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Solar - Geophysical Data

NO. 375 NOVEMBER 1975

Part I (Prompt Reports)

DATA FOR
OCTOBER 1975
SEPTEMBER 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. 375

Issued in two parts

Hope I. Leighton, Editor

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Solar - Terrestrial Data Services Division

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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.

OCTOBER 1975 DATA

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ALERT PERIODS
INTERNATIONAL URSIGRAM
AND WORLD DAYS SERVICE

OCTOBER 1975

PRESTO MESSAGES (THE RAPID REPORT OF MAJOR EVENTS)

BOULDER 07/1315Z WEAK MAGSTORM IN PROGRESS 07/1200.

SUMMARY OF THE GEOALERT WWA MESSAGES

Message serial number	Date of issue	Date of obser- vation	Wolf number	10 cm solar flux	A index	Active Regions				Outstanding events	Forecasts			Alert Situations
						Location Lat-Long	No. of Total	Flares			Date	Location Lat-Long	Desc*	
								M	X					
274	1	30	11	76	2	N32E76	0	0	0		1	N32E76	Q	SOLQUIET MAGQUIET
275	2	1	11	76	6	N32E67	0	0	0		2	N32E67	Q	SOLQUIET MAGQUIET
276	3	2	11	78	3	N32E54	0	0	0		3	N32E54	Q	SOLQUIET MAGALERT MINOR 06/11
277	4	3	11	78	7	N32E41	0	0	0		4	N32E41	Q	SOLQUIET MAGALERT MINOR 06/11
278	5	4	11	76	6	N32E30	0	0	0		5	N32E30	Q	SOLQUIET MAGALERT MINOR 06/11
279	6	5	11	76	5	N33E17	1	0	0		6	N33E17	Q	SOLQUIET MAGALERT MINOR 06/11
280	7	6	11	75	20	N33E03	0	0	0		7	N33E03	Q	SOLQUIET MAGALERT MINOR 07/09
281	8	7	13	74	25	N32W09	0	0	0		8	N32W09	Q	SOLQUIET MAGALERT MINOR 07/11
282	9	8	22	74	27	N32W22 S11E46	1 0	0 0	0 0		9	N32W22 S11E46	Q Q	SOLQUIET MAGALERT MINOR 09/11
283	10	9	11	76	28	N32W34	3	0	0		10	N32W34	Q	SOLQUIET MAGALERT MINOR 10/11
284	11	10	11	75	21	N32W46	0	0	0		11	N32W46	Q	SOLQUIET MAGALERT MINOR 11
285	12	11	11	74	6	N32W58	0	0	0		12	N32W58	Q	SOLQUIET MAGNIL
286	13	12	26	75	13	N33W75 N06E30	0 0	0 0	0 0		13	N33W75 N06E30	Q Q	SOLQUIET MAGQUIET
287	14	13	43	79	7	N33W84 N06E16	0 0	0 0	0 0		14	N33W84 N06E16	Q Q	SOLQUIET MAGQUIET
288	15	14	26	80	12	N06E01	0	0	0		15	N06E01	Q	SOLQUIET MAGQUIET
289	16	15	43	81	5	N06W12	0	0	0		16	N06W12	Q	SOLQUIET MAGQUIET
290	17	16	17	79	8	N06W25	0	0	0		17	N06W25	Q	SOLQUIET MAGQUIET
291	18	17	24	79	6	N06W39 N03E68	0 0	0 0	0 0		18	N06W39 N03E68	Q Q	SOLQUIET MAGQUIET
292	19	18	24	80	6	N06W52 N03E54	0 0	0 0	0 0		19	N06W52 N03E54	Q Q	SOLQUIET MAGQUIET
293	20	19	26	79	2	N06W68 S16E45	0 0	0 0	0 0		20	N06W68 S16E45	Q Q	SOLQUIET MAGQUIET
294	21	20	11	78	4	N05W83	0	0	0		21	N05W83	Q	SOLQUIET MAGQUIET
295	22	21	00	76	7	SPOTNIL	0	0	0		22	SPOTNIL		SOLQUIET MAGQUIET
296	23	22	00	75	5	SPOTNIL	0	0	0		23	SPOTNIL		SOLQUIET MAGALERT MINOR 23/24
297	24	23	00	75	6	SPOTNIL	0	0	0		24	SPOTNIL		SOLQUIET MAGALERT MINOR 24/25
298	25	24	00	74	4	SPOTNIL	0	0	0		25	SPOTNIL		SOLQUIET MAGNIL
299	26	25	00	73	4	SPOTNIL	0	0	0		26	SPOTNIL		SOLQUIET MAGQUIET
300	27	26	00	73	4	SPOTNIL	0	0	0		27	SPOTNIL		SOLQUIET MAGQUIET
301	28	27	00	73	4	SPOTNIL	0	0	0		28	SPOTNIL		SOLQUIET MAGQUIET
302	29	28	00	73	5	SPOTNIL	0	0	0		29	SPOTNIL		SOLQUIET MAGQUIET
303	30	29	00	72	12	SPOTNIL	0	0	0		30	SPOTNIL		SOLQUIET MAGQUIET
304	31	30	00	73	9	SPOTNIL	0	0	0		31	SPOTNIL		SOLQUIET MAGALERT 02/06
305	01	31	00	71	14	SPOTNIL	0	0	0		01	SPOTNIL		SOLQUIET MAGALERT MINOR 02/06

6
Oct 75

RELATIVE SUNSPOT NUMBERS ZURICH, R_Z

DAY	1974 FINAL		1975 PROVISIONAL									
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
1	18	0	30	0	0	0	26	7	23	37	14	15
2	27	0	30	22	7	0	33	11	18	36	16	8
3	39	9	28	28	14	0	29	8	22	46	19	9
4	45	16	19	27	11	0	28	7	22	78	29	10
5	36	17	18	20	14	21	28	7	23	93	25	8
6	25	8	23	26	14	0	20	7	33	104	24	10
7	22	7	32	34	7	15	16	0	23	102	24	9
8	14	0	29	29	13	17	0	0	19	89	23	16
9	7	0	37	22	19	9	0	0	16	83	17	15
10	24	9	31	18	20	13	9	0	23	80	10	8
11	27	21	30	13	20	0	0	9	29	72	10	8
12	24	31	31	18	15	0	0	0	33	45	16	8
13	16	34	32	9	15	0	0	0	49	52	25	16
14	8	33	11	8	17	0	7	0	44	34	17	30
15	16	35	20	8	18	0	7	8	43	31	8	23
16	20	40	17	8	30	0	8	19	39	26	14	19
17	20	36	16	0	30	0	0	17	23	19	14	8
18	18	34	20	0	24	0	8	12	29	16	13	18
19	34	43	20	0	20	0	0	16	36	8	13	16
20	40	40	18	7	16	0	0	0	26	22	30	12
21	40	40	16	8	9	0	0	7	30	23	27	7
22	44	37	16	0	0	0	8	0	27	0	23	0
23	44	28	15	0	0	7	8	12	19	8	0	0
24	37	26	7	12	0	8	7	20	30	8	0	7
25	29	9	7	9	0	7	0	24	33	11	0	0
26	25	8	7	0	13	7	0	33	30	16	0	0
27	23	8	0	0	7	26	7	38	29	18	0	0
28	13	28	7	0	0	19	13	36	26	10	0	0
29	7	16	7	0	0	16	0	23	20	10	0	0
30	7	19	7	7	7	20	0	22	27	21	7	0
31		13	0		8		8		34	21		0
MEAN	25.0	20.5	18.7	11.6	12.0	6.2	8.7	11.4	28.3	39.3	14.1	9.0

1974 yearly mean = 34.5

DAILY SOLAR SOLAR FLUX AT 2800 MHz OTTAWA ARO FLUX ADJUSTED TO 1 A.U., S_a

DAY	1974		1975									
	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
1	90.2	79.7	76.1	70.8	70.7	70.2	76.3	71.4	78.7	91.6	87.0	76.4
2	92.0	78.7	75.8	72.3	72.4	71.2	81.1	73.0	76.8	95.4	87.9	78.1
3	96.2	76.7	77.1	74.3	73.4	72.2	79.6	70.8	77.1*	97.0*	87.0	78.4
4	99.5	74.7	74.4	75.4	72.8	73.0	79.6	70.4	76.8	104.6	92.8	76.3
5	97.6*	73.2	73.7	76.5	71.3	73.7	78.4	69.3	76.8	107.9	94.4	76.1
6	92.3	71.9	73.8	81.1	72.4	73.7	75.9	68.2	76.1	120.0*	94.0	75.1
7	85.6	71.1	75.7	79.4	71.9	74.3	73.6	68.1	74.1	123.2	91.1	74.3
8	82.0	69.6	77.7	78.8	72.5	73.6	71.9	67.5	74.0	123.7	88.5	74.0
9	78.9	69.6	79.9	77.1	73.8	73.4	70.6	67.7	73.3	115.9	84.3	75.4
10	78.4	70.4	80.5	76.7	73.3	72.4	70.1	68.8	73.0	116.5	82.5	74.3
11	77.3	76.2	81.2	74.8	73.0	72.3	69.8	68.1	77.6	107.3	81.1	73.3
12	79.1	77.9	82.4	74.9	74.2	70.8	69.6	68.4	82.7	104.5*	78.2*	74.8
13	76.1	78.0	80.4	73.7	75.6*	70.7	69.1	67.9	88.5*	98.0	75.2	79.0
14	77.7	78.2	77.7	72.0	75.0	69.7	68.7	68.5	89.0	90.9*	74.2	80.0
15	80.0	83.2	77.4	69.7	73.4	69.7	68.0	68.9	85.6	86.0	74.1	80.3
16	82.5	88.3	76.5	71.4	76.0	69.2	68.5	71.4	83.6	82.8	74.3	78.5
17	84.6	88.3	74.7	69.3	75.3	69.6	60.3	70.2	81.2	79.0	74.8	78.9
18	88.5	90.3	75.8	68.3	74.2	68.3	68.7	70.2	82.8	76.4	76.2	79.2
19	96.0	91.9	74.1	70.0	72.9	67.5	68.9	71.0	81.9	76.7	76.2	78.0
20	95.6	87.3	73.8	69.5	71.9	68.0	68.6	72.5	83.3	77.2	76.5	77.1
21	96.2	86.0	74.5	68.9	71.2	68.2	69.7	68.7	83.1	80.0	76.7	75.7
22	98.7	84.4*	73.6	68.3	69.3	67.8	70.8	69.9	82.7	78.5	75.3	74.2
23	98.1	83.0	72.7	68.3	67.6	68.7	70.6	72.9	82.0	76.8	76.1	74.3
24	95.9	80.1	71.0	58.6	67.4	69.3	78.6	75.9	79.3	77.0	76.8	72.7*
25	94.5	78.9	70.3	59.4	67.9	71.6	70.2	77.7	79.8	80.6	76.7	72.1
26	92.2	75.8	70.5	58.8	68.6	72.1	69.0	79.8	80.0	81.3	76.7	71.9
27	90.8	74.3	70.1	59.4	67.3	74.4	70.5	81.5	78.5	83.6	75.7	72.1
28	86.6	73.7	70.7	68.6	67.8	74.8	70.6	80.7	76.5	83.3	76.1	71.7
29	83.8	74.1	70.4		69.0	73.2	71.0	79.4	75.5	84.7	75.9	70.8
30	82.0	74.5	70.5		69.0	73.4	71.0	78.8	78.9	86.2	75.8	70.2
31		76.1	70.1		70.5		71.1		81.9*	86.7		69.9
MEAN	88.3	78.6	75.0	72.4	71.7	71.2	71.6	71.9	79.7	92.7	80.4	75.3

* adjusted for burst

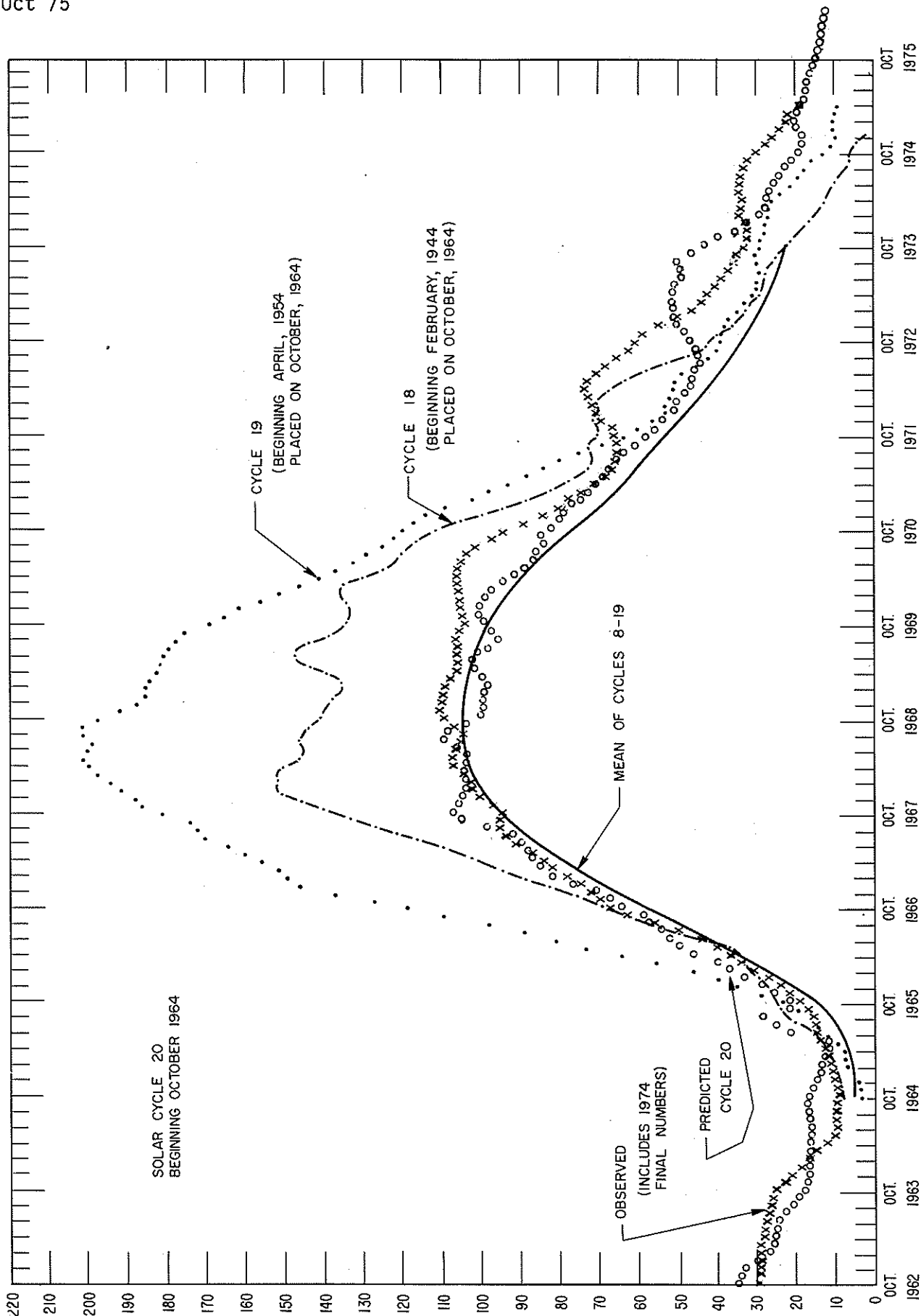
DAILY SOLAR INDICES

OCTOBER 1975

OCT 1975	YEAR DAY	BARTELS 27-DAY CYCLE NUMBER	SUNSPOT NUMBERS		OBSERVED FLUX OTTAWA 2800	SOLAR FLUX ADJUSTED TO 1 A.U.									
			R _Z	R _A '		AFCLR 15400	AFCLR 8800	AFCLR 4995	OTTAWA 2800	AFCLR 2695	AFCLR 1415	AFCLR 606	AFCLR 410	AFCLR 245	
1	274	5	15	9	76.2	524	271	119	76.4	73.5	50.2	38.6	22.3	8.3	
2	275	6	8	8	78.0	525	272	119	78.1	75.0	50.7	39.8	24.1	8.3	
3	276	7	9	8	78.3	525	276	120	78.4	74.8	51.9	39.7	24.5	8.6	
4	277	8	10	9	76.3	526	274	119	76.3	74.9	48.7	39.7	22.6	8.5	
5	278	9	8	9	76.1	525	275	118	76.1	73.8	49.1	38.9	21.8	8.1	
6	279	10	10	10	75.2	528	272	116	75.1	71.4	47.2	37.5	21.3	8.2	
7	280	11	9	9	74.5	525	276	115	74.3	71.2	47.0	36.8	22.5	8.0	
8	281	12	16	12	74.1	517	275	115	74.0	71.1	44.0	36.7	21.1	8.4	
9	282	13	15	14	75.6	521	279	119	75.4	72.7	46.4	37.0	22.1	10.1	
10	283	14	8	9	74.5	518	281	115	74.3	71.3	47.2	36.4	21.6	8.3	
11	284	15	8	9	73.6	518	280	117	73.3	72.0	47.4	36.8	21.7	8.9	
12	285	16	8	14	75.1		279	119	74.8	74.0	48.3	36.8	22.4	8.8	
13	286	17	16	21	79.4		279	122	79.0	75.5	50.5	37.8	21.6	8.8	
14	287	18	30	23	80.4	526	282	125	80.0	76.3	52.5	36.8	21.2	8.2	
15	288	19	23	20	80.8	527	277	125	80.3	78.5	58.5	38.2	21.0	8.3	
16	289	20	19	16	79.1	528	275	120	78.5	76.7	52.0	36.6	22.0	8.0	
17	290	21	8	15	79.5	522	279	121	78.9	76.4	52.2	36.6	21.5	8.1	
18	291	22	18	12	79.8	523	277	121	79.2	76.2	52.5	37.1	22.6	8.3	
19	292	23	16	11	78.6	523	275	120	78.0	75.3	52.2	38.5	22.9	8.4	
20	293	24	12	10	77.8	523	273	120	77.1	74.9	51.6	40.6	23.4	8.4	
21	294	25	7	3	76.4	524	270	120	75.7	73.3	49.7	38.3	22.4	8.0	
22	295	26	0	0	74.9	524	271	117	74.2	71.8	49.8	38.2	21.6	8.1	
23	296	27	0	0	75.0	526	270	118	74.3	70.5	49.7	37.3	21.0	8.7	
24	297	1	7	1	73.5*	526	272	117	72.7*	70.1	49.5	38.5	22.2	8.4	
25	298	2	0	0	73.0	524	265	117	72.1	70.1	48.3	38.0	22.0	8.3	
26	299	3	0	0	72.8	521	263	115	71.9	69.2	48.1	37.4	21.4	7.6	
27	300	4	0	0	73.0	522	269	115	72.1	70.5	46.8	39.8	22.1	8.0	
28	301	5	0	0	72.6	529	271	117	71.7	69.1	47.4	37.2	21.8	7.9	
29	302	6	0	0	71.8	522	268	114	70.8	67.2	44.5	37.4	21.4	8.0	
30	303	7	0	0	71.2	523	270	114	70.2	68.0	47.5	37.7	22.1	8.2	
31	304	8	0	0	71.0	523	274	112	69.9	68.2	45.4	37.7	20.7	8.0	
MEAN			9.0	8.1	75.4	524	274	118	75.3	72.7	49.3	37.9	22.0	8.3	

* Adjusted for burst.

Errata: Mean Values for Daily Solar Indices in July 1975 published in SGD 372-Part I should be corrected to the following: R_A' = 28.5; Observed Ottawa 2800 MHz Flux = 77.2; Adjusted Ottawa 2800 MHz Flux = 79.7.



PREDICTED AND OBSERVED SUNSPOT NUMBERS

SMOOTHED OBSERVED AND PREDICTED SUNSPOT NUMBERS
CYCLE 20

MONTH	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1964										9.6	13.2	11.0
1965	11.7	12.0	12.5	13.6	14.6	15.0	15.5	16.4	17.4	19.7	22.3	24.5
1966	27.7	31.3	34.5	37.4	40.7	44.6	50.3	56.6	63.1	67.6	70.2	72.7
1967	75.0	78.0	82.2	84.6	87.4	91.3	94.1	95.3	95.3	95.0	97.1	100.6
1968	102.6	102.9	104.7	107.2	107.6	106.6	105.2	104.0	107.0	109.9	110.6	110.1
1969	110.0	109.6	108.0	106.4	106.2	106.1	105.0	106.4	105.4	104.1	104.6	104.9
1970	105.6	106.0	106.2	106.1	105.8	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	17.6 (2.1)	17.0 (5.1)	16.3 (7.1)	15.8 (9.1)	15.3 (--)	14.8 (--)	14.3 (--)	13.8 (--)
1976	13.4 (--)	13.0 (--)	12.7 (--)	12.4 (--)								

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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Oct 75

H α SOLAR FLARES

OCTOBER 1975

OBSERVATORY	OBSERVED UT				LOCATION					DURATION — MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS			REMARKS	
	DATE	START	MAX. PHASE	END	APPROX.			CMP DAY									
					LAT.	MER. DIST.	CENTRAL DISTANCE										
BOUL	01	1419	1423	1434	N39	E80	.998		7.6	15	SF	2	C	1423	21	.7	
ATHN	05	0851E	0854	0859	N34	E24	.722		7.2	30	SF	3	V		32		DE H
	05	0851E	0854	0859	N34	E24	.722		7.2	80	SF	3	C		32		DE H
MCHA	06	1355	1405	1450	N33	E14	.663	13875	7.6	55	SF		C	1405	35	.4	EH
MCHA	07	2024	2025	2038	N33	E03	.636	13875	7.6	14	SN		C	2025	50	.5	EH
RAMY	08	1406	1415	1420	N32	W20	.681		7.1	14	SF	4	C		45		DE
PALE	08	2341E	2342	23520	N33	W21	.697		7.4	110	SF	3	C		23		
MANI	08	2343E	2343U	23550	N32	W21	.687		7.4	120	SF	2	V	2343	20	.2	
MANI	09	0848E	0848U	08520	N32	W26	.717		7.4	40	SF	2	V	0848	30	.4	F
CATA	09	0850E	0850	0900	N33	W27	.733		7.3	10	SN	3		0850		.7	
ATHN	09	0851E	0851U	0856	N32	W26	.717		7.4	50	SF	4	V		43		FDE
ATHN	09	0851E	0851U	0856	N32	W26	.717		7.4	50	SF	4	C		48		FDE
RAMY	09	1618	1626	1639	N31	W34	.762		7.1	21	SF	3	C		36		F
BOUL	09	1624E	1628	1643	N32	W33	.763		7.2	190	SF	1	P	1628	10	.1	
CATA	12	1225E	1250	13100	N05	E37	.626		15.3	450	SF	3		1250		.7	
CATA	12	1325E	1325	13350	N05	E37	.626		15.3	100	SF	3		1325		1.1	
CATA	13	0825	0825	08300	S11	E60	.860	13892	17.9	50	1N	3		0825		4.9	
MCHA	13	1615	1635	1705	N05	E20	.393	13890	15.2	50	SN		C	1635	100	1.1	E
ISTA	14	0808		0820	N05	E16	.339		15.5	12	SN						
CATA	14	0845E	0845	08450	N06	E09	.269		15.0		SN	3		0845		1.2	
MCHA	14	1519E		17450	N05	E05	.221	13890	15.0	1460	SN		P	1521	40	.4	EK
BOUL	14	1537	1538	1635	N 5	E 5	.221		15.0	58	SF	2	C	1538	64	.6	
BUCA	15	0840		0855	N02	W05	.176		15.0	15	SN		P	0842	107	1.2	
CATA	15	0845E	0845	0855	N02	W05	.176		15.0	100	SF	3		0845		.9	
ISTA	20	0815		0827	S10	W45	.702		17.0	12	SN						
ATHN	23	0638	0639	0644	N 2	E 7	.199		23.8	6	SN	4	V		16		DE

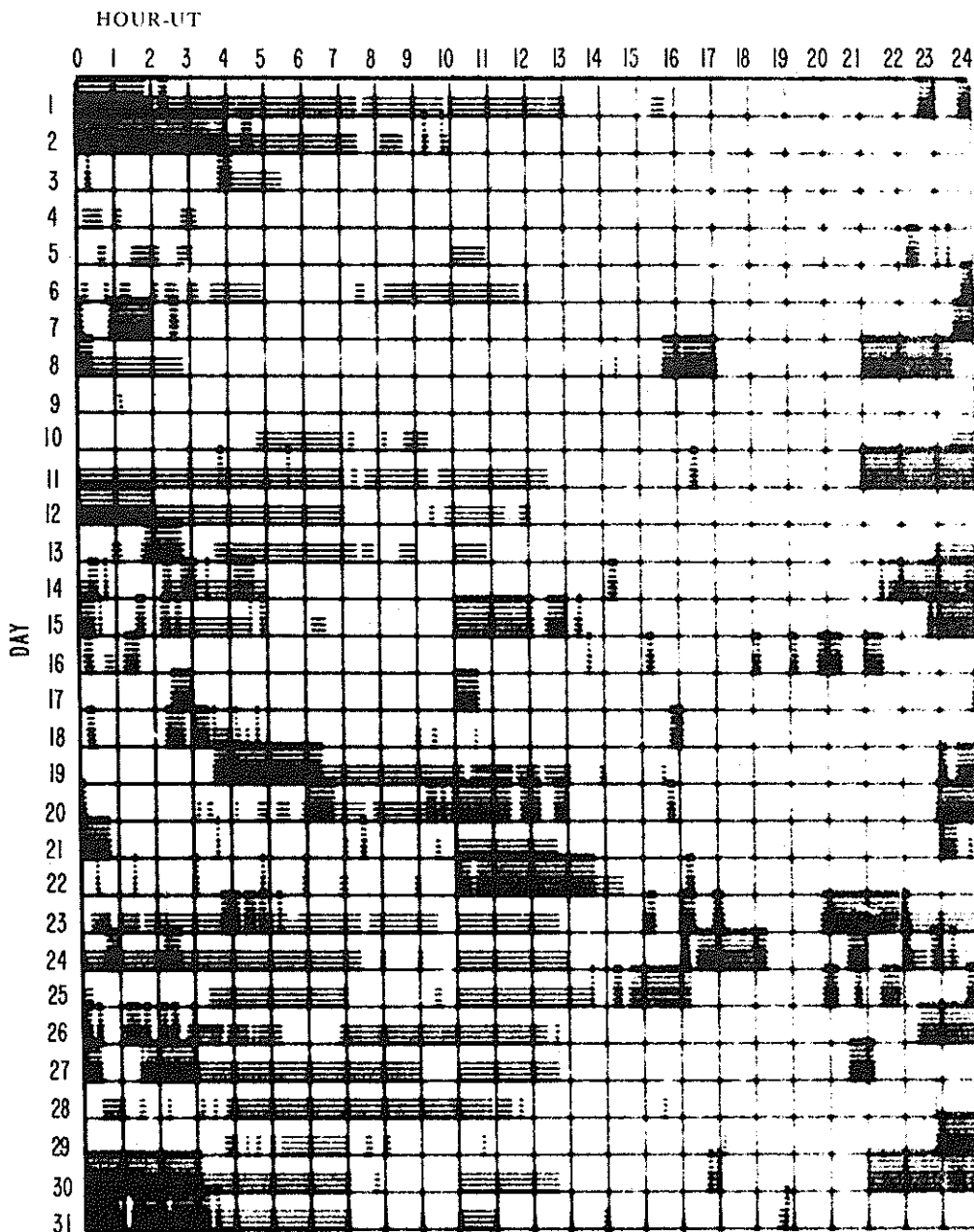
"Remarks":

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

OCTOBER 1975



Observatories included in total patrol:

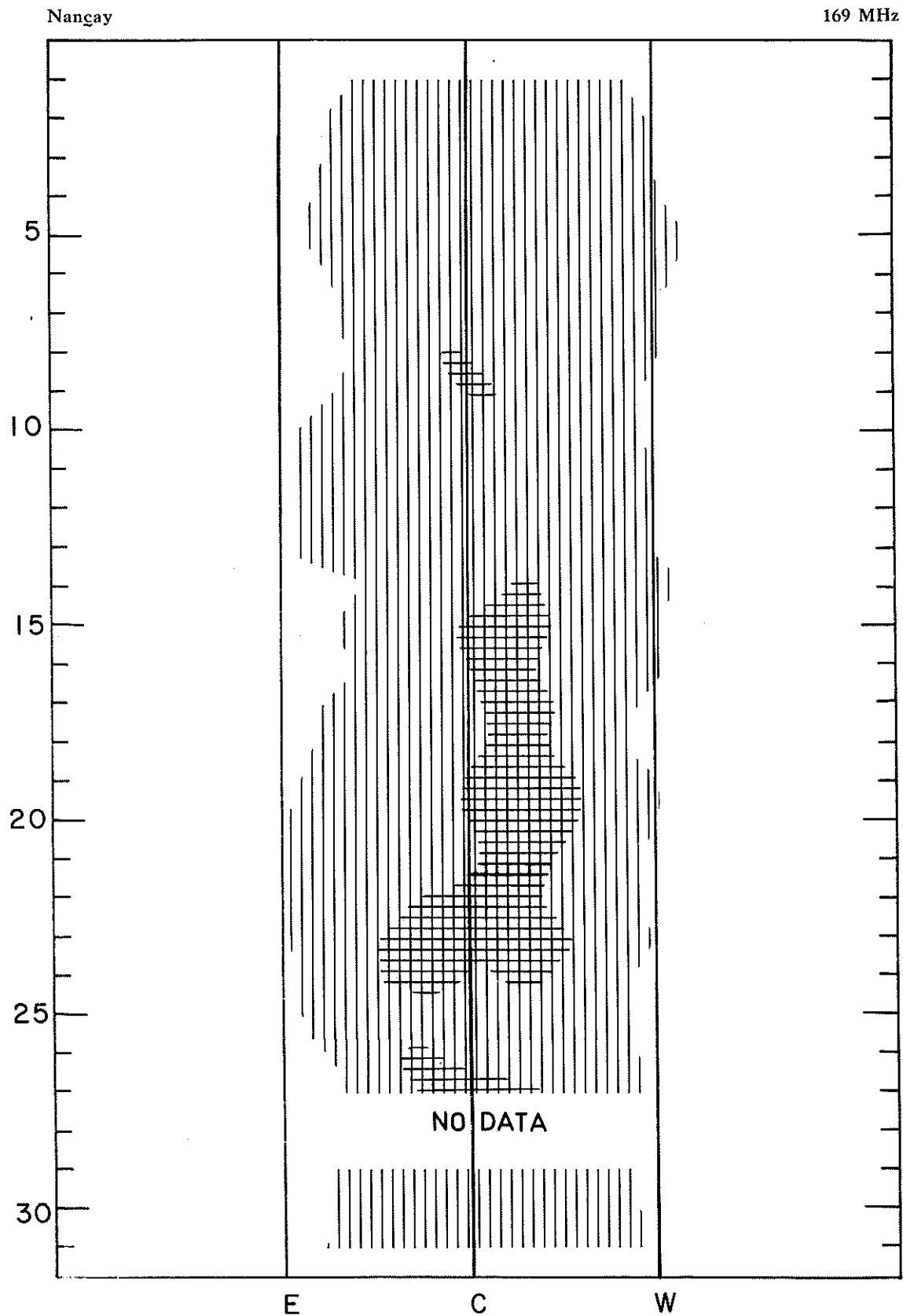
Athens	Catania	Kodaikanal	Mitaka	Tehran
Boulder	Herstmonceux	Manila	Palehua	Upice
Bucharest	Istanbul	McMath-Hulbert	Ramey	Wendelstein

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

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Oct 75

SOLAR RADIO EMISSION INTERFEROMETRIC OBSERVATION

OCTOBER 1975



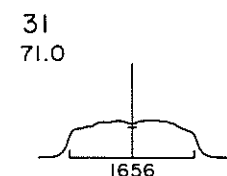
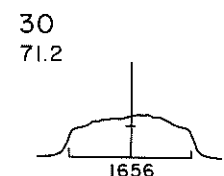
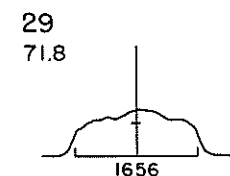
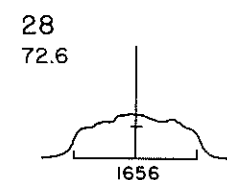
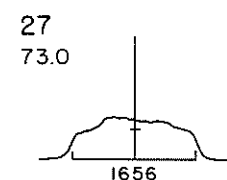
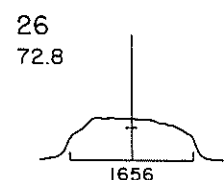
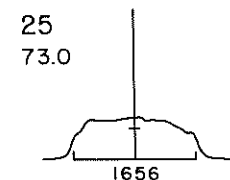
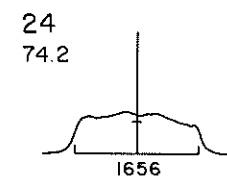
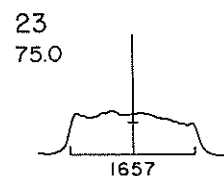
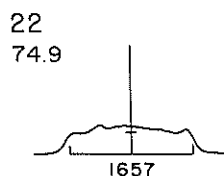
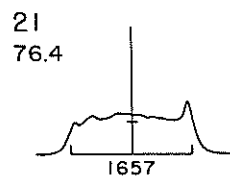
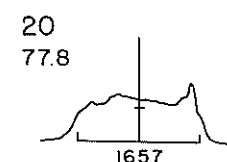
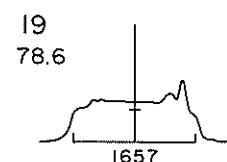
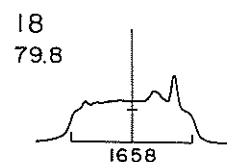
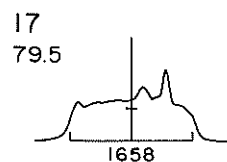
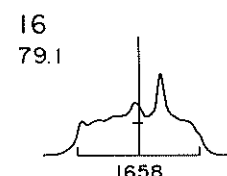
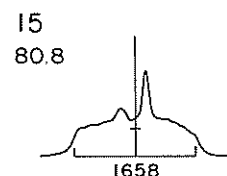
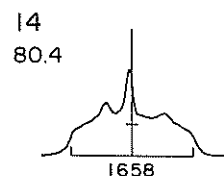
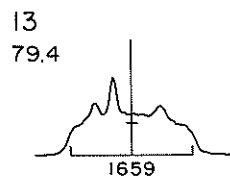
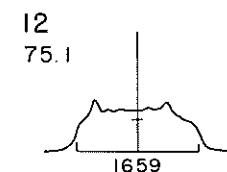
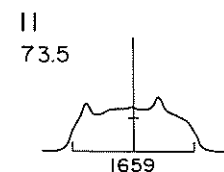
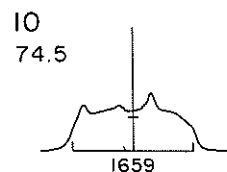
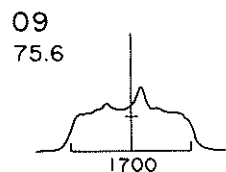
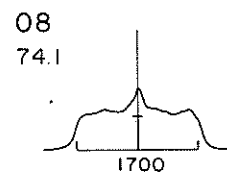
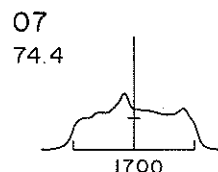
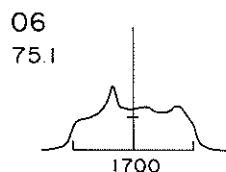
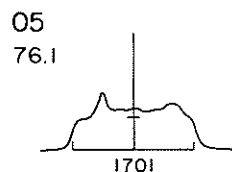
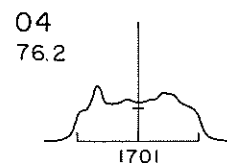
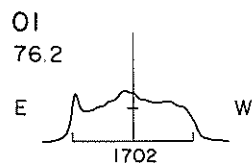
13
Oct 75

