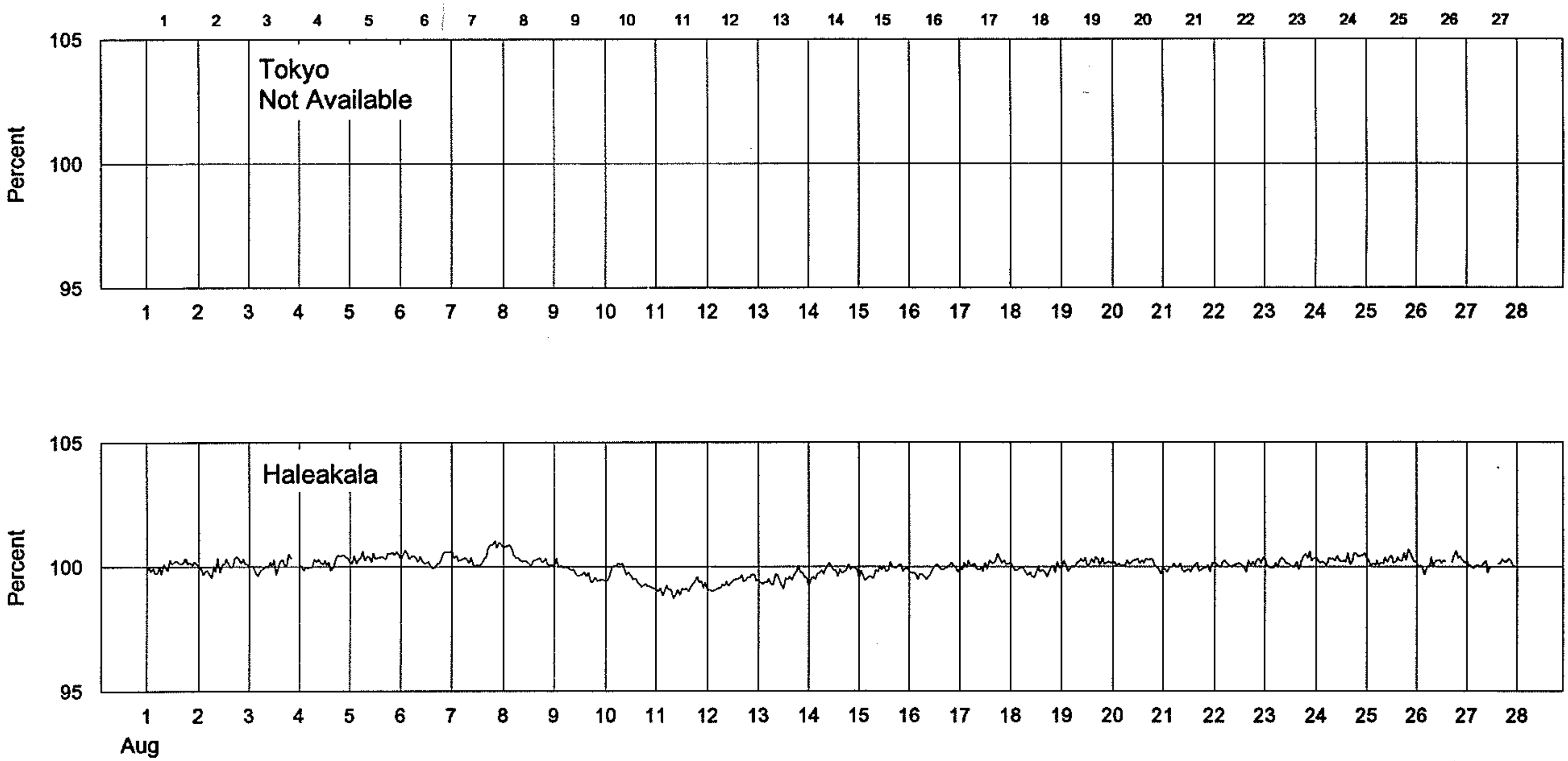
COSMIC RAY INDICES
(Neutron Monitor)
Bartels Rotation 2226 - Beginning 1 Aug 96



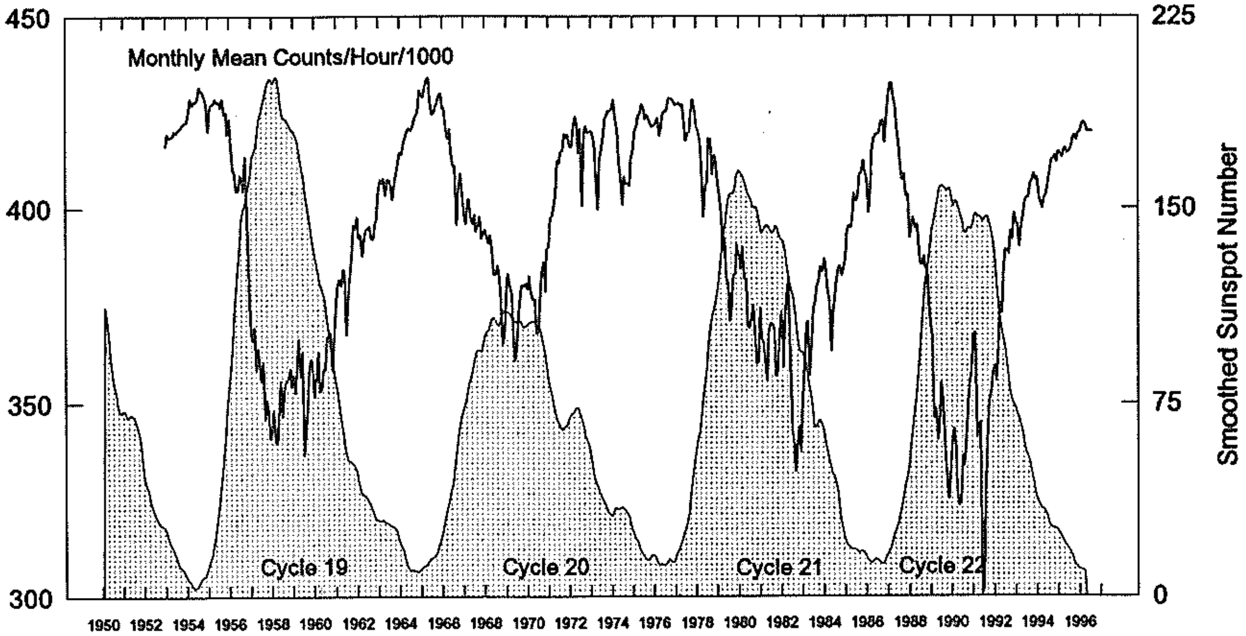
COSMIC RAY INDICES

(Neutron Monitor)

