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Thomas S. Austin, Director

Solar - Geophysical Data

NO. 376 DECEMBER 1975

Part I (Prompt Reports)

DATA FOR
NOVEMBER 1975
OCTOBER 1975

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

For obtaining bulletins on a data exchange basis, send request to: World Data Center A for Solar-Terrestrial Physics, NOAA, Boulder, Colorado 80302.

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SOLAR - GEOPHYSICAL DATA

No. 376

Issued in two parts

Hope I. Leighton, Editor

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

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Note: A = Part I, B = Part II.

NOTE: A 30 PAGE 140 - PAGE 111, 362A 32 listed under 1974 Aug shows that data for August 1974 were contained in

Solar-Geophysical Data Number 362 - Part I beginning on page 32.

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NOVEMBER 1975 DATA

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ALERT PERIODS

INTERNATIONAL URSIGRAM
AND WORLD DAYS SERVICE

NOVEMBER 1975

PRESTO MESSAGES (THE RAPID REPORT OF MAJOR EVENTS)

BOULDER 03 NOVEMBER 1975 MAGSTORM BEGINS 02/1000Z GRADUAL BEGINNING K = 5 AT 03/0000Z, K = 6 AT 03/0235Z.
BOULDER 21 NOVEMBER 1975 SOFLARE 18/M2 S07W22 21/0610Z GREATER THAN 60 MINUTES.
TENFLARE 200 FLUX UNITS 21/0610Z 52 MINUTES.
BOULDER 22 NOVEMBER 1975 WEAK MAGSTORM IN PROGRESS 22/1445Z. SSC 21/2305Z.
BOULDER 29 NOVEMBER 1975 MAGSTORM BEGINS 29/0656Z.

SUMMARY OF THE GEOALERT WWA MESSAGES

Message serial number	Date of issue	Date of observation	Wolf number	10 cm solar flux	A index	Active Regions				Outstanding events	Forecasts			Alert Situations
						Location	No of Flares	Total	M	X	Date	Location	Desc*	
						Lat-Long						Lat-Long		
305	01	31	00	71	14	-	-	-	-	SPOTNIL	01	SPOTNIL		SOLQUIET MAGALERT MINOR 02/06
306	02	01	00	72	06	-	-	-	-	SPOTNIL	02	SPOTNIL		SOLQUIET MAGALERT MINOR 03/06
307	03	02	12	73	25	-	-	-	-	RECURRENT MINOR MAGNETIC STORM STARTED 02/1000Z	03	SPOTNIL		SOLQUIET MAGALERT MINOR 03/06
308	04	03	13	74	40	S02E42	0	0	0	A GEOMAGNETIC STORM IS IN PROGRESS	04	S02E42	Q	SOLQUIET MAGALERT MINOR 04/06
309	05	04	43	77	32	S02E27 N05W07 N04E81	0 0 0	0 0 0	0 0 0	A GEOMAGNETIC STORM IS IN PROGRESS	05	S02E27 N05W07 N04E81	Q Q Q	SOLQUIET MAGALERT MINOR 05/06
310	06	05	63	80	15	S04E10 N05W19 N04E61 S07E45	0 0 4 0	0 0 0 0	0 0 0 0		06	S04E10 N05W19 N04E61 S07E45	Q Q E Q	SOLQUIET MAGALERT 06 STRATWARM ALERT/ THURSDAY/ SPRING TIME TEMPERATURE REVERSAL ESTABLISHED OVER ANTARCTICA IN MID STRATOSPHERE. CIRCULATION REVERSAL PROGRESSING IN UPPER STRATOSPHERE.
311	07	06	55	82	12	S03E01 N03E48 S06E31	0 4 0	0 0 0	0 0 0		07	S03E01 N03E48 S06E31	Q E Q	SOLQUIET MAGNIL STRATWARM ALERT/ FRIDAY/ SPRING TIME TEMPERATURE REVERSAL ESTABLISHED OVER ANTARCTICA IN MID STRATOSPHERE. CIRCULATION REVERSAL PROGRESSING IN UPPER STRATOSPHERE.
312	08	07	39	82	08	S03W14 N03E37 S06E17	0 0 0	0 0 0	0 0 0		08	S03W14 N03E37 S06E17	Q Q Q	SOLQUIET MAGQUIET STRATWARM ALERT/ SATURDAY/ STRATWARM EXISTS ANTARCTICA. WARM AIR IN LOWER STRATOSPHERE APPROACHING COASTAL REGIONS PROGRESSING POLEWARD.
313	09	08	53	83	05	S05W30 N04E25	0 0	0 0	0 0		09	S05W30 N04E25	Q Q	SOLQUIET MAGQUIET
314	10	09	37	80	18	N03E11	0	0	0		10	N03E11	Q	SOLQUIET MAGQUIET
315	11	10	21	80	10	N04W03	2	0	0		11	N04W03	Q	SOLQUIET MAGQUIET
316	12	11	16	80	12	N04W17	1	0	0		12	N04W17	Q	SOLQUIET MAGQUIET
317	13	12	29	81	09	N04W26 N07E47	0 0	0 0	0 0		13	N04W26 N07E47	Q Q	SOLQUIET MAGQUIET
318	14	13	32	81	04	N04W43 N07E30 S07W79	0 0 0	0 0 0	0 0 0		14	N04W43 N07E30 S07W79	Q Q Q	SOLQUIET MAGQUIET
319	15	14	42	85	02	N04W59 N08E16 S08E63	0 0 1	0 0 0	0 0 0		15	N04W59 N08E16 S08E63	Q Q Q	SOLQUIET MAGQUIET
320	16	15	33	86	02	N07E01 S08E50	0 4	0 0	0 0		16	N07E01 S08E50	Q E	SOLQUIET MAGQUIET
321	17	16	56	90	06	N07W09 S07E38	0 9	0 1	0 0		17	N07W09 S07E38	Q E	SOLQUIET MAGQUIET
322	18	17	64	91	11	N07W24 S06E25	0 4	0 0	0 0		18	N07W24 S06E25	Q Q	SOLQUIET MAGQUIET
323	19	18	53	96	06	N06W39 S06E11	0 3	0 0	0 0		19	N06W40 S06E10	Q E	SOLALERT 19/28 MAGQUIET
324	20	19	54	96	08	N06W51 S06W01	1 2	0 0	0 0		20	S06W51 S06W01	Q E	SOLALERT MAGQUIET
325	21	20	42	93	08	N06W65 S07W15	0 1	0 0	0 0		21	N06W66 S07W16	Q E	SOLALERT MAGQUIET
326	22	21	34	89	16	N06W83 S07W28	0 1	0 1	0 0		22	S06W83 S07W28	Q E	SOLALERT 22/28 MAGALERT 24/25
327	23	22	25	84	36	S07W40	0	0	0		23	S07W40	E	SOLALERT 23/28 MAGALERT 23/24
328	24	23	14	79	07	S07W53	0	0	0		24	S07W53	Q	SOLNIL MAGNIL
329	25	24	12	77	06	S07W65	0	0	0		25	S07W65	Q	SOLQUIET MAGQUIET
330	26	25	12	76	15	S07W81	0	0	0		26	S07W81	Q	SOLQUIET MAGQUIET
331	27	26	00	74	12	-	0	0	0	SPOTNIL	27	-		SOLQUIET MAGQUIET
332	28	27	00	73	03	-	0	0	0	SPOTNIL	28	-		SOLQUIET MAGALERT 29/02
333	29	28	00	72	08	-	0	0	0	SPOTNIL	29	-		SOLQUIET MAGALERT 29/02
334	30	29	00	73	28	-	0	0	0	SPOTNIL	30	-		SOLQUIET MAGALERT 30/02
335	01	30	00	73	27	-	0	0	0	SPOTNIL	01	-		SOLQUIET MAGALERT MINOR 01/02

RELATIVE SUNSPOT NUMBERS

ZURICH, R_z

1974 FINAL		1975 PROVISIONAL										
DAY	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
1	0	30	0	0	0	26	7	23	37	14	15	0
2	0	30	22	7	0	33	11	18	36	16	8	0
3	9	28	28	14	0	29	8	22	46	19	9	7
4	16	19	27	11	0	28	7	22	78	29	10	18
5	17	18	20	14	21	28	7	23	93	25	8	22
6	8	23	26	14	0	20	7	33	104	24	10	27
7	7	32	34	7	15	16	0	23	102	24	9	30
8	0	29	29	18	17	0	0	19	89	23	16	30
9	0	37	22	19	9	0	0	16	83	17	15	30
10	9	31	18	20	13	9	0	23	80	10	8	22
11	21	30	13	20	0	0	9	29	72	10	8	30
12	31	31	18	15	0	0	0	33	45	16	8	24
13	34	32	9	15	0	0	0	49	52	25	16	20
14	33	11	8	17	0	7	0	44	34	17	30	28
15	35	20	8	18	0	7	8	43	31	8	23	27
16	40	17	8	30	0	8	19	39	26	14	19	30
17	36	16	0	30	0	0	17	23	19	14	8	32
18	34	20	0	24	0	8	12	29	16	18	18	37
19	43	20	0	20	0	0	16	36	8	13	16	31
20	40	18	7	16	0	0	0	26	22	30	12	36
21	40	16	8	9	0	0	7	30	23	27	7	36
22	37	16	0	0	0	8	0	27	0	23	0	26
23	28	15	0	0	7	8	12	19	8	0	0	12
24	26	7	12	0	8	7	20	30	8	0	7	10
25	9	7	9	0	7	0	24	33	11	0	0	8
26	8	7	0	13	7	0	33	30	16	0	0	7
27	8	0	0	7	26	7	38	29	18	0	0	0
28	20	7	0	0	19	13	36	26	18	0	0	0
29	16	7	0	0	16	0	23	20	10	0	0	0
30	19	7	7	7	20	0	22	27	21	7	0	0
31	13	0		8		8		34	21		0	
MEAN	20.5	18.7	11.6	12.0	6.2	8.7	11.4	28.3	39.3	14.1	9.0	19.3

1974 yearly mean = 34.5

DAILY SOLAR SOLAR FLUX AT 2800 MHz
OTTAWA AROFLUX ADJUSTED TO 1 A.U., S_n

1974		1975										
DAY	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
1	79.7	78.1	70.8	70.7	70.2	76.3	71.4	78.7	91.6	87.0	76.4	70.4
2	78.7	75.8	72.3	72.4	71.2	81.1	73.0	76.8	95.4	87.9	78.1	71.4
3	76.7	77.1	74.3	73.4	72.2	79.6	70.8	77.1*	97.0*	87.8	78.4	73.0
4	74.7	74.4	75.4	72.8	73.0	79.6	70.4	76.8	104.6	92.8	76.3	75.4
5	73.2	73.7	76.5	71.3	73.7	78.4	69.3	76.8	107.9	94.4	76.1	78.9
6	71.9	73.8	81.1	72.4	73.7	75.9	68.2	76.1	120.0*	94.0	75.1	80.1
7	71.1	75.7	79.4	71.9	74.3	73.6	68.1	74.1	123.2	91.1	74.3	80.5
8	69.6	77.7	78.8	72.5	73.6	71.9	67.5	74.0	123.7	88.5	79.0	80.9
9	69.6	79.9	77.1	73.8	73.4	70.6	67.7	73.3	115.9	84.3	75.4	78.8
10	70.4	80.5	76.7	73.3	72.4	70.1	68.8	73.0	116.5	82.5	74.3	76.9
11	76.2	81.2	74.8	73.0	72.3	69.8	68.1	77.6	107.3	81.1	73.3	78.6
12	77.9	82.4	74.9	74.2	70.8	69.6	68.4	82.7	104.5*	78.2*	74.8	79.9
13	78.0	80.4	73.7	75.6*	70.7	69.1	67.9	88.5*	98.0	75.2	79.0	79.2
14	78.2	77.7	72.0	75.0	69.7	68.7	68.5	89.0	90.9*	74.2	80.0	82.7
15	83.2	77.4	69.7	73.4	69.7	68.0	68.9	85.6	86.0	74.1	80.3	83.7
16	88.3	76.5	71.4	76.0	69.2	68.5	71.4	83.6	82.8	74.3	78.5	87.6
17	88.3	74.7	69.3	75.3	69.6	68.3	70.2	81.2	79.0	74.8	78.9	88.3
18	90.3	75.8	68.3	74.2	68.3	68.7	70.2	82.8	76.4	76.2	79.2	90.8*
19	91.9	74.1	70.0	72.9	67.5	68.9	71.0	81.9	76.7	76.2	78.0	93.0*
20	87.3	73.8	69.5	71.9	68.0	68.6	72.5	83.3	77.2	76.5	77.1	90.9
21	86.0	74.5	68.9	71.2	68.2	69.7	68.7	83.1	80.0	76.7	75.7	86.6
22	84.4*	73.6	68.3	69.3	67.8	70.8	69.9	82.7	78.5	75.3	74.2	81.5
23	83.0	72.7	68.3	67.6	68.7	70.6	72.9	82.0	76.8	76.1	74.3	77.2
24	80.1	71.0	68.6	67.4	69.3	70.6	75.9	79.3	77.0	76.8	72.7*	74.7
25	78.9	70.3	69.4	67.5	71.6	70.2	77.7	79.8	80.6	76.7	72.1	73.7
26	75.8	70.5	68.8	68.6	72.1	69.0	79.8	80.0	81.3	76.7	71.9	71.9
27	74.3	70.1	69.4	67.3	74.4	70.5	81.5	78.5	83.6	75.7	72.1	70.7
28	73.7	70.7	68.6	67.8	74.8	70.6	80.7	76.5	83.3	76.1	71.7	70.4
29	74.1	70.4		69.0	73.2	71.0	79.4	75.5	84.7	75.9	70.8	70.9
30	74.5	70.5		69.0	73.4	71.6	78.8	78.9	86.2	75.8	70.2	70.6
31	76.1	70.1		70.5		71.1		81.9*	86.7		69.9	
MEAN	78.6	75.0	72.4	71.7	71.2	71.6	71.9	79.7	92.7	80.4	75.3	79.1

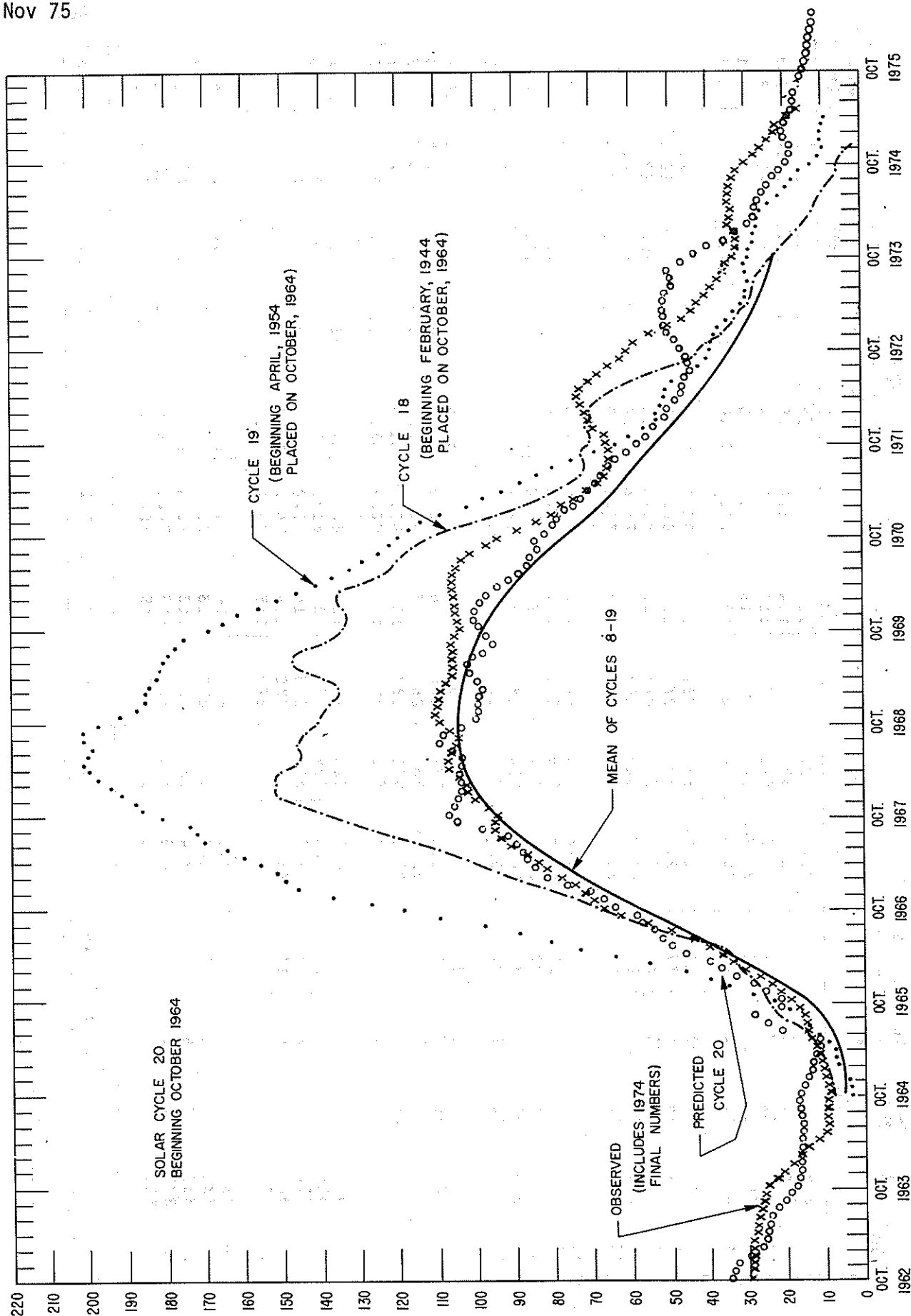
* adjusted for burst

DAILY SOLAR INDICES

NOVEMBER 1975

NOV 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 *		AFORL 15400	AFORL 8800	AFORL 4995	OTTAWA 2800	AFORL 2695	AFORL 1415	AFORL 606	AFORL 410	AFORL 245	
1	305	9	0	0	71.5	527	275	115	70.4	68.8	47.1	36.8	21.4	8.1	
2	306	10	0	0	72.6	524	271	114	71.4	69.5	45.6	34.6	20.4	7.8	
3	307	11	7	4	74.2	521	272	117	73.0	70.4	48.6	37.6	22.5	8.1	
4	308	12	18	22	76.7	526	274	118	75.4	73.0	49.1	38.2	23.5	9.1	
5	309	13	22	22	80.3	526	281	121	78.9	76.4	51.9	40.0	22.8	9.6	
6	310	14	27	29	81.6	530	282	124	80.1	78.8	53.7	39.6	22.5	8.3	
7	311	15	30	37	82.0	529	279	122	80.5	78.2	52.7	39.4	22.3	8.1	
8	312	16	30	30	82.5	529	273	122	80.9	77.9	54.4	40.3	22.4	8.6	
9	313	17	30	24	80.3	528	268	121	78.8	74.7	51.3	37.8	20.2	7.4	
10	314	18	22	18	80.5	526	270	120	78.9	78.0	55.2	40.2	21.4	8.1	
11	315	19	30	17	80.2	522	277	120	78.6	77.3	52.0	39.9	23.2	8.1	
12	316	20	24	19	81.6	525	275	121	79.9	77.9	54.7	41.2	23.5	8.4	
13	317	21	20	27	80.9	524	279	122	79.2	79.1	55.8	40.8	23.5	8.4	
14	318	22	28	31	84.5	524	282	124	82.7	80.3	57.0	40.5	23.4	8.1	
15	319	23	27	27	85.6	520	279	124	83.7	82.8	57.0	40.2	23.7	9.0	
16	320	24	30	33	89.6	533	290	130	87.6	86.6	59.5	42.6	24.2	14.7	
17	321	25	32	34	91.0	527	286	134	88.9	87.2	60.6	42.2	25.5	15.3	
18	322	26	37	34	92.9*	536	287	137	90.8*	90.6	59.7	43.6	23.7	10.7	
19	323	27	31	39	95.3*	532	287	139	93.0*	91.3	57.0	42.2	27.7	22.1	
20	324	1	36	37	93.1	520	280	132	90.9	87.0	58.4	42.6	25.5	16.7	
21	325	2	36	31	88.7	528	280	129	86.6	84.2	58.9	41.1	24.9	16.7	
22	326	3	26	16	83.6	524	277	124	81.5	80.7	54.5	41.1	37.1	80.5	
23	327	4	12	12	79.2	519	273	118	77.2	76.1	52.6	41.1	21.7	11.5	
24	328	5	10	11	76.7	521	270	118	74.7	73.7	51.3	38.2	24.1	8.8	
25	329	6	8	9	75.7	523	272	115	73.7	71.5	49.0	37.6	23.7	8.4	
26	330	7	7	2	73.8	525	274	114	71.9	69.8	46.7	38.0	20.2	8.3	
27	331	8	0	0	72.7	523	272	113	70.7	69.4	46.2	35.3	21.8	8.3	
28	332	9	0	0	72.4	521	270	113	70.4	68.9	45.9	34.7	23.1	8.0	
29	333	10	0	0	72.9	526	272	113	70.9	69.0	45.9	35.8	22.5	8.7	
30	334	11	0	0	72.6	526	279	115	70.6	70.3	47.2	37.3	21.8	8.5	
MEAN			19.3	18.8	80.8	526	277	122	79.1	77.3	52.7	39.4	23.0	12.3	

* Adjusted for burst.



PREDICTED AND OBSERVED SUNSPOT NUMBERS

SMOOTHED OBSERVED AND PREDICTED SUNSPOT NUMBERS
CYCLE 20

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Nov 75

MONTH	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1964										9.6	10.2	11.0
1965	11.7	12.0	12.5	13.6	14.6	15.0	15.5	16.4	17.4	19.7	22.3	24.9
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	70.0	82.2	84.6	87.4	91.3	94.1	95.3	95.3	95.1	97.1	102.6
1968	102.6	102.9	104.7	107.2	107.6	106.6	105.2	104.0	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	77.0	74.4	70.9	68.1	66.7	65.4	64.6	65.0	66.2	66.0	69.4
1972	70.0	71.2	72.4	73.4	72.9	70.5	68.2	65.5	62.2	60.6	58.7	55.1
1973	50.9	46.5	44.2	42.7	40.7	39.1	37.5	36.1	34.4	32.6	31.0	31.5
1974	32.7	34.4	34.0	33.9	34.6	34.5	34.0	33.1	32.1	30.3	27.6	25.2
1975	23.9	22.2	21.3	18.6	16.9	16.8 (2.1)	16.4 (5.)	16.0 (7.1)	15.6 (19.)	15.2 (--)	14.8 (--)	14.4 (--)
1976	13.9 (--)	13.4 (--)	13.0 (--)	12.5 (--)	12.0 (--)							

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

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

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H α SOLAR FLARES

NOVEMBER 1975

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS			REMARKS
	DATE NOV	START	MAX. PHASE	END	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA MIL of DIA	CORR. AREA Sq. Deg.	
ARCE	04	0827E		0907D	N03	E88	1.000		11.0	400	SN	C	0853	48		
ARCE	04	0927E		0950D	S03	E63	.890		9.1	230	SF	C	0944	60	.8	
PALE	04	2050	2050	2106	S 4	E80	.984		10.9	16	SF	2 C		6		DE
PALE	05	0041E	0041U	0047	S 4	E76	.969		10.7	60	SF	2 C		15		DE
MANI	05	0043E	0043U	0047	N04	E79	.983		11.0	40	SF	3 V	0043	20	.5	
ISTA	05	0810E		0830	N02	E71	.948		10.7	200	SN					D
MCMA	05	1458E		1650	N04	E70	.943	13926	10.9	1120	1N	C	1459	100	3.0	BEL
MCMA	05	1710	1712	1716	N03	E69	.937	13926	10.9	6	SN	C	1712	20	.6	D
PALE	05	1710	1712	1721	N 3	E66	.917		10.7	11	SF	2 C		12		OE
PALE	05	1743	1744	1819	N 4	E66	.918		10.7	36	SF	3 C		26		OE
MCMA	05	1743	1744	1749	N03	E69	.937	13926	10.9	6	SB	C	1744	20	.6	DL
BOUL	05	1835	1859	2000	N 3	E67	.924	13926	10.8	85	1N	1 C	1859	128	3.2	
PALE	05	1835	1859	1922D	N 4	E65	.911		10.6	470	SN	2 C		80		DE
MCMA	05	1844	1855	1913	N05	E68	.932	13926	10.9	29	1N	C	1855	60	2.2	EKL
PALE	05	2050	2050	2106	S 4	E80	.984		11.9	16	SF	2 C		6		DE
BOUL	05	2139	2145	2215	N 4	E64	.904	13926	10.7	36	1N	1 C	2145	96	2.2	
CULG	05	2141	2144	2155	N03	E68	.931		11.0	14	SF	P	2144	30	.8	
CULG	06	0115	0118	0142	N02	E65	.909	13926	10.9	27	1N	C	0118	90	2.1	
CULG	06	0504	0507	0517	N02	E62	.887		10.9	13	SF	P	0507	30	.6	
CULG	06	0625	0629	0645	N01	E61	.877	13926	10.8	20	1N	C	0629	100	2.1	
MANI	06	0638E	0638U	0643	N02	E60	.870		10.8	50	SN	3 V	0638	50	.9	F
ATHN	06	0922E	0924	0932	N 3	E57	.845		10.7	100	SN	2 C		48		OE
ATHN	06	0922E	0924	0932	N 3	E57	.845		10.7	100	SN	2 V		48		OE
TEHR	06	0923E	0925U	0933	N 2	E58	.853		10.7	100	SB	3 V		40		OE
ARCE	06	0926	0926	0945D	N04	E59	.864	13926	10.8	190	1N	C	0926	243	4.9	T
RAMY	06	1157	1207	1218	N 4	E56	.837	13926	10.7	21	1N	4 C		216		OE H
TEHR	06	1206E	1208U	1215D	N 3	E57	.845		10.8	90	SF	3 V		80		F H
RAMY	06	1708	1714	1725	N 3	E52	.796		10.6	17	SF	4 C		63		OE
MCMA	06	1709	1712	1718	N02	E55	.825	13926	10.8	9	SF	C	1712	40	.7	E
PALE	09	2318	2320	2326D	N 5	E 8	.242		10.6	80	SF	2 C		18		OE
ATHN	10	0721	0729	0736	N 2	E 6	.182		10.8	15	SN	3 C		80		U H
ATHN	10	0721	0729	0736	N 2	E 6	.182		10.8	15	SN	3 V		80		U H
MANI	10	0723	0728	0732D	N03	E04	.180		10.6	90	SN	3 P	0728	60	.6	FH
CATA	10	0735E	0735	0810	N02	E03	.158		10.5	350	SN	3	0735	84	1.0	
CATA	10	0830	0845	0850	N02	E03	.158		10.6	20	SN	3	0845	84	1.0	
ATHN	10	0842E	0842U	0846	N 2	E 6	.182		10.8	40	SF	3 C		32		F
ATHN	10	0842E	0842U	0846	N 2	E 6	.182		10.8	40	SF	3 V		32		F
RAMY	10	1129	1133	1141	N 2	W 0	.149		10.5	12	SN	4 C		180		UDE
RAMY	10	1428	1433	1447	N 4	W 1	.184		10.5	19	SN	4 C		36		F
BOUL	10	1429	1435	1455	N 4	W 0	.184		10.6	26	SF	1 C	1435	107	1.1	
MANI	11	0111	0116	0124	N03	W06	.197		10.6	13	SN	3 P	0116	90	.9	F
PALE	11	0112	0113	0115D	N 4	W 4	.197		10.8	30	SF	3 V		38		OE
PALE	11	0112	0113	0115D	N 4	W 4	.197		10.8	30	SF	3 C		38		OE
CATA	11	0900E	0900	0910	N02	W10	.228		10.6	100	SF	3	0900	56	.6	
BOUL	12	2024	2025	2032	N 2	W26	.460		10.9	8	SF	2 C	2025	21	.2	
BOUL	12	2035	2039	2052	S12	E 9	.180		13.5	17	SF	2 C	2039	42	.4	
RAMY	12	2038E		2038D	S15	E11	.236		13.7		SF	2 V		143		F
BOUL	12	2144	2146	2156	N 2	W28	.489		10.8	12	SF	2 C	2146	21	.2	
CULG	14	0334	0335	0338	N02	W47	.740		10.6	4	SF	C	0335	15	.2	
CULG	14	0409	0412	0418	S10	E80	.982	13937	20.2	9	1N	P	0412	60	2.4	
MANI	14	0416E	0416U	0427	S07	E75	.963		19.8	110	SN	2 V	0416	80	2.0	
ARCE	14	0807E		0835D	N06	E26	.484		16.3	280	SN	C	0819	45	.5	
RAMY	14	1141	1151	1159	N 6	E23	.443		16.2	18	SF	4 C		63		F
RAMY	14	1148E	1154	1159	N 7	E24	.464		16.3	110	SF	4 V		64		F
CATA	15	0945	0945	1000	N03	W63	.896	13926	10.7	15	1F	1	0945	112	2.5	
ARCE	15	1005E		1005D	N11	W59	.878		11.0		SF	P	1005	37	.7	
RAMY	15	1143E	1145U	1219D	S 6	E58	.844		19.8	360	SN	4 C		189		FOE
CATA	15	1145	1145	1230D	S07	E57	.834	13937	19.8	450	2B	1	1145	505	10.0	
RAMY	15	1146E	1149	1201D	S 8	E61	.870		20.1	150	SN	4 V		175		F
MCMA	15	1654		1720D	S09	E56	.824	13937	19.9	260	SF	C	1706	70	1.3	E
MCMA	15	1842	1843	1846	S09	E57	.833	13937	20.1	4	SF	C	1843	30	.5	D
MCMA	15	1847		1942D	S07	E61	.870	13937	20.4	550	1B	C	1912	90	2.0	EK
RAMY	15	1847	1908	2022	S 5	E61	.872		20.4	95	SN	4 C		135		F S
PALE	15	1848	1938U	2022D	S 8	E60	.861		20.3	940	SF	3 C		36		OE

H α SOLAR FLARES

NOVEMBER 1975

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IM-PORTANCE	OBS. COND. TYPE	MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX.		CENTRAL DISTANCE	MCMA PLAGE REGION	CMP DAY				TIME MIN.	MEAS. AREA	CORR. AREA		
					LAT.	MER. DIST.											MIL of Disk
RAMY	15	1905E	1908	1925D	S 7	E57	.834		20.1	200	SN	4	V	128		F S	
BOUL	15	1907E	1915	1940	S 5	E61	.872		20.4	330	SN	2	C	1915	96	2.0	
BOUL	15	2137	2142	2157	S10	E53	.793		19.9	20	SF	2	C	2142	21	.4	
CULG	15	2308	2316	2324	S09	E53	.793		19.9	16	SF		C	2316	40	.7	
MANI	15	2309	2311	2321	S07	E52	.784		19.9	12	SN	3	V	2311	80	1.3	D
PALE	16	0044	0050	0112	S 8	E50	.761		19.8	28	SF	3	C		26		
PALE	16	0129	0132	0153	S 8	E51	.772		19.9	24	SF	3	C		26		DE
MANI	16	0145E	0145U	0153	S07	E51	.773		19.9	80	SF	3	V	0145	30	.5	
MITK	16	0202	0210	0222D	S07	E51	.773		19.9	200	SN		C	0210	110	1.8	
PALE	16	0208E	0210	0229	S 8	E50	.761		19.8	210	SN	3	C		110		U
MANI	16	0209	0214	0226	S07	E51	.773		19.9	17	SN	3	V	0214	70	1.2	D
PALE	16	0239	0244	0253	S 8	E50	.761		19.9	14	SF	3	C		76		DE
MITK	16	0537	0547	0621D	S07	E47	.727		19.8	440	SB		C	0547	80	1.2	EH
MANI	16	0541E	0551	0617	S07	E49	.750		19.9	360	SB	3	V	0551	120	1.9	ZS
RAMY	16	1112	1117	1121	S 8	E45	.702		19.8	9	SN	4	C		48		DE H
RAMY	16	1115E	1117	1121D	S 9	E44	.690		19.8	60	SN	4	V		42		DE H
BOUL	16	1450	1525	1630	S 7	E44	.690		19.9	100	SF	2	C	1525	74	1.0	
MCMA	16	1450	1454	1520	S08	E43	.677	13937	19.8	30	SB		C	1454	70	1.0	EL
BOUL	16	1740	1744	1800	S 4	E43	.681		20.0	20	SF	2	C	1744	64	.9	
MCMA	16	1744	1745	1749	S05	E45	.704	13937	20.1	5	SF		C	1745	40	.6	E
RAMY	16	2007	2017	2024	S 8	E42	.665		20.0	17	SF	3	C		135		DE
BOUL	16	2008	2016	2055	S 9	E41	.651		19.9	47	SN	1	C	2016	107	1.4	
PALE	16	2014E	2016U	2018D	S 8	E40	.638		19.8	40	SF	2	C		80		DE
RAMY	16	2020E	2022U	2027D	S 7	E43	.678		20.1	70	SF	3	V		70		DE
BOUL	16	2138	2145	2226	N 5	W76	.973		11.2	48	SF	2	C	2145	53	1.7	
PALE	17	0014E	0014U	0020D	S 8	E37	.598		19.8	60	SF	2	C		41		DE
RAMY	17	1149E	1155	1245D	S 7	E30	.497		19.7	600	SN	4	V		128		Z F
ATHN	17	1149E	1154	1240	S 8	E31	.511		19.8	510	SN	4	C		128		Z F
ATHN	17	1149E	1154	1240	S 8	E31	.511		19.8	510	SN	4	V		128		Z F
TEHR	17	1150E	1152U	1210D	S 8	E32	.526		19.9	200	SN	2	V		58		F
CATA	17	1210E	1210	1215D	S05	E28	.468		19.6	50	SN	1		1210	112	1.3	
MCMA	17	1310E		1335	S07	E29	.481	13937	19.7	250	SF		C	1319	50	.6	EH
MCMA	17	1352	1401	1430D	S07	E27	.451	13937	19.6	380	SF		C	1401	60	.7	EH
MCMA	17	1434		1510	S07	E27	.451	13937	19.6	36	SF		C	1445	50	.6	EH
MCMA	17	1645	1648	1657	S07	E33	.541	13937	20.2	12	SN		C	1648	35	.4	DL
MCMA	17	1659	1700	1701	S07	E33	.541	13937	20.2	2	SN		C	1700	35	.4	DL
MCMA	17	1823	1828	1842	S09	E28	.466	13937	19.9	19	SN		C	1828	50	.6	E
MCMA	17	1945		1949D	S09	E26	.436	13937	19.8	40	SN		P	1946	40	.5	E
MANI	18	0752E	0754U	0757D	S08	E19	.323		19.8	50	SN	3	V	0754	50	.6	F
TEHR	18	0754E	0759	0805	S 6	E37	.599		21.1	110	SF	3	V		48		F
ATHN	18	1037	1041	1058	N 7	W30	.545		16.2	21	SN	4	V		64		U H
RAMY	18	1323E	1325	1352D	S 8	E17	.290		19.8	290	SF	4	V		32		FDE
RAMY	18	1323E	1333	1352D	S 8	E17	.290		19.8	290	SN	4	V		32		FDE
MCMA	18	1334E	1335	1520D	S07	E16	.274	13937	19.8	1060	SB		P	1335	110	1.2	E
MCMA	18	1730E		1905D	S08	E16	.274	13937	19.9	950	SF		P	1805	100	1.1	F
MCMA	18	1905	1930	1949D	S06	E20	.340	13937	20.3	440	SB		C	1930	120	1.4	E
PALE	18	1908	1926	2021D	S 8	E18	.307		20.1	730	SN	3	C		140		DE
MANI	19	0328	0332	0350	S09	E09	.159		19.8	22	SN	3	P	0332	110	1.2	F
MANI	19	0451E	0451U	0503D	N04	W45	.722		15.8	120	SF	3	P	0451	30	.4	
ATHN	19	0724E	0724U	0741D	S 9	E 8	.142		19.9	170	SN	1	V		160		U F
ATHN	19	0724E	0724U	0741D	S 9	E 8	.142		19.9	170	SN	1	C		160		U F
MANI	19	0732E	0732U	0734D	S08	E07	.122		19.8	20	SN	3	V	0732	130	1.4	F
ARCE	19	0830E		0851	S07	E06	.104		19.8	210	SN		C	0833	113	1.2	TB
ARCE	19	0848E		0852D	S09	E07	.126		19.9	40	SB		C	0851	37	.4	D
MCMA	19	1344	1349	1356	N05	W48	.759	13934	16.0	12	SF		C	1349	25	.4	OH
MCMA	19	1429	1434	1451	S09	E04	.078	13937	19.9	22	SB		C	1434	50	.5	E
CATA	19	1445E	1445	1450D	S08	E03	.055		19.8	50	SN	1		1445	56	.6	
MCMA	19	1645	1650	1715	S09	E03	.063	13937	19.9	30	SF		C	1650	40	.4	E
MCMA	19	1851	1854	1915	S09	E01	.039	13937	19.9	24	SN		C	1854	60	.6	E
MCMA	19	1932E		1942D	S07	E00	.000	13937	19.8	100	SB		C	1932	20	.2	D
MANI	20	0828	0831	0834	S08	W03	.055		20.1	6	SF	3	P	0831	30	.3	
CATA	20	1450	1450	1505D	S09	W04	.077		20.3	150	SN	1		1450	28	.3	
CULG	20	2324	2326	2330	S08	W12	.207		20.1	6	SF		C	2326	60	.6	L
ATHN	21	0610	0617	0720	S 7	W20	.340	13937	19.8	70	18	3	C		304		UDE
ATHN	21	0610	0617	0720	S 7	W20	.340	13937	19.8	70	18	3	V		304		UDE
ATHN	21	0610	0634	0720	S 7	W20	.340	13937	19.8	70	18	3	C		368		UDE

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NOVEMBER 1975

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS			REMARKS	
	DATE NOV	START	MAX. PHASE	END	APPROX.		CENTRAL DISTANCE	MCMAH PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Mill. of Disk	CORR. AREA Sq. Deg.		
					LAT.	MER. DIST.											
ATHN	21	0610	0634	0720	S 7	W20	.340	13937	19.8	70	18	3	V		368		UDE
TEHR	21	0610E	0621	0704	S 8	W21	.356	13937	19.7	540	18	4	V		388		DE
TEHR	21	0610E	0621	0704	S 8	W21	.356	13937	19.7	540	18	4	C		388		DE
CULG	21	0621E	0622U	0746D	S08	W22	.372	13937	19.6	850	1N		P	0622	240	2.4	F
MANI	21	0629E	0632	0701D	S05	W22	.374	13937	19.6	320	1B	3	P	0632	90	1.0	OZ
ARCE	21	0807E		0822D	S05	W26	.437		19.4	150	SN		C	0807	34	.4	
CATA	21	0810E	0810	0825D	S07	W25	.420		19.5	150	SN	1		0810	84	1.0	
CATA	21	0850E	0850	0940	S07	W25	.420		19.5	500	SN	1		0850	56	.6	
ARCE	21	0930		0930D	S06	W26	.436		19.4		SN		P	0930	24	.3	D
ARCE	22	0947		1005D	S08	W28	.466		20.3	180	SF		P	1005	34	.4	
MCMA	22	1405	1407	1410	S05	W34	.557	13937	20.0	5	SF		C	1407	50	.6	E
ARCE	23	0950	0955	0957	S04	W44	.693		20.1	7	SF		C	0955	31	.4	
ARCE	24	0855	0855	0855	S10	W67	.915		19.3		SF		C	0855	9		D

"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.

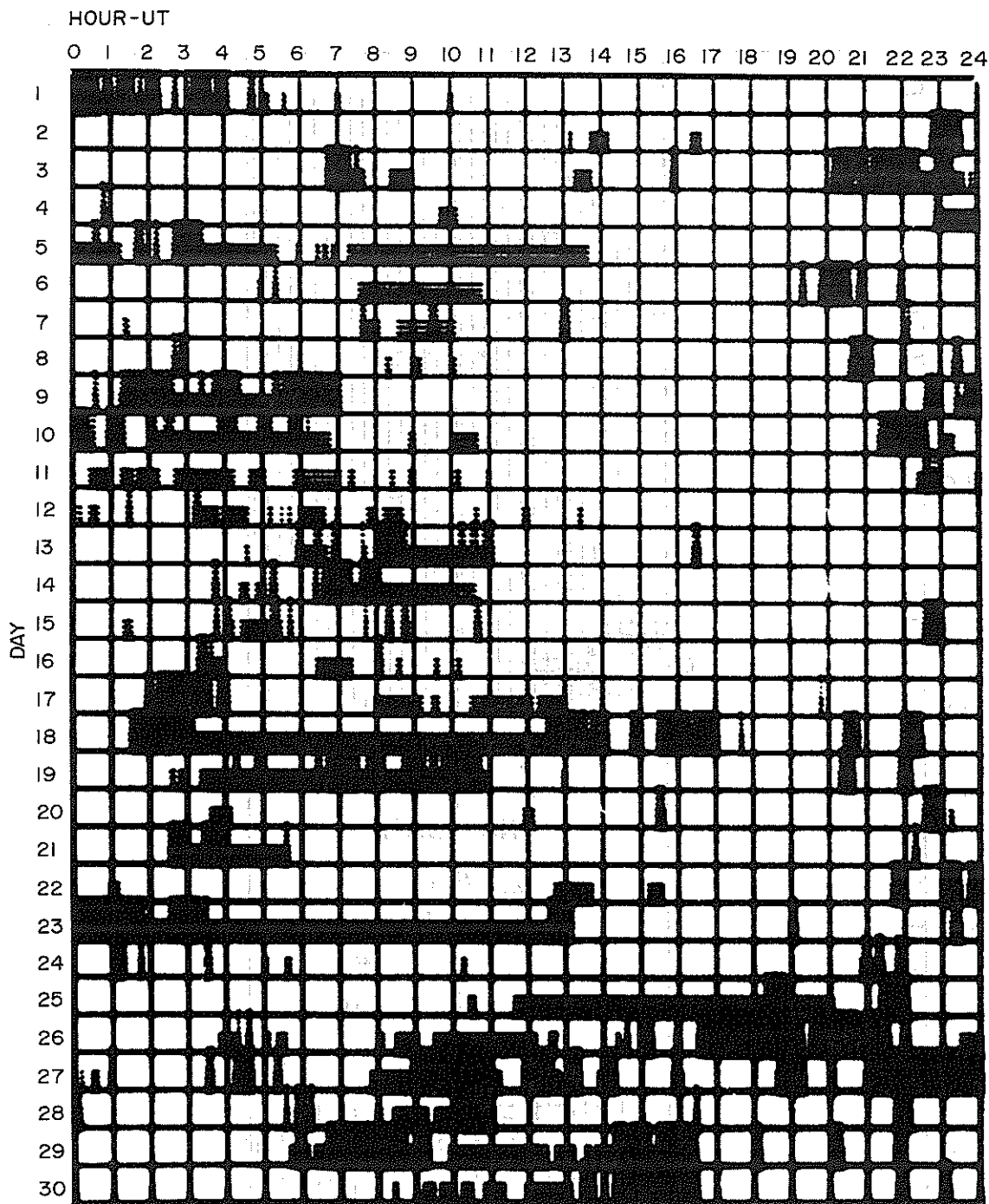
W = Great increase in area after time of maximum intensity.

X = Unusually wide H α line.

Y = System of loop-type prominences.

Z = Major sunspot umbra covered by flare.

INTERVALS OF NO FLARE PATROL OBSERVATION
FOR PRECEDING SOLAR FLARE TABLE
NOVEMBER 1975



Observatories included in total patrol:

Arcetri	Catania	Hurbanovo	McMath-Hulbert	Ramey
Athens	Culgoora	Istanboul	Mitaka	Tehran
Boulder	Herstmonceux	Manila	Palehua	Upice
				Wendelstein

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

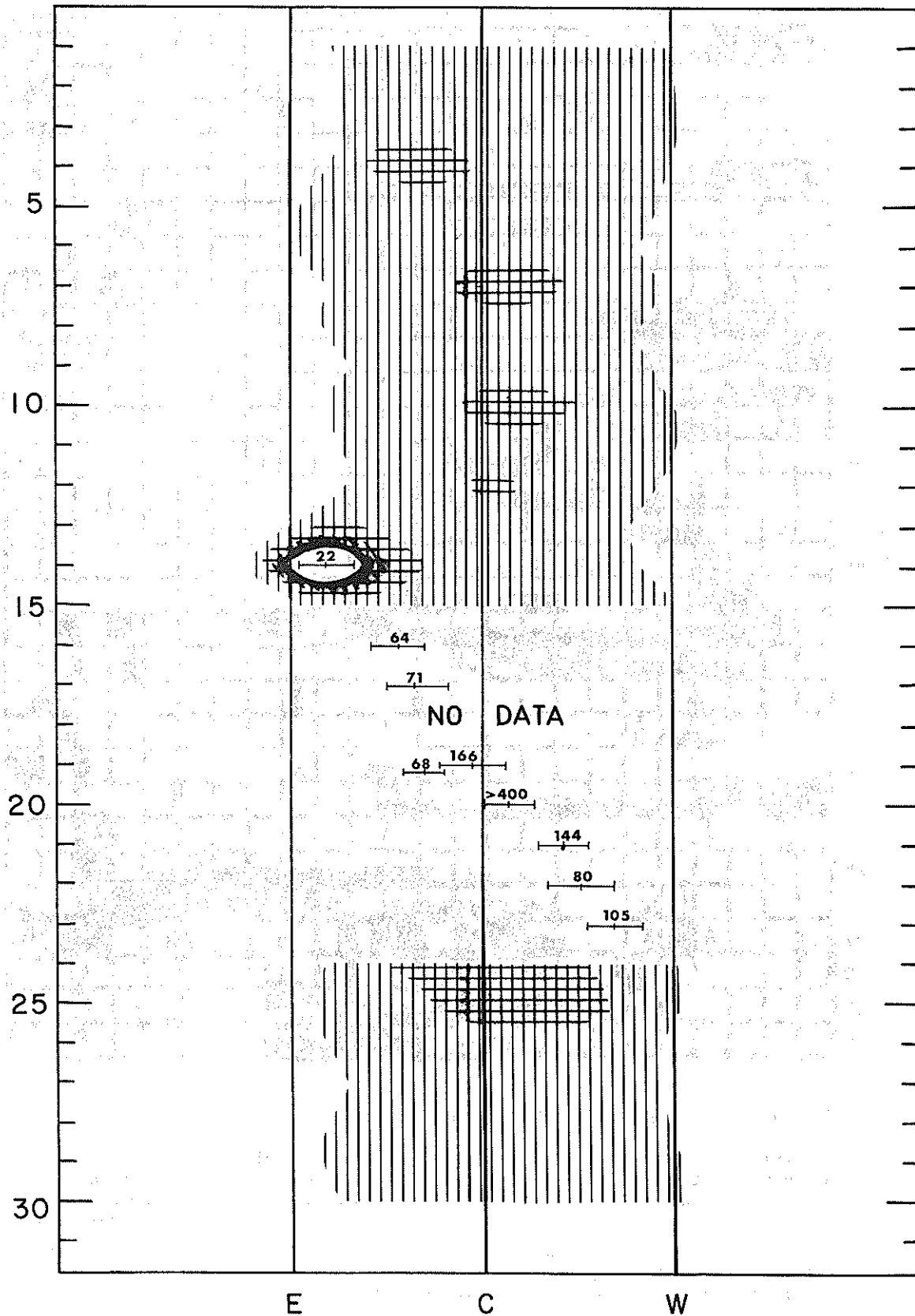
14
Nov 75

SOLAR RADIO EMISSION INTERFEROMETRIC OBSERVATION

NOVEMBER 1975

Nançay

169 MHz



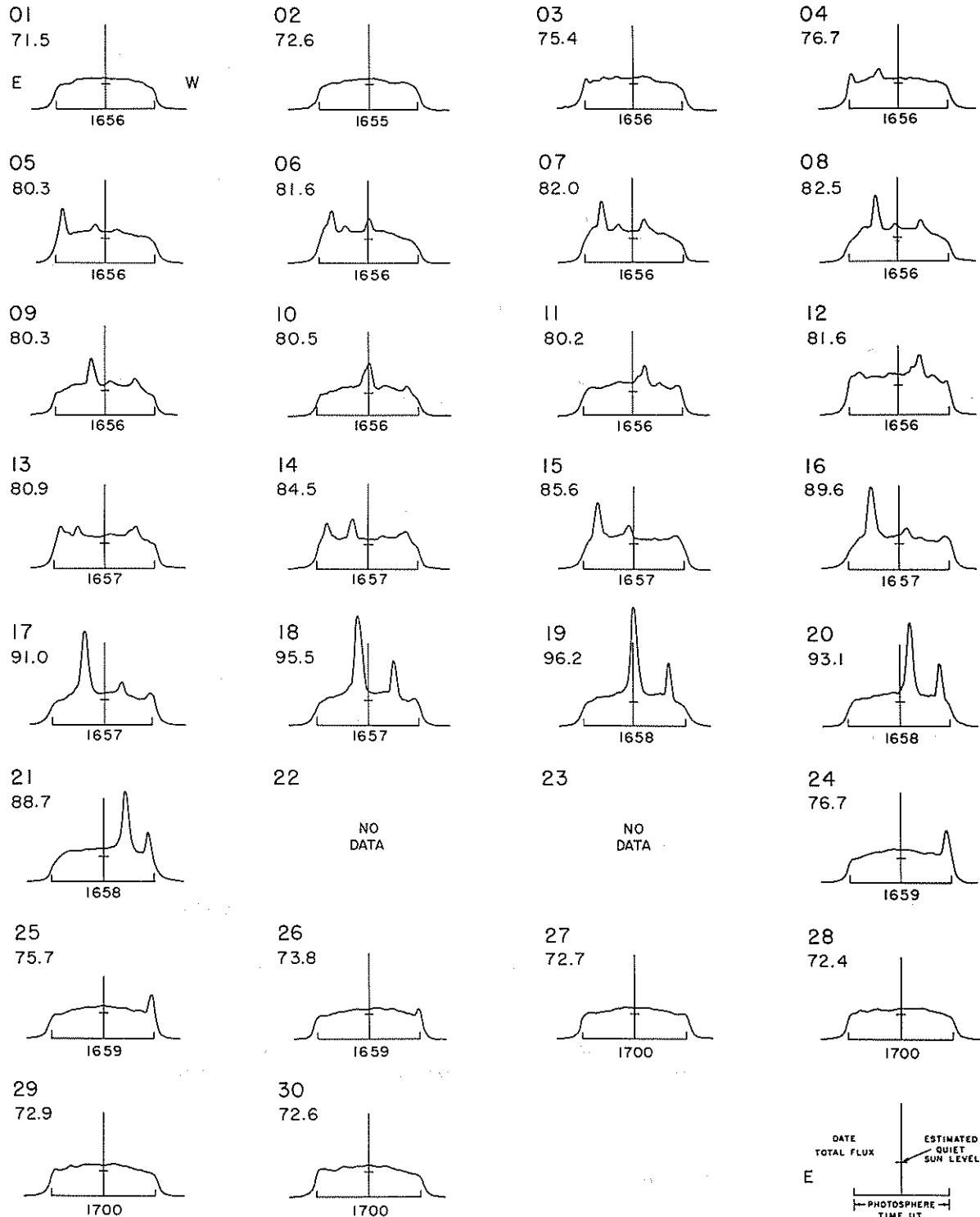
EAST - WEST SOLAR SCANS

November 1975

ALGONQUIN RADIO OBSERVATORY
CANADA

10.7 cm.

