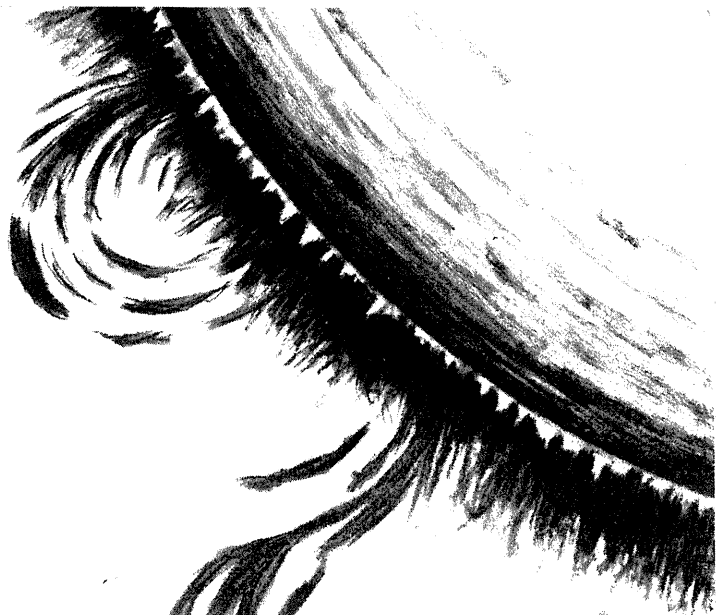


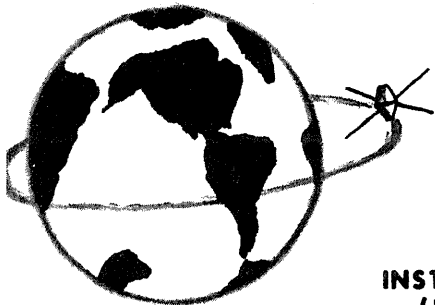
**CRPL - FB - 258**

**FOR OFFICIAL DISTRIBUTION**



**SPACE DISTURBANCES LABORATORY  
SOLAR-GEOPHYSICAL DATA**

**Issued: February 1966**



**U. S. DEPARTMENT OF COMMERCE  
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION  
INSTITUTE FOR TELECOMMUNICATION SCIENCES AND AERONOMY  
(FORMERLY CENTRAL RADIO PROPAGATION LABORATORY)  
BOULDER, COLORADO**

28 Feb 1966

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION  
INSTITUTE FOR TELECOMMUNICATION SCIENCES AND AERONOMY  
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## SOLAR - GEOPHYSICAL DATA

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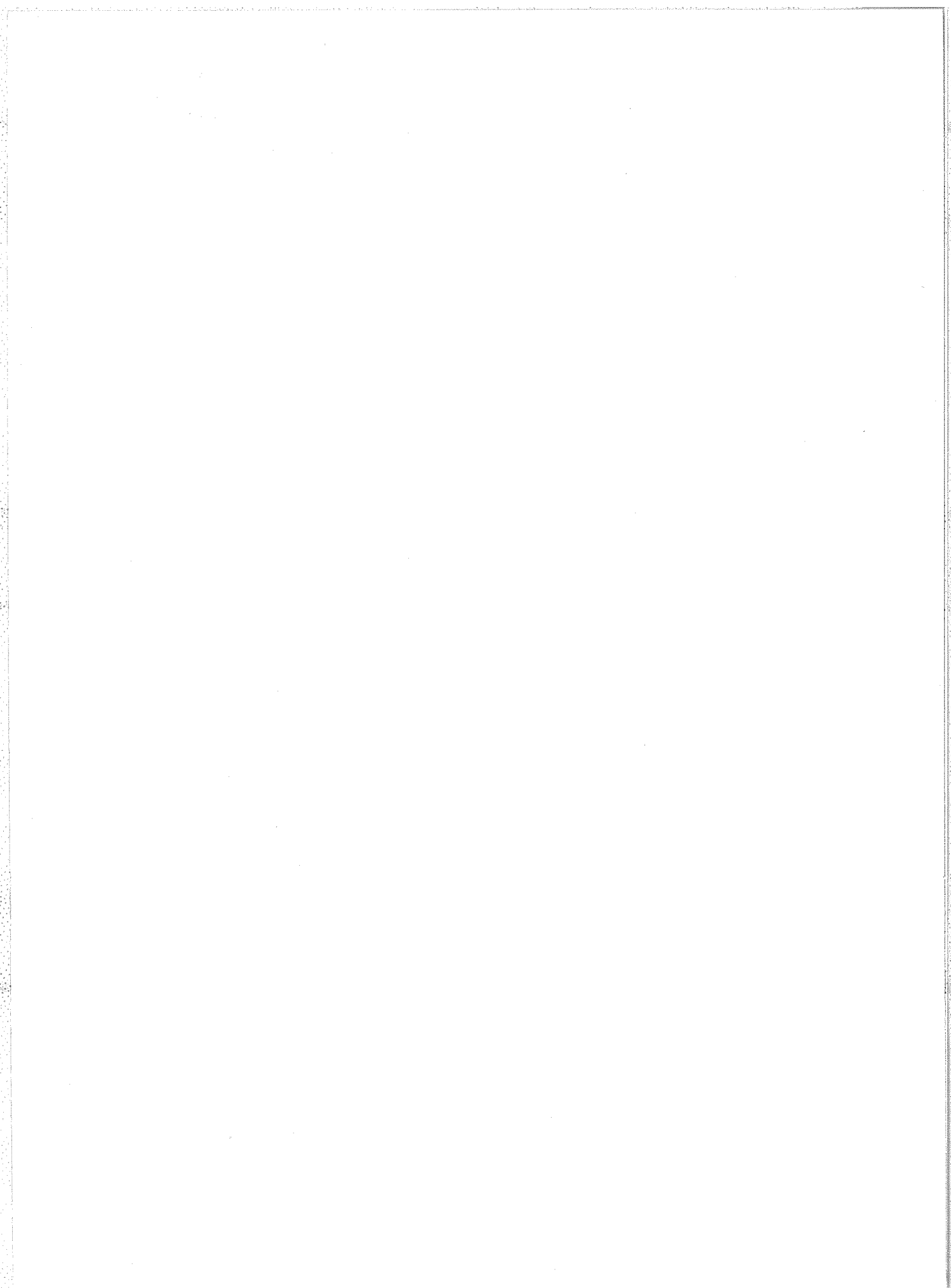
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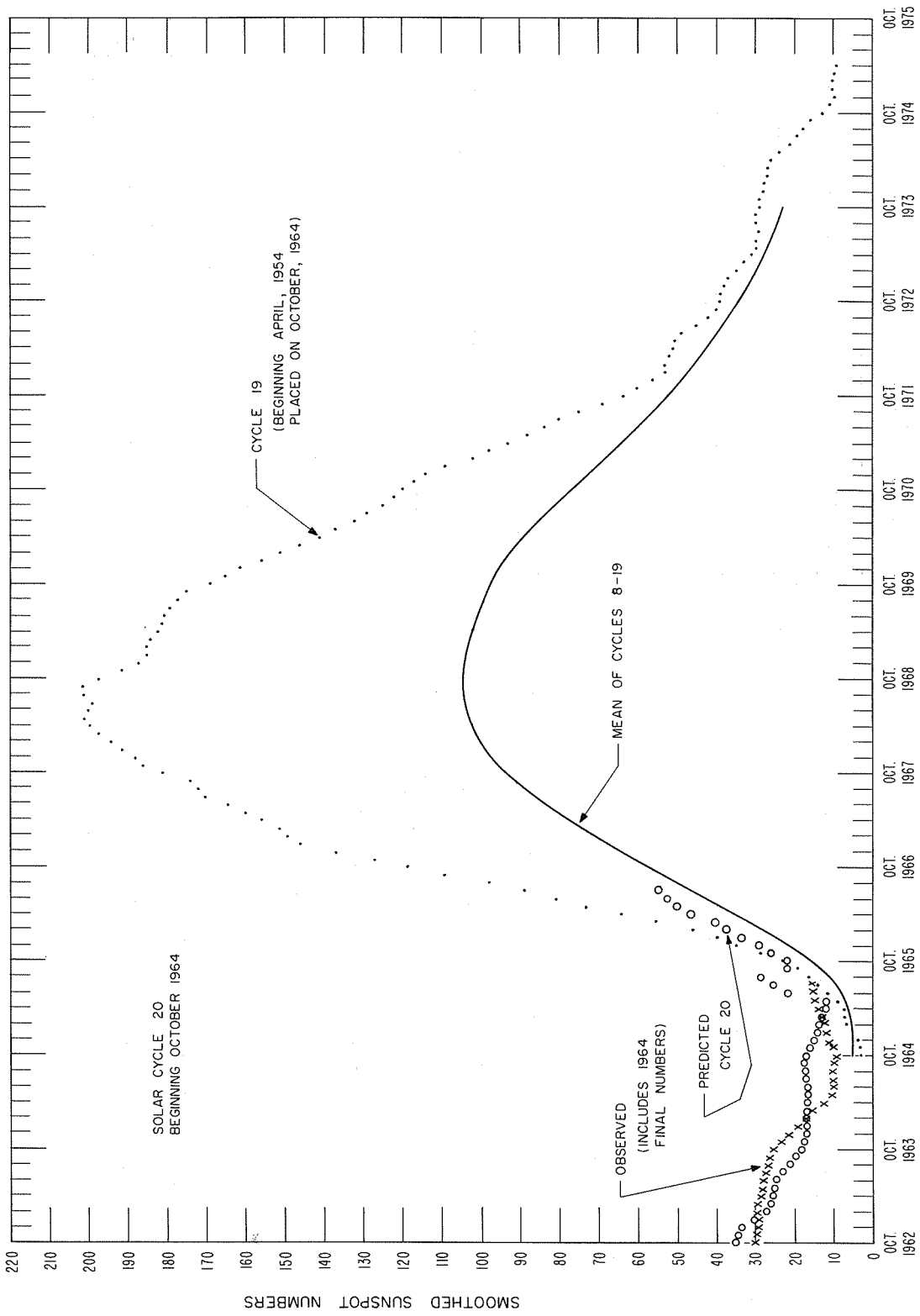
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The revised descriptive text was published in  
January 1966.





PREDICTED AND OBSERVED SUNSPOT NUMBERS

## RELATIVE SUNSPOT NUMBERS

ZÜRICH, R<sub>Z</sub>

Day	1965												1966
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.
1	23	14	16	0	0	9	18	0	20	52	29	13	18
2	26	13	7	0	14	24	20	0	20	63	28	8	17
3	31	13	0	0	8	36	19	15	21	60	20	8	16
4	31	13	8	0	8	38	17	14	22	62	13	8	15
5	26	10	13	0	7	34	8	0	22	55	13	8	8
6	19	23	26	0	0	30	17	16	19	39	29	8	7
7	18	23	26	0	11	32	22	7	23	27	40	8	7
8	17	17	7	0	15	24	29	31	22	7	46	15	13
9	11	23	0	0	9	23	33	12	18	8	38	7	13
10	8	17	12	0	0	9	29	14	15	13	41	7	7
11	7	17	9	0	0	7	35	16	19	8	40	0	8
12	0	23	18	9	15	0	30	13	17	9	26	0	0
13	0	25	16	9	21	0	23	8	17	8	17	14	17
14	7	16	17	15	15	14	12	7	8	7	16	0	30
15	8	23	12	27	30	0	11	0	8	0	10	14	36
16	7	15	9	18	36	0	8	0	16	7	9	22	57
17	7	8	11	17	55	12	7	0	8	0	7	21	50
18	20	8	22	8	72	25	0	7	9	0	0	20	64
19	22	0	17	7	75	16	0	7	7	10	0	18	68
20	28	0	19	7	72	21	0	7	0	12	0	15	63
21	23	7	9	9	70	19	0	7	0	15	0	10	52
22	22	0	0	15	62	14	0	0	0	26	7	11	44
23	13	0	0	17	50	7	0	0	11	23	0	9	38
24	19	13	7	10	43	7	0	8	17	16	7	8	41
25	18	15	17	7	30	7	7	0	13	24	0	12	27
26	18	22	10	11	22	7	0	8	17	17	7	23	19
27	34	23	18	10	7	8	7	14	24	17	0	29	16
28	17	18	12	8	0	23	0	12	23	9	8	64	14
29	25	9	0	0	0	18	0	16	37	8	8	64	19
30	22	9	0	0	0	14	9	15	50	8	15	44	28
31	15	8	0	0	0	0	7	22	0	14	0	38	15
Mean:	17.5	14.2	11.7	6.8	24.1	15.9	11.9	8.9	16.8	20.1	15.8	17.0	26.7

Yearly Mean = 15.1

All Zürich Sunspot Numbers, R<sub>Z</sub>, for 1965 are Final. The numbers for 1966 are Provisional.

