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Part I (Prompt Reports)

NO. 491 JULY 1985

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JUNE 1985

MAY 1985

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NATIONAL GEOPHYSICAL DATA CENTER

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4	Jan 59 - Dec 59	Microfilm	12	Oct 66 - Dec 66	Microfilm	20	Jan 71 - Jun 71	Microfilm
5	Jan 60 - Dec 60	Microfilm	13	Jan 67 - Dec 67	Microfilm	21	Jul 71 - Dec 71	Microfilm
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NUMBER 491

(Issued in Two Parts)

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JUNE 85

ALERT PERIODS
INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

SUMMARY OF THE GEOALERT MESSAGES

JUNE 1985

NO	DI	DO	WOLF	10CM	A	LOC	TOT	M	X	OUTSTANDING EVENTS	DA	LOC	DE	ALERTS
152	01	31	000	068	012	SPOTNIL					01	SPOTNIL		SOLQUIET MAGALERT 01
153	02	01	000	068	018	SPOTNIL					02	SPOTNIL		SOLQUIET MAGNIL
154	03	02	000	070	008	SPOTNIL					03	SPOTNIL		SOLQUIET MAGQUIET
155	04	03	024	073	008	S04E65 S14E76	0 0	0 0	0 0		04	S04E65 S14E76	Q Q	SOLQUIET MAGQUIET
156	05	04	044	075	008	S20W55 S03E52 S12E66	0 0 0	0 0 0	0 0 0		05	S20W55 S03E52 S12E66	Q Q Q	SOLQUIET MAGQUIET
157	06	05	044	082	010	S20W68 S14E52 S09E55	0 0 3	0 0 0	0 0 0		06	S20W68 S14E52 S09E55	Q Q E	SOLQUIET MAGQUIET
158	07	06	057	085	021	S04E27 S14E40 S09E42 N02E73	0 0 4 1	0 0 0 0	0 0 0 0		07	S04E27 S14E40 S09E42 N02E73	Q Q Q E	SOLQUIET MAGALERT MINOR 07/XX
159	08	07	046	086	029	S14E25 S10E27 N00E60	0 0 0	0 0 0	0 0 0		08	S14E25 S10E27 N00E60	Q Q Q	SOLQUIET MAGALERT MINOR 08/XX
160	09	08	062	086	019	S08W04 S14E12 S10E15 N01E48	1 0 0 2	0 0 0 0	0 0 0 0		09	S08W04 S14E12 S10E15 N01E48	Q Q Q Q	SOLQUIET MAGNIL
161	10	09	067	087	010	S09W08 S14W01 S10E00 N02E33	1 0 0 1	0 0 0 0	0 0 0 0	PRESTO MAGSTORM 09/1715 UT	10	S09W08 S14W01 S10E00 N02E33	Q Q Q Q	SOLQUIET MAGALERT 10/XX
162	11	10	086	089	029	S10W21 S16W15 S11W12 N01E20 N00E42	0 0 0 3 0	0 0 0 0 0	0 0 0 0 0		11	S10W21 S16W15 S11W12 N01E20 N00E42	Q Q Q Q Q	SOLQUIET MAGNIL
163	12	11	088	089	014	S09W32 S14W26 S11W22 N01E08 N01E28	0 0 0 1 0	0 0 0 0 0	0 0 0 0 0		12	S09W32 S14W26 S11W22 N01E08 N01E28	Q Q Q Q Q	SOLQUIET MAGQUIET
164	13	12	073	087	010	S09W47 S14W39 S10W36 S01W08 S01E15	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0		13	S09W47 S14W39 S10W36 S01W08 S01E15	Q Q Q Q Q	SOLQUIET MAGQUIET
165	14	13	063	086	005	S10W62 S14W54 S08W53 S01W21 S01W02	1 0 0 0 0	0 0 0 0 0	0 0 0 0 0		14	S10W62 S14W54 S08W53 S01W21 S01W02	Q Q Q Q Q	SOLQUIET MAGQUIET
166	15	14	048	083	005	S10W77 S14W66	0 0	0 0	0 0		15	S10W77 S14W66	Q Q	SOLQUIET MAGQUIET

ALERT PERIODS
INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

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JUN 85

SUMMARY OF THE GEOALERT MESSAGES

JUNE 1985

NO	DI	DO	WOLF	10CM	A	LOC	TOT	M	X	OUTSTANDING EVENTS	DA	LOC	DE	ALERTS
						S01W34	2	0	0			S01W34	Q	
						S01W17	0	0	0			S01W17	Q	
167	16	15	039	081	006	S15W79	0	0	0		16	S15W79	Q	SOLQUIET
						S02W48	3	0	0			S02W48	Q	MAGQUIET
						S10E20	0	0	0			S10E20	Q	
168	17	16	050	078	006	S13W91	0	0	0		17	S13W91	Q	SOLQUIET
						S02W62	2	0	0			S02W62	Q	MAGQUIET
						S10E07	0	0	0			S10E07	Q	
						N09E22	0	0	0			N09E22	Q	
169	18	17	040	075	009	S02W76	2	0	0		18	S02W76	Q	SOLQUIET
						S02W54	0	0	0			S02W54	Q	MAGQUIET
						S10W06	1	0	0			S10W06	Q	
170	19	18	023	071	007	S01W89	0	0	0		19	S01W89	Q	SOLQUIET
						S09W18	0	0	0			S09W18	Q	MAGQUIET
171	20	19	013	070	006	N12W19	0	0	0		20	N12W19	Q	SOLQUIET
														MAGQUIET
172	21	20	013	070	009	N12W32	0	0	0		21	N12W32	Q	SOLQUIET
														MAGQUIET
173	22	21	012	069	011	N11W47	0	0	0		22	N11W47	Q	SOLQUIET
														MAGQUIET
174	23	22	011	069	012	N09W61	0	0	0		23	N09W61	Q	SOLQUIET
														MAGQUIET
175	24	23	025	070	011	N10W77	0	0	0		24	N10W77	Q	SOLQUIET
						S14E18	0	0	0			S14E18	Q	MAGQUIET
176	25	24	015	069	006	S14E03	0	0	0		25	S14E03	Q	SOLQUIET
														MAGQUIET
177	26	25	014	069	011	S14W10	0	0	0		26	S14W10	Q	SOLQUIET
														MAGQUIET
178	27	26	024	068	015	S14W22	0	0	0		27	S14W22	Q	SOLQUIET
						S10E12	0	0	0			S10E12	Q	MAGQUIET
179	28	27	011	070	014	S12W00	0	0	0		28	S12W00	Q	SOLQUIET
														MAGQUIET
180	29	28	011	069	018	S08E82	0	0	0		29	S08E82	Q	SOLQUIET
														MAGQUIET
181	30	29	011	070	019	S09E65	0	0	0		30	S09E65	Q	SOLQUIET
														MAGQUIET
182	01	30	012	072	008	S07E56	2	0	0		01	S07E56	Q	SOLQUIET
														MAGQUIET

NO=MESSAGE SERIAL NUMBER, DI=DATE OF ISSUE, DO=DATE OF OBSERVATION, WOLF=WOLF NUMBER, 10CM=10CM SOLAR FLUX, A=A INDEX, LOC=LOCATION LATITUDE AND LONGITUDE, TOT=TOTAL NUMBER OF FLARES, M=NUMBER OF M FLARES, X=NUMBER OF X FLARES, DA=DATE OF FORECAST, DE=DESCRIPTION, Q=QUIET, E=ERUPTIVE, A=ACTIVE, P=PROTON.

PRESTO MESSAGES (THE RAPID REPORT OF MAJOR EVENTS)

PRESTO KAKIOKA 10/0050 UT MAGSTORM 09/1715 UT

INTERNATIONAL (R_1) RELATIVE SUNSPOT NUMBERS

Day	1984 Final Jul	Aug	Sep	Oct	Nov	Dec	1985 Final Jan	Feb	Mar	1985 Prov Apr	May	Jun
01	33	14	45	7	16	19	0	18	13	25	19	10
02	36	17	50	8	14	22	0	22	13	21	15	0
03	61	19	61	11	11	19	0	25	9	23	14	11
04	80	25	58	11	14	19	0	22	0	17	18	26
05	72	18	53	0	12	16	0	20	0	23	16	35
06	61	24	32	0	0	21	0	16	0	19	14	37
07	64	27	21	0	11	18	0	7	0	11	32	38
08	74	32	20	12	13	23	11	16	14	9	44	42
09	63	35	13	14	13	21	14	24	15	9	56	42
10	74	31	10	17	21	15	0	19	13	0	49	58
11	57	29	9	22	27	28	0	13	16	0	49	66
12	54	31	9	16	21	29	13	10	18	0	33	54
13	44	28	9	10	16	28	16	11	14	0	32	45
14	34	27	0	9	15	28	26	13	10	10	32	36
15	30	23	8	14	13	26	25	11	0	0	32	37
16	25	23	12	19	11	30	26	10	11	0	31	30
17	21	18	0	24	11	24	29	12	20	0	38	21
18	26	17	0	25	14	12	26	10	35	10	41	18
19	22	11	10	25	13	11	27	19	27	9	40	10
20	18	16	0	17	27	11	55	27	19	11	37	9
21	12	12	9	19	36	14	59	27	9	17	36	9
22	22	10	10	12	36	12	50	25	15	31	34	9
23	25	19	8	11	41	11	39	16	22	28	32	12
24	38	24	8	9	47	16	33	11	36	30	25	13
25	30	36	7	10	59	21	20	11	30	37	19	12
26	25	49	0	10	44	20	9	11	33	33	11	10
27	9	41	0	8	39	14	8	10	27	31	12	8
28	9	37	0	0	39	16	0	9	36	27	12	8
29	12	34	0	8	30	15	9		25	26	10	9
30	16	27	8	11	20	10	0		29	26	8	11
31	12	36		14		10	17		23		8	
Mean	37	26	16	12	23	19	16	16	17	16	27	24

The yearly mean sunspot number equaled 45.9 in 1984.

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

ALGONQUIN RADIO OBSERVATORY, OTTAWA

Day	Jul 84	Aug	Sep	Oct	Nov	Dec	Jan 85	Feb	Mar	Apr	May	Jun
01	101.7	84.0	94.1	72.0	69.5	77.0	68.4	72.2	69.3	72.2	80.6	69.5
02	103.6	86.3	93.2	74.8	70.1	76.8	67.8	73.8	69.1	72.6	76.5	72.4
03	104.8	88.4	94.5	75.2	72.0	77.9	67.7	73.6	69.0	72.5A	72.6	74.6
04	105.7	85.7	91.9	75.2	72.2	75.9	67.8	70.9	68.6	71.9	70.8	77.5
05	104.4*	85.7	89.8	74.0	71.7	73.4	67.0	71.2	67.5	71.2	71.4	84.3
06	100.3	89.9	85.9	73.2	71.0	73.0	67.9	70.6	68.1	70.5	75.0	87.4
07	100.1	92.4	85.2	73.5	70.1	72.8	68.1	70.3	68.0	70.3	79.1	88.4
08	101.1	94.0	83.4	74.6	70.5	74.1	67.4	72.5	68.7	69.9	83.7	88.9
09	104.5	94.4	80.6	73.5	72.7	74.5	68.1	73.2	68.7	69.4	89.6	89.8
10	101.3	95.4	79.1	74.1	75.8	75.7	67.4	73.6	68.0	69.7	91.7	91.7
11	96.8	90.8	77.8	74.3	73.1	78.9	67.7	73.2	69.6	69.0	89.9	91.2
12	94.7	88.0	76.5	73.9	72.8	77.8	68.4	72.3	69.3	69.6	92.1	89.9
13	92.6	86.5	75.0	74.7	71.6	76.2	72.6	70.8	69.5	69.8	91.9	89.2
14	92.2*	84.0	74.5	73.2	72.0	75.8A	72.3	70.6	69.5	70.6	90.7*	85.3
15	92.2	82.6	73.3	76.4	72.9	74.9	72.4	70.2	69.6	70.0	92.0*	83.8
16	90.1	83.1	73.4	76.6	70.7	74.2	74.7	69.8	70.1	69.4	95.5	80.9
17	87.3	81.0	74.6	76.2	71.0	72.6	75.8	70.9	72.1	70.2	92.3	77.3
18	85.5	79.1	73.8	76.5	71.7	70.2	74.1	73.4*	74.6	71.7	92.7	73.8
19	84.7	76.2	74.6	74.2	72.3	71.0	75.4	76.1	74.2	71.7	89.6	72.2
20	84.8	75.6	74.1	73.5	74.8	69.9	81.7*	75.0	74.2	72.3	86.7	71.9
21	86.7	77.2	75.1	73.2	78.3	69.7	84.9*	74.2	76.1*	77.9	84.4*	71.5
22	86.3	75.7	75.9	74.5	78.2	70.7	85.3	73.3	75.9	89.8	82.7*	71.6
23	87.3	76.0	76.1	72.7	79.3	71.3	82.5	71.7	77.3	93.3*	80.0	71.8
24	86.8	81.6	76.2	70.8	81.1	71.8	78.2	70.5	79.6	89.0*	78.3	70.8
25	85.9	83.0	74.6	70.2	83.1	72.2	73.9	70.1	78.5	95.2	77.2	71.0
26	83.4	87.7	74.3	69.4	82.5	72.3	71.0	69.7	79.7†	88.3*	75.5	70.0
27	83.0	90.4	73.5	68.6	82.5*	72.0	69.5	68.9	77.4†	80.6	74.6	70.2
28	82.5	88.6	73.1	69.3	81.1	72.2	69.6	69.7	77.7†	78.1	72.7	71.0
29	82.3	90.3	71.7	68.2	77.1	72.1	68.7		76.7†	83.2	72.5	72.3
30	82.2	91.8	72.4	68.8	76.4	71.4	68.3		75.8†	80.8	71.4	74.8
31	83.0	93.1*		69.8		70.0	69.9A		76.4†		69.6	
Mean	92.2	85.8	78.9	73.1	74.6	73.5	72.1	71.9	72.5	75.7	82.0	78.5

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 101.1 in 1984.

ERRATA: In SGD issues number 485-488, solar fluxes for 31st day of 1984 must be shifted right 1 column.

DAILY SOLAR INDICES

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JUNE 1985

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	26	10	0	67.5	551	258	103	69.5	66	55	38	16	8
02	153	27	0	0	70.4	549	250	105	72.4	69	56	39	16	7
03	154	1	11	12	72.5	541	249	108	74.6	71	60	36	16	7
04	155	2	26	23	75.3	550	260	110	77.5	72	60	35	16	8
05	156	3	35	33	81.8	521	269	103	84.3	78	64	--	17	9
06	157	4	37	34	84.9	546	274	109	87.4	84	66	44	18	10
07	158	5	38	37	85.8	---	---	---	88.4	---	---	---	---	---
08	159	6	42	37	86.3	556	276	104	88.9	84	68	43	18	8
09	160	7	42	42	87.1	562	280	106	89.8	86	73	39	17	8
10	161	8	58	53	88.9	563	273	122	91.7	89	72	59	18	11
11	162	9	66	56	88.5	550	274	119	91.2	86	73	45	14	7
12	163	10	54	43	87.1	476	247	108	89.8	90	75	51	22	9
13	164	11	45	36	86.4	562	271	107	89.2	85	72	52	21	11
14	165	12	36	31	82.7	552	266	106	85.3	81	69	49	20	8
15	166	13	37	31	81.2	---	---	---	83.8	---	---	---	---	---
16	167	14	30	27	78.4	547	273	97	80.9	77	67	44	20	10
17	168	15	21	21	74.9	546	262	103	77.3	74	63	47	19	9
18	169	16	18	18	71.4	549	262	109	73.8	71	61	46	19	8
19	170	17	10	11	69.9	555	250	104	72.2	69	60	43	19	9
20	171	18	9	10	69.6	543	256	104	71.9	69	58	50	20	10
21	172	19	9	11	69.2	---	---	---	71.5	---	---	---	---	---
22	173	20	9	10	69.3	554	253	106	71.6	67	58	33	19	9
23	174	21	12	12	69.5	549	259	100	71.8	69	56	42	21	9
24	175	22	13	14	68.5	542	261	106	70.8	69	57	44	20	11
25	176	23	12	11	68.7	550	256	100	71.0	67	57	48	21	10
26	177	24	10	10	67.7	543	260	101	70.0	65	55	47	20	10
27	178	25	8	8	67.9	535	272	92	70.2	66	56	51	21	10
28	179	26	8	13	68.7	417	270	105	71.0	68	57	48	21	9
29	180	27	9	10	69.9	515	273	109	72.3	72	55	49	24	10
30	181	1	11	13	72.3	543	260	107	74.8	72	59	51	20	13
Mean			24	22	76.1	540	263	105	78.5	75	62	45	19	9

*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.

American sunspot numbers for April 1985

Day	Ra	Day	Ra	Day	Ra	Day	Ra	Day	Ra	Day	Ra
01	21	06	15	11	0	16	0	21	18	26	37
02	25	07	12	12	0	17	8	22	30	27	36
03	25	08	10	13	0	18	9	23	33	28	32
04	19	09	10	14	8	19	9	24	32	29	30
05	21	10	0	15	0	20	10	25	35	30	27

Mean 17.1

OBSERVED AND PREDICTED SOLAR ACTIVITY INDICES

JUNE 1985

Date	RELATIVE SUNSPOT NUMBERS						2800 MHz RADIO FLUX Adjusted to 1 AU (Sa)	
	Zurich or Internat (Ri)		American (Ra)		Derived (Rs)		Monthly Mean	Smoothed
	Monthly Mean	Smoothed	Monthly Mean	Smoothed	Monthly Mean	Smoothed		
Jul 81	143.8	140	154.3	146	152.1	157	198.2	203
Aug	158.7	141	170.4	147	182.1	158	226.0	203
Sep	167.3	143	174.5	148	177.7	158	221.9	204
Oct	162.4	142	157.0	146	178.6	156	222.8	202
Nov	137.5	139	138.8	142	157.6	151	203.3	197
Dec	150.1	138	145.0	140	155.5	149	201.4	195
Jan 82	111.1	137	110.4	139	124.2	148	173.4	195
Feb	163.6	133	161.0	134	163.6	144	208.9	191
Mar	153.8	129	155.5	130	163.0	139	208.3	186
Apr	122.0	124	121.9	124	113.9	134	162.9	182
May	82.2	120	82.6	120	97.7	129	147.9	177
Jun	110.4	117	113.5	118	129.6	127	177.4	175
Jul	106.1	115	113.3	117	116.0	125	164.8	174
Aug	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	18*	17.0	20*	17.4	23	73.5	79
Jan 85	16.5	17(2)*	14.5	19	15.9	22	72.1	---
Feb	15.9	16(4)*	16.3	18	15.7	21	71.9	---
Mar	17.2	15(5)*	11.8*	17	16.3	20	72.5	---
Apr	16.1†	15(7)*	17.1*	16	19.8	19	75.7	---
May	27.4†	14(8)*	24.0*	16	26.6	19	82.0	---
Jun	24.2†	14(8)*	22.2*	15	22.8	18	78.5	---
Jul	----	13(8)*	----	15	----	17	----	---
Aug	----	13(8)*	----	14	----	17	----	---
Sep	----	12(8)*	----	13	----	16	----	---
Oct	----	11(9)*	----	12	----	15	----	---
Nov	----	10(10)*	----	11	----	13	----	---
Dec	----	9(11)*	----	10	----	13	----	---

*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.

†International numbers replaced the Zurich values in January 1981.

SMOOTHED OBSERVED AND PREDICTED SUNSPOT NUMBERS FOR CYCLE 21

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JUNE 1985

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	18
1985	17 (2)	16 (4)	15 (5)	15 (7)	14 (8)	14 (8)	13 (8)	13 (8)	12 (8)	11 (9)	10 (10)	9 (11)
1986	9 (11)	8 (12)	8 (12)	7 (11)	7 (11)	6 (11)	6 (11)	6 (11)	6 (11)	6 (11)	6 (10)	7 (10)

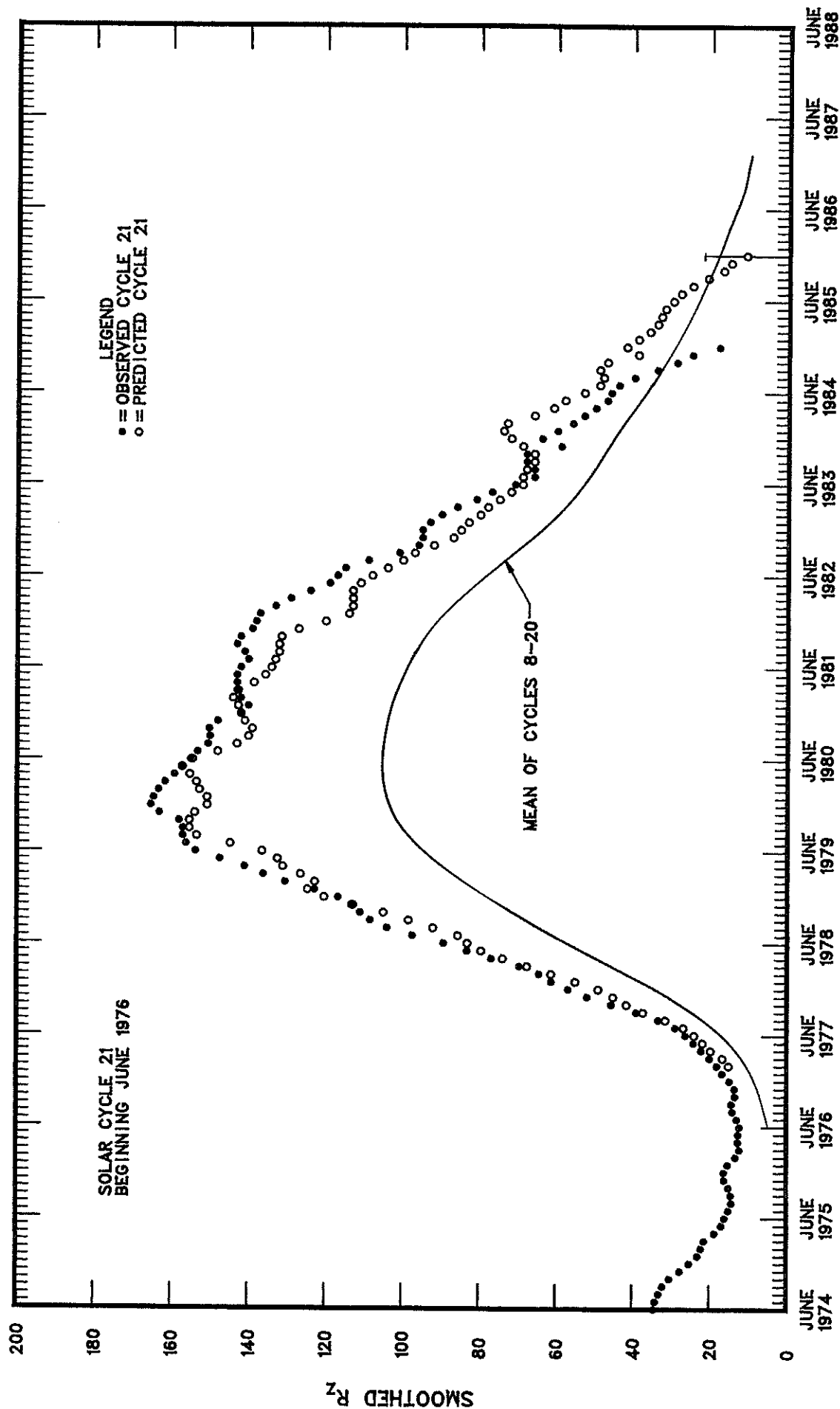
An asterisk marks the minimum and the maximum of Sunspot Cycle 21.

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 1985, 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 May 1985 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 1985 prediction tabulated above. There exists a 90% chance that in December 1985 the actual smoothed sunspot number will fall somewhere between 0 and 20.

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.

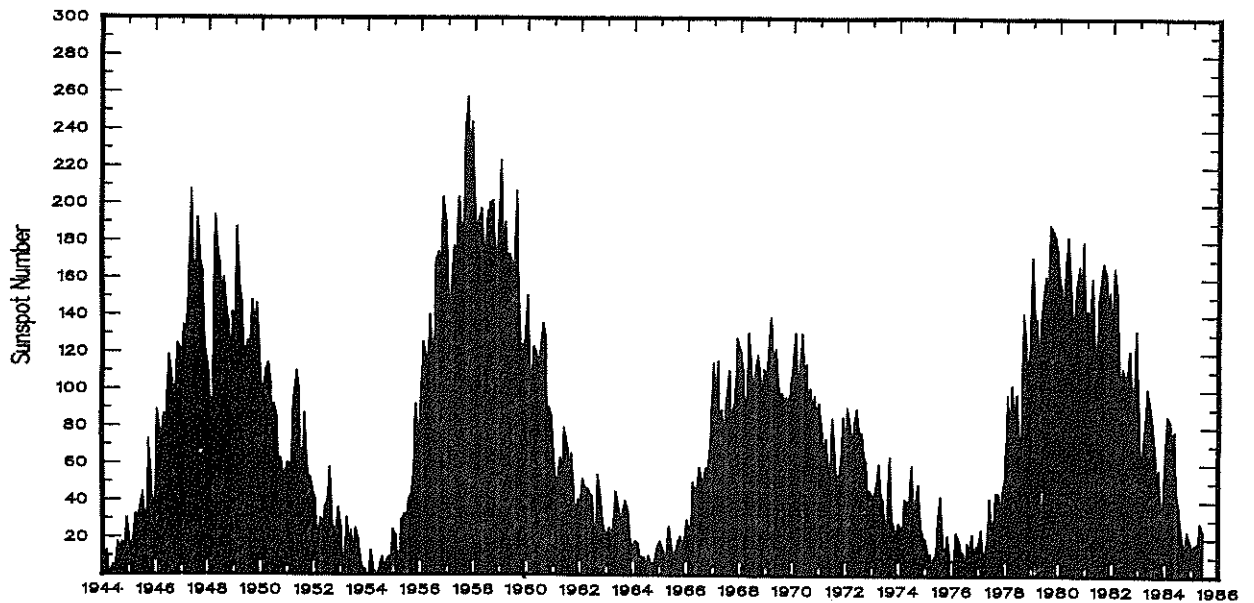
OBSERVED AND ONE-YEAR-AHEAD PREDICTED SMOOTHED SUNSPOT NUMBERS



MONTHLY MEAN SUNSPOT NUMBERS

January 1944 - June 1985

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MONTHLY MEAN SUNSPOT NUMBERS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
1985	16.5	15.9	17.2	16.1*	27.4*	24.2*						

*Provisional

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H - ALPHA SOLAR FLARES

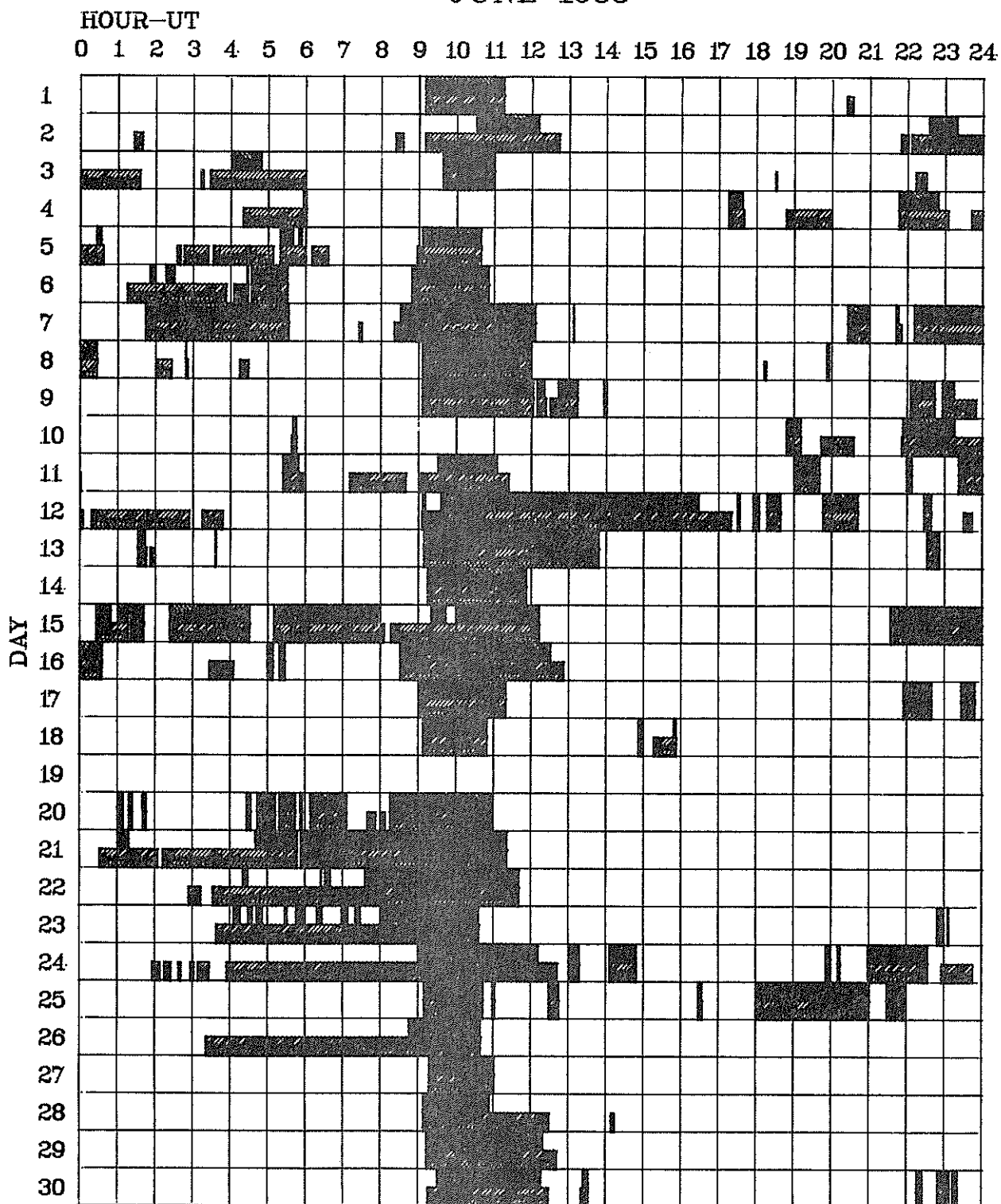
JUNE 1985

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Time (UT)	Area Measurement		Remarks
																Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	
ISTA	03	0625	0628	0640	S07	E90		06	10.0	15	SB							A
YUNN	05	0724	0732	0738D	N03	E90		06	12.0	14D				P				AG
GOES	05	0729	0737	0745						16		C 1.3						
RAMY	05	1044	1046	1053	S08	E61	4660	06	10.0	9	SF		3	C		25		
RAMY	05	1052	1053	1100	N03	E84		06	11.7	8	SF		3	C				
RAMY	05	1149	1152	1203	S09	E62	4660	06	10.1	14	SF		3	C		25		
RAMY	05	1212	1216	1231	S08	E62	4660	06	10.1	19	SF		3	C		32		
RAMY	05	1424	1433	1435	N01	E90		06	12.3	11	SF		3	C				
GOES	05	2334	2339	2345						11		C 4.7						
PALE	06	0416	0417	0424	S11	E54	4660	06	10.2	8	SF		2	C		22		
LEAR	06	0555	0555	0602	S12	E52	4660	06	10.2	7	SF		3	C		24		
HOLL	06	1516	1516	1525	S01	E81		06	12.7	9	SF	C 1.9	3	C		17		F
PALE	06	1653	1655	1715	S11	E47	4660	06	10.2	22	SF		2	C		72		F
PALE	06	1829	1831	1846	S09	E47	4660	06	10.3	17	SF		2	C		86		F
HOLL	06	1830	1833	1853	S11	E45	4660	06	10.1	23	SF		3	C		37		
LEAR	08	0028E	0030	0127	S05	E10	4659	06	08.8	59D	SF		2	C		129		U
PURP	08	0031E	0039	0139	S07	E13		06	09.0	68D	1N			C	0039	395	4.2	GK
PURP	08	0031E	0047	0139	S07	E13		06	09.0	68D	1N			C	0047	313	3.3	
HOLL	08	0037E	0037U	0143D	S07	E10	4659	06	08.8	66D	SN	C 1.2	3	C		195		UF
PALE	08	0038E	0043U	0123D	S04	E18	4659	06	09.4	45D	SF	C 1.2	2	C		93		U
PEKG	08	0058	0108	0125	S06	E13		06	09.0	27	1N			C	0125	294	3.1	U
HOLL	08	1330	1330	1339	S02	E52	4663	06	12.4	9	SN		3	C		22		
RAMY	08	1330	1331	1335	S01	E51	4663	06	12.4	5	SN		3	C		28		
HOLL	08	1439	1442	1455	S02	E52	4663	06	12.5	16	SN	C 1.0	3	C		84		F
ISTA	09	0850E		0855	S10	E11		06	10.2	5D	SN							D
HOLL	09	1345	1346	1350	S15	E05	4659	06	09.9	5	SF		3	C		33		
PALE	09	2246	2247	2322D	S01	E37	4663	06	12.7	36D	SF		3	C		31		F
LEAR	10	0219	0223	0225	S05	W15	4659	06	09.0	6	SF		3	C		25		UF
RAMY	10	1524	1524	1530	N03	E24	4663	06	12.4	6	SN		3	C		39		
RAMY	10	1544	1546	1600	N01	E20	4663	06	12.1	16	SN		3	C		60		
PALE	10	1733	1733	1739	S00	E25	4663	06	12.6	6	SF		3	C		23		
LEAR	11	0303	0304	0309	N02	E15	4663	06	12.2	6	SF		3	C		37		F
PALE	13	1958	1959	2010	S09	W51	4665	06	10.0	12	SF		3	C		27		
LEAR	14	0545	0545	0554	N04	W21	4663	06	12.7	9	SF		3	C		21		FH
RAMY	14	1719	1721	1748	N01	W28	4663	06	12.6	29	SF		3	C		36		
HOLL	14	1720	1722	1739	N02	W28	4663	06	12.6	19	SF		3	C		29		F
RAMY	16	1654	1656	1711	S02	W59	4663	06	12.3	17	SF		3	C		57		
HOLL	16	1655	1655	1702	S01	W61	4663	06	12.1	7	SF		3	C		31		F
RAMY	16	1734	1745	1753	S01	W60	4663	06	12.2	19	SN		3	C		24		
PALE	16	1737	1738	1744	N01	W55	4663	06	12.6	7	SF	C 1.1	3	C		23		
HOLL	16	1739	1741	1746	S01	W62	4663	06	12.1	7	SF	C 1.1	3	C		21		F
LEAR	17	0012	0017	0030	N02	W62	4663	06	12.4	18	SN	C 2.2	3	C		112		FH
PALE	17	0014	0018	0023	N01	W59	4663	06	12.6	9	SF	C 2.2	3	C		69		H
GOES	17	1159	1213	1220						21		C 2.9						
RAMY	17	1205	1217	1232	S01	W70	4663	06	12.3	27	SN	C 2.8	3	C		31		HS
RAMY	17	2123	2125	2134	S11	W06	4666	06	17.4	11	SF		3	C		37		
GOES	29	2315	2333	2344						29		C 2.4						
PALE	30	0245	0252	0258	S12	E76	4670	07	05.8	13	SF		2	C		54		E
LEAR	30	0251	0253	0259	S08	E68	4670	07	05.2	8	SF		3	C		45		F
ATHN	30	0927	0931	0938	S06	E67		07	05.4	11	SF		3	V	0931	19	.6	
PALE	30	2207	2207	2223	S14	E78		07	06.8	16	SF		1	C		35		E
HOLL	30	2336	2336	2402	S14	E84		07	07.3	26	SF		3	C		27		K
HOLL	30	2336	2345	2402	S14	E84		07	07.3	26	SF		3	C		33		K

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

13
Jun 85

JUNE 1985



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.

Bucharest
Holloman

Istanbul
Learmonth

Manila
Palehua

Peking
Purple Mt.

Ramey
Wendelstein

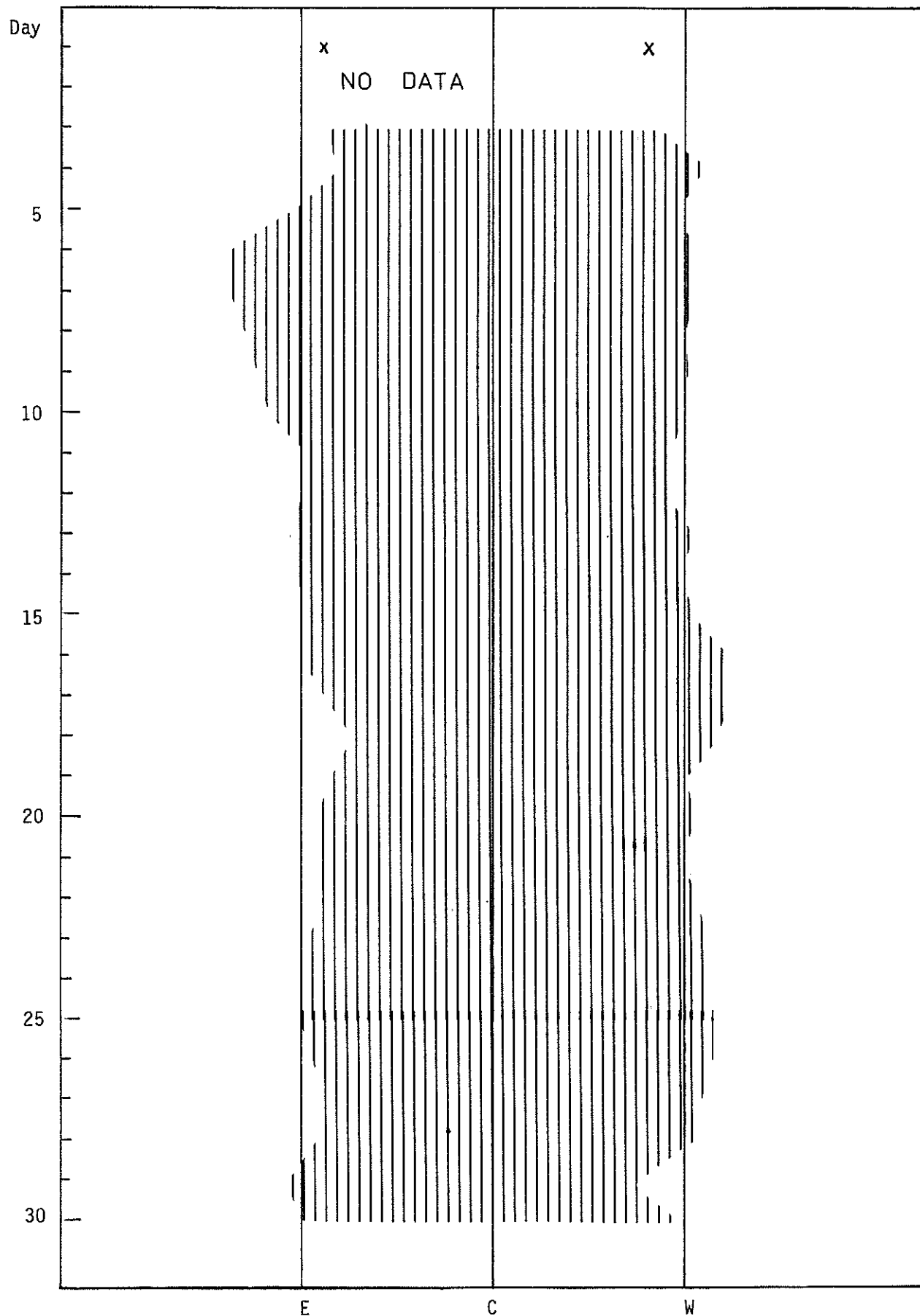
14
Jun 85

SOLAR INTERFEROMETRIC OBSERVATIONS

Nancay

JUNE 1985

169 MHz



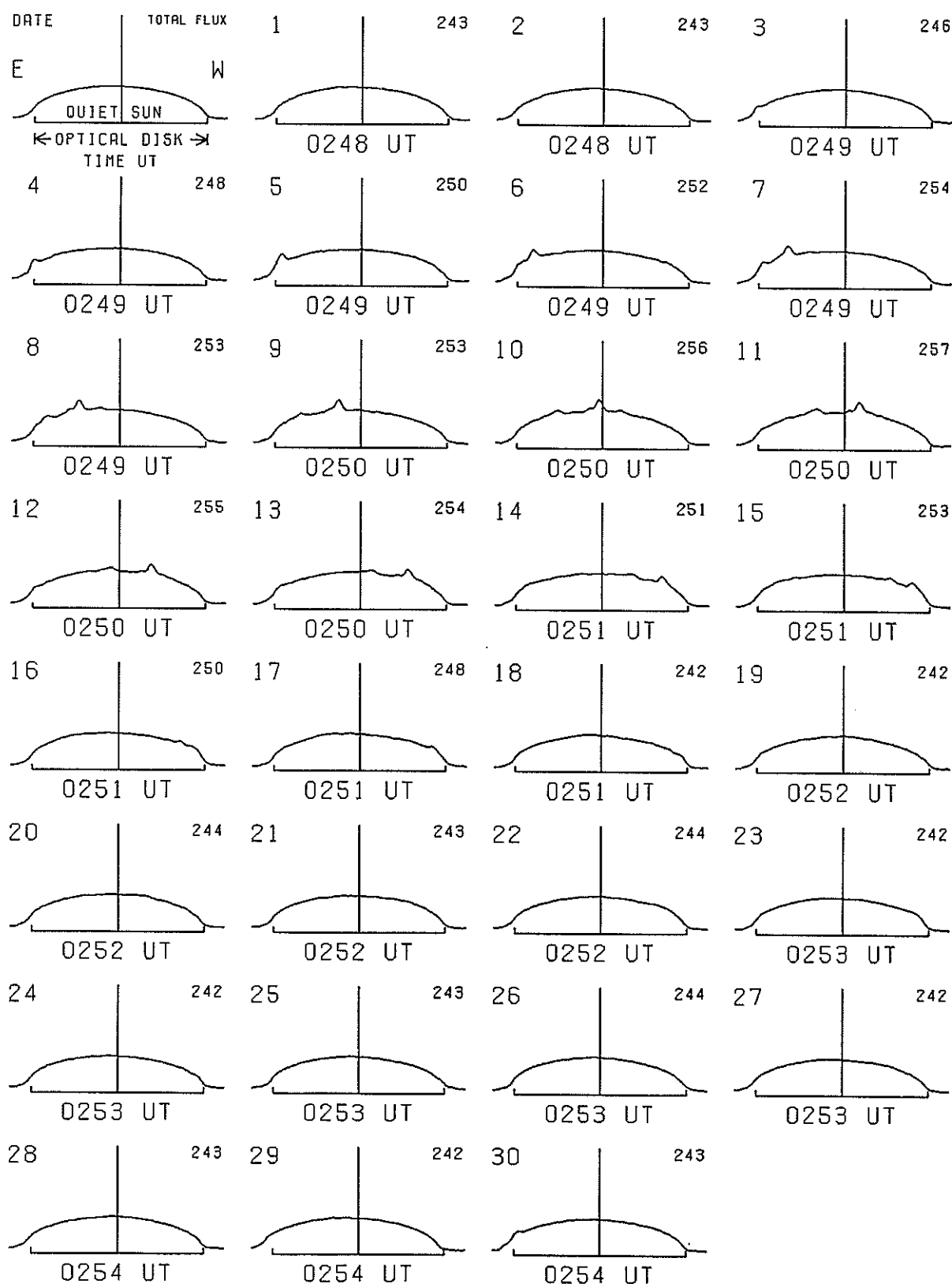
EAST-WEST SOLAR SCANS

JUNE 1985

15
Jun 85

TOYOKAWA, JAPAN

3 CM
FAN BEAM WITH 1.1 MINUTES OF ARC



16
Jun 85

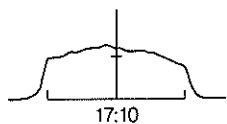
EAST-WEST SOLAR SCANS

JUNE 1985

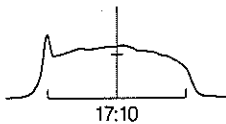
ALGONQUIN RADIO OBSERVATORY
CANADA

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

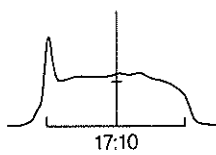
01
67.5



02
70.4



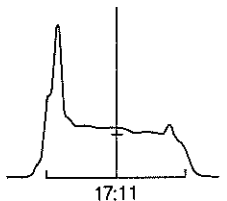
03
72.5



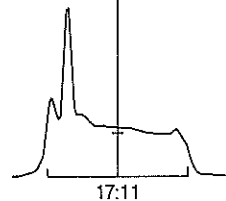
04
75.3



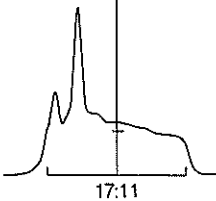
05
81.8



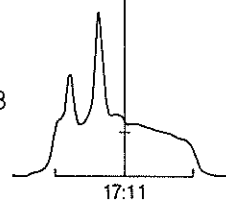
06
84.9



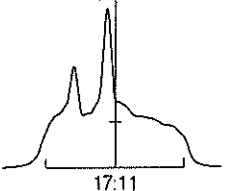
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85.8



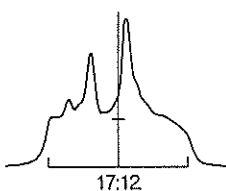
08
86.3



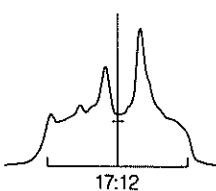
09
87.1



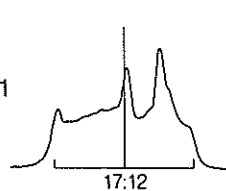
10
88.9



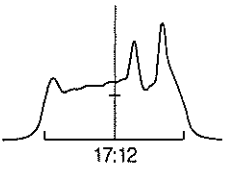
11
88.5



12
87.1



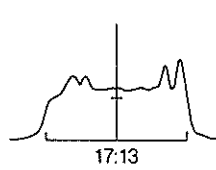
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86.4



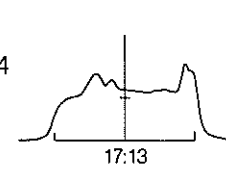
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82.7



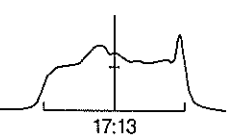
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81.2



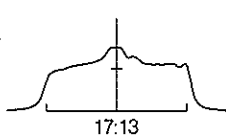
16
78.4



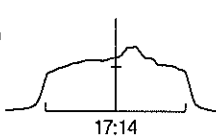
17
74.9



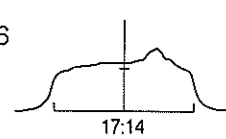
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71.4



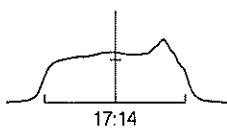
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69.9



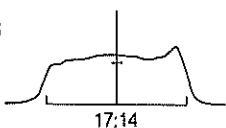
20
69.6



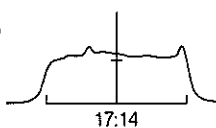
21
69.2



22
69.3



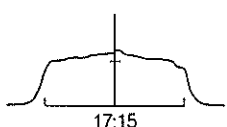
23
69.5



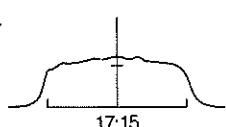
24
68.5



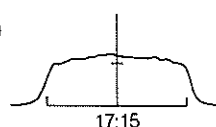
25
68.7



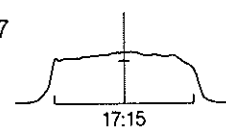
26
67.7



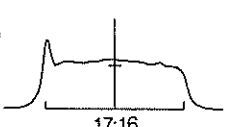
27
67.9



28
68.7



29
69.9



30
72.3



DATE
TOTAL FLUX
E
ESTIMATED
QUIET SUN
LEVEL W
PHOTOSPHERE
TIME U.T.

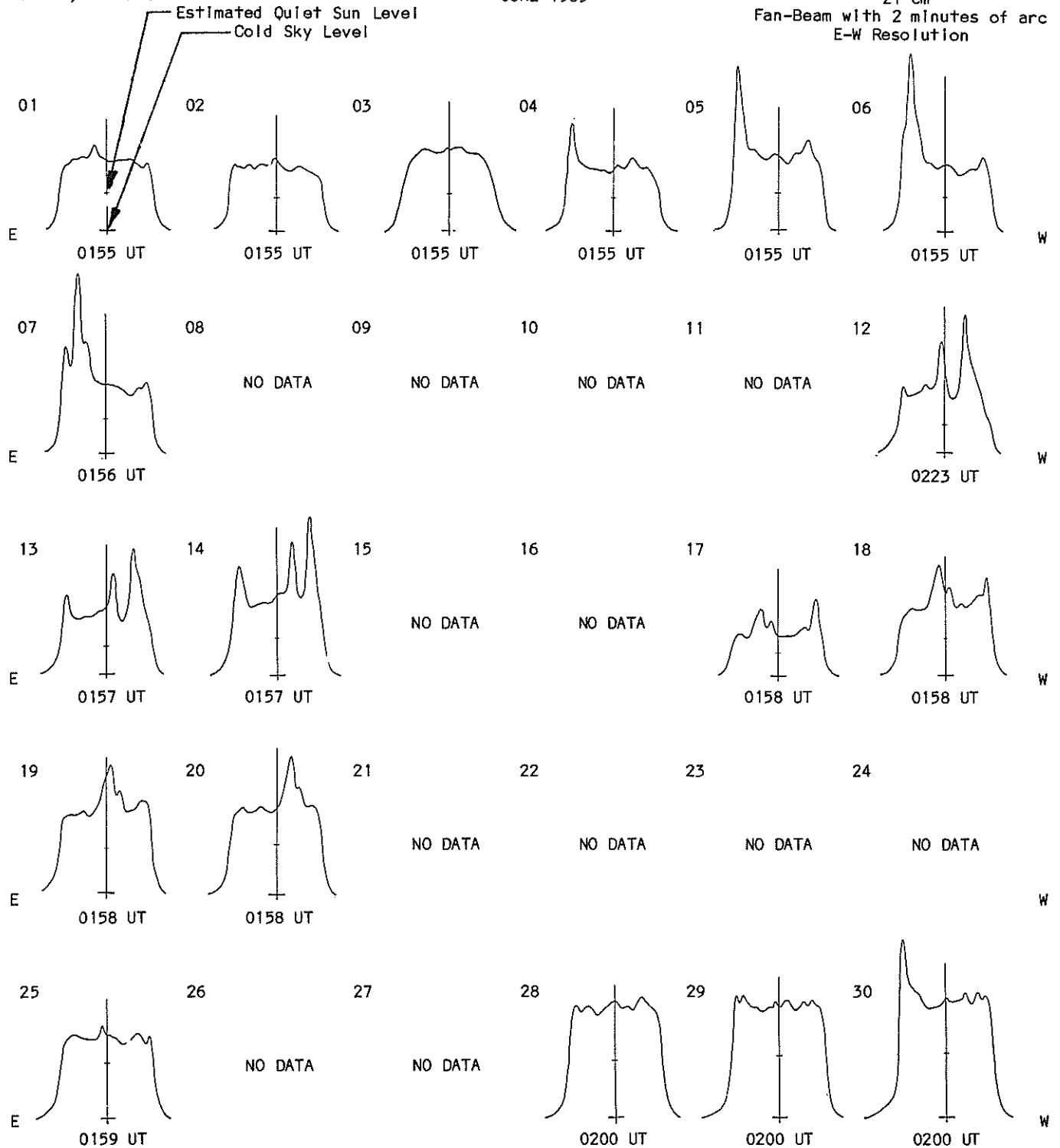
EAST - WEST SOLAR SCANS

17
Jun 85

Fleurs, Australia

JUNE 1985

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



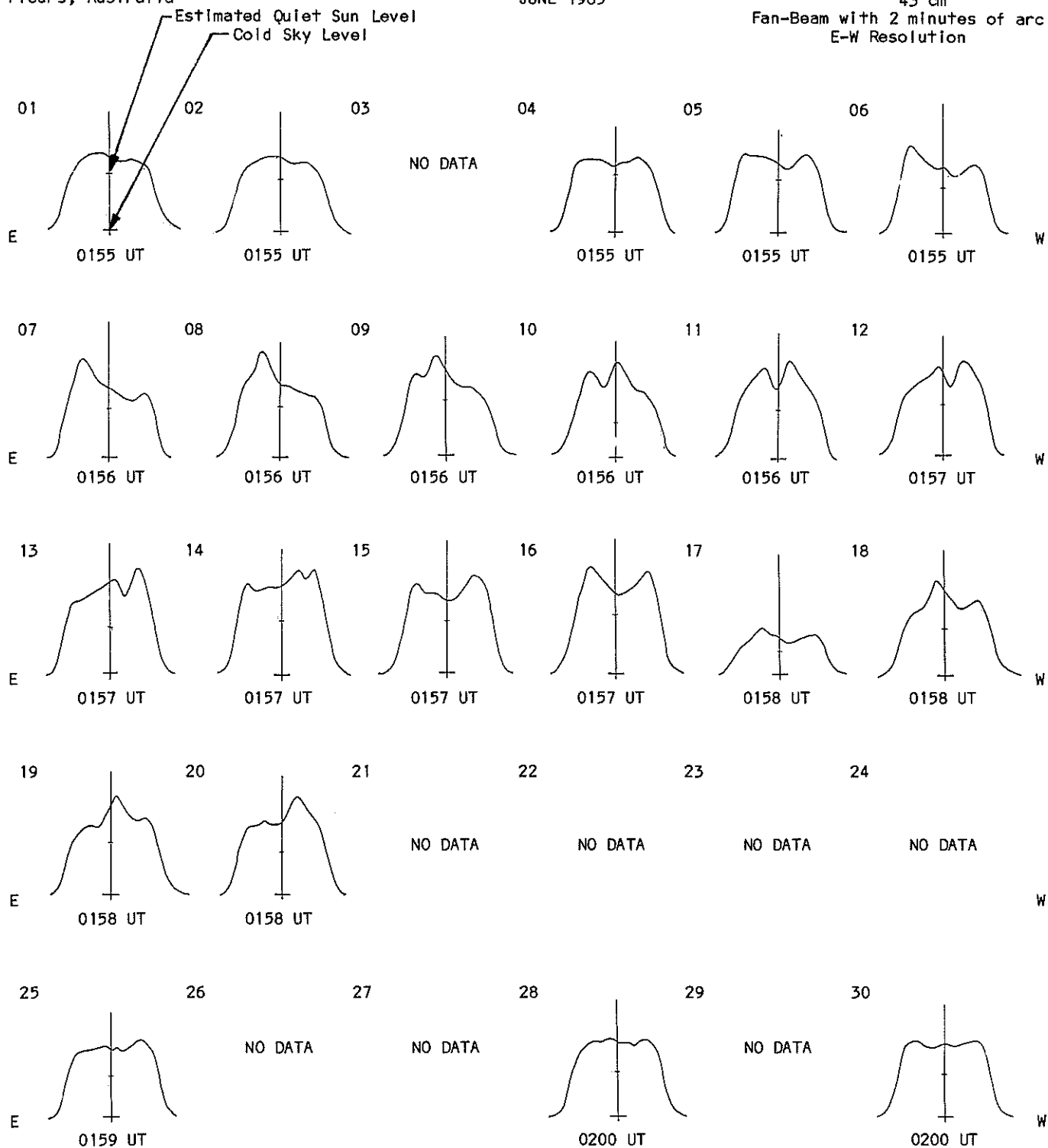
18
Jun 85

EAST - WEST SOLAR SCANS

Fleurs, Australia

JUNE 1985

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



SOLAR RADIO EMISSION SELECTED FIXED FREQUENCY EVENTS

19
Jun 85

JUNE 1985

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22	Mean W/m 2 Hz)		
02	245	LEAR	8 S	0531.1	0531.3	.9	42.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0531.1	0531.3	.9	7.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0531.1	0531.3	.9	13.0			QL=6 ST=2 TYP=3
	410	SGMR	47 GB	1643.8	1644.1	.5	97.0			QL=1 ST=3 TYP=5
	410	SGMR	47 GB	1657.6	1658.0	.7	95.0			QL=1 ST=3 TYP=5
	245	SGMR	47 GB	1657.8	1658.0	.3	62.0			QL=1 ST=3 TYP=5
03	245	SGMR	47 GB	1546.8	1546.8	.5	100.0			QL=1 ST=2 TYP=5
	410	SGMR	47 GB	1723.0	1723.1	.5	53.0			QL=6 ST=3 TYP=5
	245	SGMR	47 GB	1723.0	1723.1	.5	67.0			QL=6 ST=3 TYP=5
	610	SGMR	8 S	1723.1	1723.1	.2	18.0			QL=6 ST=3 TYP=3
05	2800	OTTA	20 GRF	1400.0	1450.0	90.0	1.6	0.8		
06	2800	OTTA	20 GRF	1810.0	1830.0	50.0	2.6	0.7		
	2800	OTTA	240 R	1925.0	2000.0	35.0	1.8	1.1		
08	2695	PENT	240 R	0015.0	0022.0	7.0	2.8			
	410	LEAR	8 S	0741.3	0741.6	.5	10.0			QL=6 ST=2 TYP=3
	245	LEAR	8 S	0741.3	0741.6	.5	30.0			QL=6 ST=2 TYP=3
	2695	ATHN	8 S	1440.0	1440.0	2.0	8.0			QL=5 ST=2 TYP=3
	4995	ATHN	4 S/F	1440.0	1440.0	8.0	8.0			QL=5 ST=2 TYP=3
	2800	OTTA	3 S	1449.0	1449.5	1.0	11.4	2.4		
09	2800	OTTA	20 GRF	1330.0	1430.0	190.0	1.8	0.9		
10	2800	OTTA	20 GRF	1215.0	1235.0	65.0	1.4	0.7		
	2800	OTTA	20 GRF	1545.0	1555.0	45.0	1.4	0.7		
11	2800	OTTA	8 S	1200.5	1200.7	.9	4.0	1.4		
12	245	LEAR	43 NS	2318.0						QL=6 ST=1 TYP=1
13	245	LEAR	43 NS	2319.0	0131.5	610.00	41.0			QL=6 ST=2 TYP=1
	2695	LEAR	8 S	0453.0	0453.5	.8	6.0			QL=6 ST=2 TYP=3
	1415	LEAR	8 S	0453.1	0453.3	.5	30.0			QL=6 ST=2 TYP=3
14	245	LEAR	43 NS	2319.0	0246.1	610.00	23.0			QL=6 ST=2 TYP=1
	410	LEAR	43 NS	2319.0	0321.8	610.00	29.0			QL=6 ST=2 TYP=1
	245	LEAR	8 S	0621.3	0621.6	.7	45.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0621.3	0622.0	1.7	10.0			QL=6 ST=2 TYP=3
	2800	OTTA	1 S	1717.0	1718.0	3.0	1.4	0.5		
15	410	LEAR	4 S/F	0158.8	0200.3	3.3	7.0			QL=6 ST=3 TYP=3
	245	LEAR	4 S/F	0158.8	0200.3	3.2	36.0			QL=6 ST=3 TYP=3
23	2695	ATHN	8 S	1206.3	1206.5	.8	3.0			QL=6 ST=3 TYP=3
	4995	ATHN	8 S	1206.3	1206.6	.8	3.0			QL=6 ST=2 TYP=3
	8800	ATHN	8 S	1206.3	1206.6	.8	11.0			QL=6 ST=2 TYP=3
29	245	LEAR	47 GB	0323.1	0323.3	.5	139.0			QL=6 ST=2 TYP=5
	410	LEAR	8 S	0323.1	0323.3	.4	24.0			QL=6 ST=2 TYP=3
	610	LEAR	8 S	0323.1	0323.3	.4	13.0			QL=6 ST=2 TYP=3
	2695	PENT	22 GRF	2325.0	2332.0	15.0	3.8	1.3		
30	2695	PENT	240 R	2305.0	2330.0	25.0	1.8	0.9		

Observatories:

BERN = Berne MANI = Manila OTTA = Ottawa ARO PENT = Penticton SGMR = Sagamore Hill
LEAR = Learmonth ATHN = Athens PALE = Palehua

Explanation of Type Code:

1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset on Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	32 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple 3F	28 Precursor	41 Group of Bursts	47 Great Burst
6 Minor	23 Simple 3AF	29 Post Burst Increase	42 Series of Bursts	48 Major
				49 Major +

Remarks:

QL = Quality (1=poor to 6=excellent)

ST = Status (1=real time; 2=final; 3=correction; 4=deletion)

TYP= Type (1=noise storm; 2=rise in base level; 3=minor; 4=group; 5=major; 6=major plus; 7=Castelli U-type burst)

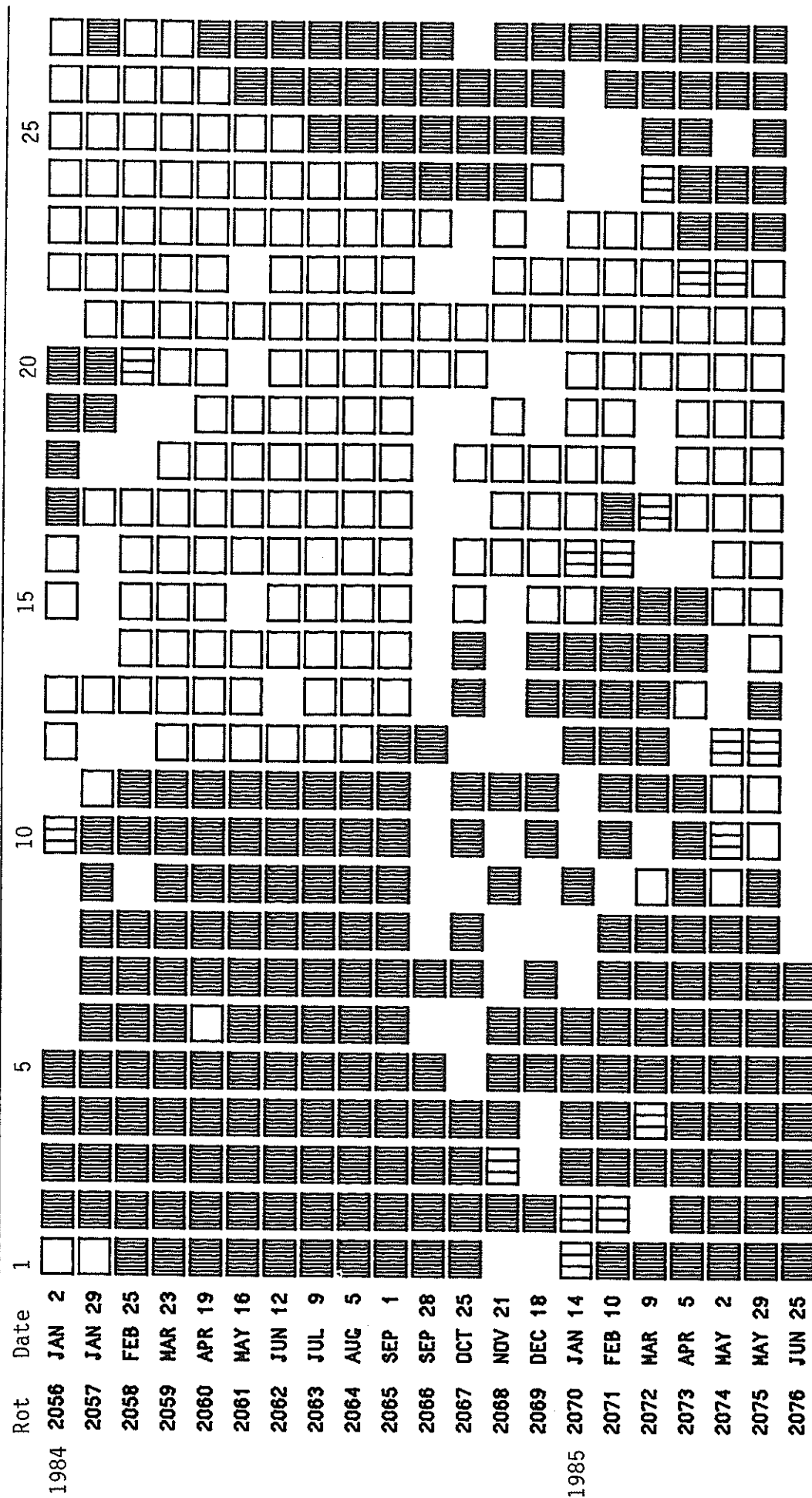
20
Jun 85

STANFORD MEAN SOLAR MAGNETIC FIELD (MICROTESLA)

Day	Jul 84	Aug	Sep	Oct	Nov	Dec	Jan 85	Feb	Mar	Apr	May	Jun
1	38	17	-38	-42	-13	-32	5	38	31	2	-5	-10
2	44	-2	-20	-63	.	.	14	35	27	-10	-8	-7
3	33	-35	-42	.	-64	.	21	32	16	-14	-9	-11
4	62	-40	-58	-76	-37	.	38	30	13	-13	-5	-12
5	41	-44	-77	.	.	.	.	15	.	-17	-5	-11
6	5	-37	-86	.	-22	15	.	.	.	-20	-5	-3
7	-28	-50	-89	.	-4	28	37	.	-8	-7	-8	4
8	-41	-82	-95	.	10	44	26	.	-17	-13	-8	6
9	-62	-83	-81	-21	12	30	.	-4	-13	-6	-5	-1
10	-56	-73	-55	.	.	.	6	-5	.	-13	4	-4
11	-66	-84	-27	.	16	39	-10	-1	-4	-29	2	3
12	-70	-91	-8	.	.	27	-8	-2	-1	-19	8	12
13	-96	-71	3	.	48	12	-10	-8	-3	-21	1	22
14	-91	-67	11	.	24	-10	-1	-9	-15	-13	.	21
15	-102	-13	10	.	.	-12	1	-23	-12	-12	.	19
16	-93	6	12	.	.	-20	-7	-17	-6	.	11	17
17	-59	11	21	32	-4	-11	-3	-13	10	3	22	13
18	-39	21	23	36	-25	.	-25	.	.	-7	33	15
19	-11	18	49	.	-23	-8	-35	-12	-7	-10	48	7
20	14	19	52	15	.	.	.	-17	-6	.	39	-10
21	9	21	44	-7	.	.	.	-15	-12	5	27	-21
22	31	26	34	-32	-6	-24	-30	-12	-12	6	25	-16
23	7	39	20	-38	1	-35	.	-7	-5	18	0	-13
24	30	47	-5	-24	-15	-46	.	-6	.	23	-9	-13
25	22	52	-26	-14	-10	.	-9	2	1	18	-21	-16
26	26	31	-35	-18	-20	.	-12	-6	.	1	.	-12
27	53	25	-26	-15	.	-23	-2	13	.	-12	-18	-12
28	43	11	-19	-32	.	-22	32	20	37	-27	-8	-9
29	54	-4	-19	.	-45	.	0	.	24	-32	-8	-13
30	36	-13	-30	.	.	-9	19	.	16	-47	-9	-9
31	31	-36	.	-71	.	-3	28	.	12	.	-5	.

