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Solar - Geophysical Data

NO. 367 ' MARCH 1975

Part I (Prompt Reports)

DATA FOR
FEBRUARY 1975
JANUARY 1975

**NATIONAL GEOPHYSICAL AND SOLAR - TERRESTRIAL DATA CENTER
BOULDER, COLORADO**

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SOLAR - GEOPHYSICAL DATA

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No. 367

Issued in two parts

Hope I. Leighton, Editor

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ALERT PERIODS

INTERNATIONAL URSIGRAM
AND WORLD DAYS SERVICE
FEBRUARY 1975

PRESTO MESSAGES (THE RAPID REPORT OF MAJOR EVENTS).

Boulder 23/1400Z Magstorm begins 23/0910Z weak Magstorm in progress 23/1400Z.

SUMMARY OF THE GEGALERT WWA MESSAGES

Message serial number	Date of issue	Date of obser- vation	Wolf number	10cm solar flux	A index	Active Regions				Outstanding events	Forecasts			Alert Situations
						Location	No. of Flares				Date	Location	Desc*	
								Lat-Long	Total					
032	01	31	00	72	17	-	-	-	-		01	SPOTNIL	-	SOLQUIET MAGALERT MINOR 01/04
033	02	01	00	73	20	-	-	-	-		02	SPOTNIL	-	SOLQUIET MAGALERT MINOR 02/04
034	03	02	33	75	19	S13E57 S10E68	0 0	0 0	0 0		03	S13E57 S10E68	Q Q	SOLQUIET MAGALERT MINOR 03/04
035	04	03	53	77	11	S13E43 S11E56 S10E49	0 0 1	0 0 0	0 0 0		04	S13E43 S11E56 S10E49	Q Q Q	SOLQUIET MAGNIL
036	05	04	25	78	07	S12E26 S11E32	0 0	0 0	0 0		05	S12E26 S11E32	Q Q	SOLQUIET MAGQUIET
037	06	05	35	79	15	N03E50 N12E40 S12E10	8 0 0	0 0 0	0 0 0		06	N03E50 N12E40 S12E10	E Q Q	SOLALERT 06/10 MAGQUIET
038	07	06	42	83	08	N04E40 S10E00 S12W08	4 0 0	0 0 0	0 0 0		07	N04E40 S10E00 S12W08	E Q Q	SOLALERT 07/10 MAGQUIET
039	08	07	27	82	09	S13W14 S11W09 N04E20	1 0 1	0 0 0	0 0 0		08	S13W14 S11W09 N04E20	Q Q Q	SOLNIL MAGALERT RECURRENCE 09/15
040	09	08	17	81	08	N04E06	0	0	0		09	N04E06	Q	SOLQUIET MAGALERT MINOR RECURRENCE 09/15
041	10	09	19	79	06	N03W05	0	0	0		10	N04W05	Q	SOLQUIET MAGALERT MINOR RECURRENCE 09/15
042	11	10	38	79	21	N03W20	0	0	0	MINOR MAGNETIC DIS- TURBANCE STARTED ABOUT 11/0000Z	11	N03W20	Q	SOLQUIET MAGALERT MINOR 11/15
043	12	11	19	77	19	N03W34	1	0	0		12	N03W34	Q	SOLQUIET MAGALERT MINOR 12/15
044	13	12	11	77	28	N03W49	0	0	0		13	N03W49	Q	SOLQUIET MAGALERT MINOR 13/15
045	14	13	11	76	18	N03W64	1	0	0		14	N03W64	Q	SOLQUIET MAGALERT MINOR 14/15
046	15	14	11	74	22	N03W77	0	0	0		15	N03W77	Q	SOLQUIET MAGALERT MINOR 15
047	16	15	00	72	16	-	0	0	0		16	SPOTNIL		SOLQUIET MAGALERT MINOR 16
048	17	16	00	73	19	-	0	0	0		17	SPOTNIL		SOLQUIET MAGALERT MINOR 17
049	18	17	00	71	14	-	0	0	0		18	SPOTNIL		SOLQUIET MAGNIL
050	19	18	00	70	12	-	0	0	0		19	SPOTNIL		SOLQUIET MAGQUIET
051	20	19	00	70	12	-	0	0	0		20	SPOTNIL		SOLQUIET MAGQUIET
052	21	20	11	71	06	N09E04	0	0	0		21	N09E04	Q	SOLQUIET MAGQUIET
053	22	21	11	70	06	N09W20	0	0	0		22	N09W20	Q	SOLQUIET MAGQUIET
054	23	22	13	70	05	N01W07	0	0	0		23	N01W07	Q	SOLQUIET MAGQUIET
055	24	23	17	70	27	S09W08	0	0	0	MINOR MAGSTORM BEGAN 23/0910Z	24	S09W08	Q	SOLQUIET MAGALERT MINOR 24
056	25	24	42	70	12	S08W03 N04W27	0 0	0 0	0 0		25	S08W03 N04W27	Q Q	SOLQUIET MAGNIL
057	26	25	14	71	16	S08W18	0	0	0		26	S08W18	Q	SOLQUIET MAGQUIET
058	27	26	00	70	10	-	0	0	0		27	SPOTNIL		SOLQUIET MAGALERT 27/03
059	28	27	00	71	04	-	0	0	0		28	SPOTNIL		SOLQUIET MAGALERT 28/03
060	01	28	00	70	10	-	0	0	0		01	SPOTNIL		SOLQUIET MAGALERT 01/03 STRATWARM ALERT / SATURDAY / STRATWARM EXISTS SIGNIFICANT INTENSIFICATION NOTED IN MID STRATOSPHERE WARM AIR SYSTEM OVER NORTHEASTERN SIBERIA.

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

6
Feb 75

RELATIVE SUNSPOT NUMBERS

ZURICH, R_Z

DAY	1974 FINAL												1975 PROVISIONAL	
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB
1	12	13	24	22	47	33	79	37	8	61	18	0	30	0
2	15	10	14	20	70	41	87	23	8	53	27	0	30	22
3	13	7	0	19	65	52	90	12	16	46	39	9	28	28
4	12	7	10	22	98	57	93	17	37	60	45	15	19	27
5	8	0	14	21	100	62	95	18	40	85	36	17	18	20
6	0	0	19	23	102	72	93	26	44	83	25	8	23	26
7	0	7	20	28	98	55	78	32	38	84	22	7	32	34
8	24	15	14	38	96	59	59	34	32	97	14	0	29	29
9	29	21	20	56	88	64	40	43	63	107	7	0	37	22
10	43	22	30	66	69	59	26	48	74	114	24	9	31	18
11	48	20	37	71	62	48	22	54	80	110	27	21	30	13
12	54	22	38	74	49	38	22	67	80	92	24	31	31	18
13	45	48	30	77	38	44	28	69	74	76	16	34	32	9
14	70	26	39	83	32	41	38	66	67	63	8	33	11	8
15	73	45	34	87	23	32	49	59	64	48	16	35	20	8
16	64	48	23	77	16	25	54	57	68	41	20	40	17	8
17	63	49	20	67	8	25	52	52	71	28	20	36	16	0
18	55	47	28	55	0	27	53	44	66	16	18	34	20	0
19	53	43	21	45	0	28	47	43	51	9	34	43	20	0
20	48	39	15	42	0	20	50	32	31	11	40	40	18	7
21	33	35	16	35	0	16	55	28	13	12	40	40	16	8
22	36	38	28	25	7	11	58	34	0	9	44	37	16	0
23	28	31	25	17	9	11	60	34	7	7	44	28	15	0
24	14	29	21	18	7	15	57	28	11	7	37	26	7	12
25	0	17	16	19	0	15	59	25	11	8	29	9	7	9
26	8	19	10	20	20	8	60	8	13	16	25	8	7	0
27	0	37	9	28	18	8	54	8	19	30	23	8	0	0
28	8	33	17	15	28	18	51	8	23	27	13	20	7	0
29	0		19	22	18	30	42	14	38	22	7	16	7	
30	6		24	16	7	47	41	8	58	22	7	19	7	
31	0		26		30		38	15		16		13	0	
MEAN	27.6	26.0	21.3	40.3	39.5	36.0	55.8	33.6	40.2	47.1	25.0	20.5	18.7	11.6

1974 yearly mean = 34.5

DAILY SOLAR FLUX AT 2800 MHz

OTTAWA ARO

FLUX ADJUSTED TO 1 A.U., S_a

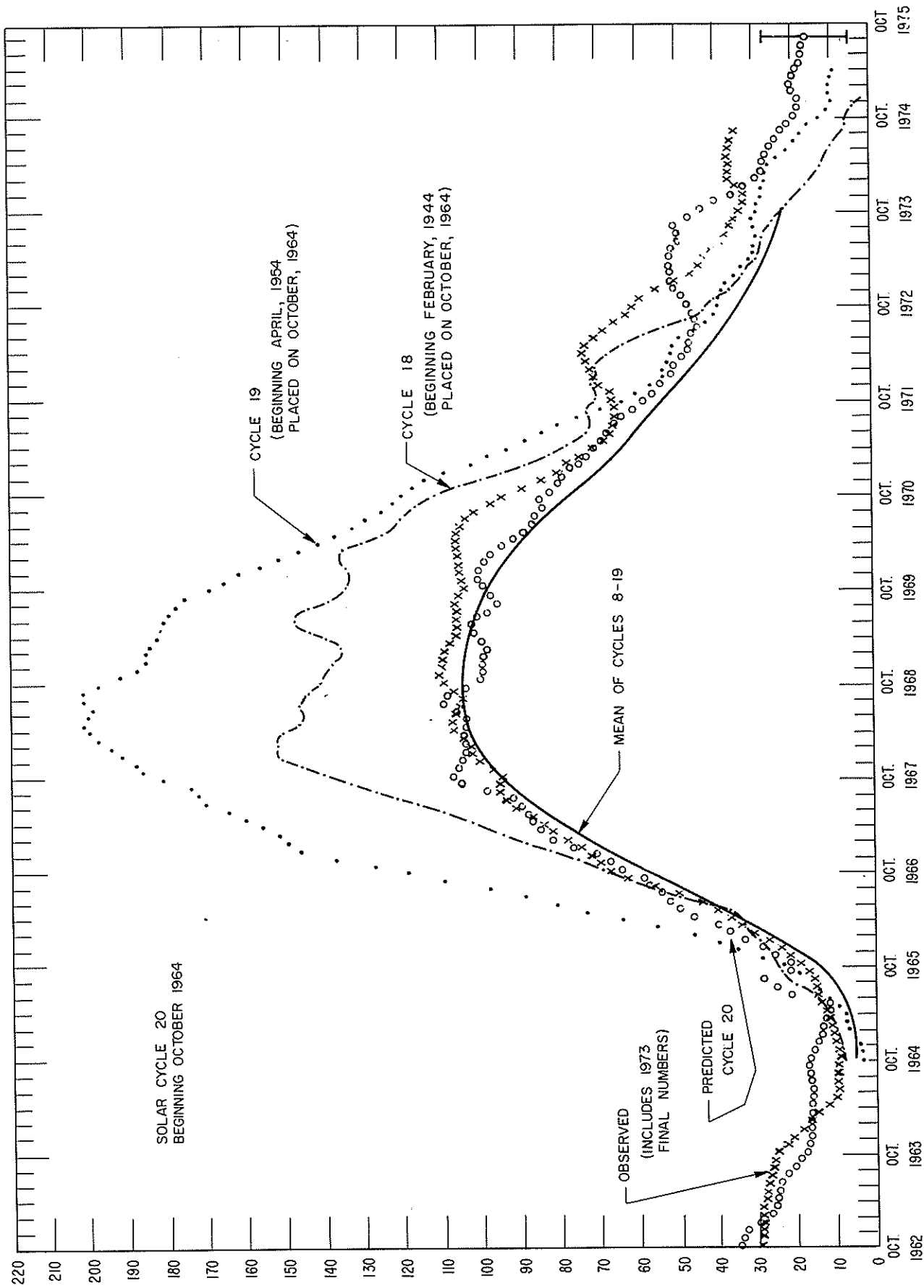
1974												1975	
DAY	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	
1	76.4	72.1	98.5	97.9	105.4*	85.1	77.8	93.1	90.2	79.7	78.1	70.8	
2	76.5	71.3	113.1*	100.1	112.7*	85.2	79.4	94.6	92.0	78.7	75.8	72.3	
3	77.1	71.5	115.5	98.9	118.5*	83.0	79.2	93.4	96.2	76.7	77.1	74.3	
4	79.0	73.3	118.0	98.2	127.8*	85.8	81.0	100.5	99.5	74.7	74.4	75.4	
5	78.6	76.3	119.7	96.5	125.6*	86.5	81.5	113.3*	97.6*	73.2	73.7	76.5	
6	77.5	80.0	123.0	95.0*	121.5	88.0	82.2	115.0	92.3	71.9	73.8	81.1	
7	76.0	80.2	119.3	92.8	110.9*	85.8	85.4	114.5*	85.6	71.1	75.7	79.4	
8	77.0	81.1	115.8	95.0*	104.7*	89.4	93.4	125.2	82.0	69.6	77.7	78.8	
9	80.2	87.8	110.0	95.1	95.5	87.5	96.0	128.9	78.9	69.6	79.9	77.1	
10	86.1	93.5*	105.1	97.0	88.2	88.3	102.0	129.3*	78.4	70.4	80.5	76.7	
11	85.9	99.8	104.3	95.3*	83.1	94.4	104.6	137.5*	77.3	76.2	81.2	74.8	
12	86.2	105.6*	97.1	91.7	83.3	99.4	105.6	144.1	79.1	77.9	82.4	74.9	
13	84.5	102.8	93.5	89.8	83.3	95.2	106.8*	126.6	76.1	78.0	80.4	73.7	
14	81.9	116.3	88.2	88.1	83.3	93.2	104.1	113.2*	77.7	78.2	77.7	72.0	
15	82.9	122.9*	84.9	84.7	85.5	92.1	103.6	103.7*	80.0	83.2	77.4	69.7	
16	81.8	115.0*	80.3	85.2	91.3	96.6	102.0*	94.9	82.5	88.3	76.5	71.4	
17	82.7	101.8	75.8	87.2	91.0	98.8	100.3	83.8	84.6	88.3	74.7	69.3	
18	80.2	98.0	75.2	84.4	86.5	95.1*	100.0	81.0	88.5	90.3	75.8	68.3	
19	80.0	87.5*	73.0	82.8	87.1	88.8	91.7	75.2	96.0	91.9	74.1	70.0	
20	79.6	82.3	72.5	83.8	86.7	82.6	85.9*	75.5	95.6	87.3	73.8	69.5	
21	79.1	79.5	71.9	81.4	90.1	81.2*	82.7	73.9	96.2	86.0	74.5	68.9	
22	80.0	75.3	72.2	82.3	95.3*	80.6	81.0	72.6	98.7	84.4*	73.6	68.3	
23	79.8	73.9	71.5	80.2	98.5	81.0	74.6	74.0	98.1	83.0	72.7	68.3	
24	76.6	75.0	71.6	79.1	92.1*	77.4	72.8	74.7	95.9	80.1	71.0	68.6	
25	74.3	76.5	72.4	78.8	89.5	75.7	72.8	76.9	94.5	78.9	70.3	69.4	
26	72.6	74.9	79.6	79.6	93.1	73.8	75.4	80.7	92.2	75.8	70.5	68.8	
27	71.8	75.3	85.1	82.4	87.9	72.7	77.0	80.0	90.8	74.3	70.1	69.4	
28	70.4	77.9	87.4	83.0	84.5	71.8	80.7	81.6	86.6	73.7	70.7	68.6	
29	71.5	81.6	89.4	89.4*	85.2	72.4	90.7	81.6	83.8	74.1	70.4		
30	72.1	91.7	93.1*	93.1*	85.9	74.2	91.5	82.7	82.0	74.5	70.5		
31	72.9		95.1		87.4	75.6		86.7*		76.1	70.1		
MEAN	78.4	86.7	92.6	89.0	95.5	85.1	88.7	97.1	88.3	78.6	75.0	72.4	

* adjusted for burst

DAILY SOLAR INDICES FEBRUARY 1975

FEB 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'}		AFCLR 15400	AFCLR 8800	AFCLR 4995	OTTAWA 2800	AFCLR 2695	AFCLR 1415	AFCLR 606	AFCLR 410	AFCLR 245	
1	32	6	0	2	72.9	522	282	116	70.8	70.5	46.7	34.3	22.4	8.6	
2	33	7	22	17	74.5	517	280	117	72.3	72.3	43.9	34.5	23.7	8.6	
3	34	8	28	23	76.5	517	279	119	74.3	73.6	48.4	34.4	22.5	8.7	
4	35	9	27	27	77.6	529	277	120	75.4	76.1	49.9	36.5	23.2	8.8	
5	36	10	20	25	78.7	525	272	122	76.5	77.7	53.8	36.2	25.2	8.9	
6	37	11	26	26	83.4	521	270	124	81.1	78.0	58.4	37.0	28.0	10.5	
7	38	12	34	30	81.6	519	271	125	79.4	79.5	54.1	38.3	22.1	13.0	
8	39	13	29	32	81.0	527	272	124	78.8	79.9	56.8	38.3	25.4	12.3	
9	40	14	22	25	79.2	530	272	122	77.1	77.4	54.8	36.2	24.1	9.1	
10	41	15	18	19	78.7	516	275	120	76.7	76.7	51.9	37.3	23.6	8.8	
11	42	16	13	20	76.8	524	275	122	74.8	75.7	55.9	37.2	23.8	9.2	
12	43	17	18	10	76.9	523	270	121	74.9	75.2	54.3	37.1	24.1	9.7	
13	44	18	9	10	75.6	529	268	120	73.7	74.3	51.6	36.5	23.4	8.5	
14	45	19	8	8	73.8	522	278	117	72.0	71.3	47.9	35.2	23.8	8.5	
15	46	20	8	3	71.5	516	274	116	69.7	70.7	46.3	35.0	23.1	8.4	
16	47	21	8	1	73.2	526	270	118	71.4	72.3	48.0	34.9	21.7	8.5	
17	48	22	0	0	71.0	531	269	115	69.3	68.6	45.1	34.5	22.4	8.1	
18	49	23	0	0	69.9	522	271	117	68.3	69.0	45.7	33.3	21.9	8.0	
19	50	24	0	0	71.6	514	266	115	70.0	68.1	44.9	33.3	20.2	7.9	
20	51	25	7	5	71.1	525	272	115	69.5	70.0	44.5	34.4	20.4	7.6	
21	52	26	8	2	70.4	527	275	114	68.9	68.7	45.0	33.4	20.4	8.0	
22	53	27	0	C	69.8	517	273	114	68.3	68.2	42.9	30.8	19.3	7.4	
23	54	1	0	5	69.8	516	270	115	68.3	67.2	45.9	31.1	21.3	7.8	
24	55	2	12	11	70.1	530	272	116	68.6	67.2	47.4	33.1	21.2	8.0	
25	56	3	9	11	70.8	529	269	118	69.4	69.6	45.4	33.3	20.7	7.9	
26	57	4	0	3	70.2	526	268	115	68.8	69.5	46.0	33.2	20.0	7.9	
27	58	5	0	0	70.7	525	269	115	69.4	68.6	45.2	32.5	19.9	7.5	
28	59	6	0	0	69.9	529	273	116	68.6	68.7	44.1	32.8	19.5	7.5	
MEAN			11.6	11.2	74.2	523	273	118	72.4	72.3	48.7	34.8	22.4	8.7	

* Corrected for burst.



PREDICTED AND OBSERVED SUNSPOT NUMBERS

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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	11.3
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	78.8	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	113.1
1969	110.0	109.6	108.0	106.4	106.2	106.1	105.8	106.4	105.4	104.1	104.6	104.9
1970	105.6	106.0	106.2	106.1	105.8	105.3	103.8	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	65.8	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	37.6	36.3	34.7	33.2	32.7	32.6
1974	34.2	36.1	35.7	35.7	36.4	36.2	35.7	34.5	32.3 (2)	30.4 (3)	28.7 (5)	27.4 (5)
1975	26.0 (5)	24.3 (6)	23.0 (6)	21.5 (7)	19.8 (8)	18.6 (9)	17.5 (11)	16.2 (-)	15.3 (-)	14.4 (-)	13.5 (-)	12.5 (-)

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 1973.

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.

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SOLAR FLARES

PARTIAL LISTING

Solar Flares for which at least one observatory has assigned a numerical importance of "1" or greater.

FEBRUARY 1975

OBSERV- ATORY	OBSERVED UT				LOCATION				DURA- TION — MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS					REMARKS
	DATE FEB	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMAH PLAGE REGION				CMP DAY	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H α	
[RAMY PALE PALE	05	1753	1814	1758	N 4	E50	.772		9.5	21	SN 3 C		.65				F
	05	1755	1821	1803	N 4	E56	.833	13470	9.9	26	1B 2 V		1.24				DE H
	05	1755	1821	1803	N 4	E56	.833	13470	9.9	26	1B 2 C		1.24				DE H
[RAMY ATHN ATHN ATHN WEND	11	1301	1315	1306	N 3	W27	.468		9.5	15	SF 4 C		.65				DE
	11	1301	1307	1303	N 4	W27	.472		9.5	6	SF 5 C		.50				DE
	11	1301	1307	1303	N 4	W27	.472		9.5	6	SF 4 V		.50				DE
	11	1301	1307	1303	N04	W27	.472		9.5	6	SF 1	1303	.52	.50			
	11	1315	1340		N02	W26	.449	13470	9.6	25	1N	P	5.16	5.50			

Note: Catania and Capri-S express Maximum Intensities in percent of the local undisturbed chromosphere instead of percent of the local continuum. Parentheses are used to indicate this difference.

"Remarks":

A = Eruptive prominence whose base is less than 90° from central meridian.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No visible spots in the neighborhood.
H = Flare accompanied by a high speed dark filament.
I = Active region very extended.
J = Distinct variations of plage intensity before or after the flare.
K = Several intensity maxima.
L = Existing filaments show signs of sudden activity.
M = White-light flare.

N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the calcium II lines H and K.
P = Flare shows helium D₃ in emission.
Q = Flare shows the Balmer continuum in emission.
R = Marked asymmetry in H α line suggests ejection of high velocity material.
S = Brightness follows disappearance of filament (same position).
T = Region active all day.
U = Two bright branches, parallel (||) or converging (Y).
V = Occurrence of an explosive phase: important and abrupt expansion in about a minute with or without important intensity increase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide H α line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

SOLAR FLARES

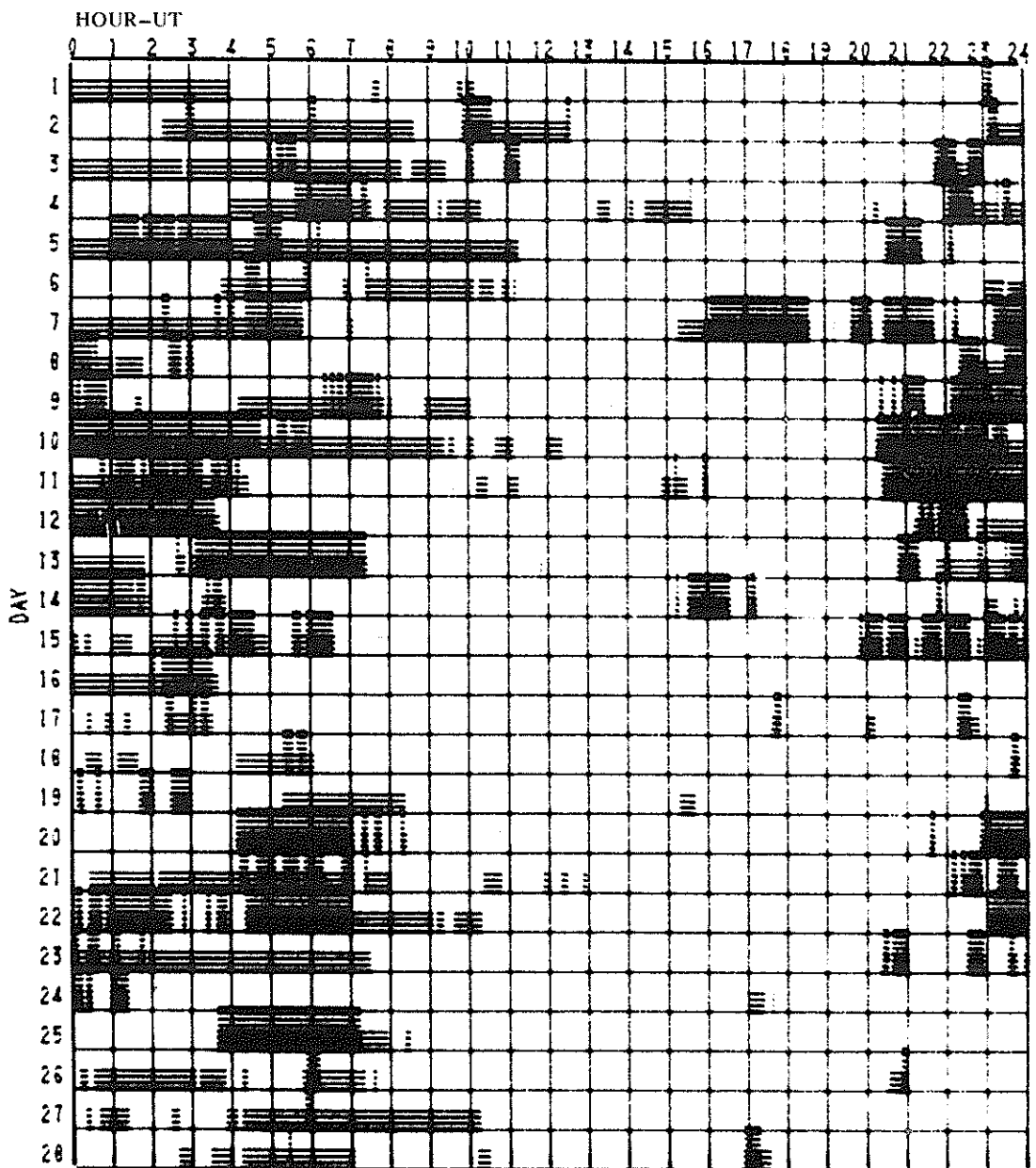
Date, time (UT) and coordinates of Subflares not included in preceding table.

FEBRUARY 1975

02 1310 S12 E61	02 1510 S12 E62	02 1720 S12 E60	03 1020 S09 E58	03 1025 S12 E60	03 1028 S08 E59
03 1031 S12 E48	03 1052 S10 E57	03 1128 S10 E57	03 1133 S10 E57	03 1205 S08 E58	03 1206 S10 E56
03 1211 S08 E58	03 1220 N01 E90	03 1236 N01 E90	03 1245 S10 E56	03 1248 S 7 E56	03 1249 S10 E56
03 1435 S08 E57	03 1515 S08 E56	03 1515 S 6 E58	03 1516 S08 E58	03 1517 S 9 E57	03 1536 S12 E45
03 1547 S10 E56	03 1551 S10 E55	04 2156 N 4 E64	05 0049 N02 E64	05 0655 N03 E62	05 1354 N 4 E53
05 1356E N03 E54	05 1510 S 9 E26	05 1531 N 4 E52	05 1643 N 4 E51	05 1911 N 4 E55	05 1911 N 4 E49
05 1913E N 4 E53	05 1914E N 4 E51	05 1914E N 4 E51	05 2100E N 2 E51	05 2101E N 3 E51	05 2132 N 4 E47
05 2203 N 4 E46	05 2250E N03 E50	06 0227 N03 E49	06 0250 N03 E49	06 0254 N 2 E48	06 0256E N 2 E49
06 0510 N03 E46	06 0510 N03 E46	06 1451 N 1 E38	06 1500 N01 E40	06 1811 N 4 E39	06 1811 N 4 E43
07 0213E N03 E36	07 0959E N03 E31	07 1041E N03 E30	07 1130 N03 E28	07 1206 N02 E27	07 1349 N02 E27
07 1418 N02 E27	07 1419 N03 E27	07 1452 N02 E25	07 1925 S12 W04	07 1926 S12 W 4	07 1926 S12 W 6
08 0742 N02 E18	08 0812 S15 W14	08 0831 S15 W14	08 0958 S15 W13	08 1030 S15 W16	08 1049 S15 W13
08 1120 N06 E15	08 1137 S15 W13	08 1155 S15 W12	08 1505 N05 E12	09 1034 N05 W04	13 1308 N 3 W55
13 1310E N04 W54	13 1310 N05 W59	13 1435 N04 W56	13 1435 N 3 W56	13 1436 N05 W60	13 1455 S10 W78
13 1458 N05 W62	13 2011 N 3 W58	20 1248 N10 W01	20 1305 N10 W02	20 1404 N10 W03	22 1057E N02 W02
22 1318 N02 W04	23 1400 S10 E16	24 0800 S09 E04	24 0830 S09 E03	27 0418E S 8 W31	

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

FEBRUARY 1975



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Observatories included in total patrol:

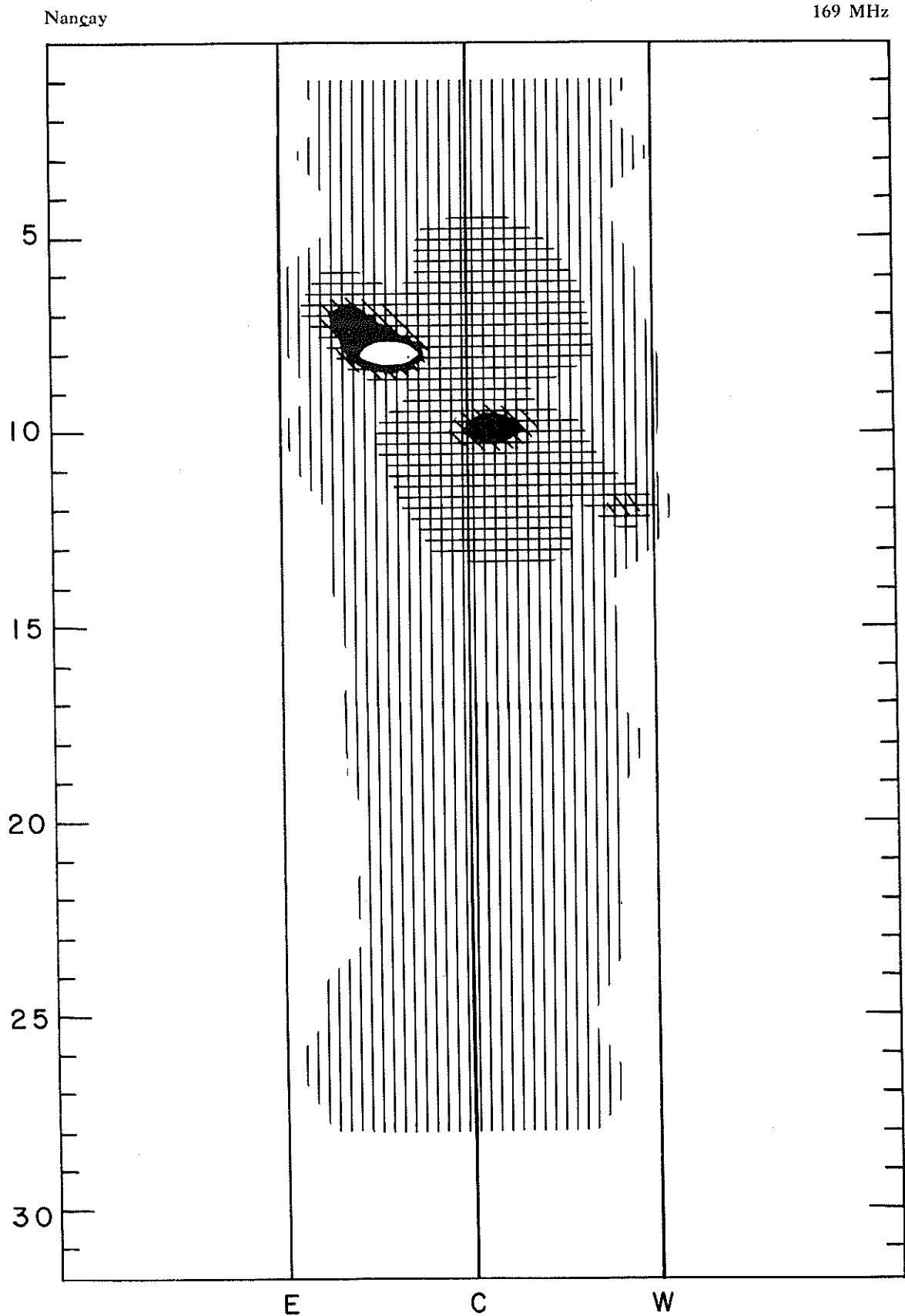
Arcetri	Bucharest	Herstmonceaux	Mitaka	Tehran
Athènes	Catania	Manila	Palehua	Upice
Boulder	Haute Provence	McMath-Hulbert	Ramèy	Wendelstein

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).

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SOLAR RADIO EMISSION INTERFEROMETRIC OBSERVATION

FEBRUARY 1975



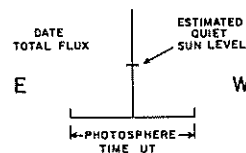
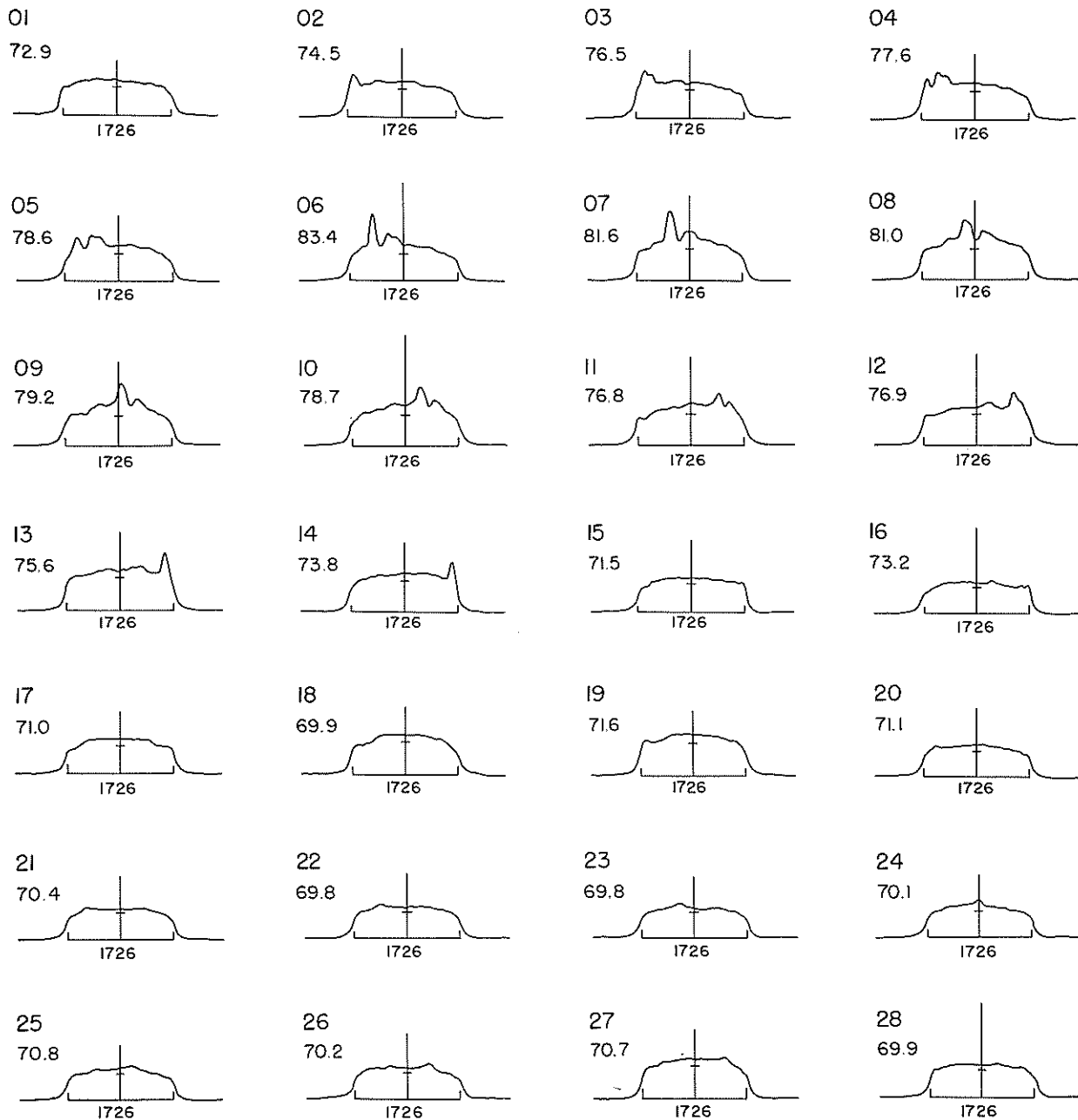
EAST - WEST SOLAR SCANS

February 1975

ALGONQUIN RADIO OBSERVATORY
CANADA

10.7 cm

Fan Beam with 1.5 minutes of arc
E - W Resolution



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Feb 75

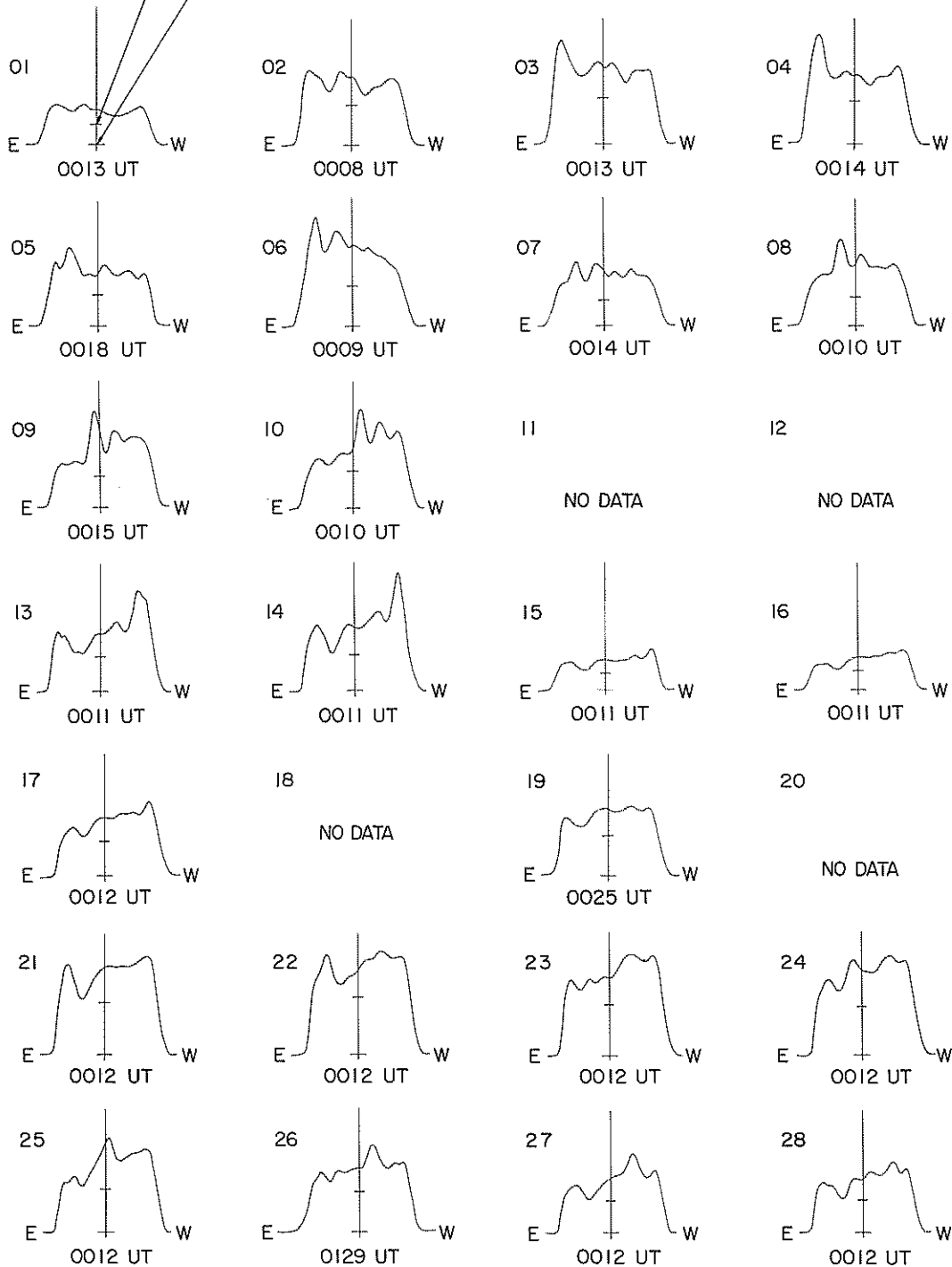
EAST-WEST SOLAR SCANS

FEBRUARY 1975

Fleurs, Australia

ESTIMATED QUIET SUN LEVEL
COLD SKY LEVEL

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



EAST-WEST SOLAR SCANS

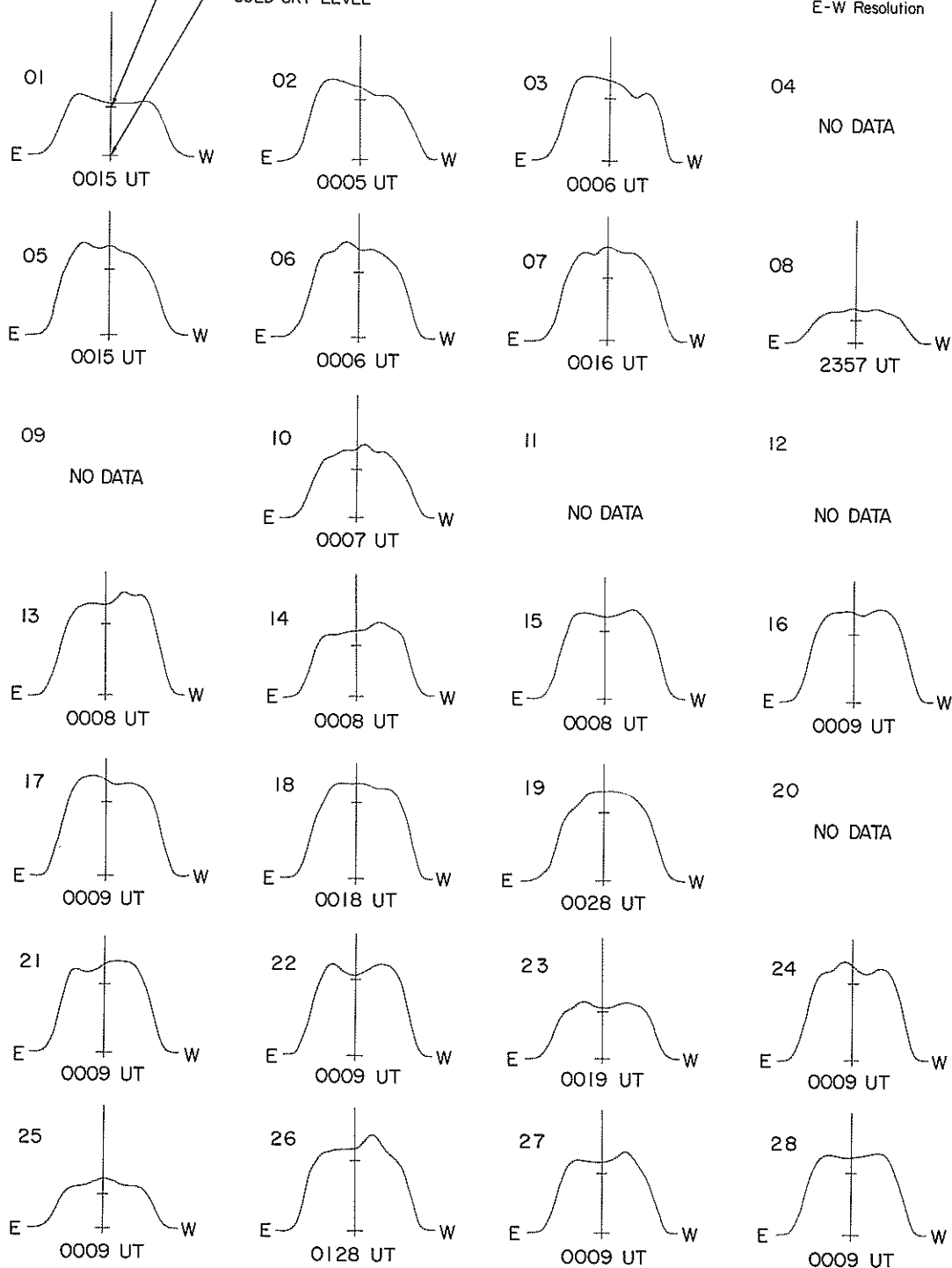
FEBRUARY 1975

Fleurs, Australia

ESTIMATED QUIET SUN LEVEL

COLD SKY LEVEL

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



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Feb 75

SOLAR RADIO EMISSION SELECTED FIXED FREQUENCY EVENTS

FEBRUARY 1975

	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
3	2800 OTTA	2 S/F	1942	1944	3	1.8	0.8		
5	2800 OTTA	27AFRF	1715		135	1.8	1.3		
	2800 OTTA	24 R	1715	1800	45	1.8	0.9		
	2695 BOUL	40 F	1757	1803	6	7	2		
	2800 OTTA	24P R	1800		60	1.8			
	2800 OTTA	26 FAL	1900	1930	30	-1.8	-1		
	2800 OTTA	2 S/F	1912	1913	3	1.6	0.9		
	2800 OTTA	240 R	1950	2140	110	2.8	1.6		
	2695 PENT	24P R	2140		100 0	2.8			
7	2800 OTTA	27 RF	1840		100	0.8	0.7		
	2800 OTTA	24 R	1840	1845	5	0.8	0.4		
	2800 OTTA	24P R	1845		70	0.8			
	2800 OTTA	26 FAL	1955	2020	25	-0.8	-0.4		
11	2800 OTTA	1 S	1540	1540.5	3.5	0.7	0.5		
13	2800 OTTA	1 S	1308	1310	6	4.4	2		
	2800 OTTA	29 PBI	1314	1314	20	1.8	1		
	2800 OTTA	21A GRF	1434.3	1435	16	1.8	0.9		
	2800 OTTA	8 S	1438.4	1438.6	0.4	5.8			
	2800 OTTA	20 GRF	2005	2015	85	1.8	0.9		
18	2800 OTTA	22F GRF	1935	1957	75	1.6	0.6		
	2695 PENT		1935	1957	75				NULL
24	2695 BOUL	1 S	1841	1842	2.5	2	1		
	2695 BOUL	1 S	1851	1852.5	3.5	3	1		

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

FEBRUARY 1975

UCSD 74 MHZ SCINTILLATIONS

DAY	3C48 VEL ERR	3C144 VEL ERR	3C147 VEL ERR	3C161 VEL ERR	3C237 VEL ERR	3C273 VEL ERR	3C298 VEL ERR	3C459 VEL ERR
1	617 62	471 67	374 40	411 49	0 0	529 89	420 32	0 0
2	419 32	329 91	0 0	0 0	0 0	617 89	777 179	419 88
3	376 77	0 0	0 0	0 0	0 0	632 197	710 229	369 13
4	480 26	545 134	461 55	0 0	0 0	0 0	422 103	369 81
5	541 24	660 99	0 0	0 0	0 0	562 83	626 211	298 72
6	623 196		0 0	0 0	0 0	0 0	381 118	257 43
7	410 41		0 0	0 0	0 0	0 0	0 0	283 39
8	481 68	783 52	0 0	0 0	0 0	619 47	0 0	439 131
9	410 118	0 0	0 0	341 109	0 0	698 323	392 63	339 51
10	325 86	545 31	497 42	483 73	0 0	687 240	590 103	267 20
11	300 84		0 0		0 0		705 253	334 27
12		396 21			0 0	633 64	918 213	0 0
13	352 125	295 16		0 0		678 123	0 0	279 85
14	365 14	240 8	0 0	330 74	0 0	0 0		230 25
15	297 6		0 0	714 294	0 0	0 0		354 59
16	352 59	259 14	0 0	0 0	0 0	0 0	0 0	0 0
21	288 14	0 0	0 0	0 0	0 0	0 0	0 0	0 0
*22	351 440		0 0	0 0	0 0	0 0	0 0	0 0
23	419 61	402 9		502 77	0 0	0 0	0 0	0 0
24	0 0	413 51	0 0	0 0	0 0	0 0	0 0	0 0
25	539 70		327 34	248 30		0 0	739 260	0 0
26	436 37		0 0	0 0	0 0	679 116	420 45	0 0
27	453 10	401 66		0 0		434 115	0 0	0 0
28	536 38	604 21	610 22	471 109	0 0	397 184	338 127	0 0

FEBRUARY	5	15	25
	UT LAT DIST DLON	UT LAT DIST DLON	UT LAT DIST DLON
3C48	1. 1. 0.99 -16.	0. 2. 0.94 -19.	23. 6. 0.87 -27.
3C144	4. -5. 1.20 -12.	4. -6. 1.17 -13.	3. -6. 1.12 -15.
3C147	4. 0. 1.20 -10.	3. 0. 1.16 -11.	2. 0. 1.13 -13.
3C161	6. -12. 1.22 -8.	5. -13. 1.20 -10.	5. -14. 1.16 -12.
3C237	9. -7. 1.29 3.	9. -7. 1.30 1.	8. -7. 1.30 -1.
3C273	11. -5. 1.22 11.	11. -5. 1.25 9.	10. -6. 1.27 7.
3C298	13. -1. 1.12 14.	13. -2. 1.16 13.	12. -2. 1.20 11.
3C459	22. 10. 0.58 -52.	21. 15. 0.43 -61.	21. 26. 0.28 -68.