Fan Beam with 1.5 minutes of arc
E - W Resolution



16
Nov 75

EAST-WEST SOLAR SCANS

NOVEMBER 1975

Fleurs, Australia

ESTIMATED QUIET SUN LEVEL

COLD SKY LEVEL

01

NO DATA

02

NO DATA

03

E 0003 UT W

03

E 2358 UT W

05

NO DATA

06

E 0007 UT W

07

E 0002 UT W

08

NO DATA

09

NO DATA

10

E 0002 UT W

11

E 0002 UT W

12

E 0002 UT W

13

E 0002 UT W

14

E 0002 UT W

15

NO DATA

16

NO DATA

17

E 0002 UT W

18

E 0002 UT W

19

E 0207 UT W

20

NO DATA

21

E 0002 UT W

22

NO DATA

23

NO DATA

24

E 0002 UT W

25

E 0003 UT W

26

E 0003 UT W

27

E 0003 UT W

28

E 0003 UT W

29

NO DATA

30

NO DATA

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

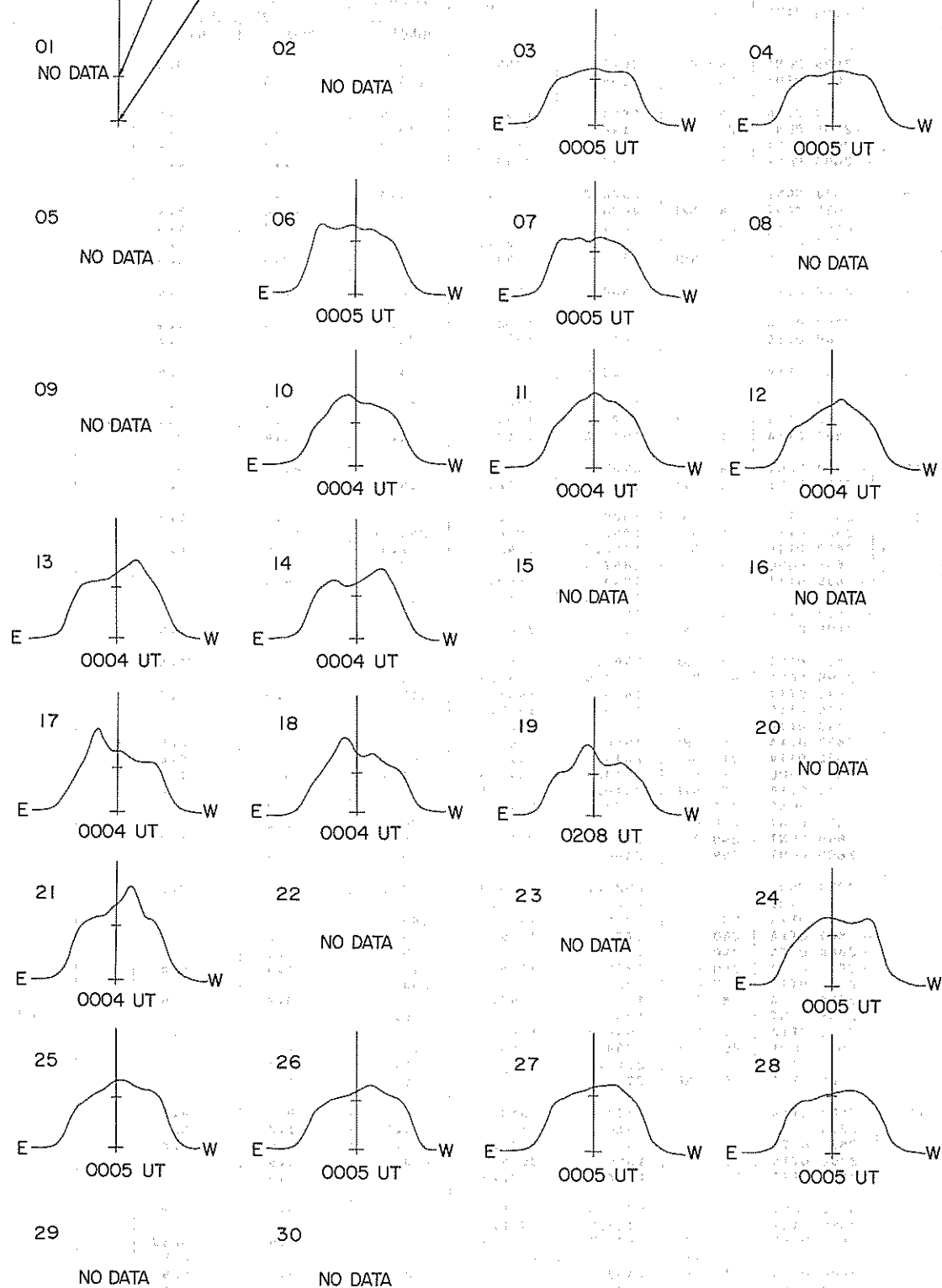
EAST-WEST SOLAR SCANS

NOVEMBER 1975

Fleurs, Australia

ESTIMATED QUIET SUN LEVEL
COLD SKY LEVEL

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



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Nov 75

SOLAR RADIO EMISSION SELECTED FIXED FREQUENCY EVENTS

NOVEMBER 1975

	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{22} \text{ Wm}^{-2} \text{ Hz}^{-1}$		INT	REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
4	2695 PENT	240 R	2010	2054	44	1.6	0.8		
	2695 PENT	24P R	2054		120 0	1.6			
5	2800 OTTA	8 S	1853	1853.2	0.5	3	1.5		
	2695 PENT	21 GRF	2140	2150	35	1.6	0.8		
	2695 PENT	8 S	2141.2	2141.9	0.8	0.8	0.4		
	2695 PENT	1 S	2143	2143.2	1	1.2	0.6		
6	8800 MANI	1 S	0626.2	0627.7	3.8	7.3	2.4		
	2695 MANI	4 S/F	0626.2	0627.7	5	24.2	9.4		
	2800 OTTA	23 GRF	1700	1715	70	1.2	0.6		
	2800 OTTA	1 S	1703.8	1704.2	1	1	0.5		
	2800 OTTA	20 GRF	1814	1840	40	0.6	0.3		
7	2800 OTTA	32 ABS	1430	1442	46	-1.6	-0.8		
8	2800 OTTA	1 S	1851.7	1852	2.5	0.8	0.4		
	2800 OTTA	20 GRF	1919	1922	23	1	0.8		
9	2800 OTTA	1 S	1922.9	1924.5	3	0.8	0.4		
10	2800 OTTA	20 GRF	1300	1345	80	2.4	1.4		
	2800 OTTA	20 GRF	1425	1435	75	2.8	1.4		
	2800 OTTA	1 S	1911.8	1912	1.5	1.4	0.7		
14	8800 MANI	4 S/F	0405	0410.2	14	340	95		
	2695 MANI	4 S/F	0405	0411.5	14.8	129	42.5		
15	2800 OTTA	20 GRF	1629	1710	75	0.8	0.4		
	2800 OTTA	21 GRF	1840	1937	240 0	11			
	2800 OTTA	1 S	1842.5	1842.9	1.5	2.6	0.9		
	2695 BOUL	45 C	1847.5	1848	2.5	2	1		
	2800 OTTA	45 C	1848	1849.5	7	4.6	2		
	2695 BOUL	40 F	1912.5	1914	25.5	4	1		
	2800 OTTA	40 F	1913	1914	22	5.4			
	2695 PENT	20 GRF	2140	2147	20	1.2	0.6		
16	8800 MANI	20 GRF	0540.2	0544.5	22.3	49.7	21.6		
	2695 MANI	46 C	0538.4	0544.4	26.2	152	47		
	2800 OTTA	21 GRF	1435	1455	110	4.6	2.3		
	2800 OTTA	1 S	1455	1455.2	2	3	1.5		
	2800 OTTA	20 GRF	1720	1722	18	1	0.5		
	2800 OTTA	20 GRF	1900	1907	28	1	0.5		
	2800 OTTA	21 GRF	2010	2018	40	1.6	0.8		
	2695 BOUL	1 S	2013.5	2014.5	1.5	3	1		
	2800 OTTA	2 S/F	2014.2	2015.1	1	3	1.7		
	2695 PENT	240 R	2050	2118	18	1.2	0.6		
	2695 PENT	24P R	2118		28	1.2			
	2695 PENT	240 R	2136	2144	8	2.4	1.2		
	2695 PENT	24P R	2144		60 0	2.4			
17	8800 MANI	1 S	0521.1	0523.9	8.9	5	2.5		NULL
	2695 MANI	1 S	0521.1	0523.8	8.9	2.5	.6		
	2800 OTTA	20 GRF	1300 E	1410	185 0	6.6			
	2800 OTTA	240 R	1700	1715	15	1.2	0.6		
	2800 OTTA	24P R	1715		55	1.2			
	2800 OTTA	240 R	1810	1825	15	1.6	0.8		
	2800 OTTA	24P R	1825		240 0	1.6			
	2800 OTTA	8 S	1843	1843.1	0.5	3.2	1.6		
	2695 PENT		1843	1843.1	0.5				
	2800 OTTA	1 S	1944.2	1945	5	1.2	0.6		
	2695 PENT	20 GRF	2000	2005	15	1	0.5		
	2800 OTTA	1 S	2018.9	2019	1.5	0.8	0.4		
	2800 OTTA	20 GRF	2025	2040	30	1	0.5		
18	2800 OTTA	23 GRF	1309	1359	290	9	4.5		
	2800 OTTA	8 S	1314	1314.3	0.5	1.2	0.6		
	2800 OTTA	1 S	1330	1330.5	1.5	1.6	0.8		
	2800 OTTA	23 GRF	1855	2028	220 0	10.6			
	2800 OTTA	40 F	1907	1921.5	23	2.6			
19	8800 MANI	1 S	0329.5	0331.2	3.2	8.8	2.9		RFI
	2695 MANI	1 S	0328.9	0331.2	5.3	6.9	3.2		
	2695 MANI	4 S/F	0721.7U	0724.5	6 U	12.6	6.3U		
	2800 OTTA	21 GRF	1325	1345	92	1	0.5		
	2800 OTTA	2 S/F	1339	1340	2	0.8	0.4		
	2800 OTTA	22 GRF	1600	1630	80	2.2	1.1		
	2800 OTTA	27A RF	1727		183	1.8	1.4		
	2800 OTTA	24 R	1727	1755	28	1.8	0.9		
	2800 OTTA	24P R	1755		115	1.8			
	2800 OTTA	21 GRF	1845	1858	25	1.8	0.9		
	2800 OTTA	8 S	1847.8	1847.8	0.1E	1.7			
	2695 PENT	20 GRF	1850	1851	14	2	0.9		
	2800 OTTA	46F C	1849	1849.9	4.5	10.6	2.4		

SOLAR RADIO EMISSION SELECTED FIXED FREQUENCY EVENTS

NOVEMBER 1975

	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ Wm}^{-2} \text{ Hz}^{-1}$		INT	REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
20	2800 OTTA	26 FAL	1950	2130	40	-1.8	-0.9		
	2695 PENT	1 S	2101.5	2103	10	0.8	0.4		
	2800 OTTA	27F RF	1305		210	2	1.7		
	2800 OTTA	24 R	1305	1340	35	2	1		
	2800 OTTA	24P R	1340		140	2			
	2800 OTTA	26 FAL	1600	1635	35	-2	-1		
	2800 OTTA	27F RF	1700		130	1.2	0.8		
	2800 OTTA	24 R	1700	1750	50	1.2	0.6		
	2800 OTTA	24P R	1750		50	1.2			
	2800 OTTA	26 FAL	1840	1910	30	-1.2	-0.6		
21	2800 OTTA	20 GRF	1935	1950	35	1.6	0.8		
	2800 OTTA	20 GRF	2045	2050	15	0.8	0.4		
	2695 MANI	28 PRE	0605.8	0614	8.7	16	5.7		
	2695 MANI	8 S	0615.5	0615.9	.6	95	35.7		
	8400 MANI	4 S/F	0607.9	0619.1	57.9	89	47.4		
	2695 MANI	46 C	0614.5	0618.8	49.4	190	95		
	8800 MANI	29 PBI	0705.8	0705.8	47	25.3	15.8		
	2695 MANI	29 PBI	0703.9	0703.9	55.1	30.2	11.4		
23	2695 BOUL	45 C	1817	1819.5	9.5	65	23		
	2800 OTTA	1 S	1441	1442	3	0.8	0.4		

Observatories:

BOUL = Boulder

MANI = Manila

OTTA = Ottawa ARO

PENT = Penticton

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 +

Note: The report from Sagamore Hill is not included here because of late arrival of data.

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Nov 75

SOLAR WIND
Interplanetary Scintillations
NOVEMBER 1975

UCSD 74MHZ 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	334 62						425 107	
2	372 24					366 24	502 179	366 35
3	365 23			496 170			750 366	367 25
4	319 47					633 98	661 260	
5	386 33					711 *	935 377	
6	318 127	281 77				824 209	818 227	
7							721 281	
8						511 135	641 198	
9		717 212			534 147			
10	431 *		446 *			475 *		367 18
11	329 *	440 *		453 *		601 *	674 *	438 *
13		282 120					442 70	
14							376 *	
15						595 118	429 89	
16							558 153	
17	379 34	519 78						
18	363 48	445 46	482 *					285 92
19	363 60	463 25		790 313				239 20
21							596 122	274 119
22								323 34
23	335 46				507 63			
24	303 *							
25	359 88						468 108	
26						622 121		
27							545 129	
28		418 92						
29	385 18	382 31				625 84	575 75	413 13
30	306 8			354 *				529 18

NOVEMBER 5					15					25				
	UT	LAT	DIST	DL ON		UT	LAT	DIST	DL ON		UT	LAT	DIST	DL ON
3C48	7.	8.	1.28	-1.		6.	8.	1.27	-3.		6.	7.	1.26	-5.
3C144	11.	2.	1.24	9.		10.	1.	1.27	7.		10.	0.	1.29	5.
3C147	10.	9.	1.22	9.		9.	8.	1.24	8.		9.	6.	1.26	6.
3C161	12.	-4.	1.18	10.		12.	-5.	1.21	8.		11.	-6.	1.23	6.
3C237	16.	0.	0.95	17.		15.	0.	1.00	17.		15.	-1.	1.06	16.
3C273	18.	3.	0.61	52.		17.	1.	0.74	42.		17.	0.	0.85	32.
3C298	20.	47.	0.39	59.		19.	31.	0.50	56.		18.	20.	0.62	50.
3C459	4.	6.	1.21	-11.		4.	6.	1.17	-13.		3.	5.	1.13	-14.

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

SOLAR X-RAYS BY SATELLITE
SMS GOES

NOVEMBER 1975

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

MO 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
11/ 1	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	M	B	B	B	B	B
11/ 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
11/ 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
11/ 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
11/ 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
11/ 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
11/ 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
11/ 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
11/ 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
11/10	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
11/11	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
11/12	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
11/13	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
11/14	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
11/15	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
11/16	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
11/17	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
11/18	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
11/19	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
11/20	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
11/21	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
11/22	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
11/23	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
11/24	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
11/25	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
11/26	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
11/27	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
11/28	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
11/29	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
11/30	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

Note: "B" indicates the flux was below the cut-off levels.
 "M" denotes periods of missing data.

SOLAR X-RAYS BY SATELLITE SMS GOES

NOVEMBER 1975

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

MO	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
11/	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
11/	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
11/	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
11/	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
11/	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
11/	6	B	0.01	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
11/	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
11/	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
11/	9	B	B	B	B	B	B	0.07	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
11/	10	B	B	B	B	B	B	0.05	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
11/	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
11/	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
11/	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
11/	14	B	B	B	B	B	B	B	B	0.02	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
11/	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
11/	16	B	B	B	B	B	B	0.03	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
11/	17	B	B	B	B	B	B	0.01	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
11/	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
11/	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
11/	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
11/	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
11/	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
11/	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
11/	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
11/	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
11/	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
11/	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
11/	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
11/	29	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/	30	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

Note: "B" indicates the flux was below the cut-off levels.
"M" denotes periods of missing data.

23
Nov 75

SOLAR X-RAYS BY SATELLITE

SMS GOES

NOVEMBER 1975

DAY	BEGIN TIME	.5-4A Wm ⁻²	1-8A Wm ⁻²	MAX TIME	.5-4A Wm ⁻²	1-8A Wm ⁻²	1/2P TIME	.5-4A Wm ⁻²	1-8A Wm ⁻²
5	1844	0.0E+00	4.0E-08	1904	2.6E-07	4.7E-06	1910	7.1E-08	2.4E-06
6	0113	8.6E-10	3.6E-07	0120	4.8E-07	6.1E-06	0124	9.2E-08	3.3E-06
6	0918	1.5E-10	1.9E-07	0924	2.7E-07	3.9E-06	0928	6.4E-08	2.0E-06
14	0404	0.0E+00	1.4E-07	0412	7.3E-07	7.2E-06	0420	1.4E-07	3.6E-06
15	1139	0.0E+00	1.0E-07	1147	2.2E-07	4.1E-06	1156	4.3E-08	2.1E-06
15	1844	5.0E-09	2.4E-07	1956	7.5E-07	4.1E-06	2042	4.3E-08	2.2E-06
16	0536	9.9E-09	4.5E-07	0551	1.0E-06	1.1E-05	0610	2.5E-07	5.5E-06
16	1113	3.6E-09	4.4E-07	1119	3.2E-07	4.1E-06	1121	1.7E-08	2.3E-06
16	2146	8.6E-08	2.3E-06	2202	7.1E-08	3.3E-06	2204	6.7E-08	2.8E-06
21	0608	4.2E-09	3.3E-07	0629	2.0E-06	2.3E-05	0656	5.6E-07	1.2E-05

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				
1901	JUL 23	TA	A*	TA	A*	T	A*	T	A	A	A	A	A	A	T	A*	TAT	T	T	A	A	A	A	A	A	A	A	A	TA	-		
1902	AUG 19	A	-	A	-	A	A	A	A	A	A	A	A	A	A	T	T	A	A	A	A	A	T	T	T	T	T	T	A	A	-	
1903	SEP 15	A	A	TA	T*	A	A	A	A	A	ATA	A	A	A	T	A	A	A	A	-	A	-	A	-	A	-	A	-	A	-	-	
1904	OCT 12	T	T	A	-	TA	-	A	A*	A	T	A	T	TA	T	A	A	A	A	T	TA	TA	AT	A	TA	A	A	A	A	A	-	
1905	NOV 8	A	A	T	A	ATA	AT	AT	TA	T	AT	T	AT	A	A	A	A	A	A*	TA	AT	A	A	A	A	A	A	A	AT	AT	T	
1906	DEC 5	T	T	T	TA	AT	T	-	T	T	T	T	A	AT	A	-	T	AT	TA	A	T	T	T	T	T	T	T	T	A	A	-	
1907	1973 JAN 1	T	T	T	T	T	T	TA	T	T	T	AT	-	A	AT	A	T	A	-	AT	-	A	TA	A	A	A	A	A	A	A	-	
1908	JAN 28	T	T	A	A	T	TA	AT	T	T	T	T	A	T	A	A	A	TA	A	A	A	A	A	A	A	A	A	A	A	A	-	
1909	FEB 24	AT	T	AT	AT	TA	AT	T	T	-	AT	TA	AT	A	T	A	A	A	A	A	A	AT	TA	A	A	A	AT	TA	A	A	-	
1910	MAR 23	T	T	T	T	T	T	A	T	T	T	T	T	TA	AT	A	T	TA	A	A	A	A	A	A	AT	AT	T	-	T	T	T	-
1911	APR 19	T	T	T	AT	T	A	T	T	T	AT	A	A	AT	T	T	T	TA	A	A	A	AT	A	A	A	A	A	A	A	A	-	
1912	MAY 16	T	T	T	T	T	T	AT	-	T	-	TA	T	A	A	AT	AT	T	TA	A	A	-	A	A	A	-	A	A	A	A	-	
1913	JUN 12	TA	T*	-	T*	-	T	T	TA	T*	A	A	T	T	-	T*	T	T	T	T	AT	TA	A	A	A	A	A	A	A	A	-	
1914	JUL 9	T	T	T	A	A	T	T	-	TA	T	T*	A	A	AT*	-	A	A	T	T	A	TA	-	T	T	T	T	A	A	A	-	
1915	AUG 5	T	T	A	A	A	T	AT	A	A	A	T	T	T	T	T	AT*	T	AT	T	A	AT	T	T	A	A	A	AT	A	A	-	
1916	SEP 1	T	TA	T	T	T	A	AT	A	A	TA	A	A	A	A	A	A	A	A	A	T	T	T	T	T	A	T	T	A	A	-	
1917	SEP 28	A	A*	TA	A	T	AT	T	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1918	OCT 25	T	T	T	A	TA	A	A	T	A	T	T*	A	T	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1919	NOV 21	A	A	T	T	-	A	A	A	AT	A	T	A	T*	TA	A	A	A	A	A	A	T	TA	T	T	T	T	T	T	T	-	
1920	DEC 18	T	T	AT	A	T	A	T	A	TA	A	T	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1921	1974 JAN 14	T	A	A	T	-	T	A	A	T	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1922	FEB 10	A	-	A	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1923	MAR 9	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1924	APR 5	A	A	A	A	-	TA	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1925	MAY 2	-	-	A	A	A	A	TA	T	A	AT	A	AT	AT	A	T*	TA	A	A	TA	T*	A	A	AT	AT	T	T	T	T	T	-	
1926	MAY 29	T	T	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1927	JUN 25	TA	TA	A	-	A	-	A	A	T	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1928	JUL 22	T	T	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	-	
1929	AUG 18	AT	-	A	-	A	-	A	-	A	-	A	-	A	-	AT	-	TA	T	T	T	T	T	T	T	T	T	T	T	T	-	
1930	SEP 14	AT	T	T	TA	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	-	
1931	OCT 11	T	T	TA	T	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1932	NOV 7	TA	-	T	-	A	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1933	DEC 4	T	T	TA	T	A	TA	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	-	
1934	DEC 31	T	A	T	T	T	A	TA	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	-	
1935	1975 JAN 27	T	T	T	A	T	AT	T	A	A	T	TA	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	-	
1936	FEB 23	TA	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1937	MAR 22	A	A	A	A	TA	T	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1938	APR 18	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1939	MAY 15	T	T	A	A	TA	TA	A	A	A	T	TA	TA	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1940	JUN 11	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1941	JUL 8	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1942	AUG 4	A	A	A	A	T	A	A	T	AT	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1943	AUG 31	A	A	A	TA	A	T	A	A	A	TA	A	T	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1944	SEP 27	A	A	T	A	A	A	A	T	T	A	T	-	A	-	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1945	OCT 24	T	T	T	T	T	T	TA	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	-	
1946	NOV 20	A	T	A	A	T	TA	T	A	A	T	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.

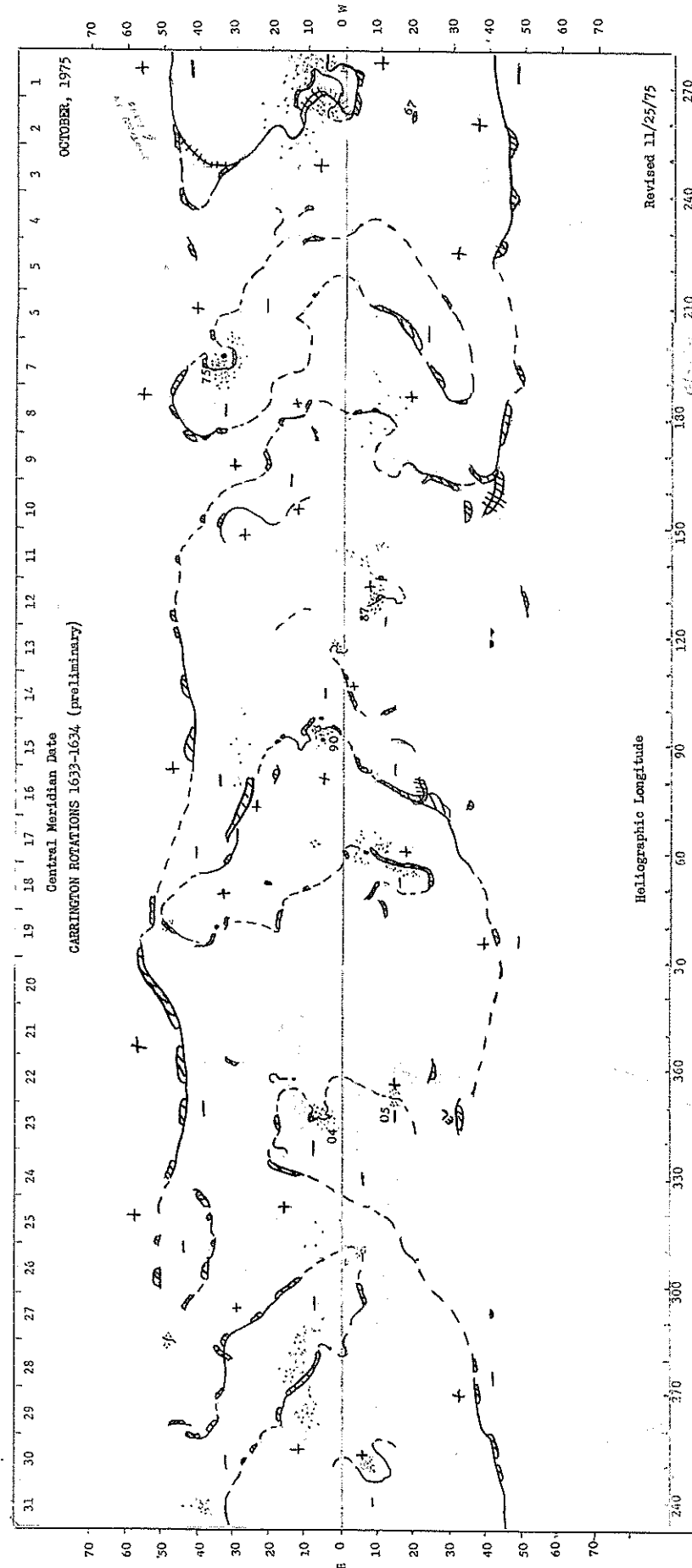
OCTOBER 1975 DATA

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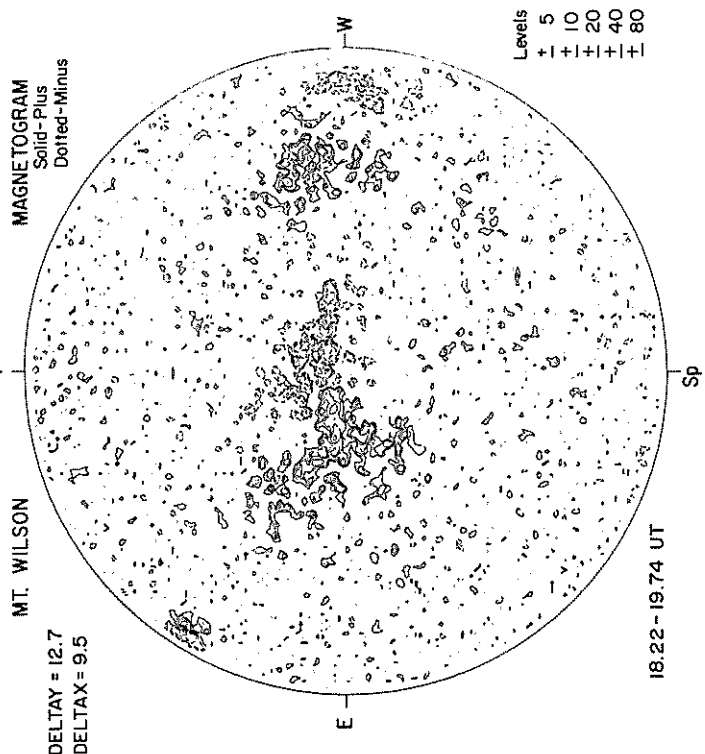
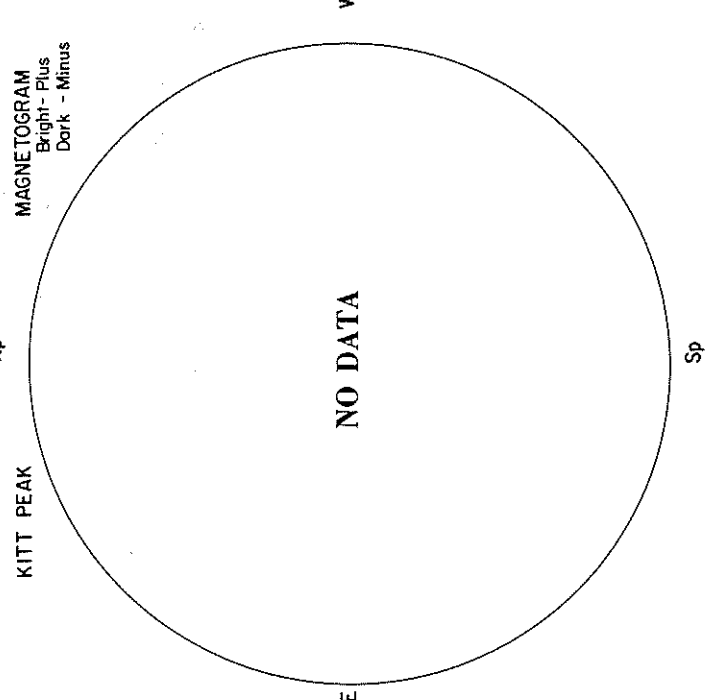
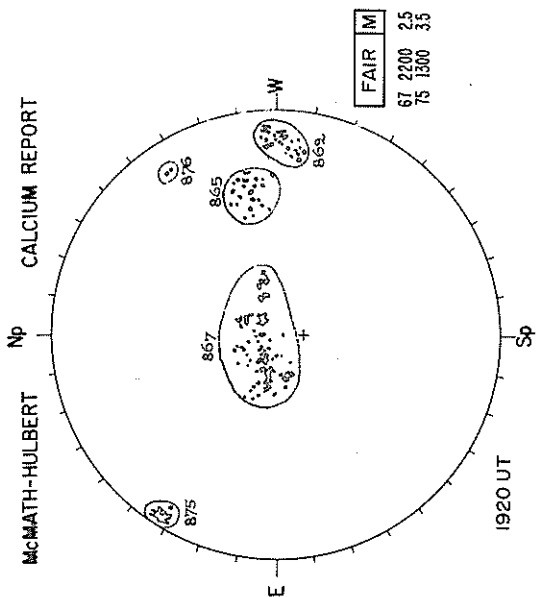
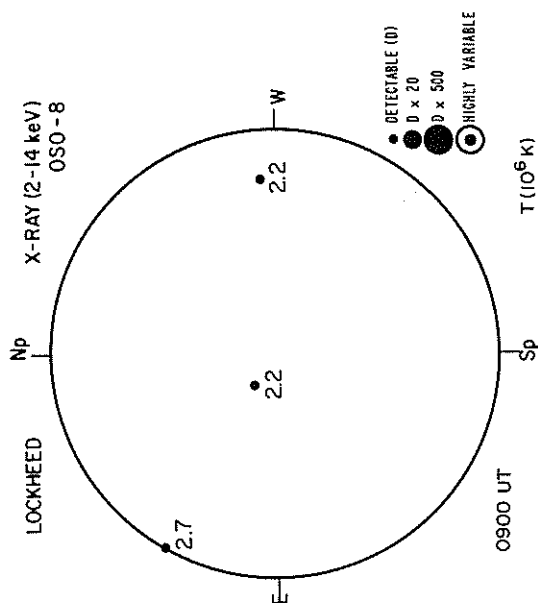
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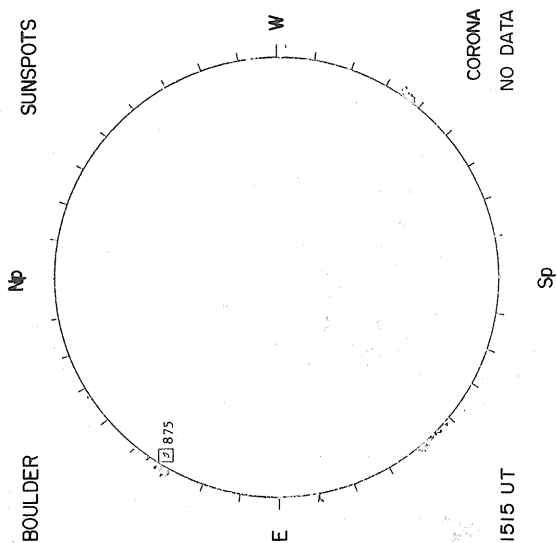
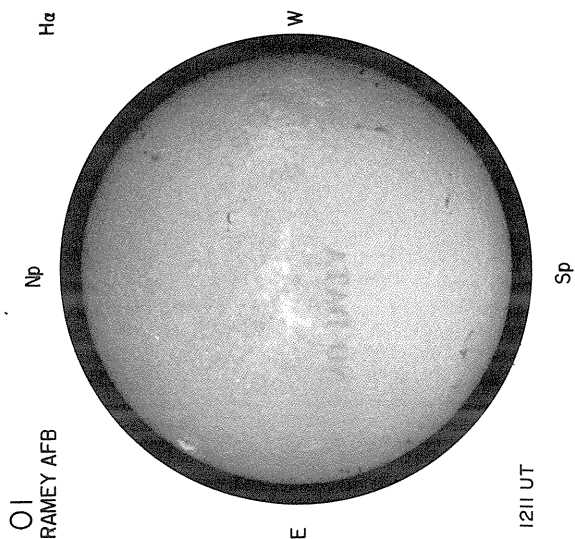
H α SYNOPSIS CHART

OCTOBER 1975



OCTOBER 1, 1975 (P = 25.98, B₀ = 6.73, L₀ = 281.43)





NELC LA POSTA

Np

OCT 1-27

NO DATA

EQUIPMENT

E

2.0 CM

└

NELC LA POSTA

└

Np

OCT 1-27

NO DATA

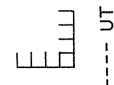
EQUIPMENT

E

W

8.6 MM

└



----- UT

Sp

Ant. Temp. Unit 100°K



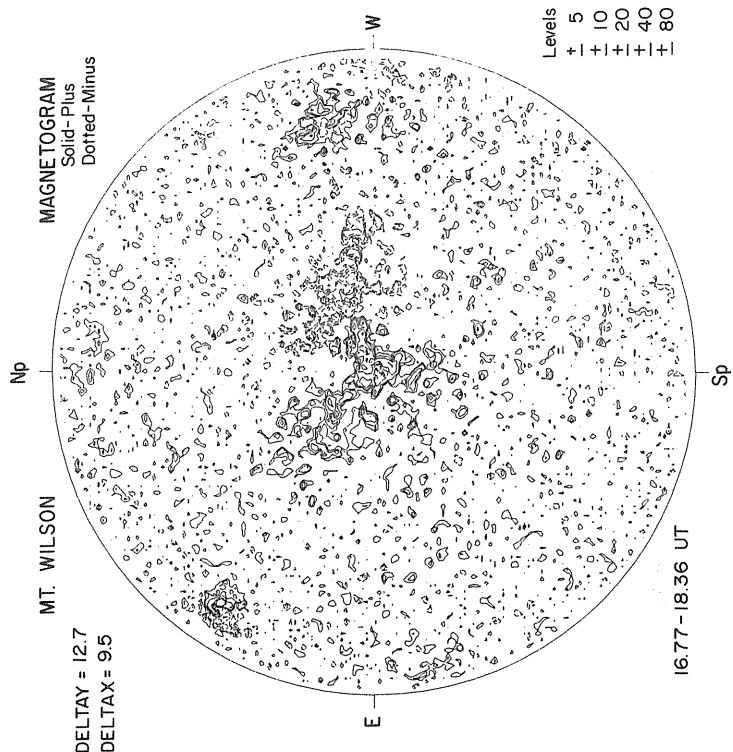
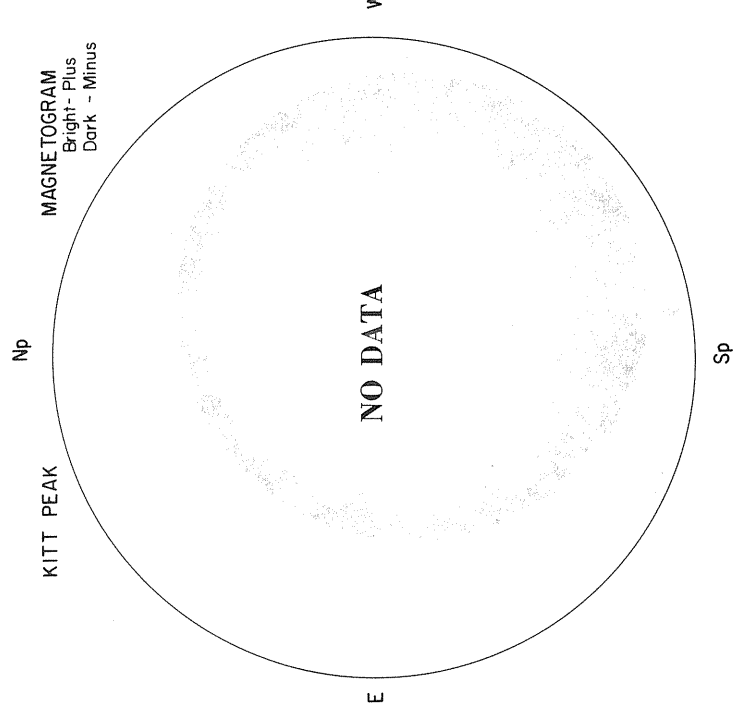
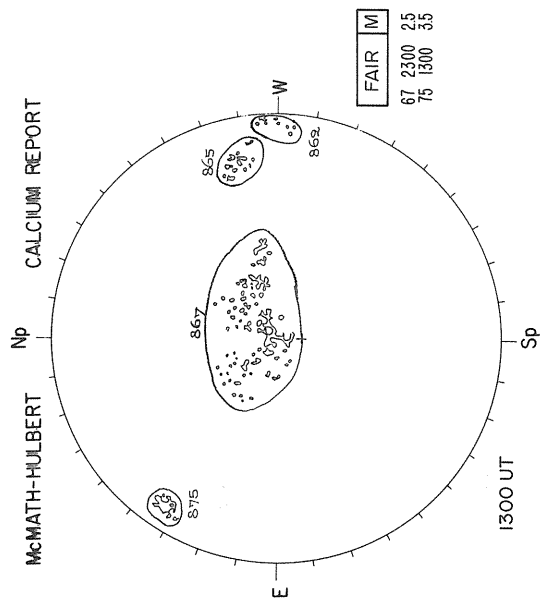
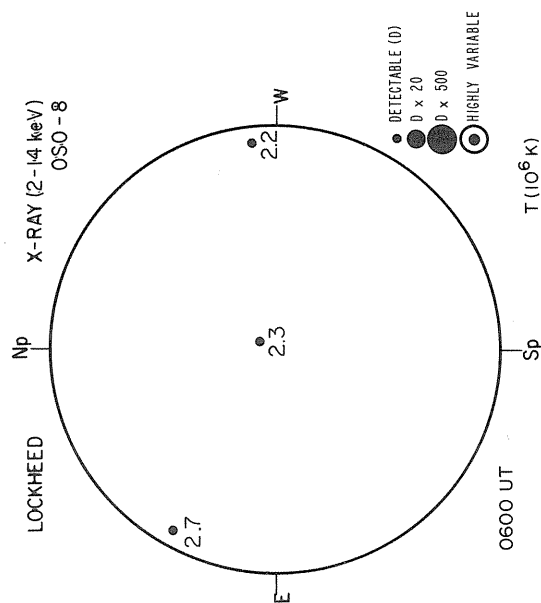
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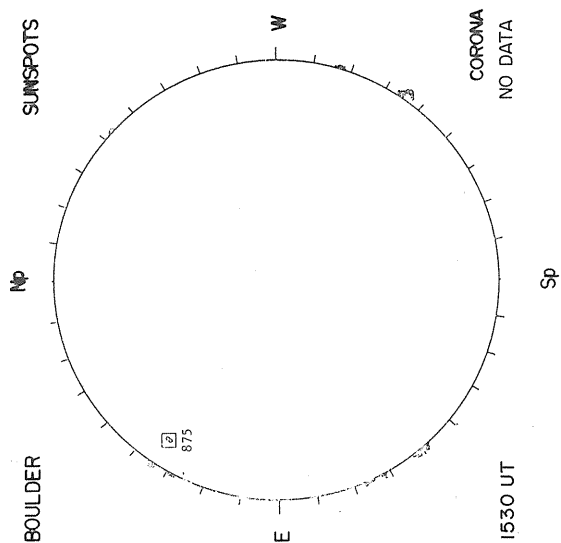
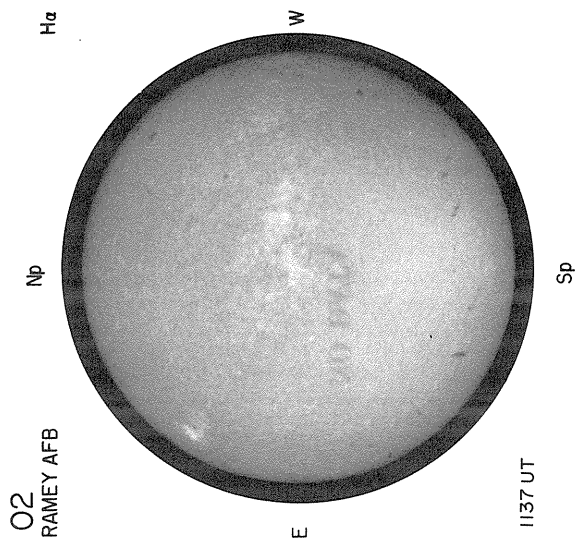
Sp

Ant. Temp. Unit 100°K

30
Oct 75

OCTOBER 2, 1975 (P = 26.04, B₀ = 6.68, L₀ = 268.23)





8.6 MM

Np

NELC LA POSTA

2.0 CM

Np

NELC LA POSTA

W

E

W

E

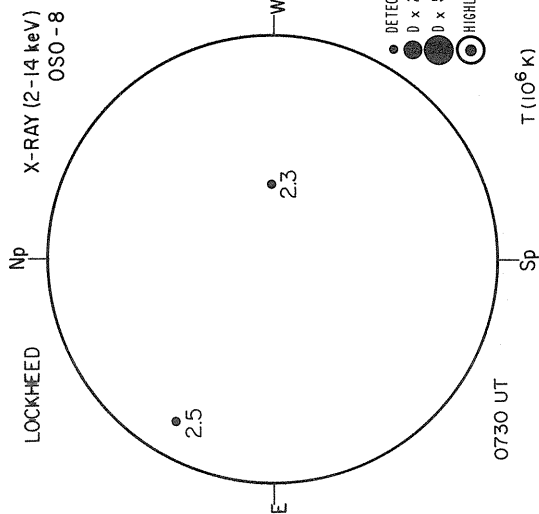
Ant. Temp. Unit 100°K

Sp

Ant. Temp. Unit 100°K

Sp

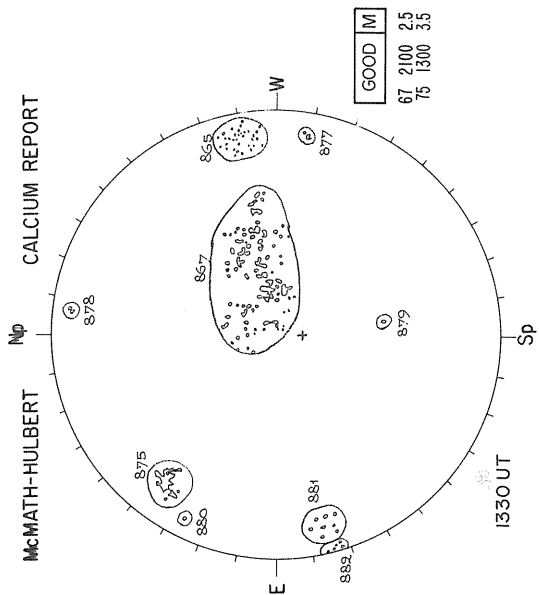
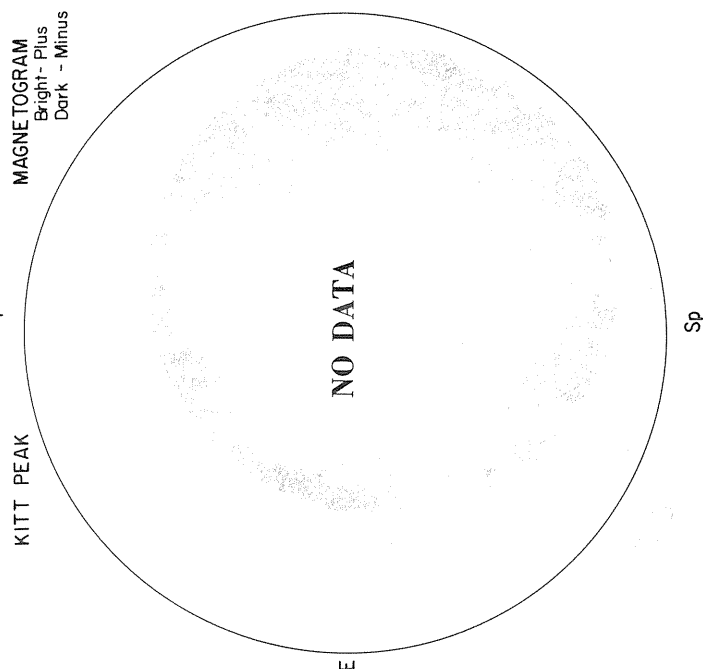
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● DETECTABLE (D)
 ○ 0 x 20
 ○ 0 x 500
 ○ HIGHLY VARIABLE

