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NO. 487 MARCH 1985

Part I (Prompt Reports)

DATA FOR
FEBRUARY 1985
JANUARY 1985

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

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

NUMBER 487

(Issued in Two Parts)

Editor:
Helen E. Coffey, Physicist

Joe H. Allen, Chief
Solar-Terrestrial Physics Division

Staff:
John A. McKinnon, Physicist
Daniel C. Wilkinson, Physicist
Viola W. Miller, Physical Science Technician
Carol Weathers, Editorial Assistant
Charles T. Shanks, Draftsman

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*Solar radio noise bursts observed at Athens, Learmonth, Manila, Palehua and Sagamore Hill during Aug 1979 through Oct 1980 appear in SOLAR-GEOPHYSICAL DATA, No. 461, Part II, pages 103-235.

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ALERT PERIODS
INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

SUMMARY OF THE GEOALERT MESSAGES

FEBRUARY 1985

NO	DI	DO	WOLF	10CM	A	LOC	TOT	M	X	OUTSTANDING EVENTS	DA	LOC	DE	ALERTS
032	01	31	026	070	018	N19W01 S14W01	0 0	0 0	0 0		01	N19W01 S14W01	Q Q	SOLQUIET MAGQUIET
033	02	01	051	074	012	S13W49 S15W17 N18W15	0 0 0	0 0 0	0 0 0		02	S13W49 S15W17 N18W15	Q Q Q	SOLQUIET MAGQUIET MAGQUIET
034	03	02	043	076	012	S14W63 N17W29 S14W28	0 1 0	0 0 0	0 0 0		03	S14W63 N17W29 S14W28	Q Q Q	SOLQUIET MAGQUIET MAGQUIET
035	04	03	030	076	007	S15W40 N17W43	2 2	0 0	0 0		04	S15W40 N17W43	Q Q	SOLQUIET MAGQUIET
036	05	04	029	073	008	N16W57 S16W53	1 0	0 0	0 0		05	N16W57 S16W53	Q Q	SOLQUIET MAGALERT MINOR 05/XX RECURRENCE
037	06	05	037	073	020	S16W70 S16W66 S07E57	0 0 3	0 0 0	0 0 0		06	S16W70 S16W66 S07E57	Q Q Q	SOLQUIET MAGALERT MINOR 06/XX RECURRENCE
038	07	06	023	073	030	N16W82 S07E41	0 0	0 0	0 0		07	N16W82 S07E41	Q Q	SOLQUIET MAGALERT MINOR 07/XX RECURRENCE
039	08	07	011	072	023	N17W96	0	0	0		08	N17W96	Q	SOLQUIET MAGALERT 08/XX
040	09	08	034	075	018	N11W02 N01E64 S12E78	0 0 0	0 0 0	0 0 0		09	N11W02 N01E64 S12E78	Q Q Q	SOLQUIET MAGN1L MAGN1L
041	10	09	039	075	019	N10W16 N01E46 S12E66	1 0 0	0 0 0	0 0 0		10	N10W16 N01E46 S12E66	Q Q Q	SOLQUIET MAGQUIET MAGQUIET
042	11	10	023	076	015	N10W31 S12E53	0 1	0 0	0 0		11	N10W31 S12E53	Q Q	SOLQUIET MAGQUIET
043	12	11	024	075	013	N11W44 S12E39	0 1	0 0	0 0		12	N11W44 S12E39	Q Q	SOLQUIET MAGQUIET
044	13	12	017	074	013	S11E27	0	0	0		13	S11E27	Q	SOLQUIET MAGQUIET
045	14	13	014	073	007	S10E14	0	0	0		14	S10E14	Q	SOLQUIET MAGQUIET
046	15	14	039	072	010	N09W86 S10E00 S07E16	0 0 0	0 0 0	0 0 0		15	N09W86 S10E00 S07E16	Q Q Q	SOLQUIET MAGQUIET MAGQUIET
047	16	15	016	072	011	S11W12	0	0	0		16	S11W12	Q	SOLQUIET MAGQUIET
048	17	16	013	072	008	S11W26	0	0	0		17	S11W26	Q	SOLQUIET MAGQUIET
049	18	17	011	073	013	S11W42	0	0	0		18	S11W42	Q	SOLQUIET MAGQUIET

ALERT PERIODS
INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

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FEB 85

SUMMARY OF GEOALERT MESSAGES

FEBRUARY 1985

NO	DI	DO	WOLF	10CM	A	LOC	TOT	M	X	OUTSTANDING EVENTS	DA	LOC	DE	ALERTS
050	19	18	000	076	007	SPOTNIL					19	SPOTNIL		SOLQUIET MAGALERT 20/XX
051	20	19	030	078	008	S09W12 N02E77	0 6	0 0	0 0		20	S09W12 N02E77	Q E	SOLQUIET MAGALERT 20/22
052	21	20	036	077	012	S09W26 S02E65	0 2	0 0	0 0		21	S09W26 S02E65	Q Q	SOLQUIET MAGALERT 21/22
053	22	21	035	076	010	S09W39 N03E52	0 1	0 0	0 0		22	S09W39 N03E52	Q Q	SOLQUIET MAGALERT MAGNIL
054	23	22	033	075	011	S09W56 N03E38	0 0	0 0	0 0		23	S09W56 N03E38	Q Q	SOLQUIET MAGALERT 24/26 RECURRENCE
055	24	23	024	073	010	N03E22	0	0	0		24	N03E22	Q	SOLQUIET MAGALERT 24/26 RECURRENCE
056	25	24	015	072	015	N03E09	0	0	0		25	N03E09	Q	SOLQUIET MAGALERT MINOR 25/26 RECURRENCE
057	26	25	017	072	017	N03W04	0	0	0		26	N03W04	Q	SOLQUIET MAGNIL
058	27	26	015	071	007	N03W18	0	0	0		27	N03W18	Q	SOLQUIET MAGALERT
059	28	27	012	070	011	N04W34	0	0	0		28	N04W34	Q	SOLQUIET MAGALERT MINOR 28/01
060	01	28	011	071	055	N04W47	0	0	0		01	N04W47	Q	SOLQUIET MAGNIL

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 - 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) FEBRUARY 1985

NO PRESTO MESSAGES ISSUED THIS MONTH

INTERNATIONAL* (R_I) RELATIVE SUNSPOT NUMBERS

Day	1984 Final Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1985 Prov Jan	Feb
01	74	103	109	48	33	14	45	7	16	19	0	18
02	78	94	89	44	36	17	50	8	14	22	0	25
03	66	88	69	45	61	19	61	11	11	19	0	25
04	54	81	52	34	80	25	58	11	14	19	0	22
05	65	61	38	30	72	18	53	0	12	16	0	20
06	49	70	27	23	61	24	32	0	0	21	0	16
07	51	50	35	34	64	27	21	0	11	18	0	7
08	64	33	54	31	74	32	20	12	13	23	12	19
09	60	36	72	26	63	35	13	14	13	21	14	24
10	46	12	85	31	74	31	10	17	21	15	0	19
11	65	21	94	37	57	29	9	22	27	28	0	11
12	72	28	100	39	54	31	9	16	21	29	13	10
13	79	24	118	41	44	28	9	10	16	28	16	10
14	88	32	111	50	34	27	0	9	15	28	26	11
15	112	59	85	80	30	23	8	14	13	26	25	11
16	117	60	97	83	25	23	12	19	11	30	26	10
17	105	56	83	73	21	18	0	24	11	24	29	16
18	95	73	70	62	26	17	0	25	14	12	26	10
19	90	82	74	51	22	11	10	25	13	11	27	19
20	103	69	70	53	18	16	0	17	27	11	63	27
21	98	68	65	43	12	12	9	19	36	14	59	27
22	87	55	77	48	22	10	10	12	36	12	53	25
23	89	59	83	54	25	19	8	11	41	11	39	16
24	80	80	86	58	38	24	8	9	47	16	33	11
25	97	99	75	44	30	36	7	10	59	21	20	11
26	97	124	87	49	25	49	0	10	44	20	0	11
27	96	121	86	40	9	41	0	8	39	14	8	10
28	98	125	69	41	9	37	0	0	39	16	0	9
29	94	120	74	50	12	34	0	8	30	15	9	
30	107	107	70	42	16	27	8	11	20	10	0	
31	113		63		12	36		14		10	15	
Mean	84	70	76	46	37	26	16	12	23	19	16	16

*International sunspot numbers have replaced the Zurich values since January 1981.
The yearly mean sunspot number equaled 45.9 in 1983.

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

ALGONQUIN RADIO OBSERVATORY, OTTAWA

Day	Mar 85	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 85	Feb
01	143.6	135.7	153.7	116.1	101.7	84.0	94.1	72.0	69.5	77.0	68.4	72.2
02	138.2	134.6*	139.3*	111.3	103.6	86.3	93.2	74.8	70.1	76.8	67.8	73.8
03	122.5	128.8*	123.1	109.6	104.8	88.4	94.5	75.2	72.0	77.9	67.7	73.6
04	114.4*	129.5	113.5*	106.8	105.7	85.7	91.9	75.2	72.2	75.9	67.8	70.9
05	109.3	118.7	114.9	104.6	104.4*	85.7	89.8	74.0	71.7	73.4	67.0	71.2
06	109.5	112.1*	108.1	98.9	100.3	89.9	85.9	73.2	71.0	73.0	67.9	70.6
07	105.0	107.8	118.3	97.3	100.1	92.4	85.2	73.5	70.1	72.7	68.1	70.3
08	103.8	100.7	121.9	94.6	101.1	94.0	83.4	74.6	70.5	74.1	67.4	72.5
09	102.4	94.9	138.3	93.6	104.5	94.4	80.6	73.5	72.7	74.5	68.1	73.2
10	98.8	93.9	150.9	92.3	101.3	95.4	79.1	74.1	75.8	75.7	67.4	73.6
11	98.6	97.3	147.9	93.2	96.8	90.8	77.8	74.3	73.1	78.9	67.7	73.2
12	102.3*	107.2	148.2*	93.0	94.7	88.0	76.5	73.9	72.8	77.8	68.4	72.3
13	114.7	113.7	151.4	98.6	92.6	86.5	75.0	74.7	71.6	76.2	72.6	70.8
14	121.1	118.8	146.9	110.2	92.2*	84.0	74.5	73.2	72.0	75.8	72.3	70.6
15	134.4	119.7	139.6	116.5*	92.2	82.6	73.3	76.4	72.9	74.9	72.4	70.2
16	124.0	117.2	137.3	110.3	90.1	83.1	73.4	76.6	70.7	74.2	74.7	69.8
17	129.1	122.9*	130.1	109.5*	87.3	81.0	74.6	76.2	71.0	72.6	75.8	70.9
18	125.8*	119.9	131.9	108.9	85.5	79.1	73.8	76.5	71.7	70.2	74.1	73.4*
19	126.5	112.5*	137.6	107.8	84.7	76.2	74.6	74.2	72.3	71.0	75.4	76.1
20	126.3	124.1*	138.0	106.6	84.8	75.6	74.1	73.5	74.8	69.9	81.7*	75.0
21	122.4	127.7	145.3*	103.4*	86.7	77.2	75.1	73.2	78.3	69.7	84.9*	74.2
22	122.7	130.8	130.1	104.6	86.3	75.7	75.9	74.5	78.2	70.7	85.3	73.3
23	115.1	136.6*	130.0	105.3	87.3	76.0	76.1	72.7	79.3	71.3	82.5	71.7
24	113.0	142.9	126.9	103.6	86.8	81.6	76.2	70.8	81.1	71.8	78.2	70.5
25	111.6	152.4	125.7*	104.6	85.9	83.0	74.6	70.2	83.1	72.2	73.9	70.1
26	120.2	174.0	121.0	100.1	83.4	87.7	74.3	69.4	82.5	72.3	71.0	69.7
27	129.1*	183.7*	120.3	101.5	83.0	90.4	73.5	68.6	82.5*	72.0	69.5	68.9
28	135.9	182.6*	118.5	99.5	82.5	88.6	73.1	69.3	81.0	72.2	69.6	69.7
29	138.1*	178.2*	121.0	100.3	82.3	90.3	71.7	68.2	77.1	72.1	68.7	
30	143.8	170.8	119.7A	101.1	82.2	91.8	72.4	68.8	76.4	71.4	68.3	
31		115.9		83.0	93.1*		69.8			70.0	69.9A	
Mean	120.8	129.7	131.1	103.5	92.2	85.8	78.9	73.1	74.6	73.5	72.1	71.9

A = interpolated value; --- = no observation.

*Adjusted for burst in progress at time of measurement.

The yearly mean 2800 MHz flux adjusted to 1 astronomical unit equaled 101.1 in 1984.

DAILY SOLAR INDICES

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FEBRUARY 1985

Julian Day		Bartels Cycle	Sunspot Numbers		Obs Flux Ottawa (2800)	Solar Flux Adjusted to 1 Astronomical Unit								
Day	Day	Day	Int	Amer	(2800)	SGMR (15400)	SGMR (8800)	SGMR (4995)	Ottawa (2800)	SGMR (2695)	SGMR (1415)	PALE (610)	PALE (410)	PALE (245)
01	32	14	18	29	74.4	559	273	108	72.2	76	58	50	22	10
02	33	15	25	25	76.0	411	244	93	73.8	66	56	50	21	10
03	34	16	25	27	75.8	566	277	104	73.6	72	58	49	20	9
04	35	17	22	27	72.9	---	272	104	70.9	70	59	30	14	6
05	36	18	20	18	73.3	---	---	---	71.2	---	---	47	21	9
06	37	19	16	13	72.6	---	---	---	70.6	---	---	50	21	9
07	38	20	7	8	72.3	---	277	104	70.3	73	57	48	23	8
08	39	21	19	15	74.5	---	---	---	72.5	---	---	45	20	9
09	40	22	24	23	75.2	---	---	---	73.2	---	---	45	18	9
10	41	23	19	22	75.6	---	274	123	73.6	75	59	52	22	10
11	42	24	11	16	75.2	---	273	86	73.2	72	60	---	---	---
12	43	25	10	12	74.2	---	268	88	72.3	71	65	47	20	9
13	44	26	10	14	72.6	---	264	89	70.8	69	56	51	21	10
14	45	27	11	12	72.4	---	277	89	70.6	67	57	50	21	10
15	46	1	11	13	72.0	---	263	97	70.2	67	57	50	21	11
16	47	2	10	11	71.5	505	270	105	69.8	70	56	---	---	---
17	48	3	16	9	72.6	522	264	86	70.9	73	57	50	22	11
18	49	4	10	0	75.1*	---	---	---	73.4*	---	---	49	24	25
19	50	5	19	20	77.9	---	---	---	76.1	---	---	49	21	13
20	51	6	27	29	76.7	---	---	---	75.0	---	---	50	39	25
21	52	7	27	25	75.9	556	262	85	74.2	68	59	49	22	12
22	53	8	25	25	74.9	542	270	90	73.3	71	57	49	22	12
23	54	9	16	17	73.2	341	243	83	71.7	68	57	49	20	9
24	55	10	11	12	72.0	546	257	95	70.5	66	58	50	21	10
25	56	11	11	12	71.5	---	---	---	70.1	---	---	47	20	6
26	57	12	11	12	71.1	551	266	96	69.7	66	56	42	17	7
27	58	13	10	11	70.2	542	271	94	68.9	67	56	---	---	---
28	59	14	9	12	71.1	558	264	102	69.7	69	56	49	21	6
Mean			17		73.7	517	266	96	71.9	70	58	48	21	11

*Adjusted for burst in progress at time of measurement.

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

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

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

OBSERVED AND PREDICTED SOLAR ACTIVITY INDICES

FEBRUARY 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		
Mar 81	135.5	143	149.2	149	157.5	156	203.2	202
Apr	156.4	143	169.2	149	180.7	158	224.7	204
May	127.5	143	141.3	149	152.8	159	198.9	204
Jun	90.9	142	99.0	147	112.9	158	161.9	203
Jul	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	47*	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	41	30.7	41	85.8	95
Sep	15.7	38(2)*	13.6	<u>39</u>	23.2	40	78.9	---
Oct	12.0	37(5)*	9.8	<u>38</u>	16.9	<u>38</u>	73.1	---
Nov	22.8	36(6)*	19.4	<u>37</u>	18.6	<u>37</u>	74.6	---
Dec	18.7	34(7)*	17.0	<u>35</u>	17.4	<u>35</u>	73.5	---
Jan 85	16.5 [†]	33(9)*	14.5	<u>34</u>	15.9	<u>34</u>	72.1	---
Feb	16.1 [†]	31(9)*	---	<u>32</u>	15.7	<u>33</u>	71.9	---
Mar	---	30(10)*	---	<u>31</u>	---	<u>31</u>	---	---
Apr	---	29(11)*	---	<u>30</u>	---	<u>30</u>	---	---
May	---	28(12)*	---	<u>29</u>	---	<u>30</u>	---	---
Jun	---	27(12)*	---	<u>28</u>	---	<u>28</u>	---	---
Jul	---	26(12)*	---	<u>27</u>	---	<u>27</u>	---	---
Aug	---	25(12)*	---	<u>26</u>	---	<u>26</u>	---	---

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

Underlined entries indicate predicted values and parentheses enclose the absolute value of the 90% confidence limits. All tabulated entries of the American sunspot number are final values. 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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FEBRUARY 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	119	117	115	109	101	96	95	95
1983	93	90	86	82	71	71	66	66	68	68	59	64
1984	60	56	53	50	48	47	44	40	38 (2)	37 (5)	36 (6)	34 (7)
1985	33 (9)	31 (9)	30 (10)	29 (11)	28 (12)	27 (12)	26 (12)	25 (12)	24 (11)	23 (11)	22 (12)	22 (12)
1986	21 (13)	21 (13)	20 (13)	19 (13)	17 (13)	16 (13)	15 (13)	14 (13)	13 (12)	13 (12)	13 (12)	12 (11)

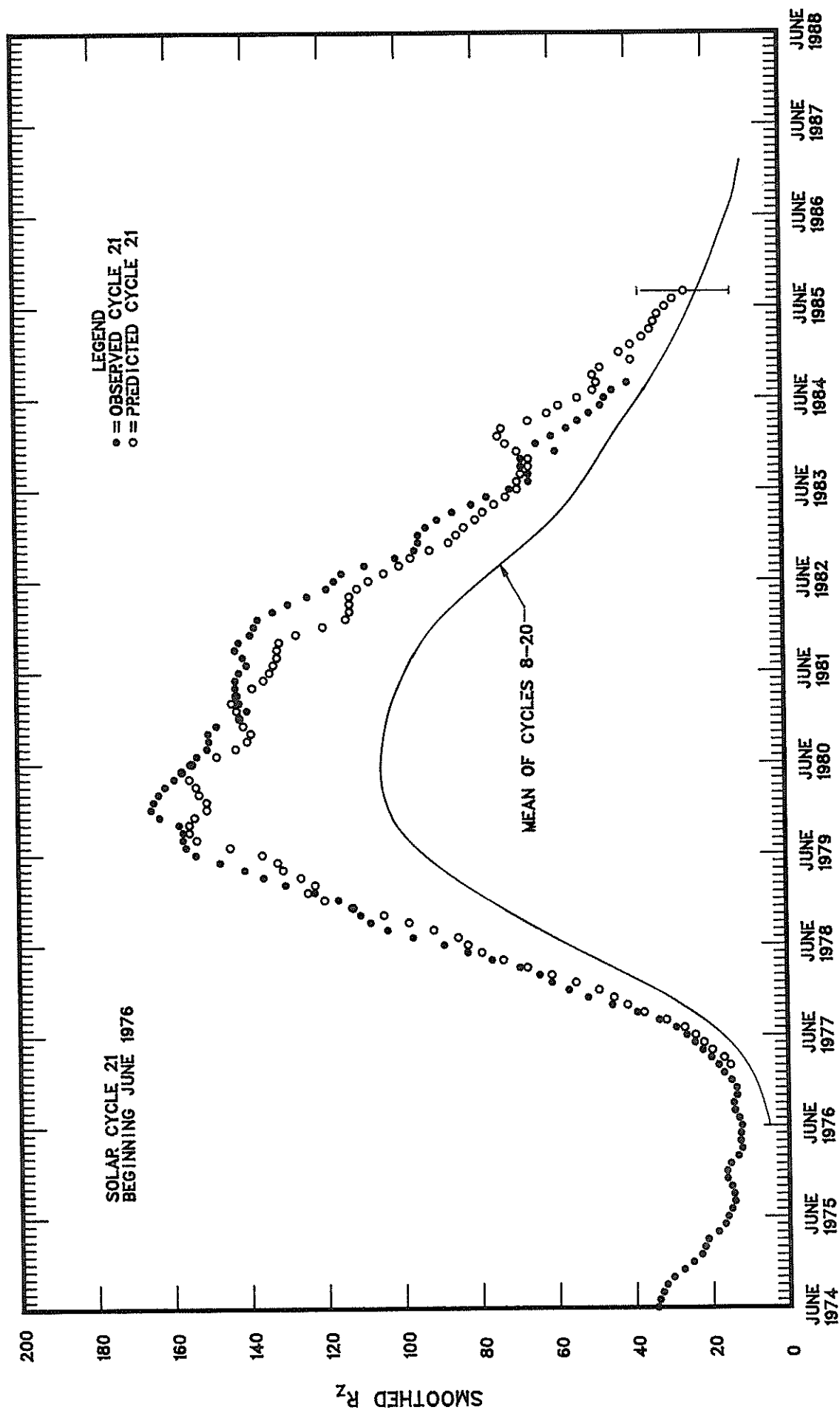
An asterisk marks the minimum and the maximum of Sunspot Cycle 21.

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 December 1984, and on provisional International numbers thereafter. Some table entries after the June 1976 value will change slightly, when we incorporate final data for 1985.

The entries with numbers in parentheses below them denote predictions by the McNish-Lincoln method. (See page 10 in the February 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 August 1985 prediction tabulated above. There exists a 90% chance that in August 1985 the actual smoothed sunspot number will fall somewhere between 13 and 37.

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.

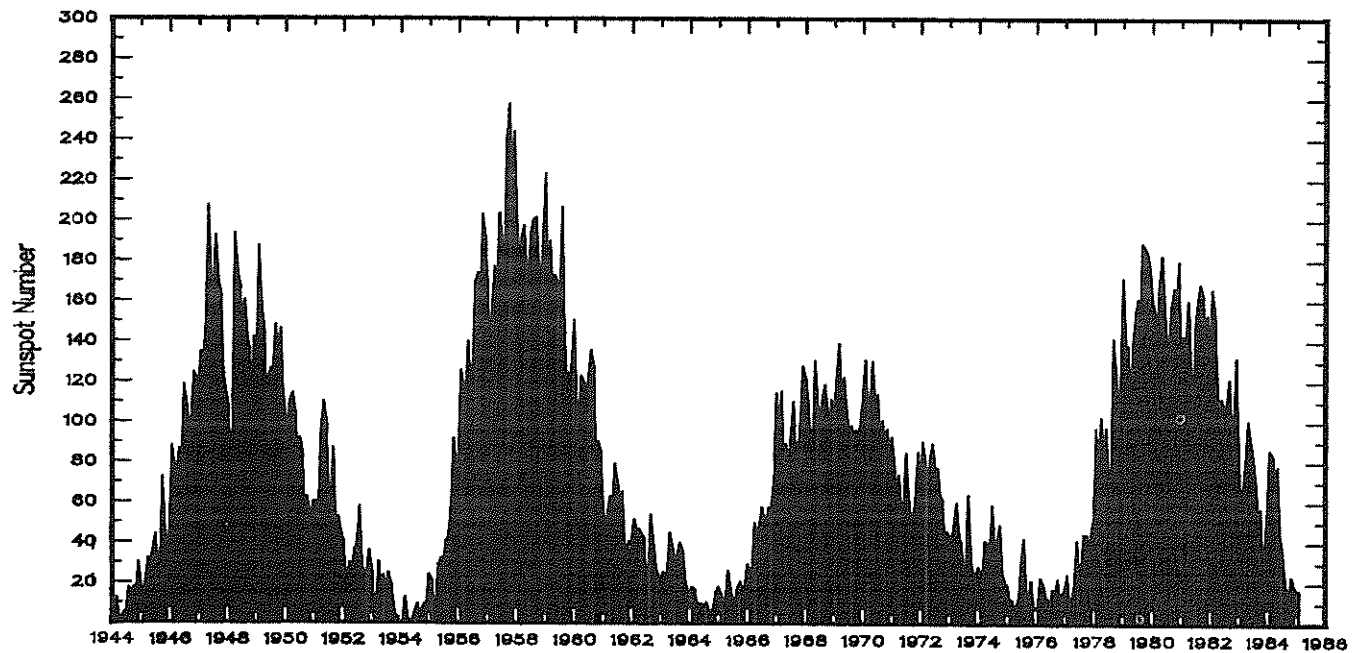
OBSERVED AND ONE-YEAR-AHEAD PREDICTED SMOOTHED SUNSPOT NUMBERS



MONTHLY MEAN SUNSPOT NUMBERS

January 1944 - February 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	55.9	63.6	37.7	32.6	40.0
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*	16.1*										

*Provisional

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H - ALPHA SOLAR FLARES

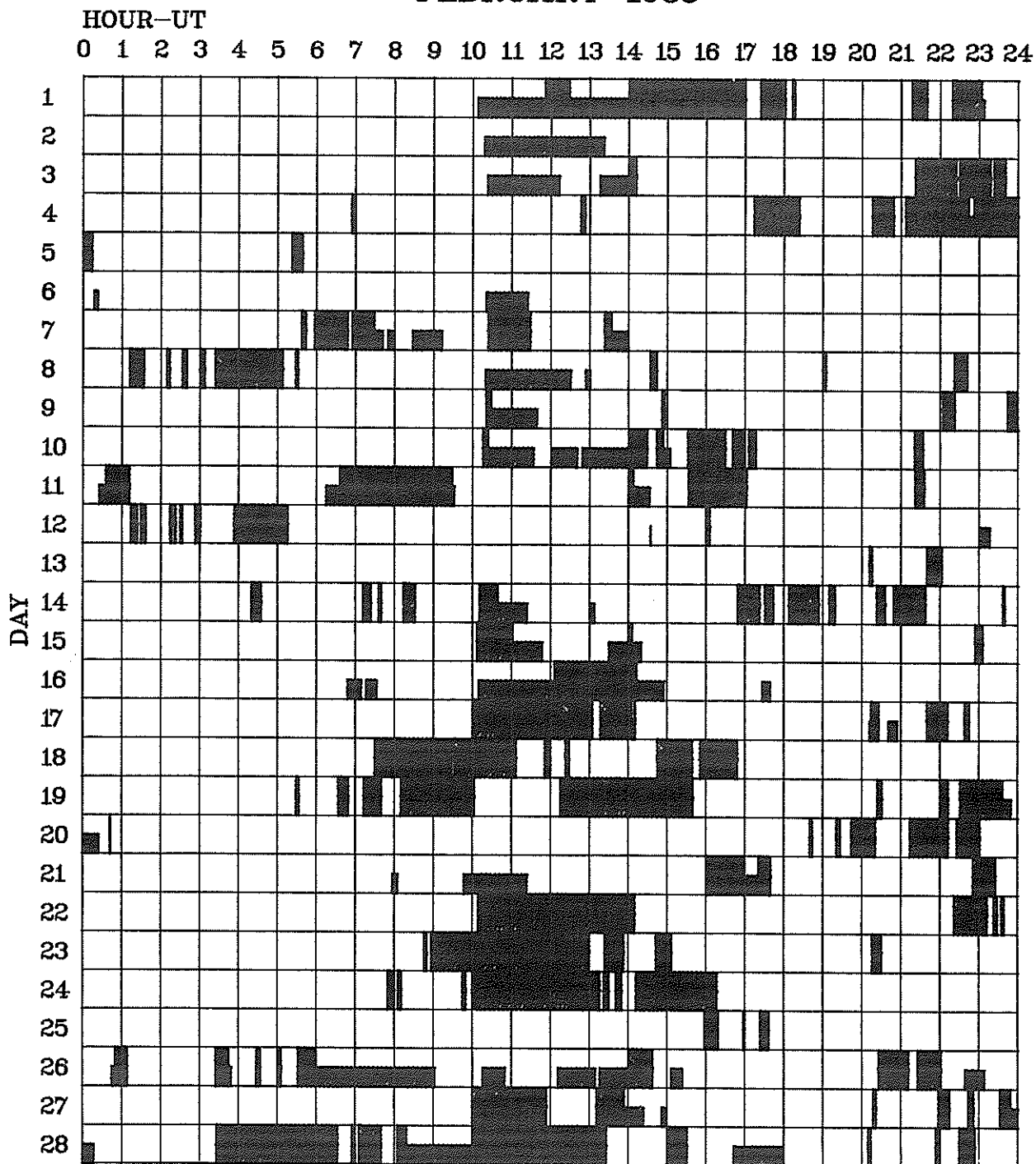
FEBRUARY 1985

Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
																Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	
RAMY	02	1323E		1346	N15	W25	4621	01	31.7	23D	SF		3	C				F
LEAR	03	0420	0420	0443	S17	W30	4620	01	31.9	23	SN	C 1.7	3	C		33		F
LEAR	03	0445	0449	0500	S16	W30	4620	01	31.9	15	SF		3	C		36		F
LEAR	03	0746	0746	0754	N15	W33	4621	01	31.8	8	SF		3	C		19		F
RAMY	03	1542	1543	1601	N15	W38	4621	01	31.8	19	SF		3	C		63		
RAMY	04	1833	1833	1900	N15	W54	4621	01	31.7	27	SF		3	C		25		
[YUNN	05	0329	0330	0332	S07	E69		02	10.3	3	SN			C		47		E
LEAR	05	0341	0343	0350	S07	E69		02	10.3	9	SF		3	C		14		F
[RAMY	05	1459	1502	1532	S07	E61		02	10.2	33	SN		3	C		54		F
HOLL	05	1501	1505	1520	S08	E61		02	10.2	19	SF		3	C		22		F
RAMY	05	1535	1537	1548	S07	E61	4623	02	10.2	13	SF		3	C		18		
[RAMY	07	1913	1915	1917D	S07	E31	4623	02	10.1	4D	1B	C 1.1	3	C		269		F
HOLL	07	1914	1917	1949	S09	E33	4623	02	10.3	35	1B	C 1.1	3	C		192		F
PALE	07	1916	1920U	1950	S09	E33	4623	02	10.3	34	1B	C 1.1	3	C		196		F
YUNN	08	0245E	0245	0249	N00	E77		02	13.9	4D	SN			P		16		DG
RAMY	09	1542	1543	1553	N11	W14	4624	02	08.6	11	SF		3	C		31		F
RAMY	10	1641	1642	1653	S12	E63	4626	02	15.4	12	SF		3	C		34		
RAMY	11	1829	1829	1845	S12	E41	4626	02	14.8	16	SN		3	C		32		
GOES	18	0743	0806	0828						45		C 2.3						
GOES	18	1140	1143	1145						5		C 1.6						
GOES	18	1449	1457	1509						20		C 1.2						
GOES	18	1549	1600	1614						25		C 1.4						
GOES	18	2315	2331	2343						28		C 4.5						
GOES	19	0101	0110	0117						16		C 1.0						
GOES	19	0127	0140	0146						19		C 2.6						
GOES	19	0218	0221	0228						10		C 2.7						
GOES	19	0823	0828	0831						8		C 1.1						
GOES	19	1503	1509	1512						9		C 1.9						
RAMY	19	1607	1607	1617	N02	E83		02	25.9	10	SN	C 3.5	3	C		29		
RAMY	19	1709	1717	1734	N02	E83		02	25.9	25	SF		3	C		23		
[RAMY	19	1811	1818	1836	N02	E83	4629	02	25.9	25	SF	C 2.0	3	C		76		
HOLL	19	1812	1815	1827	N01	E85		02	26.1	15	SF	C 2.0	3	C		45		
PALE	19	1814	1818	1831	S01	E87		02	26.2	17	SF	C 2.0	3	C		37		
RAMY	19	1920	1922	1928D	N01	E80	4629	02	25.8	8D	SF		3	C		14		
[PALE	19	2012	2012U	2021	S01	E83	4629	02	26.0	9	SF		3	C		24		
RAMY	19	2013	2013	2020D	N01	E83	4629	02	26.0	7D	SN		3	C		45		
RAMY	19	2051	2057	2125	N01	E80	4629	02	25.8	34	SF		3	C		73		
[LEAR	20	0242	0247	0253	N03	E74	4629	02	25.6	11	SF		3	C		28		
PALE	20	0243	0243	0251	N03	E77	4629	02	25.9	8	SF		3	C		10		
[HOLL	20	1452E	1456	1459D	S01	E71	4629	02	25.9	7D	SF		2	C		39		
RAMY	20	1455	1456	1515	N01	E70	4629	02	25.8	20	SN		3	C		27		F
GOES	20	2127	2132	2135						8		C 1.2						
[YUNN	21	0322E	0328	0346	N03	E64		02	25.9	24D	SN			P		63	1.5	D
PALE	21	0324	0325	0334	N03	E63	4629	02	25.8	10	SF		3	C		16		

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

13
Feb 85

FEBRUARY 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.

Athens
Bucharest

Holloman
Istanbul

Learmonth
Mitaka

Palehua
Peking
Purple Mt.

Ramey
Wendelstein
Yunnan

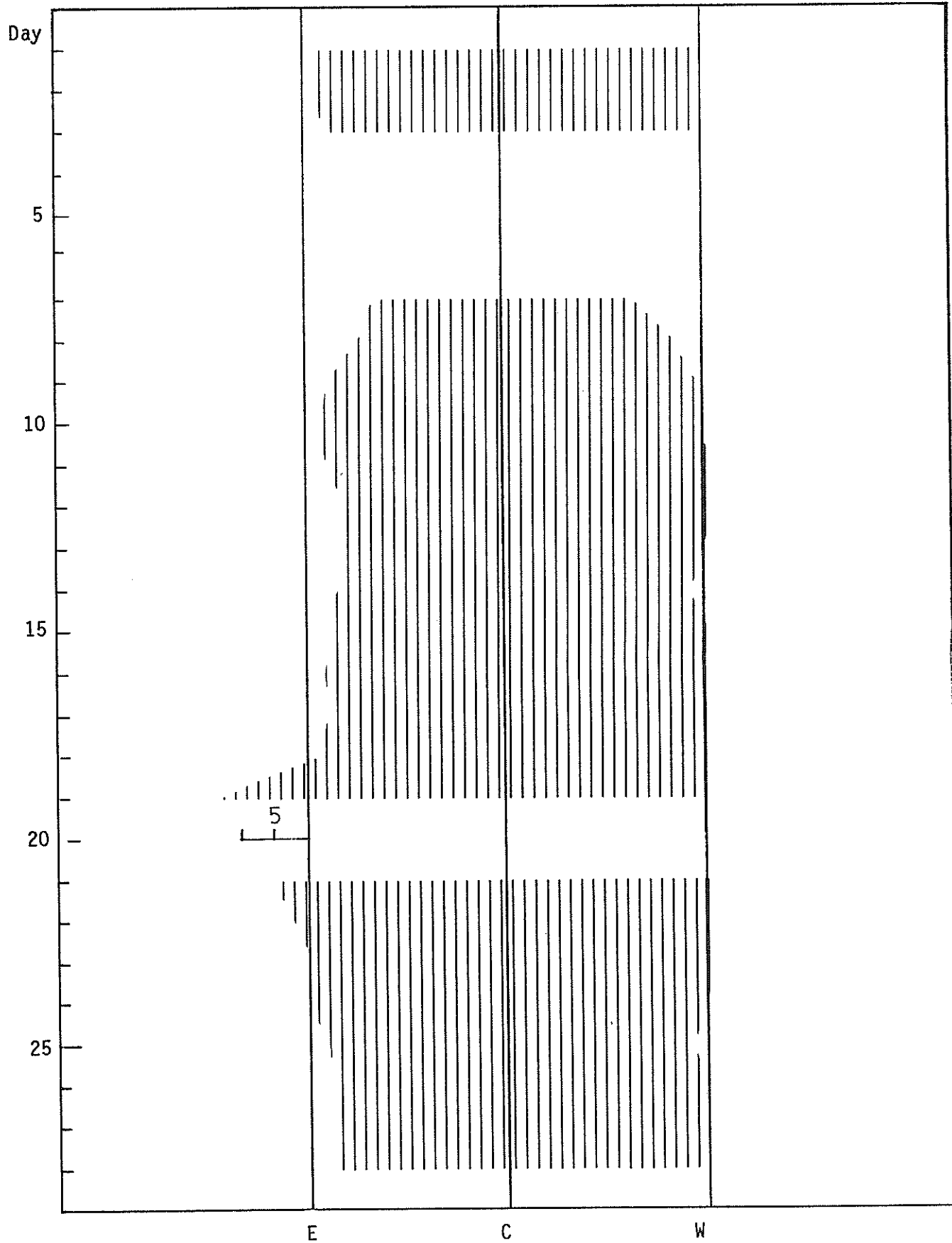
14
Feb 85

SOLAR INTERFEROMETRIC OBSERVATIONS

Nancay

FEBRUARY 1985

169 MHz



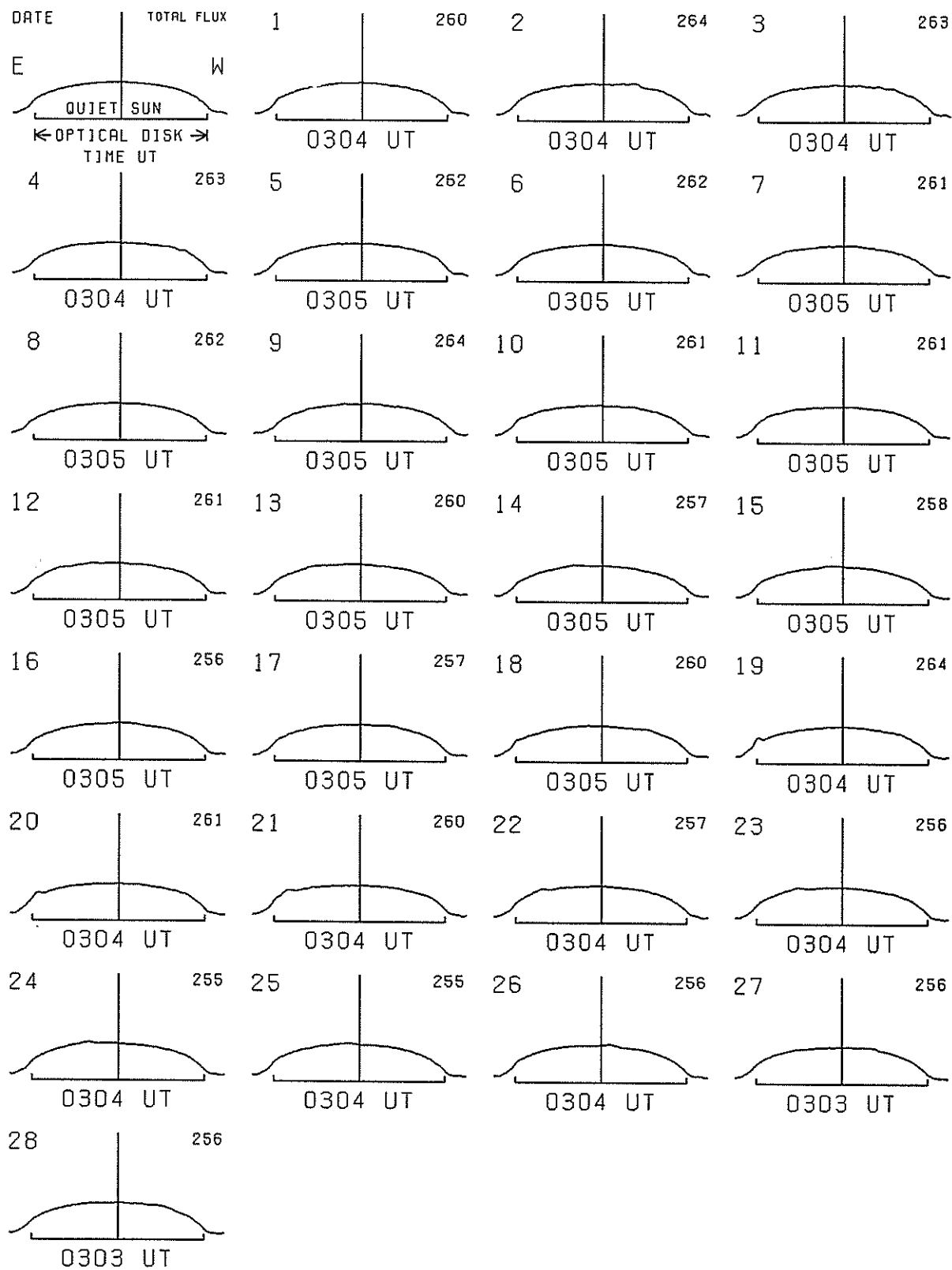
EAST-WEST SOLAR SCANS

FEBRUARY 1985

15
Feb 85

TOYOKAWA, JAPAN

3 CM
FAN BEAM WITH 1.1 MINUTES OF ARC

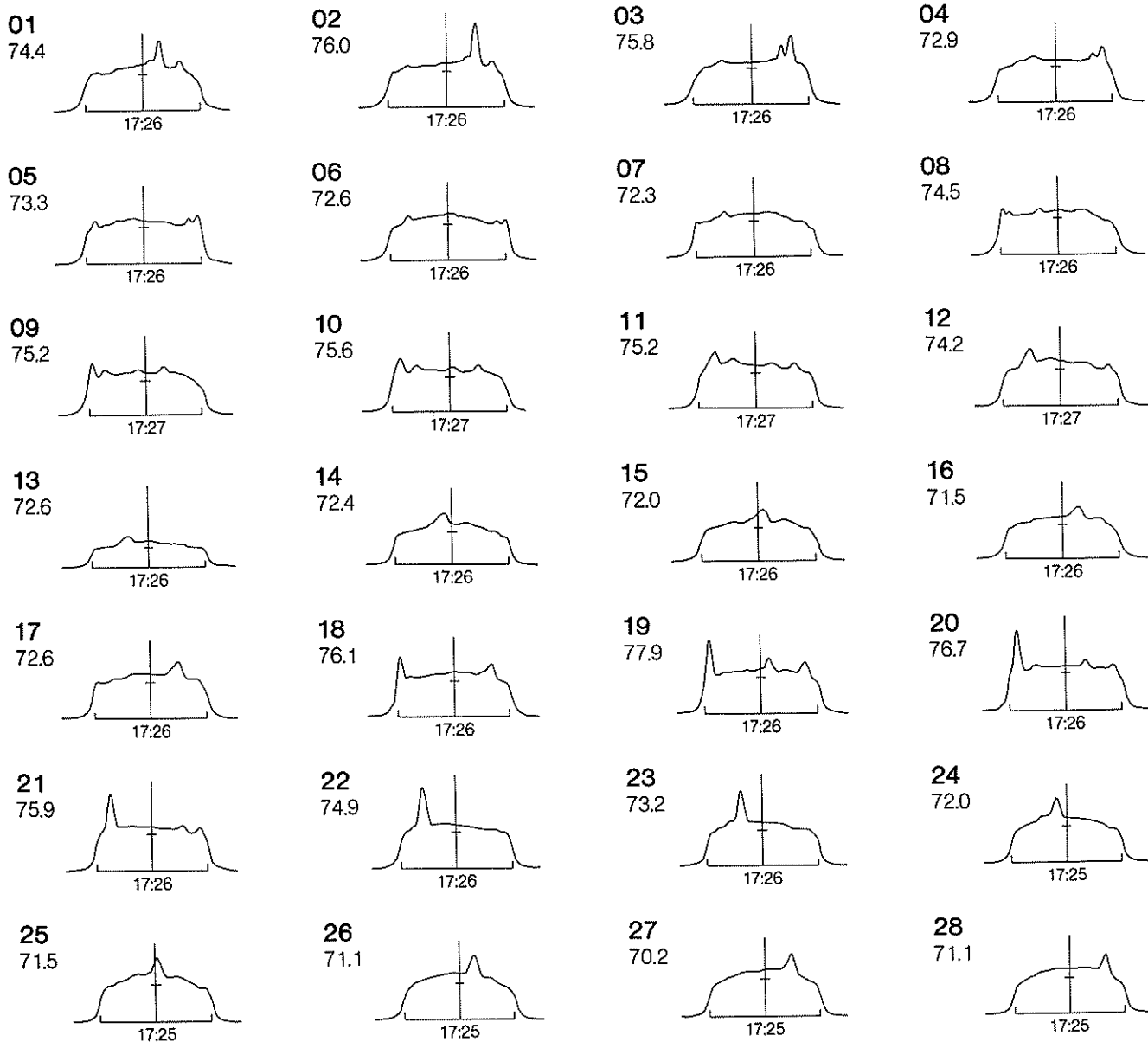


16
Feb 85

EAST-WEST SOLAR SCANS FEBRUARY 1985

ALGONQUIN RADIO OBSERVATORY
CANADA

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



DATE
TOTAL FLUX
E

ESTIMATED
QUIET SUN
LEVEL W

PHOTOSPHERE
TIME U.T.

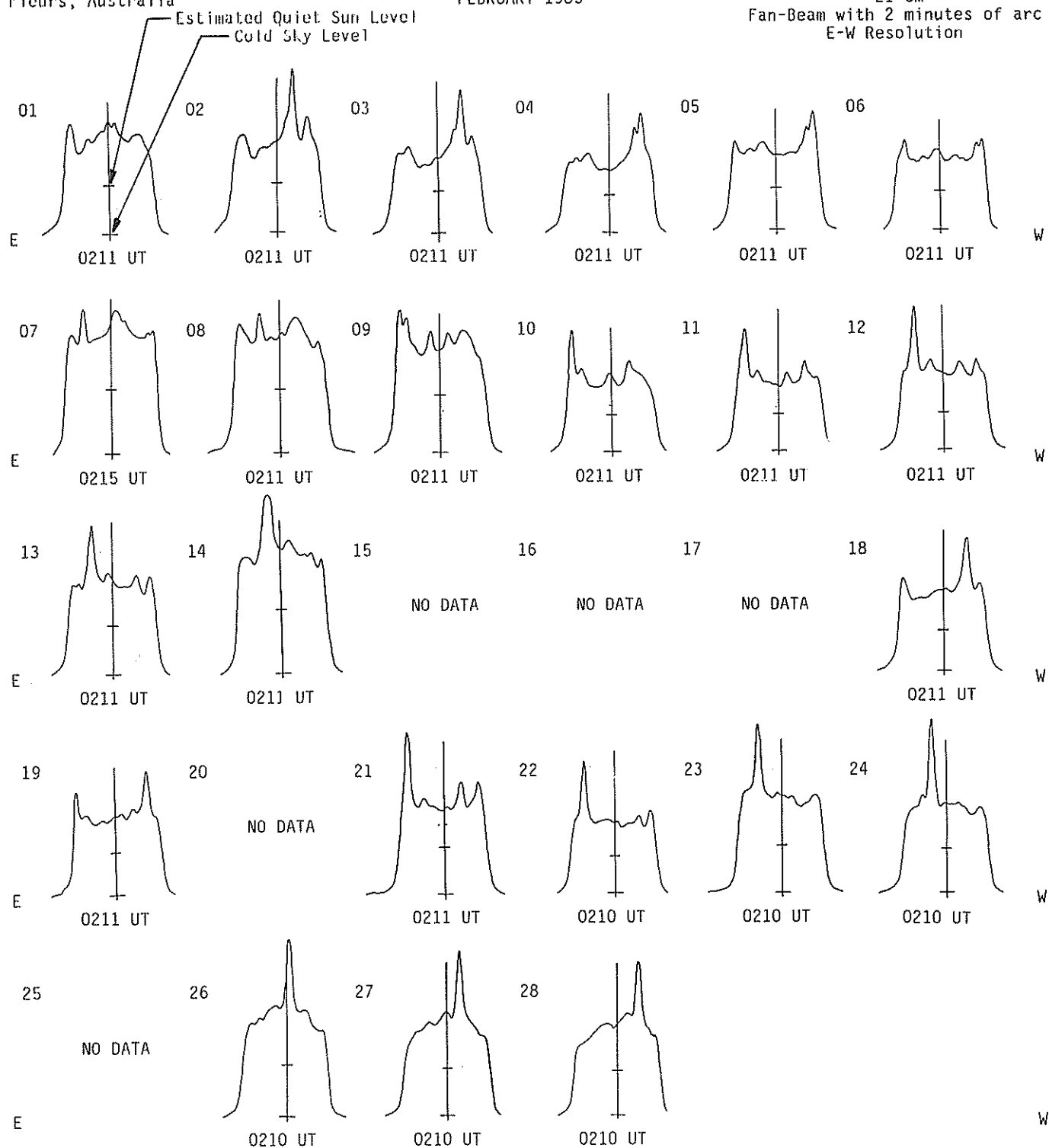
EAST - WEST SOLAR SCANS

17
Feb 85

Fleurs, Australia

FEBRUARY 1985

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



18
Feb 85

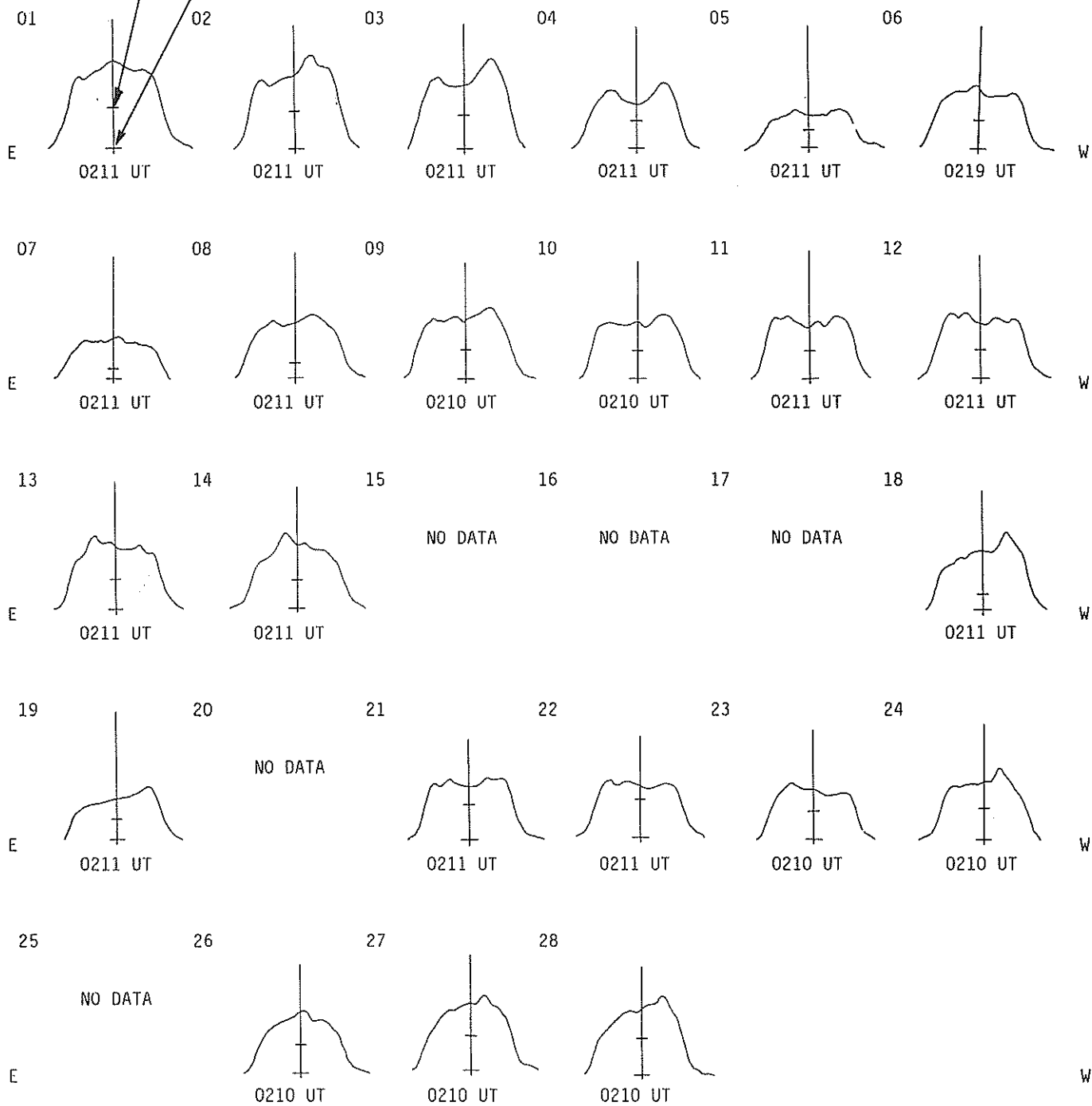
EAST - WEST SOLAR SCANS

Fleurs, Australia

FEBRUARY 1985

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

Estimated Quiet Sun Level
Cold Sky Level



SOLAR RADIO EMISSION SELECTED FIXED FREQUENCY EVENTS

19
Feb 85

FEBRUARY 1985

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean		
07	2800	OTTA	20 GRF	1910.0	1920.0	120.0	2.8	1.3		
18	2800	OTTA	20 GRF	1600.0	1750.0	225.0	1.4	0.9		
20	2800	OTTA	1 S	1453.5	1455.0	4.0	1.8	0.7		
	2800	OTTA	21 GRF	1705.0	1750.0	65.0	1.2	0.6		
	2800	OTTA	1 S	1734.2	1734.5	1.8	0.4			
	2800	OTTA	20 GRF	1925.0	1935.0	70.0	1.2	0.6		
	2800	OTTA	2 S/F	2130.0	2130.9	2.0	8.6	2.9		
22	2800	OTTA	21 GRF	1255.0	1310.0	95.0D	3.2			
	2800	OTTA	1 S	1259.5	1300.8	1.5	1.0	0.5		

Observatories:

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

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 Burstise Storm
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
Misc
1976-1985

NOAA SPACE ENVIRONMENT SERVICES CENTER
SOLAR PROTON EVENTS AFFECTING THE EARTH ENVIRONMENT

1976 - JANUARY 1985

Start				PARTICLE EVENT				ASSOCIATED FLARE AND ACTIVE REGION					
Yr	Mo	Day	Time	Maximum Day Time	Satellite Proton Flux*	Riometer Absorption	Day	Max Time	Importance X-Ray	Opt	Disk Location	NOAA/USAF Region	
76	04	30	2120	01 1700	12	0.0 dB	30	2114	X 2	2B	S09 W47	0700	
77	09	19	1430	19 2130	200	4.5	19	1054	X 2	3B	N08 W58	0889	
77	11	22	1400	22 1800	160	0.7	22	1006	X 1	2N	N24 W38	0939	
78	02	13	0930	14 1000	850	6.3	13	0255	M 7	SB	N22 W13	1001	
78	04	11	1530	11 1630	0	3.2	11	1353	X 2	2B	N19 W54	1057	
78	04	29	0445	30 2000	1000	9.8	28	1306	X 5	4B	N22 E41	1092	
78	05	07	0420	07 0420	100	0.0	07	0330	X 2	2B	N22 W64	1095	
78	06	02	0730	02 0935	19	1.8	31	1009	M 5	2B	N23 W50	1129	
78	06	24	0900	25 0230	25	1.2	22	1709	M 2	3B	N19 E18	1164	
78	07	13	0300	13 1000	20	0.0	---	---	---	---	---	---	---
78	09	10	1035	24 0400	2200	9.6	23	0941	X 1	3B	N35 W50	1294	
78	11	10	2130	10 2140	38	0.0	10	0042	M 1	2N	N17 E02	1385	
79	02	17	2020	17 2205	31	0.0	16	0200	X 2	2B	N15 E48	1574	
79	04	03	1600	03 2310	45	2.6	---	---	---	---	---	---	---
79	06	06	1850	07 0005	950	5.9	04	0409	X 1	2B	N20 E34	1781	
79	07	07	0015	07 1010	50	0.0	---	---	---	---	---	---	---
79	08	19	0850	20 0830	450	4.4	18	1343	X 1	---	S08 E90	---	---
79	08	19	0850	20 1700	410	0.0	18	1343	X 1	---	S08 E90	---	---
79	08	19	0850	21 0740	500	0.0	18	1343	X 1	---	S08 E90	---	---
79	09	15	1500	16 1200	60	0.0	14	0802	X 2	---	N10 E90	1994	
79	11	16	0430	16 1300	75	3.0	15	1639	M 1	SB	N34 W25	2110	
80	02	06	1340	06 1850	12	1.0	---	---	---	---	---	---	---
80	07	17	2300	18 1930	100	2.0	17	0603	M 3	1B	S12 E06	2562	
81	03	30	0900	30 2115	30	0.0	30	0049	M 3	2N	N13 W74	2993	
81	04	10	1745	11 0000	50	1.8	10	1655	X 2	3B	N09 W40	3025	
81	04	24	1515	24 2330	160	2.3	24	1400	X 5	2B	N18 W50	3049	
81	05	09	1200	10 2130	150	0.0	08	2252	M 7	2B	N09 E37	3099	
81	05	15	0300	16 1950	130	3.7	13	0425	X 1	3B	N11 E58	3106	
81	07	20	1430	20 1825	100	2.5	20	1329	M 5	1B	S26 W75	3204	
81	07	25	0600	25 1320	18	0.0	---	---	---	---	---	---	---
81	08	10	0115	10 0435	57	0.0	07	1916	M 4	2B	S10 E24	3275	
81	10	08	1235	11 0600	83	1.7	07	2308	X 3	1B	S19 E88	3390	
81	10	12	1235	13 2247	2000	6.3	12	0636	X 3	3B	S16 E20	3390	
81	12	10	0545	11 0900	65	0.0	09	1854	M 5	3B	N12 W16	3496	
82	01	31	0055	31 1630	830	2.2	30	2358	X 1	3B	S13 E19	3576	
82	06	06	0245	06 0245	10	0.0	06	1637	X12	3B	S11 E26	3763	
82	06	09	0040	09 0510	30	0.0	06	1637	X12	3B	S11 E26	3763	
82	07	11	0700	13 1615	2900	12.5	09	0742	X 9	3B	N17 E73	3804	
82	07	22	2030	23 0220	240	3.0	22	1734	M 4	SF	N29 W86	3804	
82	09	05	2205	06 0100	66	1.0	05	0845	M 4	3N	N11 E30	3886	
82	11	22	1940	22 2140	40	0.0	22	1828	M 7	1N	N11 W43	3994	
82	11	26	0605	26 1500	25	3.0	11	0253	X 4	2B	S11 W87	3994	
82	12	08	0010	08 1000	1000	0.0	12	2354	X 2	SB	S14 W81	4007	
82	12	17	1845	18 0945	130	3.7	15	0202	X12	2B	S10 E24	4026	
82	12	19	1920	20 0515	85	3.0	19	1624	M 9	2B	N10 W75	4022	
82	12	27	0600	27 1345	190	4.6	25	0752	X 2	1B	S14 E31	4033	
83	02	03	1200	04 1620	340	3.9	02	0619	X 4	3B	S19 W08	4077	
83	06	15	0435	15 1800	18	0.0	12	---	---	---	S09 W90	4201	
84	02	16	0915	16 1005	660	0.8	16	---	---	---	S12 W95	4408	
84	02	19	1310	21 1415	55	0.5	19	2301	X 2	2B	N16 E82	4421	
84	03	13	1440	13 1450	10	0.0	Minor Geomagnetic Activity						
84	03	14	0405	14 0505	100	0.0	14	0334	M 2	2B	S12 W42	4433	
84	04	25	1330	26 1420	2500	17.0	24	0005	X13	3B	S12 E43	4474	
84	05	24	1045	24 1140	31	0.0	24	1503	M 6	2B	S09 E24	4492	
84	05	31	1315	31 1415	15	0.0	31	1142	M 1	---	S09 W90	4492	
85	01	22	0415	31 0550	14	0.0	21	2350	X 4	2B	S08 W38	4617	

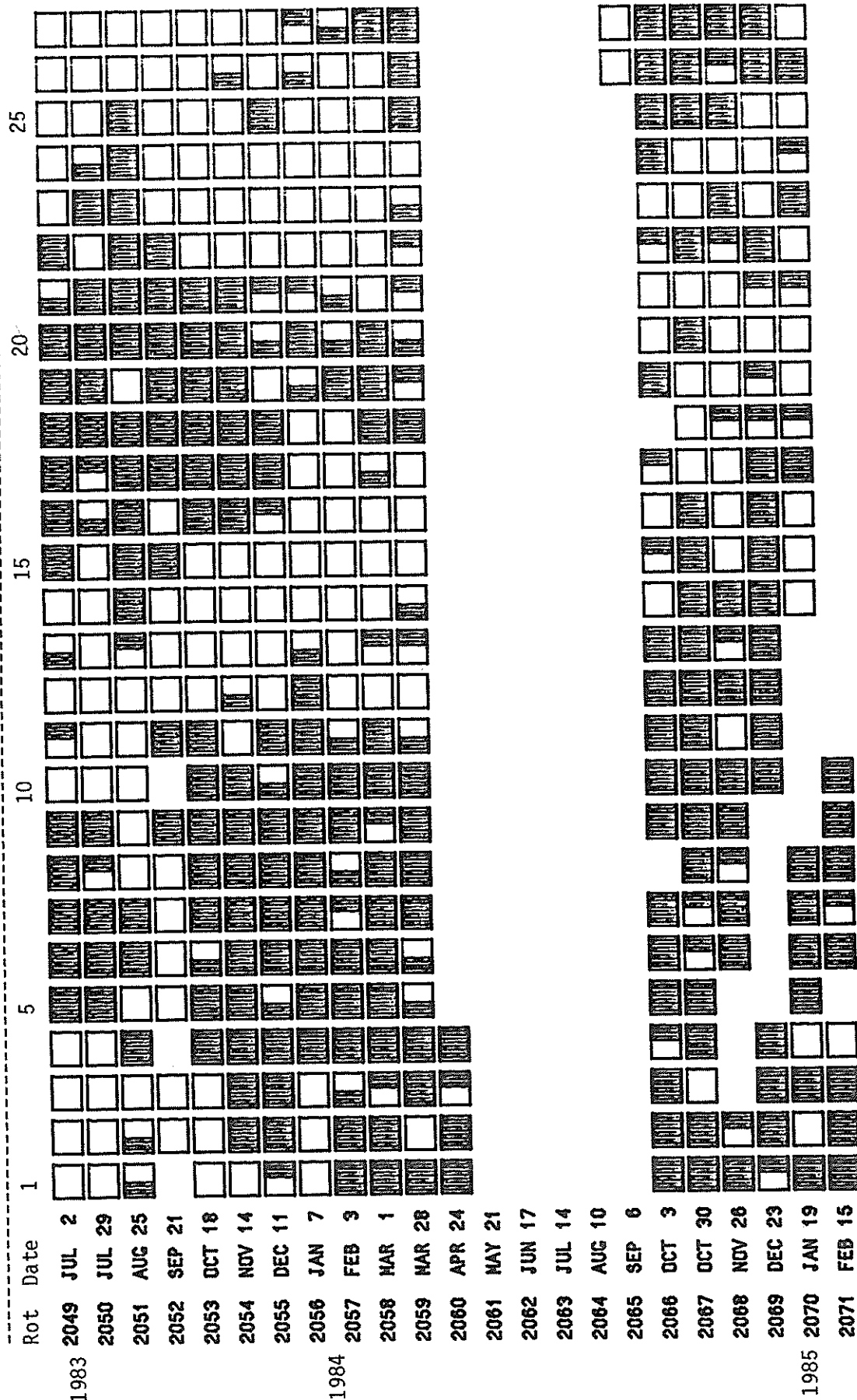
*Particle flux measured at >10 MeV at GOES geosynchronous satellite.