Bartels Rotation 2226 - Beginning 1 Aug 96



Climax Neutron Monitor Pressure-Corrected Values
Jan 1953 - Aug 1996



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	4036	4068	4090	4123	4129	4137	4118	4071
1995	4146	4143	4130	4149	4157	4143	4146	4159	4184	4190	4176	4195	4160
1996	4198	4216	4224	4218	4200	4199	4203	4196					4207

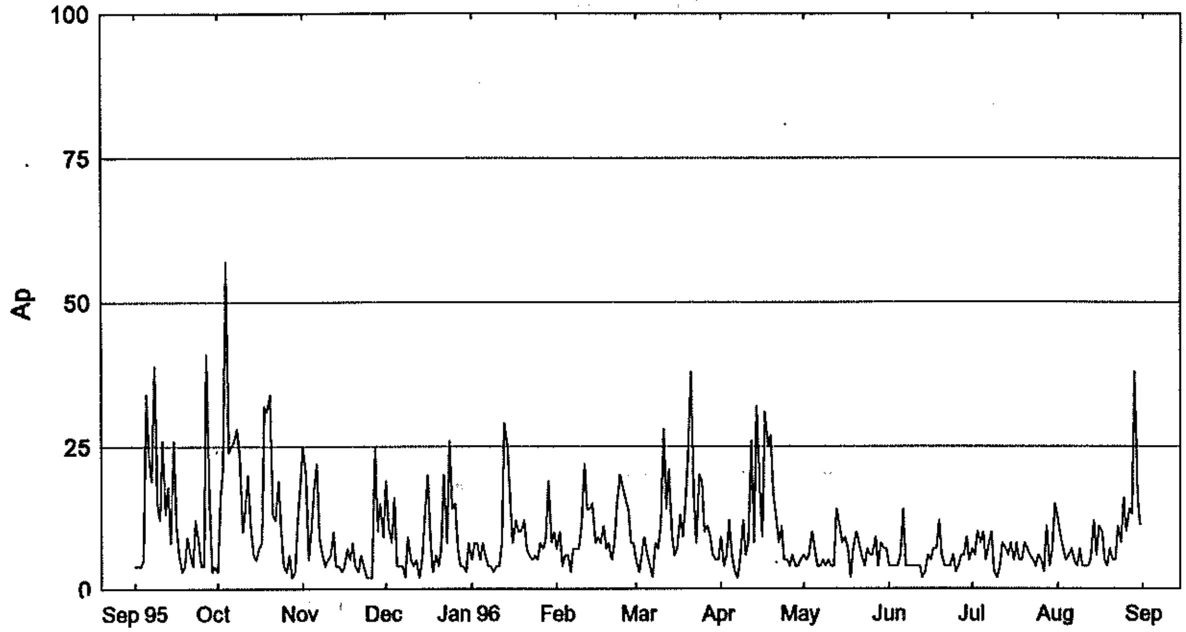
Multiply table entries by 100 to obtain hourly counting rate. Climax, Colorado: N39, W106, Alt=3400 m, Cutoff Rigidity=2.99GV (1980).
NOTE: Data may differ from previously reported values due to subsequent cleanup of data and slight changes in the averaging algorithm.
Sunspot numbers are preliminary after Sep 95.