KITT PEAK

MAGNETOGRAM
 Bright- Plus
 Dark - Minus

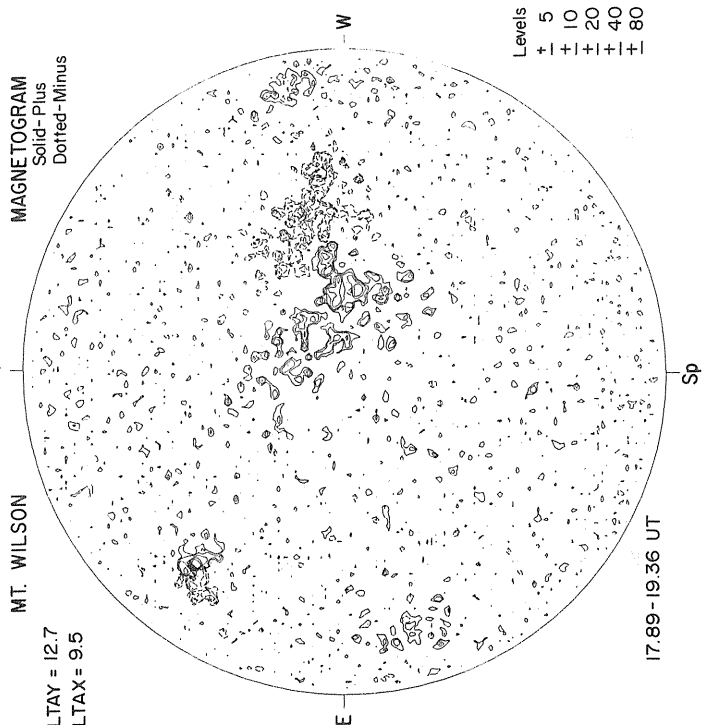


GOOD M
 67 2100 2.5
 75 1300 3.5

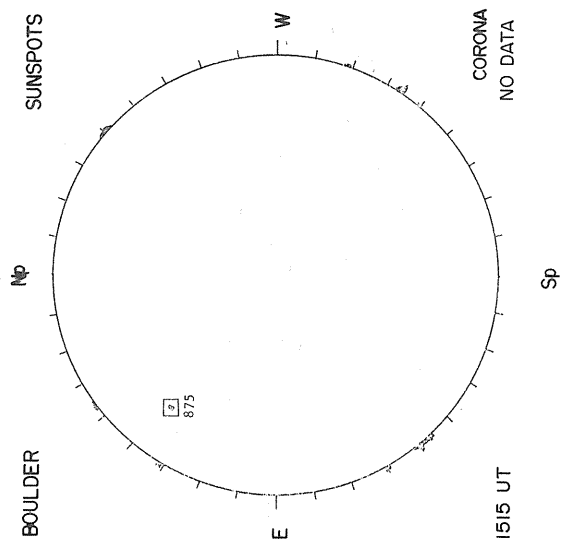
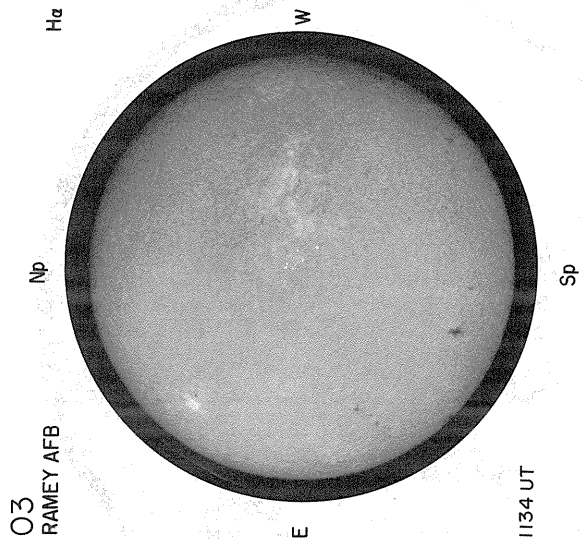
MT. WILSON

MAGNETOGRAM
 Solid- Plus
 Dotted- Minus

DELTA Y = 12.7
 DELTA X = 9.5



Levels
 + 5
 + 10
 + 20
 + 40
 + 80



NELC LA POSTA

Np

2.0 CM

NELC LA POSTA

Np

8.6 MM

E

W

E

W

Sp

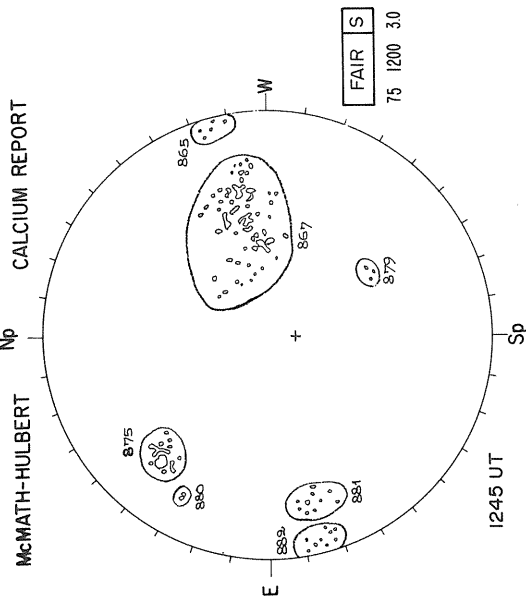
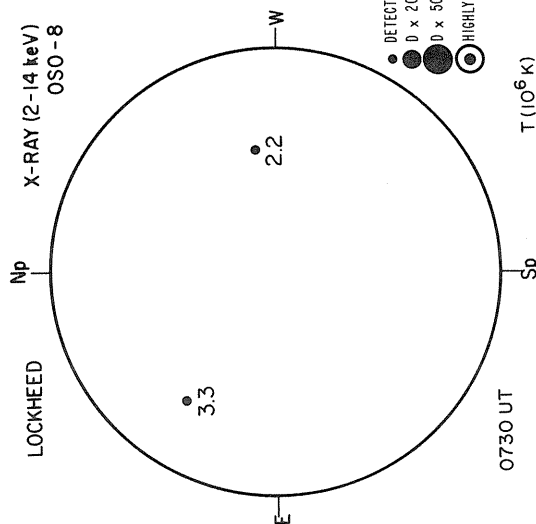
Ant. Temp. Unit 100°K

Sp

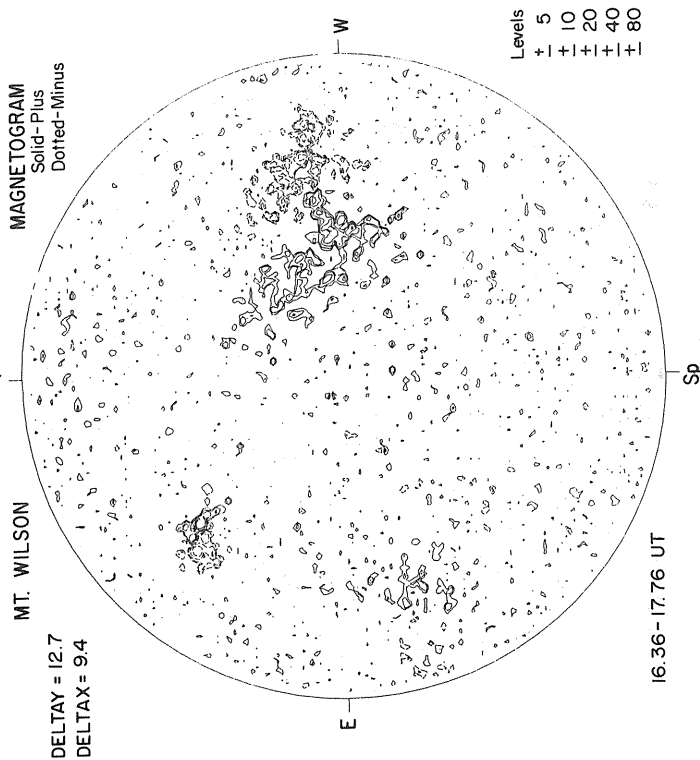
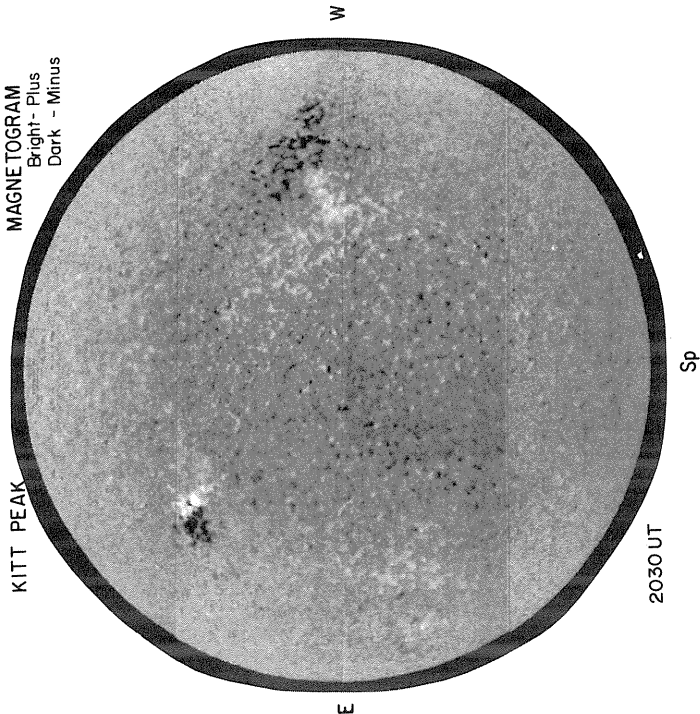
Ant. Temp. Unit 100°K

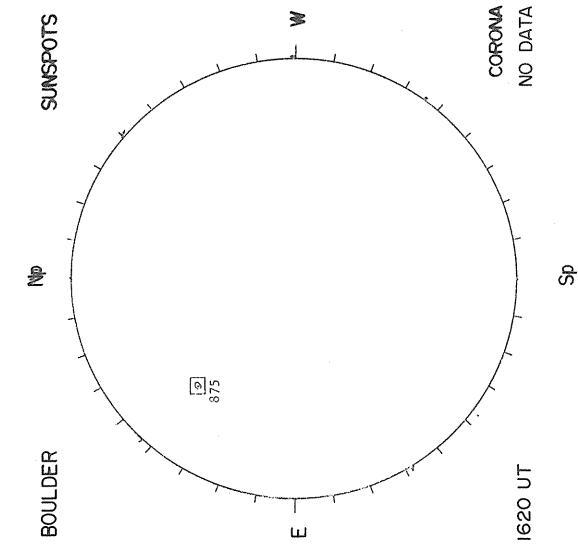
OCTOBER 4, 1975 (P=26.16, B₀=6.58, L₀=241.84)

LOCKHEED X-RAY (2-14 keV)
OSO-8



KITT PEAK MAGNETOGRAM
Bright- Plus
Dark - Minus





8.6 MM

Np

NELC LA POSTA

2.0 CM

Np

NELC LA POSTA

W

E

W

E

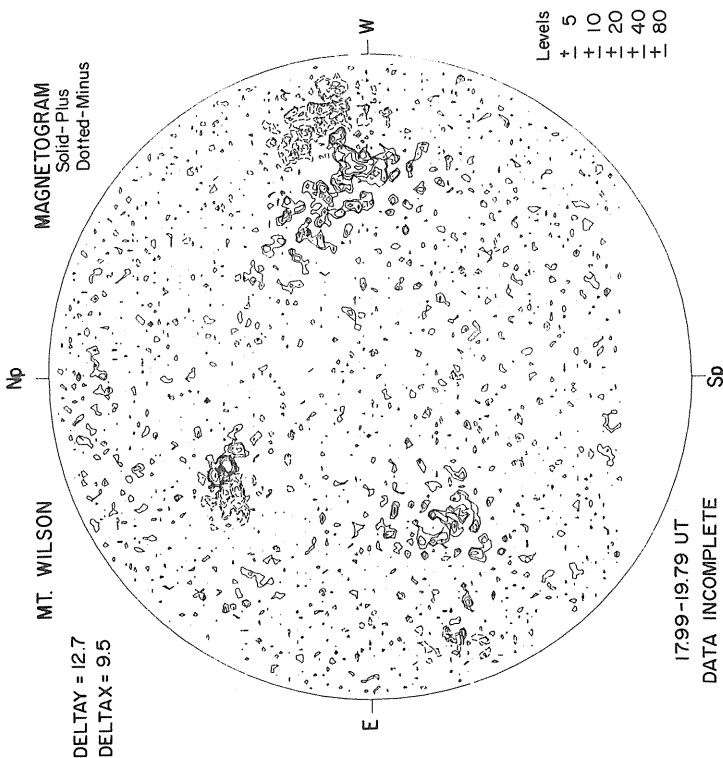
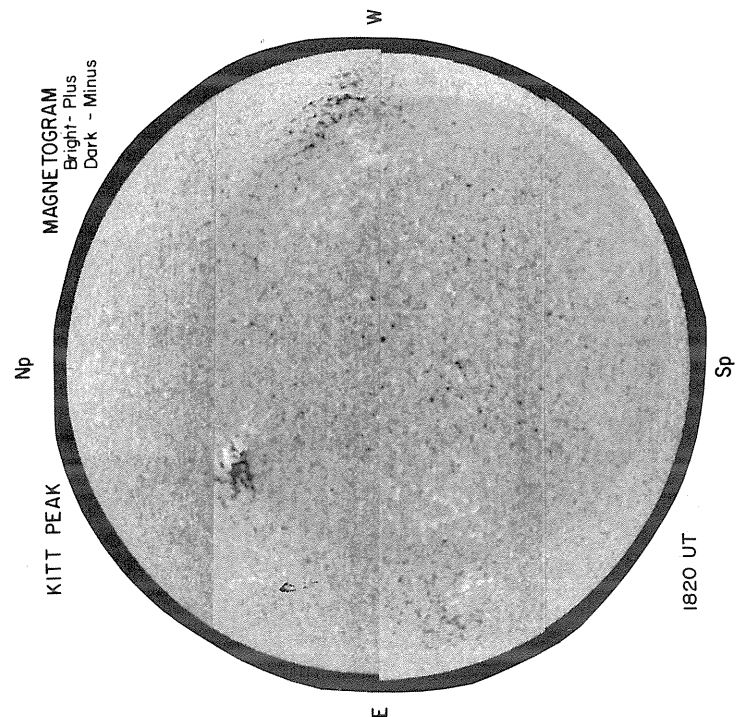
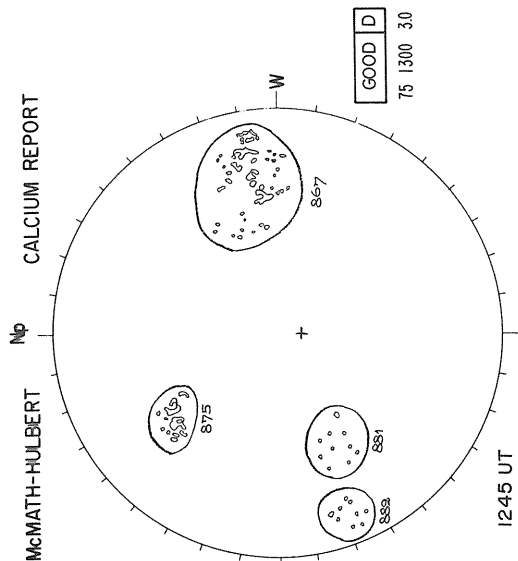
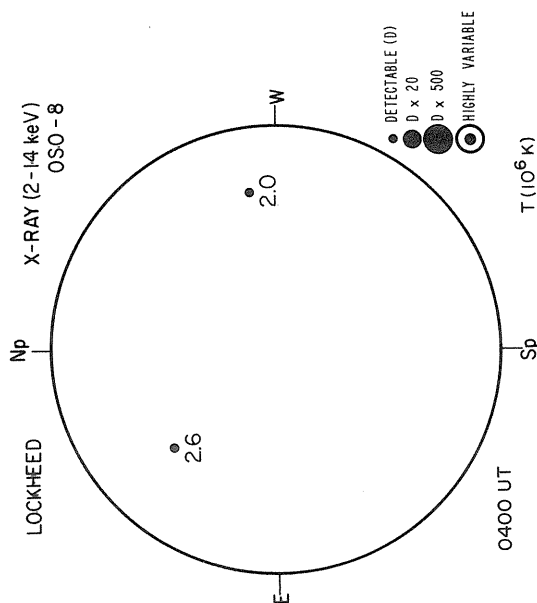
Ant. Temp. Unit 100°K

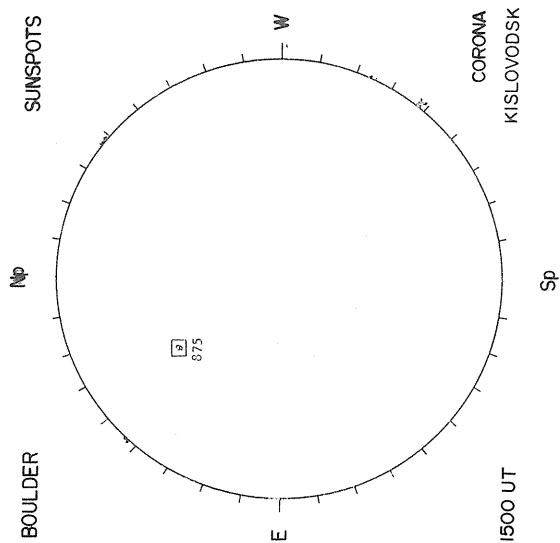
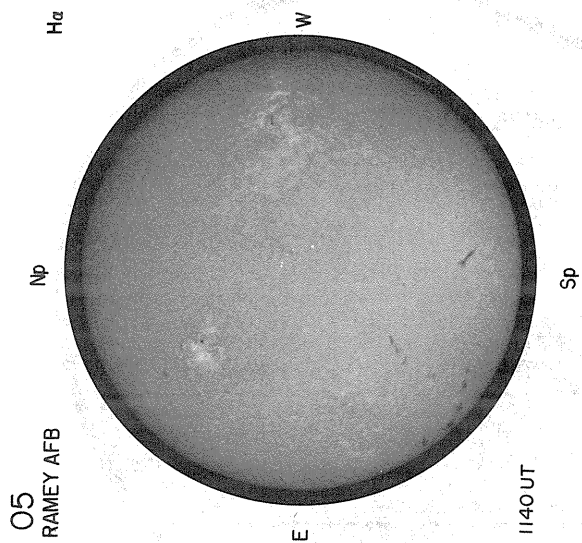
Sp

Ant. Temp. Unit 100°K

Sp

OCTOBER 5, 1975 (P = 26.20, B₀ = 6.53, L₀ = 228.65)





NELC LA POSTA

Np

2.0 CM

NELC LA POSTA

Np

8.6 MM

E

W

E

W

Sp

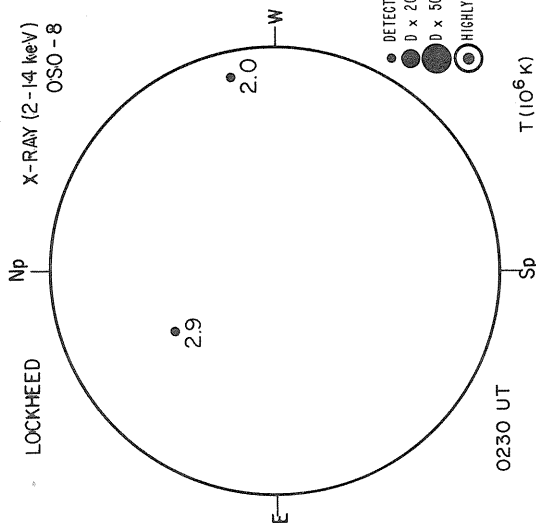
Ant. Temp. Unit 100°K

Sp

Ant. Temp. Unit 100°K

OCTOBER 6, 1975 (P = 26.24, B₀ = 6.47, L₀ = 215.45)

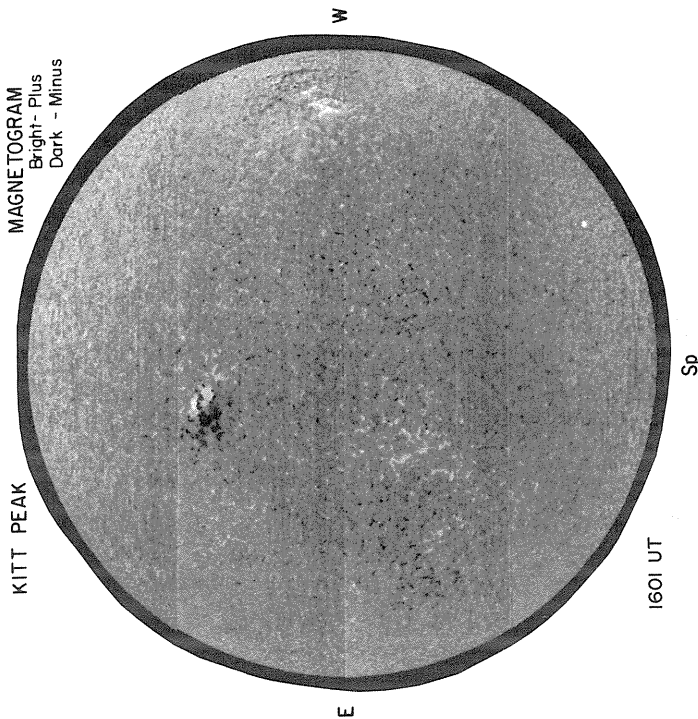
LOCKHEED X-RAY (2-14 keV)
OSO-8



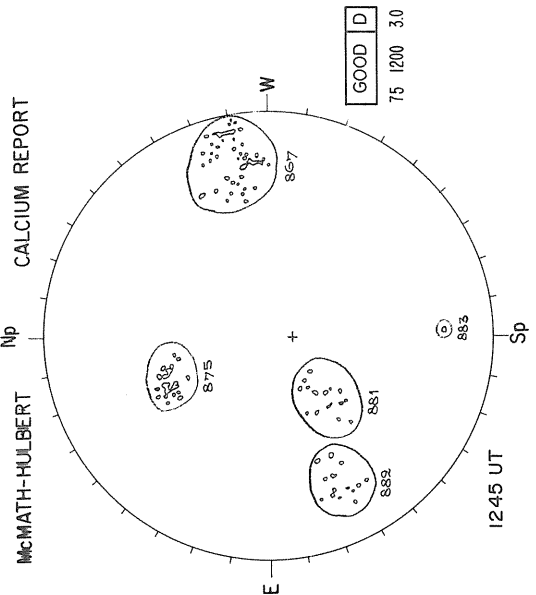
● DETECTABLE (10)
● 0 x 20
● 0 x 300
● HIGHLY VARIABLE

T (10⁶ K)

KITT PEAK MAGNETOGRAM
Bright - Plus
Dark - Minus

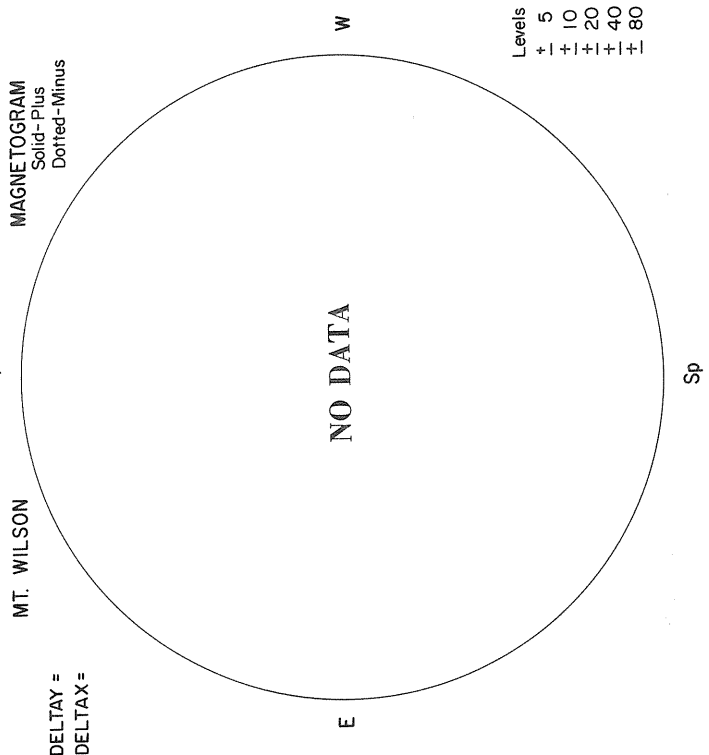


McMATH-HULBERT CALCIUM REPORT

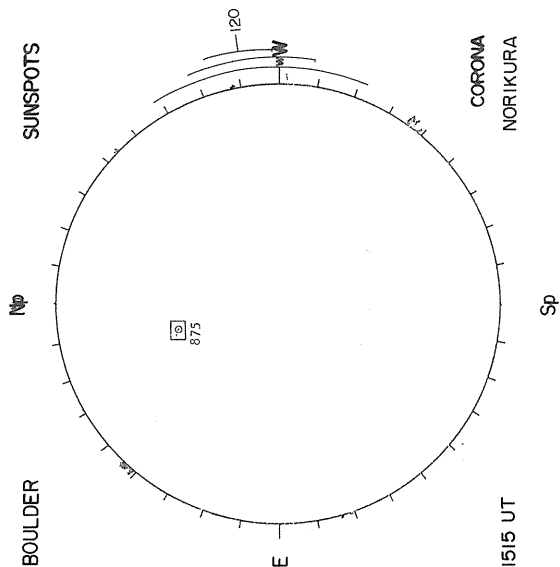
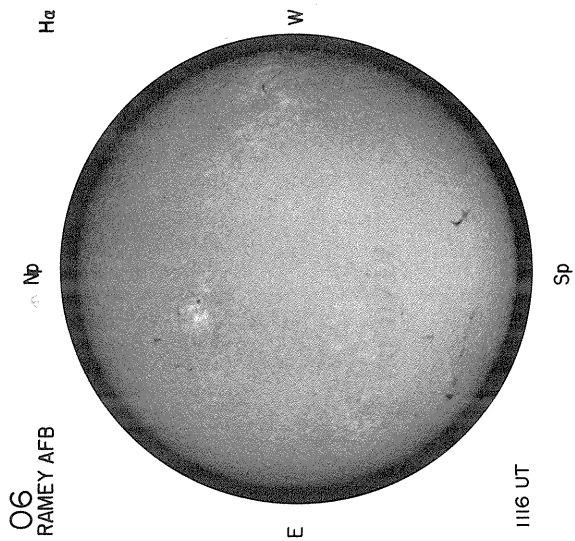


GOOD D
75 1200 3.0

MT. WILSON MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
+ 5
+ 10
+ 20
+ 40
+ 80



NELC LA POSTA

Np

E

2.0 CM

W

NELC LA POSTA

Np

E

8.6 MM

W

Sp

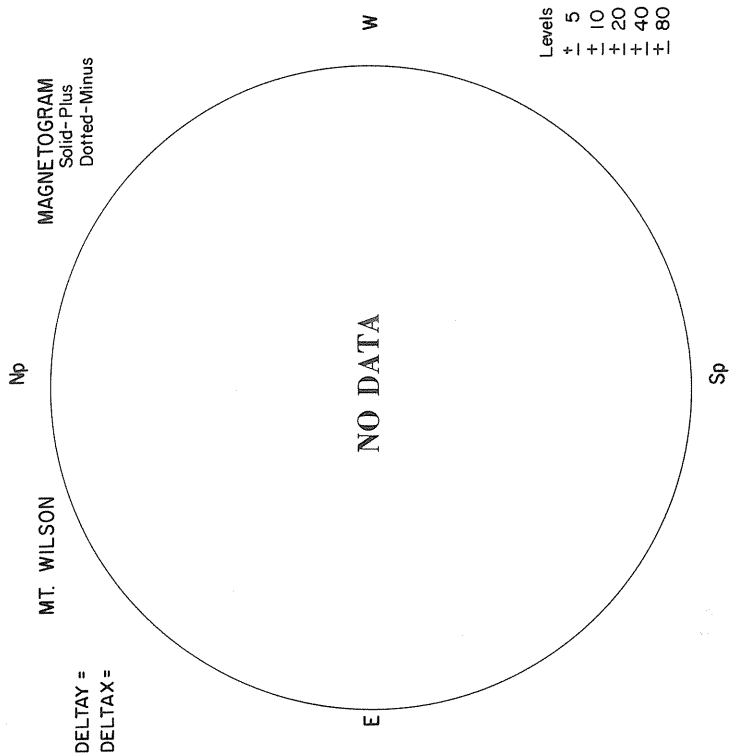
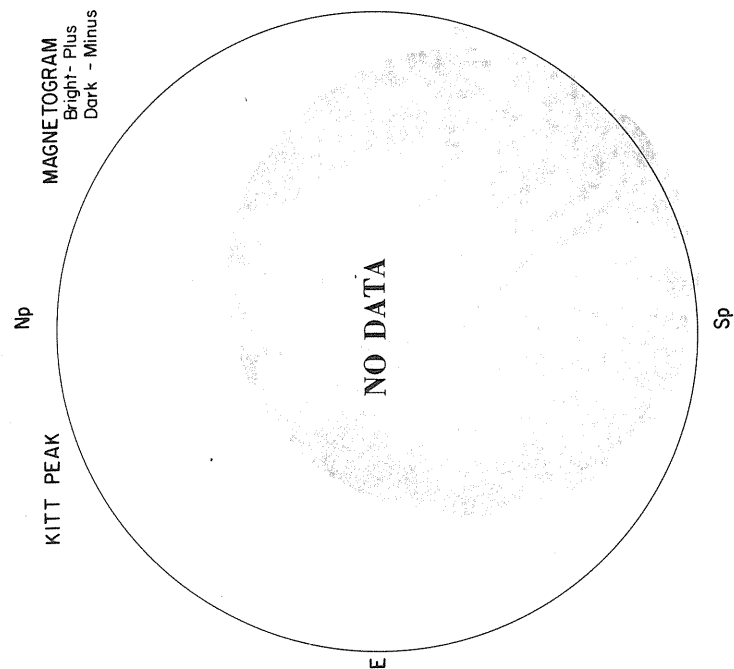
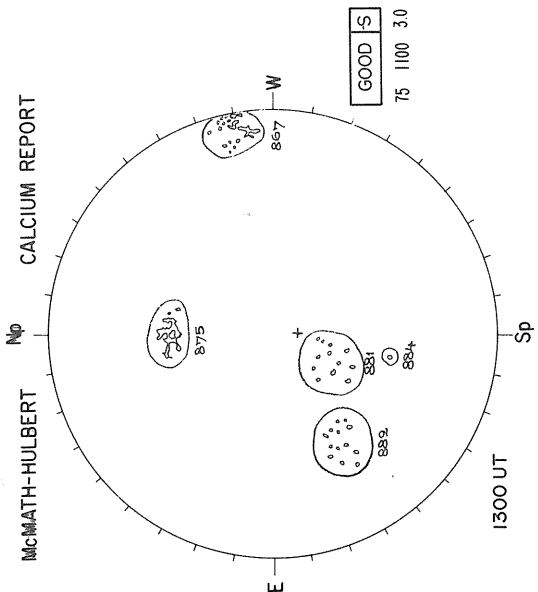
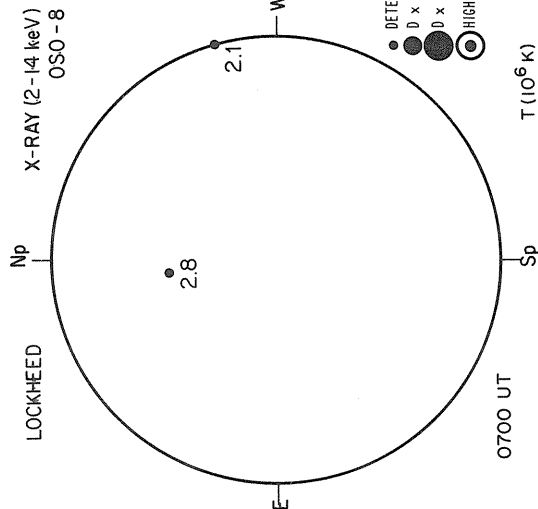
Ant. Temp. Unit 100°K

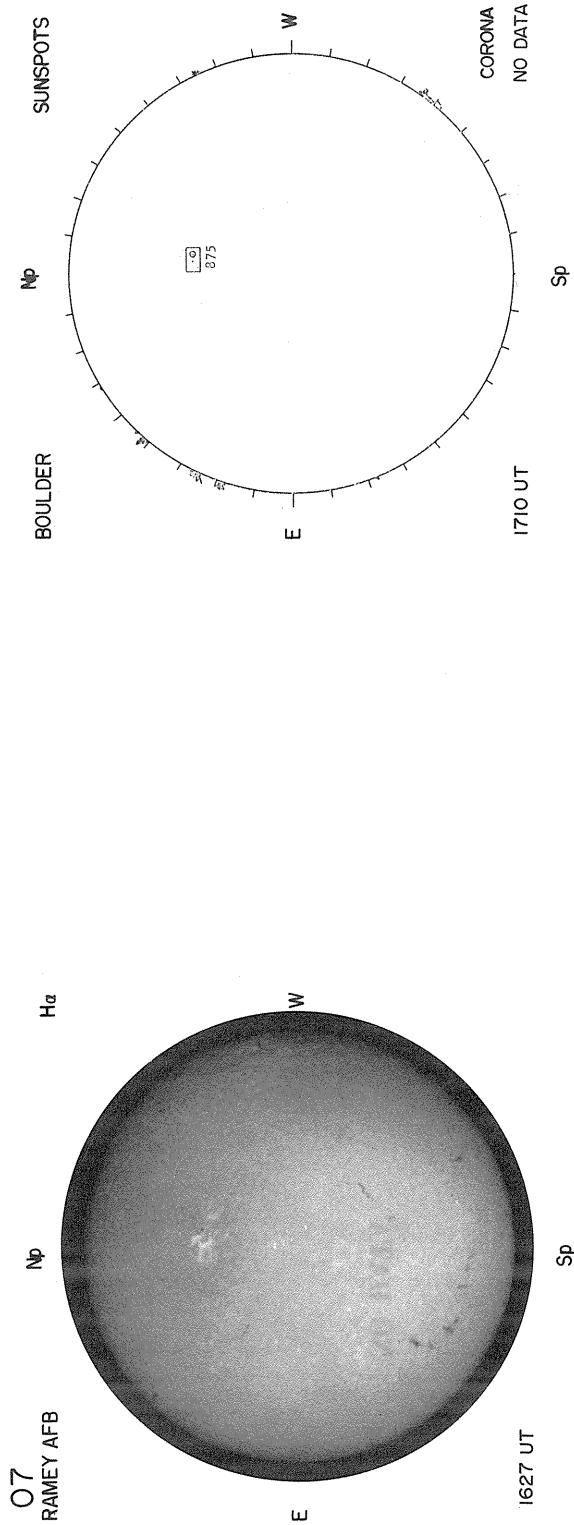
Sp

Ant. Temp. Unit 100°K

40
Oct 75

OCTOBER 7, 1975 (P=26.28, B₀=6.42, L₀=202.26)





8.6 MM

NELC LA POSTA

2.0 CM

Np

Np

NELC LA POSTA

W

E

W

E

Ant. Temp. Unit 100°K

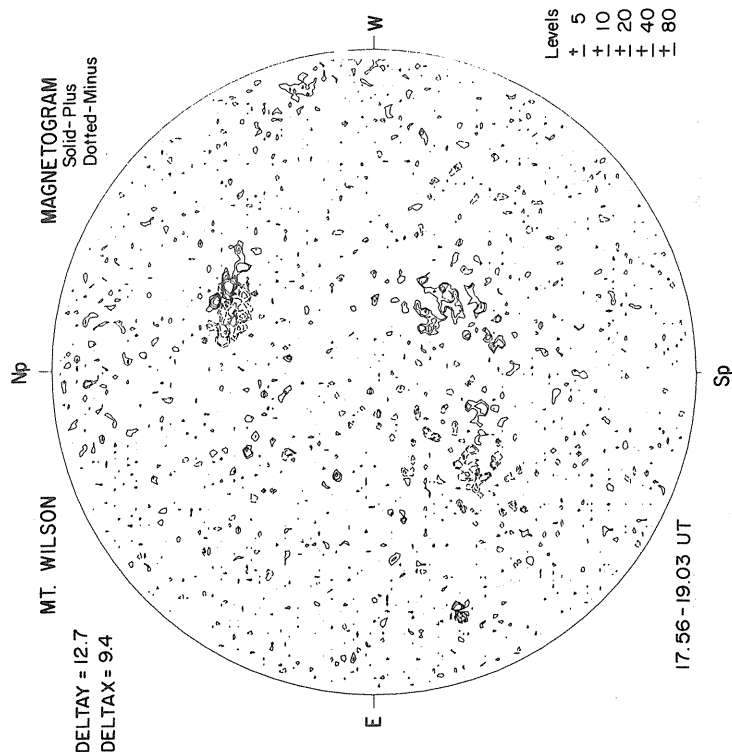
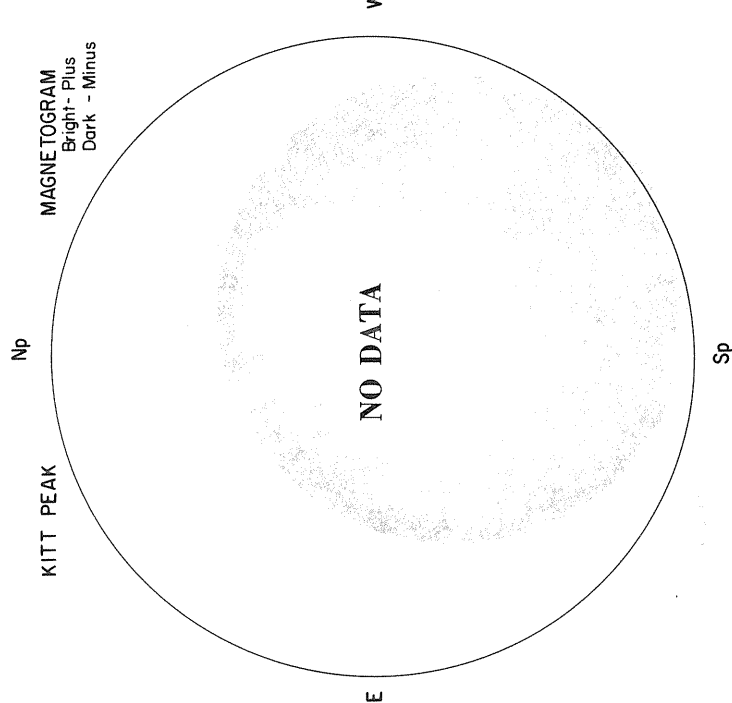
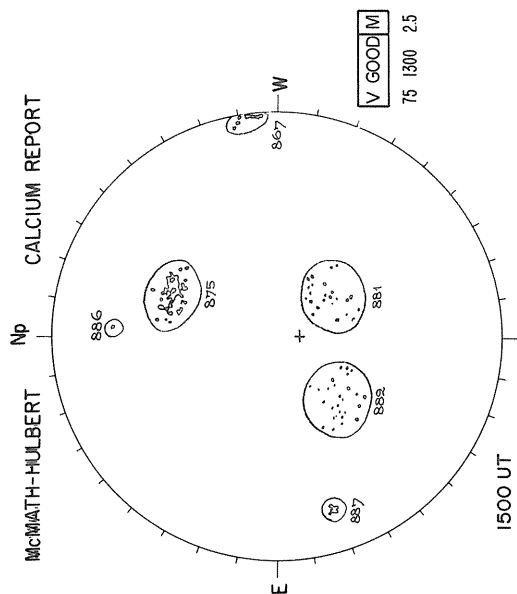
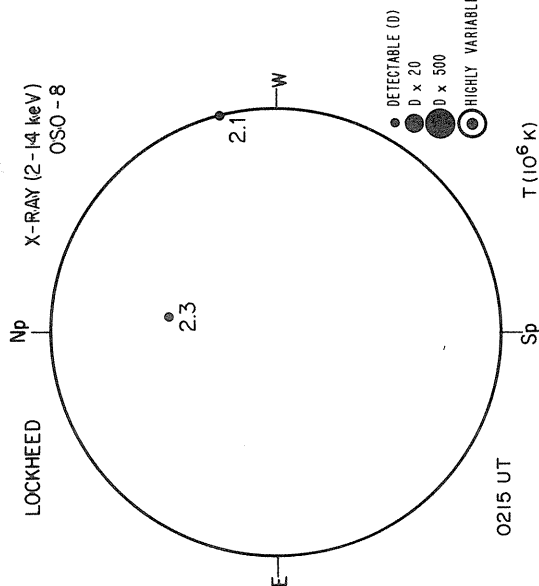
Sp

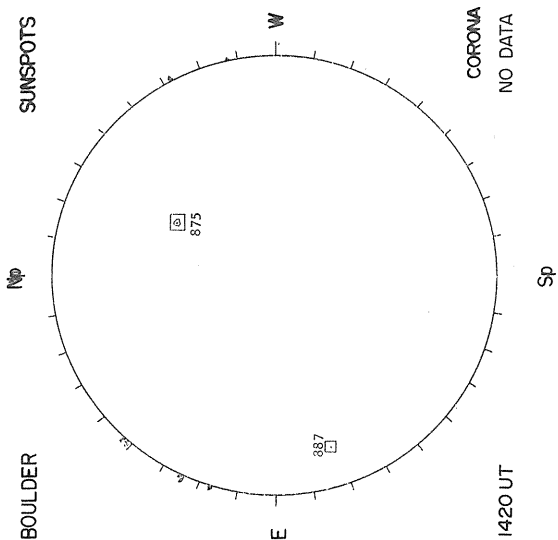
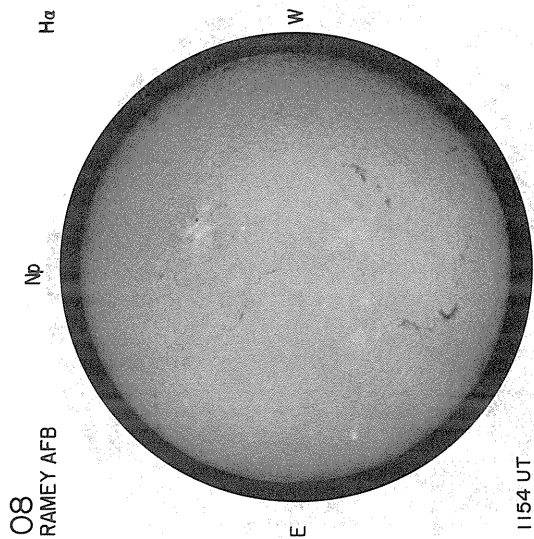
Ant. Temp. Unit 100°K

Sp

42
Oct 75

OCTOBER 8, 1975 (P = 26.30, B₀ = 6.36, L₀ = 189.07)





2.0 CM

NELC LA POSTA

Np

8.6 MM

NELC LA POSTA

Np

E

W

E

W

Ant. Temp. Unit 100°K

Sp

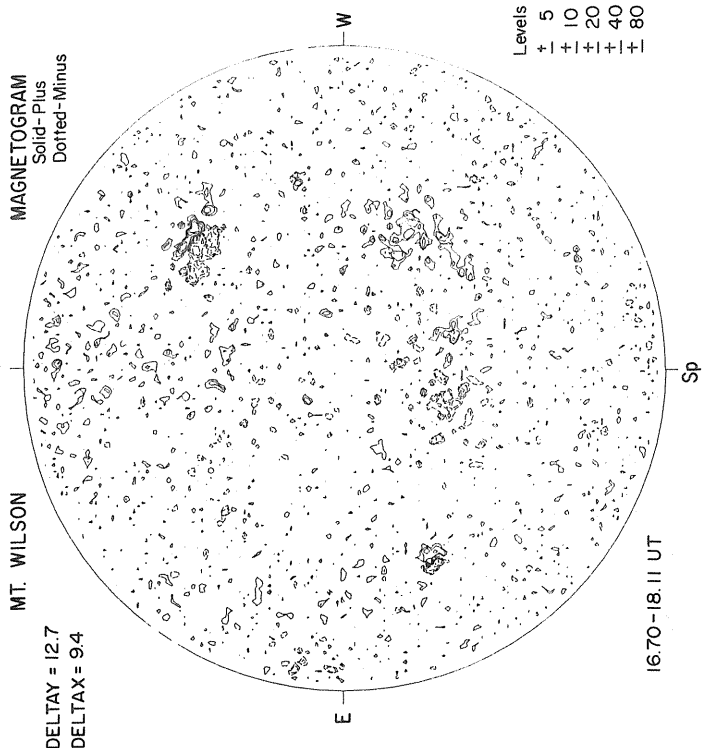
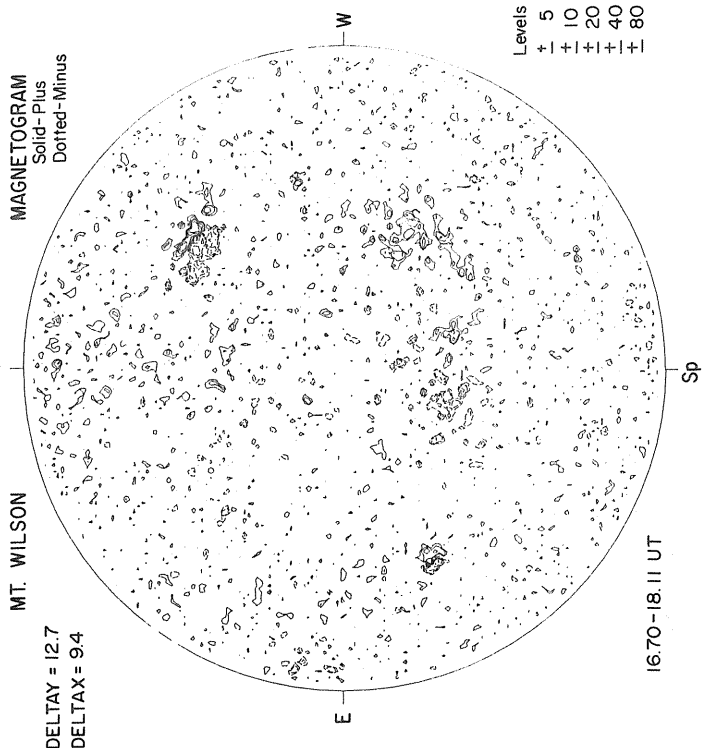
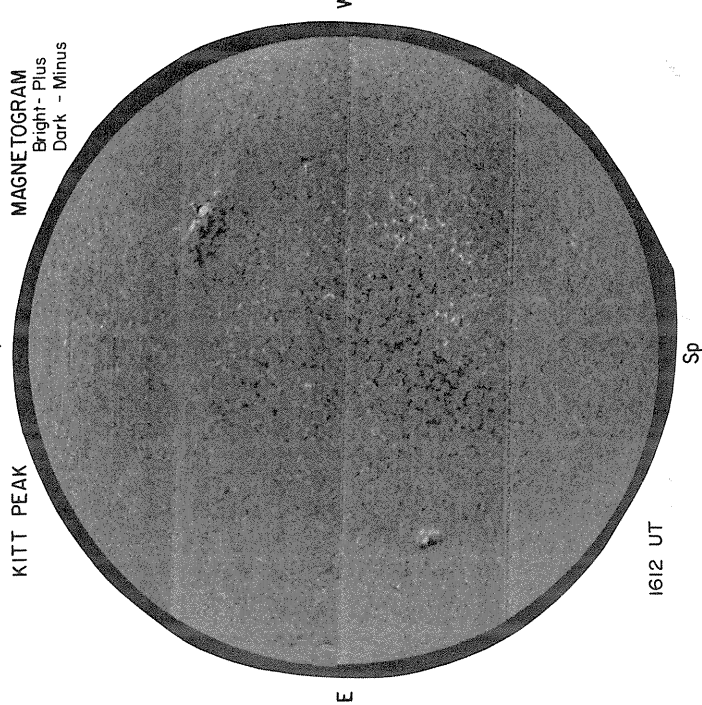
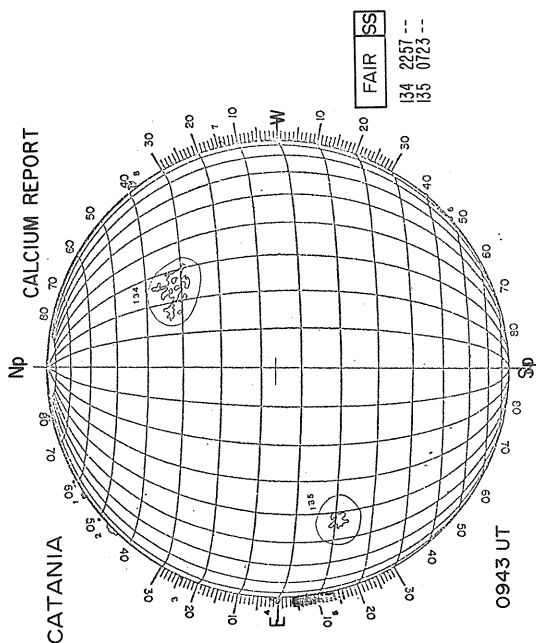
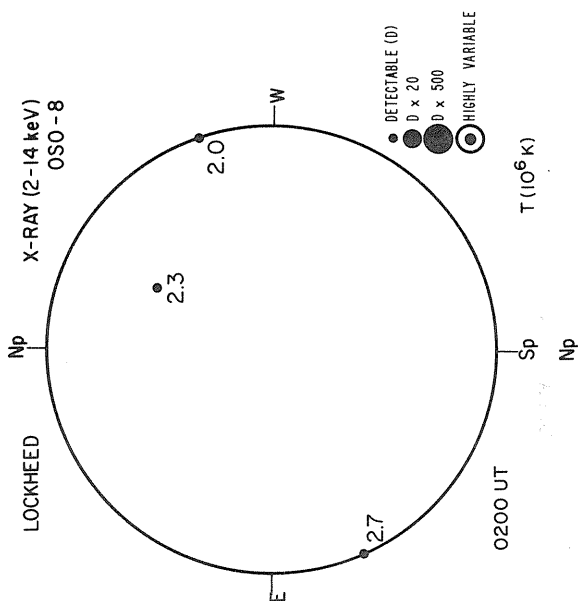
---- UT

