U.S. DEPARTMENT OF COMMERCE
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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
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ENVIRONMENTAL DATA SERVICE
Thomas S. Austin, Director

Solar - Geophysical Data

NO. 371 JULY 1975

Part I (Prompt Reports)

DATA FOR
JUNE 1975
MAY 1975

NATIONAL GEOPHYSICAL AND SOLAR - TERRESTRIAL DATA CENTER
BOULDER, COLORADO

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SOLAR - GEOPHYSICAL DATA

No. 371

Issued in two parts

Hope I. Leighton, Editor

J. Virginia Lincoln, Director
Solar - Terrestrial Data Services Division

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Note: A = Part I, B = Part II.
362A 32 listed under Aug shows that data for August 1974 were contained in *Solar-Geophysical Data* Number 362 - Part I beginning on page 32.

Errata: The index page numbers published last month in SGD-370 for 370B (Part II), involving December and January data, were incorrect. Please make changes to correspond with this month's table.

JUNE 1975 DATA

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ALERT PERIODS

INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

JUNE 1975

SUMMARY OF THE GEOALERT WWA MESSAGES

Message serial number	Date of issue	Date of observation	Wolf number	10 cm solar flux	A index	Active Regions: Location Lat-Long	Active Regions: No. of Flares Total	Active Regions: No. of Flares M	Active Regions: No. of Flares X	Outstanding events	Forecasts: Date	Forecasts: Location Lat-Long	Forecasts: Desc*	Alert Situation
152	01	31	11	69	02	S08E66	0	0	0		01	S08E66	Q	SOLQUIET MAGALERT RECURRENCE MINOR 02/06
153	02	01	12	69	18	S08E51	0	0	0		02	S08E51	Q	SOLQUIET MAGALERT MINOR 02/06
154	03	02	13	71	23	S08E37	0	0	0		03	S08E37	Q	SOLQUIET MAGALERT MINOR 03/05
155	04	03	13	69	14	S08E25	0	0	0		04	S08E25	Q	SOLQUIET MAGALERT MINOR 04/05
156	05	04	13	68	15	S06E09	2	0	0		05	S06E09	Q	SOLQUIET MAGALERT MINOR 05/06
157	06	05	28	67	13	S05W01 N02W20	0	0	0		06	S05W01 N02W20	Q Q	SOLQUIET MAGNIL
158	07	06	00	66	13	-	-	-	-		07	-		SOLQUIET MAGQUIET
159	08	07	00	66	07	-	-	-	-		08	-		SOLQUIET MAGQUIET
160	09	08	00	66	07	-	-	-	-		09	-		SOLQUIET MAGQUIET
161	10	09	00	66	06	-	-	-	-		10	-		SOLQUIET MAGQUIET
162	11	10	00	67	06	-	-	-	-		11	-		SOLQUIET MAGALERT MINOR 12/15
163	12	11	14	66	17	N06W23	0	0	0		12	N06W23	Q	SOLQUIET MAGSTORM MINOR 12/16
164	13	12	00	66	21	-	-	-	-		13	-		SOLQUIET MAGALERT RECUR 12/21
165	14	13	12	66	16	N07W04	0	0	0		14	N07W04	Q	SOLQUIET MAGALERT INTERMITTENT 14/16
166	15	14	12	66	11	N06W23	0	0	0		15	N06W23	Q	SOLQUIET MAGALERT INTERMITTENT 15/16
167	16	15	13	66	11	N06W35	0	0	0		16	N06W35	Q	SOLQUIET MAGALERT INTERMITTENT 16/17
168	17	16	18	69	15	N06W48	1	0	0		17	N06W48	Q	SOLQUIET MAGNIL
169	18	17	18	68	08	N06W64	0	0	0		18	N06W64	Q	SOLQUIET MAGQUIET
170	19	18	13	68	10	N07W79	0	0	0		19	N07W79	Q	SOLQUIET MAGQUIET
171	20	19	13	69	09	N06W90	0	0	0		20	N06W90	Q	SOLQUIET MAGQUIET
172	21	20	00	70	06	-	-	-	-		21	-		SOLQUIET MAGQUIET
173	22	21	11	67	09	S12E16	0	0	0		22	S12E16	Q	SOLQUIET MAGQUIET
174	23	22	00	68	06	-	-	-	-		23	-		SOLQUIET MAGQUIET
175	24	23	17	71	04	S11W10	0	0	0		24	S11W10	Q	SOLQUIET MAGQUIET
176	25	24	33	74	02	S11W21 N07E76	0 0	0 0	0 0		25	S11W21 N07E76	Q Q	SOLQUIET MAGQUIET
177	26	25	33	75	03	S10W35 S05W34 N06E61	0 0 0	0 0 0	0 0 0		26	S10W35 S05W34 N06E61	Q Q Q	SOLQUIET MAGQUIET
178	27	26	43	77	09	S11W50 N08E48 S06W49	0 0 0	0 0 0	0 0 0		27	S11W50 N08E48 S06W49	Q Q Q	SOLQUIET MAGQUIET
179	28	27	39	79	03	S11W60 N06E34 S06W61	0 0 0	0 0 0	0 0 0		28	S11W60 N06E34 S06W61	Q Q Q	SOLQUIET MAGALERT 28/30
180	29	28	38	78	06	S09W75 N06E21 S06W75	0 0 0	0 0 0	0 0 0		29	S09W75 N06E21 S06W75	Q Q Q	SOLQUIET MAGALERT 28/03
181	30	29	26	77	16	S12W91 N06E12	0 1	0 0	0 0		30	S12W91 N06E12	Q	SOLQUIET MAGALERT 30/02
182	01	30	30	76	21	N06W03	2	0	0		01	N06W03	Q	SOLQUIET MAGALERT 01/02 MINOR

* Q=Quiet E=Eruptive A=Active P=Proton C=Caution D=Doubtful O.G.=Other Groups

RELATIVE SUNSPOT NUMBERS

ZURICH, R_z

	1974 FINAL						1975 PROVISIONAL					
DAY	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
1	79	37	8	61	18	0	30	0	0	0	26	7
2	87	23	8	53	27	0	30	22	7	0	33	11
3	90	12	16	46	39	9	28	28	14	0	29	8
4	93	17	37	60	45	16	19	27	11	0	28	7
5	95	18	40	85	36	17	18	20	14	21	28	7
6	93	26	44	83	25	8	23	26	14	0	20	7
7	78	32	38	84	22	7	32	34	7	15	16	0
8	59	34	32	97	14	0	29	29	18	17	0	0
9	40	43	63	107	7	0	37	22	19	9	0	0
10	26	48	74	114	24	9	31	18	20	13	9	0
11	22	54	80	110	27	21	30	13	20	0	0	9
12	22	67	80	92	24	31	31	18	15	0	0	0
13	28	69	74	76	16	34	32	9	15	0	0	0
14	38	66	67	63	8	33	11	8	17	0	7	0
15	49	59	64	48	16	35	20	8	18	0	7	8
16	54	57	68	41	20	40	17	8	30	0	8	19
17	52	52	71	28	20	36	16	0	30	0	0	17
18	53	44	66	16	18	34	20	0	24	0	8	12
19	47	43	51	9	34	43	20	0	20	0	0	16
20	50	32	31	11	40	40	18	7	16	0	0	0
21	55	28	13	12	40	40	16	8	9	0	0	7
22	58	34	0	9	44	37	16	0	0	0	8	0
23	60	34	7	7	44	28	15	0	0	7	8	12
24	57	28	11	7	37	26	7	12	0	8	7	20
25	59	25	11	8	29	9	7	9	0	7	0	24
26	60	8	13	16	25	8	7	0	13	7	0	33
27	54	8	19	30	23	8	0	0	7	26	7	38
28	51	8	23	27	13	20	7	0	0	19	13	36
29	42	14	38	22	7	16	7		0	16	0	23
30	41	8	58	22	7	19	7		7	20	0	22
31	38	15		16		13	0		8		8	
MEAN	55.8	33.6	40.2	47.1	25.0	20.5	18.7	11.6	12.0	6.2	8.7	11.4

1974 yearly mean = 34.5

DAILY SOLAR FLUX AT 2800 MHz
OTTAWA ARO

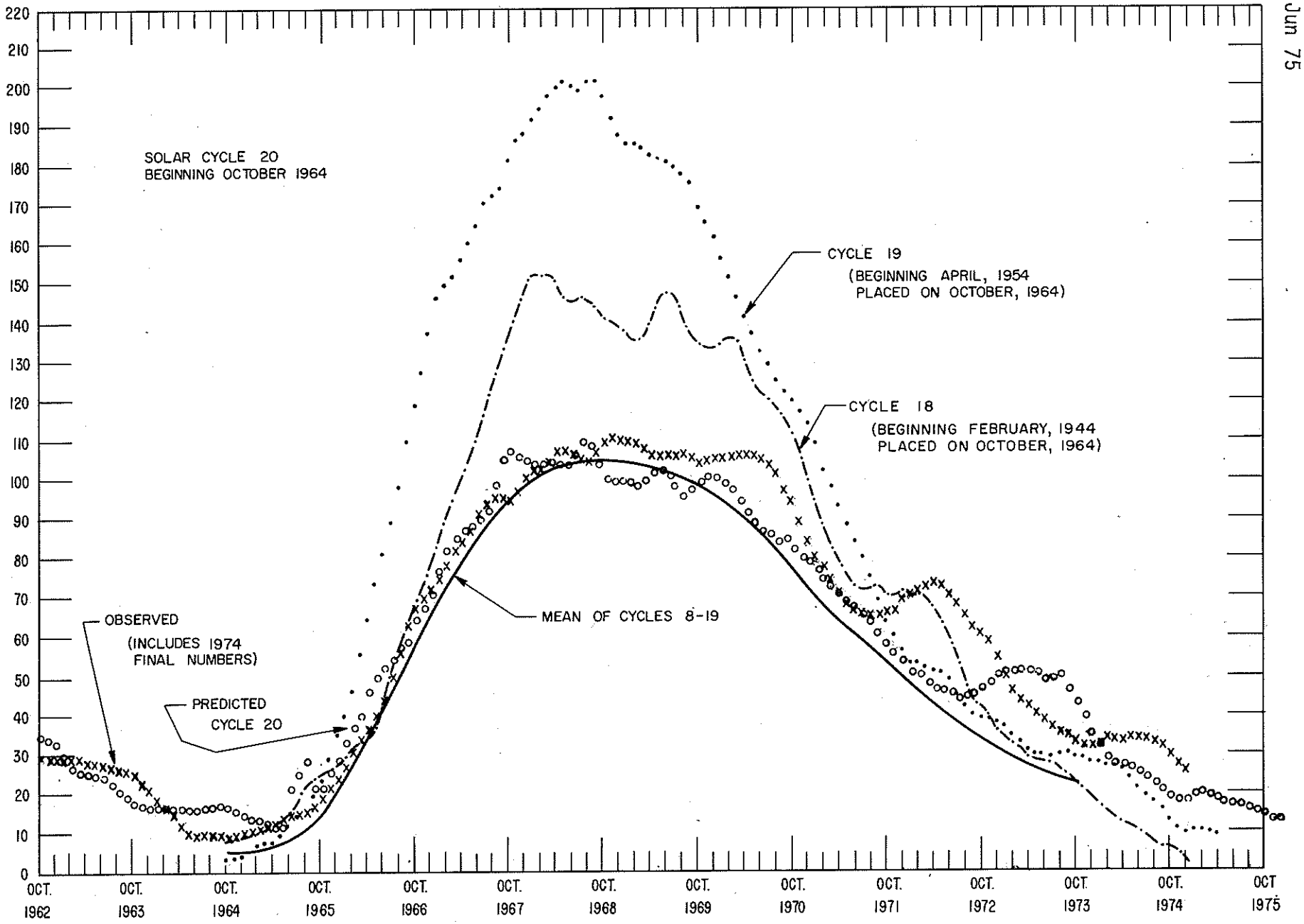
FLUX ADJUSTED TO 1 A.U., S_a

DAY	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
1	105.4*	85.1	77.8	93.1	90.2	79.7	78.1	70.8	70.7	70.2	76.3	71.4
2	112.7*	85.2	79.4	94.6	92.0	78.7	75.8	72.3	72.4	71.2	81.1	73.0
3	118.5*	83.0	79.2	93.4	96.2	76.7	77.1	74.3	73.4	72.2	79.6	70.8
4	127.8*	85.8	81.0	100.5	99.5	74.7	74.4	75.4	72.8	73.0	79.6	70.4
5	125.6*	86.5	81.5	113.3*	97.6*	73.2	73.7	76.5	71.3	73.7	78.4	69.3
6	121.5	88.0	82.2	115.0	92.3	71.9	73.8	81.1	72.4	73.7	75.9	68.2
7	110.9*	85.8	85.4	114.5*	85.6	71.1	75.7	79.4	71.9	74.3	73.6	68.1
8	104.7*	89.4	93.4	125.2	82.0	69.6	77.7	78.8	72.5	73.6	71.9	67.5
9	95.5	87.5	96.0	128.9	78.9	69.6	79.9	77.1	73.8	73.4	70.6	67.7
10	88.2	88.3	102.0	129.3*	78.4	70.4	80.5	76.7	73.3	72.4	70.1	68.8
11	83.1	94.4	104.6	137.5*	77.3	76.2	81.2	74.8	73.0	72.3	69.8	68.1
12	83.3	99.4	105.6	144.1	79.1	77.9	82.4	74.9	74.2	70.8	69.6	68.4
13	83.3	95.2	106.8*	126.6	76.1	78.0	80.4	73.7	75.6*	70.7	69.1	67.9
14	83.3	93.2	104.1	113.2*	77.7	78.2	77.7	72.0	75.0	69.7	68.7	68.5
15	85.5	92.1	103.6	103.7*	80.0	83.2	77.4	69.7	73.4	69.7	68.0	68.9
16	91.3	96.6	102.0*	94.9	82.5	88.3	76.5	71.4	76.0	69.2	68.5	71.4
17	91.0	98.8	100.3	83.8	84.6	88.3	74.7	69.3	75.3	69.6	68.3	70.2
18	86.5	95.1*	100.0	81.0	88.5	90.3	75.8	68.3	74.2	68.3	68.7	70.2
19	87.1	88.8	91.7	75.2	96.0	91.9	74.1	70.0	72.9	67.5	68.9	71.0
20	86.7	82.6	85.9*	75.5	95.6	87.3	73.8	69.5	71.9	68.0	68.6	72.5
21	90.1	81.2*	82.7	73.9	96.2	86.0	74.5	68.9	71.2	68.2	69.7	68.7
22	95.3*	80.6	81.0	72.6	98.7	84.4*	73.6	68.3	69.3	67.8	70.8	69.9
23	98.5	81.0	74.6	74.0	98.1	83.0	72.7	68.3	67.6	68.7	70.6	72.9
24	92.1*	77.4	72.8	74.7	95.9	80.1	71.0	68.6	67.4	69.3	70.6	75.9
25	89.5	75.7	72.8	76.9	94.5	78.9	70.3	69.4	67.5	71.6	70.2	77.7
26	93.1	73.8	75.4	80.7	92.2	75.8	70.5	68.8	68.6	72.1	69.0	79.8
27	87.9	72.7	77.0	80.0	90.8	74.3	70.1	69.4	67.3	74.4	70.5	81.5
28	84.5	71.8	80.7	81.6	86.6	73.7	70.7	68.6	67.8	74.8	70.6	80.7
29	85.2	72.4	90.7	81.6	83.8	74.1	70.4		69.0	73.2	70.0	79.4
30	85.9	74.2	91.5	82.7	82.0	74.5	70.5		69.0	73.4	70.0	78.8
31	87.4	75.6		86.7*		76.1	70.1		70.5		71.1	
MEAN	95.5	85.1	88.7	97.1	88.3	78.6	75.0	72.4	71.7	71.2	71.6	71.9

DAILY SOLAR INDICES

JUNE 1975

JUN 1975	YEAR DAY	BARTELS 27-DAY CYCLE NUMBER	SUNSPOT NUMBERS		OBSERVED FLUX OTTAWA 2800	SOLAR FLUX ADJUSTED TO 1 A.U.								
			R_Z	$R_{A'}$		AFCRL 15400	AFCRL 8800	AFCRL 4995	OTTAWA 2800	AFCRL 2695	AFCRL 1415	AFCRL 606	AFCRL 410	AFCRL 245
1	152	18	7	9	69.4		253	115	71.4	73.9	45.0	35.1	21.2	6.9
2	153	19	11	10	70.9	510	257	114	73.0	67.5	43.7	33.2	20.8	7.4
3	154	20	8	8	68.8	514	262	116	70.8	69.5	44.4	33.2	21.0	7.5
4	155	21	7	8	68.4	513	265	117	70.4	69.7	44.9	33.6	19.7	7.2
5	156	22	7	9	67.3	505	265	115	69.3	68.3	42.3	32.5	20.9	6.9
6	157	23	7	3	66.2			113	68.2	65.5	43.3	35.5	19.3	7.1
7	158	24	0	0	66.1	511	261	111	68.1	65.4	41.8	32.7	20.1	7.4
8	159	25	0	0	65.5	517	266	112	67.5	66.8	43.4	33.7	19.9	7.3
9	160	26	0	0	65.7	518	264	110	67.7	66.4	41.9	33.8	19.3	6.5
10	161	27	0	0	66.7	514	259	111	68.8	66.5	41.4	34.0	20.6	7.1
11	162	1	9	4	66.1	509	261	111	68.1	65.2	41.0	34.9	19.7	7.4
12	163	2	0	2	66.3	514	258	110	68.4	66.6	42.2	32.8	17.2	9.0
13	164	3	0	0	65.8	518	256	111	67.9	65.2	42.3	31.8	19.7	7.2
14	165	4	0	0	66.4	516	262	112	68.5	66.2	42.0	32.6	17.0	7.3
15	166	5	8	6	66.8	511	262	112	68.9	65.8	40.6	33.4	19.3	7.3
16	167	6	19	16	69.2	512	262	114	71.4	67.0	41.9	32.5	20.0	7.0
17	168	7	17	14	68.0	517	262	114	70.2	66.4	42.4	31.5	19.9	7.8
18	169	8	12	11	68.0	515	260	112	70.2	65.5	40.9	31.5	19.9	7.8
19	170	9	16	13	68.7	515	263	114	71.0	66.5	42.3	32.1	20.4	7.6
20	171	10	0	3	70.2	519	265	116	72.5	68.1	43.5	33.1	20.5	7.3
21	172	11	7	2	66.5	513	263	113	68.7	64.3	41.2		20.4	7.8
22	173	12	0	0	67.7	511	261	112	69.9	65.6	41.1		21.9	7.6
23	174	13	12	11	70.6	513	263	113	72.9	68.1	42.9	33.8	21.2	8.2
24	175	14	20	19	73.5	522	268	118	75.9	70.4	45.3	34.6	21.5	7.5
25	176	15	24	24	75.2	521	275	119	77.7	72.8	45.5	35.6	20.8	7.7
26	177	16	33	30	77.2	520	279	121	79.8	74.3	47.0	35.8	21.4	8.1
27	178	17	38	34	78.8	518	277	123	81.5	77.0	50.0	36.3	20.9	7.9
28	179	18	36	31	78.0	525	278	121	80.7	75.5	51.3	37.8	25.5	12.9
29	180	19	23	24	76.8	516	277	122	79.4	72.4	53.9	38.1	26.1	11.7
30	181	20	22	18	76.2	518	283	123	78.8	75.2	48.4	36.5	22.6	9.9
MEAN			11.4	10.3	69.7	515	265	115	71.9	66.6	43.9	34.0	20.6	7.9



PREDICTED AND OBSERVED SUNSPOT NUMBERS

SMOOTHED OBSERVED AND PREDICTED SUNSPOT NUMBERS
CYCLE 20

MONTH	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1964										9.6	10.2	11.0
1965	11.7	12.0	12.5	13.6	14.6	15.0	15.5	16.4	17.4	19.7	22.3	24.5
1966	27.7	31.3	34.5	37.4	40.7	44.6	50.3	56.6	63.1	67.6	70.2	72.7
1967	75.0	78.0	82.2	84.6	87.4	91.3	94.1	95.3	95.3	95.0	97.1	100.6
1968	102.6	102.9	104.7	107.2	107.6	106.6	105.2	104.8	107.0	109.9	110.6	110.1
1969	110.0	109.6	108.0	106.4	106.2	106.1	105.0	106.4	105.4	104.1	104.6	104.9
1970	105.6	106.0	106.2	106.1	105.0	105.3	103.0	101.0	97.2	93.9	89.4	84.1
1971	80.4	77.8	74.4	70.9	68.1	66.7	65.4	64.6	65.0	66.2	66.8	69.4
1972	70.8	71.2	72.4	73.4	72.9	70.5	68.2	65.5	62.2	60.6	58.7	55.1
1973	50.9	46.5	44.2	42.7	40.7	39.1	37.5	36.1	34.4	32.6	31.8	31.5
1974	32.7	34.4	34.0	33.9	34.6	34.5	34.0	33.1	32.1	30.3	27.6	25.2
1975	24.0 (1)	22.5 (3)	21.4 (4)	20.1 (5)	18.7 (6)	17.0 (8)	17.1 (10)	(16.5) (--)	(15.6) (--)	(15.0) (--)	(14.3) (--)	(13.7) (--)

For each month, the upper figure is the observed or predicted Zürich smoothed sunspot number. The lower figure in parenthesis is the corresponding absolute value of the 90% prediction interval, an indication of the uncertainty above and below the predicted number. Observed numbers are those with no prediction intervals. The observed smoothed sunspot numbers are based on final Zürich numbers through 1974.

The predicted sunspot numbers are derived from a regression analysis based on cycles 8 through 19. Tests indicate that earlier cycles are from a different statistical population. From July 1968 - February 1970 a regression analysis based on cycles 1 through 19 was used because it had not then been proven that two populations exist.

SOLAR FLARES

Partial listing including sub-flares.

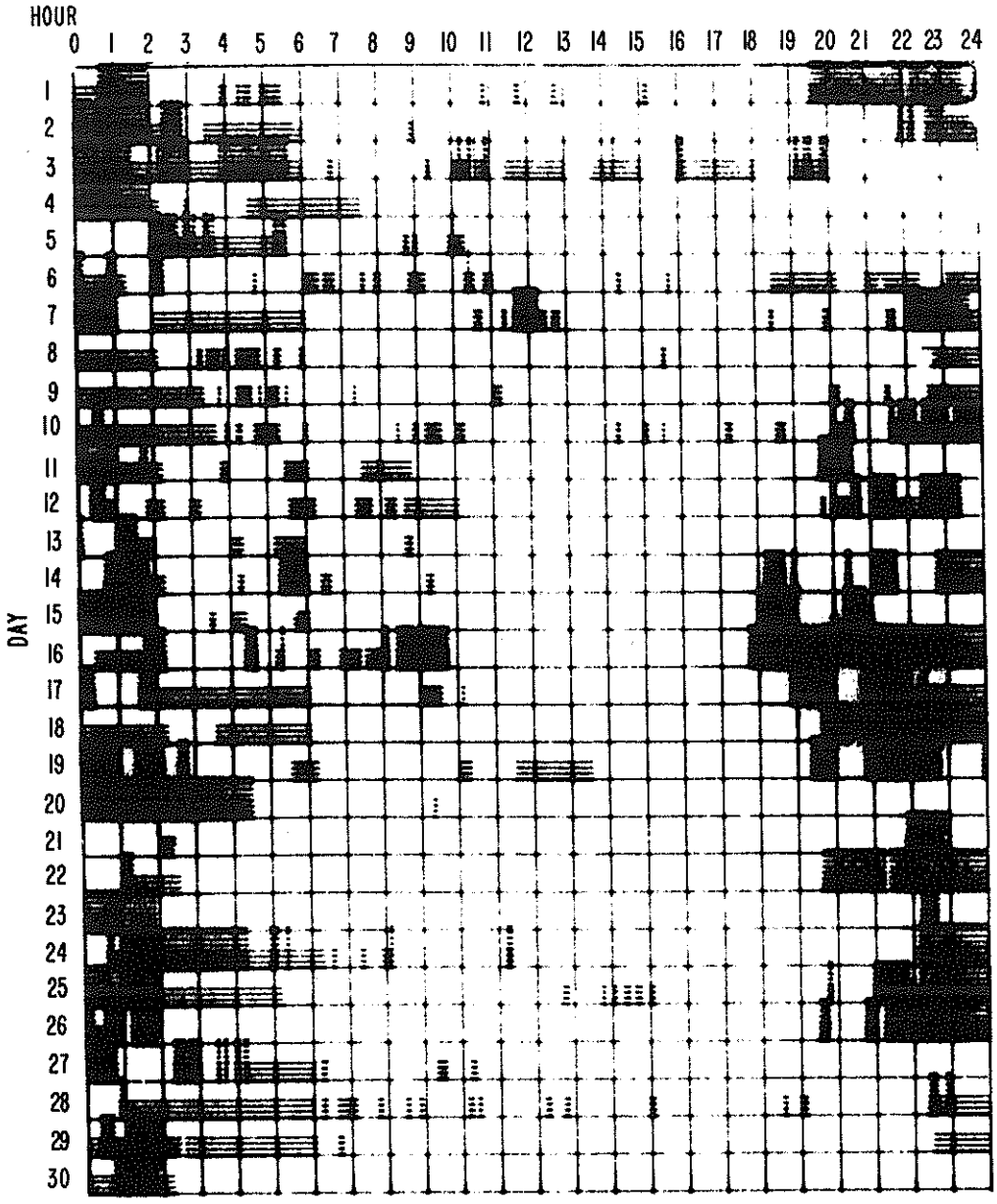
JUNE 1975

OBSERVATORY	OBSERVED UT DATE	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME UT	MEAS. AREA Mill. of Disk	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. S	REMARKS
ATHN	03	1001	1005	1003	N11	W 8	.246		3.4	4	SN	5	C		16				DE
RAMY	04	1023	1042	1028	S 9	E25	.430		6.3	19	SF	4	C		45				DE
ATHN	04	1028	1036	1031	S11	E26	.452		6.4	8	SF	3	V		48				F
ATHN	04	1028	1036	1031	S11	E26	.452		6.4	8	SF	3	C		48				F
RAMY	04	1700	1719	1702	S 8	E18	.317		6.1	19	SF	3	C		36				F
BOUL	04	1700	1708	1703	S 8	E21	.365		6.3	8	SF	3	C	1703	32	.3			
ATHN	04	1706E	1711	1707U	S 9	E28	.353		6.2	50	SF	2	V		64				F
ATHN	04	1706E	1711	1707U	S 9	E20	.353		6.2	50	SF	2	C		64				F
ATHN	11	0633	0642	0635	S21	E31	.567		13.6	9	SF	4	C		32				
ATHN	11	0633	0642	0635	S21	E31	.567		13.6	9	SF	4	V		32				
CATA	11	0635E	0650D	0640	S14	E35	.586		13.9	150	SF			0640	28	.4		(132)	
ATHN	11	1156	1201	1158	S15	E31	.536		13.8	5	SF	3	V		16				F
ATHN	11	1156	1201	1158	S15	E31	.536		13.8	5	SF	3	C		16				F
CATA	15	1015E	1035D	1025	N06	W28	.498		13.3	20D	SF			1025	28	.3		(148)	
CATA	15	1215	1250D	1225	N07	W31	.545		13.2	35D	SF			1225	56	.7		(123)	
CATA	15	1305E	1315D	1305	N07	W31	.545		13.2	10D	SF			1315	56	.7		(135)	
CATA	15	1325E	1430D	1335	N07	W32	.559		13.2	65D	SF			1335	28	.3		(129)	
CATA	16	0725	0730	0725	N05	W42	.683		13.2	5	SN			0725	56	.8		(151)	
CATA	16	0810	0820	0815	N05	W43	.695		13.1	10	SN			0815	56	.81		(155)	
HURB	16	1157E	1201D		N09	W42	.695		13.3	4D	SB						24.90		T
CATA	19	0620E	0700D	0635	N05	W84	.995	13722	13.0	40D	1F			0635	56			(129)	
CATA	19	1035E	1115	1105	S08	W73	.954		14.0	40D	SF			1105	56			(129)	
CATA	19	1035E	1115	1105	N08	W84	.996	13722	13.1	40D	1F			1105	56			(120)	
HURB	19	1215E	1413D	1238	S09	W70	.937	13729	14.3	118D	1B						29.70		
CATA	19	1250	1250	1250	S10	W74	.958	13729	14.0		1F			1250	84			(135)	
CATA	19	1250	1250	1250	N06	W86	.998		13.1		SF			1250	28			(129)	
CATA	20	1050E	1120D	1055	S11	W90	1.000	13729	13.7	30D	1F			1055	56			(126)	
CATA	20	1425	1510	1435	S08	W90	1.000	13729	13.9	45	1N			1435	84			(162)	
BOUL	20	1432	1503	1435	S12	W90	1.000		13.9	31	1N	3	C	1435	64	2.5			
CATA	20	1525	1630	1610	S10	W90	1.000	13729	13.9	65	2N			1610	81			(155)	
MCMA	20	1527	1545D	1534	S12	W90	1.000	13729	13.9	18D	SF		C	1534					
BOUL	20	1528	1550	1535	S12	W90	1.000		13.9	22	SN	3	C	1535	43	1.7			
BOUL	20	1725	1755	1732	S12	W90	1.000		14.0	30	1N	3	C	1732	54	2.1			
RAMY	21	1740	1757	1742	S 8	E23	.391		23.5	17	SF	3	C		18				DE
HURB	23	0558E	0614D	0601	S10	E01	.084		23.3	16D	SF						20.10		D
CATA	23	0605	0645D	0615	S11	W81	.985		17.2	40D	SN			0615	56	.6		(174)	
HURB	23	0628E	0633D	0631	S10	E01	.084		23.3	5D	SF						19.70		
CATA	24	1315E	1340D	1325	N05	E80	.986		30.6	25D	SF			1325	28			(138)	
CATA	24	1430E	1445D	1435	N05	E79	.983		30.5	15D	SF			1435	28			(138)	
UPIC	25	1350E	1415	1355	S11	W32	.532		23.2	25D	SF		P	1355	82	5.0			
HURB	26	0714E	0726D	0714	N10	E62	.896	13738	31.0	12D	1F						21.10		
HURB	26	0826E	0836D	0832	S09	W46	.716		22.9	10D	SF						19.70		
HURB	26	1055E	1122D	1105	S09	W46	.716		23.0	27D	SF						26.10		
HURB	27	0550E	0610D	0552	S12	W52	.785		23.3	20D	SN						20.50		T
HURB	27	0629E	0700D	0629	S10	W53	.795		23.3	31D	SN						24.70		
ARCE	27	0925E	0957		S10	W56	.825		23.2	32D	SB		C	0940	22	.4			
HURB	27	1057E	1126D	1058	S10	W58	.844	13736	23.1	29D	1N						25.60		T
CATA	27	1400E	1530	1410	S05	W60	.864		23.1	90D	SN			1410	56	1.2		(155)	
CATA	27	1410E	1420D	1410	N08	E39	.659		30.5	10D	SN			1410	28	.4		(155)	
BOUL	27	1815	1837	1817	S10	W63	.887		23.0	22	SF	3	C	1817	11	.2			
ARCE	28	0800E	1000D		S10	W70	.936		23.1	120D	SN		C	0923	51	1.2			K
MCMA	28	2007	2028	2011	N04	E33	.564	13738	31.3	21	SN		C	2011	40	.5			EL
BOUL	29	1536	1601	1544	N 7	E15	.337		30.8	25	SF	3	C	1544	21	.2			
RAMY	29	1536	1606	1544	N 8	E17	.372		30.9	30	SF	2	C		72				DE
MCMA	29	1537	1605	1540	N07	E17	.362	13738	30.9	28	SB		C	1540	50	.5			E
ATHN	29	1539	1556	1543	N 8	E16	.360		30.9	17	SN	4	V		64				F
ATHN	29	1539	1556	1543	N 8	E16	.360		30.9	17	SN	4	C		64				F
CATA	29	1545	1630	1550	N06	E17	.353		30.9	45	SN			1550	84	.9		(166)	
ATHN	30	0424	0430	0426	N 7	E 7	.253		30.7	6	SF	4	C		32				DE
TEHR	30	1009	1023	1020	N12	E11	.358		31.2	14	SF	3	V		1 90				F
TEHR	30	1015E	1220D	1017U	N12	E10	.349		31.2	125D	SF	3	C		60				
LOCA	30	1030E	1045	1030	N07	E05	.239	13738	30.8	15D	1N		V	1030	1 01	1.0			
RAMY	30	1148	1204	1153U	N 6	E 2	.209		30.6	16	SF	3	C		27				DE Z
MCMA	30	1152	1209	1154	N07	E05	.239	13738	30.9	17	SN		C	1209	30	.3			E
RAMY	30	1309	1316	1314U	N 8	E 1	.240		30.6	7	SF	4	C		33				DE

NOTE: The measured area is now reported in millionths of the solar disk.

INTERVALS OF NO FLARE PATROL OBSERVATION
FOR PRECEDING SOLAR FLARE TABLE

JUNE 1975



Observatories included in total patrol:

Arcetri	Bucharest	Hurbanovo	Manila	Ramey
Athenes	Catania	Kodaikanal	McMath-Hulbert	Tehran
Boulder	Herstmonceux	Locarno	Mitaka	Upice
				Wendelstein

Times of no flare patrol are shown by the shaded area for each day divided into times of no cinematographic patrol (bottom half of day) and times of neither visual nor cinematographic patrol (top half of day).

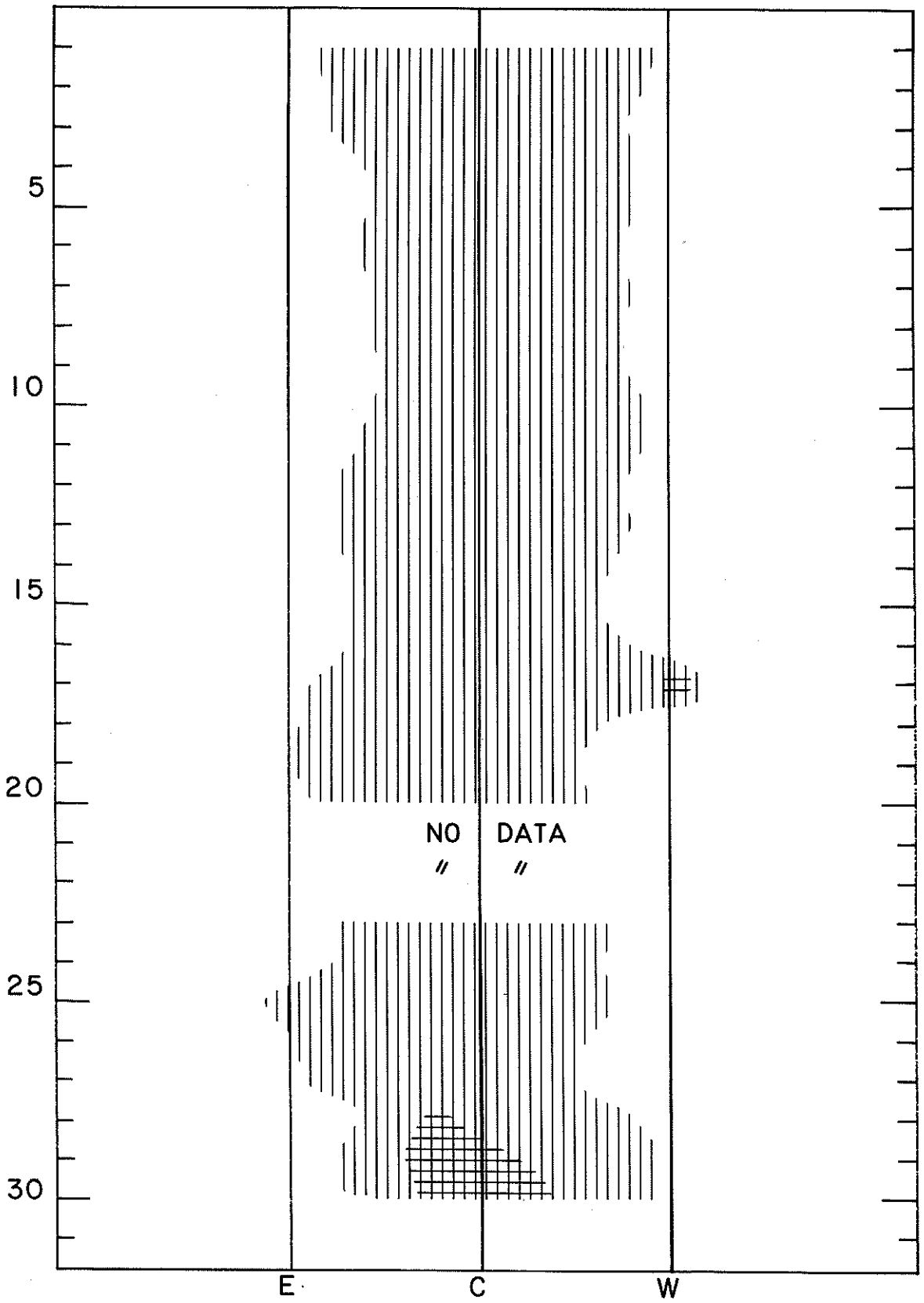
12
Jun 75

SOLAR RADIO EMISSION
INTERFEROMETRIC OBSERVATION

JUNE 1975

Nançay

169 MHz

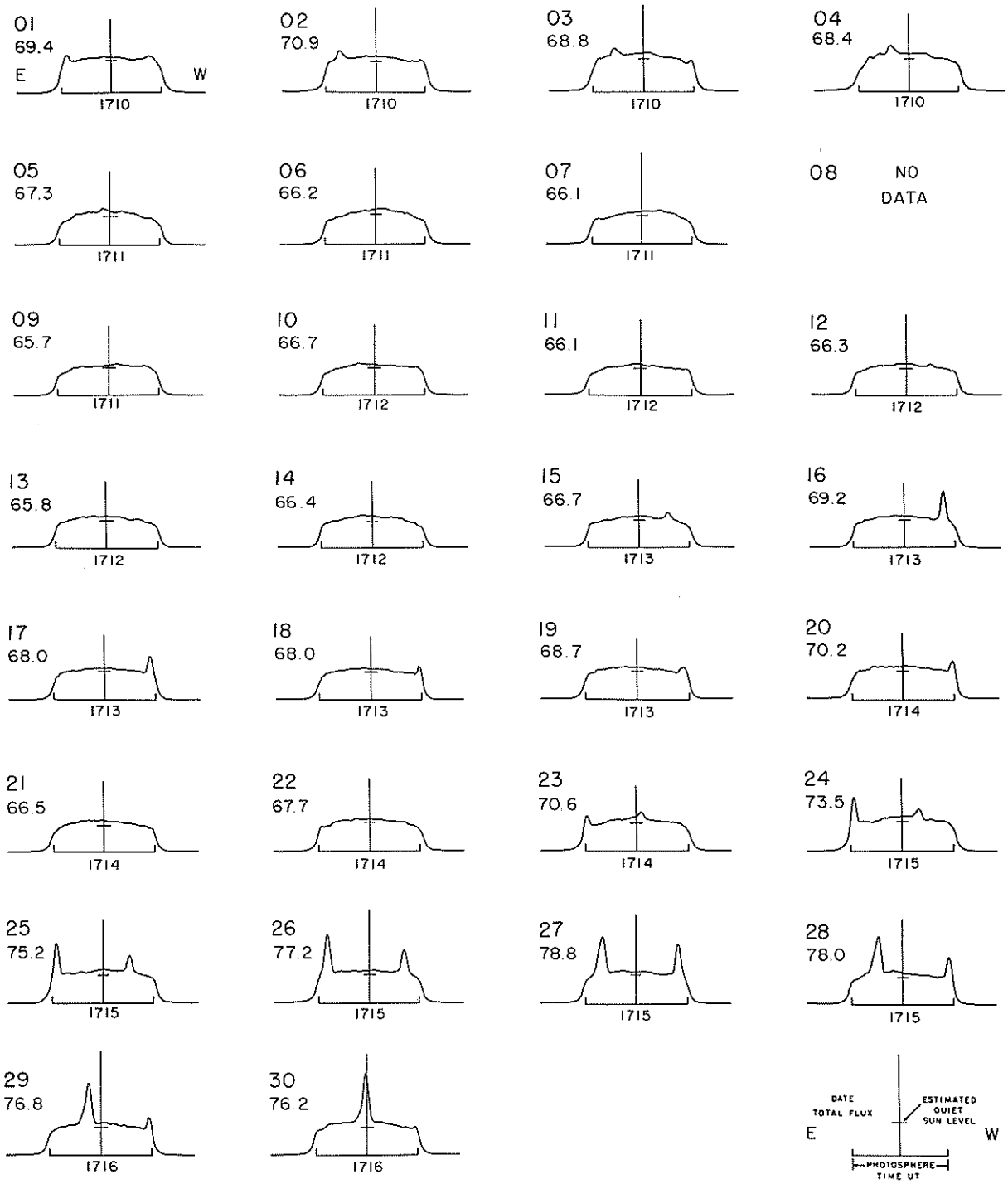


EAST-WEST SOLAR SCANS

June 1975

ALGONQUIN RADIO OBSERVATORY
CANADA

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

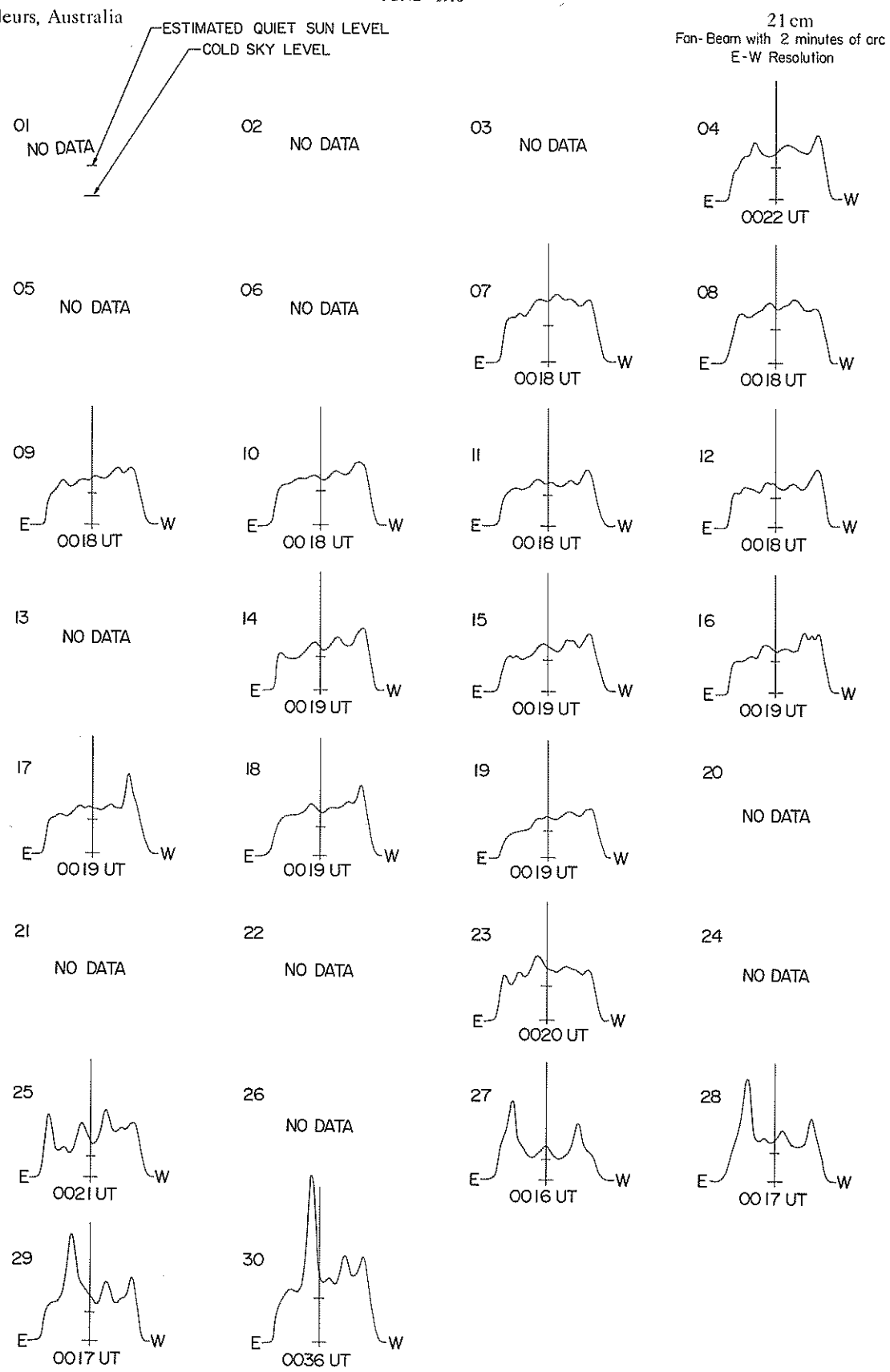


14
Jun 75

JUNE 1975

Fleurs, Australia

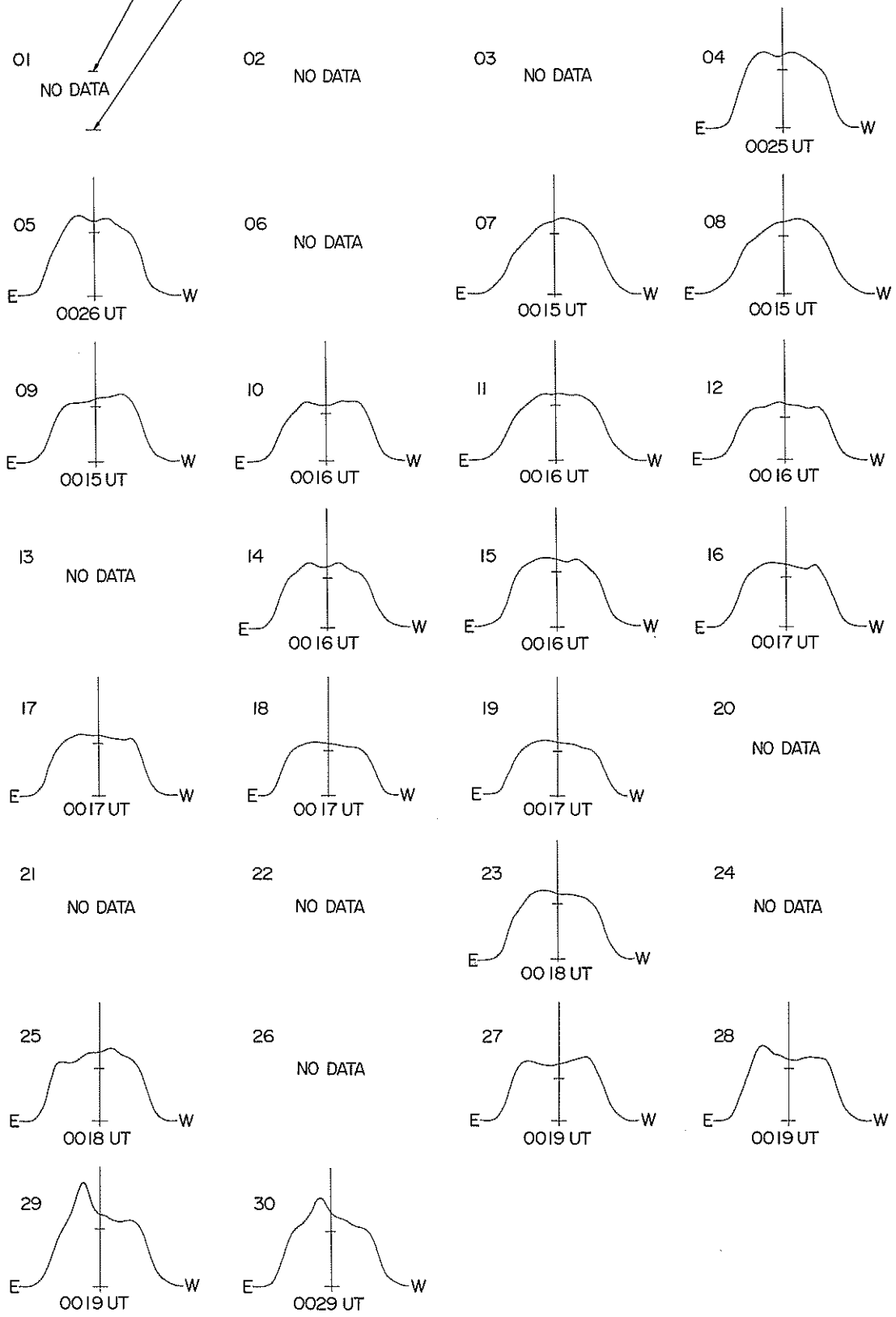
21 cm
Fan-Beam with 2 minutes of arc
E-W Resolution



JUNE 1975

Fleurs, Australia

43 cm
Fan-Beam with 4 minutes of arc
E-W Resolution



SOLAR RADIO EMISSION
SELECTED FIXED FREQUENCY EVENTS

JUNE 1975

	FREQUENCY STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY $10^{-22} Wm^{-2} Hz^{-1}$ PEAK	MEAN	INT	REMARKS
2	2695 BOUL	1 S	2024.5	2027	7	7	2		
9	2695 BOUL	2 S	2126	2127.5	2	3	1		
16	2695 BOUL	1 S	2347	2347.5	2.5	3	1		
18	2695 BOUL	1 S	1727	1727.5	1	3	1		
	2695 BOUL	8 S	1733.5	1734	1	6	2		
	2695 BOUL	8 S	1756.5	1757	1.5	4	1		
	2695 BOUL	1 S	1801.5	1802	1	2	1		
	2695 BOUL	45 C	1825.5	1828	2.5	3	1		
24	2695 BOUL	8 S	1725.5	1726	1.5	2	5		
26	2800 OTTA	1 S	1801	1801.9	3	1.2	0.5		
28	2800 OTTA	20 GRF	2000	2013	40	1.8	0.9		
	2800 OTTA	24C R	2125	2200	35	1.6	0.8		
	2800 OTTA	24P R	2200		230 D	1.6			
29	2800 OTTA	21A GRF	1530	1542	60	1.4	0.7		
	2695 BOUL	1 S	1539	1541.5	4.5	4	1		
	2800 OTTA	-A S	1540	1541	2	1.8	0.9		
	2800 OTTA	8 S	1541	1541	0.1	3			
	2800 OTTA	20 GRF	1847		11	0.8	0.6		
	2800 OTTA	20 GRF	2123	2125	20	1	0.5		
30	2800 OTTA	8 S	1436.5	1436.5	0.10	2.2			
	2695 BOUL	45 C	1715	1716	3	5	2		
	2695 BOUL	8 S	1728	1730	2.5	10	3		
	2800 OTTA	8 S	1830.2	1830.2	0.3	2.4	1.2		

Observatories:

BOUL = Boulder MANI = Manila OTTA = Ottawa ARO PENT = Penticton SGMR = Sagamore Hill

Explanation of Type Code:

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

SOLAR WIND
Interplanetary Scintillations
JUNE 1975

UCSD 74 MHZ SCINTILLATIONS

DAY	3C48 VEL	3C48 ERR	3C144 VEL	3C144 ERR	3C147 VEL	3C147 ERR	3C161 VEL	3C161 ERR	3C237 VEL	3C237 ERR	3C273 VEL	3C273 ERR	3C298 VEL	3C298 ERR	3C459 VEL	3C459 ERR
1					561	72	572	35								
2	592	7			829	154	738	88	307	39	464	11	659	146		
3	533	23			437	158	676	53	521	90					532	62
4	517	48			349	35	632	65					282	18		
5	546	48			549	58	639	14					385	110		
6					670	*	640	*								
7	437	11			472	59	658	80								
8	500	35			338	91	599	22			334	*				
9	468	11					544	65	363	28						
10	479	59			415	108	472	29	377	106						
11	364	64			485	10	458	19			379	55				
12	597	68					555	29			533	53	433	28		
13	637	13			585	95	628	58					268	8		
14	716	37			568	39	489	39								
15	704	25			656	199	479	20	599	36	538	50				
16	703	16			580	12	581	8			567	47	485	17		
17	686	90					559	139	332	72	517	16	438	19		
18	553	37											554	73		
19	616	32			458	59	537	59	276	12						
20	604	29							310	24	360	32				
21																
22	805	17					505	19								
23	830	50											293	99		
24	622	41			610	136							348	94		
25	676	54					559	85			351	9				
26	401	23			508	46			409	24			420	140		
27	522	43									419	38				
28									416	20	387	43				
29											415	30	325	24		
30	489	*														

JUNE	5 UT	5 LAT	5 DIST	5 DLON	15 UT	15 LAT	15 DIST	15 DLON	25 UT	25 LAT	25 DIST	25 DLON
3C48	17.	26.	0.70	38.	16.	20.	0.80	32.	16.	16.	0.88	25.
3C144	21.	-15.	0.16	-81.	20.	-55.	0.03	85.	19.	0.	0.18	80.
3C147	20.	49.	0.48	-42.	19.	62.	0.45	-22.	19.	63.	0.46	16.
3C161	22.	-45.	0.59	-32.	22.	-54.	0.52	-22.	21.	-58.	0.49	1.
3C237	2.	-3.	0.97	-17.	1.	-3.	0.92	-23.	0.	-4.	0.84	-32.
3C273	4.	0.	1.14	-14.	3.	0.	1.10	-16.	2.	1.	1.05	-17.
3C298	6.	3.	1.22	-10.	5.	4.	1.19	-12.	4.	5.	1.16	-13.
3C459	14.	4.	1.01	17.	14.	5.	1.06	16.	13.	6.	1.10	15.

* indicates data for which no error estimate is available, because only two antennas were operating.

PIONEER VI

JUNE 1975

Date June 1975	DSN Coverage (UT)	Data Time (UT)	ESP (°)	SOLAR WIND AMES[1] U_{H^+} † (km/sec)	SOLAR WIND AMES[1] TAU (days)	SOLAR WIND MIT[2] U_{H^+} (km/sec)	SOLAR WIND MIT[2] N_{H^+} (H^+/cc)	COSMIC RAY PROTONS[3] (particles/sec) 6-13 (Mev*)	13-175 (Mev**)	>175 (Mev)
1	2034-2350	2100	136.8	339	10.5	344	10.8	0.98	0.13	1.22
		2200		339		361	13.8	1.11	.15	1.31
		2300		383		365	20.9	1.2	.12	1.19
		2400		339		361	18.6	1.02	.13	1.22

PIONEER VII

JUNE 1975

Date June 1975	DSN Coverage (UT)	Data Time (UT)	ESP (°)	SOLAR WIND AMES[1] U_{H^+} † (km/sec)	SOLAR WIND AMES[1] TAU (days)	SOLAR WIND MIT[2] U_{H^+} (km/sec)	SOLAR WIND MIT[2] N_{H^+} (H^+/cc)	COSMIC RAY PROTONS[3] (particles/sec) 6-13 (Mev*)	13-175 (Mev**)	>175 (Mev)
22	1003-1500	1000	-061.6	654	-4.6					
		1100		654						
		1200		654						
		1300		571						
		1400		571						
		1500		571						

1 Wolfe - NASA/ARC
2 Simpson - University of Chicago

* Includes He 0.6-13 Mev/nucleons and electrons ∿0.5 Mev - see J. Retzler and J. A. Simpson, J. Geophys. Res., 74, 9, 2149-2160, 1969 for discussion of the electron response of Pioneer VII.

** Includes He >13 Mev/nucleons.
Q Used to indicate that a rate is at its quiescent level.

ESP = Earth-Sun Probe Angle.

† Peak velocity.

Note: Data sampled hourly unless otherwise noted.

PIONEER VIII
JUNE 1975

Date June 1975	DSN Coverage (UT)	Data Time (UT)	ESP (°)	SOLAR WIND[1] U_{H^+} (km/sec*)	N_{H^+} (H^+/cc)	T_{H^+} (x10^6°K)	TAU (days)	IP E-FIELD[2] 400 Hz (mv)	IMF[3] |B| (γ)	ϕ (°)	COSMIC RAY PROTONS[4] (particles/sec) >13.9 Mev	>64 Mev
29	1601-1935	1600	153.9	585	---	---	11.6	0.41	3.2	352.	7.59	0.73
		1700		585				.28	2.5	020.	7.47	.73
		1800		585				.23	4.3	030.	7.62	1.14
		1900		542				.35	5.7	090.	7.64	1.28

1 Wolfe - NASA/ARC.
2 Scarf - TRW, Inc.
3 Ness - NASA/Goddard & Mariani - Univ. of Roma
4 Webber - Univ. of N.H.

ESP = Earth-Sun Probe Angle.

PIONEER IX
JUNE 1975

Date June 1975	DSN Coverage (UT)	Data Time (UT)	ESP (°)	SOLAR WIND[1] U_{H^+} (km/sec*)	N_{H^+} (H^+/cc)	T_{H^+} (x10^6°K)	TAU (days)	IP E-FIELD[2] 400 Hz (mv)	IMF[3] |B| (γ)	ϕ (°)	COSMIC RAY PROTONS[4] (particles/sec) >13.9 Mev	>40 Mev
10	1510-2240	1500	169.8	325.	---	---	12.9	0.2	3.9	110.	7.27	0.67
		1600		350.				.22	6.2	054.	7.25	.54
		1700		350.				.22	6.	068.	7.26	.63
		1800		350.				.2	6.	067.	7.18	.62
		1900		350.				.23	6.5	046.	7.21	.73
		2000		350.				.18	4.5	076.	6.86	.63
		2100		350.				.21	5.3	095.	6.94	.76
		2200		350.				.2	5.4	098.	7.38	.69
		2300		350.				.18	5.2	059.	6.82	.66

1 Wolfe - NASA/ARC
2 Scarf - TRW, Inc.
3 Sonett and Colburn - NASA/ARC
4 Webber - Univ. of N.H.

ESP = Earth-Sun Probe Angle.

* Peak velocity

Note: Data sampled hourly unless otherwise noted.

