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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
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ENVIRONMENTAL DATA SERVICE
Thomas S. Austin, Director

Solar - Geophysical Data

NO. 357 MAY 1974

Part I (Prompt Reports)

DATA FOR
APRIL 1974
MARCH 1974

NATIONAL GEOPHYSICAL AND SOLAR - TERRESTRIAL DATA CENTER
BOULDER, COLORADO

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To standardize referencing these reports in the open literature, the following format is recommended:

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*CRPL-FB 135 through 269
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299 Part I or 299 Part II to number of current issue.

SOLAR - GEOPHYSICAL DATA

No. 357

Issued in two parts

Hope I. Leighton, Editor

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

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APRIL 1974 DATA

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For explanations of the data contained herein see *Descriptive Text* published as supplement to February 1974 *Solar-Geophysical Data* (Number 354).

ALERT PERIODS

INTERNATIONAL URSIGRAM
AND WORLD DAYS SERVICE

APRIL 1974

PRESTO MESSAGES (THE RAPID REPORT OF MAJOR EVENTS)

Date	
16	BOULDER 16/1730Z TENFLARE 112 FLUX UNITS 16/1623Z 11 MINUTE DURATION
18	BOULDER 18/0645Z MINOR RECURRENT MAGSTORM BEGINS 18/0400Z
	BOULDER 18/2310Z TENFLARE 98 FLUX UNITS 18/2226Z 03 MINUTE DURATION LARGE IMPORTANCE 2 BRIGHT SURGE OCCURRED ON WEST LIMB AT 18/2237Z. SMALL RESULTANT PROTON EVENT AT EARTH POSSIBLE BY 19/1000Z.
27	BOULDER 27/0430Z MAGSTORM BEGINS 27/0100Z

SUMMARY OF THE GEOALERT WWA MESSAGES

Message serial number	Date of issue	Date of observation	Wolf number	10cm solar flux	A index	Active Regions: Location Lat-Long	No. of Flares: Total	M	X	Outstanding events	Forecasts: Date	Location Lat-Long	Desc*	Alert Situations
091	01	31	037	073	016	N08W83	0	0	0		01	N08W83	Q	SOLQUIET MAGQUIET
						S11E30	0	0	0			S11E30	Q	
						N14E62	0	0	0			N14E62	Q	
092	02	01	032	072	014	S14E16	0	0	0		02	S12E16	Q	SOLQUIET MAGQUIET
						N13E48	0	0	0			N13E48	Q	
093	03	02	032	071	009	S13E02	0	0	0		03	S13E02	Q	SOLQUIET MAGQUIET
						N11E32	0	0	0		03	N11E32	Q	
094	04	03	024	071	025	S10W11	0	0	0	MINOR RECURRENT GEOMAGNETIC DISTURBANCE STARTED 03/0200Z	04	S10W11	Q	SOLQUIET MAGALERT MINOR 04/07
						N14E21	0	0	0			N14E21	Q	
095	05	04	030	073	028	S11W22	0	0	0	MINOR MAGNETIC DISTURBANCE CONTINUES	05	S11W22	Q	SOLQUIET MAGALERT MINOR 05/07
						N12W08	1	0	0			N12W08	Q	
096	06	05	019	076	018	N12W06	0	0	0	MINOR MAGNETIC DISTURBANCE CONTINUES	06	N12W06	Q	SOLQUIET MAGALERT MINOR 06/07
097	07	06	020	080	017	N12W19	0	0	0	MINOR MAGNETIC DISTURBANCE CONTINUES	07	N12W19	Q	SOLQUIET MAGALERT MINOR 07/09
098	08	07	057	080	014	N12W34	1	0	0		08	N12W34	Q	SOLQUIET MAGNIL
						S11E40	1	0	0			S11E40	Q	
						S10W15	0	0	0			S10W15	Q	
						N05E12	0	0	0			N05E12	Q	
099	09	08	058	081	012	N12W48	0	0	0		09	N12W48	Q	SOLQUIET MAGQUIET
						S13W31	2	0	0			S13W31	Q	
						S05E00	0	0	0			S05E00	Q	
						S17E50	3	0	0			S17E50	Q	
100	10	09	058	088	012	N14W58	1	0	0		10	N14W58	Q	SOLQUIET MAGQUIET
						S13E15	7	0	0			S13E15	E	
						S04W16	0	0	0			S04W16	Q	
												S15E34	Q	
101	11	10	069	095	016	S01E12	14	1	0		11	S01E12	E	SOLALERT 11/XX MAGQUIET
						S04W31	0	0	0			S04W31	Q	
						S15E18	0	0	0			S15E18	Q	
102	12	11	085	099	019	S11W12	13	0	0		12	S11W12	A	SOLALERT 12/XX MAGQUIET
						S03W44	4	1	0			S03W44	E	
						S13E09	0	0	0			S13E09	Q	
103	13	12	097	107	003	S13W26	13	1	0		13	S13W26	E	SOLALERT 13/15 MAGQUIET
						S05W58	1	0	0			S05W58	Q	
						S15W03	0	0	0			S15W03	Q	
104	14	13	093	102	006	S12W38	18	8	1		14	S12W38	A	SOLALERT 14/15 MAGALERT 15/XX
						S04W70	2	0	0			S04W70	Q	
						S13W20	2	0	0			S13W20	Q	
105	15	14	109	116	004	S11W52	21	1	0		15	S11W52	E	SOLALERT 15/XX
						S04W86	1	0	0			S04W86	CA	MAGALERT MINOR 15/XX
						S15W31	0	0	0			S15W31	Q	
						S08E76	0	0	0			S08E76	Q	
106	16	15	198	126	005	S12W69	19	4	0		16	S12W69	A	SOLALERT 14/17 MAGALERT 16/XX
						S13W48	4	2	0			S13W48	A	
						S07E60	0	0	0			S07E60	Q	
						N12W78	0	0	0			S12W78	Q	
						N09W64	0	0	0			N09W64	Q	
						S08W69	3	1	0			S08W69	E	

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

ALERT PERIODS

INTERNATIONAL URSIGRAM
AND WORLD DAYS SERVICE

APRIL 1974

SUMMARY OF THE GEOALERT WWA MESSAGES

Message serial number	Date of issue	Date of observation	Wolf number	10cm solar flux	A index	Active Regions: Location Lat-Long	Active Regions: No. of Flares: Total	Active Regions: No. of Flares: M	Active Regions: No. of Flares: X	Outstanding events	Forecasts: Date	Forecasts: Location Lat-Long	Forecasts: Desc*	Alert Situations
107	17	16	126	115	002	S12W80	11	1	0		17	S12W80	ACP	SOLALERT 17/XX
						S13W60	15	2	1			S13W60	ACP	MAGALERT MINOR 17/XX
						S07E50	3	0	0			S07E50	Q	
						N08W76	0	0	0			N08W76	Q	
						S08W80	1	0	0			S08W80	E	
						S12W17	0	0	0			S12W17	Q	
108	18	17	098	101	003	S13W90	5	0	0		18	S13W90	ACP	SOLALERT 18/19
						S09W90	1	0	0			S13W73	ACP	MAGALERT MINOR 18/XX
						S13W73	7	1	0			S09W90	Q	
						S13W29	1	0	0			S13W29	Q	
												S09W25	Q	
												N02W08	Q	
												S07E23	Q	
109	19	18	089	097	025	S13W86	3	0	0	MAGSTORM 18/0200	19	S13W86	A	SOLALERT 19/XX
						S08E24	0	0	0	TENFLARE 18/2226		S08E24	Q	MAGALERT MINOR 19/XX
						S13W44	6	1	0	LARGE SURGE		S13W44	E	PROTON ARRIVAL ALERT CAUTION
						S09W38	0	0	0	18/2237		S09W38	Q	19/182237
						N02W21	0	0	0			N02W21	Q	
110	20	19	048	090	025	S08E11	0	0	0	MINOR MAGNETIC	20	S08E11	Q	SOLNIL MAGALERT MINOR 20/XX
						S13W58	1	0	0	STORM CONTINUES		S13W58	Q	
						S09W51	0	0	0			S09W51	Q	
111	21	20	042	082	032	S13W67	2	0	0	MINOR GEOMAGNETIC	21	S13W67	Q	SOLQUIET MAGALERT 21/XX
						S09W62	0	0	0	STORM CONTINUES		S09W62	Q	
						N03W45	0	0	0			N03W45	Q	
112	22	21	063	079	024	S13W84	2	0	0	MINOR GEOMAGNETIC	22	S13W84	Q	SOLQUIET MAGALERT 22/XX
						S08W79	0	0	0	STORM CONTINUES		S08W79	Q	
						N03W60	0	0	0			N03W60	Q	
						S09E53	0	0	0			S09E53	Q	
113	23	22	025	074	024	N03W76	0	0	0	MINOR GEOMAGSTORM	23	N03W76	Q	SOLQUIET MAGALERT 23/XX
						S08E39	0	0	0	CONDITIONS LOCAL		S08E39	Q	
										NIGHT TIME				
114	24	23	017	073	020	S07E24	1	0	0		24	S07E24	Q	SOLQUIET MAGALERT MINOR 24/XX
						S04W63	0	0	0			S04W63	Q	
115	25	24	019	074	012	S08E11	0	0	0	MAGSTORM END	25	S08E11	Q	SOLQUIET MAGALERT MINOR 25/27
										24/0520Z				
116	26	25	024	076	016	S08W03	1	0	0		26	S08W11	E	SOLQUIET MAGNIL
117	27	26	022	074	013	S09W17	3	0	0		27	S09W17	Q	SOLQUIET MAGQUIET
118	28	27	015	074	020	S09W28	3	0	0	MAGSTORM MINOR	28	S09W28	Q	SOLQUIET MAGALERT 28/29
										BEGINS 27/0100Z				
119	29	28	000	077	016	-	0	0	0	MAGSTORM ENDS BUT	29	SPOTNIL		SOLQUIET MAGALERT 30
										FIELD REMAINS DIS-				
										TURBED				
120	30	29	033	080	014	N08E65	0	0	0	MAGSTORM ENDED	30	N08E65	Q	SOLQUIET MAGALERT 01/07
						S04E73	1	0	0	27/1800Z BUT DIS-		S04E73	Q	
						N20W37	0	0	0	TURBED CONDITIONS		N20W37	Q	
										STILL EXIST				
121	01	30	024	090	019	S04E57	1	0	0		01	S04E57	Q	SOLALERT 01/XX
						S09E77	7	3	0			S09E77	A	MAGALERT MINOR 01/07

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

RELATIVE SUNSPOT NUMBERS

ZURICH, R_Z

	1973 FINAL								1974 PROVISIONAL			
DAY	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
1	24	8	29	36	89	68	31	46	18	13	25	26
2	46	8	31	28	124	66	33	24	15	12	16	20
3	64	16	39	21	130	52	23	24	13	8	16	19
4	77	14	32	28	121	50	20	0	12	7	17	22
5	92	7	42	34	108	44	7	0	8	0	18	21
6	68	16	56	40	84	38	0	0	0	0	19	23
7	82	37	57	42	77	30	0	0	0	8	20	28
8	52	41	50	40	72	22	0	7	29	16	16	38
9	30	31	38	38	75	23	0	8	36	22	20	58
10	25	38	32	27	58	8	0	16	44	21	30	70
11	26	60	23	23	42	0	7	9	49	21	37	75
12	18	58	14	0	22	0	0	9	60	36	38	78
13	7	52	15	0	0	8	9	8	45	50	30	83
14	7	54	10	0	0	10	11	8	74	26	42	87
15	25	48	16	0	13	16	12	17	77	46	37	98
16	33	45	9	0	26	18	13	26	64	48	23	93
17	34	36	28	0	20	19	16	40	65	47	20	75
18	41	18	42	7	16	15	16	43	52	46	32	64
19	42	38	23	7	8	0	22	41	58	45	20	51
20	46	51	8	7	30	0	16	47	49	43	9	49
21	52	75	8	15	39	0	23	51	37	37	16	43
22	56	66	14	10	48	16	29	51	36	45	31	28
23	47	54	0	17	58	28	39	47	28	35	27	17
24	57	51	9	22	63	36	38	51	16	29	21	19
25	64	49	14	28	74	53	46	53	0	17	18	20
26	49	46	8	38	78	59	62	57	8	20	10	20
27	51	43	9	37	78	53	60	26	0	42	9	38
28	32	42	10	47	80	62	61	12	8	35	17	30
29	29	51	17	56	75	65	64	0	7		19	22
30	21	33	11	64	71	55	59	0	0		25	16
31	17		22	82		37		0	0		26	
MEAN	42.4	39.5	23.1	25.6	59.3	30.7	23.9	23.3	29.3	27.7	22.7	44.4

1973 yearly mean = 38.0

DAILY SOLAR FLUX AT 2800 MHz
OTTAWA ARO

FLUX ADJUSTED TO 1 A.U., S_a

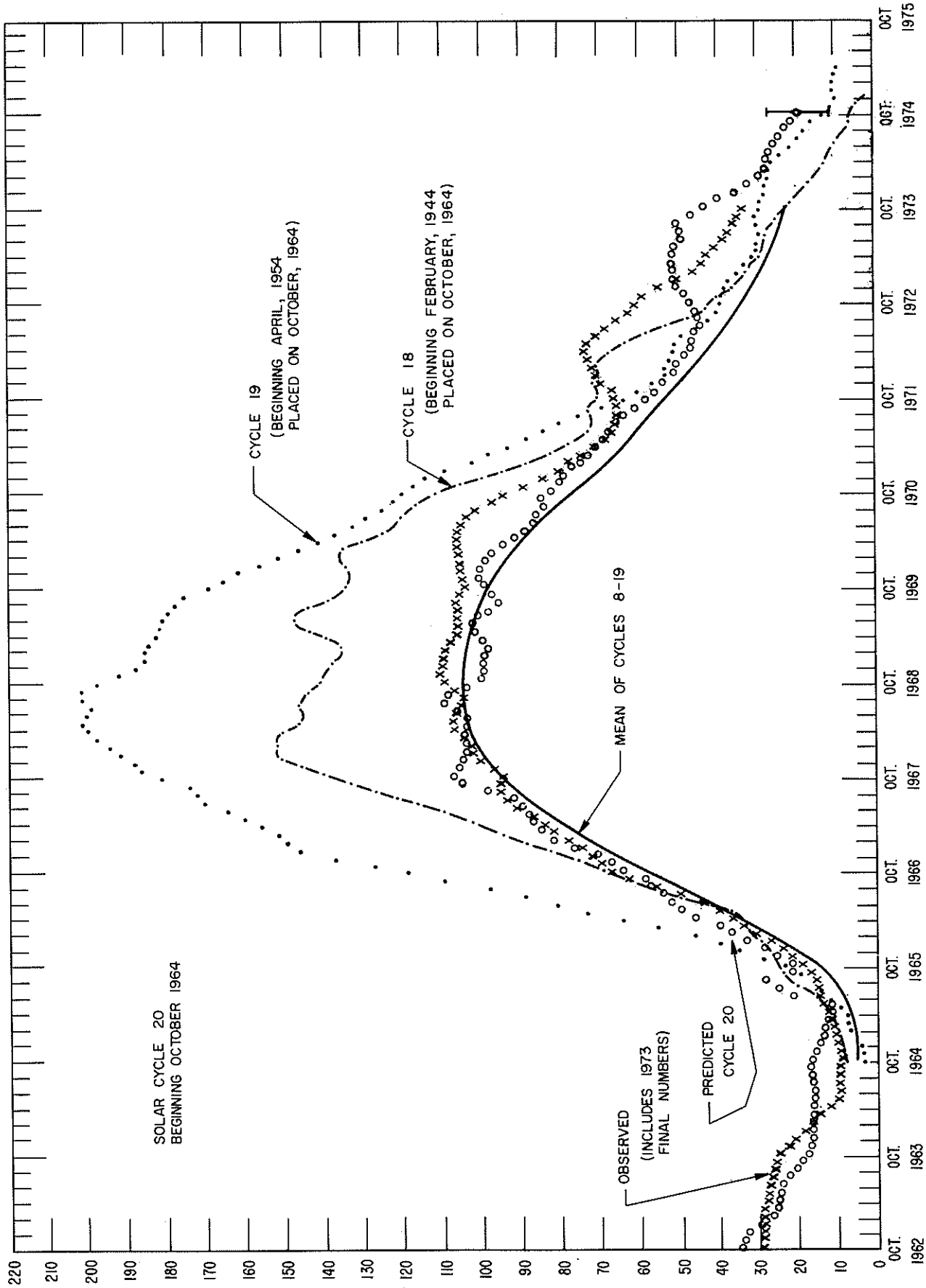
	1973								1974			
DAY	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
1	111.9*	85.2	90.9	86.9	114.9	109.0	87.0	86.9	71.5	71.8	76.4	72.1
2	115.0*	83.1	93.1	86.8	129.2*	106.1	83.9	86.3	73.2	73.1	76.5	71.3
3	117.3	81.5	93.5	85.0	136.5	103.5	81.1	82.7	73.3	73.1	77.1	71.6
4	115.9*	81.0	94.9	86.2	135.0*	94.9	77.4	78.6	72.5	72.9	79.0	73.3
5	115.0*	82.5	97.9	85.1	135.1*	90.6*	73.9	73.6	72.1	74.0	78.6	76.3
6	109.7	85.1	99.4	88.8	130.9	85.9	73.2	70.9	74.7	75.4	77.5	80.0
7	103.4	85.3	99.9	90.8	121.7*	82.2	72.1	70.4	76.0	77.4	76.0	80.2
8	100.0	87.4	97.6*	87.5	115.7	80.1	70.4	70.9	79.7	78.8	77.0	81.1
9	95.1	88.9	98.6*	87.1	113.1*	79.1	70.4	71.2	84.9	80.8	80.2	87.8
10	90.9*	91.0	100.5	83.4	106.7*	77.0	70.7	72.3*	89.2	80.5	86.1	93.5*
11	87.0	92.9	94.0	78.9	96.8	74.9	71.2	71.9	91.0*	77.5	85.9	99.8
12	86.8	93.6	85.4	76.3	89.5	72.0	70.7	72.5	94.6	76.5	86.2	105.6*
13	85.2	96.3	80.3	74.7	84.6	70.5	72.6	73.1	94.8*	77.3	84.5	102.8
14	89.3	97.7*	79.5	74.1	82.9	72.7	73.8	73.8	98.7	76.3	81.9	116.3
15	90.1	98.2	78.7	72.6	82.6	75.7	75.0	76.6	91.8	83.7	82.9	122.9*
16	89.5	95.2	79.5	74.1	83.9	75.6	75.6	79.7	90.0	84.7	81.8	115.0*
17	91.4	89.8	78.1	75.0	81.8	79.5	75.3	82.1	89.2	85.9	82.7	101.8
18	95.4	91.4	83.6	75.3	84.6	78.3	75.5	84.9	87.1	87.5	80.2	98.0
19	99.4	99.2	81.6	75.4	86.6	76.7	75.4	87.8	85.8	82.7	80.0	87.5*
20	104.7*	105.4	79.5	76.8	92.0	73.4	76.8	89.9	84.4	82.2	79.6	82.3
21	102.2	108.8	79.4	80.4*	94.9	80.0	88.7	97.6	79.7	82.2	79.1	79.5
22	103.1	109.4	77.6	80.4	99.5	85.0	84.7	96.7*	83.5*	82.2	80.0	75.3
23	99.6	108.8	78.6	81.8	103.9	89.9	86.5	96.0	81.0	84.2	79.8	73.9
24	104.5	106.1	81.6	85.3	106.2	97.6*	87.0	98.1	77.8	80.9	76.6	75.0
25	104.7	101.3	83.8	88.9	112.7	101.0	88.0*	97.6	74.1	78.6	74.3	76.5
26	101.1	100.3	85.0	91.2	115.5	101.0	91.8*	92.9	71.5	76.2	72.6	74.9
27	99.9	94.8	85.5	95.1	115.9	101.7*	88.8	88.6	70.7	76.4	71.8	75.3
28	94.1	95.2	84.2	97.5	118.1	100.7	90.7	81.7*	70.8	75.8	70.4	77.9
29	93.3	95.1	89.5*	100.8	116.5	99.1	94.9	76.4	70.7		71.5	81.6
30	90.8	94.1*	86.1	101.3	116.5*	97.4*	95.7*	74.1	70.8		72.1	91.7
31	87.2		86.6	109.6		90.5		72.0	71.3		72.9	
MEAN	99.1	94.2	87.2	84.9	106.8	87.1	79.7	81.5	80.4	78.9	78.4	86.7

* adjusted for burst

DAILY SOLAR INDICES

APRIL 1974

APR 1974	YEAR DAY	BARTELS 27-DAY CYCLE NUMBER	SUNSPOT NUMBERS		OBSERVED FLUX OTTAWA 2800	SOLAR FLUX ADJUSTED TO 1 A.U.								
			R_Z	$R_{A'}$		AFCRL 15400	AFCRL 8800	AFCRL 4995	OTTAWA 2800	AFCRL 2695	AFCRL 1415	AFCRL 606	AFCRL 410	AFCRL 245
1	91	24	26	16	72.2	517	271	119	72.1	71.2	47.1	36.2	18.7	8.4
2	92	25	20	18	71.4	506	264	116	71.3	69.5	46.2	35.0	18.7	7.8
3	93	26	19	18	71.6	510	260	118	71.6	69.1	46.2	32.1	20.0	8.6
4	94	27	22	21	73.2	518	263	119	73.3	73.1	48.2	35.4	21.5	8.5
5	95	1	21	18	76.2	512	262	121	76.3	74.0	50.1	35.9	21.3	8.6
6	96	2	23	22	79.8	512	271	123	80.0	78.1	49.5	37.8	20.4	9.0
7	97	3	28	23	80.0	512	272	122	80.2	77.5	51.8	38.1	22.4	8.8
8	98	4	38	43	80.9	513	270	125	81.1	79.2	51.9	38.5	21.8	8.3
9	99	5	58	45	87.5	514	280	129	87.8	86.5	58.9	38.2	23.8	11.5
10	100	6	70	64	93.1*	516	285	139	93.5*	91.9	61.7	39.5	26.2	10.6
11	101	7	75	73	99.3	521	286	153	99.8	98.3	64.8	44.1	27.9	11.6
12	102	8	78	68	105.1*	521	292	158	105.6*	104.3	65.1	49.3	36.2	25.4
13	103	9	83	76	102.2	529	299	151	102.8	101.9	65.0	46.0	30.4	17.3
14	104	10	87	72	115.6	524	310	169	116.3	110.2	68.5	44.7	26.0	18.1
15	105	11	98	91	122.0*	537	330		122.9*	120.3	71.8	46.6	27.5	15.3
16	106	12	93	74	114.2*	521	318	177	115.0*	111.4	67.4	48.6	25.2	16.6
17	107	13	75	62	101.0	522	300	156	101.8	98.1	62.1	47.7	35.9	22.0
18	108	14	64	57	97.1	521	294	139	98.0	92.6	61.5	41.7	26.0	11.9
19	109	15	51	41	86.7*	517	286	128	87.5*	85.9	57.2	40.3	22.7	11.7
20	110	16	49	39	81.5	511	278	120	82.3	79.3	50.2	35.2	23.4	9.4
21	111	17	43	31	78.7	509	271	120	79.5	75.8	49.3	37.3	22.7	8.6
22	112	18	28	8	74.5	506	268	118	75.3	71.1	48.0	37.5	23.8	9.2
23	113	19	17	13	73.1	505	264	117	73.9	69.5	47.7	33.6	21.6	8.8
24	114	20	19	15	74.1	510	270	120	75.0	70.7	49.4	37.4	22.7	8.9
25	115	21	20	18	75.6	511	272	117	76.5	72.8	47.0	35.6	23.6	9.4
26	116	22	20	18	73.9	510	269	117	74.9	71.7	48.6	37.9	22.3	10.3
27	117	23	38	17	74.3	508	273	118	75.3	72.0	49.2	38.3	21.8	8.4
28	118	24	30	7	76.8	516	269	120	77.9	72.7	51.5	39.1	22.3	8.3
29	119	25	22	12	80.4	517	272	124	81.6	77.0	52.3	39.8	22.4	9.2
30	120	26	16	18	90.3	519	282	134	91.7	85.7	57.4	42.6	23.4	9.7
MEAN			44.4	36.6	86.1	516	280	131	86.7	83.7	54.9	39.7	24.1	11.3



PREDICTED AND OBSERVED SUNSPOT NUMBERS

SMOOTHED OBSERVED AND PREDICTED SUNSPOT NUMBERS

CYCLE 20

MONTH	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1964										9.6	10.2	11.0
1965	11.7	12.0	12.5	13.6	14.6	15.0	15.5	16.4	17.4	19.7	22.3	24.5
1966	27.7	31.3	34.5	37.4	40.7	44.6	50.3	56.6	63.1	67.6	70.2	72.7
1967	75.0	78.8	82.2	84.6	87.4	91.3	94.1	95.3	95.3	95.0	97.1	100.6
1968	102.6	102.9	104.7	107.2	107.6	106.6	105.2	104.8	107.0	109.9	110.6	110.1
1969	110.0	109.6	108.0	106.4	106.2	106.1	105.8	106.4	105.4	104.1	104.6	104.9
1970	105.6	106.0	106.2	106.1	105.8	105.3	103.8	101.0	97.2	93.9	89.4	84.1
1971	80.4	77.8	74.4	70.9	68.1	66.7	65.4	64.6	65.8	66.2	66.8	69.4
1972	70.8	71.2	72.4	73.4	72.9	70.5	68.2	65.5	62.2	60.6	58.7	55.1
1973	50.9	46.5	44.2	42.7	40.7	39.1	37.6	36.3	34.7	33.2	31.6 (1)	30.1 (2)
1974	28.8 (3)	27.6 (4)	26.7 (5)	26.0 (5)	25.6 (5)	24.8 (6)	23.5 (7)	22.1 (7)	20.5 (7)	19.2 (8)	17.9 (9)	17.0 (9)
1975	16.3 (9)	15.4 (9)	14.8 (9)	14.3 (8)	13.7 (8)	13.3 (9)	13.1 (11)					

For each month, the upper figure is the observed or predicted Zürich smoothed sunspot number. The lower figure in parenthesis is the corresponding absolute value of the 90% prediction interval, an indication of the uncertainty above and below the predicted number. Observed numbers are those with no prediction intervals. The observed smoothed sunspot numbers are based on final Zürich numbers through 1973.

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

SOLAR FLARES

PARTIAL LISTING

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

APRIL 1974

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPORTANCE	OBS.		MEASUREMENTS					REMARKS
	DATE APR	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	MIN.		COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
BOUL	01	1605	1624	1616	N 8	W89	1.000	12834	26.0	19	1N		C	1616	.75	2.95			
RAMY	01	1612E	1623D		N08	W90	1.000		25.9	110	SN	3	C						
ZURI	10	0812	0838	0818	S12	E12	.230		11.2	26	SF		C	0818	1.47	1.60			
BUCA	10	0815	0838		S13	E12	.238	12848	11.2	23	1F		C	0819	2.21	2.30			E
MANI	10	0816E	0819D	0816U	S13	E12	.238	12848	11.2	30	1N	1		0816	2.06	2.12			F
MANI	11	0002	0034	0005	S04	W29	.484	12848	8.8	32	1B	2		0005	1.96	2.24			F
PALE	11	0003	0032	0008	S04	W31	.514		8.7	29	SB	2	C		.99				DE
MANI	11	0545	0643	0550	S13	W01	.124	12848	11.2	58	1F	2		0550	2.17	2.18			F
UPIC	11	1456	1507D	1501	S12	W05	.136	12848	11.2	110	1B	3	P	1501	2.10				ITF
UPIC	11	1540	1606	1542	S13	W06	.160	12848	11.2	26	1B	3	P	1542	2.29				ITF
MANI	11	2220	2255	2239	S04	W43	.680	12850	8.7	35	1N	2		2239	1.86	2.57			F
MITK	12	0539	0606		S11	W18	.318		10.9	27	SB		C	0539	1.44	1.50			59
MANI	12	0544E	0605D	0544U	S12	W16	.292	12848	11.0	210	1N	2		0544	1.96	2.07			F
MITK	12	0557	0614	0559	S11	W10	.193		11.5	17	SN		C	0559	.72	.70			49
BUCA	12	0600E	0725		S11	W15	.271	12848	11.1	85D	1N		P	0603	3.32	3.40			
MANI	12	2357	0052D	0026	S11	W28	.472	12848	10.9	55D	1B			0026	3.09	3.54			
PALE	13	0013E	0053D	0018U	S11	W27	.457	12848	11.0	40D	1N	2	V		2.58				U F
MANI	13	0019	0226	0041	S13	W25	.433		11.1	127	SB	2		0041	.93	1.03			
MANI	13			0106							1B			0106	2.17	2.39			
MANI	13			0117							1B			0117	2.37	2.62			
PALE	13	0111E	0159	0112U	S14	W26	.452		11.1	48D	SN	2	V		1.55				F
MITK	13	0125	0210	0130	S12	W28	.475	12848	11.0	45	1B		C	0130	2.78	3.20			59
MANI	13	0405	0505D	0420	S11	W29	.487	12848	11.0	60D	1B	2		0420	3.09	3.57			FE
MANI	13	0505E	0642D	0527	S11	W29	.487	12848	11.0	97D	2B	2		0527	6.19	7.14			FE
MANI	13			0553							2B			0553	4.64	5.36			
BUCA	13	0600E	0655		S12	W32	.533	12848	10.8	55D	1N		P	0600	4.42	5.10			
MANI	13	0649E	0738	0702	S11	W32	.531		10.9	49D	1B	2		0702	3.09	3.69			FE
ZURI	13	0658	0738	0704	S12	W30	.504	12848	11.0	40	1N		C	0704	2.10	2.40			
BUCA	13	0700	0745		S12	W29	.489	12848	11.1	45	1B		C	0705	3.32	3.80			E
TEHR	13	0705E	0707D	0705U	S13	W32	.535	12848	10.9	20	1B	1	V		11.30				F
ATHN	13	0705E	0707D	0706	S12	W32	.533		10.9	20	SN	3	C		1.49				F
CATA	13	0710E	0710D	0710	S15	W32	.541	12848	10.9		1B	3	P	0710	1.73	2.06		(389)	T
ZURI	13	0748	0832	0800	S12	W29	.489	12848	11.2	44	1N		C	0800	2.73	3.10			
BUCA	13	0750	0825D		S13	W27	.463	12848	11.3	35D	1N		P	0800	4.42	4.90			E
ATHN	13	0750	0818D	0757	S12	W31	.518	12848	11.0	26D	1B	2	C		2.31				F
MANI	13	0754E	0834D	0757	S12	W30	.504	12848	11.1	40D	2B	2		0757	7.22	8.47			FH
WEND	13	1046	1107		S13	W32	.535	12848	11.0	21	1N		V		5.16				
ZURI	13	1048	1108	1050	S12	W33	.547	12848	11.0	20	1N		C	1050	2.53	3.00			
ATHN	13	1048E	1052D	1051	S12	W34	.561		10.9	40	SB	3	V		1.65				DE
UPIC	13	1230E	1245D		S09	W33	.543	12848	11.0	15D	1N	3	P	1235	3.16				ITF
ZURI	13	1312	1330	1316	S12	W34	.561	12848	11.0	18	1N		C	1316	2.10	2.50			
MCMA	13	1318E	1350	1320	S12	W36	.589	12848	10.9	32D	1N		C	1320	1.80	2.20			E
RAMY	13	1541	1607D	1548	S13	W34	.563		11.1	26D	SN	3	C		1.39				F
ATHN	13	1542E	1544D	1544D	S12	W36	.589		11.0	2D	SB	3	V		1.65				F
MCMA	13	1548E	1632		S12	W37	.602	12848	10.9	44D	1B		C	1552	1.80	2.20			E
RAMY	13	1712	1726	1715	S13	W35	.577		11.1	14	SF	3	C		.37				DE
MCMA	13	1714	1805	1748	S12	W38	.616	12848	10.9	51	1N		C	1748	1.75	2.10			EH
MANI	14	0639	0642D	0642U	S13	W43	.682	12848	11.1	3D	1N	2		0642	1.55	2.15			F
WEND	14	0639	0708		S09	W40	.640	12848	11.3	29	1N		V		4.13				
ATHN	14	0639	0658	0642	S12	W42	.668		11.1	19	SN	4	C		.83				F
MITK	14	0639	0706	0642	S10	W44	.692	12848	11.0	27	1F		C	0642	1.55	2.10			9
4XIC	14	0646E	0720		S11	W44	.692		11.0	34D	SN	3	P	0646	1.47				ITF
MANI	15	0621E	0651D	0624	S12	W57	.835	12848	11.0	30D	1N	1		0624	1.24	2.14			F
CATA	15	0815	0830D	0825	S18	W58	.847	12848	11.0	15D	1B	3	P	0825	2.31	4.36		(324)	
MANI	15	0817E	0823D	0823U	S13	W60	.862	12848	10.8	6D	1N	1		0823	1.34	2.44			F
TEHR	15	0822E	0825D	0822U	S16	W56	.827		11.1	3D	SF	3	V		.25				F
ATHN	15	0829E	0848D	0829U	S13	W56	.826	12848	11.2	19D	1N	3	V		2.31				F
MANI	15	0915E	0936D	0924	S13	W60	.862	12848	10.9	21D	1N	1		0924	1.34	2.44			F
WEND	15	0920E	0932D		S13	W61	.870		10.8	12D	SN								
RAMY	15	1117	1212	1129	S18	W68	.923		10.4	55	SN	3	C		.93				DE
CATA	15	1130	1130D	1130	S18	W68	.923	12848	10.4		1B	3	P	1130	1.44			(214)	
BOUL	15	1308	1440	1317	S14	W36	.593		12.8	92	SN		C	1317	1.07	1.33			
MCMA	15	1321E	1410D		S14	W40	.646	12849	12.6	49D	1N		P	1321	1.55	2.00			E
PALE	15	2351	0022	2353	S06	W64	.896		11.2	31	SN	3	C		.60				DE
MANI	15	2352E	0035	2352U	S09	W65	.902		11.1	43D	SN	1		2352	.93	1.83			F
MANI	15			0020				12848			1N			0020	1.55	3.05			
MANI	16	0236	0305D	0240	S13	W49	.753	12849	12.4	29D	1N	2		0240	2.06	3.18			FU
PALE	16	0237E	0242D	0238	S14	W48	.743		12.5	5D	SN	3	C		1.24				DE U
MANI	16	0255	0305D	0300	S18	W45	.715		12.7	10D	SN	2		0300	.21	.30			
ATHN	16	0732	0739D	0739D	S14	W51	.776	12849	12.5	7D	1B	4	V		1.98				F
TEHR	16	0740E	0807D	0740U	S12	W49	.752	12849	12.6	27D	1B	2	C		2.09				F
BOUL	16	1616	1645	1625	S13	W55	.816	12849	12.6	29	1B		C	1625	1.29	2.26			
MCMA	16	1620	1800D	1710	S14	W56	.826	12849	12.5	100D	1B		C	1625	1.65	3.00			EJK

SOLAR FLARES

PARTIAL LISTING

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

APRIL 1974

OBSERVATORY	OBSERVED UT DATE APR	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
MCMA	16	1620	1800D	1625	S14	W56	.826	12849	12.5	100D	1B		C	1625	1.65	3.00			EJK
RAMY	16	1623	1655	1625	S14	W55	.817	12849	12.6	32	1B	4	V		2.31				F
UPIC	16	1629E	1646D		S13	W55	.816	12849	12.6	17D	1B	3	P	1629	2.10				
MITK	17	0423	0501	0425	S14	W88	.998	12848	10.6	38	1N		C	0425	1.24				9
MANI	17	0437E	0503D	0437U	S14	W86	.996		10.7	26D	SN	2		0437	.41	1.20			
CATA	17	0700E	0725D	0720	S15	W90	1.000	12848	10.5	25D	1N	3	P	0720	.87			(178)	
CATA	17	0825	0915	0825	S20	W90	.999	12848	10.6	50	1N	3	C	0825	.87			(158)	A
CATA	17	0825	0845	0825	S15	W90	1.000	12848	10.6	20	1N	3	C	0825	.58			(166)	
CATA	17	1200E	1215D	1200	S19	W90	1.000	12848	10.8	15D	1F	3	P	1200	.87			(148)	
UPIC	18	0527	0720D	0547U	S11	W34	.561	12856	15.7	113D	1N	3	P	0547	1.90				K
MANI	18	0547	0602	0548	S12	W35	.576		15.6	15	SF	2		0548	.41	.51			F
MANI	18	0606	0620	0609	S13	W36	.592		15.6	14	SF	2		0609	.62	.77			F
MANI	18	0623	0635	0629	S13	W35	.578		15.6	12	SF	2		0629	.31	.38			F
UPIC	18	1256E	1302U		S11	W41	.655	12856	15.5	6U	1N	3	P	1256	2.95				B
UPIC	18	1512E	1515D	1514	S12	W41	.656	12856	15.6	3D	1N	3	P	1514	1.68				
RAMY	19	1512	1555	1523	S17	W53	.800	12856	15.7	43	1F	4	C		1.86				F
UPIC	19	1514	1548U	1521	S12	W54	.806	12856	15.6	34U	1F	3	P	1521	2.29				F
RAMY	19	1524E	1524D	1524D	S17	W53	.800		15.7		1F	4	V		2.31				F
CATA	21	1450	1455	1450	S15	W80	.982	12870	15.6	5	1B	3	C	1450	.58			(214)	
MANI	30	0207E	0218	0210	S08	E90	1.000	12906	6.8	11D	1B	1		0210	1.03	3.35			
CATA	30	0945	1015	0955	S03	E68	.926	12904	5.5	30	1N	3	C	0955	1.16			(195)	
RAMY	30	1304	1325	1306	S07	E90	1.000		7.3	21	SB	3	C						
BOUL	30	1306	1325	1308	S11	E90	1.000		7.3	19	1N		C	1308	.54	2.17			

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

"Remarks":

A = Eruptive prominence whose base is less than 90° from central meridian.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No visible spots in the neighborhood.
H = Flare accompanied by a high speed dark filament.
I = Active region very extended.
J = Distinct variations of plage intensity before or after the flare.
K = Several intensity maxima.
L = Existing filaments show signs of sudden activity.
M = White-light flare.
N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the calcium II lines H and K.
P = Flare shows helium D_3 in emission.
Q = Flare shows the Balmer continuum in emission.
R = Marked assymetry in Hα 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 Hα line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

SOLAR FLARES

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

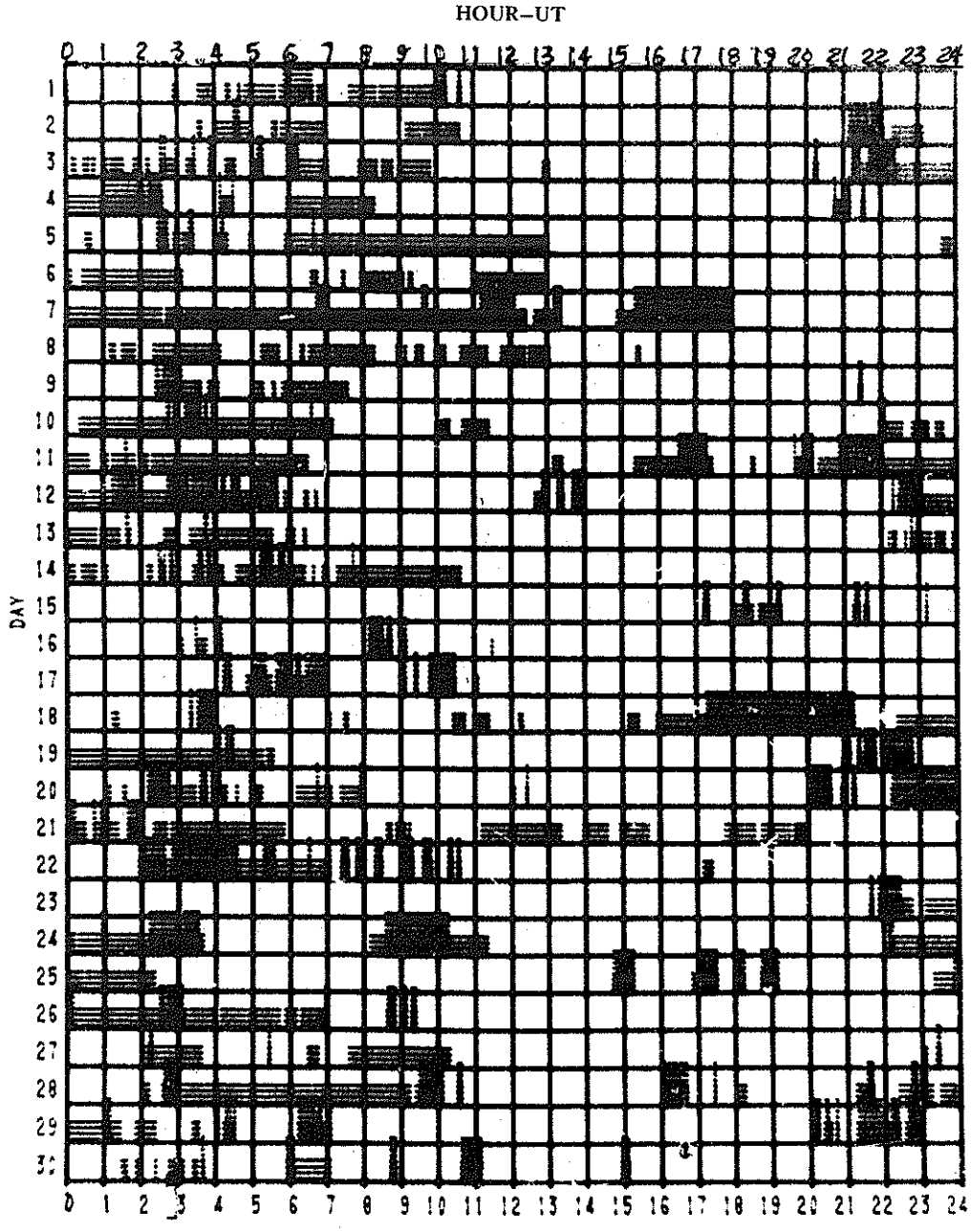
APRIL 1974

01 1350E N 9 W89	01 1436 N 9 W89	01 1500 N 9 W89	01 1504 N08 W90	01 1703 N 9 W89	01 1703 N08 W90
01 1855 N10 W90	04 0556 N12 E19	05 1135U S04 W32	05 1715 S12 W33	05 1730E S11 W35	05 1909E N12 W03
05 1914 N20 W88	05 2111E N12 W05	06 0416 S10 E68	06 0523 S10 E68	06 0925 N12 W12	06 2320 S11 E56
06 2347 N13 W21	06 2351E N13 W18	07 0705E N13 W23	07 1446E S07 E49	07 1807E S13 E49	07 2352 S11 E44
08 0625 S15 E61	08 0632E S12 E60	08 0800 S16 E59	08 0805E S14 E59	08 0838 S12 E41	08 0842E S14 E39
08 0842E N07 E35	08 1254U S18 E57	08 1409E S18 E56	08 1752 S11 E35	08 2245E S13 E34	08 2318 S13 E33
09 0000E S13 E33	09 0001 S15 E41	09 0014 S14 E33	09 0015E S13 E32	09 0053 S13 E32	09 0134 S13 E32
09 0322E S14 E29	09 0423E S13 E31	09 0459 N12 W51	09 0516 S12 E30	09 0643 S12 E29	09 0726 S11 E25
09 0904 S14 E26	09 0911E S12 E28	09 1100 S11 E24	09 1106 S14 E25	09 1305E S13 E23	09 1348 S12 E12
09 1400E S13 E23	09 1428 S12 E12	09 1510 S13 E23	09 1514 S12 E23	09 1520 S09 E23	09 1602 S11 E23
09 1637 S12 E10	09 1645 S11 E21	09 1822 S10 E02	10 0348E S11 E11	10 0420 S10 E13	10 0426E S12 E12
10 0510 S10 E13	10 0710E S13 E15	10 0711E S14 E16	10 0715E S14 E14	10 0842 S14 E15	10 0858E S13 E15
10 0917E S11 E08	10 0950E S13 E14	10 1023E S14 E15	10 1023E S12 E07	10 1023E S11 E10	10 1025E S13 E14
10 1129 S13 E13	10 1243 S12 E06	10 1250 S12 E06	10 1257 S13 E13	10 1348 S13 E13	10 1428 S13 E13
10 1440E S10 E10	10 1445E S13 E06	10 1450E S04 W24	10 1627 S15 E11	10 1630E S13 E11	10 1634 S14 E11
10 1645 S14 E10	10 1707 S16 E27	10 1707E S15 E30	10 1745E S14 E10	10 1819E S 2 W31	10 1820 S10 E05
10 1829E S04 W26	10 1830E S11 E03	10 1830E S04 W28	10 2010 S13 E10	10 2012E S12 E09	10 2022E S10 E05
10 2022E S10 E05	10 2023 S10 E04	10 2118 S14 E08	10 2122 S04 W31	10 2246 S13 E10	10 2246 S31 E10
10 2247 S13 E08	11 0000 S13 E08	11 0000 S13 E08	11 0004 S12 E08	11 0159 S12 E09	11 0159E S11 E02
11 0200 S13 E13	11 0252 S04 W33	11 0555 S04 W33	11 0559 S12 E05	11 0600E S13 E 4	11 0627 S11 E00
11 0804E S16 E21	11 0832 S08 W03	11 0930E S12 E01	11 0950E S12 W06	11 0950E S14 W01	11 0950 S01 W38
11 0950E S12 W06	11 1409E S04 W39	11 1456E S05 W39	11 1541 S04 W40	12 0018 S14 E10	12 0019 S12 W08
12 0155E S12 W10	12 0215E S12 W13	12 0230E S04 W45	12 0232 S13 W15	12 0403E S13 W10	12 0403E S15 E09
12 1410E S10 W17	12 1441E S13 W23	12 1525E S15 W19	12 1526E S19 W20	12 1540E S13 W24	12 1634 N 1 W53
12 1759 S13 W26	12 1803E S12 W22	12 1859E S11 W20	12 1938 S09 W22	12 2158E S11 W25	12 2333E S08 W22
12 2357 S11 W28	13 0225E S06 W61	13 0238 S16 W06	13 0243E S17 W07	13 0253E S16 W07	13 0305E S15 W06
13 0309 S03 W61	13 0700E S06 W62	13 0834E S11 W31	13 0840 S11 W31	13 0923E S10 W32	13 0932E S12 W32
13 1154 S10 W32	13 1805 S14 W36	13 1807 S13 W35	13 1813E S13 W36	13 2218E S11 W39	13 2218E S11 W39
13 2352 S06 W74	14 0012 S13 W39	14 0046 S12 W38	14 0046 S12 W38	14 0049 S10 W39	14 0057 S13 W41
14 0143 S12 W40	14 0233E S15 W44	14 0248E S13 W44	14 0337E S12 W36	14 0441E S12 W47	14 0500E S04 W75
14 0506E S13 W41	14 0515E S12 W45	14 0551E S12 W41	14 0747 S12 W44	14 0804E S13 W46	14 0810E S16 W25
14 0926E S12 W47	14 1111 S11 W47	14 1228 S12 W49	14 1436 S12 W48	14 1912 S13 W51	14 1913 S14 W51
14 1915E S13 W53	14 1920E S12 W52	14 2123 S14 W29	14 2325 S09 W51	14 2357 S12 W52	15 0108E S12 W53
15 0222E S12 W54	15 0253 S12 W54	15 0321 S08 W55	15 0435E S11 W56	15 0522E S08 W57	15 0526 S12 W57
15 0529E S11 W54	15 0708E S09 W56	15 0800E S13 W60	15 0943E S16 W36	15 1036 S13 W59	15 1045 S17 W59
15 1048E S12 W59	15 1056 S16 W38	15 1057E S15 W37	15 1158E S14 W38	15 1203E S16 W37	15 1254 S17 W64
15 1300E S16 W60	15 1555 S 9 E71	15 1557E S07 E67	15 1838E S12 W63	15 1901 S14 W40	16 0034 S13 W44
16 0034 S13 W44	16 0035E S14 W44	16 0043 S08 W65	16 0050 S14 W46	16 0132 S07 W68	16 0215 S13 W67
16 0220 S13 W45	16 0221E S12 W68	16 0237E S09 W65	16 0238 S10 W67	16 0351E S12 W69	16 0537E S11 W70
16 0559E S12 W71	16 0559E S12 W50	16 0959E S14 W50	16 1102E S10 W73	16 1105E S10 W71	16 1200 S16 W70
16 1209 S18 W50	16 1210E S13 W49	16 1245E S14 W70	16 1254 S09 W73	16 1300 S13 W54	16 1310 S14 E60
16 1312 S14 E61	16 1330U S13 W55	16 1349 S14 W55	16 1430 S14 W55	16 1430 S14 W53	16 1430E S13 W55
16 1430 S14 W54	16 1713 S16 W73	16 1715 S16 W75	16 1728 S13 E57	16 1738E S14 E58	16 1813 S12 W58
16 1817 S14 W56	16 1827E S14 W58	16 1906 S18 W54	16 1908E S17 W54	16 1910E S19 W54	16 1910E S14 W57
16 1912 S14 W55	16 1919 S15 W56	16 2002 S11 W79	16 2018 S13 W59	16 2020 S16 W61	16 2032 S14 W56
16 2032 S14 W57	16 2147 S14 W57	16 2241E S 9 W79	16 2250E S12 W60	16 2300E S09 W79	16 2310 S16 W85
17 0047 S14 W60	17 0056 S15 W58	17 0223E S13 W79	17 0257 S14 W85	17 0440 S15 W61	17 0453 S12 W78
17 0555E S12 W63	17 0617E S13 W62	17 0740E S13 W63	17 1130U S14 W85	17 1137 S13 W64	17 1140E S14 W66
17 1156E S13 W66	17 1404 S10 W90	17 1405 S10 W90	17 1420E S12 W67	17 1442 S14 W90	17 1511 S15 W67
17 1518 S16 W66	17 1520E S16 W66	17 1532 S16 W66	17 1834 S14 W73	17 1835 S14 W71	17 1835E S16 W68
17 1835 S15 W69	17 1922 S15 W72	17 1924 S12 W69	17 1924 S13 W69	17 2012 S 9 W90	17 2300 S13 W90
17 2321 S13 W74	17 2344 S13 W90	18 0159 S16 W90	18 0201 S16 W90	18 0210E S12 W90	18 0445 S12 W76
18 0445 S13 W76	18 1130E S19 W74	18 1305 S15 W77	18 1416 S10 W39	18 1512E S08 W36	18 1513E S13 W82
18 1530 S13 W39	18 1707 S13 W40	18 1733 S13 W39	18 2152 S15 W41	19 0946E S12 W52	19 1342 S14 W52
19 1443 S19 W88	19 1444 S15 W90	19 1520 S19 W62	20 0457E S13 W61	20 0742E S13 W62	20 1757 S13 W74
21 0018E S13 W73	21 0204E S13 W73	22 0126 S05 W83	22 0612E S15 W90	22 1346 S 7 W90	23 2044 S08 E27
24 1255 S08 E17	24 1716 S08 E15	25 0027E S08 E10	25 1348 S10 W83	25 1412 S10 W83	25 1559 S11 W83
26 0155 S07 W04	26 0651E S08 W07	27 0218 S07 W18	27 0530 S07 W19	27 0615 S09 W17	27 0810E S06 W20
27 0810E S06 W20	27 1506E S08 W25	27 1508 S08 W24	27 1744 S 6 W26	27 1745 S08 W25	27 1749E S07 W26
27 1805E S08 W27	27 2338 S06 W28	28 0441 S06 W32	29 0122E S07 W44	29 0126E S06 W44	29 0137E S08 W44
29 0224E S06 E85	29 1141 S04 E80	29 1254 S07 W52	30 1430 S07 E90	30 1512 S 7 E90	30 1603 S10 E82
30 1755 S07 E88	30 1758 S10 E85	30 1759 S11 E83	30 2114 S 4 E62	30 2247 S 9 E90	

INTERVALS OF NO FLARE PATROL OBSERVATION

FOR PRECEDING SOLAR FLARE TABLE

APRIL 1974



Observatories included in total patrol:

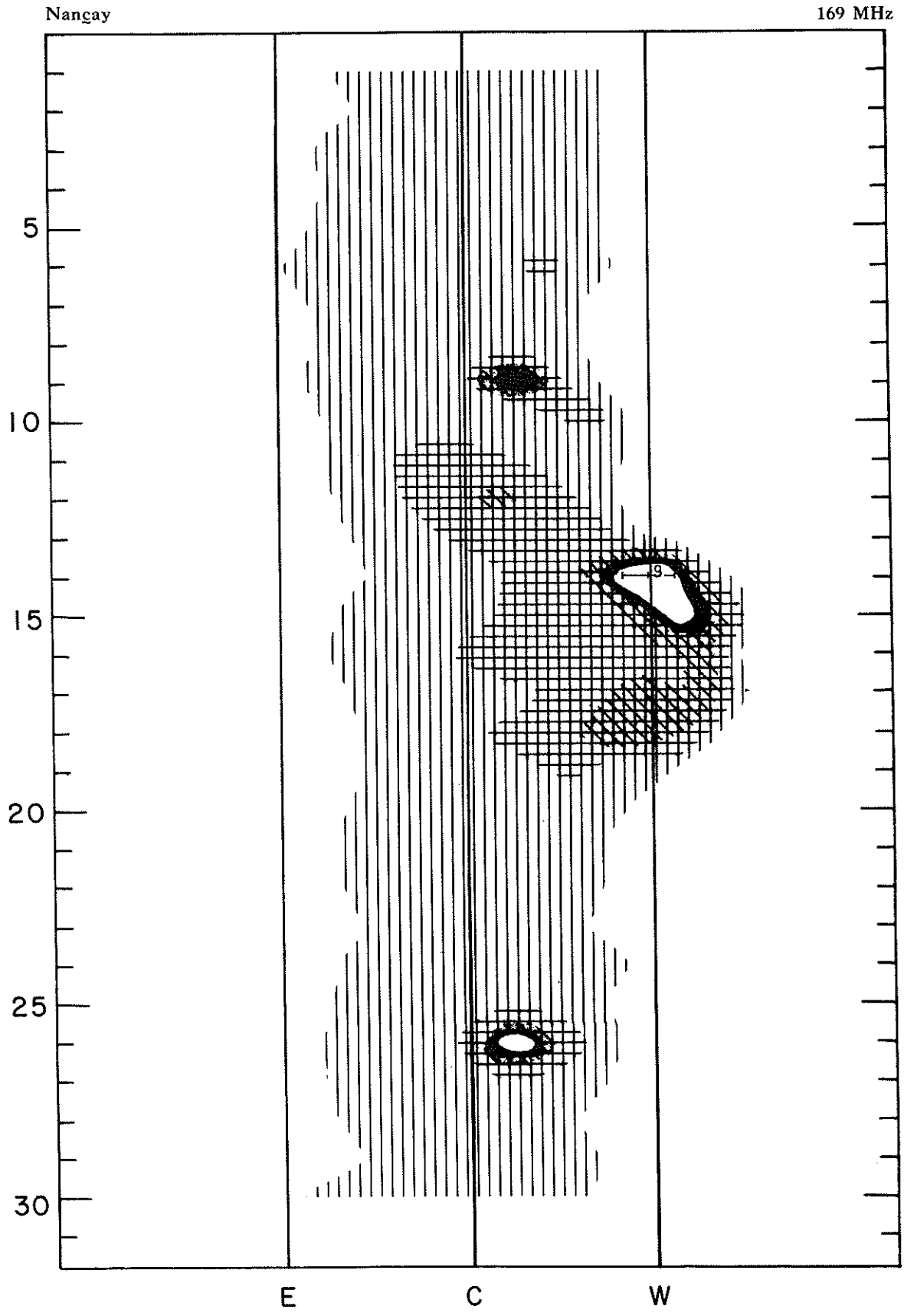
Athenes	Catania	Manila	Palehua	Upice
Boulder	Culgoora	McMath-Hulbert	Ramey	Wendelstein
Bucharest	Herstmonceux	Mitaka	Teheran	Zürich

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

14
Apr 74

SOLAR RADIO EMISSION
INTERFEROMETRIC OBSERVATION

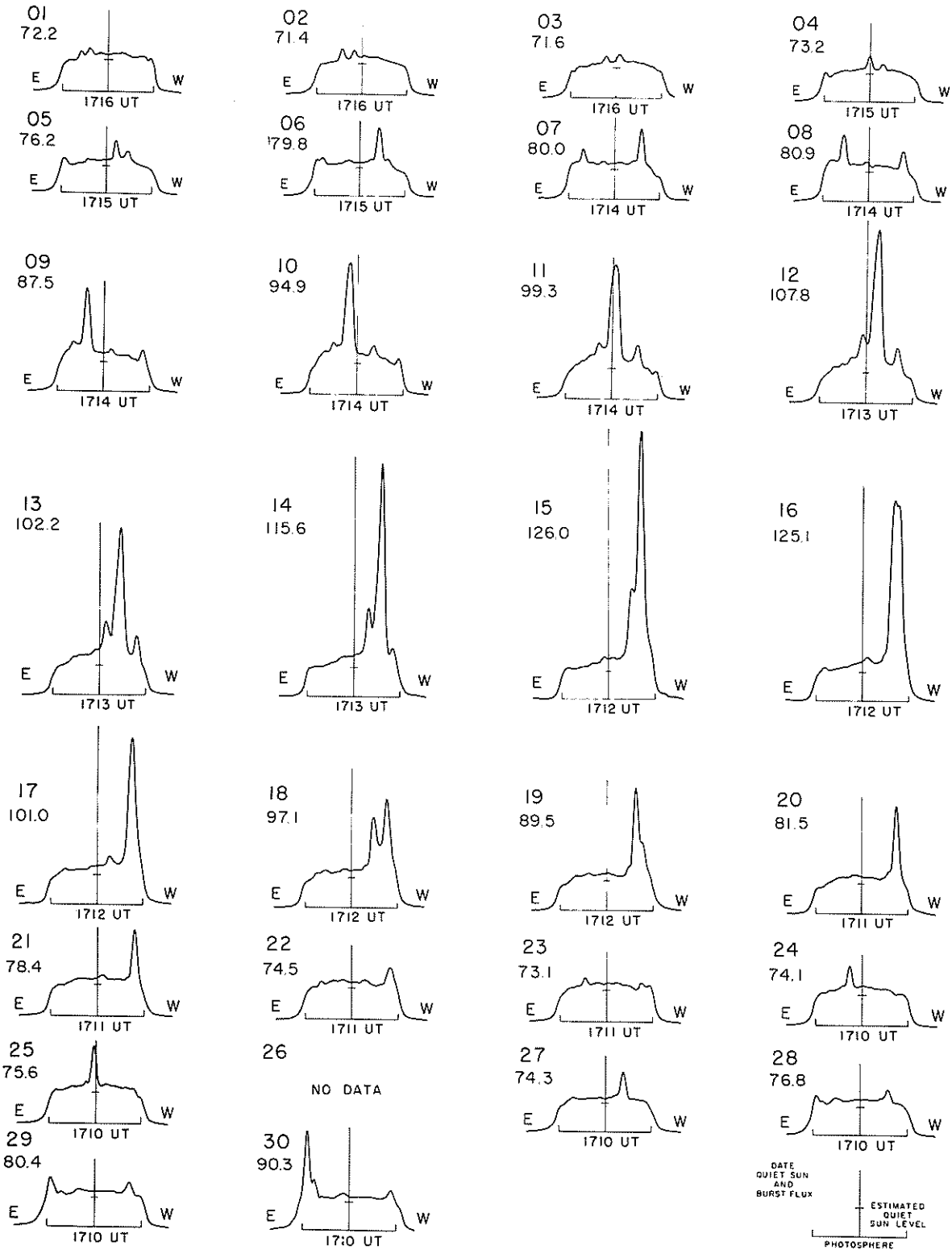
APRIL 1974



EAST-WEST SOLAR SCANS
April 1974

ALGONQUIN RADIO OBSERVATORY
CANADA

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



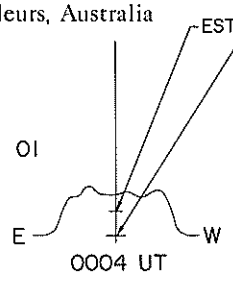
16
Apr 74

EAST-WEST SOLAR SCANS

APRIL 1974

Fleurs, Australia

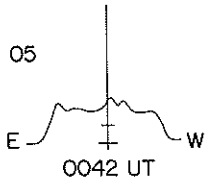
21 cm
Fan-Beam with 2 minutes of arc
E-W Resolution



02 NO DATA

03 NO DATA

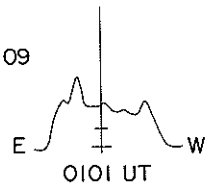
04 NO DATA

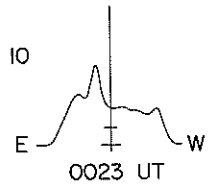


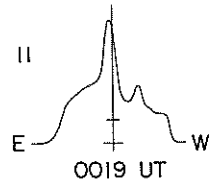
06 NO DATA

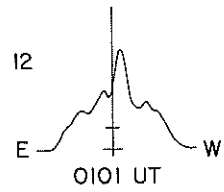
07 NO DATA

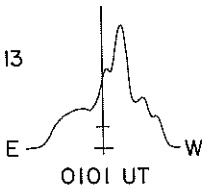
08 NO DATA

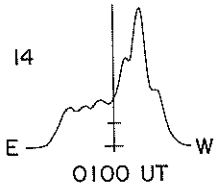


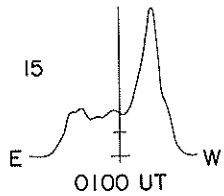


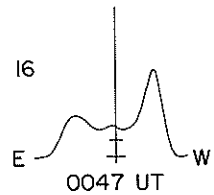


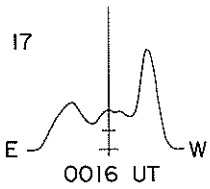


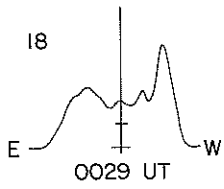


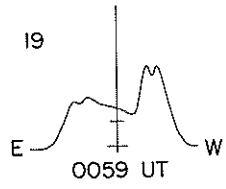


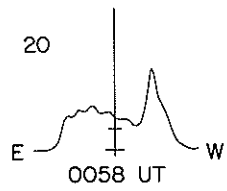


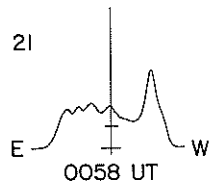


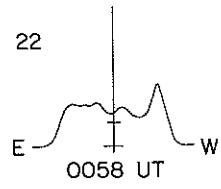


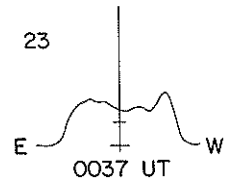


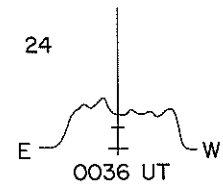


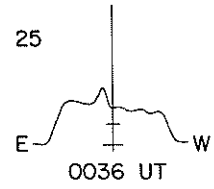


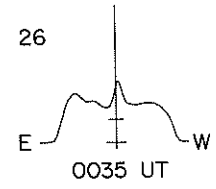


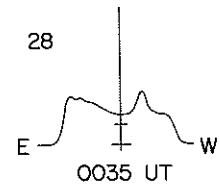


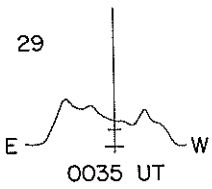


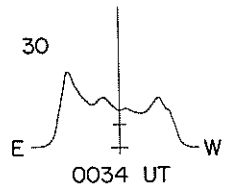










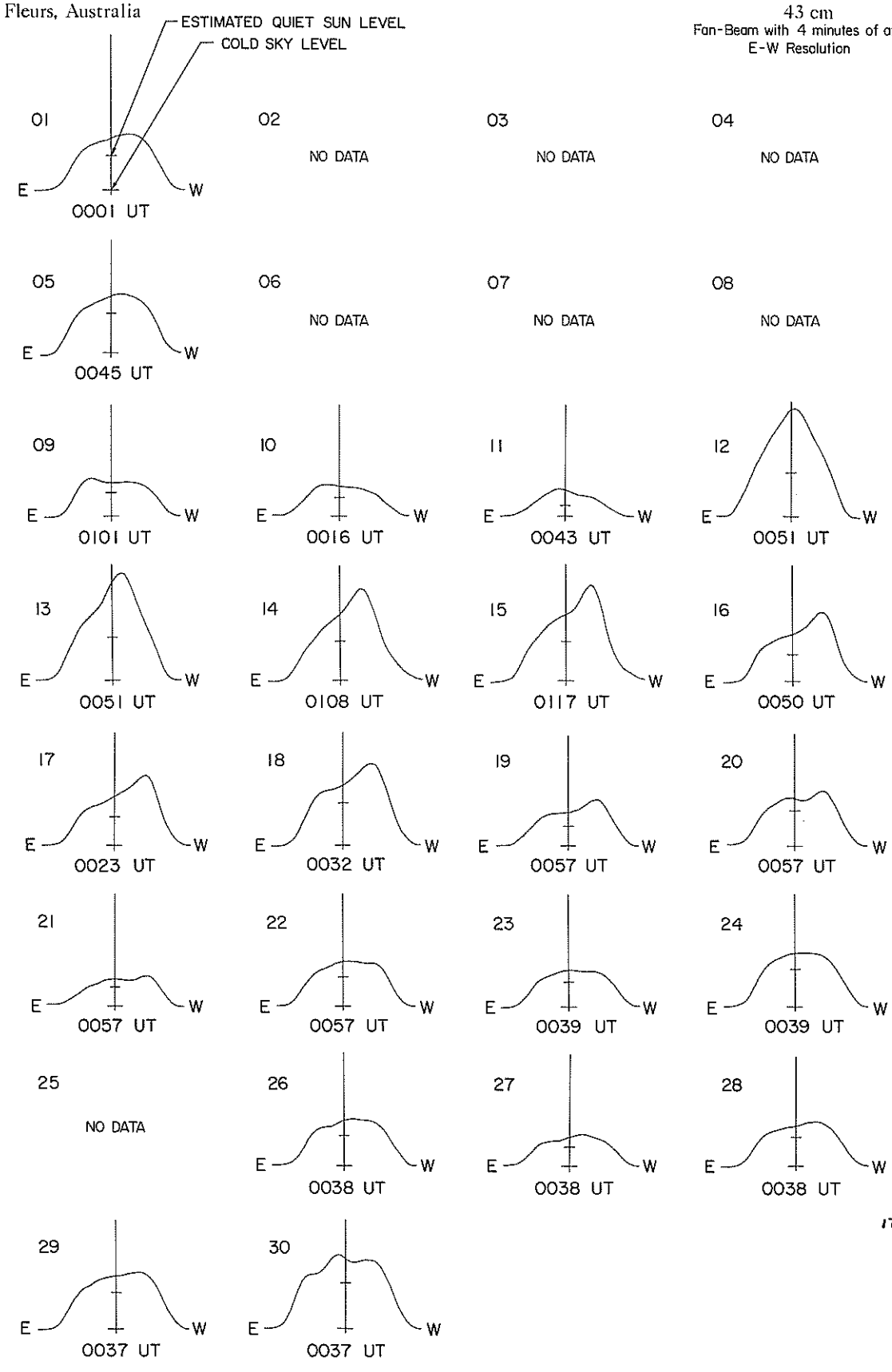


EAST-WEST SOLAR SCANS

APRIL 1974

Fleurs, Australia

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



SOLAR RADIO EMISSION
SELECTED FIXED FREQUENCY EVENTS

APRIL 1974

APR 1974	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} MEAN	INT	REMARKS
1	2800	OTTA	20	1234	1310	80	1.4	1.0		
	2695	BOUL	8	2248	2249	1.5	46.0	21.0		
4	2695	BOUL	8	1758.5	1759	1.5	52.0	22.0		
5	2800	OTTA	20	1705	1735	85	1.0	0.5		
	2800	OTTA	20	1835	1950	200	1.4	0.7		
6	2800	OTTA	20	1450	1545	110	1.2	0.6		
	2800	OTTA	20	2102	2111	20	1.0	0.5		
	2695	PENT	32	2255		54	-1.0	-0.5		
	2695	PENT	1	2349	2349.5	1	.8	0.4		
7	2800	OTTA	20	1320	1340	35	1.0	0.5		
	2800	OTTA	27	1615		85	1.6	1.2		
	2800	OTTA	24	1615	1640	25	1.6	0.8		
	2800	OTTA	24	1640		40	1.6			
	2800	OTTA	26	1720	1740	20	-1.6	-1.0		
	2800	OTTA	20	1800	1845	90	1.4	0.8		
	2800	OTTA	24	1945	2015	30	1.2	0.6		
	2800	OTTA	24	2015		315 D	1.2			
	2800	OTTA	27	2055		135	1.4	1.0		
	2800	OTTA	24	2055	2120	25	1.4	0.7		
	2800	OTTA	24	2120		60	1.4			
	2800	OTTA	26	2220	2310	50	-1.4	-0.7		
	2800	OTTA	1	2248	2249	3.5	1.0	0.5		
8	2695	PENT	1	0102	0102.5	1	.8	0.4		
	2800	OTTA	8	1256.5	1256.7	.5	.6	0.3		
	2695	PENT	24	2205	2412	127	3.8	1.9		
	2695	PENT	24	2412		60 D	3.8			
9	2800	OTTA	20	1910	1940	75	1.4	0.8		
	2800	OTTA	24	2125	2200	35	1.2	0.6		
	2695	PENT	24	2200		200 D	1.2			
10	2695	MANI	2	0711.4	0711.7	2.1	2.8	.9		
	2800	OTTA	27	1155		205	6.2	4.2		
	2800	OTTA	24	1155	1310	75	6.2	2.0		
	2800	OTTA	41	1217.6	1217.7	2.8	3.4			
	2800	OTTA	8	1217.6	1217.7	.5	3.4	1.7		
	2800	OTTA	8	1219.3	1219.4	.6	1.4	0.7		
	2800	OTTA	41	1245.2	1250.9	6	6.8			
	2800	OTTA	1	1245.2	1245.6	2	4.6	1.2		
	2800	OTTA	8	1250.8	1250.9	.5	6.8	1.7		
	2800	OTTA	24	1310	1420	70	6.2			
	2800	OTTA	26	1420	1520	60	-6.2	-4.0		
	2800	OTTA	21	1526	1605	70	3.2	1.8		
	2800	OTTA	1	1534	1534.3	1	3.0	0.8		
	2695	BOUL	8	1534	1535	1.5	5.0	2.0		
	2800	OTTA	23	1640	1750	150	2.6	1.3		
	2800	OTTA	20	1818	1819.5	10	1.6	0.8		
	2800	OTTA	24	1920	2010	50	2.6	1.1		
	2800	OTTA	24	2010		210	2.6			
	2800	OTTA	27	2020		175	2.2	1.9		
	2800	OTTA	24	2020	2030	10	2.2	1.1		
	2800	OTTA	24	2030		130	2.2			
	2800	OTTA	8	2052.7	2052.8	.3	1.4	0.7		
	2800	OTTA	20	2110	2115	15	1.2	0.6		
	2800	OTTA	20	2200	2215	40	2.6	1.3		
	2695	PENT	26	2240	2315	35	-2.2	-1.1		
	2695	PENT	20	2325	2328	15	1.4	0.7		
	2695	PENT	27	2340		120 D	4.6			
	2695	PENT	24	2340	2415	35	4.6	2.3		
	2695	PENT	1	2404.5	2405.2	2	2.2	1.1		
	2695	PENT	24	2415		45	4.6			
	2695	PENT	26	2500		40 D				
11	2695	MANI	1	0004.7	0005.4	1.5	1.9	1.0		
	8800	MANI	20	0251.2	0258.3	15.5	29.7	16.5		
	2695	MANI	20	0252	0254.8	12.2	7.5	2.5		
	2800	OTTA	27	1450		110	1.8	1.4		
	2800	OTTA	24	1450	1500	10	1.8	0.9		
	2800	OTTA	24	1500		80	1.8			
	2800	OTTA	22	1610.5	1612	11	2.4	1.0		
	2695	BOUL	3	1610.5	1612.5	3.5	3.0	1.0		
	2695	SGMR	20	1610.9	1612	12.7	3.5	2.1		
	2800	OTTA	26	1620	1640	20	-1.8	-0.9		
	2800	OTTA	27	1800		100	3.0	2.0		
	2800	OTTA	24	1800	1816	16	3.0	1.5		
	2800	OTTA	24	1816		64	3.0			
	2800	OTTA	26	1920	1940	20	-3.0	-1.5		
	2800	OTTA	24	2117	2130	13	1.8	0.9		
	2800	OTTA	24	2130		260 D	1.8			
	2695	PENT	20	2305	2310	30	1.6	0.8		
12	8800	MANI	4	0529.8	0533.1	6.5	67.0	13.4		
	2695	MANI	4	0528.4	0533.1	8.4	36.9	8.4		
	2800	OTTA	20	1225	1238	30	1.6	0.8		
	2800	OTTA	27	1300		375	1.8	1.6		

SOLAR RADIO EMISSION
SELECTED FIXED FREQUENCY EVENTS

APRIL 1974

APR 1974	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	REMARKS
	2800	OTTA	24	1300	1330	30	1.8	0.9		
	2800	OTTA	24	1330		305	1.8			
	2800	OTTA	21	1340	1503	150	3.6	1.8		
	8800	SGMR	3	1526	1526.3	4.6	24.5	7.3		
	2800	OTTA	1	1526	1526.5	2	2.0	0.7		
	2695	SGMR	1	1525.9	1526.4	2.1	1.9	.8		
	2695	BOUL	3	1526.5	1527	1.5	4.0	1.0		
	8800	SGMR	4	1542.3	1543.3	4.2	16.3	4.9		
	2800	OTTA	21	1620	1645	130	3.6	1.8		
	2800	OTTA	20	1758	1800	12	1.6	0.8		
	2800	OTTA	26	1835	1915	40	1.8	0.9		
	2800	OTTA	20	1845	1850	20	-1.2	-0.6		
	2800	OTTA	27	1930		130	1.8	1.5		
	2800	OTTA	24	1930	1945	15	1.8	0.9		
	2800	OTTA	24	1945		85	1.8			
	2800	OTTA	26	2110	2140	30	1.8	0.9		
	2695	PENT	46	2153		95	1.8			
	2695	BOUL	3	2326.5	2328	2	4.0	1.0		
13	2695	PENT	24	0000	0005	5	3.4			
	2695	PENT	24	0005		60 D	3.4			
	2695	PENT	20	0015	0033	45	2.6	1.6		
	8800	MANI	1	0104.8	0105	1.3	6.7	3.4		
	8800	MANI	4	0525	0526.1	6.2	245.0	51.0		
	2695	MANI	46	0525.4	0527.8	5.9	125.0	32.1		
	2800	OTTA	22	1223	1316	80	7.6	4.0		
	2800	OTTA	21	1440	1552	135	6.8	3.5		
	8800	SGMR	1	1541.6	1544.2	6.7	9.2	3.7		
	2695	SGMR	1	1540.8	1542.4	9	7.5	3.0		
	2800	OTTA	2	1540.5	1541.1	5	3.8	2.6		
	2695	BOUL	3	1541.5	1542.5	3.5	4.0	1.0		
	2800	OTTA	23	1705	1745	160	8.2	4.4		
	2800	OTTA	1	1724	1725.5	5	2.4	1.2		
	2800	OTTA	2	1742	1742.8	2	2.2	1.1		
	2800	OTTA	22	1806	1808	10	4.2	2.1		
	2800	OTTA	1	1908.2	1908.5	4	1.6	0.8		
	2800	OTTA	22	2000	2240	220	6.4	3.2		
14	2695	PENT	20	0045	0100	65 D	2.6			
	8800	MANI	4	0757.3	0758.5	5.4	40.6	8.5		
	2800	OTTA	20	1215	1235	50	3.0	1.5		
	2800	OTTA	22	1442	1522	140	6.0	3.4		
	8800	SGMR	20	1450.8	1505	47.4	8.8	5.3		
	2695	SGMR	20	1448.8	1457.9	97.2	6.9	4.1		
	2800	OTTA	23	1705	1910	350	7.8	3.9		
	2695	SGMR	2	1754.7	1754.8	.6	3.6	1.8		
	8800	SGMR	4	1910.9	1911.7	23.2	31.7	9.5		
	2695	SGMR	22	1910.8	1911.7	17.9	5.1	1.5		
	2800	OTTA	1	1911	1912.5	6	4.6	1.4		
	2695	BOUL	3	1911.5	1912.5	1.5	4.0	1.0		
	2695	PENT	20	2340	2357	65	4.4	2.2		
	2695	BOUL	3	2351.5	2353.5	3.5	4.0	1.0		
15	2800	OTTA	20	1125	1320	210	12.4	6.2		
	8800	SGMR	23	1232.2	1248.5	88.8	14.4	16.7		
	8800	SGMR	23		1320.1		27.9			
	2695	SGMR	22	1246	1248.5	66.2	.3	4.0		
	2695	SGMR	22		1325.3		6.5			
	8800	SGMR	4	1232.2	1232.8	2.2	33.3	10.0		
	8800	SGMR	3	1453.5	1454.1	6	18.9	5.7		
	2800	OTTA	23	1600	1755	210	4.8	3.6		
	8800	SGMR	22	1741.2	1850.9	91.7	22.1	13.3		
	2695	SGMR	22	1745.9	1802.4	74	9.0	5.4		
	2695	SGMR	22		1850.9		.3			
	2800	OTTA	2	1853.9	1854.1	1	3.8	1.8		
	2800	OTTA	24	2211	2212	1	1.6	0.8		
	2800	OTTA	24	2212		210	1.6			
16	8800	MANI	3	0236	0239.3	9	17.3	3.4		
	8800	MANI	3	0351.1	0352.1	3.6	69.0	31.2		
	8800	MANI	4	0736	0738.7	17.2U	395.0	26.2U		
	2695	MANI	4	0733.4	0739	19.8U	109.0	17.6U		
	8800	SGMR	3	1103.8	1104.5	5.4	33.1	9.9		
	8800	SGMR	1	1203.9	1205	8.1	5.1	1.0		
	8800	SGMR	1	1226.8	1227.6	1.6	5.1	2.0		
	2800	OTTA	26	1305	1325	20	-2.2	-1.1		
	8800	SGMR	21	1429.3	1432.2	14.2	6.9	3.9		
	8800	SGMR	1	1431.7	1431.9	.5	6.9	3.9		
	8800	SGMR	1	1504.5	1505	1.5	4.9	1.5		
	8800	SGMR	47	1620.2	1623.6	11.8	660.0	264.0		
	2800	OTTA	21	1620	1650	150	11.0	5.5		
	2800	OTTA	4	1622	1625	18	114.0	21.2		
	2695	BOUL	45	1621.5	1626.5	68	60.0	20.0		
	2695	SGMR	4	1622.1	1625.1	8.9	107.6	32.3		
	8800	SGMR	30	1632	1632	71.4	30.8	12.3		
	2695	SGMR	29	1631	1631	85.5	11.9	4.8		
	8800	SGMR	3	1713.2	1713.8	7.7	23.0	6.9		
	2800	OTTA	26	2000	2220	140	-5.8	-2.9		
17	8800	SGMR	20	1833.6	1835.4	13.4	8.5	5.1		

SOLAR RADIO EMISSION
SELECTED FIXED FREQUENCY EVENTS

APRIL 1974

APR 1974	FREQUENCY	STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	FLUX DENSITY MEAN	INT	REMARKS
	2800	OTTA	20	1833		23	1.0	0.7		
	2800	OTTA	26	1940	1950	10	-1.6	-0.8		
18	8800	MANI	4	0034.5	0035.7	2.8	38.3	8.7		
	8800	SGMR	1	1512	1512.4	.7	2.6	.8		
	2695	SGMR	1	1512.1	1512.4	.9	2.8	.8		
	2800	OTTA	1	1512	1512.5	1	2.8	1.4		
	2695	BOUL	8	1512	1512.5	1	5.0	1.0		
	8800	SGMR	4	1851.5	1852.2	3.2	29.1	8.7		
	8800	SGMR	46	2040	2040.5	3	32.9	11.9		
	8800	SGMR	46		2041.5		32.2			
	2695	SGMR	46	2040	2040.8	3	38.3	11.5		
	2695	SGMR	46		2041.7		31.6			
	2695	BOUL	45	2039	2041	13.5	39.0	13.0		
	2800	OTTA	28	2039	2039.5	1	1.6	1.2		
	2800	OTTA	45	2040	2040.7	8	42.0	22.0		
	2800	OTTA	29	2048	2048	40	3.4	1.7		
	2695	BOUL	3	2223.5	2224.5	1.5	3.0	1.0		
	2800	OTTA	28	2223.5	2224	2.5	2.6	1.3		
	8800	MANI	4	2226	2226.5	4.6	63.0	20.9		
	2695	MANI	4	2226	2226.5	3.8	95.0	20.2		
	2800	OTTA	4	2226	2226.5	6	102.0	17.0		
	2695	BOUL	45	2226.5	2227.5	9	60.0	22.0		
	2695	PENT	29	2232	2232	105	1.8	0.9		
19	2800	OTTA	22	1455		300	3.8	2.0		
20	2695	MANI	1	0213.8	0214.7	3.5	3.4	.9		
	2800	OTTA	26	1510	1630	80	-1.8	-0.9		
24	2800	OTTA	27	1232		118	.8	0.7		
	2800	OTTA	24	1232	1240	8	.8	0.4		
	2800	OTTA	24	1237		100	.8			
	2800	OTTA	26	1420	1430	10	- .8	-0.4		
	2800	OTTA	20	1740	1755	75	1.4	0.8		
	2800	OTTA	24	2130	2250	80	2.6	0.7		
	2800	OTTA	24	2250		180 D	2.6			
25	8800	MANI	4	0029.2	0030	4.1	15.8	3.5		
	2695	MANI	2	0029.3	0030.3	3.3	7.6	2.5		
	2695	BOUL	8	0030	0031	3.5	8.0	3.0		
	2695	PENT	1	0029.1	0030	5.9	6.6	2.2		
	2695	PENT	29	0035	0035	30	1.4	0.7		
27	2800	OTTA	27	1458		240	1.2	1.1		
	2800	OTTA	24	1458	1502	4	1.2	0.6		
	2800	OTTA	24	1502		218	1.2			
	2800	OTTA	20	1505	1515	40	1.6	0.9		
	2800	OTTA	20	1742	1800	43	1.6	0.9		
	2800	OTTA	26	1840	1858	18	- .8	-0.4		
30	8800	SGMR	2	1305.2	1308.1	6.1	9.1	1.8		
	2695	SGMR	2	1304.1	1308.1	9.2	5.7	1.1		
	2800	OTTA	23	1303	1307	15	5.6	2.8		
	2695	BOUL	45	1304.5	1311.5	7	73.0	14.0		
	2800	OTTA	8	1310.6	1310.6		60.0			
	2800	OTTA	25	1430	1540	70	2.8	1.4		
	2695	SGMR	1	1502.6	1505.6	3.8	2.4	1.0		
	2800	OTTA	2	1502.9	1503.5	4	2.0	1.1		
	2695	BOUL	45	1503	1505.5	3	5.0	2.0		
	2695	SGMR	3	1510.5	1511.5	3	24.4	7.3		
	2695	BOUL	8	1511.5	1512	1	24.0	9.0		
	2800	OTTA	1	1511	1511.5	1	3.0	1.5		
	2800	OTTA	8	1511.5	1511.5		31.0			
	2800	OTTA	29	1512	1512	10	1.4	0.7		
	2800	OTTA	8	1518.7	1518.7		2.4			
	2800	OTTA	24	1540		600 D	2.8			
	2800	OTTA	22	1556	1603	15	2.4	1.0		
	2695	BOUL	3	1601	1603.5	5	4.0	1.0		
	2695	SGMR	4	1602.5	1603.3	4.1	10.8	3.2		
	2800	OTTA	1	1733	1735	3	1.2	0.4		
	8800	SGMR	21	1755.3	1757.9	18.9	3.4	1.4		
	2695	SGMR	21	1753.9	1756.8	18.9	6.8	2.7		
	2800	OTTA	46	1754	1807	15	10.0	3.6		
	2800	OTTA		1754	1757	11	6.0			
	2695	BOUL	45	1755	1801.5	17	25.0	7.0		
	8800	SGMR	3	1806.4	1806.7	1.8	10.8	3.2		
	2695	SGMR	4	1805.5	1806.6	2.4	11.9	3.6		
	2800	OTTA		1805	1807	4	10.0			
	2800	OTTA	31	1809	1815	110	-4.8	-2.8		
	2800	OTTA	32	2125	2205	145	-3.0	-1.5		

Observatories:

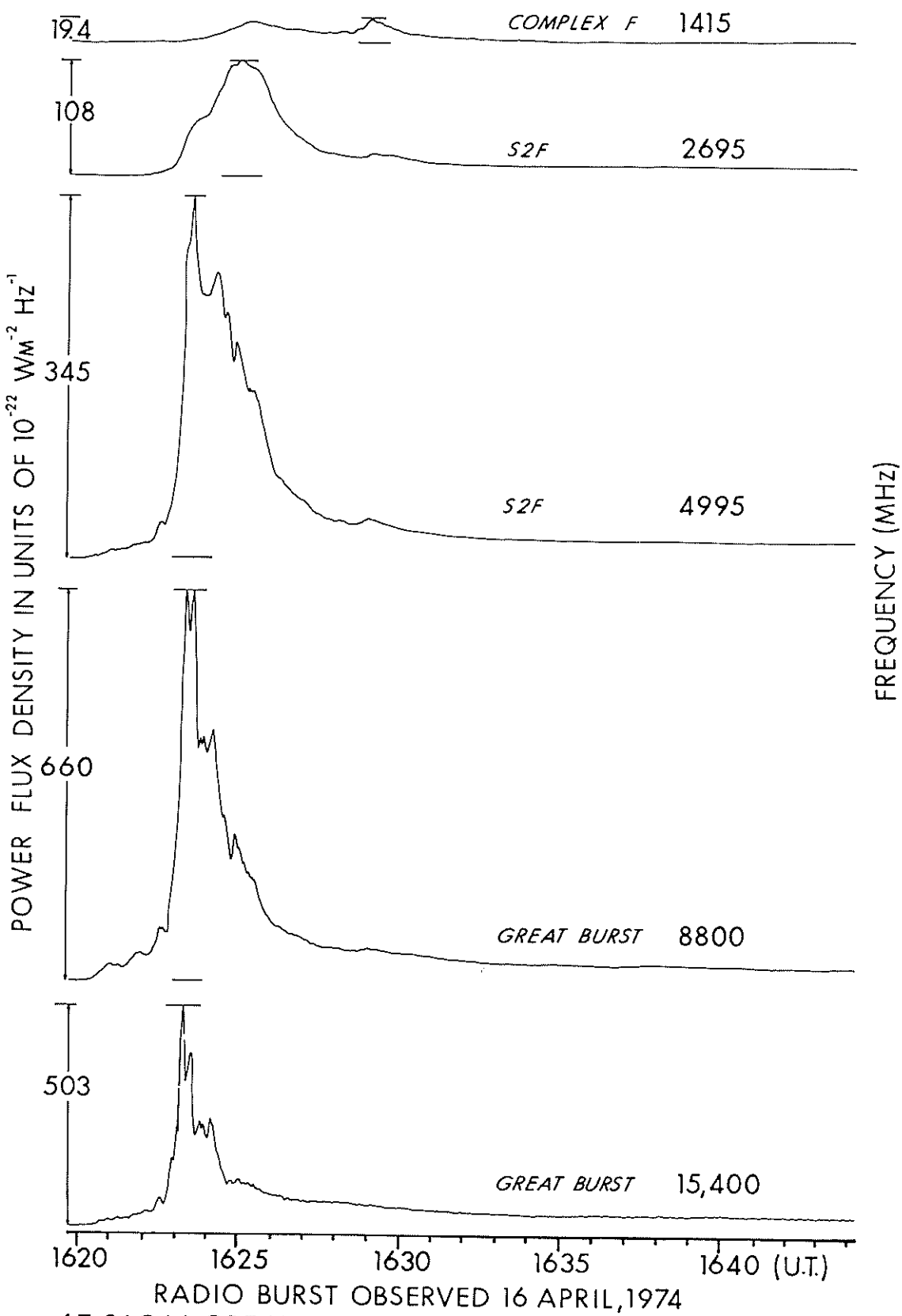
BOUL = Boulder MANI = Manila OTTA = Ottawa ARO PENT = Penticton SGMR = Sagamore Hill

Explanation of Type Code:

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

SELECTED SOLAR NOISE BURST

16 APRIL 1974



RADIO BURST OBSERVED 16 APRIL, 1974
AT SAGAMORE HILL RADIO OBSERVATORY, HAMILTON, MASS.

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
1893	1971 DEC 20	T	A	A	A	A	A	A	A	T	T	T	T	-	T	T	T	T	T	T	T	T	T	T	-	T	T	T
1894	1972 JAN 16	T	A	A	A	A	T	T*	T	T	T	T	T	T	T	T	T	T	A	A	A	T	T	T	T	T	TA	A
1895	FEB 12	A	T	A	A	A	A	T	T	T	TA	A	-	A	T	T	T	T	TA	A	T	T	T	T	T	TA	A	A
1896	MAR 10	A	A	A	A	A	A	A	A	A	A	A	T	A	T	T	T	T	A	A	T	T	T	T	T	T	A	A
1897	APR 6	A	T	T	A	T	T	T	T	T	T	T	T	T	A	T	T	A	A	A	A	A	-	A	A	T	TA	A
1898	MAY 3	A	A	A	-	A	T	T	T	T	T	T	T	T	A	A	T	A	A	A	A	A	T	A	T	T	A	T
1899	MAY 30	A	A	*	A	A*	T	T	A	T	T	T	A	-	-	-	-	-	T	-	A	A	T	T	T	T	TA	A
1900	JUN 26	A	A	A	A	A	A	A	AT	T	T	T	TA	A	T	T	A	A	A*	A*	A	T*	T	T	T	T	T	TA
1901	JUL 23	A*	A*	A*	A	A	A	A	A*	T	T	A	A	A	-	A	T	T	T	T	T	A	T	T	T	T	A	-
1902	AUG 19	-	-	A	A	A	A	A	T	A	A	A	A	T	A	A	A	T	T	T	T	A	A	T	A	A	A	-
1903	SEP 15	A	T*	A	A	A	A	A	T	A	A	A	-	-	-	-	-	T	T	T	T	T	-	T	A	A	A	T
1904	OCT 12	T	-	-	A*	T	T	T	A	A	T	A	A	A	A	A	AT	T	AT	T*	T	-	A*	AT	T	T	*	A
1905	NOV 8	A	A	A	AT	AT	AT	T	T*	A	A	A*	AT	A	A	AT	T	T	TA	T	T	T	A	A	A	A	AT	T
1906	DEC 5	T	T	AT	-	-	T	T	AT	-	T	T	A	-	-	T	TA	A	T	T	T	A*	T	T	T	T	AT	T
1907	1973 JAN 1	T	T	T	T	T	T	T	-	AT	T	-	-	TA	A	A	A	A	A	T	-	-	T	-	T	-	T	T
1908	JAN 28	T	A	T	T'	T	T	T	T	A	TA	A	A	AT	TA	AT	TA	AT	-	A	A	T	T	T	T	T	T	T
1909	FEB 24	T	T	TA	T	T	-	TA	A	A	T	A	A	A	AT	A	A	A	TA	A	A	TA	A	A	T	T	T	T
1910	MAR 23	T	T	T	A	T	T	T	TA	A	TA	A	A	-	A	A	TA	A	A	AT	T-	-	T	T	T	T	T*	T*
1911	APR 19	T	AT	T-	T	T	T	A	T	T	TA	A	A	A*	A	AT	TA	A*	T	A	TA	T*	AT	A	T	A	T	A*
1912	MAY 16	T	T	T	T	T	T	TA	T	A	AT	T	A	A	A	A	A	A*	A	A	A	A	T*	-A	A	-	T	T
1913	JUN 12	T*	T	-	T	T*	A	T	T*	T*	T	T	AT	A	A	T	-	T	A	A	A	A*	AT	-	T	A	A	T
1914	JUL 9	T	T	A	T	T	A	T*	T*	A	AT	-	A	T	TA	T	T	T	A	A*	A	A*	TA	A	TA	T*	T*	T
1915	AUG 5	T	A	A	AT	A	T	T*	T	*	AT	T	AT	T	A	TA	T	T	A	A	AT	A*	AT	A	A	TA	A*	A
1916	SEP 1	TA*	T	T	AT	A	TA*	A	*	T	T	T	A	A	A	T	T	T	A	T	A	A*	A	T*	A	A	A*	A
1917	SEP 28	A*	A	AT	T T	A* A	A A	A A	T* A	AT A*	AT T*	AT AT	T T	T* T	T T*	T* T	T T*	T* T*	AT T	TA A	A* T	- A*	A* A	A* A	A T	AT A	AT T	T* T
1918	OCT 25	T* T	T* T	A TA	A* A	A* T	A T*	T A	T A	A* A	A* A	T A	TA T	T* T	AT T	T T	T T	T* TA	T* T	T* T	T *	A A	A A	AT A	AT TA	A* T	A* -	A A
1919	NOV 21	A *	T* T	T -	A A	A* A	AT T	A T	A* T*	A TA	A* A	A* A	A* A	T TA	T T	T T	T* T	T *	T* T	T T	TA TA	A* A	T* T	T* -	T* A	A* TA	A* A	T T
1920	DEC 18	T T	AT A	A T	A* T	A TA	A* T	A* *	A A	A *	AT T	T* T	T T	T T	T *	T T	T T	T T	A T	AT T	T A	T T	T T	AT TA	T T	T* A	A* T	AT T
1921	1974 JAN 14	T A	A* T	- T	T A	A T	A A	A A	A* A	- A	A -	AT -	T* T	T* TA	T *	T A	T* T	T T	T A*	- T	- T	TA A	- -	- T	T T	- T	- T	- A
1922	FEB 10	A -	A -	- *	A A	A A	A A	A A	TA T	- A	- A	- *	T T	T T	T T	- A	- -	T T	T T	T T	T TA	T T	T T	T T	T T	T T	A A	A A
1923	MAR 9	A A	A A	A A	A A	A A	A A	T T	TA TA	A AT	A A	A A	T A	T TA	T A	T T	A T	A A	T A	T T	T T	T T	T TA	T T	TA T	TA A	TA -	A TA
1924	APR 5	A A	A A	A -	TA A	A A	A A	A A	* A	A A	A A	A A	T T	TA TA	TA T	T T	T T	T T	T T	T T	T T	T T	T A	TA A	AT T	A A	A -	

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 made from magnetograms produced by magnetometers at the Vostok Antarctic Station of the USSR for the first half of the day and the Thule Geopole Station of the U.S. Air Weather Service for the second half.

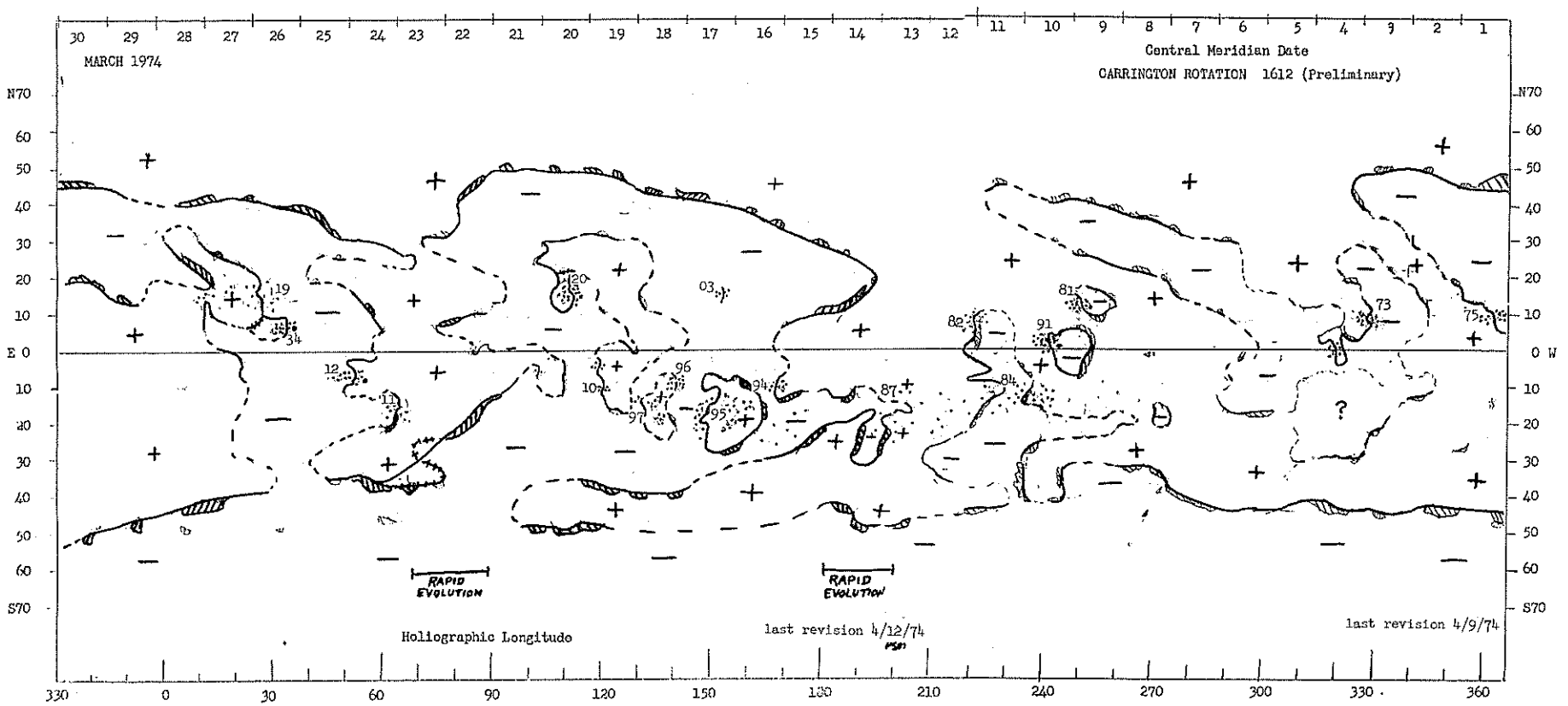
MARCH 1974 DATA

Contents

For explanations of the data contained herein see *Descriptive Text* published as supplement to February 1974 *Solar-Geophysical Data* (Number 354).

Hα SYNOPTIC CHART

MARCH 1974



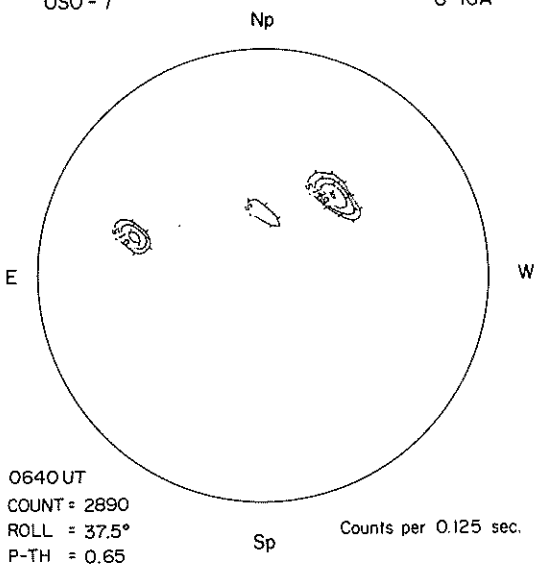
Errata: The longitudes on the synoptic charts have been labeled "Carrington longitude". These longitudes are, in fact, in the heliographic system. This change should also be noted on page 20 of the *Descriptive Text* published February 1974 including the reference to Lo, as shown on the pages of solar maps which follow.

25 Mar 74

MARCH 1, 1974 (P = -21.49, B_o = - 7.22, L_o = 6.84)

NASA GSFC
OSO - 7

X-RAY
8-16A

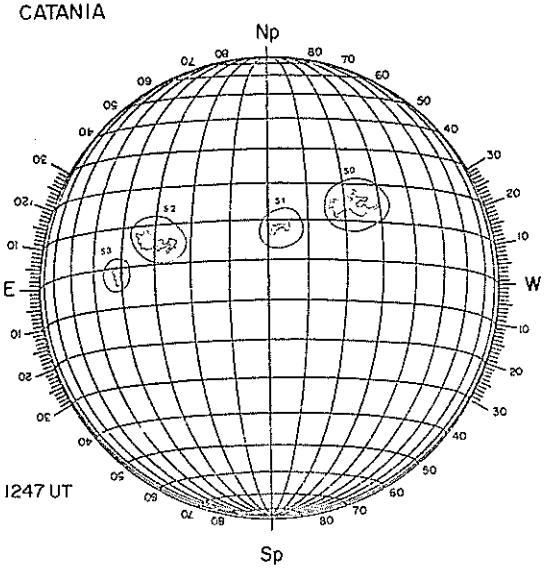


0640 UT
COUNT = 2890
ROLL = 37.5°
P-TH = 0.65

Counts per 0.125 sec.

CATANIA

CALCIUM REPORT



1247 UT

FAIR	GD
50 - 1916	---
52 - 1354	---

PROSPECT HILL
AFCRL

Np

8.6 mm

E

W

Sp

Note: The Prospect Hill Observatory has ceased operation on 8.6 mm. A replacement map at this frequency is expected.

Contours in Intervals of 200° K

MT. WILSON

Np

DELTAY =
DELTAX =

MAGNETOGRAM
Solid - Plus
Dotted - Minus

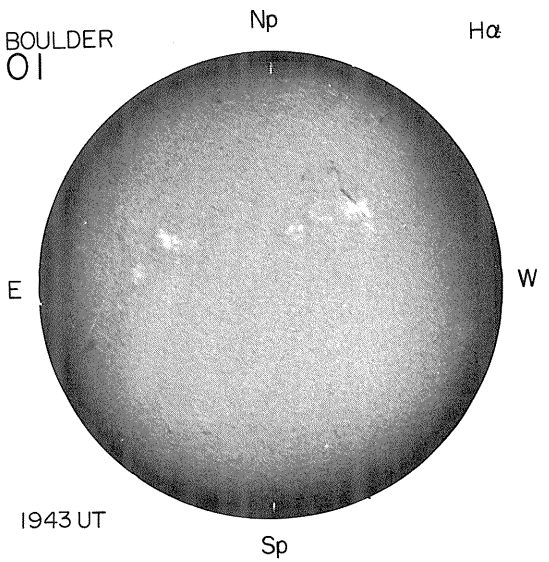
E

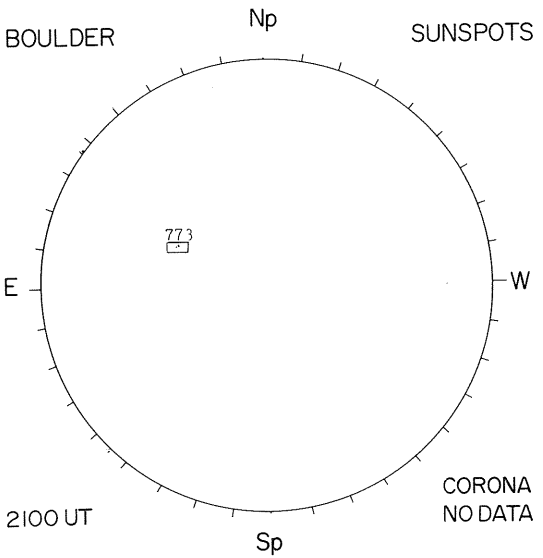
NO DATA

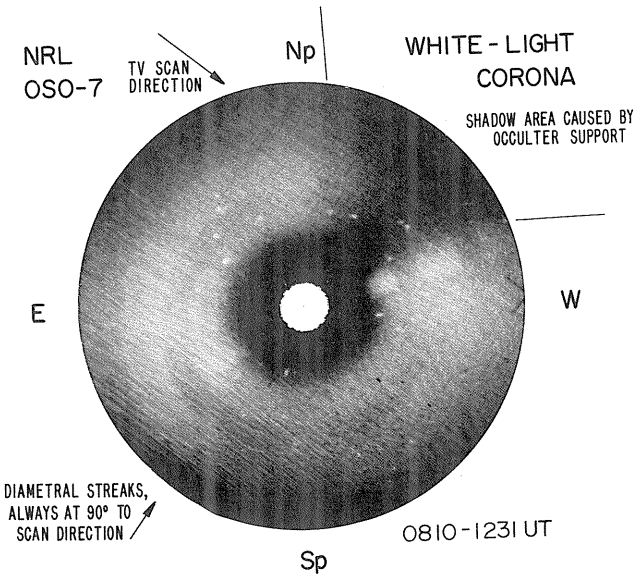
W

Sp

Levels
± 5
± 10
± 20
± 40
± 80

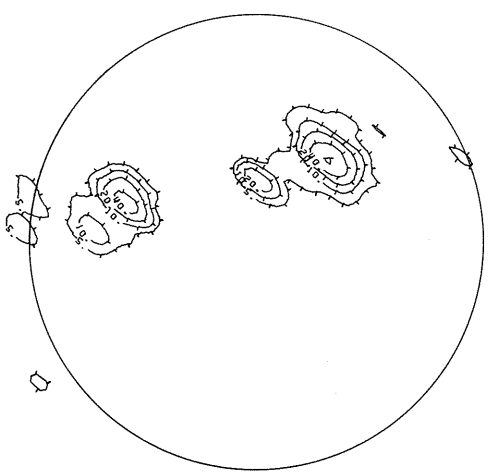






NASA GSFC
OSO - 7

FE XV
284A



0640 UT

COUNT = 2521
ROLL = 37.5°
P-TH = 0.65

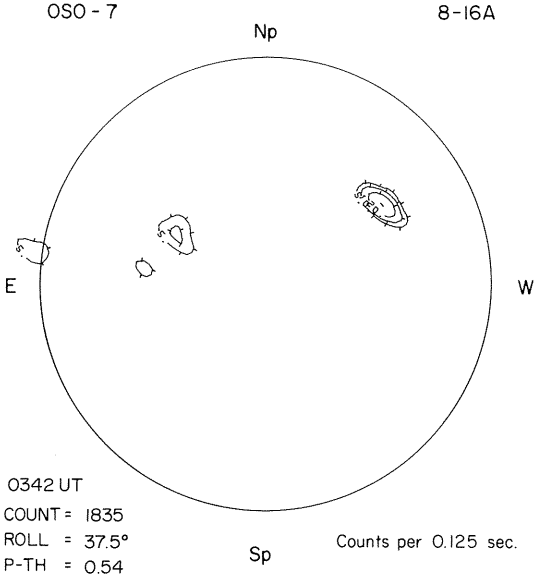
27
Mar 74

MARCH 2, 1974 (P = -21.74, B_o = -7.23, L_o = 353.67)

28 Mar 74

NASA GSFC
OSO - 7

X-RAY
8-16A

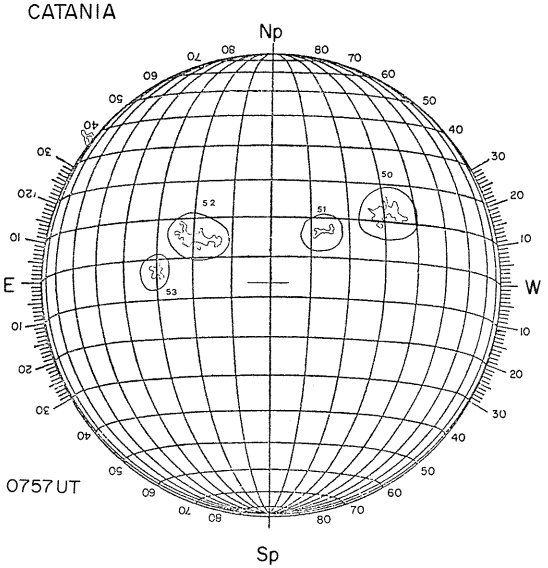


0342 UT
COUNT = 1835
ROLL = 37.5°
P-TH = 0.54

Counts per 0.125 sec.