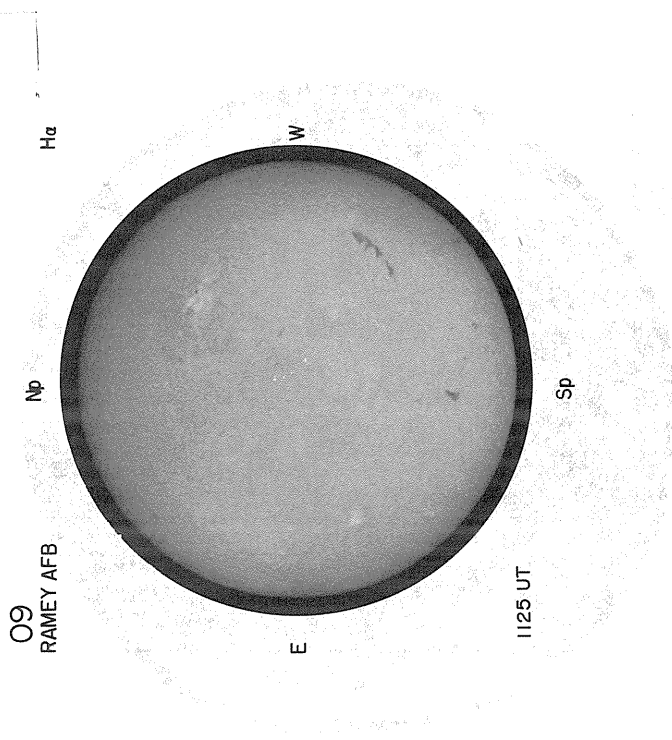
Sp

Ant. Temp. Unit 100°K

---- UT

OCTOBER 9, 1975 (P = 26.32, B₀ = 6.30, L₀ = 175.87)





NELC LA POSTA

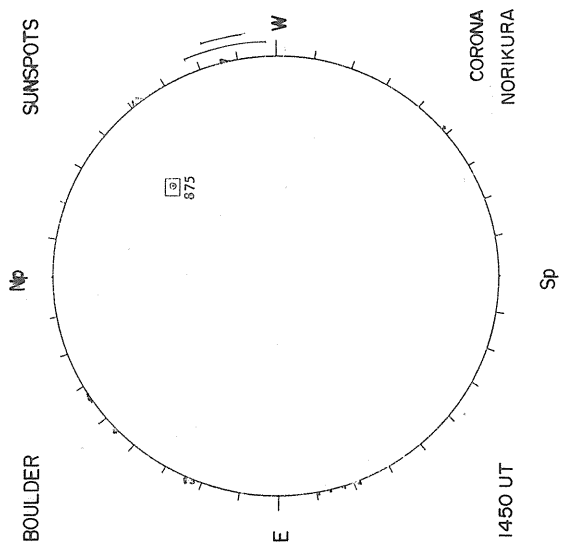
Np

2.0 CM

E

Sp

Ant. Temp. Unit 100°K



NELC LA POSTA

Np

8.6 MM

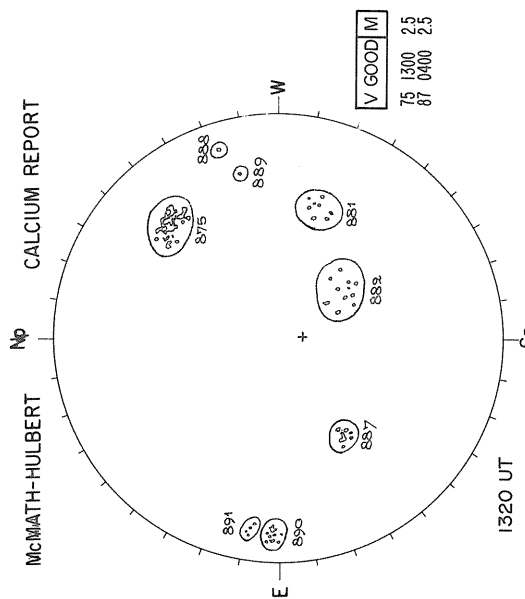
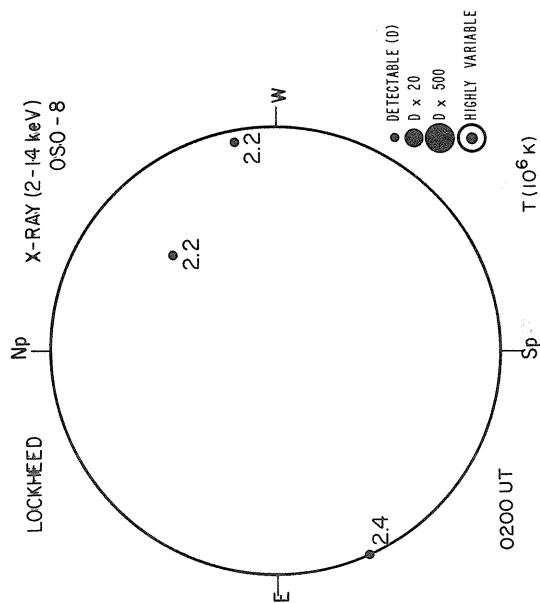
E

Sp

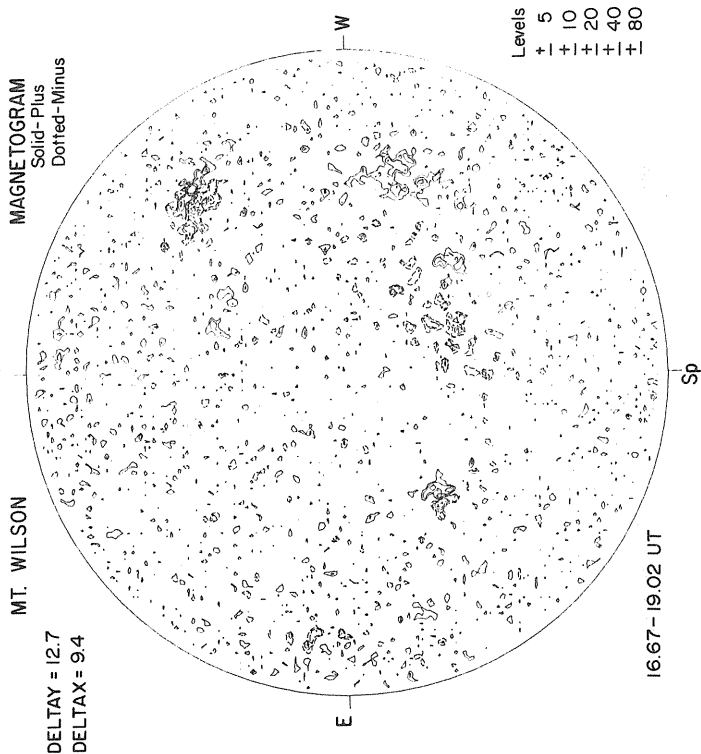
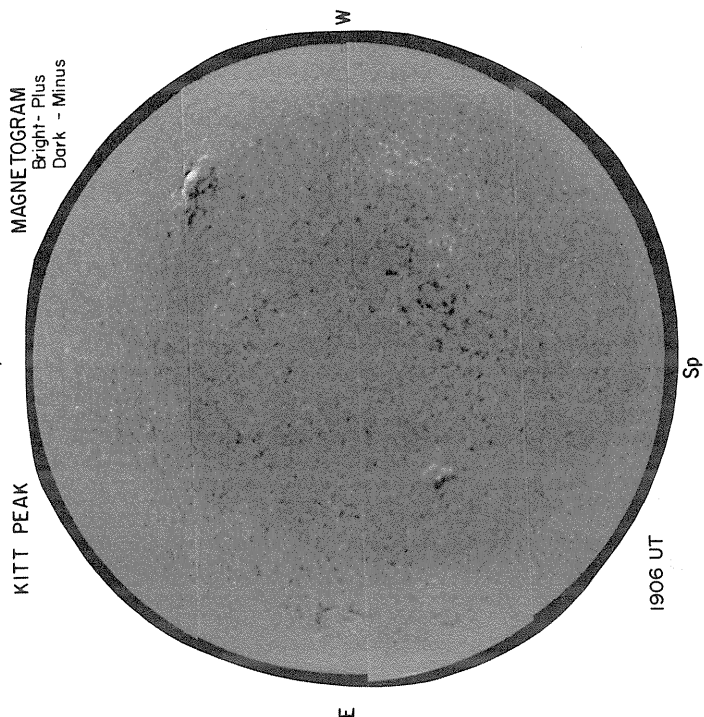
Ant. Temp. Unit 100°K

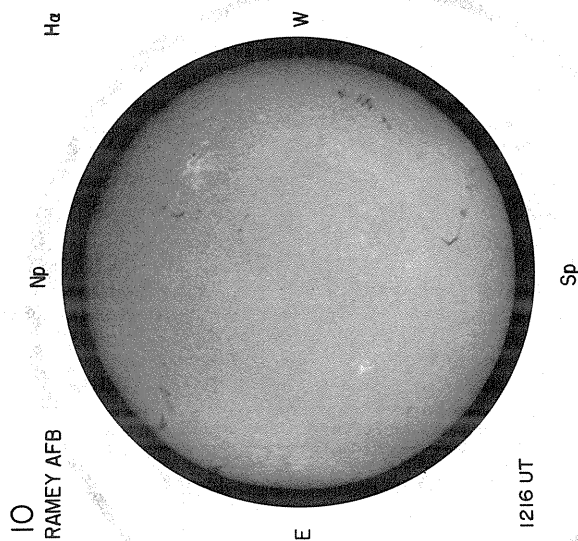
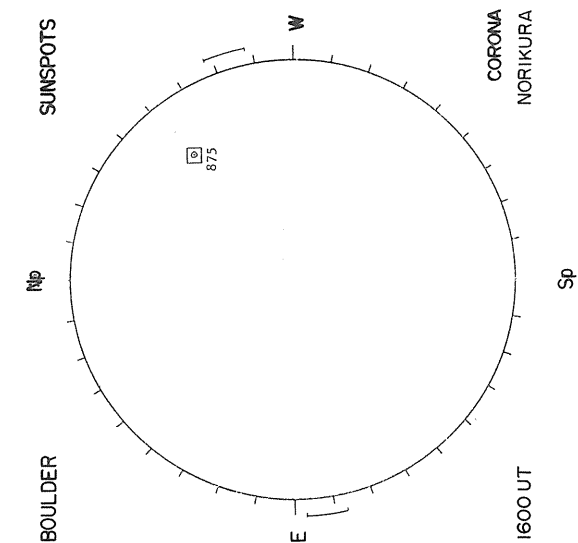
W

OCTOBER 10, 1975 (P = 26.33, $B_0 = 6.23$, $L_0 = 162.68$)



CALCIUM REPORT





8.6 MM

Np

NELC LA POSTA

2.0 CM

Np

NELC LA POSTA

W

E

W

E

Ant. Temp. Unit 100°K

Sp

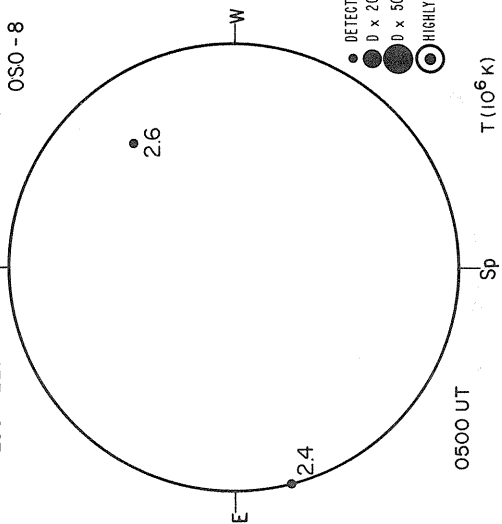
Ant. Temp. Unit 100°K

Sp

48
Oct 75

OCTOBER 11, 1975 (P = 26.33, B₀ = 6.17, L₀ = 149.49)

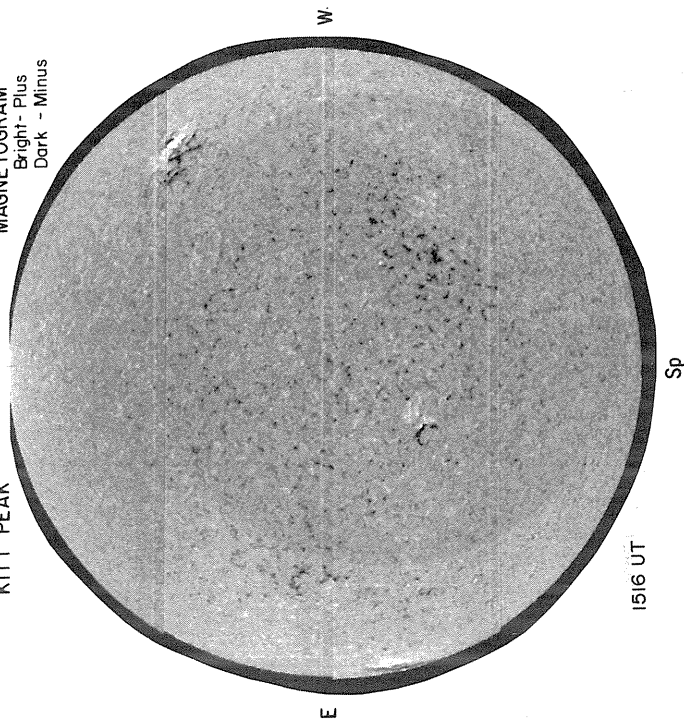
LOCKHEED
X-RAY (2-14 keV)
OSO-8



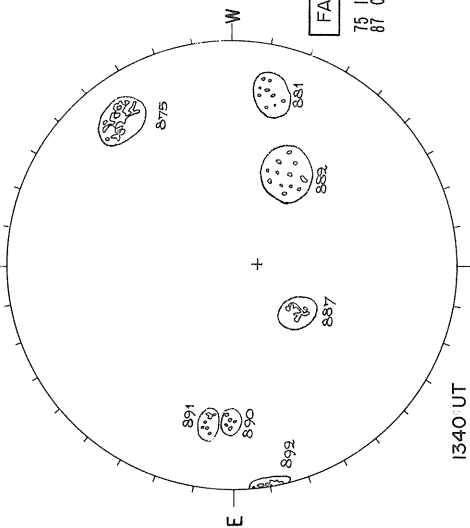
● DETECTABLE (ID)
● 0 x 20
● 0 x 500
⊙ HIGHLY VARIABLE

T (10⁶ K)

KITT PEAK
MAGNETOGRAM
Bright - Plus
Dark - Minus

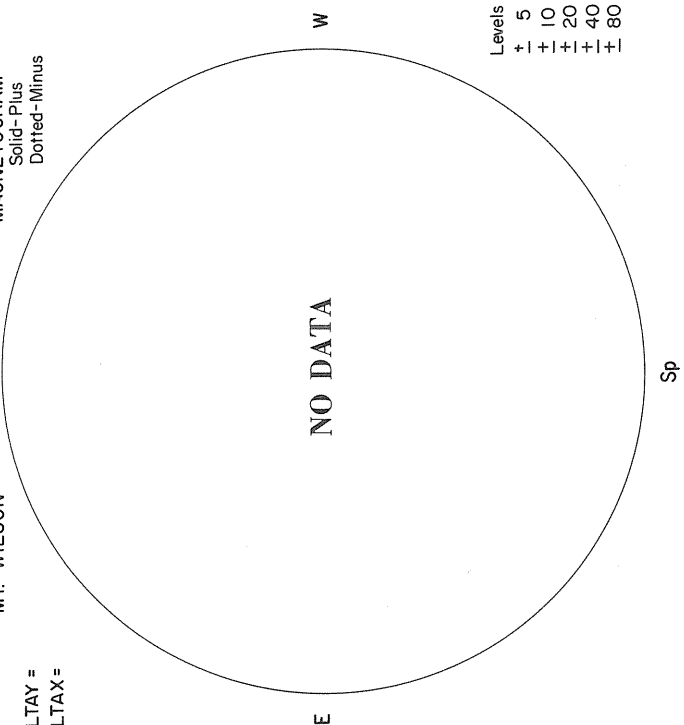


McMATH-HULBERT
CALCIUM REPORT

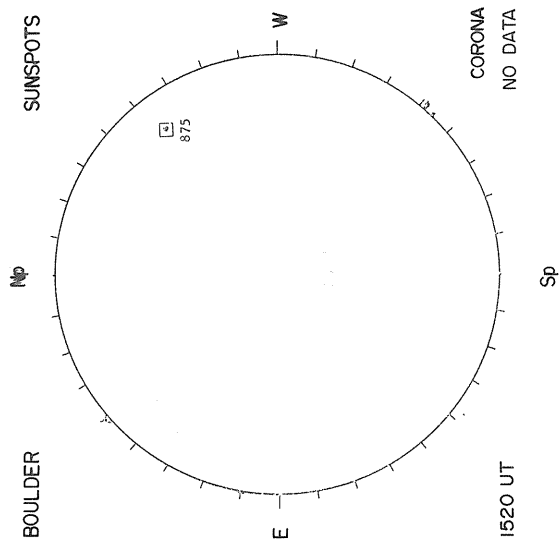
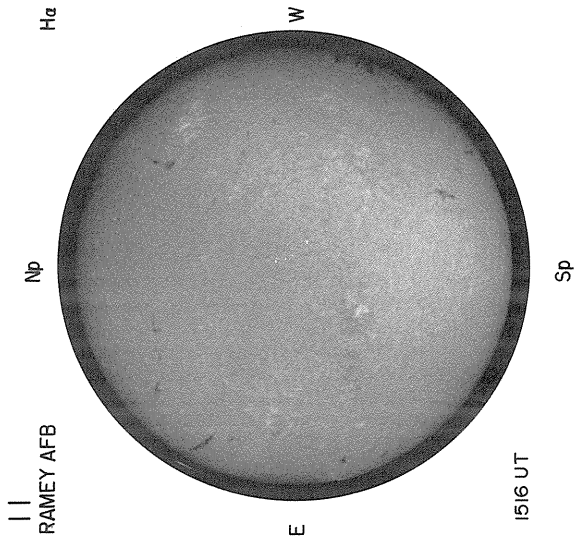


FAIR	M
75 1800	25
81 0300	23

MT. WILSON
MAGNETOGRAM
Solid - Plus
Dotted - Minus



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



NELC LA POSTA

2.0 CM

NELC LA POSTA

8.6 MM

Np

Np

E

W

E

W

Sp

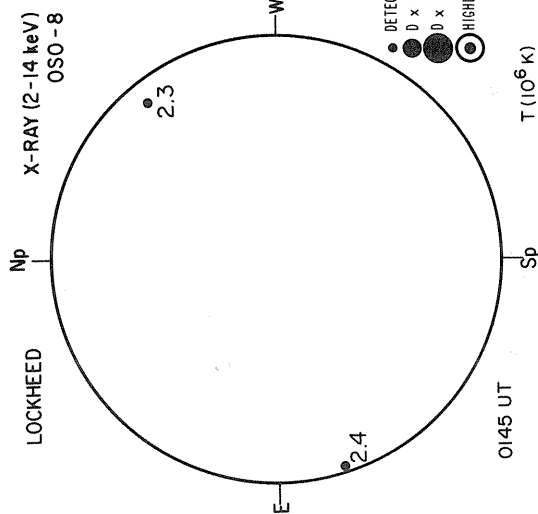
Sp

Ant. Temp. Unit 100°K

Ant. Temp. Unit 100°K

50
Oct 75

OCTOBER 12, 1975 (P = 26.33, $B_0 = 6.10$, $L_0 = 136.30$)



KITT PEAK

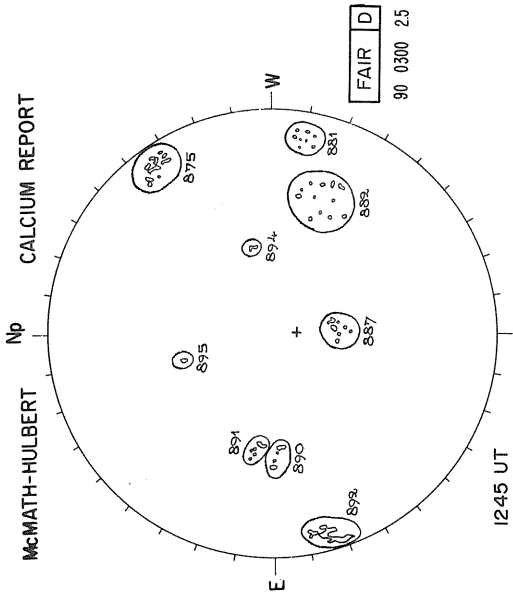
MAGNETOGRAM

Bright-Plus
Dark-Minus

NO DATA

W

E



MT. WILSON

MAGNETOGRAM

Solid-Plus
Dotted-Minus

NO DATA

W

E

Levels

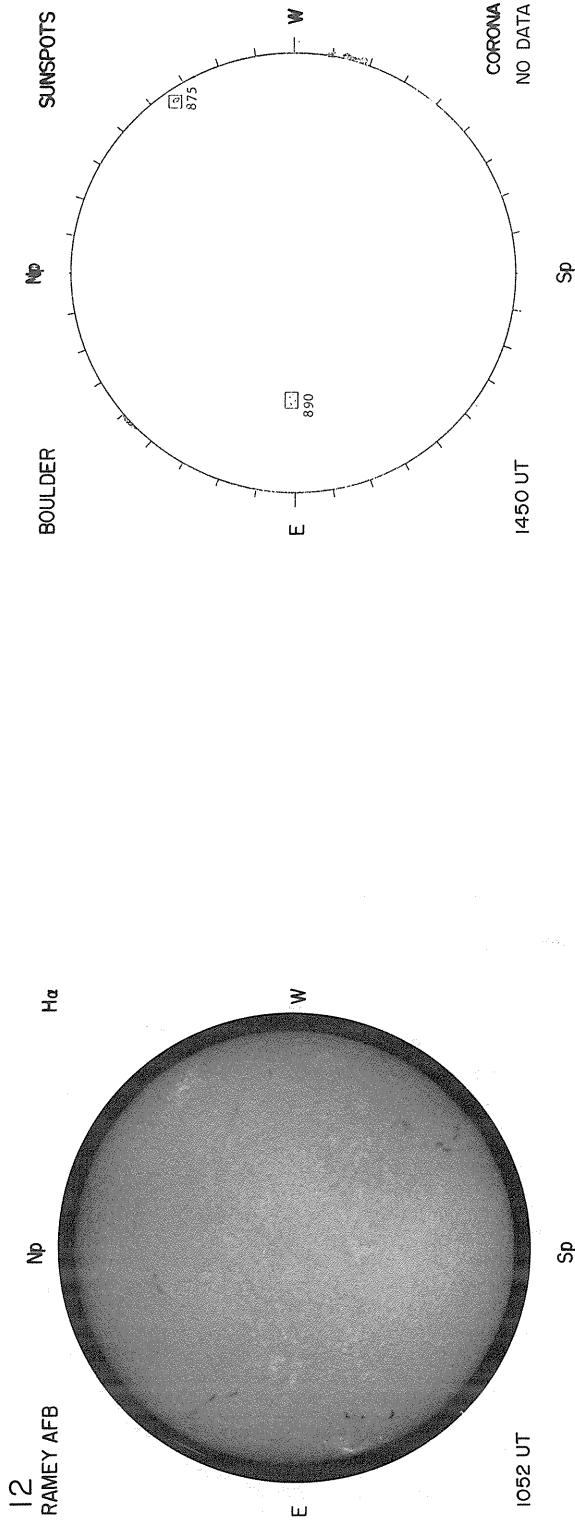
+ 5

+ 10

+ 20

+ 40

+ 80



8.6 MM

NELC LA POSTA

2.0 CM

NELC LA POSTA

Np

Np

W

E

W

E

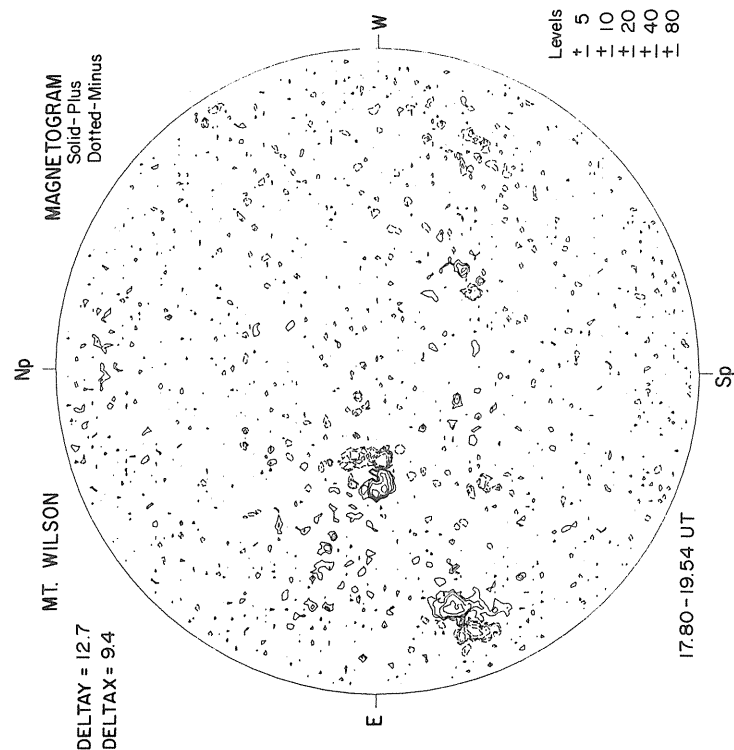
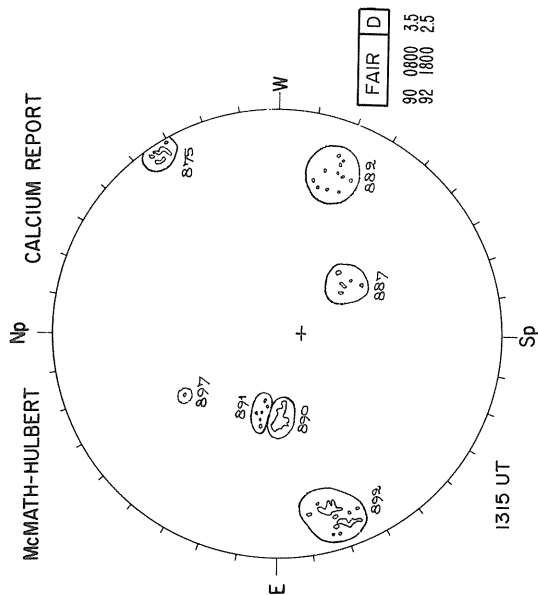
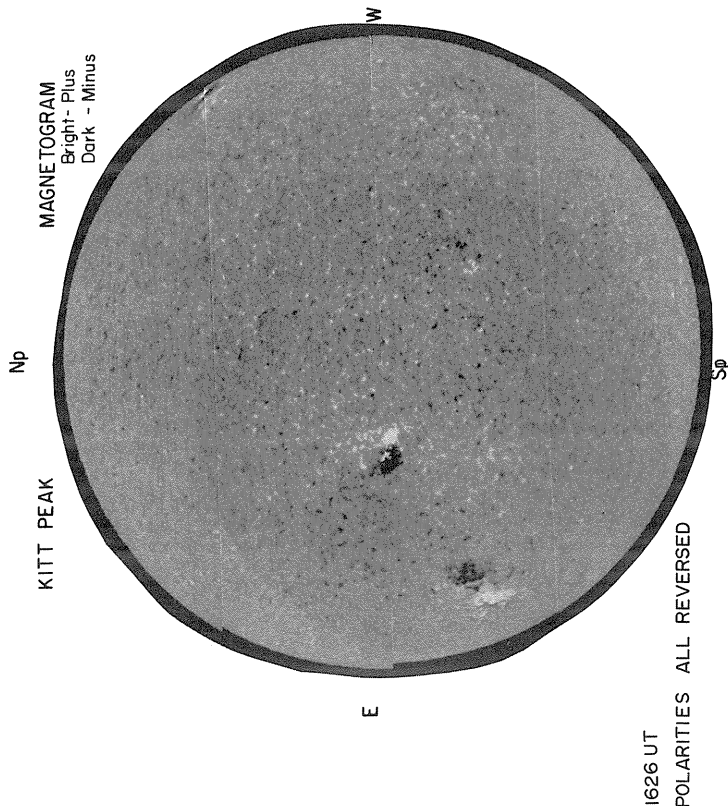
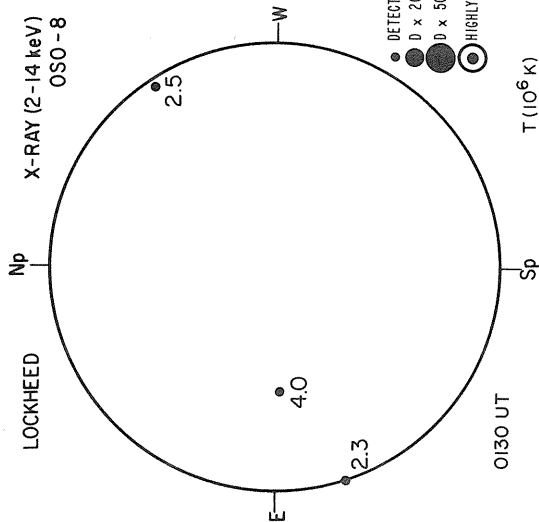
Ant. Temp. Unit 100°K

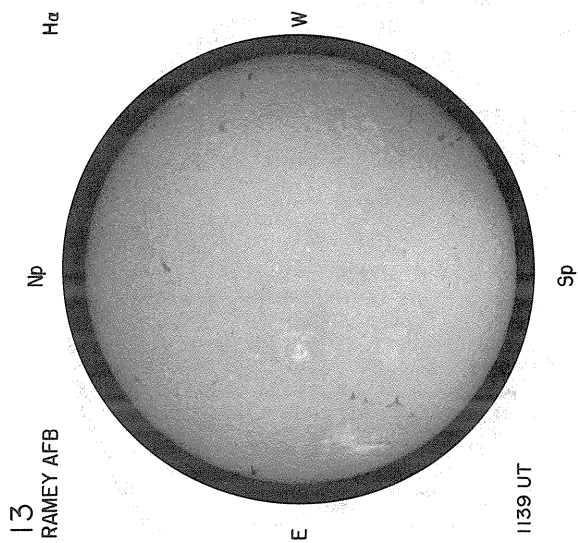
Sp

Ant. Temp. Unit 100°K

Sp

OCTOBER 13, 1975 (P = 26.32, $B_0 = 6.03$, $L_0 = 23.11$)





NELC LA POSTA

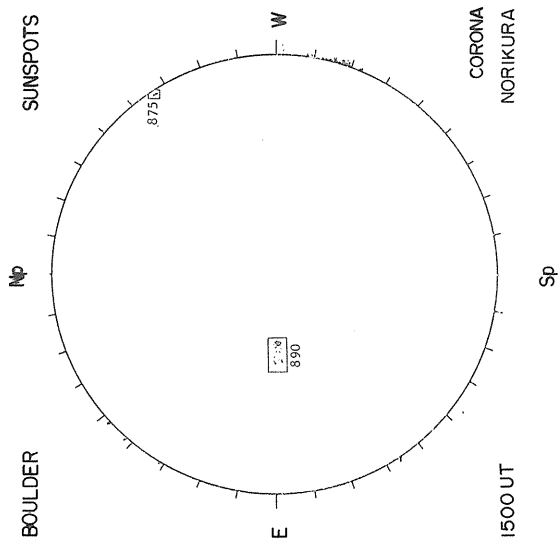
Np

2.0 CM

E

Sp

Ant. Temp. Unit 100°K



NELC LA POSTA

Np

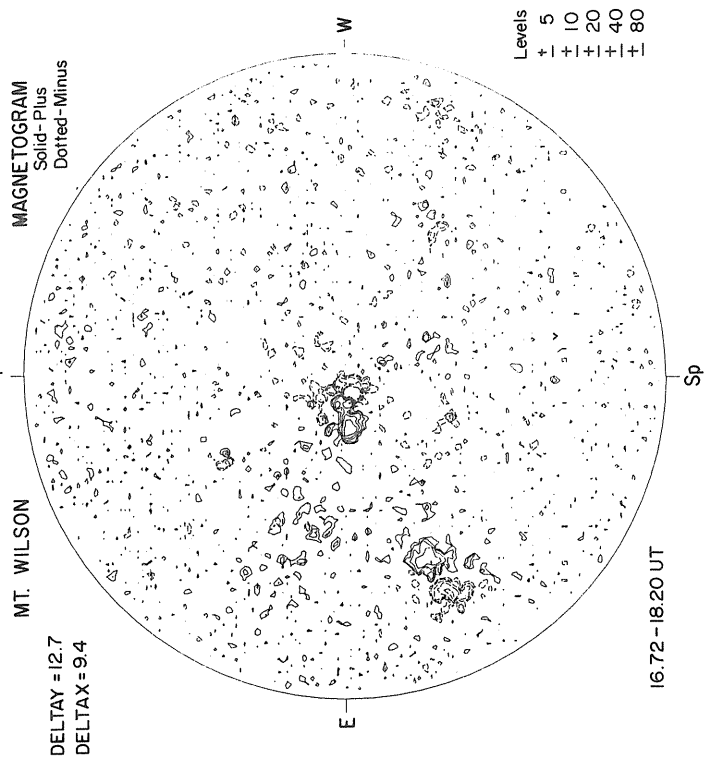
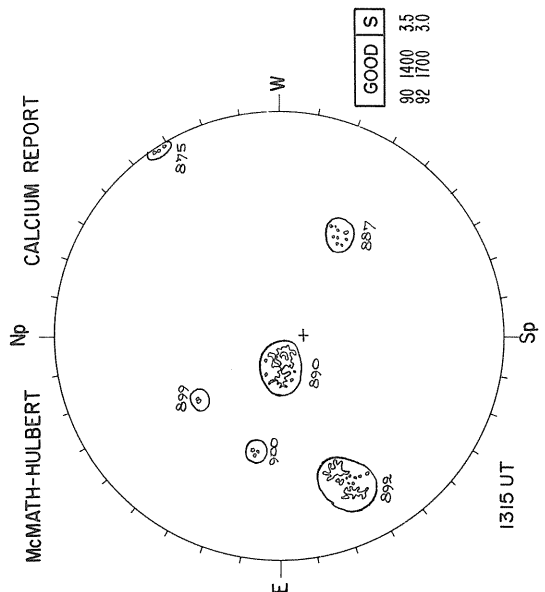
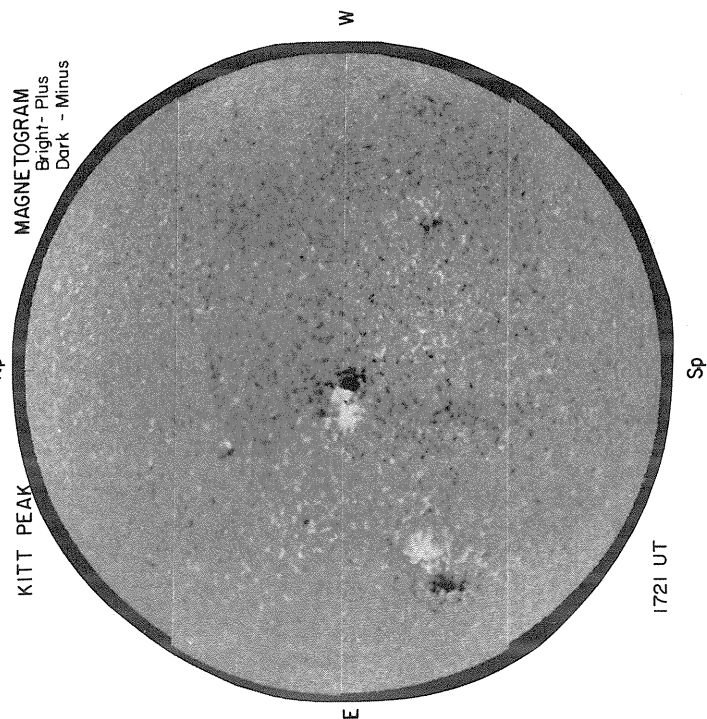
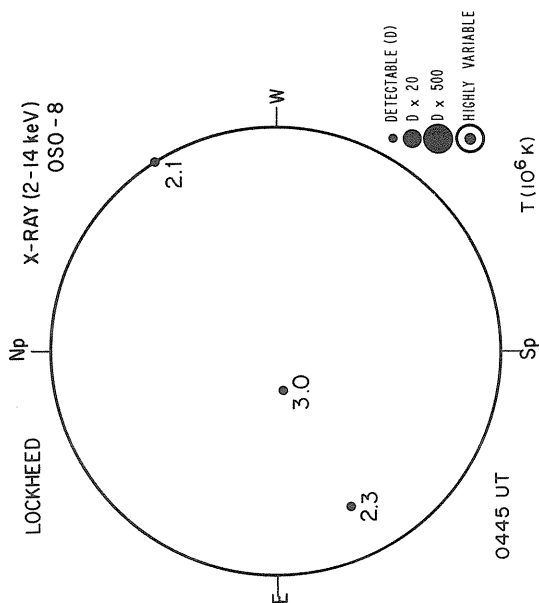
8.6 MM

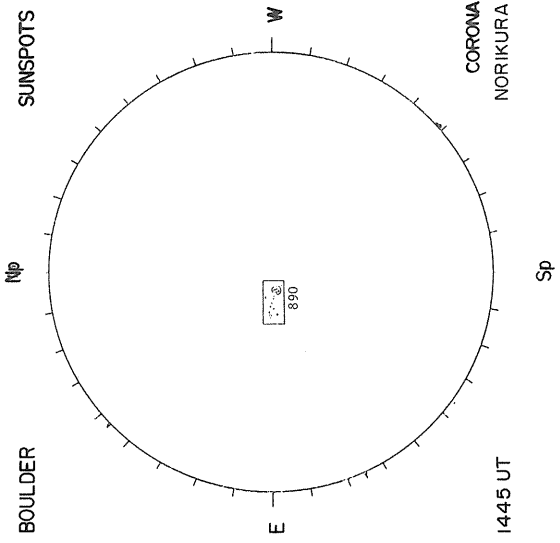
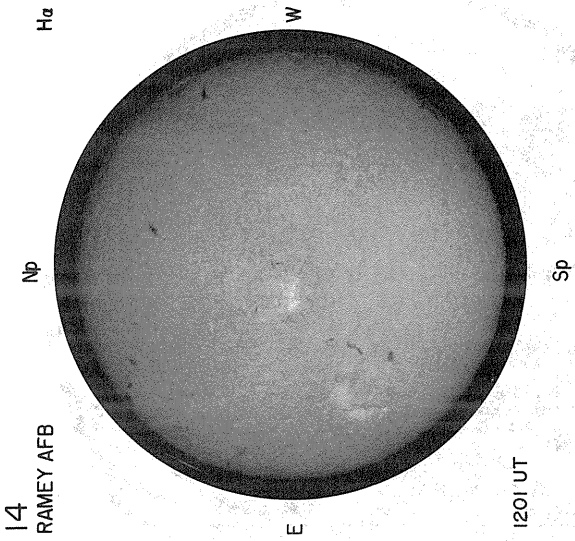
E

Sp

Ant. Temp. Unit 100°K

OCTOBER 14, 1975 (P = 26.30, B₀ = 5.96, L₀ = 109.91)





NELC LA POSTA

Np

2.0 CM

E

Sp

Ant. Temp. Unit 100°K

NELC LA POSTA

Np

8.6 MM

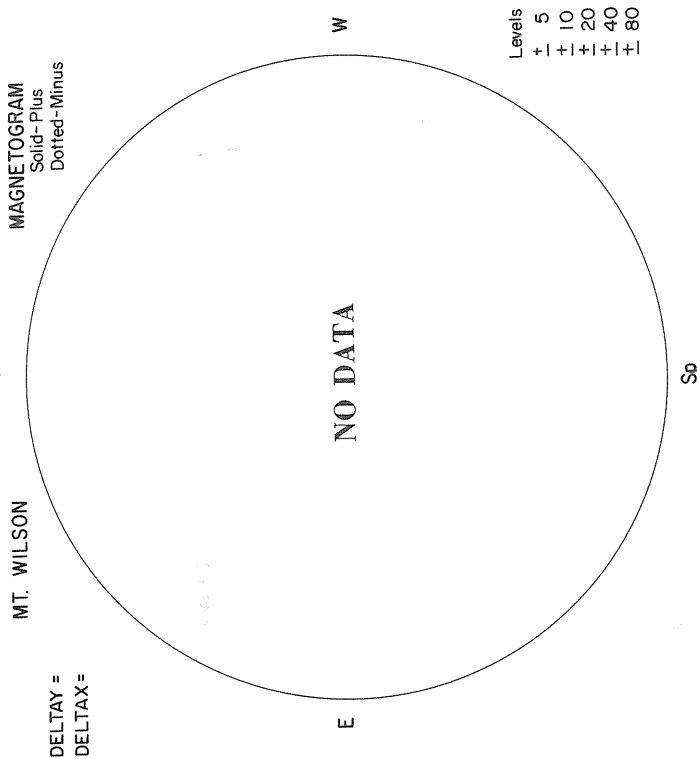
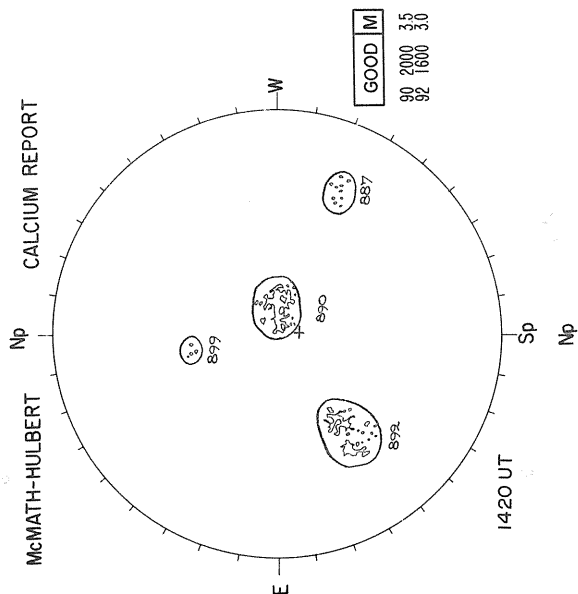
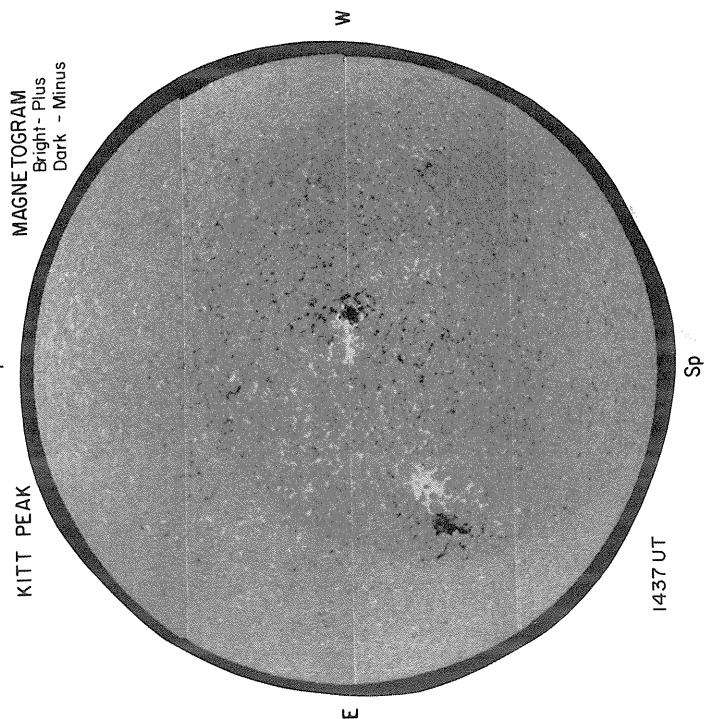
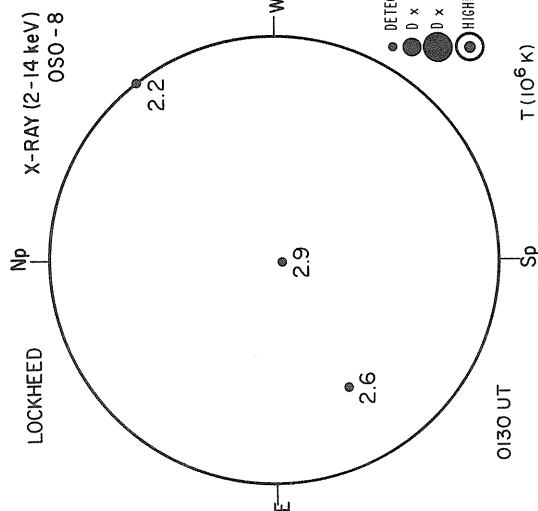
E