VOSTOK INFERRED INTERPLANETARY MAGNETIC FIELD
PRELIMINARY DATA

March 1984 - February 1985

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

VOSTOK INFERRED INTERPLANETARY MAGNETIC FIELD



Inferred Interplanetary Magnetic Field Polarity:

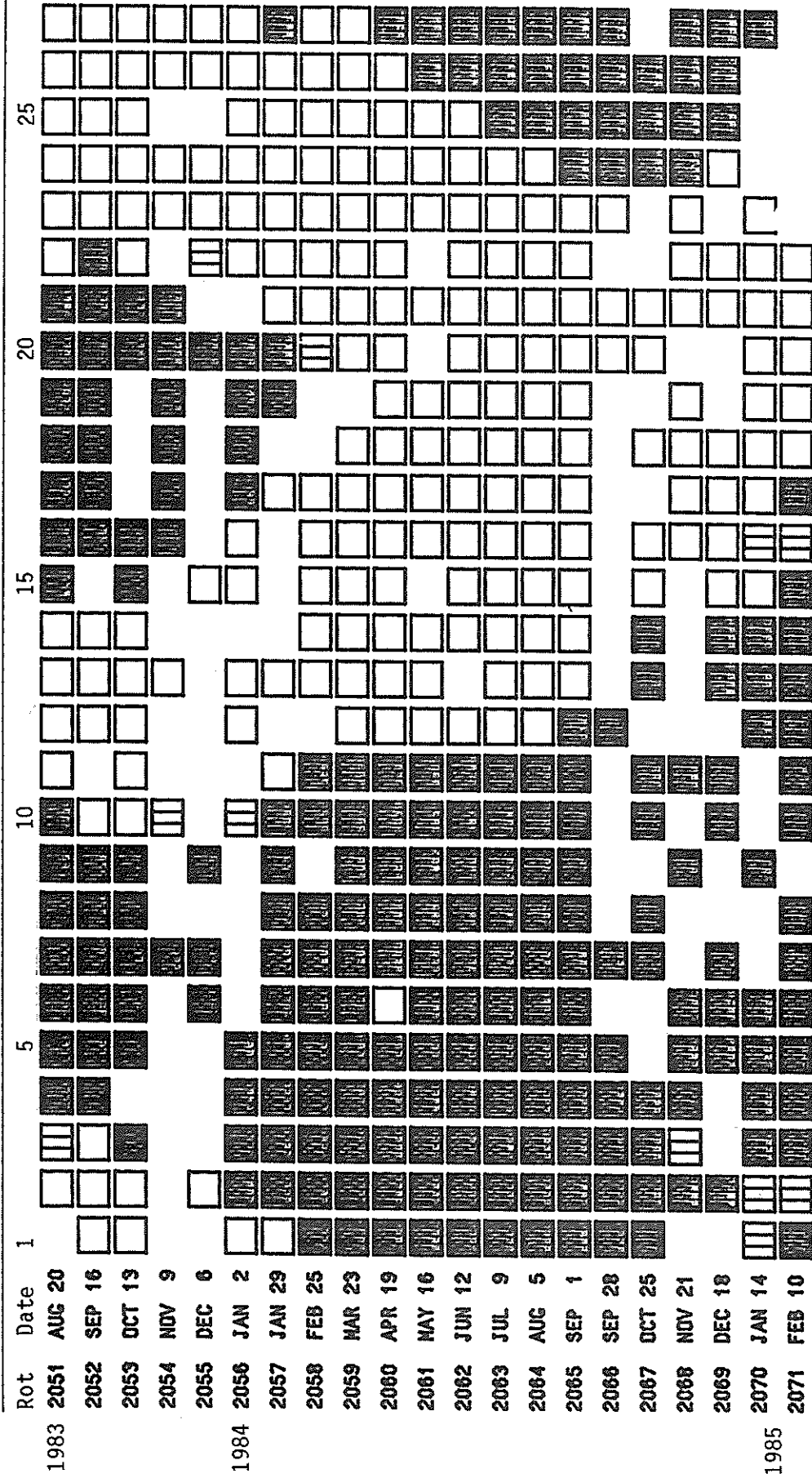
No box = no data available

= definitely towards the Sun

= definitely away from the Sun

The chart shows the daily inferences of the polarity of the interplanetary magnetic field based principally on the magnetograms produced by the magnetometer at the Vostok Antarctic Station of the USSR.

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.

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Feb 85

STANFORD MEAN SOLAR MAGNETIC FIELD (MICROTESLA)

Day	Mar 84	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 85	Feb
1	-79	-34	56	24	38	17	-38	-42	-13	-32	5	38
2	-66	-23	53	27	44	-2	-20	-63	.	.	14	35
3	-55	9	40	42	33	-35	-42	.	-64	.	21	32
4	.	29	36	.	62	-40	-58	-76	-37	.	38	30
5	-31	34	24	66	41	-44	-77	.	.	.	.	15
6	-2	31	15	.	5	-37	-86	.	-22	15	.	.
7	.	38	15	65	-28	-50	-89	.	-4	28	37	.
8	62	41	30	53	-41	-82	-95	.	10	44	26	.
9	58	25	7	24	-62	-83	-81	-21	12	30	.	-4
10	45	.	19	-18	-56	-73	-55	.	.	.	6	-5
11	47	17	47	-37	-66	-84	-27	.	16	39	-10	-1
12	35	31	42	-47	-70	-91	-8	.	.	27	-8	-2
13	.	46	32	-57	-96	-71	3	.	48	12	-10	-8
14	.	56	20	-63	-91	-67	11	.	24	-10	-1	-9
15	-1	56	-5	-61	-102	-13	10	.	.	-12	1	-23
16	19	52	-39	-75	-93	6	12	.	.	-20	-7	-17
17	55	28	-62	-73	-59	11	21	32	-4	-11	-3	-13
18	76	21	-57	-89	-39	21	23	36	-25	.	-25	.
19	82	-40	-58	-59	-11	18	49	.	-23	-8	-35	-12
20	87	-53	-62	-66	14	19	52	15	.	.	.	-17
21	57	-52	-59	-52	9	21	44	-7	.	.	.	-15
22	4	-18	-66	-31	31	26	34	-32	-6	-24	-30	-12
23	-33	-14	-68	11	7	39	20	-38	1	-35	.	-7
24	-47	9	-79	.	30	47	-5	-24	-15	-46	.	-6
25	-59	-17	-76	37	22	52	-26	-14	-10	.	-9	2
26	-57	-34	-42	33	26	31	-35	-18	-20	.	-12	-6
27	-51	-49	13	16	53	25	-26	-15	.	-23	-2	13
28	-49	-40	57	26	43	11	-19	-32	.	-22	32	20
29	-20	-15	66	15	54	-4	-19	.	-45	.	0	
30	-35	28	.	32	36	-13	-30	.	.	-9	19	
31	-21		38		31	-36		-71		-3	28	

Dot symbol indicates no data available for the day.

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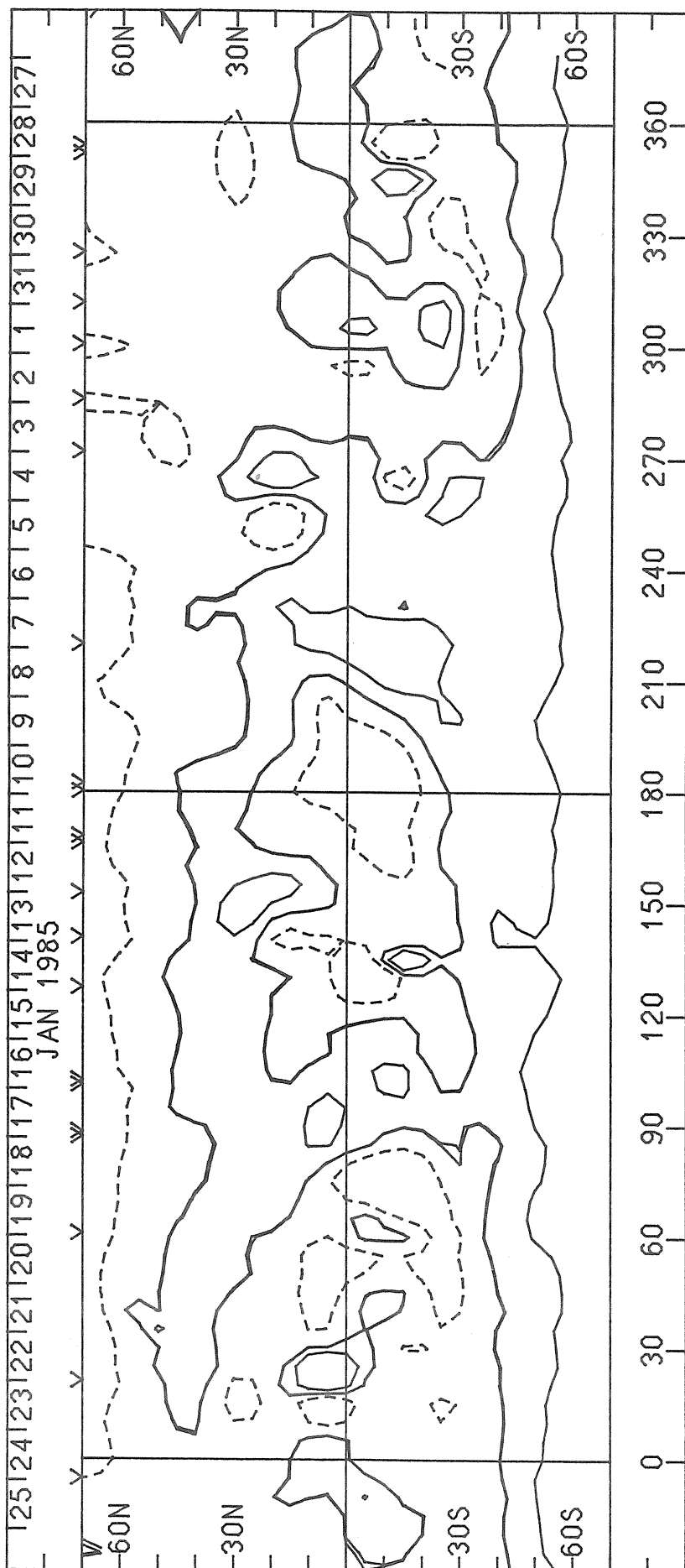
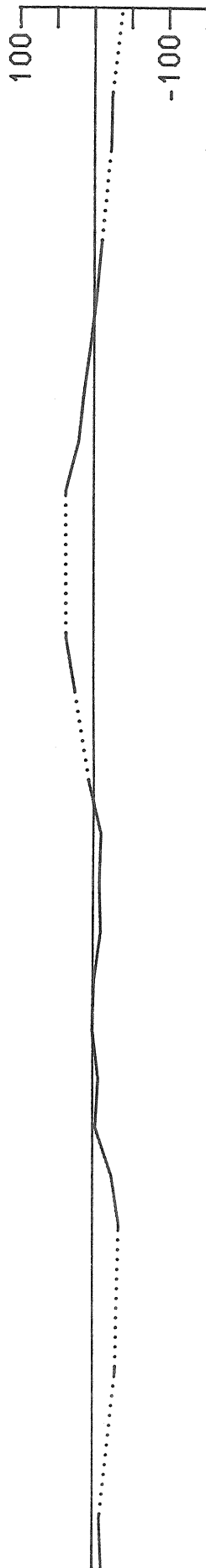
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SOLAR MAGNETIC FIELD SYNOPSIS CHART CARRINGTON ROTATION NUMBER 1757 (December 28, 1984 to January 24, 1985)

Stanford Solar Observatory

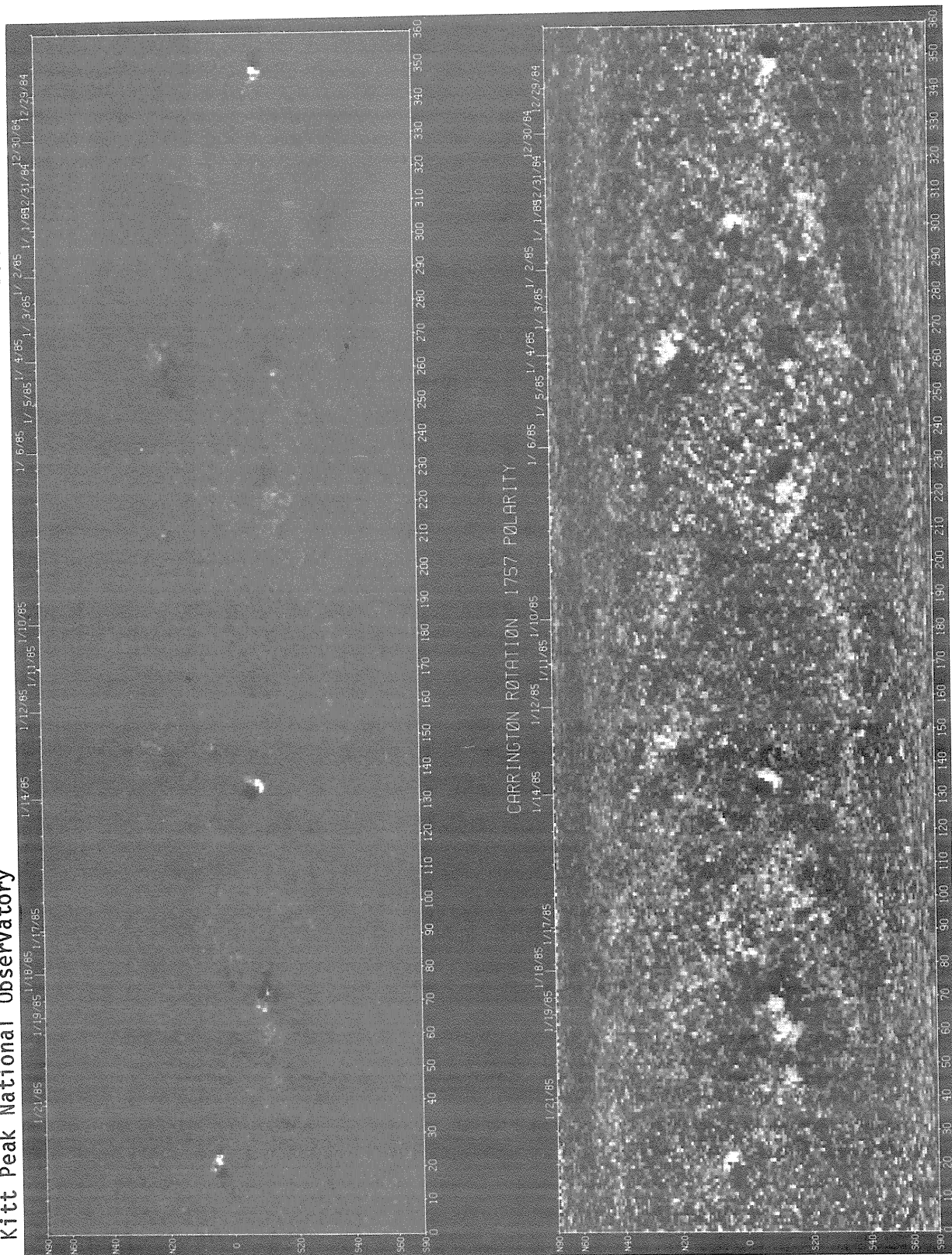
0, +100, 500, 1000, 2000 microTesla



Heliographic Longitude

CARRINGTON ROTATION NUMBER 1757
(December 28, 1984 to January 24, 1985)

Kitt Peak National Observatory
(December 28, 1964 to January 24, 1965)
Dates of Observations

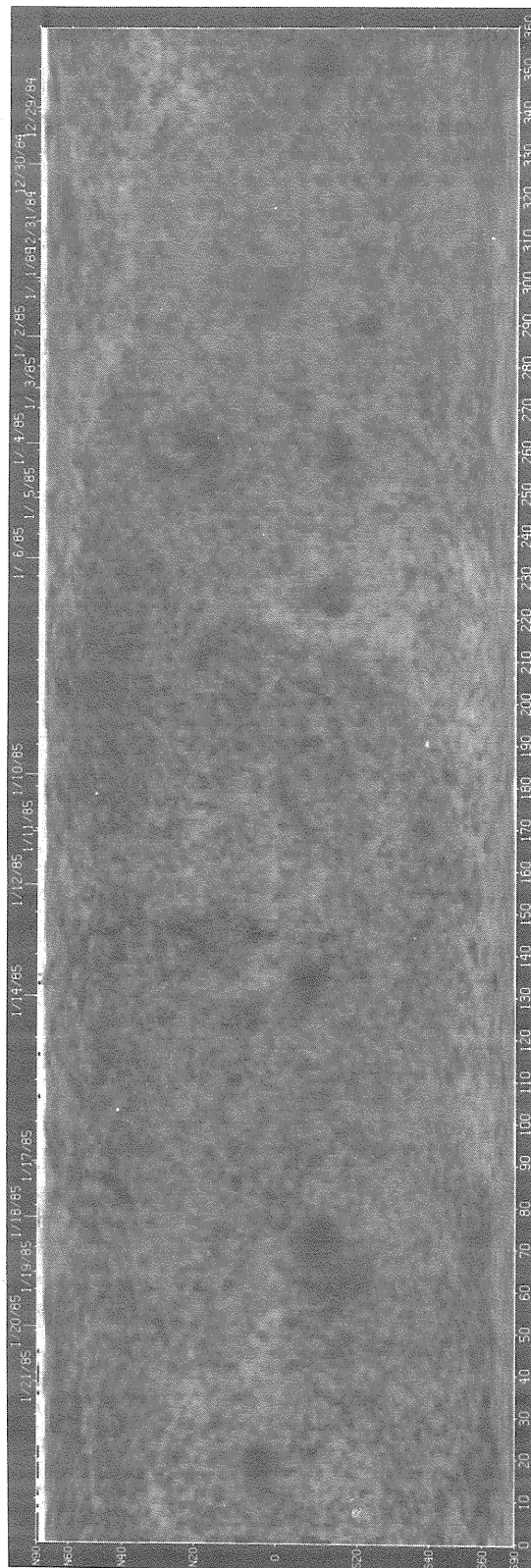


HELIUM 10830 ANGSTROM SYNOPTIC MAP OF THE SOLAR CORONA

CARRINGTON ROTATION NUMBER 1757
(December 28, 1984 to January 24, 1985)

Kitt Peak National Observatory

Dates of Observations



Heliographic Longitude

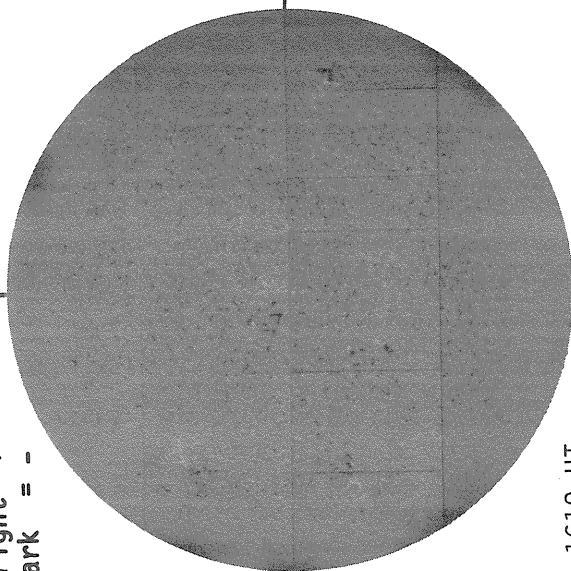
Regions for which no observations were available are black.
Irregularly shaped light areas mark either coronal holes or filament cavities.
Gray-scale display represents the strength of the helium 10830A absorption line.

JANUARY 01, 1985 (P= 1.97, B₀=-2.97, L₀= 311.17)

KITT PEAK MAGNETOGRAM

Np

Bright= +
Dark = -

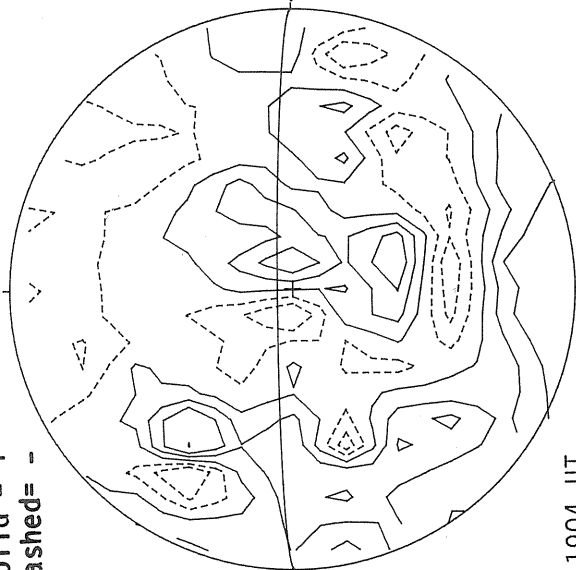


1610 UT

STANFORD MAGNETOGRAM

Np

Solid = +
Dashed= -

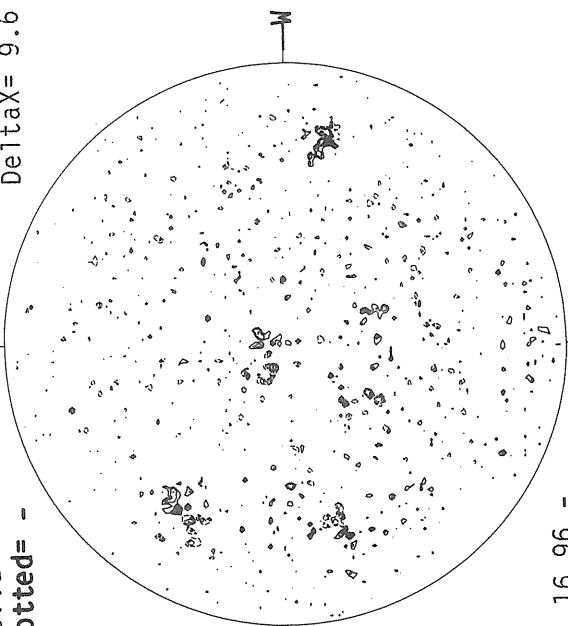


1904 UT

MT. WILSON MAGNETOGRAM

Np

Solid = +
Dotted= -



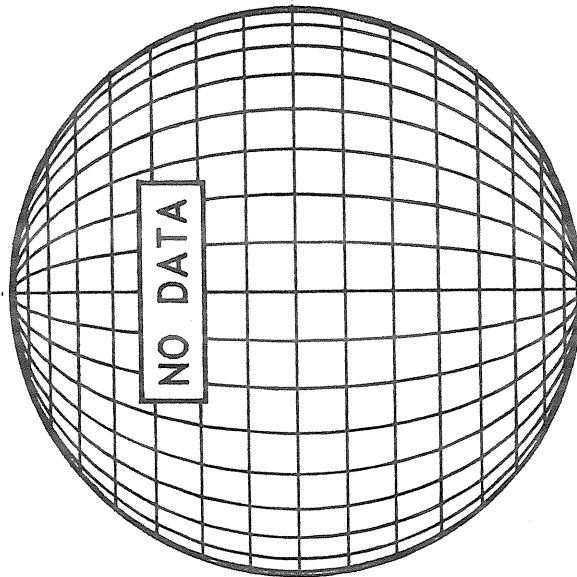
16.96 -
17.91 UT

DeltaY=12.5
DeltaX= 9.6

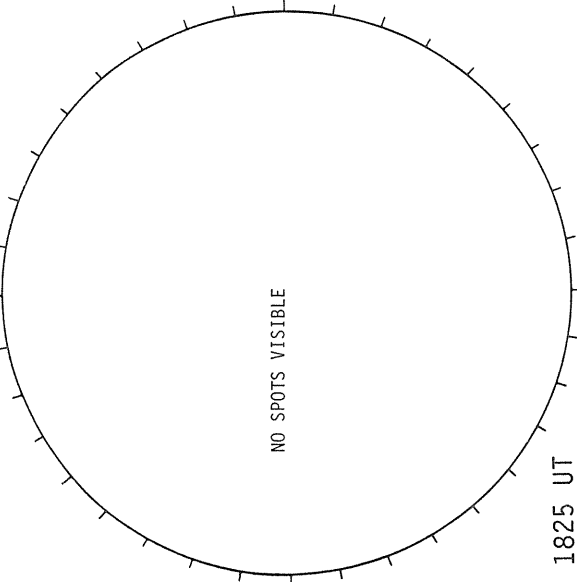
SACRAMENTO PEAK CORONA (1.15 Radii)

HOLLOMAN SUNSPOTS

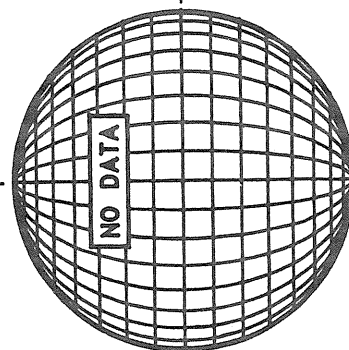
SACRAMENTO PEAK H-ALPHA



E



1825 UT



Sp

Sp

Sp

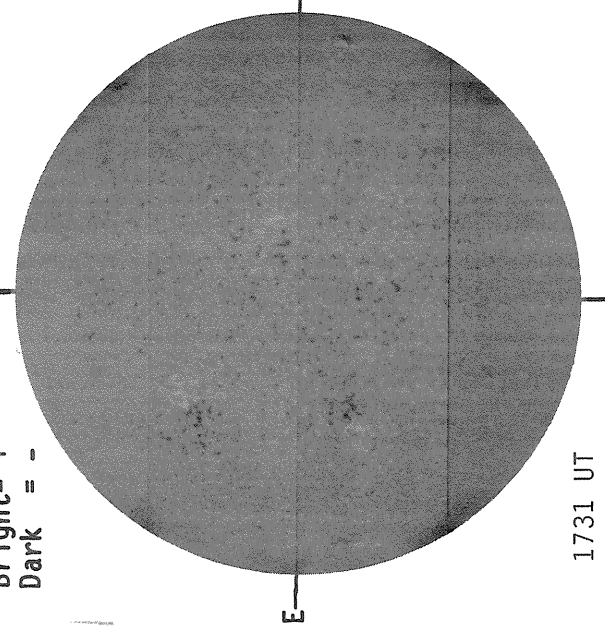
W

W

JANUARY 02, 1985 (P= 1.49, B₀=-3.09, L₀= 298.00)

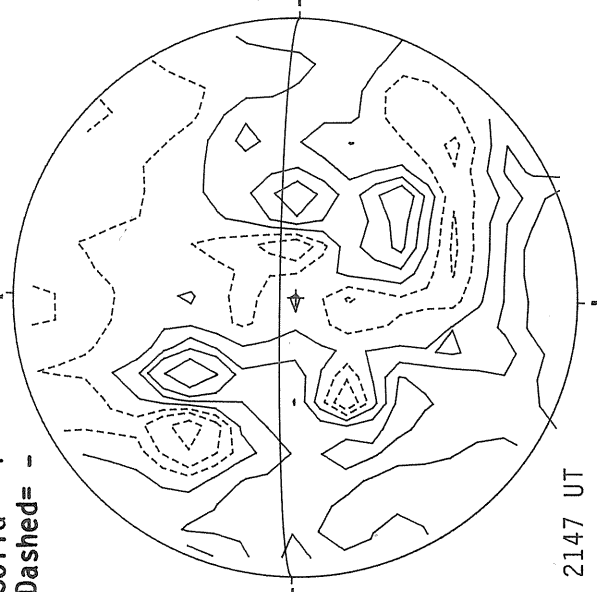
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



STANFORD MAGNETOGRAM

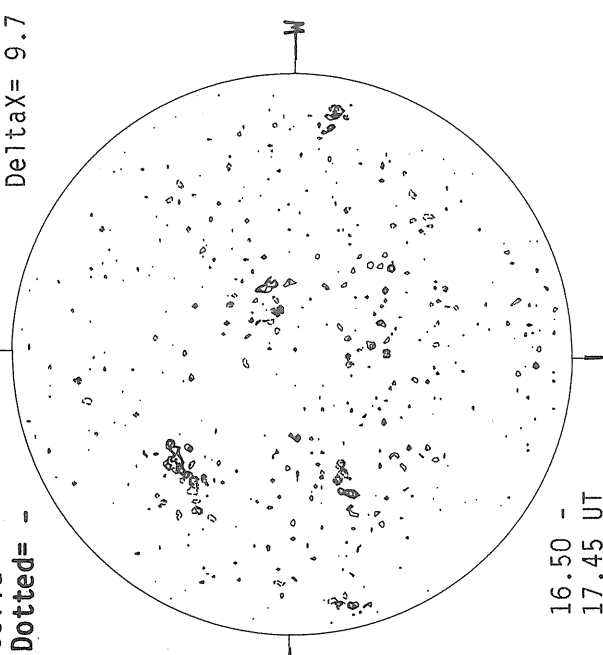
Solid = +
Dashed = -



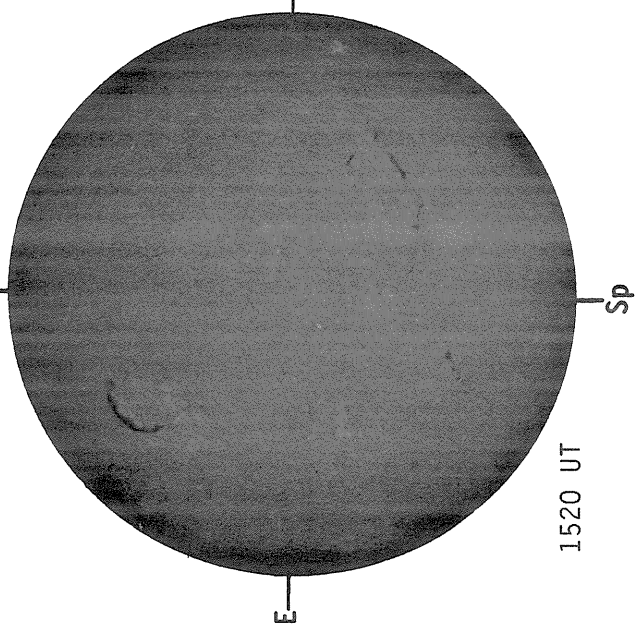
MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -

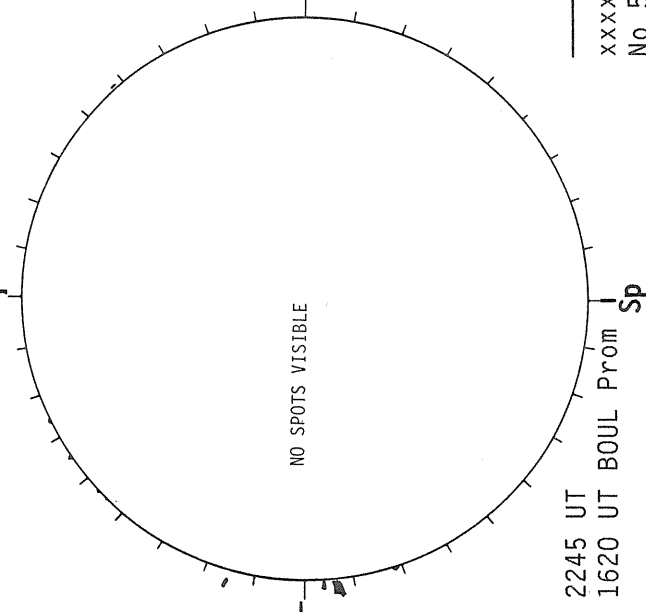
DeltaY=12.5
DeltaX= 9.7



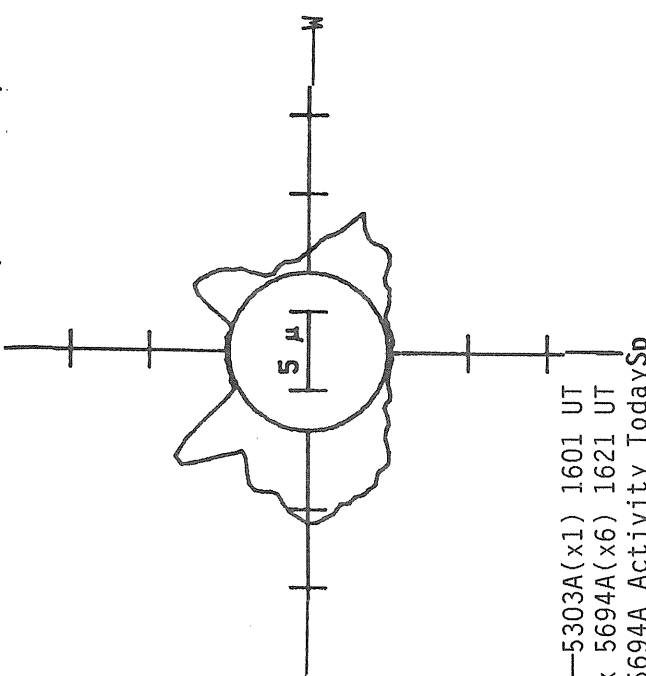
SACRAMENTO PEAK H-ALPHA



HOLLOMAN SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



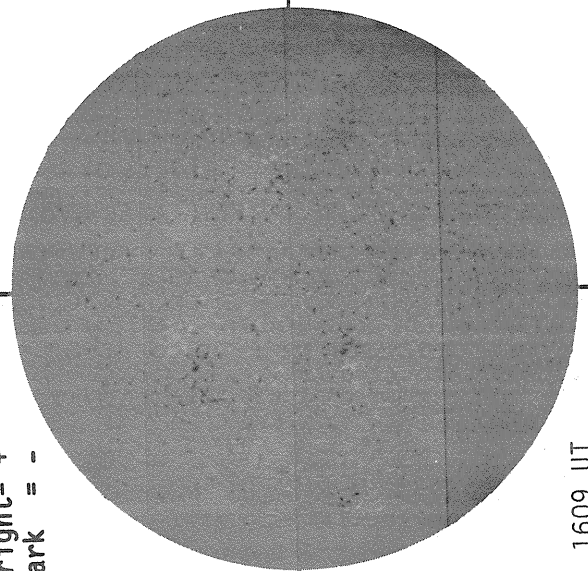
— 5303A(x1) 1601 UT
xxxx 5694A(x6) 1621 UT
No 5694A Activity TodaySp

JANUARY 03, 1985 (P= 1.01, B₀=-3.20, L₀= 284.83)

KITT PEAK MAGNETOGRAM

Np

Bright= +
Dark = -

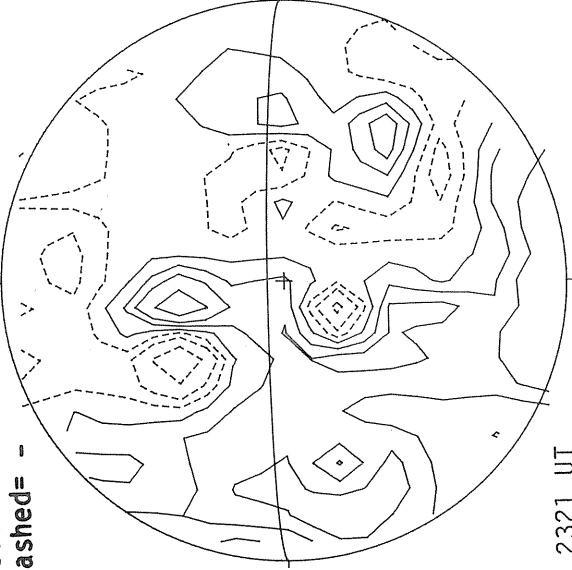


1609 UT

STANFORD MAGNETOGRAM

Np

Solid = +
Dashed = -

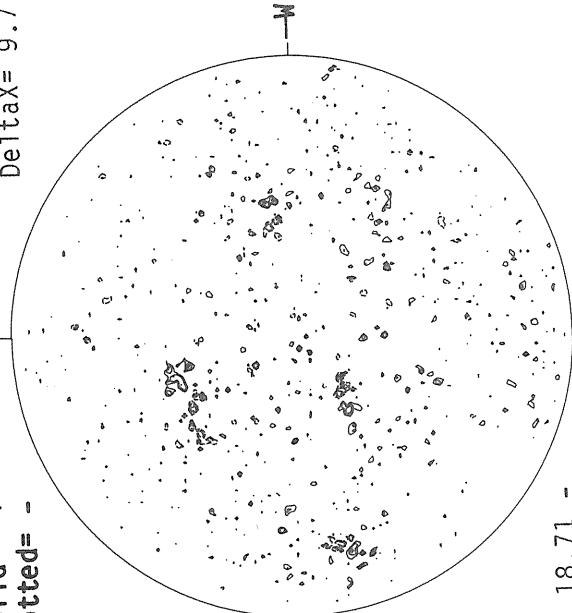


2321 UT

MT. WILSON MAGNETOGRAM

Np

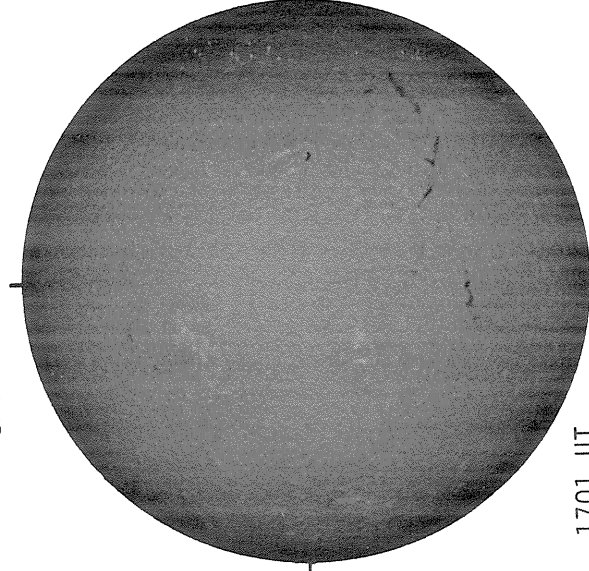
Solid = +
Dotted = -



18.71 -
19.66 UT

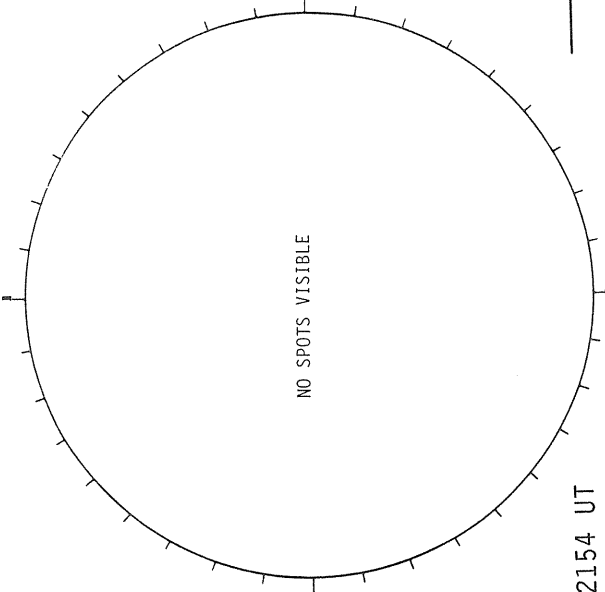
DeltaY=12.5
DeltaX= 9.7

SACRAMENTO PEAK H-ALPHA



1701 UT

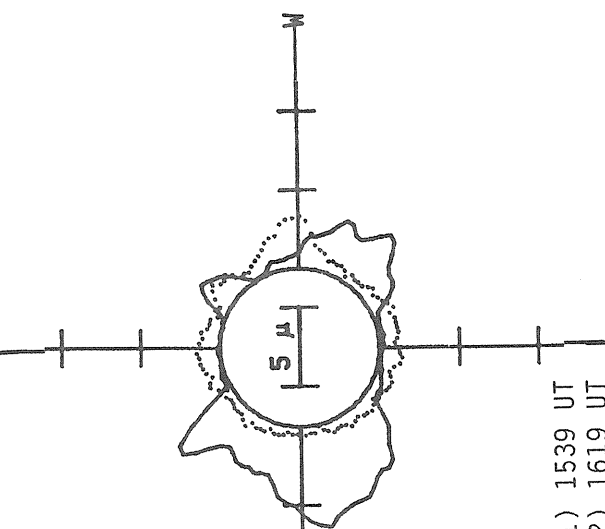
HOLLOMAN SUNSPOTS



2154 UT

Sp

SACRAMENTO PEAK CORONA (1.15 Radii)



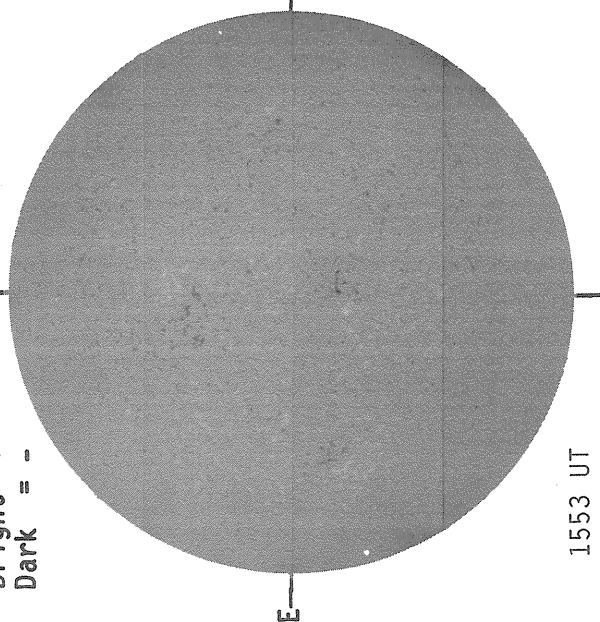
— 5303A(x1) 1539 UT
.... 6374A(x2) 1619 UT
xxxx 5694A(x6) 1558 UT
No 5694A Activity Today

JANUARY 04, 1985 (P= 0.52, $B_0 = -3.31$, $L_0 = 271.66$)

KITT PEAK MAGNETOGRAM

Np

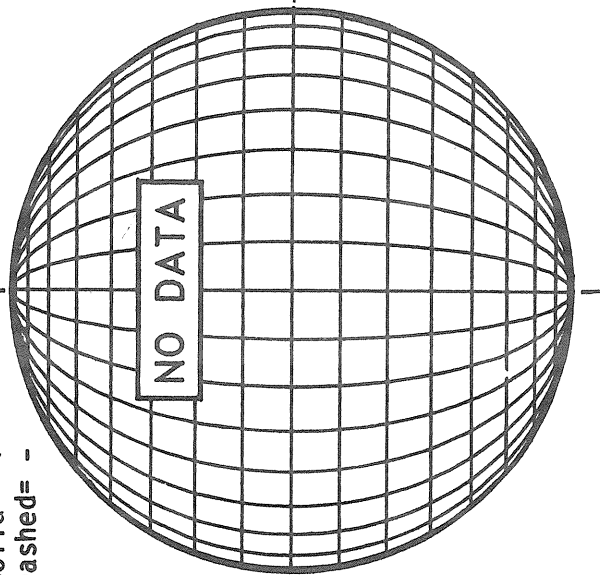
Bright= +
Dark = -



STANFORD MAGNETOGRAM

Np

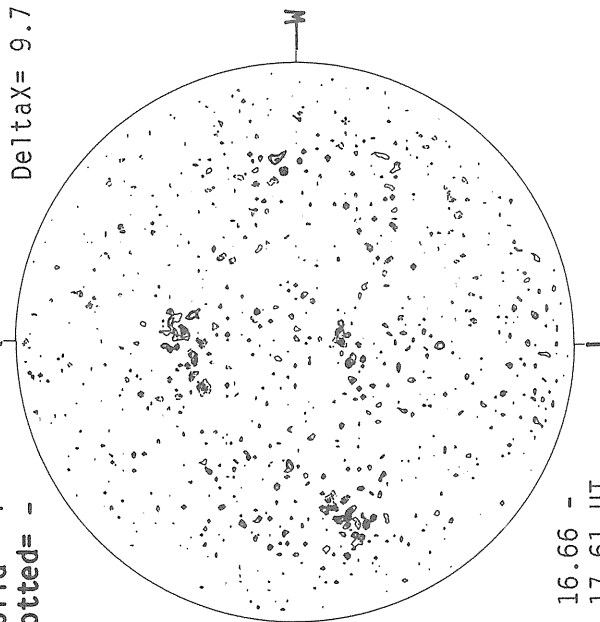
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

Np

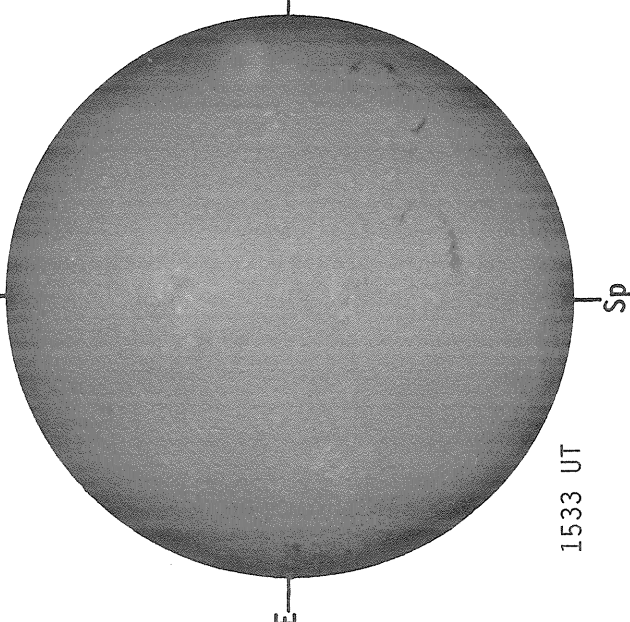
Solid = +
Dotted = -



Delta Y = 12.5
Delta X = 9.7

16.66 -
17.61 UT

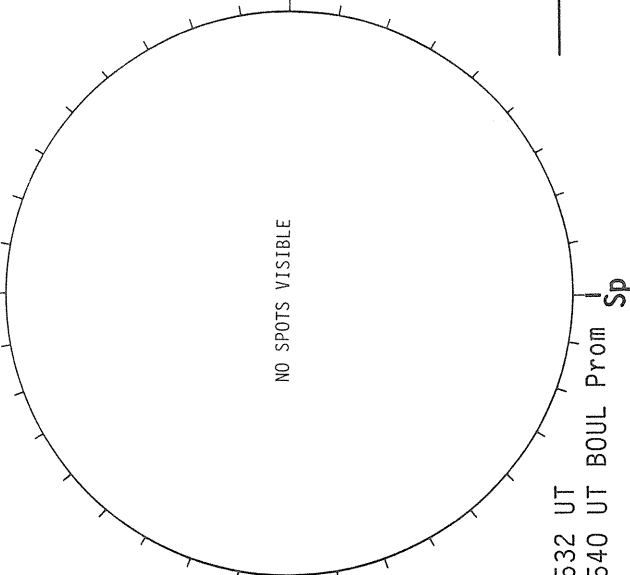
SACRAMENTO PEAK H-ALPHA



Np

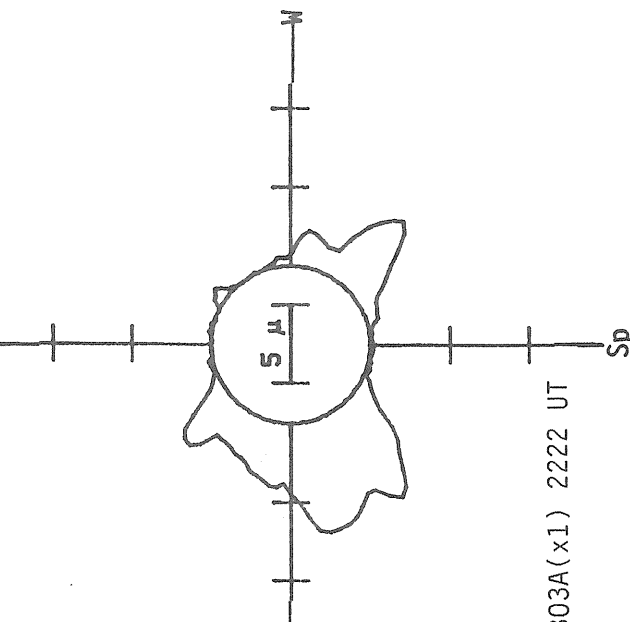
1533 UT

BOULDER SUNSPOTS



1532 UT
1540 UT BOUL Prom

SACRAMENTO PEAK CORONA (1.15 Radii)



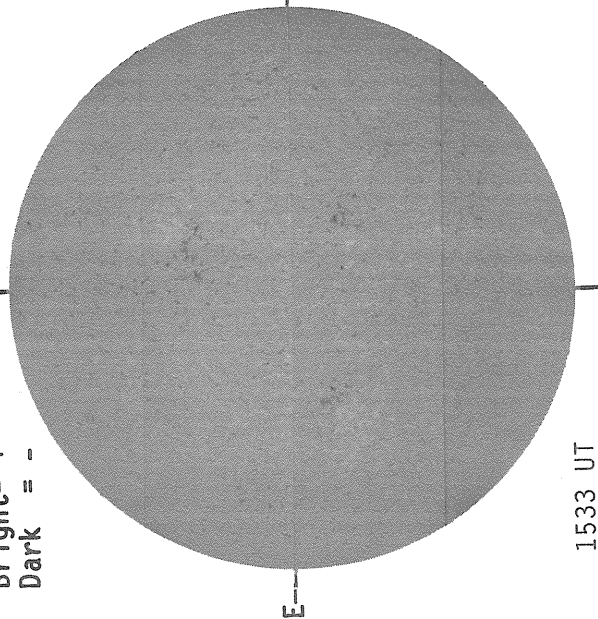
5303A(x1) 2222 UT

JANUARY 05, 1985 (P= 0.04, B₀=-3.43, L₀= 258.49)

KITT PEAK MAGNETOGRAM

Np

Bright= +
Dark = -

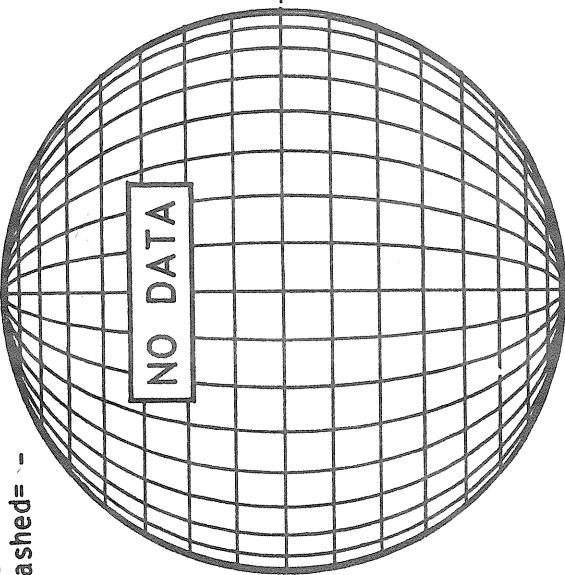


1533 UT

STANFORD MAGNETOGRAM

Np

Solid = +
Dashed = -



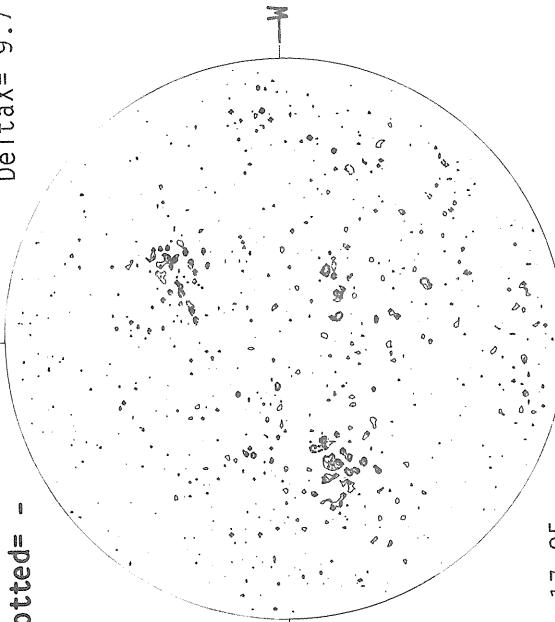
NO DATA

MT. WILSON MAGNETOGRAM

Np

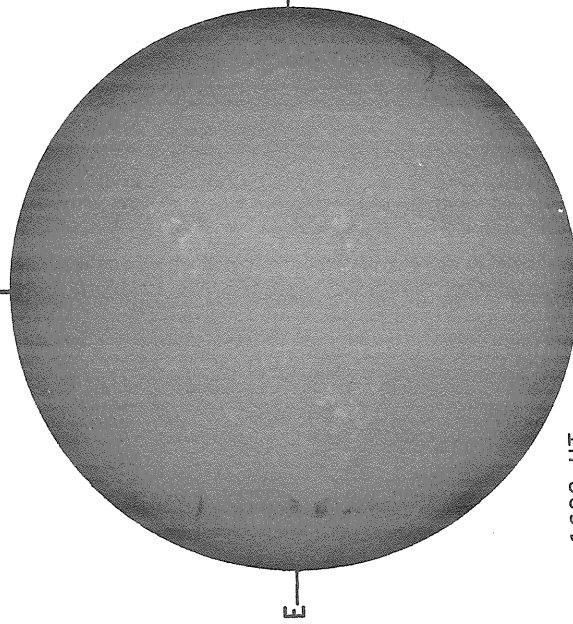
Solid = +
Dotted = -

DeltaY=12.5
DeltaX= 9.7



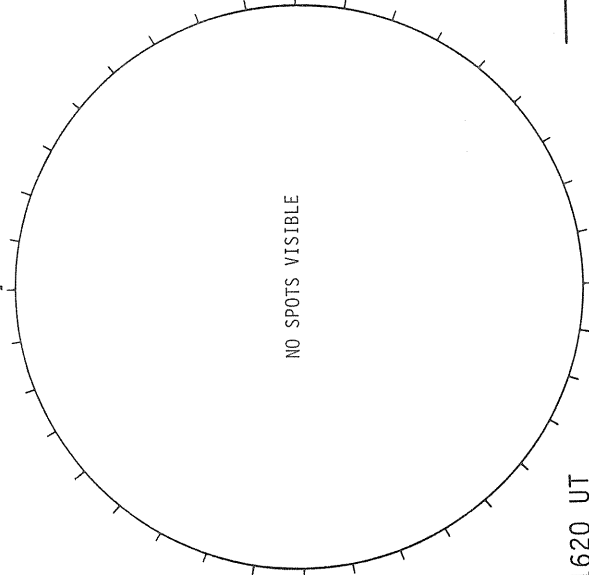
17.05 -
18.01 UT

SACRAMENTO PEAK H-ALPHA



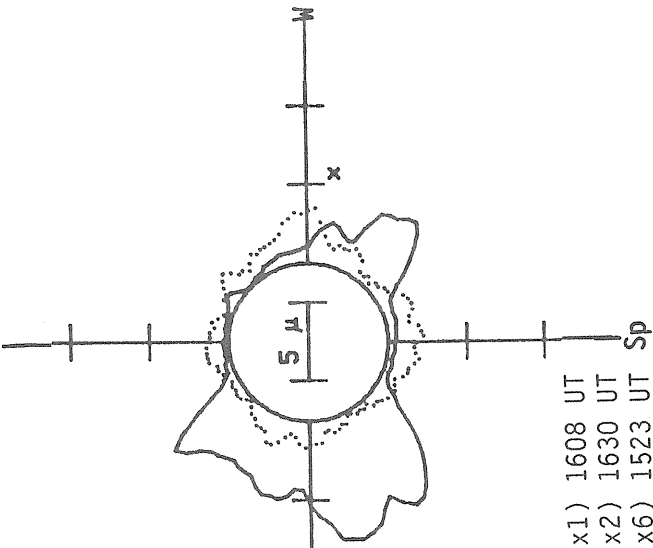
1602 UT

BOULDER SUNSPOTS



1620 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



Sp

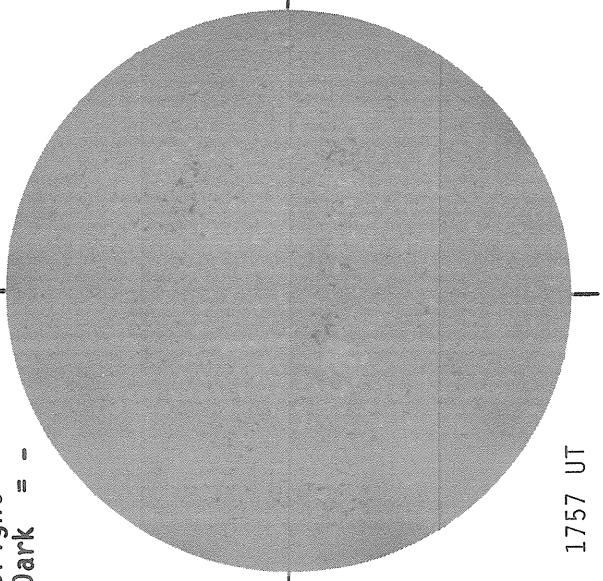
— 5303A(x1) 1608 UT
.... 6374A(x2) 1630 UT
xxxx 5694A(x6) 1523 UT

JANUARY 06, 1985 (P = -0.44, $B_0 = -3.54$, $L_0 = 245.32$)