INFERRED IP MAGNETIC FIELD

BARTELS ROTATION	DATE	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
1896	1972 MAR 10	A A A A A A A A A A A A T A T A T A T A T A T T A A A T T T A T TA T A A A A T T T T T T T T T TA T A A A A
1897	APR 6	A A T T T T A A AT T T T T T T T T TA T T T T T T T T A A T T T T AT A A A A A A A A A T - A A A A T T TA TA A A
1898	MAY 3	A A A A A A T - A A T T T T T T T T T T T T T T T T A A T A A T A A A AT A A A AT A AT A T T A A T T T T A A
1899	MAY 30	A A A A A * A A AT A* T T T T A A T T T T T TA T A A A - A - TA - A - A - T T T - A A A A T T T T T T T T TA TA A A
1900	JUN 26	A A A A A A TA A TA A A A A A T AT TA T T T T T T TA A A T T T T A A A A T A* TA A* A A T T* T T T T T T T T T T TA TA
1901	JUL 23	TA A* TA A* T A* T A A A A A A A T A* TA T T T A A A A TA A T - AT A T T T T T T T T T T T T T T T T T T T T T A A TA -
1902	AUG 19	A - A - A A A A A A A A A A TA T A A A A A A A A T T A A A A A A T T T T T T T T T TA A A A TA T A A A A TA A A -
1903	SEP 15	A A TA T* A A A A A A AT A A A A T T A AT A A A A - A - A - A - A - A T T T T T T T T T A - T T T A AT A TA A A T
1904	OCT 12	T T A - TA - A A* A T A T TA T A A A A A T TA A TA A AT A AT A A A T AT T T A AT A T* T T A - A A* T AT T T TA T TA* A A
1905	NOV 8	A A T A AT A AT AT TA AT T AT A T TA T* A A A A A A* TA AT A A A A TA AT T T A T TA TA A T A T AT T A A TA A A A A A AT AT T T
1906	DEC 5	T T T T TA AT T - T - T T T T A AT A - TA T TA T A A AT - A - A T T TA A A T T T T T A A* A T T T T T T T TA AT TA T
1907	1973 JAN 1	T T T T T T T T TA T T T A T AT - A AT A T A - AT - A TA A A A A A A A A A A T T A - T - T T T - TA T T - T T T T
1908	JAN 28	T T A A T T TA T AT T T T T A T A A A TA A A A A A AT T TA A AT A TA A AT AT - A A A A T T T T AT T T T T T T T T T
1909	FEB 24	AT T AT T AT TA AT T T T T - AT TA AT A T A T T A A A A A A A AT TA A AT A A A AT TA A A T A AT TA A A AT A T T T T T T T T
1910	MAR 23	T T T T T T T A T T T T T T T TA AT A T TA A A A A A - A A A A T TA A A A A A AT AT T - T - T T A T T T T T AT T* T T*
1911	APR 19	T T T AT T T - A T T T AT T A A AT T T T T TA A A A A AT A* A A - AT A TA A A* - T A A T TA T T* - AT A A T T - A - T A A*
1912	MAY 16	T T T T T T T T AT T - T - TA T T A A AT AT T T AT A A A - A A A - A A A* A A A A A A A A - T* A - A A A - - T T T T
1913	JUN 12	TA T* - T * - T T TA T* A A T T - T* T T* T T T T AT AT A A A A TA T * - T T - A A A A A A A* A AT T - T T A A - A T T
1914	JUL 9	T T T T A A T T - T AT A T T* A T* - A A AT * - A A T T A TA - T T T T T A A - A* A A A A* A TA - A A TA T T* T T* T T
1915	AUG 5	T T A A A A T AT A A A T T T* T T AT * T AT T T A AT T T A A A TA T T T T A A A A AT A A* A AT A A A A T TA A A* A A
1916	SEP 1	T TA* T T T T A AT A A A TA* A A A * T T T T T T T A A A A A T T T T T T T A T T T A A A* T A A T* A A A A TA A* A A
1917	SEP 28	A A* TA A T AT T T A A A A A A T A AT A* AT T* AT AT T T T T T T* T T T T* T T* AT T TA A A T - A* A A A A A T AT A AT T T
1918	OCT 25	T T T T A TA A A A T A T* T A T A A A A A T A TA T T T AT T T T T T T TA T T T T T * A A A A A AT A AT TA A T A - A A
1919	NOV 21	A * T T T - A A A A AT T A T A T* A TA A A A A A A T TA T T T T T T T * T T T T T TA TA A A T T T - T A A TA A A T T
1920	DEC 18	T T AT A A T A T A TA A T A * A A A * AT T T T T T T T T * T T T T T T T A T AT T T A T T T AT TA T T T A A T AT T
1921	1974 JAN 14	T A A T - T T A A T A A A A A A - A A - AT - T T T TA T * T A T T T T T A* AT T AT T TA A T - T T T T T T T T TA A
1922	FEB 10	A - A - A * A A A A A A A A TA T A A A A T * T T T T T T T A T - T T T T T T T TA T T T T T T T T T T T A A A A
1923	MAR 9	A A A A A A A A A A A A T T TA TA A AT A A A A T A T TA T A T T A T A A T A T T T T T T T TA T T TA T TA A TA - A TA
1924	APR 5	A A A A A A - TA A A A A A A A * A A A A A A A T T TA TA TA T T T T T T T T T T T T T T T T A TA A AT T A A A A - - -
1925	MAY 2	- - A A A A* AT T A AT AT T A T* TA A A A TA T* A A* AT AT T T T T T T T T TA T* T T T T T T T T TA - T T TA T* T T A - - -
1926	MAY 29	T T A A A * - A A A A * A A * - TA * A A A A T T T T TA TA T T T T T T T T T T T T T T T T T T T T T T T T AT* - T
1927	JUN 25	TA TA A A - A - A A T A A A A A A A A A - TA TA - T T T T T T T T - T T - T T T T T T T T T A AT AT T T T T T T T
1928	JUL 22	T T A A A A AT A A A A A A A A A A A A A A - T - T - T - T - T - T - T - AT - AT - T - TA - T - T - T - T - T - T - T -
1929	AUG 18	AT - A - A - A - A - A - A - A - A - AT - TA T T T T T T T T T T T TA AT T T T T AT T T T TA A AT - T T T T T T T - A -
1930	SEP 14	AT T T TA AT A* A A A A A A A A TA A AT A A A AT T T TA A T TA T T T T T T T T - T T T AT T T T T T T T T T T T T T T T
1931	OCT 11	T T TA T A A A A A A A A A A A A A AT A A A TA A A A T T AT - T T AT T T T T T T T T T T T T T T T T T T T T T T T T T
1932	NOV 7	TA - T - A - A - A A A A A A A A A A - A - AT - TA A T T T T T T T A T * T A T T* T AT T T T T T T T T T T TA T A T T T
1933	DEC 4	T T TA T T A TA A A T A T A * AT T* A T A * A T A A A A T T T T T T T T T T T T* T T T T T T* A * A T A A A A AT TA
1934	DEC 31	T A T T T T A TA A T A T A - A - TA T A A AT - A A* A * T T T T T T T T T T* T T* T T T T T T T * A A A A A TA* A A
1935	1975 JAN 27	T T T T A T AT T A A* A T - TA A A T A T A T A T A T - T T T T T AT T T T T T T T* T - TA A T A* AT T A TA TA T A A A A
1936	FEB 23	TA A A A A A* TA A A AT A A A A A A A A AT T A A A A A T T T T T T A T A* T T T T T TA T A* T T T A T * T T T T A A
1937	MAR 22	A A A A TA A T T A A* A A A A A A AT A* T A A A T * TA T T T T T T * T A* T T A AT A T T T A T A A T T T A A A A
1938	APR 18	A A A A A A A A A * A A* A A - A A A A A A A T T A A A A T T - T T T - T T T T T A A* T T T T - A T AT T T TA T
1939	MAY 15	T T A A TA TA A A A A T T TA TA - * A A A A A A - - - - - - - - - - - - - - - - - - T - * - * - * * T T T T A A
1940	JUN 11	A A A A A A A A A A A * - - - - - - - A A A A TA A A AT A A A A A A T T T T T T A A

T = towards the sun
A = away from the sun
* = effect doubtful or not discernable
- = missing data

The table shows daily inferences of the polarity of the interplanetary magnetic field. The first half of the day is based principally on magnetograms produced by the magnetometer at the Vostok Anarctic Station of the USSR. The magnetometer of the U.S. Air Weather Service operated by the Air Force Cambridge Research Laboratories at the Thule Geopole Station is used for the second half of the day.

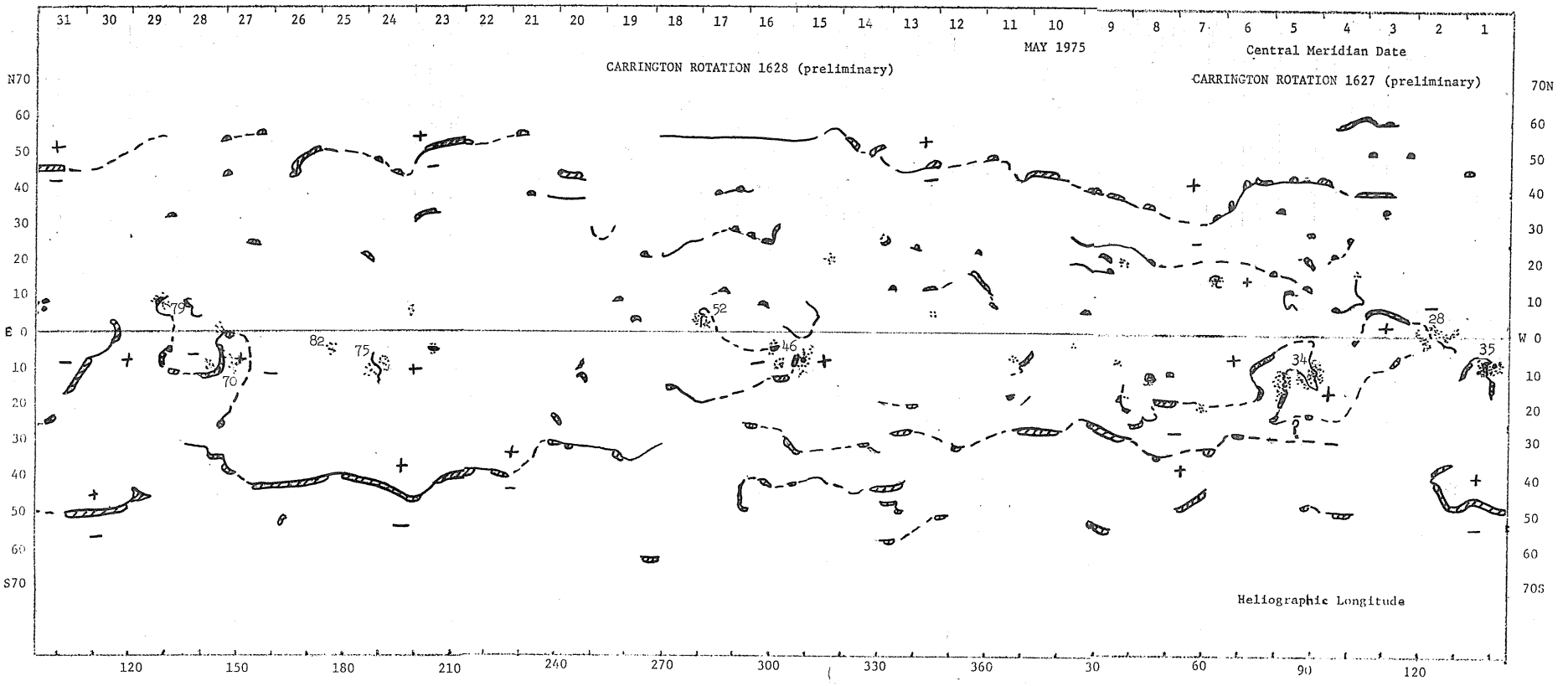
Note: Computer problems are responsible for the considerable amount of missing data in August 1974.

MAY 1975 DATA

Contents

Hα SYNOPTIC CHART

MAY 1975

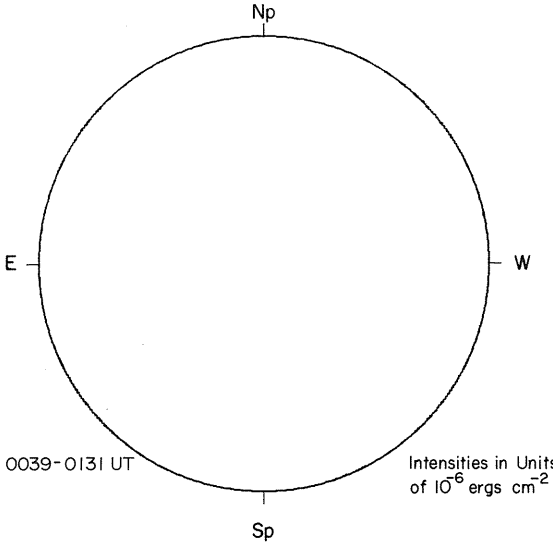


23 May 75

MAY 1, 1975 (P = -24.29, B_o = -4.19, L_o = 144.52)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

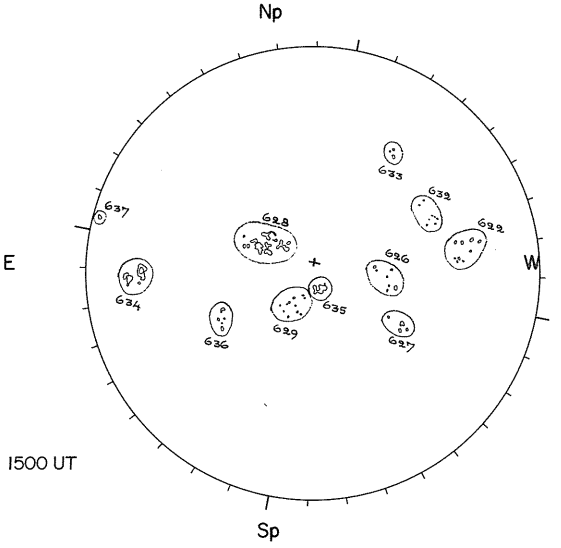


0039-0131 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

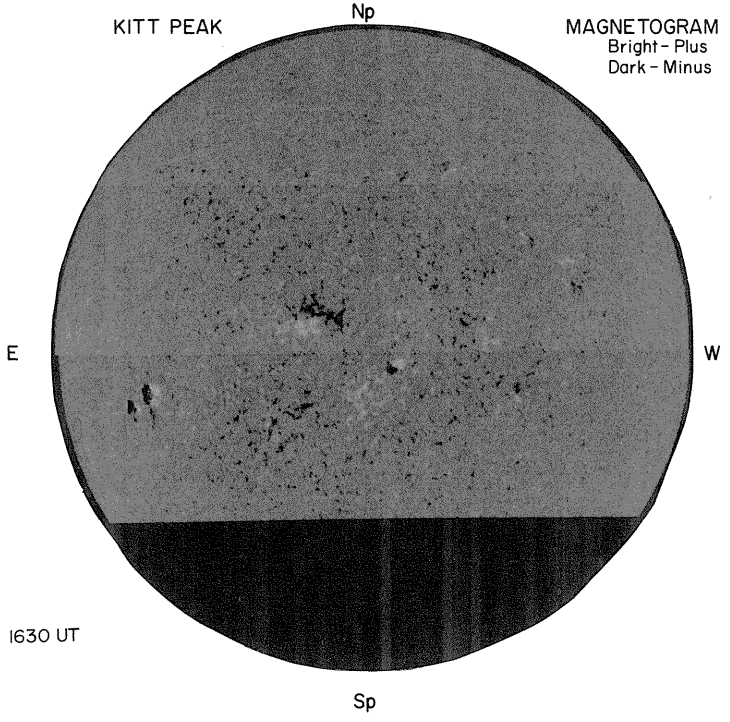


V. GOOD	M
28 - 1100	- 2.5
34 - 0800	- 3.0
35 - 0300	- 3.0
37 - 0100	- 2.5

1500 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

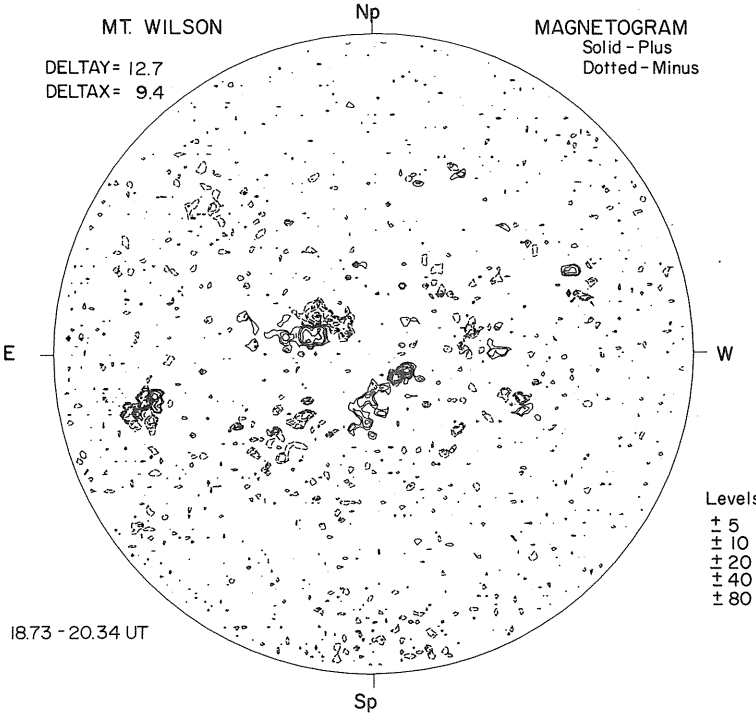


1630 UT

MT. WILSON

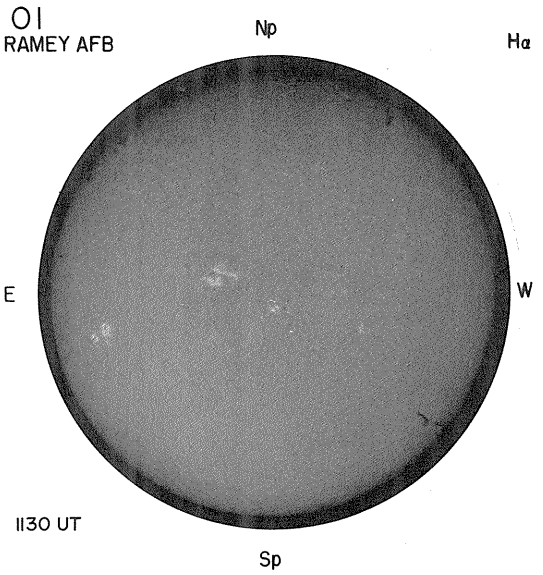
DELTAY = 12.7
DELTAX = 9.4

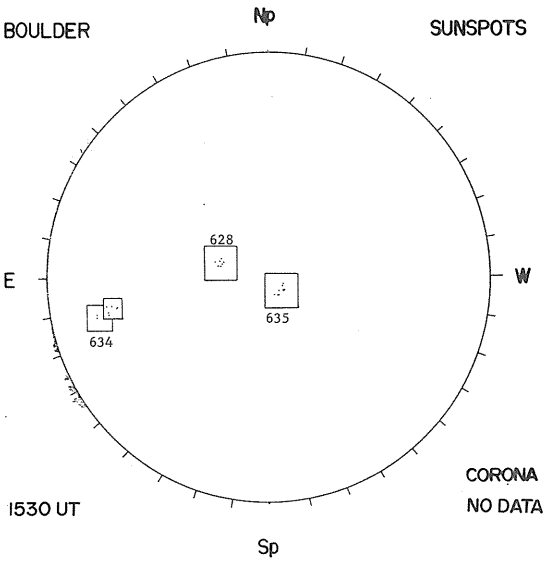
MAGNETOGRAM
Solid - Plus
Dotted - Minus

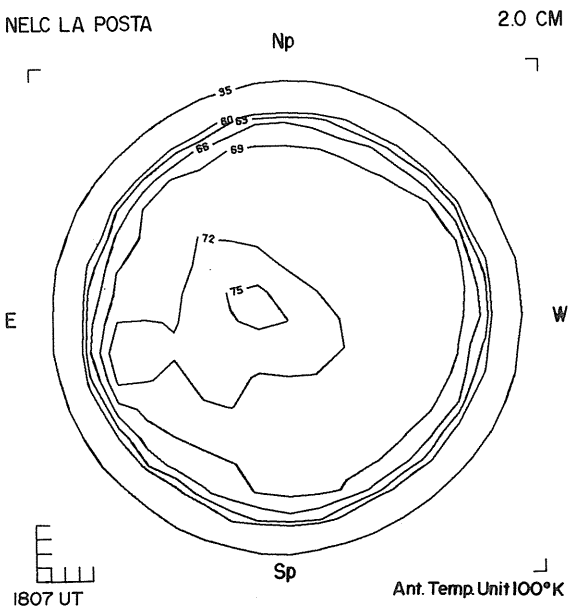


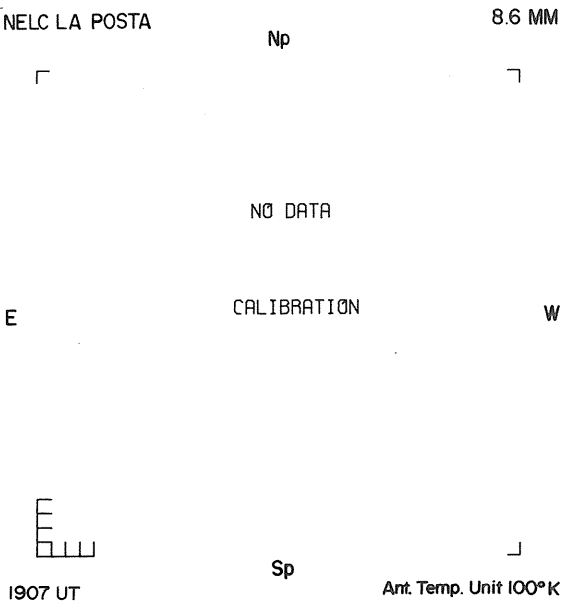
Levels
± 5
± 10
± 20
± 40
± 80

18.73 - 20.34 UT


OI
RAMEY AFB
Np
Hα
E
W
1130 UT
Sp


BOULDER
Np
SUNSPOTS
628
E
W
634
635
CORONA
NO DATA
1530 UT
Sp


NELC LA POSTA
Np
2.0 CM
95
80
63
66
69
72
75
E
W
1807 UT
Sp
Ant. Temp. Unit 100°K


NELC LA POSTA
Np
8.6 MM
NO DATA
CALIBRATION
E
W
1907 UT
Sp
Ant. Temp. Unit 100°K

25
May 75

MAY 2, 1975 (P=-24.11, B_o=-4.09, L_o=131.30)

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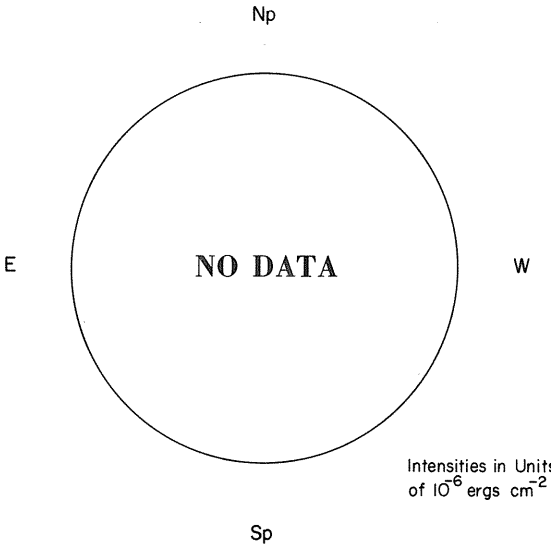
LEICESTER UNIV.

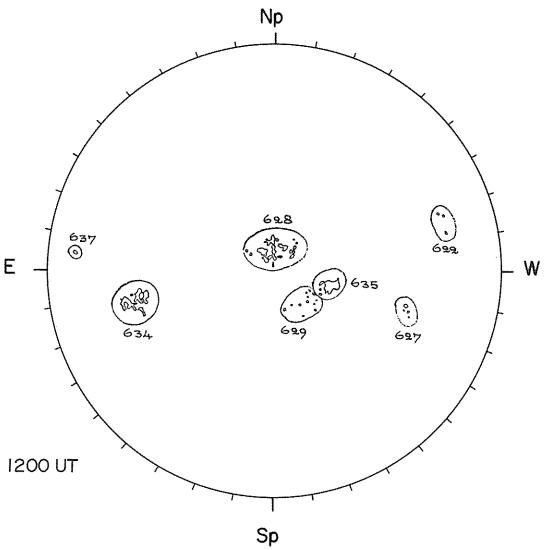
X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

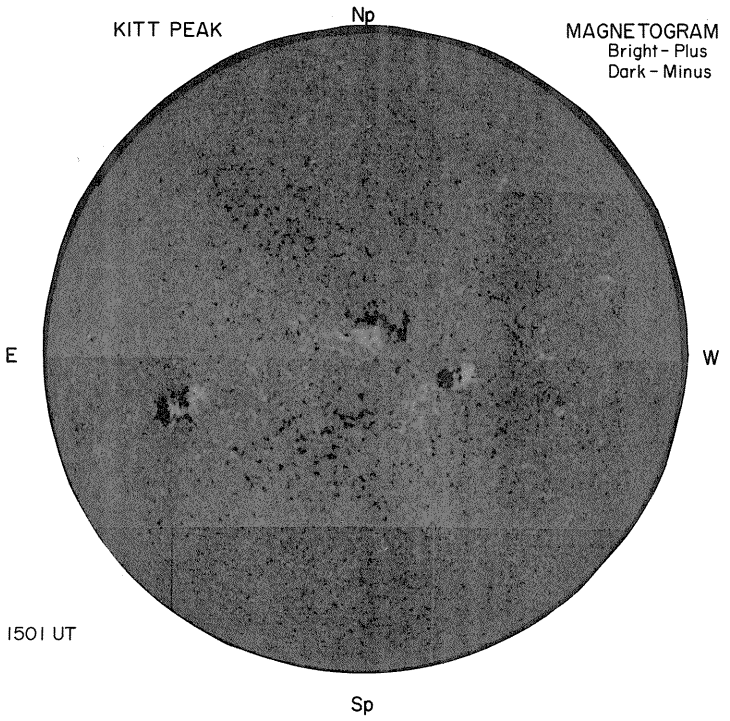


1200 UT

GOOD	D
34 - 0800	-2.5
35 - 0600	-3.5

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

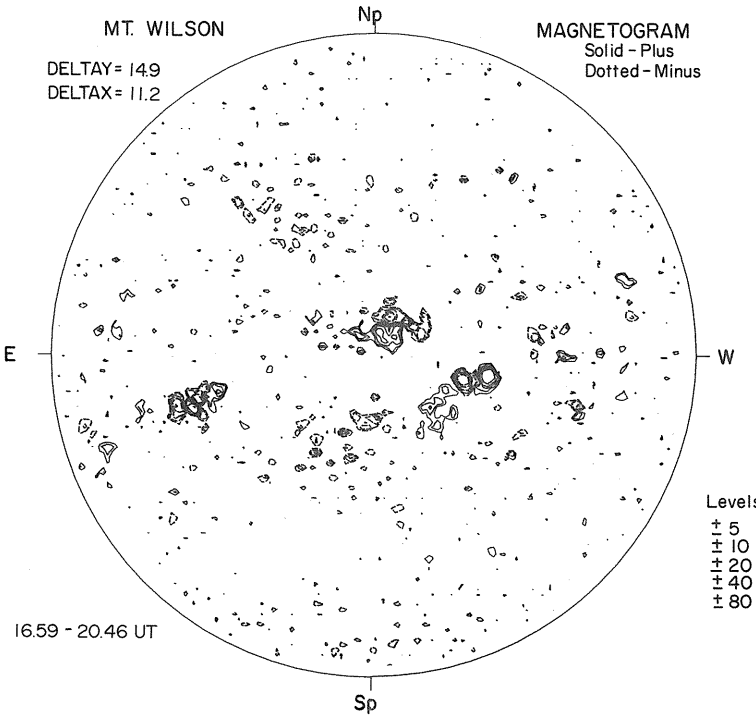


1501 UT

MT. WILSON

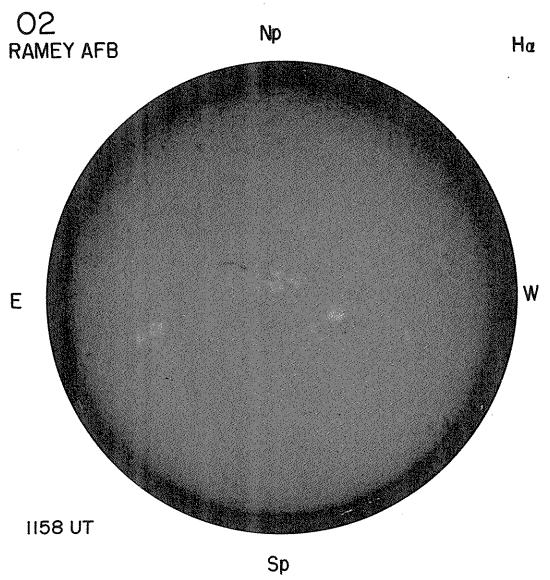
DELTAY = 14.9
DELTAX = 11.2

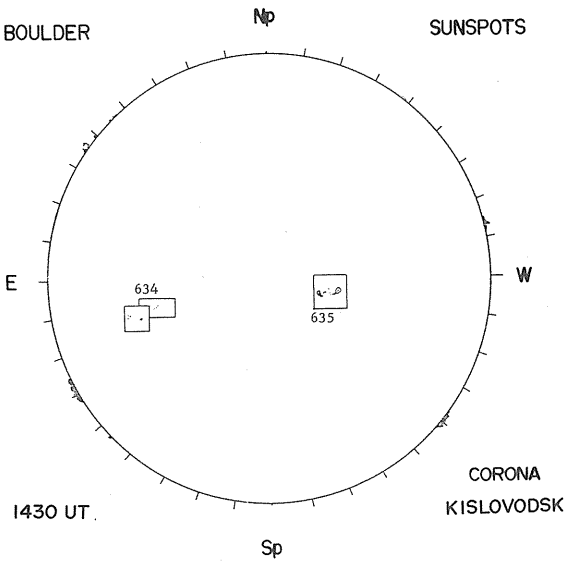
MAGNETOGRAM
Solid - Plus
Dotted - Minus

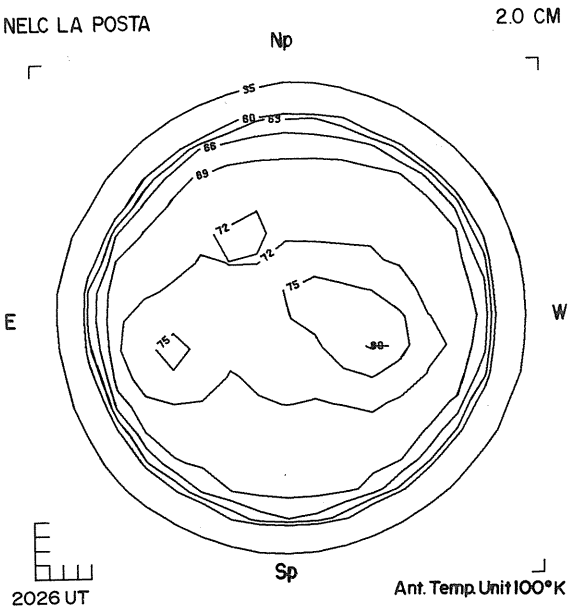


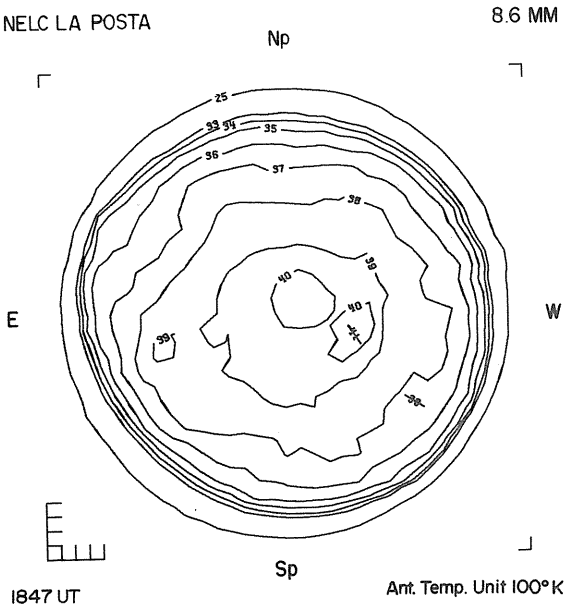
16.59 - 20.46 UT

Levels
± 5
± 10
± 20
± 40
± 80


02
RAMEY AFB
Np
Hα
E
W
1158 UT
Sp


BOULDER
Np
SUNSPOTS
E
W
634
635
CORONA
KISLOVODSK
1430 UT
Sp


NELC LA POSTA
2.0 CM
Np
E
W
Sp
2026 UT
Ant. Temp. Unit 100°K

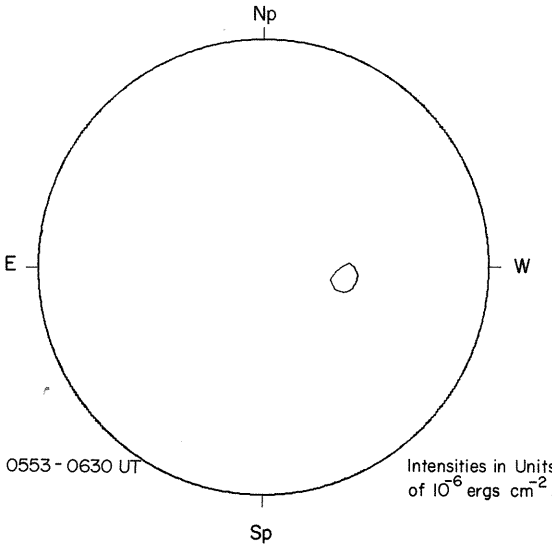

NELC LA POSTA
8.6 MM
Np
E
W
Sp
1847 UT
Ant. Temp. Unit 100°K

27
May 75

MAY 3, 1975 (P=-23.93, B_o=-3.99, L_o=118.08)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

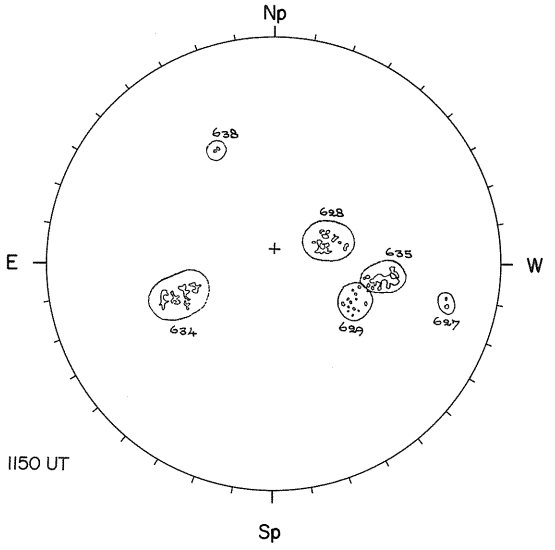


0553 - 0630 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

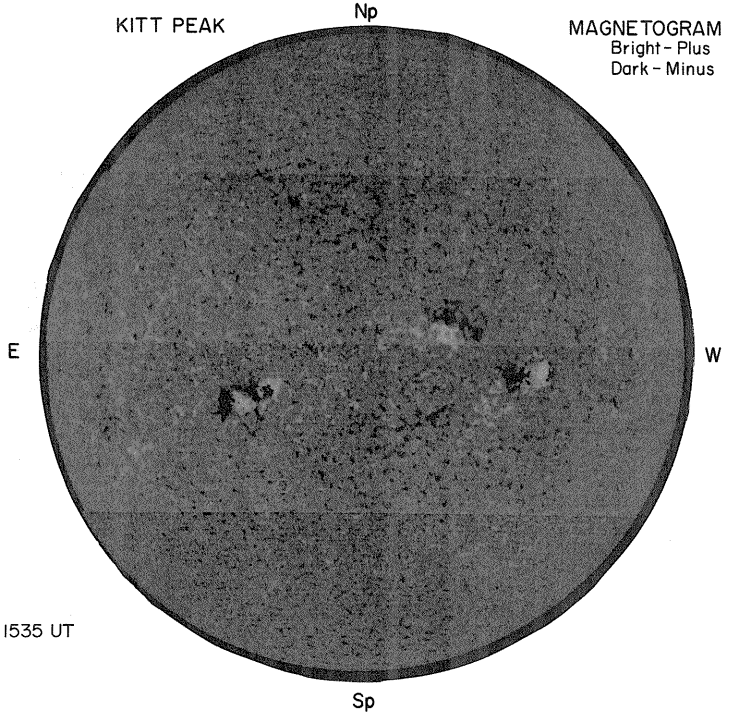


1150 UT

FAIR	M
28 - 0800	-2.5
34 - 0800	-2.5
35 - 0900	-2.5

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

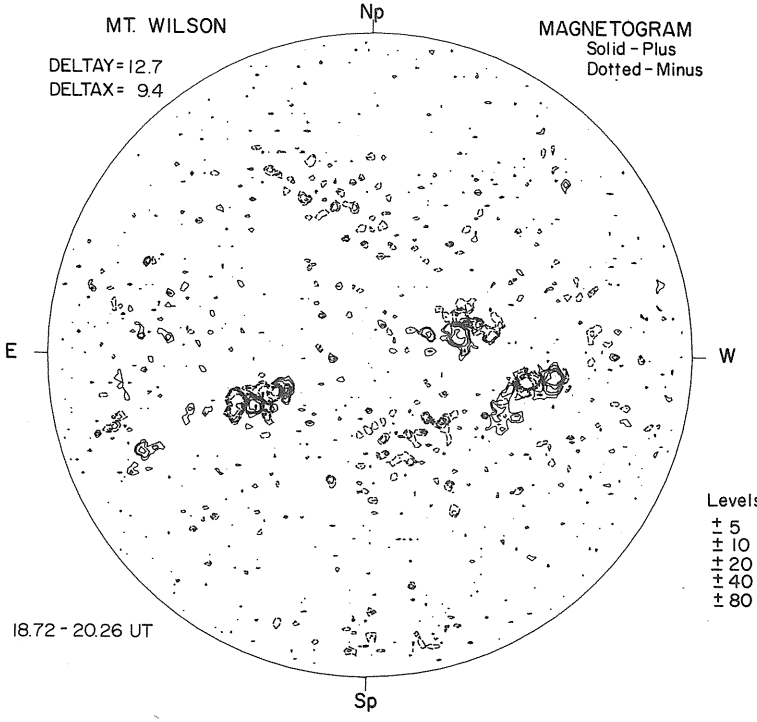


1535 UT

MT. WILSON

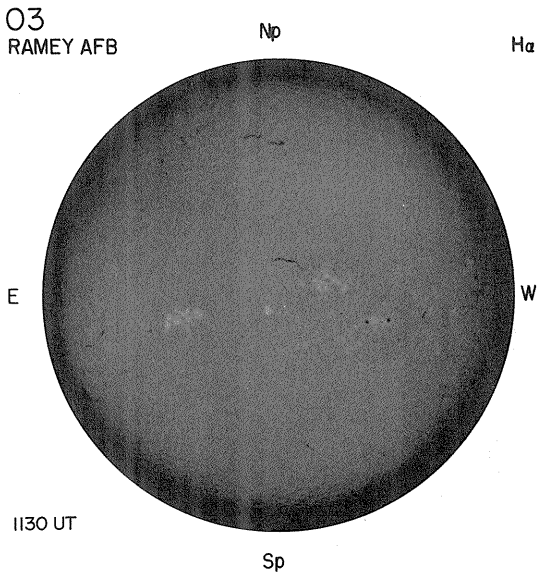
DELTAY = 12.7
DELTAX = 9.4

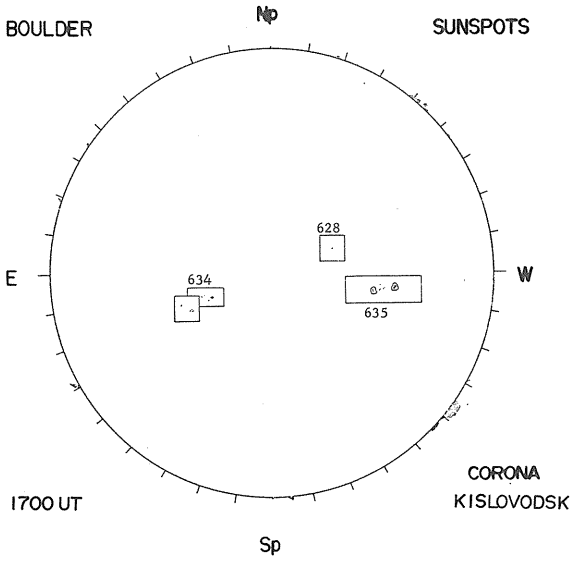
MAGNETOGRAM
Solid - Plus
Dotted - Minus

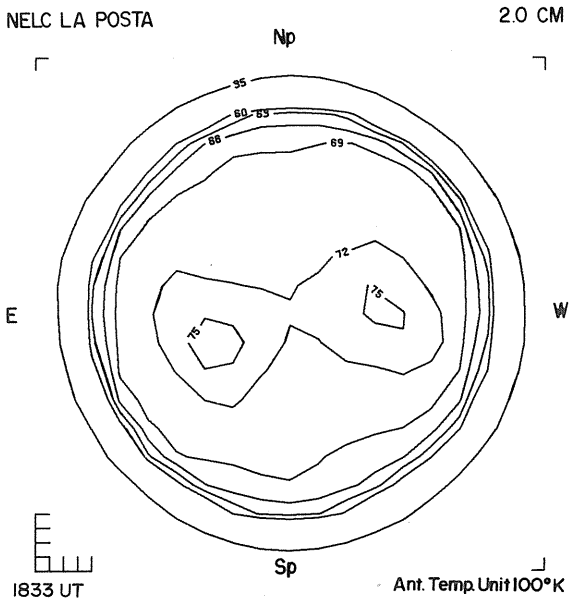


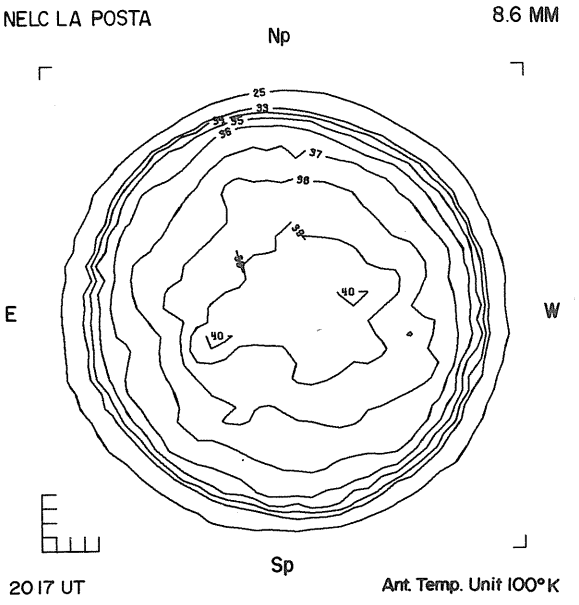
18.72 - 20.26 UT

Levels
± 5
± 10
± 20
± 40
± 80


03
RAMEY AFB
Np
Hα
E
W
1130 UT
Sp


BOULDER
Np
SUNSPOTS
628
634
635
E
W
CORONA
KISLOVODSK
1700 UT
Sp


NELC LA POSTA
2.0 CM
Np
95
60
83
68
69
72
75
75
E
W
Sp
1833 UT
Ant. Temp. Unit 100°K

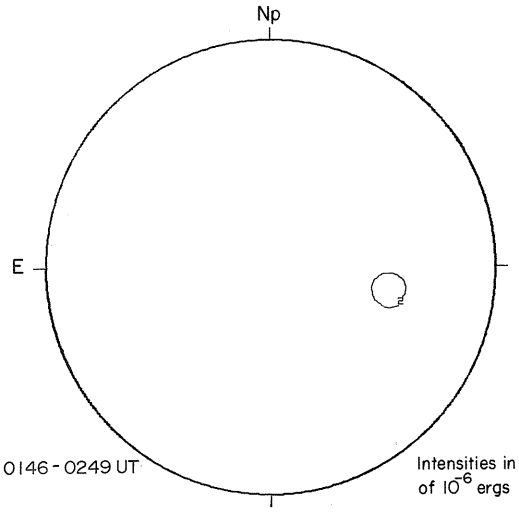

NELC LA POSTA
8.6 MM
Np
25
33
33
95
36
37
38
40
40
E
W
Sp
2017 UT
Ant. Temp. Unit 100°K

29
May 75

MAY 4, 1975 (P=-23.74, B_o=-3.89, L_o = 104.87)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

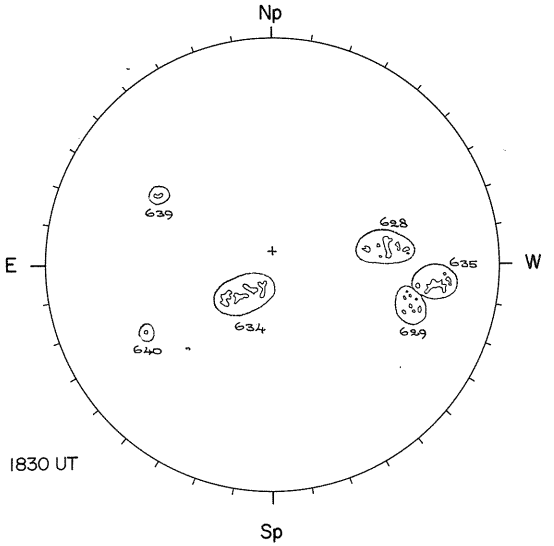


0146 - 0249 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

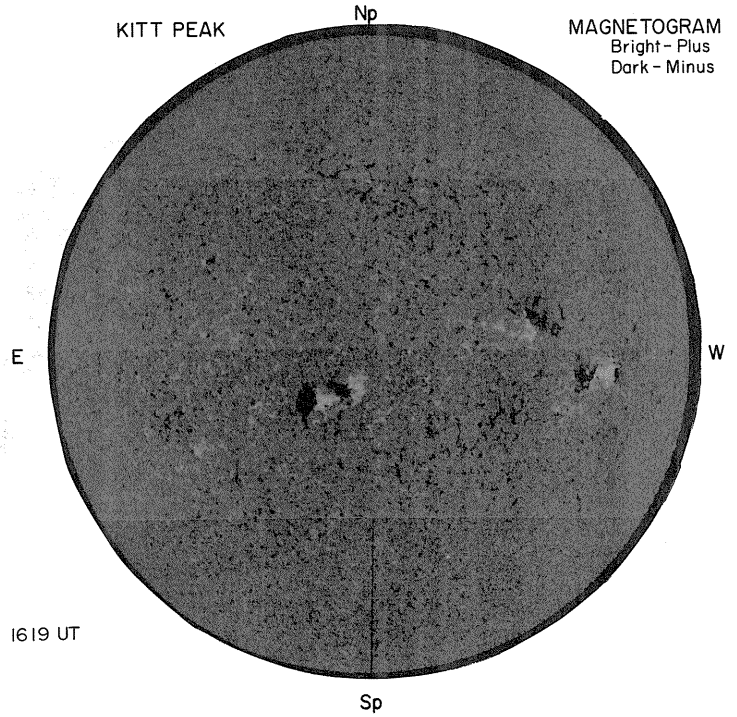


1830 UT

FAIR	D
28 - 0700 - 2.5	
34 - 1000 - 2.5	
35 - 0900 - 2.5	

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

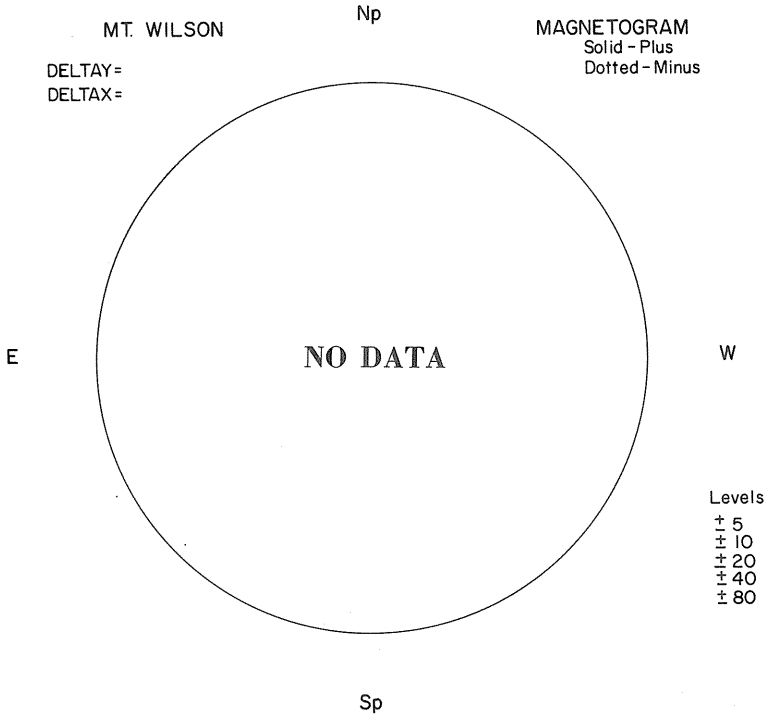


1619 UT

MT. WILSON

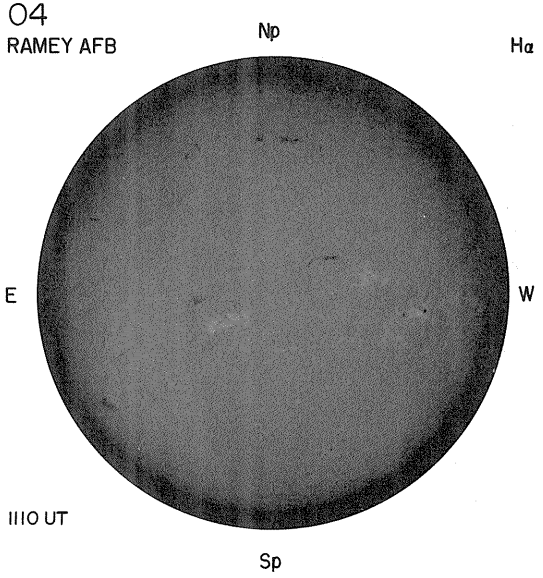
DELTAY=
DELTAX=

MAGNETOGRAM
Solid - Plus
Dotted - Minus

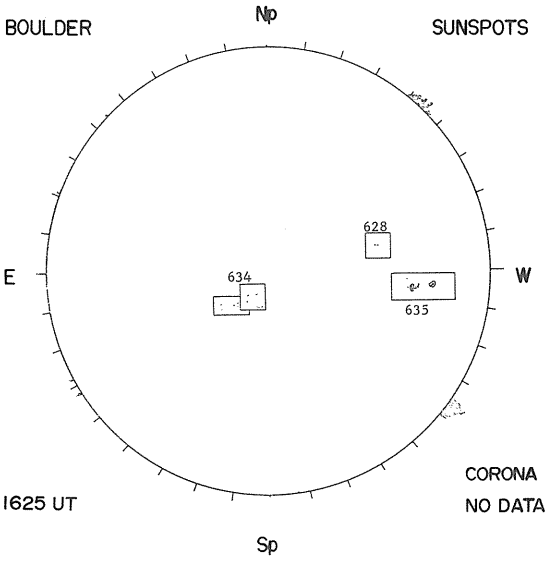


Levels
± 5
± 10
± 20
± 40
± 80

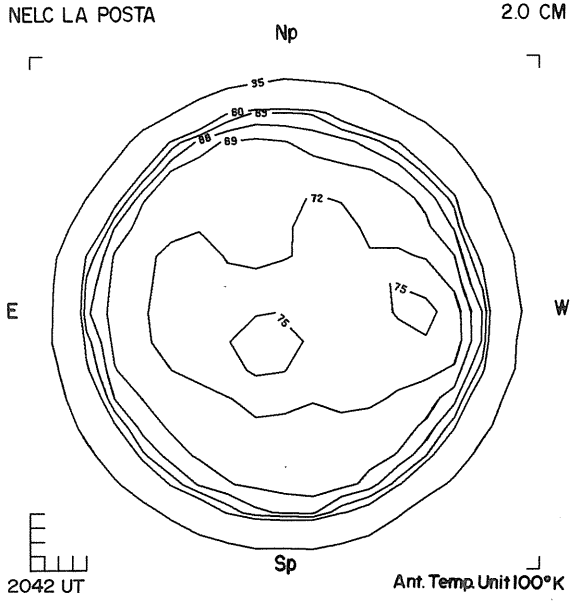
04
RAMEY AFB



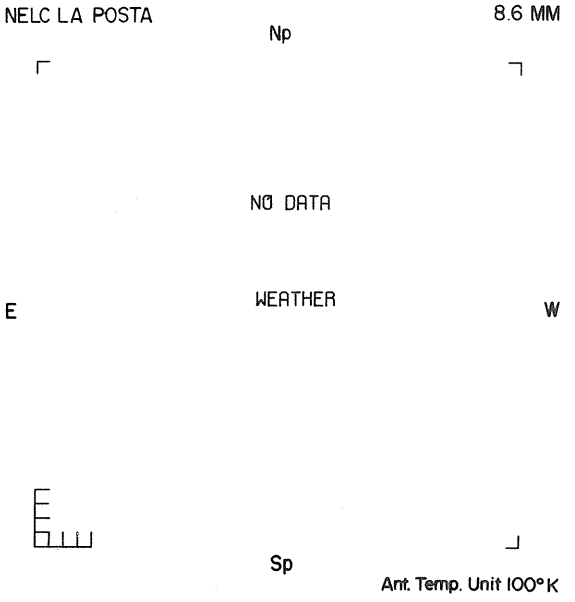
BOULDER



NELC LA POSTA



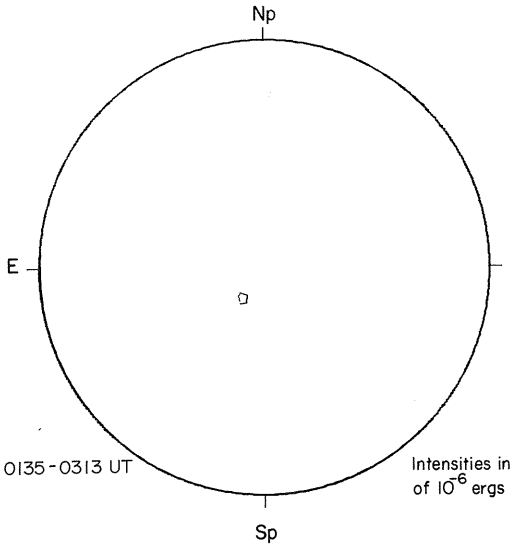
NELC LA POSTA



MAY 5, 1975 (P=-23.54, B_o=-3.78, L_o=91.65)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

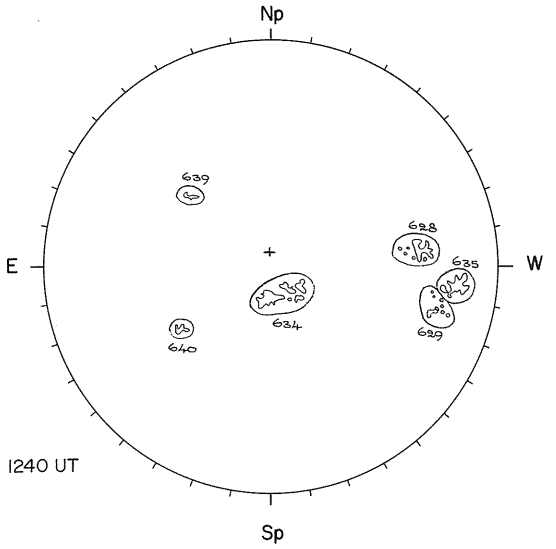


0135-0313 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

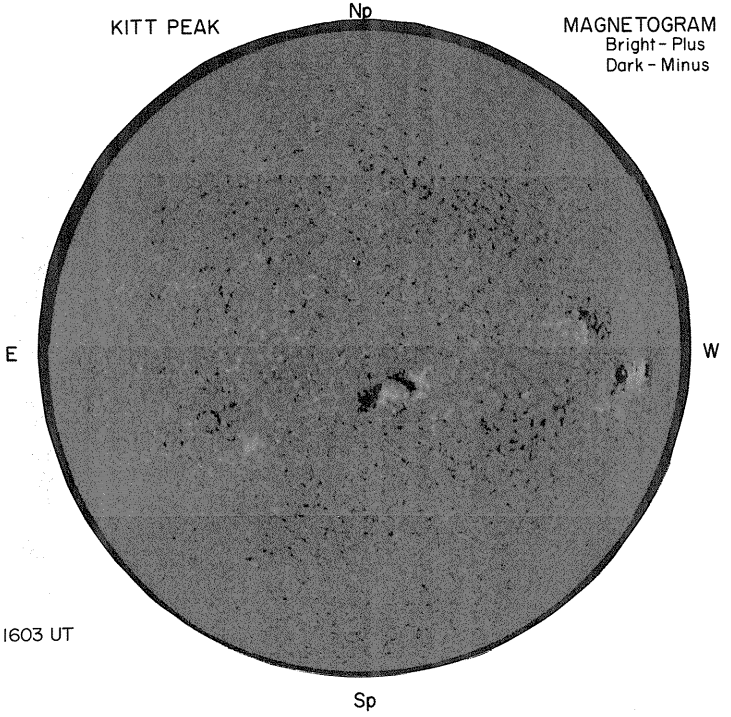


1240 UT

GOOD	D
28 - 0800 - 2.5	
34 - 1200 - 3.0	
35 - 1100 - 3.0	

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

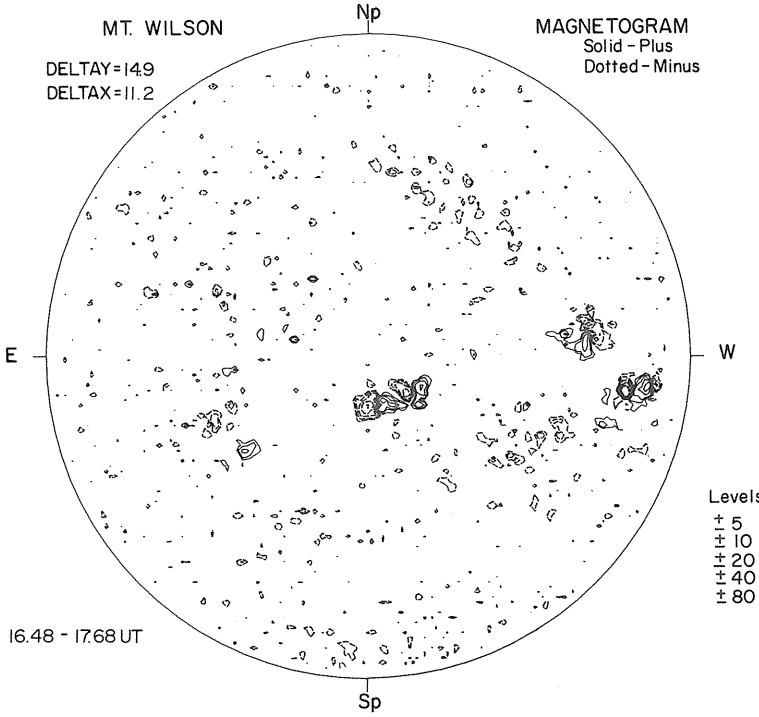


1603 UT

MT. WILSON

DELTAY=14.9
DELTAX=11.2

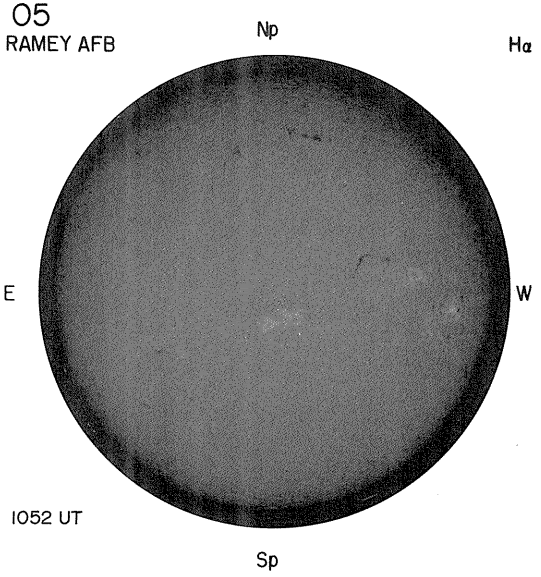
MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
± 5
± 10
± 20
± 40
± 80