CATANIA

CALCIUM REPORT



0757 UT

FAIR	GD
50 - 1308	---
52 - 1257	---

PROSPECT HILL
AFCRL

Np

E

W

Sp

Contours in Intervals of 200° K

8.6 mm

MT. WILSON

Np

DELTAY =
DELTAX =

MAGNETOGRAM

Solid - Plus
Dotted - Minus

E

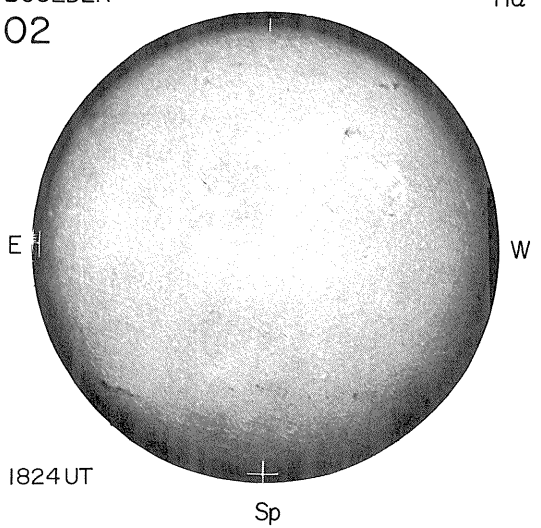
NO DATA

W

Sp

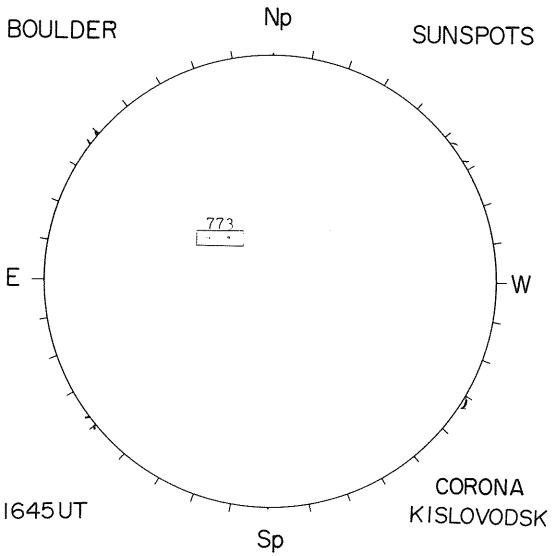
Levels
± 5
± 10
± 20
± 40
± 80

BOULDER
02



1824 UT

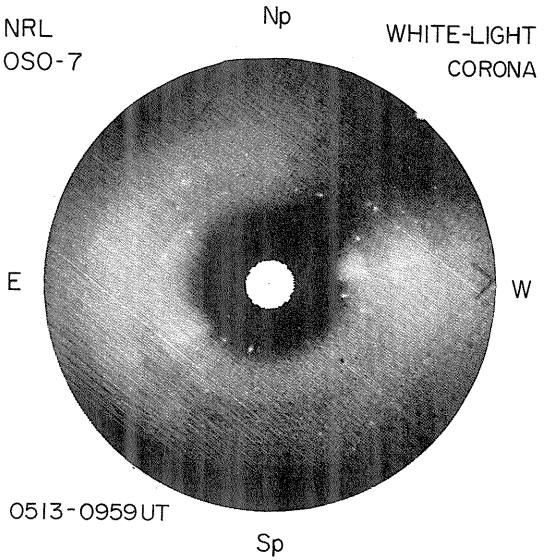
BOULDER



1645 UT

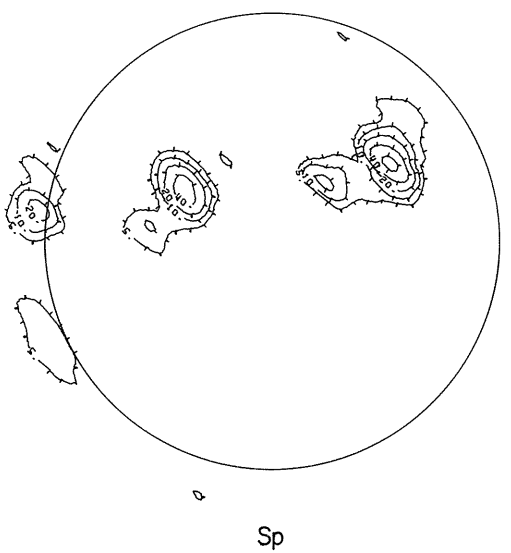
CORONA
KISLOVODSK

NRL
OSO-7



0513-0959 UT

NASA GSFC
OSO-7



0342 UT

FE XV
284A

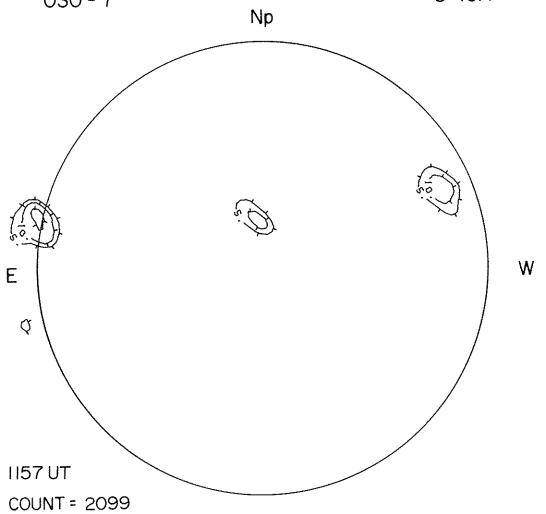
COUNT = 2729
ROLL = 37.5°
P-TH = 0.54

29
Mar 74

MARCH 3, 1974 (P=-21.99, B_o=-7.24, L_o=340.49)

NASA GSFC
OSO - 7

X-RAY
8-16A

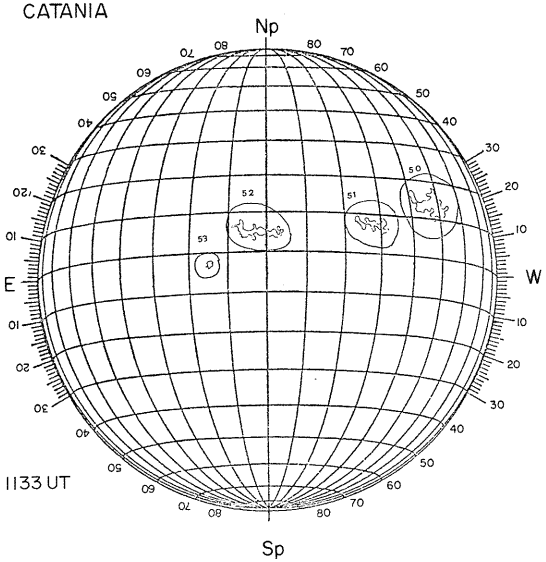


1157 UT
COUNT = 2099
ROLL = 36.4°
P-TH = 0.37

Counts per 0.125 sec.

CALCIUM REPORT

CATANIA



1133 UT

POOR	GD
50 - 1944	---
52 - 0928	---

PROSPECT HILL
AFCRL

Np

E

Sp

8.6 mm

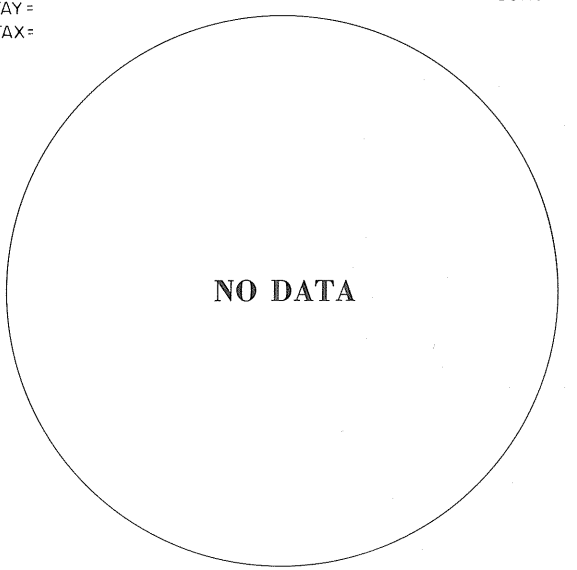
Contours in Intervals
of 200° K

MT. WILSON

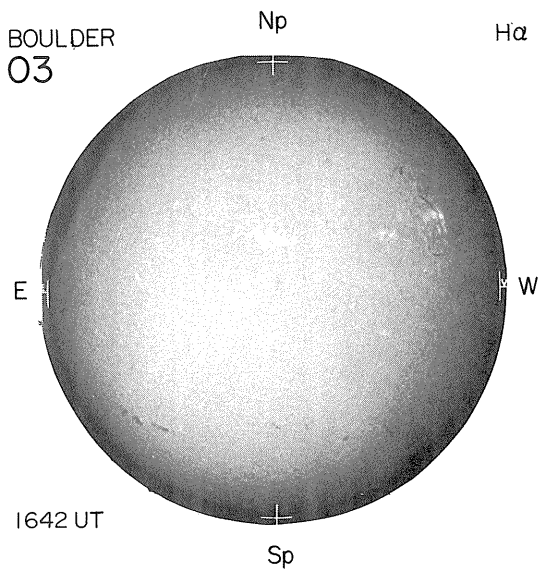
Np

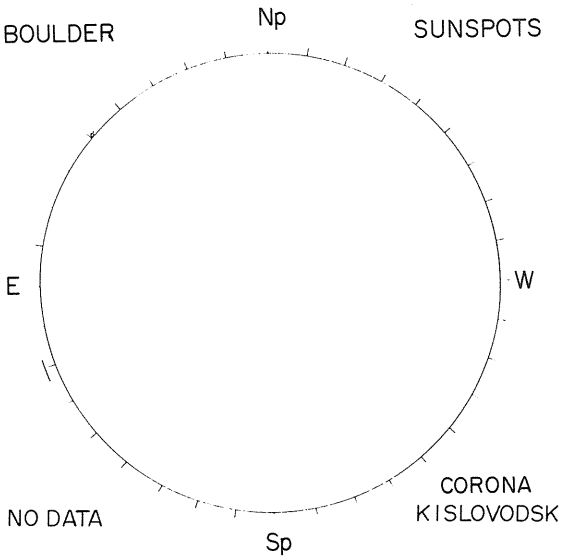
MAGNETOGRAM
Solid - Plus
Dotted - Minus

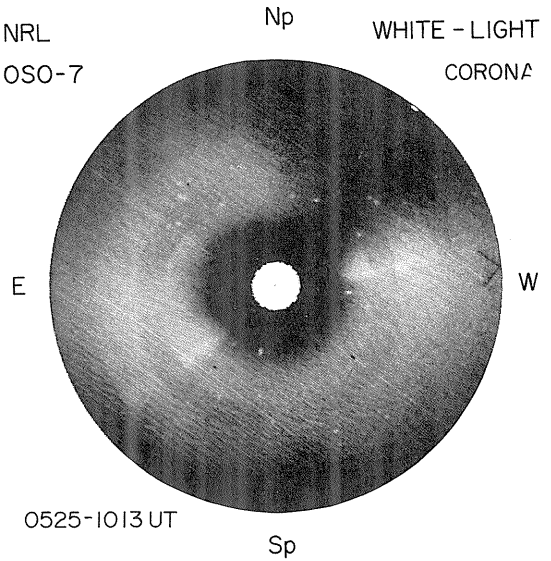
DELTAY =
DELTAX =



Levels
± 5
± 10
± 20
± 40
± 80

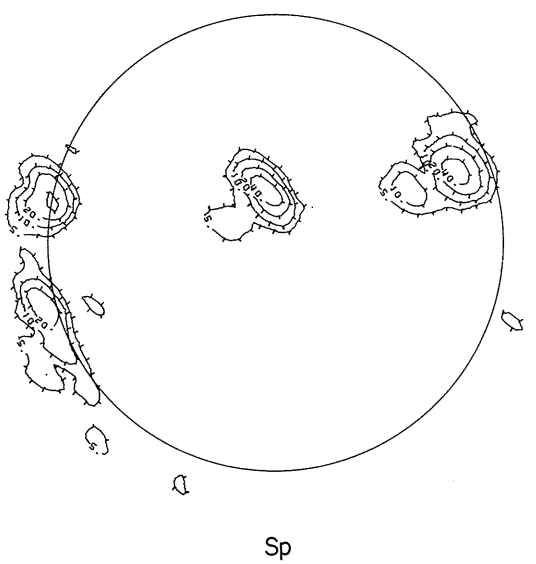






NASA GSFC
OSO - 7

FE XV
284A



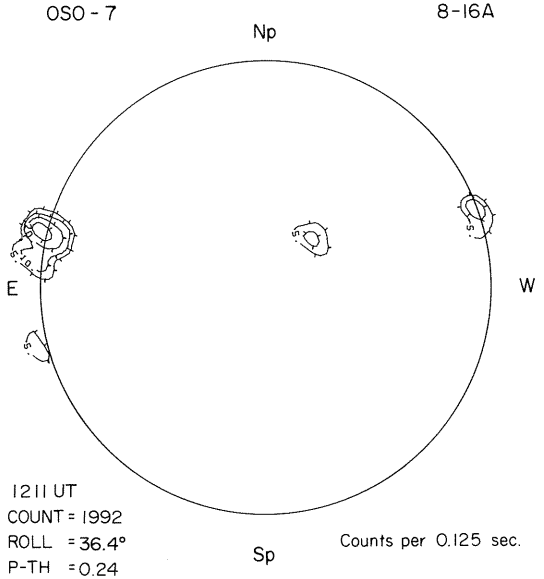
COUNT = 3120
ROLL = 36.4°
P-TH = 0.37

31
Mar 74

MARCH 4, 1974 (P=-22.22, B_o=-7.24, L_o=327.32)

NASA GSFC
OSO-7

X-RAY
8-16A

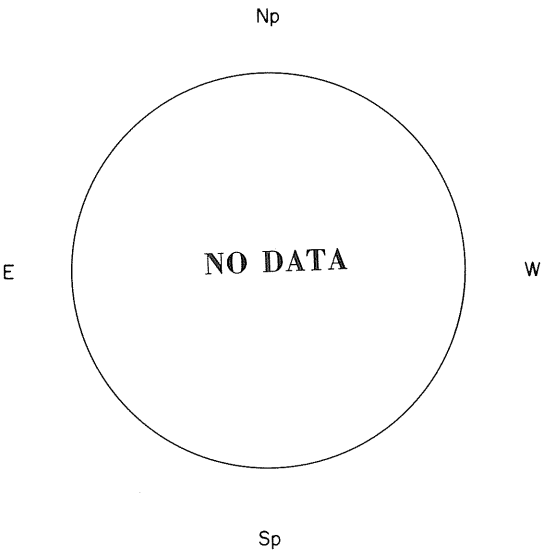


1211 UT
COUNT = 1992
ROLL = 36.4°
P-TH = 0.24

Counts per 0.125 sec.

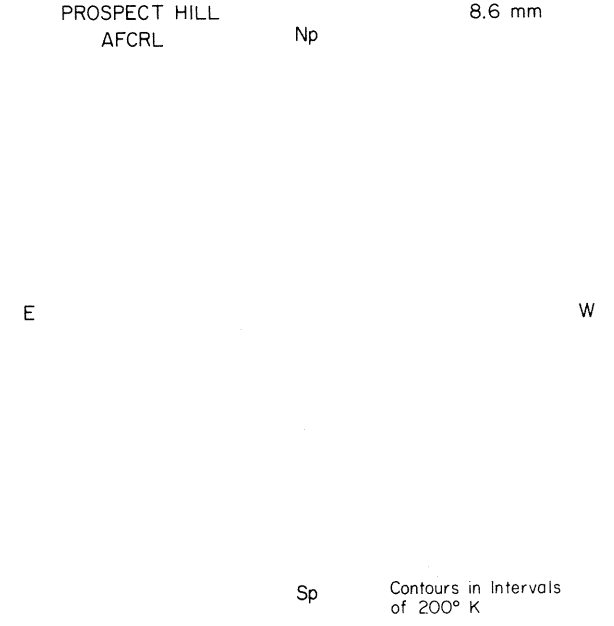
McMATH-HULBERT

CALCIUM REPORT



PROSPECT HILL
AFCRL

8.6 mm

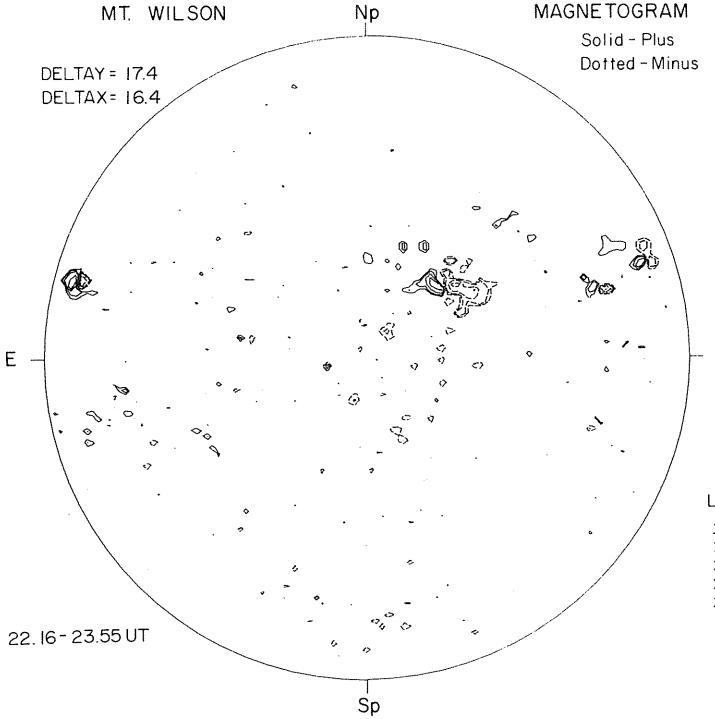


Contours in Intervals
of 200° K

MT. WILSON

MAGNETOGRAM
Solid - Plus
Dotted - Minus

DELTAY = 17.4
DELTAX = 16.4



22.16-23.55 UT

Levels
± 5
± 10
± 20
± 40
± 80

BOULDER
04

Np

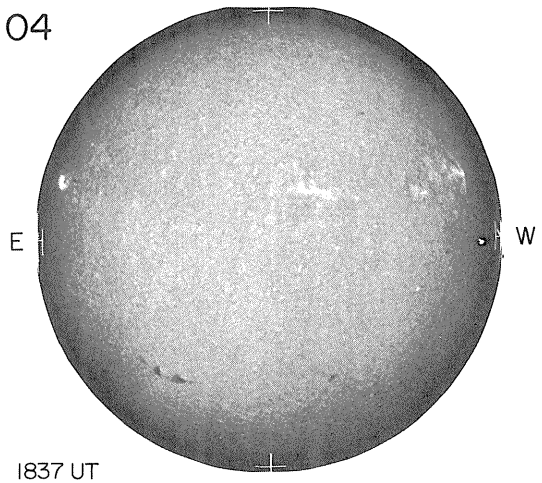
Hα

E

W

Sp

1837 UT



BOULDER

Np

SUNSPOTS

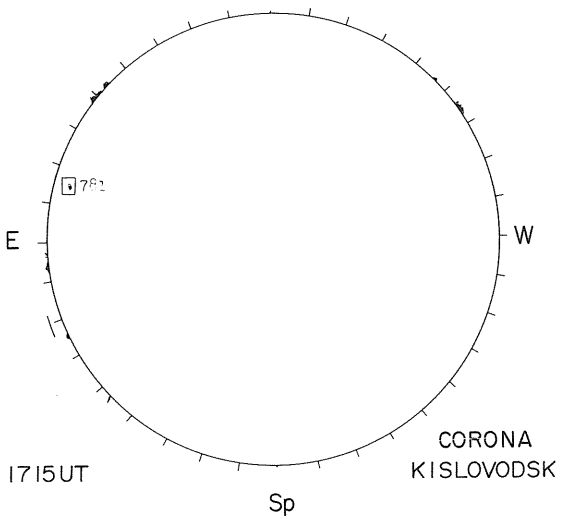
E

W

CORONA
KISLOVODSK

1715 UT

Sp



NRL
OSO-7

Np

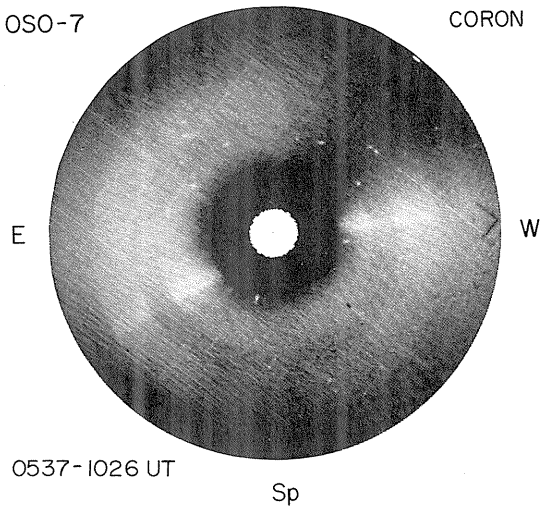
WHITE-LIGHT
CORON

E

W

0537-1026 UT

Sp



NASA GSFC
OSO-7

FE XV
284A

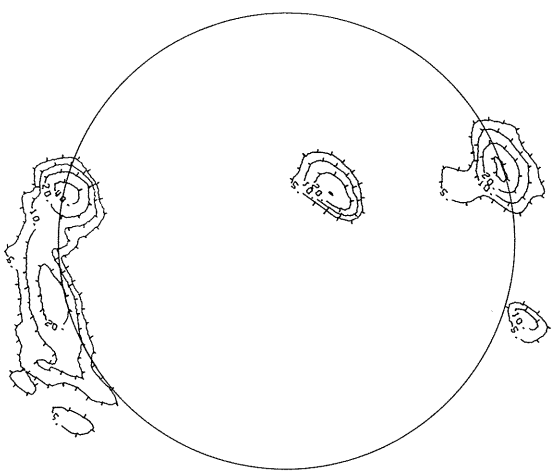
Np

E

W

Sp

1211 UT



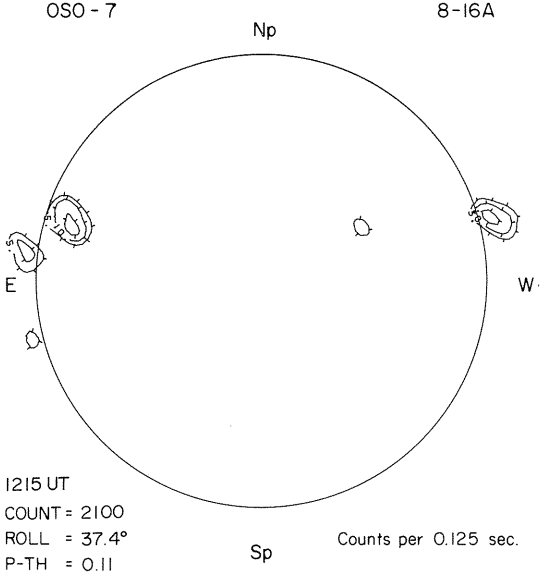
COUNT = 2904
ROLL = 36.4°
P-TH = 0.24

33
Mar 74

MARCH 5, 1974 (P=-22.46, B_o=-7.25, L_o=314.14)

NASA GSFC
OSO-7

X-RAY
8-16A

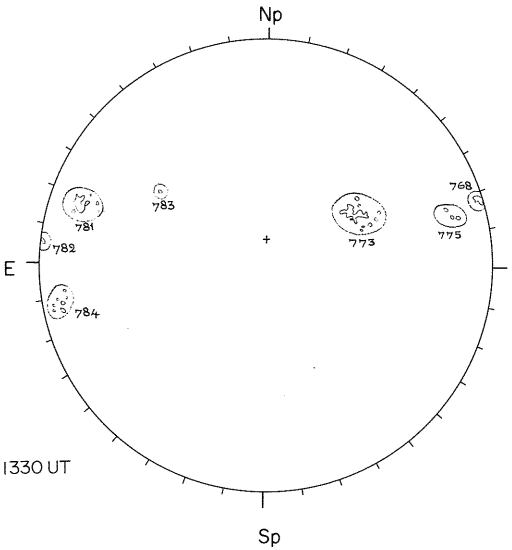


1215 UT
COUNT = 2100
ROLL = 37.4°
P-TH = 0.11

Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT

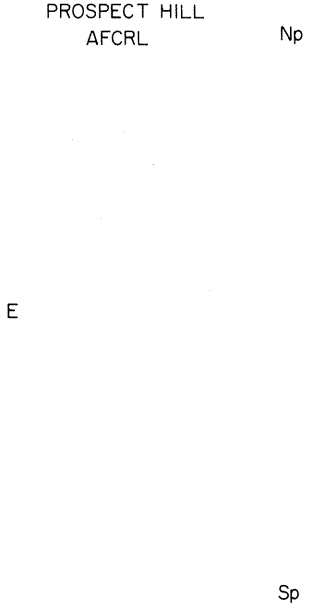


GOOD	M
73-0900	-3.0
81-1000	-3.5

1330 UT

PROSPECT HILL
AFCRL

8.6 mm

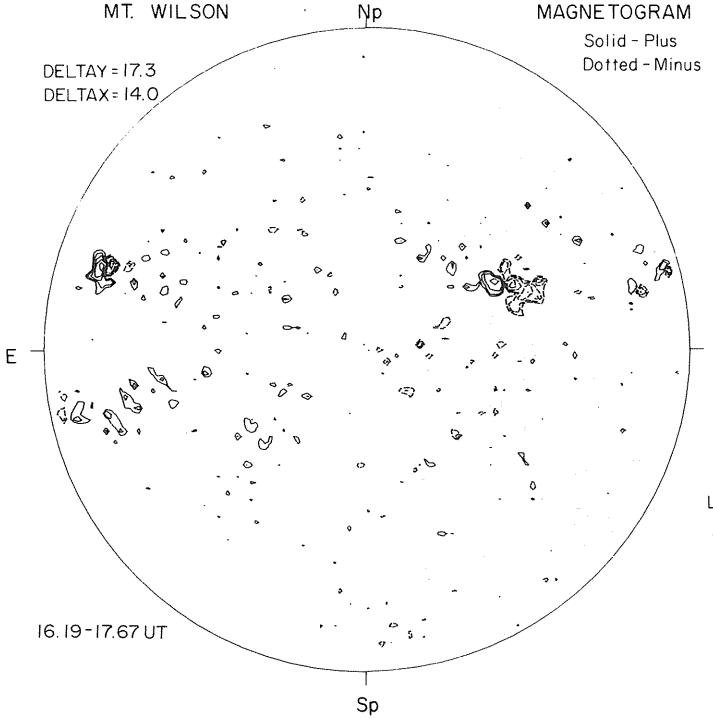


Contours in Intervals
of 200° K

MT. WILSON

MAGNETOGRAM
Solid - Plus
Dotted - Minus

DELTAY = 17.3
DELTAX = 14.0



16.19-17.67 UT

Levels
± 5
± 10
± 20
± 40
± 80

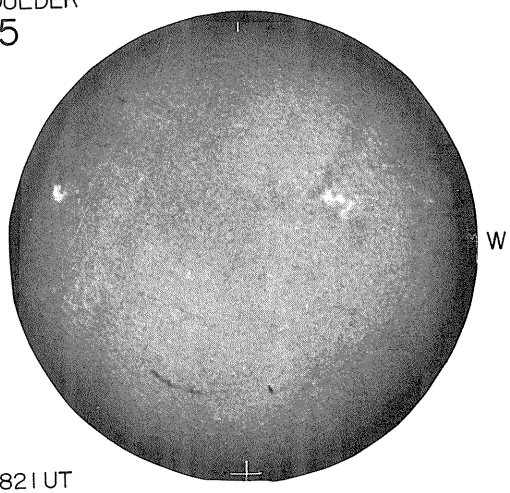
BOULDER
05

Np

Hα

E

W



1821 UT

Sp

BOULDER

Np

SUNSPOTS

781

782

E

W

CORONA
KISLOVODSK

1830 UT

Sp

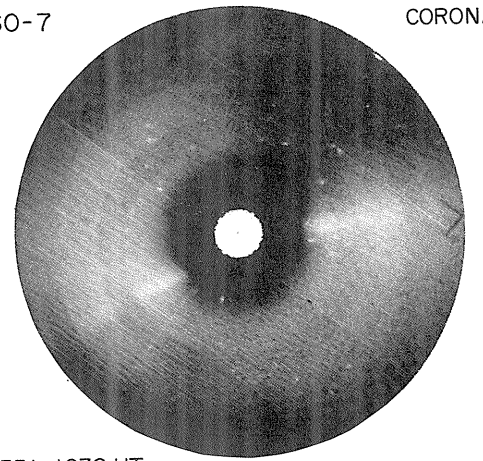
NRL
OSO-7

Np

WHITE-LIGHT
CORONA

E

W



0551-1039 UT

Sp

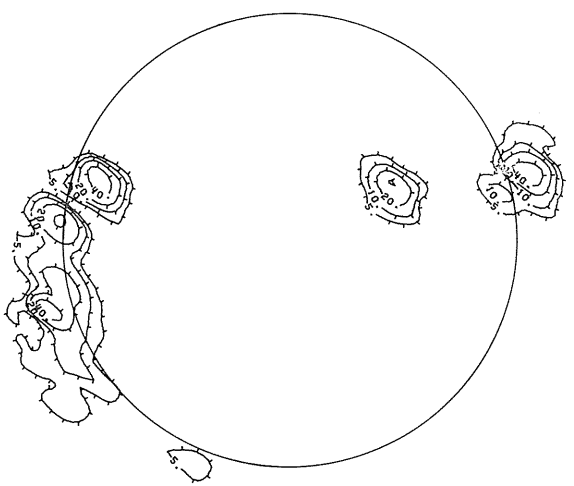
NASA GSFC
OSO-7

FE XV
284A

Np

E

W



1215 UT

Sp

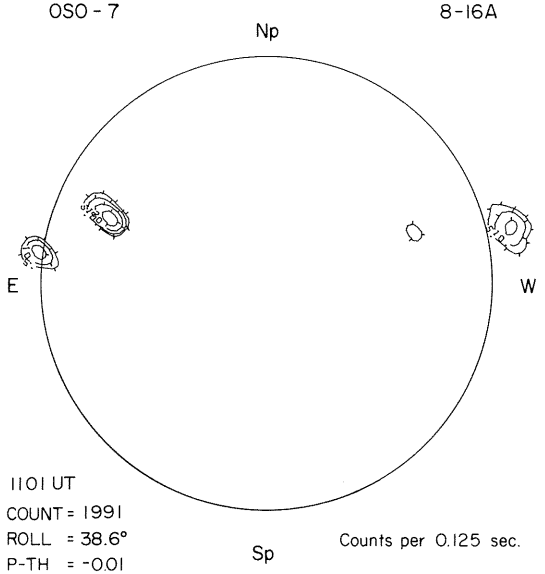
COUNT = 3095
ROLL = 37.4°
P-TH = 0.11

35
Mar 74

MARCH 6, 1974 (P=-22.68, B_o=-7.25, L_o=300.97)

NASA GSFC
OSO-7

X-RAY
8-16A

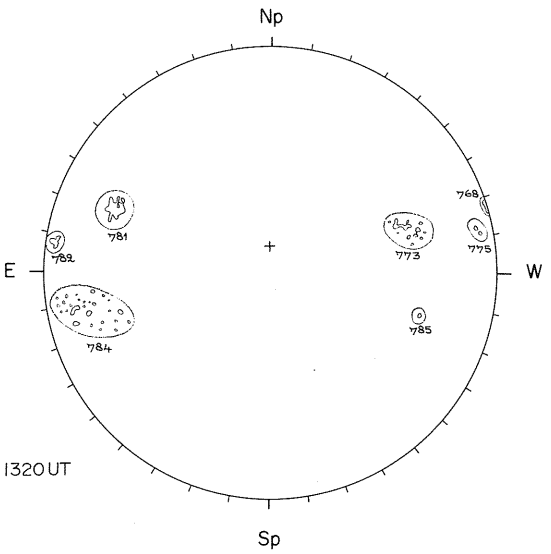


1101 UT
COUNT = 1991
ROLL = 38.6°
P-TH = -0.01

Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT

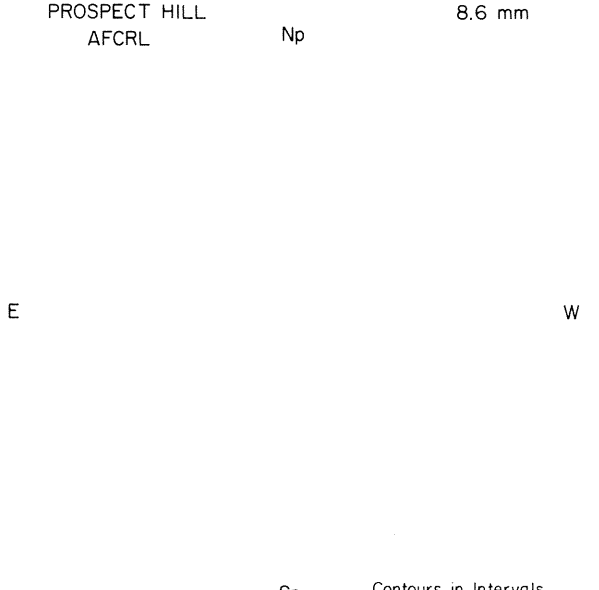


FAIR	M
73 - 0700	- 2.5
81 - 1200	- 3.0

1320UT

PROSPECT HILL
AFCRL

8.6 mm

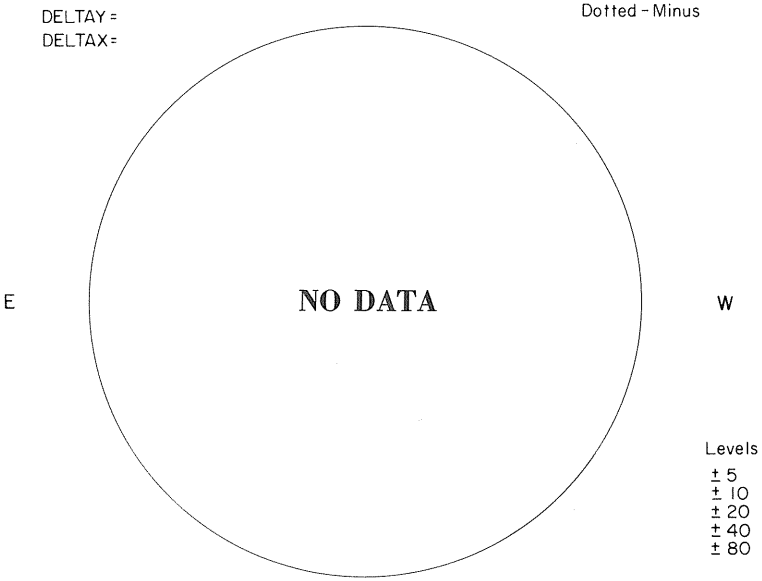


Contours in Intervals
of 200° K

MT. WILSON

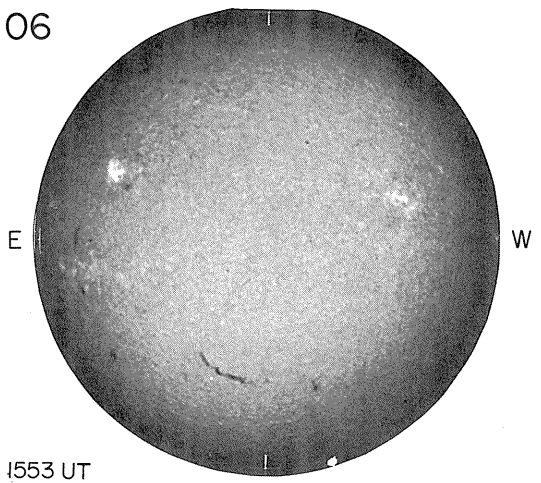
MAGNETOGRAM
Solid - Plus
Dotted - Minus

DELTAY =
DELTAX =



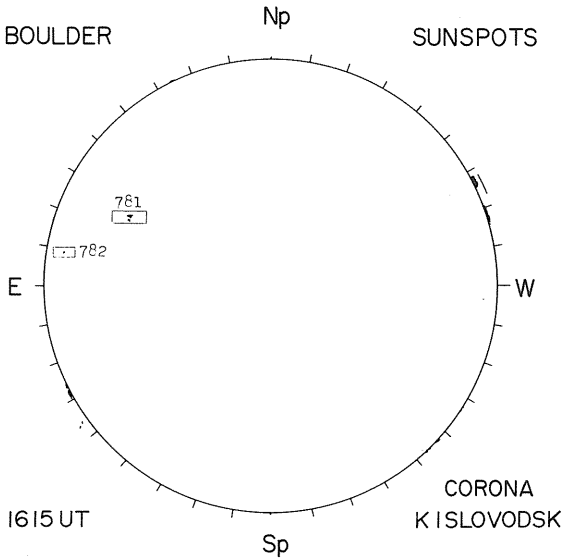
Levels
± 5
± 10
± 20
± 40
± 80

BOULDER
06



1553 UT

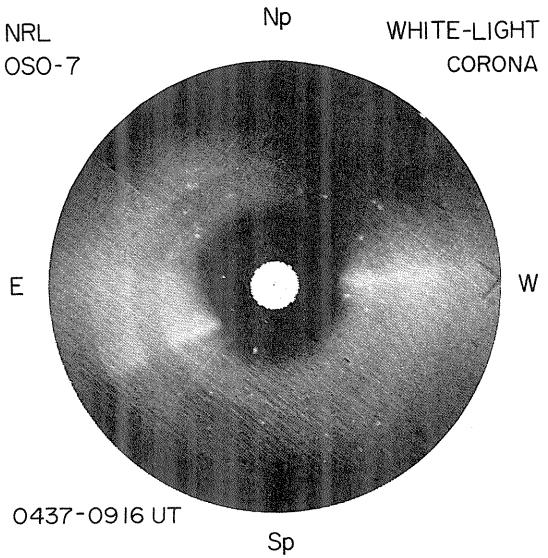
BOULDER



1615 UT

CORONA
KISLOVODSK

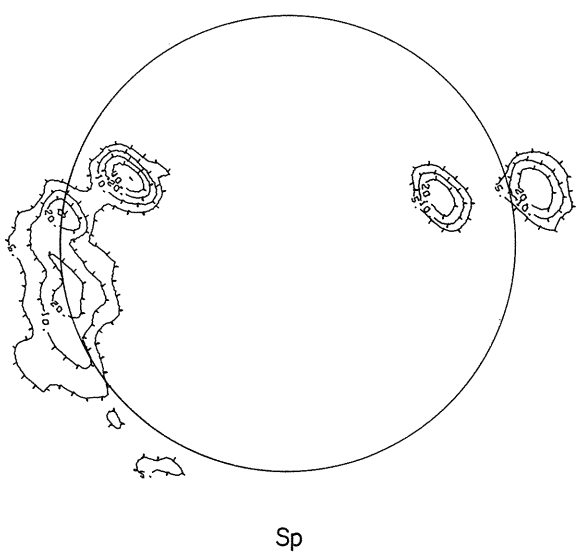
NRL
OSO-7



0437-0916 UT

NASA GSFC
OSO-7

FE XV
284A



1101 UT

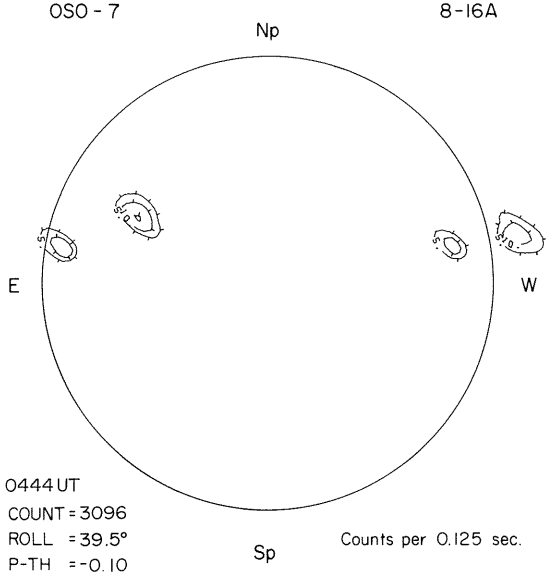
COUNT = 2894
ROLL = 38.6°
P-TH = -0.01

37
Mar 74

MARCH 7, 1974 (P=-22.90, B_o=-7.25, L_o=287.79)

NASA GSFC
OSO-7

X-RAY
8-16A

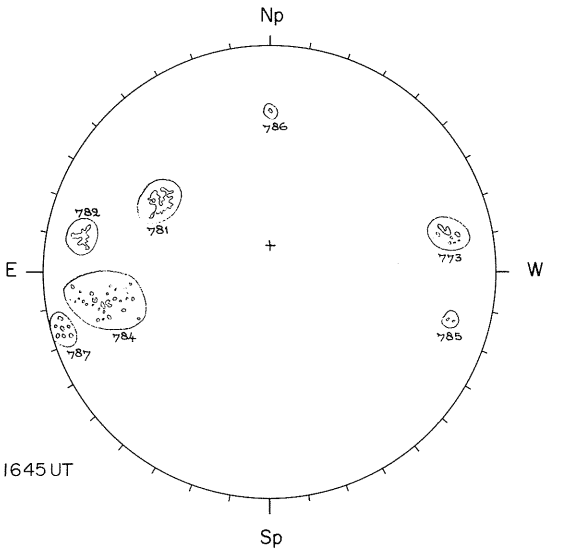


0444 UT
COUNT = 3096
ROLL = 39.5°
P-TH = -0.10

Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT



GOOD	M
73 - 0500	- 2.5
81 - 1200	- 3.0

1645 UT

PROSPECT HILL
AFCRL

Np

E

W

Sp

8.6 mm

Contours in Intervals
of 200° K

MT. WILSON

Np

MAGNETOGRAM
Solid - Plus
Dotted - Minus

DELTAY =
DELTAX =

E

NO DATA

W

Sp

Levels
± 5
± 10
± 20
± 40
± 80

BOULDER
07

Np

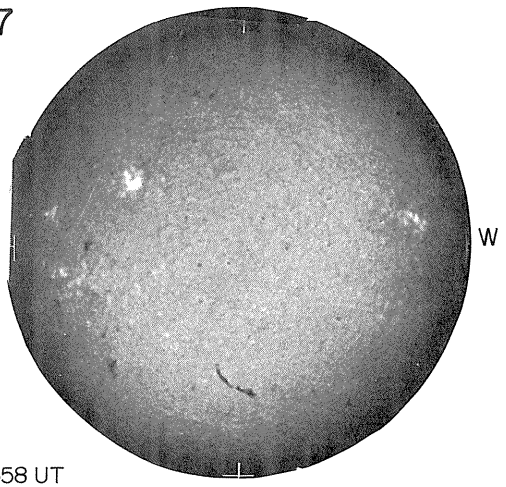
Hα

E

W

Sp

1558 UT



BOULDER

Np

SUNSPOTS

781

782

E

W

CORONA
KISLOVODSK

1630 UT

Sp

NRL
OSO-7

Np

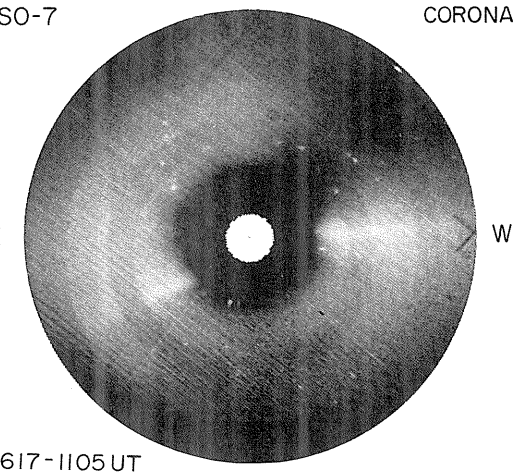
WHITE-LIGHT
CORONA

E

W

0617-1105 UT

Sp



NASA GSFC
OSO-7

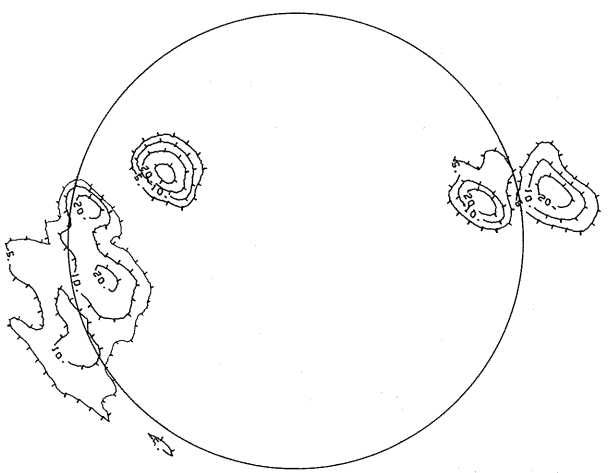
FE XV
284A

Np

E

W

Sp



0444 UT

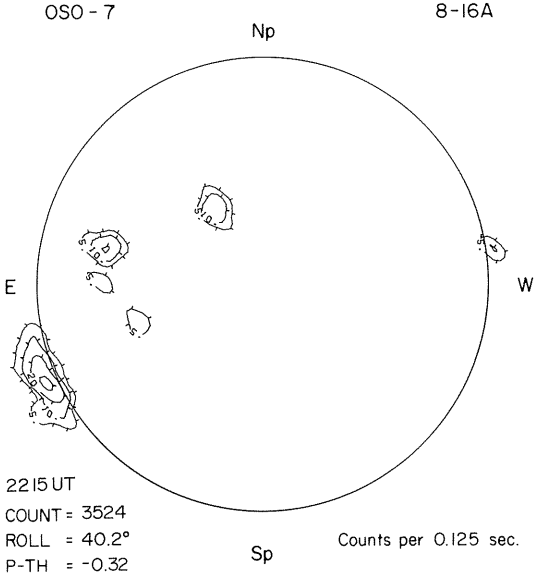
COUNT = 2832
ROLL = 39.5°
P-TH = -0.10

39
Mar 74

MARCH 8, 1974 (P = -23.12, B_o = -7.25, L_o = 274.62)

NASA GSFC
OSO - 7

X-RAY
8-16A

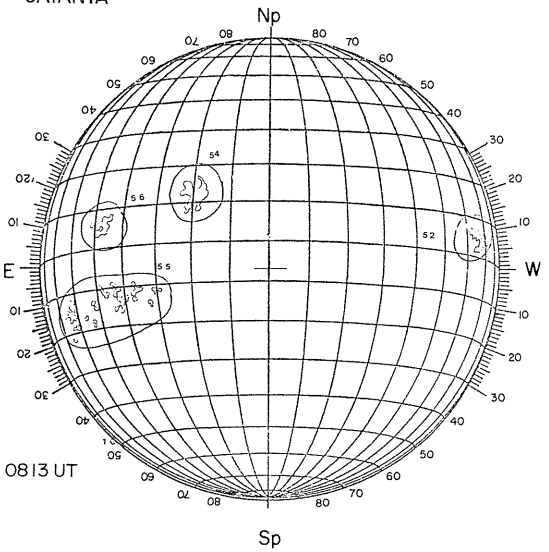


2215 UT
COUNT = 3524
ROLL = 40.2°
P-TH = -0.32

Counts per 0.125 sec.

CALCIUM REPORT

CATANIA

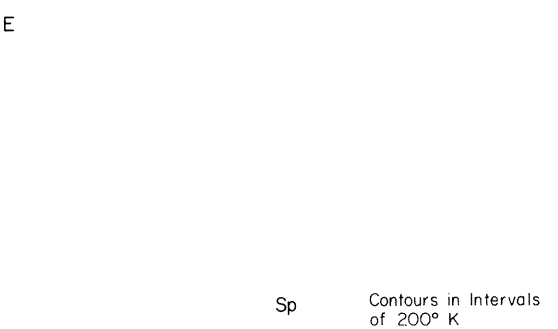


0813 UT

FAIR	GD
52 - 1392	---
54 - 1357	---

PROSPECT HILL
AFCRL

8.6 mm

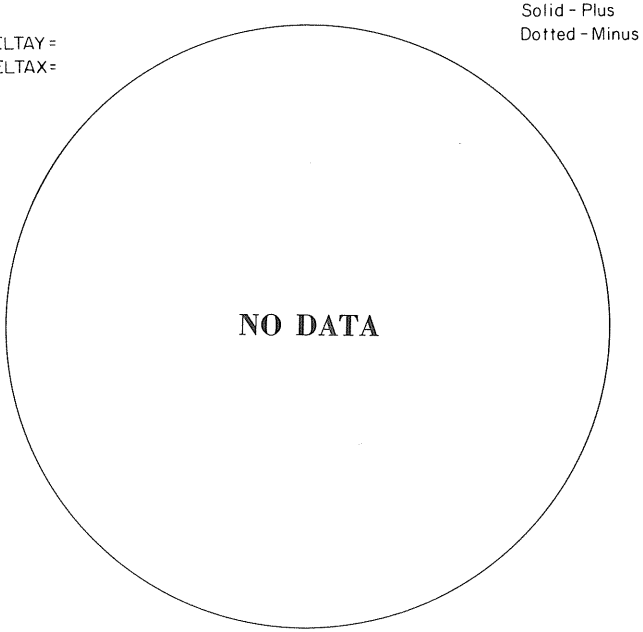


Contours in Intervals
of 200° K

MT. WILSON

MAGNETOGRAM
Solid - Plus
Dotted - Minus

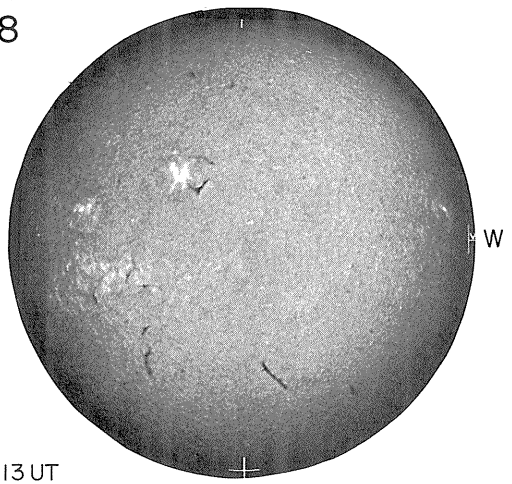
DELTAY =
DELTAX =



NO DATA

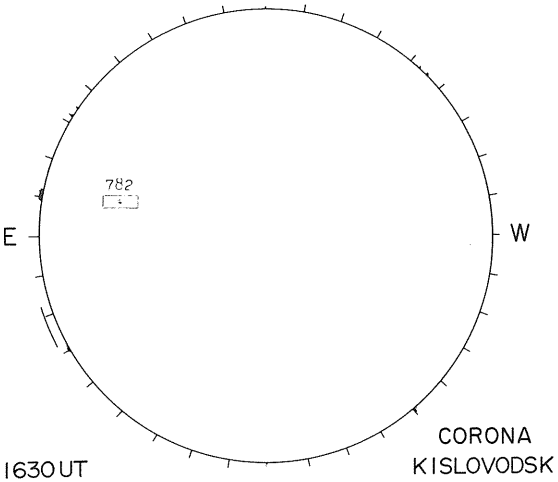
Levels
± 5
± 10
± 20
± 40
± 80

BOULDER
08



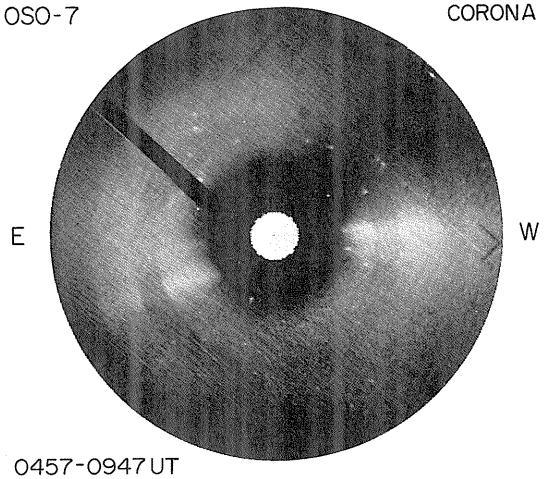
1513 UT

BOULDER



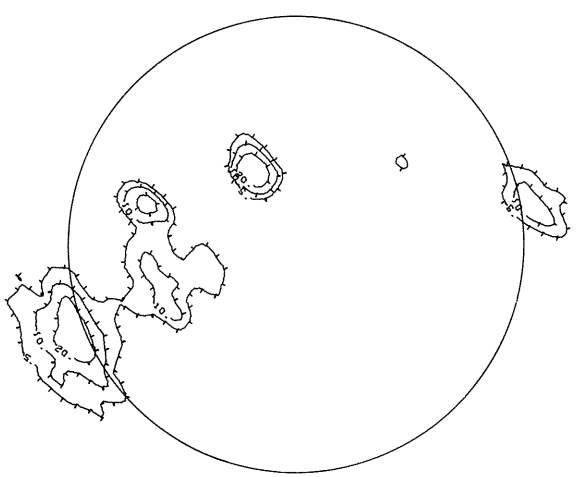
1630 UT

NRL
OSO-7



0457-0947 UT

NASA GSFC
OSO-7



2215 UT

FE XV
284A

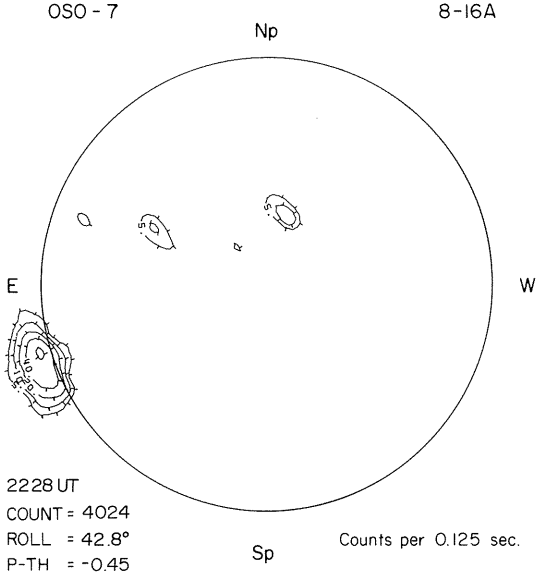
COUNT = 2499
ROLL = 40.2°
P-TH = -0.32

41
Mar 74

MARCH 9, 1974 (P = -23.32, B_o = -7.24, L_o = 261.44)

NASA GSFC
OSO - 7

X-RAY
8-16A

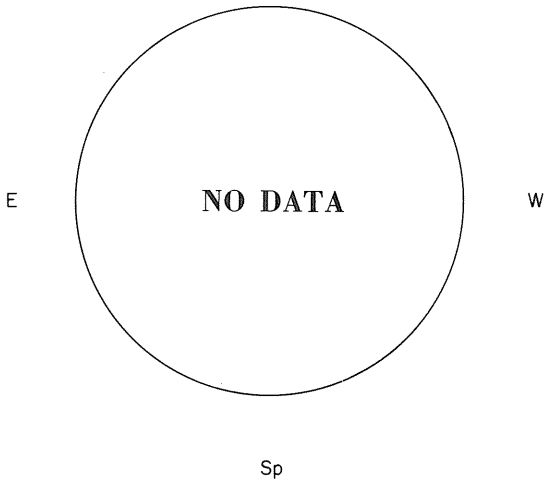


2228 UT
COUNT = 4024
ROLL = 42.8°
P-TH = -0.45

Counts per 0.125 sec.