*3C48 OBS AT 0 hr.U.T. BEFORE 21st. AND 23 hr.U.T. AFTER 21st.

Sources as given in the 3rd Cambridge Catalog.

"0" Indicates times when no velocities were obtainable.

SOLAR X-RAYS BY SATELLITE SMS-1 GOES

FEBRUARY 1975

.5 - 4Å Hourly Averages (10^{-6} watts/m²/sec)

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

1.15
3.14

2.30

0.14
0.13

SOLAR X-RAYS BY SATELLITE SMS-1 GOES

FEBRUARY 1975

1 - 8Å Hourly Averages (10^{-5} watts/m²/sec)

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

0.07
0.07

20
Feb 75

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	T	A	T	A	T	A	T	A	A	T	T	A	T	TA	A	A	A	T	T	T	T	T	T	T	TA	T	A	A	A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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1899	MAY 30	A	A	A	A	A	*	A	A	AT	*	T	T	T	A	A	T	T	T	T	TA	A	A	A	-	A	-	TA	-	A	-	T	T	-	A	A	A	T	T	T	T	T	T	TA	A	A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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1901	JUL 23	TA	A	*	TA	A	*	T	A	*	T	A	A	A	A	A	A	T	A	T	-	AT	A	T	T	T	T	T	T	T	T	A	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	A	A	T	A	A	A	A	A	A	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	ATA	A	A	A	T	T	A	ATA	A	A	A	-	A	-	A	-	A	-	A	-	A	T	T	T	T	T	T	T	T	T	T	A	ATA	TA	A	T																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
1904	OCT 12	T	T	A	-	TA	-	A	A	T	A	T	TA	T	A	A	A	T	TA	TA	A	ATA	A	A	T	AT	T	T	A	AT	A	T	*	T	T	A	-	A	A	*	T	AT	T	TA	T	TA	*	A	A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
1905	NOV 8	A	A	T	A	ATA	ATA	T	TA	T	ATA	T	T	A	A	A	A	A	*	TA	AT	A	A	A	TA	AT	T	T	A	T	TA	A	T	A	T	AT	T	A	TA	A	A	A	A	AT	AT	T	T																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
1906	DEC 5	T	T	T	T	TA	AT	T	-	T	-	T	T	T	A	ATA	-	T	A	T	TA	T	A	A	T	T	T	T	T	T	A	A	*	A	T	T	T	T	T	T	T	T	TA	AT	TA	T																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
1907	1973 JAN 1	T	T	T	T	T	T	T	TA	T	T	A	T	AT	-	A	ATA	T	A	-	AT	-	A	TA	A	A	A	A	A	A	A	T	T	A	-	T	-	T	T	-	TA	T	-	T	T	T	T																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
1908	JAN 28	T	T	A	A	T	T	TA	T	AT	T	T	T	A	T	A	A	TA	A	A	A	A	A	AT	T	TA	ATA	TA	A	AT	A	-	A	A	A	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	-	AT	TA	ATA	T	A	T	T	A	A	A	A	A	A	AT	TA	ATA	A	A	AT	TA	A	A	T	A	AT	TA	A	A	ATA	T	T	T	T	T	T	T																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
1910	MAR 23	T	T	T	T	T	T	A	T	T	T	T	T	T	T	TA	ATA	T	TA	A	A	A	A	-	A	A	A	T	TA	A	A	A	A	AT	AT	T	-	T	T	A	T	T	T	T	T	AT	*	T	*																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
1911	APR 19	T	T	T	AT	T	A	T	A	T	T	AT	T	A	A	AT	T	T	T	TA	A	A	A	A	AT	A*	A	-	ATA	TA	A	A	*	-	T	A	A	T	TA	T	*	-	AT	A	A	T	-	A	-	T	A	A*																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
1912	MAY 16	T	T	T	T	T	T	T	AT	T	-	T	-	TA	T	T	A	A	AT	AT	T	ATA	A	A	-	A	A	A	-	A	A	A*	A	A	A	A	A	A	A	A	-	T	*	A	-	A	A	-	T	T	T	T																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
1913	JUN 12	TA	T	*	-	T	*	-	T	T	TA	T	*	A	T	T	-	T	*	T	*	T	T	T	T	T	AT	ATA	A	A	A	TA	T	*	-	T	T	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
1914	JUL 9	T	T	T	T	A	A	T	T	-	TA	A	T	T	A	T	*	A	T	*	-	A	A	T	T	A	TA	-	T	T	T	T	A	A	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
1915	AUG 5	T	T	A	A	A	A	T	AT	A	A	A	T	T	T	T	T	T	*	T	T	AT	*	T	AT	T	T	A	AT	T	T	A	A	TA	T	T	T	T	A	A	A	A	AT	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	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 Antarctic 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.

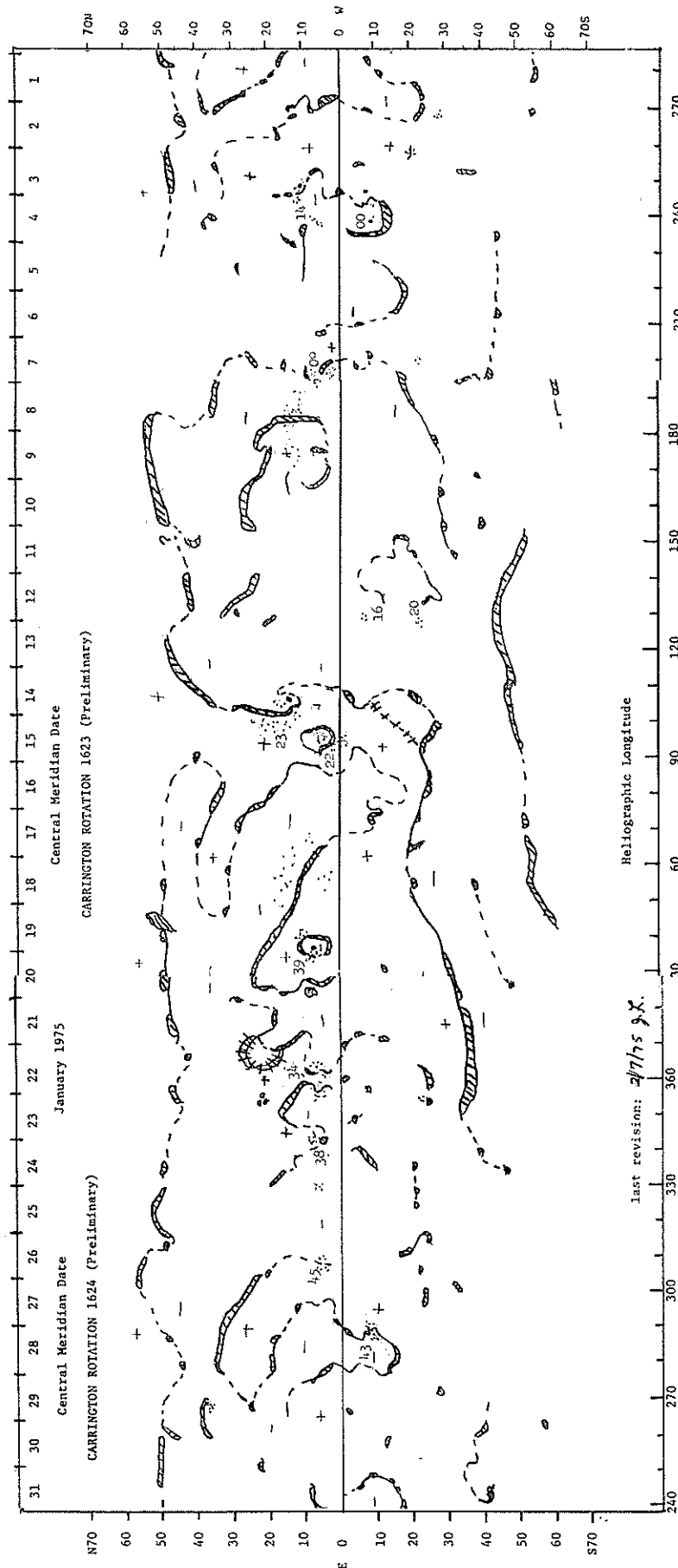
JANUARY 1975 DATA

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H_α SYNOPSIS CHART

JANUARY 1975



Last revision: 2/7/75 g.x.

JANUARY 1, 1975 (P = 2.32, B₀ = -3.00, L₀ = 286.18)

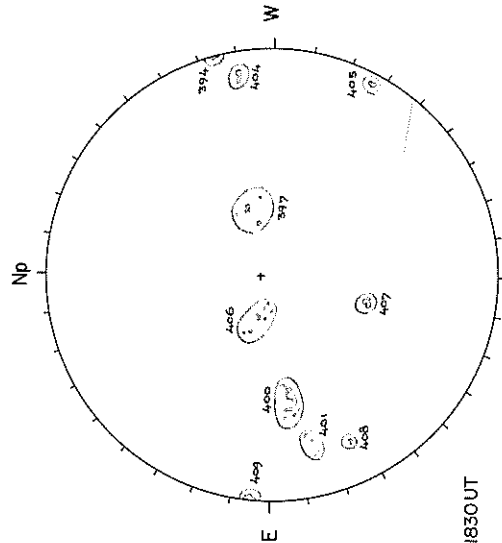
UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

Np



POOR	S
00 - 1000	-3.5
04 - 0400	-3.0
09 - 0900	-2.5

E Not Received at time of Publication. The OSO-5 X-ray Spectroheliosgrams for December, 1974 are published in the Miscellaneous Section (part II) of this issue.

W

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

Sp

KITT PEAK

Np

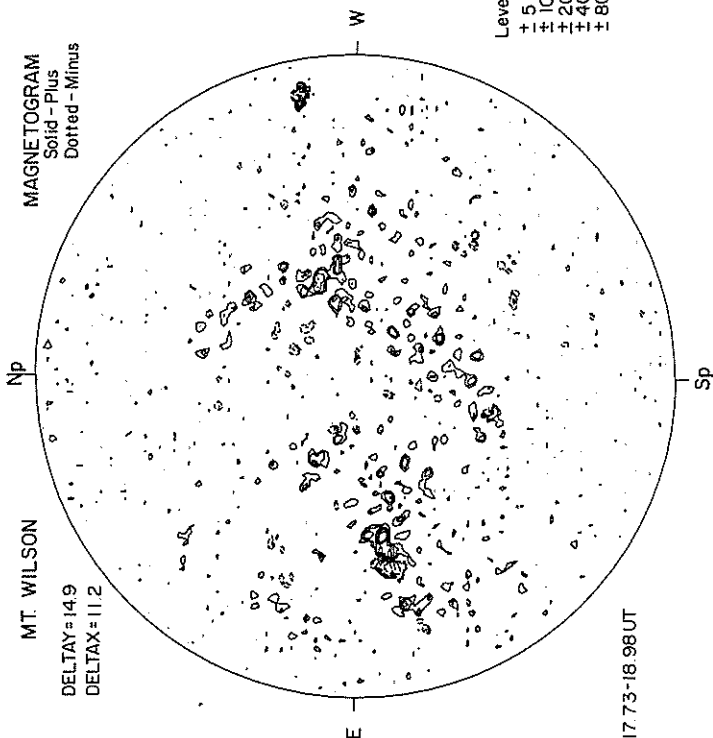
MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

DELTA Y = 14.9
DELTA X = 11.2

MAGNETOGRAM
Solid - Plus
Dotted - Minus

Np

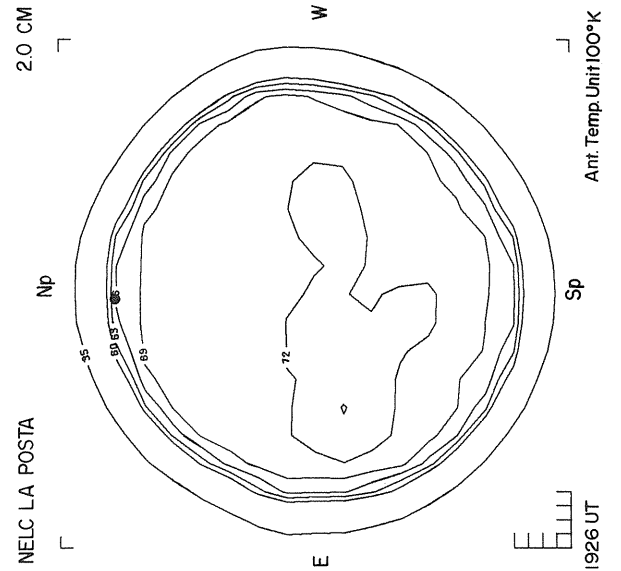
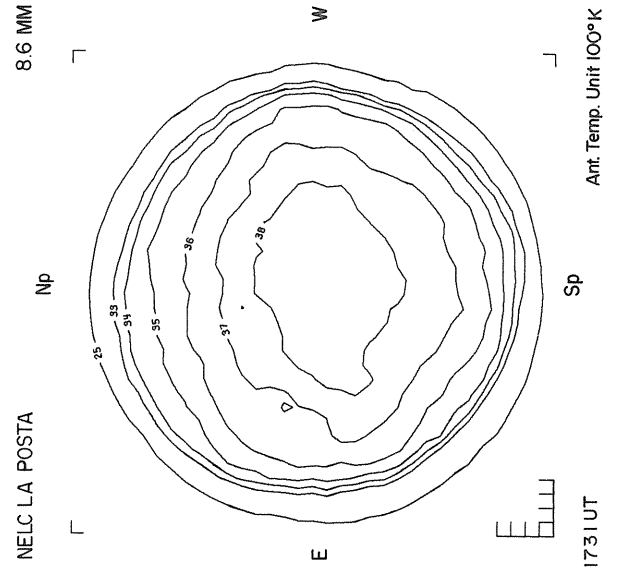
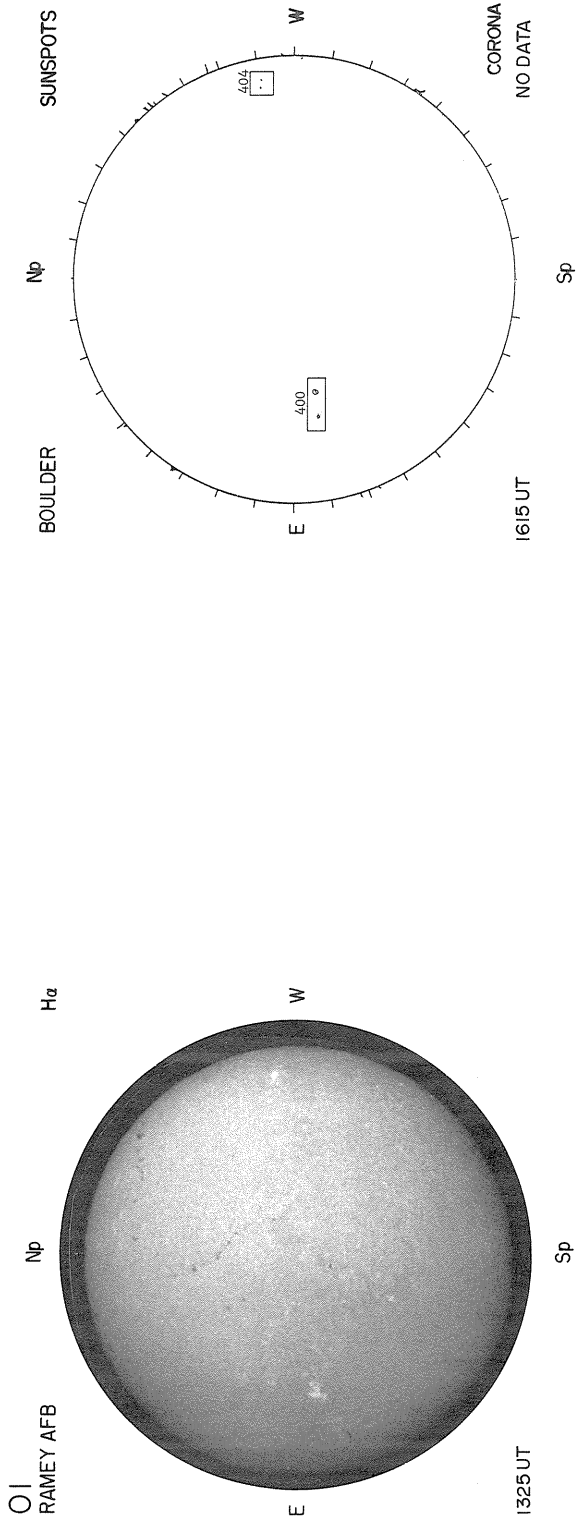


Levels
+ 5
+ 10
+ 20
+ 40
+ 80

NO DATA

E

Sp



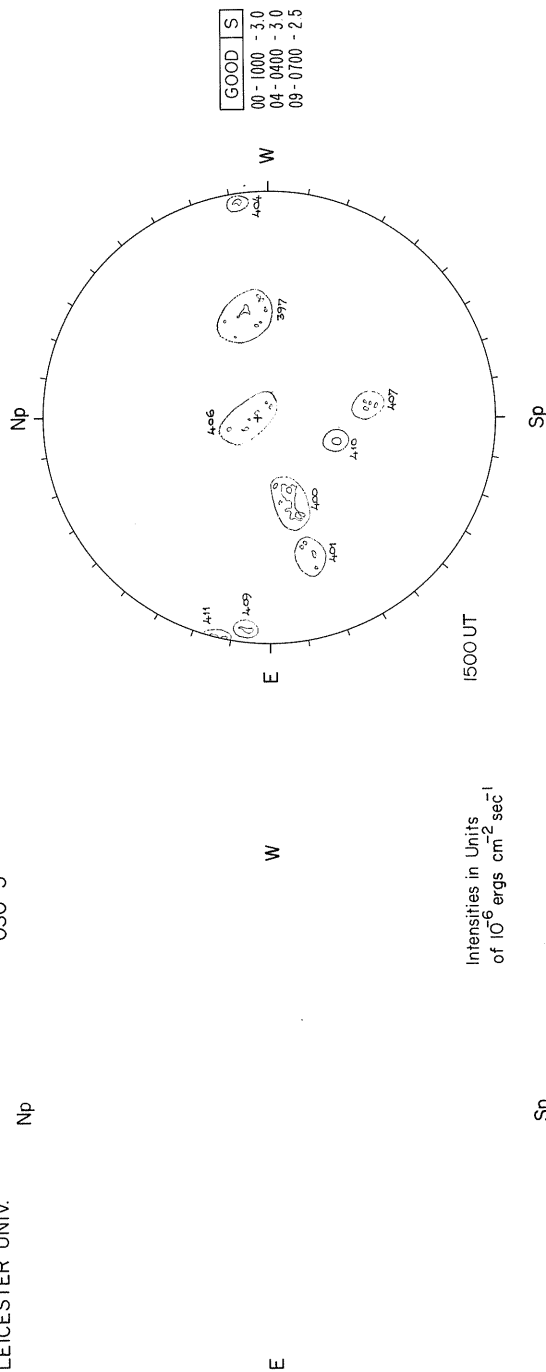
JANUARY 2, 1975 (P=1.84, B_o=-3.12, L_o=273.01)

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X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

 $\frac{d}{dz}$ 

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

5

KITT PEAK

$\frac{d}{dz}$

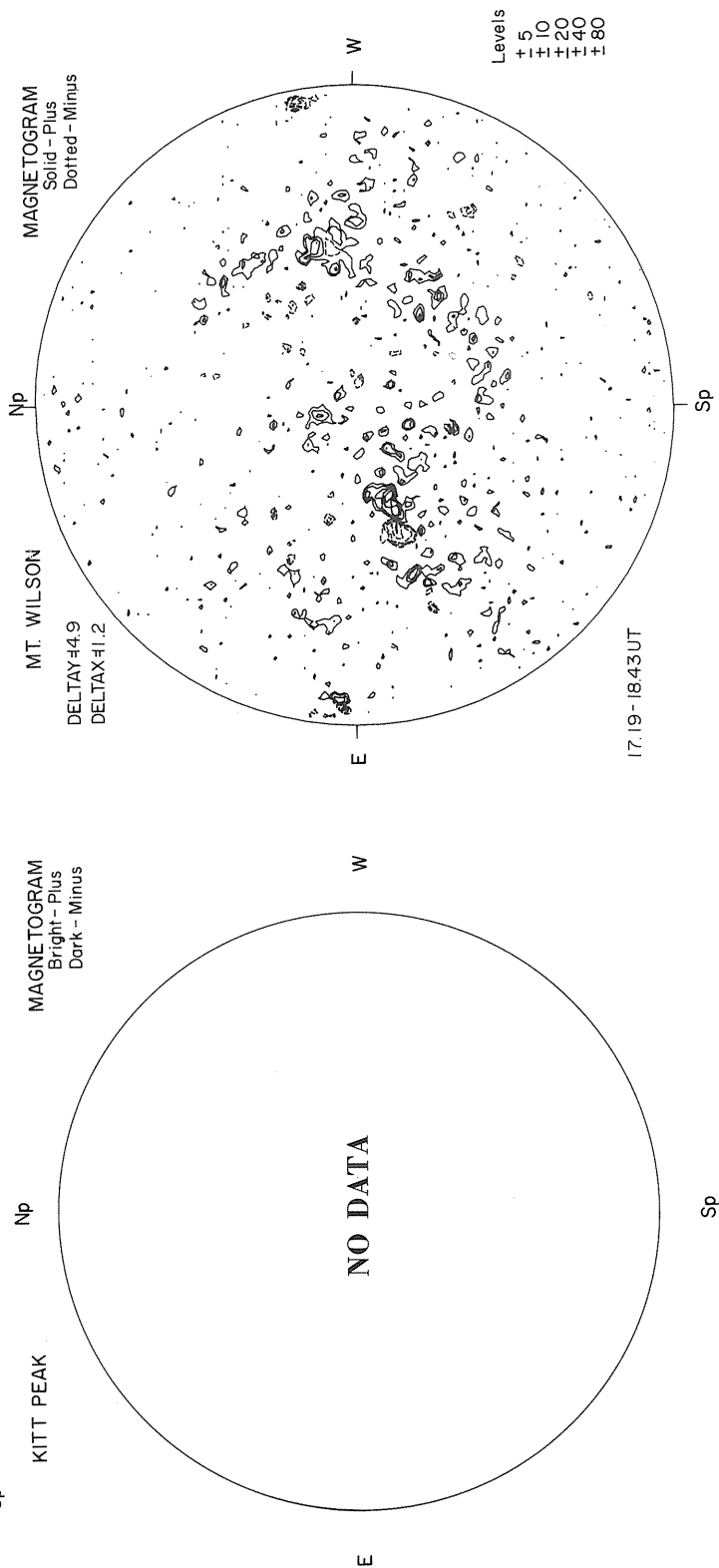
MAGNETOGRAM
Bright - Plus
Dark - Minus

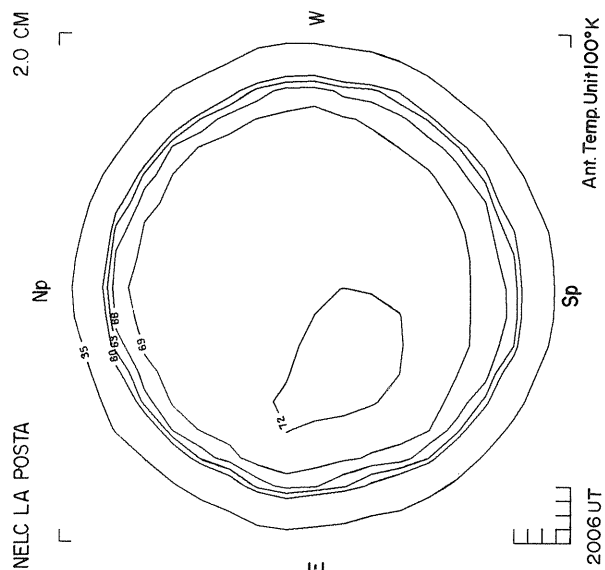
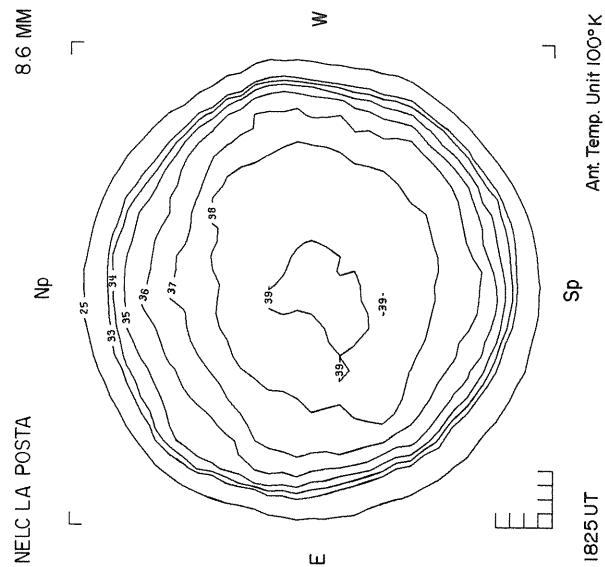
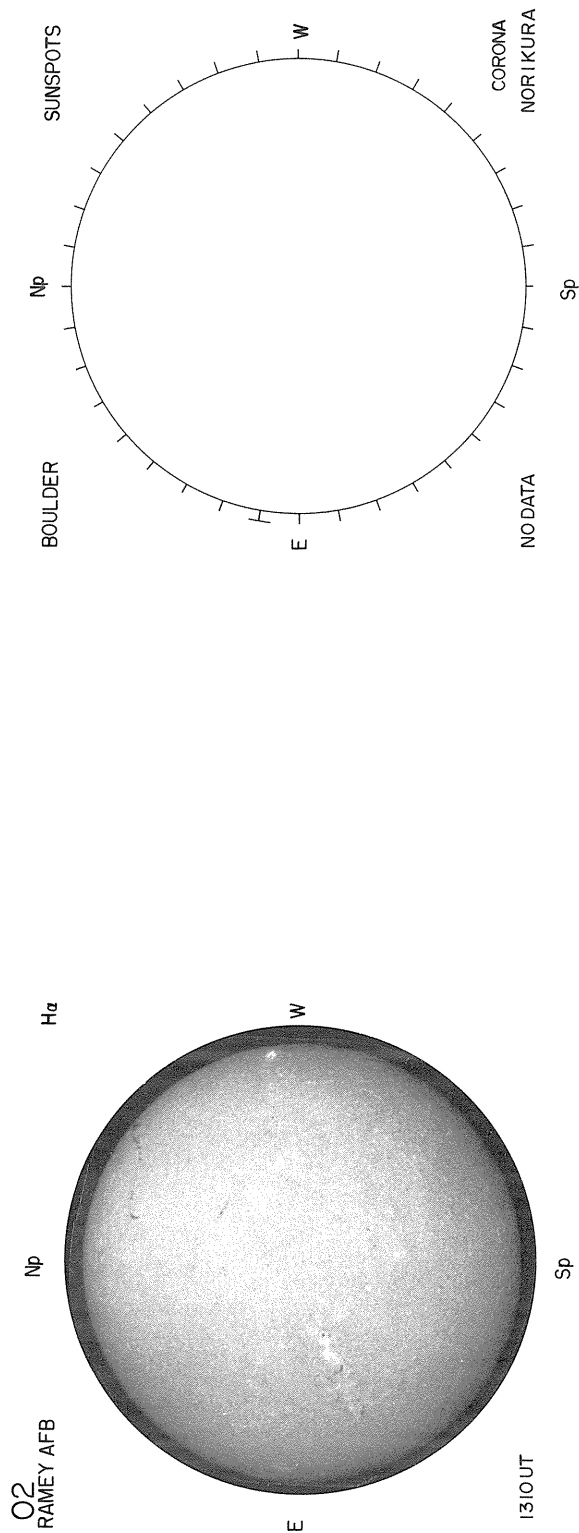
MT. WILSON

DELTA Y=4.9
DELTA X=1.2

2

MAGNETOGRAM
Solid - Plus
Dotted - Minus





JANUARY 3, 1975 (P=1.35, B₀=-3.23, L₀=259.84)

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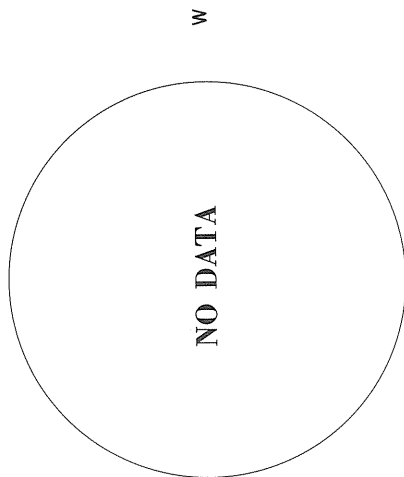
X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

Np

Np



W

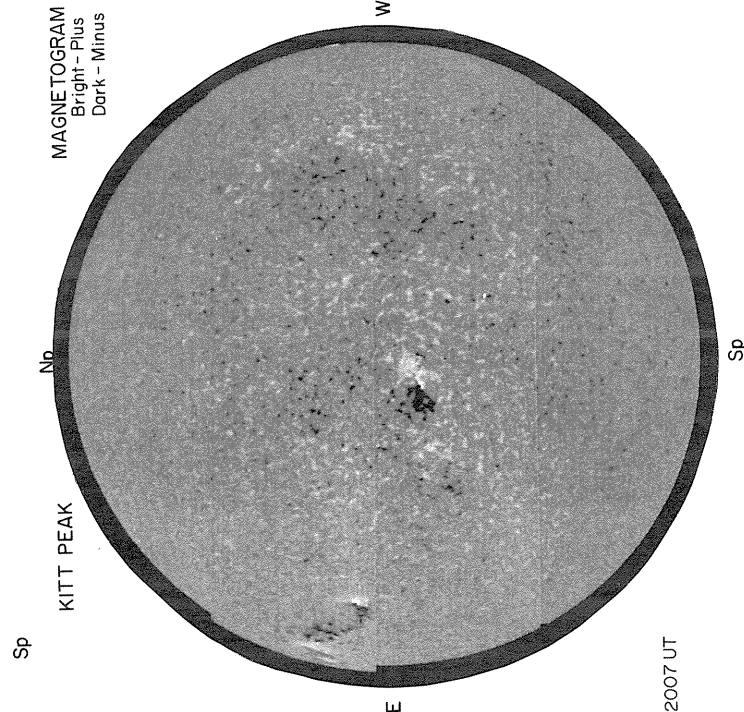
NO DATA

E

W

E

Intensities in Units
of 10⁶ ergs cm⁻² sec⁻¹



Sp

KITT PEAK

Np

MAGNETOGRAM
Bright - Plus
Dark - Minus

E

W

2007 UT

Sp

MT. WILSON

DELTA Y = 14.9
DELTA X = 11.2

Np

MAGNETOGRAM
Solid - Plus
Dotted - Minus

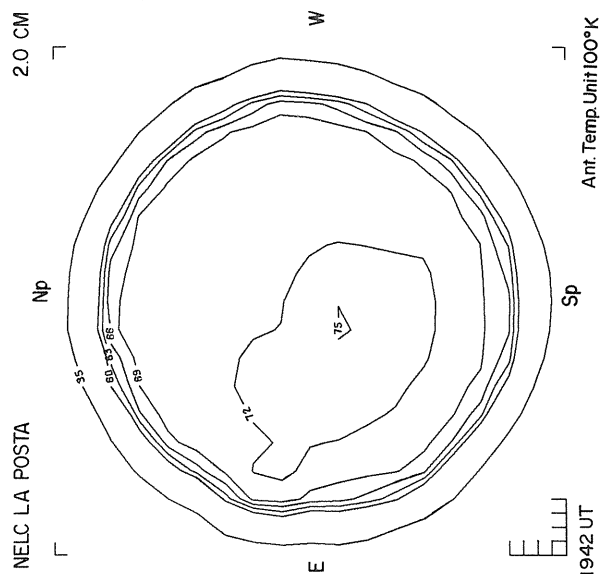
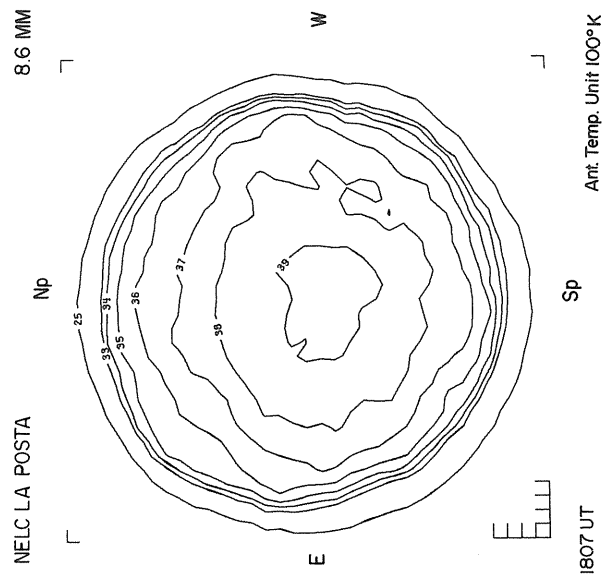
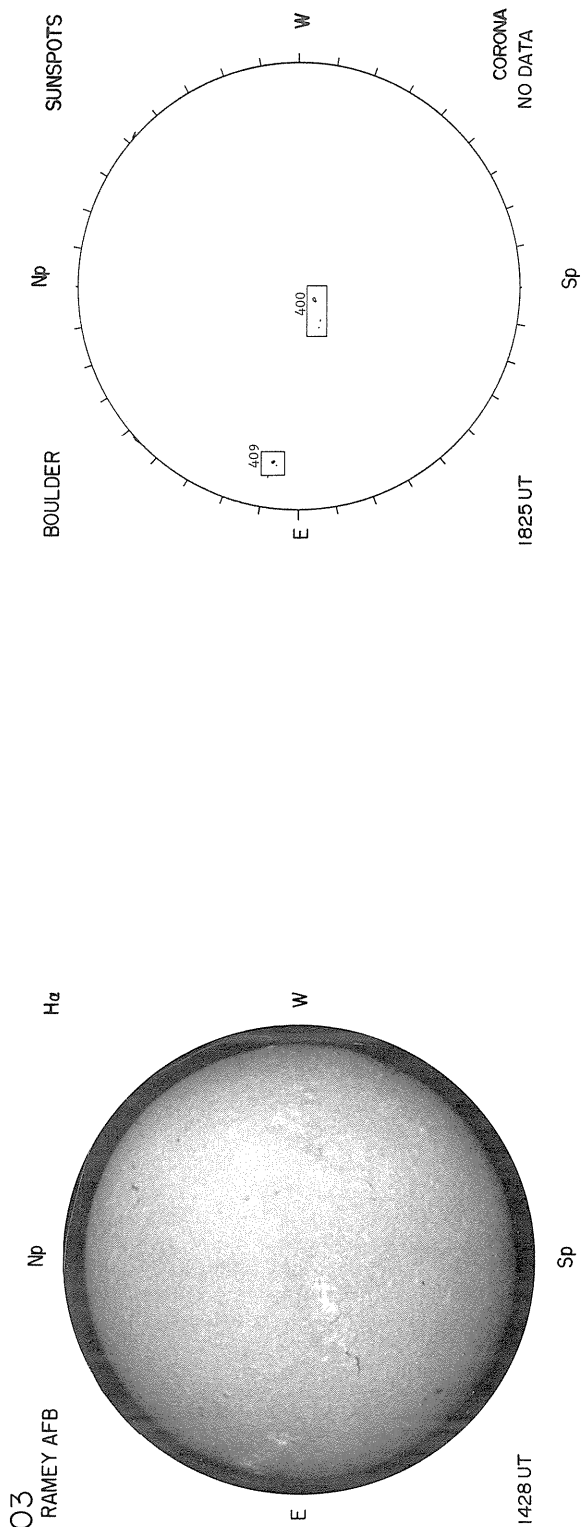
W

Levels
+5
+10
+20
+40
+80

18 43-19 69 UT

Sp

Sp



JANUARY 4, 1975 (P=0.87, $B_0 = -3.35$, $L_0 = 246.67$)

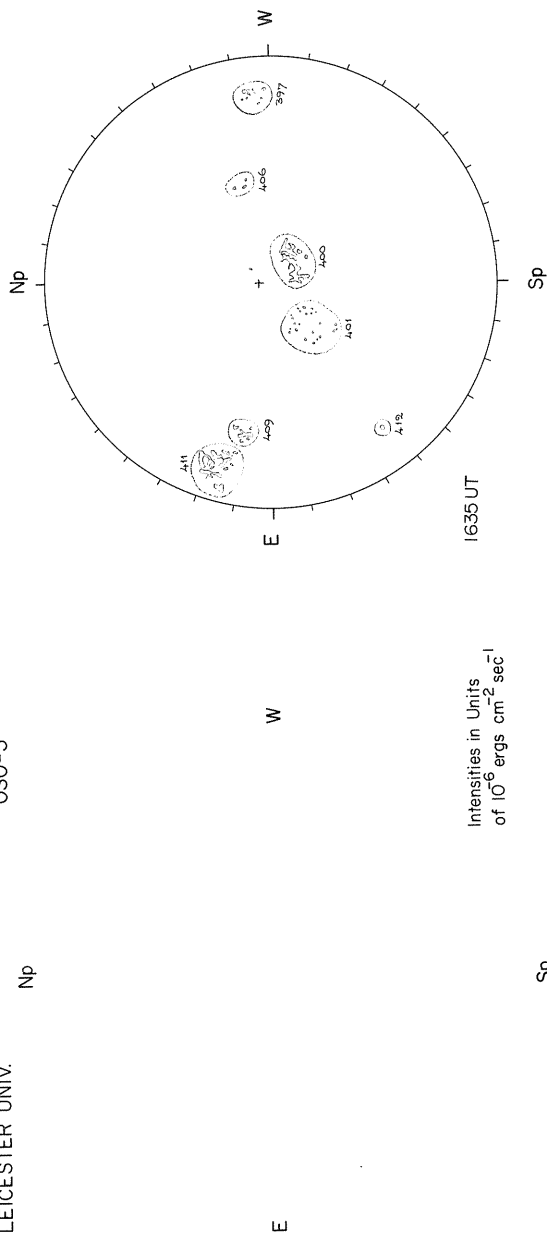
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X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

Np



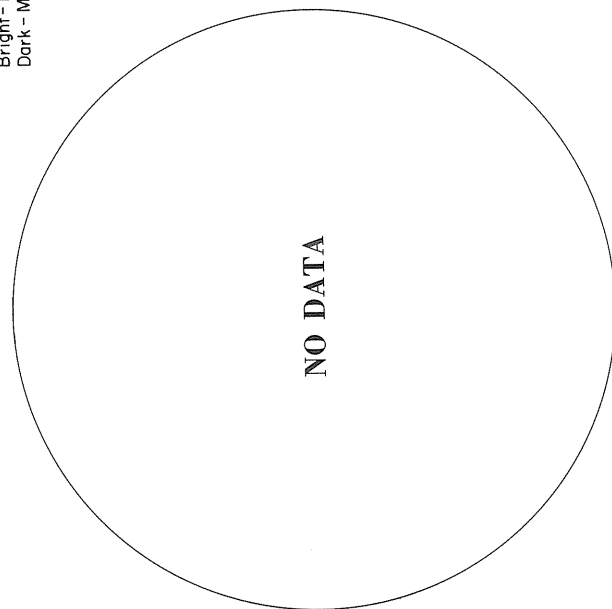
GOOD	M
00 - 0800	- 2.5
09 - 0600	- 2.5
11 - 1800	- 2.5

Sp

KITT PEAK

Np

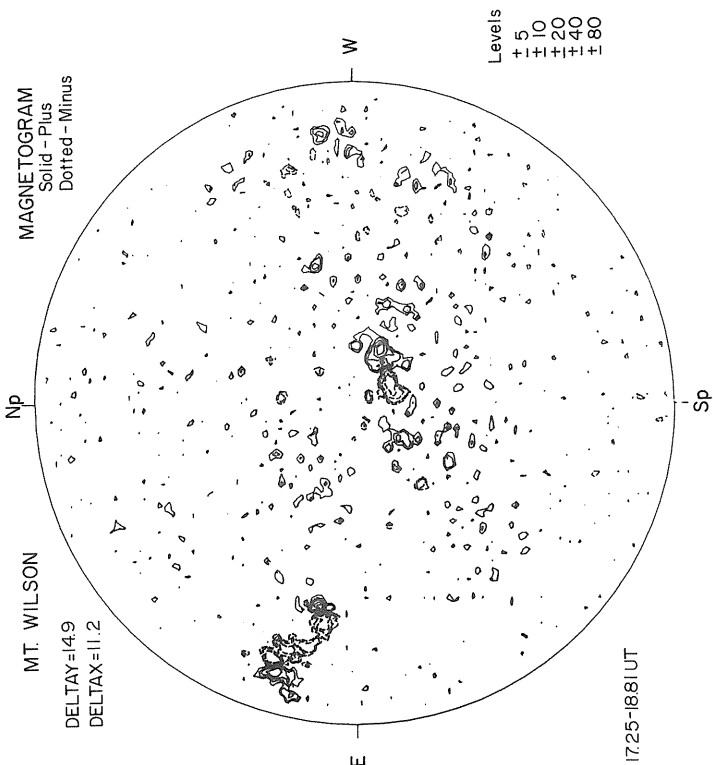
MAGNETOGRAM
Bright - Plus
Dark - Minus

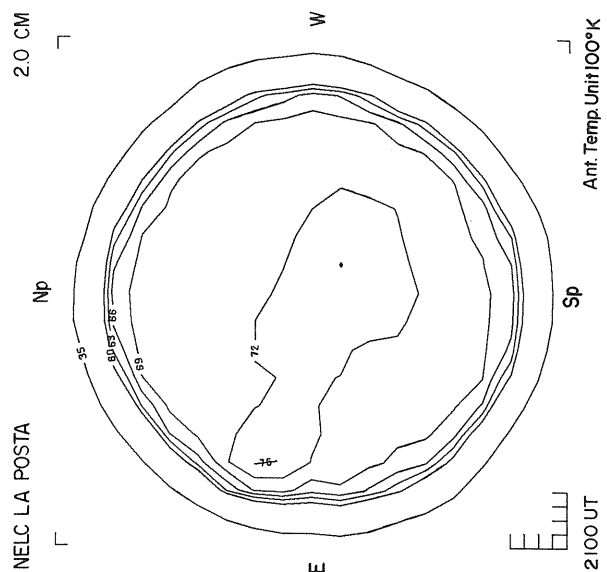
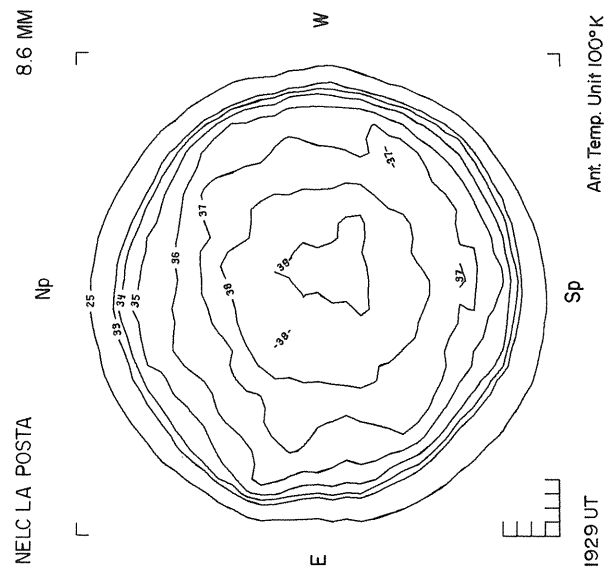
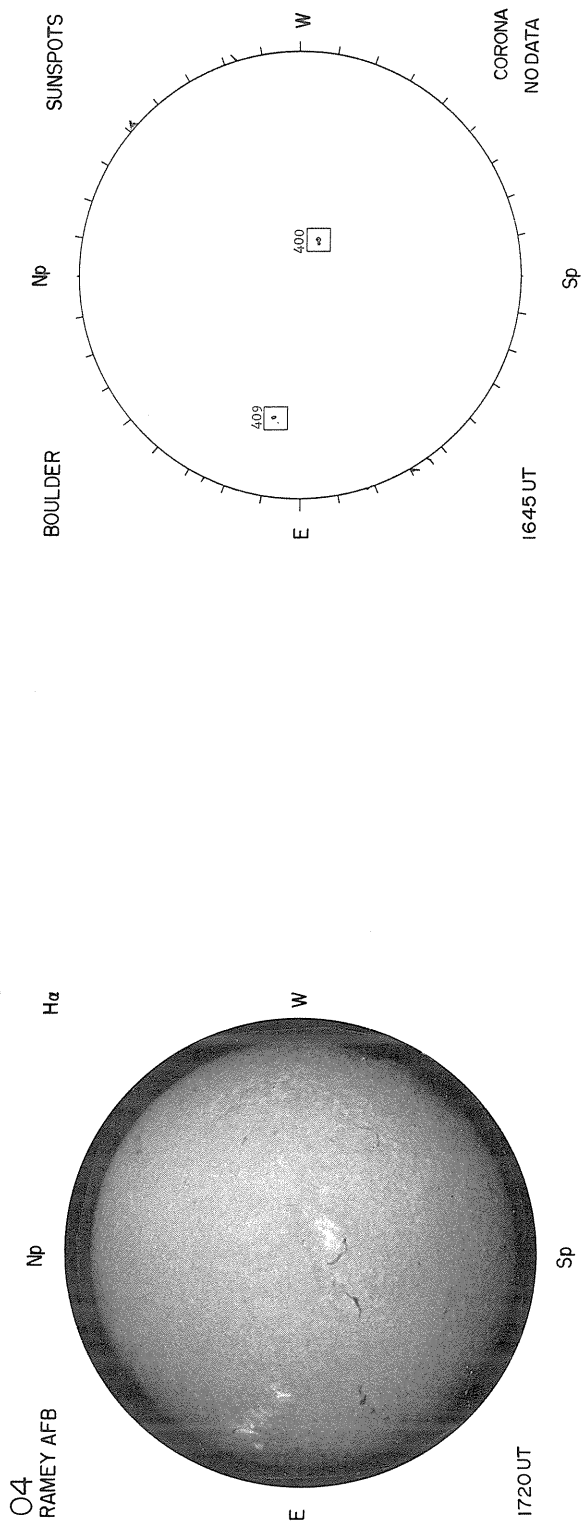


MT. WILSON

DELTA Y = 14.9
DELTA X = 11.2

MAGNETOGRAM
Solid - Plus
Dotted - Minus





JANUARY 5, 1975 (P=0.38, $B_0 = -3.46$, $L_0 = 233.50$)

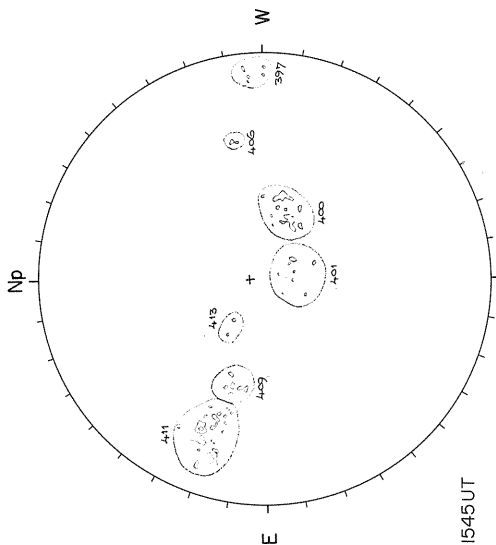
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X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

Np



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

1545 UT

Sp

KITT PEAK

Np

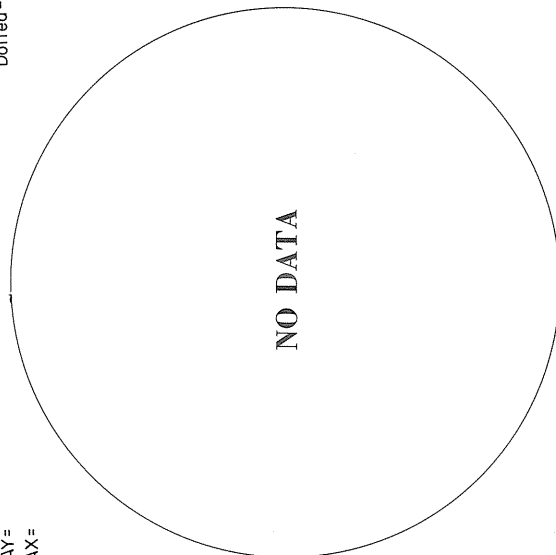
MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