## AMERICAN, R<sub>A</sub>'

Day	1965												1966
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.
1	24	13	6	0	0	14	12	0	15	33	29	10	25
2	26	12	1	0	3	20	9	0	17	39	27	10	21
3	29	13	1	0	4	29	6	7	19	50	20	10	19
4	30	11	5	0	1	39	6	2	19	43	11	9	13
5	28	10	6	0	1	33	3	0	16	37	1	10	7
6	18	17	5	0	0	33	13	0	21	26	29	12	1
7	13	19	8	0	9	34	22	7	21	16	43	9	0
8	16	20	0	0	10	21	20	6	19	5	34	2	1
9	5	20	1	0	4	13	22	9	19	10	38	3	0
10	2	22	12	0	0	2	19	10	18	11	43	0	0
11	0	21	10	5	1	0	20	10	17	11	38	0	0
12	0	22	20	10	7	0	25	14	21	9	24	0	0
13	0	22	20	11	10	0	15	1	18	10	15	0	19
14	4	22	20	12	4	0	14	1	12	2	16	0	30
15	0	24	21	17	29	0	11	0	11	0	14	18	37
16	4	14	16	12	37	0	11	0	10	0	12	21	31
17	10	10	19	14	57	10	4	0	5	0	0	18	43
18	16	3	23	8	55	17	0	3	4	0	0	19	43
19	16	0	23	0	65	15	0	1	2	8	0	16	55
20	26	0	14	1	55	13	0	2	1	12	0	0	55
21	21	0	2	13	48	11	0	0	0	14	0	7	41
22	8	0	0	19	43	5	0	0	0	22	0	8	34
23	15	0	0	18	39	0	0	0	14	20	3	10	36
24	18	4	3	10	30	0	0	0	14	21	4	6	31
25	24	14	13	10	23	0	0	0	12	16	0	17	18
26	24	19	11	16	14	1	0	3	15	11	0	20	14
27	21	22	12	12	1	6	0	16	13	12	0	35	15
28	19	19	8	3	0	6	0	12	21	11	6	44	14
29	27	1	0	0	0	8	1	3	35	11	9	55	20
30	24	0	0	0	0	13	5	12	41	11	10	47	21
31	15	0	0	0	0	0	0	19	0	12	0	28	3
Mean:	15.6	13.3	9.1	6.4	17.7	11.4	7.7	4.5	15.0	15.6	14.2	14.3	20.9

# DAILY SOLAR FLUX AT 2800 Mc/s

Ic

## OTTAWA-ARO

### OBSERVED FLUX, S

Day	1965										1965	1966
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.
1	78.5	76.5	71.2	71.1	70.8	76.0	72.0	75.4	92.0	78.8	75.4	82.0
2	79.1	75.3	71.6	70.8	73.7	75.6	73.0	75.9	93.2	79.5	75.0	78.9
3	78.7	75.0	71.3	70.7	75.2	76.2	77.3	76.6	96.0	81.1	74.9	78.5
4	77.4	75.0	71.0	69.7	78.2	75.9	78.4	76.7	97.5	79.8	74.5	80.5
5	76.2	76.1	70.7	69.0	78.3	75.4	76.3	78.7	91.6	78.0	75.4	80.0
6	76.2	76.7	70.9	70.4	78.4	78.5	78.8	77.1	85.2	80.7	76.2	79.7
7	77.3	77.0	70.7	71.4	77.2	81.5	79.6	77.7	83.6	85.2	75.3	80.9
8	75.4	74.5	70.5	72.0	78.4	81.0	77.3	78.6	82.8	80.4	76.7	80.6
9	75.4	73.0	71.7	72.4	79.0	81.4	77.6	76.1	83.3	82.0	75.0	80.1
10	75.9	73.1	73.1	72.1	78.3	80.3	76.1	75.6	80.4	84.1	75.3	79.8
11	73.7	71.9	73.7	71.1	76.5	79.9	76.7	75.7	76.0	84.2	75.6	80.9
12	73.1	73.5	73.3	71.8	76.0	78.2	75.9	75.3	74.8	80.8	75.9	84.0
13	72.4	75.6	73.6	74.4	76.8	76.3	74.8	75.0	75.8	77.3	74.0	87.2
14	71.9	74.6	75.3	75.4	76.1	74.7	73.7	75.2	74.7	76.0	74.7	93.2
15	72.6	72.7	75.0	80.5	76.7	74.5	72.5	74.9	73.8	76.5	76.8	101.9
16	73.2	71.3	74.6	86.3	76.0	72.1	73.8	73.7	72.3	74.0	77.6	106.0
17	73.4	71.6	73.2	91.1	76.3	71.9	72.4	73.8	72.5	74.3	78.4	101.7
18	72.2	75.0	73.0	90.4	78.2	71.9	73.2	73.0	72.2	75.0	78.4	104.8
19	72.3	77.0	74.1	92.4	74.9	72.5	74.3	72.8	71.8	73.4	76.8	108.6
20	71.4	74.4	72.4	94.7	76.0	73.0	73.7	72.8	72.7	72.7	74.5	102.3
21	71.6	74.0	73.0	92.8	75.9	72.6	73.6	72.5	73.3	72.2	74.1	98.9
22	71.9	72.7	72.7	92.2	78.2	71.5	72.9	71.2	76.2	71.8	72.3	94.7
23	73.0	73.0	73.2	86.2	80.2	70.9	73.0	71.8	78.7	71.3	72.7	93.5
24	74.5	72.5	70.8	85.1	78.1	70.1	72.7	76.1	76.3	71.2	71.2	91.8
25	74.2	73.8	69.6	81.0	79.3	70.0	72.2	75.8	77.9	70.6	72.1	88.1
26	73.8	73.3	69.1	77.9	78.7	69.4	72.0	77.0	78.2	71.8	76.9	85.4
27	76.1	72.1	69.2	76.0	77.7	70.0	74.5	78.4	78.0	74.1	83.7	82.4
28	76.3	71.7	69.5	74.5	76.7	70.6	73.2	80.5	77.2	77.0	83.8	80.5
29		72.0	70.2	73.7	76.4	71.1	74.2	87.3	76.7	73.9	84.7	80.7
30		71.4	69.9	74.0	77.0	71.1	75.0	89.0	76.2	75.1	81.9	78.7
31		71.6		71.6		70.7	74.9		78.1		80.8	77.7
Mean:	74.6	73.8	71.9	78.1	77.0	74.3	74.8	76.3	79.6	76.8	76.5	87.9

### FLUX ADJUSTED TO 1 A.U., S<sub>0</sub>

Day	1965										1965	1966
	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.
1	76.2	75.1	71.1	72.2	72.8	78.6	74.2	76.8	92.2	77.6	73.3	79.3
2	76.8	74.0	71.5	71.9	75.8	78.2	75.2	77.3	93.3	78.2	72.9	76.3
3	76.4	73.7	71.3	71.9	77.4	78.8	79.6	77.9	96.1	79.8	72.7	75.9
4	75.2	73.8	71.1	70.9	80.5	78.5	80.7	78.0	97.5	78.4	72.3	77.8
5	74.1	74.8	70.8	70.2	80.6	78.0	78.5	80.0	91.6	76.7	73.2	77.4
6	74.1	75.5	71.0	71.7	80.7	81.2	81.1	78.3	85.1	79.2	74.0	77.1
7	75.2	75.8	70.8	72.7	79.5	84.3	81.8	78.9	83.5	83.7	73.0	78.2
8	73.4	73.4	70.7	73.4	80.7	83.8	79.5	79.8	82.6	78.9	74.4	77.9
9	73.4	71.9	71.9	73.8	81.4	84.1	79.8	77.2	83.0	80.4	72.7	77.4
10	73.9	72.1	73.4	73.5	80.7	83.0	78.2	76.7	80.1	82.4	73.0	77.2
11	71.8	70.9	74.1	72.5	78.9	82.6	78.8	76.7	75.7	82.5	73.2	78.2
12	71.2	72.6	73.7	73.3	78.4	80.8	77.9	76.3	74.5	79.1	73.5	81.2
13	70.6	74.6	74.0	76.0	79.2	78.8	76.7	75.9	75.4	75.7	71.7	84.3
14	70.1	73.7	75.8	77.0	78.5	77.2	75.6	76.1	74.3	74.4	72.4	90.1
15	70.8	71.9	75.5	82.3	79.1	77.0	74.4	75.7	73.3	74.8	74.4	98.5
16	71.4	70.5	75.1	88.3	78.4	74.5	75.6	74.5	71.8	72.4	75.1	102.6
17	71.6	70.8	73.8	93.2	78.7	74.3	74.2	74.5	72.0	72.6	75.9	98.4
18	70.5	74.3	73.7	92.6	80.8	74.3	75.0	73.7	71.6	73.3	75.9	101.4
19	70.6	76.3	74.8	94.6	77.4	74.9	76.1	73.4	71.2	71.6	74.3	105.1
20	69.8	73.8	73.1	97.0	78.5	75.4	75.5	73.4	72.0	70.9	72.1	99.0
21	70.0	73.4	73.7	95.1	78.4	75.0	75.3	73.1	72.6	70.5	71.7	95.7
22	70.3	72.1	73.5	94.5	80.7	73.9	74.6	71.7	75.4	70.0	70.0	91.8
23	71.5	72.5	74.0	88.4	82.8	73.2	74.6	72.3	77.9	69.5	70.3	90.6
24	72.9	72.0	71.6	87.3	80.7	72.4	74.3	76.6	75.5	69.3	68.8	88.9
25	72.7	73.4	70.4	83.1	81.9	72.3	73.8	76.2	77.0	68.8	69.7	85.4
26	72.3	73.0	70.0	80.0	81.4	71.7	73.5	77.4	77.3	69.9	74.4	82.7
27	74.6	71.8	70.2	78.1	80.3	72.3	76.0	78.7	77.0	72.1	80.9	79.9
28	74.8	71.4	70.5	76.5	79.3	72.9	74.7	80.8	76.2	74.9	81.0	78.1
29		71.7	71.2	75.8	79.0	73.4	75.7	87.6	75.6	71.9	81.9	78.3
30		71.2	70.9	76.1	79.6	73.4	76.4	89.3	75.1	73.0	79.2	76.3
31		71.4		73.6		73.0	76.3		76.9		78.1	75.4
Mean:	72.7	73.0	72.4	79.9	79.4	76.8	76.6	77.2	79.1	75.1	74.1	85.0



## CALCIUM PLAGE AND SUNSPOT REGIONS

JANUARY 1966

JAN. 1966	LAT.	MCMATH PLAGE NUMBER	RETURN OF REGION	CALCIUM PLAGE DATA						SUNSPOT DATA		
				CMP VALUES		HISTORY	AGE (ROTA- TIONS)	DATE FIRST SEEN	DURA- TION (DAYS)	CMP VALUES		HISTORY
				AREA	INT.					AREA	COUNT	
1.4	N33	8112 (2)	8075	400	1.5	$\ell - d$	3	< 1/1	> 5			
2.5	N29	8113 (2)	8075	(300)	(1.5)	$\ell - d$	3	< 1/1	> 5			
3.1	N36	8114 (2)	8075	200	1.0	$\ell - d$	3	< 1/1	> 5			
3.9	N05	8115 (1)	New	(100)	(1.0)	$b - d$	1	1/1	1			
5.4	N23	8118 (1)	New	(400)	(1.0)	$b - d$	1	1/4	1			
5.6	N11	8122	New	(400)	(2.0)	$b \vee \ell$	1	1/8	4	(7)	(1)	$b - d$
6.2	N05	8120 (1)	New	(100)	(1.5)	$b - d$	1	1/5	1			
6.6	N21	8123 (1)	New	(300)	(2.0)	$b - d$	1	1/8	1			
7.6	N27	8119 (1)	New	(100)	(1.5)	$b - d$	1	1/4	1			
7.8	S19	8116	New	(500)	(1.5)	$\ell \setminus d$	1	1/1	9	(1)	(1)	$\ell \setminus d$
8.0	N27	8126 (1)	New	(100)	(1.5)	$b - d$	1	1/10	1			
11.0	N22	8117	8083	3100	3.0	$\ell \wedge \ell$	2	1/3	14	(2)	(3)	$b - d$
11.8	N01	8127	New	(100)	(1.5)	$b - d$	1	1/15	$\geq 1$			
11.9	N05	8121 (1)	New	(300)	(1.5)	$b - d$	1	1/6	1			
13.1	S29	8134 (1)	New	(300)	(2.0)	$b - d$	1	1/16	1			
13.2	N24	8124	New	(300)	(1.0)	$b \setminus d$	1	$\leq 1/8$	> 5			
14.8	N40	8128 (1)	New	(100)	(1.0)	$b - d$	1	1/15	1			
15.1	N19	8129	8099	300	1.0	$\ell \setminus d$	2	1/9	$\geq 10$			
15.4	S28	8135 (1)	New	(200)	(2.0)	$b - d$	1	1/16	1			
16.6	S00	8136 (1)	New	(100)	(1.0)	$b - d$	1	1/18	1			
17.4	N31	8140 (1)	New	(300)	(1.0)	$b - d$	1	1/21	1			
18.5	S26	8137 (1)	New	200	1.5	$b - d$	1	1/18	1			
19.6	N29	8130	New	(1000)	(3.0)	$b \wedge d$	1	$\leq 1/15$	$\geq 11$	(10)	(1)	$b \wedge d$
19.7	N17	8131	New	(3500)	(3.0)	$\ell \wedge \ell$	1	$\leq 1/15$	$\geq 11$	(290)	(53)	$\ell \wedge \ell$
21.0	N09	8132	8105	(3100)	(3.0)	$\ell \wedge \ell$	2	1/15	> 12			
21.8	S37	8138 (1)	New	(100)	(1.5)	$b - d$	1	1/18	1			
21.9	N30	8133	New	2800	3.0	$\ell \wedge \ell$	1	1/15	14	(15)	(6)	$b \wedge d$
22.1	N19	8144 (1)	New	(200)	(1.0)	$b - d$	1	1/25	1			
23.8	N23	8141 (1)	New	(100)	(1.0)	$b - d$	1	1/21	1			
24.7	N08	8142 (1)	New	(100)	(1.5)	$b - d$	1	1/21	1			
24.8	N19	8150	New	(300)	(1.5)	$b - d$	1	1/28	2			
25.6	S05	8145 (1)	New	(200)	(1.0)	$b - d$	1	1/26	1			
25.6	S23	8139	New	1200	3.0	$\ell \wedge \ell$	1	1/18	14	190	20	$b \wedge \ell$
26.5	S25	8152	New	(600)	(3.5)	$b - d$	1	1/29	4	(20)	(7)	$b - d$
28.7	N26	8143	8107	100	1.0	$\ell - d$	2	< 1/24	> 7			
28.8	S29	8148	8110	300	1.5	$\ell - \ell$	2	< 1/27	> 6			
29.5	N23	8155 (1)	New	(200)	(1.0)	$b - d$	1	1/31	1			
29.9	S02	8151 (1)	New	(200)	(1.0)	$b - d$	1	1/28	1			
30.5	S26	8146	New	(100)	(1.0)	$b - d$	1	1/26	2			

(1) These small and ephemeral plages were seen on the disk for only one day.

