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**NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE**

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**Solar - Geophysical Data**

**Part I (Prompt Reports)**

NO. 503 JULY 1986

DATA FOR  
JUNE 1986  
MAY 1986

**Michael A. Chinnery, Director**  
**NATIONAL GEOPHYSICAL DATA CENTER**  
**BOULDER, COLORADO**

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S O L A R - G E O P H Y S I C A L   D A T A

NUMBER 503

(Issued in Two Parts)

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NOTE: Geomagnetic Auroral Electrojet Indices (AE11) for March - April 1986 appear in 503B 41.



ALERT PERIODS  
INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

Summary of the Geoalert Messages JUNE 1986

Julian Day	Date of Issue	Date of Observation	Wolf No.	10-cm Solar Flux	A-index	Location		Flares			Date of Forecast	Location		Region Forecast <sup>1</sup>	Geoalerts
						°Lat	°Long	Total	M	X		°Lat	°Long		
152	01	31	012	071	018	S01	W71	0	0	0	01	S01	W71	Q	Solquiet, Magalert Minor 01/02, Recurrence.
153	02	01	011	069	015	S01	W86	0	0	0	02	S01	W86	Q	Solquiet, Magalert Minor 01/02, Recurrence.
154	03	02	011	068	008	S01	W86	0	0	0	03	S01	W86	Q	Solquiet, Magnil.
155	04	03	000	068	010	Spotnil					04	Spotnil			Solquiet, Magquiet.
156	05	04	000	067	007	Spotnil					05	Spotnil			Solquiet, Magquiet.
157	06	05	000	067	007	Spotnil					06	Spotnil			Solquiet, Magquiet.
158	07	06	000	068	005	Spotnil					07	Spotnil			Solquiet, Magquiet.
159	08	07	000	068	010	Spotnil					08	Spotnil			Solquiet, Magquiet.
160	09	08	012	068	011	N08	W42	0	0	0	09	N08	W42	Q	Solquiet, Magquiet.
161	10	09	000	069	005	Spotnil					10	Spotnil			Solquiet, Magquiet.
162	11	10	000	068	014	Spotnil					11	Spotnil			Solquiet, Magquiet.
163	12	11	000	068	009	Spotnil					12	Spotnil			Solquiet, Magquiet.
164	13	12	000	068	007	Spotnil					13	Spotnil			Solquiet, Magquiet.
165	14	13	000	068	010	Spotnil					14	Spotnil			Solquiet, Magquiet.
166	15	14	000	070	008	Spotnil					15	Spotnil			Solquiet, Magquiet.
167	16	15	000	069	010	Spotnil					16	Spotnil			Solquiet, Magquiet.
168	17	16	000	069	004	Spotnil					17	Spotnil			Solquiet, Magquiet.
169	18	17	000	068	008	Spotnil					18	Spotnil			Solquiet, Magquiet.
170	19	18	000	068	008	Spotnil					19	Spotnil			Solquiet, Magquiet.
171	20	19	000	067	005	Spotnil					20	Spotnil			Solquiet, Magquiet.
172	21	20	000	067	006	Spotnil					21	Spotnil			Solquiet, Magquiet.
173	22	21	000	067	009	Spotnil					22	Spotnil			Solquiet, Magquiet.
174	23	22	000	068	008	Spotnil					23	Spotnil			Solquiet, Magquiet.
175	24	23	000	067	008	Spotnil					24	Spotnil			Solquiet, Magquiet.
176	25	24	000	066	010	Spotnil					25	Spotnil			Solquiet, Magquiet.
177	26	25	000	066	005	Spotnil					26	Spotnil			Solquiet, Magquiet.

ALERT PERIODS  
INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

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Jun 86

Summary of the Geoalert Messages JUNE 1986

Julian Day	Date of Issue	Date of Observation	Wolf No.	10-cm Solar Flux	A-index	Location		Flares			Date of Forecast	Location		Region Forecast <sup>1</sup>	Geoalerts
						°Lat	°Long	Total	M	X		°Lat	°Long		
178	27	26	000	066	006	Spotnil					27	Spotnil		Solquiet, Magalert 27/27, Filament Disappearance.	
179	28	27	000	066	015	Spotnil					28	Spotnil		Solquiet, Magalert 28/29.	
180	29	28	000	066	015	Spotnil					29	Spotnil		Solquiet, Magnil.	
			Presto: <sup>2</sup> Kakioka Magstorm begins 27/12XX UT.												
181	30	29	000	066	007	Spotnil					30	Spotnil		Solquiet, Magquiet.	
182	01	30	000	066	007	Spotnil					01	Spotnil		Solquiet, Magquiet.	

<sup>1</sup>Q = quiet, E = eruptive, A = active, P = proton.

<sup>2</sup>Presto message is a rapid report of a major event.

INTERNATIONAL (R<sub>1</sub>) RELATIVE SUNSPOT NUMBERS

Day	1985 Final						1986 Final					
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Prov Apr	May	Jun
01	21	35	7	0	0	0	0	18	16	9	15	7
02	27	25	0	0	0	16	0	33	33	10	23	0
03	30	27	0	0	0	13	0	52	34	12	12	0
04	32	27	0	0	0	0	0	55	32	0	9	0
05	38	20	0	0	16	18	0	53	33	0	10	0
06	43	14	0	0	19	26	0	47	35	0	0	0
07	71	12	0	0	19	15	0	52	38	9	0	0
08	67	12	0	0	18	12	0	54	29	11	0	0
09	82	17	0	0	25	16	0	47	22	0	0	0
10	82	12	0	0	15	15	0	35	20	9	0	8
11	61	12	7	0	17	18	0	37	18	13	0	0
12	45	12	0	0	19	19	0	25	13	15	0	0
13	25	0	9	11	30	18	13	22	8	14	0	0
14	9	0	9	13	44	30	16	16	0	26	0	0
15	8	0	9	15	48	47	13	11	10	25	9	0
16	9	14	9	25	39	66	10	0	0	26	11	0
17	11	12	8	19	43	63	0	0	0	14	13	0
18	11	11	10	20	37	52	0	0	0	15	22	0
19	11	12	10	31	30	40	0	0	0	13	27	0
20	11	10	9	44	28	24	0	10	12	18	23	0
21	10	9	8	50	18	17	0	10	13	25	30	0
22	10	0	7	72	12	11	0	10	10	20	27	0
23	18	0	0	67	10	0	0	10	15	54	20	0
24	12	0	0	63	0	0	0	8	14	64	24	0
25	10	0	0	55	0	0	0	11	10	48	22	8
26	13	8	0	40	0	0	7	9	10	43	25	0
27	12	8	0	27	0	0	0	15	11	33	18	0
28	36	10	0	14	0	0	0	10	13	23	18	0
29	51	9	7	11	0	0	0	0	11	31	17	0
30	46	8	7	0	0	0	10	0	11	33	13	0
31	40	9	0	0	0	0	10	0	0	0	10	0
Mean	31	11	4	19	16	17	2	23	15	20	13	1

The yearly mean sunspot number equaled 17.9 in 1985.

DAILY SOLAR FLUX AT 2800 MHz (10.7 CM) ADJUSTED TO 1 AU

ALGONQUIN RADIO OBSERVATORY, OTTAWA

Day	Jul 85	Aug	Sep	Oct	Nov	Dec	Jan 86	Feb	Mar	Apr	May	Jun
01	76.9	80.5	73.0	68.3	69.0	67.8	67.0	81.8	84.1	71.8	72.5	71.1
02	79.1*	80.4	72.8	67.5	68.8	68.4	67.6	86.4*	89.2	70.6	74.3	69.8
03	81.3	79.2	73.1	68.7	68.0	68.5	68.4	96.0	91.1*	70.9	73.8	69.9
04	80.4	79.3	73.5	68.3	67.6	68.3	69.5	97.8*	91.4	71.7	71.6	69.3
05	83.3	78.5	72.2	67.0	68.5	69.7	70.7	99.8	90.5	71.9	70.8	69.3
06	87.5	77.9	72.5	66.0	70.0	71.1	72.2	99.0	89.7*	71.9	69.8	69.8
07	97.7	79.5	70.8	65.9	71.8	71.9	71.6	96.7	87.6	71.9	69.9	70.0
08	96.7*	78.5	70.3	65.8	73.7	73.0	71.2	94.3*	85.1	71.8	69.5	70.2
09	100.9*	74.9	70.6	66.0	72.9	75.2	72.7	92.5	84.3	72.0	69.8	71.1
10	104.6*	72.8	70.3	66.7	72.5	75.6	72.2	93.4*	81.6	72.5	70.9	70.3
11	97.3	68.4	69.2	67.7	74.7	76.6	71.9	95.1	79.3	72.4	71.4	70.1
12	92.9	69.7	68.5	66.9	74.7	77.3	71.2	88.4	76.9	73.1	70.9	70.5
13	85.5	68.9	70.7	66.7	74.3	75.6	74.3	86.4	74.3	74.2	71.7	70.4
14	76.4	69.3	70.4	69.8	76.9	76.4	76.4	86.2*	71.9	76.0	71.6	72.1
15	73.0	69.0	71.1	71.7	82.2*	80.2	75.1	79.6	69.7	76.0	72.7	71.3
16	71.9	68.2	70.3	73.2	78.8	83.7	75.5*	71.2	68.9	75.8	74.3	70.7
17	71.9	67.9	70.0	75.5	77.4	80.2	74.4	68.3	68.9	75.3	75.3	69.8
18	71.8	68.6	70.4	75.5	77.3	78.4	73.1	68.7	68.9	74.4	78.7	69.9
19	71.7	69.1	70.7	77.7	75.6	77.5	70.2	68.1	68.8	74.9	78.7	69.6
20	71.7	70.6	69.8	79.4	75.7	75.4*	69.2	68.1	68.4	75.0	79.6	69.6
21	71.2	70.4	69.6	84.7	73.7	75.1	67.9	66.0	68.5	74.2	79.2	69.2
22	71.0	72.7	69.8	94.3	73.1	73.5	67.3	67.7	69.1	75.1	79.2	69.7
23	71.1	72.9	69.2	93.2*	72.8	71.2	67.0	67.7	69.8	82.1	78.8	69.6
24	71.0	72.1	69.0	92.5	71.9	69.9	66.9	68.6	69.5	87.4	79.5	68.4
25	75.6	72.5	68.7	89.5*	70.3	67.3	68.0	70.1	69.6	85.7	81.1	68.5
26	77.4	72.3	68.4	83.0	69.5	66.3	67.7	72.0	70.8	84.2*	77.1	68.2
27	79.2	73.1	67.7	78.5*	69.8	66.2	67.2	75.2	70.2	83.4	74.7	68.6
28	81.2	73.1	67.8	76.7	69.0	66.2	70.0	77.0	70.4	80.1	74.3	68.3
29	83.5	73.1	68.3	73.6	69.1	66.0	71.2	99.0	71.5	77.0	74.3	68.3
30	83.8	73.9	68.3	70.5	68.8	66.3	73.7	0	71.5	74.7	72.5	68.3
31	82.4	74.1	0	69.5	0	66.6	76.6	0	71.5	0	73.2	0
Mean	81.3	73.3	70.2	74.2	72.6	72.4	70.9	81.5	76.2	75.6	74.2	69.7

A = interpolated value; --- = no observation.  
 \*Adjusted for burst in progress at time of measurement; † corrected for antenna drift.  
 The yearly mean 2800 MHz flux adjusted to 1 astronomical unit equaled 74.7 in 1985.

DAILY SOLAR INDICES

7  
Jun 86

June 1986

Day	Julian Day	Bartels Cycle Day	Sunspot Numbers		Obs Flux Ottawa (2800)	Solar Flux Adjusted to 1 Astronomical Unit								
			Int	Amer		SGMR (15400)	SGMR (8800)	SGMR (4995)	SGMR Ottawa (2800)	SGMR (2695)	SGMR (1415)	SGMR (610)	SGMR (410)	SGMR (245)
01	152	13	7	9	69.1	557	285	---	71.1	68	57	45	20	11
02	153	14	0	0	67.8	548	238	---	69.8	63	53	29	18	10
03	154	15	0	0	67.9	581	278	---	69.9	69	56	48	20	12
04	155	16	0	0	67.3	562	287	---	69.3	67	54	43	19	6
05	156	17	0	0	67.3	224	202	---	69.3	58	52	45	20	10
06	157	18	0	0	67.8	480	241	---	69.8	64	53	--	--	--
07	158	19	0	0	68.0	557	286	---	70.0	68	56	--	--	--
08	159	20	0	8	68.2	560	282	---	70.2	70	55	--	--	--
09	160	21	0	0	69.0	568	284	---	71.1	68	57	37	18	8
10	161	22	8	0	68.2	578	294	---	70.3	69	57	46	19	11
11	162	23	0	0	68.0	527	275	---	70.1	68	57	44	19	12
12	163	24	0	0	68.4	---	---	---	70.5	---	---	---	---	---
13	164	25	0	0	68.2	568	---	---	70.4	---	---	47	20	11
14	165	26	0	0	69.9	570	---	---	72.1	---	---	47	21	12
15	166	27	0	0	69.1	567	282	103	71.3	82	---	49	20	12
16	167	1	0	0	68.5	558	---	---	70.7	---	---	47	21	13
17	168	2	0	0	67.6	562	290	100	69.8	69	---	48	21	10
18	169	3	0	0	67.7	565	279	99	69.9	70	56	49	18	13
19	170	4	0	0	67.4	---	---	---	69.6	---	---	---	---	---
20	171	5	0	8	67.4	---	---	---	69.6	---	---	---	---	---
21	172	6	0	0	67.0	---	---	---	69.2	---	---	---	---	---
22	173	7	0	0	67.5	559	270	97	69.7	66	55	45	20	13
23	174	8	0	0	67.4	533	279	99	69.6	68	57	44	20	11
24	175	9	0	0	66.2	551	286	99	68.4	66	54	45	19	13
25	176	10	8	0	66.3	---	---	---	68.5	---	---	---	---	---
26	177	11	0	0	66.0	559	284	97	68.2	65	52	43	20	31
27	178	12	0	0	66.3	559	290	98	68.6	66	53	43	19	49
28	179	13	0	0	66.1	556	273	102	68.3	66	52	44	20	13
29	180	14	0	0	66.1	564	282	98	68.3	65	53	42	19	13
30	181	15	0	0	66.1	555	292	101	68.3	65	53	44	19	12
Mean			1	1.	67.6	543	275	99	69.7	67	55	44	19	14

\*Adjusted for burst in progress at time of measurement.

The observed and the adjusted Ottawa fluxes tabulated above are the "Series C" daily values reported by the Algonquin Radio Observatory, Ottawa, Ontario, Canada. The letter "A" following an entry designates an interpolated flux. Numbers in parentheses in the column headings denote frequencies in MHz.

Equipment problems produced the gaps shown here in the Air Weather Service's Sagamore Hill (SGMR) observations.

The International and American sunspot numbers shown above are preliminary values.



OBSERVED AND PREDICTED SOLAR ACTIVITY INDICES

JUNE 1986

Date	RELATIVE SUNSPOT NUMBERS						2800 MHz RADIO FLUX Adjusted to 1 AU (Sa)	
	International (Ri)		American (Ra)		Derived (Rs)		Monthly Mean	Smoothed
	Monthly Mean	Smoothed	Monthly Mean	Smoothed	Monthly Mean	Smoothed		
Aug 82	107.6	109	110.5	111	123.9	120	172.1	168
Sep	118.8	101	117.8	103	118.5	112	167.1	161
Oct	94.7	96	90.1	97	111.8	106	160.9	155
Nov	98.1	95	93.2	95	114.8	103	163.7	153
Dec	127.0	95	145.0	95	146.7	101	193.2	151
Jan 83	84.3	93	82.8	93	86.7	98	137.7	148
Feb	51.0	90	53.4	90	67.2	94	119.6	145
Mar	66.5	86	60.5	85	64.7	90	117.3	141
Apr	80.7	82	74.5	81	67.5	85	119.9	136
May	99.2	77	97.7	77	86.1	80	137.1	131
Jun	91.1	70	93.1	69	92.4	72	143.0	124
Jul	82.2	66	82.2	63	77.4	66	129.1	118
Aug	71.8	66	69.2	63	75.7	66	127.5	118
Sep	50.3	68	47.4	66	57.0	67	110.2	119
Oct	55.8	68	52.3	66	58.6	67	111.7	120
Nov	33.3	59	30.2	65	35.6	67	90.4	120
Dec	33.4	64	32.3	62	35.7	65	90.5	118
Jan 84	57.0	60	54.4	58	59.4	61	112.4	115
Feb	85.4	56	81.5	54	86.2	58	137.2	101
Mar	83.5	53	83.0	51	68.5	55	120.8	108
Apr	69.7	50	66.5	48	78.1	52	129.7	105
May	76.4	48	72.1	45	79.6	49	131.1	103
Jun	46.1	46	45.2	44	49.8	48	103.5	102
Jul	37.4	44	36.2	42	37.6	39	92.2	99
Aug	25.5	40	24.5	38	30.7	41	85.8	95
Sep	15.7	34	13.6	32*	23.2	35	78.9	90
Oct	12.0	29	9.8	27*	16.9	31	73.1	86
Nov	22.8	25	19.4	23*	18.6	26	74.6	72
Dec	18.7	22	17.0	20*	17.4	23	73.5	79
Jan 85	16.5	20	14.5	19*	15.9	21	72.1	77
Feb	15.9	20	16.3	18*	15.7	20	71.9	76
Mar	17.2	19	11.8*	16*	16.3	19	72.5	75
Apr	16.2	18	17.1*	17*	19.8	19	75.7	75
May	27.5	18	24.0*	17*	26.6	19	82.0	75
Jun	24.2	18	22.2*	16*	22.8	19	78.5	75
Jul	30.7	17*	30.8*	16*	25.8	19	81.3	75
Aug	11.1	17*	10.7*	15*	17.2	19	73.3	75
Sep	3.9	17*	3.4*	16*	13.8	20	70.2	76
Oct	18.6	17*	16.5*	16*	18.1	20	74.2	76
Nov	16.2	17*	16.4*	15*	16.4	19	72.6	75
Dec	17.3	15*	10.1*	14*	16.2	19	72.4	75
Jan 86	2.5	<u>15( 2)</u> *	2.3*	<u>14</u>	14.6	<u>19</u>	70.9	--
Feb	23.2	<u>15( 4)</u> *	23.8*	<u>13</u>	26.0	<u>18</u>	81.5	--
Mar	15.1	<u>14( 5)</u> *	12.5*	<u>13</u>	20.3	<u>17</u>	76.2	--
Apr	20.4†	<u>13( 5)</u> *	13.8*	<u>12</u>	19.6	<u>16</u>	75.6	--
May	13.1†	<u>12( 6)</u> *	11.6*	<u>11</u>	18.1	<u>15</u>	74.2	--
Jun	0.8†	<u>11( 7)</u> *	0.8*	<u>10</u>	13.3	<u>14</u>	69.7	--
Jul	----	<u>11( 8)</u> *	----	<u>10</u>	----	<u>13</u>	----	--
Aug	----	<u>10( 8)</u> *	----	<u>9</u>	----	<u>13</u>	----	--
Sep	----	<u>10( 8)</u> *	----	<u>9</u>	----	<u>12</u>	----	--
Oct	----	<u>10( 8)</u> *	----	<u>9</u>	----	<u>12</u>	----	--
Nov	----	<u>10( 8)</u> *	----	<u>9</u>	----	<u>11</u>	----	--
Dec	----	<u>10( 8)</u> *	----	<u>9</u>	----	<u>11</u>	----	--

\*An asterisk marks either a value of the observed 12-month running mean or of a predicted 12-month average that is based in part on preliminary observations.

Underlined entries indicate predicted values and parentheses enclose the absolute value of the 90% confidence limits. The two columns headed "Derived" represent a sunspot number computed from a linear regression equation between the 2800 MHz solar flux (adjusted to 1 astronomical unit) and the Zurich sunspot number.

## SMOOTHED OBSERVED AND PREDICTED SUNSPOT NUMBERS FOR CYCLE 21

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Jun 86

JUNE 1986

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1976	15	13	12	13	13	12*	13	14	14	13	14	15
1977	17	18	20	22	24	26	29	33	39	46	52	57
1978	61	65	70	77	83	89	97	104	108	111	113	118
1979	124	131	137	141	147	153	155	155	156	158	162	165*
1980	164	163	161	159	156	155	153	150	150	150	148	143
1981	140	142	143	143	143	142	140	141	143	142	139	138
1982	137	133	129	124	120	117	115	109	101	96	95	95
1983	93	90	86	82	71	71	66	66	68	68	67	64
1984	60	56	53	50	48	47	44	40	34	29	25	22
1985	21	20	19	18	18	18	17	17	17	17	17	15
1986	15 ( 2)	15 ( 4)	14 ( 5)	13 ( 5)	12 ( 6)	11 ( 7)	11 ( 8)	10 ( 8)	10 ( 8)	10 ( 8)	10 ( 8)	10 ( 8)

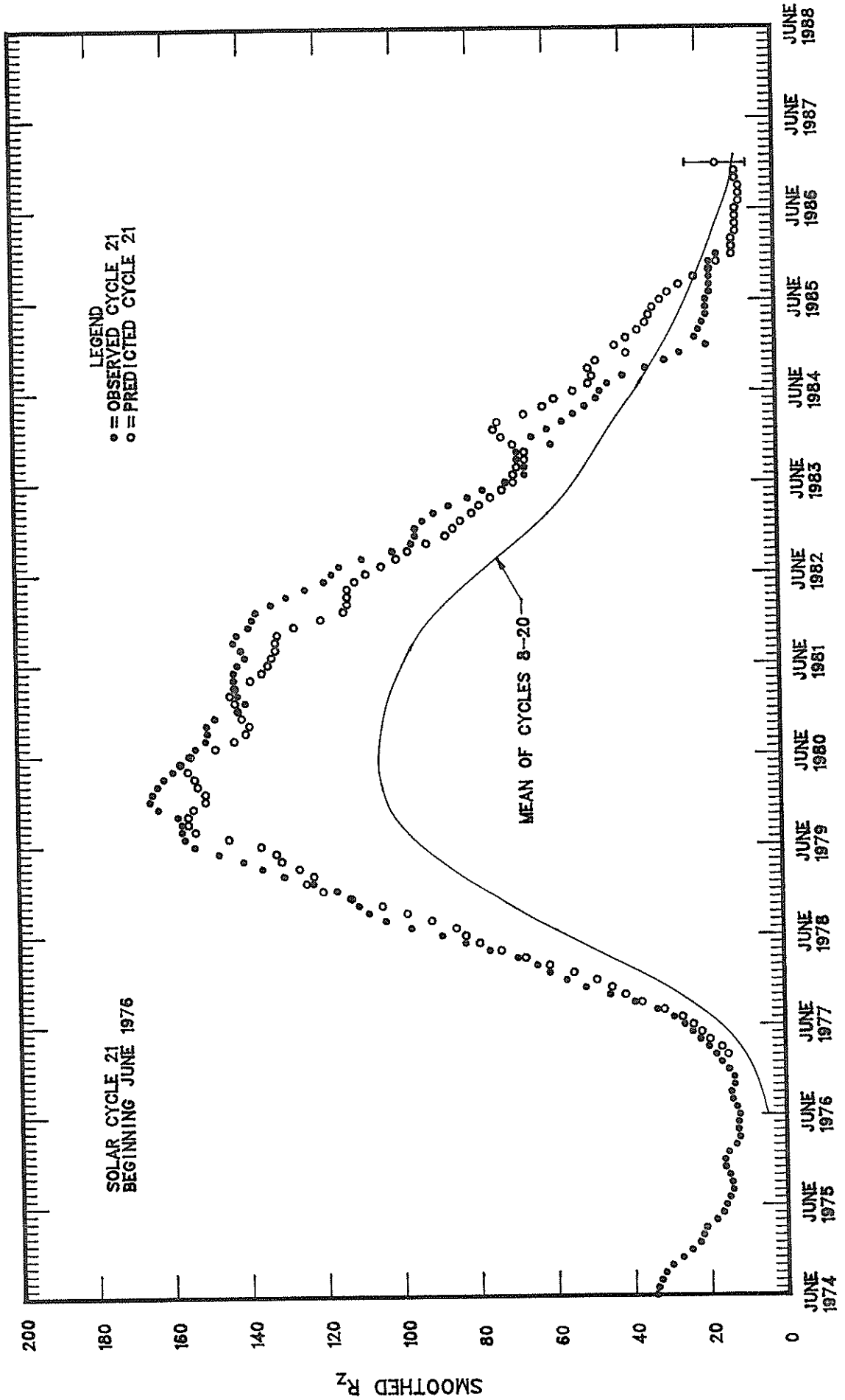
An asterisk marks the minimum and the maximum of Sunspot Cycle 21.

For the current solar cycle, this table gives observed smoothed sunspot numbers up to the one calculated from the most recently measured monthly mean. These smoothed observed values are based on final monthly mean Zurich numbers through 1980, on final international numbers through March 1986, and on provisional international numbers thereafter.

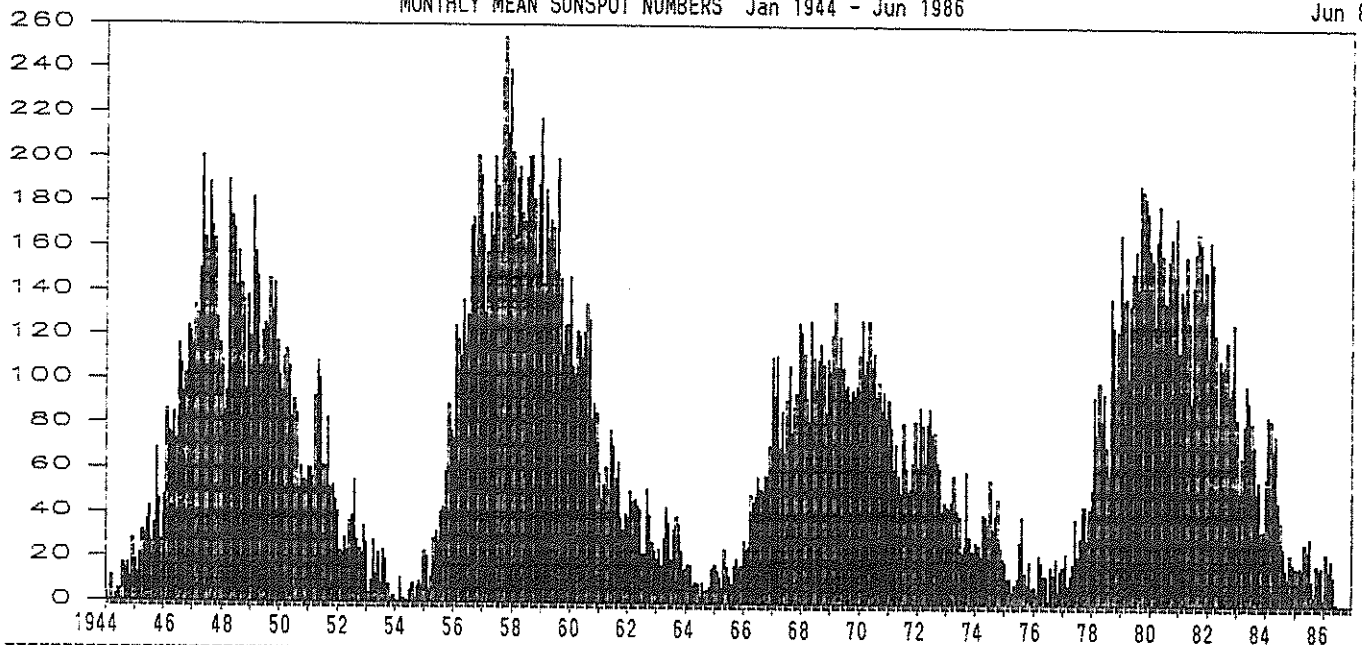
The entries with numbers in parentheses below them denote predictions by the McNish-Lincoln method. (See page 9 in the March 1986 edition of the "Solar-Geophysical Data" supplement.) Adding the number in parentheses to the predicted value generates the upper limit of the 90% confidence interval; subtracting the number in parentheses from the predicted value generates the lower limit. Consider, for example, the December 1986 prediction tabulated above. There exists a 90% chance that in December 1986 the actual smoothed sunspot number will fall somewhere between 2 and 18.

THE MCNISH-LINCOLN PREDICTION METHOD GENERATES USEFUL ESTIMATES OF SMOOTHED SUNSPOT NUMBERS FOR NO MORE THAN 12 MONTHS AHEAD. Beyond a year the predictions regress rapidly toward the mean of all 13 cycles of data used in the computation. Furthermore, the method is very sensitive to the date defined as the beginning of the current sunspot cycle, that is, to the date of the most recent sunspot minimum. In "Solar-Geophysical Data," issues 390-401, we based the current cycle predictions on March 1976 as the end of cycle 20 and the onset of the new cycle 21. Later studies, including one published by M. Waldmeier, showed that June 1976 was more appropriately the minimum epoch. We therefore generated this table using the June 1976 date.

# OBSERVED AND ONE-YEAR-AHEAD PREDICTED SMOOTHED SUNSPOT NUMBERS



MONTHLY MEAN SUNSPOT NUMBERS Jan 1944 - Jun 1986



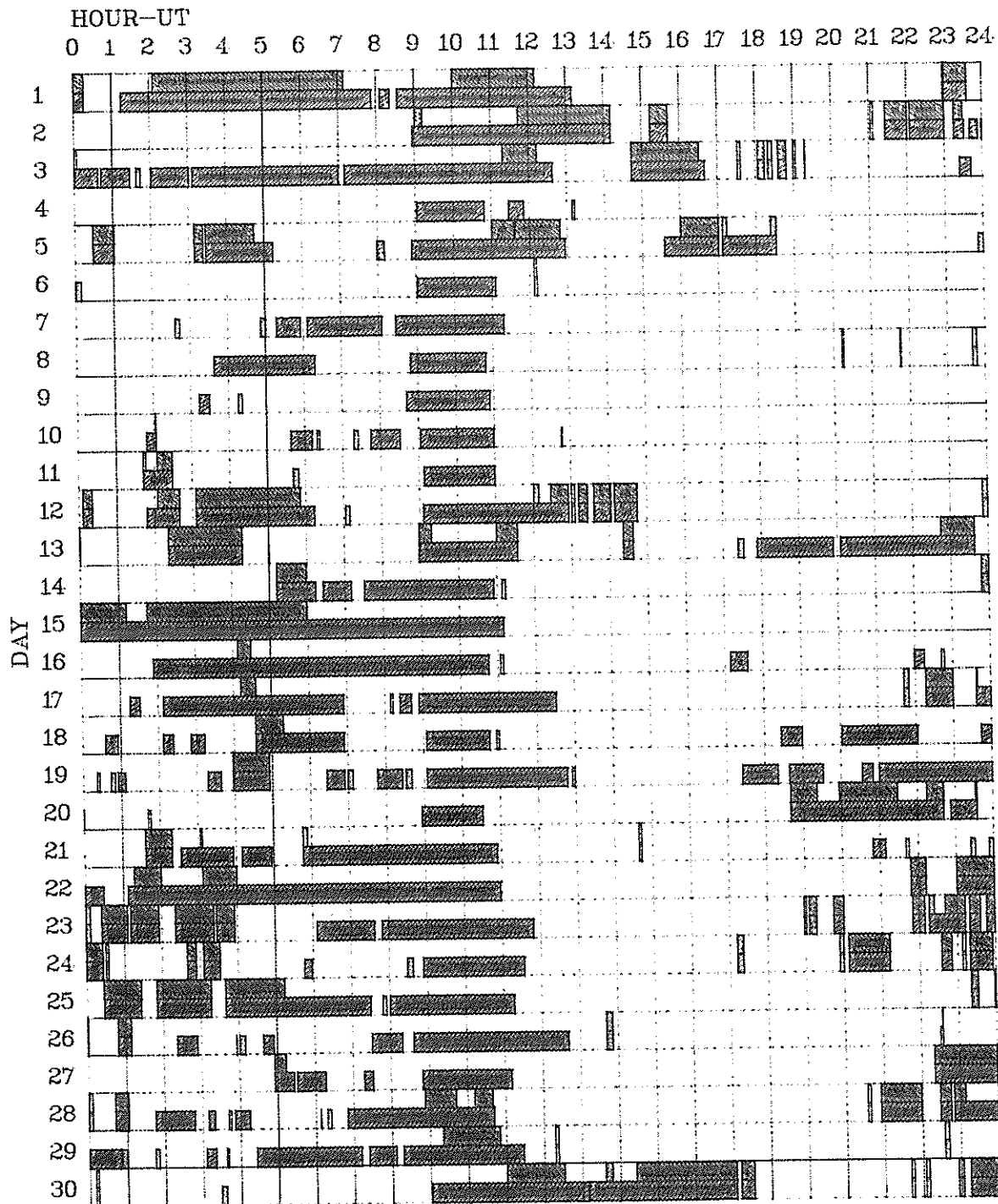
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mean
1944	3.7	0.5	11.0	0.3	2.5	5.0	5.0	16.7	14.3	16.9	10.8	28.4	9.6 m
1945	18.5	12.7	21.5	32.0	30.6	36.2	42.6	25.9	34.9	68.8	46.0	27.4	33.2
1946	47.6	86.2	76.6	75.7	84.9	73.5	116.2	107.2	94.4	102.3	123.8	121.7	92.6
1947	115.7	133.4	129.8	149.8	201.3	163.9	157.9	188.8	169.4	163.6	128.0	116.5	151.6 M
1948	108.5	86.1	94.8	189.7	174.0	167.8	142.2	157.9	143.3	136.3	95.8	138.0	136.3
1949	119.1	182.3	157.5	147.0	106.2	121.7	125.8	123.8	145.3	131.6	143.5	117.6	134.7
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
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
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	112.3
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
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
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	20.4*	13.1*	0.8*							12.5*

\*preliminary

For the yearly means, each "M" marks a sunspot cycle maximum and each "m" a minimum.

12  
Jun 86

# INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE JUNE 1986



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

Athens  
Bucharest

Holloman  
Hurbanovo

Istanbul  
Learmonth

Palehua  
Peking

Purple Mt.  
Ramey  
Yunnan

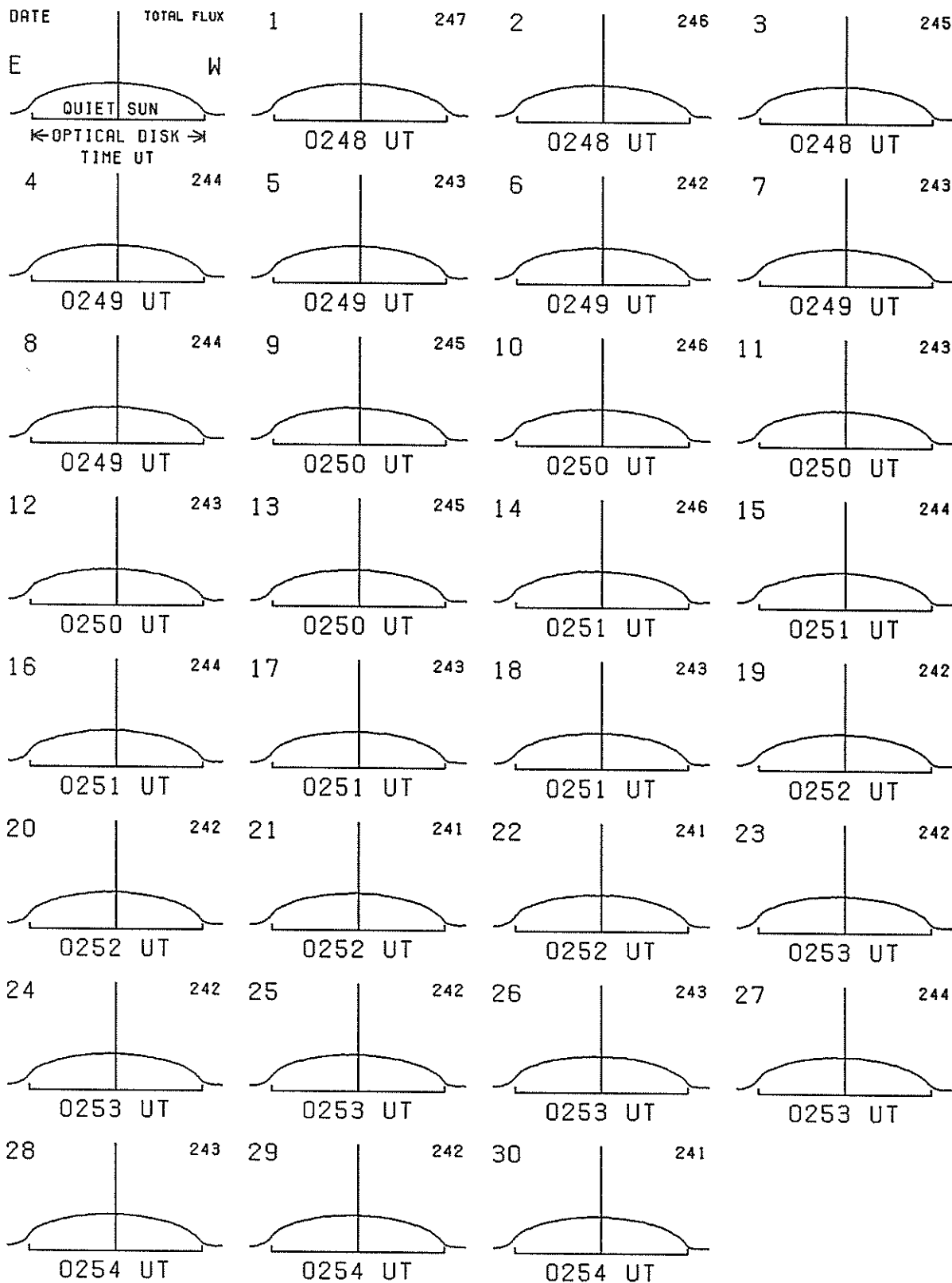
# EAST-WEST SOLAR SCANS

13  
Jun 86

JUNE 1986

TOYOKAWA, JAPAN

3 CM  
FAN BEAM WITH 1.1 MINUTES OF ARC

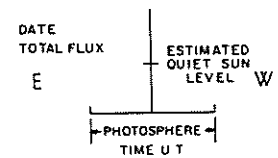
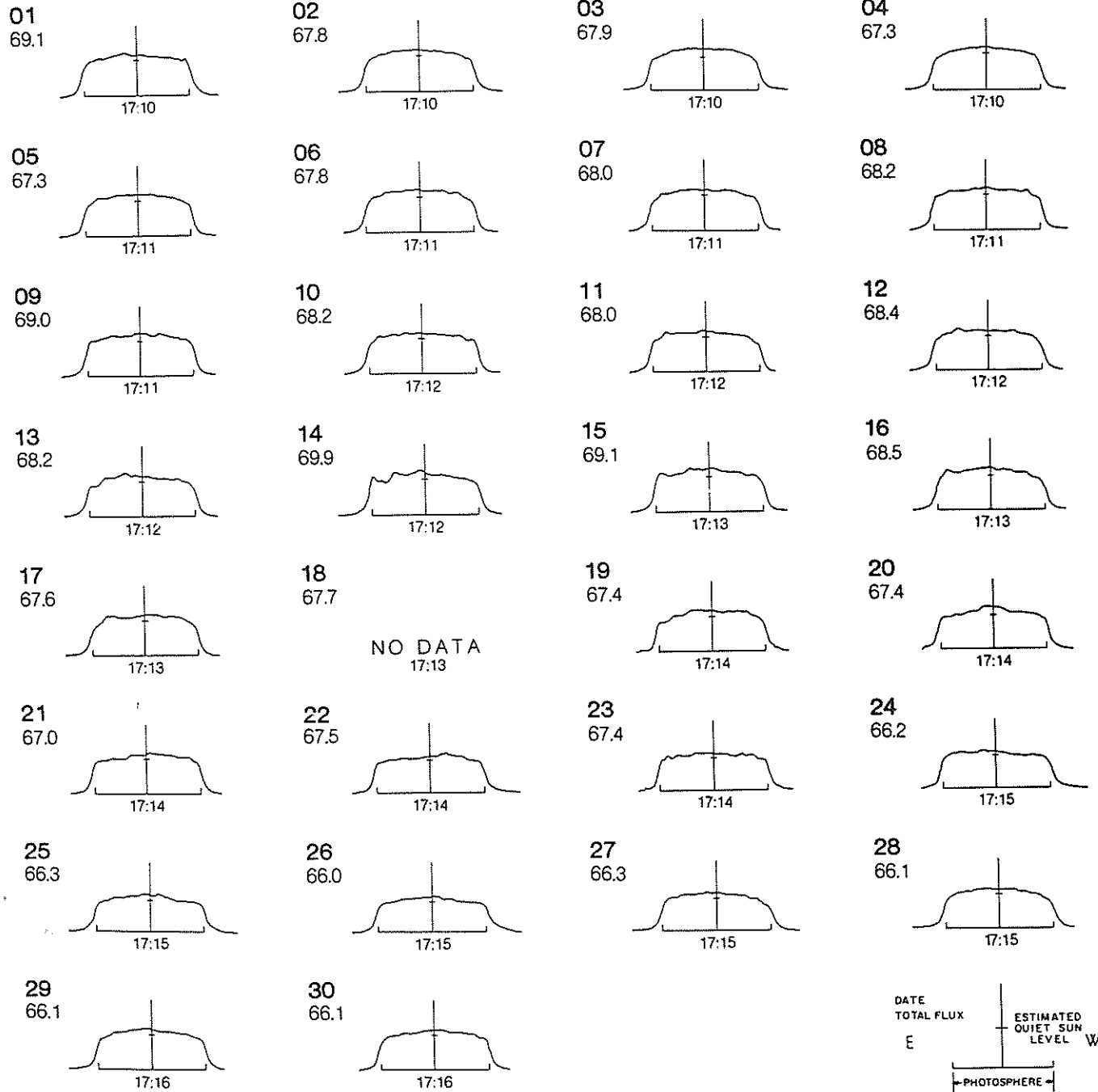


14  
Jun 86

# EAST-WEST SOLAR SCANS JUNE 1986

ALGONQUIN RADIO OBSERVATORY  
CANADA

10.7 cm  
Fan Beam with 1.5 minutes of arc  
E-W Resolution



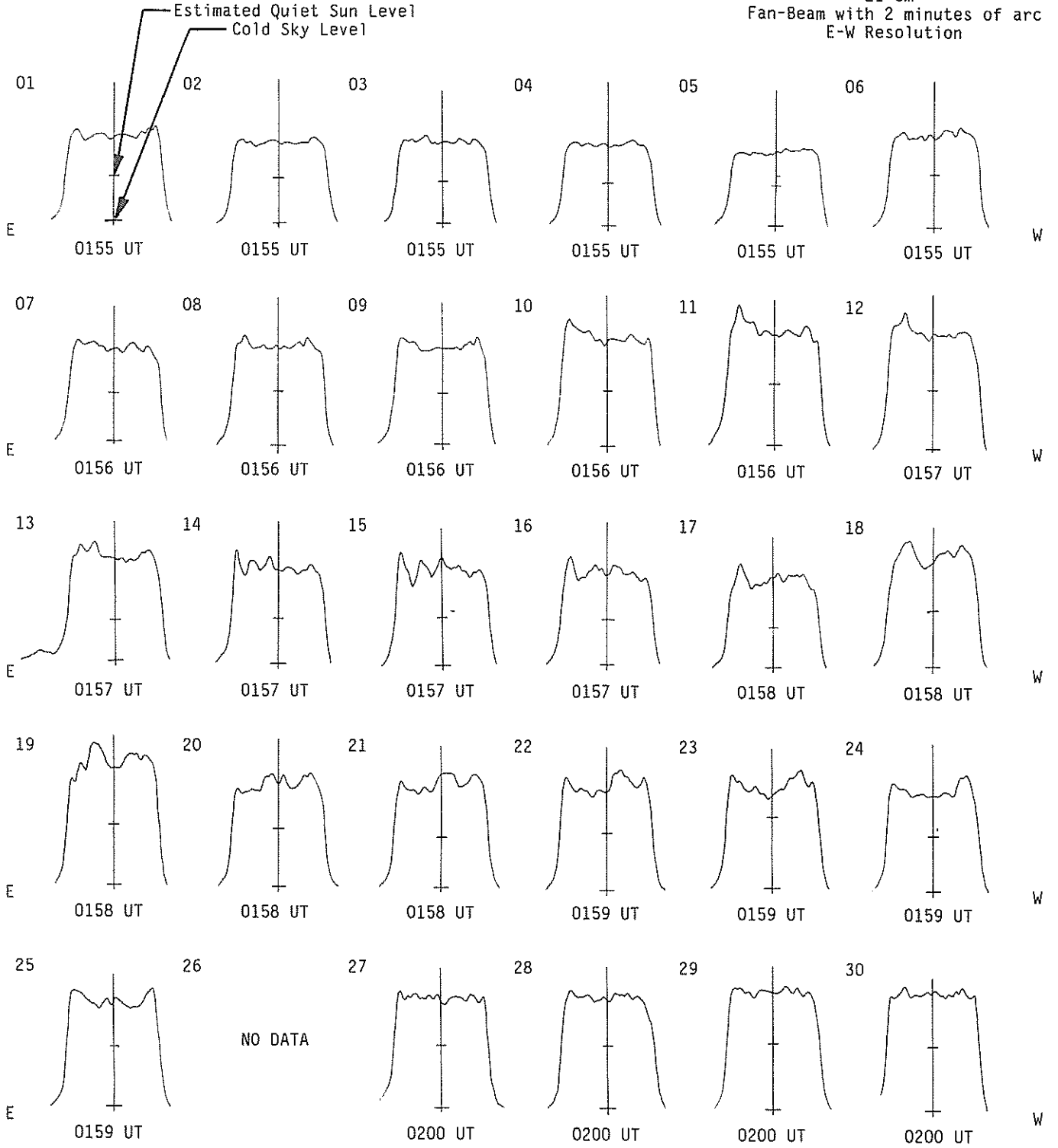
EAST - WEST SOLAR SCANS

15  
Jun 86

Fleurs, Australia

JUNE 1986

21 cm  
Fan-Beam with 2 minutes of arc  
E-W Resolution





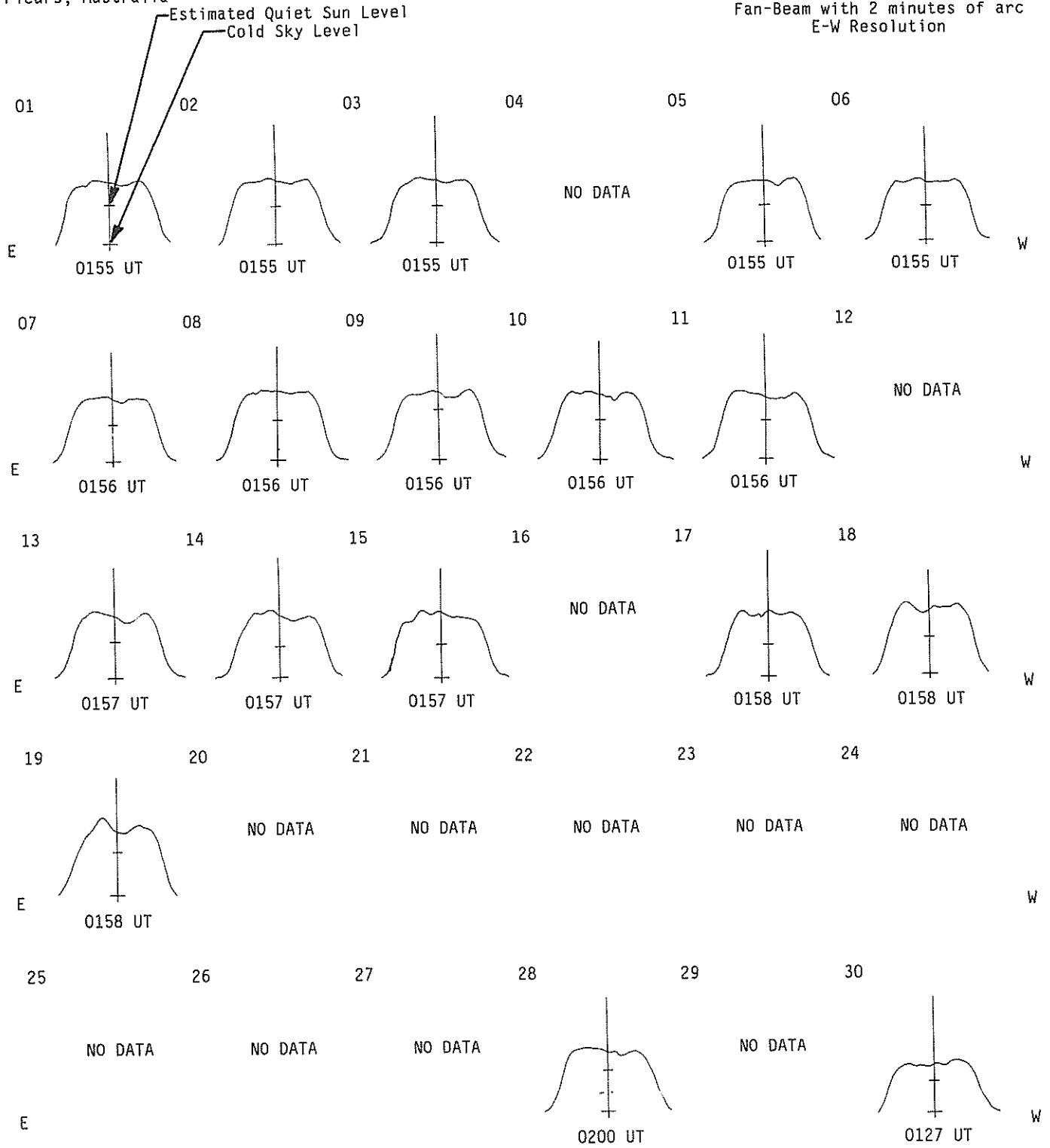
16  
Jun 86

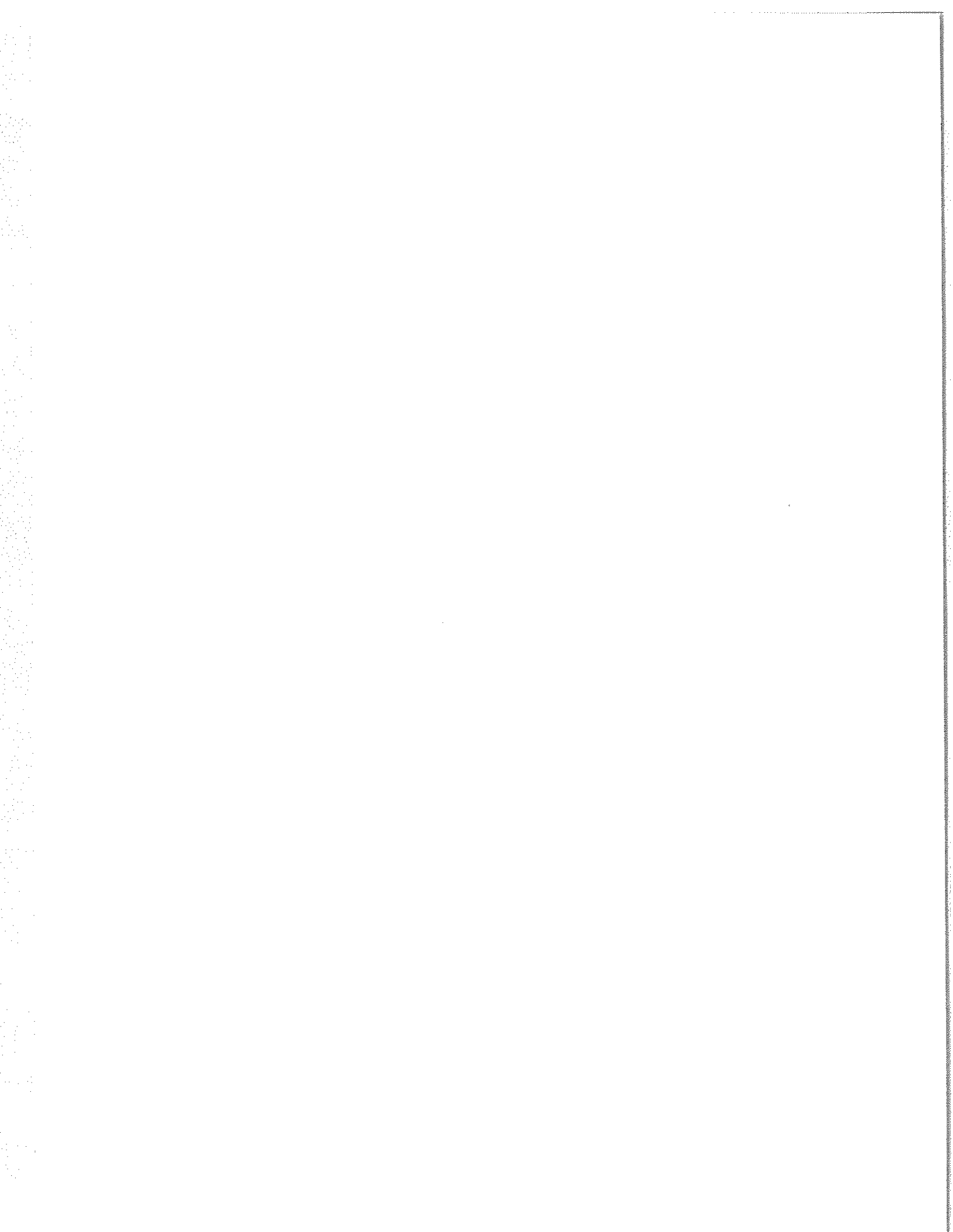
EAST - WEST SOLAR SCANS

Fleurs, Australia

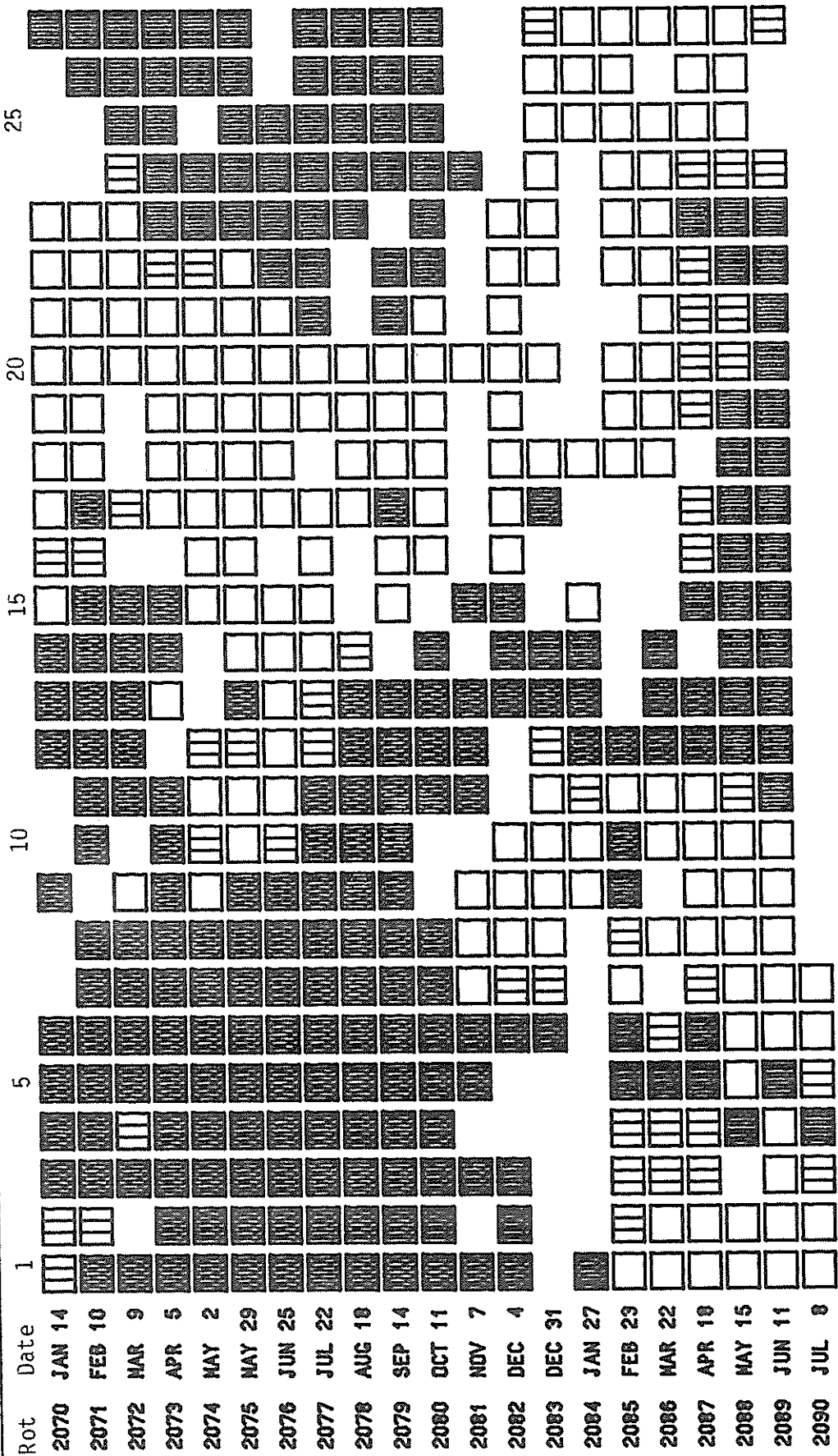
JUNE 1986

43 cm  
Fan-Beam with 2 minutes of arc  
E-W Resolution





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

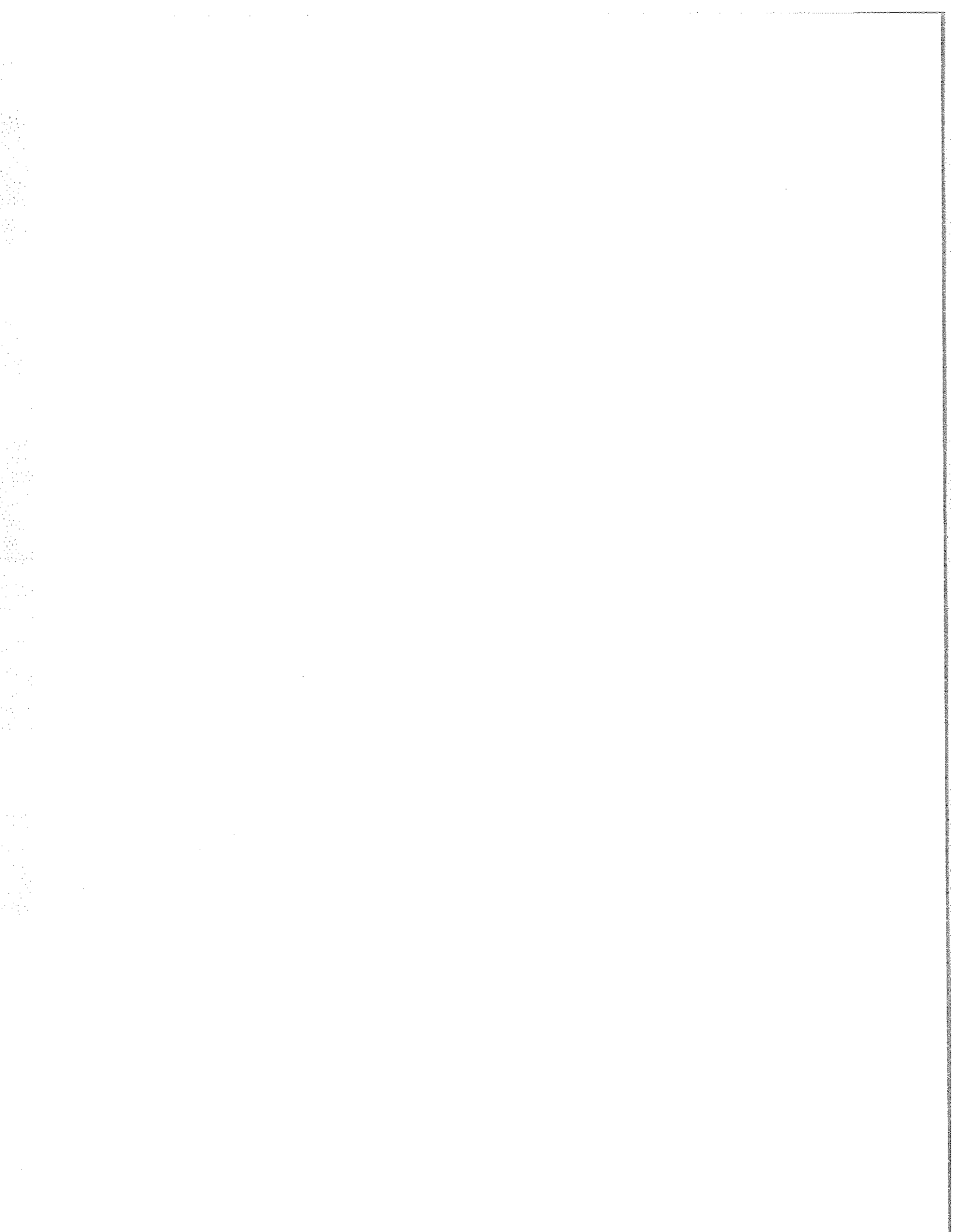
Observations are taken at 2000 UT. Rotation numbers given are the Bartels series, but the dates are not; these dates mark times of occurrence of phenomena on the Sun that affect the Earth during the given Bartels Rotation.

STANFORD MEAN SOLAR MAGNETIC FIELD (MICROTESLA)

19  
Jun 86

Day	Jul 85	Aug	Sep	Oct	Nov	Dec	Jan 86	Feb	Mar	Apr	May	Jun
1	-16	-5	.	13	-7	.	.	.	3	10	.	-6
2	-14	1	.	15	-10	.	.	.	0	-3	-7	-2
3	-5	2	7	6	-8	.	.	.	-7	-14	0	1
4	2	8	3	-6	-15	-16	.	15	-7	-16	2	-1
5	5	11	5	-13	-16	-20	-3	15	3	.	.	-4
6	17	6	3	.	-25	-25	1	2	-11	.	2	-4
7	31	10	.	-20	-26	.	14	.	.	.	2	0
8	24	.	.	-23	.	.	3	-8	.	6	0	6
9	22	8	-26	-26	-17	-14	11	-14	.	5	1	4
10	.	8	-24	-27	.	1	12	4	.	5	-5	11
11	12	-9	-24	-21	-6	13	0	.	.	3	2	5
12	7	-16	-22	-23	-5	8	-19	.	5	5	8	11
13	5	-24	-25	-16	5	3	-14	9	11	3	13	4
14	8	-28	-24	-26	11	.	.	.	8	8	13	3
15	6	-22	-21	-20	6	.	.	.	.	7	8	-3
16	-10	-23	-21	-27	.	-18	-12	.	14	.	10	6
17	-27	-22	-25	-21	-3	-20	21	.	11	8	.	6
18	-27	-20	-29	-25	-2	-21	.	.	12	5	-2	6
19	-24	-20	-28	.	-11	3	24	.	12	6	3	6
20	.	-17	-22	.	.	11	.	9	12	2	9	6
21	.	-19	-21	-17	-5	15	16	18	10	-1	7	-4
22	-19	-22	-23	-17	.	22	11	10	8	-5	6	-19
23	-19	-18	-16	-12	.	28	12	9	5	-4	9	-23
24	-10	-22	-10	-8	.	15	15	1	2	1	10	-16
25	-14	-28	-6	.	.	21	10	1	-1	7	0	-11
26	-19	-25	-5	4	15	8	2	0	-3	13	-22	-8
27	-27	-15	.	19	.	.	-3	-4	0	13	-31	-2
28	-26	-9	11	17	.	.	.	-4	.	10	-25	-4
29	-27	-4	12	14	.	.	.	.	14	-3	-14	-3
30	-25	-2	-6	16	-8	.	.	.	.	-14	-8	-3
31	-22	1	.	5	.	.	.	.	15	.	-4	.

Dot symbol indicates no data available for the day.