DELTA Y =
DELTA X =

Np

MAGNETOGRAM
Solid - Plus
Dotted - Minus



W

NO DATA

E

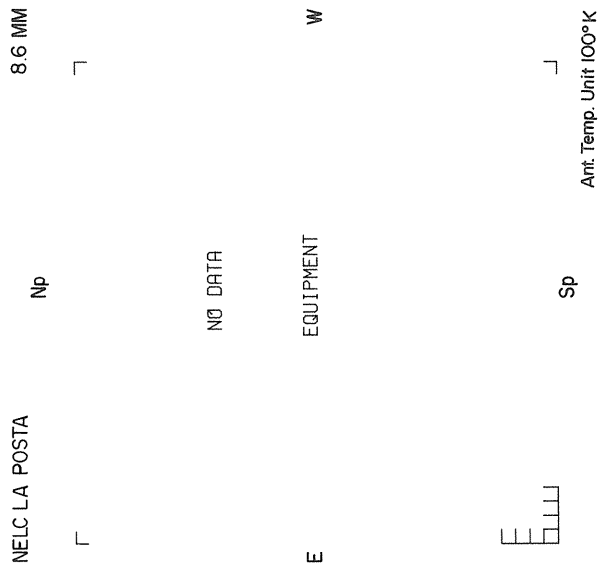
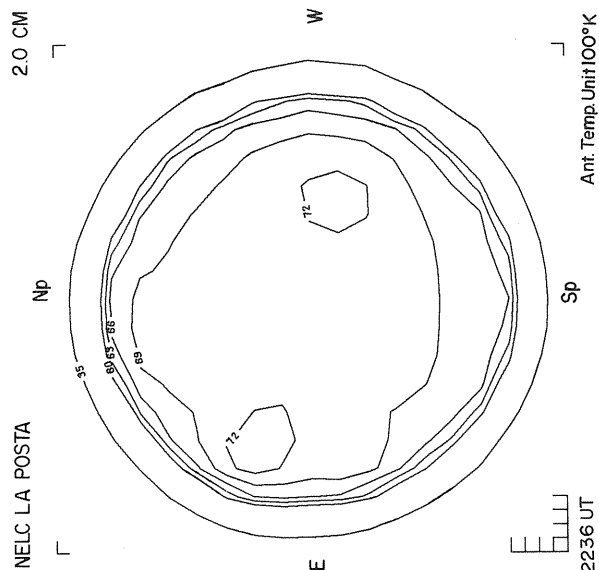
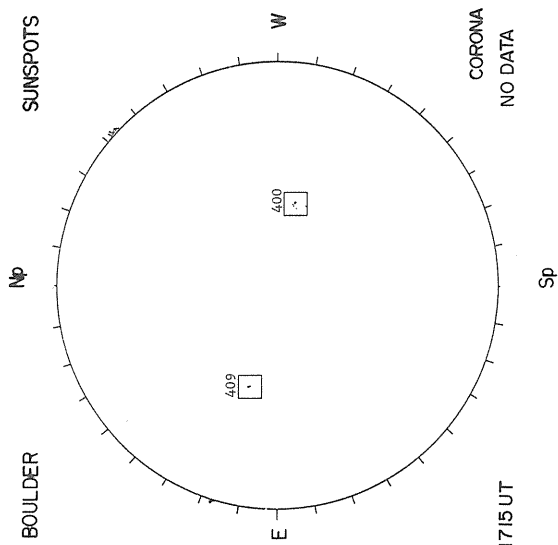
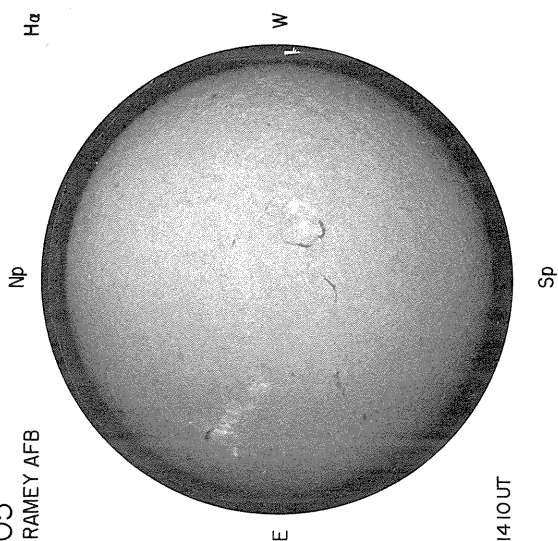
W

E

1547 UT

Sp

O5
RAMEY AFB



Ant. Temp. Unit 100°K

Ant. Temp. Unit 100°K

JANUARY 6, 1975 (P=-0.10, B₀=-3.58, L₀=220.33)

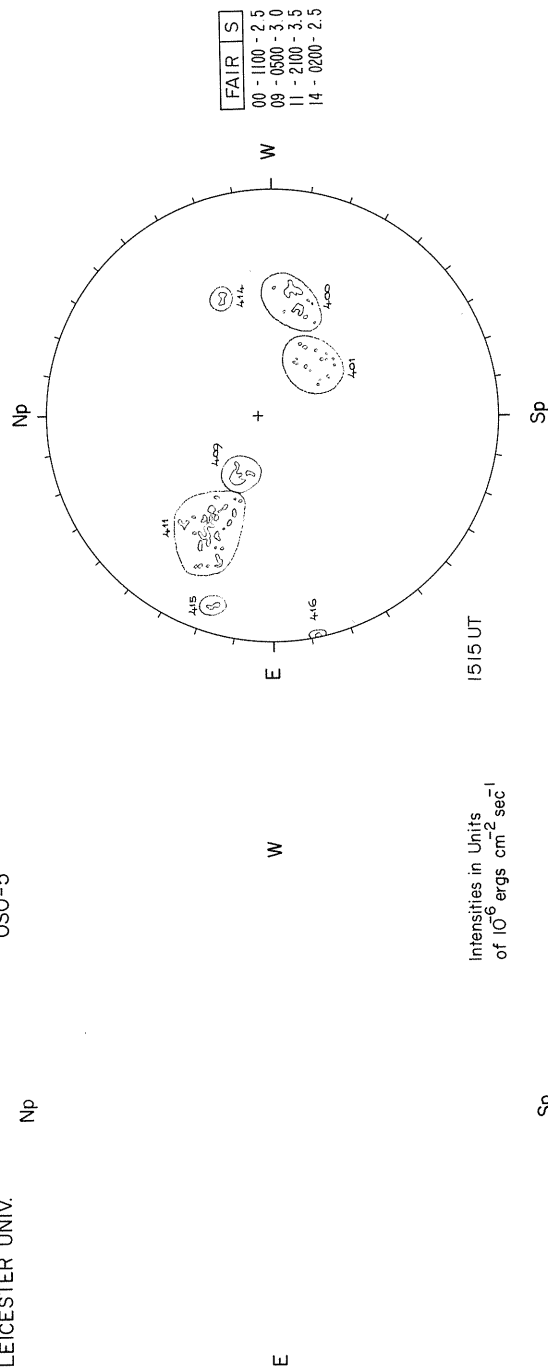
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X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

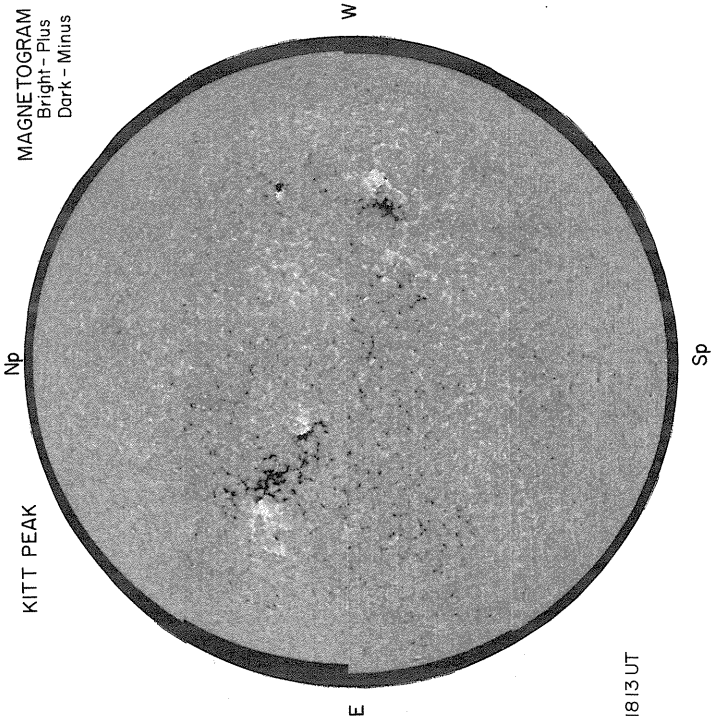
Np



Sp

KITT PEAK

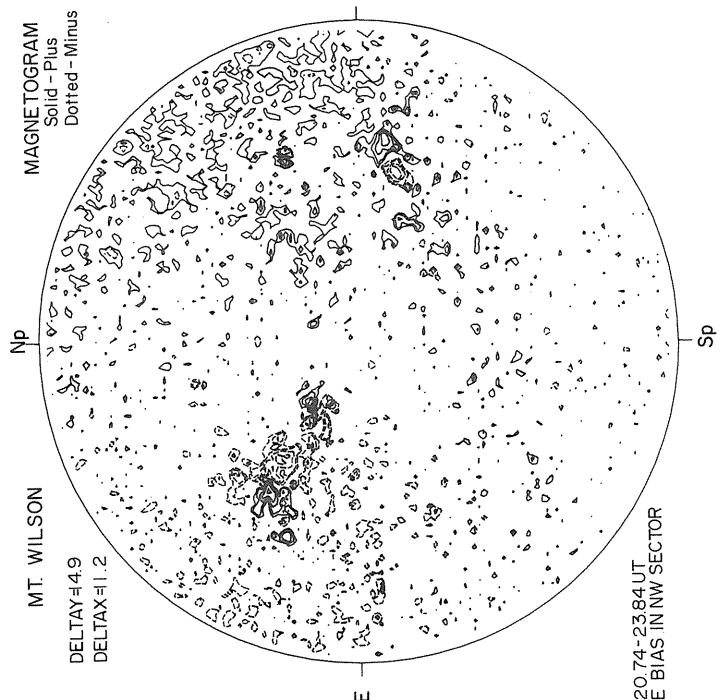
MAGNETOGRAM
Bright - Plus
Dark - Minus



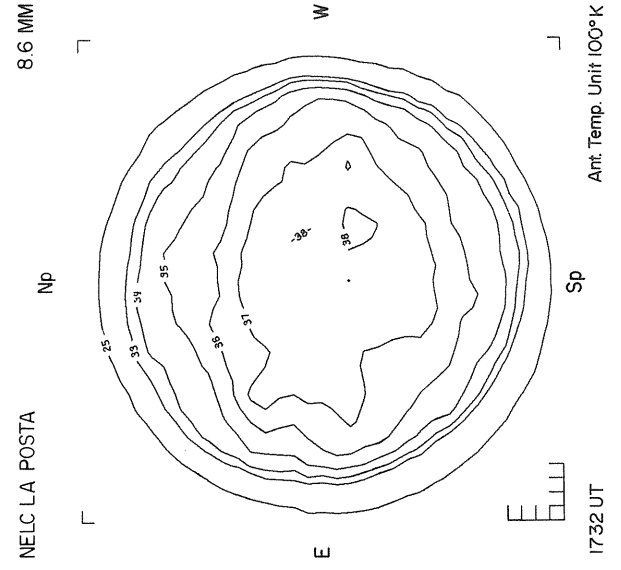
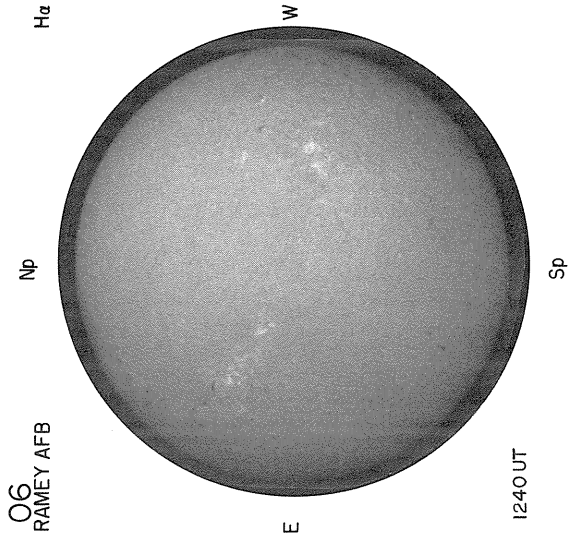
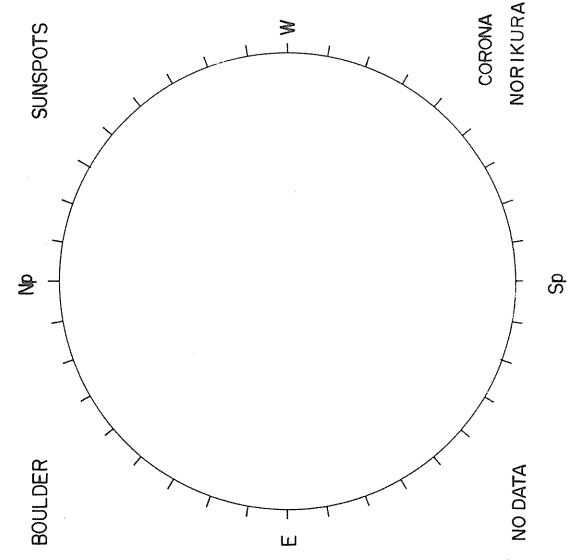
MT. WILSON

DELTA Y = 4.9
DELTA X = 1.2

MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
5
+10
+20
+40
+80



JANUARY 7, 1975 (P=-0.59, B₀=-3.69, L₀=207.16)

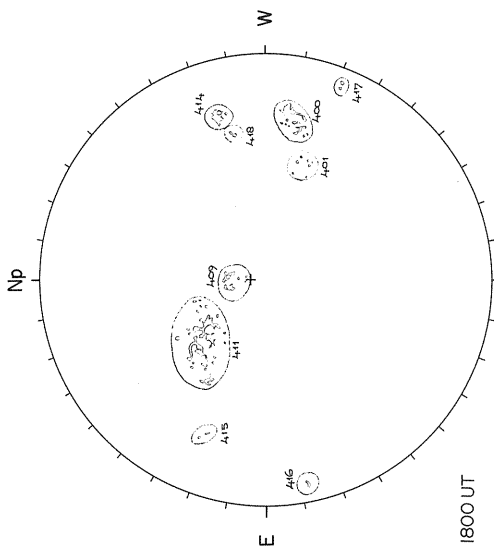
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X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

Np



Intensities in Units
of 10⁶ ergs cm⁻² sec⁻¹

1800 UT

Sp

KITT PEAK

Np

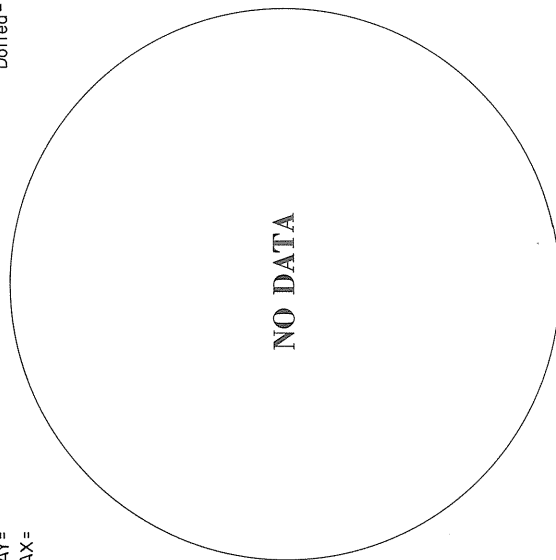
MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

DELTA Y =
DELTA X =

Np

MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
5
+1+10
+20
+40
+80

W

E

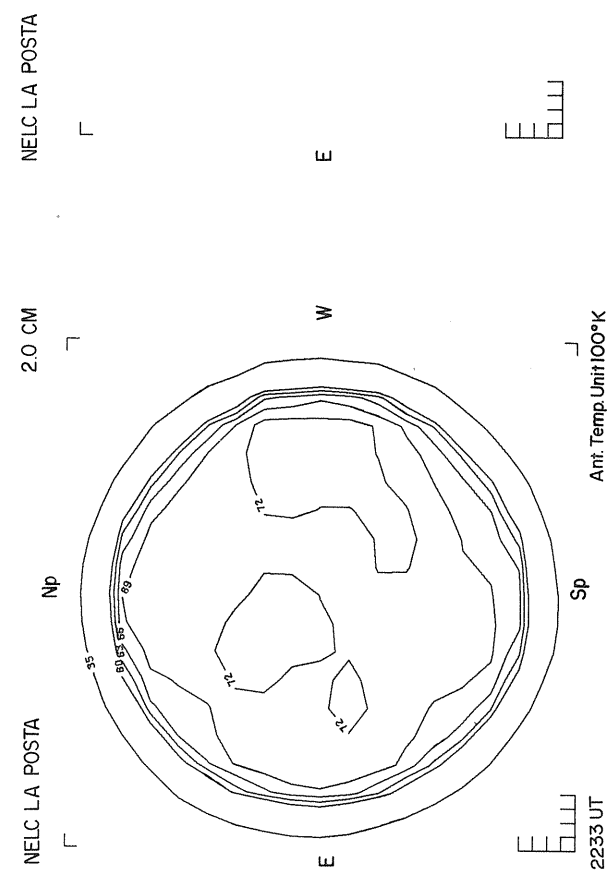
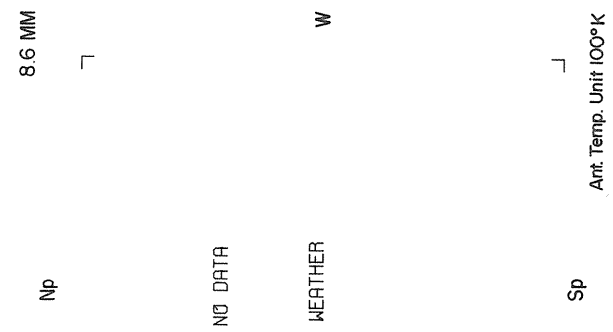
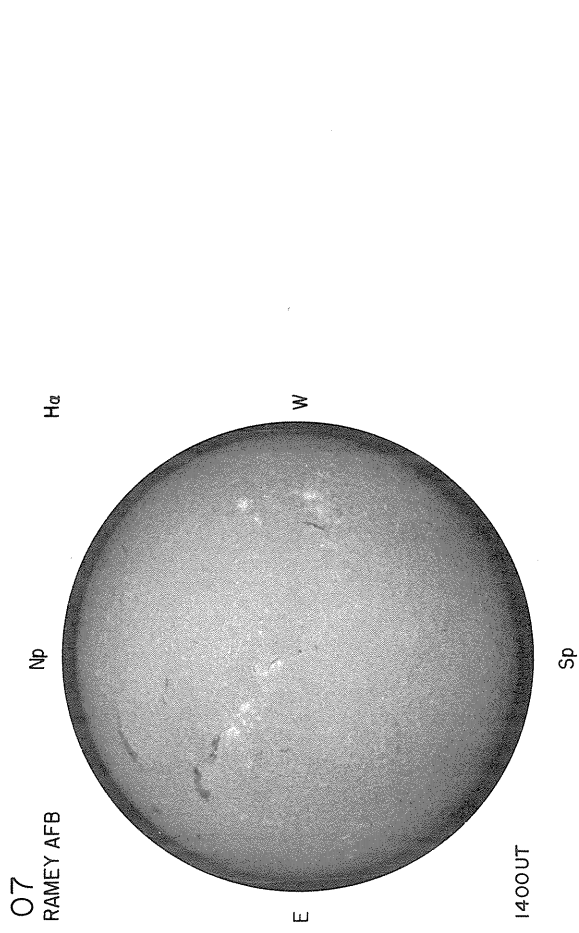
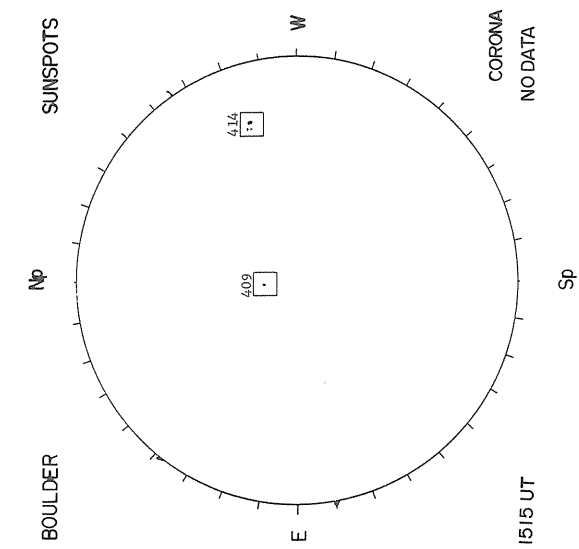
NO DATA

W

Sp

Sp

2144 UT



JANUARY 8, 1975 (P=-1.07, B₀ = -3.80, L₀ = 193.99)

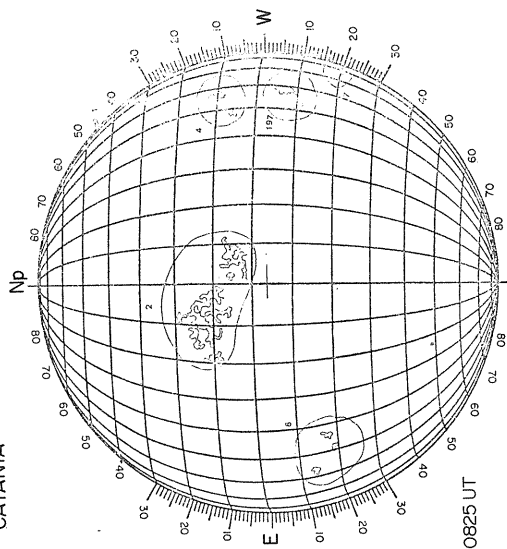
X-RAY
OSO-5

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CALCIUM REPORT

CATANIA

Np



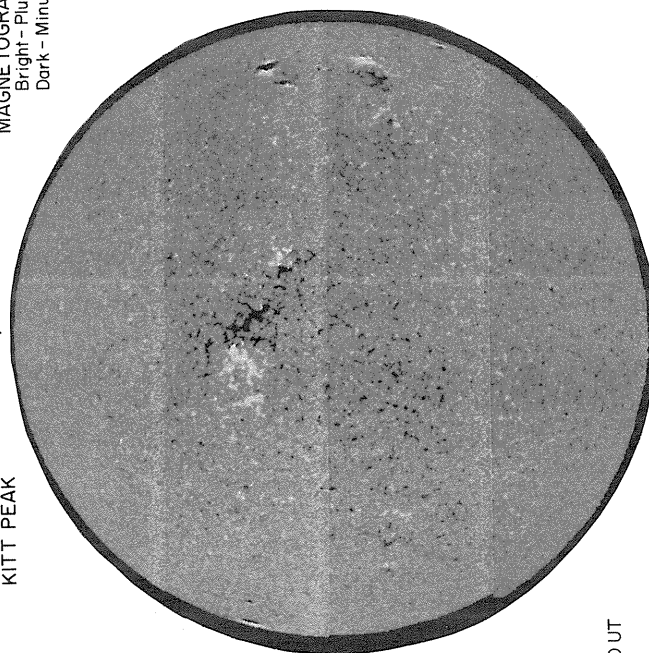
FAIR	EC
04 - 1088	---
02 - 3788	---
06 - 0823	---

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

Sp

KITT PEAK

Np



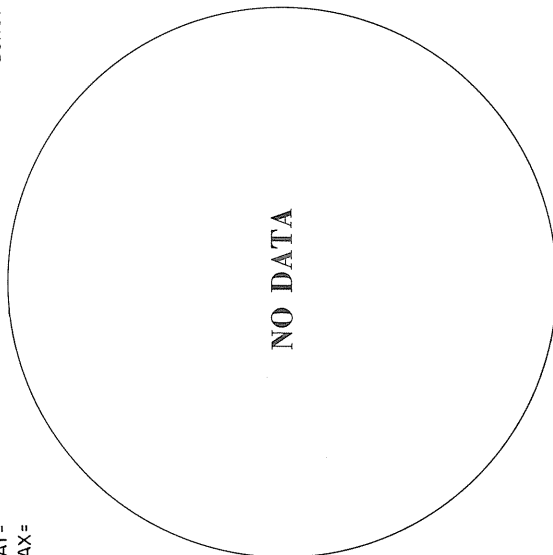
E

MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON
DELTA Y =
DELTA X =

Np

MAGNETOGRAM
Solid - Plus
Dotted - Minus



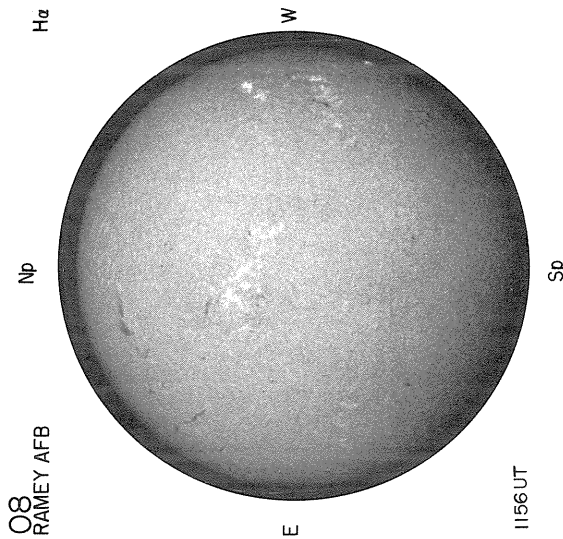
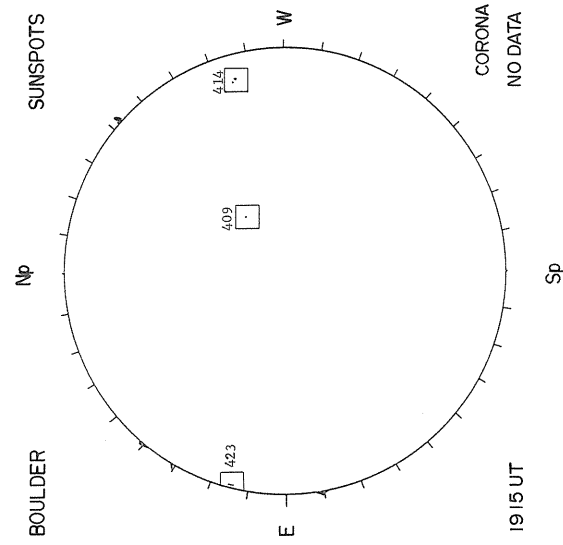
W

E

Levels
+ 5
+ 10
+ 20
+ 40
+ 80

Sp

Sp



8.6 MM

Np

NELC LA POSTA

2.0 CM

Np

NELC LA POSTA

NO DATA

W

WEATHER

E

W

WEATHER

E



Sp

Ant. Temp. Unit 100°K



Sp

Ant. Temp. Unit 100°K

JANUARY 9, 1975 ($P = -1.55$, $B_0 = -3.91$, $L_0 = 180.82$)

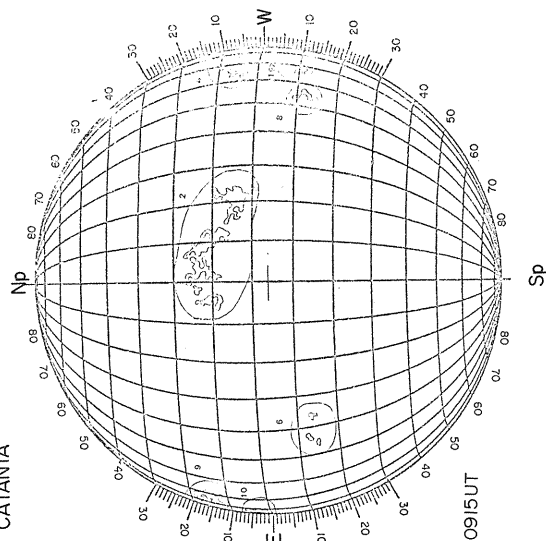
X-RAY
OSO-5

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CALCIUM REPORT

CATANIA

Np



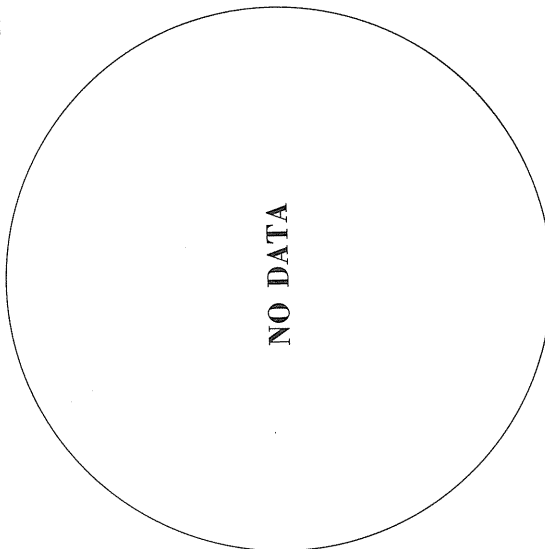
Intensities in Units
of $10^6 \text{ ergs cm}^{-2} \text{ sec}^{-1}$

Sp

KITT PEAK

Np

MAGNETOGRAM
Bright - Plus
Dark - Minus



E

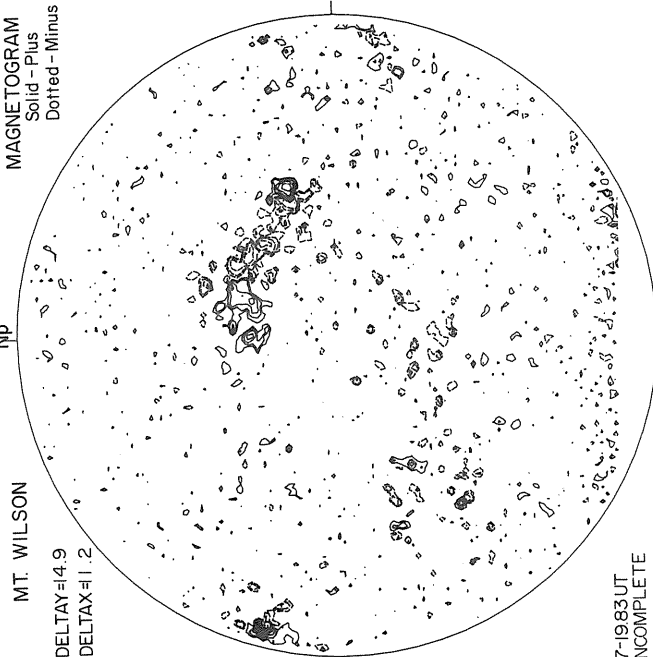
W

Sp

MT. WILSON

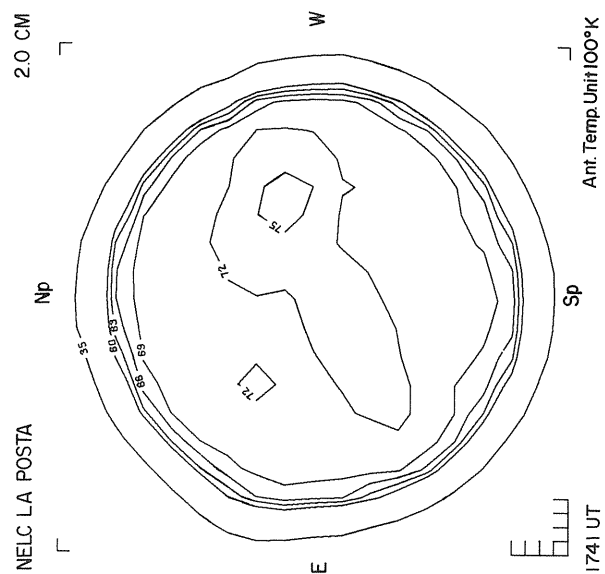
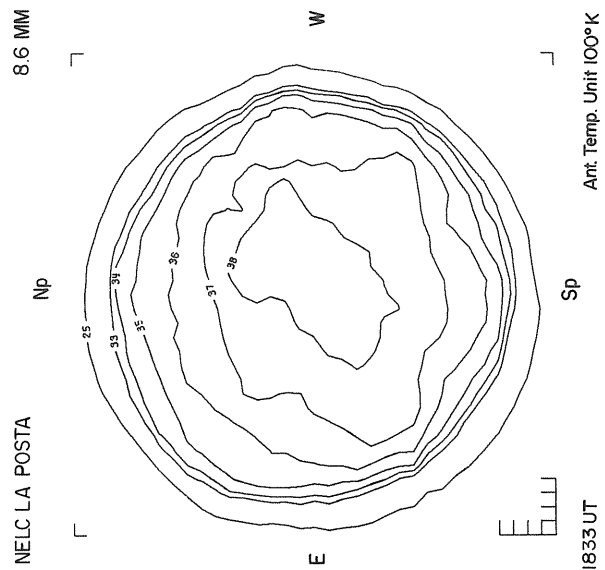
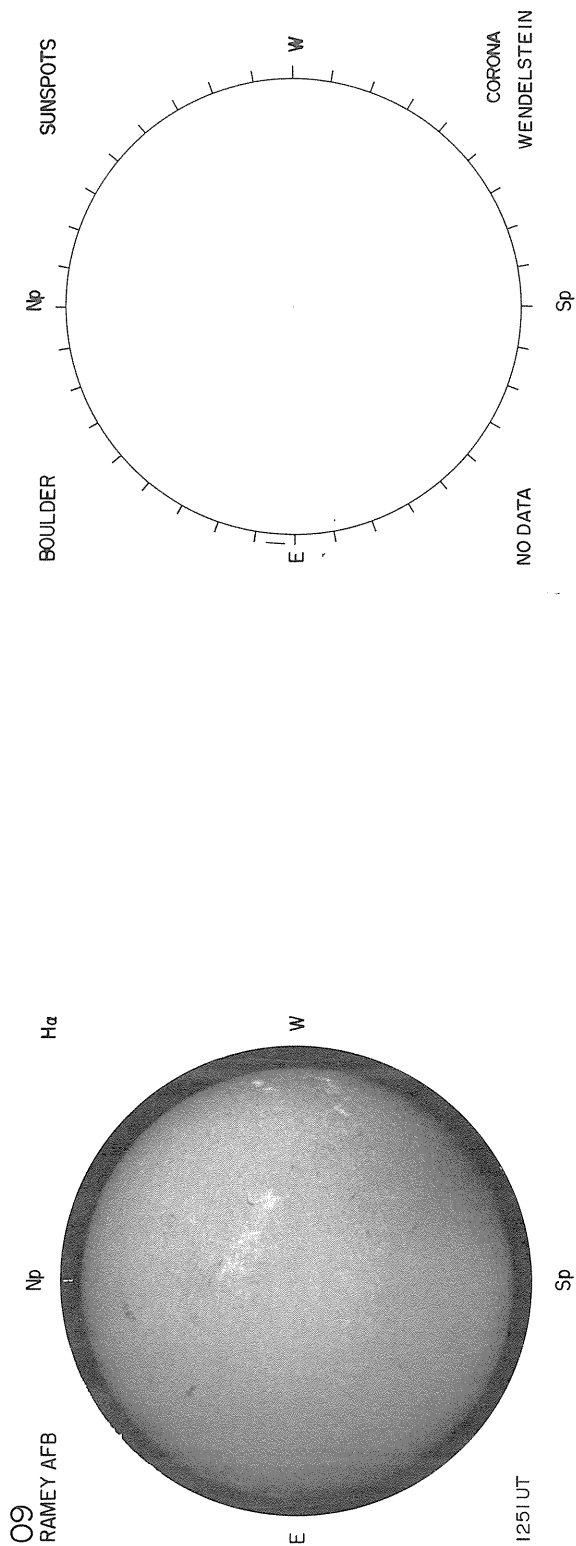
DELTA Y = 4.9
DELTA X = 1.2

MAGNETOGRAM
Solid - Plus
Dotted - Minus



1857-1983UT
DATA INCOMPLETE

Levels
+ 5
+ 10
+ 20
+ 40
+ 80



JANUARY 10, 1975 (P=-2.04, B₀=-4.01, L₀=167.66)

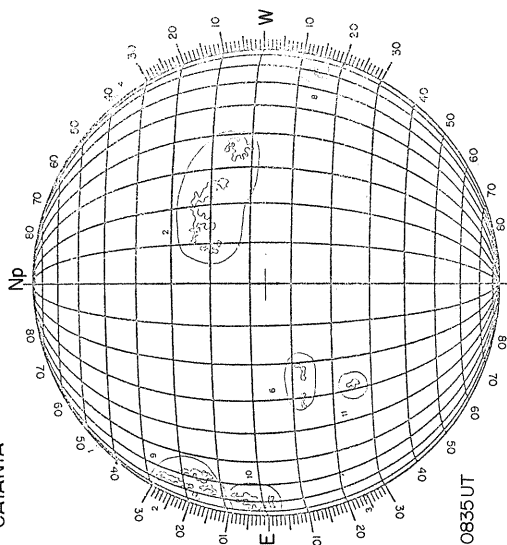
X-RAY
OSO-5

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CALCIUM REPORT

CATANIA

Np



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

Sp

KITT PEAK

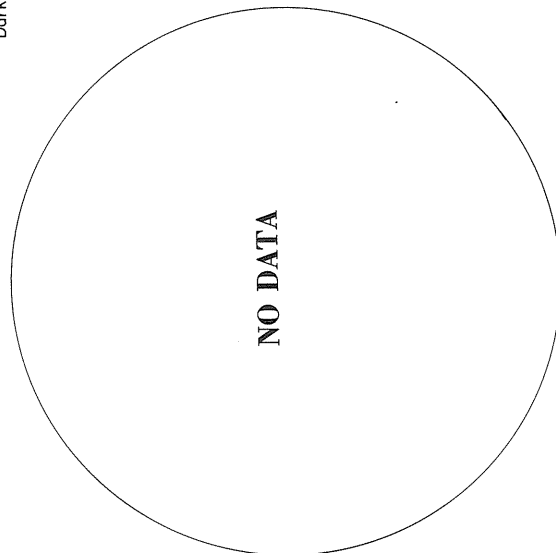
Np

MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON
DELTAY =
DELTAX =

Np

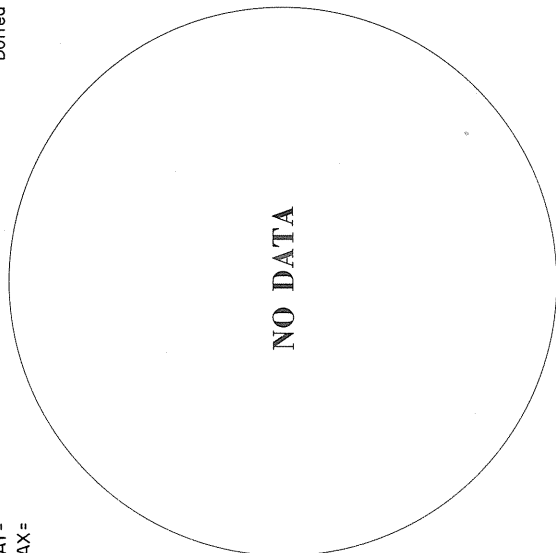
MAGNETOGRAM
Solid - Plus
Dotted - Minus



E

W

E

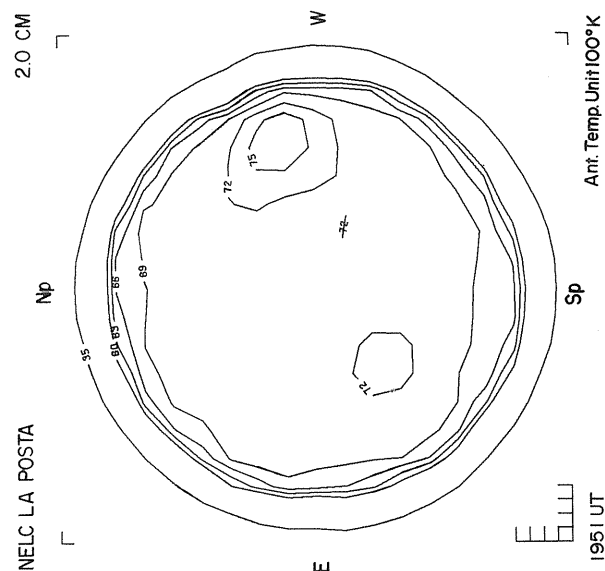
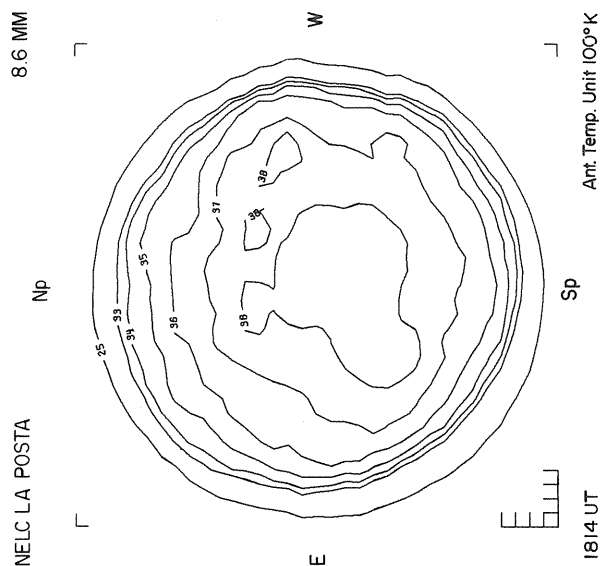
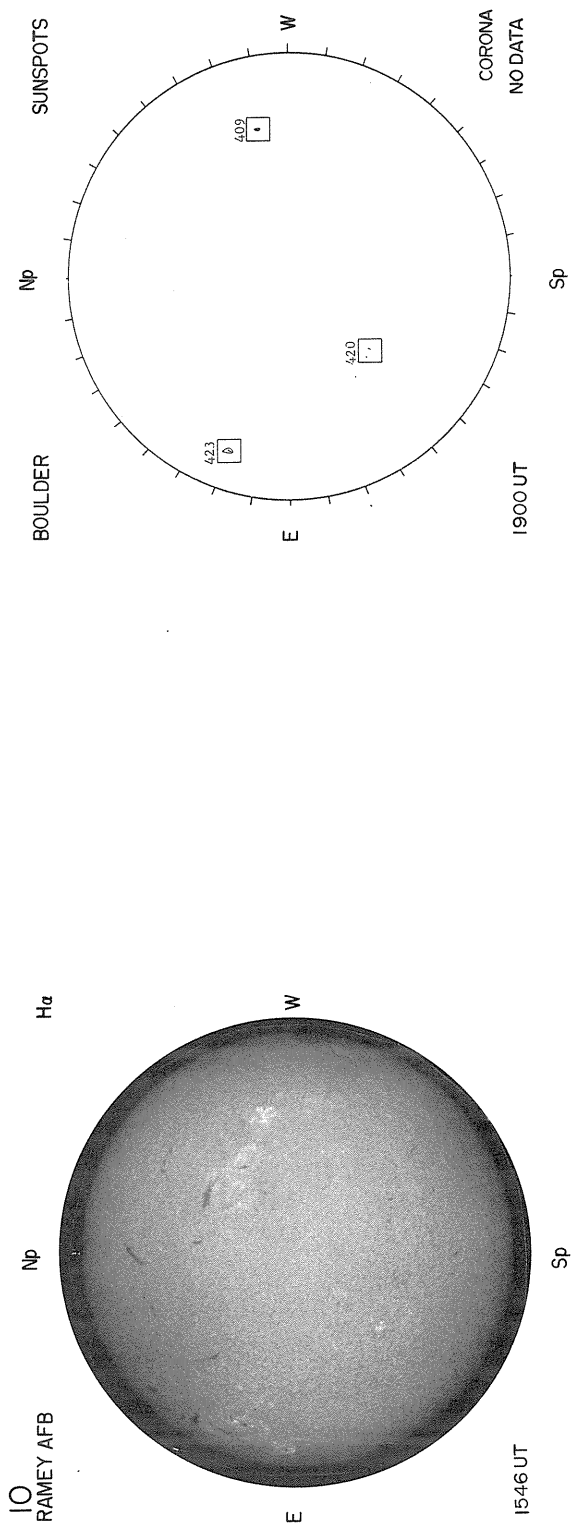


W

Levels
+ 5
+ 10
+ 20
+ 40
+ 80

Sp

Sp



JANUARY 11, 1975 (P=-2.52, B₀=-4.12, L₀=154.49)

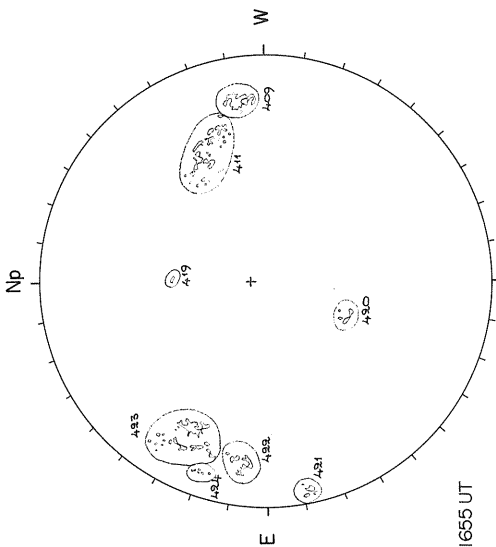
McMATH-HULBERT

McMATH-HULBERT

X-RAY
OSO-5

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Np



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

Sp

KITT PEAK

Np

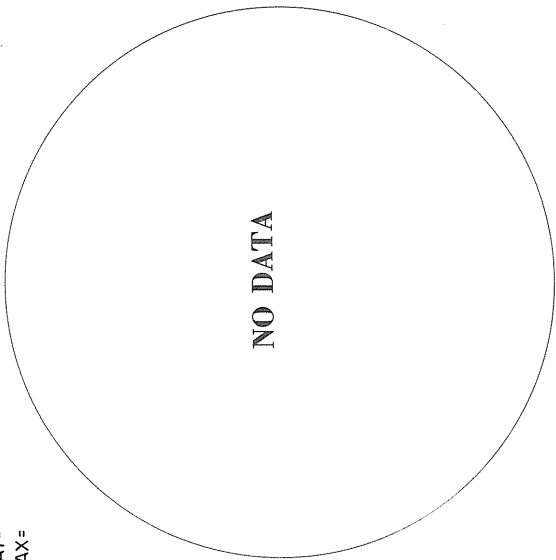
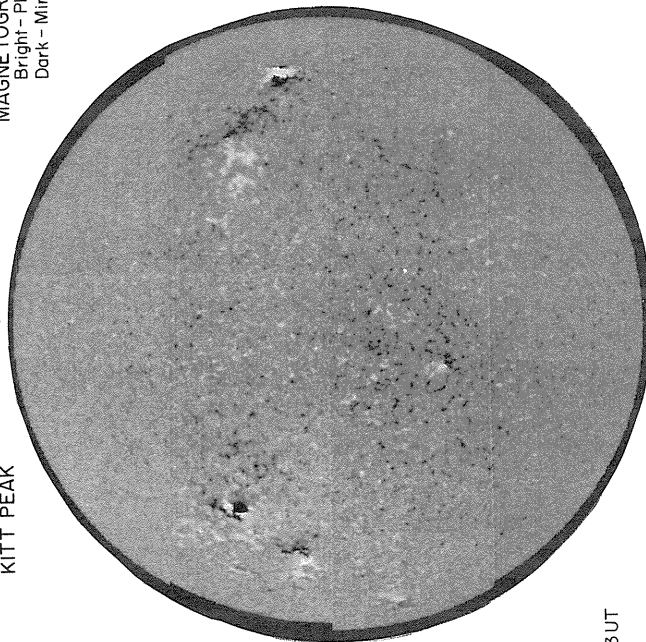
MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

DELTA Y =
DELTA X =

Np

MAGNETOGRAM
Solid - Plus
Dotted - Minus



NO DATA

W

E

W

E

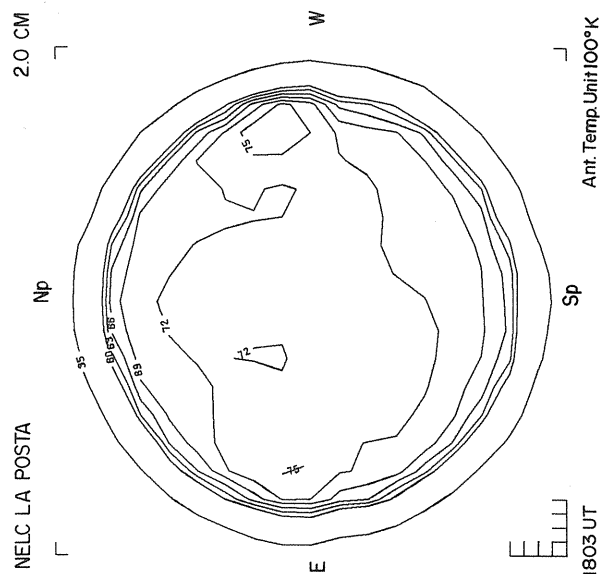
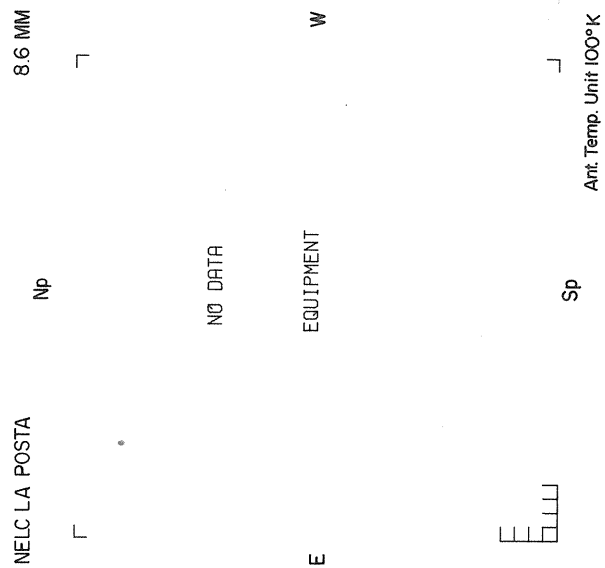
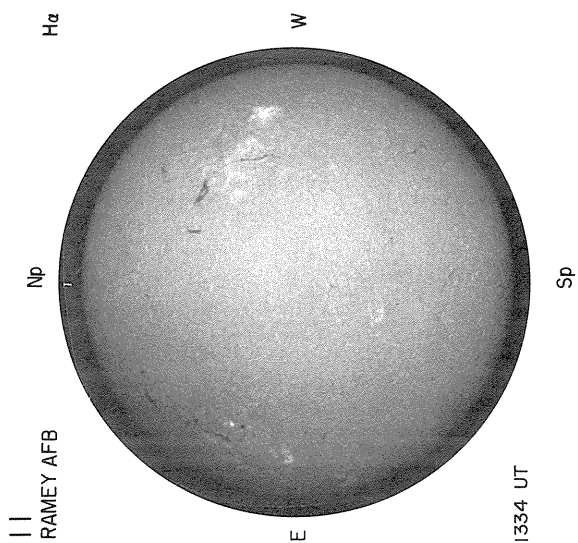
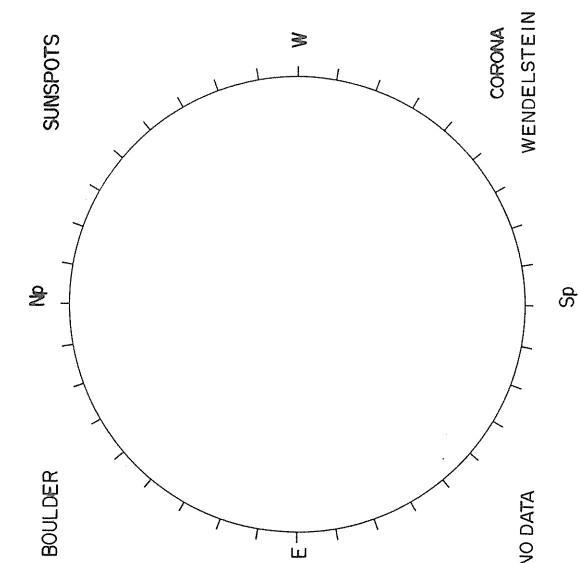
Levels
+ 5
+ 10
+ 20
+ 40
+ 80