KITT PEAK MAGNETOGRAM

Np

Bright = +
Dark = -

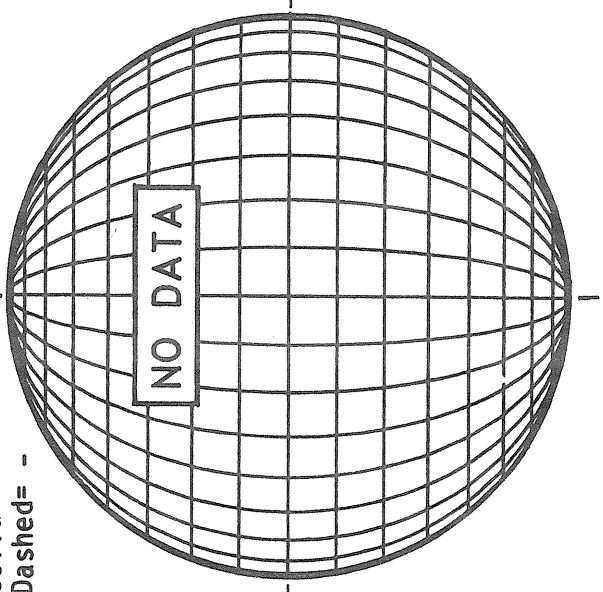


1757 UT

STANFORD MAGNETOGRAM

Np

Solid = +
Dashed = -

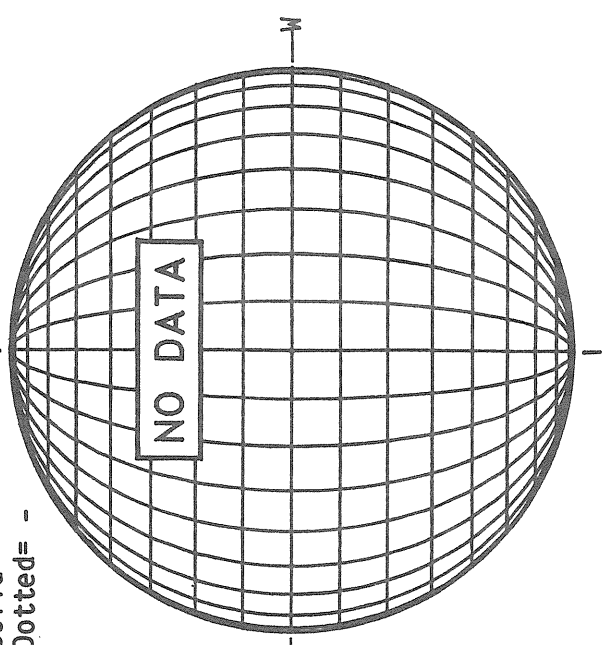


NO DATA

MT. WILSON MAGNETOGRAM

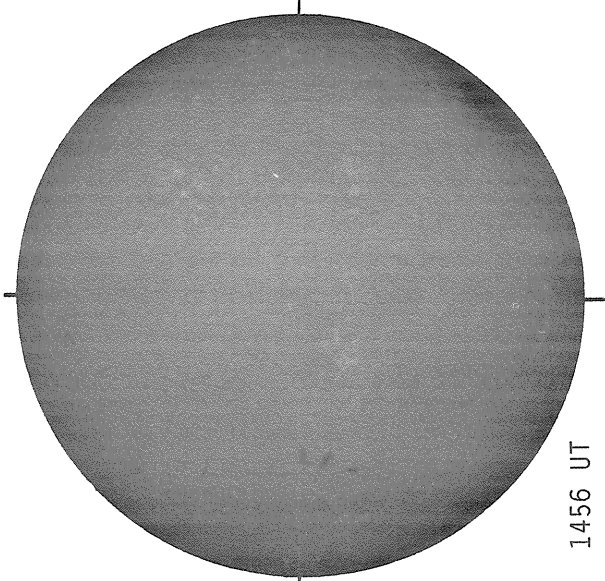
Np

Solid = +
Dotted = -



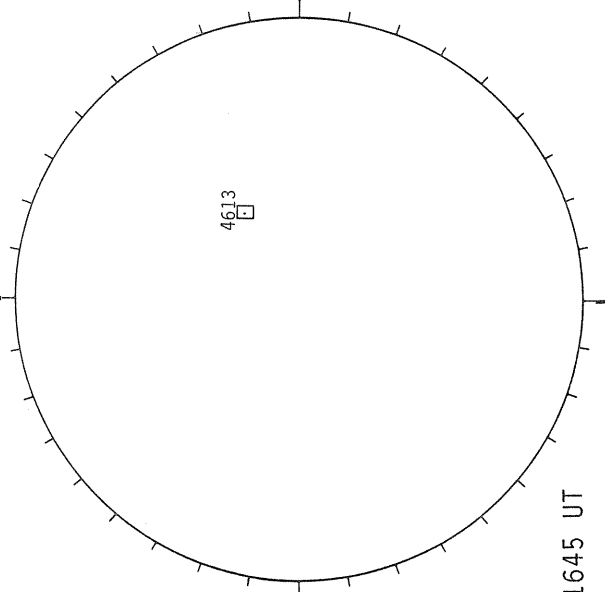
NO DATA

SACRAMENTO PEAK H-ALPHA



1456 UT

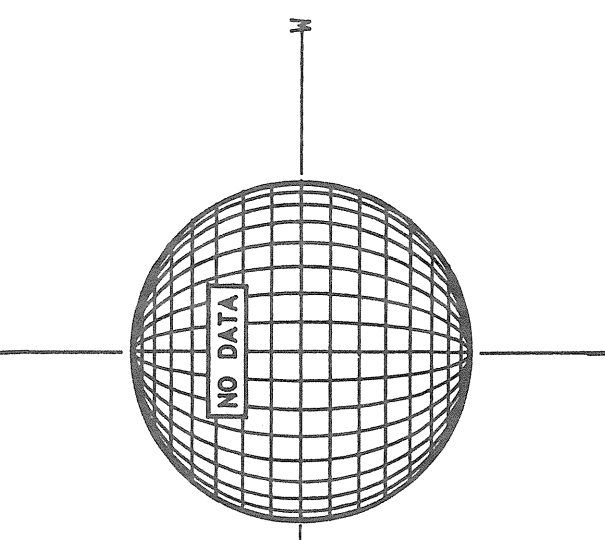
HOLLOMAN SUNSPOTS



4613

1645 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



NO DATA

Sp

Sp

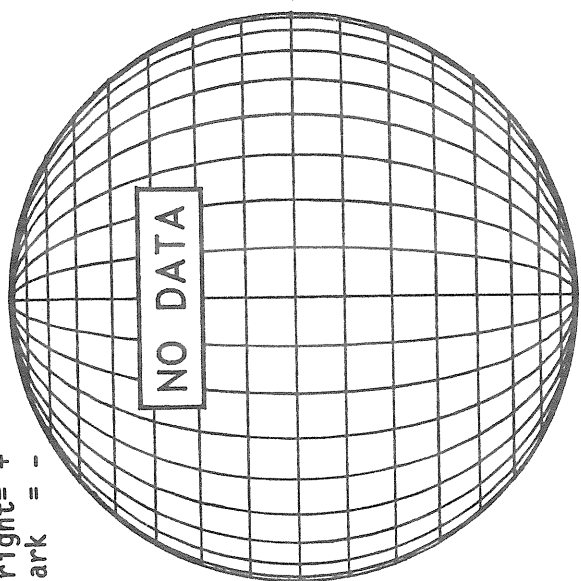
Sp

JANUARY 07, 1985 (P= -0.93, B₀ = -3.65, L₀ = 232.15)

KITT PEAK MAGNETOGRAM

Np

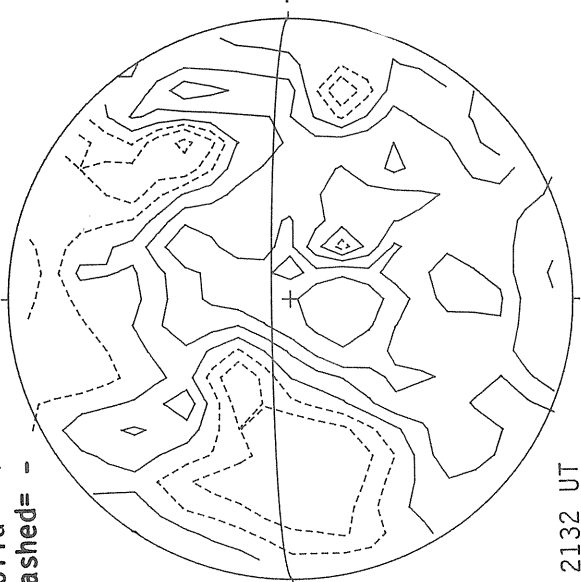
Bright= +
Dark = -



STANFORD MAGNETOGRAM

Np

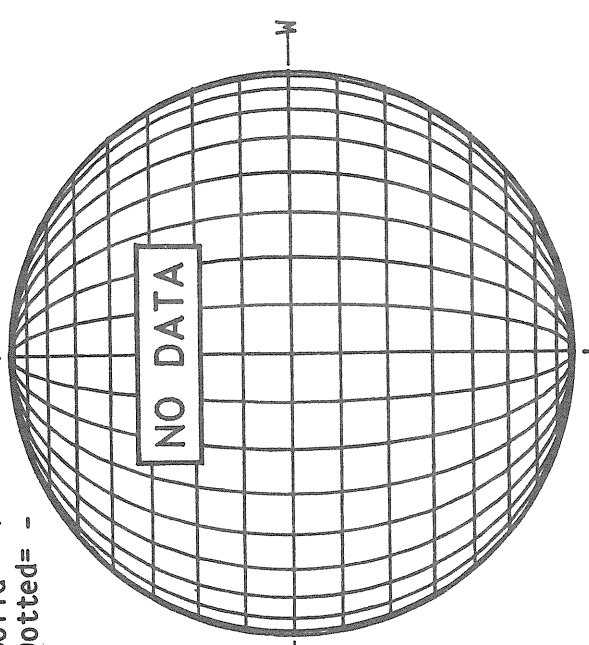
Solid = +
Dashed = -



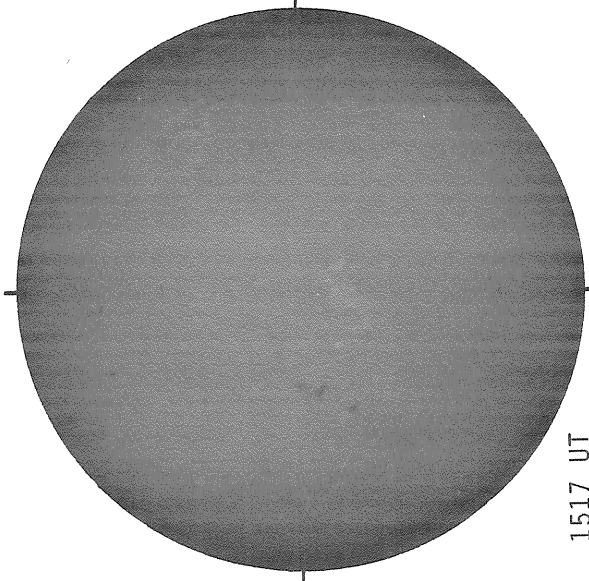
MT. WILSON MAGNETOGRAM

Np

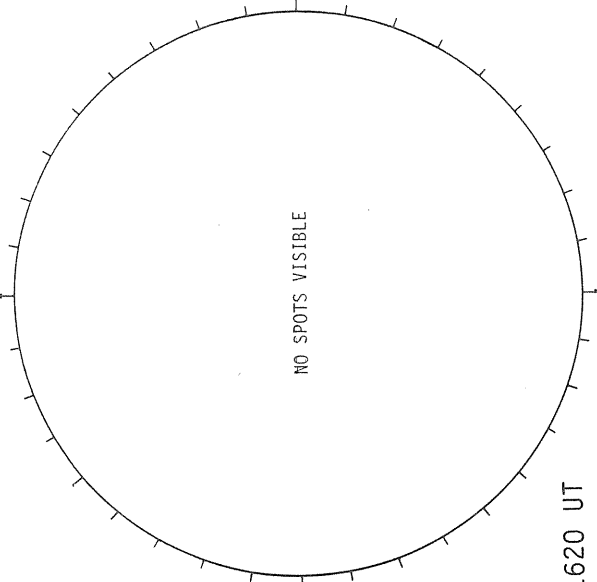
Solid = +
Dotted = -



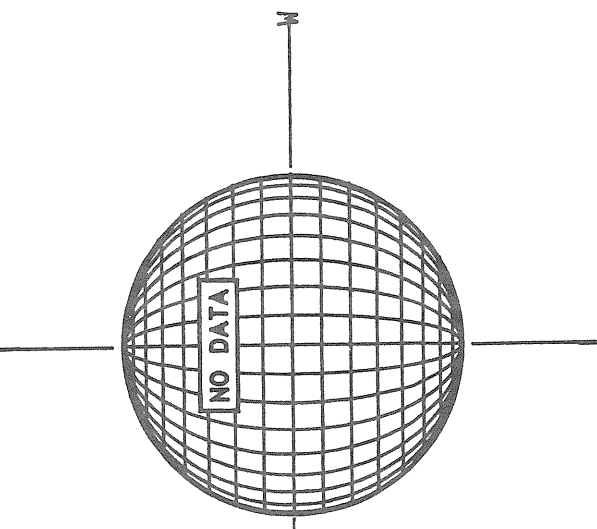
SACRAMENTO PEAK H-ALPHA



HOLLOMAN SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



1517 UT

1620 UT

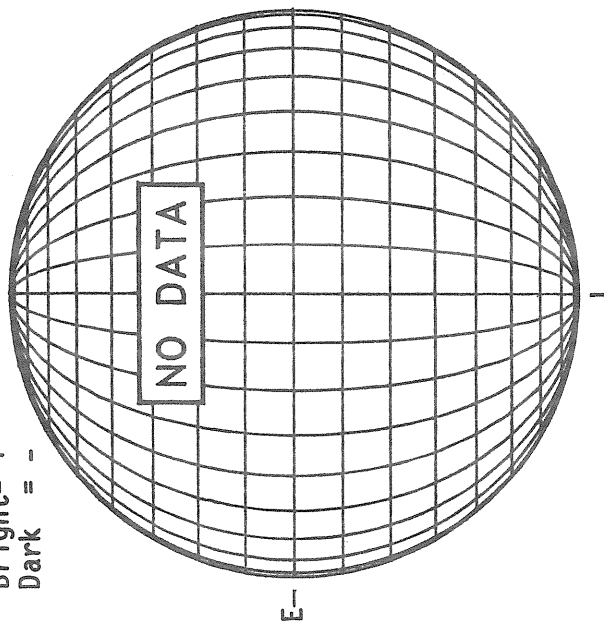
2132 UT

JANUARY 08, 1985 (P= -1.41, B₀=-3.75, L₀= 218.98)

KITT PEAK MAGNETOGRAM

Np

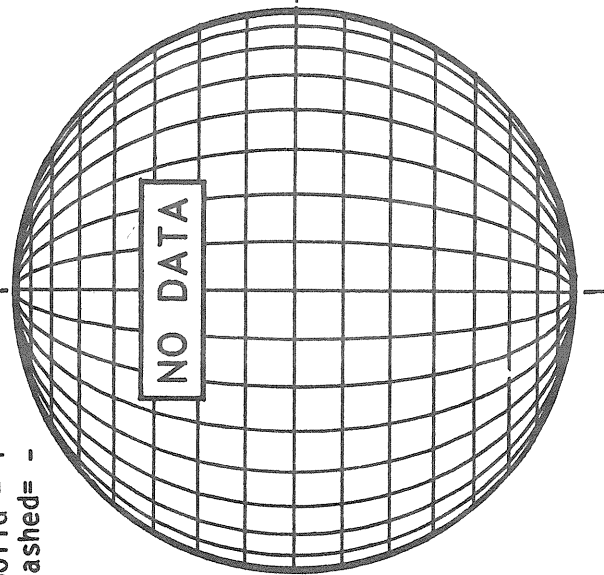
Bright= +
Dark = -



STANFORD MAGNETOGRAM

Np

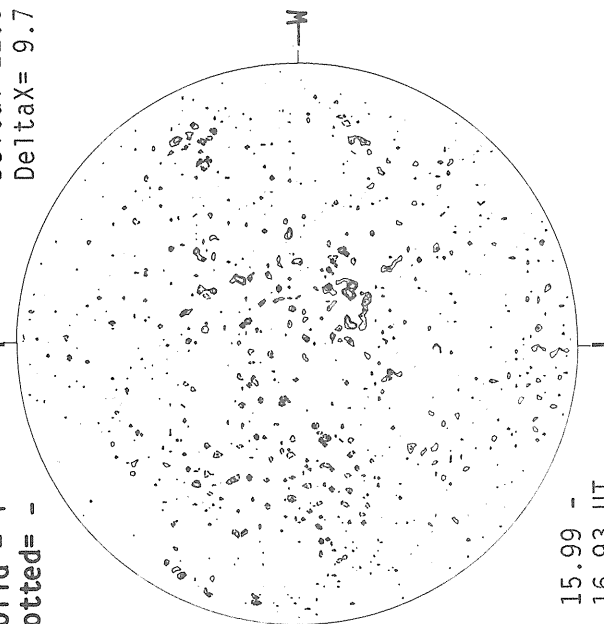
Solid = +
Dashed= -



MT. WILSON MAGNETOGRAM

Np

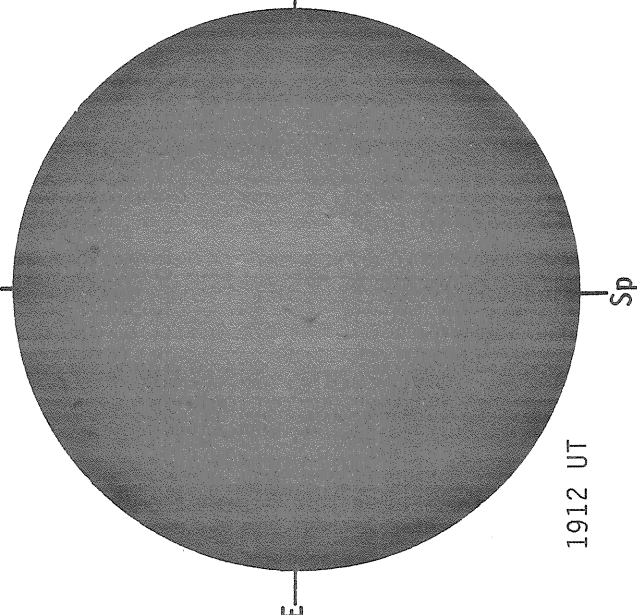
Solid = +
Dotted= -



DeltaY=12.5
DeltaX= 9.7

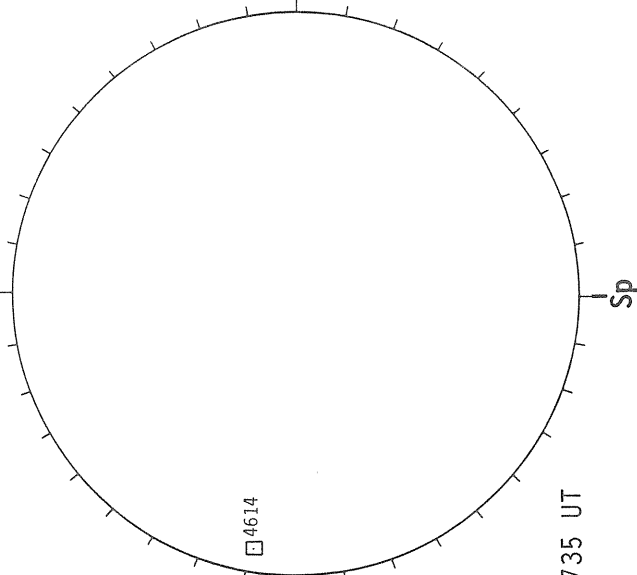
15.99 -
16.93 UT

SACRAMENTO PEAK H-ALPHA



1912 UT

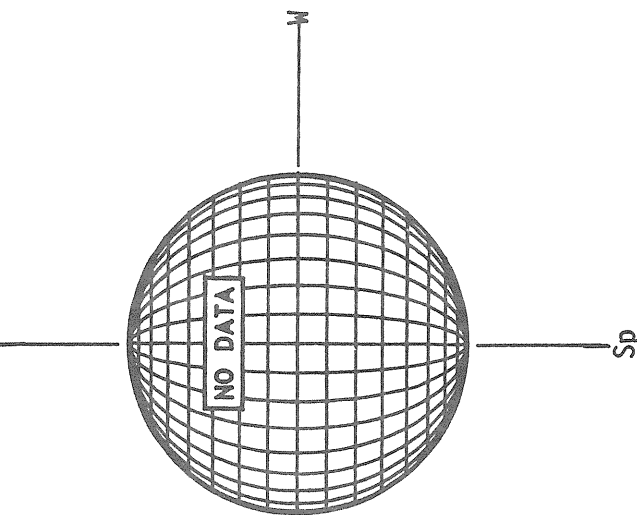
HOLLOMAN SUNSPOTS



1735 UT

4614

SACRAMENTO PEAK CORONA (1.15 Radii)



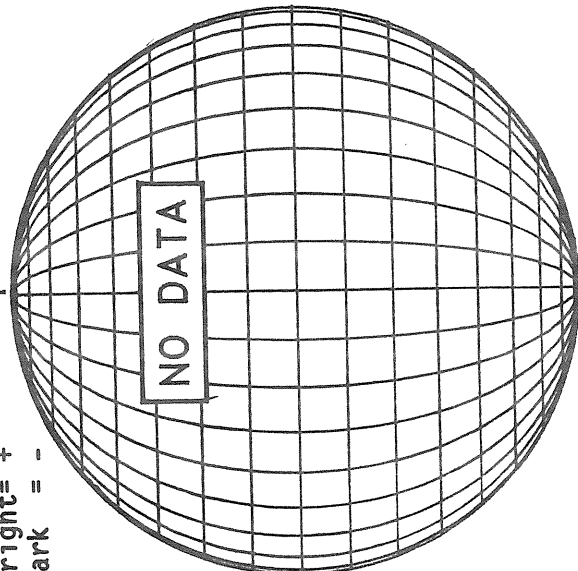
Sp

JANUARY 09, 1985 (P= -1.89, B₀=-3.86, L₀= 205.81)

KITT PEAK MAGNETOGRAM

Bright= +
Dark = -

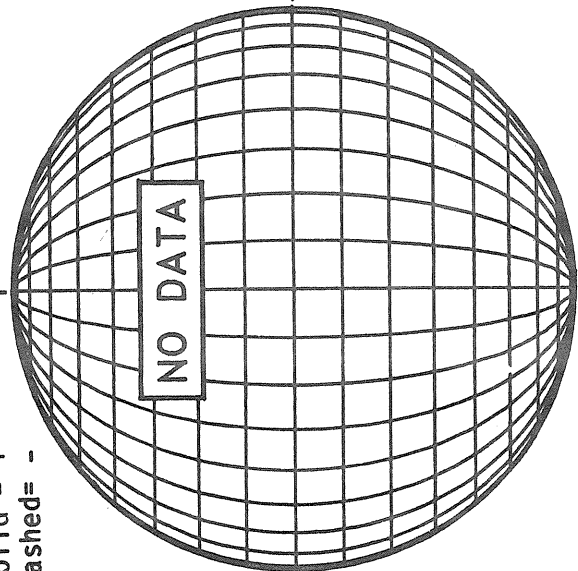
Np



STANFORD MAGNETOGRAM

Solid = +
Dashed= -

Np

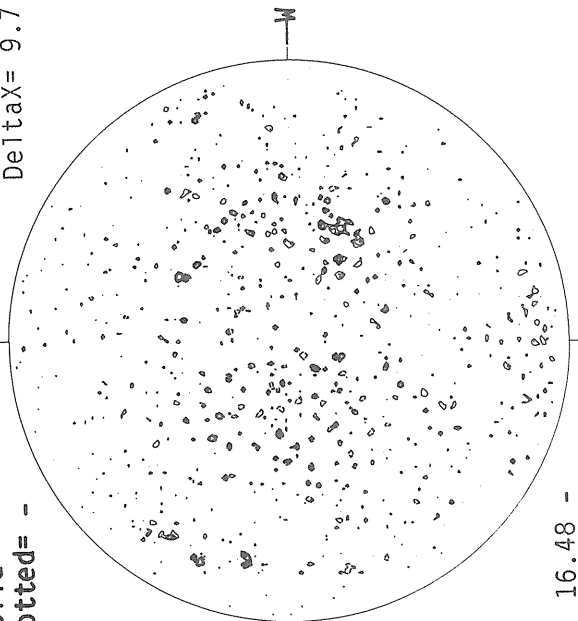


MT. WILSON MAGNETOGRAM

Solid = +
Dotted= -

Np

DeltaY=12.5
DeltaX= 9.7



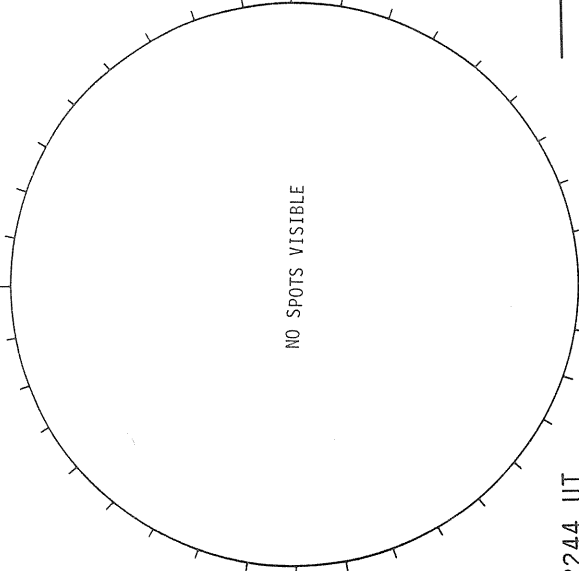
16.48 -
17.44 UT

SACRAMENTO PEAK H-ALPHA



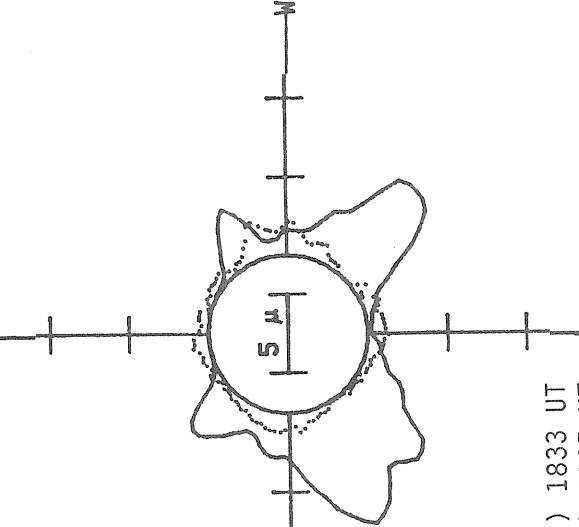
1528 UT

HOLLOMAN SUNSPOTS



2244 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



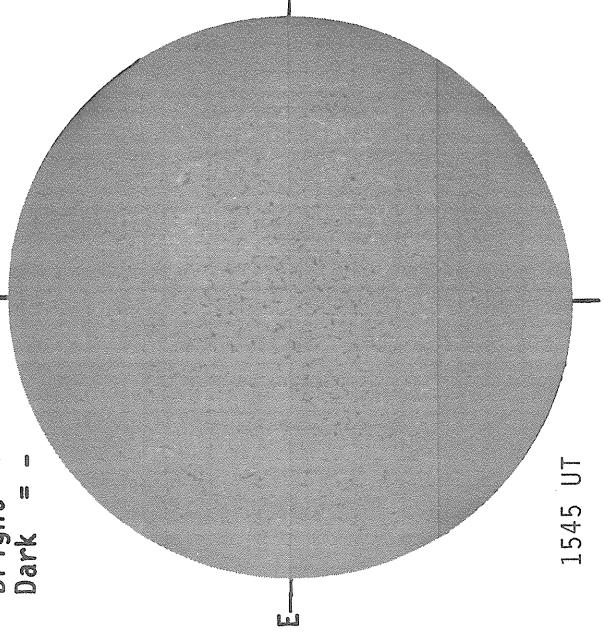
— 5303A(x1) 1833 UT
.... 6374A(x2) 1935 UT
xxxx 5694A(x6) 1911 UT
No 5694A Activity Today

JANUARY 10, 1985 (P = -2.37, B₀ = -3.97, L₀ = 192.64)

KITT PEAK MAGNETOGRAM

Bright = +
Dark = -

Np

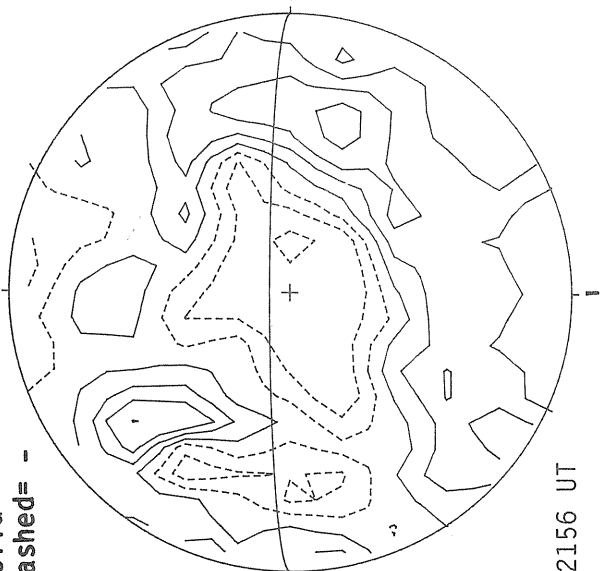


1545 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

Np

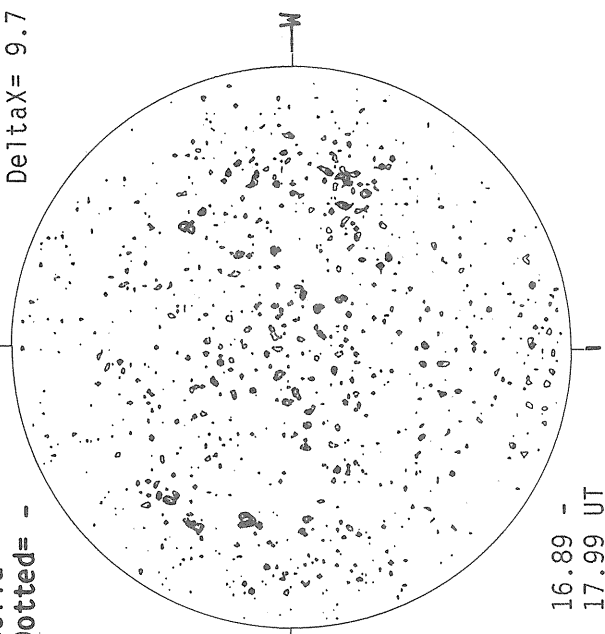


2156 UT

MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -

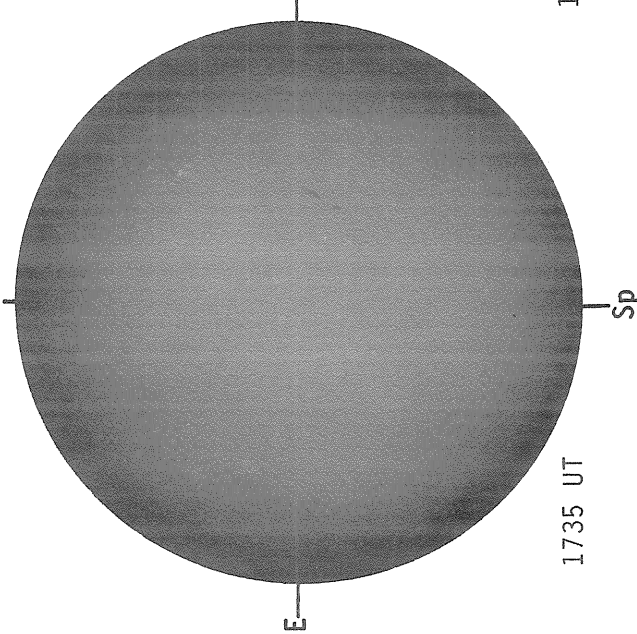
Np



16.89 -
17.99 UT

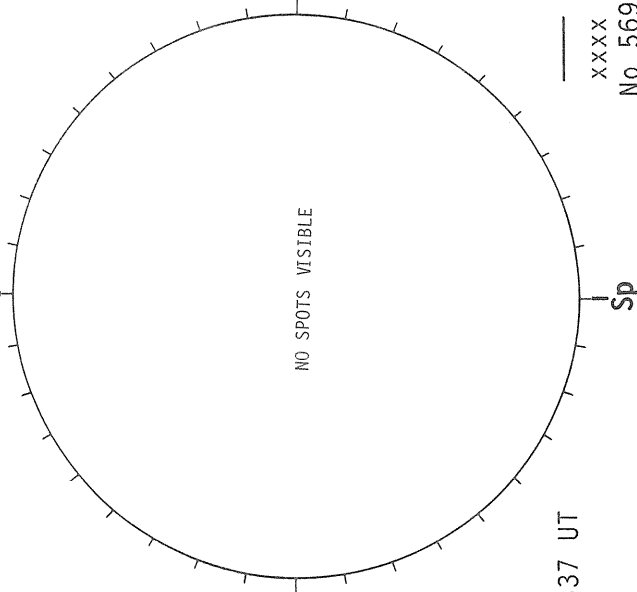
Delta Y = 12.5
Delta X = 9.7

SACRAMENTO PEAK H-ALPHA



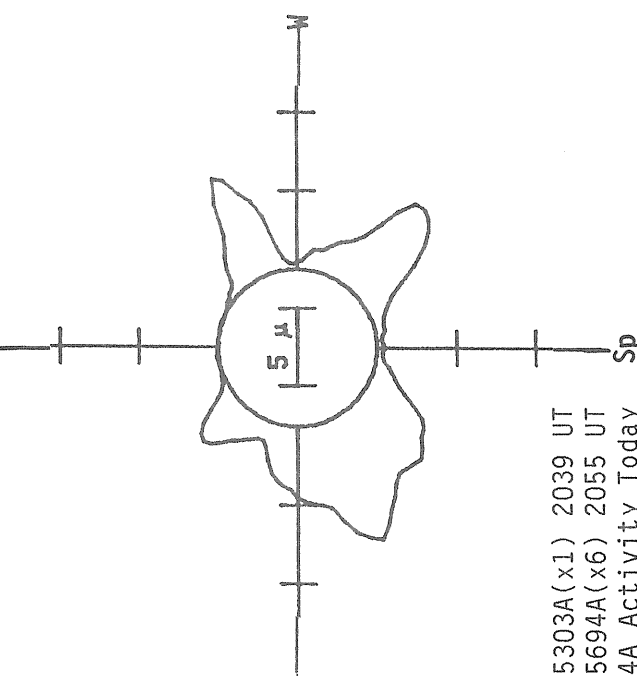
1735 UT

BOULDER SUNSPOTS



1537 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



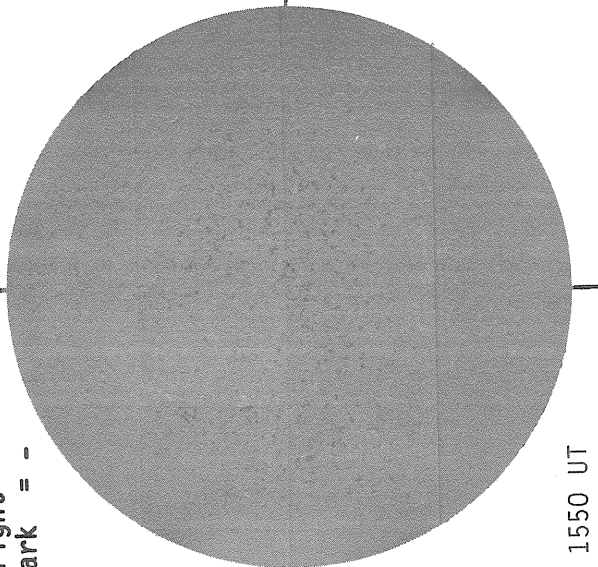
— 5303A(x1) 2039 UT
xxxx 5694A(x6) 2055 UT
No 5694A Activity Today

JANUARY 11, 1985 (P = -2.84, B₀ = -4.07, L₀ = 179.47)

KITT PEAK MAGNETOGRAM

Bright = +
Dark = -

Np

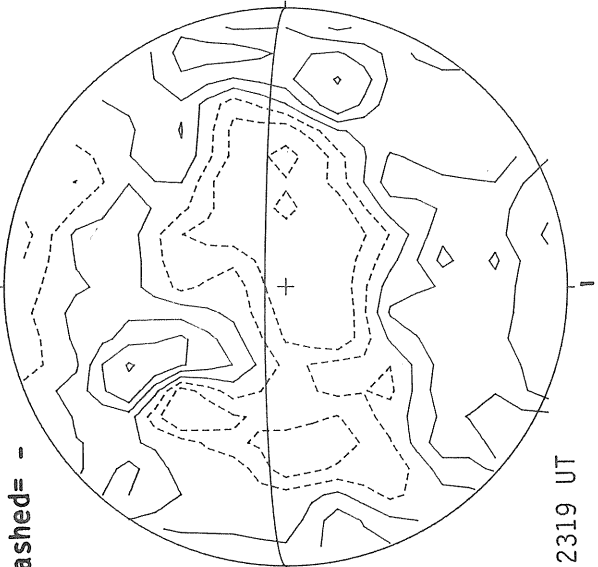


1550 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

Np

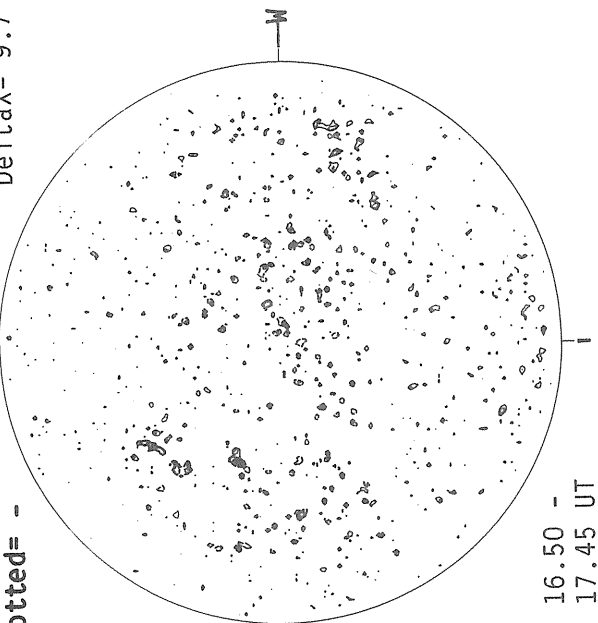


2319 UT

MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -

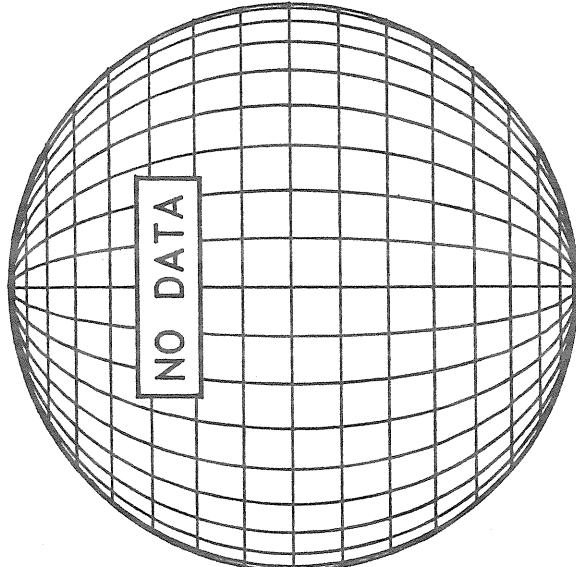
Np



16.50 -
17.45 UT

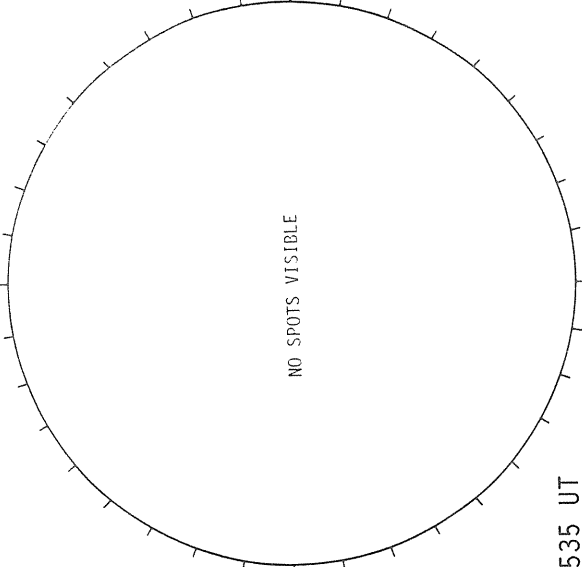
DeltaY=12.5
DeltaX= 9.7

SACRAMENTO PEAK H-ALPHA



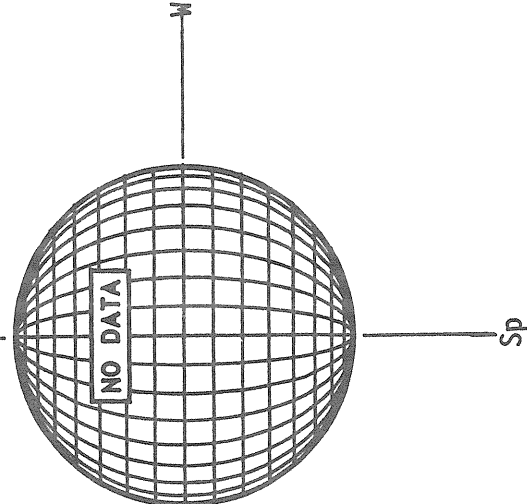
E

HOLLOMAN SUNSPOTS



1535 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



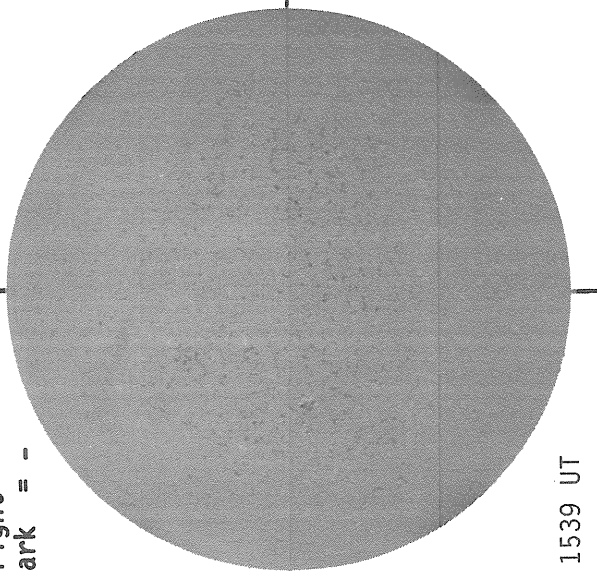
Sp

J A N U A R Y 12, 1 9 8 5 (P= -3.32, B₀=-4.18, L₀= 166.31)

KITT PEAK MAGNETOGRAM

Bright= +
Dark = -

Np

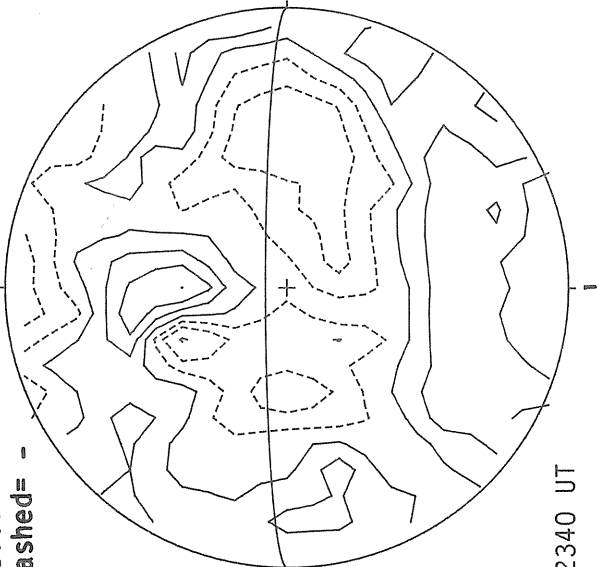


1539 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed= -

Np

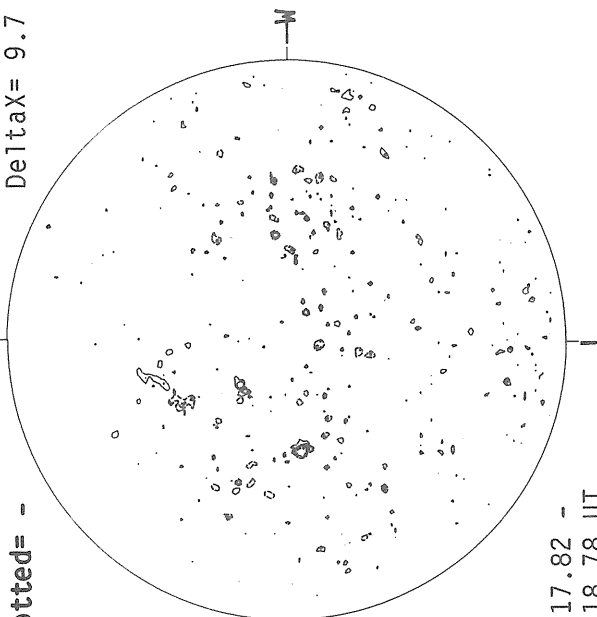


2340 UT

MT. WILSON MAGNETOGRAM

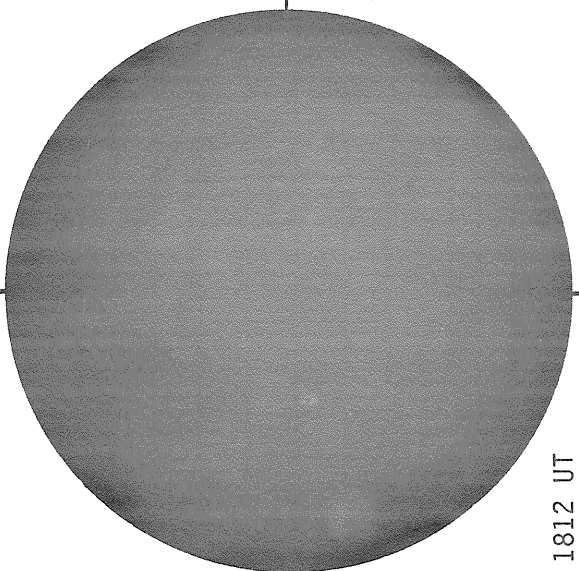
Solid = +
Dotted= -

Np



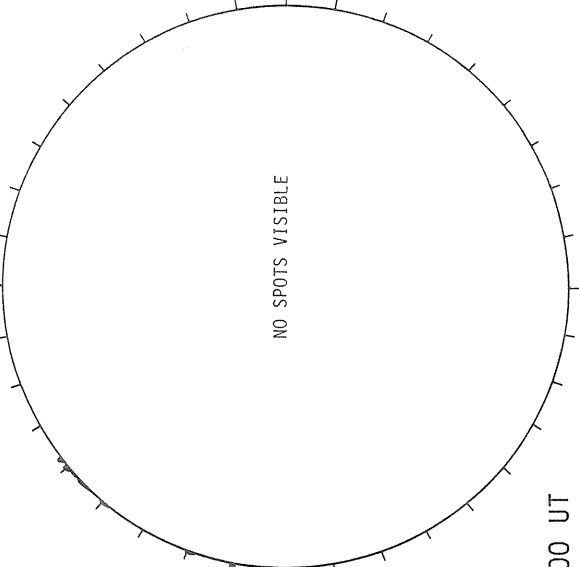
17.82 -
18.78 UT

SACRAMENTO PEAK H-ALPHA



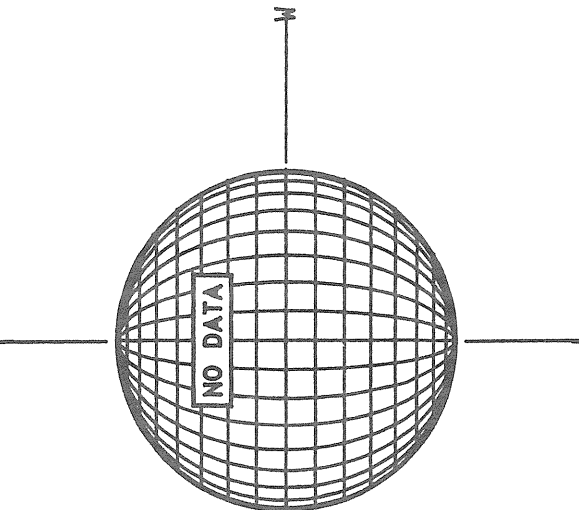
1812 UT

BOULDER SUNSPOTS



1600 UT
1610 UT BOUL Prom

SACRAMENTO PEAK CORONA (1.15 Radii)

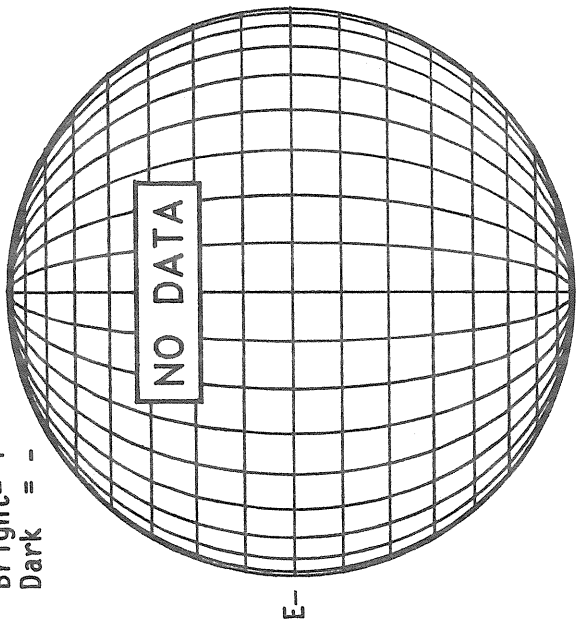


Sp

JANUARY 13, 1985 (P = -3.79, B₀ = -4.28, L₀ = 153.14)

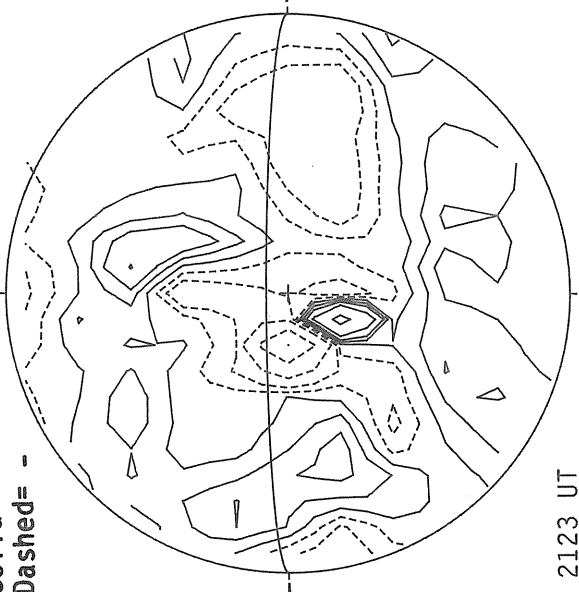
KITT PEAK MAGNETOGRAM

Bright = +
Dark = -



STANFORD MAGNETOGRAM

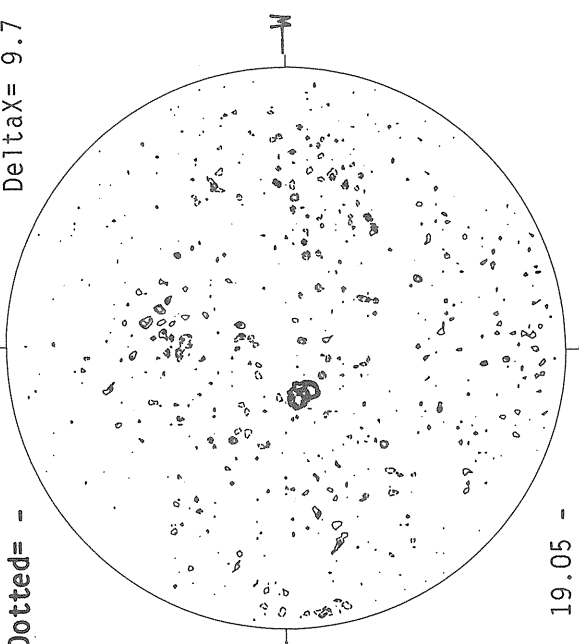
Solid = +
Dashed = -



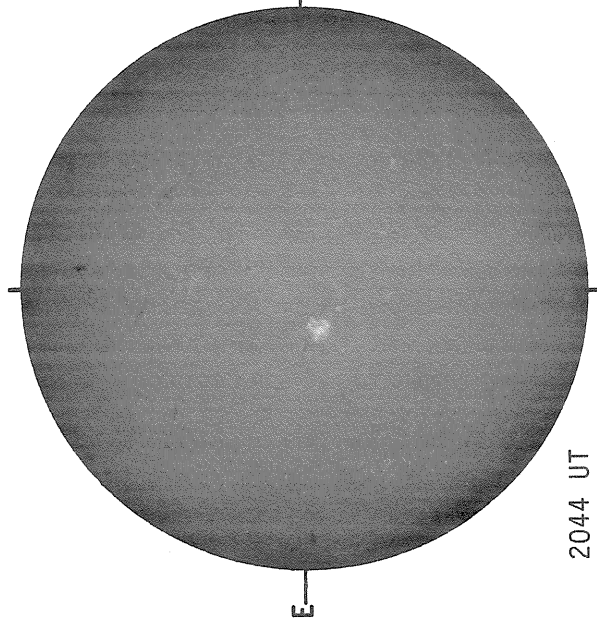
MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -

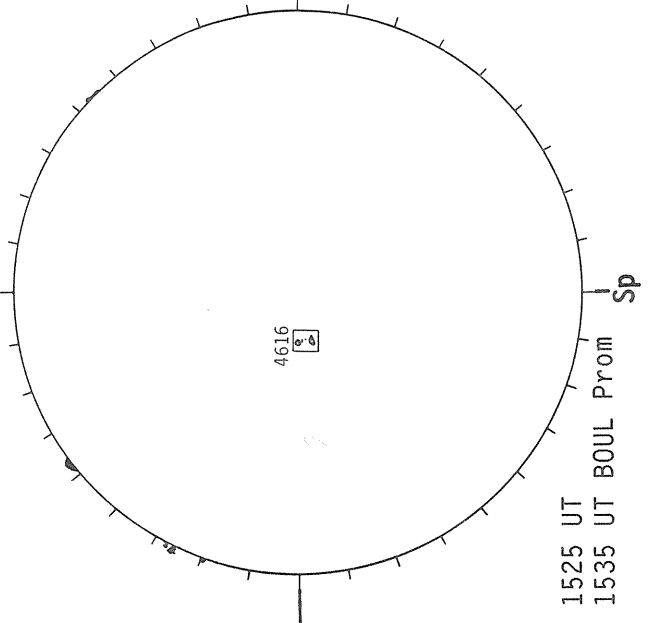
Delta Y = 12.5
Delta X = 9.7



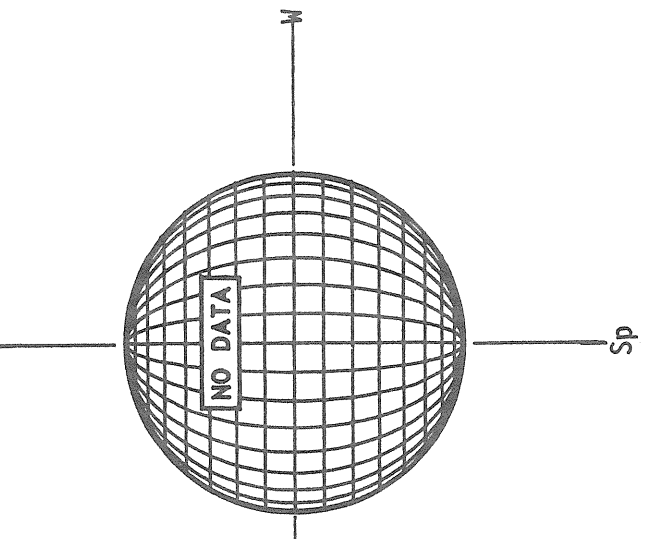
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



19.05 -
20.01 UT

2044 UT

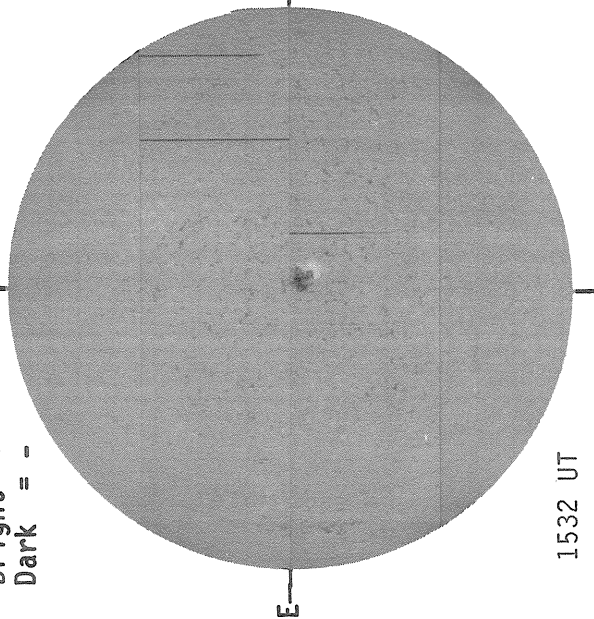
1525 UT
1535 UT BOUL Prom

JANUARY 14, 1985 (P = -4.26, B₀ = -4.38, L₀ = 139.97)

KITT PEAK MAGNETOGRAM

Bright = +
Dark = -

Np

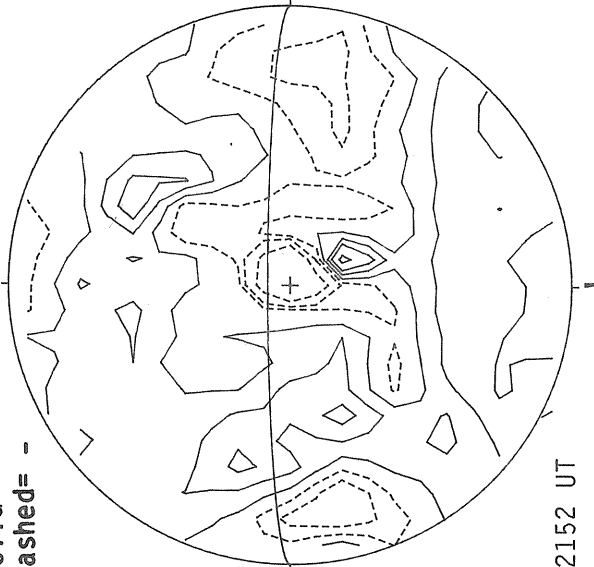


1532 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

Np

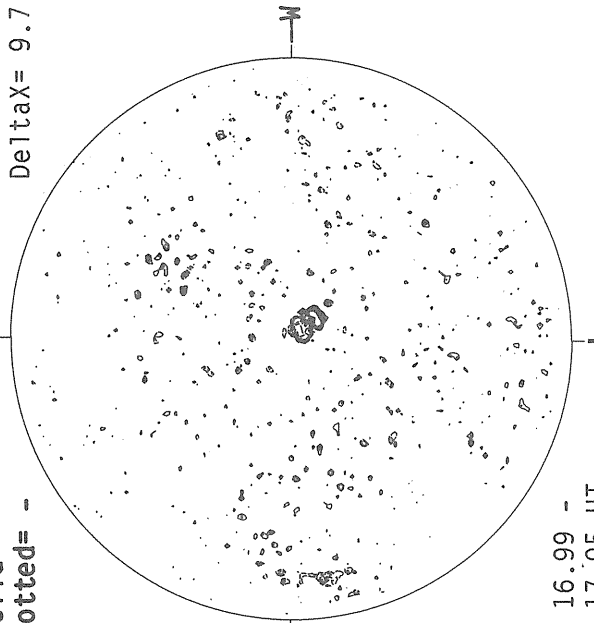


2152 UT

MT. WILSON MAGNETOGRAM

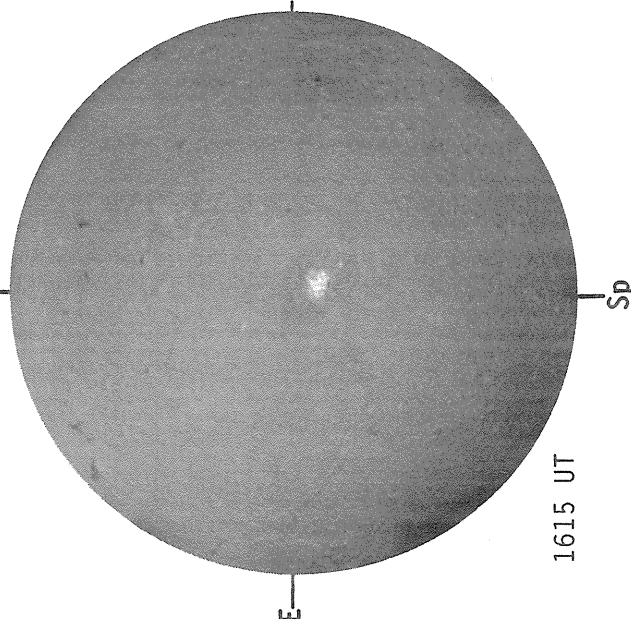
Solid = +
Dotted = -

Np



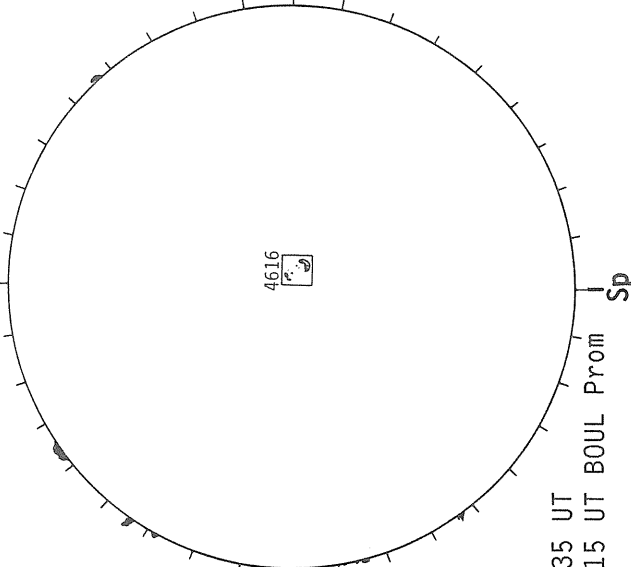
16.99 -
17.95 UT

BOULDER H-ALPHA



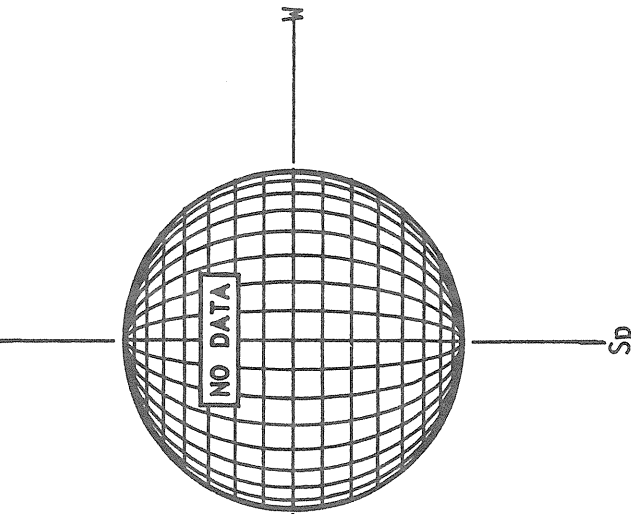
1615 UT

BOULDER SUNSPOTS



1535 UT
1615 UT BOUL Prom

SACRAMENTO PEAK CORONA (1.15 Radii)



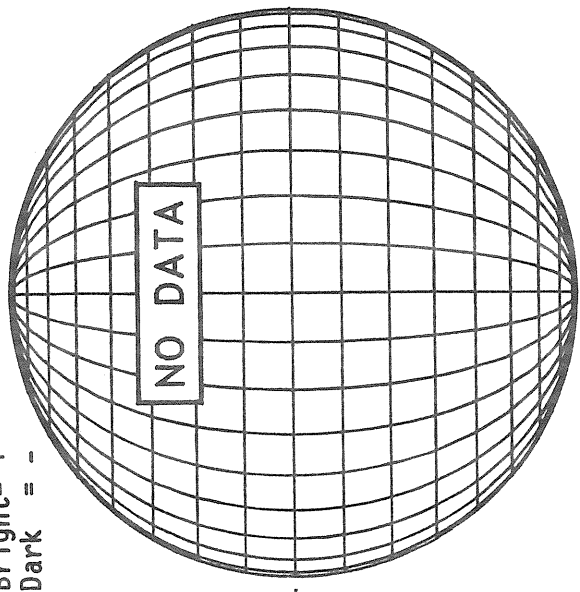
Sp

JANUARY 15, 1985 ($P = -4.73$, $B_0 = -4.48$, $L_0 = 126.80$)