Geomagnetic Activity Indices
August 1996

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	Am	aa Provisional N	S		M	
1		3+ 3 3- 2	3- 2 2- 3+	21-	12	0.7	3+ 3o 3- 2-	3- 2+ 2- 3+	25	24	23	23	24	
2		3- 1+ 3 2+	3 2- 1 1+	16+	9	0.5	3o 1+ 3+ 3+	3- 2- 1+ 1+	20	21	26	31	16	
3		2- 2+ 2- 3-	1+ 1+ 1- 2	14-	7	0.3	2o 3- 2+ 3o	2- 2- 1o 2o	16	19	15	21	14	
4	Q10	1- 1 2 2	1+ 2- 1+ 1	11	5	0.2	1- 2- 2+ 2+	1+ 2o 1+ 1o	12	14	10	12	11	CC
5		2 2+ 2- 1	2- 1 1+ 2-	13-	6	0.3	2- 2+ 2+ 1o	2o 1o 1+ 2-	12	17	11	16	12	C
6		1 1 1 1	2+ 2+ 3 2	14-	7	0.4	1o 1+ 1o 1+	2+ 2+ 3- 2-	13	16	13	8	22	K
7	Q9	1- 1 1+ 1+	1- 1 3- 2-	10+	5	0.2	1- 1+ 2o 2-	0+ 2- 3- 2o	12	15	14	9	20	
8	Q1	1 1+ 1- 1	1- 1 1- 1+	8-	4	0.1	1+ 2- 1o 1-	1o 1o 1- 1+	7	8	5	5	8	CK
9		2 0+ 0+ 2	2+ 2+ 2 3-	14	7	0.3	2- 1- 1o 2-	2o 2o 2o 2o	12	18	12	8	22	K
10	Q2	2- 2 1 1-	1 1- 1- 1-	8+	4	0.1	2- 2+ 1+ 1o	1- 1o 1- 1-	8	9	8	10	7	CK
11	Q5	2- 1- 1+ 0+	0+ 1 1+ 2	9-	4	0.1	2- 1+ 1+ 0+	0o 1o 1+ 2-	8	12	8	10	11	CC
12	Q4	1+ 1+ 1 1	1 1- 1- 2	9	4	0.2	1+ 2- 2o 1+	1- 1- 0+ 2-	9	11	8	10	9	CC
13		3- 2- 1 1	2- 1- 1- 1	10+	5	0.2	2+ 2+ 1+ 1+	2- 1o 1- 1-	10	13	10	15	8	CC
14		2- 2- 1 2+	3+ 3 4- 3	20-	12	0.7	2o 2o 2o 3-	3+ 3- 3o 3o	23	26	16	14	28	
15		2 1+ 2 2+	1+ 2- 1 1	13-	6	0.3	2o 2- 2o 2+	2- 2o 1+ 1o	13	15	10	13	12	C
16		2- 1+ 2- 3	3- 3 3+ 2+	19	11	0.6	2o 2- 2+ 3-	2+ 3o 3o 2+	21	31	20	18	33	
17		4- 3 2+ 2+	2 2- 1 2	18	10	0.6	4- 3o 3- 2+	3- 2- 1+ 2o	22	21	17	22	16	
18	Q6	1- 1- 1 2-	1+ 2 1+ 1+	10	5	0.2	1o 1- 1+ 2o	2- 2+ 1+ 1+	10	12	8	9	11	CC
19	Q3	1+ 1+ 1+ 1+	1 1 0+ 1+	9	4	0.2	1+ 1+ 1+ 2-	1+ 1o 0+ 1+	9	11	9	11	9	CC
20		2- 2- 3- 2+	2+ 2- 2 1	15+	7	0.4	2- 2o 2+ 3-	2o 2o 2- 1o	15	17	15	15	17	K
21	Q8	0+ 1+ 1 2	2- 1 2- 1+	10+	5	0.2	0+ 1+ 1o 2-	2- 1o 2- 1+	9	12	8	10	10	CC
22	Q7	1+ 2- 0+ 0+	1+ 2+ 1- 1+	9+	5	0.2	1o 2- 0+ 0+	2- 2+ 1- 1o	8	13	7	7	13	C
23		2+ 3+ 3+ 3-	3- 1 2 2-	19	11	0.6	2+ 3+ 3+ 3o	3- 1+ 2o 1+	23	23	21	27	16	
24		2+ 2 2- 2-	2+ 2- 2- 3	16+	8	0.4	2+ 2o 2+ 2+	2o 2o 1+ 3-	17	18	15	17	16	
25	D2*	4- 3- 4- 3-	3- 4- 3 2	24	16	0.9	3+ 3- 4- 3+	3o 3+ 3- 2+	31	34	36	40	30	
26		2+ 3 3+ 2	1 2- 2 3	18+	10	0.6	2+ 3o 3+ 3-	1+ 2o 2- 3o	21	26	14	22	18	
27	D4*	3 4- 3+ 2+	2- 3 3- 3-	22+	14	0.8	3- 3o 3o 3-	2o 3o 3- 2+	24	34	23	27	30	
28	D5*	3 2+ 2+ 2+	3+ 3 3- 3+	22+	13	0.8	3- 2+ 3- 3-	3o 3- 3- 3o	25	32	26	23	35	
29	D1	5- 6- 5+ 4-	4 4- 3 5+	35+	38	1.4	4o 5- 5- 4+	4- 3o 2+ 5o	61	64	69	79	54	
30	D3*	5 3 3+ 1+	1+ 2+ 3- 3-	22-	16	0.9	5- 3- 3+ 2-	2- 2o 2+ 2+	28	26	28	35	19	