Dot symbol indicates no data available for the day.

STANFORD MEAN SOLAR MAGNETIC FIELD

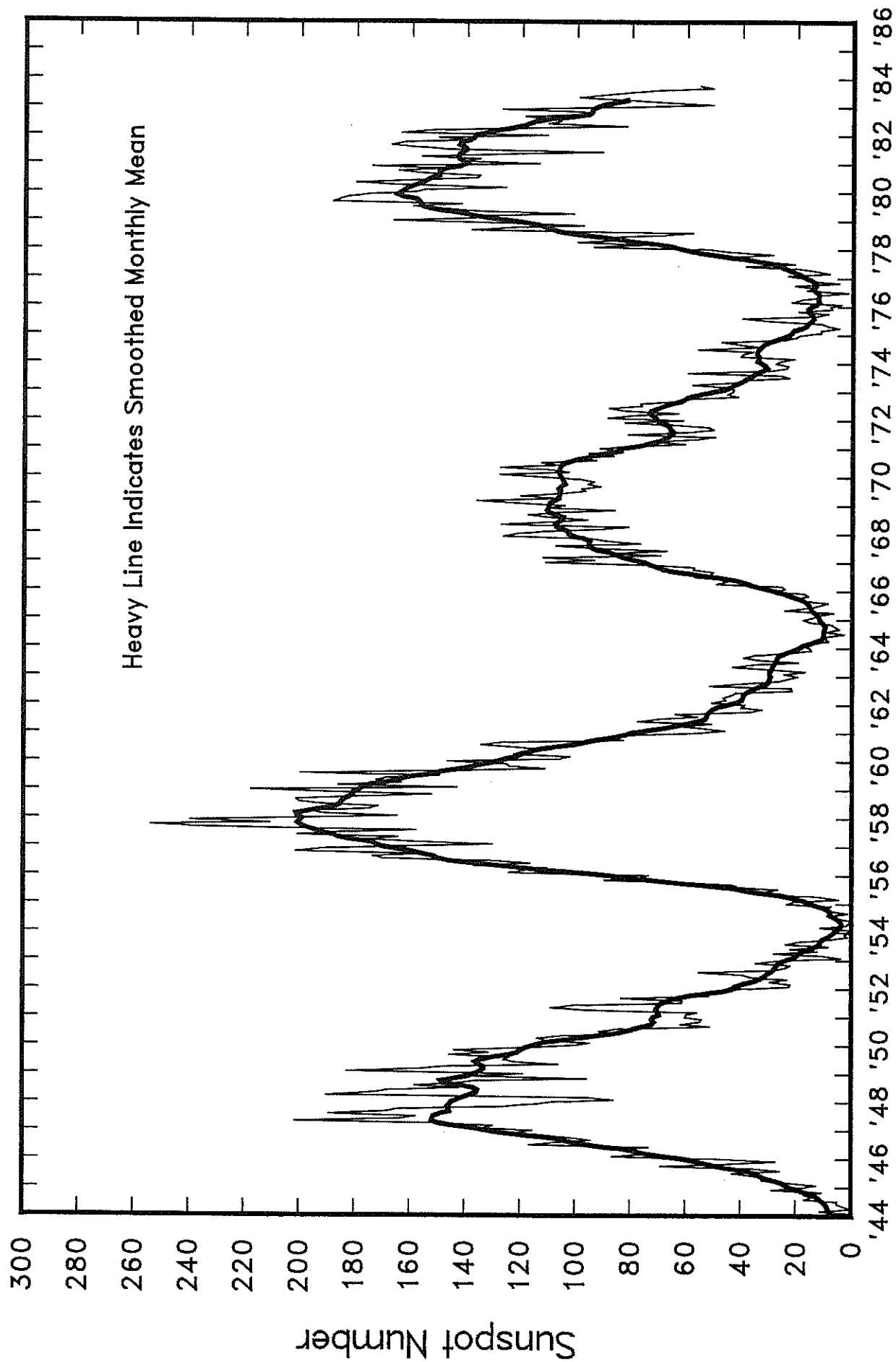


Mean Solar Magnetic Field Polarity: = field > 2 microT; = -2 microT < field < 2 microT; = field < -2 microT; No box = no data available

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

MONTHLY MEAN SUNSPOT NUMBERS

January 1944 - October 1983



C O N T E N T S

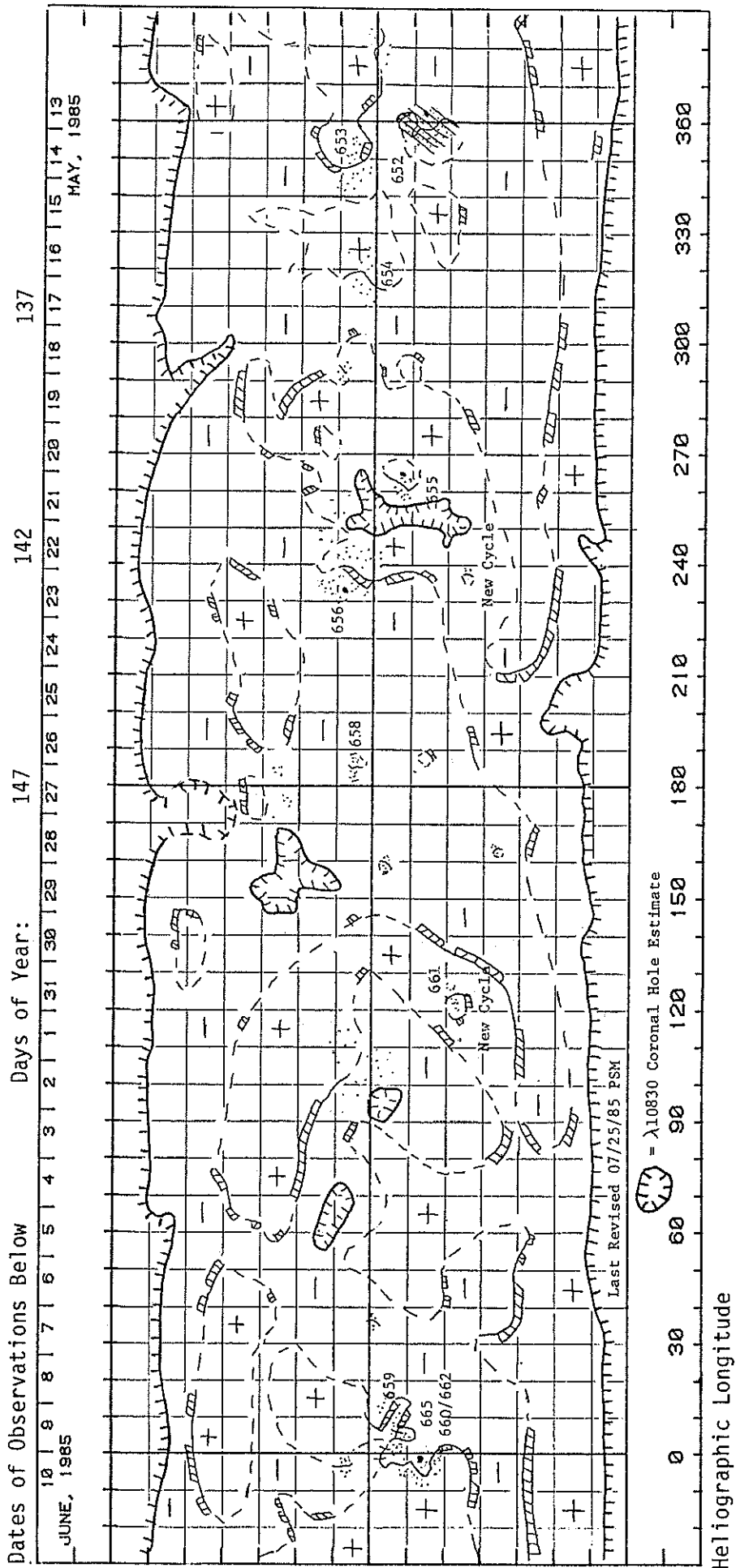
Prompt Reports

DATA FOR MAY 1985

Number 491 Part I

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PRELIMINARY H - ALPHA SOLAR SYNOPTIC CHART
CARRINGTON ROTATION NUMBER 1762
(May 13 to June 10, 1985)



SOLAR MAGNETIC FIELD SYNOPSIS CHART CARRINGTON ROTATION NUMBER 1762 (May 13 to June 10, 1985)

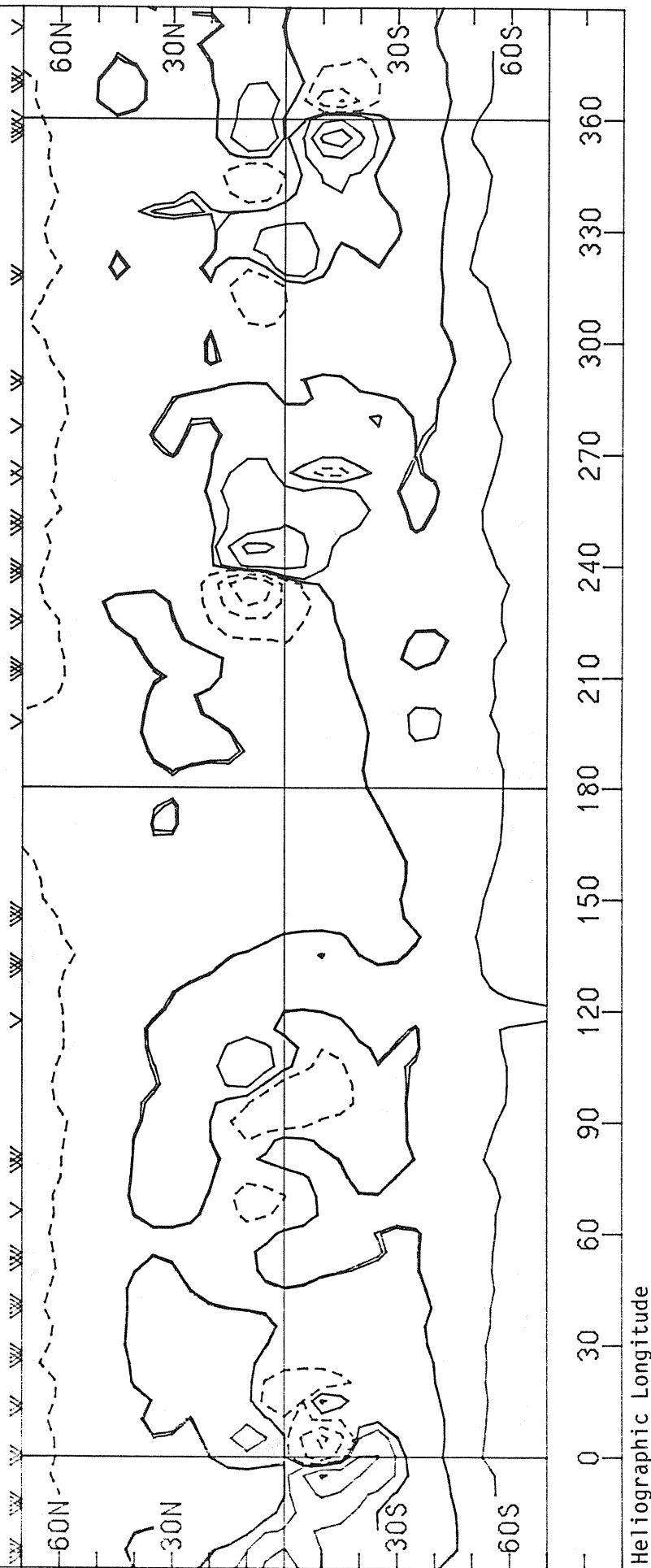
Stanford Solar Observatory

0, +100, 500, 1000, 2000 microTesla

100

-100

11 10 9 8 7 6 5 4 3 2 1 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13
MAY 1985

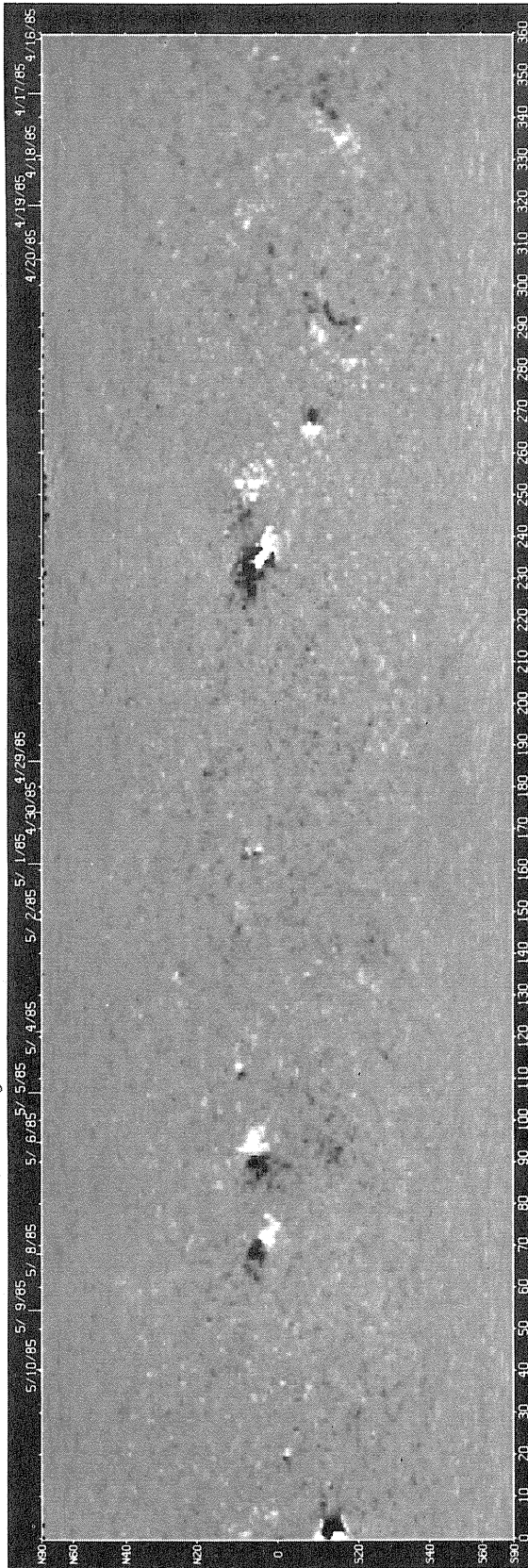


SOLAR MAGNETIC FIELD SYNOPTIC CHART

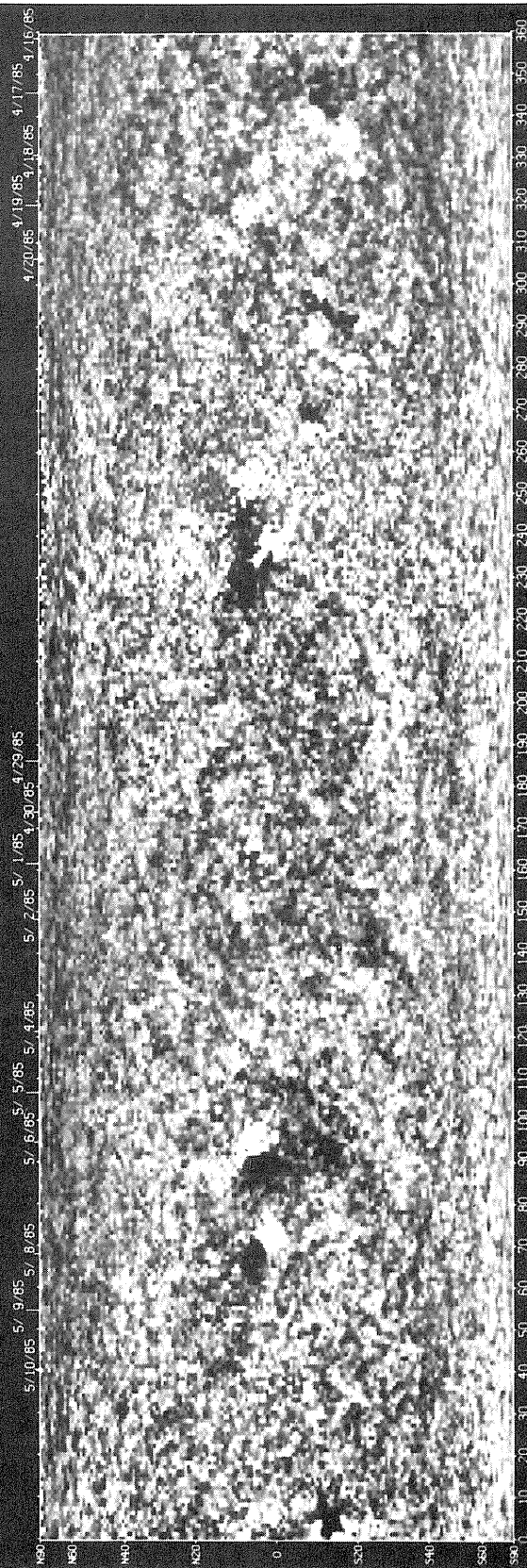
CARRINGTON ROTATION NUMBER 1761
(April 16 to May 13, 1985)

Kitt Peak National Observatory

Dates of Observations



CARRINGTON ROTATION 1761 POLARITY



HELIUM 10830 ANGSTROM SYNOPTIC MAP OF THE SOLAR CORONA

CARRINGTON ROTATION NUMBER 1761
(April 16 to May 13, 1985)

Dates of Observations

Kitt Peak National Observatory



Heliographic Longitude

Irregularly shaped light areas mark either coronal holes or filament cavities.
Strength of the helium 10830A absorption line depicted here as various shades of gray.

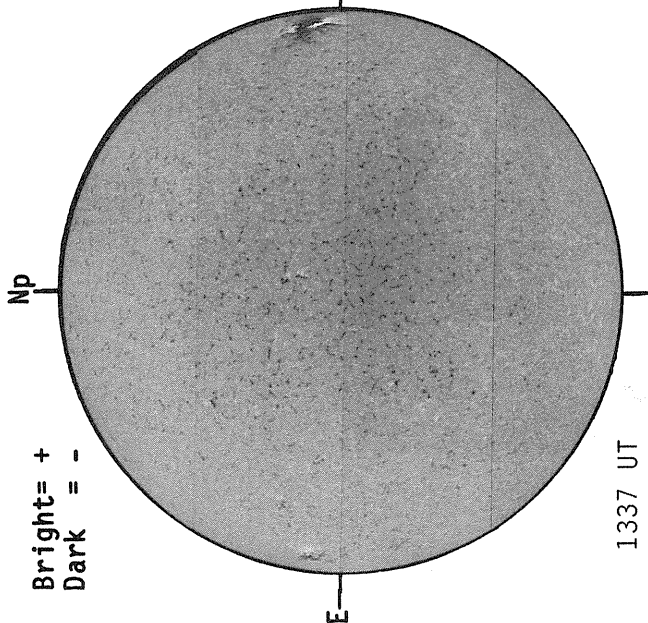
M A Y 01, 1 9 8 5 (P -24.07, B₀ = -4.12, L₀ = 169.47)

28
May 85

Delta Y = 12.4
Delta X = 9.7

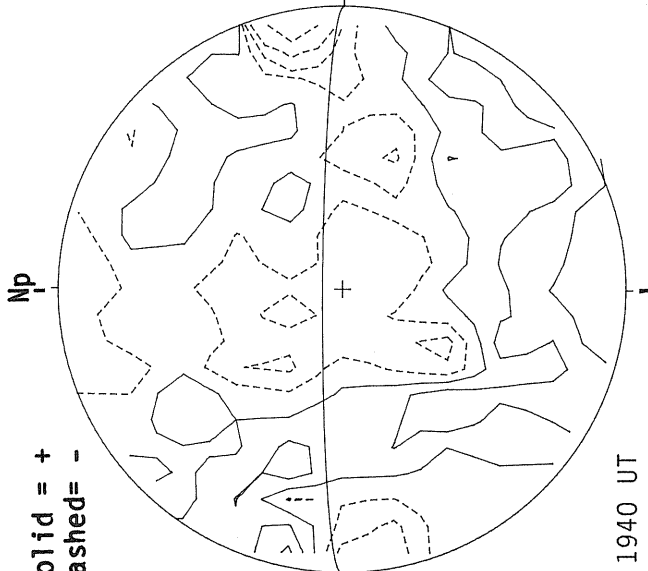
KITT PEAK MAGNETOGRAM

Bright = +
Dark = -



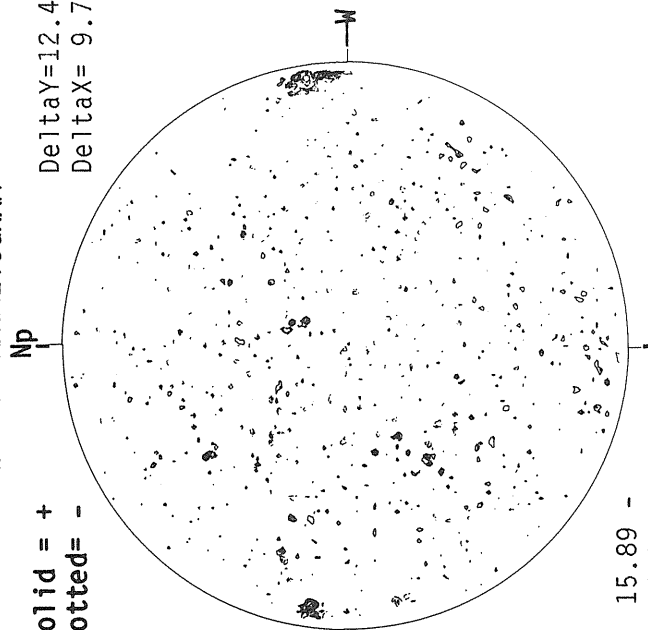
STANFORD MAGNETOGRAM

Solid = +
Dashed = -

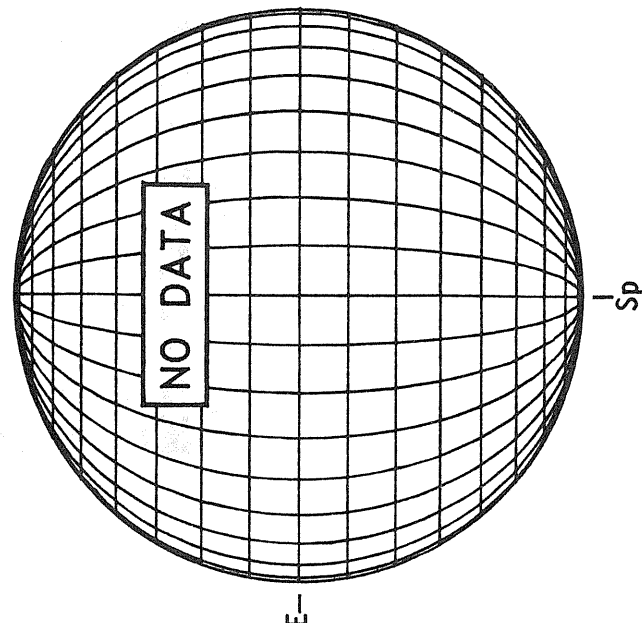


MT. WILSON MAGNETOGRAM

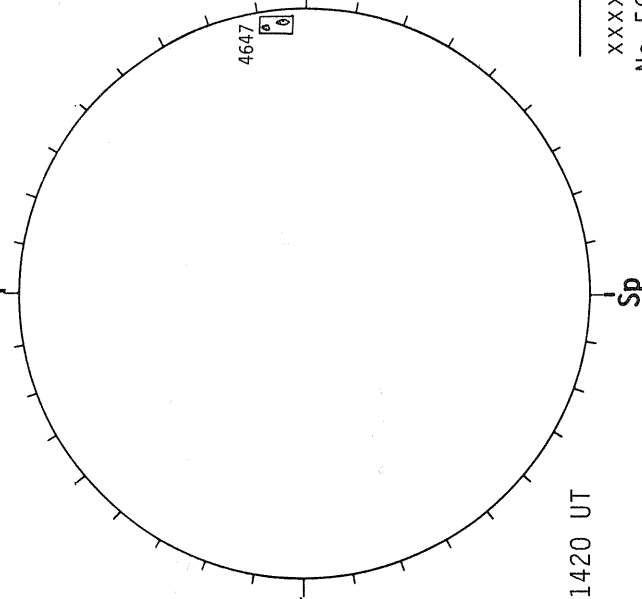
Solid = +
Dotted = -



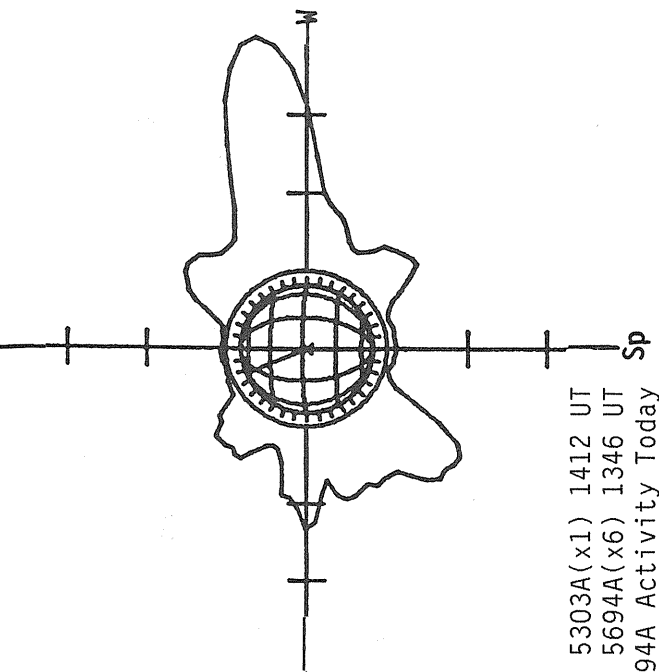
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



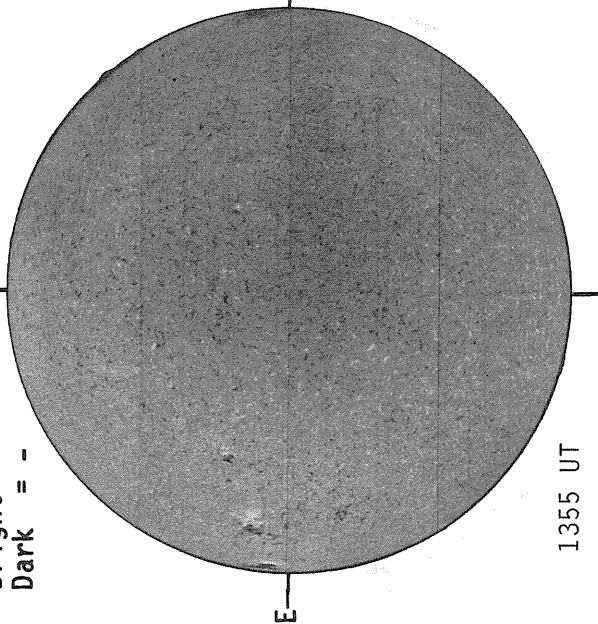
— 5303A(x1) 1412 UT
xxxx 5694A(x6) 1346 UT
No 5694A Activity Today

M A Y 02, 1 9 8 5 (P -23.89, B =-4.03, L₀ = 156.25)

KITT PEAK MAGNETOGRAM

Np

Bright= +
Dark = -

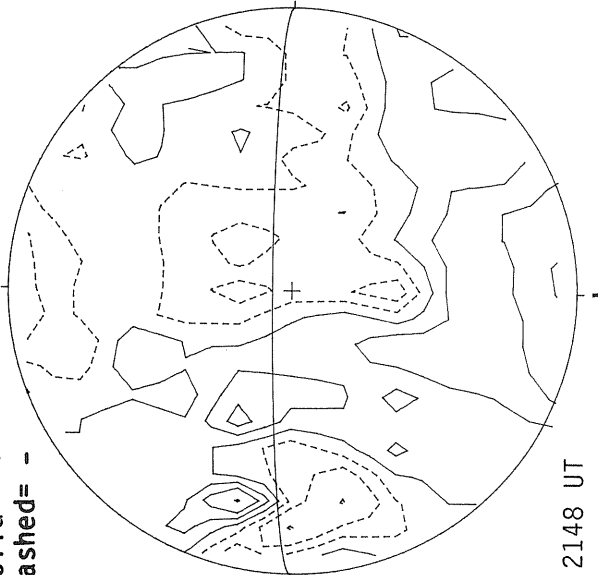


1355 UT

STANFORD MAGNETOGRAM

Np

Solid = +
Dashed = -

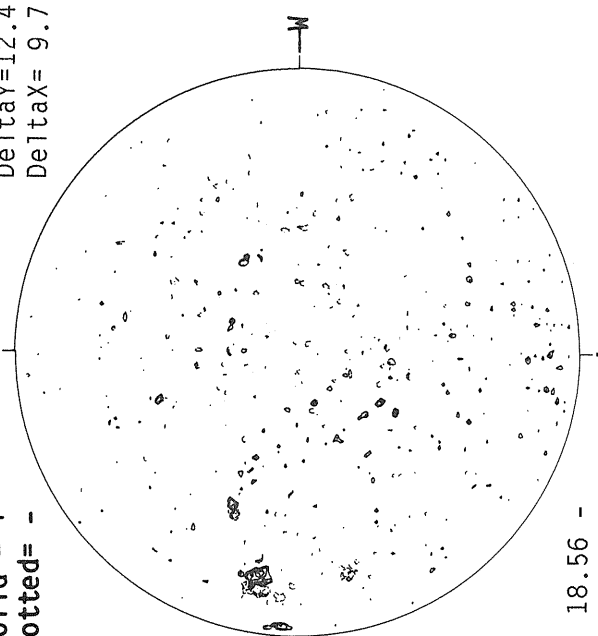


2148 UT

MT. WILSON MAGNETOGRAM

Np

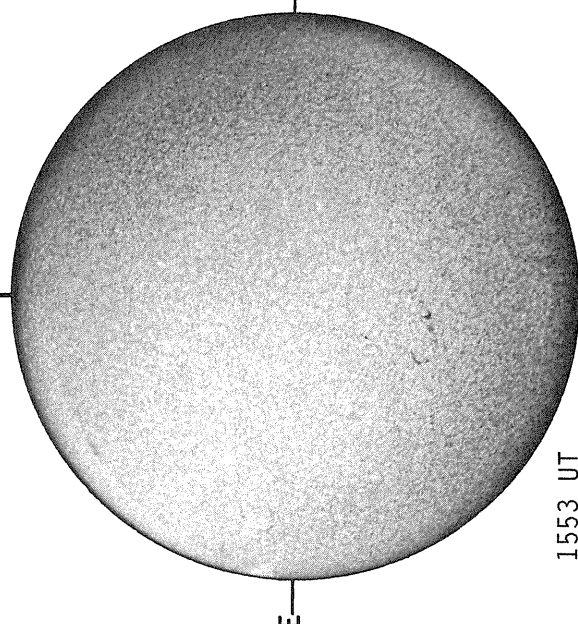
Solid = +
Dotted = -



18.56 -
19.48 UT

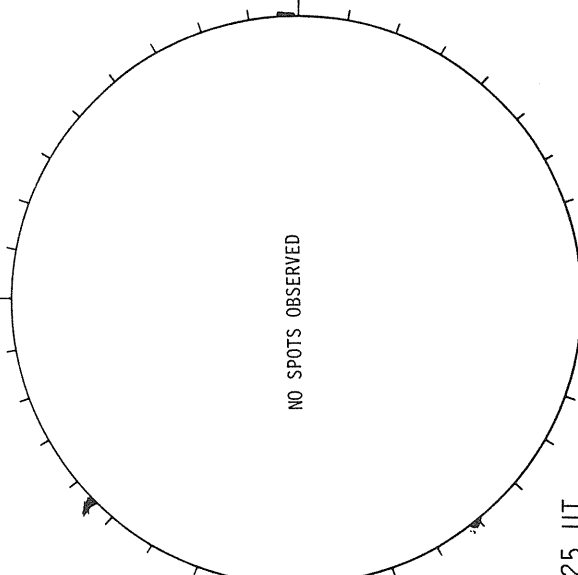
Delta Y = 12.4
Delta X = 9.7

BOULDER H-ALPHA



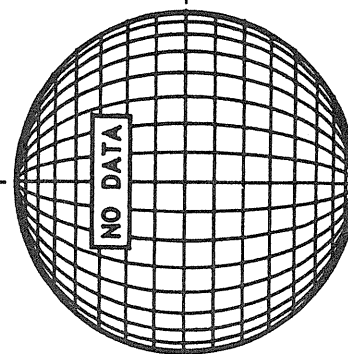
1553 UT

BOULDER SUNSPOTS



1525 UT
1553 UT BOUL Prom

SACRAMENTO PEAK CORONA (1.15 Radii)

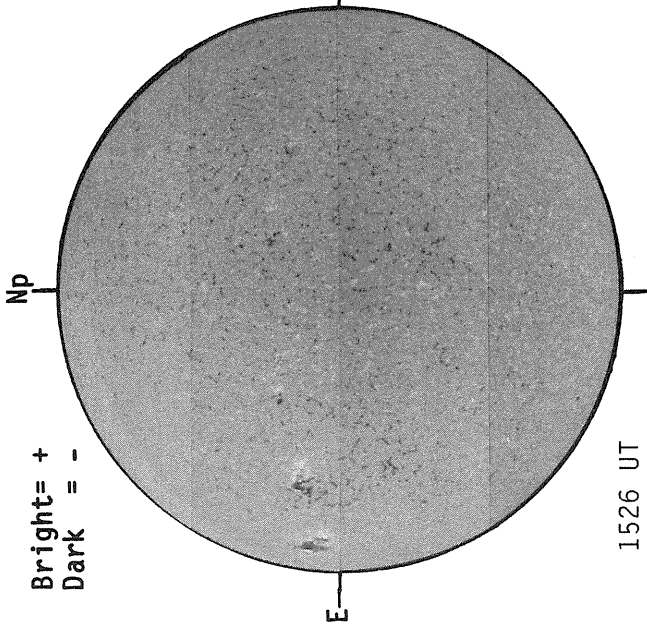


Sp

M A Y 03, 1 9 8 5 (P -23.70, B =-3.92, L₀ = 143.03)

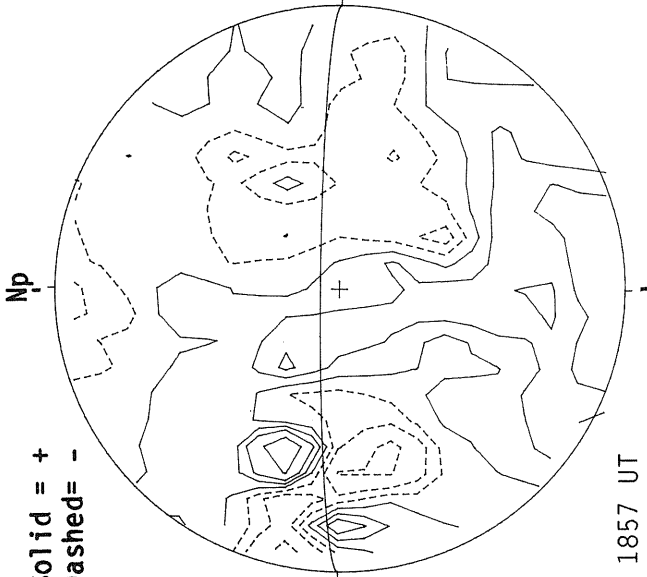
KITT PEAK MAGNETOGRAM

Bright = +
Dark = -



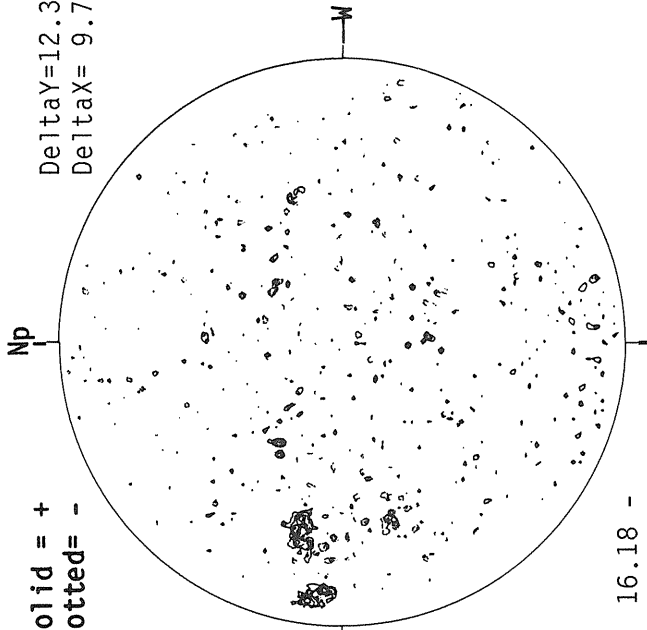
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



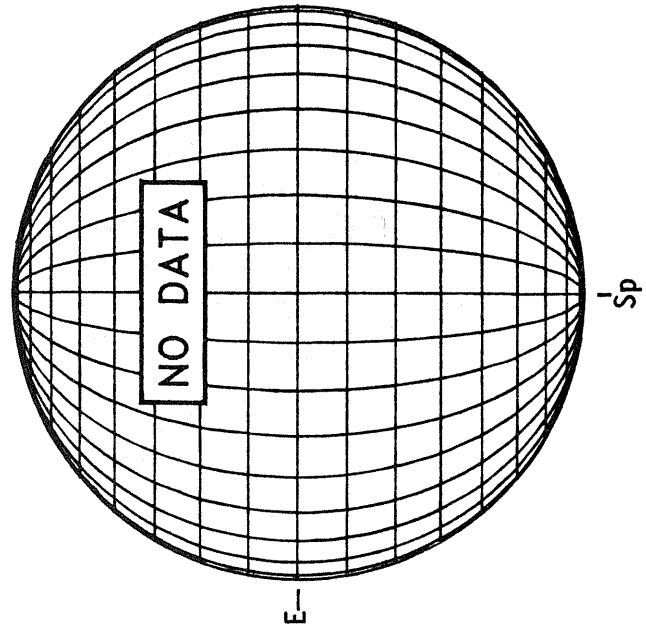
MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -

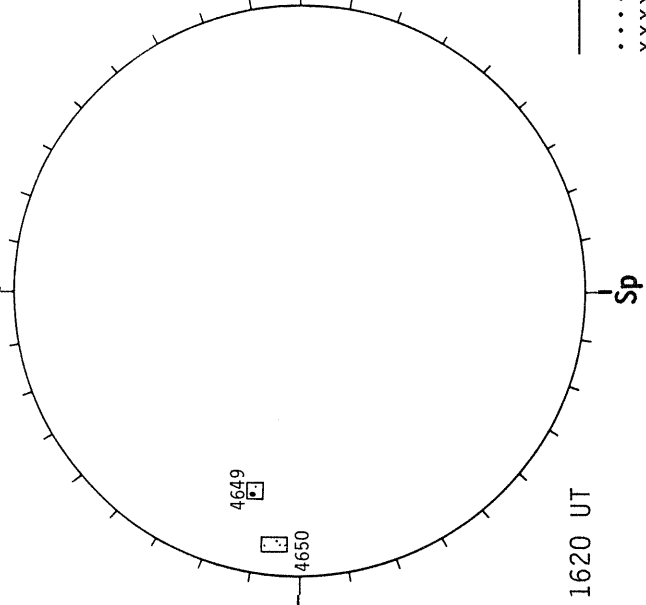


30
May 85
Delta Y = 12.35
Delta X = 9.7

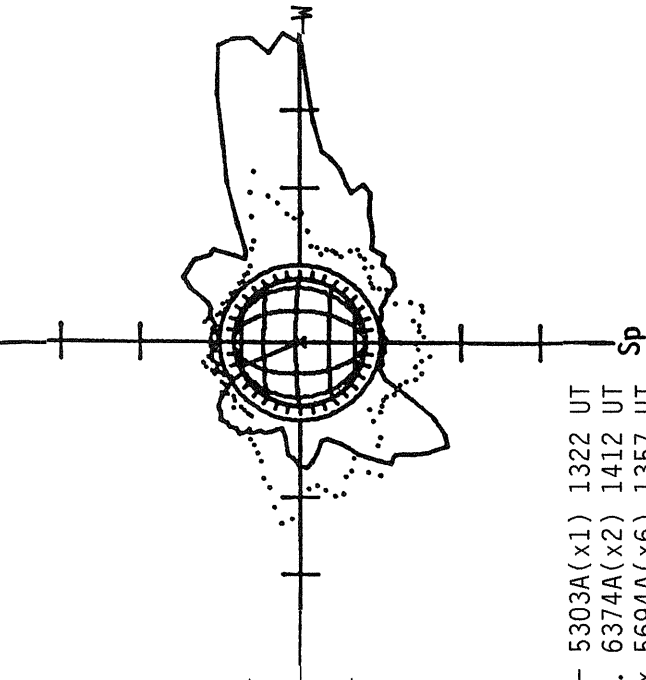
SACRAMENTO PEAK H-ALPHA



HOLLOMAN SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

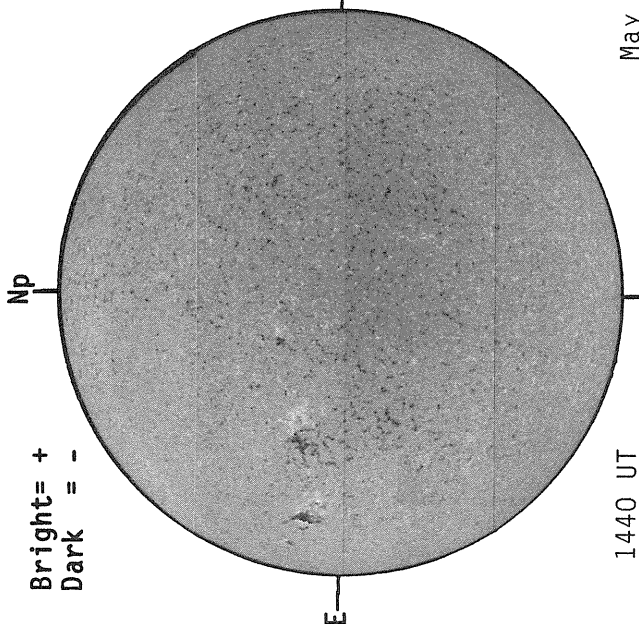


— 5303A(x1) 1322 UT
.... 6374A(x2) 1412 UT
xxxx 5694A(x6) 1357 UT
No 5694A Activity Today

M A Y 04, 1 9 8 5 (P -23.51, B =-3.82, L₀ = 129.82)

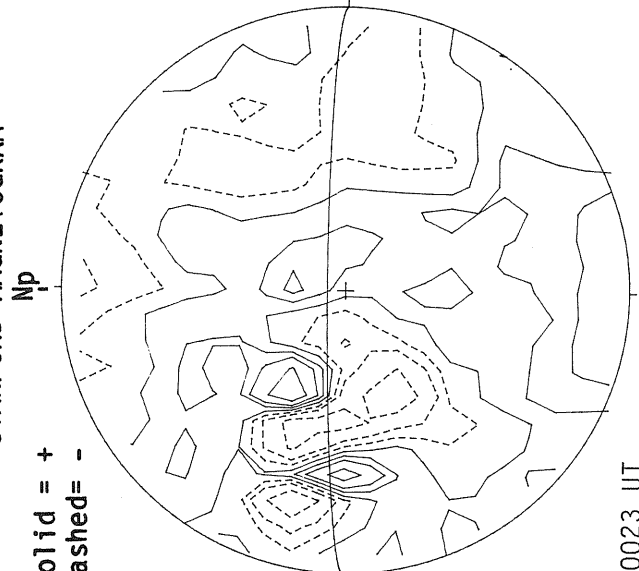
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



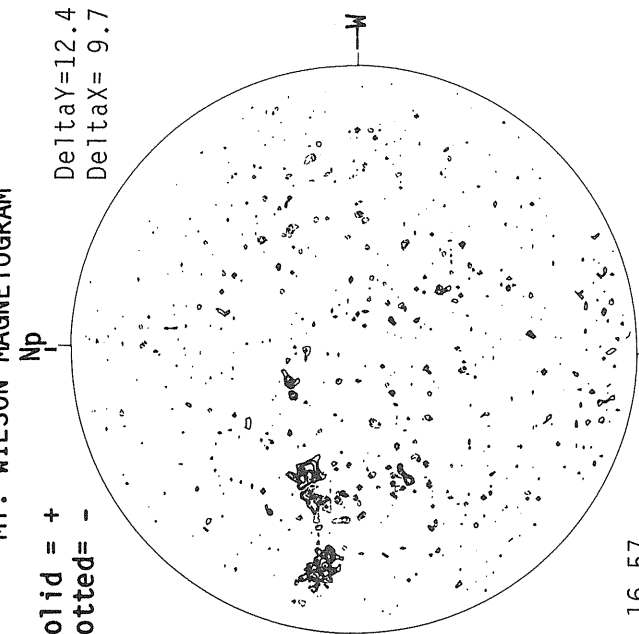
STANFORD MAGNETOGRAM

Solid = +
Dashed= -

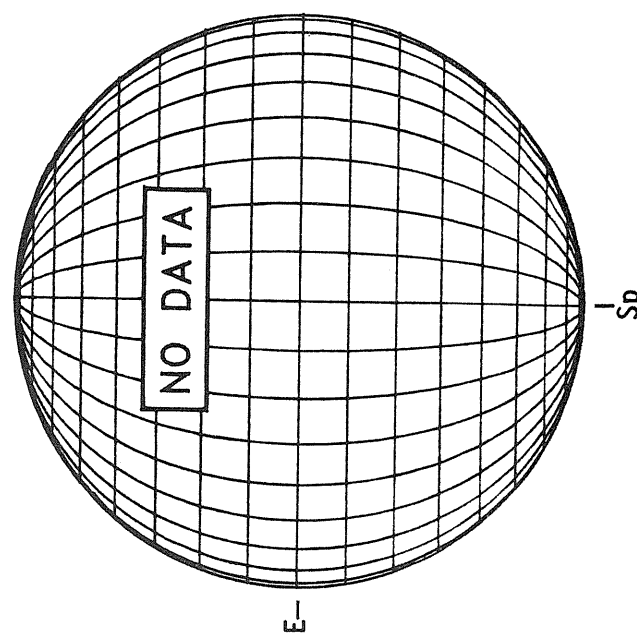


MT. WILSON MAGNETOGRAM

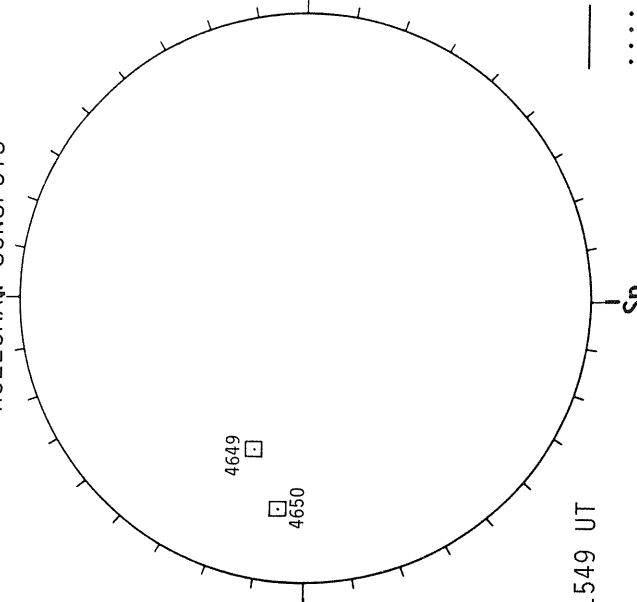
Solid = +
Dotted= -



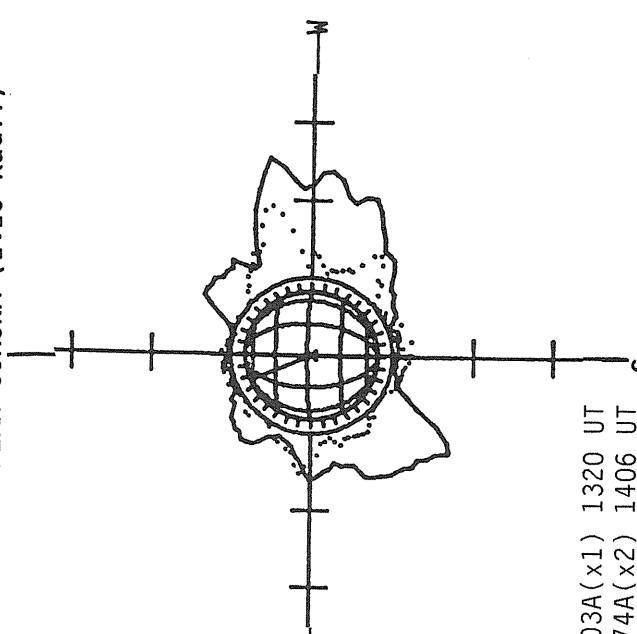
SACRAMENTO PEAK H-ALPHA



HOLLOMAN SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



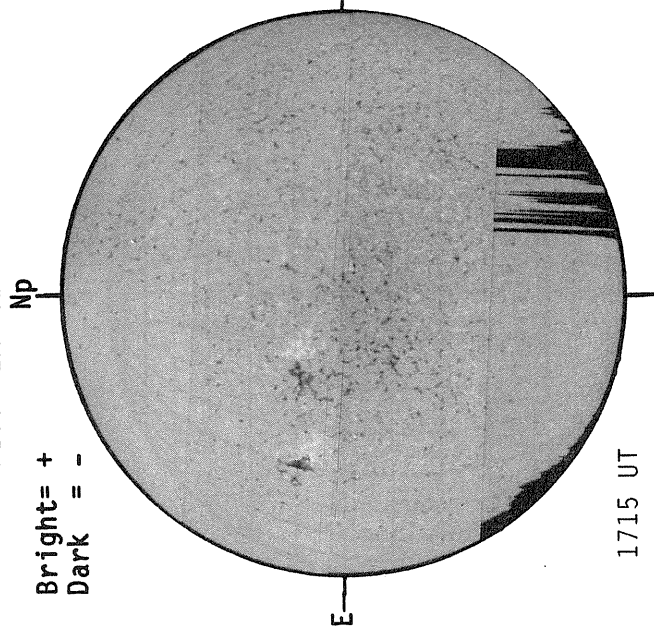
— 5303A(x1) 1320 UT
.... 6374A(x2) 1406 UT
xxxx 5694A(x6) 1354 UT
No 5694A Activity Today

M A Y 05, 1 9 8 5 (P -23.30, B =-3.72, L₀ = 116.60)

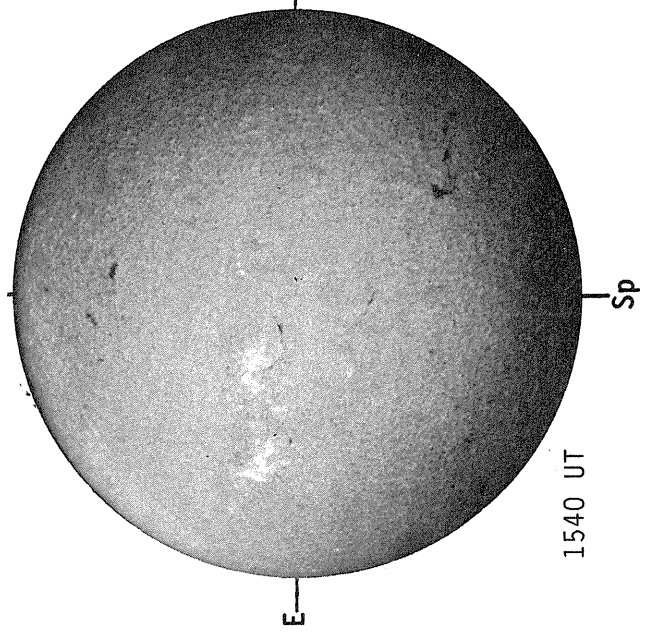
32
May 85
Delta Y=12.4
Delta X= 9.7

KITT PEAK MAGNETOGRAM

Bright= +
Dark = -

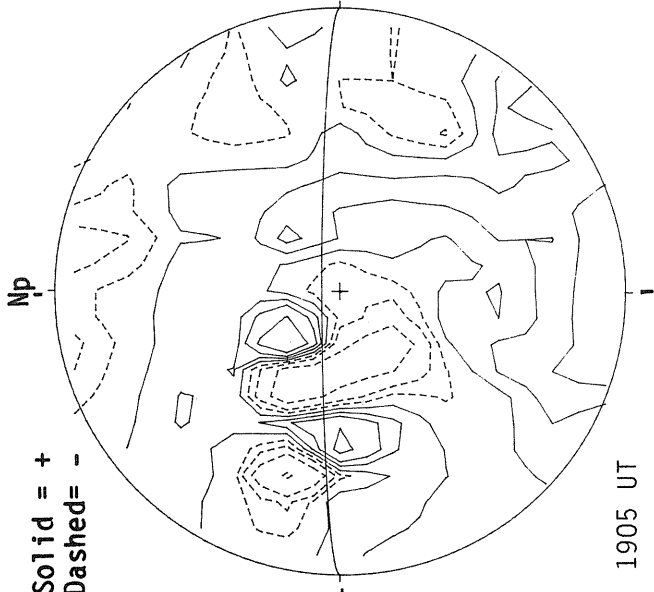


BOULDER H-ALPHA

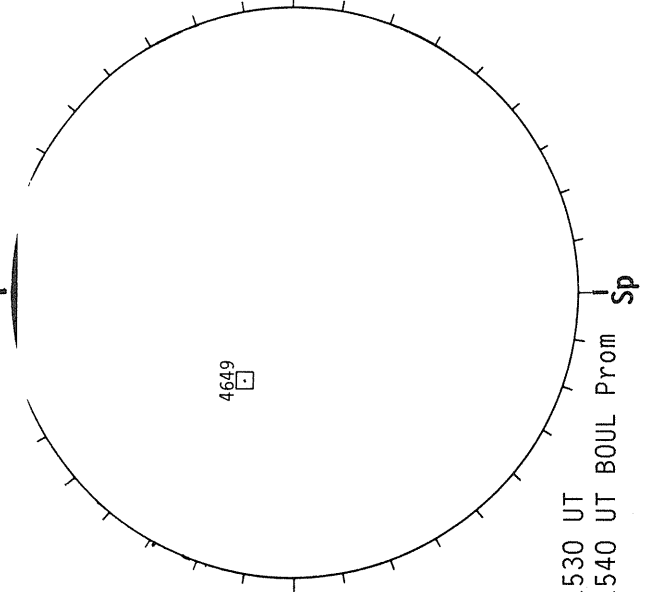


STANFORD MAGNETOGRAM

Solid = +
Dashed = -

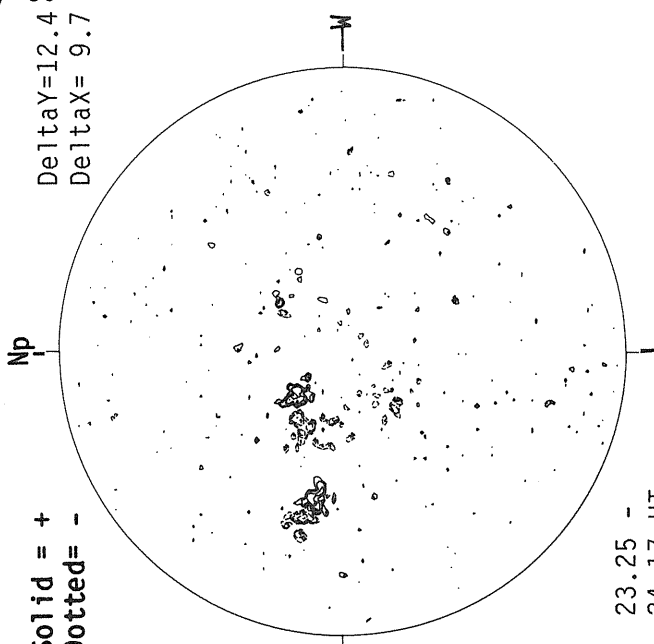


BOULDER SUNSPOTS

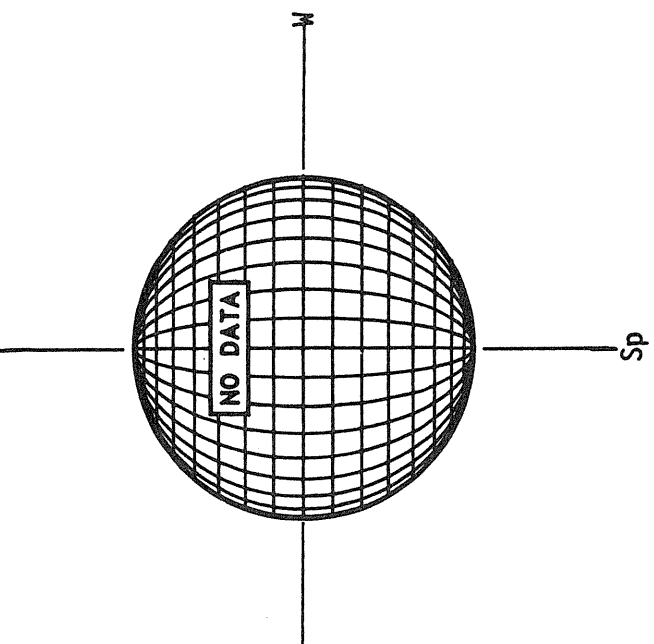


MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -



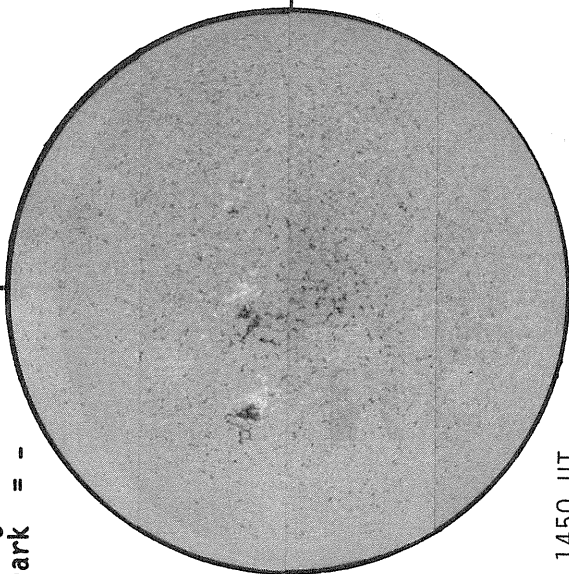
SACRAMENTO PEAK CORONA (1.15 Radii)



M A Y 06, 1 9 8 5 (P -23.10, $B_0 = -3.62$, $L_0 = 103.38$)

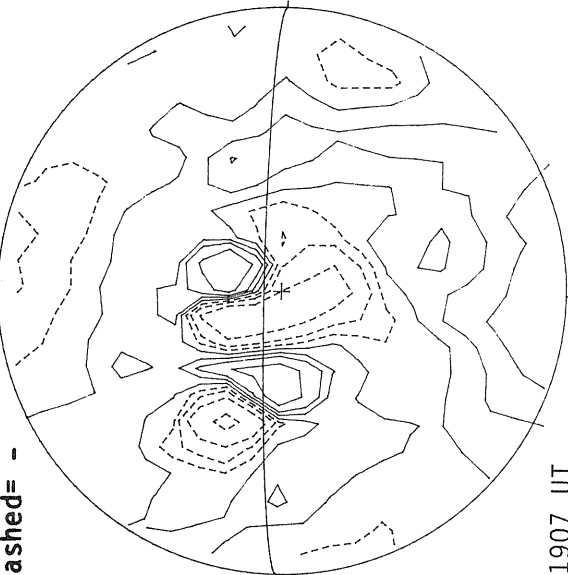
KITT PEAK MAGNETOGRAM

Bright = +
Dark = -



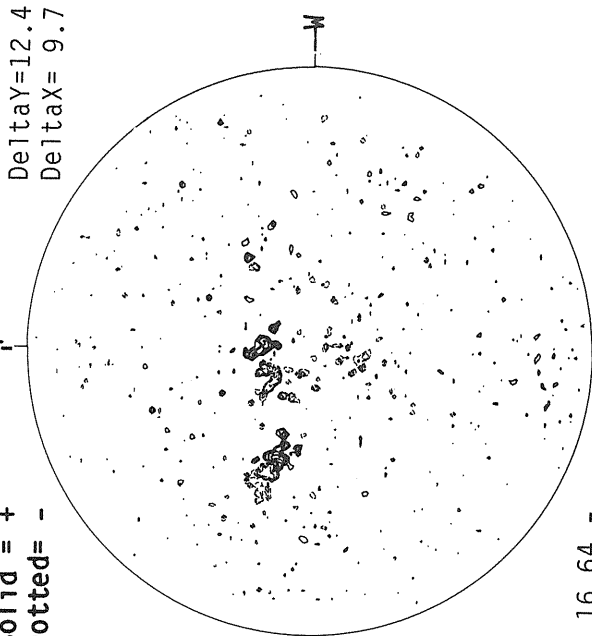
STANFORD MAGNETOGRAM

Solid = +
Dashed = -

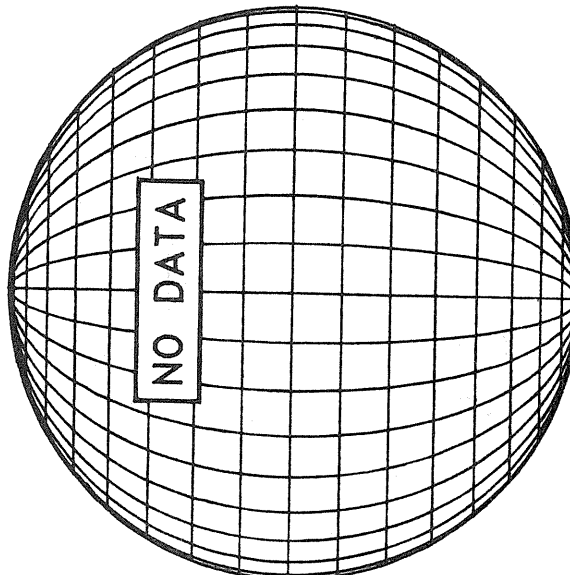


MT. WILSON MAGNETOGRAM

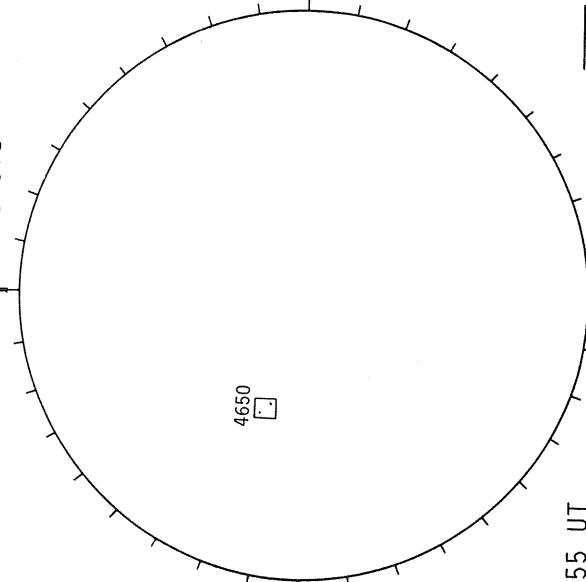
Solid = +
Dotted = -



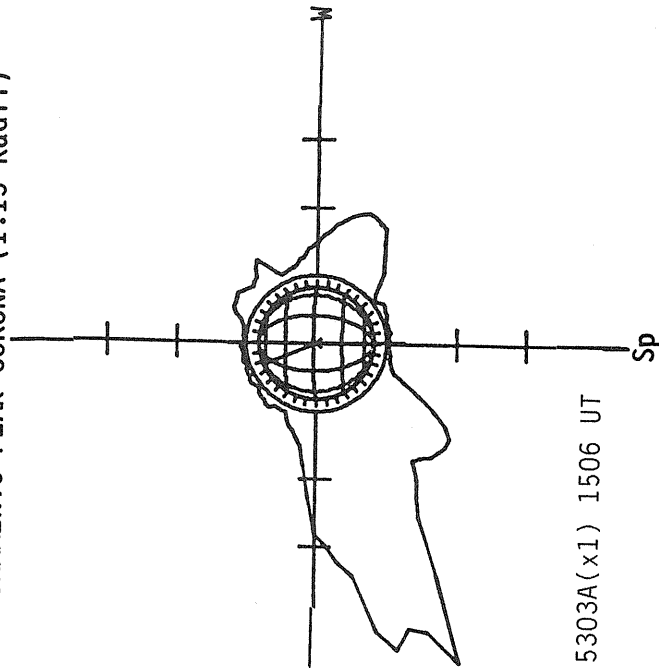
SACRAMENTO PEAK H-ALPHA



HOLLOMAN SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



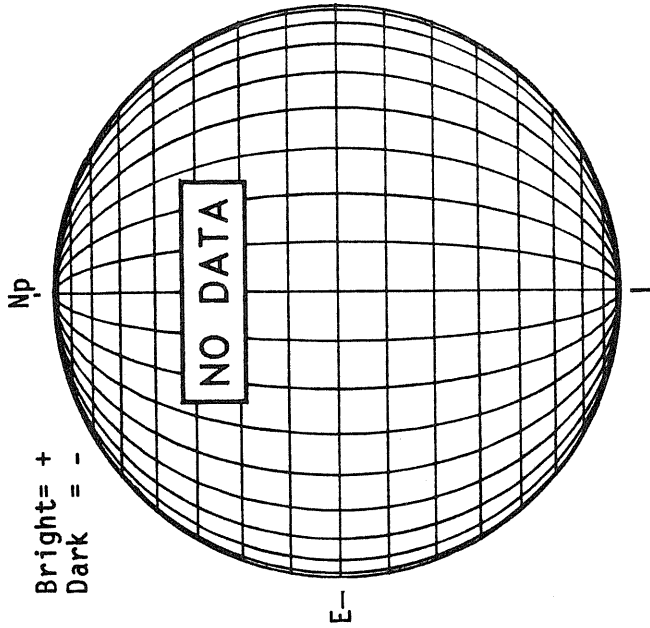
— 5303A(x1) 1506 UT

M A Y 07, 1 9 8 5 (P -22.88, B =-3.51, L₀= 90.16)