KITT PEAK MAGNETOGRAM

Bright = +
Dark = -

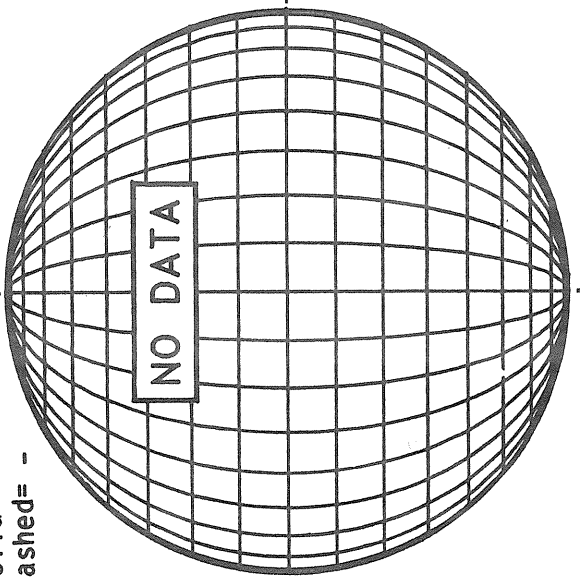
Np



STANFORD MAGNETOGRAM

Solid = +
Dashed = -

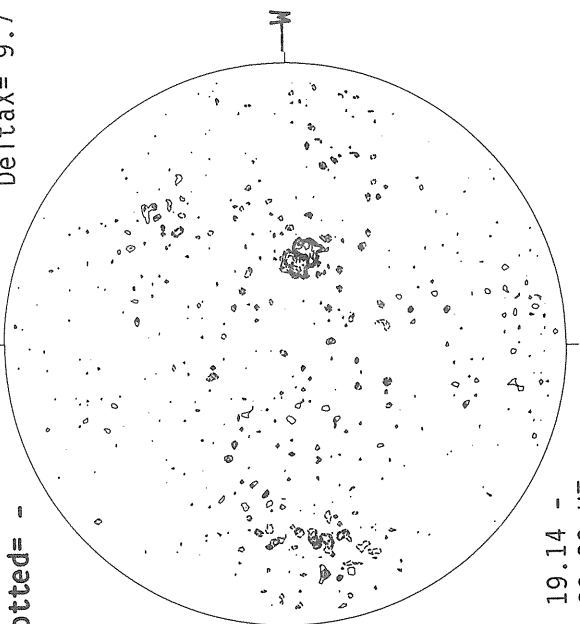
Np



MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -

Np

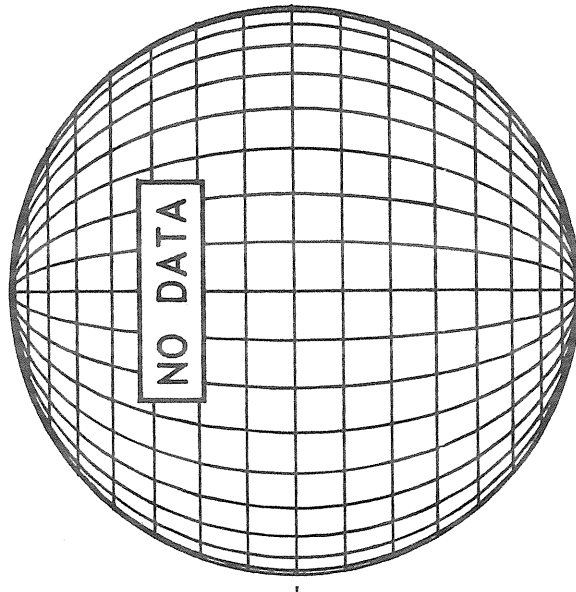


19.14 -
20.09 UT

SACRAMENTO PEAK CORONA (1.15 Radii)

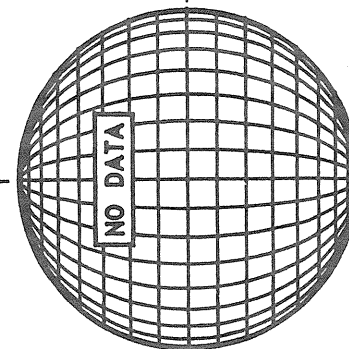
BOULDER SUNSPOTS

SACRAMENTO PEAK H-ALPHA



NO DATA

Np



NO DATA

4616

2210 UT

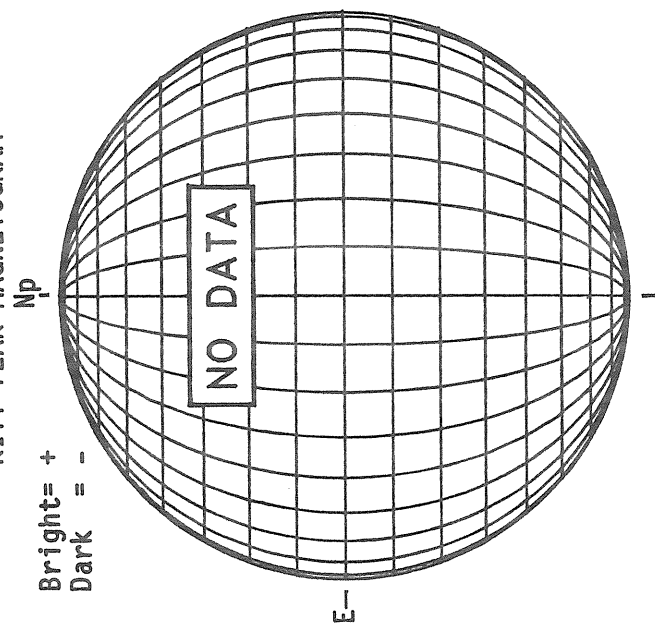
Np

Sp

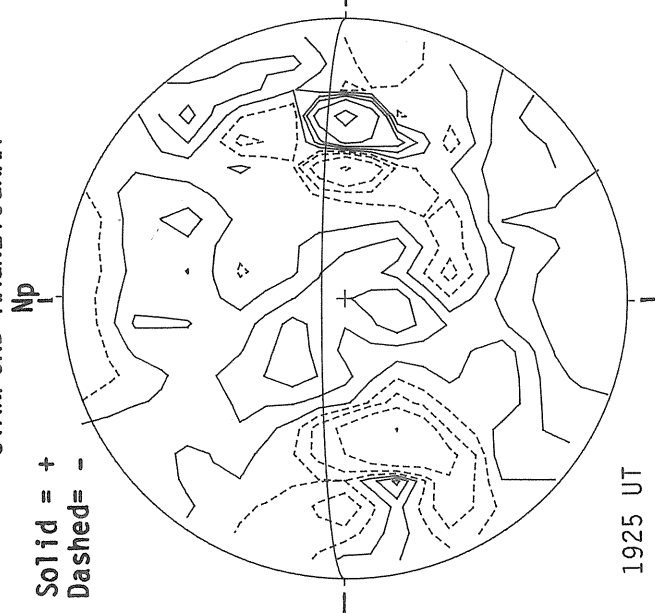
Sp

JANUARY 16, 1985 (P= -5.20, B₀ = -4.58, L₀ = 113.64)

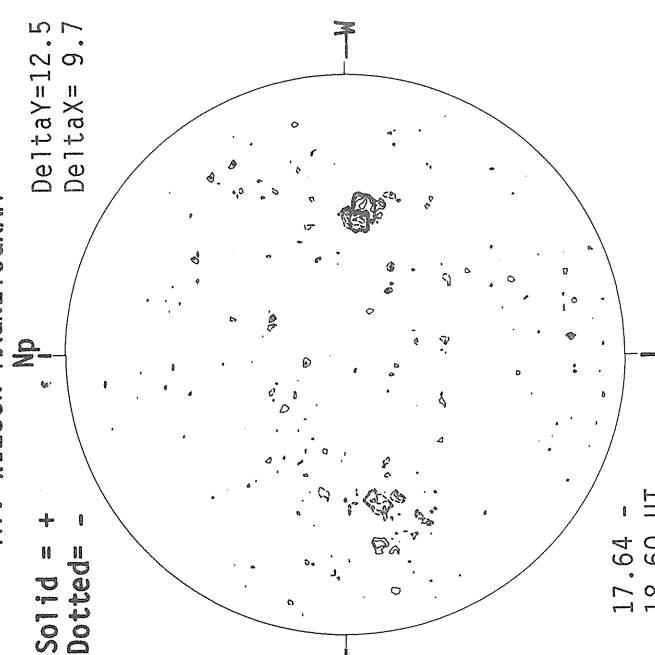
KITT PEAK MAGNETOGRAM



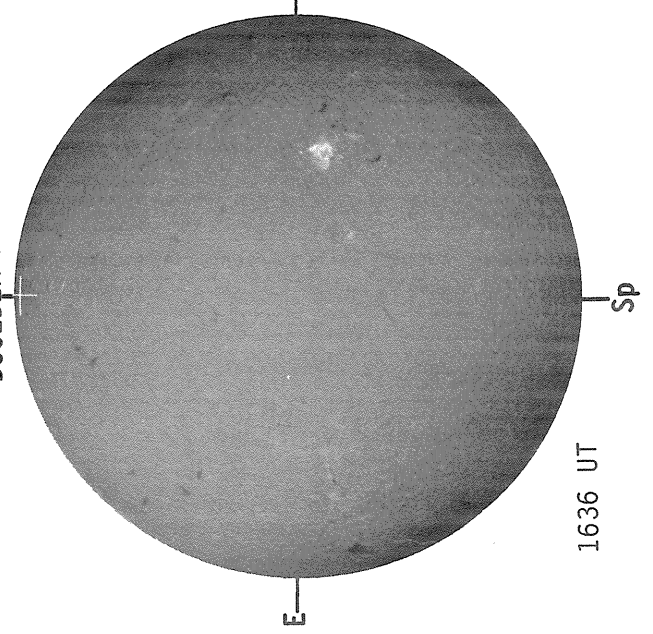
STANFORD MAGNETOGRAM



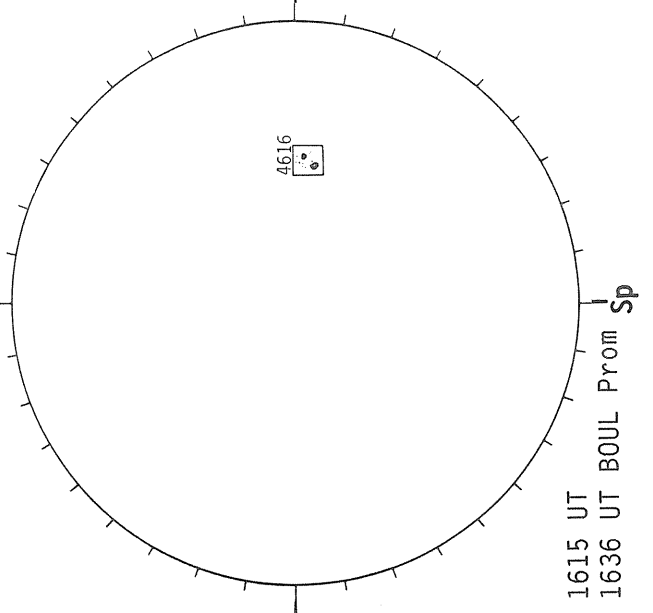
MT. WILSON MAGNETOGRAM



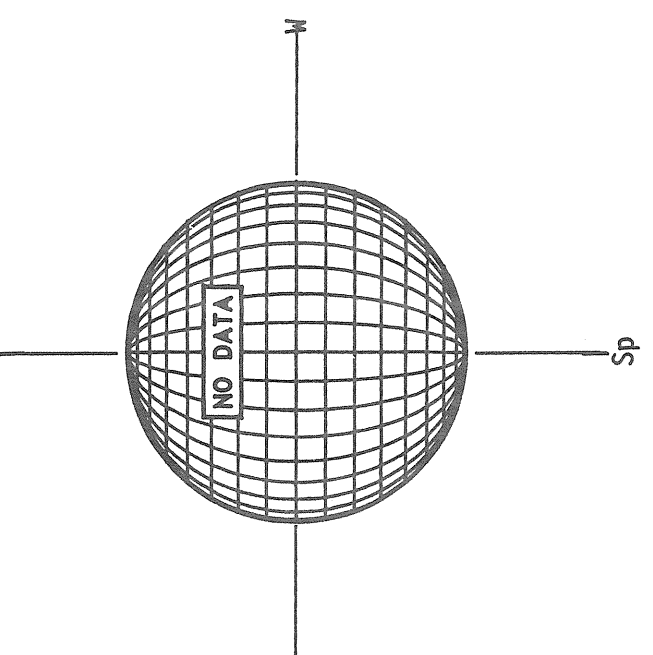
BOULDER H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



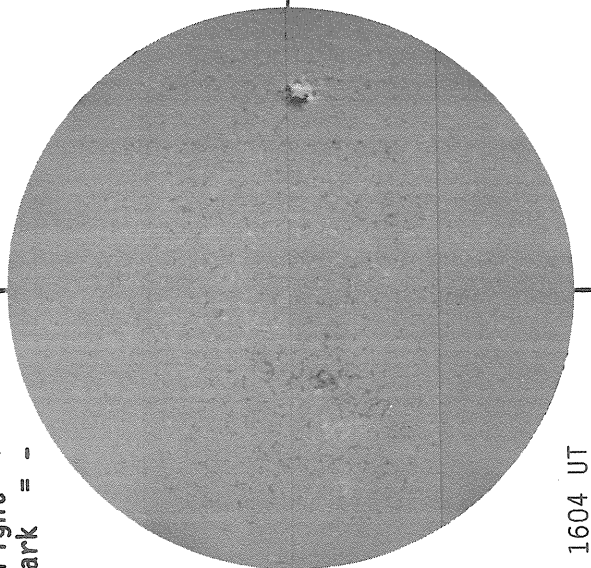
17.64 -
18.60 UT

JANUARY 17, 1985 (P= -5.66, B₀ = -4.67, L₀ = 100.47)

KITT PEAK MAGNETOGRAM

Bright= +
Dark = -

Np

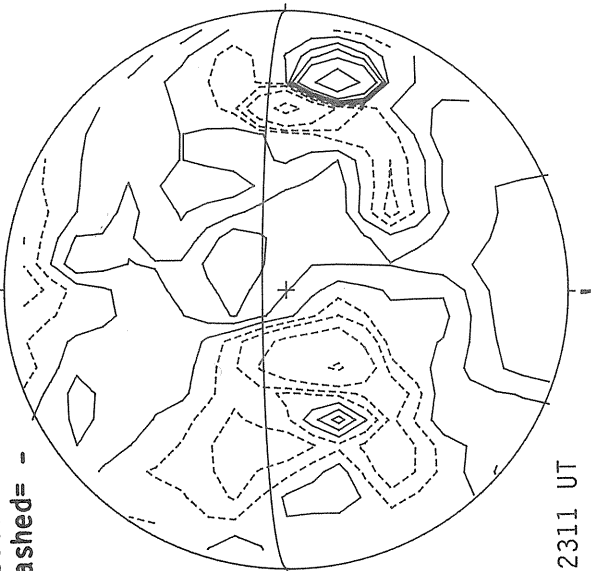


1604 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

Np

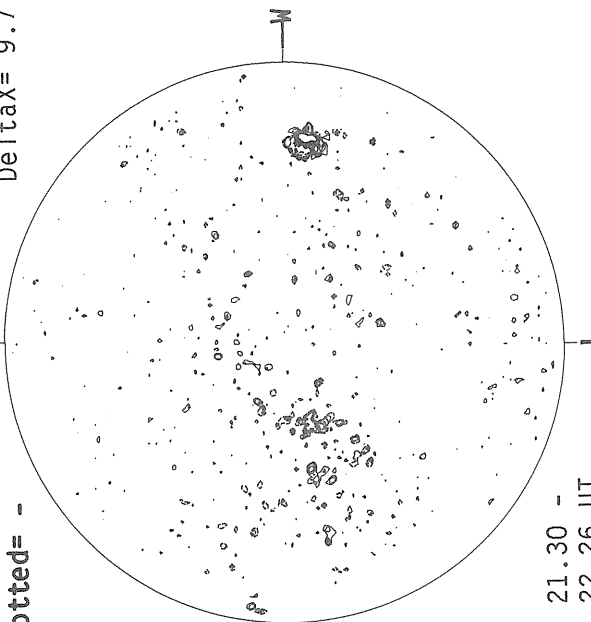


2311 UT

MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -

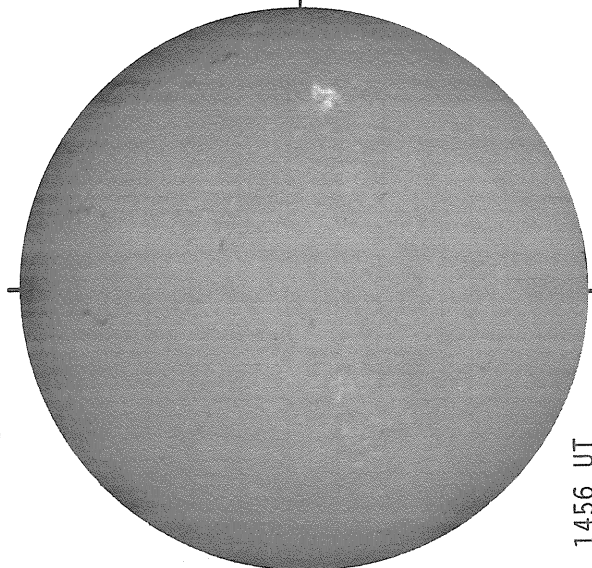
Np



21.30 -
22.26 UT

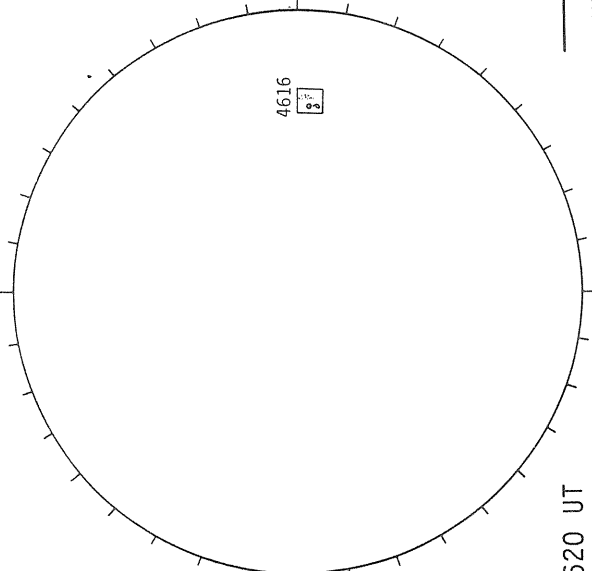
Delta Y = 12.5
Delta X = 9.7

SACRAMENTO PEAK H-ALPHA



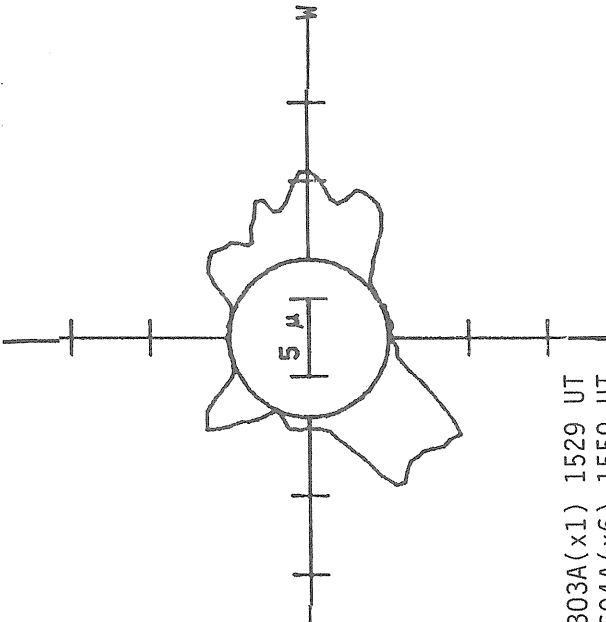
1456 UT

BOULDER SUNSPOTS



1620 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



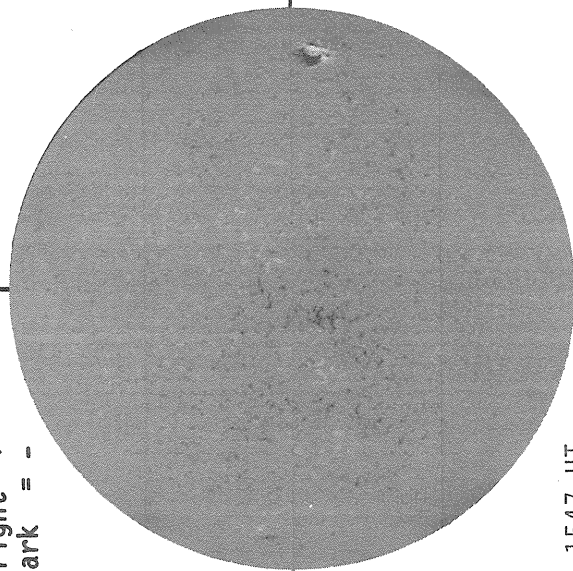
— 5303A(x1) 1529 UT
xxxx 5694A(x6) 1559 UT
No 5694A Activity Today Sp

JANUARY 18, 1985 (P = -6.12, B₀ = -4.77, L₀ = 87.30)

KITT PEAK MAGNETOGRAM

Np

Bright = +
Dark = -

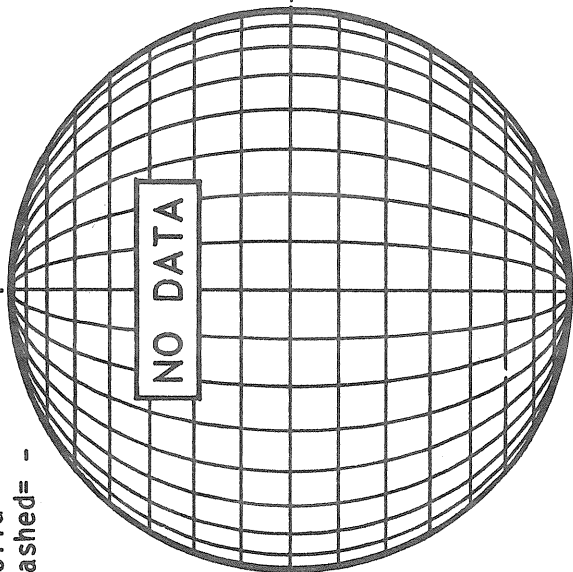


1547 UT

STANFORD MAGNETOGRAM

Np

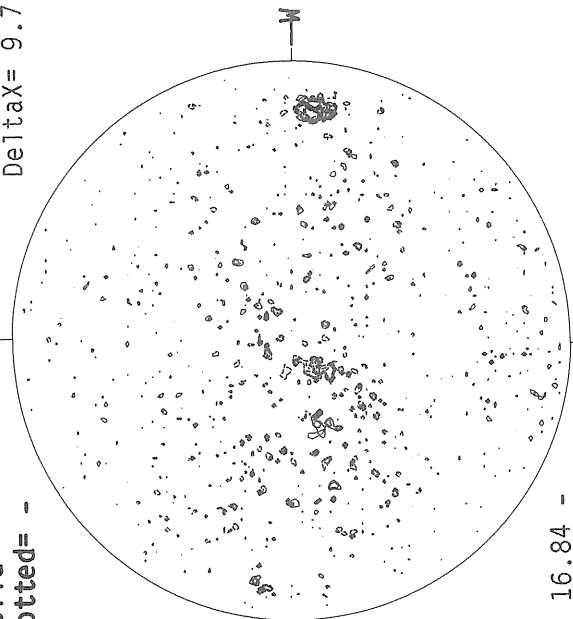
Solid = +
Dashed = -



MT. WILSON MAGNETOGRAM

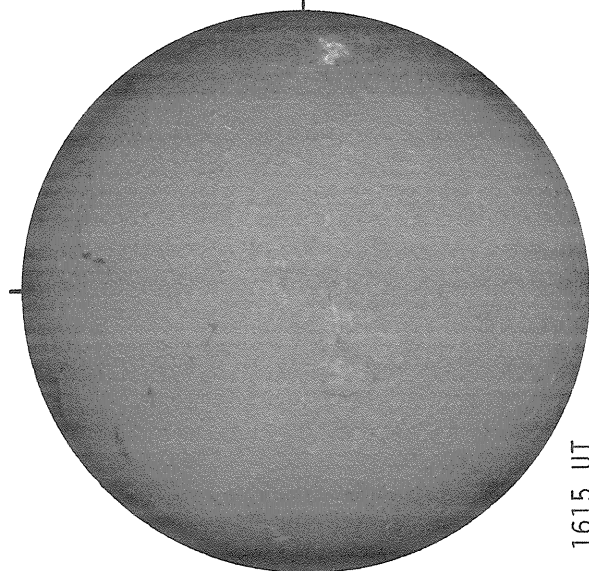
Np

Solid = +
Dotted = -



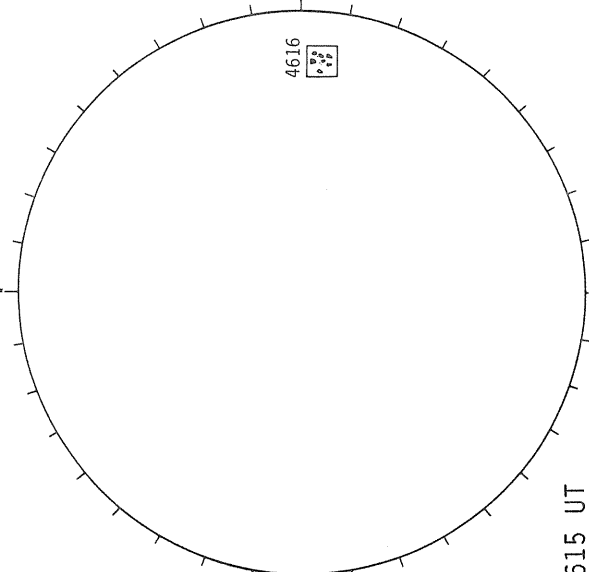
16.84 -
17.80 UT

SACRAMENTO PEAK H-ALPHA



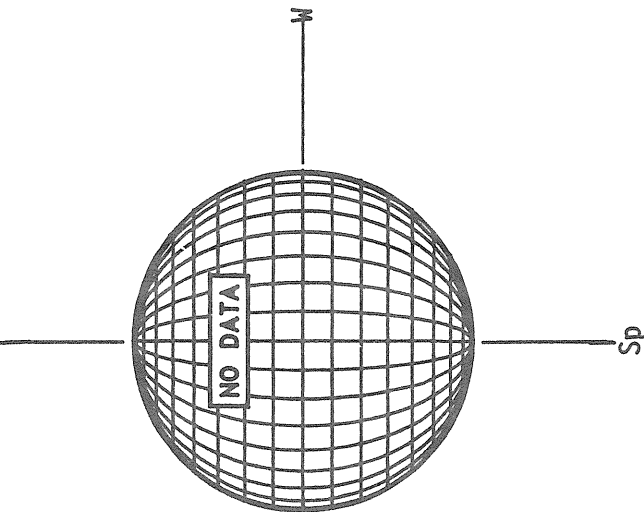
1615 UT

BOULDER SUNSPOTS



1615 UT
1630 UT BOUL Prom

SACRAMENTO PEAK CORONA (1.15 Radii)



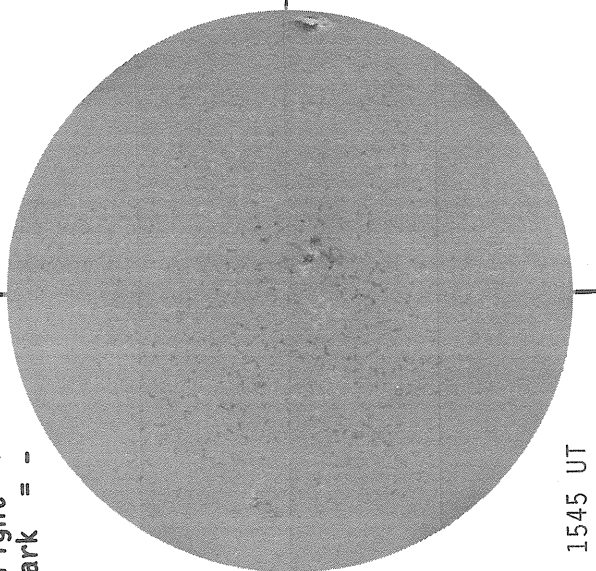
Sp

JANUARY 19, 1985 (P = -6.58, $B_0 = -4.86$, $L_0 = 74.13$)

KITT PEAK MAGNETOGRAM

Bright = +
Dark = -

Np

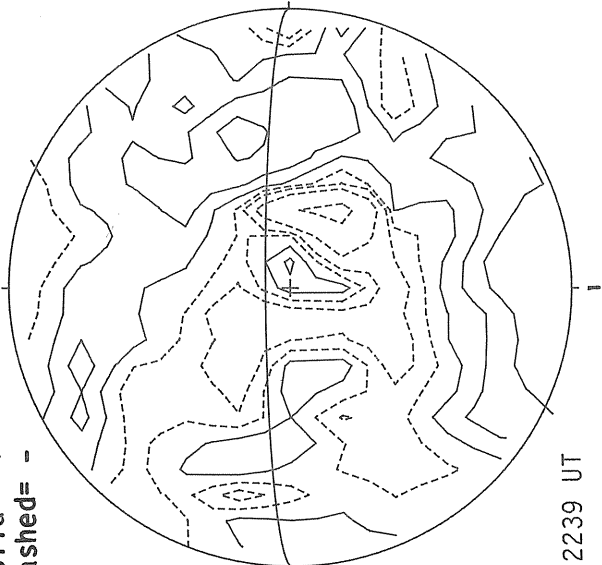


1545 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

Np

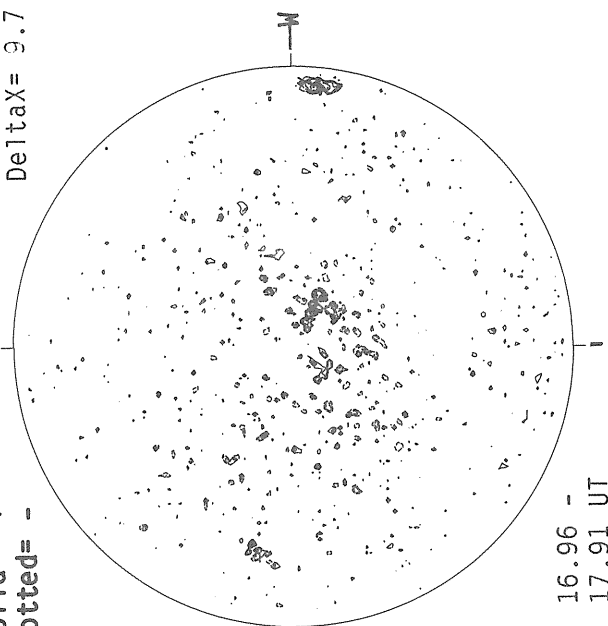


2239 UT

MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -

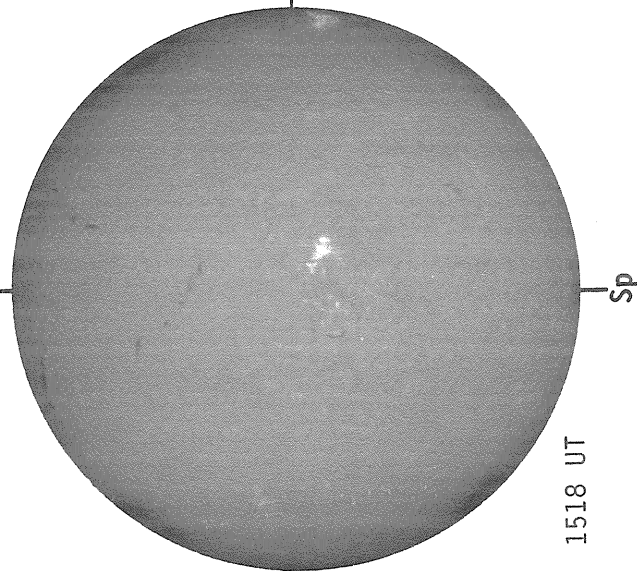
Np



16.96 -
17.91 UT

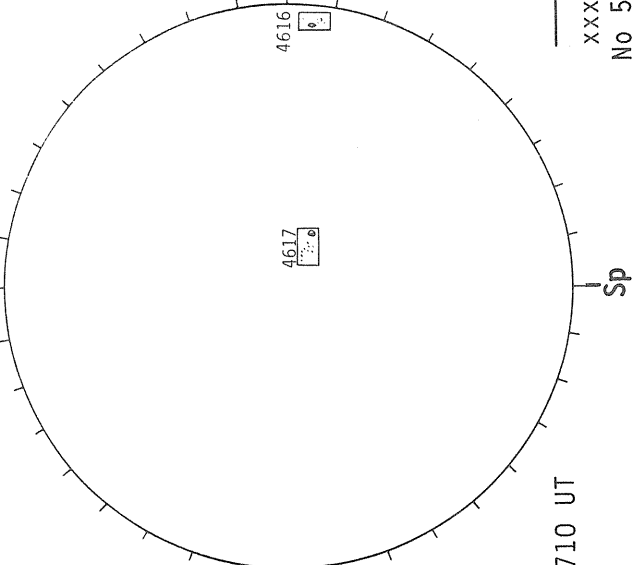
Delta Y = 12.5
Delta X = 9.7

SACRAMENTO PEAK H-ALPHA



1518 UT

BOULDER SUNSPOTS



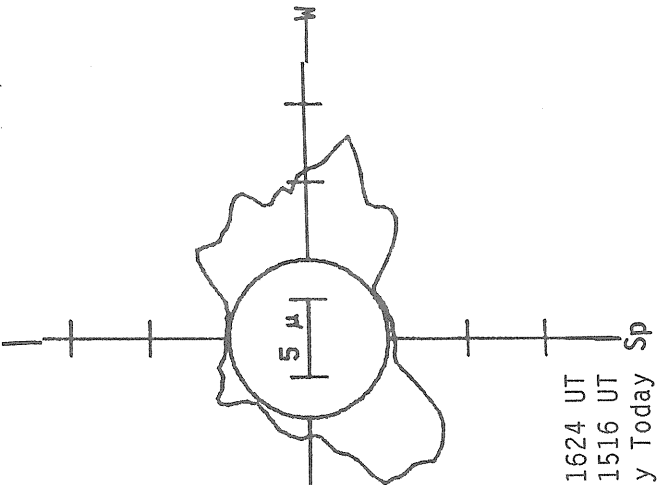
1710 UT

4617

4616

Sp

SACRAMENTO PEAK CORONA (1.15 Radii)



5303A(x1) 1624 UT
xxxx 5694A(x6) 1516 UT
No 5694A Activity Today

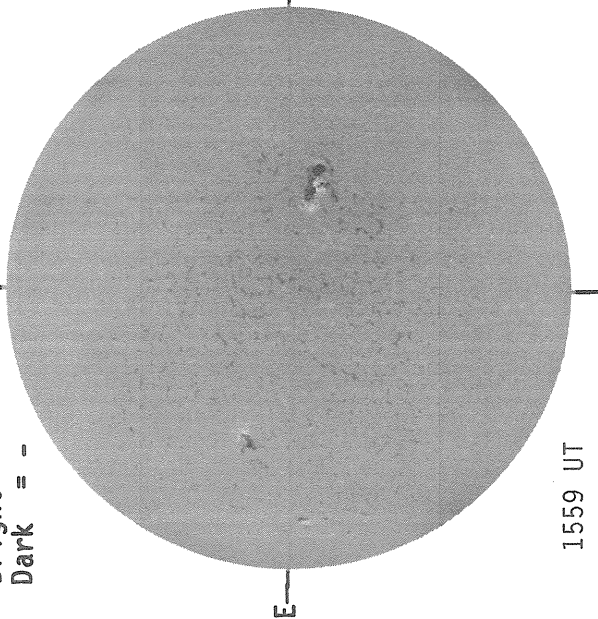
Sp

JANUARY 20, 1985 (P= -7.04, B₀ = -4.96, L₀ = 60.97)

KITT PEAK MAGNETOGRAM

Np

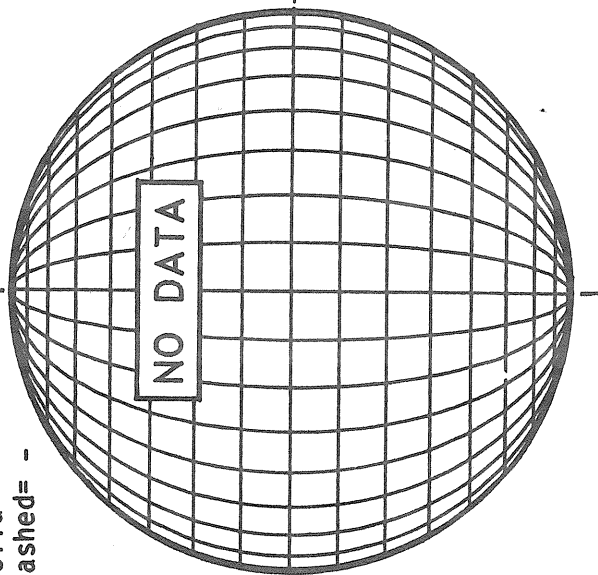
Bright= +
Dark = -



STANFORD MAGNETOGRAM

Np

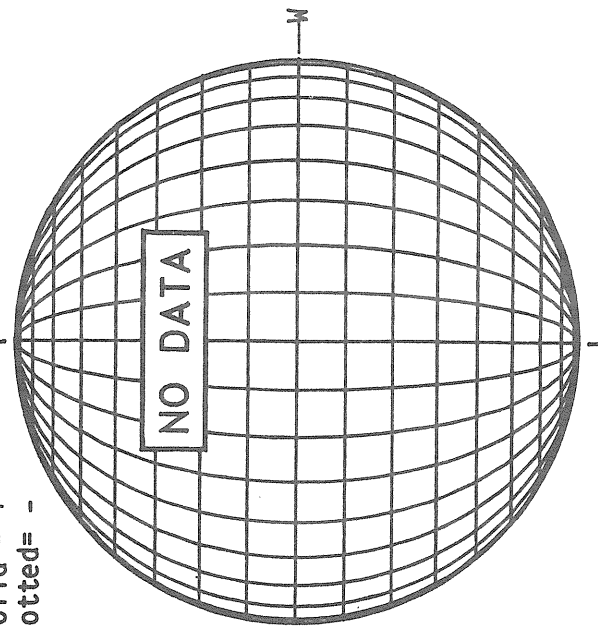
Solid = +
Dashed = -



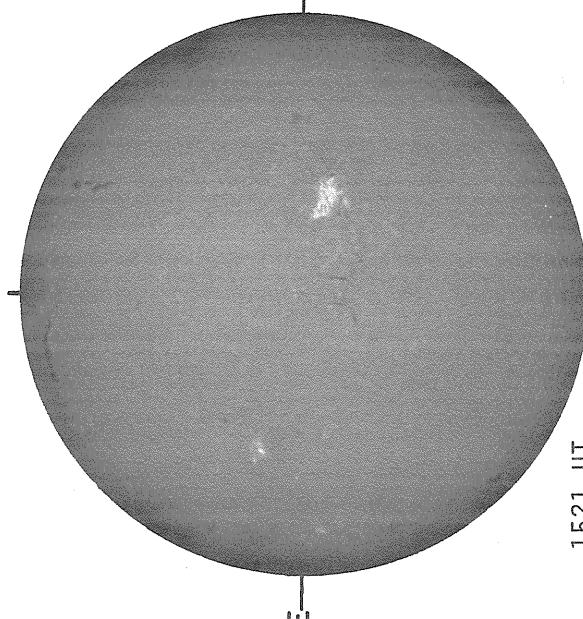
MT. WILSON MAGNETOGRAM

Np

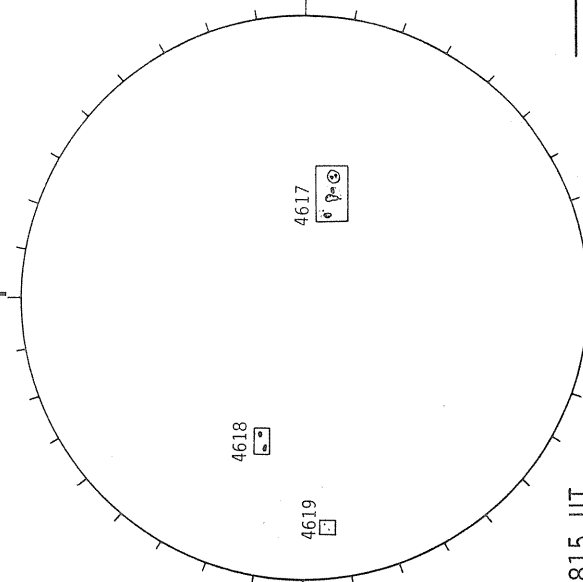
Solid = +
Dotted = -



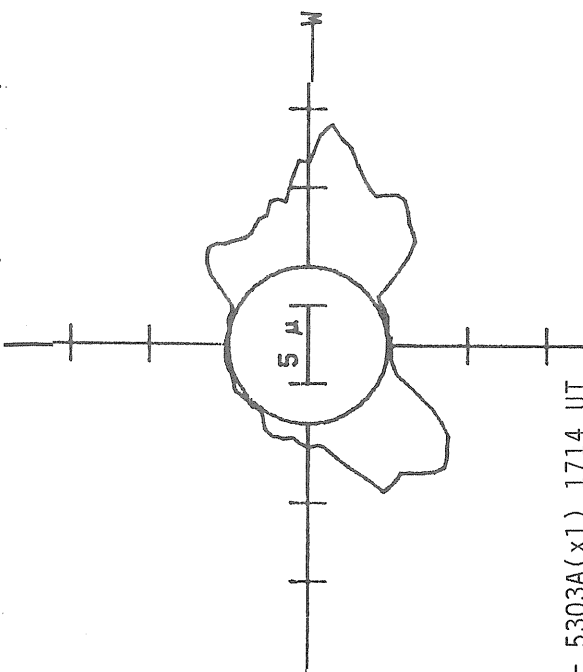
SACRAMENTO PEAK H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



— 5303A(x1) 1714 UT
xxxx 5694A(x6) 1525 UT
No 5694A Activity Today

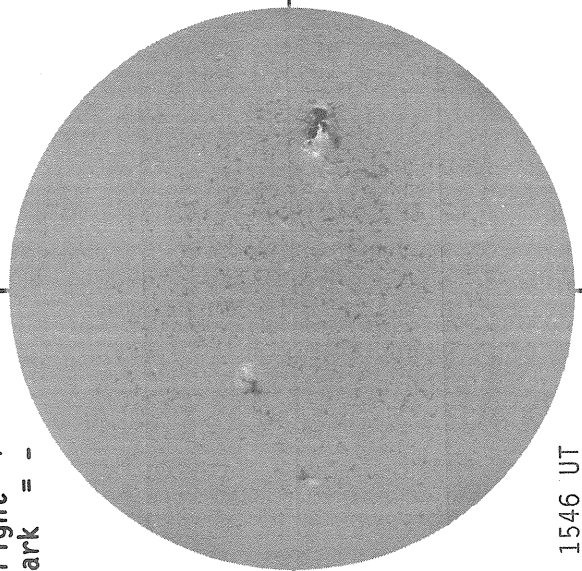
Sp

JANUARY 21, 1985 (P = -7.49, B₀ = -5.05, L₀ = 47.80)

KITT PEAK MAGNETOGRAM

Np

Bright = +
Dark = -

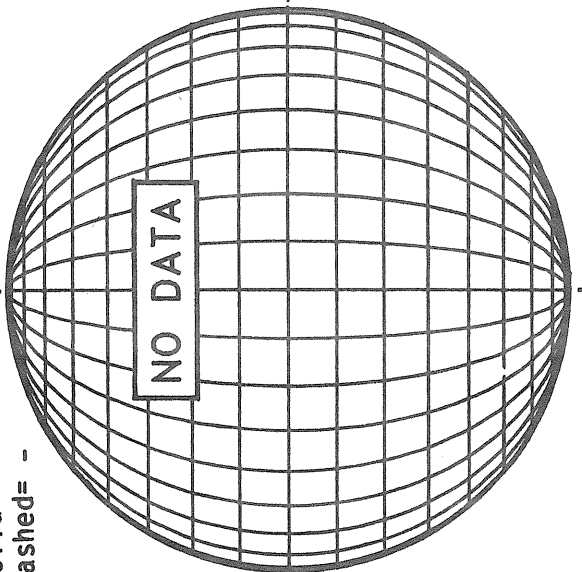


1546 UT

STANFORD MAGNETOGRAM

Np

Solid = +
Dashed = -

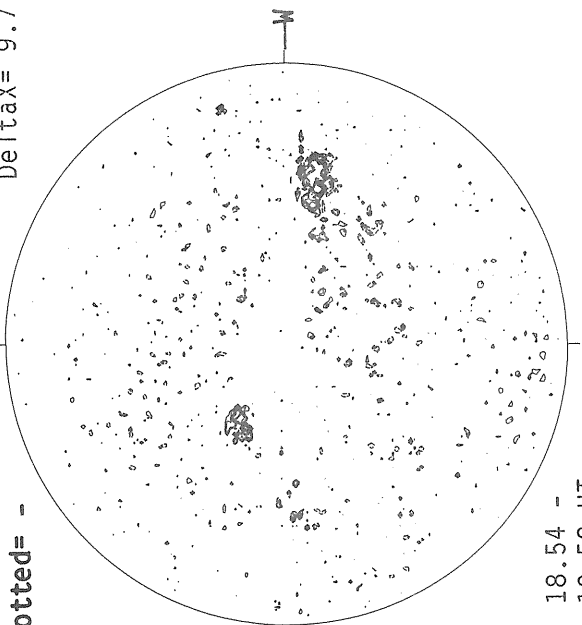


18.54 -
19.50 UT

MT. WILSON MAGNETOGRAM

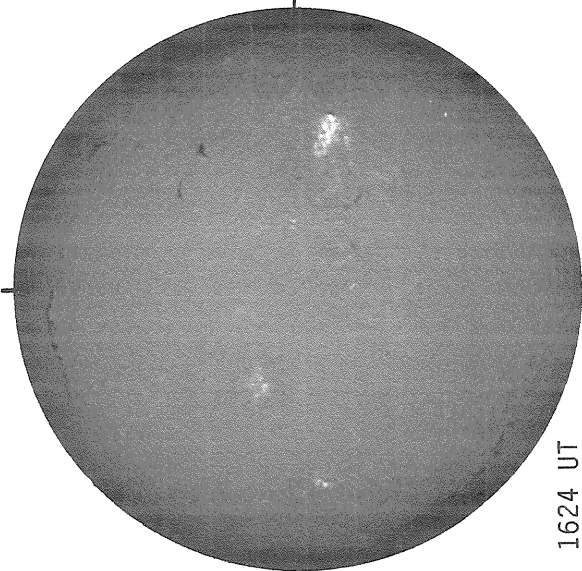
Np

Solid = +
Dotted = -



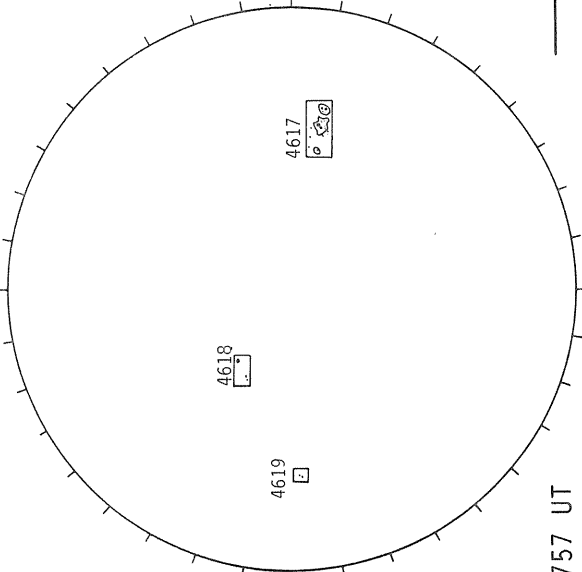
Delta Y = 12.5
Delta X = 9.7

SACRAMENTO PEAK H-ALPHA



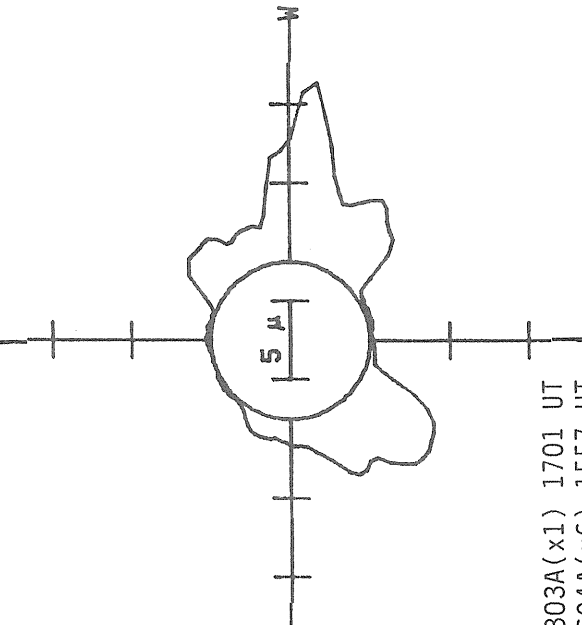
1624 UT

HOLLOMAN SUNSPOTS



1757 UT

SACRAMENTO PEAK CORONA (1.15 Radii)

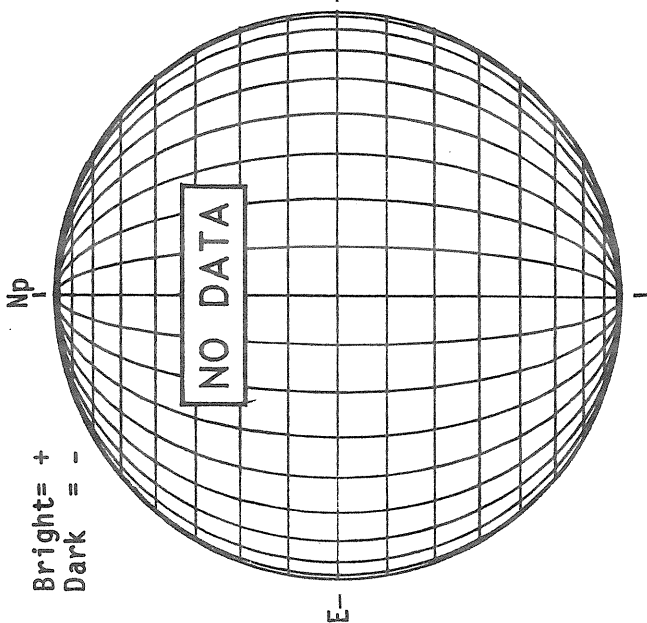


— 5303A(x1) 1701 UT
xxxx 5694A(x6) 1557 UT
No 5694A Activity Today Sp

JANUARY 22, 1985 (P = -7.94, B₀ = -5.14, L₀ = 34.64)

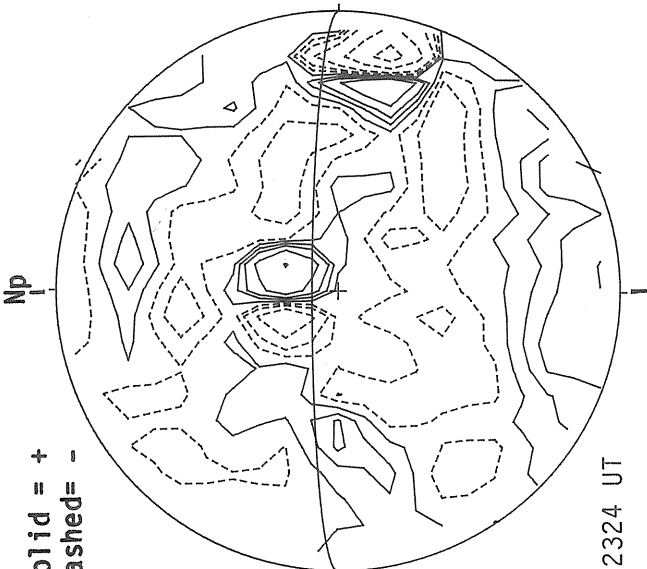
KITT PEAK MAGNETOGRAM

Bright = +
Dark = -



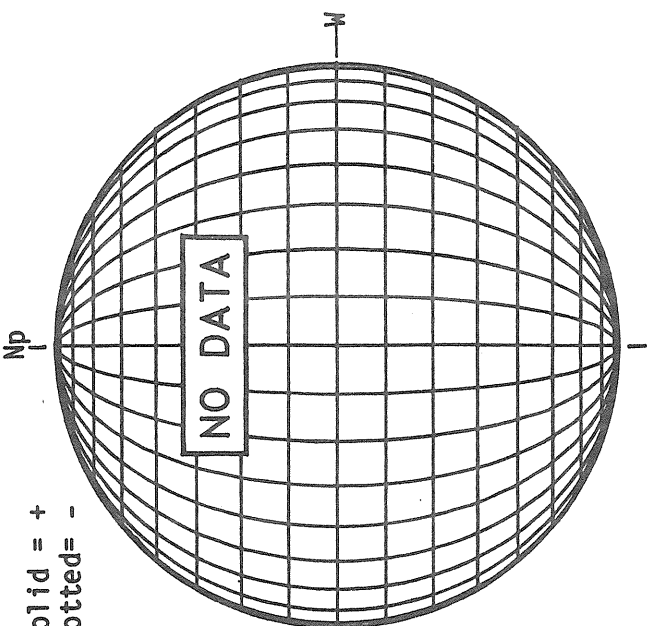
STANFORD MAGNETOGRAM

Solid = +
Dashed = -

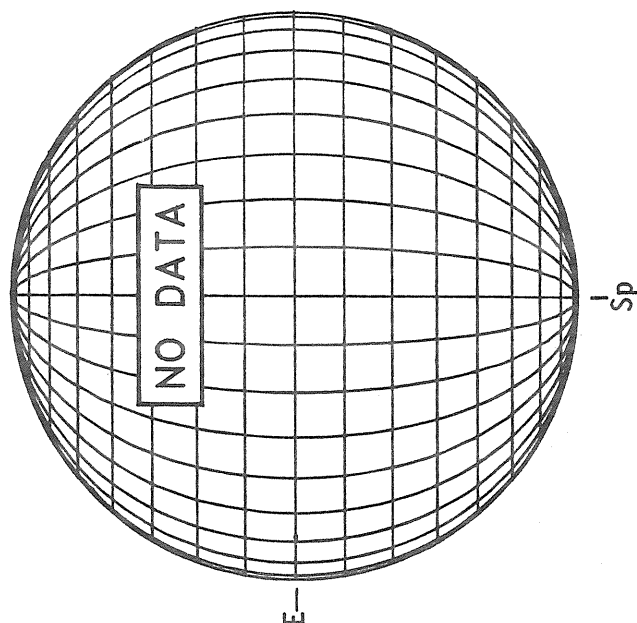


MT. WILSON MAGNETOGRAM

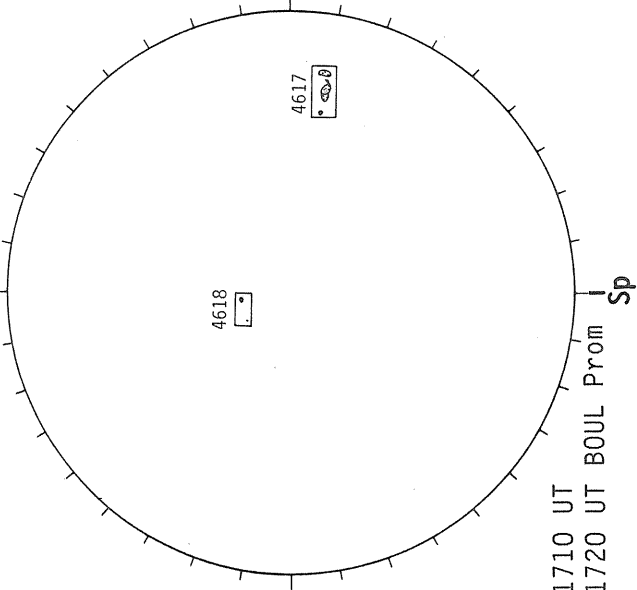
Solid = +
Dotted = -



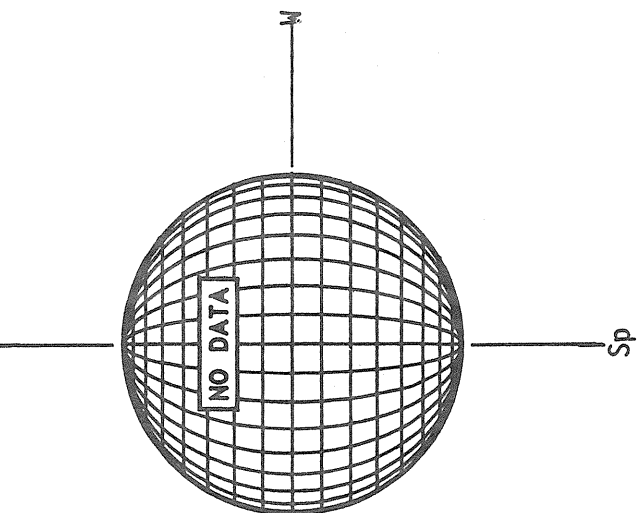
BOULDER H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

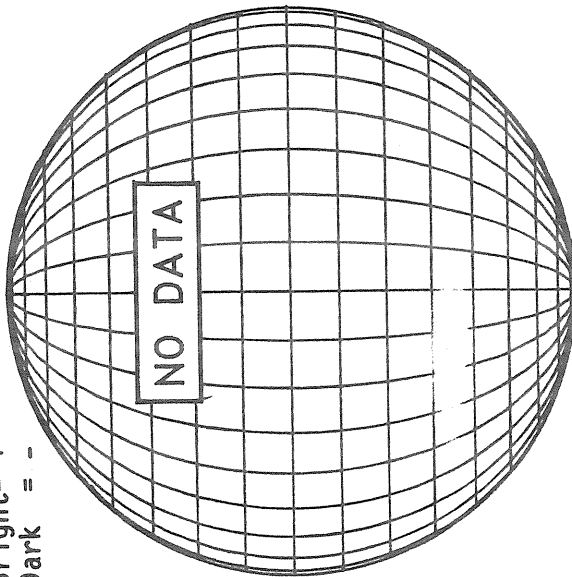


JANUARY 23, 1985 (P = -8.38, B₀ = -5.22, L₀ = 21.47)

KITT PEAK MAGNETOGRAM

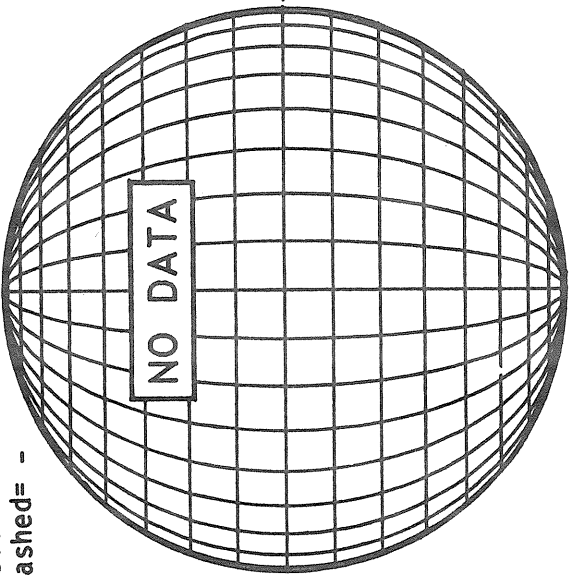
Bright = +
Dark = -

Np



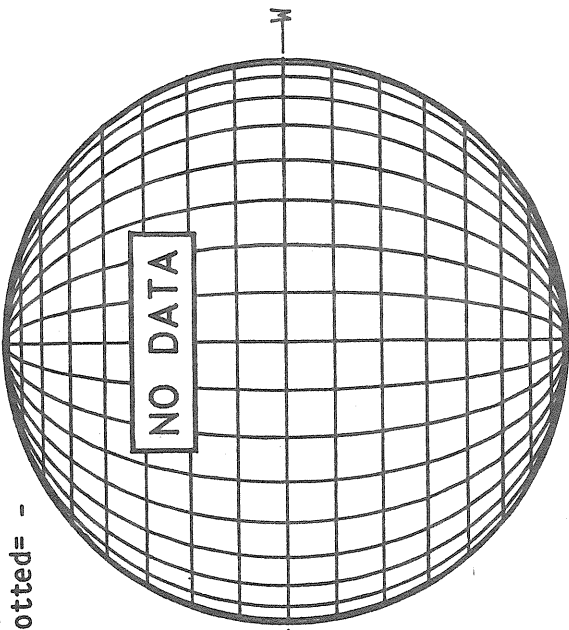
Solid = +
Dashed = -

Np



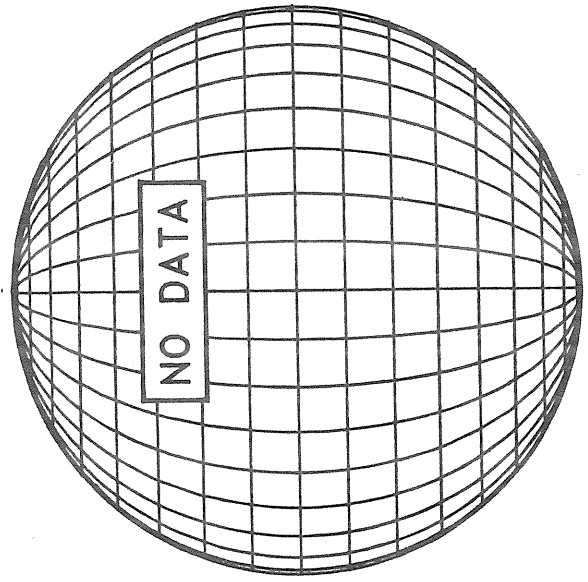
Solid = +
Dotted = -

Np



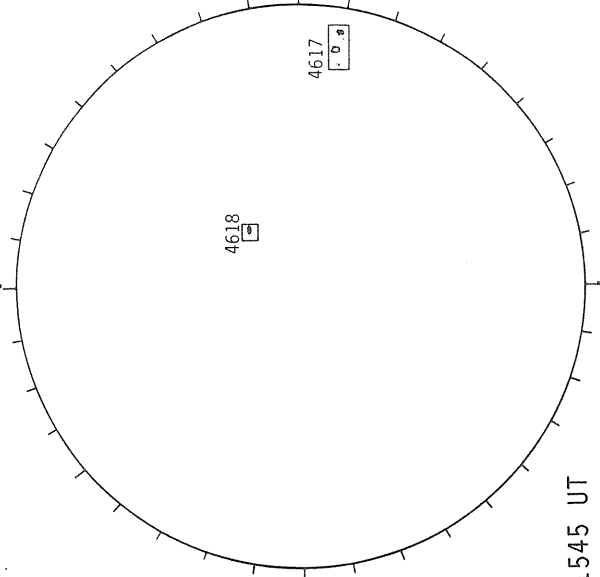
MT. WILSON MAGNETOGRAM

SACRAMENTO PEAK H-ALPHA



Sp

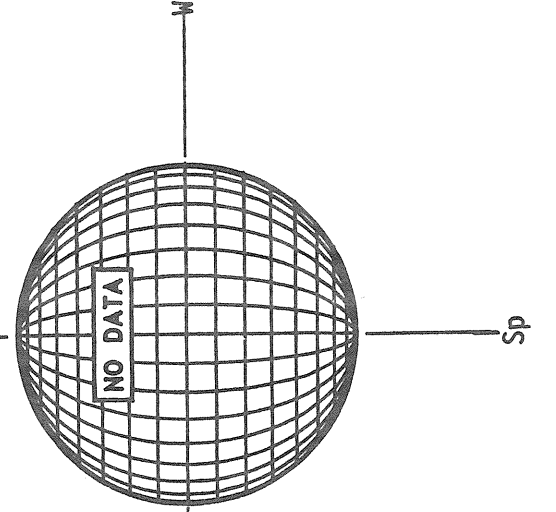
BOULDER SUNSPOTS



1545 UT

Sp

SACRAMENTO PEAK CORONA (1.15 Radii)