31		3 3+ 3 3	3- 2- 2- 1-	19	11	0.6	3- 3- 3o 3+	3- 1+ 2- 1o	21	23	21	29	15	
Mean					9	0.45			17.6	20.5	17.1		18.8	

Day	Kn Three-Hourly Indices 1 2 3 4	5 6 7 8	An	Ks Three-Hourly Indices 1 2 3 4	5 6 7 8	As	Sa	Prov Ri	Ra	Rs	IMF
1	3o 3o 3o 2o	3o 3- 2- 3o	25	3+ 3o 3- 2-	2+ 2o 2- 4o	25	82.8	19	19	27	
2	3- 1+ 3+ 3+	3o 2o 2- 2-	21	3o 2- 3+ 3+	2+ 1+ 1- 1+	20	81.9	23	21	26	
3	2- 3o 2o 3o	2- 2- 1- 2o	16	2+ 2o 2+ 3o	2- 2- 1o 2-	15	81.6	23	20	26	
4	1o 2- 2+ 2+	2- 2+ 1+ 1o	13	0+ 1+ 2+ 2+	1+ 2- 1+ 1-	11	79.9	21	19	24	
5	2o 2+ 3- 1+	2+ 1+ 2- 2-	14	2- 2+ 2o 1o	2- 1o 1- 1+	11	76.2	14	13	20	
6	1o 1o 1o 2-	3- 3- 3o 2-	15	1+ 1+ 1- 1+	2o 2- 2o 2-	11	75.1	10	10	19	
7	1o 1+ 2+ 1+	1- 2o 3- 2o	12	1- 1+ 2- 2-	0o 1+ 3o 2-	11	73.7	17	19	18	
8	1o 2- 1+ 1-	1o 1+ 1o 1+	8	1+ 2- 0+ 0+	1- 1- 0+ 1o	6	71.7	9	10	15	
9	2- 1- 1+ 2-	3- 2+ 2o 2+	14	2- 0+ 1- 1+	2- 1+ 2- 2-	10	72.1	14	14	16	
10	2- 2o 1+ 1+	1o 1+ 1o 1o	9	2o 2+ 1+ 1o	1- 1- 0+ 0o	7	73.6	15	17	17	
11	2o 1+ 2- 1-	0+ 2- 2- 2o	10	1+ 1+ 1+ 0o	0o 0+ 1- 2-	5	74.8	19	20	19	
12	1+ 2- 2- 1+	1o 1o 1- 2o	10	1+ 2o 2o 1-	0+ 1- 0o 1+	8	72.0	17	14	16	
13	2+ 2+ 1+ 1+	2- 1+ 1o 1o	11	2+ 2o 1o 1+	2- 0+ 0+ 1-	9	71.4	12	11	15	
14	2- 2- 2- 3-	4- 3o 3+ 3-	24	2o 2o 2o 3-	3o 2o 3o 3o	22	70.5	21	20	14	
15	2o 2- 2+ 2+	2- 2+ 2- 1+	15	2o 1+ 2- 3-	1+ 1+ 1- 1-	11	69.3	19	14	13	
16	2+ 2- 2+ 3o	3- 3o 3+ 2+	23	2o 1+ 2o 2+	2o 3o 3o 2+	19	69.3	10	9	13	
17	3+ 3o 3- 2+	3- 2o 1+ 2+	22	4o 3+ 2+ 2+	2+ 1+ 1o 2-	22	69.5	11	10	13	
18	1o 1- 1+ 2o	2o 3- 1+ 2-	12	1o 1- 1o 2o	1o 2- 1o 1+	9	68.4	9	8	12	
19	1+ 2- 2- 2-	2- 1+ 0+ 2o	10	1+ 1+ 1o 2-	1o 1o 0+ 1-	8	69.3	11	9	13	
20	1+ 2o 3- 3-	2+ 2+ 2o 1+	17	2- 2o 2o 2+	2- 2- 1+ 1-	12	70.1	10	9	14	
21	0+ 1+ 1o 2o	2o 1o 2- 2-	10	0o 1+ 1o 1+	1+ 1- 1+ 1o	7	71.3	10	8	15	
22	1- 1+ 0+ 0+	2- 3- 1o 1+	9	1+ 2o 0+ 1-	1+ 1+ 1- 1-	7	74.5	9	9	18	
23	3- 4- 4- 3+	3- 1+ 2o 1+	25	2- 3+ 3+ 3-	3- 2- 2- 1+	21	75.8	10	12	20	
24	2+ 2o 3- 3-	3- 2o 2- 3-	19	2+ 2+ 2+ 2o	2- 2- 1o 2+	15	76.2	16	15	20	
25	3+ 3- 4- 3+	3o 3+ 3o 2+	32	3+ 3- 4- 3+	2+ 3o 3- 2+	29	76.3	10	9	20	
26	2o 3+ 3+ 3-	1o 2+ 2- 3o	23	3- 2+ 3+ 3-	1+ 1+ 2- 3o	19	75.8	13	11	20	
27	3- 3+ 3o 3-	2- 3o 3- 3-	25	3o 3o 3- 3-	2o 3o 3- 2o	23	75.9	11	10	20	
28	3- 2+ 3- 3-	3o 3- 3- 3-	24	3- 2o 3- 3-	3o 2+ 3- 3+	25	74.7	11	10	19	
29	4- 5- 5o 4+	4- 3+ 3- 5-	58	4o 5- 5- 5-	3+ 3o 2+ 6-	63	75.0	9	10	19	
30	4+ 3- 3+ 2-	2- 2+ 2+ 2+	26	5+ 2+ 3+ 2-	2- 2- 2+ 2+	30	74.7	14	12	19	
31	3o 3- 3+ 3o	3- 2o 2o 1o	22	2+ 2+ 3o 4-	3- 1o 1+ 1o	20	77.6	17	17	22	
Mean			18.5			16.5	74.2	14.0	13.2	18.1	