EAST - WEST SOLAR SCANS

October 1975

ALGONQUIN RADIO OBSERVATORY
CANADA

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



DATE TOTAL FLUX ESTIMATED QUIET SUN LEVEL
E W
PHOTOSPHERE TIME UT

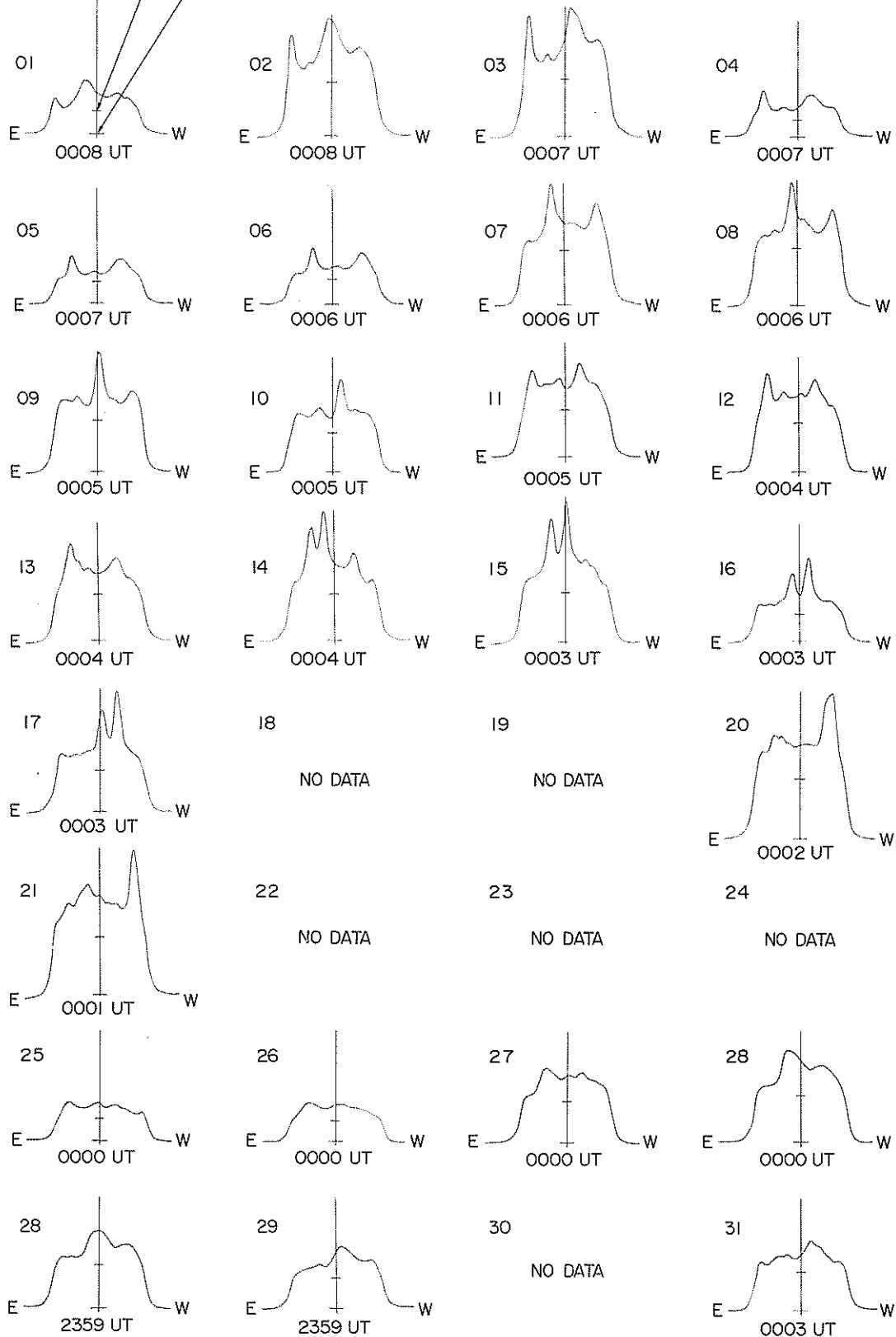
14
Oct 75

EAST-WEST SOLAR SCANS
OCTOBER 1975

Fleurs, Australia

ESTIMATED QUIET SUN LEVEL
COLD SKY LEVEL

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



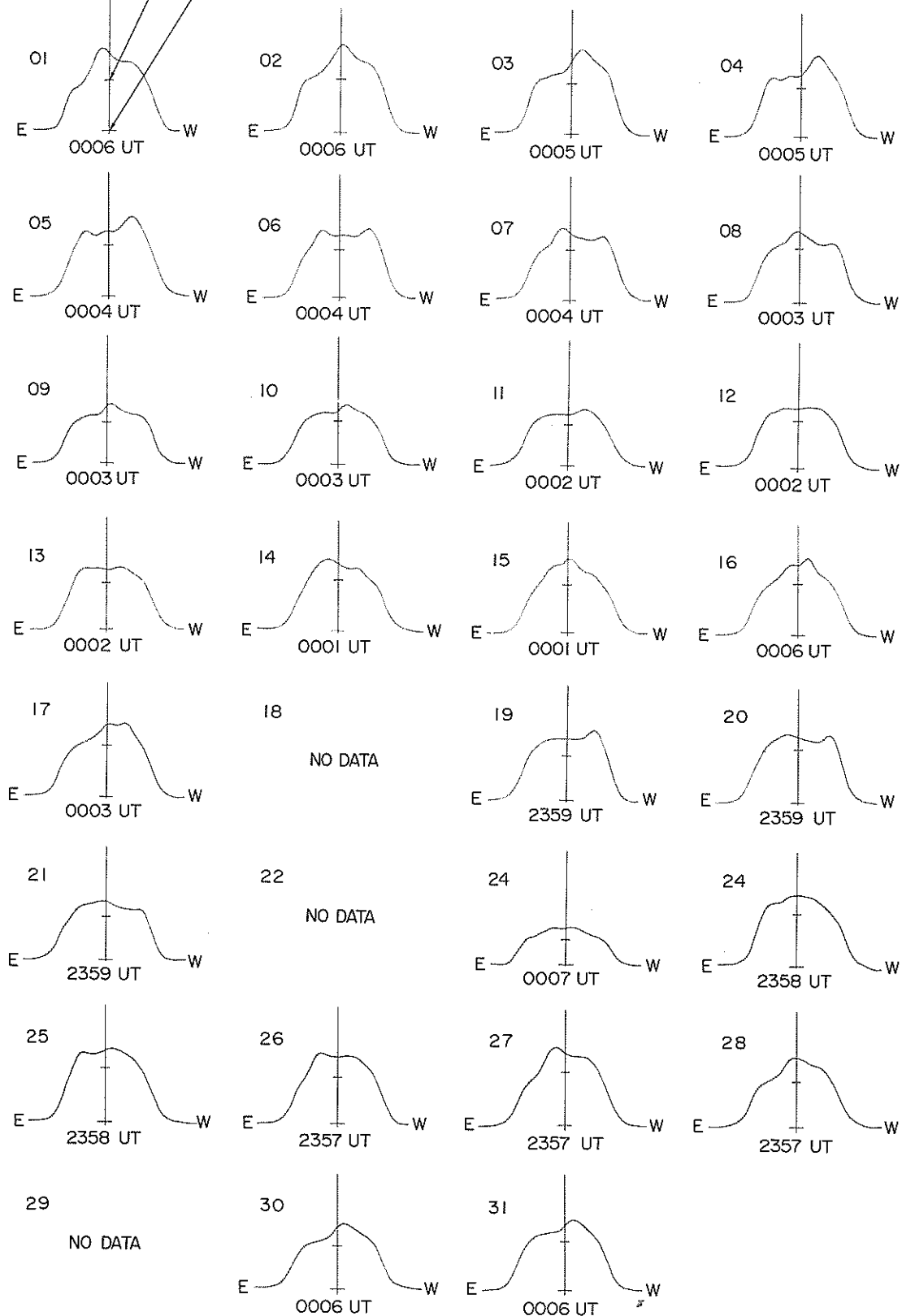
EAST-WEST SOLAR SCANS

OCTOBER 1975

Fleurs, Australia

ESTIMATED QUIET SUN LEVEL
COLD SKY LEVEL

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



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Oct 75

SOLAR RADIO EMISSION SELECTED FIXED FREQUENCY EVENTS

OCTOBER 1975

	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$		INT	REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
2	2800 OTTA	27 RF	1835		105	0.6	0.5		NULL
	2800 OTTA	24 R	1835	1845	10	0.6	0.3		
	2800 OTTA	24P R	1845		75	0.6			
	2800 OTTA	26 F	2000	2020	20	-0.6	-0.3		
3	2800 OTTA	1 S	2140.9	2142	2	1.4	0.8		
	2695 PENT		2140.9						
7	2800 OTTA	20 GRF	2025	2030	30	0.6	0.3		
8	2695 BOUL	45 C	2335	2340.5	2.5	9	3		
	2800 OTTA	45 C	2337	2339.5	4	3	1.4		
9	2800 OTTA	20 GRF	1615	1625	25	1	0.5		
13	2800 OTTA	20 GRF	1620	1635	35	1.4	0.7		
23	2695 BOUL	3 S	1900.5	1901.5	4.5	5	2		
24	2800 OTTA	20 GRF	1435	1545	220	1.4	0.7		

Observatories:

BOUL = Boulder

MANI = Manila

OTTA = Ottawa ARO

PENT = Penticton

SGMR = Sagamore Hill

Explanation of Type Code:

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

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Oct 75

SOLAR WIND
Interplanetary Scintillations
OCTOBER 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		488 34					345 12	
2					449 77		285 4	
3							366 79	
4					307 15		385 35	
5	279 46				290 8		493 90	
6	353 113	347 155			434 87		355 32	
7	476 *	388 122		415 102	496 25		388 21	
8	432 *	359 *					468 51	
9	641 309	453 *	612 233	524 129			499 67	
10	439 *	382 12		523 32			468 42	
11	429 *	736 192					401 23	
12		548 79		665 89	595 94		522 12	
13		326 119		533 21			409 7	
14					461 84		443 21	
15							344 18	
16		448 173		520 116			464 12	
17	471 *				503 119	431 142	460 40	
18		443 150			745 172		369 22	
19							491 81	
20						292 106	594 111	326 68
21	441 26	423 184				540 111	504 137	270 20
22		393 134			258 39		486 131	329 40
23							524 67	
24	288 86							299 13
25							506 193	
26					414 110		464 140	
27					338 90	402 144	421 151	
28					338 19		435 211	
29				444 135	385 97			361 82
30					501 *			
31	321 52			386 *		298 69		

OCTOBER	5	15	25
	UT LAT DIST DLON	UT LAT DIST DLON	UT LAT DIST DLON
3C48	9. 11. 1.27 5.	8. 10. 1.28 3.	8. 9. 1.28 1.
3C144	13. 5. 1.13 15.	12. 4. 1.17 13.	12. 3. 1.21 11.
3C147	12. 12. 1.11 14.	11. 11. 1.15 13.	11. 10. 1.18 11.
3C161	14. -2. 1.07 14.	14. -2. 1.11 13.	13. -3. 1.14 11.
3C237	18. -2. 0.66 48.	17. -1. 0.78 38.	17. 0. 0.88 28.
3C273	20. 32. 0.14 84.	19. 13. 0.30 73.	19. 7. 0.45 63.
3C298	22. 49. 0.44 -57.	21. 68. 0.35 -46.	21. 71. 0.33 38.
3C459	6. 8. 1.28 -5.	6. 8. 1.27 -7.	5. 7. 1.24 -9.

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

SOLAR X-RAYS BY SATELLITE SMS GOES

OCTOBER 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
10/	1	M	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	9	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	30	M	M	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
10/	31	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
OCTOBER 19751 - 8 Å 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
10/	1	M	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	9	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	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
10/	30	M	M	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
10/	31	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.

20
Oct 75

INFERRED IP MAGNETIC FIELD

BARTELS ROTATION	DATE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
1901	JUL 23	TA	A*	TA	A*	T	A*	T	A	A	A	A	A	A	A	A	A	A	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	A	A	A	A	A	A	A	A	A	A	A	A	A
1903	SEP 15	A	A	TA	T*	A	A	A	A	A	AT	A	A	A	T	A	A	A	A	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	A	A	A	A	A	A	A	A	A
1905	NOV 8	A	A	T	A	AT	A	TA	TA	TA	T	AT	A	T	A	A	A	A	A	A	A	A	A	A	A	A	A	A
1906	DEC 5	T	T	T	TA	AT	T	-	T	-	T	T	T	A	AT	A	-	TA	T	A	A	T	T	T	T	T	T	TA
1907	1973 JAN 1	T	T	T	T	T	T	T	TA	T	T	A	T	AT	-	A	AT	A	T	A	A	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	A	A	A	A	A	A	A	A	A	A	A
1909	FEB 24	AT	T	AT	AT	TA	AT	T	T	T	-	AT	TA	AT	A	T	T	A	A	A	A	A	A	A	A	A	A	A
1910	MAR 23	T	T	T	T	T	T	T	T	T	T	T	T	TA	AT	A	T	A	A	A	A	A	A	A	A	A	A	A
1911	APR 19	T	T	T	AT	T	-	A	T	T	AT	T	A	AT	T	T	T	TA	A	A	A	A	A	A	A	A	A	A
1912	MAY 16	T	T	T	T	T	T	AT	T	-	T	-	TA	T	T	A	A	AT	AT	T	TA	A	A	A	A	A	A	A
1913	JUN 12	TA	T*	-	T	*	-	T	TA	T*	A	A	T	T	-	T*	T*	T	T	T	AT	AT	A	A	A	A	A	A
1914	JUL 9	T	T	T	T	A	A	T	T	-	T	AT	A	T*	A	T*	-	A	A	T	A	TA	-	T	T	T	T	A
1915	AUG 5	T	T	A	A	A	T	AT	A	A	A	T	T	T	AT	*	T	AT	T	A	AT	T	T	A	A	A	A	A
1916	SEP 1	T	TA	T	T	T	T	A	AT	A	A	TA	A	A	*	T	T	T	T	T	A	A	A	A	A	A	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
1918	OCT 25	T	T	T	T	A	TA	A	A	A	A	T*	T	A	T	A	A	A	A	A	A	A	A	A	A	A	A	A
1919	NOV 21	A	*	T	T	-	A	A	A	AT	T	A	T	A	T*	TA	A	A	A	A	A	A	A	A	A	A	A	A
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
1921	1974 JAN 14	T	A	A	T	-	T	T	A	A	T	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
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
1924	APR 5	A	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
1925	MAY 2	-	-	A	A	A	A*	AT	T	A	AT	T	A	T*	TA	A	A	A	A	A	A	A	A	A	A	A	A	A
1926	MAY 29	T	T	A	A	A	*	-	A	A	A	A	A	*	-	TA	A	A	A	A	A	T	T	T	T	T	T	T
1927	JUN 25	TA	TA	A	A	-	A	-	A	A	T	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
1929	AUG 18	AT	-	A	-	A	-	A	-	A	-	A	-	A	-	AT	-	TA	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
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
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
1933	DEC 4	T	T	TA	T	A	TA	A	T	A	T	A	*	AT	T*	A	T	A	A	A	A	A	A	A	A	A	A	A
1934	DEC 31	T	A	T	T	T	A	TA	A	T	A	T	A	-	A	-	TA	T	A	A	AT	-	A	A*	A	A	A	A
1935	1975 JAN 27	T	T	T	T	A	T	AT	T	A	A	T	TA	A	T	A	A	T	A	T	A	T	-	T	T	T	T	T
1936	FEB 23	TA	A	A	A	A*	TA	A	A	AT	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	T	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
1939	MAY 15	T	T	A	A	TA	TA	A	A	A	T	T	TA	-	*	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
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
1942	AUG 4	A	A	A	A	T	A	A	T	AT	T	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
1943	AUG 31	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
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
1945	OCT 24	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T

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.

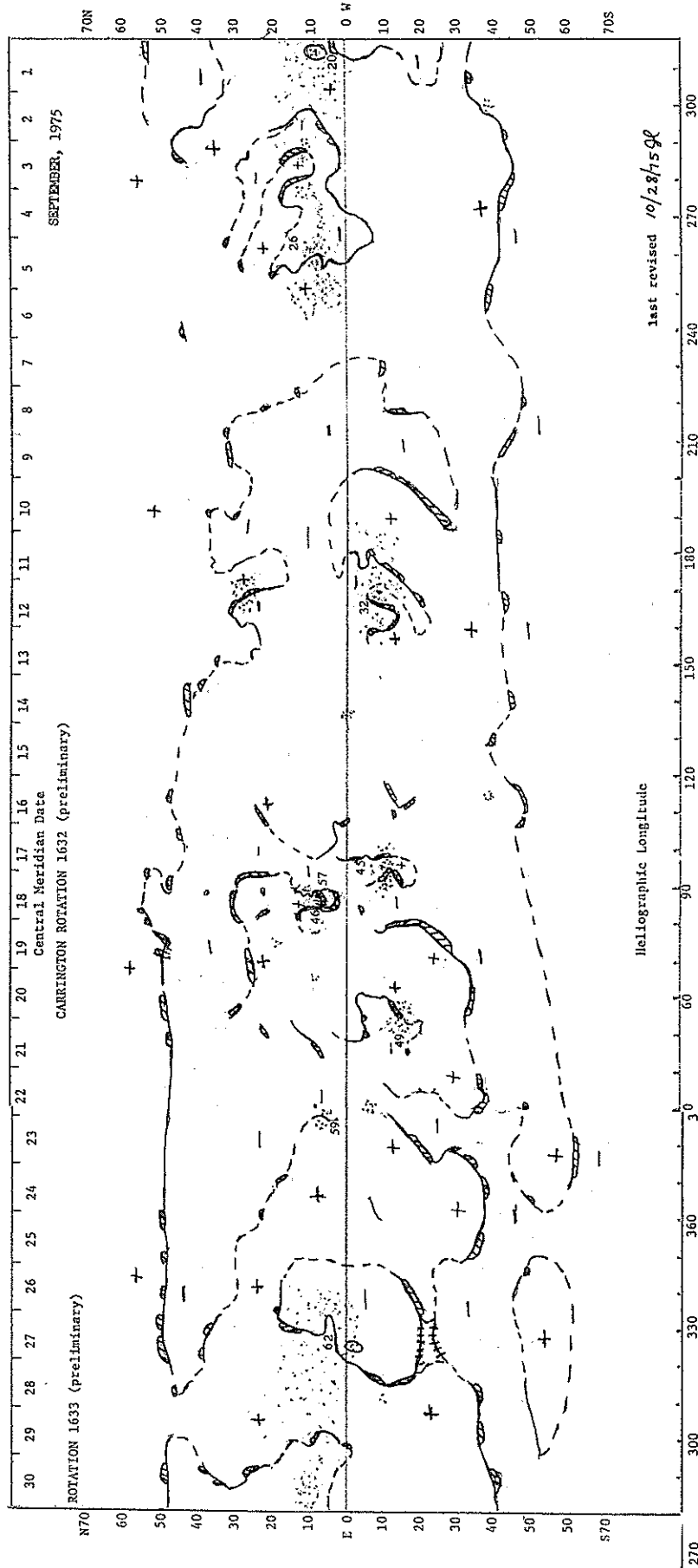
SEPTEMBER 1975 DATA

Contents

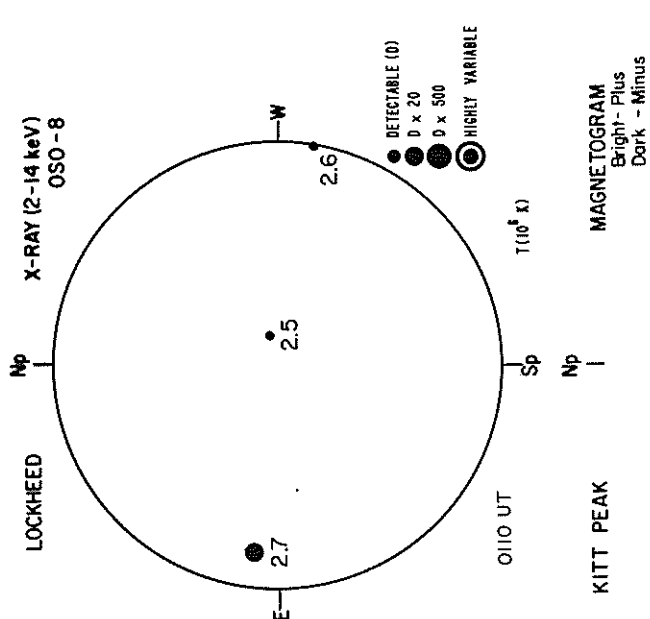
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H_α SYNOPTIC CHART

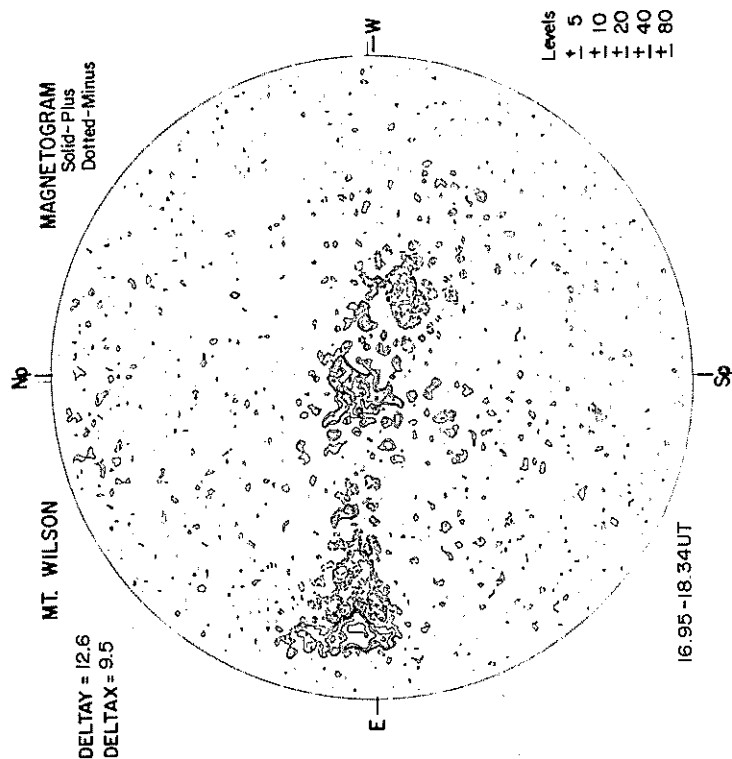
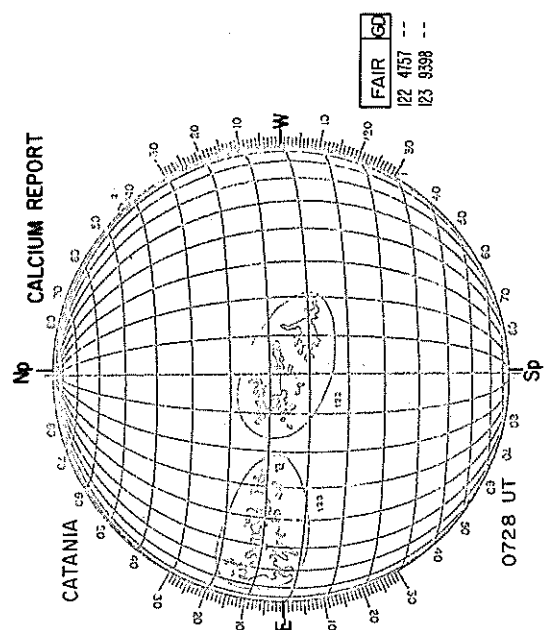
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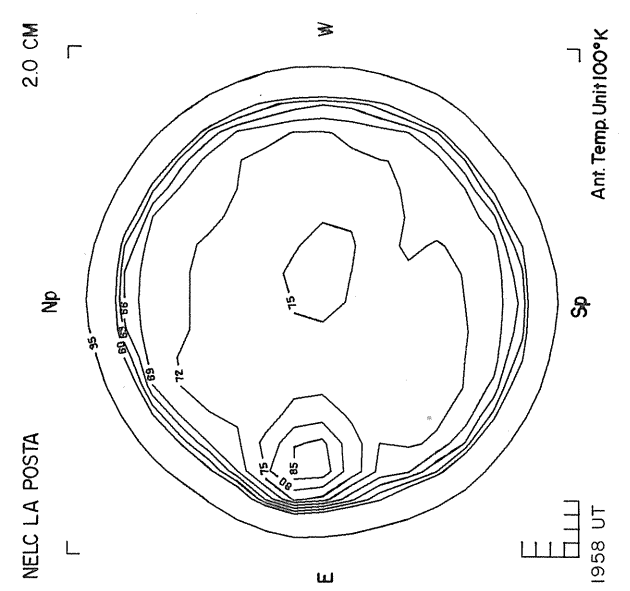
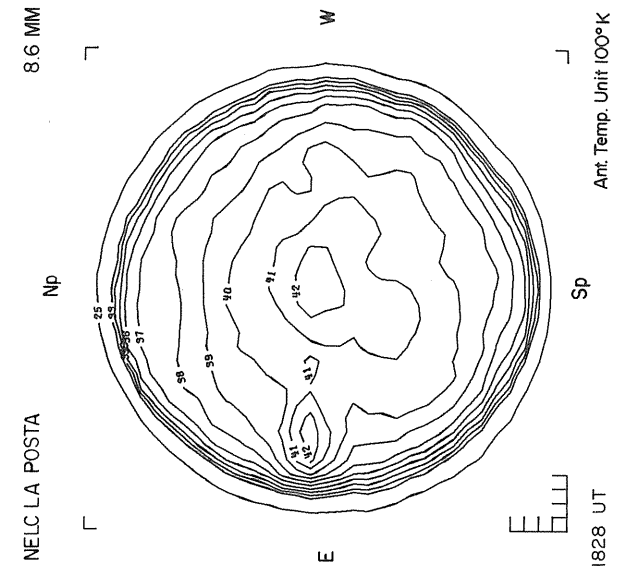
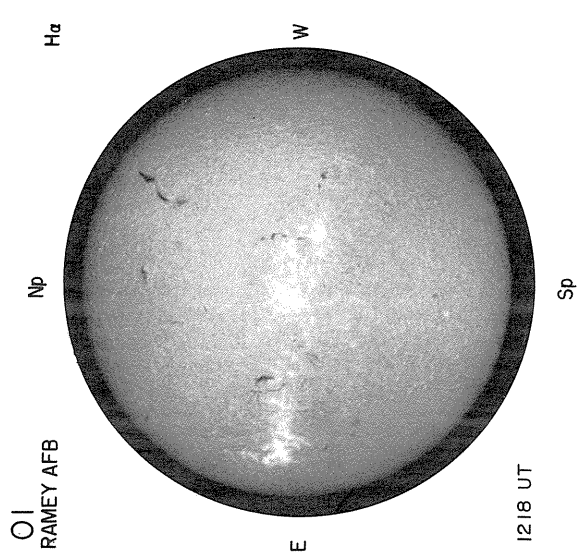
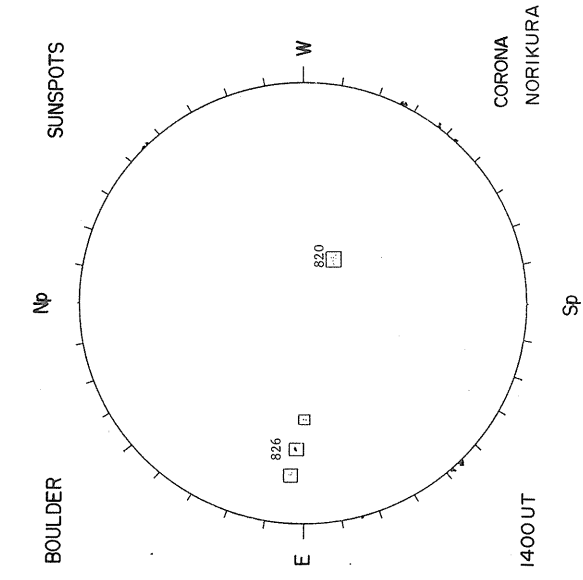


SEPTEMBER 1, 1975 (P=20.95, B₀=7.19, L₀=317.49)



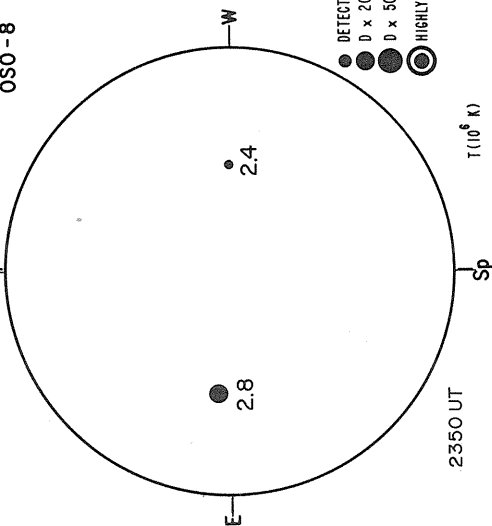
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SEPTEMBER 2, 1975 (P=21.20, B₀=7.20, L₀=304.28)

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

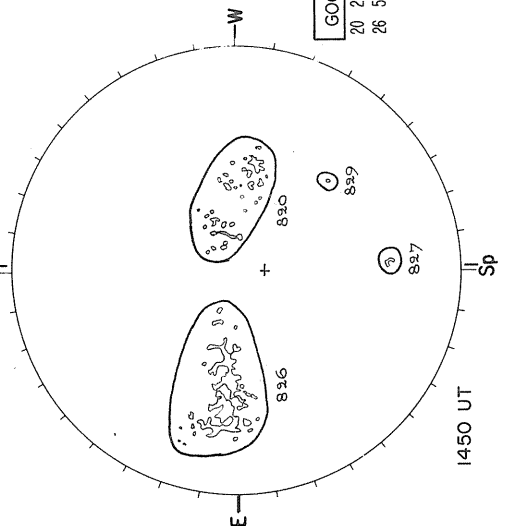


- DETECTABLE (D)
- D x 20
- D x 500
- HIGHLY VARIABLE

MAGNETOGRAM
Bright - Plus
Dark - Minus

KITT PEAK

McMATH-HULBERT

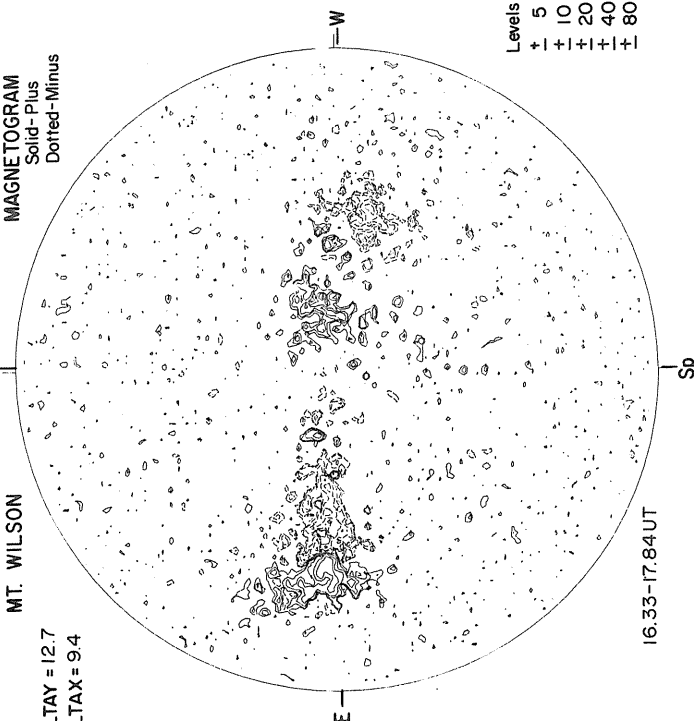


GOOD	S
20	2500
25	2500
26	5000
3	3

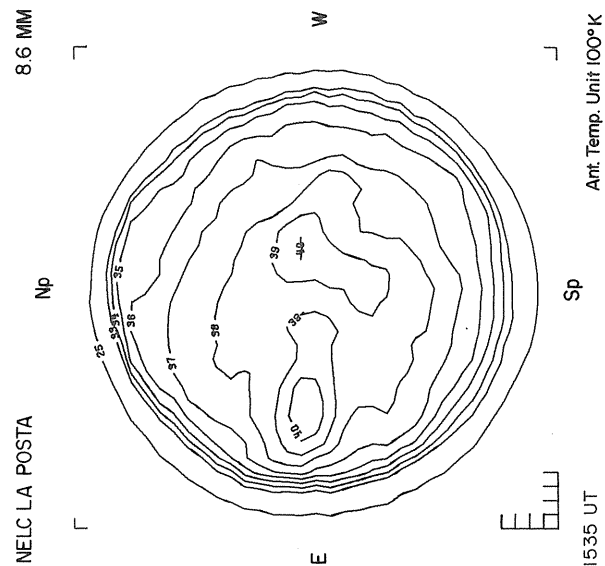
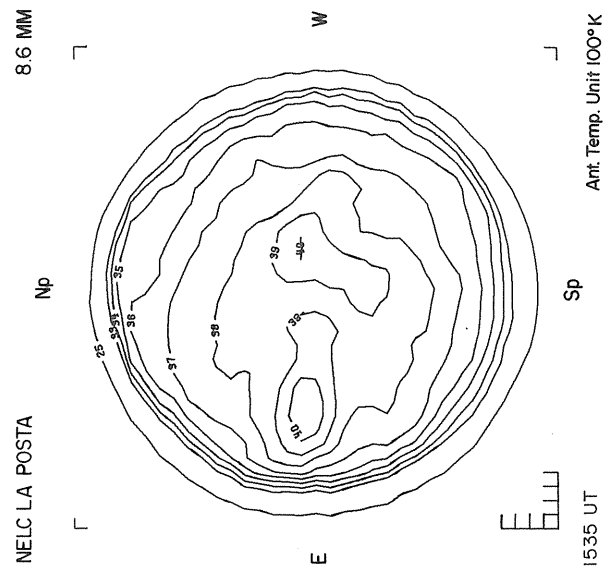
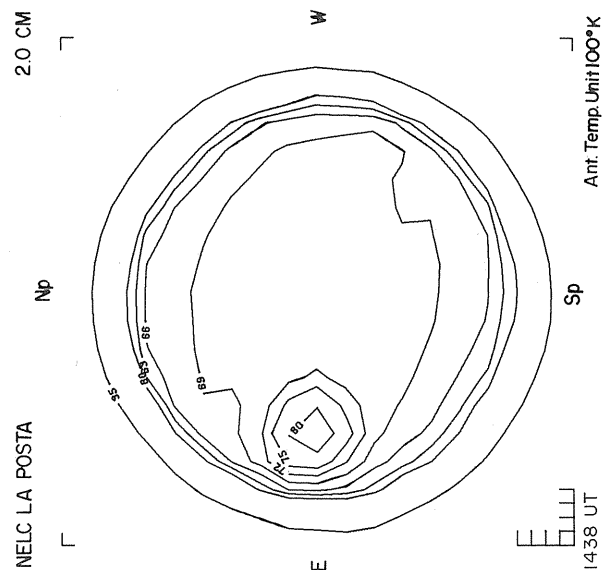
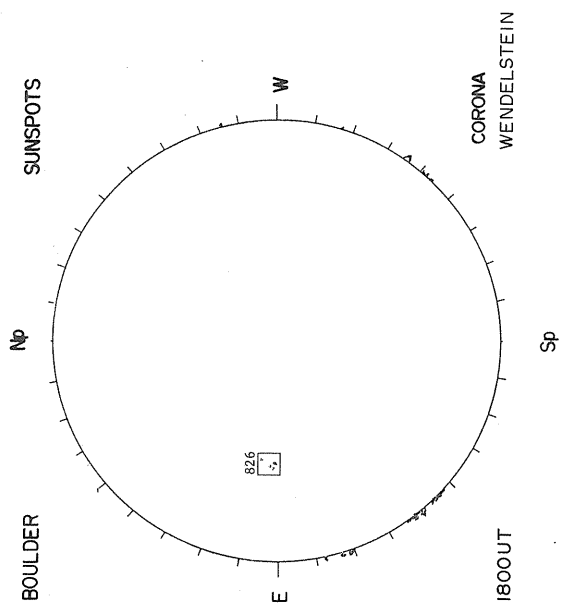
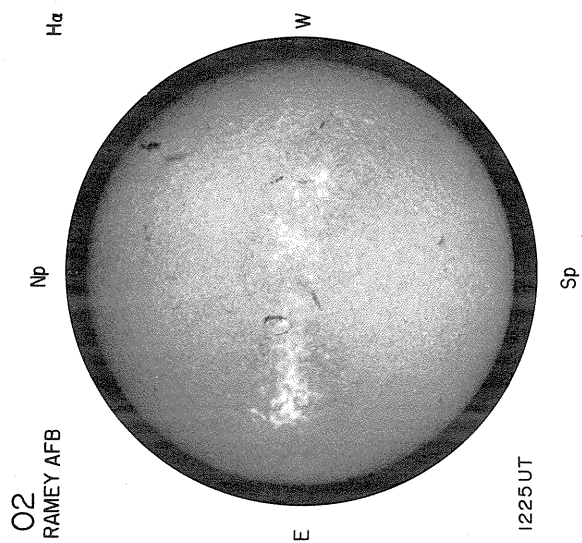
MAGNETOGRAM
Solid - Plus
Dotted - Minus

MT. WILSON

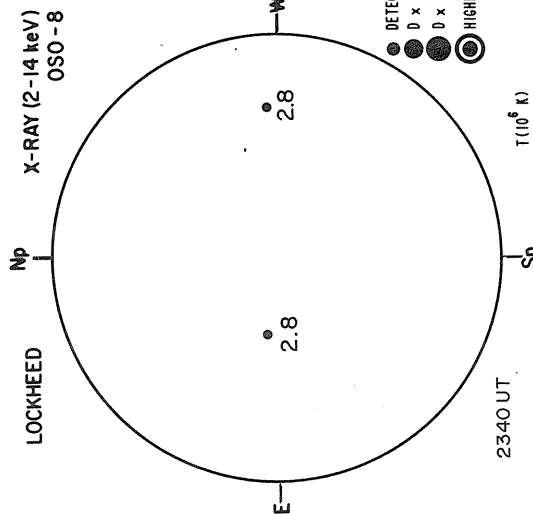
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DELTA X = 9.4