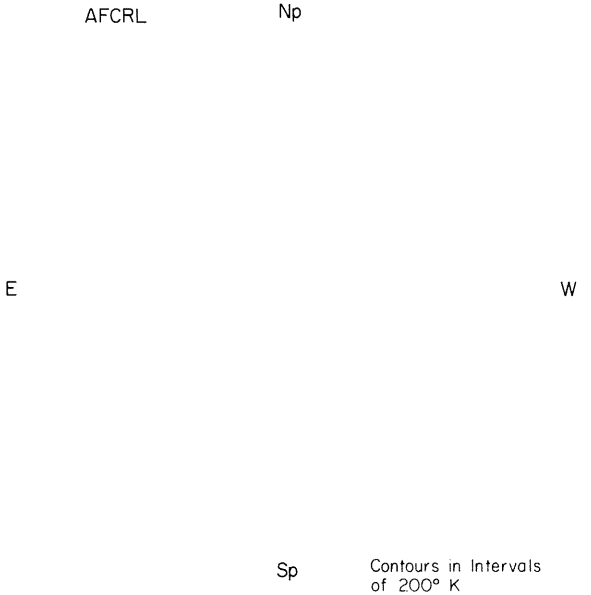
McMATH-HULBERT

CALCIUM REPORT



PROSPECT HILL
AFCRL

8.6 mm

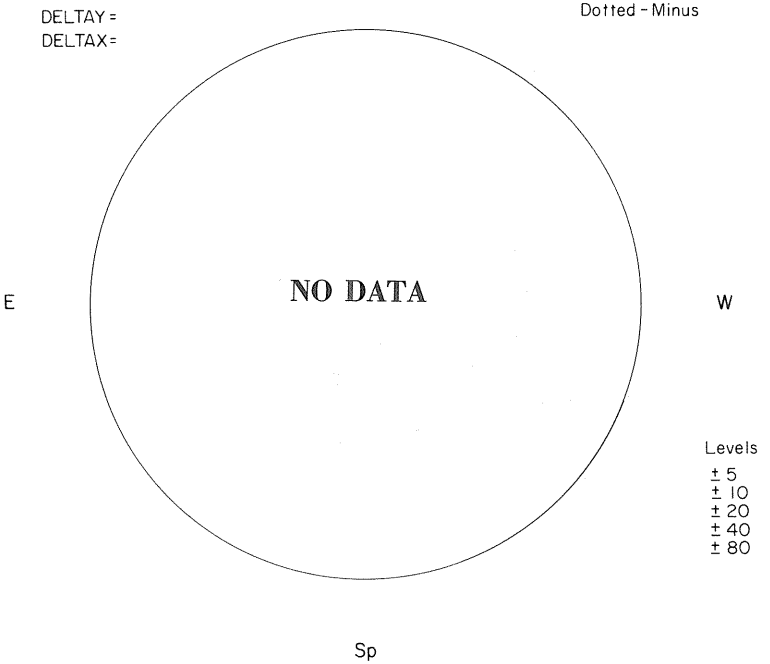


Contours in Intervals
of 200° K

MT. WILSON

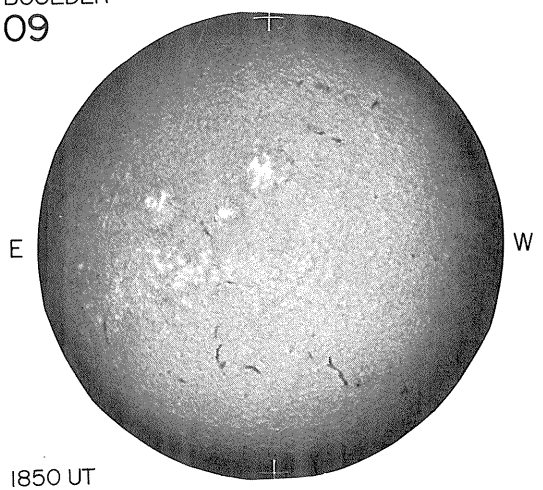
MAGNETOGRAM
Solid - Plus
Dotted - Minus

DELTAY =
DELTAX =



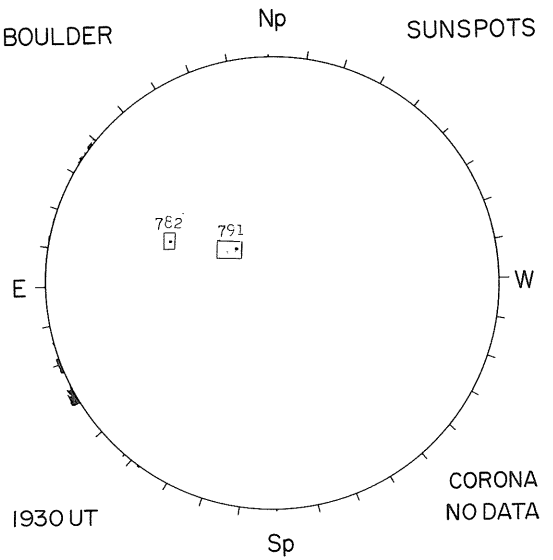
Levels
± 5
± 10
± 20
± 40
± 80

BOULDER
09



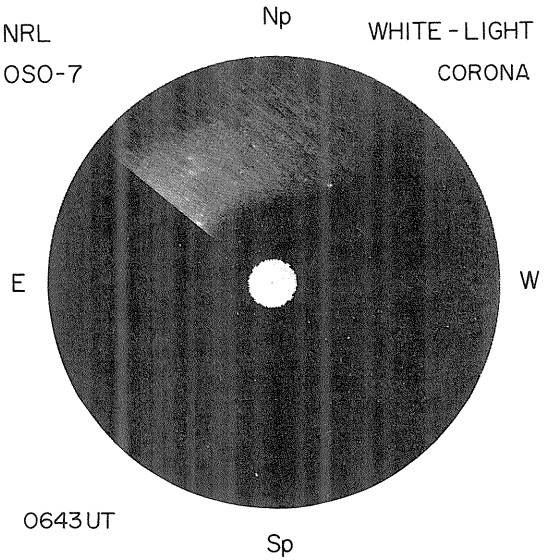
1850 UT

BOULDER



1930 UT

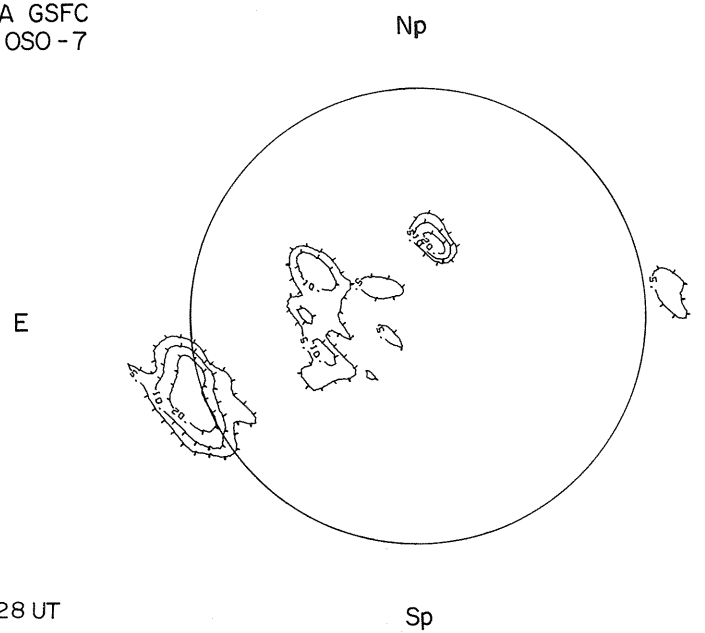
NRL
OSO-7



0643 UT

NASA GSFC
OSO - 7

FE XV
284A



2228 UT

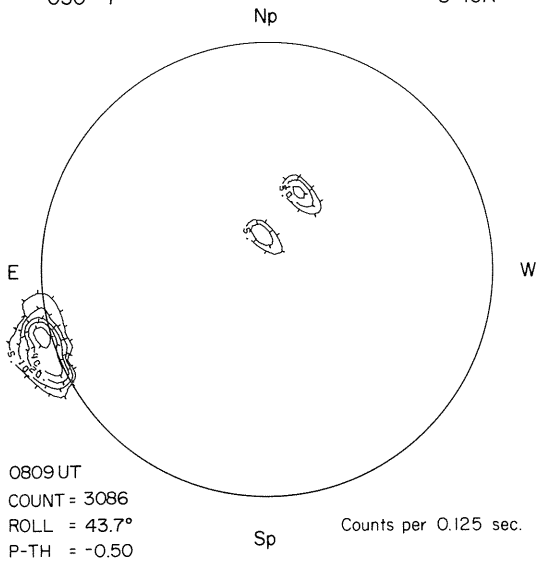
COUNT = 1916
ROLL = 42.8°
P-TH = -0.45

43
Mar 74

MARCH 10, 1974 (P=-23.52, B_o=-7.24, L_o=248.26)

NASA GSFC
OSO-7

X-RAY
8-16A

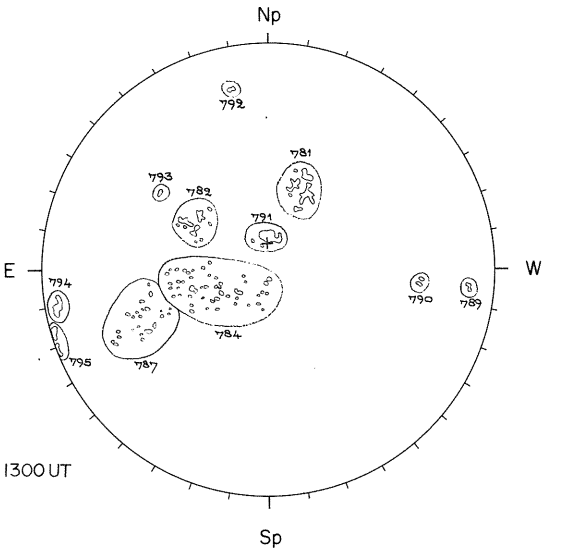


0809 UT
COUNT = 3086
ROLL = 43.7°
P-TH = -0.50

Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT

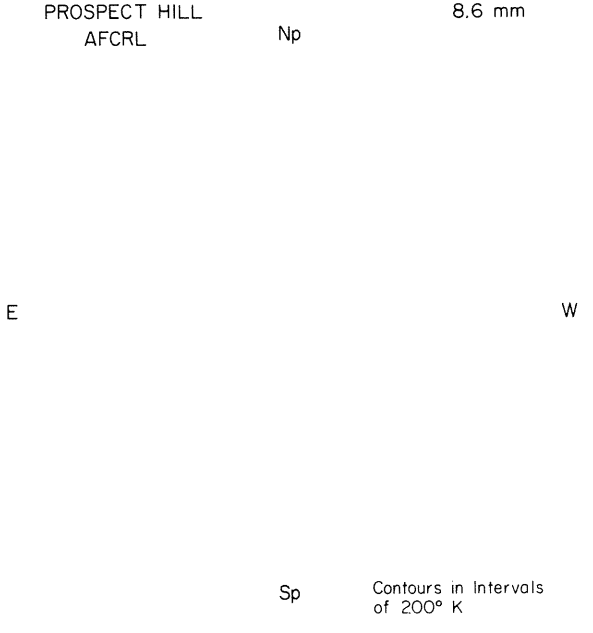


1300 UT

FAIR	D
81 - 1000	- 3.0
82 - 0800	- 2.5
91 - 0900	- 3.5
94 - 0900	- 3.0
95 - 0800	- 3.0

PROSPECT HILL
AFCRL

8.6 mm

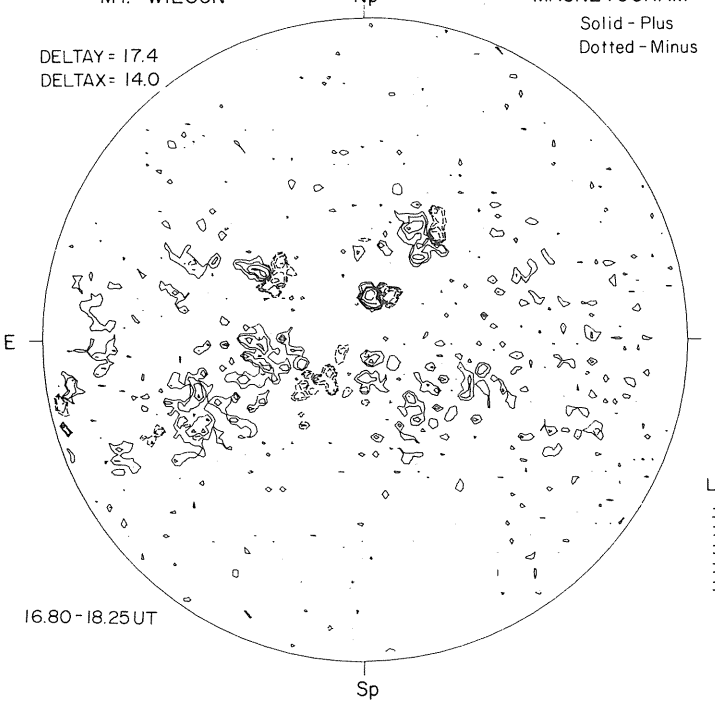


Contours in Intervals
of 200° K

MT. WILSON

MAGNETOGRAM
Solid - Plus
Dotted - Minus

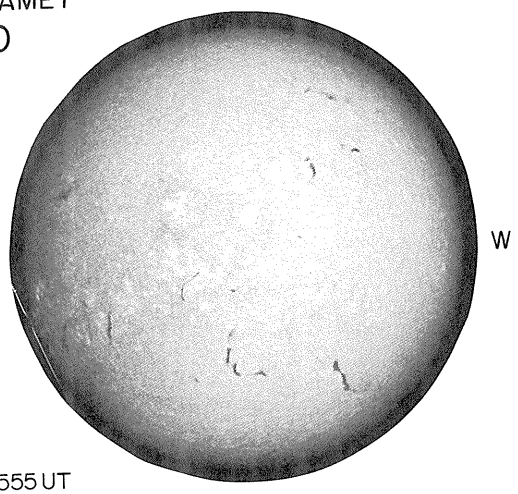
DELTAY = 17.4
DELTAX = 14.0



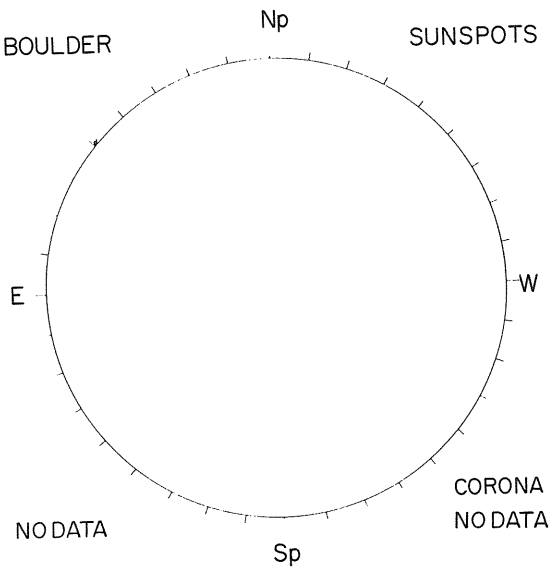
16.80 - 18.25 UT

Levels
± 5
± 10
± 20
± 40
± 80

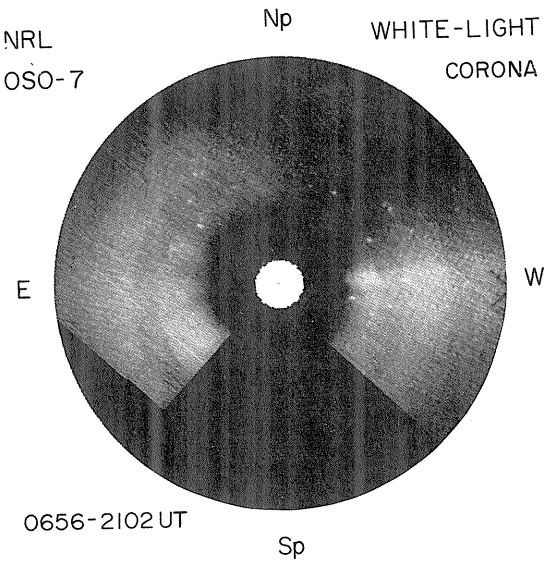
RAMEY
IO



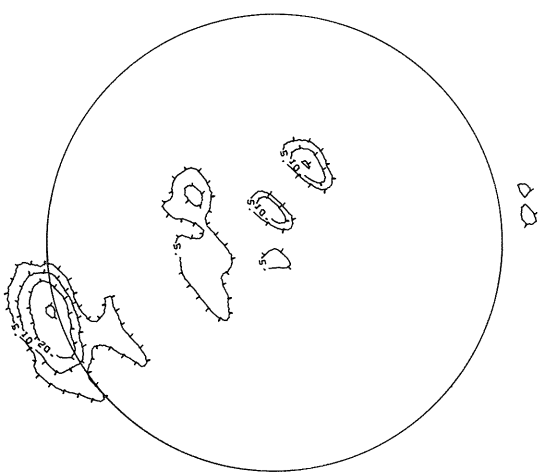
BOULDER
SUNSPOTS



NRL
OSO-7
WHITE-LIGHT
CORONA



NASA GSFC
OSO-7
FE XV
284A



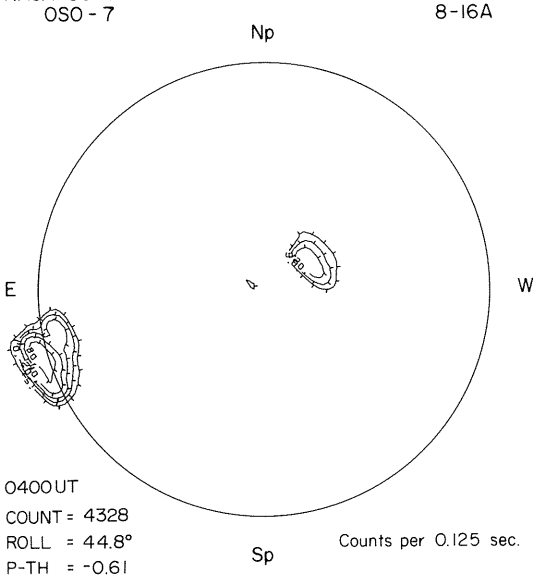
COUNT = 2027
ROLL = 43.7°
P-TH = -0.50

45
Mar 74

MARCH 11, 1974 (P=-23.71, B_o=-7.23, L_o=235.09)

NASA GSFC
OSO-7

X-RAY
8-16A

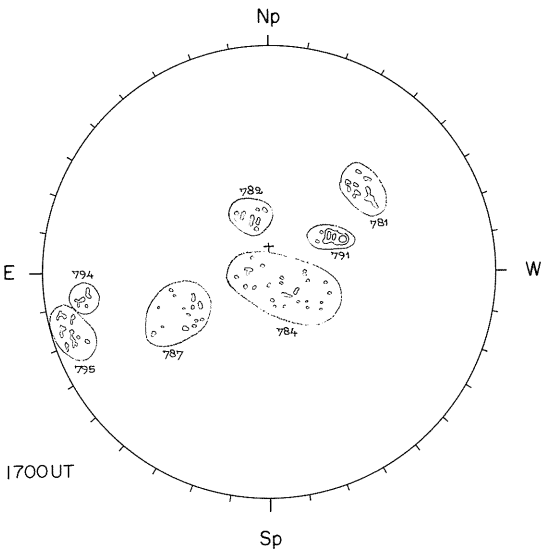


0400UT
COUNT = 4328
ROLL = 44.8°
P-TH = -0.61

Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT



1700UT

BAD	D
81 - 0900	2.5
82 - 0800	2.5
91 - 1000	3.0
94 - 0800	3.0
95 - 1300	2.5

PROSPECT HILL
AFCRL

Np

E

W

Sp

8.6 mm

Contours in Intervals
of 200° K

MT. WILSON

Np

DELTAY =
DELTAX =

E

W

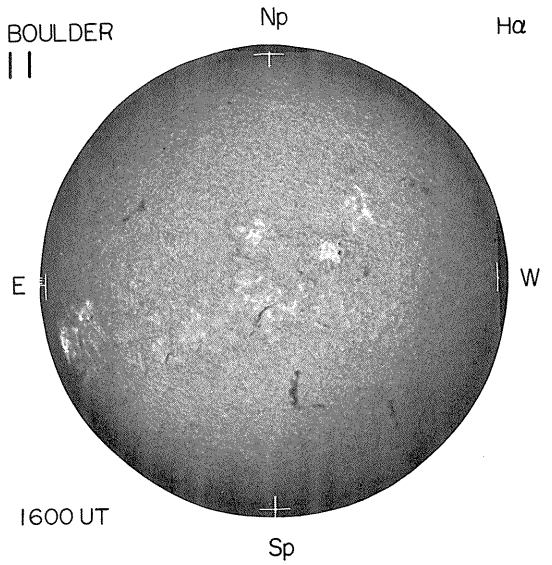
NO DATA

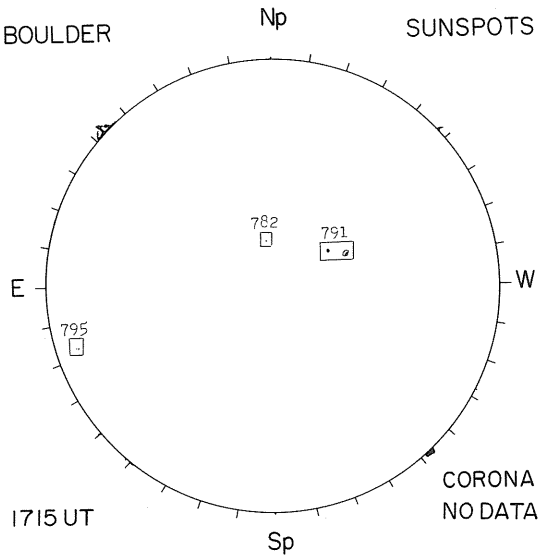
Sp

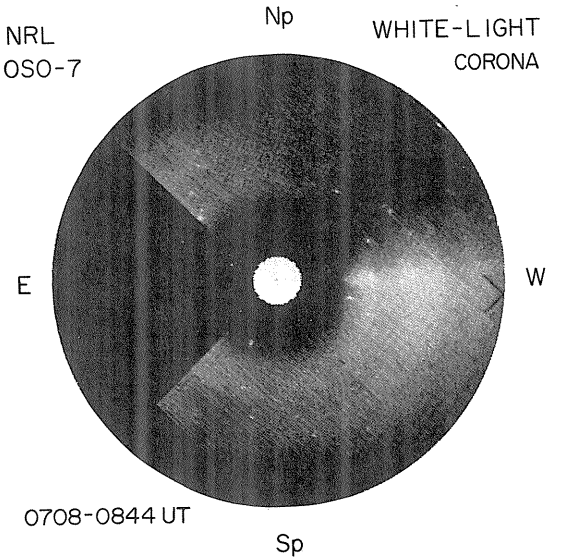
MAGNETOGRAM

Solid - Plus
Dotted - Minus

Levels
± 5
± 10
± 20
± 40
± 80

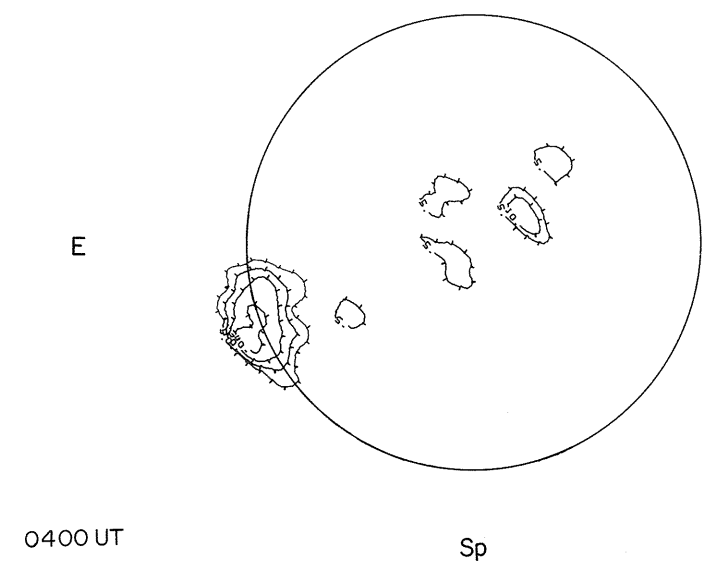






NASA GSFC
OSO-7

FE XV
284A



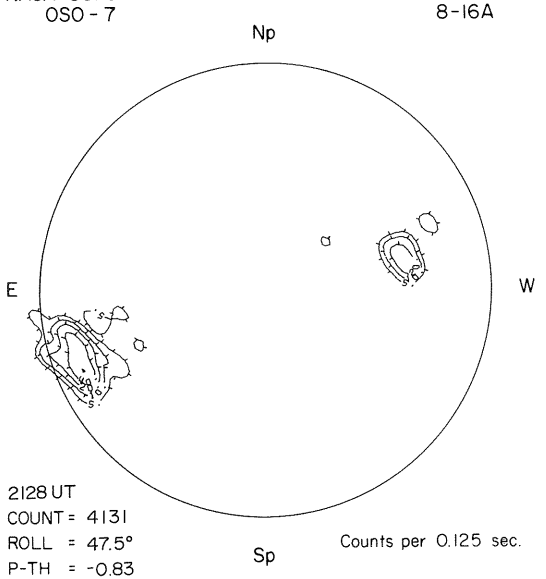
COUNT = 1789
ROLL = 44.8°
P-TH = -0.61

47
Mar 74

MARCH 12, 1974 (P=-23.90, B_o=-7.21, L_o=221.91)

NASA GSFC
OSO-7

X-RAY
8-16A

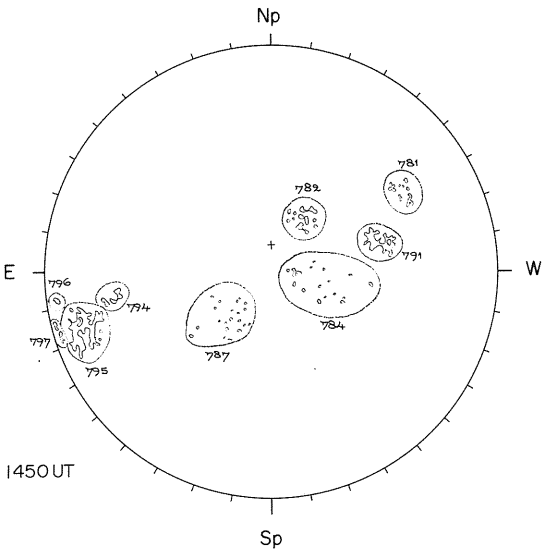


2128 UT
COUNT = 4131
ROLL = 47.5°
P-TH = -0.83

Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT

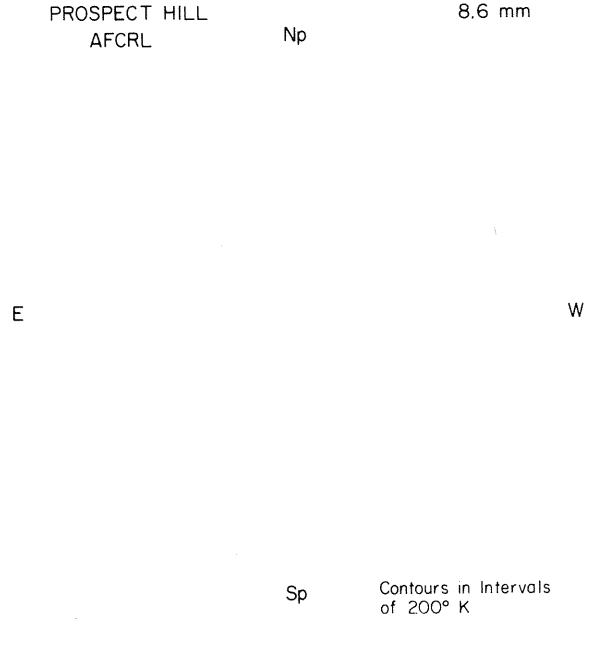


1450 UT

FAIR	M
82 - 0500 - 2.5	
91 - 1200 - 3.0	
94 - 0500 - 2.5	
95 - 3000 - 3.0	

PROSPECT HILL
AFCRL

8.6 mm

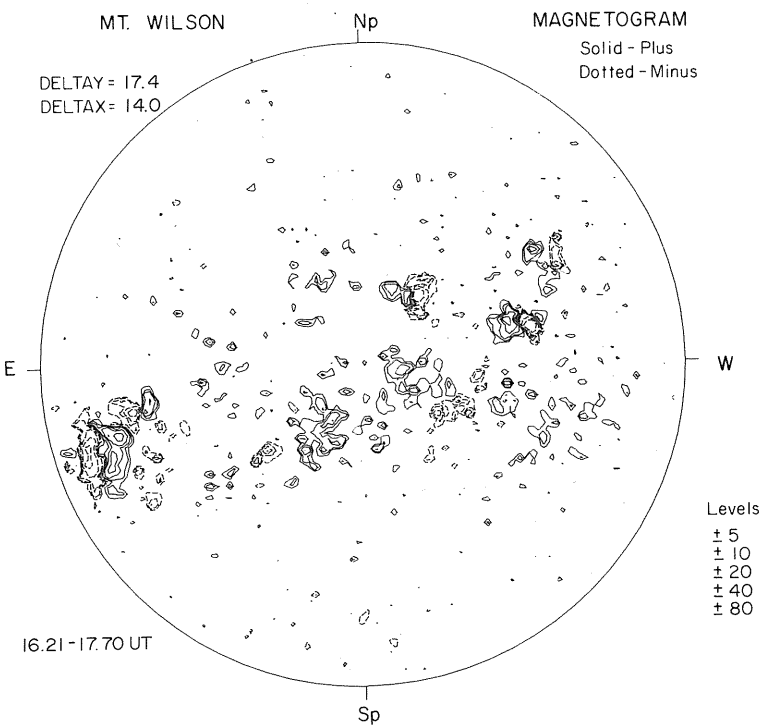


Contours in Intervals
of 200° K

MT. WILSON

MAGNETOGRAM
Solid - Plus
Dotted - Minus

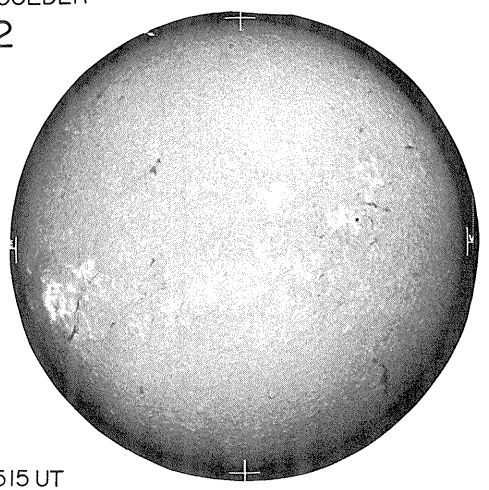
DELTAY = 17.4
DELTAX = 14.0



16.21 - 17.70 UT

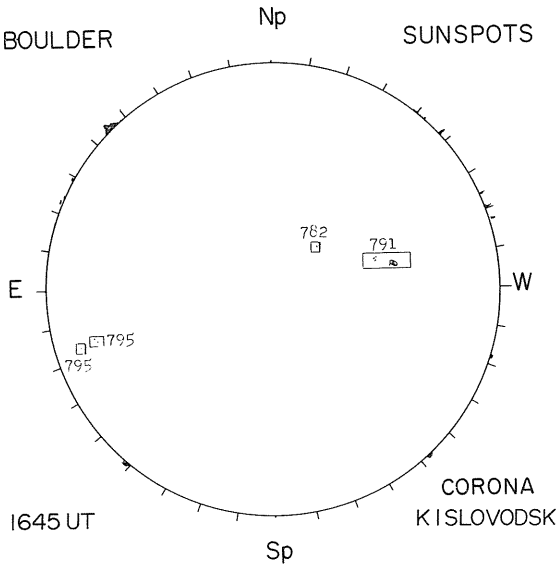
Levels
± 5
± 10
± 20
± 40
± 80

BOULDER
12



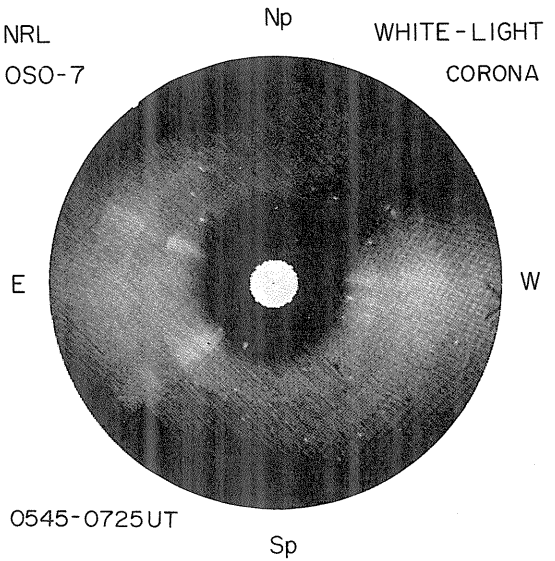
1515 UT

BOULDER



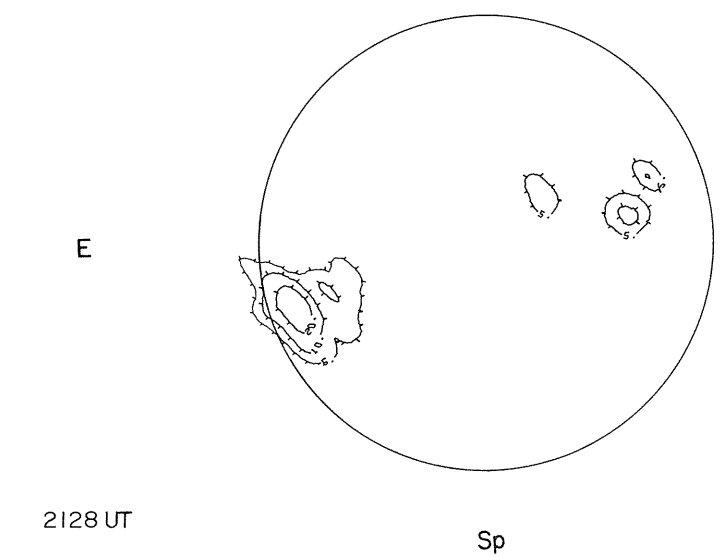
1645 UT

NRL
OSO-7



0545-0725 UT

NASA GSFC
OSO-7



2128 UT

FE XV
284A

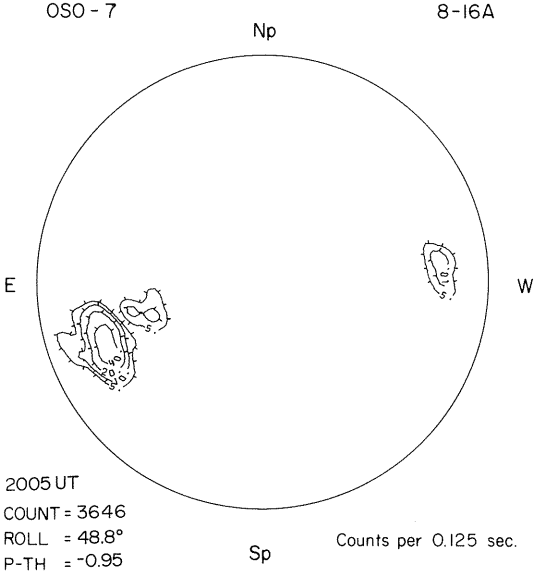
COUNT = 1313
ROLL = 47.5°
P-TH = -0.83

49
Mar 74

MARCH 13, 1974 (P=-24.08, B_o=-7.20, L_o=208.73)

NASA GSFC
OSO-7

X-RAY
8-16A

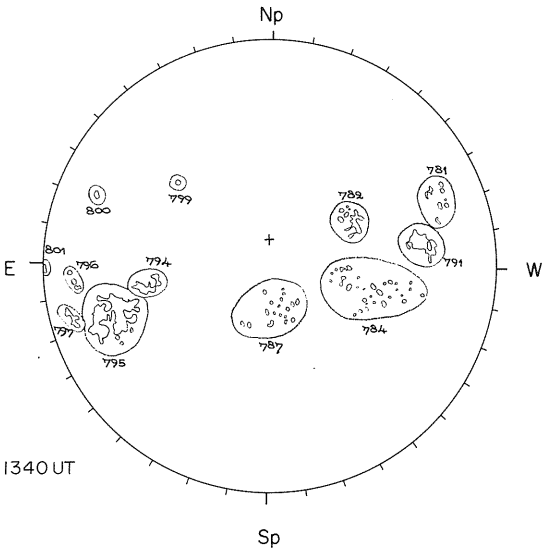


2005 UT
COUNT = 3646
ROLL = 48.8°
P-TH = -0.95

Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT

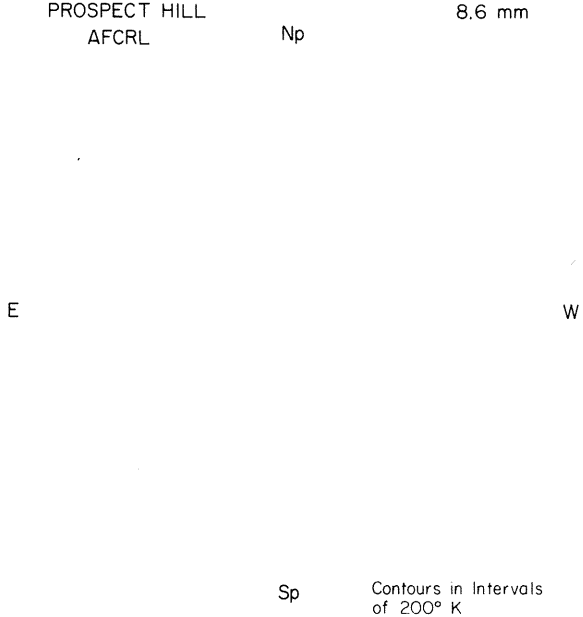


1340 UT

FAIR	M
82 - 0600 - 2.5	
91 - 1200 - 3.0	
94 - 0700 - 2.5	
95 - 3500 - 3.0	

PROSPECT HILL
AFCRL

8.6 mm



Contours in Intervals
of 200° K

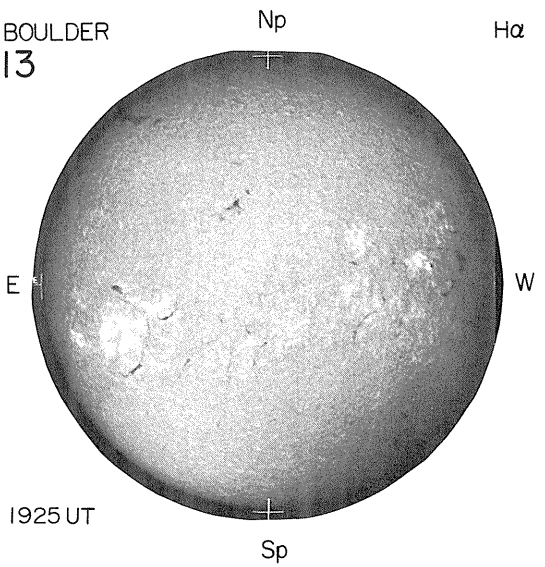
MT. WILSON

DELTAY =
DELTAX =

MAGNETOGRAM
Solid - Plus
Dotted - Minus

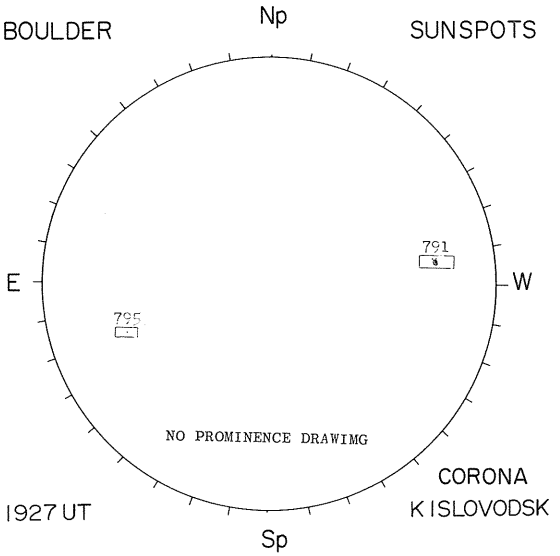
Levels
± 5
± 10
± 20
± 40
± 80

BOULDER
13



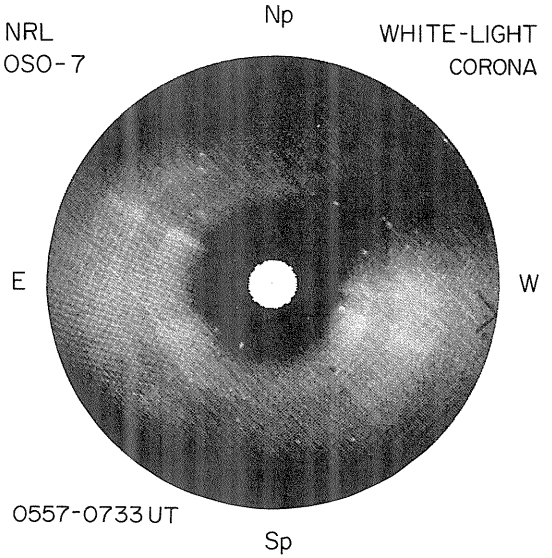
1925 UT

BOULDER



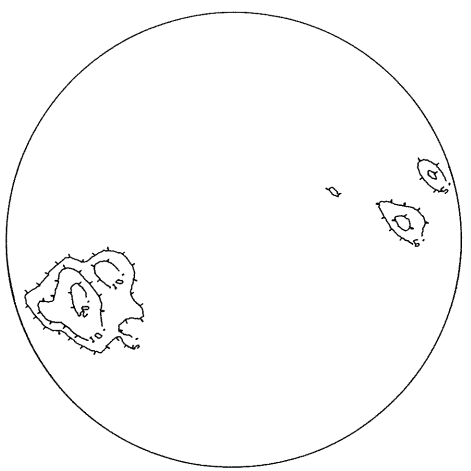
1927 UT

NRL
OSO-7



0557-0733 UT

NASA GSFC
OSO-7



2005 UT

FE XV
284A

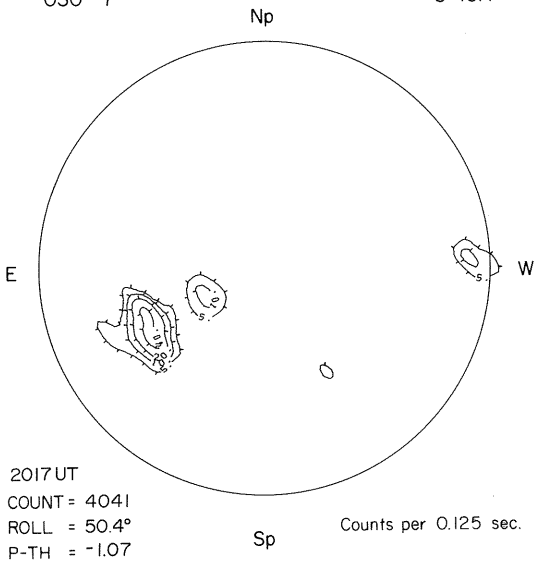
COUNT = 1116
ROLL = 48.8°
P-TH = -0.95

51
Mar 74

MARCH 14, 1974 (P=-24.25, B_o=-7.19, L_o=195.55)

NASA GSFC
OSO-7

X-RAY
8-16A

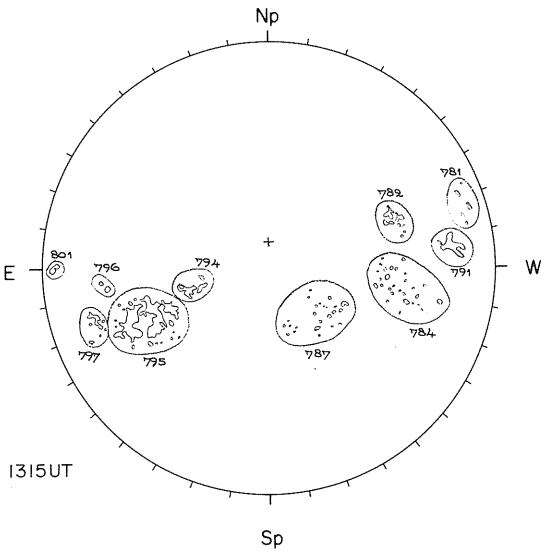


2017UT
COUNT = 4041
ROLL = 50.4°
P-TH = -1.07

Counts per 0.125 sec.

McMATH-HULBERT

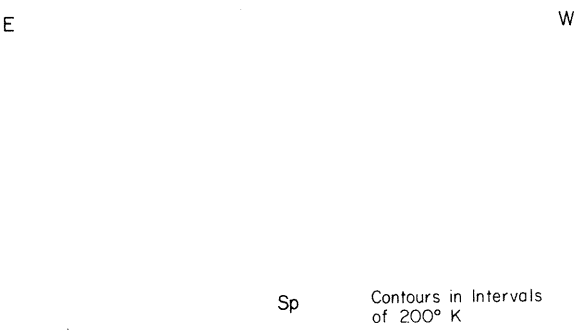
CALCIUM REPORT



1315UT

FAIR	M
91-1000	-2.5
94-0800	-2.5

PROSPECT HILL
AFCRL



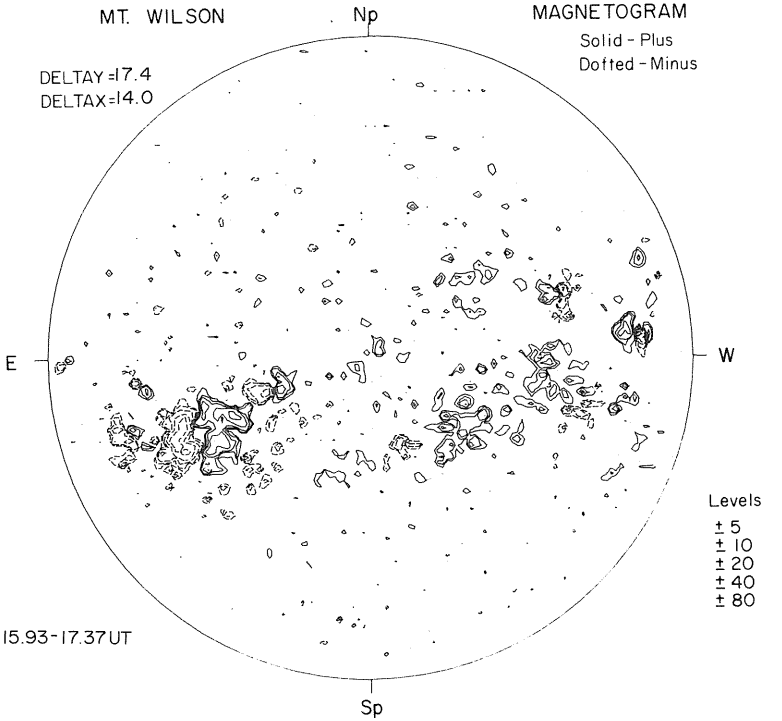
8.6 mm

Contours in Intervals
of 200° K

MT. WILSON

MAGNETOGRAM
Solid - Plus
Dotted - Minus

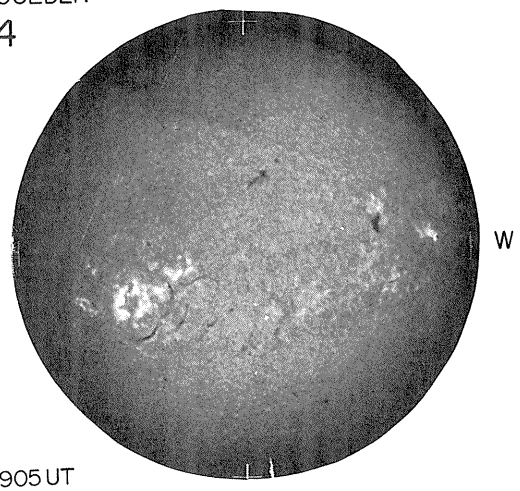
DELTAY=17.4
DELTAX=14.0



15.93-17.37UT

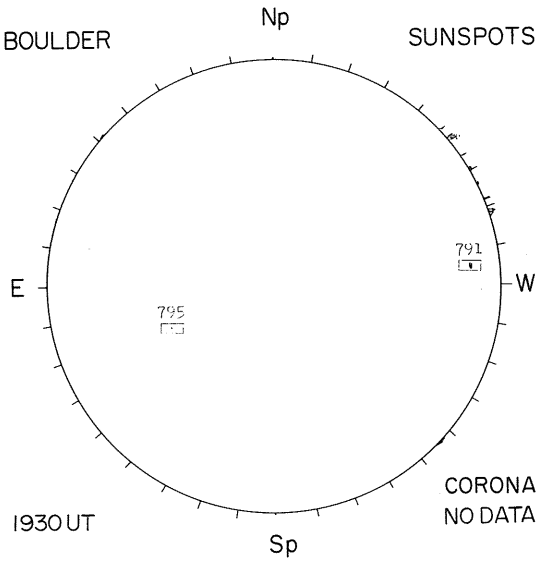
Levels
±5
±10
±20
±40
±80

BOULDER
14



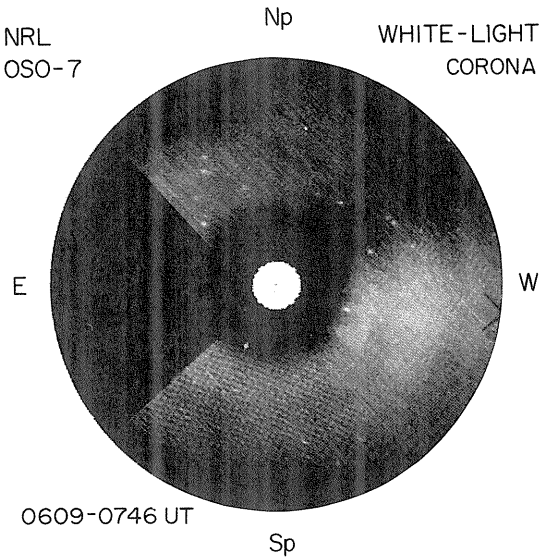
1905 UT

BOULDER



1930 UT

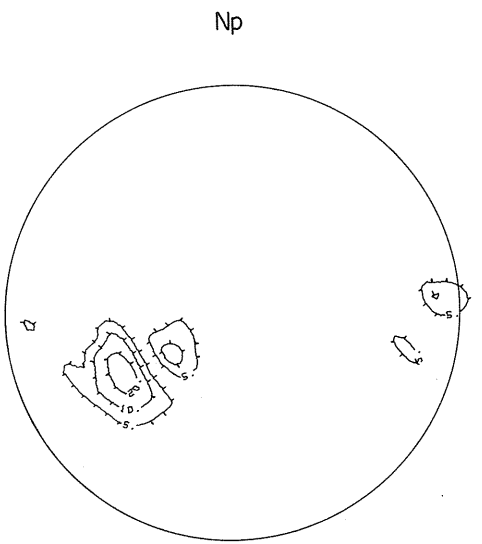
NRL
OSO-7



0609-0746 UT

NASA GSFC
OSO-7

FE XV
284A



2017 UT

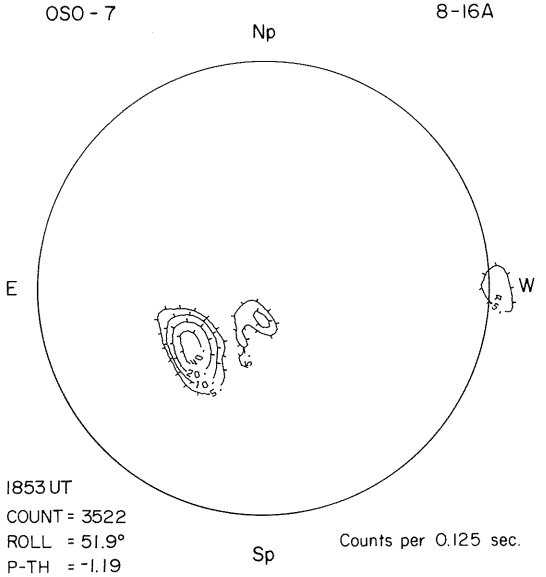
COUNT = 1164
ROLL = 50.4°
P-TH = -1.07

53
Mar 74

MARCH 15, 1974 (P=-24.42, B_o=-7.17, L_o=182.37)

NASA GSFC
OSO - 7

X-RAY
8-16A

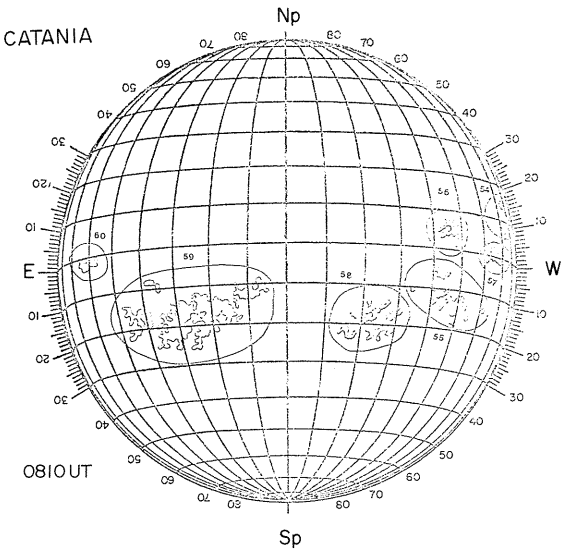


1853 UT
COUNT = 3522
ROLL = 51.9°
P-TH = -1.19

Counts per 0.125 sec.