Daily Average Indices Ap
Sep 1995 - Aug 1996

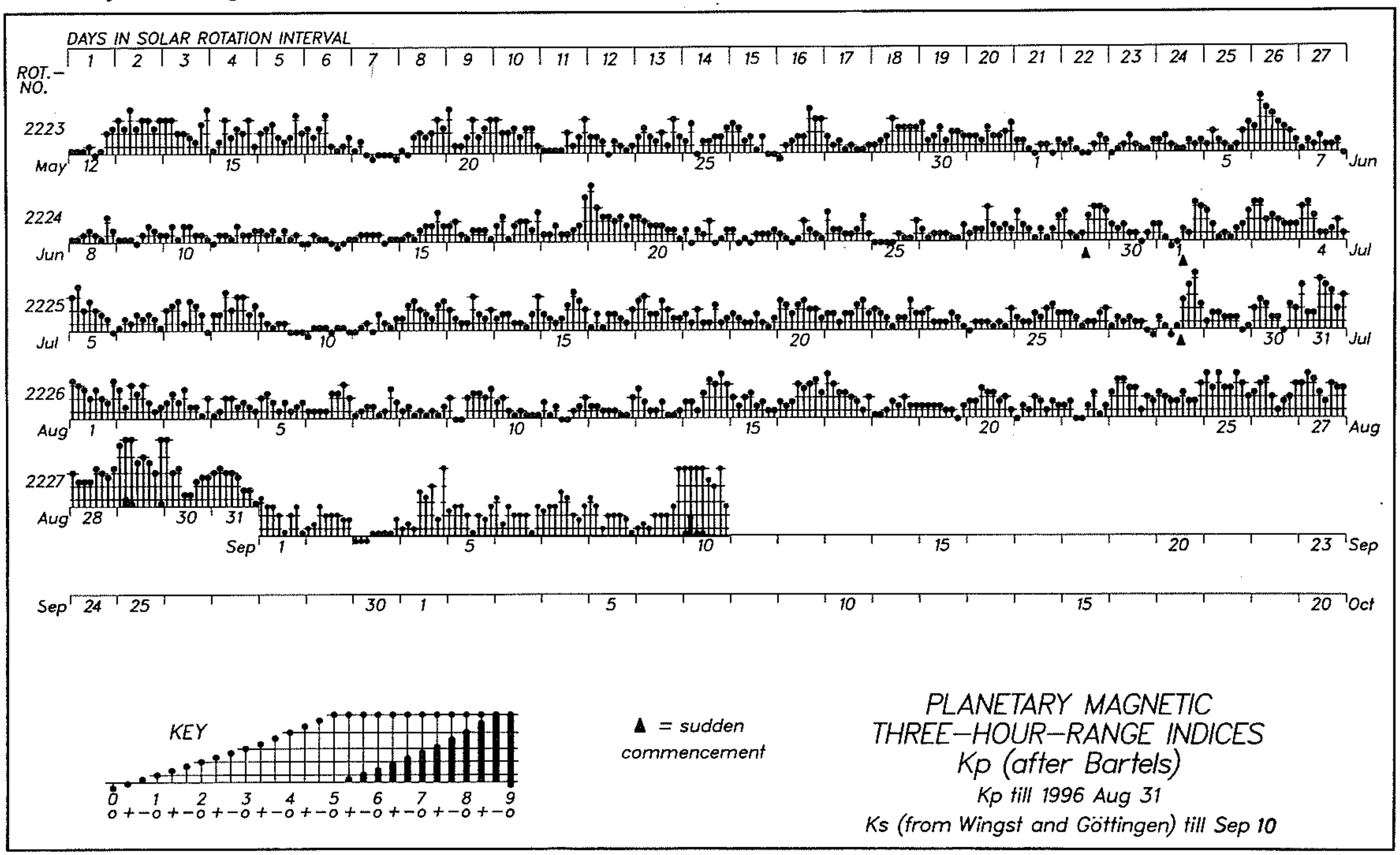


Day	Sep 95	Oct	Nov	Dec	Jan 96	Feb	Mar	Apr	May	Jun	Jul	Aug
1	4	3	25	19	5	7	5	9	6	4	7	12
2	4	16	20	11	8	10	3	4	5	4	6	9
3	4	21	5	8	8	4	6	6	6	4	10	7
4	5	57	10	16	5	6	9	12	10	4	8	5
5	34	24	18	4	8	6	6	6	7	6	10	6
6	23	25	22	4	6	3	4	3	4	14	5	7
7	19	26	9	4	4	7	2	2	4	4	8	5
8	39	28	6	2	4	7	8	5	5	4	10	4
9	15	24	4	9	3	7	7	12	4	4	3	7
10	12	10	5	5	4	11	11	6	5	4	2	4
11	26	14	6	4	4	22	28	8	4	4	4	4
12	13	20	10	5	8	14	14	26	4	4	8	4
13	18	10	4	2	29	14	21	8	14	2	7	5
14	8	6	4	5	25	15	9	32	11	3	6	12
15	26	5	3	12	16	8	6	18	8	6	8	6
16	11	7	4	20	8	9	7	9	9	5	5	11
17	6	8	7	9	12	8	13	31	7	7	8	10
18	3	32	5	3	10	11	9	25	2	7	5	5
19	4	31	8	6	10	7	15	27	7	12	5	4
20	9	34	4	4	12	8	23	17	10	6	8	7
21	6	13	3	7	7	5	38	13	8	4	7	5
22	4	12	6	20	6	8	17	8	6	4	6	5
23	12	19	4	8	5	15	8	11	4	4	5	11
24	8	10	2	26	6	20	20	5	7	6	4	8
25	4	4	2	14	5	18	19	5	6	3	6	16
26	4	3	2	15	8	16	10	4	6	4	5	10
27	41	6	25	7	7	14	11	6	9	6	3	14
28	15	2	10	4	9	8	9	4	4	6	11	13
29	3	3	15	4	19	8	6	4	8	9	4	38
30	4	12	9	3	8		5	5	7	5	7	16
31		18		8	10		5		7		15	11
Mean	13	16	9	9	9	10	11	11	7	5	7	9