34
May 85

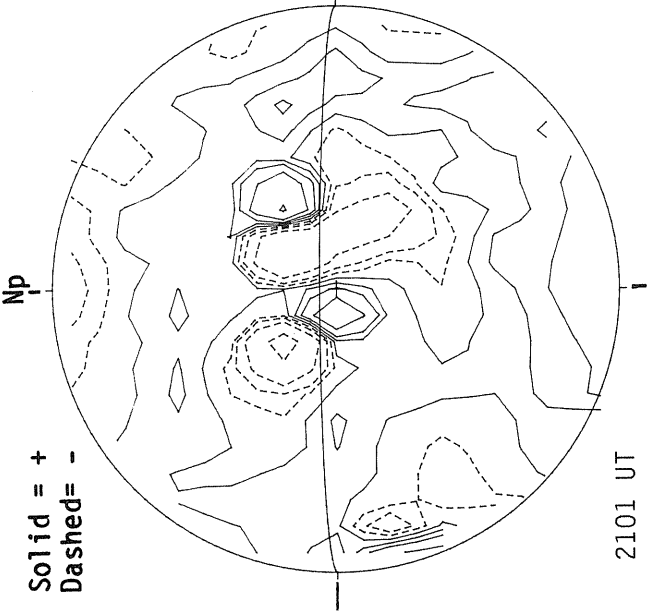
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



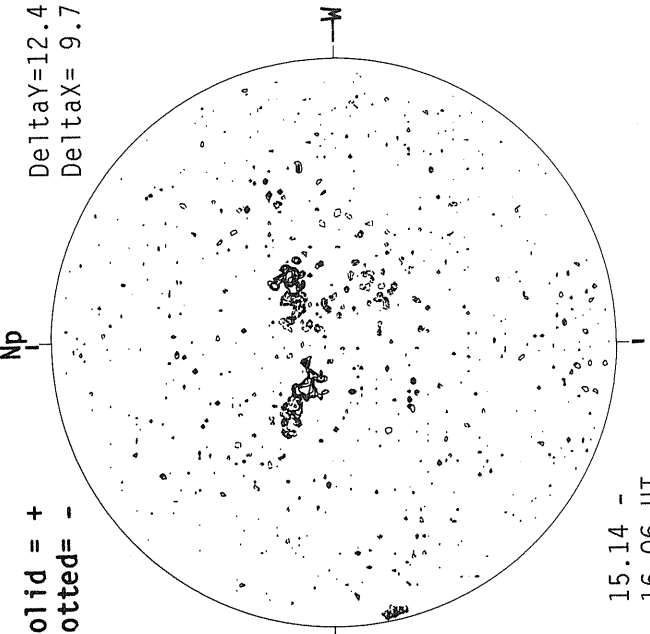
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -



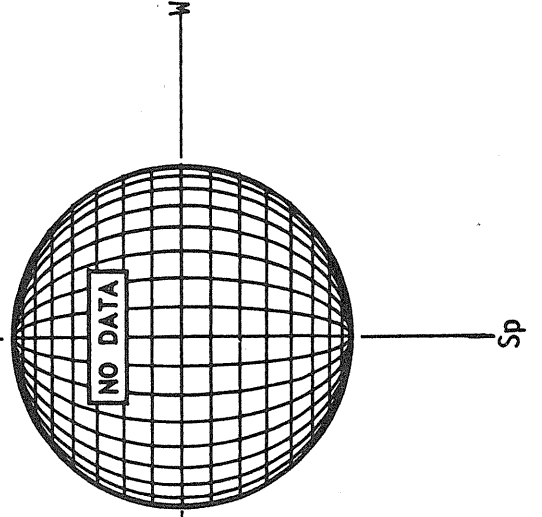
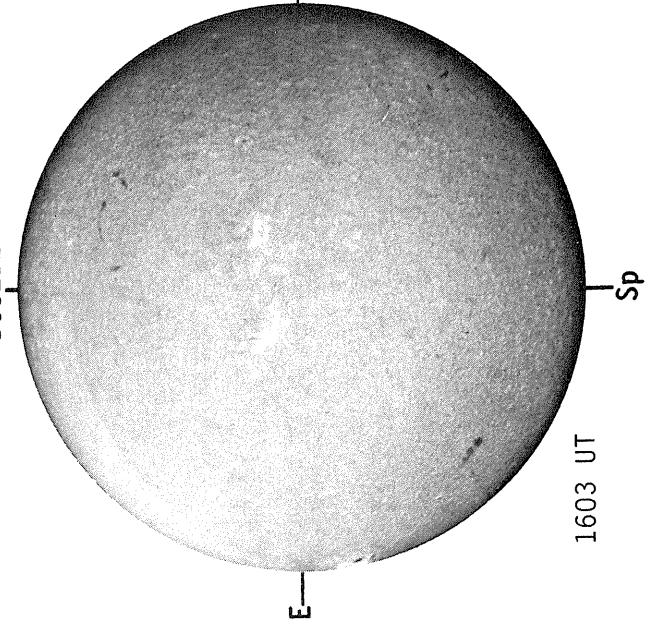
Delta Y = 12.4
Delta X = 9.7

15.14 -
16.06 UT

SACRAMENTO PEAK CORONA (1.15 Radii)

BOULDER SUNSPOTS

BOULDER H-ALPHA



4649

4652

1603 UT

1600 UT

1603 UT BOUL Prom

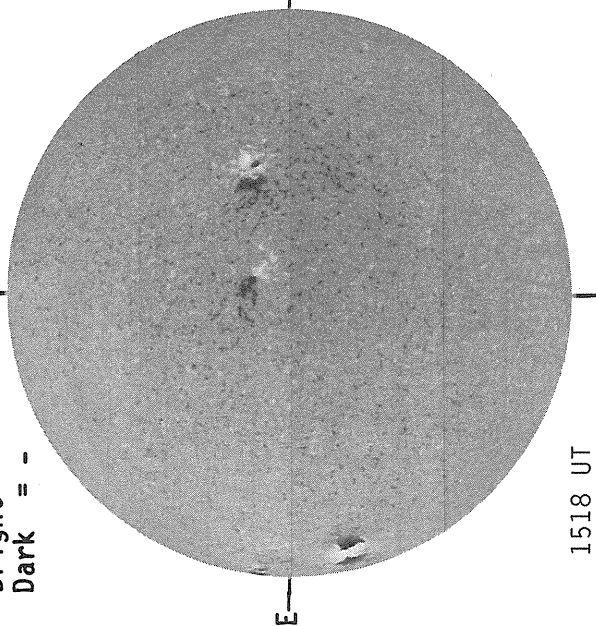
Sp

Sp

M A Y 08, 1 9 8 5 (P -22.66, B =-3.41, L₀ = 76.93)

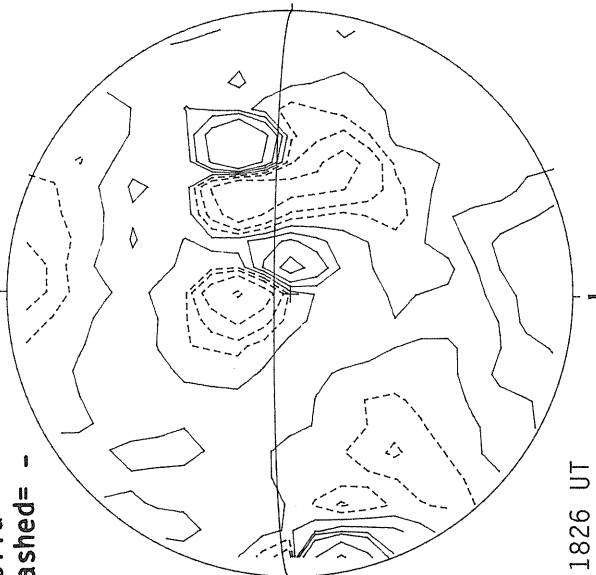
KITT PEAK MAGNETOGRAM

Bright = +
Dark = -



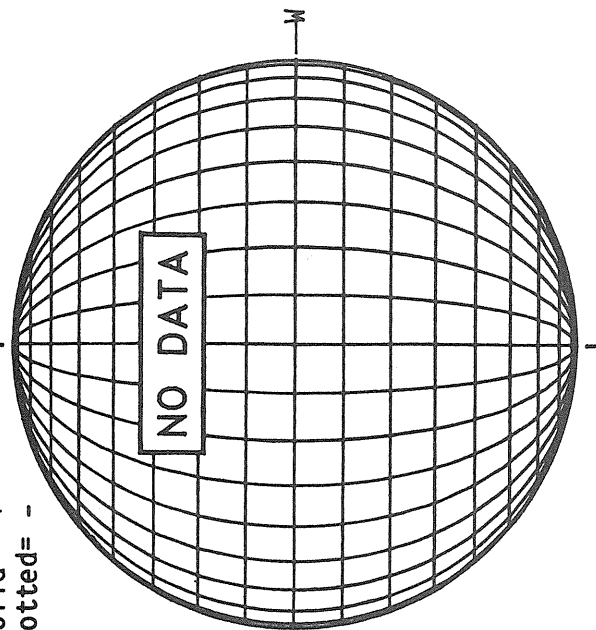
STANFORD MAGNETOGRAM

Solid = +
Dashed = -

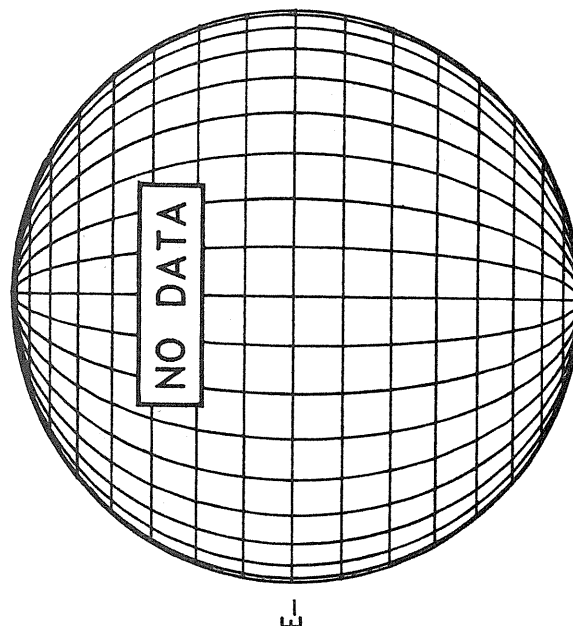


MT. WILSON MAGNETOGRAM

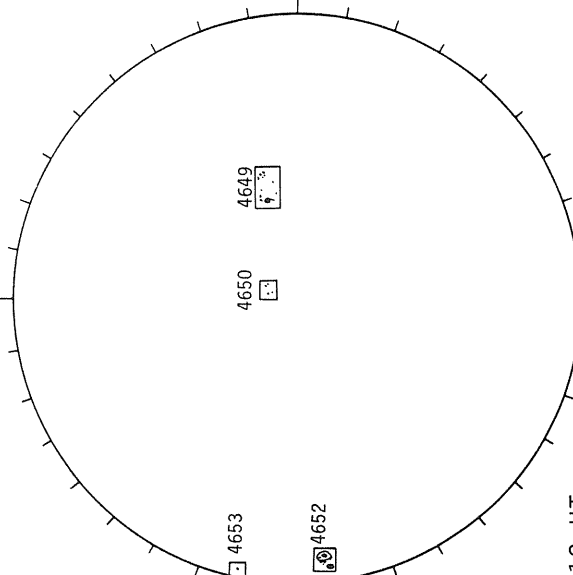
Solid = +
Dotted = -



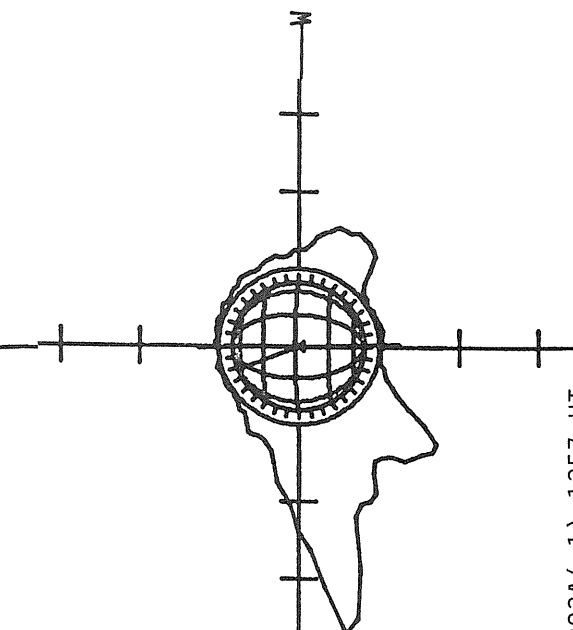
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

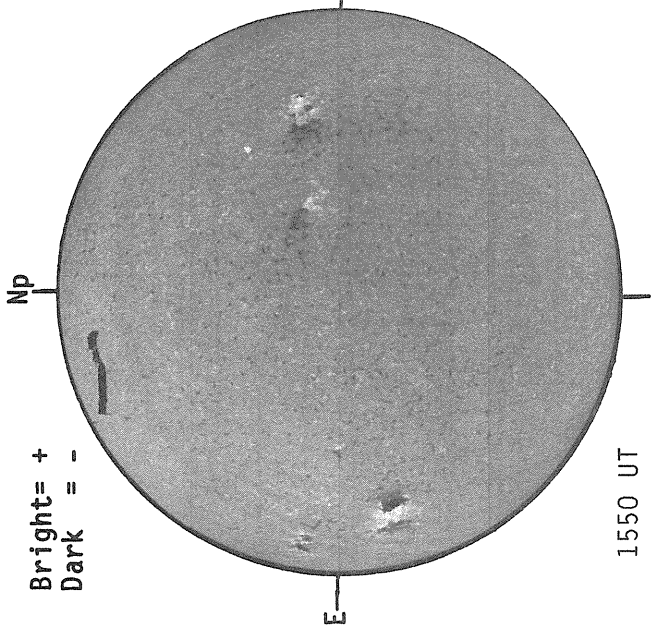


— 5303A(x1) 1357 UT
xxxx 5694A(x6) 1429 UT
No 5694A Activity Today

M A Y 09, 1985 (P -22.43, B = -3.30, $L_0 = 63.71$)

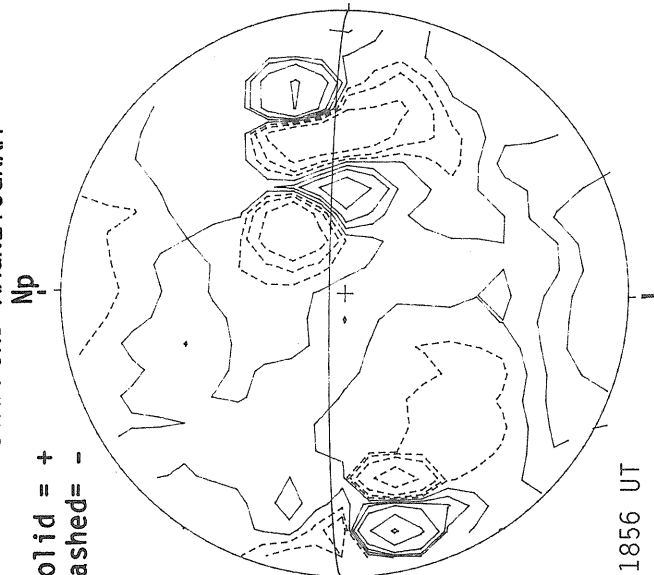
KITT PEAK MAGNETOGRAM

Bright = +
Dark = -



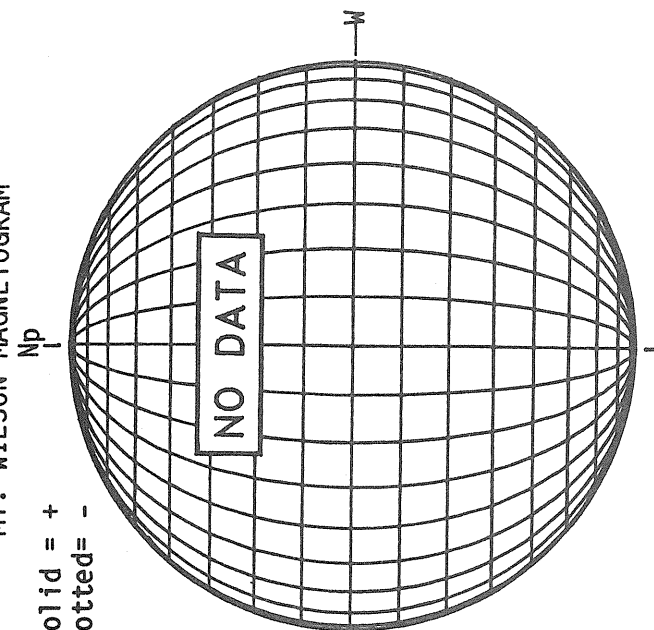
STANFORD MAGNETOGRAM

Solid = +
Dashed = -

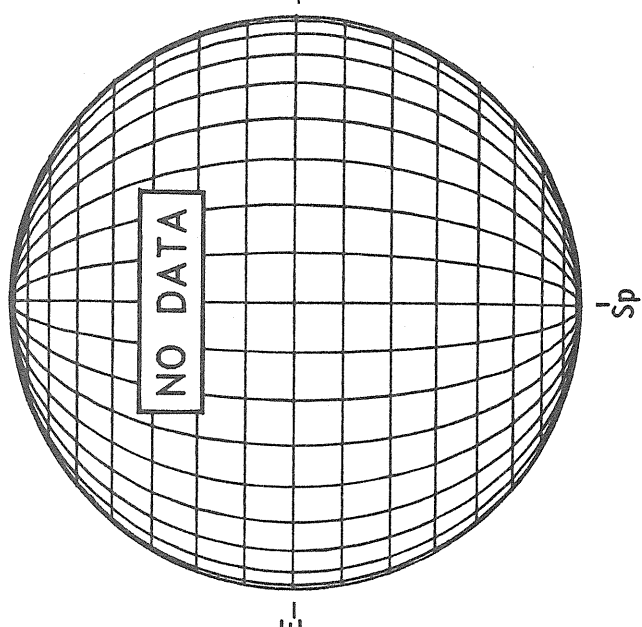


MT. WILSON MAGNETOGRAM

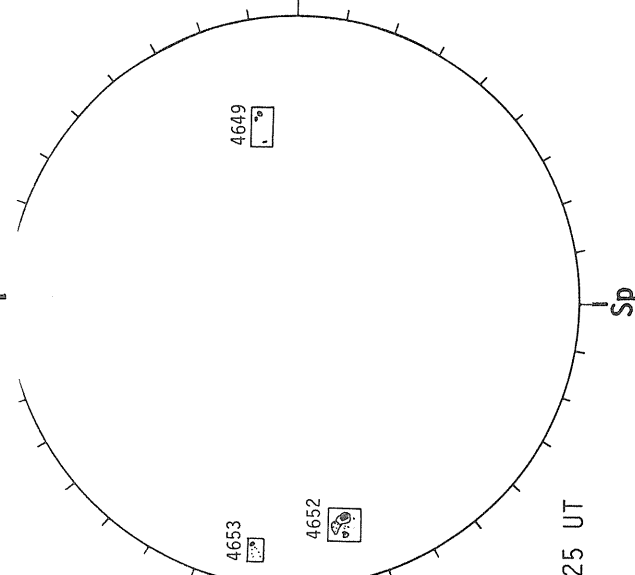
Solid = +
Dotted = -



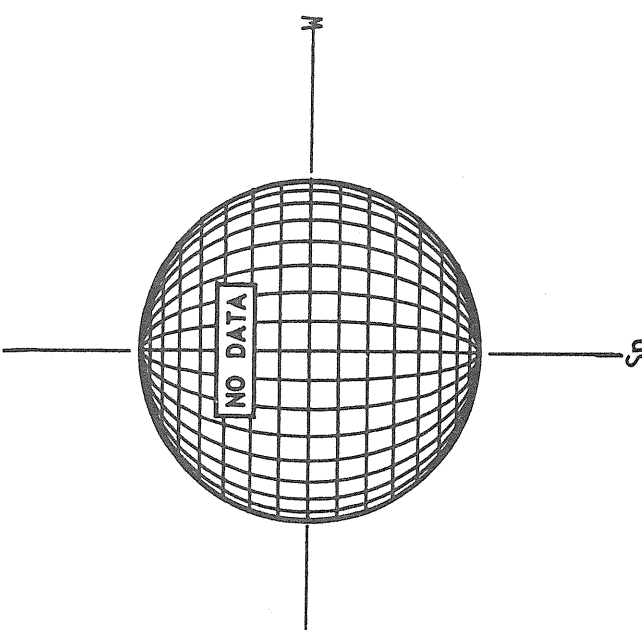
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

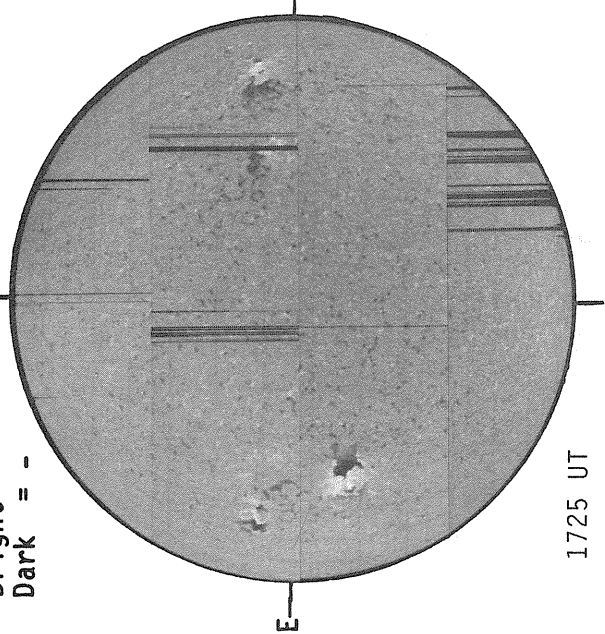


M A Y 10, 1 9 8 5 (P -22.19, B₀ = -3.19, L₀ = 50.49)

KITT PEAK MAGNETOGRAM

Bright= +
Dark = -

Np

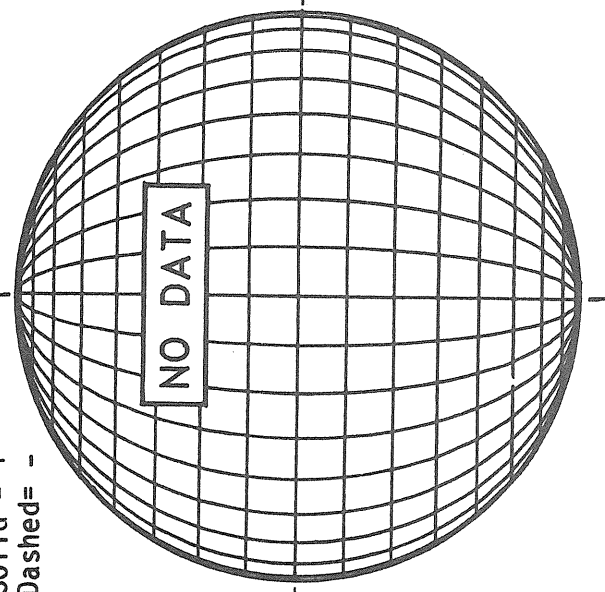


1725 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

Np

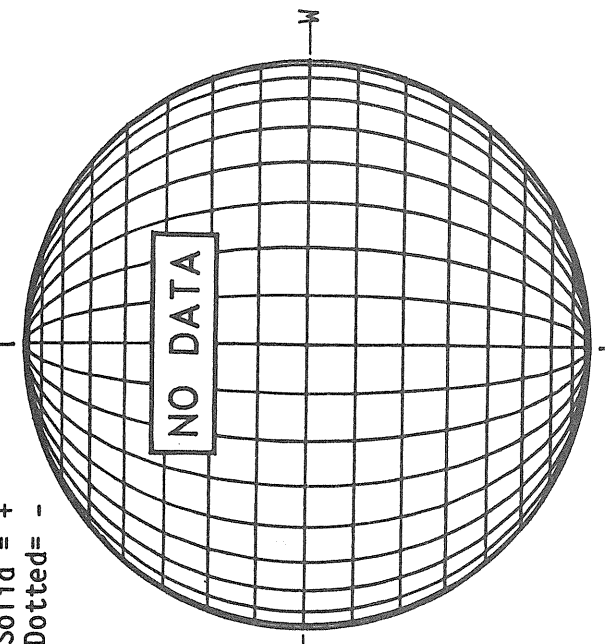


NO DATA

MT. WILSON MAGNETOGRAM

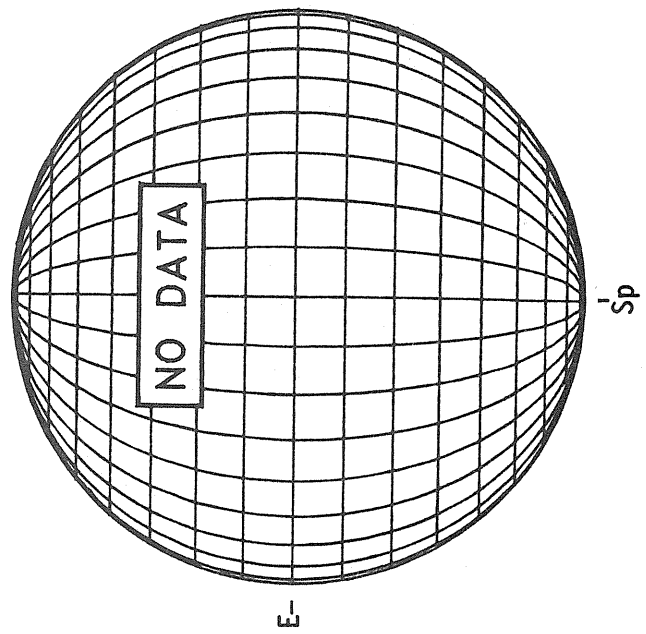
Solid = +
Dotted = -

Np



NO DATA

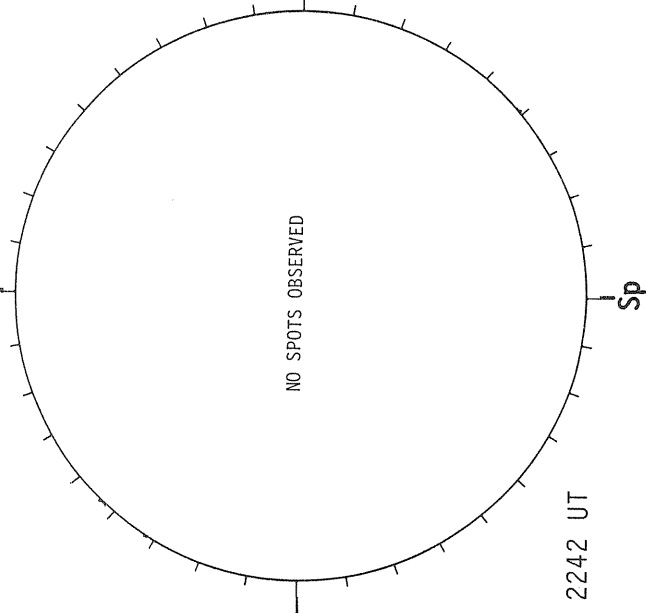
SACRAMENTO PEAK H-ALPHA



NO DATA

E-

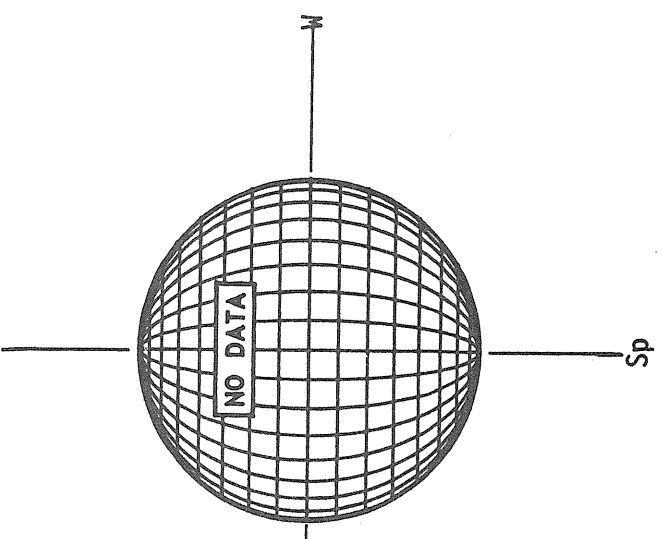
HOLLOMAN SUNSPOTS



NO SPOTS OBSERVED

2242 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



NO DATA

Sp

Sp

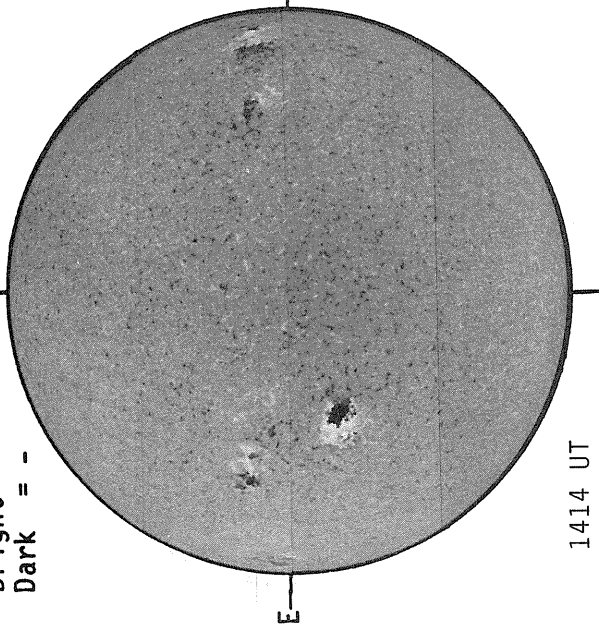
Sp

M A Y 11, 1 9 8 5 (P -21.94, B₀ = -3.09, L₀ = 37.27)

KITT PEAK MAGNETOGRAM

Np

Bright = +
Dark = -

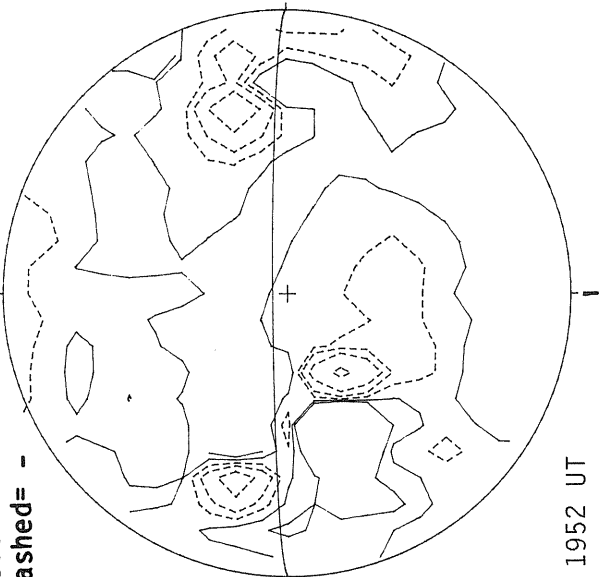


1414 UT

STANFORD MAGNETOGRAM₀

Np

Solid = +
Dashed = -

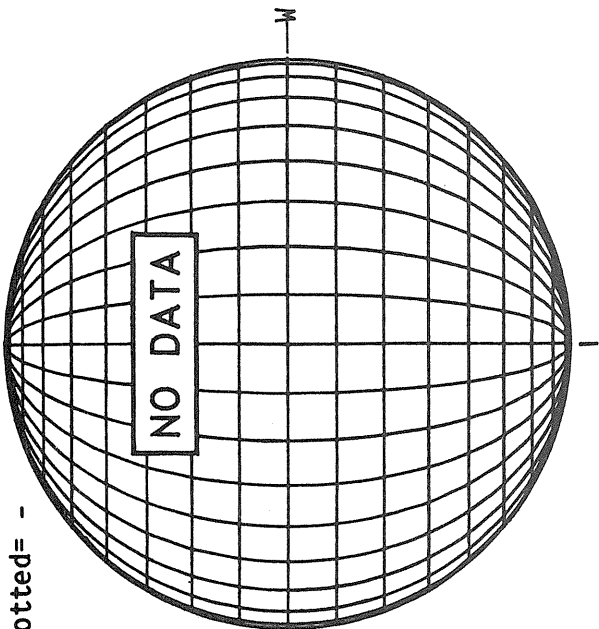


1952 UT

MT. WILSON MAGNETOGRAM

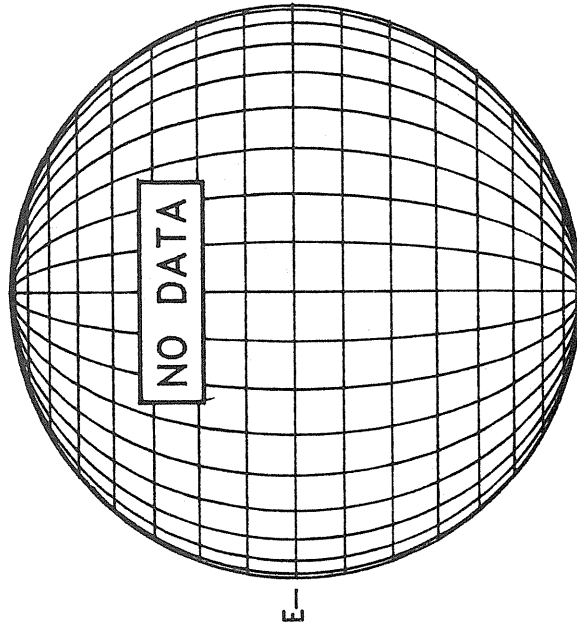
Np

Solid = +
Dotted = -



1952 UT

SACRAMENTO PEAK H-ALPHA

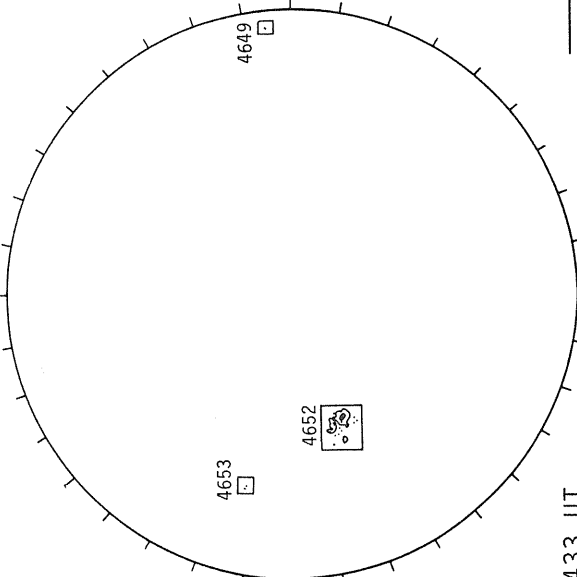


Np

NO DATA

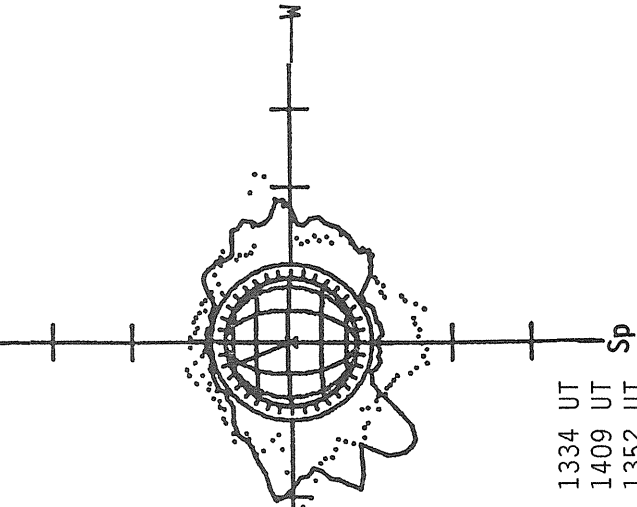
1433 UT

HOLLOMAN SUNSPOTS



1433 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



Np

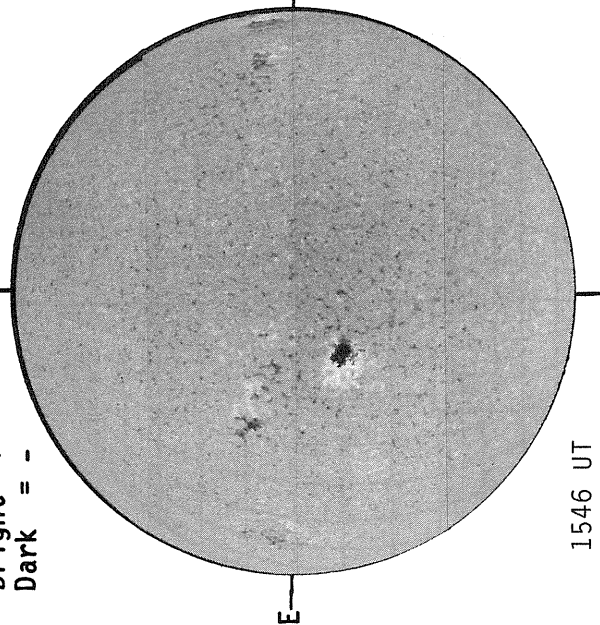
— 5303A(x1) 1334 UT
.... 6374A(x2) 1409 UT
xxxx 5694A(x6) 1352 UT
No 5694A Activity Today

M A Y 12, 1985 (P -21.69, B = -2.98, L₀ = 24.04)

KITT PEAK MAGNETOGRAM

Np

Bright= +
Dark = -

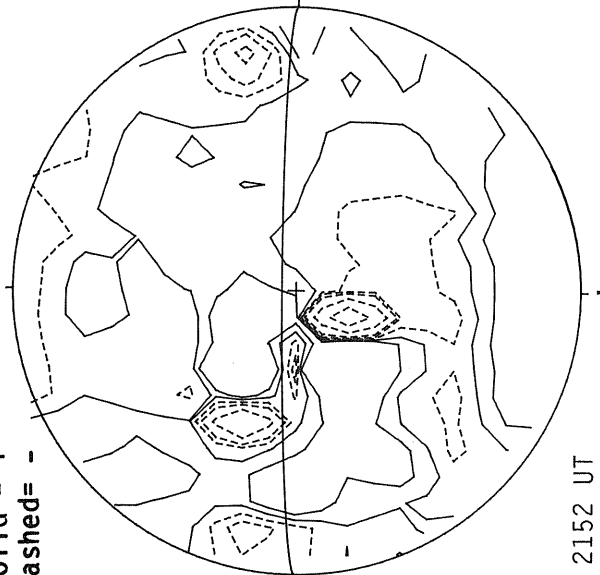


1546 UT

STANFORD MAGNETOGRAM

Np

Solid = +
Dashed = -

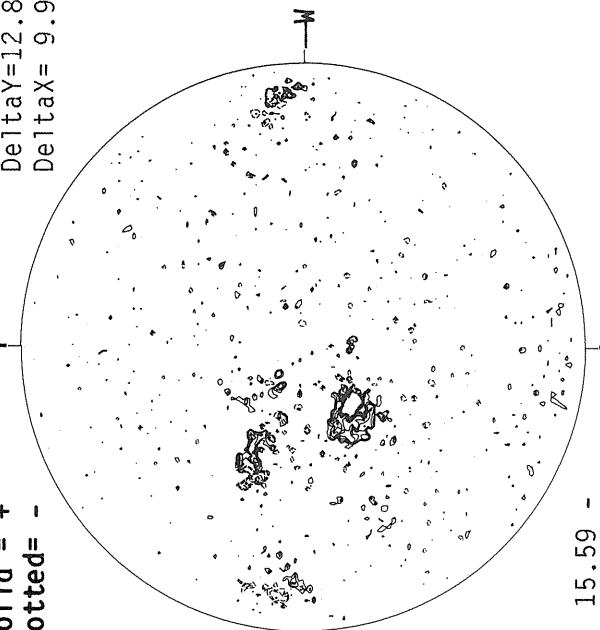


2152 UT

MT. WILSON MAGNETOGRAM

Np

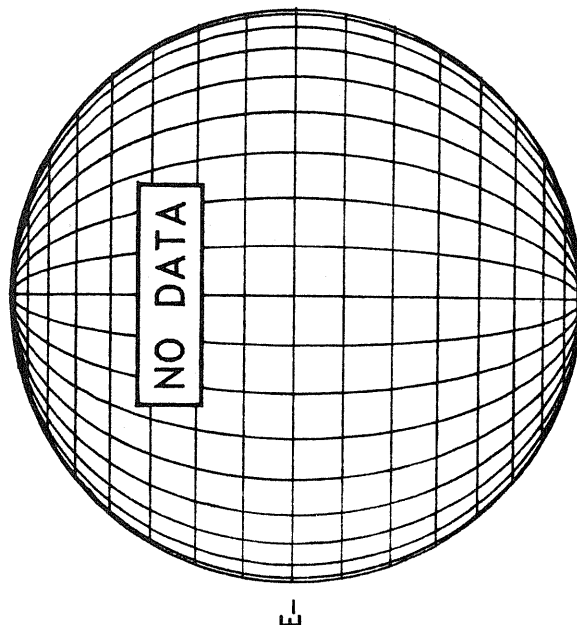
Solid = +
Dotted = -



15.59 -
16.51 UT

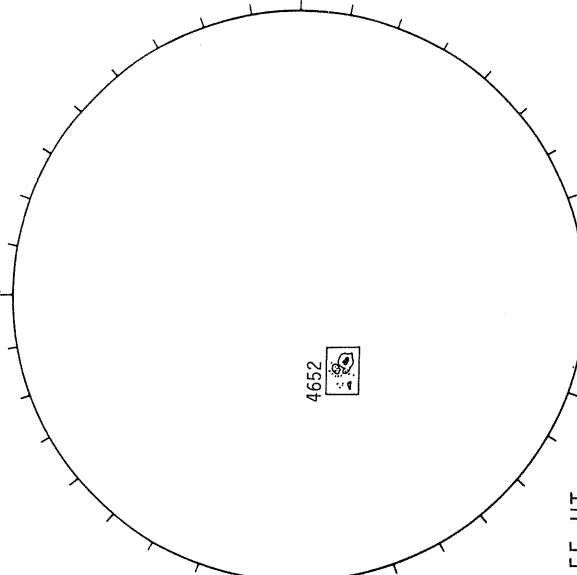
Delta Y = 12.8
Delta X = 9.9

SACRAMENTO PEAK H-ALPHA



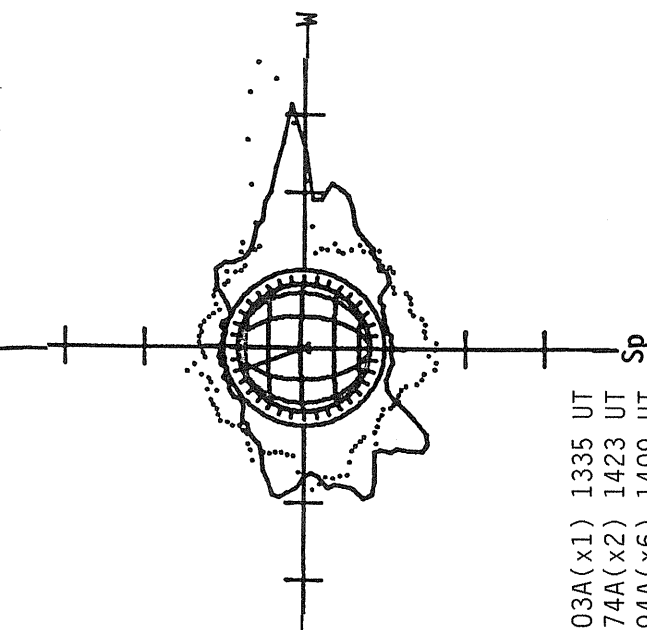
E-

HOLLOMAN SUNSPOTS



1455 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



— 5303A(x1) 1335 UT
.... 6374A(x2) 1423 UT
xxxx 5694A(x6) 1409 UT
No 5694A Activity Today

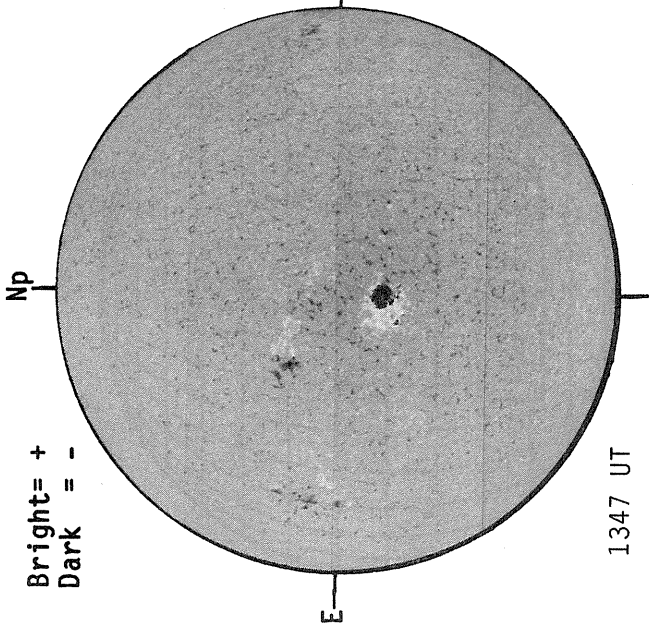
M A Y 13, 1 9 8 5 (P -21.44, B₀ = -2.87, L₀ = 10.82)

40
May 85

Delta Y = 12.4
Delta X = 9.6

KITT PEAK MAGNETOGRAM

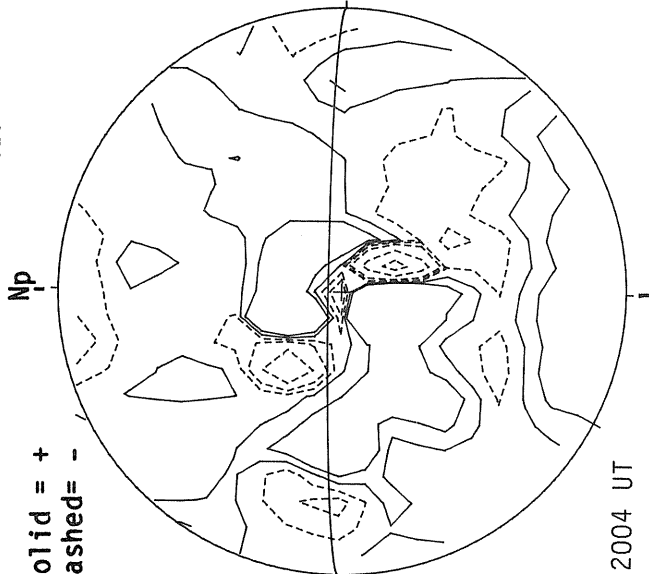
Bright = +
Dark = -



1347 UT

STANFORD MAGNETOGRAM

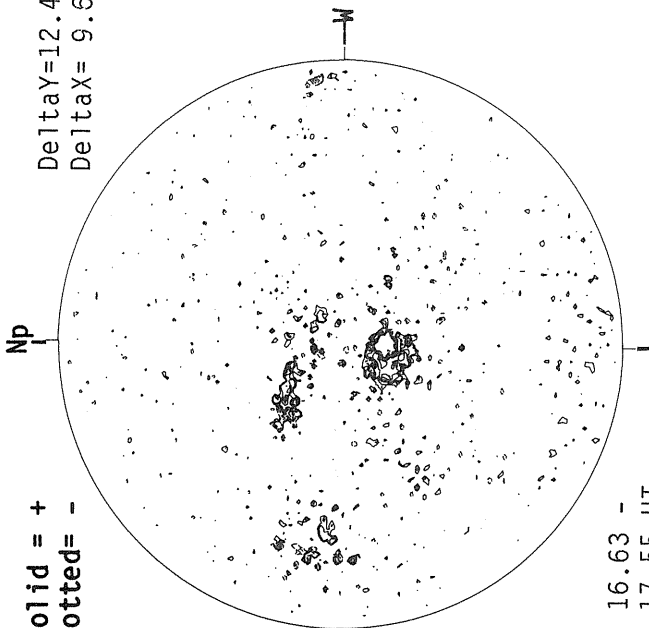
Solid = +
Dashed = -



2004 UT

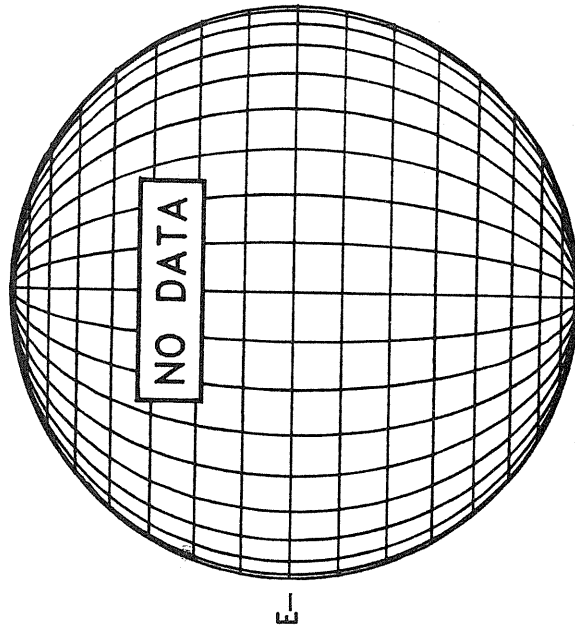
MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -



16.63 -
17.55 UT

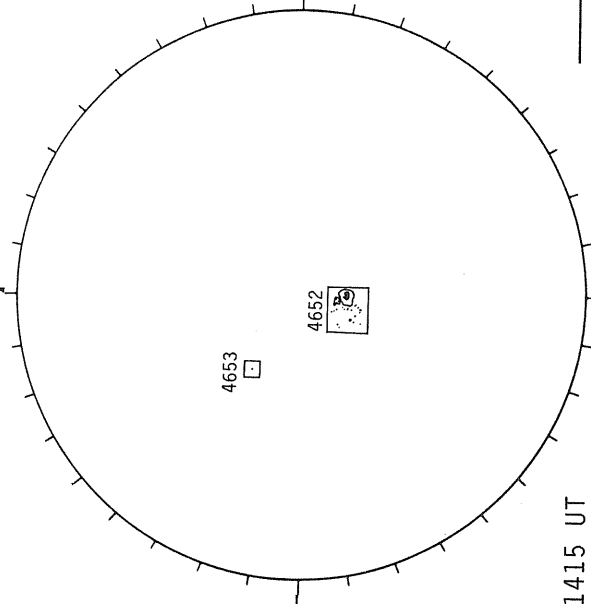
SACRAMENTO PEAK H-ALPHA



E-

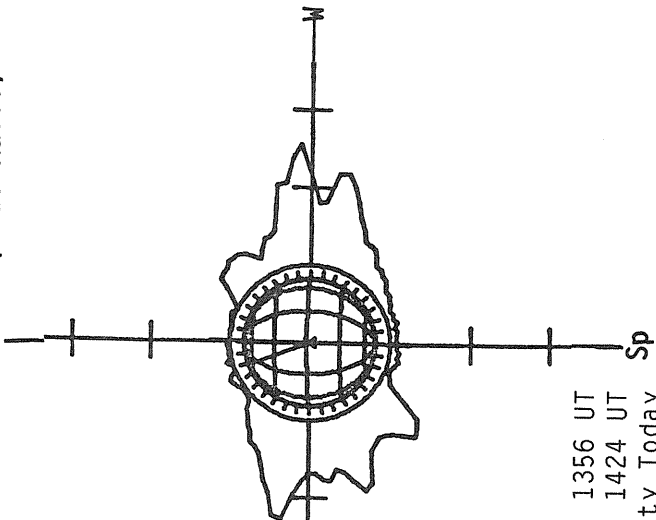
Sp

HOLLOMAN SUNSPOTS



1415 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



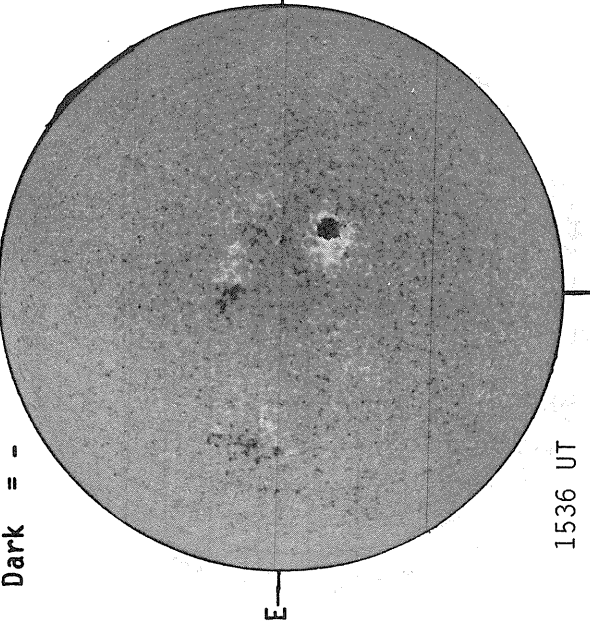
— 5303A(x1) 1356 UT
xxxx 5694A(x6) 1424 UT
No 5694A Activity Today

M A Y 14, 1985 (P -21.17, B =-2.76, L₀ = 357.60)

KITT PEAK MAGNETOGRAM

Np

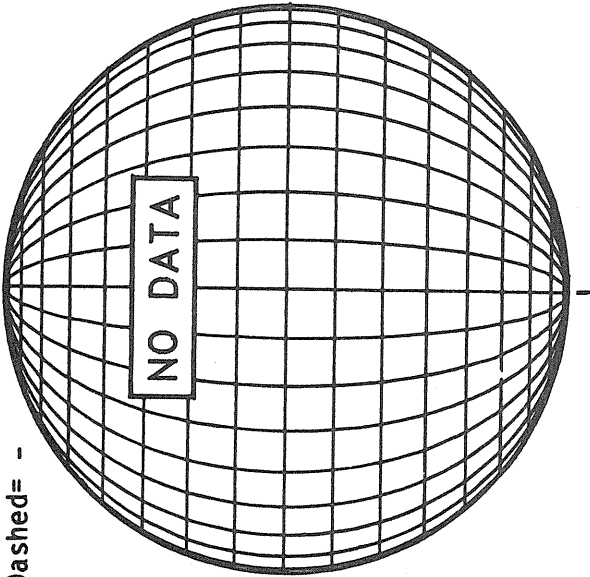
Bright= +
Dark = -



STANFORD MAGNETOGRAM₀

Np

Solid = +
Dashed = -

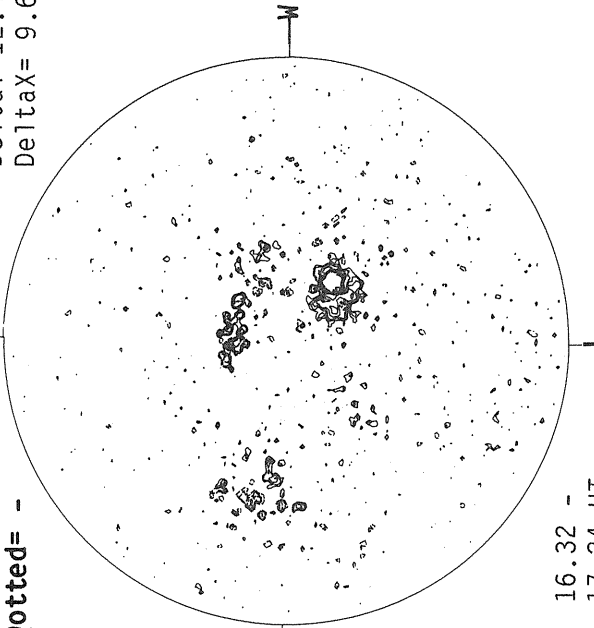


MT. WILSON MAGNETOGRAM

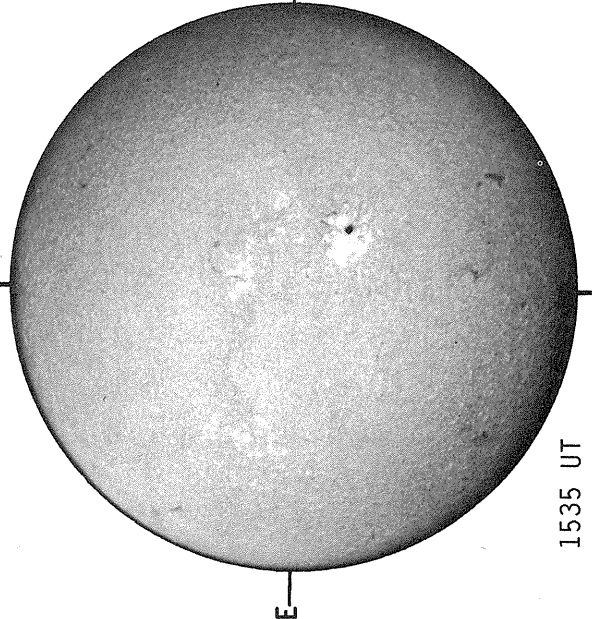
Np

Solid = +
Dotted = -

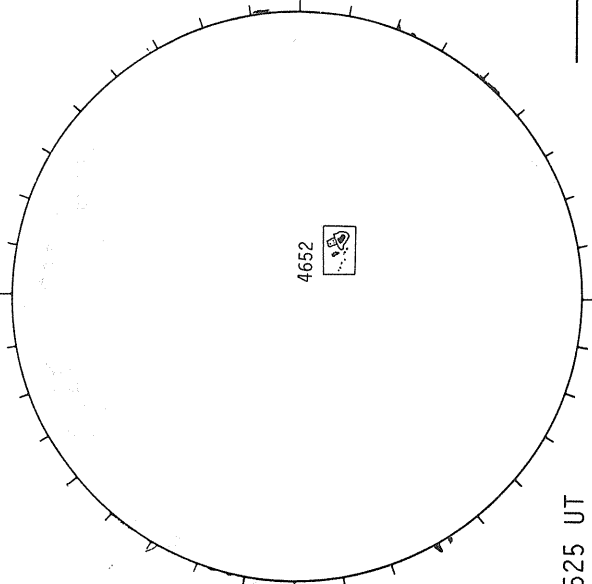
DeltaY=12.4
DeltaX= 9.6



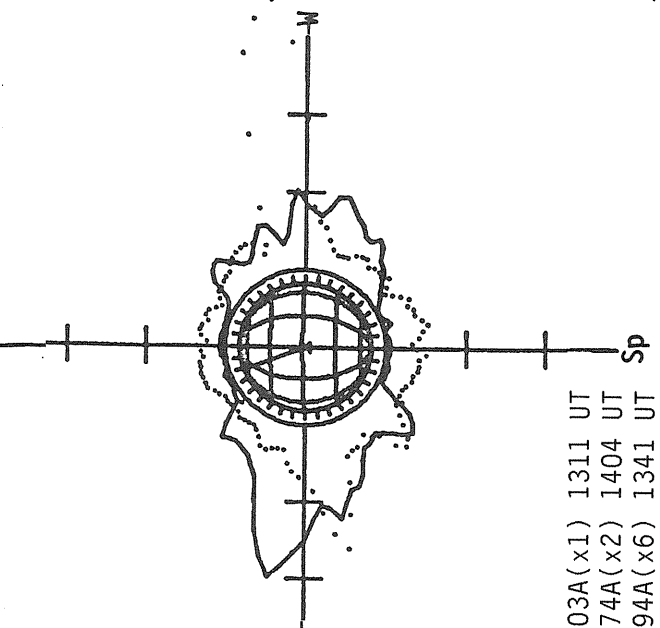
BOULDER H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



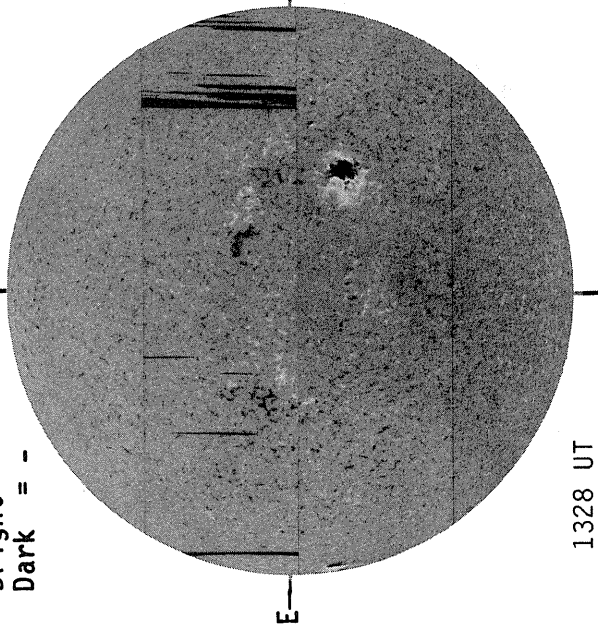
— 5303A(x1) 1311 UT
.... 6374A(x2) 1404 UT
xxxx 5694A(x6) 1341 UT
No 5694A Activity Today

M A Y 15, 1 9 8 5 (P -20.90, B₀ = -2.65, L₀ = 344.37)

KITT PEAK MAGNETOGRAM

Np

Bright = +
Dark = -

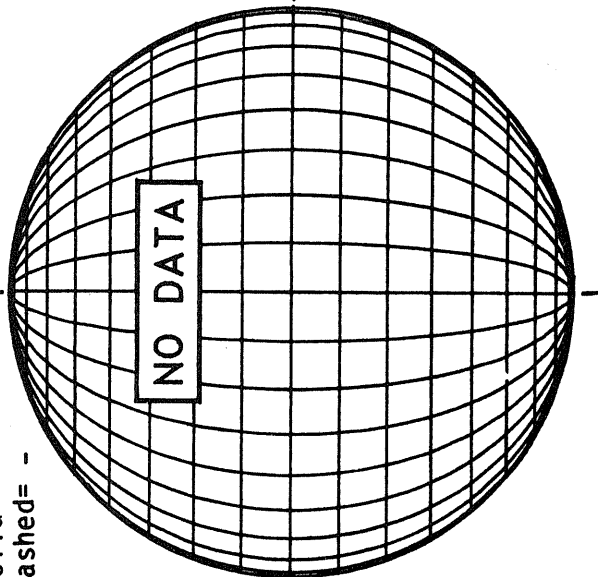


1328 UT

STANFORD MAGNETOGRAM

Np

Solid = +
Dashed = -

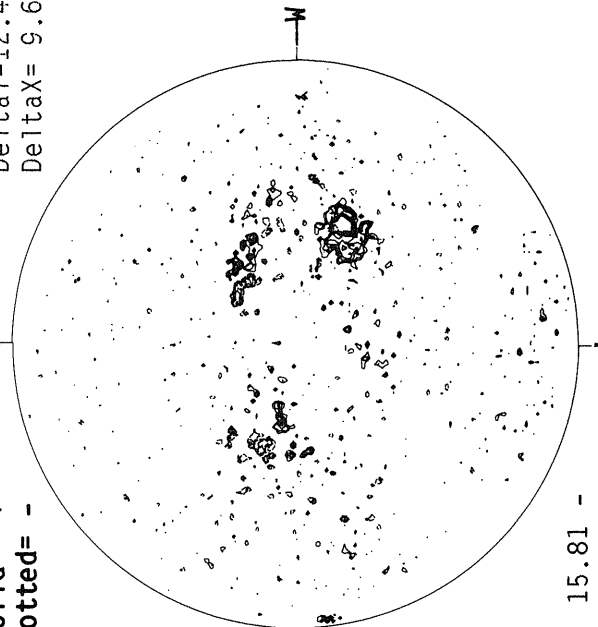


1410 UT

MT. WILSON MAGNETOGRAM

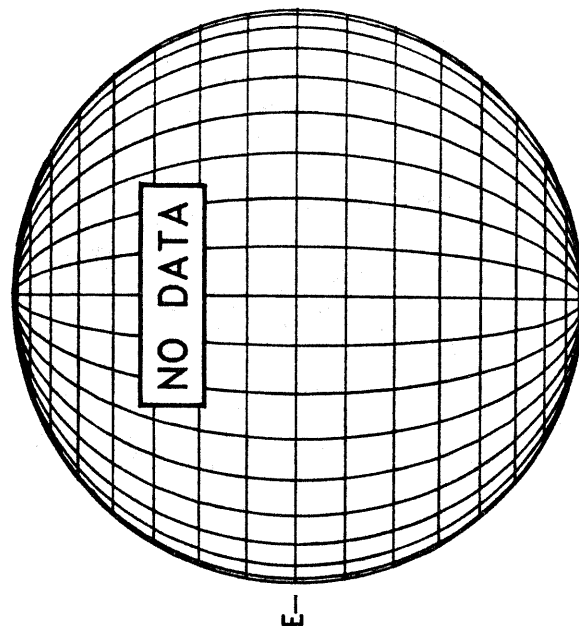
Np

Solid = +
Dotted = -



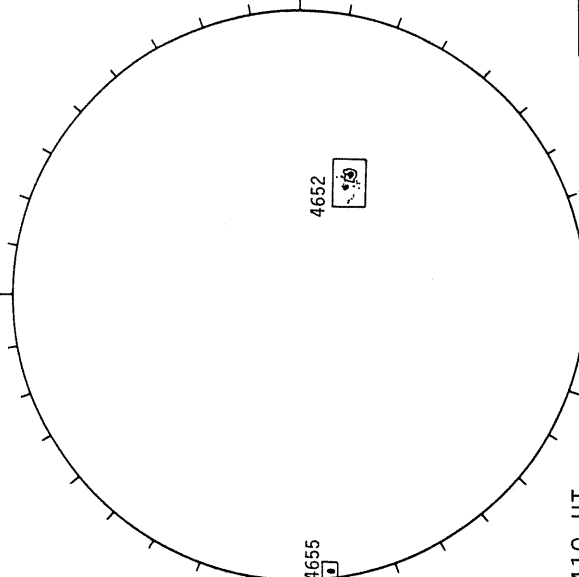
15.81 -
16.73 UT

SACRAMENTO PEAK H-ALPHA



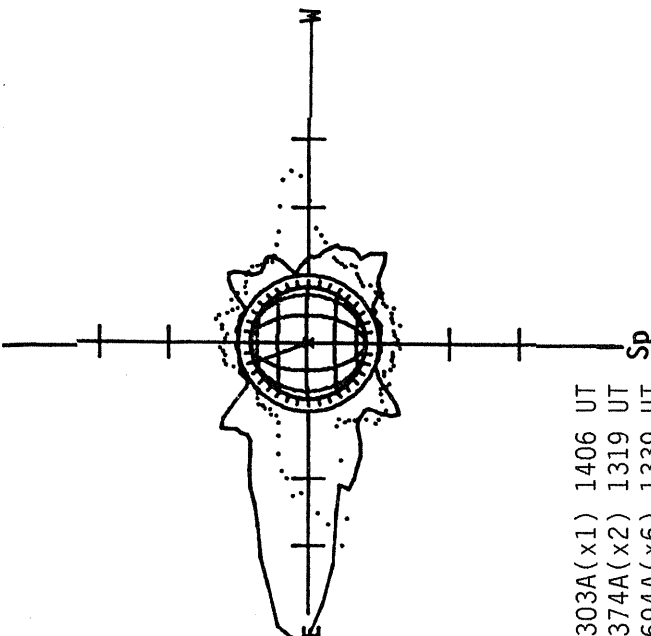
Sp

HOLLOMAN SUNSPOTS



Sp

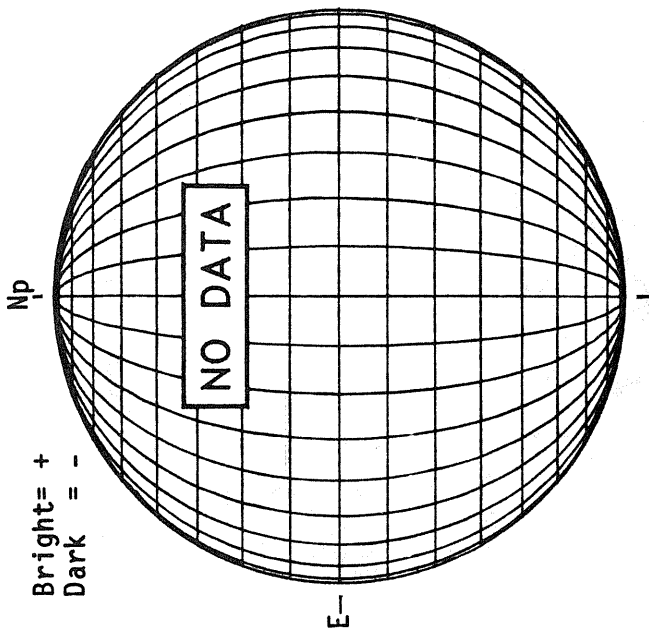
SACRAMENTO PEAK CORONA (1.15 Radii)