Levels
+ 5
+ 10
+ 20
+ 40
+ 80



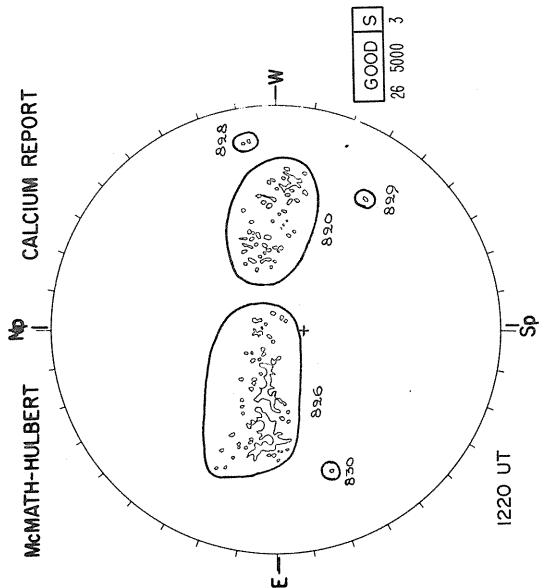
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- 0 x 20
- 0 x 500
- HIGHLY VARIABLE

MAGNETOGRAM
Bright - Plus
Dark - Minus

KITT PEAK



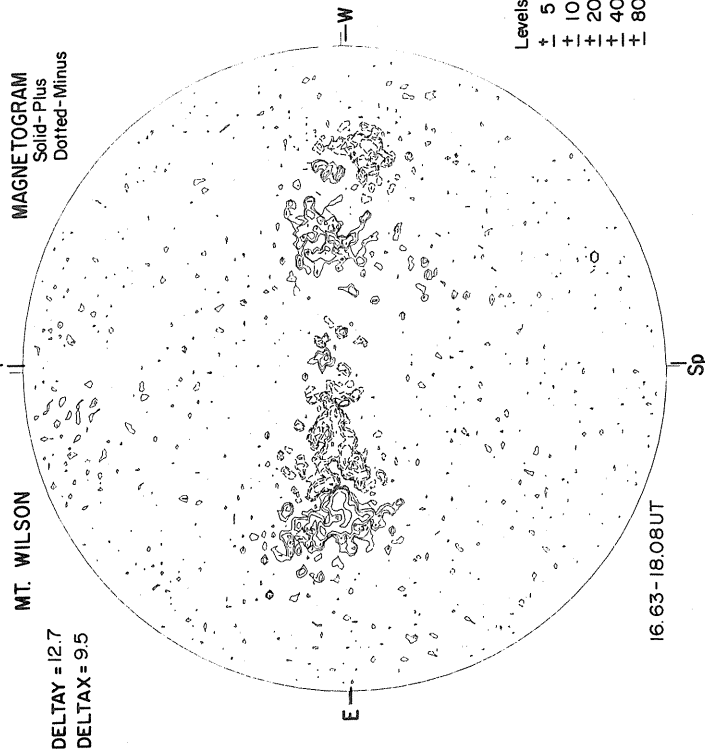
MAGNETOGRAM
Solid - Plus
Dotted - Minus

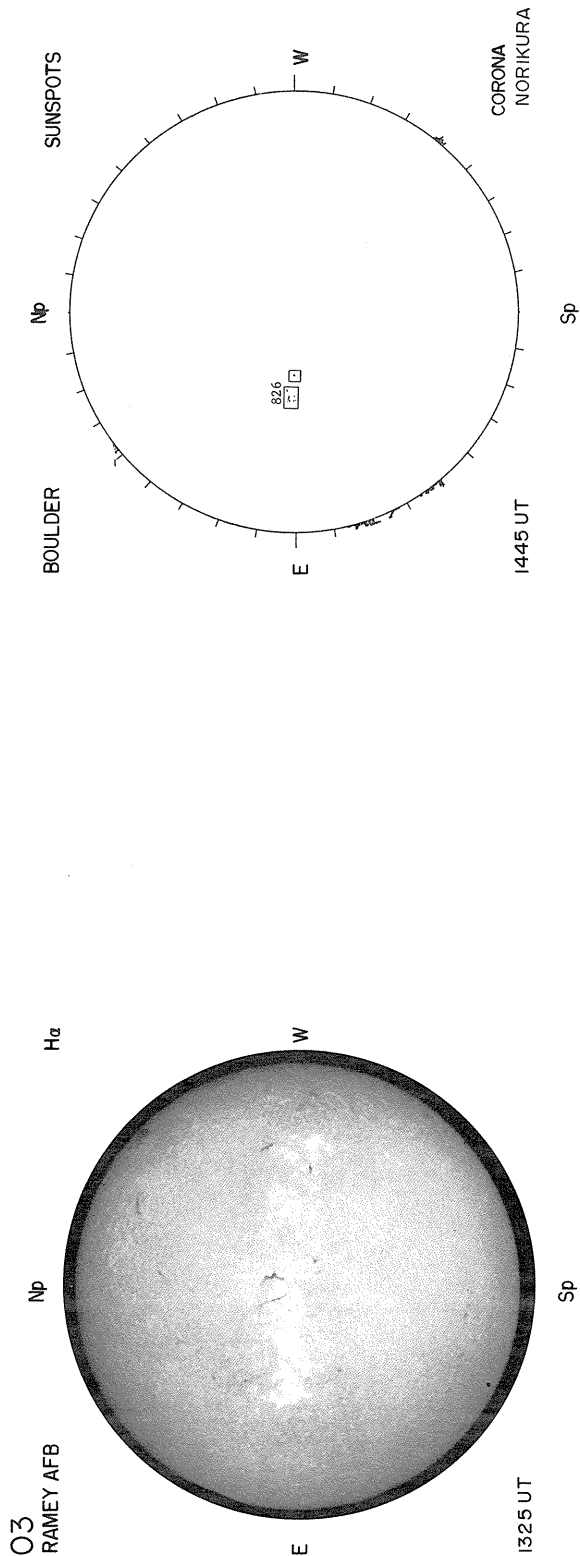
DELTA T = 12.7
DELTA T AX = 9.5

MT. WILSON

MAGNETOGRAM
Bright - Plus
Dark - Minus

KITT PEAK





8.6 MM

NELC LA POSTA

2.0 CM

Np

NELC LA POSTA

NO DATA

NO DATA

W

CLOUDY

E

W

EQUIPMENT

E



1738 UT



1738 UT

Ant. Temp. Unit 100°K

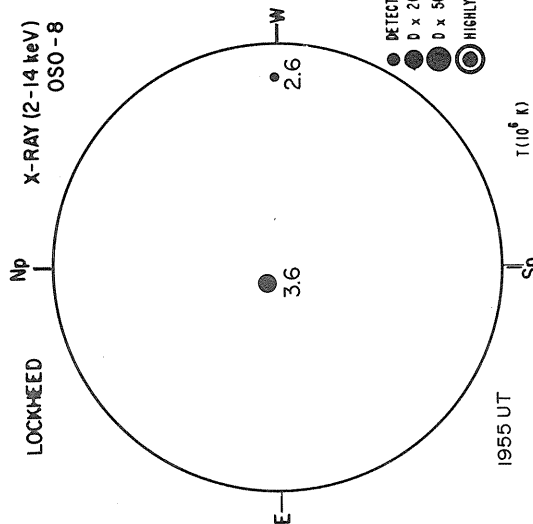
Sp

Ant. Temp. Unit 100°K

Sp

SEPTEMBER 4, 1975 (P = 21.69, $B_0 = 7.23$, $L_0 = 277.87$)

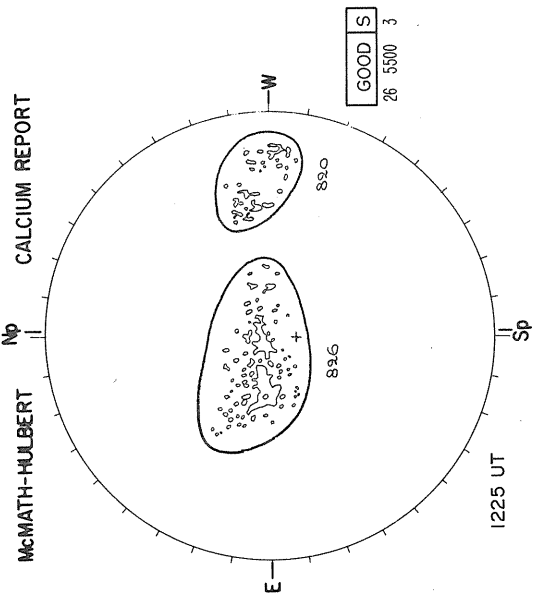
LOCKHEED
X-RAY (2-14 keV)
OSO-8



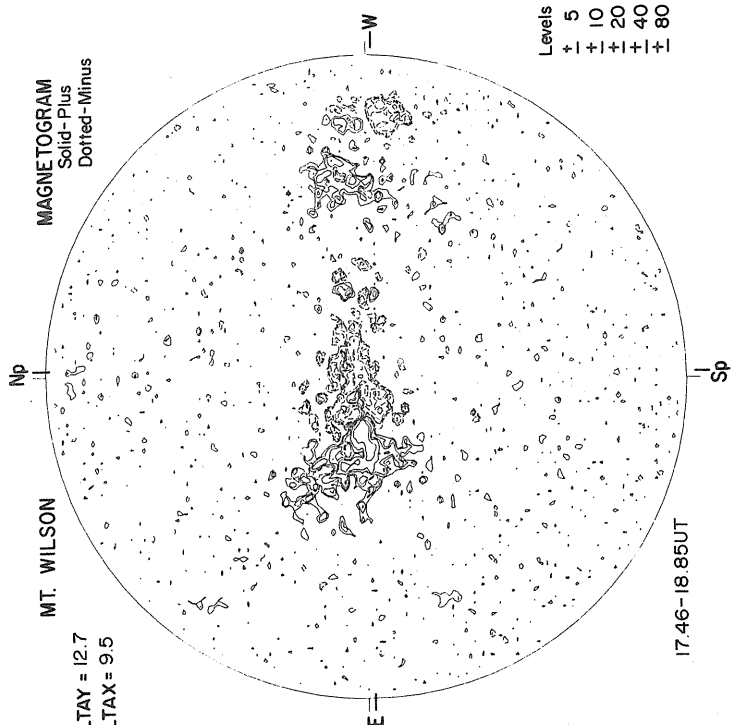
● DETECTABLE (1)
● 0 x 20
● 0 x 500
● HIGHLY VARIABLE

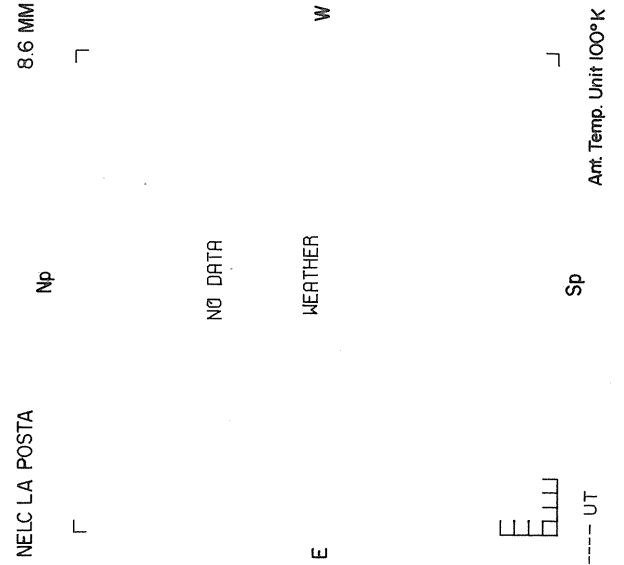
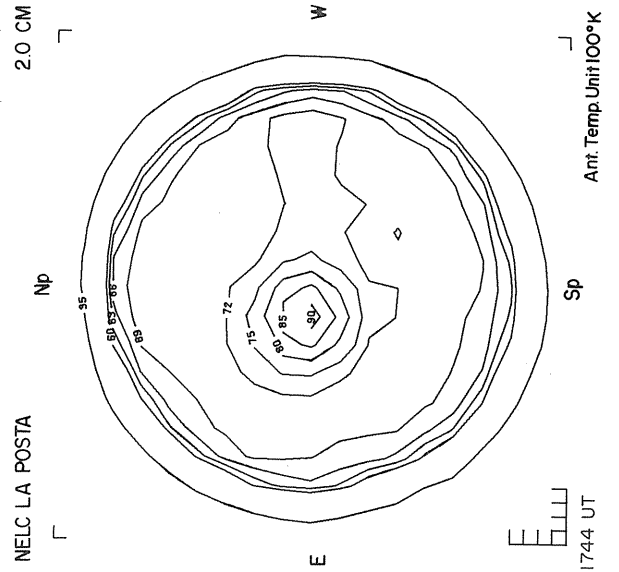
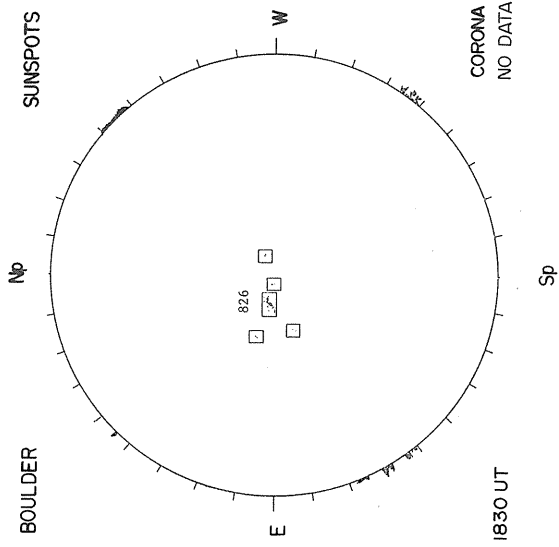
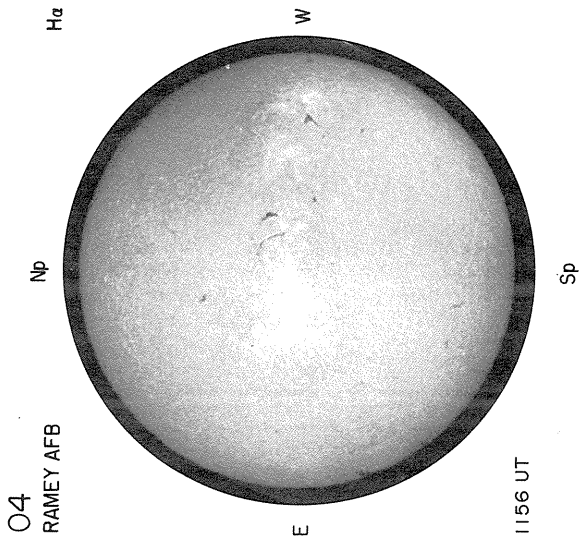
KITT PEAK
MAGNETOGRAM
Bright - Plus
Dark - Minus

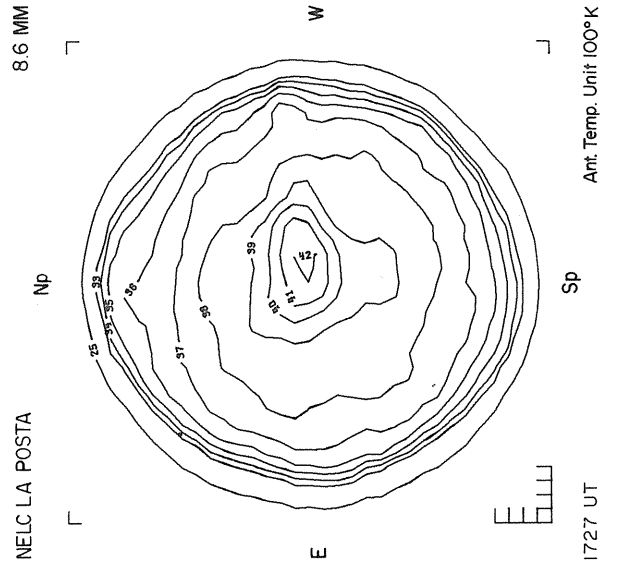
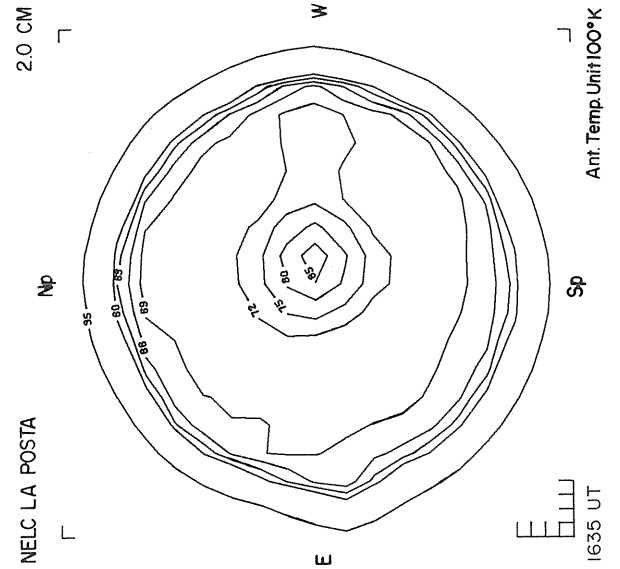
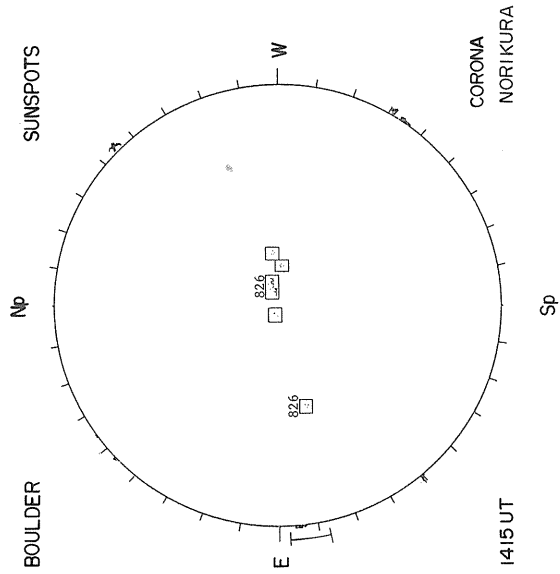
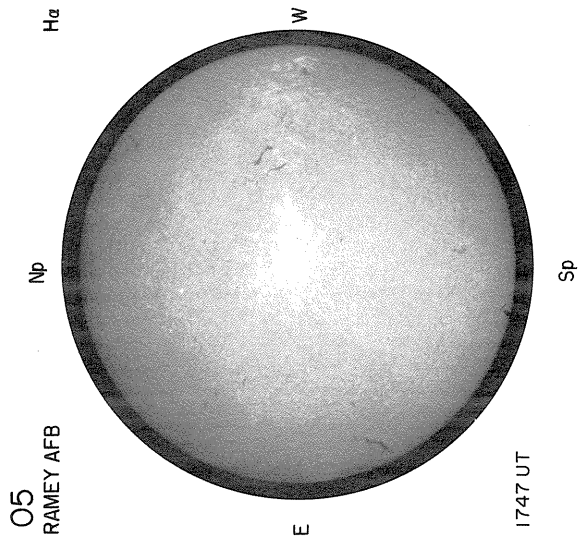
McMATH-HULBERT
CALCIUM REPORT



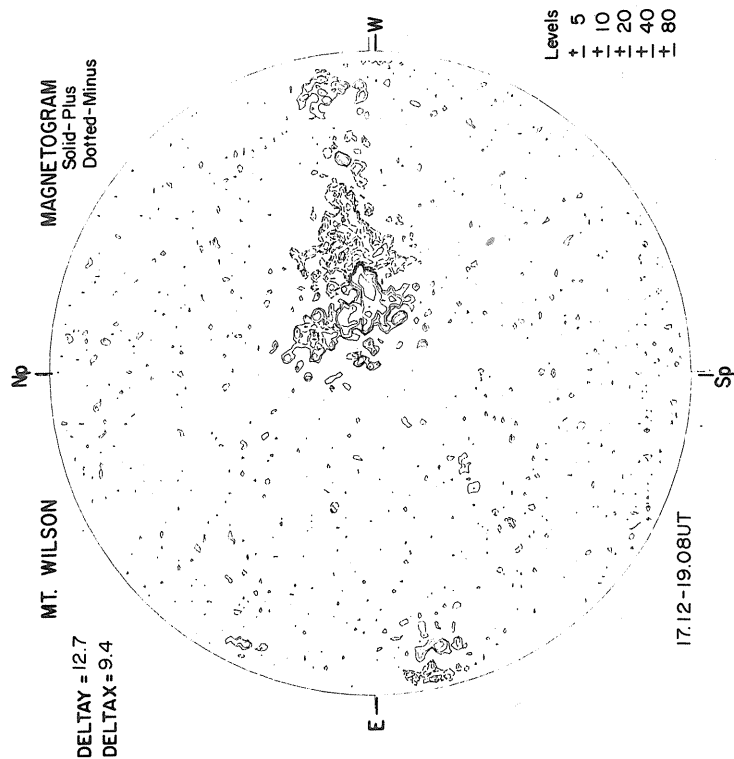
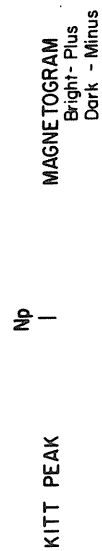
MT. WILSON
MAGNETOGRAM
Solid - Plus
Dotted - Minus

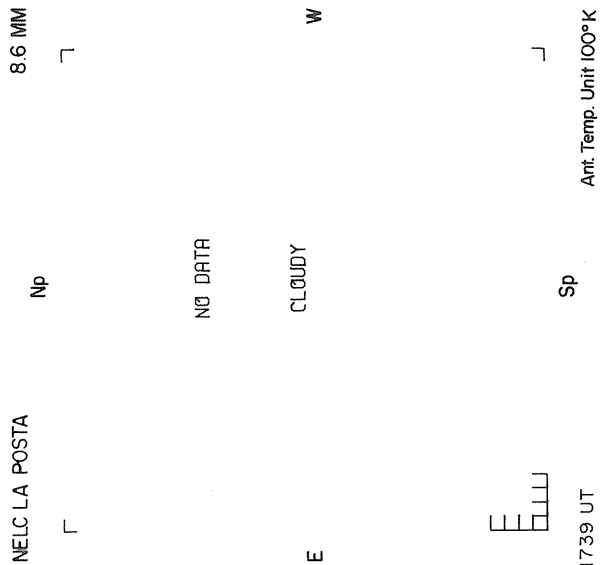
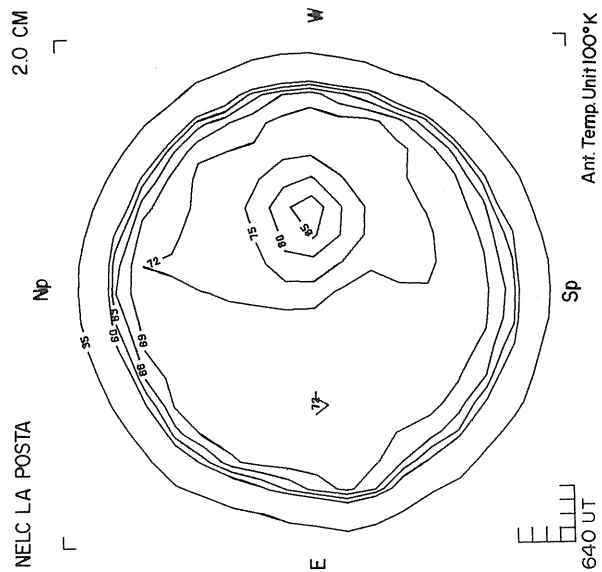
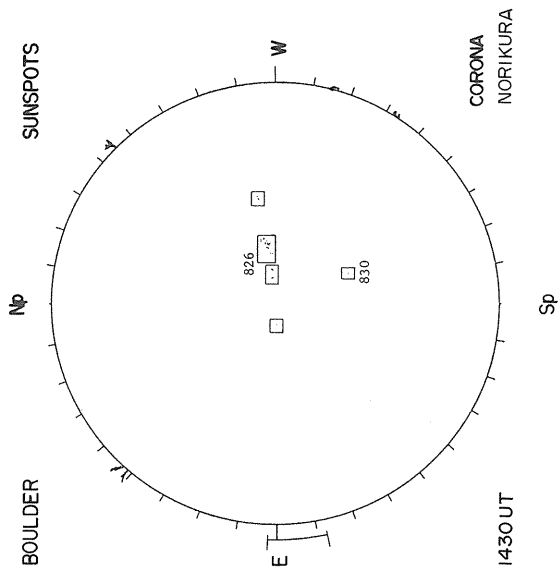
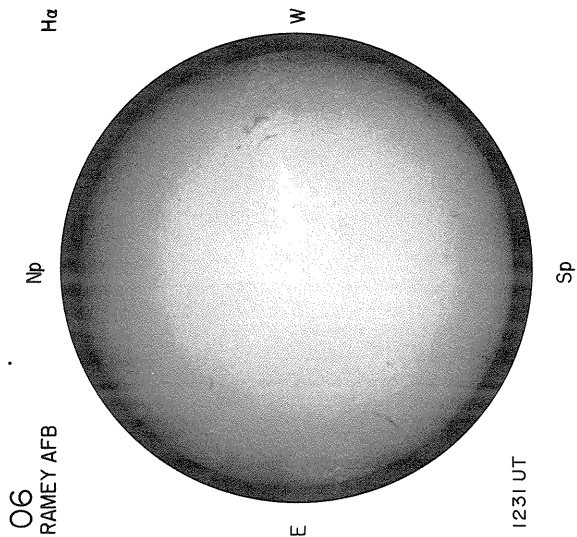




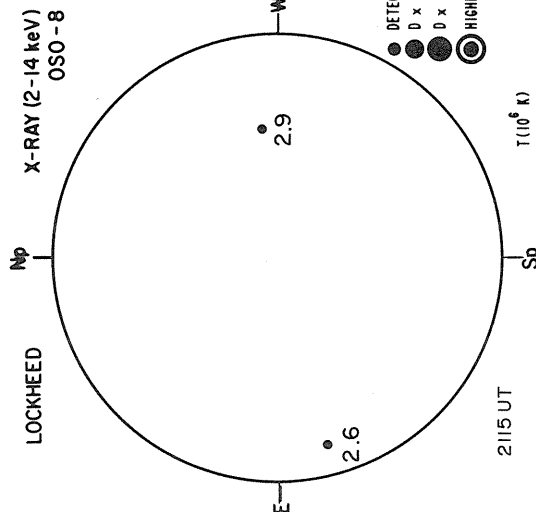


SEPTEMBER 6, 1975 (P=22.16, B₀=7.24, L₀=251.45)





SEPTEMBER 7, 1975 (P = 22.39, B₀ = 7.25, L₀ = 238.25)



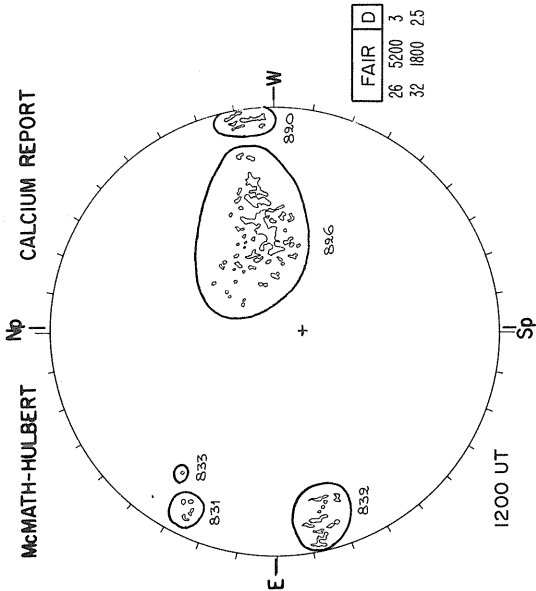
- DETECTABLE (D)
- D x 20
- D x 500
- HIGHLY VARIABLE

KITT PEAK

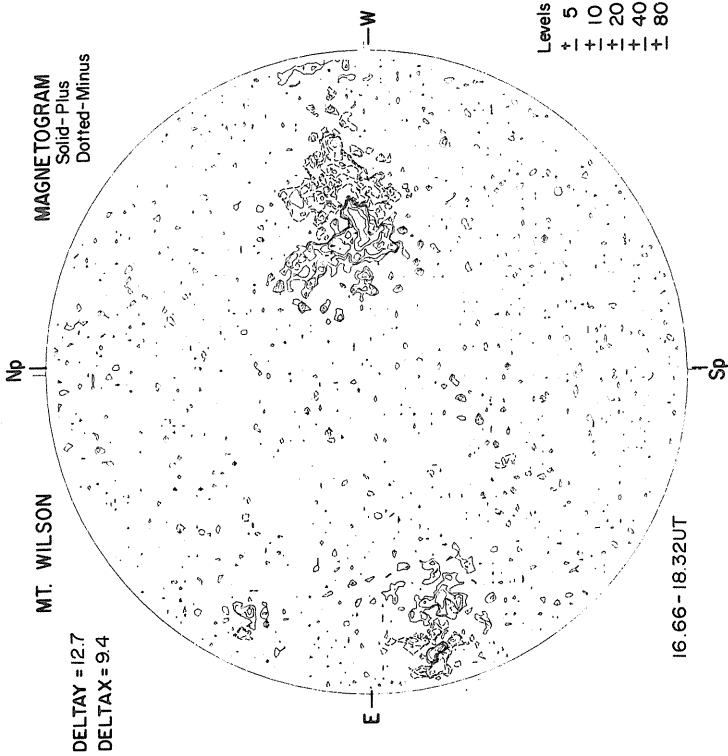
MAGNETOGRAM

Bright - Plus

Dark - Minus



FAIR	D
26	5200
32	1800
25	

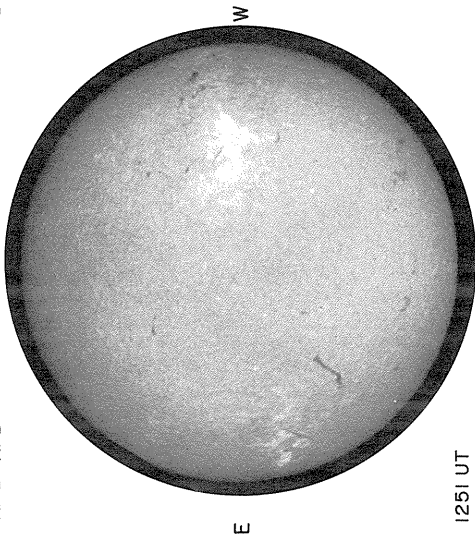


- Levels
- + 5
- + 10
- + 20
- + 40
- + 80

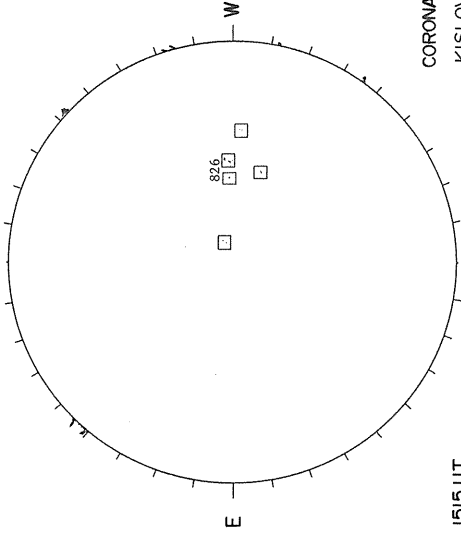
07

RAMEY AFB

H α
Np



BOULDER
Np



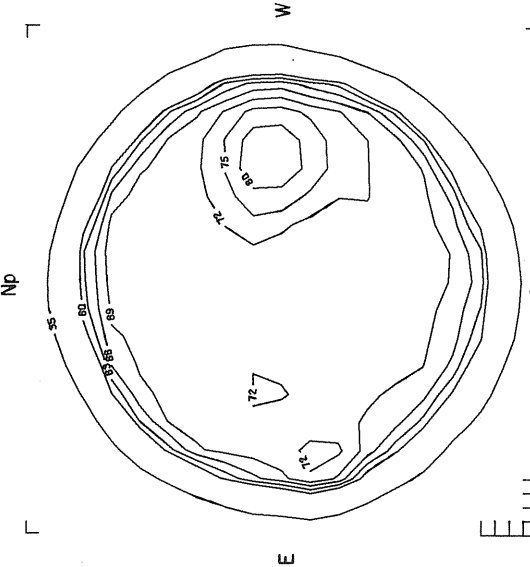
CORONA

KISLOVODSK

NO DATA 295°-300°,
310°-355°

NELC LA POSTA

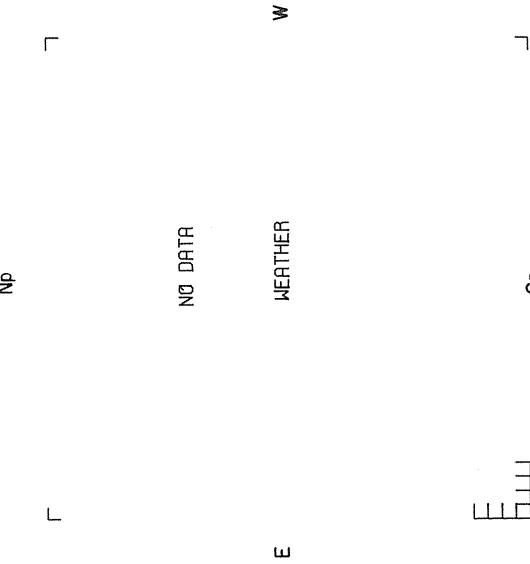
2.0 CM



Ant. Temp. Unit 100°K

NELC LA POSTA

8.6 MM



Ant. Temp. Unit 100°K

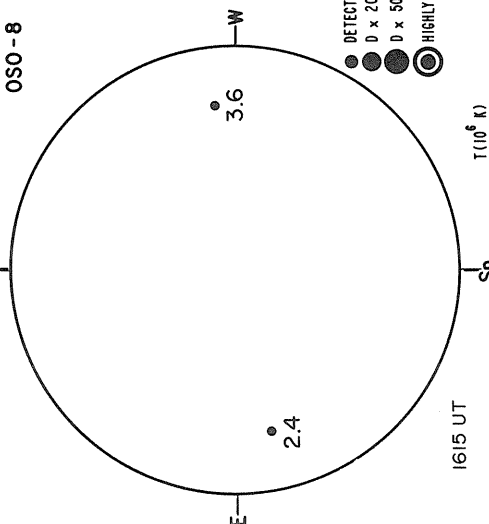
NO DATA

WEATHER

----- UT

SEPTEMBER 8, 1975 (P = 22.61, B₀ = 7.25, L₀ = 225.04)

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



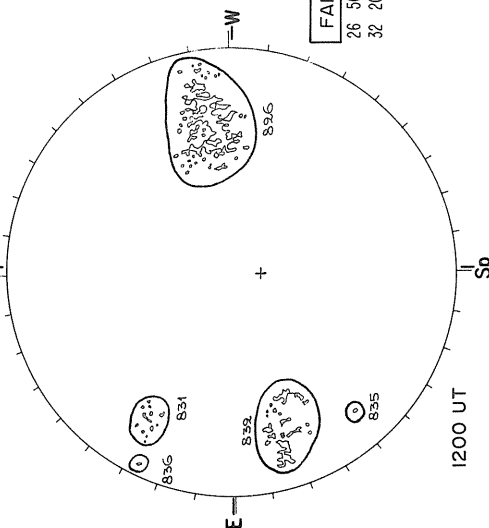
DETECTABLE (0)
0 x 20
0 x 500
HIGHLY VARIABLE

T (10⁶ K)

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

McMATH-HULBERT



FAIR	D
26	5600
3	32
2000	25

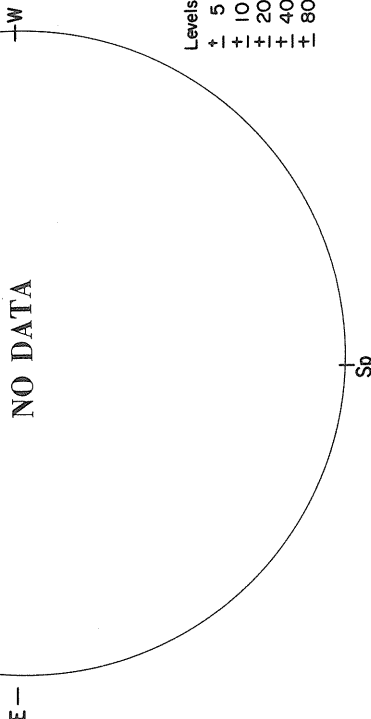
MT. WILSON

MAGNETOGRAM
Solid - Plus
Dotted - Minus

DELTA T =
DELTA T X =

NO DATA

Levels
+ 5
+ 10
+ 20
+ 40
+ 80

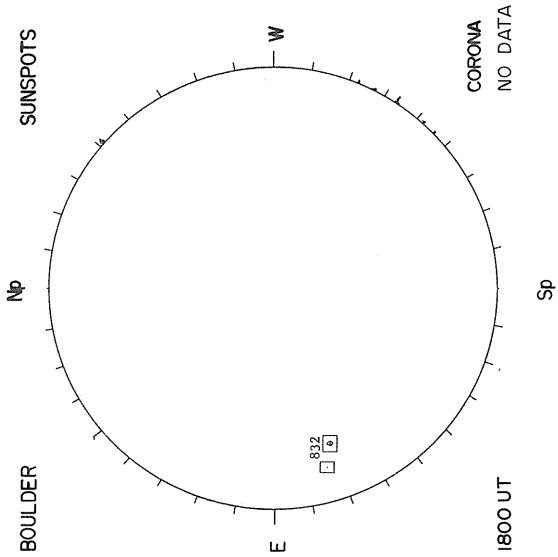
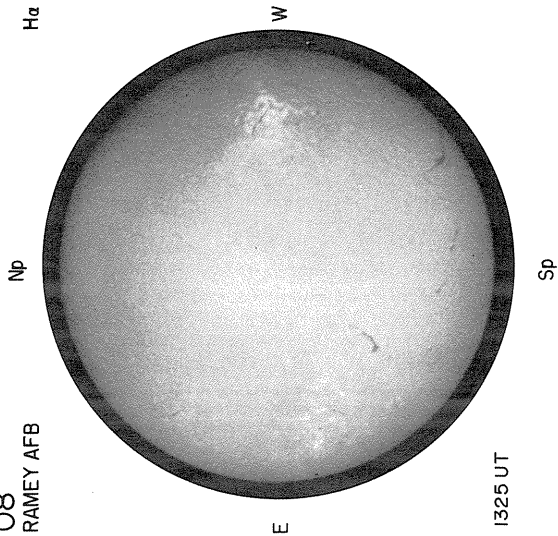