1803 UT

1655 UT

Sp

Sp



Jan 75

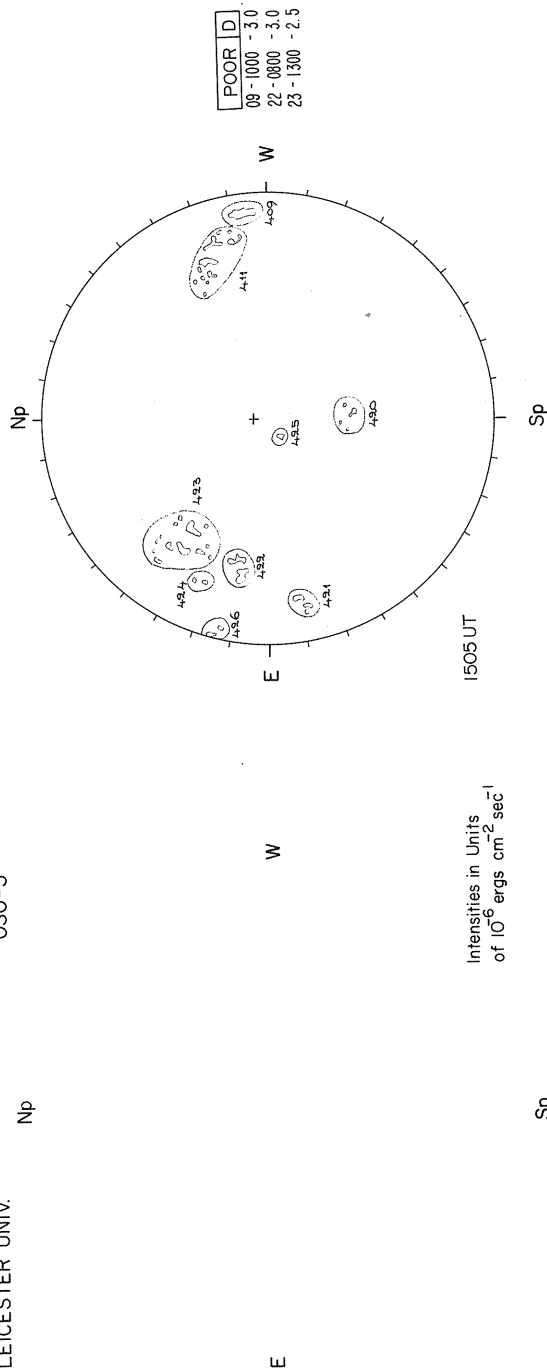
JANUARY 12, 1975 (P=-2.99, B_o=-4.23, L_o=141.32)

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X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

$$\frac{d}{dz}$$


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

5

KITT PEAK

2

MAGNETOGRAM

Bright - Plus
Dark - Minus

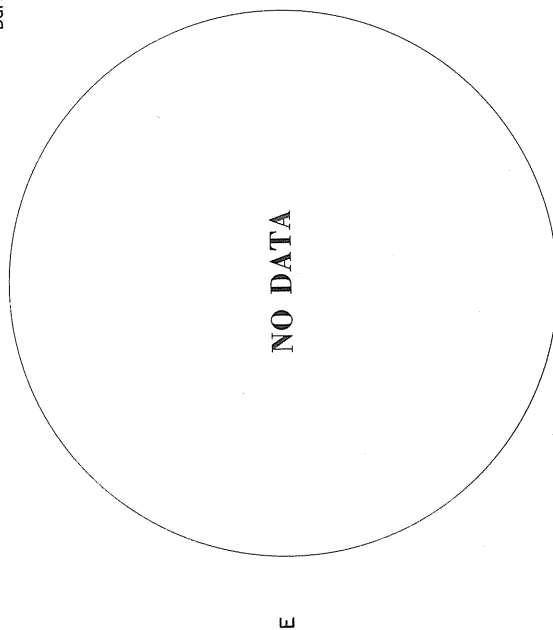
MT. WILSON

DELTA Y=14.9

DELTA_X=1.2

dp

MAGNETOGRAM
Solid - Plus
Dotted - Minus



NO DATA

W

W

W

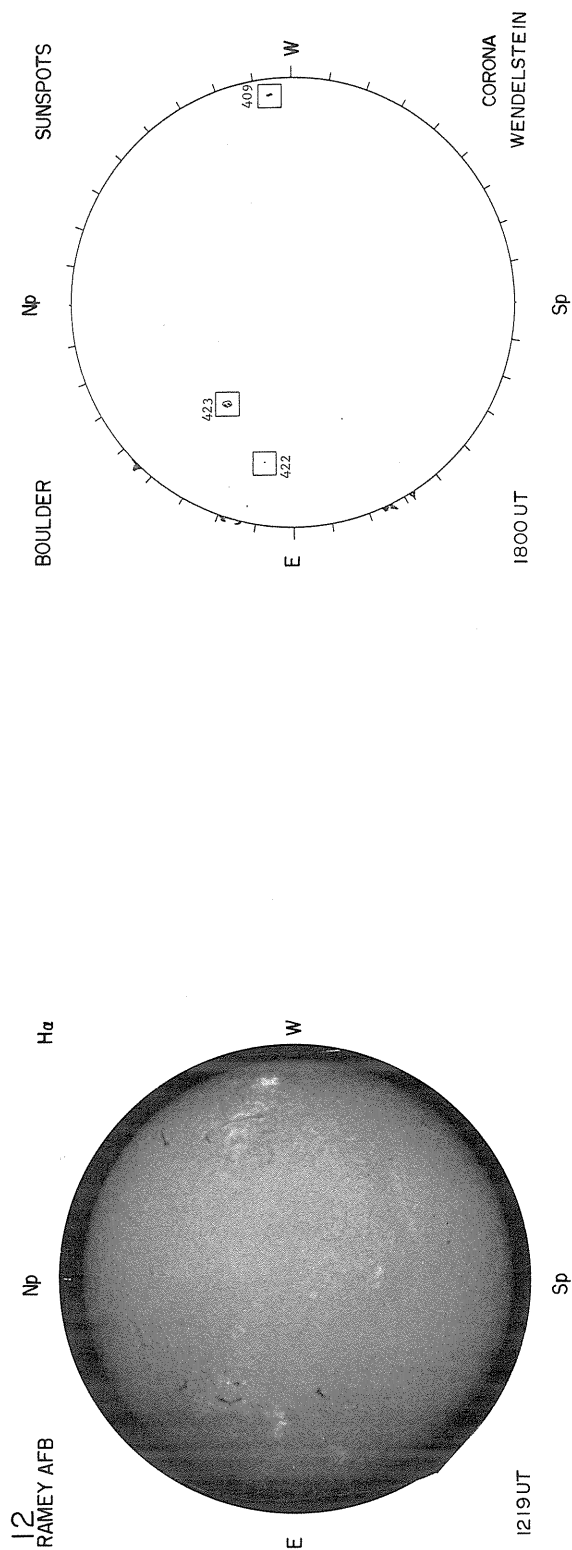
2

•

N

Levels	5	10	20	40	80
	+	+	+	+	+

17.21-18.67 UT



NELC LA POSTA

NP

2.0 CM

└

NELC LA POSTA

L

 dN

8.6 MM

└

NO DATA

WEATHER

W

W

NO DATA

EQUIPMENT

M



ds

Ant. Temp. Unit 100°K



ds

Ant. Temp. Unit 100°K

JANUARY 13, 1975 (P = -3.47, B₀ = -4.33, L₀ = 128.15)

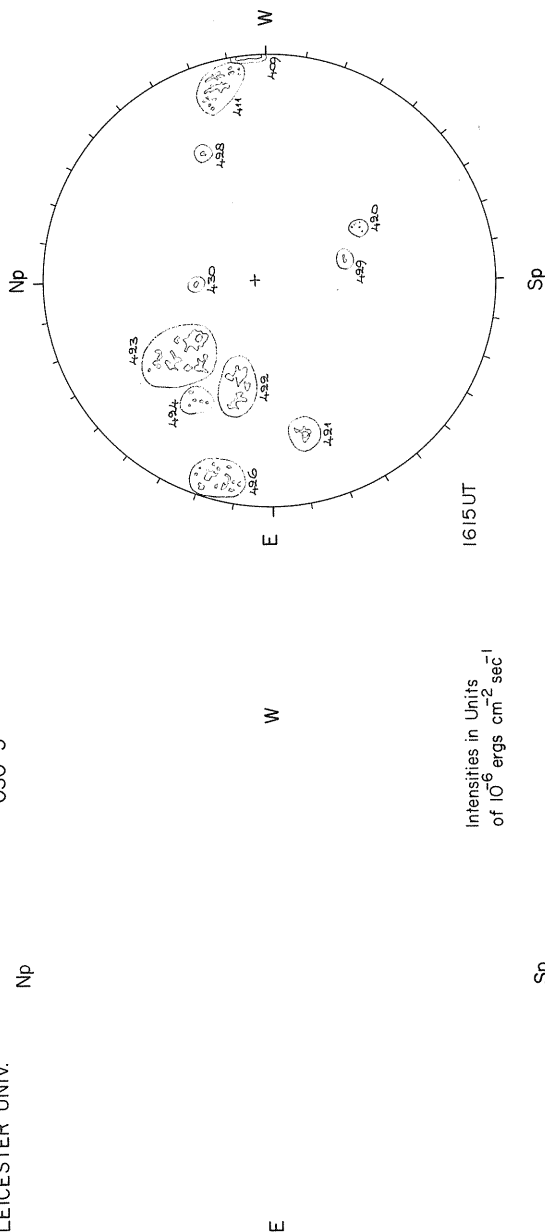
UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

Np



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

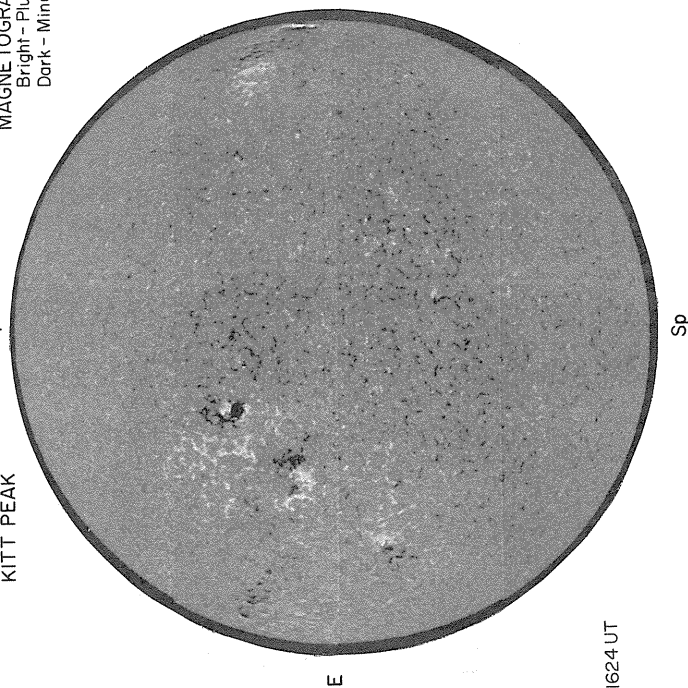
1615 UT

Sp

KITT PEAK

Np

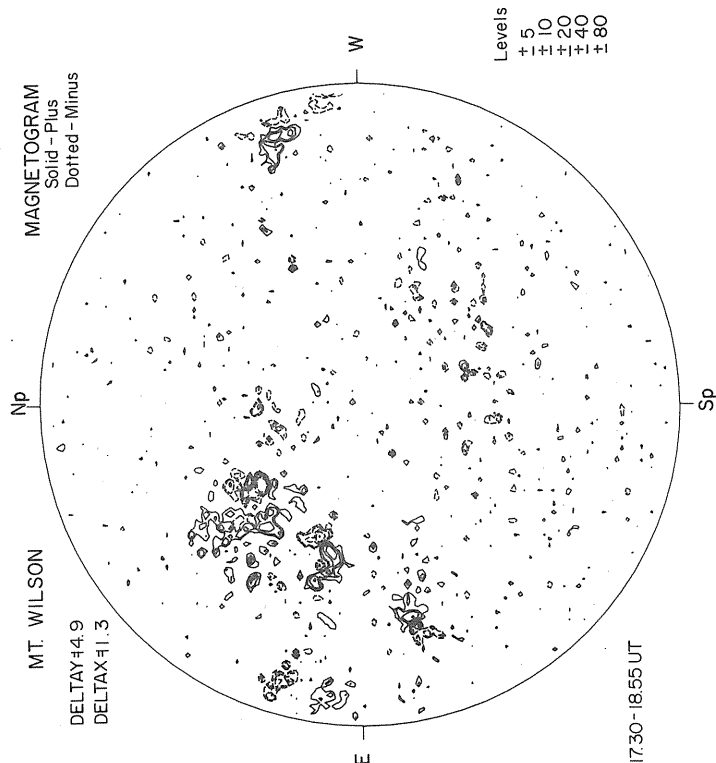
MAGNETOGRAM
Bright - Plus
Dark - Minus



1624 UT

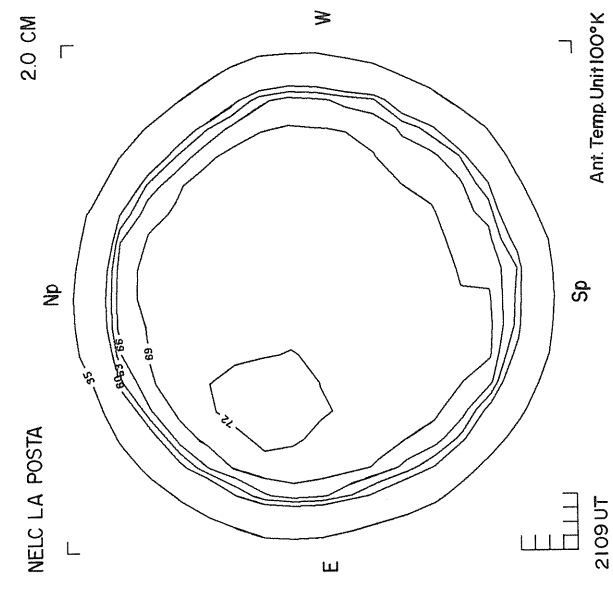
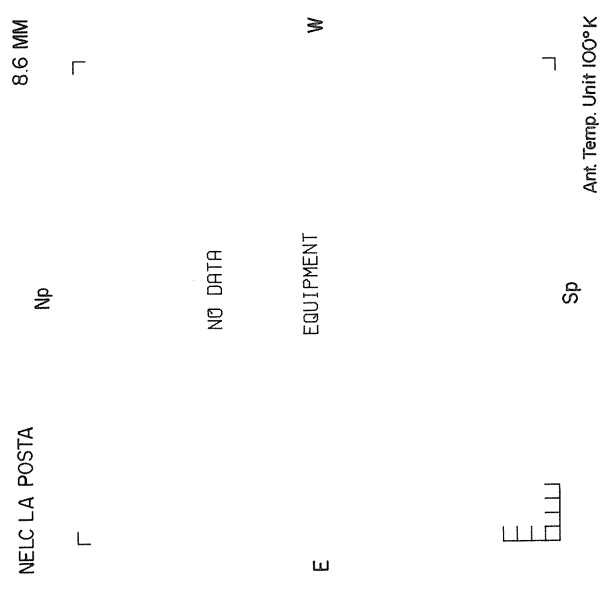
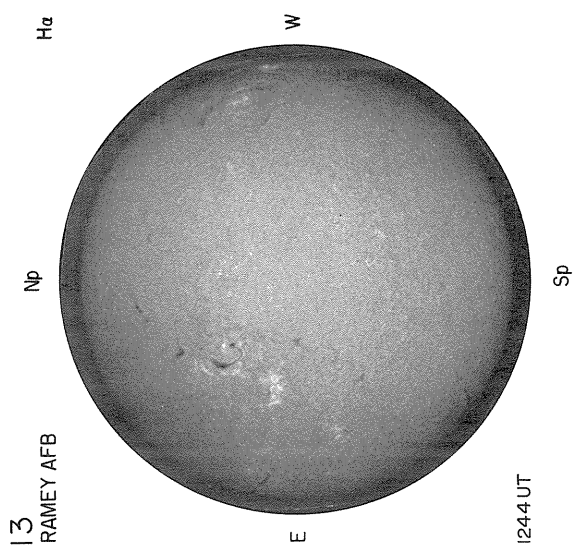
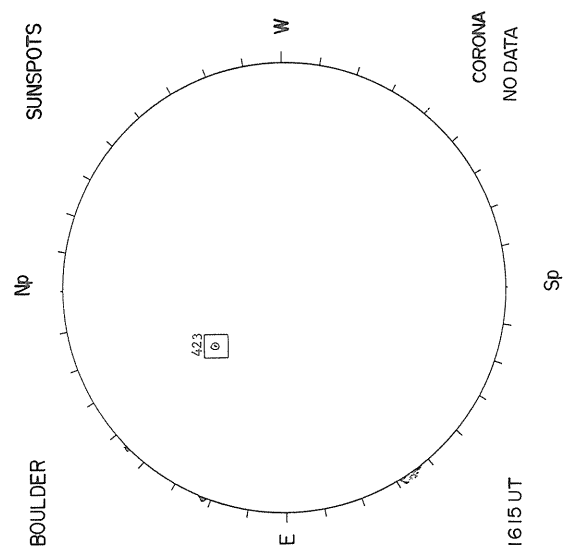
MT. WILSON
DELTA Y ± 4.9
DELTA X ± 1.3

MAGNETOGRAM
Solid - Plus
Dotted - Minus



1730-1855 UT

Levels
+ 5
+ 10
+ 20
+ 40
+ 80



JANUARY 14, 1975 (P=-3.94, B₀=-4.43, L₀=114.98)

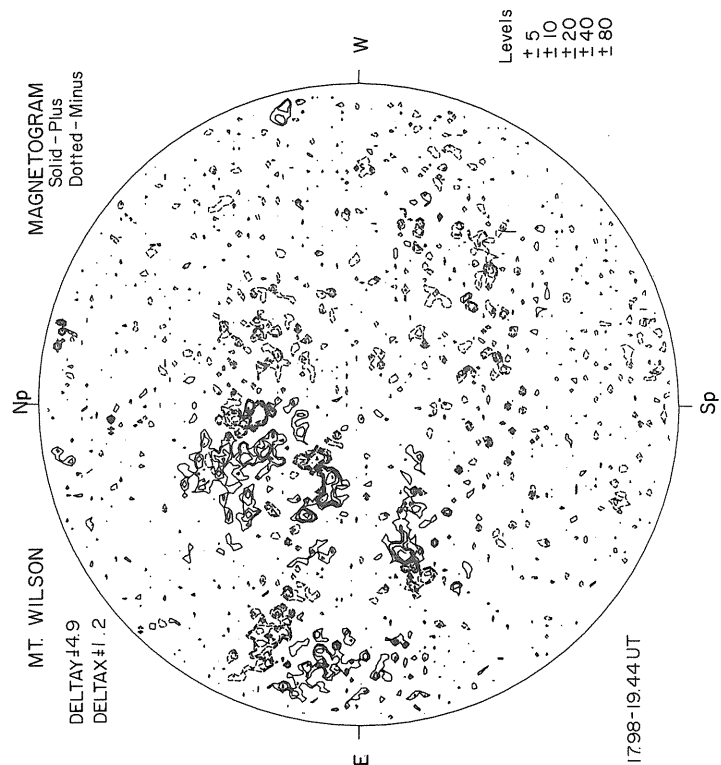
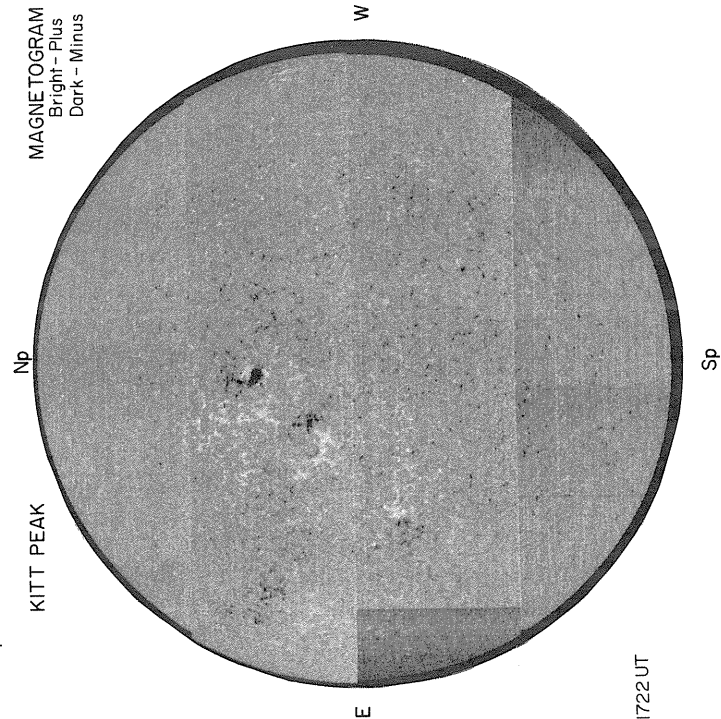
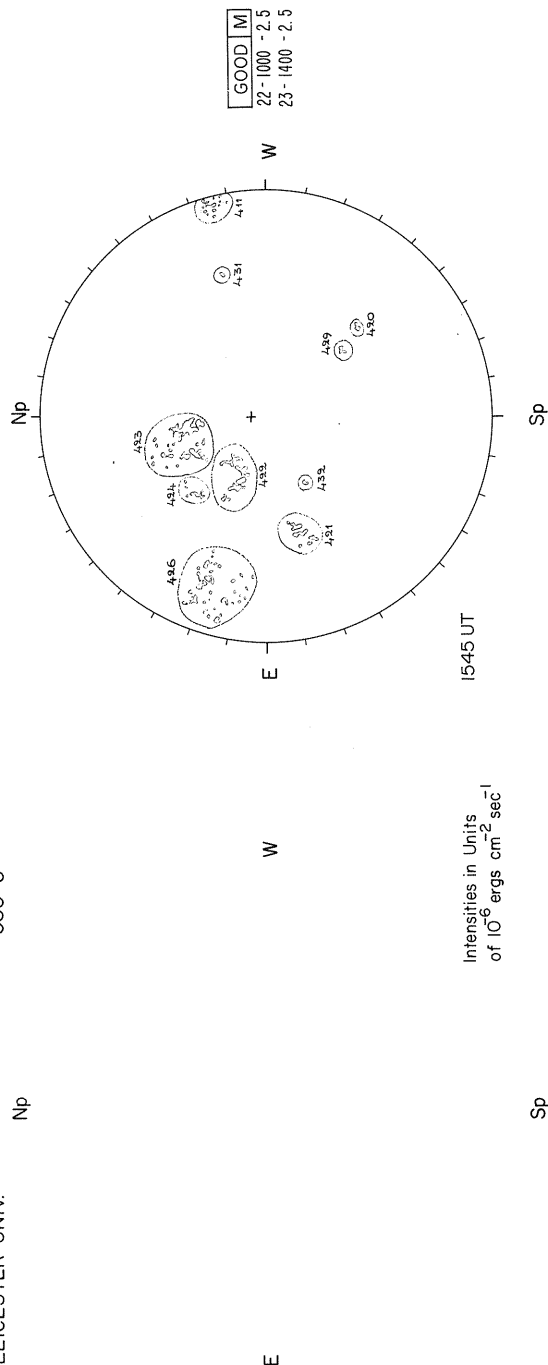
UNIV. COLLEGE LONDON
LEICESTER UNIV.

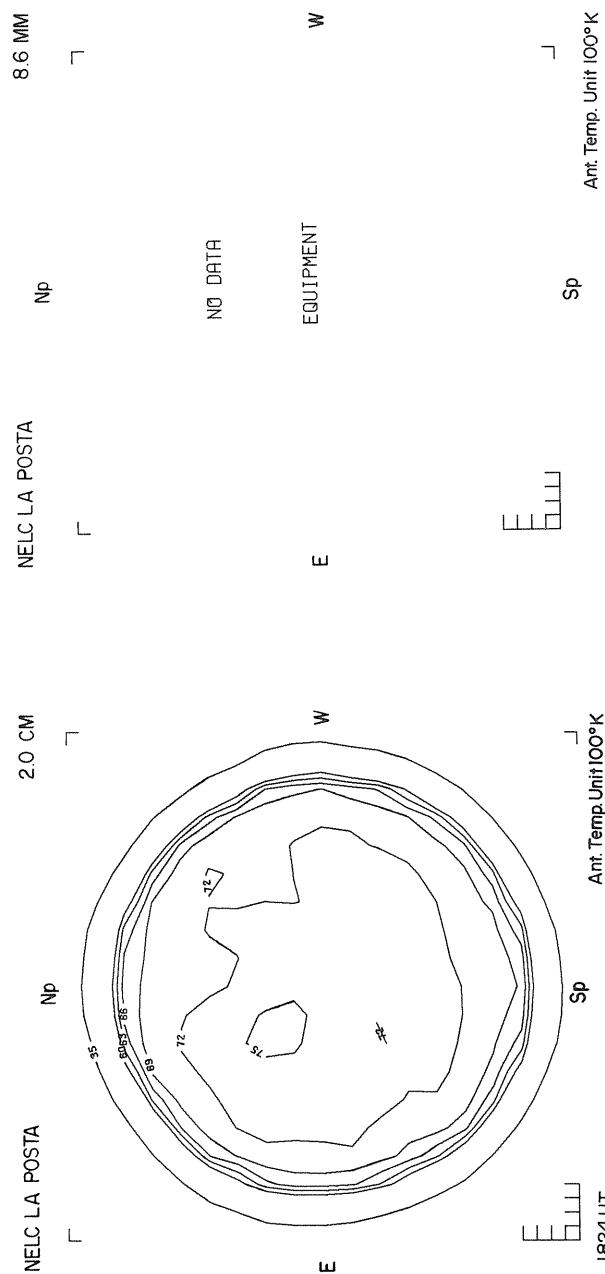
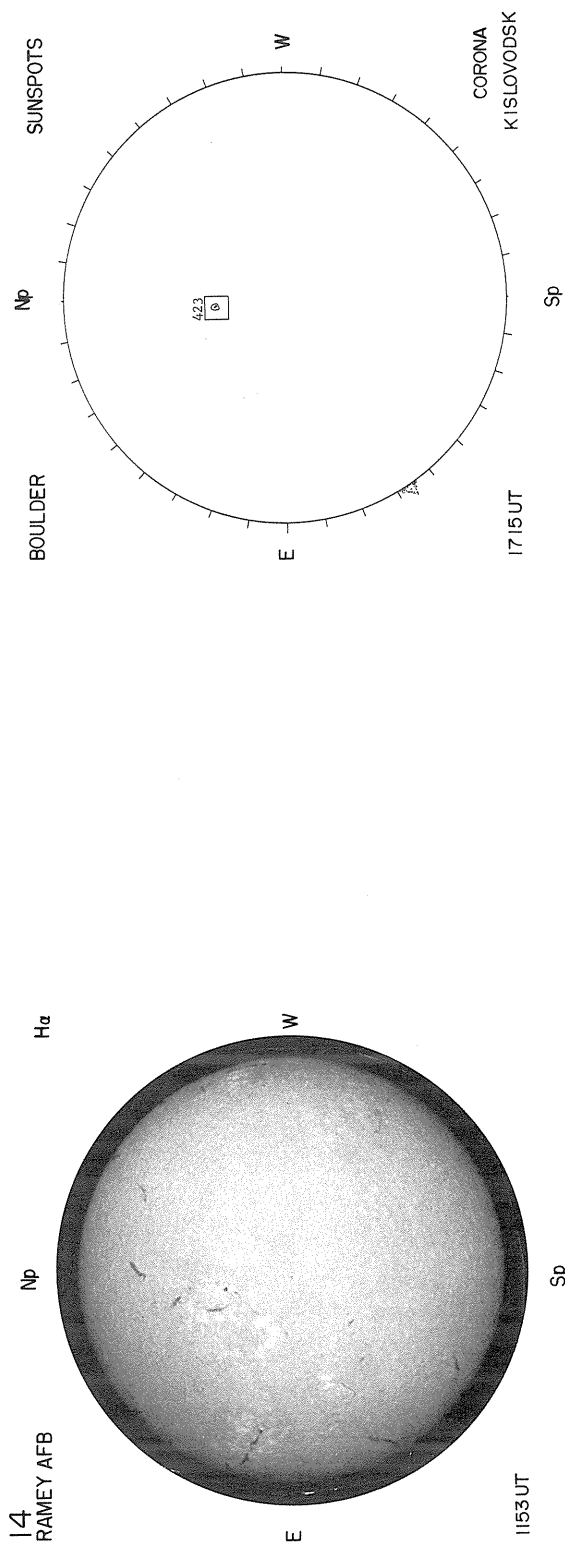
X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

Np





JANUARY 15, 1975 (P=-4.42, B₀ = -4.53, L₀ = 101.82)

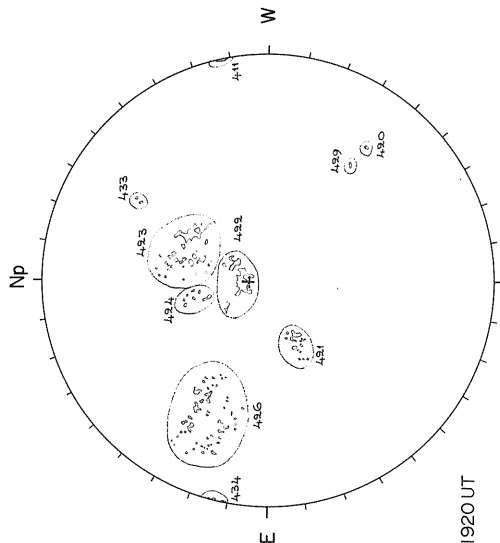
UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

Np



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

1920 UT

Sp

KITT PEAK

Np

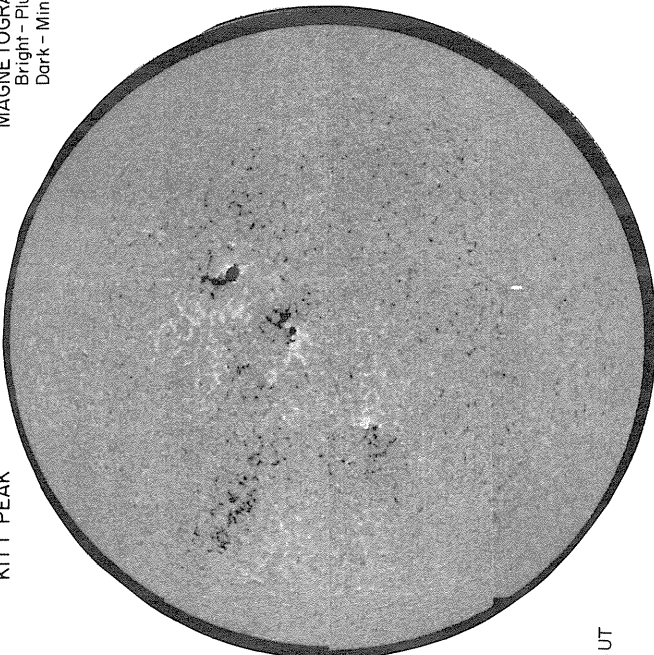
MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

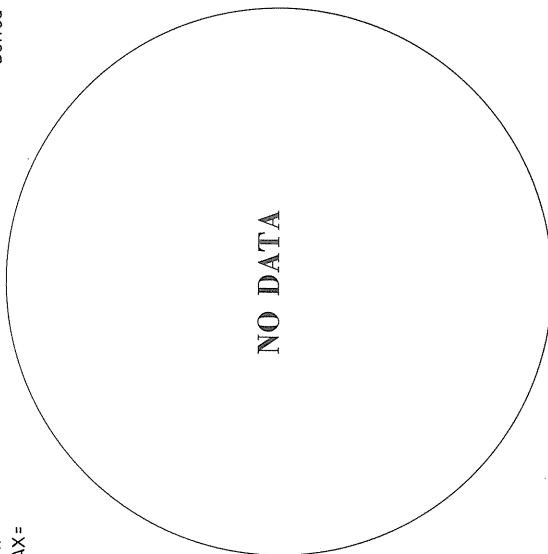
DELTA Y =
DELTA X =

Np

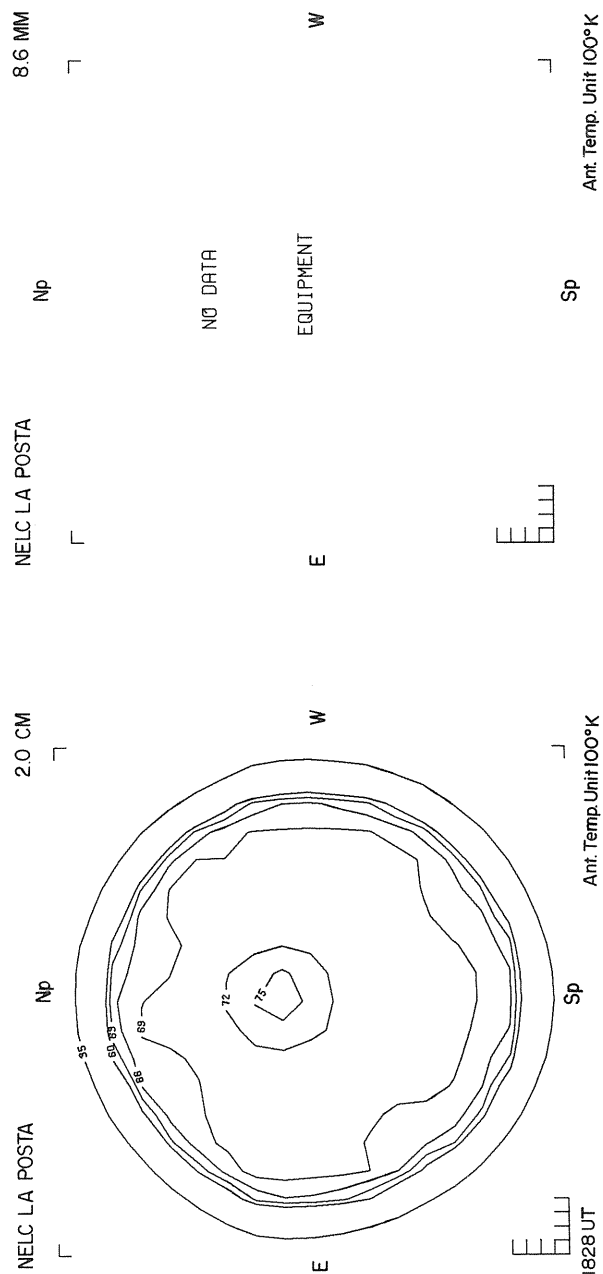
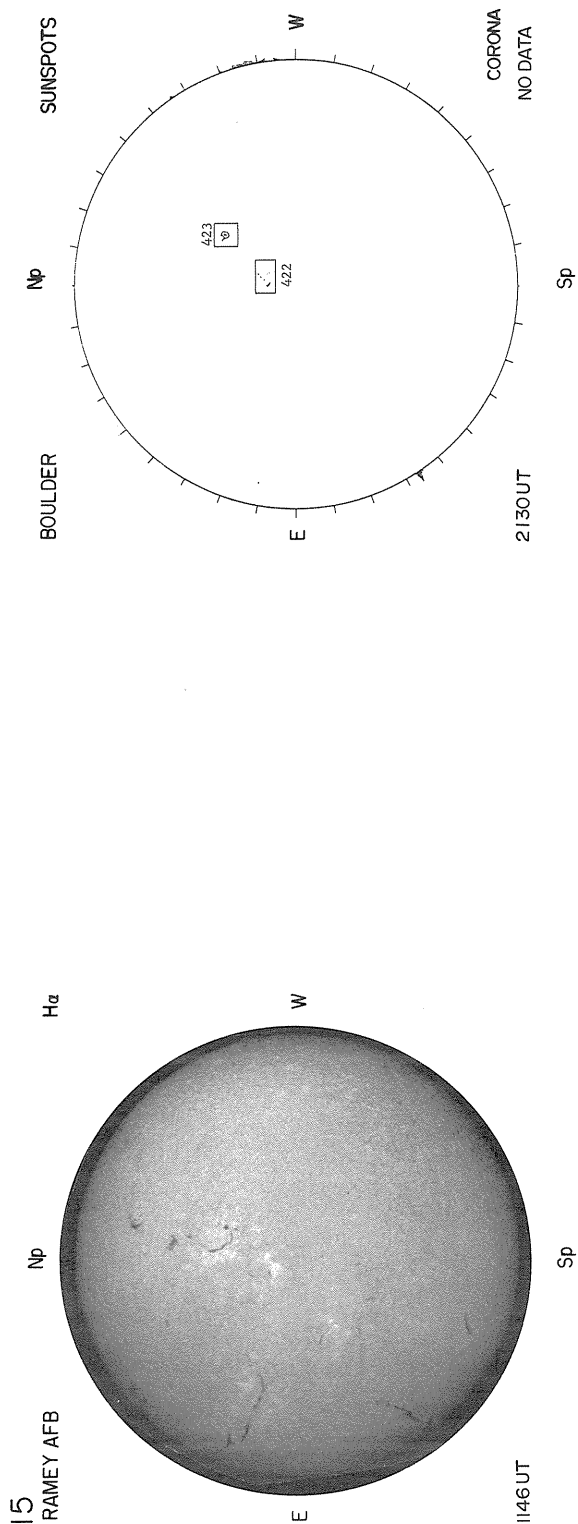
MAGNETOGRAM
Solid - Plus
Dotted - Minus



1616 UT



Levels
5
+1
+10
+20
+40
+80



JANUARY 16, 1975 (P=-4.89, B₀=-4.63, L₀=88.65)

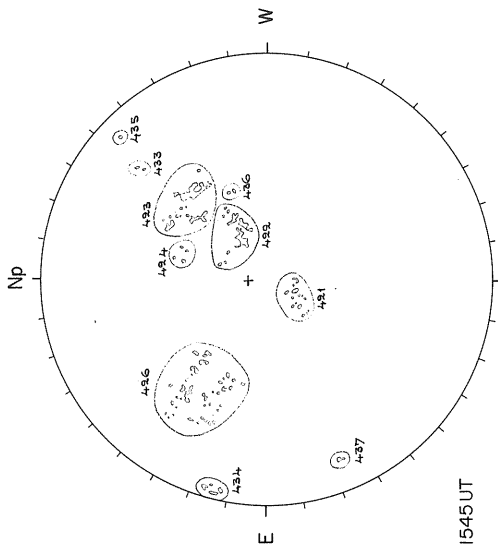
UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

Np



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

Sp

KITT PEAK

Np

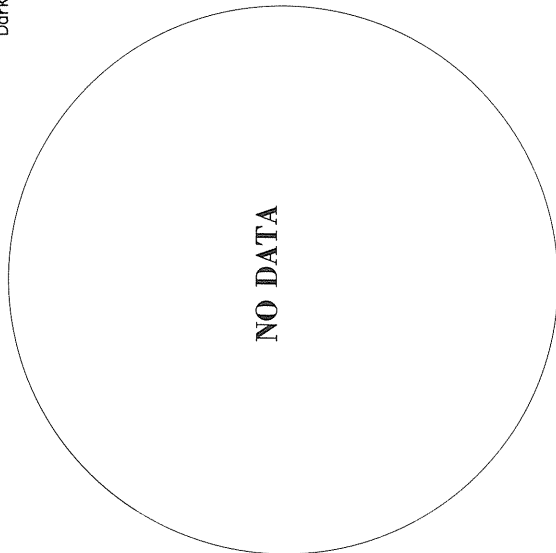
MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

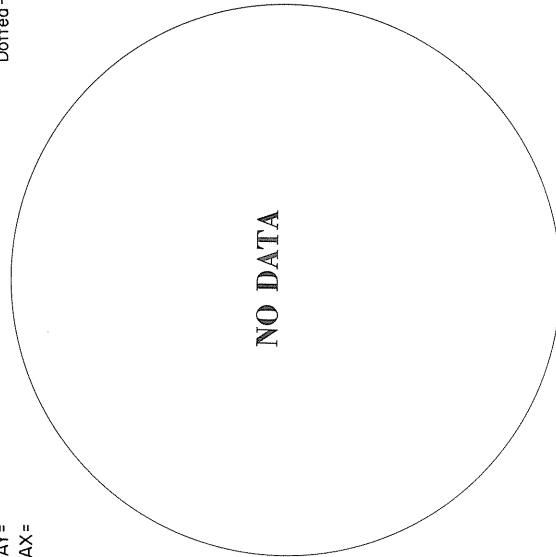
DELTA Y =
DELTA X =

Np

MAGNETOGRAM
Solid - Plus
Dotted - Minus



E

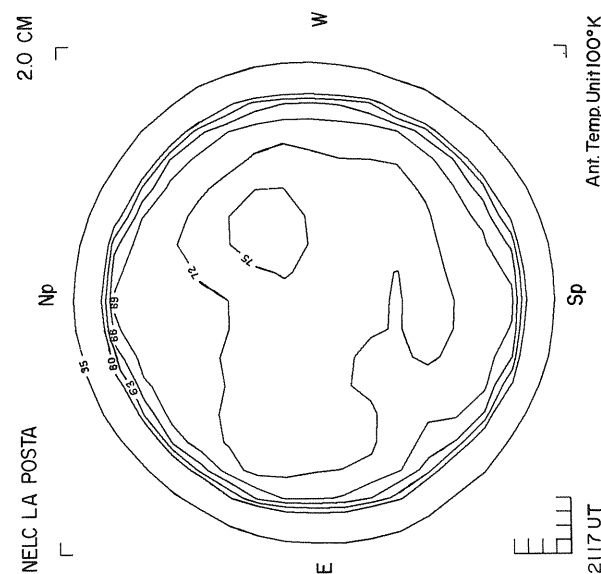
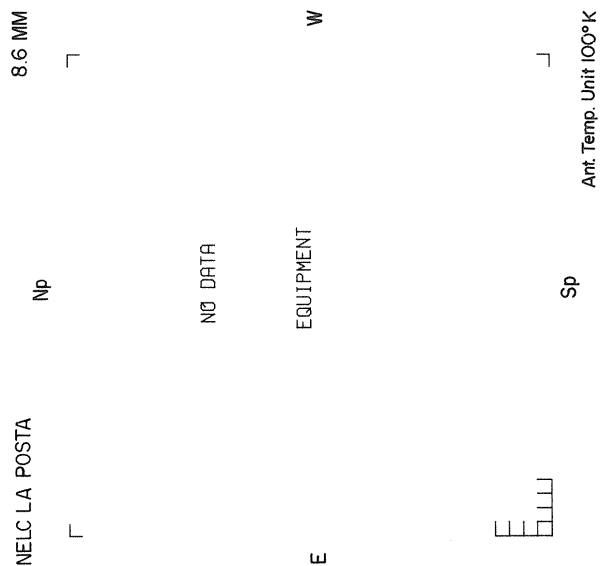
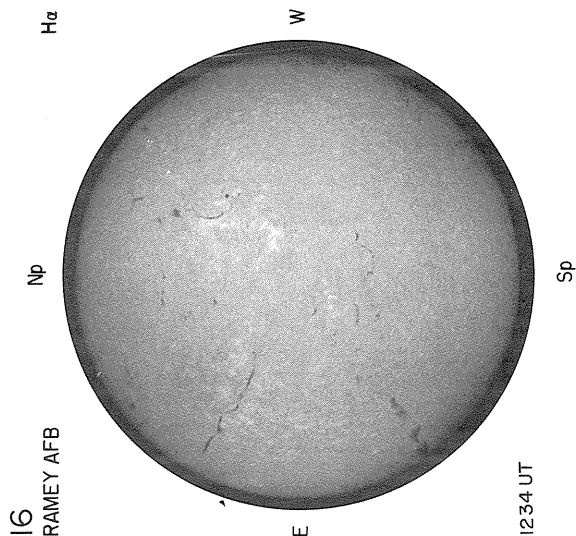
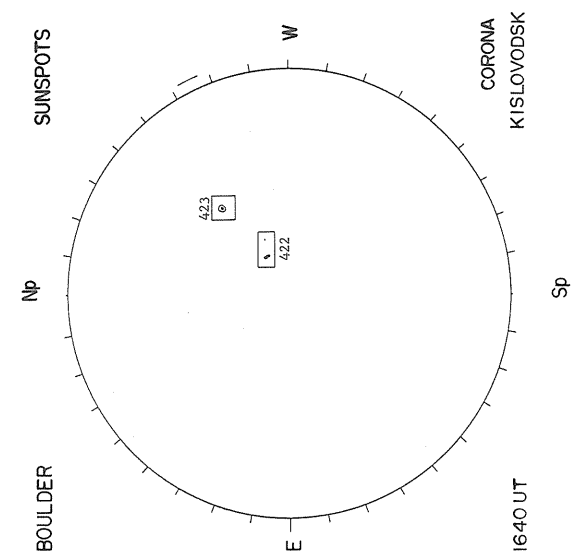


W

Levels
+ 5
+ 10
+ 20
+ 40
+ 80

Sp

Sp



JANUARY 17, 1975 (P = -5.35, B₀ = -4.73, L₀ = 75.48)

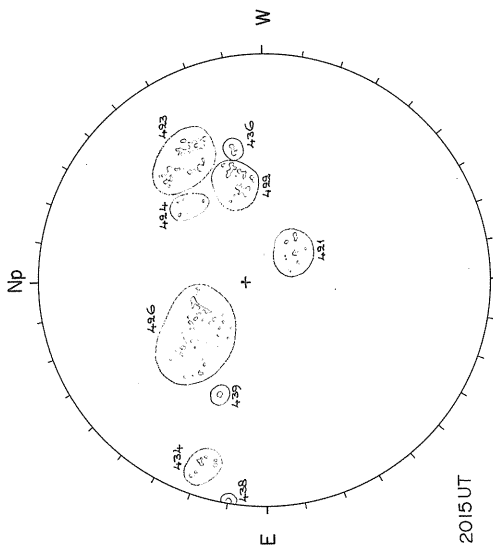
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LEICESTER UNIV.