(2) Regions 8112, 8113 and 8114 are parts of region 8075.

Due to very poor weather conditions, no calcium plage observations were secured at the McMath-Hulbert Observatory on January 2, 7, 12, 13, 14, 17, 19, 20, and 22, 1966.

## MT. WILSON MAGNETIC CLASSIFICATIONS OF SUNSPOTS

IIb

JANUARY 1966

JAN. 1966	TIME MEAS. UT	LAT.	MER. DIST.	TYPE	No.	JAN. 1966	TIME MEAS. UT	LAT.	MER. DIST.	TYPE	No.
1-2	No Obs.					15-20	No Obs.				
4	0000	S27 N22	W53 W44	$\alpha$ p $\alpha$ p	15980 15981	21	1630	N18 N32 N27 N32	W27 E04 W28 E12	$\beta$ $\gamma$ $\alpha$ f $\beta$ f $\beta$	15985 15987 15988 15989
4	2140	N22	W57	$\alpha$ p	15981						
5-7	No Spots					22	1900	N18 N32 N29 S24	W42 W08 W41 E33	$\beta$ f $\alpha$ f $\alpha$ p $\beta$	15985 15987 15988 15990
8	2320	N10	W46	$\alpha$ p	15982						
9	1620	N08 N21	W56 E11	$\alpha$ p $\alpha$ f	15982 15983	23	1630	N19 N32 S24	W53 W20 E22	$\beta$ f $\alpha$ f $\beta$	15985 15987 15990
10	No Spots										
11	Faint markings					24	1930	N19 N32 S23	W66 W34 E07	$\alpha$ f $\alpha$ f $\beta$ p	15985 15987 15990
12	No Spots										
13	1850	N30 N19	E72 E78	$\beta$ $\beta$ p	15984 15985	25	1630	S23	W04	$\beta$ p	15990
14	1820	N27 N17	E58 E63	$\beta$ p* $\gamma$	15984 15985	26-31	No Obs.				

\* Reversed Polarities for Cycle 20.

FINAL CORONAL LINE EMISSION INDICES

OCTOBER 1965

CMP Oct 1965	North East Quadrant (observed 7 days earlier)			South East Quadrant (observed 7 days earlier)			South West Quadrant (observed 7 days later)			North West Quadrant (observed 7 days later)						
	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>				
1	16	29	2	10	14	35	10	14	32	55	21	39	28	66	17	24
2	31	55	13	17	21	42	14	21	24	42	17	30	33	77	18	34
3	27	72	12	17	23	52	16	23	21	29	21	51	55	100	32	57
4	19	28	31	49	37	10	24	37	6	16	22	25	24	38	24	36
5	16	38	23	35	31	7	23	31	15	30	8	10	27	38	16	19
6	x	x	x	x	x	x	x	x	10	26	10	14	9	14	14	20
7	9	13	9	13	12	8	11	12	7	11	13	17	7	13	19	24
8	32	53	7	25	17	37	4	17	3	8	9	12	1	4	17	24
9	6	9	8	13	15	5	12	15	13	20	9	17	14	16	20	34
10	6	9	3	14	13	10	9	13	11	15	7	12	14	19	7	10
11	5	9	8	12	24	6	19	24	4	8	12	16	4	10	15	20
12	7	8	6	9	14	0	10	14	2	3	7	9	4	5	7	8
13	x	x	x	x	x	x	x	x	4	6	5	6	8	11	8	11
14	x	x	x	x	x	x	x	x	2	6	4	8	23	41	11	16
15	23	42	9	20	9	4	5	9	9	10	2	5	25	44	17	30
16	17	25	16	27	16	7	9	16	12	19	x	x	27	35	x	x
17	29	43	19	39	22	18	13	22	1	4	8	14	13	21	8	12
18	12	16	7	10	x	4	x	x	3	6	8	12	17	22	10	15
19	24	33	3	4	7	6	6	7	0	2	x	x	17	33	x	x
20	6	8	11	14	18	6	14	18	4	7	16	20	14	31	16	25
21	7	12	9	12	24	9	17	24	6	12	8	11	15	20	13	16
22	1	8	9	11	24	9	16	24	1	4	9	13	5	7	8	12
23	22	26	10	19	46	47	23	46	6	10	5	6	6	9	5	16
24	15	23	8	10	15	21	10	15	4	7	7	13	6	7	8	12
25	4	7	6	10	15	4	11	15	7	8	x	x	10	13	x	x
26	3	3	8	12	15	3	11	15	4	8	14	15	0	0	15	16
27	11	17	13	19	19	6	10	19	x	x	x	x	x	x	x	x
28	44	116	x	x	44	52	x	x	20	38	9	15	19	40	15	20
29	56	108	16	30	44	53	26	44	8	17	11	25	22	41	18	30
30	75	117	x	x	46	69	x	x	13	16	2	11	32	48	16	26
31	34	52	14	20	23	32	16	23	3	7	x	x	19	28	x	x

x = no observations      \* = yellow line emission      a = index computed from low weight data

# FINAL CORONAL LINE EMISSION INDICES

NOVEMBER 1965

CMP Nov 1965	North East Quadrant (observed 7 days earlier)			South East Quadrant (observed 7 days earlier)			South West Quadrant (observed 7 days later)			North West Quadrant (observed 7 days later)		
	G <sub>6</sub>	G <sub>1</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>1</sub>
1	x	x	10	x	x	22	7	10	6	9	13	15
2	6	8	37	2	6	44	9	11	5	13	16	24
3	5	6	16	5	7	28	x	x	x	x	x	x
4	7	10	15	2	4	26	x	x	x	x	x	x
5	3	8	13	0	3	26	x	x	x	x	x	x
6	11	36	x	4	7	x	x	x	x	x	x	x
7	14	39	41	0	0	11	x	x	x	x	x	x
8	20	46	x	9	11	x	x	x	x	x	x	x
9	9	15	32	0	3	23	x	x	x	x	x	x
10	x	x	x	x	x	x	13	15	8	10	37	66
11	x	x	24	x	x	16	x	x	x	x	x	x
12	8	9	16	0	0	16	x	x	1	4	x	x
13	x	x	8	10	15	13	x	x	x	x	x	x
14	12	14	x	0	0	14	x	x	x	x	x	x
15	18	27	13	2	6	12	x	x	x	x	x	x
16	x	x	x	x	x	x	x	x	x	x	x	x
17	37	50	30	13	14	25	x	x	x	x	x	x
18	x	x	x	x	x	x	x	x	x	x	x	x
19	x	x	x	x	x	x	x	x	x	x	x	x
20	x	x	x	x	x	x	x	x	x	x	x	x
21	x	x	x	x	x	x	x	x	x	x	x	x
22	x	x	x	x	x	x	x	x	x	x	x	x
23	x	x	x	x	x	x	5	8	x	x	4	5
24	22	26	28	22	39	17	8	10	5	6	21	36
25	x	x	x	x	x	x	x	x	x	x	x	x
26	x	x	32	x	x	17	x	x	x	x	x	x
27	x	x	x	x	x	x	x	x	x	x	x	x
28	x	x	x	x	x	x	5	7	6	15	9	12
29	x	x	x	x	x	x	x	x	6	9	x	x
30	x	x	x	x	x	x	13	16	5	7	14	15

x = no observations      \* = yellow line emission      a = index computed from low weight data

# FINAL CORONAL LINE EMISSION INDICES

DECEMBER 1965

CMP Dec 1965	North East Quadrant (observed 7 days earlier)			South East Quadrant (observed 7 days earlier)			South West Quadrant (observed 7 days later)			North West Quadrant (observed 7 days later)					
	G <sub>6</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>
1	x	x	x	x	x	x	x	11	12	5	8	14	18	6	12
2	x	x	x	x	x	x	x	13	18	8	19	11	18	7	8
3	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
4	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
5	x	x	x	x	x	x	x	9	11	16	23	46	92	13	15
6	21	x	x	4	7	x	x	10	12	15	17	35	48	14	20
7	x	x	x	x	x	x	x	x	x	x	x	15	21	19	25
8	38	12	28	16	18	6	8	x	x	x	x	x	x	x	x
9	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
10	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
11	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
12	13	9	12	4	9	9	10	6	24	x	x	13	22	x	x
13	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
14	40	12	16	14	16	9	12	0	3	x	x	40	71	x	x
15	34	32	80	13	14	15	22	x	x	x	x	x	x	x	x
16	35	26	68	16	18	10	15	x	x	x	x	x	x	x	x
17	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
18	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
19	19	17	24	8	9	15	23	x	x	x	x	x	x	x	x
20	14	17	23	9	10	16	22	x	x	x	x	x	x	x	x
21	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
22	x	x	x	x	x	x	x	1	5	8	11	5	8	12	17
23	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
24	x	x	x	x	x	x	x	8	13	3	10	41	78	9	13
25	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
26	4	x	x	0	2	x	x	x	x	x	x	x	x	x	x
27	x	x	x	x	x	x	x	1	6	7	10	2	5	11	14
28	x	x	x	x	x	x	x	2	6	11	15	4	7	15	21
29	x	x	x	x	x	x	x	7	10	13	19	7	11	18	24
30	x	x	x	x	x	x	x	6	15	13	23	9	15	15	20
31	x	x	x	x	x	x	x	19	38	x	x	16	33	x	x

x = no observations

\* = yellow line emission

a = index computed from low weight data

# PROVISIONAL CORONAL LINE EMISSION INDICES

JANUARY 1966

CMP Jan 1966	North East Quadrant (observed 7 days earlier)				South East Quadrant (observed 7 days earlier)				South West Quadrant (observed 7 days later)				North West Quadrant (observed 7 days later)			
	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>
1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
2	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
3	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
4	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
5	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
6	9	20	7	8	4	5	9	10	0	0	11	15	10	19	13	15
7	x	x	x	x	x	x	x	x	0	0	x	x	14	23	x	x
8	x	x	x	x	x	x	x	x	0	0	14	17	12	26	10	15
9	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
10	35	103	18	44	0	0	15	17	x	x	x	x	x	x	x	x
11	37	86	23	47	5	9	17	20	x	x	x	x	x	x	x	x
12	24	43	15	29	1	4	13	17	x	x	x	x	x	x	x	x
13	11	17	11	21	0	0	14	17	x	x	x	x	x	x	x	x
14	14	26	x	x	0	0	x	x	x	x	x	x	x	x	x	x
15	x	x	x	x	x	x	x	x	1	7	20	25	6	12	22	25
16	10	17	19	24	1	5	15	17	x	x	x	x	x	x	x	x
17	9	12	19	25	3	5	17	20	0	0	15	23	26	41	29	52
18	x	x	x	x	x	x	x	x	2	7	12	15	41	57	28	55
19	x	x	x	x	x	x	x	x	2	4	12	15	81	119	36	65
20	39	75	22	29	2	12	11	14	1	5	x	x	72	122	17	23
21	61	91	x	x	9	36	x	x	1	6	8	12	54	69	17	20
22	30	44	10	16	1	5	13	20	2	9	10	12	24	39	16	18
23	x	x	x	x	x	x	x	x	0	0	14	22	7	10	15	20
24	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
25	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
26	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
27	x	x	x	x	x	x	x	x	x	0	15	24	11	24	19	24
28	x	x	x	x	x	x	x	x	x	x	4	8	5	10	7	15
29	10	18	12	19	6	14	21	25	x	x	x	x	x	x	x	x
30	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
31	15	31	12	14	4	6	23	25	x	x	x	x	x	x	x	x