— 5303A(x1) 1406 UT
.... 6374A(x2) 1319 UT
xxxx 5694A(x6) 1339 UT
No 5694A Activity Today

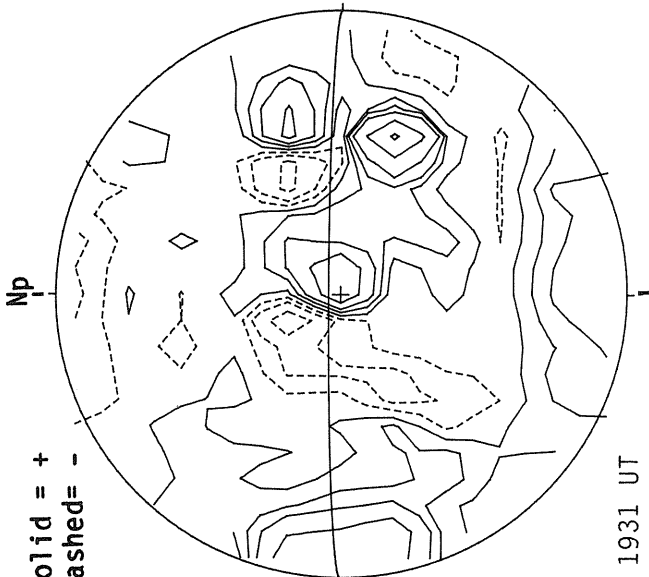
M A Y 16, 1 9 8 5 (P -20.62, B₀ = -2.53, L₀ = 331.15)

KITT PEAK MAGNETOGRAM



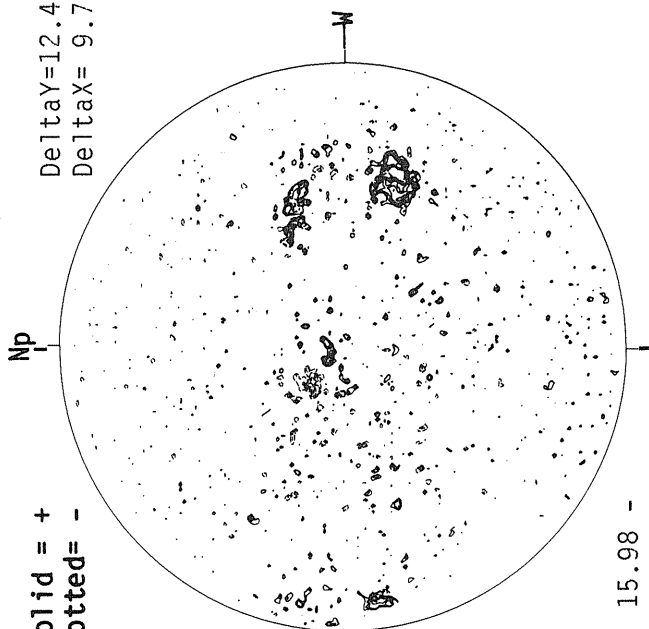
Bright = +
Dark = -

STANFORD MAGNETOGRAM



Solid = +
Dashed = -

MT. WILSON MAGNETOGRAM



Solid = +
Dotted = -

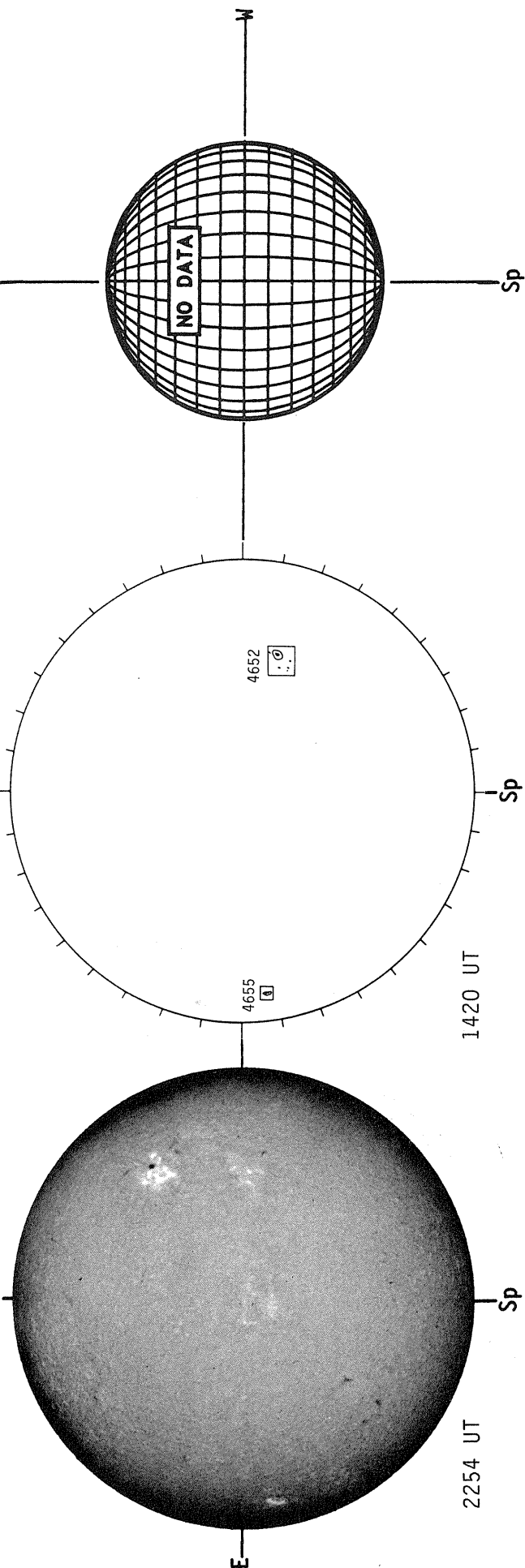
Delta Y = 12.4
Delta X = 9.7

15.98 -
16.89 UT

SACRAMENTO PEAK CORONA (1.15 Radii)

BOULDER SUNSPOTS

SACRAMENTO PEAK H-ALPHA

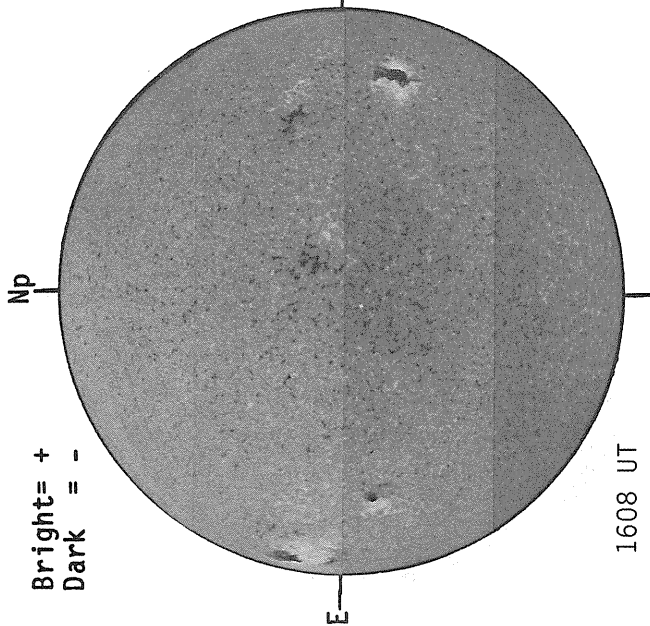


M A Y 17, 1 9 8 5 (P -20.34, E₀ = -2.42, L₀ = 317.92)

44
May 85

KITT PEAK MAGNETOGRAM

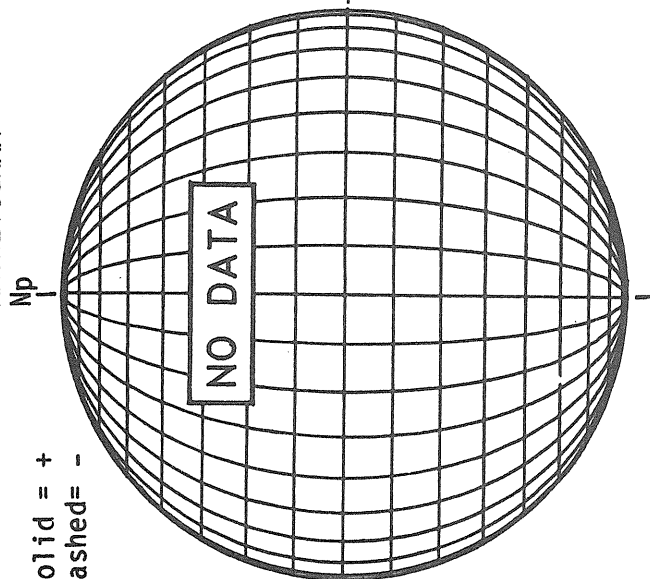
Bright= +
Dark = -



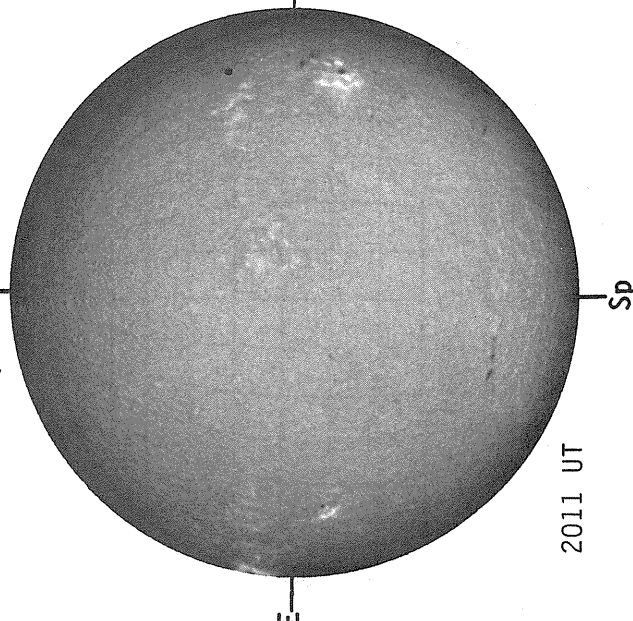
1608 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

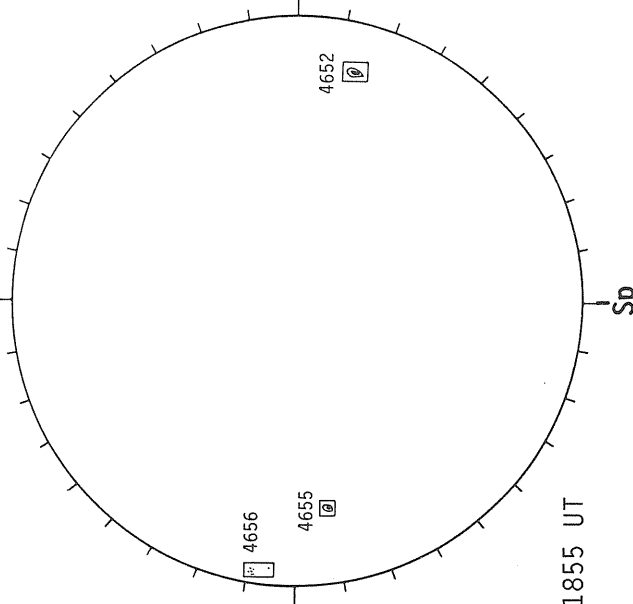


SACRAMENTO PEAK H-ALPHA



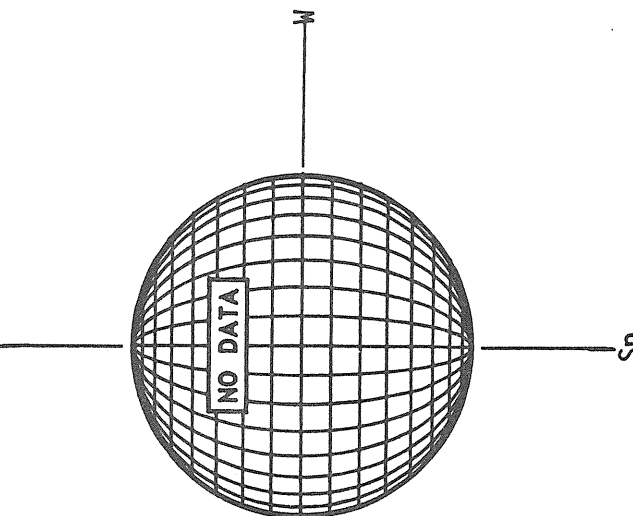
2011 UT

HOLLOMAN SUNSPOTS



1855 UT

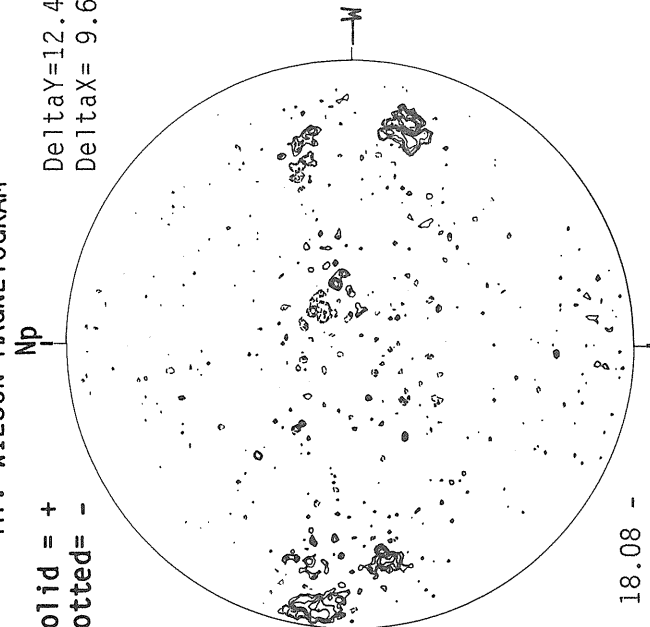
SACRAMENTO PEAK CORONA (1.15 Radii)



18.08 -
19.00 UT

MT. WILSON MAGNETOGRAM

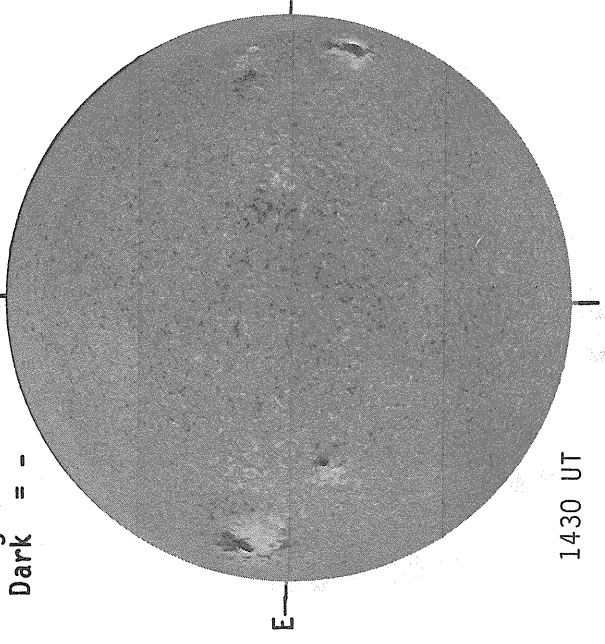
Solid = +
Dotted = -



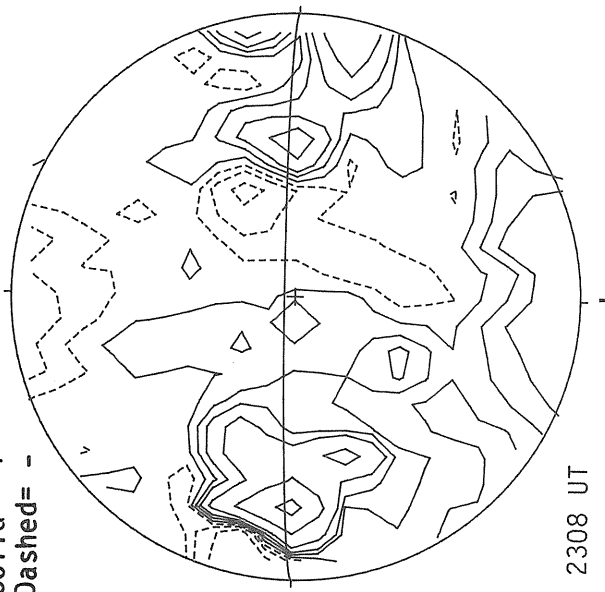
Delta Y = 12.4
Delta X = 9.6

M A Y 18, 1 9 8 5 (P -20.05, B₀ = -2.31, L₀ = 304.69)

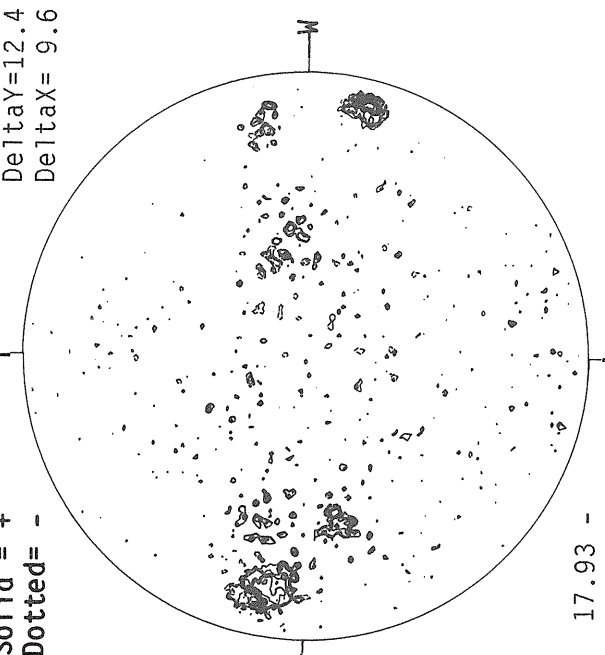
KITT PEAK MAGNETOGRAM
Np
Bright= +
Dark = -



STANFORD MAGNETOGRAM
Np
Solid = +
Dashed = -

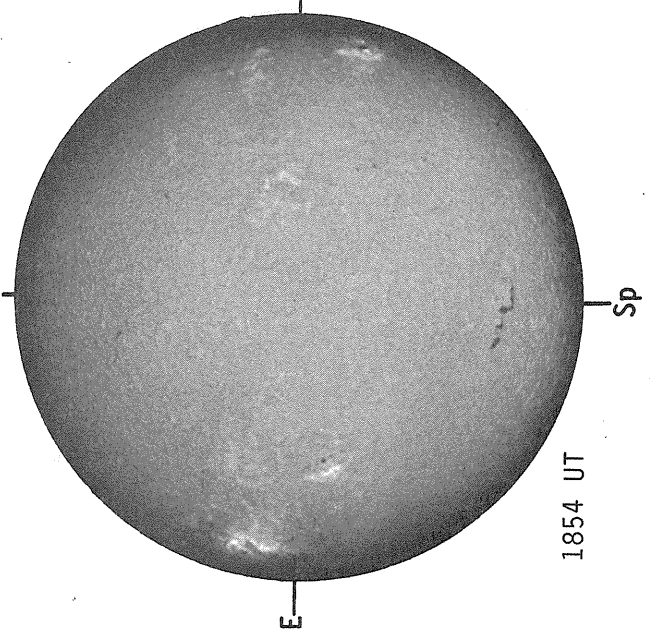


MT. WILSON MAGNETOGRAM
Np
Solid = +
Dotted = -

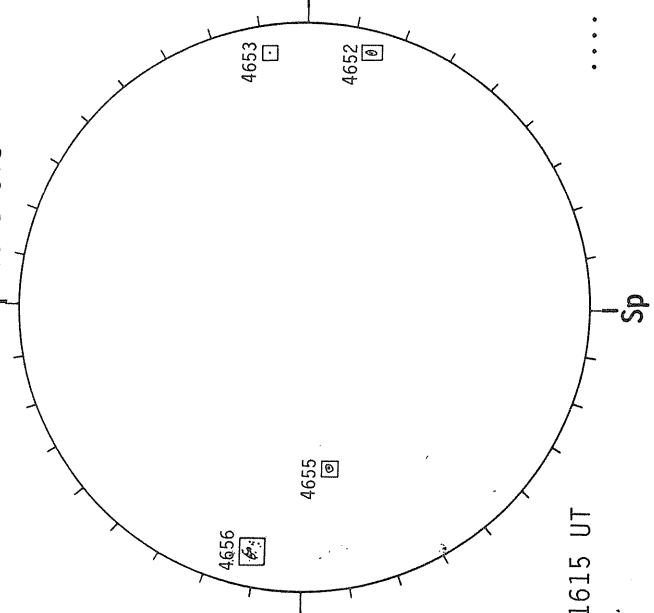


Delta Y = 12.4
Delta X = 9.6

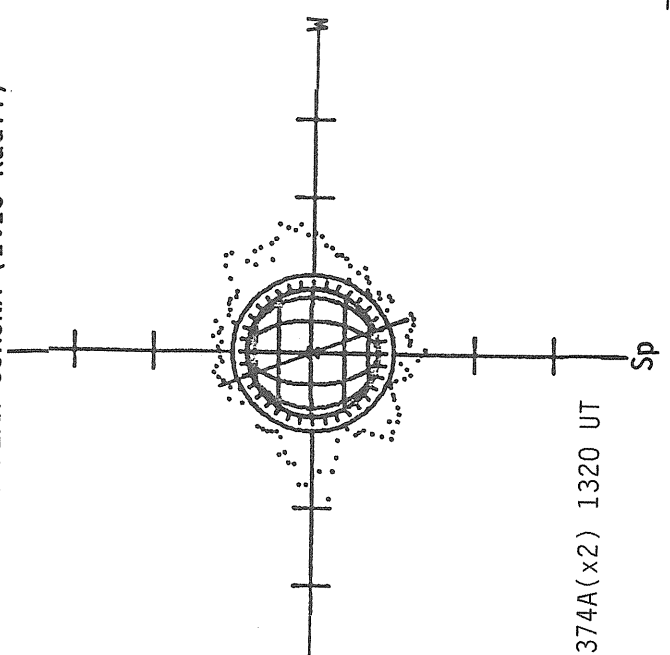
SACRAMENTO PEAK H-ALPHA



HOLLOMAN SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



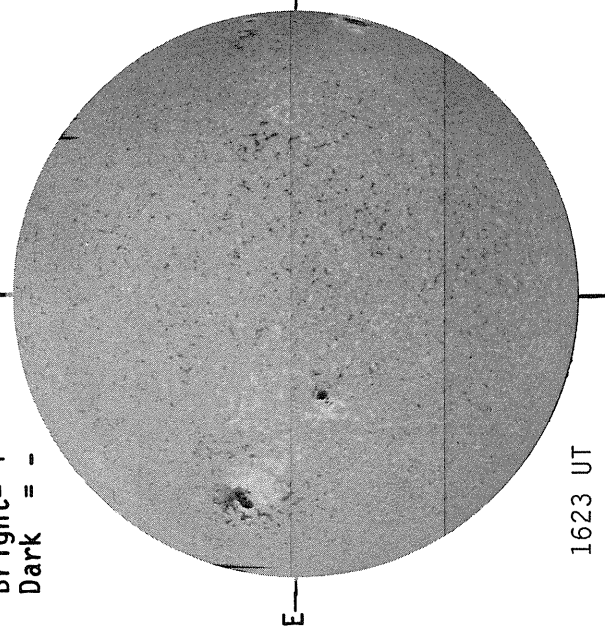
.... 6374A(x2) 1320 UT

M A Y 19, 1 9 8 5 (P -19.75, B₀ = -2.19, L₀ = 291.47)

46
May 85
DeltaY=12.4
DeltaX= 9.6

KITT PEAK MAGNETOGRAM

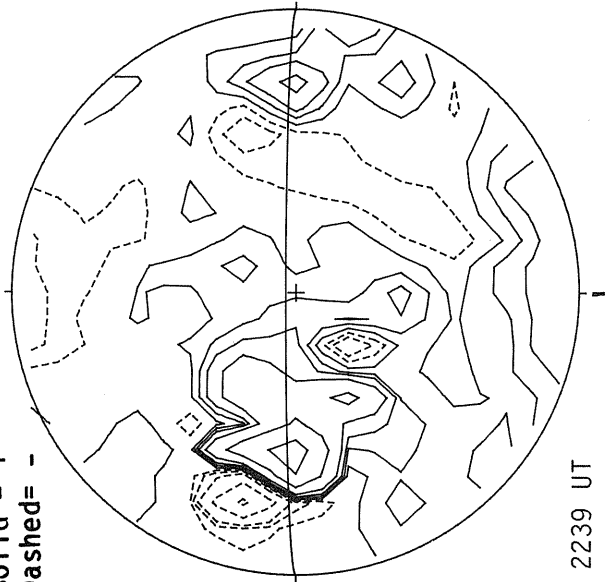
Bright = +
Dark = -



1623 UT

STANFORD MAGNETOGRAM

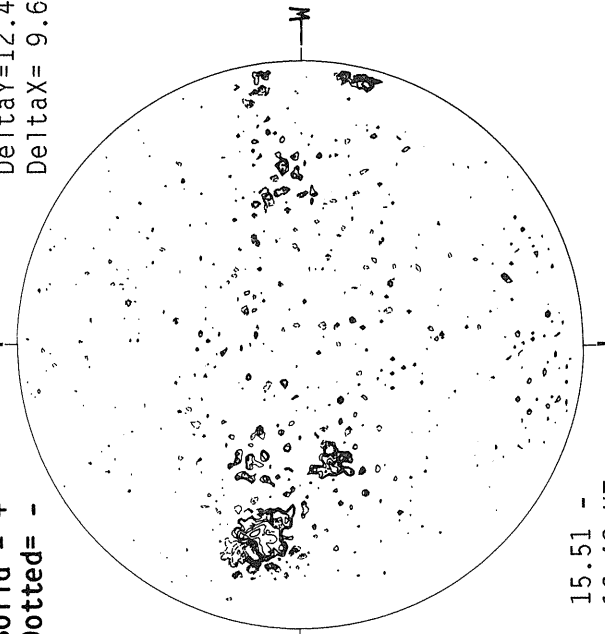
Solid = +
Dashed = -



2239 UT

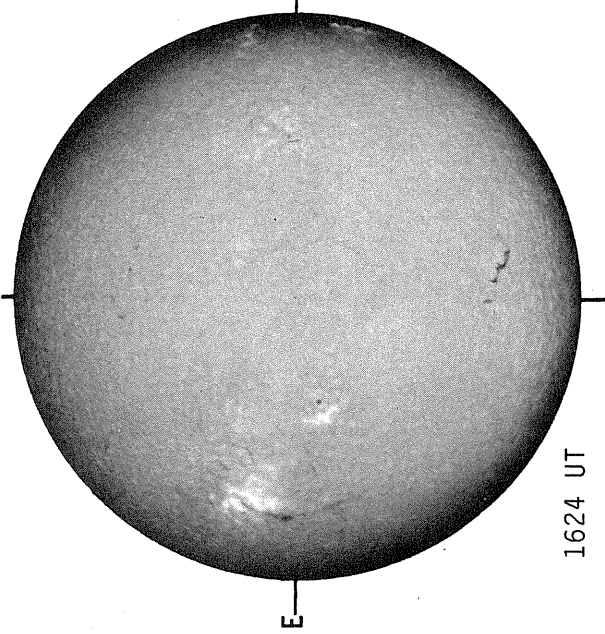
MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -



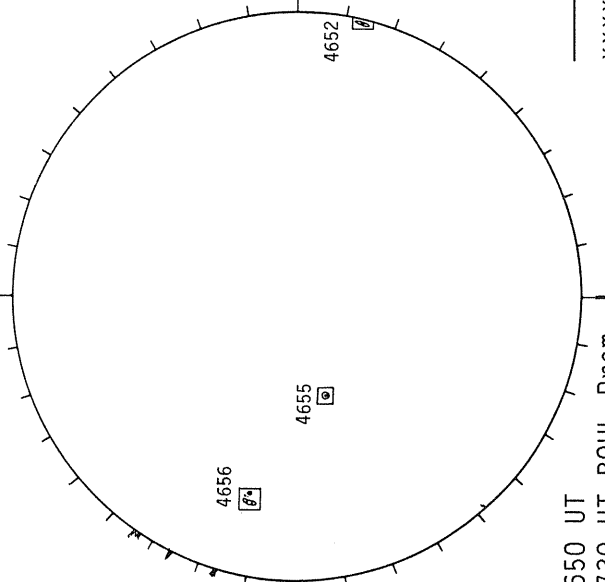
15.51 -
16.43 UT

SACRAMENTO PEAK H-ALPHA



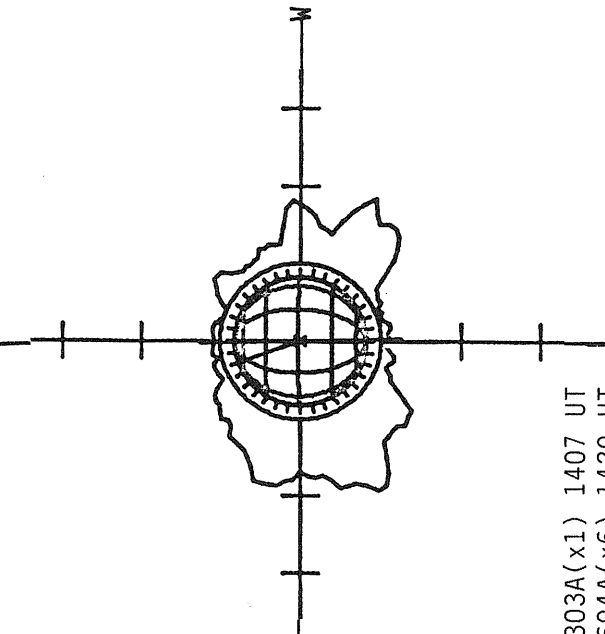
1624 UT

BOULDER SUNSPOTS



1650 UT
1730 UT BOUL Prom

SACRAMENTO PEAK CORONA (1.15 Radii)



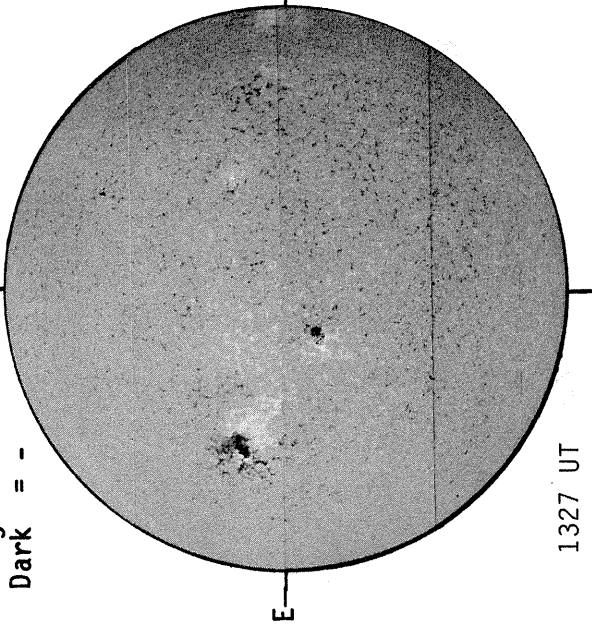
5303A(x1) 1407 UT
xxxx 5694A(x6) 1429 UT
No 5694A Activity Today

M A Y 20, 1 9 8 5 (P -19.45, $B_0 = -2.08$, $L_0 = 278.24$)

KITT PEAK MAGNETOGRAM

Np

Bright = +
Dark = -

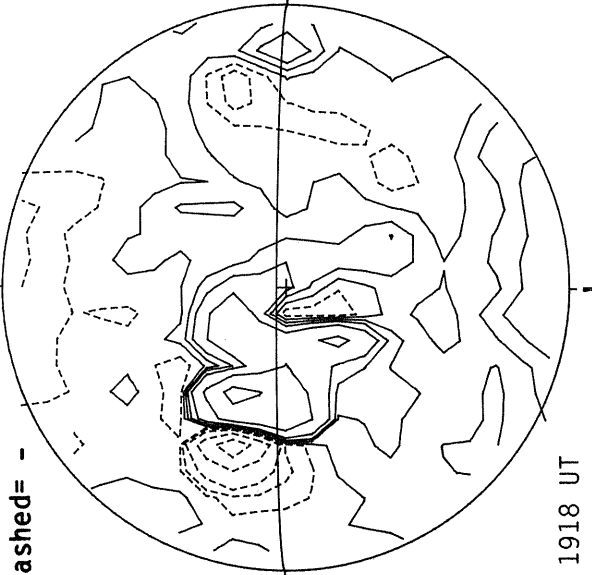


1327 UT

STANFORD MAGNETOGRAM

Np

Solid = +
Dashed = -

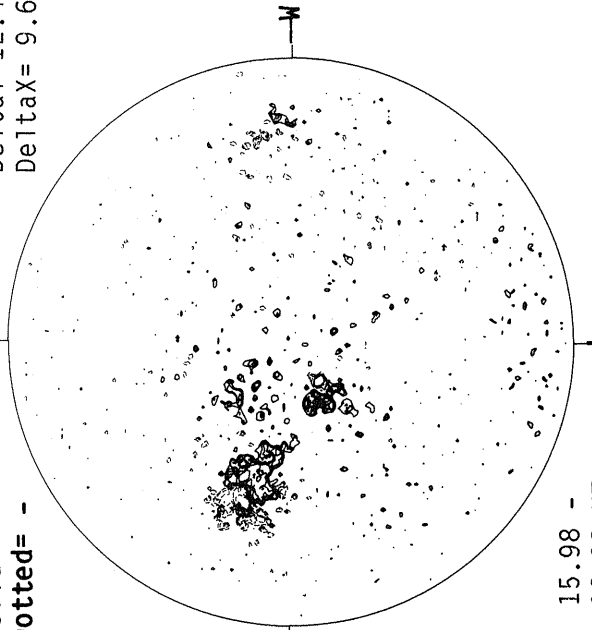


1918 UT

MT. WILSON MAGNETOGRAM

Np

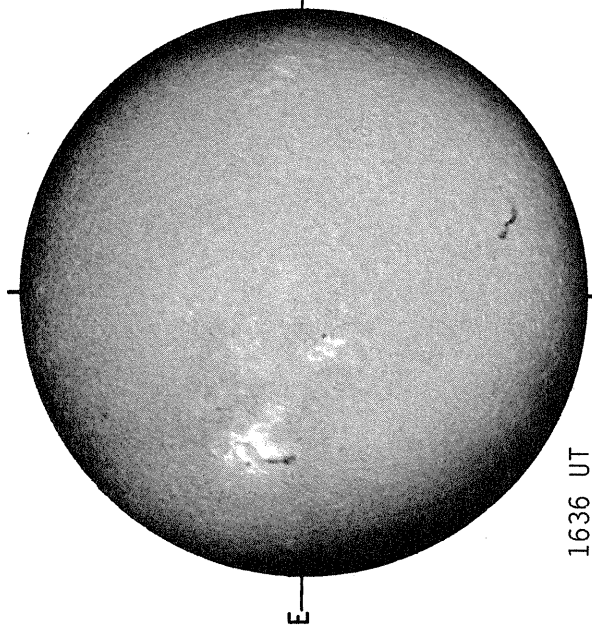
Solid = +
Dotted = -



15.98 -
16.90 UT

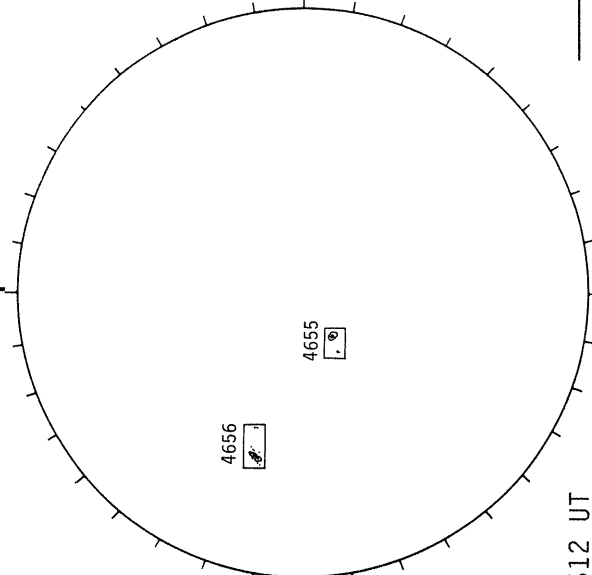
Delta Y = 12.4
Delta X = 9.6

SACRAMENTO PEAK H-ALPHA



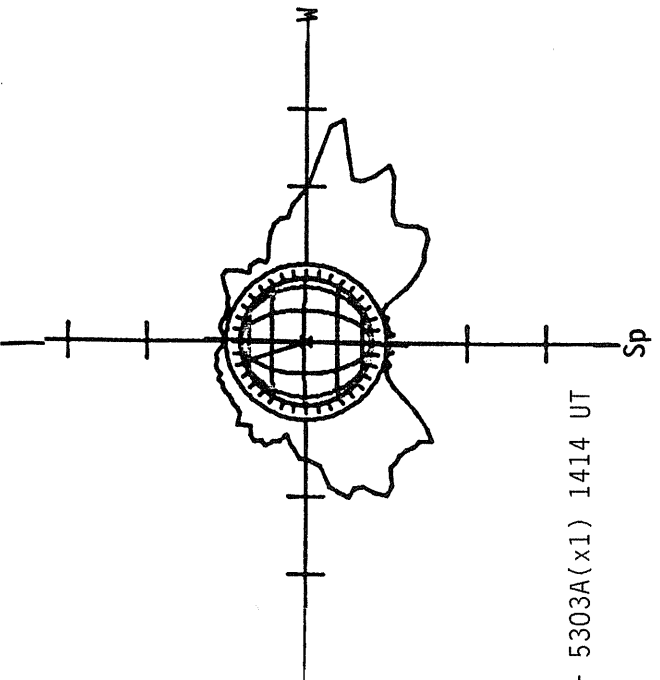
1636 UT

HOLLOMAN SUNSPOTS



1512 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



5303A(x1) 1414 UT

Sp

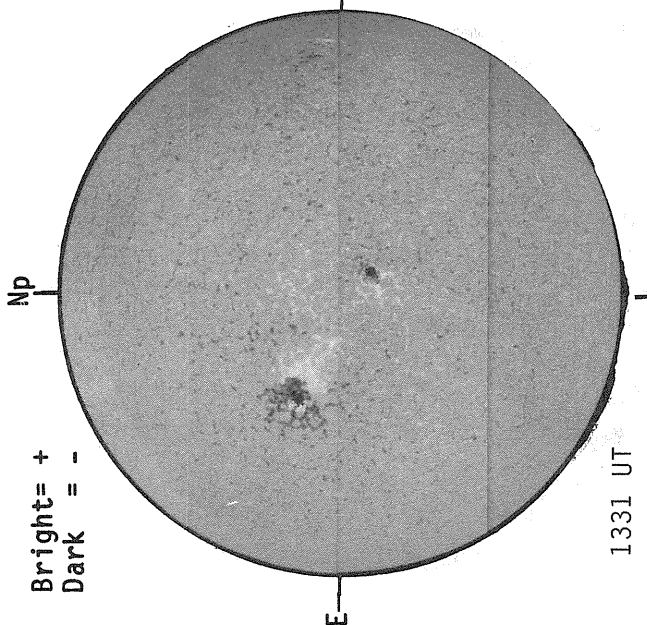
Sp

M A Y 21, 1 9 8 5 (P -19.14, B₀ = -1.97, L₀ = 265.01)

48
May 85

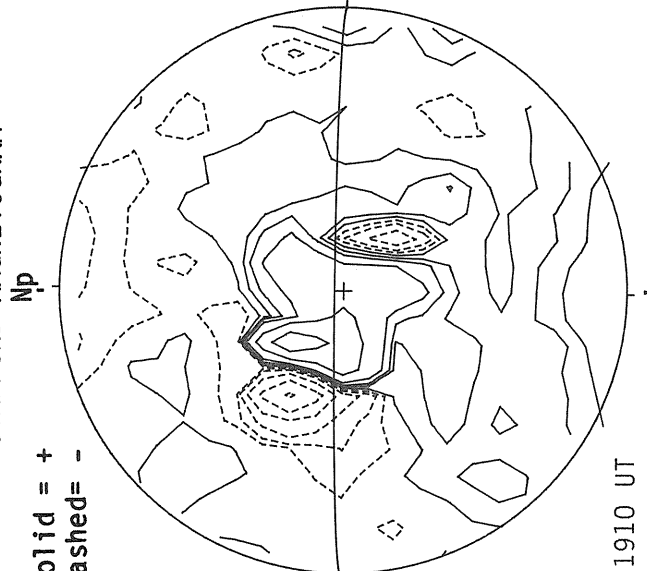
KITT PEAK MAGNETOGRAM

Bright = +
Dark = -



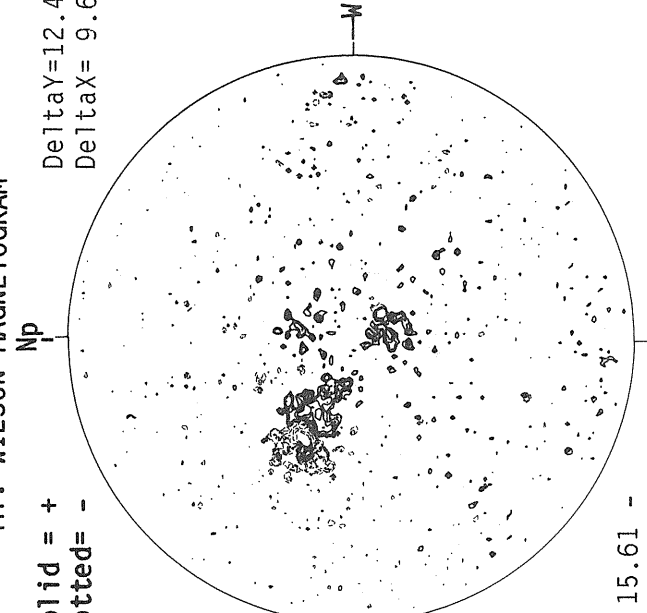
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



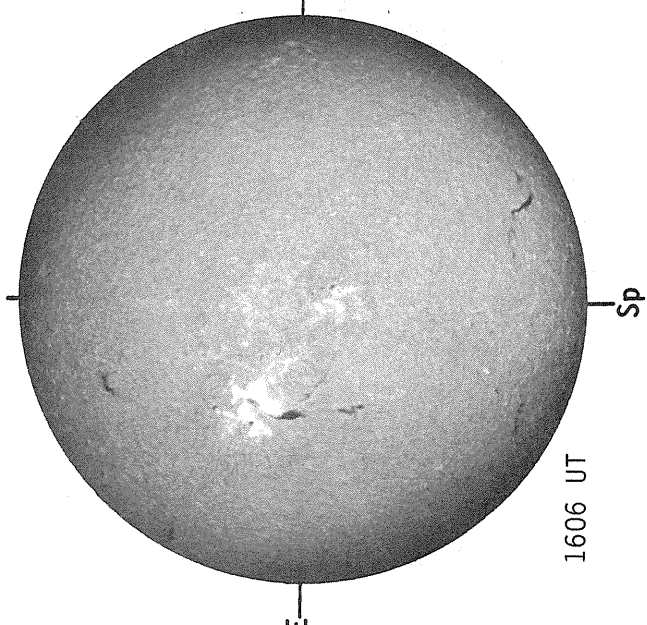
MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -

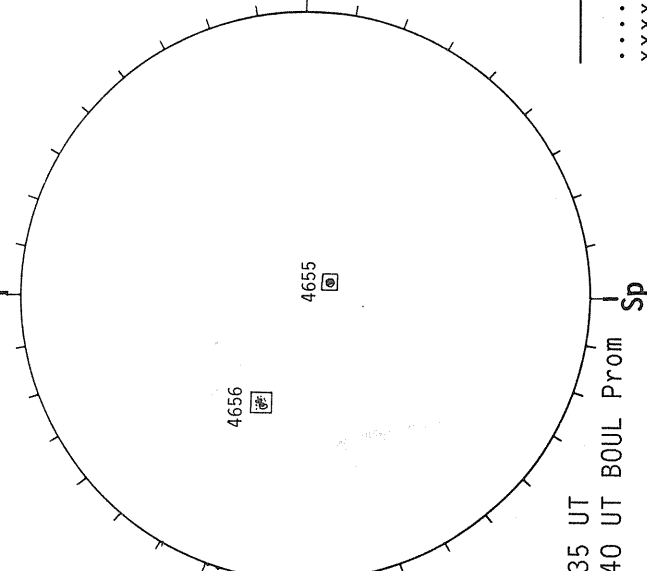


Delta Y = 12.4
Delta X = 9.6

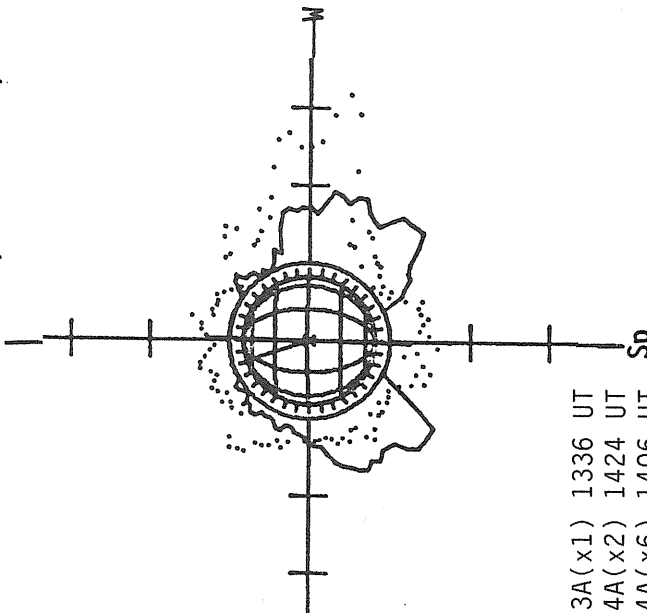
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

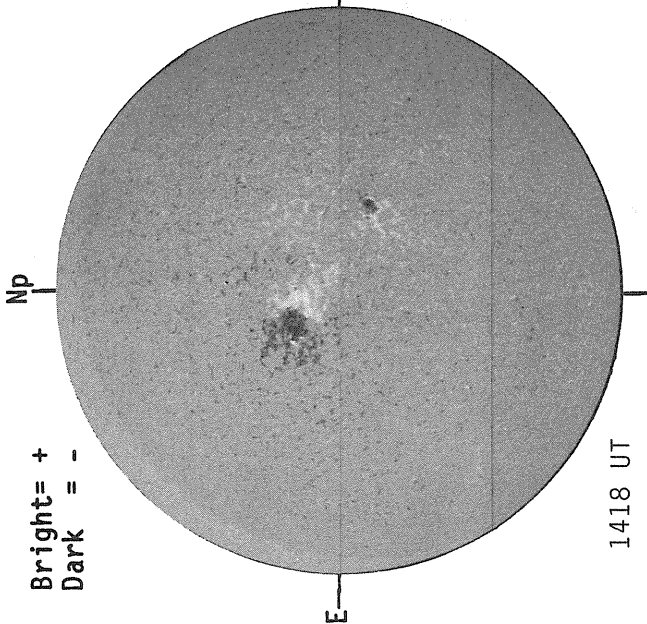


— 5303A(x1) 1336 UT
.... 6374A(x2) 1424 UT
xxxx 5694A(x6) 1406 UT
No 5694A Activity Today

M A Y 22, 1985 (P -18.83, $B_0 = -1.85$, $L_0 = 251.78$)

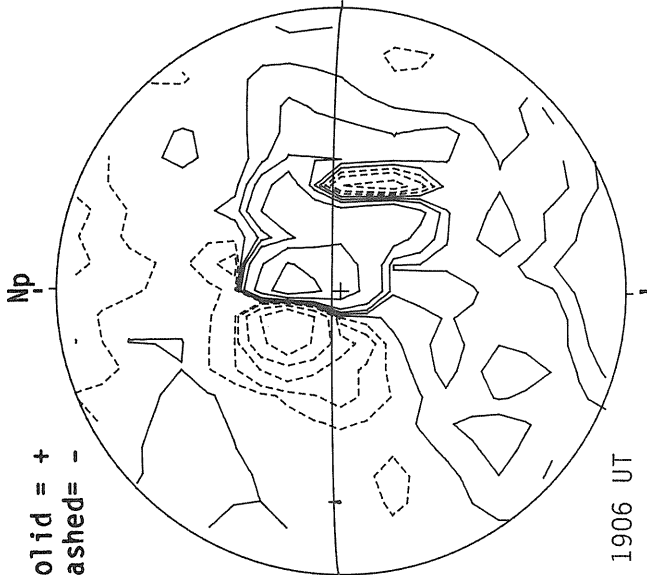
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



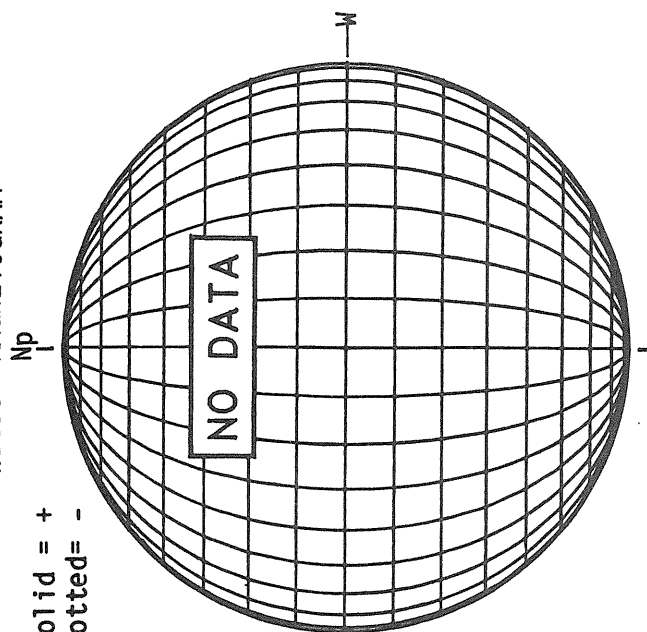
STANFORD MAGNETOGRAM

Solid = +
Dashed = -

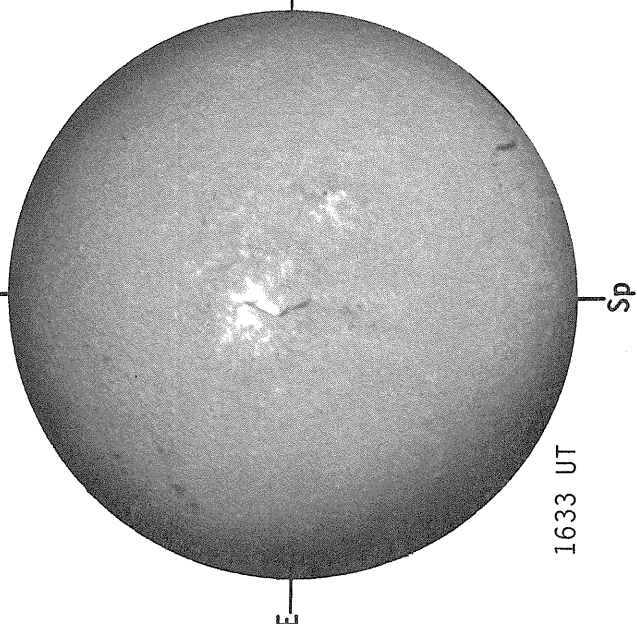


MT. WILSON MAGNETOGRAM

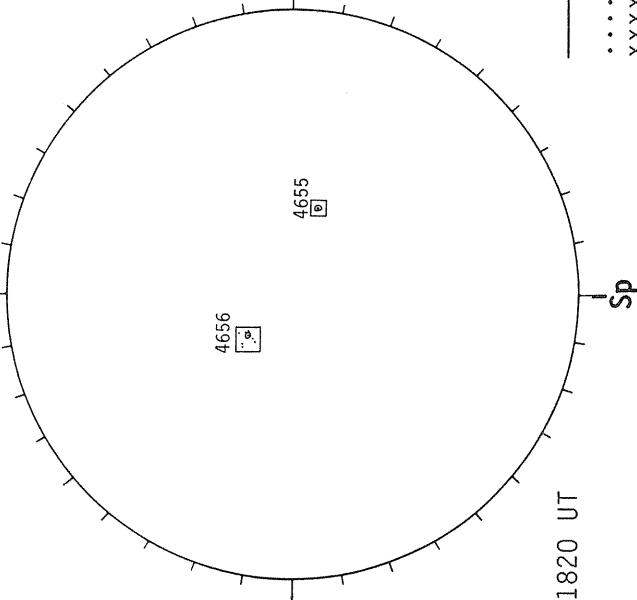
Solid = +
Dotted = -



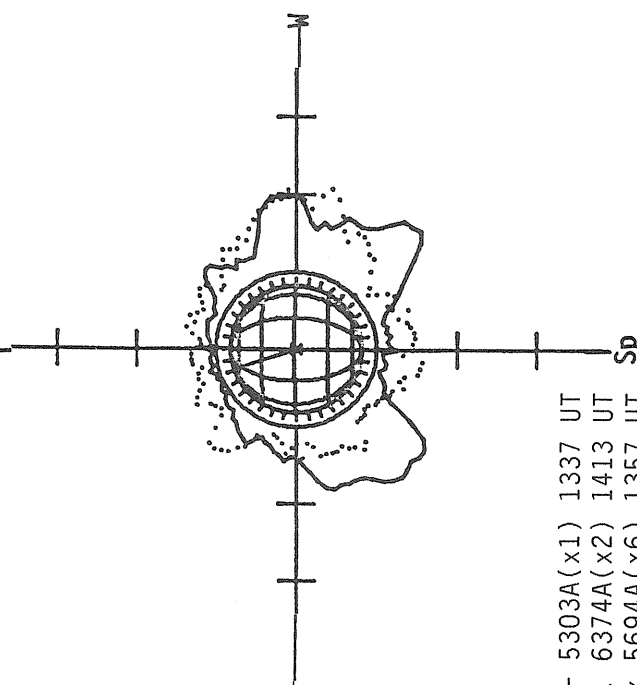
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

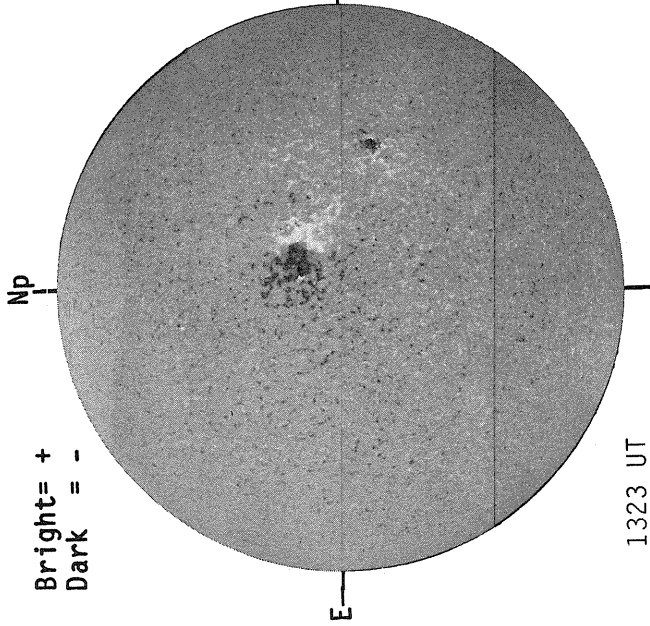


— 5303A(x1) 1337 UT
.... 6374A(x2) 1413 UT
xxxx 5694A(x6) 1357 UT
No 5694A Activity Today

M A Y 23, 1985 (P -18.51, B₀ = -1.73, L₀ = 238.55)

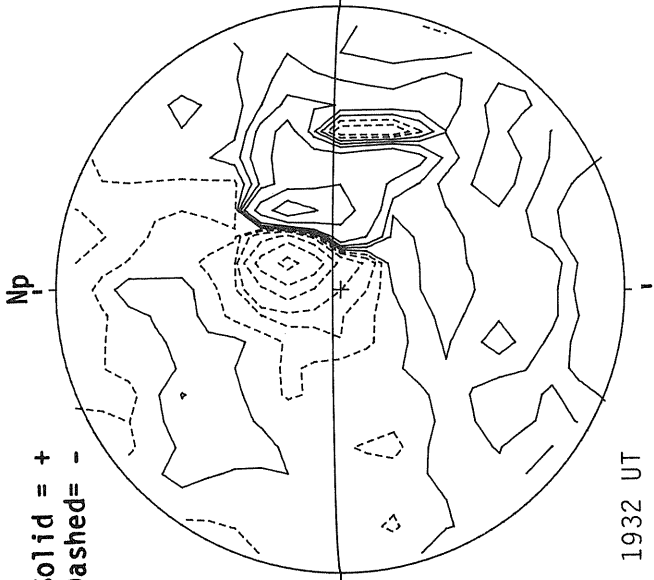
KITT PEAK MAGNETOGRAM

Bright = +
Dark = -



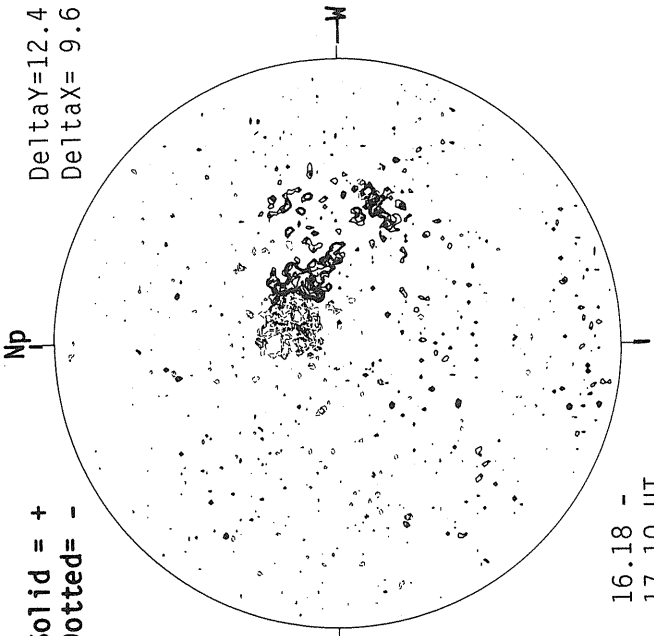
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



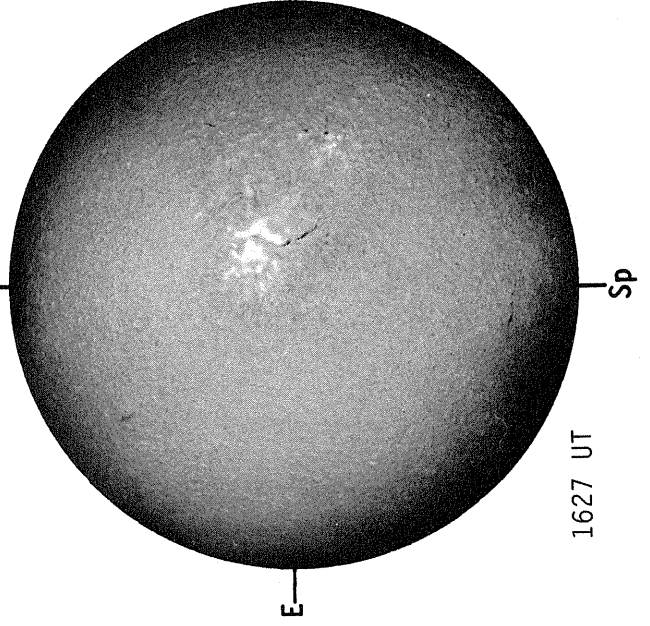
MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -

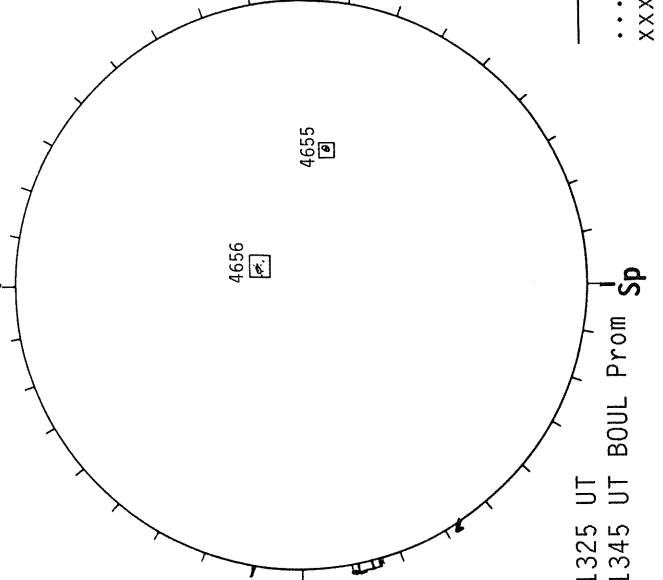


50
May 85
Delta Y = 12.4
Delta X = 9.6

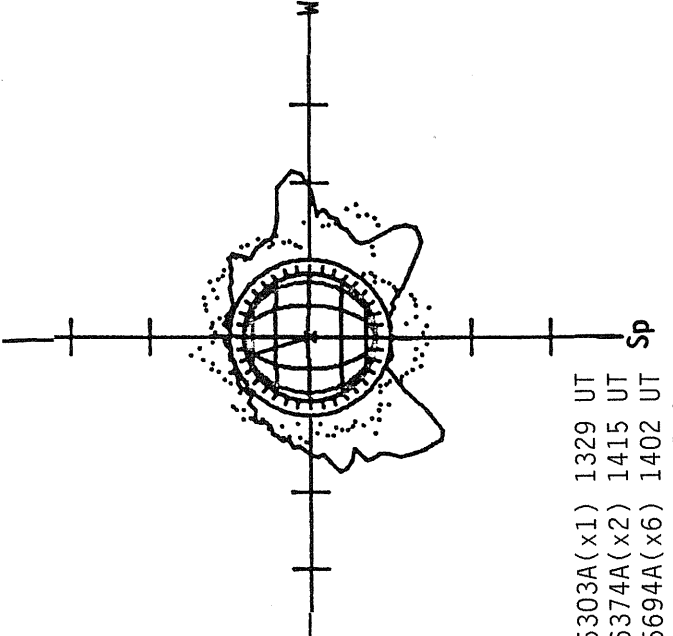
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

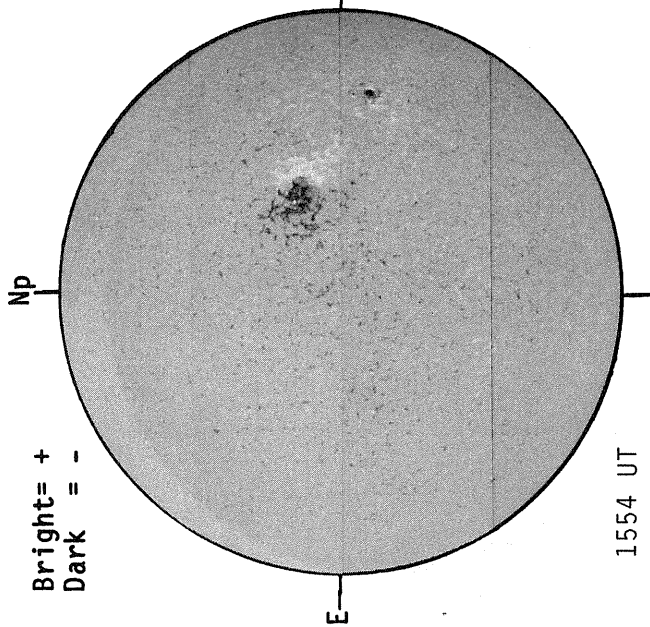


— 5303A(x1) 1329 UT
.... 6374A(x2) 1415 UT
xxxx 5694A(x6) 1402 UT
No 5694A Activity Today

M A Y 24, 1985 (P -18.18, B = -1.62, $L_0 = 225.32$)