W

E

Sp

O8
RAMEY AFB



CORONA
NO DATA

NELC LA POSTA
└─┘

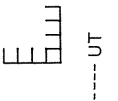
Np

NO DATA

EQUIPMENT

W

Sp



---- UT

Ant. Temp. Unit 100°K

NELC LA POSTA
└─┘

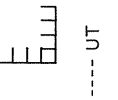
Np

NO DATA

WEATHER

W

Sp



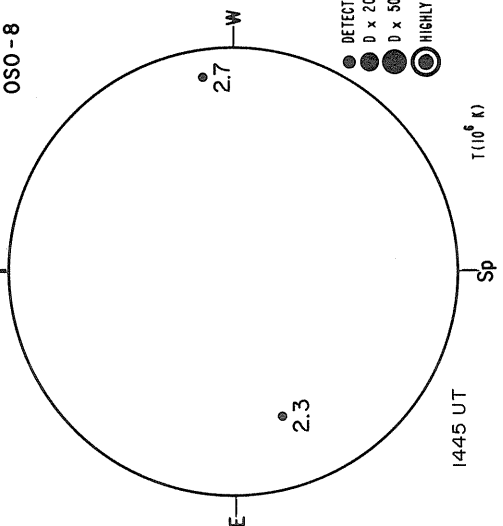
---- UT

Ant. Temp. Unit 100°K

8.6 MM
└─┘

SEPTEMBER 9, 1975 (P = 22.83, B₀ = 7.25, L₀ = 211.84)

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



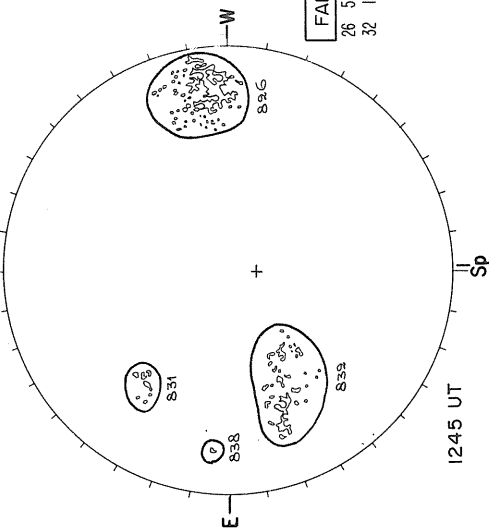
● DETECTABLE (D)
○ D x 20
● D x 500
⊙ HIGHLY VARIABLE

T (10⁶ K)

MAGNETOGRAM
Bright - Plus
Dark - Minus

KITT PEAK

McMATH-HULBERT

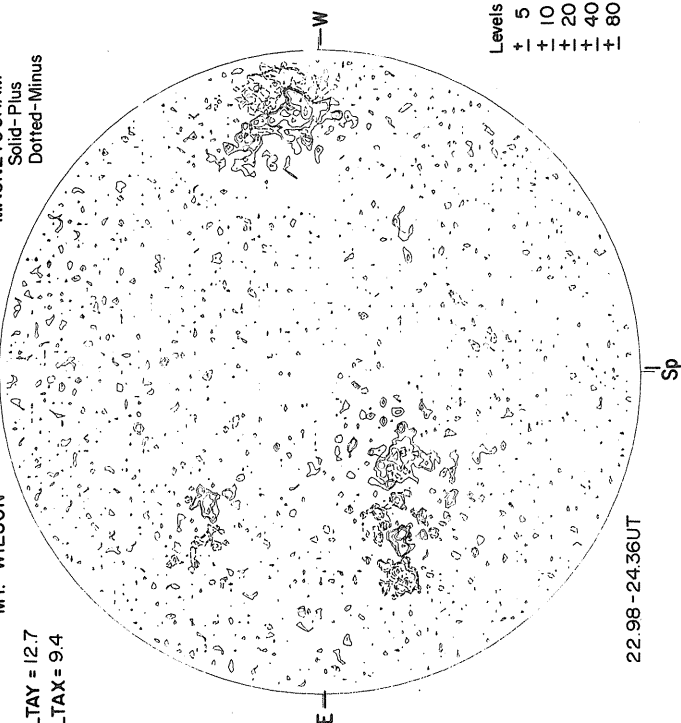


FAIR	S
26	5300
32	1900
	2.5

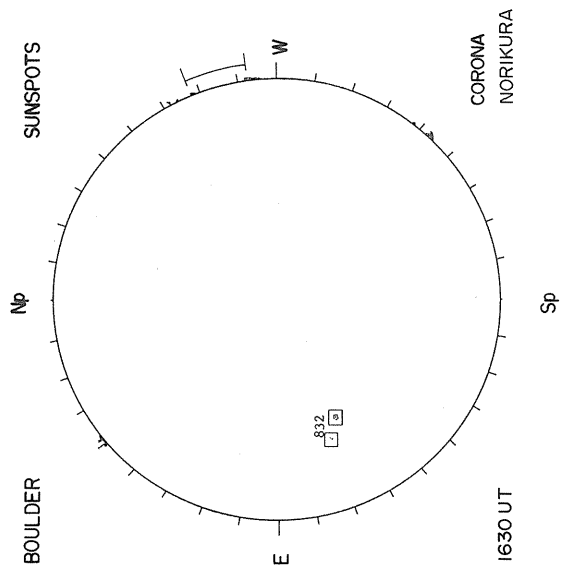
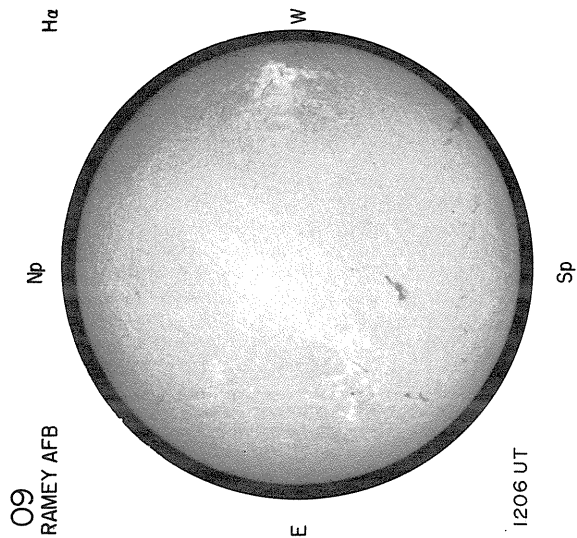
MT. WILSON

DELTA = 12.7
DELTA = 9.4

MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
+ 5
+ 10
+ 20
+ 40
+ 80



CORONA
NORIKURA

8.6 MM

Np

NELC LA POSTA

2.0 CM

Np

NELC LA POSTA

NO DATA

NO DATA

EQUIPMENT

E

W

EQUIPMENT

E

----- UT

----- UT

Sp

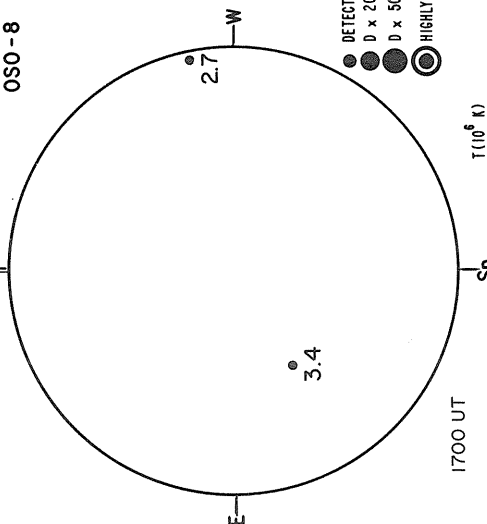
Sp

Ant. Temp. Unit 100°K

Ant. Temp. Unit 100°K

SEPTEMBER 10, 1975 (P = 23.04, $B_0 = 7.25$, $L_0 = 198.63$)

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

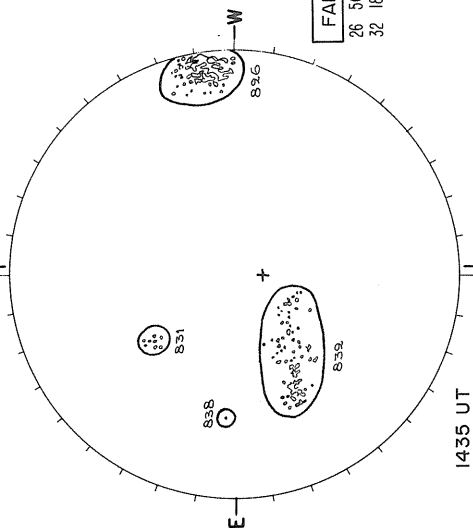


● DETECTABLE (10)
● D x 20
● D x 500
● HIGHLY VARIABLE

MAGNETOGRAM
Bright- Plus
Dark - Minus

KITT PEAK

McMATH-HULBERT



FAIR	M
26	5000 2.5
32	1800 2.5

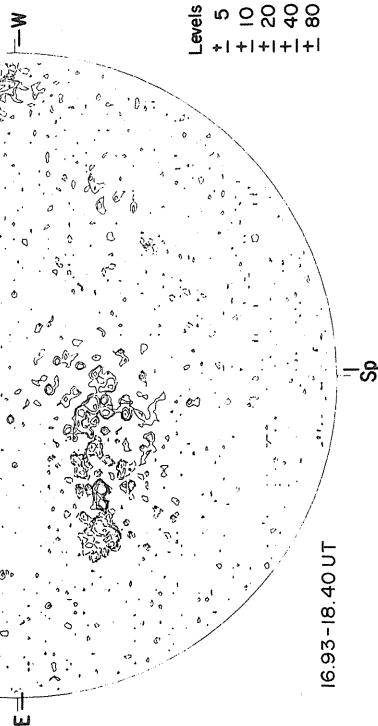
MAGNETOGRAM
Solid- Plus
Dotted- Minus

MT. WILSON

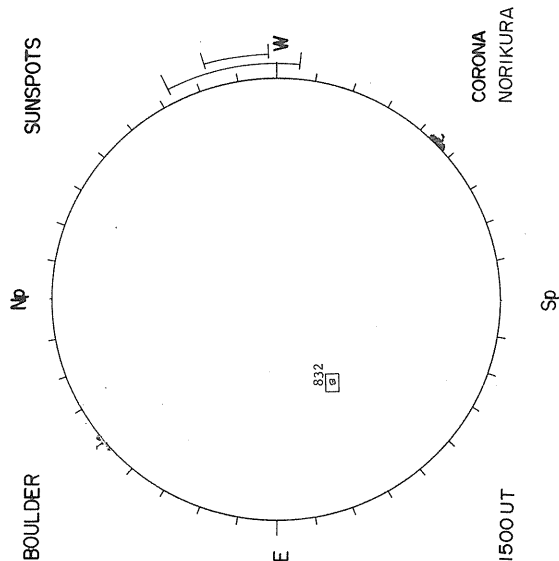
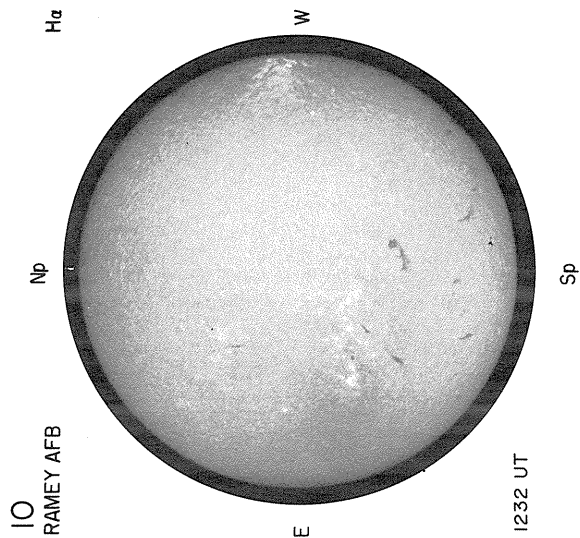
DELTA Y = 12.7
DELTA X = 9.4

Np

KITT PEAK



Levels
+ 5
+ 10
+ 20
+ 40
+ 80



NELC LA POSTA

Np

2.0 CM

NELC LA POSTA

Np

8.6 MM

NO DATA

NO DATA

E

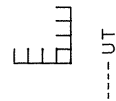
EQUIPMENT

W

E

EQUIPMENT

W



UT

Sp

Ant. Temp. Unit 100°K



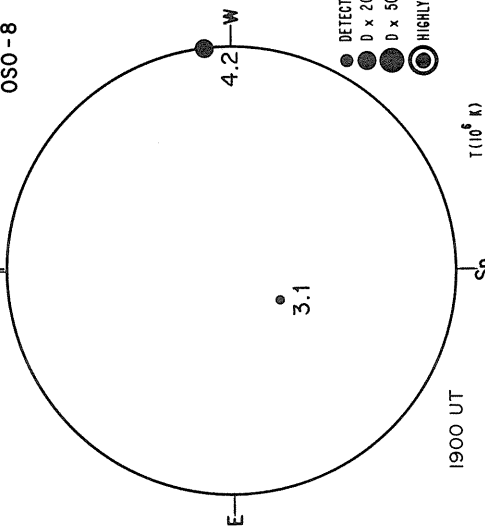
UT

Sp

Ant. Temp. Unit 100°K

SEPTEMBER 11, 1975 (P=23.24, $B_0 = 7.24$, $L_0 = 185.43$)

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



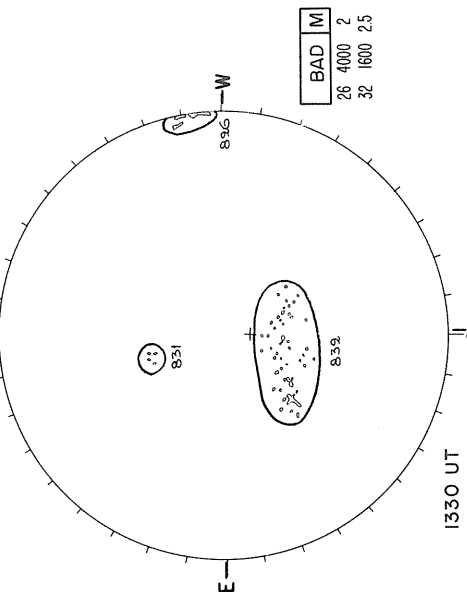
DETECTABLE (D)
D x 20
D x 500
HIGHLY VARIABLE

$T(10^6 K)$

MAGNETOGRAM
Bright - Plus
Dark - Minus

KITT PEAK

McMATH-HULBERT
CALCIUM REPORT

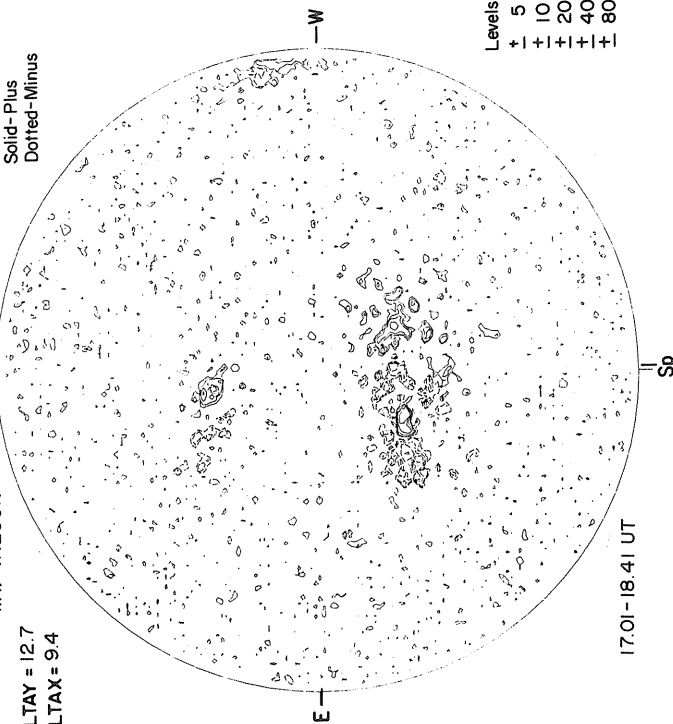


BAD M
26 4000 2
32 1600 2.5

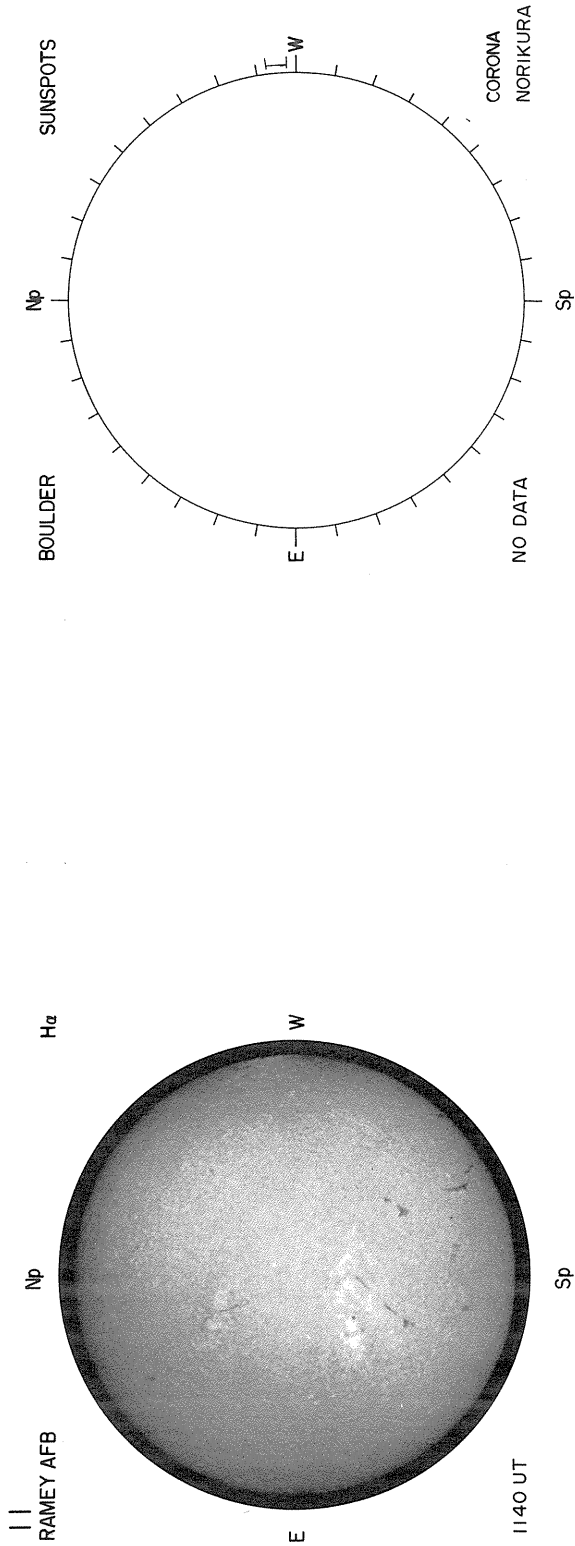
MAGNETOGRAM
Solid - Plus
Dotted - Minus

MT. WILSON

DELTA Y = 12.7
DELTA X = 9.4



Levels
+ - + - + - + - + -



NELC LA POSTA
NELC LA POSTA
2.0 CM
8.6 MM

NO DATA

EQUIPMENT

W

----- UT

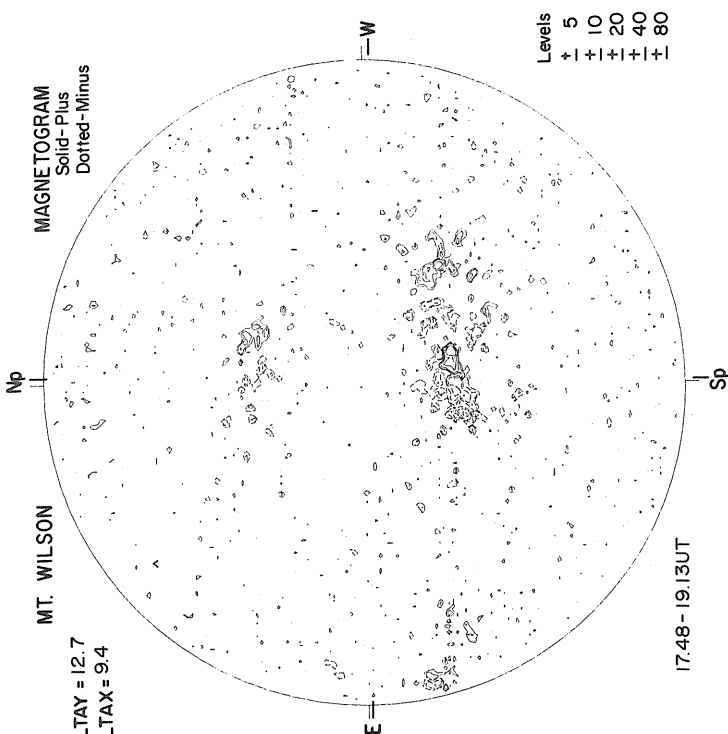
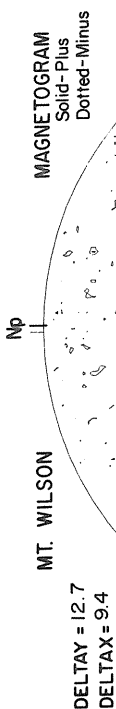
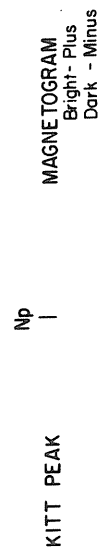
Sp

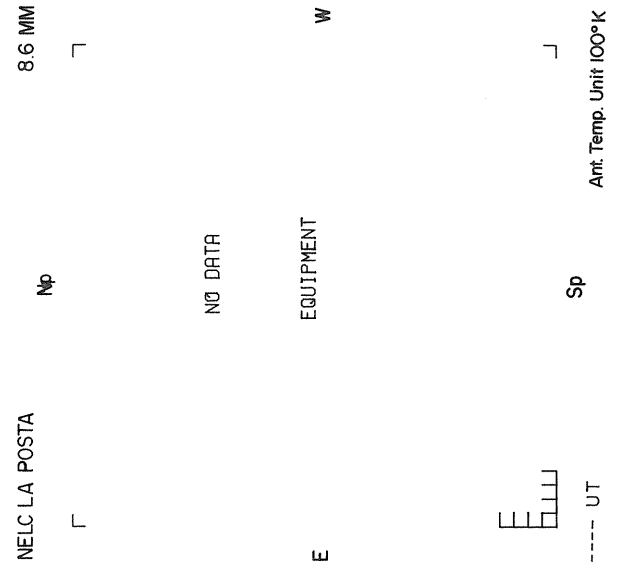
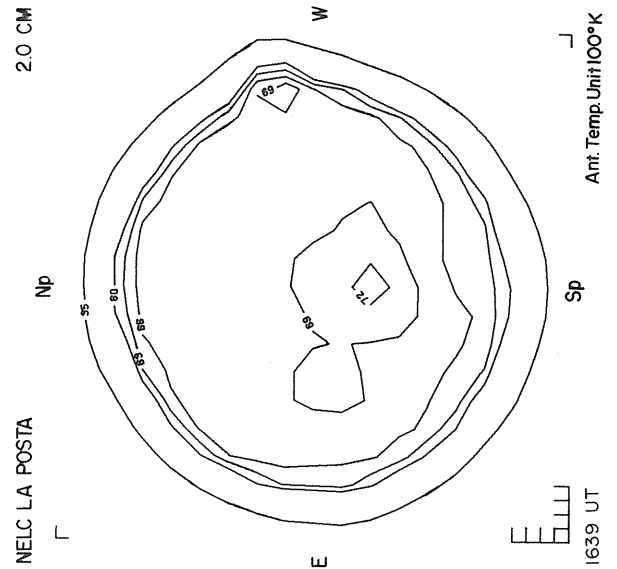
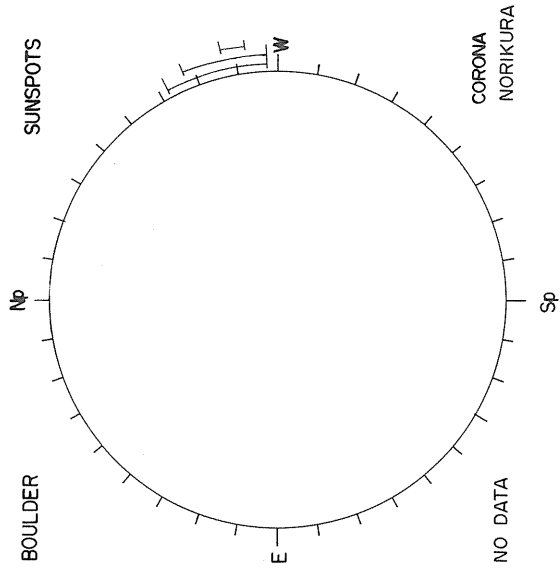
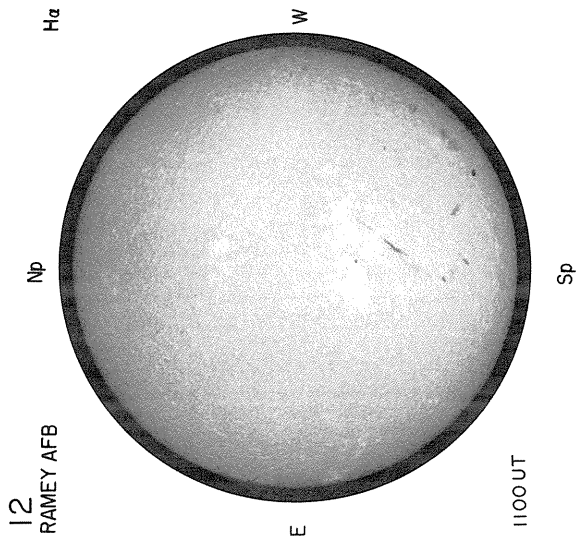
Ant. Temp. Unit 100°K

----- UT

Sp

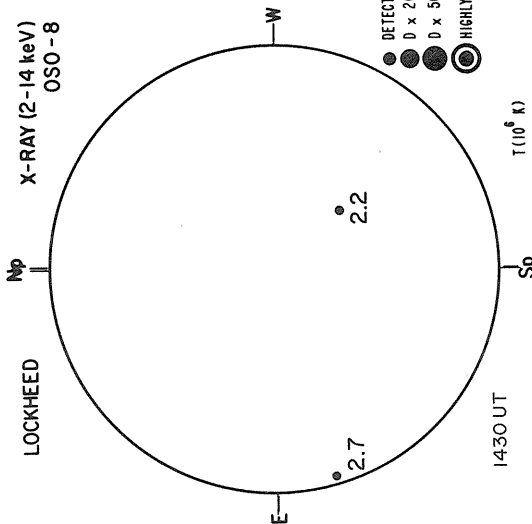
Ant. Temp. Unit 100°K





SEPTEMBER 13, 1975 (P = 23.63, B₀ = 7.23, L₀ = 159.02)

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



KITT PEAK
MAGNETOGRAM
Bright-Plus
Dark - Minus

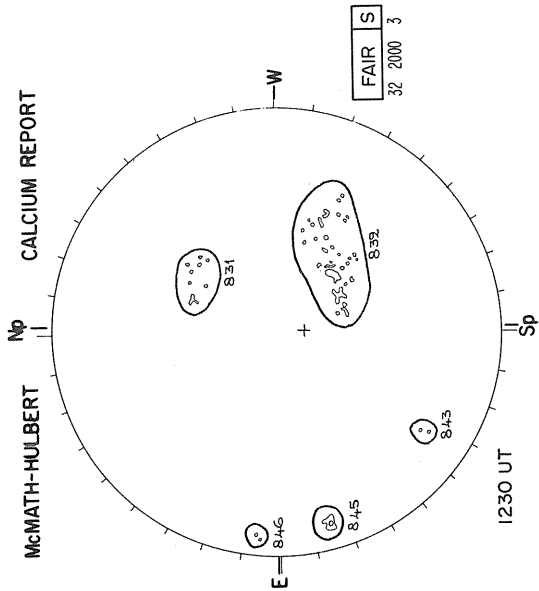
Np

W

Sp

E

McMATH-HULBERT
CALCIUM REPORT



MT. WILSON
MAGNETOGRAM
Solid-Plus
Dotted-Minus

DELTA Y = 12.7
DELTA X = 9.4

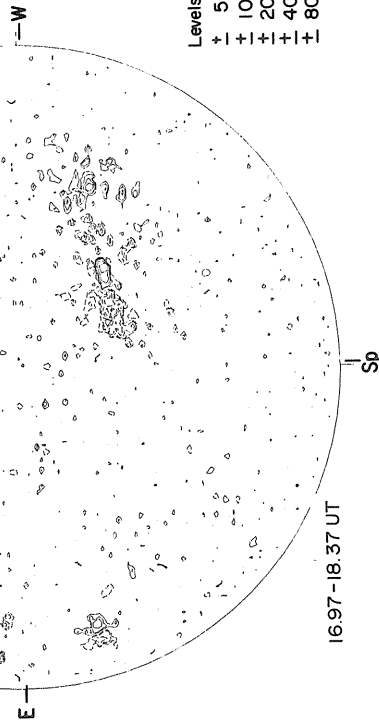
Np

W

Sp

E

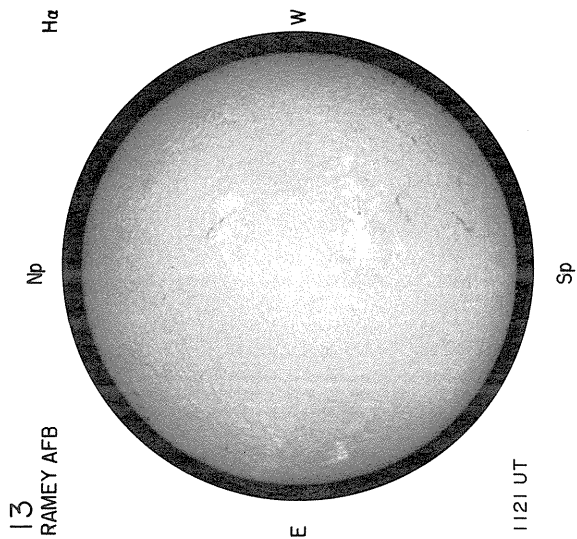
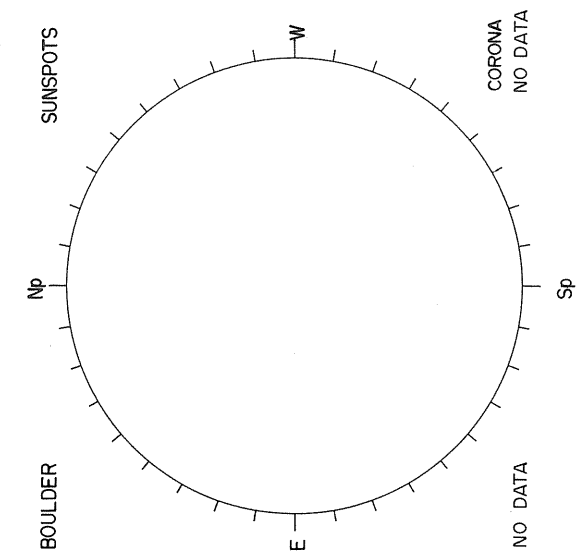
Levels
+ 5
+ 10
+ 20
+ 40
+ 80



W

E

Sp



8.6 MM

Np

NELC LA POSTA

2.0 CM

Np

NELC LA POSTA

NO DATA

EQUIPMENT

W

E

W

EQUIPMENT

E



Ant. Temp. Unit 100°K

Sp

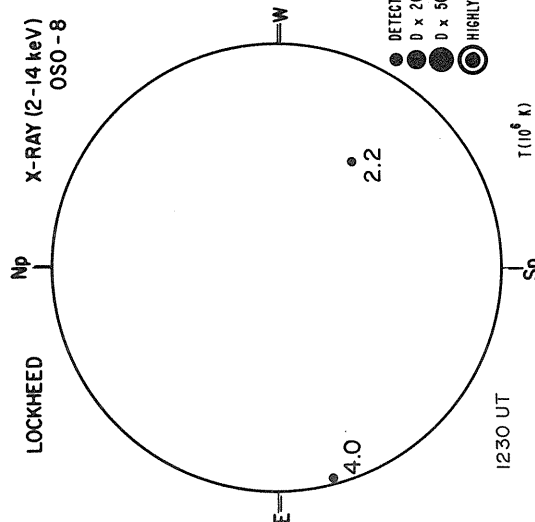
Ant. Temp. Unit 100°K



Ant. Temp. Unit 100°K

SEPTEMBER 14, 1975 (P=23.81, B₀=7.22, L₀=145.82)

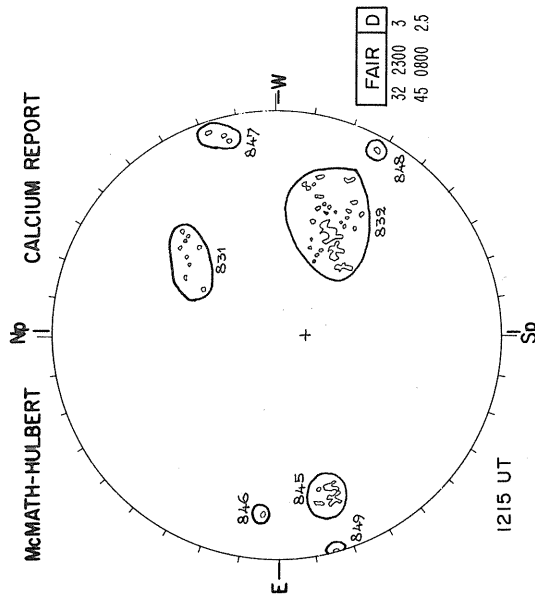
LOCKHEED
X-RAY (2-14 keV)
OSO-8



KITT PEAK

MAGNETOGRAM
Bright- Plus
Dark - Minus

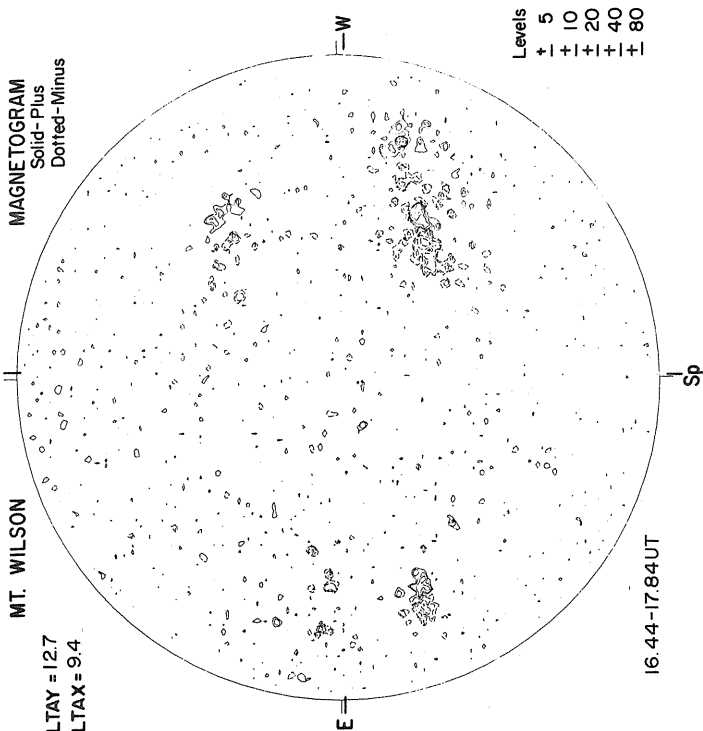
McMATH-HULBERT
CALCIUM REPORT

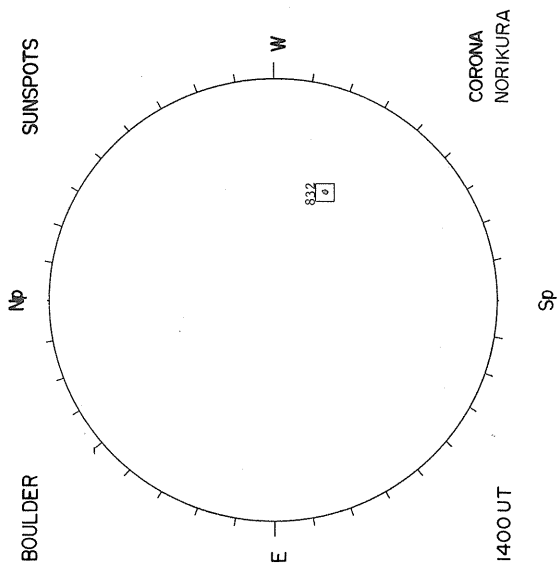
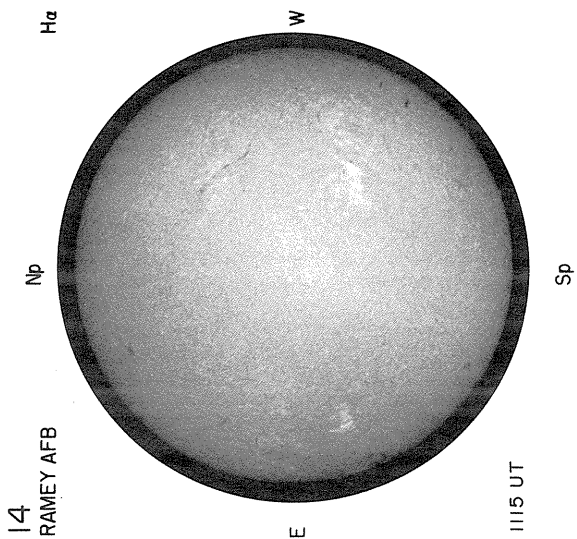