x = no observations

\* = yellow line emission

a = index computed from low weight data

SOLAR FLARES

JANUARY 1966

OBSERVATORY	OBSERVED UT			LOCATION				DURATION MIN.	IM. POR-TANCE	OBS. COND. TYPE	MEASUREMENTS				REMARKS
	DATE 1966	START	END	MAX. PHASE	APPROX. LAT.	CENTRAL DIST.	M. MATH. PLAGE REGION				CMP DAY	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	
MANI	01	0721E	0736D		N21 W06	8107		15D	SF	2	0722	.41	.40		
KANZ	03	0908E	0920D		N25 W36	8107		12D	SF					D	
LOCK	03	2023	2037	2029	S10 W35	8110		14	SN	C	2029	.30	.30	20	
SACP	04	2150	2207	2152	S18 E37	8116		17	SF	C		.42	.45		
HALE	04	2151	2202D	2152	S19 E36	8116		11D	SN	P	2152	.41	.50	F	
HALE	04	2350	0010	2354	S19 E35	8116		20	SN	C	2354	.60	.80	F	
ARCE	06	0850E	0955D	0900	N20 E50	8117		65D	SN	C	0900	.31	.54		
ARCE	07	0900E	1000D	0915	N22 W08	8123		60D	SN	C	0915	.77	.86		
ARCE	08	0900E	0915D	0905	N12 W35	8122		15D	SB	C	0905	.19	.24		
HALE	09	2345	0002	2347	N25 W26	8126		17	SF	C	2347	.20	.30		
SACP	09	2345	2358	2348	N25 W26	8126		13	SF	C		.52	.56		
KAND	10	1034	1049D		N10 W08	8117		15D	SF	S					
SACP	10	1523	1539D	1528	N21 W01	8117		10D	SF	C		.42	.41		
CLMX	10	1524E	1531	1527	N21 W01	8117		7D	SF	C	1527	.20	.20		
MCHA	10	1740E	1759		N21 W05	8117		7D	SF	SP	1752	.42	.20	DS	
HALE	10	1757	1808	1800	N20 W04	8117		11	SN	C	1800	.10	.10		
HALE	11	0129	0158	0136	N20 W12	8117		29	SN	P	0136	.60	.70	F	
KAND	11	0720E	0836		N28 W90	8126		76D	1B	P					
OTTA	11	1629	1631D		N24 W53	8126		2D	SF	C	1130				
HALE	11	2224	2235	2230	N24 W80	8122		11	SN	C	2230	.41	.80		
HALE	13	0052	0112	0058	N18 E90	8131		20	SN	P	0058	.20			
HALE	13	0202	0213	0210	N19 E90	8131		11	SN	C	0210	.20			
HALE	13	0237	0245	0242	N18 E90	8131		8	SN	C	0242	.10			
HALE	13	0246	0319	0254	N18 E90	8131		33	SN	C	0254	.41			
HUAN	13	1135E	1142		N15 E80	8131		7D	SF	P	1137	.26		D	
HALE	13	1917	1929	1925	N10 E80	8131		12	SB	C	1925	.41			
HALE	13	2158	2209D	2200	N17 E80	8131		11D	SN	C	2200	.20			
HALE	13	2242	2256	2250	N21 E80	8131		14	1F	C	2250	.71			
HALE	13	2259	2315		N17 E80	8131		16	SN	P	2301	.30			
MANI	14	0108	0118	0111	N19 E75	8131		10	SF	3	0111	.32	.70		
IKOM	14	0128			N19 E74	8131			1N	P					
KAND	14	0805E	0825		N21 E90	8131		20D	SN	S					
ARCE	14	0825E	0830D		N18 E72	8131		5D	1B	P	0825	.96	2.29	F	
KANZ	14	0916E	0921D		N19 E68	8131		5D	SF	C					
KANZ	14	0952	1010		N19 E73	8131		18	1F	C					
OTTA	14	1444	1448	1446	N20 E65	8131		4	SN	C	1446			E	
KANZ	14	1444E	1501		N18 E64	8131		17D	SF	C				E	
OTTA	14	1458	1529	1512	N20 E70	8131		31	SN	C	1521				
OTTA	14			1521											
HUAN	14	1553	1609	1555	N19 E67	8131		16	SN	C	1555	.57		E	
OTTA	14	1554	1601	1555	N19 E68	8131		7	SN	C	1555				
SACP	14	1555	1609	1557	N19 E65	8131		14	SF	C		.42	.74		
OTTA	14	1743	1757	1745	N20 E60	8131		14	SF	C	1745				
HALE	14	1815	1828	1821	N30 E90	8133		13	SN	C	1821	.20			
HALE	14	1821	1826	1821	N25 W90	8133		5	SB	C	1821	.30		A	
HALE	14	1842	1846	1843	N24 W90	8133		4	SN	C	1843	.41		A	
OTTA	14	1849	1853D		N19 E62	8131		4D	SF	C	1850			AF	
SACP	14	1849	1956D	1927	N19 E64	8131		67U	1N	C		1.65	2.86		
LOCK	14	1900	1955	1910	N18 E62	8131		55	1N	C	1910	1.50	3.30	20	
HUAN	14	1910E	1958		N19 E65	8131		48D	SN	P	1927	.62		J	
CLMX	14	1911E	1956	1927	N18 E66	8131		45D	SB	C	1927	.70	.20	E	
HUAN	14	2045	2105	2055	N20 E66	8131		20	SF	C	2055	.26		DH	
SACP	14	2046	2103U	2055	N14 E57	8131		17U	SF	C		.17	.24		
SACP	14	2123	2132U	2125	N14 E57	8131		9U	SF	C		.17	.24		
HALE	14	2211	2219	2214	N13 E58	8131		8	SF	C	2214	.20	.40		
LOCK	14	2219	2247	2250	N13 E55	8131		28	SN	C	2250	.70	1.30	20	
HUAN	14	2226	2235	2229	N16 E58	8131		9	SF	C	2229	.42	.60		
HALE	14	2226	2245	2228	N12 E55	8131		19	SN	C	2228	.50	1.00	F	
SACP	14	2227	2244	2229	N14 E57	8131		17	SN	C		.42	.60		
HALE	14	2236	2244	2239	N30 E90	8133		8	SN	C	2239	.41		FH	
HALE	14	2318	2344	2326	N30 E90	8133		26	SB	C	2326	.41			
HALE	15	0005	0016	0007	N30 E90	8133		11	SN	C	0007	.30			
HALE	15	0147	0200D	0154	N30 E90	8133		13D	SN	C	0154	.20			
WEND	15	1040E	1058		N17 E58	8131		18D	1N	VP		3.10		E	
HUAN	15	1131E			N17 E56	8131			SF	P	1131	.31	.45	E	
HUAN	15	1311	1323		N18 E56	8131		12	SF	P	1316	.42	.60	E	
HUAN	15	1528	1555D		N19 E55	8131		27D	SF	P	1542	.31	.45	D	
SACP	15	1538	1550	1544	N14 E48	8131		12	SN	C		.42	.52		
OTTA	15	1611	1624	1616	N13 E47	8131		13	SN	C	1616				





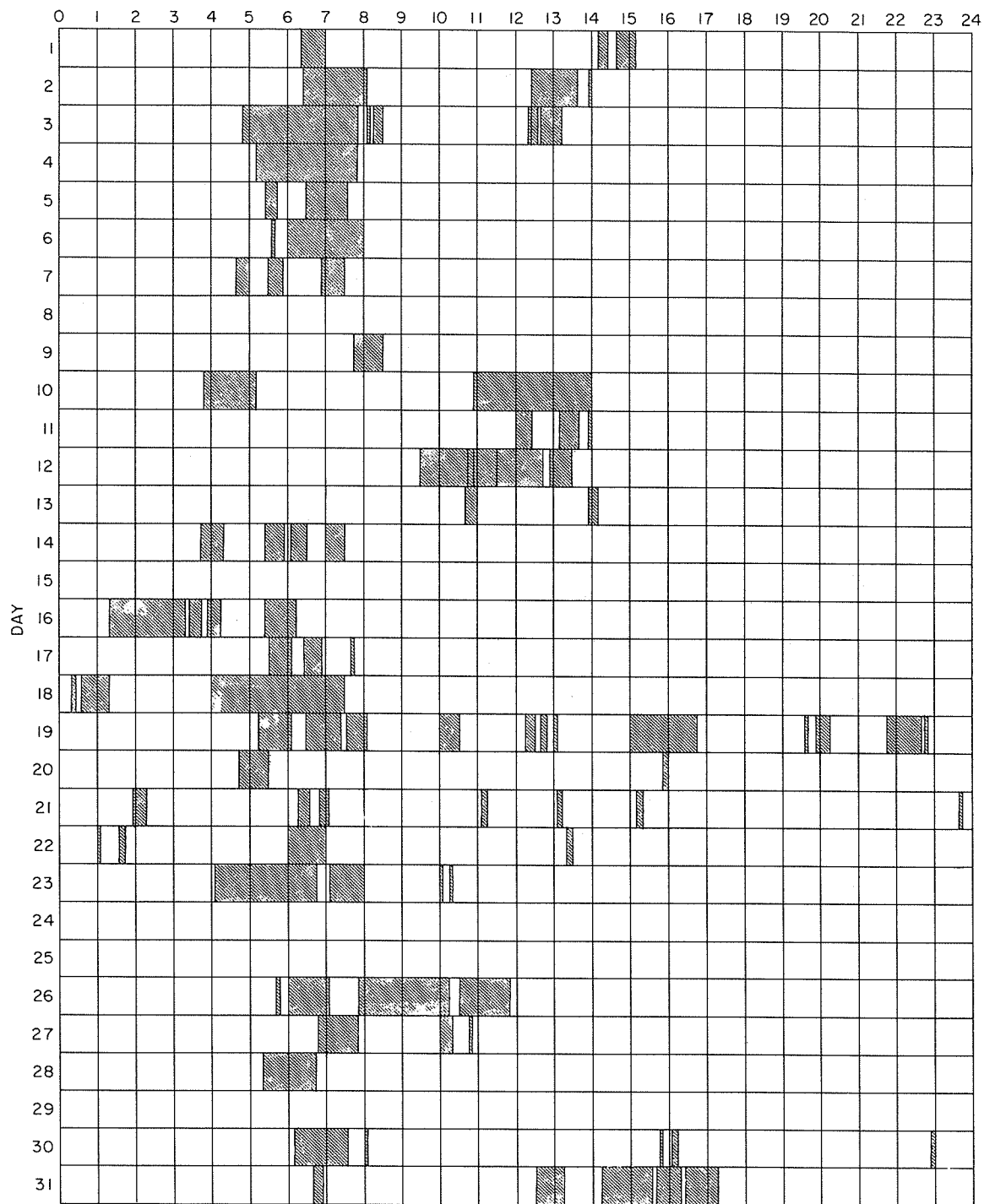


# INTERVALS OF NO FLARE PATROL OBSERVATIONS PROVISIONAL

IIIId

JANUARY 1966

HOUR-UT



Observatories included:

Arcetri  
Bucharest  
Capri F (German)  
Capri S (Swedish)  
Catania

Climax  
Haleakala  
Herstmonceux  
Huancayo  
Ikomasan

Istanbul  
Kandilli  
Kanzelhöhe  
Locarno  
Lockheed

Manila  
McMath-Hulbert  
Meudon  
Mitaka  
Monte Mario

Ondrejov  
Ottawa  
Sacramento Peak  
Tortosa  
Wendelstein  
Zürich



# SOLAR FLARES

IIIF

OCTOBER 1965

OBSERVATORY	OBSERVED UT				LOCATION				DURATION	IM-POR-TANCE	OBS. COND. TYPE	MEASUREMENTS				REMARKS
	DATE	START	END	MAX. PHASE	APPROX. LAT.	CENTRAL MER. DIST.	MOON PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ho	
1965 OCT																
-CATA	03	0720	0850	0715	N22	W05	8005	90	1-2	C	0715	1.11	1.14		162	E
-MANI	03	0724	0731	0725	N23	W08	8005	7	1-2		0725		.40	.40		
-MANI	03	0748	0756	0752	N23	W02	8005	8	1-2		0752	.30	.30			
-LOCA	03	0759	0840		N22	W03	8005	41	1-2	V	0805		.34	.33		
-BUCA	03	0809	0829		N21	E02	8005	20	1-2					2.00		
-WEND	03	0812	0829		N22	E01	8005		1-					1.10		
-WEND	03	0840	0849		N21	W04	8005		1-							
-ARCE	03	0840E	0850D		N21	W07	8005	10D	1-2		0840	.98	1.02			
-ARCE	03	0830E	0900D		S18	W20	8012	30D	1-2		0850	.72	.85			
-CATA	03	1005	1030	1007	S19	W20	8012	25	1-3	C	1007	.35	.40			D
-SACP	03	1413	1422	1416	N21	W12	8005		1-	P		.34	.33		17	
-SACP	03	1509	1556	1520U	N25	W10	8005		1-	P		.17	.16		18	
-SACP	03	1742	1756	1745	S22	W27	8012		1-	P		1.02	1.14		18	
-MCMA	03	1956E	2038D		N20	W12	8005		1-2	P	1957	.80	.80			E
-SACP	03	2119E	2119U	2119U	S32	E36	8009		1-	P		.34	.44		17	
-LOCK	03	2155	2223	2204	N17	W14	8005	49	1-2	C	2204	.70	.70		20	IJ
-HALE	03	2155	2228	2159	N18	W11	8005	33	1-2	C	2159	1.80	1.80		17	F
-CLMX	03	2157	2237	2204	N20	W12	8005	40	1-2	C	2204	2.70	2.70			
-SACP	03	2200E	2240U	2206	N19	W13	8005	40D	1-	P		2.56	2.53		20	
-HALE	03	2257	2312	2302	S31	E33	8009	15	1-2	C	2302	.40	.50			
-SACP	03	2300E	2305	2300	S32	E34	8009		1-	P		.42	.53		17	
-IKOM	03	2305	2325		S32	E37	8009	20	1-	V	2305	.80	1.40			DG
HALE	04	0045	0055	0046	S19	W26	8012	10	1-2	C	0046	.60	.70			
HALE	04	0144	0155	0146	S19	W24	8012	11	1-2	C	0146	.20	.20			
HALE	04	0337	0347D	0338	S19	W29	8012	10D	1-2	P	0338	.30	.30			
HALE	04	0339	0346	0340	S31	E31	8009	7	1-2	P	0340	.20	.30			
CULG	04	0511	0535	0514	S20	W27	8012	24	1-2	C	0514	.60	.75			
MITK	04	0520E	0532		S32	E32	8009	12D	1-	C						E
-CULG	04	0714	0718	0716	N22	W16	8005	4	1-	C	0716	.20	.21			D
-ONDR	04	0715E	0722		N19	W17	8005		1-3		0717			1.80		CD
-ARCE	04	0825E	0850D		S33	E30	8009	25D	1-3		0830	1.14	1.67			
-WEND	04	0845	0905		N21	W18	8005		1-							D
-KANZ	04	0940E	0945D		S32	E28	8009		1-							
-WEND	04	0949	0957		S34	E28	8009		1-							
-ARCE	04	0935E	1023D		S23	W31	8012	48D	2-2		0955	7.84	10.55			
-ONDR	04	0935E	1235		S24	W31	8012	180D	2-2		0952			2.00		CEFHIJ
-UCCL	04	0936	1048D	0955	S20	W32	8012	72D	2-3		0955	6.50	10.00			F
-CAPR	04	0937	1023	0955	S20	W31	8012	49	1-2	C	0955	4.60	6.60			
-LOCA	04	0937	1130	1005	S21	W31	8012	113	2+		1005		10.00			
-CAPS	04	0938	1008		S23	W28	8012	30	1-3	C	1003	2.50	3.30		170	
-KANZ	04	0940E	1014		S20	W29	8012	34D	2-							FH
-MONT	04	0941E	1040D		S21	W32	8012	59D	1+							
-KIEV	04	0945	1020	0955	S21	W33	8012	35	2-	C	0955	10.00	13.00		68	E
-WEND	04	0945E	1108D		S20	W28	8012	83D	2+				12.00			
-MEUD	04	0948E	1012D	0957	S21	W32	8012	24D	2-	P	0957	6.10	8.20			
-IZMI	04	0950E	1008D		S21	W26	8012	18D	2-							
-KHAR	04	1000E	1045		S19	W29	8012	45D	1+	P	1004	5.60	7.30		1.70	CDHO
-KODA	04	1001E	1014D		S22	W27	8012	13D	2-	P	1001	7.73	9.95			
-ARCE	04	1005E			S23	W31	8012		1-2		1006	3.33	4.48			
-WEND	04	1002	1014		S34	E28	8009		1-							
-UCCL	04	1015	1050D		S34	E29	8009	35D	1-3							E
-WEND	04	1022	1032		N21	W28	8005		1-							
-ONDR	04	1109E	1123		N19	W21	8005		1-3							
-UCCL	04	1110E	1120D		N22	W20	8005	10D	1-2		1113			1.50		CDH
-KAND	04	1220	1230		S31	E28	8009		1-							E
-WEND	04	1317	1325		N20	W13	8005		1-							
-SACP	04	1318	1335	1322	N21	W17	8005		1-	C		.44	.44		18	
-KANZ	04	1319	1325		N20	W17	8005		1-							D
-UCCL	04	1319	1327D		N22	W20	8005		1-3							E
-HUAN	04	1320	1327		N21	W18	8005	8D	1-3	C	1322	.20	.20			D
-ONDR	04	1321E	1333		S20	W32	8012		1-3	C	1323			2.00		CD
-SACP	04	1342	1353	1346	N21	W18	8005		1-3	C		.43	.43		16	
-HUAN	04	1345	1353	1348	N21	W18	8005		1-3	C	1348	.25	.25			D
-UCCL	04	1346	1351		N22	W20	8005	5	1-3							E
-KANZ	04	1347E	1351D		N20	W17	8005		1-							D
-KANZ	04	1347E	1403D		N22	W24	8005		1-							D
-WEND	04	1350	1402		N22	W16	8005		1-							D
-ONDR	04	1357	1403		S20	W32	8012		1-3							CDJ
-LOCA	04	1445	1500		S19	W36	8012	15	1-	V						
-SACP	04	1432	1443D	1438	N21	W18	8005		1-	P		1.37	1.37		16	
-CLMX	04	1433	1443	1438	N24	W18	8005	10	1-3	C	1438	.40	.40			
-UCCL	04	1433	1616D		N23	W18	8005	103D	1-3							EK
-HUAN	04	1434	1443	1437	N21	W19	8005		1-	C	1437	.25	.25			D
-OTTA	04	1435	1459	1437	N21	W18	8005	24	1-1	C	1437	.58	.58			H
-CAPE	04	1444	1502D	1449	N22	W19	8005	18D	1-		1449	1.10	1.20			H
-WEND	04	1445	1455		N20	W13	8005		1-							
-LOCA	04	1445	1505		N21	W17	8005		1-	V						
-HUAN	04	1446	1452	1449	N21	W19	8005	20	1-1	C	1449	.33	.33			D
-MEUD	04	1446	1505D	1449	N23	W16	8005	19D	1-		1449	.40	.50			EH
-KANZ	04	1448E	1457		N20	W17	8005	9D	1-							DH