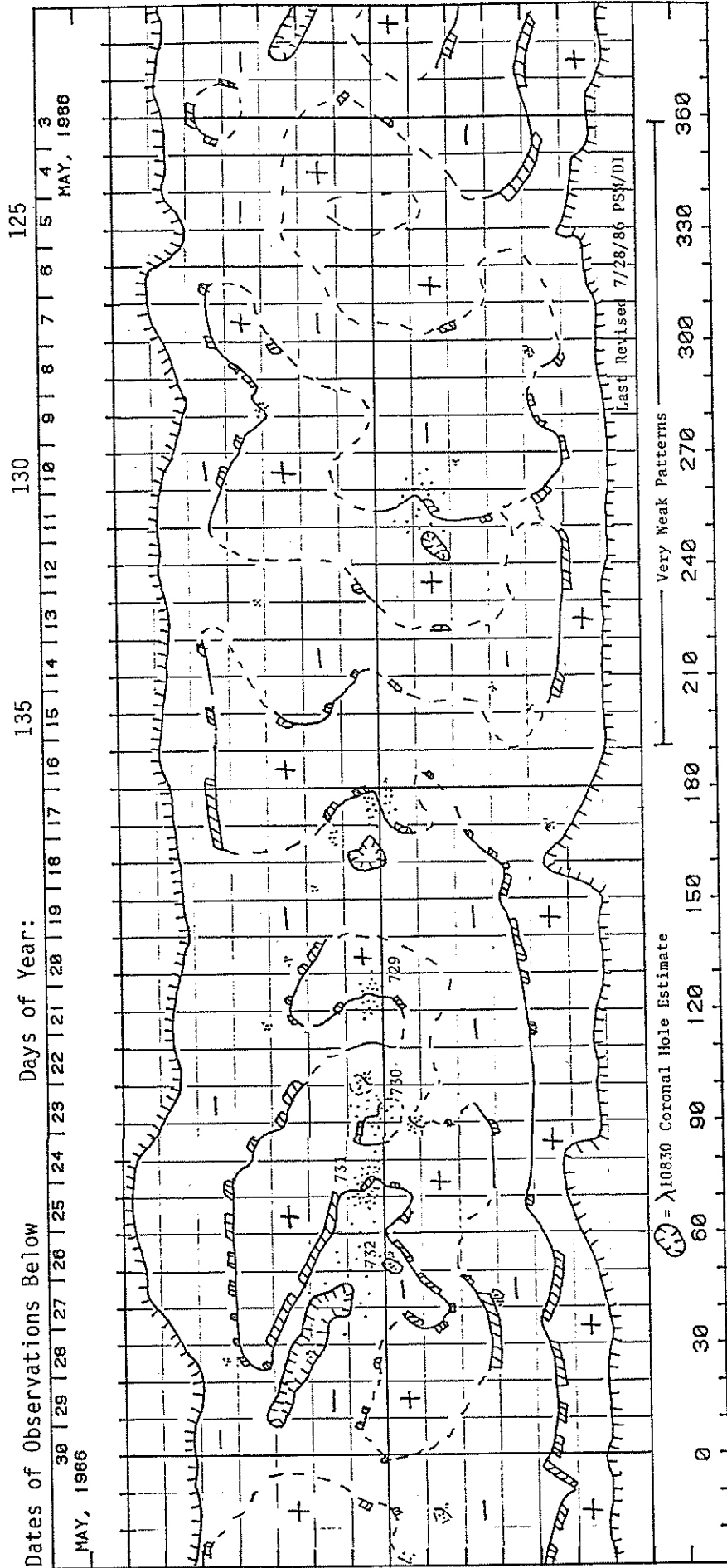


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PRELIMINARY H-ALPHA SOLAR SYNOPTIC CHART  
CARRINGTON ROTATION NUMBER 1775  
(May 3 to May 30, 1986)



Heliographic Longitude

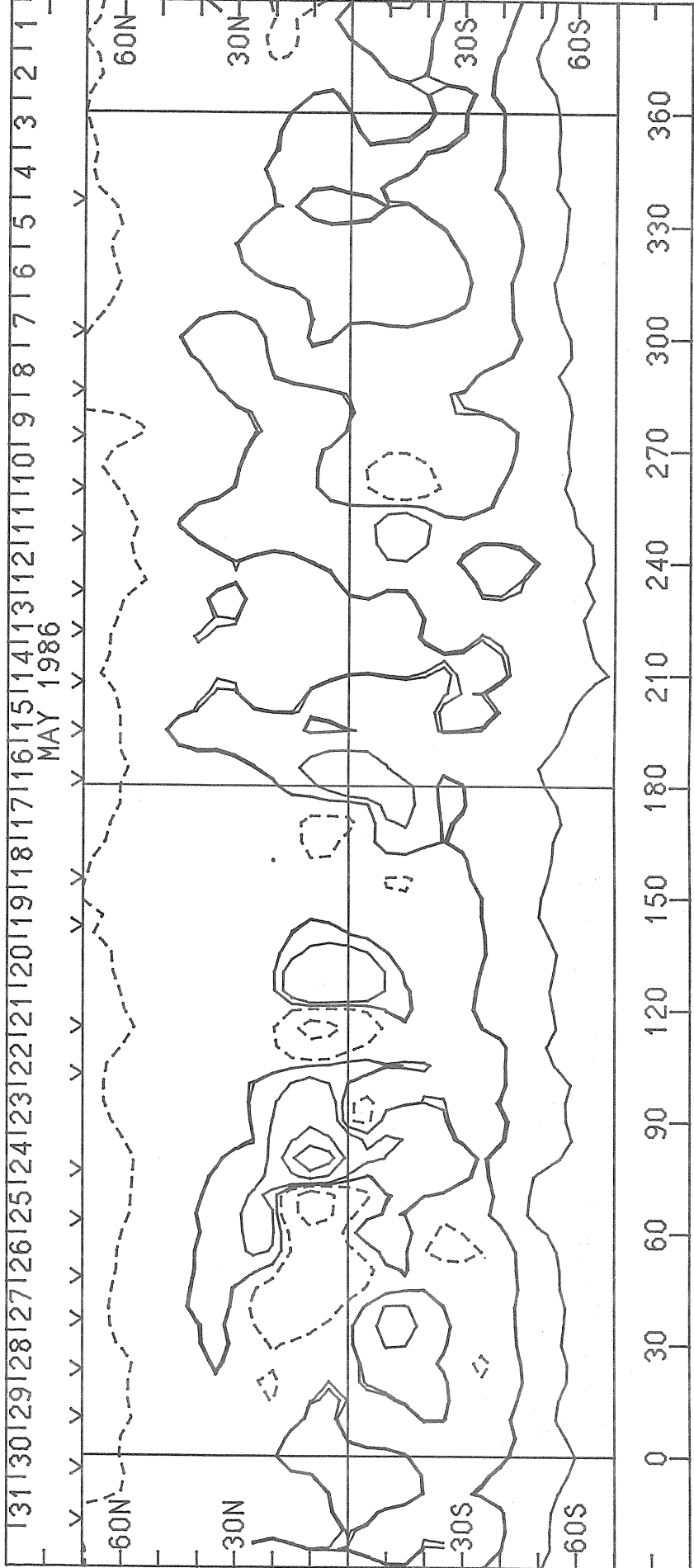
SOLAR MAGNETIC FIELD SYNOPTIC CHART  
 CARRINGTON ROTATION NUMBER 1775  
 (May 3 to May 30, 1986)

Stanford Solar Observatory

0, +100, 500, 1000, 2000 microTesla

100

-100



Heliographic Longitude

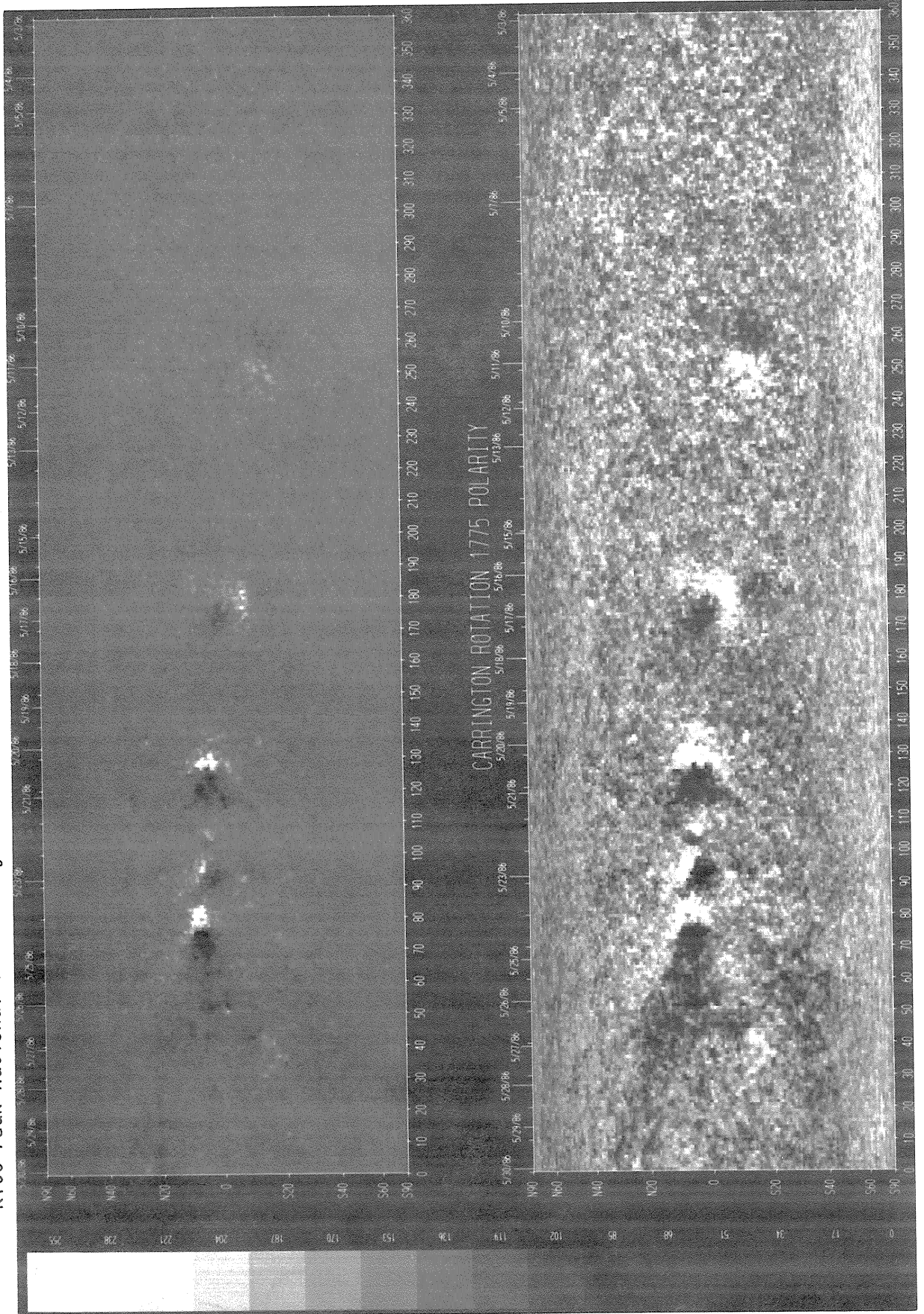


SOLAR MAGNETIC FIELD SYNOPTIC CHART

CARRINGTON ROTATION NUMBER 1775  
(May 3 to May 30, 1986)

Dates of Observations

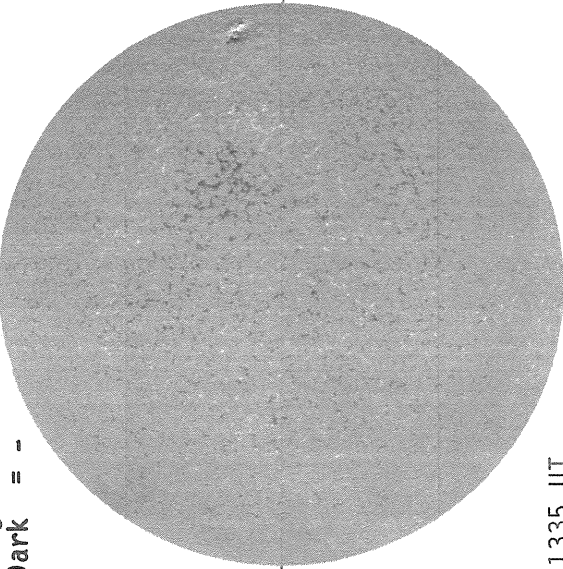
Kitt Peak National Observatory



M A Y 01, 1 9 8 6 (P=-24.11, B<sub>0</sub>=-4.15, L<sub>0</sub>= 31.91)

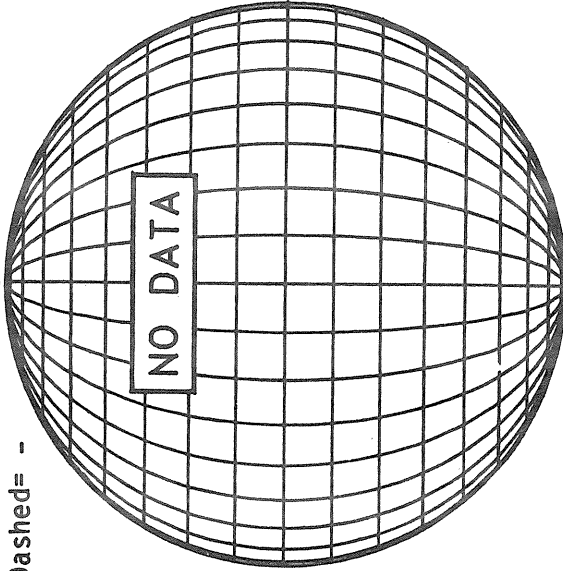
KITT PEAK MAGNETOGRAM

Bright= +  
Dark = -



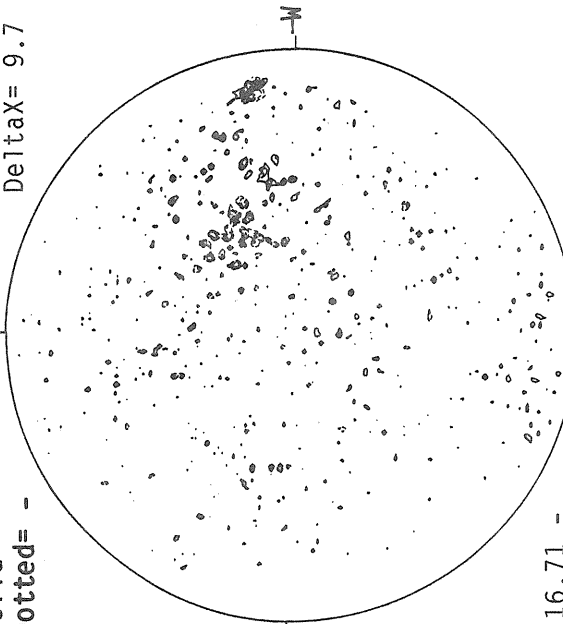
STANFORD MAGNETOGRAM

Solid = +  
Dashed = -



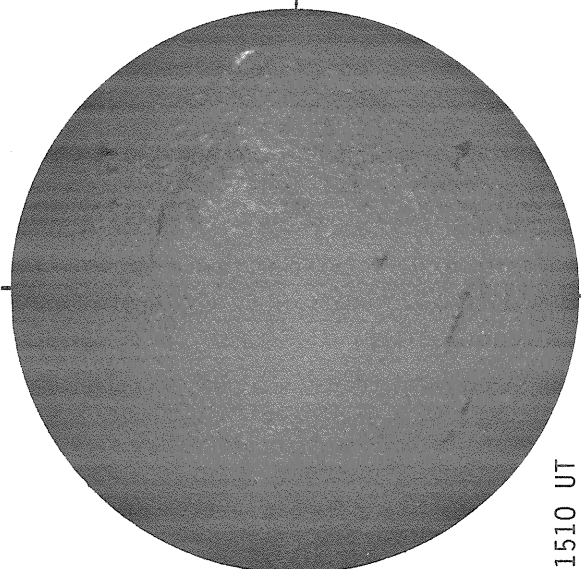
MT. WILSON MAGNETOGRAM

Solid = +  
Dotted = -

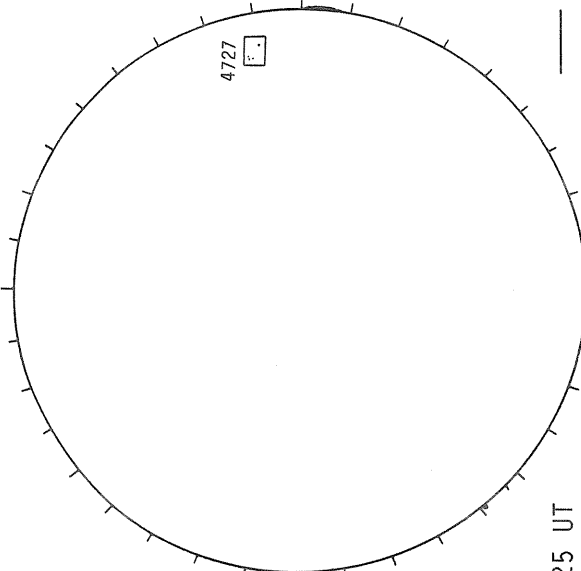


DeltaY=12.9  
DeltaX= 9.7

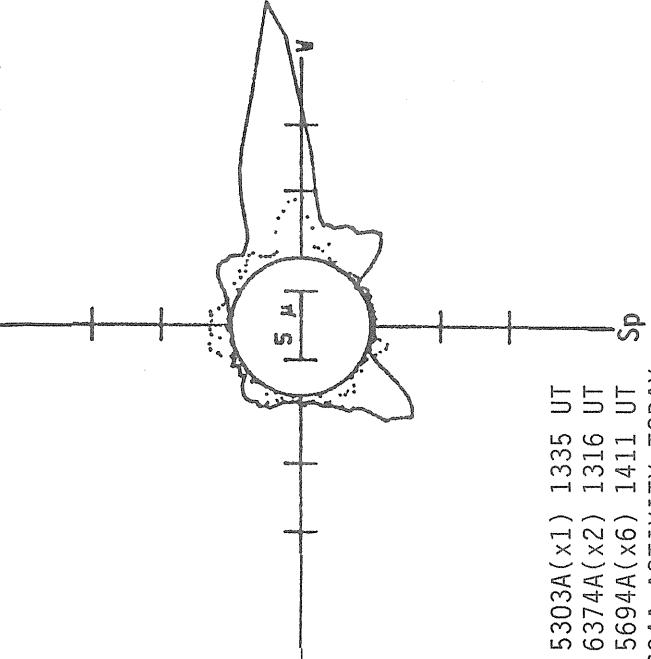
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



— 5303A(x1) 1335 UT  
 .... 6374A(x2) 1316 UT  
 xxxxx 5694A(x6) 1411 UT  
 NO 5694A ACTIVITY TODAY

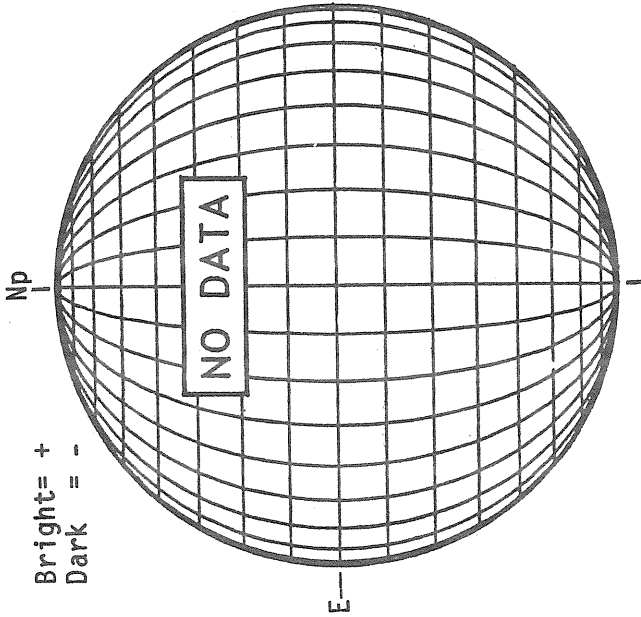
1425 UT  
 1440 UT BOUL Prom

1510 UT

26  
May 86

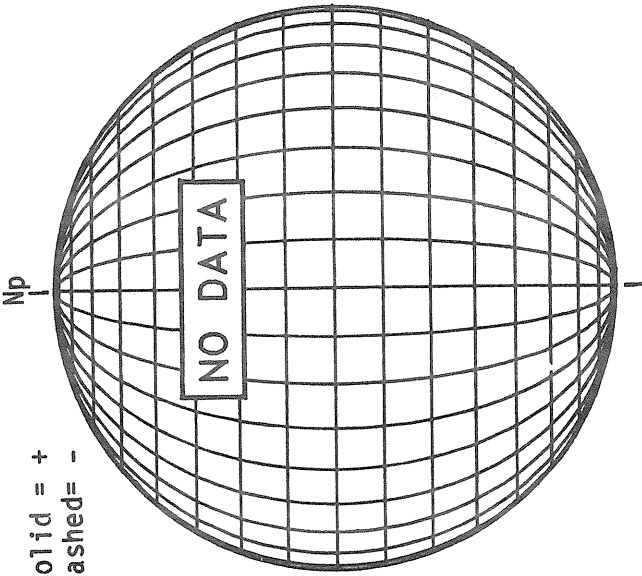
M A Y 02, 1 9 8 6 (P=-23.93, B<sub>0</sub>=-4.05, L<sub>0</sub>= 18.69)

KITT PEAK MAGNETOGRAM



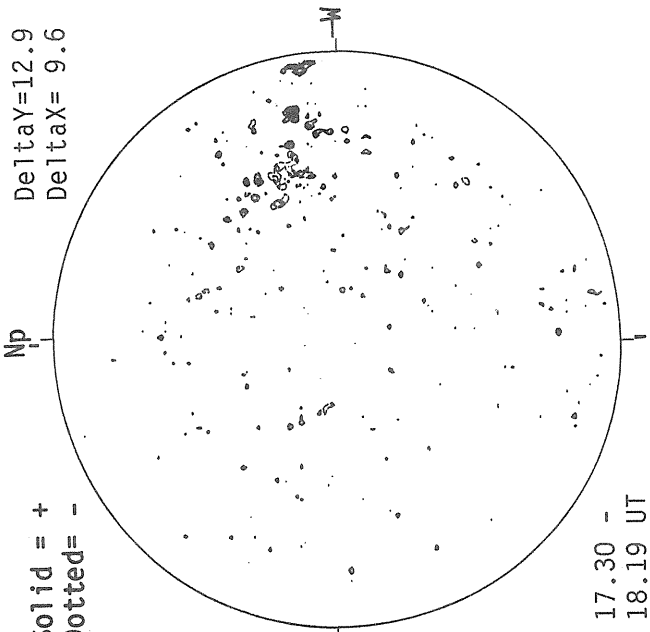
Bright= +  
Dark = -

STANFORD MAGNETOGRAM



Solid = +  
Dashed = -

MT. WILSON MAGNETOGRAM

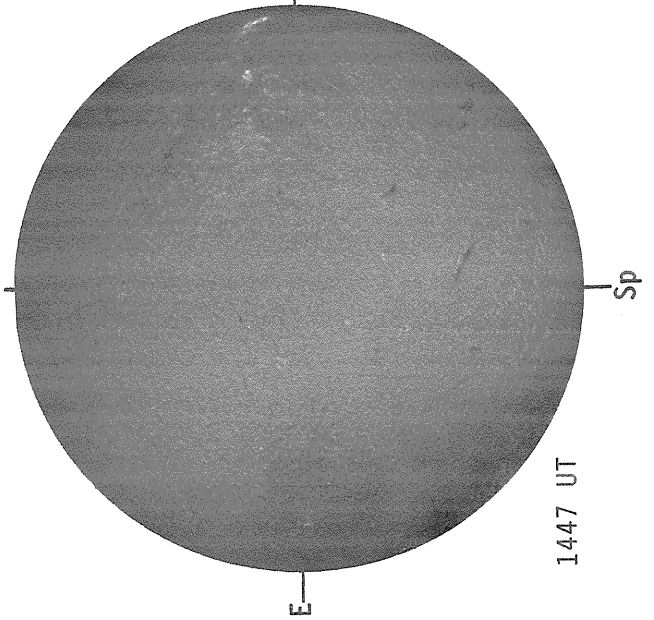


Solid = +  
Dotted = -

DeltaY=12.9  
DeltaX= 9.6

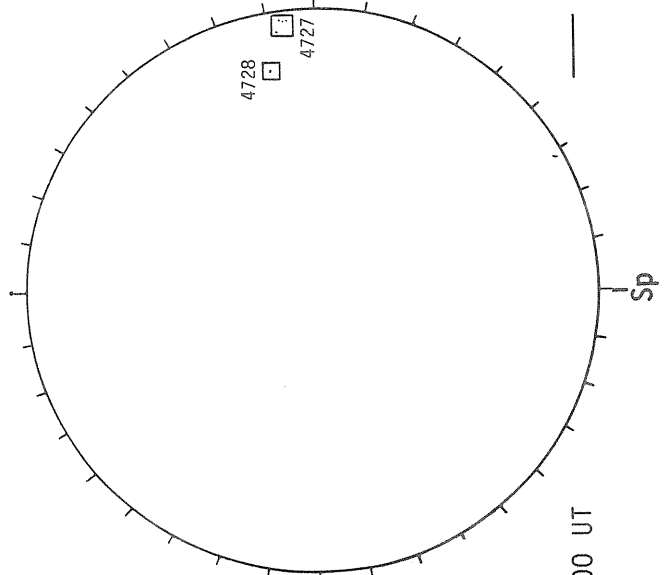
17.30 -  
18.19 UT

SACRAMENTO PEAK H-ALPHA



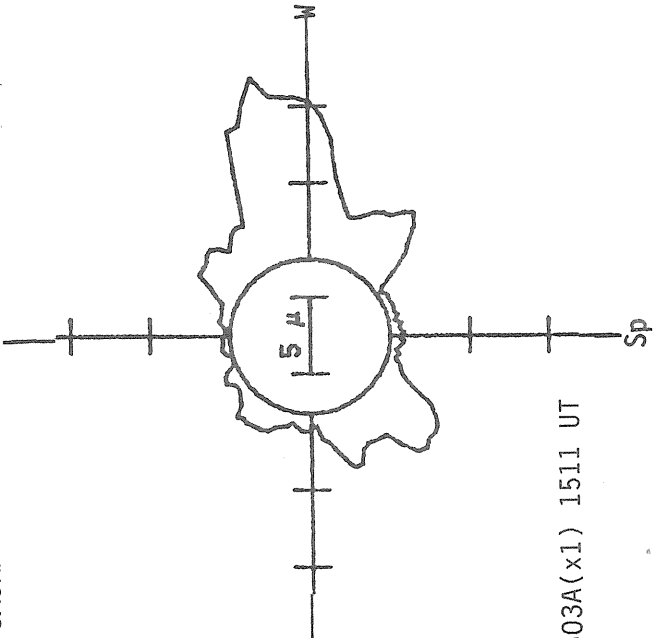
1447 UT

BOULDER SUNSPOTS



1500 UT

SACRAMENTO PEAK CORONA (1.15 Radii)

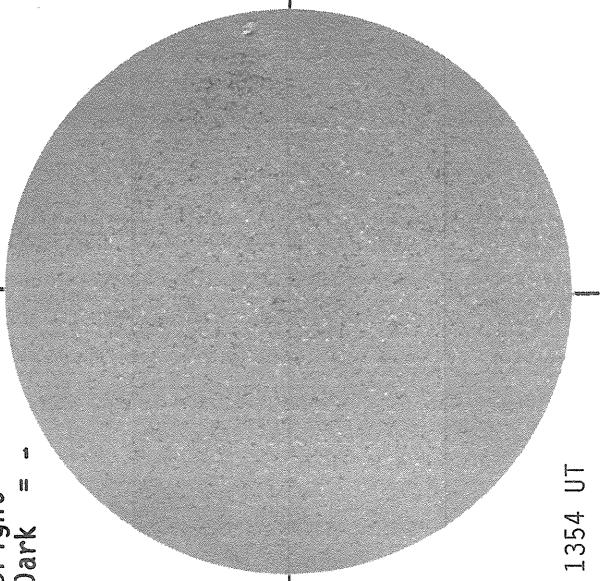


5303A(x1) 1511 UT

M A Y 03, 1 9 8 6 (P=-23.75, B<sub>0</sub>=-3.95, L<sub>0</sub>= 5.48)

KITT PEAK MAGNETOGRAM

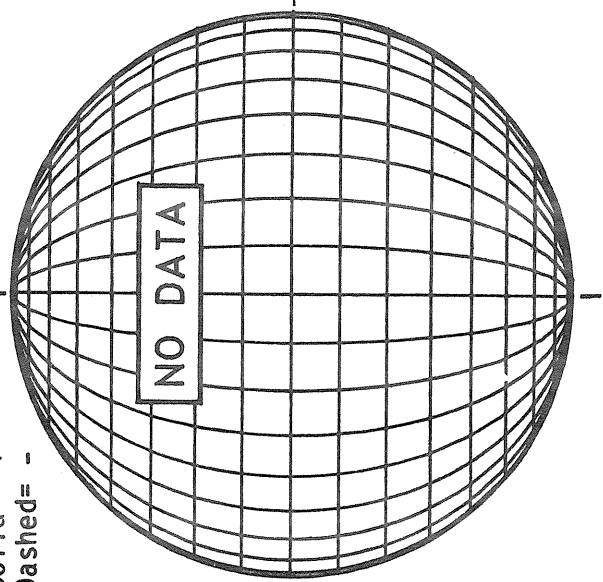
Bright= +  
Dark = -



1354 UT

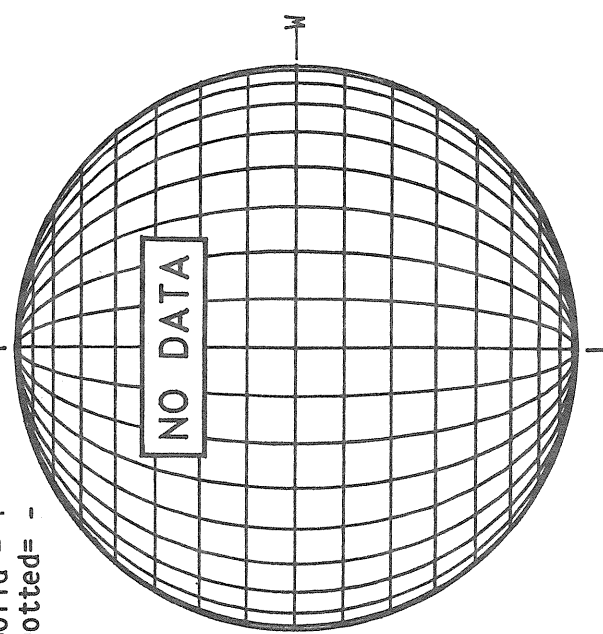
STANFORD MAGNETOGRAM

Solid = +  
Dashed = -

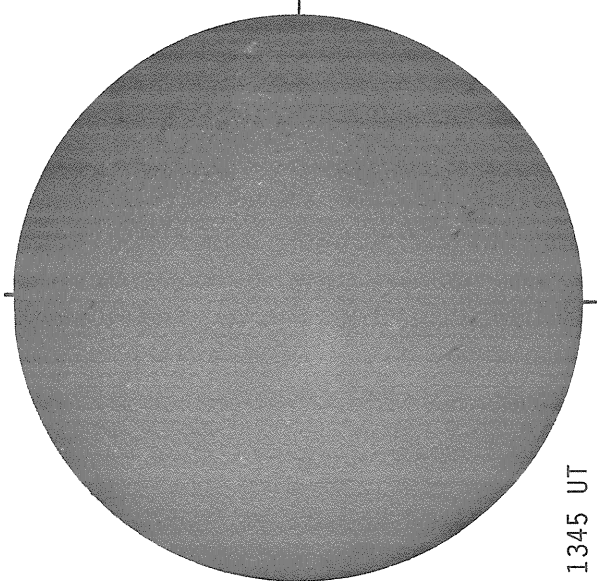


MT. WILSON MAGNETOGRAM

Solid = +  
Dotted = -

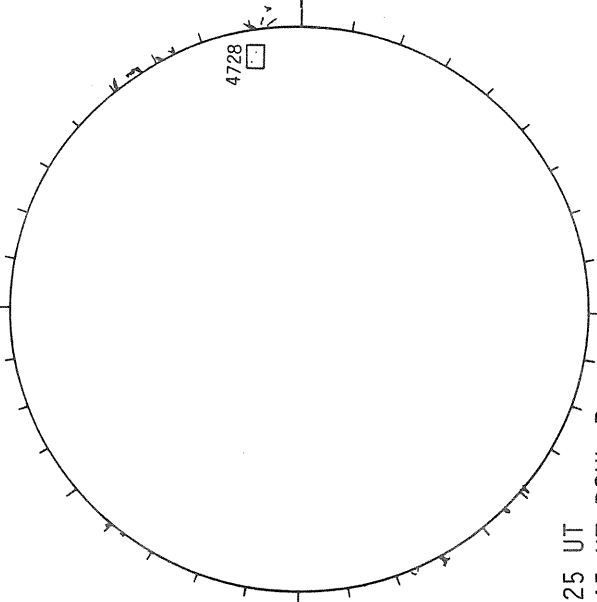


SACRAMENTO PEAK H-ALPHA



1345 UT

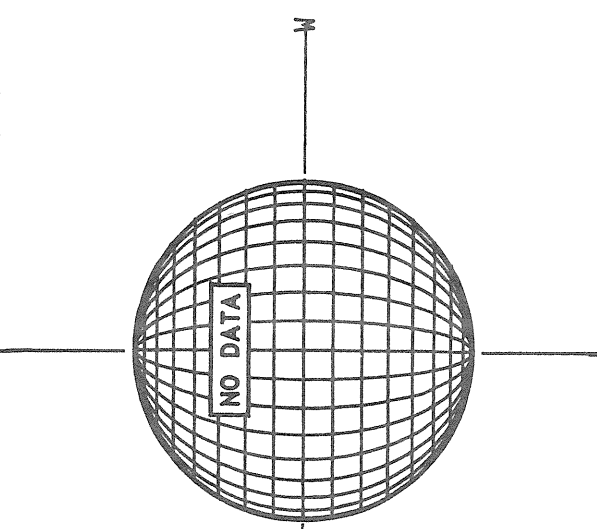
BOULDER SUNSPOTS



1325 UT

1345 UT BOUL Prom

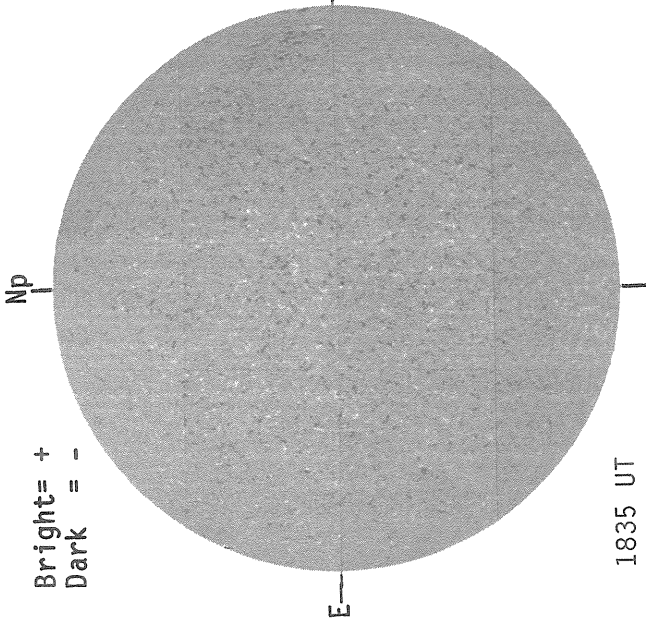
SACRAMENTO PEAK CORONA (1.15 Radii)



28  
May 86

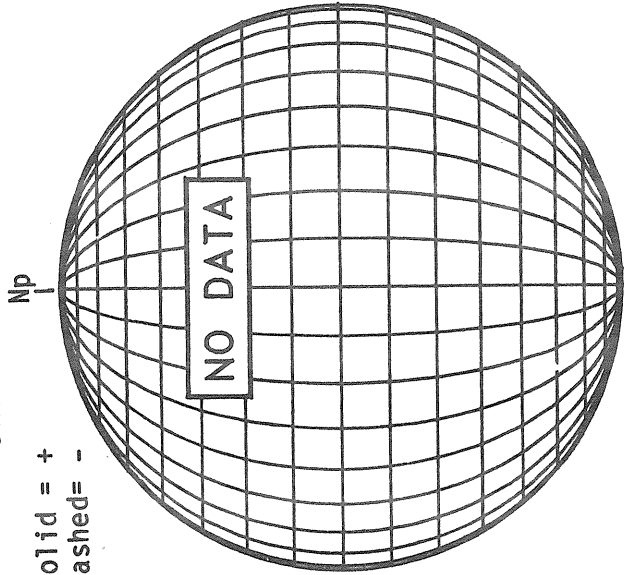
MAY 04, 1986 (P=-23.55, B<sub>0</sub>=-3.85, L<sub>0</sub>=352.26)

KITT PEAK MAGNETOGRAM



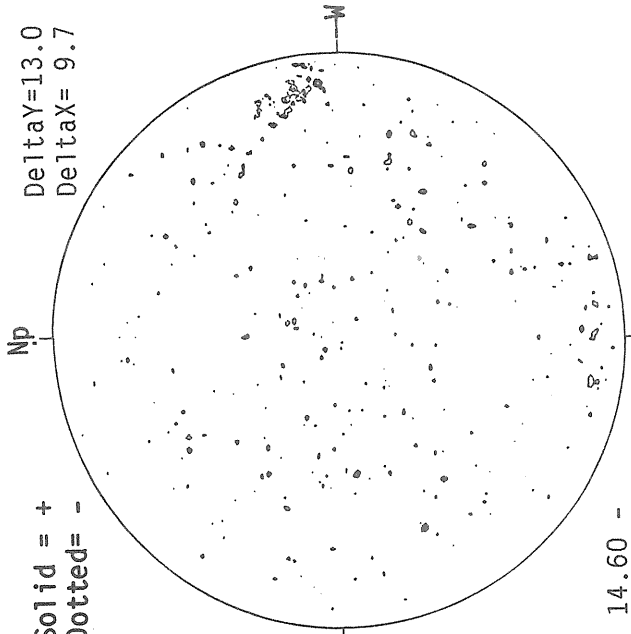
Bright = +  
Dark = -

STANFORD MAGNETOGRAM



Solid = +  
Dashed = -

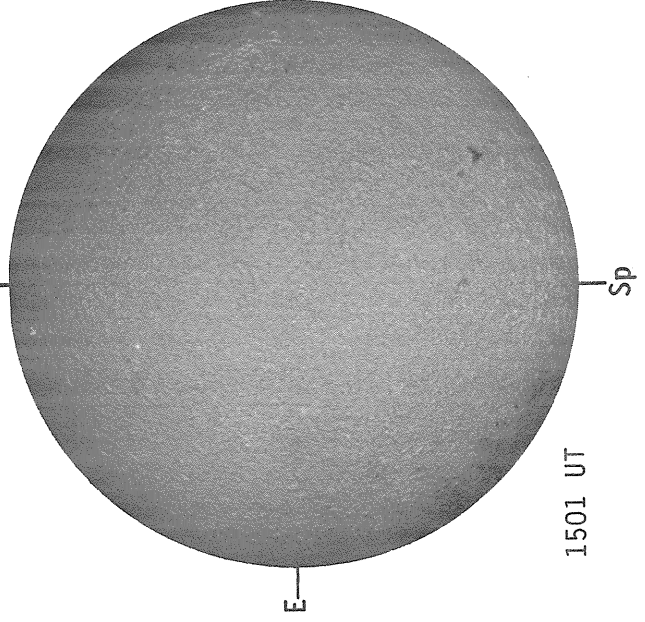
MT. WILSON MAGNETOGRAM



Solid = +  
Dotted = -

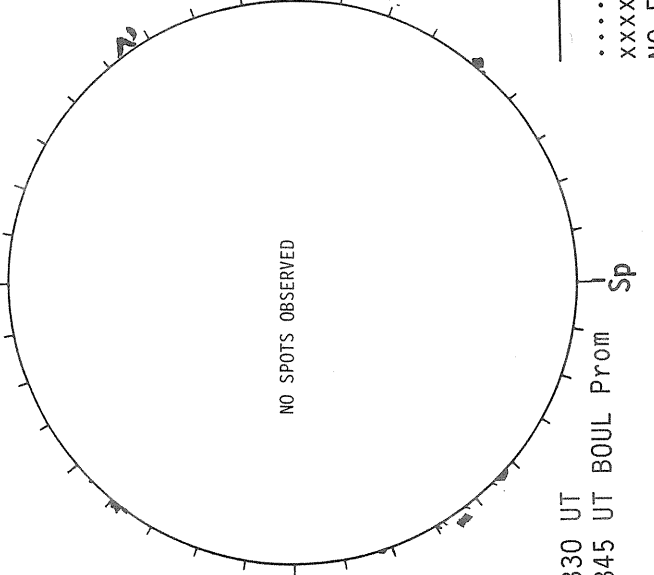
Delta Y = 13.0  
Delta X = 9.7

SACRAMENTO PEAK H-ALPHA



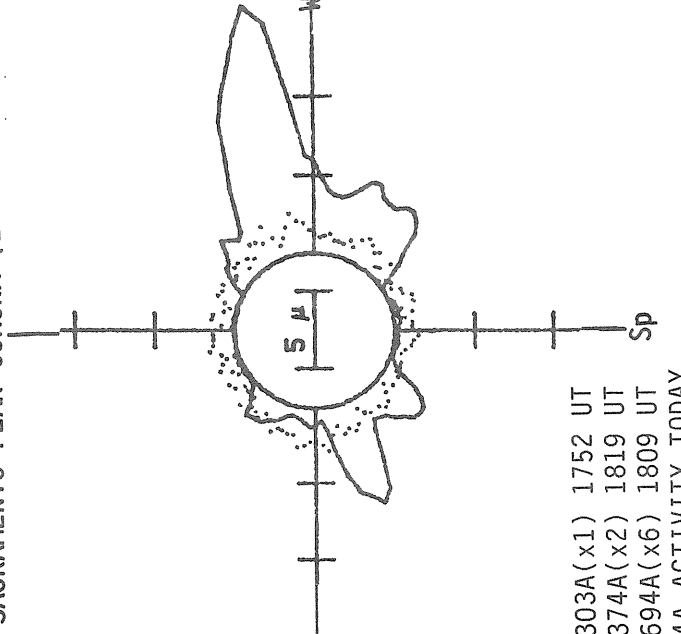
1501 UT

BOULDER SUNSPOTS



1330 UT  
1345 UT BOUL Prom

SACRAMENTO PEAK CORONA (1.15 Radii)

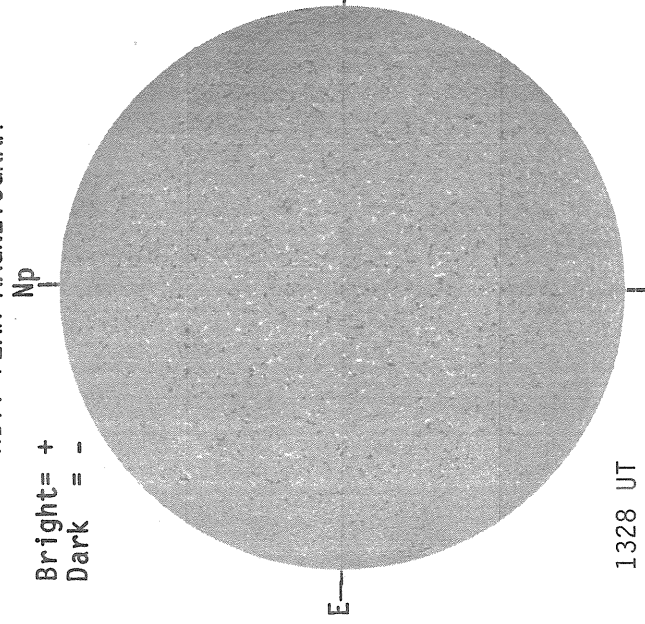


— 5303A(x1) 1752 UT  
..... 6374A(x2) 1819 UT  
xxxxx 5694A(x6) 1809 UT  
NO 5694A ACTIVITY TODAY

M A Y 05, 1 9 8 6 (P=-23.35, B<sub>0</sub>=-3.75, L<sub>0</sub>= 339.04)

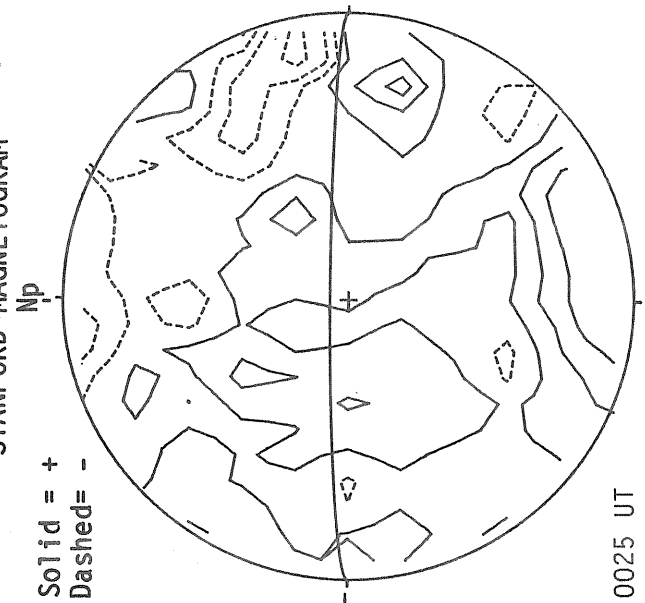
KITT PEAK MAGNETOGRAM

Bright= +  
Dark = -



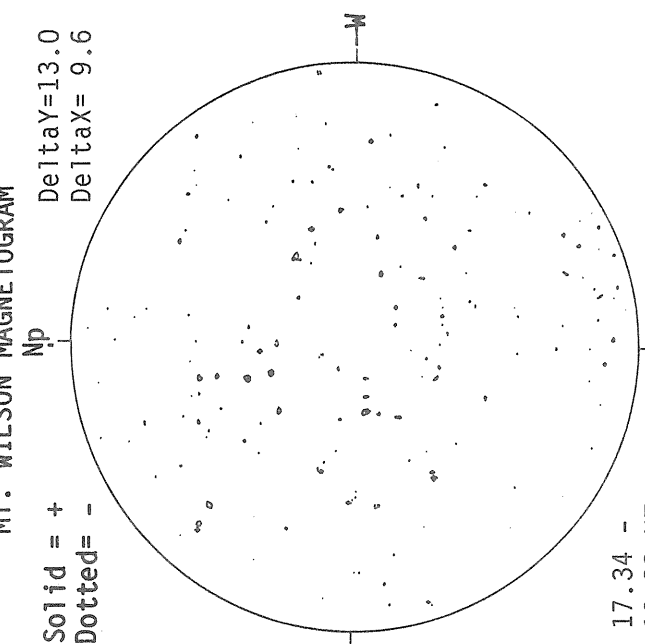
STANFORD MAGNETOGRAM

Solid = +  
Dashed = -

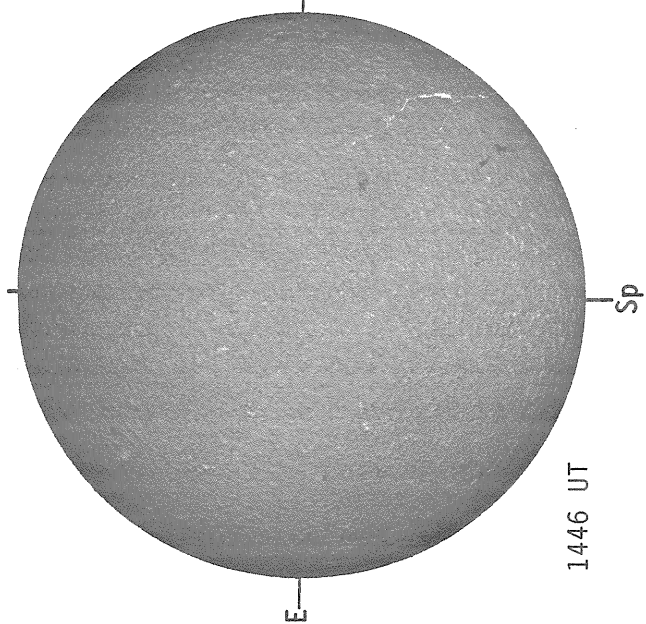


MT. WILSON MAGNETOGRAM

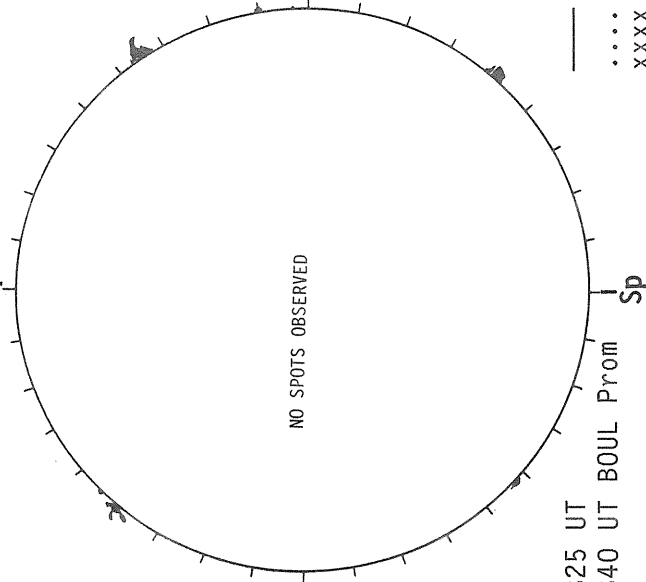
Solid = +  
Dotted = -  
Delta Y = 13.0  
Delta X = 9.6



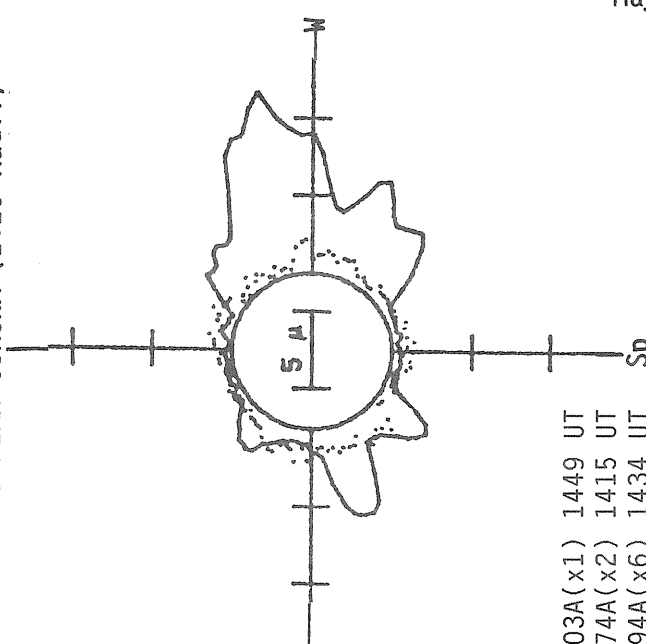
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



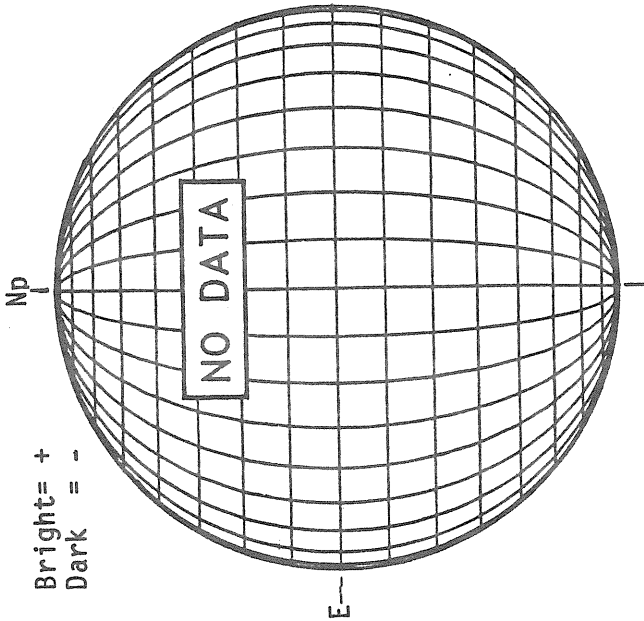
SACRAMENTO PEAK CORONA (1.15 Radii)



— 5303A(x1) 1449 UT  
 ..... 6374A(x2) 1415 UT  
 xxxxx 5694A(x6) 1434 UT  
 NO 5694A ACTIVITY TODAY

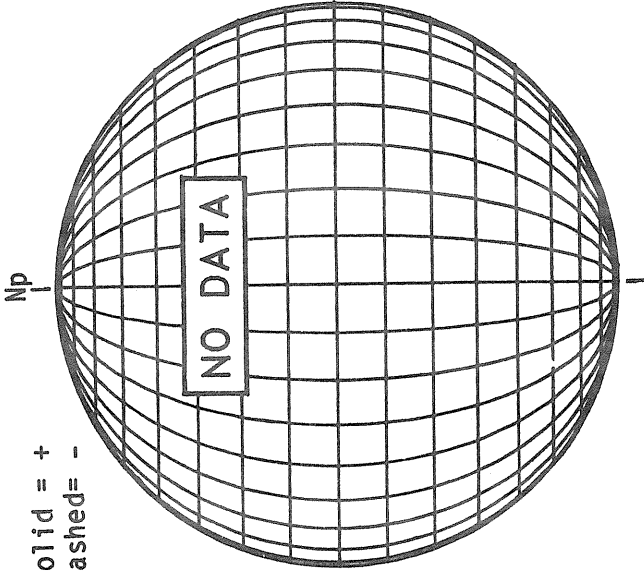
M A Y 06, 1 9 8 6 (P=-23.15, B<sub>0</sub>=-3.64, L<sub>0</sub>= 325.82)

KITT PEAK MAGNETOGRAM



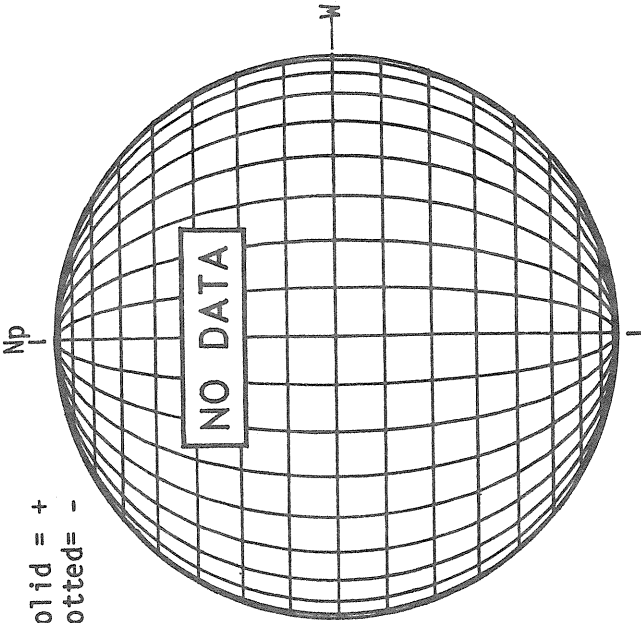
Bright = +  
Dark = -

STANFORD MAGNETOGRAM



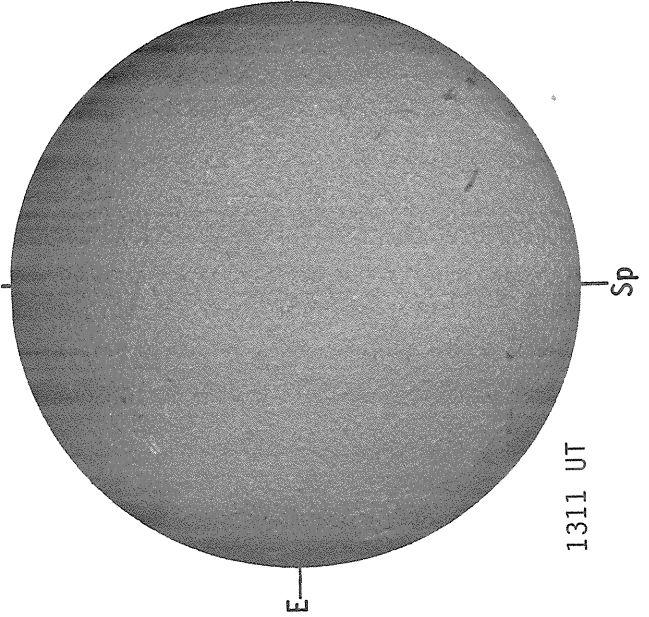
Solid = +  
Dashed = -

MT. WILSON MAGNETOGRAM



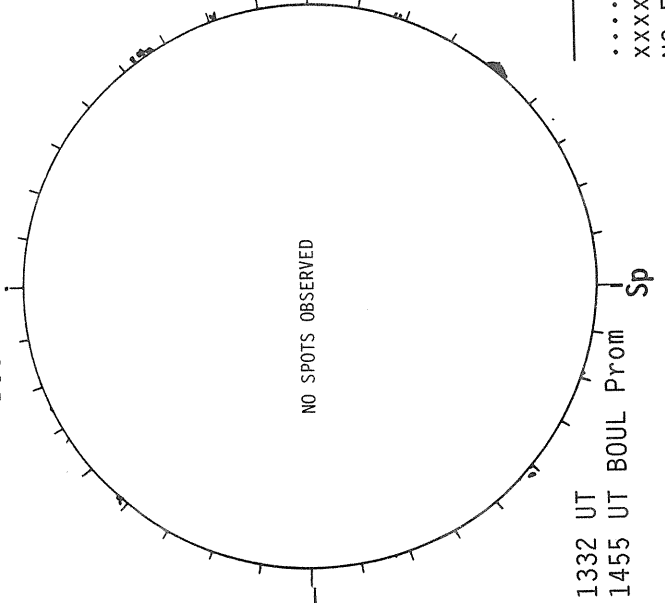
Solid = +  
Dotted = -

SACRAMENTO PEAK H-ALPHA



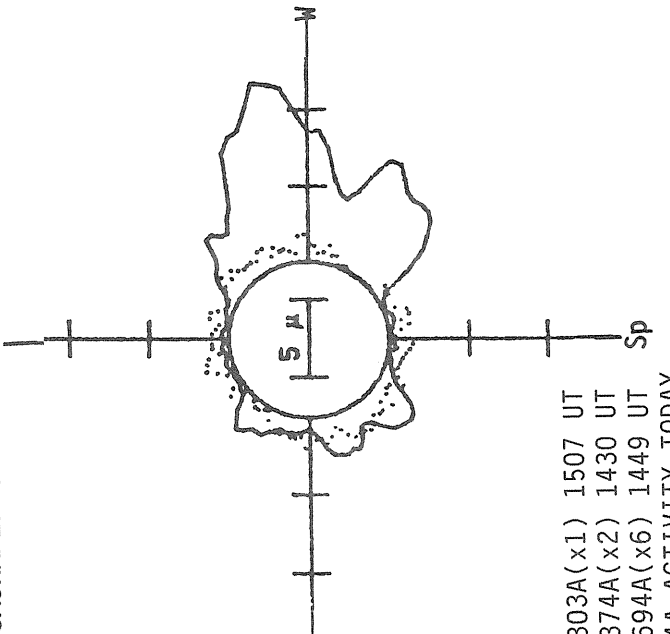
1311 UT

BOULDER SUNSPOTS



1332 UT  
1455 UT BOUL Prom

SACRAMENTO PEAK CORONA (1.15 Radii)



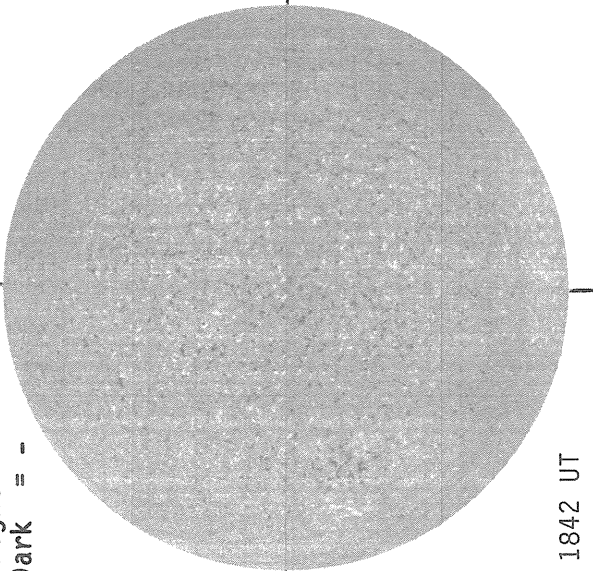
— 5303A(x1) 1507 UT  
 .... 6374A(x2) 1430 UT  
 xxxxx 5694A(x6) 1449 UT  
 NO 5694A ACTIVITY TODAY

M A Y 07, 1 9 8 6 (P=-22.93, B<sub>0</sub>=-3.54, L<sub>0</sub>= 312.60)

KITT PEAK MAGNETOGRAM

Bright= +  
Dark = -

Np

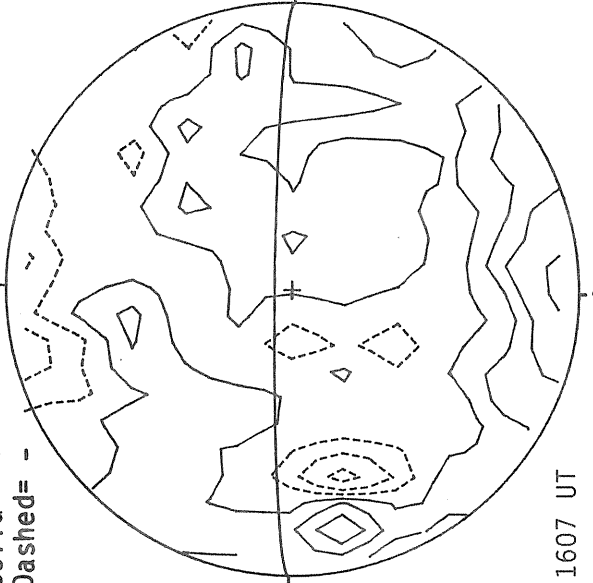


1842 UT

STANFORD MAGNETOGRAM

Solid = +  
Dashed = -

Np



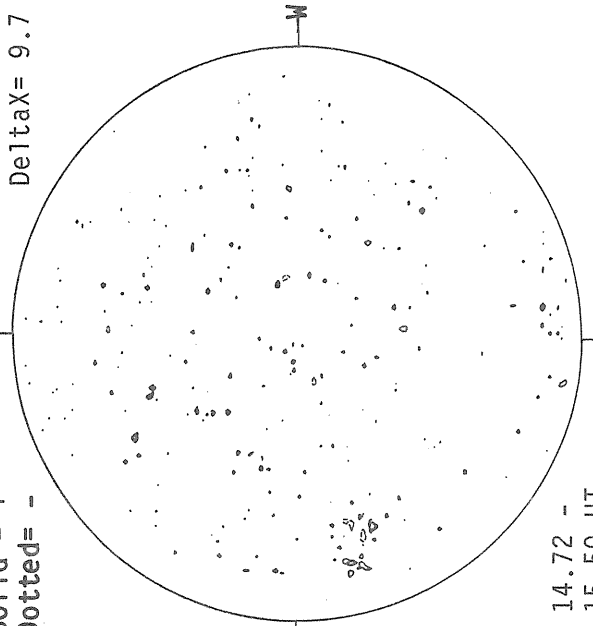
1607 UT

MT. WILSON MAGNETOGRAM

Solid = +  
Dotted = -

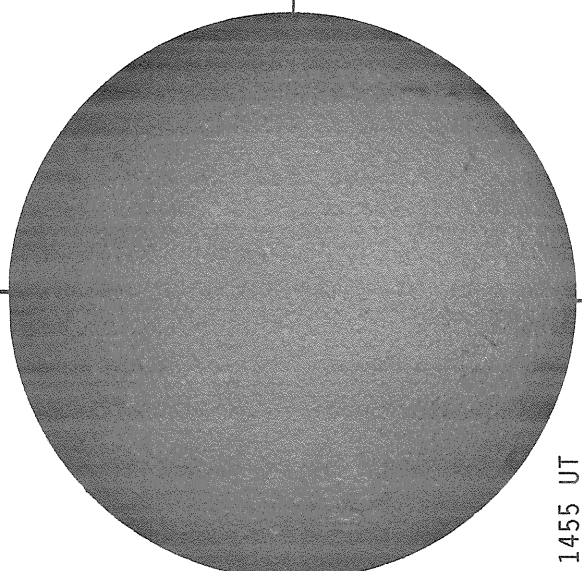
Np

DeltaY=13.0  
DeltaX= 9.7



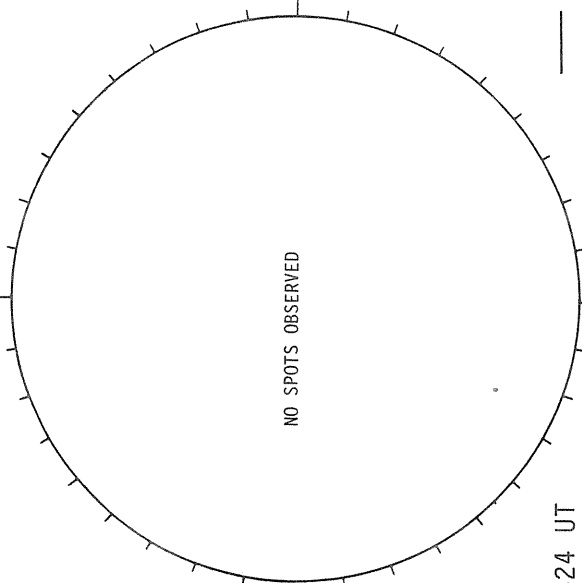
14.72 -  
15.59 UT

SACRAMENTO PEAK H-ALPHA



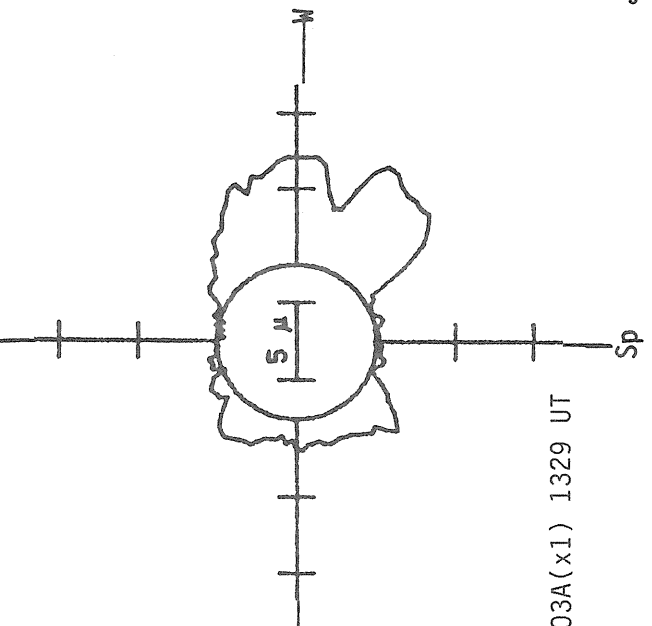
1455 UT

RAMEY SUNSPOTS



1424 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



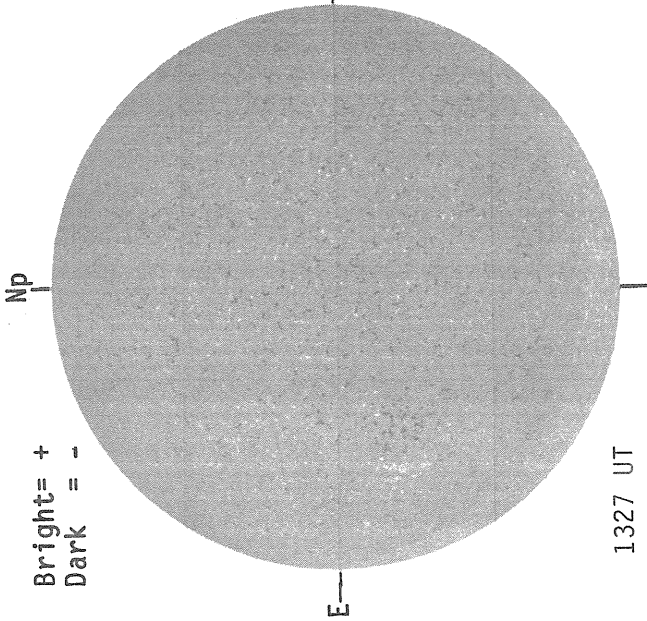
5303A(x1) 1329 UT



M A Y 08, 1 9 8 6 (P=-22.71, B<sub>0</sub> = -3.43, L<sub>0</sub> = 299.38)

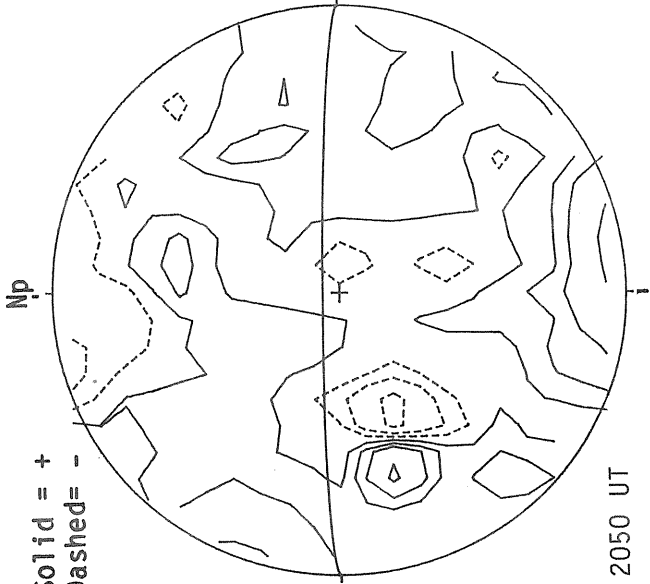
KITT PEAK MAGNETOGRAM

Bright = +  
Dark = -



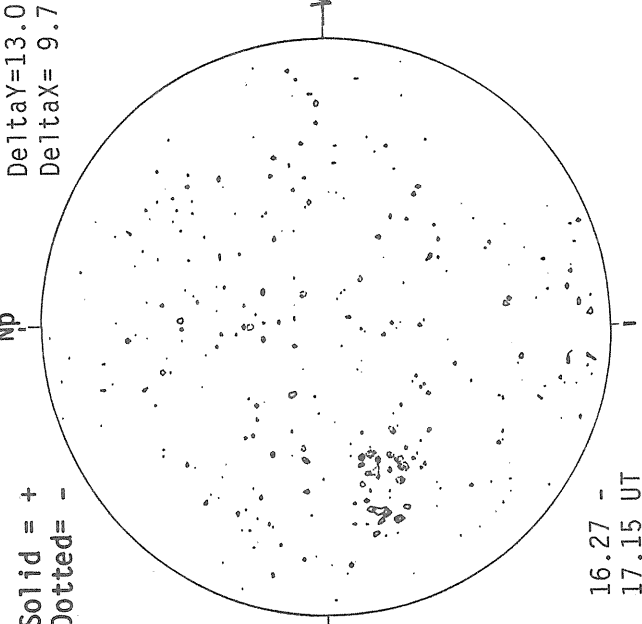
STANFORD MAGNETOGRAM

Solid = +  
Dashed = -

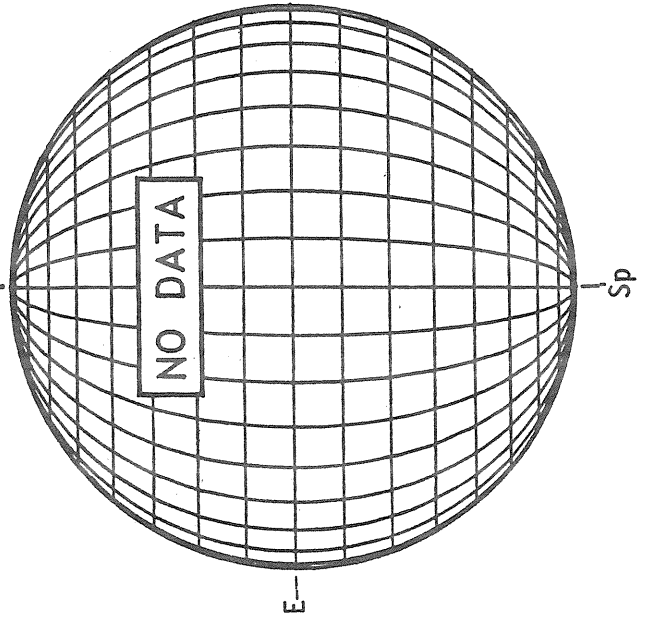


MT. WILSON MAGNETOGRAM

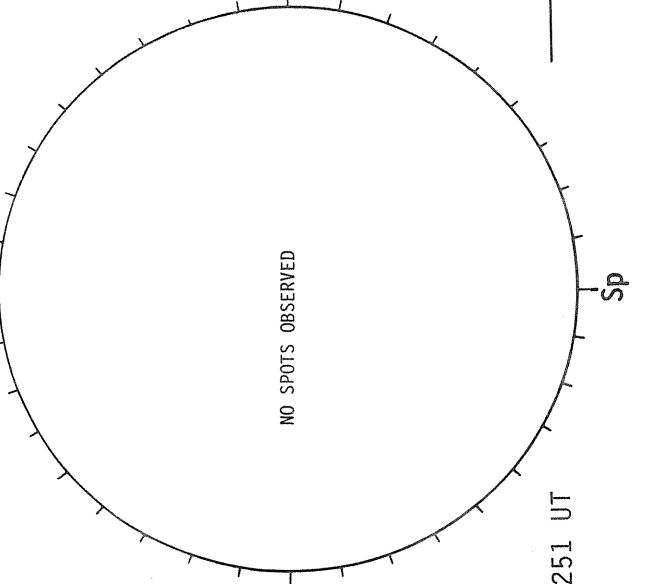
Solid = +  
Dotted = -



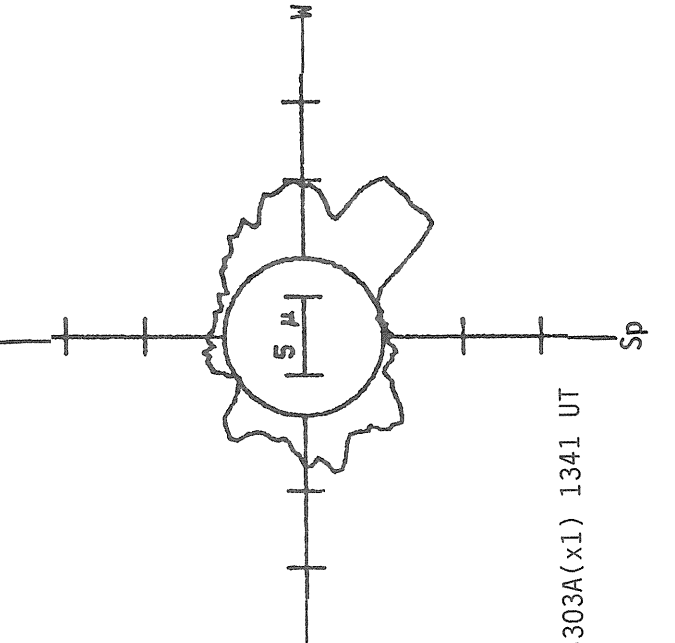
SACRAMENTO PEAK H-ALPHA



RAMEY SUNSPOTS



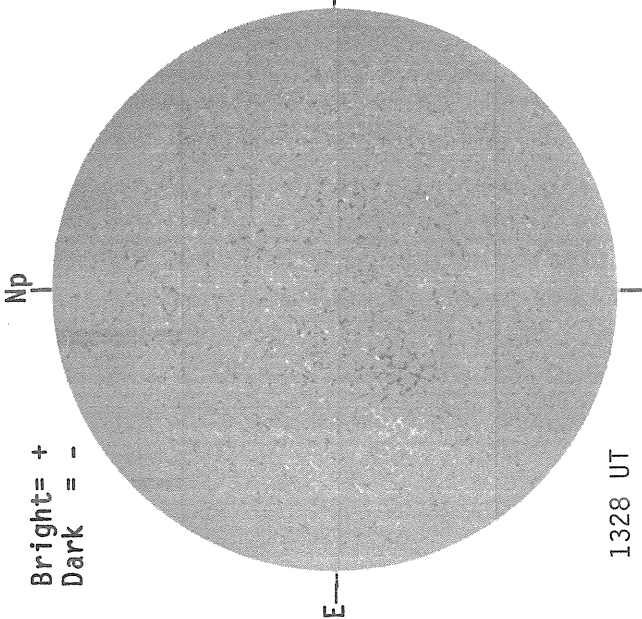
SACRAMENTO PEAK CORONA (1.15 Radii)



M A Y 09, 1 9 8 6 (P=-22.48, B<sub>0</sub>=-3.33, L<sub>0</sub>= 286.16)

KITT PEAK MAGNETOGRAM

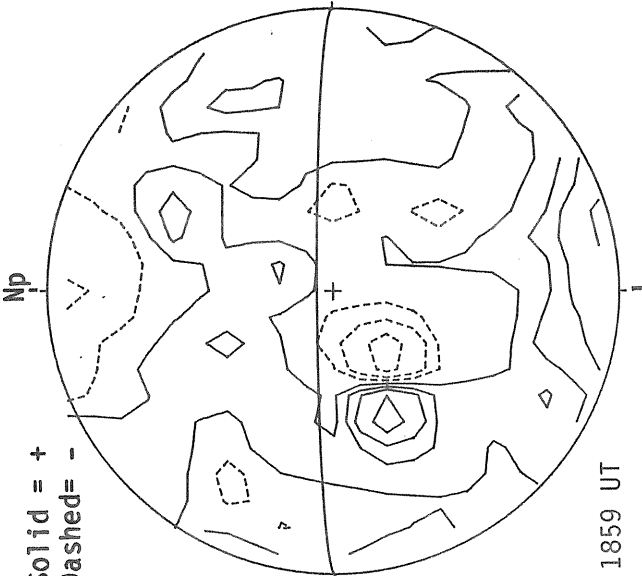
Bright= +  
Dark = -



1328 UT

STANFORD MAGNETOGRAM

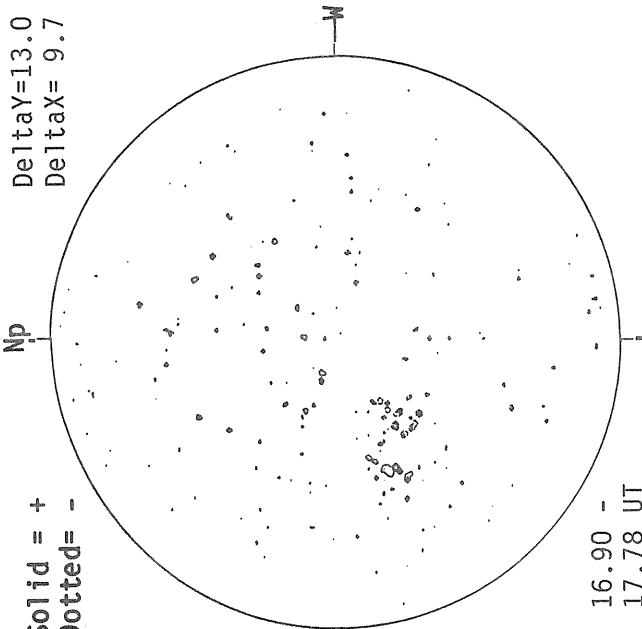
Solid = +  
Dashed = -



1859 UT

MT. WILSON MAGNETOGRAM

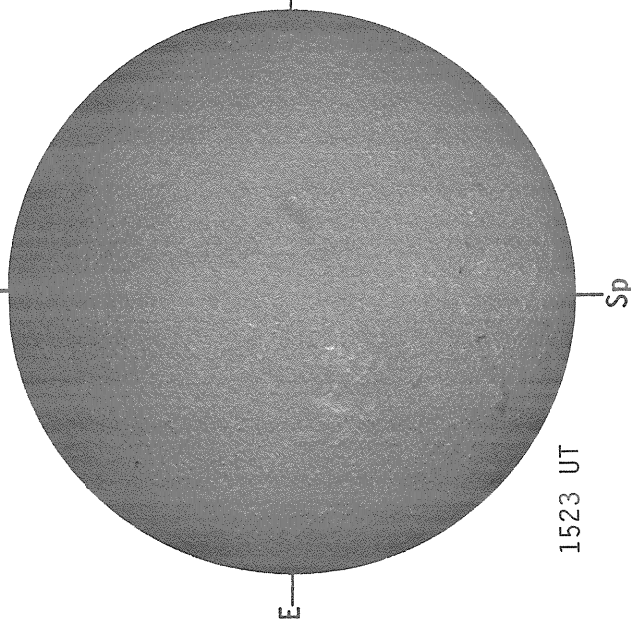
Solid = +  
Dotted = -



16.90 -  
17.78 UT

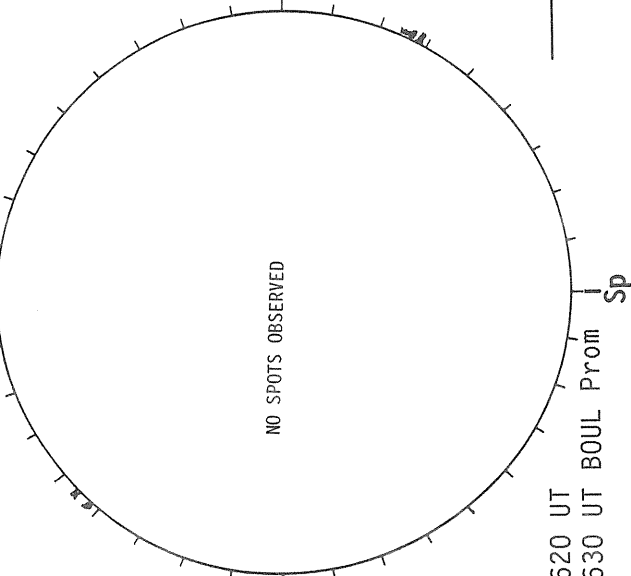
DeltaY=13.0  
DeltaX= 9.7

SACRAMENTO PEAK H-ALPHA



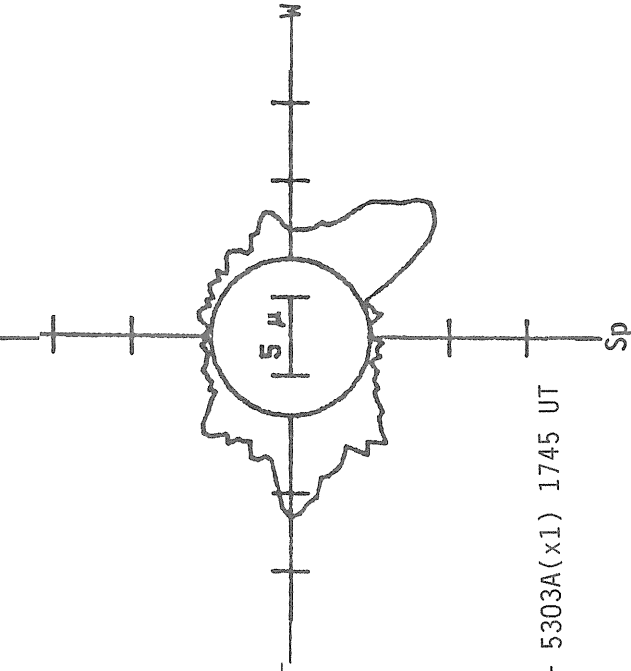
1523 UT

BOULDER SUNSPOTS



1620 UT  
1630 UT BOUL Prom

SACRAMENTO PEAK CORONA (1.15 Radii)



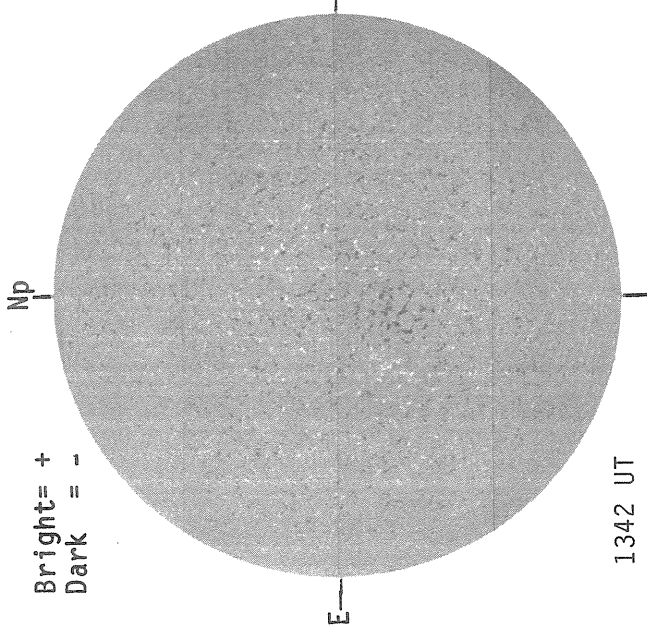
5303A(x1) 1745 UT

M A Y 10, 1 9 8 6 (P=-22.25, B<sub>0</sub>=-3.22, L<sub>0</sub>= 272.94)