X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

Np



GOOD M
22 - 0900 - 2.5
23 - 1100 - 2.5

Sp

KITT PEAK

Np

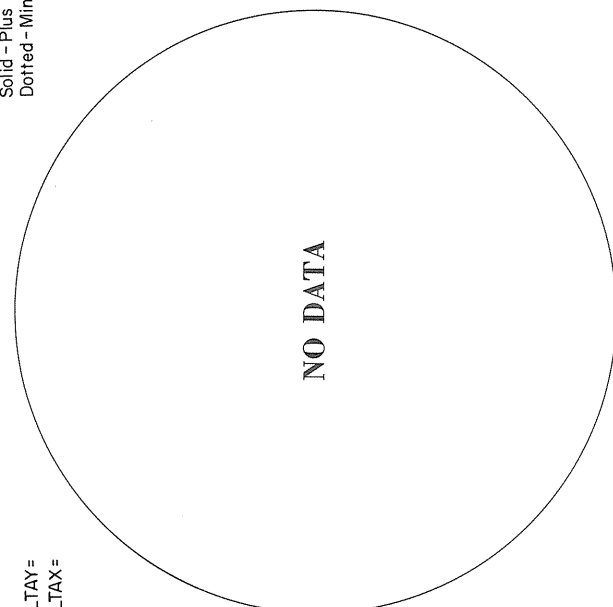
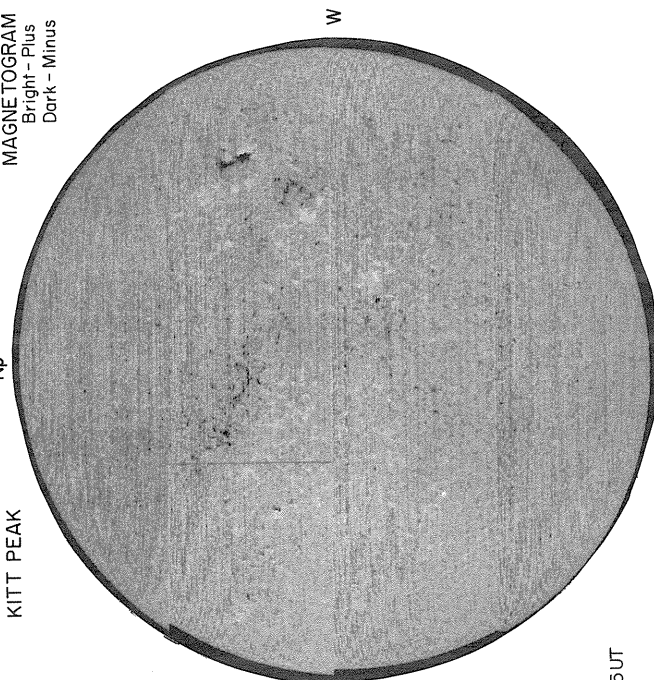
MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

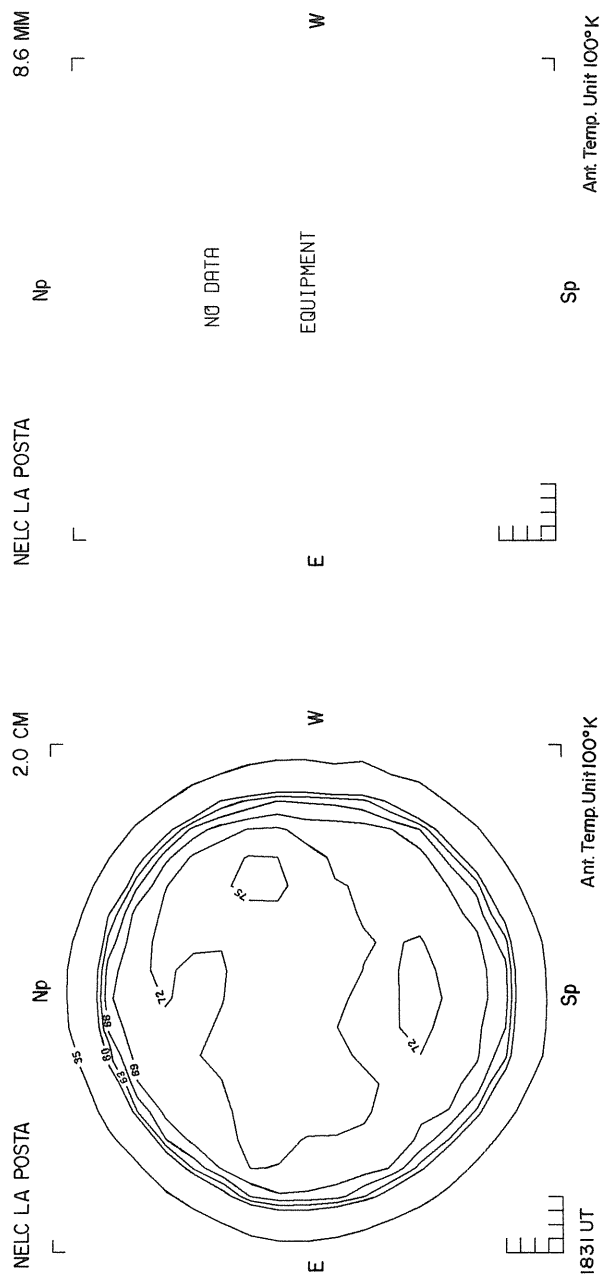
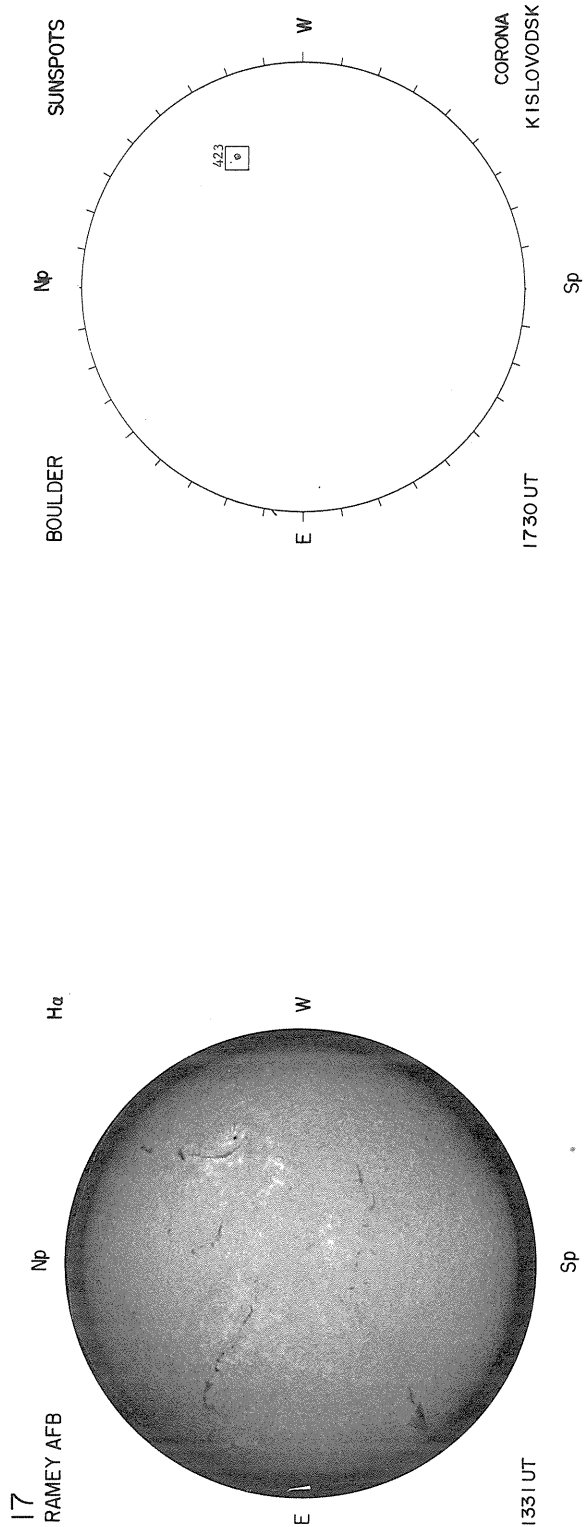
DELTA Y =
DELTA X =

Np

MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
+ 5
+ 10
+ 20
+ 40
+ 80



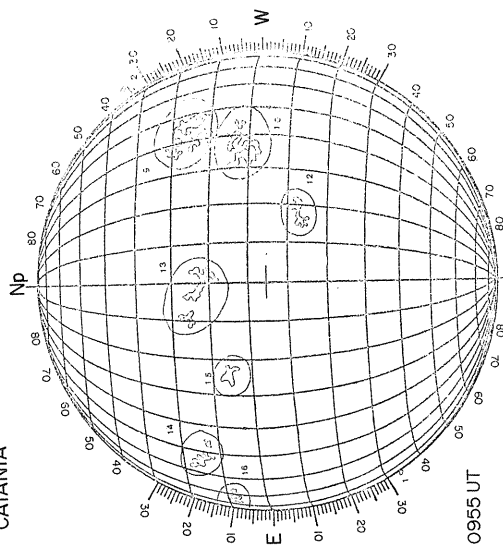
JANUARY 18, 1975 (P=-5.82, B₀=-4.83, L₀=62.32)

X-RAY
OSO-5

CATANIA

CALCIUM REPORT

Np



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

Sp

KITT PEAK

Np

MAGNETOGRAM
Bright - Plus
Dark - Minus

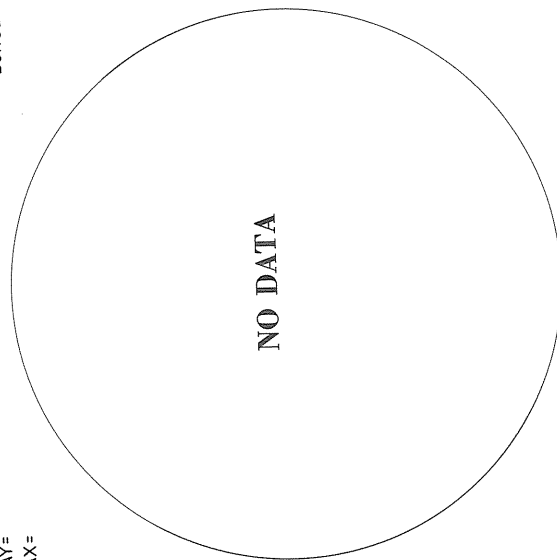
MT. WILSON

DELTA Y =
DELTA X =

Sp

MAGNETOGRAM
Solid - Plus
Dotted - Minus

Np



E

W

E

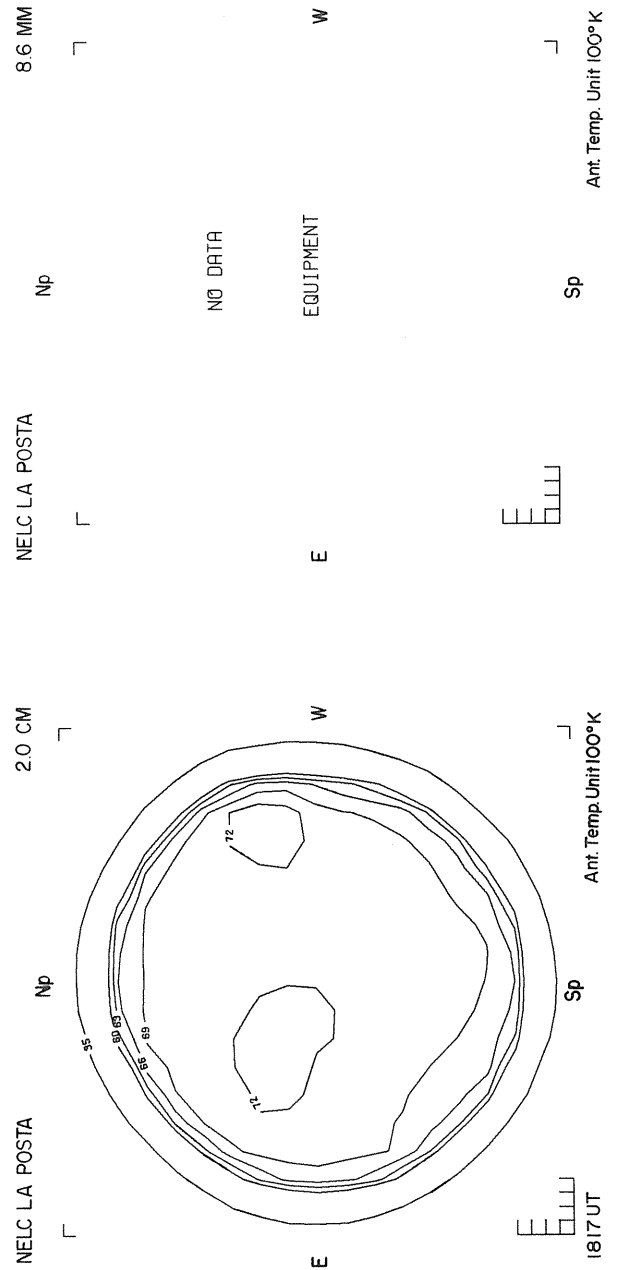
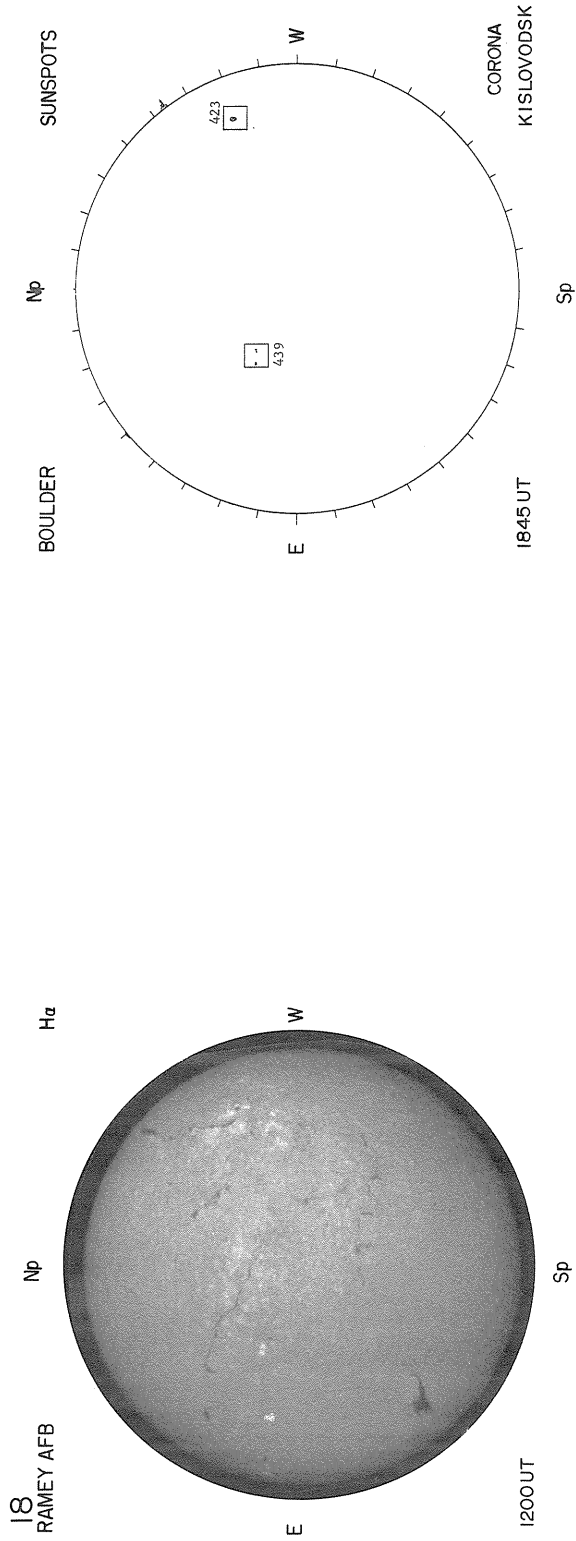
1635 UT

Sp

Sp

Levels
+ 5
+ 10
+ 20
+ 40
+ 80

W



JANUARY 19, 1975 (P=-6.28, B₀=-4.92, L₀=49.15)

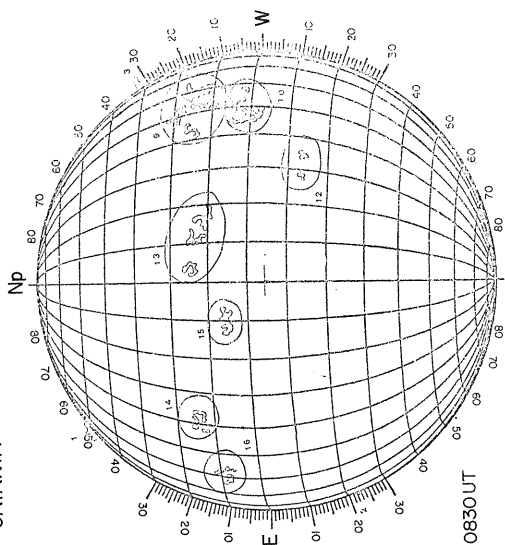
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LEICESTER UNIV.

X-RAY
OSO-5

CALCIUM REPORT

CATANIA

Np



FAIR	EC
09 - 2605	---
10 - 1306	---
13 - 0908	---
15 - 0439	---

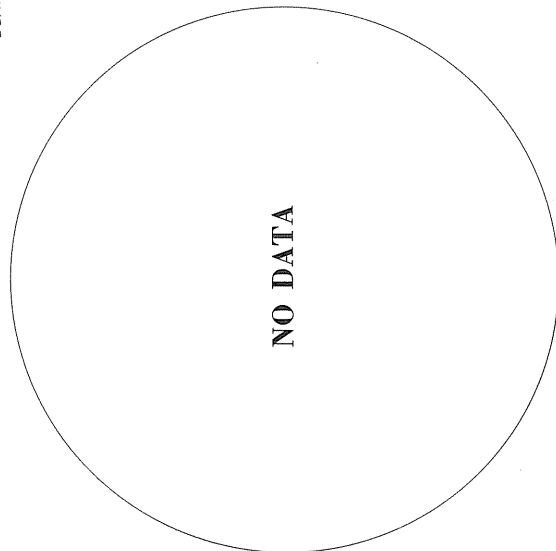
Intensities in Units
of 10^{-6} ergs $\text{cm}^{-2} \text{sec}^{-1}$

Sp

KITT PEAK

Np

MAGNETOGRAM
Bright - Plus
Dark - Minus



NO DATA

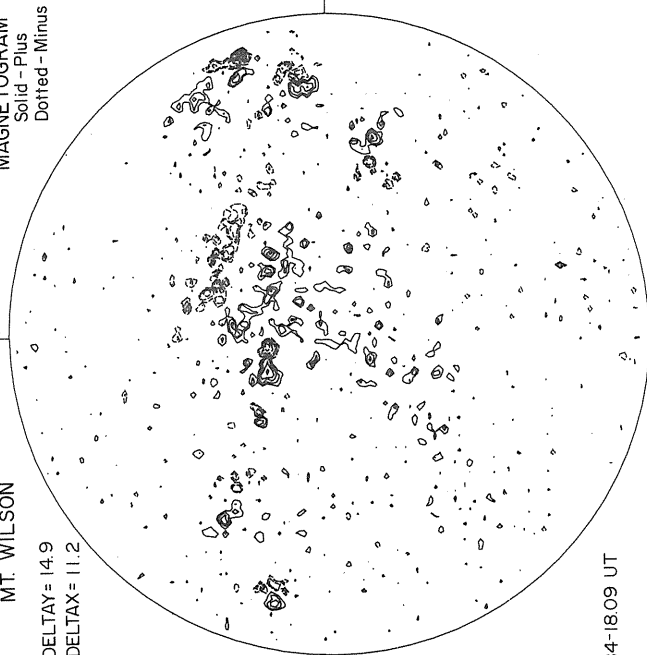
E

Sp

MT. WILSON

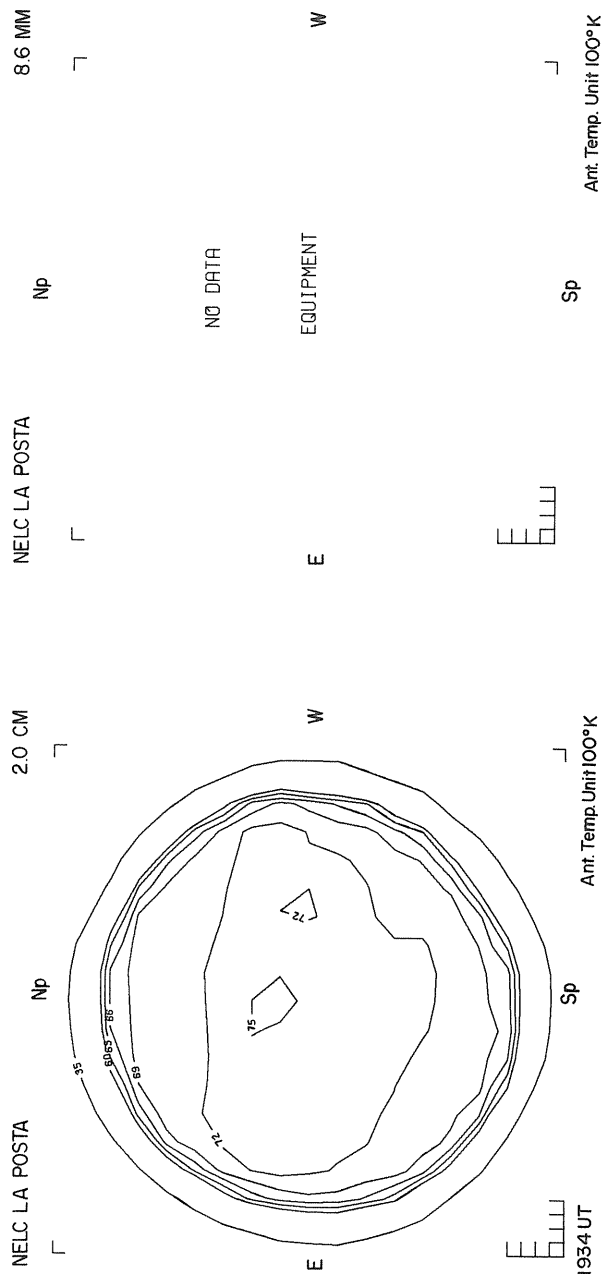
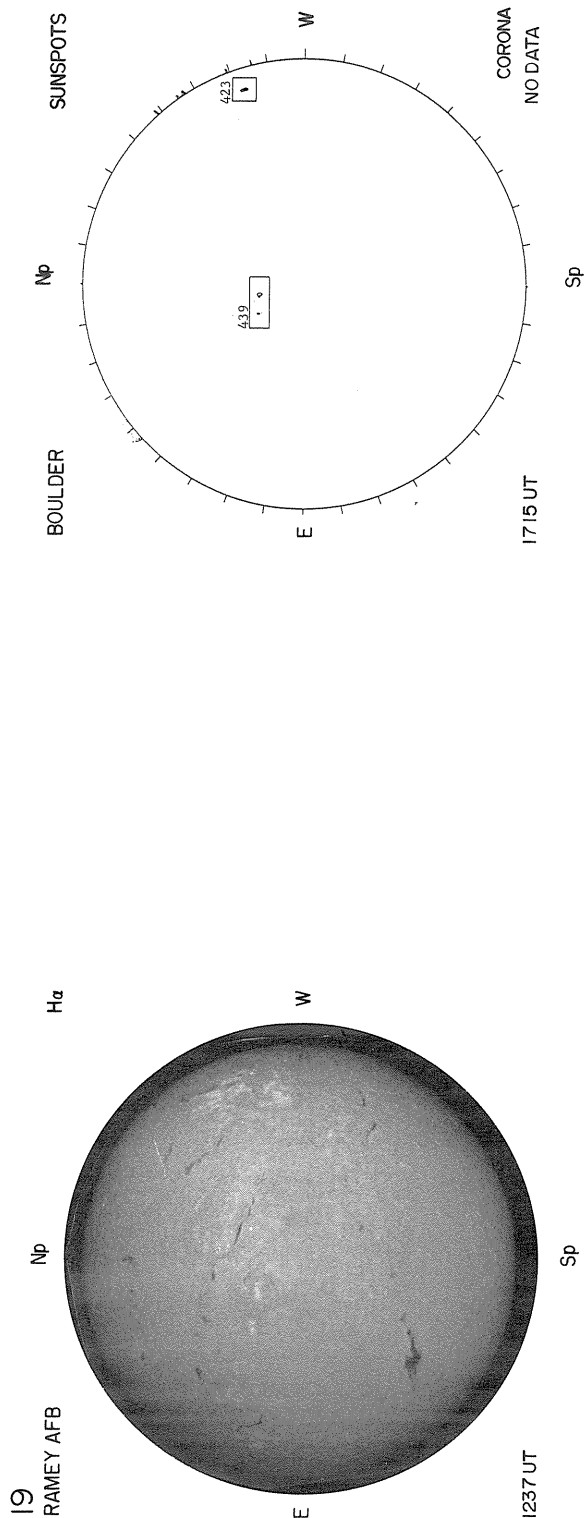
DELTA Y = 14.9
DELTA X = 11.2

MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
+5
+10
+20
+40
+80

Sp



JANUARY 20, 1975 (P=-6.74, B₀=-5.02, L₀=35.98)

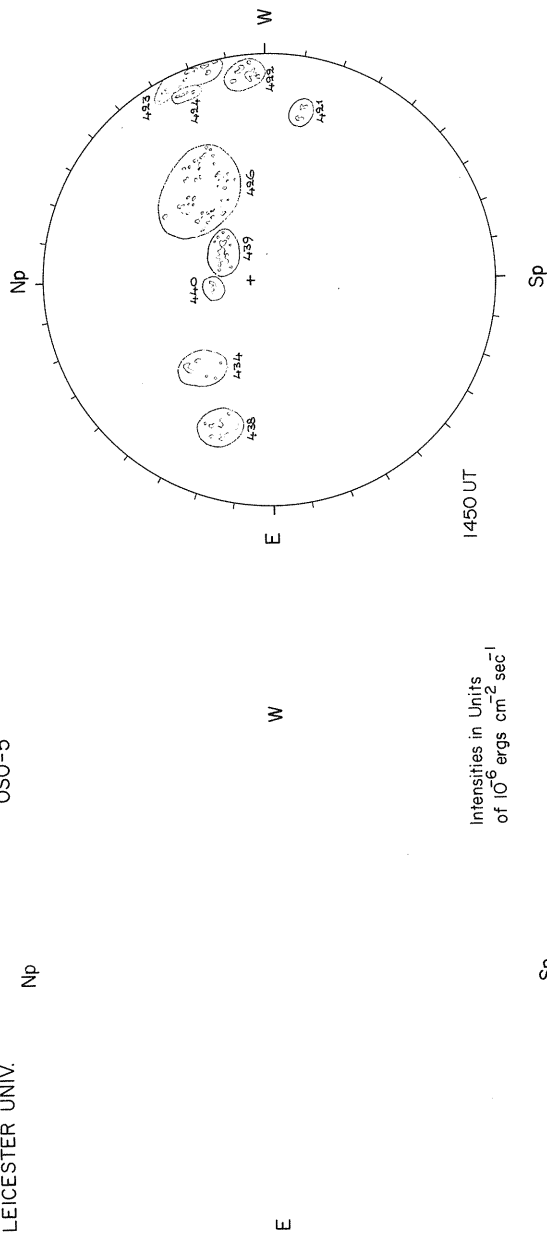
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X-RAY
OSO-5

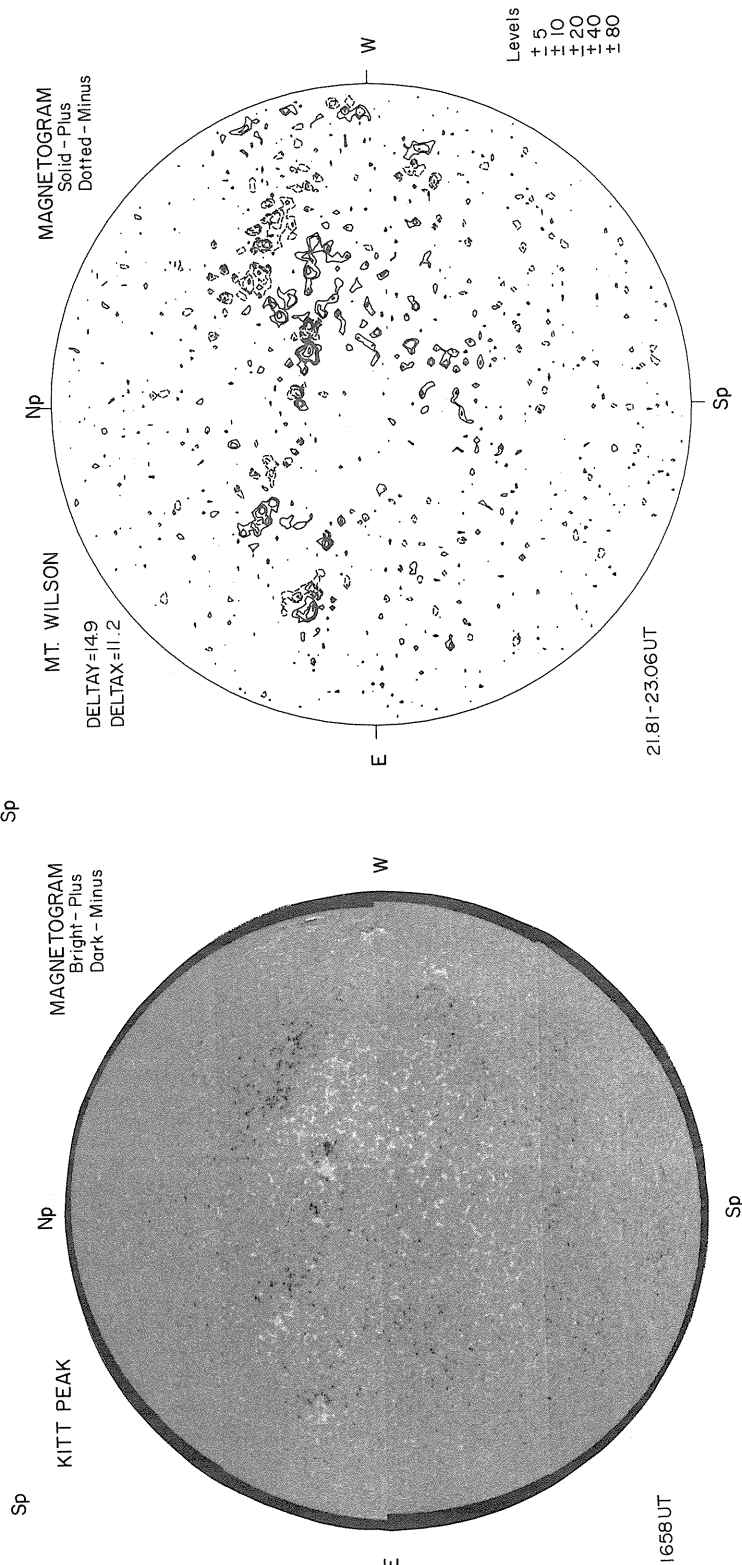
McMATH-HULBERT

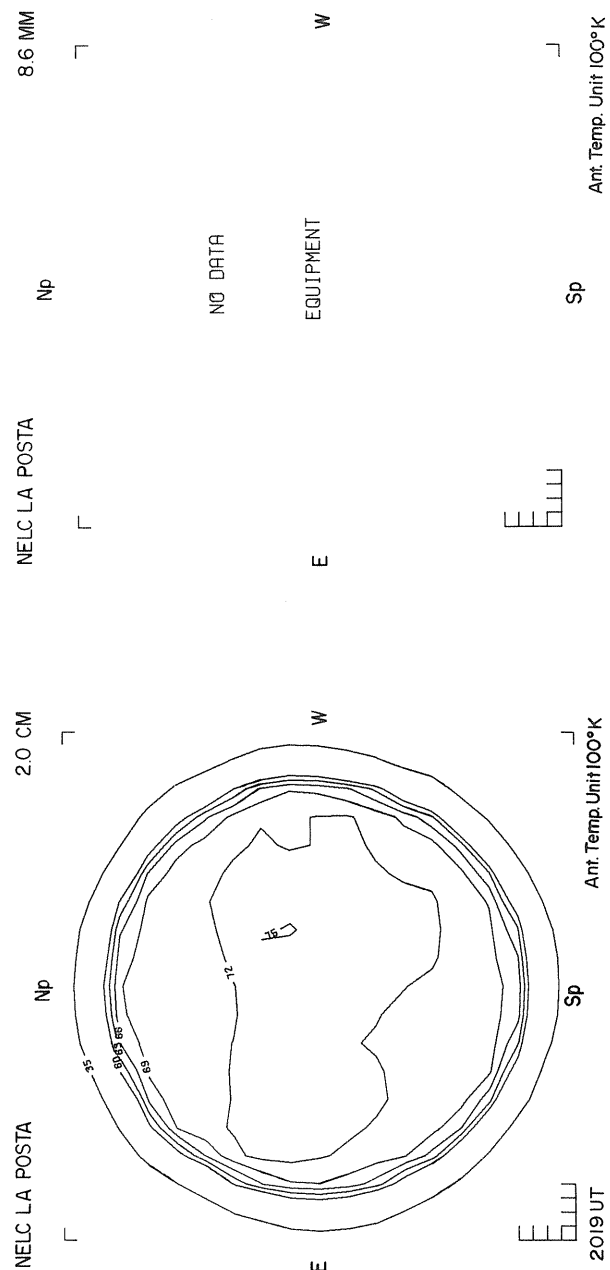
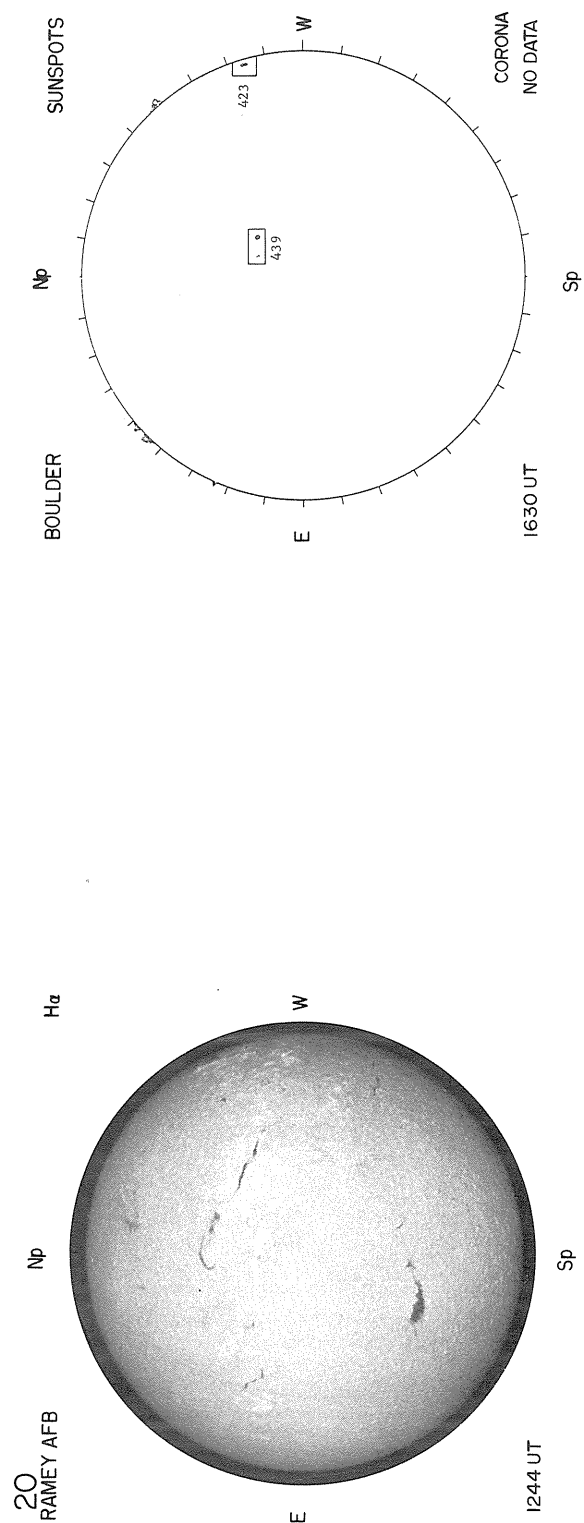
CALCIUM REPORT

Np



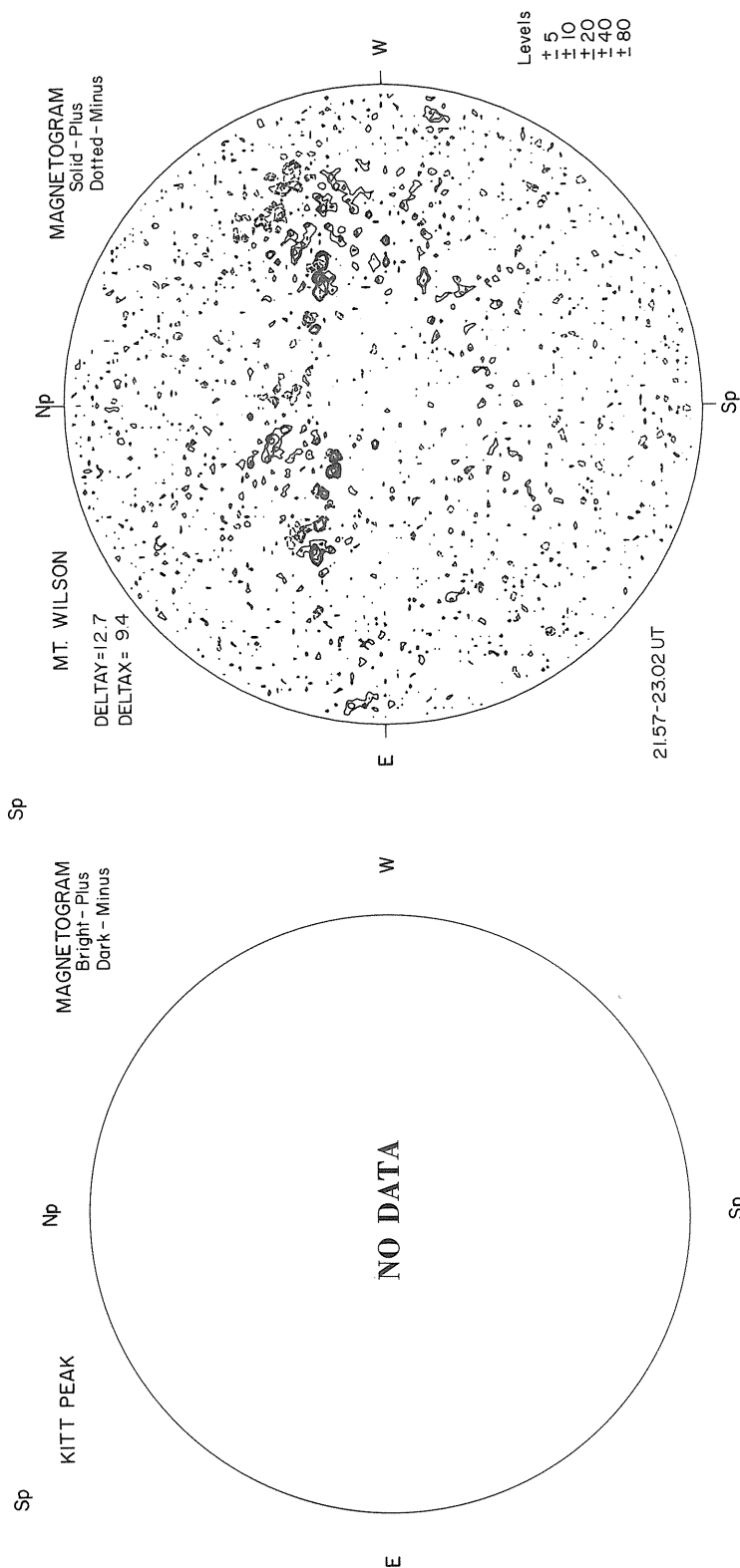
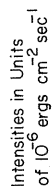
FAIR	M
39 - 0800 - 3.0	
40 - 0200 - 2.5	

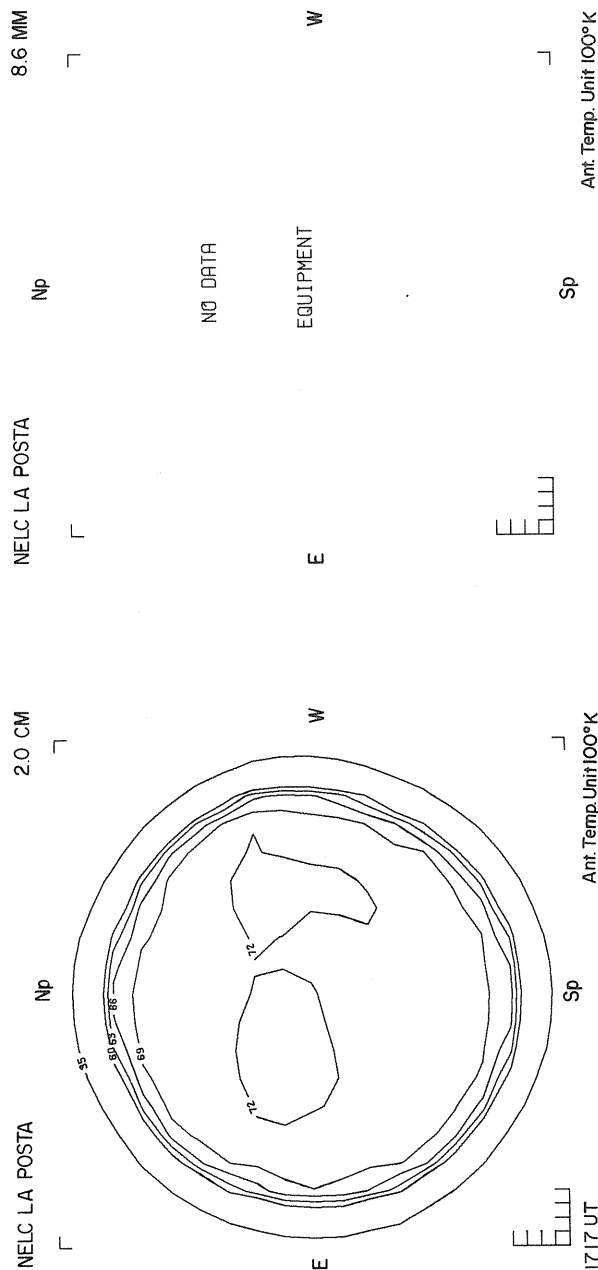
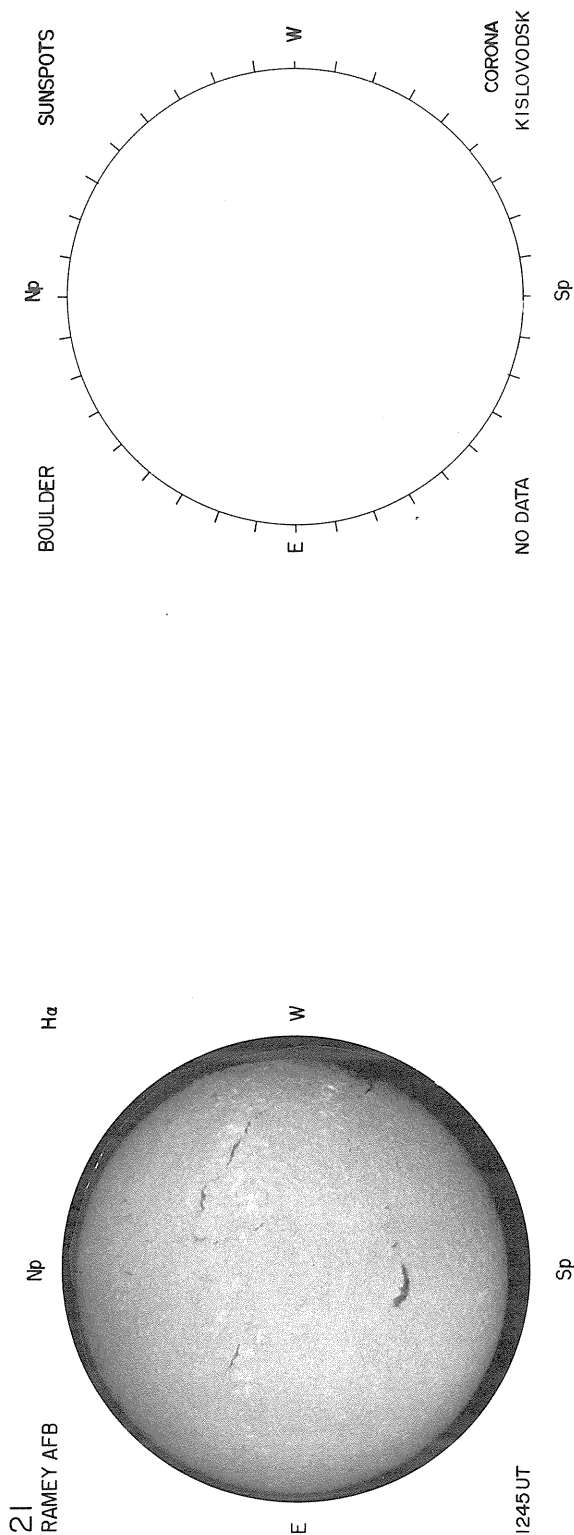




X-RAY
OSO-5

CALCIUM REPORT





JANUARY 22, 1975 (P=-7.65, B₀=-5.20, L₀=9.65)

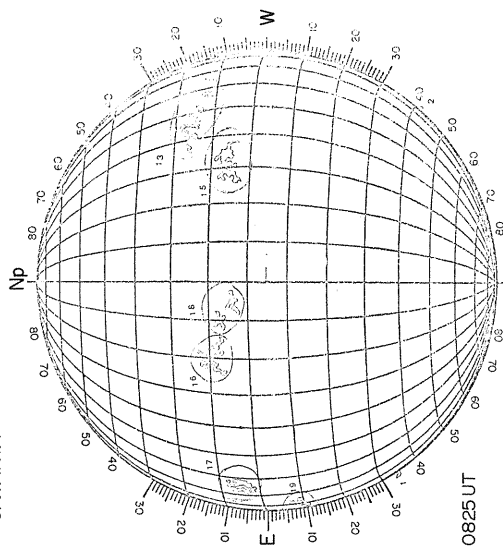
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LEICESTER UNIV.