## SOLAR FLARES

OCTOBER 1965

OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS				REMARKS		
	DATE	START	END	MAX. PHASE	APPROX. LAT.	CENTRAL MER. DIST.	MAGNATH PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ho		MAX. INT. %	
																		1965
UCCL	04	1508	1530D		N24	W27	8005	22D	1-	3							D	
LOCA	04	1515	1530		N20	W24	8005	15	1-									
CLMX	04	1612	1620	1616	N24	W18	8005	8	1-	C	1616	+40	+40					
SACP	04	1612	1621	1617	N21	W19	8005	1-	C			+42	+43		18			
MCMA	04	1613	1619D	1614	N22	W20	8005	1-	1	P	1614	+30	+30				D	
OTTA	04	1613	1619	1615	N21	W20	8005	6	1-	2	C	1615	+29	+29				
OTTA	04	1644	1657	1652	S31	E27	8009	13	1-	2	C	1652	+47	+56				
SACP	04	1645	1706	1656	N21	W22	8005	1-	C			1,54	1,56			17		
CLMX	04	1648	1703	1651	N23	W27	8005	15	1-	C	1651	+50	+50					
HUAN	04	1649E	1656D		N20	W20	8005	1-	1-	P	1656	+75	+75				E	
OTTA	04	1649	1702	1656	N19	W25	8005	13	1-	2	C	1656	1,50	1,50				F
MCMA	04	1649E	1703		N22	W20	8005	1-	1	P	1651	+50	+60				E	
CLMX	04	1652	1706	1658	N19	W22	8005	14	1-	C	1658	+90	+90					
LOCK	04	1715	1732	1722	N22	W19	8005	1-	C		1722	+40	+40				20	
HUAN	04	1716	1729	1720	N21	W21	8005	1-	C		1720	+30	+30				D	
MCMA	04	1716	1730	1718	N22	W16	8005	1-	1	C	1718	+20	+20				D	
CLMX	04	1716	1730	1718	N22	W19	8005	14	1-	C	1718	+60	+60					
SACP	04	1716	1731	1720	N21	W21	8005	1-	C		1718	+60	+60					
OTTA	04	1717	1730	1719	N21	W20	8005	13	1-	2	C	1719	+35	+35				17
OTTA	04	1729	1803D	1745	N22	W26	8005	34D	1-	2	C	1745	1,16	1,19				F
CLMX	04	1731	1824	1743	N23	W26	8005	53	1-	C	1743	+90	+90					
MCMA	04	1733	1820	1743	N21	W21	8005	1-	1	C	1743	1,00	1,10				F	
SACP	04	1759E	1832	1810	N22	W26	8005	1-	1-	P	1805	+60	+60				17	
HUAN	04	1805E	1824		N22	W25	8005	1-	1-	P	1805	+60	+60				E	
LOCK	04	1846	1912	1852	N21	W19	8005	1-	C		1852	1,00	1,00				20	
MCMA	04	1848	1905	1854	N22	W21	8005	1-	1	C	1854	+50	+60				DH	
HUAN	04	1849	1911	1856	N21	W20	8005	1-	C		1856	+38	+38				D	
SACP	04	1849	1915	1859	N21	W21	8005	1-	C			+85	+86				21	
CLMX	04	1852E	1902D	1856	N22	W19	8005	10D	1-	C	1856	+50	+50					
MCMA	04	1917	1924	1919	N22	W21	8005	1-	1	P	1919	+50	+60				E	
LOCK	04	2032	2040	2036	N21	W23	8005	1-	C		2063	+30	+30				20	
CULG	04	2033	2043	2035	N21	W26	8005	10	1-	C	2035	+40	+44					
LOCK	04	2045	2102	2052	N22	W21	8005	1-	C		2052	+40	+40				30	
CULG	04	2047	2056	2050	N23	W23	8005	9	1-	C	2050	+40	+44					
MCMA	04	2048	2056	2049	N22	W22	8005	21	1-	2	C	2049	+20	+20				D
HALE	04	2048	2109	2050	N22	W22	8005	20	1-	2	P	2050	+60	+60				
SACP	04	2053E	2056D	2055	N20	W22	8005	1-	1-	P		+77	+78				17	
CULG	04	2114	2124	2116	N23	W22	8005	10	1-	C	2116	+20	+22				H	
LOCK	04	2201	2215	2207	N22	W20	8005	8	1-	C	2207	+30	+30				20	
CULG	04	2204	2214	2207	N23	W22	8005	10	1-	1	C	2207	+20	+20				H
HALE	04	2204	2214	2207	N23	W22	8005	10	1-	1	C	2207	+20	+20				
CULG	04	2248	2303	2254	N23	W22	8005	15	1-	C	2254	+20	+22					
LOCK	04	2345	2400	2350	N21	W21	8005	1-	C		2350	+40	+40				20	
HALE	04	2347	0002	2351	N21	W23	8005	15	1-	2	C	2351	+60	+60				
VORO	04	2347	2352	2347	N19	W26	8005	5	1-	C	2347	+99	1,12				58	
CULG	04	2347	2359	2348	N23	W24	8005	12	1-	C	2348	+60	+66					
IKOM	04	2351	0010		N22	W23	8005	19	1-	V	2355	+80	1,00				D	
CULG	05	0123	0135	0125	N23	W25	8005	12	1-	C	0125	1,00	1,10				LS	
VORO	05	0124	0127D	0125	N19	W28	8005	3D	1-	C	0125	1,08	1,23				D	
HALE	05	0125	0130D	0126	N21	W25	8005	5D	1-	1	P	0126	+60	+60				
MITK	05	0128E	0130		N19	W23	8005	2D	1-	C	0128	1,50	1,60				1,80	
MANI	05	0316	0332	0321	N20	W29	8005	16	1-	2	C	0321	+70	+70				
MITK	05	0318	0324	0321	N22	W24	8005	6	1-	C							D	
HALE	05	0318	0331	0324	N21	W25	8005	13	1-	2	C	0324	+40	+40				F
MANI	05	0615	0635	0619	N20	W27	8005	20	1-	2	C	0619	+70	+70				
MITK	05	0620E	0624	0620	N19	W26	8005	4D	1-	C	0620	+80	+90				2,40	
KANZ	05	0729E	0828		N23	E45	8005	59D										
WEND	05	0924	0938		N24	W39	8005	1-										
WEND	05	1041	1049		N22	W34	8005	1-										
WEND	05	1118	1132		S17	W50	8012	1-										
SACP	05	1742	1818	1756	N20	W35	8005	1-	C			+85	+93				19	
HUAN	05	1751E	1801		N22	W35	8005	1-	1-	P	1754	+38	+42				E	
LOCK	05	1751	1803	1755	N27	W27	8005	1-	C		1755	+30	+30				20	
MCMA	05	1752	1801	1753	N21	W37	8005	1-	1	C	1753	+40	+50				E	
OTTA	05	1753E	1801D	1755	N20	W34	8005	8D	1-	1	C	1755	+46	+50				F
HALE	05	1754E	1802	1755	N20	W33	8005	8D	1-	3	P	1755	+30	+30				
SACP	05	2006	2028	2015	N20	W37	8005	1-	C			1,38	1,52				16	
HALE	05	2010	2024	2012	N19	W36	8005	14	1-	2	C	2012	+50	+60				F
MCMA	05	2010	2025	2015	N21	W38	8005	1-	1	C	2015	+60	+70				EKL	
LOCK	05	2012	2031	2018	N23	W35	8005	1-	C		2018	+30	+30				20	
SACP	05	2106	2158	2123	N19	W38	8005	1-	C			+60	+66				18	
HALE	05	2113	2150	2122	N18	W37	8005	37	1-	2	C	2122	1,00	1,10				F
LOCK	05	2116	2138	2122	N17	W36	8005	1-	C		2122	+40	+40				20	
LOCK	05	2205	2215	2210	S18	W55	8012	1-	C		2210	+20	+30				20	
MANI	05	2301	2310	2304	N24	W34	8005	9	1-	2	C	2304	+30	+33				
CULG	06	0106	0129D	0118	S20	W60	8012	23D	1-	P	0118	+80	1,80					
HALE	06	0225	0311	0234	S22	W93	8012	46	1-	1	C	0234	+10	+10				
CULG	06	0637	0734D	0648	S17	W62	8012	57D	1-	C	0648	+20	+50					
UCCL	06	1119	1130		S20	W60	8012	11	1-	3							E	