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KITT PEAK MAGNETOGRAM

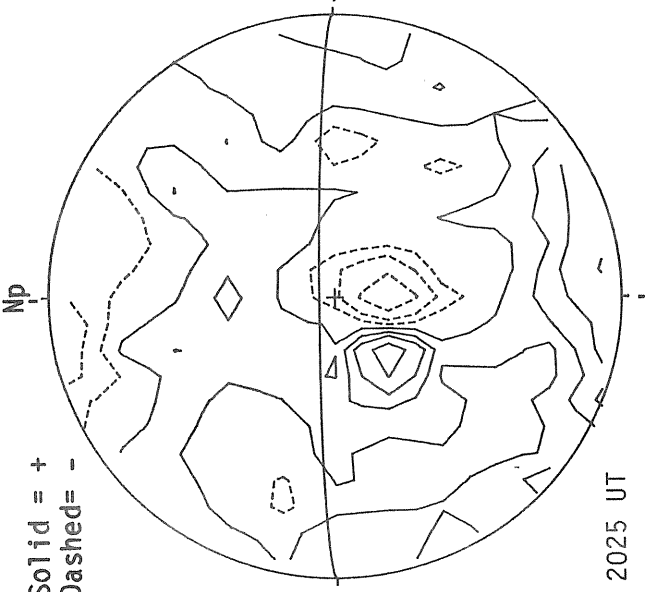
Bright= +  
Dark = -



1342 UT

STANFORD MAGNETOGRAM

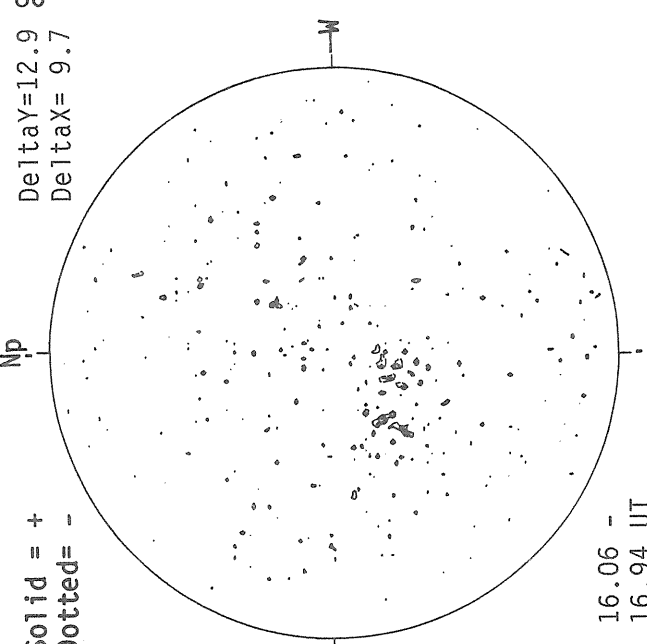
Solid = +  
Dashed = -



2025 UT

MT. WILSON MAGNETOGRAM

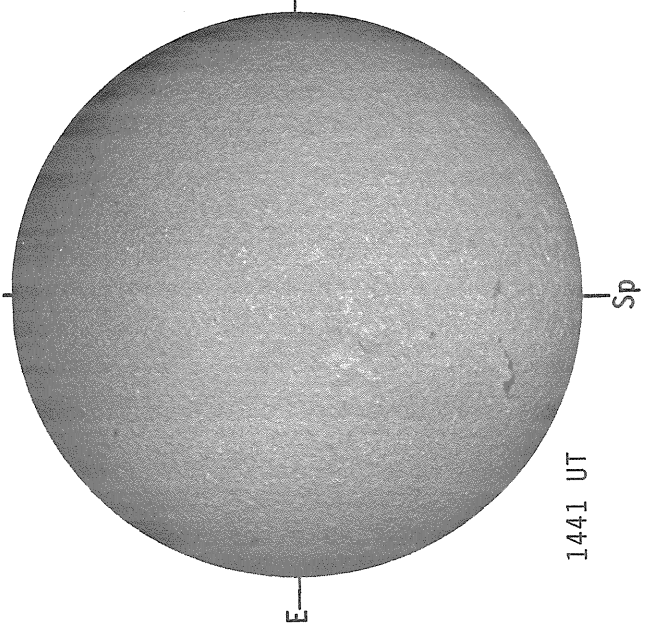
Solid = +  
Dotted = -



16.06 -  
16.94 UT

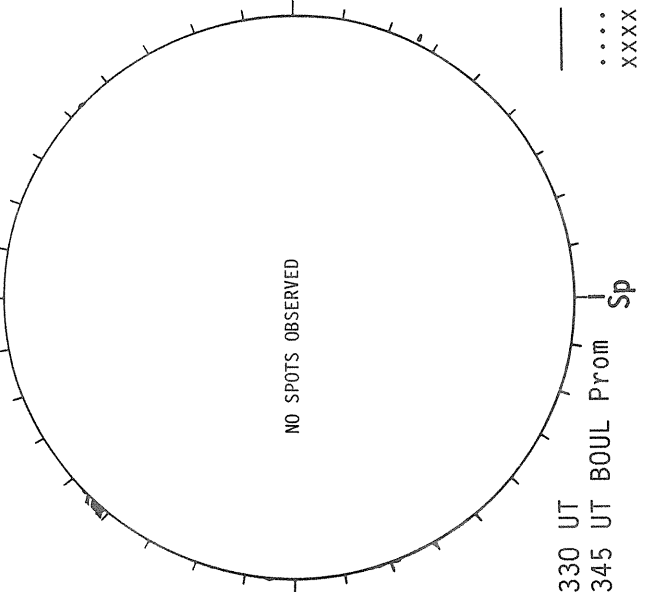
DeltaY=12.9  
DeltaX= 9.7

SACRAMENTO PEAK H-ALPHA



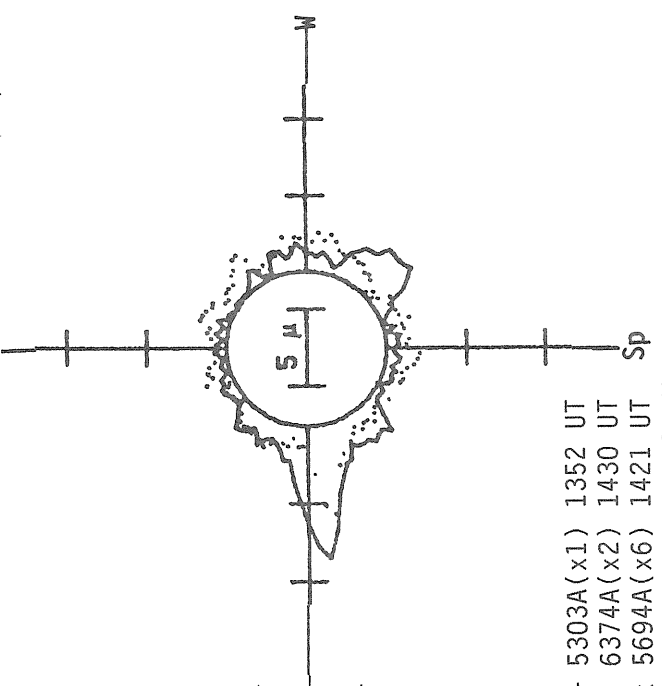
1441 UT

BOULDER SUNSPOTS



1330 UT  
1345 UT BOUL Prom  
Sp

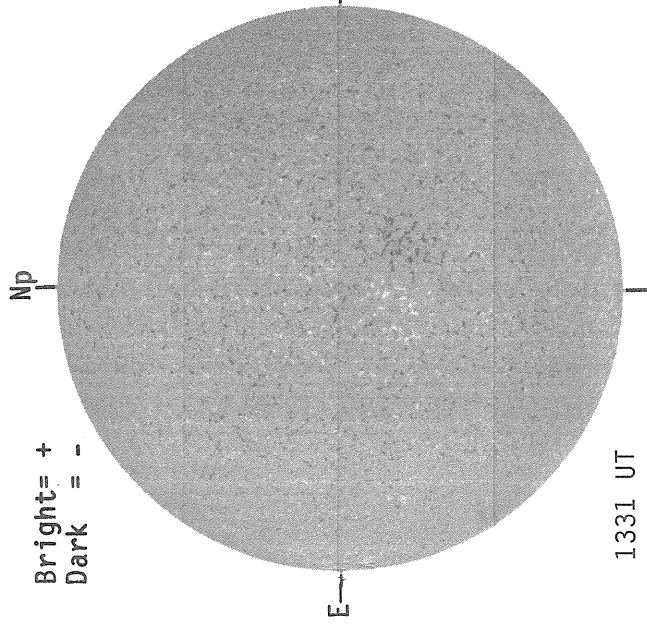
SACRAMENTO PEAK CORONA (1.15 Radii)



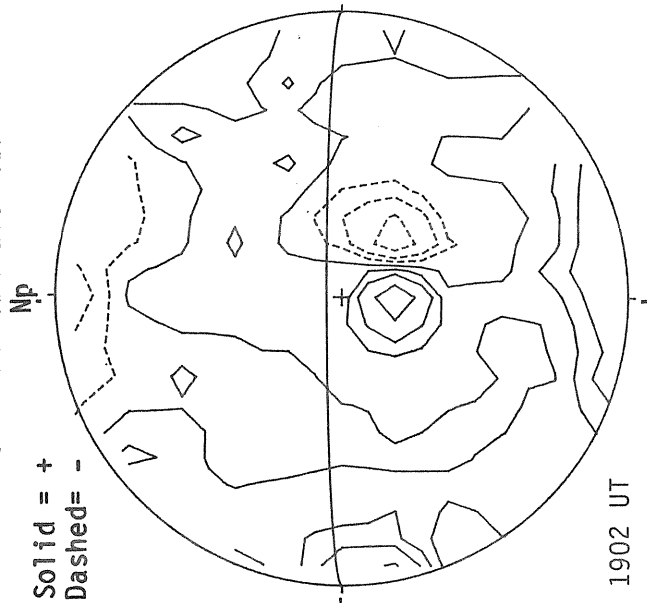
— 5303A(x1) 1352 UT  
.... 6374A(x2) 1430 UT  
xxxx 5694A(x6) 1421 UT  
NO 5694A ACTIVITY TODAY

M A Y 11, 1 9 8 6 (P=-22.00, B<sub>0</sub>=-3.11, L<sub>0</sub>= 259.72)

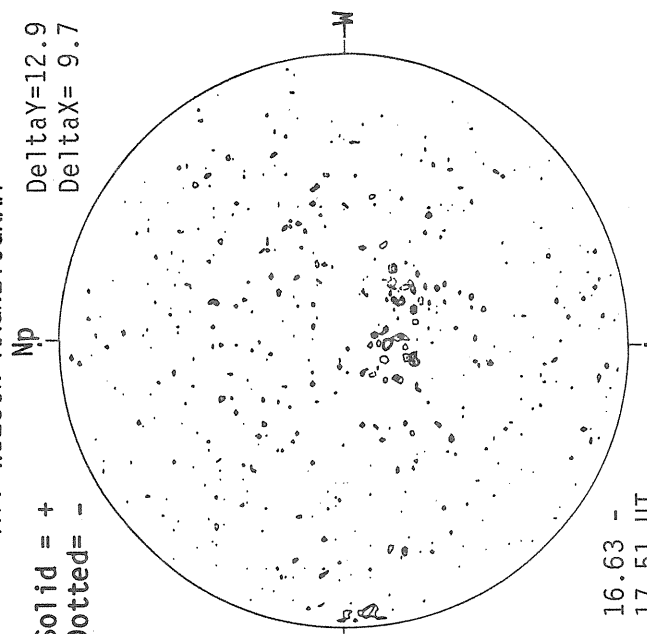
KITT PEAK MAGNETOGRAM



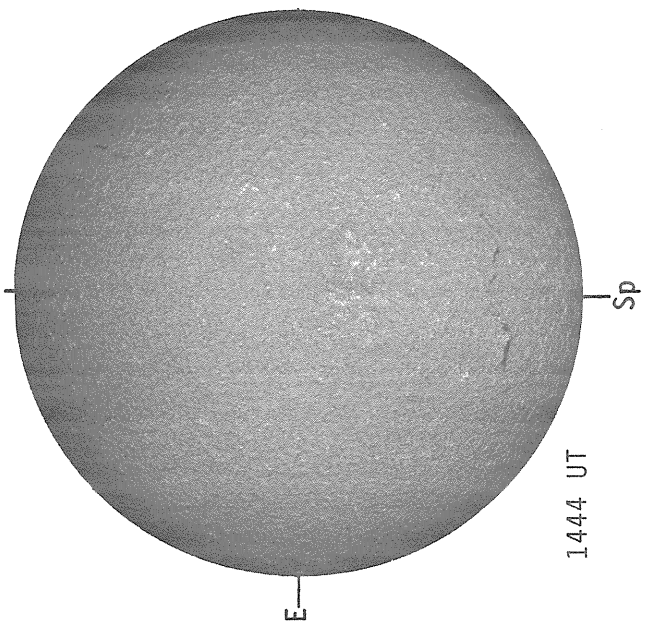
STANFORD MAGNETOGRAM



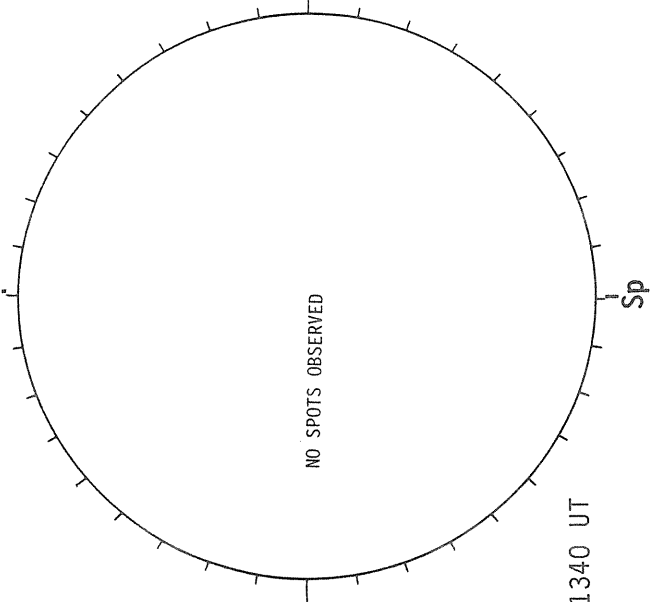
MT. WILSON MAGNETOGRAM



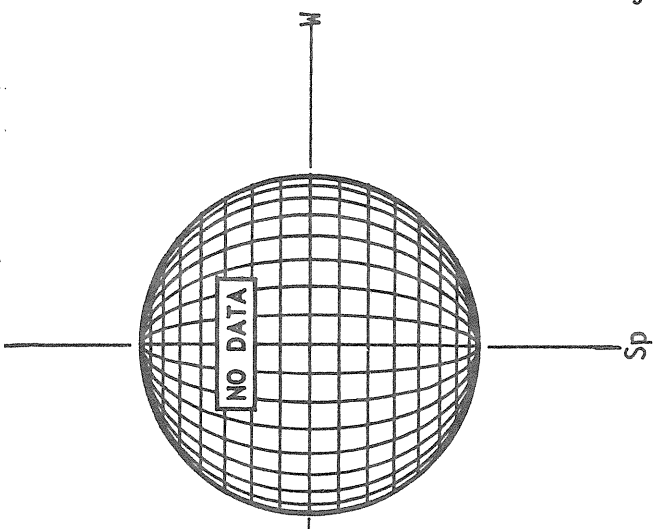
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

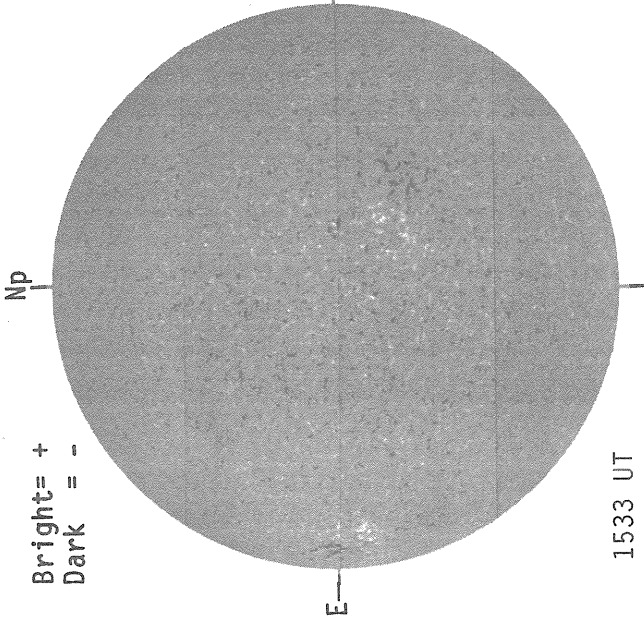


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M A Y 12, 1 9 8 6 (P=-21.75, B<sub>0</sub>=-3.00, L<sub>0</sub>= 246.49)

KITT PEAK MAGNETOGRAM

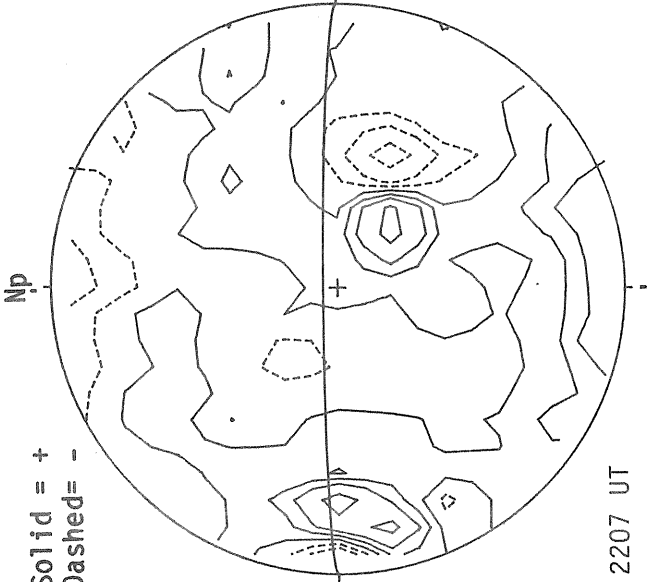
Bright = +  
Dark = -



1533 UT

STANFORD MAGNETOGRAM

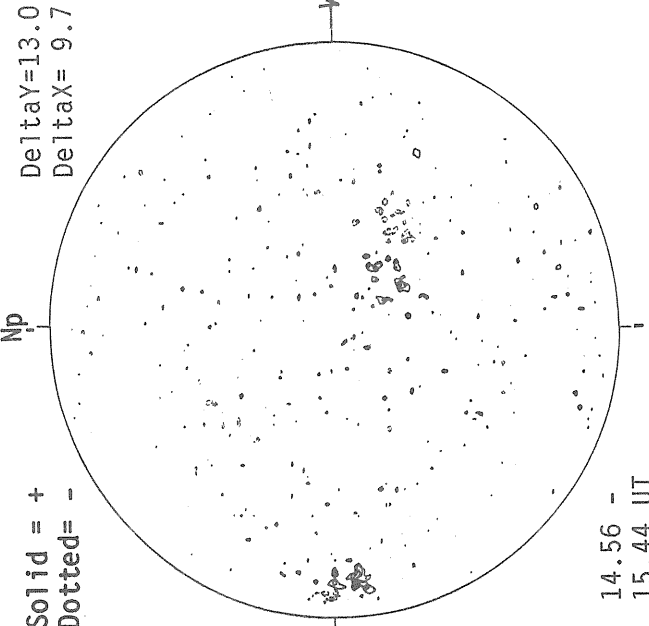
Solid = +  
Dashed = -



2207 UT

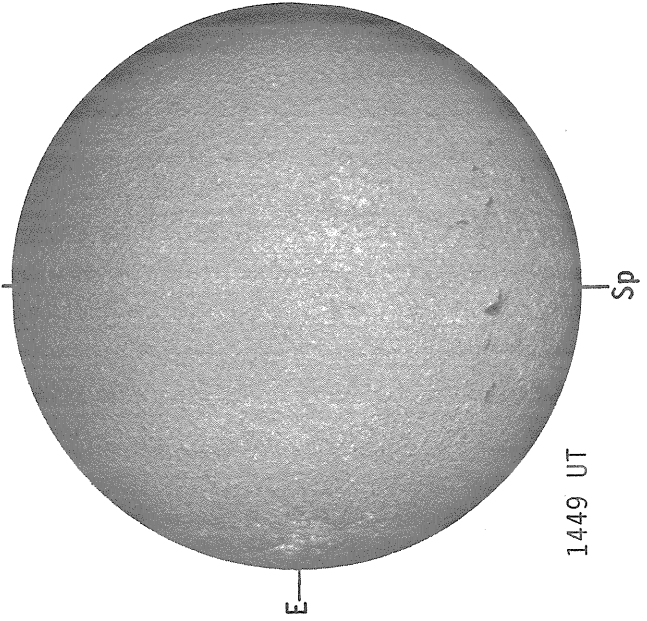
MT. WILSON MAGNETOGRAM

Solid = +  
Dotted = -



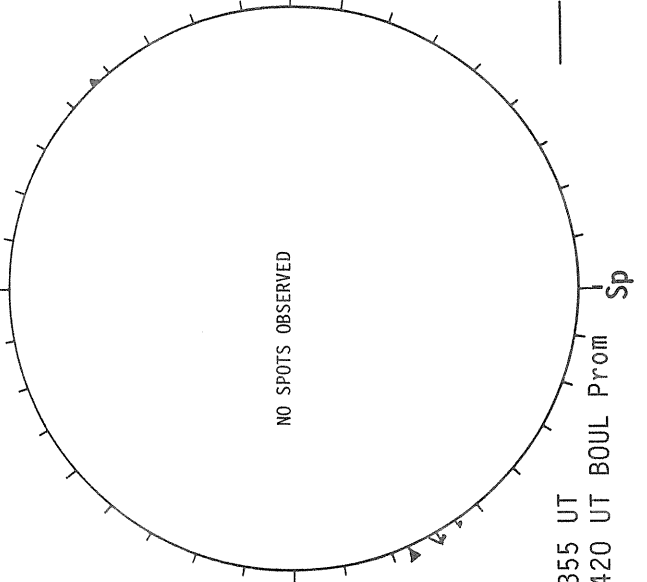
14.56 -  
15.44 UT

SACRAMENTO PEAK H-ALPHA



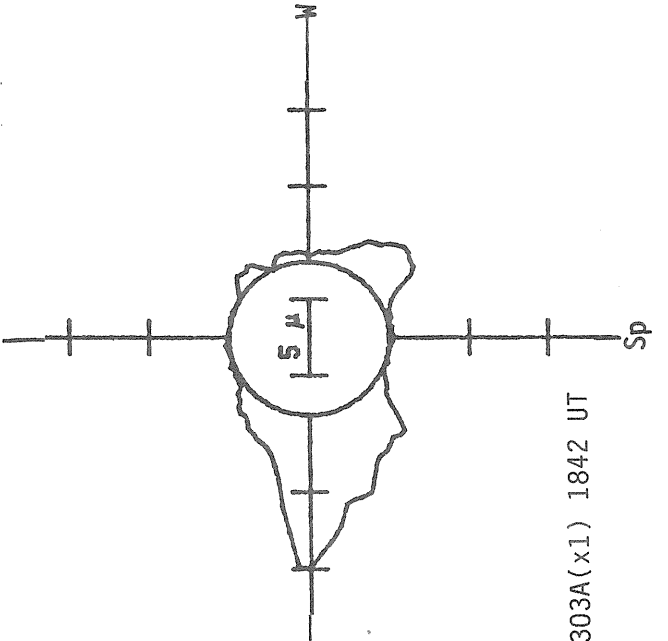
1449 UT

BOULDER SUNSPOTS



1355 UT  
1420 UT BOUL Prom

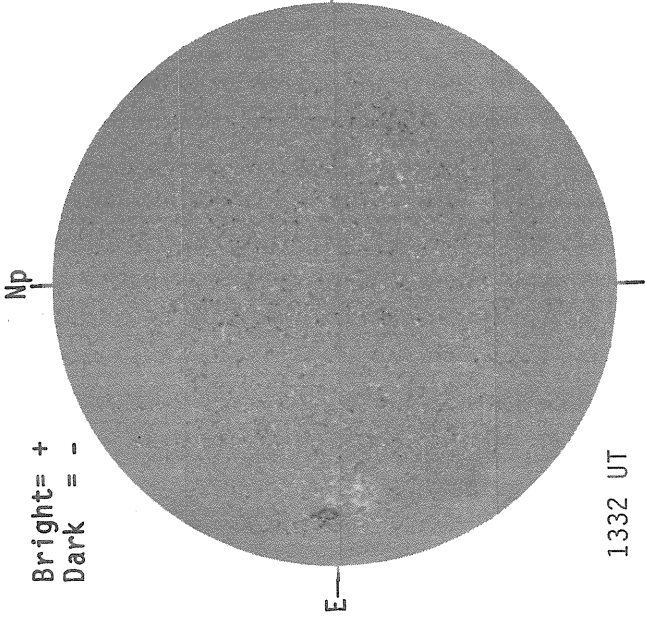
SACRAMENTO PEAK CORONA (1.15 Radii)



— 5303A(x1) 1842 UT

M A Y 13, 1 9 8 6 (P=-21.50, B<sub>0</sub>=-2.90, L<sub>0</sub>= 233.27)

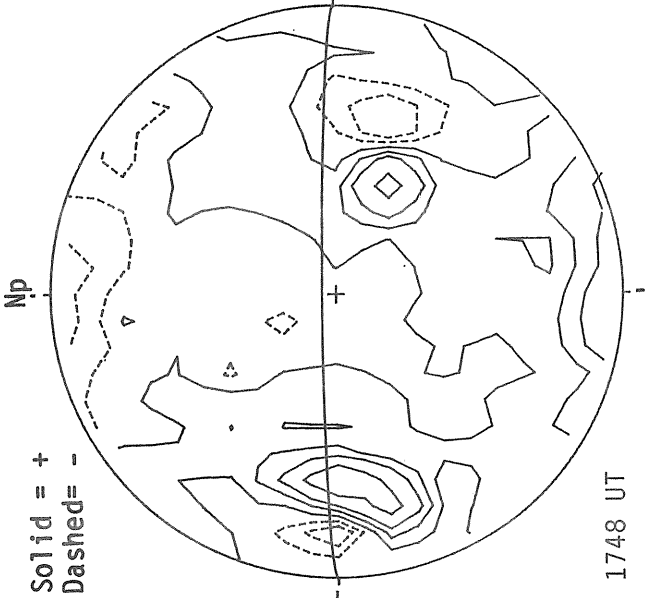
KITT PEAK MAGNETOGRAM



Bright= +  
Dark = -

1332 UT

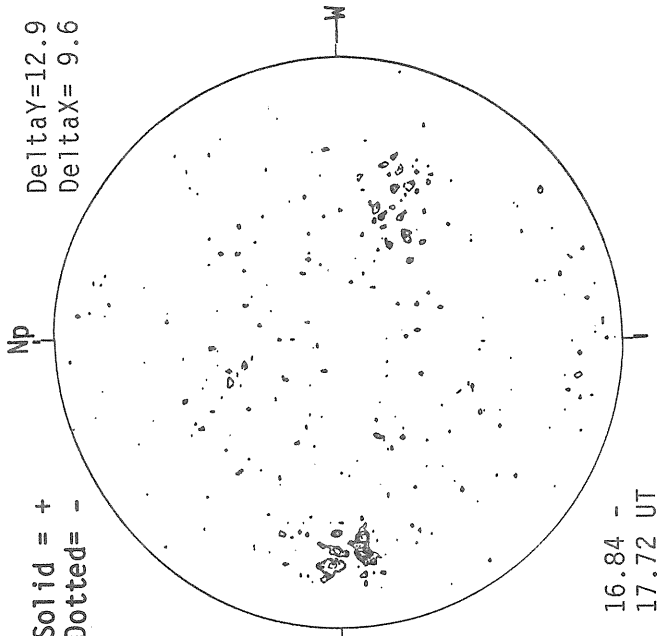
STANFORD MAGNETOGRAM



Solid = +  
Dashed = -

1748 UT

MT. WILSON MAGNETOGRAM

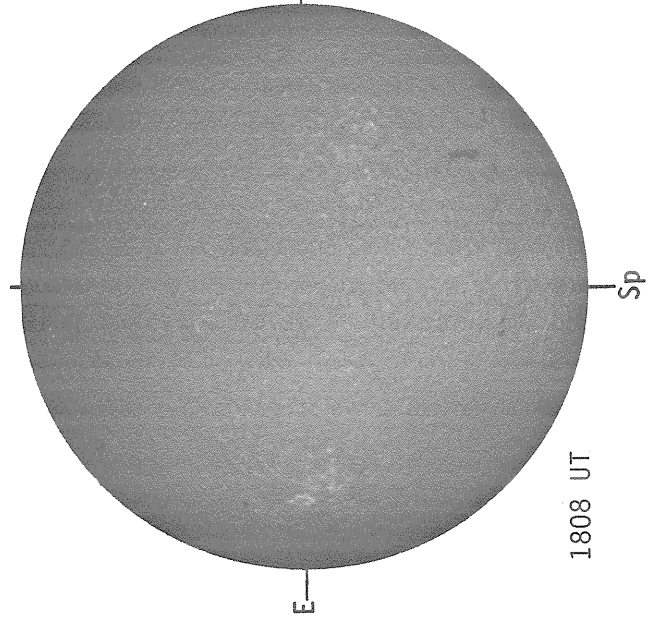


Delta Y = 12.9  
Delta X = 9.6

Solid = +  
Dotted = -

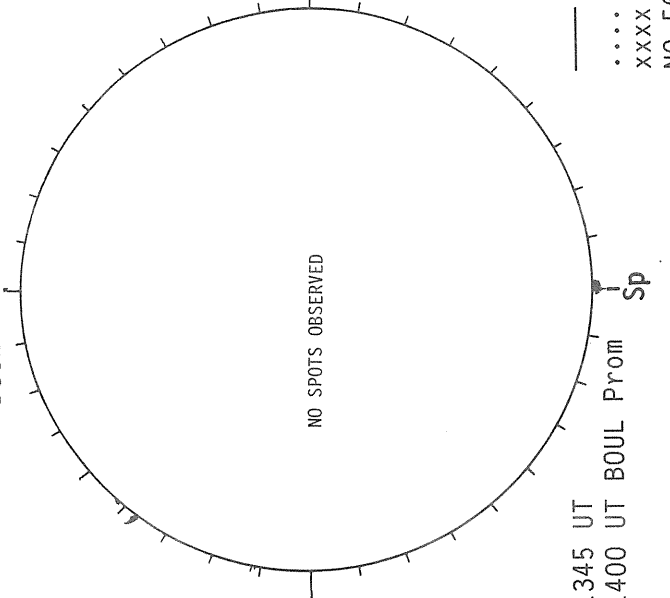
16.84 -  
17.72 UT

SACRAMENTO PEAK H-ALPHA



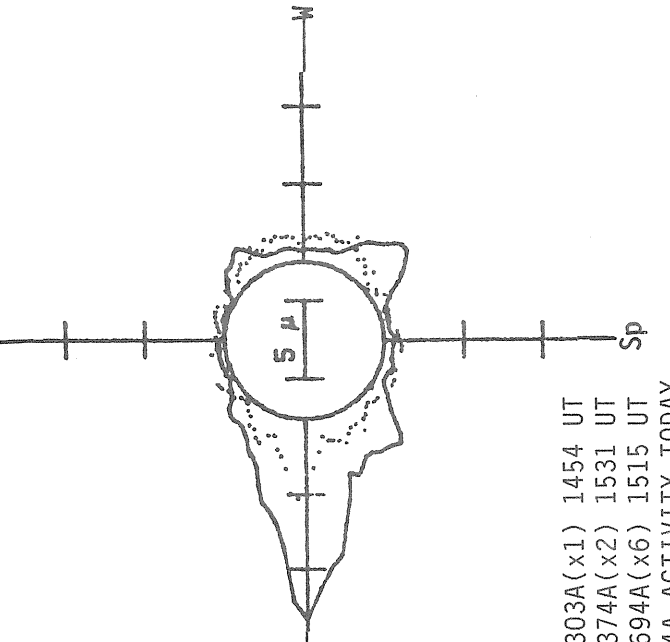
1808 UT

BOULDER SUNSPOTS



1345 UT  
1400 UT BOUL Prom

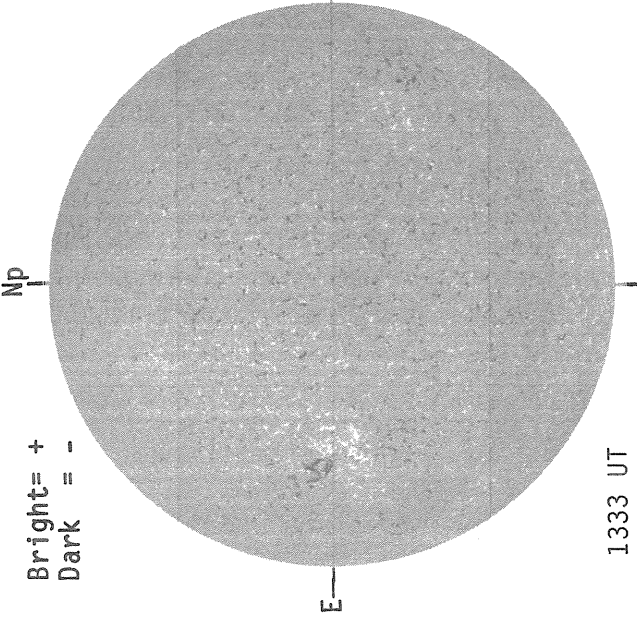
SACRAMENTO PEAK CORONA (1.15 Radii)



— 5303A(x1) 1454 UT  
..... 6374A(x2) 1531 UT  
xxxxx 5694A(x6) 1515 UT  
NO 5694A ACTIVITY TODAY

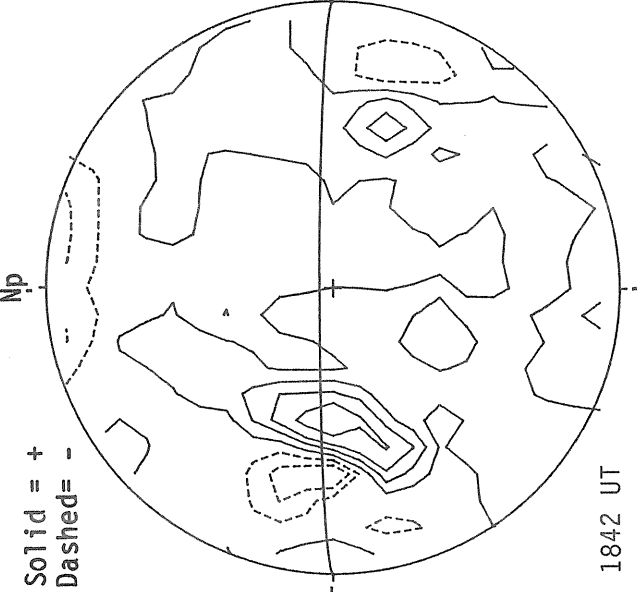
M A Y 14, 1 9 8 6 (P=-21.24, B<sub>0</sub>=-2.78, L<sub>0</sub>= 220.05)

KITT PEAK MAGNETOGRAM



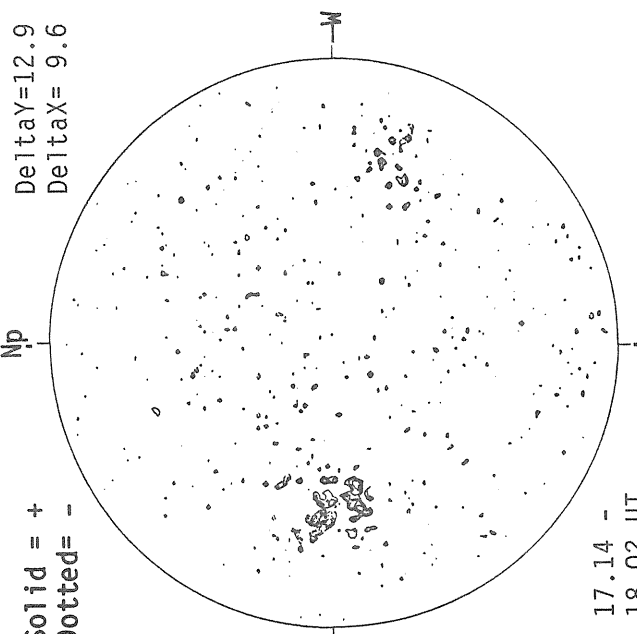
Bright= +  
Dark = -

STANFORD MAGNETOGRAM



Solid = +  
Dashed = -

MT. WILSON MAGNETOGRAM



Solid = +  
Dotted = -

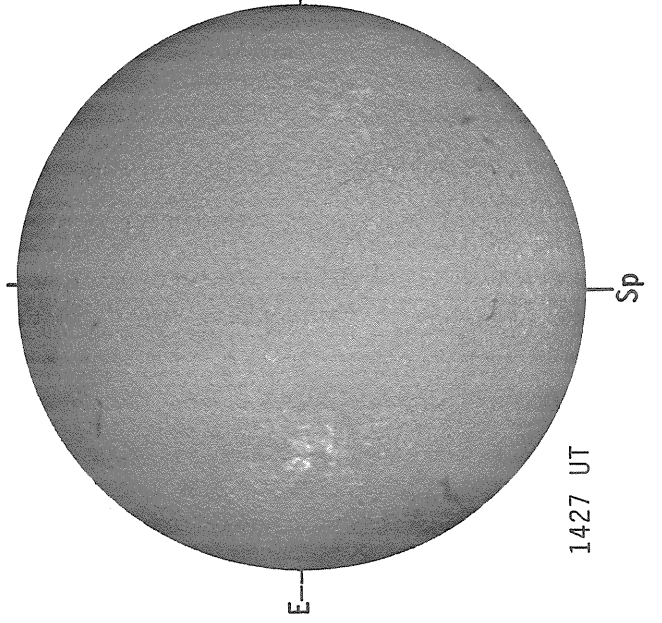
Delta Y = 12.9  
Delta X = 9.6

1333 UT

1842 UT

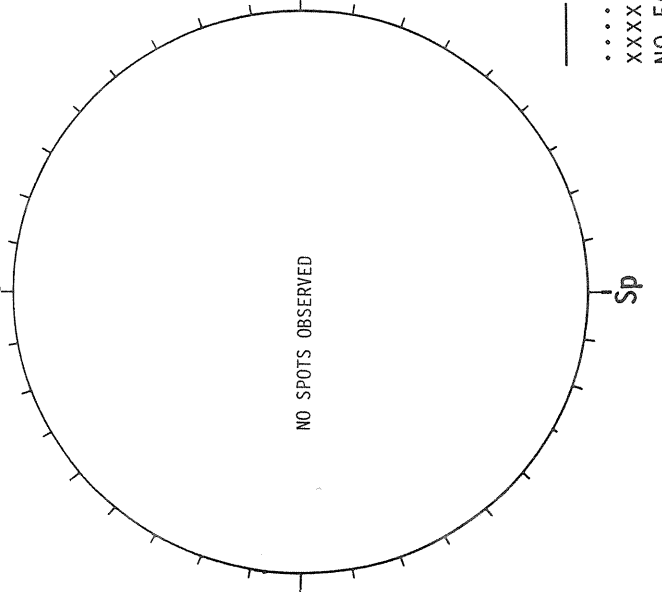
17.14 -  
18.02 UT

SACRAMENTO PEAK H-ALPHA

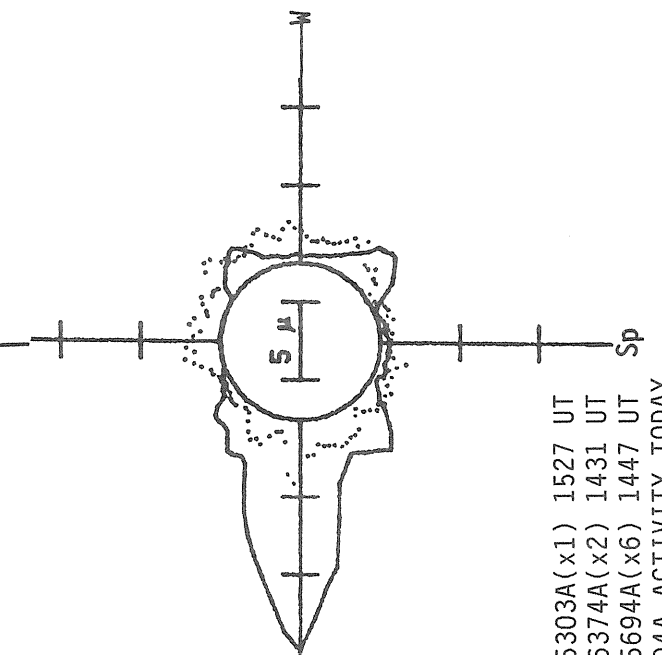


1427 UT

RAMEY SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

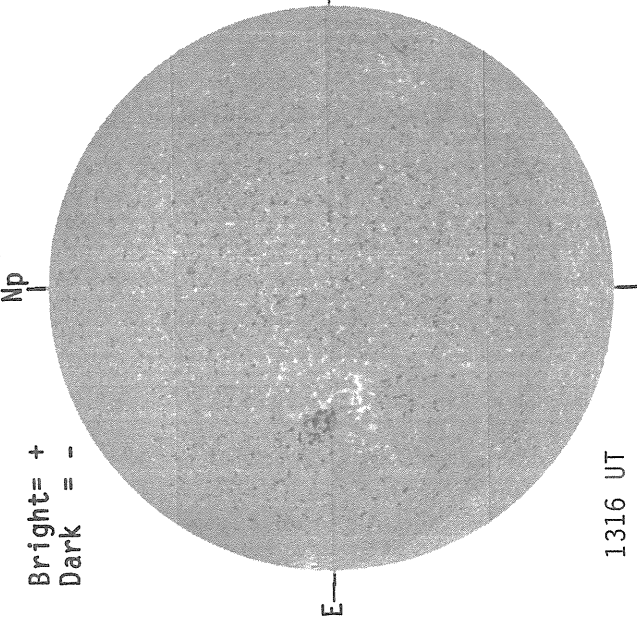


— 5303A(x1) 1527 UT  
 .... 6374A(x2) 1431 UT  
 xxxxx 5694A(x6) 1447 UT  
 NO 5694A ACTIVITY TODAY

M A Y 15, 1 9 8 6 (P=-20.97, B<sub>0</sub>=-2.67, L<sub>0</sub> = 206.82)

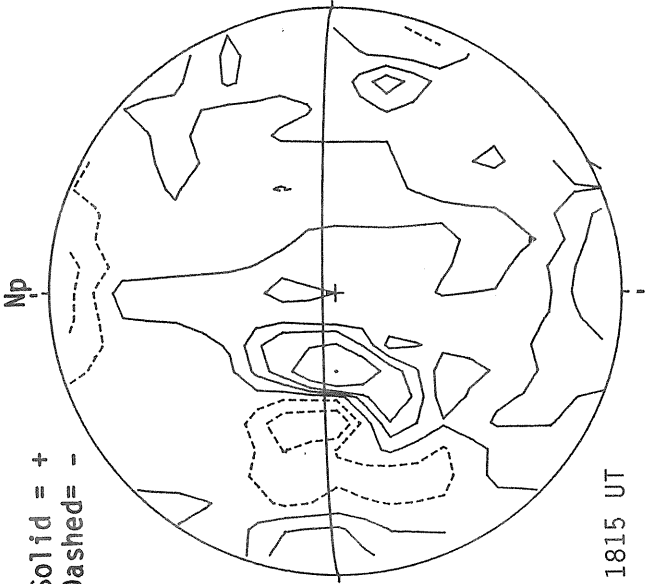
KITT PEAK MAGNETOGRAM

Bright= +  
Dark = -



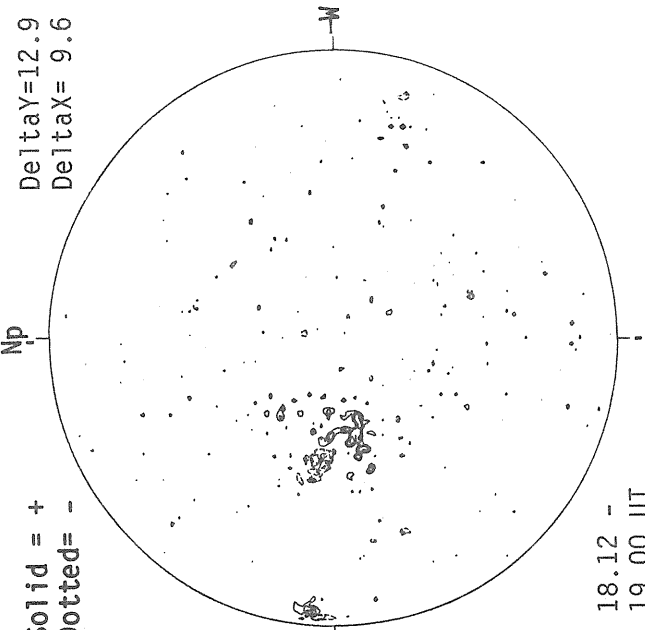
STANFORD MAGNETOGRAM

Solid = +  
Dashed = -



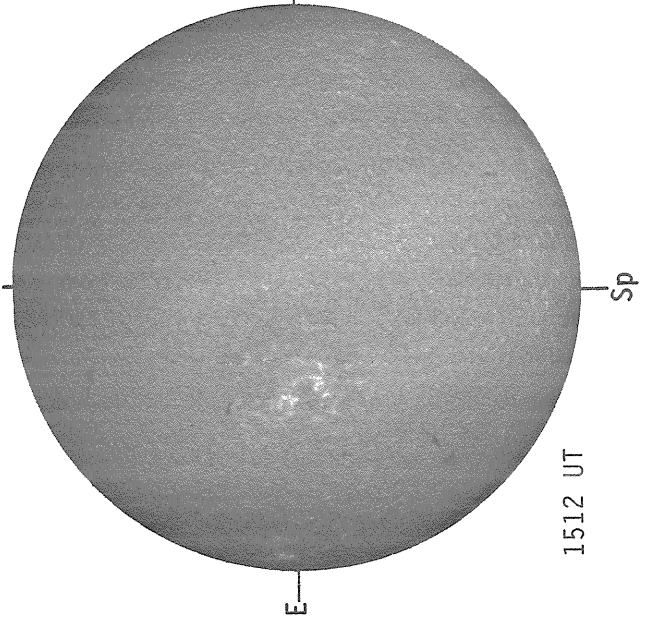
MT. WILSON MAGNETOGRAM

Solid = +  
Dotted = -

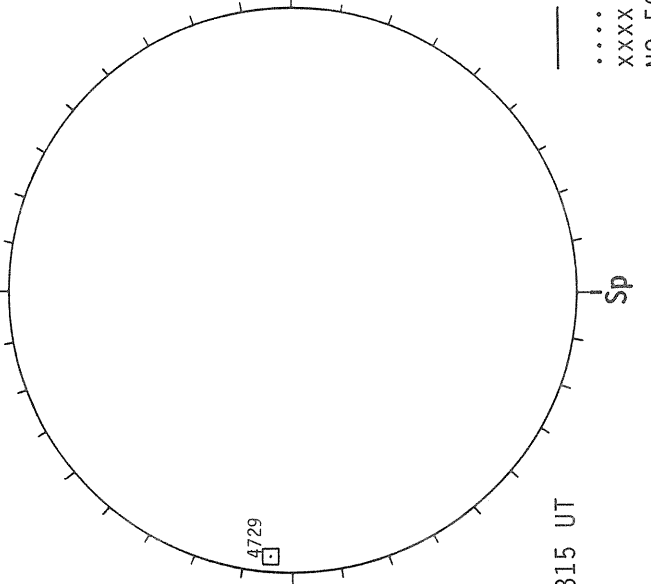


Delta Y = 12.9  
Delta X = 9.6

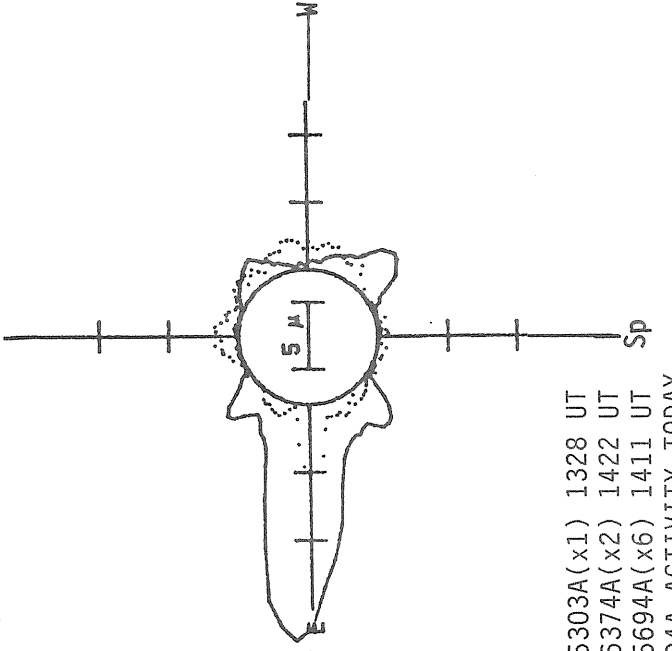
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



— 5303A(x1) 1328 UT  
 .... 6374A(x2) 1422 UT  
 xxxxx 5694A(x6) 1411 UT  
 NO 5694A ACTIVITY TODAY



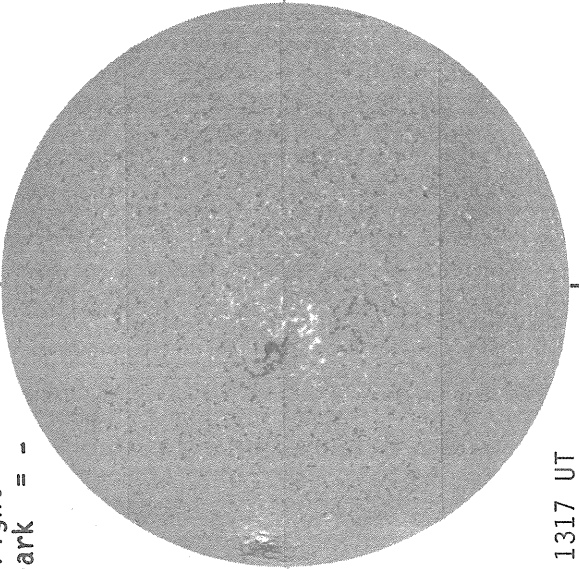
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M A Y 16, 1 9 8 6 (P=-20.69, B<sub>0</sub>=-2.56, L<sub>0</sub>= 193.60)

KITT PEAK MAGNETOGRAM

Bright= +  
Dark = -

Np

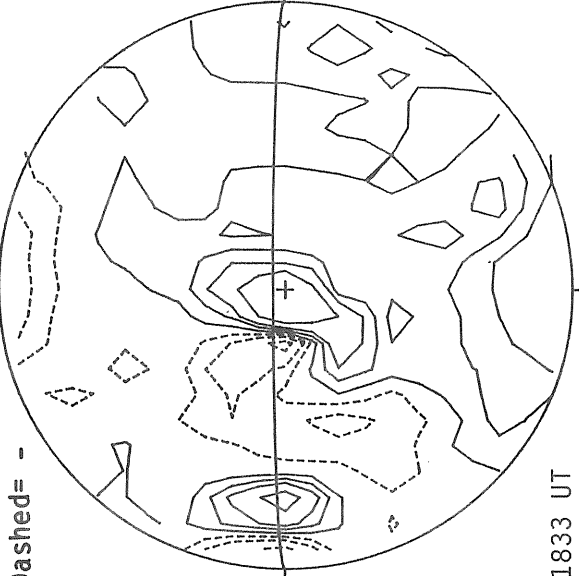


1317 UT

STANFORD MAGNETOGRAM

Solid = +  
Dashed = -

Np



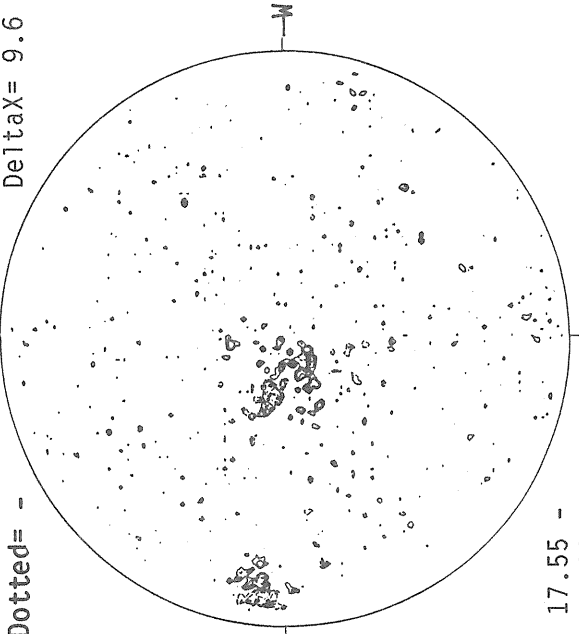
1833 UT

MT. WILSON MAGNETOGRAM

Solid = +  
Dotted = -

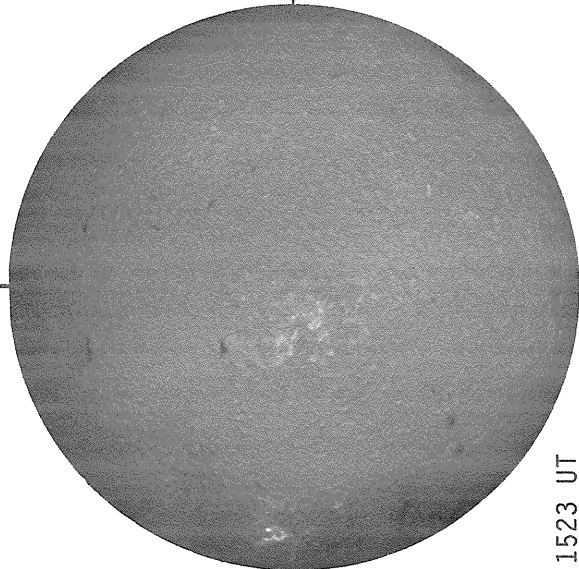
Np

Delta Y = 12.9  
Delta X = 9.6



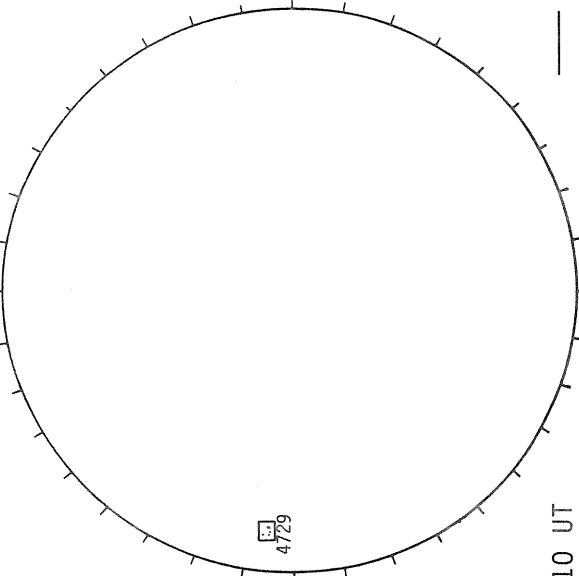
17.55 -  
18.44 UT

SACRAMENTO PEAK H-ALPHA



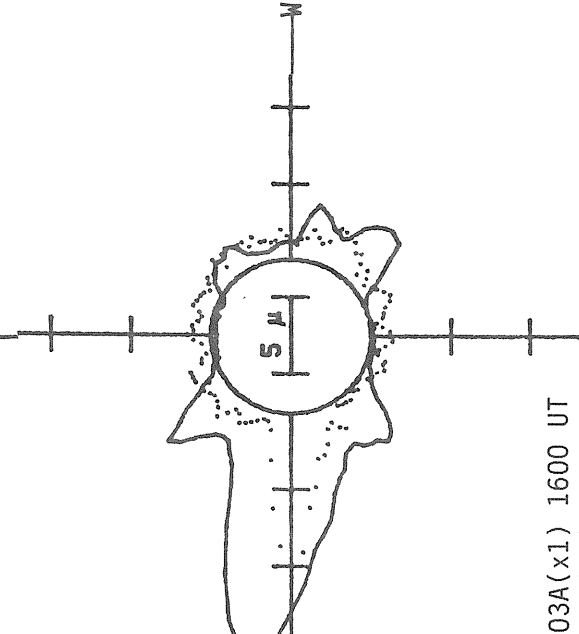
1523 UT

RAMEY SUNSPOTS



1110 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



— 5303A(x1) 1600 UT  
.... 6374A(x2) 1649 UT

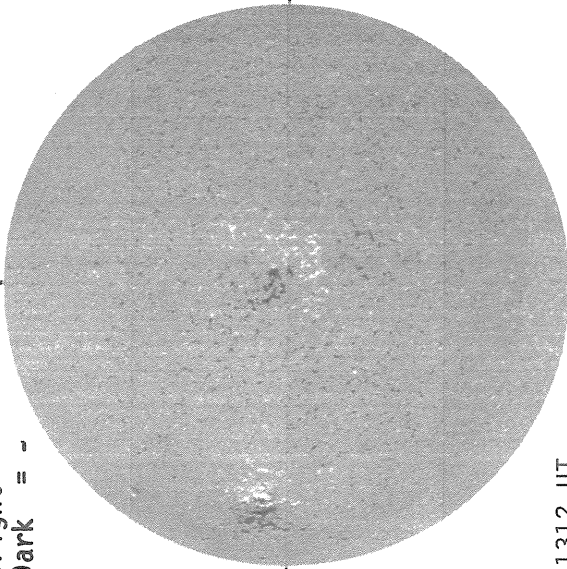
4729

M A Y 17, 1 9 8 6 (P=-20.41, B<sub>0</sub>=-2.45, L<sub>0</sub>= 180.37)

KITT PEAK MAGNETOGRAM

Bright= +  
Dark = -

Np



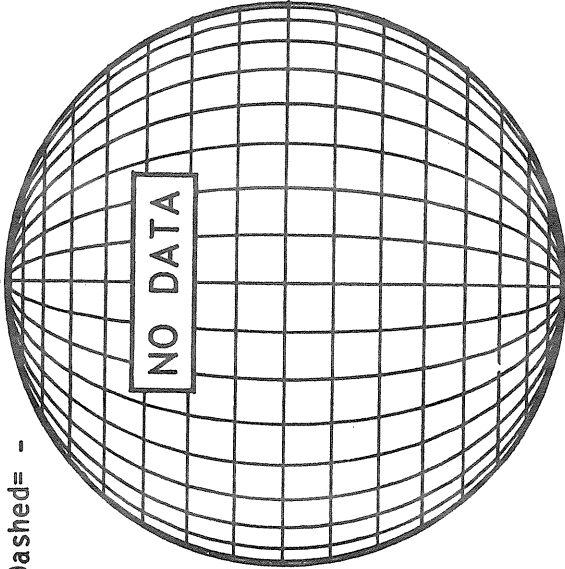
1312 UT

E

STANFORD MAGNETOGRAM

Solid = +  
Dashed = -

Np

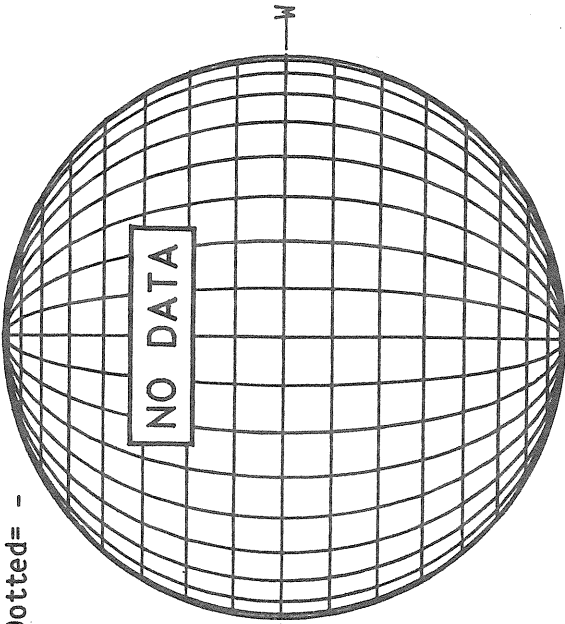


NO DATA

MT. WILSON MAGNETOGRAM

Solid = +  
Dotted = -

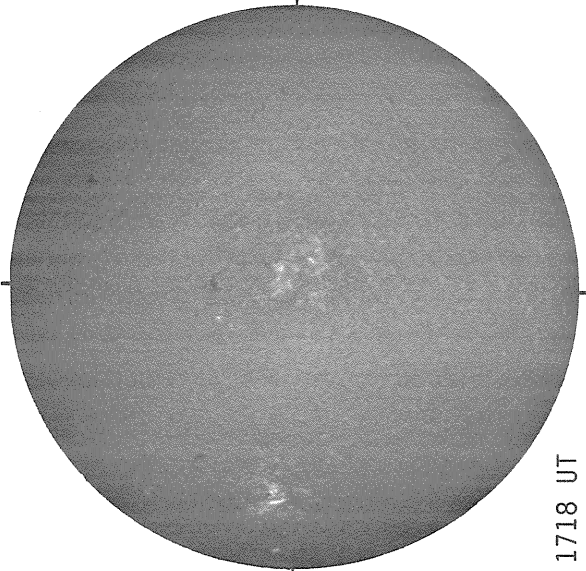
Np



NO DATA

M

SACRAMENTO PEAK H-ALPHA

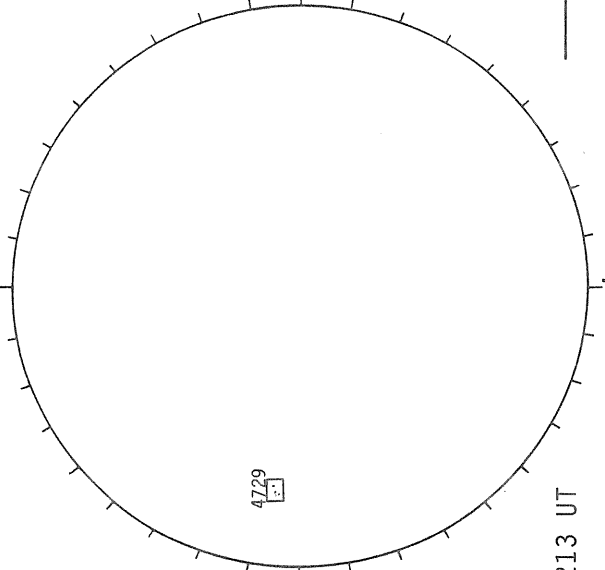


1718 UT

E

Sp

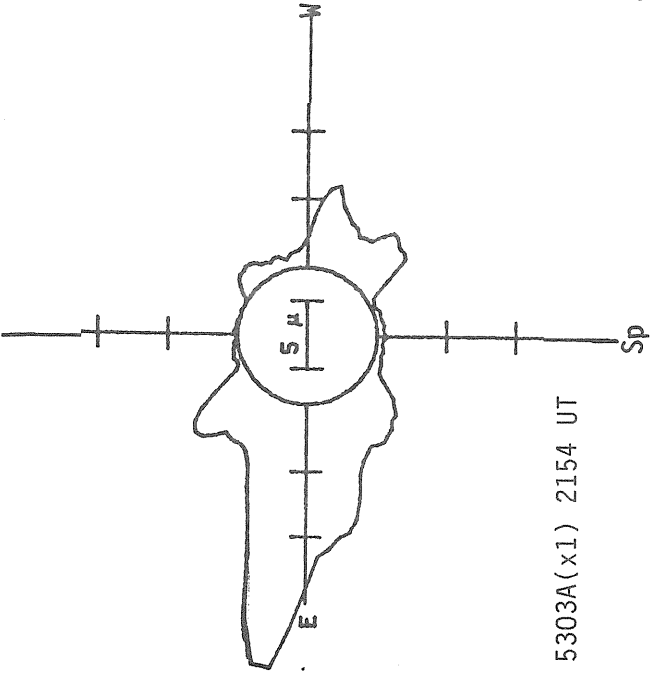
RAMEY SUNSPOTS



1213 UT

Sp

SACRAMENTO PEAK CORONA (1.15 Radfi)



5303A(x1) 2154 UT

E

M

Sp

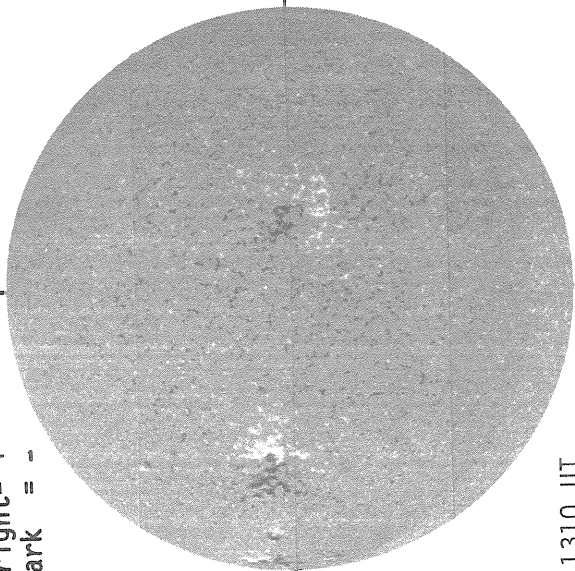
42  
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M A Y 18, 1 9 8 6 (P=-20.12, B<sub>0</sub>=-2.34, L<sub>0</sub>= 167.14)

KITT PEAK MAGNETOGRAM

Bright= +  
Dark = -

Np

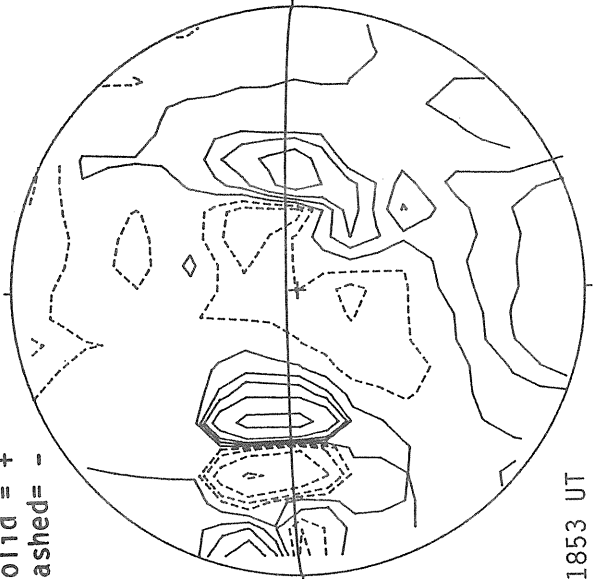


1310 UT

STANFORD MAGNETOGRAM

Solid = +  
Dashed = -

Np



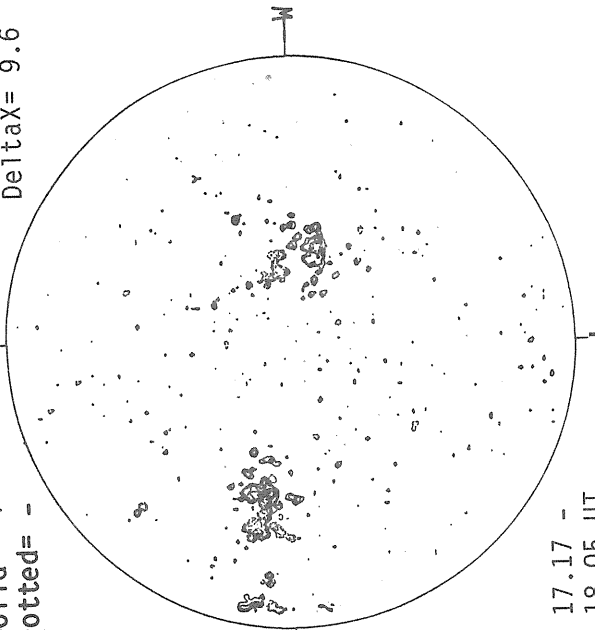
1853 UT

MT. WILSON MAGNETOGRAM

Solid = +  
Dotted = -

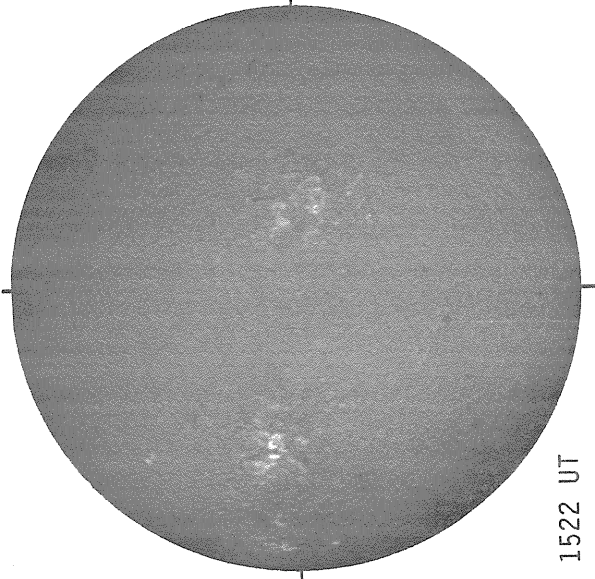
Np

Delta Y = 12.9  
Delta X = 9.6



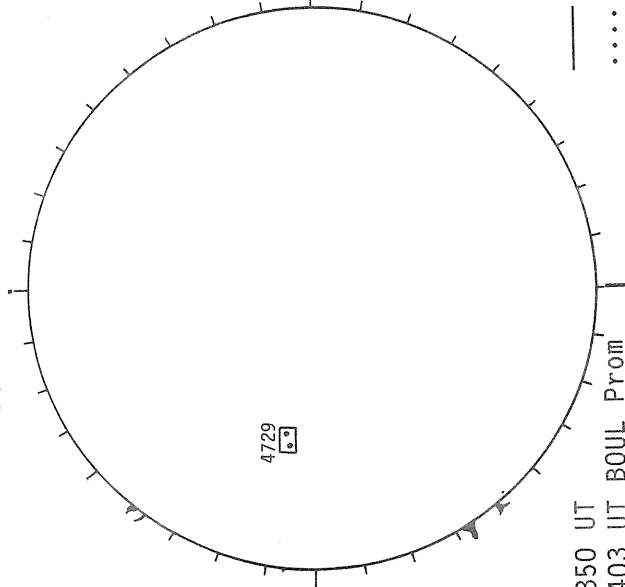
17.17 -  
18.05 UT

SACRAMENTO PEAK H-ALPHA



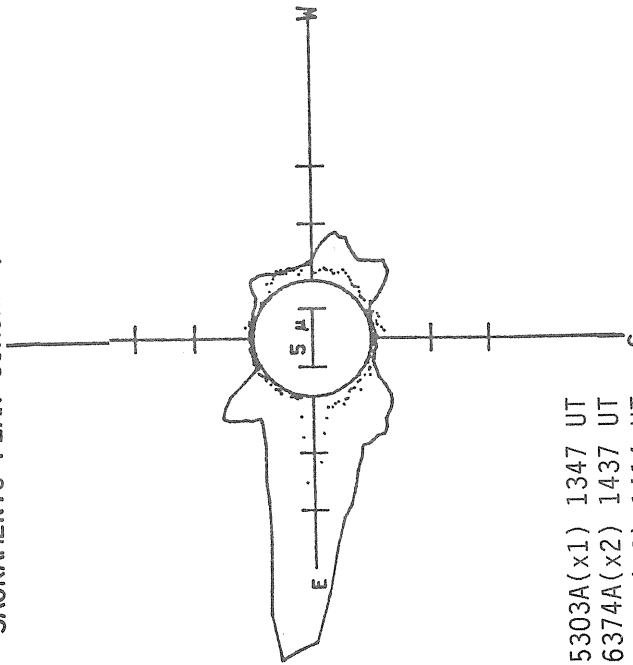
1522 UT

BOULDER SUNSPOTS



1350 UT  
1403 UT BOUL Prom

SACRAMENTO PEAK CORONA (1.15 Radii)



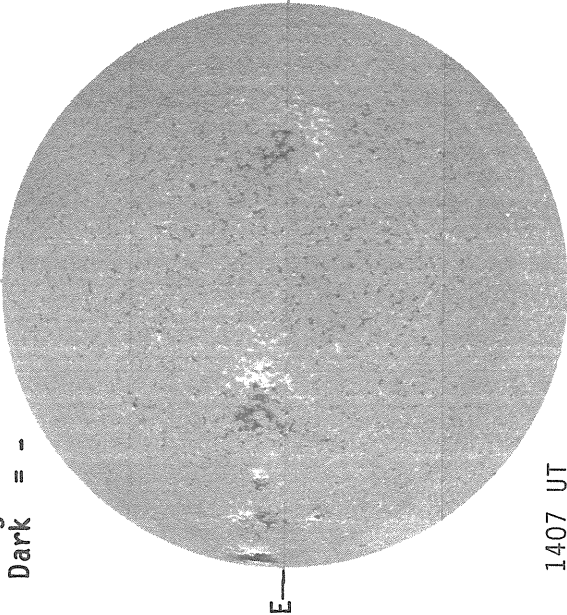
Sp

— 5303A(x1) 1347 UT  
... 6374A(x2) 1437 UT  
xxxx 5694A(x6) 1414 UT  
NO 5694A ACTIVITY TODAY

M A Y 19, 1 9 8 6 (P=-19.82, B<sub>0</sub>=-2.22, L<sub>0</sub>= 153.92)