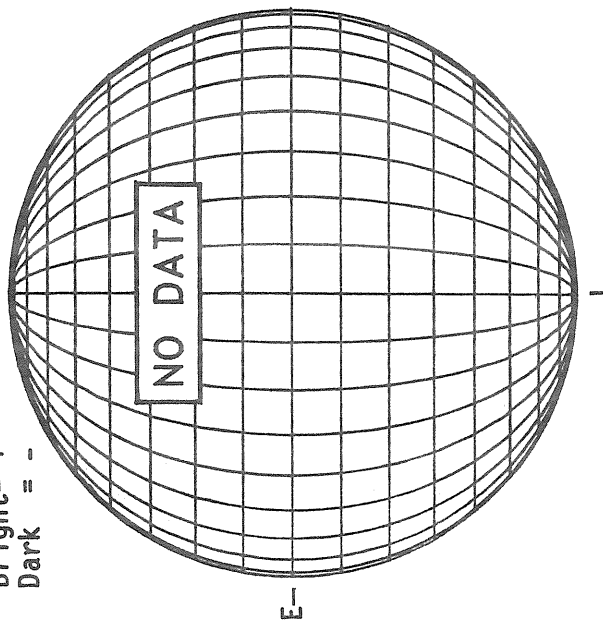


Sp

J A N U A R Y 24, 1985 (P= -8.82, B₀ = -5.31, L₀ = 8.30)

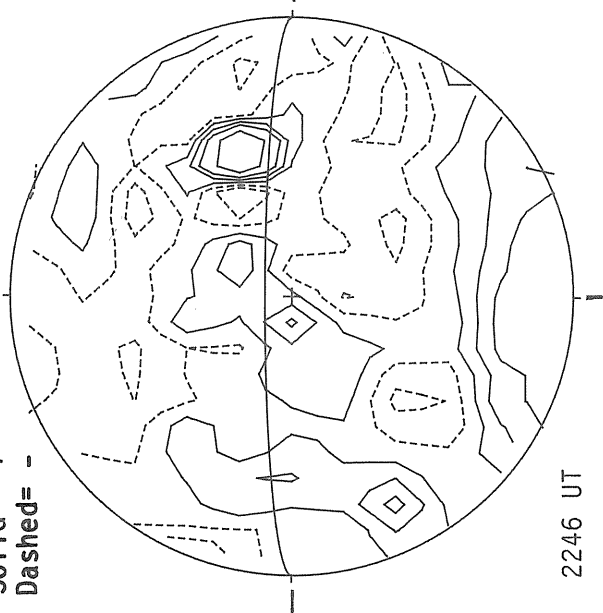
KITT PEAK MAGNETOGRAM

Bright= +
Dark = -



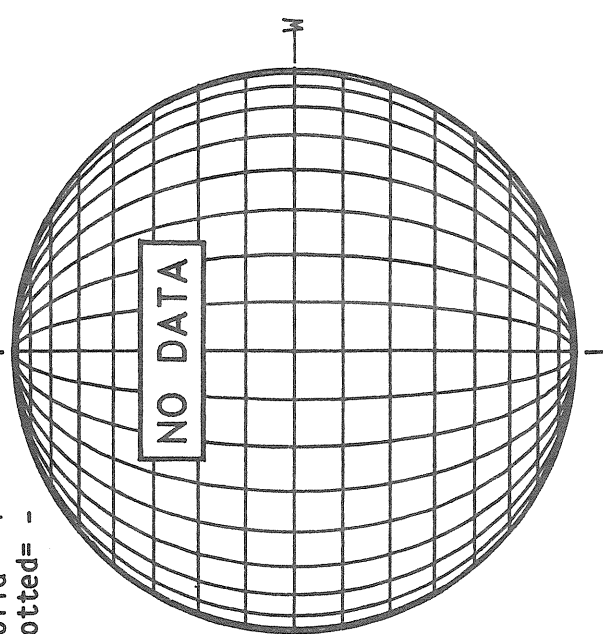
STANFORD MAGNETOGRAM

Solid = +
Dashed = -

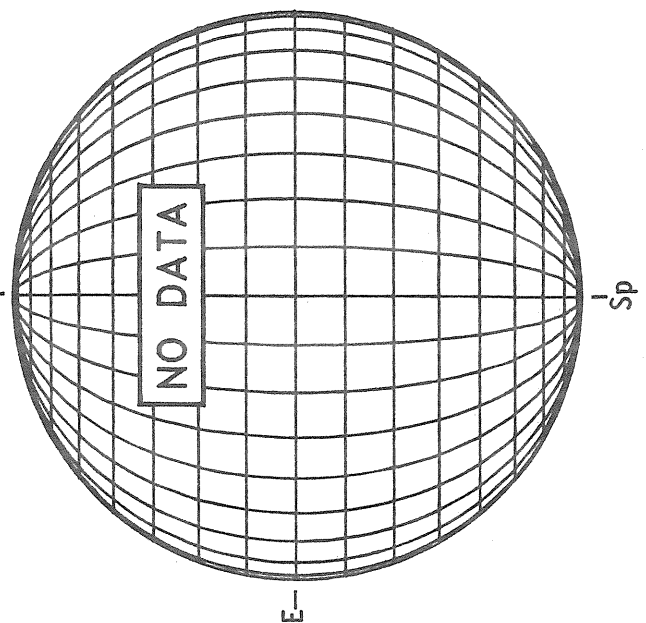


MT. WILSON MAGNETOGRAM

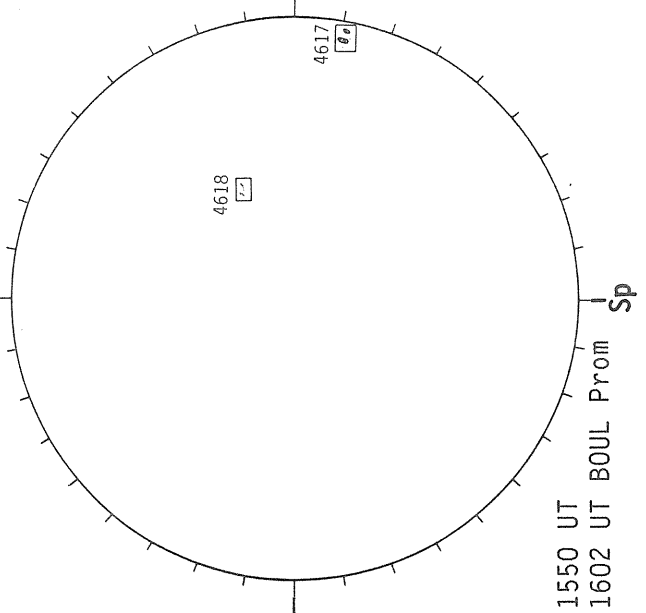
Solid = +
Dotted = -



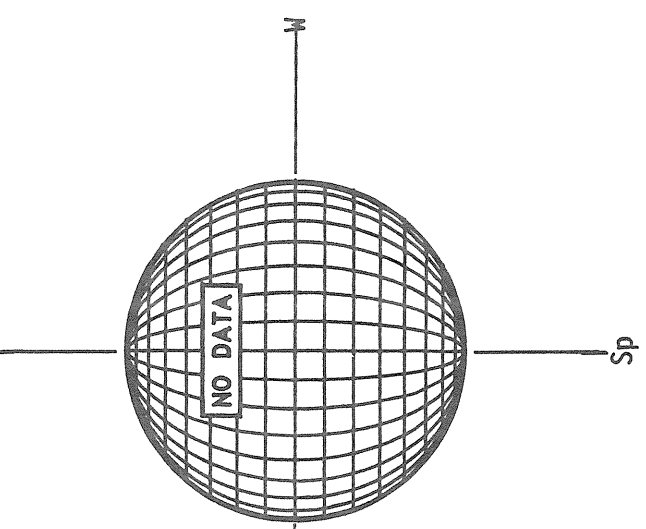
BOULDER H-ALPHA



BOULDER SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

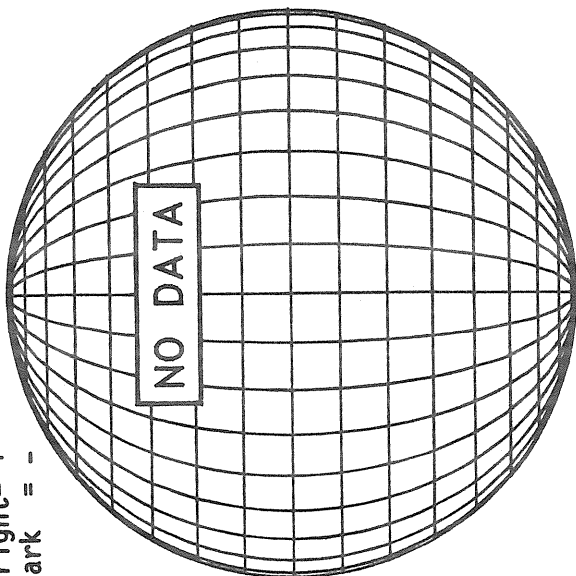


JANUARY 25, 1985 (P = -9.26, $B_0 = -5.39$, $L_0 = 355.14$)

KITT PEAK MAGNETOGRAM

Bright = +
Dark = -

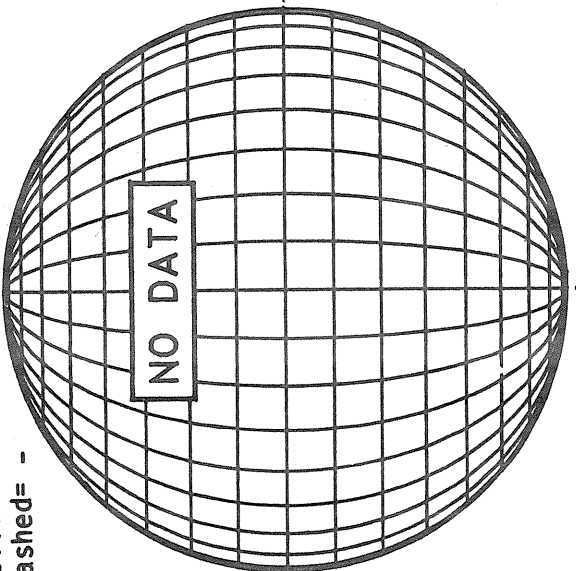
Np



STANFORD MAGNETOGRAM

Solid = +
Dashed = -

Np

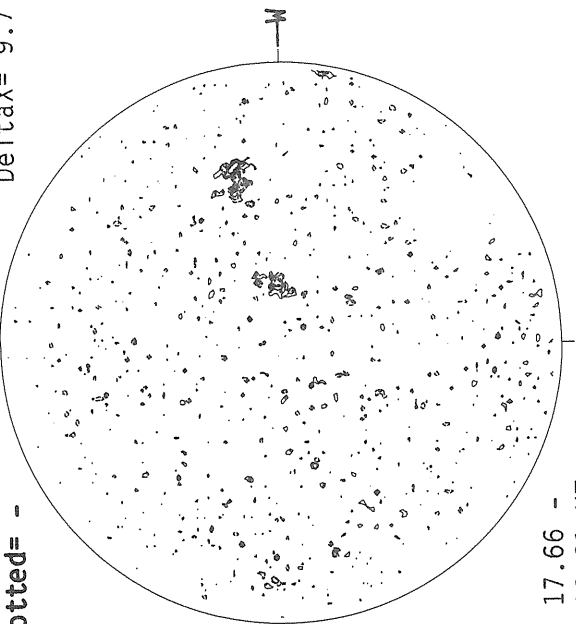


MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -

Np

Delta Y = 12.5
Delta X = 9.7



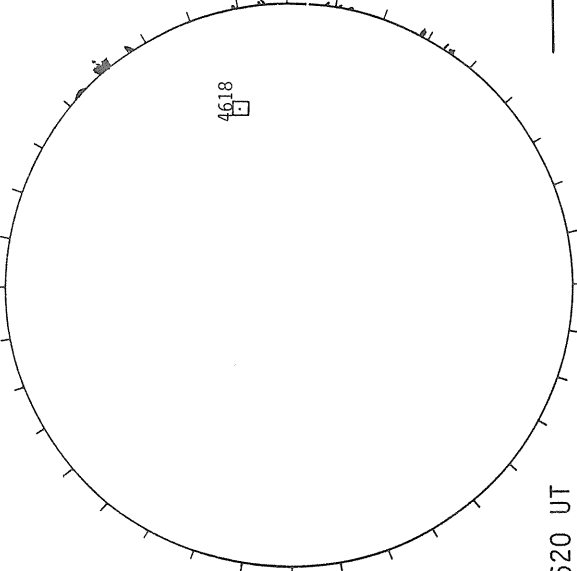
17.66 -
18.61 UT

SACRAMENTO PEAK H-ALPHA



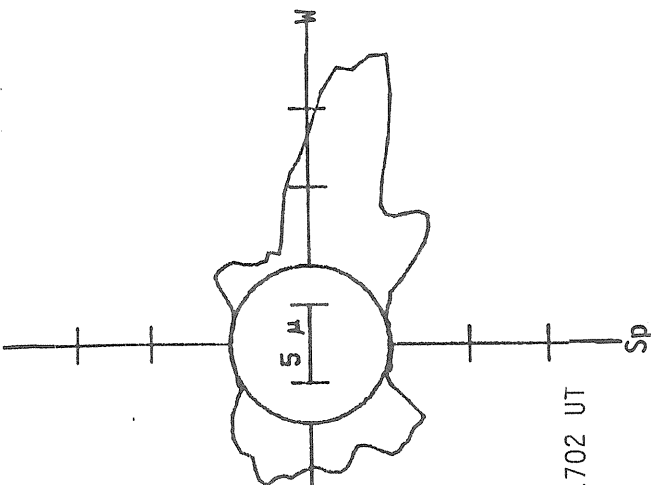
1530 UT

BOULDER SUNSPOTS



1620 UT
1632 UT BOUL Prom

SACRAMENTO PEAK CORONA (1.15 Radii)

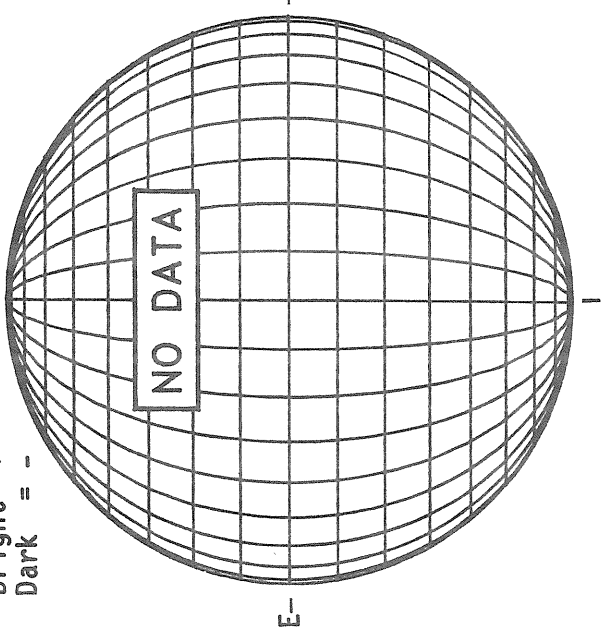


— 5303A(x1) 1702 UT

JANUARY 26, 1985 (P = -9.70, $B_0 = -5.48$, $L_0 = 341.97$)

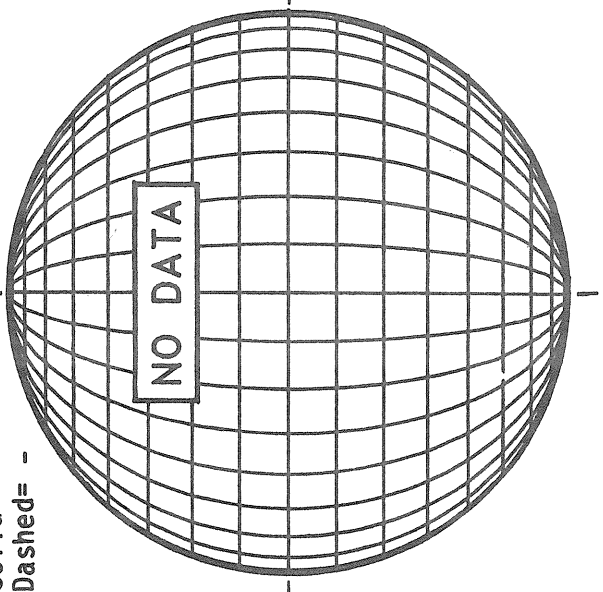
KITT PEAK MAGNETOGRAM

Bright = +
Dark = -



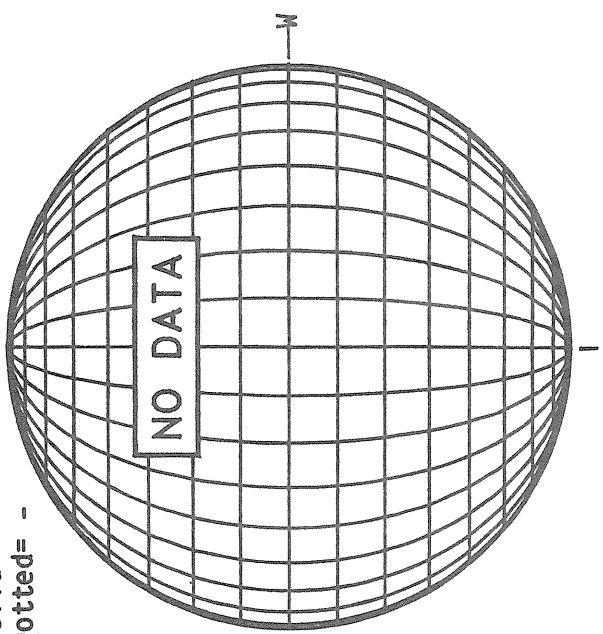
STANFORD MAGNETOGRAM

Solid = +
Dashed = -

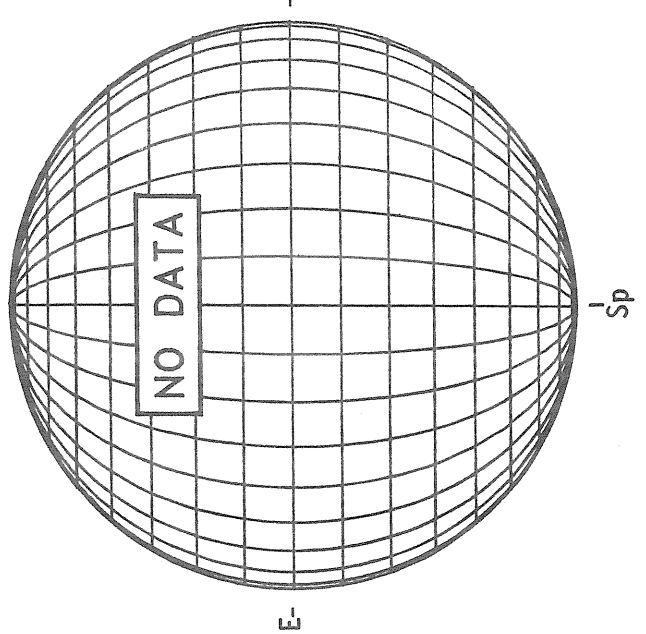


MT. WILSON MAGNETOGRAM

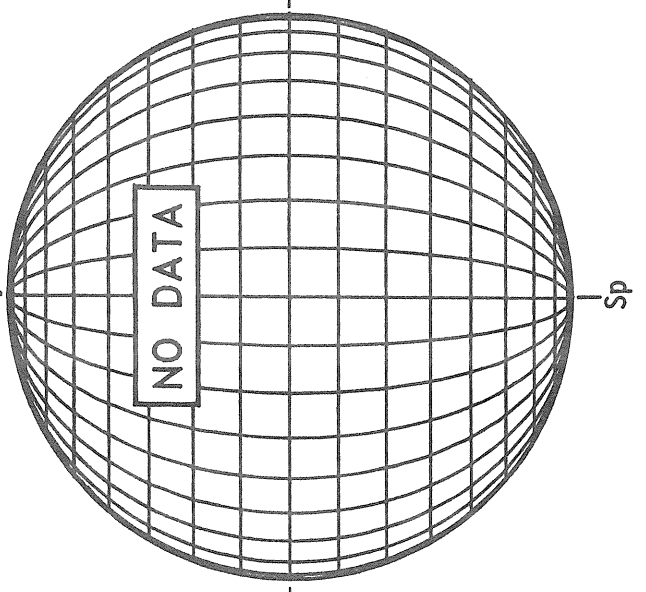
Solid = +
Dotted = -



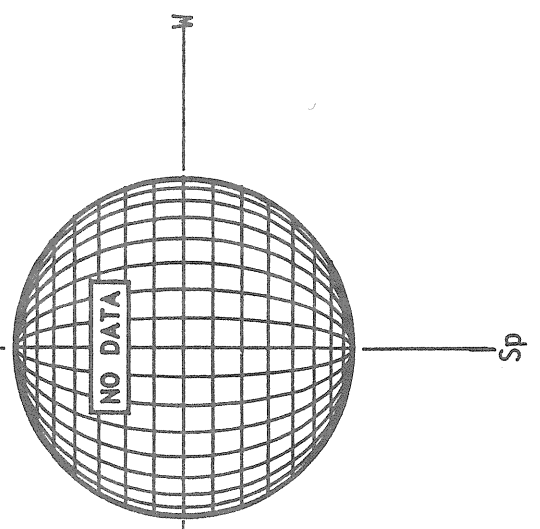
SACRAMENTO PEAK H-ALPHA



HOLLOWAN SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)

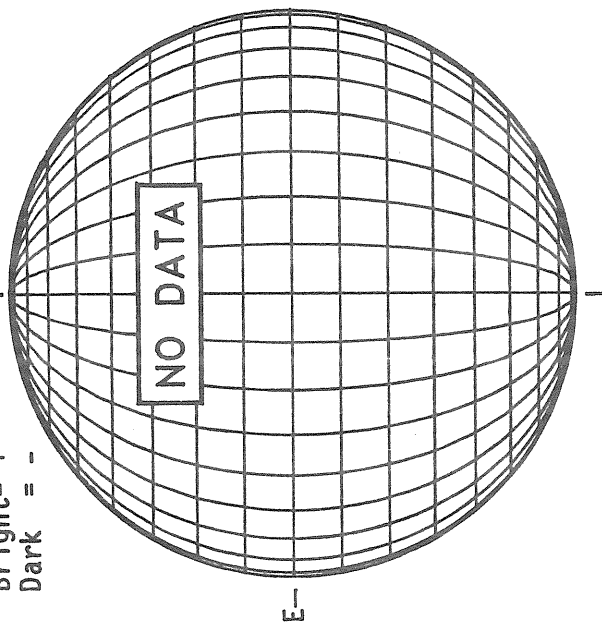


JANUARY 27, 1985 (P=-10.13, B₀=-5.56, L₀= 328.80)

KITT PEAK MAGNETOGRAM

Bright= +
Dark = -

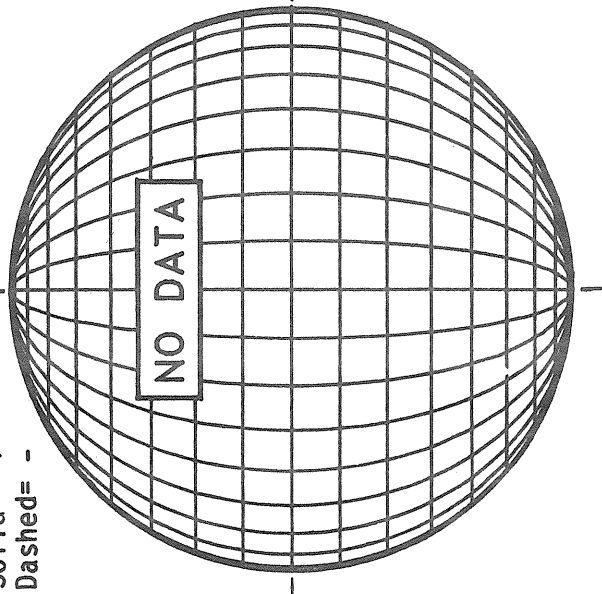
Np



STANFORD MAGNETOGRAM

Solid = +
Dashed = -

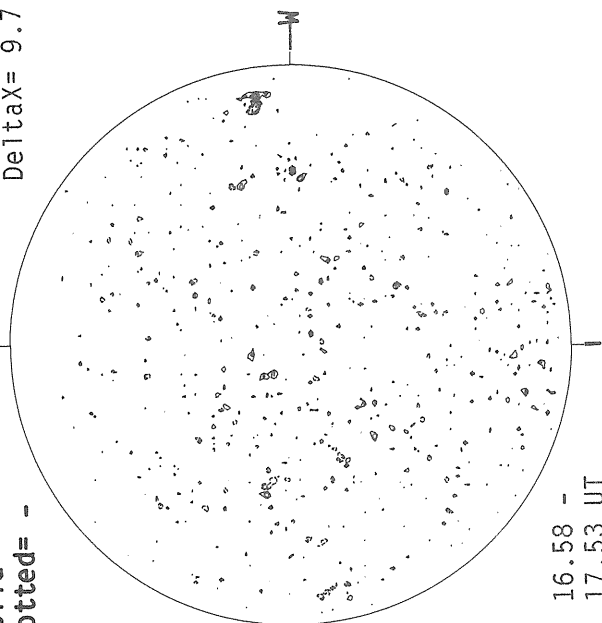
Np



MT. WILSON MAGNETOGRAM

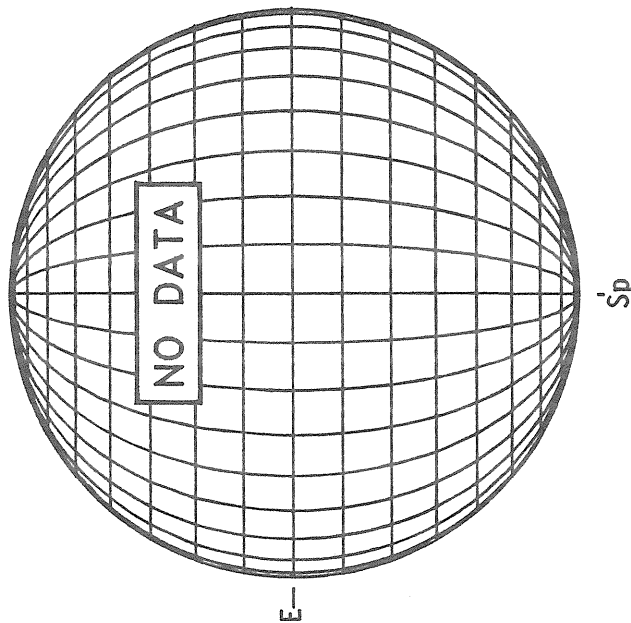
Solid = +
Dotted = -

Np

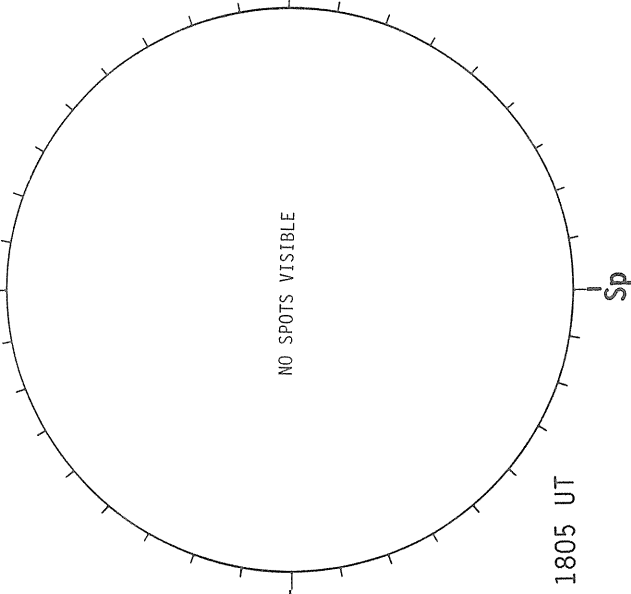


16.58 -
17.53 UT

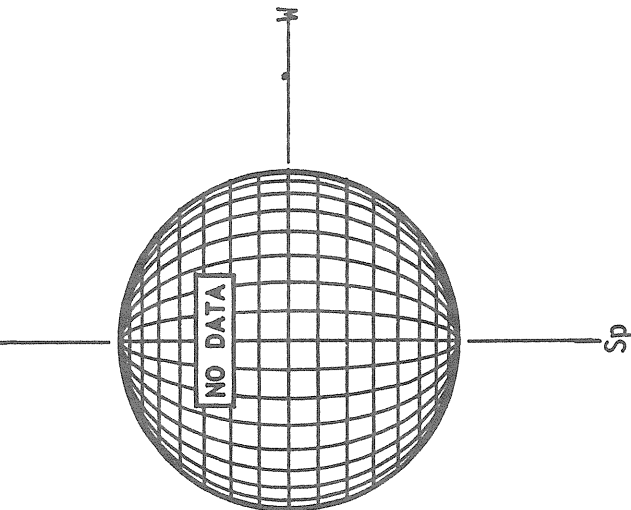
SACRAMENTO PEAK H-ALPHA



HOLLOMAN SUNSPOTS



SACRAMENTO PEAK CORONA (1.15 Radii)



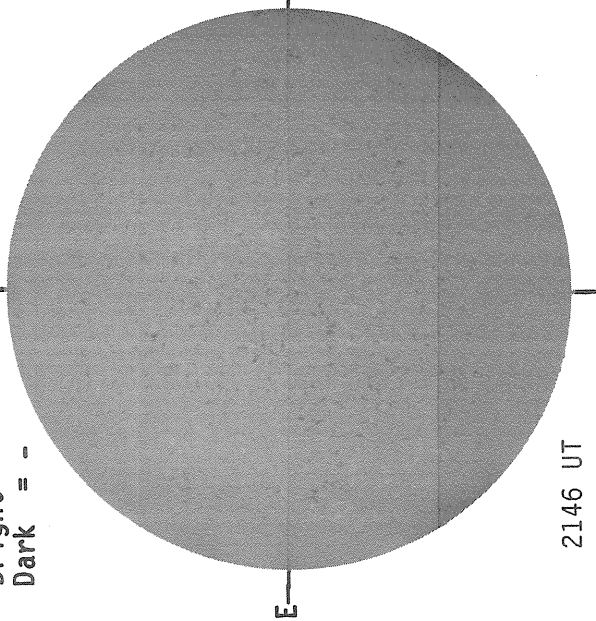
1805 UT

JANUARY 28, 1985 (P=-10.55, $B_0 = -5.63$, $L_0 = 315.64$)

KITT PEAK MAGNETOGRAM

Bright = +
Dark = -

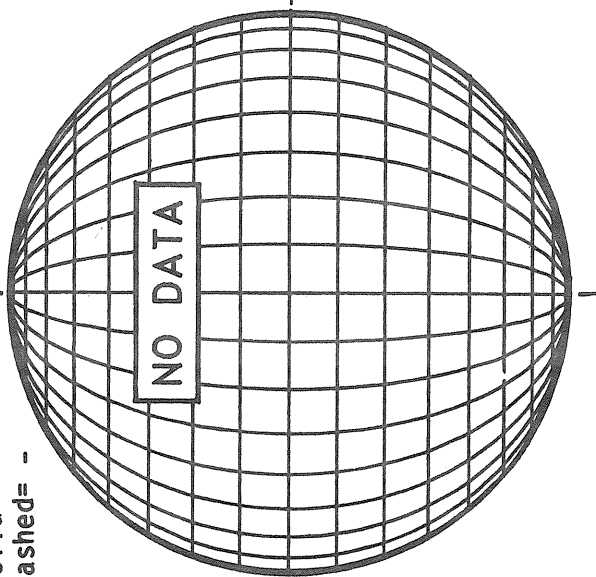
Np



STANFORD MAGNETOGRAM

Solid = +
Dashed = -

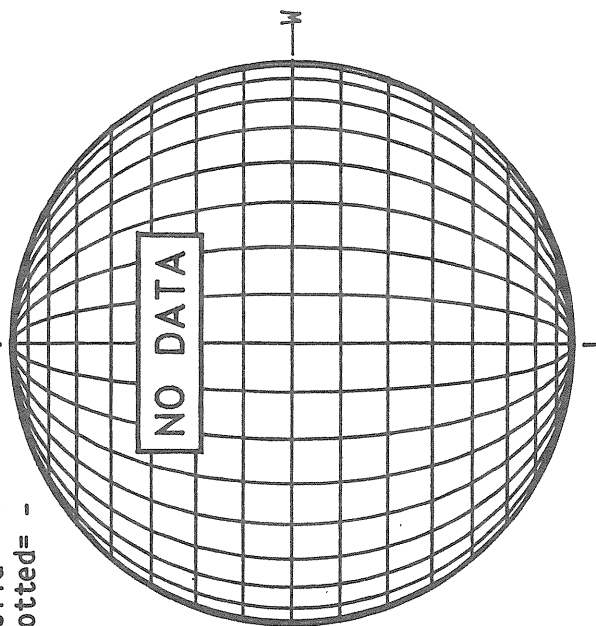
Np



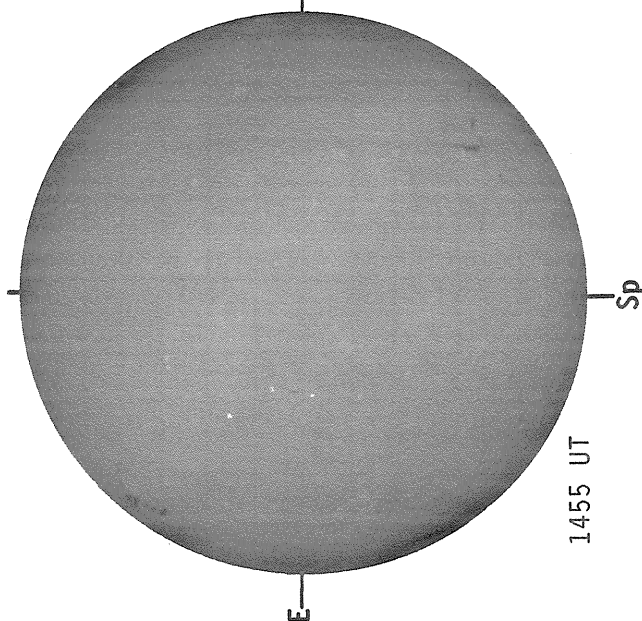
MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -

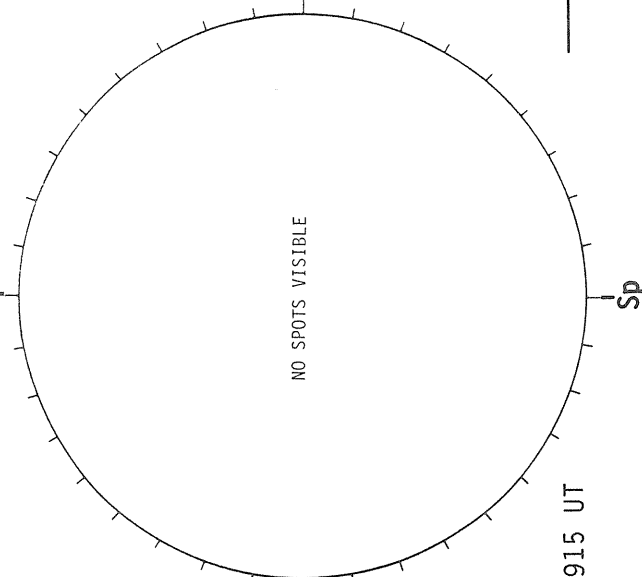
Np



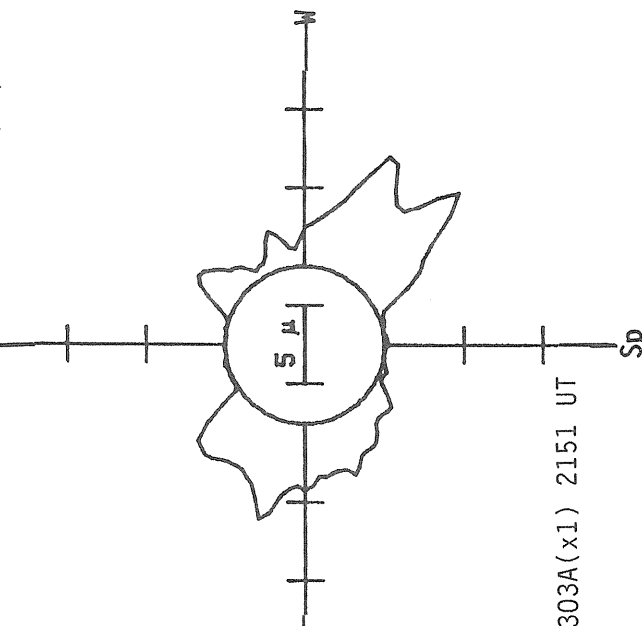
SACRAMENTO PEAK H-ALPHA



HOLLOMAN SUNSPOTS



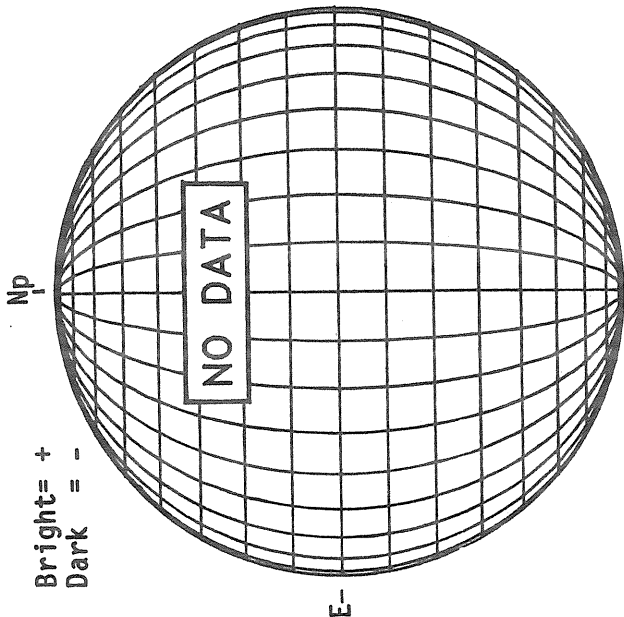
SACRAMENTO PEAK CORONA (1.15 Radii)



5303A(x1)

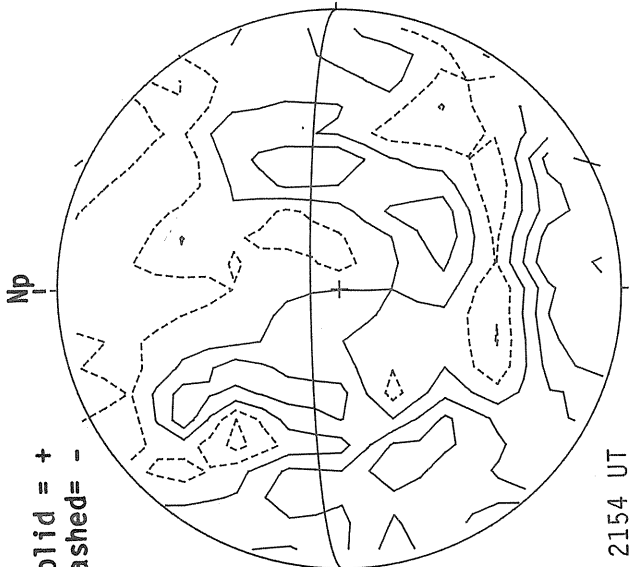
JANUARY 29, 1985 (P=-10.97, $B_0 = -5.71$, $L_0 = 302.47$)

KITT PEAK MAGNETOGRAM



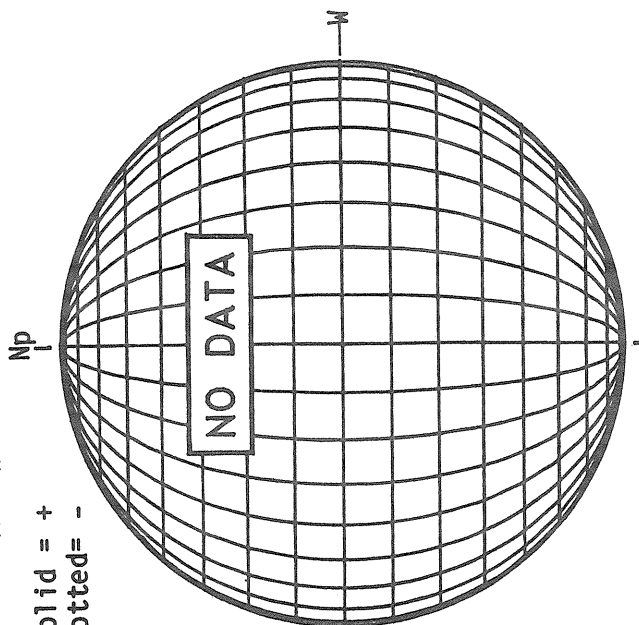
Bright= +
Dark = -

STANFORD MAGNETOGRAM



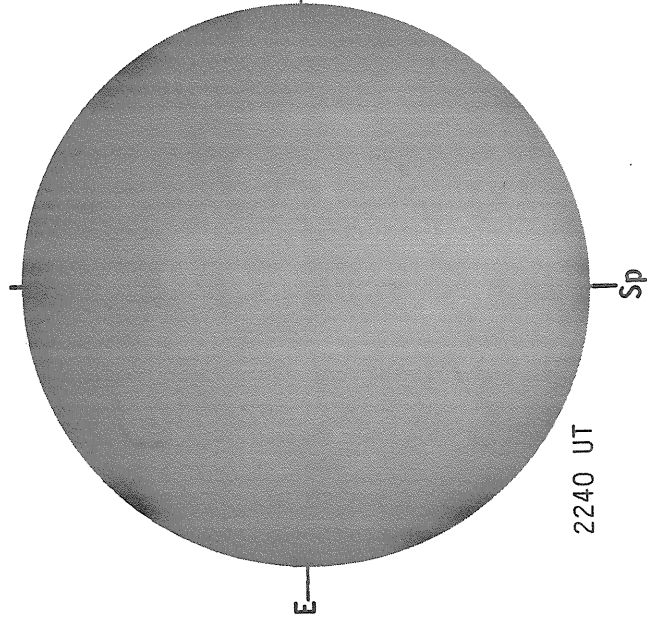
Solid = +
Dashed = -

MT. WILSON MAGNETOGRAM



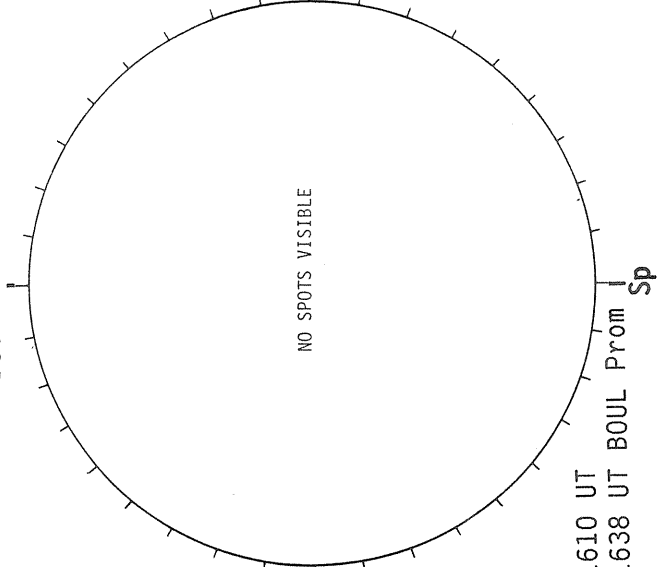
Solid = +
Dotted = -

SACRAMENTO PEAK H-ALPHA



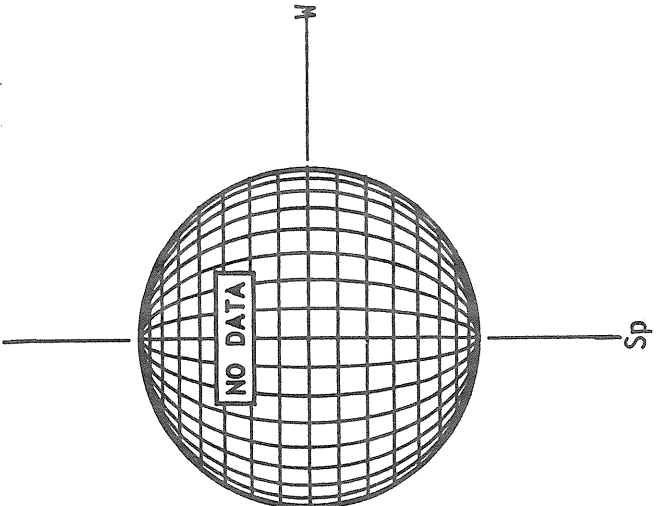
2240 UT

BOULDER SUNSPOTS



1610 UT
1638 UT BOUL Prom

SACRAMENTO PEAK CORONA (1.15 Radii)



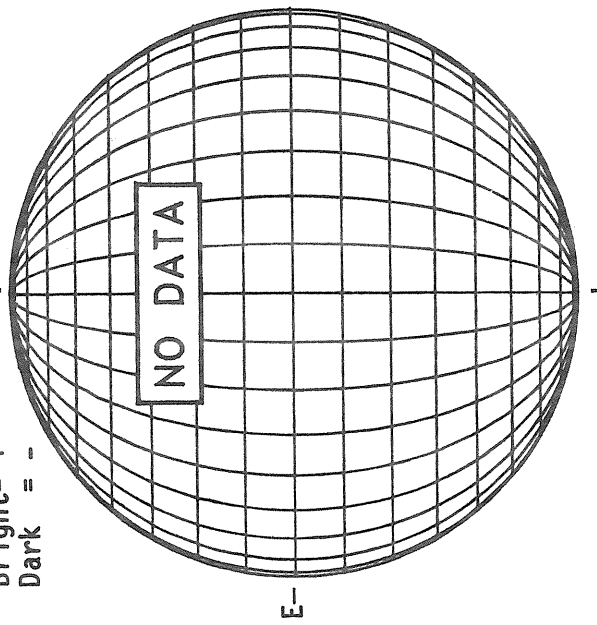
NO DATA

JANUARY 30, 1985 (P=-11.39, $B_0 = -5.79$, $L_0 = 289.31$)

KITT PEAK MAGNETOGRAM

Bright= +
Dark = -

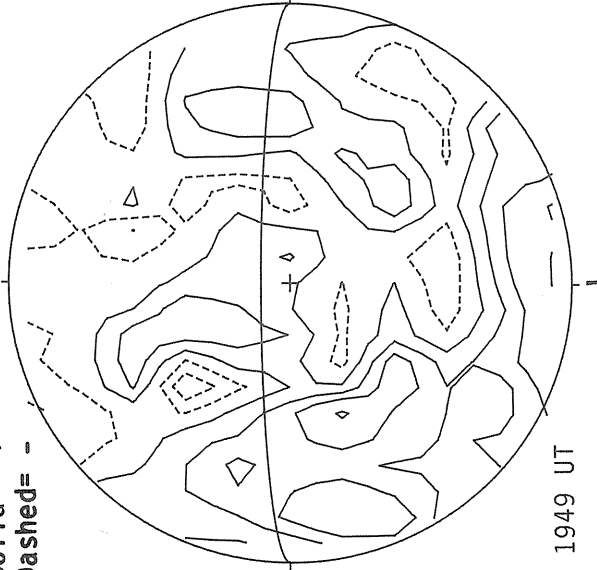
Np



STANFORD MAGNETOGRAM

Solid = +
Dashed= -

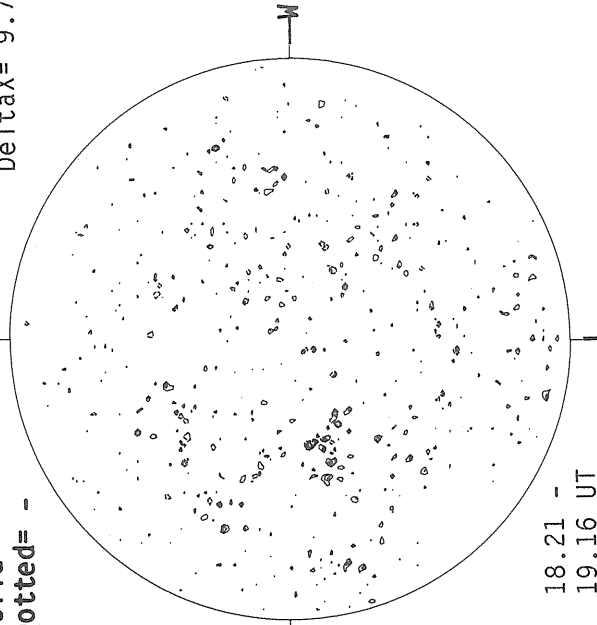
Np



MT. WILSON MAGNETOGRAM

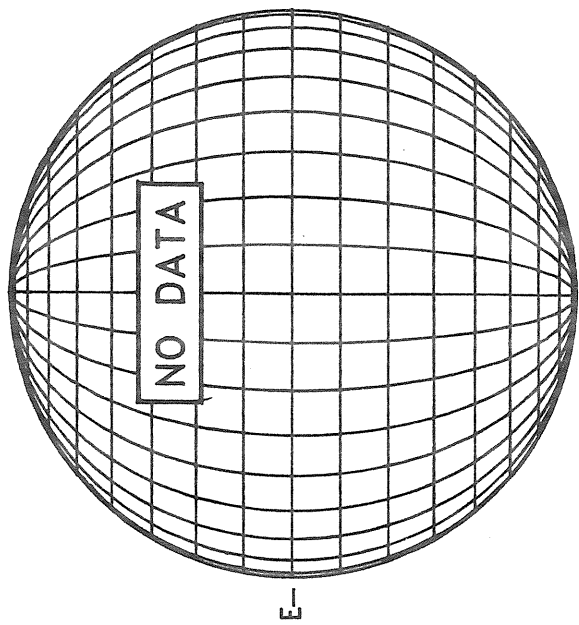
Solid = +
Dotted= -

Np

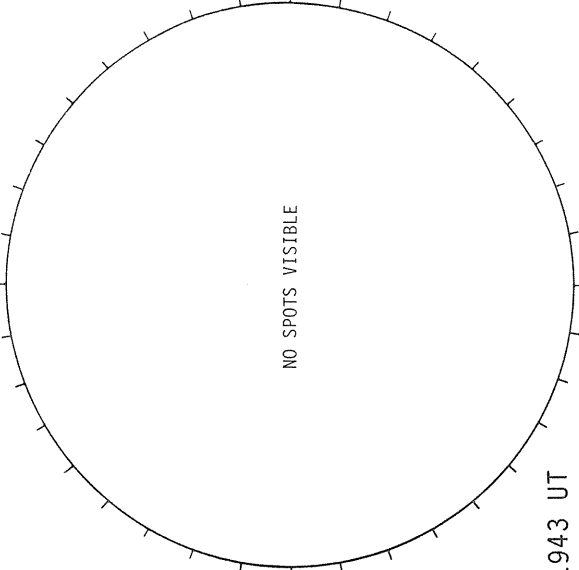


18.21 -
19.16 UT

SACRAMENTO PEAK H-ALPHA



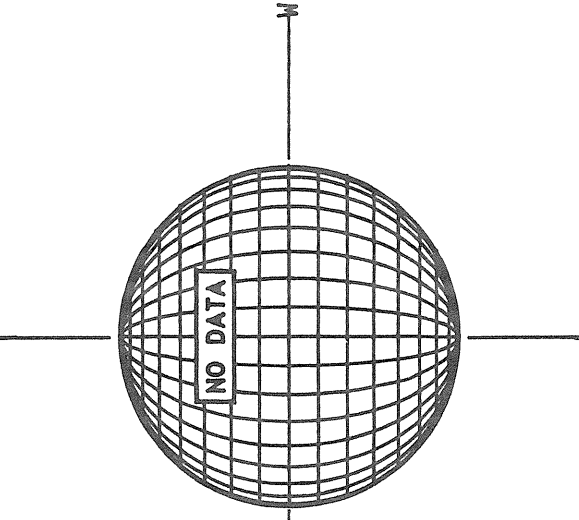
HOLLOMAN SUNSPOTS



NO SPOTS VISIBLE

1943 UT

SACRAMENTO PEAK CORONA (1.15 Radii)



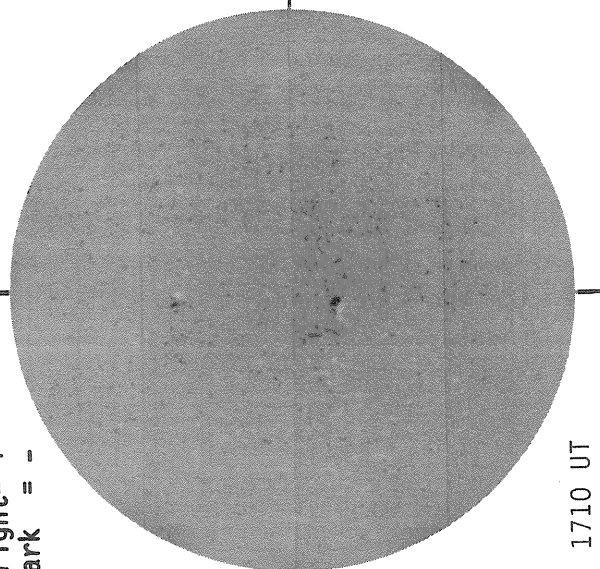
Sp

JANUARY 31, 1985 ($P=-11.80$, $B_0=-5.86$, $L_0=276.14$)

KITT PEAK MAGNETOGRAM

Bright = +
Dark = -

Np

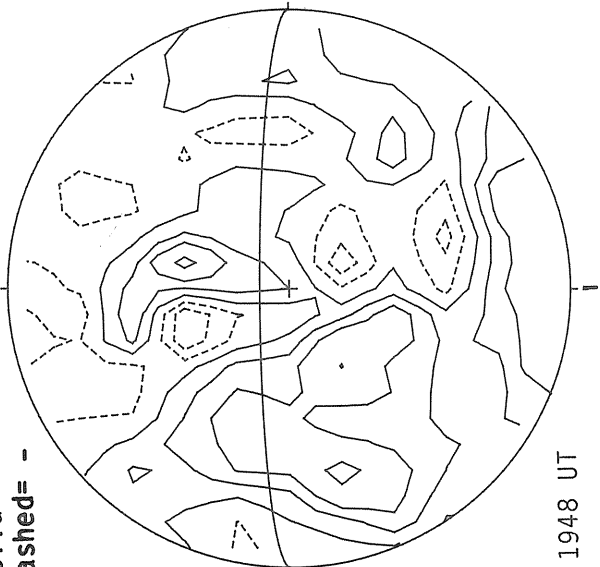


1710 UT

STANFORD MAGNETOGRAM

Solid = +
Dashed = -

Np

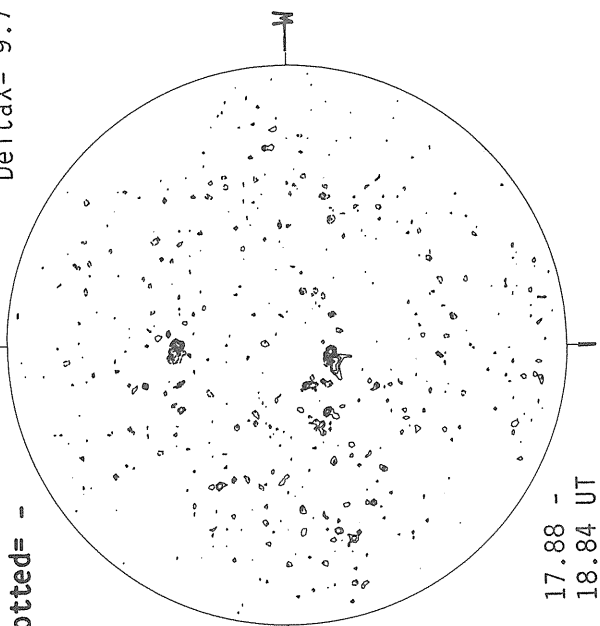


1948 UT

MT. WILSON MAGNETOGRAM

Solid = +
Dotted = -

Np

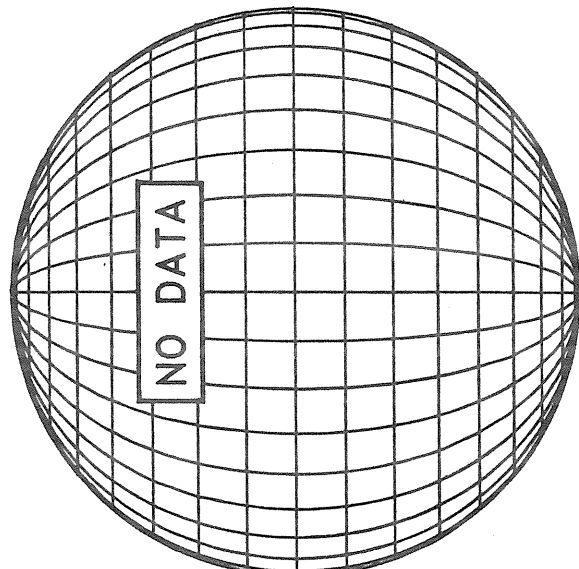


17.88 -
18.84 UT

Delta Y = 12.5
Delta X = 9.7

BOULDER H-ALPHA

NO DATA

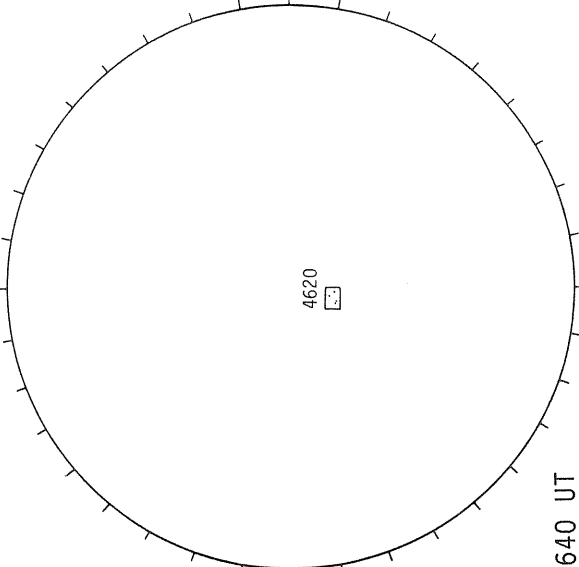


E-

Sp

BOULDER SUNSPOTS

4620

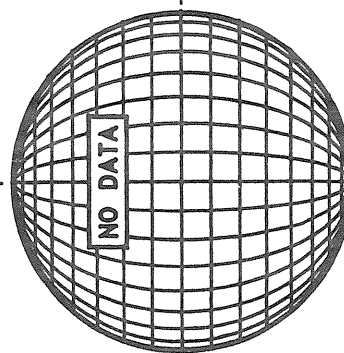


1640 UT
1650 UT BOUL Prom

Sp

SACRAMENTO PEAK CORONA (1.15 Radii)