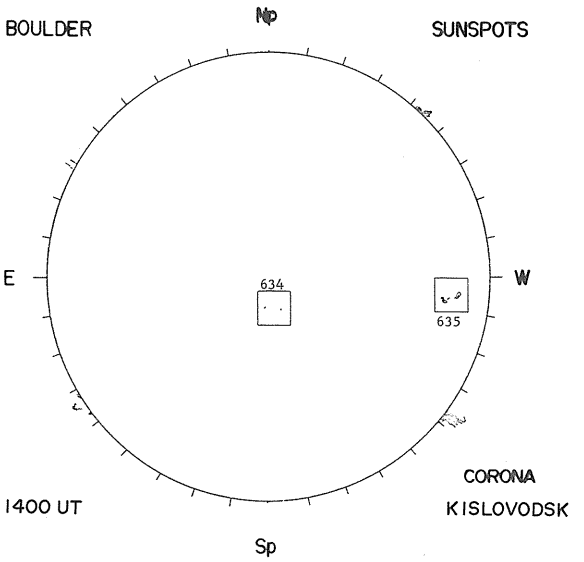
16.48 - 17.68 UT

05
RAMEY AFB



1052 UT

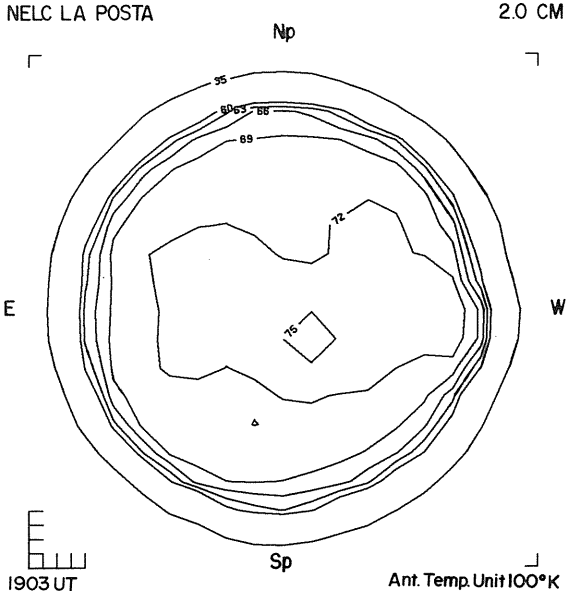
BOULDER



1400 UT

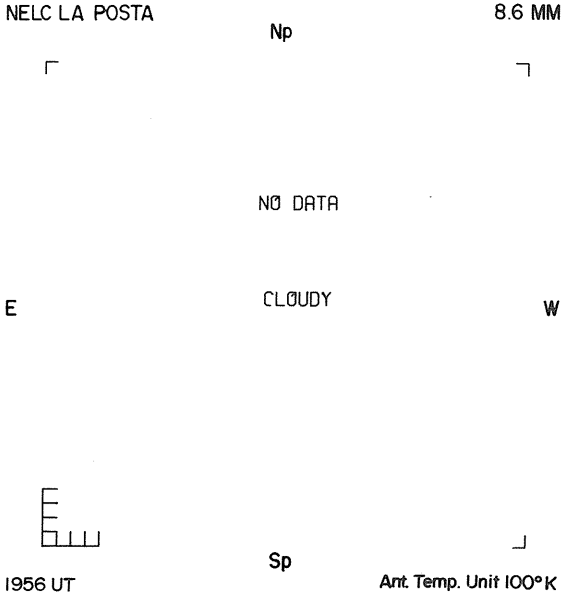
CORONA
KISLOVODSK

NELC LA POSTA



1903 UT

NELC LA POSTA

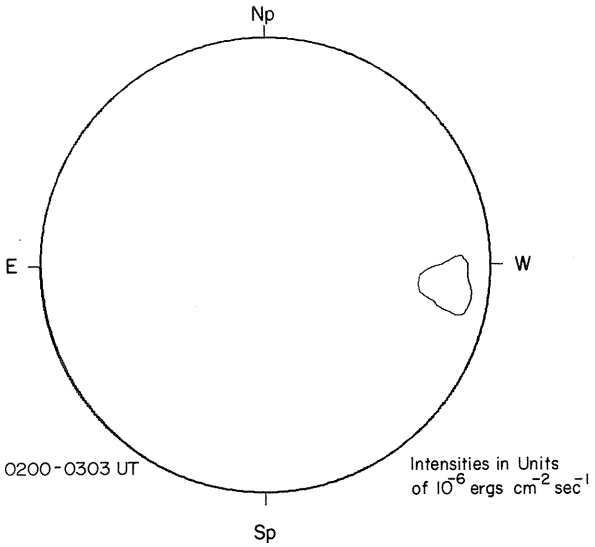


1956 UT

MAY 6, 1975 (P=-23.34, B_o=-3.68, L_o=78.43)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

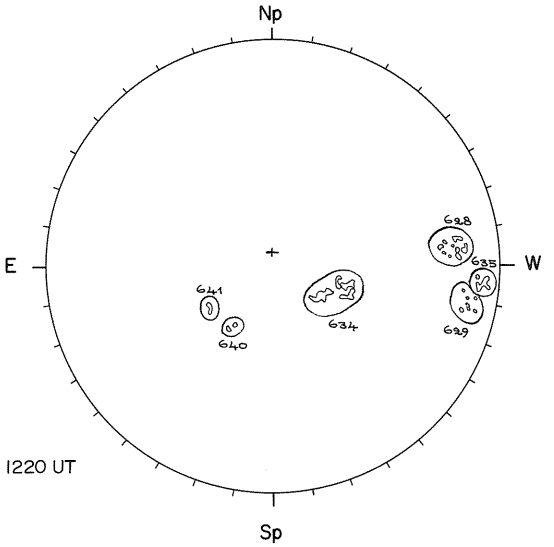


0200-0303 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT



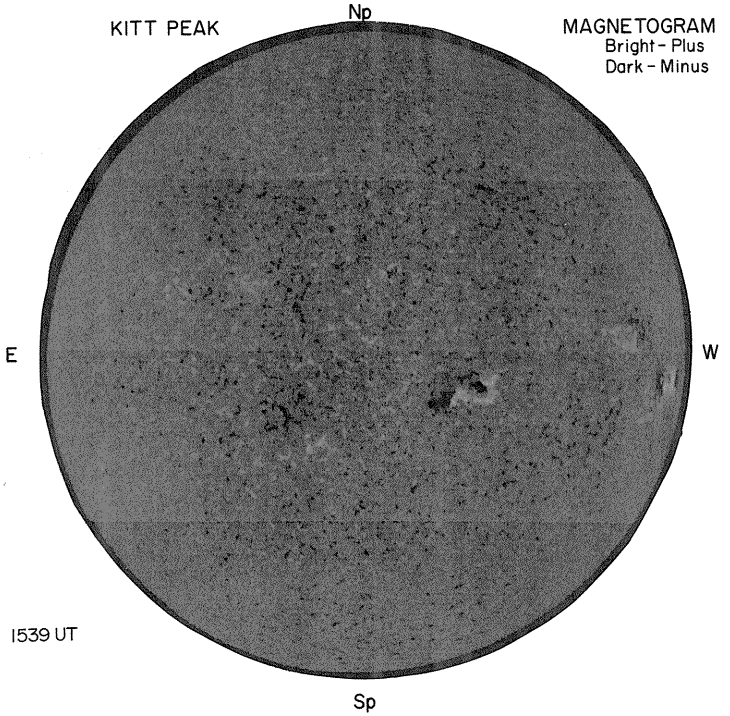
1220 UT

POOR	D

34 - 1200 - 3.0
35 - 0900 - 2.5

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

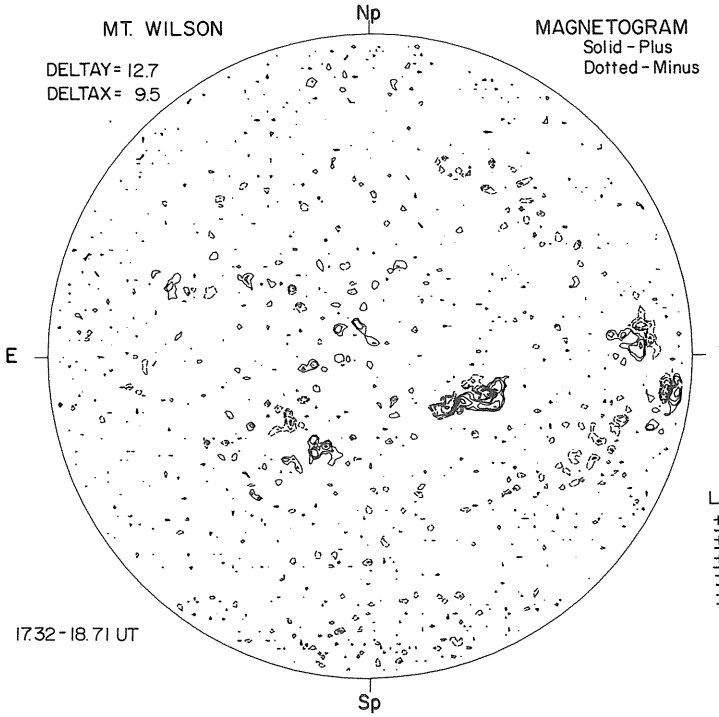


1539 UT

MT. WILSON

DELTAY= 12.7
DELTAX= 9.5

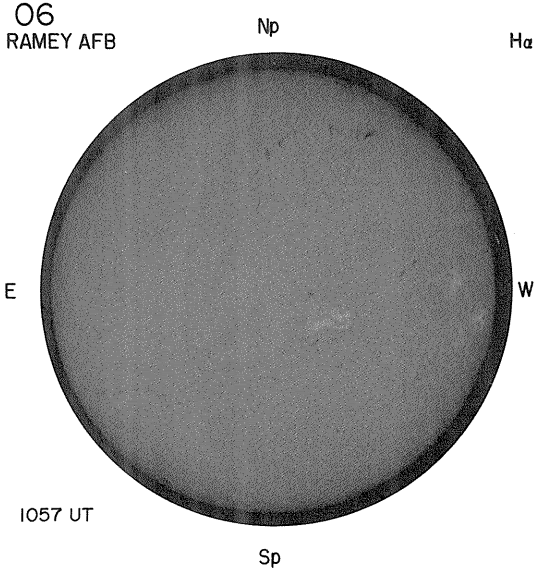
MAGNETOGRAM
Solid - Plus
Dotted - Minus



17.32 - 18.71 UT

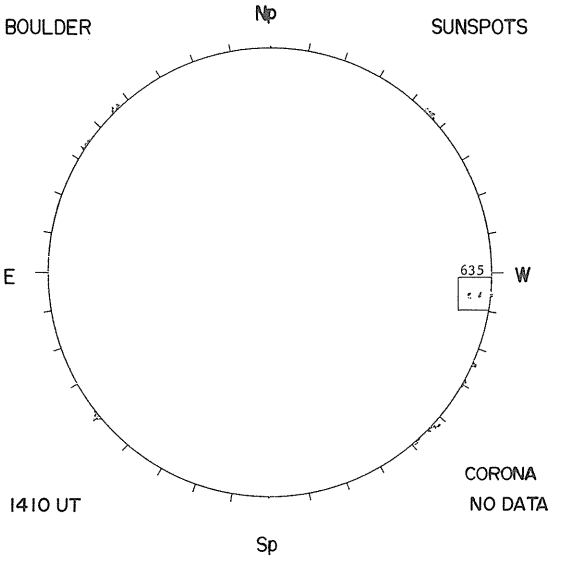
Levels
± 5
± 10
± 20
± 40
± 80

06
RAMEY AFB



1057 UT

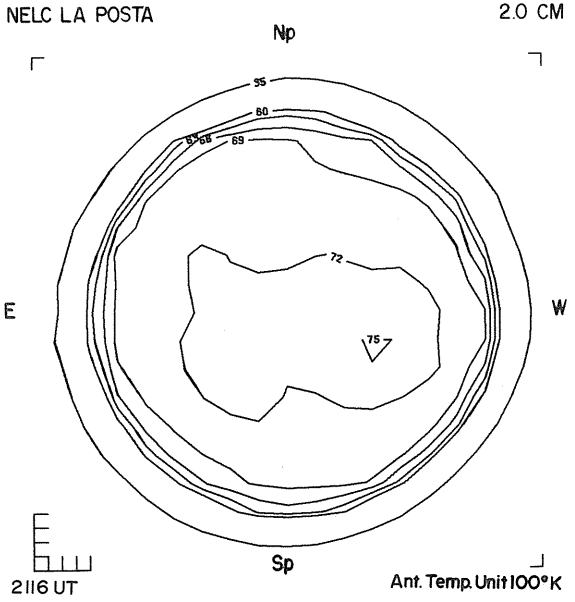
BOULDER



1410 UT

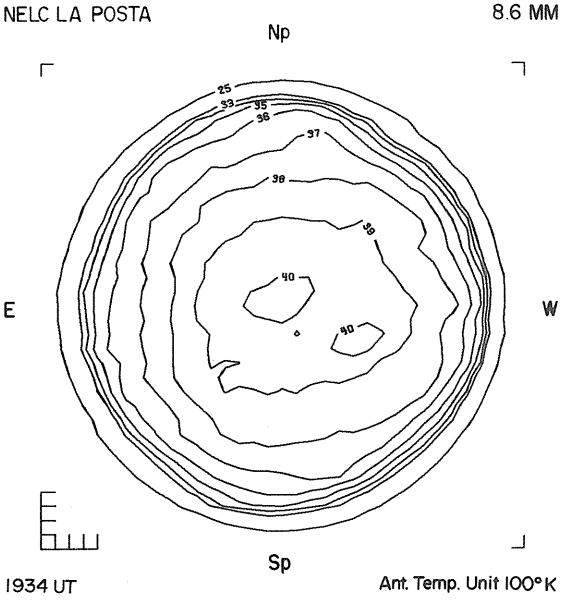
CORONA
NO DATA

NELC LA POSTA



2116 UT

NELC LA POSTA



1934 UT

MAY 7, 1975 (P=-23.12, B_o=-3.57, L_o=65.21)

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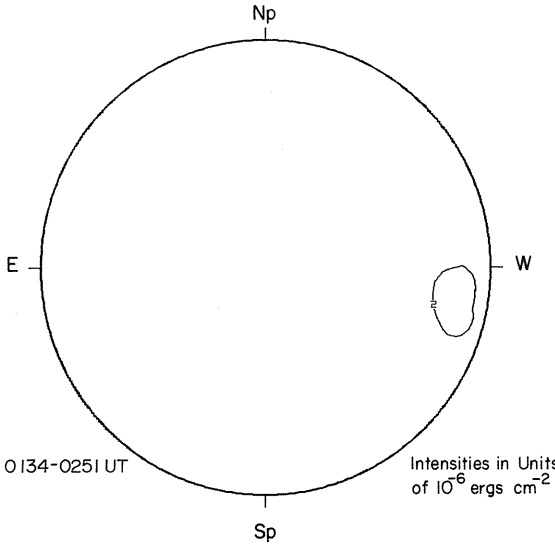
LEICESTER UNIV.

X-RAY
OSO-5

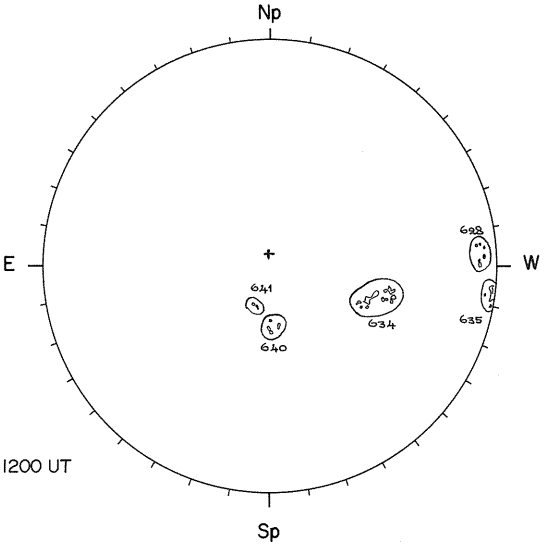


0134-0251 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT



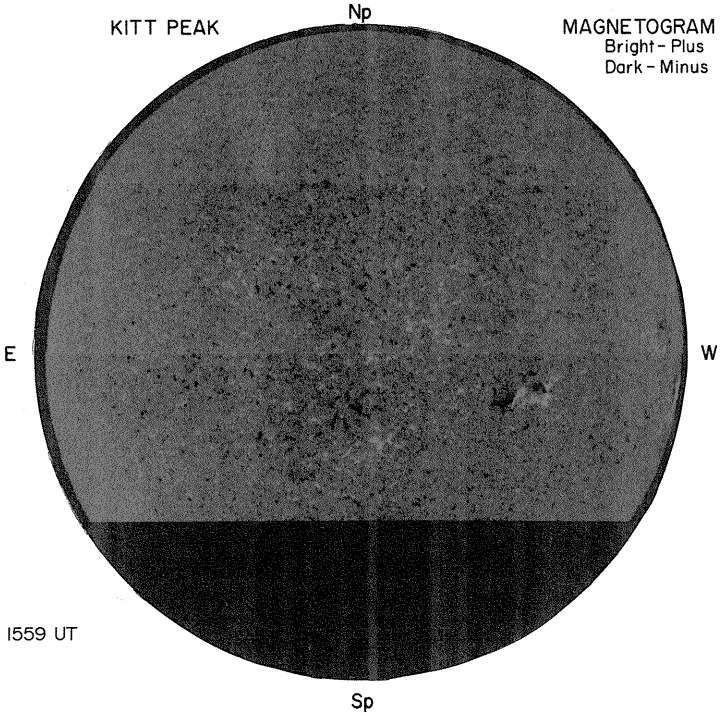
1200 UT

GOOD	M

34 - 0800 - 2.5

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

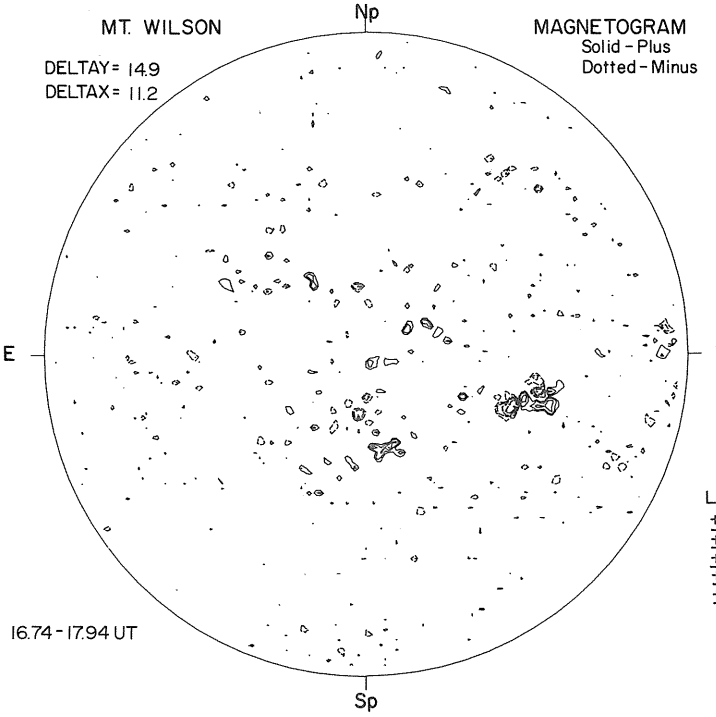


1559 UT

MT. WILSON

DELTAY= 14.9
DELTAX= 11.2

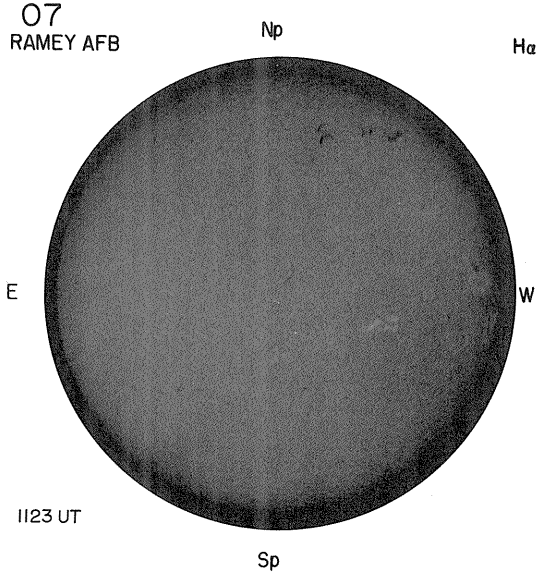
MAGNETOGRAM
Solid - Plus
Dotted - Minus



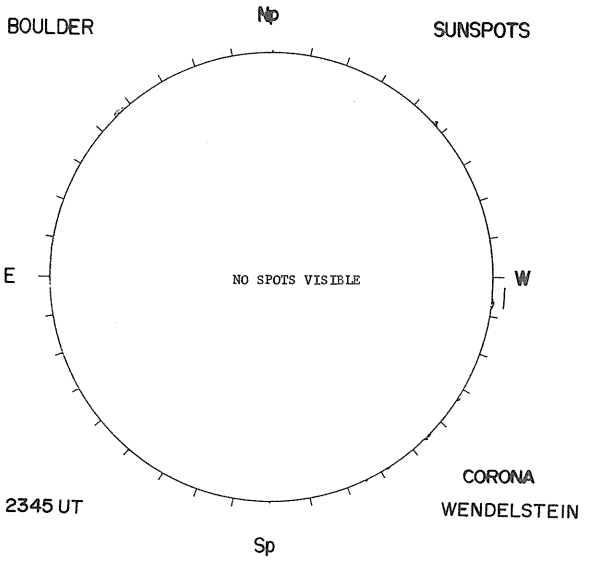
Levels
± 5
± 10
± 20
± 40
± 80

16.74 - 17.94 UT

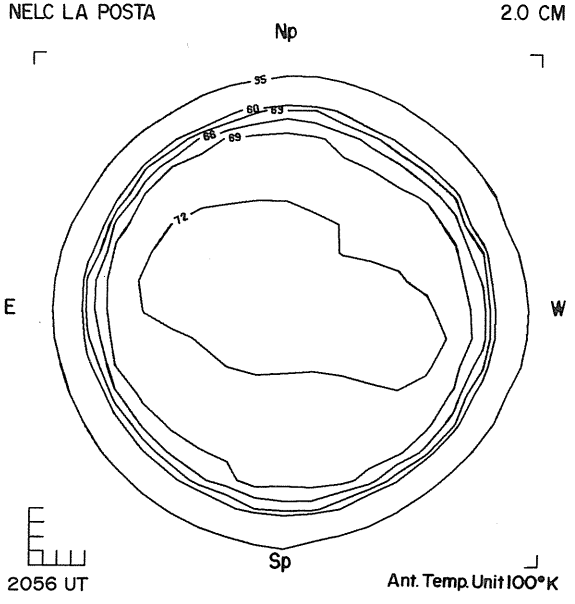
07
RAMEY AFB



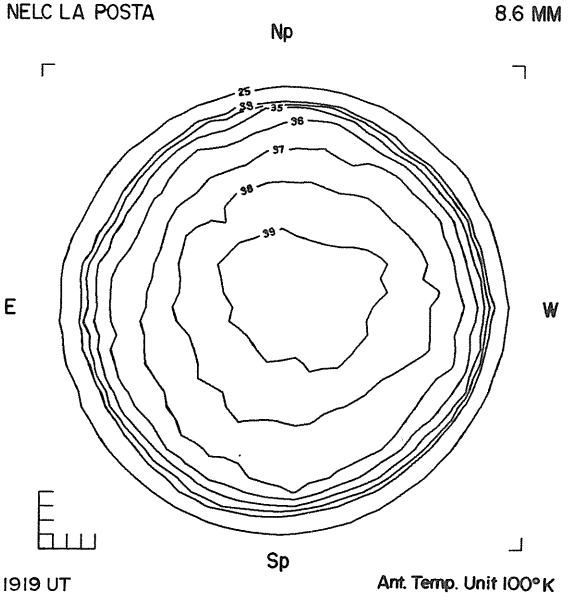
BOULDER



NELC LA POSTA



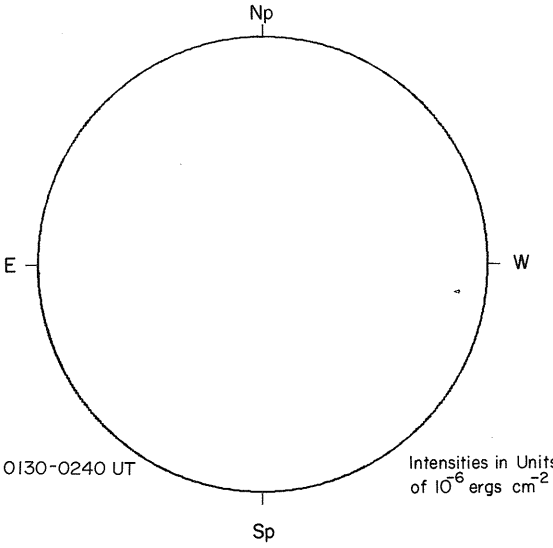
NELC LA POSTA



MAY 8, 1975 (P = -22.90, B_o = -3.47, L_o = 51.99)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

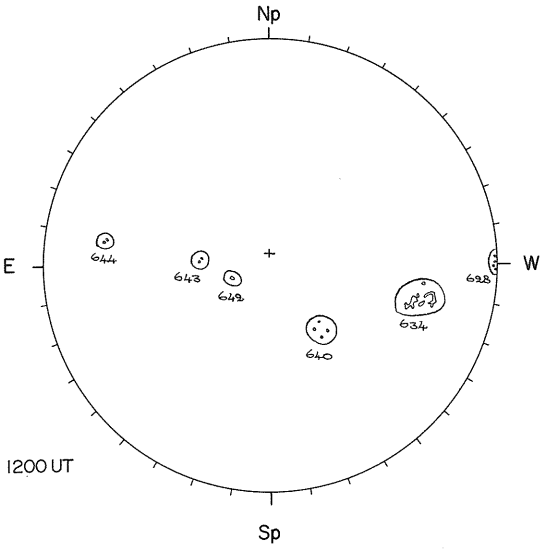


0130-0240 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

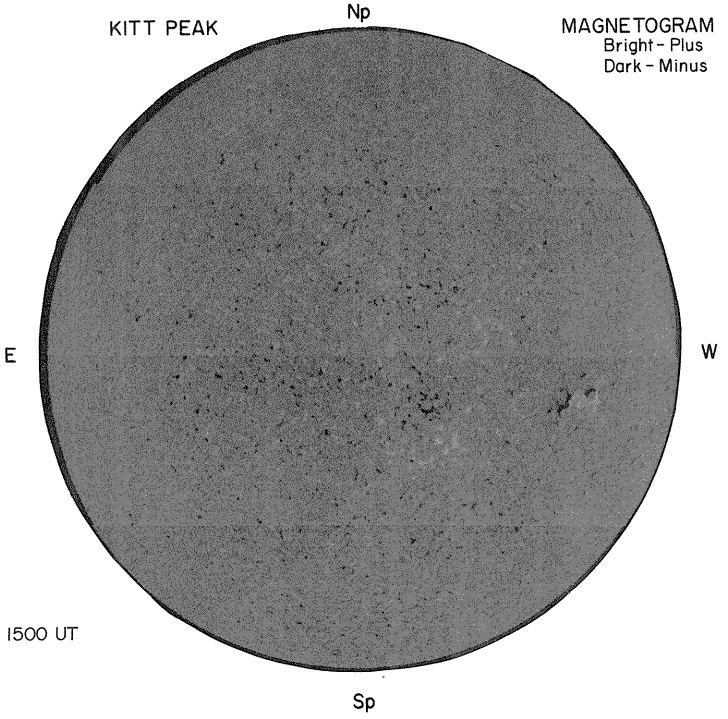


1200 UT

GOOD | D

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

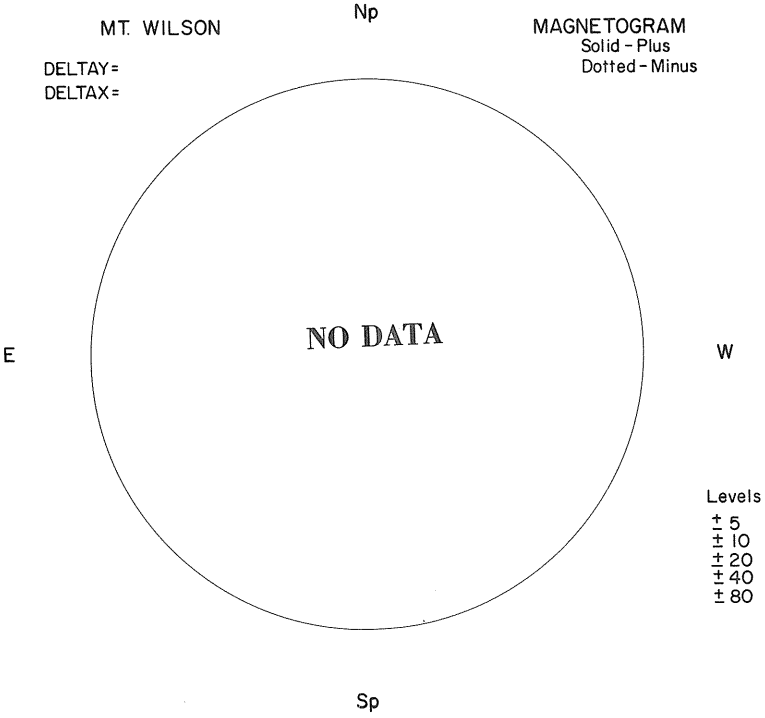


1500 UT

MT. WILSON

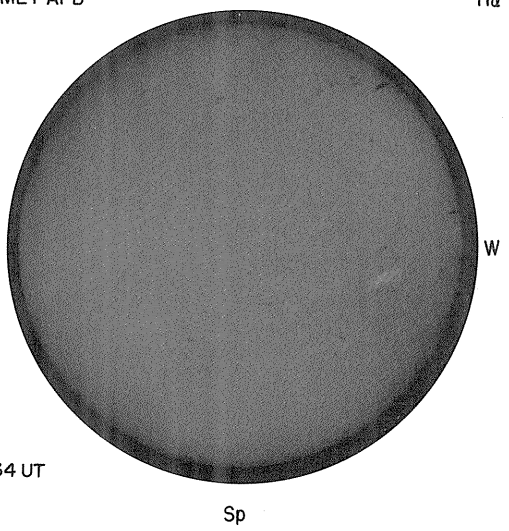
DELTAY=
DELTAX=

MAGNETOGRAM
Solid - Plus
Dotted - Minus



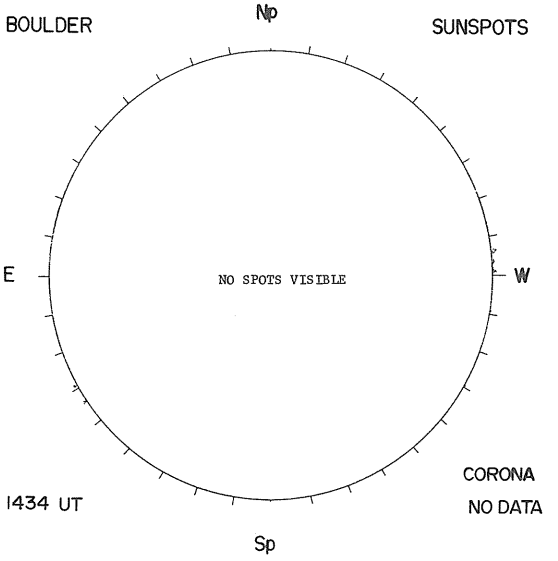
Levels
± 5
± 10
± 20
± 40
± 80

08
RAMEY AFB



1134 UT

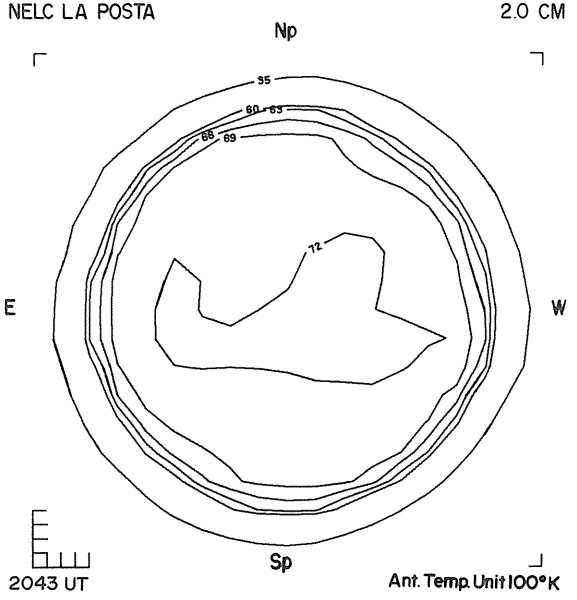
BOULDER



1434 UT

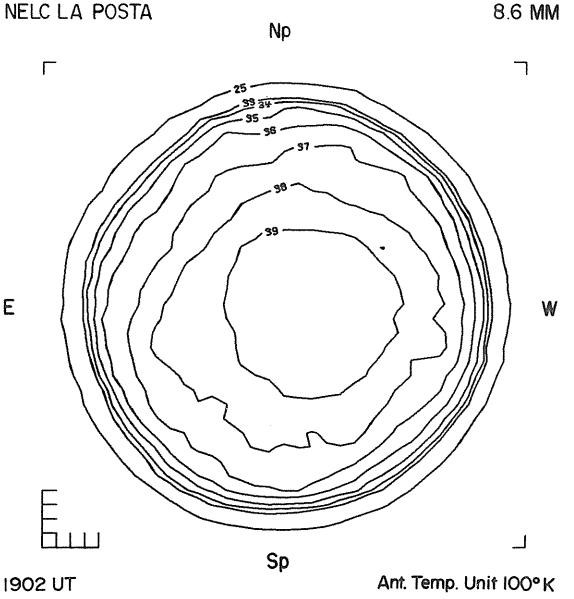
CORONA
NO DATA

NELC LA POSTA



2043 UT

NELC LA POSTA

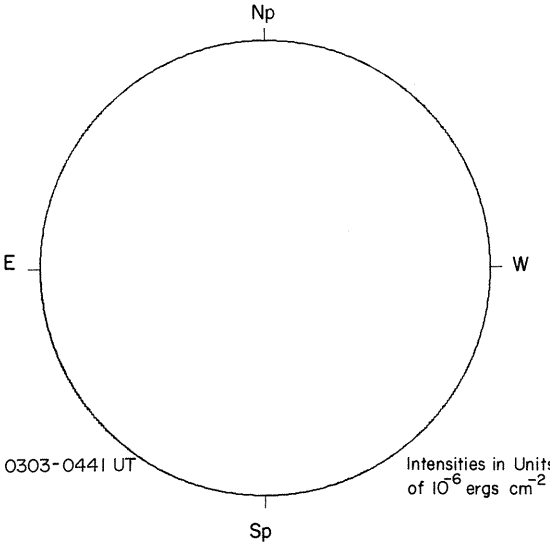


1902 UT

MAY 9, 1975 (P=-22.68, B_o=-3.36, L_o=38.77)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

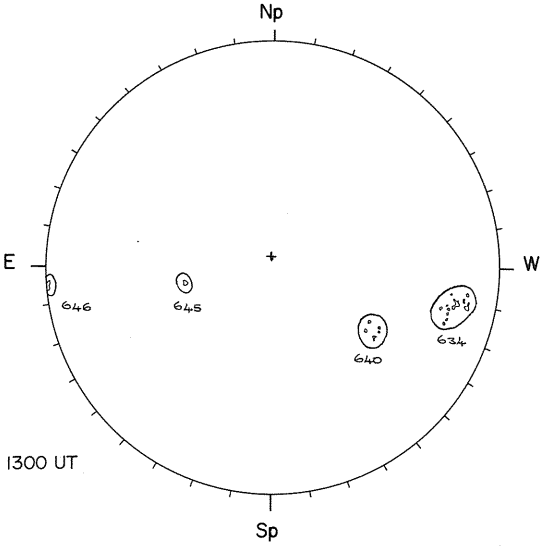


0303-0441 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

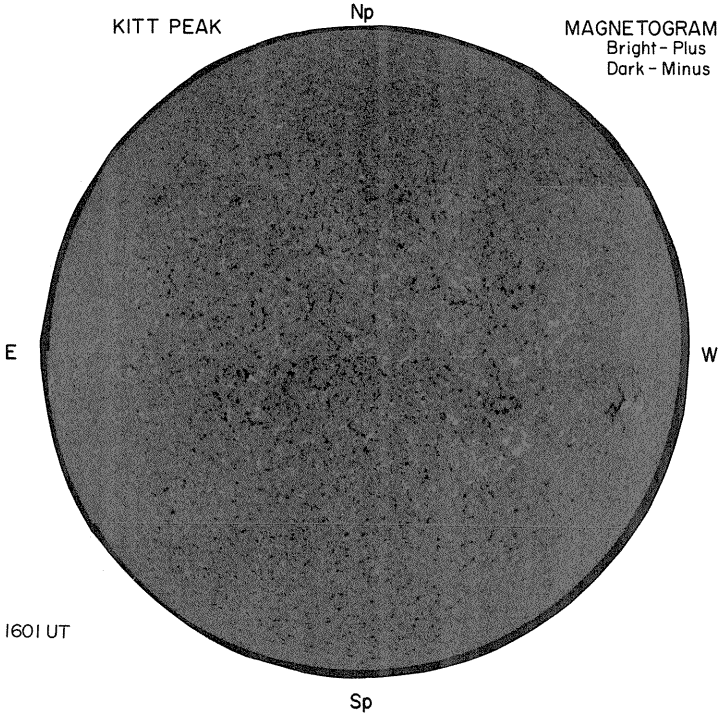


1300 UT

GOOD | M

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

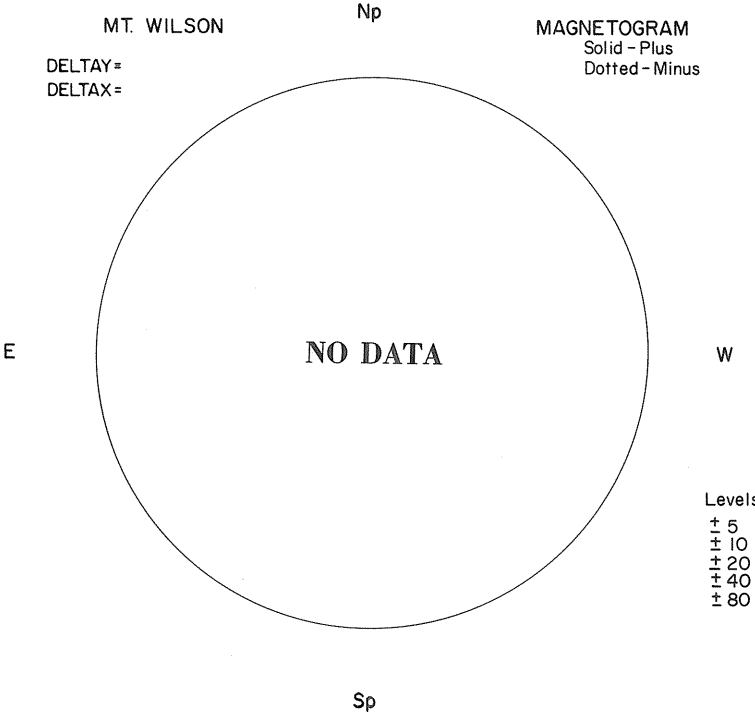


1601 UT

MT. WILSON

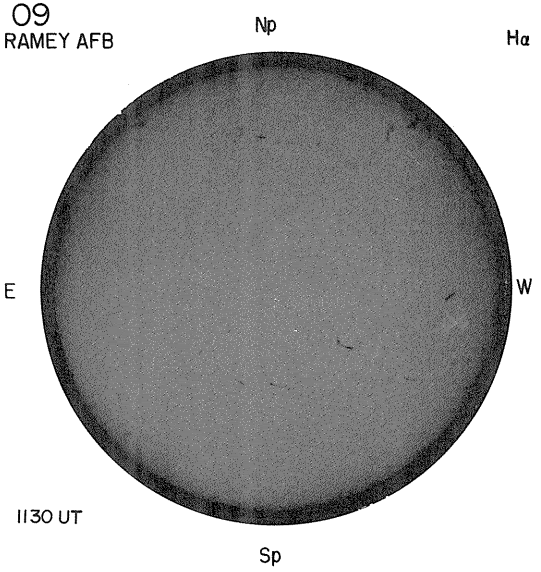
DELTAY=
DELTAX=

MAGNETOGRAM
Solid - Plus
Dotted - Minus

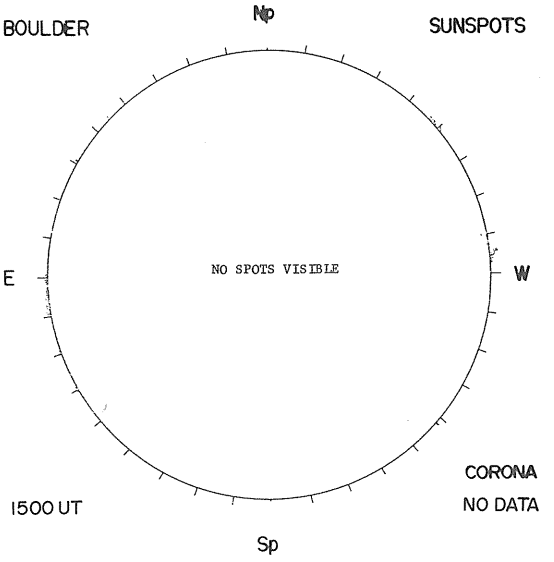


Levels
± 5
± 10
± 20
± 40
± 80

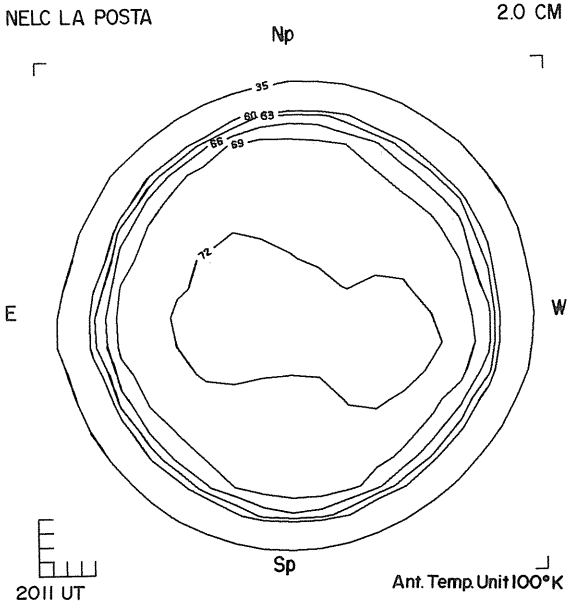
09
RAMEY AFB



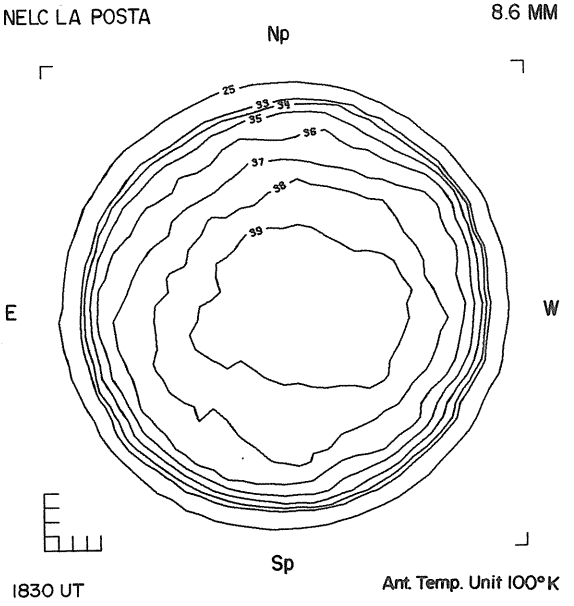
BOULDER



NELC LA POSTA



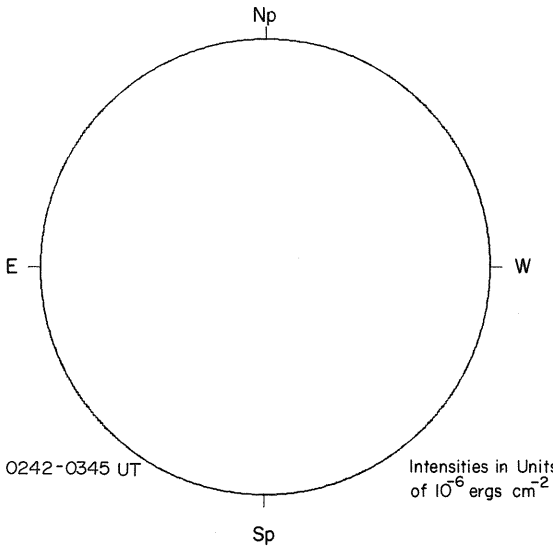
NELC LA POSTA



MAY 10, 1975 (P=-22.44, B_o=-3.25, L_o=25.55)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

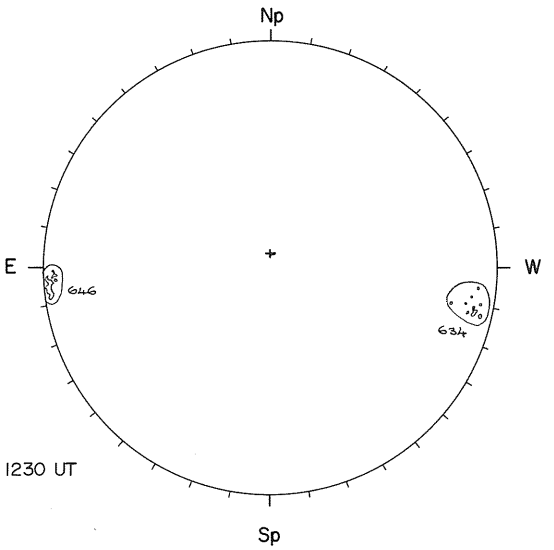


0242-0345 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

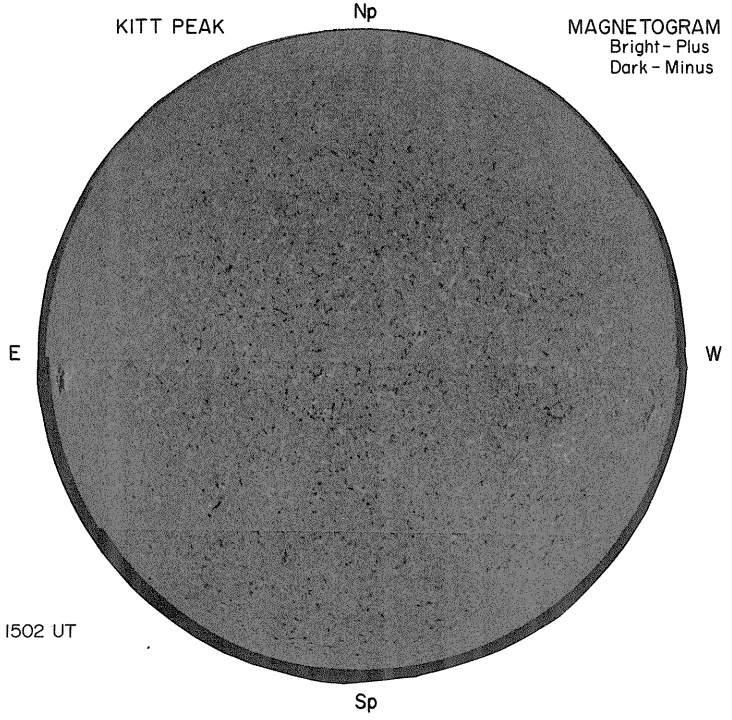


1230 UT

GOOD	M
46 - 1200 - 2.5	

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

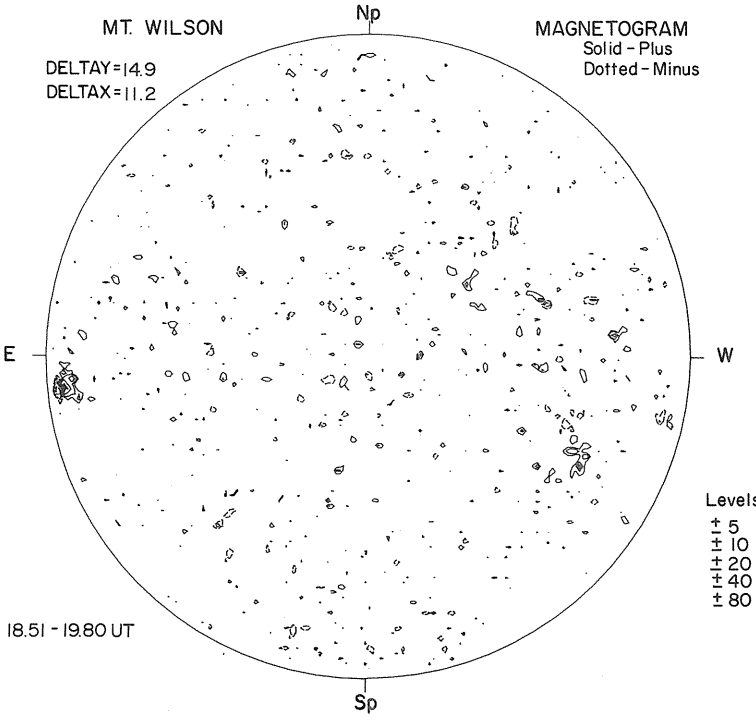


1502 UT

MT. WILSON

DELTAY=14.9
DELTAX=11.2

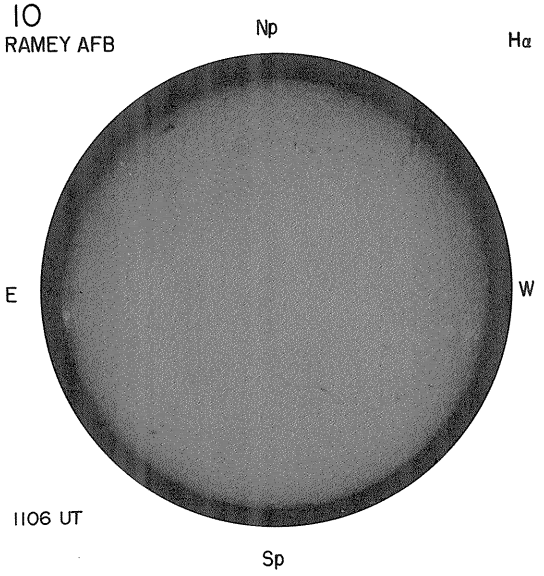
MAGNETOGRAM
Solid - Plus
Dotted - Minus



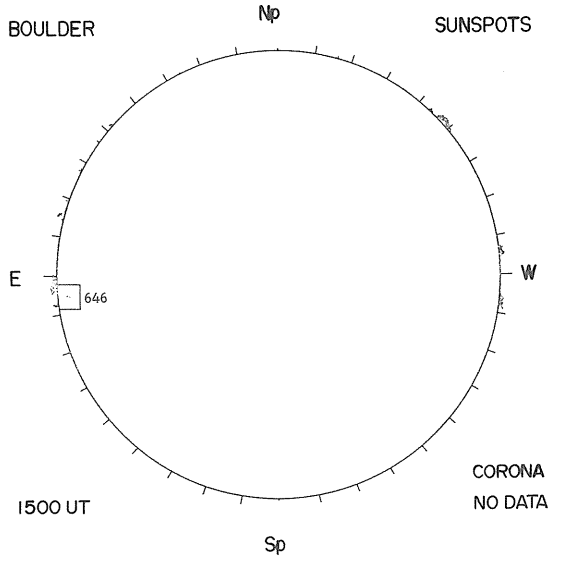
18.51 - 19.80 UT

Levels
± 5
± 10
± 20
± 40
± 80

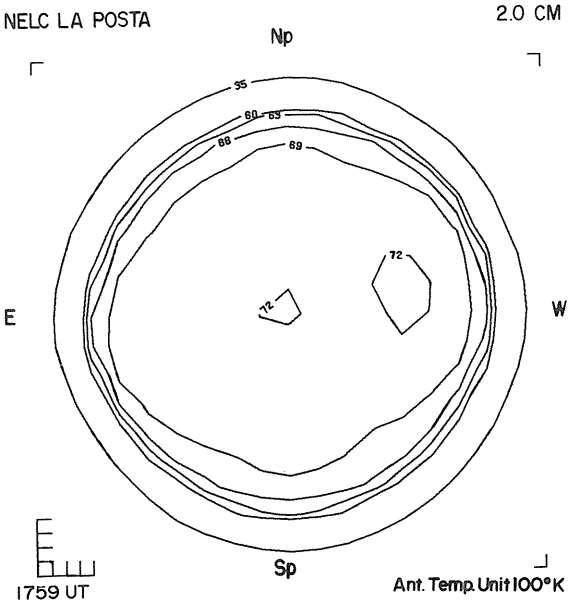
10
RAMEY AFB



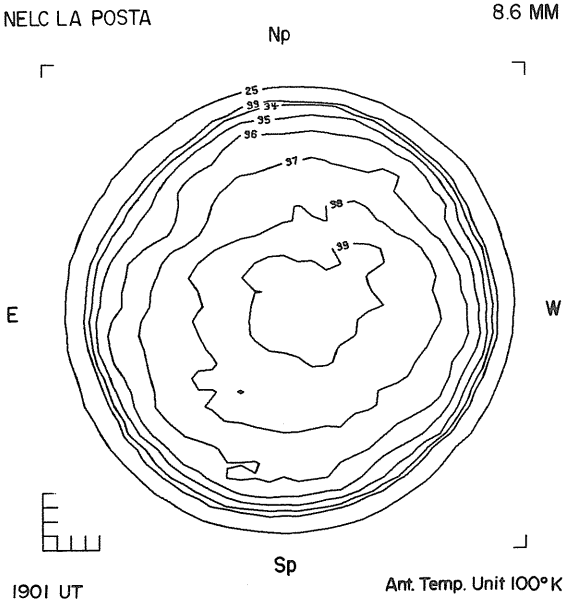
BOULDER



NELC LA POSTA



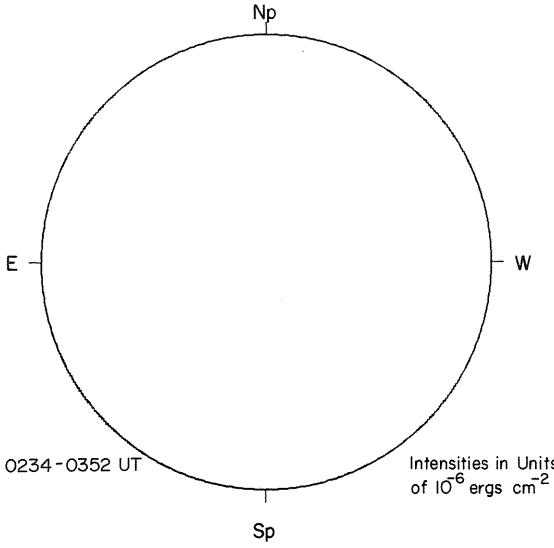
NELC LA POSTA



MAY 11, 1975 (P=-22.20, B_o=-3.14, L_o=12.32)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