KITT PEAK MAGNETOGRAM

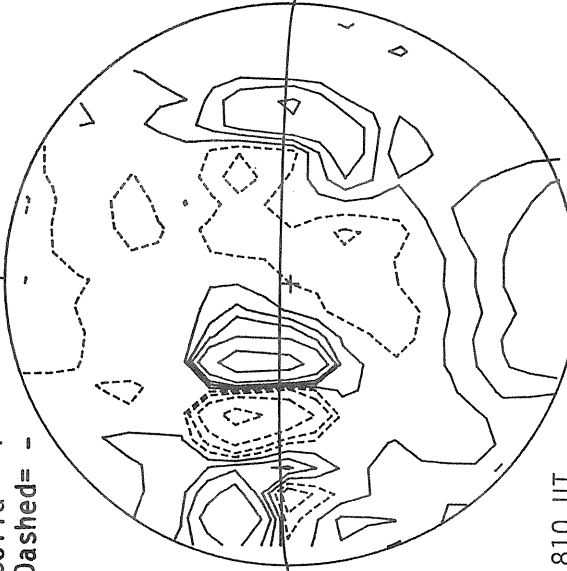
Bright= +  
Dark = -



1407 UT

STANFORD MAGNETOGRAM

Solid = +  
Dashed = -

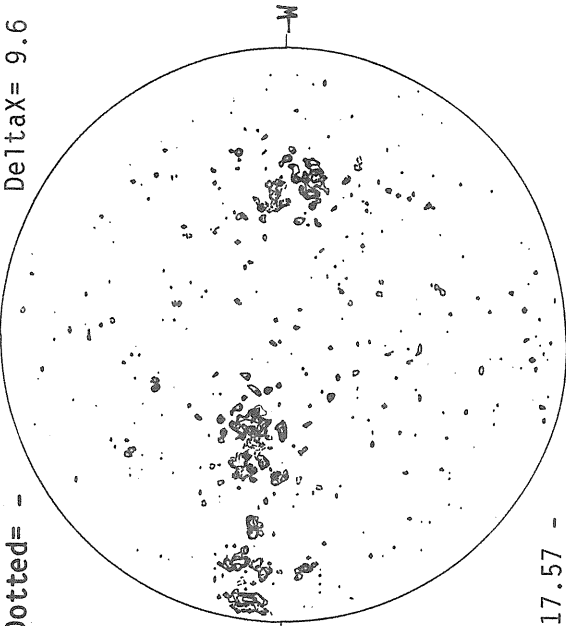


1810 UT

MT. WILSON MAGNETOGRAM

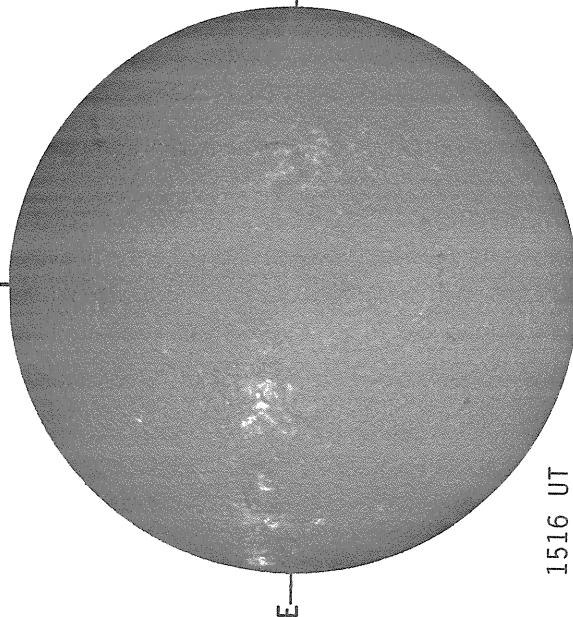
Solid = +  
Dotted = -

DeltaY=13.0  
DeltaX= 9.6



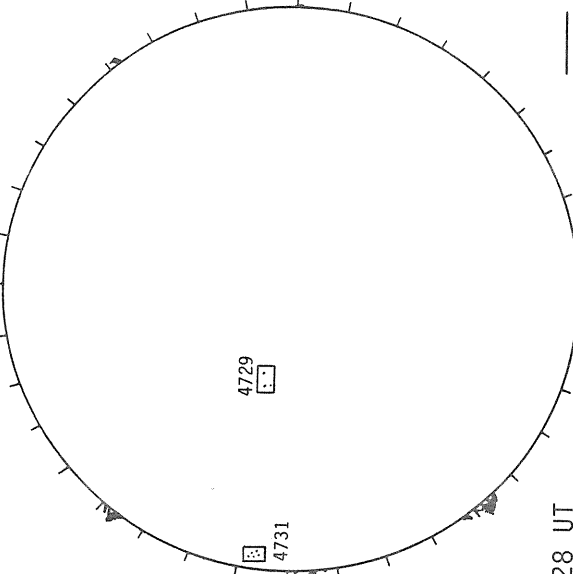
17.57 -  
18.45 UT

SACRAMENTO PEAK H-ALPHA



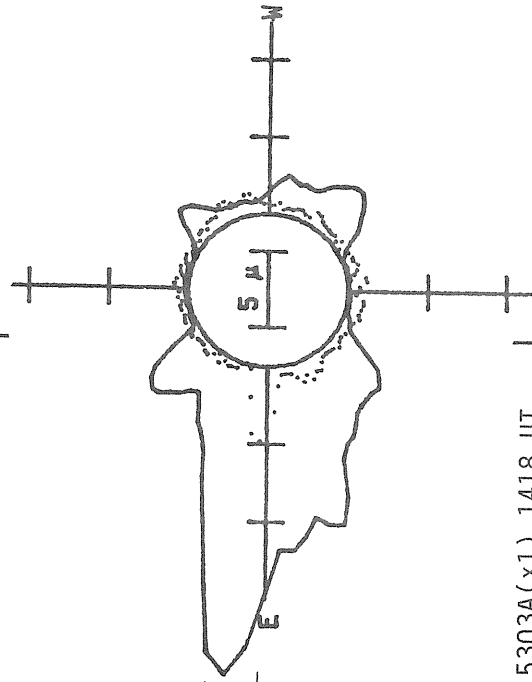
1516 UT

BOULDER SUNSPOTS



1328 UT  
1328 UT BOUL Prom

SACRAMENTO PEAK CORONA (1.15 Radii)

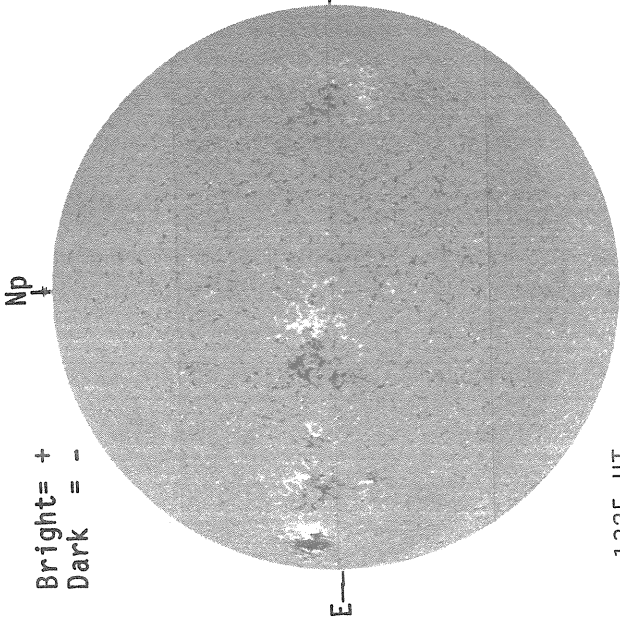


— 5303A(x1) 1418 UT  
..... 6374A(x2) 1331 UT  
xxxxx 5694A(x6) 1350 UT  
NO 5694A ACTIVITY TODAY

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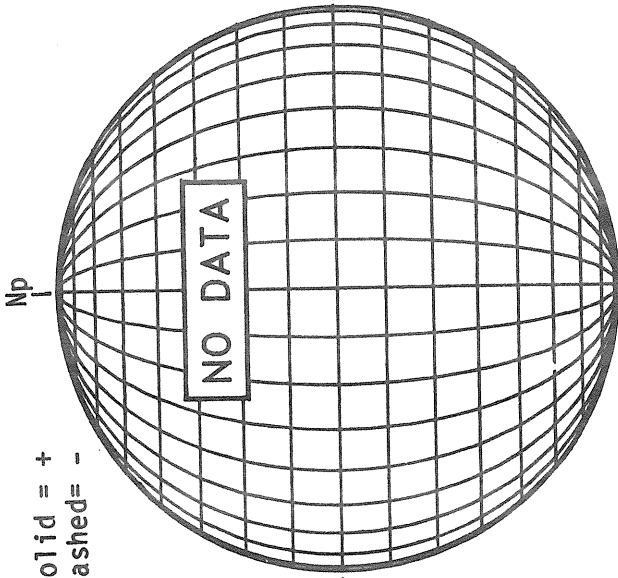
M A Y 20, 1 9 8 6 (P=-19.52, B<sub>0</sub> = -2.11, L<sub>0</sub> = 140.69)

KITT PEAK MAGNETOGRAM



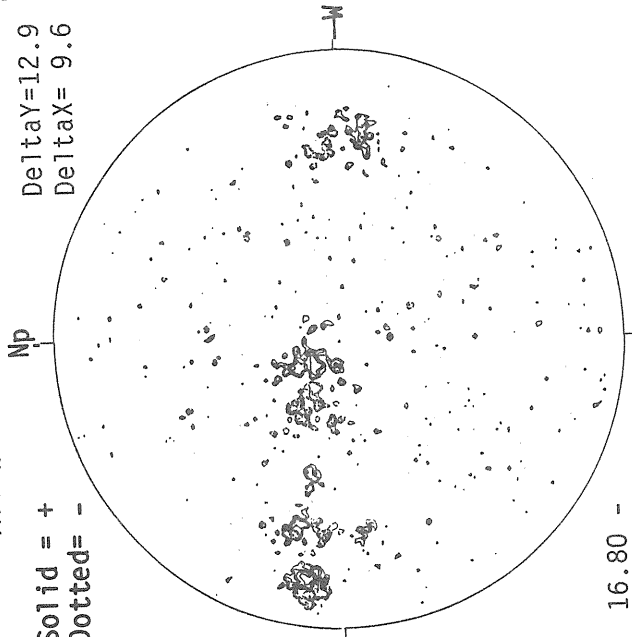
Bright = +  
Dark = -

STANFORD MAGNETOGRAM



Solid = +  
Dashed = -

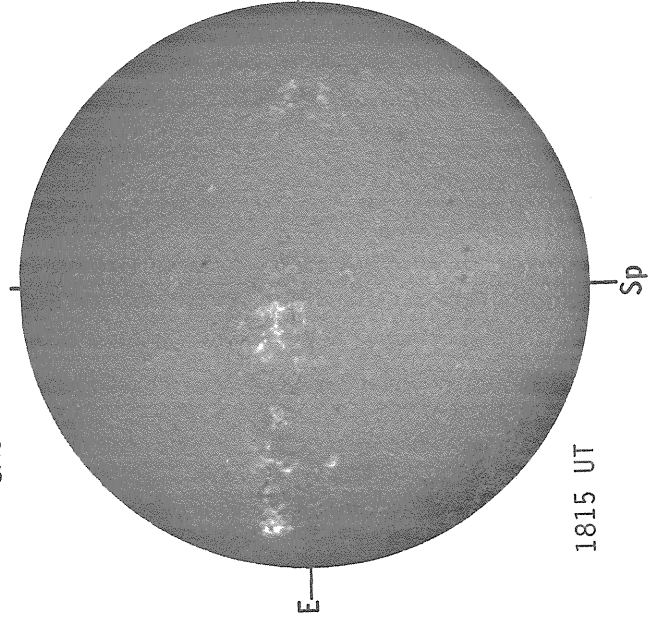
MT. WILSON MAGNETOGRAM



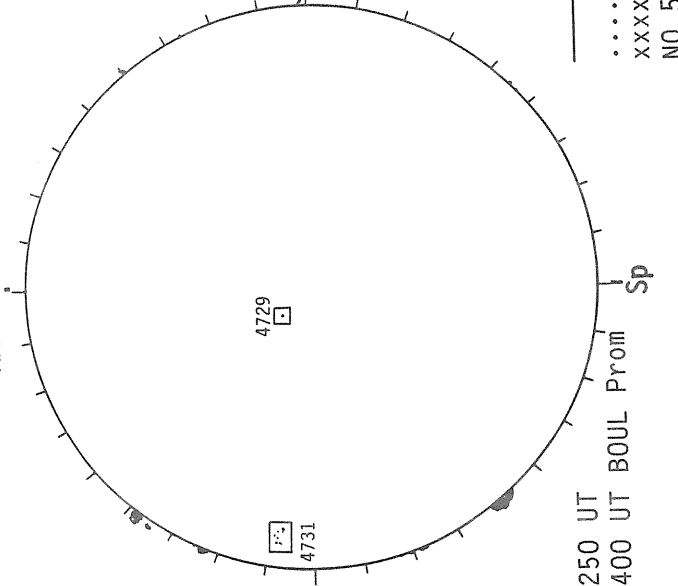
Solid = +  
Dotted = -

Delta Y = 12.9  
Delta X = 9.6

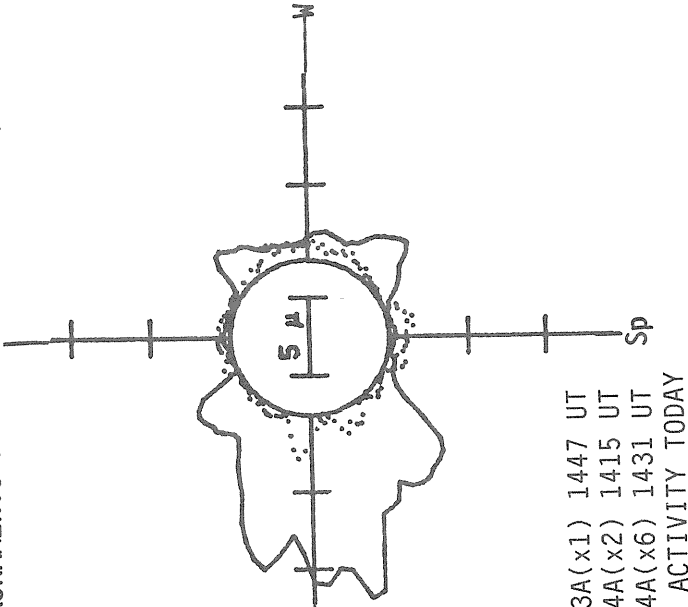
SACRAMENTO PEAK H-ALPHA



RAMEY SUNSPOTS



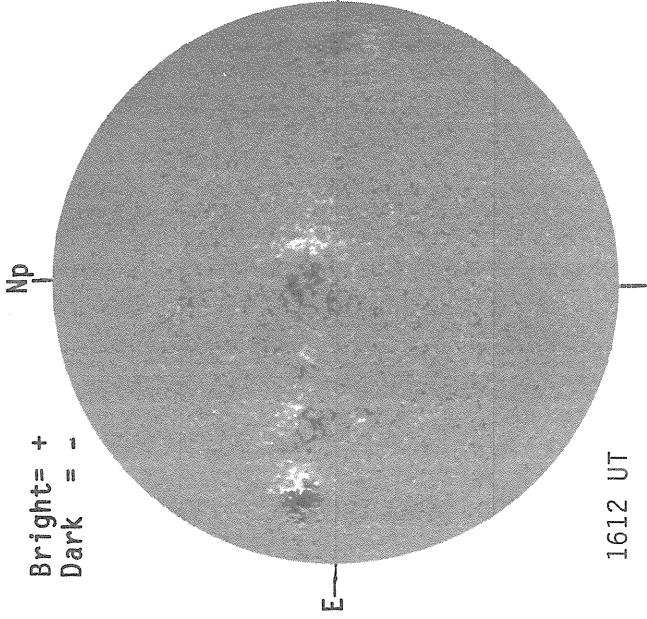
SACRAMENTO PEAK CORONA (1.15 Radii)



— 5303A(x1) 1447 UT  
... 6374A(x2) 1415 UT  
xxxx 5694A(x6) 1431 UT  
NO 5694A ACTIVITY TODAY

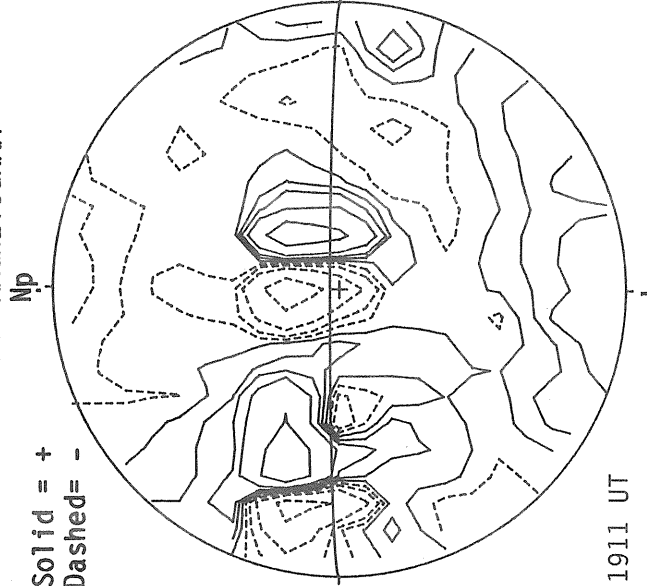
M A Y 21, 1 9 8 6 (P=-19.22, B<sub>0</sub>=-1.99, L<sub>0</sub>= 126.46)

KITT PEAK MAGNETOGRAM



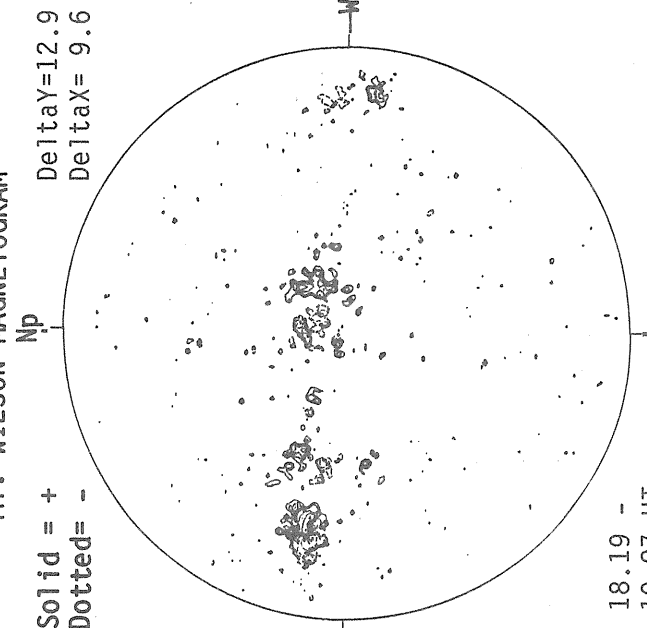
Bright= +  
Dark = -

STANFORD MAGNETOGRAM



Solid = +  
Dashed = -

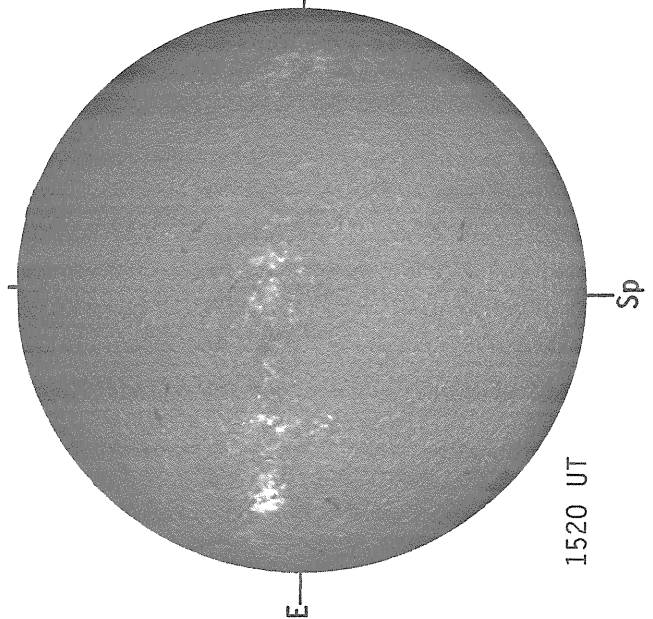
MT. WILSON MAGNETOGRAM



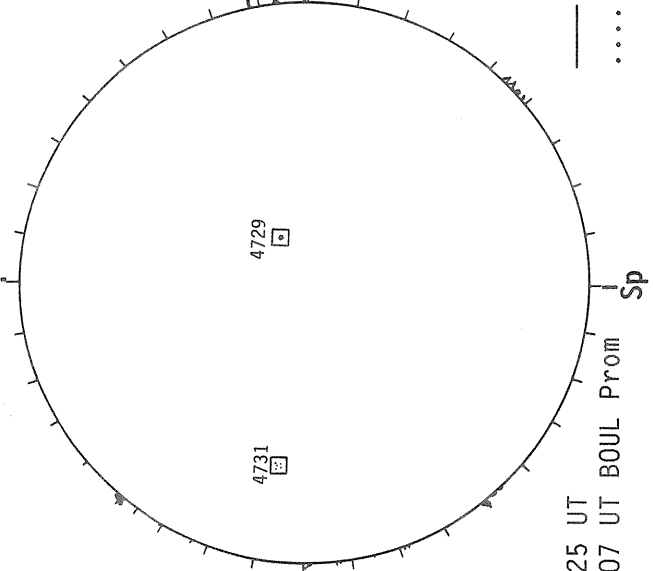
Solid = +  
Dotted = -

Delta Y = 12.9  
Delta X = 9.6

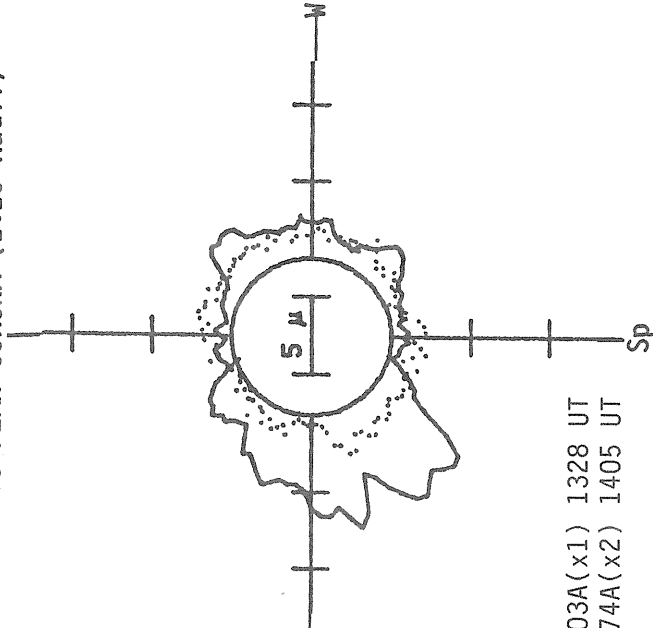
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



1325 UT  
1507 UT BOUL Prom  
1328 UT  
1405 UT

— 5303A(x1)  
.... 6374A(x2)

M A Y 22, 1 9 8 6 (P=-18.90, B<sub>0</sub>=-1.68, L<sub>0</sub>= 114.23)

KITT PEAK MAGNETOGRAM

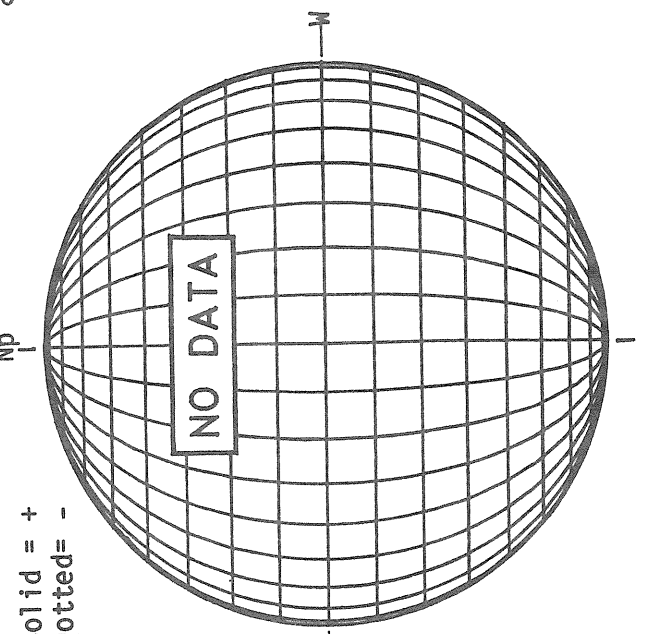
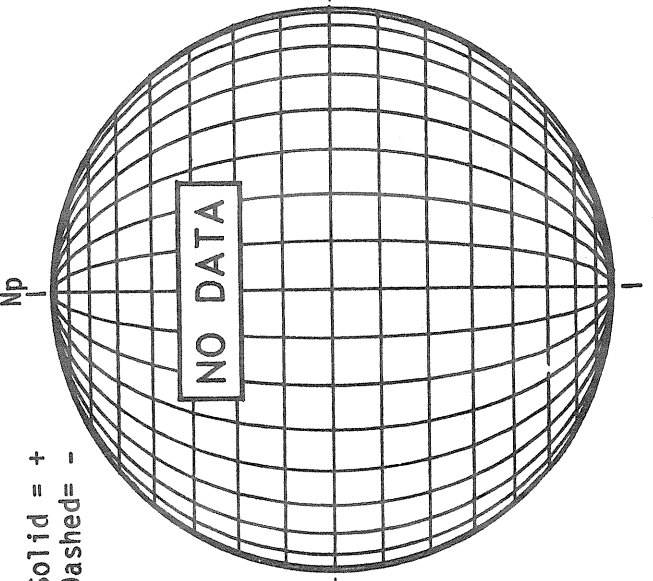
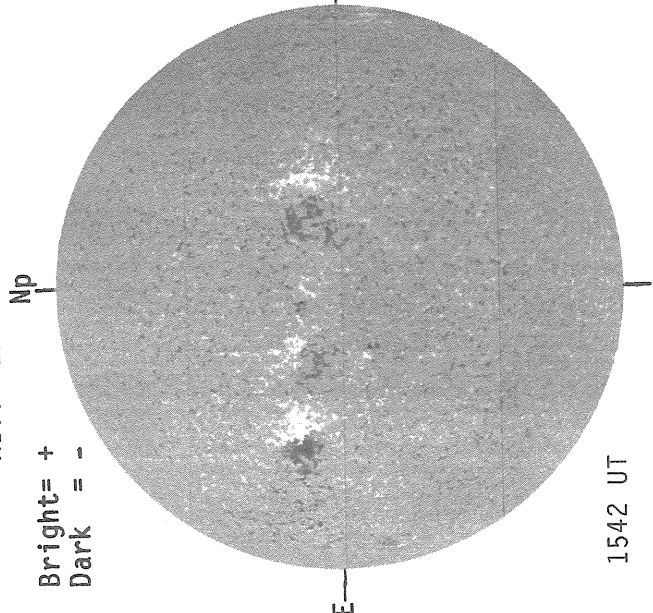
STANFORD MAGNETOGRAM

MT. WILSON MAGNETOGRAM

Bright = +  
Dark = -

Solid = +  
Dashed = -

Solid = +  
Dotted = -

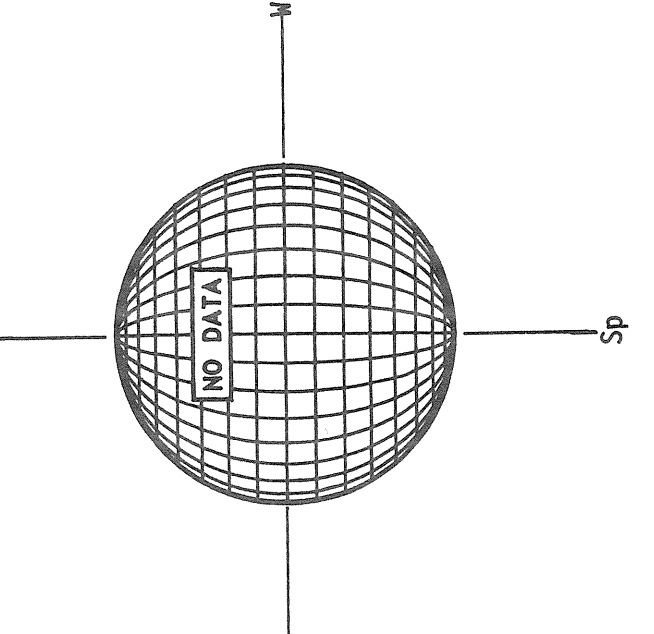
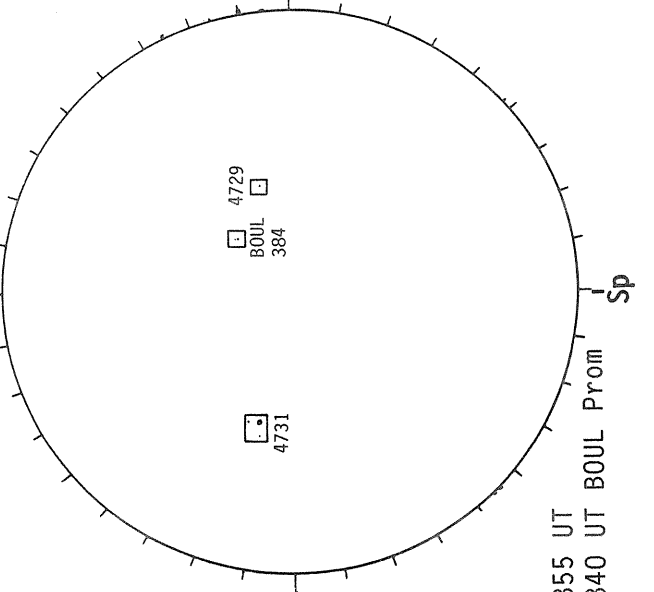
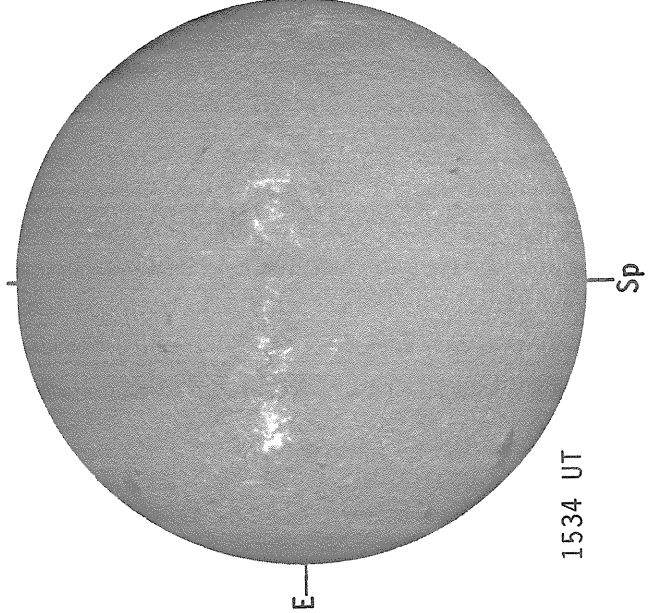


1542 UT

SACRAMENTO PEAK H-ALPHA

BOULDER SUNSPOTS

SACRAMENTO PEAK CORONA (1.15 Radii)



1534 UT

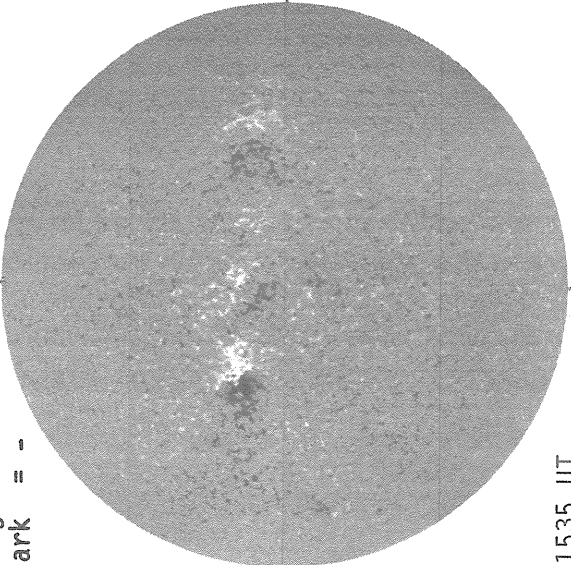
1355 UT  
1340 UT BOUL Prom

M A Y 23, 1 9 8 6 (P=-18.58, B<sub>0</sub>=-1.76, L<sub>0</sub>= 101.00)

KITT PEAK MAGNETOGRAM

Bright= +  
Dark = -

Np

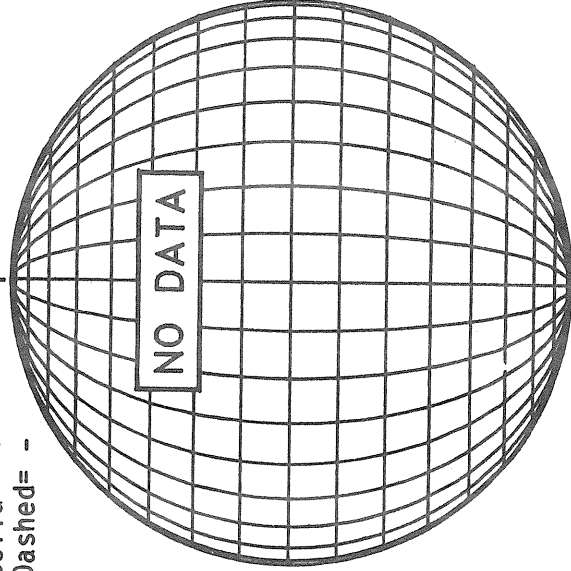


1535 UT

STANFORD MAGNETOGRAM

Solid = +  
Dashed = -

Np

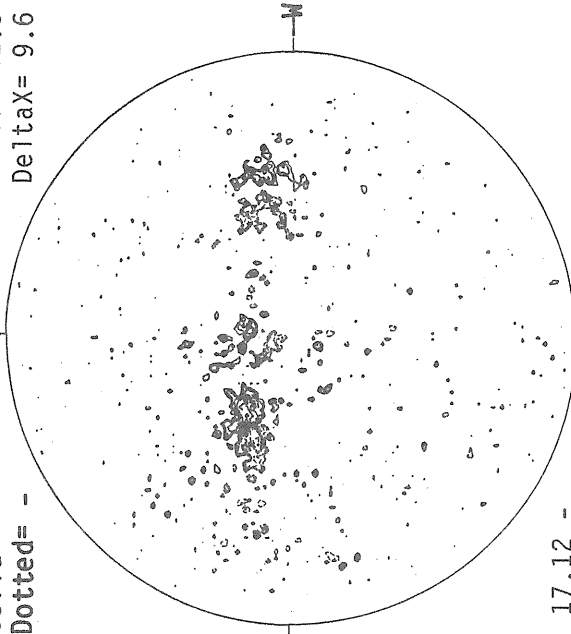


NO DATA

MT. WILSON MAGNETOGRAM

Solid = +  
Dotted = -

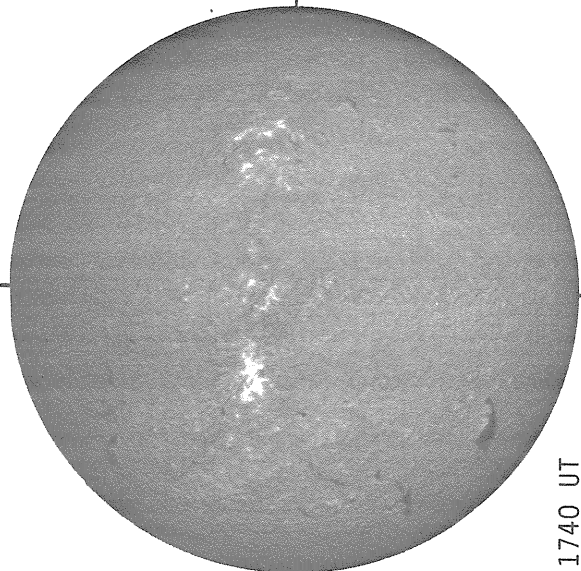
Np



Delta Y = 12.9  
Delta X = 9.6

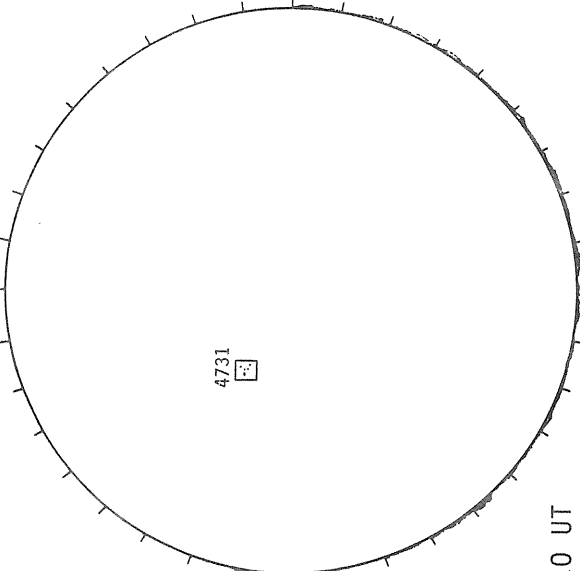
17.12 -  
18.01 UT

SACRAMENTO PEAK H-ALPHA



1740 UT

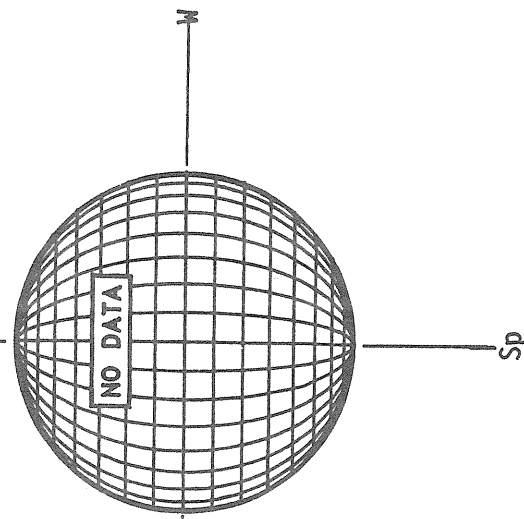
BOULDER SUNSPOTS



4731

1310 UT  
1325 UT BOUL Prom

SACRAMENTO PEAK CORONA (1.15 Radii)



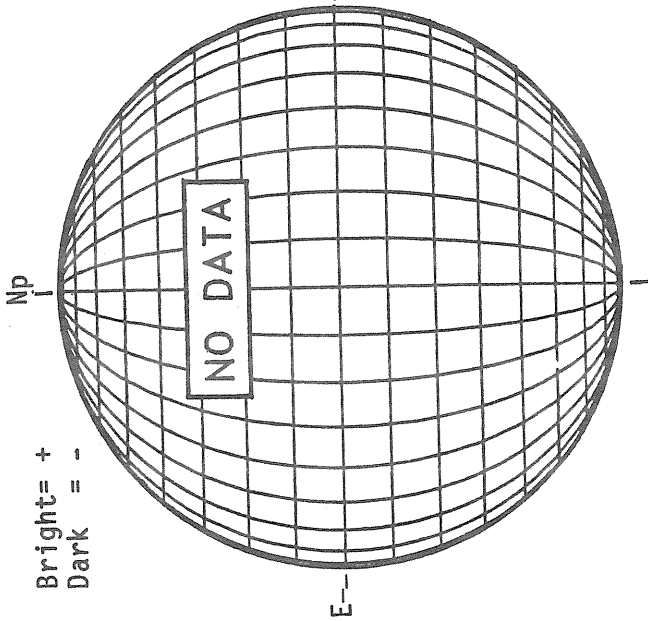
NO DATA



M A Y 24, 1 9 8 6 (P=-18.26, B<sub>0</sub>=-1.65, L<sub>0</sub>= 87.77)

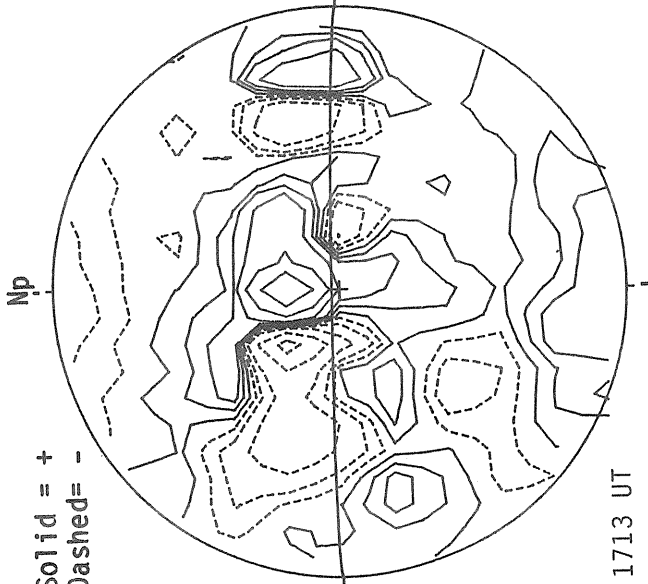
KITT PEAK MAGNETOGRAM

Bright= +  
Dark = -



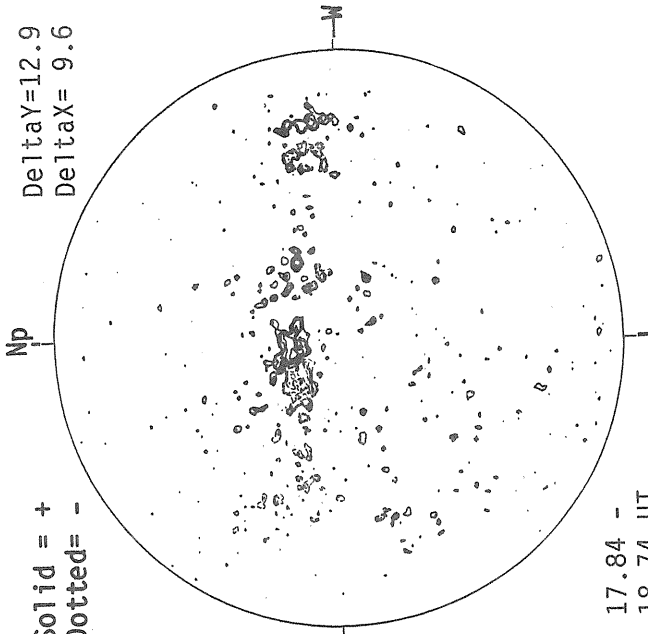
STANFORD MAGNETOGRAM

Solid = +  
Dashed = -

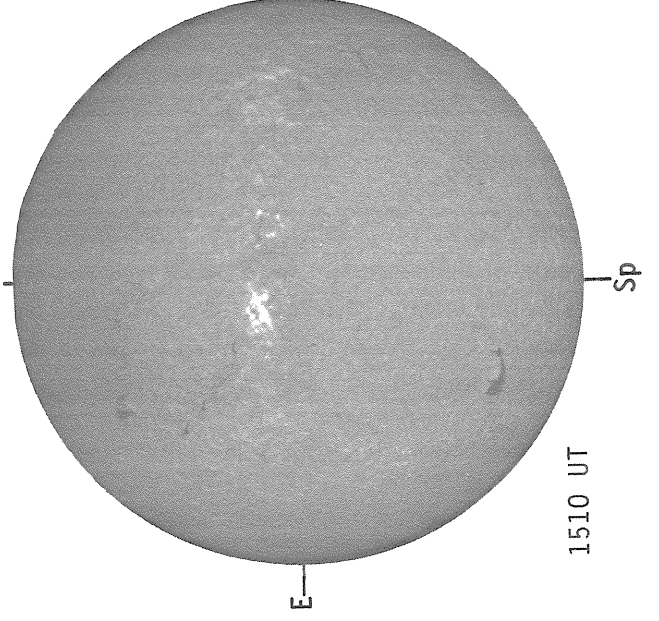


MT. WILSON MAGNETOGRAM

Delta Y = 12.9  
Delta X = 9.6

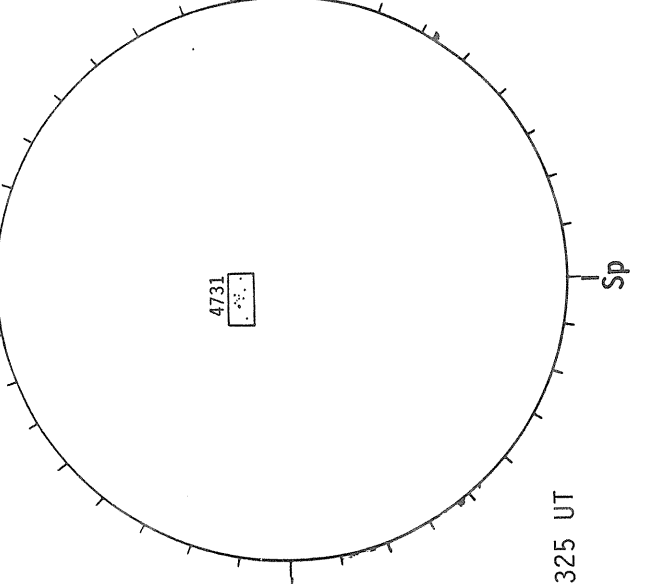


SACRAMENTO PEAK H-ALPHA



1510 UT

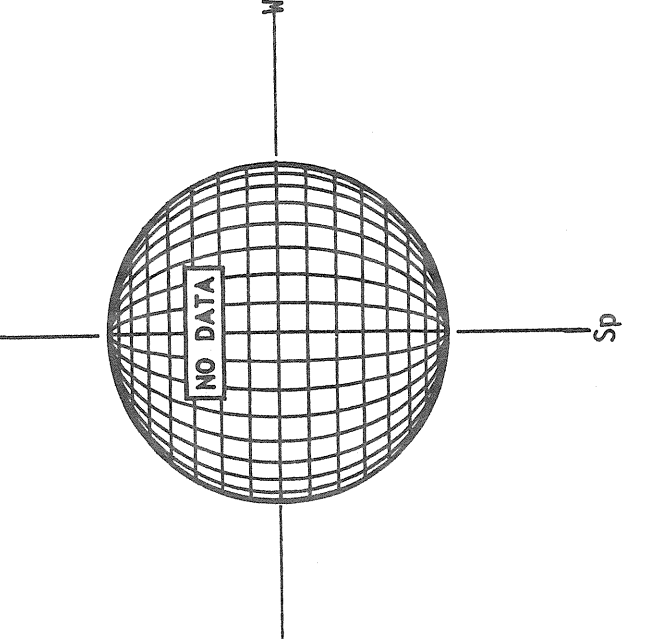
BOULDER SUNSPOTS



1325 UT

SACRAMENTO PEAK CORONA (1.15 Radii)

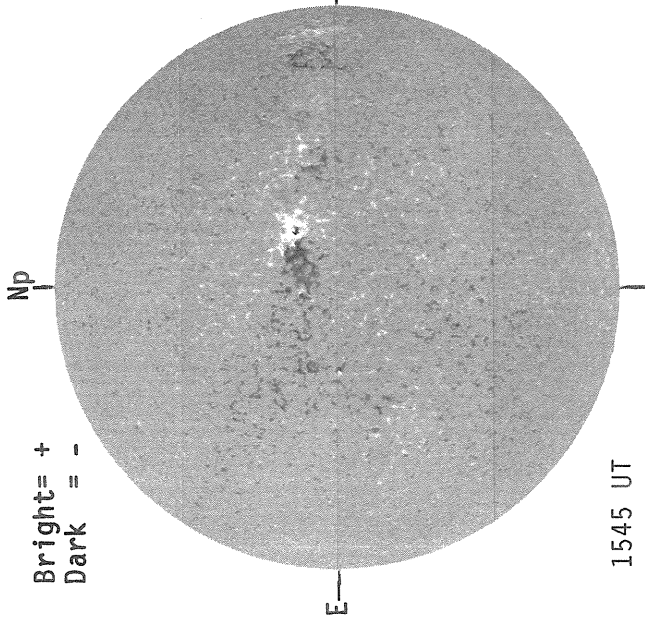
17.84 -  
18.74 UT



M A Y 25, 1 9 8 6 (P=-17.93, B<sub>0</sub>=-1.53, L<sub>0</sub>= 74.54)

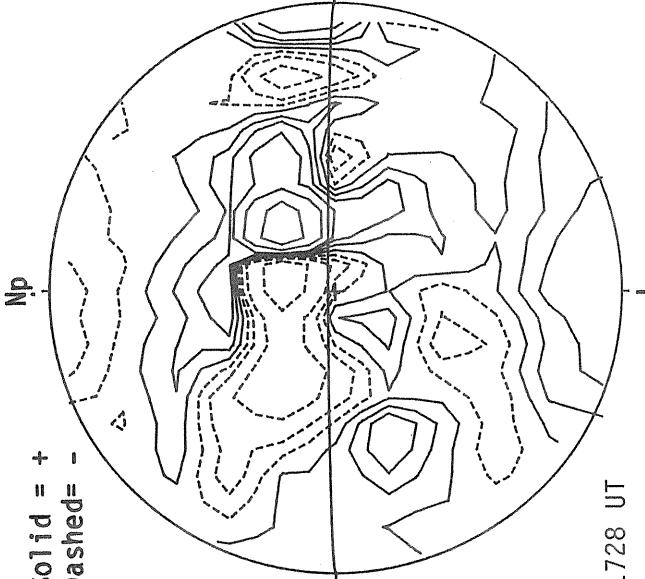
KITT PEAK MAGNETOGRAM

Bright= +  
Dark = -



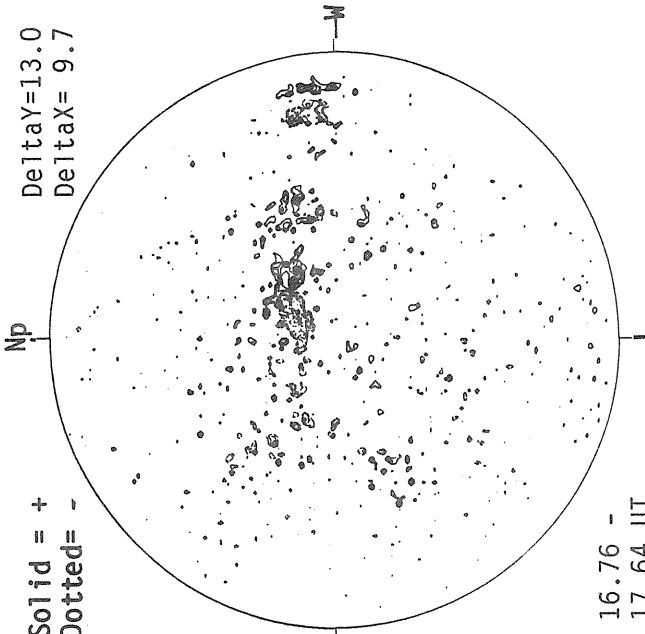
STANFORD MAGNETOGRAM

Solid = +  
Dashed = -

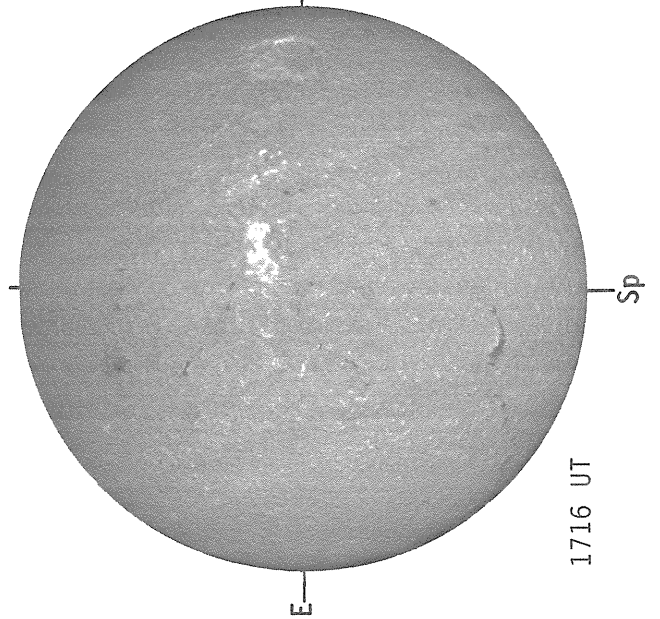


MT. WILSON MAGNETOGRAM

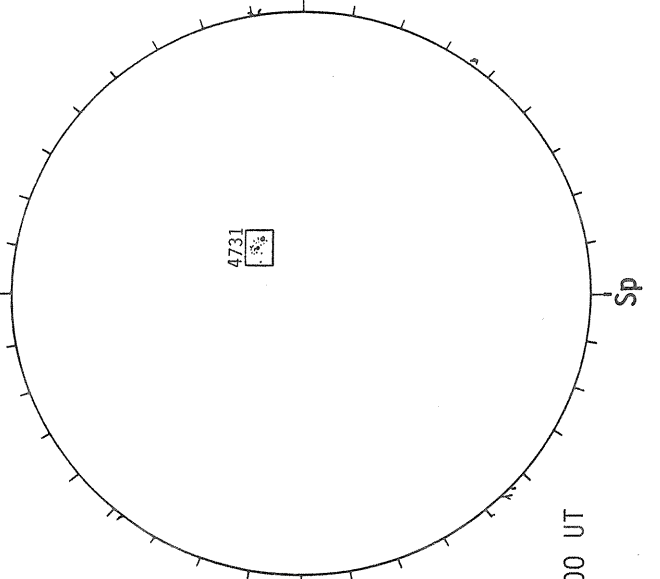
Solid = +  
Dotted = -



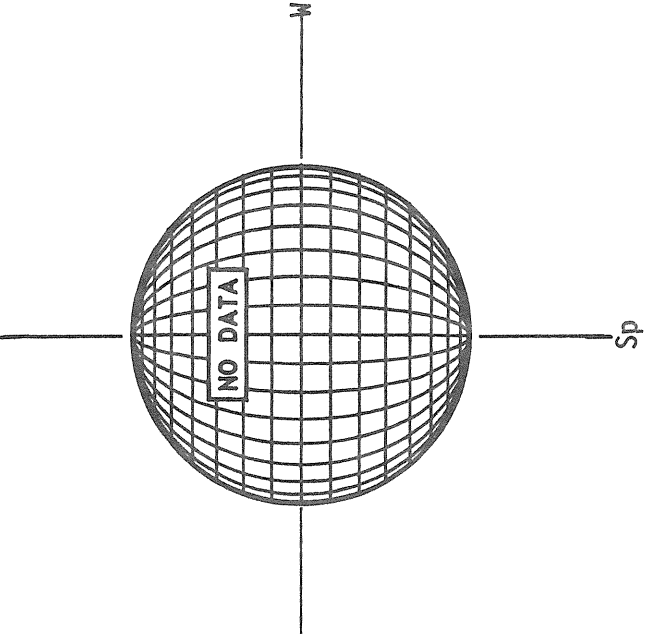
SACRAMENTO PEAK H-ALPHA



RAMEY SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

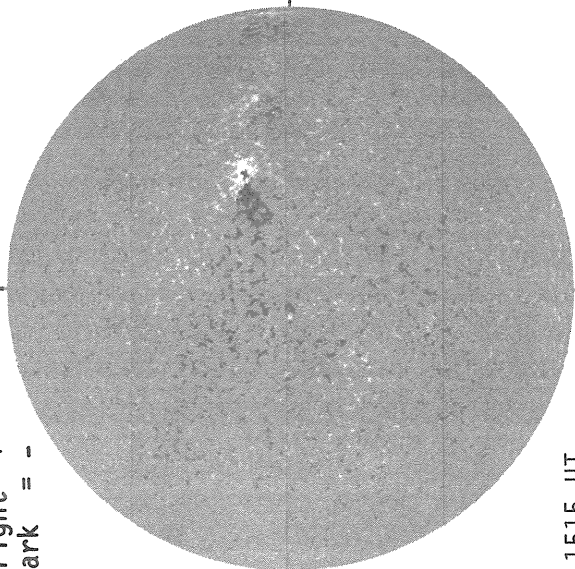


M A Y 26, 1 9 8 6 (P=-17.59, B<sub>0</sub>=-1.41, L<sub>0</sub>= 61.31)

KITT PEAK MAGNETOGRAM

Bright = +  
Dark = -

Np

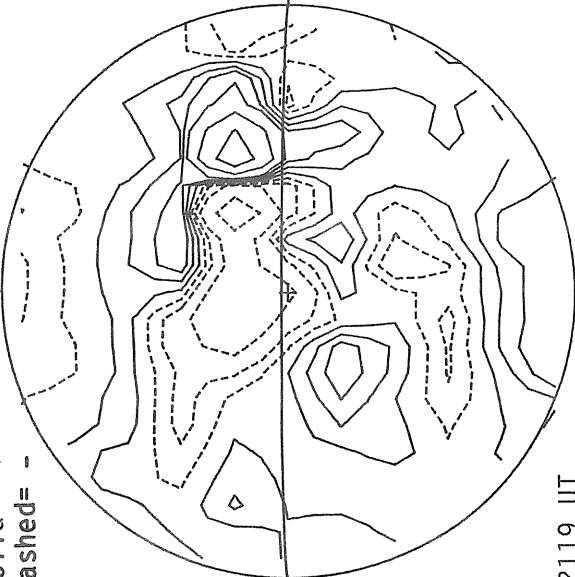


1515 UT

STANFORD MAGNETOGRAM

Solid = +  
Dashed = -

Np



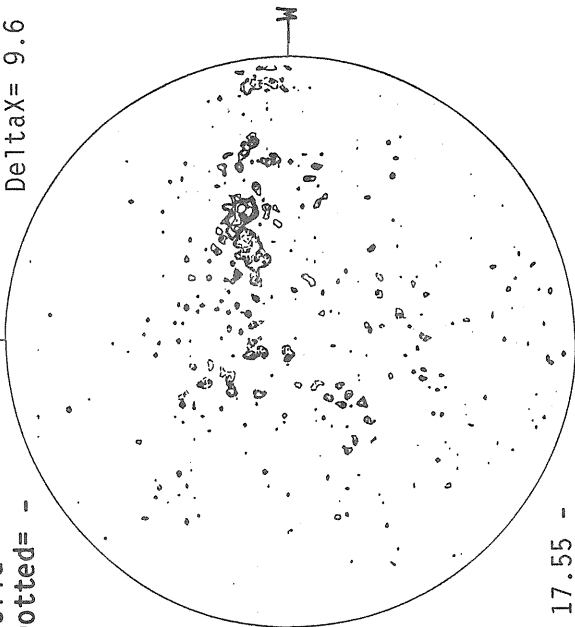
2119 UT

MT. WILSON MAGNETOGRAM

Solid = +  
Dotted = -

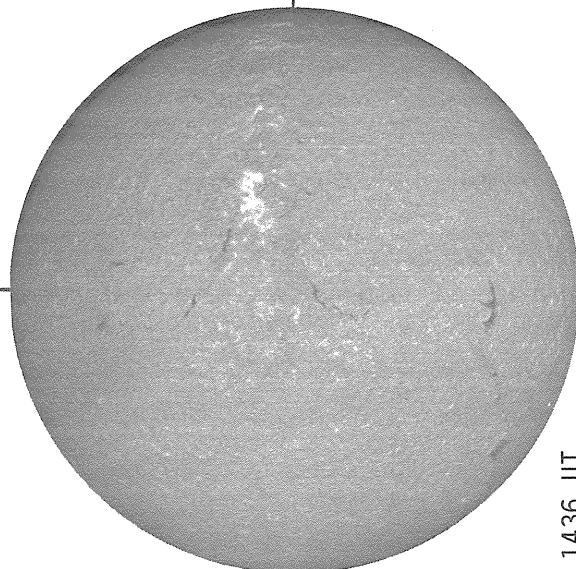
Np

DeltaY=13.0  
DeltaX= 9.6



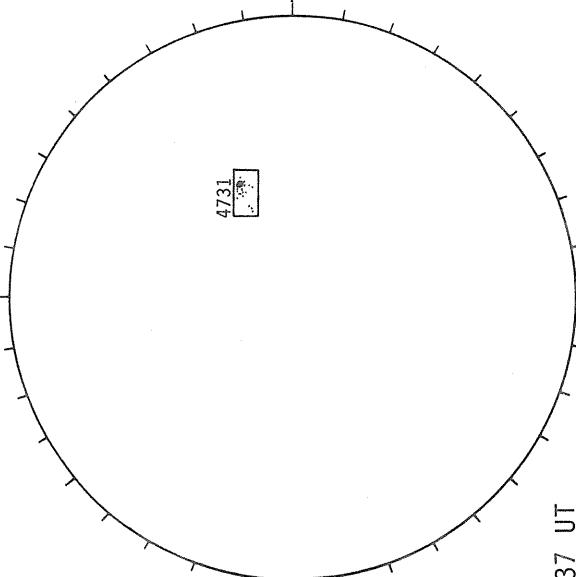
17.55 -  
18.42 UT

SACRAMENTO PEAK H-ALPHA



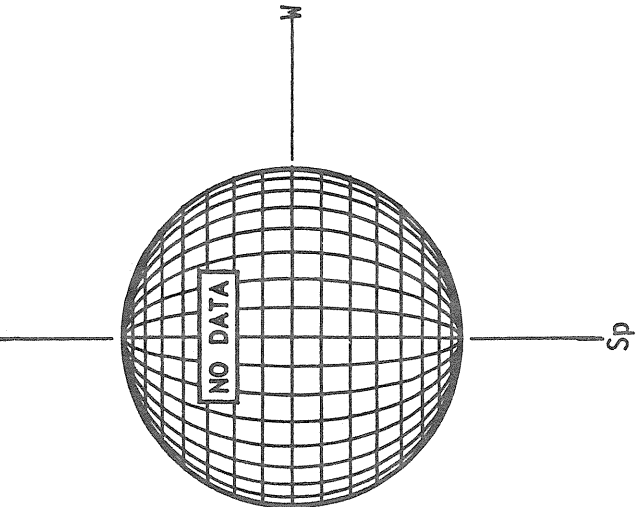
1436 UT

BOULDER SUNSPOTS



1337 UT  
1350 UT BOUL Prom

SACRAMENTO PEAK CORONA (1.15 Radii)

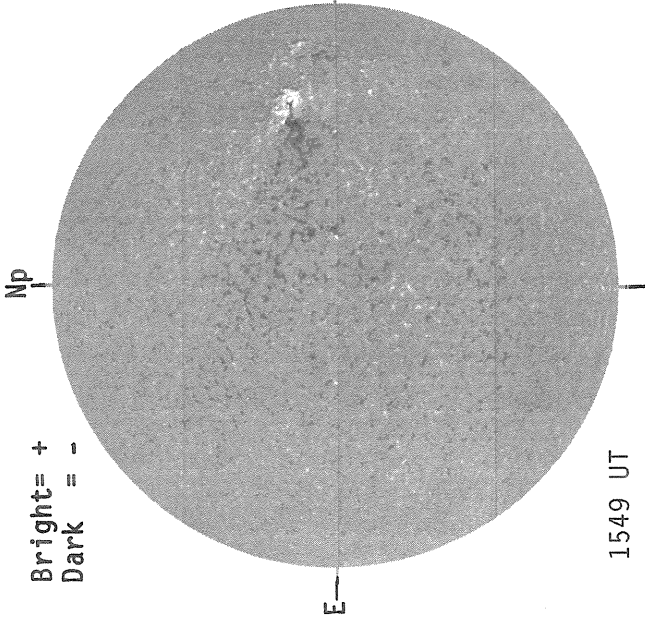


NO DATA

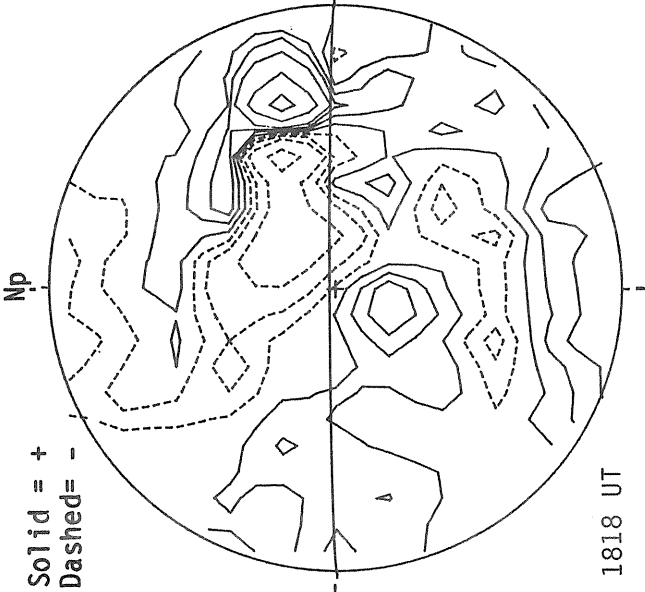
Sp

M A Y 27, 1 9 8 6 (P=-17.25, B<sub>0</sub>=-1.30, L<sub>0</sub>= 48.08)

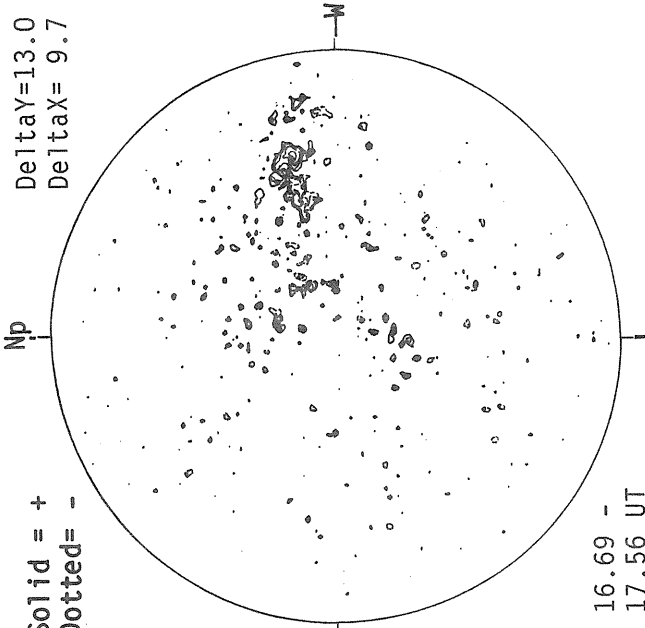
KITT PEAK MAGNETOGRAM



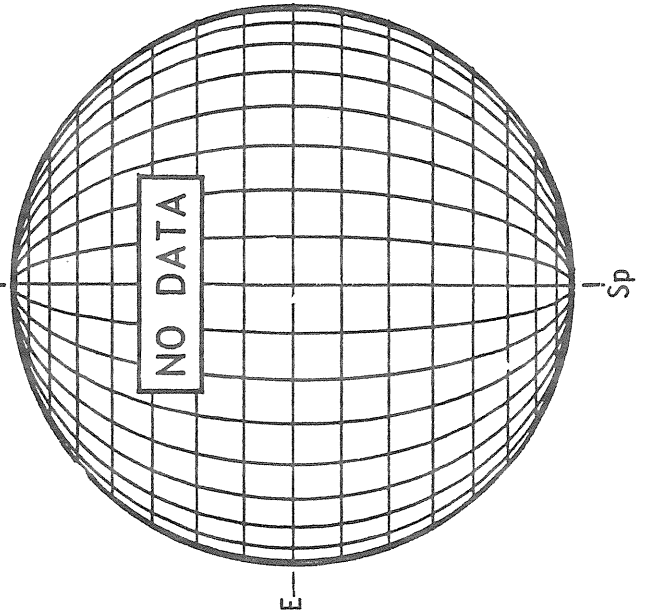
STANFORD MAGNETOGRAM



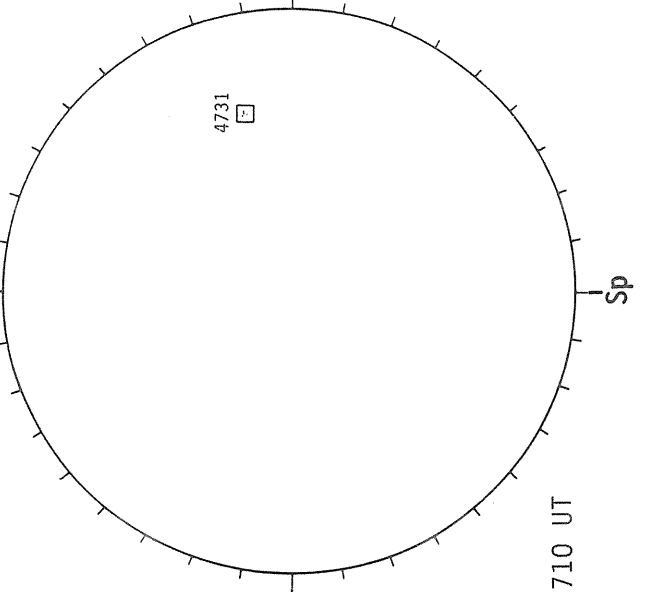
MT. WILSON MAGNETOGRAM



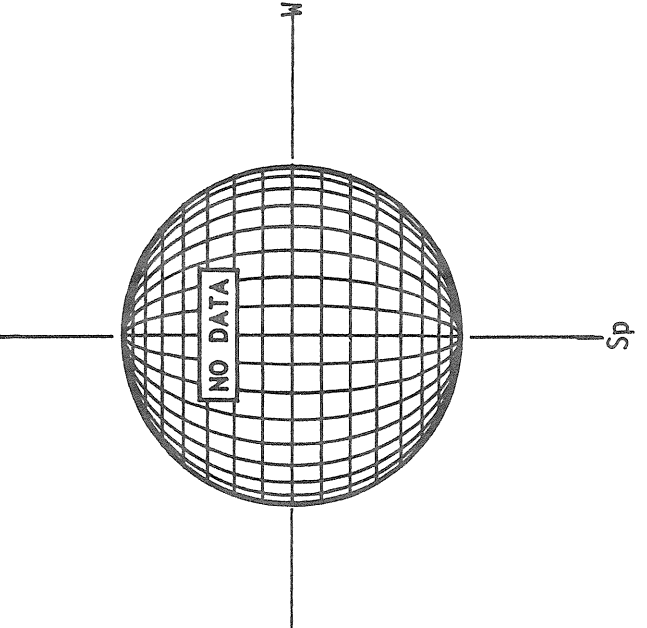
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

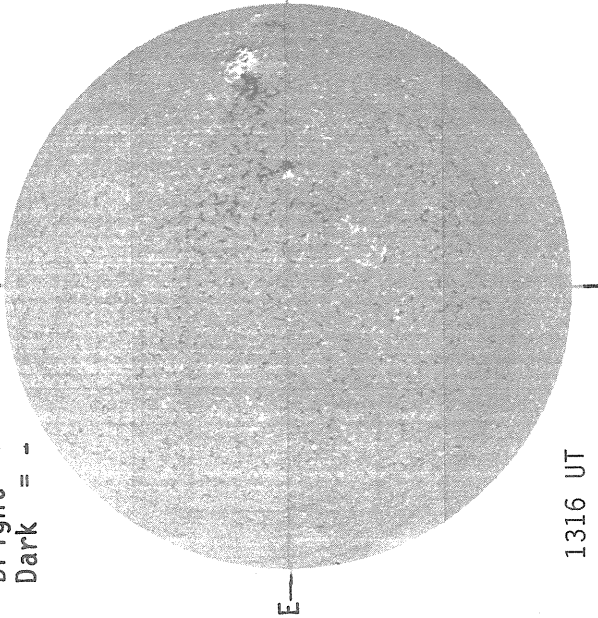


M A Y 28, 1 9 8 6 (P=-16.90, B<sub>0</sub>=-1.18, L<sub>0</sub>= 34.84)

KITT PEAK MAGNETOGRAM

Bright= +  
Dark = -

Np

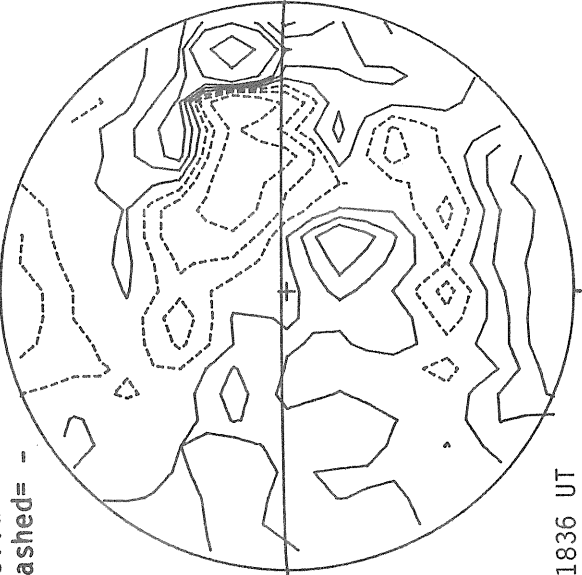


1316 UT

STANFORD MAGNETOGRAM

Solid = +  
Dashed = -

Np



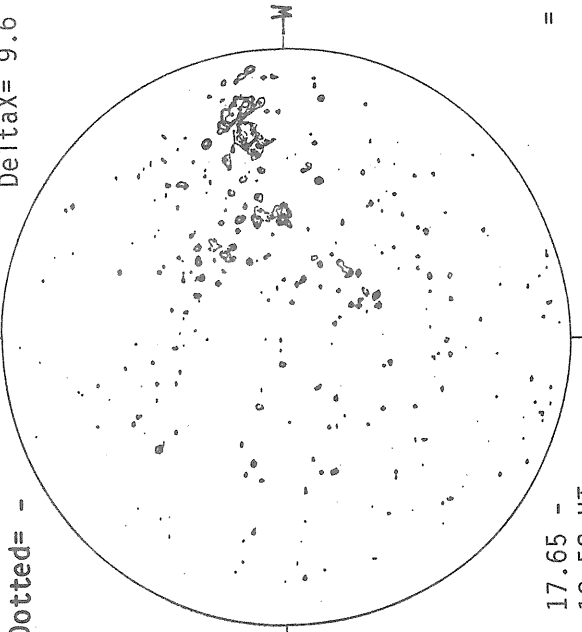
1836 UT

MT. WILSON MAGNETOGRAM

Solid = +  
Dotted = -

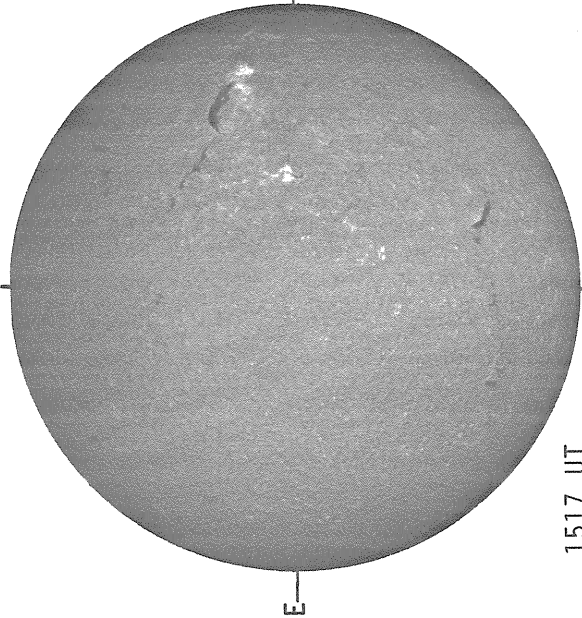
Np

Delta Y=13.0  
Delta X= 9.6



17.65 -  
18.52 UT

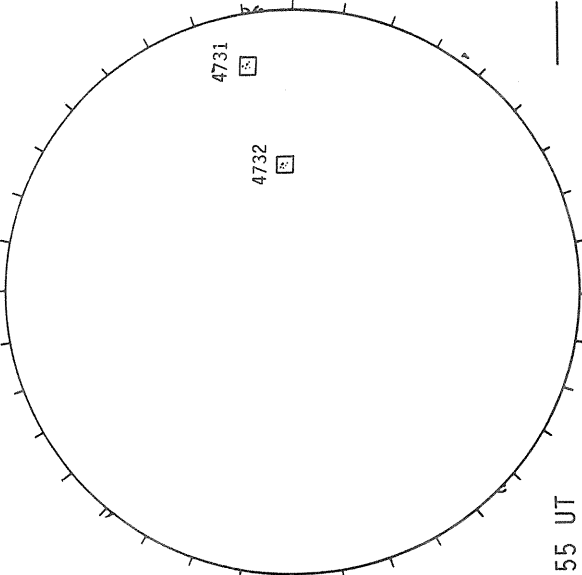
SACRAMENTO PEAK H-ALPHA



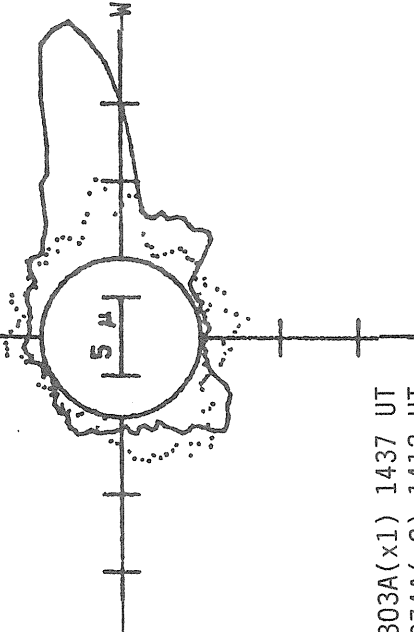
1517 UT

BOULDER SUNSPOTS

SACRAMENTO PEAK CORONA (1.15 Radii)