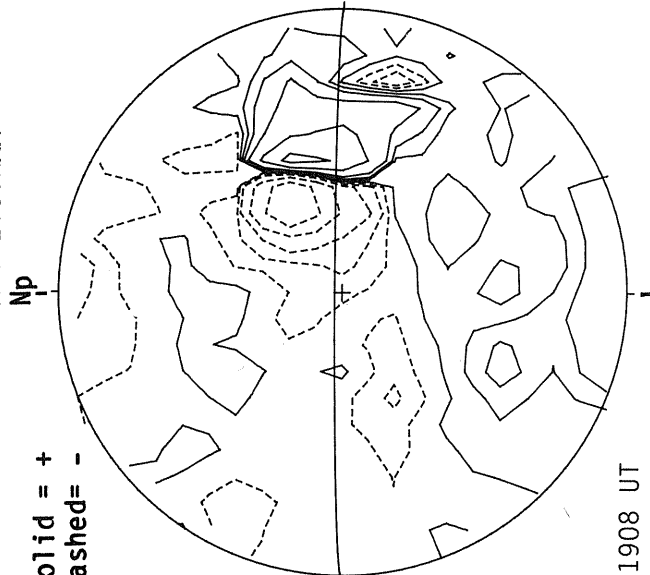
KITT PEAK MAGNETOGRAM

Bright = +
Dark = -



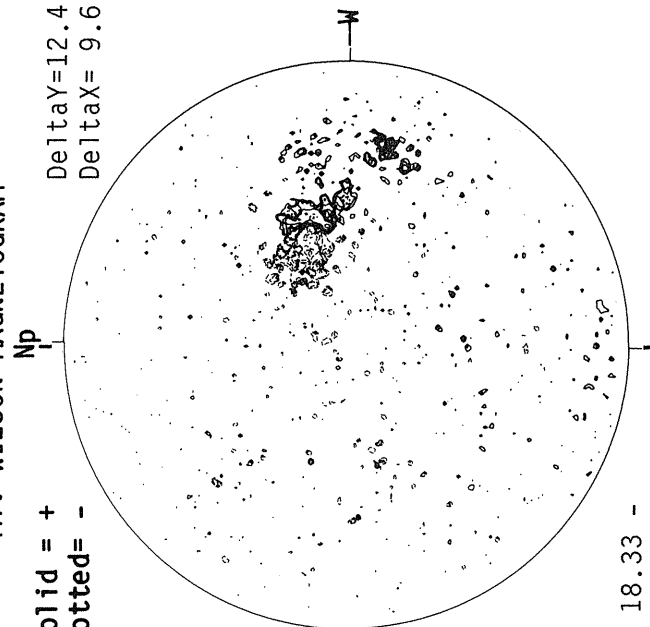
STANFORD MAGNETOGRAM

Solid = +
Dashed = -

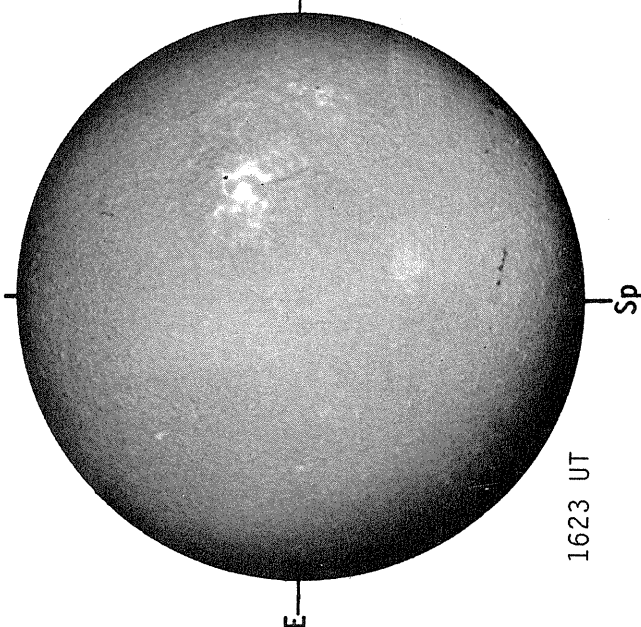


MT. WILSON MAGNETOGRAM

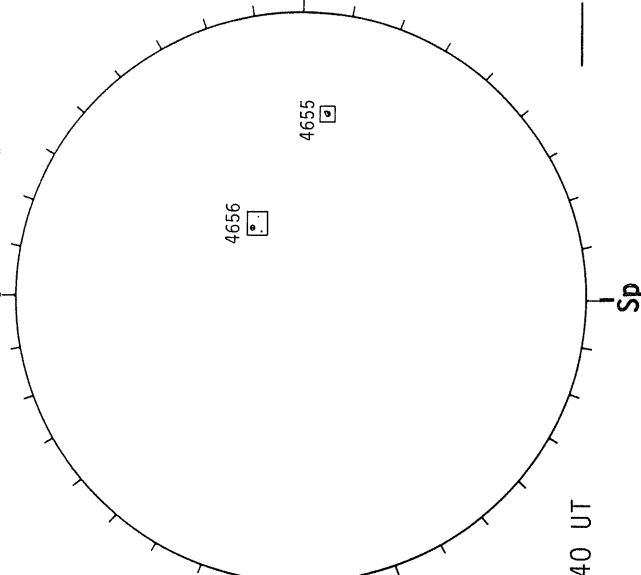
Solid = +
Dotted = -



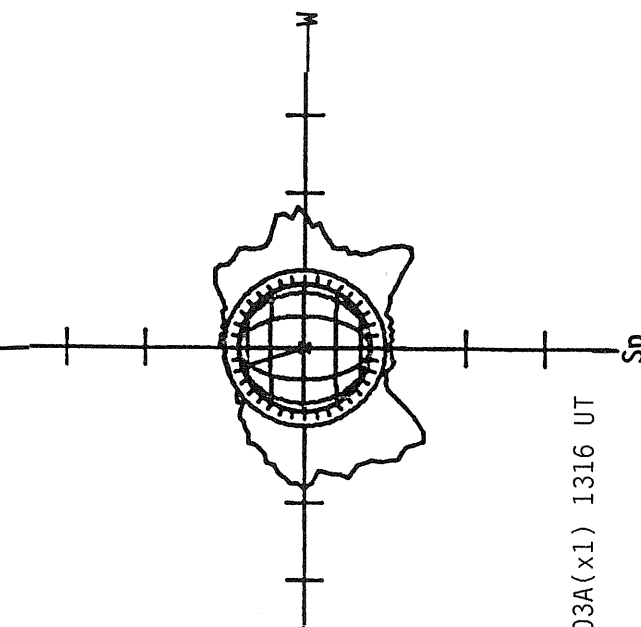
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

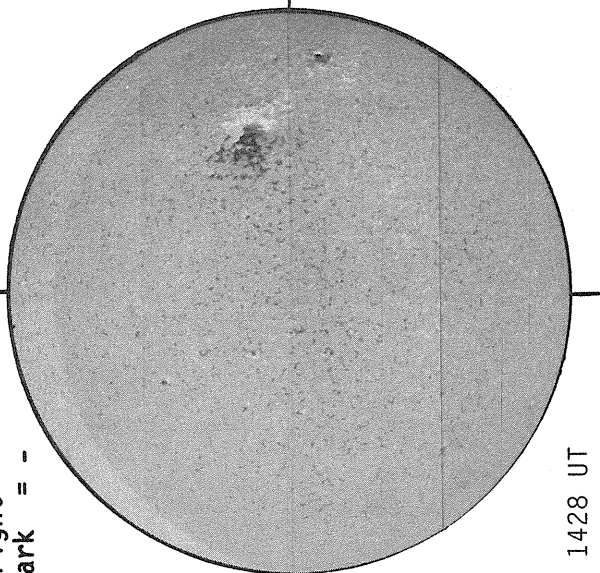


M A Y 25, 1985 (P -17.85, B₀ = -1.50, L₀ = 212.09)

KITT PEAK MAGNETOGRAM

Bright = +
Dark = -

Np

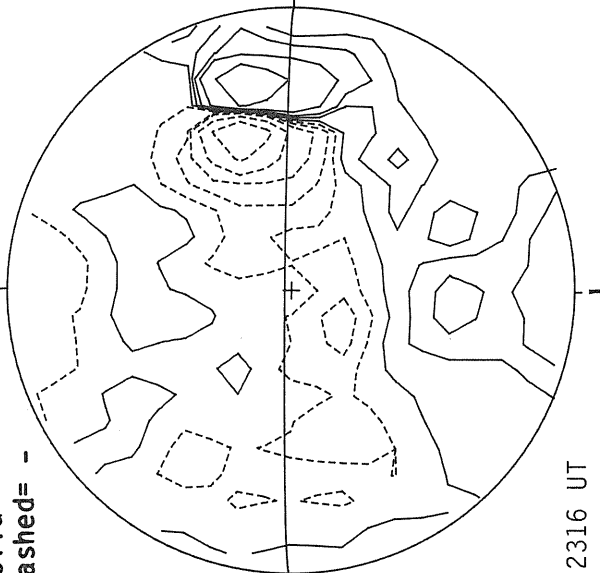


1428 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

Np

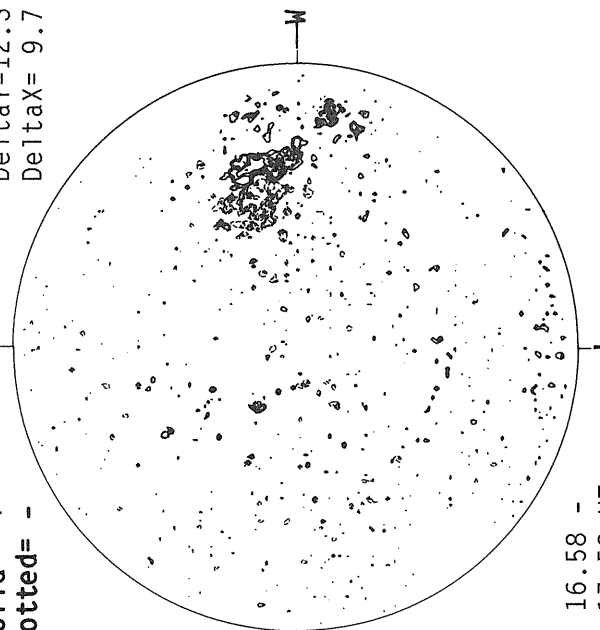


2316 UT

MT. WILSON MAGNETOGRAM

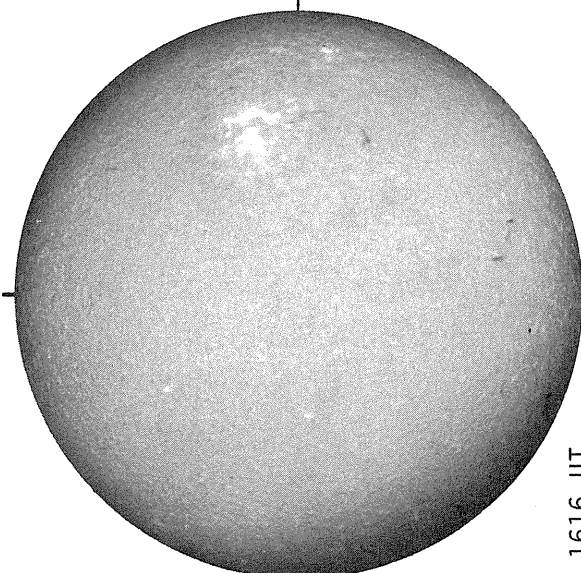
Solid = +
Dotted = -

Np



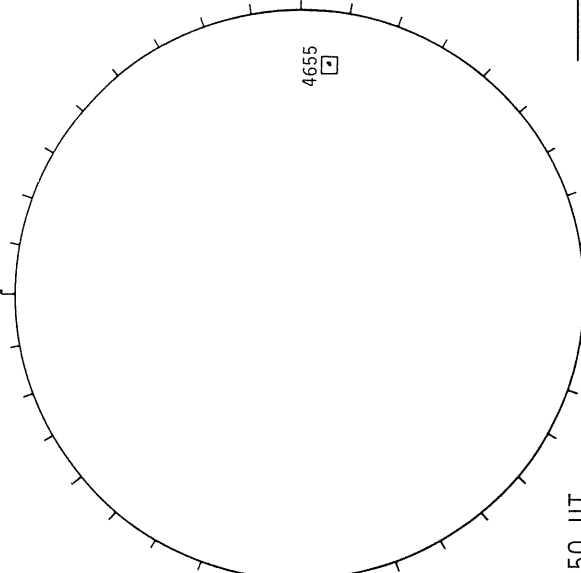
16.58 -
17.50 UT

SACRAMENTO PEAK H-ALPHA



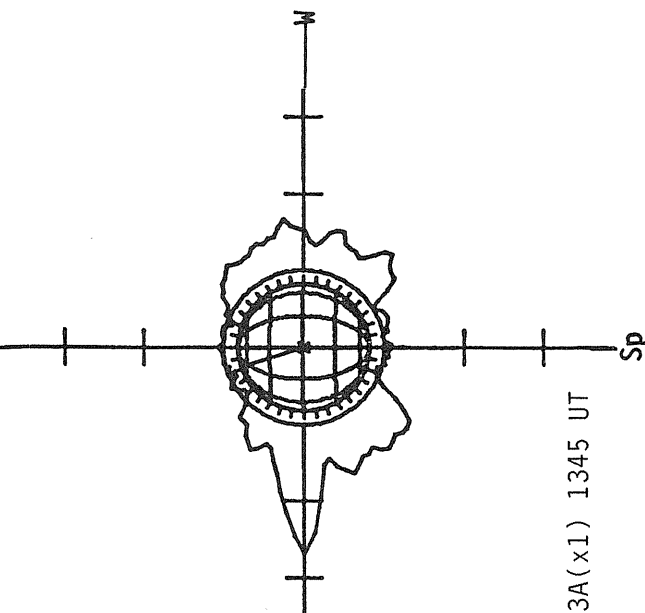
1616 UT

BOULDER SUNSPOTS



1550 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



5303A(x1) 1345 UT

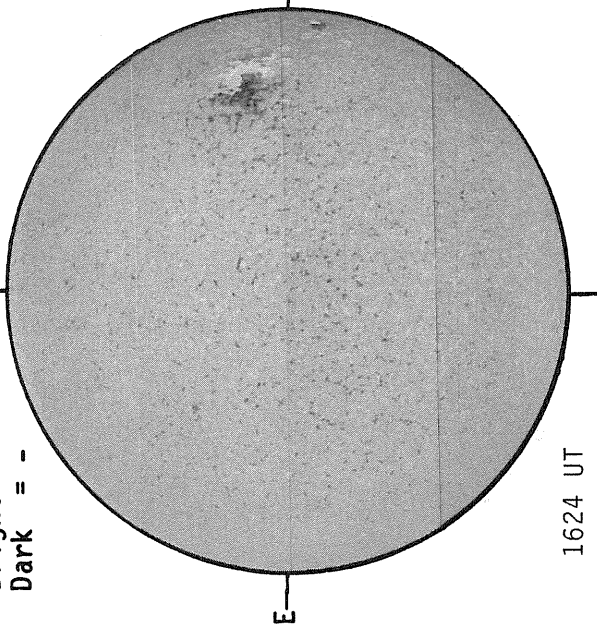
52
May 85

Delta Y = 12.3
Delta X = 9.7

M A Y 26, 1985 (P -17.51, B₀ = -1.38, L₀ = 198.86)

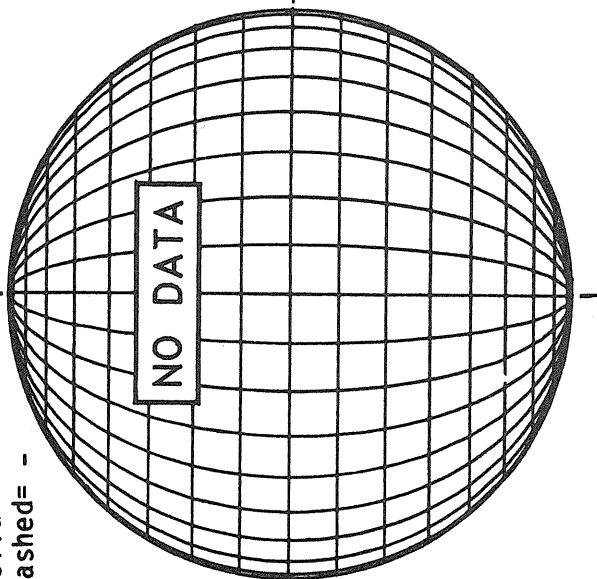
KITT PEAK MAGNETOGRAM

Bright = +
Dark = -



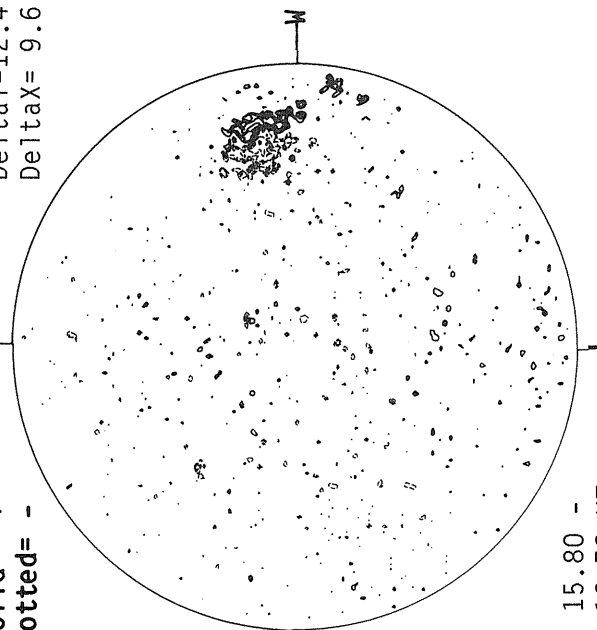
STANFORD MAGNETOGRAM

Solid = +
Dashed = -

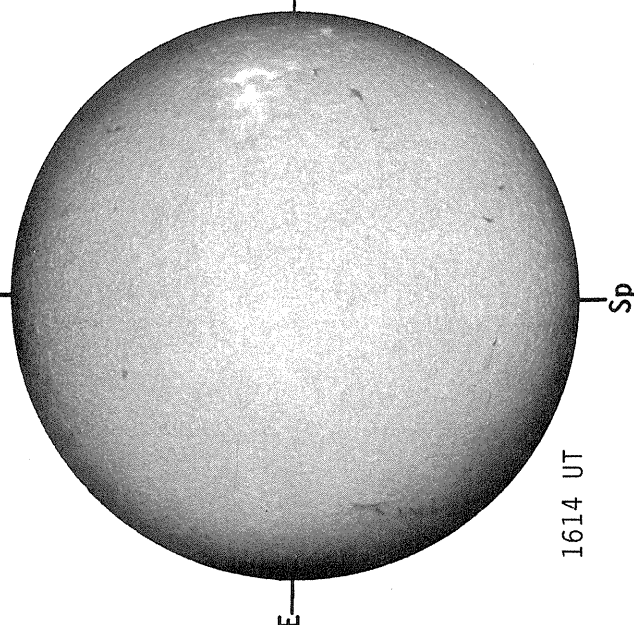


MT. WILSON MAGNETOGRAM

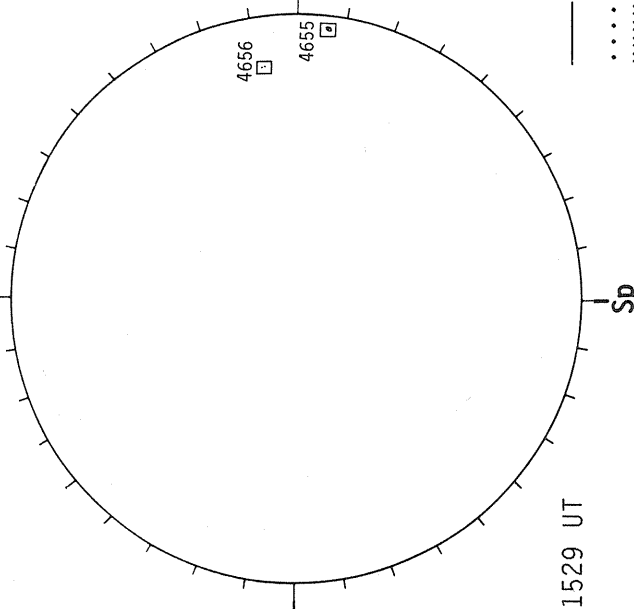
Solid = +
Dotted = -



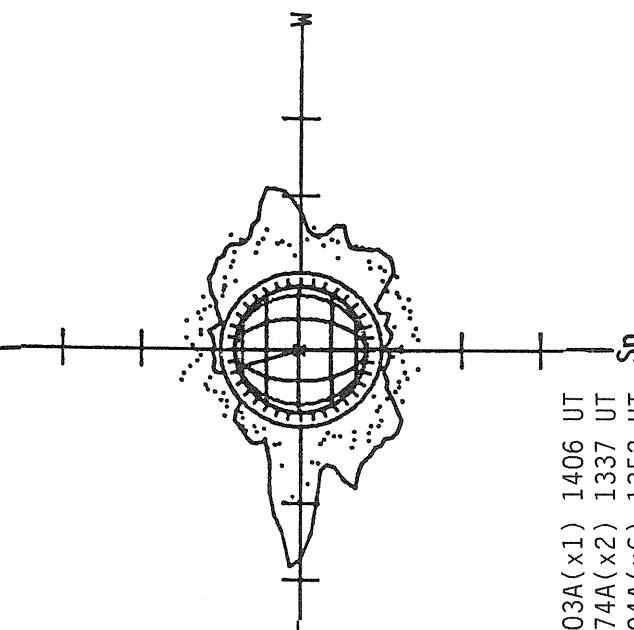
SACRAMENTO PEAK H-ALPHA



HOLLOMAN SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

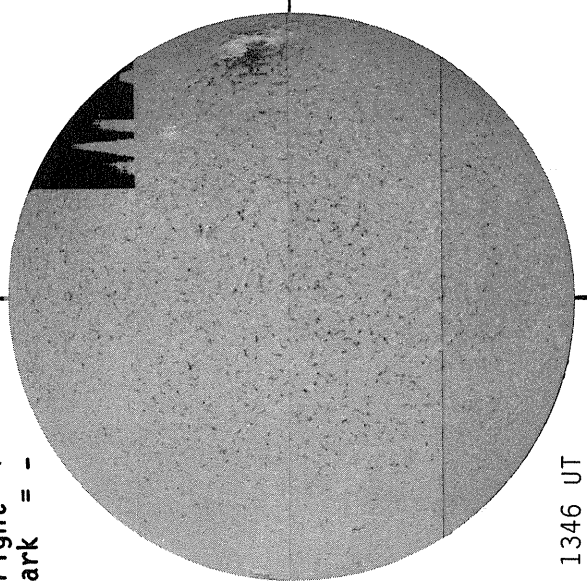


— 5303A(x1) 1406 UT
.... 6374A(x2) 1337 UT
xxxx 5694A(x6) 1352 UT
No 5694A Activity Today

M A Y 27, 1985 (P -17.17, B =-1.27, L₀ = 185.63)

KITT PEAK MAGNETOGRAM

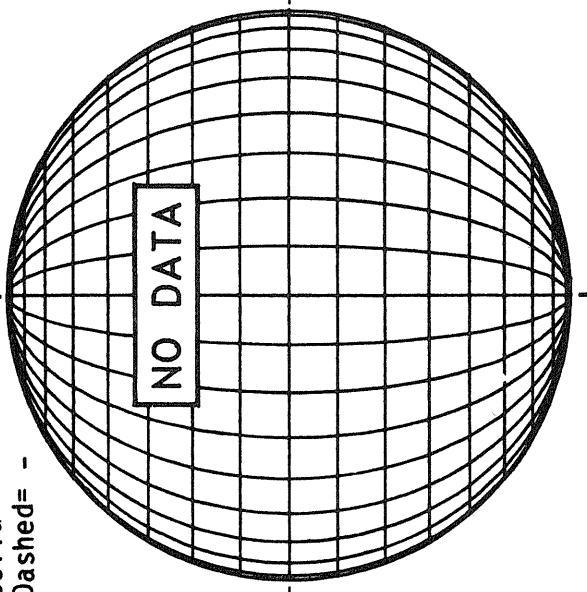
Bright = +
Dark = -



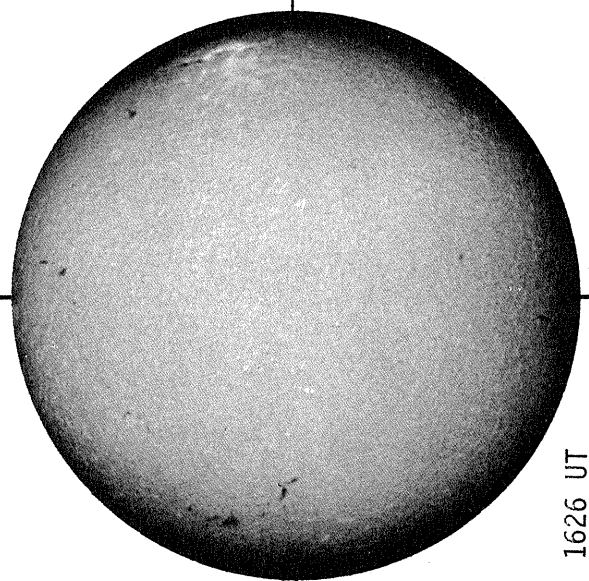
1346 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -



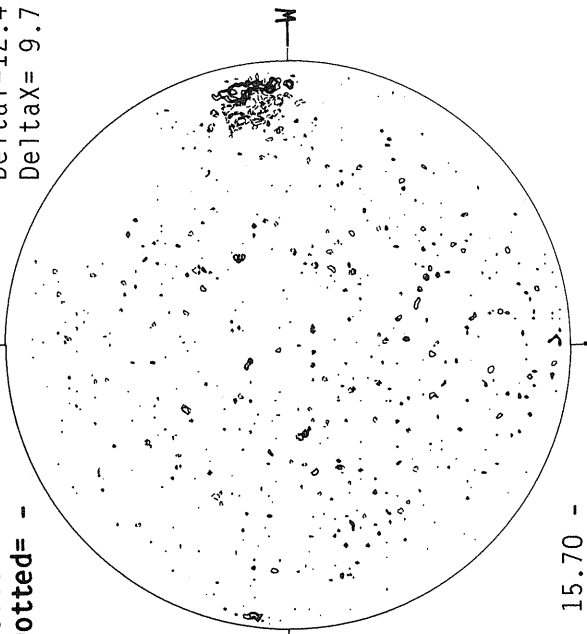
SACRAMENTO PEAK H-ALPHA



1626 UT

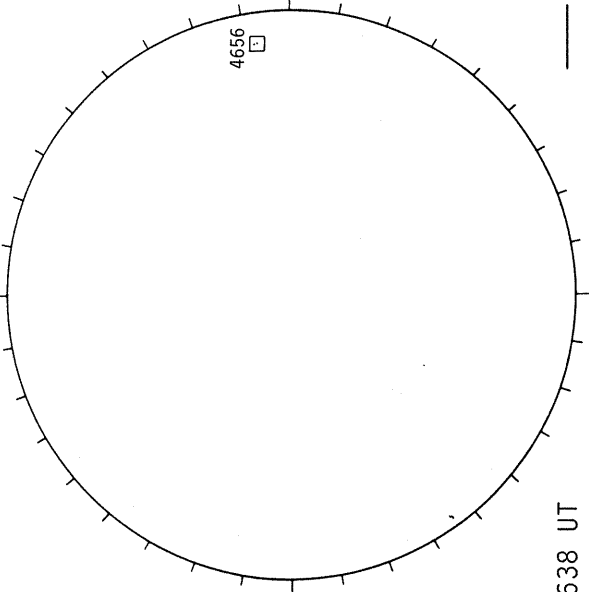
MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -

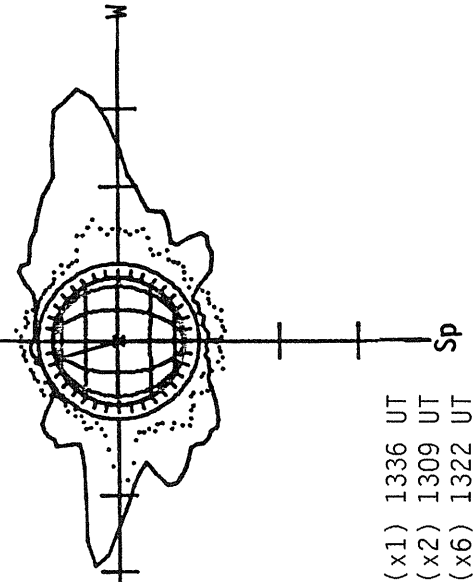


15.70 -
16.65 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



1638 UT



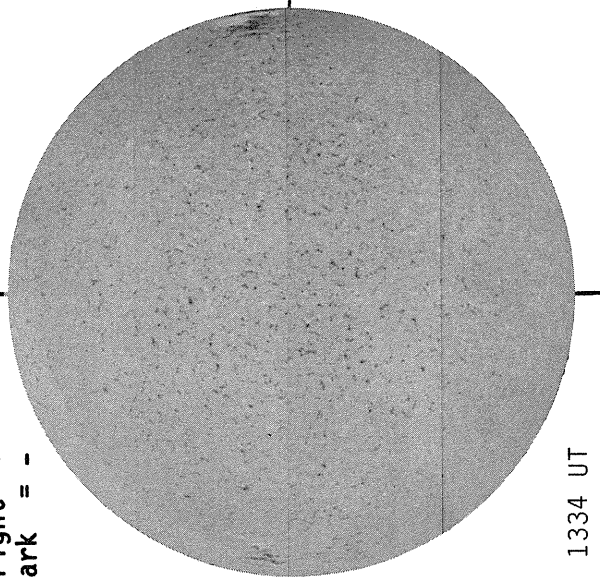
— 5303A(x1) 1336 UT
.... 6374A(x2) 1309 UT
xxxx 5694A(x6) 1322 UT
No 5694A Activity Today

M A Y 28, 1 9 8 5 (P -16.82, B =-1.15, L₀ = 172.40)

KITT PEAK MAGNETOGRAM

Np

Bright= +
Dark = -

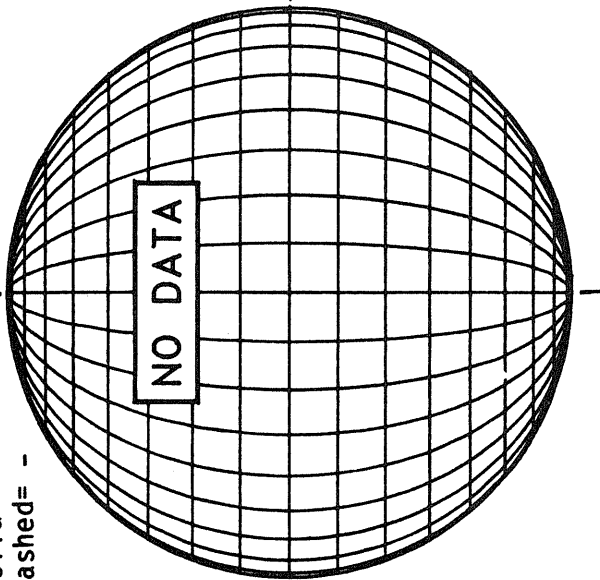


1334 UT

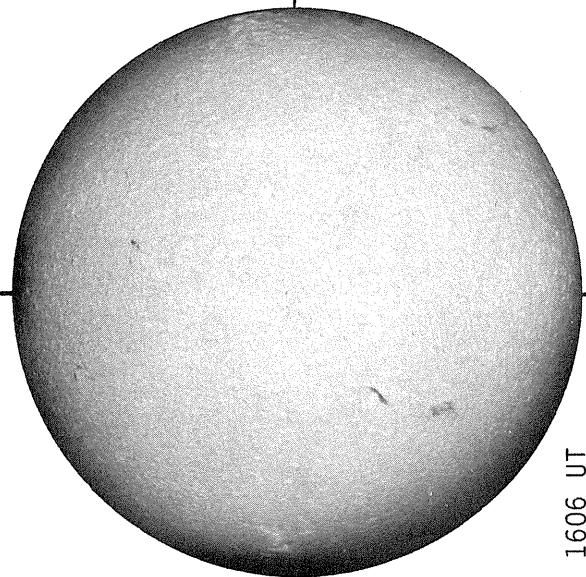
STANFORD MAGNETOGRAM

Np

Solid = +
Dashed= -



SACRAMENTO PEAK H-ALPHA

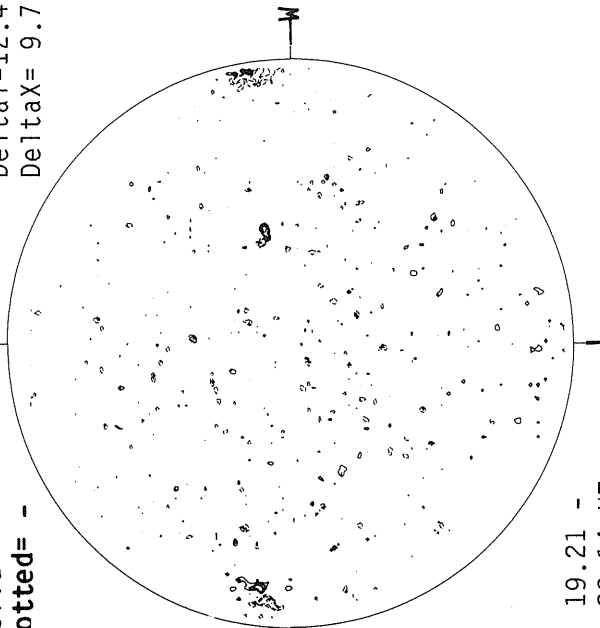


1606 UT

MT. WILSON MAGNETOGRAM

Np

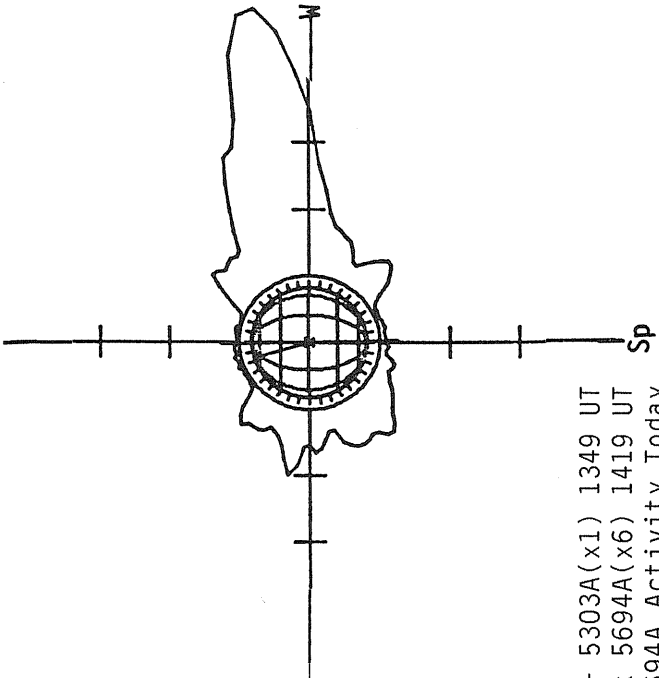
Solid = +
Dotted= -



19.21 -
20.14 UT

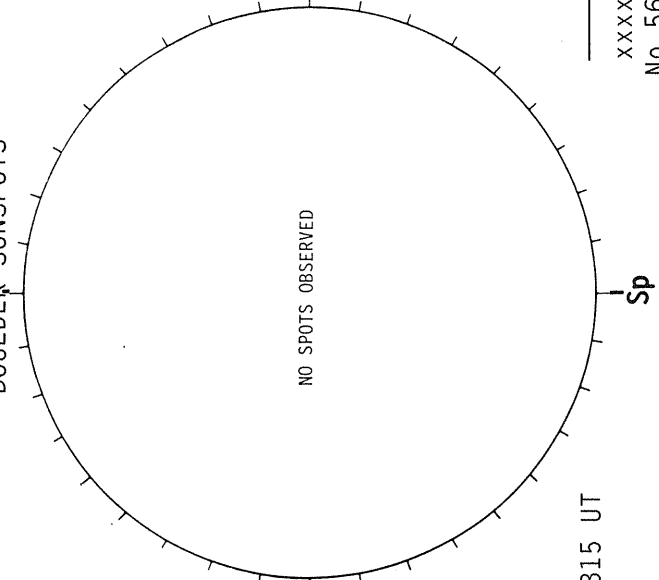
DeltaY=12.4
DeltaX= 9.7

SACRAMENTO PEAK CORONA (1.15 Radii)



— 5303A(x1) 1349 UT
xxxx 5694A(x6) 1419 UT
No 5694A Activity Today

BOULDER SUNSPOTS

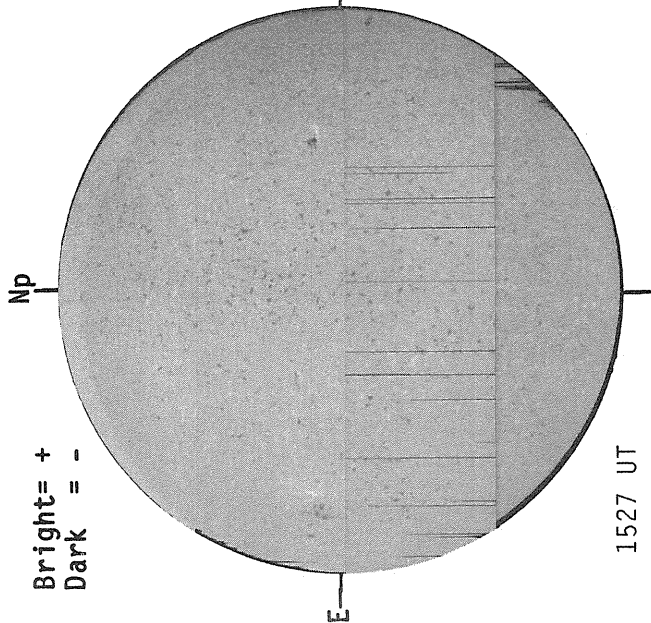


1315 UT

M A Y 29, 1985 (P -16.46, B₀ = -1.03, L₀ = 159.17)

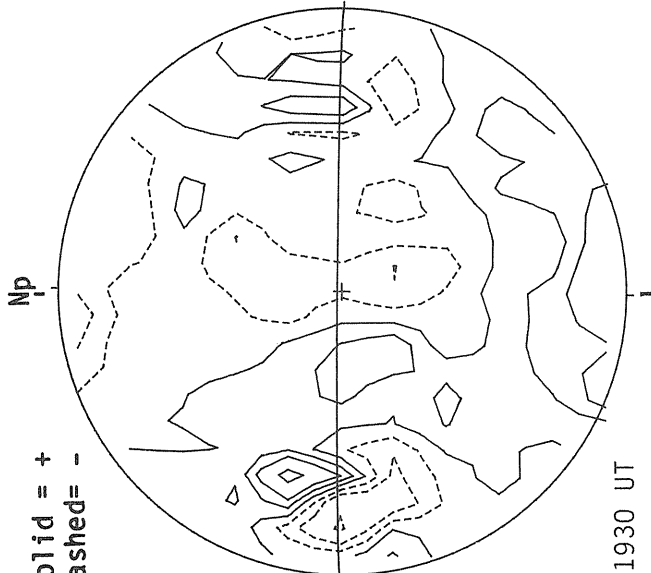
KITT PEAK MAGNETOGRAM

Bright = +
Dark = -



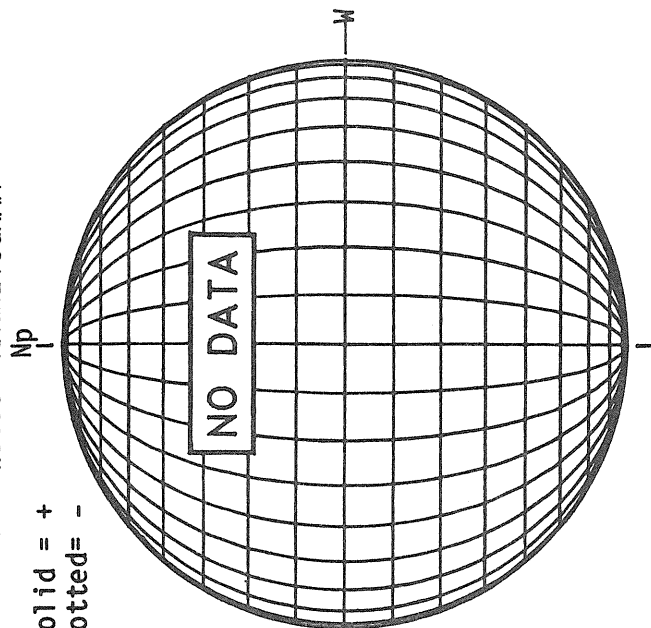
STANFORD MAGNETOGRAM

Solid = +
Dashed = -

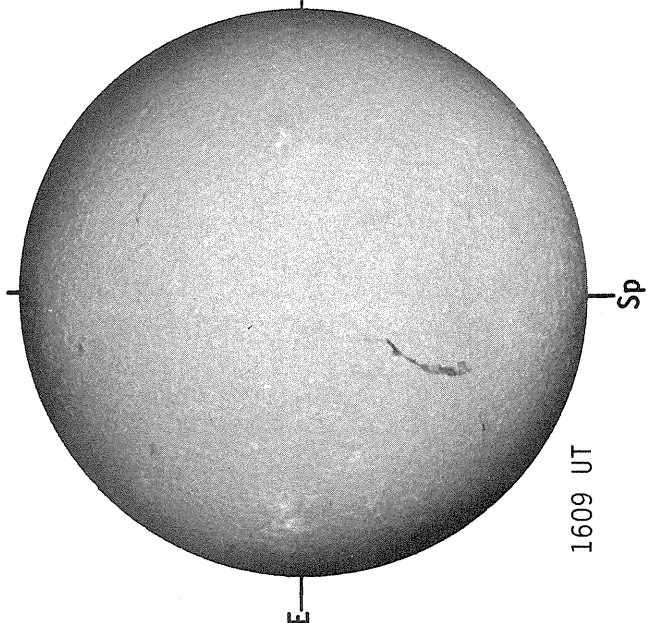


MT. WILSON MAGNETOGRAM

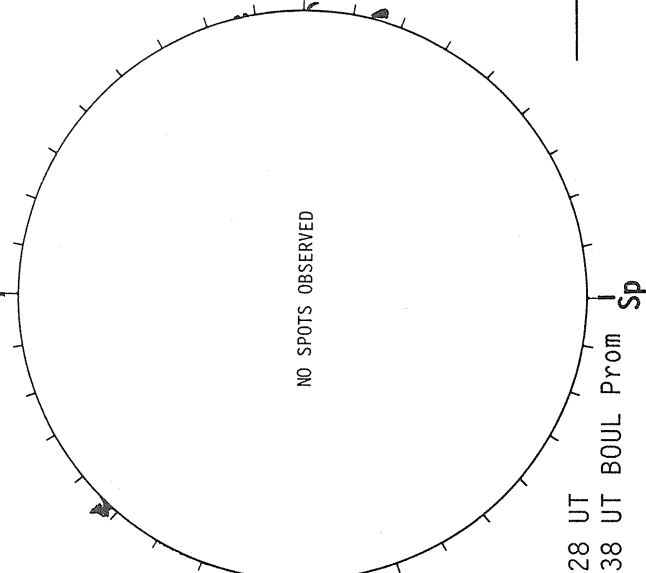
Solid = +
Dotted = -



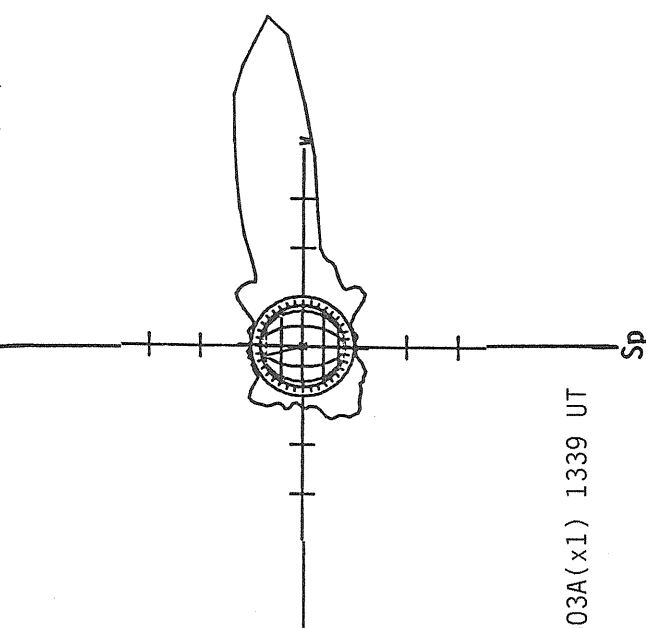
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

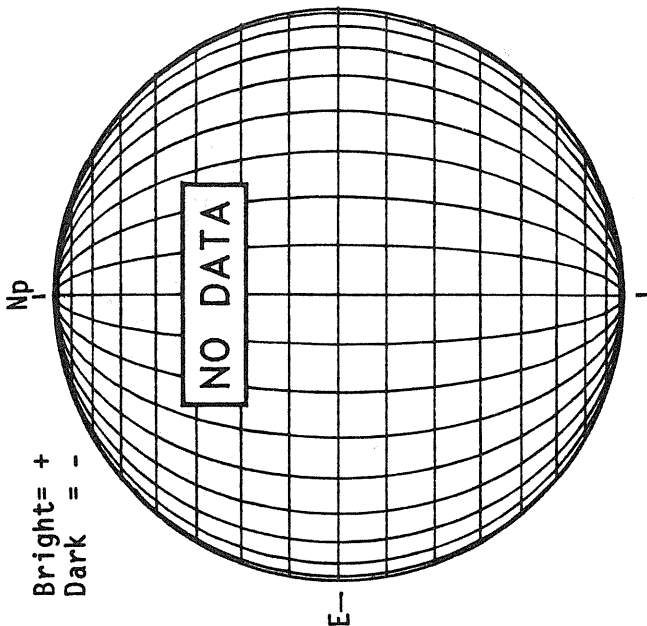


— 5303A(x1) 1339 UT

M A Y 30, 1 9 8 5 (P -16.10, B₀ = -0.91, L₀ = 145.93)

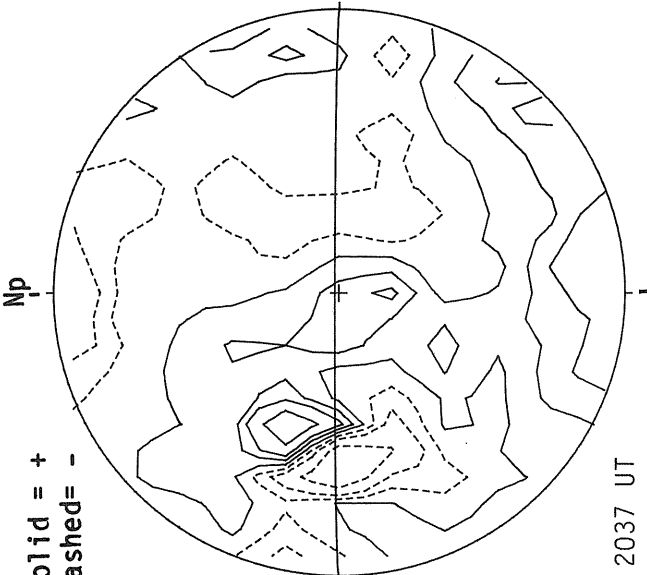
KITT PEAK MAGNETOGRAM

Bright = +
Dark = -



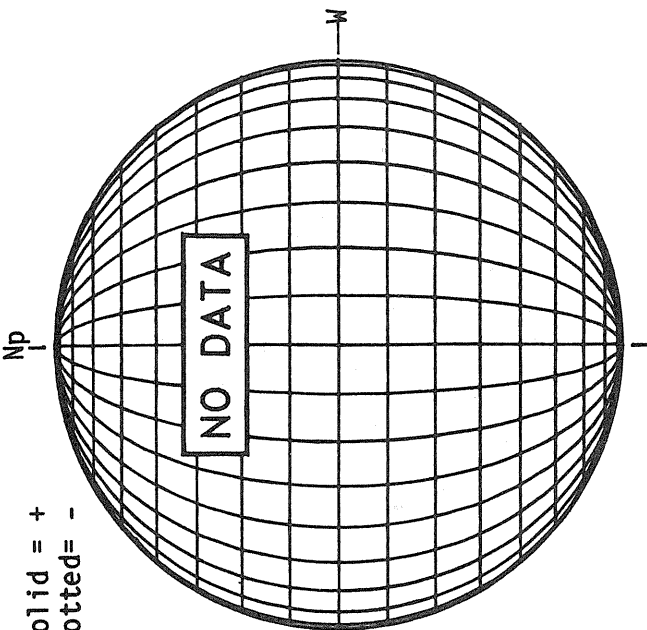
STANFORD MAGNETOGRAM

Solid = +
Dashed = -

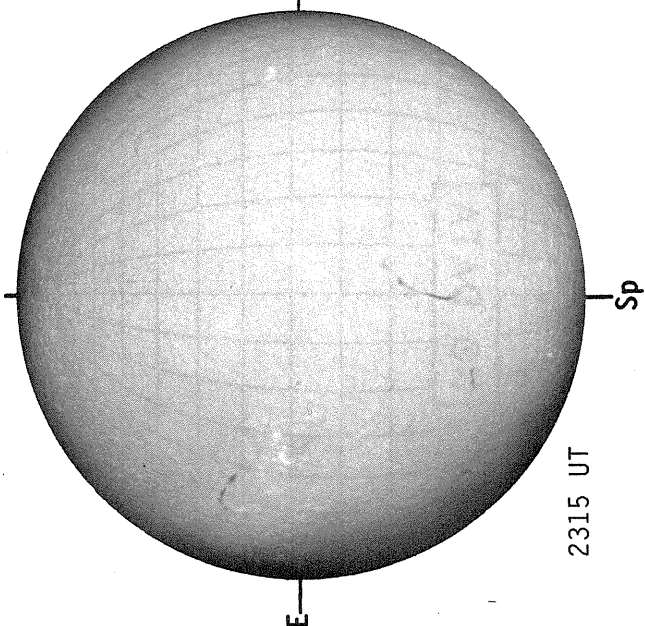


MT. WILSON MAGNETOGRAM

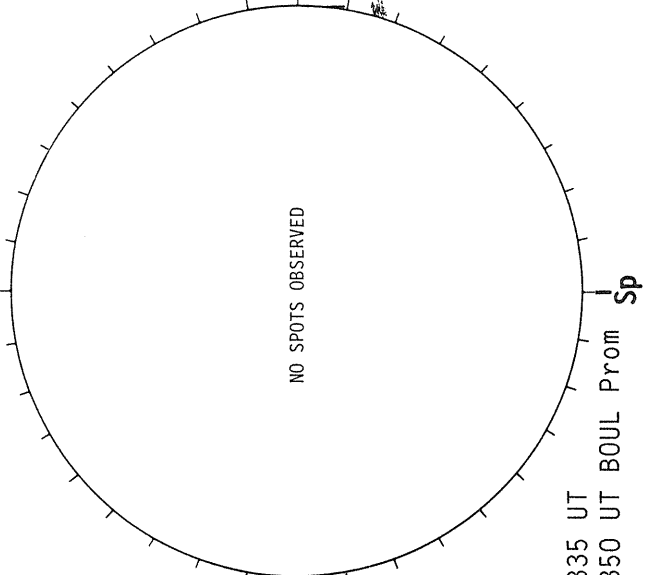
Solid = +
Dotted = -



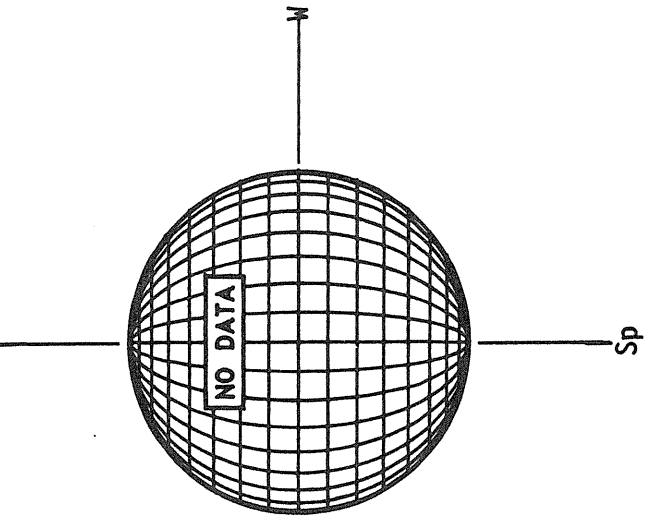
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



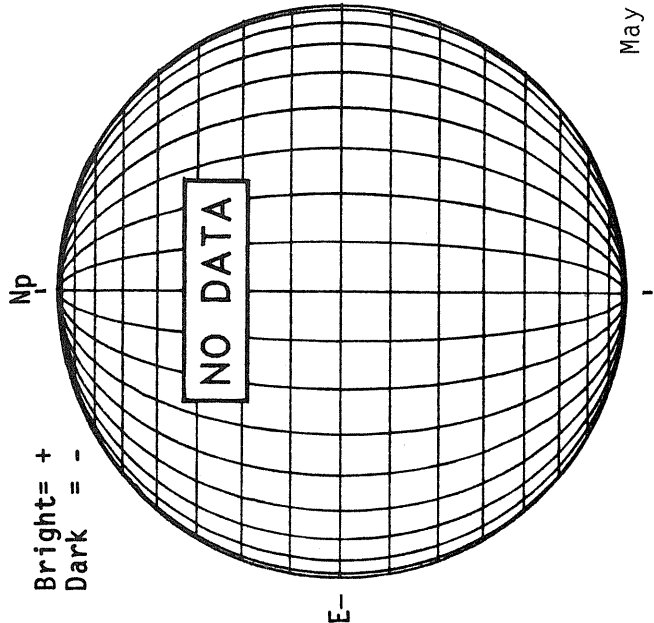
SACRAMENTO PEAK CORONA (1.15 Radii)



MAY 31, 1985 (P -15.74, B₀ = -0.79, L₀ = 132.70)

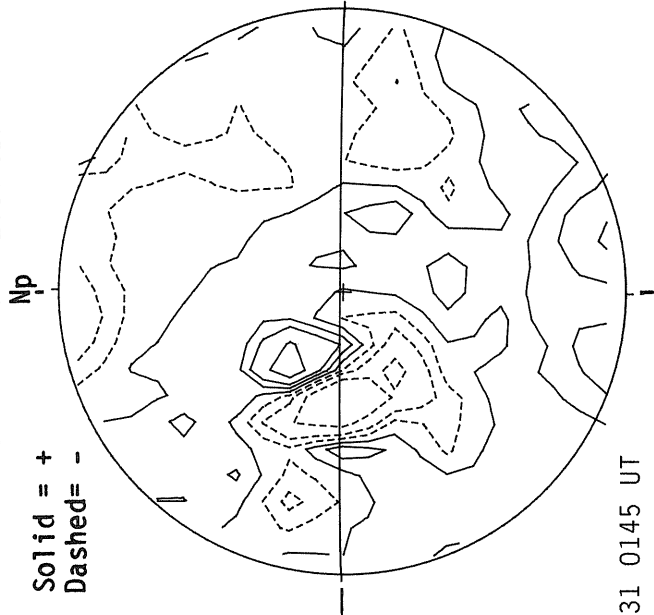
KITT PEAK MAGNETOGRAM

Bright = +
Dark = -



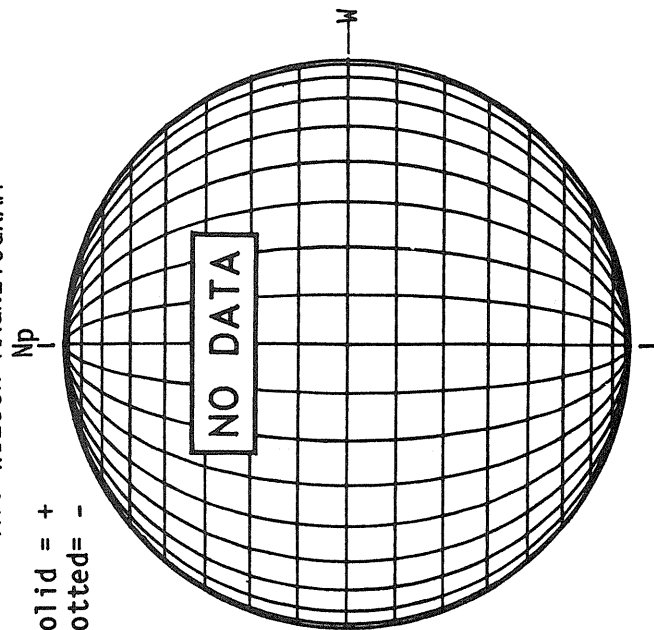
STANFORD MAGNETOGRAM

Solid = +
Dashed = -



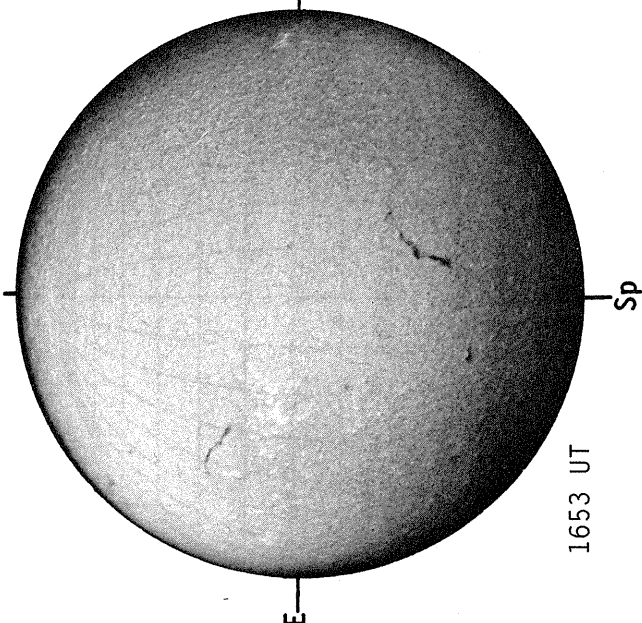
MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -



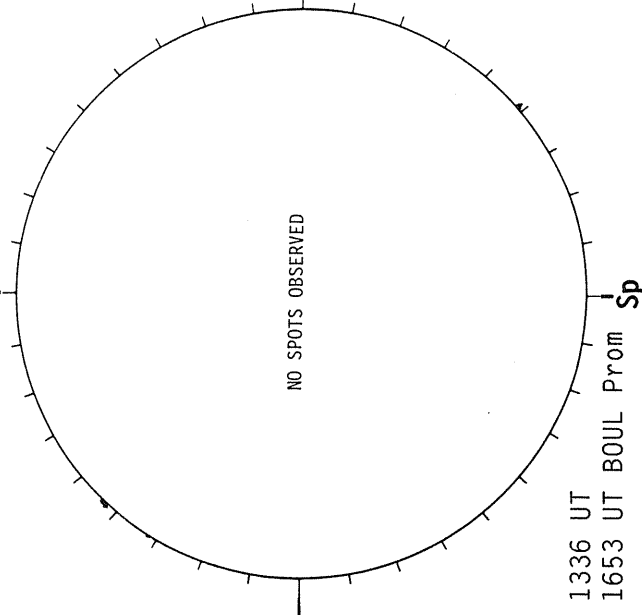
May 31 0145 UT

BOULDER H-ALPHA



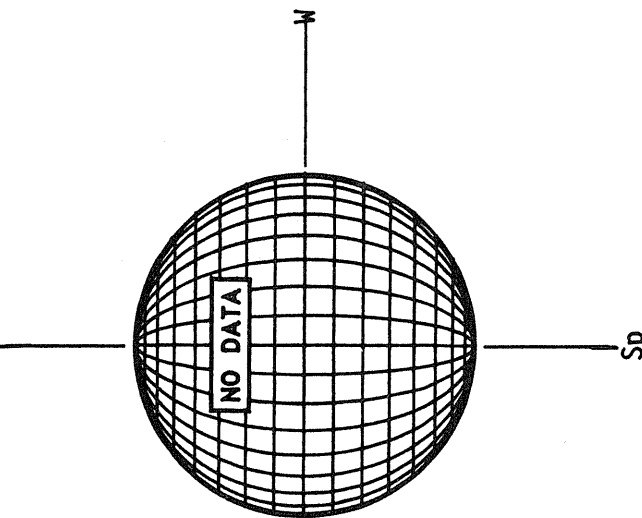
1653 UT

BOULDER SUNSPOTS



1336 UT
1653 UT BOUL Prom

SACRAMENTO PEAK CORONA (1.15 Radii)



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

59
May 85

MAY 1985																
NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Time		Lat	CMD	CMP		Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual	
4651	24220	RAMY	05	02	1238	N10 E38	05	5.4		B	BXO	20	2	2	4	
4651		MWIL	05	02	1515	N10 E35	05	5.3	3	(AP)						
4651		LEAR	05	03	0033	N10 E31	05	5.4		A	AXX	10	1	1	3	
4649	24222	RAMY	05	03	1420	N06 E46	05	7.0		B	CRO	20	2	3	4	
4649		MWIL	05	03	1445	N06 E45	05	7.0	3	(B)						
4649		PALE	05	03	1801	N05 E43	05	7.0		B	CRO	20	2	3	2	
4649	24222	LEAR	05	04	0031	N05 E41	05	7.1		A	AXX	10	1	1	3	
4649		ATHN	05	04	0630	N05 E37	05	7.0		A	AXX	10	1	1	2	
4649		RAMY	05	04	1320	N06 E32	05	7.0		A	AXX	10	2	2	3	
4649	24222	RAMY	05	04	1320	N09 E32	05	7.0		A	AXX	10	2	2	3	
4649		MWIL	05	04	1445	N06 E33	05	7.1	2	(AF)						
4649		HOLL	05	04	1549	N07 E33	05	7.1		A	AXX		1		3	
4649	24222	PALE	05	04	1750	N06 E32	05	7.1		A	AXX		1		4	
4649		RAMY	05	05	1320	N06 E17	05	6.8		B	BXO	10	3	3	3	
4649		HOLL	05	05	1525	N06 E16	05	6.8		A	AXX		2	1	4	
4649	24222	BOUL	05	05	1530	N06 E18	05	7.0		A	HSX	10	1	1	2	
4649		PALE	05	05	1737	N06 E14	05	6.8		B	BXO	10	3	3	4	
4649		MWIL	05	05	1815	N05 E14	05	6.8	3	(B)						
4649	24222	LEAR	05	06	0003	N07 E11	05	6.8		B	BXO	10	3	3	3	
4649		ATHN	05	06	0645	N05 E05	05	6.7		A	AXX	10	1		2	
4649		RAMY	05	06	1222	N07 E05	05	6.9		A	AXX	10	2	1	4	
4649	24222	ATHN	05	07	0615	N05 W07	05	6.7		A	BXO	20	2	1	1	
4649		RAMY	05	07	1256	N05 W10	05	6.8		B	BXO	30	8	5	4	
4649		MWIL	05	07	1400	N04 W11	05	6.8	4	(B)						
4649	24222	BOUL	05	07	1600	N05 W09	05	7.0		B	CSO	50	8	5	3	
4649		HOLL	05	07	1725	N06 W13	05	6.8		B	CRO	30	13	4	3	
4649		PALE	05	07	1917	N05 W14	05	6.8		B	DRO	50	13	5	3	
4649	24222	LEAR	05	08	0014	N05 W16	05	6.8		B	DAO	60	9	6	3	
4649		MWIL	05	08	1500	N04 W25	05	6.8	5	(B)						
4649		HOLL	05	08	1510	N06 W26	05	6.7		BG	DAO	90	17	7	3	
4649	24222	BOUL	05	08	1610	N06 W24	05	6.9		B	DRO	70	17	7	4	
4649		PALE	05	08	1811	N05 W29	05	6.6		B	DAO	100	6	8	2	
4649		MANI	05	08	2255	N07 W32	05	6.6		B	DSO	120	10	9	3	
4649	24222	LEAR	05	09	0430	N07 W33	05	6.7		B	DSO	90	12	9	3	
4649		ATHN	05	09	0615	N06 W36	05	6.6		B	DAO	70	8	9	3	
4649		HOLL	05	09	1559	N06 W40	05	6.7		B	CAO	50	6	8	3	
4649	24222	RAMY	05	09	1650	N05 W39	05	6.8		B	DAO	60	5	9	4	
4649		BOUL	05	09	1725	N05 W37	05	7.0		B	DSO	50	4	8	3	
4649		PALE	05	09	1807	N06 W41	05	6.7		B	DAO	60	4	10	3	
4649	24222	MANI	05	10	0039	N06 W44	05	6.7		B	CSO	70	7	10	3	
4649		RAMY	05	10	1341	N05 W51	05	6.8		B	CSO	20	5	9	4	
4649		MWIL	05	10	1500	N05 W56	05	6.4	4	(AP)						
4649	24222	PALE	05	10	1815	N07 W56	05	6.6		B	CAO	40	3	4	3	
4649		MANI	05	10	2348	N07 W60	05	6.5		B	AXX	20	2	1	3	
4649		RAMY	05	11	1244	N06 W69	05	6.4		A	AXX	10	2	2	4	
4649	24221	HOLL	05	11	1433	N06 W70	05	6.4		A	AXX		1		3	
4649		PALE	05	11	1925	N06 W72	05	6.4		A	AXX	10	1	1	2	
4649		MANI	05	11	2329	N06 W73	05	6.5		A	AXX	20	1	1	3	
4649	24221	LEAR	05	12	0100	N06 W75	05	6.4		A	AXX	10	1	1	3	
4650		RAMY	05	02	1238	N04 E77	05	8.3		A	AXX		1	1	4	
4650		MWIL	05	02	1515	N03 E75	05	8.2	3	(AP)						
4650	24221	LEAR	05	03	0033	N03 E72	05	8.4		A	AXX	10	1	1	3	
4650		ATHN	05	03	0615	N04 E68	05	8.3		A	AXX	10	1	1	2	
4650		RAMY	05	03	1420	N04 E64	05	8.4		B	CAO	20	3	3	4	
4650	24221	MWIL	05	03	1445	N03 E62	05	8.2	4	(AP)						
4650		PALE	05	03	1801	N02 E62	05	8.4		B	CRO	20	3	3	2	
4650		LEAR	05	04	0031	N03 E57	05	8.3		B	CRO	20	3	2	3	
4650	24221	ATHN	05	04	0630	N02 E53	05	8.2		A	CSO	20	2	3	2	
4650		RAMY	05	04	1320	N05 E51	05	8.4		B	CRO	30	5	7	3	
4650		MWIL	05	04	1445	N03 E48	05	8.2	4	(AP)						
4650	24221	HOLL	05	04	1549	N03 E47	05	8.2		A	AXX	10	1	1	3	
4650		PALE	05	04	1750	N04 E50	05	8.5		B	CRO	20	5	7	4	
4650		MANI	05	04	2321	N04 E45	05	8.3		B	BXO	10	5	7	3	
4650	24221	LEAR	05	05	0123	N04 E43	05	8.3		B	BXO	20	3	3	3	
4650		ATHN	05	05	0700	N03 E39	05	8.2		A	AXX	10	1		3	
4650		RAMY	05	05	1320	N04 E40	05	8.5		B	BXO	10	3	4	3	
4650	24221	HOLL	05	05	1525	N04 E38	05	8.5		B	BXO	10	3	4	4	
4650		PALE	05	05	1737	N04 E37	05	8.5		B	BXO	20	4	4	4	
4650		MWIL	05	05	1815	N03 E37	05	8.5	3	(B)						