MT. WILSON

DELTA Y = 127
DELTA X = 9.4

MAGNETOGRAM
Solid- Plus
Dotted- Minus





NELC LA POSTA

Np

2.0 CM

NELC LA POSTA

Np

8.6 MM

SEPT. 14-30
NO DATA

EQUIPMENT

W

E

EQUIPMENT

W



Sp

Ant. Temp. Unit 100°K

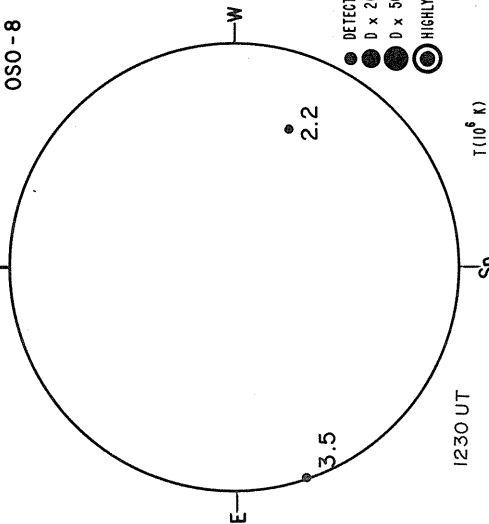


Sp

Ant. Temp. Unit 100°K

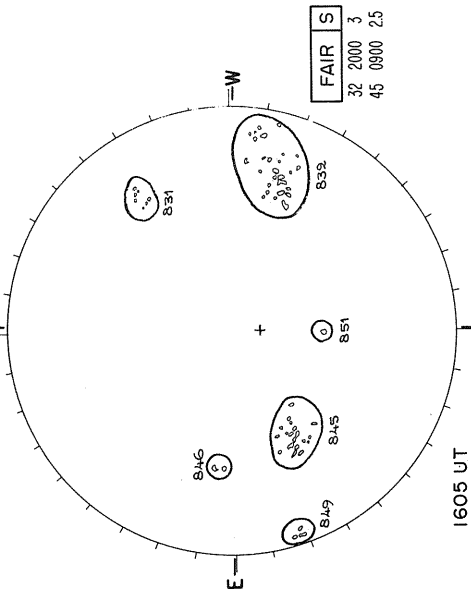
SEPTEMBER 15, 1975 (P=23.99, B₀=7.21, L₀=132.61)

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

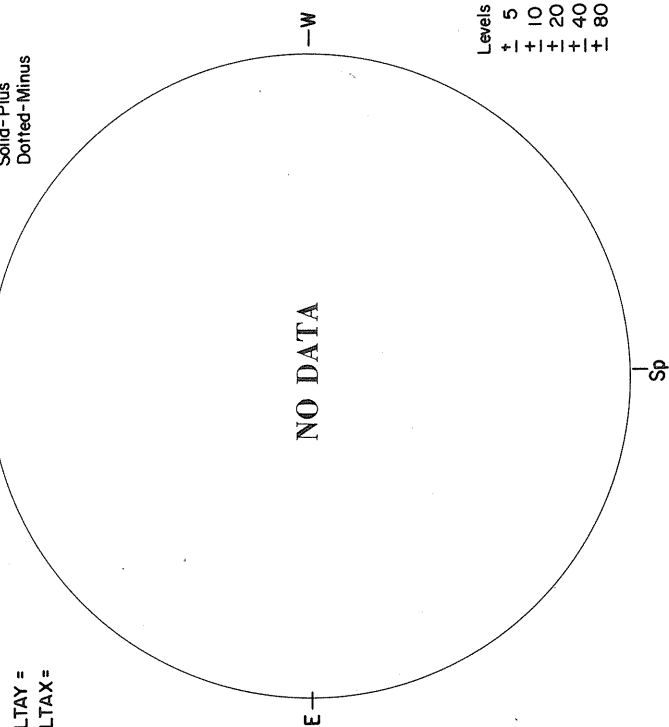


KITT PEAK
Np
MAGNETOGRAM
Bright- Plus
Dark - Minus

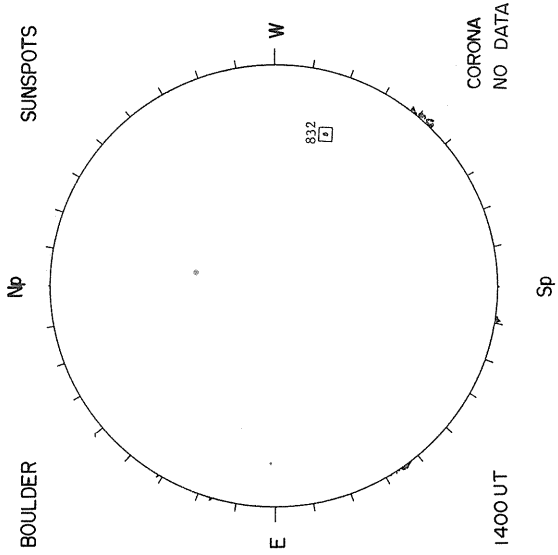
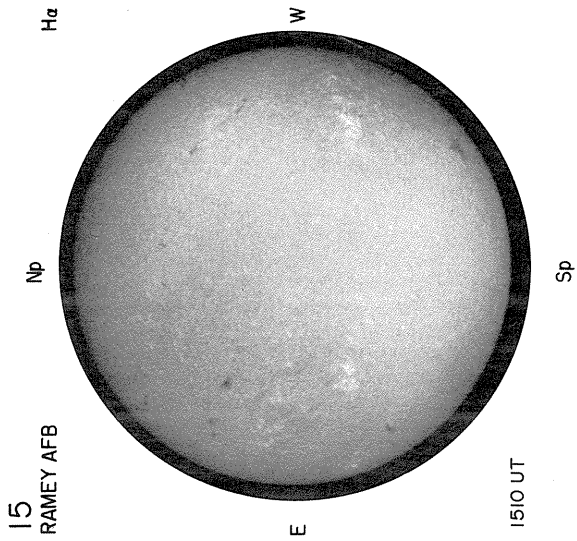
McMATH-HULBERT
Np
CALCIUM REPORT



MT. WILSON
Np
MAGNETOGRAM
Solid- Plus
Dotted- Minus



Levels
5
10
20
40
80



CORONA
NO DATA

NELC LA POSTA

2.0 CM

NELC LA POSTA

8.6 MM

E

W

E

W

Sp

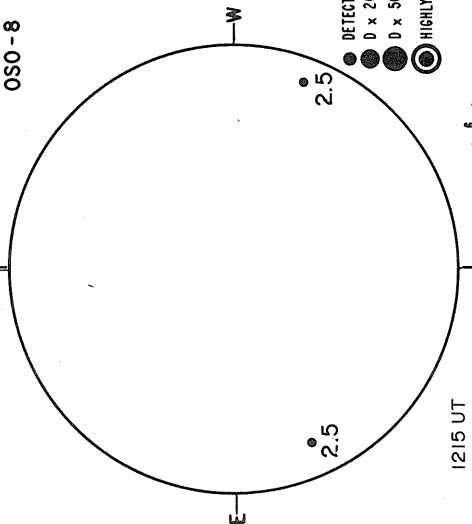
Ant. Temp. Unit 100°K

Sp

Ant. Temp. Unit 100°K

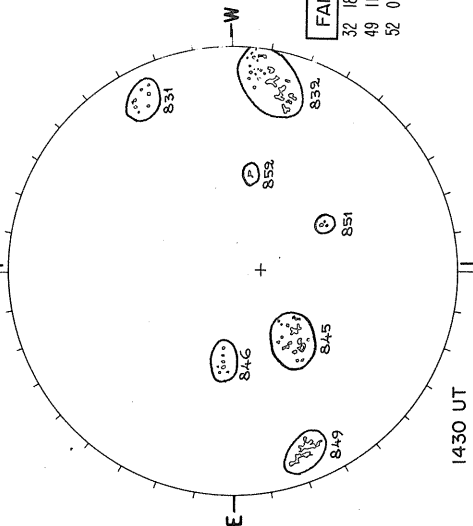
SEPTEMBER 16, 1975 (P=24.16, $B_0 = 7.19$, $L_0 = 119.41$)

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



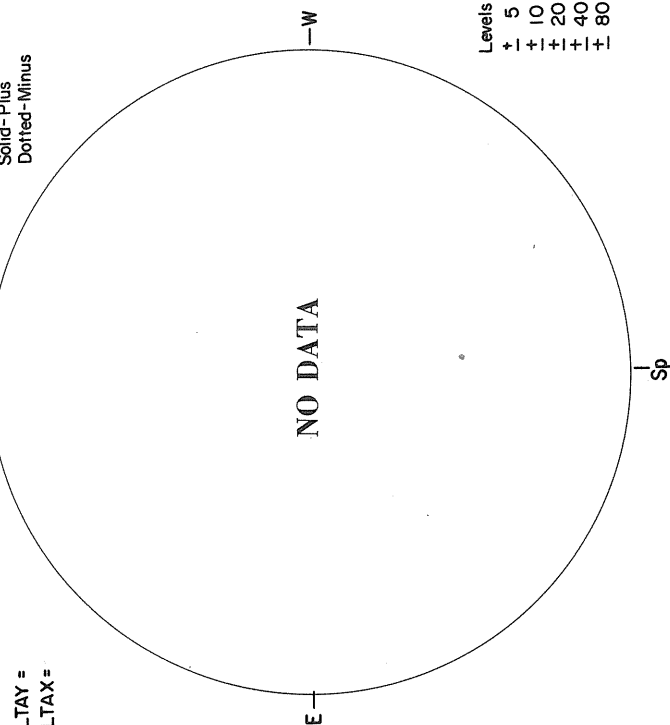
KITT PEAK
MAGNETOGRAM
Bright - Plus
Dark - Minus

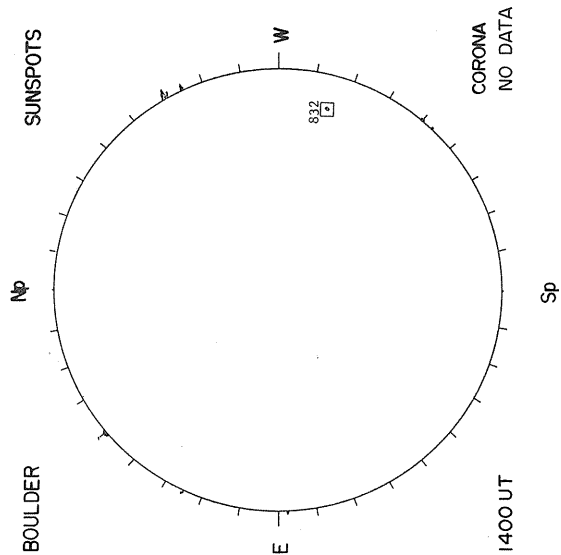
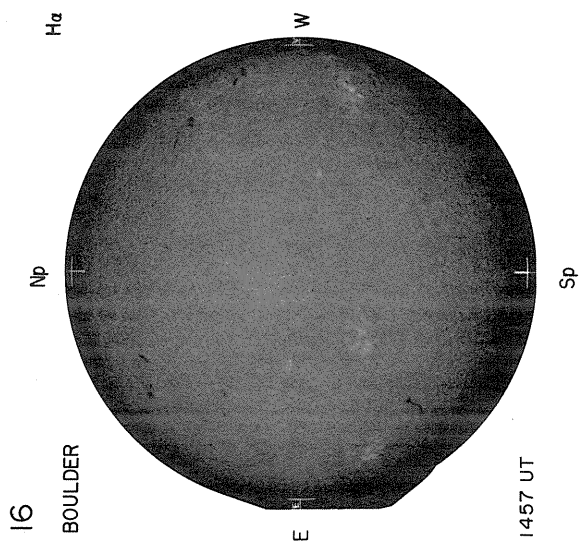
McMATH-HULBERT



MT. WILSON
MAGNETOGRAM
Solid - Plus
Dotted - Minus

DELTA Y =
DELTA X =





NELC LA POSTA

2.0 CM

NELC LA POSTA

8.6 MM

E

W

E

W

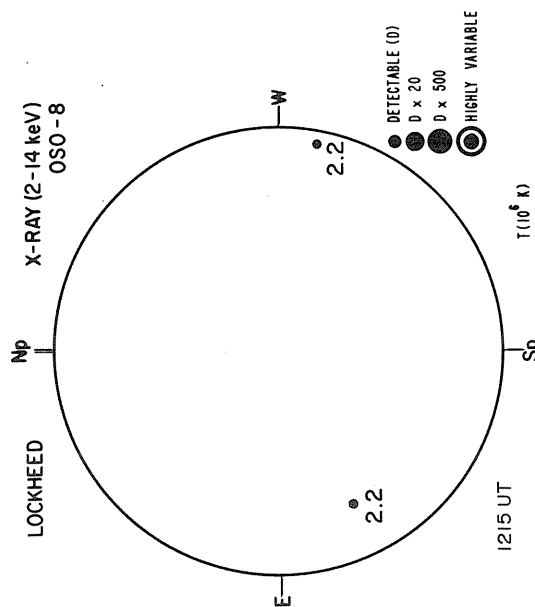
Sp

Ant. Temp. Unit 100°K

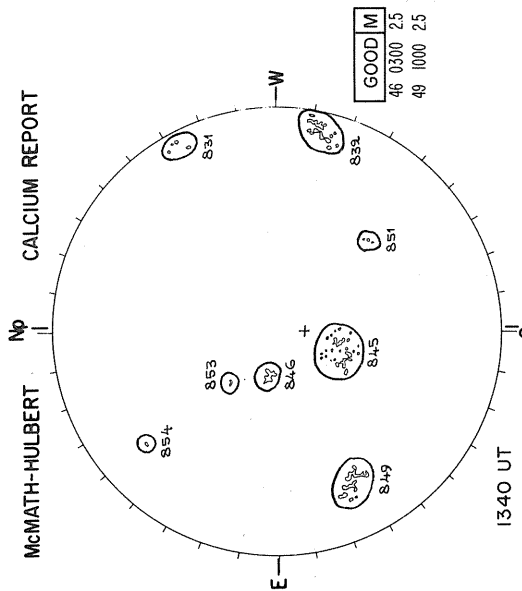
Sp

Ant. Temp. Unit 100°K

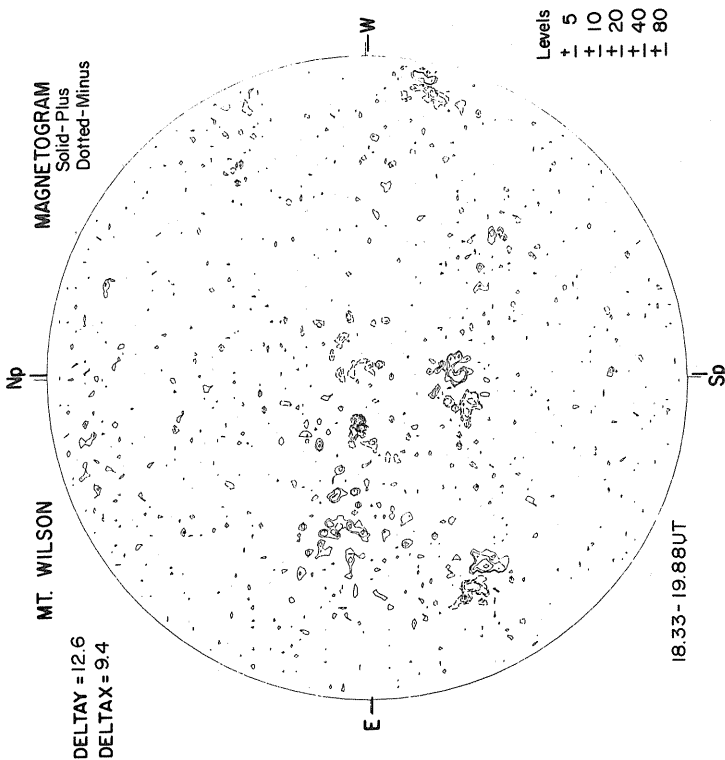
SEPTEMBER 17, 1975 (P = 24.33, B₀ = 7.18, L₀ = 106.21)

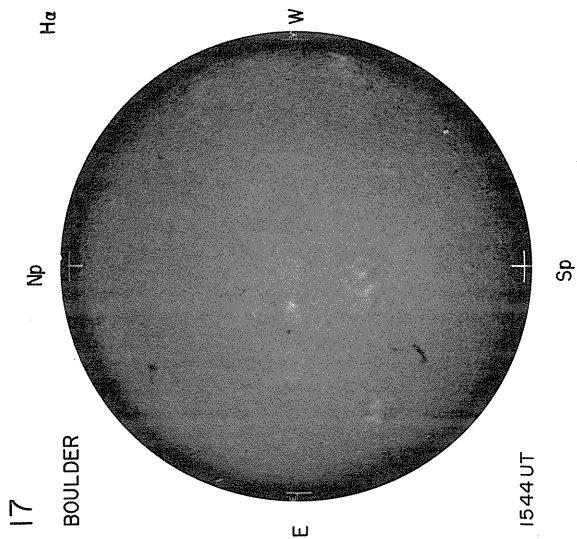


MAGNETOGRAM
Bright - Plus
Dark - Minus



MAGNETOGRAM
Solid - Plus
Dotted - Minus





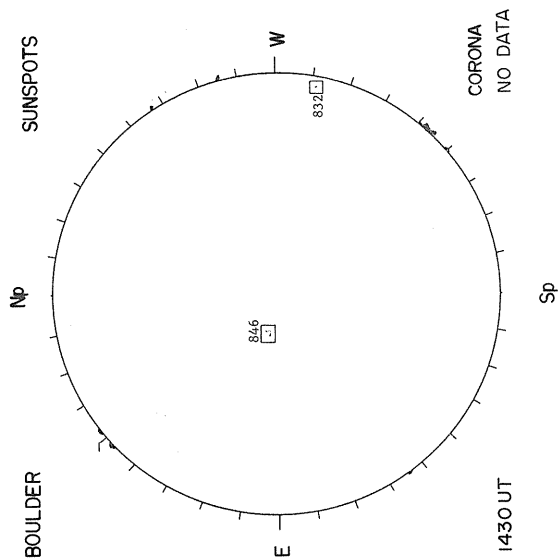
NELC LA POSTA Np

2.0 CM

E

Sp

Ant. Temp. Unit 100°K



NELC LA POSTA

8.6 MM

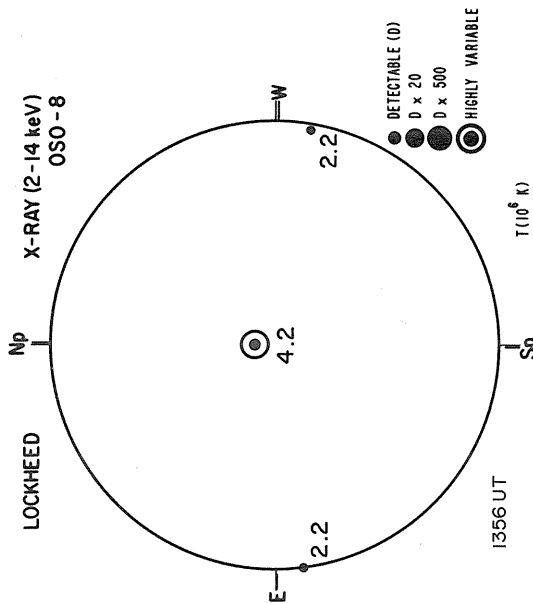
E

W

Sp

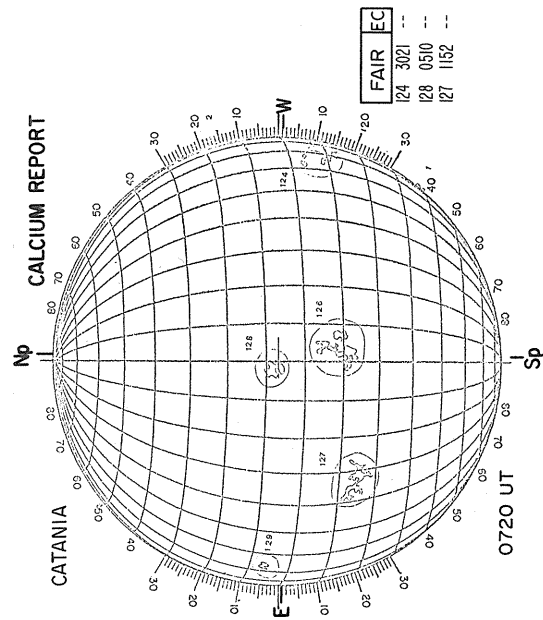
Ant. Temp. Unit 100°K

SEPTEMBER 18, 1975 (P=24.49, B₀=7.16, L₀=93.01)



MAGNETOGRAM
Bright- Plus
Dark - Minus

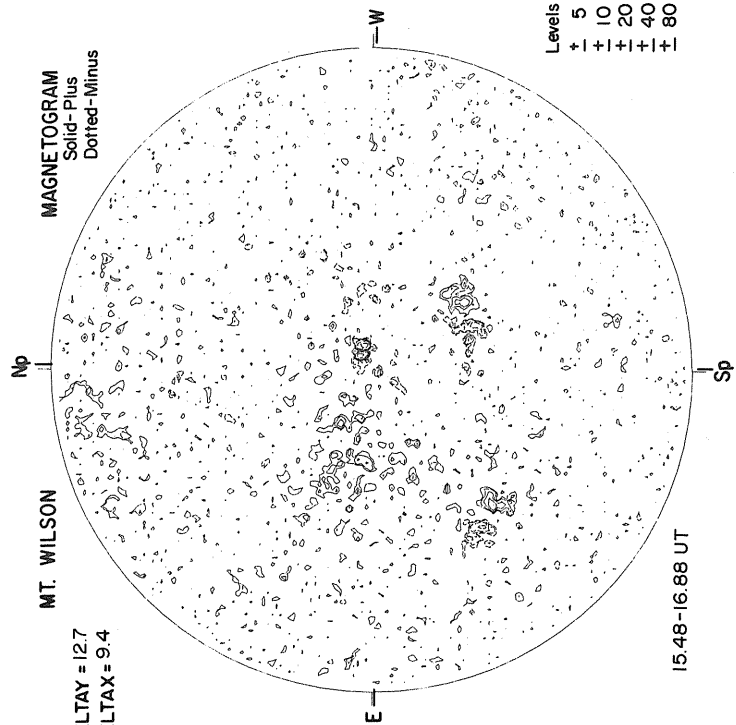
KITT PEAK



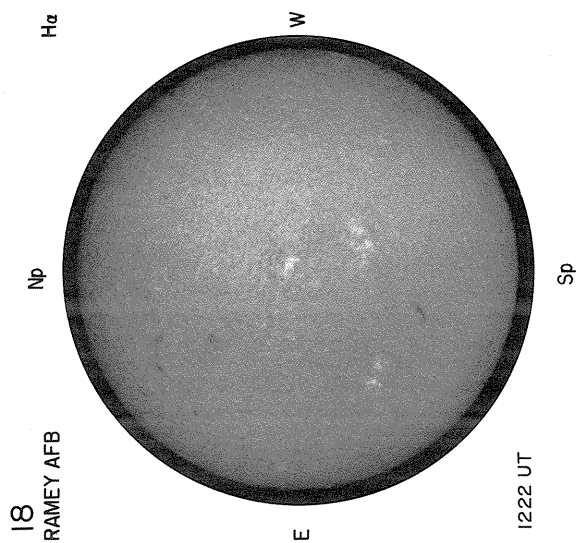
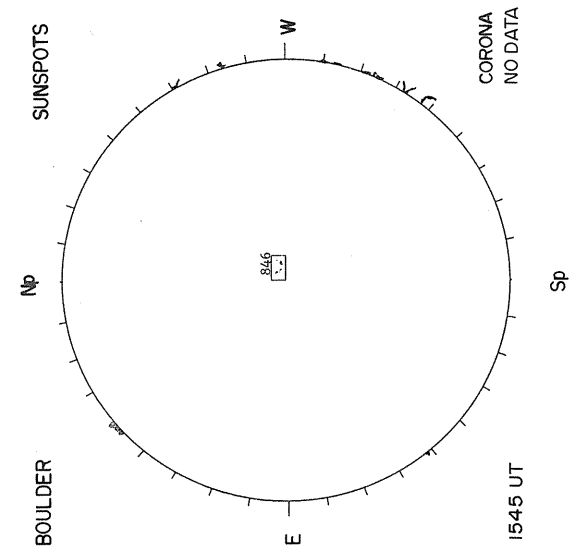
MAGNETOGRAM
Solid- Plus
Dotted- Minus

MT. WILSON

DELTA Y = 12.7
DELTA X = 9.4



Levels
+ 5
+ 10
+ 20
+ 40
+ 80



8.6 MM

Np

NELC LA POSTA

2.0 CM

Np

NELC LA POSTA

W

E

W

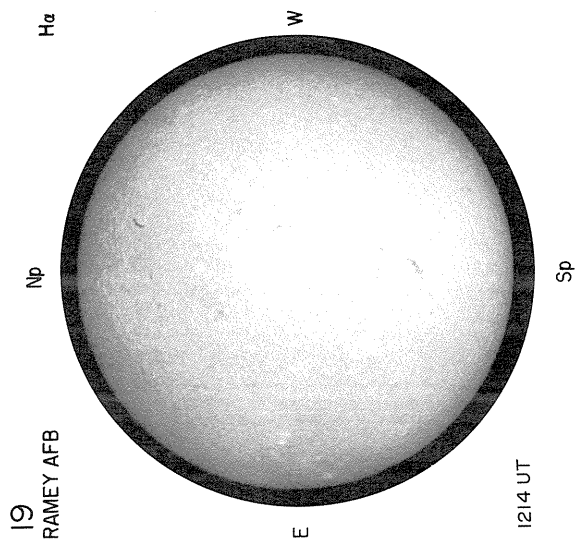
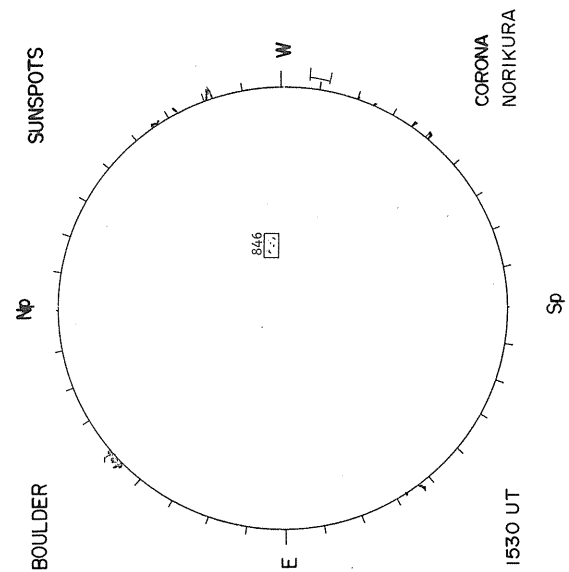
E

Sp

Sp

Ant. Temp. Unit 100°K

Ant. Temp. Unit 100°K



8.6 MM

NELC LA POSTA

2.0 CM

NELC LA POSTA

Np

Np

W

E

W

E

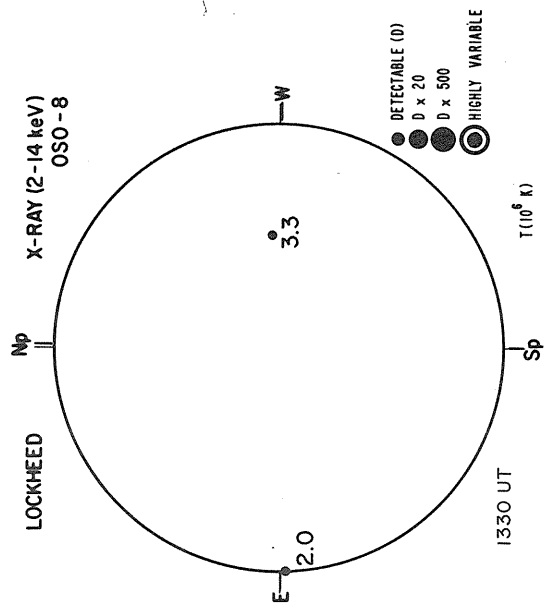
Ant. Temp. Unit 100°K

Sp

Ant. Temp. Unit 100°K

Sp

SEPTEMBER 20, 1975 (P=24.79, B₀=7.12, L₀=66.60)

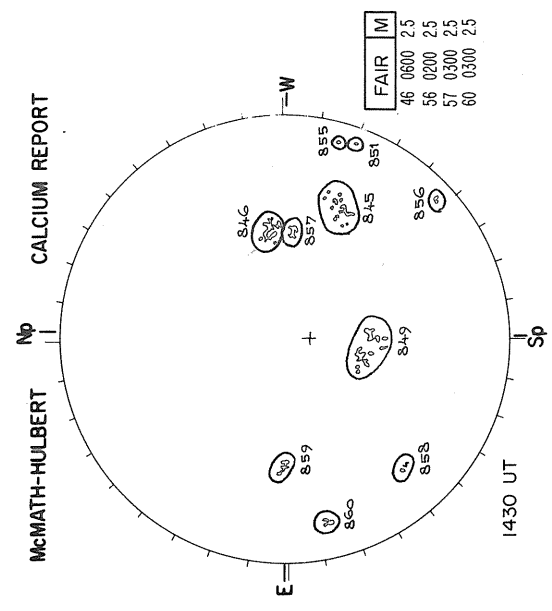


KITT PEAK

MAGNETOGRAM

Bright- Plus

Dark - Minus



MT. WILSON

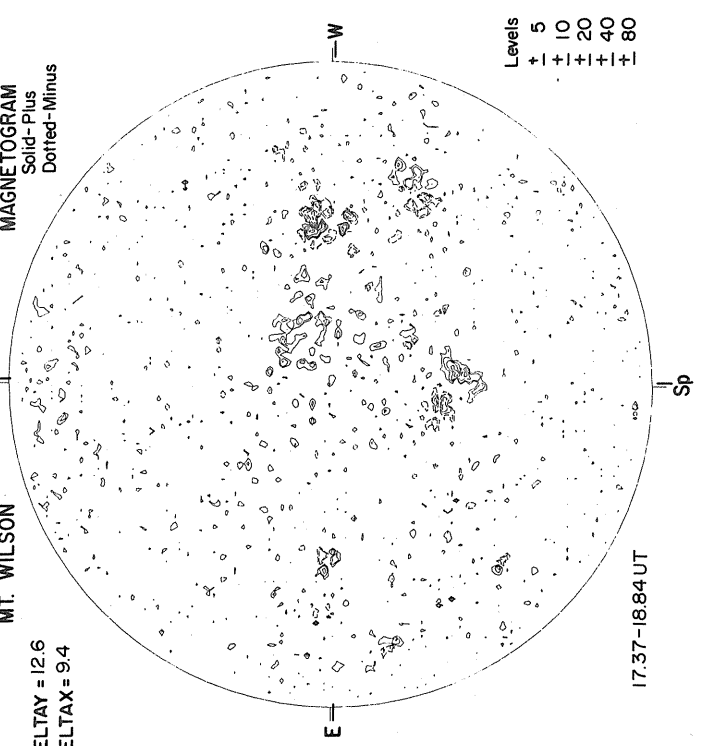
MAGNETOGRAM

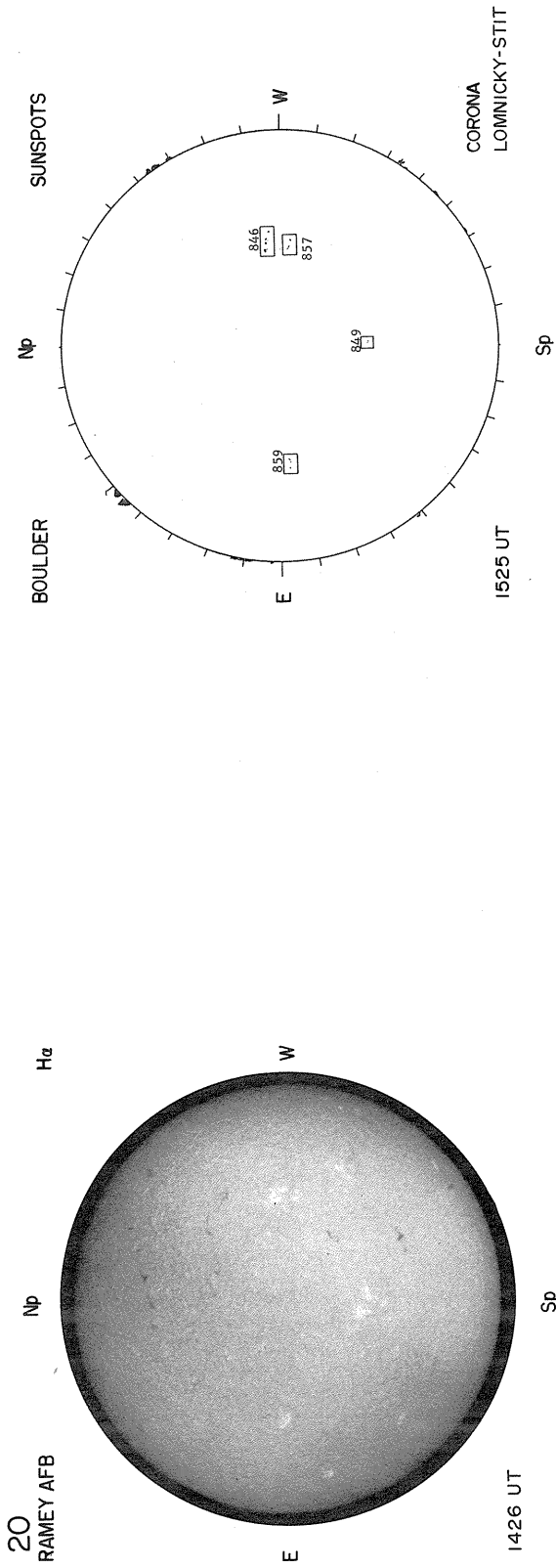
Solid- Plus

Dotted- Minus

DELTA T = 12.6

DELTA X = 9.4





8.6 MM

NELC LA POSTA

2.0 CM

Np

NELC LA POSTA

W

E

W

E

Ant. Temp. Unit 100°K

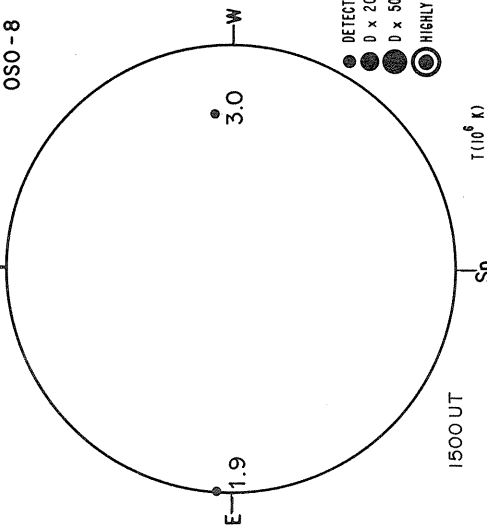
Sp

Ant. Temp. Unit 100°K

Sp

SEPTEMBER 21, 1975 (P = 2493, $B_0 = 7.09$, $L_0 = 53.40$)