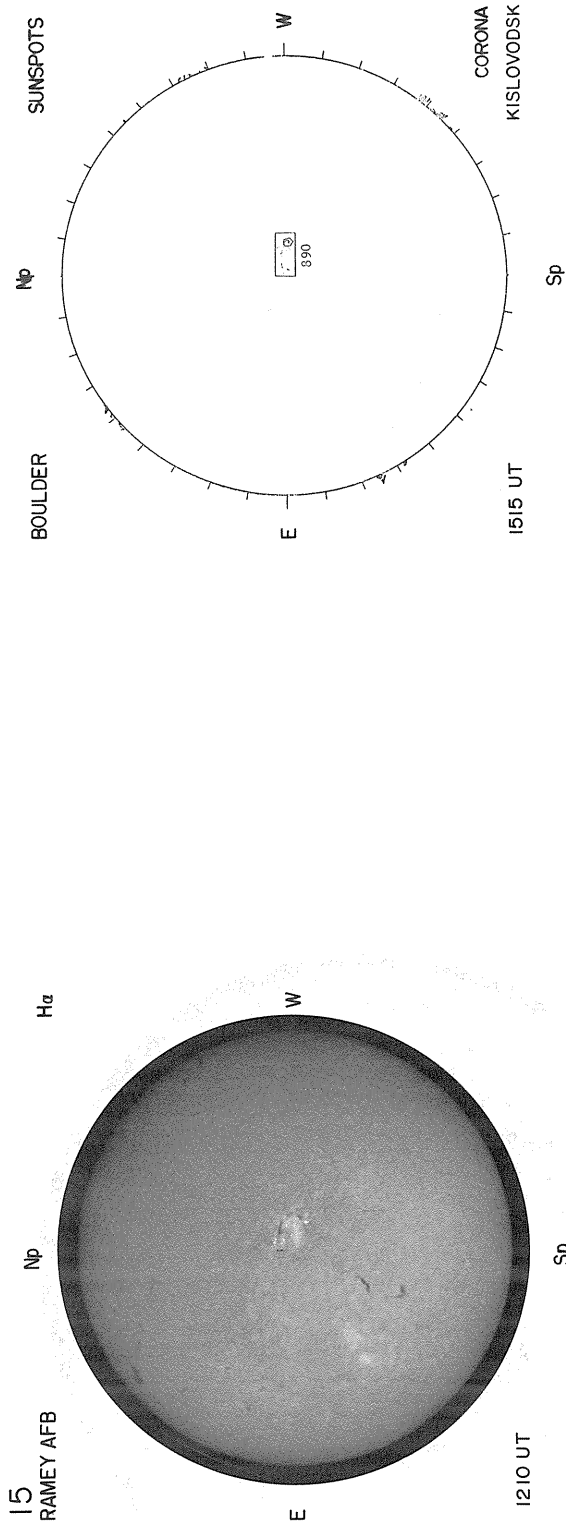
Sp

Ant. Temp. Unit 100°K

56
Oct 75

OCTOBER 15, 1975 (P = 26.27, $B_0 = 589$, $L_0 = 96.72$)





8.6 MM

NELC LA POSTA

2.0 CM

Np

NELC LA POSTA

W

E

W

E

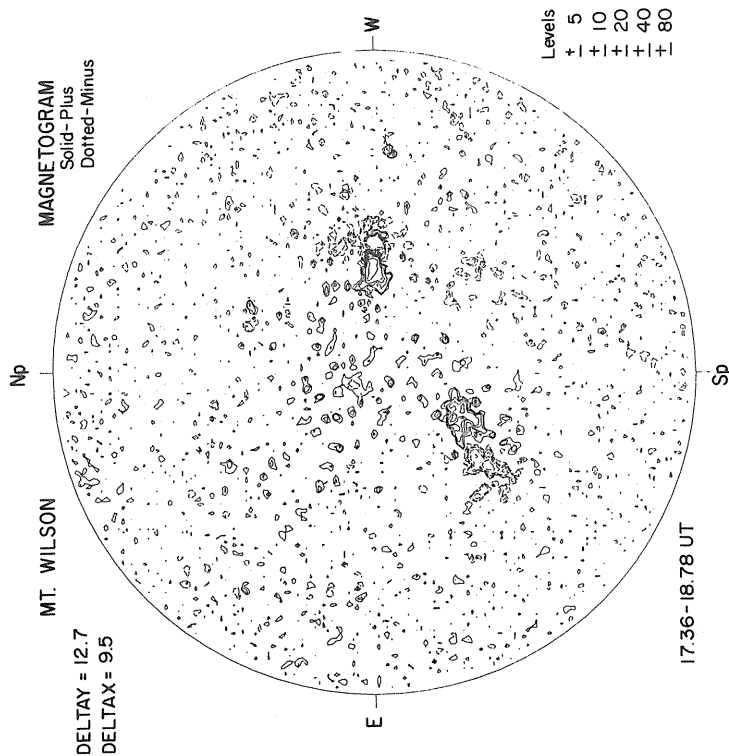
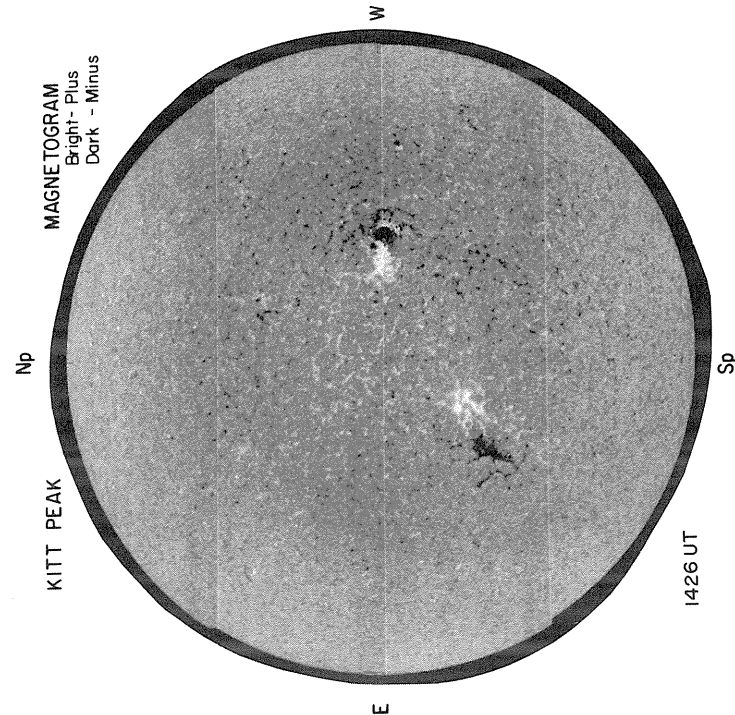
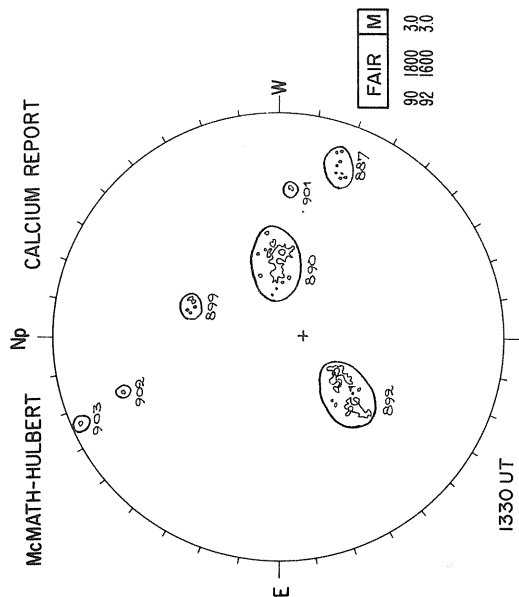
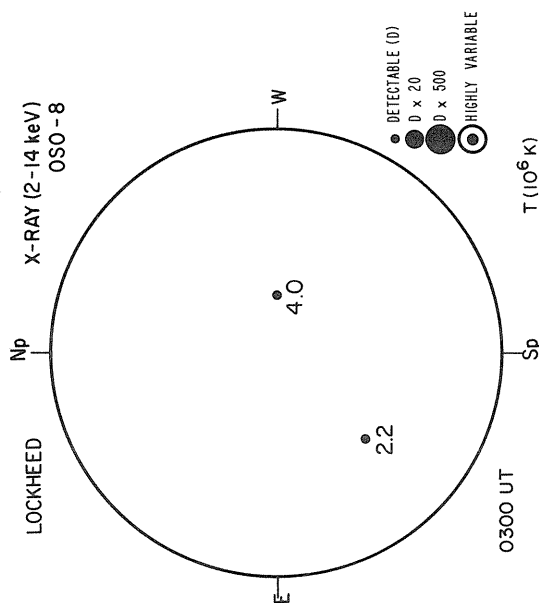
Ant. Temp. Unit 100°K

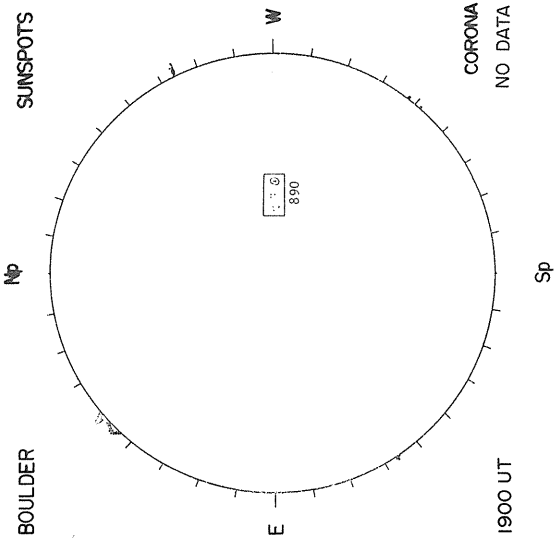
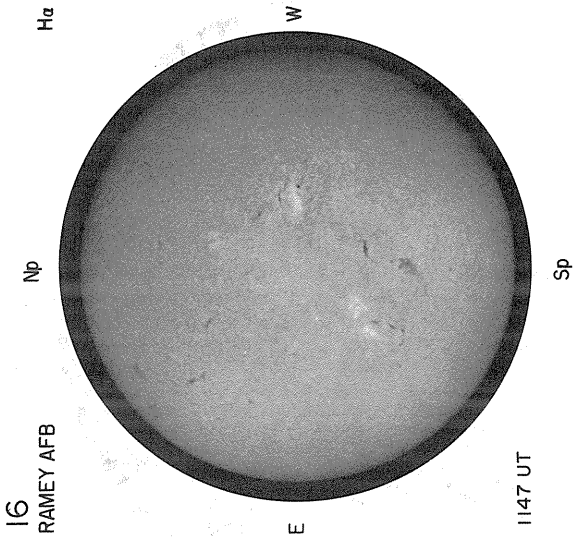
Sp

Ant. Temp. Unit 100°K

Sp

OCTOBER 16, 1975 (P=26.24, $B_0 = 5.82$, $L_0 = 83.53$)





8.6 MM

NELC LA POSTA

2.0 CM

NELC LA POSTA

Np

Np

W

E

W

E

Ant. Temp. Unit 100°K

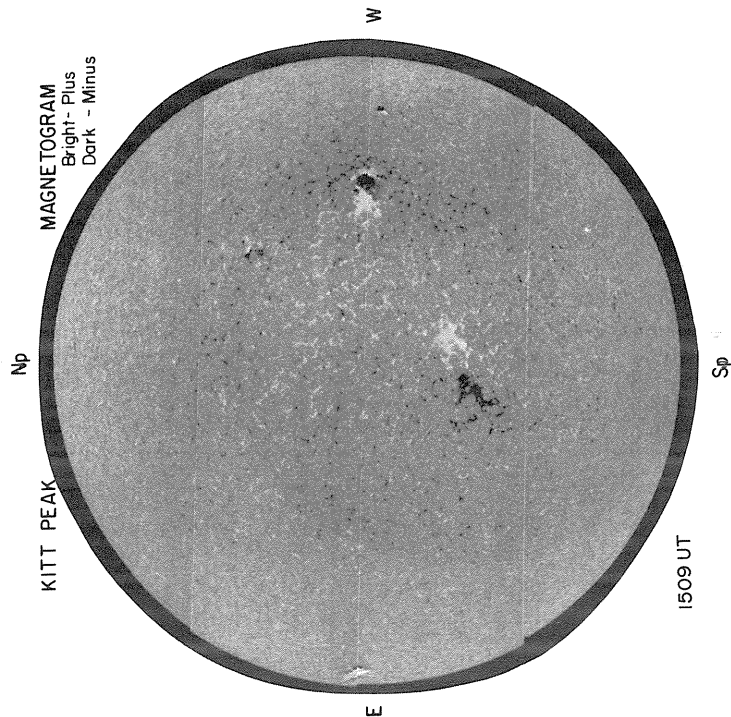
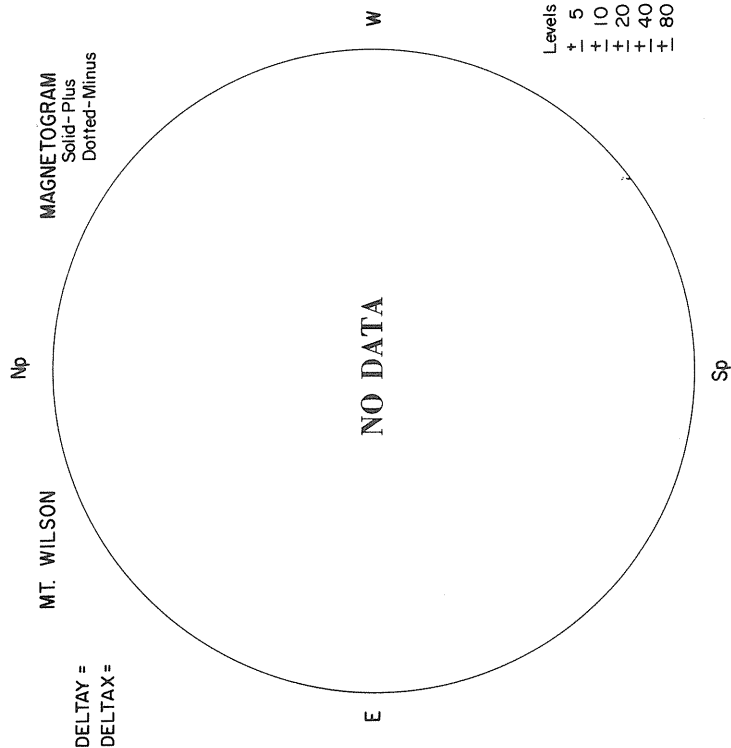
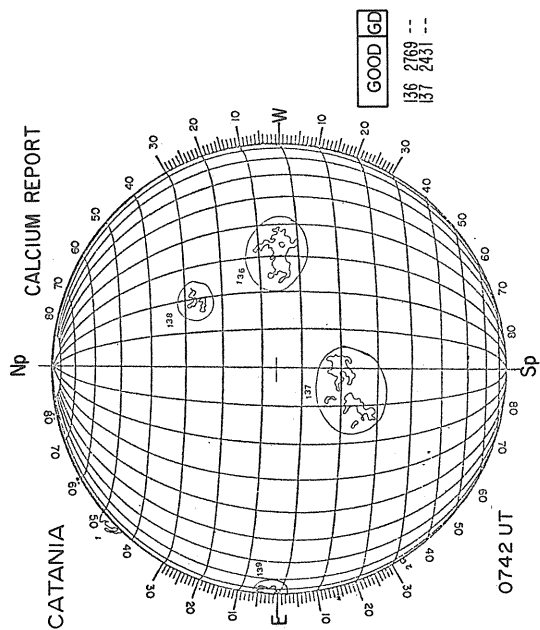
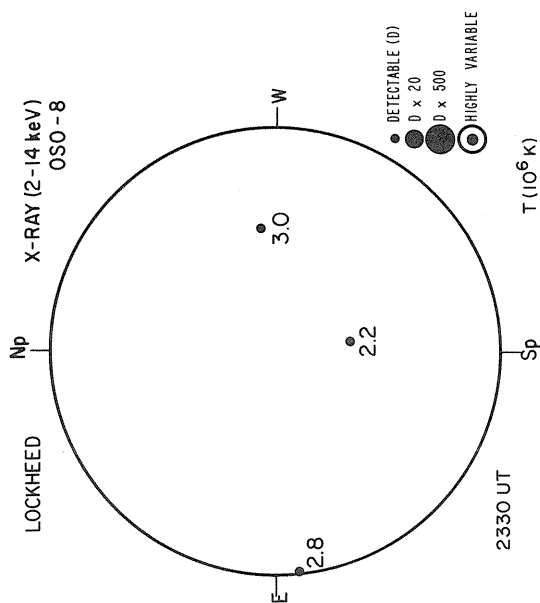
Sp

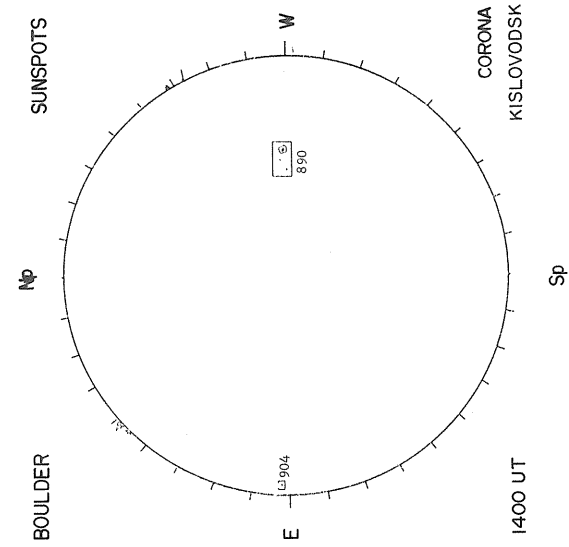
Ant. Temp. Unit 100°K

Sp

60
Oct 75

OCTOBER 17, 1975 (P = 26.19, B₀ = 5.74, L₀ = 70.34)





8.6 MM

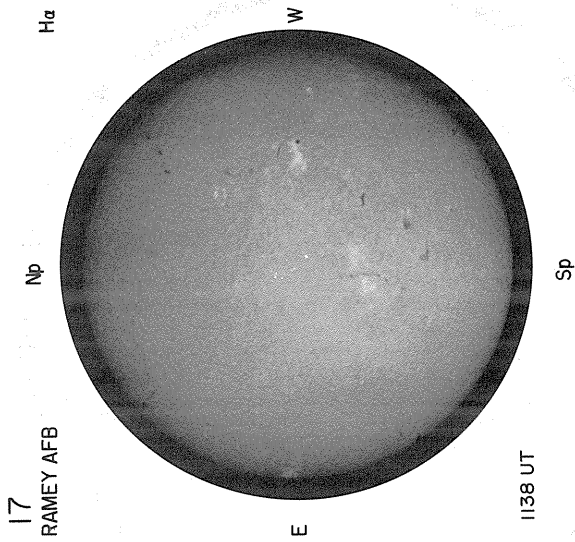
Np

NELC LA POSTA

W

Ant. Temp. Unit 100°K

Sp



2.0 CM

Np

NELC LA POSTA

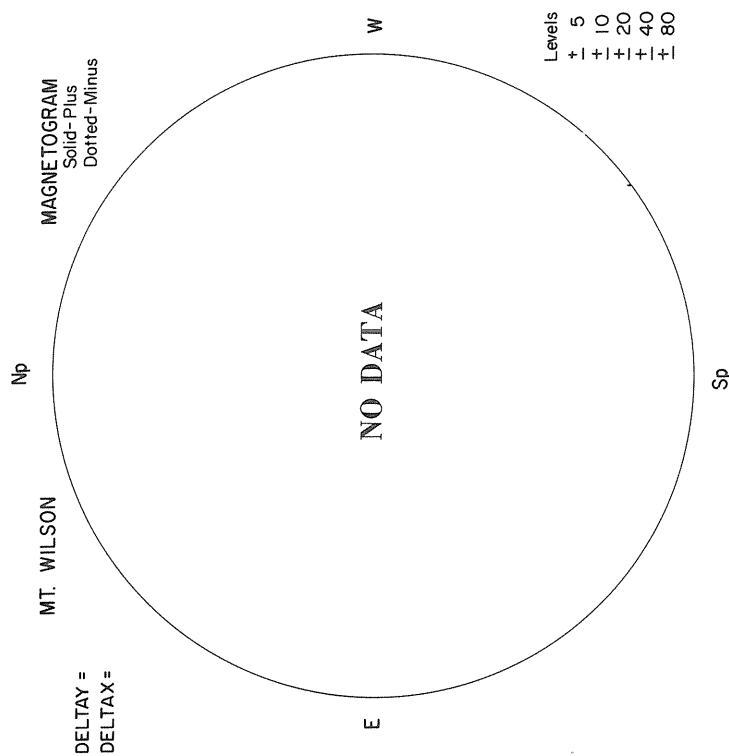
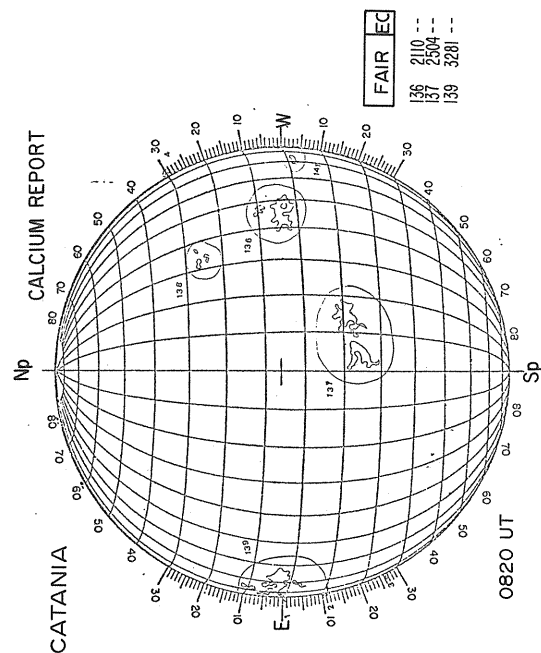
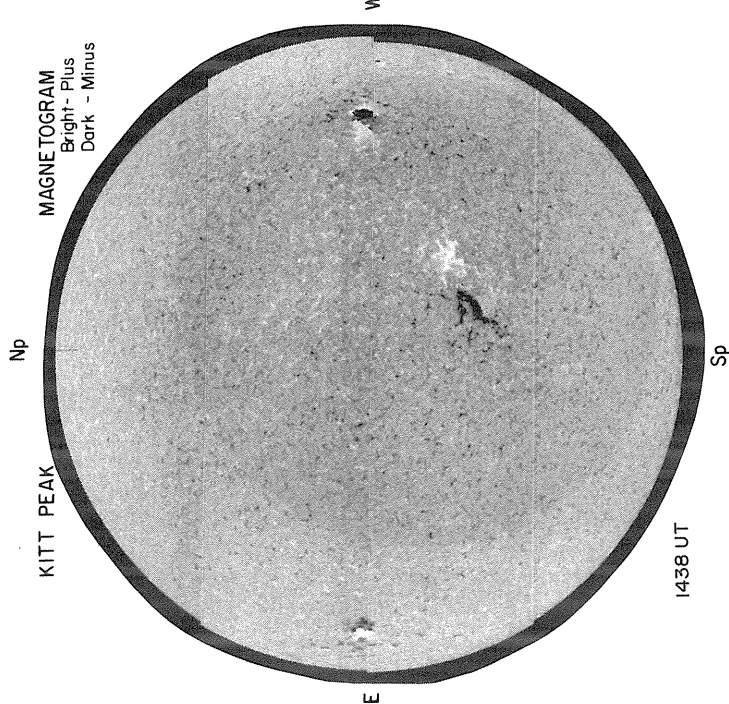
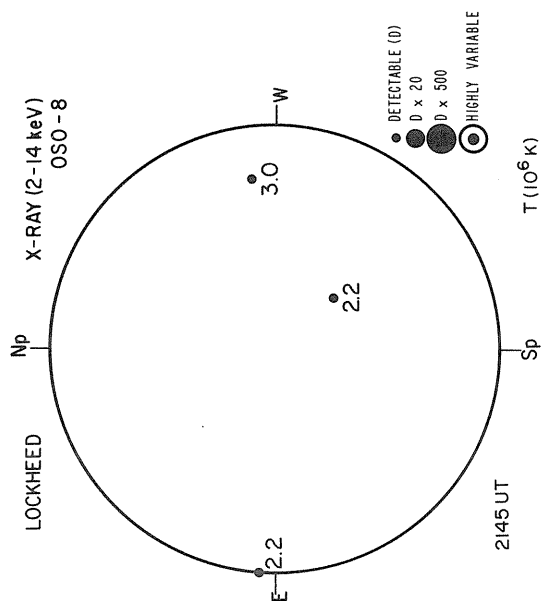
W

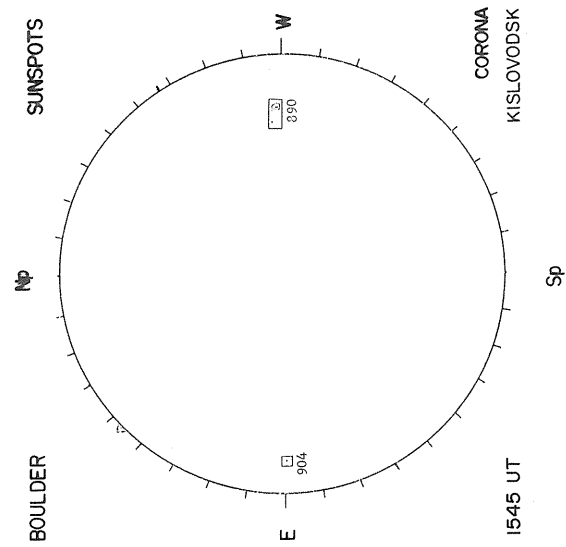
Ant. Temp. Unit 100°K

Sp

E

OCTOBER 18, 1975 (P = 26.14, B₀ = 5.66, L₀ = 57.15)





NELC LA POSTA

2.0 CM

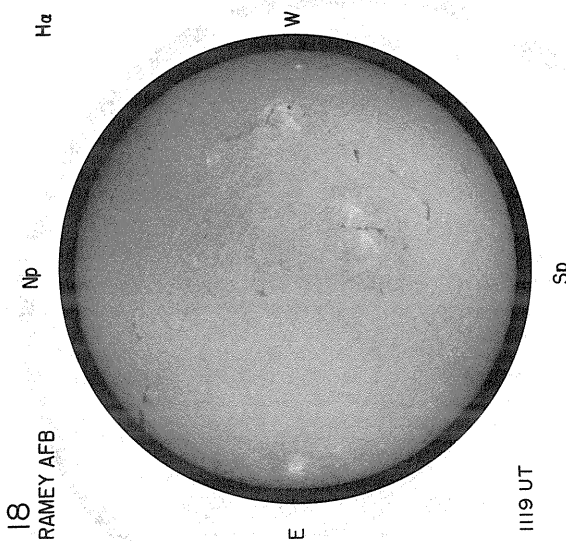
8.6 MM

E

W

Sp

Ant. Temp. Unit 100°K



NELC LA POSTA

2.0 CM

8.6 MM

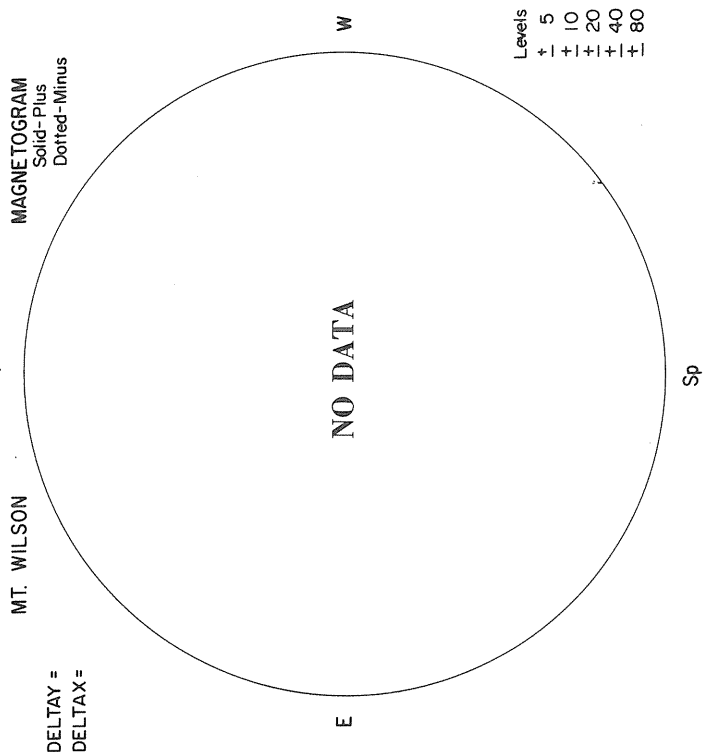
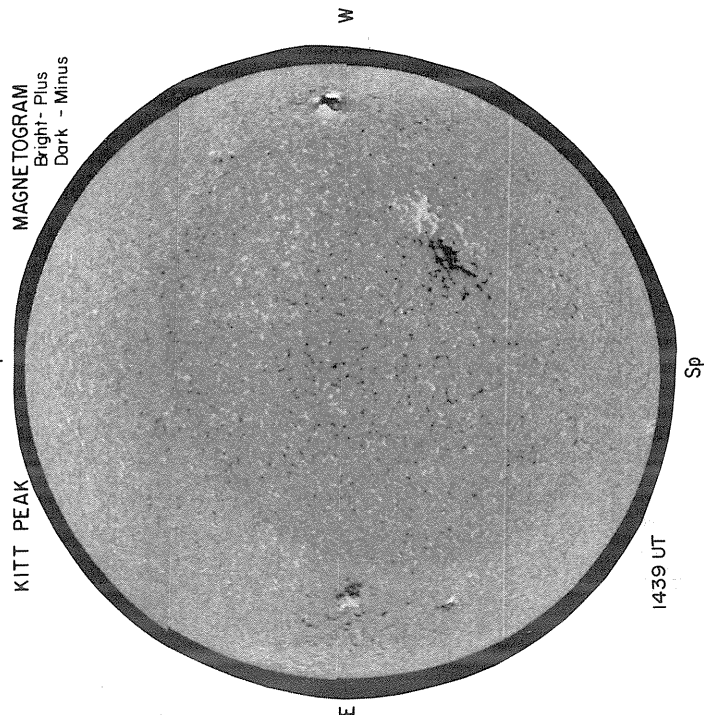
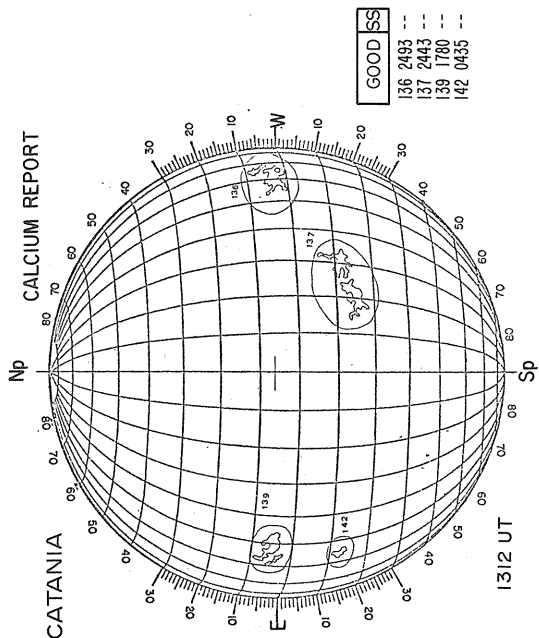
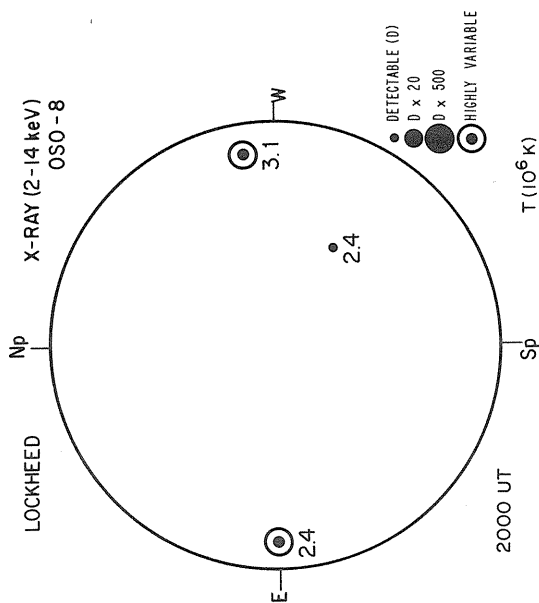
E

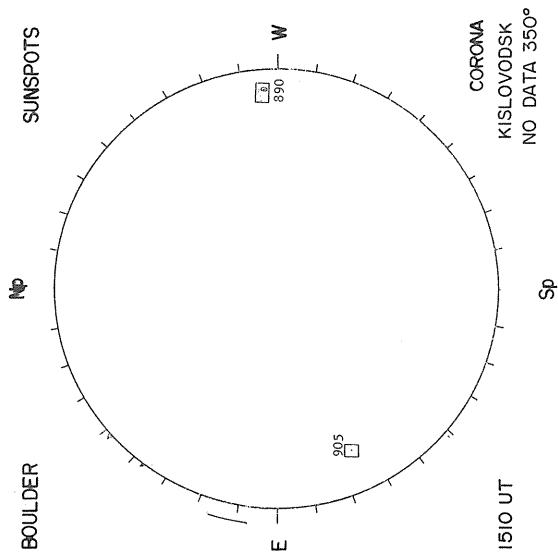
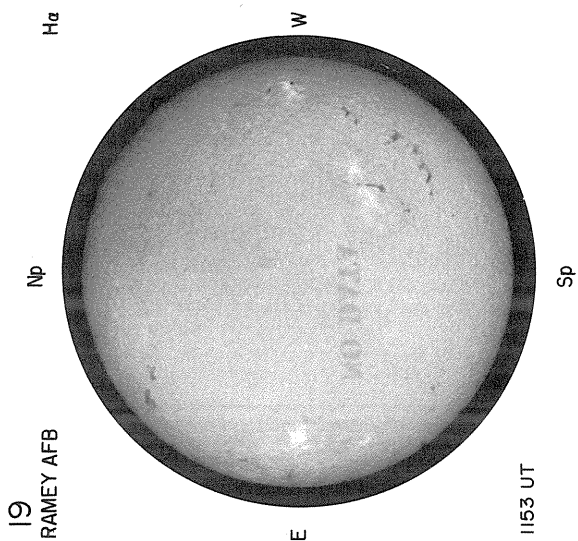
W

Sp

Ant. Temp. Unit 100°K

OCTOBER 19, 1975 (P = 26.09, B₀ = 5.58, L₀ = 43.96)





NELC LA POSTA

2.0 CM

NELC LA POSTA

8.6 MM

Np

Np

E

W

E

W

Sp

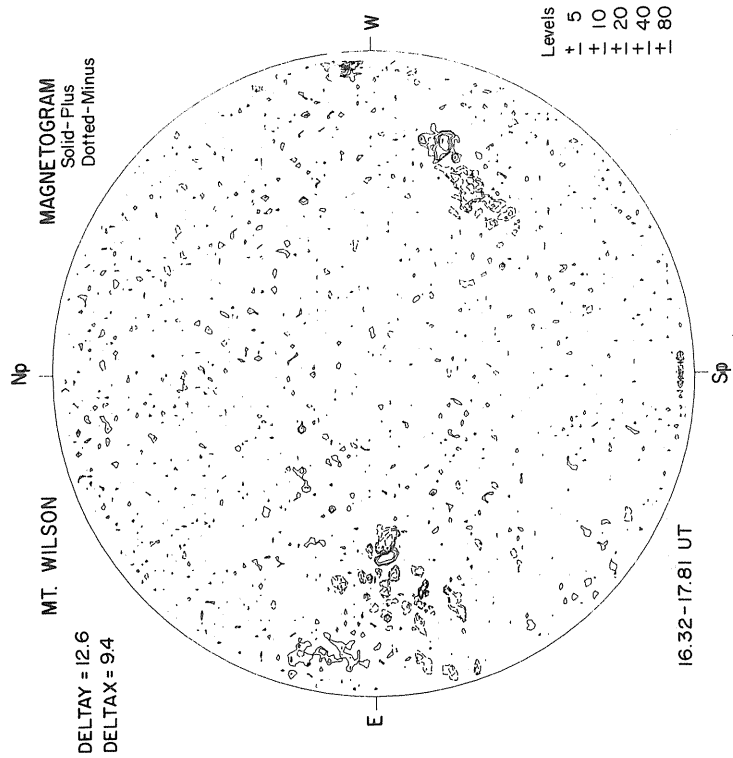
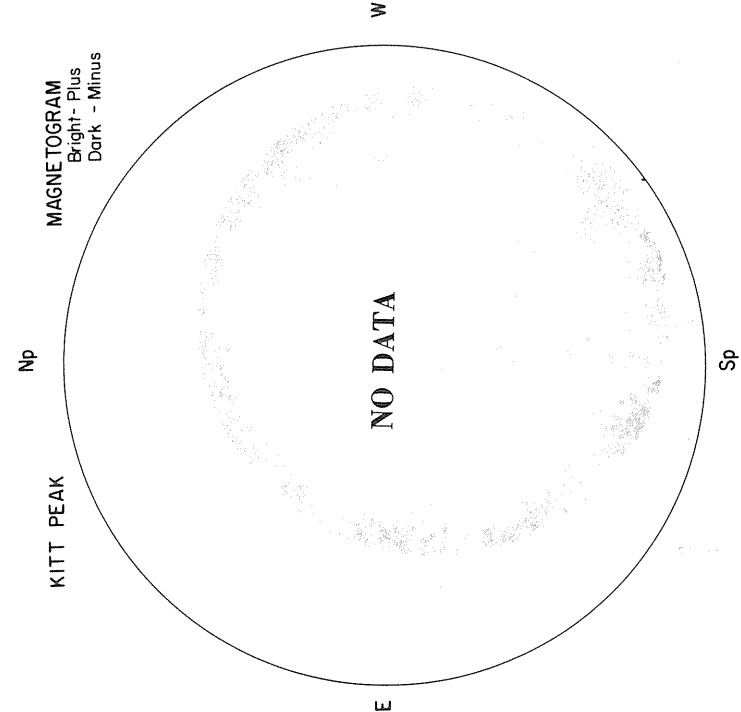
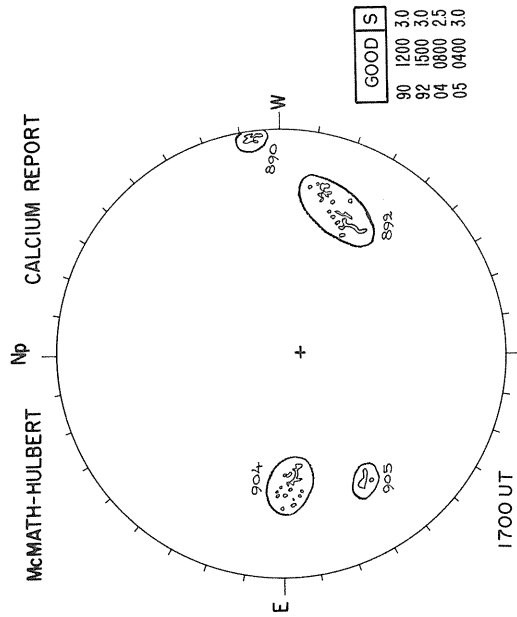
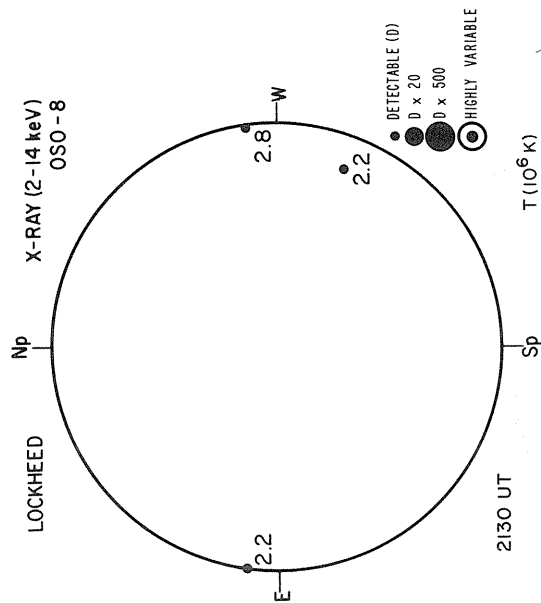
Sp

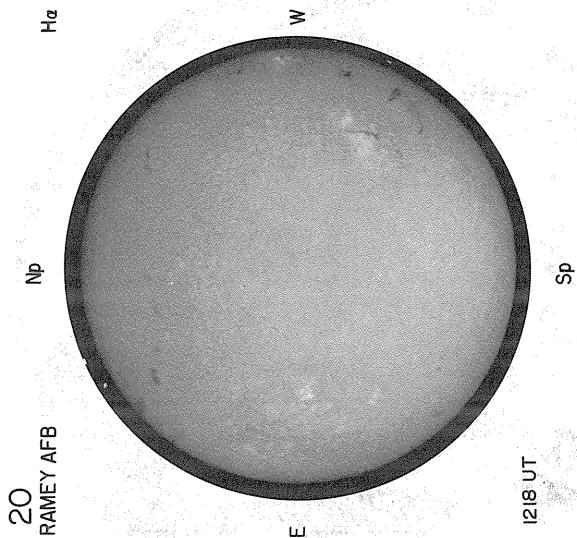
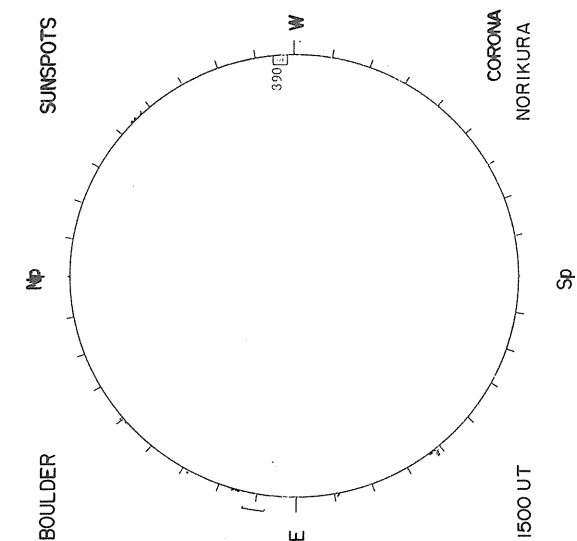
Ant. Temp. Unit 100°K

Ant. Temp. Unit 100°K

66
Oct 75

OCTOBER 20, 1975 (P = 26.02, B₀ = 5.50, L₀ = 30.77)





8.6 MM

NELC LA POSTA

2.0 CM

NELC LA POSTA

Np

Np

W

E

W

E

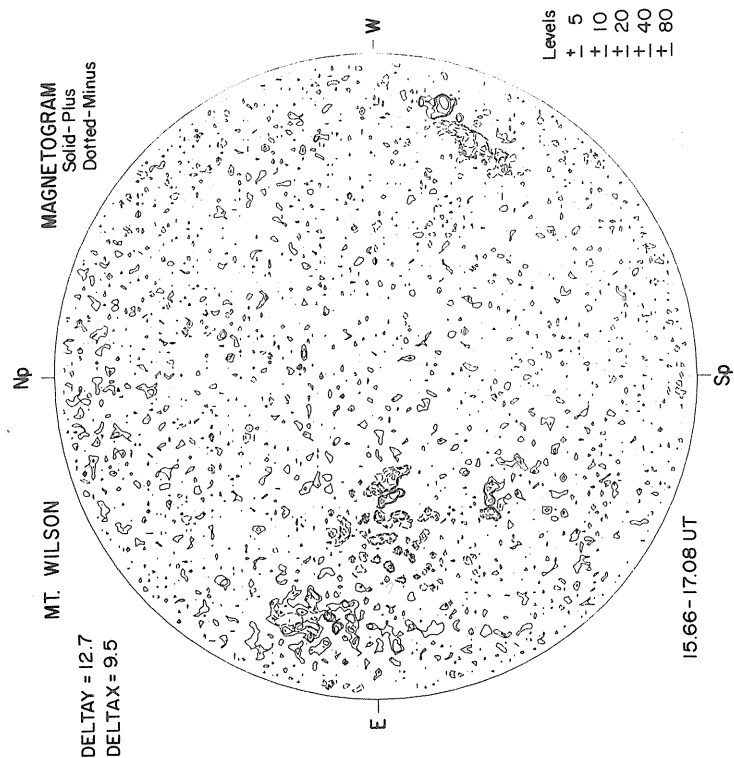
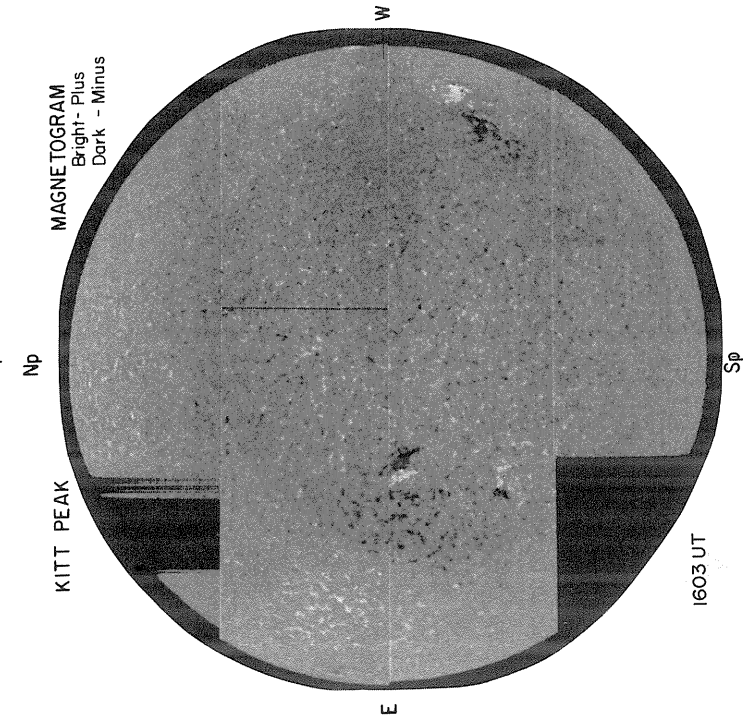
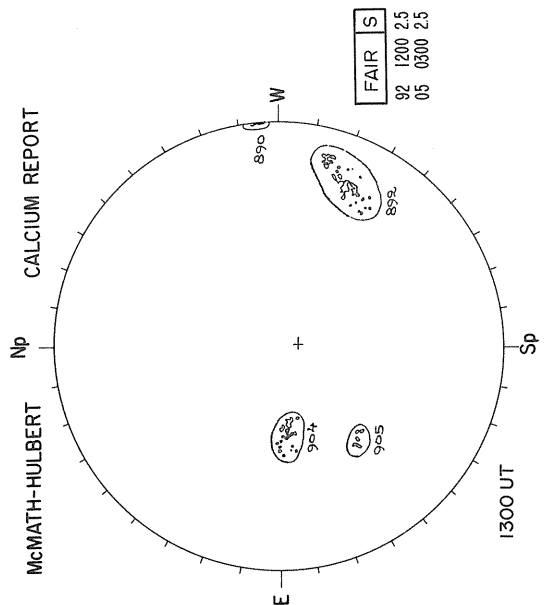
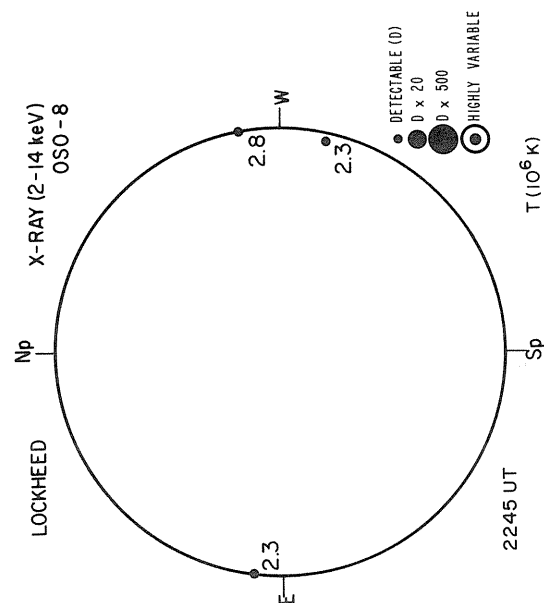
Ant. Temp. Unit 100°K