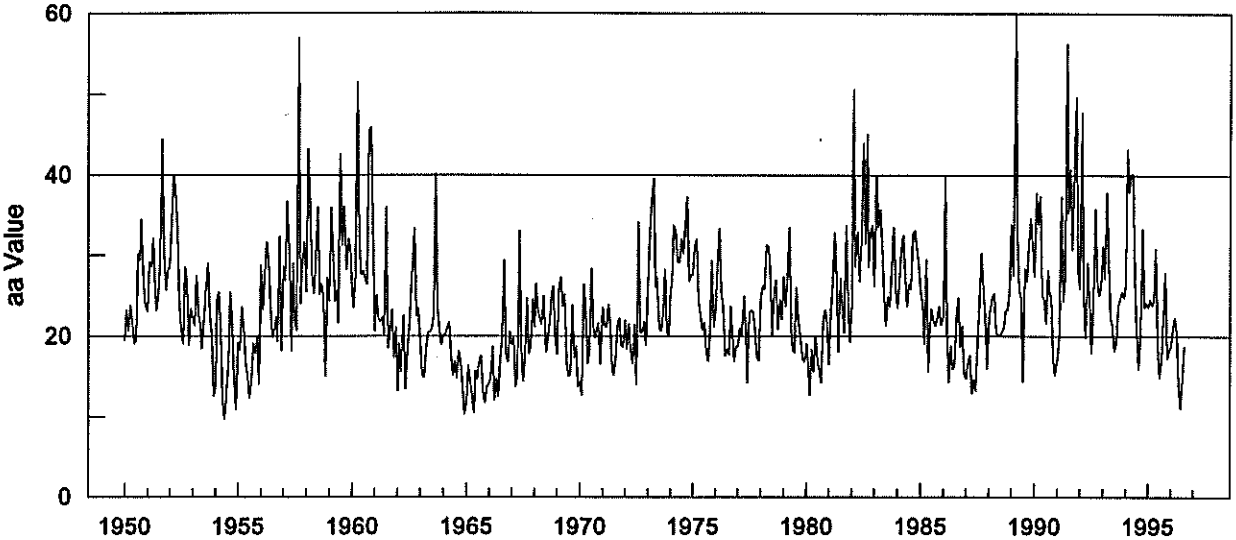
PLANETARY 3-HOUR-RANGE INDICES (Kp) BY 27-DAY SOLAR ROTATION INTERVAL

University of Gottingen

Kp through August 31, 1996



Monthly Mean aa Index Jan 1950 - Aug 1996



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
1950	19.5	23.2	20.6	23.8	21.7	19.0	19.5	30.2	29.3	34.5	28.0	24.0	24.4
1951	23.1	29.2	28.5	32.1	25.5	23.2	25.2	29.7	44.4	30.3	25.7	28.2	28.8
1952	28.5	34.3	40.1	38.0	33.1	23.8	20.7	19.0	28.5	26.4	18.9	23.4	27.9
1953	22.3	21.2	27.4	22.7	21.4	18.4	22.5	26.1	29.0	22.4	20.2	12.6	22.2
1954	13.9	24.5	25.5	20.6	12.0	9.7	13.1	16.5	25.4	21.1	14.5	10.9	17.3
1955	19.3	18.2	23.6	21.1	16.7	15.1	12.3	14.3	19.1	17.8	19.9	14.1	17.6
1956	28.7	23.3	27.6	31.7	29.3	23.5	19.8	20.7	22.4	19.3	32.3	18.2	24.7
1957	28.7	26.8	36.7	28.8	18.1	29.1	21.7	20.7	57.0	24.0	29.5	31.7	29.4
1958	25.5	43.2	36.1	27.6	25.2	29.7	36.0	25.1	26.5	24.7	15.0	27.2	28.5
1959	24.3	35.9	29.9	24.2	25.7	21.6	42.5	31.2	36.1	28.2	32.1	30.8	30.2
1960	25.2	23.5	27.6	51.5	31.6	27.6	28.1	27.2	26.4	45.6	45.9	34.5	32.9
1961	20.6	25.1	22.0	21.8	22.3	20.1	36.0	18.5	20.7	23.3	17.3	21.1	22.4
1962	13.2	19.2	15.5	22.6	13.4	18.1	21.0	26.2	29.8	33.3	22.5	23.5	21.5
1963	19.3	15.3	14.9	18.2	20.4	20.5	20.8	22.5	40.2	23.5	20.7	18.9	21.3
1964	20.1	20.1	21.0	21.7	17.5	15.1	16.9	14.8	18.2	16.9	13.8	10.3	17.2
1965	11.8	16.3	14.3	12.6	10.5	15.7	14.7	16.8	17.5	13.1	11.7	13.8	14.1
1966	14.2	14.8	18.6	12.0	14.8	12.5	17.1	20.0	29.4	17.5	16.8	20.5	17.3
1967	18.9	19.8	13.8	15.5	33.1	18.6	14.4	17.5	24.7	17.8	18.9	24.5	19.8
1968	21.1	26.5	23.3	22.2	21.4	24.9	18.0	20.1	22.0	24.8	26.2	20.3	22.6
1969	17.8	25.8	27.3	23.6	25.2	16.7	15.0	15.3	23.8	17.2	18.7	13.8	20.0
1970	14.4	12.7	26.4	23.1	16.6	18.3	28.4	21.0	19.7	20.6	21.6	16.5	19.9
1971	23.5	21.2	21.1	23.9	21.1	17.0	15.2	17.1	21.4	22.2	18.8	18.6	20.1
1972	21.9	18.3	21.5	18.1	16.6	21.5	14.0	34.2	20.4	20.4	21.8	18.9	20.6
1973	26.1	32.7	36.9	39.6	26.1	27.3	20.9	20.6	22.8	28.2	20.7	19.9	26.8
1974	25.8	26.4	33.7	32.9	29.2	29.2	32.0	30.2	33.7	37.3	26.8	27.5	30.4
1975	27.6	31.1	32.0	24.3	22.7	20.7	21.7	18.1	16.9	20.2	29.3	21.1	23.8
1976	23.3	28.5	33.4	25.4	23.7	17.5	18.4	17.7	23.7	20.4	16.9	18.6	22.3
1977	18.7	21.0	19.9	24.9	20.1	14.2	22.9	23.2	23.0	20.9	17.3	17.0	20.3
1978	24.6	26.2	25.9	31.3	31.2	28.3	19.9	25.6	27.0	20.8	24.6	22.0	25.6
1979	27.3	23.7	26.9	33.5	21.0	18.3	17.9	26.0	22.0	19.3	17.1	16.8	22.5
1980	19.0	17.3	12.7	18.4	15.6	20.0	17.0	15.9	14.2	21.9	23.3	21.7	18.1
1981	16.5	23.1	26.6	32.8	26.9	18.0	27.2	24.0	20.4	33.7	24.1	19.3	24.4
1982	24.2	50.6	28.5	32.9	26.7	32.1	43.9	31.4	45.1	28.5	33.0	33.8	34.2
1983	26.2	40.0	33.6	35.7	31.6	24.9	21.3	24.9	23.7	28.3	33.5	26.0	29.1
1984	23.5	26.7	30.7	32.5	27.2	23.7	26.4	25.8	32.6	33.1	31.0	29.0	28.5
1985	25.7	24.1	19.0	29.5	15.6	19.9	23.4	22.0	21.2	22.2	23.7	21.4	22.3
1986	22.4	40.0	21.1	14.3	18.8	15.9	16.3	22.3	24.7	18.6	21.2	15.3	20.9
1987	14.8	16.6	17.6	12.9	14.7	13.2	19.3	24.3	30.3	25.8	22.4	16.0	19.0
1988	22.4	23.4	24.8	25.2	20.5	20.0	20.2	20.6	21.4	23.2	23.3	25.5	22.5
1989	33.9	27.5	60.1	32.8	25.7	24.9	14.4	28.4	26.7	31.4	34.7	31.4	31.0
1990	27.4	37.8	33.9	37.4	25.1	24.6	21.6	28.2	25.1	25.1	17.4	15.2	26.6
1991	17.2	20.1	37.3	24.3	27.3	56.2	35.2	40.8	30.7	44.1	49.7	28.0	34.2
1992	25.9	47.7	24.5	19.8	29.1	24.8	17.9	24.1	35.8	27.0	25.0	26.1	27.3
1993	31.2	27.1	37.9	29.2	22.1	21.8	18.2	19.2	23.8	24.6	25.5	24.8	25.5
1994	26.5	43.2	37.9	40.2	40.2	27.2	20.6	16.0	20.2	33.3	23.6	24.1	29.4
1995	23.6	24.5	23.8	24.2	30.9	19.1	14.9	17.0	22.2	27.9	17.2	18.2	22.0
1996	18.8	20.8	22.3	20.5	14.0	11.1	14.7	18.8					17.6