1755 UT  
1820 UT BOUL Prom



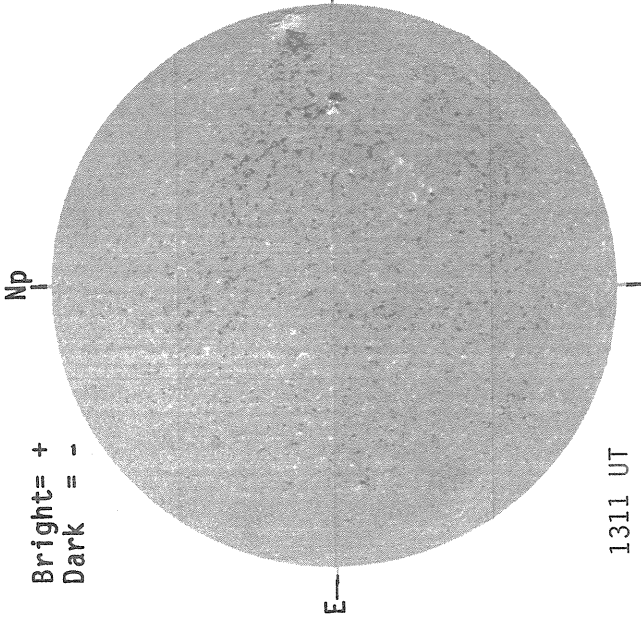
Sp

— 5303A(x1) 1437 UT  
..... 6374A(x2) 1412 UT  
xxxxx 5694A(x6) 1453 UT  
NO 5694A ACTIVITY TODAY

M A Y 29, 1 9 8 6 (P=-16.55, B<sub>0</sub>=-1.06, L<sub>0</sub>= 21.61)

KITT PEAK MAGNETOGRAM

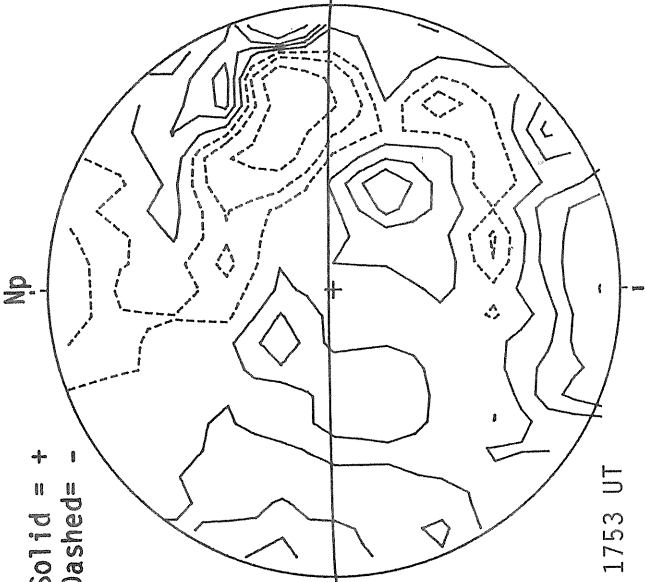
Bright= +  
Dark = -



1311 UT

STANFORD MAGNETOGRAM

Solid = +  
Dashed = -

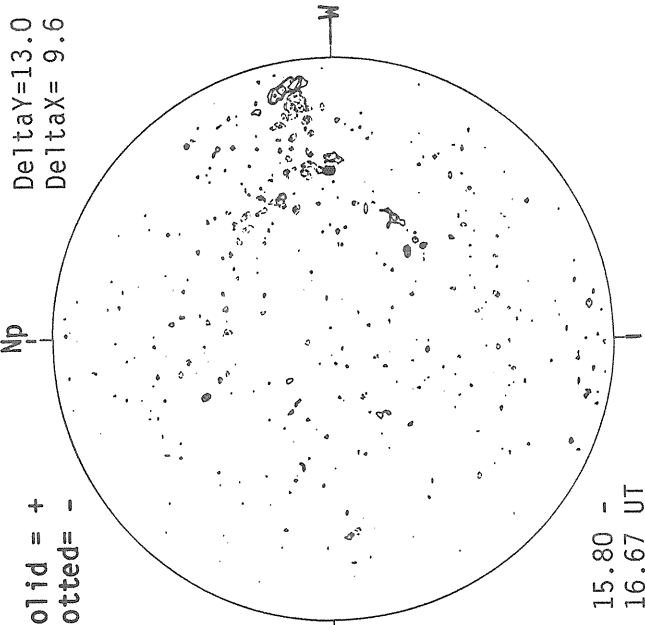


1753 UT

MT. WILSON MAGNETOGRAM

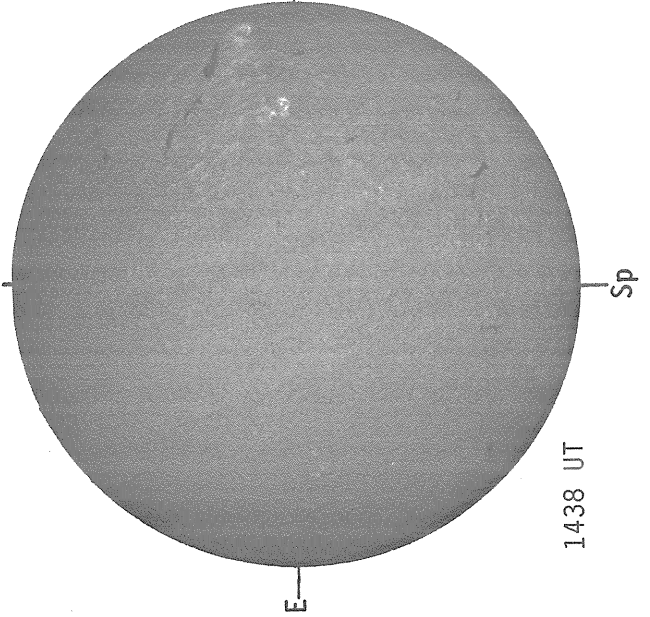
Solid = +  
Dotted = -

DeltaY=13.0  
DeltaX= 9.6



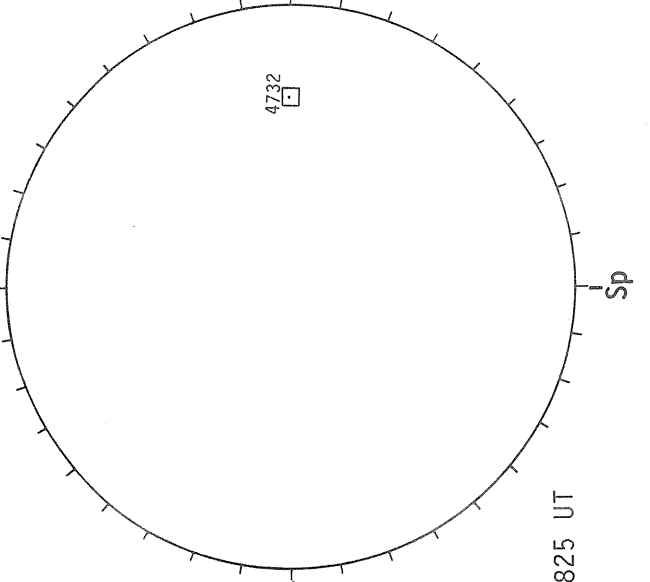
15.80 -  
16.67 UT

SACRAMENTO PEAK H-ALPHA



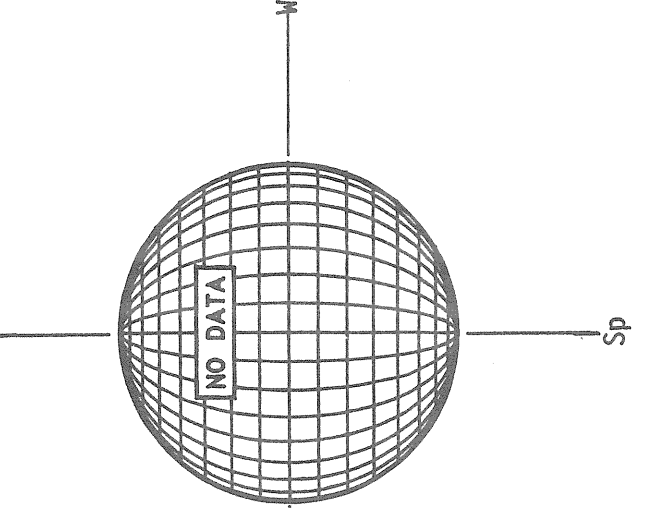
1438 UT

BOULDER SUNSPOTS



1825 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



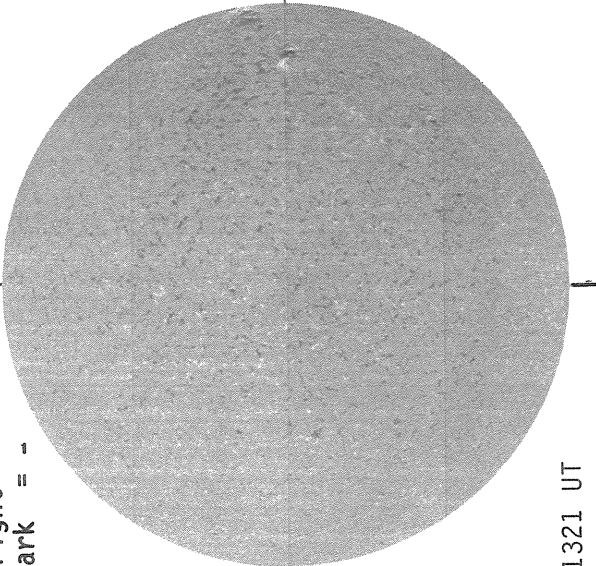
NO DATA

M A Y 30, 1 9 8 6 (P=-16.19, B<sub>0</sub>=-0.94, L<sub>0</sub>= 8.38)

KITT PEAK MAGNETOGRAM

Bright= +  
Dark = -

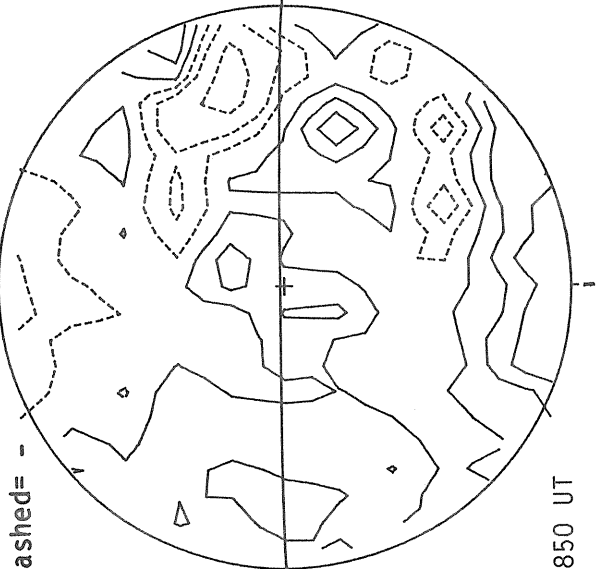
Np



STANFORD MAGNETOGRAM

Solid = +  
Dashed = -

Np

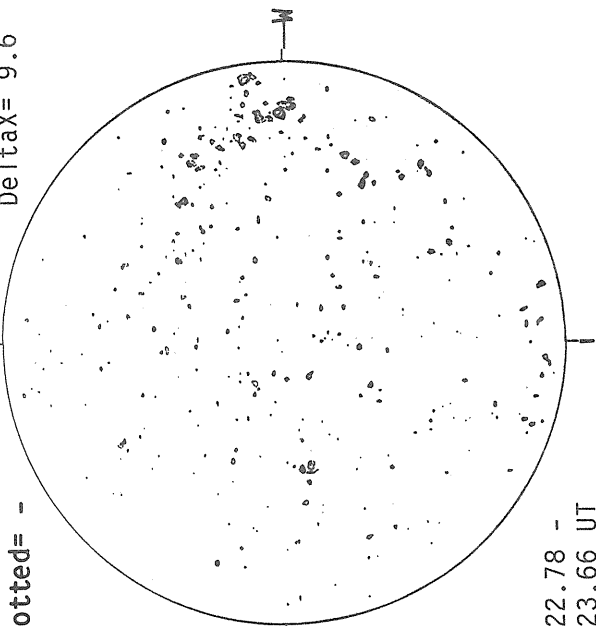


MT. WILSON MAGNETOGRAM

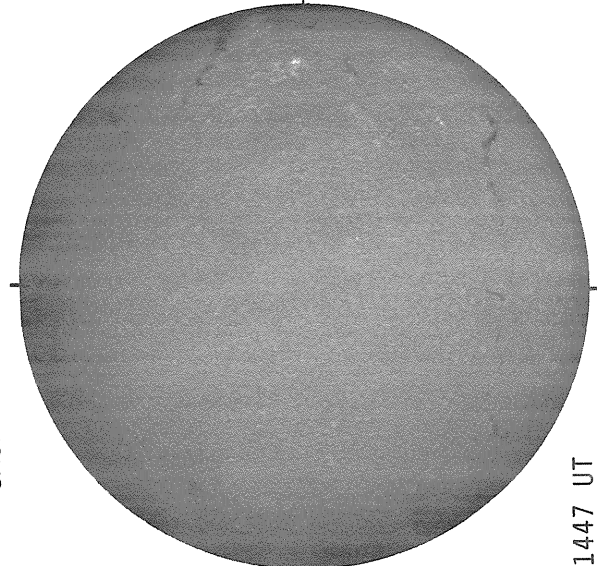
Solid = +  
Dotted = -

Np

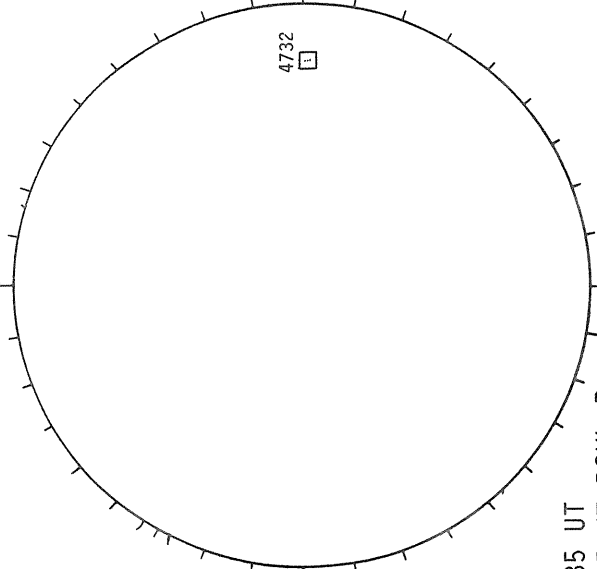
DeltaY=13.0  
DeltaX= 9.6



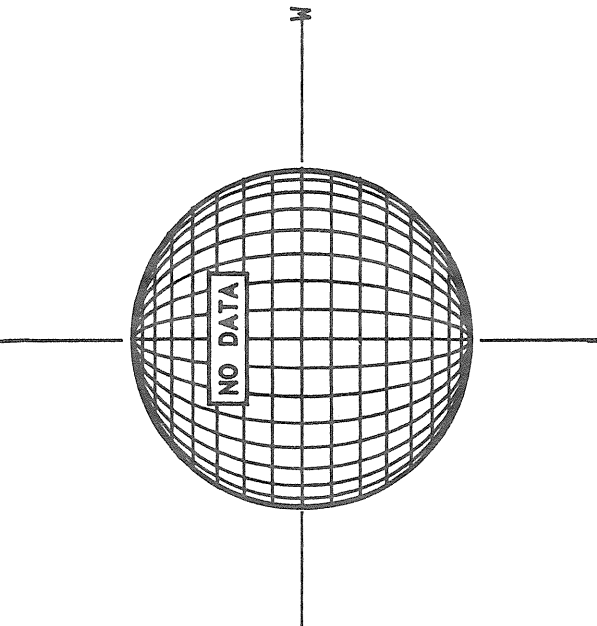
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

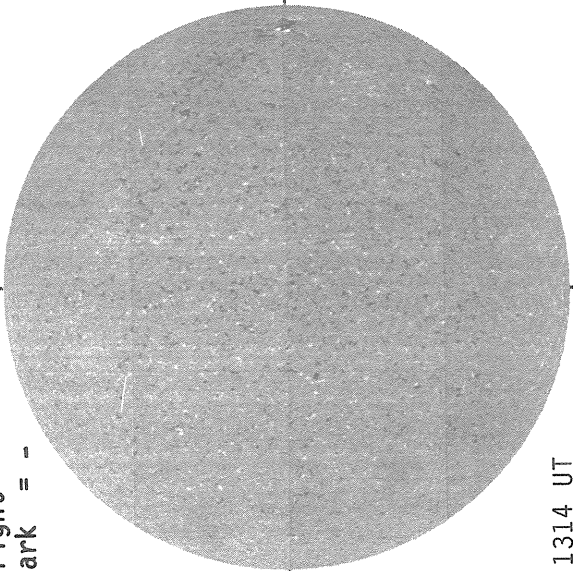


M A Y 31, 1 9 8 6 (P=-15.83, B<sub>0</sub>=-0.82, L<sub>0</sub>= 355.15)

KITT PEAK MAGNETOGRAM

Np

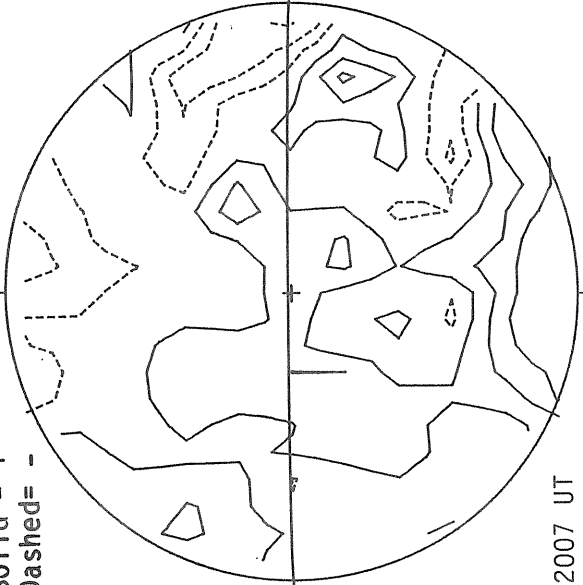
Bright= +  
Dark = -



STANFORD MAGNETOGRAM

Np

Solid = +  
Dashed = -

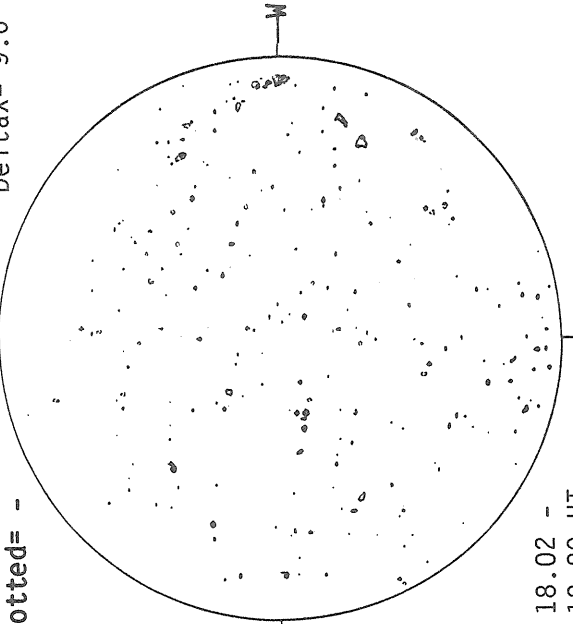


MT. WILSON MAGNETOGRAM

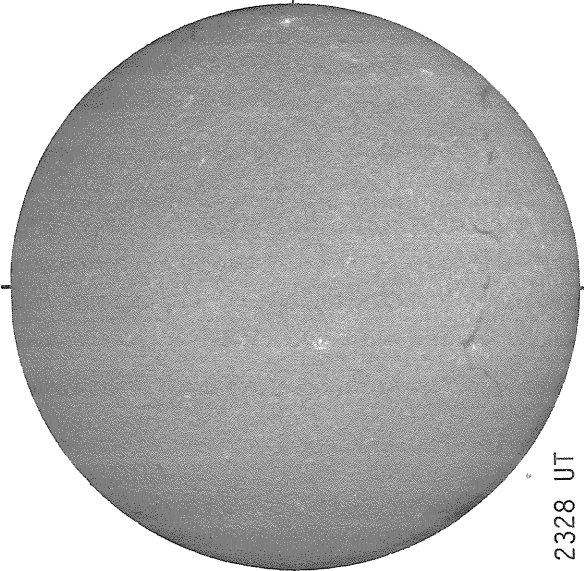
Np

Solid = +  
Dotted = -

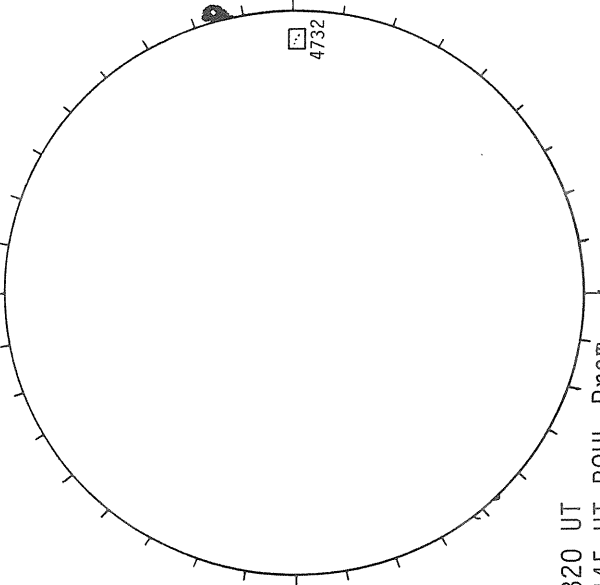
Delta Y = 13.0  
Delta X = 9.6



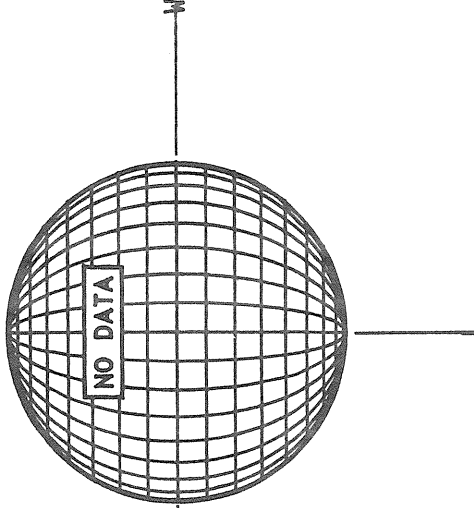
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



E

E

Sp

Sp

Sp



SUNSPOT GROUPS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

MAY 1986

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation		Lat	CMD	CMP		Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
			Mo	Day			Time (UT)	Mo							
4728A		RAMY	05	05	1259	N31 E52	05	9.6		A	AXX		1		4
	24310	MWIL	05	09	1430	N00 E09	05	10.3	2	(AP)					
4728B		LEAR	05	08	0001	S09 E35	05	10.6		A	AXX	10	1	1	2
	24312	MWIL	05	17	1600	N03 E03	05	17.9	3	(AF)					
4729	24311	MWIL	05	14	2300	N04 E80	05	20.9	3	AP					
4729		LEAR	05	15	0002	N05 E78	05	20.8		A	AXX	30	1	1	3
4729		ATHN	05	15	0725	N03 E76	05	21.0			HRX	30	1	1	3
4729		BOUL	05	15	1315	N04 E70	05	20.8		A	AXX	10	1	1	3
4729		RAMY	05	15	1315	N04 E74	05	21.1		B	CAO	10	3	6	3
4729		HOLL	05	15	1521	N04 E74	05	21.2		B	CAO	10	3	6	3
4729	24311	MWIL	05	15	1600	N03 E70	05	20.9	3	(BP)					
4729		PALE	05	15	1900	N04 E69	05	20.9		B	CAO	20	3	3	3
4729		LEAR	05	16	0002	N05 E67	05	21.0		B	BXO	50	3	4	3
4729		ATHN	05	16	0730	N04 E61	05	20.9			BXO	40	3	3	3
4729		RAMY	05	16	1110	N04 E59	05	20.9		B	DAO	10	4	4	3
4729	24311	MWIL	05	16	1500	N04 E58	05	21.0	4	(BP)					
4729		HOLL	05	16	1525	N05 E58	05	21.0		B	CRO	30	4	4	3
4729		PALE	05	16	1836	N04 E56	05	21.0		B	CRO	30	3	4	3
4729		LEAR	05	17	0117	N04 E53	05	21.0		B	CRO	20	4	4	3
4729		ATHN	05	17	0620	N04 E50	05	21.0			CSO	50	4	4	3
4729		RAMY	05	17	1213	N04 E47	05	21.0		B	CRO	60	4	3	3
4729	24311	MWIL	05	17	1600	N04 E46	05	21.1	6	(BP)					
4729		PALE	05	17	1835	N04 E44	05	21.1		B	CRO	30	6	4	3
4729		HOLL	05	17	1915	N04 E43	05	21.0		B	CSO	40	6	4	3
4729		LEAR	05	18	0102	N04 E40	05	21.0		B	CRO	30	7	4	3
4729		ATHN	05	18	0707	N04 E36	05	21.0			CSO	40	4	3	2
4729		BOUL	05	18	1350	N03 E33	05	21.0		B	BXO	40	2	4	3
4729		HOLL	05	18	1522	N04 E32	05	21.0		B	DSO	30	7	4	3
4729	24311	MWIL	05	18	1600	N04 E32	05	21.1	6	(AP)					
4729		RAMY	05	18	1850	N04 E31	05	21.1		B	DAO	50	5	4	2
4729		PALE	05	18	1935	N04 E29	05	21.0		B	CSO	60	7	4	3
4729		LEAR	05	19	0230	N05 E26	05	21.0		B	DSO	40	5	4	2
4729		ATHN	05	19	0613	N04 E22	05	20.9			CSO	40	4	4	3
4729		BOUL	05	19	1328	N03 E18	05	20.9		B	BXO	30	3	4	3
4729	24311	MWIL	05	19	1600	N04 E18	05	21.0	5	(AP)					
4729		HOLL	05	19	1610	N04 E18	05	21.0		B	DSO	20	3	3	3
4729		PALE	05	19	1838	N06 E17	05	21.0		B	CAO	40	9	4	3
4729		LEAR	05	20	0030	N04 E13	05	21.0		B	CRO	20	4	4	4
4729		ATHN	05	20	0554	N04 E10	05	21.0			CSO	20	2	2	1
4729		RAMY	05	20	1250	N04 E05	05	20.9		A	HAX	20	1	1	4
4729		HOLL	05	20	1350	N04 E05	05	21.0		A	HSX	10	1		3
4729	24311	MWIL	05	20	1600	N04 E04	05	21.0	4	(AP)					
4729		PALE	05	20	1915	N05 E02	05	21.0		A	HRX	10	1		3
4729		ATHN	05	21	0600	N04 W05	05	20.9		A	HSX	20	1	1	2
4729		BOUL	05	21	1325	N03 W10	05	20.8		A	AXX	10	1	1	2
4729		RAMY	05	21	1340	N04 W09	05	20.9		A	HRX		1	1	4
4729		HOLL	05	21	1555	N04 W11	05	20.8		A	AXX	10	1	1	4
4729	24311	MWIL	05	21	1600	N04 W11	05	20.8	4	(AP)					
4729		PALE	05	21	1905	N04 W12	05	20.9		A	HRX	10	1		3
4729		LEAR	05	22	0030	N04 W16	05	20.8		A	AXX	10	1	1	3
4729		BOUL	05	22	1355	N04 W22	05	20.9		A	AXX		1	1	2
4729		RAMY	05	22	1450	N04 W22	05	21.0		A	AXX		1		3
4729	24311	MWIL	05	22	1500	N04 W25	05	20.8	3	(AP)					
4729		HOLL	05	22	1522	N04 W24	05	20.8		A	AXX		1		3
4729		PALE	05	22	1756	N04 W25	05	20.9		A	HRX	10	1	1	2
4729		LEAR	05	23	0459	N04 W32	05	20.8		A	AXX	10	1	1	3
4729A		ATHN	05	21	0600	N07 E05	05	21.6		A	AXX	10	1		2
4729A		PALE	05	21	1905	N09 W02	05	21.6		A	AXO	10	3	1	3
4729A		BOUL	05	22	1355	N08 W11	05	21.8		A	AXX	10	1	1	2
4729A		RAMY	05	22	1450	N08 W12	05	21.7		A	AXX		1		3
4729A		PALE	05	22	1756	N08 W15	05	21.6		B	CSO	30	4	5	2
4729A		LEAR	05	24	0105	N07 W32	05	21.6		A	AXX	10	1	1	3

S U N S P O T G R O U P S  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

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May 86

MAY 1986

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Time		Lat	CMD	CMP Mo	Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
4730		PALE	05	17	1835	N05 E70	05	23.0		B	BXO	10	2	2	3
4730		HOLL	05	17	1915	N04 E66	05	22.7		A	AXX		1		3
4730		LEAR	05	18	0102	N05 E64	05	22.8		B	BXO	10	3	3	3
4730		ATHN	05	18	0707	N04 E60	05	22.8			BXO	20	2	2	2
4730	24313	HOLL	05	18	1522	N05 E57	05	22.9		B	CRO		2	3	3
4730		MWIL	05	18	1600	N04 E57	05	22.9	4	( B )					
4730		RAMY	05	18	1850	N04 E56	05	23.0		B	DAO	30	2	4	2
4730		PALE	05	18	1935	N04 E55	05	22.9		B	BXO	10	2	4	3
4730		LEAR	05	19	0230	N04 E51	05	22.9		B	BXO	10	2	3	2
4730		PALE	05	19	1838	N06 E44	05	23.1		A	AXX	10	2	1	3
	24315	MWIL	05	24	1630	N06 W16	05	23.5	4	(AP)					
4731		HOLL	05	18	1522	N06 E89	05	25.3		A	AXX		1		3
4731		PALE	05	18	1935	N05 E85	05	25.2		A	AXX	20	1	1	3
4731		LEAR	05	19	0230	N07 E77	05	24.9		A	HSX	30	2	2	2
4731		ATHN	05	19	0613	N07 E76	05	25.0			CAO	100	3	8	3
4731	24314	BOUL	05	19	1328	N07 E70	05	24.8		B	BXO	60	5	4	3
4731		MWIL	05	19	1600	N07 E71	05	25.0	5	( B )					
4731		HOLL	05	19	1610	N05 E71	05	25.0		B	DSO	60	4	6	3
4731		PALE	05	19	1838	N07 E73	05	25.2		B	DAO	80	6	9	3
4731		LEAR	05	20	0030	N05 E69	05	25.2		B	DRO	60	5	9	4
4731		ATHN	05	20	0554	N07 E64	05	25.0			DAO	60	2	7	1
4731		RAMY	05	20	1250	N06 E62	05	25.2		B	DAO	70	8	8	4
4731		HOLL	05	20	1350	N06 E59	05	25.0		B	CAO	50	8	6	3
4731	24314	MWIL	05	20	1600	N06 E60	05	25.2	4	(BP)					
4731		PALE	05	20	1915	N07 E58	05	25.1		B	CSO	50	9	9	3
4731		ATHN	05	21	0600	N05 E48	05	24.8			DAO	50	6	6	2
4731		BOUL	05	21	1325	N04 E40	05	24.5		B	BXO	10	5	2	2
4731		RAMY	05	21	1340	N07 E46	05	25.0		B	DAO	50	11	9	4
4731		HOLL	05	21	1555	N07 E45	05	25.0		B	CRO	60	10	8	4
4731	24314	MWIL	05	21	1600	N06 E45	05	25.0	4	(AP)					
4731		PALE	05	21	1905	N08 E44	05	25.1		B	CRO	60	25	10	3
4731		LEAR	05	22	0030	N06 E40	05	25.0		B	BXO	70	6	12	3
4731		BOUL	05	22	1355	N06 E27	05	24.6		B	BXO	20	3	4	2
4731		RAMY	05	22	1450	N07 E29	05	24.8		B	BXO	20	9	5	3
4731	24314	MWIL	05	22	1500	N07 E30	05	24.9	3	(AP)					
4731		HOLL	05	22	1522	N07 E29	05	24.8		B	BXO	40	8	7	3
4731		PALE	05	22	1756	N08 E27	05	24.8		B	CSO	50	16	6	2
4731		LEAR	05	23	0459	N07 E25	05	25.1		B	BXO	40	18	10	3
4731		RAMY	05	23	1230	N07 E19	05	24.9		B	BXO	50	11	9	2
4731		BOUL	05	23	1310	N07 E17	05	24.8		B	BXO	30	3	3	3
4731	24314	MWIL	05	23	1630	N07 E17	05	25.0	4	(BP)					
4731		HOLL	05	23	1754	N07 E16	05	24.9		B	BXO	30	13	9	3
4731		PALE	05	23	1813	N07 E15	05	24.9		B	BXO	20	11	6	2
4731		LEAR	05	24	0105	N07 E12	05	24.9		BG	CSI	30	24	8	3
4731		ATHN	05	24	0700	N06 E10	05	25.0			CSO	30	6	6	1
4731		BOUL	05	24	1325	N07 E04	05	24.9		B	BXI	30	10	8	2
4731		RAMY	05	24	1427	N08 E03	05	24.8		B	DAI	40	17	7	4
4731		HOLL	05	24	1445	N07 E04	05	24.9		B	CRO	60	18	6	3
4731	24314	MWIL	05	24	1630	N07 E04	05	25.0	4	(BP)					
4731		PALE	05	24	1830	N08 E02	05	24.9		B	DRO	50	14	9	2
4731		LEAR	05	25	0347	N07 W04	05	24.9		B	CRI	30	9	5	2
4731		ATHN	05	25	0806	N07 W05	05	25.0			CAO	30	3	3	1
4731		RAMY	05	25	1300	N08 W09	05	24.9		B	DAI	80	20	5	4
4731	24314	MWIL	05	25	1530	N10 W11	05	24.8	5	(BP)					
4731		HOLL	05	25	1535	N07 W12	05	24.8		B	DAI	60	14	4	2
4731		LEAR	05	26	0041	N07 W16	05	24.8		BG	CRI	50	17	4	3
4731		ATHN	05	26	0734	N09 W19	05	24.9			DRI	50	9	4	2
4731		BOUL	05	26	1337	N08 W21	05	25.0		B	CSI	120	20	7	3
4731		RAMY	05	26	1350	N08 W23	05	24.9		B	DAI	90	22	6	2
4731	24314	MWIL	05	26	1415	N10 W24	05	24.8	4	(BG)					
4731		HOLL	05	26	1425	N08 W24	05	24.8		B	DAI	90	16	4	3
4731		PALE	05	26	1920	N08 W28	05	24.7		B	DAI	80	21	5	3
4731		LEAR	05	27	0038	N08 W30	05	24.8		B	DRI	30	8	4	2
4731		ATHN	05	27	0555	N08 W32	05	24.8			DRI	30	7	3	2

SUNSPOT GROUPS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

MAY 1986

NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Time (UT)	Lat CMD	CMP Mo Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
4731	24314	MWIL	05 27 1430	N10 W39	05 24.7	4	(BG)					
4731		RAMY	05 27 1610	N09 W37	05 24.9		B	CAO	40	6	5	1
4731		BOUL	05 27 1710	N08 W39	05 24.8		B	BXO	10	4	2	2
4731		PALE	05 27 1950	N07 W42	05 24.7		B	BXO	20	4	2	2
4731		HOLL	05 27 2132	N08 W44	05 24.6		A	AXX	60	4	2	2
4731		LEAR	05 28 0020	N08 W45	05 24.6		B	CAI	40	6	3	4
4731		ATHN	05 28 0655	N08 W47	05 24.8			CRO	30	2	3	2
4731		RAMY	05 28 1230	N08 W49	05 24.8		B	CRO	30	3	5	3
4731	24314	MWIL	05 28 1430	N09 W53	05 24.6	4	(B)					
4731		HOLL	05 28 1630	N08 W55	05 24.6		A	AXX	20	2	2	4
4731		PALE	05 28 1900	N08 W57	05 24.5		A	AXX	10	1		3
4731		LEAR	05 29 0220	N08 W62	05 24.4		B	BXO	10	4	4	3
4731		ATHN	05 29 0725	N09 W63	05 24.6			AXX	20	1	1	2
4731		RAMY	05 29 1238	N10 W67	05 24.5		A	AXX		1		4
4731	24314	MWIL	05 29 1430	N08 W68	05 24.5	2	(AP)					
4731		HOLL	05 29 1538	N08 W68	05 24.6		A	AXX		1		4
4731		PALE	05 29 1740	N07 W70	05 24.5		A	AXX	10	2	1	3
4731		LEAR	05 30 0112	N08 W76	05 24.4		A	AXX	10	1	1	3
4731		HOLL	05 30 1554	N08 W82	05 24.5		A	AXX		1		3
4732		LEAR	05 26 0254	S01 E11	05 26.9		A	AXX	10	1	1	3
4732		ATHN	05 26 0734	S01 E08	05 26.9			AXX	10	1	1	2
4732	24316	MWIL	05 26 1415	N02 E04	05 26.9	4	(AF)					
4732		HOLL	05 26 1425	S01 E03	05 26.8		A	AXX		1		3
4732		LEAR	05 27 0038	S01 W01	05 27.0		A	AXX	10	1	1	2
4732		LEAR	05 28 0020	N01 W17	05 26.7		A	AXX	10	1	1	4
4732		ATHN	05 28 0655	N02 W19	05 26.9			BXO	20	2	2	2
4732		RAMY	05 28 1230	S01 W23	05 26.8		A	AXX		1		3
4732	24316	MWIL	05 28 1430	S01 W26	05 26.7	4	(BP)					
4732		HOLL	05 28 1630	S00 W27	05 26.7		A	AXX	10	1	1	4
4732		PALE	05 28 1900	S01 W28	05 26.7		A	AXX	10	1		3
4732		LEAR	05 29 0220	S01 W33	05 26.6		A	HRX	20	1	1	3
4732		ATHN	05 29 0725	S00 W35	05 26.7			AXX	20	1	1	2
4732		RAMY	05 29 1238	N02 W39	05 26.6		A	HRX	10	2	1	4
4732	24316	MWIL	05 29 1430	S01 W40	05 26.6	4	(BP)					
4732		HOLL	05 29 1538	S00 W39	05 26.7		B	CRO	20	4	5	4
4732		PALE	05 29 1740	S01 W41	05 26.7		B	CRO	20	4	5	3
4732		BOUL	05 29 1825	S00 W42	05 26.6		A	HSX	10	1	1	3
4732		LEAR	05 30 0112	S02 W47	05 26.5		B	CRO	20	3	1	3
4732		ATHN	05 30 0643	S01 W47	05 26.8			BXO	30	2	1	2
4732		RAMY	05 30 1210	S01 W55	05 26.4		A	HRX	10	2	1	3
4732	24316	MWIL	05 30 1430	S02 W55	05 26.5	4	(AP)					
4732		BOUL	05 30 1435	S01 W53	05 26.6		B	BXO	20	3	1	3
4732		HOLL	05 30 1554	S01 W55	05 26.6		A	HRX		2	1	3
4732		PALE	05 30 1832	S02 W58	05 26.4		A	AXX	10	1	1	3
4732		LEAR	05 31 0259	S02 W59	05 26.7		B	CSO	20	3	3	3
4732		ATHN	05 31 0643	S01 W61	05 26.7			BXO	20	2	1	1
4732		BOUL	05 31 1320	S01 W64	05 26.8		B	BXO	20	3	4	3
4732	24316	MWIL	05 31 1530	S02 W66	05 26.7	3	(B)					
4732		PALE	05 31 1841	S02 W68	05 26.7		B	BXO	20	2	3	2
4732		HOLL	05 31 1845	S02 W67	05 26.8		B	BXO	20	3	3	3
4732		RAMY	05 31 1855	S00 W70	05 26.6		B	BXO	10	3	3	1
4732		LEAR	06 01 0035	S02 W72	05 26.7		B	BXO	30	2	5	3
4732		CULG	06 01 0340	S03 W71	05 26.9		A	AX	10	1	1	3
4732		ATHN	06 01 0600	S02 W75	05 26.7			BXO	30	2	1	1
4732		HOLL	06 01 1430	S02 W78	05 26.9		A	AX		1		4
4732	24316	MWIL	06 01 1515	S02 W77	05 26.9	2	AP					
	24317	MWIL	05 28 1430	S04 W10	05 27.9	3	(AF)					

S U D D E N I O N O S P H E R I C D I S T U R B A N C E S

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MAY 1986

Day	Start (UT)	Max (UT)	End (UT)	Imp	Wide- spread Index	Number of Station Reports by Type					Known Flare	X-ray Class	NOAA/SESC Region
						SWF	SEA	SPA	LF- SPA	SES			
01	1340	1349	1437	1-	1		1				No flare		
02	1352	1357	1420	1-	3	1	1		1	5	1350 UT		4727
02	1553	1609	1630	1-	3		2				*		
03	0952	1015	1100	2	3		1			2	No flare		
04	0950	1005	1140	2	5	3	3	1	1	5	No flare		
06	1034	1107	1126	1-	3		2				No flare		
11	0716	0719	0732	1-	1		1				No flare		
11	1004	1009	1015	1-	1		1				No flare		
11	1152	1215U	1235	1-	3		2				No flare		
12	1333	1340	1411	1-	1		1				No flare		
15	1641	1642	1705	1-	1					1	No flare		
20	1150	1239U	1257	1-	1					1	No flare		
21	0113	0127	0150	1-	1				1		No flare		
21	0736	0751	0810	1-	1		1				No flare		
22	1402	1410	1424	1-	3		2				No flare		
24	0500	0510	0530	1	1				1		No flare		
25	1125	1135	1151	1-	3		2				No flare		
25	1238	1249	1256	1-	3		2				No flare		
25	1446	1451	1512U	1-	1		1				No flare		
26	1340	1400	1425	1-	3		2				No flare		
28	0406	0418U	0438	1-	1		1				No flare		
30	0353	0406U	0426	1-	1		1				No flare		
31	1359	1409	1426U	1-	1		1				No flare		

\* No flare patrol

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S I D s by N O A A / S E S C R E G I O N

May 1986

Day:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Events In Region #																																
4727	1																															
Events with X-ray																																
Events with No Flare Reported	1		1	1		1					3	1			1					1	2	1		1	3	1		1		1	1	
Events with No Flare Patrol																																
Events with No Region Numbers																																
Daily Event Totals	1	2	1	1		1					3	1			1					1	2	1		1	3	1		1		1	1	

OBSERVATORIES REPORTING FOR MAY 1986\*

Ayrshire, Scotland	SES	Louisville, Kentucky, USA	SES
Darmstadt, German Federal Rep.	SWF	Losov, Czechoslovakia	SEA
Edenvale, Rep. of S. Africa	SES	Maul, Hawaii, USA	SWF
Farsta, Sweden	SES	Panska Ves, Czechoslovakia	SEA, SWF, SES
Hiraiso, Japan	SWF	Paterson, New Jersey, USA	SES
Houston, Texas, USA	SES	Sofia, Bulgaria	SES
Inubo, Japan	SPA	St. Cloud, Minnesota, USA	SES
Jullusruh, German Democratic Rep.	SWF	Tavares, Florida, USA	SES
Kuhlungsborn, German Democratic Rep.	SPA, SEA	Tucson, Arizona, USA	SES
Lø Crescenta, California, USA	SES	Upice, Czechoslovakia	SEA
Latrobe, Pennsylvania, USA	SES	Valley Cottage, New York, USA	SES
Lintong, Peoples Rep. of China	SPA	Vsetin, Czechoslovakia	SEA

\*Observations are not necessarily continuous for each observatory.



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May 86

SOLAR RADIO EMISSION  
SPECTRAL OBSERVATIONS

MAY 1986

Day	Observation		Sta	Decimetric Band			Metric Band			Dekametric Band			Spectral Type
	Start (UT)	End (UT)		Start (UT)	End (UT)	Int (1-3)	Start (UT)	End (UT)	Int (1-3)	Start (UT)	End (UT)	Int (1-3)	
18			LEAR				2259.1	2259.3	1				III
20	0550	1835	WEIS				1742.2	1742.3	1				III B
			PALE				1912.5	1913.1	2				V
			PALE				1915.8	1916.6	2				V
			PALE				2055.3	2055.6	1				V
21			LEAR				0100.1	0100.6	1				III
			PALE				0100.1	0100.6	1				III
			LEAR				0143.3	0146.0	2				III
			PALE				0143.3	0145.1	2				V
			LEAR				0403.1	0403.3	1				III
			LEAR				0412.3	0413.1	1				III
	0430	1830	BLEN										
	0422	0916	WEIS				0603.7	0604.4	3				III G
			LEAR				0603.8	0604.1	1				III
	0921	1836	WEIS										
22	0419	1531	WEIS										
	0430	1830	BLEN										
	1546	1836	WEIS										
23	0420	1838	WEIS										
	0430	1830	BLEN										
24	0417	0716	WEIS										
	0430	1830	BLEN	0532.4	0532.5	1							III, RS
	0828	1839	WEIS										
25	0418	0454	WEIS										
	0420	1840	BLEN										
	0642	1318	WEIS										
	1406	1840	WEIS										
26			LEAR				0300.8	0301.1	1				III
	0416	1841	WEIS										
	0744	1830	BLEN										
27	0415	0424	WEIS										
	0420	1830	BLEN										
	0544	0643	WEIS										
	0755	1842	WEIS										
28	0413	1237	WEIS										
	0420	1840	BLEN										
	1244	1844	WEIS										
			PALE				2332.6	2333.3	2				III
29	0420	1840	BLEN	0921.6	0922.2	2	0921.6	0922.2	2				III, U, G
	0415	1827	WEIS				0921.6	0922.4	2				III G
			BLEN	1203.2	1204.2	1	1203.2	1204.2	1				III G
			WEIS				1203.3	1204.3	1				III G
30	0420	1840	BLEN										
	0554	1545	WEIS										
	1552	1844	WEIS										
31	0413	1158	WEIS										
	0420	0830	BLEN										
	1426	1840	BLEN										
			SGMR				1535.5	1539.1	1				V
			SGMR				1636.3	1636.3	1				V

COSMIC RAY INDICES  
(Neutron Monitor)

63  
May 86

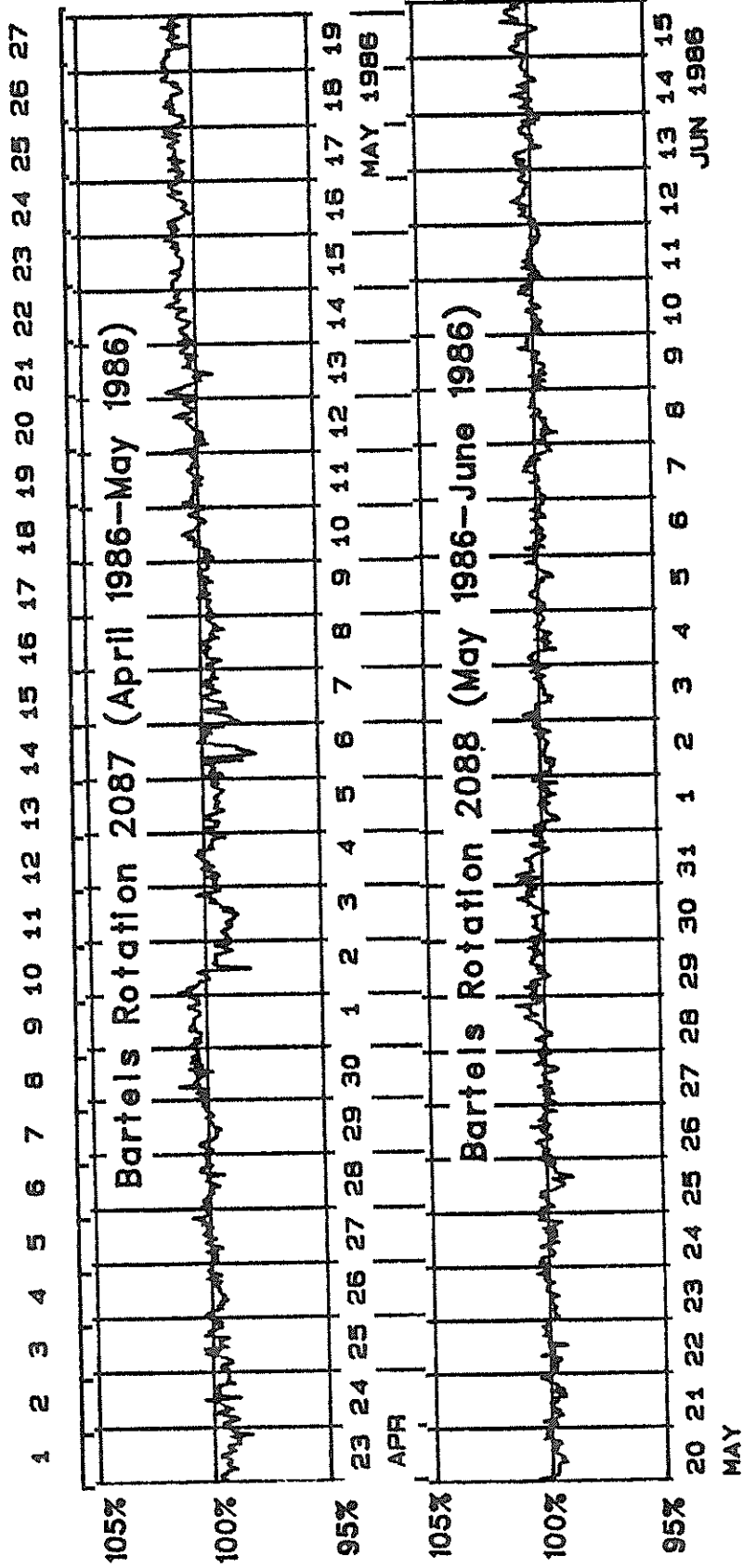
MAY 1986

Day	THULE Average (cts/h)/100	ALERT Average (cts/h)/100	DEEP RIVER Average (cts/h)/300	KIEL Average (cts/h)/100	CLIMAX Average (cts/h)/100	PREDIGTSTUHL Average (cts/h)/100	TOKYO Average (cts/h)/256	HUANCAYO Average (cts/h)/100
1	4510	7414.1	7090.6	6316.4				
2	4476	7351.7	7065.5	6288.0				
3	4453	7299.4	7043.1	6290.7				
4	4476	7363.5	7056.9	6301.8				
5	4464	7348.7	7033.6	6328.6				
6	4458	7343.7	7025.4	6327.1				
7	4460	7314.8	6994.6	6299.4				
8	4467	7312.7	7015.6	6294.6				
9	4475	7339.2	7016.0	6297.7				
10	4488	7364.4	7042.0	6298.2				
11	4496	7377.6	7051.5	6310.7				
12	4497	7385.0	7049.4	6302.5				
13	4501	7395.0	7065.4	6306.8				
14	4515	7404.3	7070.4	6307.1				
15	4522	7412.0	7046.5	6321.3				
16	4519	7379.3	7017.7	6302.9				
17	4523	7397.7	7054.2	6297.7				
18	4523	7408.9	7038.7	6293.9				
19	4526	7420.5	7045.8	6292.3				
20	4505	7381.9	7022.7	6301.5				
21	4503	7385.5	7052.8	6305.1				
22	4509	7390.9	7057.0	6300.4				
23	4509	7385.4	7046.3	6298.4				
24	4510	7393.5	7054.2	6311.4				
25	4503	7387.1	7045.7	6293.2				
26	4514	7391.2	7050.6	6302.0				
27	4509	7377.9	7053.8	6302.1				
28	4525	7413.0	7081.4	6338.6				
29	4526	7410.9	7082.7	6345.3				
30	4527	7410.2	7079.2	6340.2				
31	4526	7413.2	7057.4	6336.9				
Mean	4500	7379.8	7048.6	6308.2				

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

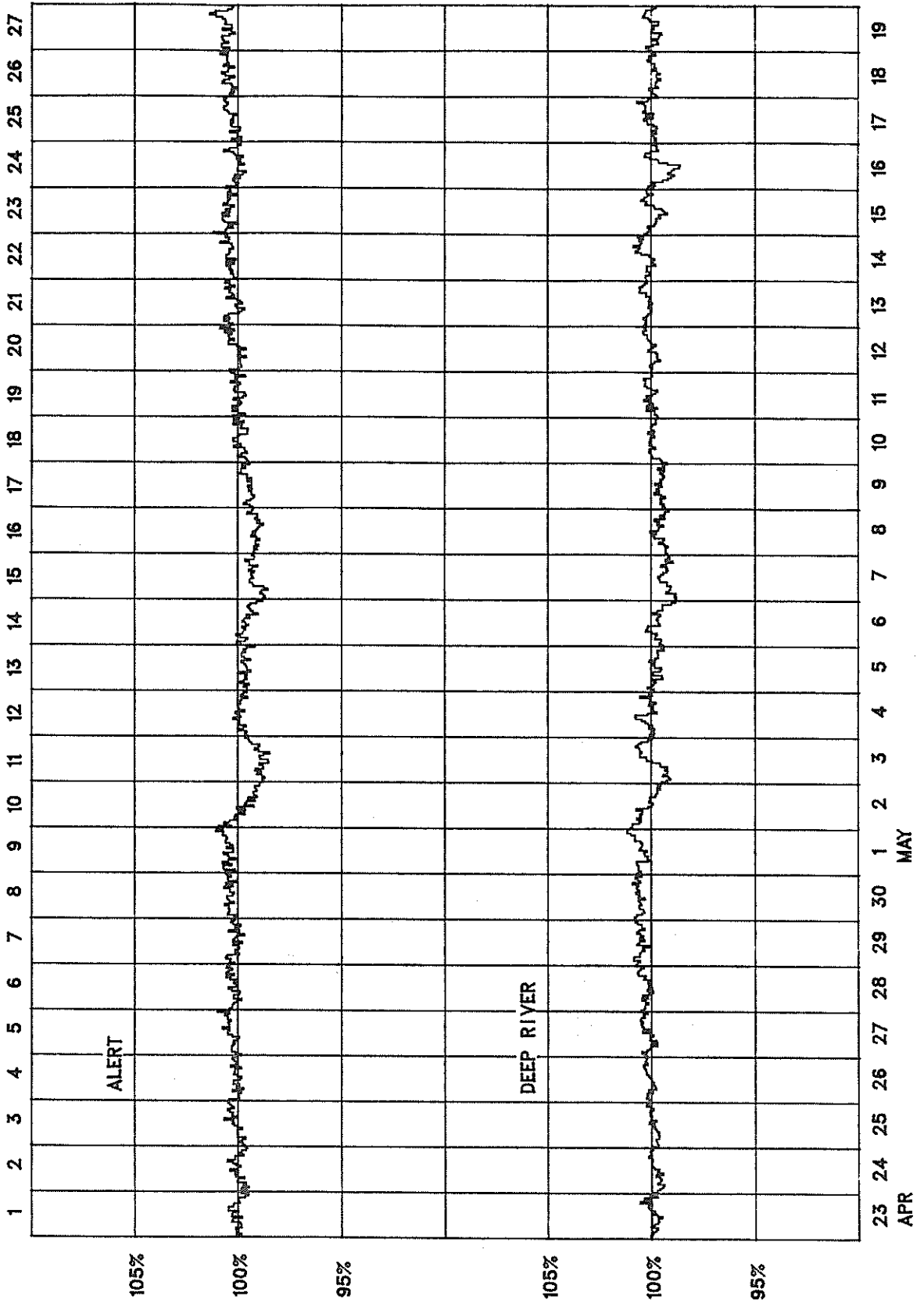


# THULE NEUTRON MONITOR



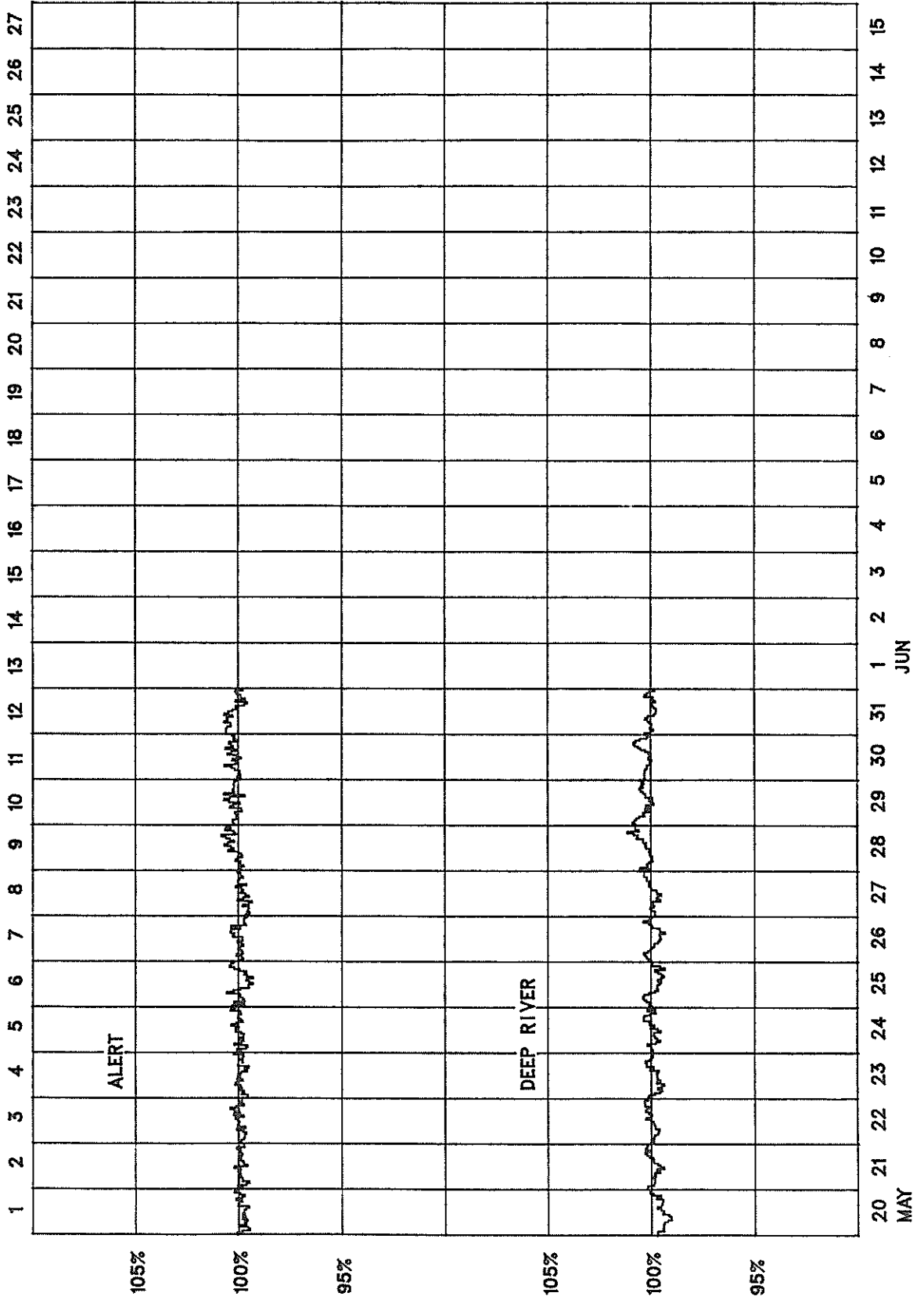
### COSMIC RAY INDICES (Neutron Monitor)

Bartels Rotation 2087 (April 1986-May 1986)



**COSMIC RAY INDICES  
(Neutron Monitor)**

**Bartels Rotation 2088 (May 1986--June 1986)**



GEOMAGNETIC ACTIVITY INDICES

67  
May 86

May 1986

Day	Kp Three-Hourly Indices								Sum	Ap	Cp	Km Three-Hourly Indices								Am	aa Provisional					
	1	2	3	4	5	6	7	8				1	2	3	4	5	6	7	8		N	S	M			
1	Q7	1	1+	2-	1	2	0	2+	1+	11-	5	0.2	1-	1+	1+	1+	1+	0	2	1	8	12	6	9	9	C
2	D2	2	3	3-	3+	6-	5	6-	7-	34	43	1.5	2-	3-	3-	3+	5	4	5-	6-	56	58	50	27	82	
3	D3	7+	6	5+	3-	2-	1-	2-	2-	27	40	1.5	6	5	5	3	2-	1	2	1+	50	50	32	72	11	
4	D4*	2-	2-	2	4	5	3	2-	4-	23-	17	0.9	2-	2-	2	3+	4	3-	2-	4-	27	29	22	15	37	
5		3	3-	1+	1+	3	3-	3	5+	22+	17	0.9	3-	3-	2-	2-	2+	3-	3-	5-	28	32	17	13	36	
6	D1	5-	6-	5	4+	5	7-	6+	6+	44	67	1.7	5-	6-	5-	4	4+	5	5	5	84	107	59	57	110	
7		4+	2-	3	2+	2	2-	3+	2-	20	12	0.7	4-	2-	3	3-	2-	2	3+	1+	23	25	19	25	19	
8		2	1	1+	2	3	2-	2	2-	15-	7	0.4	2	1-	1+	2-	3-	2-	2	2-	13	15	11	11	15	K
9	Q8	2	2	1	1+	1+	1	1+	2	12-	5	0.2	2-	1+	1	1+	2-	1	1+	2-	10	16	8	12	12	CC
10		3	1+	1-	2+	1+	1	2	1-	12+	6	0.3	3-	1	0+	2+	1+	1+	2-	1-	11	14	8	11	12	CC
11		2-	2-	2	2	2-	2-	2	2	15-	6	0.3	1+	2	2-	2-	2-	1+	2-	2-	12	14	11	13	12	CC
12		2+	3+	1+	1+	2	1	1	1+	14-	7	0.4	2-	3	1+	1	2	1	1-	1+	11	13	11	15	9	KC
13	Q6	1-	1-	1-	1	1-	1-	1+	2	8-	4	0.1	0+	0+	1-	1	1+	0+	1+	2-	6	10	7	5	12	CC
14	Q1	1+	1+	1	0	0+	1-	1-	1	6+	3	0.1	1+	1+	1	0+	0+	0+	1	1-	5	9	4	6	7	CC
15	Q4	0+	1	1	1	1-	1-	1+	2-	8-	4	0.1	0+	1	1	1	0+	1-	2-	2-	7	8	3	3	8	CC
16		0+	1	2	2	2-	1+	3-	3	14	7	0.4	1-	1+	2+	3-	2+	2	2	3	16	18	15	12	21	
17		3-	3	1	2+	2	2+	2-	2-	17-	8	0.5	3	2+	1+	2	2+	3-	1+	1+	16	21	14	16	19	
18	Q9	1-	2-	2+	2-	1+	1	0+	2	11	5	0.2	0+	2-	2+	2-	2-	1-	0+	2-	10	11	8	12	7	CK
19		2	2-	1	2-	3-	2	3-	2+	16	8	0.4	2	2	2-	2-	2	3-	3-	2-	15	21	12	10	23	K
20	Q10	2-	2-	0+	2-	2-	2	1	2-	12-	5	0.2	2-	1+	0	1+	1+	1+	1	2-	9	13	7	9	12	CK
21		0+	1-	2-	2+	2+	2+	2	1	13-	6	0.3	1-	1	2	2+	2	2	2-	1-	11	15	9	9	16	CC
22	Q3	0+	1-	0+	0	0+	1+	2	1+	6+	3	0.1	0+	0+	0+	0+	0+	1+	2-	1	5	8	2	2	8	CK
23		2	2	3	2+	2+	1	1+	2	16	8	0.4	2-	2-	3-	2	2	1	1	2-	13	19	11	18	12	C
24		2	2-	1	2-	3-	2+	1-	2-	14	7	0.3	2-	2-	1+	2-	3-	2	1-	1+	13	19	12	14	17	
25		2	3-	3	3	2	2+	1+	2-	18	10	0.5	2	3-	3	3	2	2	1+	1+	19	22	16	26	13	
26		2-	2-	3	2+	2	2+	2-	1	16-	8	0.4	2-	2-	3	3-	2-	3-	2	1	17	22	16	21	17	
27		2	1+	2	1+	1+	2	2	3	15	7	0.4	2+	2-	3-	2-	1+	2-	2-	3-	15	21	10	15	16	
28	Q2	2+	0+	0	0+	0+	0+	1-	1-	5	3	0.1	2+	0+	0+	0+	1-	0+	1-	1	5	10	5	9	6	CC
29	Q5	1	1-	0+	1+	1-	0+	1	2	7+	4	0.1	1	1-	0+	1+	1	0+	1-	2-	6	12	4	6	11	CC
30	Q6	1	1	1-	1	2-	3+	4-	3+	16-	10	0.6	1	1	1-	2-	2-	3	3+	3	17	22	13	7	29	
31	D5*	3	4-	3+	3	3-	3-	4	3+	26-	17	0.9	4-	4	3+	3-	3	2+	4-	4-	37	31	37	32	36	
Mean										12		0.49									18.5	22.6	14.8		18.8	
Day	Kn Three-Hourly Indices								An	Ks Three-Hourly Indices								As	Sa	Prov R1	Ra	Rs	IMF			
	1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8									
1	1-	1+	2-	1+	2-	0+	2+	2-		10	1-	1	1+	1	1	0	1+	0+		6	72.5	15	13	16	D	-
2	2	3-	3-	3+	5-	4	5	5+		55	2-	3-	3-	4-	5	4	4	6-		57	74.3	23	23	18	A	-
3	6	5	5	3-	2-	1-	2	1+		52	6-	5-	5-	3	2-	1	2	1		49	73.8	12	13	18	T	-
4	1+	2-	2	4-	4+	3	2	3+		29	2-	2-	2	3-	4-	3-	1+	4		25	71.6	9	8	15	A	-
5	3-	3	2	2-	2+	3-	3-	4+		27	3	2+	1+	1+	2+	3-	3-	5		28	70.8	10	0	14	A	-
6	4+	5	4	4-	4	4+	5	5		74	5	6-	5-	5-	4+	5+	5	5		96	69.8	0	0	13	O	-
7	4-	2	3	3-	2	2-	3	1+		22	4	1+	3	3-	1+	2	4-	1		23	69.9	0	0	13	T	-
8	2-	1	2-	2	3	2	2+	2-		15	2	1-	1	1+	3-	1	2-	2-		11	69.5	0	0	13	-	-
9	2	2-	1+	2-	2	2-	2	2		13	1+	1+	1-	1+	1+	0+	1-	1		7	69.8	0	0	13	C	-
10	3-	1	1-	3-	2	2-	2	1		13	3-	1	0+	1+	1	0+	1+	0+		8	70.9	0	0	15	U	-
11	1+	2-	2	2	2	2	2	2		14	1	2+	2-	1+	1	1-	1	1		9	71.4	0	0	15	R	-
12	2	3	2-	1+	2+	1	1+	2-		14	2-	3	1	0	1+	1-	0	1-		8	70.9	0	0	15	E	-
13	1	1-	1	1+	2-	1-	2-	2		8	0	0	1-	0+	1	0	1-	2-		4	71.7	0	0	15	N	-
14	1+	1+	1+	0+	0+	1-	1+	1		7	1	1	1-	0+	0	0	0+	0+		4	71.6	0	9	15	T	-
15	0+	1+	1+	1+	1-	1	2-	2		8	0+	1-	1	1-	0	0	2-	2-		5	72.7	9	8	17	L	-
16	1	1+	2+	3-	2	2-	2+	3-		16	1-	1-	2+	2+	3-	2	2-	3		16	74.3	11	10	18	A	-
17	3-	3-	1+	3-	2+	3-	2	2-		18	3+	2+	1+	2-	2+	2+	1	1		15	75.3	13	14	19	A	-
18	1	2	3-	2	2	1+	1-	2		12	0	1+	2	2-	1+	0	0	1		7	78.7	22	19	23	V	-
19	2	2-	2-	2+	3-	3-	3-	2+		18	2-	2	1+	1	1+	2+	3-	1		12	78.7	27	22	23	A	-
20	2	2-	0+	1+	2-	2-	2-	2		11	1+	1	0	1	0+	1	0+	1+		6	79.6	23	23	24	I	-
21	1	1+	2	3-	3-	2+	2	1		15	0+	1-	2	2-	1+	1+	2-	1-		8	79.2	30	19	24	A	-
22	1-	0+	1-	0+	1	2-	2	2-		8	0	0	0	0	0	0+	1	0		2	79.2	27	21	24	B	-
23	2	2	3	3-	2+	1+	1+	2		17	1+	2-	3-	2-	2-	1-	0+	2-		10	78.8	20	24	23	L	-
24	2-	2-	1+	2	3+	2+	1+	2		16	2	2-	1	1+	2+	1	0	1-		10	79.5	24	24	24	E	-
25	2-	3	3+	3	2+	3-	2-	2+		23	2-	3	3	3	2-	1	1-	0+		14	81.1	22	22	26	-	-
26	1+	2	3+	3-	2+	3-	2	1+		19	2	1+	3	3-	1+	3-	2-	0+		16	77.1	25	21	21	-	-
27	2	2-	3	2	2-	2+	2+	3		18	2+	1+	3-	2-	1-	1-	1	2+		12	74.7	18	14	19	-	-
28	3-	1-	1-	1	1	1-	1	1+		8	2	0	0	0	0+	0	0	0+		3	74.3	18	18	18	-	-
29	1+	1	1	2-	1+	1	1+	2		9	1-	0	0	1-	0+	0	0	2-		3	74.3	17	15	18	-	-
30	1	1+	1+	2	2	3	4-	3+		21	1	0+	0	1	1+	3	3	3-		14	72.5	13	9	16	-	-
31	3	4	3+	3	3-	3-	4-	3+		35	4	4+	3+	3-	3	2	4-	4-		40	73.2	10	11	17	-	-
Mean										20.2										17.0	74.2	13.1	11.6	18.1		