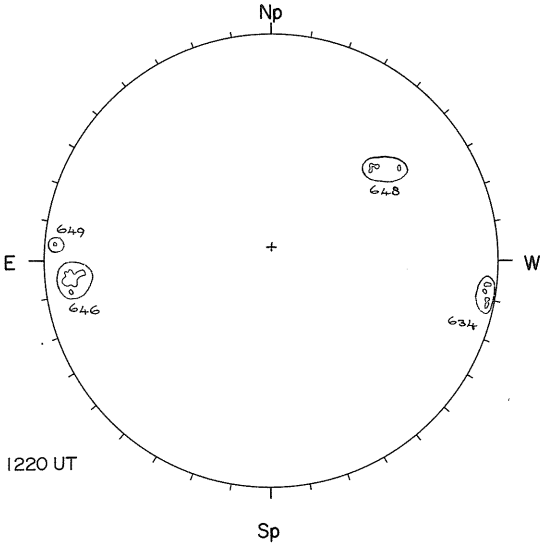


0234-0352 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

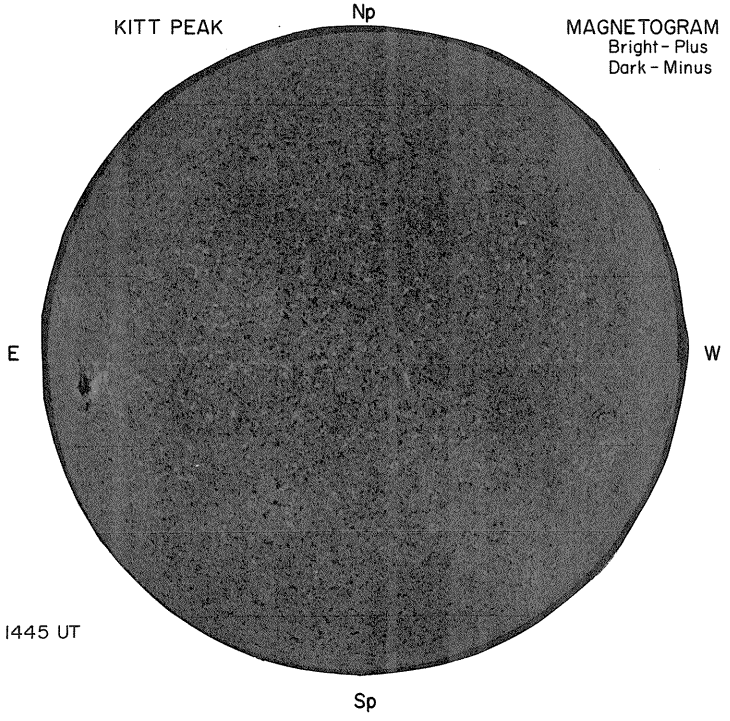


1220 UT

GOOD	D

46 - 1300 - 2.5

KITT PEAK

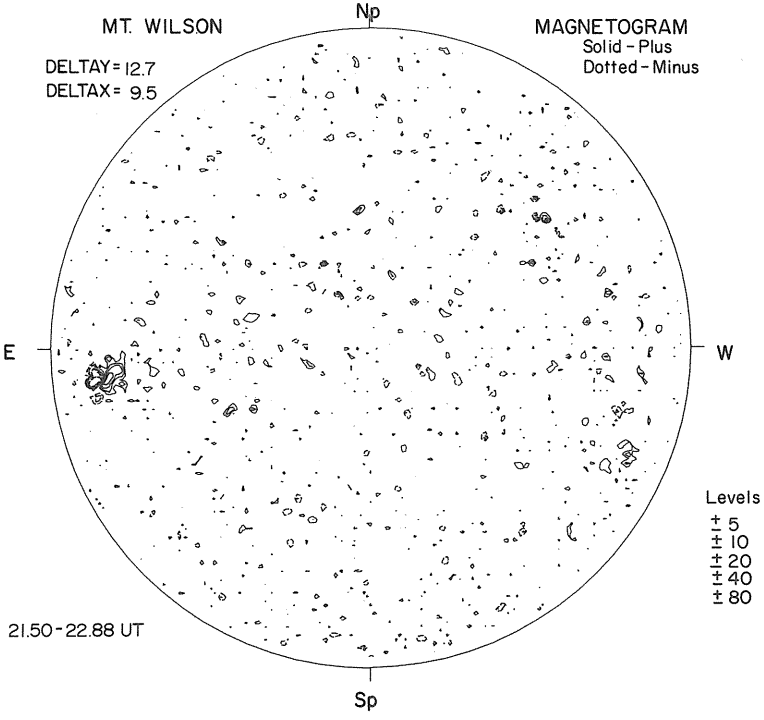


MAGNETOGRAM
Bright - Plus
Dark - Minus

1445 UT

MT. WILSON

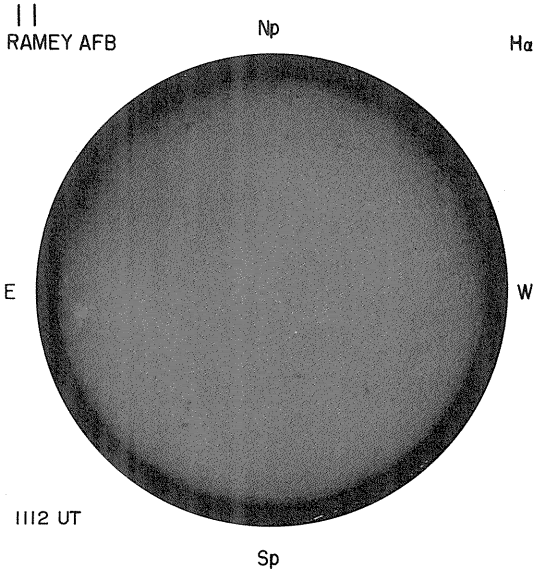
DELTAY= 12.7
DELTAX= 9.5

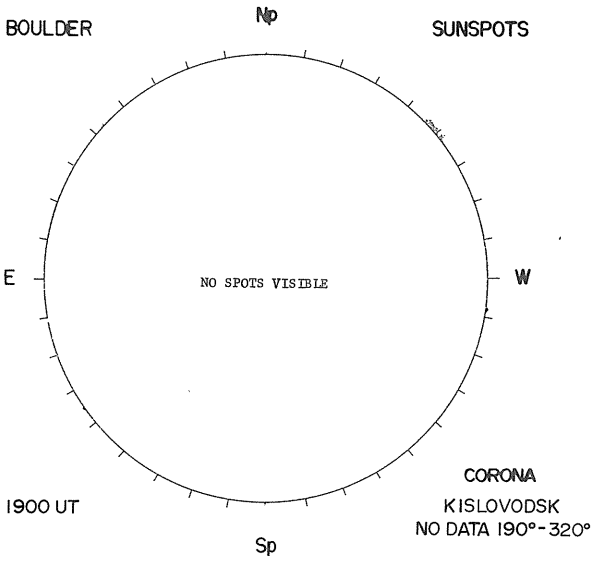


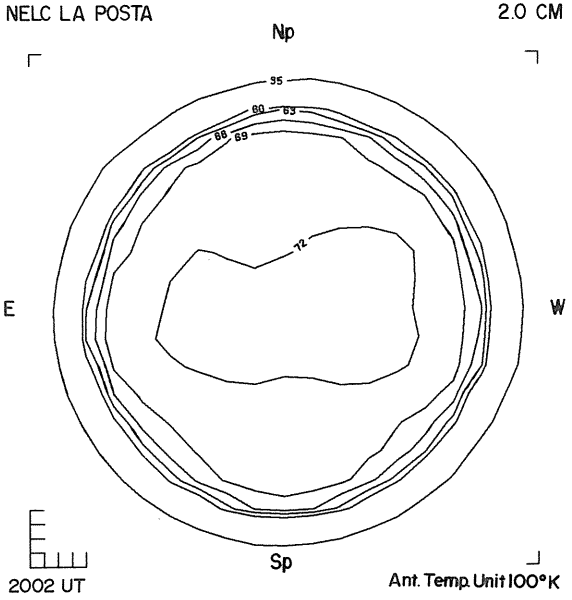
MAGNETOGRAM
Solid - Plus
Dotted - Minus

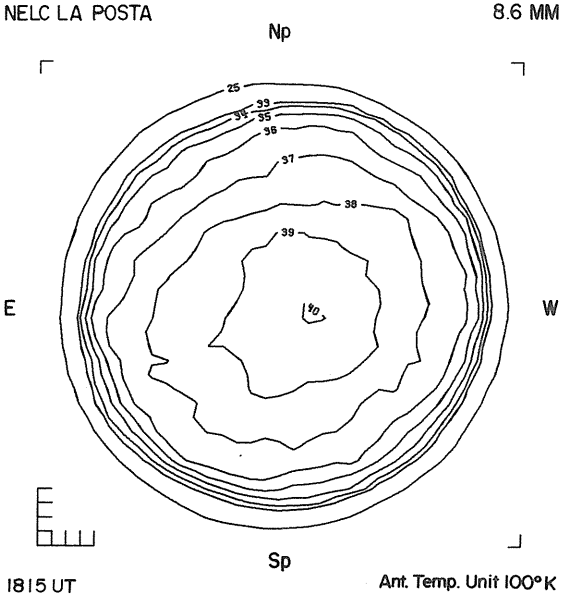
Levels
± 5
± 10
± 20
± 40
± 80

21.50-22.88 UT


RAMEY AFB
Np
Hα
E
W
1112 UT
Sp


BOULDER
Np
SUNSPOTS
E
NO SPOTS VISIBLE
W
1900 UT
Sp
CORONA
KISLOVODSK
NO DATA 190°-320°


NELC LA POSTA
2.0 CM
Np
95
80
83
68
69
72
E
W
Sp
2002 UT
Ant. Temp. Unit 100°K


NELC LA POSTA
8.6 MM
Np
25
33
34
35
36
37
38
39
40
E
W
Sp
1815 UT
Ant. Temp. Unit 100°K

MAY 12, 1975 (P=-21.96, B_o=-3.03, L_o=359.10)

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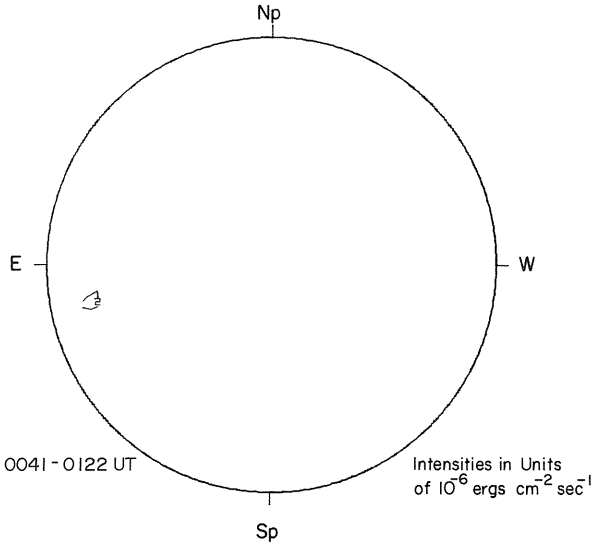
X-RAY
OSO-5

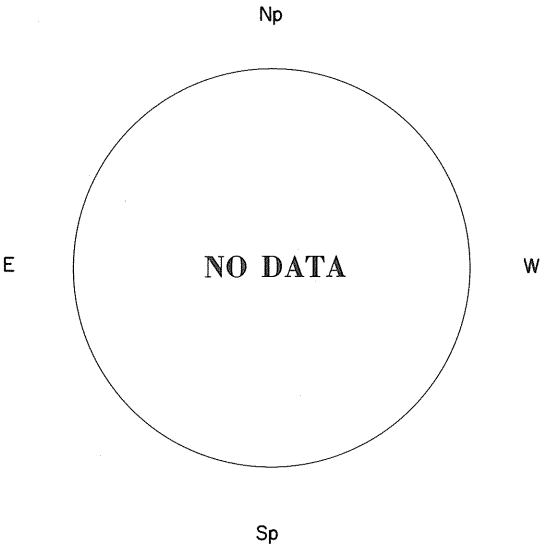


0041 - 0122 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

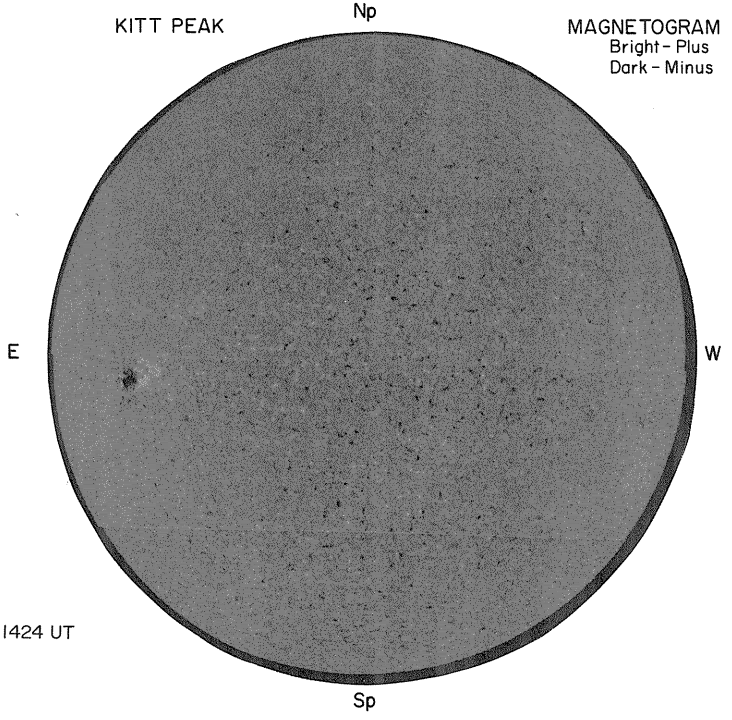
McMATH-HULBERT

CALCIUM REPORT



KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

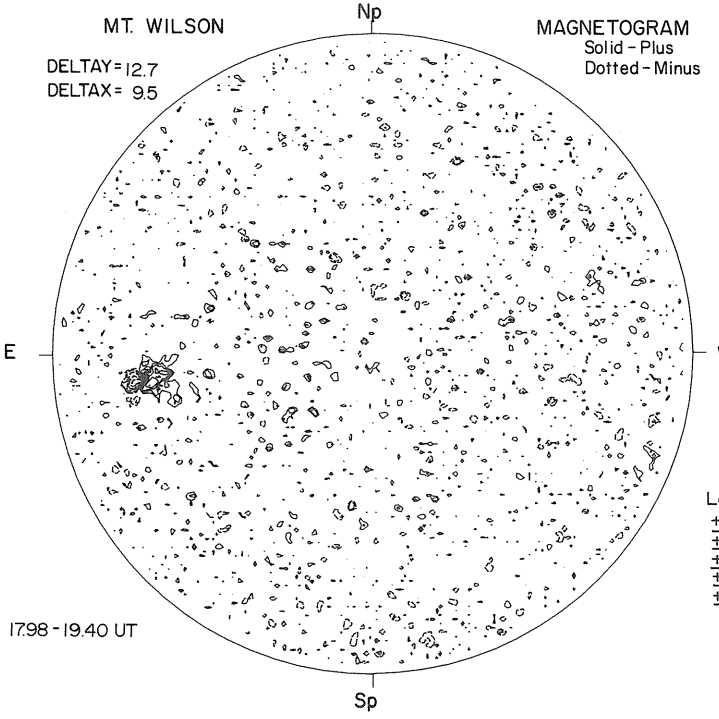


1424 UT

MT. WILSON

DELTAY = 12.7
DELTAX = 9.5

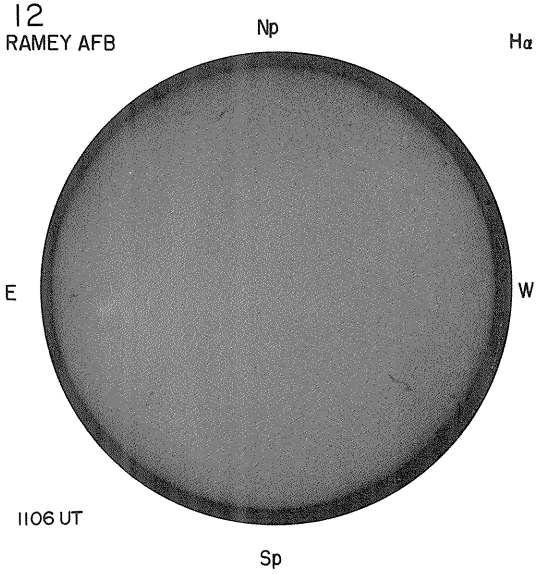
MAGNETOGRAM
Solid - Plus
Dotted - Minus



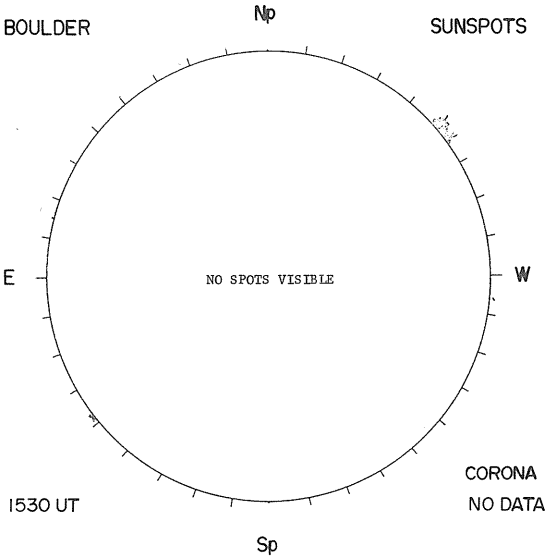
Levels
± 5
± 10
± 20
± 40
± 80

1798 - 1940 UT

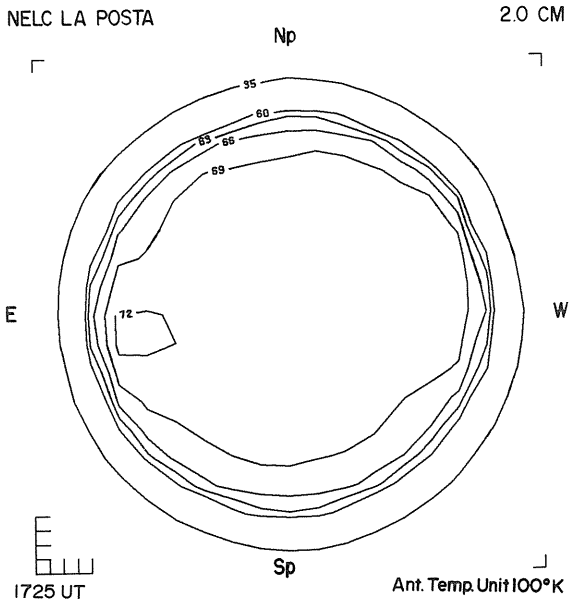
12
RAMEY AFB



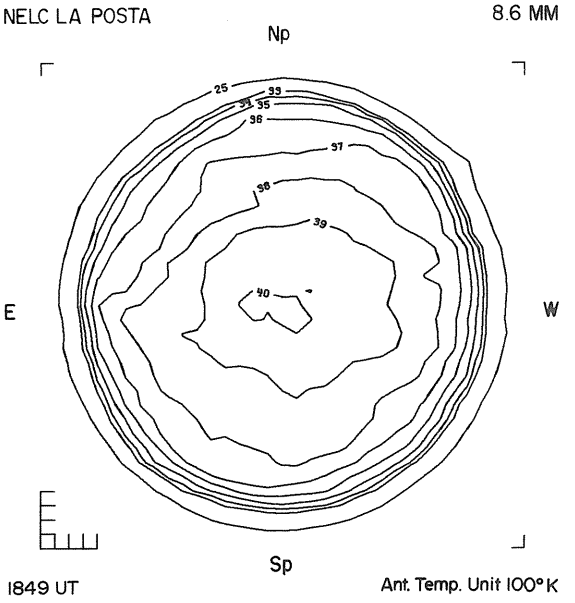
BOULDER



NELC LA POSTA



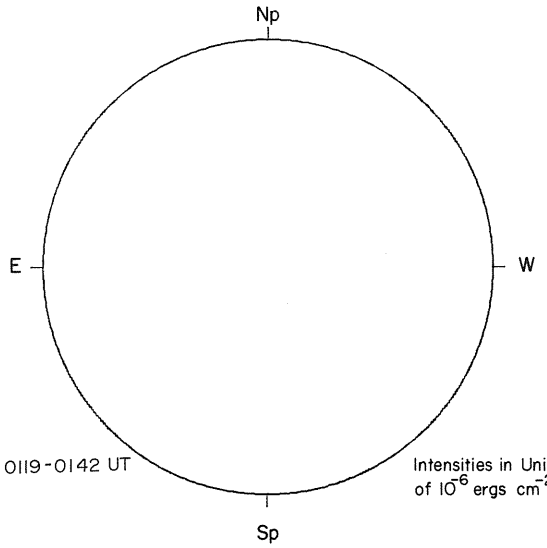
NELC LA POSTA



MAY 13, 1975 (P=-21.70, B_o=-2.92, L_o=345.88)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

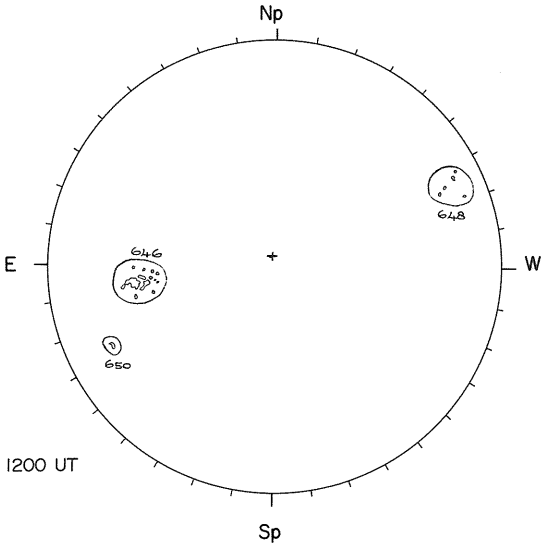


0119-0142 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT



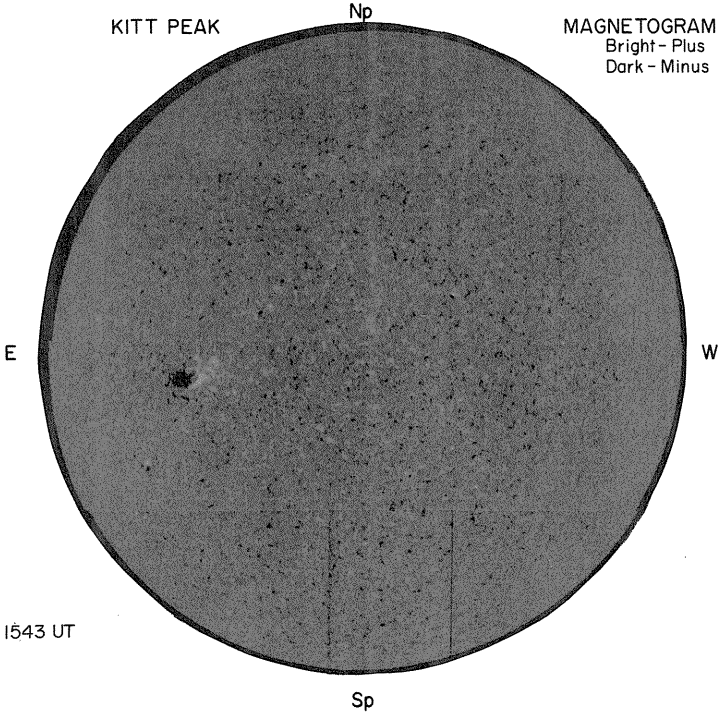
1200 UT

FAIR	D

46 - 1000 - 2.5

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

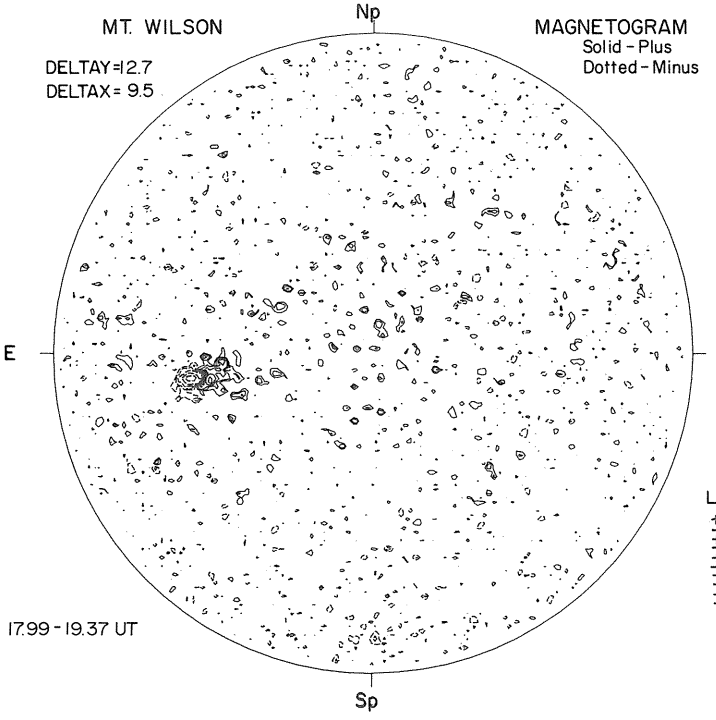


1543 UT

MT. WILSON

DELTAY=12.7
DELTAX= 9.5

MAGNETOGRAM
Solid - Plus
Dotted - Minus

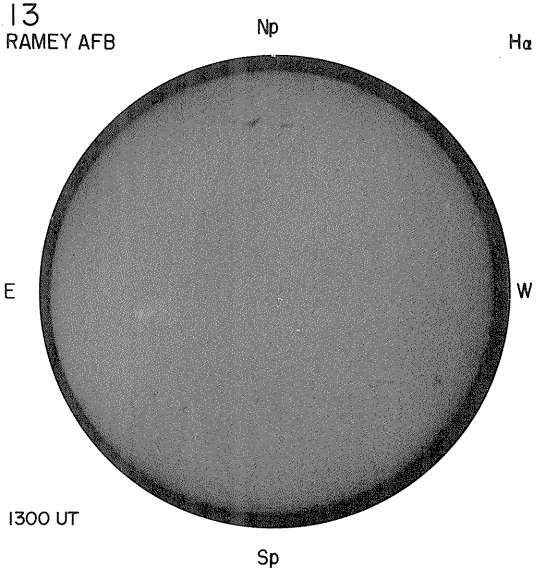


17.99 - 19.37 UT

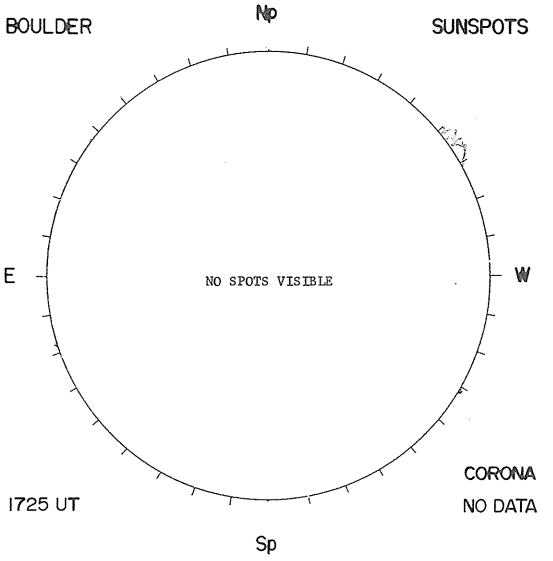
Levels
± 5
± 10
± 20
± 40
± 80

13

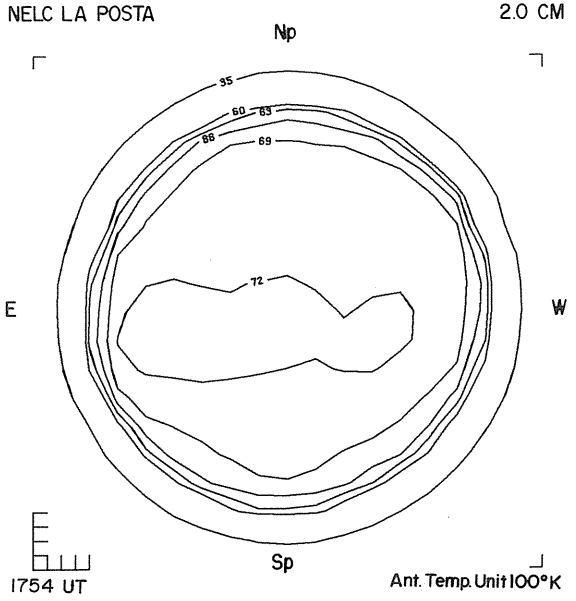
RAMEY AFB



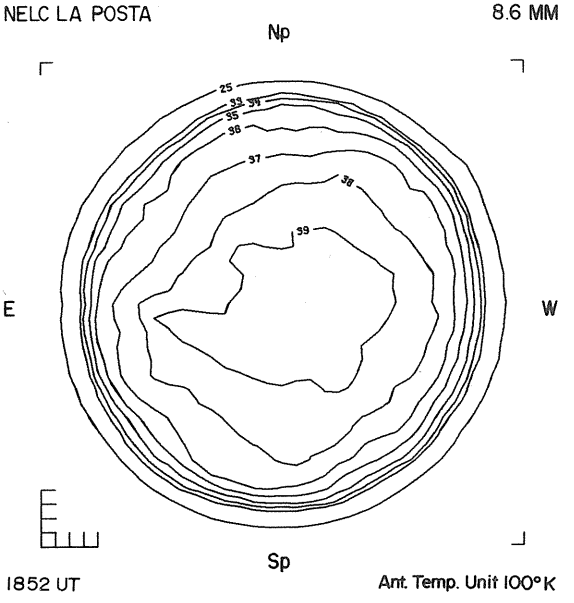
BOULDER



NELC LA POSTA



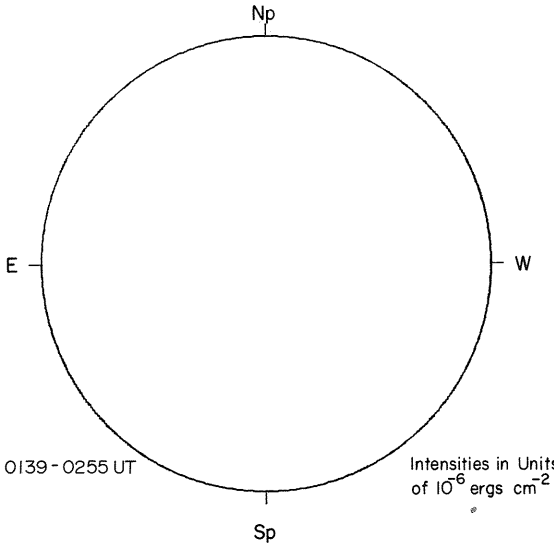
NELC LA POSTA



MAY 14, 1975 (P=-21.44, B_o=-2.81, L_o=332.65)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

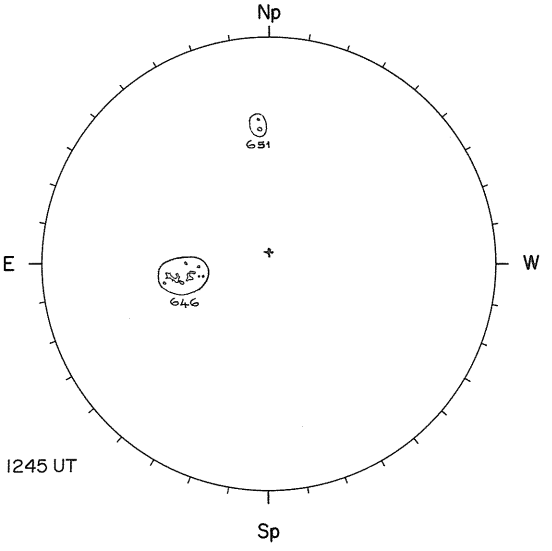


0139-0255 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

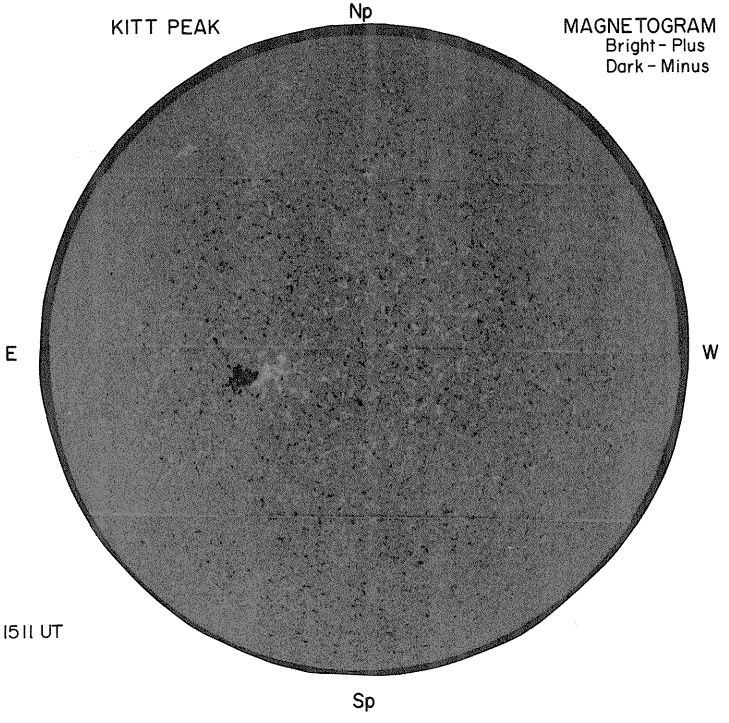


POOR | D

1245 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

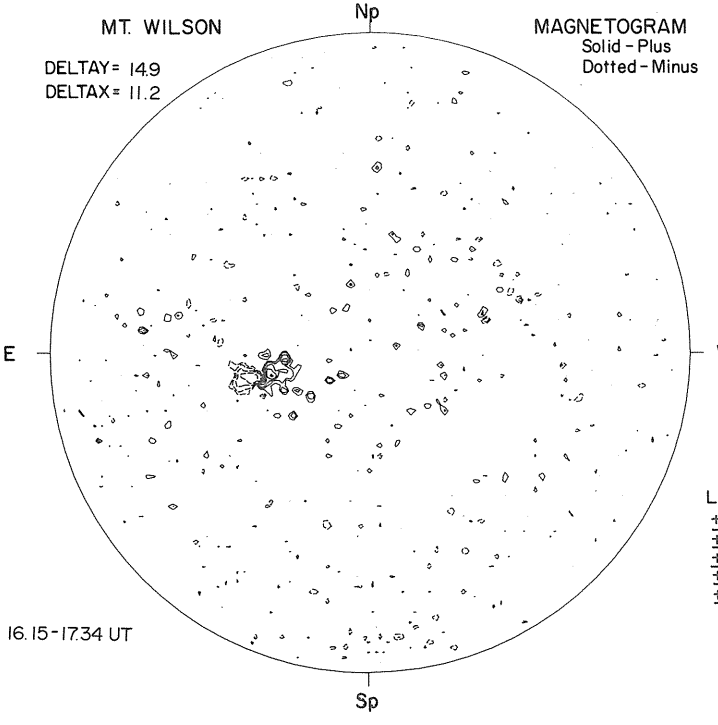


1511 UT

MT. WILSON

DELTAY= 14.9
DELTAX= 11.2

MAGNETOGRAM
Solid - Plus
Dotted - Minus

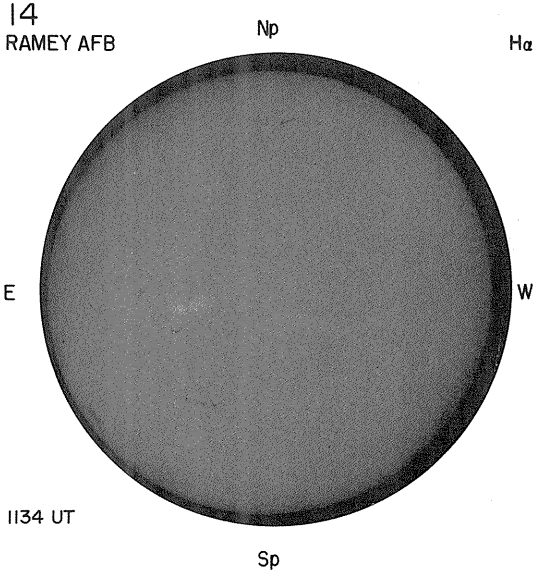


Levels
± 5
± 10
± 20
± 40
± 80

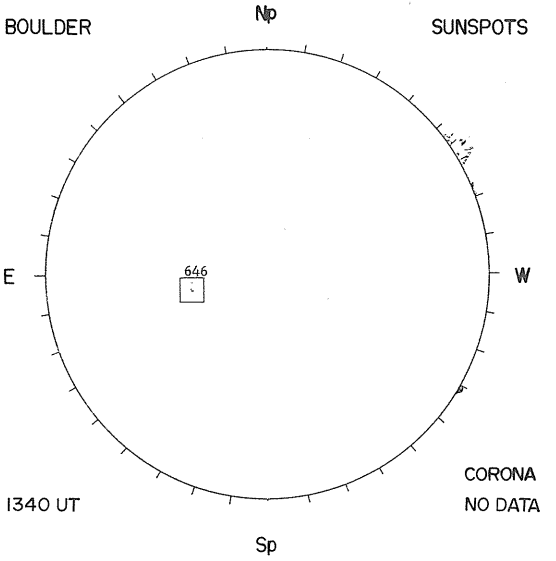
16.15-17.34 UT

14

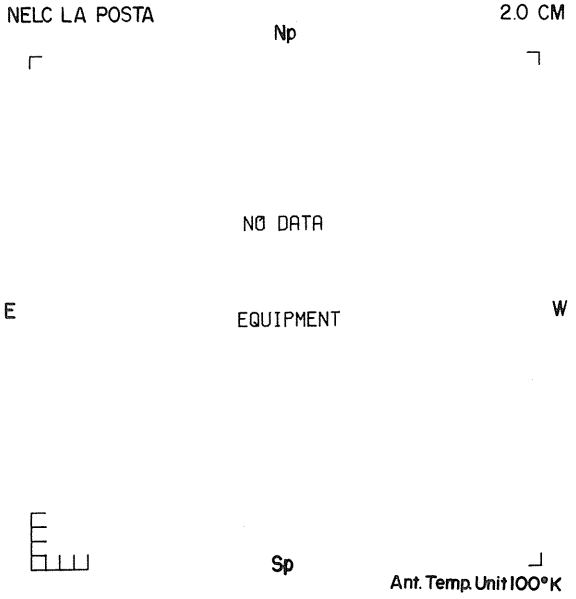
RAMEY AFB



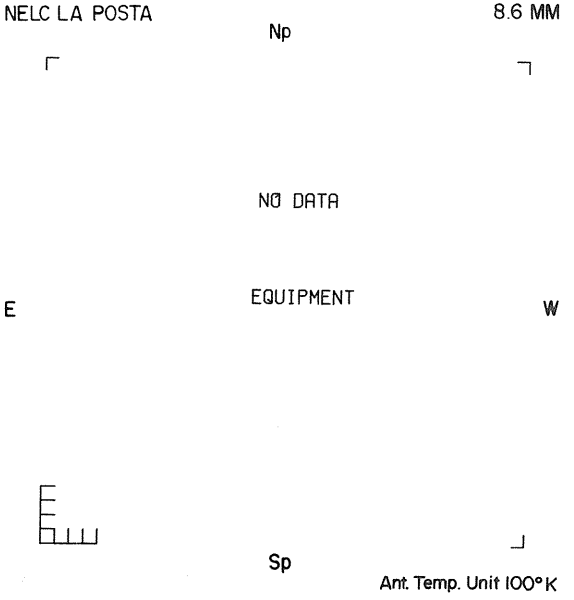
BOULDER



NELC LA POSTA



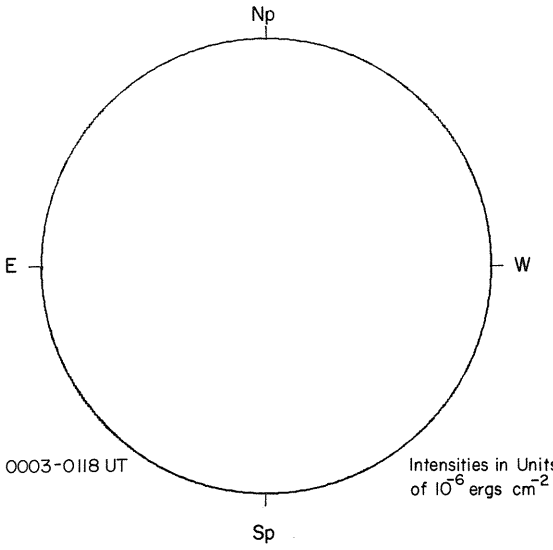
NELC LA POSTA



MAY 15, 1975 (P=-21.18, B_o=-2.69, L_o=319.43)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

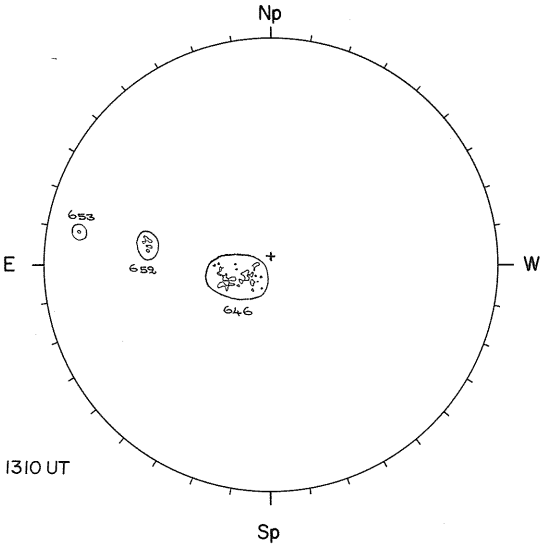


0003-0118 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

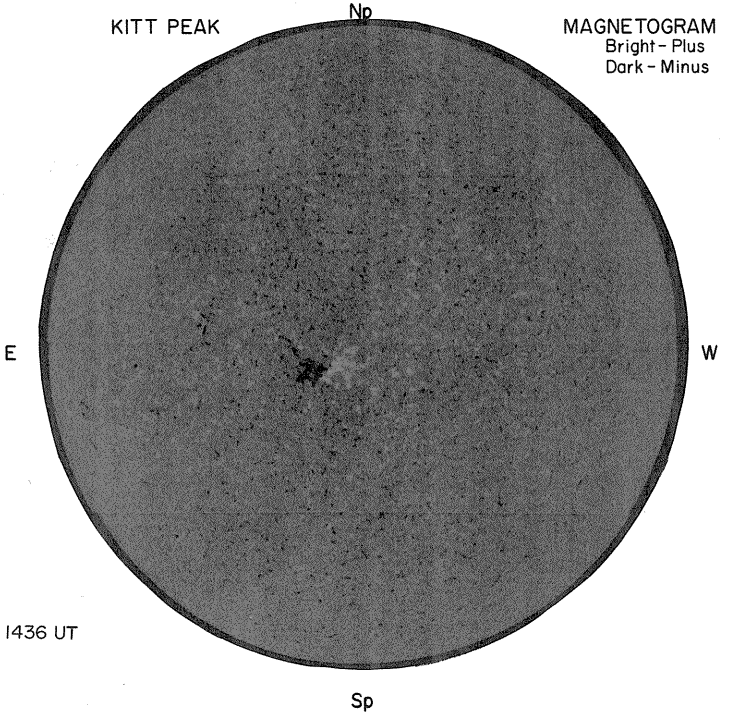


1310 UT

GOOD | S

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

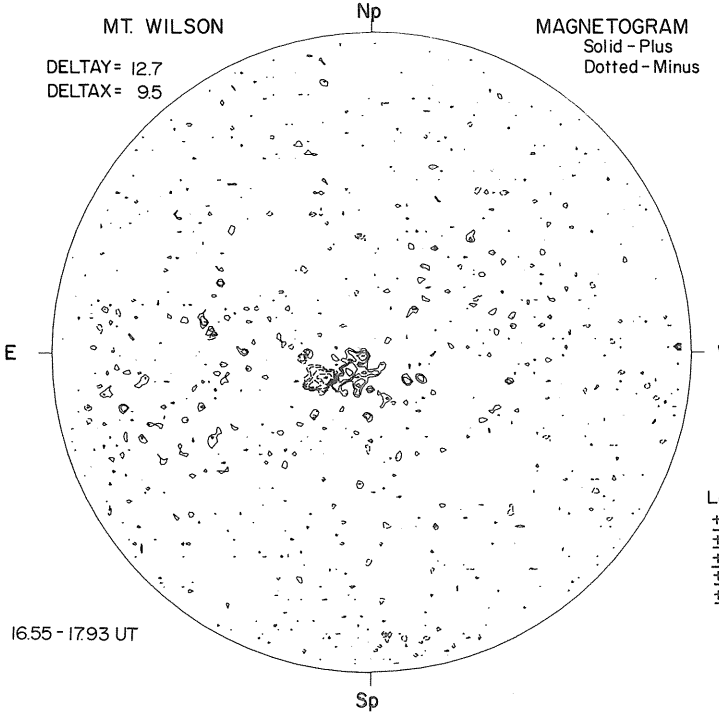


1436 UT

MT. WILSON

DELTAY= 12.7
DELTAX= 9.5

MAGNETOGRAM
Solid - Plus
Dotted - Minus

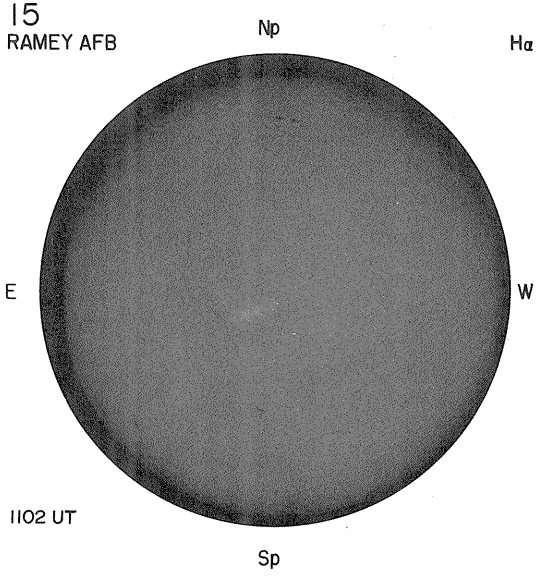


16.55 - 17.93 UT

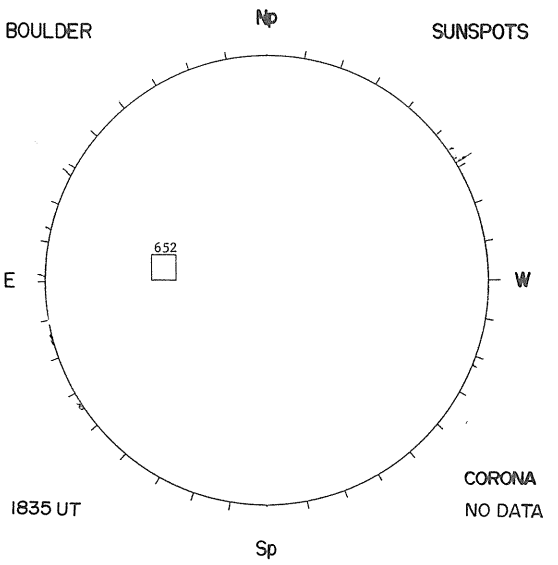
Levels
± 5
± 10
± 20
± 40
± 80

15

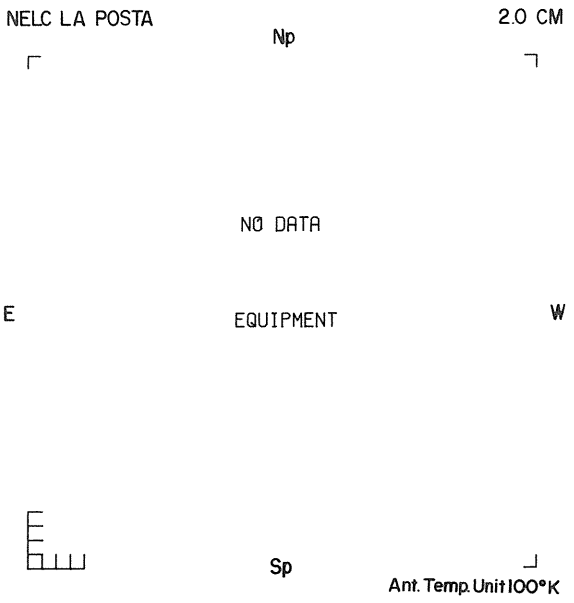
RAMEY AFB



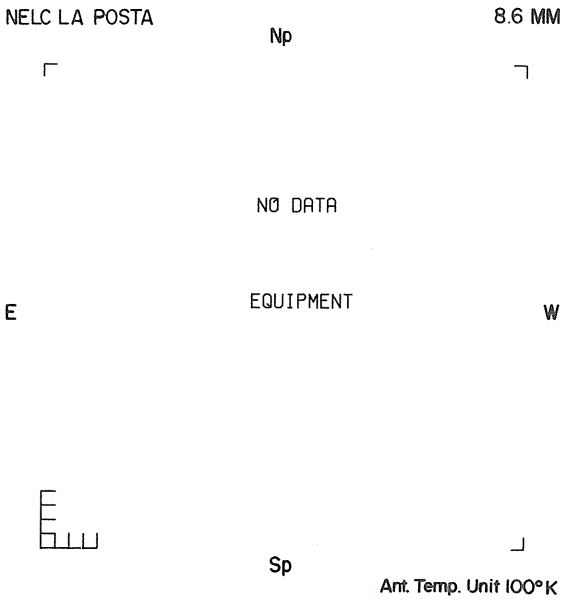
BOULDER



NELC LA POSTA



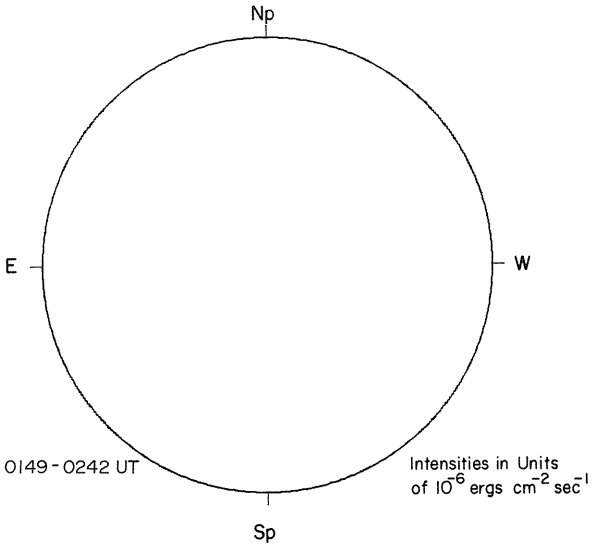
NELC LA POSTA



MAY 16, 1975 (P=-20.90, B_o=-2.58, L_o=306.20)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

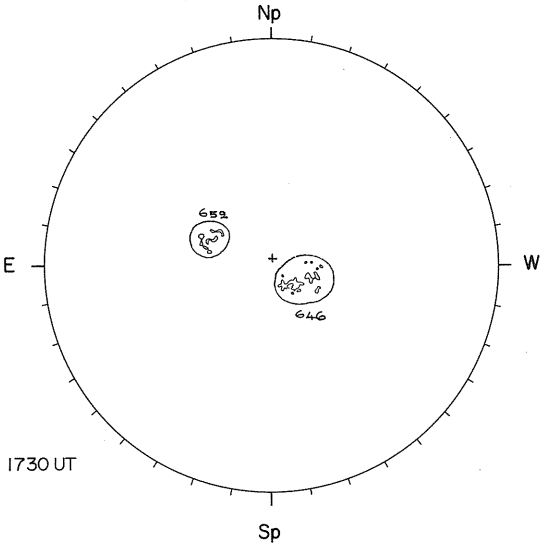


0149-0242 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

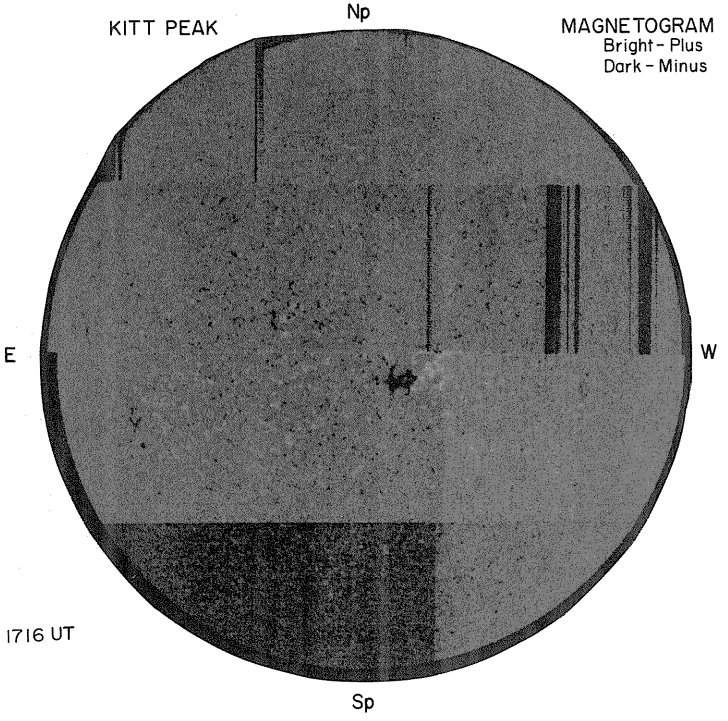


FAIR | M

1730 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

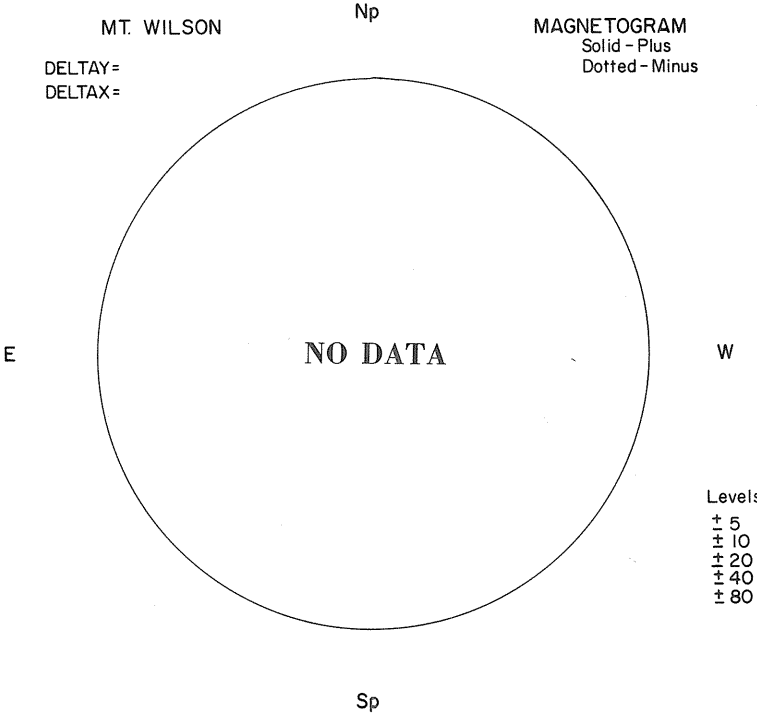


1716 UT

MT. WILSON

DELTAY=
DELTAX=

MAGNETOGRAM
Solid - Plus
Dotted - Minus

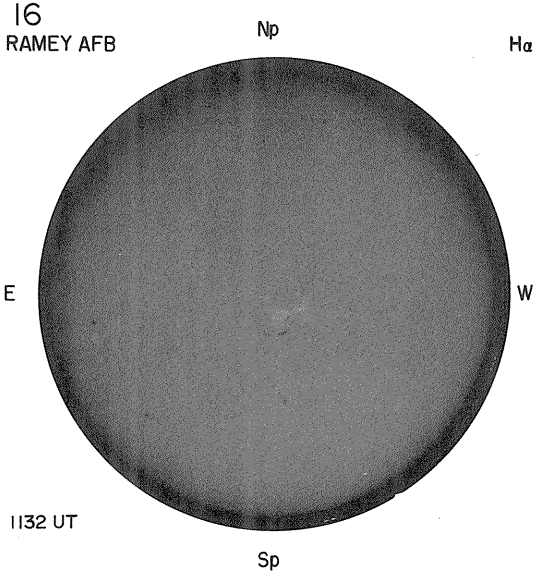


NO DATA

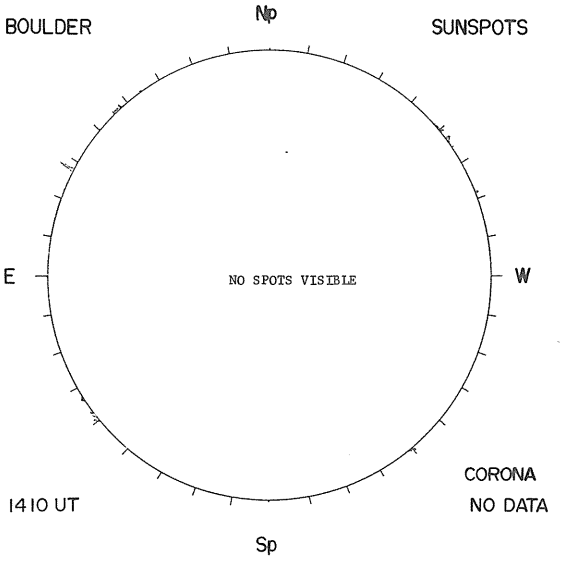
Levels
± 5
± 10
± 20
± 40
± 80

16

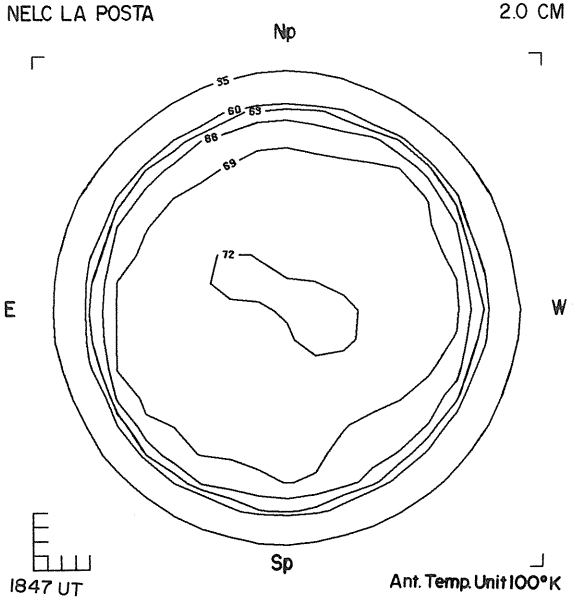
RAMEY AFB



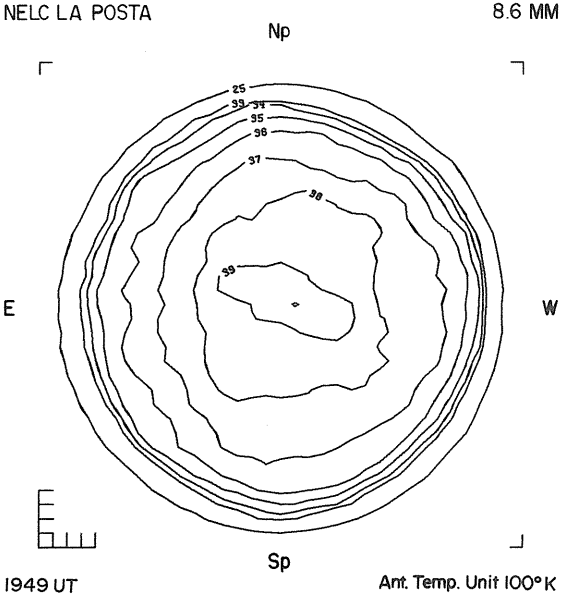
BOULDER



NELC LA POSTA



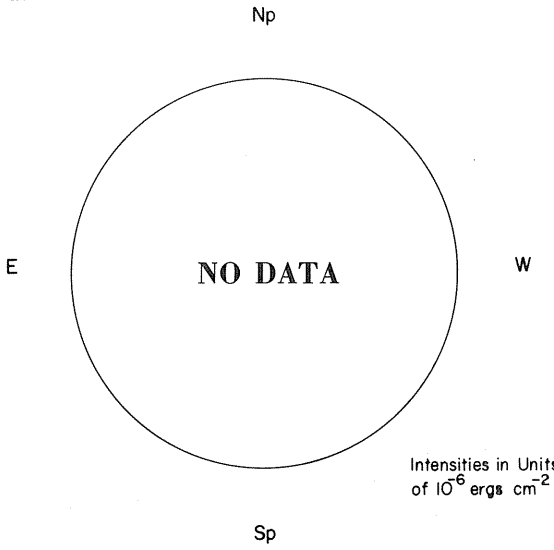
NELC LA POSTA



MAY 17, 1975 (P = -20.62, B_o = -2.47, L_o = 292.98)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

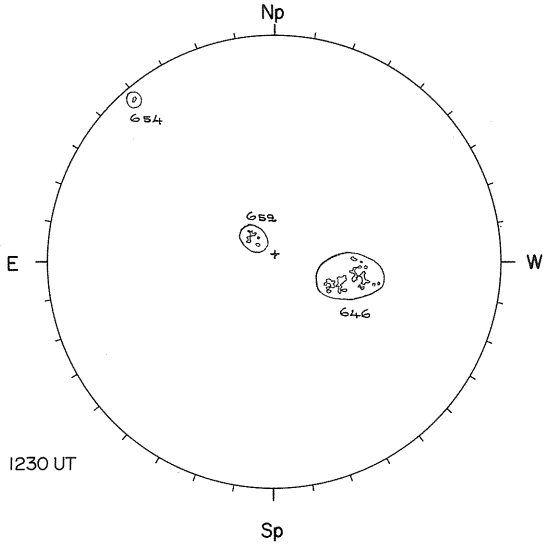
X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