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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
4650		LEAR	05 06 0003	N05	E33	05 8.5		B	BX0	20	5	5	3
4650		ATHN	05 06 0645	N04	E30	05 8.5		B	BX0	20	2	3	2
4650		RAMY	05 06 1222	N03	E26	05 8.5		B	CRO	20	3	4	4
4650	24221	MWIL	05 06 1515	N03	E23	05 8.4	4	(B)					
4650		HOLL	05 06 1555	N04	E24	05 8.5		B	BX0	10	2	3	3
4650		LEAR	05 07 0044	N04	E18	05 8.4		B	BX0	20	3	4	4
4650		ATHN	05 07 0615	N02	E14	05 8.3			AXX	10	1	1	1
4650		ATHN	05 07 0615	N02	E14	05 8.3			AXX	10	1	1	1
4650	24221	RAMY	05 07 1256	N03	E12	05 8.4		B	BX0	10	3	8	4
4650		MWIL	05 07 1400	N03	E11	05 8.4	3	(B)					
4650		HOLL	05 07 1725	N05	E11	05 8.5		B	BX0		3	3	3
4650		PALE	05 07 1917	N04	E10	05 8.6		A	AXX		1		3
4650		LEAR	05 08 0014	N03	E05	05 8.4		B	BX0	20	5	3	3
4650	24221	MWIL	05 08 1500	N02	W03	05 8.4	3	(AP)					
4650		HOLL	05 08 1510	N04	W04	05 8.3		A	AXX	10	2	1	3
4650		BOUL	05 08 1610	N03	W02	05 8.5		A	AXX	10	5	2	4
4650		PALE	05 08 1811	N04	W08	05 8.2		A	ASX	70	4	2	2
4650		MANI	05 08 2255	N04	W11	05 8.1			BX0	10	2	2	3
4650		LEAR	05 09 0430	N04	W12	05 8.3		B	BX0	10	2	2	3
4650		RAMY	05 09 1650	N04	W18	05 8.4		B	BX0	10	2	2	4
4650		PALE	05 09 1807	N04	W19	05 8.3		B	BX0		2	3	3
4650A		RAMY	05 09 1650	S02	E35	05 12.3		B	BX0	10	2	2	4
4652		LEAR	05 07 0044	S11	E86	05 13.5		B	DHI	40	2	4	4
4652		ATHN	05 07 0615	S14	E82	05 13.5			CKO	60	3	9	1
4652		ATHN	05 07 0615	S14	E82	05 13.5			CKO	60	3	9	1
4652	24223	RAMY	05 07 1256	S13	E81	05 13.7		B	DKO	240	5	9	4
4652		MWIL	05 07 1400	S14	E80	05 13.6	3	AP					
4652		BOUL	05 07 1600	S13	E75	05 13.3		B	CSI	360	4	5	3
4652		HOLL	05 07 1725	S13	E79	05 13.7		B	DKO	560	9	8	3
4652		PALE	05 07 1917	S13	E78	05 13.7		B	EKO	470	8	14	3
4652		LEAR	05 08 0014	S13	E75	05 13.7		BGD	DHO	180	5	8	3
4652	24223	MWIL	05 08 1500	S14	E67	05 13.7	5	(BP)					
4652		HOLL	05 08 1510	S12	E67	05 13.7		B	DKI	580	11	8	3
4652		BOUL	05 08 1610	S12	E68	05 13.8		B	DAI	350	11	8	4
4652		PALE	05 08 1811	S14	E67	05 13.8		B	DHO	660	5	9	2
4652		MANI	05 08 2255	S12	E65	05 13.9			DKI	390	8	10	3
4652		LEAR	05 09 0430	S13	E64	05 14.0		BGD	DKI	320	9	10	3
4652		ATHN	05 09 0615	S13	E57	05 13.6			DKI	460	10	10	3
4652		HOLL	05 09 1559	S12	E54	05 13.7		B	DKI	490	14	8	3
4652		RAMY	05 09 1650	S13	E53	05 13.7		B	DKI	530	18	9	4
4652		BOUL	05 09 1725	S12	E55	05 13.9		B	DHI	480	12	8	3
4652		PALE	05 09 1807	S15	E53	05 13.8		B	DKI	480	12	7	3
4652		MANI	05 10 0039	S15	E50	05 13.8			DKI	360	14	8	3
4652	24223	RAMY	05 10 1341	S13	E42	05 13.7		B	DKI	590	30	9	4
4652		MWIL	05 10 1500	S12	E42	05 13.8	6	(D)					
4652		PALE	05 10 1815	S13	E41	05 13.9		B	DHI	620	20	8	3
4652		MANI	05 10 2348	S13	E38	05 13.9			DKI	440	22	8	3
4652		RAMY	05 11 1244	S13	E30	05 13.8		B	DKI	730	35	9	4
4652		HOLL	05 11 1433	S12	E28	05 13.7		B	DKI	690	20	6	3
4652		PALE	05 11 1925	S13	E27	05 13.8		B	DKI	550	21	8	2
4652		MANI	05 11 2329	S13	E24	05 13.8			DKI	370	20	8	3
4652	24223	LEAR	05 12 0100	S12	E24	05 13.8		B	DKI	580	22	7	3
4652		MWIL	05 12 1445	S12	E14	05 13.7	6	(BP)					
4652		PALE	05 12 1815	S13	E13	05 13.7		BD	DKI	520	25	7	3
4652		ATHN	05 13 0630	S13	E04	05 13.6			DKI	340	13	7	1
4652		LEAR	05 13 0720	S14	E06	05 13.8		B	DHI	420	35	9	3
4652		RAMY	05 13 1345	S14	E03	05 13.8		B	DKI	560	22	8	3
4652	24223	HOLL	05 13 1415	S13	E03	05 13.8		B	DHI	490	29	8	3
4652		MWIL	05 13 1530	S12	E01	05 13.7	6	(BG)					
4652		PALE	05 13 1814	S13	E01	05 13.8		B	DKI	440	26	9	3
4652		LEAR	05 14 0053	S13	W04	05 13.7		B	DKI	490	22	9	2
4652		ATHN	05 14 0610	S12	W07	05 13.7			DKO	430	26	9	2
4652	24223	BOUL	05 14 1525	S12	W12	05 13.7		BG	DKI	360	15	7	3
4652		MWIL	05 14 1530	S12	W13	05 13.7	6	(BG)					
4652		PALE	05 14 1800	S13	W13	05 13.8		B	DKI	400	17	6	2
4652		LEAR	05 15 0028	S14	W17	05 13.7		B	DHI	420	19	9	2
4652		MANI	05 15 0121	S12	W18	05 13.7			DKO	260	15	6	2
4652		LEAR	05 15 0225	S13	W18	05 13.7		BG	DKI	440	19	9	3
4652		ATHN	05 15 0615	S12	W17	05 14.0			DKI	420	11	7	1

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NOAA/ USAF Group	Mt Wilson Group	Sta	Observation Time Mo Day (UT)	Lat CMD	CMP Mo Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual	
4652	24223	HOLL	05 15 1410	S12 W23	05 13.9		B	DKO	370	22	7	3	
4652		MWIL	05 15 1445	S13 W25	05 13.7	6	(B)						
4652		RAMY	05 15 1755	S12 W27	05 13.7		B	CKO	340	16	7	2	
4652		LEAR	05 16 0111	S13 W32	05 13.6		B	DHI	230	16	8	2	
4652		MANI	05 16 0128	S12 W30	05 13.8			DHO	290	12	8	3	
4652	24223	ATHN	05 16 0915	S13 W34	05 13.8			CHO	250	2	5	2	
4652		BOUL	05 16 1420	S12 W35	05 14.0		B	CHO	280	5	4	3	
4652		MWIL	05 16 1430	S13 W39	05 13.7	6	(BG)						
4652		PALE	05 16 1748	S13 W39	05 13.8		BG	CHO	350	12	7	3	
4652		HOLL	05 16 1840	S12 W39	05 13.8		B	CKO	260	8	6	2	
4652	24223	LEAR	05 17 0045	S13 W41	05 13.9		BG	CHO	210	7	8	2	
4652		ATHN	05 17 1100	S12 W47	05 13.9		B	CHO	290	4	5	3	
4652		MWIL	05 17 1445	S13 W55	05 13.5	6	(AP)						
4652		PALE	05 17 1815	S12 W53	05 13.8		B	CHO	250	3	4	4	
4652		HOLL	05 17 1955	S13 W54	05 13.8		A	HKX	310	1	3	3	
4652	24223	LEAR	05 18 0313	S12 W59	05 13.7		A	HHX	100	1	3	2	
4652		ATHN	05 18 0615	S14 W60	05 13.7		A	HHX	140	1	5	2	
4652		MWIL	05 18 1530	S13 W67	05 13.6	5	(AP)						
4652		LEAR	05 19 0440	S13 W75	05 13.5		A	HHX	80	1	4	2	
4652		MWIL	05 19 1430	S13 W80	05 13.6	4	(AP)						
4652	24223	HOLL	05 19 1519	S12 W78	05 13.8		A	HHX	140	1	3	3	
4652		BOUL	05 19 1650	S14 W77	05 13.9		A	HSX	120	1	2	2	
4652		RAMY	05 19 1730	S13 W78	05 13.8		A	HAX	180	1	4	3	
4652		LEAR	05 20 0225	S13 W85	05 13.7		A	HHX	100	1	5	3	
4653	24224	MWIL	05 08 1500	N06 E75	05 14.2	3	(AP)						
4653		HOLL	05 08 1510	N07 E76	05 14.3		A	AXX		1		3	
4653		BOUL	05 08 1610	N07 E73	05 14.1		A	AXX		1	1	4	
4653		LEAR	05 09 0430	N07 E69	05 14.4		B	BXO	10	2	5	3	
4653		ATHN	05 09 0615	N07 E65	05 14.1			AXX	10	1	1	3	
4653	24224	HOLL	05 09 1559	N07 E61	05 14.2		A	AXX		1	1	3	
4653		RAMY	05 09 1650	N06 E63	05 14.4		B	CRO	20	2	7	4	
4653		BOUL	05 09 1725	N06 E62	05 14.4		B	CSI	60	8	6	3	
4653		PALE	05 09 1807	N05 E62	05 14.4		B	BXO		2	4	3	
4653		MANI	05 10 0039	N05 E59	05 14.5			BXO	30	2	4	3	
4653	24225	RAMY	05 10 1341	N06 E51	05 14.4		B	BXO	10	4	7	4	
4653		MWIL	05 10 1500	N06 E49	05 14.3	3	(B)						
4653		MWIL	05 10 1500	N06 E55	05 14.7	3	(B)						
4653		PALE	05 10 1815	N06 E50	05 14.5		B	BXO	20	4	8	3	
4653		MANI	05 10 2348	N06 E50	05 14.7			BXO	20	4	8	3	
4653	24226	RAMY	05 11 1244	N07 E42	05 14.7		B	BXO	20	3	3	4	
4653		HOLL	05 11 1433	N08 E38	05 14.5		B	BXO	10	3	9	3	
4653		PALE	05 11 1925	N06 E41	05 14.9		B	BXO	10	3	4	2	
4653		MANI	05 11 2329	N06 E38	05 14.8			BXO	10	3	4	3	
4653		LEAR	05 13 0720	N07 E20	05 14.8		A	AXO	10	4	1	3	
4653	24227	RAMY	05 13 1345	N07 E16	05 14.8		A	HAX	20	1	1	3	
4653		HOLL	05 13 1415	N06 E15	05 14.7		A	AXX		1		3	
4653		MWIL	05 13 1530	N07 E15	05 14.8	3	(AF)						
4653		PALE	05 13 1814	N07 E13	05 14.7		A	AXX		2	2	3	
4653		LEAR	05 14 0053	N07 E09	05 14.7		A	AXO	10	2	1	2	
4653	24231	LEAR	05 15 0225	N05 W07	05 14.6		A	AXX	10	1	1	3	
4653		MWIL	05 15 1445	N05 W21	05 14.0	3	(AP)						
4653		MWIL	05 18 1530	N07 W63	05 13.9	3	(AP)						
4653		HOLL	05 19 1519	N08 W76	05 13.9		A	AXX		1		3	
4654A		LEAR	05 17 0045	N01 W03	05 16.8		A	AXX	10	1	1	2	
4654A	24227	RAMY	05 21 1356	N01 W64	05 16.8		A	AXX		1		3	
4654A		HOLL	05 21 1505	N02 W66	05 16.7		A	AXX		1		3	
4654		RAMY	05 13 1345	S05 E51	05 17.4		A	AXX		1		3	
4654		MWIL	05 13 1530	S05 E50	05 17.4	3	(AF)						
4654		LEAR	05 14 0053	S05 E45	05 17.4		A	AXX	10	1	1	2	
	24228	PALE	05 17 1815	N08 E17	05 19.0		A	AXX	10	2	2	4	
4655		LEAR	05 15 0225	S07 E80	05 21.1		A	AXX	10	1	1	3	
4655		ATHN	05 15 0615	S08 E78	05 21.1			CAX		1	3	1	
4655		HOLL	05 15 1410	S07 E76	05 21.3		A	HSX	30	1	2	3	
4655		MWIL	05 15 1445	S08 E77	05 21.4	3	(AP)						
4655	24228	RAMY	05 15 1755	S08 E72	05 21.1		A	HSX	60	1	2	2	
4655		LEAR	05 16 0111	S07 E71	05 21.4		A	HSX	30	1	3	2	
4655		MANI	05 16 0128	S07 E70	05 21.3			HSX	100	1	3	3	

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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
4655	24228	ATHN	05 16 0915	S09	E65	05 21.3		A	HSX	50	1	2	2
4655		BOUL	05 16 1420	S08	E62	05 21.2		A	HSX	80	3	2	3
4655		MWIL	05 16 1430	S08	E63	05 21.3	4	(AP)					
4655		PALE	05 16 1748	S07	E61	05 21.3		A	HAX	80	1	2	3
4655	24228	HOLL	05 16 1840	S07	E60	05 21.3		A	HSX	70	2	3	2
4655		LEAR	05 17 0045	S07	E57	05 21.3		A	HSX	60	1	2	2
4655		ATHN	05 17 1100	S08	E50	05 21.2		A	HSX	90	2	2	3
4655		MWIL	05 17 1445	S08	E49	05 21.3	5	(AP)					
4655	24228	PALE	05 17 1815	S07	E47	05 21.3		A	HSX	50	1	2	4
4655		HOLL	05 17 1955	S07	E46	05 21.3		A	HSX	130	1	2	3
4655		LEAR	05 18 0313	S08	E42	05 21.3		B	CSO	80	3	4	2
4655		ATHN	05 18 0615	S09	E39	05 21.2		A	HAX	60	1	2	2
4655	24228	MWIL	05 18 1530	S08	E36	05 21.3	5	(AP)					
4655		LEAR	05 19 0440	S08	E28	05 21.3		A	HSX	60	1	1	2
4655		MWIL	05 19 1430	S08	E22	05 21.3	5	(AP)					
4655		HOLL	05 19 1519	S08	E23	05 21.4		A	HSX	80	1	2	3
4655	24228	BOUL	05 19 1650	S08	E22	05 21.4		A	HSX	60	1	2	2
4655		RAMY	05 19 1730	S08	E22	05 21.4		A	HAX	90	1	2	3
4655		LEAR	05 20 0225	S08	E16	05 21.3		A	HHX	100	1	3	3
4655		ATHN	05 20 0610	S08	E12	05 21.2			HHX	80	1	3	4
4655	24228	RAMY	05 20 1310	S08	E12	05 21.4		B	DAO	120	3	4	3
4655		MWIL	05 20 1500	S08	E10	05 21.4	5	(BP)					
4655		HOLL	05 20 1512	S08	E11	05 21.5		B	CSO	100	3	4	3
4655		PALE	05 20 1949	S08	E07	05 21.4		B	DAO	100	3	4	2
4655	24228	LEAR	05 21 0010	S09	E05	05 21.4		B	CSO	80	3	6	2
4655		ATHN	05 21 0700	S07	W02	05 21.1			HSX	60	1	2	1
4655		RAMY	05 21 1356	S08	W01	05 21.5		B	CSO	80	4	3	3
4655		MWIL	05 21 1430	S08	W05	05 21.2	5	(BP)					
4655	24228	HOLL	05 21 1505	S08	W03	05 21.4		B	CSO	130	3	4	3
4655		MANI	05 21 2338	S08	W08	05 21.4			CSO	60	3	3	2
4655		LEAR	05 22 0014	S08	W10	05 21.3		A	HSX	40	1	2	2
4655		ATHN	05 22 0845	S08	W13	05 21.4		A	HSX	60	3	2	1
4655	24228	HOLL	05 22 1515	S08	W18	05 21.3		A	HSX	80	1	2	3
4655		BOUL	05 22 1820	S07	W17	05 21.5		A	HSX	50	1	2	2
4655		MANI	05 22 2337	S07	W21	05 21.4			HSX	50	2	2	2
4655		LEAR	05 23 0003	S08	W23	05 21.3		A	HHX	60	1	2	1
4655	24228	ATHN	05 23 0700	S07	W26	05 21.3		A	HSX	70	1	2	2
4655		RAMY	05 23 1230	S08	W31	05 21.2		A	HSX	60	1	2	4
4655		BOUL	05 23 1325	S07	W28	05 21.5		A	HSX	40	1	2	2
4655		MWIL	05 23 1500	S08	W32	05 21.2	5	(AP)					
4655	24228	HOLL	05 23 1733	S08	W33	05 21.2		A	HSX	90	1	2	3
4655		LEAR	05 24 0007	S08	W37	05 21.2		A	HSX	50	1	3	1
4655		MANI	05 24 0151	S08	W38	05 21.2			HSX	70	1	3	2
4655		RAMY	05 24 1234	S08	W43	05 21.3		A	HSX	50	1	2	3
4655	24228	BOUL	05 24 1340	S07	W41	05 21.5		A	HSX	30	1	2	2
4655		MWIL	05 24 1430	S08	W45	05 21.2	5	(AP)					
4655		HOLL	05 24 1451	S08	W45	05 21.2		A	HSX	70	1	2	3
4655		PALE	05 24 1810	S08	W48	05 21.2		A	HSX	80	1	2	4
4655	24228	MANI	05 24 2340	S08	W51	05 21.2			HSX	60	1	2	3
4655		LEAR	05 25 0051	S07	W51	05 21.2		A	HSX	40	3	1	3
4655		ATHN	05 25 0700	S07	W53	05 21.3			AXX	50	1	1	1
4655		MWIL	05 25 1445	S07	W59	05 21.2	5	(AP)					
4655	24228	BOUL	05 25 1550	S07	W55	05 21.5		A	HSX	10	1	2	2
4655		HOLL	05 25 1555	S08	W58	05 21.3		A	HSX	60	1	1	3
4655		PALE	05 25 1826	S07	W60	05 21.3		A	HSX	40	1	1	2
4655		LEAR	05 26 0043	S07	W64	05 21.2		A	HSX	20	1	1	3
4655	24228	ATHN	05 26 0930	S06	W65	05 21.5			HSX	40	1	2	1
4655		RAMY	05 26 1420	S07	W73	06 21.1		A	HSX	30	1	2	2
4655		MWIL	05 26 1445	S07	W71	05 21.3	4	(AP)					
4655		HOLL	05 26 1529	S07	W72	05 21.3		A	HSX	20	1	1	4
4655	24228	PALE	05 26 1815	S07	W75	05 21.1		A	HSX	20	1	2	3
4655		LEAR	05 27 0115	S07	W78	05 21.2		A	HSX	20	1	1	3
4655A	24229	LEAR	05 23 0003	N08	W07	05 22.5		B	BXO	10	2	2	1
4655A		ATHN	05 23 0700	N07	W11	05 22.5		A	AXX	10	1	1	2
4655A		HOLL	05 23 1733	N08	W17	05 22.5		A	AXX		1		3
4655A		LEAR	05 24 0007	N06	W18	05 22.7		B	BXG	20	3	3	1
4655A		MANI	05 24 0151	N06	W19	05 22.7			BXO	10	3	3	2
4655A	24229	LEAR	05 25 0051	N09	W30	05 22.8		A	AXX		2	2	3
4655B		MWIL	05 17 1445	N05	E74	05 23.1	3	(AP)					
4656		LEAR	05 17 0045	N09	E85	05 23.4		B	BXO	20	5	3	2
4656		ATHN	05 17 1100	N08	E77	05 23.2			BXO	50	6	2	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 1985														
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	
4656	24230	MWIL	05 17 1445	N09	E76	05 23.3	4	(BF)						
4656		PALE	05 17 1815	N07	E74	05 23.3		B	CAO	190	10	9	4	
4656		HOLL	05 17 1955	N09	E75	05 23.5		B	CAO	70	6	13	3	
4656		LEAR	05 18 0313	N08	E68	05 23.2		B	CAO	60	8	7	2	
4656		ATHN	05 18 0615	N08	E67	05 23.3			CAO	20	8	7	2	
4656	24230	MWIL	05 18 1530	N08	E61	05 23.2	4	(BF)						
4656		LEAR	05 19 0440	N02	E55	05 23.3		B	DAO	60	8	4	2	
4656	24230	MWIL	05 19 1430	N09	E49	05 23.3	4	(AF)						
4656		HOLL	05 19 1519	N08	E48	05 23.2		B	DKO	140	10	6	3	
4656		BOUL	05 19 1650	N08	E47	05 23.2		B	DAI	120	5	4	2	
4656		RAMY	05 19 1730	N08	E48	05 23.3		B	DAO	150	9	4	3	
4656		LEAR	05 20 0225	N09	E31	05 22.4		B	DAO	40	19	9	3	
4656		ATHN	05 20 0610	N07	E36	05 23.0			DAO	180	17	9	4	
4656		RAMY	05 20 1310	N08	E34	05 23.1		B	DAO	170	15	10	3	
4656	24230	MWIL	05 20 1500	N08	E34	05 23.2	5	(BG)						
4656		HOLL	05 20 1512	N08	E33	05 23.1		B	DAO	130	19	9	3	
4656		PALE	05 20 1949	N08	E33	05 23.3		B	DAI	80	11	5	2	
4656		LEAR	05 21 0010	N08	E28	05 23.1		B	DAO	120	16	11	2	
4656		ATHN	05 21 0700	N03	E27	05 23.3			DSO	90	7	4	1	
4656		RAMY	05 21 1356	N07	E22	05 23.2		B	DAO	90	22	8	3	
4656	24230	MWIL	05 21 1430	N07	E23	05 23.3	5	(BG)						
4656		HOLL	05 21 1505	N07	E19	05 23.1		BG	CAI	110	23	8	3	
4656		MANI	05 21 2338	N07	E15	05 23.1			CAO	70	25	8	2	
4656		LEAR	05 22 0014	N08	E13	05 23.0		B	CAO	60	19	10	2	
4656		ATHN	05 22 0845	N07	E13	05 23.3			CSO	30	7	4	1	
4656		HOLL	05 22 1515	N07	E07	05 23.2		BG	DAO	90	14	5	3	
4656		BOUL	05 22 1820	N07	E08	05 23.4		B	CSI	40	7	3	2	
4656		MANI	05 22 2337	N08	E03	05 23.2			CAO	40	6	4	2	
4656		LEAR	05 23 0003	N07	E03	05 23.2		BG	CSI	60	11	3	1	
4656		ATHN	05 23 0700	N07	W02	05 23.1			CAO	70	10	5	2	
4656		RAMY	05 23 1230	N06	W08	05 22.9		B	CAO	90	20	12	4	
4656		BOUL	05 23 1325	N07	W04	05 23.3		B	CAI	50	8	2	2	
4656	24230	MWIL	05 23 1500	N07	W05	05 23.3	5	(BG)						
4656		HOLL	05 23 1733	N06	W06	05 23.3		B	CAO	20	3	1	3	
4656		LEAR	05 24 0007	N07	W10	05 23.3		B	CAO	40	7	3	1	
4656		MANI	05 24 0151	N07	W10	05 23.3			CAO	40	5	3	2	
4656		RAMY	05 24 1234	N07	W19	05 23.1		B	BXO	40	9	8	3	
4656		BOUL	05 24 1340	N07	W14	05 23.5		B	CSO	20	3	3	2	
4656	24230	MWIL	05 24 1430	N07	W18	05 23.3	5	(BF)						
4656		HOLL	05 24 1451	N07	W20	05 23.1		B	BXO	10	8	4	3	
4656		PALE	05 24 1810	N07	W21	05 23.2		B	BXO	20	3	3	4	
4656		MANI	05 24 2340	N07	W24	05 23.2			BXO	10	4	3	3	
4656		LEAR	05 25 0051	N06	W25	05 23.2		B	BXO	10	5	3	3	
4656		ATHN	05 25 0700	N07	W26	05 23.3			AXX	20	1	1	1	
4656	24230	MWIL	05 25 1445	N07	W31	05 23.3	3	(BF)						
4656		HOLL	05 25 1555	N06	W33	05 23.2		A	AXX	10	2	2	3	
4656		PALE	05 25 1826	N08	W34	05 23.2		A	AXX		1		2	
4656		LEAR	05 26 0043	N08	W37	05 23.3		A	AXX		1	1	3	
4656	24230	MWIL	05 26 1445	N06	W45	05 23.2	2	(AP)						
4656		HOLL	05 26 1529	N06	W46	05 23.2		A	AXX		2	1	4	
4656	24230	MWIL	05 27 1430	N07	W60	05 23.1	2	(AF)						
4656		HOLL	05 27 1638	N07	W67	05 22.7		A	AXX		2	1	4	
4658		HOLL	05 28 2017	N04	W23	05 27.1		B	BXX	10	3	3	3	
4658		HOLL	05 29 1450	N04	W34	05 27.1		B	BXO	10	2	3	3	
4658		RAMY	05 29 1507	N04	W34	05 27.1		B	BXO	10	3	3	3	
4658	24232	MWIL	05 29 1515	N04	W34	05 27.1	4	(B)						
4658		PALE	05 29 1933	N05	W36	05 27.1		B	BXO	10	2	3	2	
4658		HOLL	05 30 1643	N04	W46	05 27.3		A	AXX		1		2	
4658A		PALE	05 24 1810	N24	E32	05 27.2		A	AXX		1		4	
4658A		MANI	05 24 2340	N25	E29	05 27.2			AXX	10	1	1	3	
4658A		LEAR	05 25 0051	N26	E27	05 27.1		A	AXX		1	1	3	
4661		RAMY	06 04 1221	S21	W48	05 31.8		B	CRO	30	4	3	3	
4661		HOLL	06 04 1427	S20	W50	05 31.8		B	CSO	20	5	4	3	
4661	24235	MWIL	06 04 1430	S20	W48	05 31.9	4	(B)						
4661		PALE	06 04 1805	S20	W52	05 31.8		B	CRO	20	4	4	4	
4661		ATHN	06 05 0650	S20	W57	05 31.9			BXO	20	2	3	2	
4661		RAMY	06 05 1235	S20	W62	05 31.8		B	BXO	20	5	4	4	
4661	24235	MWIL	06 05 1445	S20	W63	05 31.8	3	(B)						
4661		PALE	06 05 1745	S20	W66	05 31.7		B	BXO	20	2	4	3	
4661	24235	MWIL	06 06 1500	S20	W78	05 31.7	2	(AP)						

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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

May 1985

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	0436	0443	0518	1-	1			1			No Flare		
01	0703	0708	0732	1-	1			1			0700 UT		4647
01	1408	1410	1421	1-	1					1	No Flare		
01	1430	1437	1500	1	5	1	2	1	1	5	1430 UT	C2.7	4647
02	0620	0623	0650	2	1					1	No Flare		
02	0744	0748		2+	5	4	2	1	2	4	0745E UT		4647
02	0902		0905	1	1	1					No Flare		
07	0807	0810	0835	1-	3			1	2	2	0805 UT	C1.4	4652
07	0950	0952	1045	2+	1					1	*		
07	1953	2000	2020	1+	1					1	1948 UT	C1.3	No data
09	0556	0603	0643	1-	3			1	1		0554 UT		4652
11	0601	0613	0650	1-	1			1			0548 UT	C1.3	
12	0702	0707	0728	1-	1			1			0653 UT		No data
13	0925	0938	1136	2	5	4	1	1	2	3	0916 UT		No data
13	0945	1000	1100	2+	1					1	0939E UT		No data
13	1827	1837	1955	1-	3			1		5	1820 UT	C2.1	4652
14	0013	0030	0130	1-	3			1	1		0011 UT	C2.0	4652
16	0634	0644	0818	1-	3			1	1		0630 UT	C1.9	4652
19	1736	1742	1753	1	3					3	No Flare		
19	2053	2057	2150	1-	3			1		7	2052 UT	C3.5	4656
21	0414	0427	0524	1-	3			1	1		0411 UT	C1.9	4656
21	0953	1000	1047	1-	3	2		1	1	1	0953 UT		No data
21	2225	2232	2310	1-	1			1			No Flare		
22	0221	0230	0251	1-	1			1					
23	0222	0226	0237U	1-	1				1		0220 UT		4656
23	0313	0321	0341	1-	1			1			No Flare		
29	0208	0210	0224	1-	1				1		No Flare		
30	1339	1353	1423	1-	1			1			No Flare		
31	0129	0140	0153	1-	1				1		No Flare		

* No flare patrol

SIDs by NOAA/SESC REGION FOR MAY 1985

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
Region Number																															
4647	2	1																													
4652							1		1				1	1		1															
4656																			1		1	1	1								
X-Ray	1						2				1		1	1		1			1		1										
No Flare	2	2																	1		1		1						1	1	1
No Flare Patrol							1																								
No Data							1					1	2								1										
Event Totals	4	3					3	1			1	1	3	1		1			2		3	1	2						1	1	1

S O L A R R A D I O E M I S S I O N
S P E C T R A L O B S E R V A T I O N S

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May 85

MAY 1985													
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)	
01	0447	1811	WEIS PALE				1828.3	1831.3	2				V
02	0500	1800	BLEN	0746.3	0754.7	2							III GG
	0443	0813	WEIS				0746.7	0747.1	1				IIIG
			LEAR				0748.5	0749.1	1				III
			WEIS				0753.4	0753.9	2				IIIG,DCIM
			WEIS				0757.4	0811.1	2				II
	1030	1238	WEIS										
	1338	1812	WEIS										
	1453	1800	BLEN										
03	0443	1814	WEIS										
	0500	1800	BLEN										
04	0440	0640	WEIS										
	0500	1800	BLEN										
	0833	1815	WEIS										
05			LEAR				0119.8	0120.3	1				III
	0500	1500	BLEN										
			SGMR				1144.3	1154.8	1				GG
	0441	1503	WEIS				1144.7	1148.3	2				IIIGG
			SGMR				1313.3	1314.6	1				V
	1703	1816	WEIS										
			WEIS				2336.8	2340.1	2				V
06	0437	0724	WEIS										
	0747	0821	WEIS										
	0845	1817	WEIS										
			SGMR				1406.3	1406.6	1				V
			SGMR				1408.1	1410.0	1				V
07			LEAR				0558.8	0600.3	1				V
	0438	1025	WEIS				0558.8	0559.9	3				IIIGG
	0500	1800	BLEN				0558.9	0559.5	2				III
			WEIS				0921.8	0922.7	2				IIIG
			BLEN	0922.7	0923.7	2	0922.7	0923.7	1				IIIRS
			WEIS				0922.7	0922.8	2				DCIM
			WEIS				0923.8	0923.9	1				IIIB
	1037	1232	WEIS										
	1246	1535	WEIS				1248.3	1248.4	1				IIIB
			SGMR				1548.5	1549.3	1				V
	1636	1819	WEIS										
			SGMR				1755.6	1756.0	1				V
			PALE				2112.1	2112.3	1				III
			SGMR				2112.1	2112.3	1				V
			PALE				2138.6	2139.1	2				V
			SGMR				2138.8	2139.1	1				V
08			LEAR				0139.0	0139.3	1				III
			LEAR				0204.1	0212.8	1				G
	0435	1114	WEIS				0706.7	0707.0	3				IIIG
			WEIS				0844.9	0845.3	2				IIIG
			SGMR				1504.5	1505.1	1				V
	1150	1738	WEIS				1545.0	1545.7	2				IIIG,U
	0500	1800	BLEN				1545.4	1545.6	3				IIIB
			SGMR				1613.6	1629.1	1				GG
			SGMR				1735.8	1743.6	1				V
			BLEN				1736.6	1742.7	2				IIIGG
	1743	1820	WEIS				1742.4	1742.9	2				IIIG
09	0455	1805	BLEN										
	0433	1821	WEIS				0620.3	0620.4	1				IIIB
			WEIS				0716.1	0716.2	2				IIIB
			WEIS				0724.4	0724.7	2				IIIG
			LEAR				0733.1	0733.5	2				III
			WEIS				0733.1	0733.3	2				IIIG
			SGMR				1449.3	1449.3	1				III
			WEIS				1539.9	1541.3	1				IIIG
			WEIS				1549.4	1549.7	3				IIIG

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May 85

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

MAY 1985

Observation			Decimetric Band			Metric Band			Dekametric Band			Spectral Type	
Day	Start (UT)	End (UT)	Sta	Start (UT)	End (UT)	Int (1-3)	Start (UT)	End (UT)	Int (1-3)	Start (UT)	End (UT)		Int (1-3)
09			SGMR				1549.5	1551.0	1				V
			WEIS				1550.5	1550.9	2				IIIG
			SGMR				1653.0	2329.0	1				CONT
			PALE				2021.8	2024.6	1				V
			SGMR				2021.8	2024.6	1				V
10			LEAR				0422.5	0424.6	1				III
	0431	1009	WEIS										
			LEAR				0445.8	0448.6	1				III
			WEIS				1215.4	1216.3	1				IIIG
	1019	1821	WEIS				1219.5	1220.1	1				IIIG
			WEIS				1313.0	1315.4	3				IIIGG
			WEIS				1319.4	1322.4	2				IIIGG
			WEIS				1543.7	1545.6	2				IIIG, U
			WEIS				1550.7	1602.7	3				IIIGG
	0455	1805	BLEN	1552.5	1601.5	3	1552.5	1601.5	3				IIIGG
			WEIS				1605.7	1605.9	2				IIIG
			WEIS				1617.2	1617.4	2				U
			BLEN	1627.3	1627.7	1	1627.3	1627.7	1				IIIGG
11			LEAR				0319.5	0319.8	2				III
	0455	1805	BLEN				0455.8	0500.2	3				IIIGG
			LEAR				0455.8	0500.3	3				III
	0433	1627	WEIS				0456.1	0456.7	2				IIIG
			WEIS				0458.7	0500.0	3				IIIG
			WEIS				0552.1	0552.9	2				IIIG
			WEIS				0624.7	0626.4	3				IIIG
			BLEN				0624.8	0627.2	3				IIIGG
			LEAR				0624.8	0626.3	2				III
			LEAR				0640.8	0641.5	2				III
			WEIS				0640.8	0643.1	3				IIIG
			BLEN				0703.3	0703.7	3				III
			LEAR				0704.8	0704.8	1				III
			WEIS				0915.5	0915.7	1				IIIG
			WEIS				0936.8	0938.6	2				IIIG
			WEIS				0941.4	0942.4	1				IIIG
			BLEN	0944.2	0944.5	2	0944.2	0944.5	3				IIIGG
			WEIS				0944.3	0944.5	3				IIIG
			WEIS				0954.7	0956.3	1				IIIG
			WEIS				1010.7	1011.1	1				IIIG
			WEIS				1017.7	1021.9	2				IIIG
			WEIS				1023.3	1023.5	2				IIIG
			WEIS				1036.0	1037.1	3				IIIG
			WEIS				1123.1	1123.8	2				IIIGG
			WEIS				1204.3	1210.8	2				IIIGG
			WEIS				1224.0	1225.2	2				IIIG
			WEIS				1226.7	1229.4	1				IIIGG
			WEIS				1235.2	1239.3	2				IIIGG
			WEIS				1302.3	1303.3	1				IIIG
			WEIS				1306.6	1313.9	1				IIIG
			WEIS				1323.3	1323.5	1				IIIG
			WEIS				1336.4	1336.5	1				IIIB
			WEIS				1346.3	1348.3	3				IIIG
			WEIS				1350.3	1358.9	2				IIIG, U
			WEIS				1432.9	1433.0	1				IIIB
			WEIS				1457.3	1457.4	1				IIIB
			WEIS				1528.4	1532.2	1				IIIG
			PALE				2301.6	2302.1	2				III
12			LEAR				0006.5	0007.6	1				III
			LEAR				0045.0	0113.0	2				G
			PALE				0100.5	0100.8	1				III
			LEAR				0126.0	0936.0	2				CONT
	0455	0612	BLEN				0523.3	0523.8	3				IIIG
	0429	1824	WEIS				0606.9	0607.8	3				IIIG
			LEAR				0607.0	0608.5	2				V
			WEIS				0627.0	1635.0	2				IIIN
			LEAR				0726.3	0727.8	2				V
			LEAR				0804.6	0805.1	2				III
			WEIS				0804.7	0805.1	3				IIIG
			WEIS				0847.5	0851.0	3				IIIGG

SOLAR RADIO EMISSION
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Observation			Decimetric Band			Metric Band			Dekametric Band			Spectral Type
Day	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)	
12			WEIS			0909.3	0909.6	2				U
			WEIS			1114.3	1114.6	3				DCIM
			WEIS			1128.7	1129.1	3				IIIG
			WEIS			1147.0	1156.2	3				IIIGG
			WEIS			1332.5	1333.2	3				IIIG
			WEIS			1514.4	1518.5	3				IIIG
			PALE			1921.1	1923.8	2				V
			PALE			2022.8	2023.3	1				III
13			LEAR			0045.3	0046.1	1				III
			LEAR			0128.8	0935.0	2				CONT
			PALE			0159.5	0159.8	1				III
	0429	1030	WEIS			0440.0	1733.0	3				IIIS,B
	1108	1826	WEIS			0443.8	0443.9	3				IIIB
			WEIS			0451.0	1620.0	2				IS
	0912	1810	BLEN	0912.0E	1810.0D 1	0912.0E	1810.0D	2				I,DC
			WEIS			1112.7	1113.2	3				IIIB
			WEIS			1325.7	1326.3	3				IIIG
			WEIS			1331.4	1332.2	3				IIIG
			WEIS			1336.0	1336.1	3				IIIG
			WEIS			1357.4	1357.9	3				IIIG
			WEIS			1401.8	1411.3	3				IIIGG
			WEIS			1517.7	1519.6	3				IIIGG
			WEIS			1531.3	1531.5	3				IIIG
			WEIS			1544.5	1544.8	3				IIIG
			WEIS			1546.9	1552.6	2				IIIGG
			WEIS			1606.7	1606.9	3				IIIG
			PALE			1847.8	1848.1	1				III
			PALE			1848.6	1848.8	1				III
			PALE			1957.8	1958.8	1				V
			PALE			2005.6	2012.6	3				III
			PALE			2151.1	2151.5	2				III
			PALE			2232.5	2232.8	1				III
			PALE			2234.6	2235.8	1				III
			PALE			2247.0	2247.6	2				III
			LEAR			2326.3	2326.8	1				III
			LEAR			2334.6	2335.8	3				III
			LEAR			2347.3	2347.5	1				III
14			LEAR			0013.3	0935.0	2				CONT
			WEIS			0426.0	1154.0	2				IIIS
	0430	1810	BLEN	0430.0E	1810.0D 1	0430.0E	1810.0D	2				I,DC
	0426	1703	WEIS			0609.0	1652.0	3				IS,DC
			WEIS			0803.0	0803.4	3				IIIG,U
			BLEN	1008.9	1009.0 1	1008.9	1009.0	3				IIIB
			WEIS			1008.9	1009.1	3				IIIB
			BLEN			1056.5	1056.8	3				IIIG
			WEIS			1056.6	1057.3	3				IIIGG
			BLEN			1651.7	1651.9	3				IIIG
	1810	1827	WEIS									
15	0430	1810	BLEN	0430.0E	1810.0D 1	0430.0E	1800.0D	2				I,N,DC
	0427	0814	WEIS			0529.7	0529.8	1				IIIB
			WEIS			0542.7	0542.9	1				IIIG
			WEIS			0621.0	0805.0	2				I
			WEIS			0630.7	0630.8	1				IIIB
			WEIS			0639.8	0639.9	1				IIIB
			BLEN			0721.6	0721.9	3				IIIG
			WEIS			0721.6	0721.9	3				IIIG
			WEIS			0731.9	0732.5	2				IIIG
			WEIS			0741.8	0741.9	1				IIIB
			WEIS			0805.6	0809.9	3				IIIGG
	1338	1829	WEIS			1422.2	1422.3	2				IIIB
			WEIS			1441.3	1441.5	1				IIIG
			WEIS			1448.2	1448.3	1				IIIB
			WEIS			1524.8	1524.9	2				IIIB
			WEIS			1537.0	1624.0	3				I,DC
			WEIS			1657.8	1702.9	3				IIIG
			PALE			2027.1	2027.8	2				III
			PALE			2125.6	2127.0	3				V
16	0430	1810	BLEN			0430.0E	1800.0D	1				IN

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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)	
16			LEAR				0511.5	0511.6	1				III
			LEAR				0516.6	0517.0	1				V
			WEIS				0548.0	1300.0	3				I,S,DC
			BLEN	0550.8	0550.9	2							III,RS,G
	0425	1300	WEIS				0605.0	1544.0	2				IIIN
			LEAR				0605.1	0606.5	2				III
			SGMR				1240.0	2337.0	1				CONT
			WEIS				1248.6	1257.2	3				IIIGG
	1431	1829	WEIS										
17			LEAR				0307.8	0308.1	3				III
	0430	1603	BLEN				0430.0E	1101.0	1				IN
	0425	1831	WEIS				1007.9	1008.1	1				IIIG
			WEIS				1102.0	1116.3	2				IIIS/I
			SGMR				1744.8	1750.1	1				V
			SGMR				1822.3	1823.3	1				V
			PALE				1822.8	1823.1	1				V
			SGMR				1834.3	1835.1	1				V
18			LEAR				0425.8	0426.3	1				III
			LEAR				0510.8	0511.6	1				III
			LEAR				0621.6	0634.5	2				G
	0423	0623	WEIS				0621.7	0622.1	3				IIIG
	0430	1820	BLEN				0622.6	0648.0	1				I
	0822	1832	WEIS				0952.7	0954.6	1				IIIG
			WEIS				1019.8	1020.3	1				IIIG
			WEIS				1046.7	1046.8	2				IIIB
			SGMR				1133.8	1134.5	1				V
			WEIS				1134.9	1135.6	3				IIIG
			WEIS				1146.7	1146.8	1				IIIB
			WEIS				1149.7	1150.6	3				IIIG
			SGMR				1202.6	1203.3	1				V
			WEIS				1202.7	1203.2	3				IIIG
			SGMR				1235.3	1236.1	1				V
			WEIS				1235.4	1237.2	3				IIIGG
			SGMR				1708.0	1708.8	1				V
			WEIS				1708.0	1708.3	3				IIIG
			PALE				1910.1	1910.8	1				V
			SGMR				1910.1	1910.6	1				V
19	0430	1820	BLEN										
			LEAR				0534.8	0535.0	1				III
			LEAR				0653.5	0653.6	1				III
	0422	1422	WEIS				0653.5	0653.7	1				IIIG
	1747	1833	WEIS										
20			PALE				1939.8	1940.6	1				V
	0421	1833	WEIS				0535.1	0535.2	1				IIIB
	0430	1820	BLEN				0707.3	0707.4	2				III
			WEIS				0813.0	0813.3	3				IIIB
			WEIS				0831.8	0833.2	3				DCIM
			WEIS				1213.4	1213.7	3				DCIM
			WEIS				1549.3	1549.6	2				IIIG
21			WEIS				1728.7	1728.9	2				IIIG
			PALE				0400.8	0431.1	2				CONT
	0430	1159	BLEN										
	0421	0922	WEIS				0654.4	0654.6	3				IIIG
			LEAR				0654.5	0654.6	1				III
			LEAR				0833.3	0834.3	2				III
			WEIS				0833.3	0834.8	3				IIIGG
			WEIS				0915.1	0917.9	3				IIIGG
			LEAR				0917.6	0917.8	1				III
			SGMR				0953.8	0000.0	1				CONT
			SGMR				0953.8	0955.3	1				V
			SGMR				0953.8	2341.0	1				CONT
	1007	1205	WEIS				1047.4	1047.7	2				IIIG
			WEIS				1128.1	1128.9	3				IIIGG
			SGMR				1128.5	1128.8	1				V
			WEIS				1143.2	1143.4	2				IIIG
	1325	1810	BLEN	1549.3	1549.7	3	1549.3	1549.7	2				IIIG

SOLAR RADIO EMISSION SPECTRAL OBSERVATIONS

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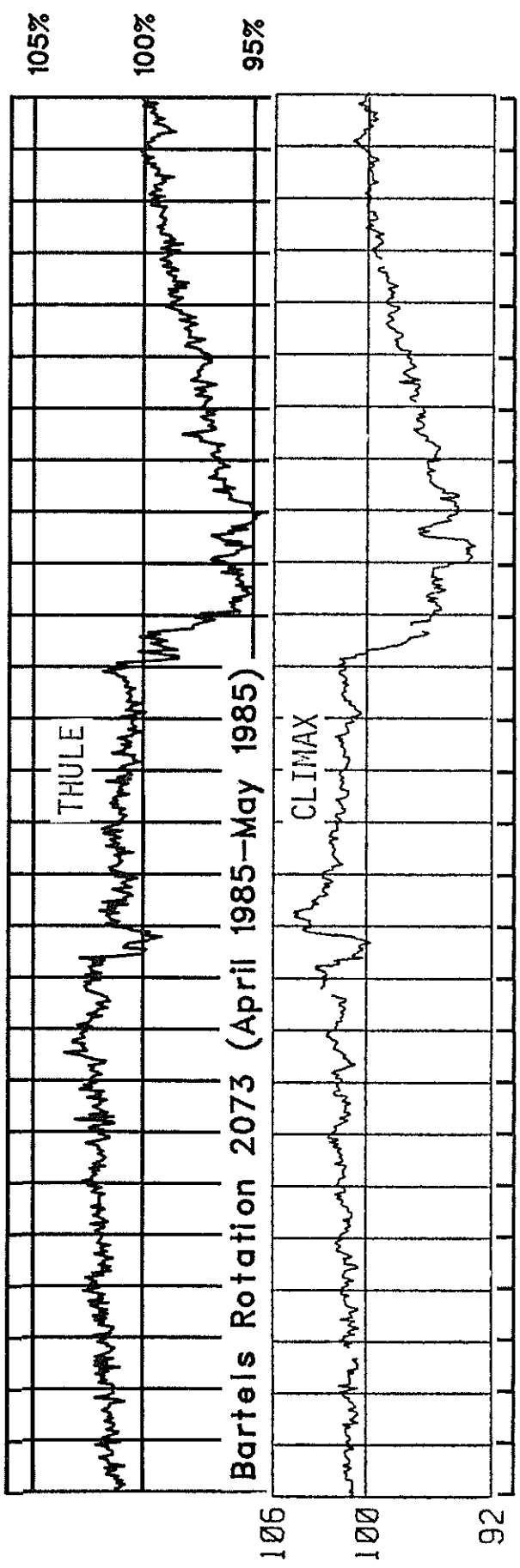
Observation				Decimetric Band			Metric Band			Dekametric Band			Spectral Type			
Day	Start (UT)	End (UT)	Sta	Start (UT)	End (UT)	Int (1-3)	Start (UT)	End (UT)	Int (1-3)	Start (UT)	End (UT)	Int (1-3)				
21	1418	1836	WEIS				1549.7	1549.8	1				DCIM			
			BLEN				1613.7	1614.5	2				IIIGG			
			WEIS				1613.7	1614.3	2				IIIG,DCIM			
			BLEN				1703.1	1744.5	2				IIIGG,N			
			WEIS				1703.3	1707.6	3				IIIGG			
			WEIS				1710.9	1711.3	1				IIIG			
			WEIS				1729.7	1729.9	3				IIIG			
			SGMR				1848.8	1853.5	2				V			
SGMR				1930.3	1933.6	1				V						
22	0430	1810	LEAR				0118.3	0126.1	2				V			
			BLEN				0547.7	0552.0	3				IIIGG			
			WEIS				0547.7	0549.9	3				IIIGG			
			LEAR				0548.6	0550.8	2				V			
			WEIS				0551.3	0551.7	1				IIIG			
			BLEN	0603.9	0604.1	2	0603.9	0604.1	3				III			
			WEIS				0608.9	0609.2	3				IIIG			
			LEAR				0609.0	0609.3	2				III			
			WEIS				0727.7	0728.3	3				IIIGG			
			WEIS				1436.0	1436.2	2				IIIG			
			BLEN	1720.8	1721.3	2	1720.8	1721.3	2				IIIG			
			SGMR				1720.8	1722.3	1				V			
			WEIS				1720.9	1721.6	3				IIIGG,DCIM			
			LEAR				2334.8	2335.1	1				III			
			23			LEAR				0203.1	0203.5	2				III
						LEAR				0257.8	0258.1	1				III
LEAR							0336.8	0339.3	2				III			
LEAR							0344.0	0344.1	1				III			
WEIS							0518.6	0518.8	1				III			
WEIS																
WEIS																
WEIS																
24	0416	1024	WEIS													
			1043	1839	WEIS											
25	0418	1621	WEIS													
			1142	1810	BLEN											
			1738	1840	WEIS											
26	0416	1841	WEIS													
			0430	1810	BLEN											
27	0415	0854	WEIS													
			0430	1810	BLEN											
			SGMR				1552.5	1552.8	1				V			
			PALE				1726.6	2041.1	1			CONT				
28	0430	1810	BLEN													
			0649	1842	WEIS											
29	0415	1212	WEIS													
			0430	1810	BLEN											
			1226	1844	WEIS											
30	0414	0700	WEIS													
			1736	1846	WEIS											
31	0700	1220	WEIS													
			1700	1845	WEIS											

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

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

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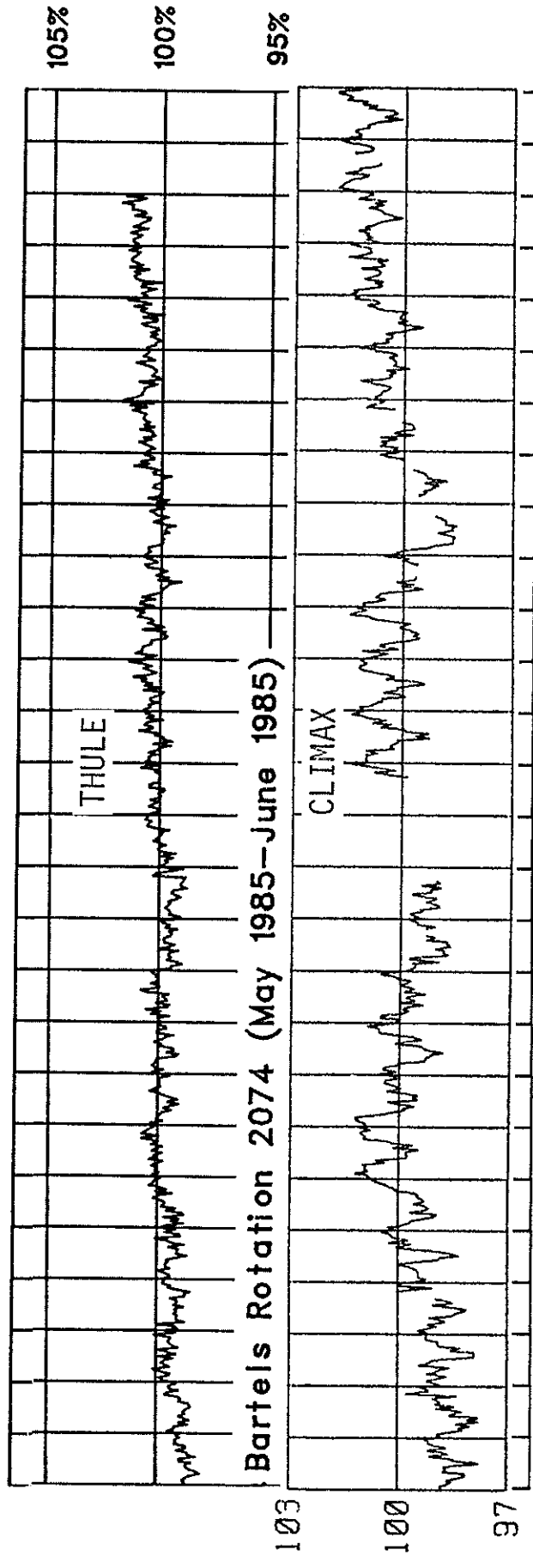
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27



APR 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 1 2 3 4 5 6 MAY 1985

COSMIC RAY INDICES (Neutron Monitor)

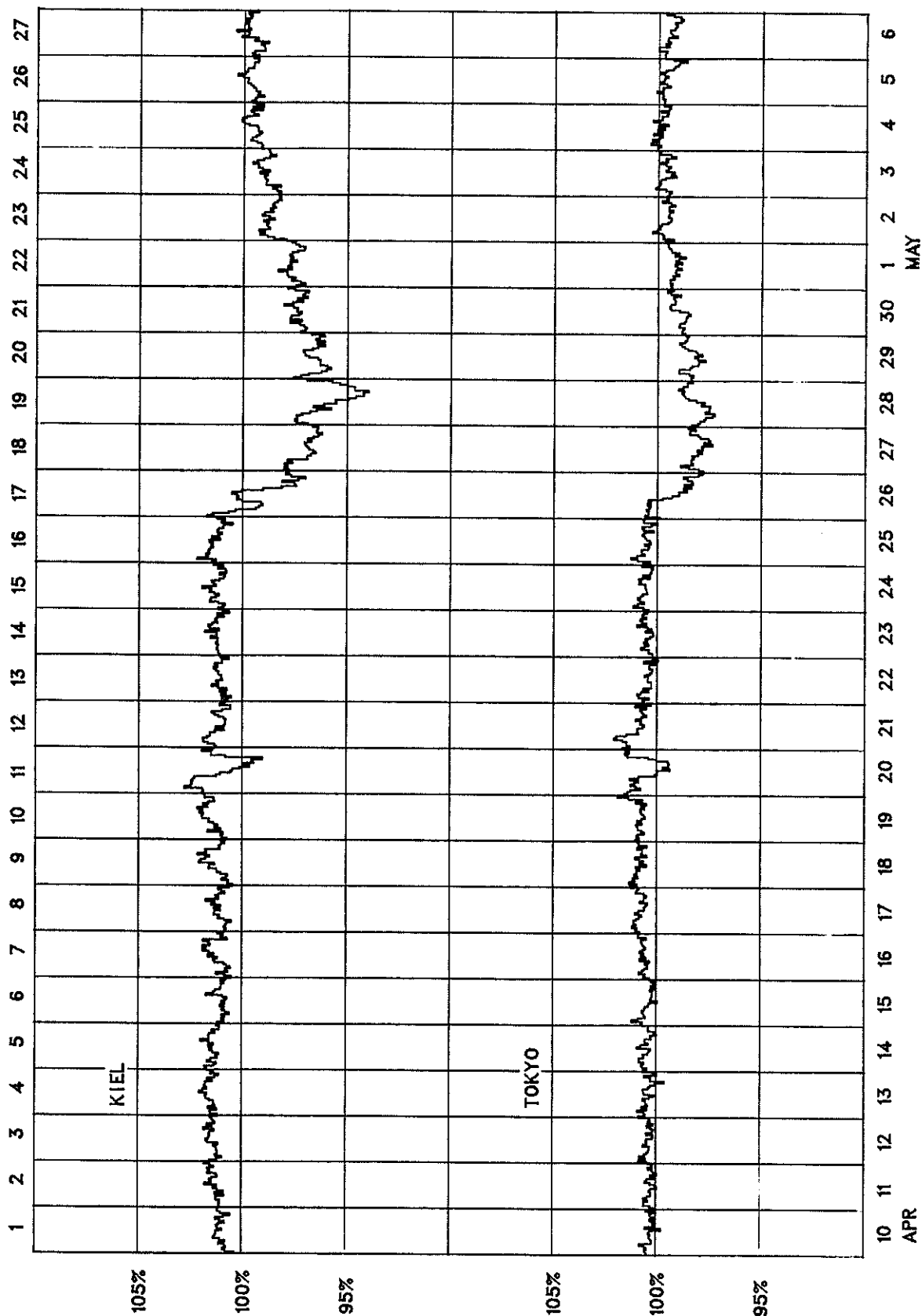
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27



MAY 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 1 2 JUN 1985

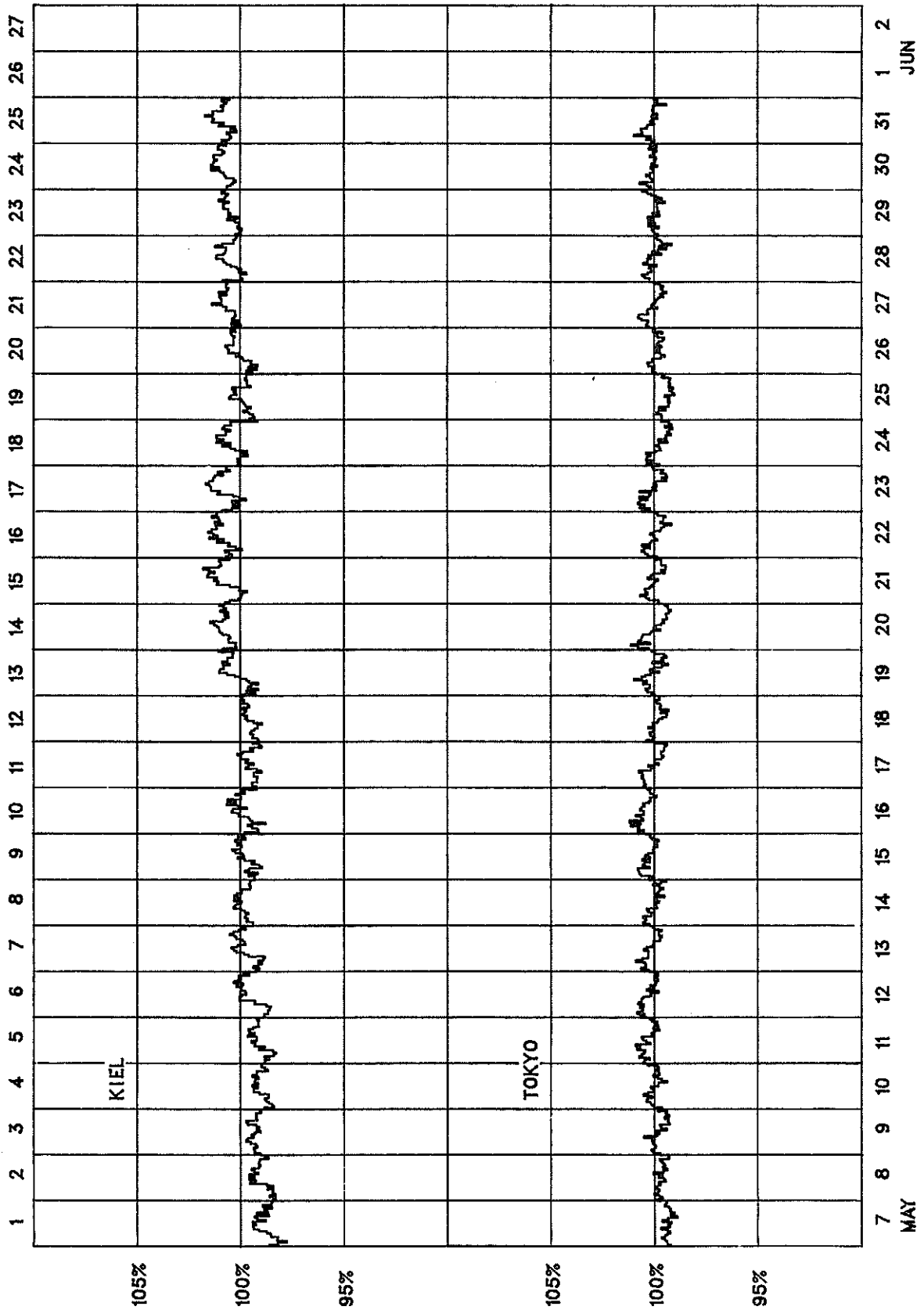
COSMIC RAY INDICES (Neutron Monitor)

Bartels Rotation 2073 (April 1985-May 1985)



COSMIC RAY INDICES
(Neutron Monitor)

Bartels Rotation 2074 (May 1985-June 1985)



COSMIC RAY INDICES
(Neutron Monitor)

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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	4206			5867.1	3819.9	1098	3604.0	
2	4235			5932.4	3861.7	1106	3619.1	
3	4268			5942.1	3886.7	1117	3619.5	
4	4285			5979.3	3917.5	1137	3629.2	
5	4305			5987.1	3926.0	1153	3618.2	
6	4304			5985.4	3938.7	1174	3612.4	
7	4301			5998.5	3948.5	1194	3616.8	
8	4313			6008.6	3947.2	1198	3628.7	
9	4338			6031.1	3954.2	1199	3632.1	
10	4321			6011.8	3962.3	1201	3640.6	
11	4330			6016.9	3983.9	1204	3652.5	
12	4343			6044.9	3990.5	1212	3651.3	
13	4365			6056.8	4022.3	1213	3647.1	
14	4348			6062.9	4011.8	1214	3640.5	
15	4349			6057.3	3997.2	1217	3650.3	
16	4359			6062.5	3998.2	1216	3659.7	
17	4336			6039.7	3971.2	1212	3643.2	
18	4330			6045.3	3972.7(36)	1209	3635.7	
19	4359			6084.8	---	1216	3643.0	
20	4365			6119.2	4025.1(14)	1218	3638.4	
21	4371			6118.8	4021.0	1214	3640.1	
22	4381			6129.6	4024.0	1214	3639.1	
23	4380			6121.8	4018.9	1214	3644.5	
24	4368			6096.7	4009.0	1218	3630.0	
25	4362			6062.3	3963.9(38)	1211	3619.0	
26	4372			6077.1	3984.8(34)	1217	3636.4	
27	4393			6109.3	4015.2	1223	3642.7	
28	4389			6102.2	4022.8	1220	3641.9	
29	4386			6101.7	4019.3	1219	3640.3	
30	4406			6126.9	4041.3	1221	3645.1	
31	4409			6123.8	4035.3	1220	3646.2	
Mean	4341			6048.5	3975.7	1197	3635.7	

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.