# SOLAR FLARES

IIIj

OCTOBER 1965

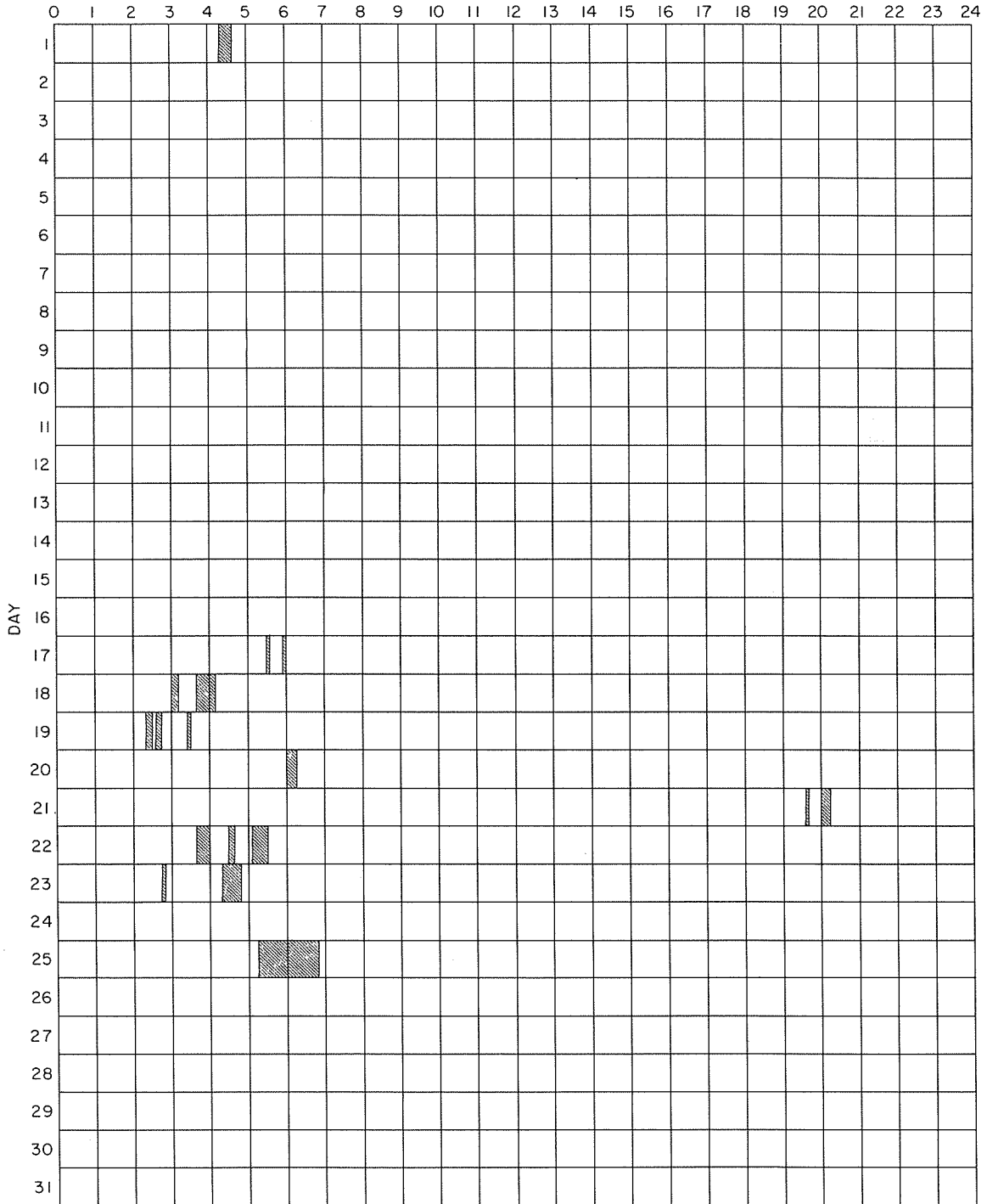
OBSERVATORY	OBSERVED UT				LOCATION				OBS.	MEASUREMENTS					REMARKS		
	DATE	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MONTH PLAGE REGION		CMP DAY	DURATION MIN.	IM. POR-TANCE	COND. TYPE	TIME UT		MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.
1965 OCT																	
ARCE	25	0940E	1000D		N25 E57			8035		20D	1- 3		0955	.16	.28		
CAPS	25	0955	1005		N25 E56			8035			1- 3		1000	.30	.50	175	GH
KANZ	25	1000E	1016D		N26 E57			8035			1- 3						
ONDR	25	1339E	1349		N24 W80			8032			1- 3		0940			1.40	CDG
MANI	26	0210	0221	0214	S13 E35			8034		11	1- 2		0214	.40	.44		
UCCL	26	0856E	0857D		S18 E30			8034		1D	1- 3						DK
LOCK	26	1607	1617	1610	N29 E08			8033			1- C		1610	.20	.20	20	
LOCK	26	2003	2053	2020	N08 W50			8034			1- C		2020	.40	.50	20	
SACP	26	2031	2045	2035	S17 E25			8034			1- C			1.18	1.25	16	
HALE	26	2033	2039	2035	S17 E24			8034		6	1- 2	C	2035	.20	.20		F
HALE	27	0324	0337U	0328	S22 E18			8034		13U	1- 1	C	0328	.40	.40		
KAND	27	0846	0917	0902	S17 E18			8034		31	1- 1		0902	1.60	2.29		
KAND	27	0917	0922D		S18 E17			8034			1- 1						
HUAN	27	1126	1134	1128	S17 E14			8034			1- 1	C	1128	.30	.30		E
UCCL	27	1126	1140		S20 E15			8034		14	1- 3						EH
WEND	27	1130E	1146		S17 E16			8034		16D	1- 1				3.00		
UCCL	27	1253	1259		N08 E50			8042		6	1- 3						E
LOCK	27	1753	1801	1756	N27 W11			8037			1- 1					20	
SACP	27	1754	1758	1756	S16 E14			8034			1- C		1756	.50	.50		
HALE	27	1754	1800	1756	S20 E12			8034		6	1- 2	C	1756	.20	.20	16	
HUAN	27	1755	1800	1756	S18 E12			8034			1- 1		1756	.20	.20		D
HUAN	28	1430	1436	1434	S17 W02			8034			1- 1		1434	.25	.25		D
UCCL	28	1518	1520		S17 W03			8034		2	1- 3						D
KANZ	28	1518E	1528		S17 W02			8034			1- 1						
HUAN	28	1745	1802	1749	N27 E24			8035			1- 1	C	1749	.80	.85		E
SACP	29	1926	1933	1929	S21 W14			8034			1- 1	C		.21	.21	15	
HALE	29	1926	1936	1930	S21 W14			8034		10	1- 2	C	1930	.40	.40		
HALE	30	0301	0313	0306	S21 W18			8034		12	1- 1	C	0306	.10	.10		
KAND	31	0558E	0728	0611	N33 E89			8051									
ADDENDA																	
1965 SEPT																	
UCCL	10	1020	1023		N27 W40			7971			1- 3						E
UCCL	10	1106E	1108D		N25 W33			7971		2D	1 3						E
UCCL	20	1353	1406		N04 E75			7992			1- 2						E
UCCL	24	0848	0916		N26 W41			7995			1- 3						E
UCCL	24	0928E	0938		N27 W35			7995			1- 3						BD
UCCL	24	1045	1046		N26 W41			7995			1- 3						D
UCCL	29	1205	1207		N20 E50			8005			1- 3						E
UCCL	29	1328	1331		N17 E50			8005			1- 3						E
UCCL	29	1339	1411		N20 E50			8005			1- 3						D
UCCL	29	1444E	1446		N20 E50			8005			1- 3						D
UCCL	29	1501	1528D	1519	N17 E50			8005		27D	1 3		1519	4.00	6.00		F



# INTERVALS OF NO FLARE PATROL OBSERVATIONS

OCTOBER 1965

HOUR-UT



Observatories included:

- |                   |              |            |                |                 |             |
|-------------------|--------------|------------|----------------|-----------------|-------------|
| Abastumani        | Catania      | Ikomasan   | Kodaikanal     | Mitaka          | Tachkent    |
| Arcetri           | Climax       | Istanbul   | Locarno        | Monte Mario     | Tortosa     |
| Bakou             | Crimee       | Izmiran    | Lockheed       | Ondrejov        | Uccle       |
| Bucharest         | Culgoora     | Kandilli   | Lvov           | Ottawa          | Voroshilov  |
| Capetown          | Haleakala    | Kanzelhöhe | Manila         | Sacramento Peak | Wendelstein |
| Capri F (German)  | Herstmonceux | Kharkov    | McMath-Hulbert | Salonique       | Wroclaw     |
| Capri S (Swedish) | Huancayo     | Kiev-Ko    | Meudon         | Siberie         | Zürich      |

# IONOSPHERIC EFFECTS OF SOLAR FLARES

III

SHORT WAVE RADIO FADEOUTS      SUDDEN PHASE ANOMALIES  
 SUDDEN COSMIC NOISE ABSORPTION      SUDDEN ENHANCEMENTS OF SIGNAL  
 SUDDEN ENHANCEMENTS OF ATMOSPHERICS      SUDDEN FREQUENCY DEVIATIONS  
 SOLAR NOISE BURSTS AT 18 Mc/s

DECEMBER 1965

DEC. 1965	UNIVERSAL TIME			TYPE SWF IMP	IMPORTANCE						BUR	WIDE SPREAD INDEX	STATIONS	KNOWN FLARE
	START	END	MAX		ABS	SCNA	SEA	SPA	SES	SFD				
05	0816	0855	0840					20				5	MA(NPG18-20), BO(GBR16-17)	
19	0102	0600	0200					94				2	BO(NAA17-94,NSS88-94, CYZ80-18)	
27	1652	1701	1654							012		1	BO(WWV10-1.2,WWV15-0.4)	1650
27	1920	2040										1	HA(WWV120)	1923E
27	1924	2030					2					3	A8 A5	
27	1927	1938	1931							012		1	BO(WWV10-1.2,WWV15-0.6)	
27	1933	2040	1935							2+		1	A3	
28	0001	0012	0002								013	1	BO(WWVH15-1.3)	0002E
28	1943	1945										5	HA BO	
29	0641	0651	0643	S 1		1						1	MA	0641E
29	0642	0705	0643									3	MA OK	
29	0831	0941	0847			1						1	ZI	0834E
29	0848	1101	0929		61							1	ZI	
29	1206	1228	1208					202				1	SL	1205
29	2007	2020	2010							006		1	BO(WWV10-0.6,WWV15-0.3)	1932
31	2229	2316	2237					47				5	MA(NPG18-47),HA(WWV120)	*

SL = Slough, Eng.  
 ZI = Zilina, Czech.

## RIOMETER EVENTS

DECEMBER 1965

GREAT WHALE RIVER

30 Mc/s

DEC. 1965	START UT	END UT	MAX UT	MAX. ABSORP. db, (tenths)	NO. OF PEAKS	DEC. 1965	START UT	END UT	MAX. UT	MAX. ABSORP. db, (tenths)	NO. OF PEAKS
1	*		1530	86	9	18	2320	1111	0447	14	6
2			1450	13	3	19	1642	2314	2146	5	3
3		0240				20	0142	0340	0226	3	1
4	0124	0430	0204	3	1	20	2241	0430	2341	3	3
4	1238	1420	1308	5	1	21	1620	0200	1652	6	3
4	1624	1950	1650	12	6						
						22	0413	0658	0452	3	1
7	0302	0844	0618	16	1	22	0936	0700	1354	24	4
9	1010	2324	1348	25	1	24	1400				
10	1830	2030	1909	9	5	25		2310	0257	15	15
11	0140	0840	0355	53	8	26	0248	2310	1356	44	9
11	1347	2032	1807	29	4						
						27	0408				
12	0012	0604	0138	22	13	28		2230	1410	62	20
12	1443	0940	0201	28	10	29	0927	2210	1749	30	6
13	1530	2242	1548	5	2	30	0246	0644	0445	18	3
18	0628	1400	0742	12	2	30	1020		1206	13	5
18	1655	1946	1706	20	2	31		1810			

\* 11 hours of missing data on December 2 make it impossible to know if the event starting at 0130 UT November 30 was continuous to December 3, 1965. Absorption events noted at Reykjavik (Iceland) would indicate this may be the case.

# SOLAR NOISE OBSERVATIONS

IVa

JANUARY 1966

PENNSYLVANIA STATE UNIVERSITY

10700, 2700, 960, 328 Mc/s

JAN 1966	FRE- QUENCY	TYPE	STARTING TIME	TIME OF MAX.	DURA- TION  MINUTES	FLUX DENSITY 10-22 <sub>wm</sub> <sup>-2</sup> (C/S)-1	
			UT	UT		PEAK	MEAN
14	10700	series of bursts	1554.0	1554.9	14.9	72.4	6.9
14	10700	group of bursts	1902.5	1903.5	45.3	15.4	11.6
16	2700	group of bursts	1817	--	146	9.3	5.6
16	10700	group of bursts	1834	--	126	20.6	10.1
16	10700	rise in base level	1852.0	1852.6	2.4	9.4	5.6
16	2700	group of bursts	1852.0	1852.6	20	32.6	5.6
16	328	rise in base level	1852.1	1852.7	1.6	11.6	5.8
17	10700	group of bursts	1406	--	302	14.0	7.0
17	10700	series of bursts	2134.2	2135.8	2.6	54.7	16.4
19	10700	group of bursts	1647.0	1647.4	12.2	5.6	2.6
22	10700	group of bursts	1537.0	1553	35.8	5.4	3.6
22	2700	rise in base level	1650.4	1652.4	7.6	2.3	0.9
25	328	rise in base level	1806.9	1807.1	1.0	66.2	33.1
25	328	rise in base level	1808.3	1810.0	2.0	165.5	86.0

SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES

JANUARY 1966

ARO-OTTAWA  
DRAO-PENTICTON

2800 Mc/s  
2700 Mc/s

	U R A N E	DESCRIPTIVE TYPE	START UT	DURATION HRS. MIN.	MEAN FLUX	MAXIMUM		REMARKS
						TIME	FLUX	
14	3	Simple 3	1725E	45D	--	1750	1.4	
14	3	Simple 3	1905	1 00D	--	1932	2.0	
15	3	Simple 3	1715	55	0.9	1740	1.8	
15	3	Simple 3	1820	1 02	0.8	1850	1.6	
15	3	Simple 3	2015	1 25	0.7	2030	1.4	
16	3	Simple 3	1550	55	0.8	1610	1.6	
16	3	Simple 3	1715	55	0.8	Indet.	1.6	
16	3	Simple 3AF	1820	2 30	4.7	1905	9.4	
	2	Simple 2	1852	6	10.0	1853.3	34.0	
17	-	Fall	1340	4 00	--	--	11.0	
17	1	Simple 1	1800.8	0.4	3.7	1801.1	7.4	
	4	Post B.I.A.	1801.3	19	1.8	--	2.4	
	1	Simple 1	1801.5	0.5	0.7	1801.8	1.4	
17	3	Simple 3	1838	27	0.5	1842	1.0	
17	3	Simple 3	1910	1 25	1.3	1945	2.6	
17	3	Simple 3A	2105	2 00D	--	2145	3.8	
	2	Simple 2	2134.5	1.5	7.0	2135.5	38.0	
18	3	Simple 3	1315E	6 40	--	1430	10.0	
18	3	Simple 3A	2043	1 25	1.3	2110	2.6	
	2	Simple 2F	2124	2.5	3.0	2126	14.0	
18		Record Incomplete	2255	30D	--	2320	80.0	
19	3	Simple 3	1358	1 15	1.7	1430	3.4	
19	3	Simple 3	1520	3 05	1.3	Indet.	2.6	
19	3	Simple 3	1828	2 07	1.3	1900	2.6	
20	1	Simple 1	1447	2	0.8	1448	1.6	
21	3	Simple 3	1830	1 20	1.0	1900	2.0	
21	3	Simple 3	2000	1 58	0.8	2005	1.0	
22	3	Simple 3A	1609	2 20	--	1611	1.8	
	1	Simple 1	1650	4D	--	1653	4.6	
23	3	Simple 3	1803	40	0.7	1825	1.4	
29	3	Simple 3A	1800	1 05	1.5	1815	3.0	
	1	Simple 1F	1803	2.5	2.5	1804.5	4.0	