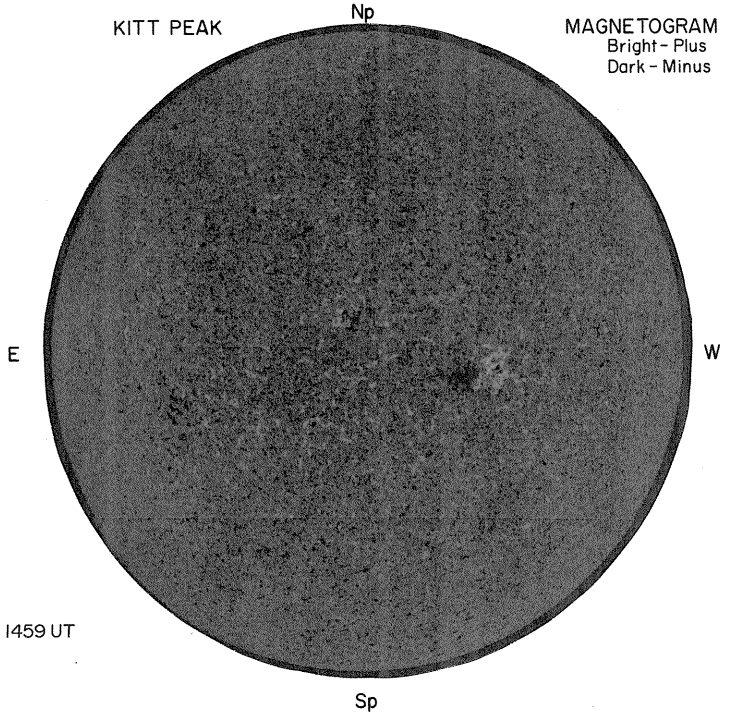


1230 UT

GOOD | M

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

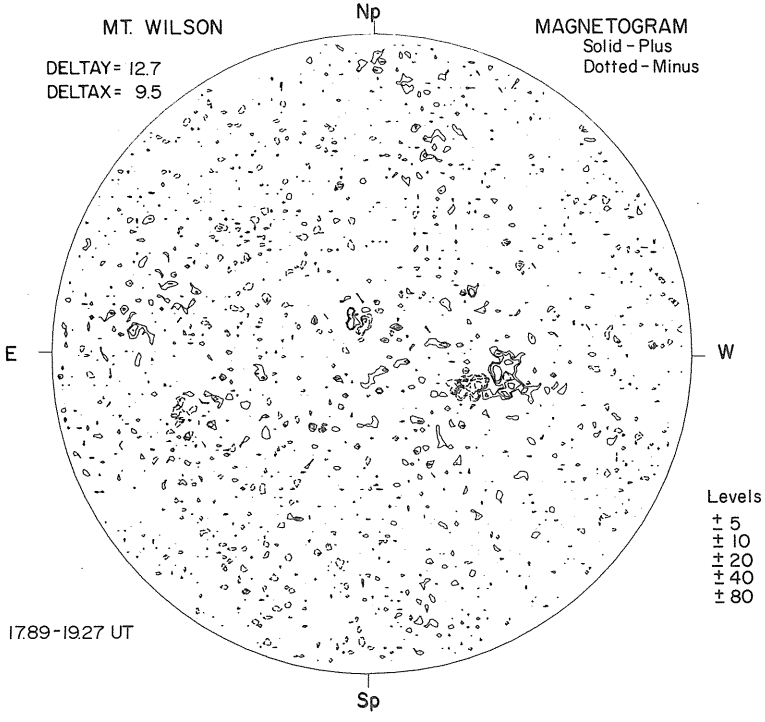


1459 UT

MT. WILSON

DELTAY = 12.7
DELTAX = 9.5

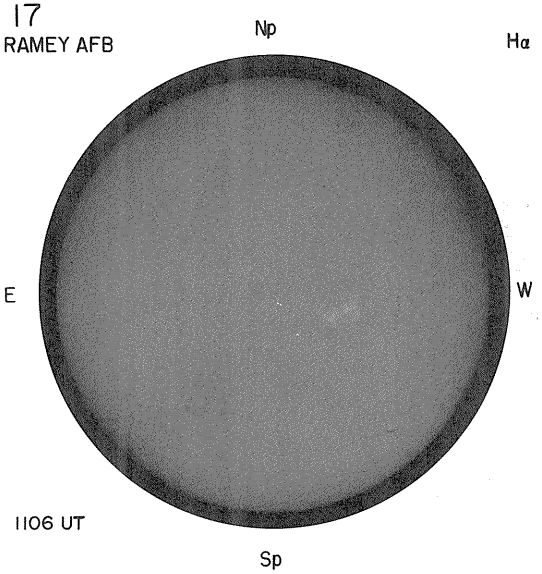
MAGNETOGRAM
Solid - Plus
Dotted - Minus



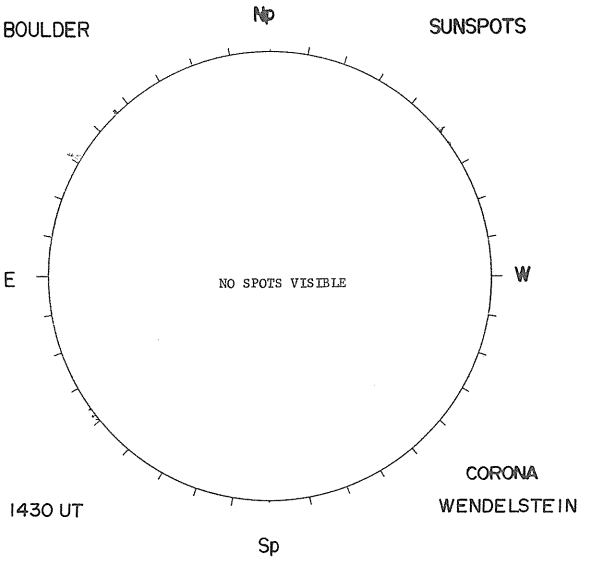
17.89 - 19.27 UT

Levels
± 5
± 10
± 20
± 40
± 80

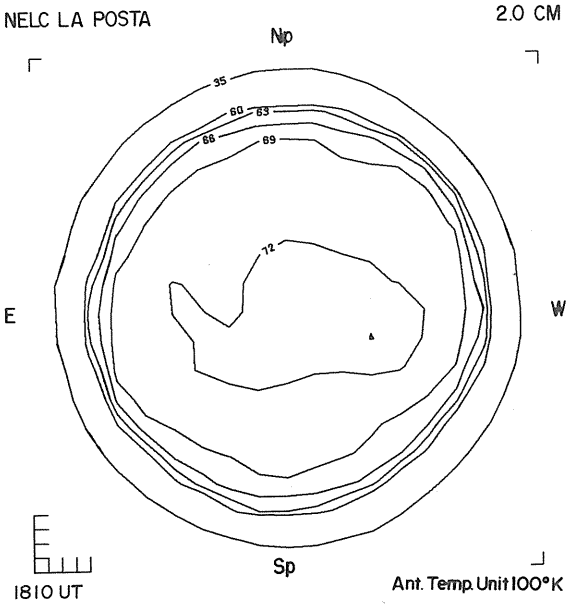
17
RAMEY AFB



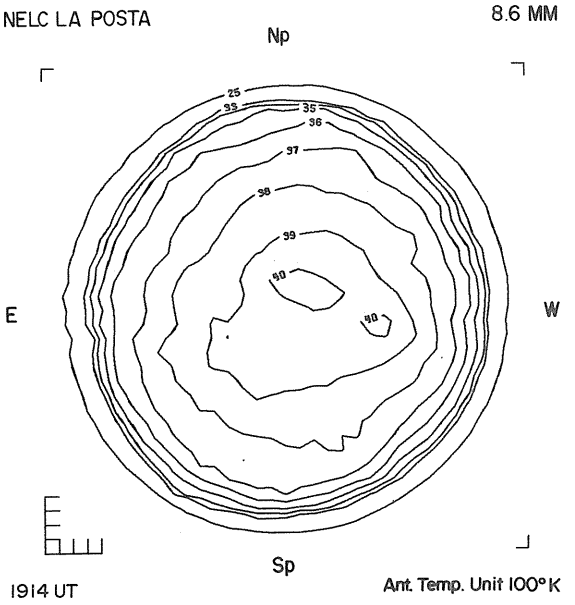
BOULDER



NELC LA POSTA



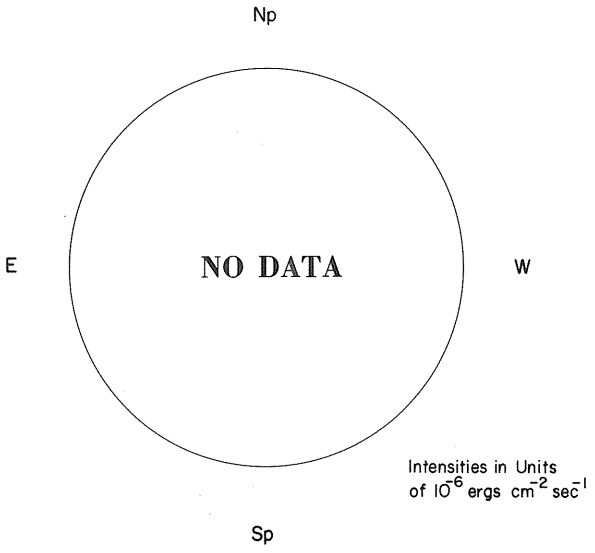
NELC LA POSTA



MAY 18, 1975 (P=-20.33, B_o=-2.35, L_o = 279.75)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

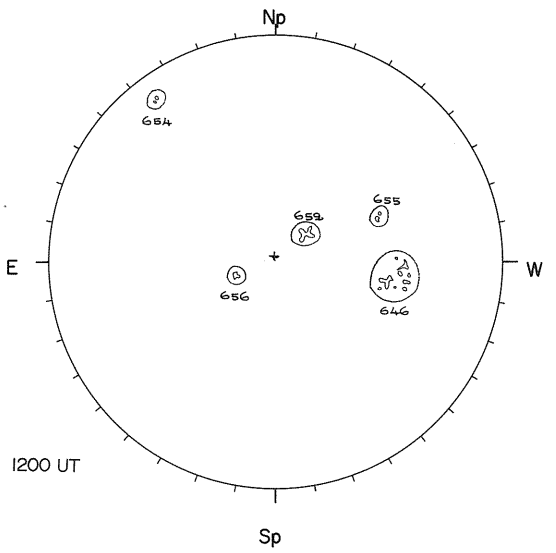
X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

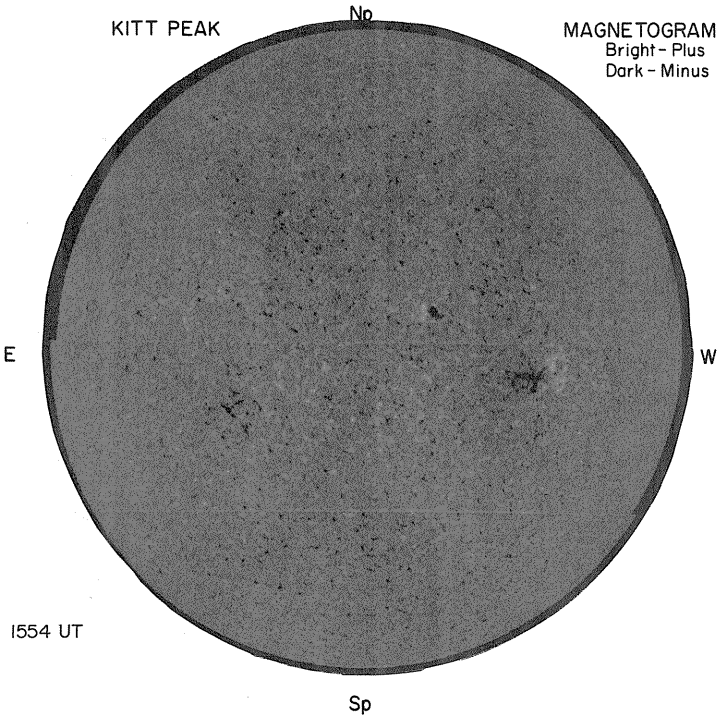


1200 UT

EXCEL D
46 - 0700 - 2.5

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

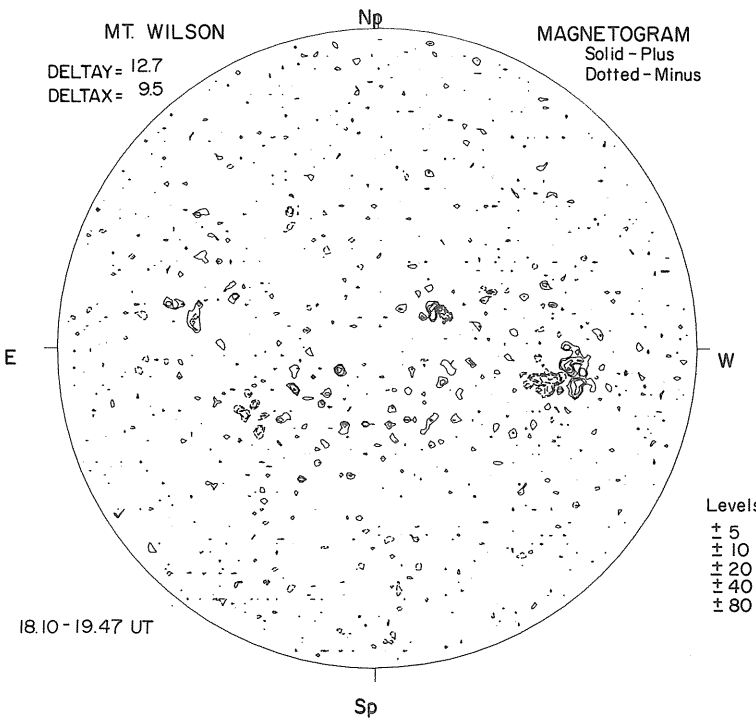


1554 UT

MT. WILSON

DELTAY = 12.7
DELTAX = 9.5

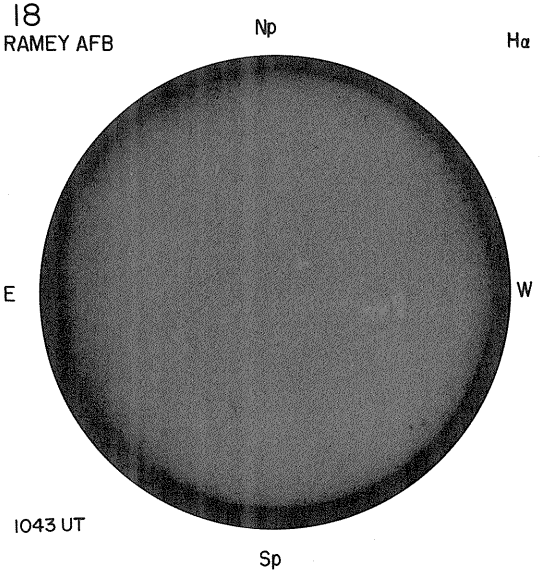
MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
± 5
± 10
± 20
± 40
± 80

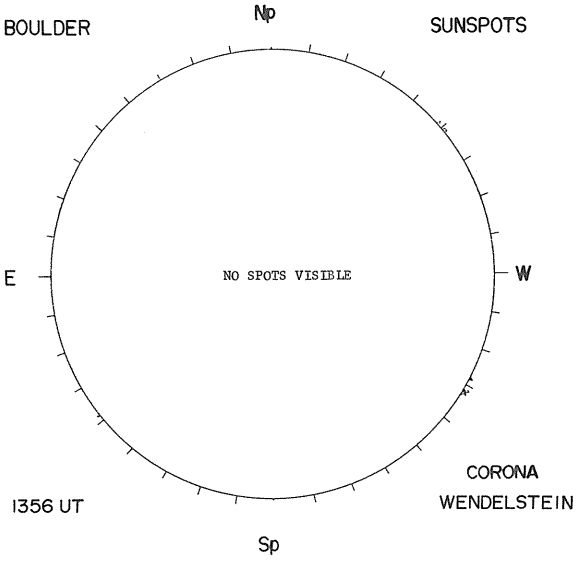
18.10 - 19.47 UT

18
RAMEY AFB



1043 UT

BOULDER

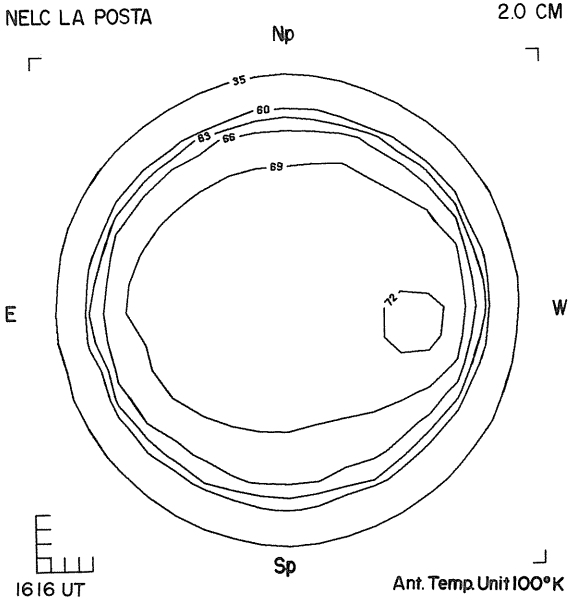


1356 UT

CORONA
WENDELSTEIN

NELC LA POSTA

2.0 CM

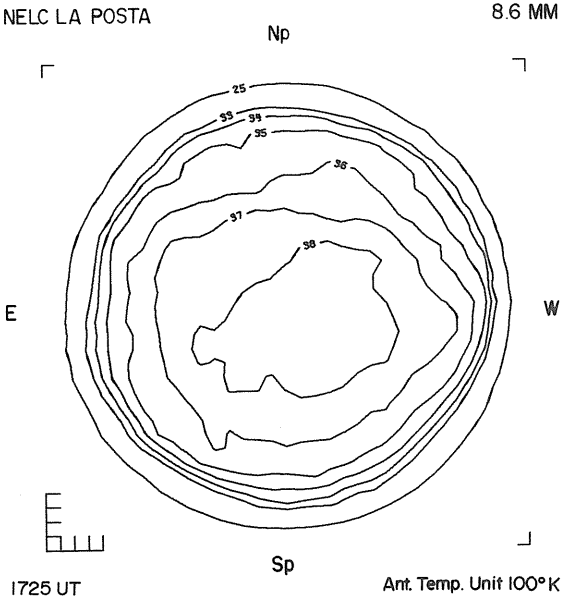


1616 UT

Ant. Temp. Unit 100°K

NELC LA POSTA

8.6 MM



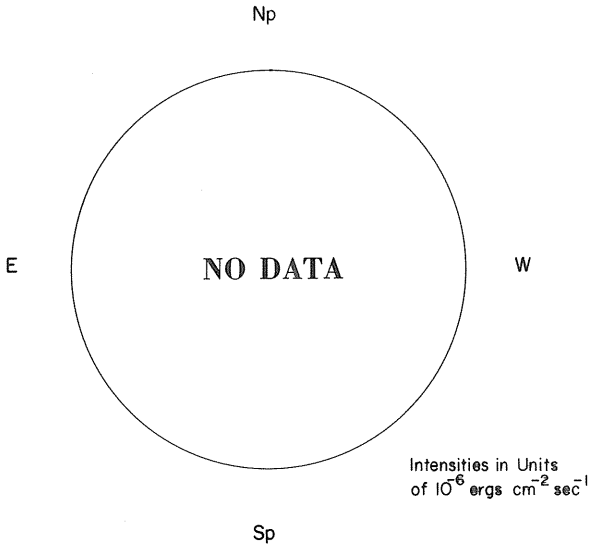
1725 UT

Ant. Temp. Unit 100°K

MAY 19, 1975 (P=-20.04, B_o=-2.24, L_o=266.52)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

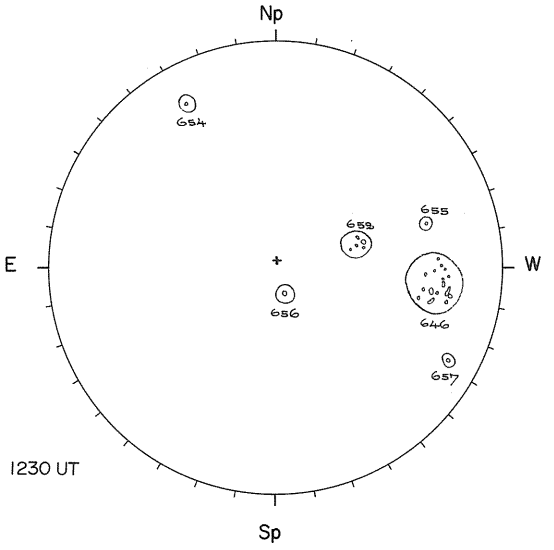
X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT



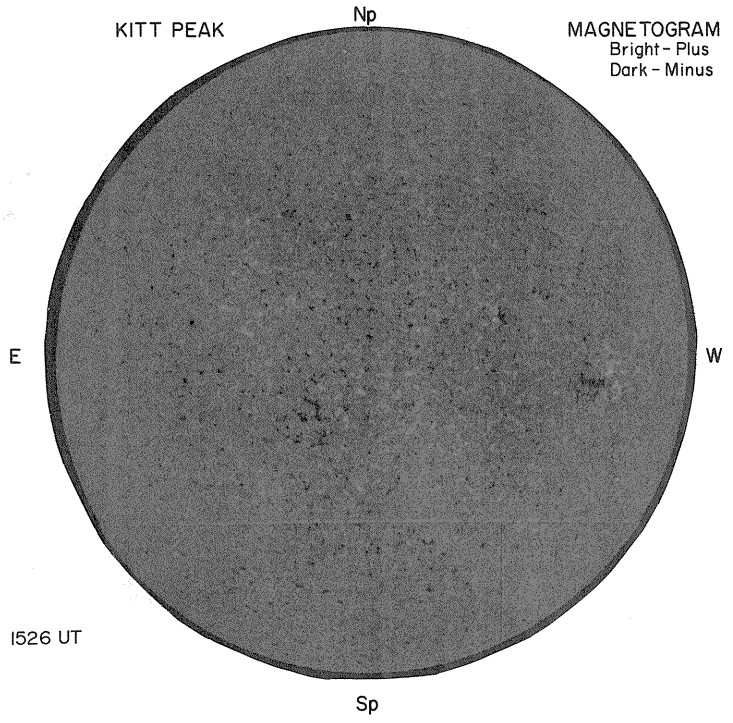
1230 UT

FAIR	D

46 - 0700 - 2.5
52 - 0200 - 2.5

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

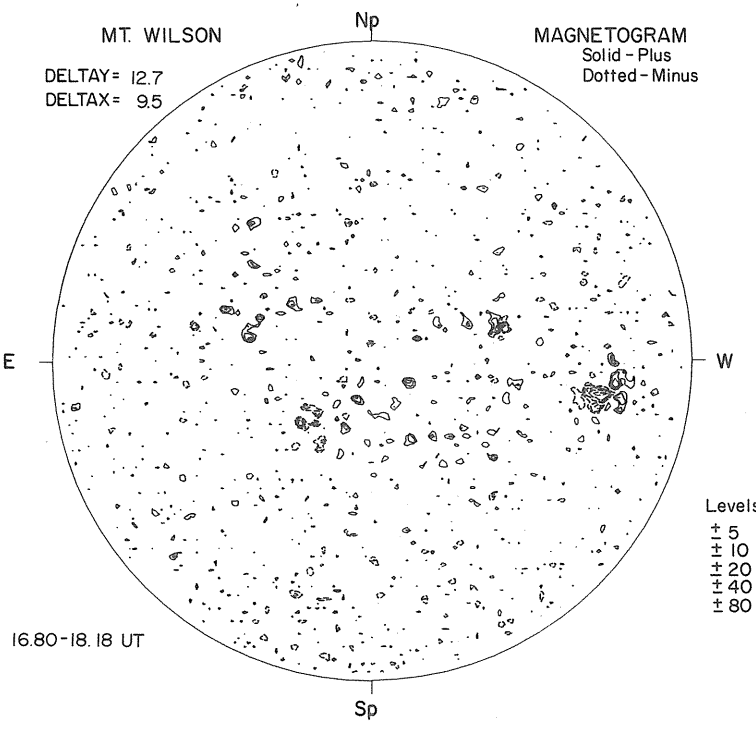


1526 UT

MT. WILSON

DELTAY= 12.7
DELTAX= 9.5

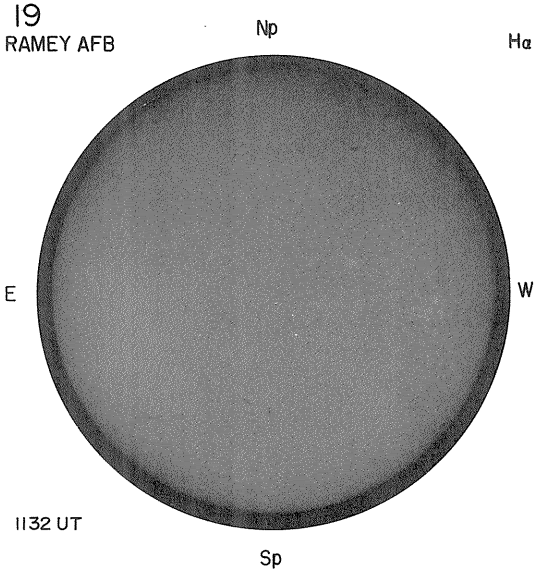
MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
± 5
± 10
± 20
± 40
± 80

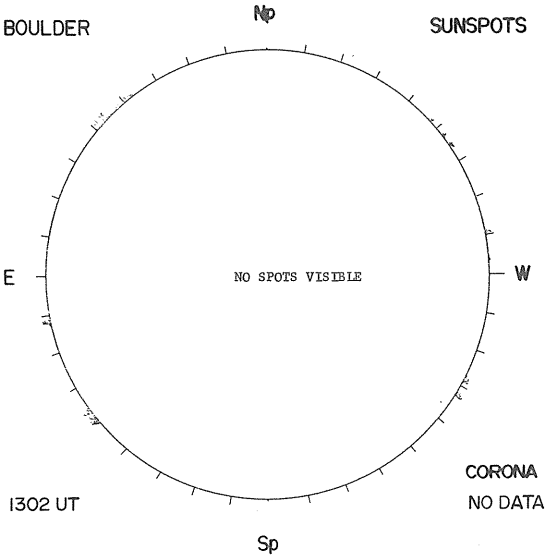
16.80-18.18 UT

19
RAMEY AFB



1132 UT

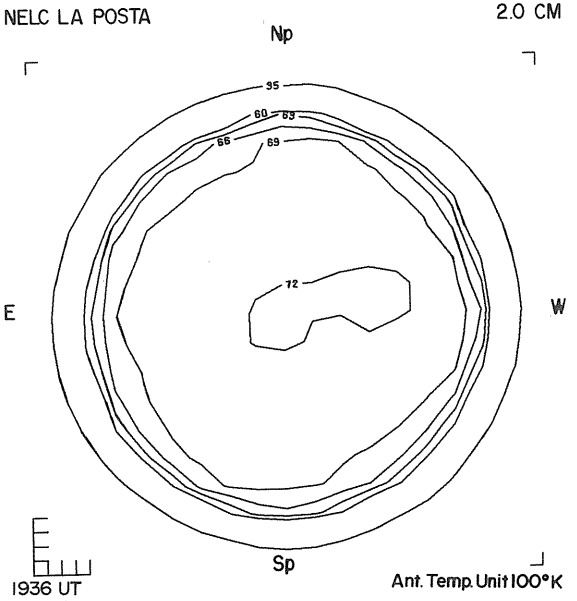
BOULDER



1302 UT

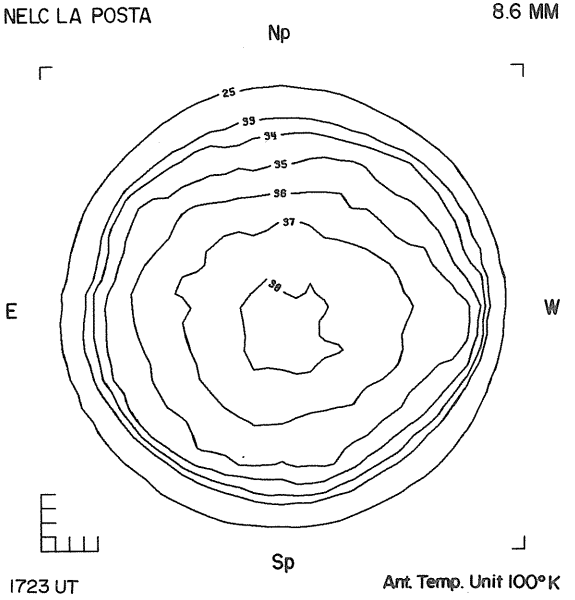
CORONA
NO DATA

NELC LA POSTA



1936 UT

NELC LA POSTA

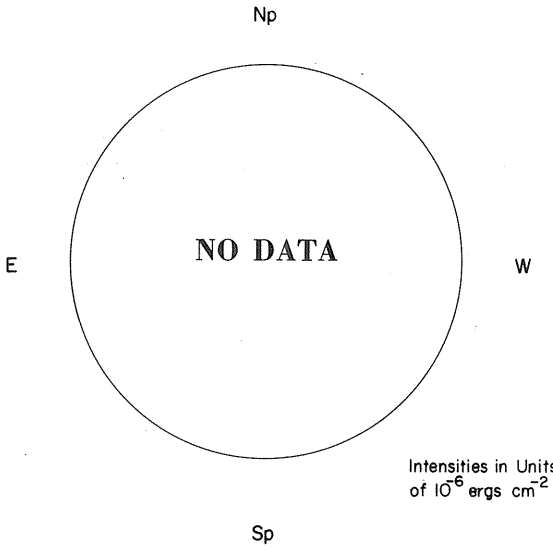


1723 UT

MAY 20, 1975 (P=-19.74, B_o=-2.12, L_o = 253.29)

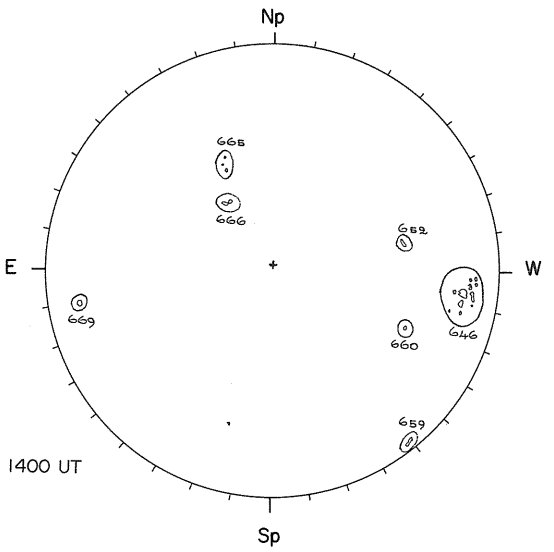
UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT



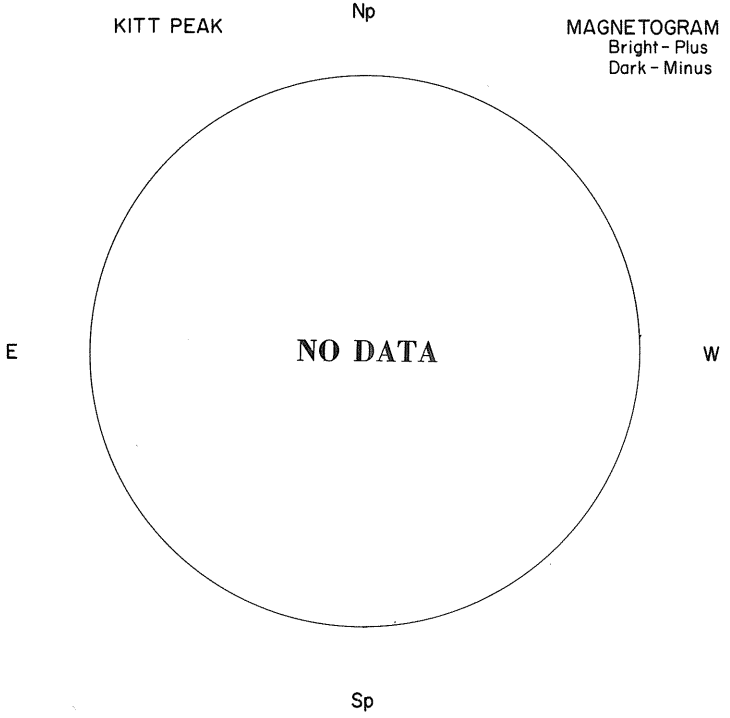
1400 UT

CALCIUM REPORT

GOOD	S
46 - 0800 - 2.5	
52 - 0200 - 2.5	
69 - 0100 - 2.5	

KITT PEAK

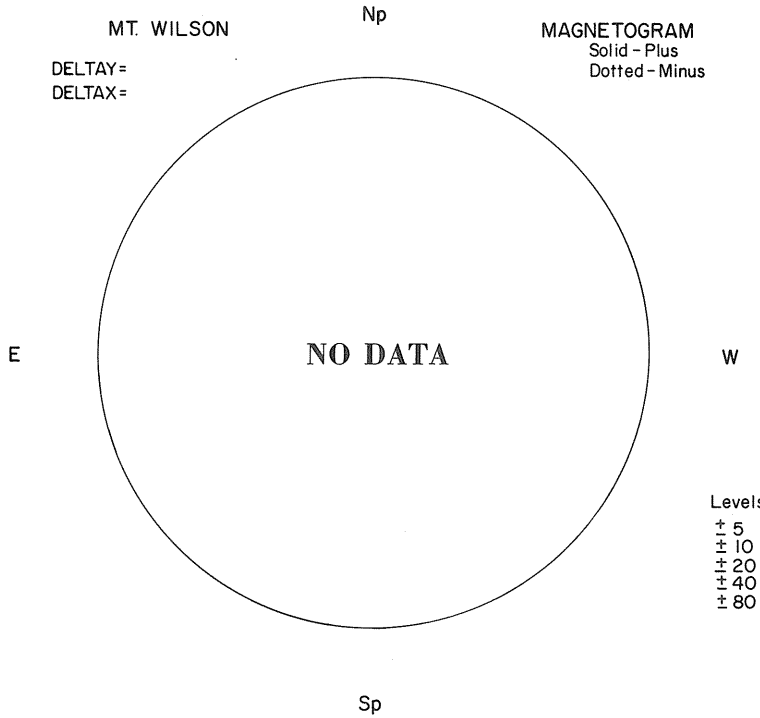
MAGNETOGRAM
Bright - Plus
Dark - Minus



MT. WILSON

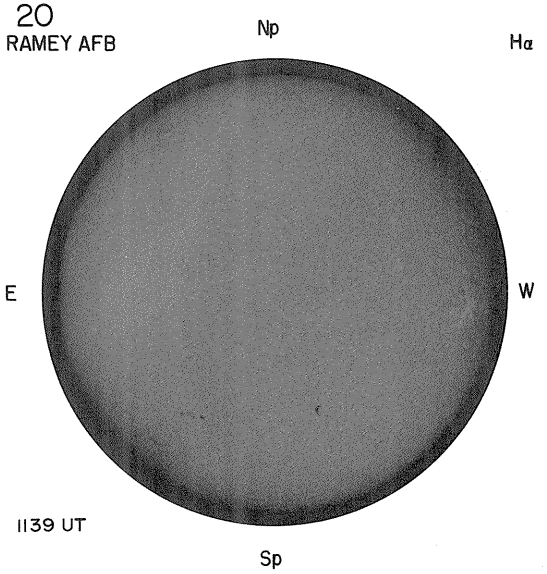
DELTAY=
DELTAX=

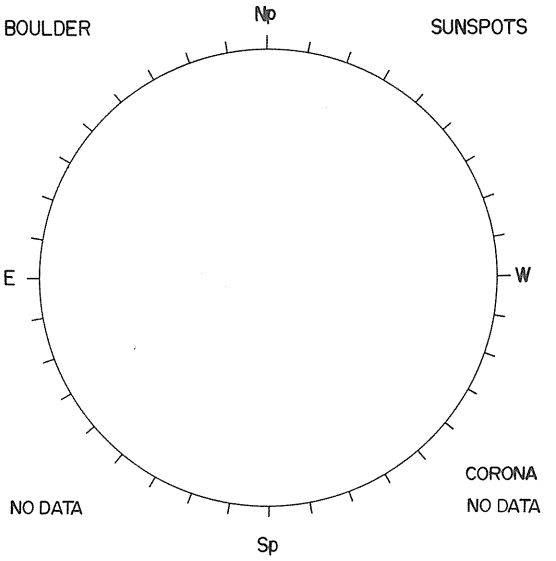
MAGNETOGRAM
Solid - Plus
Dotted - Minus

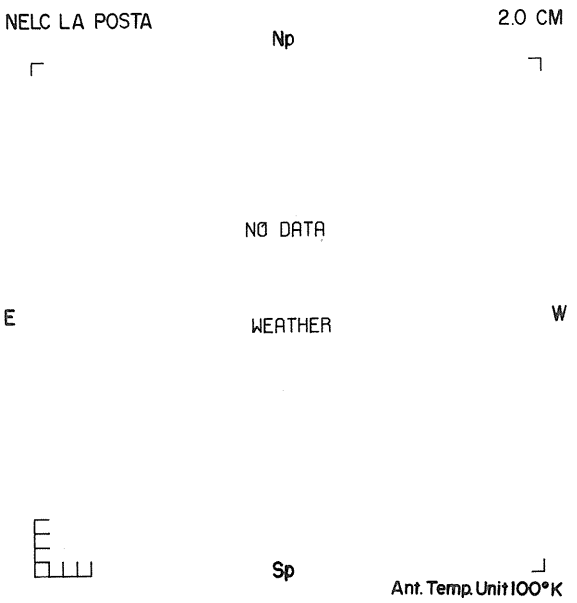


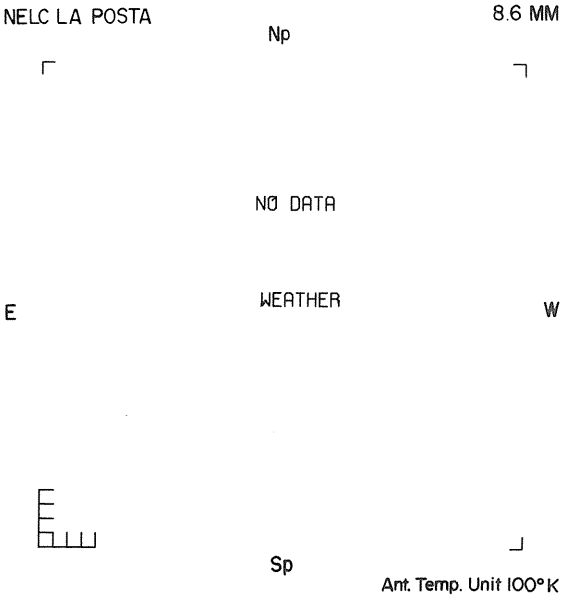
Levels
± 5
± 10
± 20
± 40
± 80

20
RAMEY AFB


Np
Hα
E
W
1139 UT
Sp


BOULDER
Np
SUNSPOTS
E
W
CORONA
NO DATA
NO DATA
Sp

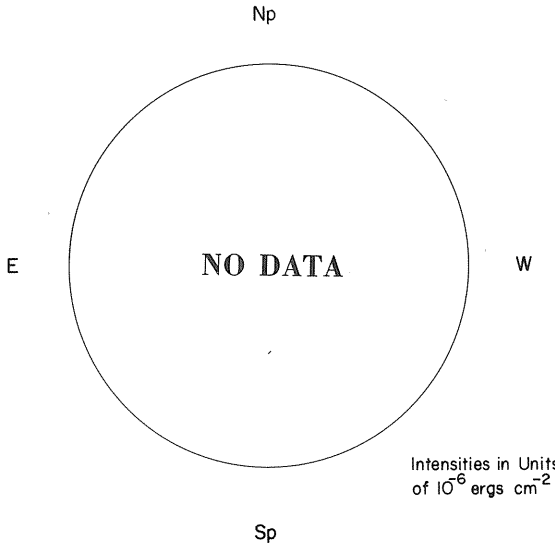

NELC LA POSTA
Np
2.0 CM
NO DATA
E
WEATHER
W
Sp
Ant. Temp. Unit 100°K


NELC LA POSTA
Np
8.6 MM
NO DATA
E
WEATHER
W
Sp
Ant. Temp. Unit 100°K

MAY 21, 1975 (P=-19.44, B_o=-2.00, L_o=240.07)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

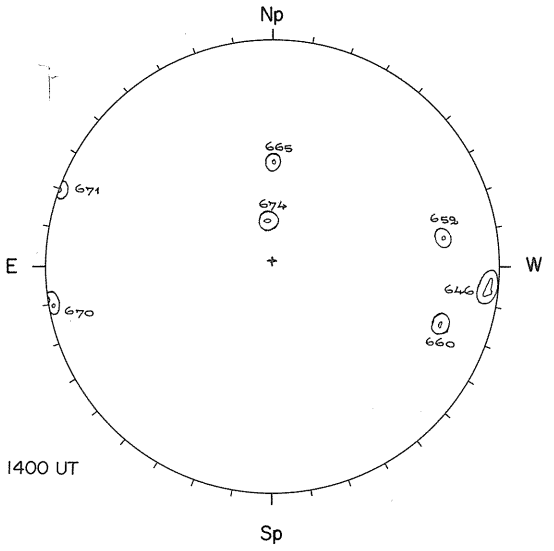
X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

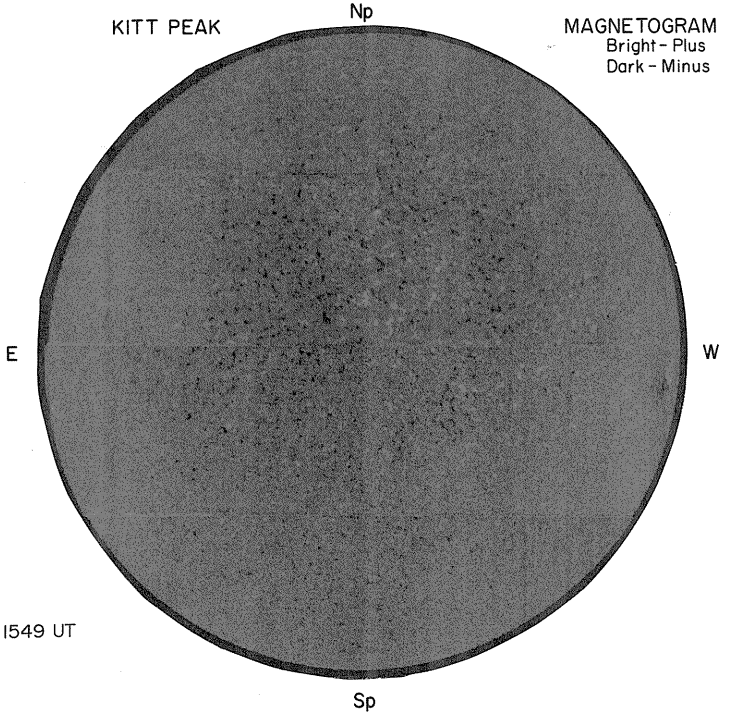


1400 UT

FAIR | S

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

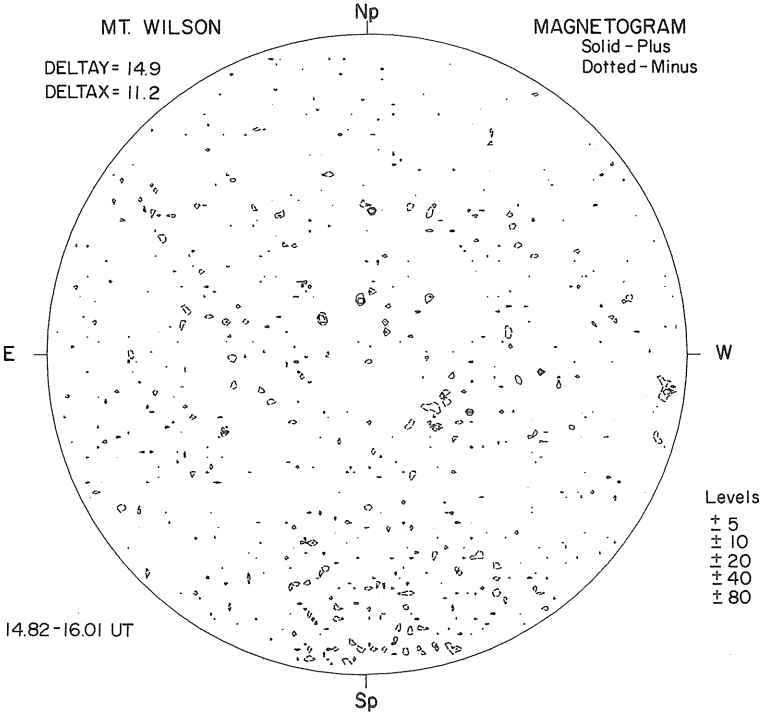


1549 UT

MT. WILSON

DELTAY= 14.9
DELTAX= 11.2

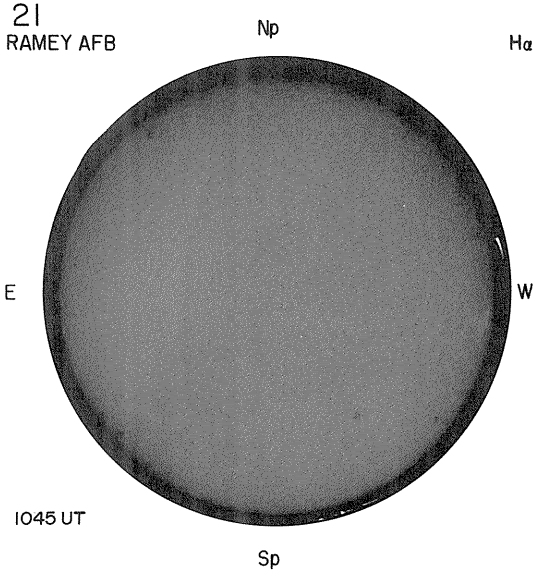
MAGNETOGRAM
Solid - Plus
Dotted - Minus

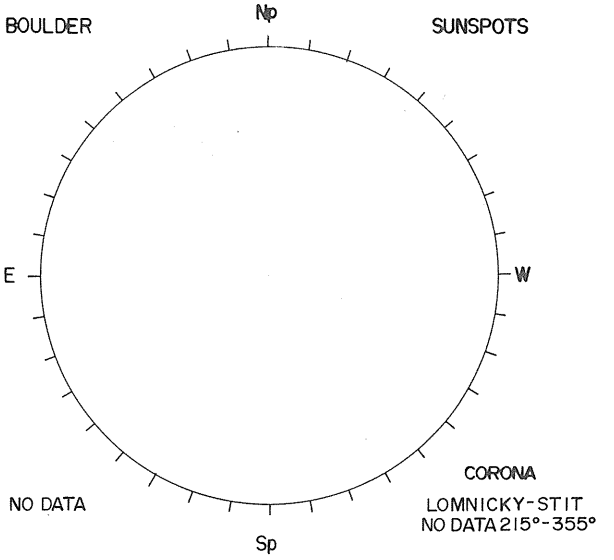


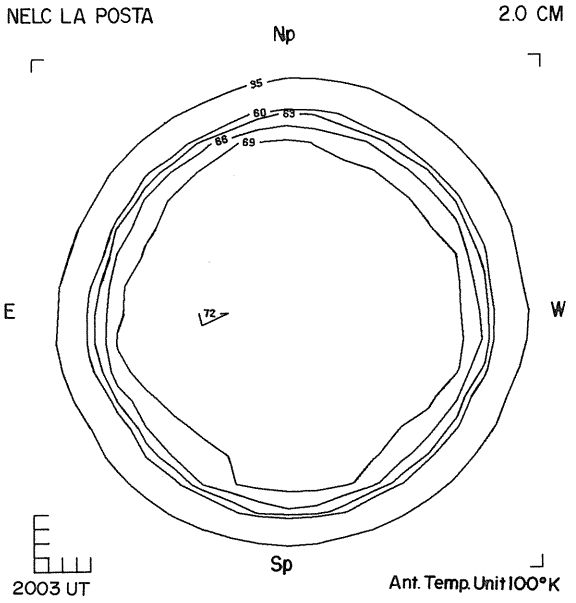
14.82-16.01 UT

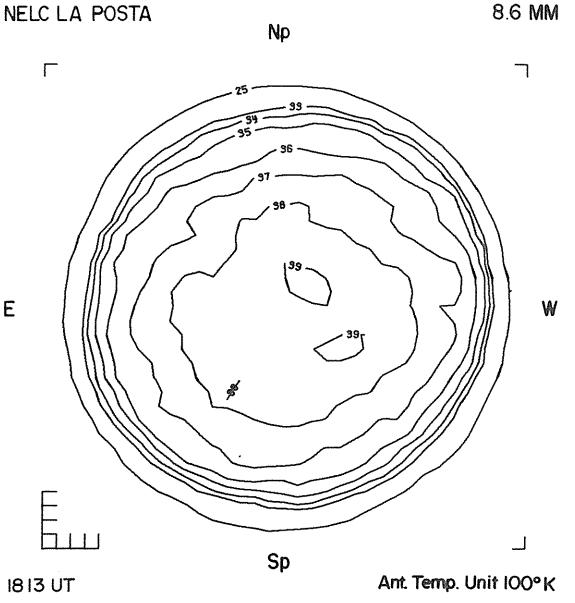
Levels
± 5
± 10
± 20
± 40
± 80

21
RAMEY AFB


Np
Hα
E
W
1045 UT
Sp


BOULDER
Np
SUNSPOTS
E
W
CORONA
NO DATA
LOMNICKY-STIT
NO DATA 215°-355°
Sp

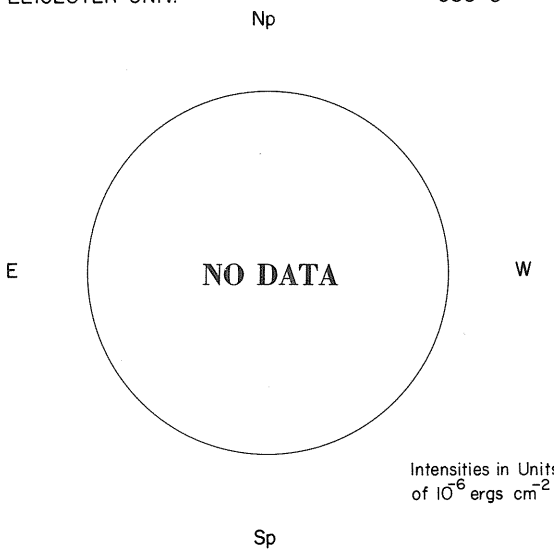

NELC LA POSTA
2.0 CM
Np
95
69
68
E
W
72
Sp
2003 UT
Ant. Temp. Unit 100°K


NELC LA POSTA
8.6 MM
Np
25
33
34
35
36
37
38
39
E
W
Sp
1813 UT
Ant. Temp. Unit 100°K

MAY 22, 1975 (P=-19.12, B_o=-1.89, L_o=226.84)

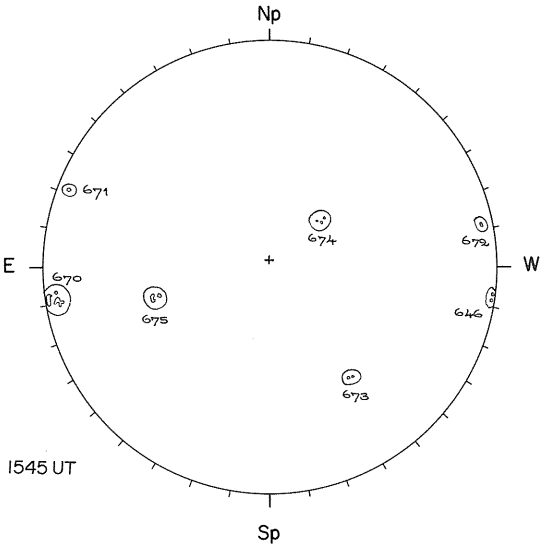
UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

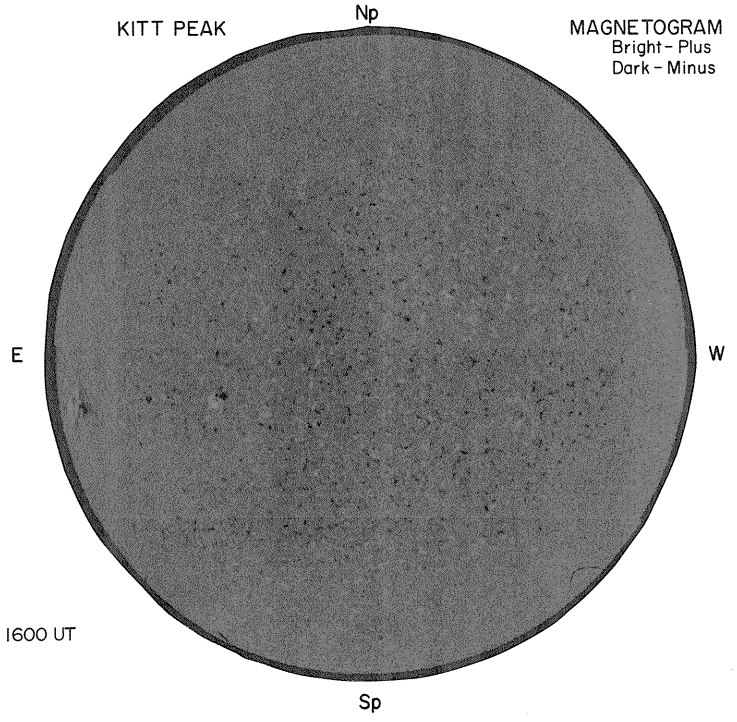


1545 UT

CALCIUM REPORT

FAIR	M
75 - 0300 - 2.5	

KITT PEAK

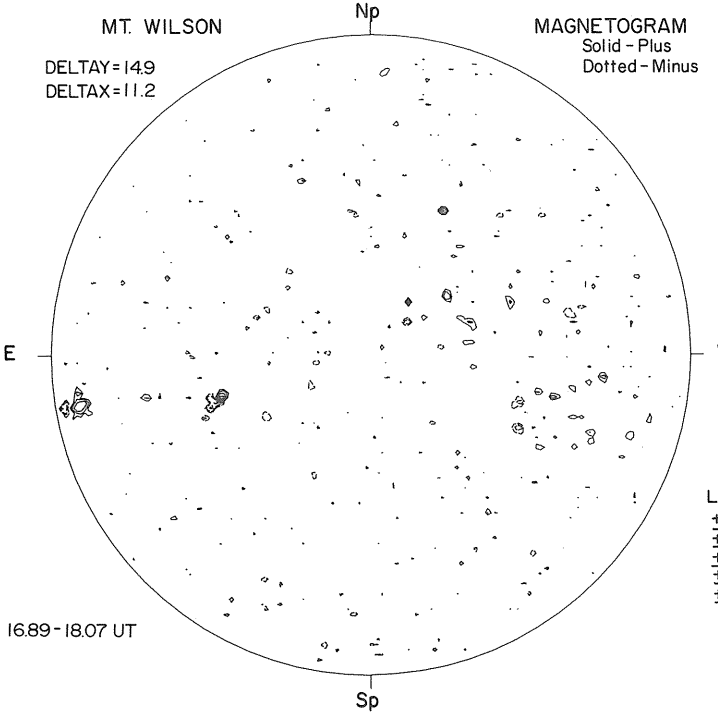


MAGNETOGRAM
Bright - Plus
Dark - Minus

1600 UT

MT. WILSON

DELTAY = 14.9
DELTAX = 11.2

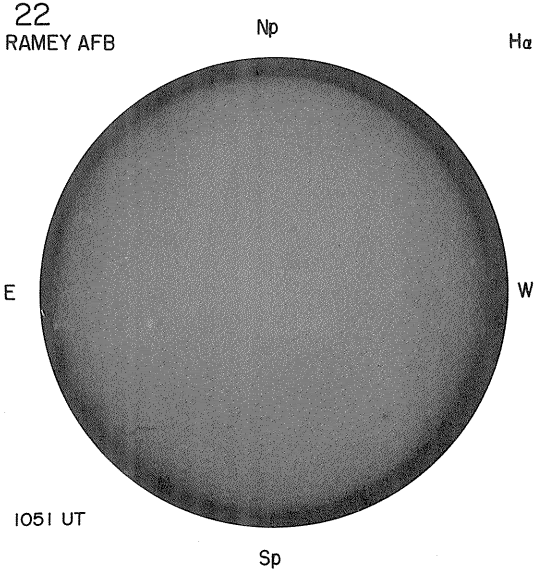


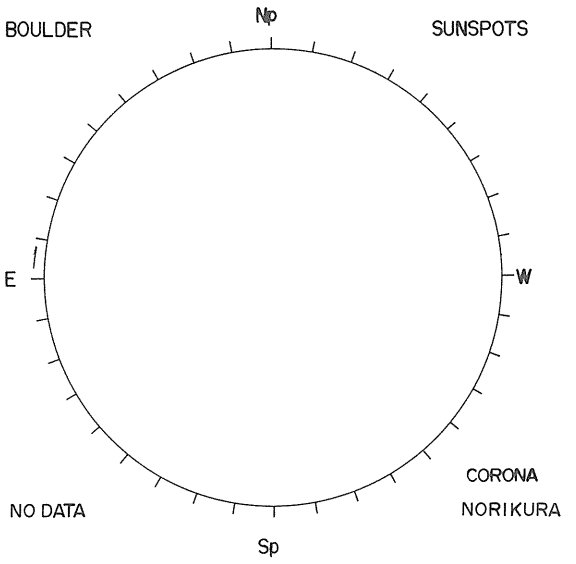
MAGNETOGRAM
Solid - Plus
Dotted - Minus

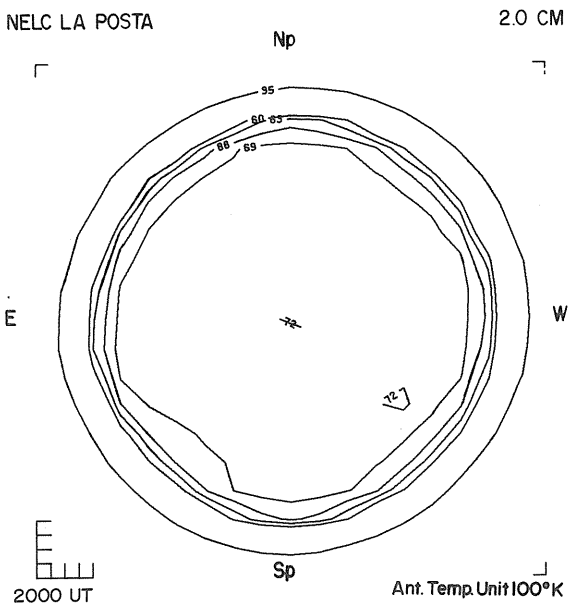
Levels
± 5
± 10
± 20
± 40
± 80

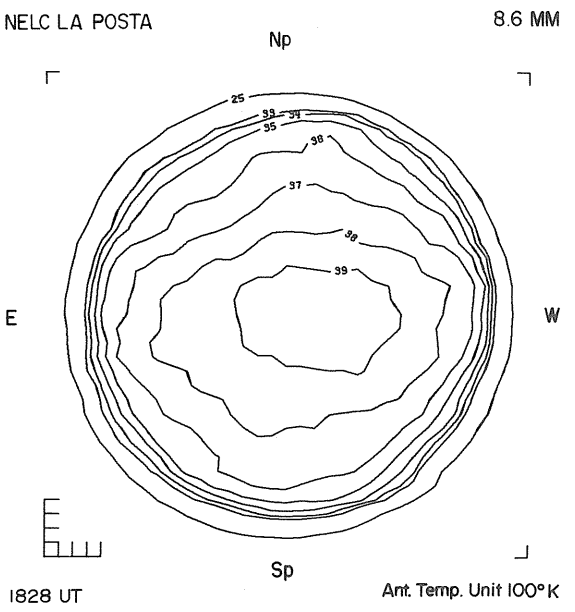
16.89 - 18.07 UT

22
RAMEY AFB


Np
Hα
E
W
1051 UT
Sp


BOULDER
Np
SUNSPOTS
E
W
CORONA
NORIKURA
NO DATA
Sp


NELC LA POSTA
2.0 CM
Np
95
60
65
66
69
72
72
E
W
Sp
2000 UT
Ant. Temp. Unit 100°K


NELC LA POSTA
8.6 MM
Np
25
33
34
35
36
37
38
39
E
W
Sp
1828 UT
Ant. Temp. Unit 100°K

MAY 23, 1975 (P=-18.81, B_o=-1.77, L_o=213.61)

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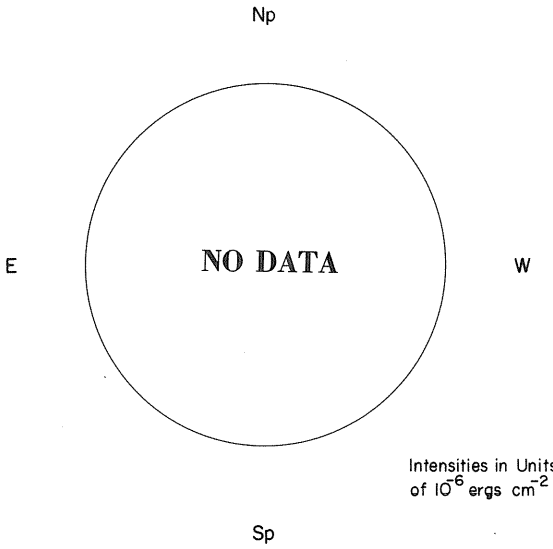
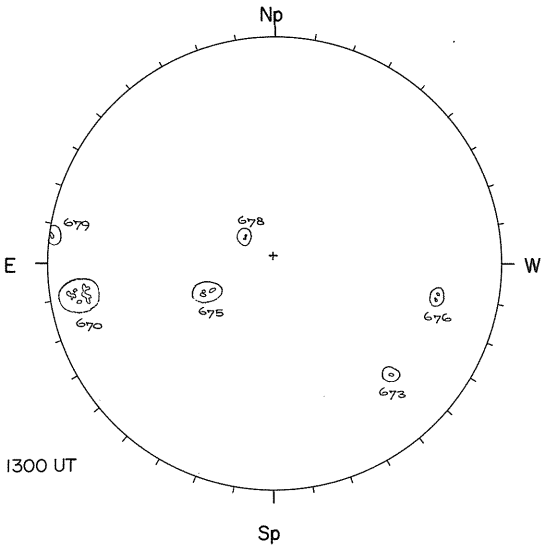
LEICESTER UNIV.