GEOMAGNETIC ACTIVITY INDICES

		May 1985																								
Day		Kp Three-Hourly Indices									Sum	Ap	Cp	Km Three-Hourly Indices								aa Provisional				
		1	2	3	4	5	6	7	8	1				2	3	4	5	6	7	8	Am	N	S	M		
1	D1	2+	2+	2+	3	3	2+	0+	2+	18	10	0.5	2	3-	2+	3+	3-	2	0+	2	19	21	16	22	15	
2		5	6	6	6-	3-	2-	1+	2-	30	38	1.4	5	5-	6-	5-	3-	2-	1+	2-	54	49	48	80	16	
3		1	1-	2	3-	2	2-	1+	2	13+	6	0.3	1	1	2	3-	2	2	1+	2+	14	16	14	13	17	
4		2	3-	3-	2+	3-	3	1+	1	18-	10	0.5	2-	3-	3	2+	3	3	2-	1-	19	19	24	19	24	
5		1+	2	2	1	1+	2	3-	3-	15	7	0.4	1+	2+	2	0+	2-	2-	3-	2+	14	20	12	11	21	
6	Q6K	4-	2+	3+	1	2-	2	2-	2+	18	10	0.6	4-	3-	3+	2-	2-	2	2-	2+	22	21	14	20	15	
7		3+	2-	1+	1	1+	1	2-	3	14+	8	0.4	3	2	1+	1+	1	1+	2-	3-	14	19	9	15	13	
8		2+	2-	2	3-	1+	2+	1+	3-	16+	8	0.4	2+	2-	2	3-	1-	2+	1+	3	16	19	11	12	18	
9		3-	3	2+	2+	1+	1	2	0	15-	8	0.4	3	3	3-	2+	1+	1+	2	0+	17	21	11	24	9	
10		0	0	0+	0+	1	1	2-	3+	8-	4	0.2	0	0	0+	0+	1-	1-	2-	3-	7	12	4	4	13 CC	
11	Q9	2	2	2+	1+	1-	1	1+	1-	11+	5	0.2	2-	2-	3	2	0+	1-	1	1-	10	12	10	16	6 C	
12	D3*	1	1+	3+	3-	3+	2+	3	3	20	12	0.7	1+	1	4-	3	3-	2	3-	3+	23	27	20	19	28	
13	D4*	3+	3-	1+	1+	2-	3-	2+	4-	19	11	0.6	3-	3-	2	1+	2-	3	2+	3+	21	26	17	17	26	
14	D2*	3+	2+	2-	1+	1+	2-	2+	1+	15+	8	0.4	3	2	2+	1+	1	1+	2	1+	14	19	7	14	12 C	
15		4-	3+	2+	2+	3-	3+	3-	4-	24	15	0.9	3+	3+	3-	2+	2+	3-	2+	4-	27	34	16	23	28	
16	D5*	1	2-	2-	2-	3-	3	3	4-	18+	11	0.6	1	2	3-	2+	3-	3-	3-	3	20	25	14	10	29	
17	Q10	2-	1	1-	1+	3-	2+	2-	3	14+	8	0.4	2-	1+	1-	1+	3-	2+	2	3-	14	20	11	8	24	
18		3-	2-	1+	1	2+	2+	3-	3	17	9	0.5	3	2	2-	1	2+	3-	2+	3	18	25	13	13	26	
19		3-	2+	2	1+	2	3-	2+	2+	18-	9	0.5	3-	2+	2+	2-	2+	3-	3-	2+	19	21	17	12	26	
20		3-	1	1-	0	1-	2-	2+	1+	10+	5	0.2	2+	1+	1-	0	1-	2-	2-	1	9	13	4	7	11 CK	
21		Q4	2-	2-	1-	1-	2-	3-	3-	3-	14+	8	0.4	1+	1+	0+	1-	2-	3-	2+	2+	13	20	11	9	23 K
22	2-		2-	1+	1	0+	1	2-	1+	10-	5	0.2	1+	2-	2-	1+	1-	0+	1+	1	8	13	5	9	9 CK	
23	2+		2+	1+	0+	1	0+	1	1	9-	4	0.2	2	2+	1-	0+	1-	1-	1-	1+	8	15	5	13	7 CC	
24	Q7		1+	1	0+	0+	1-	1	3-	2+	10-	5	0.2	2-	1+	1-	0+	1-	1	2+	2+	10	12	5	4	13 CC
25	0+		1-	1-	0+	1+	3-	2+	4+	13-	8	0.5	0+	1	0+	1-	1+	2+	2	3+	12	17	7	4	20 KK	
26	Q8	3+	2-	1	2-	2+	3-	2+	2-	17-	9	0.5	3-	1+	1+	2-	2-	2+	3-	1+	14	22	8	12	18	
27		1+	2-	1+	2	2+	1	1-	1	11+	5	0.2	1+	2-	2-	2+	2+	1+	1	1	11	14	9	10	13 KK	
28		Q3	1-	1+	1	1	2-	1	1+	2-	10-	5	0.2	1	1	1	1+	1+	1-	1+	7	11	4	7	9 CC	
29		Q2	2-	1+	2-	0+	0+	1+	1	1	9-	4	0.1	2	1+	1+	0+	0	1+	1-	1	7	9	3	7	5 CC
30		Q1	0	0+	1-	1-	1	1-	0+	2-	5+	3	0.1	0	1-	1-	1-	1	1-	0+	1	4	8	4	5	7 CC
31		3	2+	2-	0+	0+	1-	1+	3-	12+	7	0.3	3-	2	2	1-	0+	1-	1	2+	11	17	6	12	11 CK	
Mean		9 0.42												15.4 19.3 11.7 15.6												
Day		Kn Three-Hourly Indices									An	Ks Three-Hourly Indices								Prov				IMF		
		1	2	3	4	5	6	7	8	1		2	3	4	5	6	7	8	As	Sa	R _I	R _a	R _S			
1		2+	3-	3-	4-	3	3-	1	3-	24	2-	2+	2	3	2	1+	0	2-	14	80.6*	19	19	25	D	-	
2		5-	5-	5	5-	3	2	2-	2+	50	6-	5-	6	5-	2+	1+	0+	1	59	76.5	15	14	21	A	-	
3		1+	1	2	3	2	3	1+	2+	15	0+	1	2	3-	2-	2-	1+	2+	12	72.6	14	16	16	T	-	
4		2-	3-	3	2+	3	3-	2-	1+	20	1+	2+	3-	2	3+	3	1+	0+	19	70.8	18	15	14	A	-	
5		1+	2	2-	1	2-	2	3-	3-	14	1+	2+	2+	0	1+	1+	2+	2+	13	71.4	16	15	15	-	-	
6		4-	3-	3+	2-	2-	2+	2+	3-	23	4-	3-	3+	2-	2-	2	1-	2	21	75.0	14	12	19	U	-	
7		3-	2	2-	1+	1+	1+	2	3-	15	3	2	1+	1	1-	1+	1+	3-	13	79.1	32	24	23	A	-	
8		2+	2-	2+	3	1+	2+	2-	3-	18	2+	1+	1+	2	0	2+	1	3+	15	83.7	44	41	28	V	-	
9		2+	3	3	2+	1+	1+	2	1-	17	3+	3	3-	2+	1	1	2	0	16	89.6	56	49	35	A	-	
10		0+	0	1-	1	1+	1+	2	3	9	0	0	0	0	0+	0	1	3-	4	91.7	49	43	37	I	-	
11		2-	2-	3	2	1-	1+	1+	1+	12	1+	2-	3-	2	0	0	0	0	8	89.9	49	37	35	A	-	
12		1+	1+	3+	3-	3-	2+	3-	3-	21	1	1	4	3	2+	2	3-	4-	26	92.1	33	28	37	B	-	
13		3-	3-	2-	2-	2-	3-	3-	3+	21	3	2+	2+	1	1+	3+	2+	3	21	91.9	32	29	37	L	-	
14		3-	2+	2	2-	1+	2-	2+	2	16	3	2-	2+	1	1-	1-	2	1-	12	90.7*	32	27	36	E	-	
15		3+	3+	3-	2+	3-	3-	3-	3+	27	3	3	3-	3-	2	3-	2+	4-	26	92.0*	32	28	37	-	-	
16		1+	2-	2	2+	3	3-	3-	3+	21	1-	2+	3-	2+	3-	2+	2+	3-	19	95.5	31	29	41	T	-	
17		2-	1+	1	2-	3	3-	2	3-	16	2-	1	0	1+	2+	2	2	3-	12	92.3	38	32	38	-	-	
18		3-	2	2-	1	3-	3-	3-	3	20	3-	2	1+	1	2-	3-	2	3	17	92.7	41	35	38	T	-	
19		2+	2+	2+	2	2	3-	3-	2+	18	3-	2	3-	1+	3-	3-	3-	3-	20	89.6	40	35	35	H	-	
20		3-	1+	1	0	1+	2+	2	1+	11	2	1	0	0	0	1+	1+	1-	6	86.7	37	32	32	I	-	
21		1+	1+	1-	1	2-	3-	2+	3-	14	2-	1+	0+	0+	1+	3-	3-	2	12	84.4*	36	32	29	-	-	
22		2-	2	2	1+	1	1	2	1+	11	1+	1+	1	1	0	0	1-	1-	5	82.7*	34	30	27	T	-	
23		2	2+	1+	1-	1	1	1+	2-	10	2	2+	0	0	0	0	0	0+	5	80.0	32	28	24	I	-	
24		2	2-	1	1	1+	1+	3-	2+	13	2-	1	0	0	0	1-	2-	2+	7	78.3	25	22	23	M	-	
25		1	1-	1	1+	2	3-	3-	4	17	0	1	0	0	1-	1+	1+	3-	7	77.2	19	18	21	E	-	
26		3	2-	2-	2	2+	3-	3-	2	18	2+	1	1-	1	1	2-	2+	0+	10	75.5	11	10	20	-	-	
27		1+	2-	2	3-	3-	1+	2-	2-	14	1	1+	1+	2-	2+	1	0+	0+	9	74.6	12	10	19	-	-	
28		1+	1+	2-	2-	2	1+	2-	2	11	1-	0+	0+	1	1-	0	0	0+	3	72.7	12	8	17	-	-	
29		3-	2-	2	1-	0+	2-	1+	1+	11	1+	1	1	0+	0	1-	0	1-	4	72.5	10	10	16	-	-	
30		0	1-	1	1+	2-	1+	1	2-	7	0	0+	0+	0	0	0+	0	0+	1	71.4	8	9	15	-	-	
31		3-	3-	2+	1	1	1	2-	2+	15	2+	1+	1+	0+	0	0	0	3-	8	69.6	8	7	13	-	-	
Mean		17.1												13.7 82.0 27.4 24.0 26.6												

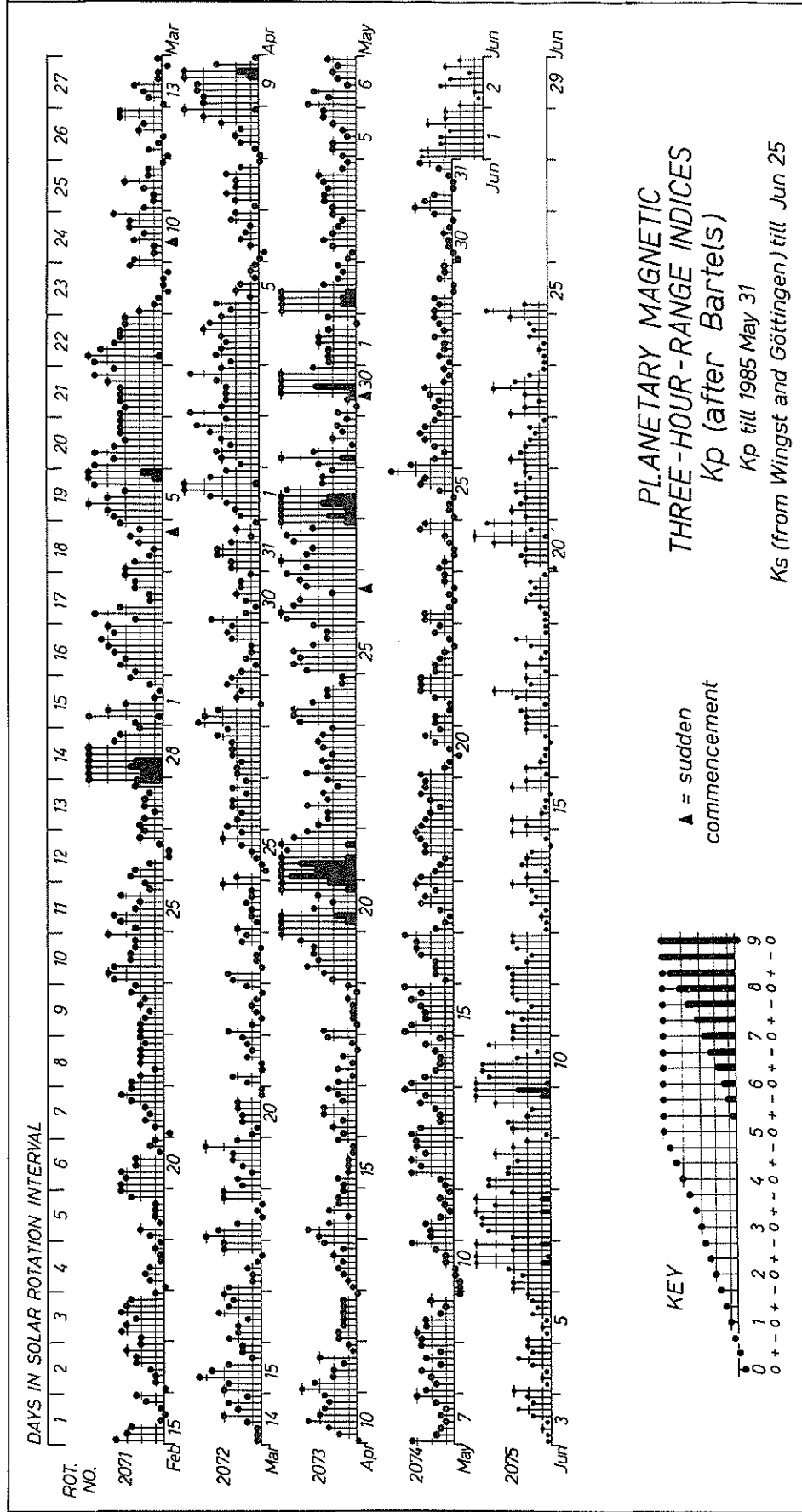
DAILY AVERAGE INDICES Ap

DAY	1984 JUN	JUL	AUG	SEP	OCT	NOV	DEC	1985 JAN	FEB	MAR	APR	MAY
1	7	14	75	11	7	27	15	33	15	16	23	10
2	12	12	24	12	10	12	27	17	11	22	16	38
3	32	12	14	12	20	18	22	13	8	14	20	6
4	26	12	14	59	6	18	28	7	3	10	17	10
5	19	12	7	63	7	13	20	6	21	42	7	7
6	12	10	4	12	21	14	22	5	46	24	5	10
7	10	7	4	6	43	20	18	5	20	22	7	8
8	10	10	14	11	24	20	8	19	24	27	15	8
9	20	9	17	12	20	12	6	46	19	4	38	8
10	15	14	8	25	29	18	9	29	24	10	11	4
11	11	11	11	17	28	20	19	20	13	6	11	5
12	7	13	15	13	32	8	17	19	11	7	5	12
13	6	62	8	11	17	10	27	14	11	4	6	11
14	4	40	20	14	15	14	8	9	16	7	10	8
15	24	25	22	10	14	52	24	9	9	14	4	15
16	42	25	15	8	19	112	33	8	7	11	8	11
17	11	43	11	6	3	35	28	9	12	8	5	8
18	27	19	6	3	43	22	15	6	4	11	4	9
19	29	14	14	36	75	21	8	7	7	9	21	9
20	16	12	10	21	63	20	6	6	10	5	53	5
21	3	8	3	10	47	22	13	12	8	5	103	8
22	6	9	1	22	46	14	9	11	7	4	11	5
23	11	8	8	112	27	10	16	36	7	5	12	4
24	22	12	23	52	39	10	4	7	18	6	17	5
25	10	8	18	43	22	10	5	9	12	5	21	8
26	8	6	10	42	14	8	26	6	5	8	30	9
27	10	14	36	25	8	7	17	11	19	10	33	5
28	21	18	36	16	8	6	31	58	60	14	61	5
29	12	12	21	12	7	13	26	24		6	17	4
30	12	8	16	11	7	36	21	17		7	42	3
31		17	12		6		24	15		10		7
MEAN	15	16	16	24	23	21	18	16	15	11	21	9

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

University of Göttingen

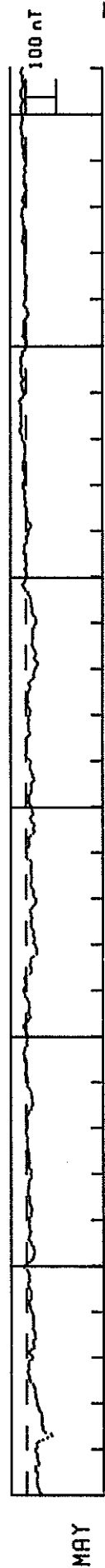
Kp through May 31, 1985



HOURLY EQUATORIAL DST VALUES(PROVISIONAL)

MAY 1985

DAY	UNIT=NT	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	-47	-41	-40	-37	-35	-33	-32	-32	-33	-36	-35	-34	-27	-29	-29	-38	-40	-36	-35	-33	-33	-32	-27	U.T.
2	-33	-32	-32	-39	-52	-67	-82	-79	-59	-53	-51	-53	-48	-50	-49	-50	-49	-49	-47	-43	-39	-38	-33	23
3	-32	-31	-29	-28	-27	-26	-26	-25	-23	-20	-11	-12	-8	-9	-6	-3	-4	-8	-6	-6	-7	-9	-18	28
4	-16	-10	-9	-16	-24	-24	-21	-22	-21	-28	-27	-27	-26	-24	-19	-23	-22	-22	-21	-20	-20	-22	-19	19
5	-13	-11	-11	-11	-7	-11	-15	-14	-14	-16	-13	-10	-7	-5	-5	-10	-9	-7	-9	-6	-5	-1	8	24
6	-1	-10	-17	-21	-23	-24	-26	-25	-23	-21	-16	-16	-11	-7	-8	-12	-12	-15	-11	-9	-9	-8	-9	9
7	-8	-16	-16	-16	-18	-17	-15	-11	-11	-10	-12	-11	-6	-5	-5	-7	-7	-8	-8	-9	-12	-17	-14	14
8	-17	-16	-9	-7	-9	-11	-11	-7	-8	-10	-10	-6	-5	-3	-4	-4	-2	-4	-5	-1	0	1	0	4
9	-3	-4	-5	-4	0	-2	-6	-10	-9	-17	-17	-22	-20	-19	-18	-18	-17	-15	-15	-12	-8	-3	-3	5
10	-5	-3	-2	2	2	0	-2	-2	-1	1	5	6	5	5	8	6	4	3	-2	-3	-1	-3	-6	6
11	-4	-1	1	3	8	8	1	-6	-9	-14	-11	-9	-8	-10	-11	-10	-9	-9	-5	-2	2	4	6	8
12	7	2	-1	2	2	5	4	-1	-13	-17	-17	-15	-13	-13	-15	-14	-17	-24	-34	-35	-35	-35	30	28
13	-23	-26	-27	-25	-22	-24	-25	-21	-17	-16	-15	-16	-17	-19	-15	-16	-13	-13	-18	-23	-29	-32	-31	31
14	-25	-23	-24	-24	-22	-17	-14	-16	-18	-17	-18	-18	-15	-15	-15	-16	-16	-17	-17	-13	-4	0	-3	4
15	0	-1	-8	-11	-11	-8	-8	-10	-15	-24	-27	-23	-23	-27	-25	-19	-15	-13	-18	-23	-21	-19	-18	18
16	-14	-10	-9	-11	-10	-10	-16	-17	-18	-19	-18	-17	-20	-27	-25	-21	-21	-18	-15	-13	-13	-13	-16	16
17	-9	-2	0	-1	-3	-3	-4	-3	-3	-4	-2	-2	-7	-13	-13	-8	-8	-9	-8	-7	-9	-10	-8	12
18	-13	-15	-13	-8	-5	-4	-8	-6	-5	-6	-6	-8	-11	-14	-14	-11	-10	-17	-23	-27	-25	-26	-28	30
19	-33	-37	-40	-34	-28	-27	-31	-33	-31	-27	-24	-21	-19	-22	-22	-23	-22	-22	-22	-21	-23	-27	-29	33
20	-32	-32	-31	-24	-21	-19	-21	-19	-17	-18	-16	-16	-14	-12	-6	-7	1	4	8	12	6	2	-1	2
21	-3	-2	0	3	0	-2	-3	0	2	1	1	5	7	5	5	5	2	-2	-4	-1	-1	-7	-8	8
22	-11	-16	-17	-13	-7	-5	-4	-2	-4	-3	-3	-1	2	2	0	2	3	5	4	2	4	8	8	8
23	10	5	2	1	2	4	6	9	10	9	8	7	5	4	4	3	1	2	2	3	4	5	9	12
24	13	13	18	20	19	15	12	16	16	14	14	15	16	16	17	17	16	16	20	21	15	10	5	6
25	8	11	12	14	15	11	8	10	14	15	15	15	14	13	16	16	16	16	11	11	11	3	0	0
26	-4	-4	-2	5	9	7	4	4	5	6	7	5	4	0	-5	-8	-8	-5	-4	1	6	6	3	0
27	1	2	1	3	1	-1	-2	0	1	-2	-2	-3	1	4	4	3	4	4	4	3	2	2	3	1
28	2	4	3	5	8	11	9	7	7	6	5	6	5	5	9	8	10	10	13	12	12	12	10	6
29	1	6	11	9	8	5	2	-2	-2	0	4	5	5	4	4	5	3	0	1	3	2	-1	-2	1
30	4	6	5	7	6	6	9	10	12	12	11	8	9	13	13	14	15	15	13	13	10	9	9	11
31	13	15	14	15	13	9	8	9	13	15	15	15	14	10	8	7	10	11	10	10	14	15	13	10



MAY

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May 85

PRINCIPAL MAGNETIC STORMS

MAY 1985

Sta	Commencement				SC Amplitudes			Maximum 3-Hour K Index Day(3-Hour Periods)	Ranges			End		
	Geomag Lat	Time Day (UT)	Type	D (Min)	H (Gamma)	Z (Gamma)	D (Min)		H (Gamma)	Z (Gamma)	Day	Hour (UT)		
COL 64.6N	01	22--	..	..	..	..	02(3,4)	7	288	1750	1080	02	24	
IRK 41.0N	01	2100	..	..	..	..	02(1,2,3,4)	5	15	101	43	02	16	
JAI 17.3N	01	0041	SC	-	0.8	9	- 4		6	91	29	02	15	
UJJ 13.5N	01	0041	SC	-	0.4	11	- 1		5	91	23	02	15	
ABG 09.5N	01	0041	SC	-	0.4	9	- 4	02(2,4)	5	4	56	25	02	15
HYB 07.6N	01	2200	..	..	..	..	02(2,3,4)	5	4	86	17	02	18	
ANN 01.5N	01	0041	SC	-	0.4	10	5		5	103	53	02	15	
TRD 01.1S	01	0041	SC		0.1	4	4		4	78	51	02	15	
KGL 56.5S	01	2200	..	..	..	..	02(1,2)	5	34	200	120	02	16	
SIT 60.0N	02	00--	..	..	..	..	02(3)	8	--	--	--	02	15	
HER 33.7S	02	00--	..	..	..	..	02(1,3)	5	21	79	88	02	13	
GNA 43.3S	02	00--	..	..	..	..	02(4)	6	20	100	110	02	18	
CNB 44.0S	02	01--	..	..	..	..	02(1,3,4)	5	23	107	76	02	15	
HYB 07.6N	31	2100	..	..	..	..	01(4,5)	4	4	86	12	01	21	

Stations Reporting:

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

FRD = FREDERICKSBURG
GNA = GNANGARA
HER = HERMANUS
HON = HONOLULU
HYB = HYDERABAD

IRK = IRKUTSK
JAI = JAIPUR
KGL = KERGUELEN
SIT = SITKA
TRD = TRIVANDRUM

UJJ = UJJAIN
WIT = WITTEVEEN

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

MAY 1985

Storm Sudden Commencements (ssc)			Solar Flare Effects (sfe)		
Day	Time	Quality: Station Group*	Day	Begin-End	Station(s)
02	0144 UT	B: WNG; C: WIT NGK SPT LNP	02	0743-0757	EBR
			17	1112-1124	MPO
			21	0951-1014	WNG
			26	1140-1155	DOU
			28	0426-0438	DOU

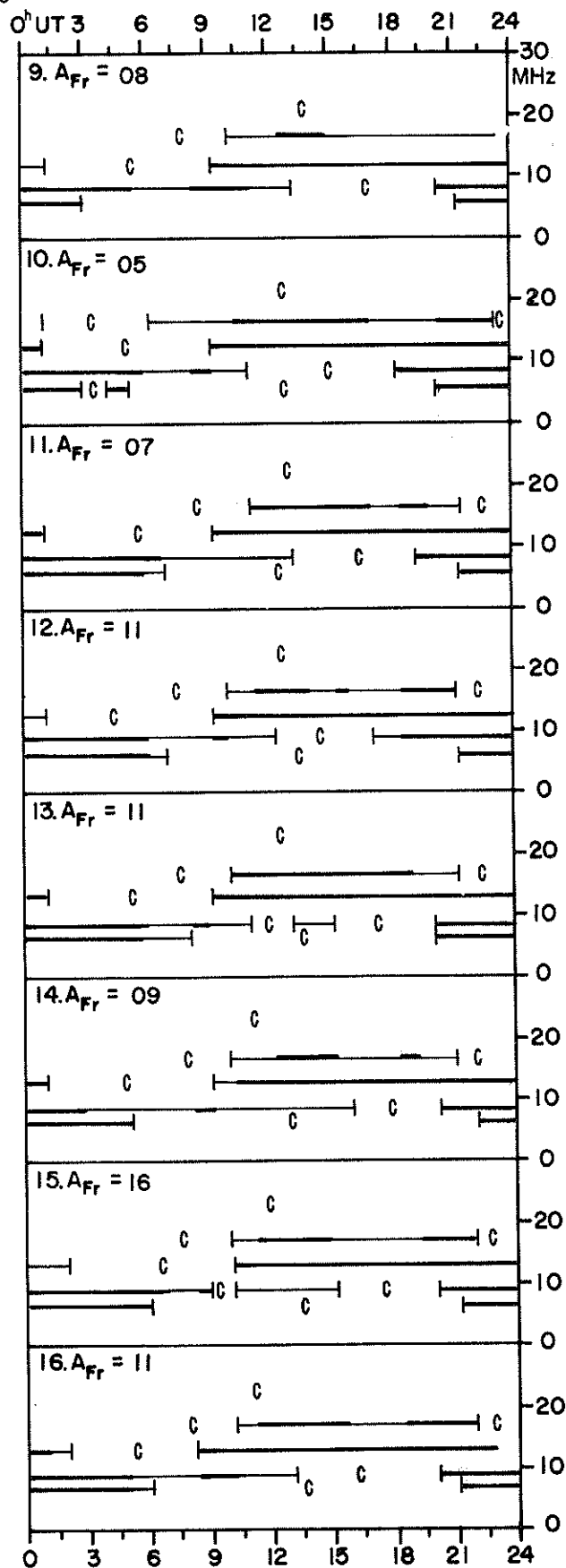
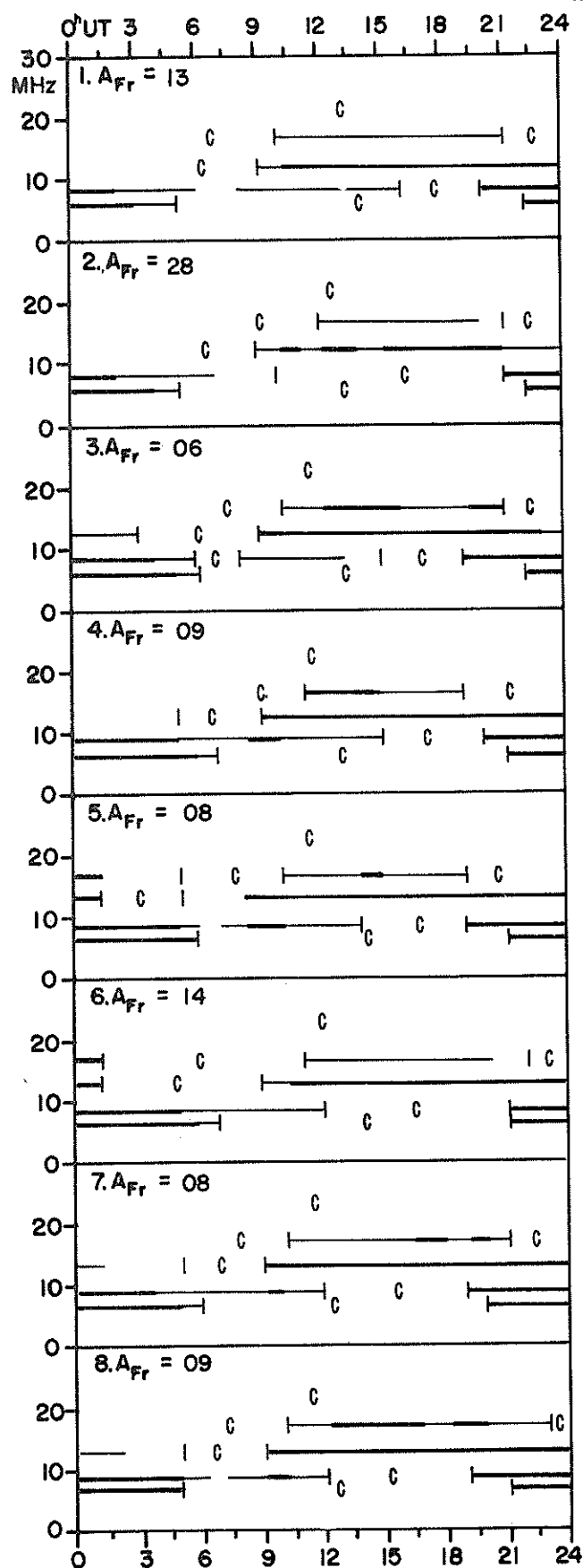
Reporting Observatories:SOD DOB NUR WNG WIT NGK HAD DOU CLF GCK MMB EBR COI
SPT FRD KAK HTY KNY LNP MPO GNA COA AMS CZT KGL DUM

*Three-letter codes identify each observatory.

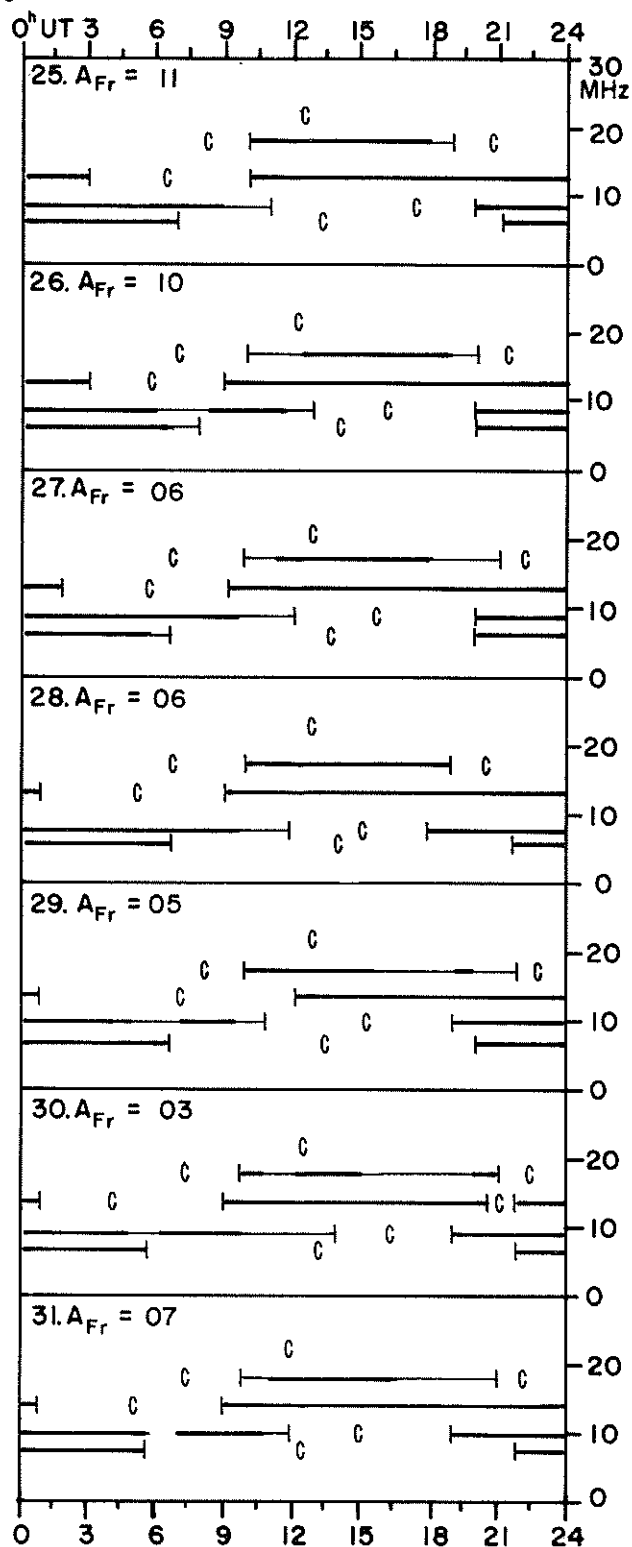
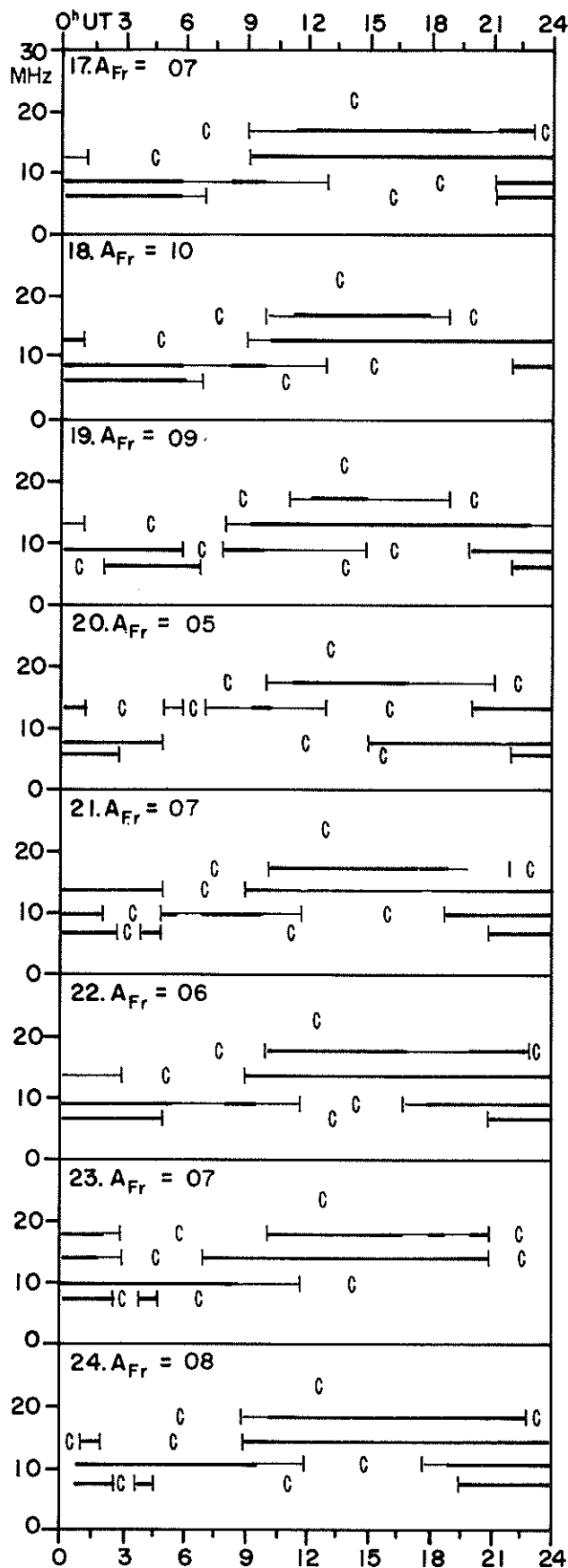
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TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH

MAY 1985



MAY 1985



Field strengths from five frequencies, 6.4, 8.6, 13.0, 17.0 and 22.5 MHz, observed on a Lüchow New York circuit are represented above. Heavy solid lines represent field strengths ≥ -12 dB above $1 \mu\text{V/m}$ (transmitter power reduced to 1 kW). Observed field strengths between -12 dB above $1 \mu\text{V/m}$ and -40 dB above $1 \mu\text{V/m}$ are represented by the fine line.

RADIO PROPAGATION QUALITY INDICES

MAY 1985

Day	Bracknell	Teheran	New York	Tokyo	Canberra
1	8.6	6.7	4.7	4.5	5.1
2	5.0	5.1	3.8	3.9	5.8
3	8.9	6.9	6.5	6.3	5.9
4	5.6	8.4	6.6	5.0	5.0
5	6.2	5.0	6.3	5.1	5.4
6	5.8	6.5	4.8	3.7	5.9
7	7.4	8.3	6.0	6.8	6.8
8	6.9	6.0	6.5	5.4	6.5
9	6.4	7.3	6.9	6.0	7.0
10	6.7	6.7	8.5	8.1	7.0
11	7.7	7.7	7.7	6.7	6.9
12	8.9	6.2	8.7	5.5	7.2
13	8.1	5.3	7.0	4.9	5.6
14	8.6	5.3	6.3	5.6	7.0
15	9.2	5.3	7.7	5.0	6.8
16	4.6	5.0	7.6	5.7	5.6
17	7.0	5.6	8.6	5.9	7.1
18	6.2	4.6	6.4	5.9	5.6
19	7.1	4.2	6.3	6.0	4.9
20	7.4	4.9	7.6	6.0	5.2
21	6.2	5.5	7.5	7.3	5.8
22	5.5	5.8	7.2	5.9	5.3
23	5.1	5.6	7.6	5.2	5.7
24	9.9	5.9	8.5	6.5	5.6
25	9.9	5.7	8.3	6.9	5.9
26	4.3	5.6	6.4	6.5	6.2
27	6.6	5.9	6.4	7.0	6.5
28	6.6	5.6	6.4	6.9	5.9
29	4.2	5.3	4.8	5.7	5.0
30	7.5	5.1	4.8	5.7	5.5
31	5.7	5.4	5.8	6.1	5.4
Mean	6.9	5.9	6.7	5.9	6.0

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 preceeding 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 preceeding 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

C O N T E N T S

Prompt Reports	LATE DATA	Number 491	Part I
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84
Late
Dec 84

C O S M I C R A Y I N D I C E S
(Neutron Monitor)

December 1984

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	4183			5811.4	3802.0	1158	3558.9	1720.1(28)
2	4190			5819.5	3802.7	1162	3567.3	---
3	4195			5811.5	3801.1	1165	3571.2	---
4	4201			5826.6	3820.9	1169	3575.6	---
5	4207			5836.2	3825.6	1169	3570.7	1737.4(14)
6	4212			5837.5	3818.3	1170	3573.4	1728.3
7	4215			5844.8	3816.4(36)	1171	3584.7	1731.5
8	4240			5865.0	3832.0	1174	3585.1	1732.7
9	4260			5885.0	3842.8	1174	3588.0	1736.3
10	4274			5873.5	3851.4	1171	3591.7	1739.8
11	4257			5874.6	3860.2	1166	3582.0	1739.3
12	4233			5842.5	3844.2	1168	3578.1	1738.0
13	4211			5860.9	3841.5	1169	3585.7	1734.7
14	4230			5873.9	3835.0	1170	3587.1	1740.0
15	4224			5854.5	3830.2	1151	3581.9	1737.4
16	4225			5868.6	3832.0	1150	3571.1	1732.4
17	4232			5893.8	3843.7	1144	3575.7	1735.5
18	4253			5885.8	3849.9	1153	3573.5	1732.9
19	4270			5887.1	3851.1	1151	3587.7	1736.8
20	4276			5903.9	3871.4	1150	3599.2	1737.0(26)
21	4280			5914.3	3868.5	1150	3593.1	1741.6
22	4252			5882.8	3839.5	1145	3587.5	1741.2
23	4257			5897.2	3854.9	1146	3594.7	1743.4
24	4269			5909.7	3864.6	1154	3598.4	1743.7
25	4244			5905.2	3836.5	1154	3592.6	1737.3
26	4236			5883.1	3825.3	1149	3579.7	1735.1(26)
27	4197			5830.2	3793.3	1144	3567.3	1732.0(4)
28	4196			5842.1	3808.6	1148	3567.6	1730.4
29	4206			5822.9	3813.9	1146	3573.0	1726.3
30	4240			5848.3	---	1149	3580.7	1731.8
31	4229			5889.4	---	1145	3588.1	1737.1(32)
Mean	4232			5863.9	3833.8	1158	3581.0	1735.6

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.

C O S M I C R A Y I N D I C E S
(Neutron Monitor)

March 1985

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	4340			6036.4	3982.4(10)	1167	3621.1	1753.1(14)
2	4327			6026.6	3968.0	1168	3617.8	---
3	4316			6017.6	3964.9	1165	3615.8	1754.3(18)
4	4330			6008.0	3965.2	1165	3615.5	1753.9(32)
5	4304			5968.2	3944.9	1165	3605.2	1748.4(28)
6	4311			5967.0	3940.2	1165	3603.3	1747.7(30)
7	4320			5984.4	3944.5	1166	3602.7	1745.9(36)
8	4333			5977.6	3937.3	1166	3597.2	1748.4(30)
9	4343			5977.5	3919.5	1167	3603.5	1749.4
10	4313			5961.4	3907.0	1166	3614.2	1748.7
11	4301			5949.7	3906.5	1166	3599.3	1748.7
12	4315			5980.7	3934.6	1166	3610.3	1752.5
13	4337			6001.1	3945.1	1167	3618.0	1752.1
14	4329			6017.6	3930.7	1167	3607.1	1748.5(32)
15	4338			6027.5	3952.6(38)	1167	3615.1	1750.8
16	4339			6035.4	3943.7	1167	3622.6	1752.3
17	4332			6013.5	3937.7	1166	3607.2	1752.2(34)
18	4336			6028.6	3949.8	1165	3614.1	1754.1
19	4338			6029.8	3952.0	1164	3617.2	1752.3
20	4316			6033.2	3945.1	1163	3617.8	1750.3
21	4282			6035.1	3945.2	1162	3621.9	1764.8(16)
22	4330			6037.8	3968.9	1162	3632.2	1755.7
23	4320			6020.4	3962.0	1162	3632.6	1760.4
24	4317			6039.1	3963.1	1162	3637.0	1760.1
25	4328			6042.2	3962.8	1162	3630.8	1758.5
26	4335			6064.8	3967.4	1163	3630.2	1762.1(34)
27	4322			6055.9	3980.6	1163	3626.7	1764.1(34)
28	4310			6024.3	3976.1	1163	3630.0	1760.9(32)
29	4306			6032.0	3981.9	1163	3627.0	1760.8(32)
30	4328			6048.7	3998.6	1163	3642.8	1767.2(38)
31	4325			6040.5	3995.9	1163	3651.8	1764.5(24)
Mean	4323			6015.6	3953.3	1165	3618.9	1754.4

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.

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Late
Apr 85

C O S M I C R A Y I N D I C E S
(Neutron Monitor)

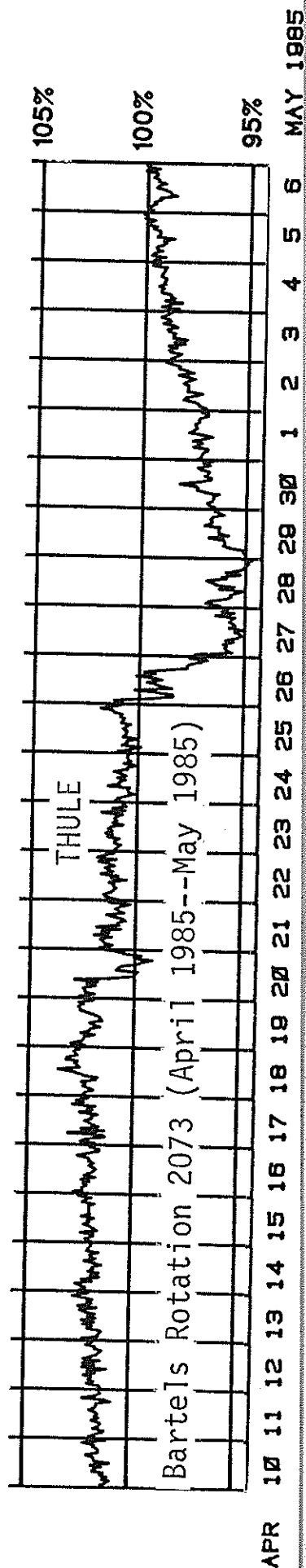
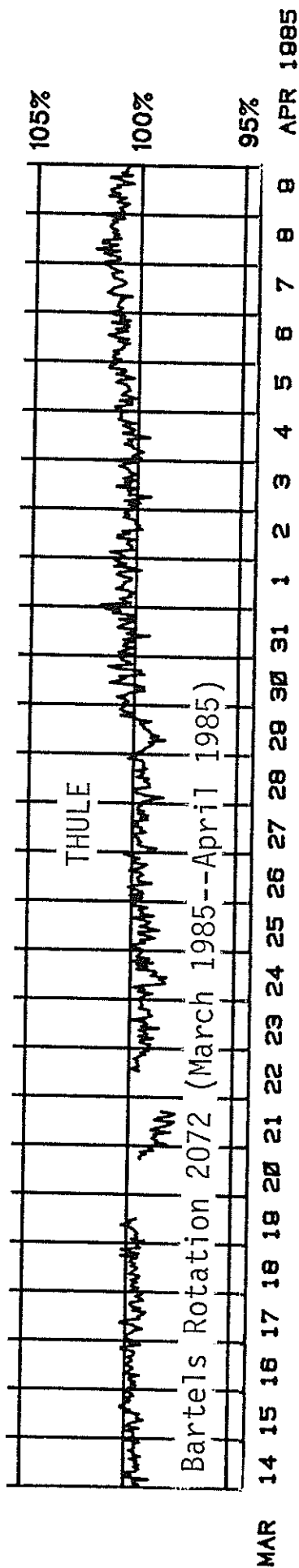
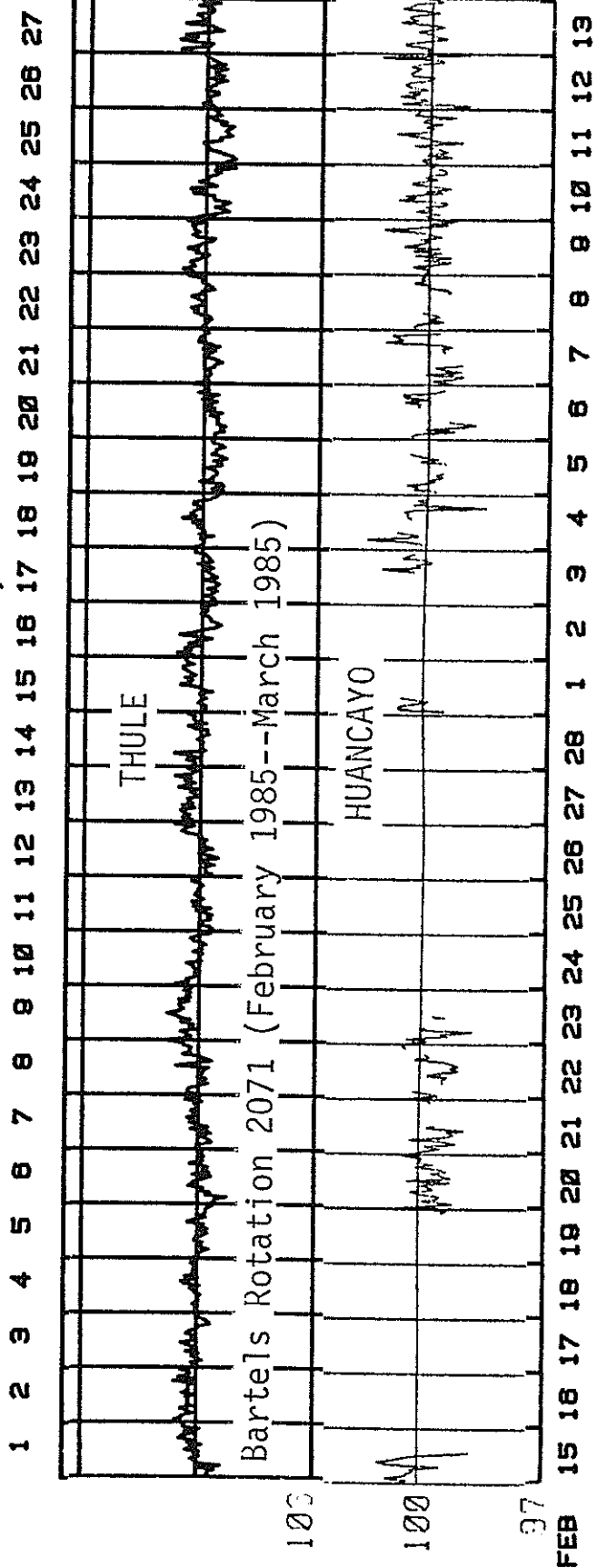
April 1985

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	4378			6028.2	3937.3(36)	1177	3652.0	
2	4370			6030.9	3941.0	1179	3652.0	
3	4368			6020.5	3951.1	1183	3641.8	
4	4368			6045.2	3960.9	1187	3635.4	
5	4386			6065.5	3963.7	1191	3641.7	
6	4395			6077.4	3968.2	1194	3646.1	
7	4402			6081.5	3980.3	1196	3644.3	
8	4413			6111.4	3981.3	1198	3648.5	
9	4395			6086.0	3987.5	1199	3654.2	
10	4383			6071.0	3973.5	1198	3644.0	
11	4387			6090.1	3971.2	1198	3643.0	
12	4397			6095.2	3968.6	1199	3647.2	
13	4406			6103.7	3974.6	1199	3647.9	
14	4406			6097.9	3983.0	1199	3651.1	
15	4411			6069.7	3982.9	1199	3648.2	
16	4413			6084.1	3998.4	1198	3655.7	
17	4414			6074.7	3992.5	1197	3662.7	
18	4434			6087.5	3999.0	1196	3664.7	
19	4419			6103.3	4005.9	1195	3663.9	
20	4368			6083.6	3999.5	1196	3656.0	
21	4372			6082.7	4059.0	1197	3670.7	
22	4378			6074.0	4013.7	1198	3649.1	
23	4368			6085.7	3993.8	1199	3651.2	
24	4351			6084.4	3984.4	1199	3655.8	
25	4355			6090.6	3979.3	1199	3654.4	
26	4274			5962.0	3870.0	1199	3610.6	
27	4142			5829.8	3756.8	1197	3564.0	
28	4141			5763.2	3717.1	1195	3565.2	
29	4159			5802.2	3747.5	1193	3575.5	
30	4195			5852.5	3782.3	1191	3596.1	
Mean	4355			6037.8	3947.4	1195	3639.8	

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.

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Late
Mar-Apr 85

COSMIC RAY INDICES (Neutron Monitor)



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Late
Dec 82

CALCIUM PLAGE REGIONS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

DECEMBER 1982

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
18670	BIGB	11	25	1214	S14	E68	11	30.6	3.0	3151	4007		
18670	BIGB	11	26	1156	S14	E59	11	30.9	3.0	2982	4007		
18670	BIGB	11	27	0951	S14	E47	12	1.0	3.5	2835	4007		
18670	BIGB	11	28	1146	S14	E34	12	1.0	3.5	3110	4007		
18670	BIGB	12	02	2056	S14	W21	12	1.3	3.0	2839	4007		
18670	BIGB	12	03	2049	S14	W34	12	1.3	3.0	2368	4007		
18670	BIGB	12	04	2028	S17	W52	11	30.9	3.0	2322	4007		
18670	BIGB	12	05	1851	S13	W59	12	1.3	3.5	2697	4007		
18670	BIGB	12	06	1834	S14	W67	12	1.7	3.5	3729	4007		
18670	BIGB	12	07	2100	S14	W74	12	2.3	3.5	2217	4007		
18671	BIGB	11	25	1214	S23	E70	11	30.9	1.5	0676	4008		
18671	BIGB	11	26	1156	S23	E61	12	1.2	2.5	0766	4008		
18671	BIGB	11	27	0951	S23	E50	12	1.3	2.5	0648	4008		
18671	BIGB	11	28	1146	S23	E37	12	1.3	2.0	0680	4008		
18671	BIGB	12	02	2056	S24	W13	12	1.9	1.5	0503	4008		
18671	BIGB	12	03	2049	S24	W25	12	1.9	1.5	0336	4008		
18671	BIGB	12	04	2028	S27	W46	12	1.3	1.5	0326	4008		
18671	BIGB	12	05	1851	S23	W54	12	1.6	1.0	0330	4008		
18671	BIGB	12	06	1834	S24	W62	12	2.0	1.0	0297	4008		
18671	BIGB	12	07	2100	S23	W73	12	2.2	1.0	0235	4008		
18672	BIGB	11	26	1156	S11	E79	12	2.4	3.5	2982	4005		
18672	BIGB	11	27	0951	S12	E64	12	2.2	3.5	3061	4005		
18672	BIGB	11	28	1146	S12	E50	12	2.2	3.5	2835	4005		
18672	BIGB	12	02	2056	S09	W00	12	2.9	3.0	2570	4005		
18672	BIGB	12	03	2049	S10	W13	12	2.9	3.0	2385	4005		
18672	BIGB	12	04	2028	S10	W31	12	2.5	3.0	2390	4005		
18672	BIGB	12	05	1851	S09	W40	12	2.8	3.5	2314	4005		
18672	BIGB	12	06	1834	S09	W51	12	2.9	3.5	2541	4005		
18672	BIGB	12	07	2100	S09	W64	12	3.1	3.0	2587	4005		
18673	BIGB	11	26	1156	S23	E79	12	2.6	2.5	1059	4019		
18673	BIGB	11	27	0951	S24	E64	12	2.3	2.5	0858	4019		
18673	BIGB	11	28	1146	S22	E50	12	2.3	2.5	1004	4019		
18673	BIGB	12	02	2056	S23	E01	12	2.9	2.0	0806	4019		
18673	BIGB	12	03	2049	S23	W10	12	3.1	2.0	0755	4019		
18673	BIGB	12	04	2028	S23	W28	12	2.7	1.5	0705	4019		
18673	BIGB	12	05	1851	S24	W36	12	3.0	1.0	0592	4019		
18673	BIGB	12	06	1834	S21	W46	12	3.2	1.0	0379	4019		
18673	BIGB	12	07	2100	S20	W59	12	3.4	1.0	0403	4019		
18674	BIGB	12	02	2056	N13	E06	12	3.3	3.0	0503	4013		
18674	BIGB	12	03	2049	N13	W07	12	3.3	3.0	0991	4013		
18674	BIGB	12	04	2028	N11	W22	12	3.2	3.0	1118	4013		
18674	BIGB	12	05	1851	N13	W34	12	3.2	3.0	1165	4013		
18674	BIGB	12	06	1834	N14	W45	12	3.4	3.0	1122	4013		
18674	BIGB	12	07	2100	N14	W58	12	3.5	3.0	1192	4013		
18681	BIGB	12	05	1851	S22	W18	12	4.4	1.0	0226			
18681	BIGB	12	06	1834	S22	W30	12	4.5	3.5	0742			
18681	BIGB	12	07	2100	S21	W43	12	4.6	2.5	0923			
18677	BIGB	12	03	2049	S09	E12	12	4.8	1.0	0251	4018		
18677	BIGB	12	04	2028	S10	W02	12	4.7	1.0	0086	4018		
18677	BIGB	12	05	1851	S09	W13	12	4.8	1.5	0261	4018		
18677	BIGB	12	06	1834	S08	W25	12	4.9	2.0	0561	4018		
18677	BIGB	12	07	2100	S07	W40	12	4.9	2.0	0588	4018		
18675	BIGB	12	02	2056	N20	E26	12	4.9	1.0	1260	4023		
18675	BIGB	12	03	2049	N23	E12	12	4.8	1.0	1629	4023		
18675	BIGB	12	04	2028	N22	W00	12	4.8	1.0	1427	4023		
18675	BIGB	12	05	1851	N22	W14	12	4.7	1.0	1444	4023		
18675	BIGB	12	06	1834	N22	W24	12	4.9	1.0	1551	4023		
18675	BIGB	12	07	2100	N22	W35	12	5.2	1.0	1444	4023		
18676	BIGB	12	02	2056	N02	E27	12	4.9	1.5	0823	4015		
18676	BIGB	12	03	2049	N02	E13	12	4.8	1.5	0470	4015		
18676	BIGB	12	04	2028	N02	W00	12	4.8	1.5	0636	4015		
18676	BIGB	12	05	1851	N02	W14	12	4.7	1.5	0609	4015		
18676	BIGB	12	06	1834	N03	W24	12	5.0	1.0	0544	4015		

C A L C I U M P L A G E R E G I O N S
(ORDRED BY CENTRAL MERIDIAN PASSAGE DATE)

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Late
Dec 82

DECEMBER 1982

Calcium Plage Region	Sta	Observation Time		Lat CMD	CMP Mo Day		Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
18676	BIGB	12	07	2100	N04	W36	12 5.2	1.0	0503	4015	
18678	BIGB	12	02	2056	N08	E47	12 6.4	3.5	5627	4010	4010A
18678	BIGB	12	03	2049	N08	E33	12 6.3	3.5	6283	4010	4010A
18678	BIGB	12	04	2028	N07	E18	12 6.2	3.5	6106	4010	4010A
18678	BIGB	12	05	1851	N10	E06	12 6.2	3.5	6490	4010	4010A
18678	BIGB	12	06	1834	N10	W06	12 6.3	3.0	5098	4010	4010A
18678	BIGB	12	07	2100	N10	W17	12 6.6	2.5	5124	4010	4010A
18678	BIGB	12	11	2257	N10	W70	12 6.7	2.5	1744	4010	4010A
18678	BIGB	12	12	1913	N12	W68	12 7.7	2.5	1619	4010	4010A
18678	BIGB	12	13	1816	N12	W74	12 8.2	1.0	0334	4010	4010A
18679	BIGB	12	02	2056	N04	E63	12 7.6	3.5	1159	4014	
18679	BIGB	12	03	2049	N04	E48	12 7.4	3.5	2116	4014	
18679	BIGB	12	04	2028	N05	E34	12 7.4	3.5	2889	4014	
18679	BIGB	12	05	1851	N07	E23	12 7.5	3.5	2140	4014	
18679	BIGB	12	06	1834	N06	E09	12 7.4	3.5	2128	4014	
18679	BIGB	12	07	2100	N07	W05	12 7.5	3.5	2066	4014	
18679	BIGB	12	11	2257	N07	W56	12 7.8	3.5	2017	4014	
18679	BIGB	12	12	1913	N06	W70	12 7.6	3.5	1987	4014	
18679	BIGB	12	13	1816	N06	W76	12 8.1	2.0	0534	4014	
18680	BIGB	12	03	2049	S09	E89	12 10.5	3.0	0503	4016	
18680	BIGB	12	04	2028	S07	E63	12 9.6	3.0	0860	4016	
18680	BIGB	12	05	1851	S08	E54	12 9.8	3.0	0887	4016	
18680	BIGB	12	06	1834	S09	E40	12 9.8	3.0	0841	4016	
18680	BIGB	12	07	2100	S09	E26	12 9.8	3.0	0856	4016	
18680	BIGB	12	11	2257	S09	W27	12 9.9	2.0	0359	4016	
18680	BIGB	12	12	1913	S09	W37	12 10.0	1.5	0300	4016	
18680	BIGB	12	13	1816	S09	W49	12 10.1	1.0	0300	4016	
18680	BIGB	12	14	1851	S08	W64	12 10.0	1.5	0280	4016	
18683	BIGB	12	05	1851	N02	E69	12 10.9	1.0	0139		
18683	BIGB	12	06	1834	N02	E52	12 10.6	1.5	0148		
18683	BIGB	12	07	2100	N02	E38	12 10.7	1.5	0251		
18682	BIGB	12	04	2028	S10	E74	12 10.4	2.5	0653	4017	4028
18682	BIGB	12	05	1851	S10	E73	12 11.3	2.5	2992	4017	4028
18682	BIGB	12	06	1834	S14	E60	12 11.3	3.0	3696	4017	4028
18682	BIGB	12	07	2100	S14	E43	12 11.1	3.5	5140	4017	4028
18682	BIGB	12	11	2257	S13	W10	12 11.2	3.0	4292	4017	4028
18682	BIGB	12	12	1913	S13	W21	12 11.2	3.0	4225	4017	4028
18682	BIGB	12	13	1816	S13	W32	12 11.3	3.0	4008	4017	4028
18682	BIGB	12	14	1851	S12	W45	12 11.4	3.0	4017	4017	4028
18682	BIGB	12	15	2010	S11	W58	12 11.5	2.5	3823	4017	4028
18682	BIGB	12	16	1802	S13	W69	12 11.5	2.5	3464	4017	4028
18682	BIGB	12	17	2224	S13	W75	12 12.3	2.5	1427	4017	4028
18684	BIGB	12	06	1834	N20	E68	12 12.0	1.0	0429		
18684	BIGB	12	07	2100	N16	E49	12 11.6	1.0	0923		
18684	BIGB	12	11	2257	N16	W03	12 11.7	1.0	0735		
18684	BIGB	12	12	1913	N10	W21	12 11.2	1.0	0751		
18684	BIGB	12	13	1816	N12	W35	12 11.1	1.0	0768		
18684	BIGB	12	14	1851	N10	W47	12 11.2	1.0	0564		
18685	BIGB	12	06	1834	S04	E73	12 12.2	1.0	0363	4020	
18685	BIGB	12	07	2100	S05	E56	12 12.1	1.0	0319	4020	
18685	BIGB	12	11	2257	S05	E06	12 12.4	2.5	0735	4020	
18685	BIGB	12	12	1913	S04	W03	12 12.6	2.5	0718	4020	
18685	BIGB	12	13	1816	S05	W17	12 12.5	2.5	0701	4020	
18685	BIGB	12	14	1851	S04	W29	12 12.6	2.5	0780	4020	
18685	BIGB	12	15	2010	S05	W43	12 12.6	2.0	0405	4020	
18685	BIGB	12	16	1802	S04	W55	12 12.6	2.0	0439	4020	
18685	BIGB	12	17	2224	S05	W79	12 12.0	1.5	0403	4020	
18686	BIGB	12	06	1834	S16	E75	12 12.5	3.0	1122	4021	
18686	BIGB	12	07	2100	S15	E62	12 12.6	3.5	4300	4021	
18686	BIGB	12	11	2257	S13	E10	12 12.7	3.5	4890	4021	
18686	BIGB	12	12	1913	S13	W00	12 12.8	3.5	5293	4021	
18686	BIGB	12	13	1816	S13	W12	12 12.8	3.5	5126	4021	
18686	BIGB	12	14	1851	S13	W25	12 12.9	3.5	5013	4021	

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CALCIUM PLAGE REGIONS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

DECEMBER 1982

Calcium Plage Region	Sta	Observation Time		LaL CMD	CMP Mo Day	Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
18686	BIGB	12 15	2010	S13 W37	12 13.0	3.0	4617	4021		
18686	BIGB	12 16	1802	S14 W50	12 13.0	3.0	4056	4021		
18686	BIGB	12 17	2224	S15 W63	12 13.2	3.0	3057	4021		
18686	BIGB	12 18	2049	S14 W70	12 13.6	3.0	2608	4021		
18687	BIGB	12 11	2257	N08 E26	12 13.9	4.0	5916	4022		
18687	BIGB	12 12	1913	N09 E13	12 13.8	4.0	6145	4022		
18687	BIGB	12 13	1816	N09 W00	12 13.8	4.0	6112	4022		
18687	BIGB	12 14	1851	N09 W13	12 13.8	3.5	7237	4022		
18687	BIGB	12 15	2010	N09 W27	12 13.8	4.0	6933	4022		
18687	BIGB	12 16	1802	N11 W38	12 13.9	3.5	6591	4022		
18687	BIGB	12 17	2224	N11 W51	12 14.1	3.0	6635	4022		
18687	BIGB	12 18	2049	N11 W60	12 14.3	3.0	7373	4022		
18687	BIGB	12 19	2245	N11 W75	12 14.3	3.5	5078	4022		
18689	BIGB	12 11	2257	S07 E39	12 14.9	3.0	1812	4024		
18689	BIGB	12 12	1913	S07 E27	12 14.8	3.0	2538	4024		
18689	BIGB	12 13	1816	S07 E15	12 14.9	3.0	2438	4024		
18689	BIGB	12 14	1851	S07 E02	12 14.9	3.0	2108	4024		
18689	BIGB	12 15	2010	S07 W11	12 15.0	3.0	2041	4024		
18689	BIGB	12 16	1802	S07 W23	12 15.0	3.0	1960	4024		
18689	BIGB	12 17	2224	S07 W40	12 14.9	2.5	1881	4024		
18689	BIGB	12 18	2049	S06 W50	12 15.1	2.5	1593	4024		
18689	BIGB	12 19	2245	S07 W68	12 14.8	2.5	1026	4024		
18691	BIGB	12 11	2257	N15 E50	12 15.7	1.0	0205			
18691	BIGB	12 12	1913	N15 E38	12 15.7	1.0	0450			
18691	BIGB	12 13	1816	N15 E24	12 15.6	1.5	0300			
18691	BIGB	12 14	1851	N16 E10	12 15.5	1.0	0116			
18691	BIGB	12 15	2010	N16 W04	12 15.5	1.0	0145			
18691	BIGB	12 16	1802	N17 W16	12 15.5	1.0	0152			
18691	BIGB	12 17	2224	N19 W28	12 15.8	1.5	0084			
18691	BIGB	12 18	2049	N18 W39	12 15.9	1.5	0096			
18691	BIGB	12 19	2245	N18 W55	12 15.7	1.0	0119			
18691	BIGB	12 20	2206	N18 W65	12 16.0	1.0	0130			
18690	BIGB	12 11	2257	S07 E52	12 15.8	3.0	1795	4025		
18690	BIGB	12 12	1913	S07 E41	12 15.9	3.5	2772	4025		
18690	BIGB	12 13	1816	S07 E29	12 15.9	3.0	2421	4025		
18690	BIGB	12 14	1851	S07 E15	12 15.9	3.0	2971	4025		
18690	BIGB	12 15	2010	S07 E02	12 16.0	3.5	2948	4025		
18690	BIGB	12 16	1802	S08 W09	12 16.1	3.5	2349	4025		
18690	BIGB	12 17	2224	S05 W25	12 16.1	3.5	2536	4025		
18690	BIGB	12 18	2049	S05 W36	12 16.2	3.5	2833	4025		
18690	BIGB	12 19	2245	S06 W52	12 16.0	3.5	2701	4025		
18690	BIGB	12 20	2206	S06 W61	12 16.3	3.5	2722	4025		
18690	BIGB	12 21	1743	S07 W77	12 16.0	2.5	1918	4025		
18692	BIGB	12 11	2257	N09 E67	12 17.0	1.5	0324	4034		
18692	BIGB	12 12	1913	N08 E52	12 16.7	2.0	0584	4034		
18692	BIGB	12 13	1816	N08 E39	12 16.7	1.5	0684	4034		
18692	BIGB	12 14	1851	N11 E29	12 17.0	1.5	0763	4034		
18692	BIGB	12 15	2010	N10 E14	12 16.9	1.0	0550	4034		
18692	BIGB	12 16	1802	N11 E04	12 17.0	1.0	0439	4034		
18692	BIGB	12 17	2224	N12 W12	12 17.0	1.0	0453	4034		
18692	BIGB	12 18	2049	N12 W21	12 17.3	1.0	0450	4034		
18692	BIGB	12 19	2245	N13 W36	12 17.2	1.0	0444	4034		
18692	BIGB	12 20	2206	N12 W47	12 17.4	1.5	0456	4034		
18692	BIGB	12 21	1743	N12 W58	12 17.4	1.5	0410	4034		
18693	BIGB	12 11	2257	S13 E64	12 16.8	2.5	1453	4026		
18693	BIGB	12 12	1913	S13 E53	12 16.8	3.5	3356	4026		
18693	BIGB	12 13	1816	S13 E41	12 16.8	3.0	2972	4026		
18693	BIGB	12 14	1851	S13 E28	12 16.9	3.5	3801	4026		
18693	BIGB	12 15	2010	S13 E14	12 16.9	3.0	3207	4026		
18693	BIGB	12 16	1802	S14 E03	12 17.0	3.0	3380	4026		
18693	BIGB	12 17	2224	S12 W12	12 17.0	3.0	3494	4026		
18693	BIGB	12 18	2049	S12 W24	12 17.0	3.0	3413	4026		
18693	BIGB	12 19	2245	S12 W37	12 17.2	3.0	2736	4026		
18693	BIGB	12 20	2206	S12 W48	12 17.3	3.0	2656	4026		
18693	BIGB	12 21	1743	S12 W62	12 17.1	3.0	2591	4026		

C A L C I U M P L A G E R E G I O N S
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