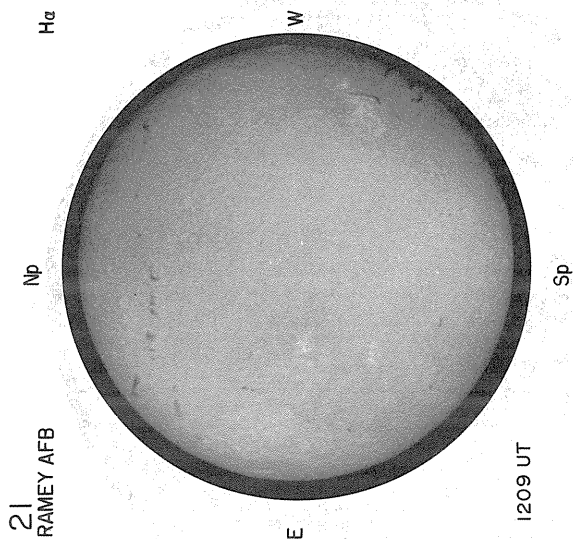
Sp

Sp

Ant. Temp. Unit 100°K

OCTOBER 21, 1975 (P = 25.95, $B_0 = 5.42$, $L_0 = 17.58$)





NELC LA POSTA

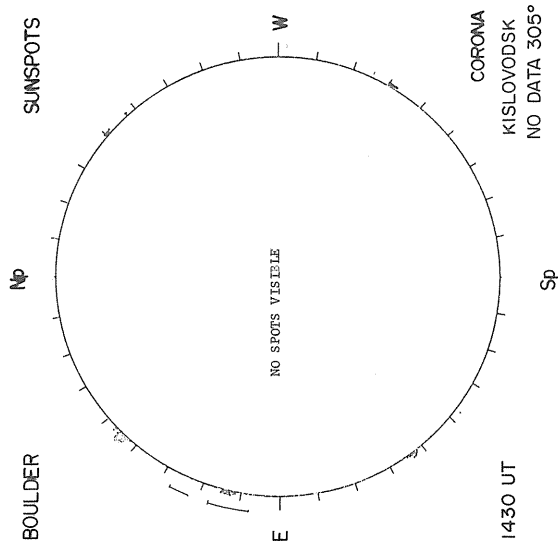
Np

2.0 CM

NELC LA POSTA

Np

8.6 MM



Sp

Ant. Temp. Unit 100°K

Sp

Ant. Temp. Unit 100°K

E

W

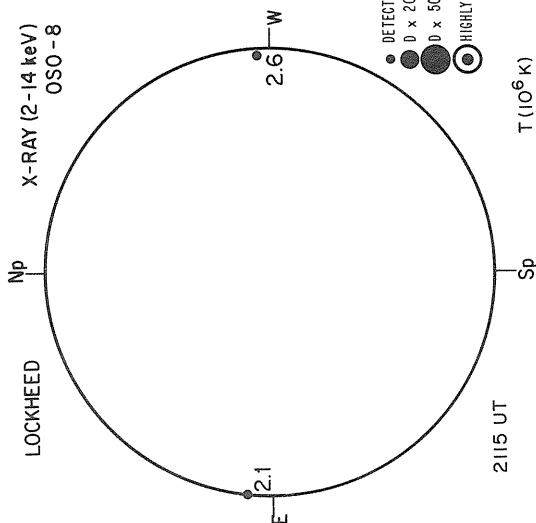
E

W

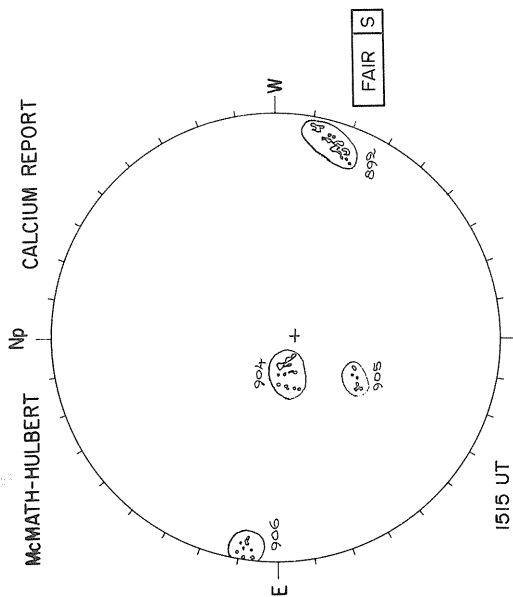
70
Oct 75

OCTOBER 22, 1975 (P=25.87, $B_0 = 5.34$, $L_0 = 4.39$)

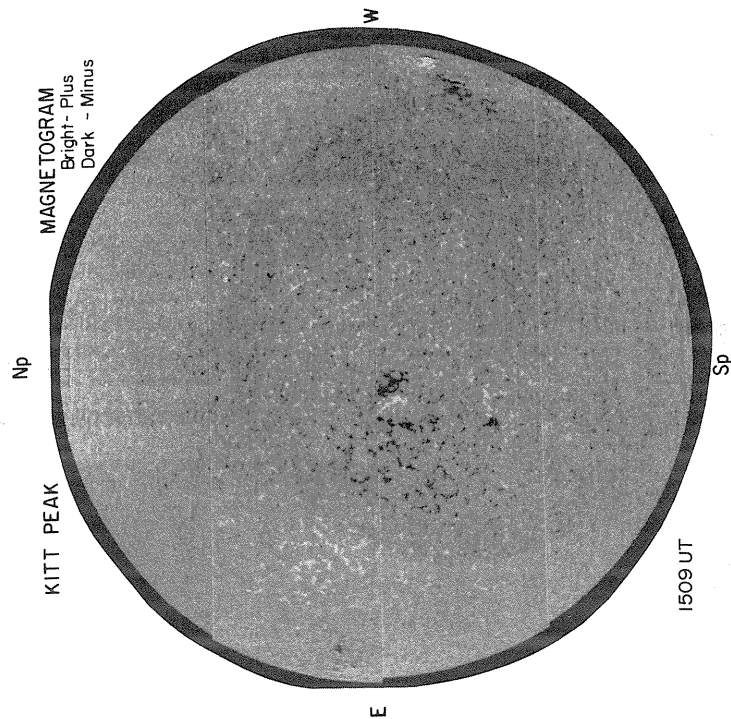
LOCKHEED
X-RAY (2-14 keV)
OSO - 8



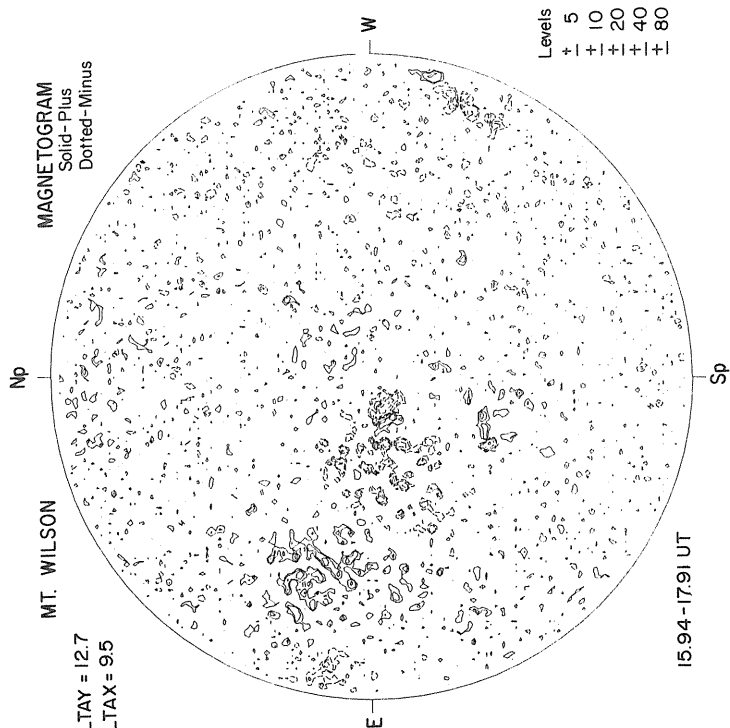
McMATH-HULBERT
CALCIUM REPORT



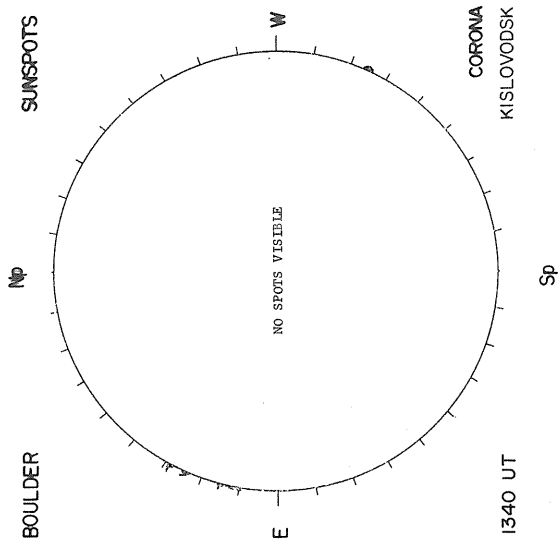
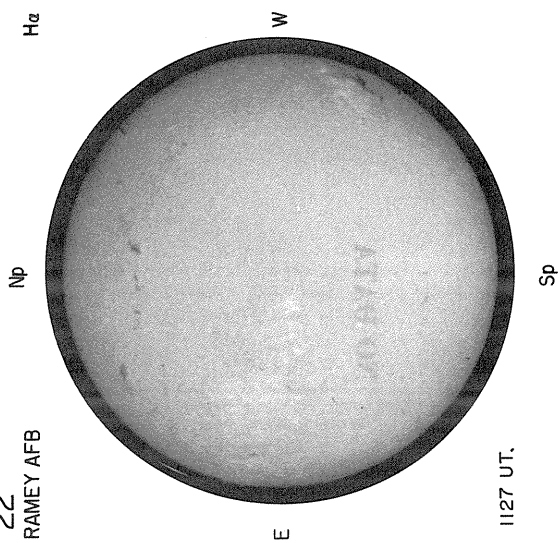
KITT PEAK
MAGNETOGRAM
Bright-Plus
Dark - Minus



MT. WILSON
MAGNETOGRAM
Solid-Plus
Dotted-Minus
DELTA T = 12.7
DELTA X = 9.5



22
RAMEY AFB



NELC LA POSTA

Np

2.0 CM

NELC LA POSTA

Np

8.6 MM

E

W

E

W

Sp

Ant. Temp. Unit 100°K

Sp

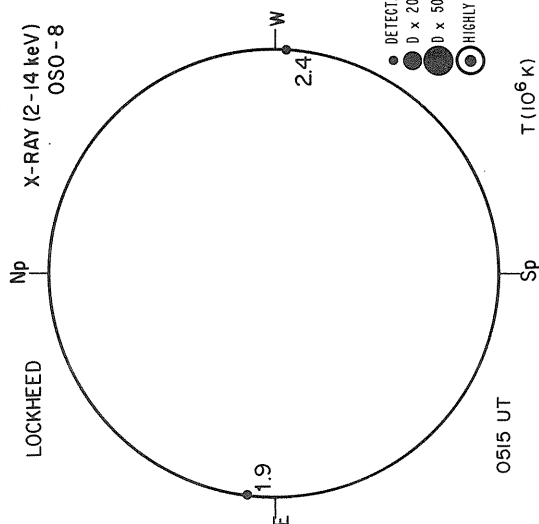
Ant. Temp. Unit 100°K

CORONA
KISLOVODSK

72
Oct 75

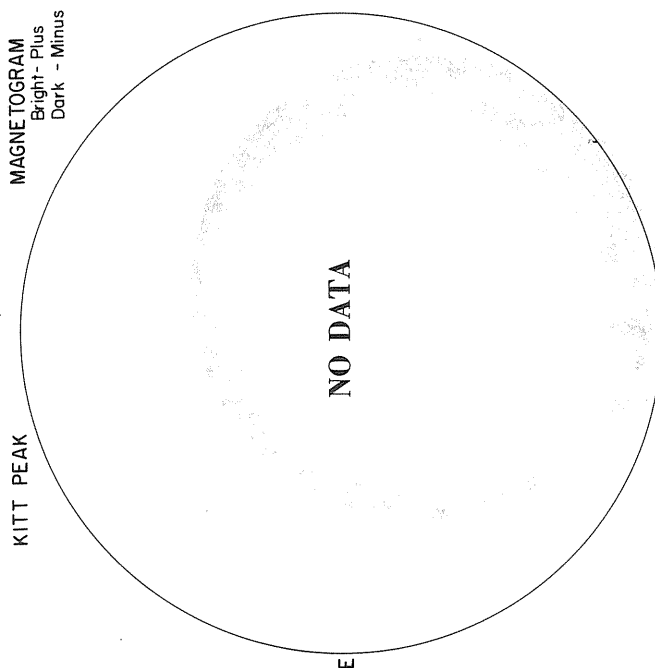
OCTOBER 23, 1975 (P = 25.78, B₀ = 5.25, L₀ = 351.20)

LOCKHEED X-RAY (2-14 keV)
OSO - 8

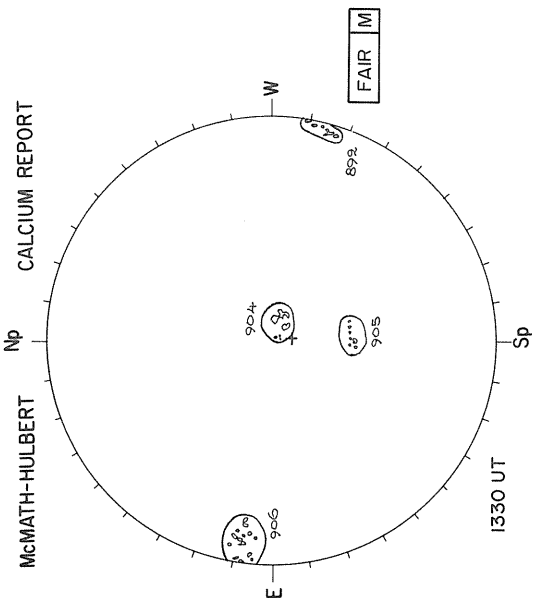


● DETECTABLE (1)
● 0 x 20
● 0 x 500
● HIGHLY VARIABLE

KITT PEAK
MAGNETOGRAM
Bright - Plus
Dark - Minus

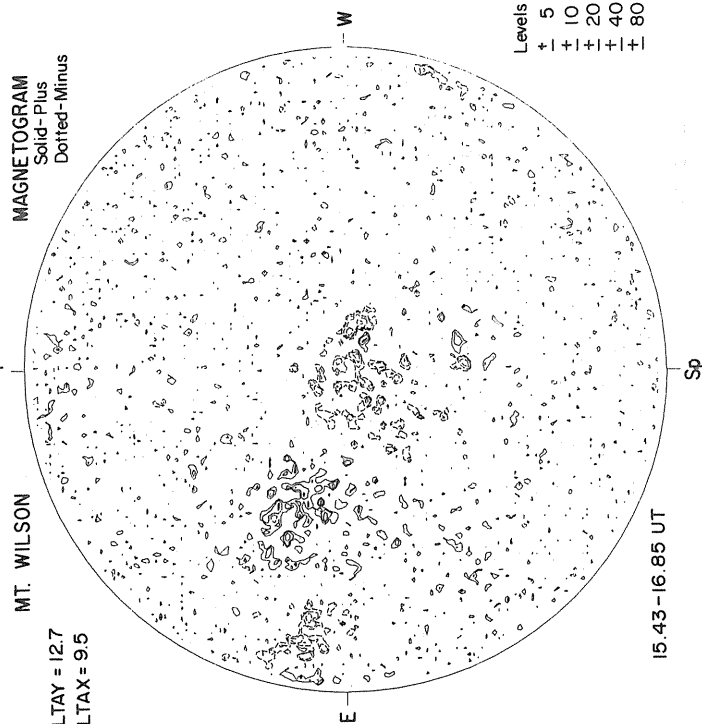


McMATH-HULBERT

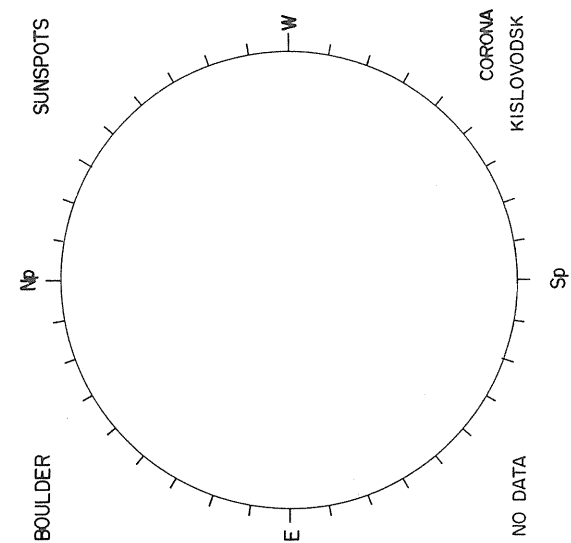


FAIR M

MT. WILSON
MAGNETOGRAM
Solid-Plus
Dotted-Minus
DELTA Y = 12.7
DELTA X = 9.5



Levels
+ 5
+ 10
+ 20
+ 40
+ 80



8.6 MM

Np

NELC LA POSTA

2.0 CM

Np

NELC LA POSTA

W

E

W

E

Ant. Temp. Unit 100°K

Sp

Ant. Temp. Unit 100°K

Sp

23
RAMEY AFB

H_α

Np

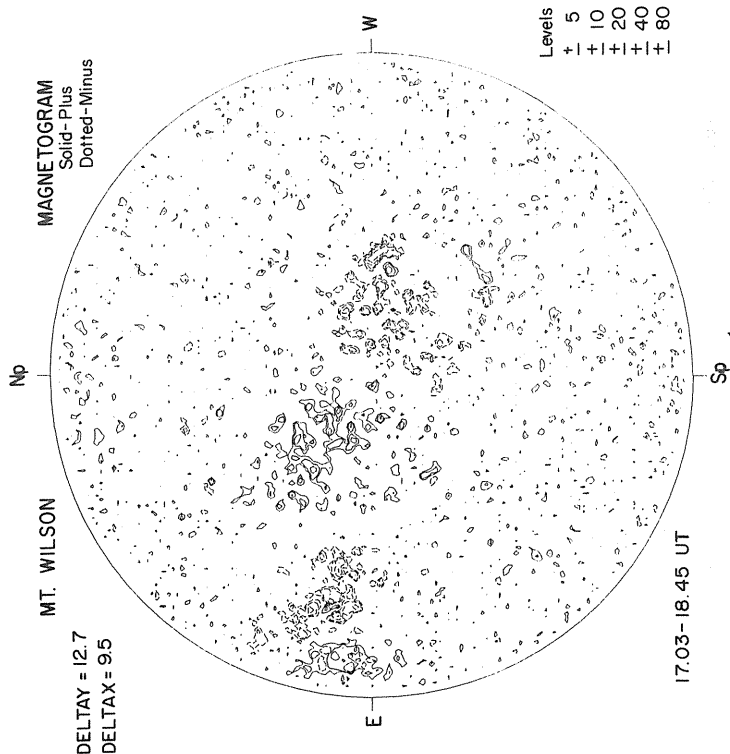
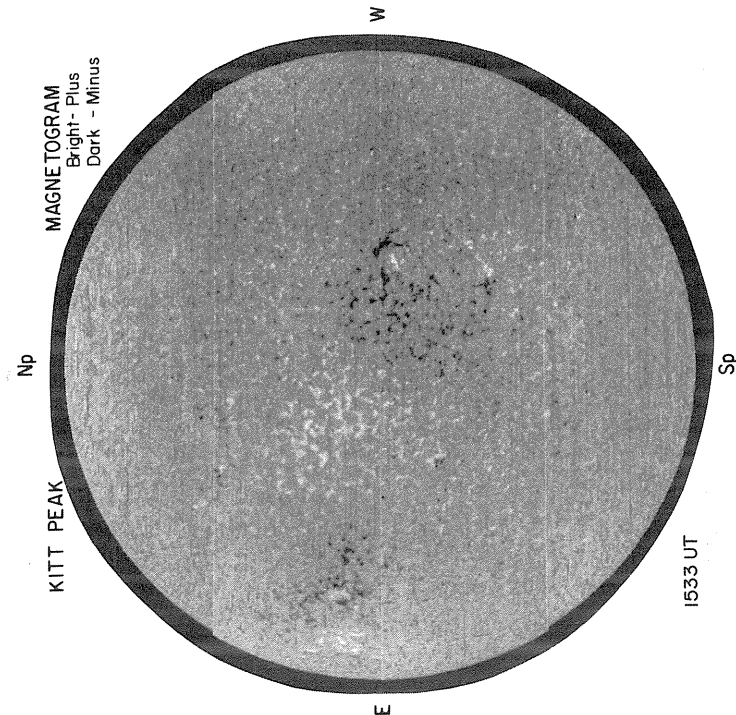
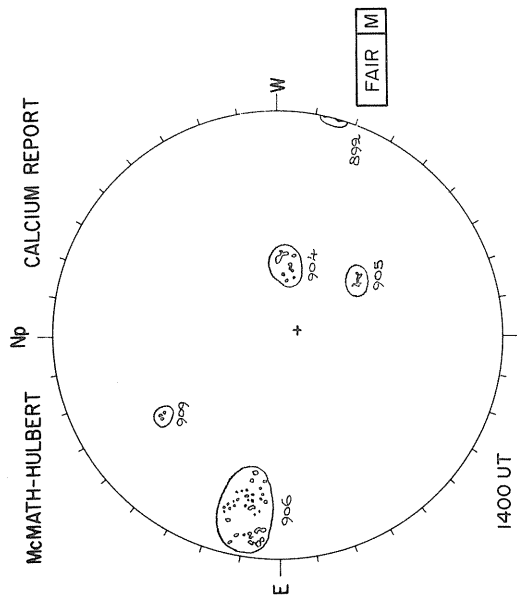
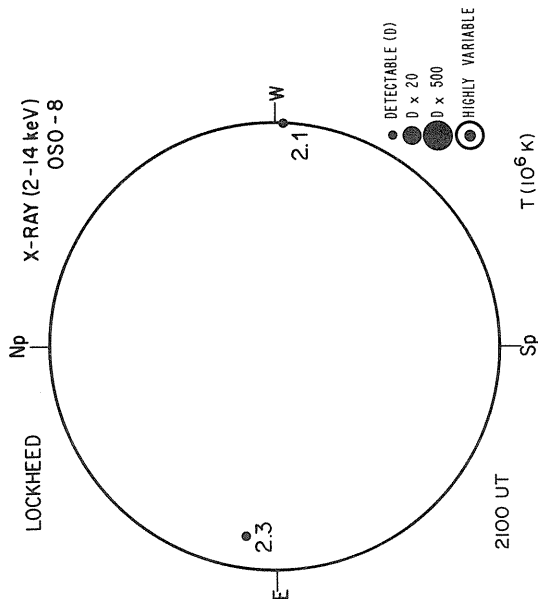
NO DATA

W

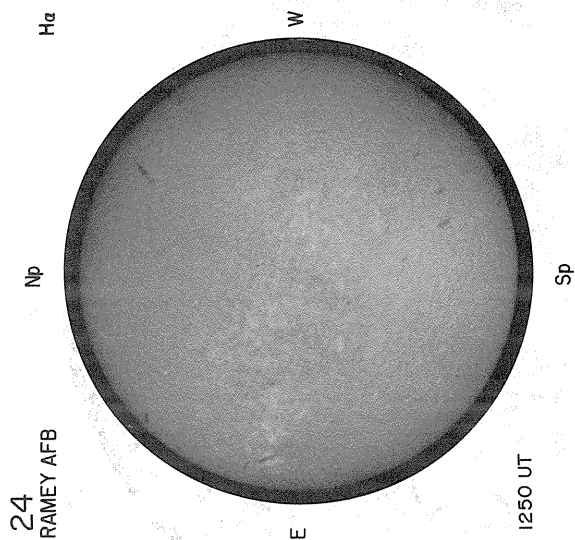
E

Sp

OCTOBER 24, 1975 (P = 25.69, $B_0 = 5.16$, $L_0 = 338.01$)



Levels
+ 5
+ 10
+ 20
+ 40
+ 80



NELC LA POSTA

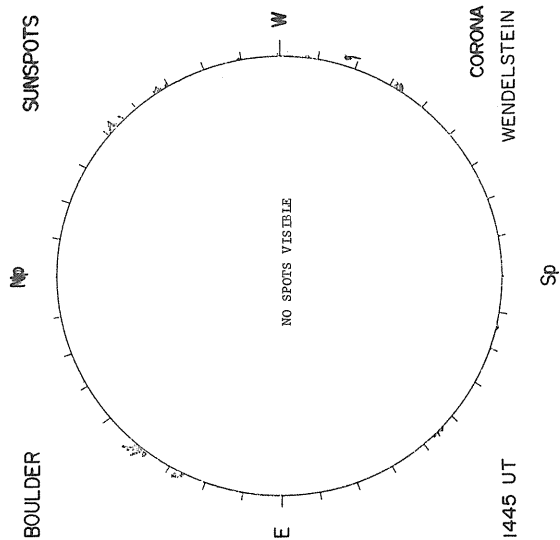
Np

2.0 CM

NELC LA POSTA

Np

8.6 MM



E

W

E

W

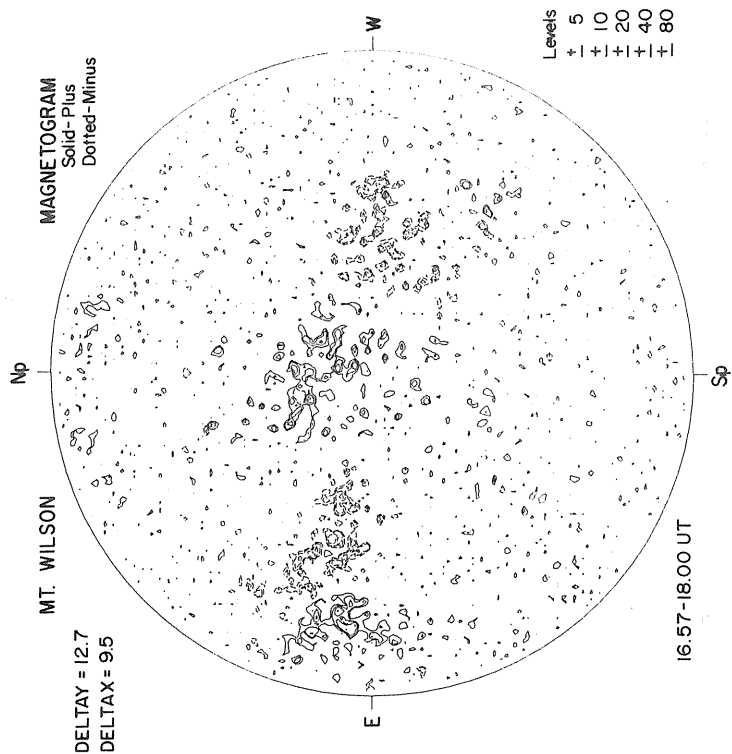
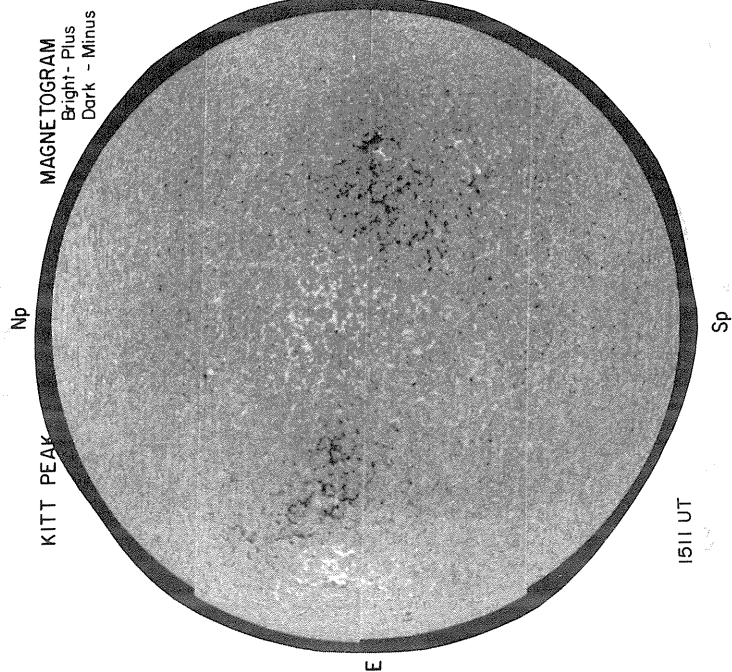
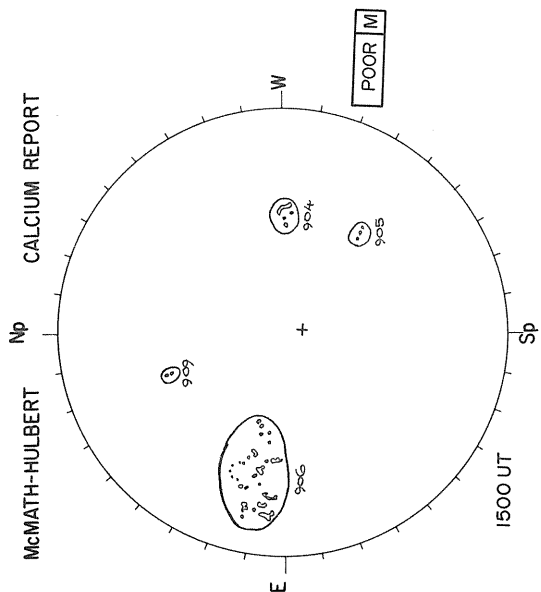
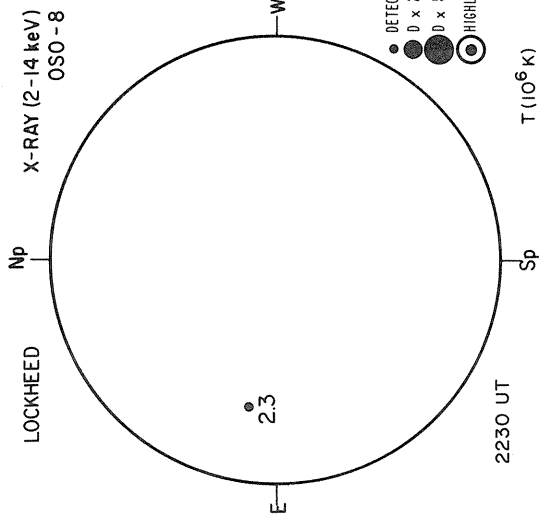
Sp

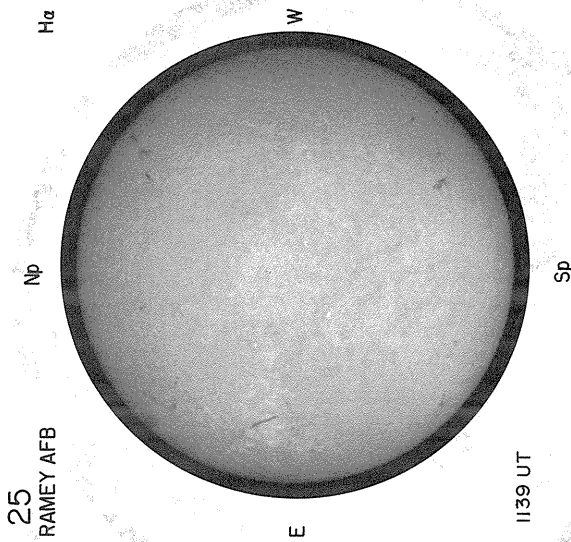
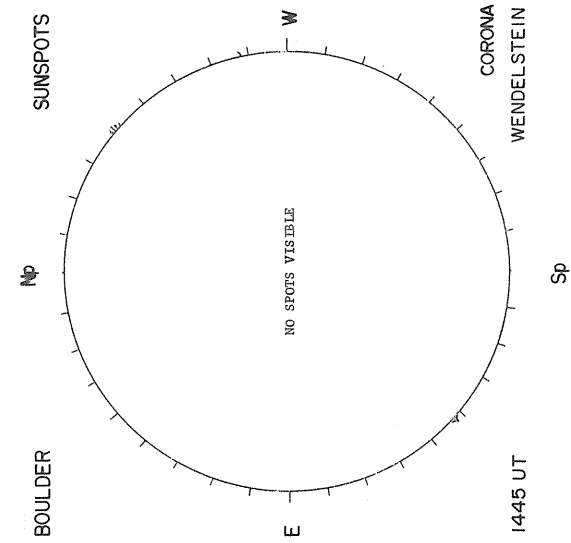
Ant. Temp. Unit 100°K

Sp

Ant. Temp. Unit 100°K

OCTOBER 25, 1975 (P = 25.58, B₀ = 5.07, L₀ = 324.82)





8.6 MM

Np

NELC LA POSTA

2.0 CM

Np

NELC LA POSTA

W

E

W

E

Ant. Temp. Unit 100°K

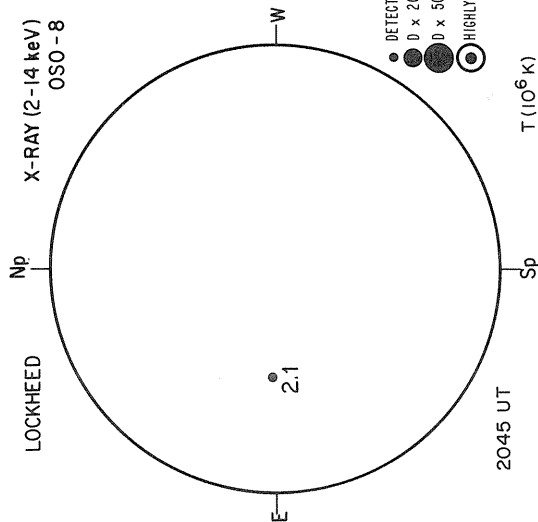
Sp

Ant. Temp. Unit 100°K

Sp

OCTOBER 26, 1975 (P = 25.47, $B_0 = 4.98$, $L_0 = 311.64$)

LOCKHEED
X-RAY (2-14 keV)
OSO-8

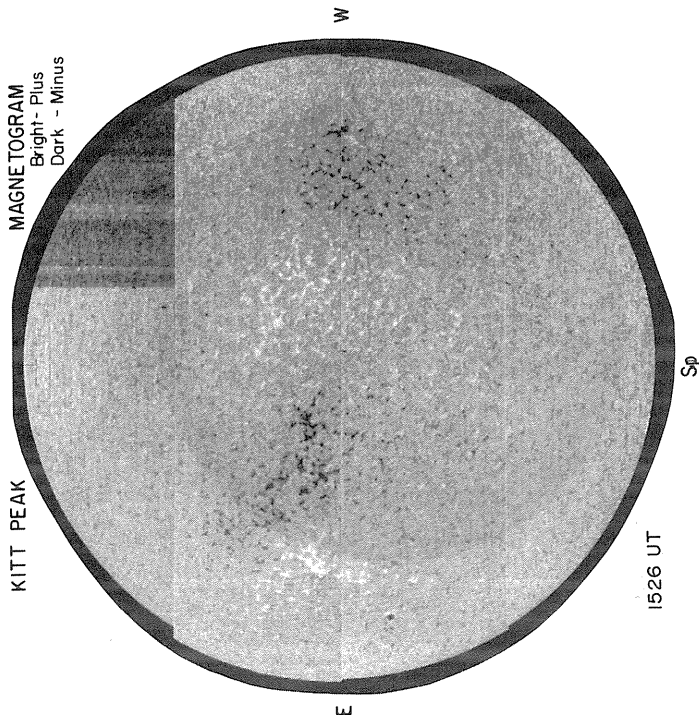


• DETECTABLE (0)
● 0 x 20
● 0 x 500
⊙ HIGHLY VARIABLE

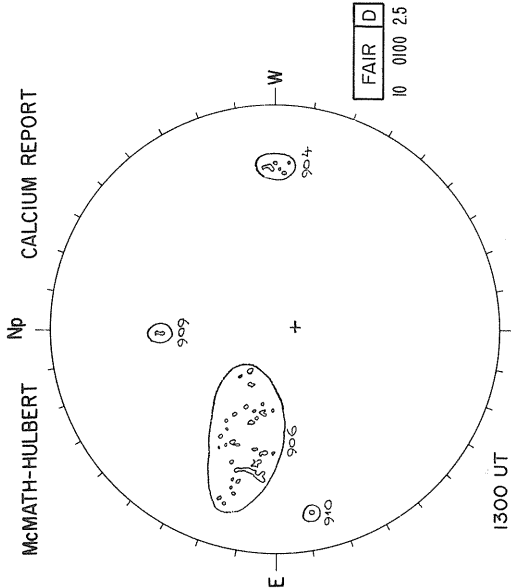
T (10^6 K)

KITT PEAK

MAGNETOGRAM
Bright-Plus
Dark-Minus



McMATH-HULBERT
CALCIUM REPORT

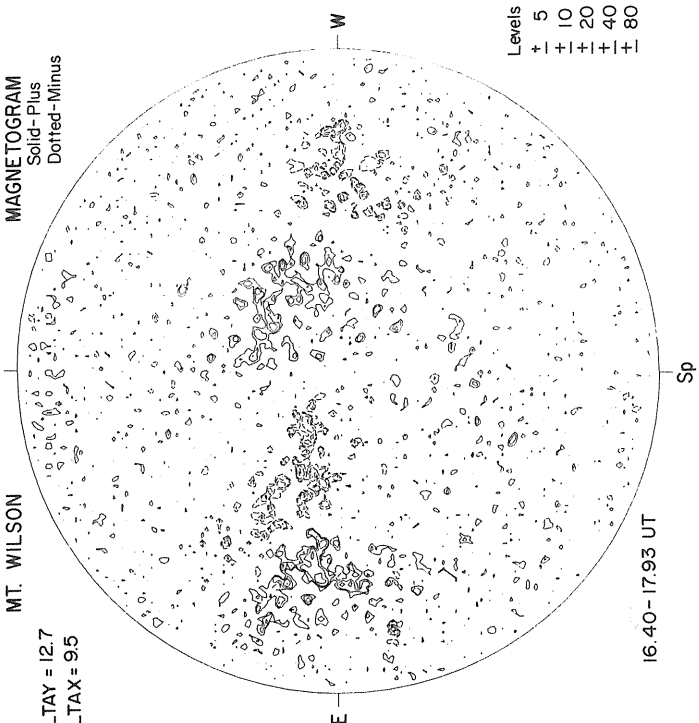


FAIR D
10 0100 2.5

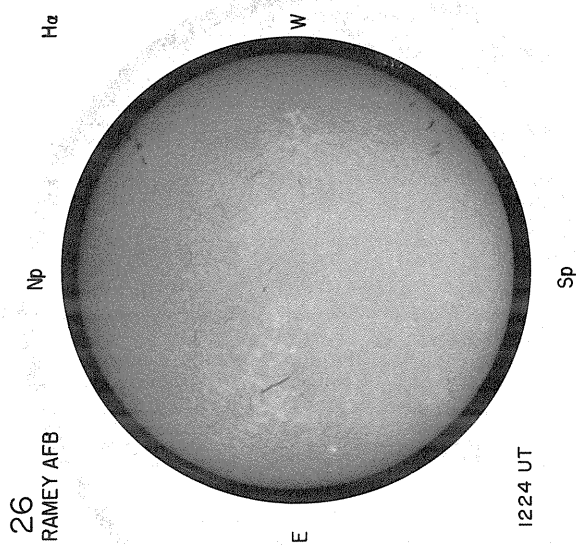
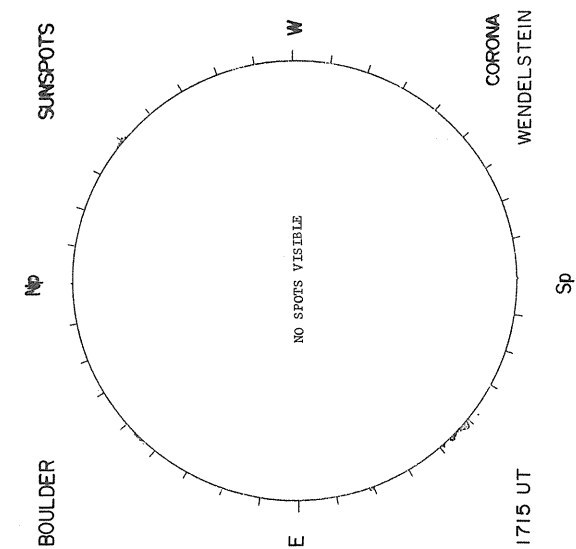
MT. WILSON

DELTA Y = 12.7
DELTA X = 9.5

MAGNETOGRAM
Solid-Plus
Dotted-Minus



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



8.6 MM

NELC LA POSTA

2.0 CM

NELC LA POSTA

Np

Np

W

E

W

E

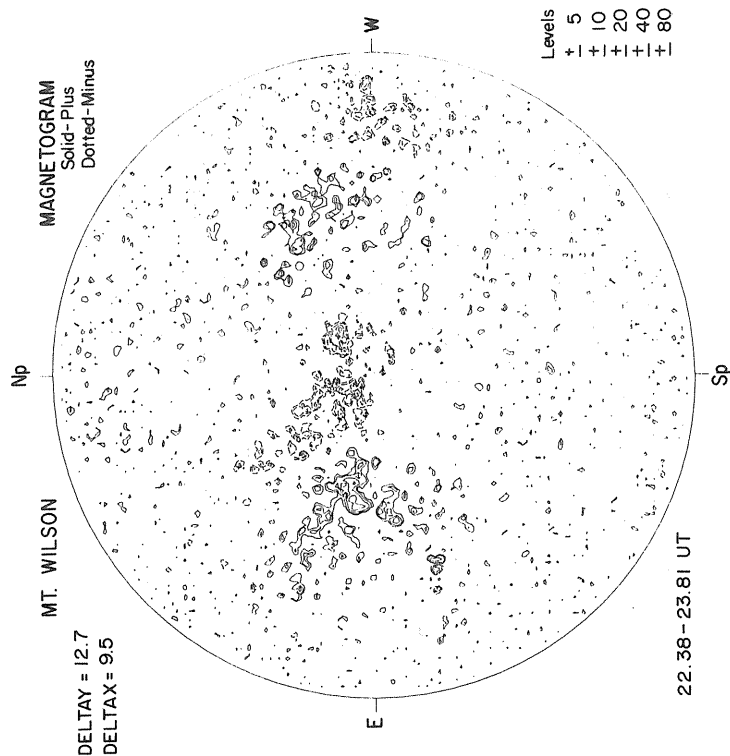
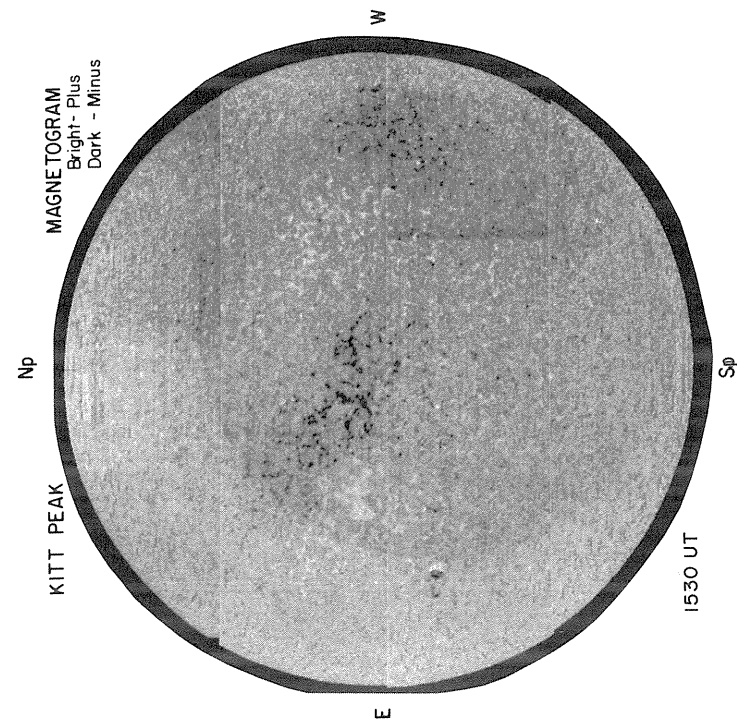
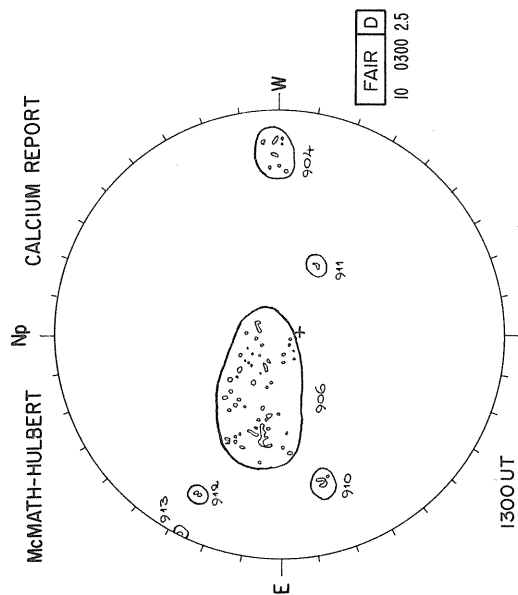
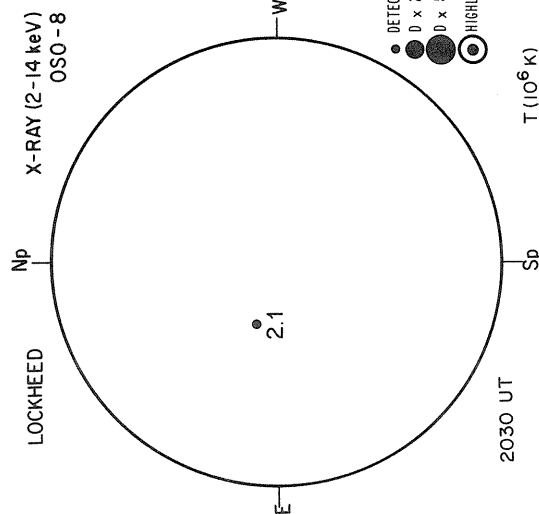
Ant. Temp. Unit 100°K