X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT



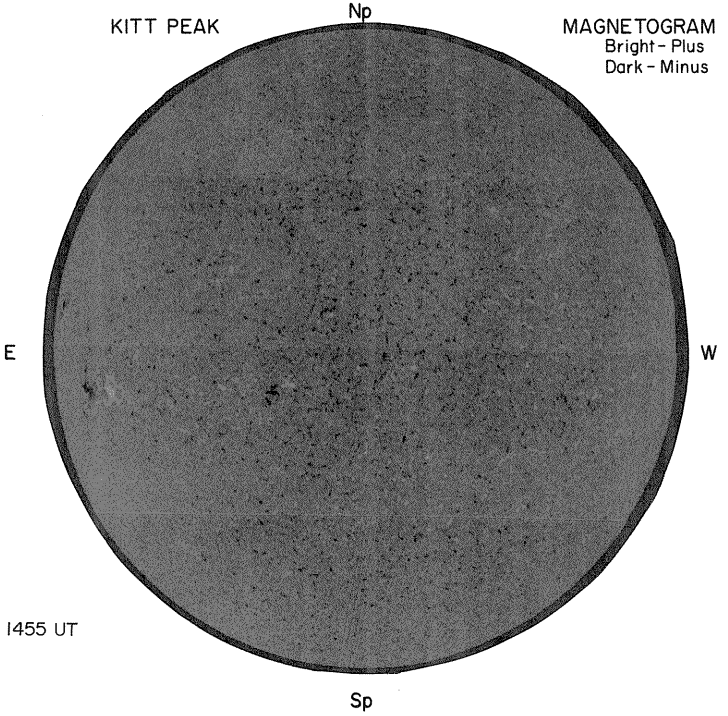
1300 UT

CALCIUM REPORT

FAIR | S

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

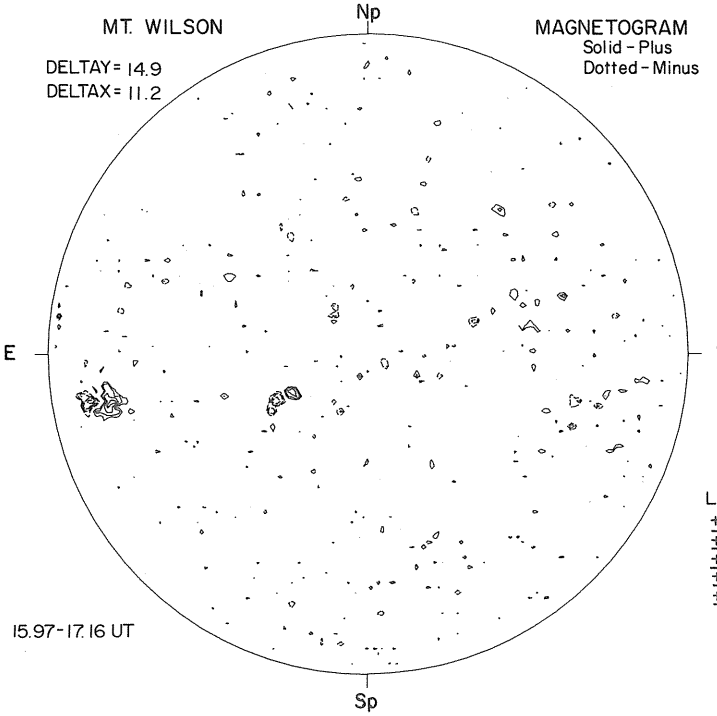


1455 UT

MT. WILSON

DELTAY = 14.9
DELTAX = 11.2

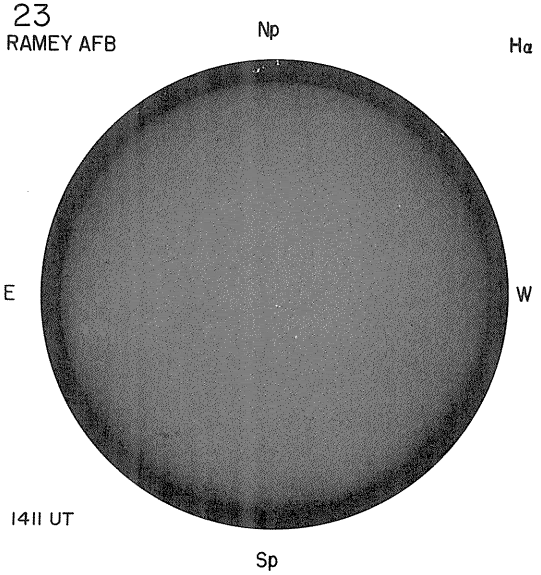
MAGNETOGRAM
Solid - Plus
Dotted - Minus

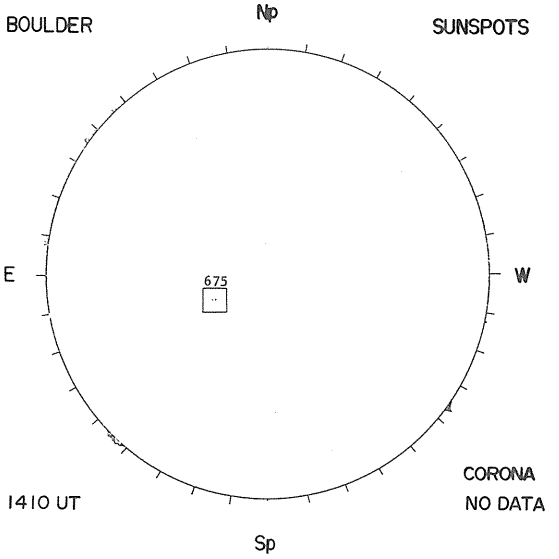


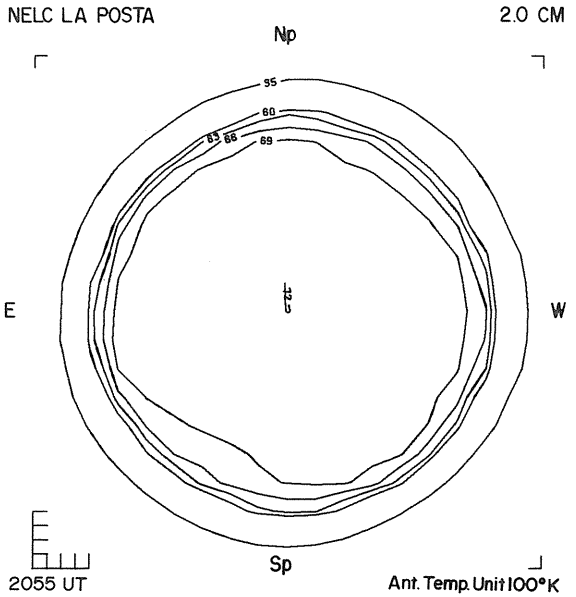
15.97-17.16 UT

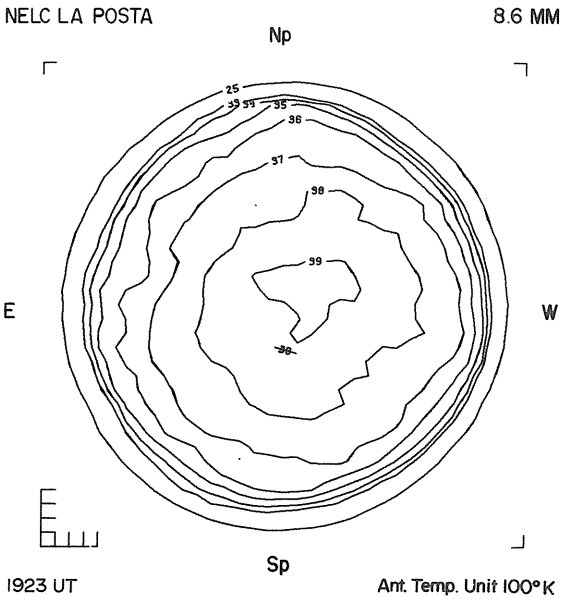
Levels
± 5
± 10
± 20
± 40
± 80

23
RAMEY AFB


Np
Hα
E
W
1411 UT
Sp


BOULDER
Np
SUNSPOTS
E
675
W
CORONA
NO DATA
1410 UT
Sp

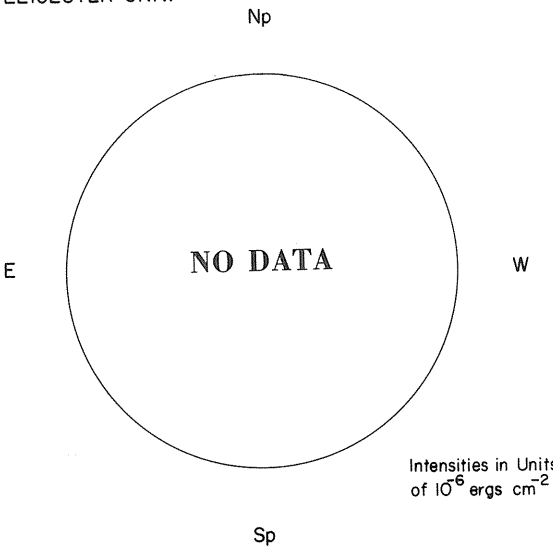

NELC LA POSTA
Np
2.0 CM
55
60
63
68
69
E
W
2055 UT
Sp
Ant. Temp. Unit 100°K


NELC LA POSTA
Np
8.6 MM
25
33
34
35
36
37
38
39
E
W
1923 UT
Sp
Ant. Temp. Unit 100°K

MAY 24, 1975 (P = -18.48, B_o = -1.65, L_o = 200.38)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

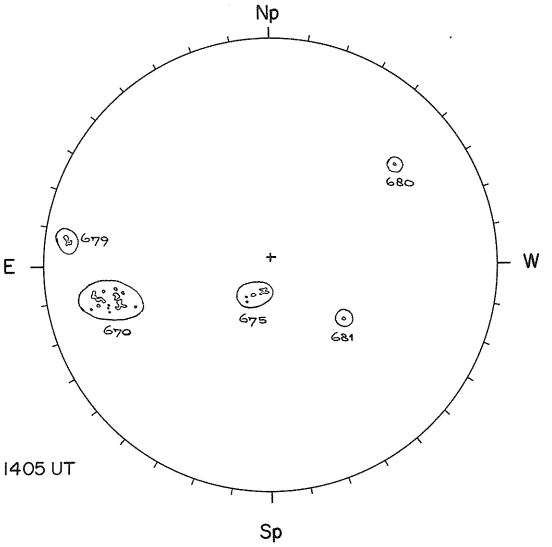
X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

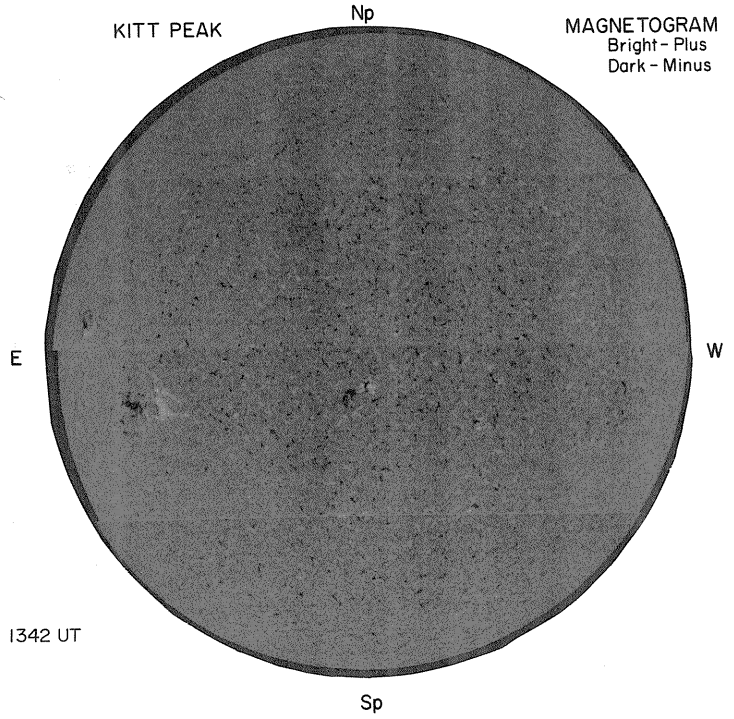


1405 UT

GOOD | M

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

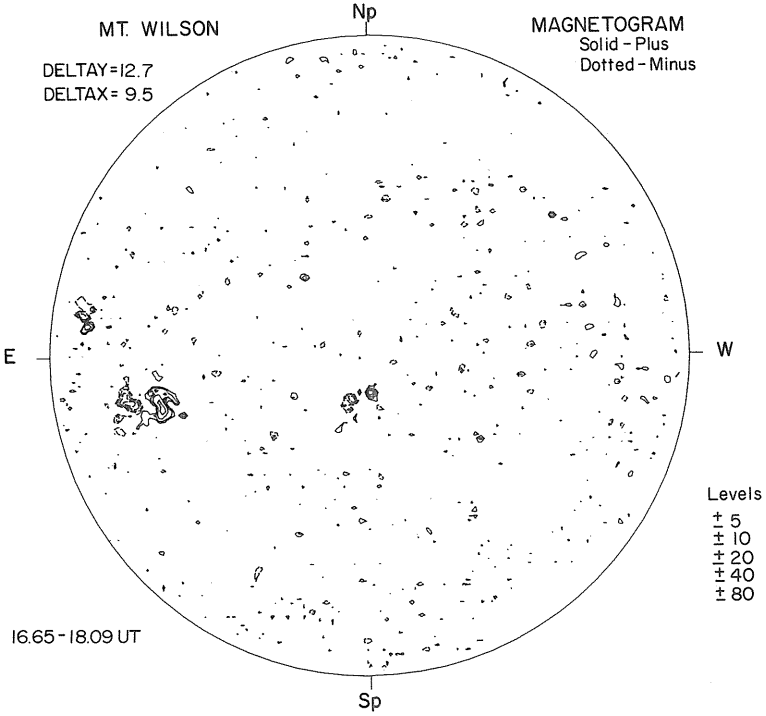


1342 UT

MT. WILSON

DELTAY=12.7
DELTAX= 9.5

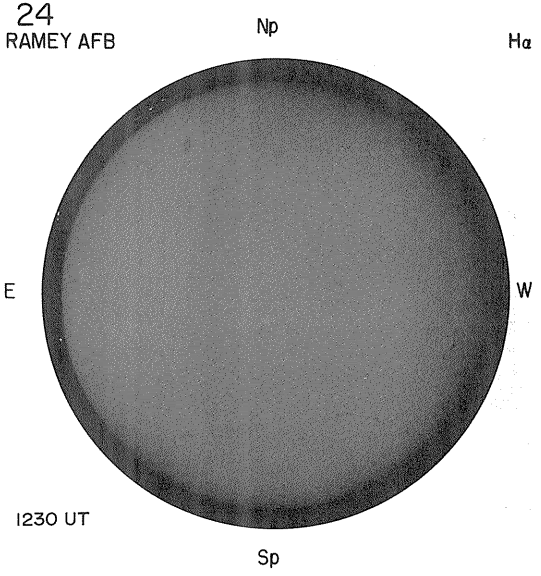
MAGNETOGRAM
Solid - Plus
Dotted - Minus

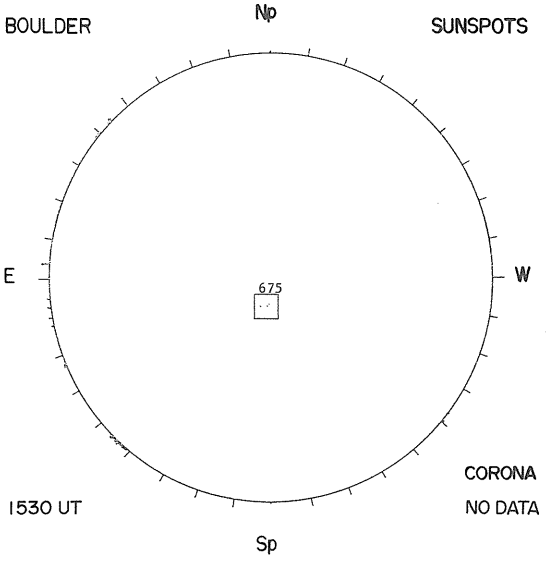


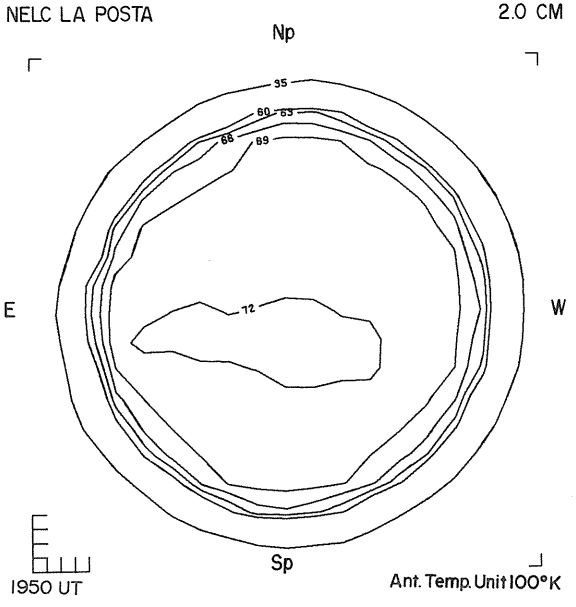
16.65 - 18.09 UT

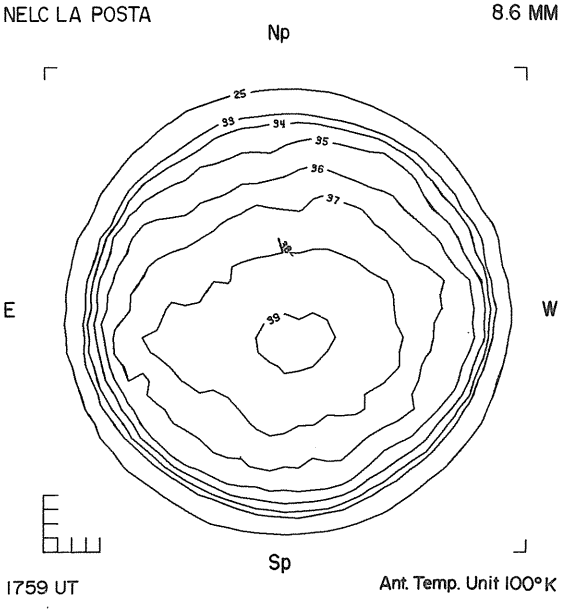
Levels
± 5
± 10
± 20
± 40
± 80

24
RAMEY AFB


Np
Hα
E
W
1230 UT
Sp


BOULDER
Np
SUNSPOTS
E
W
675
CORONA
NO DATA
1530 UT
Sp


NELC LA POSTA
2.0 CM
Np
35
60
63
66
69
72
E
W
Sp
1950 UT
Ant. Temp. Unit 100°K


NELC LA POSTA
8.6 MM
Np
25
93
94
95
96
97
98
99
E
W
Sp
1759 UT
Ant. Temp. Unit 100°K

MAY 25, 1975 (P = -18.15, B_o = -1.53, L_o = 187.15)

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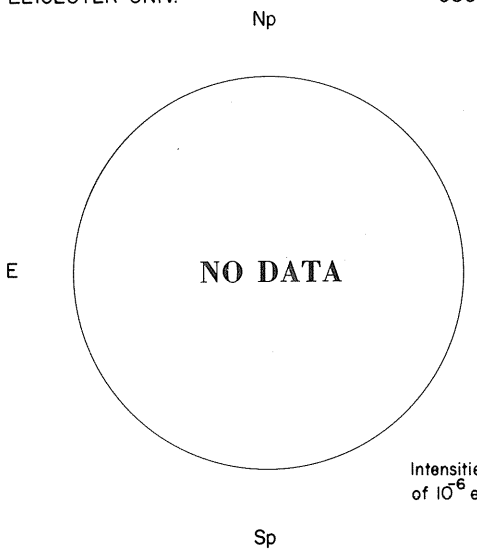
LEICESTER UNIV.

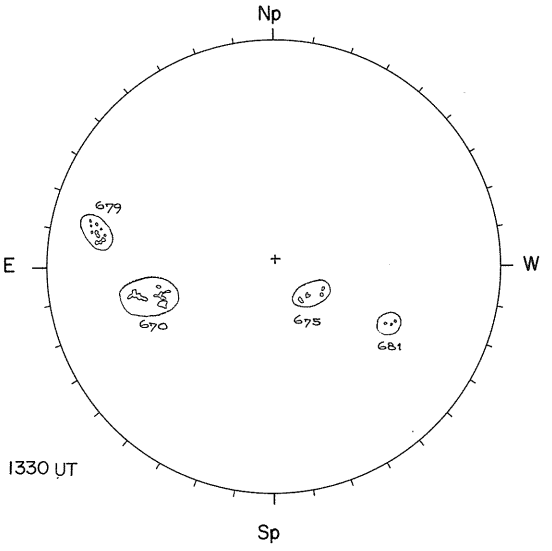
X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

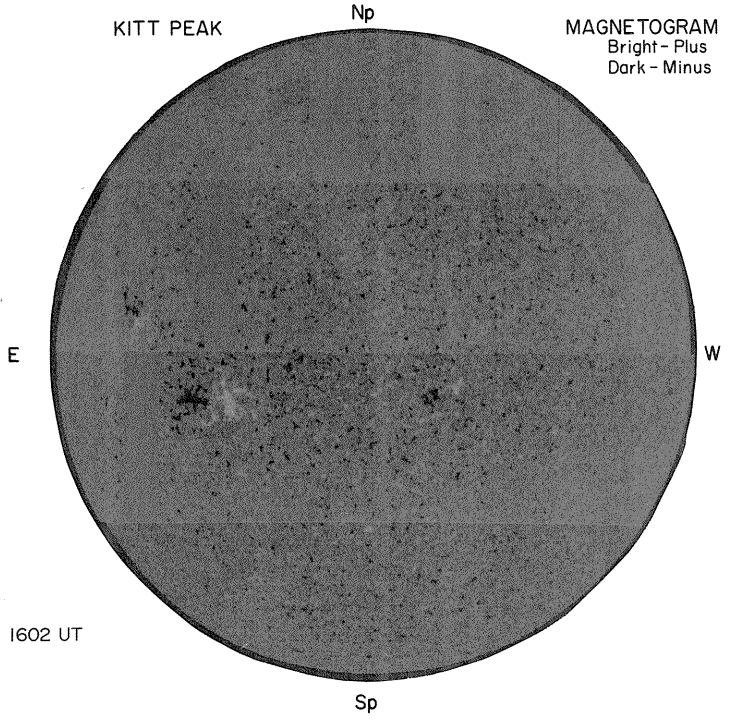


1330 UT

FAIR | M

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

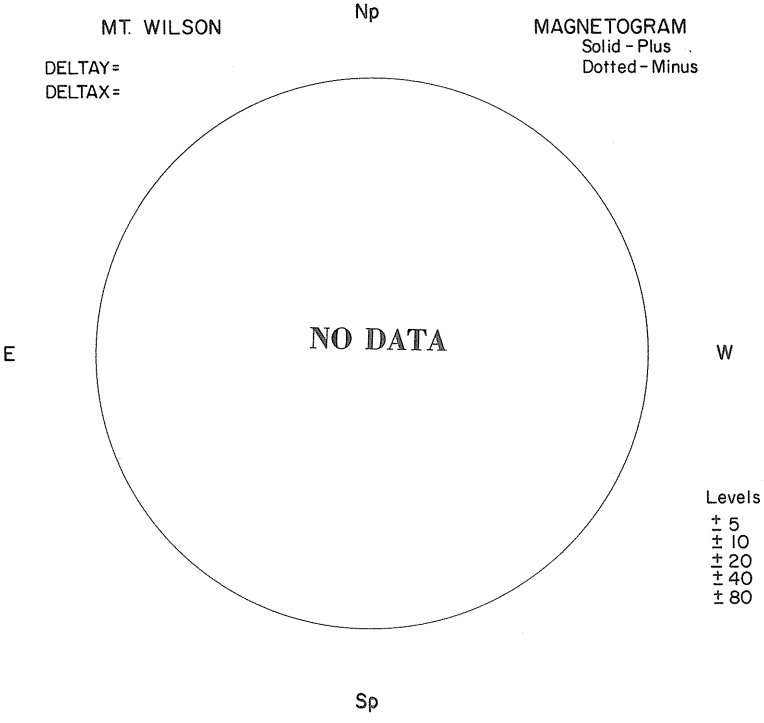


1602 UT

MT. WILSON

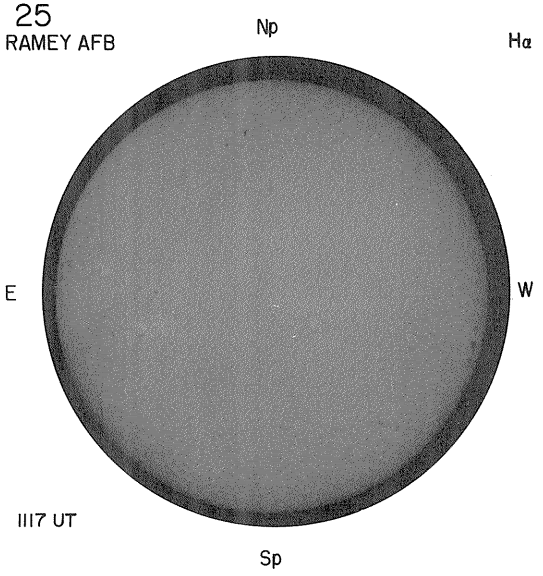
DELTAY=
DELTAX=

MAGNETOGRAM
Solid - Plus
Dotted - Minus

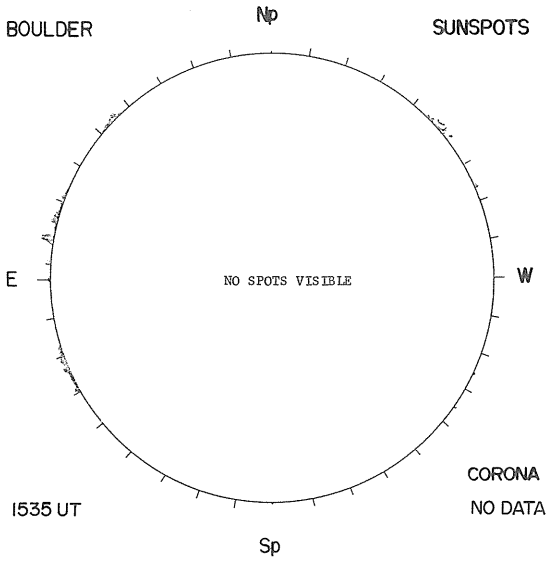


Levels
± 5
± 10
± 20
± 40
± 80

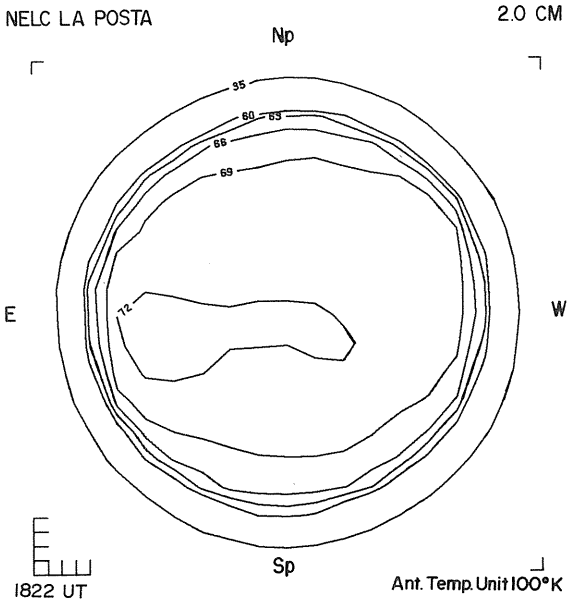
25
RAMEY AFB



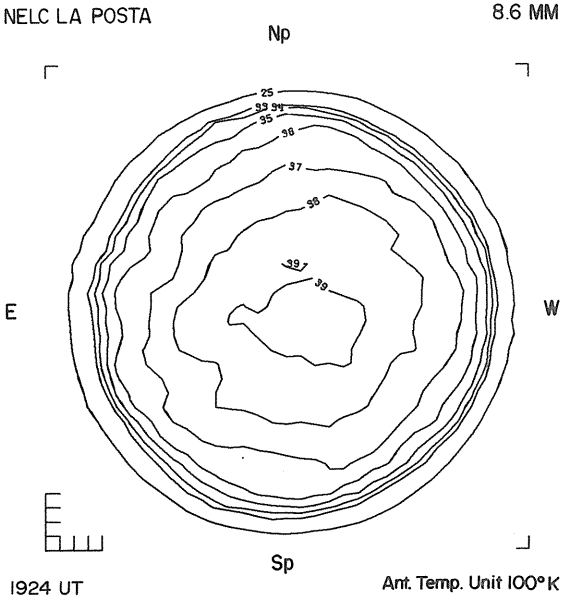
BOULDER



NELC LA POSTA



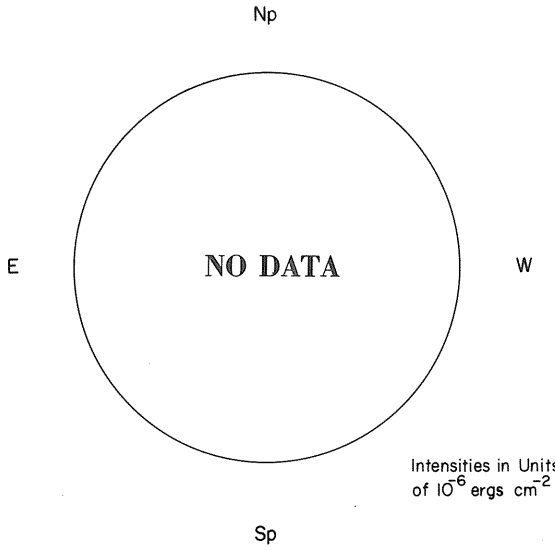
NELC LA POSTA



MAY 26, 1975 (P=-17.82, B_o=-1.41, L_o=173.91)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

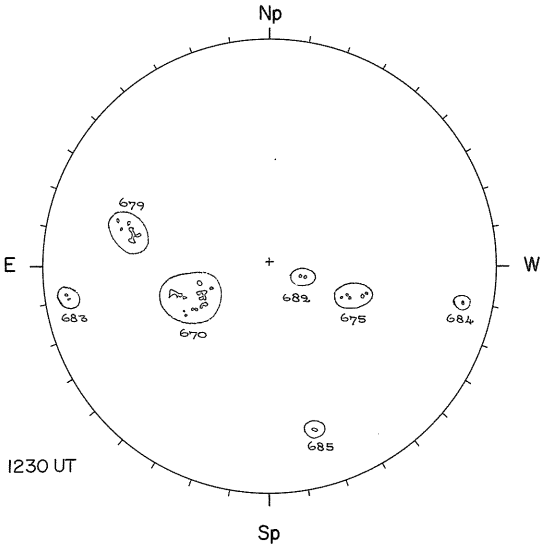
X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

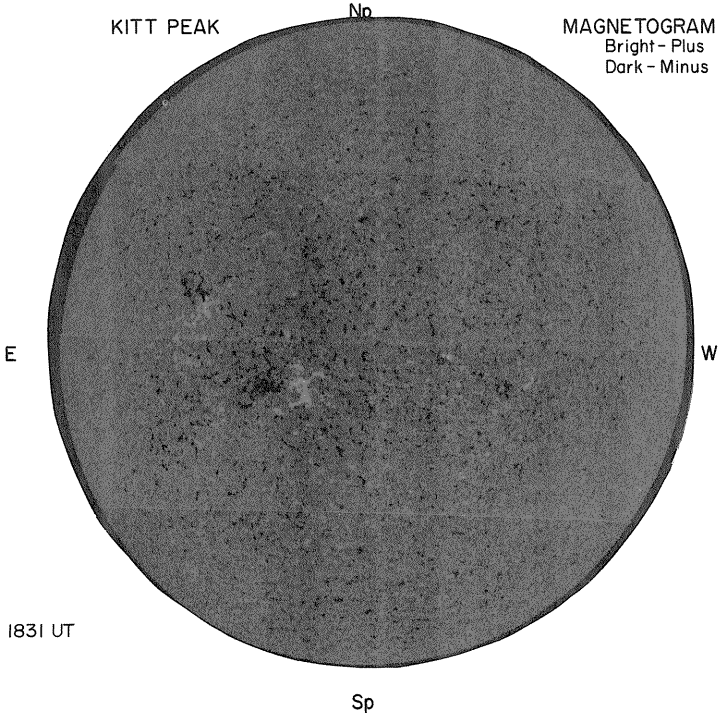


1230 UT

FAIR | M

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

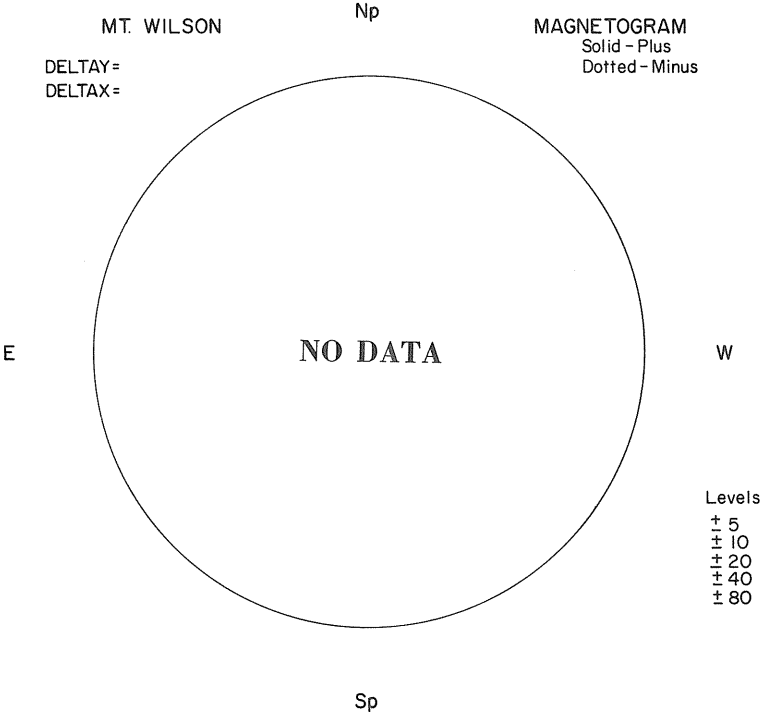


1831 UT

MT. WILSON

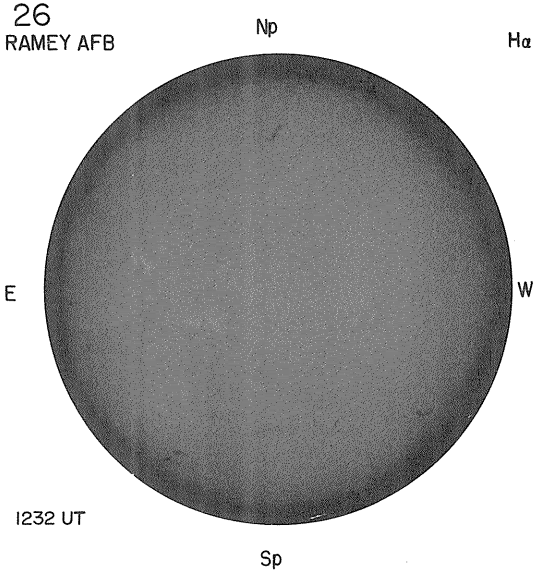
DELTAY=
DELTAX=

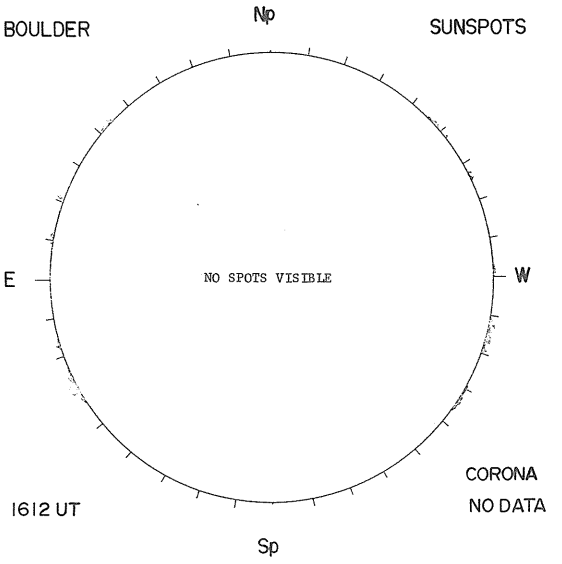
MAGNETOGRAM
Solid - Plus
Dotted - Minus

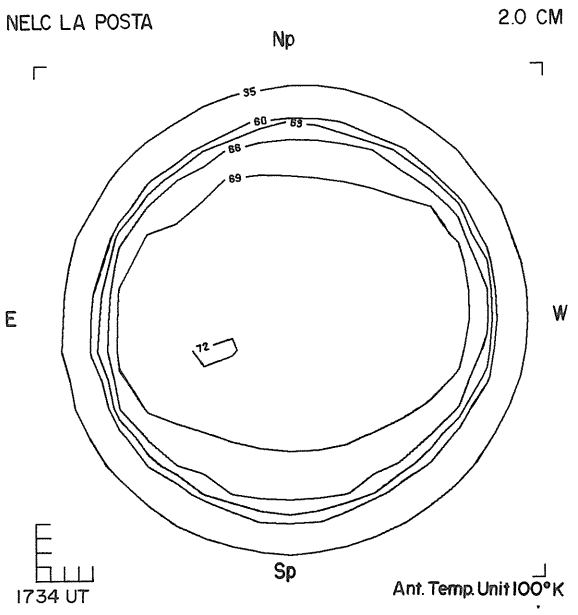


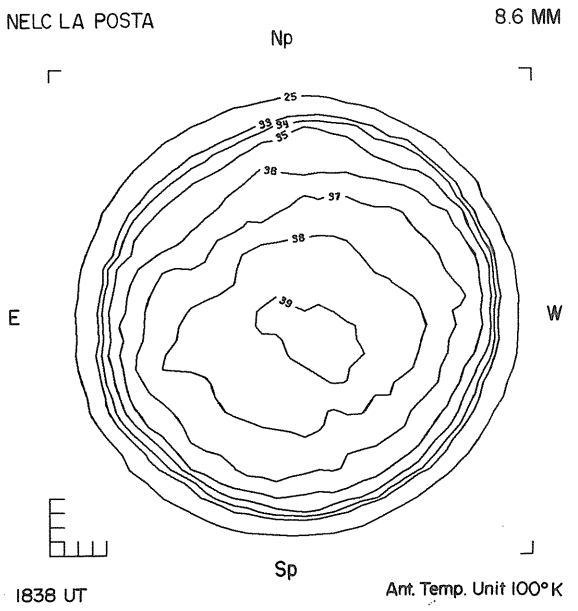
Levels
± 5
± 10
± 20
± 40
± 80

26
RAMEY AFB


Np
Hα
E
W
1232 UT
Sp


BOULDER
Np
SUNSPOTS
E
NO SPOTS VISIBLE
W
CORONA
NO DATA
1612 UT
Sp

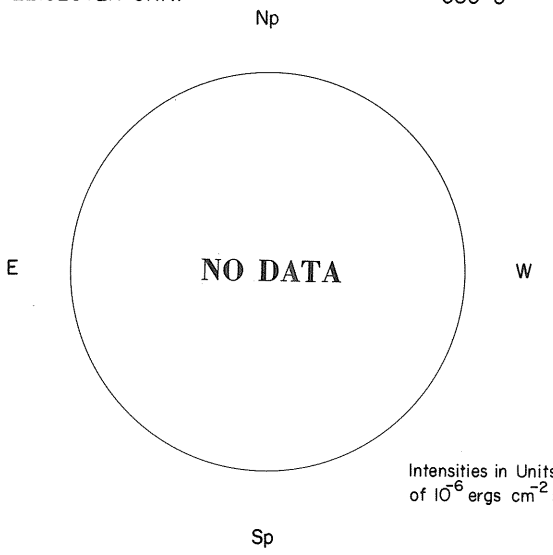

NELC LA POSTA
2.0 CM
Np
35
60
63
66
69
72
E
W
Sp
1734 UT
Ant. Temp. Unit 100°K


NELC LA POSTA
8.6 MM
Np
25
33
34
35
36
37
38
39
E
W
Sp
1838 UT
Ant. Temp. Unit 100°K

MAY 27, 1975 (P=-17.48, B_o=-1.29, L_o=160.68)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

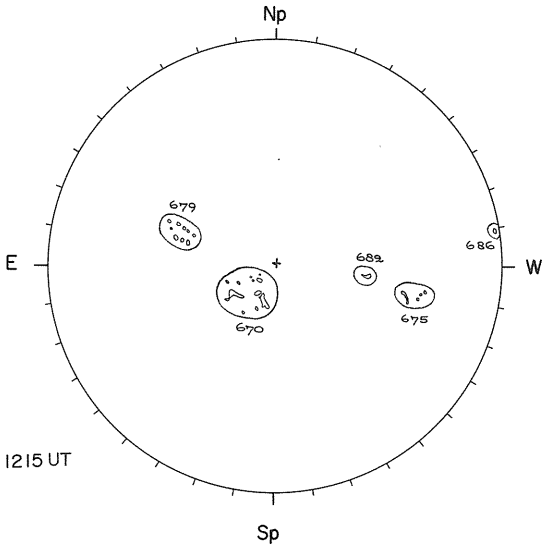
X-RAY
OSO-5



Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

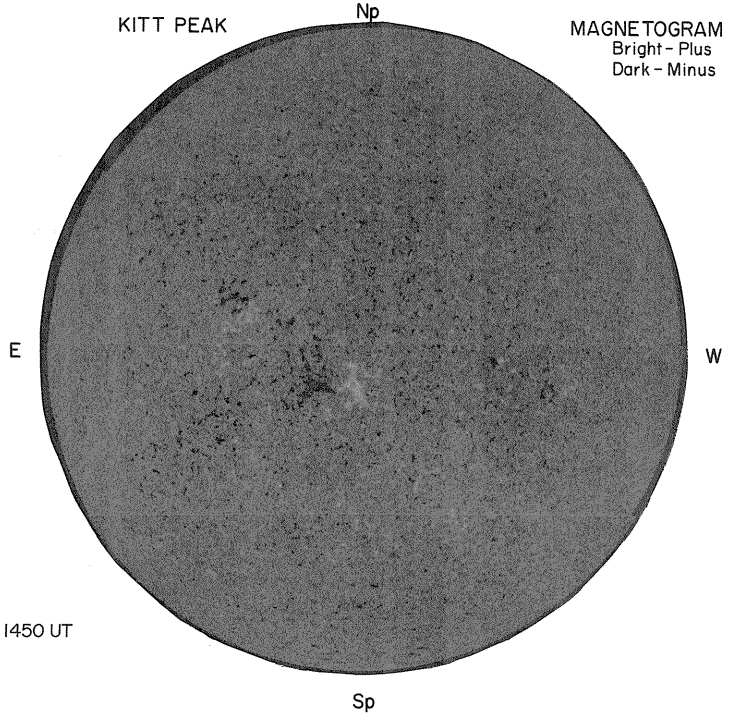
CALCIUM REPORT



1215 UT

GOOD | S

KITT PEAK

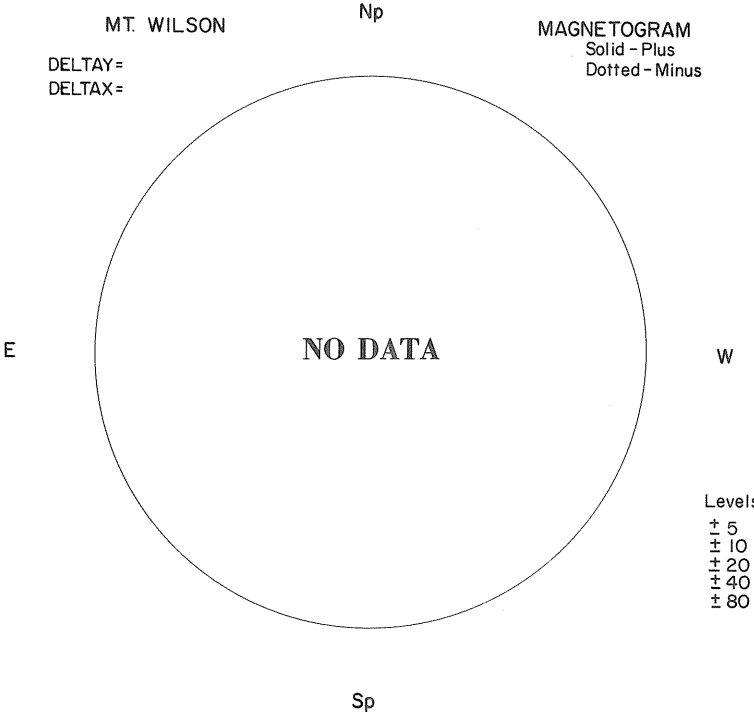


MAGNETOGRAM
Bright - Plus
Dark - Minus

1450 UT

MT. WILSON

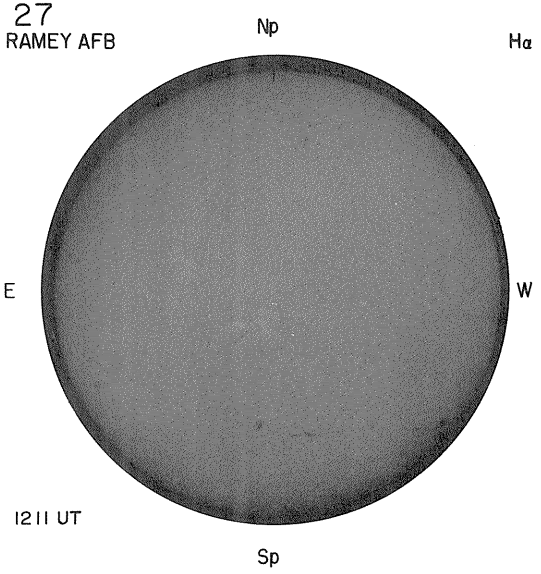
DELTAY=
DELTAX=



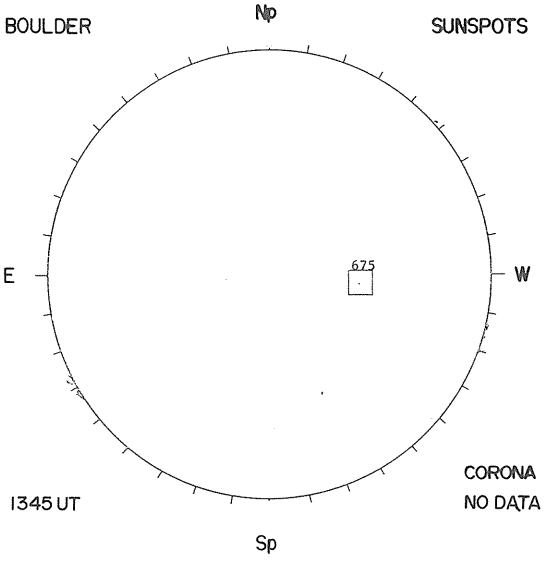
MAGNETOGRAM
Solid - Plus
Dotted - Minus

Levels
± 5
± 10
± 20
± 40
± 80

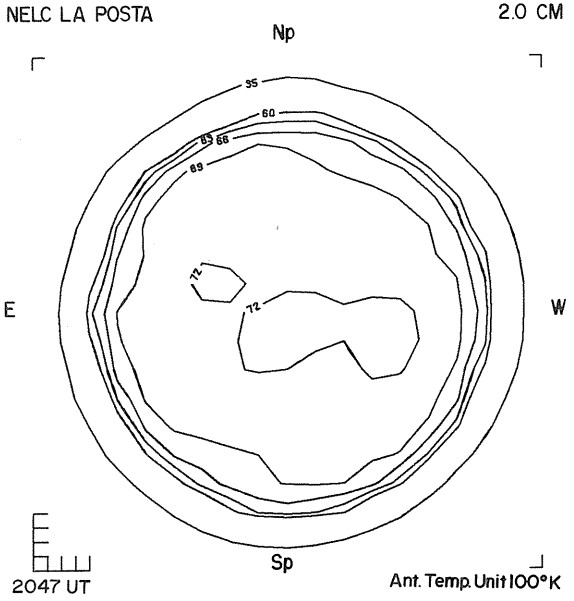
27
RAMEY AFB



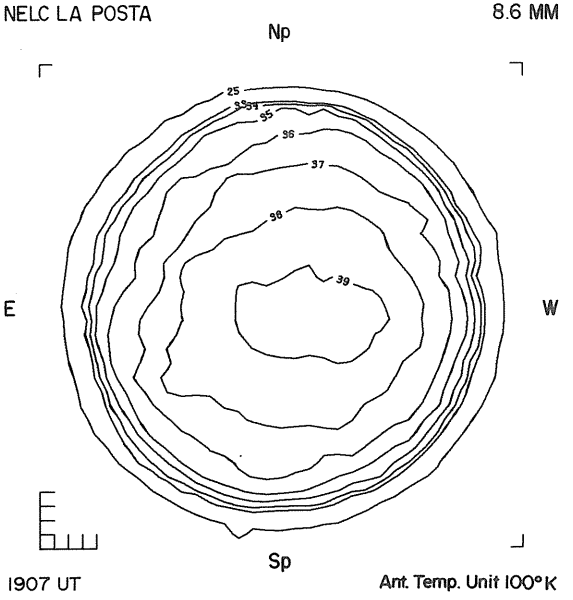
BOULDER



NELC LA POSTA



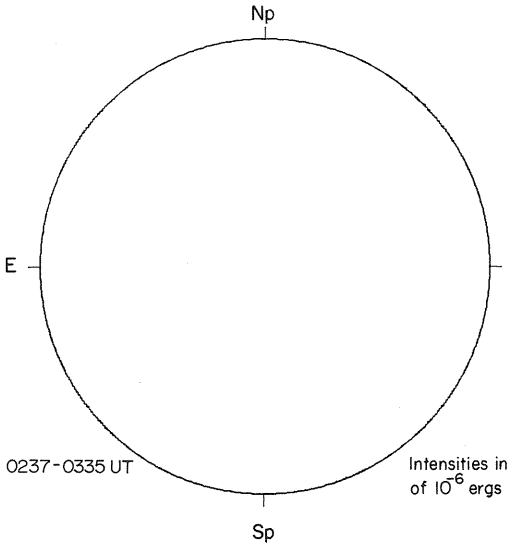
NELC LA POSTA



MAY 28, 1975 (P=-17.13, B_o=-1.18, L_o=147.45)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

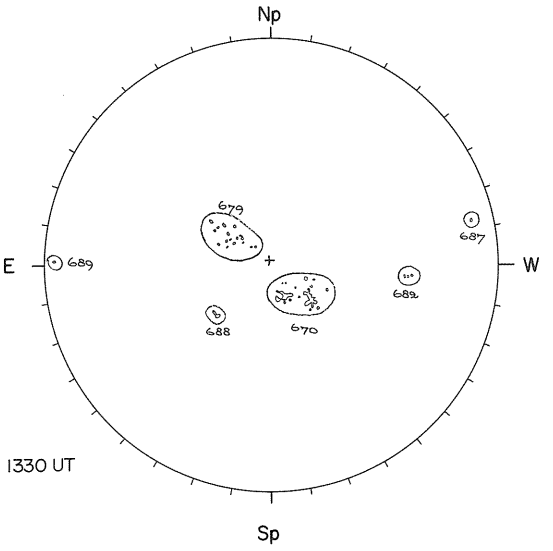


0237-0335 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

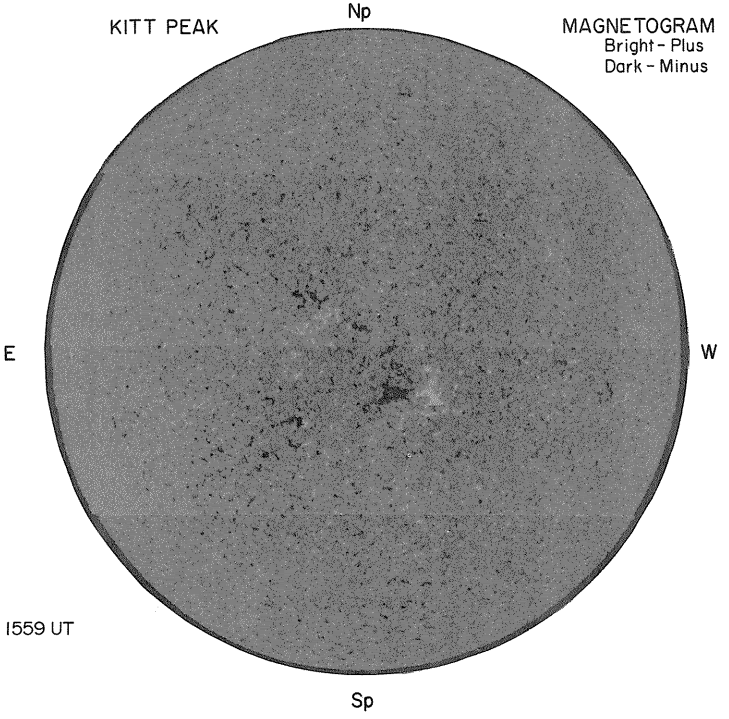
CALCIUM REPORT



1330 UT

V. GOOD M

KITT PEAK

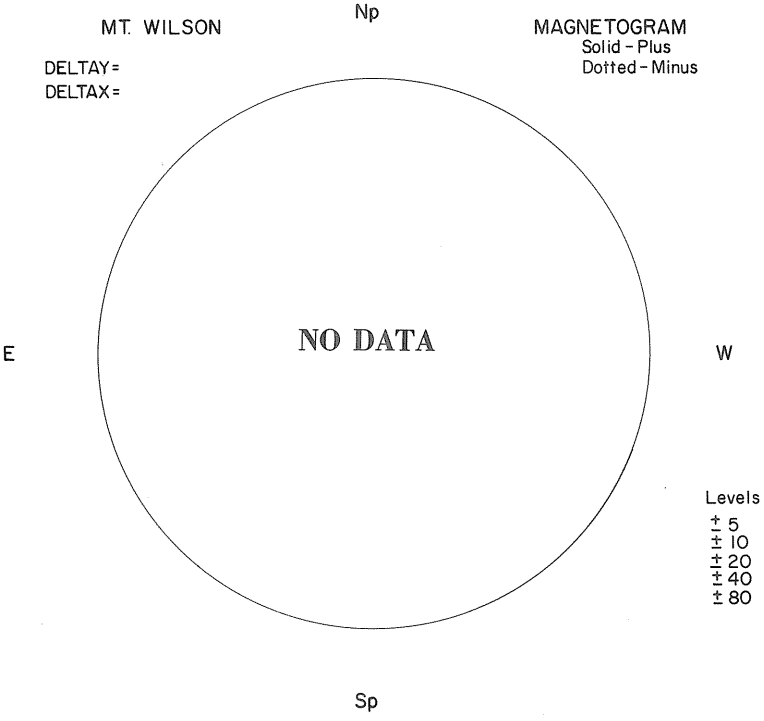


1559 UT

MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

DELTAY=
DELTAX=

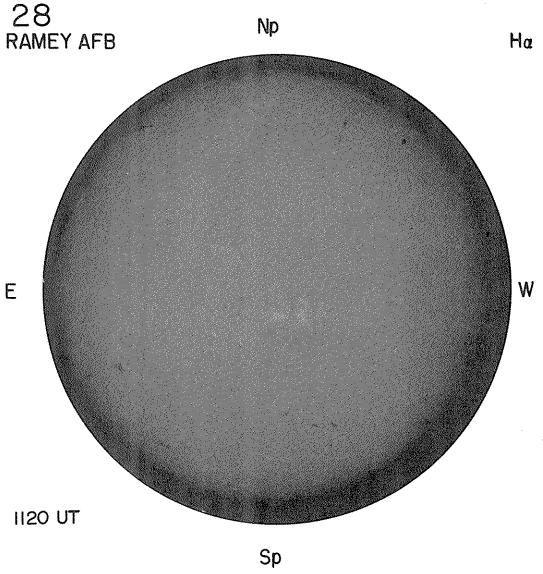


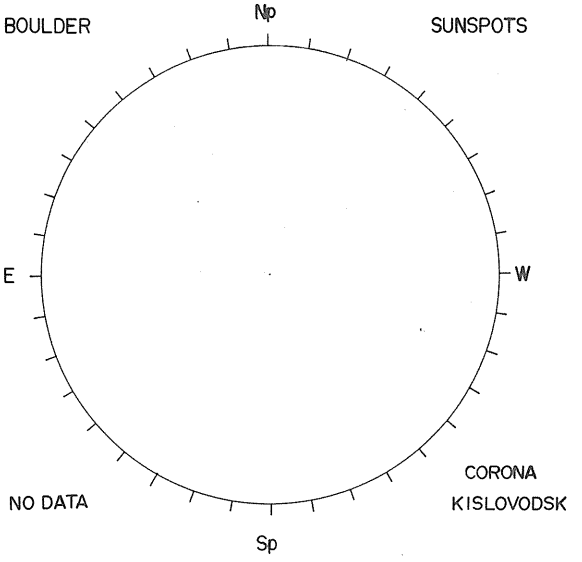
MAGNETOGRAM
Solid - Plus
Dotted - Minus

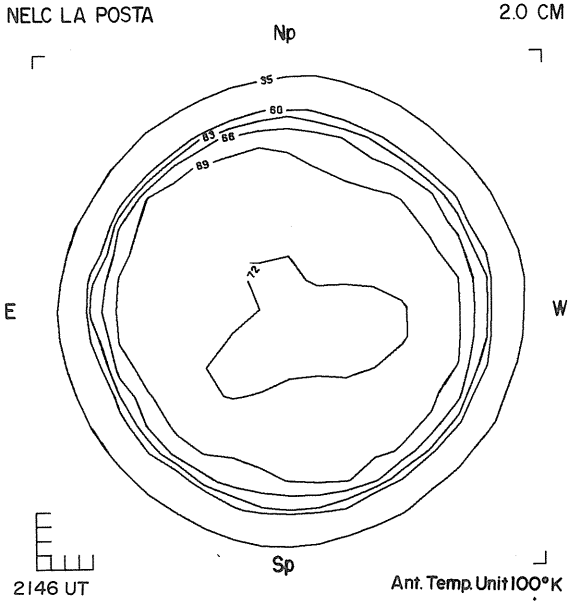
Levels
± 5
± 10
± 20
± 40
± 80

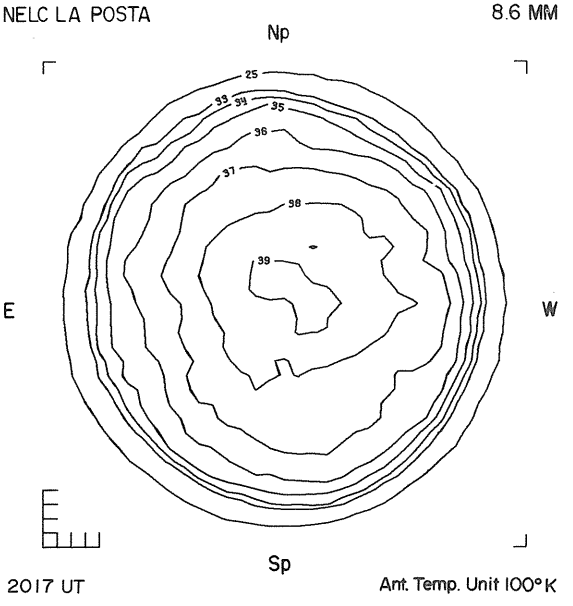
28

RAMEY AFB


Np
Hα
E
W
1120 UT
Sp


BOULDER
Np
SUNSPOTS
E
W
CORONA
KISLOVODSK
NO DATA
Sp

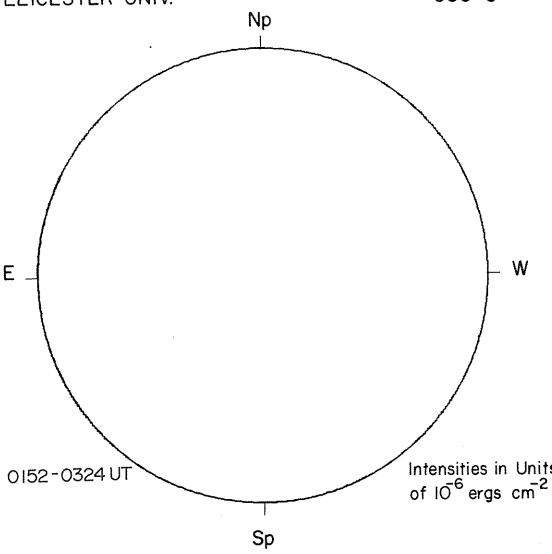

NELC LA POSTA
2.0 CM
Np
35
60
65
66
69
72
E
W
Sp
2146 UT
Ant. Temp. Unit 100°K


NELC LA POSTA
8.6 MM
Np
25
33
34
35
36
37
38
39
E
W
Sp
2017 UT
Ant. Temp. Unit 100°K