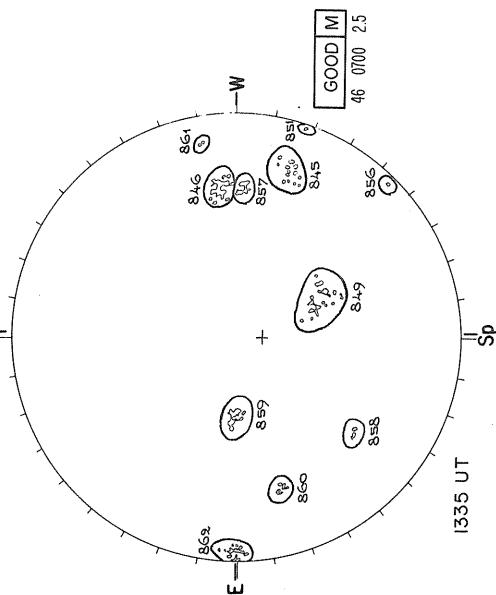
LOCKHEED
X-RAY (2-14 keV)
OSO-8



KITT PEAK
MAGNETOGRAM
Bright- Plus
Dark - Minus

Np
Sp

McMATH-HULBERT
CALCIUM REPORT

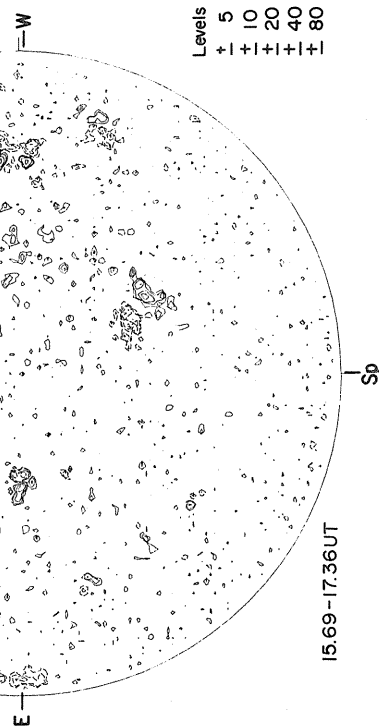


MT. WILSON
MAGNETOGRAM
Solid- Plus
Dotted- Minus

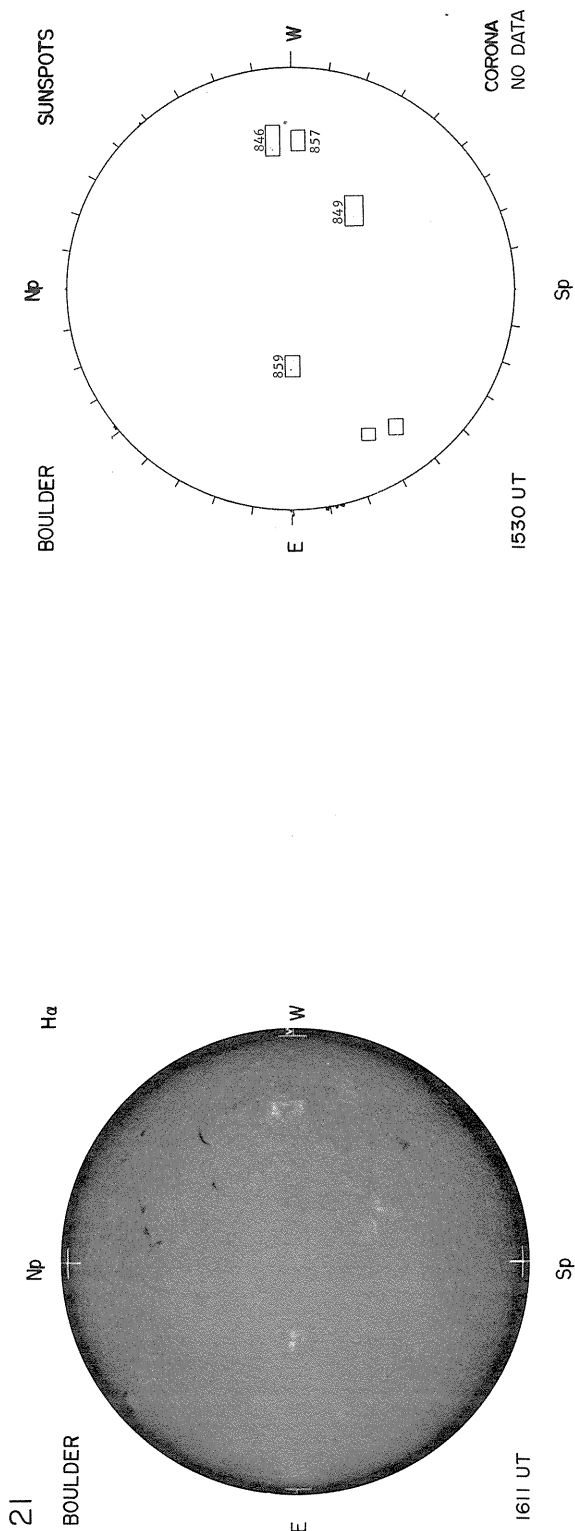
DELTA Y = 12.7
DELTA X = 9.4

Np
Sp

E-
W



Np
Sp



8.6 MM

NELC LA POSTA

2.0 CM

Np

NELC LA POSTA

W

E

W

E

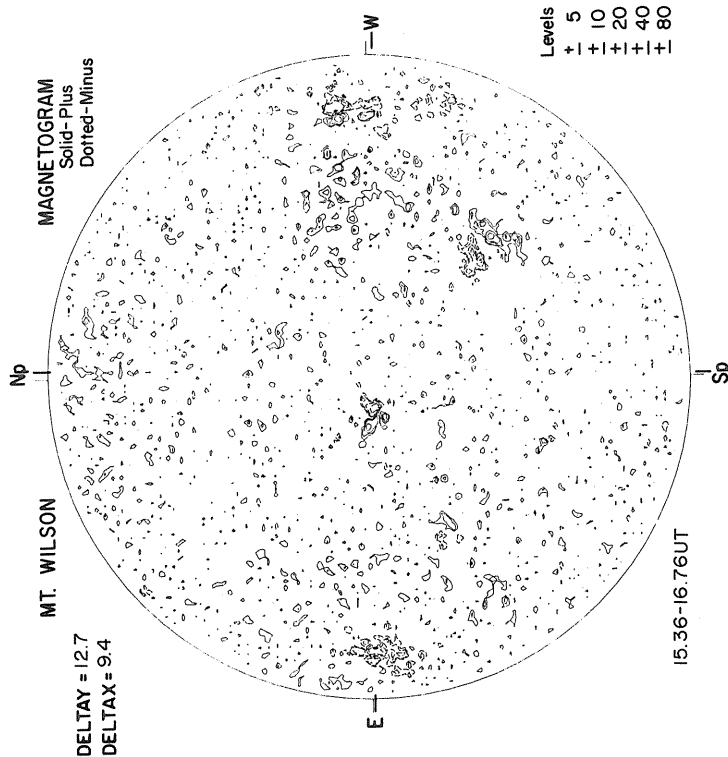
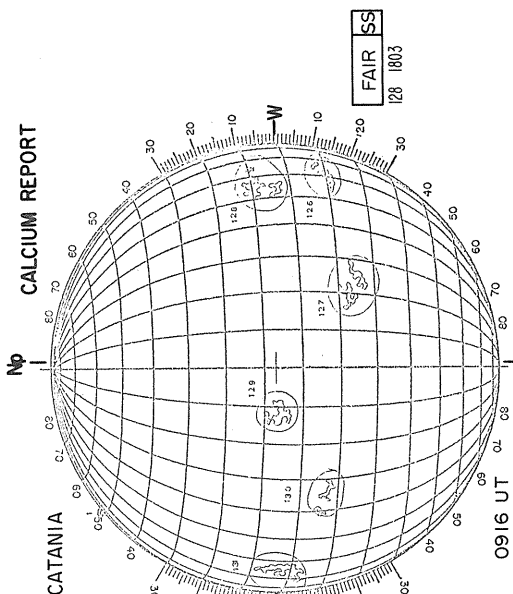
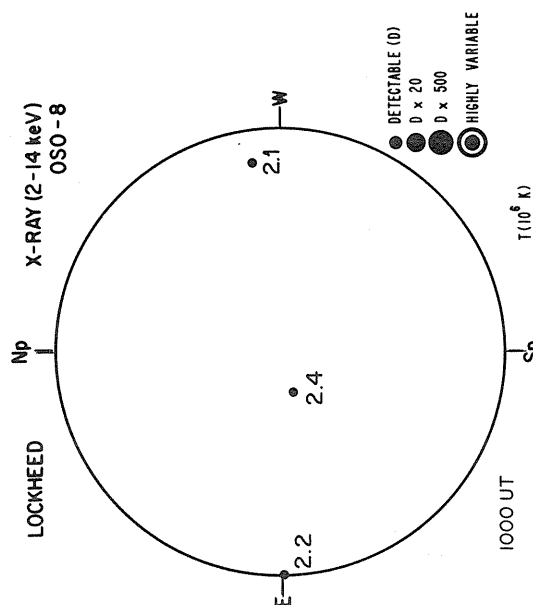
Ant. Temp. Unit 100° K

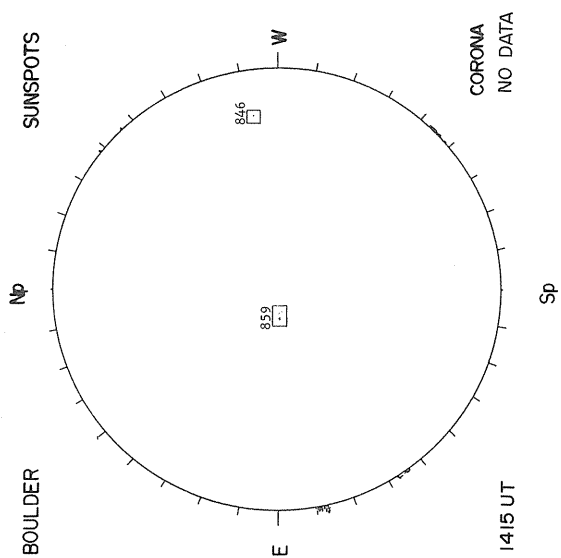
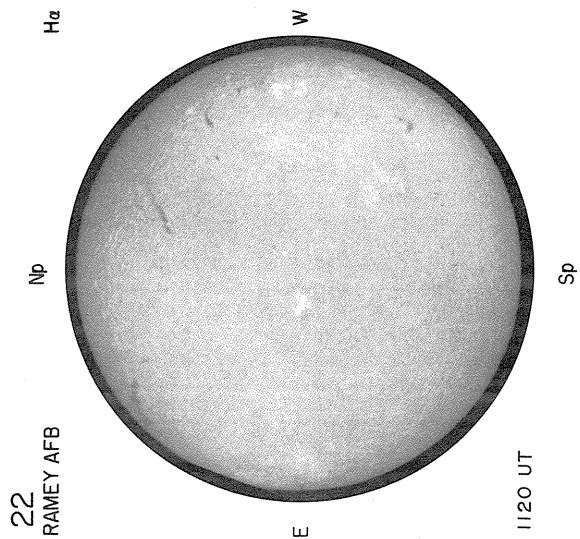
Sp

Ant. Temp. Unit 100° K

Sp

SEPTEMBER 22, 1975 (P=2507, B₀=706, L₀=40.20)





CORONA
NO DATA

8.6 MM

Np

NELC LA POSTA

2.0 CM

Np

NELC LA POSTA

W

E

W

E

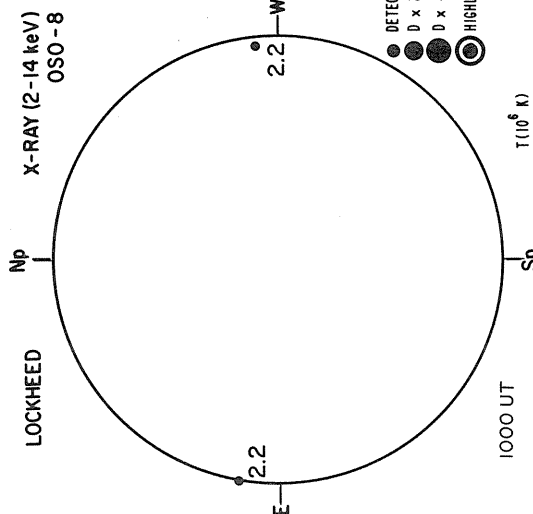
Ant. Temp. Unit 100°K

Sp

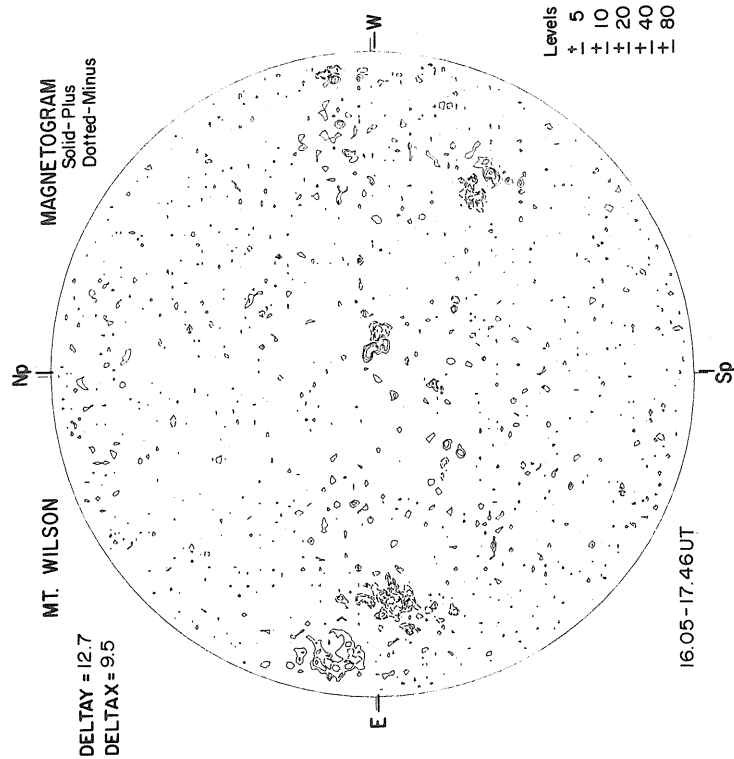
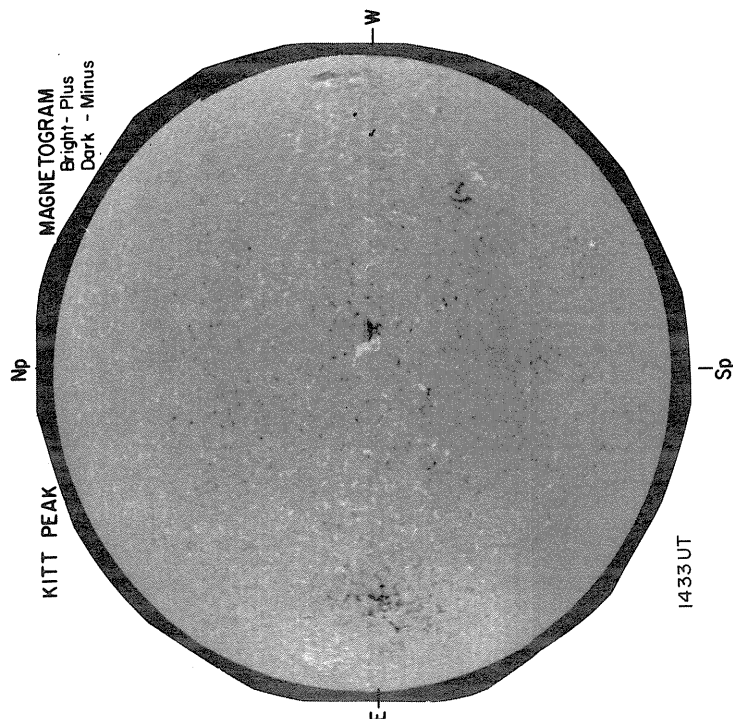
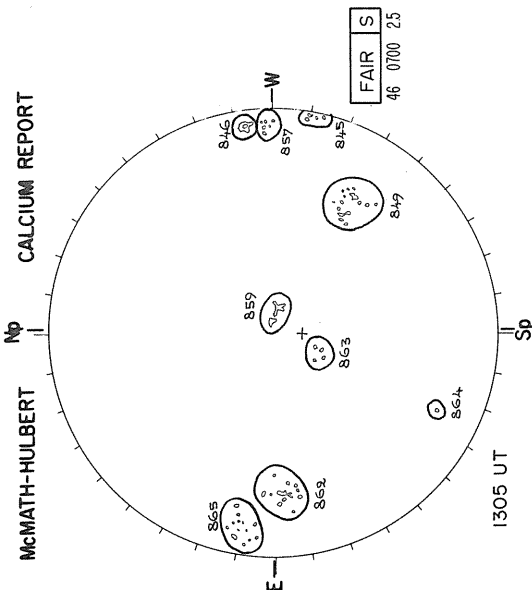
Ant. Temp. Unit 100°K

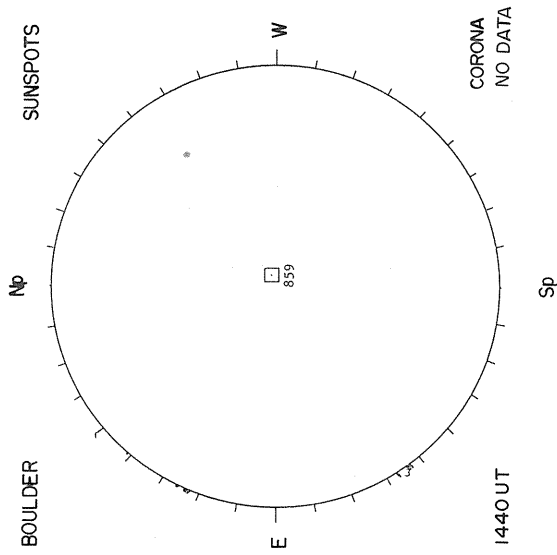
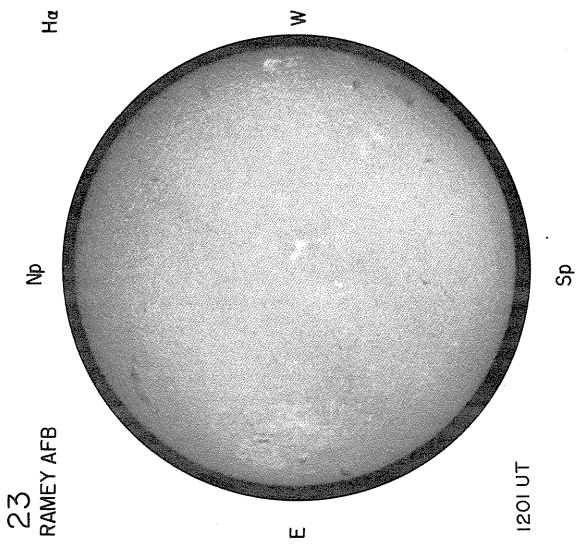
Sp

SEPTEMBER 23, 1975 (P = 25.19, B₀ = 704, L₀ = 27.00)



- DETECTABLE (ID)
- 0 x 20
- 0 x 500
- HIGHLY VARIABLE





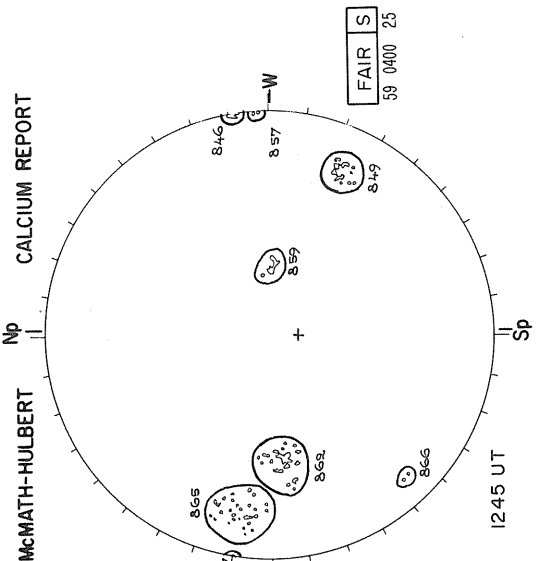
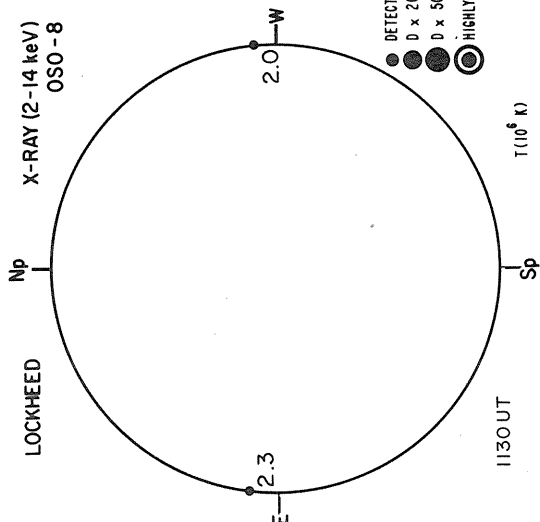
NELC LA POSTA Np 8.6 MM

E W

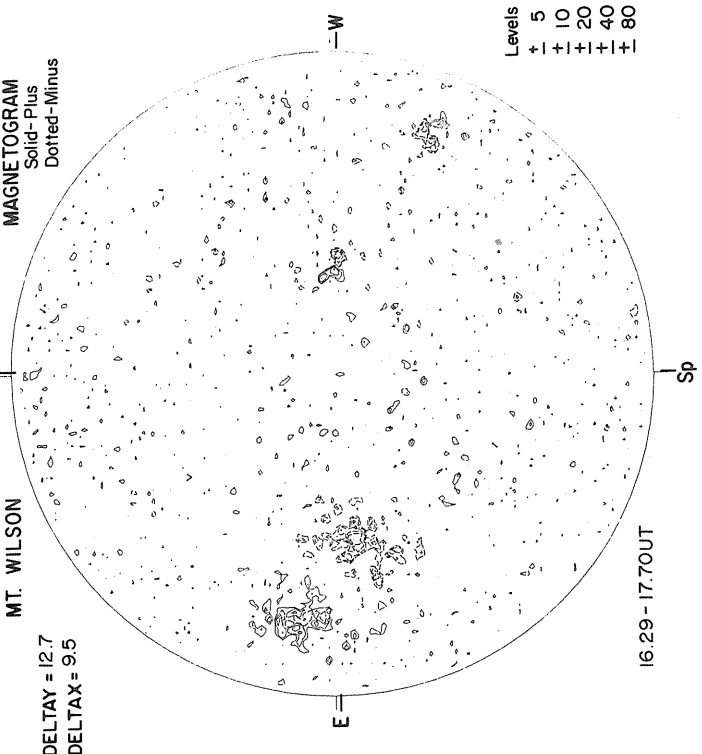
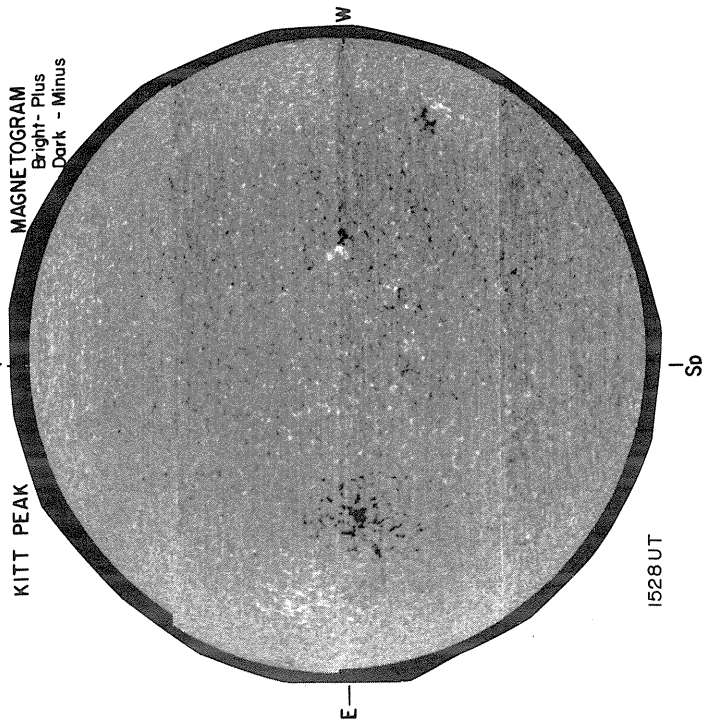
Sp Ant. Temp. Unit 100°K

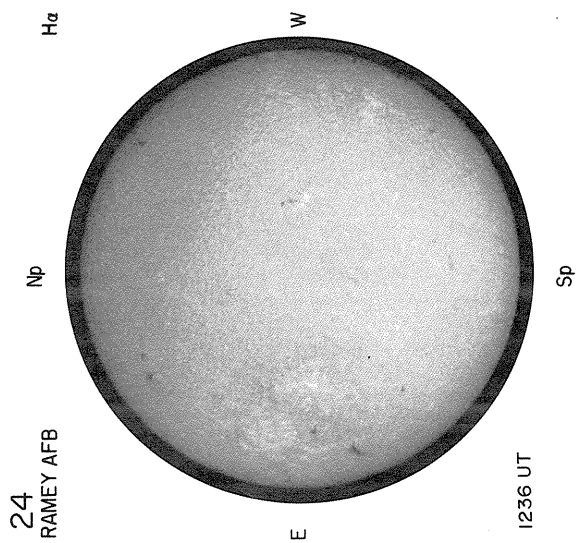
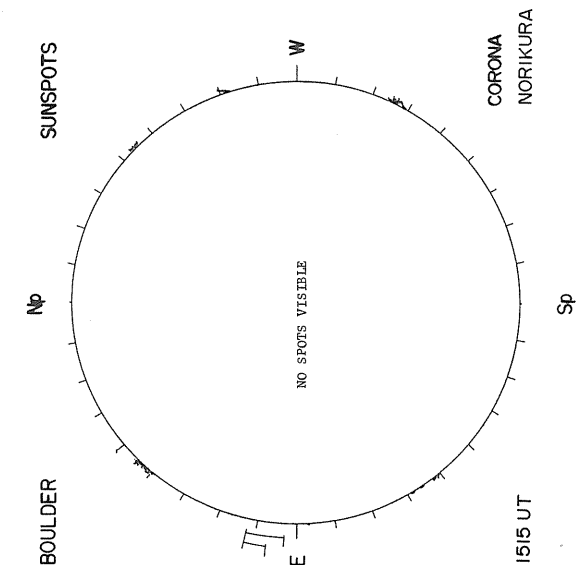
SEPTEMBER 24, 1975 (P = 25.31, B₀ = 7.00, L₀ = 13.81)

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



KITT PEAK MAGNETOGRAM
Bright - Plus
Dark - Minus





8.6 MM

NELC LA POSTA

2.0 CM

NELC LA POSTA

Np

Np

W

E

W

E

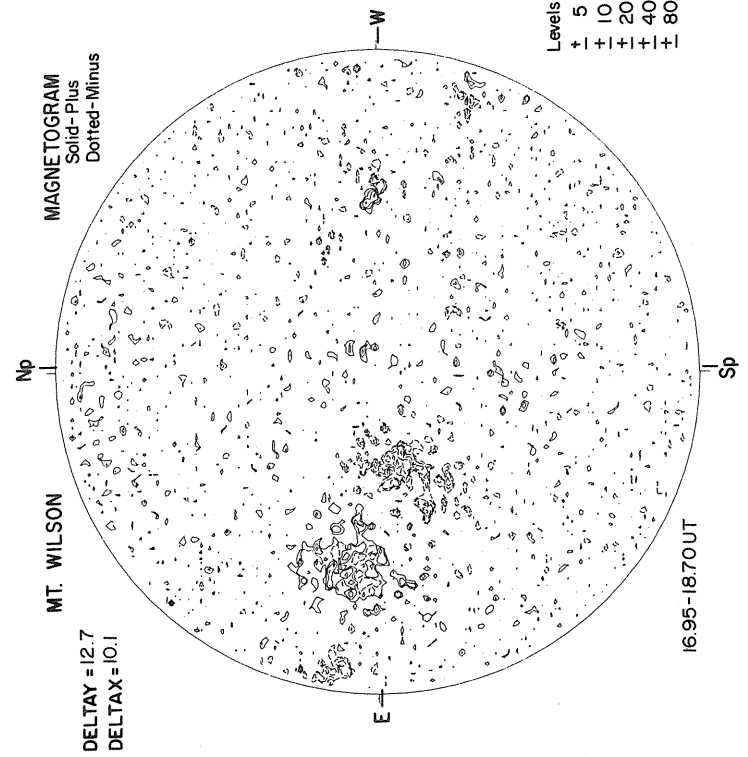
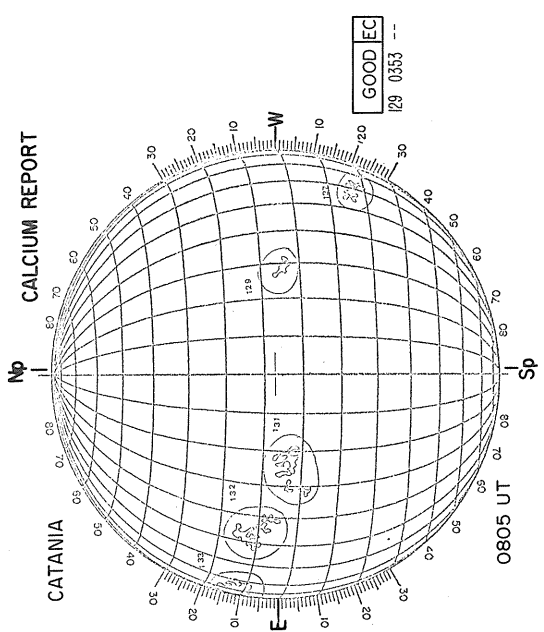
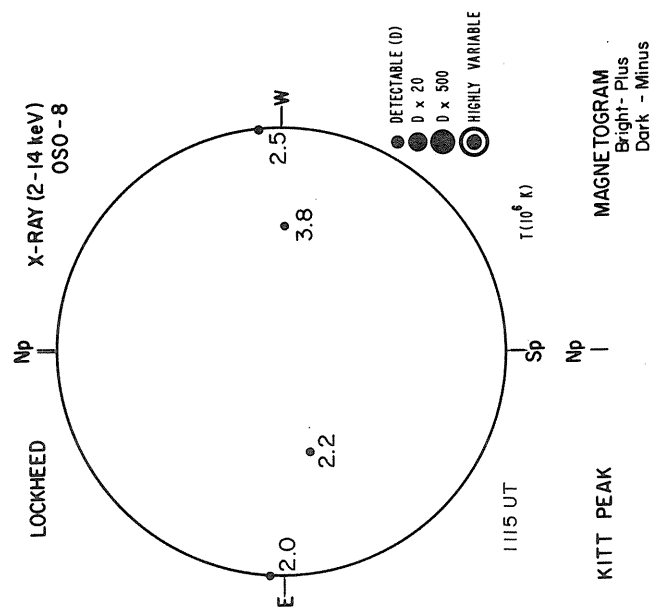
Ant. Temp. Unit 100°K

Sp

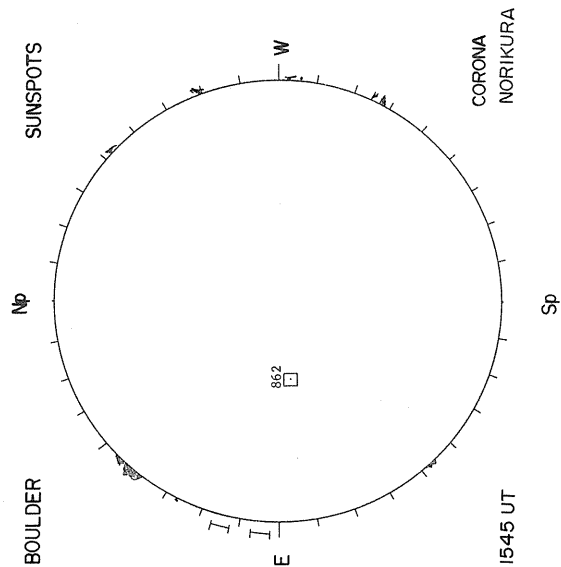
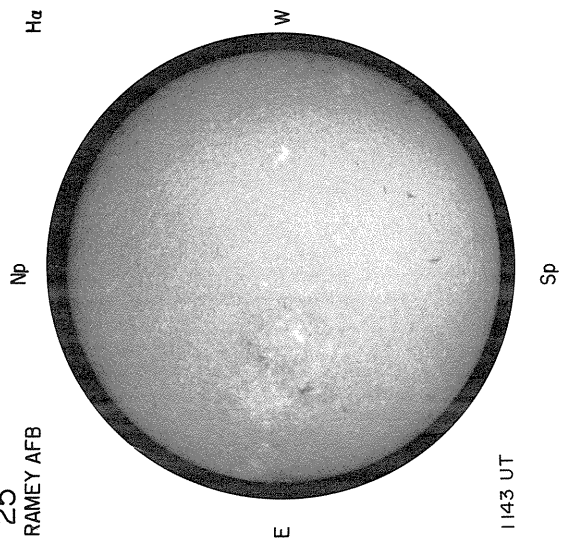
Ant. Temp. Unit 100°K

Sp

SEPTEMBER 25, 1975 (P = 25.43, B₀ = 6.97, L₀ = 0.61)



25
RAMEY AFB



NELC LA POSTA

Np

2.0 CM

NELC LA POSTA

Np

8.6 MM

E

W

E

W

Sp

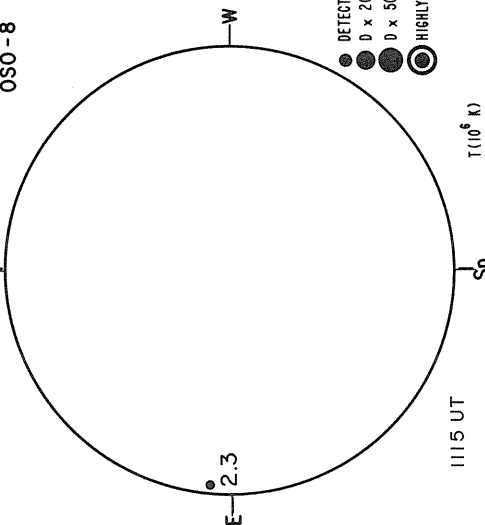
Ant. Temp. Unit 100°K

Sp

Ant. Temp. Unit 100°K

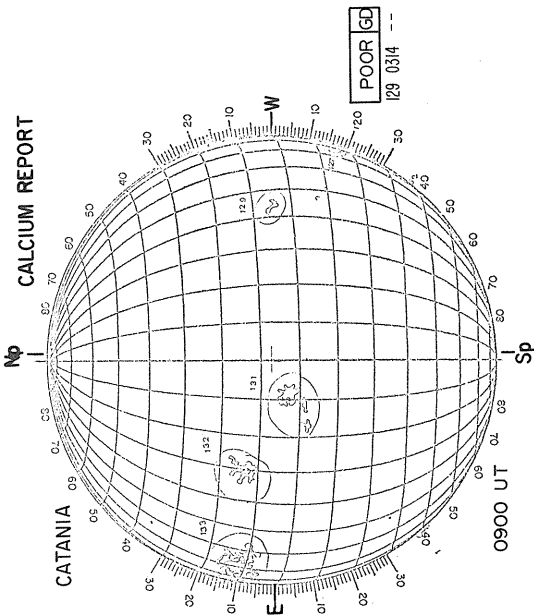
SEPTEMBER 26, 1975 (P=25.54, B₀=6.94, L₀=347.41)

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



KITT PEAK
MAGNETOGRAM
Bright-Plus
Dark-Minus

DELTA TAY = 12.7
DELTA TAX = 9.5

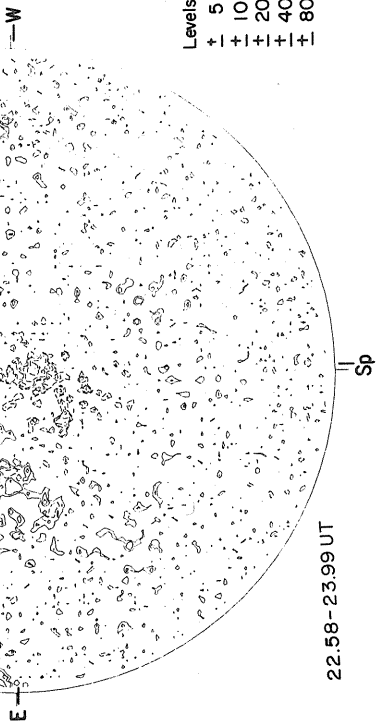


MT. WILSON
MAGNETOGRAM
Solid-Plus
Dotted-Minus

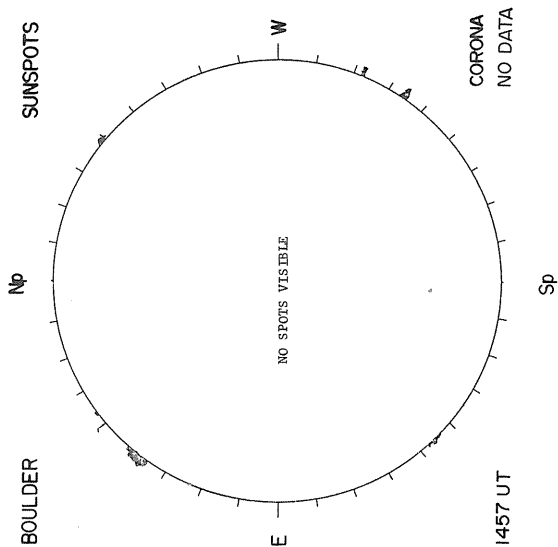
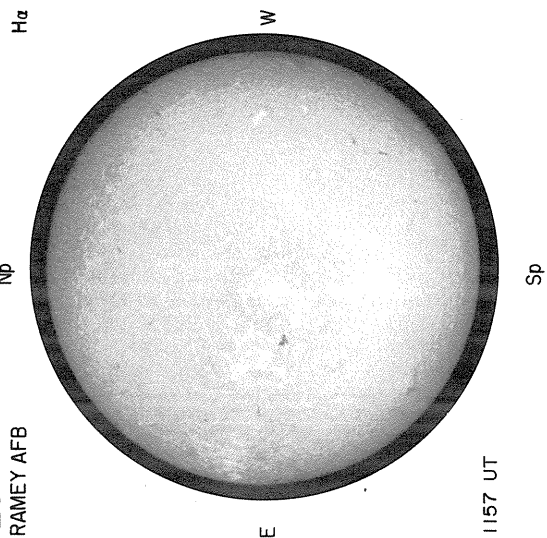
DELTA TAY = 12.7
DELTA TAX = 9.5