X-RAY
OSO-5

CATANIA

CALCIUM REPORT

Np



FAIR	EC
13 - 1221	---
15 - 1281	---
18 - 0638	---
19 - 1375	---

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

E

W

Sp

Np

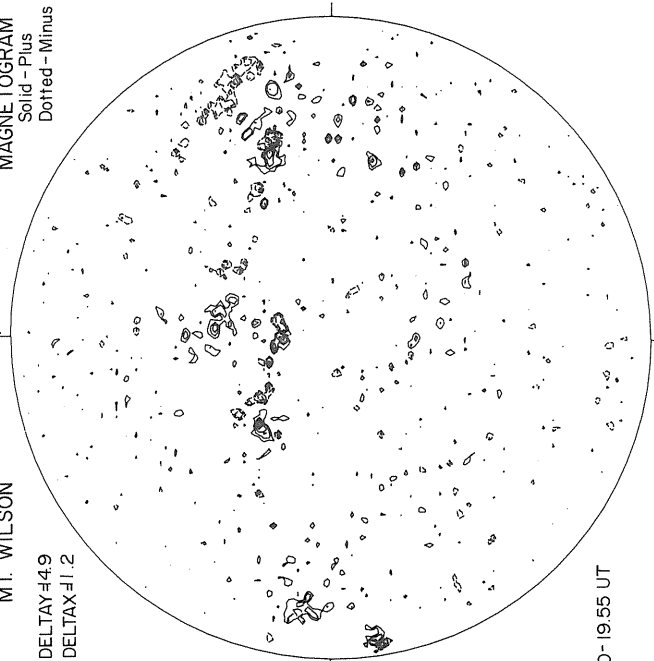
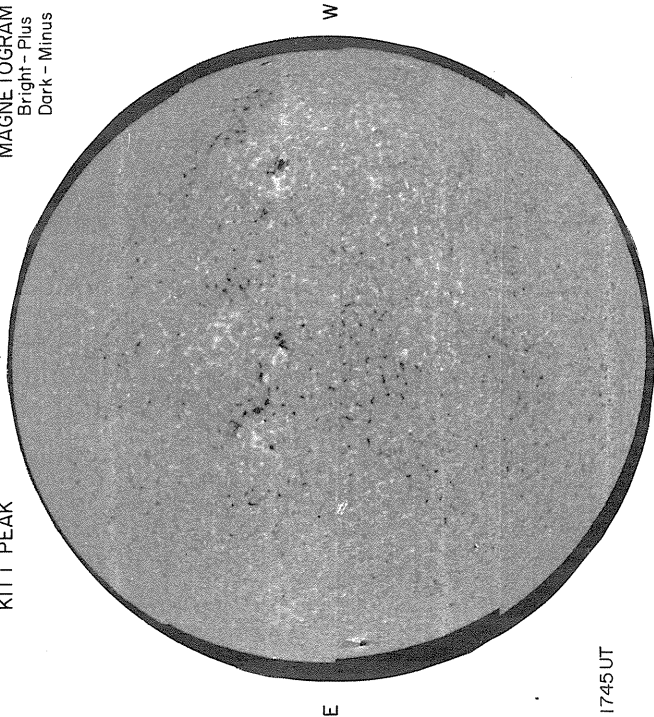
KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

DELTA T = 4.9
DELTA X = 1.2

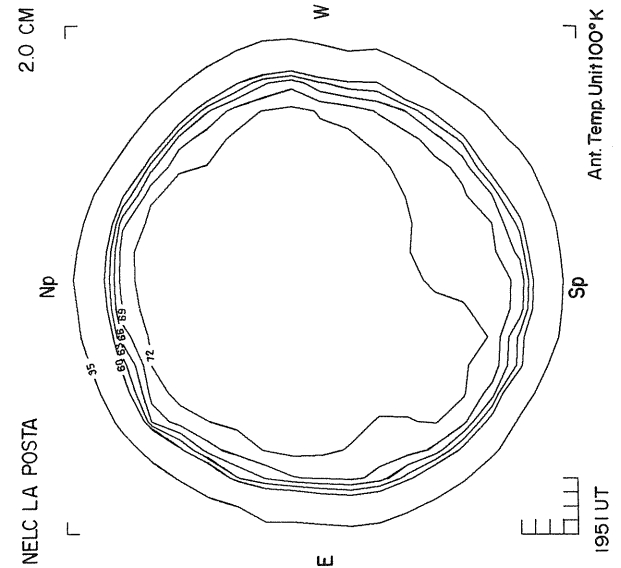
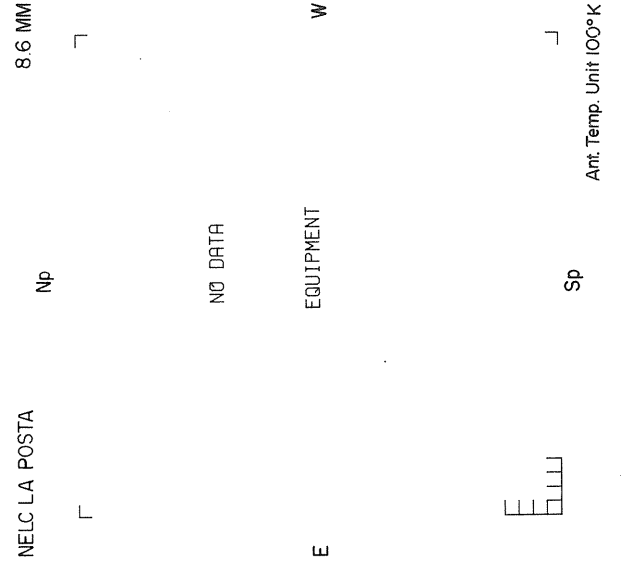
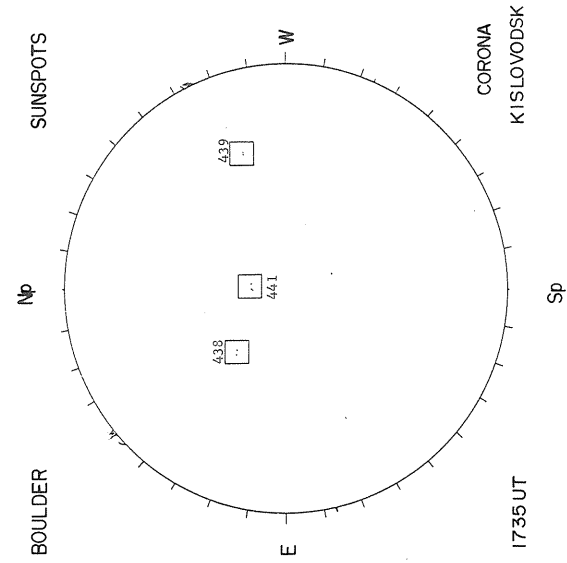
MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
+ 5
+ 10
+ 20
+ 40
+ 80

1745 UT

1830-1955 UT



JANUARY 23, 1975 (P=-8.10, B₀=-5.29, L₀=356.48)

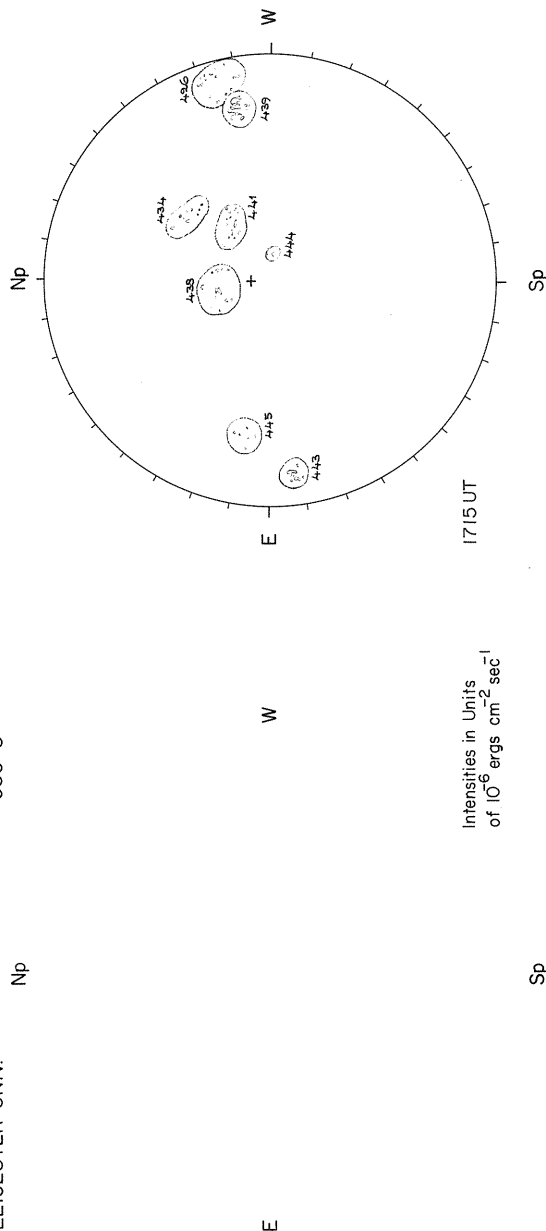
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X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

Np



Intensities in Units
of 10⁶ ergs cm⁻² sec⁻¹

Sp

KITT PEAK

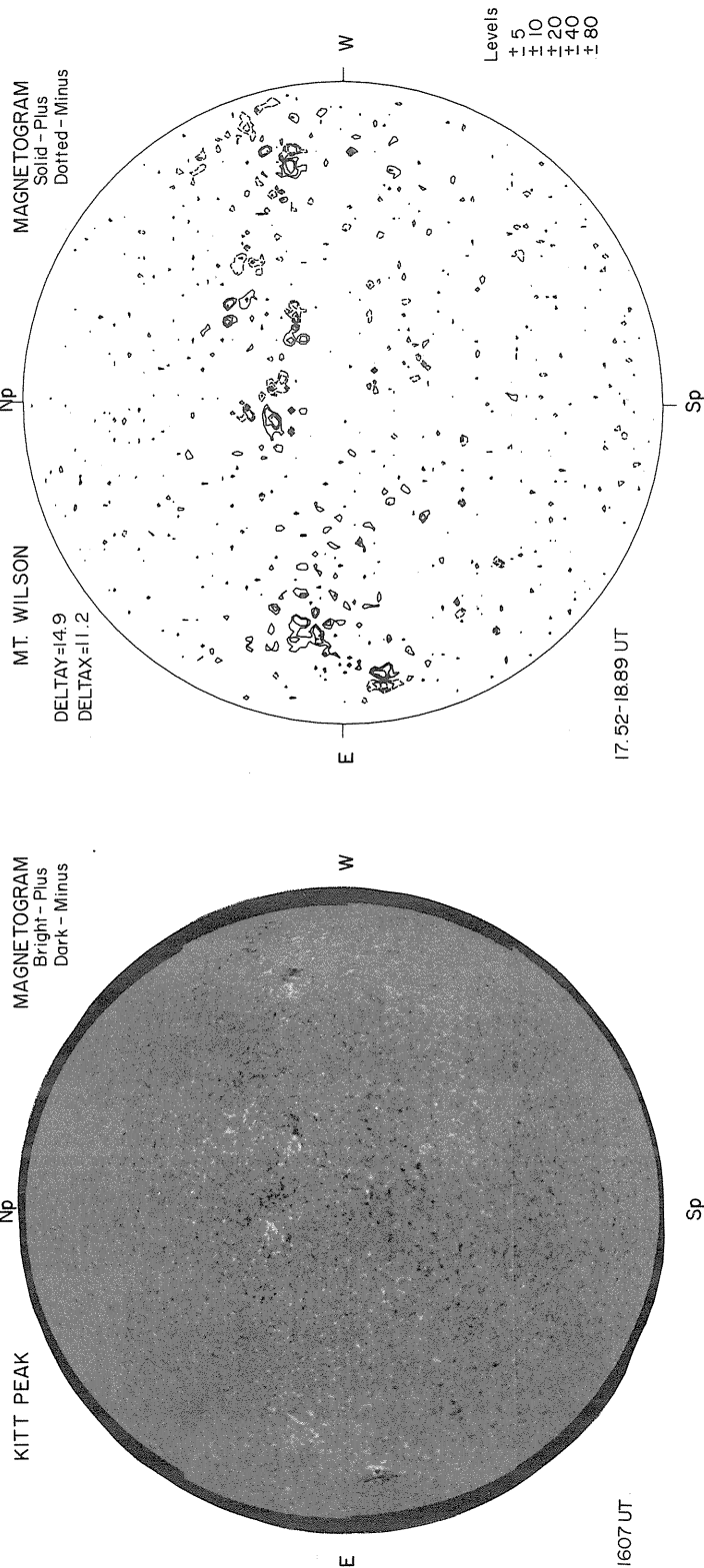
Np

MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

DELTA Y=4.9
DELTA X=11.2

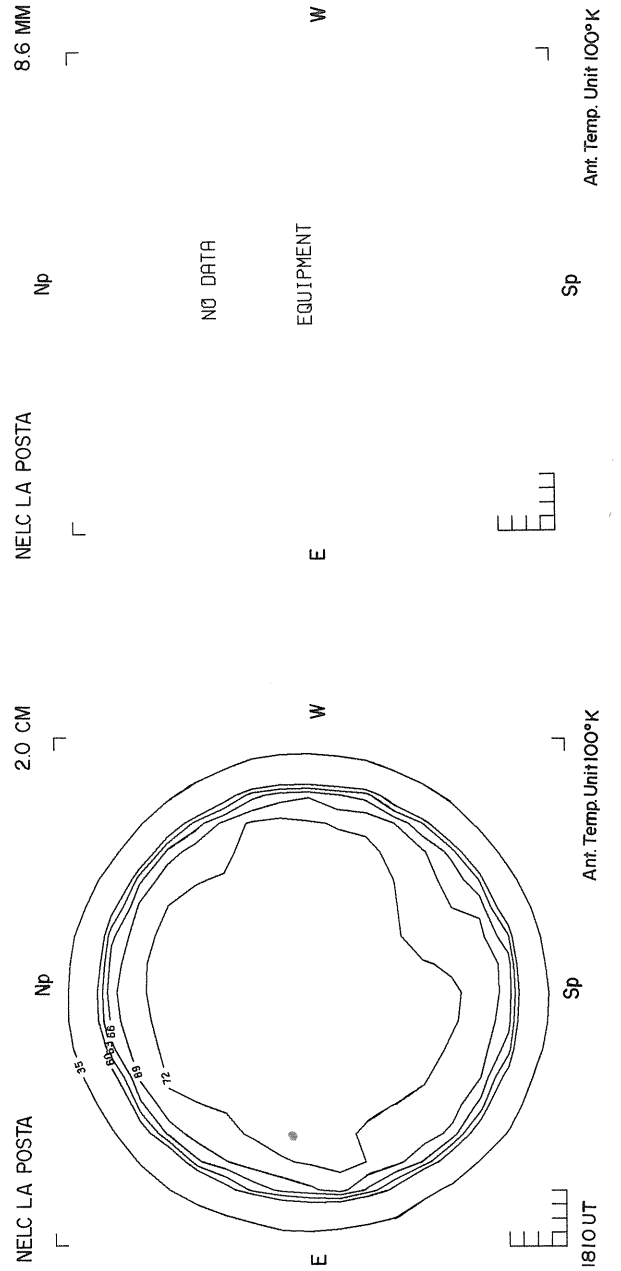
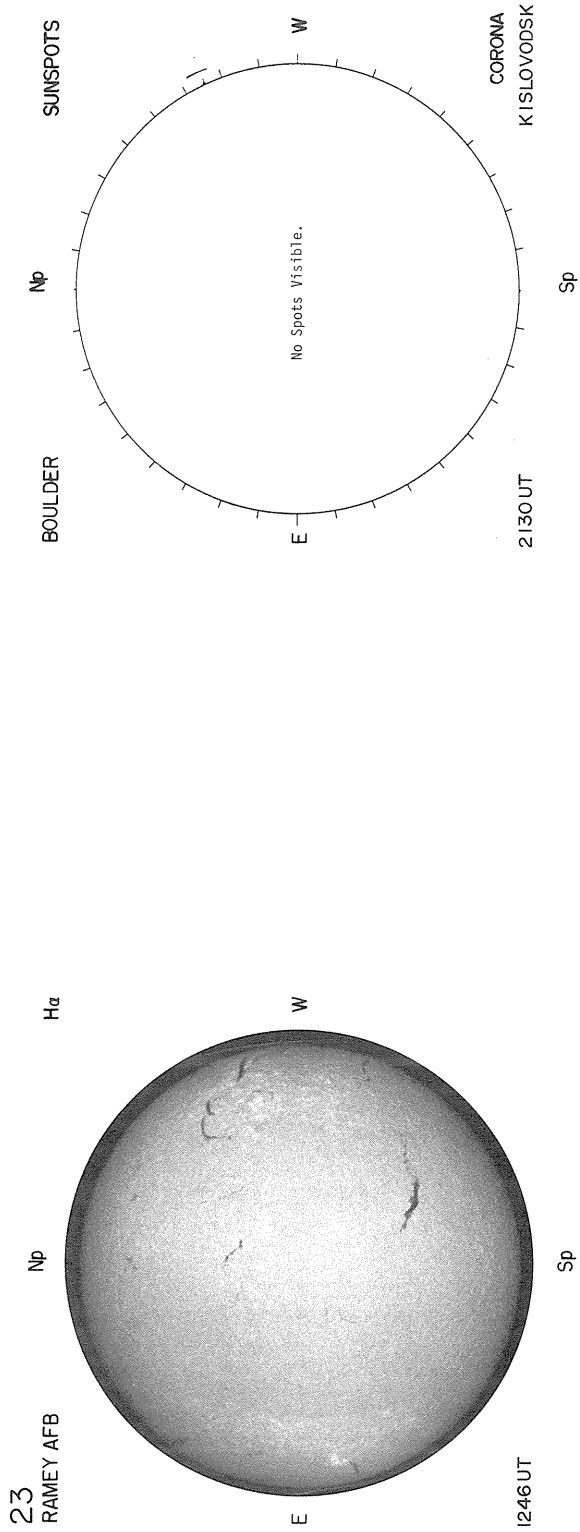
MAGNETOGRAM
Solid - Plus
Dotted - Minus



1607 UT

17.52-18.89 UT

Levels
5
+10
+20
+40
+80



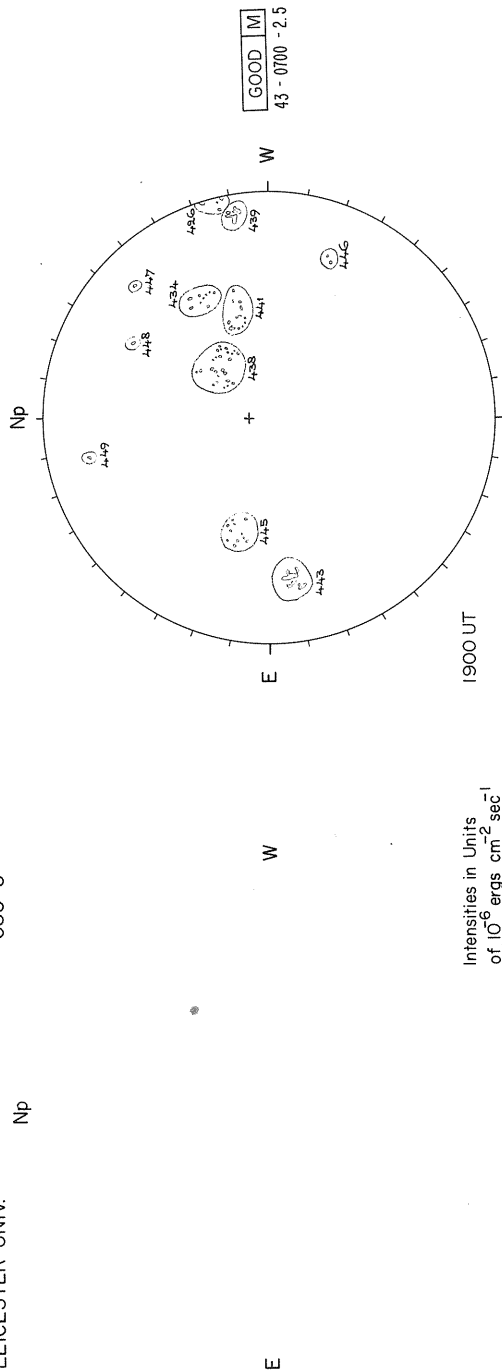
JANUARY 24, 1975 (P=-8.54, B_o=-5.38, L_o=343.31)

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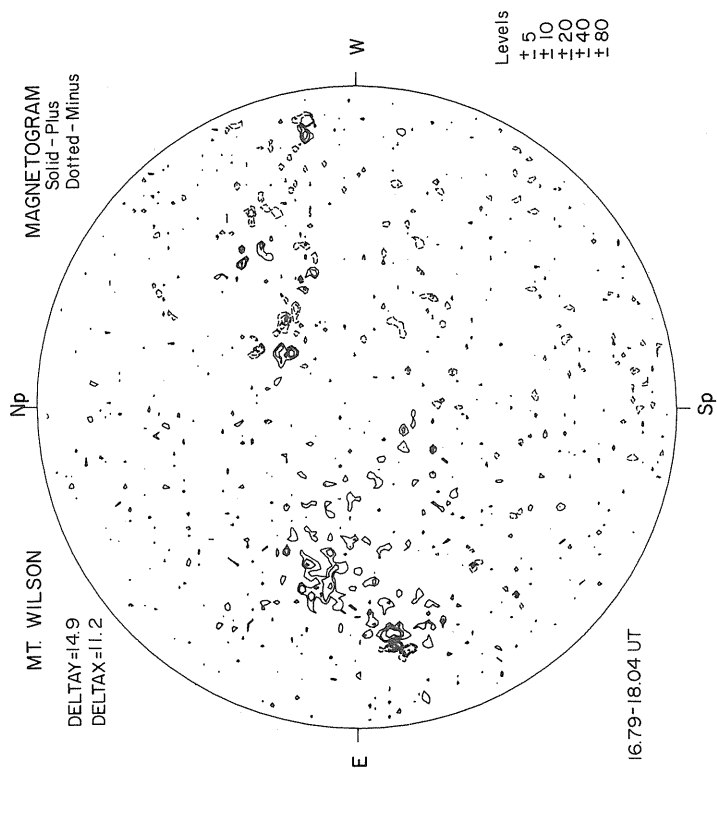
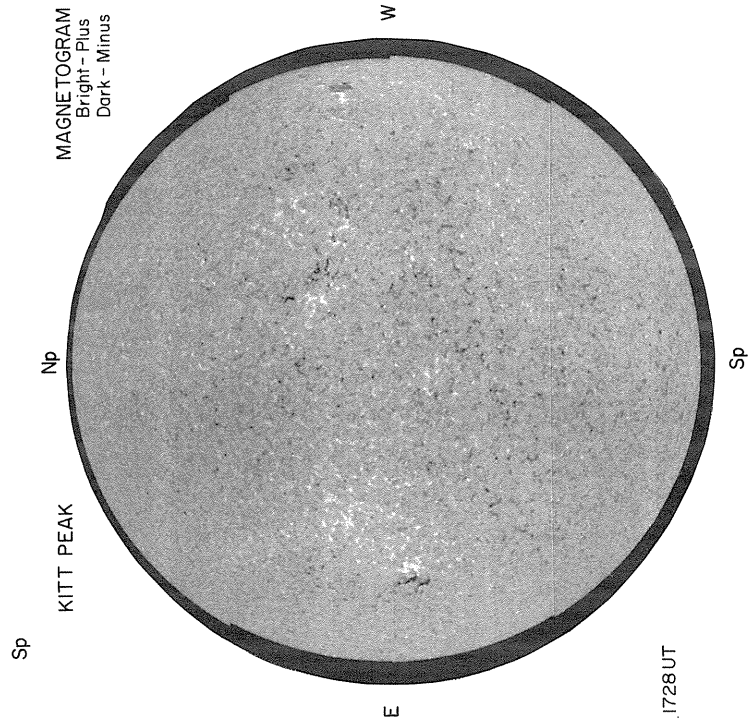
X-RAY
OSO-5

McMATH-HULBERT

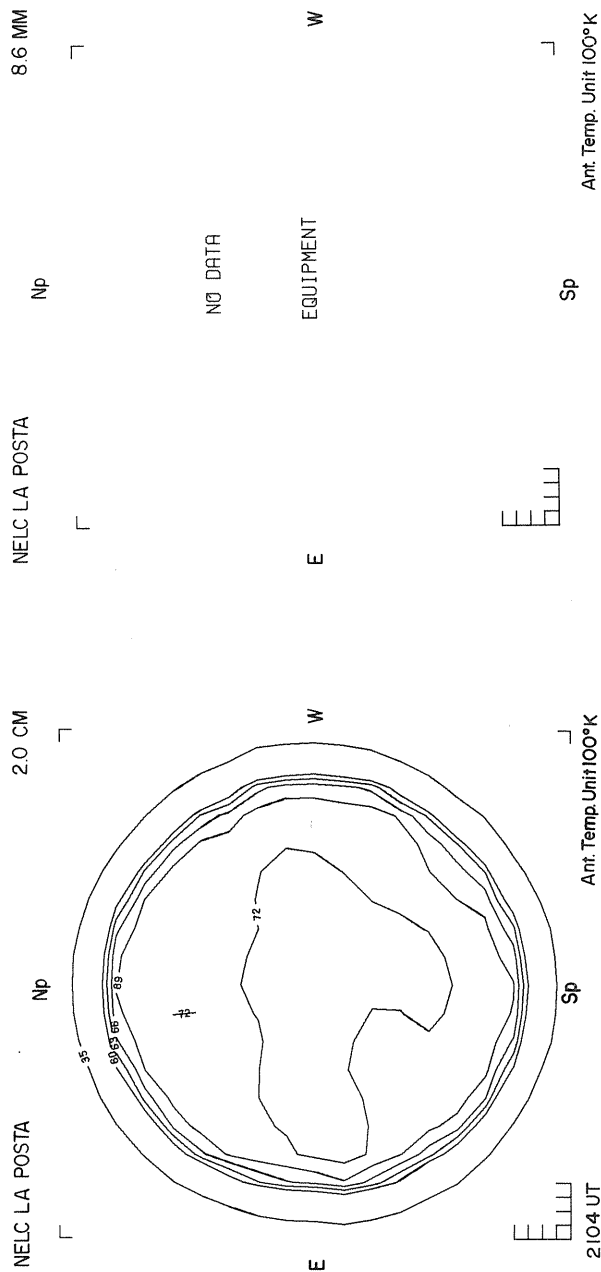
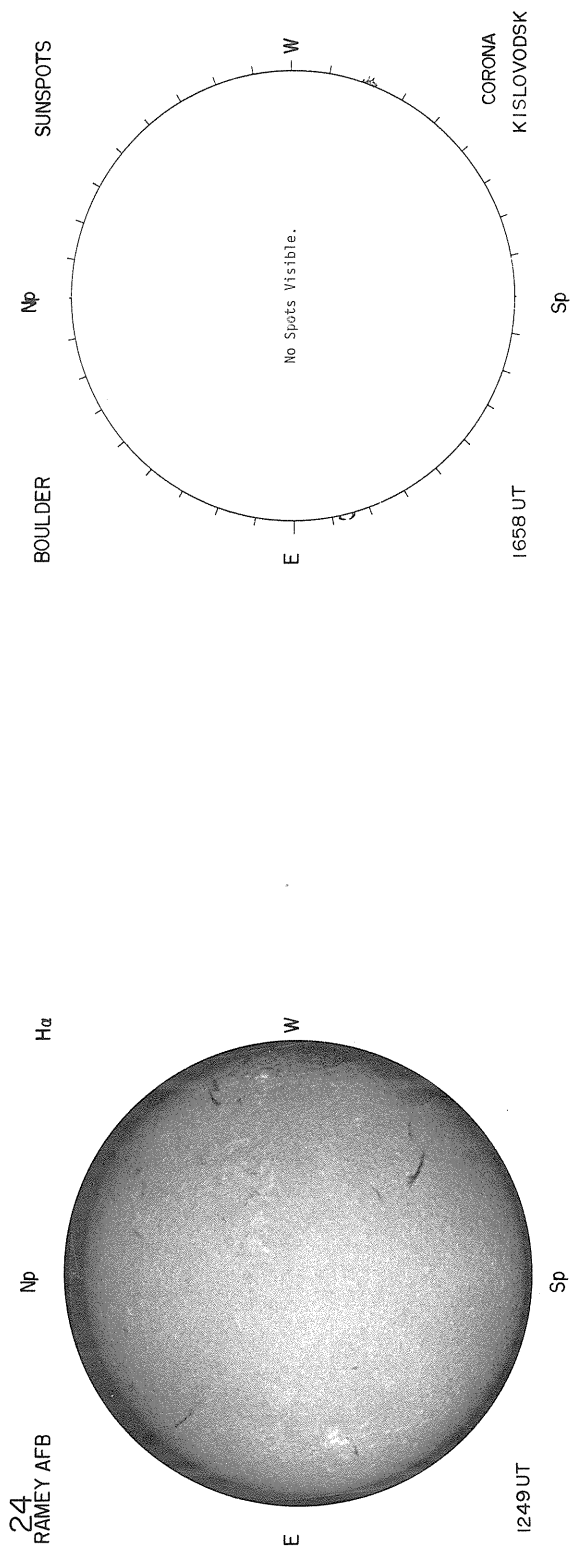
CALCIUM REPORT

$$\frac{dN}{dt}$$


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



Levels	5	10	20	40	80
	+1	+1	+1	+1	+1



JANUARY 25, 1975 (P=-898, B₀=-5.46, L₀=330.15)

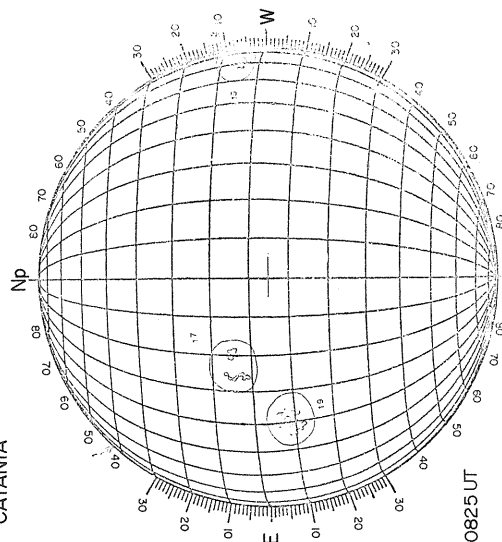
X-RAY
OSO-5

UNIV. COLLEGE LONDON
LEICESTER UNIV.

CALCIUM REPORT

CATANIA

Np



FAIR EC
19-1105 ---

W

E

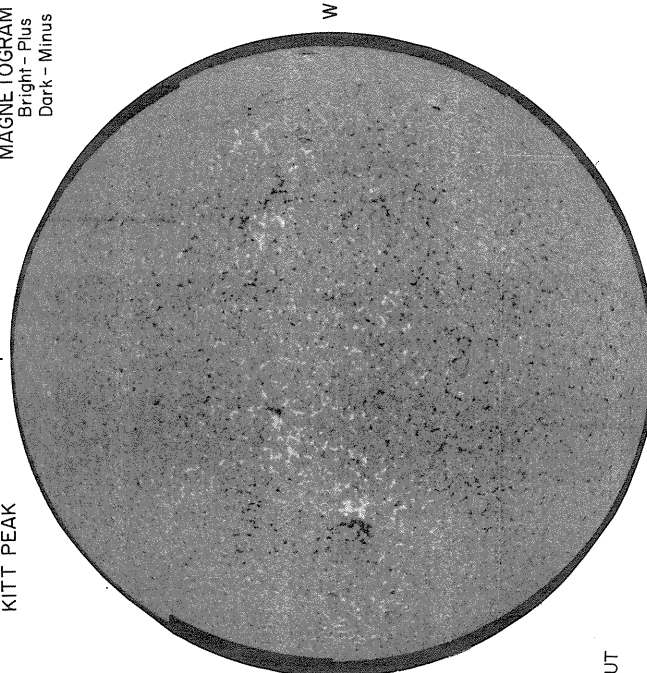
Intensities in Units
of 10^{-6} ergs $\text{cm}^{-2} \text{sec}^{-1}$

Sp

KITT PEAK

Np

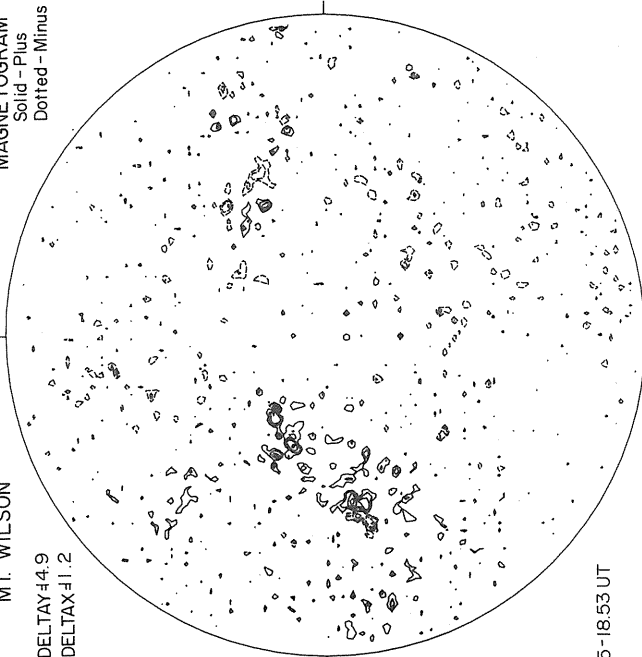
MAGNETOGRAM
Bright-Plus
Dark-Minus



MT. WILSON

DELTA Y ± 4.9
DELTA X ± 1.2

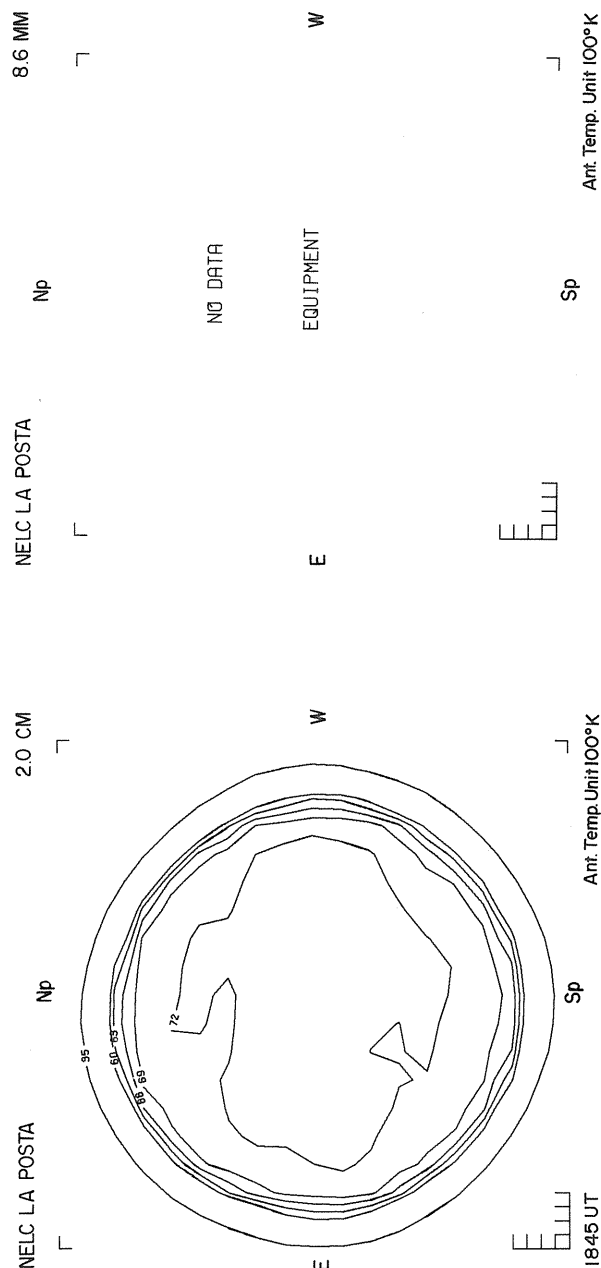
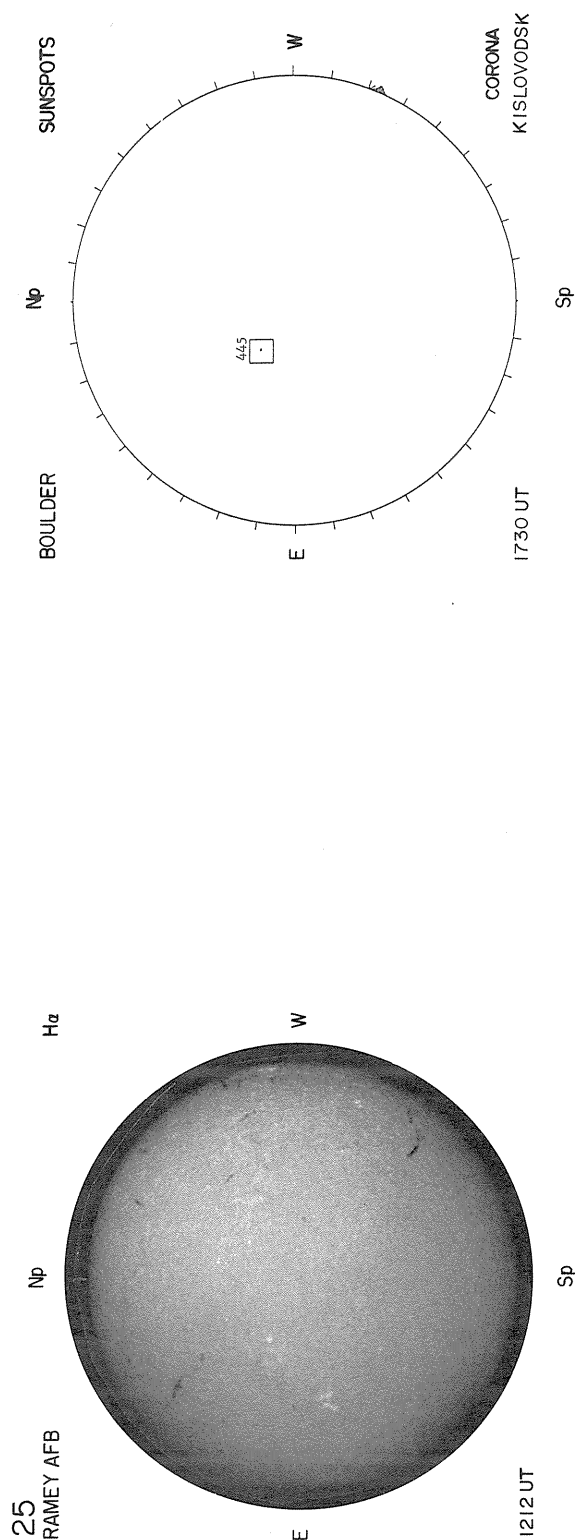
MAGNETOGRAM
Solid-Plus
Dotted-Minus



Levels
+5
+10
+20
+40
+80

1731 UT

16.95-18.53 UT



JANUARY 26, 1975 (P = -9.42, B₀ = -5.55, L₀ = 316.98)

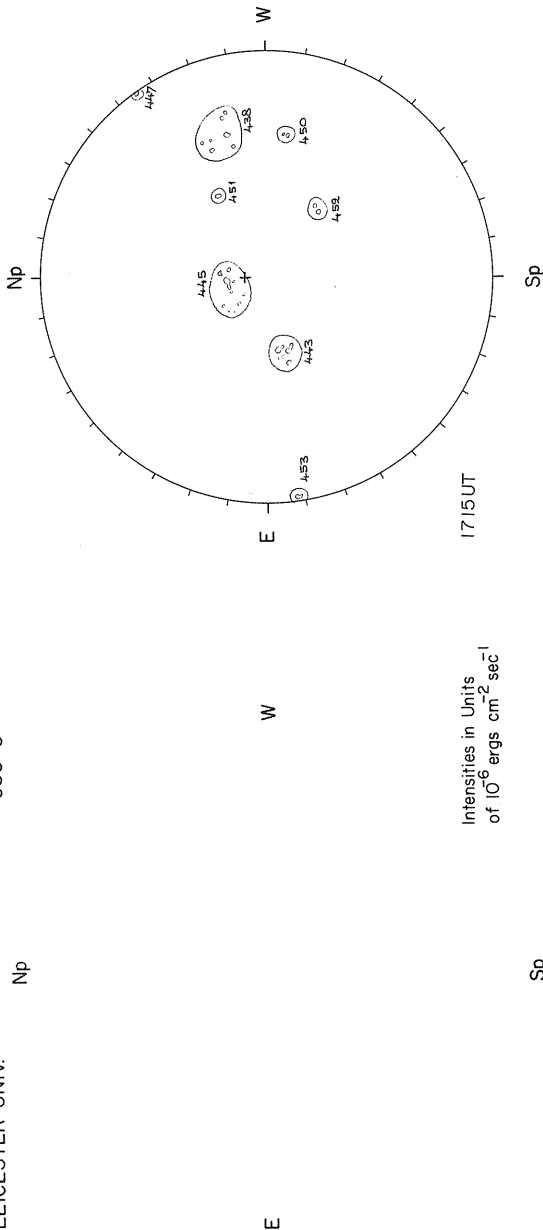
UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

Np

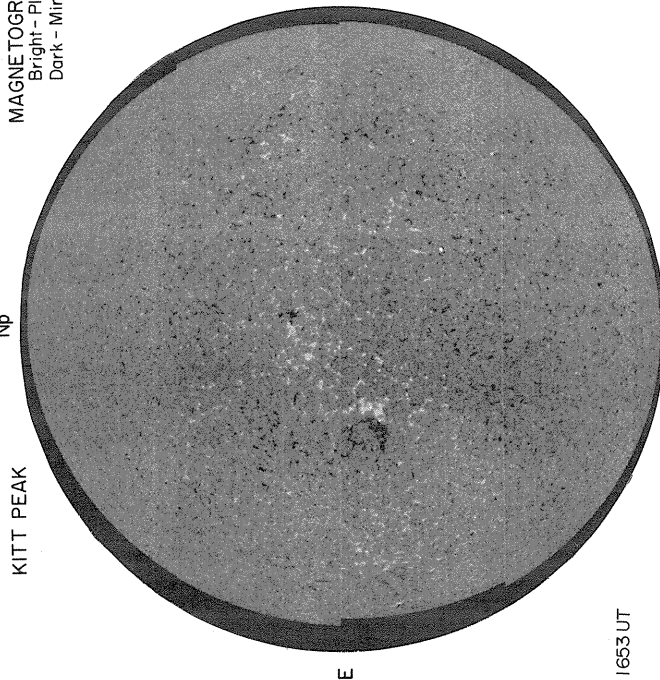


Sp

KITT PEAK

Np

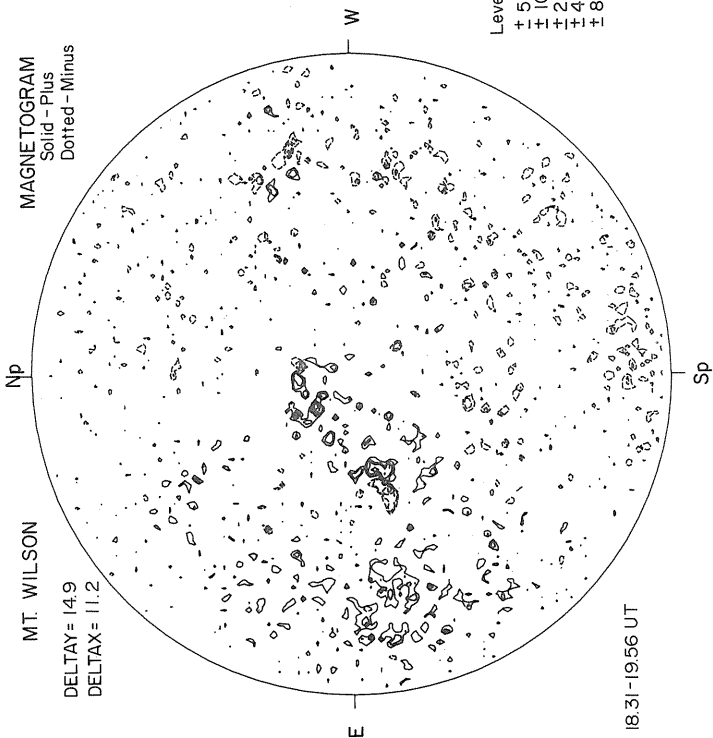
MAGNETOGRAM
Bright - Plus
Dark - Minus

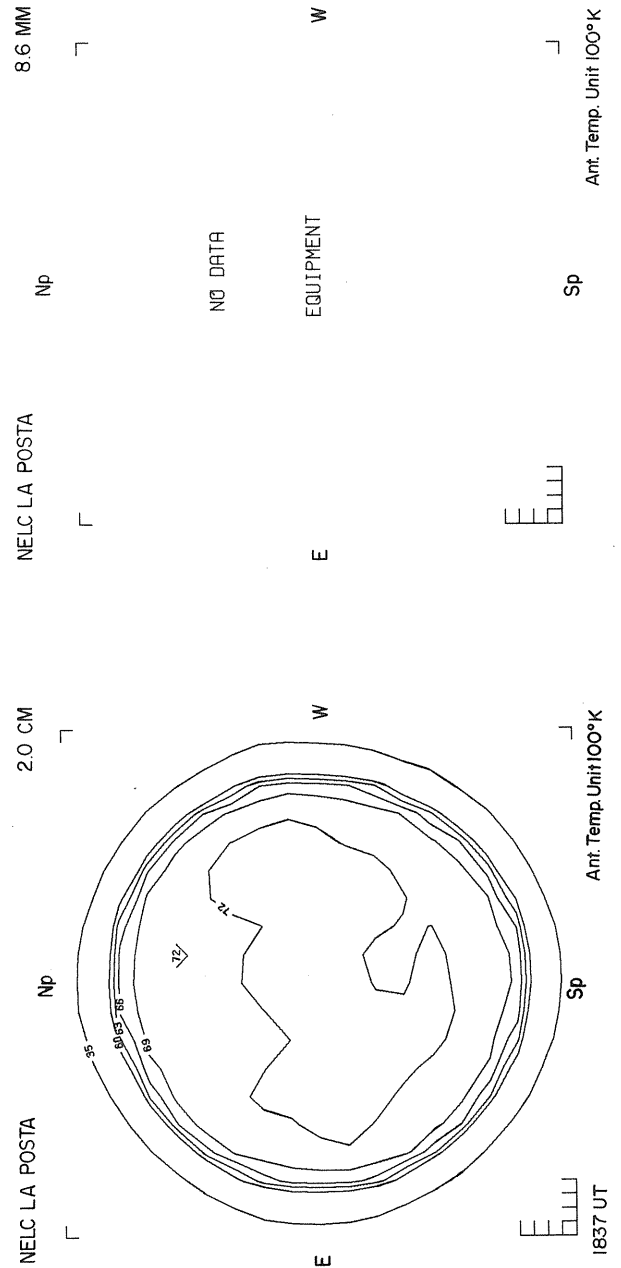
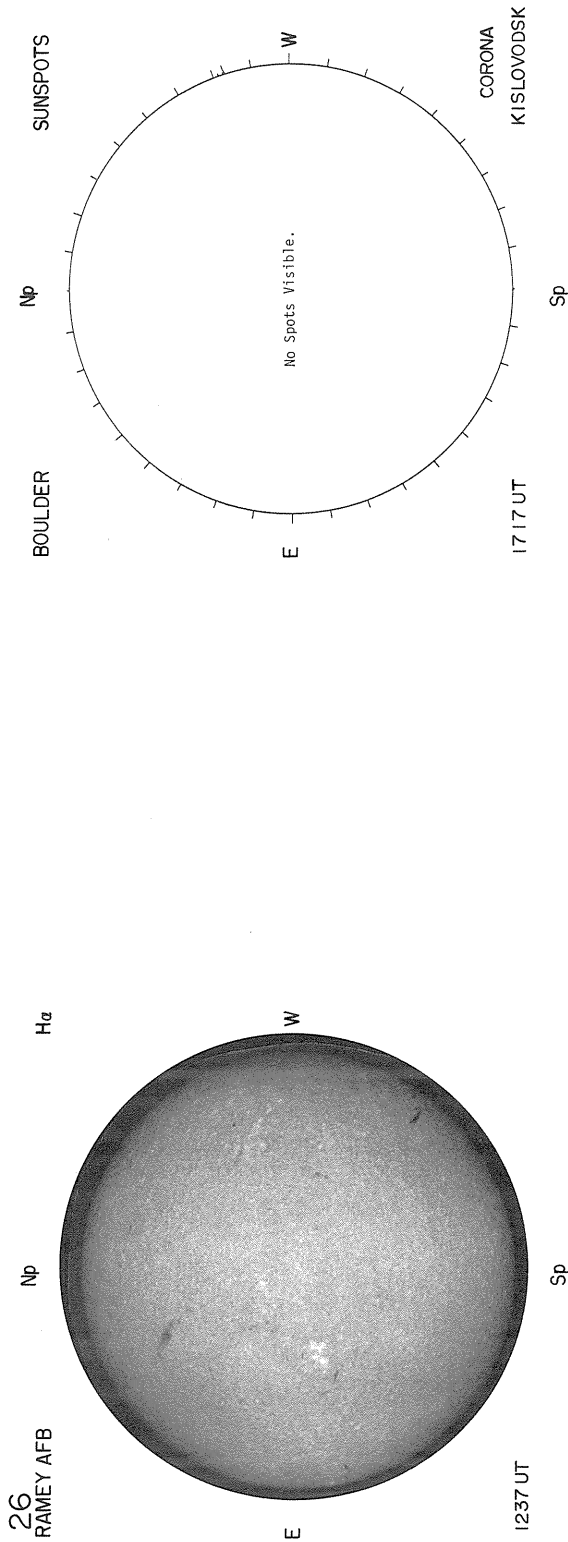


MT. WILSON

DELTA Y = 14.9
DELTA X = 11.2

MAGNETOGRAM
Solid - Plus
Dotted - Minus





JANUARY 27, 1975 (P = -9.86, B₀ = -5.63 L₀ = 303.81)

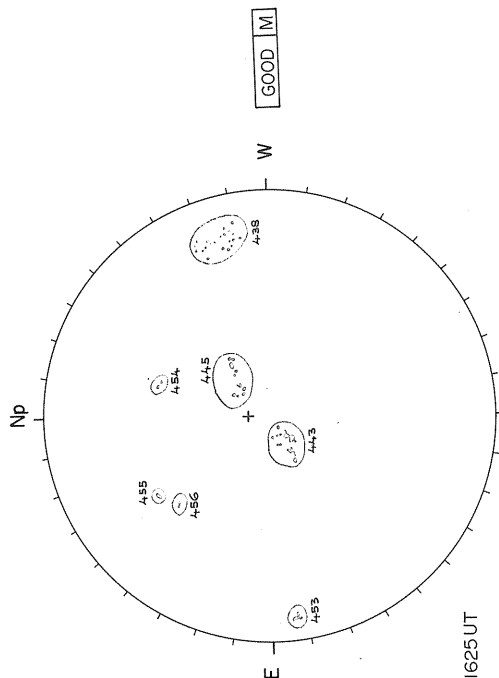
X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

UNIV. COLLEGE LONDON
LEICESTER UNIV.