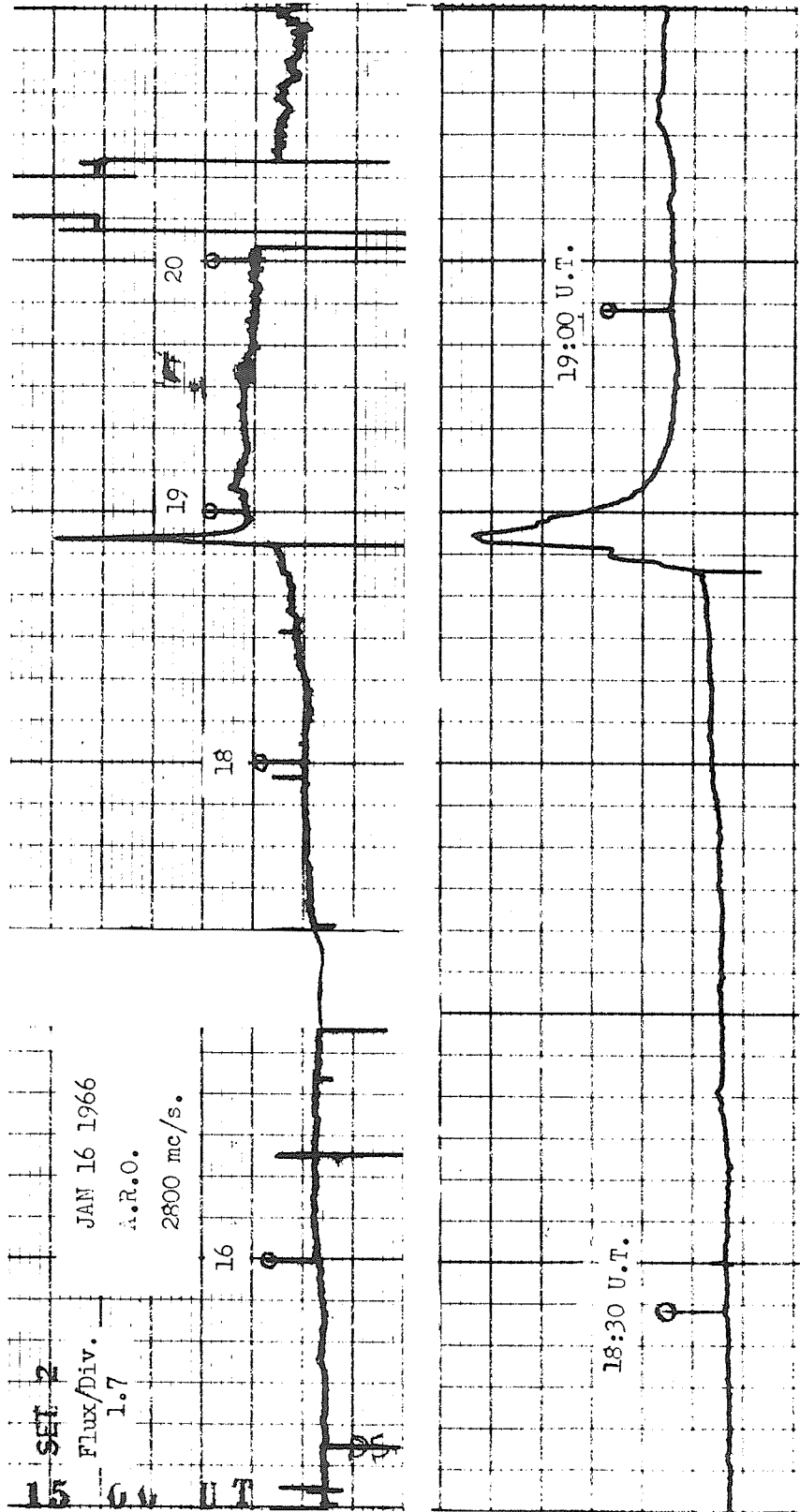
Note: January 18 -- Maximum flux reached in this period (Burst in sunset).

January 22 -- Burst incompletely recorded due to calibration.

OBSERVING PERIOD: January 1 to January 31: 1320 to 2320 UT.

SELECTED 2800 Mc/s SOLAR NOISE BURSTS  
ARO - OTTAWA, CANADA

JANUARY 1966

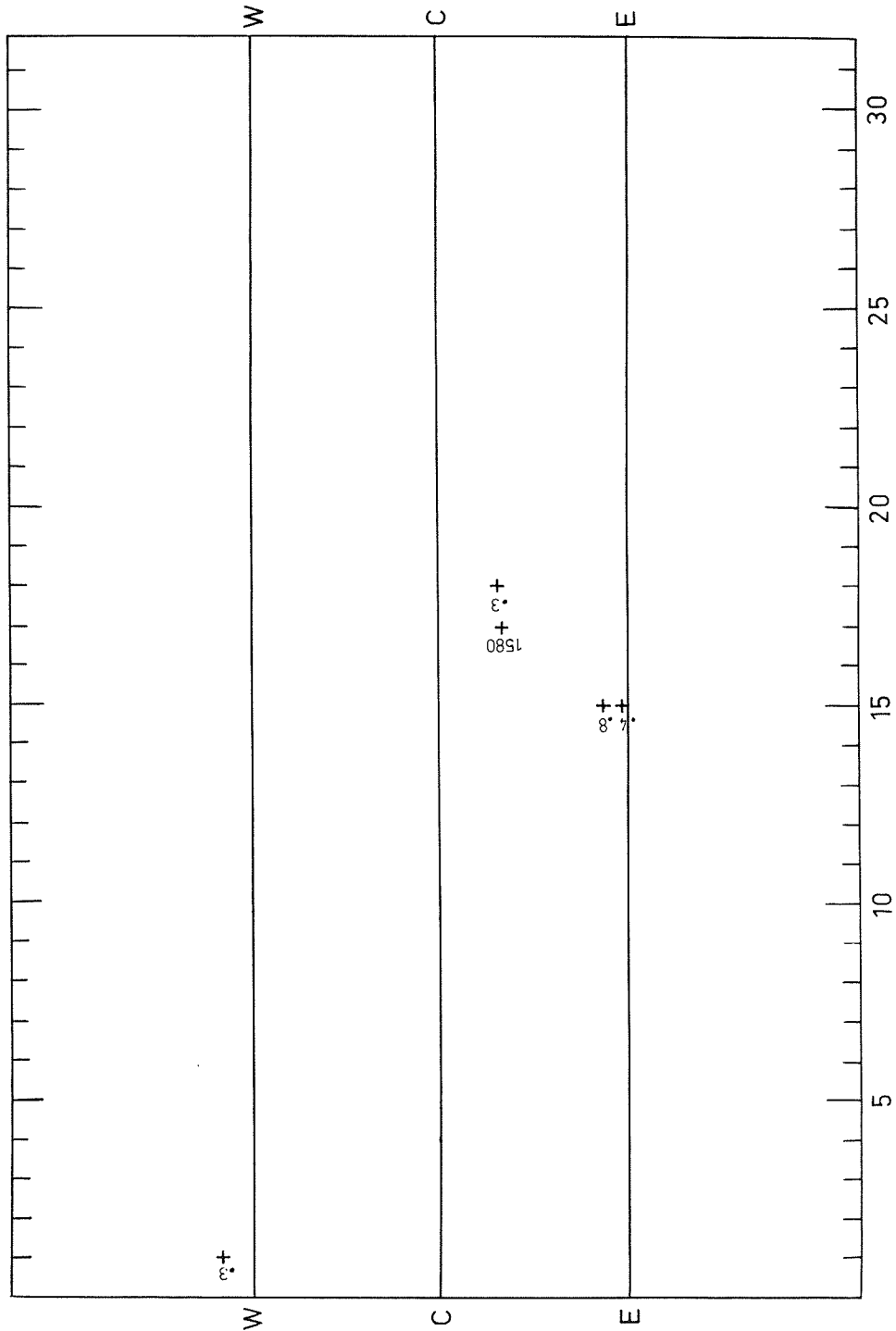


# SOLAR RADIO EMISSION INTERFEROMETRIC OBSERVATIONS

JANUARY 1966

NANÇAY

408 Mc/s



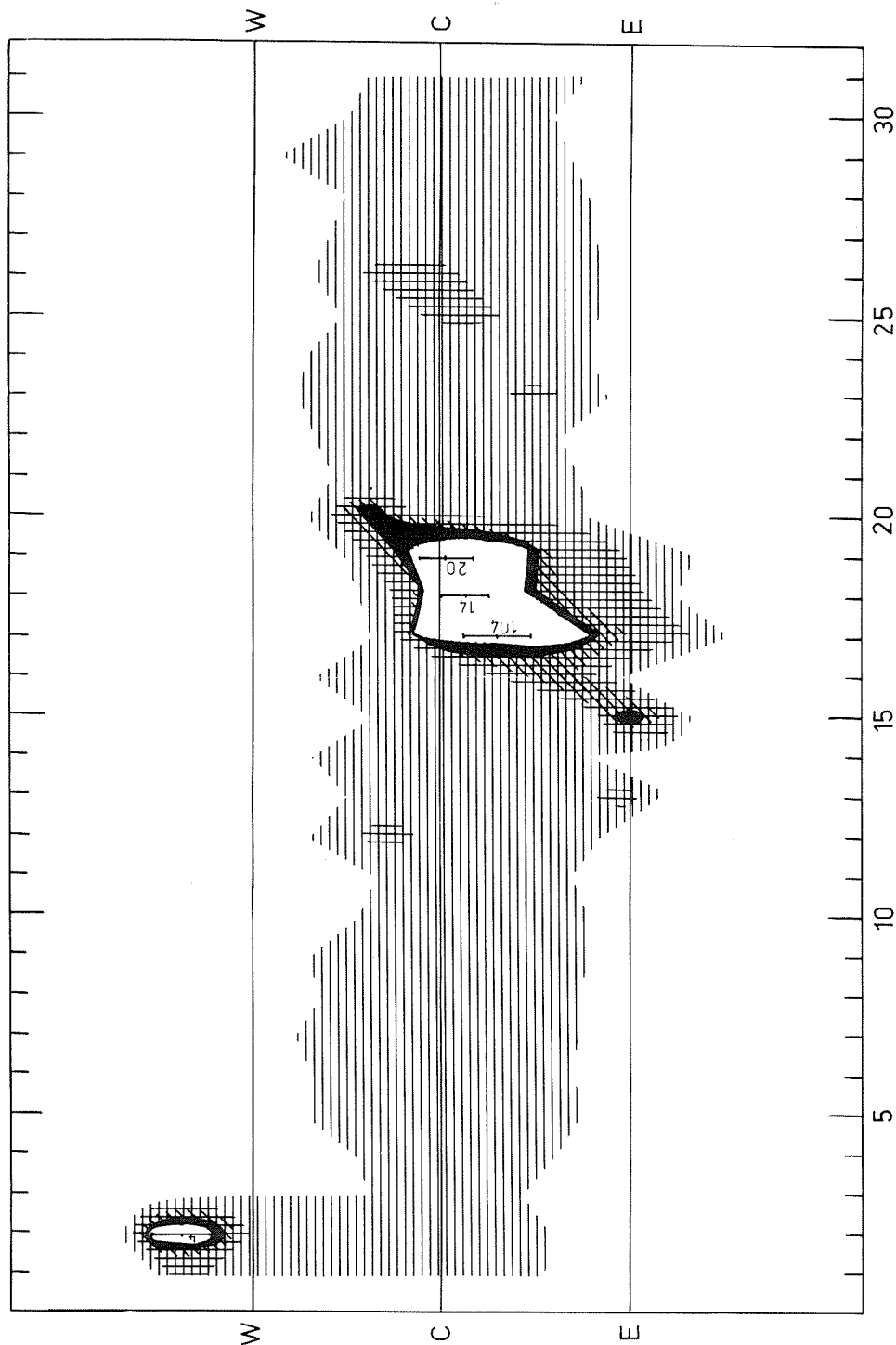
JANUARY 1966

# SOLAR RADIO EMISSION INTERFEROMETRIC OBSERVATIONS

JANUARY 1966

NANÇAY

169 Mc/s



JANUARY 1966



## SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

JANUARY 1966

ESSA BOULDER

108 Mc/s

JAN. 1966	TYPE	START UT	TIME OF MAXIMUM UT	DURATION MINUTES	INTENSITY
16	7 or 9	1810	1953	325	3
16	3	1852	1853	3.0	3
18	6	1424E	2333	563D	2
19	6	1423E	1513	566D	2
24	7	2215	2255	75	1

### NOMINAL TIMES OF OBSERVATION

JANUARY 1966

ESSA BOULDER

108 Mc/s

JAN. 1966	HOURS OF OBSERVATION U.T.	HOURS OF INTERFERENCE U.T.	JAN. 1966	HOURS OF OBSERVATION U.T.	HOURS OF INTERFERENCE U.T.
1	1427-2330	1635-1740	16	1425-2345	1725-1850
2	1427-2331		17	1424-2346	
3	1427-2332		18	1424-2347	
4	1427-2333		19	1423-2349	
5	1427-2334		20	1423-2350	
6	1427-2335	1726-1835	21	1422-2351	
7	1427-2336		22	1422-2352	
8	1427-2337		23	1421-2353	
9	1427-2338		24	1420-2354	
10	1427-2339		25	1420-2356	
11	1427-2340	1730-1820	26	1419-2357	
12	1426-2341		27	1418-2358	
13	1426-2342		28	1417-2359	
14	1426-2343		29	1417-2400	
15	1425-2344		30	1416-0002	
			31	1415-0003	

**SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES**

IVg

JANUARY 1966

HALEAKALA

107 Mc/s

JAN. 1966	TYPE	START UT	TIME OF MAXIMUM UT	DURATION MINUTES	INTENSITY
16	7 or 9	1830	1952	290	3
16	3	1852	1853	3.0	3
18	6	1655E		675D	3
18	9*	2302	2353	266	3
19	6	1655E	1720	678D	2

\*Gradual onset

Normal observing hours are on the average from 1705 to 0405 UT.