CALCIUM REPORT

CATANIA

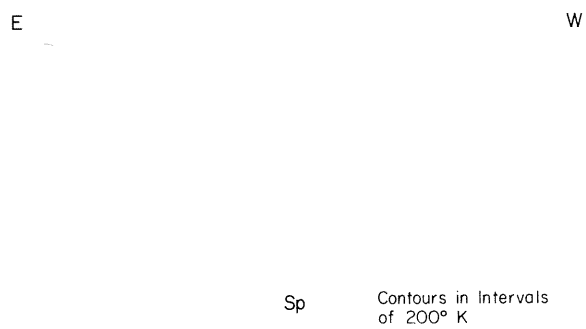


0810 UT

FAIR	GD
57 - 0987	---
59 - 7714	---

PROSPECT HILL
AFCRL

8.6 mm

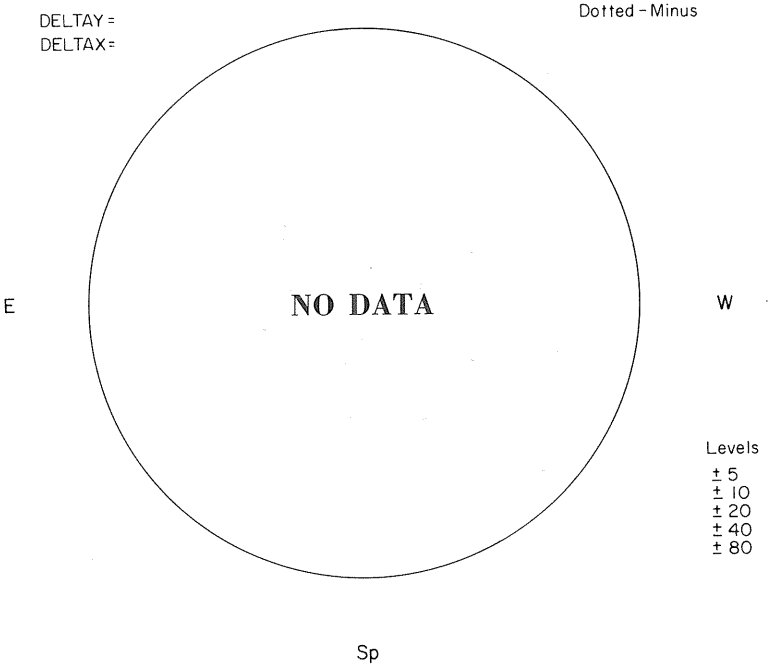


Contours in Intervals
of 200° K

MT. WILSON

MAGNETOGRAM
Solid - Plus
Dotted - Minus

DELTAY =
DELTAX =



Levels
± 5
± 10
± 20
± 40
± 80

BOULDER
15

Np

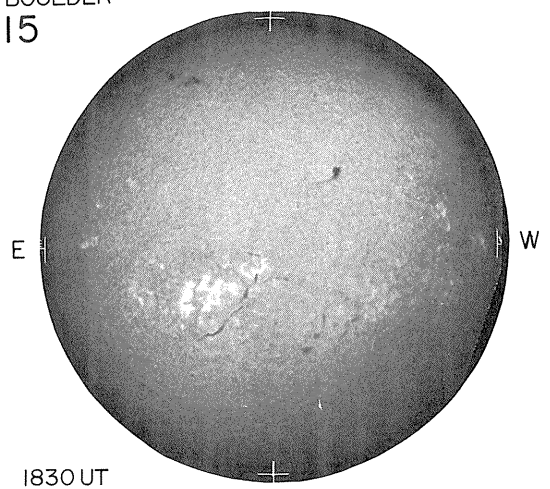
Hα

E

W

Sp

1830 UT



BOULDER

Np

SUNSPOTS

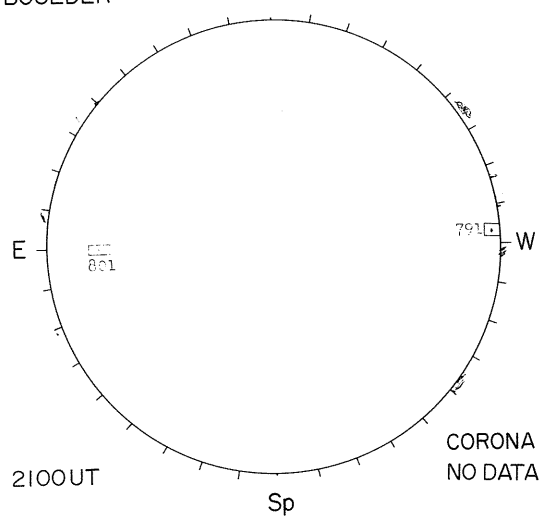
E

W

Sp

CORONA
NO DATA

2100 UT



NRL
OSO-7

Np

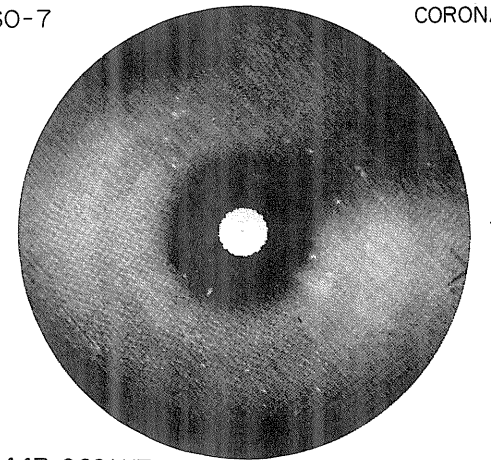
WHITE-LIGHT
CORONA

E

W

Sp

0447-0621 UT



NASA GSFC
OSO-7

Np

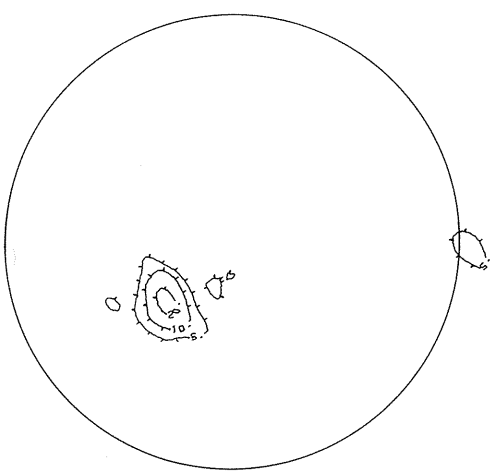
FE XV
284A

E

W

Sp

1853 UT



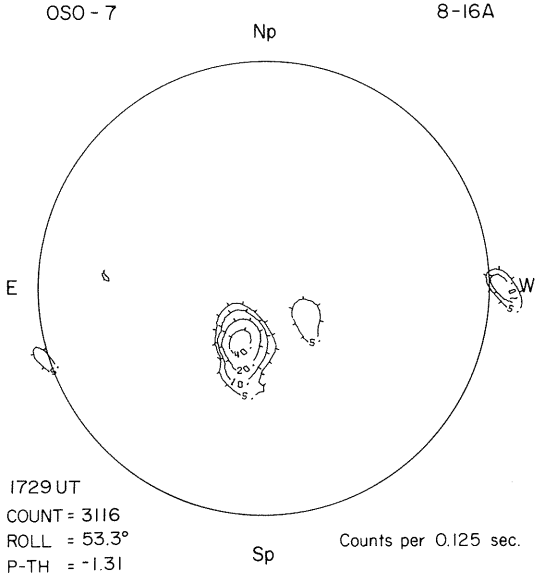
COUNT = 929
ROLL = 51.9°
P-TH = -1.19

55
Mar 74

MARCH 16, 1974 (P=-24.58, B_o=-7.15, L_o=169.19)

NASA GSFC
OSO-7

X-RAY
8-16A

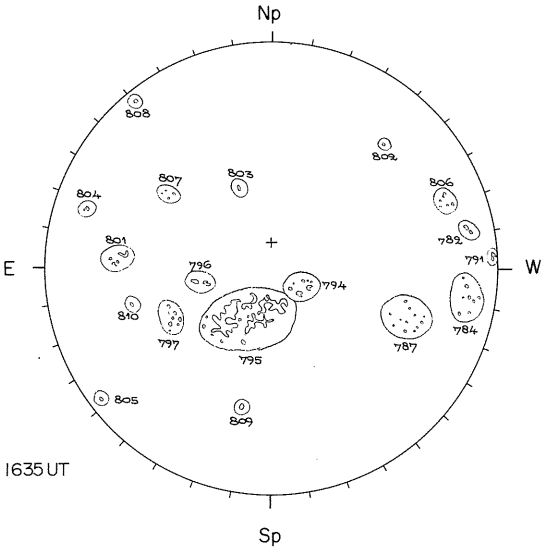


1729 UT
COUNT = 3116
ROLL = 53.3°
P-TH = -1.31

Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT



1635 UT

FAIR | M
94 - 0600 - 2.5
95 - 3100 - 3.0

PROSPECT HILL
AFCRL

Np

E

W

Sp

8.6 mm

Contours in Intervals
of 200° K

MT. WILSON

Np

MAGNETOGRAM
Solid - Plus
Dotted - Minus

DELTAY =
DELTAX =

E

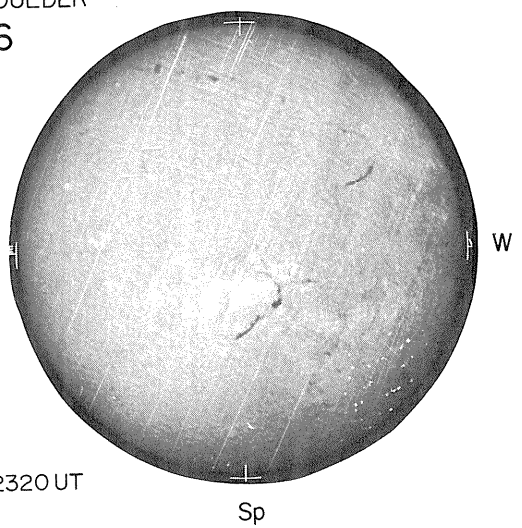
NO DATA

W

Sp

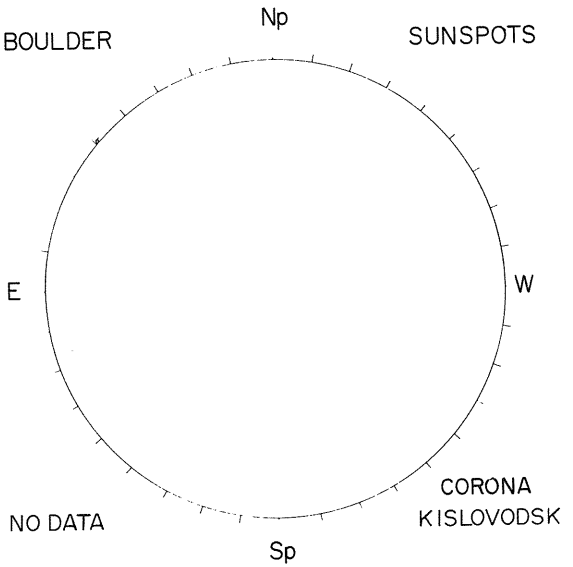
Levels
± 5
± 10
± 20
± 40
± 80

BOULDER
16



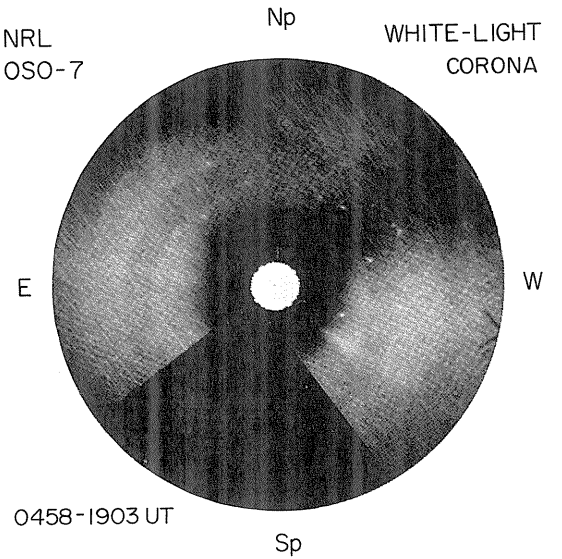
2320 UT

BOULDER



NO DATA

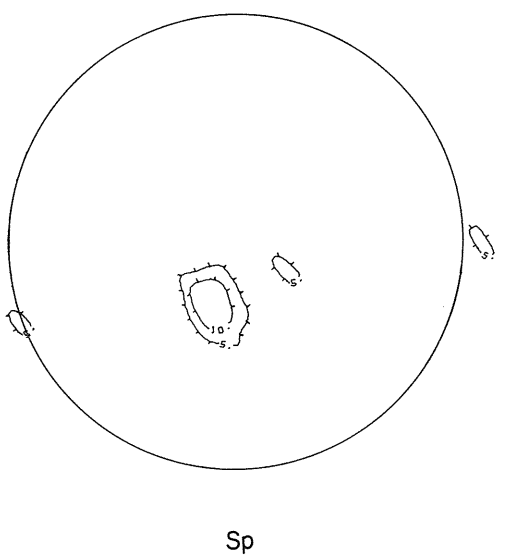
NRL
OSO-7



0458-1903 UT

NASA GSFC
OSO-7

FE XV
284A



1729 UT

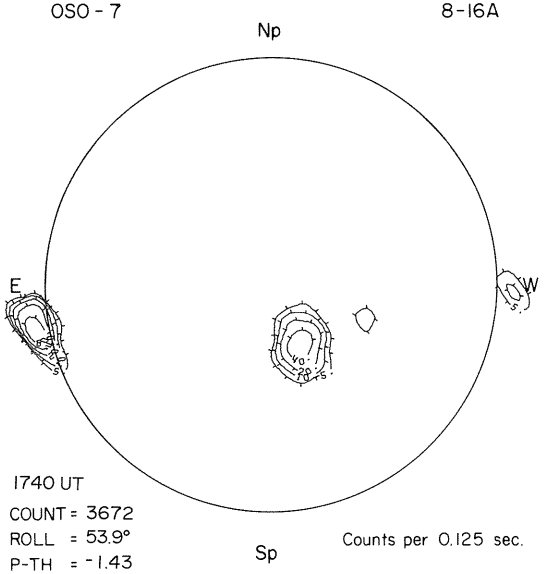
COUNT = 796
ROLL = 53.3°
P-TH = -1.31

57
Mar 74

MARCH 17, 1974 (P=-24.73, B_o=-7.13, L_o=156.01)

NASA GSFC
OSO - 7

X-RAY
8-16A

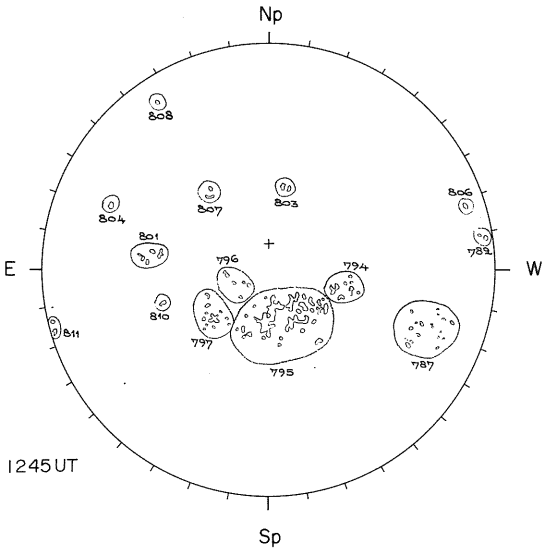


1740 UT
COUNT = 3672
ROLL = 53.9°
P-TH = -1.43

Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT

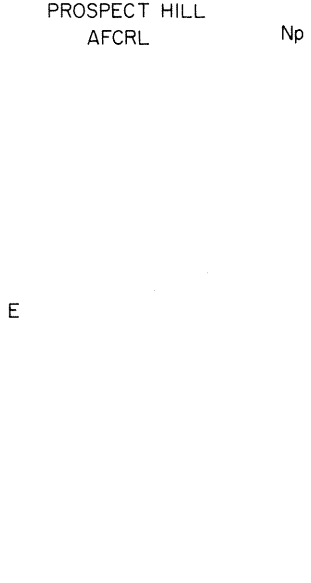


GOOD	D
94 - 0600	- 2.5
95 - 2900	- 3.0
10 - 0200	- 2.5

1245 UT

PROSPECT HILL
AFCRL

8.6 mm

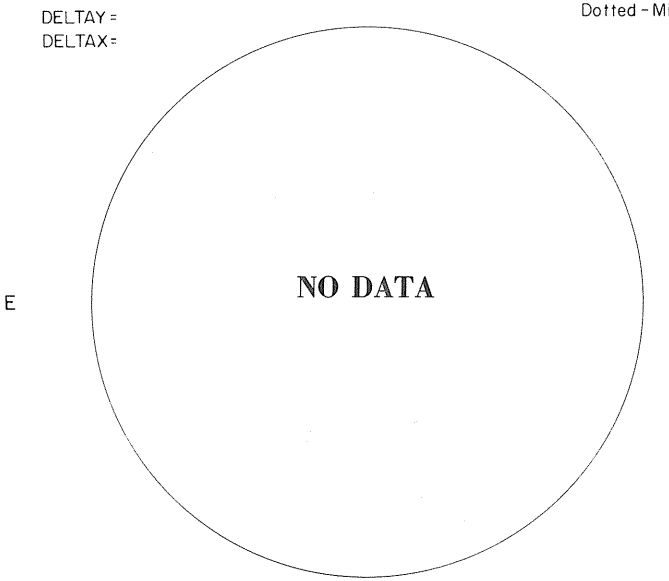


Contours in Intervals
of 200° K

MT. WILSON

MAGNETOGRAM
Solid - Plus
Dotted - Minus

DELTAY =
DELTAX =



Levels
± 5
± 10
± 20
± 40
± 80

BOULDER
17

Np

Hα

E

NO DATA

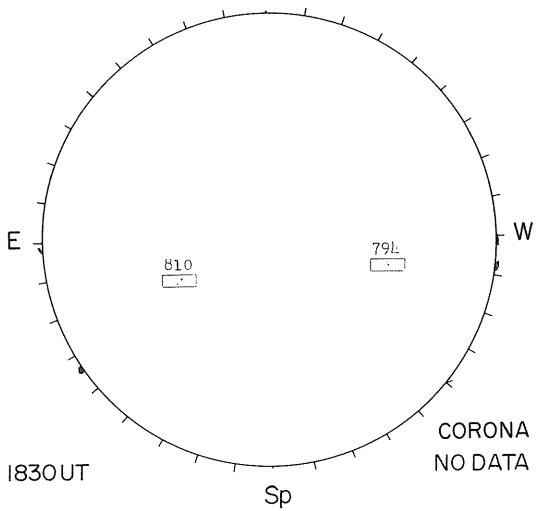
W

Sp

BOULDER

Np

SUNSPOTS



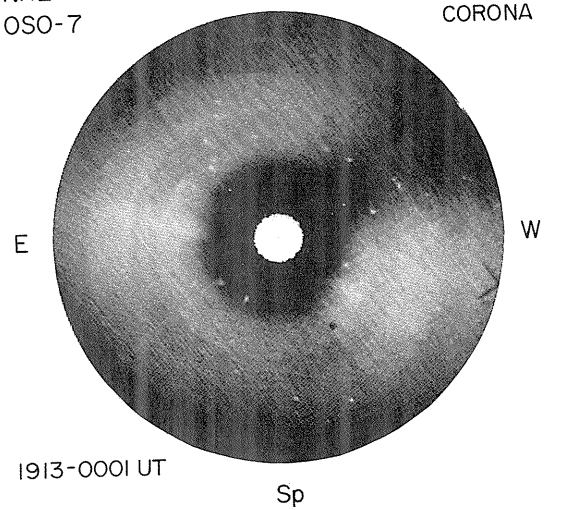
CORONA
NO DATA

1830 UT

NRL
OSO-7

Np

WHITE-LIGHT
CORONA

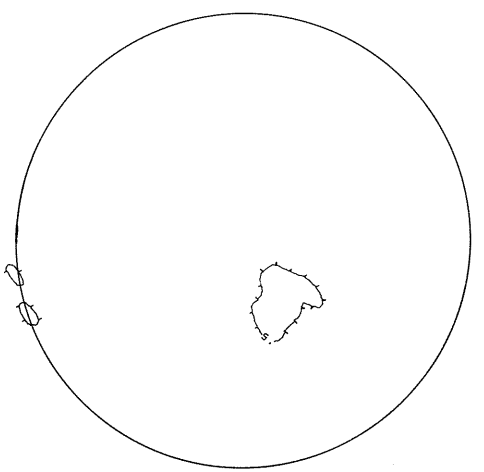


1913-0001 UT

FE XV
284A

NASA GSFC
OSO-7

Np



E

W

Sp

1740 UT

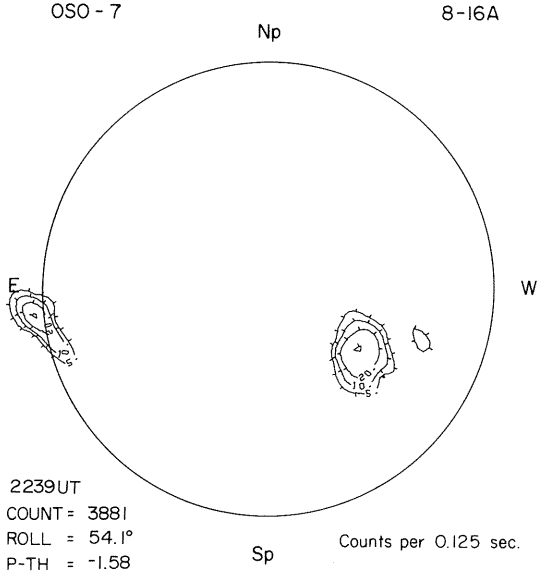
COUNT = 554
ROLL = 53.9°
P-TH = -1.43

59
Mar 74

MARCH 18, 1974 (P=-24.88, B_o=-7.10, L_o=142.83)

NASA GSFC
OSO-7

X-RAY
8-16A

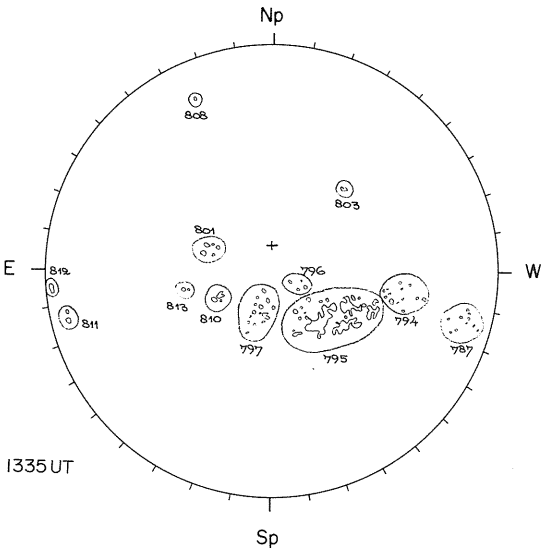


2239UT
COUNT = 3881
ROLL = 54.1°
P-TH = -1.58

Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT

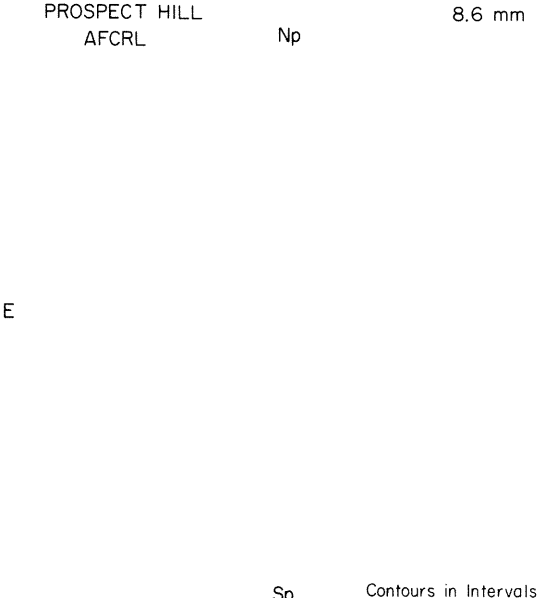


1335UT

POOR	M
95 - 3000 - 3.0	

PROSPECT HILL
AFCRL

Np



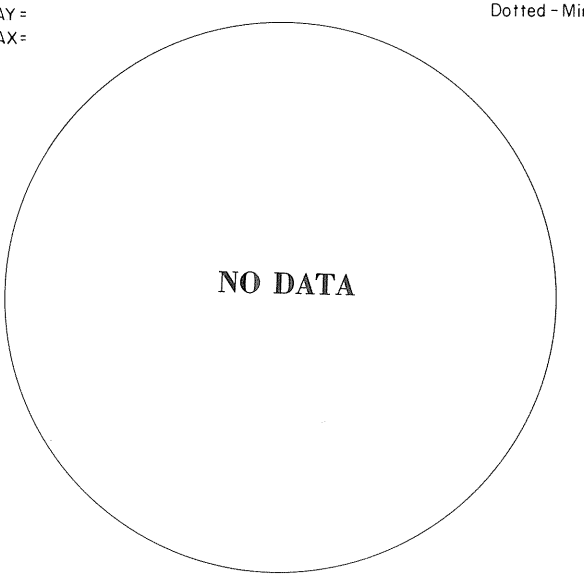
8.6 mm

Contours in Intervals
of 200° K

MT. WILSON

Np

DELTAY =
DELTAX =



MAGNETOGRAM
Solid - Plus
Dotted - Minus

Levels
± 5
± 10
± 20
± 40
± 80

BOULDER
18

Np

Hα

E

NO DATA

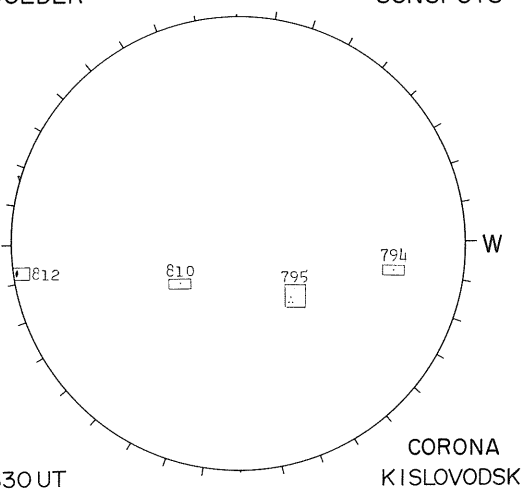
W

Sp

BOULDER

Np

SUNSPOTS



E

W

CORONA
KISLOVODSK

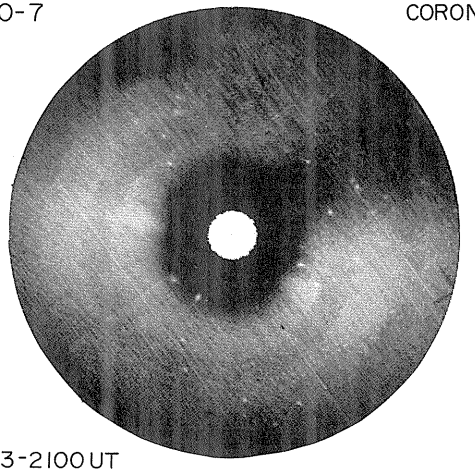
1630 UT

Sp

NRL
OSO-7

Np

WHITE-LIGHT
CORONA



E

W

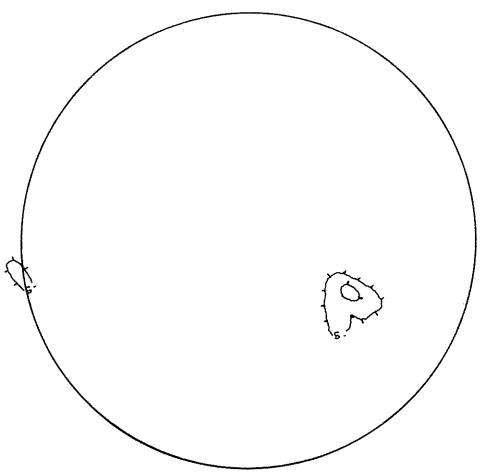
1613-2100 UT

Sp

NASA GSFC
OSO-7

Np

FE XV
284A



E

W

2239 UT

Sp

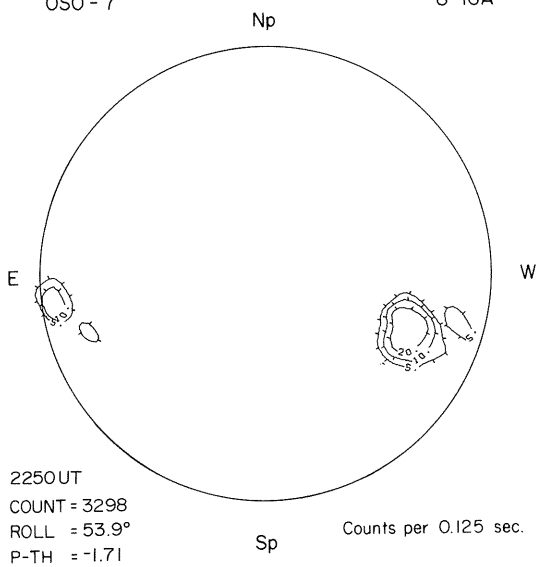
COUNT = 448
ROLL = 54.1°
P-TH = -1.58

61
Mar 74

MARCH 19, 1974 (P=-25.02, B_o=-7.07, L_o=129.64)

NASA GSFC
OSO-7

X-RAY
8-16A

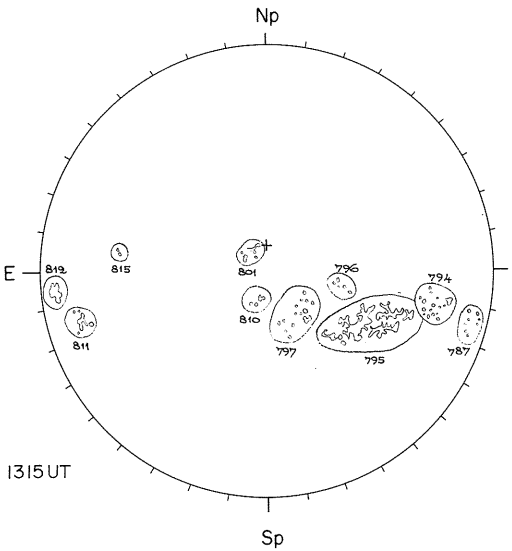


2250 UT
COUNT = 3298
ROLL = 53.9°
P-TH = -1.71

Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT



GOOD	M
95 - 3100	- 3.0
11 - 0500	- 2.5
12 - 1500	- 3.5

1315 UT

PROSPECT HILL
AFCRL

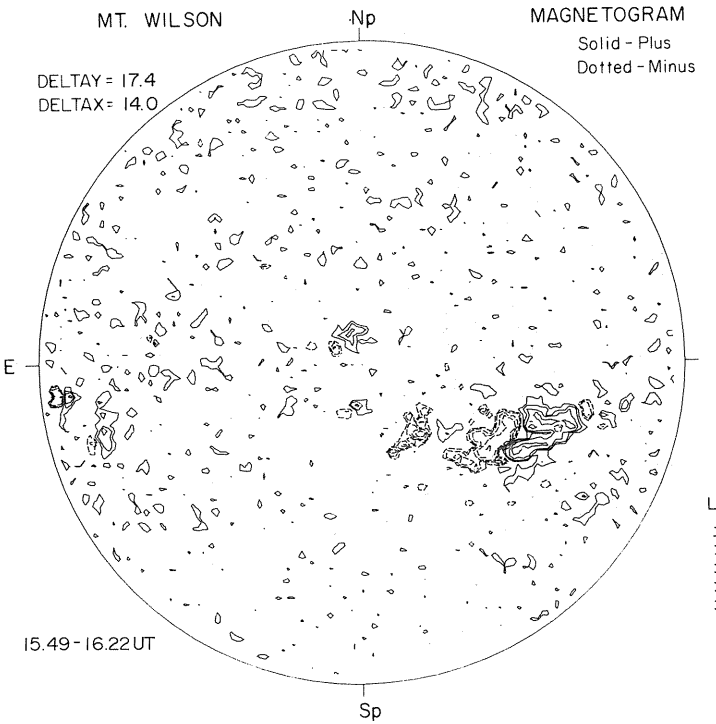
8.6 mm

Contours in Intervals
of 200° K

MT. WILSON

DELTAY = 17.4
DELTAX = 14.0

MAGNETOGRAM
Solid - Plus
Dotted - Minus



Levels
± 5
± 10
± 20
± 40
± 80

15.49 - 16.22 UT

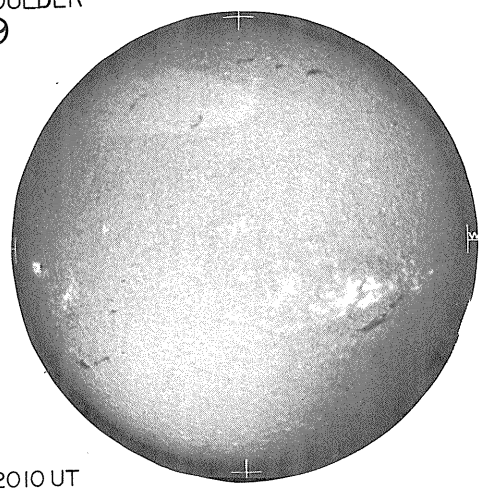
BOULDER
19

Np

Hα

E

W



2010 UT

Sp

BOULDER

Np

SUNSPOTS

E

W

S12

CORONA
NO DATA

2035 UT

Sp

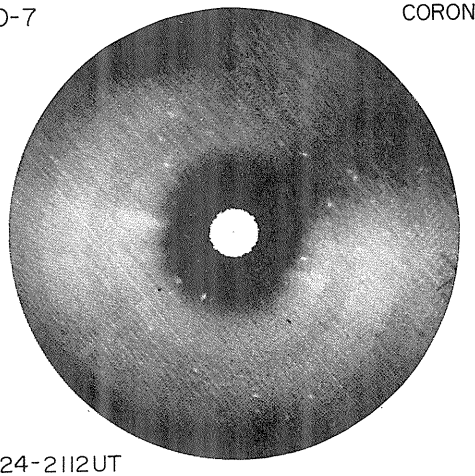
NRL
OSO-7

Np

WHITE-LIGHT
CORONA

E

W



1624-2112 UT

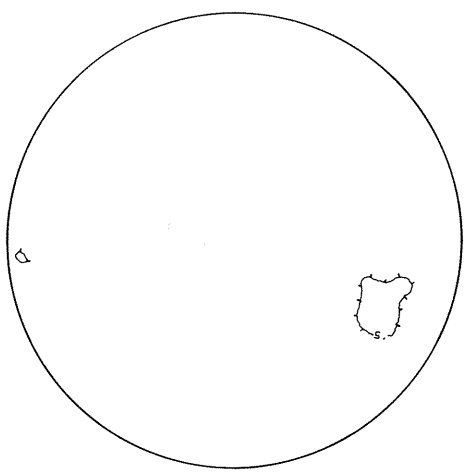
Sp

NASA GSFC
OSO-7

Np

FE XV
284A

E



W

2250 UT

Sp

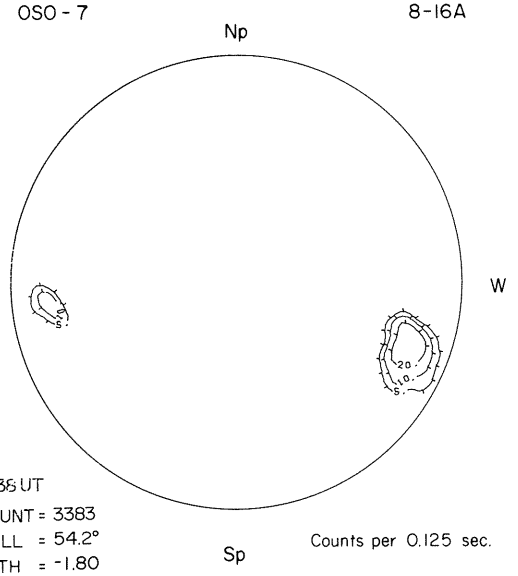
COUNT = 408
ROLL = 53.9°
P-TH = -1.71

63
Mar 74

MARCH 20, 1974 (P=-25.15, B_o=-7.05, L_o=116.46)

NASA GSFC
OSO - 7

X-RAY
8-16A

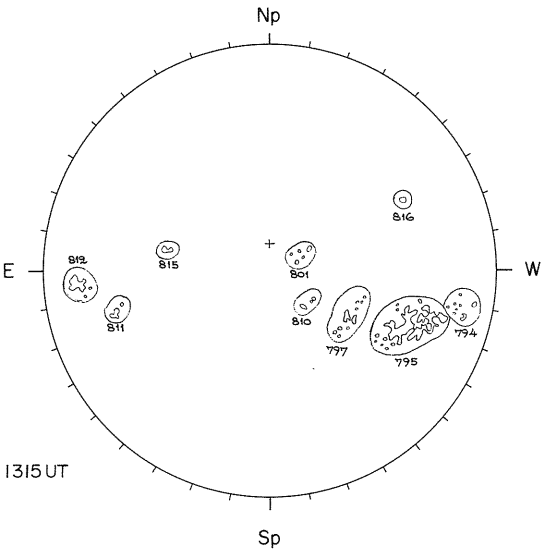


1636 UT
COUNT = 3383
ROLL = 54.2°
P-TH = -1.80

Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT



1315 UT

FAIR	M
95 - 3000	- 3.0
12 - 1200	- 3.5
15 - 0200	- 3.0
16 - 0300	- 2.5

PROSPECT HILL
AFCRL

Np

E

W

Sp

8.6 mm

Contours in Intervals
of 200° K

MT. WILSON

Np

MAGNETOGRAM

Solid - Plus
Dotted - Minus

DELTAY =
DELTAX =

E

NO DATA

W

Sp

Levels
± 5
± 10
± 20
± 40
± 80

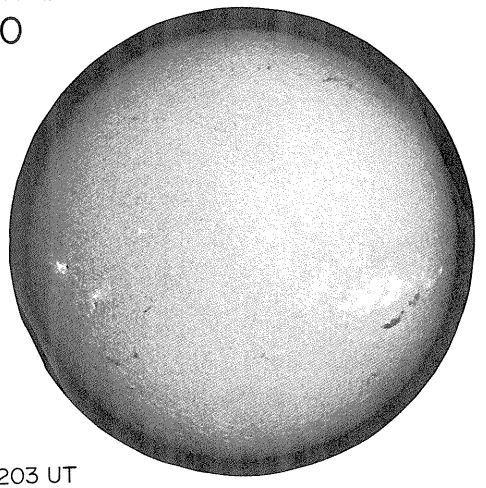
RAMEY
20

Np

Hα

E

W



1203 UT

Sp

BOULDER

Np

SUNSPOTS

E

W

NO DATA

CORONA
KISLOVODSK

Sp

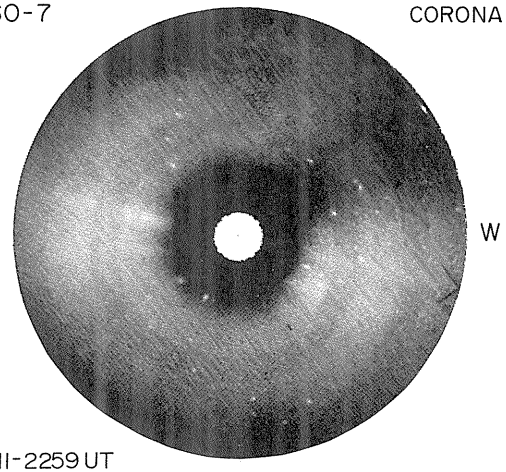
NRL
OSO-7

Np

WHITE-LIGHT
CORONA

E

W



1811-2259 UT

Sp

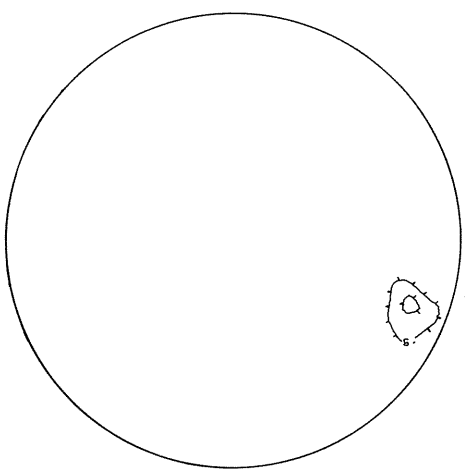
NASA GSFC
OSO-7

FE XV
284A

Np

E

W



1638 UT

Sp

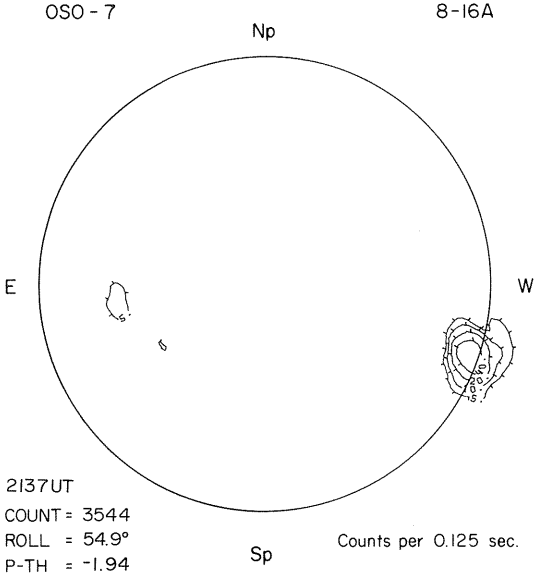
COUNT = 426
ROLL = 54.2°
P-TH = -1.80

65
Mar 74

MARCH 21, 1974 (P=-25.28, B_o=-7.02, L_o=103.28)

NASA GSFC
OSO-7

X-RAY
8-16A

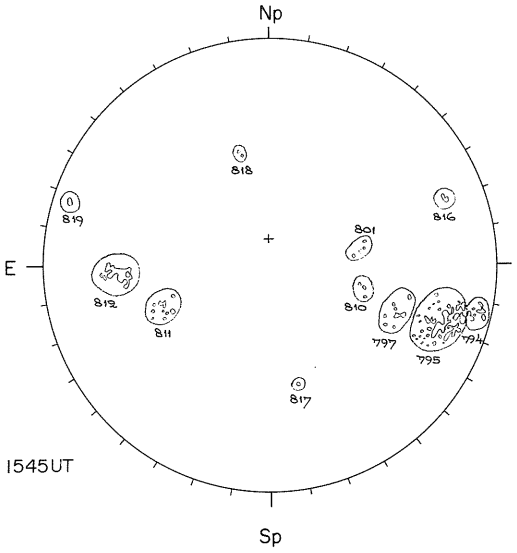


2137UT
COUNT = 3544
ROLL = 54.9°
P-TH = -1.94

Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT

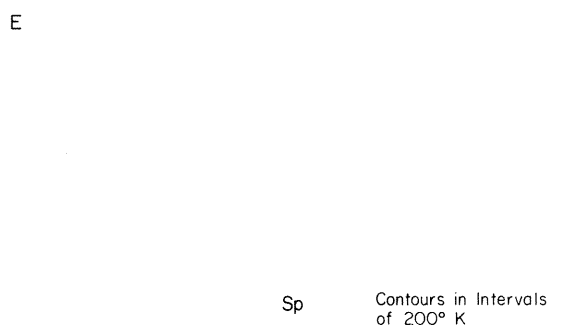


1545UT

FAIR	M
95-3000	3.5
12-1100	3.0

PROSPECT HILL
AFCRL

Np



8.6 mm

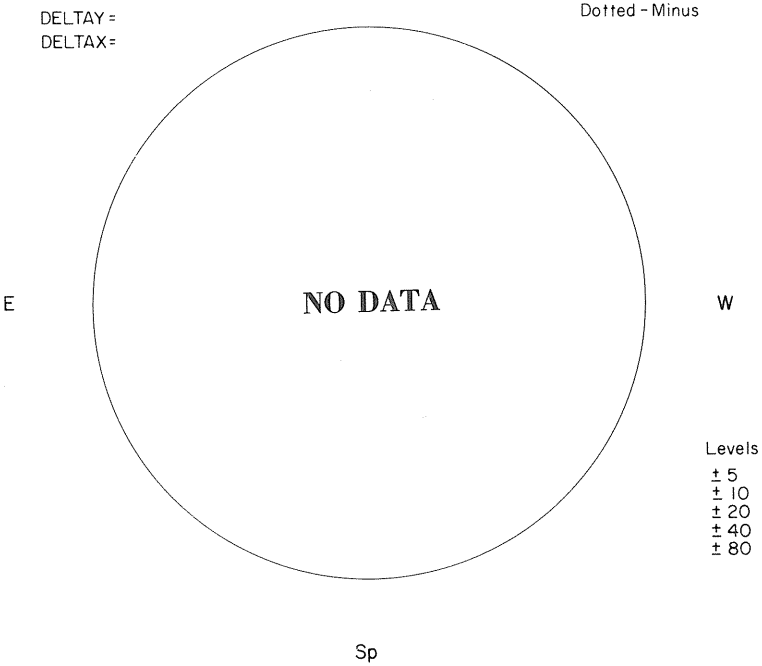
Contours in Intervals
of 200° K

MT. WILSON

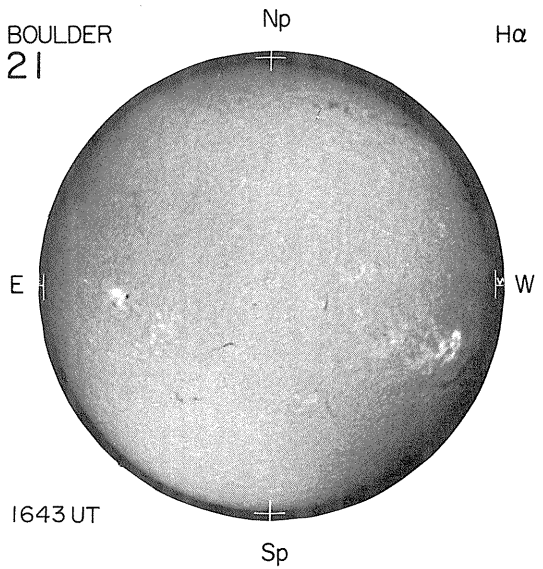
Np

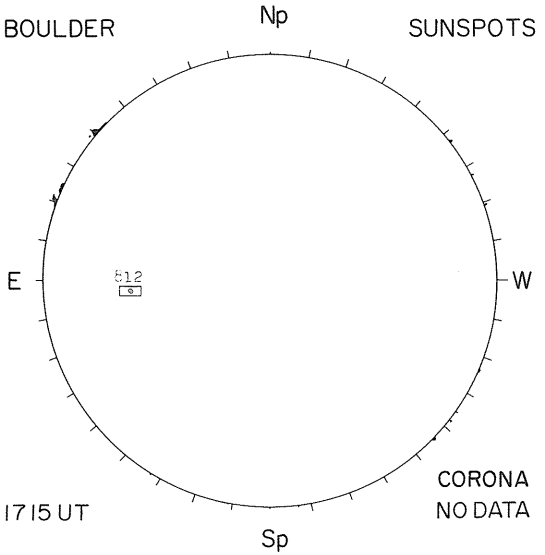
MAGNETOGRAM
Solid - Plus
Dotted - Minus

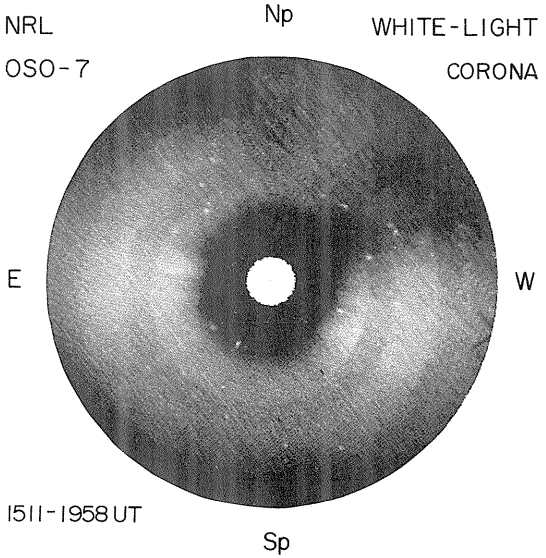
DELTAY =
DELTAX =



Levels
± 5
± 10
± 20
± 40
± 80







NASA GSFC
OSO-7

Np

FE XV
284A

E

NO DATA

W

Note: The FE XV observations from OSO-7 have deteriorated during the last few months and are now considered no longer useful.