NO DATA



Sp

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

61
Jan 85

JANUARY 1985

NOAA/ USAF Region	Mt Wilson Region	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
4614A		LEAR	12 29 0003	N02	E50	01 1.7							
4614A		MANI	12 29 0117	N02	E49	01 1.7		A	AXX	10	1	1	2
4614B		RAMY	01 05 1331	N07	W17	01 4.3		A	AXX		1		3
4614C		HOLL	01 06 1645	N07	W18	01 5.3		A	AXX		1		3
4614D		PALE	01 07 1935	S13	W02	01 7.7		A	AXX	10	2	2	2
4614E	24191	MWIL	01 09 1545	N17	W13	01 8.7	3	(B)					
4614F		MANI	01 09 0049	S14	E11	01 9.9			AXX		1		3
4614F		LEAR	01 09 0245	S14	E11	01 9.9		A	AXX	10	1	1	3
4614		HOLL	01 08 1735	N06	E66	01 13.7		A	AXX		1		3
4614	24190	MWIL	01 08 1800	N06	E65	01 13.6	2	(AF)					
4614		PALE	01 08 1936	N05	E66	01 13.8		A	AXX	10	1		3
4614		MANI	01 09 0049	N07	E62	01 13.7			AXX	10	1		3
4614		LEAR	01 09 0245	N07	E61	01 13.7		A	AXX	10	1	1	3
4614G		RAMY	01 08 1440	N06	E70	01 13.9		B	BX0	10	2	2	3
4616		PALE	01 12 1900	S08	E22	01 14.4		A	AXX	10	4	3	3
4616		MANI	01 12 2345	S07	E20	01 14.5			BX0	20	7	4	3
4616		LEAR	01 13 0218	S06	E19	01 14.5		B	BX0	40	5	4	2
4616		BOUL	01 13 1525	S06	E10	01 14.4		B	DSI	80	6	3	2
4616	24192	MWIL	01 13 2245	S08	E07	01 14.5	4	(BF)					
4616		MANI	01 14 0032	S07	E07	01 14.5			DAO	120	10	6	2
4616		LEAR	01 14 0151	S08	E06	01 14.5		B	DAI	150	15	5	2
4616		BOUL	01 14 1535	S06	W03	01 14.4		B	DAI	100	13	4	3
4616	24192	MWIL	01 14 1615	S08	W03	01 14.5	4	(B)					
4616		HOLL	01 14 1938	S07	W05	01 14.4		B	DAI	110	20	4	3
4616		PALE	01 14 2005	S08	W05	01 14.5		B	DAI	170	24	6	3
4616		LEAR	01 15 0019	S07	W08	01 14.4		BD	DAI	150	20	5	3
4616		MANI	01 15 0037	S07	W06	01 14.6			DAO	100	9	6	2
4616		ATHN	01 15 0830	S08	W14	01 14.3			DAI	100	7	6	2
4616	24192	MWIL	01 15 1545	S08	W17	01 14.4	5	(D)					
4616		PALE	01 15 2023	S08	W20	01 14.3		BD	DAI	120	21	5	3
4616		RAMY	01 15 2116	S06	W19	01 14.5		B	DAO	130	22	7	3
4616		BOUL	01 15 2210	S06	W21	01 14.4		B	DAI	90	13	5	3
4616		HOLL	01 15 2313	S06	W21	01 14.4		B	DAI	100	17	5	2
4616		LEAR	01 16 0112	S07	W23	01 14.3		BD	DAI	90	18	6	3
4616		ATHN	01 16 0900	S07	W26	01 14.4		BD	DSO	140	9	7	1
4616		RAMY	01 16 1550	S08	W30	01 14.4		B	DAO	150	30	7	3
4616		BOUL	01 16 1615	S06	W32	01 14.3		B	DAI	110	2	5	2
4616	24192	MWIL	01 16 1630	S08	W31	01 14.4	4	(BP)					
4616		PALE	01 16 1914	S05	W33	01 14.3		BD	DAI	150	33	6	4
4616		MANI	01 16 2353	S07	W35	01 14.4			DAI	290	23	9	2
4616		LEAR	01 17 0041	S07	W35	01 14.4		BD	DAI	160	28	9	3
4616		RAMY	01 17 1300	S08	W43	01 14.3		BD	DKO	380	41	7	4
4616		BOUL	01 17 1620	S06	W43	01 14.5		B	DAI	100	15	4	2
4616	24192	MWIL	01 17 1630	S08	W44	01 14.4	5	(BP)					
4616		PALE	01 17 2020	S07	W47	01 14.3		BD	DAI	230	24	6	1
4616		LEAR	01 18 0003	S07	W49	01 14.3		BD	DAI	120	20	6	3
4616		ATHN	01 18 0840	S07	W50	01 14.6			DAO	160	10	5	1
4616		RAMY	01 18 1150	S07	W55	01 14.4		BD	DAO	220	21	5	3
4616	24192	MWIL	01 18 1600	S08	W57	01 14.4	4	(B)					
4616		BOUL	01 18 1610	S06	W57	01 14.4		B	DSO	270	7	7	2
4616		HOLL	01 18 1702	S07	W57	01 14.4		BG	DAI	270	24	7	3
4616		PALE	01 18 1950	S07	W58	01 14.5		B	DAO	240	17	8	3
4616		MANI	01 19 0033	S07	W62	01 14.4			DAO	270	18	7	3
4616		RAMY	01 19 1130	S08	W69	01 14.3		BG	DAO	170	11	7	4
4616	24192	MWIL	01 19 1615	S07	W71	01 14.4	4	(B)					
4616		BOUL	01 19 1710	S07	W70	01 14.5		B	CSI	70	8	4	2
4616		HOLL	01 19 1710	S07	W70	01 14.5		BG	DAO	100	9	7	3
4616		PALE	01 19 1830	S05	W75	01 14.2		B	CSO	100	4	6	3
4616		LEAR	01 20 0200	S07	W75	01 14.5		B	DAI	30	8	5	3
4616		PALE	01 20 1913	S05	W87	01 14.3		B	CSO	40	2	3	4
4617		RAMY	01 19 1130	S10	W06	01 19.0		B	DAO	60	10	5	4
4617	24193	MWIL	01 19 1615	S09	W07	01 19.2	4	(B)					

SUNSPOT GROUPS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

JANUARY 1985

NOAA/ USAF Region	Mt Wilson Region	Sta	Observation Time		Lat	CMD	CMP Mo Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
4617		BOUL	01	19	1710	S09 W07	01 19.2		B	DAI	70	11	6	2
4617		HOLL	01	19	1710	S10 W09	01 19.0		B	BXO	50	19	7	3
4617		PALE	01	19	1830	S09 W10	01 19.0		B	CAO	90	16	6	3
4617		LEAR	01	20	0200	S13 W14	01 19.0		BG	DAI	100	24	9	3
4617		ATHN	01	20	0650	S10 W15	01 19.2			DAI	150	18	9	3
4617	24193	MWIL	01	20	1600	S10 W22	01 19.0	5	B					
4617		HOLL	01	20	1630	S10 W21	01 19.1		BG	EHI	430	26	12	3
4617		BOUL	01	20	1815	S09 W22	01 19.1		B	DSC	380	20	10	2
4617		PALE	01	20	1913	S09 W23	01 19.1		BGD	EKI	680	38	12	4
4617		LEAR	01	21	0107	S13 W27	01 19.0		BGD	EKI	210	23	12	3
4617		ATHN	01	21	0800	S09 W29	01 19.2			EKI	440	25	13	3
4617		RAMY	01	21	1345	S09 W32	01 19.2		BGD	EKO	640	36	12	4
4617	24193	MWIL	01	21	1745	S10 W35	01 19.1	5	(D)					
4617		HOLL	01	21	1757	S10 W35	01 19.1		BD	EHI	590	24	13	3
4617		PALE	01	21	1935	S08 W37	01 19.0		BGD	EKI	750	25	13	3
4617		MANI	01	22	0030	S10 W40	01 19.0			EKI	580	23	16	3
4617		LEAR	01	22	0050	S11 W39	01 19.1		BGD	EKI	380	21	13	3
4617		ATHN	01	22	0630	S10 W41	01 19.2			EKI	600	25	14	2
4617		RAMY	01	22	1215	S09 W46	01 19.1		BGD	EKO	300	21	13	3
4617	24193	MWIL	01	22	1600	S10 W49	01 19.0	6	(B)					
4617		BOUL	01	22	1710	S10 W47	01 19.2		BGD	EKO	430	30	13	2
4617		MANI	01	23	0011	S10 W53	01 19.0			EKO	650	27	16	3
4617		LEAR	01	23	0058	S11 W54	01 19.0		BG	EKI	260	13	16	3
4617		ATHN	01	23	0615	S09 W55	01 19.1			EKO	320	10	12	3
4617		RAMY	01	23	1515	S10 W62	01 19.0		BGD	FAO	400	18	13	4
4617		BOUL	01	23	1545	S10 W60	01 19.1		B	EAI	240	15	13	2
4617	24193	MWIL	01	23	1815	S10 W65	01 18.9	5	(B)					
4617		HOLL	01	23	1946	S11 W63	01 19.1		BG	EAI	270	15	13	1
4617		LEAR	01	24	0101	S11 W65	01 19.2		BG	EHO	100	9	14	2
4617		ATHN	01	24	0815	S06 W73	01 18.9			EHO	200	3	14	1
4617		RAMY	01	24	1400	S09 W75	01 19.0		B	DAO	150	6	10	2
4617		HOLL	01	24	1825	S10 W75	01 19.1		B	EAO	220	5	13	3
4617		PALE	01	24	2224	S08 W79	01 19.0		BG	EKI	140	5	15	3
4617		LEAR	01	25	0017	S11 W80	01 19.0		B	EHO	80	5	11	3
4617		MANI	01	25	0513	S10 W80	01 19.2			DAO	540	7	12	3
4618		HOLL	01	19	1710	N05 E45	01 23.1		A	AXX		1		3
4618		PALE	01	19	1830	N03 E44	01 23.1		A	AXX		1		3
4618		LEAR	01	20	0200	N04 E39	01 23.0		B	BXO	10	3	3	3
4618		ATHN	01	20	0650	N05 E38	01 23.1			BXO	20	3	2	3
4618	24194	MWIL	01	20	1600	N04 E32	01 23.1	4	B					
4618		HOLL	01	20	1630	N05 E33	01 23.2		B	BXO	20	6	5	3
4618		BOUL	01	20	1815	N04 E30	01 23.0		B	DSO	20	2	2	2
4618		PALE	01	20	1913	N03 E31	01 23.1		B	DAO	60	11	6	4
4618		LEAR	01	21	0107	N04 E26	01 23.0		B	DAO	20	9	7	3
4618		ATHN	01	21	0800	N05 E22	01 23.0			CAO	40	6	6	3
4618		RAMY	01	21	1345	N05 E20	01 23.1		B	DAO	50	9	6	4
4618	24194	MWIL	01	21	1745	N04 E17	01 23.0	4	(B)					
4618		HOLL	01	21	1757	N05 E16	01 22.9		B	CRO	20	6	6	3
4618		PALE	01	21	1935	N04 E16	01 23.0		B	CRO	20	6	6	3
4618		MANI	01	22	0030	N05 E14	01 23.1			CRO	60	6	7	3
4618		LEAR	01	22	0050	N05 E14	01 23.1		B	CSO	20	5	7	3
4618		ATHN	01	22	0630	N03 E10	01 23.0			CAO	30	3	5	2
4618		RAMY	01	22	1215	N06 E04	01 22.8		B	DAO	40	2	2	3
4618	24194	MWIL	01	22	1600	N06 E02	01 22.8	3	(AP)					
4618		BOUL	01	22	1710	N04 E03	01 22.9		B	CSO	10	2	4	2
4618		MANI	01	23	0011	N05 E00	01 23.0			CSO	70	2	4	3
4618		LEAR	01	23	0058	N06 W04	01 22.7		A	HSX	20	2	1	3
4618		ATHN	01	23	0615	N08 W05	01 22.9		A	HSX	20	1	2	3
4618		RAMY	01	23	1515	N06 W11	01 22.8		B	CAO	10	4	3	4
4618		BOUL	01	23	1545	N06 W12	01 22.8		B	CSO	20	2	2	2
4618	24194	MWIL	01	23	1815	N06 W14	01 22.7	3	(B)					
4618		HOLL	01	23	1946	N06 W14	01 22.8		B	DSO	40	3	2	1
4618		LEAR	01	24	0101	N06 W17	01 22.8		A	AXX	10	3	1	2
4618		ATHN	01	24	0815	N06 W20	01 22.8		A	BXO	40	2	3	1
4618		RAMY	01	24	1400	N08 W24	01 22.8		B	BXO	20	7	4	2
4618		HOLL	01	24	1825	N06 W25	01 22.9		B	BXO	20	5	3	3
4618		PALE	01	24	2224	N08 W38	01 22.1		B	BXO	10	5	4	3
4618		LEAR	01	25	0017	N07 W31	01 22.7		B	BXO	10	2	3	3
4618		MANI	01	25	0513	N05 W30	01 23.0			BXO	70	3	3	3
4618		HOLL	01	25	1600	N06 W37	01 22.9		B	BXO	10	3	2	3

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NOAA/ USAF Region	Mt Wilson Region	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	
4618	24194	BOUL	01 25	1620	N05	W39	01 22.8			A	AXX	10	1	1	3	
4618		MWIL	01 25	1745	N07	W38	01 22.9	3		(BF)						
4618		PALE	01 25	1842	N08	W41	01 22.7			A	AXX	10	1	1	2	
4619	24195	MWIL	01 20	1600	S06	E56	01 24.9	3		AF						
4619		HOLL	01 20	1630	S05	E55	01 24.8			B	BXO	10	2	2	3	
4619		PALE	01 20	1913	S07	E55	01 24.9			B	BXO	20	5	5	4	
4619	24195	LEAR	01 21	0107	S07	E52	01 24.9			B	CXO	10	3	3	3	
4619		ATHN	01 21	0800	S05	E48	01 24.9			B	BXO	10	3	4	3	
4619		MWIL	01 21	1745	S06	E42	01 24.9	3		(AF)						
4619		HOLL	01 21	1757	S06	E42	01 24.9			A	AXX	10	2	1	3	
4619		PALE	01 21	1935	S08	E41	01 24.9			A	AXX	10	3	2	3	
4619		MANI	01 22	0030	S06	E38	01 24.9				BXO	30	2	3	3	
4619		LEAR	01 22	0050	S07	E38	01 24.9			B	BXO	10	2	3	3	
4619		ATHN	01 22	0630	S08	E35	01 24.9				AXX	10	1	1	2	
4619		RAMY	01 22	1215	S06	E32	01 24.9			A	HAX	20	1	1	3	
4619A			PALE	01 26	1912	N07	W23	01 25.1			A	AXX		1		3
4619A			LEAR	01 27	0010	N04	W28	01 24.9			A	AXX	10	1	1	2
4622	24197	MWIL	02 01	1600	S15	W45	01 29.3	3		(BF)						
4622		RAMY	02 01	1819	S14	W46	01 29.3			B	BXO	20	5	4	3	
4622		PALE	02 01	1957	S11	W47	01 29.3			B	BXO	20	7	6	3	
4622	24197	MANI	02 02	0047	S15	W51	01 29.2				BXO	20	4	3	3	
4622		LEAR	02 02	0127	S15	W52	01 29.1			A	AXX	20	3	3	3	
4622		ATHN	02 02	1000	S13	W54	01 29.3				BXO	30	2	3	3	
4622		RAMY	02 02	1428	S14	W58	01 29.2			B	BXO	10	3	3	3	
4622		HOLL	02 02	1644	S13	W59	01 29.2			B	BXO	10	3	5	3	
4622		MWIL	02 02	1915	S15	W61	01 29.2	2		(AF)						
4622		PALE	02 02	1935	S12	W61	01 29.2			B	BXO	10	3	4	4	
4620		24196	MWIL	01 31	1545	S15	E03	01 31.9	3		(BP)					
4620			BOUL	01 31	1640	S15	E02	01 31.8			A	AXX	10	4	2	2
4620			PALE	01 31	1945	S14	E01	01 31.9			A	AXX	10	5	3	3
4620		24196	LEAR	02 01	0125	S13	E03	02 1.3			A	AXX	10	2	2	3
4620	ATHN		02 01	0730	S14	W07	01 31.8			A	HSX	10	1	1	1	
4620	MWIL		02 01	1600	S15	W12	01 31.8	2		(AP)						
4620	PALE		02 01	1957	S15	W15	01 31.7			B	BXO	10	4	4	3	
4620	HOLL		02 02	1644	S15	W23	02 1.0			A	AXX		1		3	
4620	PALE		02 02	1935	S14	W26	01 31.9			A	AXX		1		4	
4620	MANI		02 02	2348	S15	W26	02 1.0				BXO	20	5	3	3	
4620	LEAR		02 03	0040	S15	W28	01 31.9			B	BXO	20	4	3	3	
4620	ATHN		02 03	0800	S14	W31	02 1.0				CSO	40	6	4	3	
4620	BOUL		02 03	1520	S13	W35	02 1.0			B	CAO	30	3	3	2	
4620	24199		MWIL	02 03	1545	S16	W36	01 31.9	4		(BF)					
4620		RAMY	02 03	1550	S16	W36	01 31.9			B	BXO	20	2	3	3	
4620		PALE	02 03	2213	S14	W38	02 1.1			B	CRO	20	3	3	1	
4620	24199	MANI	02 04	0110	S15	W40	02 1.0				AXO	30	3	3	3	
4620		LEAR	02 04	0308	S17	W40	02 1.1			B	DSO	10	3	1	2	
4620		RAMY	02 04	1346	S17	W48	01 31.9			B	BXO	20	4	3	4	
4620		BOUL	02 04	1621	S19	W46	02 1.2			A	AXX	10	2	1	2	
4620		MWIL	02 04	1915	S16	W49	02 1.1	3		(AF)						
4620		MANI	02 05	0058	S17	W53	02 1.0				AXX	10	2	1	3	
4620		LEAR	02 05	0115	S15	W52	02 1.1			A	AXX	10	2	1	3	
4621		24198	PALE	01 31	1945	N19	E01	01 31.9			A	AXX	10	3	3	3
4621			LEAR	02 01	0125	N18	W03	01 31.8			A	AXX	10	3	3	3
4621			ATHN	02 01	0730	N18	W06	01 31.9				CSO	20	3	2	1
4621		24198	MWIL	02 01	1600	N17	W12	01 31.8	4		(B)					
4621	BOUL		02 01	1620	N17	W13	01 31.7			B	CSO	40	5	3	2	
4621	RAMY		02 01	1819	N18	W13	01 31.8			B	CAO	40	9	4	3	
4621	PALE		02 01	1957	N19	W12	01 31.9			B	CRO	50	20	6	3	
4621	MANI		02 02	0047	N18	W16	01 31.8				DAO	80	8	5	3	
4621	LEAR		02 02	0127	N17	W16	01 31.8			B	DAO	70	7	5	3	
4621	ATHN		02 02	1000	N16	W19	02 1.0				DSO	110	10	4	3	
4621	RAMY		02 02	1428	N17	W25	01 31.7			B	DAO	130	9	5	3	
4621	BOUL		02 02	1611	N17	W26	01 31.7			B	DSO	70	10	6	2	
4621	HOLL		02 02	1644	N16	W25	01 31.8			B	DSO	150	9	6	3	
4621	24198		MWIL	02 02	1915	N16	W27	01 31.8	5		(B)					
4621		PALE	02 02	1935	N18	W26	01 31.8			B	DAO	150	12	7	4	
4621		MANI	02 02	2348	N18	W29	01 31.8				DSO	120	4	7	3	

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SUNSPOT GROUPS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

JANUARY 1985

NOAA/ USAF Region	Mt Wilson Region	Sta	Observation Time		Lat	CMD	CMP Mo Day	Max H	Mag Class	Spot Class	Corrected Area (10-6 Hemi)	Spot Count	Long. Extent (Deg)	Qual
4621		LEAR	02	03	0040	N17 W30	01 31.7		B	DSO	110	8	7	3
4621		ATHN	02	03	0800	N18 W34	01 31.7			DSO	130	8	9	3
4621		BOUL	02	03	1520	N17 W36	01 31.9		B	DSO	50	2	5	2
4621	24198	MWIL	02	03	1545	N16 W38	01 31.8	4	(B)					
4621		RAMY	02	03	1550	N16 W39	01 31.7		B	DAO	70	5	7	3
4621		PALE	02	03	2213	N17 W43	01 31.7		B	DAO	60	5	7	1
4621		MANI	02	04	0110	N18 W43	01 31.8			DAO	110	7	7	3
4621		LEAR	02	04	0308	N15 W45	01 31.7		B	DSO	40	4	7	2
4621		RAMY	02	04	1346	N16 W52	01 31.6		B	DAO	40	5	8	4
4621		BOUL	02	04	1621	N12 W54	01 31.6		B	DSO	40	5	6	2
4621	24198	MWIL	02	04	1915	N16 W53	01 31.8	4	(B)					
4621		MANI	02	05	0058	N16 W58	01 31.6			DSO	80	4	86	3
4621		LEAR	02	05	0115	N17 W57	01 31.7		B	DSO	20	2	6	3
4621		ATHN	02	05	0650	N16 W59	01 31.8			DSO	20	2	7	2
4621		RAMY	02	05	1344	N15 W65	01 31.7		B	DAO	20	2	8	4
4621		HOLL	02	05	1502	N16 W64	01 31.8		B	DSO	30	2	8	3
4621	24198	MWIL	02	05	1545	N15 W64	01 31.8	3	(B)					
4621		PALE	02	05	2218	N18 W70	01 31.6		B	CRO	10	2	9	1
4621		MANI	02	06	0040	N18 W71	01 31.6			CRO	70	2	9	3
4621		LEAR	02	06	0109	N19 W65	02 1.1		A	AXX	10	1	1	2
4621		ATHN	02	06	0700	N16 W75	01 31.6			CAO	20	3	5	3
4621		RAMY	02	06	1340	N15 W75	01 31.9		A	HAX	10	1	1	3
4621		BOUL	02	06	1520	N16 W75	02 1.0		A	AXX	20	1	1	3
4621	24198	MWIL	02	06	1545	N15 W75	02 1.0	3	(AF)					
4621		HOLL	02	06	1626	N17 W75	02 1.0		A	HSX	10	1	2	3
4621		PALE	02	06	2200	N19 W83	01 31.6		A	AXX	10	1		2
4621		MANI	02	07	0009	N18 W85	01 31.5			AXX	20	1	1	3
4621		LEAR	02	07	0012	N16 W79	02 1.0		A	AXX	10	1	1	2

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

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JANUARY 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			
03	1154	1208	1226	1	1	1	1				*		
08	0918	0923	0950	1-	1					1	No Flare		
11	1321	1331	1405	1	1		1				No Flare		
12	1045	1048U	1118	1-	1		1				*		
12	1314	1324	1337	1-	1		2				No Flare		
12	1345	1351	1415	1-	1		1				No Flare		
13	0935	0945	0954	1-	1		1				No Flare		
13	1836	1840	1857	1-	3					3	1828 UT	C2.1	
15	1915	1919	1955	1-	3			1		3	1912 UT	C3.1	4616
17	1017	1022	1058	1-	1			1			*		
19	0702	0709	0725	1-	1			1			0702 UT		4616
20	0012	0021	0122	1-	3			1		1	0011 UT	C2.3	4617
20	0231	0248	0341	1-	3			1		1	0236E UT	C1.3	
20	0522	0527	0606	1-	1			1			No Flare		
20	1255	1340	1357	1	3					2	1252 UT	C2.1	
20	2046	2058	2227	2	5	1		2		7	2044 UT	M4.1	4617
21	0012	0019	0058	1-	1			1			0009 UT	C2.0	4617
21	0218	0222	0238	1-	1			1			0208 UT	C2.0	
21	0344	0358	0506D	3	3	1		1			0343 UT	M2.2	
21	0506	0513	0706	3	3	1		1			0510E UT	M1.1	
21	0707	0717	0805	1-	1			1			0707 UT	C1.9	4617
21	0958	1008	1020	1-	3			1	1	5	0955 UT	C4.6	4617
21	1045	1053	1126	1	5			1	1	7	1048 UT		
21	1121	1137U	1155	1-	1		1				No Flare		
21	1157	1200	1238	1-	1		1				No Flare		
21	1313	1328		1-	1			1		1	1302 UT	C1.8	4617
21	1353	1408		1-	1			1		1	No Flare		
21	1414	1420	1440	2+	5	2	3	1	1	10	1410 UT	M2.4	4617
21	1515	1520	1540	1	5		3	1	1	7	1514 UT	M1.2	
21	1643	1706	1918	2+	5			1		8	1631E UT	M3.3	4617
21	2054	2102U	2128	1+	1			1			2037 UT		4617
21	2128	2129	2145	1	3			2		6	2127 UT	M1.2	4617
21	2247	2300	2344	1-	1			1			No Flare		
21	2352	0005	0147D	3+	5	2		2	1	2	2346 UT	X4.7	4617
22	0147E	0157	0310	1+	3			1		1	0143E UT		
22	0354	0404	0421	1-	1			1			0356 UT		4617
22	0515	0517	0534	1-	1			1			0505 UT		4617
22	0538	0543	0606	1-	1			1			No Flare		
22	1017	1018U	1052	1	1		1				No Flare		
22	1103	1106	1120	1-	3			1	1	3	1100 UT	C3.1	
23	0412	0416	0444	1-	1			1			No Flare		
23	0727	0740	0917	3	3			1		2	0725 UT		4617
23	1017	1021	1046	1-	1			1			No Flare		
23	1112	1118	1140	1-	3	1		2	1	2	1109 UT	C3.6	
23	1146	1202	1241	1-	3	1		2	1	2	1140 UT	C5.8	
23	1240	1245	1302	1-	3		1			1	1238 UT	C2.5	4617
23	1732	1735	1800	1	3					2	1730 UT	C2.0	4617
24	0045	0052	0151	1+	3			1		1	0044 UT	C4.0	4617
24	0542	0558	0712	1-	3			1		2	0548	C1.8	4617
24	0647	0658	0720	1-	1		1				No Flare		
24	1125	1135	1220	1-	3			1		1	1122 UT	C3.0	4617
26	1135	1203U	1221	1-	1		1				*		

* = No Flare Patrol.

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

SIDs by NOAA/SESC REGION

January 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															1				1												
4616																				2	9	2	3	3							
4617																															
X-Ray													1		1					4	12	1	4	3							
No Flare								1			1	2	1		1					1	4	3	2	1							
No Flare Patrol		1										1					1									1					
No Data																															
Event Totals		1						1			1	3	2		2		1		1	5	18	7	7	4		1					

OBSERVATORIES REPORTING FOR JANUARY 1985*

Ayrshire, Scotland (AY)	SES	Mauli, Hawaii, USA (MI)	SWF
Darmstadt, GFR (DA)	SWF	Panska Ves, Czechoslovakia (PU)	SEA, SWF, SES
Edenvale, South Africa (A52)	SES	Paterson, New Jersey, USA (A46)	SES
Farsta, Sweden (FA)	SES	Sao Paulo, Brasil (UM)	SPA, SES
Glenorchy, Tasmania, Australia (GN)	SES	Sofia, Bulgaria (SF)	SES
Hiraiso, Japan (HI)	SWF	St. Cloud, Minnesota, USA (SC)	SES
Hobart, Tasmania, Australia (TA)	SEA	Tavares, Florida, USA (A49)	SES
Inubo, Japan (IN)	SPA	Tucson, Arizona, USA (A9)	SES
Juliusruh, GDR (JU)	SWF	Upice, Czechoslovakia (UI)	SEA
Kuhlungsborn, GDR (KU)	SPA, SEA	Valley Cottage, New York, USA (A01)	SES
Latrobe, Pennsylvania, USA (A19)	SES	Vsetin, Czechoslovakia (VS)	SEA
Llanherne, Australia (LL)	SPA		

*Observations are not necessarily continuous for each reporting station.

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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JANUARY 1985

Day	Observation			Decimetric Band			Metric Band			Dekametric Band			Spectral Type
	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)	
01	0830	1550	BLEN										
	0852	1455	WEIS										
02	0758	0847	WEIS										
	0830	1550	BLEN										
	0852	1456	WEIS										
03	0811	1457	WEIS										
	0830	1550	BLEN										
04	0758	1226	WEIS										
	1421	1453	WEIS										
05	0822	0915	WEIS										
	0931	1427	WEIS										
	1430	1446	WEIS										
07	0800	1454	WEIS										
	1501	1511	WEIS										
08	0756	1302	WEIS										
	1312	1414	WEIS										
	1435	1459	WEIS										
09	0758	1501	WEIS										
10	0757	1344	WEIS										
	1355	1503	WEIS										
11	0755	1056	WEIS										
	1111	1509	WEIS										
12	0751	1510	WEIS										
13	0751	1218	WEIS										
	1241	1511	WEIS										
14	0751	1052	WEIS										
	1144	1448	WEIS										
	1516	1533	WEIS										
			SGMR				1820.0	1820.6	1				
			SGMR				1824.3	1824.6	1				
			SGMR				1855.0	1856.3	1				
15	0750	1111	WEIS										
	1135	1513	WEIS										
16	0748	1028	WEIS										
	1054	1516	WEIS										
17			LEAR				0249.5	0249.8	2				
			LEAR				0255.5	0255.6	1				
			LEAR				0323.5	0328.3	2				G
			LEAR				0618.3	0619.0	1				
			LEAR				0840.0	0953.0	1				
	0751	1518	WEIS				0859.9	0900.6	2				CONT
			LEAR				0900.0	0900.8	1				G
			WEIS				0959.4	0959.8	1				G
													G
18	0757	1242	WEIS										
19			LEAR				1013.8	1014.1	1				
			PALE				2005.1	2007.3	1				
20			LEAR				0430.1	0430.5	1				
			LEAR				0710.3	0710.6	1				
			LEAR				0717.8	0718.0	1				
			LEAR				0741.3	0741.5	1				
			LEAR				0817.1	0817.3	1				
			LEAR				0847.5	0848.1	2				V
			LEAR				0848.3	0848.5	1				

SOLAR RADIO EMISSION SPECTRAL OBSERVATIONS

JANUARY 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)		
20				WEIS				1057.0	1448.0	2				IN	
	1055	1524		WEIS				1120.5	1122.7	1				IIIG	
				WEIS				1134.9	1135.0	1				IIIB	
				WEIS				1137.7	1138.4	1				IIIG	
				WEIS				1206.6	1206.7	1				IIIB	
				WEIS				1302.7	1302.8	1				IIIG	
				WEIS				1309.3	1310.8	1				IIIG	
				WEIS				1323.3	1323.7	1				IIIG	
				WEIS				1330.7	1331.8	1				IIIG	
				WEIS				1423.4	1423.7	1				IIIG	
				WEIS				1442.9	1443.0	1				IIIB	
				WEIS				1445.3	1445.7	1				IIIG	
21				LEAR				0050.0	1055.0	1				CONT	
	0743	0910		WEIS				0755.0	1525.0	3				I,DC	
	1024	1236		WEIS											
	1354	1530		WEIS											
22				LEAR				0000.1	1055.0	3				IV	
				PALE				0000.8	0030.8	3				IV	
				LEAR				0302.8	0303.1	2				III	
	0745	0824		WEIS											
	0834	0852		WEIS											
	1348	1540		BLEN				0907.8	0908.1	2				III	
	1013	1300		WEIS											
				BLEN	1102.6	1102.7	1	1102.6	1102.7	2				III	
				BLEN	1233.4	1233.6	2							III	
				BLEN				1239.8	1540.0D	1				I,N	
				PALE				2146.3	2148.0	2				V	
23				LEAR				0021.3	0022.0	1				III	
				LEAR				0907.8	0908.8	2				III	
				SGMR				1343.6	1344.3	1				III	
24	0742	1527		WEIS				0823.0	1527.0	3				IN	
	0730	1540		BLEN				1325.0	1540.0D	1				I,N	
25	0730	1540		BLEN											
	0742	0921		WEIS											
	1003	1415		WEIS											
26	0730	1540		BLEN											
	0754	1335		WEIS											
	1423	1459		WEIS											
	1522	1534		WEIS											
27	0730	1540		BLEN											
	0735	1536		WEIS											
28	0730	1545		BLEN											
	0737	1303		WEIS											
	1310	1538		WEIS											
29	0730	1240		BLEN											
	0732	1539		WEIS											
	1403	1540		BLEN											
30	0730	0815		BLEN											
	0730	1541		WEIS											
	1519	1550		BLEN											
31	0730	1550		BLEN											
	0732	0843		WEIS											
	0848	1543		WEIS											

THULE 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

BARTELS ROTATION 2069

105%

100%

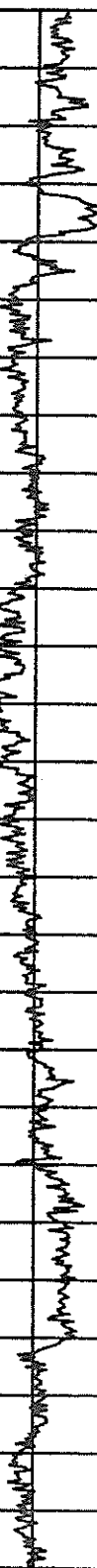
95%

DEC

JAN 1985

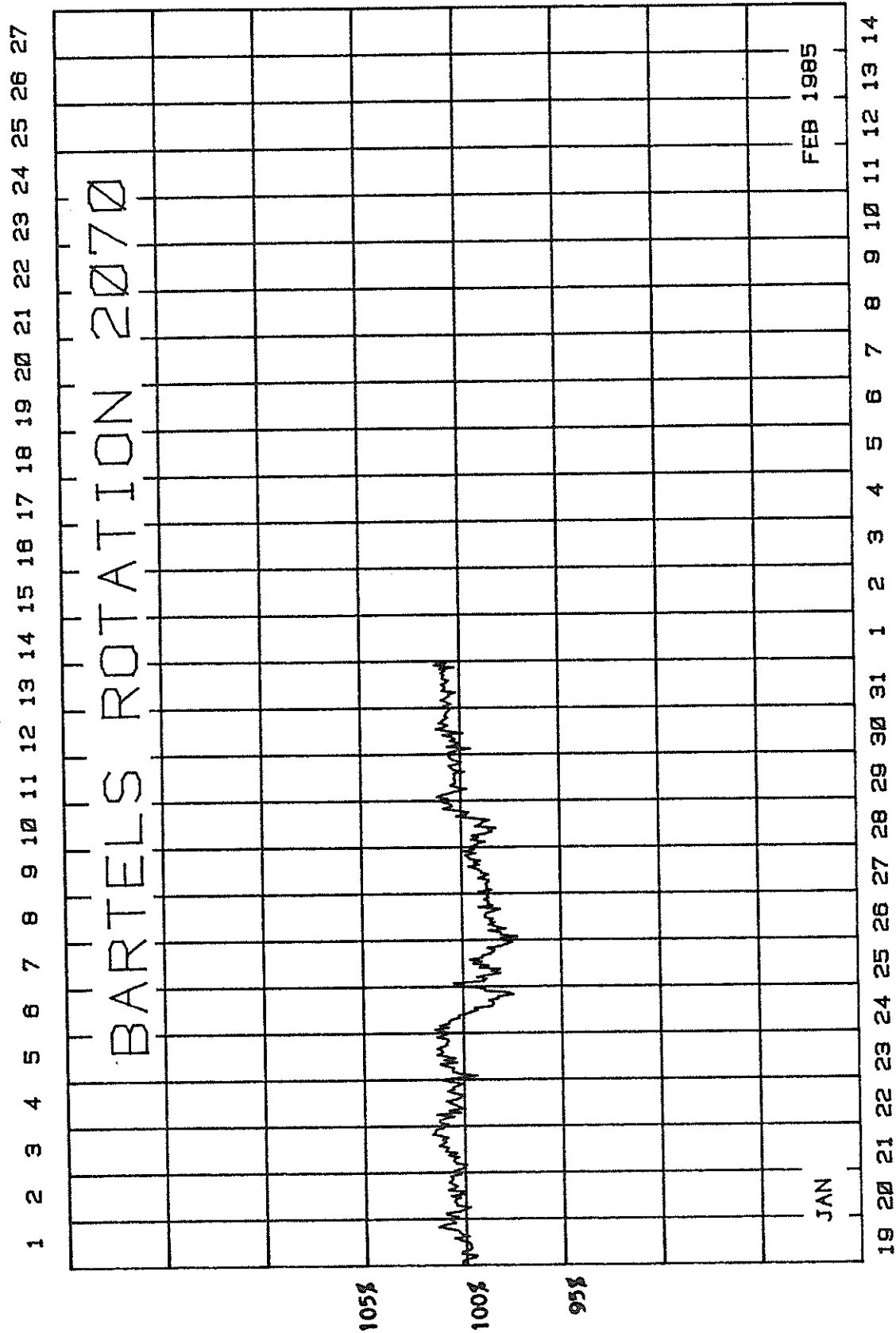
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69
Jan 85



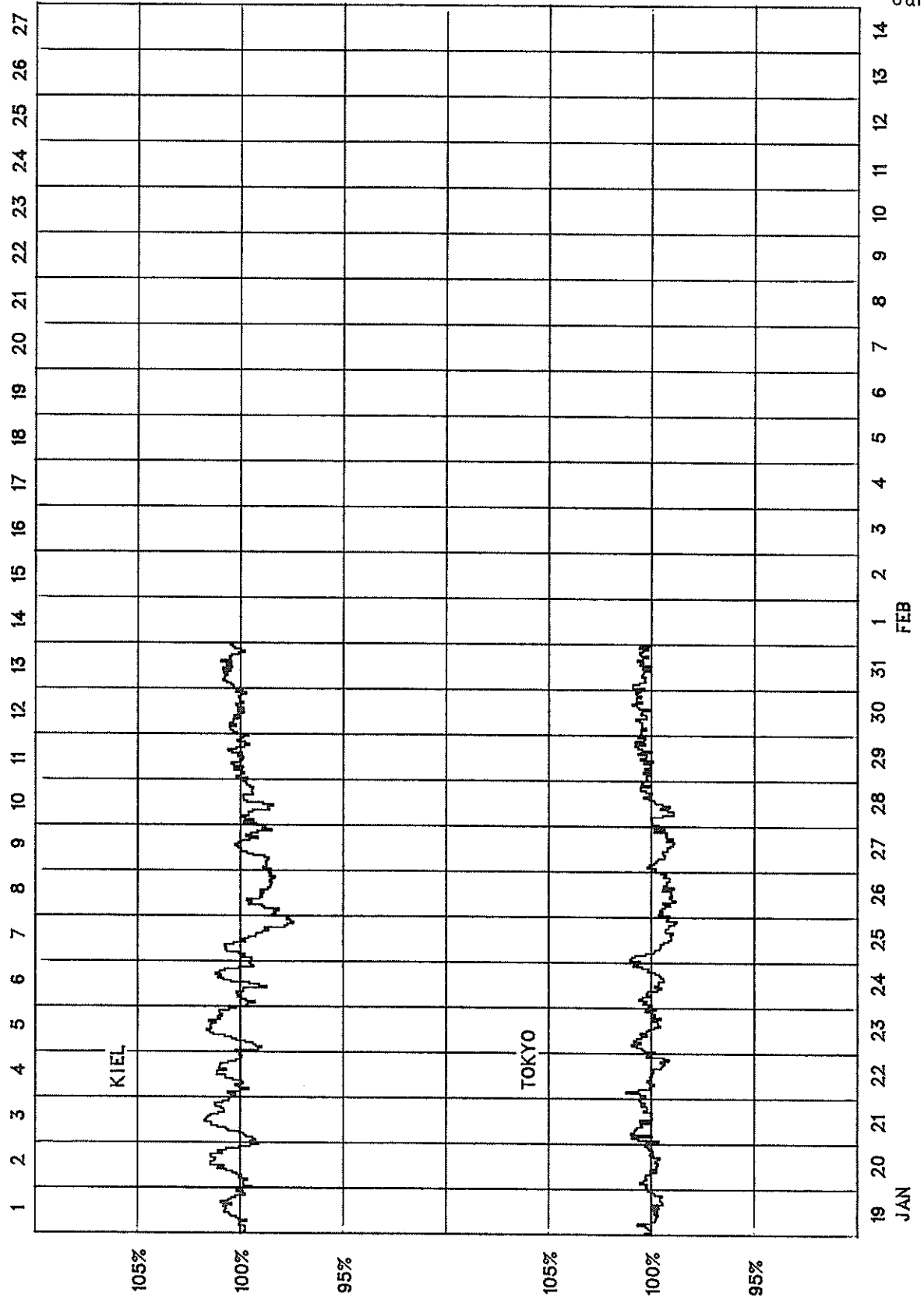
70
Jan 85

THULE NEUTRON MONITOR



COSMIC RAY INDICES
(Neutron Monitor)

Bartels Rotation 2070 (January 1985--February 1985)



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

January 1985

Day	THULE Average (cts/h)/100	ALERT Average (cts/h)/100	DEEP RIVER Average (cts/h)/300	KIEL Average (cts/h)/100	CL IMAX Average (cts/h)/100	PREDIGTSTUHL Average (cts/h)/100	TOKYO Average (cts/h)/256	HUANCAYO Average (cts/h)/100
1	4244			5917.5		1148	3597.5	
2	4259			5929.0		1148	3602.7	
3	4268			5950.1		1148	3598.9	
4	4282			5962.7		1148	3604.2	
5	4277			5957.7		1150	3601.2	
6	4299			5970.0		1149	3607.7	
7	4301			5963.2		1153	3607.8	
8	4292			5965.7		1155	3608.1	
9	4258			5934.9		1156	3603.2	
10	4256			5902.5		1151	3585.8	
11	4268			5912.8		1149	3592.7	
12	4285			5927.3		1148	3589.7	
13	4281			5943.3		1149	3585.1	
14	4261			5898.0		1144	3580.2	
15	4196			5882.5		1138	3571.6	
16	4223			5892.0		1140	3575.5	
17	4215			5908.9		1142	3585.7	
18	4212			5899.8		1139	3584.0	
19	4232			5900.9		1143	3587.6	
20	4242			5915.0		1147	3593.2	
21	4257			5929.9		1149	3605.1	
22	4248			5910.5		1147	3591.9	
23	4254			5924.7		1154	3597.5	
24	4202			5888.1		1144	3592.6	
25	4170			5843.1		1130	3576.2	
26	4157			5813.1		1126	3564.5	
27	4186			5844.0		1136	3572.7	
28	4200			5855.2		1144	3586.8	
29	4237			5887.8		1153	3603.4	
30	4244			5895.7		1143	3610.6	
31	4253			5916.6		1136	3606.6	
Mean	4244			5911.0		1145	3592.6	

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.

GEOMAGNETIC ACTIVITY INDICES

73
Jan 85

January 1985

Day		Kp Three-Hourly Indices									Sum	Ap	Cp	Km Three-Hourly Indices								Am	aa Provisional			
		1	2	3	4	5	6	7	8	1				2	3	4	5	6	7	8	N		S	M		
1	D4	3+	4+	4-	4-	3-	4-	6-	6-	33-	33	1.3	3-	3+	3-	3	2+	3+	5	5	47	56	39	34	60	
2		4	3+	3+	2+	3-	2	2+	5-	25-	17	0.9	3+	3	2+	2+	3	2-	2	4	27	32	23	25	30	
3		4-	3-	2+	3-	1	2-	3+	4-	21	13	0.8	3	2+	2+	2+	1	2	3	3+	21	31	15	22	24	
4	Q9A	3	2	1+	2-	1	1+	1+	3-	14+	7	0.4	2+	1+	1	1+	1-	1+	2	2+	12	17	7	13	11 C	
5	Q4	2	2-	1	1	1	2-	1+	3-	12+	6	0.3	2-	1+	1	1	1+	1+	2-	3-	11	14	9	9	14 CC	
6	Q2	2+	2	1-	1-	1-	1+	2	2-	11+	5	0.2	2-	1+	1	0+	1	2-	2	1+	9	16	6	9	14 CC	
7	Q1	1+	2+	1+	0+	1-	1	2-	2-	10+	5	0.2	1+	2	1+	1-	1	1+	2	2-	10	13	8	10	11 CC	
8		2	1	2	1+	2+	4-	5+	5-	22+	19	1.0	1+	2-	2	2-	2+	4-	5+	4+	35	34	33	11	56	
9	D2	4	6	6-	5-	6-	5-	4-	3+	38	46	1.5	4-	4+	4+	4+	5	4	3+	3-	58	68	45	57	57	
10	D5	4+	5	4-	5-	3+	4+	4	3	32+	29	1.3	3	4-	3	4	3	4-	3+	3-	37	54	34	48	40	
11		3	3+	4	4	3	3	4-	3+	27+	20	1.0	2+	3-	3	3+	3-	3	4-	3-	29	33	26	26	33	
12		3-	4-	3+	3+	4-	3+	3+	4-	27	19	1.0	2+	3	3-	3	4-	3	3	3	29	33	26	26	33	
13		3	3+	3	3-	3+	3+	3-	2-	23	14	0.8	3-	3-	2+	2+	3-	3-	3	1+	21	28	18	20	27	
14		1+	3-	2-	2+	3-	3+	1+	1+	17-	9	0.5	1+	2-	1+	3-	2+	3	1	1+	15	18	17	18	18	
15		1+	1+	2	2+	2	3+	3	2	17+	9	0.5	1	1-	2	3-	2	3	3-	2	17	21	16	13	25	
16	Q10A	2+	3	2+	2+	2+	2	1	1-	16	8	0.4	2	2+	2	3-	3-	2-	1	1-	14	14	13	16	11	
17		0	0+	1	3+	2+	3+	3-	2	15	9	0.5	0	1-	1	3	2+	3	3-	2-	16	21	17	12	26	
18	Q3	2	2-	1	1+	2-	1+	2	1+	12+	6	0.3	2-	2-	1	2-	2	2-	2	1+	12	14	11	11	14 C	
19	Q7A	1-	1-	2	3-	2	3	1	0+	12+	7	0.3	1-	1	2	3-	3-	3	1	0+	15	10	20	15	16 K	
20	Q5K	1+	1-	1+	1	1	3-	3-	1+	12	6	0.3	1+	1	1+	1+	2-	3-	2+	2-	13	15	11	9	17 K	
21		2-	5-	3	2+	3-	2	1+	1+	19	12	0.7	2-	4-	3-	3-	3	2	2-	2	21	20	21	26	16	
22		1+	1	2+	2	1+	2+	2+	5-	17+	11	0.6	2	2-	3-	2	2	2+	3-	4+	23	23	22	11	34	
23	D3	3+	6-	5	5	5-	4	3	4-	35-	36	1.4	3+	4+	5	4+	4+	4-	3	3	53	60	59	67	53	
24	Q8A	1	2-	2+	1	2	2	2+	2	14+	7	0.3	1	1	2-	1	2	2-	2+	2	12	14	10	7	17 C	
25		3	3	3	2	1+	1	1+	1	16-	9	0.5	3-	3-	3-	2	2-	1	2-	1+	16	17	14	22	10	
26	Q6	1	1	1+	2-	1	3-	2-	2+	13-	6	0.3	1-	1-	1+	2-	1+	3-	2-	3-	12	14	13	10	19 K	
27		2+	3-	1+	1	1	2-	3+	4+	18-	11	0.6	2	2	1+	1+	1	1+	3	4	19	21	19	11	29	
28	D1	6-	5	5-	5	6-	6	5	6-	43-	58	1.7	5	4	4-	5-	5+	6	5	5	92	73	79	63	89	
29		5	4	1	2	2	2+	4	6-	26	24	1.2	4+	3	1+	2	2	2+	4-	5-	35	38	22	25	36	
30		4	3	3+	3-	2+	4-	3-	3+	25	17	0.9	3	3-	3-	2+	2+	3+	3-	3-	25	34	21	23	32	
31		3+	2+	2+	4	4-	3	2	3	24-	15	0.9	3+	3-	2+	3+	3+	3	2	2+	27	31	24	24	31	
Mean												16	0.73									25.3	28.6	22.6	25.7	
Day		Kn Three-Hourly Indices									An	Ks Three-Hourly Indices									As	Sa	Prov			
		1	2	3	4	5	6	7	8	1		2	3	4	5	6	7	8	R ₁	R _a			R _s	IMF		
1		3-	4-	3-	3+	3-	4-	5+	5-	50	3-	3	3-	3	2-	3	5-	5+	44	68.4	0	0	12	T	-	
2		3+	3	2+	2+	3	2	2	4+	29	3+	3	2+	3-	3-	2-	2	4-	26	67.8	0	0	11	T	-	
3		3	3-	2+	3-	1+	2	3	3+	23	3	2+	2	2+	1-	2-	3	3	19	67.7	0	0	11	T	-	
4		3-	2-	1+	2-	1	2-	2-	3-	13	2	1+	1	1+	0+	1+	2	2	10	67.8	0	0	11	T	-	
5		2-	1+	1	1	1+	2-	1+	3-	11	2-	1+	1+	1	1+	1	2	3-	11	67.0	0	0	10	T	-	
6		2-	1+	1	0+	1	2-	2+	2-	10	2	1+	1	1-	1	2-	2-	1	9	67.9	0	2	11	T	-	
7		1+	1+	2-	1-	1	2-	2	2-	10	1+	2+	1+	1	1	1+	2	1+	10	68.1	0	0	12	T	-	
8		2-	1+	2-	1+	3-	4-	5+	4+	36	1+	2-	2	2-	2+	3+	5+	5-	35	67.4	12	10	11	T	-	
9		4	5-	5-	5-	5	5-	3+	3	65	3+	4+	4+	4	5-	4-	3+	2+	52	68.1	14	3	12	AT	-	
10		3+	4-	3	4+	3+	4	4-	2+	42	3-	3+	3	4-	3-	3+	3	3-	32	67.4	0	0	11	AT	-	
11		2+	3-	3+	4-	3-	3	4-	3-	31	2+	3-	3	3	3-	3	4-	3-	28	67.7	0	0	11	A	-	
12		2+	3	3-	3+	4-	3	3	3+	32	2+	3	3-	3	3	3	3	3	27	68.4	13	3	12	AT	-	
13		2+	3-	3-	2+	3	3	3	2-	24	3-	2	2-	2	2+	3	3-	1+	17	72.6	16	18	16	T	-	
14		1+	2-	1	3	3-	3+	1+	1	16	1+	2	2-	2+	2	3-	1	1+	13	72.3	26	25	16	A	-	
15		1	1-	2+	3-	2+	4-	3+	2-	20	1	1-	2-	2+	2	2+	2+	2+	14	72.4	25	20	16	A	-	
16		2-	3-	2	3-	3	2	1	1-	16	2	2	2	2+	2+	1+	1-	1-	12	74.7	26	26	19	A	-	
17		0	0+	1	3+	3-	4-	3-	2-	18	0	1-	1+	3	2	3-	2+	2-	14	75.8	29	26	20	T	-	
18		2	2-	1	2-	2+	2-	2	1+	12	2-	2	1	1+	2-	2	2	1	12	74.1	26	24	18	T	-	
19		0+	1-	2-	3-	3	3+	1	0+	16	1	1+	2+	3	3-	3	1	1-	15	75.4	27	28	19	T	-	
20		1+	1-	1	1+	2-	3	3-	1+	13	1+	1	2-	1+	2-	2+	2	2	12	81.7*	63	56	26	A	-	
21		2-	4-	2+	3-	3	2	2-	2	21	2-	4-	3	3-	3	2+	2-	2	22	84.9*	59	47	30	T	-	
22		2+	2-	3-	2-	2	3-	3-	4+	24	2	2-	2+	2	2	2-	3-	4+	23	85.3	53	48	30	A	-	
23		3	4+	5-	5-	5-	4	3-	3+	56	3+	4+	5	4	4+	4-	3	3-	51	82.5	39	35	27	T	-	
24		1	1+	2	1	2+	2	2+	2	13	1-	1	2-	1-	2-	2-	3-	2	11	78.2	33	30	22	T	-	
25		3-	3-	3-	2	2-	1	2-	1	15	3	3-	3-	2	1+	1	2-	1+	15	73.9	20	19	18	T	-	
26		1-	1-	1	2-	1+	3-	2-	3-	12	1-	1	2-	2-	1	3-	2-	3-	13	71.0	0	8	15	T	-	
27		2+	2	1+	1+	1+	2	3+	4	20	2-	2-	2-	1+	1	1	3	4	17	69.5	8	8	13	-	-	
28		5	5-	3+	5-	5+	6-	5-	5-	88	5	4-	4-	5	5+	6	5+	5	97	69.6	0	0	13	-	-	
29		4	3	1+	2	2	3-	4	5-	36	5-	3	1+	2+	2	2	4-	5-	35	68.7	9	0	12	-	-	
30		3	3	3	2+	3-	4-	3-	3-	28	3-	3-	3-	2	2+	3	3-	3-	23	68.3	0	0	12	-	-	
31		3	3-	2+	4-	4-	3+	2+	3-	30	3+	3-	2+	3	3+	3-	2-	2	24	69.9A	15	12	13	-	-	
Mean												26.8									24.0	72.1	16.5	14.5	15.9	

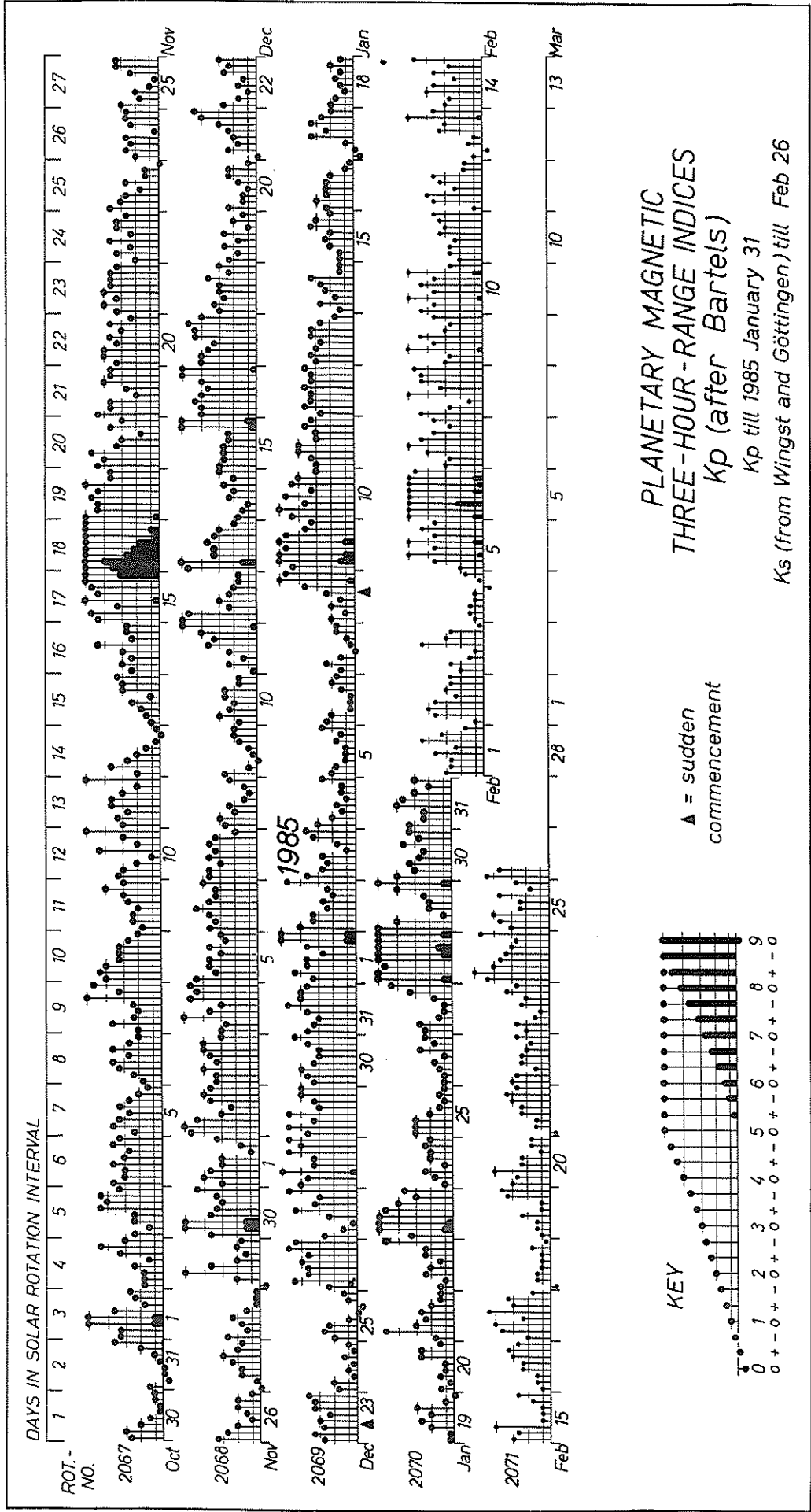
DAILY AVERAGE INDICES Ap

DAY	1984 FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN
1	16	32	34	22	7	14	75	11	7	27	15	33
2	20	38	46	13	12	12	24	12	10	12	27	17
3	19	35	42	12	32	12	14	12	20	18	22	13
4	54	9	84	13	26	12	14	59	6	18	28	7
5	14	4	57	27	19	12	7	63	7	13	20	6
6	8	31	12	10	12	10	4	12	21	14	22	5
7	9	26	25	4	10	7	4	6	43	20	18	5
8	7	29	58	5	10	10	14	11	24	20	8	19
9	9	13	37	19	20	9	17	12	20	12	6	46
10	21	17	8	27	15	14	8	25	29	18	9	29
11	21	9	13	10	11	11	11	17	28	20	19	20
12	12	11	15	12	7	13	15	13	32	8	17	19
13	36	19	15	9	6	62	8	11	17	10	27	14
14	43	6	18	12	4	40	20	14	15	14	8	9
15	19	9	10	9	24	25	22	10	14	52	24	9
16	7	16	4	7	42	25	15	8	19	112	33	8
17	9	22	8	32	11	43	11	6	3	35	28	9
18	17	18	7	12	27	19	6	3	43	22	15	6
19	7	12	12	22	29	14	14	36	75	21	8	7
20	13	4	20	30	16	12	10	21	63	20	6	6
21	14	7	11	44	3	8	3	10	47	22	13	12
22	8	21	5	32	6	9	1	22	46	14	9	11
23	15	18	6	30	11	8	8	112	27	10	16	36
24	10	10	6	30	22	12	23	52	39	10	4	7
25	7	34	33	16	10	8	18	43	22	10	5	9
26	16	16	103	14	8	6	10	42	14	8	26	6
27	34	23	26	7	10	14	36	25	8	7	17	11
28	8	60	17	8	21	18	36	16	8	6	31	58
29	10	52	18	9	12	12	21	12	7	13	26	24
30		29	9	17	12	8	16	11	7	36	21	17
31		25		7		17	12		6		24	15
MEAN	17	21	25	17	15	16	16	24	23	21	18	16

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

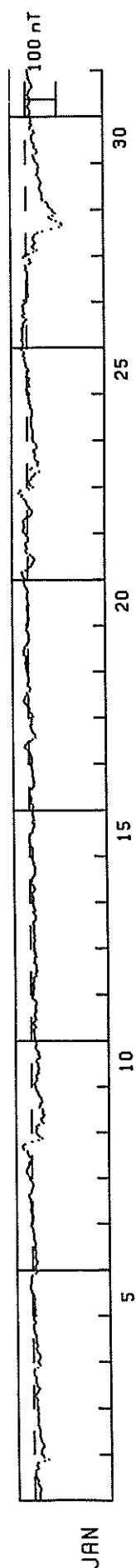
University of Gottingen

Kp through January 31, 1985



JANUARY 1985

DAY	UNIT=NT			UNIT=NT																				U.T.		
	1	2		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	-16	-17	-15	-18	-19	-30	-25	-16	-12	-10	-13	-7	-3	-4	-3	-5	-12	-11	-8	-12	-33	-46	-31	-29	-23	
2	-24	-26	-30	-33	-30	-9	-4	-24	-22	-19	-19	-21	-19	-18	-17	-13	-14	-14	-14	-13	-14	-16	-13	-13	-14	
3	-11	-11	-11	-13	-9	-13	-10	-8	-13	-16	-20	-13	-10	-7	-8	-7	-4	-2	-1	-2	-3	-7	-1	-3	-8	
4	-18	-23	-21	-19	-13	-4	-4	-10	-5	-3	-3	-1	3	4	7	7	7	3	4	5	2	0	-10	-14	-10	
5	-5	-5	-7	-5	-4	-4	-4	-4	-5	-5	-3	-1	3	4	7	7	7	3	4	5	2	0	-10	-14	-10	
6	-8	-9	-13	-15	-11	-9	-9	-9	-10	-11	-8	-7	-8	-10	-9	-7	-4	-5	-5	-3	-1	-2	1	3	2	
7	-1	-2	-2	-2	0	3	3	3	3	1	1	5	5	5	10	9	4	1	0	-2	-3	-3	0	6	7	
8	9	14	18	17	14	11	8	37	8	-42	-37	6	11	13	14	26	29	28	23	-1	-21	-33	-24	-18	-14	
9	-16	-17	-16	-23	-38	-32	-31	-8	-25	-23	-20	-37	-20	-36	-27	-30	-34	-32	-31	-25	-20	-17	-17	-13	-13	
10	-8	-11	-17	-18	-17	-17	-23	-22	-22	-25	-23	-20	-20	-16	-19	-26	-25	-23	-23	-18	-13	-13	-17	-16	-16	
11	-11	-10	-10	-8	-9	-8	-8	-15	-10	-6	-11	-15	-14	-11	-12	-16	-16	-14	-14	-17	-18	-12	-5	-3	-6	
12	-6	-7	-10	-8	-7	-7	-8	-11	-9	-10	-17	-16	-19	-19	-18	-17	-15	-11	-13	-13	-18	-14	-14	-11	-12	
13	-11	-9	-10	-13	-14	-10	-13	-13	-10	-9	-10	-11	-12	-8	-11	-16	-18	-17	-17	-10	-16	-13	-10	-8	-7	
14	-9	-10	-9	-5	-6	-13	-16	-16	-13	-9	-4	-5	-4	-9	-13	-17	-16	-15	-18	-15	-12	-12	-9	-9	-9	
15	-9	-10	-10	-8	-6	-1	-1	0	0	0	2	-1	-4	-10	-11	-13	-16	-15	-10	-14	-13	-12	-10	-9	-9	
16	-11	-13	-10	-2	-6	-7	-7	-6	-1	0	-1	-8	-12	-16	-16	-16	-14	-13	-11	-12	-11	-10	-8	-7	-7	
17	-9	-10	-10	-7	-5	-2	2	7	9	13	10	3	-5	-13	-21	-22	-17	-12	-10	-7	-5	-10	-10	-10	-10	
18	-14	-11	-6	-4	-3	2	6	6	12	14	11	8	11	4	-4	-6	-4	1	-1	-1	-2	-2	1	1	3	
19	5	6	6	8	0	6	0	0	6	3	3	14	0	10	3	1	1	-3	-1	2	0	9	11	13	9	
20	11	15	18	18	6	-4	-10	-14	-14	-18	-21	-20	-15	-7	2	7	1	3	6	6	-1	-2	-2	4	7	
21	14	14	10	9	11	13	11	11	5	-7	-13	-16	-34	-7	-3	1	3	5	11	18	17	27	21	-6	-18	
22	-9	-6	-5	-12	-16	-22	-26	-26	-39	-10	-16	-34	-36	-34	-27	-24	-25	-26	-22	-23	-30	-32	-28	-22	-18	
23	-17	-17	-18	-18	-18	-16	-13	-13	-12	-13	-12	-13	-14	-16	-16	-15	-16	-10	-11	-6	12	8	8	16	18	
24	-4	-2	0	-7	-5	-2	-2	-5	-7	2	-1	0	-5	-4	2	3	4	7	-8	6	12	8	8	16	18	
25	-4	-4																								
26	12	11																								
27	7	-1																								
28	-8	-24																								
29	-79	-73																								
30	-32	-28																								
31	-12	-17																								