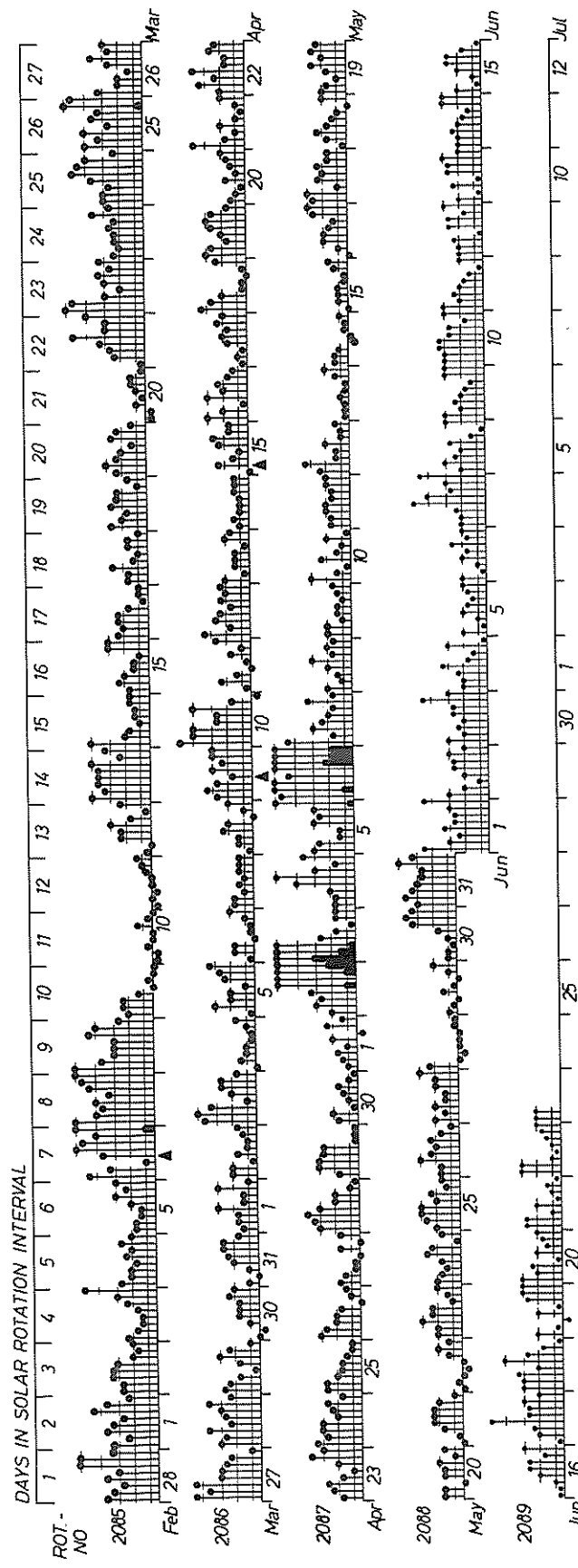
DAILY AVERAGE INDICES Ap

DAY	1985							1986				
	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
1	18	14	18	6	3	15	15	25	5	18	8	5
2	6	3	11	4	5	32	14	18	6	12	5	43
3	4	6	6	4	11	28	9	10	6	12	14	40
4	5	33	6	2	12	16	12	5	5	8	4	17
5	5	16	4	3	66	10	8	4	7	8	9	17
6	25	21	3	9	41	13	7	20	11	32	4	67
7	30	19	4	9	27	7	5	32	82	33	5	12
8	16	16	6	10	16	6	3	11	202	23	5	7
9	22	8	5	12	6	14	5	14	100	5	13	5
10	30	8	7	12	6	19	17	11	10	2	19	6
11	11	10	5	9	16	10	11	4	20	2	6	6
12	10	48	27	5	12	4	7	5	18	7	10	7
13	4	20	41	5	20	24	30	3	15	21	5	4
14	4	16	11	29	8	17	11	4	19	8	4	3
15	5	7	12	18	18	16	10	5	5	8	7	4
16	3	5	9	33	17	10	6	3	5	6	8	7
17	7	20	9	13	15	14	8	6	9	6	6	8
18	4	13	12	5	22	15	12	7	14	8	7	5
19	3	8	12	35	14	14	41	4	9	9	11	8
20	13	8	12	29	6	3	11	15	17	3	5	5
21	7	5	10	23	16	5	5	27	26	17	7	6
22	6	4	28	13	17	8	6	11	30	22	11	3
23	7	13	17	9	13	4	4	17	35	11	10	8
24	5	12	7	17	8	4	10	12	19	21	12	7
25	12	12	18	18	9	6	6	26	18	27	7	10
26	21	16	14	19	4	6	8	12	26	12	7	8
27	13	15	15	17	4	20	12	37	20	18	4	7
28	18	13	13	6	4	8	35	30	25	14	11	3
29	13	5	17	4	11	37	7	19		8	9	4
30	10	11	10	5	3	52	46	14		5	5	10
31		36	32		6		22	8		7		17
MEAN	11	14	13	13	14	15	13	14	27	13	8	12

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

Kp through May 31, 1986

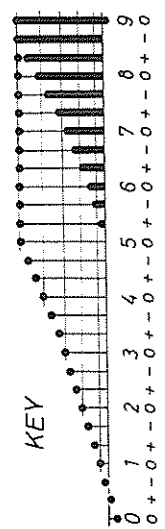
University of Göttingen



PLANETARY MAGNETIC  
THREE-HOUR-RANGE INDICES  
Kp (after Bartels)

Kp till 1986 May 31  
Ks (from Wingst and Göttingen) till June 23

▲ = sudden commencement



0  
1  
2  
3  
4  
5  
6  
7  
8  
9

PRINCIPAL MAGNETIC STORMS

MAY 1986

Sta	Geomag Lat	Commencement		SC Amplitudes			Maximum 3-Hour K Index Day(3-Hour Periods)	K	Ranges			End Hour	
		Day	Time (UT)	Type	D (Min)	H (Gamma)			Z (Gamma)	D (Min)	H (Gamma)		Z (Gamma)
COL	64.6N	01	18--	..	..	..	02(5,6)	7	249	1940	1020	03	12
FRD	49.6N	01	20--	..	..	..	03(1)	7	47	139	108	07	--
HYB	07.6N	01	2000	..	..	..	02(6)	6	4	171	24	03	14
ETT	00.6S	01	2000	..	..	..		-	-5	227	55	03	15
KGL	56.5S	01	2010	..	..	..	02(8)	7	60	504	416	03	10
WIT	54.2N	02	0900	..	..	..	03(1)	7	38	163	155	03	09
BJI	28.5N	02	02--	..	..	..	03(1)	5	10	115	31	03	16
JAI	17.3N	02	03--	..	..	..		-	6	137	35	03	16
SHL	14.7N	02	03--	..	..	..		-	5	133	38	03	16
UJJ	13.5N	02	03--	..	..	..		-	5	140	28	03	16
ABG	09.5N	02	03--	..	..	..	02(7) 03(1)	5	5	164	42	03	16
ANN	01.5N	02	03--	..	..	..		-	5	204	46	03	16
TRD	01.1S	02	03--	..	..	..		-	4	190	81	03	16
CNB	43.9S	02	10--	..	..	..	02(5)	5	19	123	51	03	11
WIT	54.2N	04	0940	..	..	..	04(5,8)	5	12	145	26	04	24
HYB	07.6N	04	0900	..	..	..	06(2,5,7,8)	5	6	166	35	07	20
ETT	00.6S	04	0100	..	..	..		-	-8	109	36	04	18
COL	64.6N	05	11--	..	..	..	06(2,3,4,5,6,7)	6	295	1550	1200	07	20
WIT	54.2N	05	1200	..	..	..	06(8)	7	60	217	116	07	02
JAI	17.3N	05	16--	..	..	..		-	8	117	42	07	24
SHL	14.7N	05	16--	..	..	..		-	7	115	37	07	24
UJJ	13.5N	05	16--	..	..	..		-	6	114	47	07	24
ABG	09.5N	05	16--	..	..	..	06(7,8)	5	6	123	59	07	24
ANN	01.5N	05	16--	..	..	..		-	6	147	33	07	24
ETT	00.6S	05	1500	..	..	..		-	-6	171	60	07	20
TRD	01.1S	05	16--	..	..	..		-	5	174	88	07	24
GNA	43.2S	05	15--	..	..	..	06(2,4,7,8)	5	18	100	130	07	02
CNB	43.9S	05	11--	..	..	..	06(6,7)	5	22	117	55	06	24
KGL	56.5S	05	1145	..	..	..	06(7)	7	66	600	388	07	09

Stations Reporting:

ABG = ALIBAG  
ANN = ANNAMALAINAGAR  
BJI = BEIJING  
CNB = CANBERRA  
COL = COLLEGE

ETT = ETAIYAPURAM  
FRD = FREDERICKSBURG  
GNA = GNANGARA  
HON = HONOLULU  
HYB = HYDERABAD

JAI = JAIPUR  
KGL = KERGUELEN  
SHL = SHILLONG  
TRD = TRIVANDRUM  
UJJ = UJJAIN  
WIT = WITTEVEEN

RADIO PROPAGATION QUALITY INDICES

71  
May 86

MAY 1986

Day	Bracknell	Teheran	New York	Tokyo	Johannesburg	Canberra
1	6.6	6.5	5.0	7.2	7.0	6.3
2	5.7	5.0	2.9	5.4	6.3	3.9
3	3.1	2.2	0.2	2.9	1.1	1.9
4	4.0	3.2	1.2	3.3	2.9	2.2
5	5.9	3.4	3.3	2.9	4.1	3.0
6	4.8	2.7	0.6	1.0	1.7	2.7
7	4.5	5.9	1.5	1.1	5.5	1.4
8	4.5	4.9	3.0	3.1	4.4	4.6
9	5.6	6.6	4.8	3.5	5.3	4.2
10	7.2	8.2	5.8	5.1	5.2	4.6
11	7.5	6.4	5.4	6.5	5.8	2.6
12	7.0	7.9	5.8	6.8	6.0	6.3
13	8.0	7.7	6.7	7.9	5.9	6.9
14	8.9	9.1	8.6	9.0	8.9	8.4
15	9.1	7.9	8.9	9.3	8.0	9.0
16	7.7	7.7	8.6	6.7	6.6	8.7
17	6.7	7.3	8.8	7.1	5.7	8.6
18	7.1	8.6	7.8	8.9	5.7	8.3
19	5.9	8.2	8.2	8.9	5.5	6.8
20	6.8	8.1	8.5	9.6	6.1	8.2
21	6.5	8.7	8.3	9.3	8.8	8.2
22	6.9	7.8	8.4	9.6	8.5	8.8
23	5.1	7.2	7.8	8.9	7.8	7.5
24	5.3	7.6	8.0	9.1	7.2	7.3
25	5.7	7.3	6.8	7.9	7.8	8.3
26	6.3	7.6	6.1	8.5	7.1	8.1
27	5.6	4.3	6.9	7.8	6.4	8.4
28	4.0	5.8	8.1	7.3	7.4	5.5
29	6.8	6.5	7.3	8.9	4.8	8.3
30	7.1	6.6	6.5	7.5	4.8	7.3
31	4.8	4.4	4.1	5.4	4.9	7.3
Mean	6.2	6.5	5.9	6.7	5.9	6.2

CALCULATION OF QUALITY INDICES (Q)

From all 24 hourly field strength values and from all frequencies of the same circuit a median field strength value is calculated (FD). This daily value is compared with the average value (FA) of the preceding 27 days (1 sun rotation).

$$Q = 6.0 + 20 \log(FD/FA)/3.0$$

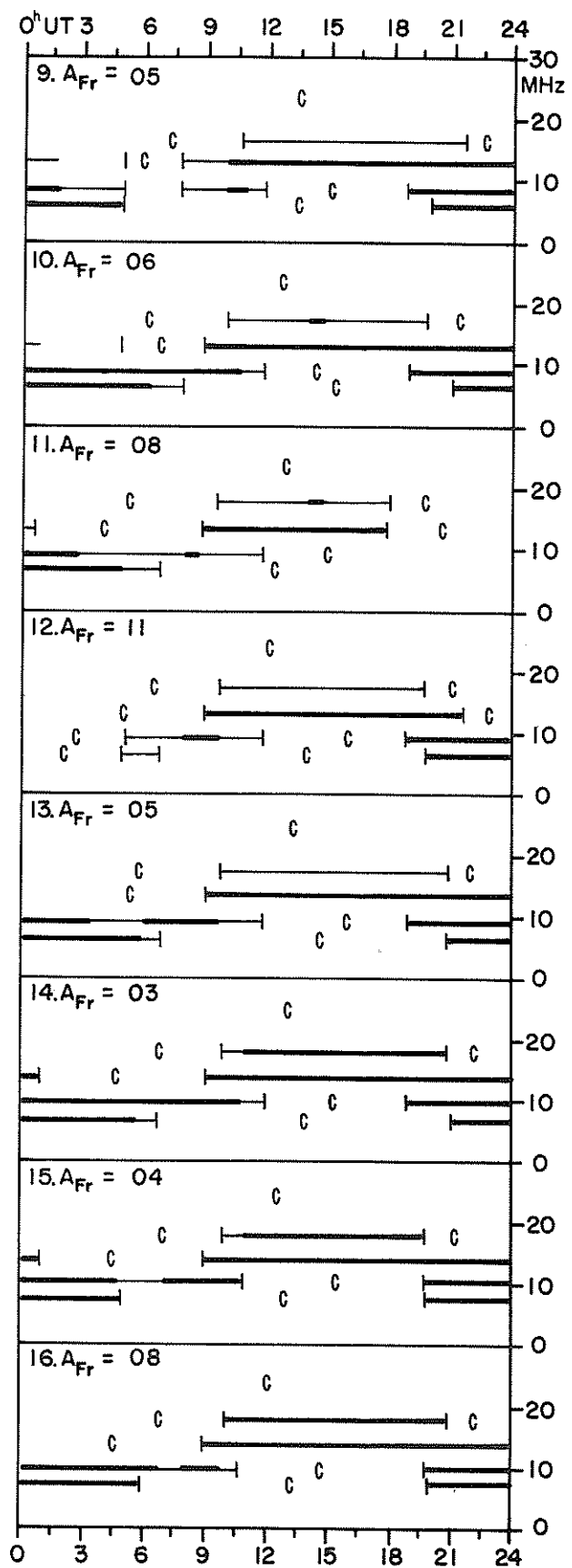
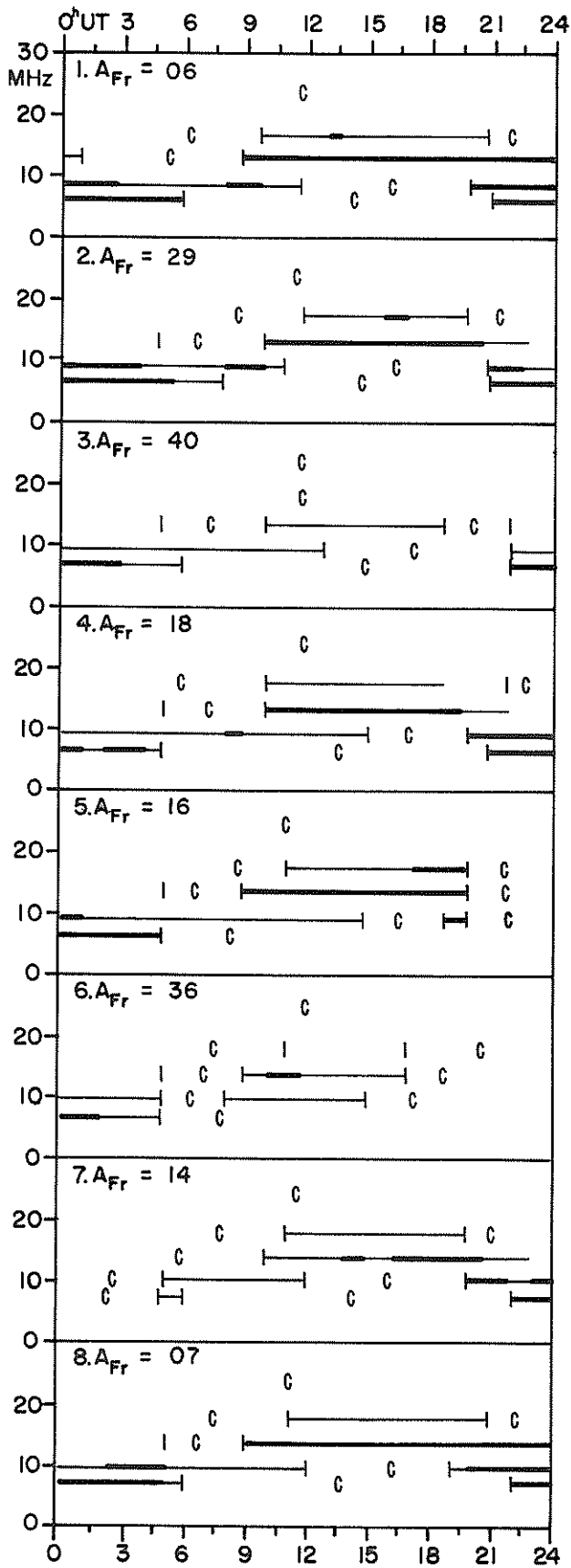
The quality indices vary from 0.0 to 9.9 where 6.0 is normal. Conditions are "normal" (index = 6.0), if they correspond to the average of the preceding 27 days.

SCALE FOR QUALITY INDICES

- 0.0 - 1.0 = very poor
- 1.1 - 3.0 = poor
- 3.1 - 5.0 = fair
- 5.1 - 7.0 = normal
- 7.1 - 9.0 = good
- 9.1 - 9.9 = very good

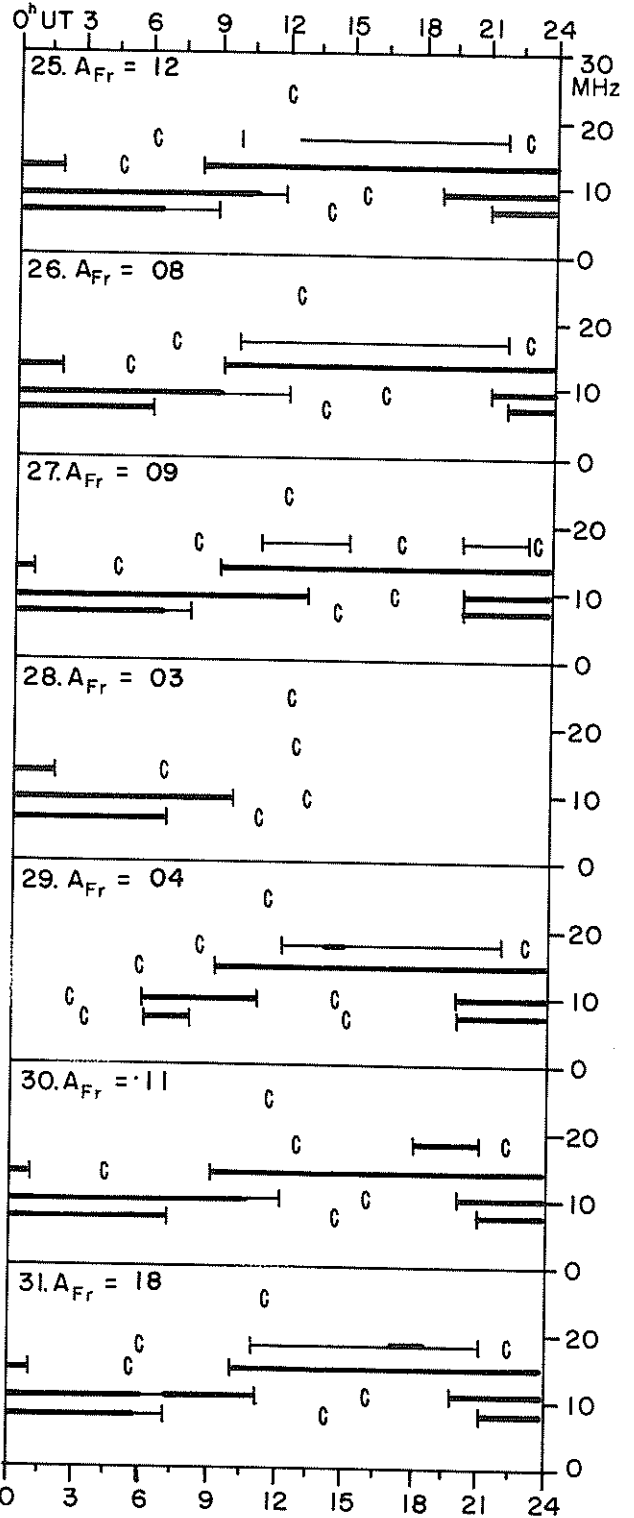
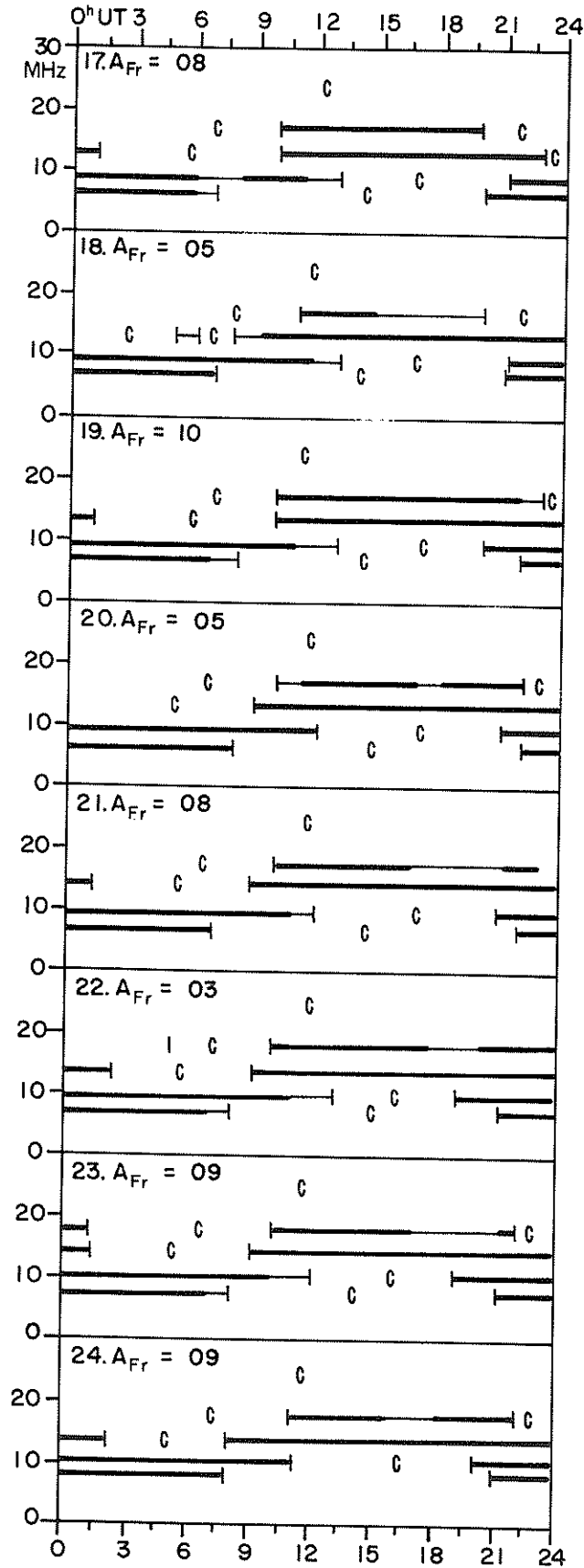


TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH  
MAY 1986

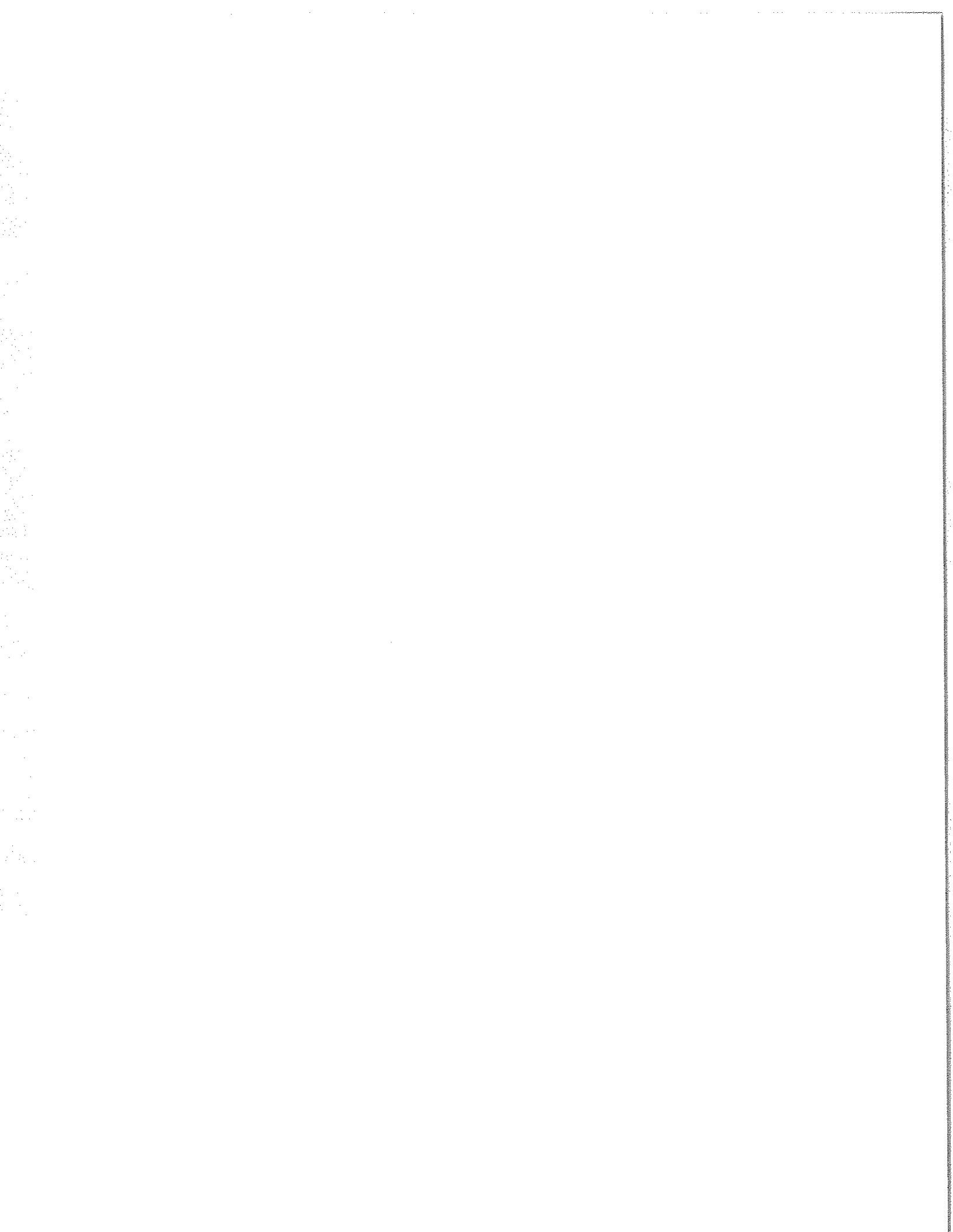


TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH

MAY 1986



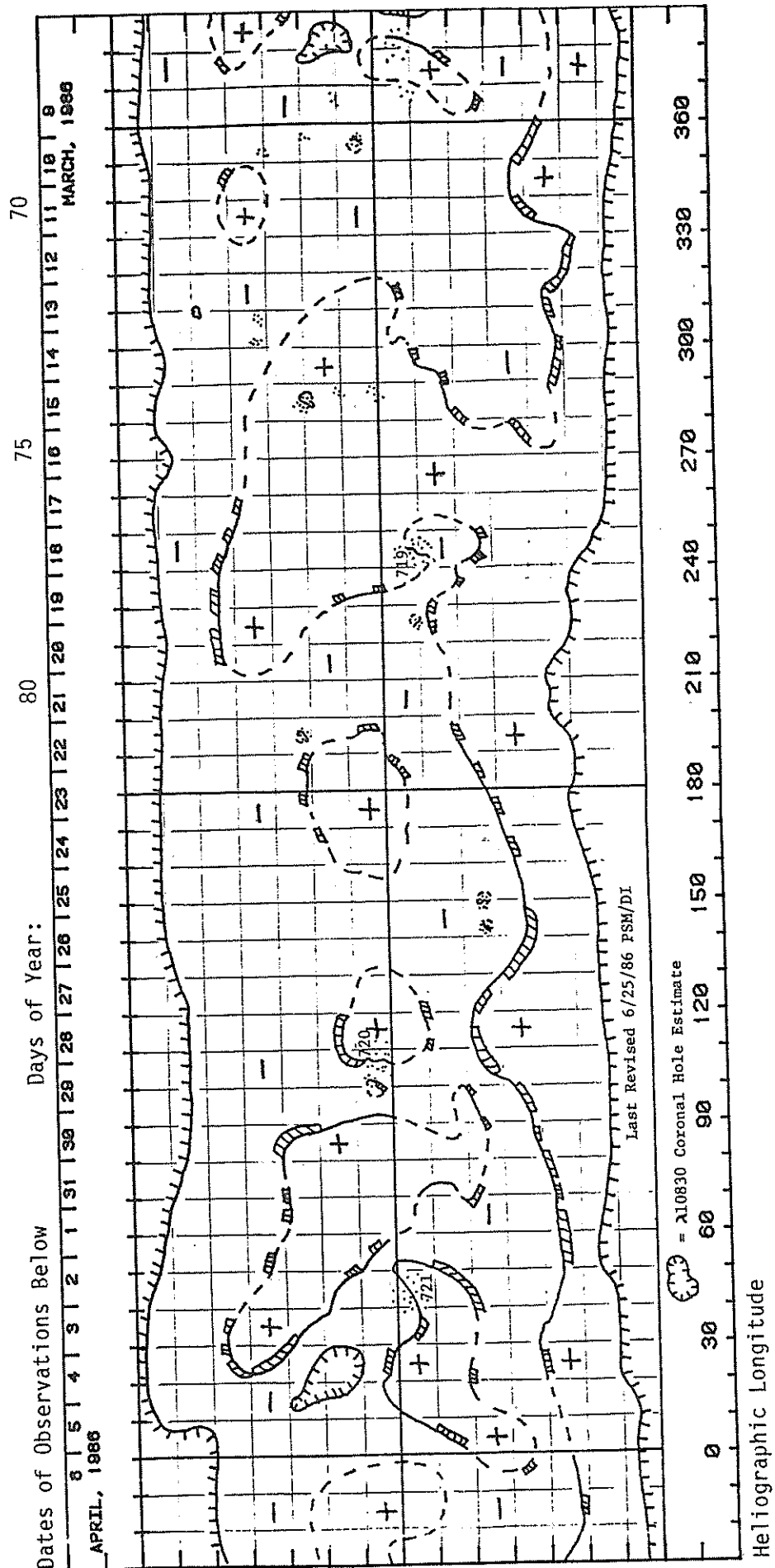
Field strengths from four frequencies, 6.4, 8.6, 13.0, and 17.0 MHz, observed on a Norddeich-New York circuit are represented above. Heavy solid lines represent field strengths  $\geq$  -12 dB above 1  $\mu$ V/m (transmitter power reduced to 1 kW). Observed field strengths between -12 dB and -40 dB above 1  $\mu$ V/m are represented by the fine line.



C O N T E N T S

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PRELIMINARY H - ALPHA SOLAR SYNOPSIS CHART  
CARRINGTON ROTATION NUMBER 1773  
(March 9 to April 6, 1986)



COSMIC RAY INDICES  
(Neutron Monitor)

77  
Late  
Feb 86

FEBRUARY 1986

Day	THULE Average (cts/h)/100	ALERT Average (cts/h)/100	DEEP RIVER Average (cts/h)/300	KIEL Average (cts/h)/100	CLIMAX Average (cts/h)/100	PREDIGTSTUHL Average (cts/h)/100	TOKYO Average (cts/h)/256	HUANCAYO Average (cts/h)/100
1	4515	7331.8	6963.5	6251.4		1194	3671.8	
2	4512	7330.5	6974.4	6256.7		1202	3668.4	
3	4522	7365.4	6984.0	6273.1		1210	3676.7	
4	4519	7343.3	6989.7	6281.4		1214	3683.4	
5	4513	7361.4	6998.5	6297.2		1220	3681.3	
6	4487	7335.5	6965.9	6297.2		1222	3681.2	
7	4360	7118.1	6805.7	6124.2		1193	3645.2	
8	4205	6854.7	6563.0	5950.6		1174	3624.3	
9	4123	6729.1	6394.5	5776.2		1141	3589.1	
10	4199	6859.2	6522.5	5883.0		1155	3601.0	
11	4267	6973.2	6623.1	5962.6		1160	3624.2	
12	4300	7020.0	6684.7	6003.5		1163	3635.5	
13	4334	7057.9	6739.6	6054.5		1175	3636.2	
14	4330	7038.5	6731.2	6049.2		1175	3635.2	
15	4266	6963.2	6667.3	5984.6		1167	3636.5	
16	4259	6949.0	6640.4	5999.4		1171	3624.4	
17	4214	6861.4	6543.7	5905.9		1145	3584.5	
18	4253	6946.2	6549.3	5930.7		1158	3536.7	
19	4268	6931.8	6590.0	5968.7		1166	3535.5	
20	4298	7043.3	6648.7	5999.6		1171	3594.9	
21	4343	7143.3	6699.3	6069.2		1185	3628.8	
22	4370	7163.2	6772.4	6106.0		1192	3640.6	
23	4422	7236.9	6851.3	6176.5		1204	3664.5	
24	4434	7266.2	6868.6	6185.7		1203	3675.5	
25	4452	7294.5	6923.7	6200.9		1207	3670.2	
26	4458	7303.1	6939.5	6202.3		1210	3670.8	
27	4463	7308.6	6942.8	6202.5		1210	3659.7	
28	4445	7262.7	6908.8	6202.8		1210	3676.6	
Mean	4362	7121.1	6767.4	6092.7		1147	3637.6	

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

78  
Late  
Mar 86

COSMIC RAY INDICES  
(Neutron Monitor)

MARCH 1986

Day	THULE Average (cts/h)/100	ALERT Average (cts/h)/100	DEEP RIVER Average (cts/h)/300	KIEL Average (cts/h)/100	CLIMAX Average (cts/h)/100	PREDIGTSTUHL Average (cts/h)/100	TOKYO Average (cts/h)/256	HUANCAYO Average (cts/h)/100
1	4424	7254.7	6893.9	6193.6			3665.9	
2	4426	7259.3	6899.3	6202.4			3665.7	
3	4447	7267.2	6880.2	6192.9			3674.0	
4	4448	7258.2	6890.4	6190.1			3656.8	
5	4462	7262.0	6901.4	6177.9			3674.2	
6	4466	7260.1	6916.7	6219.3			3680.6	
7	4429	7203.2	6908.7	6182.7			3673.5	
8	4410	7148.7	6833.5	6142.1			3657.4	
9	4351	7025.6	6709.2	6056.6			3623.0	
10	4341	7035.4	6718.6	6058.8			3624.8	
11	4343	7020.4	6719.1	6043.9			3633.0	
12	4361	7065.4	6743.6	6079.4			3641.9	
13	4395	7120.9	6785.8	6121.1			3647.3	
14	4402	7128.7	6798.9	6114.4			3623.1	
15	4402	7114.9	6829.9	6130.4			3622.3	
16	4408	7156.4	6857.9	6153.9			3657.0	
17	4419	7210.6	6865.6	6157.8			3660.5	
18	4420	7246.6	6874.7	6174.6			3649.1	
19	4441	7254.0	6891.5	6184.7			3652.6	
20	4455	7260.5	6921.7	6196.6			3675.2	
21	4452	7271.7	6914.5	6194.8			3667.1	
22	4461	7296.8	6904.1	6200.8			3645.1	
23	4459	7318.4	6916.8	6220.4			3574.2	
24	4448	7257.3	6912.6	6240.5			3669.4	
25	4461	7307.8	6898.5	6229.4			3677.4	
26	4431	7316.0	6903.5	6224.4			3675.6	
27	4432	7313.0	6936.9	6209.0			3669.8	
28	4442	7323.8	6954.0	6211.1			3656.4	
29	4445	7312.6	6942.5	6226.3			3677.5	
30	4463	7361.6	6973.0	6264.3			3665.6	
31	4460	7361.4	6988.0	6263.4			3694.3	
Mean	4426	7225.6	6873.7	6176.0			3655.8	

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

COSMIC RAY INDICES  
(Neutron Monitor)

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Late  
Apr 86

APRIL 1986

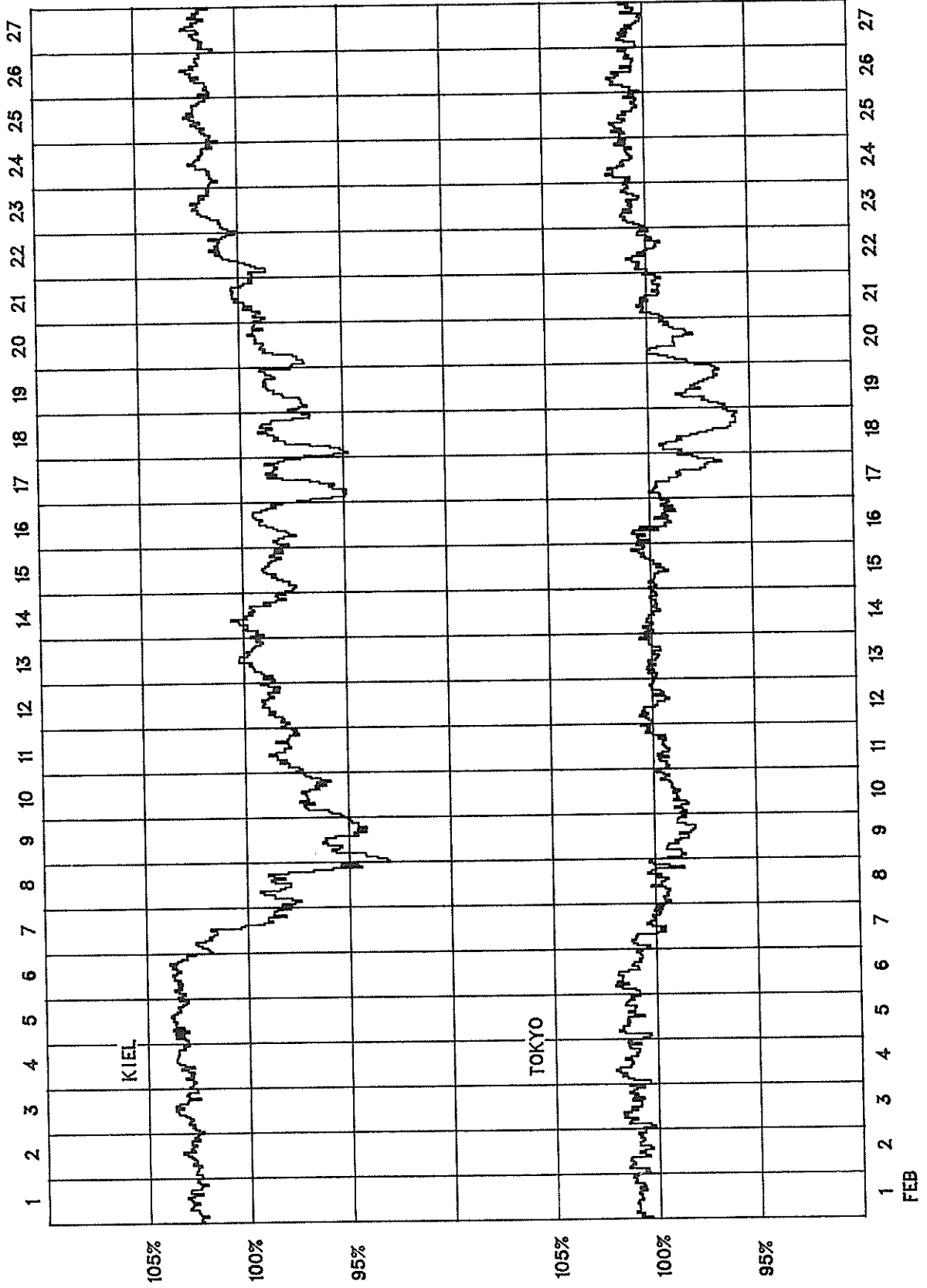
Day	THULE Average (cts/h)/100	ALERT Average (cts/h)/100	DEEP RIVER Average (cts/h)/300	KIEL Average (cts/h)/100	CLIMAX Average (cts/h)/100	PREDIGTSTUHL Average (cts/h)/100	TOKYO Average (cts/h)/256	HUANCAYO Average (cts/h)/100
1	4458	7330.8	6975.5	6257.9				
2	4465	7355.5	6990.9	6243.3				
3	4466	7358.3	6998.5	6254.7				
4	4474	7371.6	7006.0	6257.8				
5	4476	7384.6	7016.8	6264.0				
6	4465	7379.2	7012.0	6240.8				
7	4449	7355.5	7017.5	6227.7				
8	4458	7375.2	7047.6	6241.7				
9	4452	7366.1	7053.7	6264.7				
10	4429	7353.4	7047.2	6270.0				
11	4422	7348.5	7042.1	6268.7				
12	4436	7336.6	7040.4	6295.9				
13	4437	7350.2	7039.7	6301.2				
14	4443	7350.0	7046.2	6316.0				
15	4440	7343.6	7033.6	6291.0				
16	4443	7334.0	7038.9	6292.6				
17	4447	7338.5	7033.0	6286.7				
18	4446	7351.8	7029.7	6288.1				
19	4442	7347.3	7025.5	6285.3				
20	4450	7340.0	7022.3	6291.6				
21	4456	7368.1	7044.9	6287.6				
22	4459	7374.0	7058.2	6287.1				
23	4456	7378.2	7045.0	6276.9				
24	4466	7370.5	7035.1	6277.9				
25	4475	7385.1	7041.5	6281.2				
26	4478	7381.0	7058.4	6300.4				
27	4490	7402.0	7064.9	6320.0				
28	4489	7393.5	7070.2	6317.5				
29	4486	7386.0	7088.3	6306.1				
30	4506	7404.9	7092.3	6299.5				
Mean	4459	7363.8	7037.2	6279.8				

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

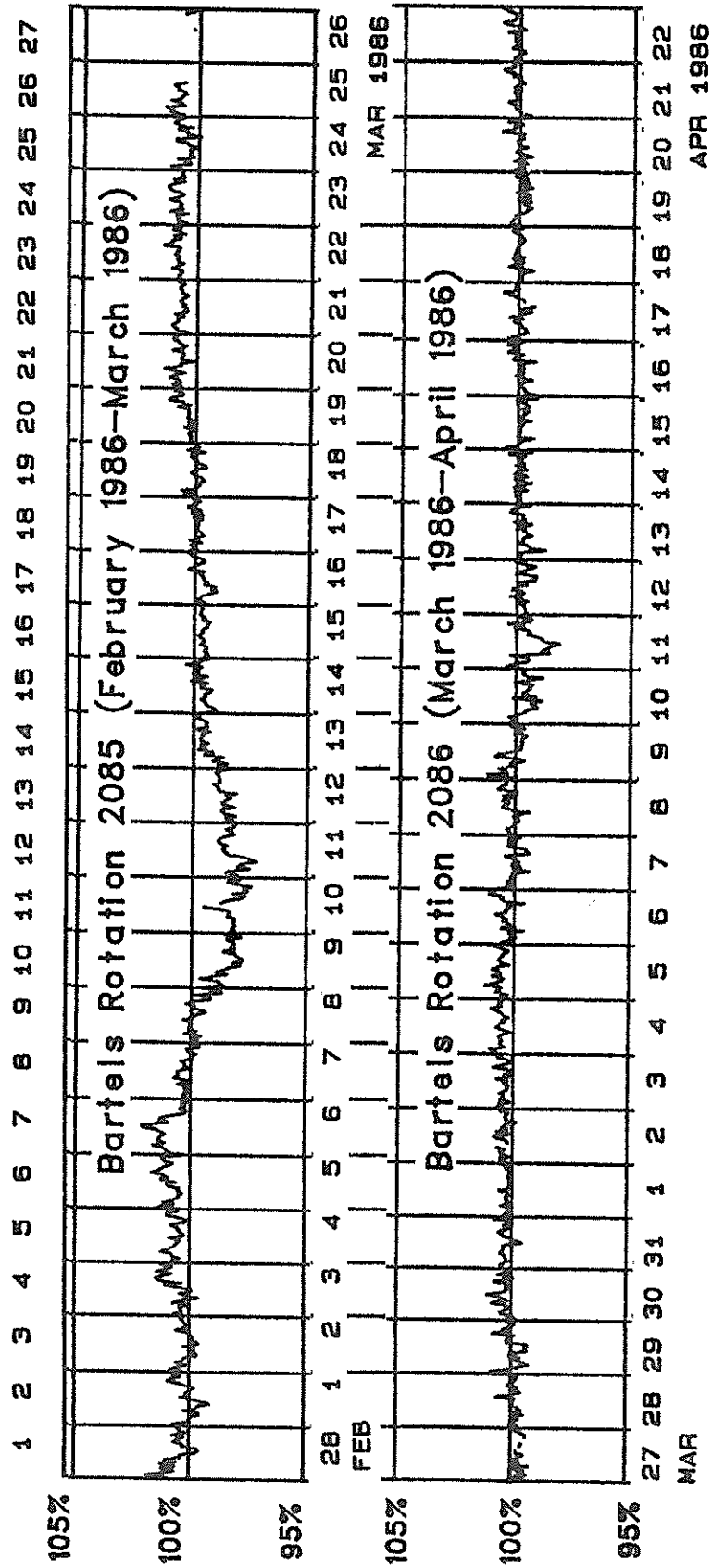


COSMIC RAY INDICES  
(Neutron Monitor)

Bartels Rotation 2084 (February 1986)



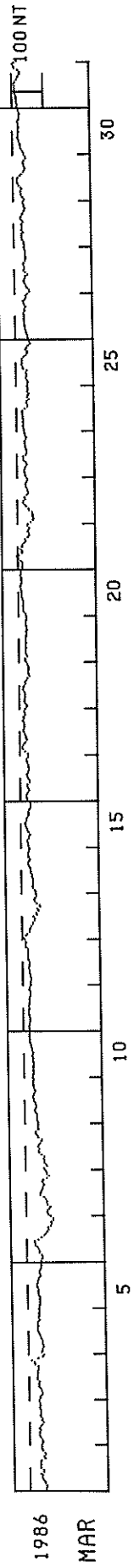
# THULE NEUTRON MONITOR



HOURLY EQUATORIAL DST VALUES (PROVISIONAL)

MARCH 1986

DAY	U.T.																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1	-53	-55	-55	-50	-47	-43	-39	-40	-36	-44	-44	-36	-34	-35	-34	-37	-50	-45	-51	-50	-42	-39	-39	-39	-39						
2	-42	-42	-40	-36	-33	-33	-33	-35	-33	-37	-40	-45	-40	-42	-38	-36	-37	-37	-37	-36	-35	-35	-32	-33	-33						
3	-35	-38	-42	-42	-41	-37	-33	-32	-32	-34	-28	-28	-29	-29	-29	-31	-31	-31	-30	-19	-11	-31	-31	-46	-50						
4	-42	-44	-46	-49	-48	-45	-45	-43	-40	-37	-35	-32	-31	-31	-33	-30	-33	-38	-34	-36	-36	-36	-37	-36	-36						
5	-37	-39	-39	-39	-39	-39	-36	-34	-34	-35	-32	-30	-32	-34	-36	-37	-42	-41	-39	-41	-44	-46	-45	-44	-44						
6	-46	-50	-51	-48	-41	-40	-37	-34	-28	-28	-26	-37	-48	-56	-61	-66	-71	-70	-78	-82	-79	-86	-87	-78	-78						
7	-71	-68	-69	-74	-78	-70	-67	-68	-62	-57	-46	-48	-50	-52	-55	-58	-58	-53	-68	-68	-74	-68	-66	-63	-63						
8	-59	-69	-66	-61	-61	-60	-61	-52	-44	-42	-45	-41	-44	-47	-52	-55	-43	-39	-34	-34	-42	-42	-42	-43	-43						
9	-42	-39	-39	-39	-35	-33	-36	-36	-38	-35	-34	-30	-29	-28	-30	-32	-35	-32	-30	-29	-29	-29	-30	-28	-28						
10	-29	-30	-30	-31	-30	-31	-33	-31	-29	-30	-28	-29	-31	-28	-27	-24	-23	-21	-21	-20	-18	-19	-20	-21	-21						
11	-20	-19	-19	-20	-22	-22	-22	-20	-18	-19	-19	-20	-19	-20	-20	-21	-21	-22	-25	-24	-23	-21	-22	-25	-25						
12	-26	-26	-28	-28	-25	-24	-22	-22	-21	-22	-22	-24	-21	-19	-18	-18	-19	-19	-18	-12	-10	-12	-12	-8	-8						
13	-6	-12	-17	-23	-26	-27	-31	-35	-35	-41	-43	-38	-47	-47	-55	-51	-60	-58	-49	-43	-40	-44	-48	-46	-46						
14	-45	-43	-38	-36	-38	-38	-37	-38	-34	-35	-31	-30	-30	-28	-23	-22	-26	-29	-23	-23	-22	-26	-28	-27	-27						
15	-24	-23	-22	-21	-25	-27	-30	-25	-22	-21	-17	-15	-16	-18	-18	-22	-26	-26	-25	-29	-33	-32	-33	-27	-27						
16	-22	-21	-21	-22	-26	-29	-26	-22	-23	-31	-31	-27	-24	-22	-25	-27	-29	-28	-28	-23	-22	-21	-26	-28	-28						
17	-26	-17	-10	-9	-11	-15	-19	-24	-21	-21	-17	-14	-12	-13	-16	-15	-14	-11	-14	-14	-19	-17	-16	-18	-18						
18	-24	-23	-19	-17	-17	-19	-19	-19	-16	-12	-13	-16	-20	-18	-23	-27	-34	-31	-29	-30	-30	-30	-27	-23	-23						
19	-20	-21	-28	-26	-22	-22	-22	-23	-22	-24	-22	-22	-23	-24	-26	-23	-27	-25	-23	-23	-22	-26	-26	-26	-26						
20	-24	-19	-16	-16	-15	-16	-16	-15	-13	-11	-11	-11	-10	-9	-7	-7	-10	-12	-11	-10	-7	-8	-9	-12	-12						
21	-13	-13	-15	-13	-8	-2	3	-4	-13	-13	-9	-13	-16	-20	-25	-24	-33	-37	-37	-32	-36	-37	-32	-34	-34						
22	-43	-50	-53	-50	-49	-47	-38	-35	-29	-23	-18	-21	-25	-24	-30	-35	-34	-33	-29	-28	-28	-31	-34	-31	-31						
23	-27	-25	-24	-24	-25	-29	-29	-29	-22	-21	-21	-29	-33	-31	-30	-28	-28	-26	-26	-29	-30	-27	-25	-24	-24						
24	-23	-22	-21	-22	-21	-22	-21	-20	-18	-18	-19	-28	-36	-36	-33	-34	-40	-36	-38	-40	-35	-37	-38	-35	-35						
25	-38	-39	-36	-32	-34	-34	-33	-35	-24	-22	-19	-20	-21	-21	-25	-33	-37	-37	-32	-36	-40	-48	-44	-44	-44						
26	-41	-39	-38	-35	-34	-33	-31	-31	-29	-29	-29	-29	-29	-27	-33	-31	-35	-31	-29	-28	-32	-35	-36	-40	-40						
27	-48	-48	-41	-37	-34	-30	-31	-34	-35	-42	-35	-31	-32	-32	-29	-30	-36	-37	-38	-35	-35	-36	-34	-32	-32						
28	-34	-33	-32	-28	-26	-25	-26	-30	-25	-27	-28	-26	-30	-28	-22	-23	-29	-31	-34	-37	-34	-34	-31	-33	-33						
29	-36	-30	-26	-25	-23	-27	-25	-19	-15	-13	-14	-16	-22	-27	-34	-37	-39	-35	-34	-32	-36	-41	-40	-36	-36						
30	-34	-32	-28	-25	-23	-24	-21	-19	-17	-18	-19	-20	-19	-20	-19	-18	-17	-20	-22	-22	-24	-22	-18	-15	-15						
31	-16	-17	-16	-13	-13	-13	-12	-9	-10	-9	-9	-9	-7	-11	-16	-19	-21	-26	-26	-21	-9	-7	-4	-9	-9						



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

83  
Late  
Apr 86

APRIL 1986

Storm Sudden Commencements (ssc)			Solar Flare Effects (sfe)		
Day	Time	Quality: Station Group*	Day	Begin-End	Station(s)
09	1034	B: WNG WIT AQU QUE LNP CZT KGL; C: NGK GCK SPT TEN	16	1003-1014	NGK
15	0435	B: WNG WIT AQU SPT TEN LNP; C: NGK	20	1127-1137	NGK CLF
			24	0609-0658	MMB KAK HTY KNY LNP
			26	0152-0157	QUE

Reporting Observatories:

DOB NUR WNG WIT NGK CLF GCK MMB AQU EBR COI SPT  
FRD KAK HTY KNY QUE TEN LNP GNA AMS CZT KGL DUM

\*Three-letter codes identify each observatory.

CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

JANUARY 1985

Calcium Plage Region	Sta	Observation Time		Lat CMD	CMP		Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
		Mo	Day		Mo	Day					
19522	BIGB	12	28	1933	N01 E53	01	1.8	.7	0600	4614A	
19522	BIGB	12	29	2028	N01 E40	01	1.8	.7	0600	4614A	
19522	BIGB	12	30	2109	N01 E25	01	1.7	.5	0600	4614A	
19522	BIGB	12	31	1936	N02 E13	01	1.8	.5	0600	4614A	
19522	BIGB	01	01	1757	N01 E02	01	1.9	.7	0600	4614A	
19522	BIGB	01	02	1711	N01 W11	01	1.9	.7	0600	4614A	
19522	BIGB	01	03	1704	N01 W25	01	1.8	.9	0600	4614A	
19522	BIGB	01	04	1822	N01 W39	01	1.8	1.0	0300	4614A	
19522	BIGB	01	05	2007	N01 W54	01	1.8	1.0	0300	4614A	
19526	BIGB	12	31	1936	S22 E23	01	2.6	.6	0250		
19526	BIGB	01	01	1757	S15 E11	01	2.6	1.0	0200		
19524	BIGB	12	29	2028	N20 E78	01	4.8	.7	1600		
19524	BIGB	12	30	2109	N19 E65	01	4.8	.8	1600		
19524	BIGB	12	31	1936	N19 E50	01	4.6	.7	1600		
19524	BIGB	01	01	1757	N20 E35	01	4.4	1.1	1400		
19524	BIGB	01	02	1711	N20 E22	01	4.4	.9	1400		
19524	BIGB	01	03	1704	N19 E10	01	4.5	.7	0800		
19524	BIGB	01	04	1822	N17 W03	01	4.5	.6	0700		
19524	BIGB	01	05	2007	N17 W16	01	4.6	.6	0458		
19524	BIGB	01	08	2003	N17 W56	01	4.6	.5	0300		
19524	BIGB	01	09	2032	N17 W67	01	4.8	.5	0200		
19525	BIGB	12	29	2028	S13 E80	01	4.9	.7	0550		
19525	BIGB	12	30	2109	S13 E67	01	4.9	.6	0550		
19525	BIGB	12	31	1936	S13 E52	01	4.7	.7	0550		
19525	BIGB	01	01	1757	S14 E39	01	4.7	.9	0600		
19525	BIGB	01	02	1711	S14 E27	01	4.7	.8	0600		
19525	BIGB	01	03	1704	S13 E13	01	4.7	.8	0600		
19525	BIGB	01	04	1822	S14 W01	01	4.7	.6	0500		
19525	BIGB	01	05	2007	S14 W15	01	4.7	.8	0500		
19525	BIGB	01	08	2003	S13 W55	01	4.7	.5	0500		
19527	BIGB	01	02	1711	S13 E64	01	7.5	.8	0500	4614D	
19527	BIGB	01	03	1704	S11 E50	01	7.5	.8	0500	4614D	
19527	BIGB	01	04	1822	S12 E36	01	7.5	.5	0600	4614D	
19527	BIGB	01	05	2007	S12 E21	01	7.4	.5	0600	4614D	
19527	BIGB	01	08	2003	S14 W15	01	7.7	.5	0600	4614D	
19530	BIGB	01	09	2032	N18 W16	01	8.6	.8	0300	4614E	
19530	BIGB	01	10	1758	N18 W28	01	8.6	.7	0400	4614E	
19530	BIGB	01	11	2038	N18 W43	01	8.6	.7	0125	4614E	
19535	BIGB	01	16	1842	N07 W59	01	12.3	.5	0300		
19535	BIGB	01	17	1819	N07 W72	01	12.4	2.2	0300		
19531	BIGB	01	08	2003	N07 E65	01	13.7	.7	0300	4614	4614G
19531	BIGB	01	09	2032	N06 E50	01	13.6	.7	0300	4614	4614G
19531	BIGB	01	10	1758	N06 E37	01	13.5	.7	0300	4614	4614G
19531	BIGB	01	11	2038	N06 E22	01	13.5	.7	0350	4614	4614G
19531	BIGB	01	12	1539	N05 E12	01	13.5	.7	0150	4614	4614G
19533	BIGB	01	11	2038	S06 E34	01	14.4	.8	0150	4616	
19533	BIGB	01	12	1539	S06 E24	01	14.4	.8	0350	4616	
19533	BIGB	01	13	2136	S08 E07	01	14.4	1.0	0900	4616	
19533	BIGB	01	14	1908	S08 W05	01	14.4	3.2	1300	4616	
19533	BIGB	01	15	1859	S08 W19	01	14.4	3.2	1600	4616	
19533	BIGB	01	16	1842	S08 W32	01	14.4	3.5	1800	4616	
19533	BIGB	01	17	1819	S08 W45	01	14.4	3.7	2000	4616	
19533	BIGB	01	18	1809	S08 W59	01	14.3	3.2	2200	4616	
19533	BIGB	01	19	1808	S08 W74	01	14.2	3.2	2650	4616	
19533	BIGB	01	20	2027	S09 W87	01	14.3	.5	1500	4616	
19537	BIGB	01	16	1842	N10 W08	01	16.2	.5	0100		
19537	BIGB	01	17	1819	N10 W21	01	16.2	.5	0100		
19540	BIGB	01	21	2153	N10 W61	01	17.3	1.0	0150		
19534	BIGB	01	13	2136	S11 E69	01	19.1	3.0	0400		
19534	BIGB	01	14	1908	S10 E57	01	19.1	1.3	0400		

CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

JANUARY 1985

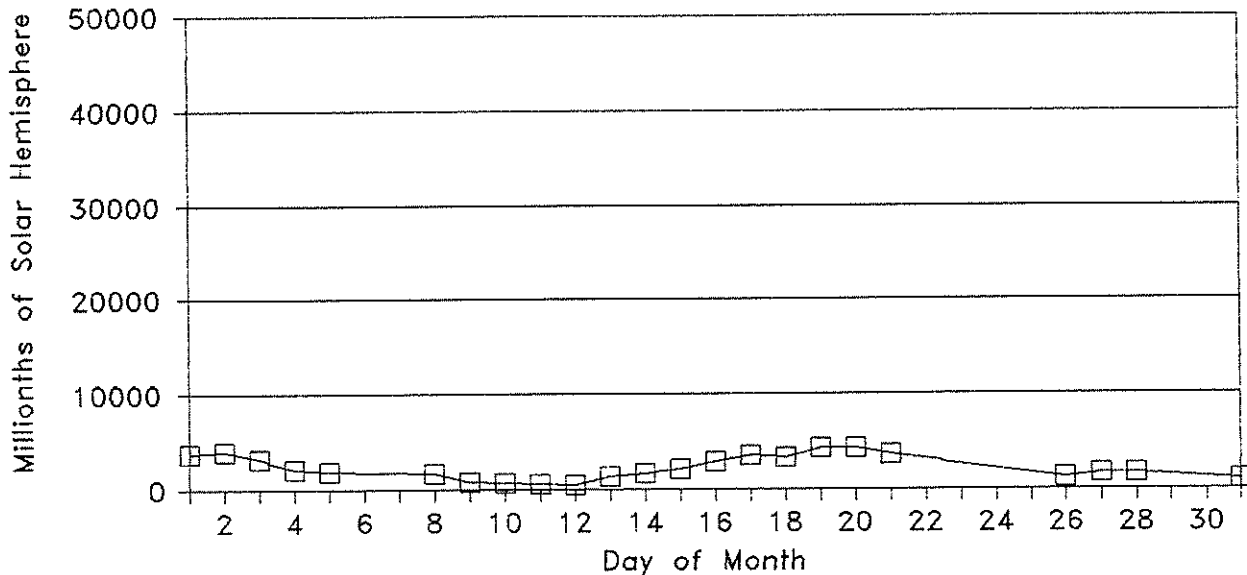
Calcium Plage Region	Sta	Observation Time			Lat CMD	CMP		Corrected Area (10-6 Hemi)	NOAA/USAF Sunspot Groups			
		Mo	Day	(UT)		Mo	Day		Intensity	#1	#2	#3
19534	BIGB	01	15	1859	S11 E45	01	19.2	1.1	0500			
19534	BIGB	01	16	1842	S11 E32	01	19.2	1.1	0650			
19534	BIGB	01	17	1819	S10 E18	01	19.1	.6	0700			
19534	BIGB	01	18	1809	S11 E05	01	19.1	.8	0700			
19534	BIGB	01	19	1808	S15 W07	01	19.2	.5	0250			
19538	BIGB	01	19	1808	S09 W08	01	19.1	3.0	0900	4617		
19538	BIGB	01	20	2027	S11 W24	01	19.0	3.5	1800	4617		
19538	BIGB	01	21	2153	S11 W37	01	19.1	3.5	2000	4617		
19536	BIGB	01	17	1819	N04 E74	01	23.3	1.6	0500	4618		
19536	BIGB	01	18	1809	N04 E59	01	23.2	1.5	0500	4618		
19536	BIGB	01	19	1808	N05 E45	01	23.1	2.3	0600	4618		
19536	BIGB	01	20	2027	N05 E28	01	22.9	2.2	0600	4618		
19536	BIGB	01	21	2153	N05 E14	01	22.9	2.1	1000	4618		
19536	BIGB	01	26	1821	N03 W51	01	22.9	2.0	1000	4618		
19536	BIGB	01	27	1816	N04 W66	01	22.8	2.0	1300	4618		
19536	BIGB	01	28	2145	N04 W79	01	23.0	1.7	1300	4618		
19539	BIGB	01	20	2027	S06 E52	01	24.7	1.5	0400	4619		
19539	BIGB	01	21	2153	S05 E38	01	24.7	2.2	0500	4619		
19541	BIGB	01	26	1821	N06 W23	01	25.0	.7	0200	4619A		
19541	BIGB	01	27	1816	N06 W37	01	25.0	2.0	0400	4619A		
19541	BIGB	01	28	2145	N06 W50	01	25.2	1.5	0400	4619A		
19546	BIGB	02	01	2224	S15 W48	01	29.4	1.7	0750	4622		
19543	BIGB	01	31	1710	N17 E02	01	31.9	2.5	0400	4621		
19543	BIGB	02	01	2224	N16 W15	01	31.8	2.8	0500	4621		
19543	BIGB	02	05	1712	N15 W65	01	31.8	2.2	1100	4621		
19543	BIGB	02	06	1757	N15 W77	01	31.9	1.8	1000	4621		
19544	BIGB	01	31	1710	S16 E03	01	31.9	1.7	0450	4620		
19544	BIGB	02	01	2224	S16 W13	01	31.9	1.7	0600	4620		
19544	BIGB	02	05	1712	S15 W64	01	31.9	1.7	0600	4620		
19544	BIGB	02	06	1757	S15 W79	01	31.8	1.0	0600	4620		

DAILY PLAGE SUMMARIES

JANUARY 1985

Day	Sta	Plage Index	Plage Count	Smallest Plage (Millionths of Solar Hemisphere)	Largest Plage	Total Area (Millionths of Solar Hemisphere)	Smallest Intensity	Largest Intensity
01	BIGB	3.6	5	200	1400	3800	.7	2.2
02	BIGB	3.1	5	500	1400	4000	.7	2.5
03	BIGB	1.8	5	500	800	3200	.7	1.3
04	BIGB	1.2	4	300	700	2100	.5	1.0
05	BIGB	1.1	4	300	600	1858	.5	1.0
06	No Observations This DAY							
07	No Observations This DAY							
08	BIGB	0.6	4	300	600	1700	.5	.7
09	BIGB	0.4	3	200	300	800	.5	.8
10	BIGB	0.4	2	300	400	700	.7	.7
11	BIGB	0.4	3	125	350	625	.7	.8
12	BIGB	0.4	2	150	350	500	.7	.8
13	BIGB	1.3	2	400	900	1300	1.0	3.0
14	BIGB	4.4	2	400	1300	1700	1.3	3.2
15	BIGB	5.2	2	500	1600	2100	1.1	3.2
16	BIGB	6.0	4	100	1800	2850	.5	3.5
17	BIGB	5.9	5	100	2000	3600	.5	3.7
18	BIGB	4.4	3	500	2200	3400	.8	3.2
19	BIGB	5.8	4	250	2650	4400	.5	3.2
20	BIGB	7.1	4	400	1800	4300	.5	3.5
21	BIGB	8.4	4	150	2000	3650	1.0	3.5
22	No Observations This DAY							
23	No Observations This DAY							
24	No Observations This DAY							
25	No Observations This DAY							
26	BIGB	1.3	2	200	1000	1200	.7	2.0
27	BIGB	1.6	2	400	1300	1700	2.0	2.0
28	BIGB	0.7	2	400	1300	1700	1.5	1.7
29	No Observations This DAY							
30	No Observations This DAY							
31	BIGB	1.8	3	150	450	1000	.5	2.5

DAILY PLAGE AREAS FOR JANUARY 1985



BIG BEAR SOLAR OBSERVATORY  
ACTIVE REGION SUMMARY

JANUARY 1985

Region Number	Return Of Region	Rotation Age	First Seen This Rotation	Duration This Rotation
19522	New	1	841228	10 Days
19526	New	1	841231	02
19524	19510	3	841229	13
19525	New	1	841229	11
19527	New	1	850102	07
19530	New	1	850109	04
19535	New	1	850116	02
19531	New	1	850108	04
19533	New	1	850111	10
19537	New	1	850116	02
19540	New	1	850121	02
19534	19518	3	850113	07
19538	New	1	850119	06
19536	New	1	850117	13
19539	New	1	850120	02
19541	New	1	850126	04
19542	New	1	850128	01
19546	New	1	850201	01

1. No CaK Observations at BBSO on January 6, 7, 22-25, 29, 30.
2. No CaK Plots on January 6, 7, 12, 22-25, 28-31.
3. No KPNO Magnetograms on January 1, 2, 7-9, 13, 15, 16, 22-27, 29, 30.
4. Contiguous Plages: 19534/19538



CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

FEBRUARY 1985

Calcium Plage Region	Sta	Observation Time		Lat CMD	CMP		Intensity	Corrected Area (10-6 Hem1)	NOAA/USAF #1	Sunspot #2	Groups #3
		Mo	Day		Mo	Day					
19545	BIGB	01	31	1710	S02 E08	02	1.3	.5	0150		
19547	BIGB	02	01	2224	N19 E68	02	7.1	1.5	1000		
19547	BIGB	02	05	1712	N18 E19	02	7.2	1.5	1250		
19547	BIGB	02	06	1757	N18 E05	02	7.1	1.0	1250		
19547	BIGB	02	07	1733	N18 W07	02	7.2	1.0	1250		
19547	BIGB	02	08	1726	N18 W20	02	7.2	1.0	1250		
19547	BIGB	02	10	1915	N19 W49	02	7.1	.7	1000		
19547	BIGB	02	11	2218	N19 W61	02	7.3	.6	1000		
19547	BIGB	02	12	1729	N19 W68	02	7.5	.5	1000		
19550	BIGB	02	08	1726	N10 E02	02	8.9	1.8	0150	4624	
19550	BIGB	02	10	1915	N10 W28	02	8.7	2.0	0700	4624	
19550	BIGB	02	11	2218	N09 W42	02	8.8	2.0	0700	4624	
19550	BIGB	02	12	1729	N09 W53	02	8.7	2.0	0700	4624	
19550	BIGB	02	13	1905	N09 W67	02	8.8	2.2	0700	4624	
19550	BIGB	02	14	1822	N08 W73	02	9.3	.8	0700	4624	
19549	BIGB	02	06	1757	S17 E32	02	9.2	.7	0175		
19548	BIGB	02	05	1712	S06 E64	02	10.5	2.0	0750	4623	
19548	BIGB	02	06	1757	S06 E45	02	10.1	2.3	0750	4623	
19548	BIGB	02	07	1733	S06 E34	02	10.3	2.1	0750	4623	
19548	BIGB	02	08	1726	S06 E19	02	10.1	2.0	0750	4623	
19548	BIGB	02	10	1915	S08 W09	02	10.1	1.8	0800	4623	
19548	BIGB	02	11	2218	S08 W23	02	10.2	1.6	0800	4623	
19548	BIGB	02	12	1729	S07 W33	02	10.2	1.5	0750	4623	
19548	BIGB	02	13	1905	S08 W47	02	10.3	1.5	1000	4623	
19548	BIGB	02	14	1822	S08 W59	02	10.3	1.2	1000	4623	
19548	BIGB	02	15	1803	S08 W74	02	10.2	1.2	1000	4623	
19553	BIGB	02	10	1915	N05 W00	02	10.8	.7	0400	4623A	
19553	BIGB	02	11	2218	N05 W15	02	10.8	.7	0350	4623A	
19553	BIGB	02	12	1729	N05 W26	02	10.8	.5	0200	4623A	
19551	BIGB	02	08	1726	N01 E66	02	13.6	1.0	0650	4625	
19551	BIGB	02	10	1915	N01 E36	02	13.5	1.4	0600	4625	
19551	BIGB	02	11	2218	N01 E21	02	13.5	1.3	0600	4625	
19551	BIGB	02	12	1729	N01 E11	02	13.6	.6	0500	4625	
19551	BIGB	02	13	1905	N01 W03	02	13.6	.7	0800	4625	
19551	BIGB	02	14	1822	N01 W16	02	13.6	.7	0800	4625	
19551	BIGB	02	15	1803	N01 W30	02	13.5	.7	0800	4625	
19551	BIGB	02	16	2334	N01 W47	02	13.5	.7	0750	4625	
19551	BIGB	02	17	1619	N01 W56	02	13.5	.7	0700	4625	
19556	BIGB	02	15	1803	N02 W23	02	14.0	.7	0100		
19554	BIGB	02	10	1915	S11 E47	02	14.3	.6	0125		
19554	BIGB	02	11	2218	S10 E32	02	14.3	1.0	0150		
19554	BIGB	02	12	1729	S10 E22	02	14.4	.6	0150		
19554	BIGB	02	13	1905	S11 E08	02	14.4	.7	0150		
19552	BIGB	02	08	1726	S12 E80	02	14.7	1.4	1700	4626	
19552	BIGB	02	10	1915	S11 E58	02	15.2	2.3	3600	4626	
19552	BIGB	02	11	2218	S11 E44	02	15.2	2.5	3600	4626	
19552	BIGB	02	12	1729	S12 E34	02	15.3	2.3	3500	4626	
19552	BIGB	02	13	1905	S11 E19	02	15.2	2.4	3500	4626	
19552	BIGB	02	14	1822	S11 E05	02	15.1	2.3	3500	4626	
19552	BIGB	02	15	1803	S11 W06	02	15.3	2.4	3500	4626	
19552	BIGB	02	16	2334	S11 W22	02	15.3	2.3	3500	4626	
19552	BIGB	02	17	1619	S12 W30	02	15.4	2.4	3500	4626	
19552	BIGB	02	19	1924	S12 W61	02	15.2	2.3	3400	4626	
19552	BIGB	02	20	1804	S12 W73	02	15.2	1.8	3400	4626	
19555	BIGB	02	14	1822	S06 E22	02	16.4	2.0	0300		
19555	BIGB	02	15	1803	S06 E07	02	16.3	1.7	0300		
19555	BIGB	02	16	2334	S07 W08	02	16.4	.3	0200		
19555	BIGB	02	17	1619	S07 W17	02	16.4	.3	0150		
19555A	BIGB	02	22	1936	N05 W54	02	18.8	1.0	0400		
19557	BIGB	02	19	1924	S09 W10	02	19.0	1.2	0750	4628	

CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

89  
Late  
Feb 85

FEBRUARY 1985

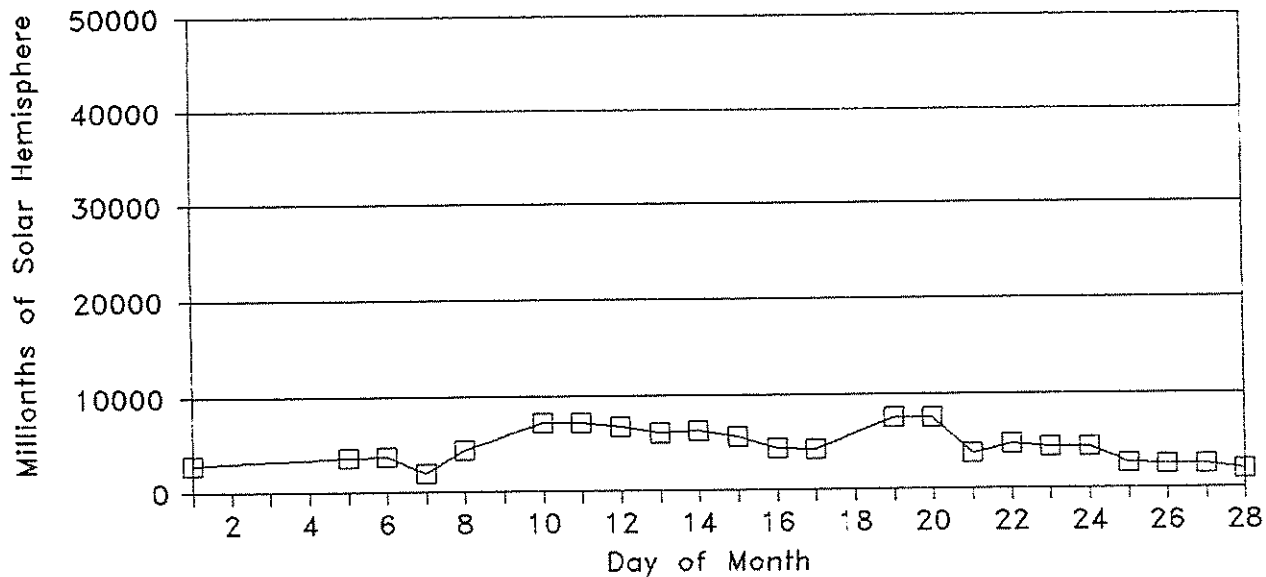
Calcium Plage Region	Sta	Observation Time		Lat	CMD	CMP Mo Day	Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF Sunspot Groups		
		Mo	Day (UT)						#1	#2	#3
19557	BIGB	02	20	1804	S09 W22	02 19.1	2.0	0750	4628		
19557	BIGB	02	21	1906	S09 W36	02 19.1	2.0	0750	4628		
19557	BIGB	02	22	1936	S09 W49	02 19.1	2.0	0750	4628		
19557	BIGB	02	23	2138	S09 W65	02 19.0	.5	0750	4628		
19557	BIGB	02	24	2028	S10 W73	02 19.4	.5	0700	4628		
19558	BIGB	02	19	1924	N10 E53	02 23.8	.4	0450			
19558	BIGB	02	20	1804	N09 E43	02 24.0	.6	0450			
19559	BIGB	02	19	1924	N01 E77	02 25.5	2.8	3000	4629		
19559	BIGB	02	20	1804	N02 E67	02 25.7	2.8	3000	4629		
19559	BIGB	02	21	1906	N02 E52	02 25.7	2.7	3000	4629		
19559	BIGB	02	22	1936	N03 E40	02 25.8	2.8	3000	4629		
19559	BIGB	02	23	2138	N02 E25	02 25.8	2.7	3000	4629		
19559	BIGB	02	24	2028	N04 E12	02 25.7	2.6	3000	4629		
19559	BIGB	02	25	2023	N03 W00	02 25.8	2.4	2000	4629		
19559	BIGB	02	26	1458	N03 W10	02 25.9	2.7	2000	4629		
19559	BIGB	02	27	0002	N03 W17	02 25.7	2.7	2000	4629		
19559	BIGB	02	28	1754	N02 W41	02 25.7	2.6	2000	4629		
19559	BIGB	03	01	2114	N01 W54	02 25.9	2.5	2500	4629		
19559	BIGB	03	03	2215	N01 W80	02 26.0	2.0	2500	4629		
19560	BIGB	02	22	1936	N18 E68	02 28.0	.5	0700			
19560	BIGB	02	23	2138	N18 E52	02 27.9	.5	0700			
19560	BIGB	02	24	2028	N17 E40	02 27.9	.6	0750			
19560	BIGB	02	25	2023	N17 E27	02 27.9	.5	0700			
19560	BIGB	02	26	1458	N17 E18	02 28.0	.4	0600			
19560	BIGB	02	27	0002	N17 E10	02 27.8	.4	0600			

DAILY PLAGE SUMMARIES

FEBRUARY 1985

Day	Sta	Plage Index	Plage Count	Smallest Plage (Millionths)	Largest Plage of Solar Hemisphere	Total Area	Smallest Intensity	Largest Intensity
01	BIGB	3.5	4	500	1000	2850	1.5	2.8
02	No Observations This DAY							
03	No Observations This DAY							
04	No Observations This DAY							
05	BIGB	3.6	4	600	1250	3700	1.5	2.2
06	BIGB	2.9	5	175	1250	3775	.7	2.3
07	BIGB	2.5	2	750	1250	2000	1.0	2.1
08	BIGB	3.4	5	150	1700	4500	1.0	2.0
09	No Observations This DAY							
10	BIGB	8.2	7	125	3600	7225	.6	2.3
11	BIGB	9.8	7	150	3600	7200	.6	2.5
12	BIGB	8.8	7	150	3500	6800	.5	2.3
13	BIGB	10.0	5	150	3500	6150	.7	2.4
14	BIGB	9.7	5	300	3500	6300	.7	2.3
15	BIGB	9.5	5	100	3500	5700	.7	2.4
16	BIGB	7.7	3	200	3500	4450	.3	2.3
17	BIGB	7.4	3	150	3500	4350	.3	2.4
18	No Observations This DAY							
19	BIGB	6.1	4	450	3400	7600	.4	2.8
20	BIGB	6.2	4	450	3400	7600	.6	2.8
21	BIGB	6.0	2	750	3000	3750	2.0	2.7
22	BIGB	7.6	4	400	3000	4850	.5	2.8
23	BIGB	7.6	3	700	3000	4450	.5	2.7
24	BIGB	8.0	3	700	3000	4450	.5	2.6
25	BIGB	5.1	2	700	2000	2700	.5	2.4
26	BIGB	5.5	2	600	2000	2600	.4	2.7
27	BIGB	5.4	2	600	2000	2600	.4	2.7
28	BIGB	3.9	1	2000	2000	2000	2.6	2.6

DAILY PLAGE AREAS FOR FEBRUARY 1985



BIG BEAR SOLAR OBSERVATORY  
ACTIVE REGION SUMMARY

91  
Late  
Feb 85

FEBRUARY 1985

Region Number	Return Of Region	Rotation Age	First Seen This Rotation	Duration This Rotation
19543	New	1	850131	07 Days
19544	New	1	850131	07
19545	New	1	850131	01
19547	New	1	850201	13
19548	19533	2	850205	11
19549	New	1	850206	01
19550	New	1	850208	07
19551	New	1	850208	10
19552	19538	2	850208	13
19553	New	1	850210	03
19554	New	1	850210	04
19555	New	1	850214	04
19556	New	1	850215	01
19557	New	1	850219	06
19558	New	1	850219	02
19559	New	1	850219	13
19560	19543	2	850222	06

1. No CaK Observations at BBSO on February 2-4, 9, 18.
2. No CaK Plots on February 2-9, 17, 18, 26.
3. No KPNO Magnetograms on February 2-4, 9, 18, 19, 21, 22, 27.
4. No Contiguous Plages.