22.58-23.99 UT

Levels
+ 5
+ 10
+ 20
+ 40
+ 80



26
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

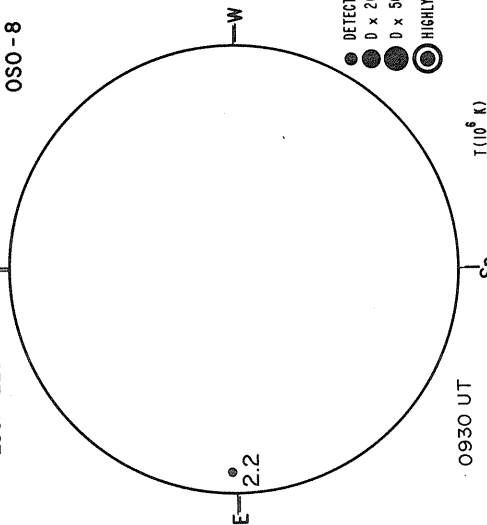
Sp

Ant. Temp. Unit 100°K

76
Sep 75

SEPTEMBER 27, 1975 (P=25.64, B₀=6.90, L₀=334.21)

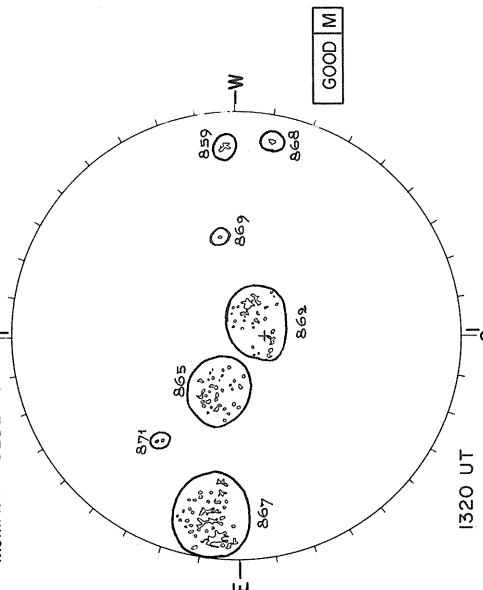
LOCKHEED
Np
X-RAY (2-14 keV)
OSO-8



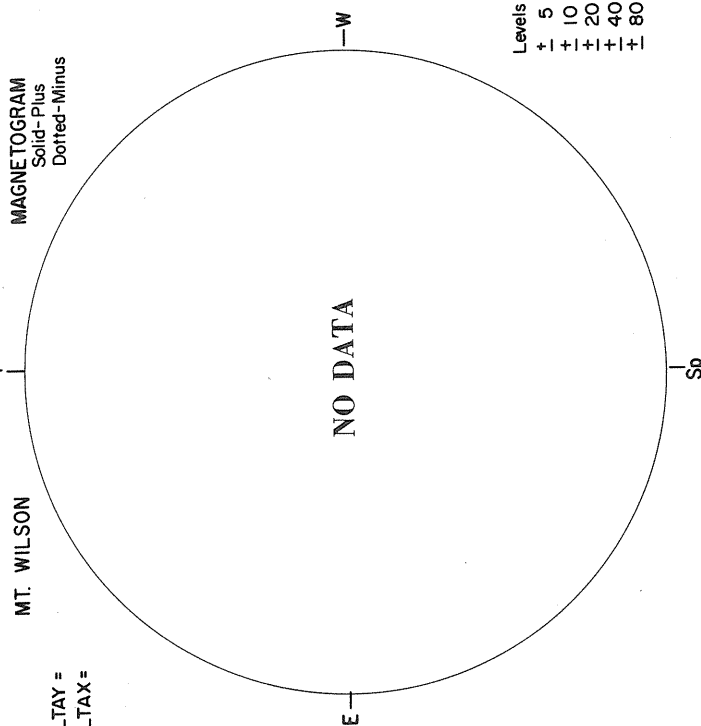
MAGNETOGRAM
Bright-Plus
Dark-Minus

DELTA TAY =
DELTA TAX =

McMATH-HULBERT
Np
CALCIUM REPORT

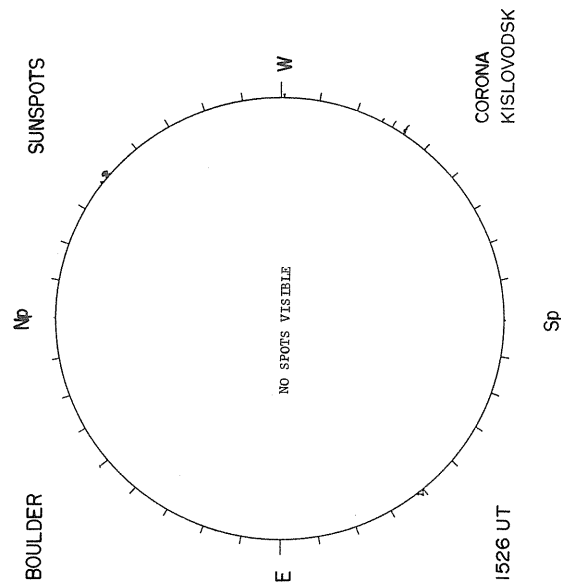
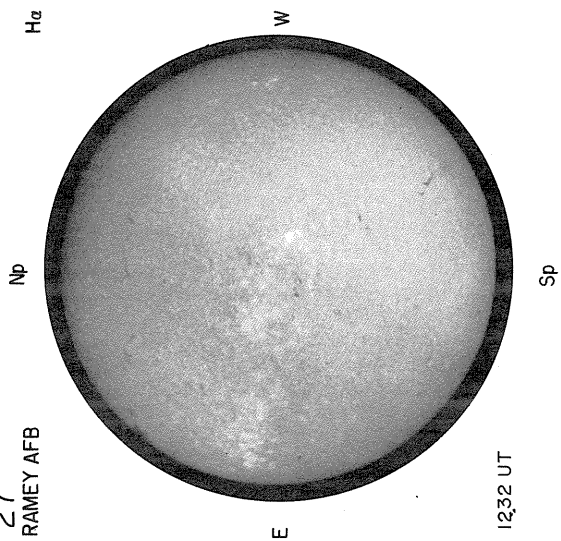


MAGNETOGRAM
Solid-Plus
Dotted-Minus



Levels
+ 5
+ 10
+ 20
+ 40
+ 80

27
RAMEY AFB



NELC LA POSTA

Np

2.0 CM

NELC LA POSTA

Np

8.6 MM

E

W

E

W

Sp

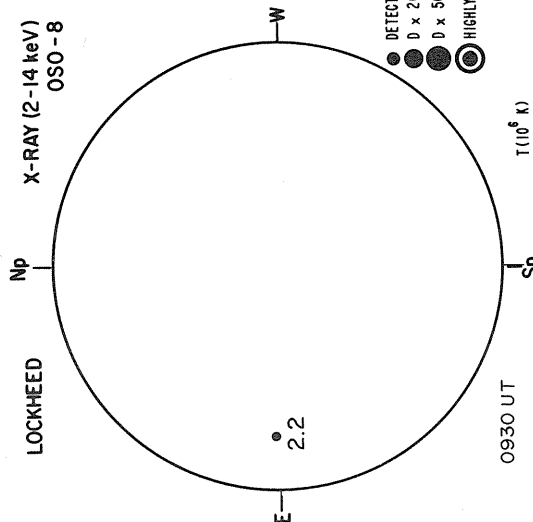
Ant. Temp. Unit 100°K

Sp

Ant. Temp. Unit 100°K

SEPTEMBER 28, 1975 (P = 25.73, B₀ = 6.86, L₀ = 321.01)

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

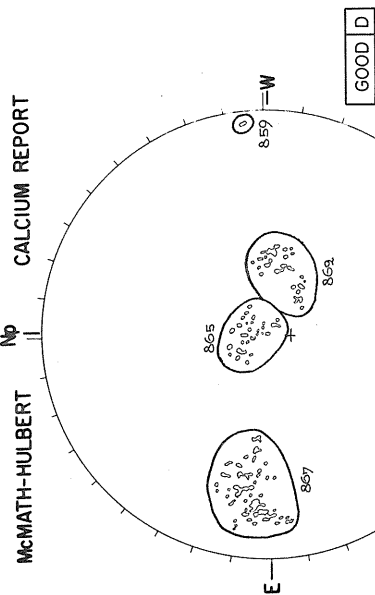


DETECTABLE (0)
0 x 20
0 x 500
HIGHLY VARIABLE

MAGNETOGRAM
Bright - Plus
Dark - Minus

KITT PEAK

McMATH-HULBERT
CALCIUM REPORT



GOOD D

MAGNETOGRAM
Solid-Plus
Dotted-Minus

DELTA Y = 12.7
DELTA X = 9.4

MT. WILSON

Np

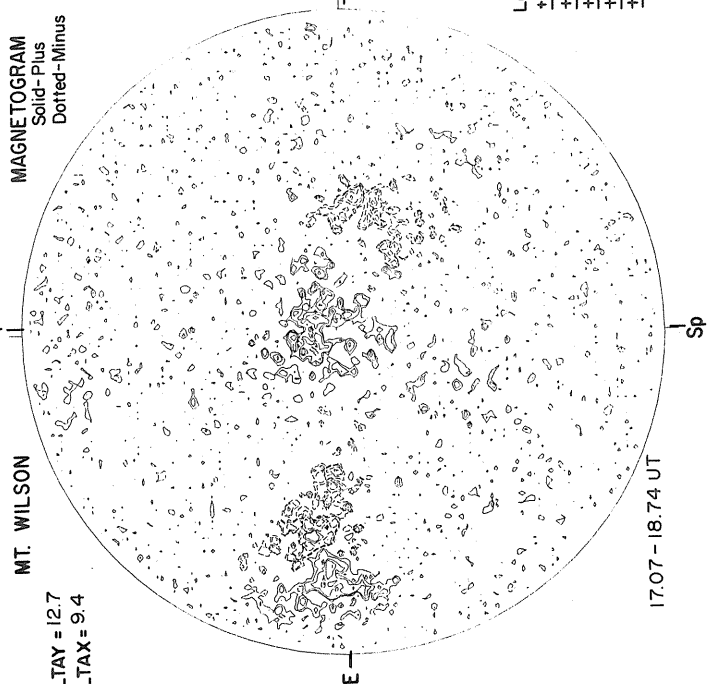
Sp

W

E

17.07 - 18.74 UT

Levels
+ 1 5 10 20 40 80



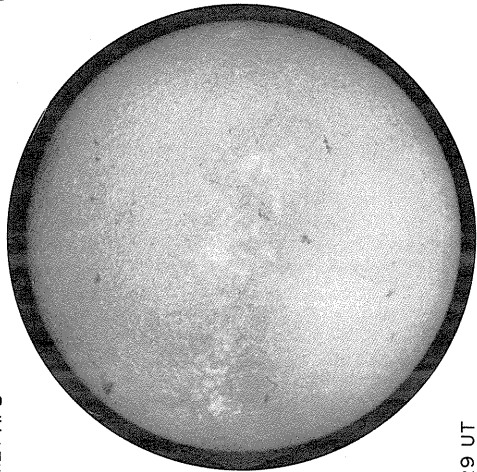
Sp

28

RAVEY AFB

H α

Np



E

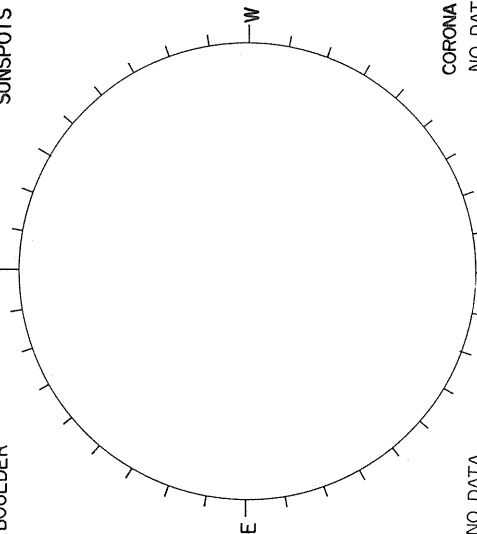
1129 UT

Sp

BOULDER

Np

SUNSPOTS



E

NO DATA

Sp

CORONA
NO DATA

NELC LA POSTA

Np

2.0 CM

NELC LA POSTA

Np

8.6 MM

E

W

E

W

Sp

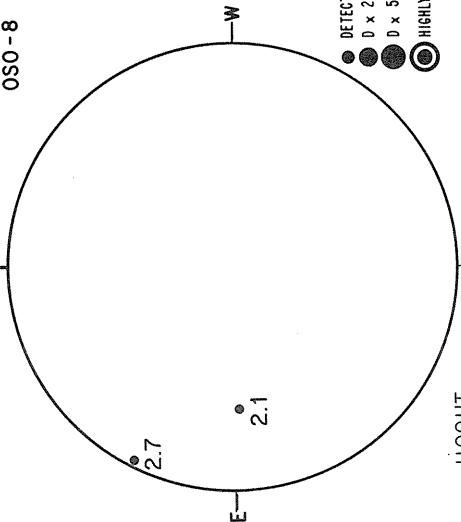
Ant. Temp. Unit 100°K

Sp

Ant. Temp. Unit 100°K

SEPTEMBER 29, 1975 (P = 25.82, B₀ = 6.82, L₀ = 307.82)

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



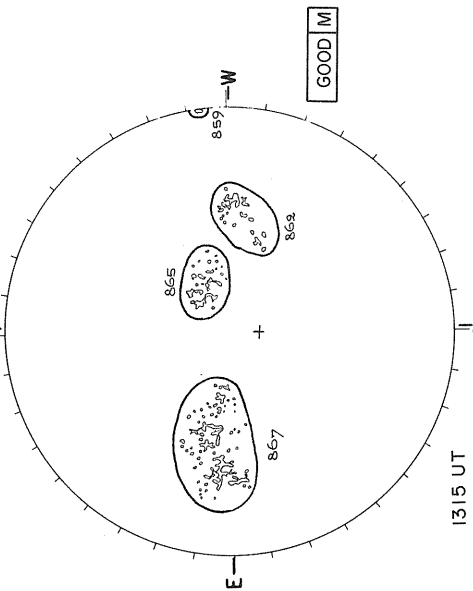
● DETECTABLE (ID)
● 0 x 20
● 0 x 500
⊙ HIGHLY VARIABLE

T (10⁶ K)

KITT PEAK

MAGNETOGRAM
Bright - Plus
Dark - Minus

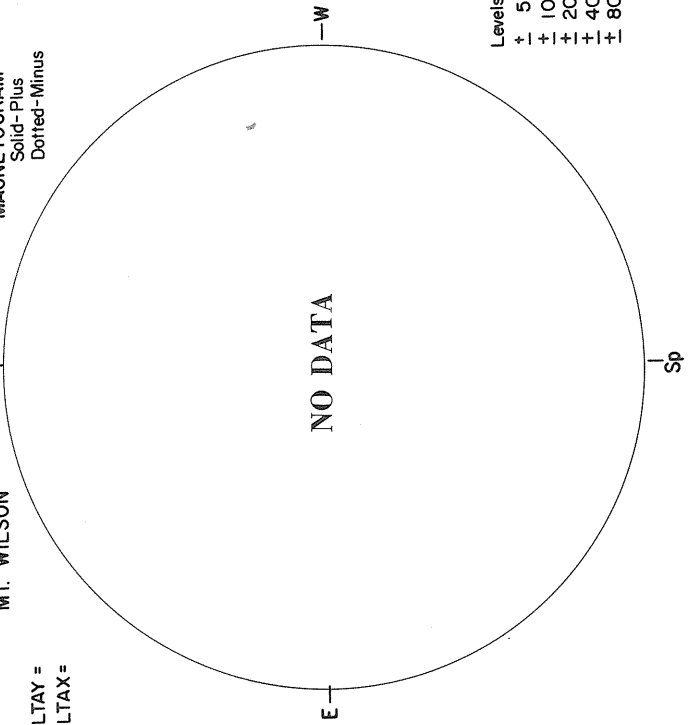
McMATH-HULBERT
Np
CALCIUM REPORT



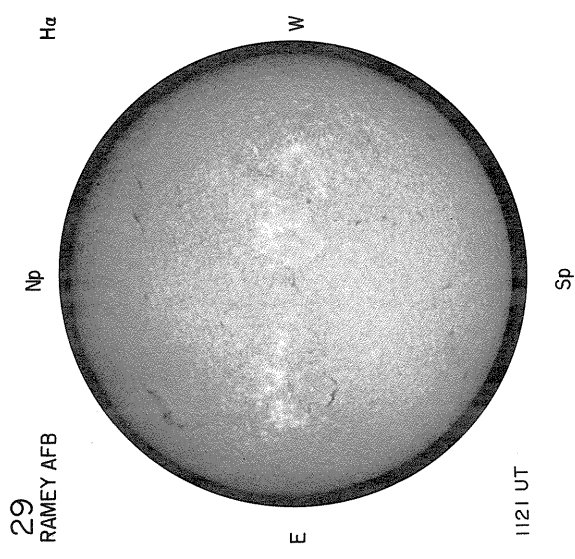
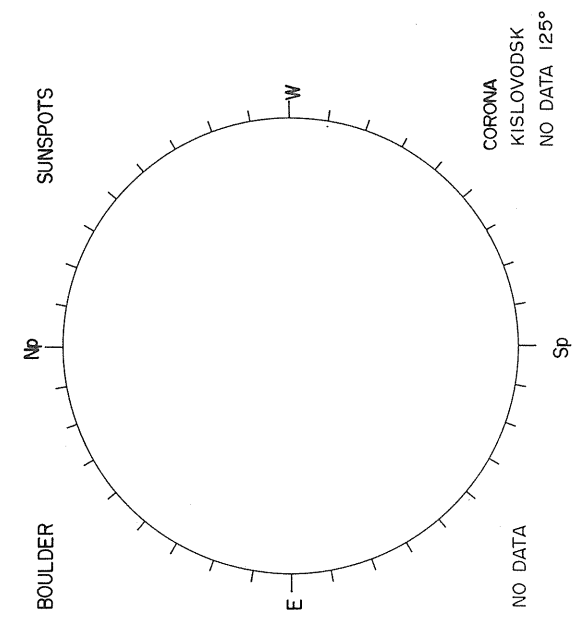
GOOD M

MAGNETOGRAM
Solid - Plus
Dotted - Minus

MT. WILSON
Np
DELTA T =
DELTA X =



Levels
+ 5
+ 10
+ 20
+ 40
+ 80



8.6 MM

NELC LA POSTA

2.0 CM

NELC LA POSTA

W

E

W

E

Ant. Temp. Unit 100°K

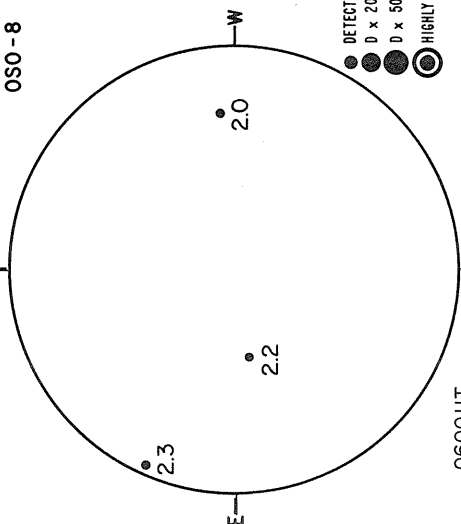
Sp

Ant. Temp. Unit 100°K

Sp

SEPTEMBER 30, 1975 (P = 2590, $B_0 = 6.78$, $L_0 = 294.62$)

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



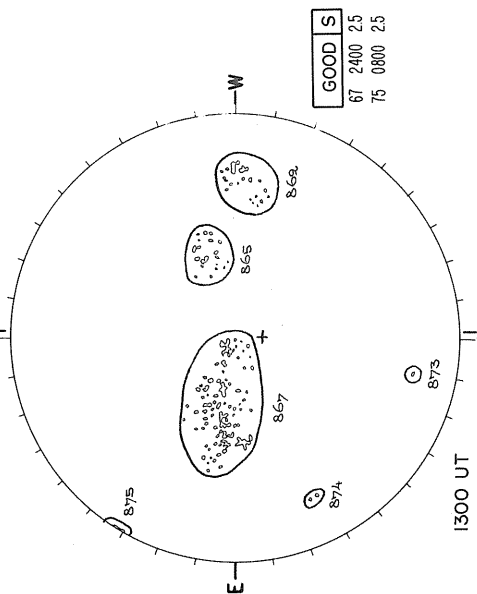
MAGNETOGRAM
Bright - Plus
Dark - Minus

DELTA Y =
DELTA X =

MT. WILSON

MAGNETOGRAM
Solid - Plus
Dotted - Minus

McMATH-HULBERT
CALCIUM REPORT



NO DATA

W

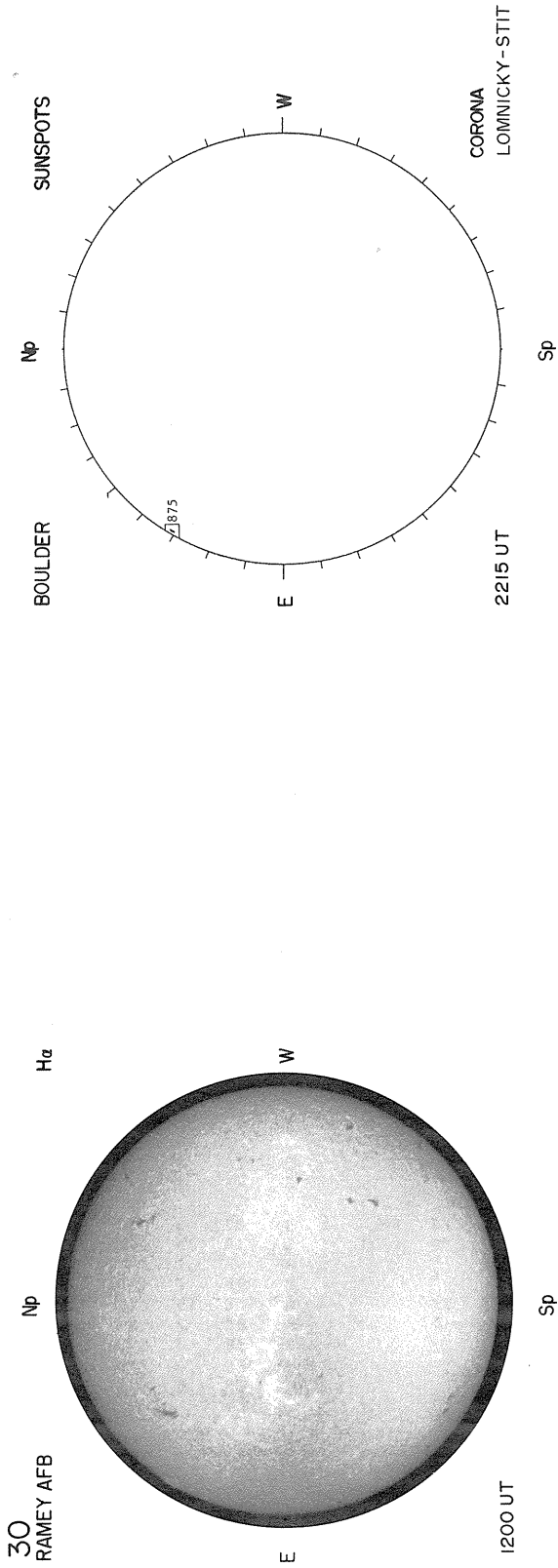
E

W

E

Levels
+ 5
+ 10
+ 20
+ 40
+ 80

Sp



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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Sep 75

REGIONS OF SOLAR ACTIVITY

SEPTEMBER 1975

MCMATH REGION 13820				CMP DATE 1.1				RETURN OF REGION 13786				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	8	25	13820	N04 E86	318	900	2.0	19612	N03 E80	324	X	2	B	10	1	AXX
75	8	26	13820	N04 E70	319	2500	2.5	19612	N03 E68	323	A					
75	8	27	13820	N04 E60		2000	2.5									
75	8	28	13820	N04 E47	318	2500	2.5	19614	N00 E41	323	A					
75	8	29						19614	N00 E26	325	(AP)	3	B	0	7	BX0
75	8							19616	N10 E39	312	(A)	3	B	0	2	BX0
75	8	30						19614	N00 E11	326	(AP)	2	B	10	1	AXX
75	8	31						19614	N00 W02	326	X		R	20	6	BXI
75	8								S01 E01				R	20	6	BXI
75	9	1							S01 W13				B	10	6	AXX
75	9	2	13820	N05 W20	314	2500	2.5		S01 W27				R	10	3	BX0
75	9	3	13820	N05 W33	316	2500	2.0									
75	9	4	13820	N05 W46	316	2500	2.0									
75	9	6	13820	N06 W72	316	2100	1.5									
75	9	7	13820	N08 W80	310	1200	1.5									

MCMATH REGION 13827				CMP DATE 2.4												
				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	9	2	13827	S36 W03	297	100	1.0									

MCMATH REGION 13826				CMP DATE 5.0				RETURN OF REGION 13790				ROTATION 2				
				CALCIUM PLAGE DATA				SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	8	28	13826	N08 E83	282	800	2.0	19615	N09 E77	287	AP					
75	8	30						19615	N12 E50	287	A					
75	8							19617	N07 E78	259	(AF)	2	B	10	2	AXX
75	8	31						19617	N08 E60	264	(BF)	1				
75	9	1						19618	N07 E32	276	(BP)	1	B	0	2	AXX
75	9							19617	N08 E43	265	(BP)	2	B	10	1	HXX
75	9								N07 E53				B	10	3	BX0
75	9	2	13826	N08 E32	262	5000	3.0	19618	N07 E21	273						
75	9							19617	N06 E37	257	(BF)	3	R	20	4	CRO
75	9	3	13826	N08 E20	263	5000	3.0	19617	N07 E20	261	(BF)	3	B	20	23	BX0
75	9								N07 E16				B	0	4	AXX
75	9	4	13826	N08 E07	263	5500	3.0	19619	N07 W15	283	(AP)	1				
75	9							19618	N10 W05	273	(AF)	1	B	0	2	AXX
75	9							19617	N08 E08	260	(B)	3	B	120	43	CAI
75	9								N02 E15				B	10	4	AXX
75	9								N11 E18				B	10	4	BX0
75	9								N07 E03				B	10	2	AXX
75	9	5						19619	N07 W29	282						
75	9							19618	N10 W19	272			B	10	4	BX0
75	9							19617	N08 W06	259	(B)	3	B	140	31	CAI
75	9								S02 E27				B	0	5	BX0
75	9								N08 E03				B	10	3	BX0
75	9								N05 W10				B	20	5	BX0
75	9	6	13826	N10 W20	264	5700	3.0	19619	N09 W40	282	(AF)	1				
75	9							19618	N10 W31	273	(AP)	2	B	20	3	BX0
75	9							19617	N08 W17	259	(B)	3	B	130	25	CAI
75	9								N06 E06				B	0	1	AXX
75	9								N08 W09				B	50	7	BX0
75	9	7	13826	N10 W30	260	5200	3.0	19617	N06 W31	257			B	70	15	DAO
75	9								N08 W22				B	20	2	AXX
75	9								N09 W05				B	20	3	BX0
75	9								N03 W36				B	20	3	BX0
75	9								S01 W24				B	20	2	AXX
75	9	8	13826	N09 W44	261	5600	3.0	19617	N09 W45	260	(AF)	1				
75	9	9	13826	N09 W59	263	5300	3.0									
75	9	10	13826	N09 W71	261	5000	2.5									
75	9	11	13826	N09 W85	262	4000	2.0									

MCMATH REGION 13830				CMP DATE 6.5												
				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	9	3	13830	S09 E40	243	100	1.0									
75	9	6							S12 W09				B	0	1	AXX

REGIONS OF SOLAR ACTIVITY

SEPTEMBER 1975

MCMATH REGION 13840

CMP DATE 7.4

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
75	9	12	13840	N36 W67	231	100	1.0								

MCMATH REGION 13847

CMP DATE 9.3

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
75	9	14	13847	N17 W69	207	300	1.5								

MCMATH REGION 13848

CMP DATE 9.7

				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	9	14	13848	S24 W64	202	200	1.0								

MCMATH REGION 13833

CMP DATE 11.0

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
75	9	7	13833	N30 E46	184	100	2.0								

MCMATH REGION 13835

CMP DATE 11.9

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
75	9	8	13835	S28 E45	172	100	1.5								

MCMATH REGION 13831

CMP DATE 12.1

RETURN OF REGION 13811

ROTATION 2

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
75	9	6	13831	N28 E76	168	400	1.5								
75	9	7	13831	N28 E63	167	400	1.5								
75	9	8	13831	N28 E50	167	400	1.5								
75	9	9	13831	N28 E35	169	500	1.5								
75	9	10	13831	N28 E20	170	200	1.5								
75	9	11	13831	N28 E07	170	200	1.5								
75	9	12	13831	N28 W06	170	500	1.0								
75	9	13	13831	N28 W19	170	500	1.0								
75	9	14	13831	N28 W25	163	500	1.0								
75	9	15	13831	N28 W44	167	400	1.0								
75	9	16	13831	N28 W58	169	300	1.0								
75	9	17	13831	N28 W71	168	200	1.0								

MCMATH REGION 13832

CMP DATE 12.2

RETURN OF REGION 13796

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	9	6	13832	S09 E73	171	1400	2.0	19620	S10 E76	166	(AP)	3	8	20	1 HHX
75	9	7	13832	S08 E58	172	1800	2.5	19620	S09 E59	167	(AP)	4	8	120	1 HHX
75	9								S11 E68				8	20	1 AXX
75	9	8	13832	S08 E45	172	2000	2.5	19620	S09 E48	167	(AP)	5	8	90	2 HSX
75	9								S09 E55				8	0	1 AXX
75	9	9	13832	S08 E33	171	1900	2.5	19620	S09 E34	168	(AP)	4	8	110	1 HSX
75	9								S09 E40				8	40	3 AXX
75	9	10	13832	S08 E21	169	1800	2.5	19620	S09 E20	167	(AP)	4	R	70	1 HSX
75	9	11	13832	S08 E09	168	1600	2.5	19620	S09 E08	168	(BP)	4	R	80	4 HSX
75	9	12	13832	S08 W05	169	2000	3.0	19620	S09 W09	167	(AP)	4	R	70	3 CSO
75	9	13	13832	S08 W18	169	2000	3.0	19620	S09 W18	167	(AP)	4	M	60	3 CSO
75	9	14	13832	S08 W30	168	2300	3.0	19622	S07 W49	185	(GF)	2			
75	9							19620	S09 W31	167	(BP)	4	B	60	1 HXX

(Cont'd)

REGIONS OF SOLAR ACTIVITY

SEPTEMBER 1975

MC MATH REGION 13862 CMP DATE 27.3 RETURN OF REGION 13820* ROTATION 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	9	21	13862	N02 E76	330	700	1.5									
75	9	23	13862	N02 E45	334	700	2.0									
75	9	24	13862	N02 E33	334	800	2.0									
75	9	25						19627	N03 E21	330	(AP)	2	8	10	1	AXX
75	9	27	13862	N02 W04	330	1000	2.0									
75	9	28	13862	N03 W16	330	1200	2.0									
75	9	29	13862	N04 W30	330	1300	2.0									
75	9	30	13862	N03 W42	329	1100	2.0									
75	10	01	13862	N04 W64		1000	1.5									
75	10	02	13862	N04 W77		700	1.0									

MC MATH REGION 13866 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	9	24	13866	S32 E49	318	100	1.0									

MC MATH REGION 13865 CMP DATE 28.6 RETURN OF REGION 13820* ROTATION 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	9	23	13865	N11 E64	315	500	1.5									
75	9	24	13865	N12 E53	314	700	1.5									
75	9	27	13865	N12 E14	312	800	1.5									
75	9	28	13865	N11 E01	313	800	1.5									
75	9	29	13865	N12 W12	312	900	1.5									
75	9	30	13865	N12 W24	311	700	1.5									
75	10	01	13865	N12 W40		700	2.5									
75	10	02	13865	N12 W53		700	1.5									
75	10	03	13865	N12 W66		500	1.5									
75	10	04	13865	N12 W78		400	1.5									

MC MATH REGION 13877 CMP DATE 28.8

				CALCIUM PLAGE DATA				SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	10	03	13877	S05 W63		200	1.5									

MC MATH REGION 13871 CMP DATE 29.9

				CALCIUM PLAGE DATA				SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
75	9	27	13871	N26 E31	295	100	1.0									

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

Note: Region 13831 is a return of the active new cycle region 13811 of the previous rotation.
 Region 13832 experienced a resurgence on the disk during the previous rotation.
 Region 13845 is new plage that has developed near the location of old region 13807.
 Region 13846 has formed amongst remnants of old plage 13808 of the previous rotation.
 No calcium spectroheliograms were obtained at the McMath-Hulbert Observatory on September 5, 18, 19, 22, 25 and 26, 1975.
 Sunspot observations were made at Mt. Wilson Observatory on all days during September 1975.