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

JANUARY 1985

Sta	Geomag Lat	Commencement			SC Amplitudes			Maximum 3-Hour K Index Day(3-Hour Periods)	K	Ranges			End	
		Day	Time (UT)	Type	D (Min)	H (Gamma)	Z (Gamma)			D (Min)	H (Gamma)	Z (Gamma)	Day	Hour (UT)
HER	33.7S	01	19--	..	..	..	..	01(7,8)	5	20	80	94	01	22
COL	64.6N	08	16--	..	..	..	..	09(4,5) 10(4)	7	197	1750	1000	11	03
SIT	60.0N	08	17--	..	..	..	..	09(4)	7	--	--	460	10	13
WIT	54.2N	08	1412	SC	0	4	0	08(7) 09(2,5)	6	30	200	55	10	20
HON	21.1N	08	1412	SC	..	11	3	08(7) 09(4)	5	8	118	19	09	19
JAI	17.3N	08	1412	SC	- 0.2	18	- 3		-	8	110	26	11	20
SHL	14.7N	08	1412	SC	..	14	2		-	8	105	31	11	20
UJJ	13.5N	08	1412	SC	- 0.1	20	- 4		-	7	122	30	11	20
ABG	09.5N	08	1412	SC	- 0.6	21	- 3	08(6,7,8) 09(2,3,6)	5	7	123	48	11	20
HYB	07.6N	08	1412	SC	- 0.2	19	- 3	08(7)	6	6	134	19	10	21
GUA	04.0N	08	1412	..	..	..	..	08(7)	5	10	120	30	08	21
ANN	01.5N	08	1412	SC	- 0.7	25	11		-	7	166	60	11	20
TRV	01.1S	08	1412	SC	0.1	18	- 23		-	6	180	126	11	20
HER	33.7S	08	1411	SC	2	14	15	08(6,7) 09(5)	5	32	113	88	09	19
GNA	43.2S	08	1412	SC*	0.8	18	*	08(7,8) 09(5)	5	26	150	120	09	19
CNB	43.9S	08	1412	SC	..	27	5	08(7) 10(4)	5	25	131	58	10	13
JAI	17.3N	17	0800	..	..	..	..		-	2	65	13	18	21
SHL	14.7N	17	0800	..	..	..	..		-	2	67	9	18	21
UJJ	13.5N	17	0800	..	..	..	..		-	2	73	16	18	21
ABG	09.5N	17	0800	..	..	..	..	17(4)	5	2	81	24	18	21
ANN	01.5N	17	0800	..	..	..	..		-	3	109	36	18	21
TRV	01.1S	17	0800	..	..	..	..		-	3	130	52	18	21
COL	64.6N	22	0831	SC*	25	..	36	23(3,4)	7	187	1280	800	23	24
WIT	54.2N	22	2000	..	..	..	..	22(8) 23(2,3,4,5,6)	5	23	110	50	23	22
CNB	43.9S	22	16--	..	..	..	..	23(3)	6	17	127	46	23	23
JAI	17.3N	23	0806	SC	- 1.4	57	- 14		-	4	111	16	23	24
SHL	14.7N	23	0806	SC	0.4	45	9		-	3	90	20	23	24
UJJ	13.5N	23	0806	SC	- 0.7	63	- 13		-	3	111	15	23	24
ABG	09.5N	23	0806	SC	- 0.5	57	- 11	23(3,4)	5	3	101	24	23	24
HYB	07.6N	23	0806	SC	- 0.5	61	- 6	23(3,4)	5	2	105	19	24	00
GUA	04.0N	23	0702	..	..	..	..		-	--	--	--	23	--
GUA	04.0N	23	0805	SC	..	50	- 15	23(3)	6	--	70	30	23	18
ANN	01.5N	23	0806	SC	- 2.5	98	34		-	4	105	71	23	24
TRV	01.1S	23	0806	SC	0.4	90	-104		-	2	97	150	23	24
HER	33.7S	23	0805	SC	8	35	21	23(3)	5	16	100	65	23	17
COL	64.6N	27	18--	..	..	..	..	28(6)	8	622	2150	1870	29	05
WIT	54.2N	27	1800	..	..	..	..	28(1,6,7,8)	6	39	220	130	29	03
JAI	17.3N	27	1800	..	..	..	..		-	7	209	21	29	01
SHL	14.7N	27	1800	..	..	..	..		-	5	237	23	29	01
UJJ	13.5N	27	1800	..	..	..	..		-	3	205	22	29	01
ABG	09.5N	27	1800	..	..	..	..	28(4,5)	6	4	219	40	29	01
HYB	07.6N	27	1810	SC	- 0.1	9	- 1	28(5)	7	6	235	19	29	03
GUA	04.0N	27	2206	..	..	..	..	28(5)	6	--	190	20	28	21
ANN	01.5N	27	1800	..	..	..	..		-	--	--	--	29	01
TRV	01.1S	27	1800	..	..	..	..		-	3	231	104	29	01
HER	33.7S	27	18--	..	..	..	..	28(1,5,6,7)	5	25	194	147	29	02
GNA	43.2S	27	17--	..	..	..	..	28(6)	6	34	200	160	29	07
CNB	43.9S	27	18--	..	..	..	..	28(6)	6	28	160	58	02	29
SIT	60.0N	28	00--	..	..	..	..	28(5)	8	--	--	--	29	04
WIT	54.2N	29	1900	..	..	..	..	29(8)	7	18	165	40	30	02
HER	33.7S	29	19--	..	..	..	..	29(8)	5	22	60	79	30	04

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

GNA = GNANGARA
GUA = GUAM
HER = HERMANUS
HON = HONOLULU
HUA = HUANCAYO

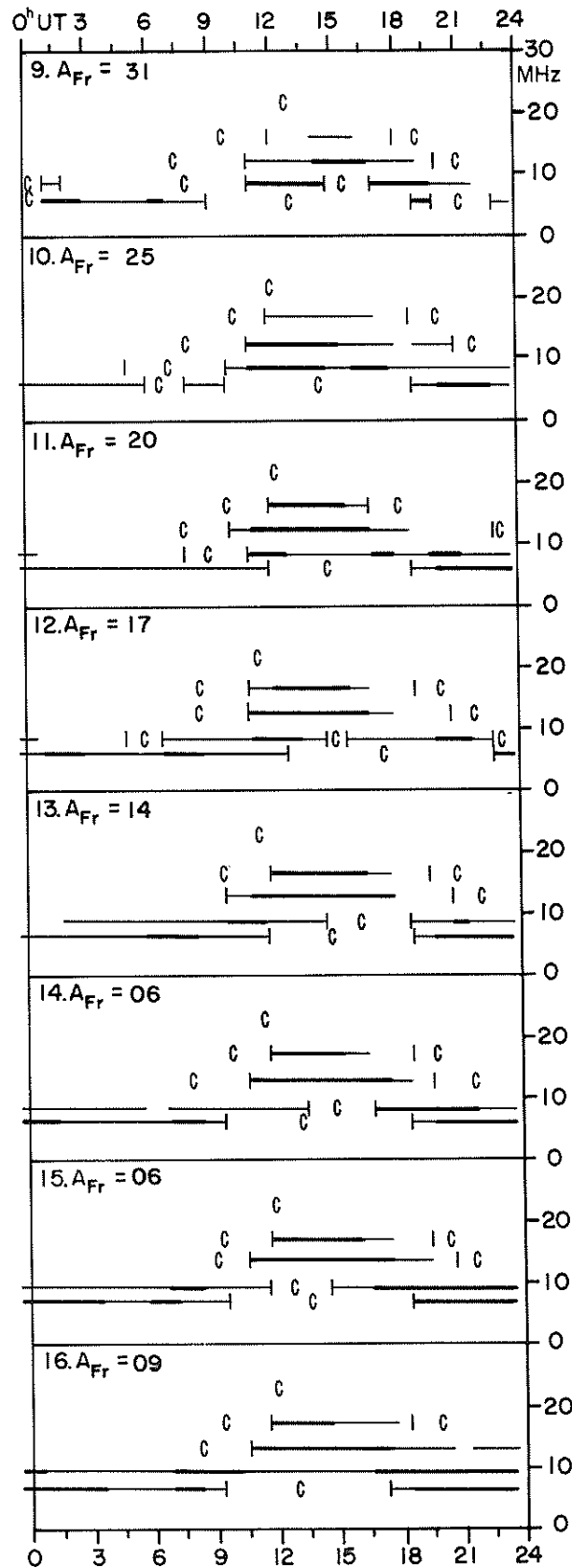
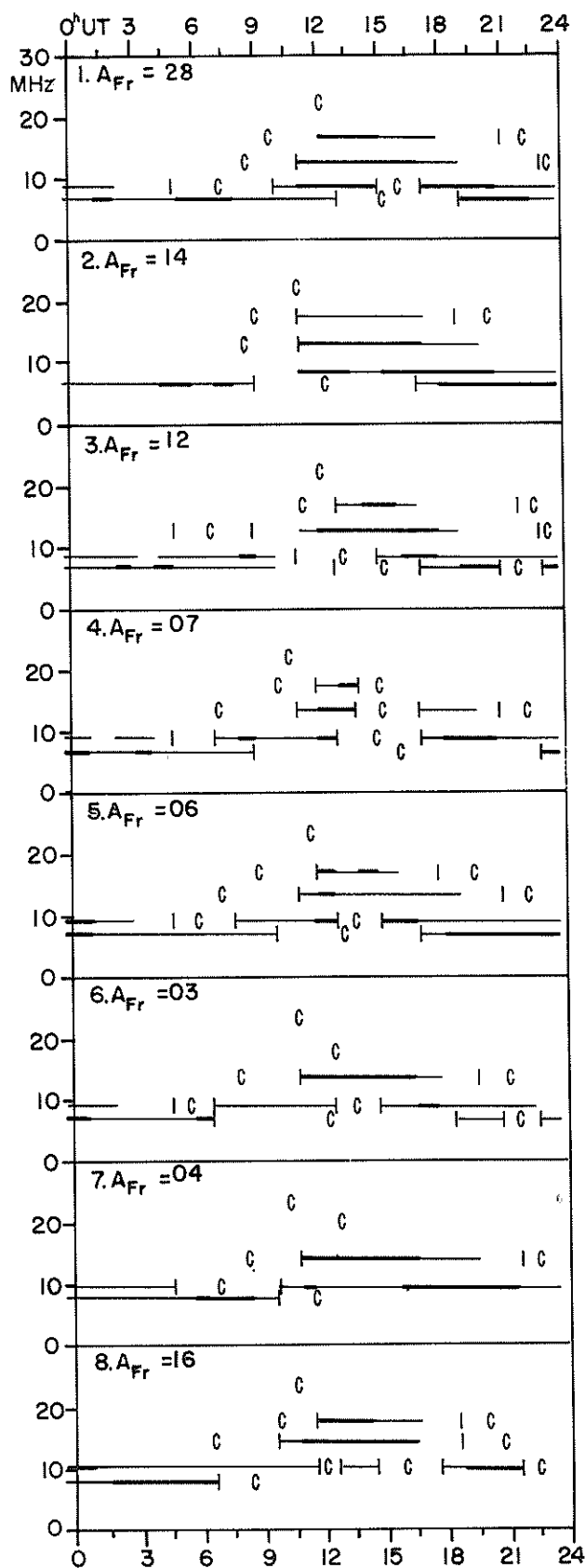
HYB = HYDERABAD
IRK = IRKUTSK
JAI = JAIPUR
KGL = KERGUELEN
PMG = PORT MORESBY

SHL = SHILLONG
SIT = SITKA
TRD = TRIVANDRUM
UJJ = UJJAIN
WIT = WITTEVEEN

78
Jan 85

TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH

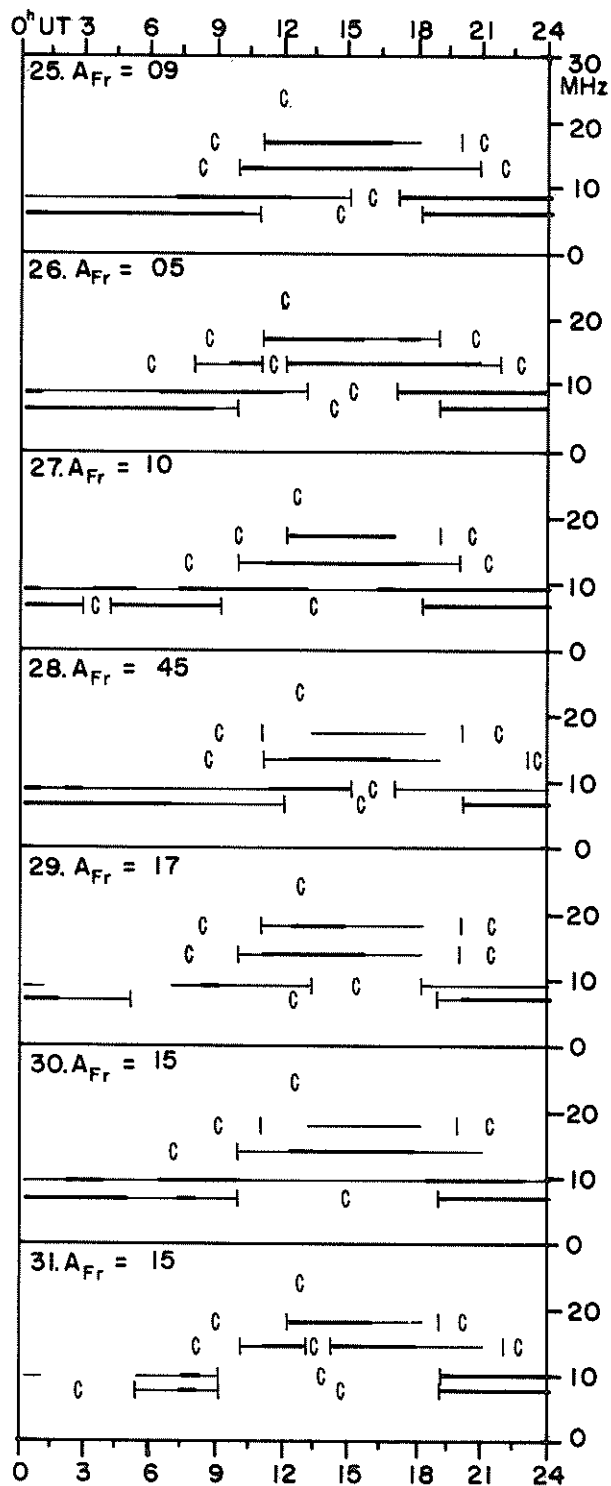
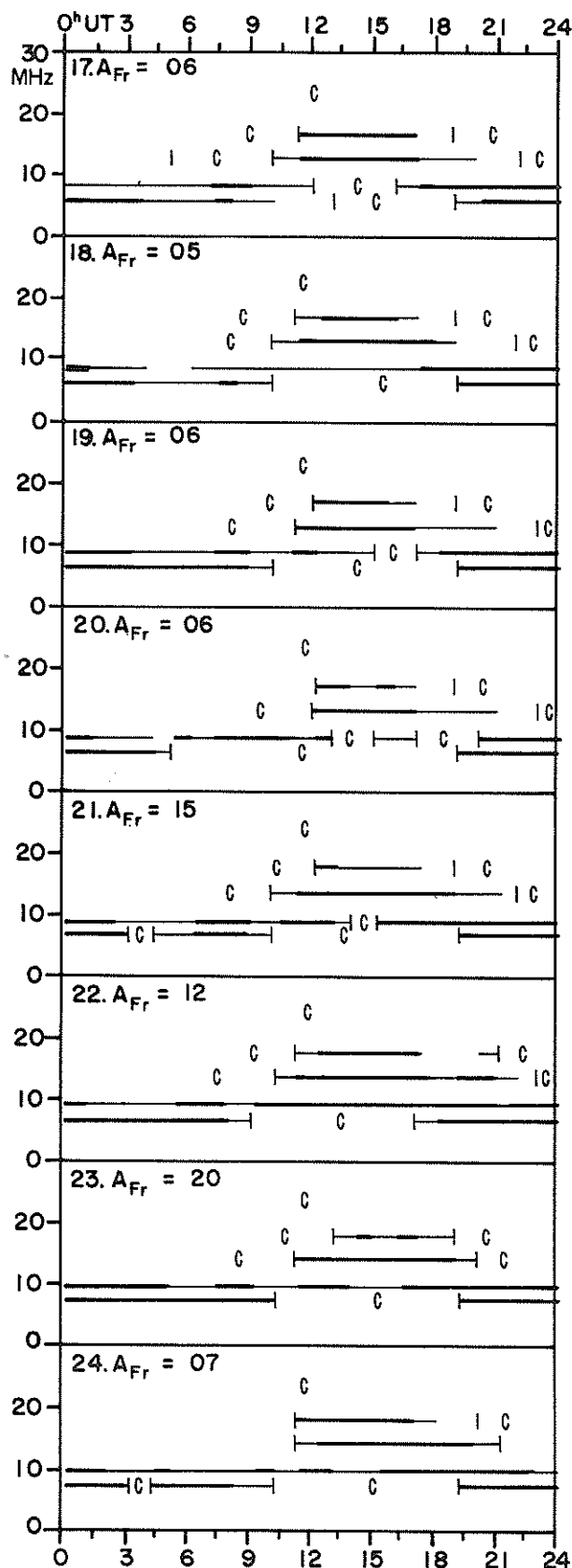
January 1985



TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH

79
Jan 85

January 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

JANUARY 1985

Day	Bracknell	Teheran	New York	Tokyo	Canberra
1	4.5	3.9	4.8	5.6	5.0
2	4.2	2.3	3.7	5.6	3.4
3	5.2	2.6	2.8	5.9	4.4
4	3.6	4.1	2.5	5.3	4.3
5	3.6	3.5	2.3	5.5	3.8
6	4.1	4.6	2.7	5.1	4.1
7	4.5	6.6	4.5	5.4	4.8
8	6.7	3.7	5.0	5.7	4.9
9	5.0	3.7	3.2	4.7	4.6
10	4.2	2.3	3.0	4.8	6.4
11	4.8	5.1	4.1	4.4	4.9
12	5.7	4.8	3.7	5.6	4.4
13	4.3	5.1	4.4	5.9	4.8
14	5.1	6.6	4.7	5.5	5.5
15	5.1	4.8	5.5	5.5	5.3
16	5.4	3.5	5.9	5.2	4.9
17	4.6	4.1	5.3	4.5	5.9
18	5.9	5.7	5.9	5.5	5.5
19	7.0	4.4	6.9	6.1	6.2
20	5.9	6.4	7.3	6.1	5.1
21	8.2	9.2	8.5	6.2	6.8
22	8.4	7.3	8.7	5.8	6.4
23	6.6	8.0	6.9	6.1	6.5
24	5.2	4.6	5.9	5.4	6.1
25	6.9	5.3	8.2	6.0	6.8
26	6.2	7.0	8.0	5.7	6.7
27	7.4	6.2	7.0	5.6	6.0
28	7.0	5.1	3.6	5.0	5.0
29	6.5	4.3	5.0	5.6	4.4
30	4.5	3.8	5.0	6.0	4.8
31	5.2	3.8	5.0	4.8	5.7
Mean	5.5	4.9	5.2	5.5	5.3

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

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PIONEER XII SOLAR WIND

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Late
Aug 83

PIONEER XII (VENUS ORBITER) SOLAR WIND MEASUREMENTS

AUGUST 1983

Day	Time (UT)	Earth-Sun Vehicle Angle	Speed (km/s)	Protons Density (par/cm ³)	Temp (x10 ⁶ K)
1	0141		478	20.0	0.202
2	0127	14°	616	7.4	0.199
3	0131		442	9.3	0.145
4	0144		394	14.0	0.048
5	0114		362	36.1	0.043
6	0145		322	22.8	0.034
7	0131	11°	311	38.3	0.031
8	0130		361	75.9	0.243
9	0144		370	17.7	0.063
10	0129		346	24.9	0.015
11	0142		466	18.2	0.356
12	0138	8°	583	10.0	0.237
13	0039		358	3.2	0.099
14	0118		421	42.4	0.147
15	0123		438	8.9	0.154
16	---		---	---	---
17	0130	6°	332	19.3	0.033
18	0132	5°	345	55.2	0.084
19	0127		468	28.1	0.037
20	0130		391	27.3	0.160
21	0126	3°	369	22.7	0.154
22	0141		407	24.1	0.128
23	0126		491	16.2	0.219
24	0129		534	18.3	0.343
25	0126		675	8.5	0.271
26	0115	3°	619	9.0	0.241
27	---		---	---	---
28	0126		325	35.1	0.054
29	0129		381	24.0	0.063
30	0155		554	12.0	0.486
31	0120	5°	600	---	0.253

PIONEER XII (VENUS ORBITER) SOLAR WIND MEASUREMENTS

SEPTEMBER 1983

Day	Time (UT)	Earth-Sun Vehicle Angle	Speed (km/s)	Protons Density (par/cm ³)	Temp (x10 ⁶ K)
1	0127	5°	512	8.4	0.271
2	0118		410	13.1	0.113
3	0126		389	41.5	0.091
4	0115		321	---	0.014
5	0119		286	39.0	0.061
6	0134	8°	313	49.1	0.140
7	0113		340	37.7	0.119
8	0124		387	39.9	0.126
9	0114		619	6.5	0.079
10	0121	9°	507	10.8	0.336
11	0127		420	12.4	0.157
12	0124		372	16.8	0.039
13	0124		481	15.7	0.140
14	---		---	---	---
15	0105		350	192.5	0.029
16	0119		466	16.7	0.253
17	0125		373	27.1	0.170
18	0128		404	15.5	0.128
19	0111		364	26.0	0.078
20	0105		700	9.6	0.348
21	0107	18°	465	8.8	0.132
22	0125		572	9.6	0.383
23	0108		441	9.6	0.230
24	0108		385	19.1	0.170
25	0132		368	32.6	0.037
26	0114		565	12.1	0.216
27	0121		656	11.7	0.388
28	---		---	---	---
29	0116		439	10.9	0.125
30	0118		406	13.4	0.088

84
Late
Oct 83

PIONEER XII (VENUS ORBITER) SOLAR WIND MEASUREMENTS

OCTOBER 1983

Day	Time (UT)	Earth-Sun Vehicle Angle	Protons		
			Speed (km/s)	Density (par/cm ³)	Temp (x10 ⁶ K)
1	0109	23°	333	42.8	0.337
2	0111		314	18.7	0.040
3	0122		272	54.0	0.037
4	---		---	---	---
5	0102		429	15.2	0.033
6	0106	31°	335	28.3	0.062
7	0112		322	59.2	0.038
8	0126		569	9.2	0.199
9	0132		540	11.1	0.261
10	0125		---	---	---
11	0134		456	15.7	0.176
12	---		---	---	---
13	0128		338	32.8	0.031
14	0128		365	21.4	0.122
15	0118		298	71.4	0.033
16	0137	31°	367	27.3	0.205
17	0127		542	56.2	0.165
18	0128		369	34.4	0.077
19	---		---	---	---
20	0128		524	63.5	0.082
21	0114		438	15.1	0.071
22	0107		389	21.1	0.049
23	0144		287	56.3	0.094
24	0154		305	28.5	0.074
25	0232		358	32.7	0.331
26	---	31°	---	---	---
27	0139		419	26.3	0.316
28	0133		420	16.2	0.360
29	0119		329	16.4	0.057
30	0143		311	39.4	0.028
31	0147	---	374	30.8	0.178

PIONEER XII (VENUS ORBITER) SOLAR WIND MEASUREMENTS

NOVEMBER 1983

Day	Time (UT)	Earth-Sun Vehicle Angle	Speed (km/s)	Protons Density (par/cm ³)	Temp (x10 ⁶ K)
1	0142	42°	457	32.6	0.249
2	---		---	---	---
3	0219		370	12.6	0.094
4	---		---	---	---
5	0143		515	12.9	0.480
6	---	51°	---	---	---
7	0136		505	13.9	0.231
8	0131		458	14.8	0.200
9	---		---	---	---
10	0200		496	12.4	0.239
11	1205		558	15.3	0.314
12	1211		635	12.6	0.523
13	1206		490	10.4	0.119
14	1202		409	22.3	0.068
15	1207		381	24.3	0.286
16	1207		431	19.6	0.144
17	1201		436	21.9	0.112
18	1201		376	36.5	0.054
19	1204		659	15.4	0.339
20	1202		569	9.1	0.152
21	1210		649	7.3	0.352
22	1208		613	12.3	0.385
23	1209		642	9.9	0.561
24	1207		520	12.9	0.278
25	1224		469	15.5	0.109
26	1206		363	13.5	0.034
27	1205		334	24.2	0.041
28	1203		430	24.7	0.173
29	1205		489	17.6	0.190
30	1207		434	13.7	0.090

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PIONEER XII (VENUS ORBITER) SOLAR WIND MEASUREMENTS

DECEMBER 1983

Day	Time (UT)	Earth-Sun Vehicle Angle	Protons		
			Speed (km/s)	Density (par/cm ³)	Temp (x10 ⁶ K)
1	1201	61°	361	48.4	0.103
2	1207		421	37.0	0.056
3	1203		621	16.3	0.317
4	1208		623	9.1	0.335
5	1201		541	9.9	0.124
6	1200	69°	432	17.2	0.133
7	1206		394	19.7	0.031
8	1207		326	28.5	0.047
9	1202		362	31.7	0.109
10	1201		492	14.1	0.191
11	---		---	---	---
12	1210		553	7.1	0.098
13	1211		401	24.8	0.072
14	1208		420	25.3	0.116
15	1200		421	21.2	0.087
16	1206		444	47.3	0.138
17	---		---	---	---
18	---		---	---	---
19	1207		327	92.5	0.045
20	---		---	---	---
21	1202		508	12.7	0.138
22	1201		432	15.6	0.128
23	1206		398	14.4	0.015
24	---		---	---	---
25	1214		362	12.4	0.043
26	1207		319	47.4	0.039
27	1206		591	20.4	0.441
28	1201		479	18.2	0.279
29	1207		504	15.3	0.116
30	1203		390	31.0	0.171
31	1201		410	48.5	0.056

PIONEER XII (VENUS ORBITER) SOLAR WIND MEASUREMENTS

JANUARY 1984

Day	Time (UT)	Earth-Sun Vehicle Angle	Speed (km/s)	Protons Density (par/cm ³)	Temp (x10 ⁶ K)
1	1211	79°	428	29.3	0.087
2	1207		484	17.6	0.234
3	1222		369	16.2	0.068
4	1208		365	28.0	0.071
5	1201		345	57.3	0.016
6	1208		486	28.9	0.238
7	1231		479	16.0	0.108
8	1213		582	8.4	0.421
9	1210		663	7.6	0.287
10	1210		635	7.3	0.184
11	1205	87°	537	9.1	0.056
12	1206		372	16.1	0.173
13	---		---	---	---
14	1205		349	52.1	0.063
15	---		---	---	---
16	1206		445	10.5	0.210
17	---		---	---	---
18	1242		369	23.9	0.255
19	1202		343	30.6	0.057
20	1207		413	18.9	0.182
21	1158		492	13.9	0.092
22	1202		390	11.5	0.025
23	1214		327	25.7	0.051
24	1209		354	82.6	0.029
25	1208		364	44.5	0.013
26	1201		562	81.9	0.145
27	1207		442	7.9	0.026
28	1200		347	15.3	0.051
29	1205		416	28.7	0.266
30	1205		388	18.5	0.065
31	1206		403	25.4	0.099

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

DECEMBER 1984

Storm Sudden Commencements (ssc)			Solar Flare Effects (sfe)		
Day	Time	Quality: Station Group*	Day	Begin-End	Station(s)
13	0102	A: QUE MPO; B: WNG GCK GNA: C: NGK VAL BDV CLF SPT LNP			n o n e
21	1721	B: WNG MPO; C: NGK VAL EBR			
23	0939	A: MPO; B: WNG; C: WIT NGK BDV			

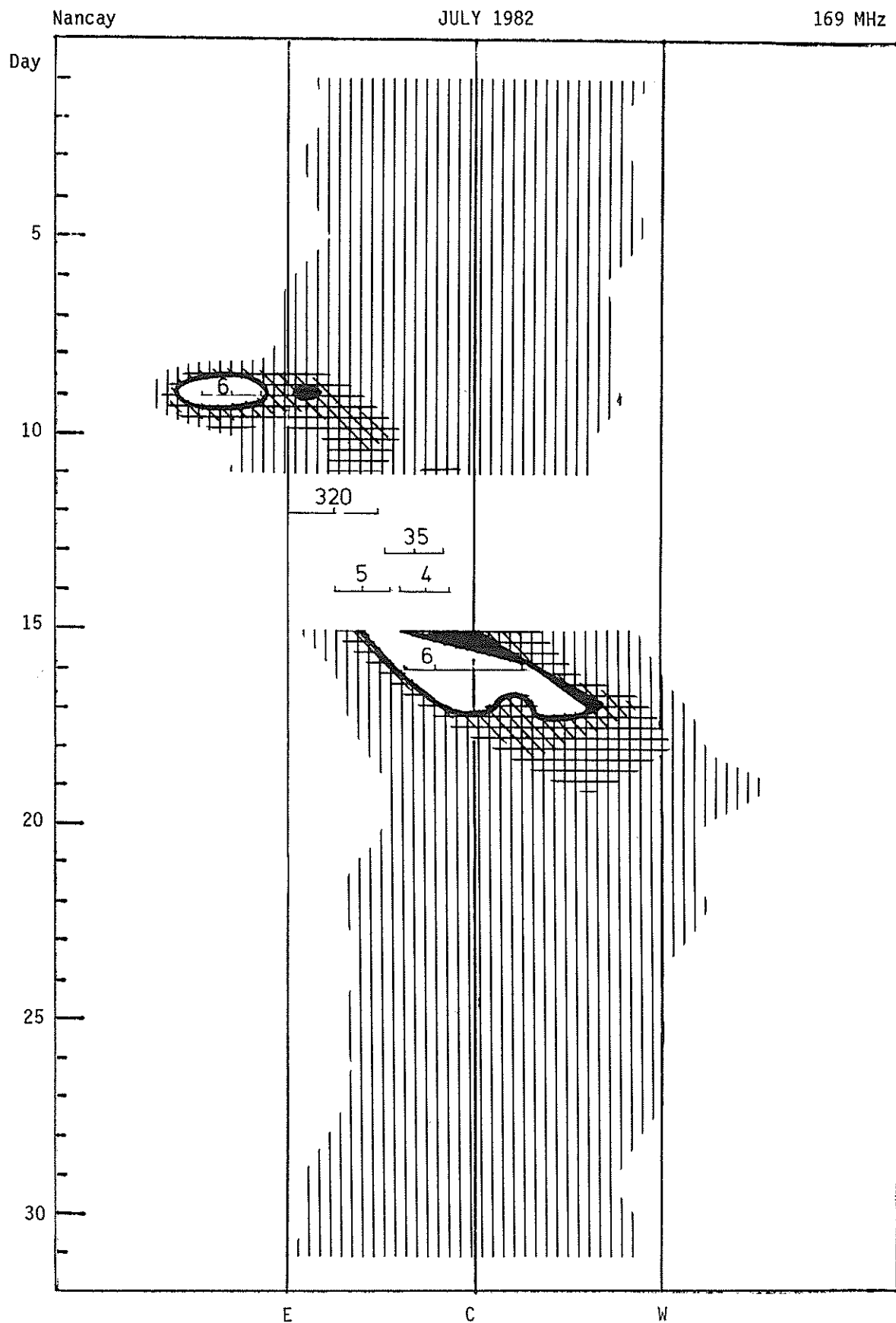
Reporting Observatories:

SOD DOB NUR WNG WIT NGK VAL HAD BDV CLF GCK MMB AQU
EBR COI SPT FRD KAK HTY KNY QUE LNP MPO GNA CAO AMS
CZT KGL DUM

*Three-letter codes identify each observatory.

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SOLAR INTERFEROMETRIC OBSERVATIONS



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

May 1983

August 1978

September 1978

	HUANCAYO Average (cts/h)/100	CLIMAX Average (cts/h)/100	CLIMAX Average (cts/h)/100
1	1733.2	4220.8	4183.5
2	1732.2	4213.0	4180.4
3	1730.0	4214.1	4186.9
4	1725.0	4223.3	4192.8
5	1724.2	4216.0	4211.0
6	1729.8	4199.4	4193.9
7	1726.5	4167.6	4207.5
8	1722.9	4165.5	4205.3
9	1725.0	4164.6	4172.5
10	1730.5	4176.1	4173.9
11	1730.4	4187.9	4211.7
12	1721.7	4189.5	4278.3
13	1716.7	4190.8	4250.2
14	1711.8	4208.1	4211.4
15	1712.9	4194.7	4194.9
16	1720.7	---	4185.6
17	1703.4	---	4203.0
18	1698.1	---	4208.0
19	1715.7	---	4204.0
20	1722.8	---	4200.4
21	1721.2	4071.2	4209.5
22	1704.0	4088.3	4219.0
23	1705.0	4108.7	4235.5
24	1706.5	4149.6	4227.9
25	1717.0	---	4170.3
26	1710.1	---	4142.8
27	1708.4	4165.8	4082.4
28	1718.7	4260.8	4113.4
29	1725.0	4213.7	3981.5
30	1724.5	4192.8	3952.0
31	1726.4	4201.5	
Mean	1719.4	4182.6	4179.6

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

CALCIUM PLAGE REGIONS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

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AUGUST 1982

Calcium Plage Region	Sta	Mo	Day	Time (UT)	Lat	CMD	CMP Mo	Day	Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
18480	BIGB	07	25	1730	S12	E80	07	31.7	2.0	1200	3834	3835	3832
18480	BIGB	07	27	1500	S12	E58	08	1.0	2.5	2700	3834	3835	3832
18480	BIGB	07	28	1505	S12	E44	07	31.9	2.5	2800	3834	3835	3832
18480	BIGB	07	29	1455	S10	E31	07	31.9	2.0	2300	3834	3835	3832
18480	BIGB	07	30	1500	S10	E18	08	1.0	2.5	2100	3834	3835	3832
18480	BIGB	07	31	1700	S10	E04	08	1.0	2.5	2700	3834	3835	3832
18480	BIGB	08	01	1659	S11	W09	08	1.0	2.0	2700	3834	3835	3832
18480	BIGB	08	02	1713	S10	W22	08	1.1	2.5	2800	3834	3835	3832
18480	BIGB	08	03	1509	S10	W36	07	31.9	2.5	2400	3834	3835	3832
18480	BIGB	08	04	1545	S10	W50	07	31.9	2.5	1800	3834	3835	3832
18480	BIGB	08	05	1913	S10	W65	07	31.9	2.5	1600	3834	3835	3832
18492B	BIGB	07	28	1505	S12	E80	08	3.6	3.0	0200	3829		
18492B	BIGB	07	29	1455	S12	E67	08	3.7	3.5	0800	3829		
18492B	BIGB	07	30	1500	S13	E55	08	3.8	4.0	2000	3829		
18492B	BIGB	07	31	1700	S13	E40	08	3.7	3.5	2500	3829		
18492B	BIGB	08	01	1659	S12	E28	08	3.8	2.5	2500	3829		
18492B	BIGB	08	02	1713	S11	E15	08	3.8	3.0	3200	3829		
18492B	BIGB	08	03	1509	S12	W00	08	3.6	3.5	3400	3829		
18492B	BIGB	08	04	1545	S12	W13	08	3.7	3.5	3000	3829		
18492B	BIGB	08	05	1913	S12	W27	08	3.8	4.0	3500	3829		
18492B	BIGB	08	07	1846	S13	W52	08	3.8	3.5	4200	3829		
18492B	BIGB	08	08	1607	S13	W67	08	3.6	3.0	4300	3829		
18492B	BIGB	08	09	1444	S13	W80	08	3.6	3.0	3500	3829		
18495	BIGB	07	29	1455	N15	E90	08	5.4	1.0	0300	3830		
18495	BIGB	07	30	1500	N15	E80	08	5.7	3.0	1700	3830		
18495	BIGB	07	31	1700	N15	E64	08	5.5	3.0	2800	3830		
18495	BIGB	08	01	1659	N16	E50	08	5.5	2.5	2500	3830		
18495	BIGB	08	02	1713	N17	E36	08	5.4	3.0	2400	3830		
18495	BIGB	08	03	1509	N17	E24	08	5.4	3.0	2200	3830		
18495	BIGB	08	04	1545	N17	E10	08	5.4	2.5	2400	3830		
18495	BIGB	08	05	1913	N17	W05	08	5.4	2.5	1900	3830		
18495	BIGB	08	07	1846	N16	W32	08	5.3	2.5	1200	3830		
18495	BIGB	08	08	1607	N16	W45	08	5.2	2.5	1300	3830		
18495	BIGB	08	09	1444	N16	W59	08	5.1	3.0	1400	3830		
18495	BIGB	08	10	1449	N16	W72	08	5.1	3.5	1300	3830		
18495	BIGB	08	11	1508	N16	W90	08	4.8	3.0	0900	3830		
18506	BIGB	07	31	1700	S20	E75	08	6.4	2.0	1500			
18506	BIGB	08	01	1659	S20	E65	08	6.7	1.5	1400			
18506	BIGB	08	02	1713	S18	E51	08	6.6	1.5	1000			
18506	BIGB	08	03	1509	S19	E36	08	6.4	1.5	0900			
18506	BIGB	08	04	1545	S20	E23	08	6.4	2.0	0800			
18506	BIGB	08	05	1913	S19	E07	08	6.3	1.5	0800			
18506	BIGB	08	07	1846	S20	W18	08	6.4	1.5	0700			
18506	BIGB	08	08	1607	S20	W32	08	6.2	1.5	0700			
18506	BIGB	08	09	1444	S19	W46	08	6.1	1.5	700			
18506	BIGB	08	10	1449	S19	W58	08	6.2	1.0	0500			
18506	BIGB	08	11	1508	S19	W76	08	5.8	1.0	0500			
18508	BIGB	08	02	1713	N12	E63	08	7.5	1.0	0200	3838		
18508	BIGB	08	03	1509	N11	E50	08	7.4	2.0	0200	3838		
18508	BIGB	08	04	1545	N10	E34	08	7.2	3.5	1000	3838		
18508	BIGB	08	05	1913	N10	E17	08	7.1	3.0	1200	3838		
18508	BIGB	08	07	1846	N10	W10	08	7.0	3.0	1500	3838		
18508	BIGB	08	08	1607	N10	W23	08	6.9	3.0	1600	3838		
18508	BIGB	08	09	1444	N10	W35	08	7.0	2.5	2500	3838		
18508	BIGB	08	10	1449	N10	W50	08	6.9	3.5	2500	3838		
18508	BIGB	08	11	1508	N10	W64	08	6.8	3.0	2000	3838		
18508	BIGB	08	12	1455	N10	W88	08	6.0	2.5	1200	3838		
18514	BIGB	08	05	1913	S15	E19	08	7.2	1.5	0200	3840	3836A	
18514	BIGB	08	07	1846	S15	W07	08	7.2	3.0	0900	3840	3836A	
18514	BIGB	08	08	1607	S15	W21	08	7.1	3.5	1400	3840	3836A	
18514	BIGB	08	09	1444	S15	W36	08	6.9	2.5	1700	3840	3836A	
18514	BIGB	08	10	1449	S15	W47	08	7.0	3.0	2000	3840	3836A	
18514	BIGB	08	11	1508	S15	W62	08	6.9	3.0	1600	3840	3836A	
18514	BIGB	08	12	1455	S16	W78	08	6.7	3.0	1500	3840	3836A	
18515	BIGB	08	07	1846	S18	W03	08	7.5	2.0	0100	3847	3840	

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CALCIUM PLAGE REGIONS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

AUGUST 1982

Calcium Plage Region	Sta	Mo	Day	Observation Time (UT)	Lat	CMD	Mo	Day	CMP Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
18515	BIGB	08	08	1607	S18	W17	08	7.4	2.5	0300	3847	3840	
18515	BIGB	08	09	1444	S19	W32	08	7.2	2.0	0700	3847	3840	
18515	BIGB	08	10	1449	S18	W45	08	7.2	3.0	1000	3847	3840	
18515	BIGB	08	11	1508	S19	W60	08	7.0	3.0	1000	3847	3840	
18515	BIGB	08	12	1455	S20	W75	08	6.9	3.5	1200	3847	3840	
18509	BIGB	08	02	1713	N10	E78	08	8.6	2.5	0600	3847B	3838	
18509	BIGB	08	03	1509	N10	E64	08	8.4	2.0	0700	3847B	3838	
18509	BIGB	08	04	1545	N10	E49	08	8.3	2.5	0700	3847B	3838	
18509	BIGB	08	05	1913	N10	E34	08	8.3	2.5	0600	3847B	3838	
18509	BIGB	08	07	1846	N10	E06	08	8.2	2.5	0600	3847B	3838	
18509	BIGB	08	08	1607	N10	W06	08	8.2	2.0	0600	3847B	3838	
18509	BIGB	08	09	1444	N10	W20	08	8.1	2.5	0500	3847B	3838	
18509	BIGB	08	10	1449	N11	W35	08	8.0	2.0	0500	3847B	3838	
18509	BIGB	08	11	1508	N11	W48	08	8.0	2.0	0600	3847B	3838	
18509	BIGB	08	12	1455	N10	W67	08	7.6	2.0	0600	3847B	3838	
18510	BIGB	08	02	1713	S16	E80	08	8.8	2.0	0700	3848	3846	3836
18510	BIGB	08	03	1509	S16	E65	08	8.6	2.0	0700	3848	3846	3836
18510	BIGB	08	04	1545	S16	E50	08	8.4	2.5	0700	3848	3846	3836
18510	BIGB	08	05	1913	S16	E34	08	8.4	3.0	1100	3848	3846	3836
18510	BIGB	08	07	1846	S16	E09	08	8.5	2.5	1200	3848	3846	3836
18510	BIGB	08	08	1607	S16	W05	08	8.3	2.5	1100	3848	3846	3836
18510	BIGB	08	10	1449	S16	W33	08	8.1	2.5	1400	3848	3846	3836
18510	BIGB	08	11	1508	S16	W47	08	8.1	2.5	1200	3848	3846	3836
18510	BIGB	08	12	1455	S16	W60	08	8.1	2.5	1200	3848	3846	3836
18512	BIGB	08	03	1509	S12	E68	08	8.7	1.5	0100	3841		
18512	BIGB	08	04	1545	S12	E55	08	8.8	2.5	0300	3841		
18512	BIGB	08	05	1913	S12	E38	08	8.7	2.5	0300	3841		
18512	BIGB	08	07	1846	S12	E12	08	8.7	2.5	0400	3841		
18512	BIGB	08	08	1607	S12	W02	08	8.5	2.5	0500	3841		
18512	BIGB	08	09	1444	S12	W14	08	8.5	3.0	0600	3841		
18512	BIGB	08	10	1449	S11	W28	08	8.5	2.5	0500	3841		
18512	BIGB	08	11	1508	S11	W41	08	8.5	1.5	0400	3841		
18512	BIGB	08	12	1455	S11	W54	08	8.5	1.5	0300	3841		
18511	BIGB	08	03	1509	N09	E84	08	9.9	4.0	2000	3837	3850	3839
18511	BIGB	08	04	1545	N09	E75	08	10.3	4.0	5500	3837	3850	3839
18511	BIGB	08	05	1913	N10	E65	08	10.7	4.0	14000	3837	3850	3839
18511	BIGB	08	07	1846	N12	E38	08	10.6	3.5	13000	3837	3850	3839
18511	BIGB	08	08	1607	N12	E25	08	10.5	4.0	13000	3837	3850	3839
18511	BIGB	08	09	1444	N11	E14	08	10.7	4.0	14000	3837	3850	3839
18511	BIGB	08	10	1449	N12	W00	08	10.6	4.5	15000	3837	3850	3839
18511	BIGB	08	11	1508	N12	W14	08	10.6	4.5	15800	3837	3850	3839
18511	BIGB	08	12	1455	N11	W28	08	10.5	4.0	16000	3837	3850	3839
18511	BIGB	08	14	1916	N11	W58	08	10.4	4.0	16000	3837	3850	3839
18511	BIGB	08	15	1739	N12	W73	08	10.2	4.0	16500	3837	3850	3839
18511	BIGB	08	16	2055	N11	W79	08	10.9	3.0	4000	3837	3850	3839
18511	BIGB	08	17	1802	N11	W90	08	11.0	3.0	2500	3837	3850	3839
18513	BIGB	08	04	1545	S28	E77	08	10.7	1.5	0500			
18513	BIGB	08	05	1913	S27	E63	08	10.7	1.5	0700			
18513	BIGB	08	07	1846	S27	E40	08	10.9	2.0	0600			
18513	BIGB	08	08	1607	S27	E27	08	10.8	2.0	0600			
18513	BIGB	08	09	1444	S27	E12	08	10.5	2.0	0800			
18513	BIGB	08	10	1449	S27	W00	08	10.6	2.0	0700			
18513	BIGB	08	11	1508	S27	W14	08	10.5	1.5	0700			
18513	BIGB	08	12	1455	S27	W26	08	10.6	1.5	0800			
18513	BIGB	08	14	1916	S28	W56	08	10.4	2.0	0800			
18513	BIGB	08	15	1739	S29	W70	08	10.2	2.0	1100			
18516	BIGB	08	07	1846	S05	E55	08	11.9	2.0	0300	3844		
18516	BIGB	08	08	1607	S06	E40	08	11.7	2.0	0200	3844		
18516	BIGB	08	09	1444	S08	E25	08	11.5	2.5	0700	3844		
18516	BIGB	08	10	1449	S08	E12	08	11.5	3.0	1000	3844		
18516	BIGB	08	11	1508	S08	W03	08	11.4	2.5	1400	3844		
18516	BIGB	08	12	1455	S08	W16	08	11.4	2.5	1300	3844		
18516	BIGB	08	14	1916	S09	W47	08	11.3	2.5	1600	3844		
18516	BIGB	08	15	1739	S08	W60	08	11.2	2.5	2000	3844		
18516	BIGB	08	16	2055	S10	W81	08	10.8	1.5	1300	3844		

CALCIUM PLAGE REGIONS
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Calcium Plage Region	Sta	Mo	Day	Time (UT)	Lat	CMD	CMP Mo	Day	Intensity	Corrected Area (10 ⁻⁶ Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
18517	BIGB	08	07	1846	S12	E64	08	12.6	2.0	0400			
18517	BIGB	08	08	1607	S13	E48	08	12.3	2.0	0300			
18517	BIGB	08	09	1444	S13	E33	08	12.1	2.5	0700			
18517	BIGB	08	10	1449	S13	E20	08	12.1	2.5	0600			
18517	BIGB	08	11	1508	S13	E06	08	12.1	2.5	0800			
18517	BIGB	08	12	1455	S13	W08	08	12.0	2.0	0600			
18517	BIGB	08	14	1916	S14	W37	08	12.0	2.0	0600			
18517	BIGB	08	15	1739	S15	W50	08	11.9	2.0	0600			
18517	BIGB	08	16	2055	S16	W65	08	11.9	1.5	0500			
18520	BIGB	08	07	1846	N25	E65	08	12.8	2.0	0800	3842		
18520	BIGB	08	08	1607	N24	E50	08	12.5	2.0	1200	3842		
18520	BIGB	08	09	1444	N22	E37	08	12.4	2.5	2700	3842		
18520	BIGB	08	10	1449	N22	E22	08	12.3	2.0	2400	3842		
18520	BIGB	08	11	1508	N22	E09	08	12.3	2.0	2100	3842		
18520	BIGB	08	12	1455	N21	W04	08	12.3	2.0	2200	3842		
18520	BIGB	08	14	1916	N20	W36	08	12.0	2.5	2500	3842		
18520	BIGB	08	15	1739	N23	W49	08	11.9	2.5	2800	3842		
18520	BIGB	08	16	2055	N19	W63	08	12.1	2.5	2000	3842		
18520	BIGB	08	17	1802	N19	W77	08	11.9	2.0	2000	3842		
18518	BIGB	08	07	1846	S06	E80	08	13.8	2.0	0900	3843	3853	
18518	BIGB	08	08	1607	S07	E67	08	13.7	2.0	1000	3843	3853	
18518	BIGB	08	09	1444	S10	E52	08	13.5	3.0	2500	3843	3853	
18518	BIGB	08	10	1449	S09	E40	08	13.6	3.5	3000	3843	3853	
18518	BIGB	08	11	1508	S09	E25	08	13.5	3.5	3000	3843	3853	
18518	BIGB	08	12	1455	S09	E11	08	13.4	3.0	3000	3843	3853	
18518	BIGB	08	14	1916	S09	W19	08	13.4	3.0	3000	3843	3853	
18518	BIGB	08	15	1739	S08	W31	08	13.4	2.5	2700	3843	3853	
18518	BIGB	08	16	2055	S09	W47	08	13.3	3.0	1800	3843	3853	
18518	BIGB	08	17	1802	S09	W61	08	13.2	2.5	1500	3843	3853	
18518	BIGB	08	18	2340	S09	W80	08	13.0	2.0	1200	3843	3853	
18519	BIGB	08	07	1846	N17	E80	08	13.9	2.0	1200	3845	3855A	
18519	BIGB	08	08	1607	N17	E72	08	14.1	2.0	1800	3845	3855A	
18519	BIGB	08	09	1444	N16	E59	08	14.1	3.0	3800	3845	3855A	
18519	BIGB	08	10	1449	N16	E46	08	14.1	3.0	4000	3845	3855A	
18519	BIGB	08	11	1508	N16	E36	08	14.4	3.0	4100	3845	3855A	
18519	BIGB	08	12	1455	N16	E18	08	14.0	3.0	4200	3845	3855A	
18519	BIGB	08	14	1916	N16	W11	08	14.0	3.5	4000	3845	3855A	
18519	BIGB	08	15	1739	N16	W26	08	13.8	3.0	4000	3845	3855A	
18519	BIGB	08	16	2055	N16	W38	08	14.0	2.5	3800	3845	3855A	
18519	BIGB	08	17	1802	N16	W50	08	13.9	2.0	2000	3845	3855A	
18519	BIGB	08	18	2340	N17	W69	08	13.7	2.5	1000	3845	3855A	
18519	BIGB	08	19	1824	N17	W79	08	13.8	2.0	0600	3845	3855A	
18530	BIGB	08	17	1802	N14	W45	08	14.3	3.5	1200	3864		
18530	BIGB	08	18	2340	N14	W63	08	14.2	2.5	1300	3864		
18530	BIGB	08	19	1824	N13	W76	08	14.0	3.0	1500	3864		
18530	BIGB	08	20	2007	N13	W87	08	14.3	2.0	0400	3864		
18528	BIGB	08	14	1916	N08	W02	08	14.6	3.0	0700	3861		
18528	BIGB	08	15	1739	N07	W15	08	14.6	3.5	1000	3861		
18528	BIGB	08	16	2055	N07	W31	08	14.5	3.5	1200	3861		
18528	BIGB	08	18	2340	N07	W62	08	14.3	3.0	1100	3861		
18528	BIGB	08	19	1824	N07	W75	08	14.1	3.5	1200	3861		
18528	BIGB	08	20	2007	N08	W85	08	14.5	2.5	0600	3861		
18522	BIGB	08	11	1508	S13	E56	08	15.8	3.0	0300	3856		
18522	BIGB	08	12	1455	S13	E40	08	15.6	3.5	0700	3856		
18522	BIGB	08	14	1916	S13	E13	08	15.8	4.0	2000	3856		
18522	BIGB	08	15	1739	S12	W03	08	15.5	4.0	2800	3856		
18522	BIGB	08	16	2055	S12	W17	08	15.6	3.0	2500	3856		
18522	BIGB	08	17	1802	S12	W31	08	15.4	3.5	2800	3856		
18522	BIGB	08	18	2340	S12	W47	08	15.4	3.5	3700	3856		
18522	BIGB	08	19	1824	S12	W59	08	15.3	4.0	4000	3856		
18522	BIGB	08	20	2007	S11	W70	08	15.6	3.5	4000	3856		
18522	BIGB	08	21	2233	S12	W90	08	15.1	3.5	3000	3856		
18521	BIGB	08	09	1444	N25	E78	08	15.6	2.0	0600			
18521	BIGB	08	10	1449	N25	E64	08	15.6	1.5	0500			

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Calcium Plage Region	Sta	Mo	Day	Time (UT)	Lat	CMD	Mo	Day	Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
18521	BIGB	08	12	1455	N26	E39	08	15.6	2.5	1200			
18521	BIGB	08	14	1916	N26	E11	08	15.6	2.5	1800			
18521	BIGB	08	15	1739	N26	E03	08	16.0	2.0	2100			
18521	BIGB	08	16	2055	N26	W10	08	16.1	2.5	1800			
18521	BIGB	08	17	1802	N27	W24	08	15.9	2.5	1800			
18521	BIGB	08	18	2340	N27	W40	08	15.9	2.0	1700			
18521	BIGB	08	19	1824	N27	W50	08	15.9	2.5	2000			
18521	BIGB	08	20	2007	N28	W67	08	15.6	2.0	2500			
18521	BIGB	08	21	2233	N28	W79	08	15.8	2.0	2500			
18525	BIGB	08	14	1916	N15	E33	08	17.3	1.0	0900	3859		
18525	BIGB	08	15	1739	N15	E19	08	17.2	2.0	0700	3859		
18525	BIGB	08	16	2055	N15	E04	08	17.2	2.0	0500	3859		
18526	BIGB	08	14	1916	N13	E49	08	18.5	2.0	0300	3860		
18526	BIGB	08	15	1739	N13	E38	08	18.6	1.0	0100	3860		
18526	BIGB	08	16	2055	N13	E22	08	18.5	1.0	0100	3860		
18526	BIGB	08	17	1802	N14	E10	08	18.5	1.0	0100	3860		
18523	BIGB	08	14	1916	S07	E69	08	20.0	3.5	1800	3858		
18523	BIGB	08	15	1739	S07	E56	08	19.9	3.5	3000	3858		
18523	BIGB	08	16	2055	S06	E39	08	19.8	3.0	2500	3858		
18523	BIGB	08	17	1802	S06	E24	08	19.5	3.0	2500	3858		
18523	BIGB	08	18	2340	S06	E08	08	19.6	2.5	2000	3858		
18523	BIGB	08	19	1824	S06	W05	08	19.4	2.5	1700	3858		
18523	BIGB	08	20	2007	S06	W18	08	19.5	2.5	1500	3858		
18523	BIGB	08	21	2233	S06	W34	08	19.4	2.5	1400	3858		
18523	BIGB	08	22	1643	S06	W48	08	19.1	2.0	1000	3858		
18523	BIGB	08	23	1602	S07	W58	08	19.3	2.0	0700	3858		
18523	BIGB	08	25	1719	S07	W89	08	19.0	2.0	0300	3858		
18535	BIGB	08	21	2233	S09	W24	08	20.1	2.0	0100	3858		
18535	BIGB	08	22	1643	S09	W38	08	19.8	2.0	0100	3858		
18524	BIGB	08	14	1916	S10	E89	08	21.5	3.0	0300	3866A		
18524	BIGB	08	15	1739	S10	E68	08	20.8	2.0	0300	3866A		
18524	BIGB	08	16	2055	S10	E52	08	20.8	1.5	0200	3866A		
18524	BIGB	08	17	1802	S09	E39	08	20.7	2.0	0300	3866A		
18524	BIGB	08	18	2340	S09	E22	08	20.6	1.5	0300	3866A		
18524	BIGB	08	19	1824	S09	E11	08	20.6	1.0	0300	3866A		
18524	BIGB	08	20	2007	S09	W03	08	20.6	1.0	0400	3866A		
18524	BIGB	08	21	2233	S09	W20	08	20.4	2.0	0300	3866A		
18524	BIGB	08	22	1643	S09	W31	08	20.4	2.0	0300	3866A		
18524	BIGB	08	23	1602	S10	W47	08	20.1	2.0	0300	3866A		
18524	BIGB	08	25	1719	S09	W76	08	20.0	2.0	0300	3866A		
18529	BIGB	08	16	2055	N27	E57	08	21.3	3.0	0500	3862	3866	
18529	BIGB	08	17	1802	N27	E43	08	21.1	4.0	0600	3862	3866	
18529	BIGB	08	18	2340	N27	E26	08	21.0	3.0	1000	3862	3866	
18529	BIGB	08	19	1824	N27	E15	08	20.9	3.5	1700	3862	3866	
18529	BIGB	08	20	2007	N26	E03	08	21.1	3.0	1500	3862	3866	
18529	BIGB	08	21	2233	N26	W13	08	20.9	3.0	2000	3862	3866	
18529	BIGB	08	22	1643	N26	W27	08	20.6	3.0	1800	3862	3866	
18529	BIGB	08	23	1602	N26	W36	08	20.9	3.0	1800	3862	3866	
18529	BIGB	08	25	1719	N27	W65	08	20.6	3.0	1400	3862	3866	
18529	BIGB	08	26	1628	N29	W78	08	20.6	2.5	0500	3862	3866	
18527	BIGB	08	15	1739	N22	E84	08	22.2	2.5	1300			
18527	BIGB	08	16	2055	N25	E60	08	21.5	2.5	1000			
18527	BIGB	08	17	1802	N25	E54	08	21.9	3.0	1400			
18527	BIGB	08	18	2340	N25	E41	08	22.2	2.5	0500			
18527	BIGB	08	19	1824	N25	E26	08	21.8	2.0	0500			
18527	BIGB	08	20	2007	N25	E14	08	21.9	1.5	0700			
18527	BIGB	08	21	2233	N24	W02	08	21.8	2.0	0600			
18527	BIGB	08	22	1643	N25	W15	08	21.5	2.0	0500			
18527	BIGB	08	23	1602	N25	W24	08	21.8	1.5	0500			
18527	BIGB	08	25	1719	N25	W51	08	21.8	2.0	0500			
18527	BIGB	08	26	1628	N27	W60	08	22.0	1.0	0300			
18534	BIGB	08	19	1824	S03	E32	08	22.1	2.0	0300	3869		
18534	BIGB	08	20	2007	S03	E18	08	22.2	1.5	0300	3869		