PLANETARY GEOMAGNETIC ACTIVITY

3-HOUR-RANGE INDICES Km AND aa BY 27-DAY SOLAR ROTATION INTERVAL

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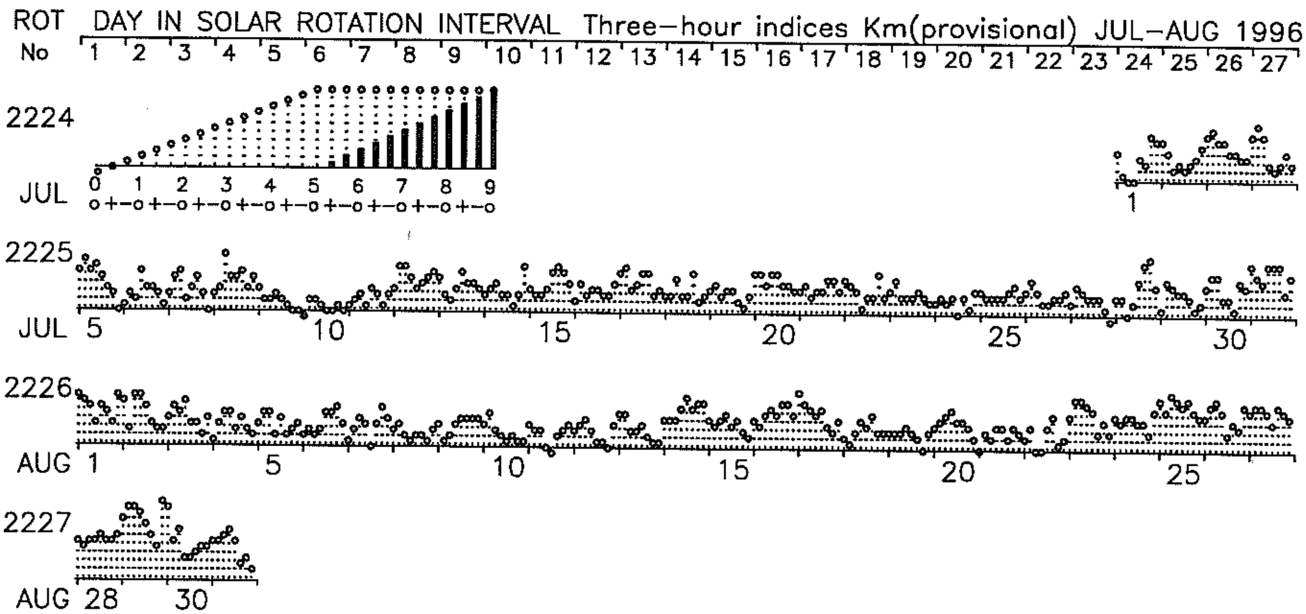
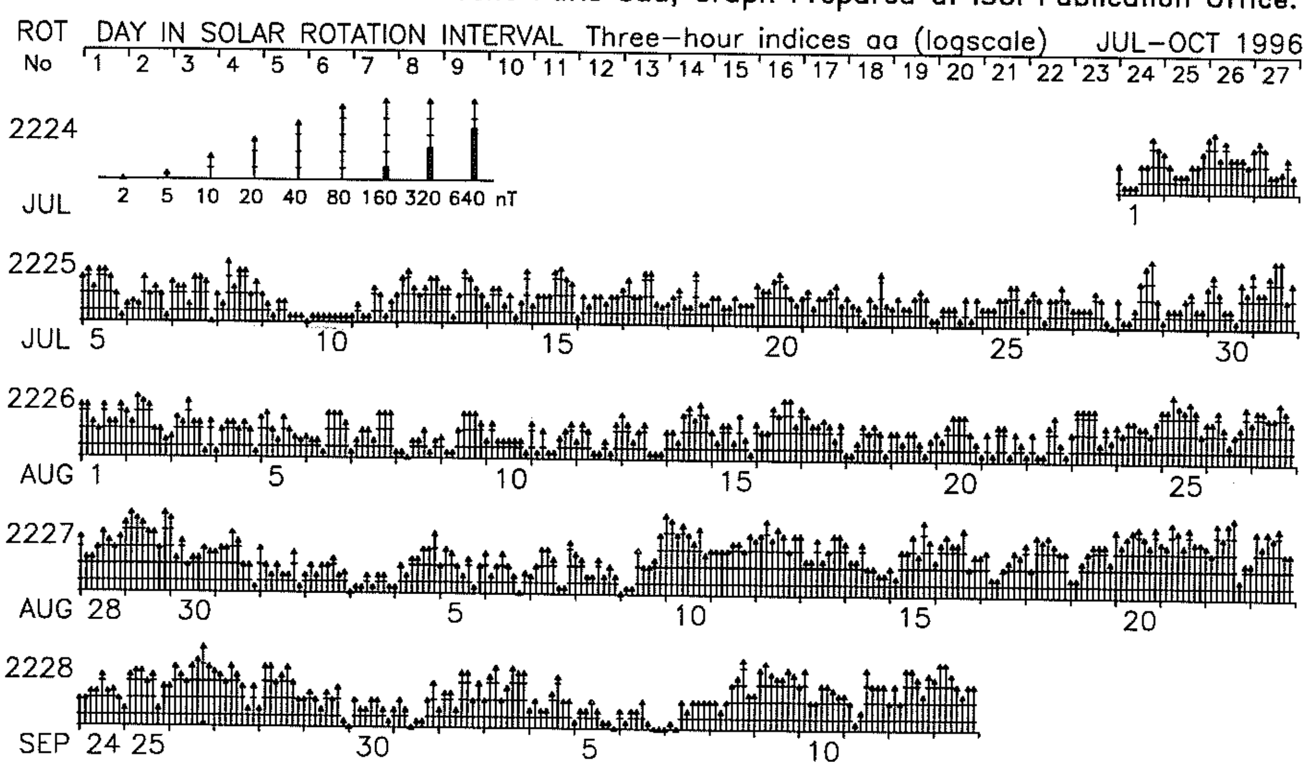


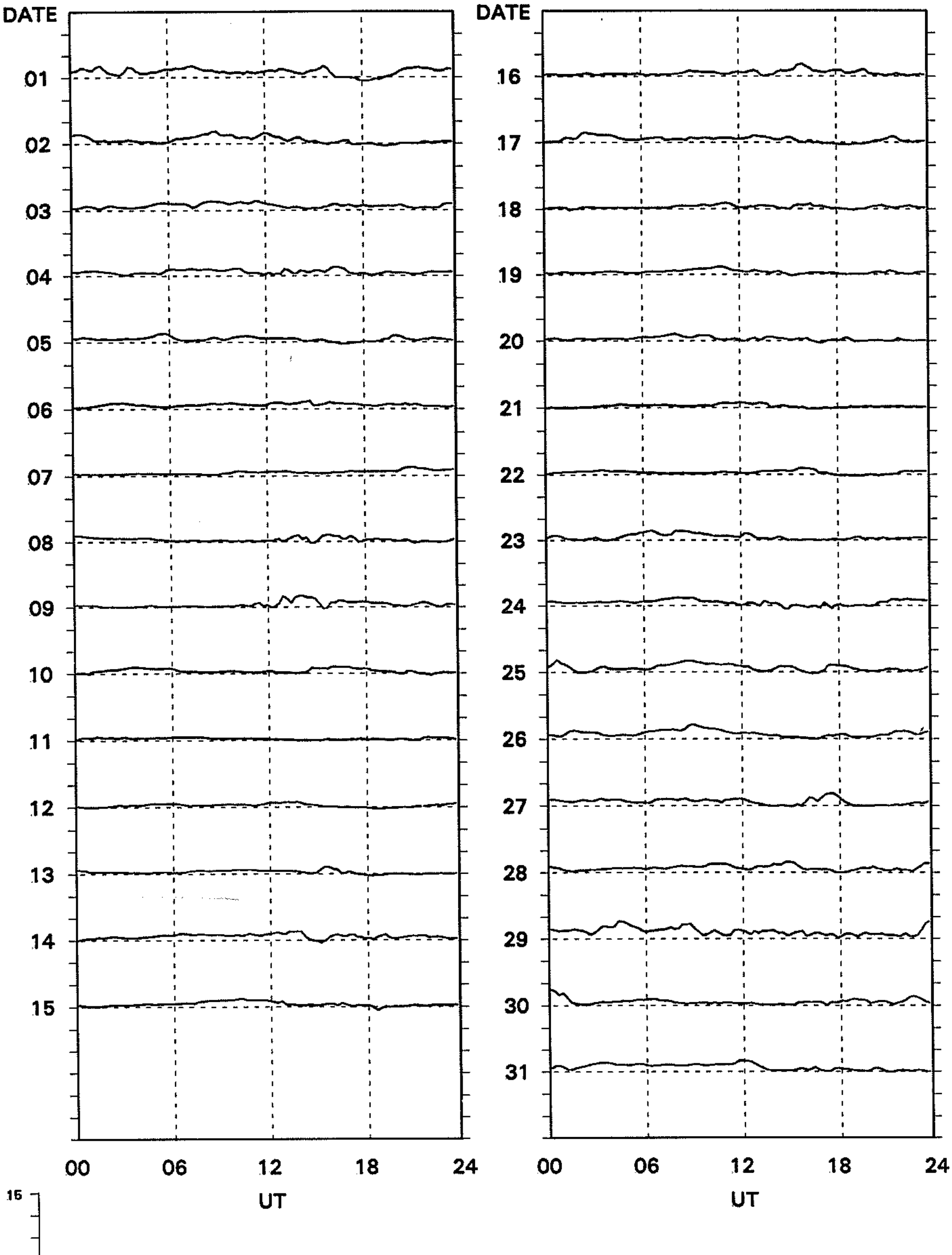
Indices Derivation at Universite Paris Sud; Graph Prepared at ISGI Publication Office.