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DECEMBER 1982

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
18700	BIGB	12	20	2206	S02	W11	12	20.1	2.0	0277	4035		
18700	BIGB	12	21	1743	S02	W22	12	20.1	2.0	0311	4035		
18700	BIGB	12	24	1803	S03	W62	12	20.1	1.5	0246	4035		
18694	BIGB	12	14	1851	S07	E88	12	21.4	2.0	0500	4029		
18694	BIGB	12	15	2010	S06	E80	12	21.8	1.0	0469	4029		
18694	BIGB	12	16	1802	S12	E64	12	21.6	1.0	0439	4029		
18694	BIGB	12	17	2224	S07	E44	12	21.2	1.0	0755	4029		
18694	BIGB	12	18	2049	S06	E32	12	21.3	1.0	0595	4029		
18694	BIGB	12	19	2245	S06	E19	12	21.4	1.5	0855	4029		
18694	BIGB	12	20	2206	S06	E06	12	21.4	1.5	0880	4029		
18694	BIGB	12	21	1743	S07	W04	12	21.4	1.5	0475	4029		
18694	BIGB	12	24	1803	S07	W42	12	21.6	1.5	0902	4029		
18695	BIGB	12	15	2010	N12	E89	12	22.5	1.0	0145	4030		
18695	BIGB	12	16	1802	N11	E67	12	21.8	1.0	0152	4030		
18695	BIGB	12	17	2224	N11	E49	12	21.6	1.0	0470	4030		
18695	BIGB	12	18	2049	N13	E41	12	22.0	1.0	0300	4030		
18695	BIGB	12	19	2245	N09	E22	12	21.6	1.0	0205	4030		
18695	BIGB	12	20	2206	N08	E08	12	21.5	1.0	0326	4030		
18695	BIGB	12	21	1743	N08	W02	12	21.6	1.0	0262	4030		
18695	BIGB	12	24	1803	N08	W40	12	21.7	1.5	0295	4030		
18695	BIGB	12	26	1743	N08	W67	12	21.7	1.0	0097	4030		
18696	BIGB	12	17	2224	S27	E57	12	22.4	1.0	0151			
18696	BIGB	12	18	2049	S28	E44	12	22.3	1.0	0225			
18696	BIGB	12	19	2245	S28	E31	12	22.4	1.0	0820			
18696	BIGB	12	20	2206	S27	E19	12	22.4	1.0	0880			
18696	BIGB	12	21	1743	S27	E10	12	22.5	1.0	0459			
18696	BIGB	12	24	1803	S28	W24	12	22.9	1.0	0377			
18696	BIGB	12	26	1743	S28	W47	12	23.1	1.0	0114			
18696	BIGB	12	27	1843	S28	W58	12	23.2	1.0	0131			
18702	BIGB	12	24	1803	S19	W27	12	22.7	3.5	0787	4036		
18702	BIGB	12	26	1743	S19	W51	12	22.8	3.0	0733	4036		
18702	BIGB	12	27	1843	S19	W64	12	22.9	2.5	0656	4036		
18702	BIGB	12	28	1832	S19	W72	12	23.3	2.0	0737	4036		
18688	BIGB	12	24	1803	N06	W23	12	23.0	3.5	0738	4038		
18688	BIGB	12	26	1743	N05	W49	12	23.1	3.0	0749	4038		
18688	BIGB	12	27	1843	N05	W64	12	23.0	2.5	0770	4038		
18688	BIGB	12	28	1832	N06	W69	12	23.6	3.5	0785	4038		
18697	BIGB	12	17	2224	S10	E62	12	22.6	2.5	0672	4031		
18697	BIGB	12	18	2049	S16	E56	12	23.1	2.5	0869	4031		
18697	BIGB	12	19	2245	S17	E44	12	23.3	2.0	0872	4031		
18697	BIGB	12	20	2206	S17	E31	12	23.3	2.0	0863	4031		
18697	BIGB	12	21	1743	S19	E19	12	23.2	2.0	0656	4031		
18697	BIGB	12	24	1803	S17	W16	12	23.5	2.0	0656	4031		
18697	BIGB	12	26	1743	S17	W41	12	23.6	2.0	0603	4031		
18697	BIGB	12	27	1843	S17	W53	12	23.7	2.0	0524	4031		
18697	BIGB	12	28	1832	S16	W62	12	24.1	2.0	0596	4031		
18698	BIGB	12	17	2224	N11	E89	12	24.6	1.5	0672			
18698	BIGB	12	18	2049	N10	E63	12	23.6	1.5	2270			
18698	BIGB	12	19	2245	N10	E49	12	23.6	2.0	2052			
18698	BIGB	12	20	2206	N09	E35	12	23.5	2.5	1988			
18698	BIGB	12	21	1743	N12	E26	12	23.7	2.0	1344			
18698	BIGB	12	24	1803	N19	W15	12	23.6	1.5	0852			
18698	BIGB	12	26	1743	N21	W37	12	23.9	1.0	0994			
18698	BIGB	12	27	1843	N22	W51	12	23.9	1.0	0934			
18698	BIGB	12	28	1832	N20	W63	12	23.9	1.0	0816			
18703	BIGB	12	20	2206	N07	E43	12	24.1	2.5	0800	4032		
18703	BIGB	12	21	1743	N08	E30	12	24.0	2.5	0800	4032		
18703	BIGB	12	24	1803	N08	W12	12	23.8	3.5	1394	4032		
18703	BIGB	12	26	1743	N08	W39	12	23.8	3.0	1418	4032		
18703	BIGB	12	27	1843	N08	W52	12	23.9	3.0	1443	4032		
18703	BIGB	12	28	1832	N09	W60	12	24.3	3.0	1318	4032		
18699	BIGB	12	18	2049	S25	E64	12	23.8	1.5	0305			

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CALCIUM PLAGE REGIONS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

DECEMBER 1982

Calcium Plage Region	Sta	Observation Time Mo Day (UT)	Lat CMD	CMP Mo Day	Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
18699	BIGB	12 19 2245	S26 E55	12 24.2	2.0	0906			
18699	BIGB	12 20 2206	S26 E42	12 24.2	1.5	0945			
18699	BIGB	12 21 1743	S26 E32	12 24.2	2.0	0705			
18699	BIGB	12 24 1803	S27 W03	12 24.5	1.5	0705			
18699	BIGB	12 26 1743	S25 W28	12 24.6	1.5	0700			
18699	BIGB	12 27 1843	S25 W40	12 24.7	1.5	0705			
18699	BIGB	12 28 1832	S25 W50	12 24.9	1.0	0471			
18701	BIGB	12 21 1743	S15 E89	12 28.5	3.5	0475	4033	4042	
18701	BIGB	12 24 1803	S15 E44	12 28.1	3.5	5395	4033	4042	
18701	BIGB	12 26 1743	S16 E19	12 28.2	3.5	5476	4033	4042	
18701	BIGB	12 27 1843	S15 E05	12 28.1	3.5	5805	4033	4042	
18701	BIGB	12 28 1832	S15 W06	12 28.3	3.5	4270	4033	4042	
18701	BIGB	12 30 1904	S16 W32	12 28.4	3.5	4314	4033	4042	
18701	BIGB	12 31 1950	S16 W44	12 28.5	3.5	4736	4033	4042	
18701	BIGB	01 01 1931	S16 W55	12 28.7	3.0	4572	4033	4042	
18701	BIGB	01 02 1900	S16 W70	12 28.6	2.5	2400	4033	4042	
18712	BIGB	12 30 1904	S03 W14	12 29.7	2.0	0161	4043		
18712	BIGB	12 31 1950	S02 W26	12 29.9	1.5	0128	4043		
18712	BIGB	01 01 1931	S02 W39	12 30.0	1.0	0096	4043		
18712	BIGB	01 02 1900	S01 W53	12 29.9	1.0	0100	4043		
18704	BIGB	12 24 1803	N13 E65	12 29.6	1.0	0377			
18704	BIGB	12 26 1743	N13 E38	12 29.6	1.0	0391			
18704	BIGB	12 27 1843	N14 E30	12 30.0	1.0	0557			
18704	BIGB	12 28 1832	N15 E18	12 30.1	1.0	0486			
18704	BIGB	12 30 1904	N15 W09	12 30.1	1.0	0531			
18704	BIGB	12 31 1950	N15 W20	12 30.3	1.0	0576			
18704	BIGB	01 01 1931	N15 W34	12 30.3	1.0	0370			
18704	BIGB	01 02 1900	N15 W48	12 30.2	1.0	0300			
18704	BIGB	01 03 1908	N16 W60	12 30.3	1.5	0272			
18705	BIGB	12 24 1803	S14 E67	12 29.8	3.0	2082	4039		
18705	BIGB	12 26 1743	S15 E43	12 30.0	3.0	2151	4039		
18705	BIGB	12 27 1843	S16 E28	12 29.9	3.0	2574	4039		
18705	BIGB	12 28 1832	S15 E16	12 30.0	3.0	2778	4039		
18705	BIGB	12 30 1904	S15 W09	12 30.1	3.0	2173	4039		
18705	BIGB	12 31 1950	S15 W22	12 30.2	3.0	2112	4039		
18705	BIGB	01 01 1931	S15 W34	12 30.3	3.0	1500	4039		
18705	BIGB	01 02 1900	S14 W48	12 30.3	3.0	1500	4039		
18705	BIGB	01 03 1908	S15 W57	12 30.6	2.5	1504	4039		
18705	BIGB	01 04 1857	S18 W81	12 29.7	1.5	0738	4039		
18707	BIGB	12 27 1843	N14 E46	12 31.2	1.0	0098			
18707	BIGB	12 28 1832	N14 E32	12 31.2	2.0	0094			
18719	BIGB	01 03 1908	N06 W44	12 31.5	1.5	0144			
18719	BIGB	01 04 1857	N06 W70	12 30.6	1.0	0082			

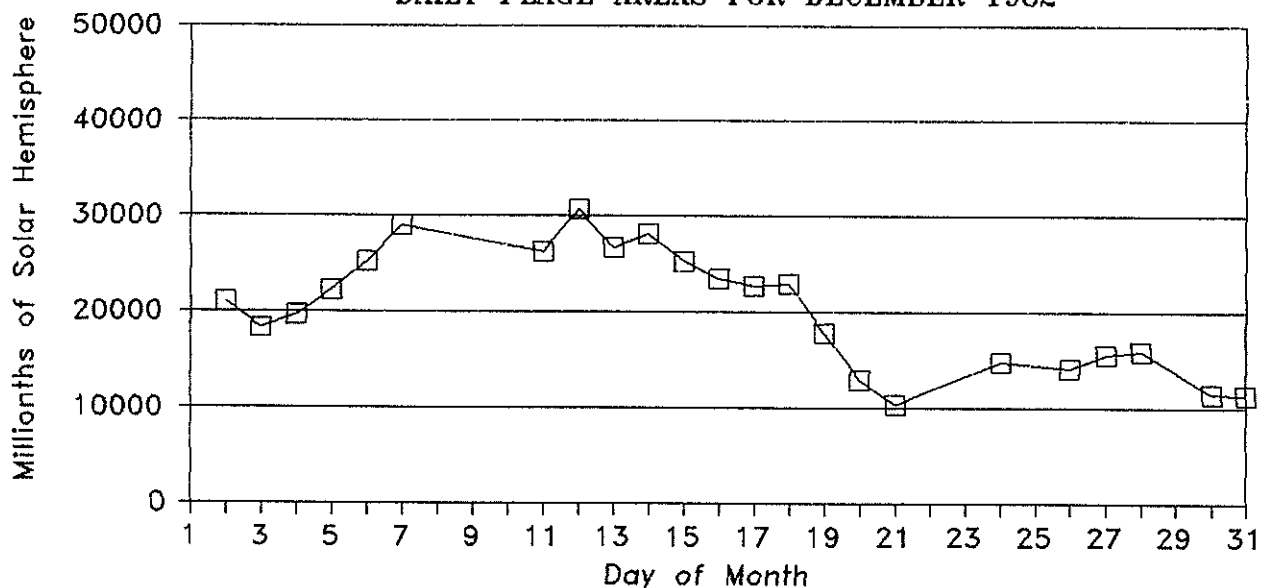
DAILY PLAGE SUMMARIES

DECEMBER 1982

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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	BIGB	39.3	12	336	5627	20978	1.0	3.5
03	BIGB	42.6	12	218	6283	18305	1.0	3.5
04	BIGB	46.5	13	86	6106	19690	1.0	3.5
05	BIGB	43.2	14	139	6490	22286	1.0	3.5
06	BIGB	47.9	17	148	5098	25291	1.0	3.5
07	BIGB	52.7	17	235	5140	29071	1.0	3.5
08	No Observations This DAY							
09	No Observations This DAY							
10	No Observations This DAY							
11	BIGB	67.1	13	205	5916	26277	1.0	4.0
12	BIGB	81.1	13	300	6145	30738	1.0	4.0
13	BIGB	74.7	13	300	6112	26698	1.0	4.0
14	BIGB	77.6	12	116	7237	28150	1.0	3.5
15	BIGB	66.3	11	145	6933	25283	1.0	4.0
16	BIGB	52.3	11	152	6591	23421	1.0	3.5
17	BIGB	40.3	14	84	6635	22690	1.0	3.5
18	BIGB	36.3	13	96	7373	22930	1.0	3.5
19	BIGB	23.9	12	119	5078	17814	1.0	3.5
20	BIGB	20.6	12	130	2722	12923	1.0	3.5
21	BIGB	12.9	12	262	2591	10406	1.0	3.5
22	No Observations This DAY							
23	No Observations This DAY							
24	BIGB	29.7	13	246	5395	14806	1.0	3.5
25	No Observations This DAY							
26	BIGB	30.8	12	97	5476	14110	1.0	3.5
27	BIGB	33.3	13	98	5805	15541	1.0	3.5
28	BIGB	30.1	13	94	4270	15851	1.0	3.5
29	No Observations This DAY							
30	BIGB	25.8	7	161	4314	11427	1.0	3.5
31	BIGB	23.7	9	112	4736	11392	1.0	3.5

DAILY PLAGE AREAS FOR DECEMBER 1982



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Late
Dec 82

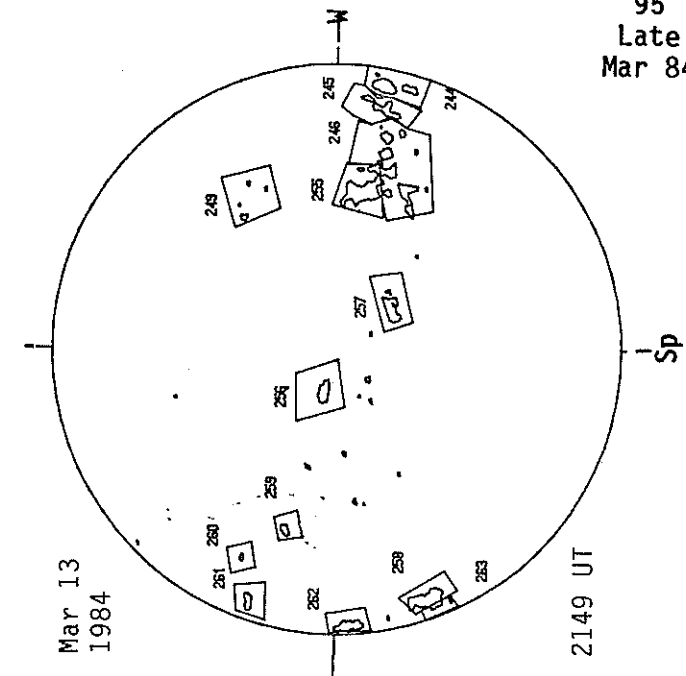
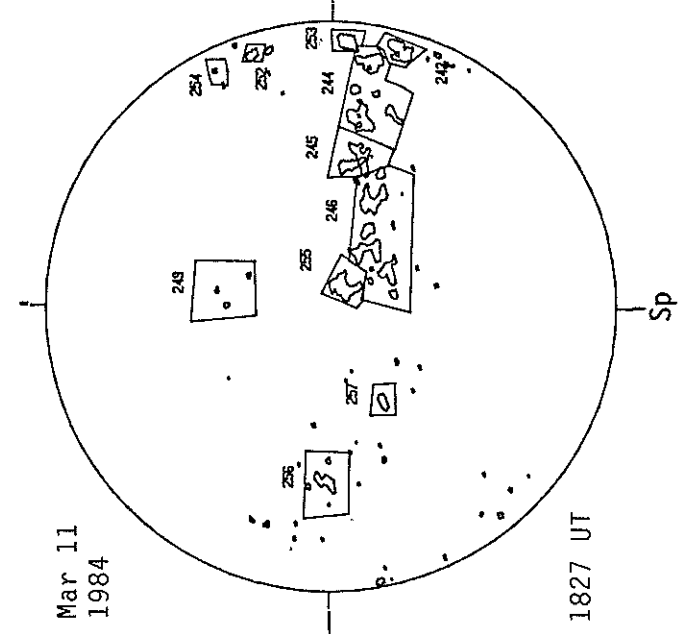
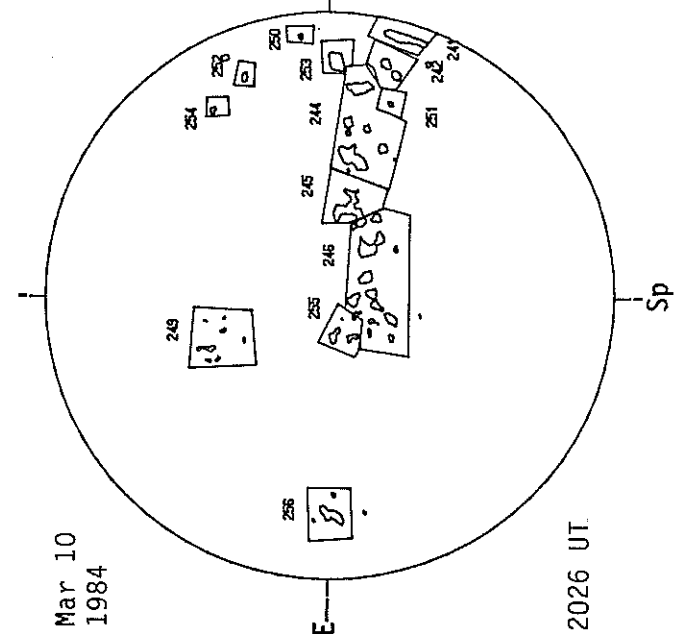
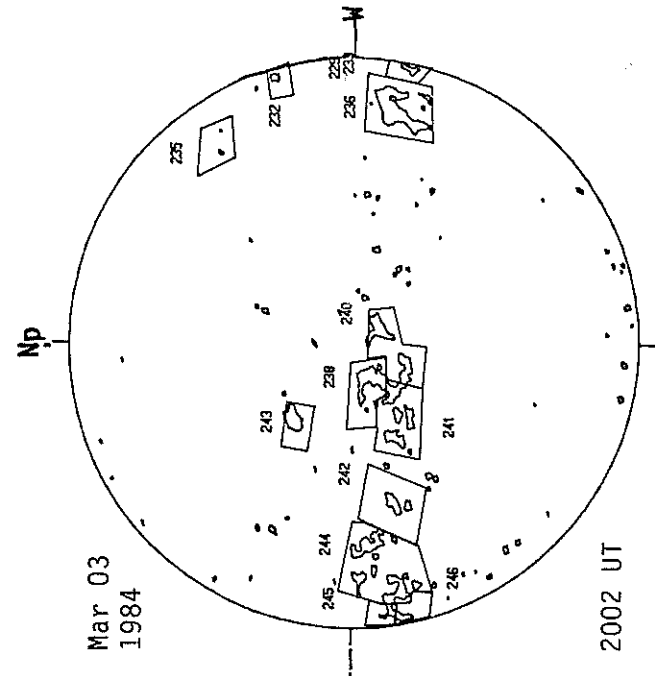
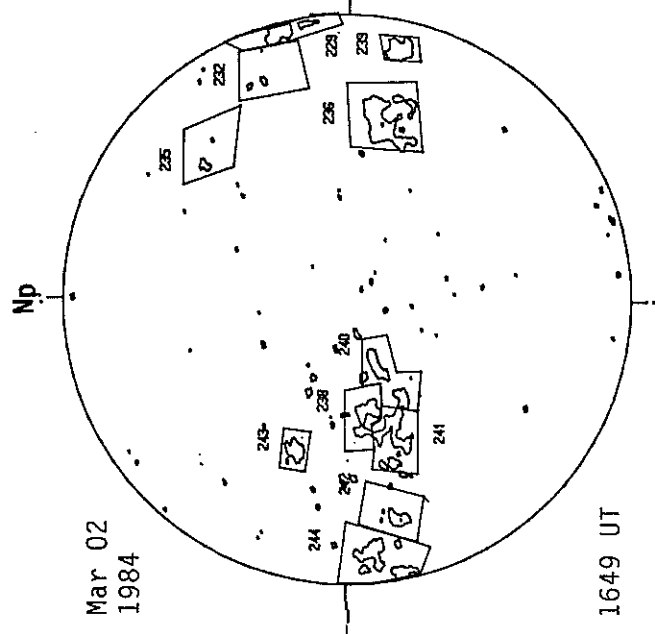
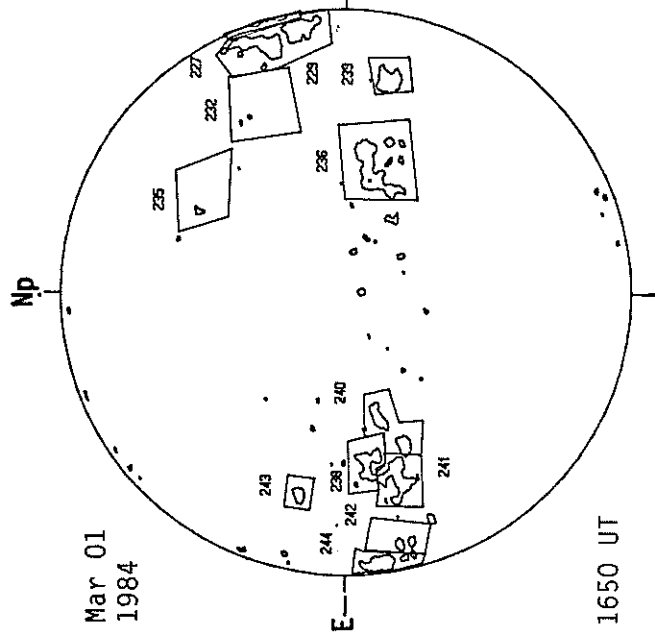
BIG BEAR SOLAR OBSERVATORY
ACTIVE REGION SUMMARY

DECEMBER 1982

REGION	IDENTIFICATION	AGE	FIRST SEEN	DURATION
18670	New (vic. of 18633)	1	821125	13 days
671	18633	2	821125	13
672	New (vic. of 18633)	1	821126	>12
673	New (vic. of 18633)	1	821126	>12
674	New	1	821202	>06
677	New	1	821203	>05
681	New	1	821205	>03
675	18634 & 18635	4	821202	>06
676	18641	3	821202	>06
678	New (vic. of 18646)	2	821202	>12
679	New	1	821202	>12
680	New	1	821203	12
682	18650	2	821204	14
683	New	1	821205	>03
684	Part of 18647	5	821206	>09
685	New	1	821206	12
686	New	1	821206	13
687	New	1	821207	13
689	New (vic. of 18653)	1	821211	>09
691	New	1	821211	>10
690	New	1	821211	>11
692	New	1	821211	>11
693	18656	3	821211	>11
700	New	1	821220	05
694	New (vic. of 18662)	1	821215	>10
695	18661	2	821215	12
696	New (vic. of 18663)	1	821217	11
702	New	1	821224	>05
688	New	1	821224	>05
697	New	1	821217	>12
698	18665	4	821217	>12
703	New	1	821220	>08
699	18666	2	821218	>11
701	18670	2	821221	
704	18674	1	821224	
705	18672	2	821224	

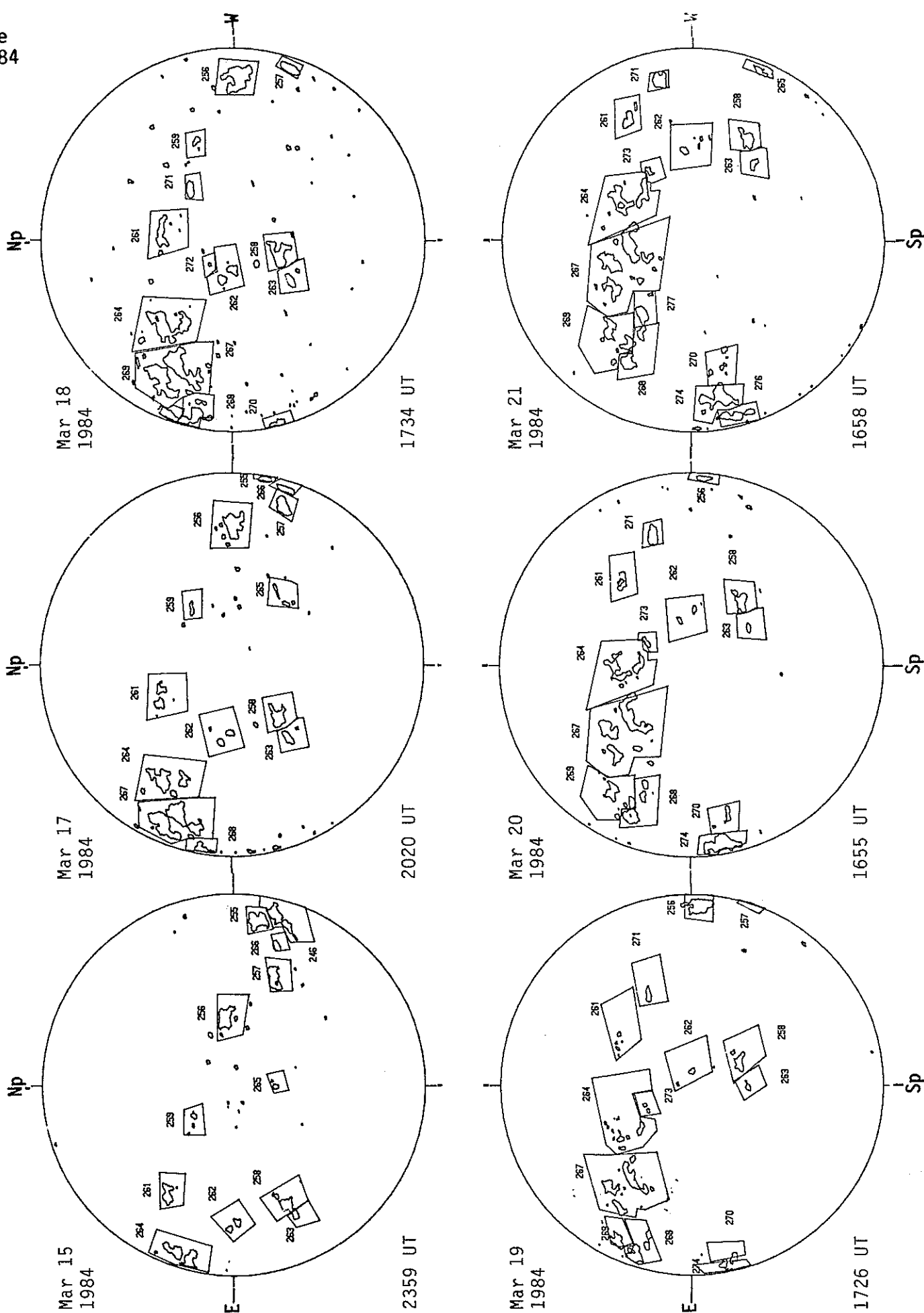
1. No CaK Observations at BBSO on Dec. 1, 8, 9, 10, 20, 22, 23, 25, 29.
2. No CaK Prints on Dec. 2, 8-10, 17, 22, 23, 25, 29.
3. No KPNO Magnetograms on Dec. 1, 2, 6-13, 21-31.
4. Contiguous Plages: 18670/18671
18690/18693
5. Mount Wilson CaK Prints were used on Dec. 3, 4, 7, 12, 14.

BIG BEAR SOLAR CALCIUM PLAGE REGIONS

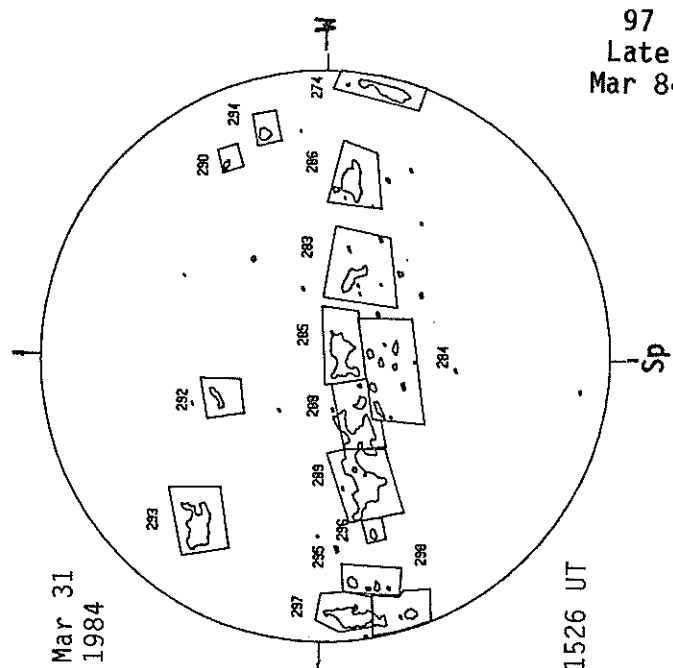
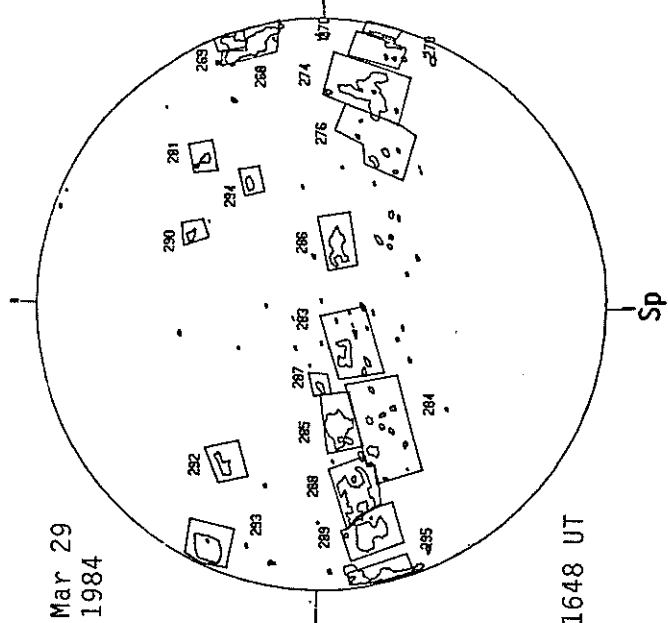
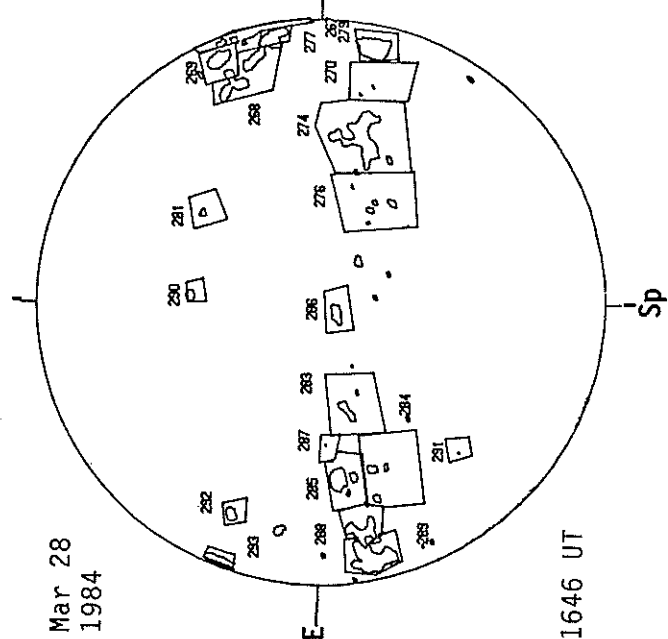
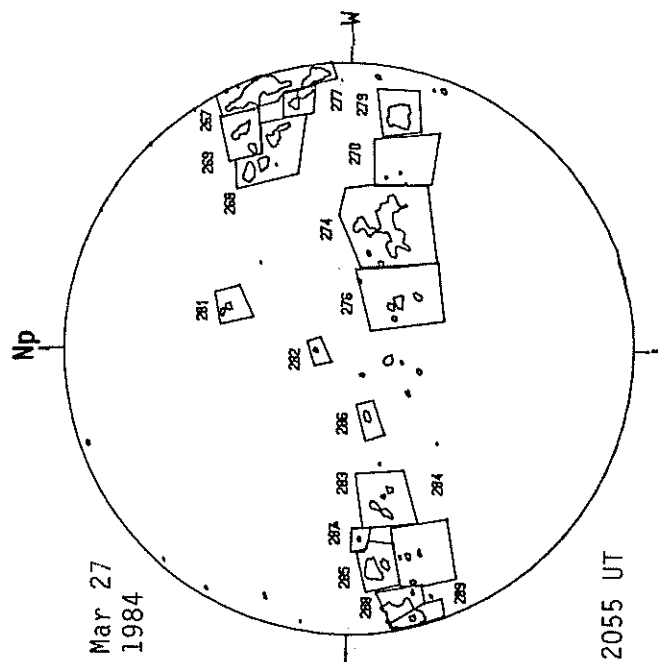
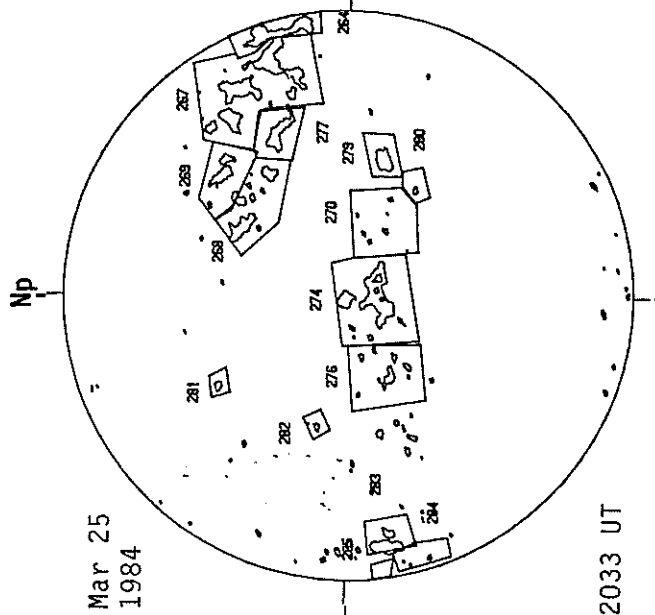
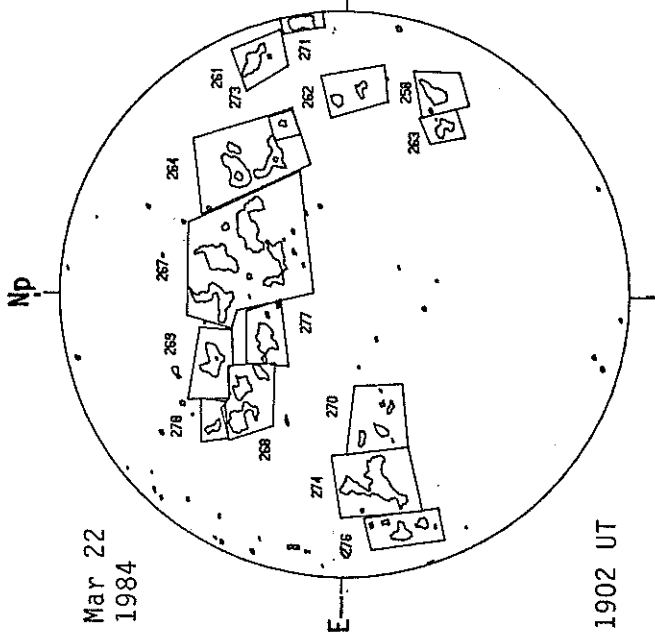


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Late
Mar 84

BIG BEAR SOLAR CALCIUM PLAGE REGIONS



BIG BEAR SOLAR CALCIUM PLAGE REGIONS



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Late
Mar 84

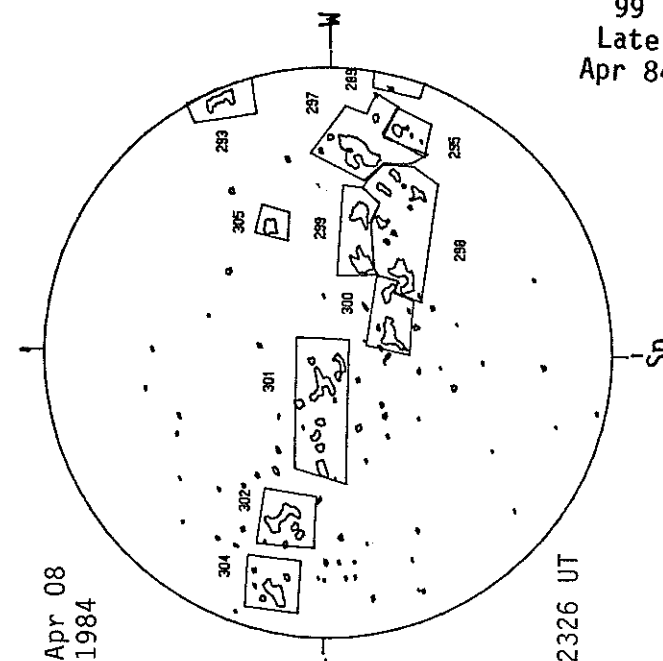
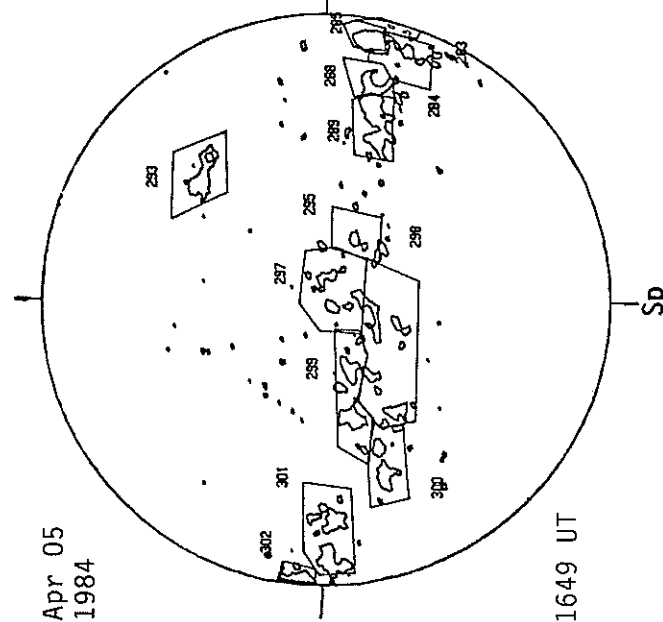
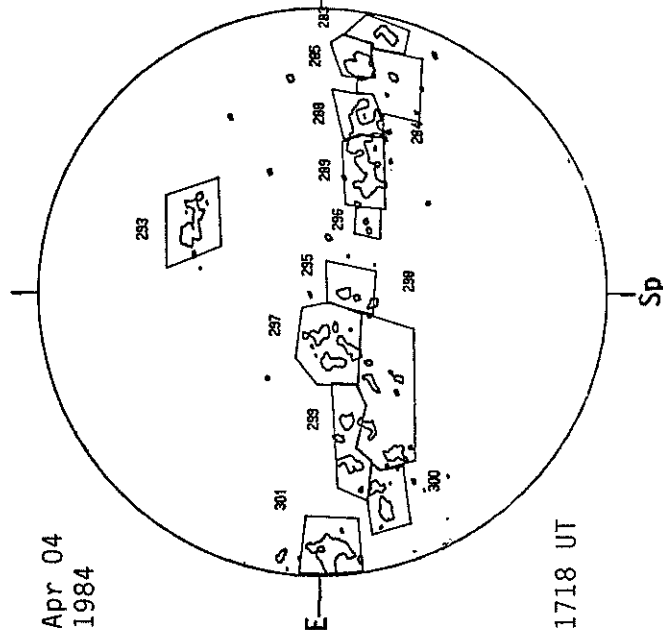
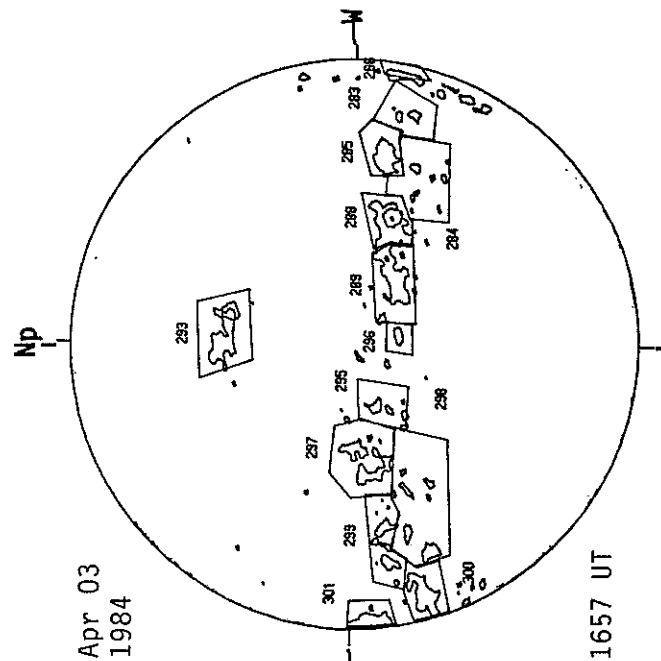
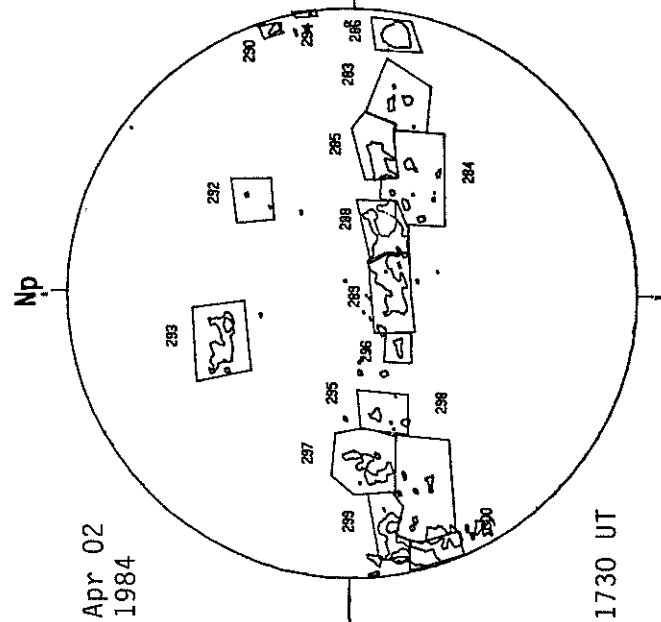
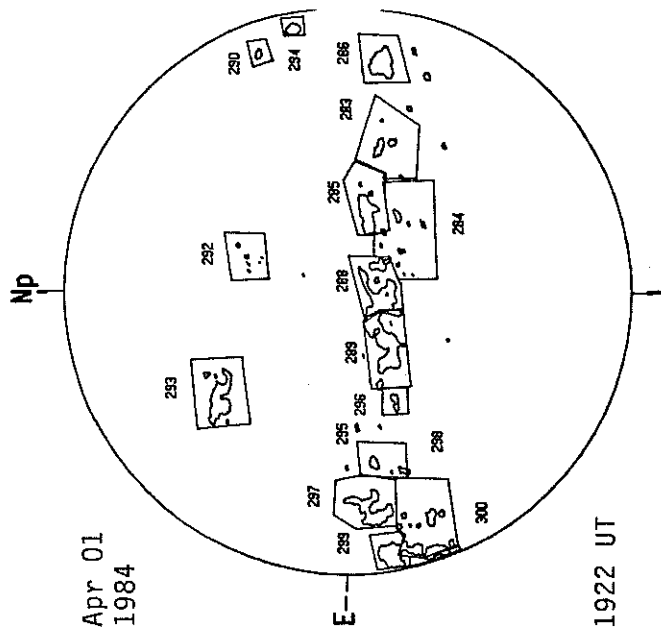
BIG BEAR SOLAR OBSERVATORY
ACTIVE REGION SUMMARY

MARCH 1984

REGION	IDENTIFICATION	AGE	FIRST SEEN	DURATION
19247	New	1	840304	03 Days
240	19210	2	840226	14
238	New in upper portion of 19210 and 19211	1	840226	14
241	19211	2	840227	14
243	New	1	840301	10
250	New	1	840301	11
242	19220	2	840229	13
253	New	1	840310	02
252	New	1	840307	05
251	New	1	840307	>01
254	New	1	840310	01
244	19212	2	840301	14
245	19214	2	840303	11
246	19215 and 19216	3	840303	14
249	19217	2	840305	10
255	New	1	840310	08
266	New	1	840314	05
257	New	1	840311	09
256	New	1	840310	11
265	New	1	840314	03
259	New	1	840313	07
260	New	1	840313	02
271	New	1	840318	>05
261	New	1	840313	>09
258	19223	2	840312	>10
262	New	1	840313	>09
263	New	1	840313	13
272	New	1	840318	01
273	New	1	840319	>03
264	Leading polarity of 19227	4	840314	12
267	19227	4	840317	12
277	New	1	840321	09
279	New	1	840325	05
269	19229	3	840318	12
280	New	1	840325	>01
268	19229	3	840317	13
270	19239	2	840318	>12
278	New	1	840322	>01
274	19236	2	840319	13
276	New	1	840321	>09
281	New	1	840325	07
294	New	1	840329	05
282	New	1	840325	03
290	New	1	840328	06
286	New	1	840327	08
283	19240	3	840325	12
287	New	1	840327	03
285	19238	2	840325	>12
291	New	1	840328	02

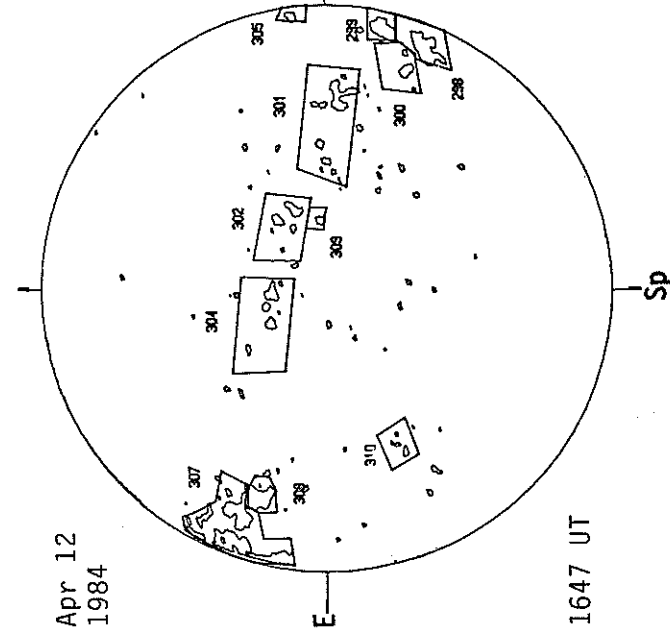
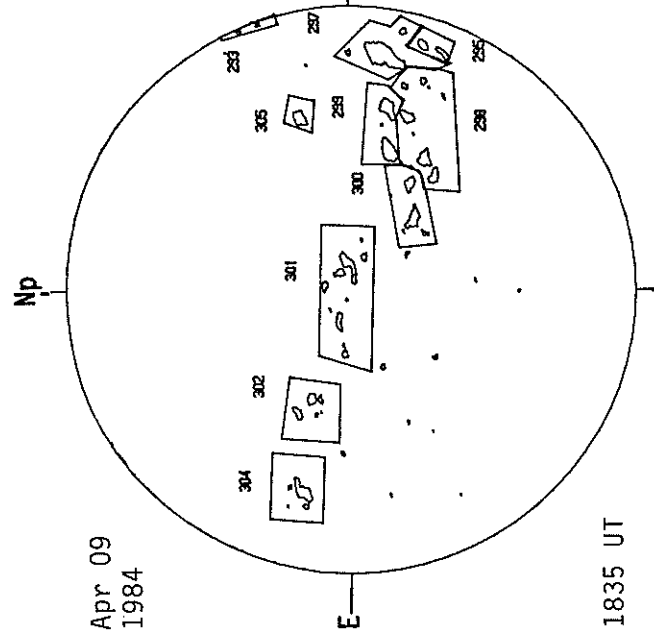
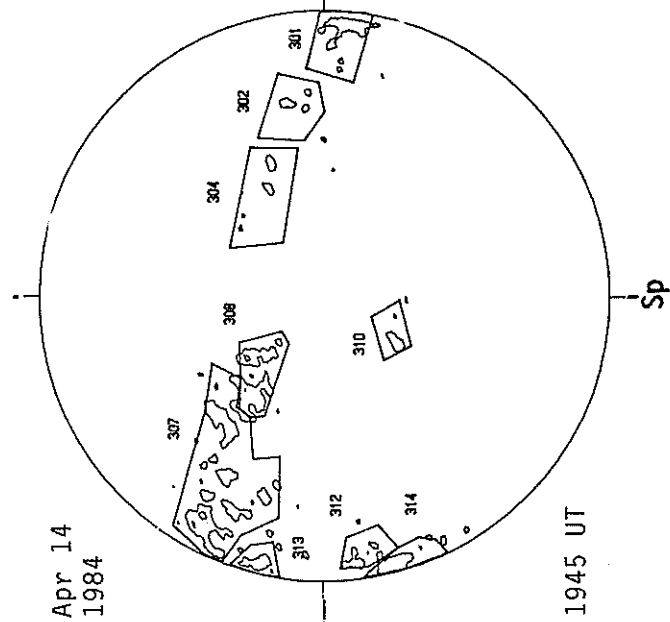
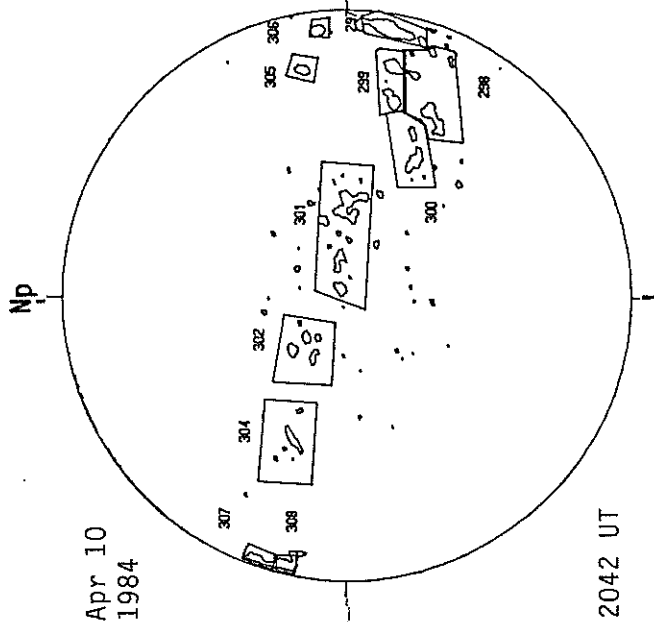
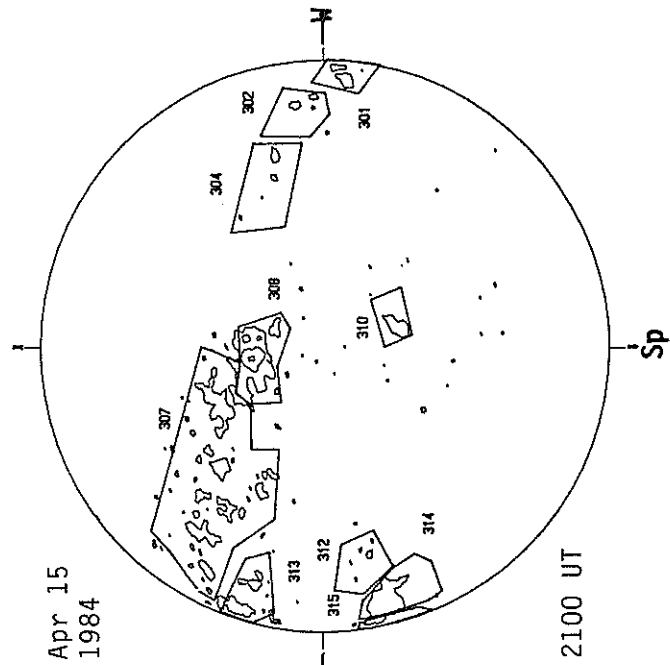
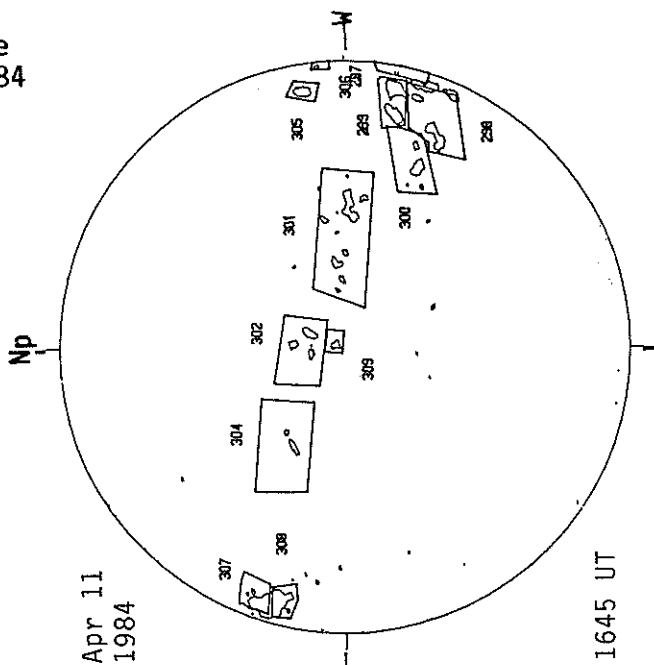
1. No CaK Observations at BBSO on March 8, 9, 16, 23, 24, 26, 30
2. No CaK Plots on March 4-9, 12, 14, 16, 23, 24, 26, 30.
3. No KPNO Magnetograms on March 8, 9, 16, 23, 24, 26, 30.
4. Contiguous Plages: 19238/19240/19241, 19244/19251, 19245/19246, 19258/19263, 19268/19269.

BIG BEAR SOLAR CALCIUM PLAGE REGIONS

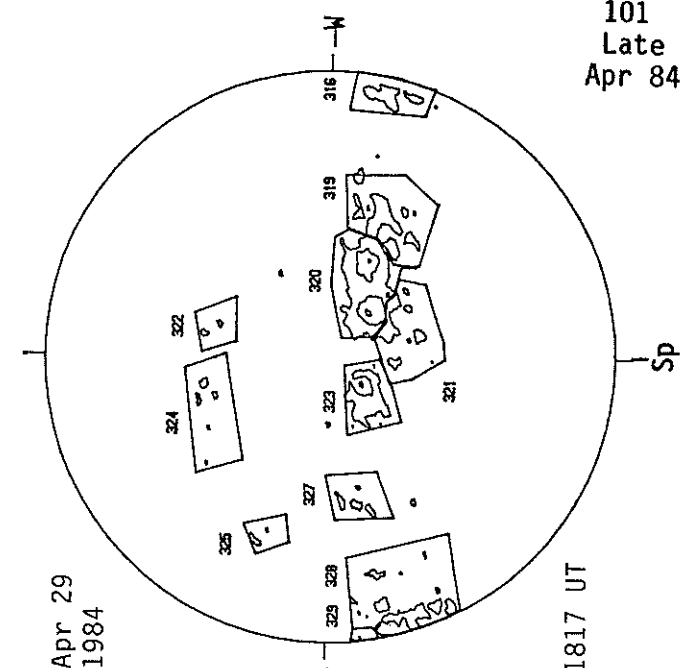
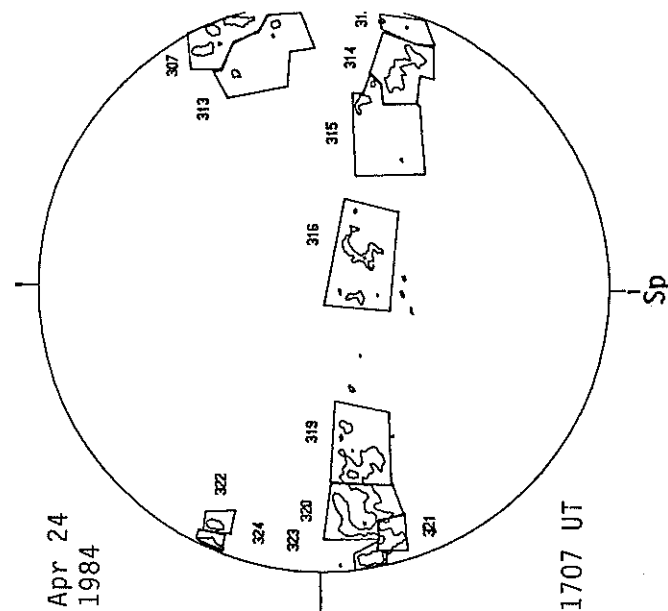
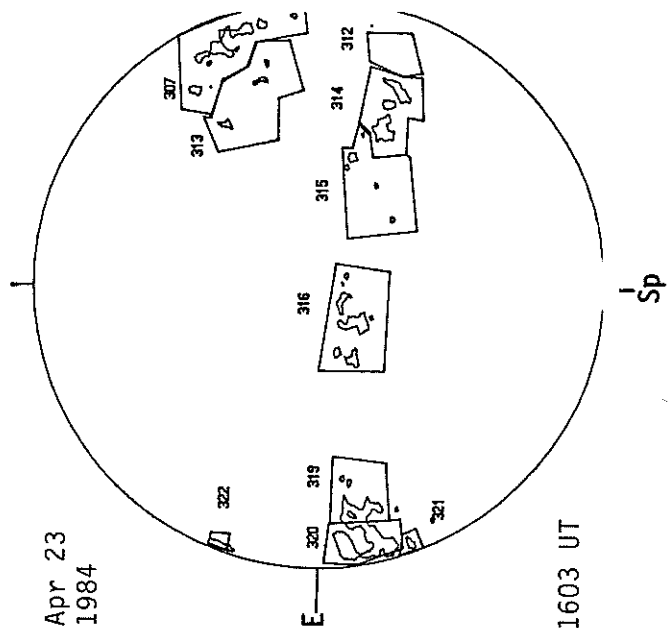
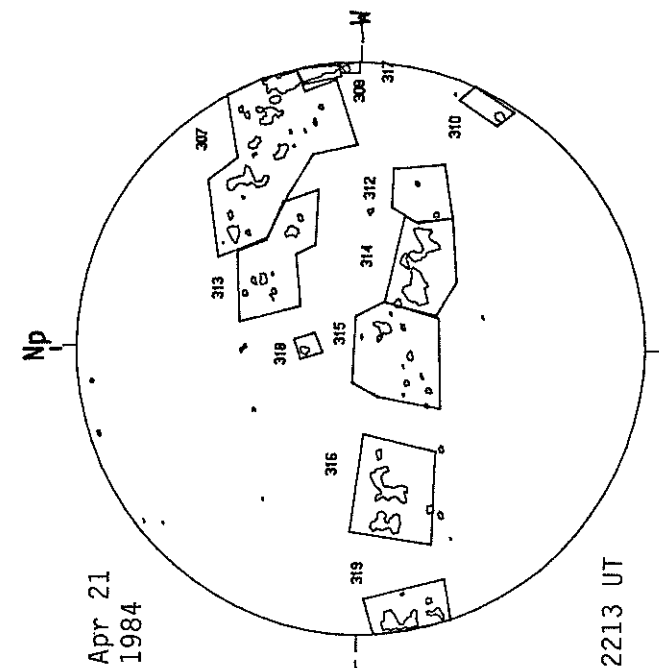
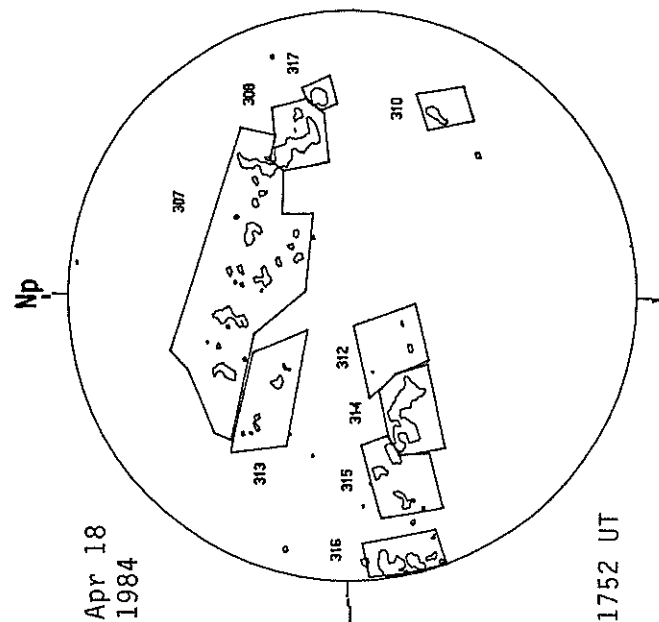
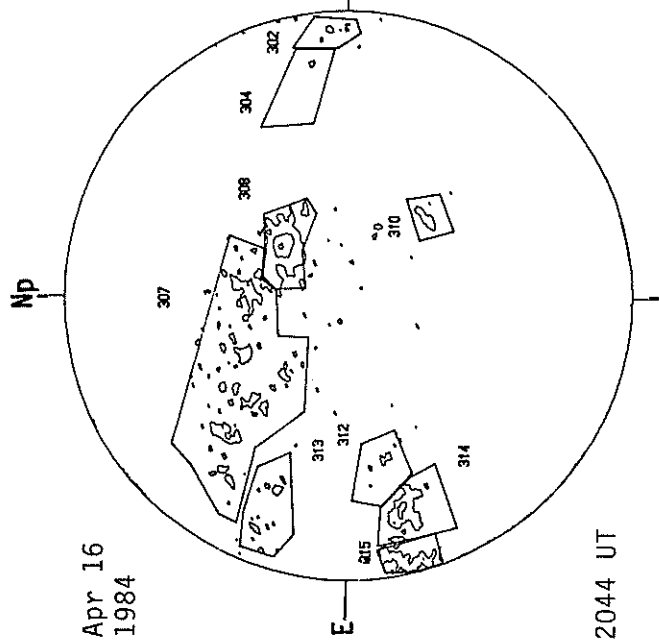


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Late
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BIG BEAR SOLAR CALCIUM PLAGE REGIONS

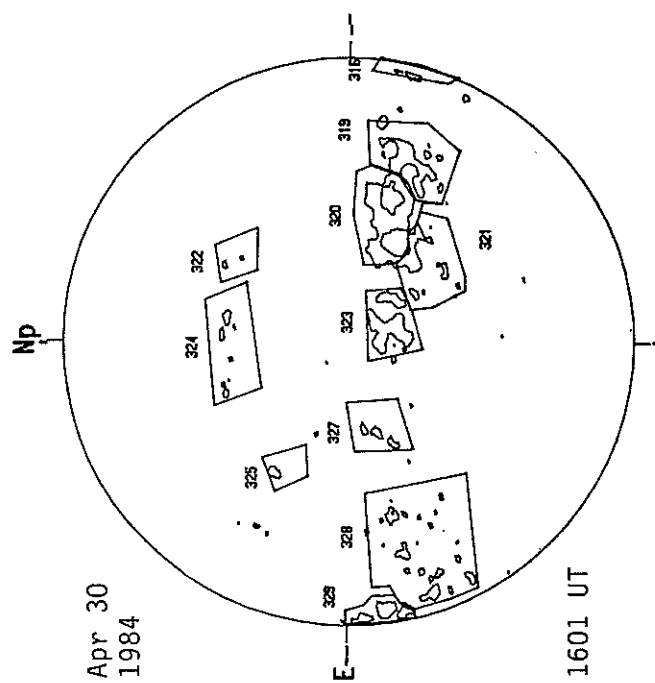


BIG BEAR SOLAR CALCIUM PLAGE REGIONS



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Late
Apr 84

BIG BEAR SOLAR CALCIUM PLAGE REGIONS



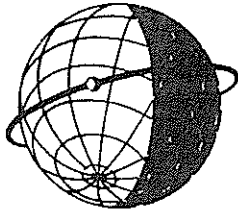
BIG BEAR SOLAR OBSERVATORY
ACTIVE REGION SUMMARY

103
Late
Apr 84

APRIL 1984

REGION	IDENTIFICATION	AGE	FIRST SEEN	DURATION
19284	19241	3	840325	>12 Days
292	New	1	840328	07
288	New	1	840327	>10
289	New	1	840327	13
293	New	1	840328	12
296	New	1	840331	05
295	New, in trailing portion of 19244	1	840329	12
297	19245	3	840331	>12
306	New	1	840410	02
298	19246	4	840331	>13
299	19255	2	840401	>12
305	New	1	840408	05
300	19266	2	840401	>12
301	19256	2	840403	13
309	New	1	840411	01
302	New	1	840405	>12
304	19271	2	840408	>09
317	New	1	840418	04
310	New	1	840412	10
308	New	1	840410	>12
307	19267, 19364 and 19269	5	840410	14
312	19279	2	840414	>11
313	19268	4	840414	>11
314	New (vic. of 19270)	1	840414	>11
315	19274	3	840415	>10
318	New	1	840421	>01
316	New in leading portion of 19286	1	840418	13
319	New (vic. of 19285)	1	840421	12
320	New (vic. of 19288)	1	840423	13
321	19289	2	840423	13
322	New	1	840423	10
323	New	1	840424	13
324	19293	2	840424	13

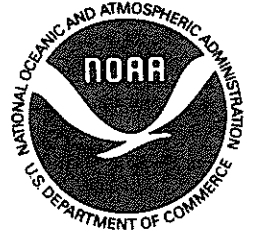
1. No CaK Observations at BBSO on April 6, 7, 12, 13, 17, 19, 20, 22, 25-28.
2. No CaK Plots on April 6, 7, 12, 13, 17, 19, 20, 22, 25-28.
3. No KPNO Magnetograms on April 6, 7, 12, 13, 17, 19, 20, 22, 25-28.
4. Contiguous Plages: 19288/19289, 19314/19315, 19319/19320/19321.



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."