92  
Late  
Mar 85

CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

MARCH 1985

Calcium Plage Region	Sta	Observation Time		Lat CMD	CMP		Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF Sunspot Groups		
		Mo	Day (UT)		Mo	Day			#1	#2	#3
19561	BIGB	03	05 1456	S13 W17	03	4.3	1.5	0150			
19561	BIGB	03	06 1851	S13 W24	03	5.0	1.5	0150			
19564	BIGB	03	12 2150	N07 W55	03	8.8	2.5	1700	4632		
19564	BIGB	03	13 2157	N06 W70	03	8.7	3.2	1700	4632		
19564	BIGB	03	14 1634	N06 W80	03	8.7	2.7	1700	4632		
19562	BIGB	03	09 1540	S03 E41	03	12.7	1.5	0550	4630		
19565	BIGB	03	12 2150	N12 E04	03	13.2	.6	0150			
19565	BIGB	03	13 2157	N12 W09	03	13.2	.6	0150			
19563	BIGB	03	09 1540	S12 E59	03	14.1	.8	2000	4631		
19563	BIGB	03	12 2150	S13 E12	03	13.8	.8	2000	4631		
19563	BIGB	03	13 2157	S14 W00	03	13.9	.8	2000	4631		
19563	BIGB	03	14 1634	S13 W10	03	13.9	.5	2000	4631		
19563	BIGB	03	15 1714	S13 W23	03	14.0	.6	1900	4631		
19563	BIGB	03	16 1756	S13 W37	03	13.9	.5	1800	4631		
19563	BIGB	03	17 1745	S13 W50	03	14.0	.5	1800	4631		
19563	BIGB	03	18 1717	S13 W57	03	14.4	.4	1700	4631		
19563	BIGB	03	19 2350	S13 W73	03	14.5	.4	1700	4631		
19568	BIGB	03	17 1745	N05 W47	03	14.2	.4	0400	4635		
19568	BIGB	03	18 1717	N04 W58	03	14.4	.5	0400	4635		
19568	BIGB	03	19 2350	N05 W79	03	14.1	.3	0400	4635		
19571	BIGB	03	20 2110	N18 W41	03	17.7	2.0	0300			
19571	BIGB	03	21 1419	N18 W50	03	17.8	1.5	0450			
19571	BIGB	03	22 2234	N18 W69	03	17.7	1.0	0150			
19566	BIGB	03	16 1756	S12 E47	03	20.3	1.0	0125	4633		
19566	BIGB	03	17 1745	S12 E33	03	20.2	1.8	0900	4633		
19566	BIGB	03	18 1717	S13 E20	03	20.2	1.5	1100	4633		
19566	BIGB	03	19 2350	S12 E03	03	20.2	1.7	0850	4633		
19566	BIGB	03	20 2110	S12 W09	03	20.2	1.2	0850	4633		
19566	BIGB	03	21 1419	S12 W18	03	20.2	1.2	1000	4633		
19566	BIGB	03	22 2234	S12 W35	03	20.3	1.2	1000	4633		
19566	BIGB	03	23 1431	S12 W45	03	20.2	1.2	1000	4633		
19566	BIGB	03	24 1719	S12 W58	03	20.3	1.0	0850	4633		
19566	BIGB	03	25 1713	S13 W71	03	20.4	.7	0850	4633		
19575	BIGB	03	22 2234	N04 W21	03	21.4	1.5	0175	4638		
19575	BIGB	03	23 1431	N04 W30	03	21.4	1.5	0450	4638		
19575	BIGB	03	24 1719	N03 W45	03	21.3	2.0	0600	4638		
19575	BIGB	03	25 1713	N03 W58	03	21.4	1.3	0600	4638		
19575	BIGB	03	26 1959	N02 W72	03	21.4	.3	0400	4638		
19575	BIGB	03	27 1508	N03 W80	03	21.6	.3	0400	4638		
19567	BIGB	03	16 1756	S10 E70	03	22.0	1.0	1300	4634		
19567	BIGB	03	17 1745	S10 E56	03	21.9	2.2	1300	4634		
19567	BIGB	03	18 1717	S10 E43	03	21.9	1.7	1400	4634		
19567	BIGB	03	19 2350	S10 E26	03	21.9	1.7	1200	4634		
19567	BIGB	03	20 2110	S10 E14	03	21.9	1.3	1200	4634		
19567	BIGB	03	21 1419	S10 E05	03	22.0	1.2	1000	4634		
19567	BIGB	03	22 2234	S10 W13	03	22.0	1.4	1000	4634		
19567	BIGB	03	23 1431	S10 W23	03	21.9	1.4	1000	4634		
19567	BIGB	03	24 1719	S10 W36	03	22.0	1.1	1000	4634		
19567	BIGB	03	25 1713	S11 W49	03	22.0	1.0	1000	4634		
19567	BIGB	03	26 1959	S13 W64	03	22.0	.7	0900	4634		
19567	BIGB	03	27 1508	S12 W79	03	21.7	.5	0900	4634		
19572	BIGB	03	20 2110	S01 E29	03	23.0	.6	0200			
19572	BIGB	03	21 1419	S01 E18	03	22.9	.6	0150			
19569	BIGB	03	18 1717	S08 E72	03	24.1	1.2	0800			
19569	BIGB	03	19 2350	S09 E57	03	24.3	.8	0700			
19569	BIGB	03	20 2110	S09 E46	03	24.3	.5	0700			
19569	BIGB	03	21 1419	S09 E37	03	24.4	.5	0700			
19569	BIGB	03	22 2234	S08 E18	03	24.3	.5	0700			
19569	BIGB	03	23 1431	S09 E09	03	24.3	.5	0700			
19569	BIGB	03	24 1719	S08 W05	03	24.3	.3	0700			

CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

MARCH 1985

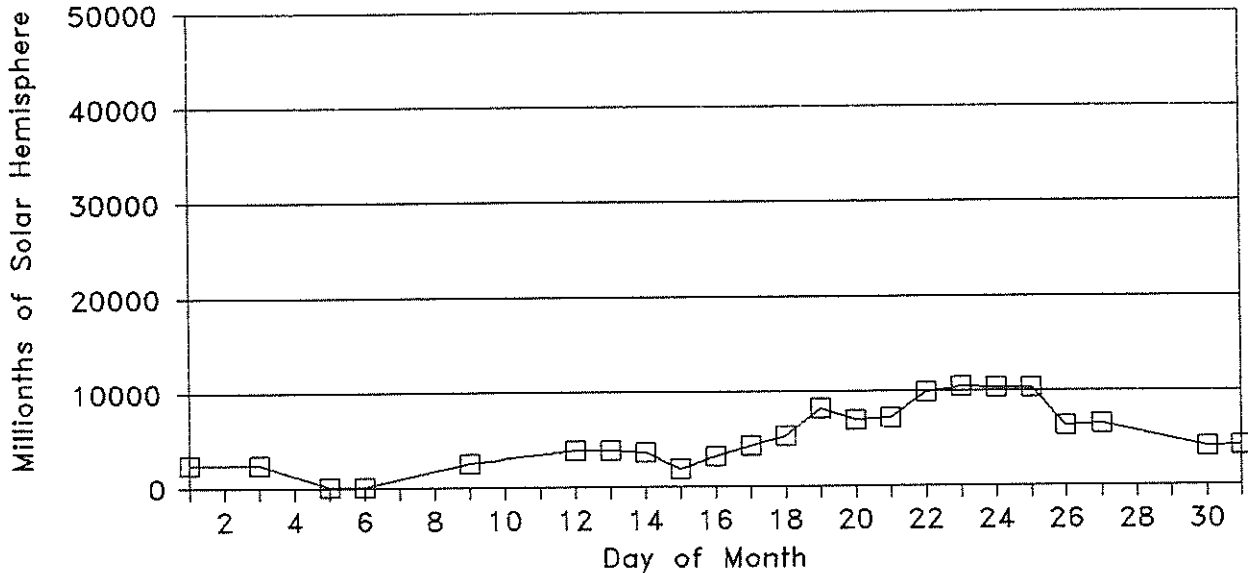
Calcium Plage Region	Sta	Mo	Day	Observation Time (UT)	Lat	CMD	CMP Mo	Day	Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
19569	BIGB	03	25	1713	S08	W18	03	24.4	.3	0700			
19570	BIGB	03	19	2350	N02	E60	03	24.5	1.5	1500	4634B		
19570	BIGB	03	20	2110	N01	E49	03	24.5	.4	1500	4634B		
19570	BIGB	03	21	1419	N01	E37	03	24.3	.4	1800	4634B		
19570	BIGB	03	22	2234	N03	E17	03	24.2	.5	1800	4634B		
19570	BIGB	03	23	1431	N03	E11	03	24.4	.5	1650	4634B		
19570	BIGB	03	24	1719	N03	W05	03	24.3	.3	1650	4634B		
19570	BIGB	03	25	1713	N03	W19	03	24.3	.3	1650	4634B		
19578	BIGB	03	26	1959	N12	W19	03	25.4	.6	0125			
19578	BIGB	03	27	1508	N13	W29	03	25.4	.6	0125			
19573	BIGB	03	19	2350	S14	E77	03	25.8	1.5	1900	4636		
19573	BIGB	03	20	2110	S13	E68	03	26.0	1.4	1900	4636		
19573	BIGB	03	21	1419	S13	E58	03	26.0	1.4	1800	4636		
19573	BIGB	03	22	2234	S12	E39	03	25.9	1.4	1650	4636		
19573	BIGB	03	23	1431	S13	E30	03	25.9	1.4	1350	4636		
19573	BIGB	03	24	1719	S12	E16	03	25.9	.8	1250	4636		
19573	BIGB	03	25	1713	S13	E03	03	25.9	.8	1250	4636		
19573	BIGB	03	26	1959	S13	W12	03	25.9	.8	1000	4636		
19573	BIGB	03	27	1508	S13	W22	03	26.0	1.2	1000	4636		
19573	BIGB	03	30	2258	S13	W64	03	26.1	1.5	1000	4636		
19573	BIGB	03	31	1935	S13	W78	03	25.9	1.2	1100	4636		
19579	BIGB	03	27	1508	N01	W15	03	26.5	.6	0300			
19574	BIGB	03	20	2110	N16	E75	03	26.6	.5	0400			
19574	BIGB	03	21	1419	N16	E67	03	26.7	.5	0300			
19574	BIGB	03	22	2234	N15	E48	03	26.6	.5	0400			
19574	BIGB	03	23	1431	N16	E39	03	26.6	.5	0300			
19577	BIGB	03	24	1719	S06	E41	03	27.8	.8	0300	4639		
19577	BIGB	03	25	1713	S06	E28	03	27.8	1.5	0300	4639		
19577	BIGB	03	26	1959	S07	E13	03	27.8	.7	0400	4639		
19577	BIGB	03	27	1508	S07	E02	03	27.8	1.0	0400	4639		
19577	BIGB	03	30	2258	S10	W44	03	27.6	.7	0300	4639		
19576	BIGB	03	22	2234	N06	E74	03	28.5	2.5	3000	4637		
19576	BIGB	03	23	1431	N07	E69	03	28.8	2.8	4000	4637		
19576	BIGB	03	24	1719	N07	E54	03	28.8	3.0	4000	4637		
19576	BIGB	03	25	1713	N07	E41	03	28.8	3.1	4000	4637		
19576	BIGB	03	26	1959	N07	E25	03	28.7	2.9	3500	4637		
19576	BIGB	03	27	1508	N07	E15	03	28.7	2.8	3500	4637		
19576	BIGB	03	30	2258	N06	W29	03	28.8	2.5	2200	4637		
19576	BIGB	03	31	1935	N06	W40	03	28.8	2.3	2300	4637		
19576	BIGB	04	01	1829	N06	W53	03	28.9	2.4	2300	4637		
19576	BIGB	04	02	1404	N06	W65	03	28.8	2.4	2300	4637		
19576	BIGB	04	03	1753	N06	W87	03	28.3	1.6	1800	4637		
19580	BIGB	03	31	1935	N03	W29	03	29.6	.8	0150	4641		
19580	BIGB	04	01	1829	N03	W42	03	29.7	1.0	0150	4641		
19582	BIGB	03	31	1935	S04	W01	03	31.7	.7	0100			

DAILY PLAGE SUMMARIES

MARCH 1985

Day	Sta	Plage Index	Plage Count	Smallest Plage (Millionths of Solar Hemisphere)	Largest Plage	Total Area	Smallest Intensity	Largest Intensity
01	BIGB	3.6	1	2500	2500	2500	2.5	2.5
02	No Observations This DAY							
03	BIGB	0.7	1	2500	2500	2500	2.0	2.0
04	No Observations This DAY							
05	BIGB	0.2	1	150	150	150	1.5	1.5
06	BIGB	0.2	1	150	150	150	1.5	1.5
07	No Observations This DAY							
08	No Observations This DAY							
09	BIGB	1.4	2	550	2000	2550	.8	1.5
10	No Observations This DAY							
11	No Observations This DAY							
12	BIGB	3.9	3	150	2000	3850	.6	2.5
13	BIGB	3.3	3	150	2000	3850	.6	3.2
14	BIGB	1.6	2	1700	2000	3700	.5	2.7
15	BIGB	1.0	1	1900	1900	1900	.6	.6
16	BIGB	1.2	3	125	1800	3225	.5	1.0
17	BIGB	3.5	4	400	1800	4400	.4	2.2
18	BIGB	3.9	5	400	1700	5400	.4	1.7
19	BIGB	5.3	7	400	1900	8250	.3	1.7
20	BIGB	4.6	8	200	1900	7050	.4	2.0
21	BIGB	4.9	8	150	1800	7200	.4	1.5
22	BIGB	7.5	9	150	3000	9875	.5	2.5
23	BIGB	9.2	8	300	4000	10450	.5	2.8
24	BIGB	10.7	8	300	4000	10350	.3	3.0
25	BIGB	12.4	8	300	4000	10350	.3	3.1
26	BIGB	10.5	6	125	3500	6325	.3	2.9
27	BIGB	11.2	7	125	3500	6625	.3	2.8
28	No Observations This DAY							
29	No Observations This DAY							
30	BIGB	5.7	4	300	2200	4100	.7	2.5
31	BIGB	4.7	5	100	2300	4250	.7	2.3

DAILY PLAGE AREAS FOR MARCH 1985



BIG BEAR SOLAR OBSERVATORY  
ACTIVE REGION SUMMARY

95  
Late  
Mar 85

MARCH 1985

Region Number	Return Of Region	Rotation Age	First Seen This Rotation	Duration This Rotation
19561	New	1	850305	>08 Days
19564	New	1	850312	>03
19565	New	1	850312	>02
19563	19552	3	850309	>11
19568	New	1	850317	03
19571	New	1	850320	03
19566	New	1	850316	07
19575	New	1	850322	>06
19567	New	1	850316	>12
19569	New	1	850318	08
19570	19559	2	850319	07
19578	New	1	850326	>02
19573	New	1	850319	13
19574	New	1	850320	05
19579	New	1	850327	>01
19577	New	1	850324	07
19576	New	1	850322	13
19580	New	1	850331	02

1. No CaK Observations at BBSO on March 2, 4, 7, 8, 10, 11.
2. No CaK Plots on March 2, 5, 8, 9-11, 21, 23, 27-29.
3. No KPNO Magnetograms on March 2, 3, 6-8, 10-12, 14, 15, 17, 19, 28, 29.
4. No Contiguous Plages.



CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

APRIL 1985

Calcium Plage Region	Sta	Observation Time (UT)		Lat CMD	CMP		Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot Groups		
		Mo	Day		Mo	Day				#2	#3	
19581	BIGB	03	30	2258	S26 E68	04	5.2	1.3	0600	4640		
19581	BIGB	03	31	1935	S26 E57	04	5.2	1.3	0600	4640		
19581	BIGB	04	01	1829	S26 E44	04	5.2	1.6	0900	4640		
19581	BIGB	04	02	1404	S26 E34	04	5.2	1.8	0750	4640		
19581	BIGB	04	03	1753	S25 E18	04	5.1	1.8	0600	4640		
19581	BIGB	04	04	1517	S25 E07	04	5.2	2.0	0600	4640		
19581	BIGB	04	05	1609	S28 W04	04	5.4	1.8	0650	4640		
19581	BIGB	04	06	1455	S26 W18	04	5.2	1.5	0600	4640		
19581	BIGB	04	07	1405	S26 W30	04	5.2	1.4	0600	4640		
19581	BIGB	04	08	1603	S26 W45	04	5.2	1.5	0600	4640		
19583	BIGB	04	01	1829	S21 E55	04	6.0	.7	0100	4642		
19583	BIGB	04	02	1404	S22 E46	04	6.1	2.5	0550	4642		
19583	BIGB	04	03	1753	S21 E29	04	6.0	2.3	0700	4642		
19583	BIGB	04	04	1517	S21 E17	04	5.9	2.7	0850	4642		
19583	BIGB	04	05	1609	S21 E04	04	6.0	2.0	1100	4642		
19583	BIGB	04	06	1455	S21 W08	04	6.0	2.5	1000	4642		
19583	BIGB	04	07	1405	S21 W21	04	6.0	2.1	1000	4642		
19583	BIGB	04	08	1603	S22 W36	04	5.9	2.3	0900	4642		
19583	BIGB	04	09	1642	S22 W48	04	6.0	2.0	0900	4642		
19583	BIGB	04	10	1534	S22 W62	04	5.9	1.8	0850	4642		
19583	BIGB	04	11	1850	S23 W76	04	5.9	.8	0700	4642		
19585	BIGB	04	08	1603	S03 W07	04	8.1	2.1	0200	4644		
19585	BIGB	04	09	1642	S02 W22	04	8.0	2.2	0300	4644		
19584	BIGB	04	04	1517	S16 E67	04	9.7	2.0	0600	4643		
19584	BIGB	04	05	1609	S16 E53	04	9.7	1.8	0850	4643		
19584	BIGB	04	06	1455	S16 E40	04	9.6	2.5	1000	4643		
19584	BIGB	04	07	1405	S16 E27	04	9.6	2.0	0700	4643		
19584	BIGB	04	08	1603	S16 E14	04	9.7	1.8	0700	4643		
19584	BIGB	04	09	1642	S16 W00	04	9.7	1.8	0550	4643		
19584	BIGB	04	10	1534	S17 W13	04	9.7	1.0	0550	4643		
19584A	BIGB	04	22	2322	N01 W81	04	16.9	1.0	0700			
19586	BIGB	04	12	1710	S11 E65	04	17.6	.7	1000	4643D		
19586	BIGB	04	13	2358	S12 E48	04	17.6	.7	1100	4643D		
19586	BIGB	04	14	1820	S12 E37	04	17.5	.7	1100	4643D		
19586	BIGB	04	15	1407	S13 E30	04	17.8	.7	1000	4643D		
19586	BIGB	04	16	1928	S12 E13	04	17.8	.7	1000	4643D		
19586	BIGB	04	17	1456	S12 E02	04	17.8	.5	1000	4643D		
19592	BIGB	04	23	1631	N01 W39	04	20.8	.8	0100	4648		
19592	BIGB	04	24	2050	N01 W57	04	20.6	.8	0300	4648		
19592	BIGB	04	25	1929	N01 W72	04	20.4	1.0	0650	4648		
19588	BIGB	04	16	1928	S10 E67	04	21.8	.6	0850			
19588	BIGB	04	17	1456	S11 E54	04	21.7	.7	0950			
19588	BIGB	04	18	1736	S12 E38	04	21.6	.6	1000			
19588	BIGB	04	19	2131	S12 E28	04	22.0	.6	1100			
19588	BIGB	04	20	1443	S13 E13	04	21.6	.6	1000			
19589	BIGB	04	17	1456	S07 E79	04	23.5	.7	0700	4646		
19589	BIGB	04	18	1736	S07 E64	04	23.5	2.5	0750	4646		
19589	BIGB	04	19	2131	S07 E51	04	23.7	2.7	0950	4646		
19589	BIGB	04	20	1443	S07 E38	04	23.4	2.7	0950	4646		
19589	BIGB	04	21	1630	S07 E22	04	23.3	2.3	0900	4646		
19589	BIGB	04	22	2322	S08 E06	04	23.4	2.0	0900	4646		
19589	BIGB	04	23	1631	S08 W04	04	23.4	2.0	0900	4646		
19589	BIGB	04	24	2050	S10 W19	04	23.4	1.7	0850	4646		
19589	BIGB	04	25	1929	S10 W33	04	23.3	1.7	0850	4646		
19589	BIGB	04	26	1838	S10 W46	04	23.3	1.7	0800	4646		
19589	BIGB	04	27	2146	S10 W59	04	23.5	1.4	0800	4646		
19589	BIGB	04	28	2147	S10 W72	04	23.5	1.2	0800	4646		
19590	BIGB	04	18	1736	N07 E79	04	24.6	1.5	1400	4646A		
19590	BIGB	04	19	2131	N07 E68	04	25.0	1.5	1950	4646A		
19590	BIGB	04	20	1443	N07 E57	04	24.9	1.8	2300	4646A		
19590	BIGB	04	21	1630	N08 E41	04	24.8	1.8	2300	4646A		
19590	BIGB	04	22	2322	N09 E25	04	24.8	1.8	2200	4646A		

CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

APRIL 1985

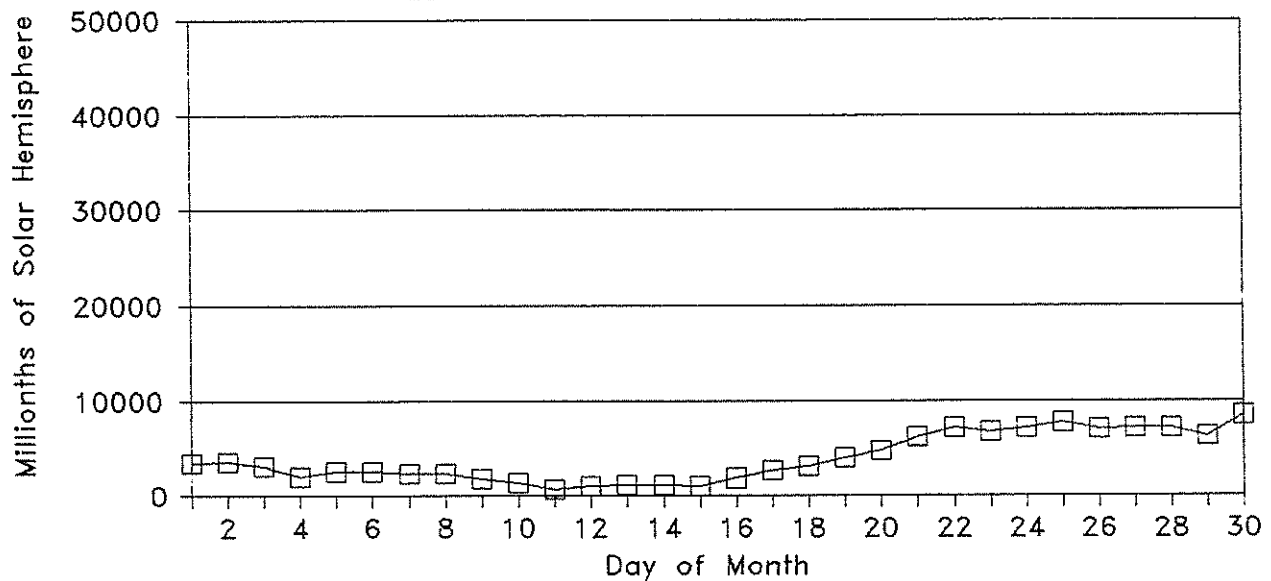
Calcium Plage Region	Sta	Observation Time (UT)		Lat CMD		CMP Mo Day		Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF Sunspot Groups		
		Mo	Day	Mo	Day	Mo	Day			#1	#2	#3
19590	BIGB	04	23	1631	N09 E17	04	25.0	1.8	2100			4646A
19590	BIGB	04	24	2050	N08 W00	04	24.9	1.5	2100			4646A
19590	BIGB	04	25	1929	N09 W12	04	24.9	1.4	2000			4646A
19590	BIGB	04	26	1838	N09 W25	04	24.9	1.4	2000			4646A
19590	BIGB	04	27	2146	N07 W42	04	24.8	1.3	2000			4646A
19590	BIGB	04	28	2147	N07 W54	04	24.9	1.0	1900			4646A
19590	BIGB	04	29	1739	N07 W64	04	24.9	1.0	1900			4646A
19590	BIGB	04	30	1942	N09 W74	04	25.3	.5	1300			4646A
19591	BIGB	04	20	1443	N05 E76	04	26.3	3.0	0600			4647
19591	BIGB	04	21	1630	N05 E59	04	26.1	3.5	3000			4647
19591	BIGB	04	22	2322	N05 E45	04	26.3	3.7	3400			4647
19591	BIGB	04	23	1631	N05 E33	04	26.1	3.7	3700			4647
19591	BIGB	04	24	2050	N05 E16	04	26.1	3.7	4000			4647
19591	BIGB	04	25	1929	N06 E03	04	26.0	3.7	4300			4647
19591	BIGB	04	26	1838	N05 W09	04	26.1	3.7	4300			4647
19591	BIGB	04	27	2146	N05 W23	04	26.2	3.7	4400			4647
19591	BIGB	04	28	2147	N05 W36	04	26.2	3.5	4500			4647
19591	BIGB	04	29	1739	N05 W47	04	26.2	3.5	4400			4647
19591	BIGB	04	30	1942	N05 W61	04	26.2	3.5	4700			4647
19591	BIGB	05	01	1810	N05 W72	04	26.5	3.5	4700			4647

DAILY PLAGE SUMMARIES

APRIL 1985

Day	Sta	Plage Index	Plage Count	Smallest Plage (Millionths)	Largest Plage of Solar Hemisphere)	Total Area	Smallest Intensity	Largest Intensity
01	BIGB	4.3	4	100	2300	3450	.7	2.4
02	BIGB	4.0	3	550	2300	3600	1.8	2.5
03	BIGB	2.3	3	600	1800	3100	1.6	2.3
04	BIGB	3.5	3	600	850	2050	2.0	2.7
05	BIGB	3.9	3	650	1100	2600	1.8	2.0
06	BIGB	4.9	3	600	1000	2600	1.5	2.5
07	BIGB	3.7	3	600	1000	2300	1.4	2.1
08	BIGB	3.7	4	200	900	2400	1.5	2.3
09	BIGB	2.7	3	300	900	1750	1.8	2.2
10	BIGB	1.1	2	550	850	1400	1.0	1.8
11	BIGB	0.1	1	700	700	700	.8	.8
12	BIGB	0.3	1	1000	1000	1000	.7	.7
13	BIGB	0.5	1	1100	1100	1100	.7	.7
14	BIGB	0.6	1	1100	1100	1100	.7	.7
15	BIGB	0.6	1	1000	1000	1000	.7	.7
16	BIGB	0.8	2	850	1000	1850	.6	.7
17	BIGB	0.9	3	700	1000	2650	.5	.7
18	BIGB	1.6	3	750	1400	3150	.6	2.5
19	BIGB	3.1	3	950	1950	4000	.6	2.7
20	BIGB	5.1	4	600	2300	4850	.6	3.0
21	BIGB	10.1	3	900	3000	6200	1.8	3.5
22	BIGB	14.1	4	700	3400	7200	1.0	3.7
23	BIGB	16.7	4	100	3700	6800	.8	3.7
24	BIGB	18.7	4	300	4000	7250	.8	3.7
25	BIGB	19.9	4	650	4300	7800	1.0	3.7
26	BIGB	19.0	3	800	4300	7100	1.4	3.7
27	BIGB	17.3	3	800	4400	7200	1.3	3.7
28	BIGB	13.9	3	800	4500	7200	1.0	3.5
29	BIGB	11.0	2	1900	4400	6300	1.0	3.5
30	BIGB	9.7	5	500	4700	8600	.5	3.5

DAILY PLAGE AREAS FOR APRIL 1985



BIG BEAR SOLAR OBSERVATORY  
ACTIVE REGION SUMMARY

99  
Late  
Apr 85

APRIL 1985

Region Number	Return Of Region	Rotation Age	First Seen This Rotation	Duration This Rotation
19581	New	1	850330	10 Days
19583	New	1	850401	11
19585	New	1	850408	02
19584	New	1	854404	07
19582	New	1	850422	01
19586	19567	2	850412	06
19592	New	1	850423	03
19588	19573	2	850416	05
19589	New	1	850417	12
19590	19576	2	850418	13
19591	New	1	850420	13

2. No CaK Plots on April 2-8, 10, 15, 17, 18, 20.
3. No KPNO Magnetograms on April 21-28.
4. No Contiguous Plages.

100  
Late  
May 85

CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

MAY 1985

Calcium Plage Region	Sta	Observation Time		Lat CMD	CMP		Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF Sunspot Groups			
		Mo	Day		UT	Mo			Day	#1	#2	#3
19587	BIGB	04	30	1942	N07	E06	05 1.3	1.5	0500			
19587	BIGB	05	01	1810	N07	W06	05 1.3	.8	0400			
19593	BIGB	04	30	1942	N25	E36	05 3.6	1.0	0500			
19593	BIGB	05	01	1810	N25	E23	05 3.5	1.0	0300			
19593	BIGB	05	02	2111	N25	E09	05 3.6	.7	0200			
19595	BIGB	05	02	2111	N10	E32	05 5.3	1.5	0450	4651		
19595	BIGB	05	03	1526	N09	E22	05 5.3	1.4	0250	4651		
19595	BIGB	05	04	2212	N09	E04	05 5.2	1.3	0300	4651		
19595	BIGB	05	05	1954	N09	W07	05 5.3	.8	0200	4651		
19594	BIGB	04	30	1942	N04	E75	05 6.4	2.4	1600	4649		
19594	BIGB	05	01	1810	N04	E67	05 6.8	2.5	1300	4649		
19594	BIGB	05	02	2111	N05	E52	05 6.8	2.8	1300	4649		
19594	BIGB	05	03	1526	N05	E44	05 6.9	2.5	1300	4649		
19594	BIGB	05	04	2212	N05	E23	05 6.6	2.2	1300	4649		
19594	BIGB	05	05	1954	N05	E12	05 6.7	2.0	1300	4649		
19594	BIGB	05	06	2202	N05	W01	05 6.8	2.0	1400	4649		
19594	BIGB	05	07	2000	N05	W13	05 6.9	2.8	1800	4649		
19594	BIGB	05	08	1929	N05	W29	05 6.6	3.0	2400	4649		
19594	BIGB	05	09	2228	N04	W38	05 7.1	2.5	2800	4649		
19594	BIGB	05	10	1725	N05	W52	05 6.8	2.3	2800	4649		
19594	BIGB	05	11	2039	N07	W69	05 6.7	2.4	2700	4649		
19594	BIGB	05	12	1546	N04	W77	05 6.9	2.3	2700	4649		
19596	BIGB	05	02	2111	N04	E73	05 8.3	3.0	2000	4650		
19596	BIGB	05	03	1526	N04	E66	05 8.6	2.9	2000	4650		
19596	BIGB	05	04	2212	N05	E46	05 8.4	2.8	1800	4650		
19596	BIGB	05	05	1954	N06	E33	05 8.3	2.5	1800	4650		
19596	BIGB	05	06	2202	N04	E19	05 8.3	2.5	1800	4650		
19596	BIGB	05	07	2000	N04	E07	05 8.3	2.3	1500	4650		
19596	BIGB	05	08	1929	N05	W07	05 8.3	2.1	1400	4650		
19596	BIGB	05	09	2228	N04	W19	05 8.5	2.0	1400	4650		
19596	BIGB	05	10	1725	N04	W30	05 8.5	2.3	1200	4650		
19596	BIGB	05	11	2039	N03	W48	05 8.3	2.3	1000	4650		
19596	BIGB	05	12	1546	N03	W60	05 8.2	2.3	1000	4650		
19596	BIGB	05	13	1803	N02	W71	05 8.4	1.8	1000	4650		
19597	BIGB	05	04	2212	N09	E58	05 9.3	.7	0200			
19600	BIGB	05	09	2228	S02	E29	05 12.1	.5	0175	4650A		
19600	BIGB	05	10	1725	S03	E20	05 12.2	.7	0300	4650A		
19598	BIGB	05	07	2000	S12	E72	05 13.2	3.0	4000	4652		
19598	BIGB	05	08	1929	S11	E56	05 13.0	3.5	4200	4652		
19598	BIGB	05	09	2228	S12	E49	05 13.6	3.8	4200	4652		
19598	BIGB	05	10	1725	S12	E40	05 13.7	4.0	4000	4652		
19598	BIGB	05	11	2039	S12	E23	05 13.6	4.0	4000	4652		
19598	BIGB	05	12	1546	S12	E11	05 13.5	4.0	3400	4652		
19598	BIGB	05	13	1803	S12	E02	05 13.9	4.1	3400	4652		
19598	BIGB	05	14	2001	S12	W14	05 13.8	3.8	3400	4652		
19598	BIGB	05	15	1653	S12	W26	05 13.7	4.0	3400	4652		
19598	BIGB	05	16	1730	S12	W39	05 13.8	4.0	3400	4652		
19598	BIGB	05	18	1431	S13	W67	05 13.5	3.9	3400	4652		
19598	BIGB	05	19	1940	S13	W72	05 14.4	3.8	3400	4652		
19599	BIGB	05	08	1929	N08	E66	05 13.8	2.0	1400	4653		
19599	BIGB	05	09	2228	N07	E58	05 14.3	2.3	2000	4653		
19599	BIGB	05	10	1725	N06	E46	05 14.2	2.3	1800	4653		
19599	BIGB	05	11	2039	N07	E34	05 14.4	2.3	1800	4653		
19599	BIGB	05	12	1546	N07	E20	05 14.1	2.3	1800	4653		
19599	BIGB	05	13	1803	N09	E08	05 14.3	2.3	1700	4653		
19599	BIGB	05	14	2001	N09	W06	05 14.4	2.3	1700	4653		
19599	BIGB	05	15	1653	N09	W17	05 14.4	2.3	1700	4653		
19599	BIGB	05	16	1730	N08	W30	05 14.5	2.3	1700	4653		
19599	BIGB	05	18	1431	N08	W60	05 14.1	2.3	1700	4653		
19599	BIGB	05	19	1940	N07	W64	05 15.0	2.1	1700	4653		
19599	BIGB	05	20	1821	N08	W76	05 15.1	1.5	6500	4653		
19601	BIGB	05	11	2039	N04	E66	05 16.8	1.2	1000	4654	4654A	

CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

MAY 1985

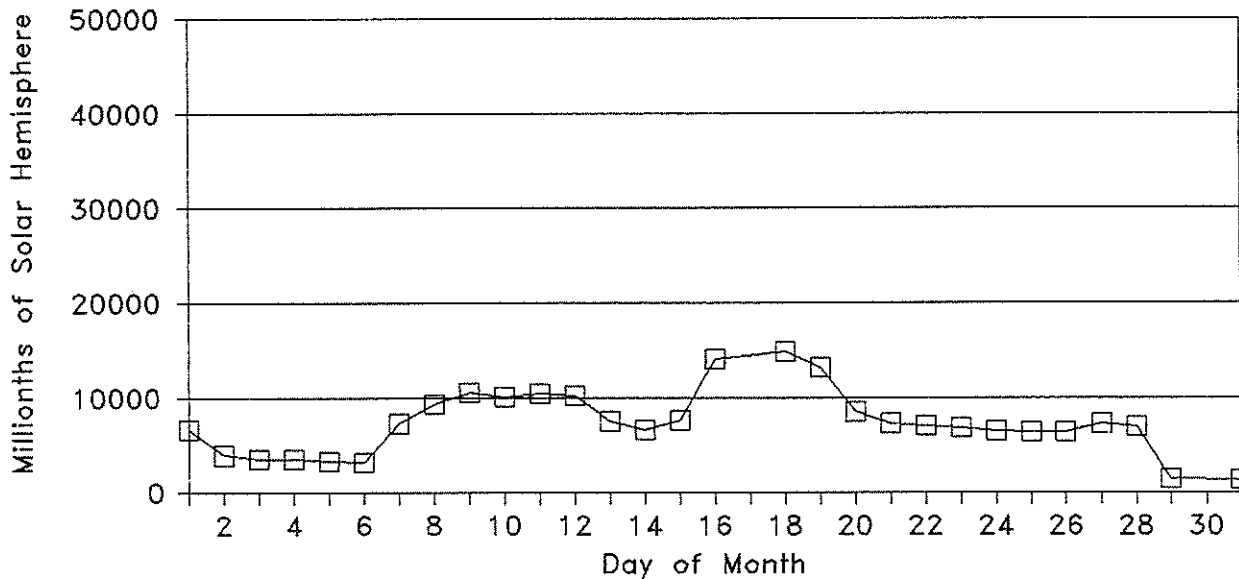
Calcium Plage Region	Sta	Observation Time			CMP Mo Day	Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
		Mo	Day	(UT)						
19601	BIGB	05	12	1546	N03 E56	05 16.8	1.5	1300	4654	4654A
19601	BIGB	05	13	1803	N03 E42	05 16.9	1.8	1500	4654	4654A
19601	BIGB	05	14	2001	N03 E28	05 16.9	1.5	1600	4654	4654A
19601	BIGB	05	15	1653	N03 E18	05 17.0	1.3	1600	4654	4654A
19601	BIGB	05	16	1730	N04 E02	05 16.9	.8	1600	4654	4654A
19601	BIGB	05	18	1431	N03 W23	05 16.9	.5	1600	4654	4654A
19602	BIGB	05	15	1653	S08 E72	05 21.1	2.5	1000	4655	
19602	BIGB	05	16	1730	S07 E58	05 21.1	2.5	1450	4655	
19602	BIGB	05	18	1431	S08 E31	05 20.9	2.7	1400	4655	
19602	BIGB	05	19	1940	S09 E21	05 21.4	2.2	1300	4655	
19602	BIGB	05	20	1821	S08 E06	05 21.2	2.2	0800	4655	
19602	BIGB	05	21	2052	S08 W06	05 21.4	2.2	1300	4655	
19602	BIGB	05	22	1758	S08 W18	05 21.4	2.2	1300	4655	
19602	BIGB	05	23	1323	S08 W30	05 21.3	2.2	1300	4655	
19602	BIGB	05	24	1743	S08 W43	05 21.5	2.0	1300	4655	
19602	BIGB	05	25	1829	S08 W56	05 21.6	2.0	1200	4655	
19602	BIGB	05	26	2207	S09 W69	05 21.7	1.2	1200	4655	
19602	BIGB	05	27	1620	S06 W76	05 21.9	1.0	1000	4655	
19603	BIGB	05	16	1730	N07 E72	05 22.1	2.7	6000	4655A	4655B 4656
19603	BIGB	05	18	1431	N07 E50	05 22.3	2.7	6800	4655A	4655B 4656
19603	BIGB	05	19	1940	N07 E40	05 22.8	2.7	6800	4655A	4655B 4656
19603	BIGB	05	20	1821	N08 E28	05 22.9	2.7	1300	4655A	4655B 4656
19603	BIGB	05	21	2052	N07 E15	05 23.0	2.7	6000	4655A	4655B 4656
19603	BIGB	05	22	1758	N07 E03	05 23.0	2.7	5800	4655A	4655B 4656
19603	BIGB	05	23	1323	N07 W07	05 23.0	2.7	5600	4655A	4655B 4656
19603	BIGB	05	24	1743	N07 W22	05 23.1	2.5	5300	4655A	4655B 4656
19603	BIGB	05	25	1829	N06 W35	05 23.1	2.5	5300	4655A	4655B 4656
19603	BIGB	05	26	2207	N05 W49	05 23.2	2.7	5300	4655A	4655B 4656
19603	BIGB	05	27	1620	N04 W57	05 23.4	2.7	5300	4655A	4655B 4656
19603	BIGB	05	28	1334	N06 W72	05 23.2	2.7	5300	4655A	4655B 4656
19605	BIGB	05	29	1527	N05 W34	05 27.1	2.2	0450		
19605	BIGB	05	31	2130	N04 W65	05 27.4	2.0	0350		
19608	BIGB	06	04	1844	S21 W52	05 31.8	2.8	0300	4661	
19608	BIGB	06	05	1921	S22 W65	05 31.8	2.8	0700	4661	
19608	BIGB	06	06	1644	S21 W79	05 31.6	2.5	0700	4661	

DAILY PLAGE SUMMARIES

MAY 1985

Day	Sta	Plage Index	Plage Count	Smallest Plage (Millionths)	Largest Plage of Solar Hemisphere	Total Area	Smallest Intensity	Largest Intensity	
01	BIGB	6.3	4	300	4700	6700	.8	3.5	
02	BIGB	4.4	4	200	2000	3950	.7	3.0	
03	BIGB	4.8	3	250	2000	3550	1.4	2.9	
04	BIGB	6.5	4	200	1800	3600	.7	2.8	
05	BIGB	6.4	3	200	1800	3300	.8	2.5	
06	BIGB	7.0	2	1400	1800	3200	2.0	2.5	
07	BIGB	11.6	3	1500	4000	7300	2.3	3.0	
08	BIGB	18.0	4	1400	4200	9400	2.0	3.5	
09	BIGB	20.4	5	175	4200	10575	.5	3.8	
10	BIGB	21.0	5	300	4000	10100	.7	4.0	
11	BIGB	21.8	5	1000	4000	10500	1.2	4.0	
12	BIGB	20.2	5	1000	3400	10200	1.5	4.0	
13	BIGB	20.0	4	1000	3400	7600	1.8	4.1	
14	BIGB	18.2	3	1600	3400	6700	1.5	3.8	
15	BIGB	18.2	4	1000	3400	7700	1.3	4.0	
16	BIGB	21.1	5	1450	6000	14150	.8	4.0	
17	No Observations This DAY								
18	BIGB	21.9	5	1400	6800	14900	.5	3.9	
19	BIGB	21.4	4	1300	6800	13200	2.1	3.8	
20	BIGB	6.8	3	800	6500	8600	1.5	2.7	
21	BIGB	18.3	2	1300	6000	7300	2.2	2.7	
22	BIGB	18.2	2	1300	5800	7100	2.2	2.7	
23	BIGB	17.3	2	1300	5600	6900	2.2	2.7	
24	BIGB	14.0	2	1300	5300	6600	2.0	2.5	
25	BIGB	12.0	2	1200	5300	6500	2.0	2.5	
26	BIGB	9.6	2	1200	5300	6500	1.2	2.7	
27	BIGB	8.2	3	1000	5300	7300	1.0	2.7	
28	BIGB	5.3	2	1700	5300	7000	2.0	2.7	
29	BIGB	1.9	2	450	1000	1450	1.7	2.2	
30	No Observations This DAY								
31	BIGB	1.7	2	350	1000	1350	1.5	2.0	

DAILY PLAGE AREAS FOR MAY 1985



BIG BEAR SOLAR OBSERVATORY  
ACTIVE REGION SUMMARY

103  
Late  
May 85

MAY 1985

Region Number	Return Of Region	Rotation Age	First Seen This Rotation	Duration This Rotation
19587	New	1	850430	02 Days
19593	New	1	850430	03
19595	New	1	850502	04
19594	New	1	850430	13
19596	New	1	850502	12
19597	New	1	850504	01
19600	New	1	850509	02
19598	New	1	850507	13
19599	New	1	850508	12
19601	New	1	850511	08
19602	New	1	850515	13
19603	19591	2	850516	13
19605	New	1	850529	03

1. No CaK Observations at BBSO on May 30.
2. No CaK Plots on May 3, 10, 12, 17, 23, 28, 29.
3. No KPNO Magnetograms on May 7, 16, 21, 30, 31.
4. No Contiguous Plages.



CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

JUNE 1985

Calcium Plage Region	Sta	Mo	Day	Observation Time (UT)	Lat	CMD	CMP Mo	Day	Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
19604	BIGB	05	27	1620	N07	E73	06	2.1	2.0	1000	4659A		
19604	BIGB	05	28	1334	N06	E65	06	2.4	2.0	1700	4659A		
19604	BIGB	05	29	1527	N06	E50	06	2.4	1.7	1000	4659A		
19604	BIGB	05	31	2130	N06	E19	06	2.3	1.5	1000	4659A		
19604	BIGB	06	01	1441	N05	E12	06	2.5	1.3	1000	4659A		
19604	BIGB	06	02	0014	N05	E06	06	2.4	1.2	1000	4659A		
19604	BIGB	06	03	1315	N05	W15	06	2.4	1.0	1000	4659A		
19604	BIGB	06	04	1844	N05	W31	06	2.5	1.0	1300	4659A		
19604	BIGB	06	05	1921	N04	W43	06	2.6	.8	1200	4659A		
19604	BIGB	06	06	1644	N05	W57	06	2.4	.9	1200	4659A		
19604	BIGB	06	07	2023	N04	W67	06	2.8	.5	1000	4659A		
19606	BIGB	06	03	1315	S06	E70	06	8.8	2.3	1000	4659		
19606	BIGB	06	04	1844	S05	E55	06	8.9	2.3	1000	4659		
19606	BIGB	06	05	1921	S06	E42	06	8.9	2.4	1300	4659		
19606	BIGB	06	06	1644	S06	E30	06	8.9	2.4	1300	4659		
19606	BIGB	06	07	2023	S06	E16	06	9.0	2.2	1400	4659		
19606	BIGB	06	08	2231	S06	W00	06	8.9	2.2	1400	4659		
19606	BIGB	06	09	2340	S06	W15	06	8.9	2.2	1400	4659		
19606	BIGB	06	10	2221	S06	W27	06	8.9	2.2	1200	4659		
19606	BIGB	06	11	1952	S06	W39	06	8.9	2.2	1200	4659		
19606	BIGB	06	12	1540	S06	W49	06	9.0	1.8	1000	4659		
19606	BIGB	06	13	1309	S06	W63	06	8.8	1.8	1000	4659		
19606	BIGB	06	14	1626	S06	W80	06	8.7	1.8	0800	4659		
19612	BIGB	06	10	2221	S09	W19	06	9.5	3.0	0600	4665		
19612	BIGB	06	11	1952	S10	W32	06	9.4	3.0	1100	4665		
19612	BIGB	06	12	1540	S11	W42	06	9.5	3.0	1300	4665		
19612	BIGB	06	13	1309	S10	W55	06	9.4	3.1	1300	4665		
19612	BIGB	06	14	1626	S12	W71	06	9.3	3.1	1300	4665		
19607	BIGB	06	03	1315	S13	E80	06	9.6	3.5	4000	4660	4662	4665
19607	BIGB	06	04	1844	S12	E70	06	10.0	3.8	4000	4660	4662	4665
19607	BIGB	06	05	1921	S11	E55	06	9.9	4.0	3800	4660	4662	4665
19607	BIGB	06	06	1644	S11	E43	06	9.9	4.0	3800	4660	4662	4665
19607	BIGB	06	07	2023	S11	E30	06	10.1	3.7	3500	4660	4662	4665
19607	BIGB	06	08	2231	S13	E14	06	10.0	3.2	3500	4660	4662	4665
19607	BIGB	06	09	2340	S12	W00	06	10.0	3.0	3700	4660	4662	4665
19607	BIGB	06	10	2221	S13	W09	06	10.2	3.0	3500	4660	4662	4665
19607	BIGB	06	11	1952	S13	W22	06	10.2	3.0	3500	4660	4662	4665
19607	BIGB	06	12	1540	S14	W32	06	10.2	3.0	3400	4660	4662	4665
19607	BIGB	06	13	1309	S13	W45	06	10.1	2.8	3400	4660	4662	4665
19607	BIGB	06	14	1626	S13	W60	06	10.1	2.8	3400	4660	4662	4665
19607	BIGB	06	15	1507	S13	W75	06	10.0	2.4	3400	4660	4662	4665
19607	BIGB	06	16	0012	S13	W88	06	9.4	1.0	1000	4660	4662	4665
19613	BIGB	06	13	1309	N06	W42	06	10.4	2.0	0400			
19613	BIGB	06	14	1626	N06	W57	06	10.4	2.0	0500			
19613	BIGB	06	15	1507	N06	W70	06	10.4	1.7	0500			
19613	BIGB	06	16	0012	N05	W80	06	10.0	.3	0500			
19609	BIGB	06	06	1644	N02	E73	06	12.1	2.8	2200	4663		
19609	BIGB	06	07	2023	N01	E61	06	12.4	2.7	2200	4663		
19609	BIGB	06	08	2231	N02	E45	06	12.3	3.0	2000	4663		
19609	BIGB	06	09	2340	N01	E32	06	12.4	3.0	2000	4663		
19609	BIGB	06	10	2221	N01	E21	06	12.5	3.0	2000	4663		
19609	BIGB	06	11	1952	N05	E09	06	12.5	2.8	2000	4663		
19609	BIGB	06	12	1540	N00	W00	06	12.6	2.7	2000	4663		
19609	BIGB	06	13	1309	N01	W12	06	12.6	2.4	2000	4663		
19609	BIGB	06	14	1626	N01	W27	06	12.7	2.4	2000	4663		
19609	BIGB	06	15	1507	N01	W40	06	12.6	2.4	2000	4663		
19609	BIGB	06	16	0012	N00	W43	06	12.8	2.3	2000	4663		
19609	BIGB	06	17	1922	S02	W60	06	13.3	2.2	2500	4663		
19609	BIGB	06	18	1604	S02	W79	06	12.8	1.9	2500	4663		
19611	BIGB	06	09	2340	N11	E46	06	13.4	1.8	0200	4663A		
19611	BIGB	06	10	2221	N11	E39	06	13.9	2.2	0200	4663A		
19611	BIGB	06	11	1952	N12	E23	06	13.6	2.3	0300	4663A		
19611	BIGB	06	12	1540	N11	E13	06	13.6	1.8	0200	4663A		
19611	BIGB	06	13	1309	N12	W01	06	13.5	.3	0200	4663A		
19610	BIGB	06	08	2231	N02	E66	06	13.9	1.8	0500	4664		

CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

JUNE 1985

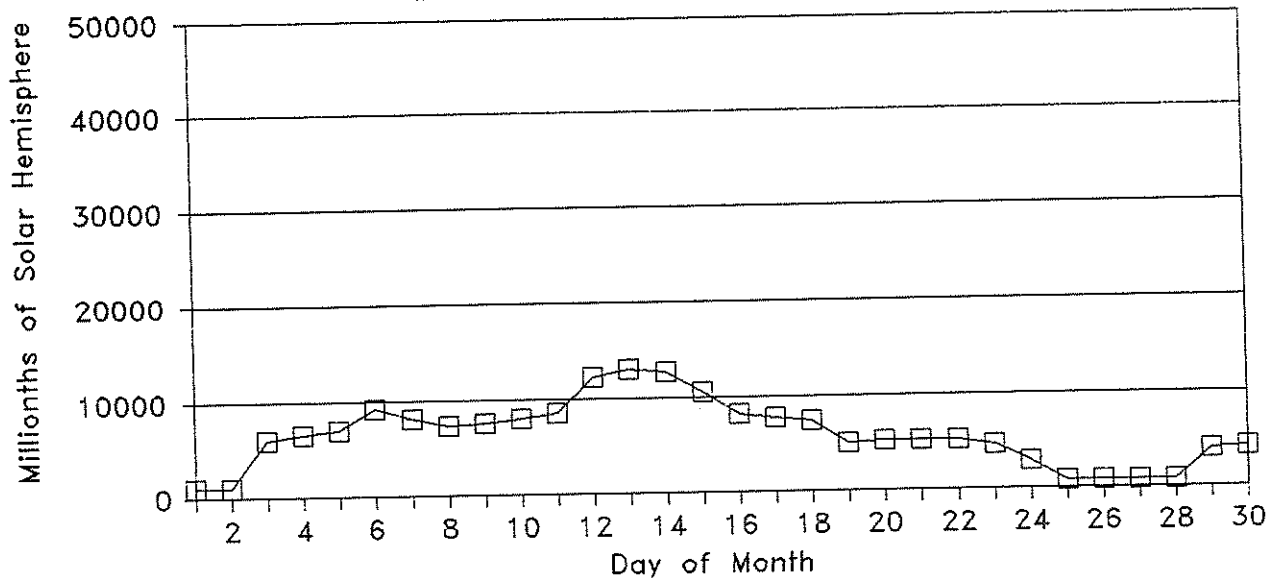
Calcium Plage Region	Sta	Observation Time		Lat CMD	CMP		Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot Groups	
		Mo	Day (UT)		Mo	Day				#2	#3
19610	BIGB	06	09	2340	N04 E52	06	13.9	2.7	0300	4664	
19610	BIGB	06	10	2221	N01 E42	06	14.1	2.7	0500	4664	
19610	BIGB	06	11	1952	N00 E31	06	14.1	2.5	0500	4664	
19610	BIGB	06	12	1540	S02 E19	06	14.1	2.0	0450	4664	
19610	BIGB	06	13	1309	S01 E05	06	13.9	.7	0600	4664	
19610	BIGB	06	14	1626	S01 W10	06	13.9	.7	0600	4664	
19610	BIGB	06	15	1507	S01 W22	06	14.0	.5	0400	4664	
19610	BIGB	06	16	0012	S01 W26	06	14.1	.5	0400	4664	
19610	BIGB	06	17	1922	S03 W53	06	13.8	.5	0450	4664	
19614	BIGB	06	12	1540	S07 E62	06	17.3	.4	0350	4666	
19614	BIGB	06	13	1309	S08 E51	06	17.4	1.8	0600	4666	
19614	BIGB	06	14	1626	S08 E35	06	17.3	1.8	0600	4666	
19614	BIGB	06	15	1507	S08 E22	06	17.3	1.8	0800	4666	
19614	BIGB	06	16	0012	S09 E18	06	17.3	1.7	0800	4666	
19614	BIGB	06	17	1922	S10 W06	06	17.3	1.8	0850	4666	
19614	BIGB	06	18	1604	S10 W17	06	17.4	1.7	1000	4666	
19614	BIGB	06	19	1502	S10 W30	06	17.4	1.7	1000	4666	
19614	BIGB	06	20	2259	S10 W47	06	17.4	1.5	0900	4666	
19614	BIGB	06	21	1744	S10 W58	06	17.4	1.0	0900	4666	
19614	BIGB	06	22	1735	S10 W65	06	17.8	1.0	0900	4666	
19615	BIGB	06	12	1540	N07 E73	06	18.1	1.0	3500	4667	
19615	BIGB	06	13	1309	N07 E69	06	18.7	1.5	3500	4667	
19615	BIGB	06	14	1626	N07 E51	06	18.5	1.5	3500	4667	
19615	BIGB	06	15	1507	N07 E40	06	18.6	1.5	3500	4667	
19615	BIGB	06	16	0012	N07 E35	06	18.6	1.8	3500	4667	
19615	BIGB	06	17	1922	N09 E10	06	18.5	1.8	4000	4667	
19615	BIGB	06	18	1604	N09 W02	06	18.5	1.7	4000	4667	
19615	BIGB	06	19	1502	N09 W14	06	18.6	1.7	4000	4667	
19615	BIGB	06	20	2259	N09 W32	06	18.5	2.0	4300	4667	
19615	BIGB	06	21	1744	N09 W42	06	18.6	2.0	4300	4667	
19615	BIGB	06	22	1735	N08 W56	06	18.5	2.0	4300	4667	
19615	BIGB	06	23	1728	N08 W70	06	18.5	2.0	4300	4667	
19615	BIGB	06	24	2343	N08 W85	06	18.6	1.7	2200	4667	
19616	BIGB	06	23	1728	S14 E20	06	25.2	2.0	0400	4668	
19616	BIGB	06	24	2343	S14 E04	06	25.3	2.0	0740	4668	
19616	BIGB	06	25	1558	S14 W05	06	25.3	2.0	0750	4668	
19616	BIGB	06	26	1553	S14 W18	06	25.3	1.8	0750	4668	
19616	BIGB	06	27	1830	S15 W34	06	25.2	1.5	0800	4668	
19616	BIGB	06	28	1600	S14 W45	06	25.3	1.5	0800	4668	
19616	BIGB	06	29	1452	S14 W60	06	25.1	1.2	0800	4668	
19616	BIGB	06	30	1645	S14 W72	06	25.2	1.0	0700	4668	
19618	BIGB	06	30	1645	S11 W39	06	27.8	1.0	0350	4669	
19618	BIGB	07	01	1723	S10 W50	06	28.1	2.5	0400	4669	
19618	BIGB	07	02	1618	S10 W63	06	28.0	2.5	0575	4669	
19618	BIGB	07	03	1618	S10 W68	06	28.7	.5	0575	4669	

DAILY PLAGE SUMMARIES

JUNE 1985

Day	Sta	Plage Index	Plage Count	Smallest Plage (Millionths of Solar Hemisphere)	Largest Plage	Total Area (Millionths of Solar Hemisphere)	Smallest Intensity	Largest Intensity
01	BIGB	1.3	1	1000	1000	1000	1.3	1.3
02	BIGB	1.2	1	1000	1000	1000	1.2	1.2
03	BIGB	3.6	3	1000	4000	6000	1.0	3.5
04	BIGB	7.5	4	300	4000	6600	1.0	3.8
05	BIGB	11.9	4	700	3800	7000	.8	4.0
06	BIGB	15.8	5	700	3800	9200	.9	4.0
07	BIGB	16.8	4	1000	3500	8100	.5	3.7
08	BIGB	18.1	4	500	3500	7400	1.8	3.2
09	BIGB	19.6	5	200	3700	7600	1.8	3.0
10	BIGB	21.0	6	200	3500	8000	2.2	3.0
11	BIGB	21.4	6	300	3500	8600	2.2	3.0
12	BIGB	19.8	8	200	3500	12200	.4	3.0
13	BIGB	17.5	9	200	3500	13000	.3	3.1
14	BIGB	15.0	8	500	3500	12700	.7	3.1
15	BIGB	11.1	6	400	3500	10600	.5	2.4
16	BIGB	9.8	6	400	3500	8200	.3	2.3
17	BIGB	11.2	4	450	4000	7800	.5	2.2
18	BIGB	9.1	3	1000	4000	7500	1.7	1.9
19	BIGB	7.9	2	1000	4000	5000	1.7	1.7
20	BIGB	8.0	2	900	4300	5200	1.5	2.0
21	BIGB	6.7	2	900	4300	5200	1.0	2.0
22	BIGB	4.9	2	900	4300	5200	1.0	2.0
23	BIGB	3.4	2	400	4300	4700	2.0	2.0
24	BIGB	1.6	2	740	2200	2940	1.7	2.0
25	BIGB	1.4	1	750	750	750	2.0	2.0
26	BIGB	1.2	1	750	750	750	1.8	1.8
27	BIGB	1.0	1	800	800	800	1.5	1.5
28	BIGB	0.8	1	800	800	800	1.5	1.5
29	BIGB	2.9	2	800	3200	4000	1.2	2.5
30	BIGB	5.9	3	350	3200	4250	1.0	3.5

DAILY PLAGE AREAS FOR JUNE 1985



BIG BEAR SOLAR OBSERVATORY  
ACTIVE REGION SUMMARY

107  
Late  
Jun 85

JUNE 1985

Region Number	Return Of Region	Rotation Age	First Seen This Rotation	Duration This Rotation
19608	New	1	850604	03 Days
19604	19594	2	850527	12
19606	19598	2	850603	12
19612	New	1	850610	05
19607	New	1	850603	14
19613	New	1	850613	04
19609	New	1	850606	13
19611	New	1	850609	05
19610	New	1	850608	10
19614	19602	2	850612	11
19615	19603	3	850612	13
19616	New	1	850623	07
19618	New	1	850630	04

2. No CaK Plots on June 1, 3, 13-15, 29.
3. No KPNO Magnetograms on June 22, 24.
4. Contiguous Plages: 19606/19607/19612.

CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

JULY 1985

Calcium Plage Region	Sta	Observation Time		Lat CMD	CMP		Intensity	Corrected Area (10-6 Hem1)	NOAA/USAF #1	Sunspot Groups	
		Mo	Day		Mo	Day				#2	#3
19622	BIGB	07	04	2045	N05	W11	07 4.0	.8	0350	4670A	
19622	BIGB	07	05	1643	N05	W22	07 4.0	.5	0450	4670A	
19617	BIGB	06	29	1452	S08	E70	07 4.9	2.5	3200	4670	
19617	BIGB	06	30	1645	S08	E59	07 5.1	3.5	3200	4670	
19617	BIGB	07	01	1723	S09	E46	07 5.2	2.8	3300	4670	
19617	BIGB	07	02	1618	S09	E32	07 5.1	2.8	3300	4670	
19617	BIGB	07	03	1618	S08	E21	07 5.2	2.8	3300	4670	
19617	BIGB	07	04	2045	S08	E04	07 5.2	2.8	3300	4670	
19617	BIGB	07	05	1643	S08	W07	07 5.2	2.8	3300	4670	
19617	BIGB	07	07	2332	S10	W35	07 5.3	2.8	3000	4670	
19617	BIGB	07	08	1555	S10	W44	07 5.3	2.2	3000	4670	
19617	BIGB	07	09	1650	S10	W59	07 5.3	2.2	3000	4670	
19617	BIGB	07	10	1609	S10	W71	07 5.3	1.5	3000	4670	
19625	BIGB	07	07	2332	S09	W20	07 6.5	3.1	0650	4674	
19625	BIGB	07	08	1555	S08	W30	07 6.4	3.1	1400	4674	
19625	BIGB	07	09	1650	S09	W43	07 6.5	3.4	2000	4674	
19625	BIGB	07	10	1609	S09	W56	07 6.5	3.4	2400	4674	
19625	BIGB	07	11	1525	S09	W71	07 6.3	3.8	2500	4674	
19625	BIGB	07	12	1525	S08	W82	07 6.5	3.8	1500	4674	
19620	BIGB	07	01	1723	N06	E75	07 7.3	.8	1000	4674A	
19620	BIGB	07	02	1618	N06	E55	07 6.8	.8	1000	4674A	
19620	BIGB	07	03	1618	N07	E47	07 7.2	1.0	1000	4674A	
19620	BIGB	07	04	2045	N06	E29	07 7.0	.7	1000	4674A	
19620	BIGB	07	05	1643	N06	E18	07 7.0	.7	1000	4674A	
19620	BIGB	07	07	2332	N04	W10	07 7.2	.6	1000	4674A	
19620	BIGB	07	08	1555	N04	W21	07 7.1	1.0	1000	4674A	
19620	BIGB	07	09	1650	N03	W38	07 6.9	1.2	1300	4674A	
19620	BIGB	07	10	1609	N03	W51	07 6.9	.7	1300	4674A	
19620	BIGB	07	11	1525	N04	W63	07 6.9	.5	1000	4674A	
19619	BIGB	07	01	1723	S14	E75	07 7.4	3.2	3500	4671	4672
19619	BIGB	07	02	1618	S14	E60	07 7.2	3.2	3700	4671	4672
19619	BIGB	07	03	1618	S15	E50	07 7.5	3.2	3700	4671	4672
19619	BIGB	07	04	2045	S15	E32	07 7.3	3.1	3700	4671	4672
19619	BIGB	07	05	1643	S15	E21	07 7.3	3.2	3700	4671	4672
19619	BIGB	07	07	2332	S15	W07	07 7.4	3.4	3800	4671	4672
19619	BIGB	07	08	1555	S15	W16	07 7.4	3.5	3800	4671	4672
19619	BIGB	07	09	1650	S16	W31	07 7.3	3.7	3800	4671	4672
19619	BIGB	07	10	1609	S16	W45	07 7.2	3.6	3900	4671	4672
19619	BIGB	07	11	1525	S17	W57	07 7.3	3.8	3400	4671	4672
19619	BIGB	07	12	1525	S17	W66	07 7.6	3.8	3900	4671	4672
19619	BIGB	07	13	1558	S18	W76	07 7.9	1.0	1200	4671	4672
19621	BIGB	07	03	1618	S02	E77	07 9.4	1.0	0900		
19621	BIGB	07	04	2045	S02	E61	07 9.4	1.1	1200		
19621	BIGB	07	05	1643	S02	E50	07 9.4	1.1	1400		
19621	BIGB	07	07	2332	S03	E19	07 9.4	.7	1300		
19621	BIGB	07	08	1555	S03	E11	07 9.5	1.0	1300		
19621	BIGB	07	09	1650	S03	W02	07 9.5	1.2	1000		
19621	BIGB	07	10	1609	S03	W15	07 9.5	1.2	0600		
19621	BIGB	07	11	1525	S03	W28	07 9.5	1.0	0500		
19621	BIGB	07	12	1525	S03	W41	07 9.6	1.0	0500		
19621	BIGB	07	13	1558	S03	W54	07 9.6	1.0	0300		
19623	BIGB	07	07	2332	N05	E20	07 9.5	1.8	0300	4675	4676
19623	BIGB	07	08	1555	N05	E11	07 9.5	1.5	0400	4675	4676
19623	BIGB	07	09	1650	N03	W03	07 9.5	2.2	0850	4675	4676
19623	BIGB	07	10	1609	N03	W16	07 9.5	2.8	1000	4675	4676
19623	BIGB	07	11	1525	N03	W32	07 9.2	2.7	1500	4675	4676
19623	BIGB	07	12	1525	N03	W45	07 9.3	2.8	1200	4675	4676
19623	BIGB	07	13	1558	N03	W58	07 9.3	3.0	1200	4675	4676
19623	BIGB	07	14	2135	N03	W73	07 9.4	2.8	1200	4675	4676
19624	BIGB	07	07	2332	S02	E36	07 10.7	2.0	0300	4675A	4675B
19624	BIGB	07	08	1555	S02	E27	07 10.7	2.0	0400	4675A	4675B
19624	BIGB	07	09	1650	S02	E11	07 10.5	1.5	0300	4675A	4675B
19624	BIGB	07	10	1609	S03	W02	07 10.5	1.0	0300	4675A	4675B
19624	BIGB	07	11	1525	S03	W16	07 10.4	.7	0300	4675A	4675B

CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

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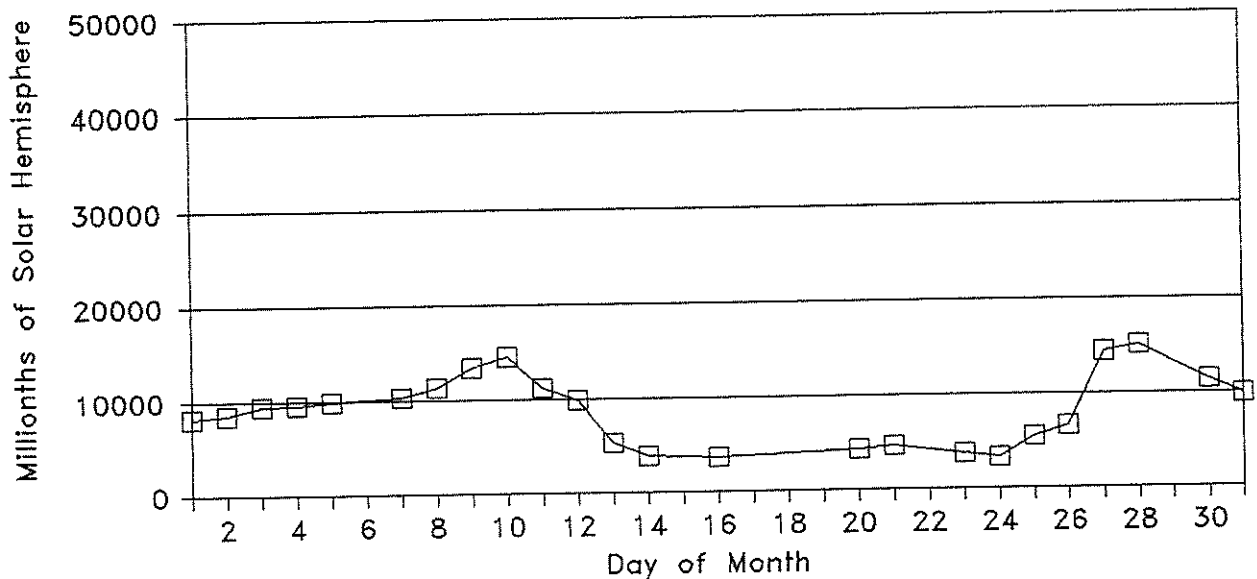
Calcium Plage Region	Sta	Observation Time		Lat CMD	CMP		Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
		Mo	Day		Mo	Day					
19624	BIGB	07	12	1525	S03 W29	07 10.5	1.0	0300	4675A	4675B	
19624	BIGB	07	13	1558	S03 W42	07 10.5	1.0	0200	4675A	4675B	
19624	BIGB	07	14	2135	S03 W55	07 10.8	.6	0200	4675A	4675B	
19626	BIGB	07	09	1650	N09 E74	07 15.2	.5	1200			
19626	BIGB	07	10	1609	N09 E61	07 15.2	1.0	2100			
19626	BIGB	07	11	1525	N09 E48	07 15.2	1.5	2000			
19626	BIGB	07	12	1525	N09 E35	07 15.3	1.0	2500			
19626	BIGB	07	13	1558	N09 E23	07 15.4	1.0	2500			
19626	BIGB	07	14	2135	N09 E10	07 15.6	.8	2500			
19626	BIGB	07	16	1643	N08 W16	07 15.5	1.0	2200			
19626	BIGB	07	20	1642	N06 W64	07 15.9	.8	1700			
19626	BIGB	07	21	1628	N06 W72	07 16.3	.7	1000			
19627	BIGB	07	16	1643	S14 E69	07 21.9	2.4	1500	4677		
19627	BIGB	07	20	1642	S13 E19	07 22.1	2.3	1500	4677		
19627	BIGB	07	21	1628	S13 E06	07 22.1	2.3	1700	4677		
19627	BIGB	07	23	1303	S14 W17	07 22.2	2.2	1400	4677		
19627	BIGB	07	24	1421	S15 W30	07 22.3	2.0	1250	4677		
19627	BIGB	07	25	1537	S15 W43	07 22.4	2.0	1250	4677		
19627	BIGB	07	26	1502	S15 W59	07 22.1	1.8	1250	4677		
19627	BIGB	07	27	2210	S14 W78	07 22.0	1.7	1100	4677		
19628	BIGB	07	20	1642	S07 E47	07 24.2	1.8	1200	4677A		
19628	BIGB	07	21	1628	S07 E34	07 24.2	2.0	1200	4677A		
19628	BIGB	07	23	1303	S08 E09	07 24.2	1.8	1000	4677A		
19628	BIGB	07	24	1421	S08 W05	07 24.2	1.8	0900	4677A		
19628	BIGB	07	25	1537	S08 W18	07 24.3	1.7	1000	4677A		
19628	BIGB	07	26	1502	S09 W32	07 24.2	1.7	1000	4677A		
19628	BIGB	07	27	2210	S08 W49	07 24.2	1.5	1000	4677A		
19628	BIGB	07	28	1338	S08 W57	07 24.3	1.8	0850	4677A		
19662	BIGB	07	25	1537	N38 W10	07 24.8	1.5	0100			
19630	BIGB	07	24	1421	N03 E13	07 25.6	1.0	0050	4679		
19630	BIGB	07	25	1537	N03 W02	07 25.5	2.7	0500	4679		
19630	BIGB	07	26	1502	N03 W15	07 25.5	2.7	0500	4679		
19630	BIGB	07	27	2210	N03 W33	07 25.4	2.7	0600	4679		
19630	BIGB	07	28	1338	N03 W41	07 25.5	2.4	0300	4679		
19629	BIGB	07	21	1628	S12 E72	07 27.1	3.0	0800	4678		
19629	BIGB	07	23	1303	S12 E43	07 26.8	2.8	1300	4678		
19629	BIGB	07	24	1421	S14 E30	07 26.9	2.5	1100	4678		
19629	BIGB	07	25	1537	S13 E15	07 26.8	2.4	1300	4678		
19629	BIGB	07	26	1502	S13 E04	07 26.9	2.3	1300	4678		
19629	BIGB	07	27	2210	S12 W17	07 26.6	2.3	1300	4678		
19629	BIGB	07	28	1338	S12 W24	07 26.7	1.8	1100	4678		
19638	BIGB	07	28	1338	S32 W19	07 27.1	2.2	0200	4678A		
19634	BIGB	07	23	1303	S30 E52	07 27.6	1.5	0090			
19637	BIGB	07	28	1338	N08 E16	07 29.8	.7	0200	4678B		
19637	BIGB	07	30	1816	N07 W12	07 29.9	2.1	0200	4678B		
19637	BIGB	07	31	1317	N06 W23	07 29.8	2.4	0099	4678B		
19635	BIGB	07	27	2210	N37 E28	07 30.2	1.4	0300			
19635	BIGB	07	28	1338	N37 E19	07 30.1	.5	0300			
19640	BIGB	08	02	2231	N12 W39	07 31.0	2.9	0270			
19640	BIGB	08	03	1816	N11 W48	07 31.1	.9	0050			
19631	BIGB	07	25	1537	S08 E71	07 31.0	.5	1400	4678C	4681	
19631	BIGB	07	26	1502	S09 E68	07 31.7	1.3	1600	4678C	4681	
19631	BIGB	07	27	2210	S08 E49	07 31.6	2.5	1700	4678C	4681	
19631	BIGB	07	28	1338	S08 E44	07 31.9	2.3	1700	4678C	4681	
19631	BIGB	07	30	1816	S09 E18	08 1.1	1.9	1350	4678C	4681	
19631	BIGB	07	31	1317	S08 E04	07 31.8	2.6	1690	4678C	4681	
19631	BIGB	08	01	1610	S11 W10	07 31.9	2.7	1440	4678C	4681	
19631	BIGB	08	02	2231	S11 W27	07 31.9	2.1	1180	4678C	4681	
19631	BIGB	08	03	1816	S11 W38	07 31.9	2.1	0680	4678C	4681	
19631	BIGB	08	04	1412	S10 W49	07 31.9	2.0	0670	4678C	4681	
19631	BIGB	08	05	1532	S10 W63	07 31.9	1.9	0530	4678C	4681	

DAILY PLAGE SUMMARIES

JULY 1985

Day	Sta	Plage Index	Plage Count	Smallest Plage (Millionths of Solar Hemisphere)	Largest Plage (Millionths of Solar Hemisphere)	Total Area (Millionths of Solar Hemisphere)	Smallest Intensity	Largest Intensity
01	BIGB	9.5	4	400	3500	8200	.8	3.2
02	BIGB	14.2	4	575	3700	8575	.8	3.2
03	BIGB	16.6	5	575	3700	9475	.5	3.2
04	BIGB	19.9	5	350	3700	9550	.7	3.1
05	BIGB	21.6	5	450	3700	9850	.5	3.2
06	No Observations This DAY							
07	BIGB	23.4	7	300	3800	10350	.6	3.4
08	BIGB	24.1	7	400	3800	11300	1.0	3.5
09	BIGB	24.4	8	300	3800	13450	.5	3.7
10	BIGB	20.2	8	300	3900	14600	.7	3.6
11	BIGB	15.4	7	300	3400	11200	.5	3.8
12	BIGB	10.9	6	300	3900	9900	1.0	3.8
13	BIGB	4.6	5	200	2500	5400	1.0	3.0
14	BIGB	2.9	3	200	2500	3900	.6	2.8
15	No Observations This DAY							
16	BIGB	3.2	2	1500	2200	3700	1.0	2.4
17	No Observations This DAY							
18	No Observations This DAY							
19	No Observations This DAY							
20	BIGB	5.2	3	1200	1700	4400	.8	2.3
21	BIGB	6.6	4	800	1700	4700	.7	3.0
22	No Observations This DAY							
23	BIGB	7.2	4	90	1400	3790	1.5	2.8
24	BIGB	6.0	4	50	1250	3300	1.0	2.5
25	BIGB	7.9	6	100	1400	5550	.5	2.7
26	BIGB	7.4	7	500	1600	6650	.7	2.7
27	BIGB	15.7	9	300	3200	14500	1.4	2.8
28	BIGB	15.9	10	200	4500	15150	.5	3.0
29	No Observations This DAY							
30	BIGB	21.5	6	200	4200	11450	.7	3.0
31	BIGB	24.6	6	99	4980	9942	1.5	3.5

DAILY PLAGE AREAS FOR JULY 1985



BIG BEAR SOLAR OBSERVATORY  
ACTIVE REGION SUMMARY

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JULY 1985

Region Number	Return Of Region	Rotation Age	First Seen This Rotation	Duration This Rotation
19622	New	1	850704	04 Days
19617	19607 and 19612	2	850629	12
19625	New	1	850707	06
19620	19609	2	850701	10
19619	New	1	850701	12
19621	New	1	850703	10
19623	New	1	850707	08
19624	New	1	850707	>08
19626	19615	4	850709	13
19627	New	1	850716	12
19628	New	1	850720	10
19662	New	1	850725	01
19630	New	1	850725	05
19629	New	1	850721	09
19638	New	1	850728	01
19634	New	1	850723	01
19637	New	1	850728	>04
19635	New	1	850727	02
19631	19617	3	850725	13

1. No CaK Observations on July 6, 15, 17-19, 22.
2. No CaK Plots on July 6, 15, 17-19, 22.
3. No KPNO Magnetograms on July 16, 18, 19, 21, 27, 28.
4. Contiguous Plages: 19621/19623, 19633/19636
5. NSO Calcium data used on July 23-31.