Sp

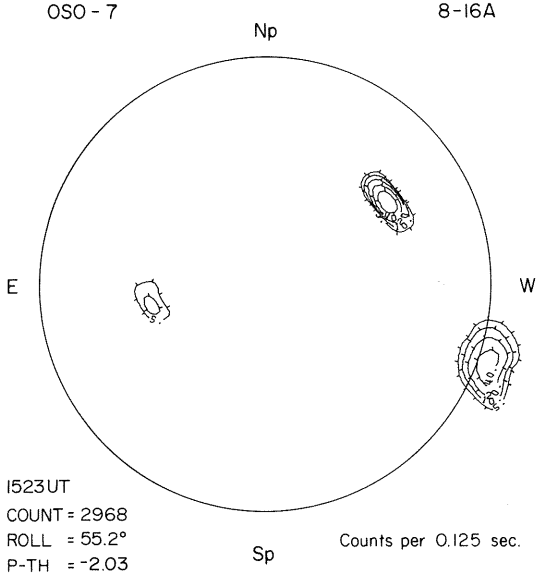
COUNT =
ROLL =
P-TH =

67
Mar 74

MARCH 22, 1974 (P=-25.40, B_o=-6.98, L_o=90.09)

NASA GSFC
OSO-7

X-RAY
8-16A

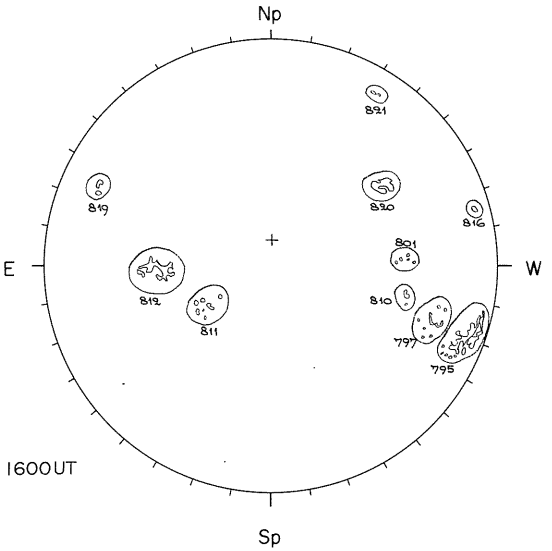


1523UT
COUNT = 2968
ROLL = 55.2°
P-TH = -2.03

Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT

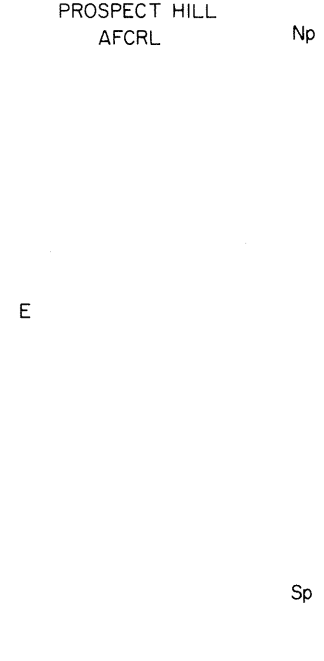


1600UT

FAIR	M
95 - 2700	2.5
12 - 0900	3.0
20 - 0800	4.0

PROSPECT HILL
AFCRL

8.6 mm

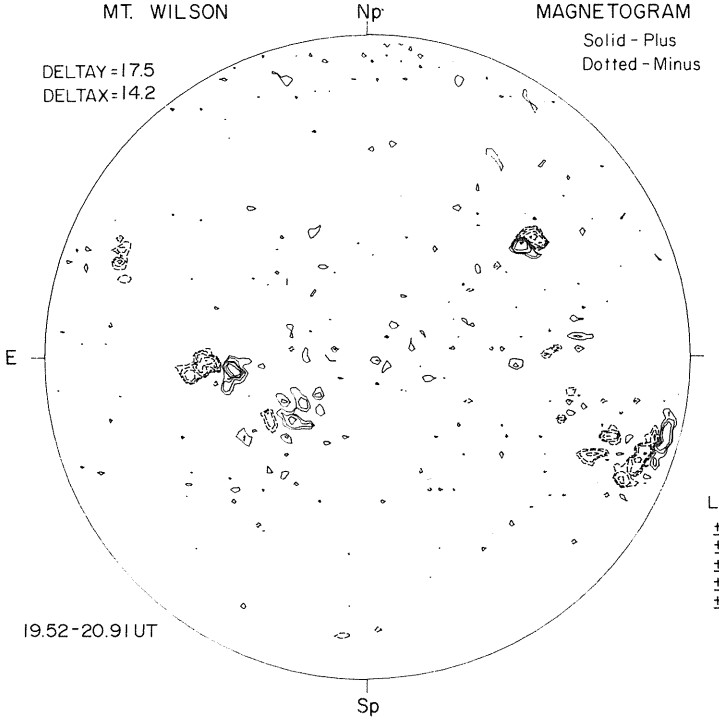


Contours in Intervals
of 200° K

MT. WILSON

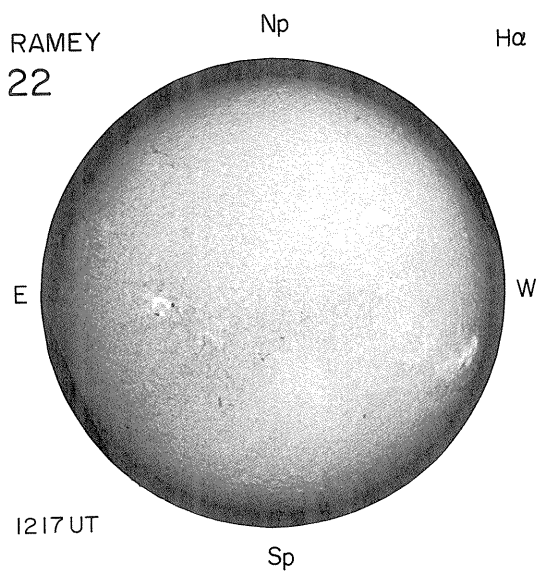
MAGNETOGRAM
Solid - Plus
Dotted - Minus

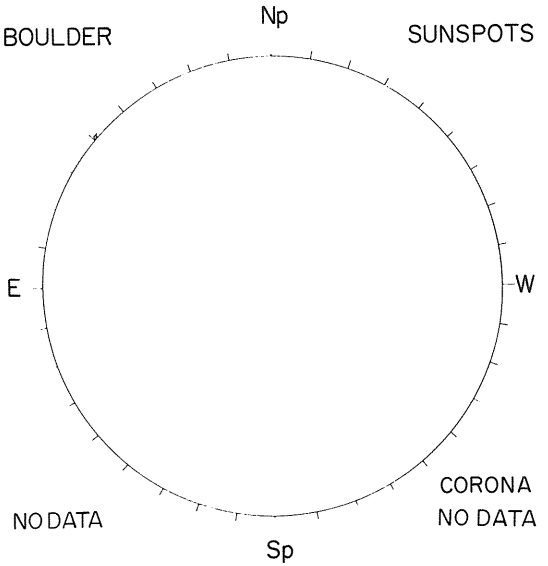
DELTAY = 17.5
DELTAX = 14.2

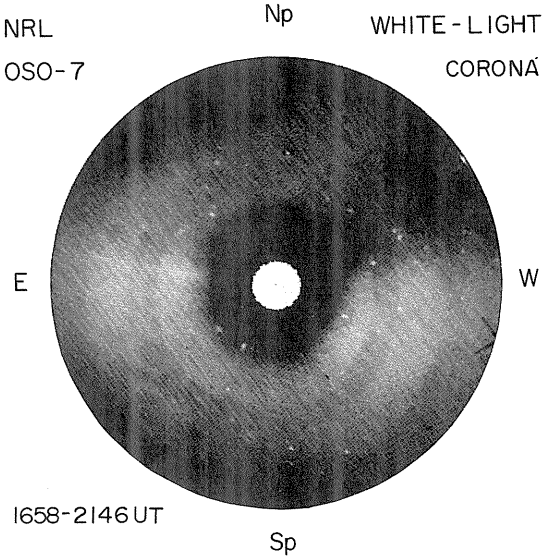


19.52-20.91 UT

Levels
± 5
± 10
± 20
± 40
± 80







NASA GSFC
OSO - 7

Np

FE XV
284A

E

NO DATA

W

Sp

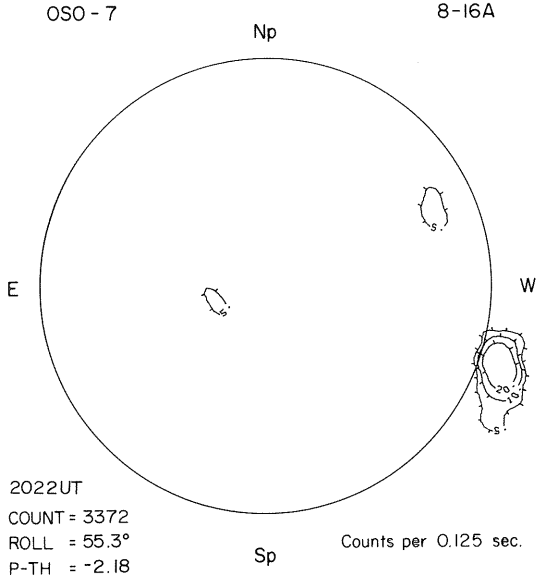
COUNT =
ROLL =
P-TH =

69
Mar 74

MARCH 23, 1974 (P=-25.51, B_o=-6.95, L_o=76.91)

NASA GSFC
OSO - 7

X-RAY
8-16A

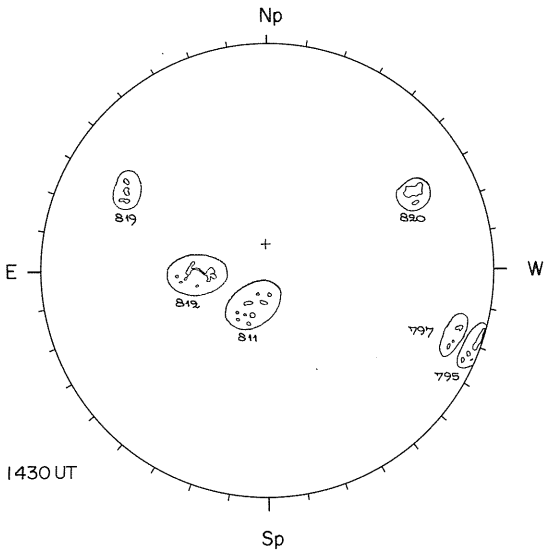


2022UT
COUNT = 3372
ROLL = 55.3°
P-TH = -2.18

Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT



1430 UT

POOR	S
95 - 1200	- 2.5
12 - 0800	- 3.0
20 - 1100	- 3.5

PROSPECT HILL
AFCRL

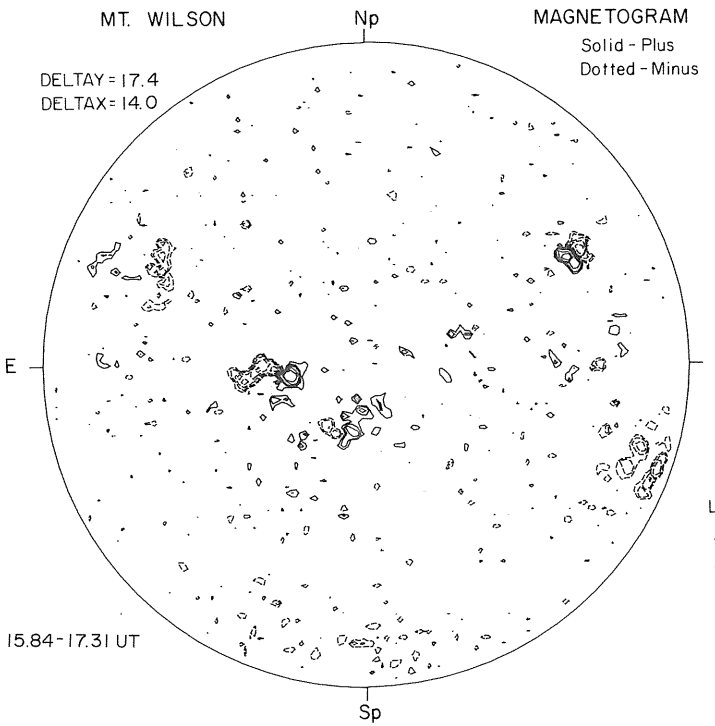
8.6 mm

Contours in Intervals
of 200° K

MT. WILSON

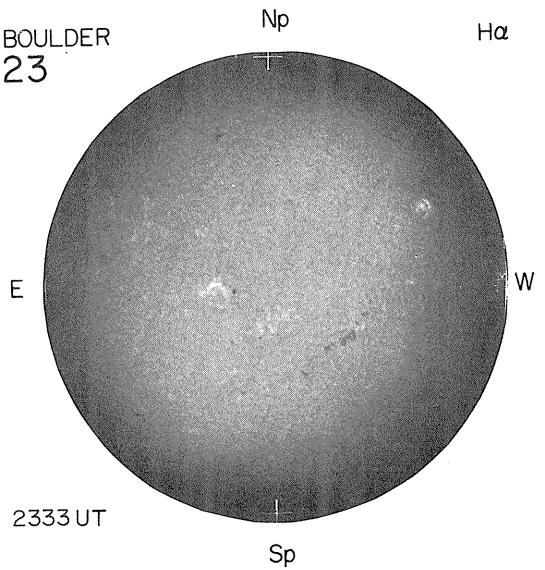
MAGNETOGRAM
Solid - Plus
Dotted - Minus

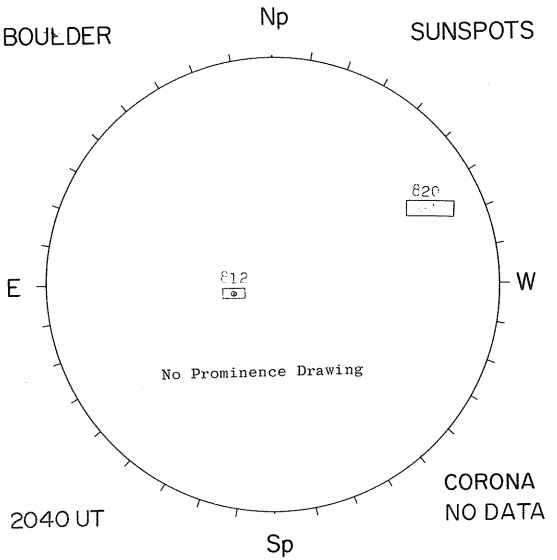
DELTAY = 17.4
DELTAX = 14.0

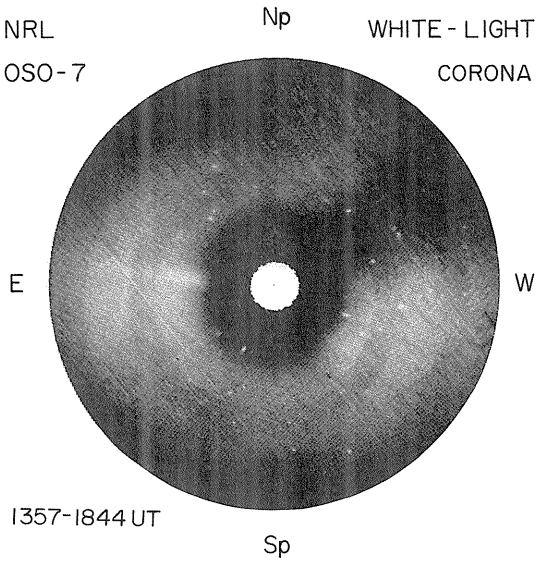


15.84 - 17.31 UT

Levels
± 5
± 10
± 20
± 40
± 80







NASA GSFC
OSO - 7

Np

FE XV
284A

E

NO DATA

W

Sp

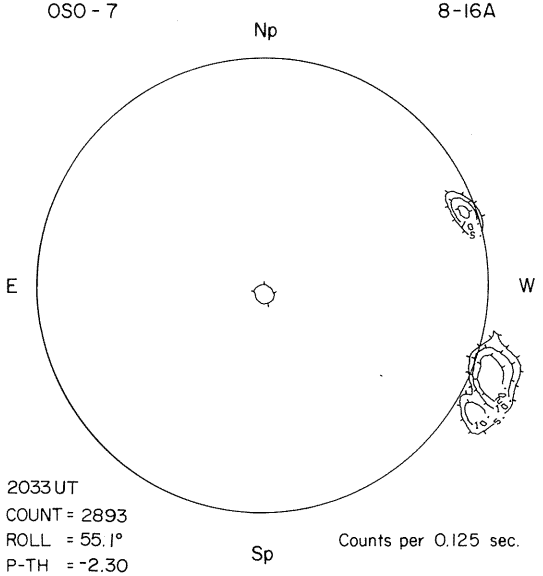
COUNT =
ROLL =
P-TH =

71
Mar 74

MARCH 24, 1974 (P=-25.61, B_o=-6.91, L_o=63.72)

NASA GSFC
OSO-7

X-RAY
8-16A

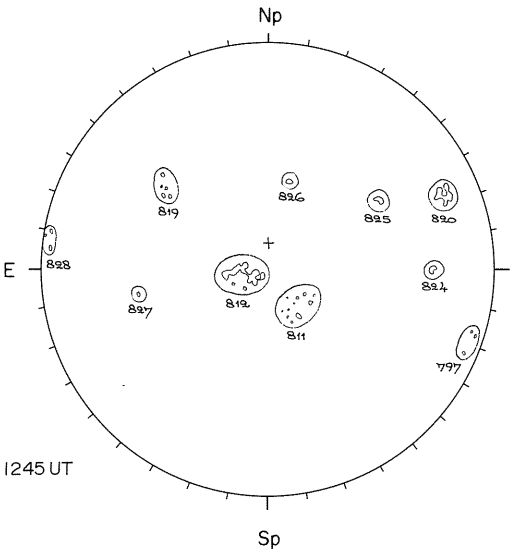


2033 UT
COUNT = 2893
ROLL = 55.1°
P-TH = -2.30

Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT

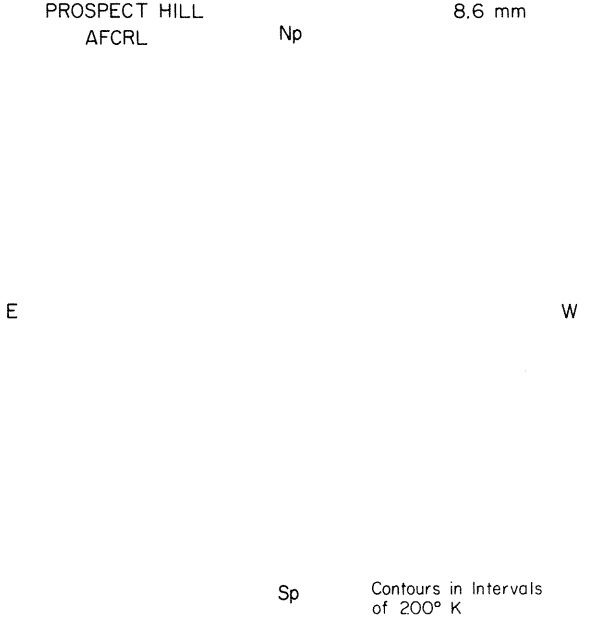


POOR	M
12 - 0800	- 2.5
20 - 0900	- 3.0
24 - 0200	- 2.5

1245 UT

PROSPECT HILL
AFCRL

8.6 mm

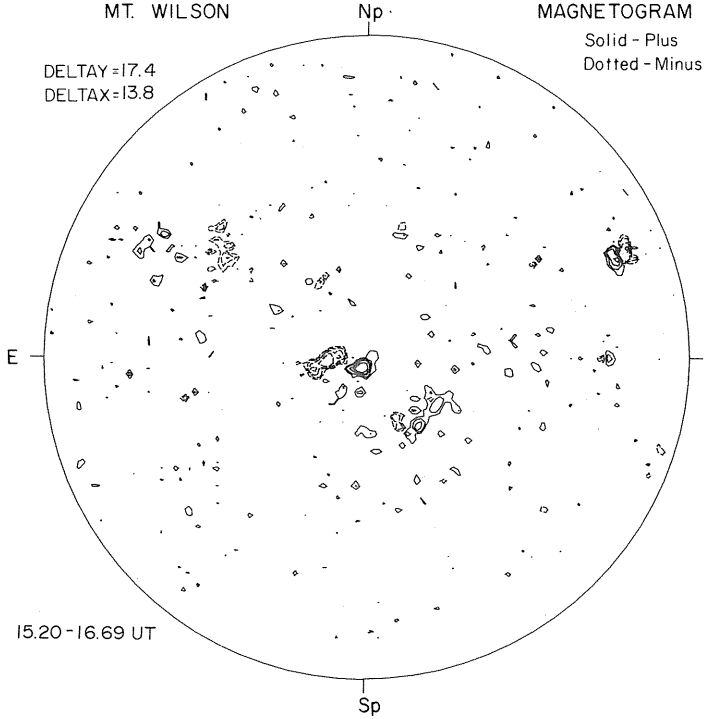


Contours in Intervals
of 200° K

MT. WILSON

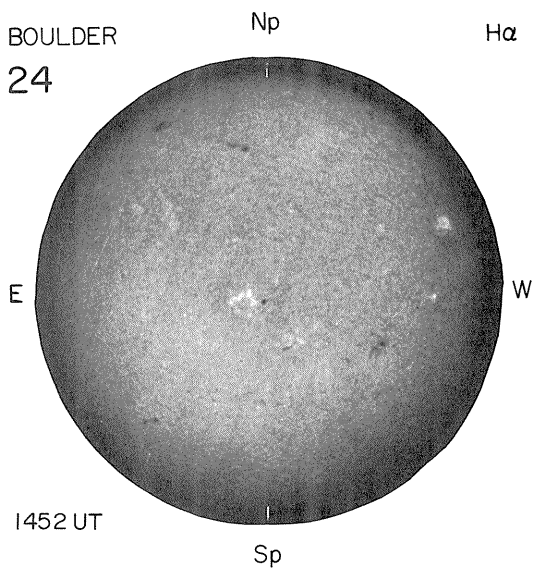
MAGNETOGRAM
Solid - Plus
Dotted - Minus

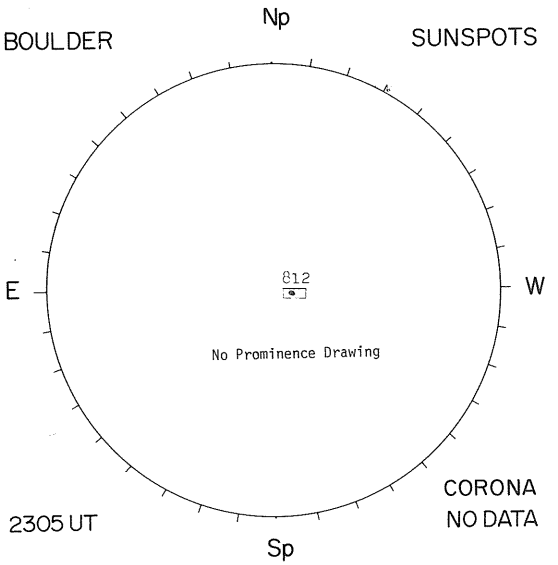
DELTAY = 17.4
DELTAX = 13.8

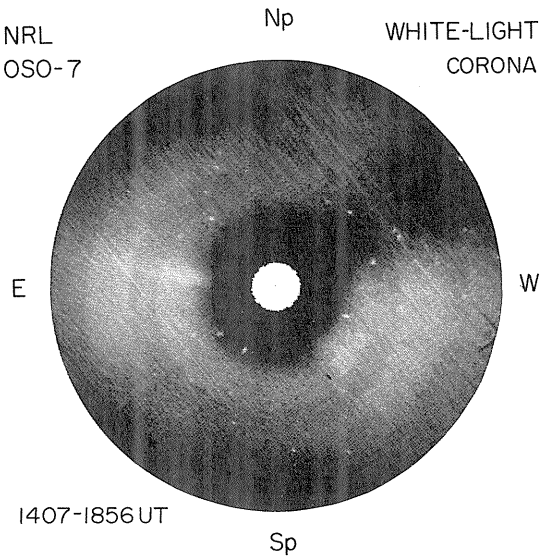


15.20 - 16.69 UT

Levels
± 5
± 10
± 20
± 40
± 80







NASA GSFC
OSO-7

Np

FE XV
284A

E

NO DATA

W

Sp

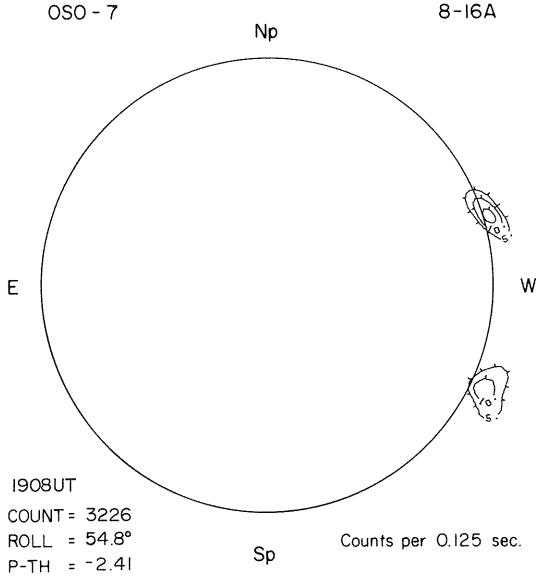
COUNT =
ROLL =
P-TH =

73
Mar 74

MARCH 25, 1974 (P=-25.71, B_o=-6.87, L_o=50.54)

NASA GSFC
OSO-7

X-RAY
8-16A

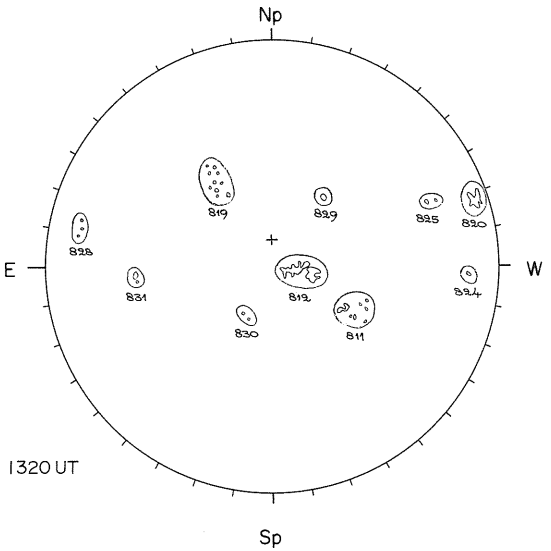


1908UT
COUNT = 3226
ROLL = 54.8°
P-TH = -2.41

Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT



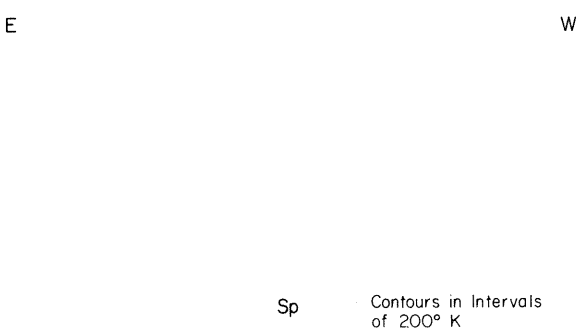
1320 UT

POOR	M
20-0900	-2.5

PROSPECT HILL
AFCRL

Np

8.6 mm



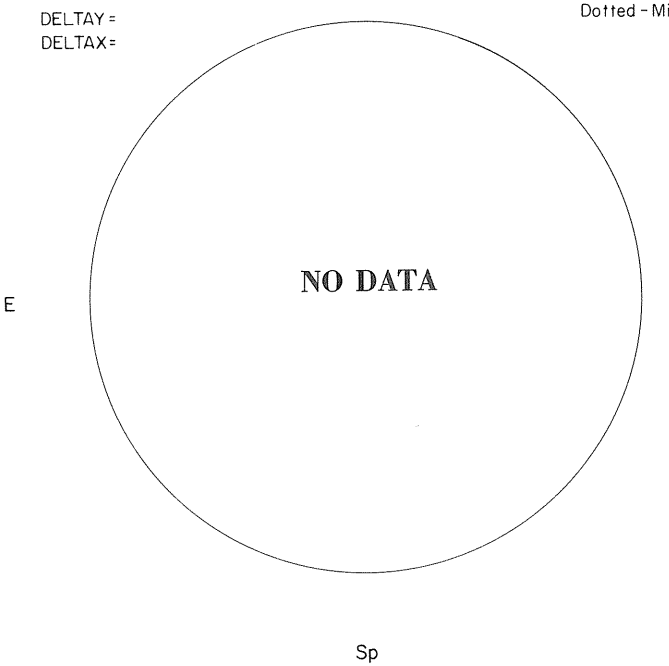
Contours in Intervals
of 200° K

MT. WILSON

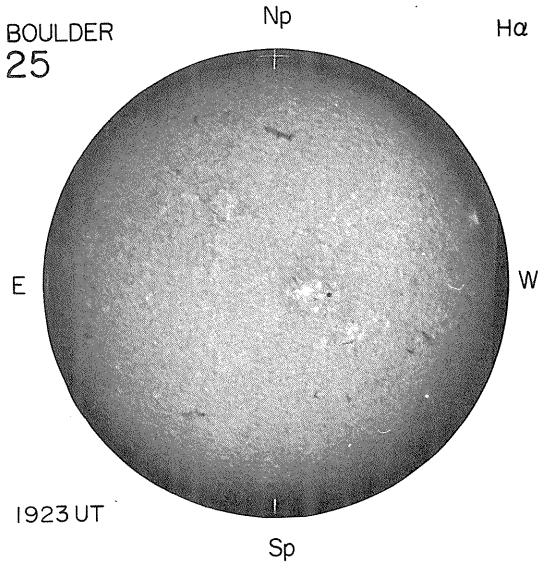
Np

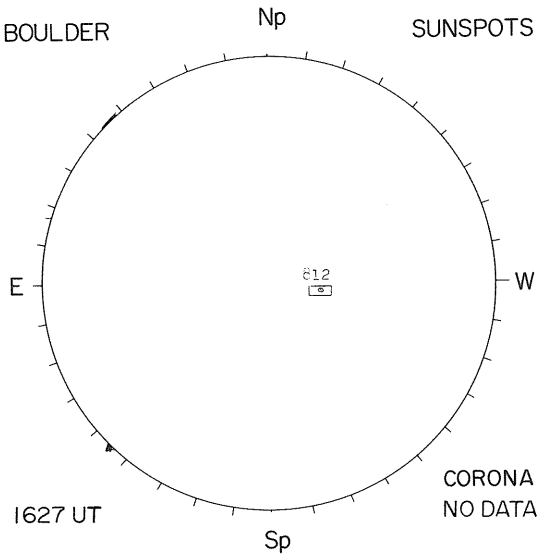
MAGNETOGRAM
Solid - Plus
Dotted - Minus

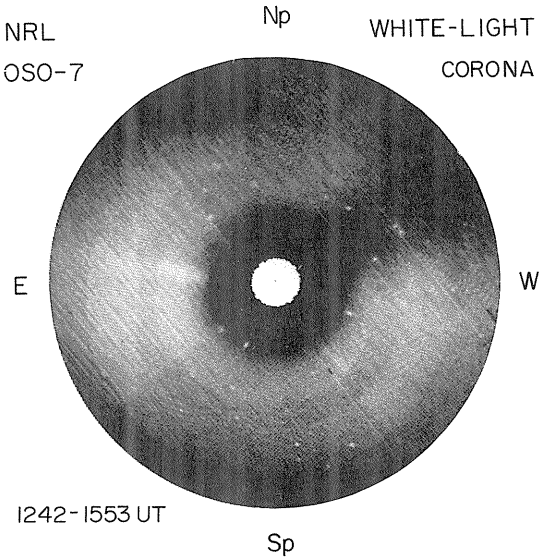
DELTAY =
DELTAX =



Levels
± 5
± 10
± 20
± 40
± 80







NASA GSFC
OSO-7

Np

FE XV
284A

E

NO DATA

W

Sp

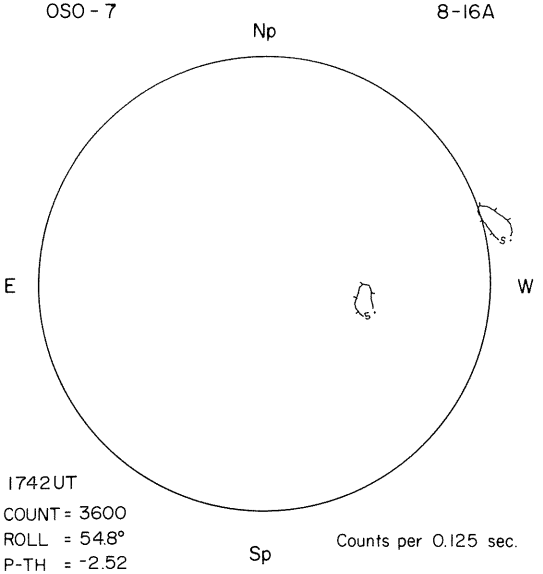
COUNT =
ROLL =
P-TH =

75
Mar 74

MARCH 26, 1974 (P=-25.80, B_o=-6.83, L_o=37.35)

NASA GSFC
OSO-7

X-RAY
8-16A

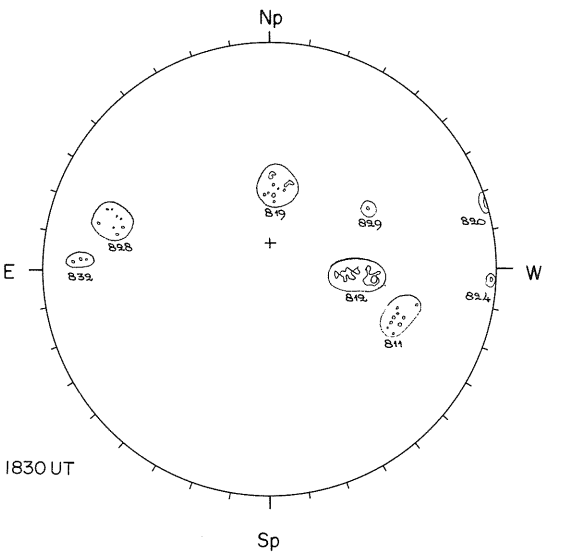


1742 UT
COUNT = 3600
ROLL = 54.8°
P-TH = -2.52

Counts per 0.125 sec.

McMATH-HULBERT

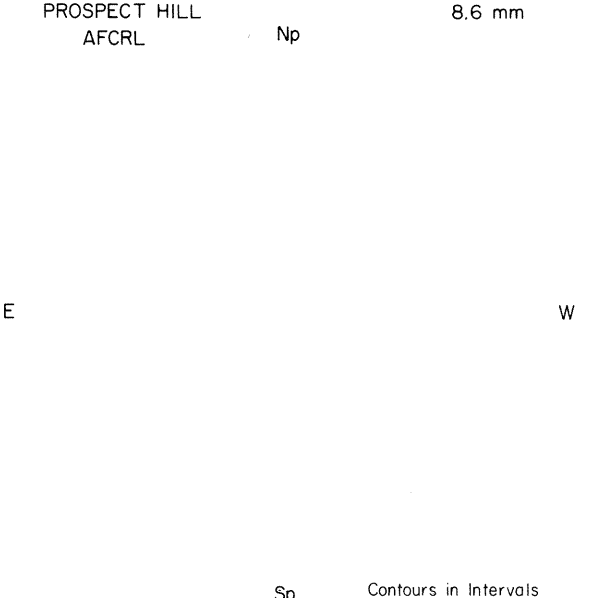
CALCIUM REPORT



FAIR | M

1830 UT

PROSPECT HILL
AFCRL



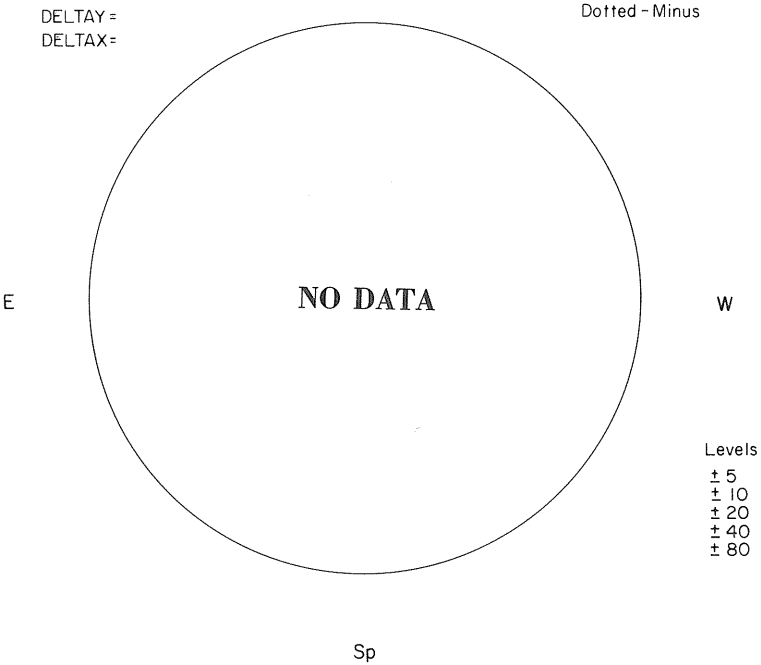
8.6 mm

Contours in Intervals
of 200° K

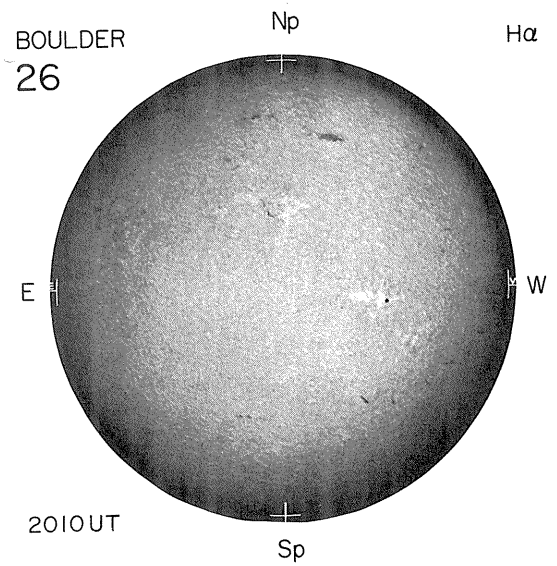
MT. WILSON

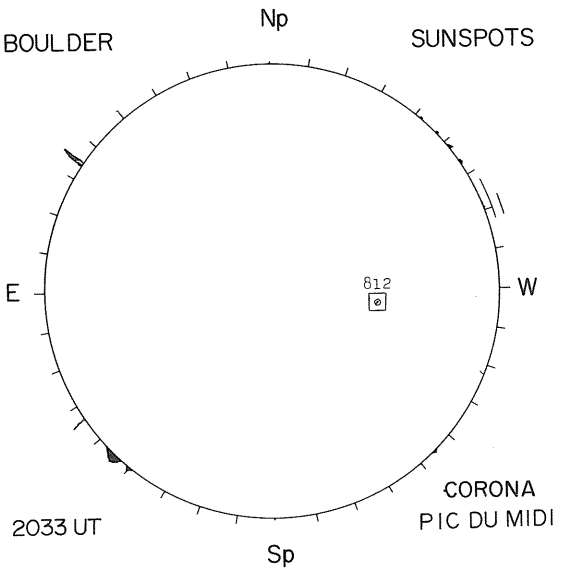
MAGNETOGRAM
Solid - Plus
Dotted - Minus

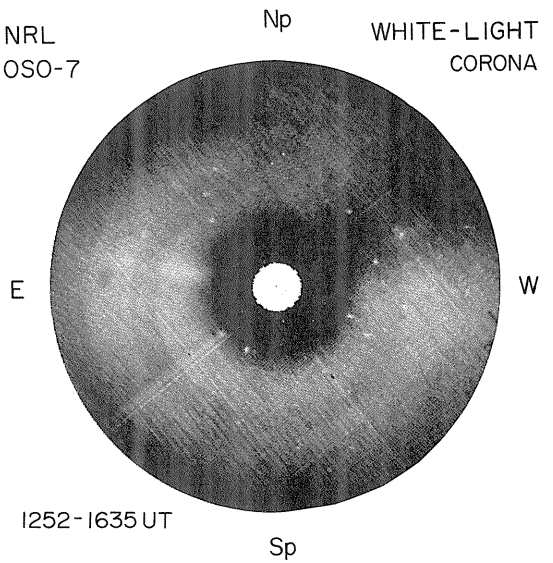
DELTAY =
DELTAX =



Levels
± 5
± 10
± 20
± 40
± 80







NASA GSFC
OSO-7

Np

FE XV
284A

E

NO DATA

W

Sp

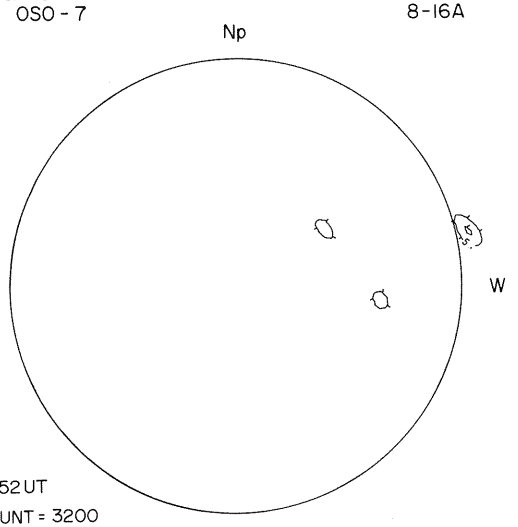
COUNT =
ROLL =
P-TH =

77
Mar 74

MARCH 27, 1974 (P=-25.89, B_o=-6.79, L_o=24.16)

NASA GSFC
OSO-7

X-RAY
8-16A

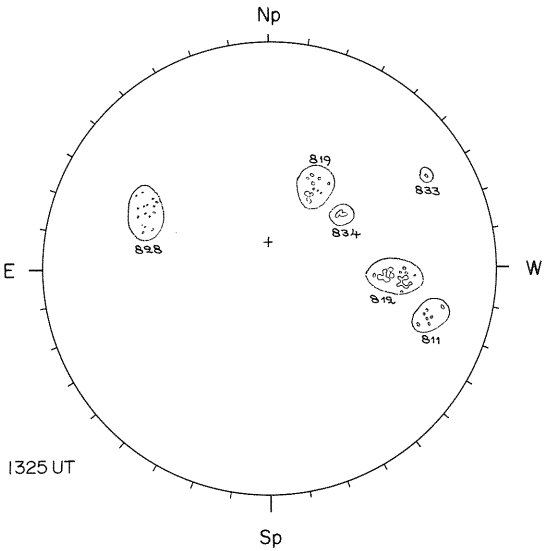


1752 UT
COUNT = 3200
ROLL = 54.5°
P-TH = -2.64

Counts per 0.125 sec.

McMATH-HULBERT

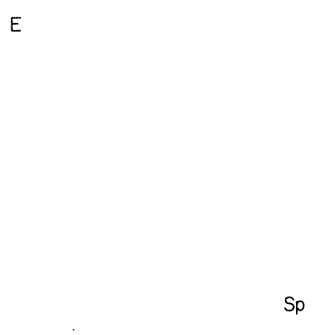
CALCIUM REPORT



FAIR | M
34 - 0300 - 2.5

1325 UT

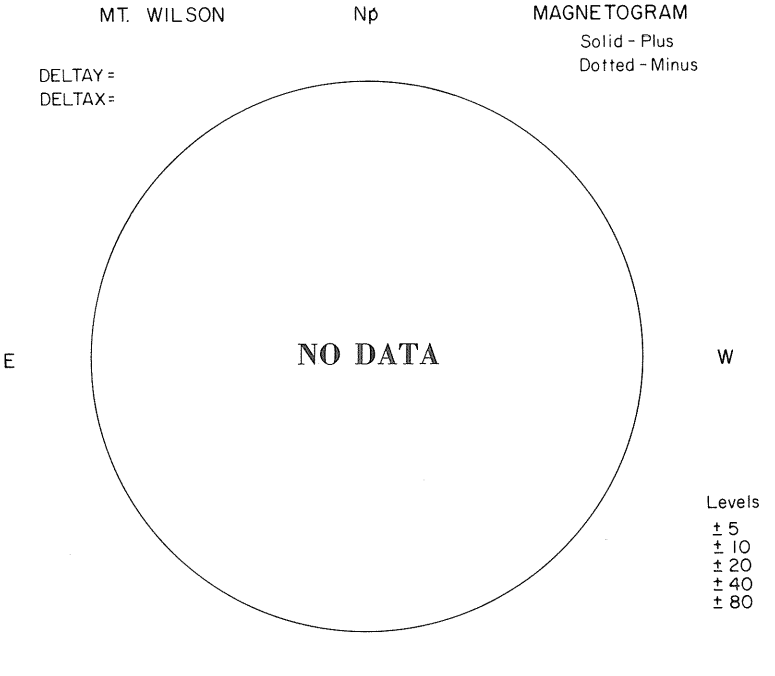
PROSPECT HILL
AFCRL



8.6 mm

Contours in Intervals
of 200° K

MT. WILSON

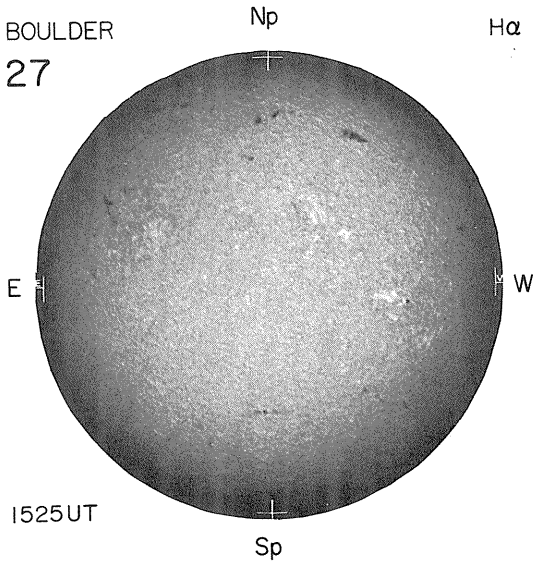


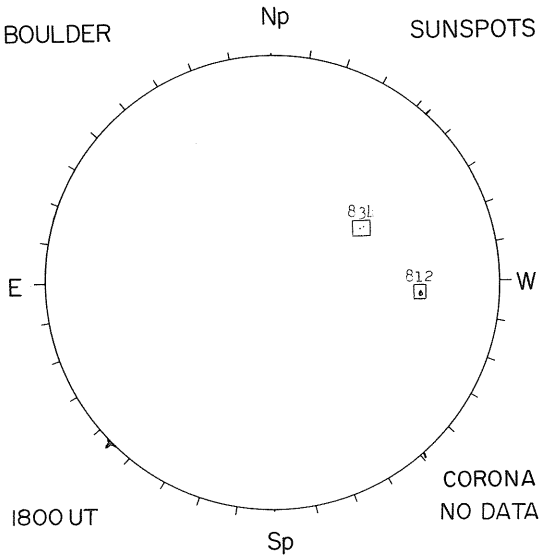
MAGNETOGRAM
Solid - Plus
Dotted - Minus

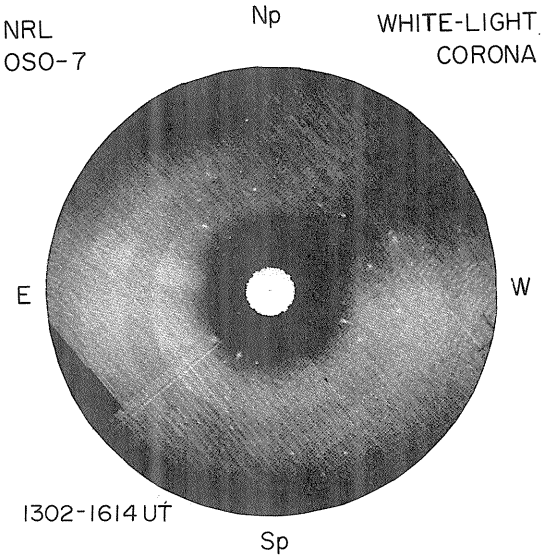
DELTAY =
DELTAX =

NO DATA

Levels
± 5
± 10
± 20
± 40
± 80







NASA GSFC
OSO-7

Np

FE XV
284A

E

NO DATA

W

Sp

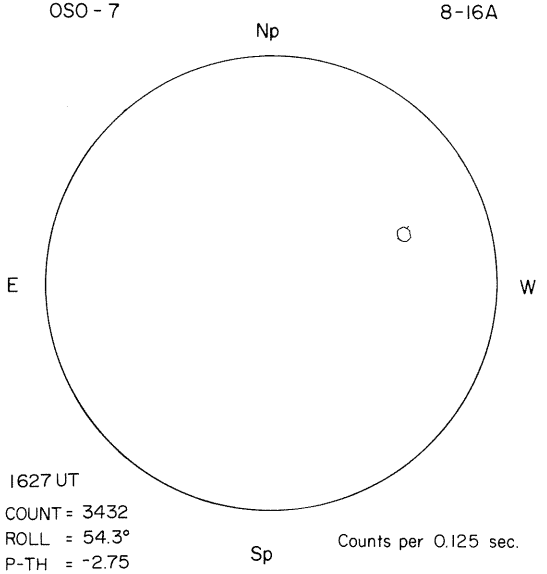
COUNT =
ROLL =
P-TH =

79
Mar 74

MARCH 28, 1974 (P=-25.96, B_o=-6.74, L_o=10.97)

NASA GSFC
OSO-7

X-RAY
8-16A

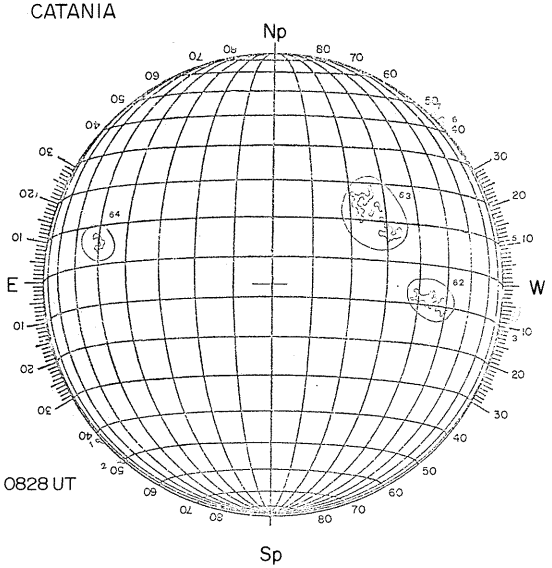


1627 UT
COUNT = 3432
ROLL = 54.3°
P-TH = -2.75

Counts per 0.125 sec.

CALCIUM REPORT

CATANIA

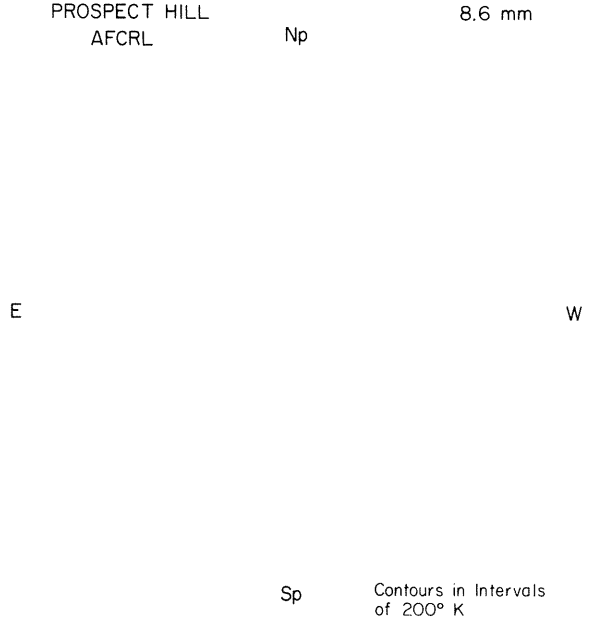


0828 UT

FAIR | GD
63 - 1650 ---

PROSPECT HILL
AFCRL

8.6 mm

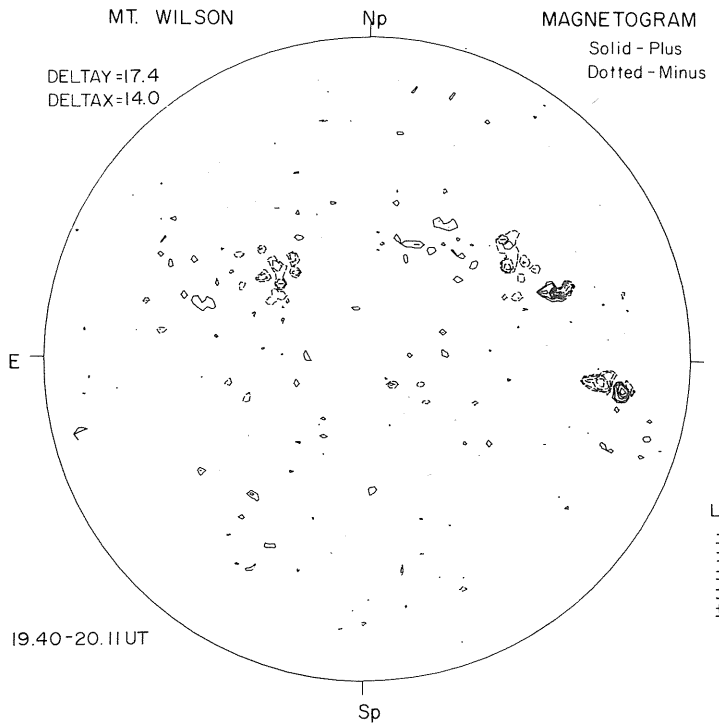


Contours in Intervals
of 200° K

MT. WILSON

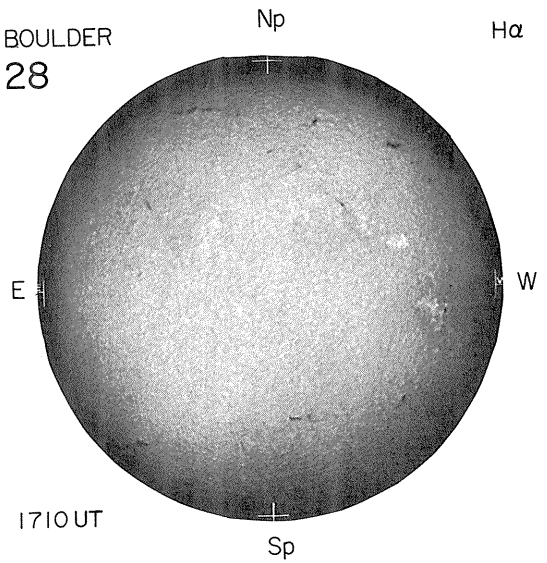
MAGNETOGRAM
Solid - Plus
Dotted - Minus

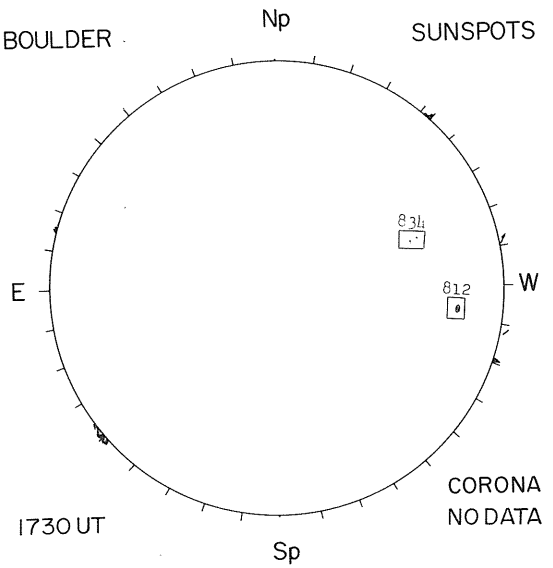
DELTAY=17.4
DELTAX=14.0

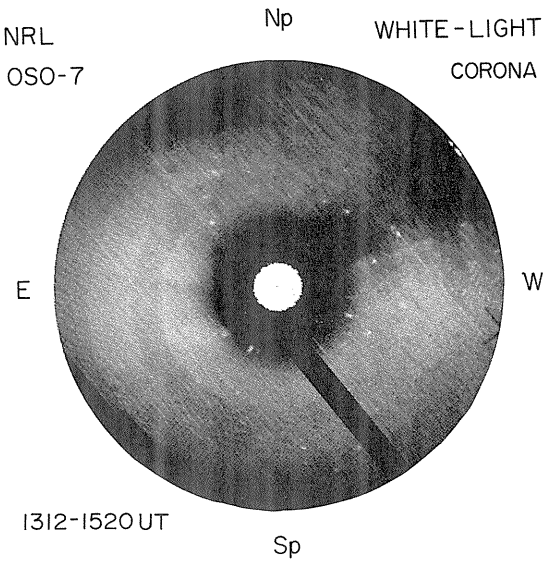


19.40-20.11 UT

Levels
± 5
± 10
± 20
± 40
± 80







NASA GSFC
OSO-7

Np

FE XV
284A

E

NO DATA

W

Sp

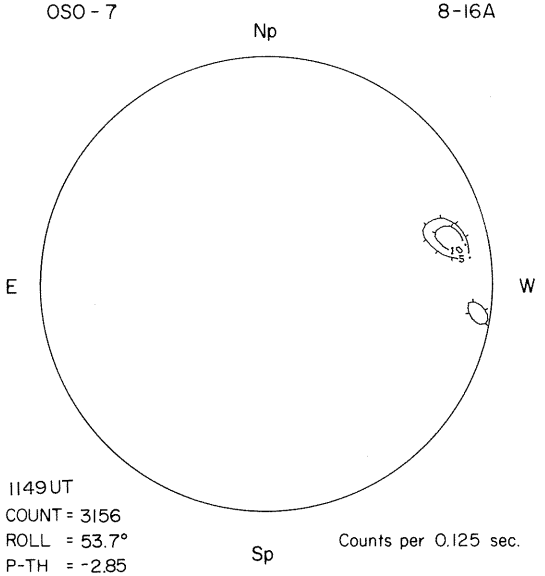
COUNT =
ROLL =
P-TH =

81
Mar 74

MARCH 29, 1974 (P=-26.03, B_o=-6.69, L_o=357.78)

NASA GSFC
OSO-7

X-RAY
8-16A

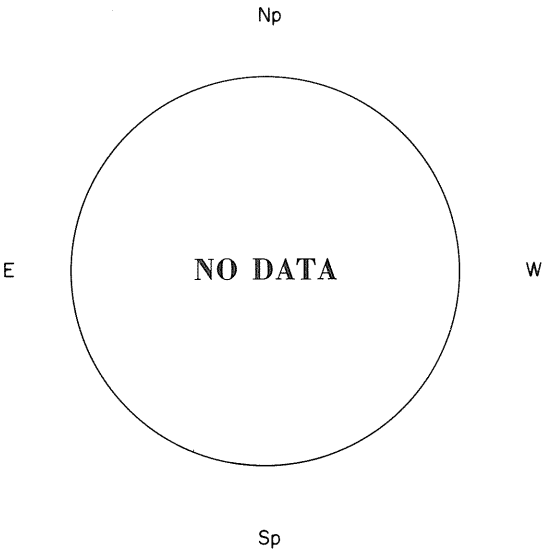


1149 UT
COUNT = 3156
ROLL = 53.7°
P-TH = -2.85

Counts per 0.125 sec.