Sp

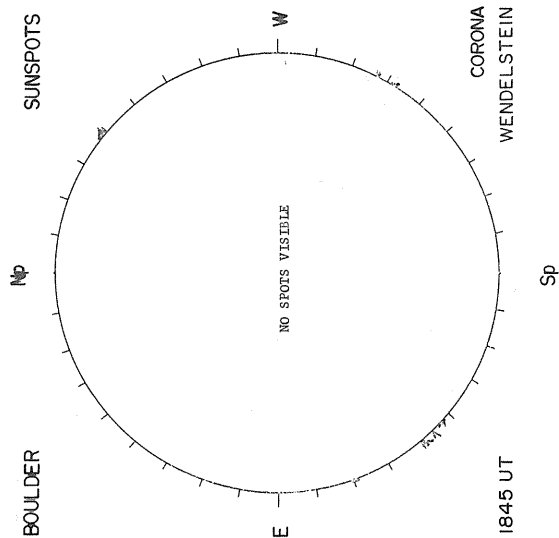
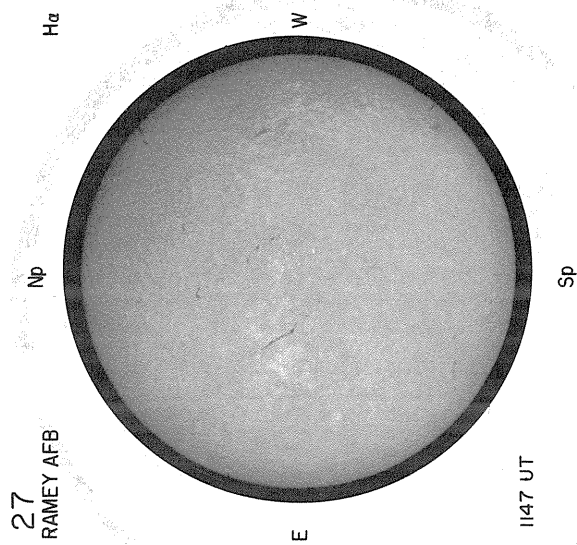
Ant. Temp. Unit 100°K

Sp

OCTOBER 27, 1975 (P = 25.35, B₀ = 4.89, L₀ = 298.45)



Levels
+ 5
+ 10
+ 20
+ 40
+ 80



NELC LA POSTA

Np

2.0 CM

NELC LA POSTA

Np

8.6 MM

E

W

E

W

Sp

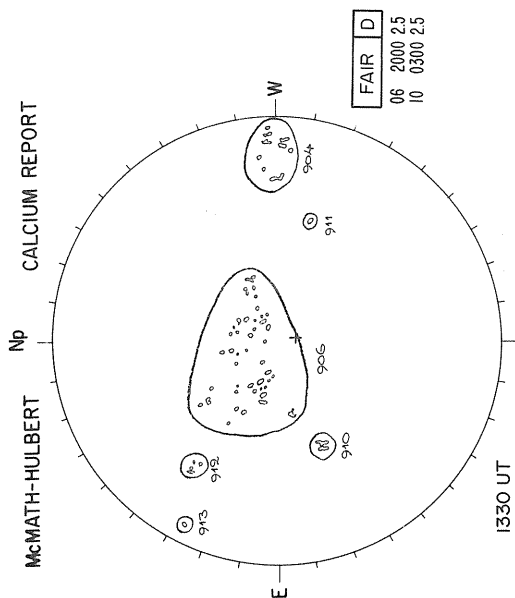
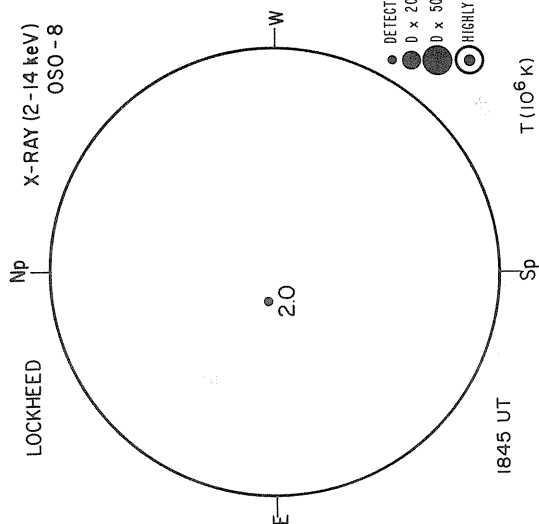
Ant. Temp. Unit 100°K

Sp

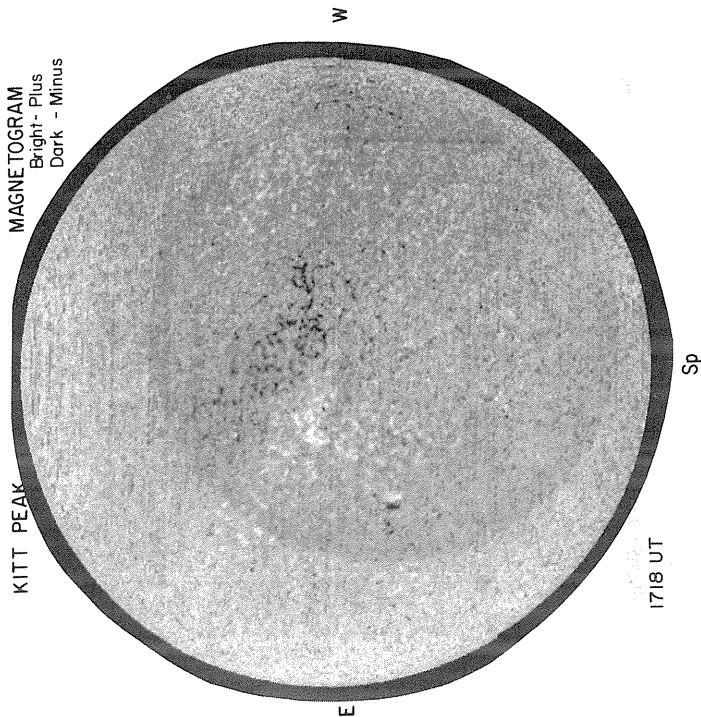
Ant. Temp. Unit 100°K

OCTOBER 28, 1975 (P = 25.23, B₀ = 4.80, L₀ = 285.26)

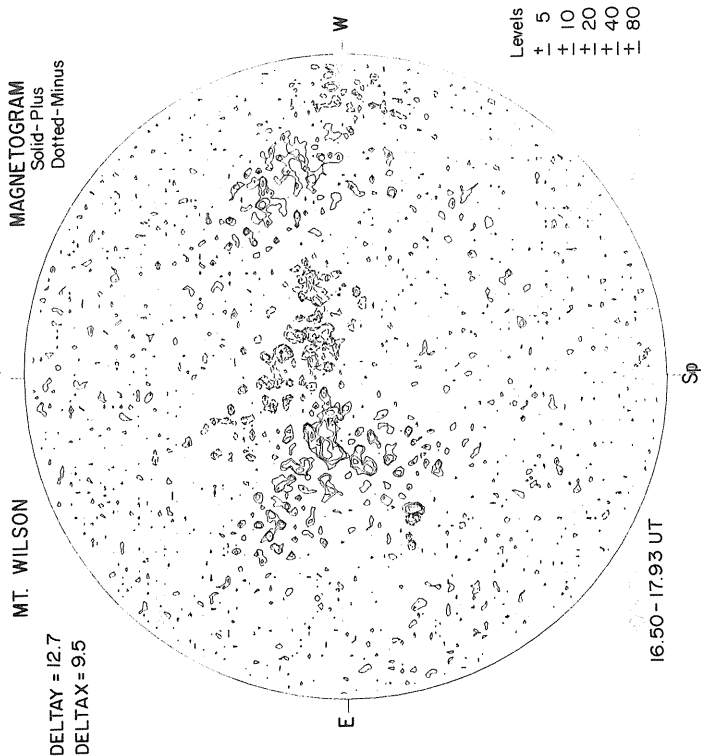
LOCKHEED
X-RAY (2-14 keV)
OSO-8



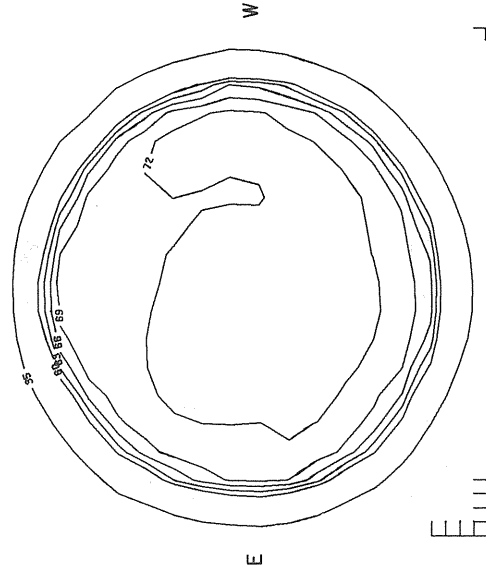
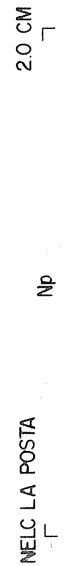
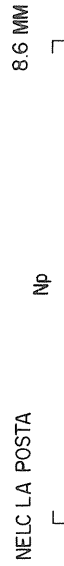
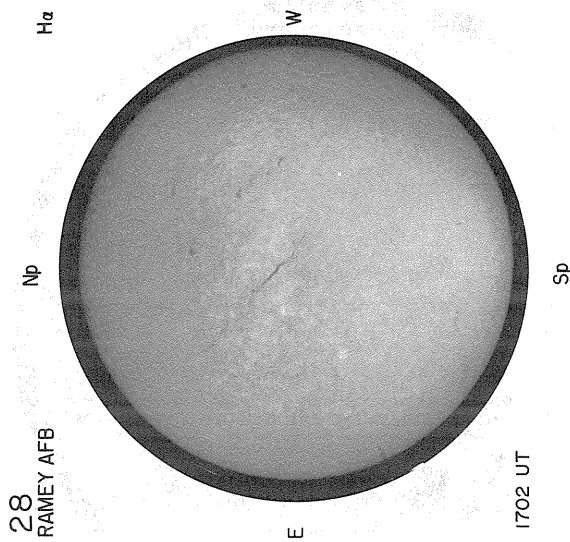
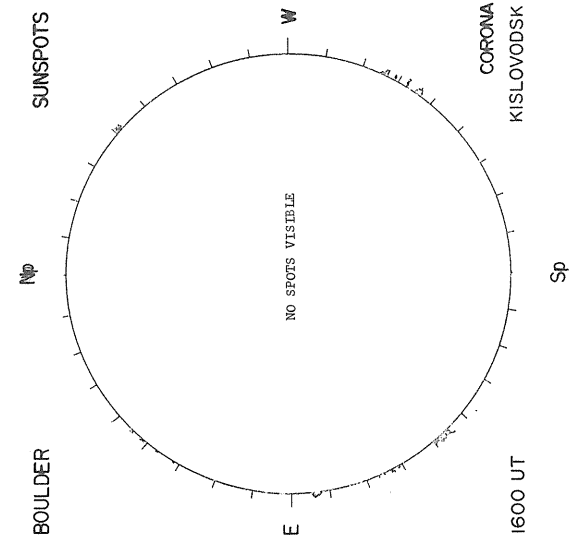
KITT PEAK
MAGNETOGRAM
Bright - Plus
Dark - Minus



MT. WILSON
MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
 + 5
 + 10
 + 20
 + 40
 + 80



NO DATA

CALIBRATION



Ant. Temp. Unit 100°K

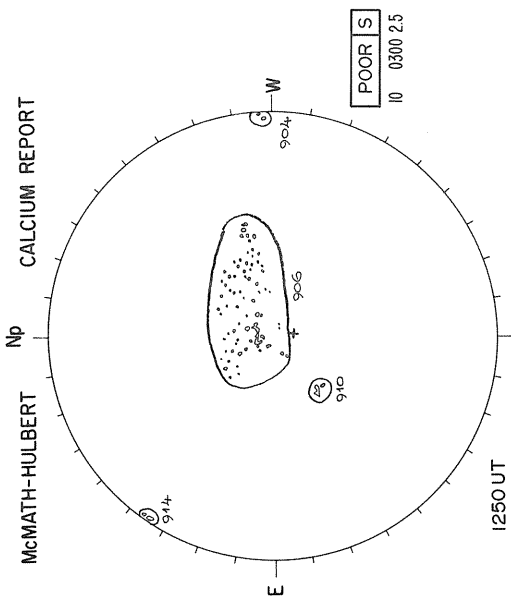
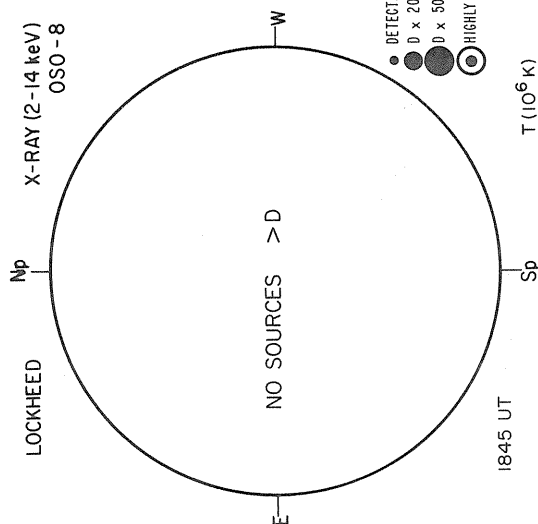
1919 UT

Ant. Temp. Unit 100°K

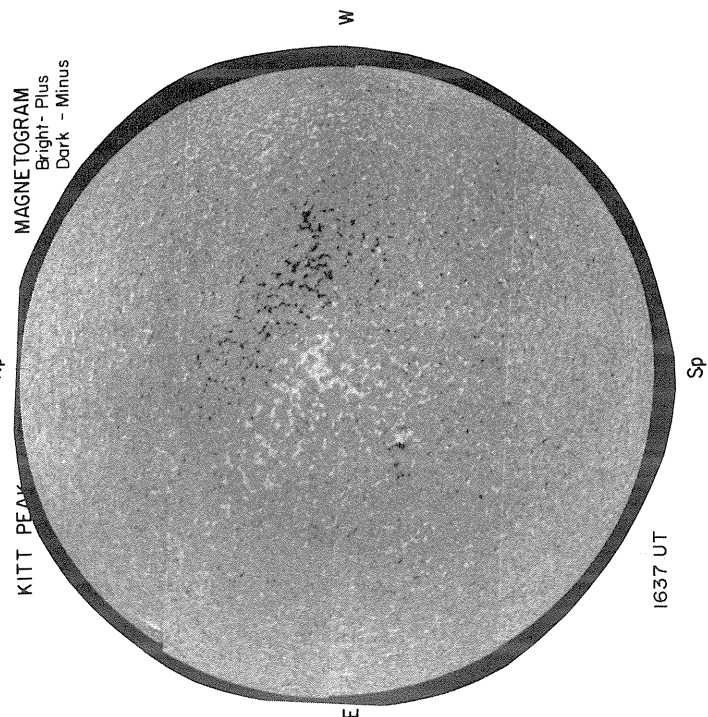
1823 UT

OCTOBER 29, 1975 (P = 25.09, $B_0 = 4.70$, $L_0 = 272.07$)

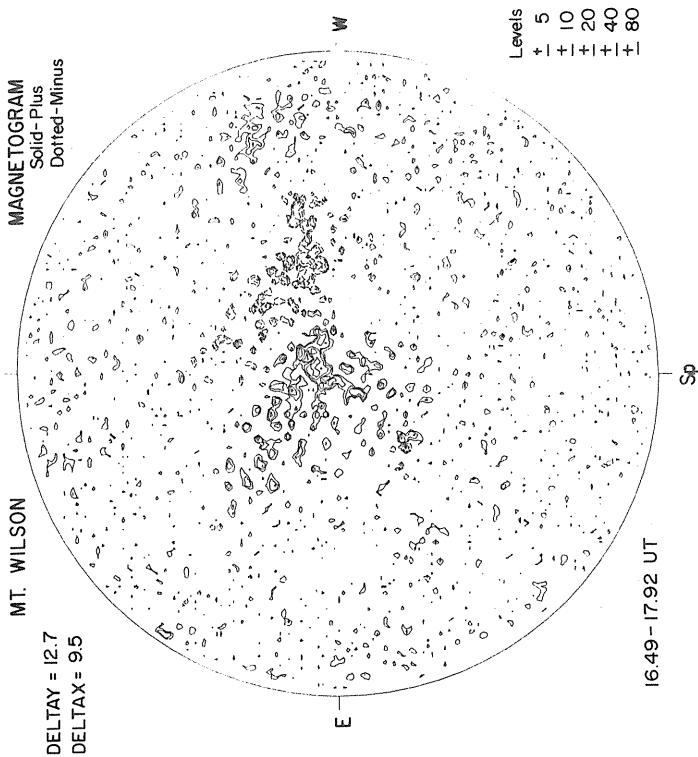
LOCKHEED X-RAY (2-14 keV)
OSO-8

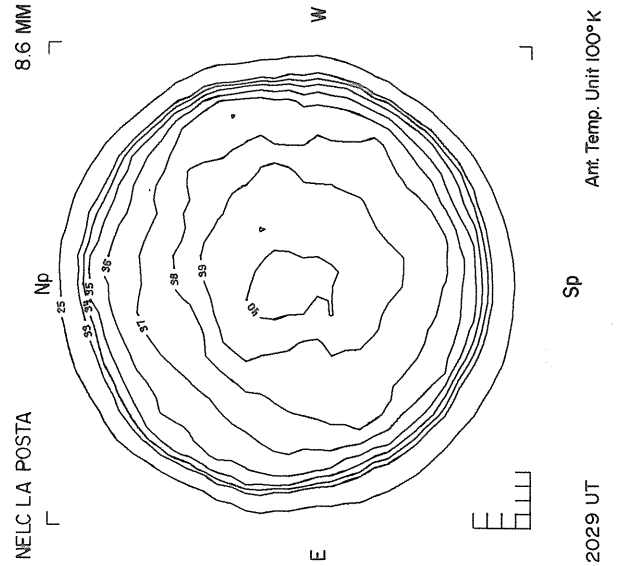
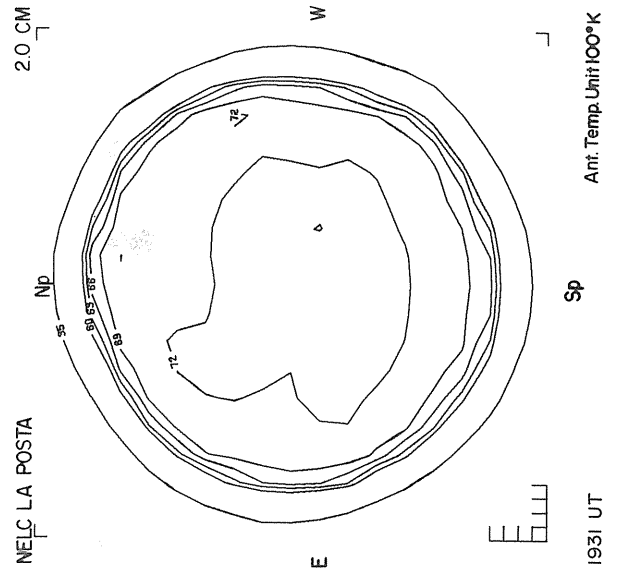
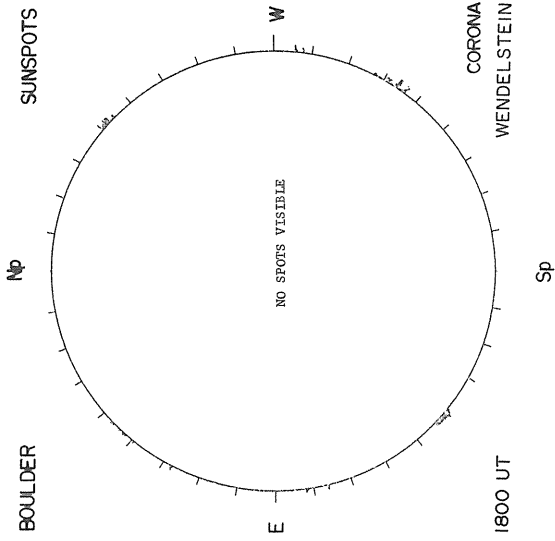
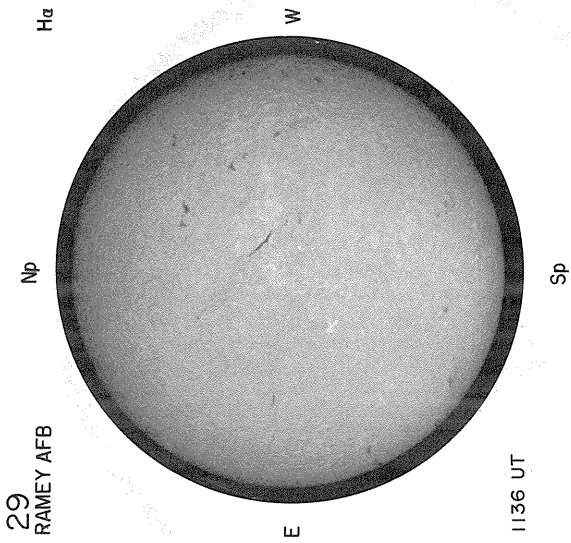


KITT PEAK MAGNETOGRAM
Bright - Plus
Dark - Minus



MT. WILSON MAGNETOGRAM
Solid - Plus
Dotted - Minus



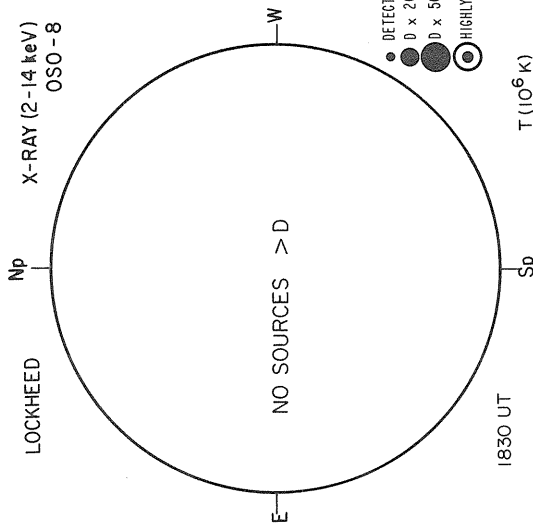


OCTOBER 30, 1975

(P = 24.95, B₀ = 4.60, L₀ = 258.89)

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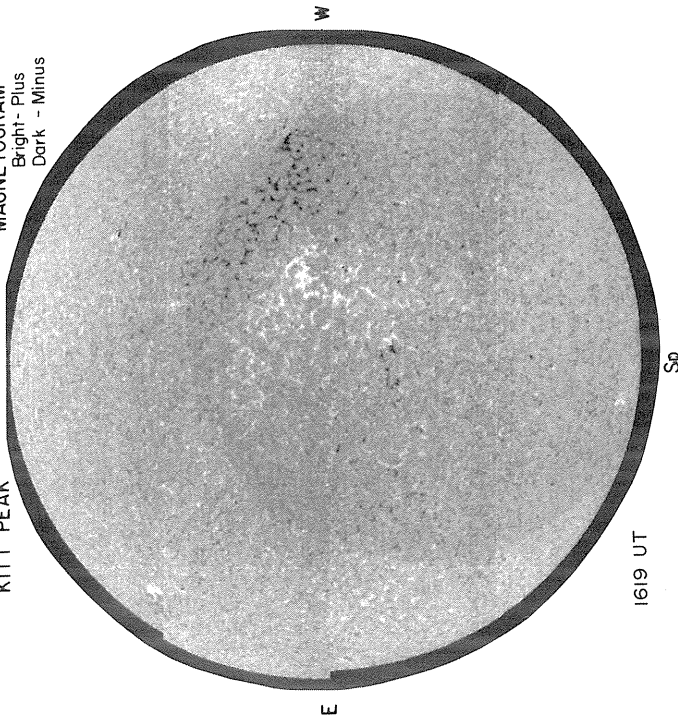
LOCKHEED
X-RAY (2-14 keV)
OSO - 8



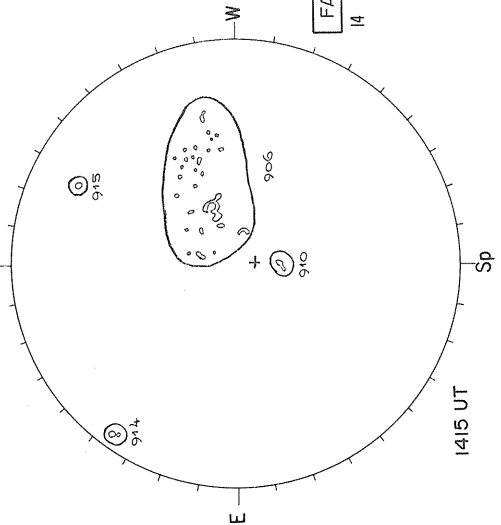
● DETECTABLE (D)
● 0 x 20
● 0 x 500
● HIGHLY VARIABLE

T (10⁶ K)

KITT PEAK
MAGNETOGRAM
Bright - Plus
Dark - Minus

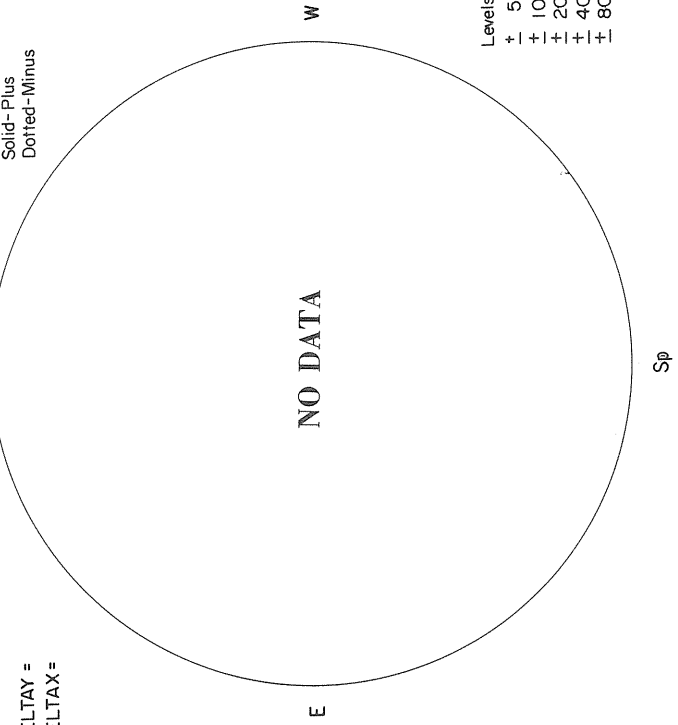


McMATH-HULBERT
CALCIUM REPORT

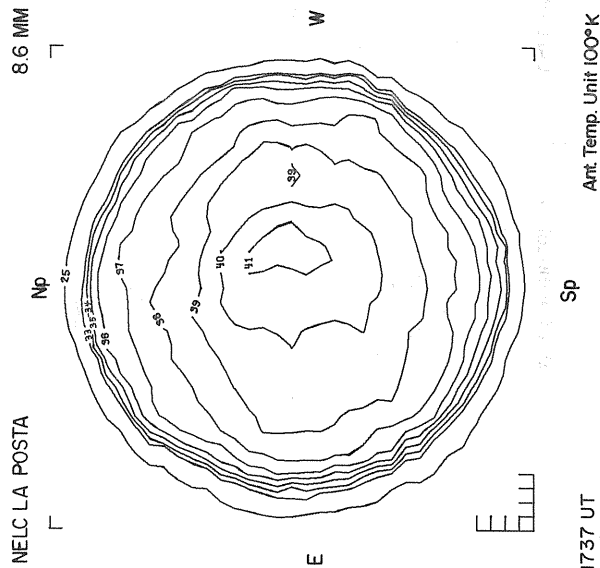
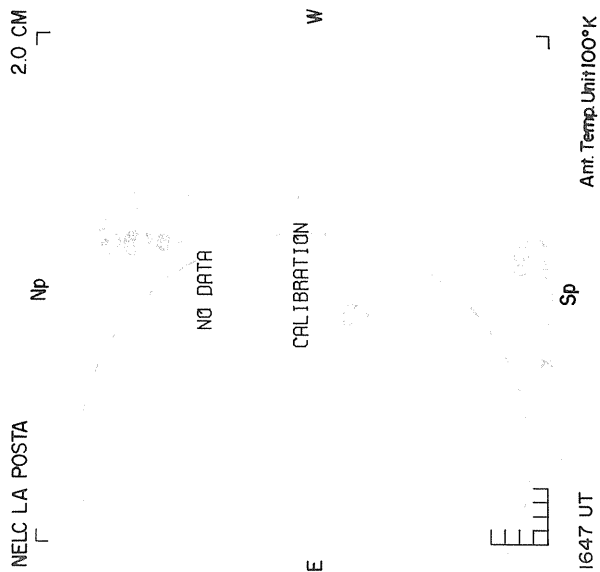
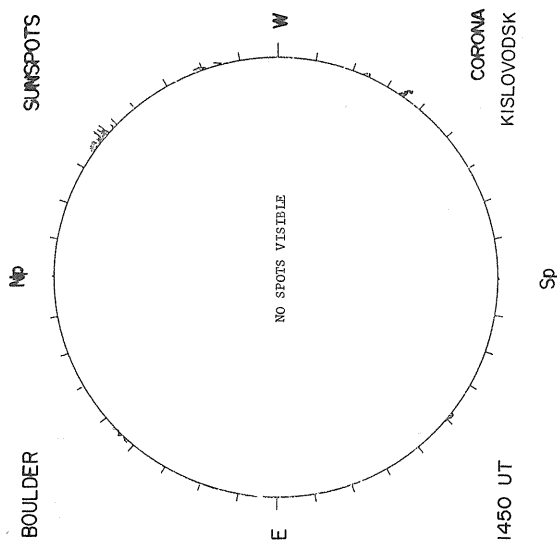
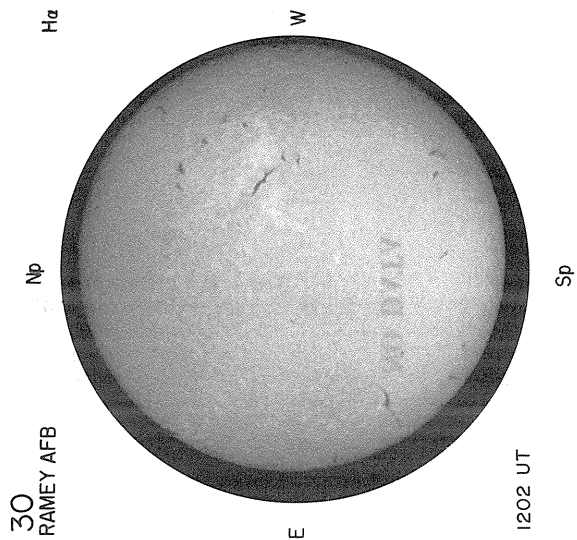


FAIR M
14 0300 25

MT. WILSON
MAGNETOGRAM
Solid - Plus
Dotted - Minus

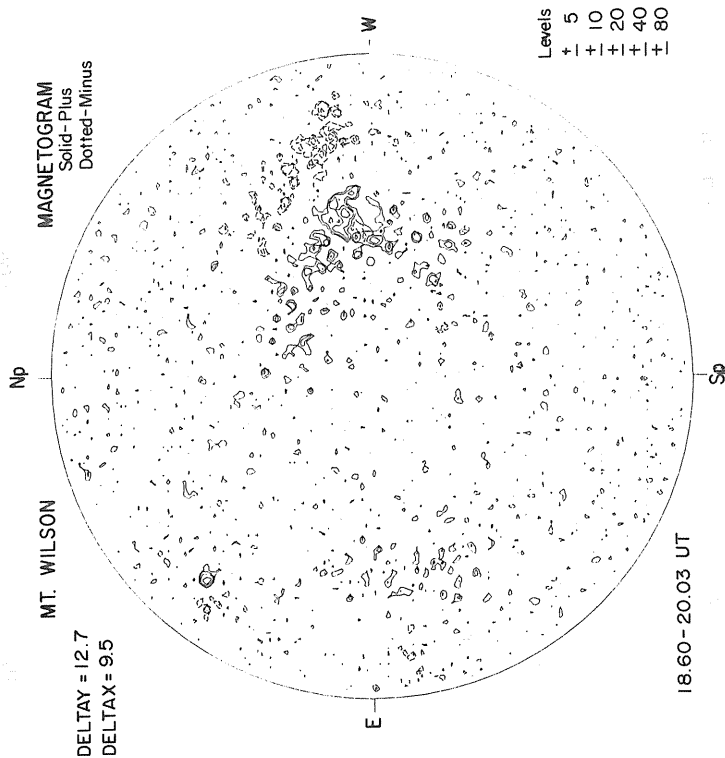
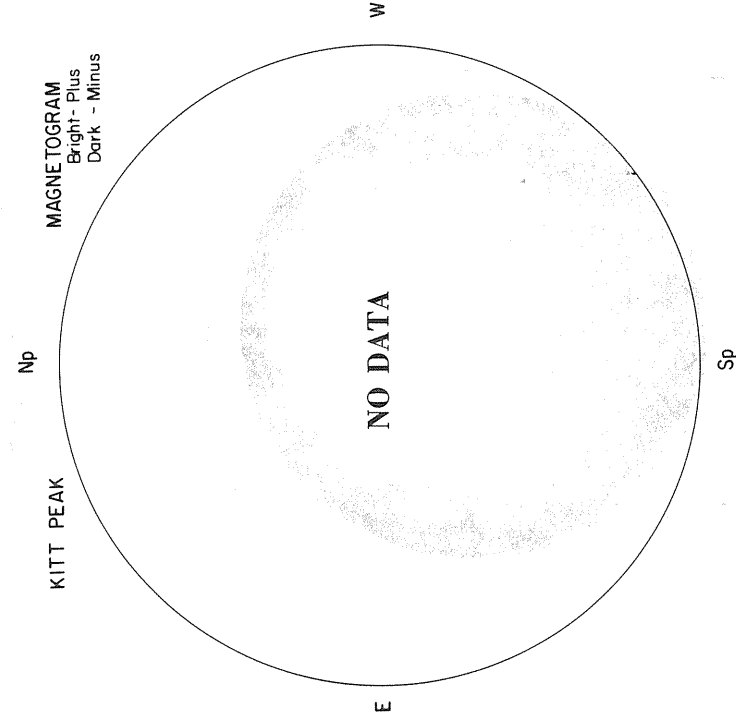
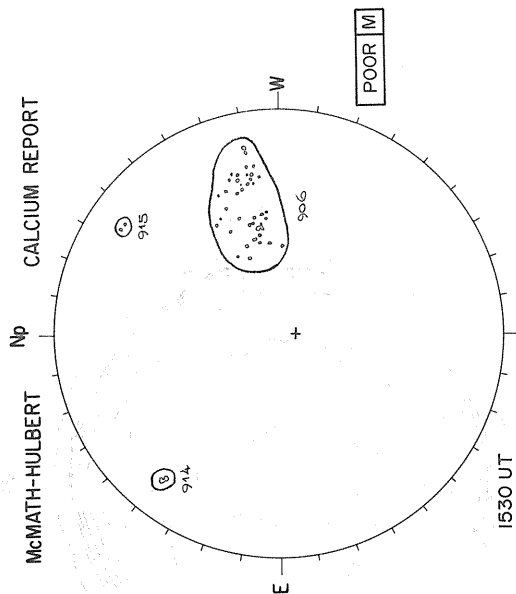
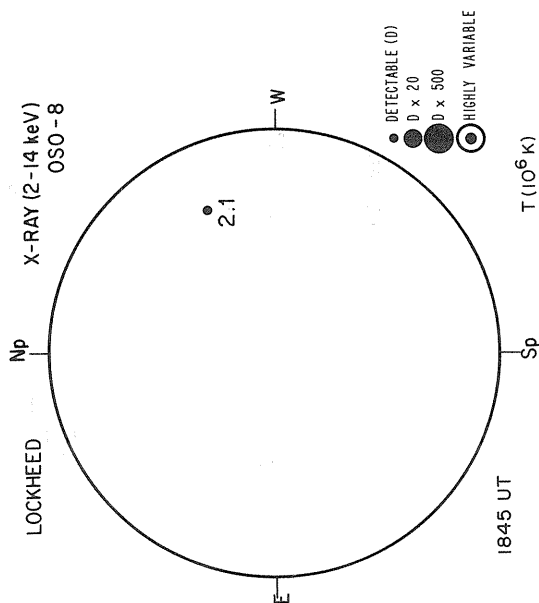


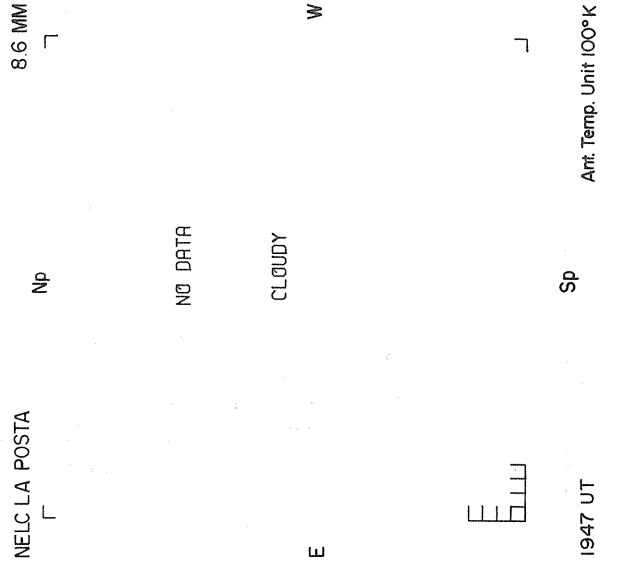
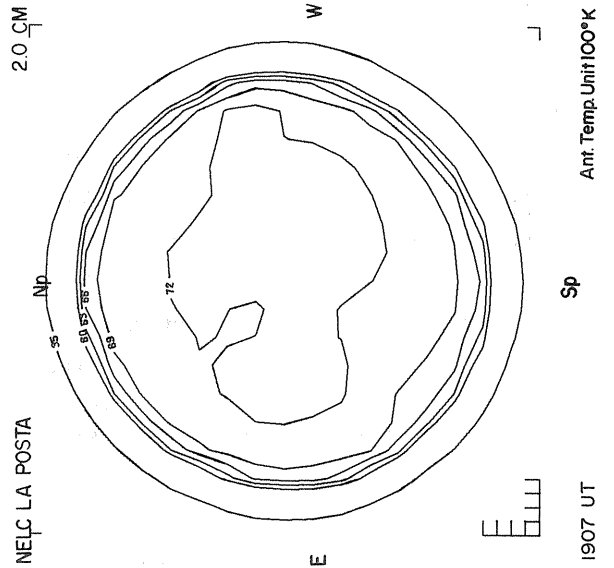
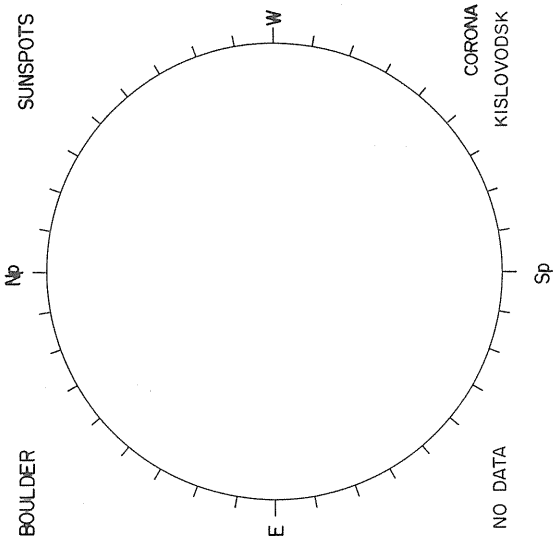
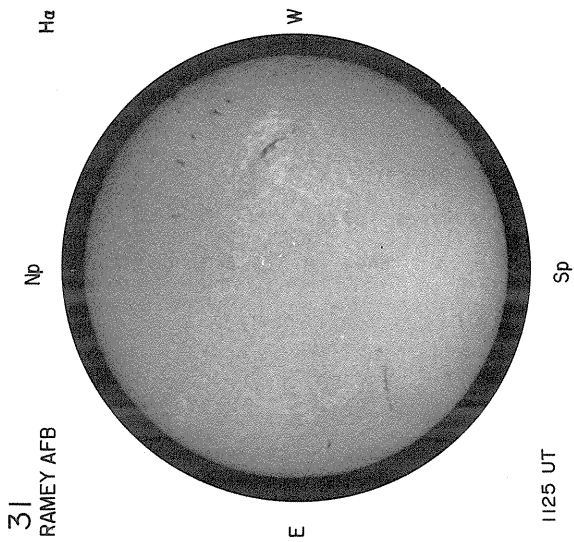
Levels
+ 5
+ 10
+ 20
+ 40
+ 80



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OCTOBER 31, 1975 (P=2480, B₀=4.50, L₀=245.70)





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REGIONS OF SOLAR ACTIVITY

OCTOBER 1975

MCMATH REGION 13904				CMP DATE 23.2				RETURN OF REGION 13862*				ROTATION 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	10	17						19633	N03 E70	351	(AP)	3 B	10	1	AXX
75	10	18						19633	N04 E60	349	(BP)	2 B	10	1	AXX
75	10	20	13904	N02 E33	348	800	2.5								
75	10	21	13904	N02 E22	348	700	2.0								
75	10	22	13904	N03 E08	347	700	2.0								
75	10	23	13904	N03 W05	348	600	2.0								
75	10	24	13904	N03 W18	348	400	2.0								
75	10	25	13904	N03 W32	348	400	2.0								
75	10	26	13904	N03 W45	349	400	2.0								
75	10	27	13904	N04 W57	347	500	2.0								
75	10	28	13904	N04 W66	343	600	1.5								
75	10	29	13904	N04 W78	342	200	1.0								

MCMATH REGION 13905				CMP DATE 23.5												
				CALCIUM PLAGE DATA				SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	10	19						19634	S16 E49	346	(AP)	2	B	10	1	AXX
75	10	20	13905	S18 E36	345	400	3.0	19635	S15 E26	356	AP					
75	10	21	13905	S17 E26	344	300	2.5									
75	10	22	13905	S16 E12	343	200	2.0									
75	10	23	13905	S16 E00	343	200	1.5									
75	10	24	13905	S16 W14	344	200	1.0									
75	10	25	13905	S16 W27	343	100	1.0									

MCMATH REGION 13911				CMP DATE 26.2									
				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	10	27	13911	S05 W18	308	100	2.0						
75	10	28	13911	S04 W32	309	100	1.0						

MCMATH REGION 13909				CMP DATE 26.6														
				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	10	24	13909	N36	E26	304	100	1.0										
75	10	25	13909	N36	E14	302	100	1.5										
75	10	26	13909	N36	E01	303	100	1.0										

MCMATH REGION 13915				CMP DATE 28.2									
				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	10	30	13915	N48 W32	283	200	1.5						
75	10	31	13915	N48 W44	281	100	1.0						

MCMATH REGION 13906				CMP DATE 28.9				RETURN OF REGION 13867				ROTATION 4			
				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA CNT	CLASS	
75	10	22	13906	N10 E75	280	700	1.0								
75	10	23	13906	N10 E68	275	1000	1.5								
75	10	24	13906	N10 E54	276	1300	2.0								
75	10	25	13906	N10 E40	276	1400	2.0								
75	10	26	13906	N10 E28	276	1600	2.0								
75	10	27	13906	N10 E15	275	2100	2.0								
75	10	28	13906	N10 E04	273	2000	2.5								

(Cont'd)

*An asterisk beside the "Return of Region" number indicates that the new region is only part of the area of the old region.

REGIONS OF SOLAR ACTIVITY

OCTOBER 1975

(Cont'd)

75	10	29	13906	N10 W10	274	1600	2.0
75	10	30	13906	N10 W20	271	1700	2.0
75	10	31	13906	N10 W33	270	1600	1.5
75	11	2	13906	N10 W60		1300	2.0
75	11	4	13906	N08 W85		500	1.0

MCMATH REGION 13917

CMP DATE 30.3

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	11	2	13917	S03 W45		300	1.5								

MCMATH REGION 13910

CMP DATE 30.7

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	10	26	13910	S07 E56	248	100	2.5								
75	10	27	13910	S07 E42	248	300	2.5								
75	10	28	13910	S07 E29	248	300	2.5								
75	10	29	13910	S07 E15	249	300	2.5								
75	10	30	13910	S07 E01	250	200	2.0								

MCMATH REGION 13912

CMP DATE 31.5

CALCIUM PLAGE DATA

SUNSPOT DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
75	10	27	13912	N25 E51	239	200	1.5								
75	10	28	13912	N26 E39	238	200	1.5								

MCMATH REGION 13918

CMP DATE 31.5

CALCIUM PLAGE DATA

SUNSPOT DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
75	11	2	13918	N38 W28		200	1.5								

No calcium spectroheliograms were obtained at the McMath-Hulbert Observatory on October 9, 17, 18 and 19, 1975.
No sunspot observations were made at Mt. Wilson Observatory on October 7 and 11, 1975.