MAY 29, 1975 (P=-16.78, B_o=-1.06, L_o=134.22)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

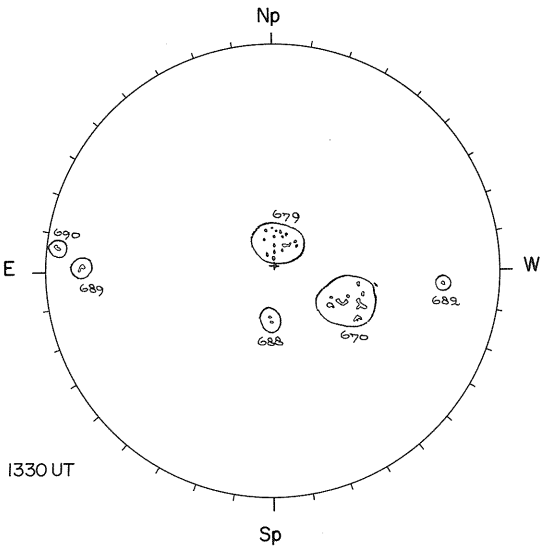


0152-0324 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

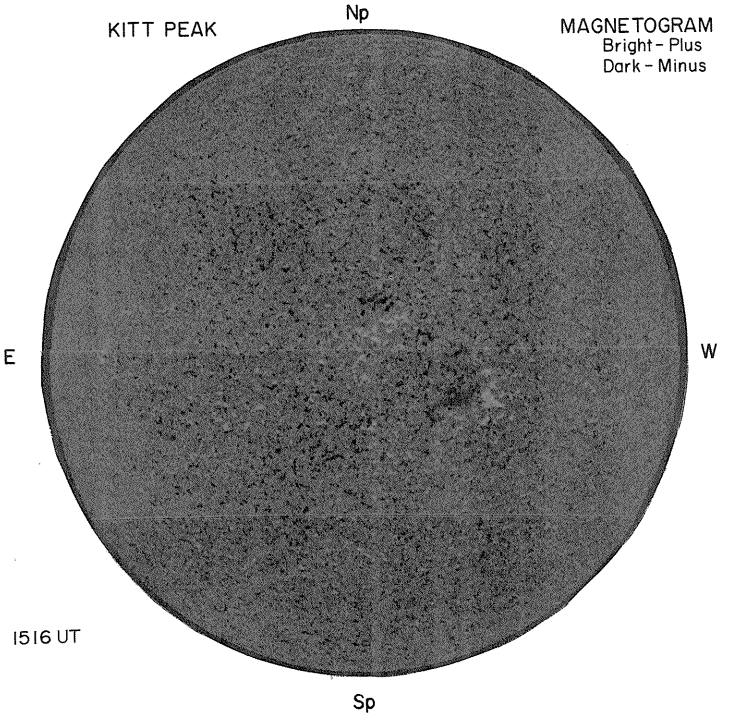
CALCIUM REPORT



1330 UT

FAIR | M

KITT PEAK

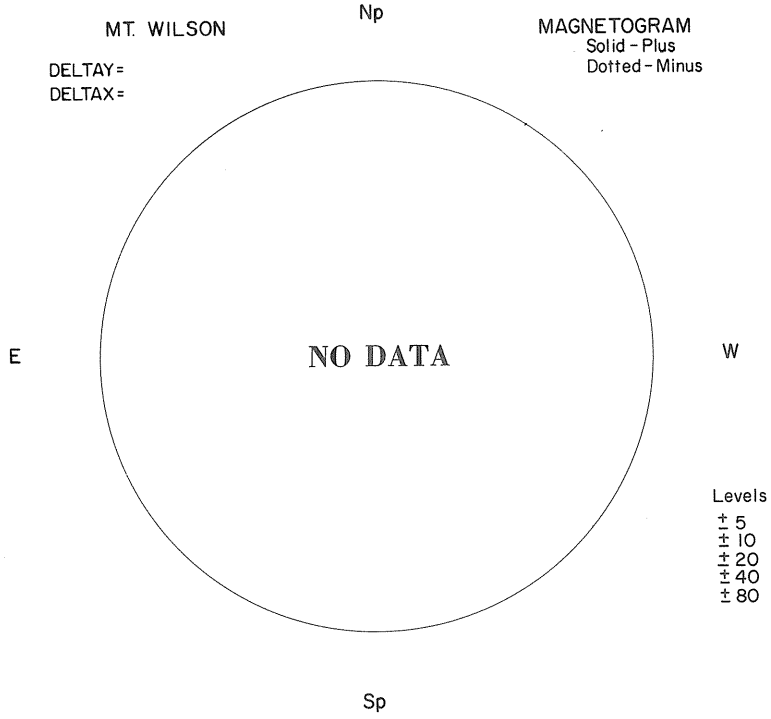


1516 UT

MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

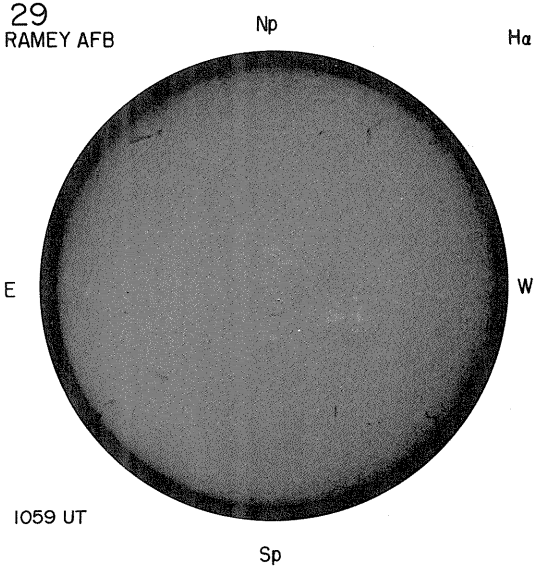
DELTAY=
DELTAX=

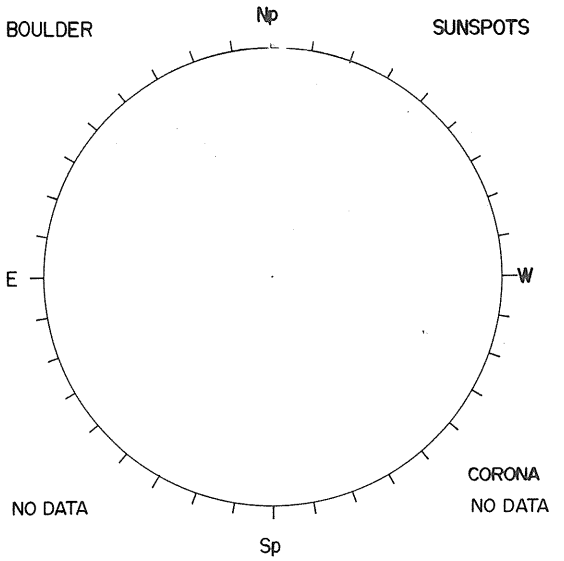


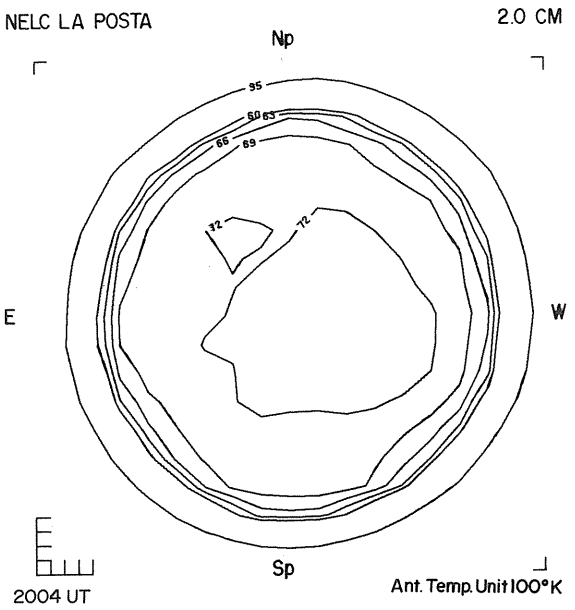
MAGNETOGRAM
Solid - Plus
Dotted - Minus

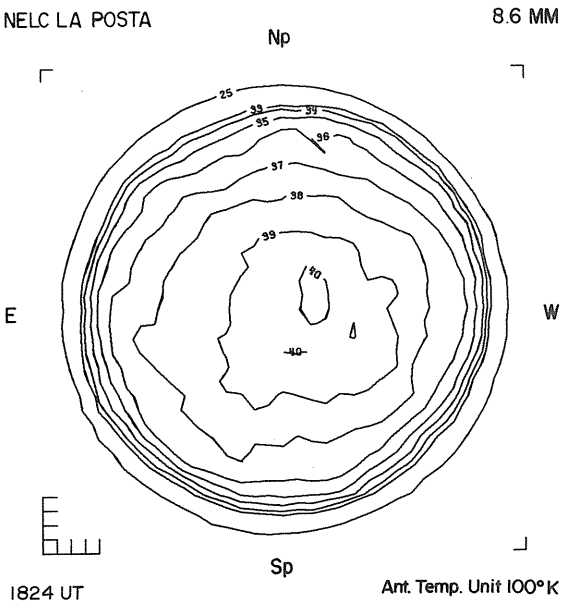
Levels
± 5
± 10
± 20
± 40
± 80

29
RAMEY AFB


Np
Hα
E
W
1059 UT
Sp


BOULDER
Np
SUNSPOTS
E
W
CORONA
NO DATA
NO DATA
Sp

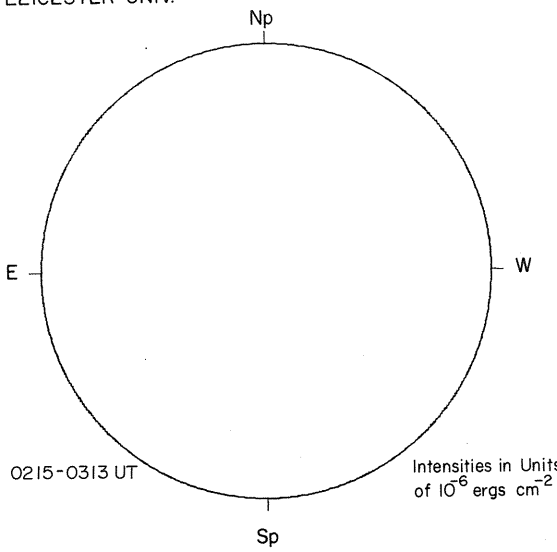

NELC LA POSTA
2.0 CM
Np
95
60
63
66
69
72
72
E
W
Sp
2004 UT
Ant. Temp. Unit 100°K


NELC LA POSTA
8.6 MM
Np
25
33
34
35
36
37
38
39
40
40
E
W
Sp
1824 UT
Ant. Temp. Unit 100°K

MAY 30, 1975 (P=-16.42, B_o=-0.94, L_o=120.99)

UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

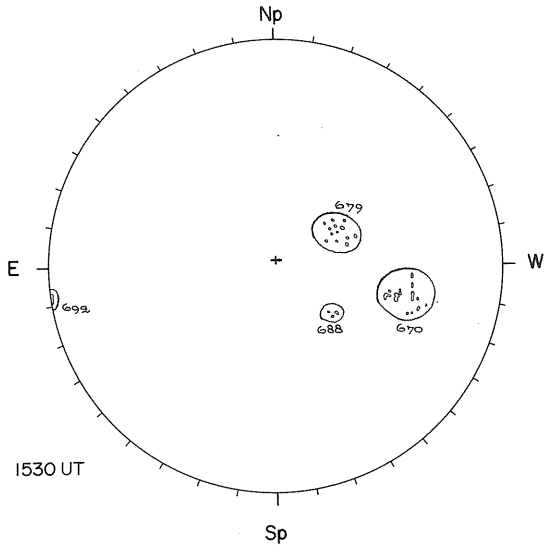


0215-0313 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

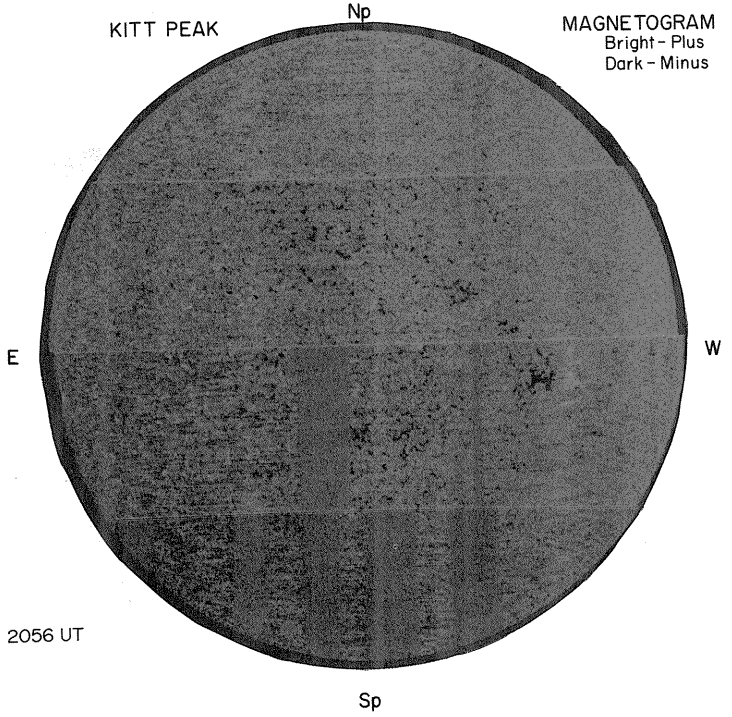


FAIR | M

1530 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

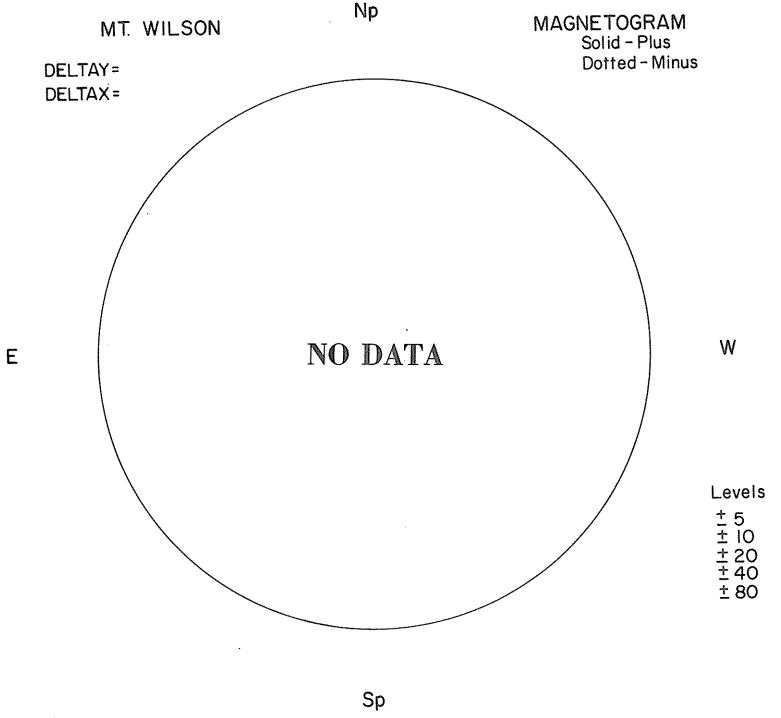


2056 UT

MT. WILSON

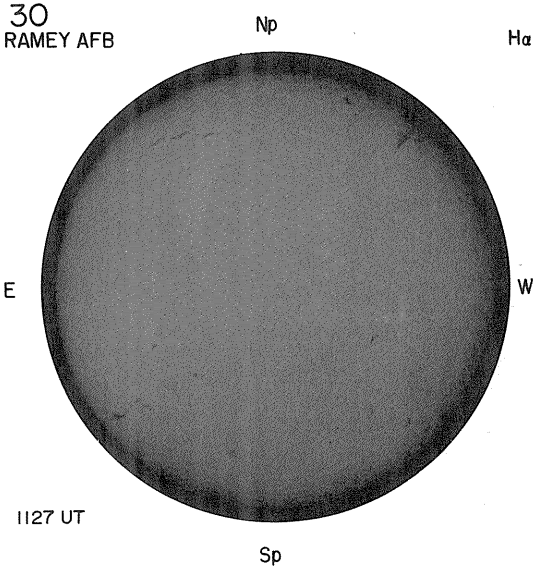
DELTAY=
DELTAX=

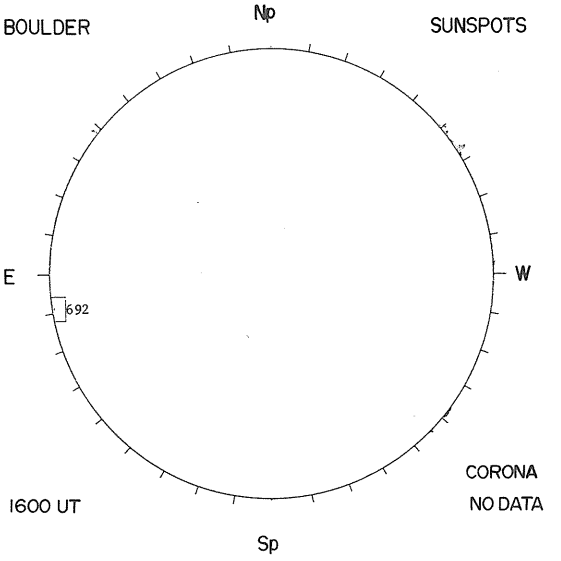
MAGNETOGRAM
Solid - Plus
Dotted - Minus

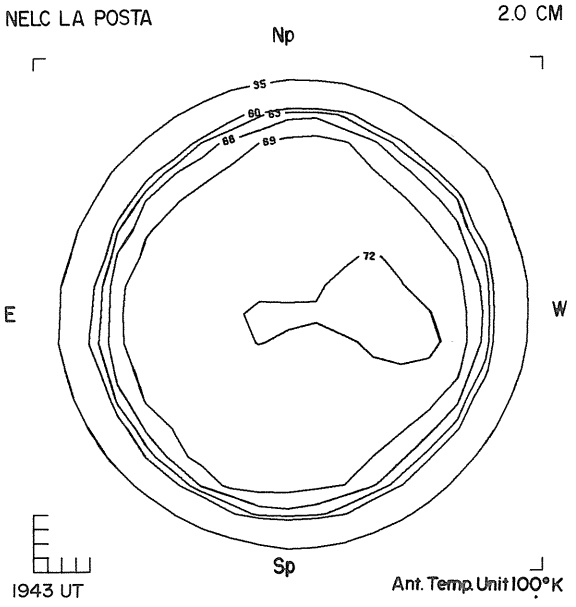


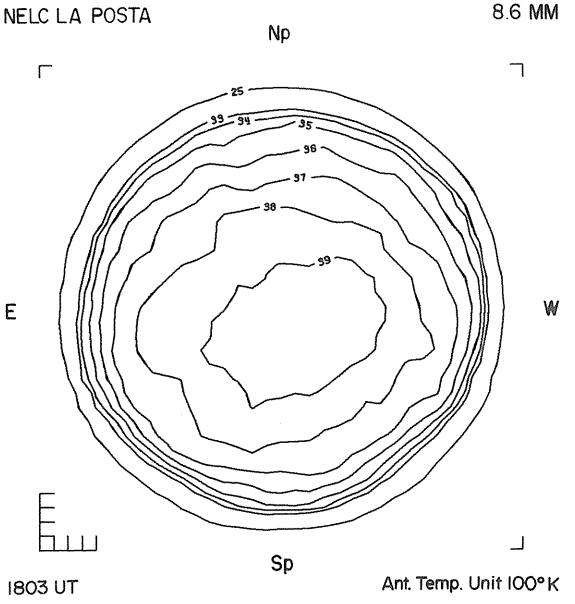
Levels
± 5
± 10
± 20
± 40
± 80

30
RAMEY AFB


Np
Hα
E
W
1127 UT
Sp


BOULDER
Np
SUNSPOTS
E
W
692
CORONA
NO DATA
1600 UT
Sp


NELC LA POSTA
2.0 CM
Np
35
60
63
66
69
72
E
W
Sp
1943 UT
Ant. Temp. Unit 100°K


NELC LA POSTA
8.6 MM
Np
25
33
34
35
36
37
38
39
E
W
Sp
1803 UT
Ant. Temp. Unit 100°K

MAY 31, 1975 (P=-16.06, B_o=-0.82, L_o=107.75)

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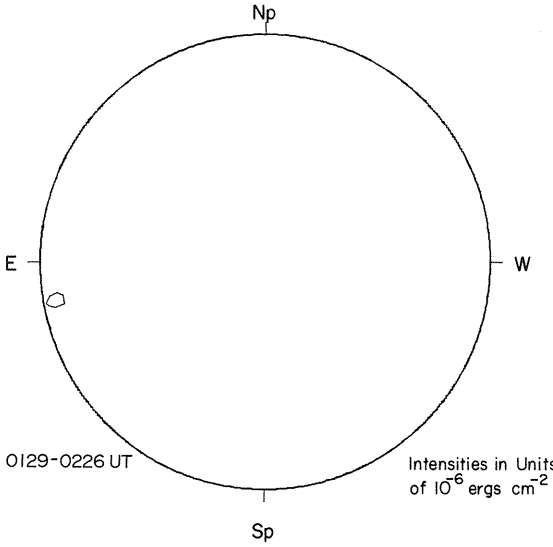
LEICESTER UNIV.

X-RAY
OSO-5

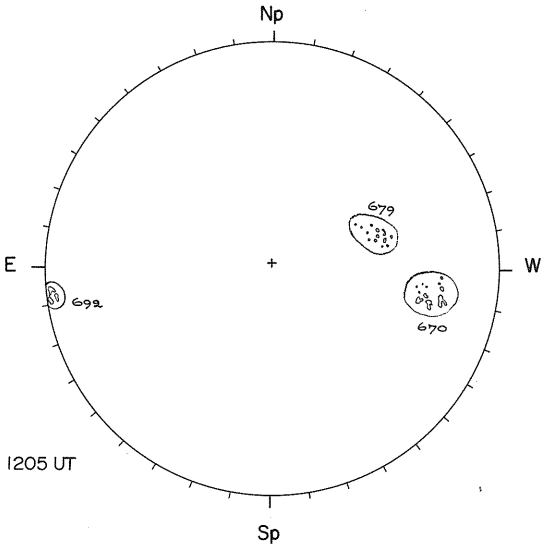


0129-0226 UT

Intensities in Units of 10^{-6} ergs cm^{-2} sec^{-1}

McMATH-HULBERT

CALCIUM REPORT

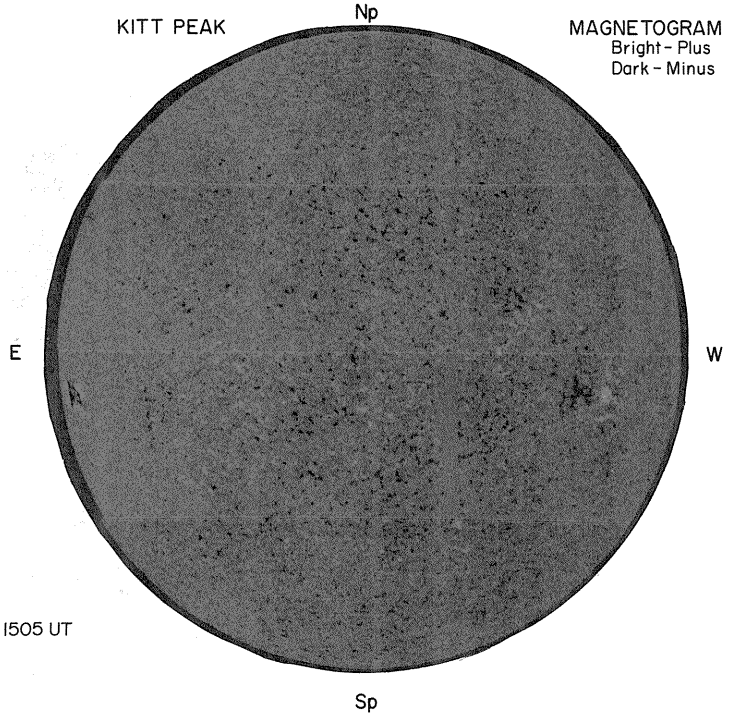


FAIR | M

1205 UT

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

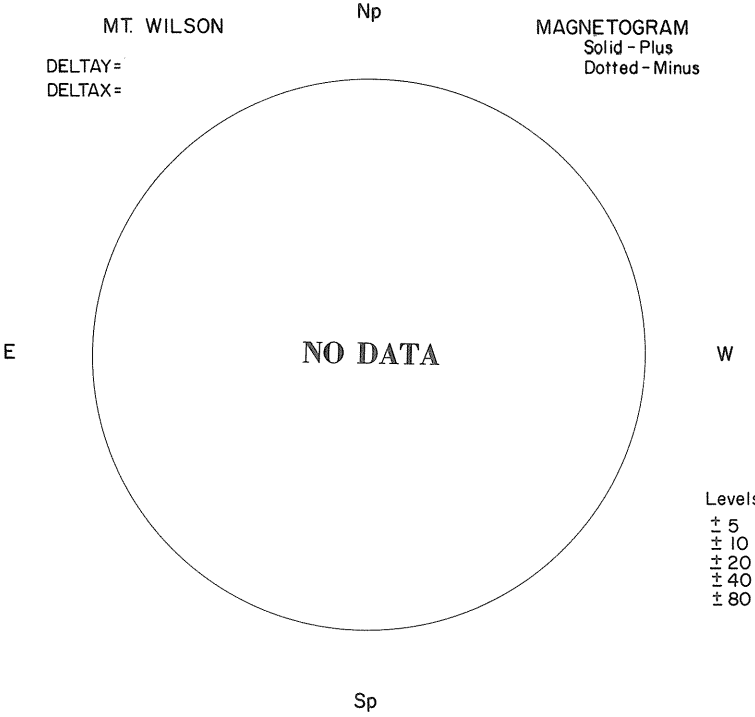


1505 UT

MT. WILSON

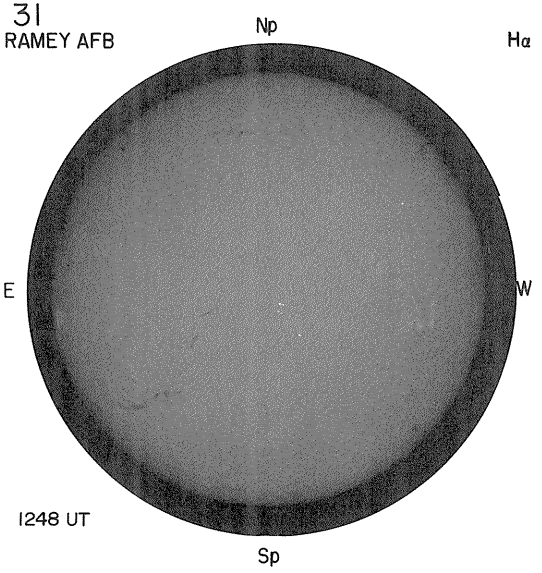
DELTAY=
DELTAX=

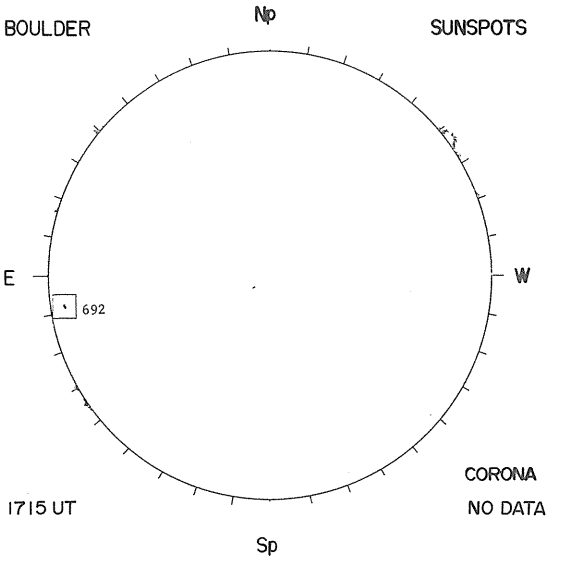
MAGNETOGRAM
Solid - Plus
Dotted - Minus

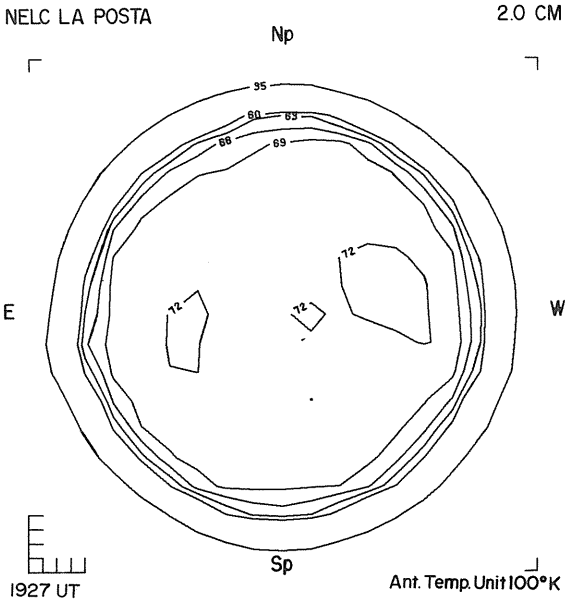


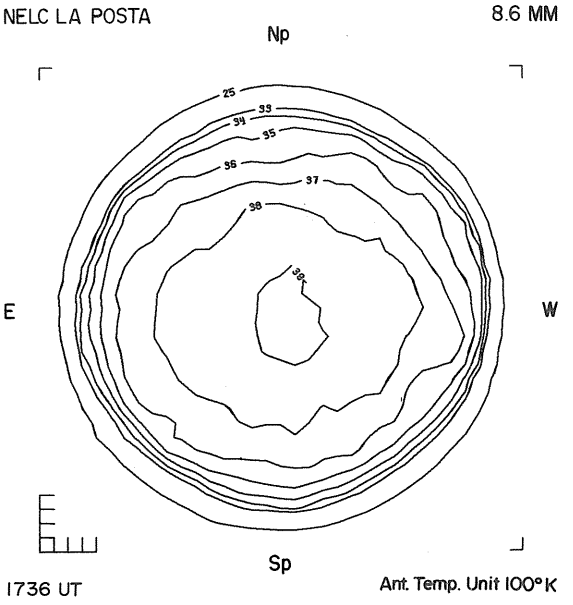
Levels
± 5
± 10
± 20
± 40
± 80

31
RAMEY AFB


Np
Hα
E
W
1248 UT
Sp


BOULDER
Np
SUNSPOTS
E
W
692
CORONA
NO DATA
1715 UT
Sp


NELC LA POSTA
2.0 CM
Np
95
80
69
68
69
72
72
72
E
W
Sp
1927 UT
Ant. Temp. Unit 100°K


NELC LA POSTA
8.6 MM
Np
25
33
34
35
36
37
38
38
E
W
Sp
1736 UT
Ant. Temp. Unit 100°K

REGIONS OF SOLAR ACTIVITY

MAY 1975

MCMATH REGION 13635 CMP DATE 1.5

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	1	13635	S08 W02	138	300	3.0	19568	S08 W04	140	(BP)	3	B	10	9	CRO
75	5	2	13635	S08 W14	138	600	3.5	19568	S08 W17	139	(B)	4	B	150	19	DSI
75	5	3	13635	S08 W28	139	900	2.5	19568	S08 W31	140	(BP)	5	B	260	10	DSI
75	5	4	13635	S08 W46	140	900	2.5	19568	S08 W48	140	(B)	4	B	270	17	DSO
75	5	5	13635	S08 W56	141	1100	3.0	19568	S08 W59	142	(B)	4	B	260	10	DSO
75	5	6	13635	S07 W69	141	900	2.5	19568	S08 W71	141	(B)	4	B	180	4	DSO
75	5	7	13635	S07 W84	142	700	2.0	19568	S08 W82	138		2	R	10	1	AXX

MCMATH REGION 13629 CMP DATE 2.0 RETURN OF REGION 13568 ROTATION 3

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	4	26	13629	S15 E78	126	400	1.0									
75	4	27	13629	S14 E64	126	500	1.0									
75	4	29	13629	S14 E37	128	300	1.0									
75	4	30	13629	S14 E20	131	400	1.0									
75	5	1	13629	S14 E05	131	200	1.0									
75	5	2	13629	S14 W08	132	200	1.0									
75	5	3	13629	S14 W21	132	200	1.0									
75	5	4	13629	S13 W39	133	300	1.0									
75	5	5	13629	S13 W49	134	400	1.0									
75	5	6	13629	S13 W61	133	400	1.0									

MCMATH REGION 13628 CMP DATE 2.6

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	4	26	13628	N02 E83	121	1200	3.5	19564	N03 E75	123	(BP)	3	B	20	4	BXI
75	4	27	13628	N02 E70	120	1200	3.0	19564	N01 E66	123	(BP)	2	B	40	7	CAO
75	4	28						19564	N01 E51	125	(BP)	2	B	10	1	AXX
75	4	29	13628	N03 E40	125	1200	3.0	19564	N02 E36	127	(AP)	1	B	10	1	AXX
75	4							19567	S02 E38	125	BF					
75	4	30	13628	N02 E26	125	1200	2.5	19564	N01 E24	126	(BP)	1	B	0	1	AXX
75	5	1	13628	N02 E13	123	1100	2.5	19567	S01 E13	123	(AP)	3	B	10	8	BXO
75	5	2	13628	N02 E00	124	900	2.0	19564	N03 W06	128						
75	5	3	13628	N02 W13	124	800	2.5	19564	N02 W16	125	(AP)	2	B	10	1	AXX
75	5	4	13628	N01 W30	124	700	2.5	19564	N02 W33	125	(AP)	1	B	0	5	AXX
75	5	5	13628	N01 W40	125	800	2.5									
75	5	6	13628	N01 W52	124	800	2.0	19564	N02 W55	125						
75	5	7	13628	N01 W69	127	500	1.5									
75	5	8	13628	N01 W84	129	200	1.0									

MCMATH REGION 13636 CMP DATE 3.4

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	1	13636	S20 E23	113	600	1.0									

MCMATH REGION 13638 CMP DATE 4.8

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	3	13638	N27 E17	94	100	1.0									

MCMATH REGION 13634 CMP DATE 5.4

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	4	30	13634	S13 E63	88	300	2.0									
75	5	1	13634	S12 E53	83	600	3.0	19569	S10 E47	89	(BP)	2	B	20	9	BXO
75	5							19570	S12 E52	84	(B)	2	B	10	5	BXO
75	5	2	13634	S12 E40	84	800	2.5	19569	S10 E33	89	(B)	1	B	10	3	BXO
75	5							19570	S12 E38	84	(BP)	3	B	10	4	CSO

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75	5	3	13634	S12 E26	85	600	2.5	19569	S10 E18	91	(BP	3	B	20	6	CRI
75	5							19570	S12 E25	84	(BP)	2	B	10	5	BXO
75	5	4	13634	S11 E08	86	1000	2.5	19570	S13 E05	87	(AP)	2	B	20	7	BXO
75	5								S10 E04				B	10	7	BXO
75	5	5	13634	S11 W02	87	1200	3.0	19570	S12 W03	86	(BP	2	B	20	2	BXO
75	5	6	13634	S11 W14	86	1200	3.0	19570	S13 W18	88	(AP)	1				
75	5	7	13634	S11 W28	86	800	2.5	19570	S13 W31	87	AP		R	10	2	BXO
75	5								S12 W24				R	10	2	BXO
75	5	8	13634	S12 W42	87	700	2.0									
75	5	9	13634	S12 W56	87	500	1.5									
75	5	10	13634	S12 W68	87	400	1.5									
75	5	11	13634	S10 W78	84	400	1.0									

MCMATH REGION 13639 CMP DATE 7.2

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	4	13639	N14 E32	62	200	1.5									
75	5	5	13639	N14 E22	63	200	1.5									

MCMATH REGION 13637 CMP DATE 7.3 RETURN OF REGION 13584 ROTATION 2

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	1	13637	N04 E80	56	100	2.5									
75	5	2	13637	N03 E63	61	100	1.0									

MCMATH REGION 13640 CMP DATE 7.4

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	4	13640	S20 E36	56	100	1.5									
75	5	5	13640	S20 E26	59	200	1.5									
75	5	6	13640	S20 E12	60	200	1.5									
75	5	7	13640	S19 W02	60	200	1.0									
75	5	8	13640	S20 W14	59	200	1.0									
75	5	9	13640	S19 W28	59	200	1.0									

MCMATH REGION 13641 CMP DATE 7.8

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	6	13641	S14 E16	56	200	1.5									
75	5	7	13641	S13 E04	54	100	1.0									

MCMATH REGION 13648 CMP DATE 9.1

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	11	13648	N21 W32	38	200	1.5									
75	5	13	13648	N21 W58	38	200	1.0									

MCMATH REGION 13642 CMP DATE 9.3

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	8	13642	S05 E10	35	100	1.0									

MCMATH REGION 13643 CMP DATE 9.9

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	8	13643	S02 E19	26	100	1.0									

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MCMATH REGION 13645 CMP DATE 11.3

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	9	13645	S08 E23	8	100	1.5									

MCMATH REGION 13644 CMP DATE 12.1

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	8	13644	N05 E47	359	100	1.0									

MCMATH REGION 13651 CMP DATE 14.8

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	14	13651	N33 E03	324	100	1.5									

MCMATH REGION 13657 CMP DATE 15.1

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	19	13657	S25 W58	319	100	1.0									

MCMATH REGION 13659 CMP DATE 15.3

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	20	13659	S50 W70	317	200	1.0									

MCMATH REGION 13646 CMP DATE 16.2

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	9	13646	S05 E84	308	400	1.5									
75	5	10	13646	S05 E77	303	1200	2.5	19571	S06 E75	303	(AP)	1	B	0	2	BXO
75	5	11	13646	S06 E63	304	1300	2.5	19571	S06 E62	302	AP					
75	5	12						19571	S06 E50	301						
75	5	13	13646	S06 E36	304	1000	2.5									
75	5	14	13646	S06 E23	304	700	2.0									
75	5	15	13646	S06 E09	304	700	2.0									
75	5	16	13646	S06 W07	304	600	2.0									
75	5	17	13646	S06 W19	306	700	2.0									
75	5	18	13646	S06 W32	306	700	2.5									
75	5	19	13646	S06 W45	306	700	2.5									
75	5	20	13646	S06 W59	306	800	2.5									
75	5	21	13646	S06 W74	307	800	2.0									
75	5	22	13646	S06 W88	307	200	1.0									

MCMATH REGION 13655 CMP DATE 16.4

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	18	13655	N09 W28	302	100	1.0									
75	5	19	13655	N09 W42	303	100	1.0									

MCMATH REGION 13649 CMP DATE 17.0 RETURN OF REGION 13619 ROTATION 2

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	11	13649	N03 E73	294	100	1.0									

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MCMATH REGION 13650 CMP DATE 17.3

CALCIUM PLAGE DATA								SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT CLASS
75	5	13	13650	S23 E50	290	100	1.5								

MCMATH REGION 13672 CMP DATE 17.3

CALCIUM PLAGE DATA								SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT CLASS
75	5	22	13672	N11 W71	290	100	1.5								

MCMATH REGION 13660 CMP DATE 17.7

CALCIUM PLAGE DATA								SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT CLASS
75	5	20	13660	S16 W38	285	100	1.0								
75	5	21	13660	S16 W50	283	100	1.0								

MCMATH REGION 13652 CMP DATE 18.0

CALCIUM PLAGE DATA								SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT CLASS
75	5	15	13652	N04 E33	280	200	2.0								
75	5	16	13652	N04 E17	280	200	1.0								
75	5	17	13652	N04 E06	281	200	1.5								
75	5	18	13652	N04 W07	281	300	2.0								
75	5	19	13652	N04 W22	283	200	2.5								
75	5	20	13652	N04 W35	282	200	2.5								
75	5	21	13652	N05 W50	283	100	1.5								

MCMATH REGION 13656 CMP DATE 19.3

CALCIUM PLAGE DATA								SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT CLASS
75	5	18	13656	S06 E10	264	100	1.5								
75	5	19	13656	S08 W03	264	100	1.0								

MCMATH REGION 13676 CMP DATE 19.9

CALCIUM PLAGE DATA								SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT CLASS
75	5	23	13676	S10 W48	255	100	1.0								

MCMATH REGION 13653 CMP DATE 20.0

CALCIUM PLAGE DATA								SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT CLASS
75	5	15	13653	N07 E59	254	100	1.0								

MCMATH REGION 13673 CMP DATE 20.8

CALCIUM PLAGE DATA								SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT CLASS
75	5	22	13673	S30 W25	244	100	1.0								
75	5	23	13673	S30 W36	243	100	1.0								

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MCMATH REGION 13666 CMP DATE 21.5

CALCIUM PLAGE DATA								SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	20	13666	N14 E12	235	200	1.5									

MCMATH REGION 13665 CMP DATE 21.6

CALCIUM PLAGE DATA								SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	20	13665	N26 E13	234	100	1.5									
75	5	21	13665	N26 W01	234	100	1.5									

MCMATH REGION 13674 CMP DATE 21.6

CALCIUM PLAGE DATA								SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	21	13674	N09 E00	233	100	1.0									
75	5	22	13674	N10 W14	233	100	1.0									

MCMATH REGION 13686 CMP DATE 21.6

CALCIUM PLAGE DATA								SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	27	13686	N09 W78	233	300	1.0									

MCMATH REGION 13680 CMP DATE 21.9

CALCIUM PLAGE DATA								SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	24	13680	N25 W36	230	100	1.0									

MCMATH REGION 13684 CMP DATE 22.0

CALCIUM PLAGE DATA								SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	26	13684	S10 W60	228	100	1.0									

MCMATH REGION 13654 CMP DATE 22.1

CALCIUM PLAGE DATA								SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	17	13654	N45 E60	227	100	1.0									
75	5	18	13654	N45 E47	227	100	1.0									
75	5	19	13654	N45 E34	227	100	1.5									

MCMATH REGION 13681 CMP DATE 23.1

CALCIUM PLAGE DATA								SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	24	13681	S16 W19	213	100	1.0									
75	5	25	13681	S16 W32	213	100	1.0									

MCMATH REGION 13687 CMP DATE 23.6

CALCIUM PLAGE DATA								SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	28	13687	N11 W65	206	100	2.0									

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MCMATH REGION 13678 CMP DATE 24.1

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	23	13678	N05 E08	199	100	1.0									

MCMATH REGION 13675 CMP DATE 24.9

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	22	13675	S09 E30	189	300	2.5	19572	S10 E28	191	(AP)	3	R	10	1	HRX
75	5	23	13675	S09 E16	189	200	2.0	19572	S10 E15	191	(BP	4	B	10	2	BXO
75	5	24	13675	S09 E04	190	200	2.0	19572	S09 E01	192	(AP)	2	B	20	3	BXI
75	5	25	13675	S09 W10	191	200	1.5									
75	5	26	13675	S09 W23	191	200	1.0									
75	5	27	13675	S09 W36	191	200	1.0									

MCMATH REGION 13669 CMP DATE 25.1

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	20	13669	S10 E60	187	100	2.5									

MCMATH REGION 13685 CMP DATE 25.3

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	26	13685	S47 W16	184	100	1.0									

MCMATH REGION 13682 CMP DATE 25.8

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	26	13682	S03 W09	177	100	1.5									
75	5	27	13682	S03 W22	177	200	2.0	19573	S04 W26	179	A		B	10	1	AXX
75	5	28	13682	S03 W36	177	100	1.0									
75	5	29	13682	S03 W49	177	100	1.0									

MCMATH REGION 13671 CMP DATE 28.0

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	21	13671	N19 E89	144	200	1.5									
75	5	22	13671	N19 E71	148	100	1.5									

MCMATH REGION 13670 CMP DATE 28.1 RETURN OF REGION 13635 ROTATION 2

CALCIUM PLAGE DATA								SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	21	13670	S09 E89	144	200	2.0									
75	5	22	13670	S09 E74	145	700	2.0									
75	5	23	13670	S09 E62	145	700	2.0									
75	5	24	13670	S10 E47	147	700	2.0									
75	5	25	13670	S10 E34	147	700	2.0									
75	5	26	13670	S10 E21	147	600	2.0									
75	5	27	13670	S10 E08	147	600	2.0									
75	5	28	13670	S10 W07	148	600	2.0									
75	5	29	13670	S10 W20	148	600	2.0									
75	5	30	13670	S10 W34	148	600	2.0									
75	5	31	13670	S09 W46	148	500	2.0									
75	6	01	13670	S09 W60		500	2.0									
75	6	02	13670	S09 W73		500	2.0									
75	6	03	13670	S08 W88		200	1.0									

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MCMATH REGION 13696 CMP DATE 28.1

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	6	02	13696	N13 W70		100	2.0									

MCMATH REGION 13693 CMP DATE 28.7

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	6	01	13693	N02 W49		100	1.0									

MCMATH REGION 13679 CMP DATE 29.4 RETURN OF REGION 13628 ROTATION 2

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	23	13679	N07 E82	125	200	2.0									
75	5	24	13679	N06 E67	127	300	2.0									
75	5	25	13679	N06 E54	127	300	2.0									
75	5	26	13679	N07 E40	128	400	2.0									
75	5	27	13679	N07 E26	129	400	2.0									
75	5	28	13679	N07 E11	130	400	2.0									
75	5	29	13679	N07 W02	130	300	1.5									
75	5	30	13679	N07 W15	129	300	1.5	19574	N17 W07	117	BP					
75	5	31	13679	N07 W26	128	300	1.0									
75	6	01	13679	N07 W40		300	1.5									
75	6	02	13679	N08 W57		400	1.5									
75	6	03	13679	N08 W71		300	1.0									

MCMATH REGION 13688 CMP DATE 29.6

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	28	13688	S14 E15	126	200	2.0									
75	5	29	13688	S14 E01	127	100	1.5									
75	5	30	13688	S14 W14	128	100	1.0									

MCMATH REGION 13694 CMP DATE 30.6

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	6	01	13694	N06 W25		100	1.0									

MCMATH REGION 13683 CMP DATE 31.4

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	5	26	13683	S08 E65	103	100	1.0									

No calcium spectroheliograms were secured at the McMath-Hulbert Observatory on May 12, 1975.
No sunspot observations were made at Mt. Wilson Observatory on May 20, 1975.