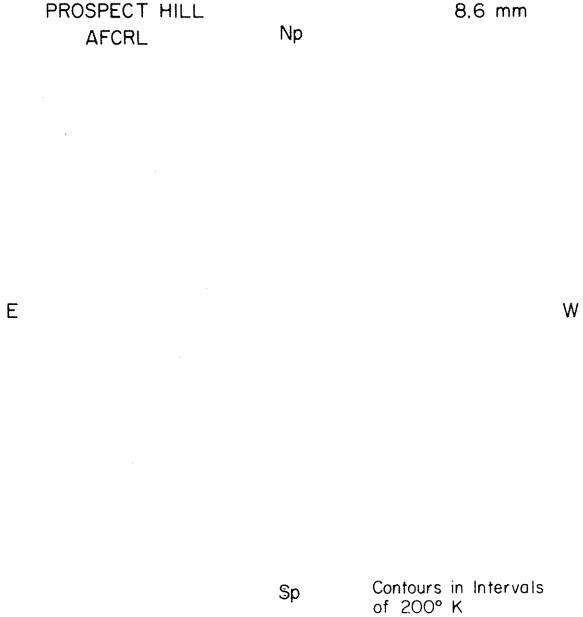
McMATH-HULBERT

CALCIUM REPORT



PROSPECT HILL
AFCRL

8.6 mm

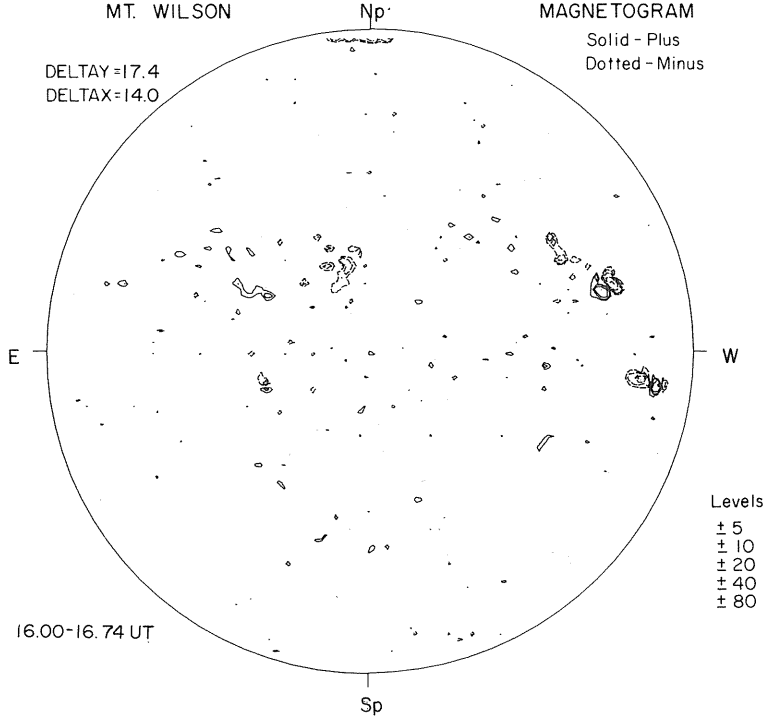


Contours in Intervals
of 200° K

MT. WILSON

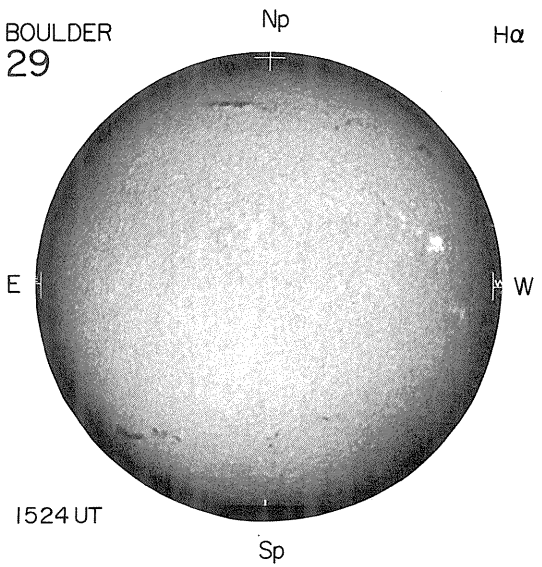
MAGNETOGRAM
Solid - Plus
Dotted - Minus

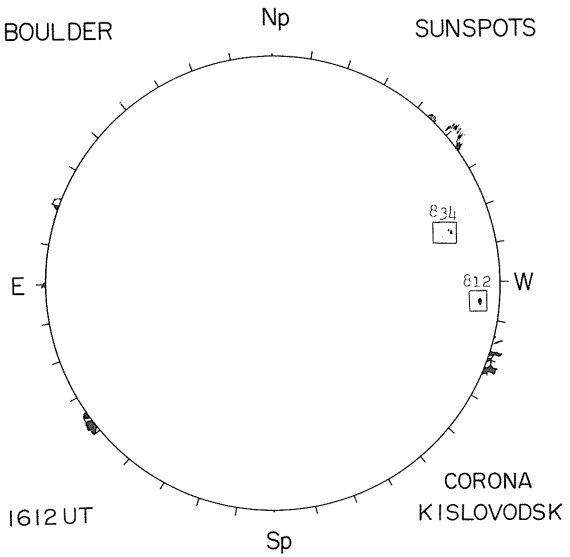
DELTAY = 17.4
DELTAX = 14.0

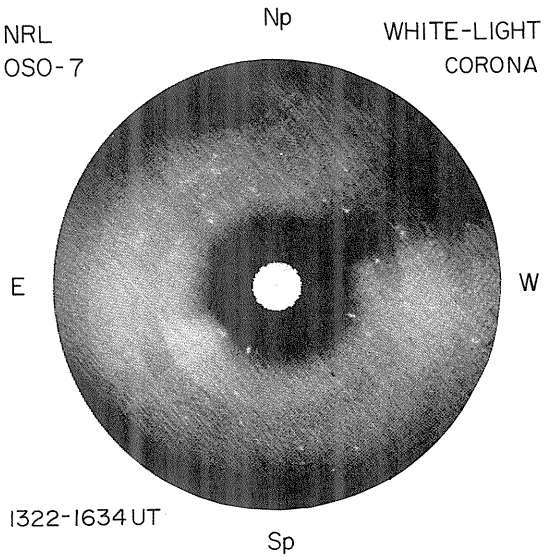


16.00-16.74 UT

Levels
± 5
± 10
± 20
± 40
± 80







NASA GSFC
OSO-7

Np

FE XV
284A

E

NO DATA

W

Sp

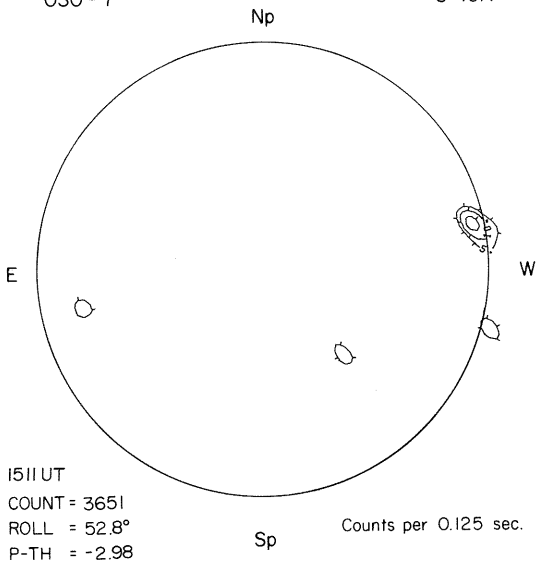
COUNT =
ROLL =
P-TH =

83
Mar 74

MARCH 30, 1974 (P=-26.09, B_o=-6.65, L_o=344.59)

NASA GSFC
OSO - 7

X-RAY
8-16A

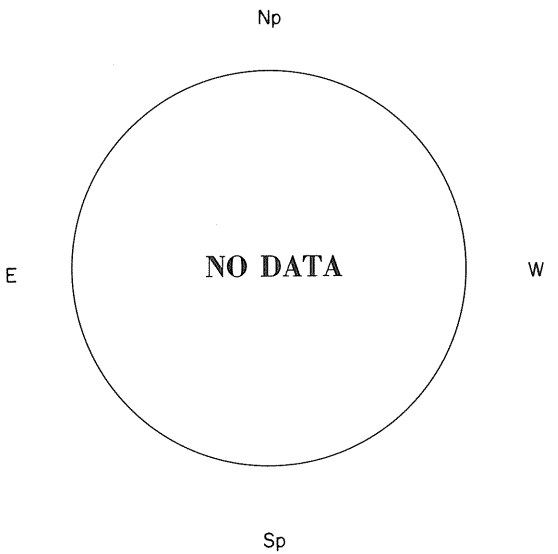


1511 UT
COUNT = 3651
ROLL = 52.8°
P-TH = -2.98

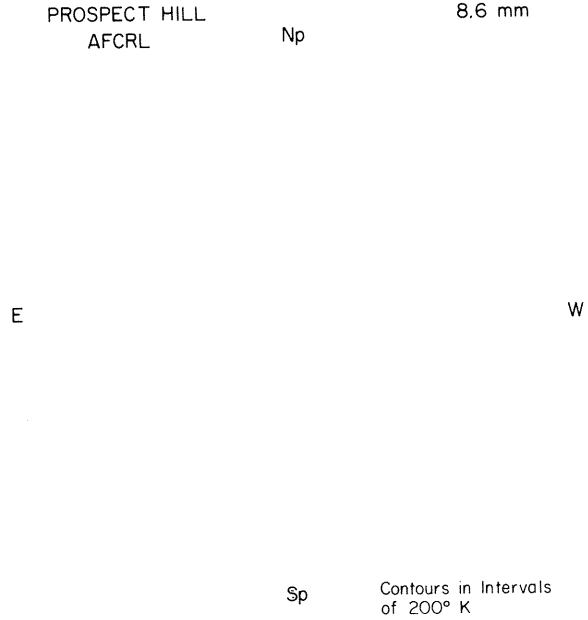
Counts per 0.125 sec.

McMATH-HULBERT

CALCIUM REPORT



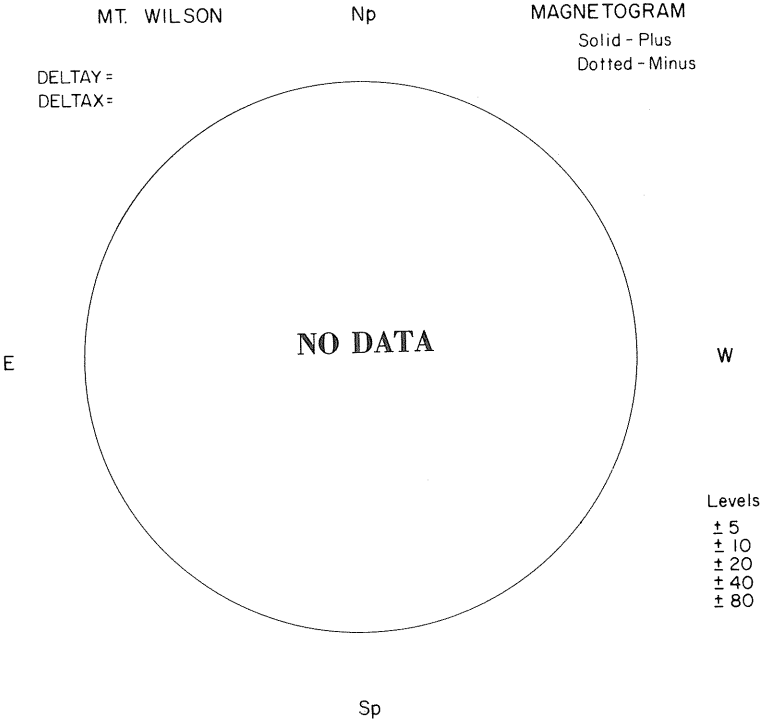
PROSPECT HILL
AFCRL



8.6 mm

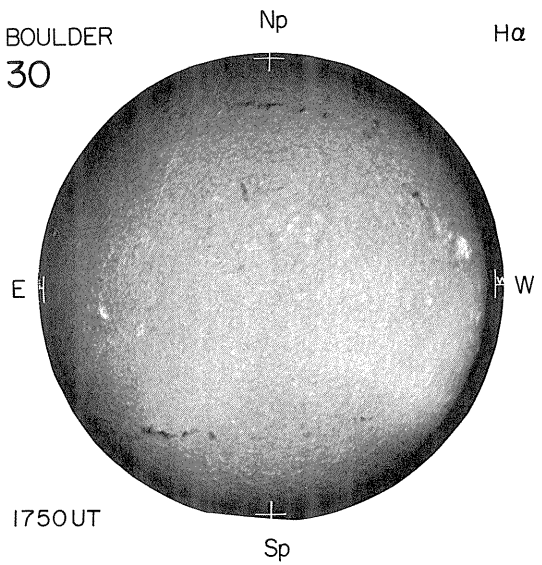
Contours in Intervals
of 200° K

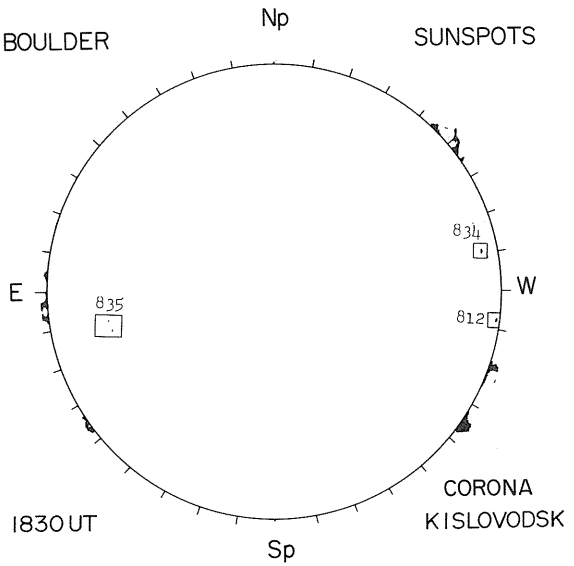
MT. WILSON

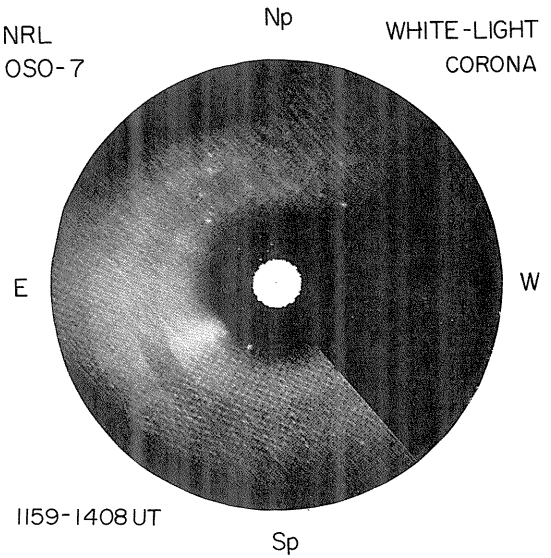


MAGNETOGRAM
Solid - Plus
Dotted - Minus

Levels
± 5
± 10
± 20
± 40
± 80







NASA GSFC
OSO-7

Np

FE XV
284A

E

NO DATA

W

Sp

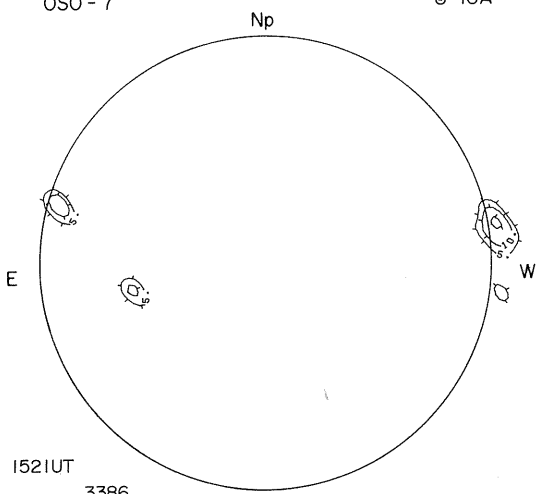
COUNT =
ROLL =
P-TH =

85
Mar 74

MARCH 31, 1974 (P=-26.15, B_o=-6.59, L_o=331.40)

NASA GSFC
OSO-7

X-RAY
8-16A

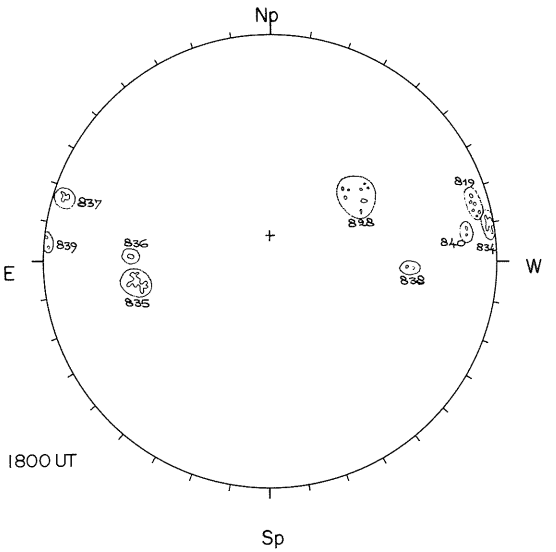


1521UT
COUNT = 3386
ROLL = 52.3°
P-TH = -3.09

Counts per 0.125 sec.

McMATH-HULBERT

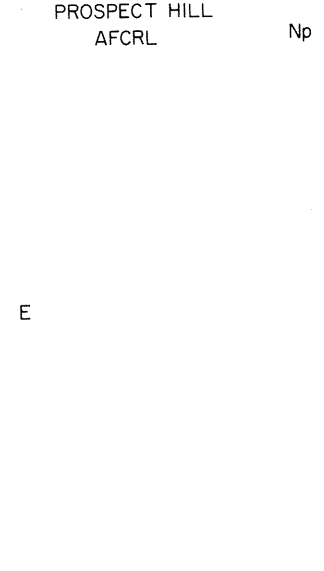
CALCIUM REPORT



	M
34 - 1000	- 2.5
35 - 0700	- 2.5
37 - 0400	- 2.5

1800 UT

PROSPECT HILL
AFCRL



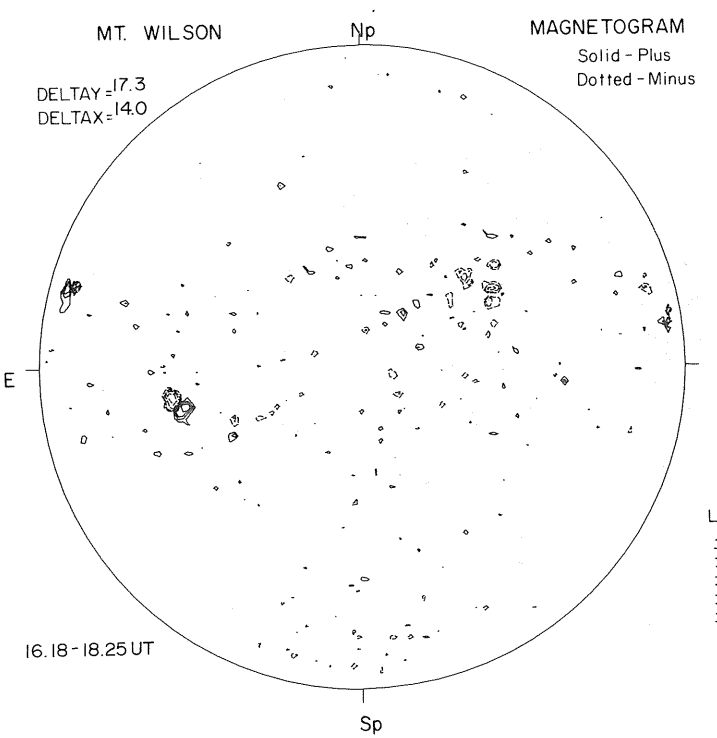
8.6 mm

Contours in Intervals of 200° K

MT. WILSON

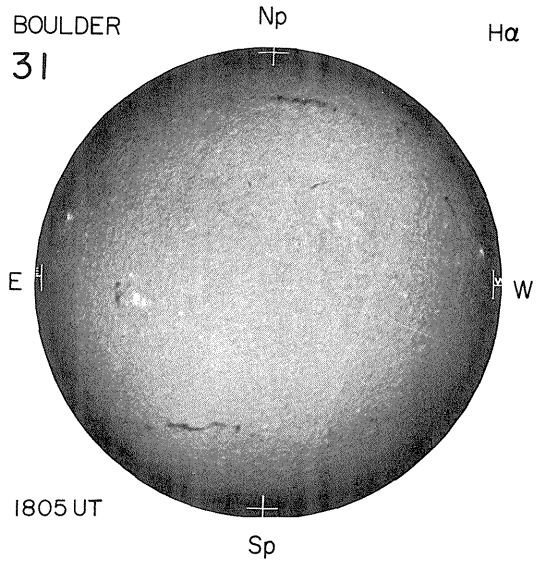
MAGNETOGRAM
Solid - Plus
Dotted - Minus

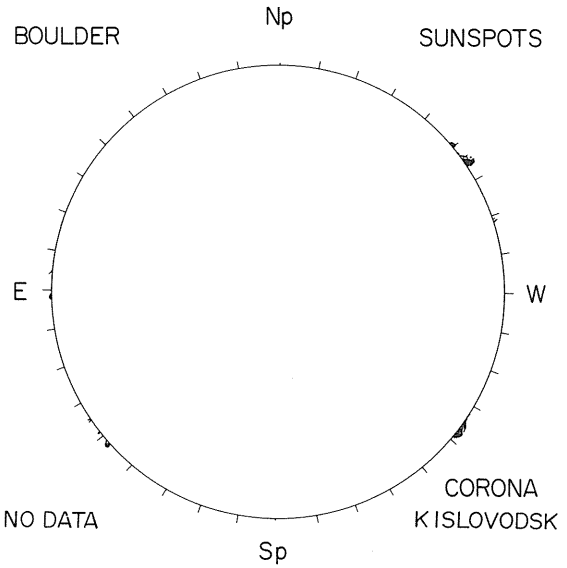
DELTAY = 17.3
DELTAX = 14.0

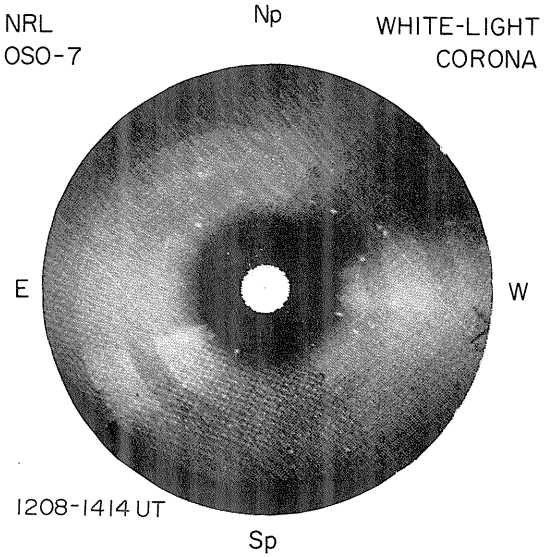


16.18 - 18.25 UT

Levels
± 5
± 10
± 20
± 40
± 80







NASA GSFC
OSO-7

Np

FE XV
284A

E

NO DATA

W

Sp

COUNT =
ROLL =
P-TH =

87
Mar 74

REGIONS OF SOLAR ACTIVITY

MARCH 1974

MCMATH REGION 12775 CMP DATE 1.3

			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
74	2	26	12775	N08 E37	1	300	3.0	19340	N08 E33	0			B	20	4	BXO
74	2	27	12775	N08 E24	0	400	3.0	19340	N08 E22	1	(BF)	3	B	10	9	BXO
74	2	28	12775	N08 E09	1	500	3.0		N08 E08				B	10	3	BXO
74	3	1							N08 E04				M	0	2	AXX
74	3	5	12775	N08 W56	3	300	1.5									
74	3	6	12775	N08 W69	2	200	1.0									

MCMATH REGION 12771 CMP DATE 2.5

			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
74	2	24	12771	N10 E80	346	100	1.0									
74	2	25	12771	N10 E65	348	100	1.5									
74	3	1						19343	N11 E20		B					

MCMATH REGION 12772 CMP DATE 2.5

			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
74	2	25	12772	N05 E65	348	100	1.5									

MCMATH REGION 12785 CMP DATE 3.2

			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
74	3	6	12785	S16 W44	337	100	1.0									
74	3	7	12785	S16 W59	337	100	1.0									

MCMATH REGION 12773 CMP DATE 3.7

			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
74	2	25	12773	N07 E84	329	100	1.5									
74	2	26	12773	N07 E72	327	800	3.0	19341	N05 E65	329	(AP)	3	B	40	1	HSX
74	2	27	12773	N07 E57	328	1000	3.0	19341	N05 E55	329	(B)	3	B	50	12	CRO
74	2	28	12773	N06 E43	328	1100	3.5									
74	3	1	12773						N06 E37				M	40	3	CRO
74	3	2	12773					19341	N05 E12		B		M	10	2	AXX
74	3	3	12773						N06 E11				M	10	1	AXX

MCMATH REGION 12778 CMP DATE 4.3

			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
74	2	28	12778	N13 E47	324	100	1.5									

MCMATH REGION 12779 CMP DATE 4.5

			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
74	2	28	12779	S27 E50	321	100	1.0									

MCMATH REGION 12777 CMP DATE 4.7

			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
74	2	27	12777	S01 E68	317	300	2.5									
74	2	28	12777	S02 E53	318	500	2.5									

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MCMATH REGION 12789 CMP DATE 5.5

				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
74	3	10	12789	S08 W66	307	200	2.0									

MCMATH REGION 12780 CMP DATE 5.7

				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
74	2	28	12780	S08 E65	306	100	1.0									

MCMATH REGION 12790 CMP DATE 7.2

				CALCIUM PLAGE DATA				SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
74	3	10	12790	S08 W44	285	200	1.5									

MCMATH REGION 12786 CMP DATE 7.7

				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
74	3	7	12786	N38 E00	278	100	1.5									

MCMATH REGION 12783 CMP DATE 7.8

				CALCIUM PLAGE DATA				SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
74	3	5	12783	N13 E29	278	100	2.0									

MCMATH REGION 12781 CMP DATE 9.9

				CALCIUM PLAGE DATA				SUNSPOT DATA								
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
74	3	4						19344	N10 E64	252	(AP)	3	B	70	1	HSX
74	3	5	12781	N13 E57	250	1000	3.5	19344	N11 E57	249	(BP)	3	B	50	1	HSX
74	3	6	12781	N13 E45	248	1200	3.0	19344	N11 E42	249	(BP)	4	B	50	3	HAX
74	3	7	12781	N13 E30	248	1200	3.0		N12 E28				B	10	3	AXX
74	3	9							N01 E10				B	30	5	CRO
74	3	10	12781	N13 W08	249	1000	3.0									
74	3	11	12781	N13 W24	249	900	2.5									
74	3	12	12781	N13 W37	250	600	2.0									
74	3	13	12781	N13 W50	251	600	2.0									
74	3	14	12781	N13 W63	251	500	1.5									

MCMATH REGION 12791 CMP DATE 10.5

				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
74	3	10	12791	N02 W01	242	900	3.5	19346	N00 W05	243	(BP)	4	R	60	15	ORI
74	3	11	12791	N02 W16	241	1000	3.0	19346	N01 W16	241	(BP)	5	B	110	8	DSO
74	3	12	12791	N02 W29	242	1200	3.0	19346	N01 W31	242	(BP)	5	B	100	5	DSO
74	3	13	12791	N02 W43	244	1200	3.0	19346	N01 W43	243	(BP)	5	B	90	3	HSX
74	3	14	12791	N02 W55	243	1000	2.5	19346	N01 W56	243	(BP)	5	B	80	1	HSX
74	3	15						19346	N00 W72	245	(AP)	3	B	50	1	HSX
74	3	16	12791	N02 W83	242	600	2.0		N02 W84				R	0	1	AXX

The column marked STA is inserted to indicate the source of data for sunspot area, count and classification.
B = Boulder M = Manila R = Ramey

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MCMATH REGION 12784 CMP DATE 11.5 RETURN OF REGION 12749, 12739 12738 ROTATION 2

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
74	3	5	12784	S13 E70	237	400	1.0
74	3	6	12784	S13 E58	235	600	1.5
74	3	7	12784	S13 E49	229	800	1.5
74	3	10	12784	S13 E12	229	1300	2.0
74	3	11	12784	S11 W03	228	1100	2.0
74	3	12	12784	S11 W15	228	800	1.5
74	3	13	12784	S12 W28	229	800	1.0
74	3	14	12784	S12 W40	228	800	1.0
74	3	16	12784	S12 W66	225	400	1.0

SUNSPOT DATA

MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS

MCMATH REGION 12792 CMP DATE 11.6

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
74	3	10	12792	N47 E14	227	200	1.5

SUNSPOT DATA

MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS

MCMATH REGION 12782 CMP DATE 12.0

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
74	3	5	12782	N06 E89	218	400	2.0
74	3	6	12782	N06 E76	217	700	2.0
74	3	7	12782	N06 E58	220	800	2.0
74	3	8					
74	3	9					
74	3	10	12782	N05 E19	222	800	2.5
74	3	11	12782	N05 E04	221	800	2.5
74	3	12	12782	N06 W09	222	500	2.5
74	3	13	12782	N06 W23	224	600	2.5
74	3	14	12782	N06 W35	223	600	2.0
74	3	16	12782	N07 W62	221	200	2.0
74	3	17	12782	N07 W75	224	200	1.0

SUNSPOT DATA

MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
19345	N05 E80	226	(AP)	3	B	0	1	AXX
19345	N04 E67	224	(AP)	3	B	50	1	HSX
	N06 E54				B	30	1	HSX
	N06 E41				B	30	1	HRX
	N06 E27				B	30	1	HRX
19345	N06 E12	226	(AP)	1	R	0	1	AXX
19345	N04 E02	223	(BP)	2	B	0	1	AXX
	N05 W12				B	0	1	ORX

MCMATH REGION 12806 CMP DATE 12.7

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
74	3	16	12806	N13 W53	212	200	1.0
74	3	17	12806	N13 W65	214	100	1.0

SUNSPOT DATA

MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS

MCMATH REGION 12793 CMP DATE 12.8

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
74	3	10	12793	N14 E30	211	200	1.5

SUNSPOT DATA

MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS

MCMATH REGION 12787 CMP DATE 13.5 RETURN OF REGION 12742 ROTATION 3&4

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
74	3	7	12787	S16 E75	203	500	1.0
74	3	10	12787	S17 E37	204	800	2.0
74	3	11	12787	S17 E23	202	800	2.0
74	3	12	12787	S17 E12	201	700	1.0
74	3	13	12787	S17 W01	202	600	1.0
74	3	14	12787	S17 W13	201	600	1.0
74	3	16	12787	S17 W40	199	500	1.0
74	3	17	12787	S18 W50	199	600	1.0
74	3	18	12787	S17 W63	198	500	1.0
74	3	19	12787	S17 W76	198	300	1.0

SUNSPOT DATA

MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS

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MCMATH REGION 12802 CMP DATE 14.0

				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
74	3	16	12802	N28 W35	154	100	1.0									

MCMATH REGION 12799 CMP DATE 15.5

				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
74	3	13	12799	N15 E26	175	100	1.0									

MCMATH REGION 12794 CMP DATE 16.2

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
74	3	10	12794	S11 E76	165	900	3.0									
74	3	11	12794	S11 E59	166	800	3.0									
74	3	12	12794	S12 E47	166	500	2.5									
74	3	13	12794	S12 E34	167	700	2.5									
74	3	14	12794	S12 E21	167	800	2.5									
74	3	16	12794	S12 W07	166	600	2.5									
74	3	17	12794	S12 W20	169	600	2.5	19351	S13 W30	177	(BP	2	B	0	3	AXX
74	3	18	12794	S12 W33	168	700	2.0		S12 W45				B	0	1	AXX
74	3	19	12794	S12 W47	169	600	2.0									
74	3	20	12794	S13 W61	170	600	1.5		S15 W55				M	10	1	AXX
74	3	21	12794	S14 W75	169	700	1.5									

MCMATH REGION 12795 CMP DATE 17.3 RETURN OF REGION 12752 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
74	3	10	12795	S18 E86	155	800	3.0	19347	S06 E80	158	AP					
74	3	11	12795	S18 E69	156	1300	2.5	19347	S17 E71	154	(BP)	3	B	50	4	BXO
74	3	12	12795	S18 E63	150	3000	3.0	19347	S17 E58	153	(BP)	2	B	10	2	BXO
74	3								S17 E64				B	0	1	AXX
74	3	13	12795	S18 E50	151	3500	3.0	19347	S16 E44	156	(AP)	3	B	10	1	AXX
74	3	14	12795	S18 E37	151	3500	3.0	19347	S18 E32	155	(BP)	2	B	0	1	AXX
74	3							19349	S16 E34	153	(BP)	2				
74	3	15						19347	S17 E15	158	(AP)	1				
74	3							19349	S15 E18	155		1				
74	3	16	12795	S18 E08	151	3100	3.0	19350	S21 E09	149	(AF)	2	R	0	2	AXX
74	3	17	12795	S18 W04	153	2900	3.0	19350	S22 W05	152	(BF)	1				
74	3							19347	S17 W05	152	(B)	1				
74	3	18	12795	S18 W18	153	3000	3.0	19350	S21 W14	148	(AF)	2	B	10	4	BXO
74	3	19	12795	S18 W30	152	3100	3.0	19350	S24 W24	146	(AF)	2				
74	3	20	12795	S18 W43	152	3000	3.0									
74	3	21	12795	S18 W57	151	3000	3.5	19354	S15 W62	157	A					
74	3	22	12795	S18 W71	152	2700	2.5	19354	S15 W73	155	B		R	0	1	AXX
74	3	23	12795	S19 W83	152	1200	2.5									

MCMATH REGION 12803 CMP DATE 17.4

				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
74	3	16	12803	N14 E09	150	100	2.0									
74	3	17	12803	N14 W04	153	200	1.0									
74	3	18	12803	N14 W18	153	100	1.0									

MCMATH REGION 12809 CMP DATE 17.6

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
74	3	16	12809	S45 E12	147	100	1.5									

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MCMATH REGION 12800 CMP DATE 17.7

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
74	3	13	12800	N14 E55	146	100	1.5									

MCMATH REGION 12816 CMP DATE 17.7

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
74	3	20	12816	N12 W38	147	300	2.5									
74	3	21	12816	N12 W53	147	200	1.5									
74	3	22	12816	N12 W67	148	200	1.0									

MCMATH REGION 12796 CMP DATE 18.1

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
74	3	12	12796	S08 E78	135	200	2.0									
74	3	13	12796	S07 E64	137	300	1.5									
74	3	14	12796	S08 E49	139	200	2.0									
74	3	16	12796	S09 E20	139	200	1.5									
74	3	17	12796	S10 E08	141	300	1.5									
74	3	18	12796	S10 W07	142	200	1.0									
74	3	19	12796	S10 W20	142	200	1.0									

MCMATH REGION 12797 CMP DATE 18.7 RETURN OF REGION 12747 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
74	3	12	12797	S16 E64	129	800	2.0									
74	3	13	12797	S16 E69	132	900	2.0									
74	3	14	12797	S17 E55	133	900	2.0									
74	3	16	12797	S17 E28	131	300	1.5									
74	3	17	12797	S17 E15	134	500	1.5									
74	3	18	12797	S17 E02	133	590	2.0									
74	3	19	12797	S17 W09	131	500	2.0									
74	3	20	12797	S17 W22	131	600	2.0									
74	3	21	12797	S17 W36	130	500	2.0									
74	3	22	12797	S18 W50	131	400	1.5									
74	3	23	12797	S19 W62	131	300	2.0									
74	3	24	12797	S19 W73	130	200	1.0									

MCMATH REGION 12807 CMP DATE 18.7

				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
74	3	16	12807	N13 E28	131	200	1.0									
74	3	17	12807	N13 E15	134	200	1.0									

MCMATH REGION 12821 CMP DATE 19.6

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
74	3	22	12821	N45 W41	122	100	1.0									

MCMATH REGION 12810 CMP DATE 19.7

				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
74	3	16	12810	S14 E40	119	100	1.5									
74	3	17	12810	S14 E28	121	200	2.5	19352	S15 E26	121	(BP)	3	B	10	2	BXO
74	3	18	12810	S14 E15	120	200	2.0	19352	S16 E15	119	(AP)	1	B	0	1	AXX
74	3	19	12810	S14 E02	120	200	2.0									

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74	3	20	12810	S14 W10	119	200	1.0
74	3	21	12810	S14 W24	118	100	1.0
74	3	22	12810	S14 W37	118	100	1.5

MCMATH REGION 12801 CMP DATE 19.9

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
74	3	13	12801	S02 E85	116	500	1.5
74	3	14	12801	S02 E74	114	500	2.0
74	3	15					
74	3	16	12801	S02 E44	115	400	2.0
74	3	17	12801	S02 E32	117	400	2.0
74	3	18	12801	S02 E17	118	300	2.0
74	3	19	12801	S02 E04	118	300	2.0
74	3	20	12801	S02 W09	118	200	2.0
74	3	21	12801	S02 W24	118	200	1.5
74	3	22	12801	S02 W37	118	200	1.0

SUNSPOT DATA

NW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
19348	S03 E79	121	AP					
19348	S03 E66	121	(AP)	2				
19348	S02 E53	120	(AP)	2	B	10	1	AXX
19348	S03 E38	120	(AP)	1	R	0	1	AXX

MCMATH REGION 12820 CMP DATE 20.2

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
74	3	22	12820	N15 W33	114	800	4.0
74	3	23	12820	N15 W44	113	1100	3.5
74	3	24	12820	N15 W54	111	900	3.0
74	3	25	12820	N15 W67	110	900	2.5
74	3	26	12820	N15 W83	109	600	2.0

SUNSPOT DATA

NW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
19355	N15 W28	110	(BP)	3	R	30	11	DRI
19355	N15 W43	111	(BP)	3	B	30	5	CSO
19355	N16 W54	109	(BP)	2				

MCMATH REGION 12813 CMP DATE 20.4

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
74	3	18	12813	S12 E24	111	100	1.5

SUNSPOT DATA

NW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS

MCMATH REGION 12808 CMP DATE 20.8

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
74	3	16	12808	N45 E59	100	100	1.5
74	3	17	12808	N43 E43	106	100	1.0
74	3	18	12808	N43 E30	105	100	1.0

SUNSPOT DATA

NW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS

MCMATH REGION 12824 CMP DATE 20.9

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
74	3	24	12824	S05 W48	105	200	2.5
74	3	25	12824	S05 W61	104	100	1.5
74	3	26	12824	S05 W78	104	100	1.0

SUNSPOT DATA

NW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS

MCMATH REGION 12804 CMP DATE 21.0

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
74	3	16	12804	N13 E57	102	100	1.5
74	3	17	12804	N12 E46	103	100	1.5

SUNSPOT DATA

NW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS

MCMATH REGION 12817 CMP DATE 21.0

CALCIUM PLAGE DATA

YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT
74	3	21	12817	S39 W09	103	100	1.5

SUNSPOT DATA

NW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS

REGIONS OF SOLAR ACTIVITY

MARCH 1974

MCMATH REGION 12825 CMP DATE 22.2

				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
74	3	24	12825	N13 W31	88	300	2.0								
74	3	25	12825	N12 W45	88	200	1.0								

MCMATH REGION 12818 CMP DATE 22.3

				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
74	3	21	12818	N23 E08	86	100	1.0								

MCMATH REGION 12832 CMP DATE 22.4

				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
74	3	26	12832	N10 W58	84	200	1.0								

MCMATH REGION 12805 CMP DATE 22.5

				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
74	3	16	12805	S38 E77	82	100	1.0								

MCMATH REGION 12815 CMP DATE 22.7

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
74	3	19	12815	S01 E41	81	200	1.5								
74	3	20	12815	S01 E28	81	200	3.0								

MCMATH REGION 12833 CMP DATE 23.9

				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
74	3	27	12833	N18 W48	64	100	1.5								

MCMATH REGION 12811 CMP DATE 24.0

				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
74	3	17	12811	S15 E86	63	300	1.0								
74	3	18	12811	S15 E73	62	300	2.0								
74	3	19	12811	S15 E60	62	500	2.5		S10 E65			B	70	2	CSO
74	3	20	12811	S15 E47	62	300	2.0		S07 E49			H	110	1	HSX
74	3	21	12811	S15 E31	63	300	2.0								
74	3	22	12811	S16 E18	63	300	1.5								
74	3	23	12811	S16 E05	64	400	1.5								
74	3	24	12811	S16 W07	64	400	1.5		S08 W05			B	70	1	HSX
74	3	25	12811	S16 W21	64	400	1.5								
74	3	26	12811	S16 W36	62	400	1.5								
74	3	27	12811	S16 W47	63	300	1.0								

MCMATH REGION 12826 CMP DATE 24.1

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H STA	AREA	CNT	CLASS
74	3	24	12826	N15 W06	63	100	1.5								

REGIONS OF SOLAR ACTIVITY

MARCH 1974

MCMATH REGION 12829 CMP DATE 24.6

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
74	3	25	12829	N10 W13	56	100	1.0									
74	3	26	12829	S02 E27	-0	100	1.0									

MCMATH REGION 12812 CMP DATE 25.0

				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
74	3	18	12812	S05 E83	52	600	2.0	19353	S09 E80	54	(AP)	3	B	150	1	HSX
74	3	19	12812	S07 E73	49	1500	3.5	19353	S09 E70	52	(BP)	3				
74	3	20	12812	S07 E60	49	1200	3.5	19353	S08 E58	50	(AP)	4	M	120	2	CSO
74	3								S07 E65				M	120	2	CSO
74	3	21	12812	S07 E45	49	1100	3.0	19353	S09 E40	55	(AP)	5	B	60	1	HSX
74	3	22	12812	S07 E31	50	900	3.0	19353	S09 E27	55	(AP)	5	R	100	1	HSX
74	3	23	12812	S07 E18	51	800	3.0	19353	S09 E15	53	(BP)	4				
74	3	24	12812	S07 E06	51	800	2.5	19353	S09 E01	54	(AP)	4				
74	3	25	12812	S07 W07	50	700	2.0		S08 W14				B	60	1	HSX
74	3	26	12812	S07 W24	50	800	2.0		S09 W28				B	70	1	HSX
74	3	27	12812	S07 W35	51	800	2.0		S09 W42				B	60	1	HSX
74	3	28						19353	S09 W55	53	(AP)	3	B	100	1	HSX
74	3	29						19353	S09 W65	54	(AP)	4	B	100	3	CRO
74	3	30							S09 W81				B	50	1	HSX

MCMATH REGION 12834 CMP DATE 26.1

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
74	3	27	12834	N07 W19	35	300	2.5		N08 W14				B	10	2	BXO
74	3	26						19356	N08 W40	38	(BF)	2	B	10	7	BXO
74	3	29						19356	N08 W49	38	(BP)	4	B	100	1	HSX
74	3	30							N08 W67				B	30	1	HSX
74	3	31	12834	N08 W78	39	1000	2.5	19356	N08 W81	41	(AP)		R	20	1	HRX
74	4	1	12834	N08 W90		700	1.5									

MCMATH REGION 12830 CMP DATE 26.2

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
74	3	25	12830	S19 E08	35	100	1.0									

MCMATH REGION 12819 CMP DATE 26.6 RETURN OF REGION 12768 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
74	3	21	12819	N14 E68	26	300	1.5									
74	3	22	12819	N15 E54	27	300	1.5									
74	3	23	12819	N16 E41	28	400	2.0									
74	3	24	12819	N16 E28	29	300	1.5									
74	3	25	12819	N16 E15	28	400	1.5									
74	3	26	12819	N15 W02	28	400	1.5									
74	3	27	12819	N15 W13	29	500	1.5									
74	3	31	12819	N14 W67	28	300	1.0									

MCMATH REGION 12840 CMP DATE 27.1

				CALCIUM PLAGE DATA				SUNSPOT DATA							
YR	MO	DA	MC NO.	LAT CMD	L	AREA	INT	MW NO.	LAT CMD	L	MAG.	H	STA	AREA	CNT	CLASS
74	3	31	12840	N04 W61	22	200	1.0									

REGIONS OF SOLAR ACTIVITY

MARCH 1974

MCMATH REGION 12827 CMP DATE 27.2

				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
74	3	24	12827	S12 E35	22	100	1.0							

MCMATH REGION 12831 CMP DATE 28.4

				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
74	3	25	12831	S08 E36	5	200	1.0							

MCMATH REGION 12838 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
74	3	31	12838	S08 W39	0	100	1.0							

MCMATH REGION 12828 CMP DATE 30.1 RETURN OF REGION 12773 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
74	3	24	12828	N07 E74	344	300	1.0							
74	3	25	12828	N07 E60	344	200	1.0							
74	3	26	12828	N07 E45	342	300	1.0							
74	3	27	12828	N07 E34	343	300	1.0							
74	3	31	12828	N09 W22	344	400	1.5							
74	4	1	12828	N10 W35		200	1.0							
74	4	2	12828	N10 W48		200	1.0							
74	4	3	12828	N10 W62		200	1.0							

Note:

Region 12773 is a resurgence of activity in the location of old plage 12725 of the previous rotation.
Region 12777 is a new plage, in the same location of old plage 12723.
Region 12781 is a new plage that has formed near the location of region 12748 of the previous rotation.
Region 12794 is probably mostly new plage that has formed near the location of old region 12746.
No calcium spectroheliograms were obtained at the McMath-Hulbert Observatory on March 1, 2, 3, 4, 8, 9, 15, 28, 29 and 30, 1974.
No sunspot observations were made at Mt. Wilson Observatory on March 3, 7, 8, 9, 25, 26, 27 and 30, 1974.