Np



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

1625 UT

Sp

KITT PEAK

Np

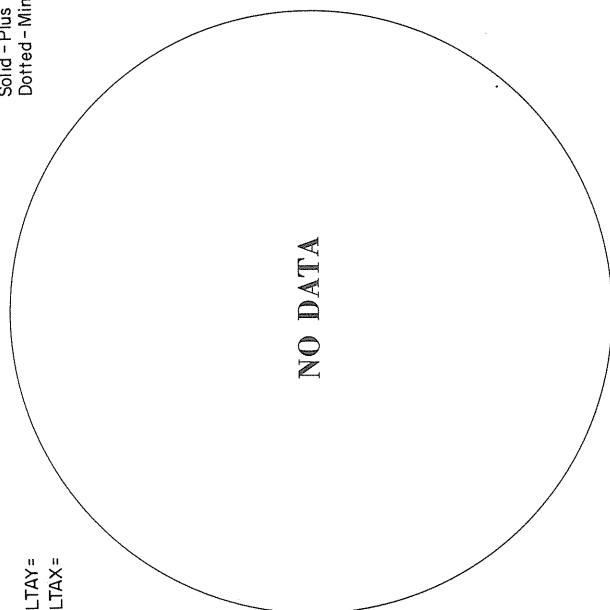
MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

DELTA Y =
DELTA X =

Np

MAGNETOGRAM
Solid - Plus
Dotted - Minus



1751 UT

Sp

E

W

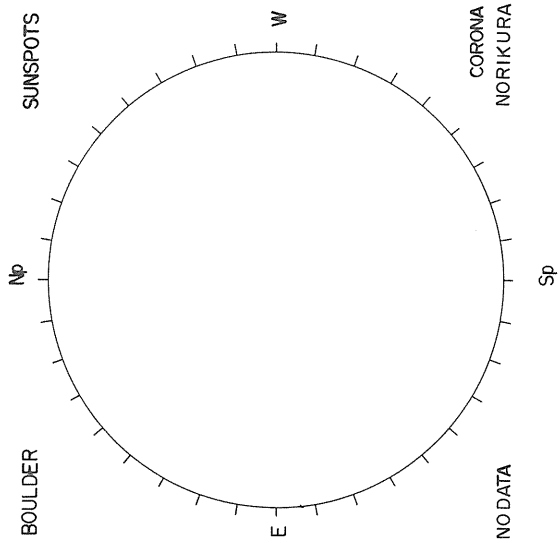
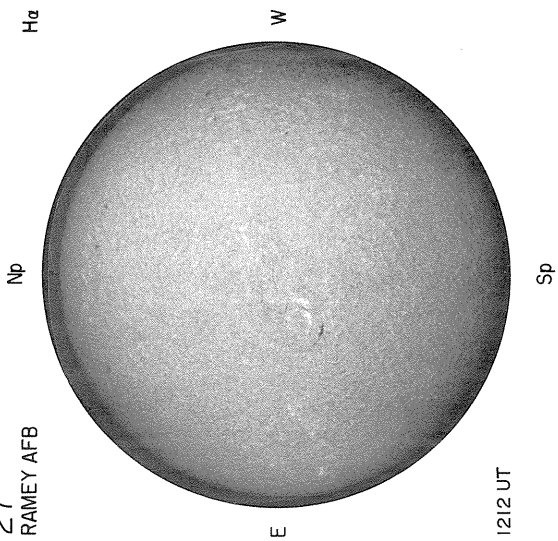
E

W

NO DATA

Levels
+5
+10
+20
+40
+80

27
RAMEY AFB



NELC LA POSTA

2.0 CM

NELC LA POSTA

8.6 MM

NO DATA

NO DATA

E

WEATHER

W

E

EQUIPMENT

W



Sp

Ant. Temp. Unit 100°K



Sp

Ant. Temp. Unit 100°K

JANUARY 28, 1975 (P=-10.29, B₀=-5.71, L₀=290.65)

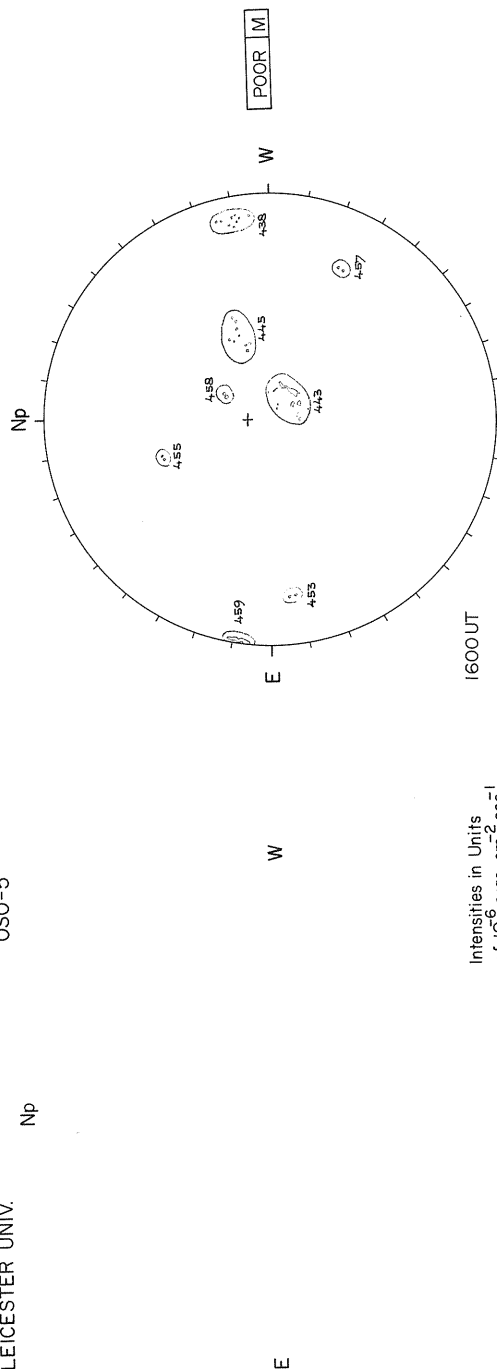
UNIV. COLLEGE LONDON
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X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

Np

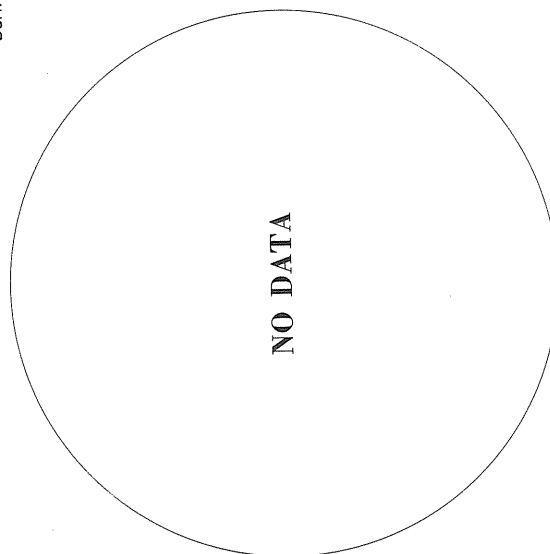


Sp

KITT PEAK

Np

MAGNETOGRAM
Bright - Plus
Dark - Minus



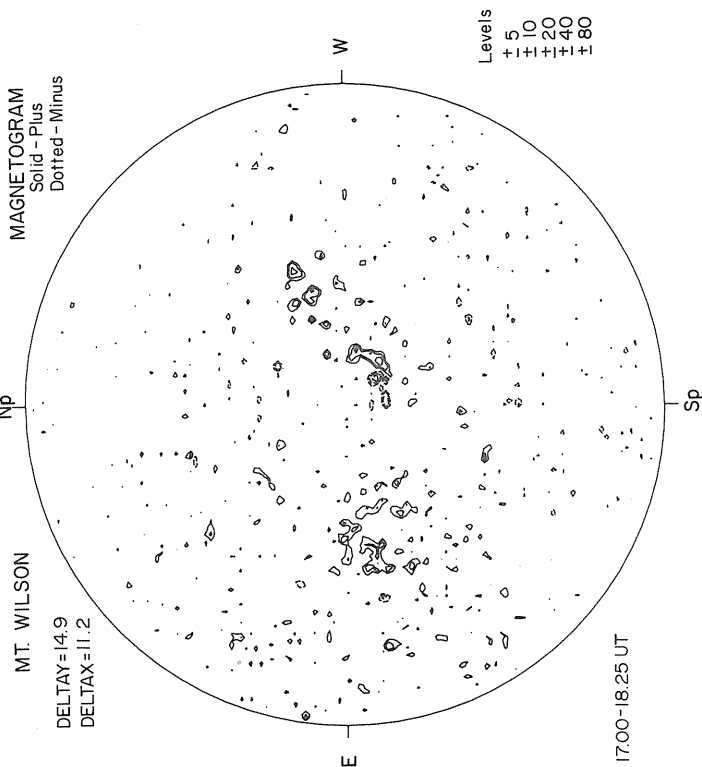
Sp

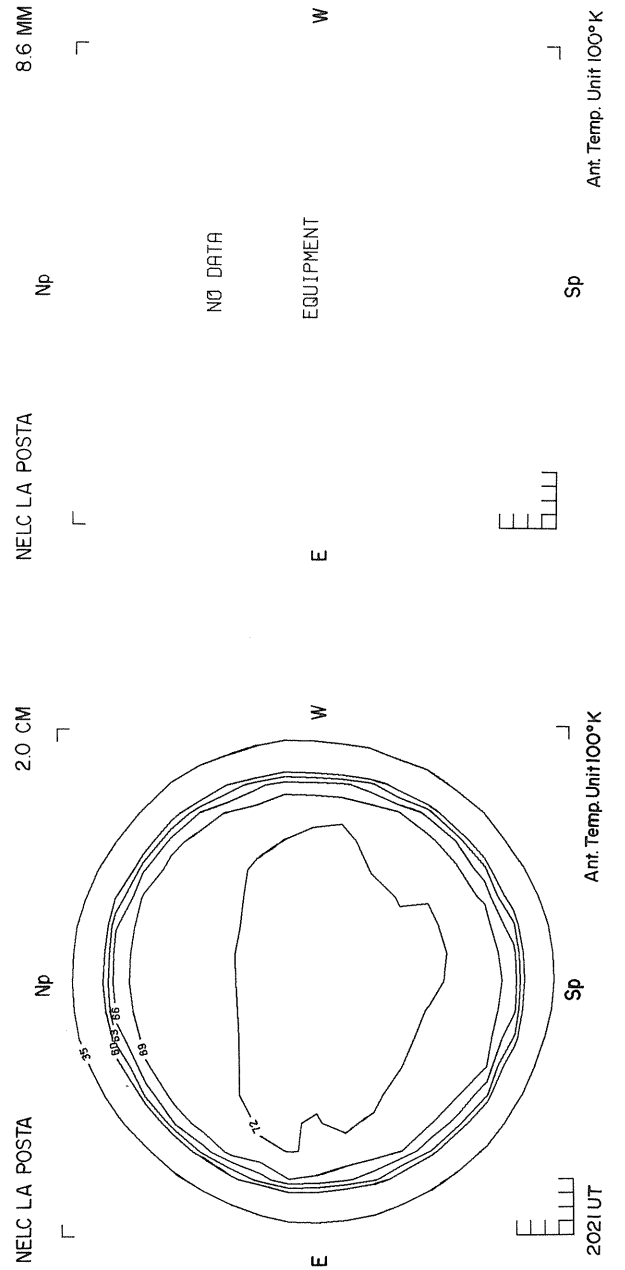
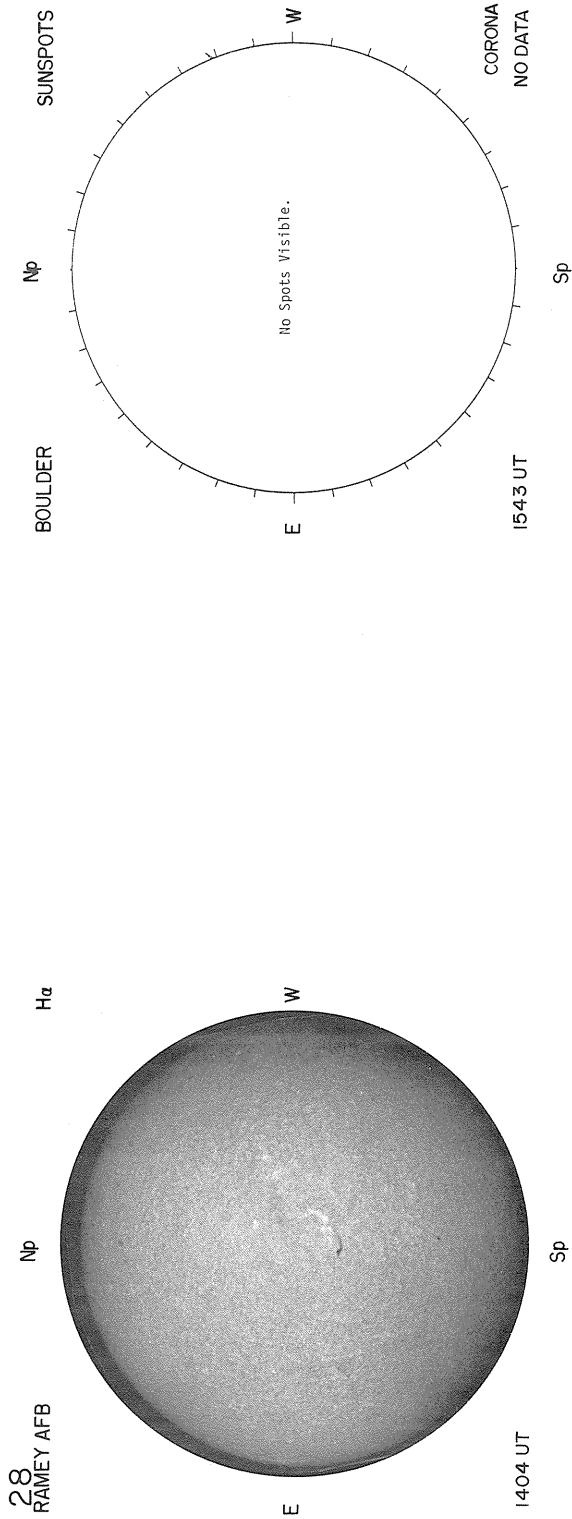
MT. WILSON

DELTA T = 14.9
DELTA X = 11.2

Np

MAGNETOGRAM
Solid - Plus
Dotted - Minus





JANUARY 29, 1975 (P=-10.71, B₀=-5.79, L₀=277.48)

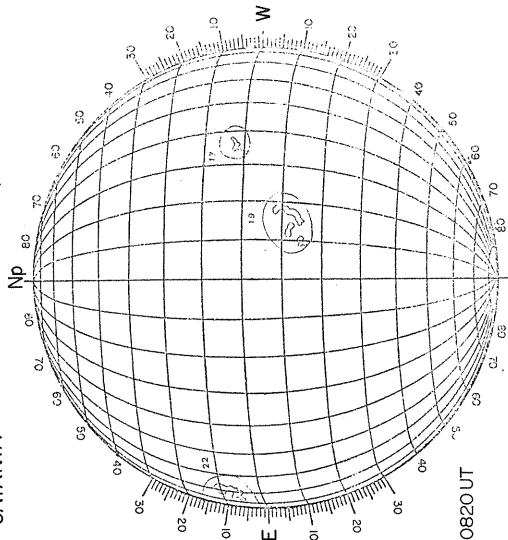
UNIV COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

Np

CATANIA

CALCIUM REPORT



GOOD EC
19 - 0829 - - -

Intensities in Units
of 10^{-2} ergs $\text{cm}^{-2} \text{sec}^{-1}$

Sp

KITT PEAK

Np

MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

DELTA Y =
DELTA X =

Np

MAGNETOGRAM
Solid - Plus
Dotted - Minus

E

NO DATA

W

E

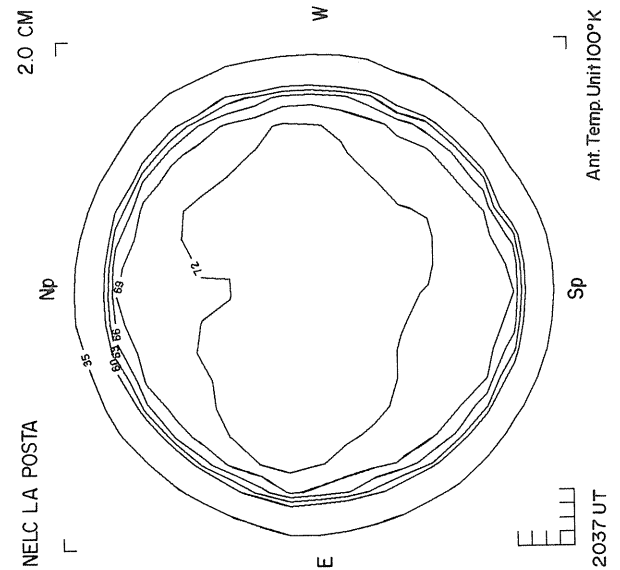
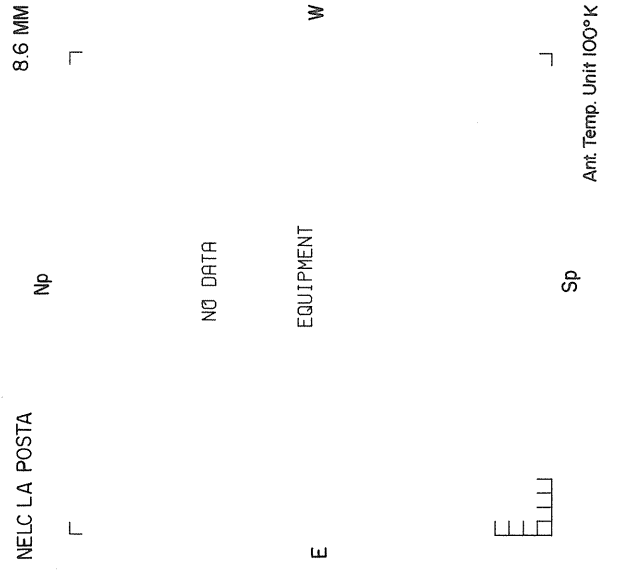
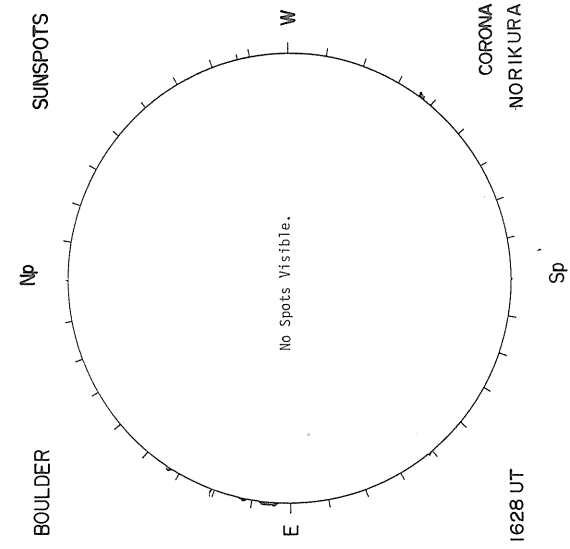
NO DATA

W

Levels
+ 5
+ 10
+ 20
+ 40
+ 80

Sp

Sp



JANUARY 30, 1975 (P=-11.14, B₀=-586, L₀=264.31)

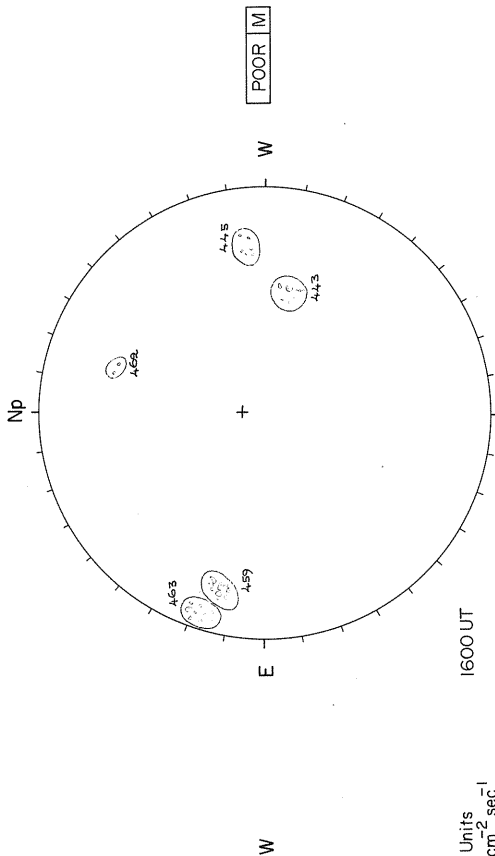
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LEICESTER UNIV.

X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

Np



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

1600 UT

Sp

KITT PEAK

Np

MAGNETOGRAM

Bright - Plus
Dark - Minus

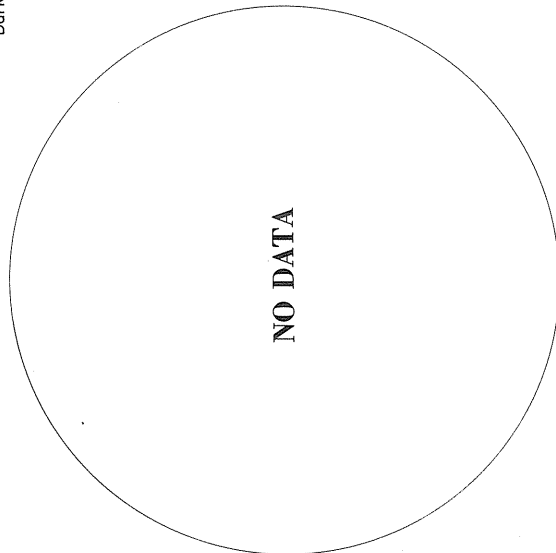
MT. WILSON

DELTA Y =
DELTA X =

Np

MAGNETOGRAM

Solid - Plus
Dotted - Minus



E

W

E

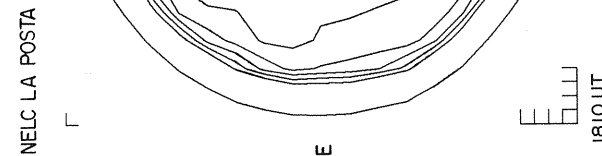
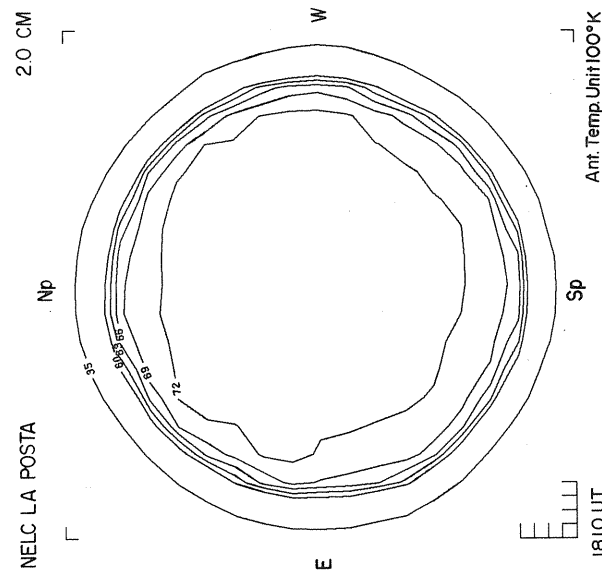
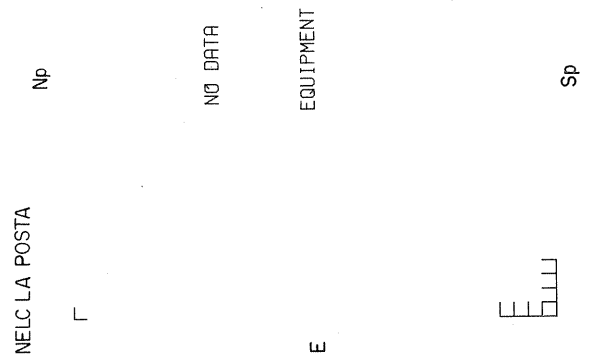
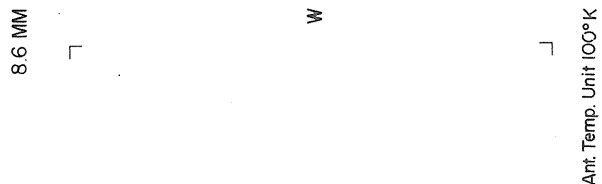
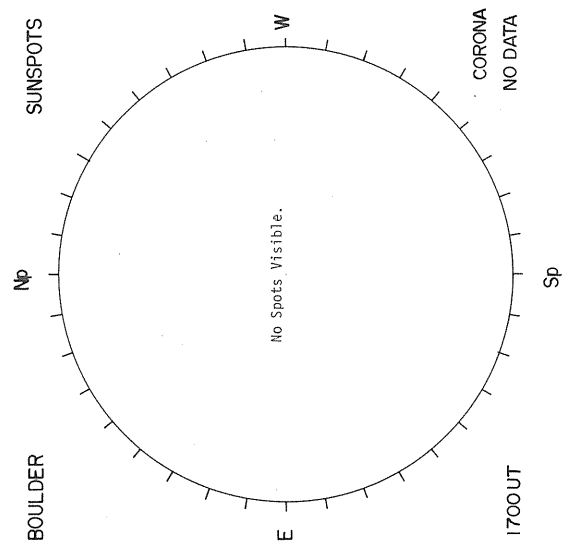
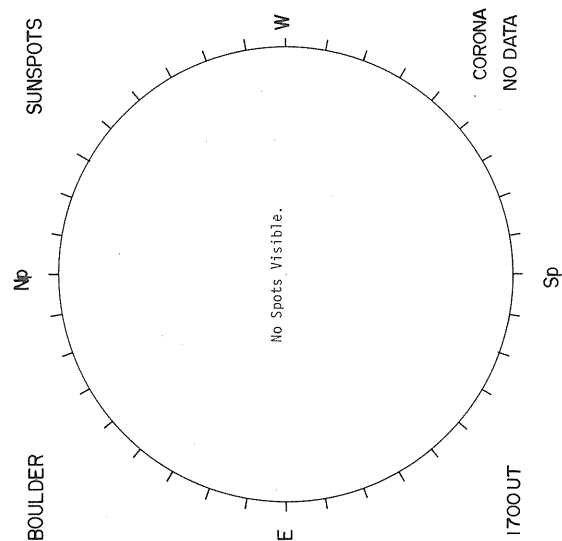
NO DATA

W

Levels
+ 5
+ 10
+ 20
+ 40
+ 80

Sp

Sp



JANUARY 31, 1975 (P=-11.55, B₀=-5.94, L₀=251.15)

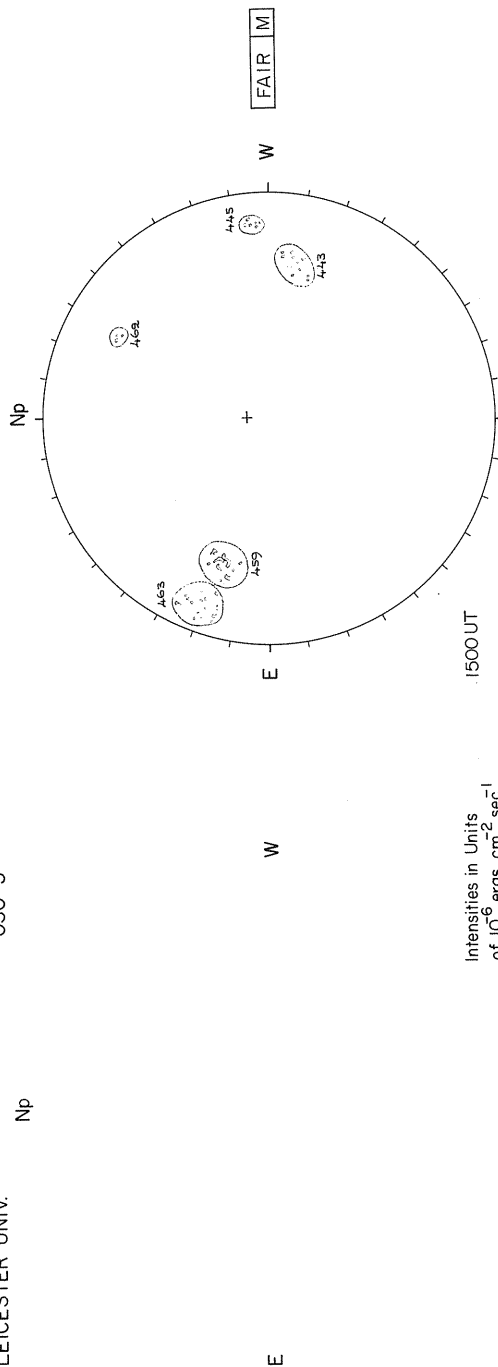
UNIV. COLLEGE LONDON
LEICESTER UNIV.

X-RAY
OSO-5

McMATH-HULBERT

CALCIUM REPORT

Np



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

Sp

KITT PEAK

Np

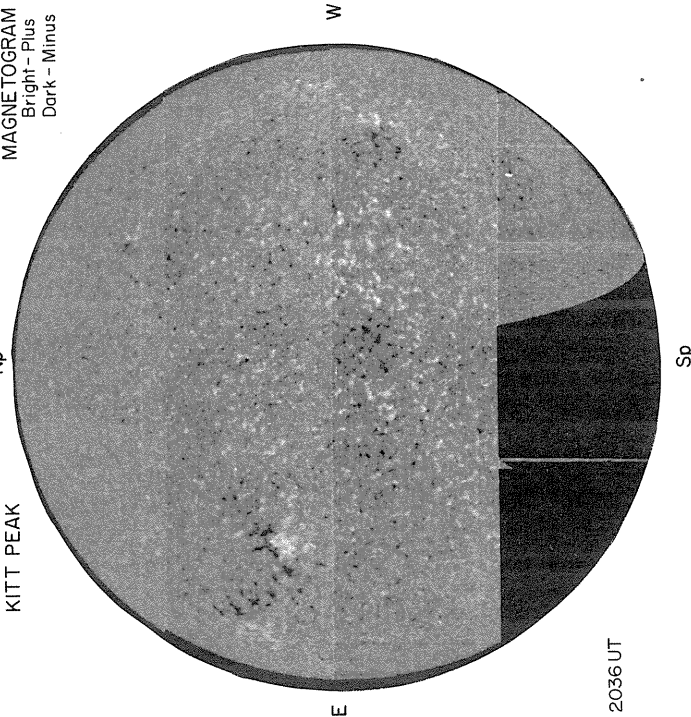
MAGNETOGRAM
Bright - Plus
Dark - Minus

MT. WILSON

DELTA =
DELTA X =

Np

MAGNETOGRAM
Solid - Plus
Dotted - Minus



NO DATA

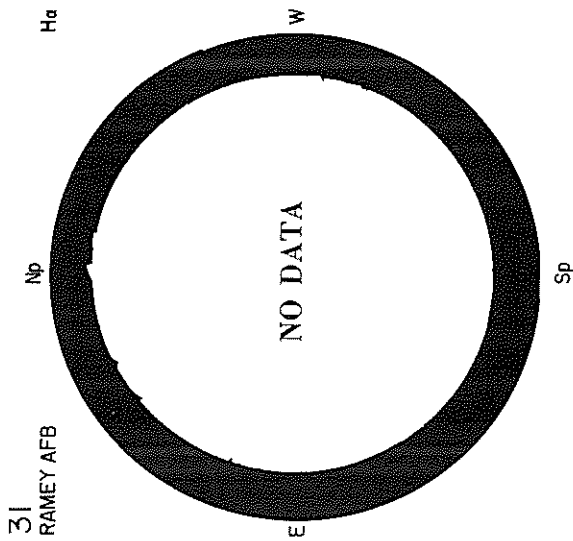
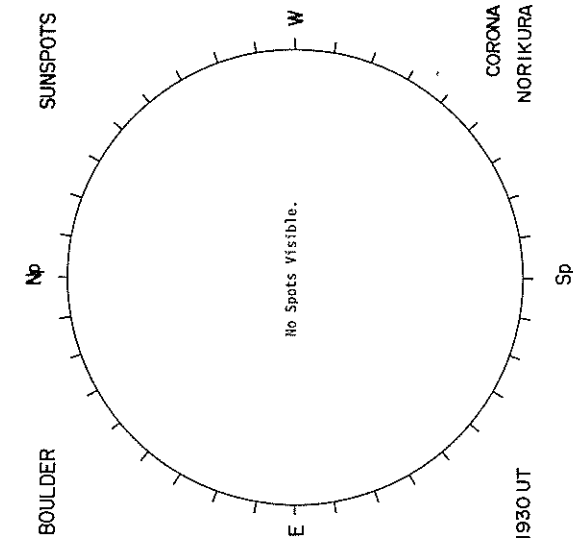
E

W

W

Levels
+ 5
+ 10
+ 20
+ 40
+ 80

Sp



8.6 MM

Np

NELC LA POSTA

2.0 CM

Np

NELC LA POSTA

NO DATA

NO DATA

W

EQUIPMENT

E

W

WEATHER

E



Sp

Sp

Ant. Temp. Unit 100°K

Ant. Temp. Unit 100°K

REGIONS OF SOLAR ACTIVITY

JANUARY 1975

MCMATH REGION 13434				CMP DATE 22.4				RETURN OF REGION 13394				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	1	15	13434	N13 E85	5	300	1.5								
75	1	16	13434	N13 E75	4	400	1.5								
75	1	17	13434	N14 E62	0	400	2.0								
75	1	20	13434	N14 E23	3	300	2.0								
75	1	21	13434	N15 E10	3	300	2.0								
75	1	23	13434	N15 W17	3	200	1.5								
75	1	24	13434	N15 W32	4	200	1.5								
MCMATH REGION 13441				CMP DATE 22.7											
				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	1	21	13441	N05 E15	359	500	3.0	19541	N05 E15	359	(BP)	2 R	10 4 BX0		
75	1	22						19541	N05 W03	359	B	B	10 3 BX0		
75	1	23	13441	N05 W14	0	400	2.5								
75	1	24	13441	N04 W28	0	300	1.5								
MCMATH REGION 13448				CMP DATE 23.0											
				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	1	24	13448	N33 W24	356	100	1.0								
MCMATH REGION 13444				CMP DATE 23.2											
				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	1	23	13444	S05 W07	353	100	1.0								
MCMATH REGION 13450				CMP DATE 23.8											
				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	1	26	13450	S10 W39	345	200	1.0								
MCMATH REGION 13438				CMP DATE 23.9				RETURN OF REGION 13404				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	1	17	13438	N10 E85	338	200	1.0								
75	1	20	13438	N10 E44	343	600	2.0								
75	1	21	13438	N09 E30	344	800	2.0								
75	1	22													
75	1	23	13438	N08 E03	343	400	2.0		N08 E17			B	10 2 BX0		
75	1	24	13438	N08 W12	344	400	1.5		N08 E11			M	0 1 AXX		
75	1	26	13438	N08 W40	346	400	1.5								
75	1	27	13438	N08 W53	346	400	1.0								
75	1	28	13438	N08 W66	347	200	1.0								
75	1	29						19544	N05 W65	333	AP				
MCMATH REGION 13451				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	1	26	13451	N07 W22	328	200	1.5								
MCMATH REGION 13457				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	1	28	13457	S23 W45	326	100	1.0								

REGIONS OF SOLAR ACTIVITY

JANUARY 1975

MCMATH REGION 13462

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	1	30	13462	N35 W14	269	100	1.0								
75	1	31	13462	N36 W26	267	100	1.0								
75	2	1	13462	N36 W40		100	1.5								

MCMATH REGION 13467

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	2	3	13467	S16 W65		100	1.0								

Note: Region 13422 is mostly a new plage formed in the same location as old region 13384 of the previous rotation. Region 13439 formed on the disk, in the location of old 13983.
No calcium spectroheliograms were secured at the McMath-Hulbert Observatory on January 3, 8, 9, 10, 18, 19, 22, 25 and 29, 1975.
No sunspot observations were made at Mt. Wilson Observatory on January 8, 27, 30 and 31, 1975.

DAILY CALCIUM PLAGE INDEX

JANUARY 1975

YR	MO	DAY	INDEX	YR	MO	DAY	INDEX	YR	MO	DAY	INDEX
75	1	1	4.7	75	1	11	8.5	75	1	21	7.6
75	1	2	5.3	75	1	12	8.7	75	1	22	*
75	1	3	*	75	1	13	9.8	75	1	23	4.2
75	1	4	5.7	75	1	14	8.8	75	1	24	3.5
75	1	5	7.9	75	1	15	10.2	75	1	25	*
75	1	6	10.7	75	1	16	9.6	75	1	26	3.7
75	1	7	8.3	75	1	17	7.7	75	1	27	2.5
75	1	8	*	75	1	18	*	75	1	28	1.9
75	1	9	*	75	1	19	*	75	1	29	*
75	1	10	*	75	1	20	8.1	75	1	30	1.6
								75	1	31	1.7

* NO OBSERVATIONS

	UNIVERSAL TIME				WIDE SPREAD INDEX	NUMBER OF STATION REPORTS BY TYPE								KNOWN FLARE	McMATH REGION
DAY	START	END	MAX	IMP		SWF	SCNA	SEA	SPA	LF- SPA	SES	SFD			
03	0325	0456	0333	1-	3				2				0323 0740E	13404 13400	
03	0732E	0753	0745U	1-	1			1							
26	1710	1746	1713	1-	1							*			

DATE	TIME (UT) and STATION	DATE	TIME (UT) and STATION
01-11	0000-2400 A36	14	0000-2400 A32, 1005-1330 UM (17 kHz)
01	0000-2400 A37	15	2114-2119 TM
03	1400-1733 UM (17 kHz)	16	0000-2400 A28
04	1924-2017 UM (16 kHz)	17	1357-1713 UM (17 kHz)
05	0000-2400 A28	19-20	0712-0145 B0
07	0000-2400 TN, 1007-1337 UM (16 kHz)	21	1003-1336 UM (16 kHz)
08	0000-2400 A19	22	1905-1945 UM (17 kHz)
09	0000-2400 A19, 0809-0920 UM (16 kHz), 1718-1800 TM	23	0000-2400 A28
10	0000-2400 A29, 1400-1717 UM (17 kHz)	24	1400-1745 UM (17 kHz)
11	0000-2400 A28, 0000-2400 A29	29	1300-1815 MC
12	0000-2400 A29	30	0000-2400 A28
13	0000-2400 A32	31	0000-2400 A28, 1400-1730 UM (17 kHz)

AAVSO (A1) (SEA) (A1, A19, A21, A26,
A28, A29, A30, A31, A32, A35,
A36, A37, A40) (SES) (A31) (SWF)
BOULDER (BO) (SCNA, SEA)
DARMSTADT (DA) (SWF)
DEBRE ZEIT (DE) (SPA)
HERSTMENCEUX (HC) (SEA)
HIRAISO (HI) (SWF)
HOBART (TA) (SEA)
HUANCAYO (HU) (SWF)
INUBO (IN) (SPA)

JOHANNESBERG (JH) (SES)
MANILA (MA) (SPA)
MCMATH (MC) (SWF, SCNA)
PANSKA VES (PU) (SWF, SEA, SES)
POITIERS (PO) (SEA)
PRESTON (LO) (SEA)
SAO PAULO (UM) (SPA, SES)
ST CLOUD (SC) (SES)
TABLE MOUNTAIN (TM) (SPA, LF-SPA)
TORINO (TN) (SPA)
UPICE (UI) (SEA)

DAY	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	18	19	20	21	22	23	24	25	26	27	28	29	30	31
REGION																																
40				1																												
04				1																												
X-RAY																																
UNKNOWN																																
NO FP																																

SOLAR RADIO EMISSION SPECTRAL OBSERVATIONS

JANUARY 1975

JAN 1975	TIMES OF OBSERVATION		STATION	EVENTS												SPECTRAL TYPE	
				CENTIMETRIC BAND			DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND				
	START UT	END UT		INT	START UT	END UT	INT	START UT	END UT	INT	START UT	END UT	INT				
01	0000 0000	0919 0735	MANI CULG CULG							0000 0045	0045 0301	1				IIIS IIIN,W	
	0734 1218 1430 1417 2035	1520 2115 2400 2346 2400	DURN SGMR BOUL HARV CULG							1945 2035	1946 2230	1				IIIG IIIN,W	
02	0000 0000	0919 0735	MANI CULG CULG				0514.5	0515	1	0150 0514.5	0230 0515	1				IIIN,W IIIG,U	
	0734 1218 1417 1430 2036	1524 2115 2346 2400 2400	DURN SGMR HARV BOUL CULG CULG							2040 2125.5	2400	1 1	2125.5		1	IIIN IIIB	
	2220	2400	MANI														
03	0000	0735	CULG CULG CULG CULG CULG CULG CULG CULG CULG							0000 0000 0406 0442.5 0446 0523.5 0621 0650.5 0653	0736 0736 0407 0443.5 0447 0524.5 0622 0653 0657	1 1 1 1 1 1 1 2		0654 0654.2	0656 0655.8	1 2	IIIS,W N,RS,OP IIIG IIIG IIIG IIIG IIIG IIIGG IIIGG IIIG
	0000 0734 0829	0920 1524 1520	MANI DURN DWIN DWIN				0829	1520	1	0829 0918.5 0923.3	1520 0919.5 0923.7	1 1 1				IW IIIG IIIG	
	1218 1417 2036 2220	2115 2347 2400 2400	SGMR HARV CULG MANI CULG				2233.5	2234	1	2036 2232.5 2234.0 2312.6 2355	2400 2235 2242.2 2315.8	1 1 1 1 2	2234.0 2312.6	2242.2 2315.8	1 1	IIIS,W IIIG IIIG IIIG RS,OP	
04	0000 0000	0732 0920	CULG MANI CULG CULG CULG				0302.5	0304	1	0000 0017.5 0019 0302.5	0732 0633 0630.5	1 2 1				IIIS,W N,RS,OP RS,OP IIIG	
	1219 0734 1430 1417	2117 1524 2400 2346	SGMR DURN BOUL HARV BOUL BOUL CULG MANI							1422.2 1717.7 1717.8 1903 1903.1 1903.5 1927.8 2037	1422.3 1717.8 1717.8 1904 1903 1903.5 1928.0 2400	1 1 1 3 2 2 1 1	1717.7 1903	1717.8 1904 1903.5 1928.0	1 3 2 1	IIIG III IIIG III III IIIN,W	
05	0000 0000	0920 0737	MANI CULG CULG CULG							0315 0315 0315 0734 E	0737 0737 0737 0810	1 1 1 1				IS IIIS,W N,RS,OP I	
	0734 1219 1430 1502	1449 2120 1600 1524	DURN SGMR BOUL DURN BOUL BOUL							1433.5	1434.3	1	1433.5	1434.3	1	III	
	1417 1900 2038	2343 2400 2400	HARV HARV BOUL CULG CULG CULG MANI CULG				2038	2307	1	1800 1920 2038 2038 2325	1801 1921 2400 2400 2336	3 1 1 1 1	1521.2 1630 1800 1920 1950	1600.0 1740 1801 1921 2350	1 1 3 1 1	CONT CONT IIIG IIIG CONT IS IIIN IIIS	
	2221	2400	MANI										2325	2336	1	IIIGG	
06	0000	0737	CULG CULG CULG				0031	0036	1	0000 0000 0028	0737 0737 0036	1 1 2	0031 0032.8	0036 0035.5	1 1	IS IIIN IIIGG IIIG IIIG IIIG IIIG IIIG,V,U	
	0000	0921	MANI CULG CULG CULG CULG CULG CULG DURN SGMR HARV				0743.4	0757.5	3	0520 0522.5 0715 0722 0736 0737.8	0521 0523.5 0716.5 0722.5 0736 0747.9	2 2 1 2 1 1	0522.5	0523.5	1	IWP	

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

JANUARY 1975

JAN 1975	TIMES OF OBSERVATION		STATION	EVENTS												SPECTRAL TYPE	
	START UT	END UT		CENTIMETRIC BAND			DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND				
				START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.		
06	1430 2222 2038	2400 2400 2400	BOUL MANI CJLG								2309	2316					IIIN,W,U
07	0000 0000 0731 0800 0923 1218 1417 1430 2039 2222	0739 0922 1530 1454 1935 2121 2345 2400 2400 2400	CJLG MANI DURN WEIS JWIN SGMR HARV BOUL CJLG MANI				0923	1536	1	0923	1536	1		1921.4	1921.7	2	III

SOLAR RADIO EMISSION SPECTRAL OBSERVATIONS

JANUARY 1975

JAN 1975	TIMES OF OBSERVATION		STATION	EVENTS												SPECTRAL TYPE	
				CENTIMETRIC BAND			DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND				
	START UT	END UT		INT	START UT	END UT	INT	START UT	END UT	INT	START UT	END UT	INT				
11			HARV							2106	2107	2				IIIG	
	2223	2400	HARV							2112	2114	1	2113		2	IIIG	
12	0030	0709	CULG				0304	0304.5	1	0030	0400	2				IIIS,W	
			CULG							0304	0305					IIIG,U	
			CULG				0707	0708	1	0400	0730	2				IIIN,W	
	0000	0925	MANI							0706	0709	2	0707.5	0708.3	3	IIIG,V	
	0713	0730	CULG													III	
	0731	1045	DURN							0713	E	0730	1			II	
	0808	1300	WEIS														
	1057	1530	DURN														
	1217	2126	SGMR														
	1430	2400	BOUL							1443.6	1443.7	1	1443.6	1443.7	1	III	
			BOUL							1705	2330	1	1705	2330	1	CONT	
	1418	2351	HARV							1941	2223	2	1941	2125	2	IIIN	
	2040	2400	CULG							2040	2400	1				IIIS,U	
			CULG							2100	2400	1				IS	
			CULG				2108	2112	1	2108	2112	1				IIIGG	
			CULG							2129	2132	2	2129.5	2130.5	1	IIIGG	
			HARV							2129	2131	3	2129	2131	3	IIIGG	
	2223	2400	CULG							2221	2222	2				IIIG,U	
			MANI														
			CULG							2250	2251	1				IIIG,U	
13	0000	0331	CULG							0000	0331	1				IIIS	
	0000	0925	MANI							0000	0331	1				IS	
			CULG							0039.5	0040	2				IIIG	
			CULG				0053	0054	1	0052	0055	2				IIIGG,V	
			CULG				0227	0228	1	0227	0229	2				IIIG,U	
	0500	0735	CULG							0500	0735	1				IS	
			CULG							0500	0735	1				IIIS	
			CULG				0549		1	0549		1				IIIB,U	
			CULG							0639	0640.5	1				IIIG,U,V	
	0731	1538	DURN							0731	E	1538	0	1		IN	
	1308	1507	WEIS							1017.0	1506.0	1				IS	
			WEIS							1204.0	1204.2	1				IIIB	
	1417	2346	HARV							1418	2346	0	1			I	
	1217	2128	SGMR											1418.6	1419.1	1	III
	1430	2400	BOUL							1515.3	1515.7	1	1515.3	1515.7	1	III	
			SGMR							1515.4	1515.9	1	1515.4	1515.9	1	III	
			HARV							1557	1558	3	1558		3	IIIG	
			BOUL							1557.7	1558.4	2	1557.7	1558.4	2	IIIG	
			SGMR										1557.9	1558.3	2	III	
			BOUL							1600	2242	1	1600	2242	1	CONT	
			HARV							1746	2005	1	1746	2005	1	IIIN	
	2040	2331	CULG				2040	2331	1	2040	2331	1				IS	
			CULG							2040	2331	1				IIIS	
			CULG							2150.5	2154.5	2	2152	2154	1	IIIGG,V	
			HARV							2151	2154	3	2151	2154	3	IIIGG,V	
			BOUL							2151.7	2158.5	1	2151.7	2158.5	1	IIIG	
			HARV							2157	2159	3				IIIGG	
			CULG				2157	2158	1	2157	2158.5	2				IIIG	
			HARV							2206	2207	2				IIIG	
	2223	2400	MANI														
			HARV							2338	2339	2				IIIG	
			HARV							2344		2				U	
14	0000	0927	MANI													IS	
	0104	0717	CULG							0104	0717	1				IIIS	
			CULG							0104	0717	1				IIIGG,V	
			CULG				0257.5	0258	1	0256	0300	2				IN	
	0731	1541	DURN							0731	E	1541	0	2		IS	
	0800	1507	WEIS							0800.0	1506.0	1				IIIG	
			WEIS							0938.5	0941.2	2				IIIG	
			WEIS							0942.3	0943.5	2				IIIG	
			JJRN				0942.5	0942.6	2	0942.5	0943.0	2				IIIG	
			WEIS							1001.5	1002.5	1				IIIG	
			WEIS							1203.0	1203.3	1				IIIG	
			DURN							1203.2	1203.3	1				IIIG	
			WEIS							1232.7	1232.8	1				IIIB	
			WEIS							1302.2	1302.5	1				IIIB	
	1417	2347	HARV							1417	2347	0	1			I	
	1216	2129	SGMR											1425.4	1427.4	1	IIIG
			HARV							1426	1427	2				IIIG	
			WEIS							1426.0	1426.2	1				IIIB	
			HARV							1626	2038	1	1626	2038	1	IIIN	
	1430	2400	BOUL							1626.5	2303	1	1626.5	2303	1	CONT	
			HARV							2010	2012	3				IIIGG,V,U	
			SGMR										2010.7	2011.7	2	III	
			HARV							2015	2019	1				UNCLF	
			CULG							2041	2400	1				IIIS	
	2041	2400	CULG				2041	2400	1	2041	2400	1				IS	
	2224	2400	MANI														
15	0000	0500	CULG				0000	0500	1	0000	0500	1				IIIS	
			CULG							0000	0500	1				IS	
			CULG							0202	0202.5	2				IIIG,U	

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

JANUARY 1975

JAN 1975	TIMES OF OBSERVATION		STATION	EVENTS												SPECTRAL TYPE
	CENTIMETRIC BAND			DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND						
	START UT	END UT		INT.	START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.			
15	0000	0927	CULG				0212		1	0212		3	0212		1	IIIB
			MANI										0212.2	0212.5	3	III
	0630	0736	CULG				0630	0736	1	0630	0736	1				IIIS
	0731	1541	DURN							0731 E	1541 D	2				IS
	0802	1507	WEIS							0819.0	1457.0	1				IN
			WEIS							1055.8	1056.0	1				IS
			WEIS							1140.8	1141.0	1				IIIB
			WEIS							1305.8	1306.0	1				IIIG
			WEIS							1407.0	1407.3	3				IIIG
			DURN							1407.1	1409.9	3				IIIGG
			WEIS							1409.0	1409.8	2				IIIG
	1216	2130	SGMR										1409.2	1410.0	2	III
			WEIS							1416.0	1416.2	1				IIIG
	1430	2400	BOUL										1540	2318	1	CONT
	1417	2351	HARV							1720	1721	3	1720	1721	3	IIIG,U,V
			SGMR										1720.7	1721.0	1	III
			HARV							1748	2010	1	1803	2010	1	IIIN
			HARV							1938	2350	1				IN
			HARV							1944	1945	2	1944	1945	2	IIIG
			HARV							1959	2002	3	1959	2001	3	IIIGG
		SGMR										2000.0	2000.5	1	III	
		CULG				2041	2215								IS,W	
		CULG							2041	2400	1				IS	
	2041	2400	CULG						2041	2400	1				IIIS	
		HARV							2128	2130	2				IIIG	
		CJLG							2128.5	2129.5	2				IIIG	
	2224	2400	MANI													
16	0000	0928	MANI													
			CULG							0134	0500	1				IIIS
	0134	0500	CULG				0134	0500	1	0134	0500	1				IS
			CULG							0250	0251	2				IIIG
	0630	0741	CULG				0630	0650	1	0630	0741	1				IS
			CULG							0630	0741	1				IIIS
	0731	1543	DURN							0731 E	1543 D	1				IN,OC
	0805	0821	WEIS													
	0825	1510	WEIS							0845.0	1428.0	1				IN
			WEIS							0856.9	0857.0	1				IIIG
	1400	2400	BOUL							1428.8	1429.6	1				III
			WEIS							1428.9	1429.1	3				IIIB
	1418	2358	HARV							1429		3				IIIB
			HARV							1542	1544	3	1542	1543	3	IIIG,V
			DURN							1542.2	1542.5	3				IIIG
			BOUL							1542.3	1543.6	2	1542.3	1543.6	2	IIIG
	1215	2131	SGMR										1542.5	1542.8	1	III
			HARV							1756	1757	3				IIIG
			BOUL							1756.5	1756.9	2	1756.5	1756.9	2	III
			BOUL							1802.4	1802.5	1	1802.4	1802.5	1	III
2041	2332	CULG				2041	2130	1	2041	2331	1				IS	
		CULG							2157	2332	1				IIIN,W	
2224	2400	MANI														
		HARV							2259	2348	1				IN	
17	0000	0928	MANI													
	0102	0231	CULG				0102	0231	1	0102	0231	1				IS
			CULG							0102	0231	1				IIIN
			CULG							0108	0109	1				IIIB
			CULG							0404	0534	1				IIIN
	0404	0534	CULG							0404	0534	1				IS
			CULG							0445		1				IIIB
	0731	1543	DURN													
	0800	1513	WEIS							1205.3	1206.0	1				IIIG
			WEIS							1212.6	1213.3	1				IIIG
			WEIS							1301.2	1301.5	1				IIIB
			WEIS							1305.7	1306.3	2				IIIG
	1215	2132	SGMR										1305.8	1306.5	1	IIIG
			WEIS							1308.2	1309.3	2				IIIG,RS
			WEIS							1312.3	1312.8	2				IIIG
	1400	2400	BOUL							1500.4	1500.8	1	1500.4	1500.8	1	III
			BOUL							1639.9	1640.5	1	1639.9	1640.5	1	III
			BOUL							1640	2047	2	1640	2047	2	IIIN
	1417	2346	HARV							1644.8	1646.2	2	1644.8	1646.2	2	III
			BOUL							1645	1646	3	1645	1646	3	IIIGG
			SGMR										1645.0	1645.8	1	III
			HARV							1858	1900	3	1858	1900	3	IIIGG,V,U
			SGMR										1858.8	1900.0	3	III
			BOUL							1858.9	1900.5	3	1858.9	1900.5	3	III
			BOUL							1920.5	1920.8	1	1920.5	1920.8	1	III
			HARV							1923	1924	3	1923	1924	3	IIIG,V
			BOUL							1923.0	1924.0	2	1923.0	1924.0	2	IIIG
			SGMR										1923.0	1923.9	2	III
			HARV							1943	1944	1	1943	1944	1	IIIG
			BOUL							1943.0	1943.8	1	1943.0	1943.8	1	III
		BOUL							2019.8	2020.0	1				III	
		BOUL							2046.5	2047.0	1	2046.5	2047.0	1	III	
		BOUL							2147.8	2148.1	1	2147.8	2148.1	1	III	
		HARV							2157	2201	2	2158	2201	2	IIIGG	
		BOUL							2157.2	2201.1	2	2157.2	2201.1	2	IIIG	
2202	2400	CULG							2202	2400	1				IIIN	

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SOLAR RADIO EMISSION SPECTRAL OBSERVATIONS

JANUARY 1975

JUN 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	
29	0000	0745	CULG													
	0720	1506	DURN													
	0744	1530	WEIS													
	1206	2148	SGHR													
	1400	2400	BOUL													
	1401	1900	HARV													
	1927	2246	HARV													
	2045	2400	CULG													
30	2224	2400	MANI													
	0000	0932	MANI													
	0000	0745	CULG													
	0000	0030	BOUL													
	0718	1213	DURN													
	0745	1531	WEIS													
	1205	2149	SGHR													
	1244	1605	JJRN													
31	1400	2400	BOUL													
	1402	2346	HARV													
	2045	2400	CULG													
	2224	2400	MANI													
	0000	0932	MANI													
	0000	0745	CULG													
	0000	0030	BOUL													
	0716	1605	JJRN													
	0925	1535	WEIS													
	1204	2150	SGHR													
	1400	2400	BOUL													
	1401	2346	HARV													
	2045	2400	CULG													
	2224	2400	MANI													

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

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

SELECTED SOLAR EVENTS

JANUARY 1975

Culgoora

UT Date 1975. JANUARY	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.)				
03	0446	0448	160	0.3	70	0	1 }	IIIG	*
			80	0.4	70	0	2 }		
			43.25	0.4	70	-	1 }		
13	2300	0500	160	0.5	60	R	1-2	IS }	Persisted with varying inten- sity to January 17
			80	0.7	60	0	2	IS }	
			43.25	0.9	50	-	1	IIIS}	
18	0151	0153	160	1.1	300	0	1 }	IIIG	*
			80	1.4	310	0	2 }		
			43.25	1.7	330	-	2 }		

Days without Heliograph observations: 26, 27

* Other type IIIs observed at same position during day.