DAILY CALCIUM PLAGE INDEX

MAY 1975

YR	MO	DAY	INDEX	YR	MO	DAY	INDEX	YR	MO	DAY	INDEX
75	5	1	6.7	75	5	11	1.7	75	5	21	0.8
75	5	2	5.7	75	5	12	*	75	5	22	1.2
75	5	3	6.0	75	5	13	2.2	75	5	23	1.3
75	5	4	6.0	75	5	14	1.4	75	5	24	1.7
75	5	5	7.6	75	5	15	1.8	75	5	25	1.8
75	5	6	5.9	75	5	16	1.4	75	5	26	2.2
75	5	7	2.4	75	5	17	1.6	75	5	27	2.5
75	5	8	1.5	75	5	18	2.3	75	5	28	2.5
75	5	9	0.7	75	5	19	2.0	75	5	29	1.9
75	5	10	0.8	75	5	20	2.0	75	5	30	1.5
								75	5	31	1.3

* NO OBSERVATIONS

SUDDEN IONOSPHERIC DISTURBANCES

MAY 1975

DAY	UNIVERSAL TIME START	END	MAX	IMP	WIDE SPREAD INDEX	NUMBER OF STATION REPORTS BY TYPE SWF	SCNA	SEA	SPA	LF-SPA	SES	SFD	KNOWN FLARE	McMATH REGION
08	0243	0317	0246	1-	3				1			1	0242	13634

PERIODS OF NO OBSERVATIONS:

DATE	TIME (UT) and STATION	DATE	TIME (UT) and STATION
01-08	0000-2400 A28	14-31	0000-2400 A36
03	0000-2400 TN	16-17	0000-2400 A28
04	1400-2400 MC, 0000-2400 A36	21	1200-1212 MC
05-07	0000-2400 A34	27	0000-2400 TN
05	0000-1334 MC, 0000-2400 A36	27-29	0000-2400 A26
06	0000-2400 TN	29	0300-0642 TM
08	2225-2400 TM	30	2141-2400 MC
09	0000-0422 TM	31	0000-0118 MC

STATIONS REPORTING FOR MAY 1975

AAVSO (A31) (SWF) (A 1, A26, A31) (SEA) (A1, A4, A19, A21, A28, A29, A30, A31, A32, A34, A35, A36, A37, A38) (SES)
DARMSTADT (DA) (SWF)
DEBRE ZEIT (DE) (SPA)
HAWAII (HA) (SFD)
HERMANUS (HS) (SEA)
HERSTMONCEUX (HC) (SEA)
HIRAISO (HI) (SWF)
HOBART (TA) (SEA)
HUANCAYO (HU) (SWF)
INUBO (IN) (SPA)
KULA (KL) (SPA)
MCMATH (MC) (SWF, SCNA)
PANSKA VES (SWF, SEA, SES)
POITIERS (PO) (SEA)
PRESTON (LO) (SEA)
SOFIA (SF) (SES)
ST CLOUD (SC) (SES)
TABLE MOUNTAIN (TM) (SPA, LF-SPA)
TORINO (TN) (SPA)
UPICE (UI) (SEA)

SIDS BY McMATH REGION

MAY 1975

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
DAY																															
REGION																															
34								1																							
X-RAY																															
UNKNOWN																															
NO FP																															

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

MAY 1975

MAY 1975	TIMES OF OBSERVATION START UT	TIMES OF OBSERVATION END UT	STATION	EVENTS: CENTIMETRIC BAND START UT	CENTIMETRIC BAND END UT	CENTIMETRIC BAND INT.	DECIMETRIC BAND START UT	DECIMETRIC BAND END UT	DECIMETRIC BAND INT.	METRIC BAND START UT	METRIC BAND END UT	METRIC BAND INT.	DEKAMETRIC BAND START UT	DEKAMETRIC BAND END UT	DEKAMETRIC BAND INT.	SPECTRAL TYPE
01	0000	0729	CULG													
	0000	0200	BOUL													
	0000	1010	MANI													
	0446	1502	WEIS													
	0543	1818	DURN													
	1200	1500	BOUL													
	0943	2338	SGMR										1855.4	1855.6	2	III
	2030	2400	CULG							2042	2400	1				IS
			CULG				2050		1	2050		2				IIIB,U
			CULG							2050	2055					IIIGG,W
			CULG							2124		1				IIIB
			CULG							2154	2250					IIIN,W
	1246	2246	HARV							2155	2157	1				IIIG
			CULG							2211.5	2212.5	2				IIIG,U
			HARV							2212	2213	1				IIIGG
			SGMR										2212.0	2212.3	2	III
	1800	2400	BOUL										2212.0	2212.7	1	III
			CULG							2231.5		1				IIIB,U
			CULG							2245.5		1				IIIB,U
02	0000	0729	CULG							0000	0245					IS,W
	0000	0200	BOUL													
	0300	1010	MANI													
			CULG				0350	0355	1							FAST DRIFT
			CULG				0444	0535		0059	0255					IIIN,W
	0451	1033	DURN							0459.8	0500.5	2				IIIG
			CULG				0521		1	0521						FAST DRIFT
			DURN				0521.3	0521.4	2	0521.3	0521.4	2				IIIG
			DURN				0533.7	0533.8	2	0533.7	0533.8	2				IIIG
			CULG							0554	0720	1				I
	0625	1808	WEIS													
			DURN				0900	1033 D	1	0900	1033 D	1				I,N
	1150	2340	SGMR													
	1200	2400	BOUL													
	1127	1821	DURN				1416	1821 D	2	1505	1821 D	2				I,DC
	1245	2246	HARV							1510	1748	1				IN
	2029	2400	CULG				2036	2400		2036	2400	1				IS
			CULG							2054	2400	1				IIIN
	2136	2400	MANI													
03	0000	1010	MANI													
	0000	0200	BOUL													
	0000	0729	CULG				0000	0720	1	0000	0530	1				IS
	0448	1227	DURN				0448 E	1227 D	3	0448 E	1227 D	3				I
	1246	2301	HARV							1250	1528	1				IN
	0450	1319	WEIS							1502	1702	1				IS
			HARV							1942	1944	3				IIIGG
	2030	2400	CULG				2035	2400	1							IS
	2136	2400	MANI													
			CULG				2151			2151		1				IIIB
			CULG				2158	2200.5	2	2158	2200.5	2	2158.5			IIIGG,U,W
			HARV							2158	2200	3	2158	2159	3	IIIGG
	0940	2341	SGMR										2158.5	2159.4	2	III
			BOUL							2158.5	2200.0	1	2158.5	2200.0	1	IIIG
			CULG							2230	2400	1				IS
			HARV							2235	2301	1				I
			CULG				2345.5	2346	2	2345.5	2346	2				IIIG,U
			BOUL							2345.8	2346.0	1				III
04	0000	1010	MANI													
			CULG							0000	0523	1				IS
	0000	0726	CULG				0000	0710		0000	0651					IIIN,W
			CULG				0021.5	0022		0021.5	0022					IIIG
			CULG							0235	0236					IIIB,U
			CULG				0238.5	0241	2	0238.5	0241	2	0239	0240	2	IIIGG,U,V
			CULG							0244		2				IIIB,U
			CULG							0246.5	0247.5	2				IIIG
	0450	1811	WEIS							0450	1805	2				IN,DC
			CULG				0532	0539	1	0532	0539	2				IIIG,U
	0448	1445	DURN				0532.2	0532.5	3							IIIG,U
			WEIS							0532.3	0532.5	1				IIIG
			WEIS							0536.3	0537.4	2				IIIG
			DURN				0536.5	0538.3	3	0536.5	0538.3	3				IIIG
			WEIS							0538.3	0538.4	2				IIIB
			WEIS							0543.9	0544.5	1				IIIG
			CULG				0544	0544.5	1	0544	0544.5	2				IIIG,U
			CULG				0642	0643	1							FAST DRIFT
			DURN				0642.2	0642.8	3							IIIG
			DURN				0820	1140	3							I
			DURN							1306.4	1307.0	3				IIIG
			WEIS							1306.7	1307.3	2				IIIG
	1246	2246	HARV							1307		2				IIIG
	1455	1820	DURN													
			HARV							1759	1800	3				IIIG,U
			WEIS							1759.8	1800.0	2				IIIG
	0939	2342	SGMR										1759.9	1800.3	1	III
			SGMR										1801.9	1802.2	1	III
			WEIS							1801.9	1802.1	2				IIIG
			HARV							1802	1803	3				IIIG
			HARV							1911	2246	1				I

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

MAY 1975

MAY 1975	TIMES OF OBSERVATION		STATION	EVENTS													SPECTRAL TYPE
				CENTIMETRIC BAND			DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND				
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.		
04			SGMR										1913.2	1913.6	1		III
	2030	2400	CULG				2030	2400	1	2030	2400	1					IS
	2136	2400	MANI														
05	0000	1010	MANI														
	0000	0729	CULG				0000	0729	1	0000	0729	1					IS
			CULG							0326	0327	1					IIIG
	0450	0623	WEIS							0553.5	0639.0	1					IS
	0701	1813	WEIS							0701.0	1735.0	1					IN
	0448	1825	DURN				0910	1825 D	2	0920	1825 D	2					I,DC
	0939	2343	SGMR														
	1246	2246	HARV							1246	1623	1					I
			WEIS							1352.4	1353.4	1					IIIG
			HARV							1728	1900	1					IN
			HARV							1900	2200	1					I
	1200	2400	BOUL							1912	2400	1					IS
			BOUL										1943.5	1947.2	1		III
	2029	2400	CULG				2029	2400	1	2029	2400	1					IS
			CULG							2029	2400						IIIN,W
	2136	2400	MANI														
			CULG							2315	2316	1	2315.5	2316			IIIG
			BOUL							2315.0	2316.0	1	2315.0	2316.0	1		III
06	0000	0200	BOUL							0000	0130	1					IS
	0000	1010	MANI														
			CULG							0000	0533						IIIN,W
	0000	0729	CULG				0000	0420	1	0000	0615	1					IS
			BOUL										0013.7	0014.3	1		III
	0936	2344	SGMR														
	0430	1252	WEIS							1103.5	1252.0	1					IN
	1200	2400	BOUL														
	0445	1825	DURN				1205	1825 D	1	0943	1825 D	1					I,N
	1246	2251	HARV														
	1256	1816	WEIS							1640.0	1731.0	1					IN
	2029	2400	CULG				2029	2155		2029	2157						IS,W
	2135	2400	MANI														
07	0000	1010	MANI														
	0000	0200	BOUL														
	0444	1828	DURN														
	0450	1817	WEIS														
	0000	0729	CULG							0632	0633						IIIG
	0935	2345	SGMR														
	1200	2400	BOUL														
	1245	2246	HARV														
	2029	2237	CULG														
	2135	2400	MANI														
08	0000	1011	MANI														
	0000	0200	BOUL														
	0444	0532	DURN														
	0542	1829	DURN														
	0934	2346	SGMR														
	1247	1640	HARV														
	1400	1600	BOUL														
	1645	2246	HARV														
	1900	2400	BOUL														
	2029	2400	CULG														
	2134	2400	MANI														
09	0000	1011	MANI														
	0000	0200	BOUL														
	0000	0728	CULG														
	0443	1830	DURN														
	0656	1823	WEIS														
	0933	2347	SGMR														
	1200	1900	BOUL														
	1246	2246	HARV														
	2028	2400	CULG														
	2133	2400	MANI														
	2200	2400	BOUL														
10	0000	0200	BOUL														
	0000	1010	MANI														
	0000	0728	CULG														
	0932	2348	SGMR														
	0427	1245	WEIS							0937.0	0937.7	1					IIIG
	0442	1830	DURN							0937.4	0937.6	2					IIIG
	1246	2245	HARV														
	1324	1825	WEIS														
	2029	2400	CULG														
	2133	2400	MANI														
	2300	2400	BOUL														
11	0000	0200	BOUL														
	0000	1010	MANI														
	0000	0728	CULG														
	0430	1827	WEIS														
	0442	1822	DURN														
	0530	2349	SGMR														

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

MAY 1975

MAY 1975	TIMES OF OBSERVATION		STATION	EVENTS												SPECTRAL TYPE
				CENTIMETRIC BAND			DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
11	1246	2246	HARV													
	1300	2400	BOUL													
	2028	2400	CULG													
	2132	2400	MANI													
12	0000	1010	MANI													
	0000	0200	BOUL													
	0000	0728	CULG													
	0430	0526	WEIS													
	0442	1834	DURN													
	0650	1824	WEIS													
	0929	2350	SGMR													
	1130	2400	BOUL													
	1245	2246	HARV													
	2028	2400	CULG													
	2132	2400	MANI													
13	0000	1010	MANI													
	0000	0200	BOUL													
	0000	0728	CULG													
	0439	1834	DURN													
	0928	2351	SGMR													
	1130	2400	BOUL													
	1246	2246	HARV													
	2028	2400	CULG													
	2132	2400	MANI													
14	0000	1010	MANI													
	0000	0200	BOUL													
	0000	0723	CULG													
	0436	1836	DURN													
	1130	2400	BOUL													
	1246	2246	HARV													
	0927	2353	SGMR										1446.0	1446.3	1	III
	2029	2400	CULG													
	2132	2400	MANI													
15	0000	1010	MANI													
	0000	0230	BOUL													
	0000	0728	CULG													
	0437	1720	DURN													
	0926	2354	SGMR													
	1130	2400	BOUL													
	1246	2246	HARV													
	1556	1828	WEIS													
	1806	1836	DURN													
	2028	2400	CULG													
	2132	2400	MANI													
16	0000	1010	MANI													
	0000	0230	BOUL													
	0000	0728	CULG							0139						IIIB,W
	0412	0705	WEIS													
	0436	1836	DURN													
	0740	1130	WEIS													
	0925	2355	SGMR													
	1130	1900	BOUL													
	1135	1645	WEIS													
	1246	2245	HARV													
	2028	2400	CULG													
	2131	2400	MANI													
	2200	2400	BOUL													
17	0000	0230	BOUL													
	0000	1010	MANI													
	0000	0728	CULG													
	0436	1836	DURN													
	0924	2356	SGMR													
	1130	2400	BOUL													
	1246	2251	HARV													
	2028	2400	CULG							2130						IIIB,W
	2130	2400	MANI													
18	0000	1010	MANI													
	0000	0230	BOUL													
	0000	0728	CULG													
	0435	1836	DURN													
	0923	2357	SGMR													
	1130	2400	BOUL													
	1246	2256	HARV													
	2028	2400	CULG													
	2130	2400	MANI													
19	0000	1008	MANI													
	0000	0230	BOUL													
	0000	0728	CULG													
	0435	1308	DURN													
	0922	2358	SGMR													
	1130	2400	BOUL													
	1245	2246	HARV													

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

MAY 1975

MAY 1975	TIMES OF OBSERVATION		STATION	EVENTS												SPECTRAL TYPE
				CENTIMETRIC BAND			DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
19	1318	1836	DURN													
	2028	2117	CULG													
	2129	2400	MANI													
	2205	2400	CULG													
20	0000	1008	MANI													
	0000	0230	BOUL													
	0000	0728	CULG							0506						IIIB
	0435	1836	DURN				1151.4	1151.5	1	1151.4	1151.5	2				III
	0700	0756	WEIS							1154.3	1155.7	2				IIIG
	0921	2359	SGMR										1154.4	1155.8	2	IIIG
	1130	2400	BOUL										1154.6	1156.0	2	IIIG
	1035	1355	WEIS							1156.6	1156.7	1				IIIB
	1247	2246	HARV													
	1528	1801	WEIS													
	2029	2400	CULG													
	2129	2400	MANI													
21	0000	1008	MANI													
	0000	0230	BOUL													
	0000	0728	CULG													
	0405	1130	WEIS													
	0643	1837	DURN													
	0920	2400	SGMR													
	1130	2400	BOUL													
	1140	1845	WEIS													
	1246	2246	HARV													
	2028	2400	CULG													
	2129	2400	MANI													
22	0000	1008	MANI													
	0000	0230	BOUL													
	0000	0729	CULG													
	0415	1635	WEIS													
	0434	1837	DURN													
	0920	2401	SGMR													
	1130	2400	BOUL													
	1245	2311	HARV													
	2029	2400	CULG													
	2128	2400	MANI													
23	0000	1008	MANI													
	0000	0230	BOUL													
	0000	0729	CULG													
	0434	1837	DURN													
	0745	1847	WEIS													
	0919	2402	SGMR													
	1130	2400	BOUL													
	1246	2246	HARV													
	2029	2400	CULG													
	2128	2400	MANI													
24	0000	0601	MANI													
	0000	0230	BOUL													
	0000	0729	CULG													
	0405	1136	WEIS													
	0433	1837	DURN													
	0750	1008	MANI													
	0918	2402	SGMR													
	1130	2400	BOUL													
	1140	1846	WEIS													
	1246	2246	HARV													
	2029	2400	CULG													
	2128	2400	MANI													
25	0000	1008	MANI													
	0000	0230	BOUL													
	0000	0729	CULG													
	0400	1657	WEIS													
	0433	1837	DURN													
	0917	2403	SGMR													
	1130	2400	BOUL													
	1245	2246	HARV													
	2029	2400	CULG													
	2128	2400	MANI													
26	0000	1008	MANI													
	0000	0230	BOUL													
	0000	0729	CULG													
	0432	0618	DURN													
	0628	1837	DURN													
	0724	1851	WEIS													
	0917	2404	SGMR													
	1246	2124	HARV													
	1400	2400	BOUL													
	2029	2400	CULG													
	2126	2400	MANI													
	2217	2246	HARV													
27	0000	0729	CULG													

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

MAY 1975

MAY 1975	TIMES OF OBSERVATION		STATION	EVENTS												SPECTRAL TYPE
				CENTIMETRIC BAND			DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
27	0000	1008	MANI													
	0000	0230	BOUL													
	0404	0700	WEIS													
	0432	0920	DURN													
	0915	1237	WEIS													
	0916	2405	SGMR													
	1130	2400	BOUL													
	1246	2246	HARV													
	1250	1849	WEIS													
	2029	2400	CULG													
	2129	2400	MANI													
28	0000	1008	MANI													
	0000	0230	BOUL													
	0000	0729	CULG													
	0355	1617	WEIS													
	0915	2406	SGMR													
	1130	2400	BOUL													
	1246	2246	HARV													
	1630	1850	WEIS													
	2029	2400	CULG													
	2129	2400	MANI													
29	0000	1011	MANI													
	0000	0230	BOUL													
	0000	0729	CULG							0343		1				IIIB
	0355	1340	WEIS													
	0548	1345	DURN													
	0915	2407	SGMR													
	1130	2400	BOUL													
	1245	2245	HARV													
	1345	1425	WEIS													
	2030	2400	CULG													
	2129	2400	MANI													
30	0000	0710	MANI													
	0000	0230	BOUL													
	0000	0729	CULG													
	0645	1837	DURN													
	0705	1048	WEIS													
	0743	1011	MANI													
	0914	2408	SGMR													
	1100	1854	WEIS													
	1130	2400	BOUL													
	1246	2245	HARV													
	2030	2400	CULG													
	2129	2400	MANI													
31	0000	0822	MANI													
	0000	0230	BOUL													
	0000	0730	CULG													
	0350	1546	WEIS													
	0430	1837	DURN													
	0903	1011	MANI													
	0914	2408	SGMR													
	1130	2400	BOUL													
	1246	2246	HARV													
	2030	2400	CULG													
	2129	2400	MANI													

The symbols used in connection with the spectral type in describing the important bursts are as follows:

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

SELECTED SOLAR EVENTS
MAY 1975

Culgoora

UT Date 1975. MAY	HELIOGRAPH EVENT							Spectral Type	REMARKS
	Start (UT)	End (UT)	Freq. (MHz)	Positions		Polar-ization	Inten-sity (1-3)		
				Central Dist. ($R_\odot$)	Position Angle (Deg.)				
1-2	2300	0500	160	0	-	L	2	I	This type I storm persisted until west limb passage on May 7
2	0411	0412	80	0	-	0	2	IIIB	
4	0238	0241	(160 (80 (43.25	0.8 1.0 1.5	230 240 260	0 0 -	2) 3) 3)	IIIGG,U,V	
	0246	0248	(160 (80	0.8 1.0	230 240	0 0	1) 2)	IIIG	
5	0326	0328	80	1.1	250	0	3	IIIG	

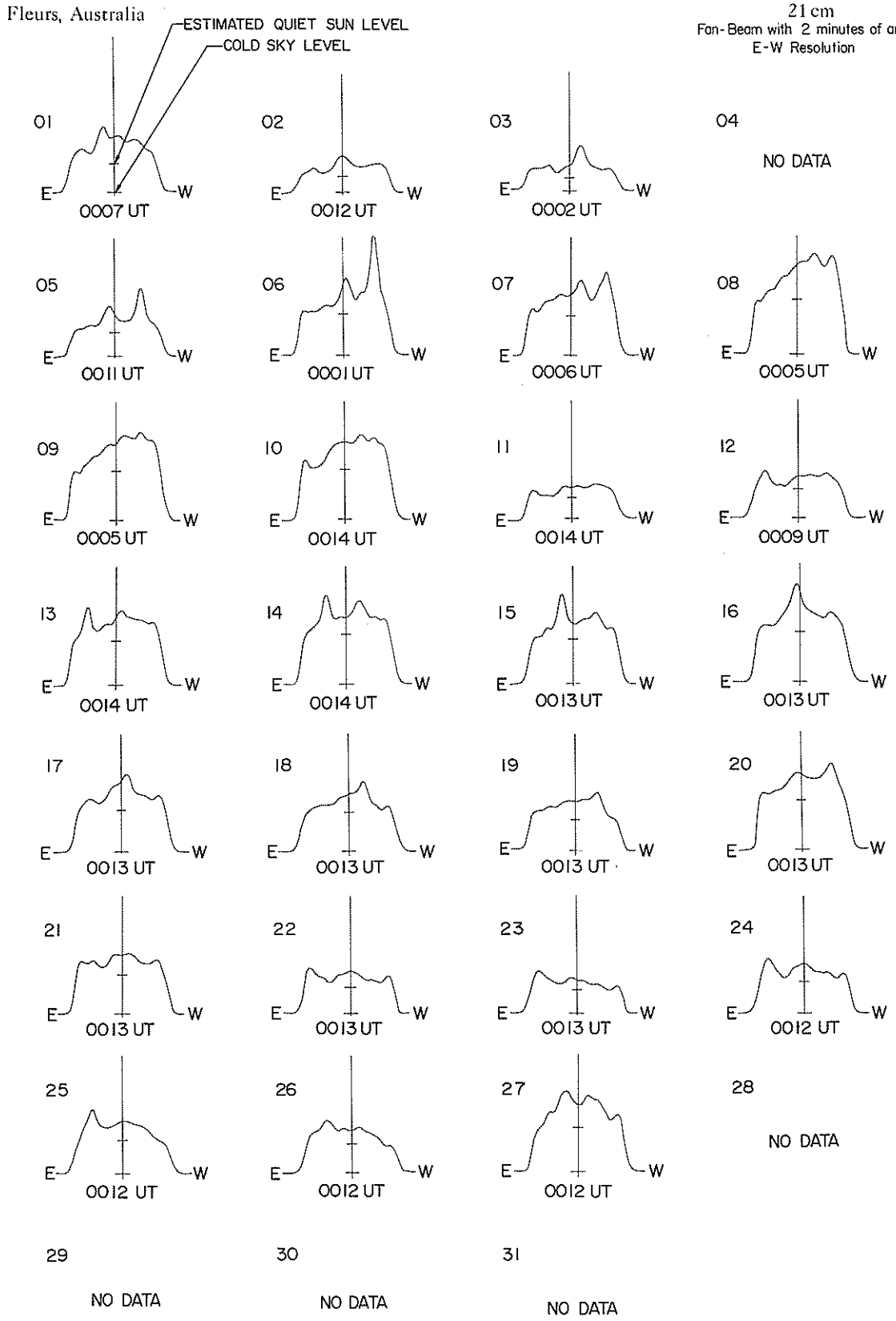
Days without Heliograph observations: ...Daily observations.....

EAST-WEST SOLAR SCANS

MAY 1975

Fleurs, Australia

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

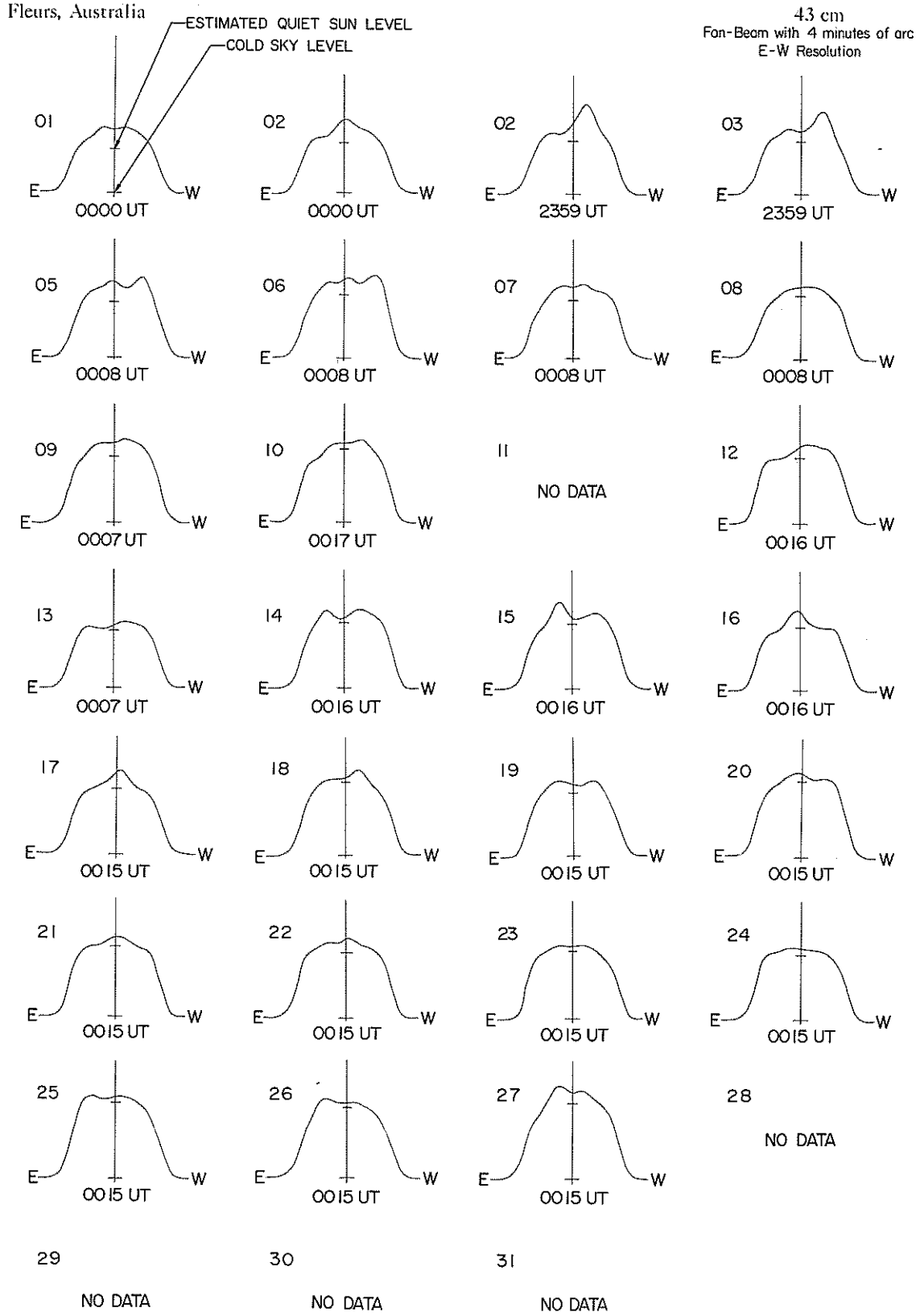


EAST-WEST SOLAR SCANS

MAY 1975

Fleurs, Australia

43 cm
Fan-Beam with 4 minutes of arc
E-W Resolution



COSMIC RAY INDICES
(Neutron Monitors)
MAY 1975

MAY 1975	THULE Average cts/hr	ALERT Average cts/hr	DEEP RIVER Average cts/hr	CALGARY Average cts/hr	SULPHUR MT Average cts/hr	KIEL Average cts/hr	CLIMAX Average cts/hr	TOKYO Average cts/hr
1	4595.3	7560.5	7102.1(12)	11852.6	9121.9	6387.3	4279.1(34)	3567.1
2	4625.0	7600.7	7109.8	11846.2	9118.1	6392.5	4281.2	3566.0
3	4613.1	7577.6	7093.3	11784.4	9094.4	6388.2	4278.6	3555.2
4	4613.5	7542.4	7099.8	11749.7	9061.1	6385.3	4273.5	3551.8
5	4580.9	7510.3	7052.8	11631.6	8924.5	6329.3	4267.5	3558.6
6	4532.5	7455.2	7006.7	11552.5	8805.7	6301.4	-- (0)	3542.6
7	4524.7	7443.4	7010.7	11568.8	8810.4	6313.1	-- (0)	3548.5
8	4542.3	7464.9	7041.3	11638.6	8874.6	6343.1	-- (0)	3562.1
9	4555.3	7489.9	7066.5	11697.8	9016.5	6375.0	-- (0)	3562.2
10	4564.9	7494.3	7075.4	11698.4	9020.2	6367.7	-- (0)	3567.4
11	4582.2	7533.4	7082.2	11770.3	9044.7	6373.3	-- (0)	3571.0
12	4571.1	7497.5	7074.0	11780.1	9044.2	6359.2	-- (0)	3566.1
13	4568.7	7493.9	7059.4	11735.8	9023.9	6340.0	-- (0)	3555.2
14	4574.5	7510.0	7071.3	11780.4	9027.8	6352.6	4246.5(12)	3562.7
15	4593.9	7525.6	7059.2	11757.5(16)	9028.6	6356.5	4238.2	3561.9
16	4574.5	7507.7	7054.5	-- (0)	9029.5	6349.4	4258.2	3546.6
17	4548.6	7462.8	7003.3	-- (0)	8962.1	6303.7	4228.0(6)	3537.0
18	4526.8	7424.9	6993.0	11729.7(16)	8962.8	6277.8	-- (0)	3537.2
19	4506.0	7426.5	6982.8	11550.9	8920.0	6258.0	4181.2(8)	3518.9
20	4490.6	7382.5	6932.2	11542.2	8885.1	6256.2	4199.8	3529.6
21	4496.8	7403.4	6940.5	11608.2	8899.7	6267.4	4199.9	3525.2
22	4517.8	7434.0	6957.3	11682.0	8925.8	6290.2	4203.9	3536.3
23	4529.1	7457.4	6989.2	11632.0	8971.2	6312.2	4219.5	3532.5
24	4549.7	7495.6	7026.0	11724.1	9006.2	6335.0	4224.2	3549.2
25	4580.8	7527.8	7032.8	11787.0	9037.4	6331.0	4242.5	3553.9
26	4553.6	7500.2	7022.4	11730.7	9006.2	6351.4	4245.8	3554.4
27	4580.3	7540.4	7072.3	11815.5	9080.3	6368.3	4262.8	3555.4
28	4579.6	7514.5	7074.8	11821.8	9072.2	6380.7	4262.7	3556.3
29	4569.5	7498.2	7041.4	11750.2	9033.9	6369.8	4249.5	3547.7
30	4562.5	7472.6	7042.3	11709.3	9015.1	6375.6	4249.2	3547.8
31	4583.4	7526.3	7032.8	11748.8	9034.1	6364.9	4232.5	3551.5
MEAN	4560.9	7492.7	7038.8	11713.0	8995.4	6340.5	4242.0	3550.9

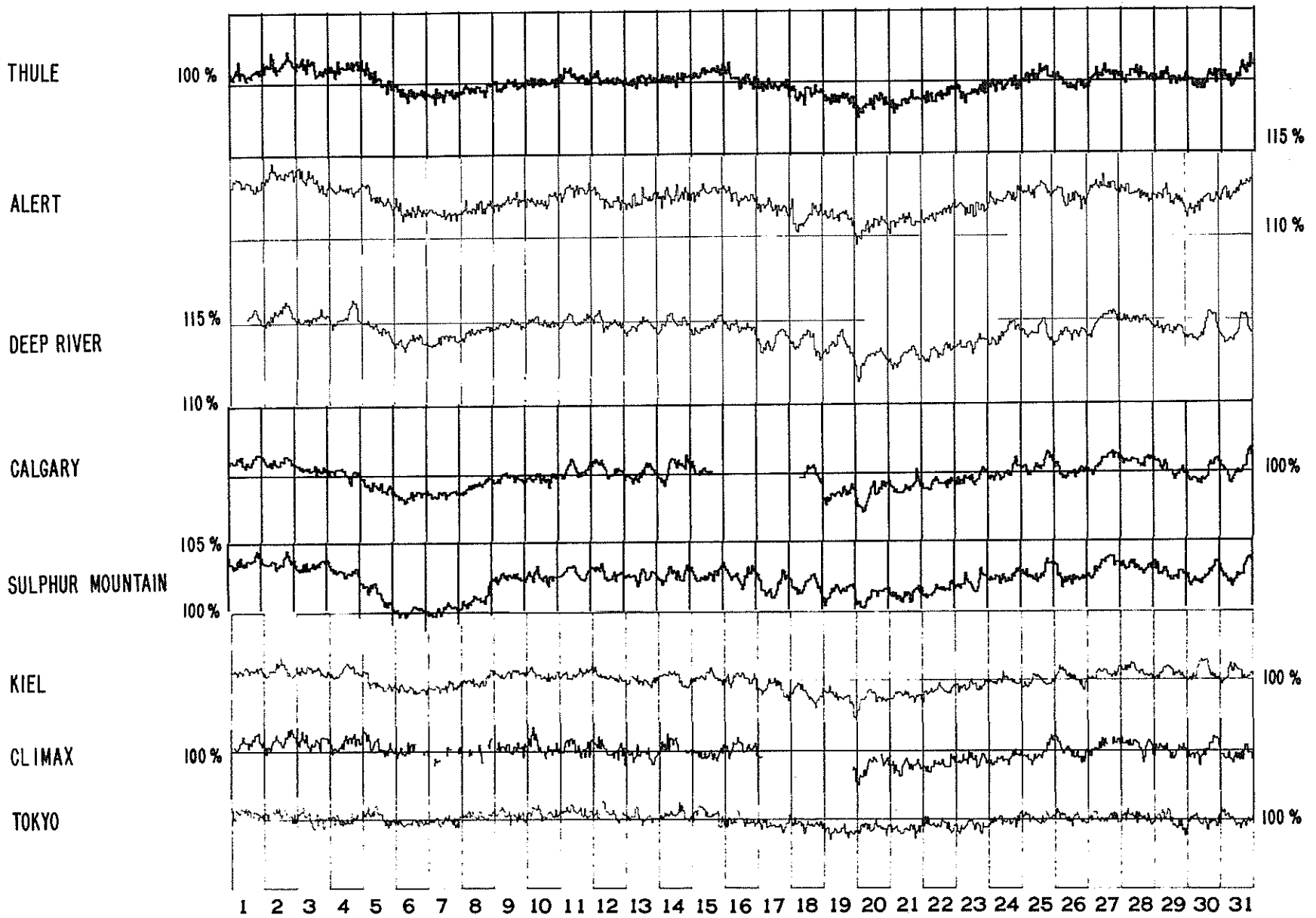
( ) Number of hours for which data are available if less than 24. Number of Section Hours at Climax if sum of both sections is less than 40 hours.

Thule, Alert, Calgary, Sulphur Mountain, Kiel and Climax Scaling Factors = 100.
Deep River Scaling Factor = 300.
Tokyo Scaling Factor = 128.

COSMIC RAY INDICES

(Neutron Monitors)

MAY 1975

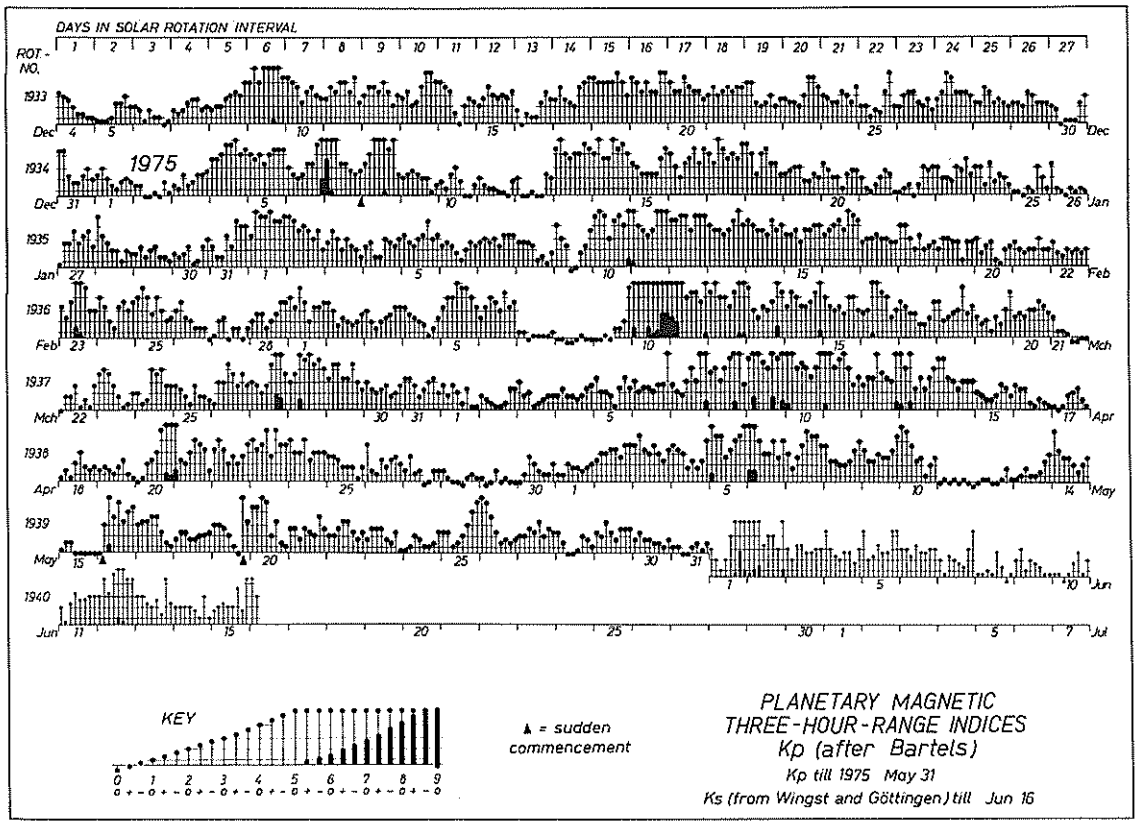


GEOMAGNETIC ACTIVITY INDICES

MAY 1975

Day	Three-Hour Range Indices Kp 1	2	3	4	5	6	7	8	Sum	Prel Ci	Cp	Ap	aa N	S	M	
1 Q	1	1	2	2-	2-	1+	2-	2	12+	0.3	0.3	6	14	13	10 18	
2	2+	3	3	3+	3+	3-	4-	4-	25	0.9	0.9	16	32	35	25 42	
3	4-	4+	3+	3	4-	3	2+	3+	27-	0.9	1.0	19	34	36	36 34	
4	4-	3+	3	2-	2+	2-	2+	4	22	0.8	0.8	14	25	25	25 25	
5 D	6-	4+	4+	3-	3+	4	4+	5	34-	1.2	1.3	34	55	39	52 43	
6 D	6	6	4	3	3	4	3-	4	33-	1.3	1.4	35	49	47	58 39	
7 D	3	2-	3-	4-	5-	4+	4+	4-	28	1.2	1.1	22	32	41	23 50	
8	4-	2+	2+	2	2	2+	3+	4	22	0.9	0.8	14	27	21	19 30	
9	3+	2+	2+	3	3-	3-	3+	1+	24	0.9	0.9	16	27	34	22 39	
10	5	5-	4-	2+	3-	1	2	3-	24	1.1	1.0	19	30	30	40 20	
11QQ	0+	1-	0+	1-	0+	1-	0+	0	3+	0.0	0.0	2	4	4	4 4	CK
12QQ	0+	1-	1-	0+	0+	1-	2-	1-	5+	0.0	0.1	3	6	4	4 7	CC
13 Q	1-	1	2-	1	1	1+	2+	3	12	0.2	0.3	6	16	10	8 19	K
14	5-	3+	3-	3-	2	1+	2	3-	21+	0.8	0.8	14	24	28	30 22	
15QQ	1-	1+	1+	0+	0+	0+	0+	0+	5	0.0	0.1	3	7	4	6 6	C
16 D	0+	3	6-	4-	5-	3+	4	4+	29	1.3	1.2	28	41	47	32 56	
17	3	3+	3+	4-	4-	2+	1+	1	22-	0.8	0.8	14	27	30	34 23	
18 Q	2-	2+	2+	2-	2-	2	2	2+	16	0.4	0.4	7	19	19	19 19	
19	3	3	3-	2	1	0+	5	3+	20+	0.9	0.9	15	32	18	22 28	
20 D	4+	4+	5	5-	2	3+	1+	1	26	1.3	1.1	23	34	31	47 18	
21	3-	3-	2-	3-	2+	2	4-	3-	20+	0.6	0.7	12	24	20	21 24	
22	2	2	3-	3+	3+	2+	2-	2+	20-	0.5	0.6	11	19	22	23 19	
23	2-	3-	3-	3-	2-	1+	2+	1-	16-	0.4	0.4	8	16	12	16 12	
24 Q	1-	1	2	2-	1	1	1+	2+	11	0.1	0.2	5	14	10	13 11	CK
25	2+	2+	1	1+	2	3	4	5-	21-	0.9	0.8	14	36	21	17 41	
26	5	5-	4-	2+	1+	2-	1+	2-	22-	1.0	1.0	18	25	20	34 11	
27	2	2	3-	2+	3+	2	3-	2+	19+	0.6	0.6	10	19	19	17 22	
28QQ	2+	1+	0+	0+	1-	2	2-	1	10-	0.1	0.2	5	12	6	8 11	C
29	2+	2	3+	2+	2-	3-	3-	3-	20-	0.8	0.6	11	23	23	24 21	
30 Q	2-	2+	2-	2-	1+	1+	1	2-	13-	0.1	0.3	6	14	10	14 11	CK
31QQ	1	1	0+	0+	1	1+	1-	1+	7	0.1	0.1	4	11	6	6 10	CC
									MEAN	0.66	0.67	13	24.2	22.1	23.2	

GEOMAGNETIC ACTIVITY INDICES



DAILY AVERAGE INDICES Ap

	1974							1975				
DAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
1	28	10	6	24	28	6	6	7	37	21	7	6
2	18	12	22	32	30	5	15	4	23	10	5	16
3	19	9	35	16	12	6	15	7	12	11	6	19
4	9	31	24	20	8	3	9	32	10	9	7	14
5	6	74	21	19	10	5	7	27	17	30	10	34
6	6	130	20	14	11	10	4	26	8	20	15	35
7	3	15	22	12	6	7	8	44	15	3	25	22
8	6	36	16	7	10	21	13	36	8	2	32	14
9	7	15	16	5	39	39	42	7	11	8	52	16
10	15	20	16	6	10	10	20	6	38	60	35	19
11	32	14	10	4	6	48	21	4	36	53	34	2
12	29	23	5	6	17	70	18	4	35	37	27	3
13	21	12	6	16	86	36	22	32	27	29	29	6
14	18	23	5	9	30	38	13	33	25	29	21	14
15	37	10	4	73	50	10	14	15	21	20	7	3
16	16	10	6	88	68	16	8	21	30	27	6	28
17	15	8	6	3	47	14	18	29	14	13	5	14
18	10	6	10	19	43	8	28	22	15	17	6	7
19	13	6	40	34	29	14	27	10	11	11	5	15
20	18	11	46	35	41	22	21	10	8	14	25	23
21	7	9	39	43	10	24	19	6	8	3	23	12
22	8	8	37	24	15	18	14	8	7	6	15	11
23	7	62	36	16	5	16	17	12	32	13	25	8
24	8	51	26	26	38	26	14	10	17	14	17	5
25	10	22	13	30	22	19	12	5	20	8	8	14
26	40	20	7	38	28	17	12	5	9	17	9	18
27	54	24	18	25	25	9	21	14	5	34	5	10
28	26	18	20	14	29	6	12	12	12	38	3	5
29	19	13	31	16	18	3	11	6		22	2	11
30	15	8	17	21	12	2	6	7		10	6	6
31		6	21		8		14	16		13		4
MEAN	17	24	19	23	26	18	15	16	18	20	16	13

PRINCIPAL MAGNETIC STORMS

MAY 1975

OBS. 2 letter IAGA code	GEOMAGNETIC LATITUDE	COMMENCEMENT DAY	hr min (UT)	TYPE	SC - AMPLITUDES D(')	H(γ)	Z(γ)	MAXIMUM 3 HOUR - INDEX K DAY(3 HOUR PERIOD)	K	RANGES D(')	H(γ)	Z(γ)	UT END DAY	HOUR
HD	7.6N	1	0616	SC	- 0.4	+19	- 1	01(3)	4	5	109	26	03	01
PM	18.7S	1	0616	SC	+ 0.2	+12	+10	05(3) 06(2) 07(5)	5	6	80	40	10	13
CO	64.6N	4	23--	..	..	..	..	06(2,3,4)	6	189	1470	810	06	19
NE	55.1N	4	21--	..	..	..	..	06(1,2)	6	39	143	173	06	06
WI	54.2N	4	21--	..	..	..	..	05(1,7,8) 06(1,2,6) 07(5,6,7)	5	25	185	90	08	03
FR	49.6N	4	23--	..	..	..	..	05(1) 06(1)	6	42	140	78	06	11
IR	41.0N	4	02--	..	..	..	..	07(5)	6	15	159	38	08	05
TU	40.4N	4	23--	..	..	..	..	06(2)	6	15	110	35	06	13
HO	21.1N	4	23--	..	..	..	..	06(2)	4	10	75	51	06	12
HO	7.6N	4	2100	..	..	..	..	05(3,6,7) 06(1,2,6)	4	5	87	27	06	17
GU	4.0N	4	2313	..	..	..	..	05(3)	5	0	80	40	08	15
HR	33.7S	4	21--	..	..	..	..	05(1) 06(1,2)	5	26	48	73	06	10
BD	43.9N	5	21--	..	..	..	..	06(1)	6	29	114	73	06	13
SJ	29.9N	5	1342	..	..	..	..	06(1)	5	07	63	16	06	24
HO	7.6N	6	2000	..	..	..	..	07(5)	5	3	100	18	08	03
NE	55.1N	9	2128	SC	2	22	..	10(1,2)	5	31	103	121	10	15
HR	33.7S	9	14--	..	..	..	..	09(8) 10(1)	5	18	73	56	10	14
KG	56.5S	13	1924	SC	..	..	..	13(7) 14(1)	4	--	--	--	14	07
CO	64.6N	16	0308	SC*	-10	+47	+ 5	16(5)	7	152	1270	810	16	19
NE	55.1N	16	0308	SC	1	22	3	16(3)	6	31	205	166	17	18
WI	54.2N	16	0308	SC*	- 1 *	+26	0	16(3,5,8)	5	15	185	45	17	18
FR	49.6N	16	0308	SC	- 0.5	+23	- 3	16(3)	6	27	90	75	17	15
BD	48.9N	16	0308	SC	- 1	17	- 2	16(3)	5	19	110	56	17	19
IR	41.0N	16	02--	..	..	..	..	16(5)	6	29	87	50	17	20
TU	40.4N	16	0307	SC	- 1	+17	+ 1	16(3)	6	10	110	25	17	18
SJ	29.9N	16	0308	SC	+ 0.5	13	3	16(5)	5	10	64	18	17	12
MB	21.3N	16	0307	SC	--	+16	- 2	16(8)	4	--	--	--	17	03
HO	21.1N	16	0308	SC	- 0	+ 3	+ 2	16(3)	5	6	77	18	17	--
AL	9.5N	16	0307	SC	..	..	..	16(3)	5	4	120	27	16	24
HO	7.6N	16	0308	SC	+ 0.1	+20	- 1	16(3,5)	5	4	131	23	17	21
GU	4.0N	16	0307	SC	..	17	- 5	16(3)	6	0	110	40	17	16
AN	1.5N	16	0307	SC	- 0.7	26	10	--	-	3	137	47	16	24
TV	1.1S	16	0307	SC	0.0	21	32	--	-	3	150	93	16	24
PM	18.7S	16	0307	SC*	+ 0.2*	+17	+16	16(3,5)	5	4	120	80	17	16
HR	33.7S	16	03--	..	..	..	..	16(5)	5	14	88	61	17	15
GN	43.2S	16	0308	SC	+ 5	+ 3	+ 2	16(5)	7	27	90	140	17	16
CO	64.6N	19	1950	SC*	+26	-63	+50	20(3,4)	7	116	1330	570	20	11
SI	60.0N	19	1951	SC*	+11.1*	-26.0*	-14.8*	20(3)	7	80	540	660	20	10
NE	55.1N	19	1951	SC*	2	18	..	--	-	--	--	--	--	--
WI	54.2N	19	1951	SC*	- 2	+78 *	0	19(7,8) 20(6)	5	15	165	45	20	19
FR	49.6N	19	1950	SC*	- 0.5	-15	+ 1	20(1)	6	21	140	46	20	11
BD	48.9N	19	1950	SC*	- 1	28	- 3	20(1)	6	17	147	65	20	22
IR	41.0N	19	1954	SC*	- 3	50	7	19(7) 20(1,4)	5	15	110	30	20	20
TU	40.4N	19	1950	SC*	- 2	+30	+ 1	20(1)	6	10	135	15	20	12
SJ	29.9N	19	1951	SC*	- 0.5	25	9	20(1)	6	05	96	24	20	10
MB	21.3N	19	1951	SC	- 0.7	+36	- 3	20(1)	6	2	90	9	20	18
HO	21.1N	19	1950	SC*	+ 1 *	+21	+ 8	20(1)	6	5	113	23	20	10
AL	9.5N	19	1951	SC	- 0.5	32	- 4	20(1)	6	4	109	25	20	18
HO	7.6N	19	1951	SC	- 0.3	+31	- 3	20(1)	5	3	119	17	20	19
GU	4.0N	19	1950	SC	1	20	- 6	20(1)	6	0	170	30	20	18
AN	1.5N	19	1951	SC	- 1.1	34	19	--	-	3	128	48	20	16
TV	1.1S	19	1951	SC	0.3	26	38	--	-	3	132	129	20	18
PM	18.7S	19	1950	SC*	+ 0.6*	+18	+18	20(1)	5	4	140	70	20	19
HR	33.7S	19	1950	SC	+ 1	+21	+14	20(1)	5	12	74	74	20	18
KG	56.5S	19	1952	SC	..	..	..	19(7)	5	--	--	--	20	18
NE	55.1N	20	0042	SC	4	45	6	20(3)	6	40	219	230	20	18
NE	55.1N	25	16--	..	..	..	..	26(2)	6	38	112	147	26	12
WI	54.2N	25	16--	..	..	..	..	25(7) 26(1)	5	25	105	65	26	09
BD	48.9N	25	21--	..	..	..	..	26(2)	6	29	89	56	26	15
AL	9.5N	25	16--	..	..	..	..	25(6,7,8) 26(1)	4	4	44	30	26	20
HO	7.6N	25	1630	..	..	..	..	25(6,7,8)	4	3	43	16	26	19
AN	1.5N	25	16--	..	..	..	..	--	-	3	49	49	26	20
TV	1.1S	25	16--	..	..	..	..	--	-	3	87	34	26	20
HR	33.7S	25	16--	..	..	..	..	26(1)	5	14	67	76	26	17
AL	9.5N	27	0633	SC	- 0.6	26	- 5	27(3)	5	5	84	26	28	05
HO	7.6N	27	0633	SC	- 0.5	+27	- 1	27(3)	4	4	89	21	28	03
AN	1.5N	27	0633	SC	- 0.1	42	17	--	-	3	106	26	28	05
TV	1.1S	27	0633	SC	0.0	41	48	--	-	3	107	76	28	05

Reports were received from the following observatories:

College, Sitka, Newport, Witteveen, Fredericksburg, Boulder, Irkutsk, Tucson, San Juan, Honolulu, M'Bour, Alibag, Hyderabad, Guam, Annamalainagar, Trivandrum, Port Moresby, Hermanus, Gnangara, Toolangi, Port-aux-Francais

SUDDEN COMMENCEMENTS AND SOLAR FLARE EFFECTS

MAY 1975

PRELIMINARY REPORT ON RAPID MAGNETIC VARIATIONS (by Dr. A. Romana)

The meaning of the station symbols is given in the IAGA-Bulletins nr. 12 and 32. Times of ssc and si are mean values. If given by ten or more stations they are underlined.

Sudden commencements followed by a magnetic storm or a period of storminess (ssc)

16 0308 A: VI LG FR PE KS; B: SO WN WI FU IK EB KA PM LM GN; C: NI CI SZ PP TN

19 1951 A: SO WN WI VI OT LG IK EB TL FR PE KS QU SZ LM DU; B: DO FU IK CI KA PM PP GN CZ KG; C: NI (si: B: SS)

27 0634 A: LB KS; B: QU PP? LM; C: EB TL PE (si: B: TN; C: KA)

Sudden impulses found in the magnetograms (si)

01 0616 B: WN FU EB KA TN; C: TL? (ssc: B: KS QU PM; C: NI IK PP - sfe: SS)

27 1817 B: WN WI FU EB TL (ssc: B: VI IK QU; C: PE - sfe: LG SZ)

Solar-flare effects (sfe)

Effects confirmed by ionospheric or solar observations are underlined.

03 1347 - 1401 SZ

13 1602 - 1611 LG

16 1841 - .... SS

21 1654 - 1703 LG

27 1323 - 1340 SO TL (si: B: WN)

30 1501 - 1510 LG

RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

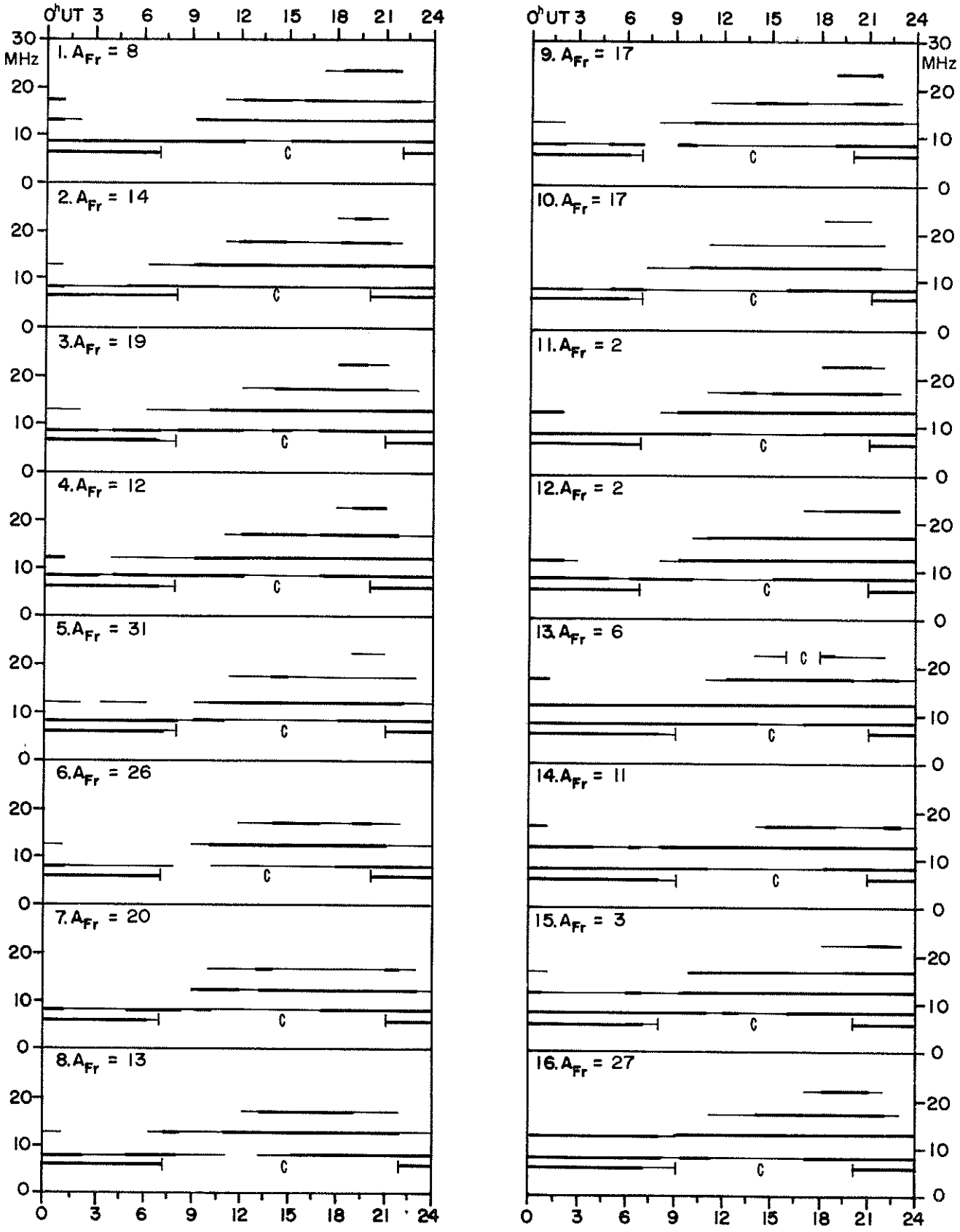
MAY 1975

North Atlantic

MAY 1975	WHOLE DAY INDICES NORTH ATLANTIC	ADVANCE FORECASTS (JC-REPORTS) FOR WHOLE DAY	NORTH ATLANTIC 6-HOURLY QUALITY FIGURES 00 TO 06	06 TO 12	12 TO 18	18 TO 24	SHORT-TERM FORECASTS ISSUED ABOUT ONE HOUR IN ADVANCE OF 02	08	14	20	GEOMAGNETIC INDICES K_{FR} HALF DAY (1)	(2)	A_{FR} OBSERVED
01	6o	6	6o	6-	6+	6+	6	6	5	6	2	2	8
02	6o	6	6-	5+	6o	7-	6	6	5	6	3	3	14
03	6+	6	6o	6-	7o	6+	6	6	6	5	(4)	3	19
04	6+	6	7-	5+	6+	7-	5	5	6	5	3	2	12
05	6o	5	6o	5o	6+	6+	5	5	5	5	(4)	(4)	31
06	6-	4	6-	5o	6-	6-	5	4	4	5	(5)	2	26
07	6o	4	6-	5+	6+	6+	4	5	5	5	3	(4)	20
08	5o	5	6o	6-	7-	6+	5	4	6	5	3	3	13
09	6o	5	6o	6o	6+	7-	5	5	6	6	3	3	17
10	6-	5	6o	6o	6-	6-	5	4	5	5	(4)	2	17
11	6o	5	6-	6o	7-	6+	5	5	6	6	1	0	2
12	6+	6	6+	6+	6+	7-	6	6	6	6	1	1	2
13	6-	6	6o	5o	6+	6o	6	6	6	6	1	2	6
14	6-	6	6-	4+	6o	6o	6	6	6	6	3	1	11
15	6-	6	5+	5+	6o	6o	5	6	6	6	1	1	3
16	6-	6	6o	6-	6-	6o	6	6	4	5	(4)	(4)	27
17	6+	6	6+	6o	6+	6+	5	4	5	5	(4)	2	16
18	6o	5	6o	6o	6o	6-	5	5	5	5	3	2	10
19	6o	5	6o	6o	6o	6o	6	5	5	6	3	3	17
20	6-	5	5+	6-	6o	6o	5	5	5	5	(5)	2	28
21	6o	5	6o	6o	6o	6o	5	5	5	6	3	3	11
22	6-	5	6o	5+	6-	6-	5	5	5	5	3	2	8
23	6o	5	6o	6+	6o	6o	5	6	6	6	3	2	8
24	5+	6	6o	7-	6+	6+	6	6	6	6	1	1	5
25	6o	6	6+	6o	6o	6o	6	6	6	6	2	3	10
26	6-	6	6-	6-	5o	6-	6	5	5	5	(4)	2	19
27	6o	6	6-	6o	6+	6+	5	5	5	6	3	3	12
28	6+	6	6o	7-	6-	6+	5	5	6	6	2	2	6
29	5+	6	7-	6+	6-	6+	6	6	6	6	3	3	12
30	6+	6	6+	6+	6+	6+	6	5	6	6	2	1	6
31	6+	5	6o	6o	6+	6+	6	6	6	6	1	2	4

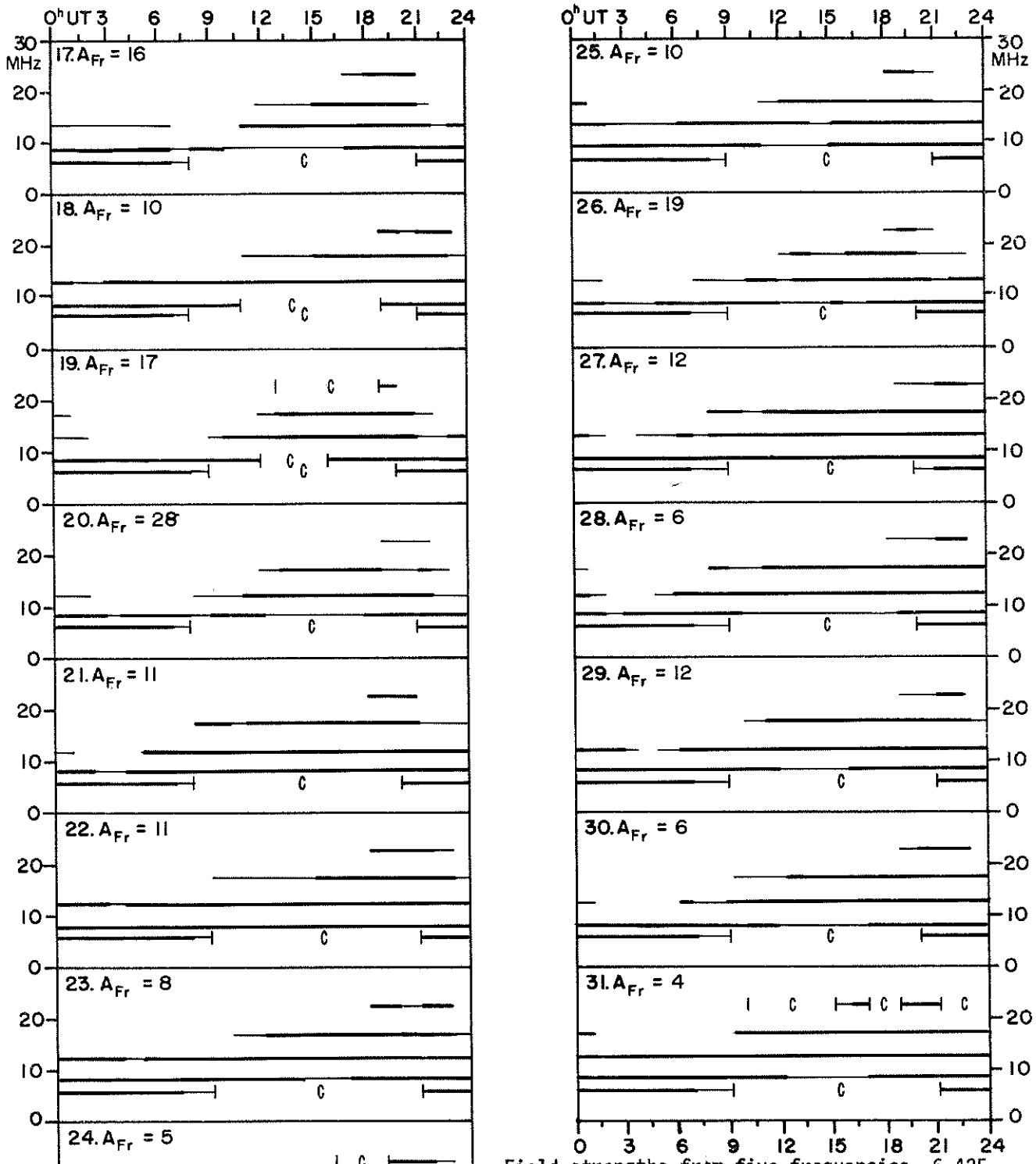
TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH

MAY 1975



TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH

MAY 1975



Field strengths from five frequencies, 6.425, 8.542, 12.813, 17.084 and 22.378 MHz, observed on a Lüchow.- Halifax circuit are represented above. Heavy solid lines represent field strengths ≥-12 dB above 1 μv/m (transmitter power reduced to 1 kW). Observed field strengths between -12 dB above 1 μv/m and -40 dB above 1 μv/m are represented by the fine line. **Adapted from Observations by Deutsche Bundespost**

USC0958 - E21

RADIO PROPAGATION QUALITY INDICES

MAY 1975

Quality Indices calculated for reception at Lüchow

	TOKYO	HALIFAX	MAURITIUS	CANBERRA	BRACKNEL
1	5.1	7.3	7.7	4.5	12.1
2	4.8	7.2	7.1	5.0	14.2
3	4.5	6.8	6.6	4.9	12.4
4	5.1	7.6	6.7	4.7	12.8
5	4.2	6.0	6.2	4.1	11.6
6	3.7	5.3	6.3	4.3	11.2
7	2.9	5.7	5.5	4.4	12.9
8	2.7	6.0	4.0	3.5	11.1
9	2.7	6.3	5.2	3.8	11.7
10	3.5	6.1	4.9	4.7	12.2
11	4.8	7.4	5.0	4.1	12.5
12	5.7	8.2	5.9	5.1	13.4
13	4.6	7.9	6.9	5.1	13.9
14	4.2	7.1	7.6	5.9	13.5
15	6.5	7.6	6.6	5.6	13.5
16	4.6	6.5	7.0	5.3	12.5
17	3.9	6.2	6.2	4.9	12.6
18	4.9	7.7	5.6	4.6	13.1
19	4.8	6.8	5.9	4.7	12.2
20	3.9	6.2	6.0	4.7	11.7
21	4.9	7.9	7.2	4.7	12.2
22	4.8	7.7	6.9	5.1	12.1
23	5.5	7.8	6.2	5.5	12.4
24	5.7	8.1	6.3	5.3	12.2
25	4.1	6.9	6.1	4.9	11.9
26	3.3	7.0	5.9	5.7	12.0
27	5.3	8.5	6.5	5.2	12.6
28	5.0	8.3	6.8	6.6	12.8
29	4.5	8.4	7.1	6.2	12.6
30	5.6	8.2	6.8	5.6	12.6
31	5.8	8.8	6.5	5.8	13.1
MEAN	4.6	7.2	6.3	5.0	12.5

The method of calculation of the radio propagation indices changed in July 1974. An absolute quality figure is calculated for a 24-hour period from Tokyo, Halifax, Mauritius (Africa) and Canberra. The figure 0.0 corresponds to a median field strength of -30 dB above 1μV/m (converted into 1 kW and referred to an omnidirectional antenna). The figures 1 to 10 are in steps of 5 dB with the figure 10.0 corresponding to a median field strength of +20 dB above 1μV/m. The field strength of the frequency with the highest value for each hour is used in place of a mean of all recorded frequencies. This is done on the assumption that the optimum frequency would be used for communication.

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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."