DAILY CALCIUM PLAGE INDEX

MARCH 1974

YR	MO	DAY	INDEX	YR	MO	DAY	INDEX	YR	MO	DAY	INDEX
74	3	1	*	74	3	11	12.6	74	3	21	9.9
74	3	2	*	74	3	12	11.7	74	3	22	8.2
74	3	3	*	74	3	13	14.6	74	3	23	6.5
74	3	4	*	74	3	14	15.0	74	3	24	5.6
74	3	5	5.1	74	3	15	*	74	3	25	3.9
74	3	6	4.8	74	3	16	13.1	74	3	26	3.0
74	3	7	5.6	74	3	17	12.8	74	3	27	3.2
74	3	8	*	74	3	18	12.1	74	3	28	*
74	3	9	*	74	3	19	12.7	74	3	29	*
74	3	10	13.0	74	3	20	11.7	74	3	30	*
								74	3	31	3.1

* NO OBSERVATIONS

SUDDEN IONOSPHERIC DISTURBANCES

MARCH 1974

DAY	UNIVERSAL TIME START	END	MAX	IMP	WIDE SPREAD INDEX	NUMBER OF STATION REPORTS BY TYPE SWF	SCNA	SEA	SPA	LF-SPA	SES	SFD	KNOWN FLARE	McMATH REGION
09	1040	1100	1042	1-	1				1				*	
12	2038	2115	2050	1-	1				1				2046E	12850
17	1955	2015	1958	1-	1				1				*	
20	2157	2257	2221	1-	1				1				*	
21	0428	0602	0518	1-	1				1				0422E	12884
23	1404U	1426	1407	1-	1			1					1402	12873
23	1500	1550	1514	1-	3	1					4		NF	

STATIONS REPORTING FOR MARCH 1974

AAVSO (A1, A17, A26, A32) (SEA) (A1, A19, A21, A30, A31, A33, A35, A37) (SES) (A31, A38) (SWF)
AREQUIPA (AQ) (SPA)
BOULDER (BO) (SCNA, SEA)
DARMSTADT (DA) (SWF)
DEBRE ZEIT (DE) (SPA)
HANA, MAUI (MU) (SPA)
HAWAII (HA) (SFD)
HERSTMONCEUX (HC) (SEA)
HIRAISO (HI) (SWF)
HOBART (TA) (SEA)
HUANCAYO (HU) (SWF)
INUBO (IN) (SPA)
JOHANNESBURG (JH) (SPA)
MANILA (MA) (SEA, SCNA)
MCMATH (MC) (SWF, SCNA)
PANSKA VES (PU) (SWF, SEA, SES)
POITIERS (PO) (SEA)
PRESTON (LO) (SEA)
SAO PAULO (UM) (SPA, SES)
SOFIA (SF) (SES)
ST. CLOUD (SC) (SES)
TABLE MOUNTAIN (TM) (SWF, SPA, LF-SPA)
TORINO (TN) (SPA)
TORTOSA (TS) (SEA)
UPICE (UI) (SEA)

PERIODS OF NO OBSERVATIONS:

DATE	TIME (UT) and STATION
01	1338-1350 TM
04	1241-1720 BO
05	0705-0725 BO, 0747-0809 MA, 1433-1937 BO
06	0425-1346 TM, 0758-1517 UM (16 kHz), 0942-2000 BO, 2100-2145 BO
07	2216-2221 TM
08	2253-2302 TM
09	0500-0640 MA, 0804-1012 UM (16 kHz)
10	0759-0945 UM (16 kHz), 1824-1843 TM
13	1840-1902 TM, 2130-2134 TM
14	1612-1735 UM (13 kHz)
15	1406-1540 UM (17 kHz), 1553-1637 UM (17 kHz), 1712-1745 UM (17 kHz)
18	0736-1756 UM (16 kHz)
19	0000-0256 MA
20-22	0600-0600 A35
20	0743-1135 UM (16 kHz)
21	1354-1728 UM (17 kHz), 2124-2128 TM
23-24	0600-0600 A35
27	1636-1640 TM
29	1355-1721 UM (17 kHz)
30-31	0600-2400 A35
31	0903-0856 MA

SID's BY McMATH REGION

FEBRUARY 1974

DAY	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
REGION																															
50												1																			
73																							1								
84																					1										
X-RAY																															
UN-KNOWN																							1								
NO FP								1								1				1											

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

MARCH 1974

MAR 1974	TIMES OF OBSERVATION		STATION	EVENTS												SPECTRAL TYPE
				CENTIMETRIC BAND			DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
01	0000	0100	BCUL													
	0000	0451	CULG							0204.5	0205					IIIG,W
			CULG							0409	0410	1				IIIG
	0648	1408	WEIS													
	0512	0745	CULG							0726.5						IIIB,W
	0804	1322	DURN													
	1124	2228	SGMR													
	1330	2400	BCUL													
	1345	2300	HARV													
	1442	1627	WEIS													
	2045	2400	CULG													
02	0000	0100	BCUL													
	0000	0745	CULG							0201						IIIB,W
	0647	1629	WEIS													
	0858	1555	DURN													
	1122	2230	SGMR													
	1330	2400	BCUL													
	1346	2300	HARV													
	2045	2400	CULG													
03	0000	0100	BCUL													
	0000	0745	CULG							0439						IIIB,W
	0654	1545	WEIS													
	0858	1555	DURN													
	1120	2231	SGMR													
	1330	2400	BCUL													
	1345	2400	HARV													
	2045	2400	CULG							2212	2212.5	1				IIIG
04	0000	0745	CULG													
	0000	0028	HARV													
	0000	0100	BCUL													
	0700	1653	WEIS													
	0858	1554	DURN													
	1119	2232	SGMR													
	1158	1558	OWIN													
	1330	2400	BCUL													
	1345	2245	HARV													
	2044	2400	CULG													
05	0000	0745	CULG													
	0000	0100	BCUL													
	0622	1634	WEIS													
	0813	1551	OWIN													
	0857	1554	DURN													
	1117	2233	SGMR													
	1300	1600	BCUL													
	1343	2245	HARV													
	1900	2400	BCUL													
	2045	2400	CULG													
06	0000	0745	CULG													
	0000	0100	BCUL													
	0653	0700	WEIS													
	0745	1430	WEIS													
	0906	0925	DURN													
	1115	2235	SGMR													
	1320	1508	DURN													
	1330	2246	HARV													
	1330	2400	BCUL													
	1450	1657	WEIS													
	2043	2115	CULG													
	2205	2400	CULG													
07	0000	0743	CULG													
	0000	0100	BCUL													
	0630	1641	WEIS													
	0801	1600	OWIN													
	0802	0825	DURN													
	0953	1453	DURN													
	1114	2236	SGMR													
	1330	2246	HARV													
	1330	2400	BCUL													
	2044	2400	CULG													
08	0000	0743	CULG													
	0000	0100	BCUL													
	0641	0801	WEIS													
	0739	1216	OWIN													
	0756	1453	DURN													
	0826	1151	WEIS													
	1112	2237	SGMR													
	1157	1653	WEIS													
	2043	2400	CULG							2122.5	2125	1				IIIG
	1330	2400	BCUL							2123.8	2124.9	1	2123.8	2124.9	1	IIIG
	1330	2246	HARV							2124		2	2124		2	IIIG
09	0000	0100	BCUL													
	0000	0742	CULG													

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

MARCH 1974

MAR 1974	TIMES OF OBSERVATION		STATION	EVENTS												SPECTRAL TYPE
				CENTIMETRIC BAND			DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
09	0643	1645	HEIS													
	0755	1453	OURN													
	1110	2238	SGMR													
	1330	2246	HARV													
	1330	2400	BOUL													
	2043	2400	CULG													
10	0000	0742	CULG													
	0000	0100	BOUL													
	0644	1145	HEIS													
	0757	1454	OURN													
	1109	2239	SGMR													
	1330	2400	HARV													
	1330	1800	BOUL													
	2043	2400	CULG													
11	0000	0600	CULG													
	0000	0034	HARV													
	0609	0742	CULG							0630	0720	1				I
	0757	0923	OURN													
	0757	1531	OWIN				0757	1405	1	0757	1405	1				I
	1107	2241	SGMR													
			OWIN				1150.8	1150.9	1							IIIG
	0659	1645	HEIS							1230.4	1239.6	1				IIIG
			OWIN				1233.1	1233.5	2							IIIG
			OWIN				1236.4	1236.9	1							IIIG
			OWIN				1237.6	1238.0	1							IIIG
			OWIN				1239.2	1239.8	2	1239.2	1239.8	2				IIIG
			OWIN				1310.0	1310.1	1							IIIG
	1324	1454	OURN													
	1330	2246	HARV													
			OWIN				1514.5	1514.6	2	1514.5	1514.6	2				IIIG
			HEIS							1514.5	1514.2	2				IIIG
	1726	2400	BOUL													
	2043	2400	CULG													
12	0000	0742	CULG													
	0000	0100	BOUL													
	0621	1623	HEIS													
	0736	0913	OWIN				0736	0913	1	0736	0913	1				I
	0756	1453	OURN													
	0953	1609	OWIN				0953	1609	1	0953	1609	1				IW
	1105	2242	SGMR													
	1300	1600	BOUL													
	1330	2246	HARV													
	1626	1646	HEIS													
	1900	2400	BOUL										2031.9	2034.2	1	IIIG
	2043	2400	CULG													
13	0000	0100	BOUL													
	0000	0742	CULG				0300	0301	1	0300	0301	2	0300	0301	2	IIIG
	0625	0647	HEIS													
	0756	1453	OURN													
	0736	1555	OWIN				0853.8	0854.0	1							IIIG
			OWIN				1003.8	1003.9	1	1003.8	1003.9	1				IIIG
	1103	2243	SGMR													
			OWIN				1124.3	1124.4	1							IIIG
	1330	2245	HARV							1816		3	1816		3	IIIB
	1300	1600	BOUL							1816.1	1816.4	1	1816.1	1816.4	1	III
	2043	2400	CULG							2244.5	2245.5	1				UNCLF
			CULG							2255	2305	1				I
14	0000	0100	BOUL													
	0627	1432	HEIS													
	0000	0741	CULG							0657.5	0658.5	1				IIIG
	0727	1557	OWIN													
	0756	1453	OURN													
	1102	2244	SGMR													
	1300	2400	BOUL													
	1330	2245	HARV													
	2042	2400	CULG													
15	0000	0100	BOUL													
	0000	0741	CULG							0322	0328	2				IIIGG
	0721	1529	OWIN													
	0800	1456	OURN													
	1100	2245	SGMR													
	1340	1352	HEIS													
	1511	1554	HEIS													
	1643	1654	HEIS													
	1300	2400	BOUL							1832.0	1840.0	1	1832.0	1840.0	1	CONT
	1330	2245	HARV							1836	1838	1	1836	1838	1	IIIG
	2042	2400	CULG													
16	0000	0610	CULG													
	0000	0100	BOUL													
	0620	0740	CULG													
	0626	1653	HEIS													
	0800	1457	OURN													
	1058	2246	SGMR													

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

MARCH 1974

MAR 1974	TIMES OF OBSERVATION		STATION	EVENTS												SPECTRAL TYPE
				CENTIMETRIC BAND			DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
16	1330	2245	HARV													
	1300	2400	BOUL													
	2041	2400	CULG							1618.1	1618.3	1	1618.1	1618.3	1	III
17	0000	0740	CULG													
	0000	0130	BOUL													
	0625	1653	WEIS													
	0759	1457	DURN													
	1056	2246	SGMR													
	1300	2400	BOUL													
	1330	2250	HARV													
	2041	2400	CULG													
18	0000	0740	CULG													
	0703	1409	WEIS													
	0800	1454	DURN													
	0820	1608	OWIN													
	1300		BOUL										1312.7	1314.1	2	III
	1055	2249	SGMR										1312.7	1314.2	2	III
	1330	2245	HARV							1336	1603	1				IN
	2041	2400	CULG													
19	0000	0740	CULG													
	0000	0130	BOUL													
	0645	1209	WEIS													
	0833	0922	DURN													
	0935	0942	DURN													
	0939	1121	OWIN													
	1012	1400	DURN													
	1053	2250	SGMR													
	1255	1551	WEIS													
	1300	1700	BOUL													
	1330	2245	HARV													
	1219	1556	OWIN							1403.8	1404.0	1				IIIG
	1554	1655	WEIS													
	2000	2400	BOUL													
	2040	2400	CULG													
20	0000	0740	CULG													
	0000	0130	BOUL													
	0643	0722	WEIS													
	0725	0935	WEIS													
	0732	1547	OWIN													
	1000	1437	WEIS													
	1051	2251	SGMR													
	1300	2400	BOUL													
	1316	2033	HARV													
	1534	1700	WEIS													
	2039	2245	HARV													
	2040	2400	CULG													
21	0000	0130	BOUL													
	0000	0739	CULG							0210.5		1				IIIE
			CULG							0456		1				IIIB,U
	0653	0824	WEIS													
	1047	1701	WEIS													
	1049	2252	SGMR													
	1315	2245	HARV													
	1330	2400	BOUL													
	2040	2400	CULG													
22	0000	0130	BOUL													
	0615	1312	WEIS													
	0000	0739	CULG							0658	0659.5	1				IIIG
	1048	2253	SGMR													
	0737	1603	OWIN				1300	1330	1	1300	1330	1				IW
	1316	2245	HARV													
	1330	2400	BOUL													
			OWIN				1344.4	1344.5	2	1344.4	1344.5	2				IIIG
	1357	1705	WEIS													
			OWIN				1404.3		1							IIIB
			OWIN				1510.6		1							IIIB
			OWIN				1517.4		1	1517.4		1				IIIB
	2040	2400	CULG													
23	0000	0739	CULG													
	0000	0130	BOUL													
	0615	1706	WEIS													
	1046	2255	SGMR													
	1316	2245	HARV													
	1330	2400	BOUL													
	2039	2400	CULG				2047	2200	1	2047	2207	1				IS
24	0000	0130	BOUL													
	0000	0738	CULG							0558.5						IIIB,H
	0622	1150	WEIS													
	1044	2256	SGMR													
	1315	2245	HARV													
	1330	2400	BOUL													
	2039	2400	CULG							2052.5	2053					IIIG,H

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

MARCH 1974

MAR 1974	TIMES OF OBSERVATION		STATION	EVENTS												SPECTRAL TYPE
				CENTIMETRIC BAND			DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
25	0000	0738	CULG													
	0000	0130	BCUL													
	0654	1700	WEIS													
	1042	2257	SGHR													
	1316	2245	HARV													
	1330	2400	BCUL													
	2038	2400	CULG													
26	0000	0130	BCUL													
	0000	0738	CULG				0159	0159.5	1	0159	0159.5	1				IIIG
	0601	0709	WEIS													
	0827	1425	WEIS													
	1041	2258	SGHR													
	1300	2400	BCUL													
	1315	2245	HARV													
	1429	1703	WEIS													
	2038	2400	CULG													
27	0000	0130	BCUL													
	0000	0738	CULG							0110.5						IIIB,W
	0603	0615	WEIS													
	0645	1705	WEIS													
	1040	2258	SGHR													
	1300	2400	BCUL													
	1316	2245	HARV													
	2037	2400	CULG							2037	2342					IN,W
28	0000	0737	CULG													
	0000	0130	BCUL													
	0605	1255	WEIS													
	1037	2300	SGHR													
	1300	2400	BCUL													
	1316	2245	HARV													
	1324	1702	WEIS													
	1435	1501	DURN													
	2038	2400	CULG				2154.5	2155								IS,W
			CULG							2233.5	2237	1				IIIG
										0032	0033	1				IIIG
29	0000	0737	CULG							0032.1	0034.0	1	0032.1	0034.0	1	IIIG
	0000	0130	BCUL							0335	0710					IS,W
			CULG				0255	0426		0408	0556					IIIN,W
			CULG													
	0603	1224	WEIS													
	0803	1442	DURN													
	1035	2301	SGHR													
	1250	1300	WEIS													
	1315	1704	WEIS													
	1315	2245	HARV							1844	1903	1				IN
	2037	2400	CULG				2037	2313	1	2135	2400	1				IS
	1300	2400	BCUL										2037.2	2037.9	1	III
			BCUL							2050.7	2051.0	1	2050.7	2051.0	1	III
			CULG							2103	2400					IIIN,W
			BCUL							2322	2400	1	2322	2400	1	CONT
													0000	0025	1	CONT
30	0000	0130	BCUL													IIIN
			CULG							0000	0100	1				IS
	0000	0736	CULG							0000	0055	1				
	0556	1705	WEIS													
	1034	2303	SGHR										1726.7	1727.7	1	III
	1400	2400	BCUL							1936	1938	2	1936	1938	2	IIIG
	1316	2245	HARV							1936.7	1937.9	1	1936.7	1937.9	1	IIIG
			BOUL							2059	2148					IIIN,W
	2037	2400	CULG													
31	0000	0130	BCUL							0258						IIIB,W
	0000	0736	CULG							0412.5	0413					IIIG,W
			CULG													
	0557	0948	WEIS													
	1032	2304	SGHR													
	1230	2400	BCUL													
	1315	2245	HARV													
	2035	2400	CULG							2131		1				IIIB
			CULG							2132	2132.5	1				IIIG
			CULG							2137						IIIB,W

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

B = Single burst
G = Small group (< 10) of bursts
GG = Large group (> 10) of bursts
C = Underlying continuum (particularly with type I)
S = Storm in the sense of intermittent but apparently connected activity
N = Intermittent activity in this period
U = U-shaped burst of Type III

RS = Reverse slope burst
DP = Drifting pairs
DC = Drifting Chains
H = Herringbone
W = Weak
P = Pulsations
CONT = Continuum
UNCLF = Unclassified activity

SELECTED SOLAR EVENTS

MARCH 1974

Culgoora

UT Date 1974 March	HELIOGRAPH EVENT							Spectral Type	REMARKS
	Start (UT)	End (UT)	Freq. (MHz)	Positions: Central Dist. ($R_\odot$)	Positions: Position Angle (Deg.)	Polarization	Intensity (1-3)		
13	0259	0301	(43.25	1.5	280	-	3)		
			(80	1.0	280	0	3)	IIIG	
			(160	0.9	280	0	1)		
13/14	2300	0500	(43.25	1.5	80	-	1)		
			(80	0.9	80	r	1-2)	I	
			(160	1.0	80	R	1-2)		
29	0031	0033	(43.25	1.5	270	-	2)		
			(80	1.0	270	0	2)	IIIG	
			(160	1.0	270	0	1)		
29/30	2300	0100	(43.25	1.3	270	-	1)		
			(80	1.0	270	0	1-2)	I	
			(160	1.0	240	R	1-2)		

Days without Heliograph observations: Nil

COSMIC RAY INDICES

(Neutron Monitors)

MARCH 1974

MAR. 1974	THULE Average cts/hr	ALERT Average cts/hr	DEEP RIVER Average cts/hr	CALGARY Average cts/hr	SULPHUR MT Average cts/hr	KIEL Average cts/hr	DALLAS Average cts/hr	TOKYO Average cts/hr
1	4599.5	7570.6	7047.2	12060.7	8980.6	6391.5	6379.6	3572.6
2	4621.2	7591.2	7057.0	12108.5	9059.0	6418.1	6405.7	3588.9(8)
3	4645.7	7628.0	7053.9	12155.8	9058.2	6415.5	6416.4	-- (0)
4	4646.8	7639.1	7082.3	12165.2	9094.3	6418.5	6419.4	3603.5(23)
5	4660.6	7656.5	7102.8	12190.9	9126.8	6424.1	6437.0	3600.1
6	4597.5	7577.2	7001.7	12042.1	8919.6	6330.3	6350.1	3574.2
7	4578.1	7531.0	6977.9	12023.4	8929.9	6330.7	6342.3	3564.5
8	4573.3	7533.6	6988.6	12031.0	8937.9	6328.2	6359.7	3574.6
9	4571.0	7535.5	6991.4	11996.9	8949.7	6338.4	6361.4	3575.9
10	4555.8	7492.0	6980.0	11931.9	8891.8	6316.7	6324.9	3572.5
11	4529.6	7447.6	6952.8	11917.2	8860.1	6292.5	6314.7	3571.5
12	4508.2	7420.3	6961.3	11923.6	8861.4	6291.2	6319.5	3576.6
13	4506.2	7438.0	6969.3	11932.3	8884.0	6295.5	6325.0	3559.0
14	4494.1	7410.8	6952.2	11918.1	8856.1	6303.7	6312.9	3551.2
15	4519.2	7442.2	6951.9	11925.8	8865.2	6290.9	6303.5	3555.5
16	4521.0	7424.5	6953.7	11883.2	8854.2(10)	6331.7	6342.5	3558.7(23)
17	4554.5	7471.3	6987.7	11921.4	8878.2	6321.0	6336.2	3561.2
18	4575.3	7519.2	7010.1	11960.3	8898.1	6348.4	6345.2	3560.2
19	4594.8	7551.1	7022.7	12041.8	8964.8	6352.7	6359.7	3571.2
20	4591.3	7543.6	7008.6	12083.5	8952.8	6337.0	6363.0	3573.6
21	4593.5	7552.5	7009.5	12087.5	8957.0	6338.5	6398.3	3578.7
22	4566.2	7501.7	6986.3	12027.2	8918.1	6305.0	6364.3	3575.9
23	4555.1	7462.1	6957.0	12022.5	8889.5	6278.3	6341.9	3572.2
24	4541.6	7447.4	6971.1	12004.6	8883.6	6284.5	6346.8	3566.1
25	4538.8	7457.2	6975.2	12013.4	8897.7	6306.0	6338.6	3561.7
26	4551.1	7461.1	6978.2	12037.1	8919.8	6328.1	6349.8	3563.0(20)
27	4564.3	7474.1	6991.3	12047.6	8955.9	6338.0	6346.7	-- (0)
28	4560.3	7468.3	6981.8	12018.8	8953.7	6317.1	6338.3	3563.8(19)
29	4534.7	7439.3	6953.3	11967.2	8871.6	6308.6	6349.7	3563.4
30	4545.8	7445.0	6957.5	11975.7	8892.7	6286.9	6358.0	3572.4
31	4546.0	7462.9	6971.8	12019.4	8883.3	6295.3	6353.5	3574.1
MEAN	4565.8	7503.1	6993.1	12014.0	8930.5	6331.0	6355.0	3570.6

( ) Number of hours for which data are available if less than 24.

Thule, Alert, Calgary, Sulphur Mountain and Kiel Scaling Factors = 100.
Deep River Scaling Factor = 300.
Dallas " " = 120.
Tokyo " " = 128.

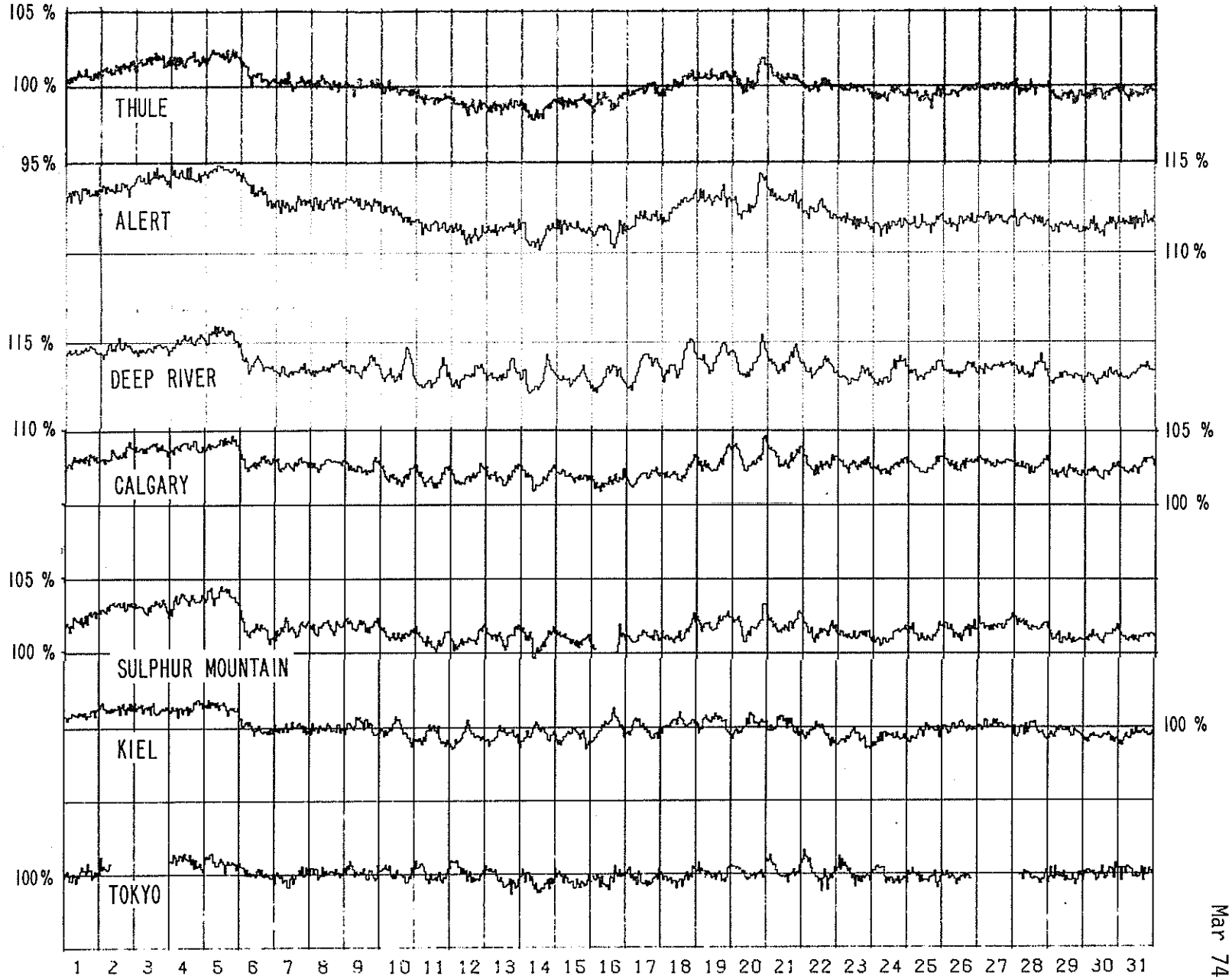
See *Descriptive Text* for other characteristics.

Note: The Dallas Neutron Monitor Station has ceased operation as of March 31, 1974.

COSMIC RAY INDICES

(Pressure Corrected Hourly Totals)

MARCH 1974



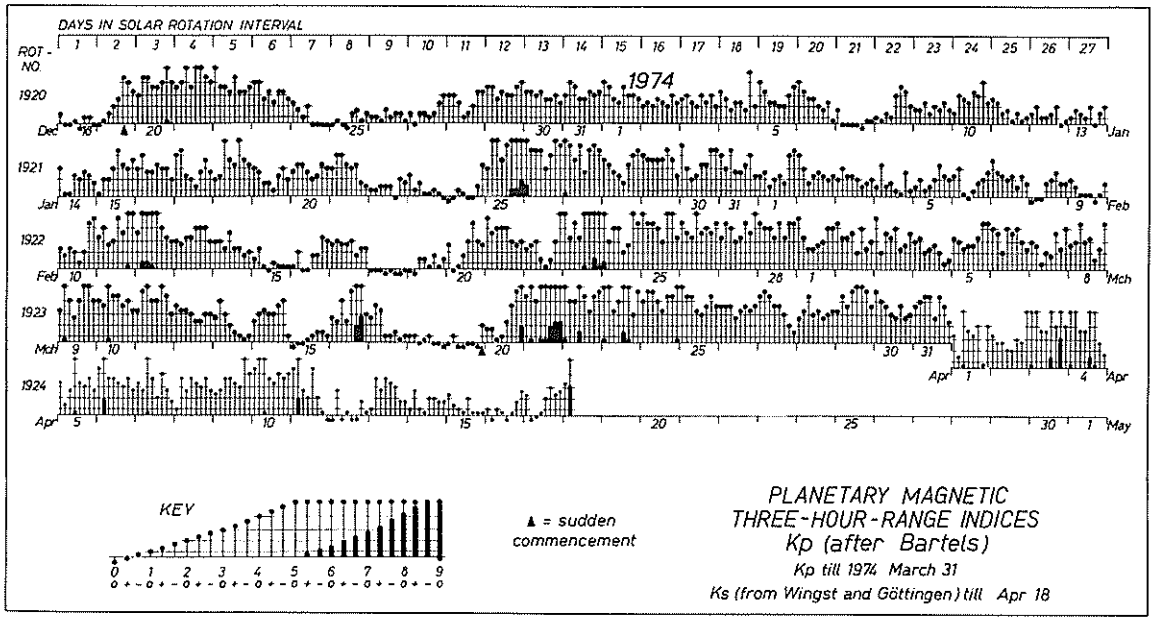
105
Mar 74

GEOMAGNETIC ACTIVITY INDICES

MARCH 1974

Day	Three-Hour Range Indices Kp									Prel Ci	Cp	Ap	aa			
	1	2	3	4	5	6	7	8	Sum				N	S	M	
1	5-	3+	2+	2+	3-	3	4	4	26+	1.0	1.0	20	32	30	25	37
2	4+	3+	3+	4-	2	4	2+	3	26	0.9	1.0	18	29	36	34	30
3	5-	2	4-	3+	4	2+	3-	4-	26+	1.0	1.0	20	33	35	35	33
4 Q	3	3+	2	2+	3-	2	1	1+	18-	0.4	0.5	10	17	19	21	14
5	3+	3	2+	3-	3-	3+	4+	4+	26	1.0	1.0	18	36	30	19	48
6	4	4-	2	4	4-	4	3	2+	27-	1.0	1.0	20	29	27	24	33
7 Q	3	3-	1	2	2-	4-	2+	4	20+	0.8	0.7	13	26	23	14	35
8 Q	3-	3	4+	3	3+	1+	2+	4+	24+	1.0	0.9	17	23	33	25	30
9	3+	5+	4	3-	4	5	5	4	33+	1.4	1.3	33	57	41	36	62
10	4	4-	5+	4+	4+	4-	4	3+	33-	1.3	1.3	30	46	41	39	48
11	3+	5-	5	4	4	5	4+	3	33+	1.4	1.3	32	47	44	45	46
12 Q	4-	3+	3+	3	2+	2+	3	3	24	0.7	0.9	15	27	23	26	25
13QQ	3-	4	3	2	1+	1	1-	1	16-	0.3	0.5	10	15	15	23	8
14 Q	2+	3	3+	3	3	4-	4	1	23+	0.8	0.9	16	30	28	20	39
15QQ	0	0+	0+	1-	1	1+	1+	1	6	0.0	0.1	3	8	4	3	9 C
16 D	3-	2+	4	2+	5-	6+	7	3	32+	1.5	1.5	42	50	76	29	97
17QQ	3-	4-	3+	1	1	1+	1-	1	15-	0.3	0.5	9	12	14	19	8 K
18QQ	1	1	0+	1-	1	0+	0+	0	5-	0.0	0.0	3	5	6	6	5 CC
19QQ	0+	1	0	0	0+	0+	0	2	4	0.0	0.0	2	5	6	5	6 CC
20	2-	2-	1-	1	2+	4-	5-	6+	22	1.1	1.1	23	31	34	11	55
21 D	4+	5+	4	5+	5+	6+	7-	7-	44	1.7	1.7	68	82	66	50	98
22 D	5+	4	4	6	4+	3+	4+	5-	36	1.6	1.4	39	46	67	65	48
23 D	5+	5	3+	4	6	5+	3	5-	37-	1.4	1.5	42	50	52	45	58
24 D	4	5-	5-	4	3+	4+	4+	5+	35-	1.3	1.3	34	52	45	40	57
25	5	4+	4+	3+	3	4-	4+	4-	32-	1.3	1.2	28	44	43	45	42
26	4-	4-	4-	3-	3+	4-	3+	4-	28-	1.1	1.0	20	37	36	30	43
27	4+	5-	4+	4-	4-	3	2	1+	27	1.1	1.1	22	35	39	48	26
28	3-	3+	4+	3	3+	3-	3	3+	26-	0.9	1.0	18	23	30	25	27
29	3+	4+	4-	5-	5	5	5-	4-	34+	1.3	1.3	34	52	49	34	67
30	5-	4	4-	3	3-	4-	3-	3	27+	0.9	1.0	20	34	34	36	33
31	4-	4	4+	4+	3-	4+	4-	2+	29+	1.1	1.1	24	40	39	44	35
									MEAN	0.95	0.97	23	34.0	34.4	34.2	

GEOMAGNETIC ACTIVITY INDICES



DAILY AVERAGE INDICES Ap

	1973									1974		
DAY	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR
1	91	17	3	19	12	5	5	4	4	17	13	20
2	54	12	20	11	16	6	31	7	2	9	12	18
3	26	9	14	7	7	6	48	5	5	11	8	20
4	9	8	19	4	8	12	12	18	29	13	7	10
5	7	5	10	4	9	15	10	14	17	14	8	18
6	4	13	8	3	13	9	12	9	10	12	7	20
7	4	16	4	3	8	8	6	28	8	2	10	13
8	8	17	6	13	9	8	6	11	7	10	5	17
9	7	12	9	8	5	44	10	12	21	7	4	33
10	4	7	33	6	4	27	21	8	8	14	14	30
11	24	6	34	6	4	12	11	6	8	6	30	32
12	3	7	30	6	5	7	15	4	4	5	40	15
13	46	20	24	8	10	8	17	10	4	5	20	10
14	57	80	18	8	8	4	7	8	6	8	12	16
15	9	37	13	32	4	12	6	8	8	15	4	3
16	60	32	11	15	3	14	30	10	4	15	7	42
17	51	27	18	6	2	10	27	17	6	16	11	9
18	46	22	30	6	4	7	22	19	3	24	1	3
19	42	21	38	10	6	3	20	4	13	9	4	2
20	46	23	18	9	9	12	20	6	29	14	12	23
21	42	46	6	5	6	15	37	23	34	16	23	68
22	44	20	3	6	12	17	20	7	25	5	14	39
23	25	15	10	14	22	63	6	8	18	4	44	42
24	14	4	34	6	46	28	7	26	4	4	29	34
25	14	6	6	9	29	27	5	42	3	50	34	28
26	28	8	4	36	18	25	3	18	4	38	28	20
27	26	10	4	29	26	8	4	14	6	34	26	22
28	26	8	21	14	28	4	20	6	11	18	27	18
29	59	3	41	18	20	4	86	5	19	22		34
30	18	3	29	19	13	4	28	4	15	21		20
31		4		26	9		19		17	19		24
MEAN	30	17	17	12	12	14	18	12	11	15	16	23

HOURLY EQUATORIAL Dst VALUES (PROVISIONAL)

MARCH 1974

NASA/GODDARD SPACE FLIGHT CENTER

DAY	(Time-UT) 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	-9	-9	-12	-11	-5	-10	-13	-13	-12	-8	-6	-4	0	0	-5	-10	-10	-7	-7	-10	-9	-5	-3	-4
2	-7	-4	-7	-9	-8	-10	-8	-7	-5	-12	-10	-3	6	6	2	-9	-16	-13	-6	-5	-7	-8	-5	-12
3	-9	-2	1	3	2	2	0	-8	-10	-10	-4	-5	-11	-18	-18	-14	-10	-11	-13	-16	-13	-9	-10	-8
4	-4	-3	-3	-8	-6	-4	-3	-3	-4	-1	-4	-7	-3	-2	0	-3	-3	-6	-5	-5	-4	-3	2	3
5	4	-7	-18	-19	-15	-12	-12	-9	-7	-8	-3	0	2	1	0	-7	-6	-8	-8	-11	-14	-8	-7	-24
6	-29	-23	-24	-28	-25	-17	-10	-7	-5	-8	-12	-6	-11	-15	-12	-12	-11	-15	-9	-11	-11	-7	-6	-6
7	-5	-3	-7	-12	-14	-5	-1	1	0	-1	3	6	8	6	-4	-14	-25	-24	-19	-17	-16	-16	-21	-19
8	-19	-17	-15	-15	-12	-9	-8	-11	-8	-12	-5	-2	-6	-10	-5	-7	-7	-7	-8	-15	-17	-13	-17	-17
9	-19	-21	-22	-24	-47	-32	-28	-20	-14	-10	1	9	15	10	1	1	-6	-22	-25	-12	-13	-13	-15	-14
10	-16	-8	-3	-4	-2	-3	-2	-2	-12	-9	-10	-4	-5	-11	-15	-18	-14	-15	-12	-12	-9	-10	-7	-4
11	-6	-5	-1	-4	-5	-1	-2	-11	-14	-17	-11	-4	-5	-4	-7	-7	-11	-15	-19	-15	-11	-10	-10	-7
12	-9	-8	-3	-5	-5	-6	-7	-6	-4	-3	-2	-4	-1	1	-1	-4	-4	-3	-4	-2	-4	-5	-5	-3
13	-3	-3	1	1	-3	-5	-6	-7	-5	-1	-1	2	2	5	4	2	3	3	2	2	4	2	-2	0
14	1	2	1	3	4	3	2	-2	-1	0	0	-4	-2	0	-3	-14	-21	-19	-16	-16	-15	-13	-12	-11
15	-9	-5	-2	-1	0	-1	1	4	5	5	6	7	5	5	6	9	11	13	13	10	8	9	7	7
16	4	7	12	13	9	4	3	-2	-1	0	9	17	15	6	-12	-33	-55	-78	-79	-83	-85	-72	-67	-63
17	-55	-46	-42	-42	-45	-43	-39	-35	-30	-25	-22	-25	-25	-25	-23	-20	-19	-17	-15	-13	-12	-12	-17	-22
18	-24	-22	-20	-19	-17	-13	-9	-9	-8	-8	-10	-11	-11	-12	-9	-9	-9	-9	-8	-7	-7	-6	-5	-5
19	-2	2	4	5	5	7	10	11	10	11	12	14	14	12	9	7	8	7	6	6	9	11	18	16
20	17	21	25	20	16	16	14	12	12	13	15	12	9	11	1	-6	-8	-13	-24	-35	-44	-51	-45	-42
21	-40	-37	-35	-39	-30	-33	-27	-19	-25	-21	-21	-28	-30	-24	-21	-41	-69	-74	-67	-70	-72	-68	-73	-72
22	-56	-53	-48	-44	-42	-43	-37	-36	-42	-45	-42	-43	-39	-43	-41	-39	-38	-32	-31	-33	-25	-23	-27	-31
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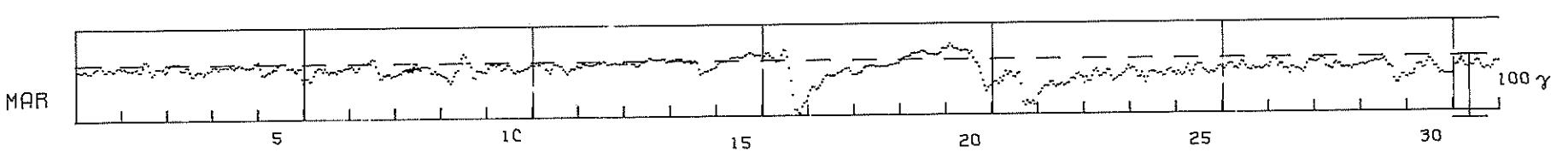
27	-17	-10	-3	-2	-5	-16	-12	-11	-19	-18	-21	-27	-16	-15	-19	-20	-21	-23	-26	-20	-11	-7	-8	-9
28	-8	-9	-6	-2	-2	-5	-17	-19	-20	-21	-12	-9	-13	-13	-17	-19	-17	-18	-19	-21	-17	-15	-15	-13
29	-12	-12	-15	-12	-10	-9	-9	-7	-8	-9	-7	-5	-3	-9	-16	-15	-20	-36	-42	-42	-37	-30	-30	-33
30	-35	-31	-30	-29	-26	-14	-13	-13	-20	-18	-10	-5	-5	-10	-17	-16	-22	-28	-26	-30	-30	-30	-28	-29
31	-23	-16	-14	-9	-5	-12	-18	-20	-15	-17	-18	-10	-8	-10	-16	-21	-24	-20	-20	-23	-19	-11	-9	-11



PRINCIPAL MAGNETIC STORMS

MARCH 1974

OBS. 2 letter IAGA code	GEOMAG-NETIC LATI-TUDE	COMMENCEMENT DAY	COMMENCEMENT hr min (UT)	TYPE	SC - AMPLITUDES D(')	SC - AMPLITUDES H(γ)	SC - AMPLITUDES Z(γ)	MAXIMUM 3 HOUR - INDEX K DAY(3 HOUR PERIOD)	K	RANGES D(')	RANGES H(γ)	RANGES Z(γ)	UT END DAY	UT END HOUR
CO	64.6N	3	07--	..	..	..	..	03(5)	7	207	1300	790	03	20
CO	64.6N	8	23--	..	..	..	..	08(5) 10(4,5) 11(4,5)	6	161	1680	630	11	21
NE	55.1N	8	22--	..	..	..	..	10(2,3)	5	33	90	141	10	23
WI	54.2N	8	18--	..	..	..	..	09(7) 11(6)	6	40	200	70	11	21
TU	40.4N	8	22--	..	..	..	..	08(8) 10(3) 11(2,3)	5	12	100	30	12	16
HR	33.7S	8	19--	..	..	..	..	08(8) 09(6,7)	5	23	88	78	12	08
BO	48.9N	9	03--	..	..	..	..	10 3	6	23	125	45	12	16
IR	41.0N	9	06--	..	..	..	..	10(5) 11(5)	6	24	113	34	11	22
HO	7.6N	9	0611	SC	- 0.2	+18	- 1	09(5,6,7)	5	4	110	35	11	21
GU	4.0N	9	0120	..	..	..	..	10(5)	5	00	110	30	12	16
HU	0.6S	9	0600	..	..	..	..	09(6,7)	5	12	269	58	11	21
PM	18.7S	9	03--	..	..	..	..	10(5) 11(5)	5	5	90	50	12	06
GN	43.2S	9	06--	..	..	..	..	09(7) 10(5) 11(5)	5	16	80	110	12	14
NE	55.1N	11	0045	..	..	..	..	11(2,3)	5	30	117	77	12	14
HO	7.6N	15	1430	..	..	..	..	16(6)	7	5	228	31	17	07
GU	4.0N	15	0031	..	..	..	..	16(6)	5	00	150	20	17	11
CO	64.6N	16	05--	..	..	..	..	16(5,6,7)	7	350	1590	990	17	11
SI	60.0N	16	0703	SC	+ 3.8	+82.2	+14.0	16(6)	7	100	800	520	17	08
NE	55.1N	16	0426	..	..	..	..	16(7)	6	46	224	115	17	08
WI	54.2N	16	11--	..	..	..	..	16(6,7)	6	40	175	190	16	22
BO	48.9N	16	05--	..	..	..	..	16 6	5	25	145	45	17	10
EB	43.9N	16	1129	SC*	--	+ 3	--	16(6,7)	6	17	191	88	16	22
IR	41.0N	16	10--	..	..	..	..	16(5,6,7)	6	29	184	60	17	06
TU	40.4N	16	04--	..	..	..	..	16(6,7) 17(2)	5	16	105	30	17	12
AL	9.5N	16	0429	..	..	..	..	16(5,6)	6	4	216	29	16	23
AN	1.5N	16	0429	..	..	..	..	--	-	3	261	57	16	23
HU	0.6S	16	0742	..	..	..	..	16(7)	7	8	456	43	16	23
TV	1.1S	16	0429	..	..	..	..	--	-	1	302	122	16	23
AP	16.0S	16	0701	..	..	..	..	16(7)	5	6	85	20	17	10
PM	18.7S	16	03--	..	..	..	..	16(6,7)	5	7	130	80	17	12
HR	33.7S	16	11--	..	..	..	..	16(6,7)	6	26	169	179	16	21
GN	43.2S	16	07--	..	..	..	..	16(7)	6	20	110	120	17	07
TO	46.7S	16	04--	..	..	..	..	16(6,7)	6	24	120	60	17	12
CO	64.6N	19	2204	SC*	+11	-41	+13	--	-	--	--	--	--	--
SI	60.0N	19	2204	SC*	+ 3.1	+ 8.9	- 4.4	21(6)	8	100	970	630	27	14
BO	48.9N	19	2204	SC*	- 2	+15	--	21 4	6	33	175	105	27	18
EB	43.9N	19	2204	SC*	--	+ 7	--	21(6,7)	6	26	165	89	27	18
AL	9.5N	19	2204	SC	- 0.2	9	- 2	20(8)	5	3	118	21	21	01
HO	7.6N	19	2202	SC	- 0.2	+ 8	- 1	21(6)	6	4	175	24	23	23
AN	1.5N	19	2204	SC	0.3	8	5	--	-	2	162	44	21	01
TV	1.1S	19	2204	SC	0.0	8	9	--	-	1	183	76	21	01
PM	18.7S	19	2204	SC*	- 0.5*	+10	+ 8	21(2,6) 22(1,4) 23(5) 25(3) 29(5) 31(4)	5	7	160	60	02	00
GN	43.2S	19	2204	SC	--	6	- 1	21(5)	7	28	140	160	27	19
CO	64.6N	20	10--	..	..	..	..	21(6) 22(4) 23(5)	7	390	1870	1130	27	21
NE	55.1N	20	1855	..	..	..	..	21(2) 22(4)	6	43	220	320	27	19
WI	54.2N	20	15--	..	..	..	..	21(8)	7	50	225	125	27	17
FR	49.6N	20	19--	..	..	..	..	21(6)	6	30	200	115	27	16
IR	41.0N	20	13--	..	..	..	..	21(5,6,7,8)	6	30	129	70	22	21
TU	40.4N	20	20--	..	..	..	..	21(6)	6	15	145	40	27	18
SJ	29.9N	20	1400	..	..	..	..	21(6)	6	9	113	53	23	05
GU	4.0N	20	1241	..	..	..	..	22(4)	5	00	140	30	25	17
AP	16.0S	20	18--	..	..	..	..	22(4)	5	6	89	34	26	16
HR	33.7S	20	14--	..	..	..	..	20(8) 21(6)	6	32	152	162	26	09
TO	46.7S	20	13--	..	..	..	..	22(4)	6	30	210	90	27	21
KG	56.5S	20	14--	..	..	..	..	21(6,7,8)	7	--	--	--	24	--
AL	9.5N	21	0344	..	..	..	..	21(4,5,6,7) 22(4,5)	5	4	115	25	22	20
AN	1.5N	21	0344	..	..	..	..	--	-	3	144	56	22	20
HU	0.6S	21	0337	..	..	..	..	21(6,7)	6	7	269	35	23	21
TV	1.1S	21	0344	..	..	..	..	--	-	3	160	98	22	20
IR	41.0N	22	23--	..	..	..	..	23(5)	6	24	96	36	23	18
IR	41.0N	23	21--	..	..	..	..	24(4,5,7) 25(3,4)	5	15	107	28	25	23
SI	60.0N	28	05--	..	..	..	..	29(5)	7	60	640	480	01	20
NE	55.1N	28	0536	..	..	..	..	28(3) 29(2,5) 30(3) 31(2,4)	5	30	144	147	31	18
HR	33.7S	28	18--	..	..	..	..	28(8) 29(6)	5	17	75	91	30	02
CO	64.6N	29	02--	..	..	..	..	29(5)	7	189	1410	920	30	19
WI	54.2N	29	05--	..	..	..	..	29(6,7) 30(1,6) 31(1,6,7)	5	25	135	70	31	22
EB	43.9N	29	12--	..	..	..	..	29(5,6)	5	14	87	56	30	02
IR	41.0N	29	05--	..	..	..	..	29(5)	7	16	86	28	29	21
GN	43.2S	29	06..	..	..	..	..	31(4)	6	22	80	130	31	21
TO	46.7S	29	05--	..	..	..	..	29(5,6) 31(4)	5	25	100	50	01	03
IR	41.0N	30	00--	..	..	..	..	31(4,6)	5	14	93	34	31	22

SUDDEN COMMENCEMENTS AND SOLAR FLARE EFFECTS

MARCH 1974

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, si and bay-commencements 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)

19 2204 A: LG FR; B: WN HB KS PM LM DU; C: EB TL PP KG (si: A: FU; B: NU IK; C: WI KA)

Sudden impulses found in the magnetograms (si)

n o n e

Solar-flare effects (sfe)

Effects confirmed by ionospheric or solar observations are underlined.

02 1059 - 1109 SZ (si: A: LG)

03 1617 - 1623 SZ

06 1300 - 1317 SZ (si: A: LG - bs: B: LM)

16 1116 - 1135 SZ

29 0947 - 0959 SZ

RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

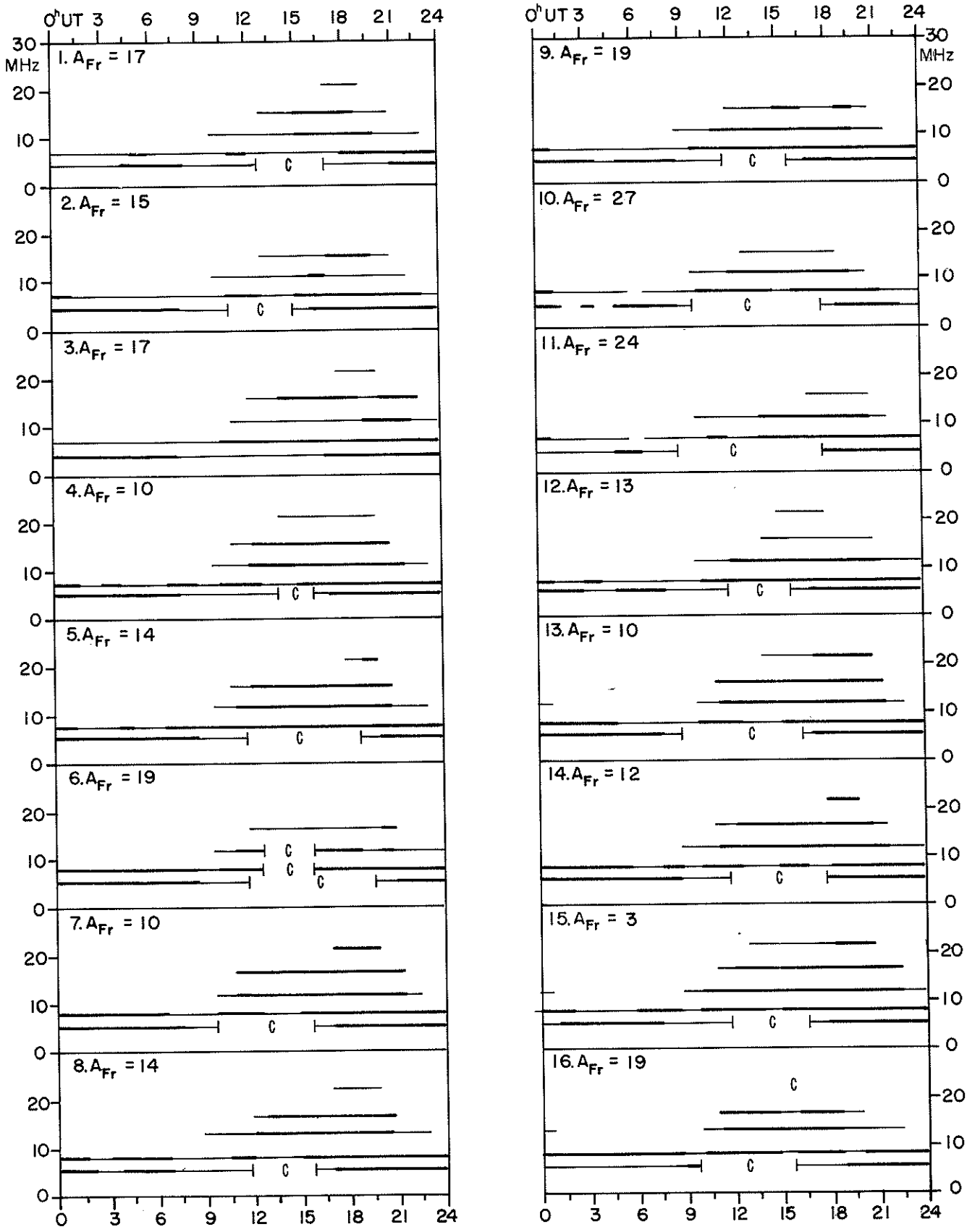
MARCH 1974

North Atlantic

MAR 1974	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)	HALF DAY (2)	OBSERVED
01	5+	6	4+	4+	6-	6+	5	4	5	6	3	3	17
02	6+	6	6-	6o	6o	7o	6	6	6	5	(4)	2	15
03	6o	6	6-	5o	7o	6+	6	5	6	5	3	3	17
04	6o	6	6o	5+	6+	7-	5	5	6	5	3	2	10
05	6+	6	7-	5+	7o	7o	6	6	6	6	3	3	14
06	5+	6	6-	4+	6-	6o	6	5	5	6	(4)	3	19
07	6o	6	6o	6-	7-	7-	6	5	6	6	2	3	10
08	6-	6	6-	5-	7-	6+	6	5	5	6	3	3	14
09	6-	6	6-	5-	6+	6-	6	5	5	5	3	(4)	19
10	6-	5	6-	4+	6o	6o	5	5	5	5	(4)	(4)	27
11	6-	5	5+	5-	6o	6o	5	5	5	5	(4)	(4)	24
12	6o	5	6-	6-	6+	6+	5	5	5	6	3	2	13
13	6o	6	6-	5o	6+	6+	6	5	5	6	3	1	10
14	6+	6	6+	6o	7-	6+	6	6	5	6	3	2	12
15	7-	6	6+	6+	7-	7-	6	5	6	7	1	2	3
16	6o	6	6+	6+	6-	6-	7	6	6	5	2	(4)	19
17	6-	6	6-	6o	5o	6+	4	5	5	5	3	1	8
18	6+	6	6+	6-	7-	7-	6	6	6	6	1	0	1
19	7-	6	7-	6o	7-	7-	6	6	6	7	0	1	1
20	6+	5	7-	7-	7-	5+	7	6	6	6	1	3	12
21	4-	5	4-	4-	4-	3+	6	5	5	4	(4)	(5)	40
22	4o	5	3+	4-	4+	5-	3	3	4	4	(5)	(4)	31
23	5-	4	4-	4+	5+	6-	4	4	5	5	(4)	(4)	27
24	5-	4	4-	4o	6o	6-	5	4	5	5	(4)	(4)	25
25	5o	4	5+	4o	6-	6-	5	5	5	5	(4)	3	21
26	5-	5	4o	4o	5-	6o	5	5	5	5	3	3	16
27	5o	5	6-	3o	6-	5+	5	5	5	5	(4)	2	19
28	6-	5	5-	5+	6+	6-	5	5	5	6	3	3	16
29	5-	5	5+	3+	5o	6-	6	5	5	5	(4)	(4)	24
30	4+	6	4o	2+	6-	6-	5	5	5	5	(4)	2	16
31	5o	6	5+	4-	5o	6o	6	5	6	5	(4)	3	18

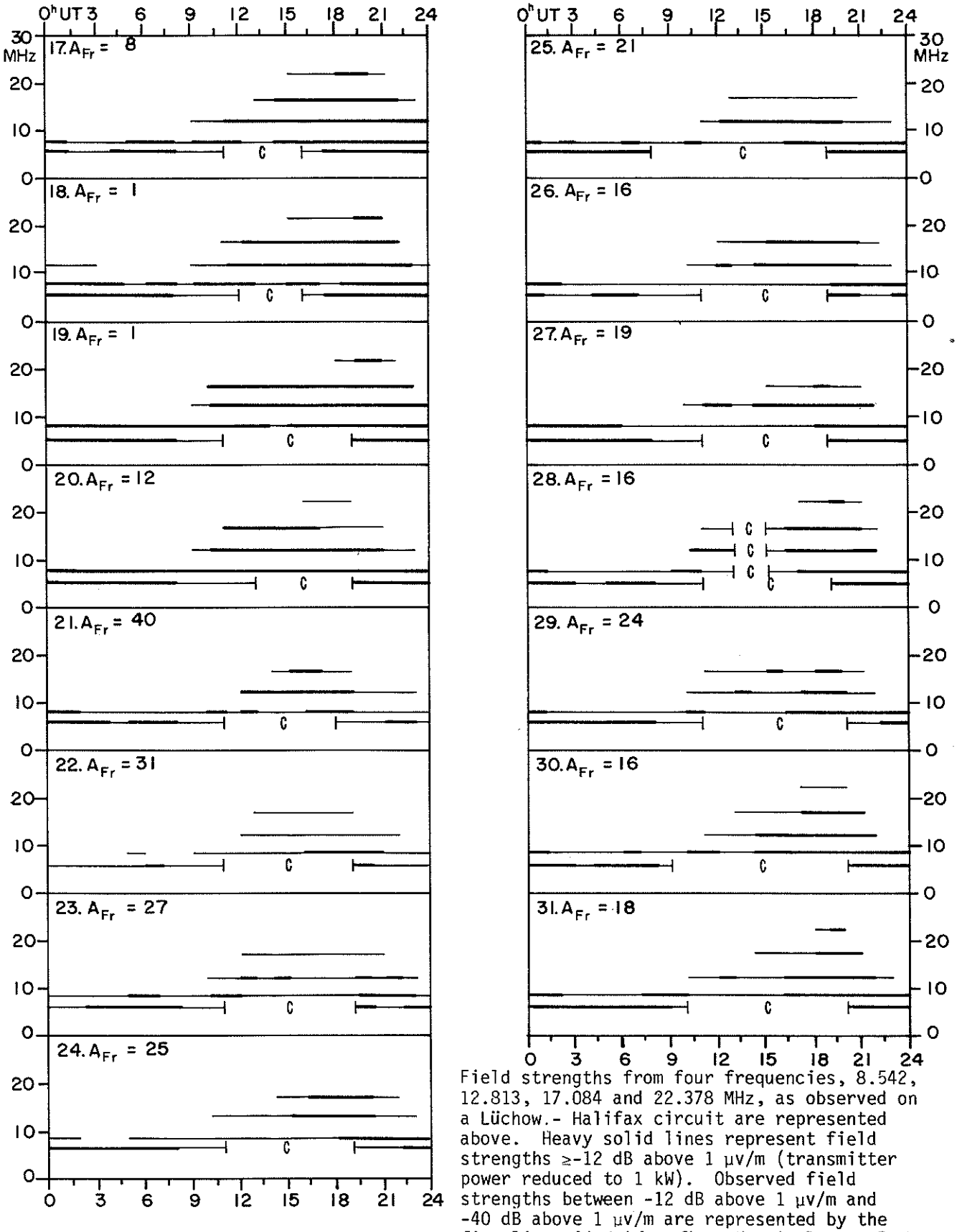
TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC PATH

MARCH 1974



TRANSMISSION FREQUENCY RANGES -- NORTH ATLANTIC

MARCH 1974



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

RADIO PROPAGATION QUALITY INDICES

MARCH 1974

Calculated from the records of four frequencies
on the circuit Lüchow - Halifax (Germany - Canada)

Date	Day	Night	D+N
1	5.1	3.9	4.2
2	5.1	3.6	4.1
3	6.3	5.0	5.2
4	7.6	4.8	5.9
5	7.5	5.1	6.1
6	5.2	4.5	4.5
7	8.6	4.5	6.3
8	6.9	4.1	5.3
9	5.6	3.7	4.5
10	4.3	3.2	3.7
11	4.8	4.3	4.3
12	6.2	5.3	5.4
13	8.5	5.7	6.9
14	8.0	5.0	6.3
15	8.7	6.6	7.2
16	5.9	4.1	4.8
17	7.5	6.5	6.5
18	7.3	6.6	6.6
19	8.3	6.8	7.1
20	6.1	3.9	4.9
21	3.0	2.2	2.5
22	2.4	3.4	2.7
23	3.7	3.5	3.4
24	3.7	4.1	3.7
25	4.3	4.1	3.9
26	4.2	4.2	4.0
27	3.8	3.8	3.6
28	5.1	4.1	4.4
29	3.9	3.9	3.7
30	4.9	4.7	4.5
31	4.7	4.2	4.2

USCOMM-NOAA-ASHEVILLE--5-31-74--1125

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."