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DAILY CALCIUM PLAGE INDEX

SEPTEMBER 1975

YR	MO	DAY	INDEX	YR	MO	DAY	INDEX	YR	MO	DAY	INDEX
75	9	1	*	75	9	11	4.6	75	9	21	5.1
75	9	2	18.5	75	9	12	6.8	75	9	22	*
75	9	3	18.2	75	9	13	6.8	75	9	23	4.2
75	9	4	19.6	75	9	14	7.9	75	9	24	3.8
75	9	5	*	75	9	15	7.1	75	9	25	*
75	9	6	17.5	75	9	16	5.9	75	9	26	*
75	9	7	16.1	75	9	17	5.3	75	9	27	5.6
75	9	8	15.6	75	9	18	*	75	9	28	7.0
75	9	9	12.3	75	9	19	*	75	9	29	7.3
75	9	10	8.1	75	9	20	6.0	75	9	30	8.4

* NO OBSERVATIONS

SEPTEMBER 1975

SEPTEMBER 1975

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SOLAR RADIO EMISSION SPECTRAL OBSERVATIONS

SEPTEMBER 1975

SEP 1975	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE
				DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT	START UT	END UT	INT	START UT	END UT	INT	
15	2147	2400	MANI										
16	0000	0595	MANI										
	0000	0130	BOUL										
	0527	1334	DURN										
	0546	1532	WEIS										
	1027	2248	SGMR										
	1230	2400	BOUL										
	1316	2245	HARV										
	1537	1652	WEIS										
	2148	2400	MANI										
17	0000	0959	MANI										
	0000	0130	BOUL										
	0547	1657	WEIS										
	0638	1724	DURN										
	1029	2247	SGMR										
	1230	2400	BOUL										
	1317	2245	HARV										
	2148	2400	MANI										
18	0000	0959	MANI										
	0000	0100	BOUL										
	0550	1312	WEIS										
	1030	2245	SGMR										
	0534	1724	DURN	1158.3	1158.5	2							IIIG,RS
	1300	2400	BOUL										
	1315	2245	HARV										
			DURN	1356.4	1357.3	3	1356.5	1356.6	2				IIIG
	1320	1652	WEIS				1356.5	1356.7	1				IIIG
			DURN	1357.4	1358.4	2							OCIM,C
	2148	2400	MANI										
19	0000	0958	MANI										
	0000	0100	BOUL										
	0535	1722	DURN										
	0549	1651	WEIS										
	1031	2243	SGMR										
	1316	2245	HARV										
	1500	2400	BOUL										
	2148	2400	MANI										
20	0000	0955	MANI										
	0000	0100	BOUL										
	0535	1447	DURN										
	0553	1026	WEIS										
	1032	2241	SGMR										
	1040	1647	WEIS										
	1230	2400	BOUL										
	1316	2245	HARV										
	2148	2400	MANI										
21	0000	0955	MANI										
	0000	0100	BOUL										
	0557	1649	WEIS										
	1033	2239	SGMR										
	1230	2400	BOUL										
	1316	2245	HARV										
	2148	2400	MANI										
22	0000	0953	MANI										
	0000	0100	BOUL										
	0534	1716	DURN										
	0559	0843	WEIS										
	0852	1642	WEIS	0941.2	0941.3	2							III8
	1034	2238	SGMR										
	1230	2400	BOUL										
	1316	2245	HARV										
	2148	2400	MANI										
23	0000	0953	MANI										

SEPTEMBER 1975

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COSMIC RAY INDICES
(Neutron Monitors)
SEPTEMBER 1975

	THULE	ALERT	DEEP RIVER	CALGARY	SULPHUR MT	KIEL	CLIMAX	TOKYO
SEPT. 1975	Average cts/hr	Average cts/hr	Average cts/hr	Average cts/hr	Average cts/hr	Average cts/hr	Average cts/hr	Average cts/hr
1	4607.5	7549.2	7063.4	11850.6	9055.5	6352.9	-- (0)	3562.9
2	4591.9	7542.8	7045.0	11805.7	9022.0	6336.8	-- (0)	3562.4
3	4577.6	7520.9	7041.2	11786.6	8997.3	6346.1	-- (0)	3557.7
4	4578.0	7534.3	7057.1	11816.2	9024.9	6360.3	4248.6(30)	3562.5
5	4609.8	7568.2	7086.2	11913.5	9046.4	6391.1	4263.4(28)	3560.5
6	4588.4	7540.5	7106.0	11896.2	9076.8	6393.2	4283.9(26)	3569.1
7	4588.5	7584.5	7081.9	11886.4	9059.8	6379.9	4266.4(20)	3564.2
8	4561.4	7520.0	7075.9	11859.2	9067.2	6366.7	4274.3(14)	3567.8
9	4527.9	7488.1	7053.3	11806.9	9007.7	6355.5	4248.9(28)	3548.8
10	4528.8	7487.2	7034.0	11750.2	8983.9	6343.0	4250.5(28)	3540.4
11	4514.8	7474.8	7010.3	11778.8	8995.6	6341.0	4249.4(28)	3532.9
12	4507.0	7464.0	7013.4	11783.9	8975.4	6351.8	4238.3(30)	3532.8
13	4511.9	7492.0	7035.0	11808.5	8995.9	6362.3	4236.6(32)	3536.6
14	4520.8	7502.0	7034.1	11786.8	9003.0	6356.0	4247.8(26)	3542.2
15	4532.3	7510.5	7023.2	11789.9	9002.8	6324.9	4231.8(32)	3541.7
16	4534.8	7503.8	7040.7	11813.1	9037.8	6313.0	4241.4	3547.5
17	4543.2	7515.4	7050.4	11711.9	9011.2	6309.4	4244.7	3548.2
18	4527.5	7495.1	7014.3	11706.3	8974.9	6309.2	4240.9	3536.1
19	4488.3	7439.7	6955.3	11669.0	8933.1	6259.7	4209.9	3530.7
20	4488.6	7426.4	6978.7	11686.0	8927.8	6285.4	4217.0	3534.5
21	4498.7	7444.0	7000.9	11719.4	8942.7	6280.5	4220.6	3537.3
22	4503.0	7454.2	6995.0	11721.5	8948.4	6287.0	4208.2	3530.3
23	4503.2	7456.1	6996.5	11760.1	8970.4	6296.0	4213.1	3535.0
24	4527.0	7480.9	7016.5	11760.7	8996.4	6323.7	4231.1	3539.0
25	4559.1	7521.5	7030.0	11800.9	9019.2	6350.5	4234.7	3546.4
26	4566.8	7521.3	7030.6	11824.4	9036.8	6363.7	4254.4	3551.8
27	4540.4	7480.3	7016.9	11790.9	8999.1	6337.0	4261.3	3540.7
28	4550.3	7492.8	7026.8	11767.0	8986.2	6309.6	4242.5	3540.9
29	4560.7	7484.5	7029.7	11779.8	8998.4	6305.1	4243.5	3537.1
30	4566.7	-- (0)	7043.5	11822.4	9023.3	6320.0	4251.8	3545.7
MEAN	4543.5	7499.8	7032.8	11788.4	9004.0	6333.7	4242.8	3546.1

() 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.

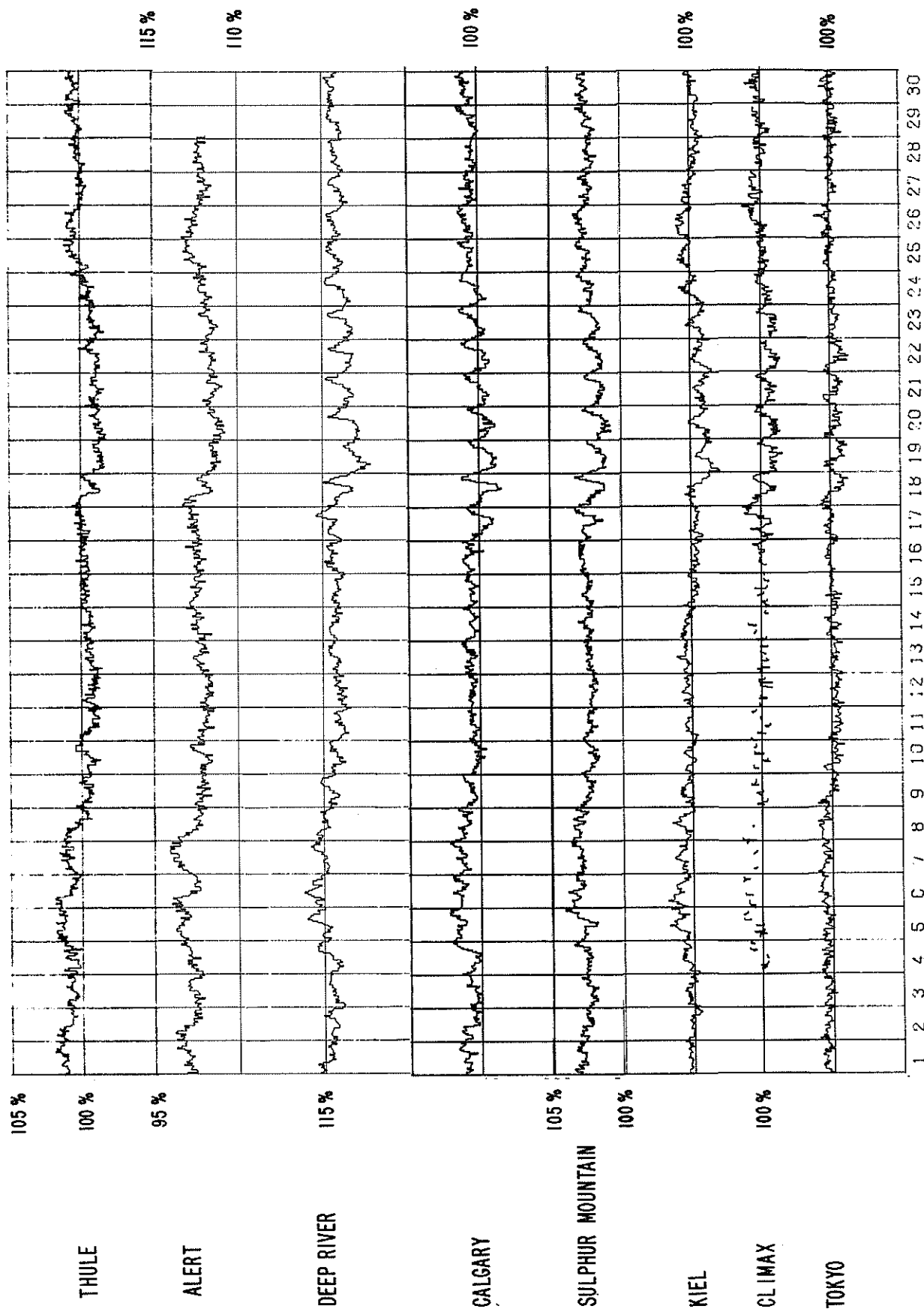
Deep River Scaling Factor = 300.

Tokyo Scaling Factor = 128.

COSMIC RAY INDICES (Neutron Monitors)

SEPTEMBER 1975

97
Sep 75



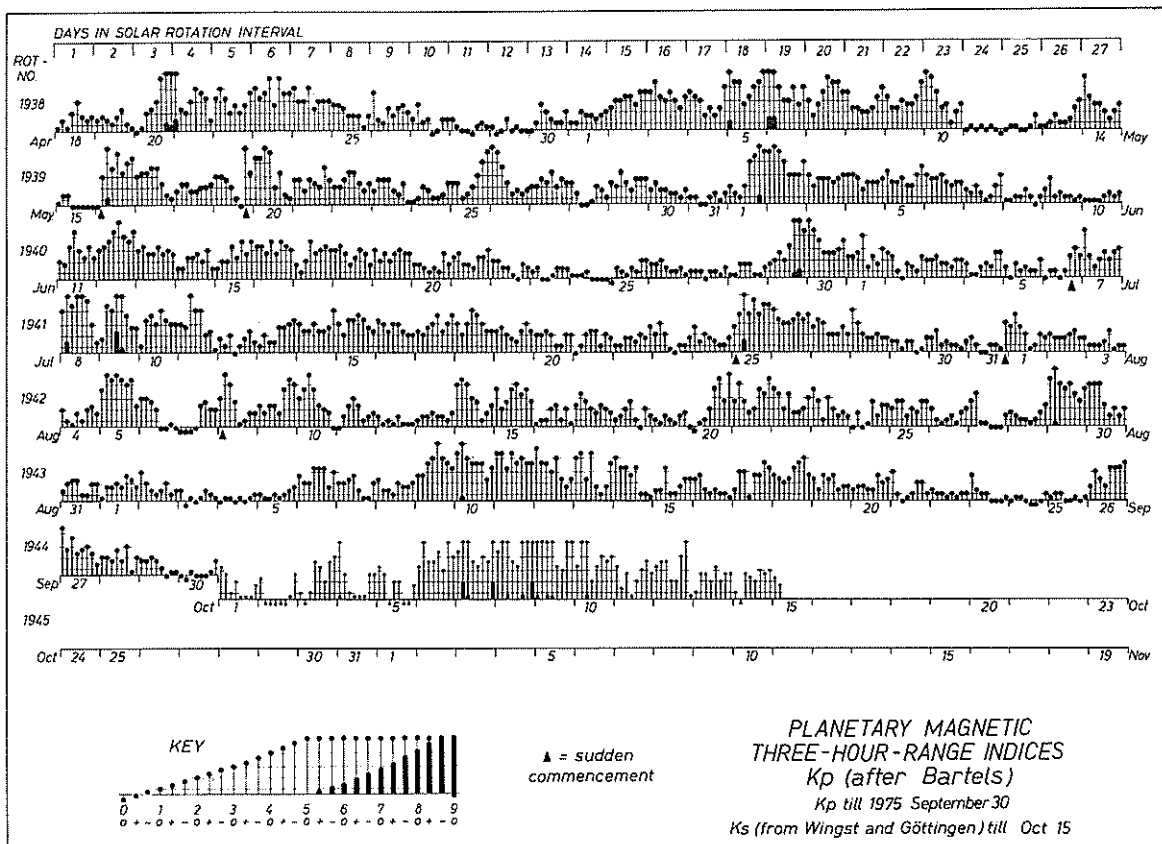
98
Sep 75

GEOMAGNETIC ACTIVITY INDICES

SEPTEMBER 1975

Day	Three-Hour Range Indices Kp									Cp	Ap	aa		
	1	2	3	4	5	6	7	8	Sum			N	S	M
1	1-	2-	2-	2	2-	3-	2+	2-	14+	0.3	7	17	15	13 20
2	3	2	1+	1	1+	2	1	1+	13	0.3	6	13	12	15 10 CK
3 QQ	1+	0	1-	0+	1-	1+	1	1-	6	0.1	3	9	6	6 9 CC
4 QQ	0+	1-	1-	0+	1-	0+	1-	1	5-	0.0	3	7	6	7 6 CC
5 Q	1	1-	1-	1	1-	1	1+	2-	8	0.1	4	8	7	6 9 CK
6	3-	2	2	3+	3+	3+	2-	3	21+	0.7	13	28	23	25 26
7	2	2	2+	3-	1+	1-	1-	2	14-	0.3	7	14	9	16 8 C
8	2+	1+	1+	1	2	2-	2-	2	13+	0.3	6	15	8	9 15 C
9 0	3-	3-	4-	4	5	4	4-	3+	29	1.1	24	35	40	27 48
10 0	4+	5+	4	4-	4-	4-	2+	3+	30+	1.2	26	37	42	43 36
11 0	4+	4+	3+	4+	4-	4	4-	4-	31+	1.2	26	48	37	45 40
12 0	5-	4-	4-	3	4	2+	2-	2+	25+	1.0	19	30	30	34 26
13 0	4	4+	2+	4+	2-	1	2-	4-	23	0.9	17	33	21	36 18
14	4	3+	3+	3-	3+	1	1	1-	19+	0.7	13	20	25	30 15
15	1+	1+	3+	1	1	2-	2+	2+	14+	0.4	8	16	15	14 18 K
16 Q	2+	3-	1+	1	1+	1	1	1-	11+	0.3	6	10	6	8 9 CK
17	1+	3	3	1-	3-	3-	4-	3+	20+	0.7	13	26	23	19 31
18	3-	2+	2	2+	3+	4-	4	3-	23	0.8	14	24	23	13 34
19	2+	1+	3-	2+	3-	1+	2-	2-	16	0.4	8	15	15	15 16
20	1+	2-	2-	1+	1+	3-	2	2+	14+	0.3	7	17	12	10 18
21	3	1	0+	1-	1	2	2	1	11	0.3	6	12	10	11 12 CK
22 Q	1+	1	1	1-	1	1-	1	1	8-	0.1	4	9	7	9 7 CC
23 Q	3-	1+	1	1	0+	0+	0+	1-	8-	0.1	4	10	7	13 5 CC
24 QQ	0+	1-	1-	0+	0	0	0+	1	3+	0.0	2	7	4	5 7 CC
25 QQ	1-	1	1	0+	0+	1-	0+	1-	5	0.1	3	6	4	4 6 CC
26	2-	3	2+	2-	3+	3+	3+	4-	22+	0.8	14	32	20	14 37
27	4+	3-	4-	2+	3-	3	2+	1+	22+	0.8	14	21	27	25 24
28	2	2	2-	3-	2-	3	1-	2	16-	0.4	8	20	19	20 20
29 Q	2-	2-	2	2-	1	0+	1-	1-	10-	0.2	5	10	9	11 8 CK
30 QQ	0+	0	1-	0+	0+	0+	1-	2-	4+	0.0	2	6	5	5 6 CK
MEAN										0.46	10	18.5	16.2	17.5

GEOMAGNETIC ACTIVITY INDICES

DAILY AVERAGE INDICES A_p

1974				1975								
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SUM
1	28	6	6	7	37	21	7	6	24	12	9	7
2	30	5	15	4	23	10	5	16	28	6	7	0
3	12	6	15	7	12	11	6	19	12	7	5	3
4	8	3	9	32	10	9	7	14	11	6	6	3
5	10	5	7	27	17	30	16	34	12	5	29	4
6	11	10	4	26	8	20	15	35	11	6	7	13
7	6	7	8	44	15	3	25	22	6	12	5	7
8	10	21	13	36	8	2	32	14	4	37	14	6
9	39	39	42	7	11	8	52	16	5	35	15	24
10	10	10	20	6	38	80	35	19	4	17	15	20
11	6	43	21	4	36	53	34	2	14	19	7	26
12	17	70	18	4	35	37	27	3	27	5	4	19
13	46	36	22	32	27	29	29	6	14	10	5	17
14	30	36	13	33	25	29	21	14	8	13	16	13
15	50	19	14	15	21	20	7	3	13	15	18	8
16	68	16	8	21	30	27	6	28	17	12	5	6
17	47	14	18	29	14	13	5	14	12	14	9	13
18	43	3	28	22	15	17	6	7	12	15	6	14
19	29	14	27	10	11	11	5	15	12	9	4	6
20	41	22	21	10	8	14	25	23	6	6	15	7
21	10	24	19	6	8	3	23	12	9	6	17	6
22	15	18	14	8	7	6	15	11	5	6	12	4
23	5	16	17	12	32	13	25	3	4	6	10	4
24	38	26	14	10	17	14	17	5	3	6	6	2
25	22	19	12	5	20	8	8	14	4	33	9	3
26	28	17	12	5	9	17	9	19	5	19	5	14
27	25	9	21	14	5	34	5	10	4	11	6	14
28	29	6	12	12	12	38	3	5	4	16	5	8
29	19	3	11	6		22	2	11	26	4	27	5
30	12	2	6	7		18	6	6	22	5	14	2
31	8		14	16		13		4		5	6	
MEAN	26	19	15	16	18	20	16	13	11	12	10	10

HOURLY EQUATORIAL DST VALUES (PROVISIONAL)

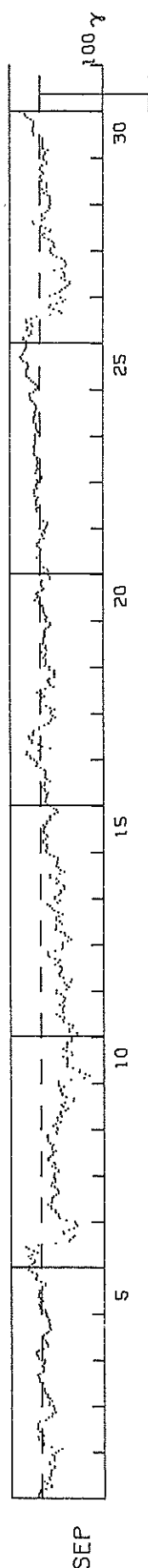
SEPTEMBER 1975

NASA/GODDARD SPACE FLIGHT CENTER

(Units-Gommas)

(Time-UT)

DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	3	2	1	0	-4	-10	-10	-5	-3	-8	-7	-9	-9	-9	-10	-12	-12	-8	-7	-12	-12	-12	-10	-13
2	-16	-19	-9	-2	-2	-1	2	3	-2	-1	1	3	3	3	3	1	-5	-7	-10	-11	-13	-12	-12	-11
3	-8	-8	-10	-8	-6	-4	-3	-3	-3	-1	-1	-2	1	1	2	3	1	-2	-3	-3	-1	-3	-4	-4
4	2	3	4	4	2	-2	-6	-6	-5	-4	-2	-2	-3	-5	-7	-9	-8	-8	-8	-7	-8	-6	-5	-5
5	-4	-4	1	1	2	0	-2	0	2	2	1	1	-1	-1	-4	-4	0	4	4	3	4	8	11	10
6	10	8	6	5	9	11	8	3	6	11	13	2	-14	-26	-27	-29	-31	-21	-20	-26	-30	-33	-32	-31
7	-23	-17	-16	-16	-14	-13	-10	-9	-7	-10	-11	-11	-12	-14	-16	-16	-15	-13	-10	-11	-13	-12	-12	-12
8	-13	-16	-16	-14	-11	-13	-12	-7	-7	-9	-11	-12	-14	-11	-11	-12	-9	-7	-7	-6	-7	-15	-14	-16
9	-15	-12	-14	-18	-16	-15	-19	-18	-18	-23	-25	-21	-19	-22	-30	-31	-23	-20	-20	-18	-19	-21	-17	-16
10	-16	-28	-40	-45	-41	-35	-36	-29	-24	-24	-25	-24	-24	-21	-29	-28	-23	-21	-24	-25	-24	-28	-29	-29
11	-34	-33	-26	-26	-29	-30	-26	-21	-20	-22	-18	-15	-21	-21	-20	-22	-18	-20	-22	-23	-21	-19	-15	-15
12	-24	-26	-24	-22	-28	-29	-21	-18	-17	-19	-20	-20	-18	-14	-16	-18	-13	-8	-7	-7	-14	-20	-21	-20
13	-21	-25	-28	-26	-23	-22	-19	-14	-15	-15	-20	-18	-15	-15	-17	-20	-17	-13	-11	-9	-7	-16	-18	-13
14	-14	-17	-19	-19	-22	-22	-21	-15	-17	-15	-9	-9	-18	-22	-19	-17	-15	-16	-16	-17	-16	-13	-9	-6
15	-5	-7	-6	-6	-3	-3	-5	-7	-6	-4	-3	-4	-5	-3	-6	-7	-9	-10	-10	-13	-16	-15	-13	-10
16	-7	-5	-5	-6	-7	-7	-8	-5	-4	-2	-4	-5	-9	-7	-5	-5	-5	-5	-4	-1	3	2	3	5
17	8	9	12	11	1	-10	-2	1	7	7	9	10	6	6	5	0	0	-4	-8	-10	-11	-14	-12	-10
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20	-5	-7	-5	-4	-3	-3	-4	-2	0	1	4	2	1	3	1	-2	-4	-2	-1	-2	-3	-10	-9	-8
21	-5	-8	-7	-4	-1	-1	-1	0	2	0	-1	-1	-2	0	2	2	0	-1	-4	-3	-2	-5	-4	-6
22	-7	-8	-8	-4	-1	-1	-1	0	2	3	1	3	3	3	2	1	4	5	5	4	2	3	2	1
23	2	-2	-3	-1	3	2	1	2	2	1	1	2	2	4	5	4	4	5	4	3	3	4	3	4
24	3	1	2	3	3	3	5	5	5	4	3	4	3	2	2	3	4	6	8	8	9	8	5	3
25	1	1	3	5	7	9	11	12	12	11	10	9	10	11	14	16	17	15	14	13	12	11	11	11
26	11	14	14	9	7	7	11	10	6	7	11	12	7	2	-11	-21	-19	-13	-10	-11	-17	-22	-24	-20
27	-10	-15	-19	-21	-24	-26	-28	-28	-24	-21	-23	-24	-22	-14	-21	-24	-25	-24	-23	-21	-16	-13	-11	-10
28	-11	-14	-13	-14	-12	-9	-5	-3	-5	-10	-11	-6	-2	5	6	-3	-5	-3	-2	-6	-8	-10	-9	-11
29	-10	-11	-10	-10	-8	-5	-7	-3	-7	-7	-7	-3	-3	-1	-2	-4	-3	-1	-1	-3	-7	-7	-5	-4
30	-4	-6	-6	-8	-4	-3	-4	-3	-3	-3	-1	5	5	6	6	5	4	4	5	7	10	12	13	17



PRINCIPAL MAGNETIC STORMS

SEPTEMBER 1975

OBS. 2 letter IAGA code	GEOMAG- NETIC LATI- TUDE	COMMENCEMENT		SC - AMPLITUDES			MAXIMUM 3 HOUR - INDEX K		RANGES			UT END	
		hr min DAY (UT)	TYPE	D(')	H(γ)	Z(γ)	DAY (3 HOUR PERIOD)	K	D(')	H(γ)	Z(γ)	DAY	HOURL
AL	09.5N	6 07--	..	..	..	..	06(5,6)	5	5	112	34	06	18
HD	07.6N	6 0000	..	..	..	..	06(5,6)	5	7	123	31	07	15
AN	01.5N	6 07--	..	..	..	..	--	-	5	149	56	06	18
TV	01.1S	6 07--	..	..	..	..	--	-	3	197	45	06	18
HD	07.6N	6 1200	..	..	..	..	09(6)	5	5	104	30	12	16
GO	64.6N	9 01--	..	..	..	..	09(5) 11(4) 12(5)	7	230	1860	680	12	16
SI	60.0N	9 0720	SC	+ 3.7	0	- 4.4	11(4)	6	60	600	560	12	16
NE	55.1N	9 00--	..	..	..	..	10(2)	6	43	103	198	14	14
BD	48.9N	9 02--	..	..	..	..	10(2)	6	30	90	59	14	18
GN	43.2S	9 04--	..	..	..	..	09(5,6) 10(5) 11(4)	5	18	80	110	11	18
KG	56.5S	9 06--	..	..	..	..	10(1,2)	5	--	--	--	13	06
KG	56.5S	13 21--	SC	..	..	..	13(8) 14(1,2)	4	--	--	--	14	15
HD	07.6N	17 0401	SC	- 0.4	+17	- 2	17(2)	4	6	77	32	18	22
AL	09.5N	26 08--	..	..	..	..	26(5)	5	2	101	21	26	20
HD	07.6N	26 0330	..	..	..	..	26(5,6)	5	4	115	26	28	20
GU	04.0N	26 1015	..	..	..	..	26(5)	5	0	60	10	27	17
AN	01.5N	26 08--	..	..	..	..	--	-	2	109	41	26	20
TV	01.1S	26 08--	..	..	..	..	--	-	1	137	41	26	20
PM	18.7S	26 04--	..	..	..	..	27(5)	5	4	110	30	28	18

Reports were received from the following observatories:

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

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Sep 75

SUDDEN COMMENCEMENTS AND SOLAR FLARE EFFECTS
SEPTEMBER 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)

n o n e

Sudden impulses found in the magnetograms (si)

n o n e

Solar-flare effects (sfe)

Effects confirmed by ionospheric or solar observations are underlined.

12 1229 - 1241 SZ
13 0806 - 0813 SZ
19 0917 - 0924 SZ
19 1830 - 1838 LG

20 1408 - 1418 SZ
28 1331 - 1347 SZ
28 1610 - 1621 LG SZ

RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

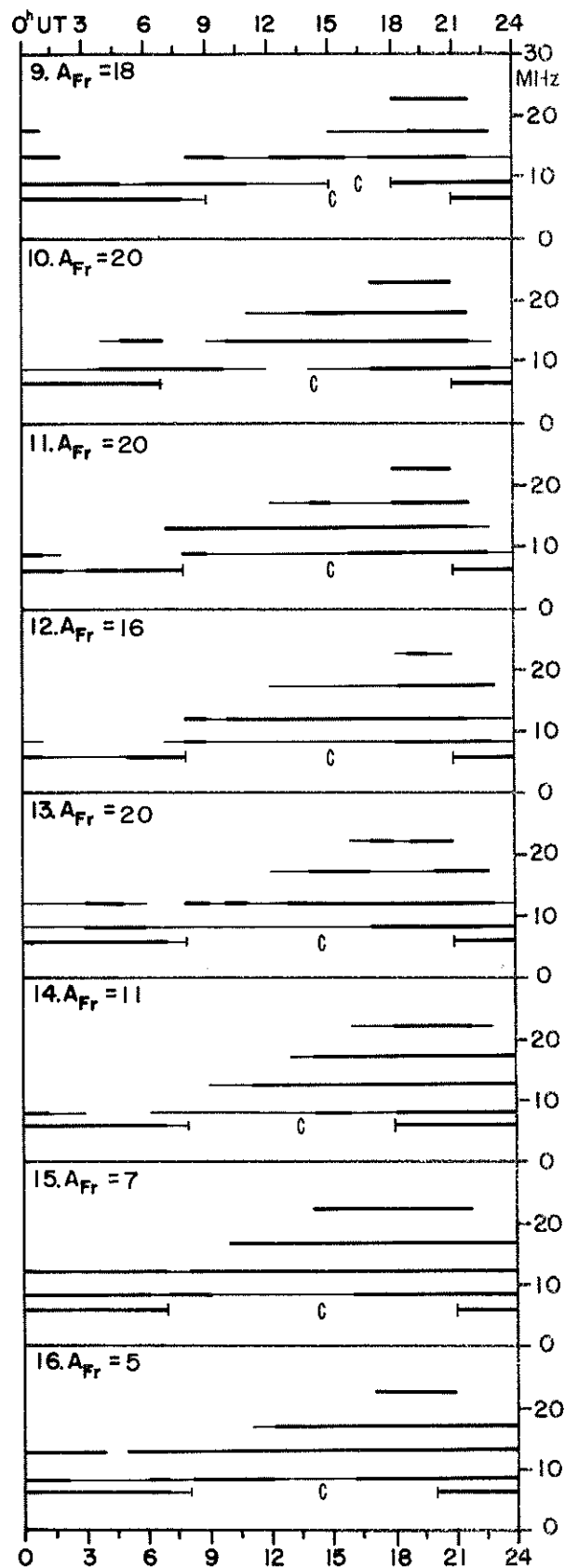
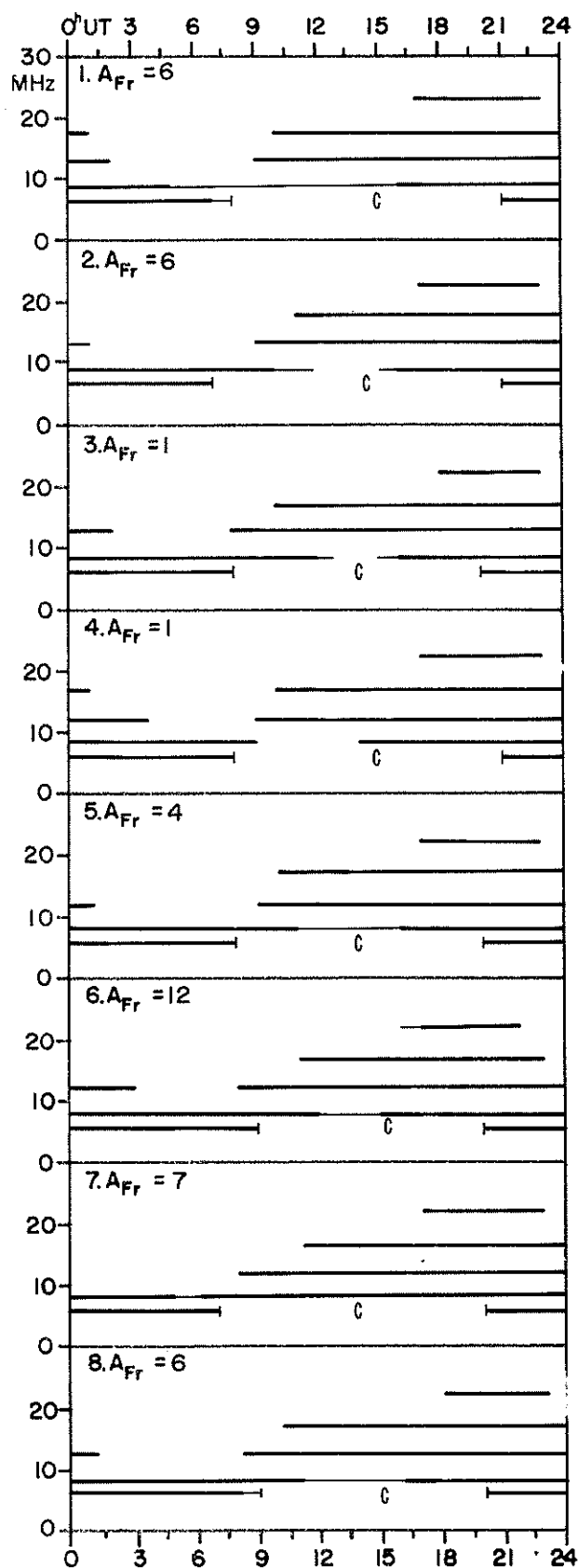
SEPTEMBER 1975

North Atlantic

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

TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH

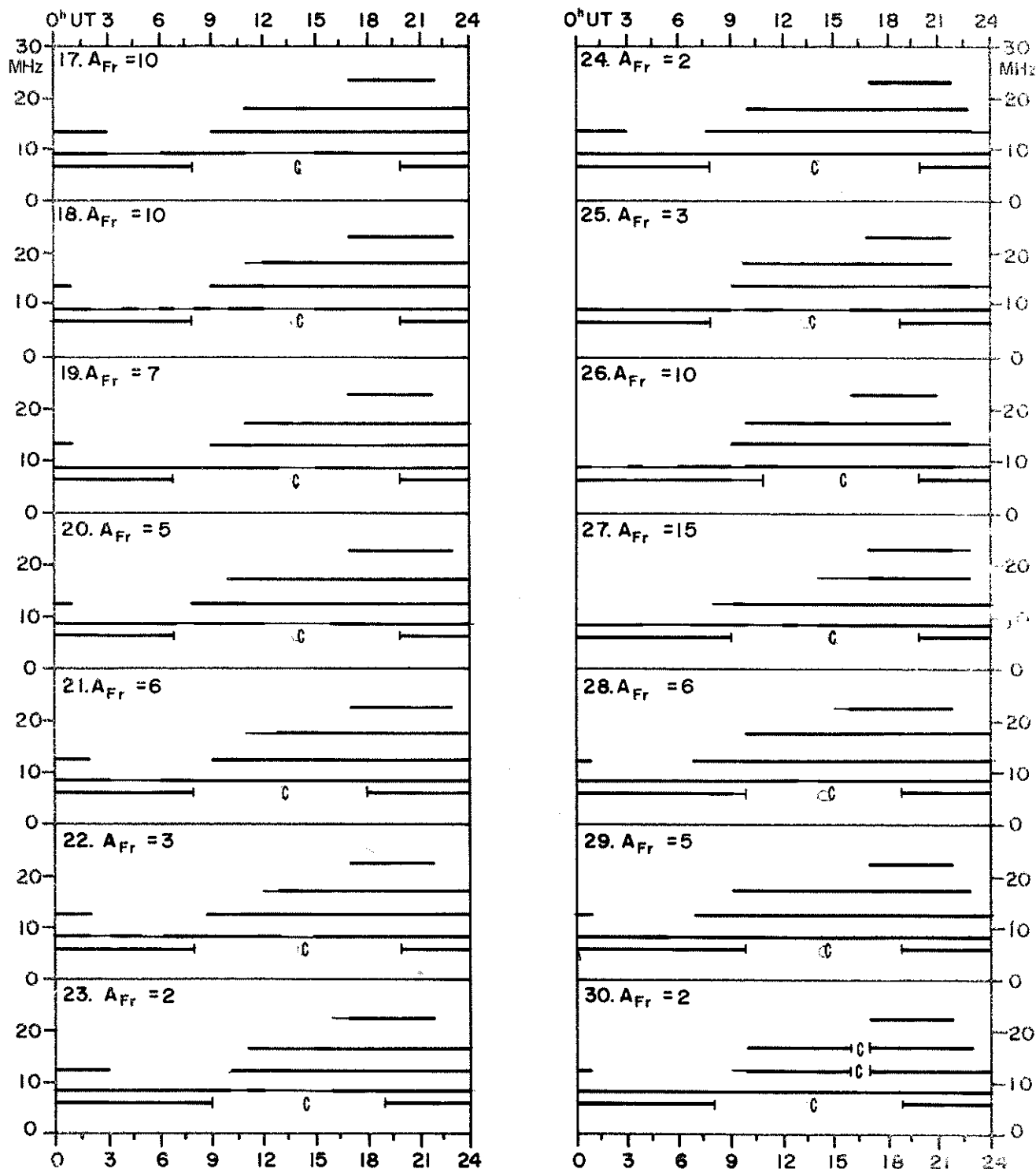
SEPTEMBER 1975



TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH

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Sep 75

SEPTEMBER 1975



Adapted from Observations by Deutsche Bundespost

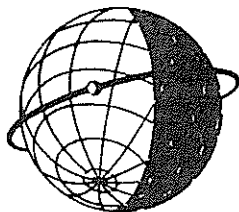
RADIO PROPAGATION QUALITY INDICES

SEPTEMBER 1975

Quality Indices calculated for reception at Lüchow

	TOKYO	HALIFAX	MAURITIUS	CANBERRA	BRACKNEL
1	8.1	8.3	6.9	6.6	13.5
2	8.1	8.7	7.0	6.9	14.1
3	8.5	9.1	7.0	6.7	13.4
4	8.9	9.7	6.8	6.1	12.7
5	9.1	10.3	6.2	6.2	13.9
6	7.9	9.1	7.0	5.9	13.8
7	7.4	9.5	7.0	5.9	13.7
8	8.3	8.8	4.9	6.2	13.6
9	7.4	5.7	5.6	5.9	13.5
10	6.6	5.6	5.9	5.6	13.3
11	6.6	5.3	5.2	5.0	12.8
12	7.8	5.9	5.9	5.1	12.7
13	7.2	5.9	5.7	4.9	12.9
14	7.9	6.1	5.8	5.1	12.8
15	8.3	7.8	6.0	5.5	12.8
16	7.9	9.0	6.3	5.4	13.0
17	8.0	8.5	6.6	5.4	13.8
18	8.4	7.2	6.7	5.8	14.1
19	10.2	8.6	6.8	5.8	13.9
20	10.0	8.7	6.4	5.8	14.2
21	9.4	8.6	6.9	5.8	14.1
22	9.3	8.9	6.2	5.6	14.4
23	8.9	9.5	6.2	5.3	14.1
24	9.5	9.3	5.7	5.7	14.2
25	9.1	8.6	5.4	5.5	14.1
26	9.7	8.1	4.6	5.3	13.8
27	9.6	6.9	4.9	5.7	13.2
28	9.6	8.7	4.7	5.5	13.5
29	9.2	9.0	5.2	5.8	14.2
30	8.9	9.0	8.0	5.7	13.8
MEAN	8.5	8.1	6.1	5.7	13.6

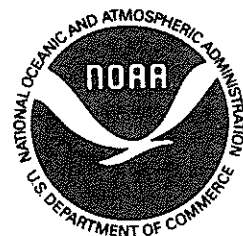
The method of calculation of the radio propagation indices changed in July 1974. An absolute quality figure is calculated for a 24-hour period from Tokyo, Halifax, Mauritius (Africa) and Canberra. The figure 0.0 corresponds to a median field strength of -30 dB above 1 μ V/m (converted into 1 kW and referred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



WORLD DATA CENTER A

FOR

SOLAR-TERRESTRIAL PHYSICS



The ICSU Panel on WDCs has recommended that it would be appropriate courtesy to acknowledge in publications that data were obtained from the originating station or investigator through the intermediary of the WDCs. The following statement is suggested:

"Data used in this study were provided by WDC-A for Solar-Terrestrial Physics, NOAA E/GC2, 325 Broadway, Boulder Colorado 80303, USA."