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Calcium Plage Region	Sta	Observation Time		Lat CMD		CMP Mo Day		Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
18534	BIGB	08	21	2233	S03 E01	08	22.0	2.5	0700	3869		
18534	BIGB	08	22	1643	S03 W11	08	21.9	2.5	0400	3869		
18534	BIGB	08	23	1602	S04 W23	08	21.9	1.5	0500	3869		
18534	BIGB	08	25	1719	S03 W52	08	21.8	1.5	0500	3869		
18534	BIGB	08	26	1628	S02 W66	08	21.7	1.5	0300	3869		
18533	BIGB	08	18	2340	S17 E43	08	22.2	1.5	0300	3873		
18533	BIGB	08	19	1824	S17 E33	08	22.3	1.5	0300	3873		
18533	BIGB	08	20	2007	S17 E18	08	22.2	2.0	0500	3873		
18533	BIGB	08	21	2233	S17 E03	08	22.2	2.0	0500	3873		
18533	BIGB	08	22	1643	S16 W10	08	21.9	2.0	0400	3873		
18533	BIGB	08	23	1602	S16 W21	08	22.1	3.5	0500	3873		
18533	BIGB	08	25	1719	S16 W50	08	21.9	2.0	0300	3873		
18533	BIGB	08	26	1628	S18 W65	08	21.7	1.5	0400	3873		
18531	BIGB	08	17	1802	S13 E79	08	23.7	3.5	1500	3867		
18531	BIGB	08	18	2340	S14 E68	08	24.1	4.0	4000	3867		
18531	BIGB	08	19	1824	S14 E59	08	24.2	4.0	4000	3867		
18531	BIGB	08	20	2007	S14 E45	08	24.2	3.5	4500	3867		
18531	BIGB	08	21	2233	S14 E28	08	24.0	4.0	4000	3867		
18531	BIGB	08	22	1643	S13 E16	08	23.9	3.5	4000	3867		
18531	BIGB	08	23	1602	S13 E04	08	24.0	3.5	3100	3867		
18531	BIGB	08	25	1719	S13 W26	08	23.7	3.5	3600	3867		
18531	BIGB	08	26	1628	S12 W38	08	23.8	3.5	4000	3867		
18531	BIGB	08	27	1703	S12 W54	08	23.6	3.5	3600	3867		
18531	BIGB	08	28	1639	S13 W66	08	23.7	3.5	3700	3867		
18531	BIGB	08	29	1627	S13 W80	08	23.6	3.5	2500	3867		
18504	BIGB	08	21	2233	N13 E39	08	24.9	2.0	0500	3871		
18504	BIGB	08	22	1643	N13 E27	08	24.7	2.0	0400	3871		
18504	BIGB	08	23	1602	N14 E17	08	24.9	2.5	0600	3871		
18504	BIGB	08	25	1719	N15 W12	08	24.8	2.5	0500	3871		
18504	BIGB	08	26	1628	N15 W22	08	25.0	2.5	0700	3871		
18504	BIGB	08	27	1703	N16 W38	08	24.8	3.0	0700	3871		
18504	BIGB	08	28	1639	N16 W54	08	24.6	2.5	0500	3871		
18536	BIGB	08	25	1719	N23 W10	08	24.9	3.5	1100	3877		
18536	BIGB	08	26	1628	N23 W22	08	25.0	3.5	1800	3877		
18536	BIGB	08	27	1703	N23 W38	08	24.8	3.5	2400	3877		
18536	BIGB	08	29	1627	N23 W63	08	24.8	3.5	3000	3877		
18536	BIGB	08	30	1740	N23 W79	08	24.6	3.0	3000	3877		
18536	BIGB	08	31	1633	N23 W90	08	24.7	3.5	1200	3877		
18532	BIGB	08	20	2007	N13 E74	08	26.4	3.0	0500	3870		
18532	BIGB	08	21	2233	N13 E49	08	25.6	3.5	1800	3870		
18532	BIGB	08	22	1643	N13 E34	08	25.3	3.5	2500	3870		
18532	BIGB	08	23	1602	N15 E26	08	25.6	3.5	2800	3870		
18532	BIGB	08	25	1719	N15 E01	08	25.8	3.5	3200	3870		
18532	BIGB	08	26	1628	N15 W11	08	25.8	3.5	3500	3870		
18532	BIGB	08	27	1703	N15 W26	08	25.7	3.5	3600	3870		
18532	BIGB	08	28	1639	N15 W38	08	25.8	3.5	3500	3870		
18532	BIGB	08	29	1627	N15 W51	08	25.8	3.5	3800	3870		
18532	BIGB	08	30	1740	N15 W64	08	25.9	3.5	3800	3870		
18532	BIGB	08	31	1633	N15 W80	08	25.6	3.5	2800	3870		
18537	BIGB	08	23	1602	S10 E56	08	27.9	1.5	0800	3874		
18537	BIGB	08	25	1719	S11 E30	08	28.0	2.0	1400	3874		
18537	BIGB	08	26	1628	S11 E14	08	27.7	2.0	1400	3874		
18537	BIGB	08	27	1703	S11 E01	08	27.8	2.0	1300	3874		
18537	BIGB	08	29	1627	S11 W26	08	27.7	1.0	1200	3874		
18537	BIGB	08	30	1740	S11 W41	08	27.6	1.0	1200	3874		
18537	BIGB	08	31	1633	S11 W54	08	27.6	1.0	1000	3874		
18537	BIGB	09	01	1734	S10 W69	08	27.6	2.0	0900	3874		
18537	BIGB	09	02	1710	S09 W75	08	28.2	1.0	0400	3874		
18546	BIGB	08	28	1639	N08 W10	08	27.9	2.0	1000	3881		
18546	BIGB	08	29	1627	N08 W24	08	27.9	3.0	1000	3881		
18546	BIGB	08	30	1740	N08 W38	08	27.9	3.0	1100	3881		
18546	BIGB	08	31	1633	N08 W52	08	27.8	3.0	1200	3881		
18546	BIGB	09	01	1734	N09 W68	08	27.7	3.0	1300	3881		
18546	BIGB	09	02	1710	N10 W79	08	27.9	3.0	1400	3881		

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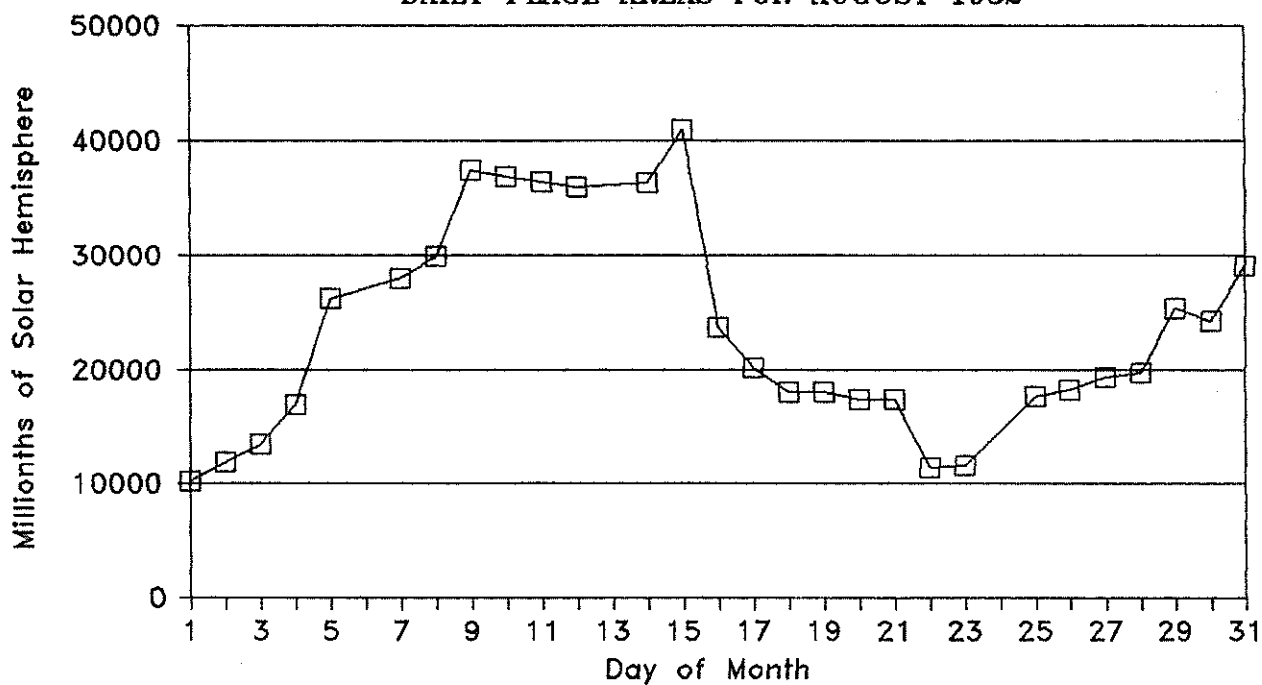
Calcium Plage Region	Sta	Mo	Day	Observation Time (UT)	Lat	CMD	CMP Mo	Day	Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
18539	BIGB	08	25	1719	N08	E45	08	29.1	3.5	1300	3875		
18539	BIGB	08	26	1628	N08	E32	08	29.1	2.5	1300	3875		
18539	BIGB	08	27	1703	N08	E17	08	29.0	3.0	1400	3875		
18539	BIGB	08	28	1639	N08	E04	08	29.0	3.5	1400	3875		
18539	BIGB	08	29	1627	N08	W09	08	29.0	3.5	1500	3875		
18539	BIGB	08	30	1740	N08	W22	08	29.1	2.5	1400	3875		
18539	BIGB	08	31	1633	N08	W37	08	28.9	2.5	1300	3875		
18539	BIGB	09	01	1734	N09	W50	08	29.1	3.0	1100	3875		
18539	BIGB	09	02	1710	N10	W63	08	29.1	3.0	1000	3875		
18538	BIGB	08	25	1719	N19	E51	08	29.6	2.0	0700			
18538	BIGB	08	26	1628	N17	E39	08	29.6	1.5	0400			
18538	BIGB	08	27	1703	N18	E24	08	29.5	1.5	0400			
18538	BIGB	08	28	1639	N18	E12	08	29.6	1.5	0400			
18538	BIGB	08	29	1627	N18	W02	08	29.5	1.5	0600			
18538	BIGB	08	30	1740	N18	W17	08	29.4	1.0	0400			
18538	BIGB	08	31	1633	N19	W30	08	29.4	1.0	0500			
18538	BIGB	09	01	1734	N22	W46	08	29.3	1.0	0700			
18538	BIGB	09	02	1710	N22	W57	08	29.4	1.0	0600			
18541	BIGB	08	25	1719	S11	E56	08	29.9	2.5	1100	3875A		
18541	BIGB	08	26	1628	S12	E48	08	30.3	2.5	1900	3875A		
18541	BIGB	08	27	1703	S12	E27	08	29.7	2.5	1800	3875A		
18541	BIGB	08	28	1639	S12	E21	08	30.3	1.5	2000	3875A		
18541	BIGB	08	29	1627	S12	E09	08	30.4	1.5	2100	3875A		
18541	BIGB	08	30	1740	S12	W08	08	30.1	1.5	2200	3875A		
18541	BIGB	08	31	1633	S12	W19	08	30.2	2.0	2700	3875A		
18541	BIGB	09	01	1734	S13	W34	08	30.3	2.5	3000	3875A		
18541	BIGB	09	02	1710	S13	W46	08	30.3	2.0	2100	3875A		
18541	BIGB	09	04	2114	S13	W70	08	30.7	1.5	2000	3875A		
18543	BIGB	08	25	1719	S22	E67	08	30.9	2.5	0500			
18543	BIGB	08	26	1628	S22	E55	08	30.9	3.0	0700			
18543	BIGB	08	27	1703	S22	E39	08	30.7	2.5	0600			
18543	BIGB	08	28	1639	S22	E28	08	30.8	2.0	0600			
18543	BIGB	08	29	1627	S23	E13	08	30.7	2.5	0400			
18543	BIGB	08	30	1740	S23	W01	08	30.6	2.0	0300			
18543	BIGB	08	31	1633	S22	W13	08	30.7	2.5	0300			
18543	BIGB	09	01	1734	S22	W28	08	30.7	1.5	0300			
18543	BIGB	09	02	1710	S22	W41	08	30.7	1.5	0200			
18540	BIGB	08	25	1719	N07	E76	08	31.4	3.5	1000	3876	3887	
18540	BIGB	08	26	1628	N06	E59	08	31.1	3.0	1100	3876	3887	
18540	BIGB	08	27	1703	N06	E44	08	31.0	3.0	1000	3876	3887	
18540	BIGB	08	28	1639	N06	E32	08	31.1	2.5	0800	3876	3887	
18540	BIGB	08	29	1627	N06	E18	08	31.0	2.0	0800	3876	3887	
18540	BIGB	08	30	1740	N06	E04	08	31.0	1.5	0600	3876	3887	
18540	BIGB	08	31	1633	N07	W09	08	31.0	1.5	0600	3876	3887	
18540	BIGB	09	01	1734	N08	W26	08	30.9	1.5	0600	3876	3887	
18540	BIGB	09	02	1710	N08	W40	08	30.8	1.0	0500	3876	3887	
18540	BIGB	09	04	2114	N08	W69	08	30.8	1.0	0400	3876	3887	
18540	BIGB	09	05	1634	N08	W79	08	30.9	1.0	0300	3876	3887	
18499	BIGB	09	01	1734	N06	W18	08	31.4	2.5	0400			
18499	BIGB	09	02	1710	N06	W31	08	31.4	2.0	0700			
18499	BIGB	09	04	2114	N07	W61	08	31.3	3.5	0700			
18499	BIGB	09	05	1634	N07	W73	08	31.2	3.0	0700			
18499	BIGB	09	06	1818	N08	W84	08	31.5	1.5	0600			

DAILY PLAGE SUMMARIES

AUGUST 1982

Day	Sta	Plage Index	Plage Count	Smallest Plage (Millionths)	Largest Plage of Solar Hemisphere	Total Area	Smallest Intensity	Largest Intensity
01	BIGB	17.3	6	500	2700	10200	1.5	2.5
02	BIGB	23.8	9	200	3200	11900	1.0	3.0
03	BIGB	25.9	11	100	3400	13400	1.5	4.0
04	BIGB	30.5	11	300	5500	17000	1.5	4.0
05	BIGB	49.7	12	200	14000	26200	1.5	4.0
06	No Observations This Day							
07	BIGB	61.6	16	100	13000	28000	1.5	3.5
08	BIGB	72.6	16	200	13000	29900	1.5	4.0
09	BIGB	88.9	16	500	14000	37400	1.5	4.0
10	BIGB	109.0	16	500	15000	36900	1.0	4.5
11	BIGB	106.0	16	300	15800	36400	1.0	4.5
12	BIGB	92.2	15	300	16000	36000	1.5	4.0
13	No Observations This Day							
14	BIGB	79.3	14	300	16000	36300	1.0	4.0
15	BIGB	66.1	15	100	16500	41000	1.0	4.0
16	BIGB	38.3	15	100	4000	23700	1.0	3.5
17	BIGB	31.6	13	100	2800	20200	1.0	4.0
18	BIGB	28.9	12	300	4000	18100	1.5	4.0
19	BIGB	31.5	12	300	4000	18100	1.0	4.0
20	BIGB	27.2	12	300	4500	17400	1.0	3.5
21	BIGB	32.0	12	100	4000	17400	2.0	4.0
22	BIGB	29.6	10	100	4000	11400	2.0	3.5
23	BIGB	28.9	10	300	3100	11600	1.5	3.5
24	No Observations This Day							
25	BIGB	38.3	16	300	3600	17700	1.5	3.5
26	BIGB	41.4	14	300	4000	18300	1.0	3.5
27	BIGB	41.1	13	400	3600	19400	1.0	3.5
28	BIGB	33.9	14	400	3700	19700	1.0	3.5
29	BIGB	39.9	15	400	3800	25400	1.0	3.5
30	BIGB	33.6	16	300	3800	24300	1.0	3.5
31	BIGB	45.5	18	300	3200	29100	1.0	3.5

DAILY PLAGE AREAS FOR AUGUST 1982



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Late
Sep 82

CALCIUM PLAGE REGIONS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

SEPTEMBER 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
18542	BIGB	08 27 1703	N19 E66	09 1.7	1.0	0400			
18542	BIGB	08 28 1639	N20 E51	09 1.6	1.0	0500			
18542	BIGB	08 29 1627	N19 E37	09 1.5	1.0	0700			
18542	BIGB	08 30 1740	N19 E23	09 1.5	1.0	0500			
18542	BIGB	08 31 1633	N19 E10	09 1.4	1.5	0500			
18542	BIGB	09 01 1734	N20 W04	09 1.4	1.0	0500			
18542	BIGB	09 02 1710	N20 W18	09 1.3	1.0	0700			
18542	BIGB	09 04 2114	N22 W46	09 1.3	1.0	0700			
18542	BIGB	09 05 1634	N22 W59	09 1.1	1.0	0600			
18542	BIGB	09 06 1818	N22 W68	09 1.5	1.0	0600			
18544	BIGB	08 27 1703	S19 E69	09 2.0	2.5	1000	3879		
18544	BIGB	08 28 1639	S18 E56	09 1.9	2.5	1700	3879		
18544	BIGB	08 29 1627	S18 E43	09 1.9	3.5	1900	3879		
18544	BIGB	08 30 1740	S18 E28	09 1.9	3.5	1800	3879		
18544	BIGB	08 31 1633	S17 E14	09 1.7	3.5	2300	3879		
18544	BIGB	09 01 1734	S16 W00	09 1.7	3.5	2700	3879		
18544	BIGB	09 02 1710	S16 W14	09 1.6	3.0	2300	3879		
18544	BIGB	09 04 2114	S15 W42	09 1.7	2.5	2100	3879		
18544	BIGB	09 05 1634	S14 W54	09 1.6	3.0	1900	3879		
18544	BIGB	09 06 1818	S14 W69	09 1.5	3.0	1600	3879		
18545	BIGB	08 27 1703	N08 E76	09 2.4	2.5	1200	3880	3891	
18545	BIGB	08 28 1639	N09 E64	09 2.5	3.5	2800	3880	3891	
18545	BIGB	08 29 1627	N09 E51	09 2.5	2.5	2700	3880	3891	
18545	BIGB	08 30 1740	N10 E36	09 2.4	2.5	2700	3880	3891	
18545	BIGB	08 31 1633	N11 E25	09 2.6	3.0	3200	3880	3891	
18545	BIGB	09 01 1734	N12 E10	09 2.5	2.5	3000	3880	3891	
18545	BIGB	09 02 1710	N12 W03	09 2.5	2.5	3000	3880	3891	
18545	BIGB	09 04 2114	N12 W34	09 2.3	2.0	2400	3880	3891	
18545	BIGB	09 05 1634	N13 W44	09 2.4	2.0	2000	3880	3891	
18545	BIGB	09 06 1818	N13 W56	09 2.5	2.0	2100	3880	3891	
18545	BIGB	09 07 1810	N13 W69	09 2.5	2.0	2100	3880	3891	
18502	BIGB	09 04 2114	N27 W23	09 3.1	1.0	0300	3888		
18502	BIGB	09 05 1634	N27 W35	09 3.0	1.0	0300	3888		
18502	BIGB	09 06 1818	N26 W50	09 2.9	1.0	0300	3888		
18502	BIGB	09 07 1810	N27 W68	09 2.4	2.0	0700	3888		
18547	BIGB	08 28 1639	S24 E89	09 4.4	1.0	0400	3883		
18547	BIGB	08 29 1627	S24 E69	09 4.0	3.0	1400	3883		
18547	BIGB	08 30 1740	S24 E57	09 4.1	2.0	1800	3883		
18547	BIGB	08 31 1633	S23 E39	09 3.7	2.5	2700	3883		
18547	BIGB	09 01 1734	S22 E26	09 3.7	3.0	2700	3883		
18547	BIGB	09 02 1710	S21 E12	09 3.6	3.5	3000	3883		
18547	BIGB	09 04 2114	S21 W18	09 3.5	3.5	3300	3883		
18547	BIGB	09 05 1634	S20 W28	09 3.5	3.5	3100	3883		
18547	BIGB	09 06 1818	S20 W40	09 3.7	3.5	3600	3883		
18547	BIGB	09 07 1810	S20 W55	09 3.5	3.5	3800	3883		
18547	BIGB	09 09 1650	S21 W77	09 3.8	3.5	2800	3883		
18548	BIGB	08 28 1639	S08 E89	09 4.4	1.0	0400	3882		
18548	BIGB	08 29 1627	S08 E76	09 4.4	3.0	1800	3882		
18548	BIGB	08 30 1740	S08 E58	09 4.1	2.5	2000	3882		
18548	BIGB	08 31 1633	S07 E43	09 3.9	3.5	2800	3882		
18548	BIGB	09 01 1734	S06 E29	09 3.9	3.0	2800	3882		
18548	BIGB	09 02 1710	S06 E15	09 3.8	3.0	2800	3882		
18548	BIGB	09 04 2114	S05 W15	09 3.8	2.5	2000	3882		
18548	BIGB	09 05 1634	S04 W27	09 3.7	2.5	1700	3882		
18548	BIGB	09 06 1818	S04 W39	09 3.8	2.5	1700	3882		
18548	BIGB	09 07 1810	S04 W54	09 3.7	2.5	1800	3882		
18548	BIGB	09 09 1650	S04 W75	09 4.1	2.5	0700	3882		
18503	BIGB	09 04 2114	N26 E07	09 5.4	1.0	0300	3893		
18503	BIGB	09 05 1634	N26 W06	09 5.2	1.0	0300	3893		
18503	BIGB	09 06 1818	N25 W18	09 5.4	1.5	0200	3893		
18503	BIGB	09 07 1810	N26 W32	09 5.3	1.0	0200	3893		
18552	BIGB	08 31 1633	S18 E67	09 5.8	1.0	0500			
18552	BIGB	09 01 1734	S18 E52	09 5.7	1.0	0400			
18552	BIGB	09 02 1710	S18 E35	09 5.4	1.0	0300			

CALCIUM PLAGE REGIONS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

SEPTEMBER 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
18552	BIGB	09	04	2114	S18	E09	09	5.6	1.0	0400			
18552	BIGB	09	05	1634	S18	W03	09	5.5	1.0	0300			
18552	BIGB	09	06	1818	S18	W16	09	5.5	1.0	0300			
18552	BIGB	09	07	1810	S18	W29	09	5.5	1.0	0300			
18552	BIGB	09	09	1650	S18	W53	09	5.7	3.0	0500			
18549	BIGB	08	30	1740	N07	E88	08	6.3	2.0	0500	3885		
18549	BIGB	08	31	1633	N08	E69	09	5.9	3.5	1000	3885		
18549	BIGB	09	01	1734	N08	E54	09	5.8	2.0	1300	3885		
18549	BIGB	09	02	1710	N09	E40	09	5.7	2.0	1200	3885		
18549	BIGB	09	04	2114	N09	E10	09	5.6	2.5	1200	3885		
18549	BIGB	09	05	1634	N10	W01	09	5.6	2.5	1200	3885		
18549	BIGB	09	06	1818	N10	W13	09	5.8	2.5	1200	3885		
18549	BIGB	09	07	1810	N11	W29	09	5.6	3.0	1300	3885		
18549	BIGB	09	09	1650	N11	W57	09	5.4	2.5	1500	3885		
18549	BIGB	09	10	1810	N10	W70	09	5.5	2.0	1560	3885		
18498	BIGB	09	01	1734	S28	E68	09	7.0	1.5	0400			
18498	BIGB	09	02	1710	S27	E54	09	6.9	1.0	0500			
18498	BIGB	09	04	2114	S27	E21	09	6.5	1.5	0500			
18498	BIGB	09	05	1634	S27	E09	09	6.4	1.5	0500			
18498	BIGB	09	06	1818	S27	W04	09	6.4	1.5	0500			
18498	BIGB	09	07	1810	S27	W15	09	6.6	1.5	0600			
18498	BIGB	09	09	1650	S26	W41	09	6.5	1.5	0600			
18498	BIGB	09	10	1810	S25	W58	09	6.3	1.5	0562			
18498	BIGB	09	11	2158	S23	W66	09	6.8	1.5	0616			
18550	BIGB	08	30	1740	N09	E90	09	6.5	2.0	1000	3897		
18550	BIGB	08	31	1633	N11	E72	09	6.1	2.5	3000	3897		
18550	BIGB	09	01	1734	N12	E66	09	6.7	2.5	3000	3897		
18550	BIGB	09	02	1710	N12	E55	09	6.8	2.5	3200	3897		
18550	BIGB	09	04	2114	N12	E23	09	6.6	2.0	3800	3897		
18550	BIGB	09	05	1634	N12	E12	09	6.6	2.5	3800	3897		
18550	BIGB	09	06	1818	N12	W04	09	6.5	2.5	4600	3897		
18550	BIGB	09	07	1810	N12	W19	09	6.3	2.5	4600	3897		
18550	BIGB	09	09	1650	N13	W44	09	6.4	2.5	4500	3897		
18550	BIGB	09	10	1810	N18	W49	09	7.0	2.0		3897		
18550	BIGB	09	11	2158	N18	W60	09	7.3	2.0		3897		
18550	BIGB	09	12	2131	N18	W70	09	7.6	2.5		3897		
18550	BIGB	09	13	2224	N18	W75	09	8.2	1.5	2190	3897		
18501	BIGB	09	02	1710	S10	E57	09	7.0	1.0	0400	3900		
18501	BIGB	09	04	2114	S10	E26	09	6.8	1.5	0500	3900		
18501	BIGB	09	05	1634	S09	E15	09	6.8	1.5	0500	3900		
18501	BIGB	09	06	1818	S09	E02	09	6.9	2.0	0600	3900		
18501	BIGB	09	07	1810	S09	W12	09	6.8	2.0	0600	3900		
18501	BIGB	09	09	1650	S09	W39	09	6.8	2.0	0500	3900		
18501	BIGB	09	10	1810	S08	W40	09	7.7	1.5	0406	3900		
18501	BIGB	09	11	2158	S07	W68	09	6.8	1.5	0525	3900		
18551	BIGB	08	31	1633	N12	E87	09	7.2	3.5	1500	3886		
18551	BIGB	09	01	1734	N12	E76	09	7.4	3.0	1700	3886		
18551	BIGB	09	02	1710	N12	E58	09	7.1	3.5	2400	3886		
18551	BIGB	09	04	2114	N12	E29	09	7.1	3.5	3200	3886		
18551	BIGB	09	05	1634	N13	E15	09	6.8	3.0	2900	3886		
18551	BIGB	09	06	1818	N13	E02	09	6.9	3.5	2700	3886		
18551	BIGB	09	07	1810	N13	W10	09	7.0	3.5	2900	3886		
18551	BIGB	09	09	1650	N14	W35	09	7.0	3.5	2800	3886		
18551	BIGB	09	11	2158	N14	W65	09	7.0	3.5	2500	3886		
18556	BIGB	09	04	2114	N22	E53	09	8.9	1.5	0800			
18556	BIGB	09	05	1634	N23	E42	09	8.9	1.5	0900			
18556	BIGB	09	06	1818	N22	E29	09	9.0	2.0	0800			
18556	BIGB	09	07	1810	N22	E15	09	8.9	2.0	0900			
18556	BIGB	09	09	1650	N22	W10	09	8.9	2.0	0900			
18556	BIGB	09	10	1810	N23	W26	09	8.7	1.5	0360			
18556	BIGB	09	11	2158	N23	W39	09	8.9	1.5	0415			
18556	BIGB	09	12	2131	N22	W53	09	8.8	2.0	0428			
18556	BIGB	09	13	2224	N22	W65	09	8.9	2.0	0740			
18553	BIGB	09	04	2114	S12	E56	09	9.1	1.0	0400	3889		

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Late
Sep 82

CALCIUM PLAGE REGIONS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

SEPTEMBER 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
18553	BIGB	09	05	1634	S10 E47	09 9.2	1.0	0400	3889		
18553	BIGB	09	06	1818	S11 E36	09 9.5	1.0	0500	3889		
18553	BIGB	09	07	1810	S10 E21	09 9.3	1.5	0800	3889		
18553	BIGB	09	09	1650	S10 W05	09 9.3	2.5	1100	3889		
18553	BIGB	09	10	1810	S10 W20	09 9.2	2.0	1092	3889		
18553	BIGB	09	11	2158	S10 W31	09 9.6	2.5	1370	3889		
18553	BIGB	09	12	2131	S10 W44	09 9.6	2.5	1178	3889		
18553	BIGB	09	13	2224	S13 W55	09 9.8	2.5	1140	3889		
18553	BIGB	09	14	2109	S13 W77	09 9.1	2.0	1100	3889		
18554	BIGB	09	04	2114	N12 E74	09 10.4	2.0	1500	3890		
18554	BIGB	09	05	1634	N10 E64	09 10.5	2.0	1600	3890		
18554	BIGB	09	06	1818	N09 E53	09 10.7	2.5	2000	3890		
18554	BIGB	09	07	1810	N09 E35	09 10.4	2.5	2200	3890		
18554	BIGB	09	09	1650	N09 E11	09 10.5	2.5	1600	3890		
18554*	BIGB	09	10	1810	N06 W09	09 10.1	1.5	1170	3890		
18554	BIGB	09	11	2158	N06 W21	09 10.3	2.0	1401	3890		
18554	BIGB	09	12	2131	N06 W34	09 10.3	2.0	1468	3890		
18554	BIGB	09	13	2224	N08 W46	09 10.5	2.0	1317	3890		
18554	BIGB	09	14	2109	N07 W64	09 10.1	2.5	1500	3890		
18559	BIGB	09	05	1634	S17 E59	09 10.2	1.0	0700	3899		
18559	BIGB	09	06	1818	S18 E46	09 10.3	1.5	0600	3899		
18559	BIGB	09	07	1810	S18 E32	09 10.2	2.0	0700	3899		
18559	BIGB	09	09	1650	S18 E06	09 10.1	1.5	0600	3899		
18559	BIGB	09	10	1810	S16 W07	09 10.2	2.0	0702	3899		
18559	BIGB	09	11	2158	S16 W18	09 10.5	2.0	0816	3899		
18559	BIGB	09	12	2131	S16 W30	09 10.6	2.5	0643	3899		
18559	BIGB	09	13	2224	S16 W43	09 10.7	2.0	0370	3899		
18559	BIGB	09	14	2109	S18 W68	09 9.7	1.5	0400	3899		
18558	BIGB	09	07	1810	N18 E42	09 10.9	1.5	0500	3894		
18558	BIGB	09	09	1650	N19 E16	09 10.9	1.5	0500	3894		
18558	BIGB	09	10	1810	N18 E04	09 11.1	1.0	0437	3894		
18558	BIGB	09	11	2158	N18 W11	09 11.1	1.5	0600	3894		
18558	BIGB	09	12	2131	N18 W19	09 11.4	1.5	0500	3894		
18558	BIGB	09	13	2224	N18 W38	09 11.0	1.5	0400	3894		
18558	BIGB	09	14	2109	N18 W53	09 10.8	1.5	0500	3894		
18555	BIGB	09	05	1634	S11 E75	09 11.3	3.0	3700	3895		
18555	BIGB	09	06	1818	S12 E69	09 12.0	3.0	3700	3895		
18555	BIGB	09	07	1810	S11 E51	09 11.6	3.0	4800	3895		
18555	BIGB	09	09	1650	S11 E26	09 11.6	4.0	5200	3895		
18555	BIGB	09	10	1810	S11 E07	09 11.3	3.0	5787	3895		
18555	BIGB	09	11	2158	S10 W04	09 11.6	2.5	5128	3895		
18555	BIGB	09	12	2131	S10 W17	09 11.6	2.5	4712	3895		
18555	BIGB	09	13	2224	S10 W29	09 11.7	3.0	5076	3895		
18555	BIGB	09	14	2109	S11 W48	09 11.3	3.0	5200	3895		
18560	BIGB	09	07	1810	S21 E59	09 12.3	1.5	0400	3902		
18560	BIGB	09	09	1650	S21 E34	09 12.3	2.0	0400	3902		
18560	BIGB	09	10	1810	S22 E14	09 11.8	3.5	0827	3902		
18560	BIGB	09	11	2158	S23 E02	09 12.1	3.0	1032	3902		
18560	BIGB	09	12	2131	S23 W09	09 12.2	2.5	1362	3902		
18560	BIGB	09	13	2224	S22 W22	09 12.2	3.0	1421	3902		
18560	BIGB	09	14	2109	S23 W36	09 12.1	3.0	1500	3902		
18557	BIGB	09	07	1810	N16 E66	09 12.8	1.5	0400			
18557	BIGB	09	09	1650	N16 E39	09 12.6	2.0	0400			
18557	BIGB	09	10	1810	N16 E21	09 12.3	1.5	0390			
18557	BIGB	09	11	2158	N17 E08	09 12.5	1.0	0400			
18557	BIGB	09	12	2131	N17 W05	09 12.5	1.0	0445			
18557	BIGB	09	13	2224	N16 W20	09 12.4	1.5	0325			
18557	BIGB	09	14	2109	N16 W32	09 12.4	1.5	0400			
18565	BIGB	09	14	2109	N18 E08	09 15.5	1.5	0400	3909		
18565	BIGB	09	20	1740	N18 W66	09 15.7	2.0	0941	3909		
18565	BIGB	09	21	1701	N18 W78	09 15.8	1.5	0321	3909		
18561	BIGB	09	09	1650	S11 E80	09 15.7	3.0	1200	3901		
18561	BIGB	09	11	2158	S14 E55	09 16.1	2.0	4143	3901		

CALCIUM PLAGE REGIONS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

SEPTEMBER 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
18561	BIGB	09	12	2131	S13 E42	09 16.1	3.0	4131	3901	
18561	BIGB	09	13	2224	S13 E27	09 16.0	2.5	3641	3901	
18561	BIGB	09	14	2109	S13 E14	09 15.9	3.0	4700	3901	
18561	BIGB	09	20	1740	S12 W59	09 16.3	2.5	6894	3901	
18561	BIGB	09	21	1701	S12 W69	09 16.5	3.0	1343	3901	
18861	BIGB	09	10	1810	S13 E69	09 16.0	3.0	4025		
18563	BIGB	09	12	2131	S09 E66	09 17.8	1.0	0352		
18563	BIGB	09	13	2224	S09 E50	09 17.7	1.0	0296		
18563	BIGB	09	14	2109	S08 E36	09 17.6	1.5	0500		
18577	BIGB	09	23	1414	N15 W79	09 17.6	1.5	0600		
18564	BIGB	09	13	2224	N00 E57	09 18.2	2.0	0251	3906	
18564	BIGB	09	14	2109	N02 E43	09 18.1	2.5	0700	3906	
18564	BIGB	09	20	1740	N01 W32	09 18.3	3.0	0794	3906	
18564	BIGB	09	21	1701	N01 W45	09 18.3	3.5	0452	3906	
18564	BIGB	09	23	1414	N01 W77	09 17.8	1.0	0100	3906	
18562	BIGB	09	12	2131	S18 E80	09 19.0	2.0	1239	3905	
18562	BIGB	09	13	2224	S18 E60	09 18.5	2.0	1954	3905	
18562	BIGB	09	14	2109	S17 E47	09 18.4	2.5	2300	3905	
18562	BIGB	09	20	1740	S14 W27	09 18.7	4.0	2117	3905	
18562	BIGB	09	21	1701	S14 W39	09 18.8	4.0	1562	3905	
18562	BIGB	09	23	1414	S17 W75	09 17.9	1.0	1526	3905	
18567	BIGB	09	14	2109	S13 E71	09 20.2	2.5	2900	3907	
18567	BIGB	09	20	1740	S13 W12	09 19.8	3.0	2984	3907	
18567	BIGB	09	21	1701	S13 W24	09 19.9	4.0	2540	3907	
18567	BIGB	09	23	1414	S15 W53	09 19.6	3.0	3402	3907	
18567	BIGB	09	25	1651	S15 W71	09 20.3	4.0	3500	3907	
18566	BIGB	09	14	2109	N20 E76	09 20.7	2.0	1500	3908	
18566	BIGB	09	20	1740	N20 W00	09 20.7	2.0	1088	3908	
18566	BIGB	09	21	1701	N20 W13	09 20.7	2.0	0978	3908	
18566	BIGB	09	23	1414	N20 W37	09 20.8	2.5	2051	3908	
18566	BIGB	09	25	1651	N20 W58	09 21.3	3.5	2404	3908	
18569	BIGB	09	14	2109	N23 E78	09 20.9	1.5	0800		
18569	BIGB	09	20	1740	N22 E12	09 21.6	2.0	0941		
18569	BIGB	09	21	1701	N22 W01	09 21.6	1.5	2394		
18569	BIGB	09	23	1414	N23 W24	09 21.7	1.5	1828		
18569	BIGB	09	25	1651	N22 W46	09 22.2	2.5	3672		
18570	BIGB	09	20	1740	S10 E13	09 21.7	1.5	0279	3912	
18570	BIGB	09	21	1701	S10 W00	09 21.7	2.0	0233	3912	
18570	BIGB	09	25	1651	S09 W44	09 22.4	4.0	1000	3912	
18568	BIGB	09	20	1740	N13 E15	09 21.9	2.0	2352	3910	3914
18568	BIGB	09	21	1701	N13 E02	09 21.8	3.0	3051	3910	3914
18568	BIGB	09	23	1414	N13 W28	09 21.5	2.0	2354	3910	3914
18568	BIGB	09	25	1651	N13 W49	09 22.0	4.0	2808	3910	3914
18571	BIGB	09	20	1740	S09 E23	09 22.5	2.5	0456	3913	
18571	BIGB	09	21	1701	S09 E11	09 22.5	2.5	0335	3913	
18571	BIGB	09	23	1414	S09 W20	09 22.1	2.5	0970	3913	
18572	BIGB	09	20	1740	N10 E42	09 23.9	1.5	0559	3918	
18572	BIGB	09	21	1701	N10 E28	09 23.8	1.5	0365	3918	
18572	BIGB	09	23	1414	N11 W00	09 23.6	1.0	0429	3918	
18572	BIGB	09	25	1651	N11 W23	09 24.0	2.0	0633	3918	
18572	BIGB	09	28	1832	N12 W69	09 23.6	1.5	0600	3918	
18573	BIGB	09	20	1740	S09 E41	09 23.8	2.0	0191	3920	
18573	BIGB	09	21	1701	S09 E29	09 23.9	2.0	0200	3920	
18573	BIGB	09	23	1414	S08 W00	09 23.6	1.5	0159	3920	
18578	BIGB	09	23	1414	N17 E11	09 24.4	1.0	0238		
18575	BIGB	09	20	1740	N10 E57	09 25.0	1.0	0100		

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Late
Sep 82

CALCIUM PLAGE REGIONS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

SEPTEMBER 1982

Calcium Plage Region	Sta	Mo	Day	Time (UT)	Lat	CMD	CMP Mo	Day	Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
18575	BIGB	09	21	1701	N10	E45	09	25.1	1.5	0160			
18575	BIGB	09	23	1414	N07	E18	09	24.9	1.0	0365			
18575	BIGB	09	25	1651	N09	W12	09	24.8	2.0	0600			
18575	BIGB	09	28	1832	N11	W53	09	24.8	1.5	0700			
18575	BIGB	09	29	1622	N11	W67	09	24.6	1.0	0700			
18574	BIGB	09	20	1740	S13	E57	09	25.0	1.0	0602		3925	
18574	BIGB	09	21	1701	S13	E45	09	25.1	2.0	0584		3925	
18574	BIGB	09	23	1414	S11	E23	09	25.3	2.0	0700		3925	
18574	BIGB	09	25	1651	S11	W03	09	25.5	3.5	0168		3925	
18574	BIGB	09	28	1832	S12	W46	09	25.3	3.0	1200		3925	
18574	BIGB	09	29	1622	S12	W58	09	25.3	2.0	1200		3925	
18574	BIGB	09	30	2000	S13	W70	09	25.5	2.0	1200		3925	
18576	BIGB	09	21	1701	N02	E67	09	26.7	1.5	0730			
18576	BIGB	09	23	1414	N03	E44	09	26.9	1.0	2496			
18576	BIGB	09	25	1651	N05	E19	09	27.1	2.0	2400			
18576	BIGB	09	28	1832	N05	W24	09	27.0	2.5	2300			
18576	BIGB	09	29	1622	N06	W38	09	26.8	2.0	2000			
18576	BIGB	09	30	2000	N06	W50	09	27.1	2.5	2000			
18576	BIGB	10	01	1925	N06	W62	09	27.3	1.5	0722			
18576	BIGB	10	02	1526	N06	W74	09	27.2	1.5	0592			
18580	BIGB	09	23	1414	S20	E42	09	26.8	1.5	0540		3916	
18580	BIGB	09	25	1651	S19	E20	09	27.2	3.5	2044		3916	
18580	BIGB	09	28	1832	S18	W22	09	27.1	3.0	2100		3916	
18580	BIGB	09	29	1622	S17	W34	09	27.1	3.0	1800		3916	
18580	BIGB	09	30	2000	S17	W47	09	27.3	3.5	1800		3916	
18580	BIGB	10	01	1925	S17	W59	09	27.4	3.0	1032		3916	
18580	BIGB	10	02	1526	S17	W71	09	27.3	2.5	0435		3916	
18589	BIGB	10	01	1925	S09	W46	09	28.4	2.5	0499			
18589	BIGB	10	02	1526	S09	W58	09	28.4	2.5	0435			
18581	BIGB	09	23	1414	S14	E75	09	29.3	1.0	2162		3919	3928
18581	BIGB	09	25	1651	S13	E41	09	28.8	3.5	2635		3919	3928
18581	BIGB	09	28	1832	S10	E02	09	28.9	3.0	3000		3919	3928
18581	BIGB	09	29	1622	S10	W12	09	28.8	3.0	2700		3919	3928
18581	BIGB	09	30	2000	S10	W25	09	28.9	3.5	3000		3919	3928
18581	BIGB	10	01	1925	S11	W37	09	29.1	3.5	1531		3919	3928
18581	BIGB	10	02	1526	S11	W48	09	29.1	3.5	2192		3919	3928
18581	BIGB	10	04	1825	S09	W68	09	29.8	2.5	1031		3919	3928
18579	BIGB	09	23	1414	N14	E72	09	29.0	1.0	3784		3917	
18579	BIGB	09	25	1651	N16	E37	09	28.5	3.5	3628		3917	
18579	BIGB	09	28	1832	N15	E04	09	29.1	3.5	3000		3917	
18579	BIGB	09	29	1622	N15	W10	09	28.9	3.5	3200		3917	
18579	BIGB	09	30	2000	N15	W26	09	28.9	3.5	3300		3917	
18579	BIGB	10	01	1925	N17	W33	09	29.4	3.0	2993		3917	
18579	BIGB	10	02	1526	N17	W44	09	29.4	3.0	3062		3917	
18579	BIGB	10	03	1627	N18	W56	09	29.5	3.0	2716		3917	
18579	BIGB	10	04	1825	N18	W68	09	29.7	2.0	1910		3917	
18579	BIGB	10	05	1727	N17	W78	09	29.9	2.0	0524		3917	
18584	BIGB	09	25	1651	N18	E53	09	29.7	2.5	1500			
18584	BIGB	09	28	1832	N18	E09	09	29.4	3.5	1700			
18584	BIGB	09	29	1622	N19	W02	09	29.5	3.0	1600			
18584	BIGB	09	30	2000	N20	W16	09	29.6	3.0	1500			
18583	BIGB	09	25	1651	N13	E61	09	30.3	3.0	2232		3922	
18583	BIGB	09	28	1832	N14	E14	09	29.8	3.5	2900		3922	
18583	BIGB	09	29	1622	N14	E07	09	30.2	3.5	2800		3922	
18583	BIGB	09	30	2000	N14	W06	09	30.4	3.5	3200		3922	
18583	BIGB	10	01	1925	N14	W20	09	30.3	3.5	1720		3922	
18583	BIGB	10	02	1526	N14	W32	09	30.2	3.5	2001		3922	
18583	BIGB	10	03	1627	N14	W42	09	30.5	3.5	1713		3922	
18583	BIGB	10	04	1825	N15	W57	09	30.4	4.0	1724		3922	
18583	BIGB	10	05	1727	N13	W72	09	30.3	3.5	2366		3922	
18583	BIGB	10	06	1726	N14	W77	09	30.9	2.0	0957		3922	
18590	BIGB	10	01	1925	N00	W19	09	30.4	1.5	0292			

CALCIUM PLAGE REGIONS
(ORDERED BY CENTRAL MERIDIAN PASSAGE DATE)

SEPTEMBER 1982

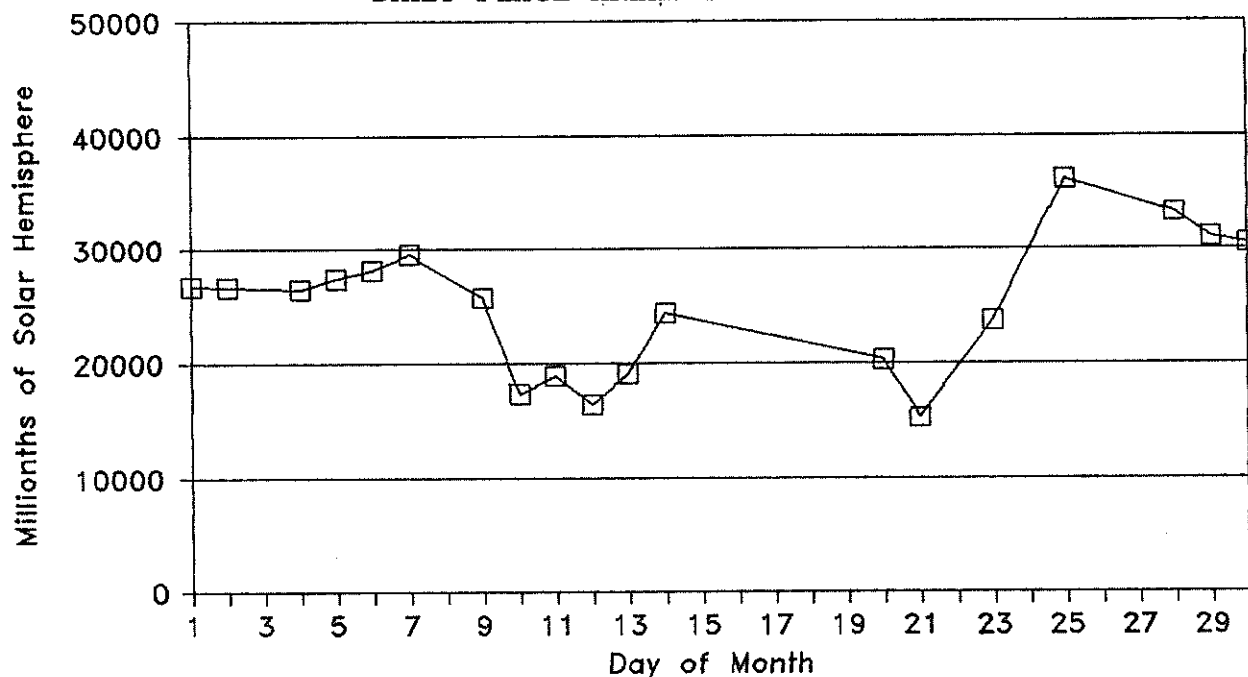
Calcium Plage Region	Sta	Mo	Day	Observation Time (UT)	Lat	CMD	CMP Mo	Day	Intensity	Corrected Area (10-6 Hemi)	NOAA/USAF #1	Sunspot #2	Groups #3
18590	BIGB	10	02	1526	N00	W31	09	30.3	2.0	0313			
18590	BIGB	10	03	1627	N00	W41	09	30.6	1.5	0190			
18590	BIGB	10	04	1825	N00	W56	09	30.6	1.0	0101			
18585	BIGB	09	25	1651	S25	E69	10	1.0	2.5	3945	3921	3923	
18585	BIGB	09	28	1832	S23	E33	10	1.3	3.0	6800	3921	3923	
18585	BIGB	09	29	1622	S23	E19	10	1.1	3.0	6800	3921	3923	
18585	BIGB	09	30	2000	S22	W02	09	30.7	3.0	6300	3921	3923	
18585	BIGB	10	01	1925	S21	W11	10	1.0	3.0	7534	3921	3923	
18585	BIGB	10	02	1526	S21	W21	10	1.0	3.0	8091	3921	3923	
18585	BIGB	10	03	1627	S19	W34	10	1.1	3.0	7820	3921	3923	
18585	BIGB	10	04	1825	S21	W44	10	1.4	3.0	8163	3921	3923	
18585	BIGB	10	05	1727	S21	W60	10	1.1	3.0	7436	3921	3923	
18585	BIGB	10	06	1726	S18	W64	10	1.8	2.5	7475	3921	3923	
18588	BIGB	09	28	1832	N26	E23	09	30.5	2.5	0500	3927		
18588	BIGB	09	29	1622	N26	E11	09	30.5	2.0	0500	3927		
18588	BIGB	09	30	2000	N27	W02	09	30.7	2.0	0400	3927		

DAILY PLAGE SUMMARIES

SEPTEMBER 1982

Day	Sta	Plage Index	Plage Count	Smallest Plage (Millionths of Solar Hemisphere)	Largest Plage	Total Area	Smallest Intensity	Largest Intensity
01	BIGB	97.9	18	300	3000	26800	1.0	3.5
02	BIGB	49.8	19	200	3200	26700	1.0	3.5
03	No Observations This Day							
04	BIGB	48.2	19	300	3800	26500	1.0	3.5
05	BIGB	47.1	20	300	3800	27400	1.0	3.5
06	BIGB	50.8	19	200	4600	28200	1.0	3.5
07	BIGB	55.1	19	200	4800	29600	1.0	3.5
08	No Observations This Day							
09	BIGB	51.7	17	400	5200	25800	1.5	4.0
10	BIGB	31.6	13	360	5787	17318	1.0	3.5
11	BIGB	32.5	13	400	5128	18946	1.0	3.5
12	BIGB	30.8	12	352	4712	16458	1.0	3.0
13	BIGB	32.7	13	251	5076	19121	1.0	3.0
14	BIGB	38.6	15	400	5200	24400	1.5	3.0
15	No Observations This Day							
16	No Observations This Day							
17	No Observations This Day							
18	No Observations This Day							
19	No Observations This Day							
20	BIGB	37.6	14	100	6894	20298	1.0	4.0
21	BIGB	33.6	15	160	3051	15248	1.5	4.0
22	No Observations This Day							
23	BIGB	24.9	17	100	3784	23704	1.0	3.0
24	No Observations This Day							
25	BIGB	63.2	17	168	3945	36207	2.0	4.0
26	No Observations This Day							
27	No Observations This Day							
28	BIGB	77.2	14	500	6800	33300	1.5	3.5
29	BIGB	76.0	12	500	6800	31000	1.0	3.5
30	BIGB	77.9	11	400	6300	30500	2.0	3.5

DAILY PLAGE AREAS FOR SEPTEMBER 1982



BIG BEAR SOLAR OBSERVATORY
ACTIVE REGION SUMMARY

SEPTEMBER 1982

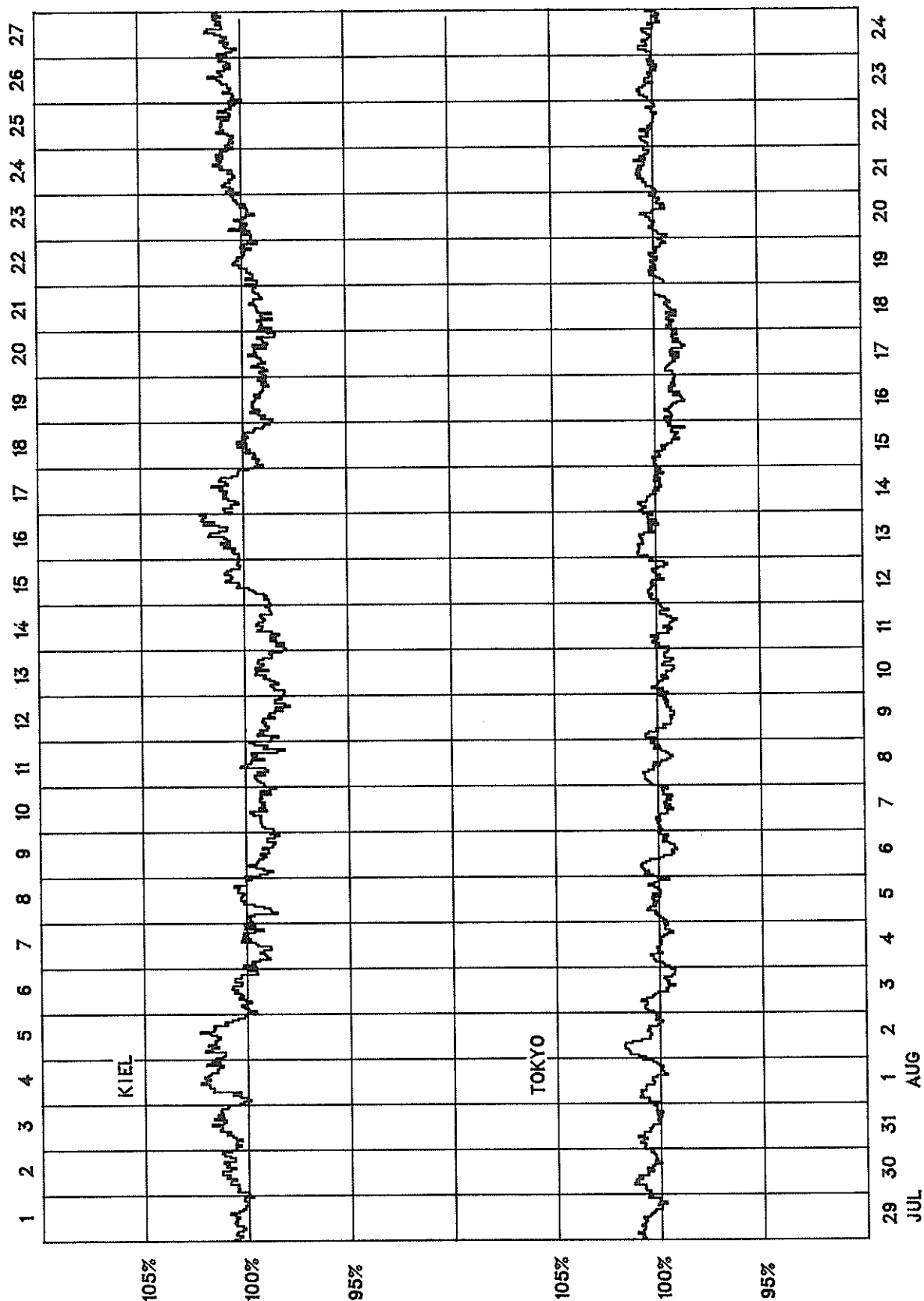
REGION	IDENTIFICATION	AGE	FIRST SEEN	DURATION
18542	New	1	820827	11 days
544	18492	2	820827	11
545	New	1	820827	12
547	New	1	820901	>11
548	New	1	820828	13
552	New	1	820901	>10
549	New	1	820830	12
550	18511	4	820830	15
551	New (vic. of 18511)	1	820901	>11
556	New (vic. of 18520)	1	820904	09
553	18518	3	820904	>10
559	18517	3	820905	>09
554	New	1	820904	>10
558	New	1	820907	>07
555	18522	2	820905	>09
560	New	1	820907	>07
557	New	1	820907	>07
565	New	1	820914	07
561	18523	2	820909	12
563	New (vic. of 18524)	1	820912	>08
577	New	1	820923	>01
564	18534	2	820923	10
562	18533	2	820912	11
567	18531	3	820914	11
566	18504	2	820914	>11
569	18532	3	820914	>11
570	New	1	820920	>02
568	New	1	820920	>05
571	New	1	820920	>05
582	New	1	820925	>03
572	18546	2	820920	>08
573	New	1	820920	>03
578	New	1	820923	>01
575	18539	2	820920	>10
574	New (vic. of 18541)	1	820920	>10
576	18540	2	820921	>10
581	New (vic. of 18544)	1	820923	11
579	New (vic. of 18545)	1	820923	12
584	New (vic. of 18545)	1	820925	>10
580	New (vic. of 18541)	1	820921	>11
583	New (vic. of 18545)	1	820925	>11
585	18547	2	820925	>11
588	New	1	820928	>07

TOTAL = 43 SEPTEMBER REGIONS

- (1) Contiguous Plages: 18499/18540
18549/18550/18551
18566/18568/18596
18579/18584
- (2) KPNO Magnetograms not available September 6, 8, 10, 11, 17-30.
- (3) Calcium K filter heliograms not available September 3, 8, 15 through 19, 24, 26, 27.

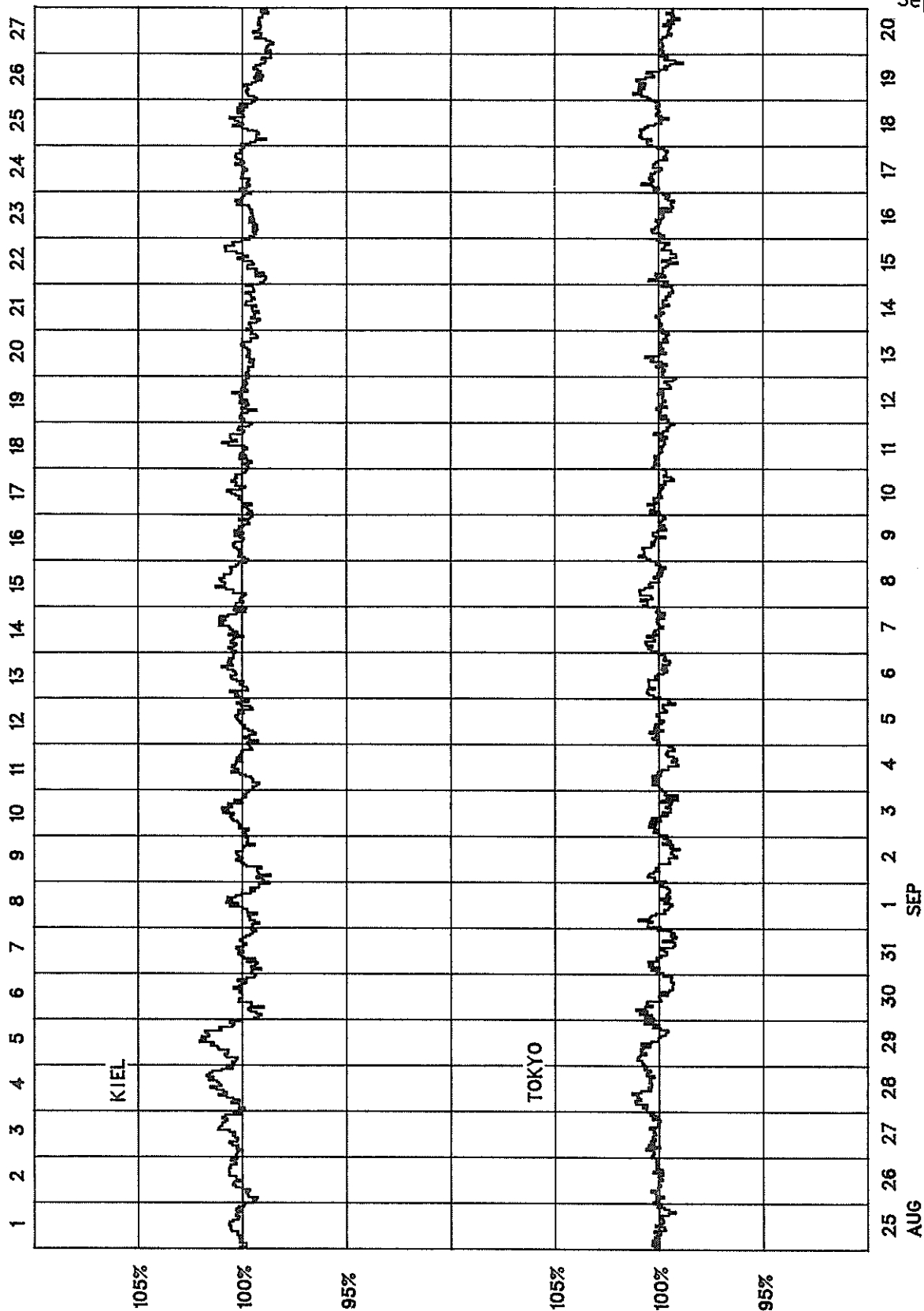
COSMIC RAY INDICES
(Neutron Monitor)

Bartels Rotation 2050 (July 1983–August 1983)



COSMIC RAY INDICES (Neutron Monitor)

Bartels Rotation 2051 (August 1983-September 1983)



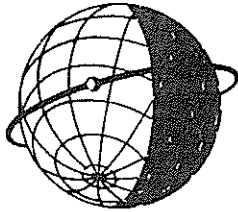
ERRATA: Tokyo and Kiel data from August 1981 mistakenly appeared in the August 1983 table and graphs.

COSMIC RAY INDICES

August 1983

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	TOKYO Average (cts/h)/256	HUANCAYO Average (cts/h)/100
1	4207	6816.1	6429.7	5850.7	3793.9(38)	3552.5	1741.0
2	4204	6784.0	6428.0	5851.1	3785.5	3564.9	1738.8
3	4150	6721.8	6353.8	5785.6	3742.4(32)	3537.7	1740.2
4	4118	6667.4	6322.7	5749.9	-----	3534.5	1724.3
5	4131	6677.5	6364.6	5766.4	-----	3542.8	1730.7
6	4095	6627.9	6302.0	5722.3	-----	3537.3	1726.9
7	4116	6672.4	6307.2	5725.9	-----	3529.2	1721.0
8	4093	6628.9	6248.3	5735.9	-----	3542.5	1720.7
9	4087	6606.4	6265.1	5699.5	-----	3527.3	1716.0
10	4086	6624.7	6284.0	5706.8	3677.8	3525.1	1714.7
11	4096	6621.5	6295.4	5704.5	3683.0	3526.9	1712.3(38)
12	4123	6675.7	6347.3	5772.7	3734.3	3540.9	1724.9
13	4163	6734.3	6412.1	5837.2	3777.5	3556.7	1727.0
14	4189	6776.8	6418.0	5816.1	3771.5	3543.6	1723.6
15	4166	6735.0	6346.0	5749.8	3732.9	3519.7	1713.8
16	4131	6694.8	6292.3	5725.7	3695.8	3507.1	1707.0
17	4118	6667.5	6286.4	5721.1	3701.9	3505.5	1707.6
18	4126	6674.8	6302.9	5727.1	3717.1	3515.1(19)	1714.0
19	4152	6719.3	6337.9	5763.9	3741.8	3534.7	1724.5
20	4156	6724.0	6350.8	5770.9	3753.4	3536.2	1722.5
21	4172	6745.3	6405.7	5817.4	3788.0	3554.7	1733.6
22	4176	6739.2	6385.2	5814.4	-----	3544.2	1731.3
23	4176	6733.6	6396.1	5816.4	-----	3547.0	1731.7
24	4180	6745.4	6415.3	5828.9	-----	3543.6	1733.6
25	4177	6746.7	6414.1	5832.3	-----	3542.7	1731.9
26	4191	6772.4	6400.3	5829.4	-----	3547.0	1732.4
27	4206	6796.0	6436.2	5850.2	3816.3(6)	3553.5	1736.1
28	4208	6796.1	6461.2	5870.7	3821.8	3568.3	1738.1
29	4218	6814.2	6483.5(13)	5877.8	3821.9	3560.0	1740.5
30	4175	6750.7	6381.2	5805.5	3765.4	3545.2	1730.6
31	4177	6744.4	6384.5	5804.5	3762.8	3537.2	1726.8
Mean	4154	6717.3	6363.2	5784.9	3750.8	3539.5	1726.5

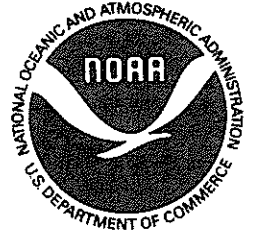
For less than 24-hour coverage, parentheses enclose the number of hours for which data are available.
For Climax and Huancaayo, parentheses enclose the number of section hours whenever the sum of both sections falls below 40 hours.



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."