Indices Derivation at Universite Paris Sud; Graph Prepared at ISGI Publication Office.

PC-INDEX

Thule **August, 1996**



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

AUGUST 1996

Sta	Geomag Lat	Commencement Day	Time (UT)	Type	SC Amplitudes D (Min)	H (Gamma)	Z (Gamma)	Maximum 3-Hour K Index Day(3-Hour Periods)	K	Ranges D (Min)	H (Gamma)	Z (Gamma)	End Day	Hour (UT)
UJJ	13.6N	12	2200	..	..	..	..		-	5	54	28	14	23
NGP	11.3N	12	2200	..	..	..	..		-	4	77	24	14	23
ABG	09.4N	12	2200	..	..	..	..	06(7) 13(1)	4	5	69	32	14	23
HYB	07.6N	12	2234	SC	0.2	10	- 1	13(1) 14(5,7)	4	5	74	20	14	22
GUA	04.3N	12	22--	..	..	..	..	13(1)	5	--	40	20	13	08
PND	02.0N	12	2200	..	..	..	..		-	4	81	31	14	23
TRD	01.1S	12	2200	..	..	..	..		-	--	109	48	14	23
UJJ	13.6N	16	0800	..	..	..	..		-	6	79	39	17	22
NGP	11.3N	16	0800	..	..	..	..		-	6	104	32	17	22
ABG	09.4N	16	0800	..	..	..	..	16(4) 23(2)	-	6	93	53	17	22
HYB	07.6N	16	0500	..	..	..	..	16(3,4)	4	6	95	28	17	23
PND	02.0N	16	0800	..	..	..	..		-	5	97	43	17	22
ETT	00.7S	16	0200	..	..	..	..		-	--	104	35	17	12
TRD	01.1S	16	0800	..	..	..	..		-	--	104	53	17	22
ETT	00.7S	22	1315	SC	- 0.4	7	7		-	--	153	59	23	16
UJJ	13.6N	25	0700	..	..	..	..		-	4	55	17	26	22
NGP	11.3N	25	0700	..	..	..	..		-	4	62	16	26	22
ABG	09.4N	25	0700	..	..	..	..	25(3)	-	4	54	27	26	22
PND	02.0N	25	0700	..	..	..	..		-	4	71	49	26	22
TRD	01.1S	25	0700	..	..	..	..		-	3	111	38	22	00
UJJ	13.6N	27	1600	..	..	..	..		-	7	57	33	29	23
NGP	11.3N	27	1627	..	..	..	..		-	7	72	30	29	23
ABG	09.4N	27	1600	..	..	..	..	29(3,4,6)	-	8	65	56	29	23
PND	02.0N	27	1627	..	..	..	..		-	7	88	41	29	23
TRD	01.1S	27	1600	..	..	..	..		-	7	131	55	29	00
FRD	49.4N	28	19--	..	..	..	..	29(2,3,8) 30(1)	5	27	85	42	01	06
HYB	07.6N	28	0500	..	..	..	..	28(4)29(1,3,4,6)31(5)	4	7	83	30	31	13
GUA	04.3N	28	23--	..	..	..	..	29(4)	5	10	110	10	29	16
ETT	00.7S	28	0200	..	..	..	..		-	--	128	39	30	20
HER	33.6S	28	23--	..	..	..	..	29(2,8) 30(1)	5	15	49	42	30	02
AMS	46.8S	28	14--	..	..	..	..	29(3,8)	5	24	80	72	30	02
CZT	51.5S	28	16--	..	..	..	..	29(8)	6	34	116	80	30	03
PAF	57.2S	28	13--	..	..	..	..	29(8) 30(1)	6	30	400	180	30	04
DRV	75.2S	28	14--	..	..	..	..	30(1)	5	456	418	441	31	18

Stations:

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

Stations reporting no storms observed: BJI

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

AUGUST 1996

Storm Sudden Commencements (SSC)

Day	Time	Quality: Station Group*
12	2234	B: HRB COI QUE
		C: BDV GCK HYB

Solar Flare Effects (sfe)

Day	Begin-End	Station(s)
01	1038-1043	MPO
04	1357-1403	MPO
21	1029-1035	BDV

REPORTING OBSERVATORIES (up to the 2nd of October 1996):
SOD DOB NUR WNG BDV CLF HRB NAG GCK MMB EBR COI FRD KAK HTY KNY QUE 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 identified with a plus sign (+).

WORLD DATA CENTER A

FOR

SOLAR-TERRESTRIAL PHYSICS

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NOAA
U.S. DEPARTMENT OF COMMERCE

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."