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DAILY CALCIUM PLAGE INDEX

OCTOBER 1975

YR	MO	DAY	INDEX
75	10	1	8.0
75	10	2	8.0
75	10	3	7.8
75	10	4	6.8
75	10	5	6.7
75	10	6	6.0
75	10	7	4.8
75	10	8	4.1
75	10	9	*
75	10	10	4.0

YR	MO	DAY	INDEX
75	10	11	4.4
75	10	12	4.7
75	10	13	6.4
75	10	14	9.0
75	10	15	11.4
75	10	16	10.4
75	10	17	*
75	10	18	*
75	10	19	*
75	10	20	6.7

YR	MO	DAY	INDEX
75	10	21	3.8
75	10	22	3.0
75	10	23	2.3
75	10	24	2.5
75	10	25	3.0
75	10	26	3.5
75	10	27	5.4
75	10	28	6.3
75	10	29	3.9
75	10	30	3.9
75	10	31	2.3

* NO OBSERVATIONS

DAY	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
REGION																															
90																															
X-RAY																															
UNKNOWN																															
NO FP																															

OCT 1975	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE		
	START UT	END UT		DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND					
				START UT	END UT	INT	START UT	END UT	INT	START UT	END UT	INT			
06	0000	0716	CULG				0000	0716						IIIN,W	
	0603	1642	DURN												
	0810	1609	WEIS												
	0821	1200	DWIN	0821	1200	1	0821	1200	1					IN	
			DWIN				0833.7	0833.8	1					IIIG	
			DWIN				0841.3		1					IIIB	
			DWIN				0848.1	0848.4	1					IIIG	
			DWIN				0901.2		1					IIIB	
			DWIN				0901.6	0901.7	1					IIIG	
			DWIN				0953.5	0955.2	1					IIIG	
		1049	2213	SGMR											
				DWIN	1114.1	1114.5	1	1114.1	1114.5	1					IIIG
		1300	2400	BOUL				1745.9	1746.2	1	1745.9	1746.2	1		III
		1316	2245	HARV				1746		3	1746		3		IIIG
	2021	2400	CULG	2100	2400									IS,W	
	2146	2400	MANI												
07	0000	0935	MANI				0000	0720						IIIN,W	
	0000	0720	CULG	0000	0210									IS,W	
		0000	0030	BOUL											
			CULG				0409	0410	1	0409	0410	1		IIIG	
			CULG	0602.5	0603	1	0602.5	0603	1	0602.5	0603	1		IIIG	
			CULG	0626	0626.5	1	0626	0626.5	1					IIIG	
		0617	1610	WEIS			0630.4	0630.9	1					IIIG	
		0614	1641	DURN	0630.4	0630.7	1	0630.4	0630.7	1				IIIG	
			CULG	0630	0631	1	0630	0631	2	0630	0631	1		IIIG	
		1051	2211	SGMR											
		0854	1326	DWIN	1158.6		1	1158.6		1					IIIB
		1317	2245	HARV											
		1300	2400	BOUL				1439.2	1441.5	1	1439.2	1441.5	1		IIIG
		2147	2400	MANI											
		2020	2400	CULG				2155	2159						IIIG,W
			CULG				2319							IIIB,W	
08	0000	0720	CULG												
	0000	0030	BOUL												
	0000	0934	MANI												
	0603	1639	DURN												
	0619	0749	WEIS												
	0800	1600	WEIS												
	0953	1332	DWIN	0953	1332	1	0953	1332	1					IN	
			DWIN	1103.0	1103.8	1								IIIG	
			DWIN	1106.1	1106.5	1								IIIG	
		1317	2245	HARV				1656	1700	3	1656	1700	3		IIIGG,V,U
		1300	2400	BOUL				1657.8	1700.5	2	1657.8	1700.5	2		IIIG
		1052	2209	SGMR							1658.7	1700.1	2		V
				SGMR							1845.8	1846.2	1		III
				BOUL				1845.8	1846.4	1	1845.8	1846.4	1		IIIG
				HARV				1846	1847	2	1846	1847	2		IIIG
		2020	2100	CULG											
		2146	2400	MANI											
		2200	2400	CULG											
			CULG	2337	2341	1								IIIG	
			CULG				2342.5	2345	1					II	
			CULG	2352	2358	1								I	
09	0000	0720	CULG												
	0000	0030	BOUL												
	0000	0934	MANI												
	0624	1603	WEIS												
	0603	1636	DURN	0946	1636	0 3	0946	1636	0 3					I,OC,N	
	1053	2208	SGMR												
	1300	2400	BOUL												
	1317	2245	HARV												
	2146	2400	MANI												
	2020	2400	CULG				2344.5		1	2345		1		IIIB	
10	0000	0030	BOUL												
	0000	0932	MANI												

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SOLAR RADIO EMISSION SPECTRAL OBSERVATIONS

OCTOBER 1975

OCT 1975	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE	
	START UT	END UT		DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND				
				START UT	END UT	INT	START UT	END UT	INT	START UT	END UT	INT		
10	0000	0719	CULG	0259	0300	1								IIIG
			CULG	0407.5	0408.5	1								IIIG
			CULG				0523.5		1					IIIB
			CULG	0535.5	0537	1	0535.5	0536	1					IIIG
	0625	0828	WEIS											
	0603	1633	DURN	0902.7	0903.4	2	0902.7	0903.4	1					IIIG
	0837	1557	WEIS				0902.8	0903.4	1					IIIG
	1054	2206	SGMR											
	1300	2400	BOUL											
	1332	2245	HARV											
11	2019	2400	CULG				2034							IIIB,W
	2146	2400	MANI											
	0000	0932	MANI											
	0000	0719	CULG											
	0000	0030	BOUL											
	0603	1633	DURN											
	0628	1559	WEIS											
	1055	2204	SGMR											
	1300	2400	BOUL											
	1331	2245	HARV											
12	2019	2400	CULG											
	2147	2400	MANI											
	0000	0931	MANI											
	0000	0030	BOUL											
	0000	0719	CULG	0221	0222	1	0221.5	0222	1					IIIG
	0605	0739	DURN	0606.9	0607.0	2								I
	0630	0922	WEIS											
	0752	1630	DURN											
	1056	2203	SGMR											
	1300	2400	BOUL											
13	1332	2245	HARV											
	2019	2400	CULG											
	2147	2400	MANI											
	0000	0931	MANI											
	0000	0719	CULG											
	0000	0030	BOUL											
	0640	1259	WEIS											
	1057	2201	SGMR											
	0608	1617	DURN	1202.4	1202.5	3								III
	1300	2400	BOUL											
14	1331	2245	HARV											
	1450	1558	WEIS											
	2019	2400	CULG											
	2148	2400	MANI											
	0000	0928	MANI											
	0000	0718	CULG											
	0000	0030	BOUL											
	0608	1617	DURN											
	0638	0950	WEIS											
	1059	2159	SGMR							1327.9	1328.3	1		III
15	1510	1547	WEIS											
	1300	2400	BOUL							1629.4	1630.0	1		III
	1334	2245	HARV				1629	1630	2	1629	1630	2		IIIB
	2018	2400	CULG				2120.5		1					IIIB
			CULG				2138	2139						IIIG,W
	2147	2400	MANI											
	0000	0030	BOUL											
	0000	0357	CULG	0212	0245		0212	0357						IIIN,W
			CULG	0305	0357	1								IS
	0000	0928	MANI							0402.0	0402.4	3		III
0520	0718	CULG				0520	0718						IIIN,W	
			CULG	0520	0718	1								IS
	0609	1620	DURN	0609 E	1620 D	3	0609 E	1620 D	2					I,C,N,DC
			DURN	0842.1	0842.3	3	0842.1	0842.3	3					IIIG,U,RS
			DURN	0843.8	0843.9	1								IIIRS

[illegible]

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SOLAR RADIO EMISSION SPECTRAL OBSERVATIONS

OCTOBER 1975

[illegible]

SELECTED SOLAR EVENTS

OCTOBER 1975

Culgoora

UT Date 1975 OCT.	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.)				
7	0409	0410	160 80 43.25	0.4 0.6 0.8	30 30 30	0 0 -	†	IIIG	
8	2342	2345	160 80	0.6 0.7	0 0	0 0		II	
15	2242	2244	160 80 43.25	0.8 1.0 1.2	340 340 330	0 0 -		IIIG	
17	0244	0246	160 80	1.0 1.1	130 130	0 0		IIIG	Not recording at 43.25 MHz

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

† Because of equipment modifications which are in progress, intensity classifications are not available for this month. An indication of intensities can be obtained from the corresponding entries in "Solar Radio Emission - Spectral Observations"

COSMIC RAY INDICES
(Neutron Monitors)

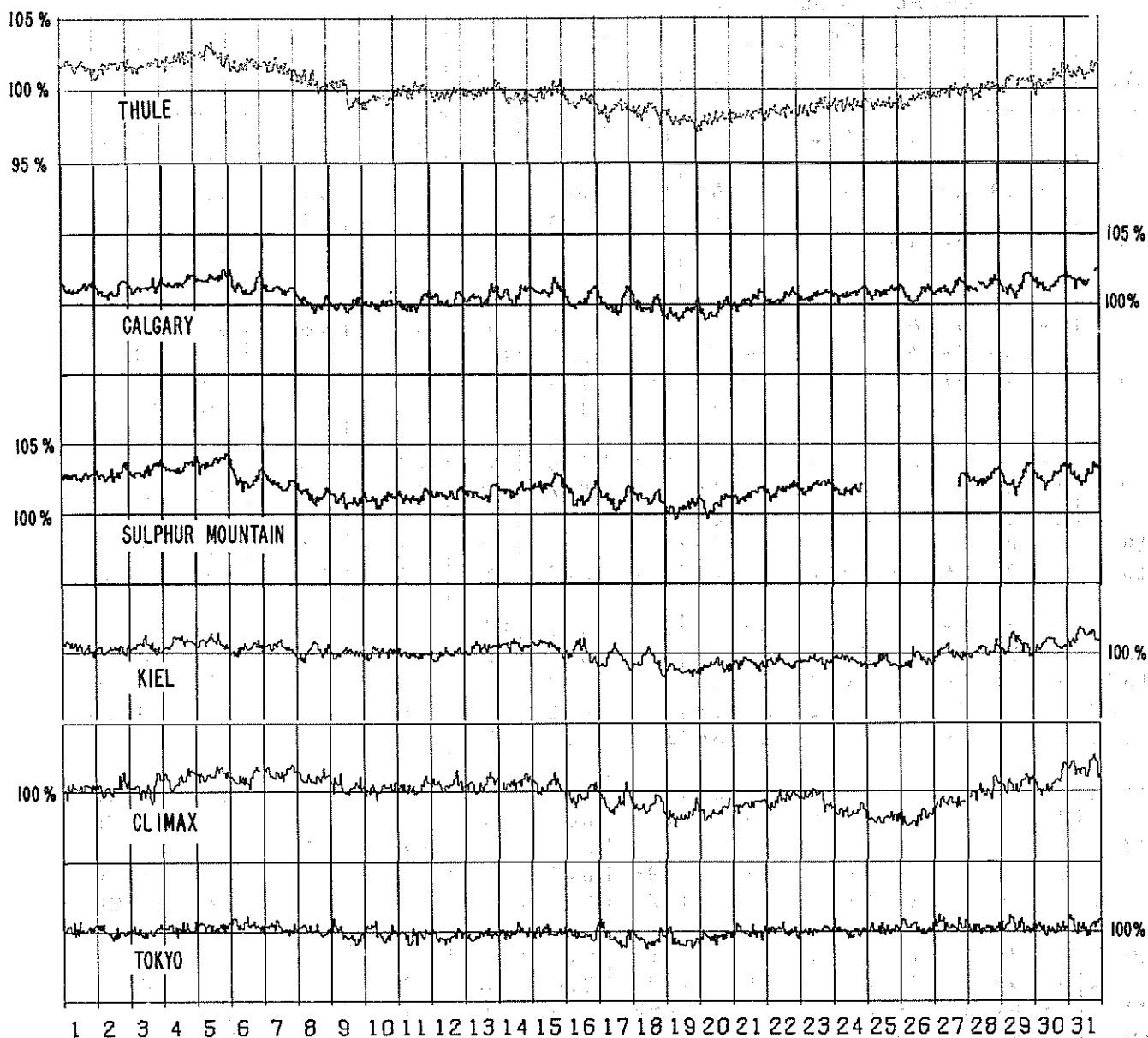
OCTOBER 1975

OCT. 1975	THULE Average cts/hr	ALERT Average cts/hr	DEEP RIVER Average cts/hr	CALGARY Average cts/hr	SULPHUR MT Average cts/hr	KIEL Average cts/hr	CLIMAX Average cts/hr	TOKYO Average cts/hr
1	4563.0	Not available at time of publication	Not available at time of publication	11833.9	9016.1	6334.8	4242.9	3544.7
2	4558.3			11816.7	9031.8	6326.5	4246.9	3537.7
3	4565.1			11842.2	9055.5	6339.5	4243.2	3539.0
4	4583.0			11886.3	9072.8	6359.0	4272.0	3545.7
5	4599.7			11924.0	9107.9	6359.7	4285.3	3551.2
6	4567.6			11856.3	9001.9	6331.7	4279.5	3555.5
7	4557.7			11826.6	8971.6	6337.8	4291.6	3547.6
8	4517.5			11714.2	8900.8	6319.7	4275.5	3542.2
9	4482.5			11698.0	8864.2	6312.5	4248.7	3530.5
10	4455.3			11706.0	8868.6	6315.4	4240.0	3536.3
11	4485.6			11707.5	8883.3	6305.2	4244.7	3528.2
12	4475.6			11743.7	8902.2	6308.7	4254.4	3526.4
13	4481.4			11762.8	8909.2	6336.0	4256.5	3527.5
14	4472.5			11785.1	8926.3	6348.0	4261.8	3536.8
15	4480.8			11823.8	8972.3	6343.1	4248.7	3537.0
16	4455.1			11747.4	8897.2	6316.3	4222.1	3531.0
17	4428.6			11717.5	8874.1	6285.1	4202.3	3524.7
18	4420.3			11696.6	8878.6	6273.4	4189.1	3517.7
19	4395.5			11631.7	8814.2	6234.4	4160.5	3514.6
20	4391.2			11655.9	8841.0	6253.2	4169.7	3525.0
21	4408.2			11732.2	8898.0	6266.9	4192.9	3536.7
22	4418.2			11755.1	8927.1	6270.5	4207.7	3539.4
23	4429.2			11773.9	8949.5(23)	6277.4	4212.2	3540.0
24	4439.5			11790.4	8925.1(21)	6281.5	4170.2	3538.4
25	4444.1			11803.7	-- (0)	6268.2	4149.2	3543.0
26	4455.3			11789.3	-- (0)	6278.7	4150.4	3548.3
27	4478.3			11832.8	9007.7(6)	6311.0	4197.1	3555.4
28	4486.7			11856.3(23)	9002.1	6323.9	4234.6	3545.0
29	4509.8			11856.3(23)	9002.4	6345.0	4253.9	3552.1
30	4515.4			11871.8	9014.9	6348.7	4258.9	3545.0
31	4542.6			11912.4(20)	9028.1	6388.6	4304.7	3552.6
MEAN	4485.9			11785.5	8949.8	6312.9	4231.2	3538.6

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

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

COSMIC RAY INDICES (Neutron Monitors) OCTOBER 1975



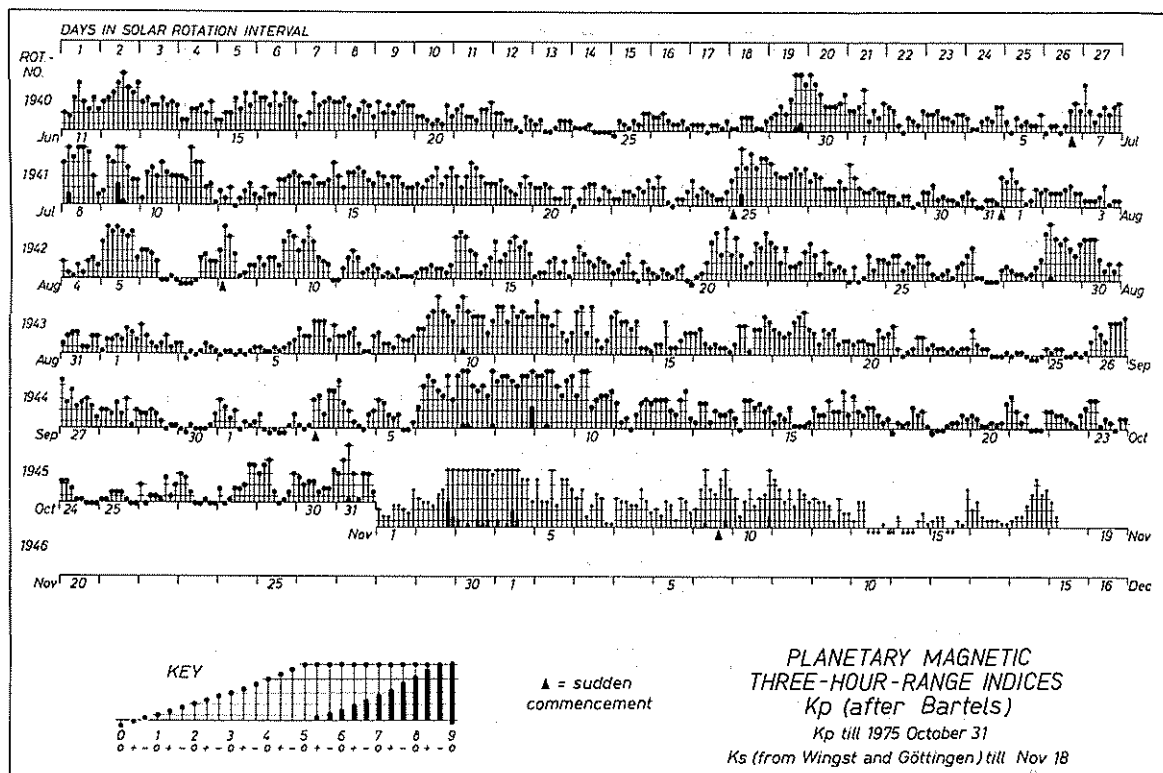
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Oct 75

GEOMAGNETIC ACTIVITY INDICES

OCTOBER 1975

Day	Three-Hour Range Indices Kp									Cp	Ap	aa		
	1	2	3	4	5	6	7	8	Sum			N	S	M
1	3	2+	1+	2	0+	1	1-	1	12-	0.3	6	15	12	19 8 KK
2 QQ	2-	0+	0	0+	0	0	1-	2-	5-	0.0	2	6	4	5 5 CC
3	1-	0+	1-	3	3+	2-	4-	4-	17	0.7	11	22	17	11 29
4	4+	3-	2	1	1-	0+	2-	2	15-	0.5	9	17	11	17 11
5	3	3-	2-	1+	2-	0+	0+	1	12	0.3	6	11	10	14 8 C
6 D	2+	4	5-	4+	4-	3+	5-	3	30	1.2	25	35	42	36 42
7 D	5-	5+	5+	4	4-	4	3+	5+	36-	1.4	38	67	46	55 58
8 D	4+	5-	5-	4+	4	5-	5-	7-	38	1.5	45	62	62	51 73
9 D	5-	5-	5+	5	4	3+	4+	5-	36	1.4	37	48	54	58 45
10 D	3+	5	5	2+	3	3+	3+	4-	29	1.2	24	43	29	39 32
11	3-	1	1+	0+	2-	3-	3	3-	15+	0.5	8	17	16	9 24
12	3	3	3	2	2-	3	4-	1+	21-	0.7	12	23	18	19 23
13	1	3-	3-	1	2	2-	2-	2	15-	0.4	7	16	12	11 17
14	1+	0+	3	3	2+	3-	2	2+	17	0.5	9	16	38	27 27
15 QQ	1	2-	1+	2+	1-	1-	1-	1	9+	0.2	5	9	11	12 8 C
16	2+	2-	2-	3	2	2	4-	2-	18	0.5	10	20	26	23 23
17	3+	2	2-	2+	2+	2-	1	1+	16-	0.4	8	16	15	19 12
18 Q	0	1	1-	1	2+	2-	2	1-	9+	0.2	4	10	12	6 17 KC
19 QQ	0	0+	0+	1-	1	1	2-	1+	6+	0.1	3	7	8	6 9 CC
20 Q	2-	1+	1-	1-	1	1-	1	3-	10-	0.2	5	10	8	7 11 CC
21 Q	3+	2	1	2-	0+	0+	0+	2	11	0.3	6	10	9	13 7 CC
22	2	2-	2-	1+	1	1-	2-	2+	12+	0.3	6	13	12	12 13 CC
23	3	3	1-	1+	1	0+	1+	1+	12	0.3	7	14	12	14 13 KC
24 QQ	2+	2+	2-	1-	1-	0+	0+	0+	9-	0.2	4	9	8	12 5 CC
25 QQ	1-	1-	1+	1+	1+	1-	0+	0+	7-	0.1	4	6	11	7 10 CC
26 Q	2	0+	1	1	1-	3-	1	2	11-	0.2	5	12	10	6 17 KK
27 Q	3	3-	1+	0+	0+	1-	0+	0+	9	0.2	5	9	10	12 7 CK
28	2-	0+	1-	2-	2-	2	4-	4-	15+	0.5	9	20	18	11 28
29	3	4-	4	1+	0+	1-	1+	3	17+	0.7	12	24	13	24 14
30	3-	2	2+	2+	1+	2-	2-	3+	17+	0.5	9	20	16	19 17
31	3	4	5+	3	1-	3	3	1+	23+	1.0	19	28	33	40 22
MEAN										0.53	12	20.5	19.5	20.0

GEOMAGNETIC ACTIVITY INDICES

DAILY AVERAGE INDICES A_p

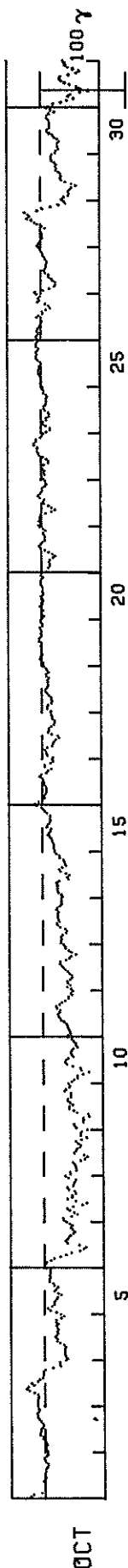
	1974		1975									
DAY	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
1	6	6	7	37	21	7	6	24	12	9	7	6
2	5	15	4	23	10	5	16	28	6	7	6	2
3	6	15	7	12	11	6	19	12	7	5	3	11
4	3	9	32	10	9	7	14	11	6	6	3	9
5	5	7	27	17	36	10	34	12	5	29	4	6
6	10	4	26	8	20	15	35	11	6	7	13	25
7	7	8	44	15	3	25	22	6	12	5	7	38
8	21	13	36	8	2	32	14	4	37	14	6	45
9	39	42	7	11	8	52	16	5	35	15	24	37
10	10	20	6	38	80	35	19	4	17	15	26	24
11	48	21	4	36	53	34	2	14	18	7	26	8
12	70	18	4	35	37	27	3	27	5	4	19	12
13	36	22	32	27	29	29	6	14	10	5	17	7
14	38	13	33	25	29	21	14	8	13	16	13	9
15	10	14	15	21	20	7	3	13	15	18	8	5
16	16	8	21	30	27	6	28	17	12	5	6	10
17	14	18	29	14	13	5	14	12	14	9	13	8
18	8	28	22	15	17	6	7	12	15	6	14	4
19	14	27	10	11	11	5	15	12	9	4	8	3
20	22	21	10	8	14	25	23	6	6	15	7	5
21	24	19	6	8	3	23	12	9	6	17	6	6
22	18	14	8	7	6	15	11	5	6	12	4	6
23	16	17	12	32	13	25	8	4	6	10	4	7
24	26	14	10	17	14	17	5	3	6	6	2	4
25	19	12	5	20	8	8	14	4	33	9	3	4
26	17	12	5	9	17	9	18	5	19	5	14	5
27	9	21	14	5	34	5	10	4	11	6	14	5
28	6	12	12	12	38	3	5	4	10	5	8	9
29	3	11	6		22	2	11	26	4	27	5	12
30	2	6	7		10	6	6	22	5	14	2	9
31		14	16		13		4		5	6		19
MEAN	18	15	16	18	20	16	13	11	12	10	10	12

HOURLY EQUATORIAL DST VALUES (PROVISIONAL)

OCTOBER 1975

NASA/GODDARD SPACE FLIGHT CENTER

DAY	(Time-UT)																								(Units-Gammas)
	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	17	13	3	0	0	0	0	0	2	-1	-2	0	0	-1	-1	-3	-4	-4	-1	0	1	-2	-4	-4	-4
2	-3	-2	-1	-3	-2	0	2	2	5	5	4	4	2	1	2	4	6	8	8	9	7	6	7	8	
3	8	8	8	7	7	8	12	18	21	19	12	15	8	5	2	1	1	1	-1	-10	-19	-18	-18	-25	
4	-27	-25	-24	-24	-24	-25	-23	-23	-18	-15	-15	-13	-14	-16	-15	-16	-15	-14	-16	-14	-14	-20	-23	-19	
5	-14	-7	-4	-9	-12	-12	-13	-15	-16	-20	-16	-12	-14	-16	-12	-10	-6	-6	-7	-6	-7	-7	-7	-3	
6	0	-2	-3	-8	-12	-19	-26	-32	-42	-46	-49	-41	-27	-25	-27	-29	-31	-34	-36	-33	-31	-33	-30	-26	
7	-23	-22	-32	-39	-35	-30	-27	-34	-45	-50	-37	-27	-33	-33	-37	-36	-29	-27	-34	-35	-36	-37	-28	-25	
8	-31	-31	-38	-38	-37	-36	-34	-43	-48	-51	-47	-35	-37	-39	-42	-43	-40	-37	-44	-50	-43	-43	-44	-51	
9	-38	-36	-35	-46	-47	-46	-53	-52	-39	-35	-30	-30	-34	-31	-28	-28	-32	-32	-32	-24	-26	-30	-31	-29	
10	-33	-36	-40	-40	-46	-53	-44	-43	-34	-27	-25	-26	-29	-35	-33	-32	-33	-35	-40	-38	-37	-35	-33	-28	
11	-29	-32	-31	-30	-29	-28	-27	-24	-21	-19	-18	-17	-19	-20	-16	-15	-19	-22	-26	-30	-30	-34	-32	-35	
12	-33	-28	-32	-29	-28	-32	-34	-34	-31	-29	-26	-24	-22	-20	-20	-27	-31	-33	-39	-33	-30	-26	-26	-24	
13	-21	-21	-22	-21	-23	-27	-28	-26	-20	-17	-15	-19	-18	-17	-17	-17	-17	-16	-17	-20	-22	-22	-22	-22	
14	-23	-22	-18	-17	-17	-17	-17	-16	-19	-30	-29	-31	-27	-21	-19	-23	-27	-26	-25	-24	-20	-19	-16	-14	
15	-14	-13	-13	-13	-12	-11	-10	-8	-6	-8	-9	-10	-5	-6	-8	-9	-9	-9	-9	-5	-3	-1	1	7	
16	9	4	0	-3	-2	-4	-5	-5	-5	-4	-2	-2	-1	0	3	1	-5	-7	-11	-3	-3	-10	-13	-12	
17	-13	-6	-5	-4	-3	-6	-12	-13	-14	-16	-20	-18	-11	-7	-8	-8	-11	-14	-15	-15	-12	-12	-11	-10	
18	-10	-6	-6	-7	-11	-12	-11	-11	-8	-6	-4	-4	-6	-7	-7	-7	-7	-8	-5	-5	-8	-6	-5	-2	
19	-2	-1	1	2	1	-1	0	0	0	1	1	0	3	3	2	0	1	0	1	2	-1	-1	1	1	
20	-1	-3	0	0	-2	0	2	-1	-2	-2	-1	1	-2	-2	-1	-1	-1	1	1	1	0	-2	1	0	
21	-6	0	-8	-10	-10	-9	-10	-14	-16	-13	-8	-4	1	3	1	-1	-4	-4	-4	-3	-2	-5	-2	2	
22	4	1	3	2	2	1	-5	-12	-16	-12	-8	-3	-2	-3	2	4	2	0	-1	-1	-4	-6	-5	-4	
23	-2	0	-4	-3	-4	-1	0	-3	-8	-8	-6	-2	3	4	5	5	5	9	9	6	6	1	-1	-3	
24	-6	-10	-10	-5	-2	-2	-6	-6	-9	-9	-8	-4	-3	-3	-5	-6	-6	-6	-7	-6	-3	-3	-1	-2	
25	0	1	0	0	1	2	3	3	3	2	2	0	1	4	6	6	5	6	4	3	6	6	5	3	
26	5	6	4	3	5	4	2	1	0	-1	0	5	3	-2	-2	-6	-11	-9	-5	4	2	3	1	5	
27	7	-3	-10	-16	-17	-17	-14	-12	-9	-9	-5	-3	-5	-6	-6	-7	-7	-5	-4	-2	-2	0	1	3	
28	4	3	1	0	-2	-2	0	0	1	-5	-1	4	7	11	16	13	15	19	4	-2	-12	-21	-29	-27	
29	-24	-27	-32	-33	-32	-34	-36	-41	-36	-29	-24	-23	-24	-23	-21	-18	-18	-17	-18	-16	-13	-12	-12	-13	
30	-17	-18	-21	-20	-19	-20	-22	-19	-16	-14	-10	-7	-8	-11	-10	-10	-10	-9	-7	-7	-10	-16	-12	-7	
31	-9	-15	-24	-31	-39	-32	-35	-46	-56	-46	-42	-34	-28	-24	-22	-23	-33	-42	-45	-38	-32	-29	-28	-26	



PRINCIPAL MAGNETIC STORMS

OCTOBER 1975

OBS. 2 letter IAGA code	GEOMAG- NETIC LATI- TUDE	COMMENCEMENT			SC - AMPLITUDES			MAXIMUM 3 HOUR - INDEX K		RANGES			UT END	
		DAY	hr min (UT)	TYPE	D(')	H(y)	Z(y)	DAY(3 HOUR PERIOD)	K	D(')	H(y)	Z(y)	DAY	HOURL
HD	7.6N	3	0600	..	..	..	..	3(7,8)	3	4	100	27	04	06
NE	55.1N	3	0619	SC	0.5	1.0	..	4(1)	5	25	58	83	04	09
NB	21.3N	3	1114	SC*	+ 0.2	+17	..	3(7)	5	1	78	12	05	06
KG	56.5S	3	1116	SC	--	--	--	3(8)	4	--	--	--	04	06
AL	9.5N	6	05--	..	..	..	..	6(7) 7(5) 8(6,8) 9(2)	5	5	120	47	09	19
HD	7.6N	6	0500	..	..	..	..	6(4) 7(6) 8(6)	5	5	126	32	10	23
GU	4.0N	6	0508	..	..	..	..	7(4)	5	10	120	30	10	09
AN	1.5N	6	05--	..	..	..	..	--	-	3	172	72	09	19
CO	64.6N	6	05--	..	..	..	..	7(3) 8(4) 9(3,4)	7	215	1960	1010	11	02
SI	60.0N	6	05--	..	..	..	..	8(4)	-	70	--	730	10	10
NE	55.1N	6	05--	..	..	..	..	10(2)	6	44	125	230	11	04
HI	54.2N	6	11--	..	..	..	..	6(7) 7(8) 8(8)	6	38	215	60	10	10
TU	40.4N	6	05--	..	..	..	..	7(1,2,3,4,8)	5	16	120	30	10	12
GN	43.2S	6	04--	..	..	..	..	6(7) 7(4,5)	5	16	90	120	11	03
								8(4,5,6,7,8) 9(3,4)						
HR	33.7S	6	18--	..	..	..	..	6(7) 7(2) 8(8) 9(4)	6	20	105	102	10	09
PH	18.7S	6	04--	..	..	..	..	6(4) 7(3,4) 8(4) 9(3)	5	6	110	50	11	00
								10(2)						
HO	21.1N	6	05--	..	..	..	..	8(3)	5	6	71	21	--	--
NB	21.3N	6	00--	..	..	..	..	7(8)	5	3	59	18	11	00
TU	40.4N	6	05--	..	..	..	..	8(2,4,7,8) 9(2,3,4)	5	16	120	30	10	12
								10(2,3)						
KG	56.5S	6	05--	..	..	..	..	8(8)	7	--	--	--	11	02
HU	0.6S	6	0030	..	..	..	..	6(4,5)	5	7	238	38	07	24
TV	1.1S	6	05--	..	..	..	..	--	-	2	215	96	09	19
FR	49.6N	7	01--	..	..	..	..	8(8)	6	29	88	79	10	09
BO	48.9N	7	01--	..	..	..	..	10(3)	6	31	116	73	11	06
SJ	29.9N	7	0100	..	..	..	..	8(7)	5	8	77	26	08	04
TO	46.7S	8	04--	..	..	..	..	8(4,8) 9(3,4)	5	16	150	50	10	00
AL	9.5N	14	0634	SC	- 0.4	13	- 3	14(3,4,5,6,8)	3	4	76	29	15	06
HD	7.6N	14	0618	SC	- 0.4	+13	- 1	14(5) 16(7)	4	5	93	22	17	19
AN	1.5N	14	0634	SC	- 0.5	23	7	--	-	3	111	34	15	06
NE	55.1N	14	0619	..	..	..	..	14(3)	5	19	72	45	14	23
TV	1.1S	14	0634	SC	0.2	20	24	--	-	2	138	76	15	06
AL	9.5N	28	13--	..	..	..	..	28(7)	4	2	48	20	29	05
HD	7.6N	28	0500	..	..	..	..	28(7)	4	2	84	13	29	06
AN	1.5N	28	13--	..	..	..	..	--	-	1	61	19	29	05
NE	55.1N	28	1221	..	..	..	..	29(3) 31(3)	5	31	107	121	31	12
TV	1.1S	28	13--	..	..	..	..	--	-	1	62	55	29	05
PH	18.7S	31	04--	..	..	..	..	31(3)	5	4	110	30	01	00

Reports were received from the following observatories:

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

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Oct 75

SUDDEN COMMENCEMENTS AND SOLAR FLARE EFFECTS

OCTOBER 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)

03 1116 A: LG; B: WN DB IK PE LM CZ KG; C: NI EB TL SZ (si: A: NU; C: PP -
sfe: SS)

Sudden impulses found in the magnetograms (si)

n o n e

Solar-flare effects (sfe)

Effects confirmed by ionospheric or solar observations are underlined.

04 1148 - 1157 SZ

04 1251 - 1303 SZ

10 1151 - 1156 SZ

28 1248 - 1302 SZ

RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

OCTOBER 1975

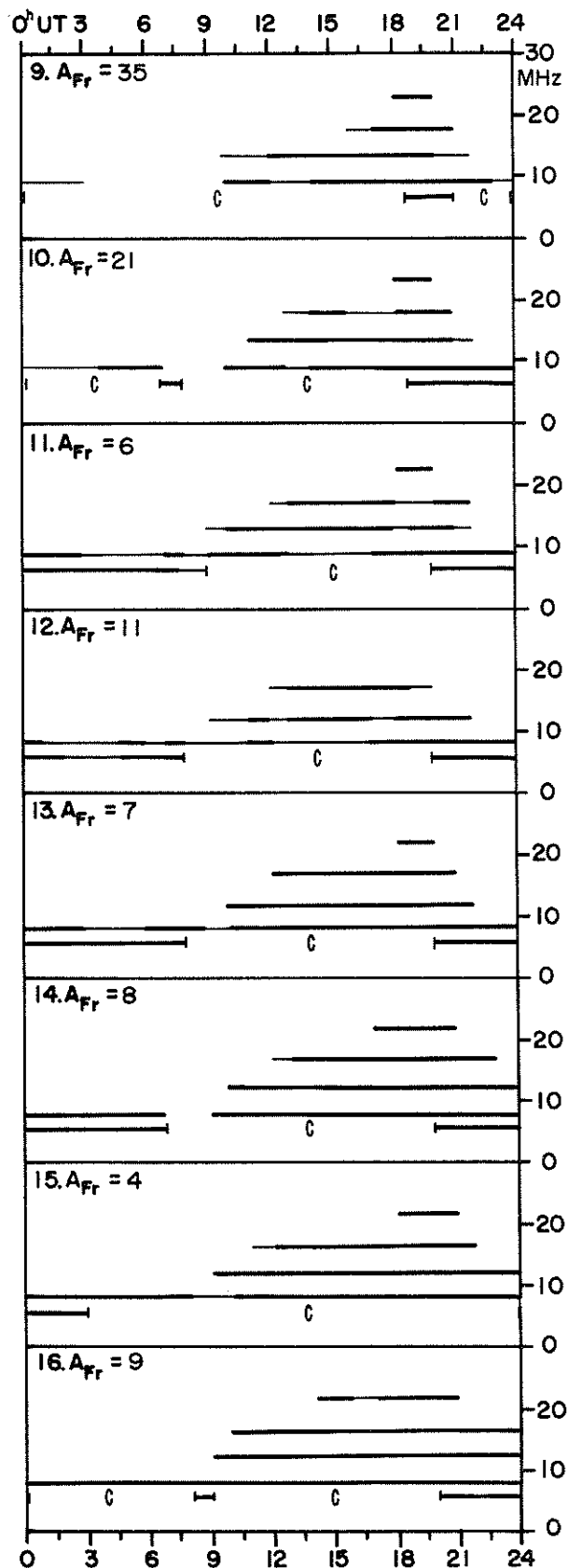
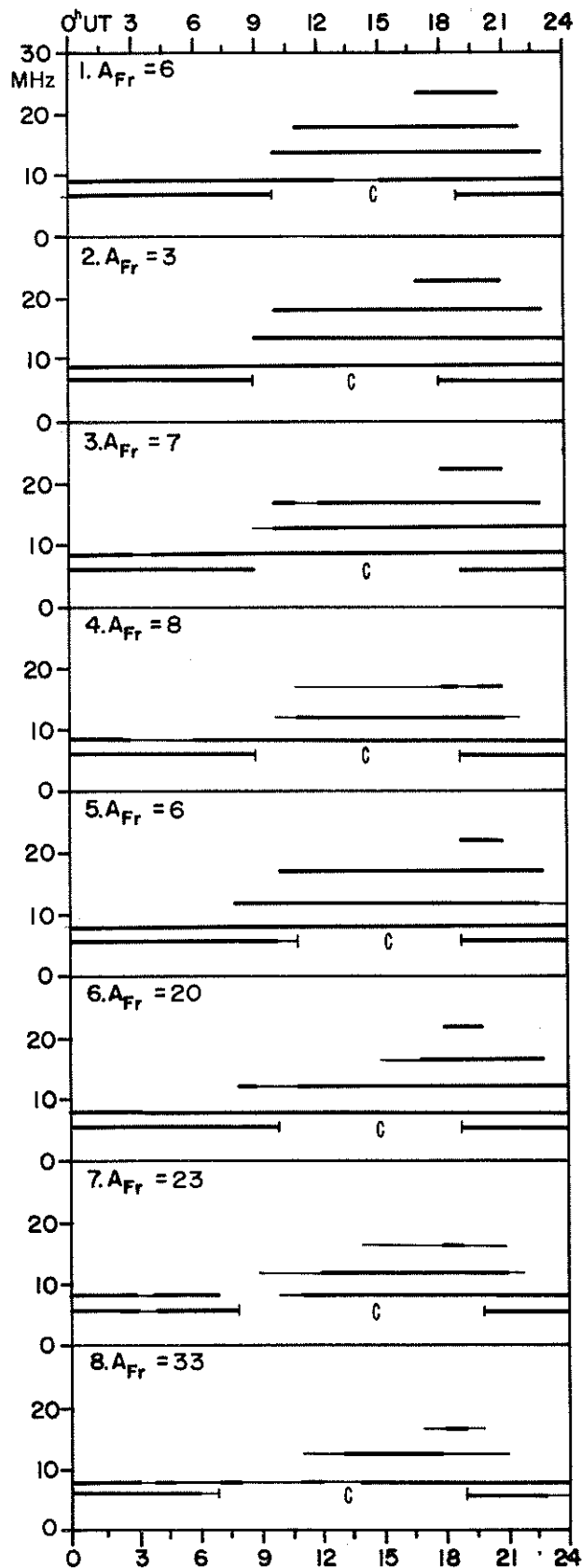
North Atlantic

OCT 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	60	7	6-	5+	70	6+	6	6	6	7	2	1	6
02	60	6	60	50	6+	6+	7	6	6	7	1	1	3
03	6+	6	6+	6-	7-	6+	6	6	6	6	1	2	7
04	60	6	60	5+	6+	60	5	5	5	5	3	1	8
05	60	6	5+	6-	7-	6+	6	6	6	6	2	1	6
06	60	5	6-	6+	60	6-	6	6	6	5	(4)	3	20
07	5+	5	5+	5+	5+	6-	5	4	5	5	(4)	3	23
08	50	5	5+	5-	50	4+	5	4	4	5	(4)	(4)	33
09	5-	5	4+	4+	50	5-	4	4	5	5	(5)	(4)	35
10	50	5	5+	4+	6-	50	4	4	5	5	(4)	3	21
11	6-	5	6-	5+	6-	6-	5	5	6	6	1	2	6
12	5+	6	50	6-	5+	50	5	5	5	5	3	2	11
13	5+	6	50	6-	5+	5+	5	5	5	5	2	2	7
14	60	6	6-	6-	60	60	5	5	5	6	2	2	8
15	6-	6	6-	6-	60	60	6	6	5	6	2	1	4
16	60	6	60	6+	60	6+	6	5	5	6	2	2	9
17	60	6	60	60	60	6+	6	6	5	6	2	1	6
18	60	6	60	60	60	6+	5	5	6	6	1	2	3
19	6+	6	7-	60	60	6+	5	5	6	6	0	1	2
20	60	7	60	6-	7-	6+	6	6	6	7	1	1	3
21	60	7	60	6-	60	6+	6	6	6	6	2	1	5
22	60	7	60	5+	60	6+	5	5	5	6	2	1	5
23	60	5	6-	50	6+	6+	6	6	6	5	2	1	6
24	6+	5	60	7-	6+	6+	5	5	6	6	2	0	3
25	6+	5	60	60	6+	7-	6	6	6	6	1	1	2
26	6+	6	60	6-	7-	70	5	5	5	5	1	1	4
27	6+	6	6+	60	6+	7-	5	5	5	5	2	0	4
28	7-	6	6+	6+	7-	7-	6	6	6	7	1	2	6
29	6+	6	7-	6+	6+	7-	6	5	5	6	3	1	11
30	6+	6	6+	6-	7-	7-	6	5	5	6	3	2	9
31	60	6	6+	60	60	60	6	5	5	6	3	1	10

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Oct 75

TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH

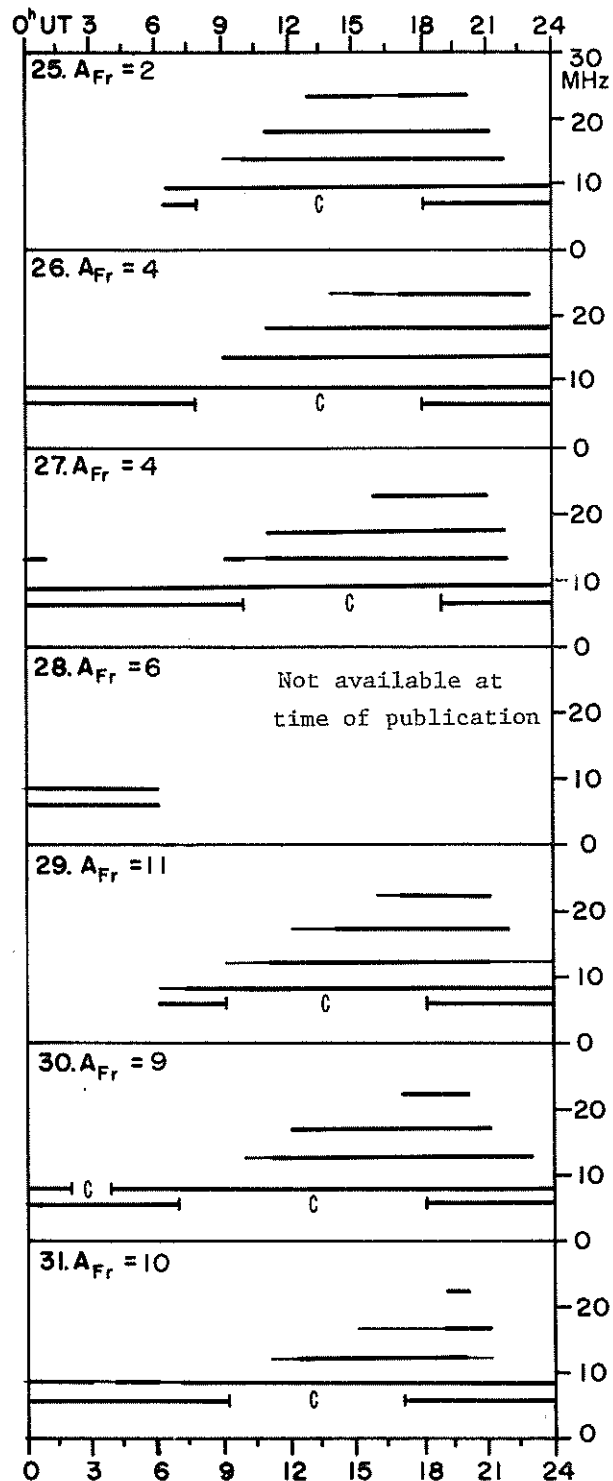
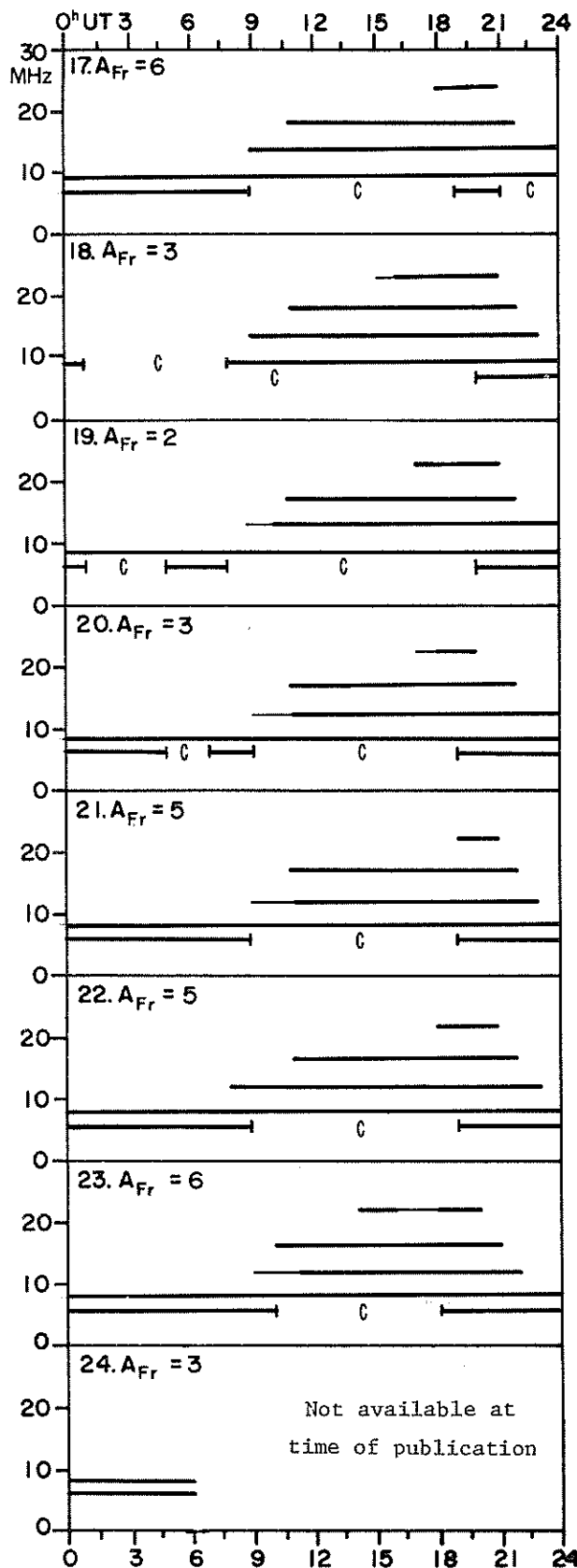
OCTOBER 1975



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

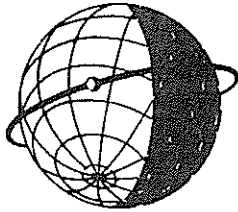
RADIO PROPAGATION QUALITY INDICES

OCTOBER 1975

Quality Indices calculated for reception at Lüchow

	TOKYO	HALIFAX	MAURITIUS	CANBERRA	BRACKNELL
1	8.4	9.3	8.1	5.4	14.4
2	9.1	9.6	7.7	5.2	14.1
3	9.0	8.5	7.2	4.9	14.4
4	8.8	7.6	7.7	5.1	14.0
5	8.7	8.4	7.9	5.3	14.0
6	10.4	7.3	8.3	5.3	14.2
7	7.2	6.1	7.8	5.0	13.6
8	6.2	5.1	7.7	5.0	13.6
9	5.7	5.3	8.0	4.9	13.0
10	6.2	5.8	8.8	4.6	13.1
11	6.6	5.9	8.4	4.5	13.1
12	7.2	5.8	8.2	4.6	13.4
13	6.4	7.3	8.4	5.1	13.7
14	6.2	7.0	9.1	5.7	13.8
15	6.7	7.7	9.8	5.4	14.2
16	7.7	9.1	9.0	5.4	14.6
17	7.3	8.9	9.4	5.4	14.4
18	6.9	9.3	10.4	5.7	14.5
19	7.2	8.9	10.0	5.2	14.8
20	7.4	9.4	10.1	5.0	14.4
21	7.2	9.3	9.6	5.7	14.6
22	7.6	9.0	9.3	5.6	15.0
23	7.8	9.5	9.2	5.8	14.9
24	7.7	9.1	9.2	5.5	13.8
25	7.4	9.2	9.6	5.8	14.2
26	8.6	8.7	9.6	6.3	14.6
27	8.4	9.4	9.2	6.4	14.9
28	8.0	9.2	9.1	6.1	15.1
29	7.0	8.1	8.7	6.0	14.2
30	6.7	8.3	8.8	5.5	13.9
31	6.1	7.2	9.3	5.2	14.2
MEAN	7.5	8.0	8.8	5.4	14.2

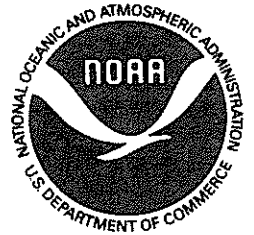
The method of calculation of the radio propagation indices changed in July 1974. An absolute quality figure is calculated for a 24-hour period from Tokyo, Halifax, Mauritius (Africa) and Canberra. The figure 0.0 corresponds to a median field strength of -30 dB above 1 μ V/m (converted into 1 kW and referred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

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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."