COSMIC RAY INDICES
(Neutron Monitors)
JANUARY 1975

	THULE	ALERT	DEEP RIVER	CALGARY	SULPHUR MT	KIEL	CLIMAX	TOKYO
JAN 1975	Average cts/hr	Average cts/hr	Average cts/hr	Average cts/hr	Average cts/hr	Average cts/hr	Average cts/hr	Average cts/hr
1	4438.8	7357.2	6878.8	11616.4	8713.8	6198.7	4155.9E*	3551.2
2	4458.5	7391.2	6885.3	11668.9	8736.7	6209.8	4166.4E	3557.0
3	4468.2	7404.3	6904.2	11698.1	8783.6	6216.5	4172.2E	3557.3
4	4428.2	7354.4	6877.0	11636.8	8737.4	6194.6	4153.8E	3552.8
5	4412.0	7309.6	6850.0	11570.1	8686.8	6168.8	4144.4E	3548.7
6	4409.5	7311.1	6837.0	11520.8	8672.6	6166.1	4129.2E	3526.2
7	4357.5	7204.0	6741.3	11344.4	8498.9	6111.4	4082.4E	3519.0
8	4363.8	7212.0	6707.4	11351.0	8549.6	6110.5	4066.2E	3489.5
9	4423.9	7347.8	6790.8	11504.6	8643.7	6156.5	4134.0E	3514.8
10	4463.7	7390.4	6837.6	11635.6	8735.2	6184.2	4162.6E	3538.8
11	4491.6	7439.3	6886.5	11726.9	8785.5	6222.7	4184.0E	3553.7
12	4530.3	7508.1	6958.5	11743.3	8807.4	6269.5	4182.6E	3565.5
13	4456.3	7386.0	6880.5	11602.8	8675.1	6222.4	4143.6	3542.3
14	4450.0	7378.2	6876.0	11610.0	8688.2	6187.6	4136.9	3541.2
15	4415.5	7311.2	6863.5	11519.4	8579.6	6165.7	4104.2	3513.3
16	4389.0	7264.0	6811.2	11469.7	8551.3	6120.3	4080.4	3515.5
17	4372.3	7260.0	6802.8	11401.0	8527.2	6136.3	4080.8	3525.3
18	4391.5	7276.9	6820.4	11480.4	8567.3	6158.9	4095.4	3538.7
19	4420.0	7320.7	6854.5	11545.4	8601.0	6183.3	4119.9	3549.7
20	4437.8	7346.4	6897.6	11609.7	8676.8	6200.0	4143.4	3554.1
21	4467.6	7393.5	6914.0	11702.6	8729.7	6233.8	4171.2	3554.2
22	4485.0	7436.9	6931.5	11730.6	8753.0	6256.3	4182.6	3558.9
23	4500.9	7459.0	6959.7	11756.1	8788.3(20)	6299.8	4190.7	3551.6
24	4495.8	7437.5	6938.3	11751.0	8817.2(12)	6271.6	4190.2	3540.4
25	4510.9	7456.8	6963.6	11798.7	8813.6	6284.1	4180.8	3552.8
26	4520.7	7454.0	7005.3	11858.4	8871.4	6277.7	4207.2	3553.7
27	4531.0	7464.5	6981.5	11857.4	8867.6	6302.8	4216.2	3556.7
28	4533.5	7459.5	6966.0	11838.5	8878.4	6334.2	4227.1	3565.9
29	4522.7	7448.0	6969.8	11868.6	8881.1	6312.6	4218.5	3559.5
30	4539.0	7460.9	6979.1	11859.2	8883.2	6282.7	4212.1	3559.6
31	4535.3	7454.7	6973.4	11873.3	8907.6	6287.4	4225.7	3565.0
MEAN	4458.7	7377.4	6888.5	11650.0	8722.9	6217.0	4156.8	3544.3

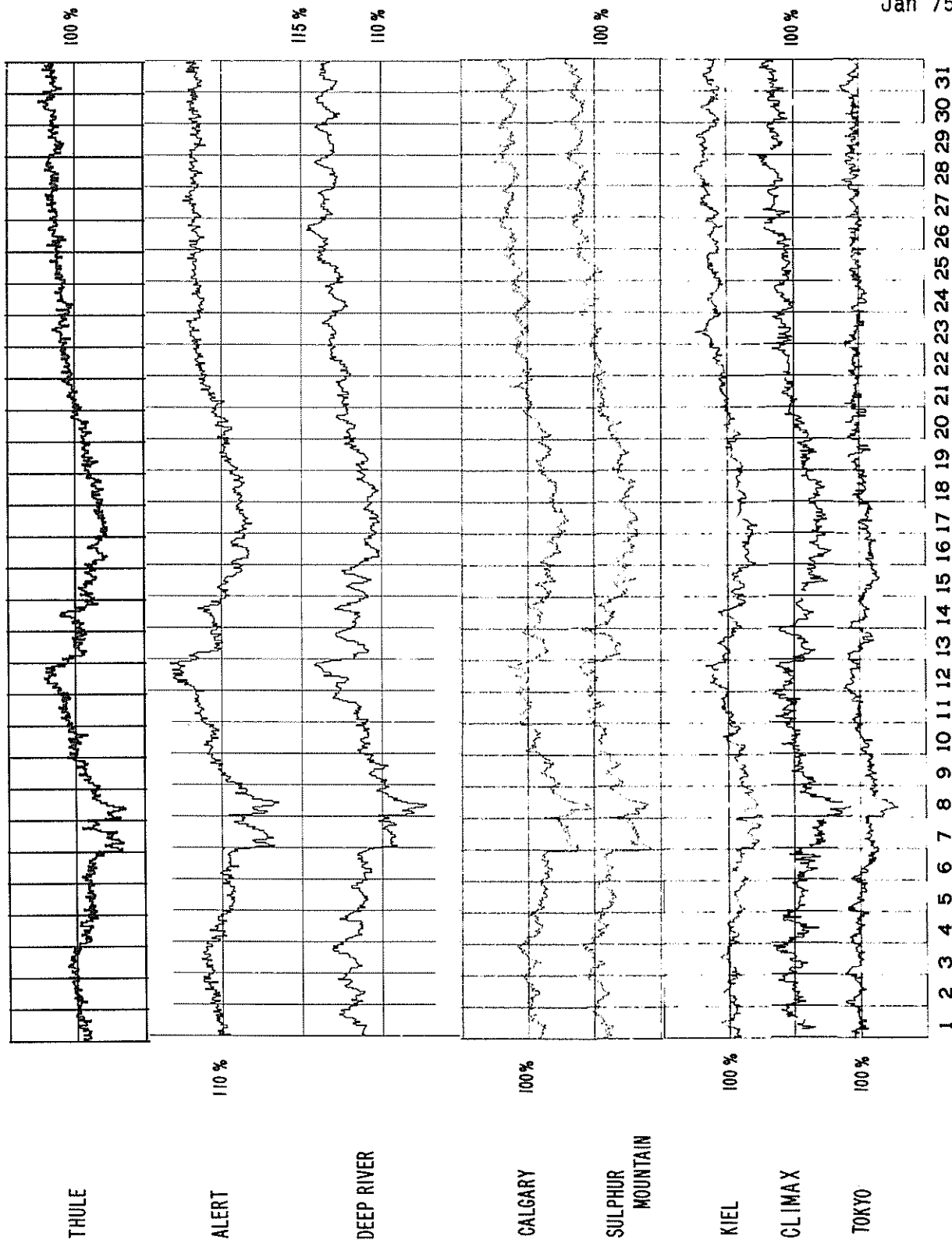
() Number of hours for which data are available if less than 24.
Asterisk indicates sum of both sections at Climax is less than 40 hours.

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

N: One section normalized by multiplicative factor.
E: One section estimated from sections ratio.

COSMIC RAY INDICES (Neutron Monitors)

JANUARY 1975



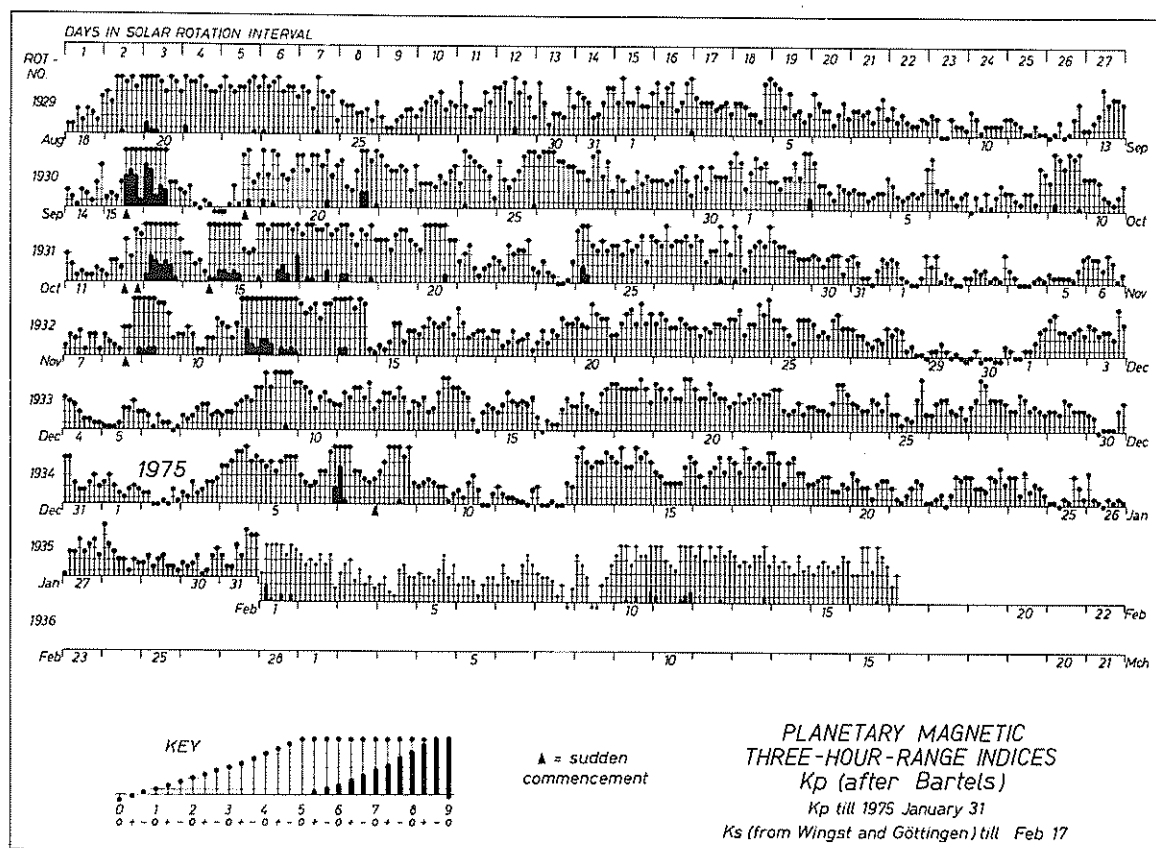
106
Jan 75

GEOMAGNETIC ACTIVITY INDICES

JANUARY 1975

Day	Three-Hour Range Indices Kp									Prel Ci	Cp	Ap	aa		
	1	2	3	4	5	6	7	8	Sum				N	S	M
1	2+	3	2	1+	1	2-	2	2-	15	0.3	0.4	7	17	18	20 15
2QQ	1+	1+	0+	0+	1-	0+	2-	1-	7-	0.2	0.1	4	8	6	6 8 CC
3	1+	1	2+	1+	2-	2+	2+	3-	15	0.5	0.4	7	13	21	14 21
4 D	4-	4-	4	5-	5-	5	4	4+	34	1.5	1.3	32	64	54	44 75
5	4	4-	4	3+	4	4+	4+	4+	32	1.3	1.2	27	52	39	36 55
6	3	2+	2	2+	3+	3+	5-	6+	27+	1.3	1.2	26	46	35	19 62
7 D	4-	5+	5	3+	3+	3-	2+	3-	32+	1.4	1.5	44	50	42	70 22
8 D	3+	4	5	5	5+	4+	5	2+	34+	1.6	1.4	36	50	91	80 61
9	2	2+	3-	2+	2	2	1-	1+	15+	0.4	0.4	7	18	14	17 16
10 Q	2-	1	2+	3	2-	0+	0+	1+	12-	0.1	0.3	6	12	12	18 7 KK
11QQ	2	1+	1	1	1-	1-	0+	2-	9-	0.2	0.1	4	8	9	10 7 CC
12QQ	2	0+	0+	1-	0+	0+	2+	2	8+	0.2	0.1	4	7	10	7 10 C
13 D	4+	5	4	4-	4	4	5-	4+	34	1.5	1.3	32	47	59	53 53
14 D	4	5	4-	4-	5	4+	5-	4	34+	1.5	1.3	33	52	57	47 62
15	3+	3	2+	2+	2+	2+	4-	4+	24-	0.9	0.9	15	27	36	25 37
16	4	3	2	3+	4-	4+	3+	4+	28	1.3	1.1	21	41	47	35 53
17	4	3+	5	4+	4-	4	4-	5-	33-	1.2	1.3	29	50	41	42 49
18	5-	4	2+	4	4+	3+	3+	2+	28+	1.2	1.1	22	41	28	34 35
19	2+	3-	3	3	2-	2-	2+	2	19-	0.6	0.6	10	18	24	25 16
20	3+	3-	2	2	1	2+	3-	3-	19-	0.5	0.6	10	17	17	15 20
21 Q	2	1	1-	1+	2	3-	2+	1-	13-	0.3	0.3	6	13	14	10 18
22 Q	1-	1	1+	0+	1+	3	3-	3	13+	0.5	0.4	8	19	13	8 24
23	3	2	2	2-	3	3-	4-	2+	20+	0.9	0.7	12	29	21	19 32
24	3	3	1+	3+	2-	2+	2	1+	18	0.5	0.6	10	20	15	19 17
25QQ	1-	1-	0+	1	1-	3	2	1	9+	0.4	0.2	5	11	10	7 15 KK
26QQ	3+	1	1-	0+	1	1-	1	1-	9-	0.2	0.2	5	8	9	9 8 C
27	1-	3-	3-	4-	3-	3+	4-	2+	22-	1.0	0.8	14	25	35	26 34
28	5-	3+	3-	2	2	1	2	2-	19+	0.7	0.7	12	21	27	32 17
29 Q	2-	2+	1+	2	2+	1+	1+	1	13+	0.2	0.3	6	10	14	13 11 K
30 Q	2-	1+	2-	2+	1-	1	2+	3	14	0.5	0.4	7	15	18	14 19
31	2+	1+	1+	3+	2+	4+	4	4	23	1.0	0.9	16	39	42	21 61
MEAN										0.77	0.71	16	27.4	28.3	27.9

GEOMAGNETIC ACTIVITY INDICES

DAILY AVERAGE INDICES A_p

DAY	1974	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1975	JAN
1		13	20	17	9	28	10	6	24	28	6	6		7
2		12	18	15	16	18	12	22	32	30	5	15		4
3		8	20	39	24	19	9	35	16	12	6	15		7
4		7	10	35	34	9	31	24	20	8	3	9		32
5		8	18	18	35	6	74	21	19	10	5	7		27
6		7	20	26	6	6	130	20	14	11	10	4		26
7		10	13	18	15	3	15	22	12	6	7	8		44
8		5	17	13	13	6	36	16	7	10	21	13		36
9		4	33	16	11	7	15	16	5	39	39	42		7
10		14	30	28	3	15	20	16	6	10	10	20		6
11		30	32	19	5	32	14	10	4	6	48	21		4
12		40	15	3	5	29	23	5	6	17	70	18		4
13		20	10	7	4	21	12	6	16	86	36	22		32
14		12	16	5	10	18	23	5	9	30	38	13		33
15		4	3	4	30	37	10	4	73	50	10	14		15
16		7	42	4	26	16	10	6	88	68	16	8		21
17		11	9	6	38	19	8	6	3	47	14	18		29
18		1	3	46	24	10	6	10	19	43	8	28		22
19		4	2	39	18	13	6	40	34	29	14	27		10
20		12	23	46	18	18	11	46	35	41	22	21		10
21		23	68	35	18	7	9	39	43	10	24	19		6
22		14	39	31	22	8	8	37	24	15	18	14		8
23		44	42	29	25	7	82	36	16	5	16	17		12
24		29	34	19	39	8	51	26	26	38	26	14		10
25		34	23	20	14	10	22	13	30	22	19	12		5
26		28	20	21	11	40	20	7	38	28	17	12		5
27		26	22	19	14	54	24	18	25	25	9	21		14
28		27	18	22	10	26	18	20	14	29	6	12		12
29			34	19	7	19	13	31	16	18	3	11		6
30			20	16	17	15	8	17	21	12	2	6		7
31			24		36		6	21		8		14		16
MEAN		16	23	21	18	17	24	19	23	26	18	15		16

HOURLY EQUATORIAL DST VALUES (PROVISIONAL)

JANUARY 1975

NASA/GODDARD SPACE FLIGHT CENTER

(Time-UT)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	3	2	1	0	-1	2	5	6	-1	-1	3	3	1	3	5	4	2	2	2	1	-1	2	1	-1
2	0	1	3	4	7	9	11	13	11	13	14	12	10	8	6	9	11	12	12	13	13	12	11	11
3	12	17	26	28	29	32	34	36	16	13	18	13	11	8	5	7	8	10	15	20	21	21	25	22
4	15	16	13	13	14	9	6	6	6	0	5	8	10	4	-6	-19	-14	-12	-11	-8	-12	-11	-9	-15
5	-15	-11	-7	-11	-6	-5	-8	-5	-16	-12	-2	-2	-3	-6	-8	-9	-9	-10	-5	-3	-15	-13	-10	-7
6	-6	-5	-6	-3	-1	1	0	0	3	4	7	6	1	0	0	1	3	-1	-5	-9	3	-8	-11	-13
7	-30	-35	-38	-48	-39	-35	-42	-32	-26	-17	-17	-19	-19	-19	-16	-25	-22	-16	-12	-8	-12	-17	-14	-1
8	6	11	15	17	8	18	3	7	9	8	4	3	-11	-16	-17	-20	-20	-24	-33	-24	-17	-16	-11	-12
9	-7	-5	-6	-7	-6	-6	-6	-5	-6	-5	-3	-4	-6	-5	-6	-8	-7	-5	-4	-7	-8	-9	-11	-11
10	-10	-11	-11	-11	-9	-7	-7	0	1	0	-1	0	0	1	0	-2	-1	-2	-4	-6	-7	-9	-7	-5
11	-2	-1	-4	-10	-9	-8	-5	-3	-1	0	1	2	2	4	0	-5	-8	-7	-5	-3	0	3	3	4
12	4	2	0	-2	-1	2	5	8	6	7	4	5	5	7	12	13	15	16	20	24	20	22	29	29
13	30	18	13	13	7	9	12	3	-10	-24	-19	-12	-10	-7	-10	-17	-11	-14	-15	-12	-17	-25	-24	-18
14	-11	-9	-12	-13	-7	-10	-6	-6	-2	-6	-7	-6	-2	-6	-5	-18	-28	-33	-29	-31	-32	-35	-31	-28
15	-27	-21	-18	-16	-12	-11	-6	-5	-2	1	-5	-3	2	0	6	10	7	2	-1	0	-4	-26	-35	-35
16	-26	-19	-14	-11	-11	-3	-3	-2	0	5	4	3	-7	-11	-17	-19	-16	-16	-14	-16	-20	-17	-18	-20
17	-22	-17	-13	-16	-12	-9	-7	-5	-13	-6	-5	-5	-3	-7	-5	-3	-6	-9	-12	-13	-15	-14	-17	-22
18	-20	-19	-15	-14	-11	-11	-7	-6	-5	-3	-5	-4	-4	-7	-5	-7	-6	-4	-5	-10	-14	-13	-7	-8
19	-5	-3	-3	-5	-4	-4	0	4	4	3	-2	0	1	0	2	6	6	0	-3	-4	-7	-6	-7	-8
20	-7	-5	-3	-5	-4	0	4	6	12	14	15	13	11	9	8	6	6	4	3	-1	0	-3	-7	-7
21	-5	-5	-4	-5	-5	-2	3	4	4	5	9	8	6	5	5	4	7	3	1	-2	-3	1	0	-2
22	-3	-2	-1	0	1	3	7	10	13	14	16	15	12	11	9	10	7	1	-3	-3	1	1	-7	-12
23	-11	2	0	2	6	11	17	13	13	14	18	19	17	16	14	15	15	10	6	-6	0	8	8	2
24	-2	1	3	5	9	11	14	12	10	7	8	11	9	10	7	7	4	0	-2	-3	-2	1	5	5
25	6	8	6	5	7	6	6	7	11	12	14	18	23	21	20	20	19	16	14	12	9	13	14	11
26	7	10	12	17	18	15	13	13	17	15	19	16	13	14	16	19	21	19	19	13	19	16	16	19
27	23	33	37	41	40	43	25	22	17	9	3	1	1	3	7	9	2	4	1	-9	-9	-9	-5	-1
28	-6	-1	-1	3	7	5	3	0	3	4	4	6	6	2	1	3	5	4	2	2	2	7	13	12
29	18	22	19	23	25	29	30	25	21	20	15	8	5	7	13	15	16	13	9	9	10	11	13	15
30	19	23	26	26	25	22	16	17	18	15	17	23	22	22	21	25	29	25	21	18	15	10	10	9
31	7	7	9	10	12	10	15	23	26	24	24	21	19	20	24	30	27	14	12	10	4	5	7	6



PRINCIPAL MAGNETIC STORMS

JANUARY 1975

OBS. 2 letter IAGA code	GEOMAG- NETIC LATI- TUDE	COMMENCEMENT			SC - AMPLITUDES			MAXIMUM 3 HOUR - INDEX K		RANGES			UT END	
		hr min	DAY	(UT)	TYPE	D(')	H(γ)	Z(γ)	K	D(')	H(γ)	Z(γ)	DAY	HOUR
CO	64.6N	3 08--	..		..	..	..	05(4,5)	7	234	1640	1150	05	23
NE	55.1N	3 19--	..		..	..	..	04(3,4,5,6)	5	27	94	70	05	24
HY	7.6N	3 1300	..		..	..	..	04(6)	6	5	128	24	05	23
GU	4.0N	3 2204	..		..	..	..	04(4)	4	0	100	10	04	20
HU	0.6S	3 1535	..		..	..	..	04(6,7)	5	12	222	47	05	22
KG	56.5S	3 06--	..		..	..	..	04(6)	6	--	--	--	05	23
SI	60.0N	4 0727	SC		-14.7	+36.3	+27.2	04(5)	6	40	380	290	05	23
WI	54.2N	4 10--	..		..	..	..	04(6) 05(7,8)	5	35	195	60	05	23
HR	33.7S	4 05--	..		..	..	..	04(6)	5	28	95	93	05	03
GN	43.2S	4 06--	..		..	..	..	07(1) 08(4,5,7)	6	19	130	150	09	02
CO	64.6N	6 10--	..		..	..	..	06(4,5,7,8) 07(1,3,5)	6	204	1510	760	07	13
SI	60.0N	6 11--	..		..	..	..	07(3)	-	--	650	470	07	13
NE	55.1N	6 1957	SC*		4	9	3	07(1)	7	63	130	166	07	20
WI	54.2N	6 15--	..		..	..	..	06(8) 07(1)	7	47	275	85	07	09
FR	49.6N	6 13--	..		..	..	..	07(1)	6	33	134	39	07	21
BD	48.9N	6 1958	SC*		- 1	28	- 8	07(7)	7	47	133	52	07	18
TU	40.4N	6 1958	SC		- 1	+28	+ 2	06(8) 07(1)	6	28	195	30	09	01
SJ	29.9N	6 1430	..		..	..	..	07(1)	6	8	76	40	07	16
AL	9.5N	6 1956	SC		- 0.7	29	- 9	06(8)	5	7	116	47	07	16
HY	7.6N	6 1000	..		..	..	..	07(1)	5	7	115	14	07	21
HY	7.6N	6 1957	SI		- 0.5	+31	- 3	--	-	--	--	--	--	--
GU	4.0N	6 1957	SC		--	20	-10	07(1)	6	--	--	--	07	17
AN	1.5N	6 1956	SC		- 1.3	38	21	--	-	7	123	78	07	16
HU	0.6S	6 1100	..		..	..	..	06(7,8)	5	11	262	48	08	23
TV	1.1S	6 1956	SC		0.3	30	38	--	-	5	111	98	07	16
HR	33.7S	6 1957	SC		+ 2	+36	+21	06(8) 07(1) 08(7)	6	33	138	115	08	22
CO	64.6N	7 2321	SC*		+ 9	+45	+14	08(4)	8	193	2170	980	09	02
SI	60.0N	7 2322	SC*		+ 4.6*	+ 6.8*	- 2.9*	08(3)	-	--	--	370	09	01
NE	55.1N	7 2321	SC*		1	13	3	08(3)	6	47	198	121	09	02
WI	54.2N	7 2322	SC*		- 2 *	+20	0	08(7)	7	37	225	50	08	22
FR	49.6N	7 2322	SC*		+ 3	+17	- 5	08(3)	5	17	125	29	08	22
BD	48.9N	7 2323	SC*		- 2	14	- 3	08(3)	5	26	129	32	09	15
SJ	29.9N	7 2322	SC		--	--	--	--	4	--	--	--	08	21
AL	9.5N	7 2322	SC		- 0.5	11	- 5	07(1)	6	5	135	29	08	22
HY	7.6N	7 0024	SI		- 1.7	+58	- 1	--	-	--	--	--	--	--
HY	7.6N	7 2321	SC		- 0.3	+12	- 1	08(3,4,6,7)	5	5	144	19	08	22
GU	4.0N	7 2322	SC		--	20	-05	08(1)	5	0	120	30	08	23
AN	1.5N	7 2322	SC		- 0.7	13	8	--	-	6	166	53	08	22
TV	1.1S	7 2322	SC		0.1	11	12	--	-	4	185	123	08	22
KG	56.5S	7 2323	SC		--	--	--	08(7)	6	--	--	--	08	22
HY	7.6N	8 0236	SI		- 1.0	+34	- 3	--	-	--	--	--	--	--
CO	64.6N	12 17--	..		..	..	..	14(5)	7	170	1670	820	15	03
NE	55.1N	12 1951	..		..	..	..	14(3,5)	5	28	162	128	15	06
HY	7.6N	12 1700	..		..	..	..	14(7)	5	5	106	25	14	23
GU	4.0N	12 1843	..		..	..	..	13(1)	5	0	130	30	15	18
HU	0.6S	12 1715	..		..	..	..	13(6)	6	8	231	57	14	23
HR	33.7S	12 19--	..		..	..	..	13(3,6,7,8)	5	20	112	70	15	00
GN	43.2S	12 17--	..		..	..	..	13(1,5) 14(1,5,6)	5	22	90	100	19	17
KG	56.5S	12 17--	..		..	..	..	15(8) 16(5,6) 17(6)	6	--	--	--	18	18
WI	54.2N	13 01--	..		..	..	..	13(7) 14(7)	6	35	165	50	15	02
BD	48.9N	13 01--	..		..	..	..	13(2)	5	24	120	37	15	15
HY	7.6N	15 1430	..		..	..	..	16(6)	5	4	93	30	18	16
NE	55.1N	16 10--	..		..	..	..	17(1,3,4) 18(5)	5	32	99	89	18	18
BD	48.9N	16 14--	..		..	..	..	17(2)	5	24	90	37	19	14
HY	7.6N	27 0300	..		..	..	..	27(3)	4	3	115	11	27	21
CO	64.6N	31 10--	..		..	..	..	01(4)	7	198	1370	860	02	16
NE	55.1N	31 1105	..		..	..	..	31(6) 1(3,4)	5	33	112	160	02	18
BD	48.9N	31 11--	..		..	..	..	31(6)	5	22	103	46	03	07
HY	7.6N	31 0700	..		..	..	..	31(6,7) 01(5)	5	5	120	19	02	23
GN	43.2S	31 10..	..		..	..	..	31(6,7) 01(5)	5	19	80	100	02	16
KG	56.5S	31 09--	..		..	..	..	01(5)	5	--	--	--	02	22

Reports were received from the following observatories:

College Sitka	Newport Witteveen	Fredericksburg Boulder	Tucson San Juan	Honolulu Alibag	Hyderabad Guam	Annamalainagar Huancayo	Trivandrum Hermanus	Gnangara Port-aux-Francais
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SUDDEN COMMENCEMENTS AND SOLAR FLARE EFFECTS

JANUARY 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)

06 1957 A: IK HU; B: SZ PP DU; C: KA (si: A: LG; B: EB SS)

07 2322 A: OT TL FR; B: SI WN FU IK EB HU PP CZ KG; C: NI DB KA SS DU

Sudden impulses found in the magnetograms (si)

07 0027 A: SS HU; B: EB CI PP; C: KA (bps: B: WN)

Solar-flare effects (sfe)

Effects confirmed by ionospheric or solar observations are underlined.

29 1251 - 1327 NI

RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

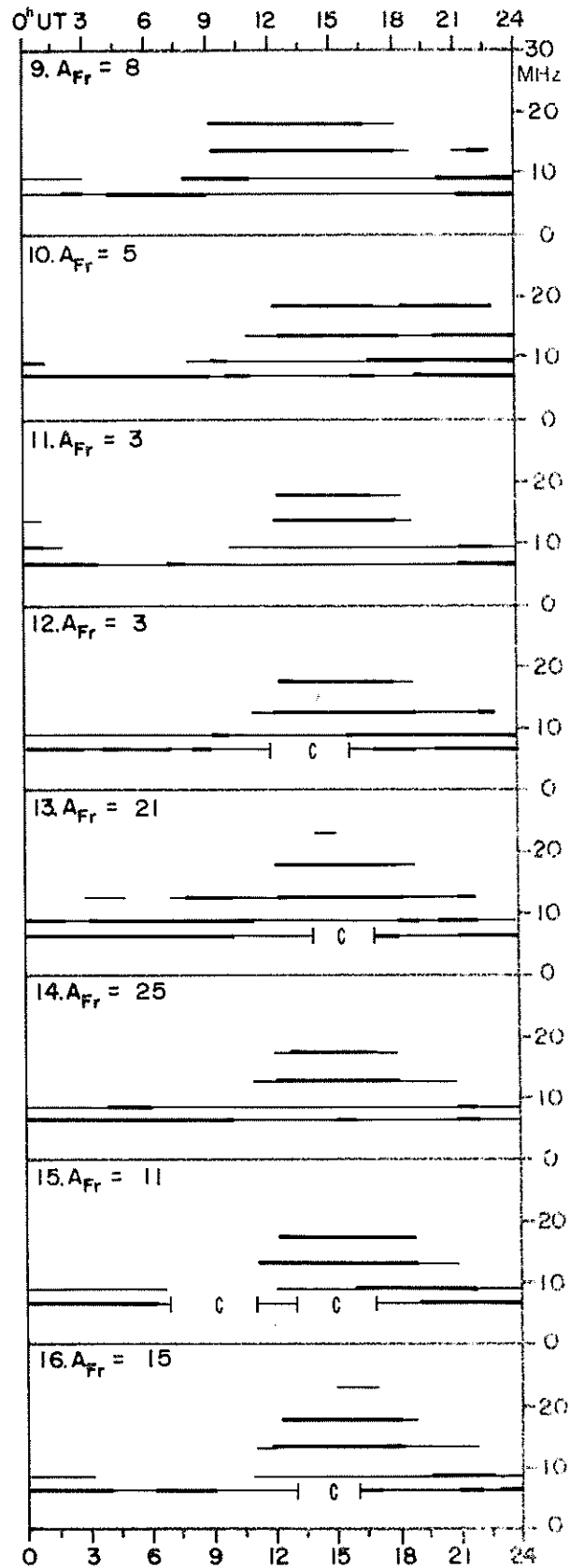
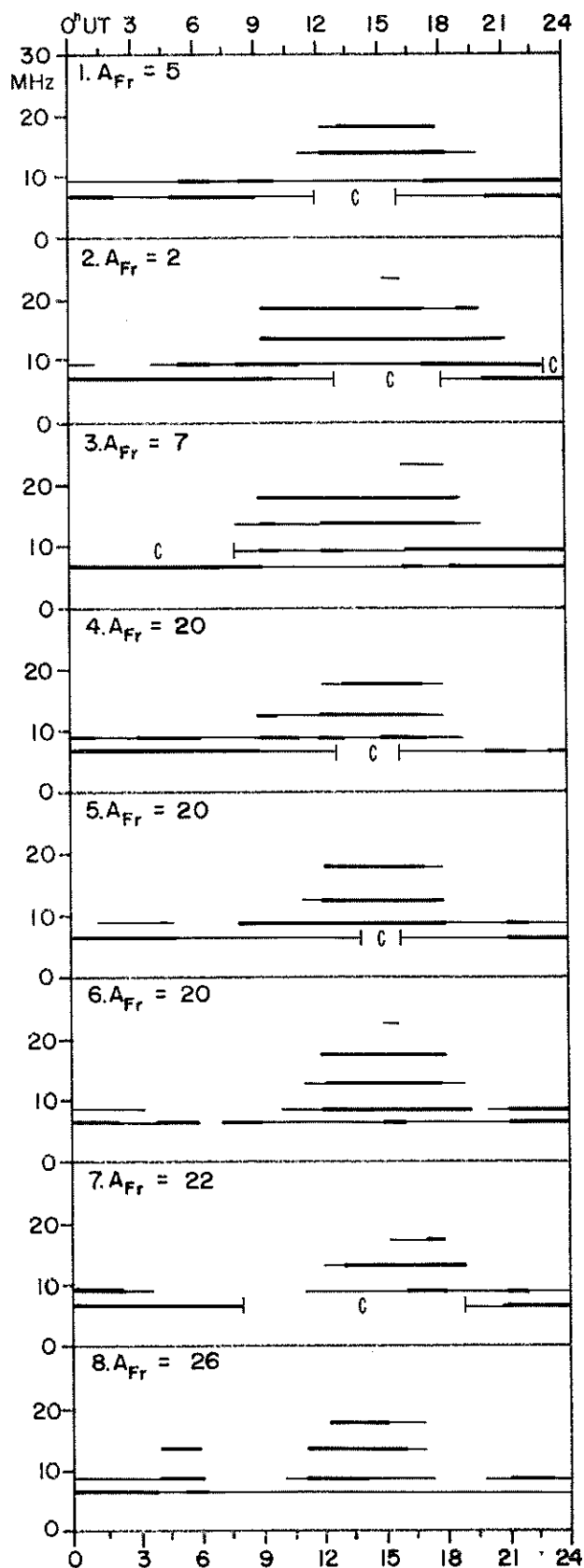
JANUARY 1975

North Atlantic

JAN 1975	WHOLE DAY INDICES NORTH ATLANTIC	ADVANCE FORECASTS (JC- REPORTS) FOR WHOLE DAY	NORTH ATLANTIC								GEOMAGNETIC INDICES	
			6-HOURLY QUALITY FIGURES				SHORT-TERM FORECASTS ISSUED ABOUT ONE HOUR IN ADVANCE OF				K _{FR}	A _{FR}
			00 TO 06	06 TO 12	12 TO 18	18 TO 24	02	08	14	20	HALF DAY (1) (2)	OBSERVED
01	6-	6	60	50	5+	60	5	5	5	5	2 1	5
02	6-	6	6-	6-	60	6-	6	6	6	6	1 1	2
03	6-	6	6-	4+	70	6+	5	6	6	6	2 2	7
04	6-	6	60	4-	7-	6-	5	5	5	4	3 (4)	20
05	50	5	50	3+	50	6+	4	4	5	5	3 (4)	20
06	5+	5	60	4-	6-	50	5	5	5	5	2 (4)	20
07	4+	5	4+	3-	50	5+	5	4	4	5	(4) 2	22
08	4+	5	50	4-	5+	40	4	4	4	4	(4) (4)	26
09	50	4	4+	50	6-	5+	4	4	5	5	3 1	8
10	6-	5	50	50	6+	6-	5	6	5	5	2 0	5
11	6-	5	5+	6-	6+	5+	5	5	6	5	1 1	3
12	6-	5	5+	6-	6+	5+	5	5	5	5	1 1	3
13	5+	5	50	50	6+	50	5	5	5	5	(4) (4)	21
14	5+	5	5+	4+	60	50	4	4	4	4	(4) (4)	25
15	5+	5	5-	40	60	60	4	4	5	5	3 3	11
16	50	5	6-	4-	50	50	4	5	5	5	3 3	15
17	5-	5	50	4-	5+	5+	5	5	4	5	(5) 3	28
18	5+	5	5+	6-	50	5+	5	5	5	5	(4) 3	19
19	50	6	5-	5-	6-	5+	5	5	5	5	3 1	8
20	50	6	50	4+	6-	50	5	5	5	6	2 2	8
21	6-	6	5-	6-	60	6-	5	5	5	6	1 1	4
22	5+	5	50	5-	6-	6-	6	5	6	6	1 2	4
23	6-	6	5+	5+	6+	6-	6	5	5	6	2 3	10
24	60	6	6-	60	6+	60	6	5	5	6	3 1	10
25	6-	6	6-	60	6+	5+	6	6	6	6	1 2	4
26	6-	6	5+	6-	6+	6-	6	6	5	5	2 1	4
27	6-	6	6-	50	6-	60	6	6	5	5	3 3	12
28	6-	6	6-	5+	60	5+	5	5	5	6	3 1	9
29	5+	6	5+	4+	6-	5+	5	5	5	6	2 1	6
30	5+	6	5+	5-	5+	6-	5	5	5	6	2 2	7
31	5+	6	6-	50	6-	5+	5	5	5	5	2 3	11

TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH

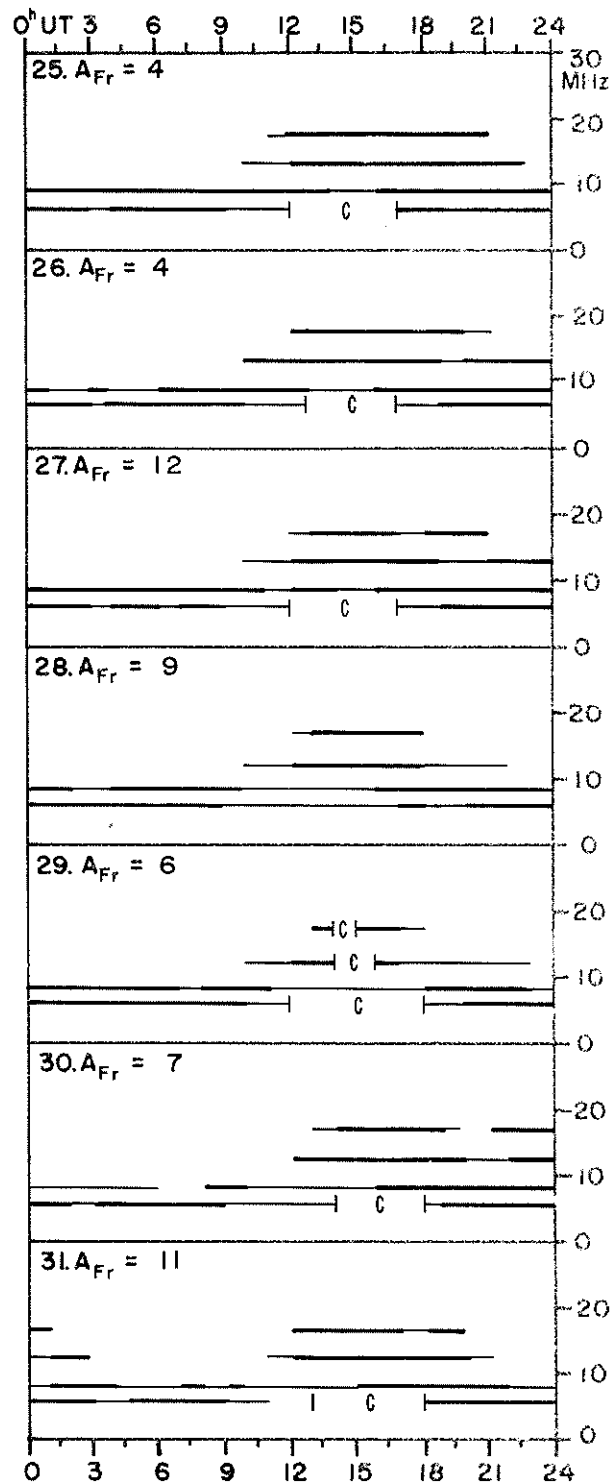
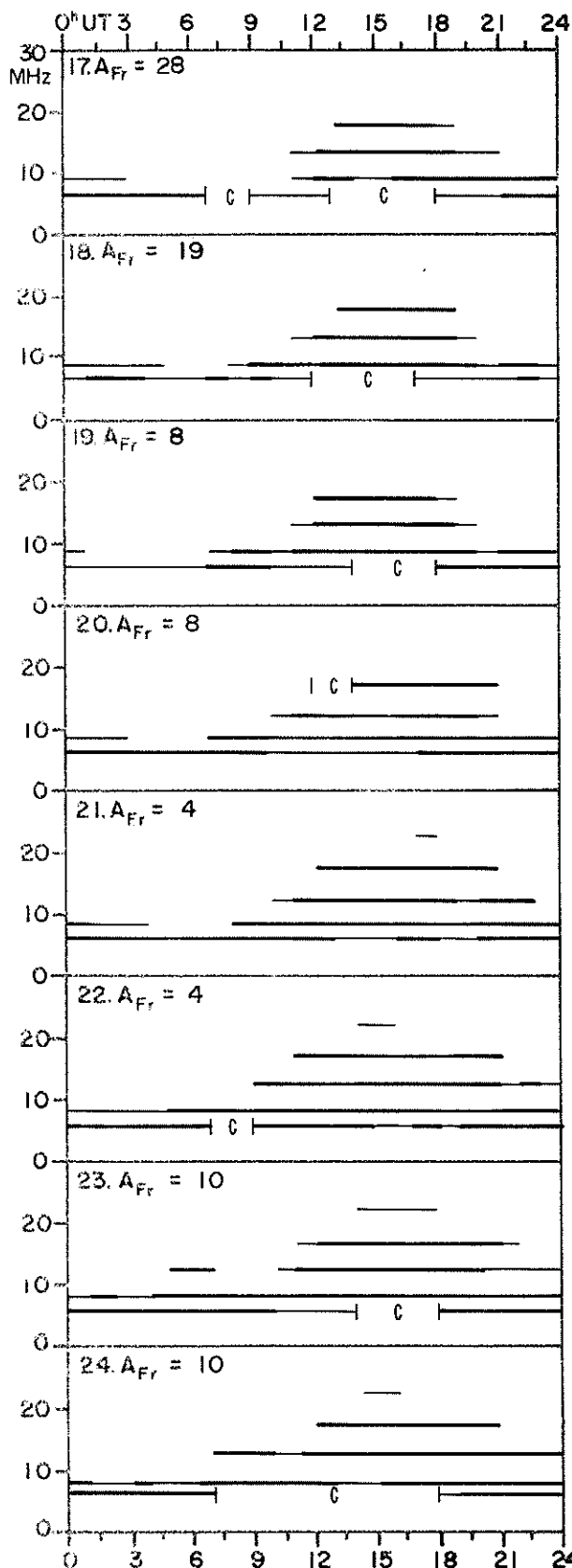
JANUARY 1975



TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH

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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 $1 \mu\text{V/m}$ (transmitter power reduced to 1 kW). Observed field strengths between -12 dB above $1 \mu\text{V/m}$ and -40 dB above $1 \mu\text{V/m}$ are represented by the fine line. Adapted from Observations by Deutsche Bundespost

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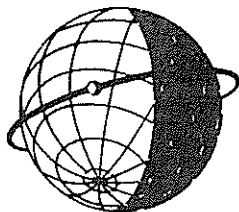
RADIO PROPAGATION QUALITY INDICES

JANUARY 1975

Quality Indices calculated for reception at Lüchow

	TOKYO	HALIFAX	MAURITIUS	CANBERRA	BRACKNELL
1	4.7	5.6	6.9	3.7	11.9
2	4.5	6.6	6.5	3.4	12.2
3	5.5	7.3	6.3	3.7	12.6
4	5.0	5.0	5.5	3.6	9.6
5	4.4	4.7	6.0	3.2	10.1
6	6.2	5.2	5.6	3.7	12.1
7	5.7	4.6	4.4	2.7	10.6
8	5.4	3.3	5.4	3.2	11.1
9	5.3	5.4	5.7	3.2	11.7
10	4.8	6.1	6.3	3.5	12.2
11	6.0	4.5	6.1	3.7	11.6
12	5.3	5.8	6.5	3.5	12.8
13	5.9	6.0	6.3	4.0	11.9
14	5.5	4.6	6.1	3.9	10.6
15	5.0	5.5	5.8	3.5	11.5
16	5.0	4.8	5.2	3.3	11.6
17	4.3	4.7	5.1	3.3	11.6
18	4.4	4.9	5.1	2.9	10.8
19	5.3	6.0	5.7	3.5	11.7
20	6.2	7.0	6.6	3.5	12.4
21	6.4	6.5	6.8	3.8	12.8
22	6.7	7.0	6.5	4.0	12.9
23	6.4	7.2	6.4	3.8	11.9
24	5.7	7.3	6.1	4.0	13.1
25	5.7	6.4	5.6	3.7	12.9
26	6.2	6.9	5.8	3.6	13.1
27	5.9	6.3	5.6	4.0	12.8
28	5.5	5.5	5.8	3.7	11.5
29	5.4	5.2	6.2	3.7	10.8
30	5.4	6.0	6.2	4.3	11.5
31	5.2	5.8	6.0	3.5	11.4

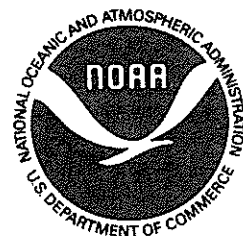
The method of calculation of the radio propagation indices changed in July 1974. An absolute quality figure is calculated for a 24-hour period from Tokyo, Halifax, Mauritius (Africa) and Canberra. The figure 0.0 corresponds to a median field strength of -30 dB above 1 μ V/m (converted into 1 kW and referred 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 1 μ V/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.



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."