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CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

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Calcium Plage Region	Sta	Observation Time		Lat CMD	CMP		Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
		Mo	Day		Mo	Day					
19641	BIGB	08	04	1412	N27	W46	08 1.0	1.5	0100		
19641	BIGB	08	05	1532	N27	W59	08 1.0	1.3	0110		
19632	BIGB	07	26	1502	N07	E85	08 2.0	.7	0500	4680	4680A
19632	BIGB	07	27	2210	N07	E68	08 2.0	2.8	2900	4680	4680A
19632	BIGB	07	28	1338	N07	E63	08 2.3	3.0	3300	4680	4680A
19632	BIGB	07	30	1816	N06	E38	08 2.6	3.0	4200	4680	4680A
19632	BIGB	07	31	1317	N07	E26	08 2.5	2.8	4980	4680	4680A
19632	BIGB	08	01	1610	N08	E08	08 2.3	3.5	4560	4680	4680A
19632	BIGB	08	02	2231	N08	W09	08 2.3	2.7	4280	4680	4680A
19632	BIGB	08	03	1816	N07	W17	08 2.5	3.0	3530	4680	4680A
19632	BIGB	08	04	1412	N08	W29	08 2.4	2.3	3460	4680	4680A
19632	BIGB	08	05	1532	N08	W43	08 2.4	2.5	2690	4680	4680A
19632	BIGB	08	07	1348	N08	W69	08 2.4	2.1	2407	4680	4680A
19632	BIGB	08	08	1349	N08	W78	08 2.7	1.7	1296	4680	4680A
19633	BIGB	07	26	1502	S12	E85	08 2.0	.7	0500		
19633	BIGB	07	27	2210	S09	E66	08 1.9	2.3	2400		
19633	BIGB	07	28	1338	S10	E65	08 2.4	2.0	2700		
19633	BIGB	07	30	1816	S10	E35	08 2.4	2.3	1300		
19633	BIGB	07	31	1317	S09	E25	08 2.4	3.0	0860		
19633	BIGB	08	01	1610	S10	E10	08 2.4	2.7	1620		
19633	BIGB	08	02	2231	S10	W07	08 2.4	2.7	1430		
19633	BIGB	08	03	1816	S10	W17	08 2.5	2.7	1040		
19633	BIGB	08	04	1412	S10	W28	08 2.5	2.1	0640		
19633	BIGB	08	05	1532	S10	W43	08 2.4	1.8	0540		
19633	BIGB	08	07	1348	S11	W73	08 2.1	.9	0400		
19636	BIGB	07	27	2210	S17	E70	08 2.2	2.5	3200	4682	4682A
19636	BIGB	07	28	1338	S16	E73	08 3.1	2.8	4500	4682	4682A
19636	BIGB	07	30	1816	S18	E47	08 3.3	2.7	3800	4682	4682A
19636	BIGB	07	31	1317	S16	E38	08 3.4	3.5	2010	4682	4682A
19636	BIGB	08	01	1610	S20	E22	08 3.3	3.5	3210	4682	4682A
19636	BIGB	08	02	2231	S20	E05	08 3.3	2.9	3450	4682	4682A
19636	BIGB	08	03	1816	S20	W06	08 3.3	2.9	2950	4682	4682A
19636	BIGB	08	04	1412	S20	W17	08 3.3	2.4	3120	4682	4682A
19636	BIGB	08	05	1532	S20	W31	08 3.3	2.6	2640	4682	4682A
19636	BIGB	08	07	1348	S18	W54	08 3.5	2.7	1700	4682	4682A
19636	BIGB	08	08	1349	S17	W69	08 3.3	2.8	1504	4682	4682A
19636	BIGB	08	09	1346	S17	W77	08 3.7	1.2	0760	4682	4682A
19639	BIGB	07	30	1816	N05	E80	08 5.7	.7	0600	4682B	
19639	BIGB	07	31	1317	N04	E69	08 5.7	1.5	0303	4682B	
19639	BIGB	08	01	1610	N05	E48	08 5.3	1.3	0370	4682B	
19639	BIGB	08	02	2231	N05	E31	08 5.2	2.0	0260	4682B	
19639	BIGB	08	03	1816	N04	E22	08 5.4	1.7	0400	4682B	
19639	BIGB	08	04	1412	N04	E11	08 5.4	1.1	0430	4682B	
19639	BIGB	08	05	1532	N04	W03	08 5.4	1.5	0620	4682B	
19639	BIGB	08	07	1348	N04	W29	08 5.4	1.1	0540	4682B	
19639	BIGB	08	08	1349	N05	W38	08 5.7	1.0	0190	4682B	
19639	BIGB	08	09	1346	N05	W52	08 5.7	1.4	0090	4682B	
19642	BIGB	08	05	1532	N12	E65	08 10.5	.8	0300		
19642	BIGB	08	07	1348	N12	E52	08 11.5	1.5	0210		
19642	BIGB	08	08	1349	N12	E39	08 11.5	1.5	0450		
19642	BIGB	08	09	1346	N12	E28	08 11.7	1.6	0390		
19642	BIGB	08	12	2301	N13	W14	08 11.9	1.0	0440		
19642	BIGB	08	13	1402	N12	W25	08 11.7	.8	0260		
19642	BIGB	08	14	1336	N12	W38	08 11.7	1.0	0200		
19644	BIGB	08	08	1349	S01	E57	08 12.8	3.4	0170	4687	
19644	BIGB	08	09	1346	S01	E44	08 12.8	3.5	0480	4687	
19644	BIGB	08	12	2301	S01	E05	08 13.3	1.7	0750	4687	
19644	BIGB	08	13	1402	S01	W08	08 13.0	1.5	0380	4687	
19644	BIGB	08	14	1336	S01	W20	08 13.1	.9	0220	4687	
19644	BIGB	08	16	1415	S01	W47	08 13.1	.3	0030	4687	
19643	BIGB	08	07	1348	N09	E78	08 13.4	1.7	0518	4688	
19643	BIGB	08	08	1349	N10	E65	08 13.4	2.6	0540	4688	
19643	BIGB	08	09	1346	N09	E53	08 13.5	3.1	0560	4688	
19643	BIGB	08	12	2301	N09	E13	08 13.9	1.6	0750	4688	

CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

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Late  
Aug 85

AUGUST 1985

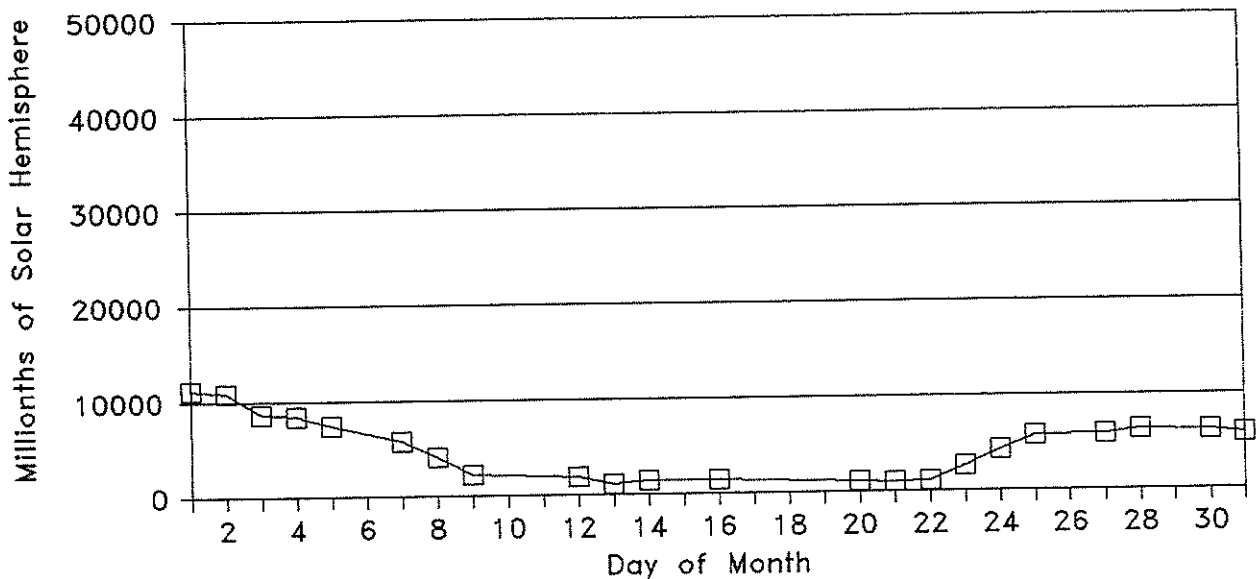
Calcium Plage Region	Sta	Observation Time		Lat	CMD	CMP Mo Day	Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF Sunspot Groups		
		Mo	Day						(UT)	#1	#2
19643	BIGB	08	13	1402	N10 E04	08 13.9	1.5	0500	4688		
19643	BIGB	08	14	1336	N09 W08	08 14.0	1.7	0520	4688		
19643	BIGB	08	16	1415	N09 W35	08 14.0	1.4	0500	4688		
19649	BIGB	08	20	2137	S22 W58	08 16.4	2.7	0750	4690		
19649	BIGB	08	21	1336	S22 W68	08 16.3	2.3	0836	4690		
19648	BIGB	08	20	2137	S13 W48	08 17.3	1.3	0130	4689		
19645	BIGB	08	14	1336	S12 E50	08 18.3	.6	0070			
19645	BIGB	08	16	1415	S12 E23	08 18.3	.8	0150			
19646	BIGB	08	14	1336	S09 E68	08 19.7	1.0	0412			
19646	BIGB	08	16	1415	S09 E41	08 19.7	1.0	0670			
19646	BIGB	08	20	2137	S09 W10	08 20.1	1.2	0240			
19646	BIGB	08	21	1336	S09 W19	08 20.1	1.0	0210			
19646	BIGB	08	22	2213	S09 W37	08 20.1	.6	0180			
19647	BIGB	08	16	1415	N02 E57	08 20.8	2.9	0160	4689A		
19651	BIGB	08	22	2213	S09 E75	08 28.5	1.0	0900	4689C		
19651	BIGB	08	23	1936	S09 E60	08 28.3	1.5	1500	4689C		
19651	BIGB	08	24	1929	S09 E46	08 28.3	1.5	1500	4689C		
19651	BIGB	08	25	1659	S09 E33	08 28.2	1.1	1930	4689C		
19651	BIGB	08	27	1600	S09 E12	08 28.6	1.2	1830	4689C		
19651	BIGB	08	28	1552	S08 W01	08 28.6	.9	1740	4689C		
19651	BIGB	08	30	0027	S08 W19	08 28.6	1.2	1880	4689C		
19651	BIGB	08	31	1803	S10 W40	08 28.7	.9	1230	4689C		
19650	BIGB	08	23	1936	N06 E69	08 29.0	1.9	1209			
19650	BIGB	08	24	1929	N06 E55	08 28.9	2.0	1716			
19650	BIGB	08	25	1659	N06 E44	08 29.0	1.9	2070			
19650	BIGB	08	27	1600	N05 E18	08 29.0	1.8	2260			
19650	BIGB	08	28	1552	N05 E05	08 29.0	2.0	2270			
19650	BIGB	08	30	0027	N05 W13	08 29.0	2.0	2190			
19650	BIGB	08	31	1803	N06 W36	08 29.0	1.7	1990			
19650	BIGB	09	02	1928	N06 W63	08 29.2	1.5	1230			
19650	BIGB	09	03	1727	N06 W75	08 29.2	1.5	1200			
19655	BIGB	08	31	1803	N07 W21	08 30.2	1.6	0340	4692		
19655	BIGB	09	02	1928	N07 W48	08 30.3	1.0	0300	4692		
19652	BIGB	08	24	1929	S18 E73	08 30.4	2.0	1158			
19652	BIGB	08	25	1659	S18 E61	08 30.3	1.7	1760			
19652	BIGB	08	27	1600	S25 E41	08 30.8	2.2	1430			
19652	BIGB	08	28	1552	S26 E28	08 30.8	2.6	1870			
19652	BIGB	08	30	0027	S26 E10	08 30.8	2.5	2040			
19652	BIGB	08	31	1803	S25 W10	08 31.0	2.3	1950			
19652	BIGB	09	02	1928	S25 W38	08 31.0	1.9	2050			
19652	BIGB	09	03	1727	S25 W50	08 30.9	1.8	2000			
19653	BIGB	08	27	1600	N05 E48	08 31.2	1.7	0390	4691		
19653	BIGB	08	28	1552	N05 E35	08 31.3	1.7	0350	4691		
19653	BIGB	08	30	0027	N06 E17	08 31.3	.7	0160	4691		
19653	BIGB	08	31	1803	N04 W05	08 31.4	2.2	0300	4691		

DAILY PLAGE SUMMARIES

AUGUST 1985

Day	Sta	Plage Index	Plage Count	Smallest Plage (Millionths of Solar Hemisphere)	Largest Plage	Total Area	Smallest Intensity	Largest Intensity	
01	BIGB	33.7	5	370	4560	11200	1.3	3.5	
02	BIGB	27.6	6	260	4280	10870	2.0	2.9	
03	BIGB	22.4	6	50	3530	8650	.9	3.0	
04	BIGB	16.1	6	100	3460	8420	1.1	2.4	
05	BIGB	12.5	7	110	2690	7430	.8	2.6	
06	No Observations This DAY								
07	BIGB	5.1	6	210	2407	5775	.9	2.7	
08	BIGB	3.2	6	170	1504	4150	1.0	3.4	
09	BIGB	3.0	5	90	760	2280	1.2	3.5	
10	No Observations This DAY								
11	No Observations This DAY								
12	BIGB	2.8	3	440	750	1940	1.0	1.7	
13	BIGB	1.5	3	260	500	1140	.8	1.5	
14	BIGB	1.4	5	70	520	1422	.6	1.7	
15	No Observations This DAY								
16	BIGB	1.4	5	30	670	1510	.3	2.9	
17	No Observations This DAY								
18	No Observations This DAY								
19	No Observations This DAY								
20	BIGB	1.3	3	130	750	1120	1.2	2.7	
21	BIGB	0.8	2	210	836	1046	1.0	2.3	
22	BIGB	0.3	2	180	900	1080	.6	1.0	
23	BIGB	1.8	2	1209	1500	2709	1.5	1.9	
24	BIGB	4.0	3	1158	1716	4374	1.5	2.0	
25	BIGB	5.8	3	1760	2070	5760	1.1	1.9	
26	No Observations This DAY								
27	BIGB	8.5	4	390	2260	5910	1.2	2.2	
28	BIGB	10.4	5	110	2270	6340	.6	2.6	
29	No Observations This DAY								
30	BIGB	11.0	4	160	2190	6270	.7	2.5	
31	BIGB	8.7	6	70	1990	5880	.9	2.3	

DAILY PLAGE AREAS FOR AUGUST 1985



BIG BEAR SOLAR OBSERVATORY  
ACTIVE REGION SUMMARY

115  
Late  
Aug 85

AUGUST 1985

Region Number	Return Of Region	Rotation Age	First Seen This Rotation	Duration This Rotation
19640	New	1	850802	02 Days
19633	19625	2	850726	13
19632	New in location 10620	1	850726	14
19641	New	1	850804	>02
19636	19619	2	850727	14
19639	19623	2	850730	>11
19642	19626	5	850805	>10
19644	New	1	850808	>09
19643	New	1	850807	>10
19649	New	1	850820	>02
19648	New	1	850820	>01
19645	19627	2	850814	>03
19646	19628	2	850814	09
19647	New	1	850816	>01
19651	19631 and 19633	4,3	850822	>10
19650	19632	2	850822	12
19652	19636	3	850824	>11
19655	New (formed in trailing polarity of 19650)	1	850831	03

1. No CaK Observations at BBSO on August 1-21.
2. No CaK Plots on August 6, 10, 11, 15, 17-19, 26, 29.
3. No KPNO Magnetograms on August 1, 2, 8, 11, 20.
4. Contiguous Plages: 19633/19636, 19650/19655
5. NSO Calcium data used on August 1-21.

116  
Late  
Sep 85

CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

SEPTEMBER 1985

Calcium Plage Region	Sta	Observation Time		La+ CMD	CMP		Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
		Mo	Day		Mo	Day					
19654	BIGB	08	28	1552	N03 E50	09	1.4	.6	0110		
19656	BIGB	08	31	1803	S01 E56	09	4.9	1.0	0070		
19657	BIGB	09	02	1928	S34 E33	09	5.4	1.2	0050		
19660	BIGB	09	07	1605	N06 W05	09	7.3	1.3	0100	4693A	
19658	BIGB	09	07	1605	N01 E44	09	10.9	.8	0200		
19659	BIGB	09	07	1605	S21 E62	09	12.4	3.0	1300	4693	
19659	BIGB	09	08	1903	S20 E55	09	13.0	2.5	1346	4693	
19659	BIGB	09	10	1725	S19 E25	09	12.6	2.5	1090	4693	
19659	BIGB	09	12	2318	S19 W05	09	12.6	2.4	1040	4693	
19659	BIGB	09	13	1620	S19 W16	09	12.4	2.3	1100	4693	
19659	BIGB	09	14	2231	S20 W30	09	12.6	2.1	0930	4693	
19659	BIGB	09	15	1906	S20 W41	09	12.6	1.8	0770	4693	
19659	BIGB	09	16	2259	S21 W57	09	12.6	1.7	0540	4693	
19659	BIGB	09	17	1452	S20 W69	09	12.3	2.0	0700	4693	
19663	BIGB	09	15	1906	N32 E04	09	16.1	2.9	0230	4693B	
19663	BIGB	09	16	2259	N32 W09	09	16.2	2.0	0150	4693B	
19663	BIGB	09	17	1452	N33 W17	09	16.3	1.0	0150	4693B	
19664	BIGB	09	21	1508	S10 W65	09	16.7	3.0	0300		
19661	BIGB	09	12	2318	S10 E72	09	18.4	2.0	0503	4694	
19661	BIGB	09	13	1620	S10 E73	09	19.2	3.5	1300	4694	
19661	BIGB	09	14	2231	S11 E63	09	19.7	3.1	1540	4694	
19661	BIGB	09	15	1906	S11 E56	09	20.0	3.6	1580	4694	
19661	BIGB	09	16	2259	S11 E36	09	19.7	3.2	1840	4694	
19661	BIGB	09	17	1452	S10 E22	09	19.3	3.0	1600	4694	
19661	BIGB	09	21	1508	S12 W33	09	19.1	2.7	1400	4694	
19661	BIGB	09	22	1408	S11 W45	09	19.2	2.0	1300	4694	
19661	BIGB	09	23	1410	S12 W58	09	19.2	1.7	1200	4694	
19661	BIGB	09	24	1411	S12 W71	09	19.2	1.2	1000	4694	
19667	BIGB	09	25	1514	N18 W67	09	20.5	2.5	0150		
19667	BIGB	09	26	1415	N19 W80	09	20.5	2.0	0100		
19665	BIGB	09	21	1508	N05 E47	09	25.1	.8	1000		
19665	BIGB	09	22	1408	N05 E35	09	25.2	1.3	1500		
19665	BIGB	09	23	1410	N05 E20	09	25.1	1.3	1200		
19665	BIGB	09	24	1411	N05 E06	09	25.0	1.0	1000		
19665	BIGB	09	25	1514	N05 W07	09	25.1	1.0	1200		
19665	BIGB	09	26	1415	N05 W20	09	25.1	1.0	1000		
19665	BIGB	09	27	1730	N05 W36	09	25.0	1.1	0840		
19665	BIGB	09	28	1934	N05 W50	09	25.1	.9	0670		
19665	BIGB	09	29	1439	N05 W60	09	25.1	.8	0750		
19666	BIGB	09	21	1508	S20 E70	09	27.0	2.5	1200		
19666	BIGB	09	22	1408	S22 E63	09	27.4	2.0	1800		
19666	BIGB	09	23	1410	S24 E50	09	27.4	2.0	1600		
19666	BIGB	09	24	1411	S25 E40	09	27.7	2.0	1500		
19666	BIGB	09	25	1514	S24 E26	09	27.6	2.0	1700		
19666	BIGB	09	26	1415	S24 E10	09	27.4	1.7	1500		
19666	BIGB	09	27	1730	S24 W05	09	27.3	2.0	1640		
19666	BIGB	09	28	1934	S24 W20	09	27.3	1.6	1500		
19666	BIGB	09	29	1439	S22 W30	09	27.3	1.8	1500		
19666	BIGB	09	30	1842	S24 W45	09	27.3	1.9	1400		
19666	BIGB	10	01	1906	S24 W59	09	27.3	.9	1070		
19666	BIGB	10	02	1704	S24 W71	09	27.3	1.0	0770		
19668	BIGB	09	29	1439	S15 E14	09	30.7	2.0	0150	4695	
19668	BIGB	09	30	1842	S16 W02	09	30.6	1.8	0200	4695	
19668	BIGB	10	01	1906	S15 W13	09	30.8	1.2	0070	4695	

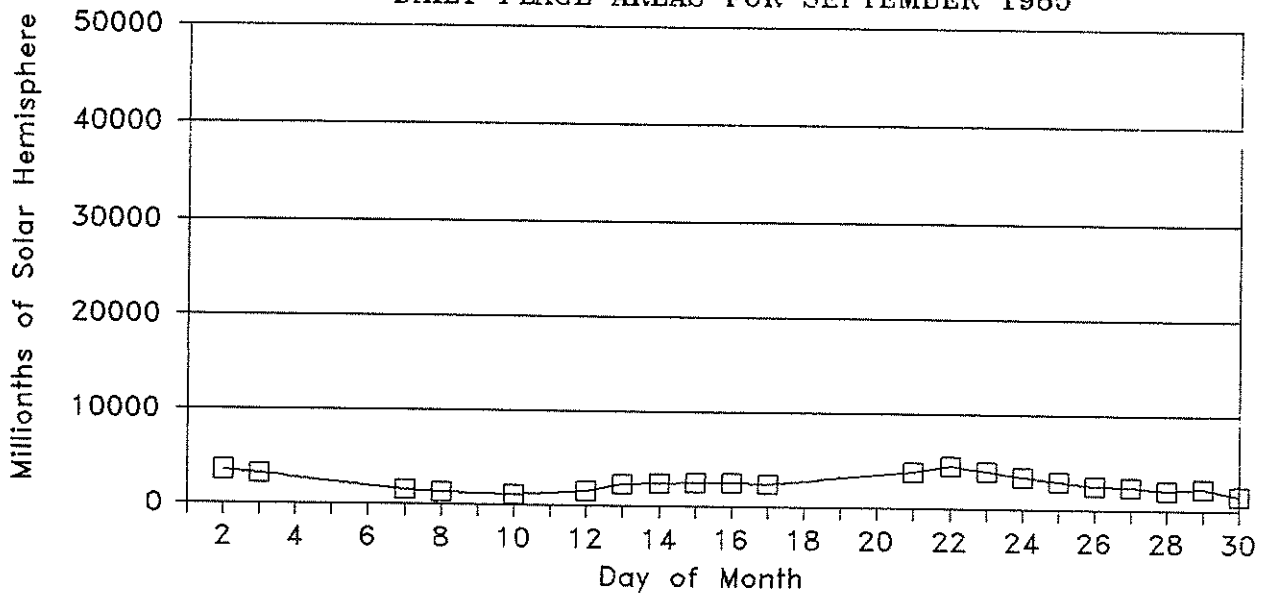
DAILY PLAGE SUMMARIES

117  
Late  
Sep 85

SEPTEMBER 1985

Day	Sta	Plage Index	Plage Count	Smallest Plage (Millionths of Solar Hemisphere)	Largest Plage	Total Area (Hemisphere)	Smallest Intensity	Largest Intensity
01	No Observations This DAY							
02	BIGB	3.8	4	50	2050	3630	1.0	1.9
03	BIGB	2.4	2	1200	2000	3200	1.5	1.8
04	No Observations This DAY							
05	No Observations This DAY							
06	No Observations This DAY							
07	BIGB	1.9	3	100	1300	1600	.8	3.0
08	BIGB	1.8	1	1346	1346	1346	2.5	2.5
09	No Observations This DAY							
10	BIGB	2.3	1	1090	1090	1090	2.5	2.5
11	No Observations This DAY							
12	BIGB	2.6	2	503	1040	1543	2.0	2.4
13	BIGB	3.5	2	1100	1300	2400	2.3	3.5
14	BIGB	3.6	2	930	1540	2470	2.1	3.1
15	BIGB	4.5	3	230	1580	2580	1.8	3.6
16	BIGB	5.3	3	150	1840	2530	1.7	3.2
17	BIGB	4.9	3	150	1600	2450	1.0	3.0
18	No Observations This DAY							
19	No Observations This DAY							
20	No Observations This DAY							
21	BIGB	4.8	4	300	1400	3900	.8	3.0
22	BIGB	4.8	3	1300	1800	4600	1.3	2.0
23	BIGB	4.3	3	1200	1600	4000	1.3	2.0
24	BIGB	3.4	3	1000	1500	3500	1.0	2.0
25	BIGB	4.1	3	150	1700	3050	1.0	2.5
26	BIGB	3.3	3	100	1500	2600	1.0	2.0
27	BIGB	3.7	2	840	1640	2480	1.1	2.0
28	BIGB	2.4	2	670	1500	2170	.9	1.6
29	BIGB	2.7	3	150	1500	2400	.8	2.0
30	BIGB	2.0	2	200	1400	1600	1.8	1.9

DAILY PLAGE AREAS FOR SEPTEMBER 1985



118  
Late  
Sep 85

BIG BEAR SOLAR OBSERVATORY  
ACTIVE REGION SUMMARY

SEPTEMBER 1985

Region Number	Return Of Region	Rotation Age	First Seen This Rotation	Duration This Rotation
19653	New (vic. of leading polarity 19639)	1	850827	>05 Days
19654	New (vic. of trailing polarity 19639)	1	850828	>01
19656	New	1	850831	>01
19657	New (new cycle)	1	850902	01
19660	New	1	850907	01
19658	New	1	850907	>01
19659	New	1	850906	>11
19664	New	1	850921	01
19663	New	1	850915	>03
19661	New	1	850912	>11
19667	New	1	850925	02
19665	19650	3	850921	>09
19666	19652	4	850921	>10

1. No Cak Data on September 1, 4-6, 9, 11, 18-20.
2. No CaK Plots on September 1, 4-6, 9, 11, 13, 18-20, 23, 24, 26.
3. No KPNO Magnetograms on September 1, 4-6, 9, 11, 18-20.
4. Contiguous Plages: None

CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

OCTOBER 1985

Calcium Plage Region	Sta	Observation Time		Lat	CMD	CMP		Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
		Mo	Day			Mo	Day					
19669	BIGB	10	11	2039	S05 W45	10	8.5	1.5	0200			
19670	BIGB	10	14	1416	S11 W16	10	13.4	.6	0070			
19671	BIGB	10	14	1416	S15 W01	10	14.5	3.0	0250	4697		
19671	BIGB	10	15	1422	S15 W14	10	14.5	2.1	0600	4697		
19671	BIGB	10	16	1710	S16 W28	10	14.6	1.6	0550	4697		
19671	BIGB	10	17	2129	S16 W45	10	14.5	1.3	0280	4697		
19671	BIGB	10	18	2250	S16 W59	10	14.5	1.3	0170	4697		
19671	BIGB	10	19	1846	S16 W67	10	14.7	1.5	0400	4697		
19672	BIGB	10	15	1422	N04 E90	10	22.3	.7	0700	4698		
19672	BIGB	10	16	1710	N04 E74	10	22.2	3.8	1910	4698		
19672	BIGB	10	17	2129	N04 E56	10	22.1	3.5	2760	4698		
19672	BIGB	10	18	2250	N04 E44	10	22.2	3.6	2920	4698		
19672	BIGB	10	19	1846	N05 E33	10	22.2	3.5	3200	4698		
19672	BIGB	10	20	1719	N05 E20	10	22.2	3.5	3800	4698		
19672	BIGB	10	21	1430	N05 E06	10	22.0	3.5	3300	4698		
19672	BIGB	10	22	2211	N04 W11	10	22.1	3.4	3240	4698		
19672	BIGB	10	23	1424	N04 W19	10	22.2	3.0	2500	4698		
19672	BIGB	10	24	1835	N04 W35	10	22.1	3.0	2700	4698		
19672	BIGB	10	25	1424	N05 W47	10	22.1	3.0	1000	4698		
19672	BIGB	10	26	1748	N04 W65	10	21.9	3.2	1700	4698		
19672	BIGB	10	27	1616	N04 W78	10	21.8	3.0	1500	4698		
19673	BIGB	10	18	2250	N04 E57	10	23.2	2.3	0200	4699		
19673	BIGB	10	19	1846	N05 E47	10	23.3	3.5	1200	4699		
19673	BIGB	10	20	1719	N04 E34	10	23.3	3.5	1200	4699		
19673	BIGB	10	21	1430	N04 E17	10	22.9	3.0	1400	4699		
19673	BIGB	10	22	2211	N03 W03	10	22.7	2.6	1610	4699		
19673	BIGB	10	23	1424	N04 W06	10	23.1	3.0	1700	4699		
19673	BIGB	10	24	1835	N04 W23	10	23.0	3.5	1600	4699		
19673	BIGB	10	25	1424	N04 W34	10	23.0	3.2	1500	4699		
19673	BIGB	10	26	1748	N03 W50	10	23.0	3.4	1500	4699		
19673	BIGB	10	27	1616	N04 W64	10	22.9	3.3	1500	4699		
19675	BIGB	10	20	1719	N07 E31	10	23.0	3.5	0600	4699		
19675	BIGB	10	21	1430	N07 E17	10	22.9	3.5	1000	4699		
19675	BIGB	10	22	2211	N08 W01	10	22.8	3.1	1920	4699		
19675	BIGB	10	23	1424	N07 W12	10	22.7	3.5	1800	4699		
19675	BIGB	10	24	1835	N07 W26	10	22.8	3.5	2800	4699		
19675	BIGB	10	25	1424	N07 W38	10	22.7	3.5	2600	4699		
19675	BIGB	10	26	1748	N08 W52	10	22.8	3.5	2000	4699		
19675	BIGB	10	27	1616	N08 W65	10	22.8	3.5	2000	4699		
19674	BIGB	10	19	1846	S22 E57	10	24.2	.5	0700			
19674	BIGB	10	20	1719	S24 E46	10	24.3	.5	0900			
19674	BIGB	10	21	1430	S24 E34	10	24.2	.9	0500			
19674	BIGB	10	22	2211	S25 E14	10	24.0	1.4	0490			
19674	BIGB	10	23	1424	S24 E07	10	24.1	1.0	0400			
19674	BIGB	10	24	1835	S24 W05	10	24.4	1.0	0500			
19674	BIGB	10	25	1424	S24 W17	10	24.3	.8	0400			
19674	BIGB	10	26	1748	S24 W31	10	24.3	.6	0300			
19674	BIGB	10	27	1616	S24 W45	10	24.2	.6	0300			

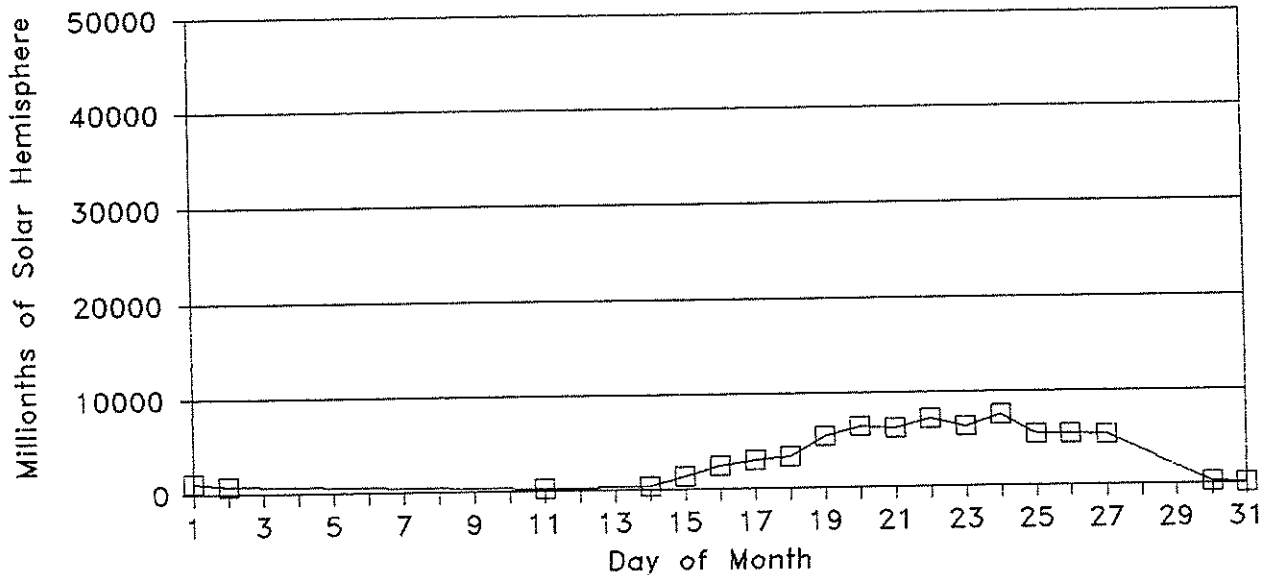


DAILY PLAGE SUMMARIES

OCTOBER 1985

Day	Sta	Plage Index	Plage Count	Smallest Plage (Millionths of Solar Hemisphere)	Largest Plage	Total Area	Smallest Intensity	Largest Intensity
01	BIGB	0.5	2	70	1070	1140	.9	1.2
02	BIGB	0.2	1	770	770	770	1.0	1.0
03	No Observations This DAY							
04	No Observations This DAY							
05	No Observations This DAY							
06	No Observations This DAY							
07	No Observations This DAY							
08	No Observations This DAY							
09	No Observations This DAY							
10	No Observations This DAY							
11	BIGB	0.2	1	200	200	200	1.5	1.5
12	No Observations This DAY							
13	No Observations This DAY							
14	BIGB	0.8	2	70	250	320	.6	3.0
15	BIGB	1.2	2	600	700	1300	.7	2.1
16	BIGB	2.5	2	550	1910	2460	1.6	3.8
17	BIGB	5.4	2	280	2760	3040	1.3	3.5
18	BIGB	7.7	3	170	2920	3290	1.3	3.6
19	BIGB	12.4	4	400	3200	5500	.5	3.5
20	BIGB	17.9	4	600	3800	6500	.5	3.5
21	BIGB	19.1	4	500	3300	6200	.9	3.5
22	BIGB	21.4	4	490	3240	7260	1.4	3.4
23	BIGB	18.6	4	400	2500	6400	1.0	3.5
24	BIGB	20.8	4	500	2800	7600	1.0	3.5
25	BIGB	13.2	4	400	2600	5500	.8	3.5
26	BIGB	9.6	4	300	2000	5500	.6	3.5
27	BIGB	5.7	4	300	2000	5300	.6	3.5
28	No Observations This DAY							
29	No Observations This DAY							
30	BIGB	0.3	1	200	200	200	1.5	1.5
31	BIGB	0.0	1	70	70	70	.6	.6

DAILY PLAGE AREAS FOR OCTOBER 1985



BIG BEAR SOLAR OBSERVATORY  
ACTIVE REGION SUMMARY

121  
Late  
Oct 85

OCTOBER 1985

Region Number	Return Of Region	Rotation Age	First Seen This Rotation	Duration This Rotation
19668	New	1	850929	02 Days
19669	New	1	851011	01
19670	New	1	851014	01
19671	New	1	851014	06
19672	New (in loc. of 19665)	1	851015	15
19675	New (in loc. of 19665)	1	851020	>08
19673	New (in loc. of 19665)	1	851018	>11
19674	Leading polarity of 19666	1	851019	>09

1. No CaK Data on October 4, 7-10, 28.
2. No CaK Plots on October 13, 20, 26.
3. No KPNO Magnetograms on October 1, 2, 4, 7-10, 16-18, 28.
4. Contiguous Patches: 19672/19673/19675

CALCIUM PLAGE REGIONS  
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

NOVEMBER 1985

Calcium Plage Region	Sta	Observation Time		Lat CMD	CMP		Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF Sunspot Groups			
		Mo	Day		Mo	Day			#1	#2	#3	
19676	BIGB	10	30	1434	S09 E23	11	1.3	1.5	0200			
19676	BIGB	10	31	2248	S10 E05	11	1.3	.6	0070			
19677	BIGB	11	05	1733	N16 W25	11	3.8	2.7	0400			4700
19677	BIGB	11	06	1649	N15 W38	11	3.8	3.0	1000			4700
19677	BIGB	11	07	1657	N14 W53	11	3.7	3.0	1200			4700
19677	BIGB	11	08	1548	N14 W65	11	3.7	2.7	2300			4700
19679	BIGB	11	14	1618	N06 W31	11	12.3	1.3	0150			
19678	BIGB	11	08	1548	S10 E88	11	15.3	2.0	0900			4701
19678	BIGB	11	14	1618	S10 E06	11	15.1	2.8	1000			4701
19678	BIGB	11	15	1658	S10 W07	11	15.2	2.7	1000			4701
19678	BIGB	11	16	1607	S10 W21	11	15.1	2.7	1100			4701
19678	BIGB	11	17	2049	S10 W38	11	15.0	2.7	1100			4701
19678	BIGB	11	18	1814	S11 W50	11	15.0	2.7	0900			4701
19678	BIGB	11	19	2305	S12 W71	11	14.6	3.2	0650			4701
19678	BIGB	11	20	1715	S10 W76	11	15.0	2.8	0390			4701
19683	BIGB	11	19	2305	S04 W40	11	17.0	1.4	0150			
19681	BIGB	11	14	1618	S08 E45	11	18.0	3.8	1000			4703
19681	BIGB	11	15	1658	S08 E31	11	18.0	3.7	1800			4703
19681	BIGB	11	16	1607	S07 E17	11	17.9	3.5	2200			4703
19681	BIGB	11	17	2049	S07 E01	11	17.9	3.5	2600			4703
19681	BIGB	11	18	1814	S07 W12	11	17.9	3.4	2200			4703
19681	BIGB	11	19	2305	S10 W31	11	17.6	3.1	2089			4703
19681	BIGB	11	20	1715	S10 W41	11	17.6	3.1	2060			4703
19681	BIGB	11	23	1856	S10 W78	11	17.9	2.6	1793			4703
19680	BIGB	11	14	1618	N07 E50	11	18.4	2.5	4000			4702
19680	BIGB	11	15	1658	N07 E37	11	18.5	2.4	3700			4702
19680	BIGB	11	16	1607	N06 E25	11	18.5	2.5	3100			4702
19680	BIGB	11	17	2049	N07 E08	11	18.5	2.5	3300			4702
19680	BIGB	11	18	1814	N07 W04	11	18.5	2.5	3500			4702
19680	BIGB	11	19	2305	N06 W18	11	18.6	2.2	3214			4702
19680	BIGB	11	20	1715	N06 W28	11	18.6	2.0	2770			4702
19680	BIGB	11	23	1856	N06 W69	11	18.6	.9	1983			4702
19682	BIGB	11	14	1618	N01 E75	11	20.3	.6	0100			4704
19682	BIGB	11	15	1658	N01 E60	11	20.2	1.2	0200			4704
19682	BIGB	11	16	1607	N01 E47	11	20.2	2.4	0500			4704
19682	BIGB	11	17	2049	N01 E29	11	20.0	2.4	0700			4704
19682	BIGB	11	18	1814	N01 E16	11	19.9	2.3	0500			4704
19682	BIGB	11	19	2305	N02 W01	11	19.9	2.0	0370			4704
19682	BIGB	11	20	1715	N02 W11	11	19.9	1.8	0350			4704
19682	BIGB	11	23	1856	N01 W52	11	19.9	.6	0170			4704
19684	BIGB	11	26	1816	N13 E52	11	30.7	2.1	0762			
19684	BIGB	11	30	2159	N13 W07	11	30.4	1.1	0620			
19684	BIGB	12	04	1829	N15 W62	11	30.1	.7	0480			
19684	BIGB	12	05	2208	N15 W76	11	30.2	.7	0360			

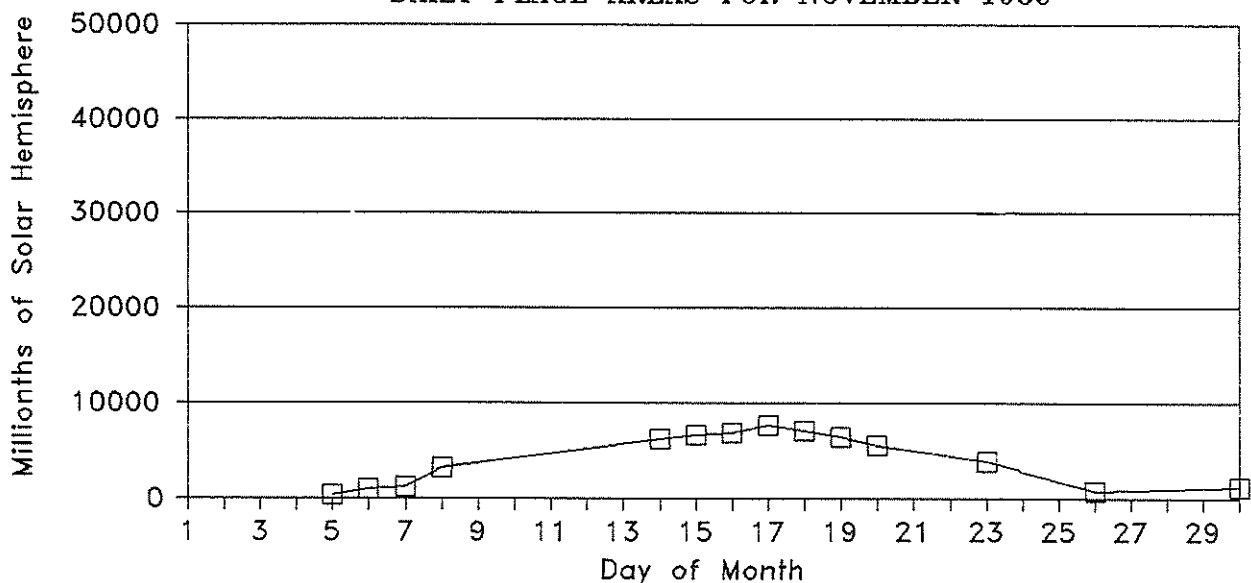
DAILY PLAGE SUMMARIES

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Late  
Nov 85

NOVEMBER 1985

Day	Sta	Plage Index	Plage Count	Smallest Plage (Millionths of Solar Hemisphere)	Largest Plage	Total Area	Smallest Intensity	Largest Intensity
01	No Observations This DAY							
02	No Observations This DAY							
03	No Observations This DAY							
04	No Observations This DAY							
05	BIGB	0.9	1	400	400	400	2.7	2.7
06	BIGB	2.3	1	1000	1000	1000	3.0	3.0
07	BIGB	2.0	1	1200	1200	1200	3.0	3.0
08	BIGB	2.4	2	900	2300	3200	2.0	2.7
09	No Observations This DAY							
10	No Observations This DAY							
11	No Observations This DAY							
12	No Observations This DAY							
13	No Observations This DAY							
14	BIGB	11.7	5	100	4000	6250	.6	3.8
15	BIGB	15.3	4	200	3700	6700	1.2	3.7
16	BIGB	17.8	4	500	3100	6900	2.4	3.5
17	BIGB	20.9	4	700	3300	7700	2.4	3.5
18	BIGB	18.5	4	500	3500	7100	2.3	3.4
19	BIGB	13.6	5	150	3214	6473	1.4	3.2
20	BIGB	10.3	4	350	2770	5570	1.8	3.1
21	No Observations This DAY							
22	No Observations This DAY							
23	BIGB	1.4	3	170	1983	3946	.6	2.6
24	No Observations This DAY							
25	No Observations This DAY							
26	BIGB	0.9	1	762	762	762	2.1	2.1
27	No Observations This DAY							
28	No Observations This DAY							
29	No Observations This DAY							
30	BIGB	1.2	2	570	620	1190	1.1	1.6

DAILY PLAGE AREAS FOR NOVEMBER 1985



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Late  
Nov 85

BIG BEAR SOLAR OBSERVATORY  
ACTIVE REGION SUMMARY

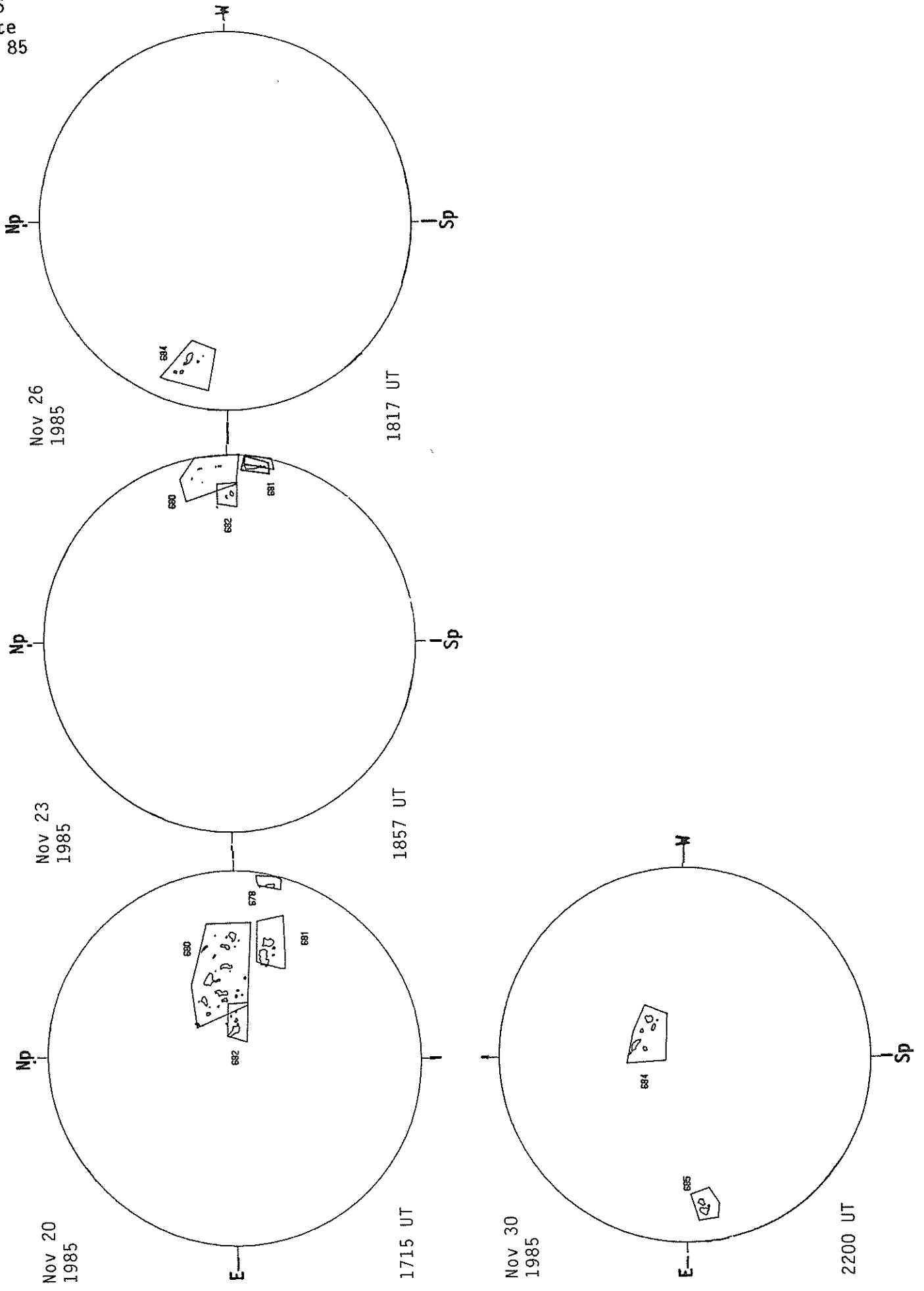
NOVEMBER 1985

Region Number	Return Of Region	Rotation Age	First Seen This Rotation	Duration This Rotation
19676	New	1	851030	>01 Days
19677	New	1	851105	>04
19678	New	1	851108	13
19679	New	1	851114	1
19680	19672, 19673, 19676	2	851114	>11
19681	New	1	851114	>10
19682	New (in vicinity of 19672, 19673, 19675)	1	851114	>11
19683	New	1	851119	1
19684	19677	2	851126	>13

1. No CaK data on November 9-13, 21, 22, 24, 25, 27-29.
2. CaK data but no plots on November 4-8, 4-16.
3. No KPNO magnetograms on November 9-13, 25-30.
4. Contiguous Plages: 19680/19682/18683
5. No Active Plage Regions observed November 1-4.

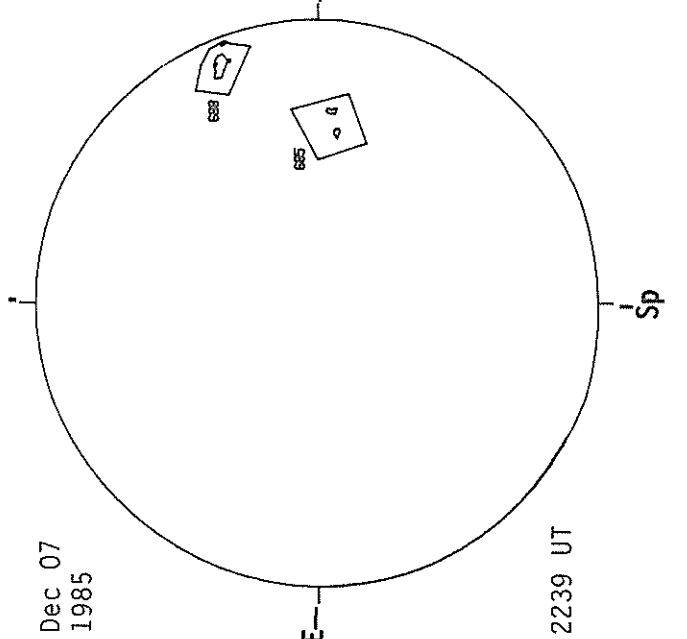
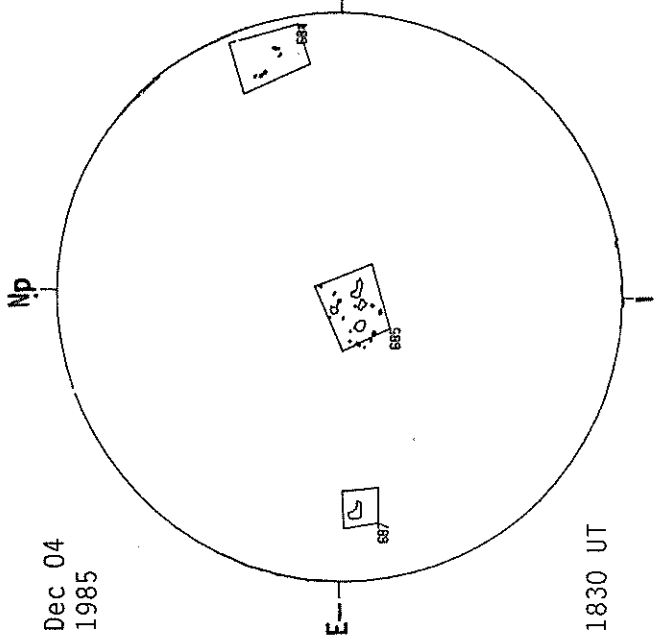
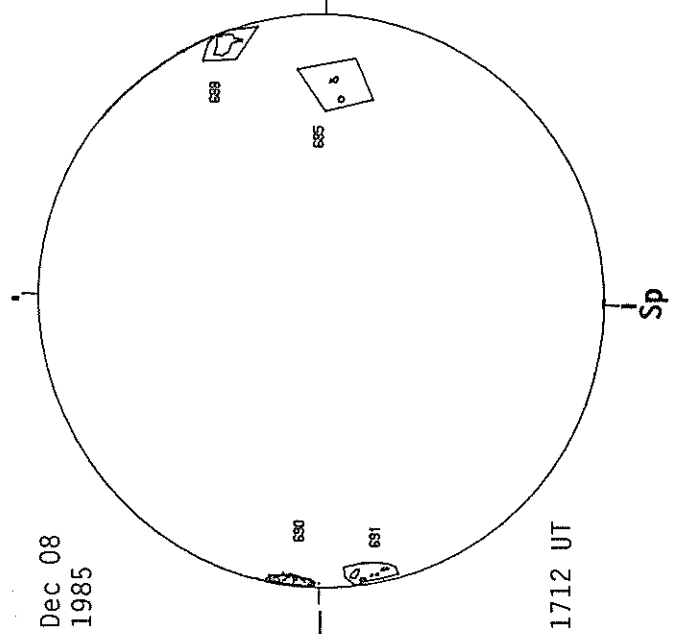
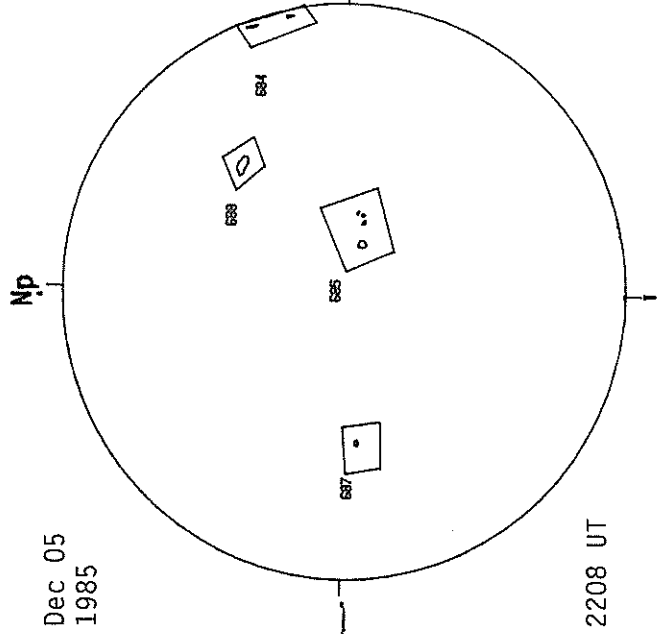
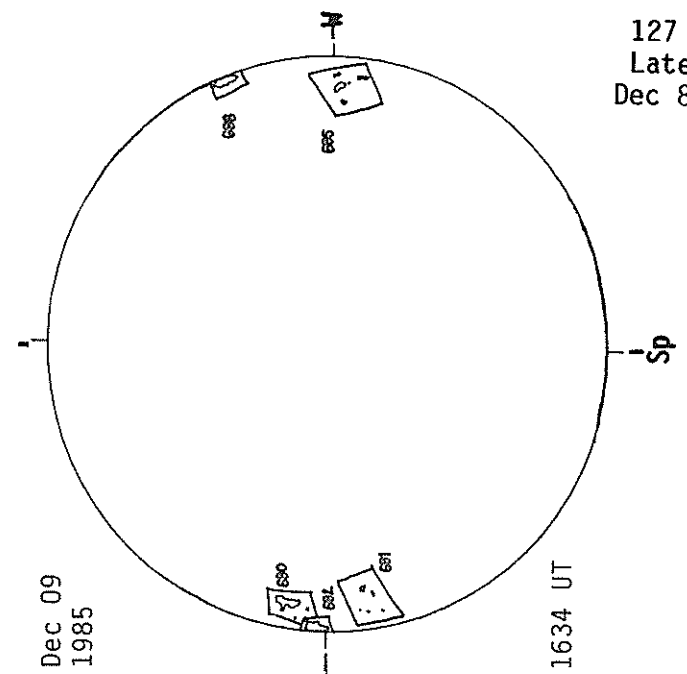
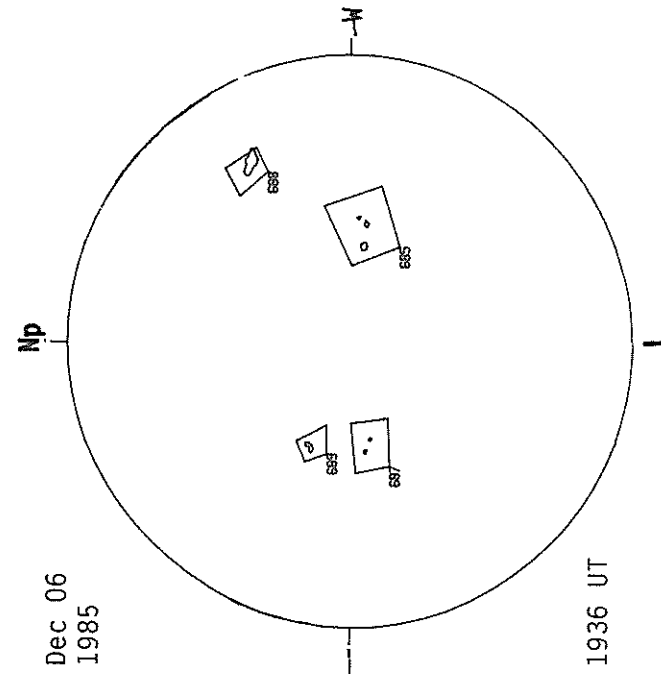


BIG BEAR SOLAR CALCIUM PLAGE REGIONS



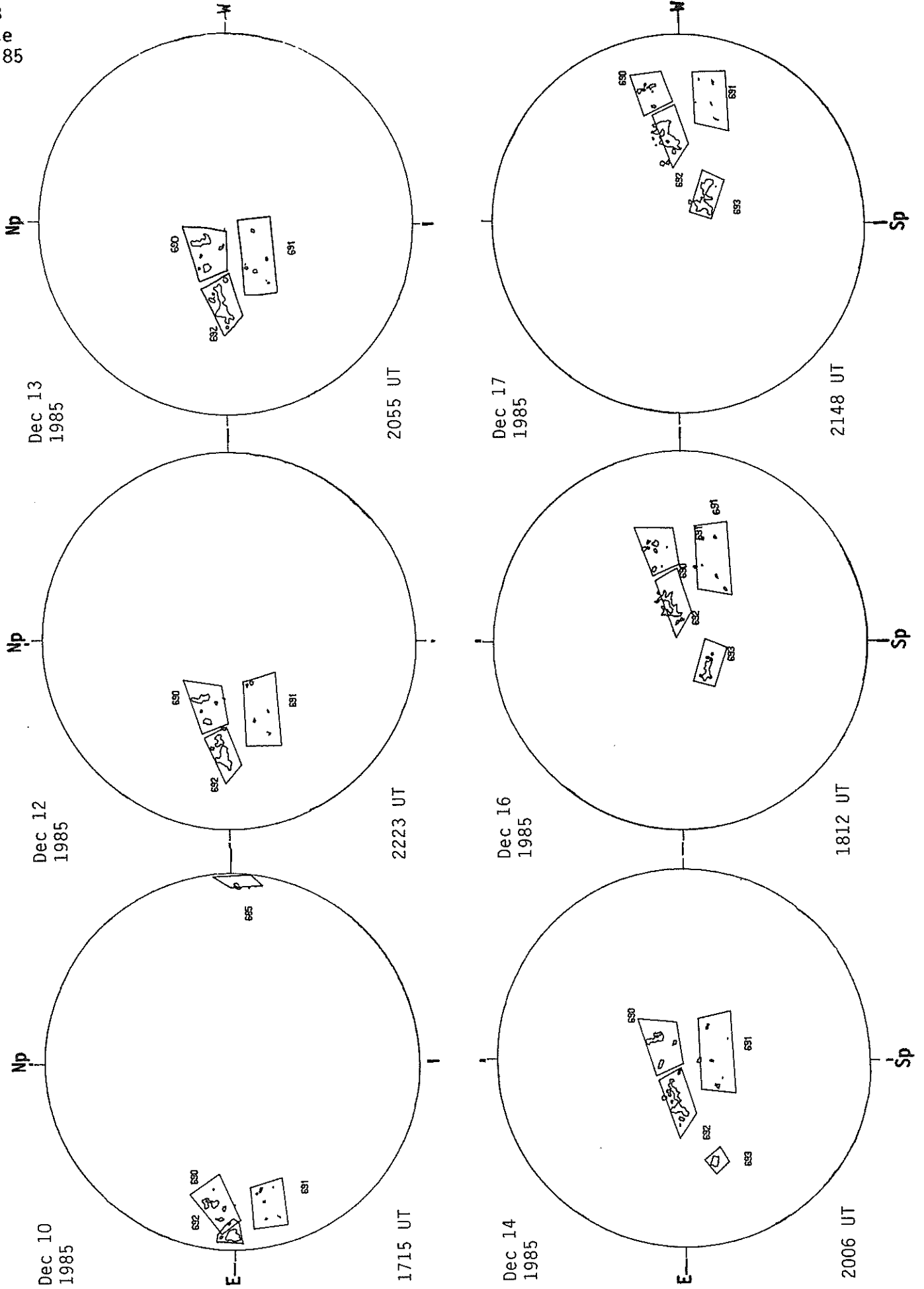
BIG BEAR SOLAR CALCIUM PLAGE REGIONS

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Dec 85

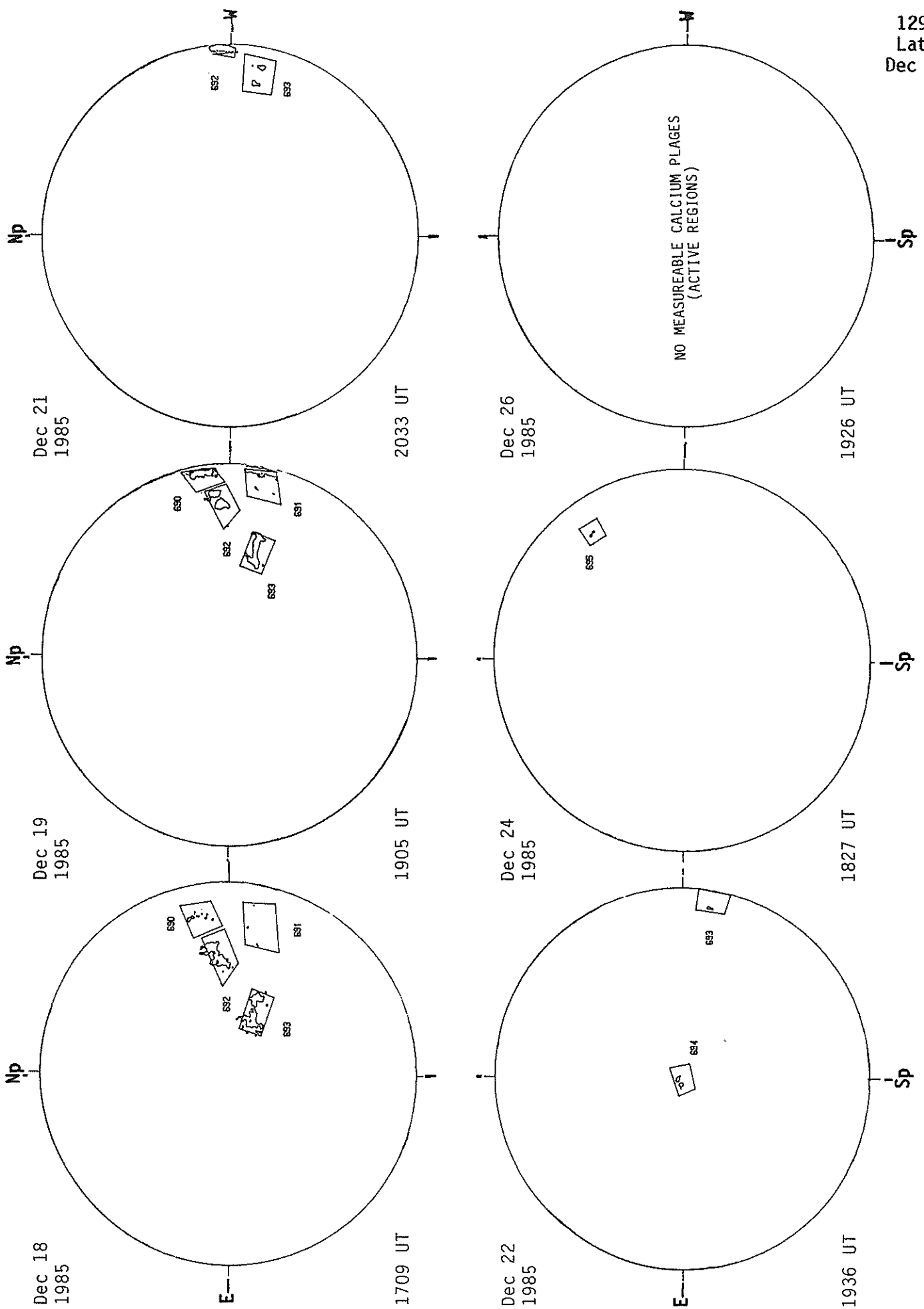




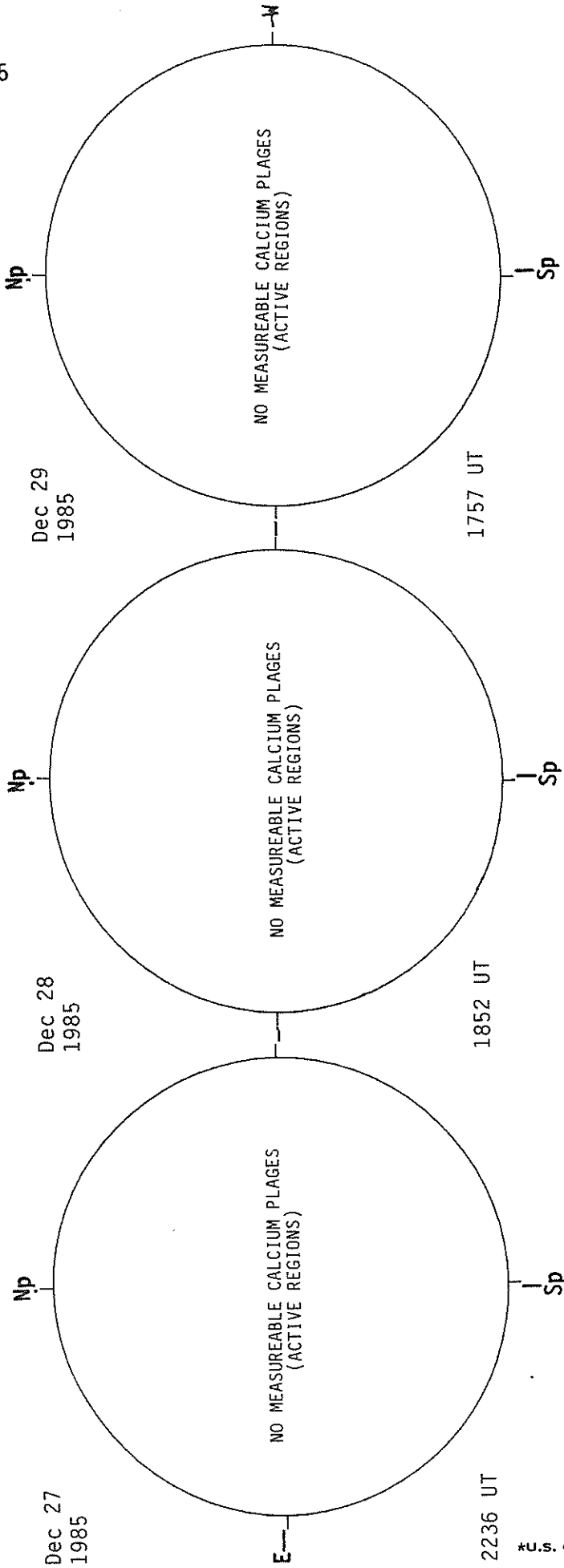
BIG BEAR SOLAR CALCIUM PLAGE REGIONS

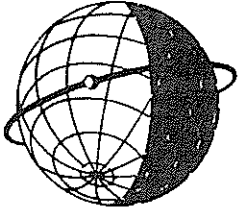


BIG BEAR SOLAR CALCIUM PLAGE REGIONS

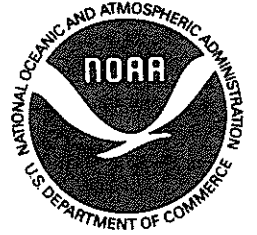


BIG BEAR SOLAR CALCIUM PLAGE REGIONS





**WORLD DATA CENTER A**  
**FOR**  
**SOLAR-TERRESTRIAL PHYSICS**



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

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