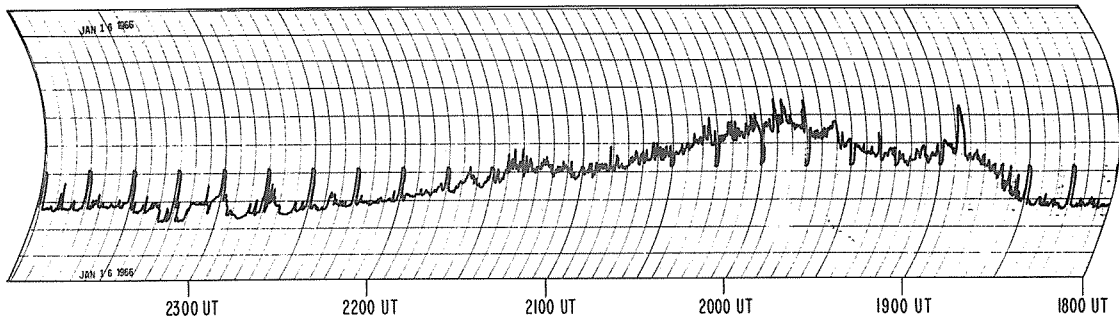
Equipment failure caused loss of record from 0130 UT January 20  
until end of month.

# SOLAR NOISE BURSTS

JANUARY 16, 1966

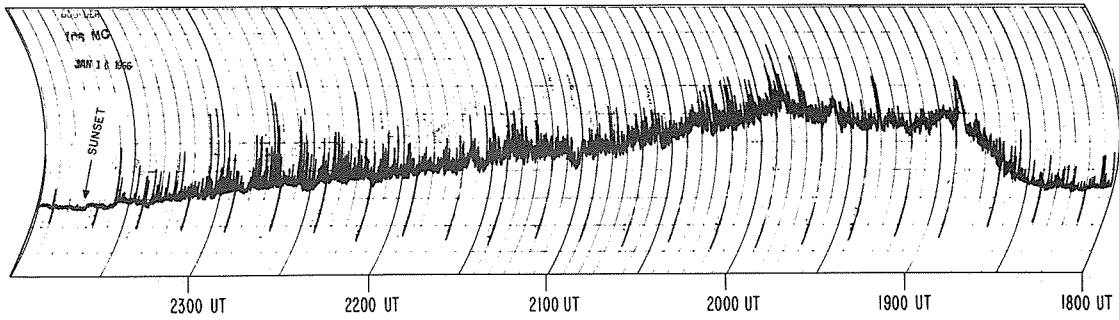
HALEAKALA

107 Mc/s



BOULDER

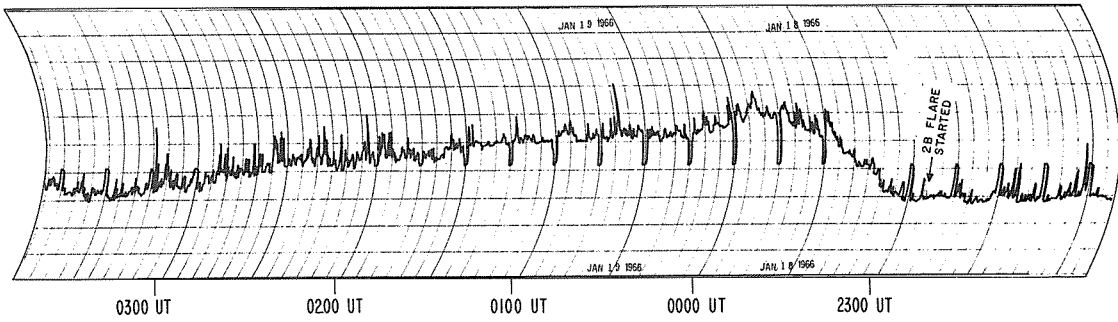
108 Mc/s



JANUARY 18, 19, 1966

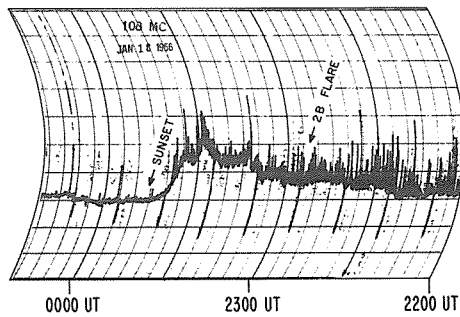
HALEAKALA

107 Mc/s



BOULDER

108 Mc/s



# SOLAR RADIO EMISSION SPECTRAL OBSERVATIONS

IVi

OCTOBER 1965 - NOVEMBER 1965

**FORT DAVIS**

**25-320 Mc/s**

1965	OBSERVING HOURS	IMPORTANT BURSTS			FREQUENCY RANGE MC.	REMARKS
		TYPE	TIMES U.T.	INT.		
<u>October</u>						
1	1324-2330					Weak I throughout day
2	1325-2330	III G	1906-1907	2	200-<25	Weak I throughout day
		III G	1910-1913	2	200-<25	
		III G	2122-2123	2	240-140	
3	1325-2330					
4	1324-2400	I	1324-2014	2	180-<25	Weak I throughout day
5	1325-2400					
6	1325-2400	I	1854-2006	1	180-110	Weak I during day
7	1325-2400					
8	1326-2400					
9	1325-2330					
10	1325-2330					
11	1325-2330					
12	1325-2330					
13	1325-2330					
14	1324-2330					
15	1325-2330					
16	1325-2330					
17	1325-1945					
18	1325-2330					
19	1325-2330					
20	1325-2330					
21	1333-2330					
22	1323-2330					1712; U-burst
23	1324-2330					
24	1323-2330					
25	1324-2330					
26	1323-2330					
27	1323-2330					
28	1324-2330					
29	1323-2330					
30	1323-2330					
31	1323-2330					
<u>November</u>						
1	1354-2330					
2	1355-2345					
3	1355-2345					
4	1355-2345					
5	1354-2345					
6	1355-2345	III G	2051-2052	2	300-110	
7	1354-2345					Weak I throughout day
8	1550-2345	I	1550- ~1800	1	200-125	Weak I throughout day
		I	2020- ~2240	1	200-100	Weak I during day
9	1350-2345					Weak I during day
10	1350-2345					Weak I during day
11	1351-2345					
12	1350-2345					
13	1351-2345					Weak I during day
14	1351-2345					
15	1350-2345					
16	1351-2345					
17	1350-2345					
18	1350-2345					
19	1351-2345					
20	1350-2345					
21	1350-2345					
22	1350-2345					
23	1351-2345					
24	1351-2345					
25	1351-2345					
26	1351-2345					
27	1351-2345					
28	1351-2345					
29	1351-2345					
30	1350-2345					

IVj

# SOLAR RADIO EMISSION SPECTRAL OBSERVATIONS

DECEMBER 1965

FORT DAVIS

25 - 320 Mc/s

1965	OBSERVING HOURS	IMPORTANT BURSTS			FREQUENCY RANGE MC.	REMARKS
		TYPE	TIMES U. T.	INT.		
<u>December</u>						
1	1351-2345					
2	1350-2345					
3	1350-2345					
4	1351-2345					
5	1350-2345					
6	1351-2345					
7	1350-2345					
8	1350-2345					
9	1351-2345					
10	1350-2345					
11	1350-2345					
12	1350-2400					
13	1351-2345					
14	1351-2345					
15	1350-2345					
16	1351-2345					
17	1351-2345					
18	1351-2345					
19	1351-2345					
20	1350-2345					
21	1350-2345					
22	1350-2345					
23	1351-2345					
24	1351-2345					
25	1350-2345					
26	1350-2345					
27	1350-2345					Weak I throughout day
28	1350-2345					Weak I during day
29	1351-2345					Weak I during day
30	1556-2345					
31	1525-2345					

**SOLAR RADIO EMISSION  
SPECTRAL OBSERVATIONS**

IVk

JANUARY 1966

UNIVERSITY OF COLORADO

7.6-41 Mc/s

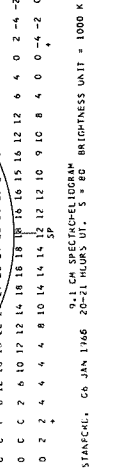
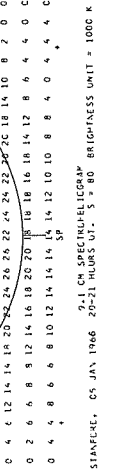
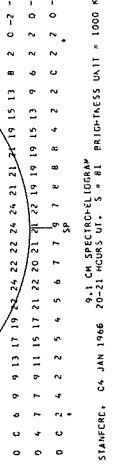
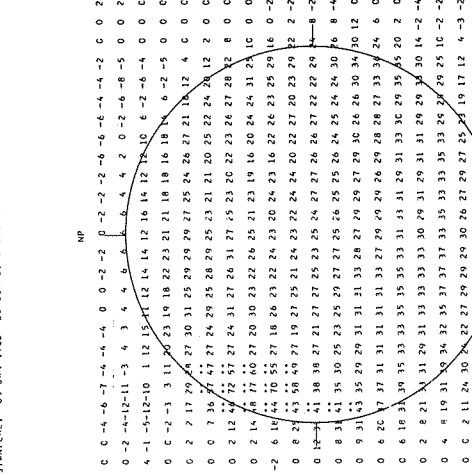
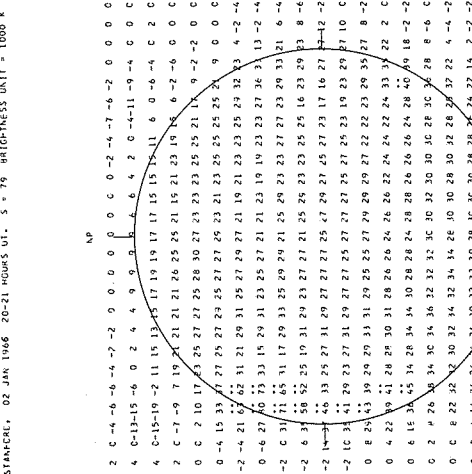
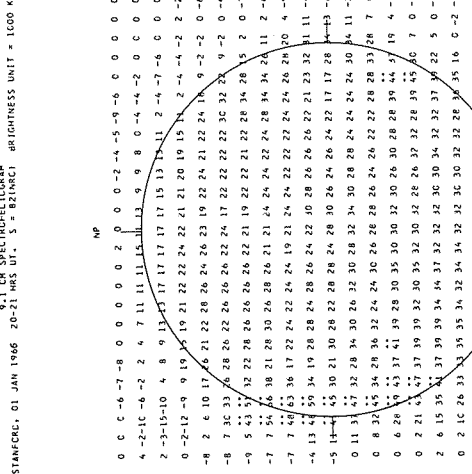
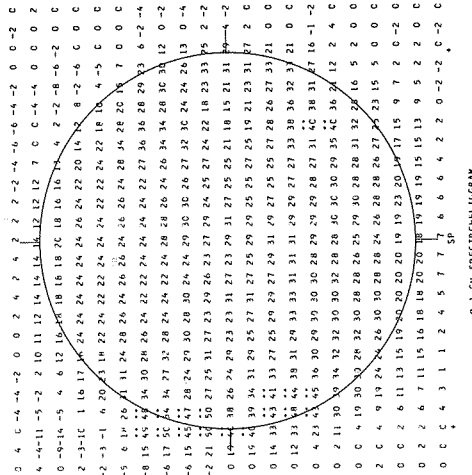
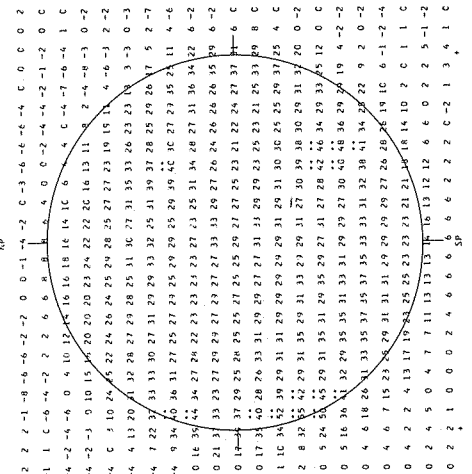
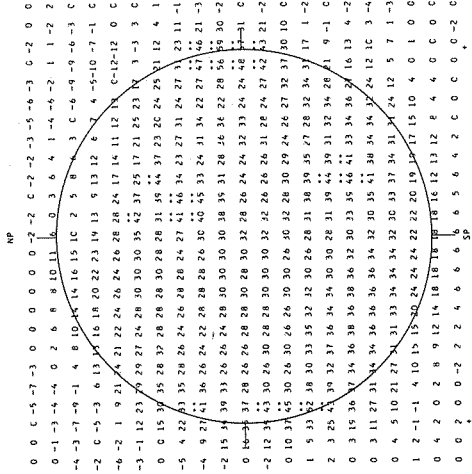
Date Jan 1966	Bursts				1966	Bursts			
	Type	Time (U.T.)	Inten- sity	Frequency Range (Mc/s)		Type	Time (U.T.)	Inten- sity	Frequency Range (Mc/s)
1	no observ.	1400-2330			24	III	1651-1651:30	1	25-41
2	III	1846:30-1847:15	1	34-41		III	1700:30-1700:45	1+	24-38
	III	2203-2203:30	1	26-39		continuum	1718-1730	1-	22-41
11	III	1738-1738:30	1	22-41		III	1908:30-1909	1+	20-41
	III	1930:15-1930:30	1-	27-41		III	1934-1934:30	1-	23-41
	no observ.	2100-2330				III	2025-2025:30	1	23-41
12	III	1456:15-1456:45	1	25-41		continuum	2040-2255	1-	22-41
	III	2155:30-2156:15	2	16-41	25	III	1505:30-1505:45	2	21-35
	III	2200:15-2201	1	26-41		III	1601:30-1602	2	16-41
	III	2210:15-2211:30	2	16-41		III	1603-1603:30	1+	18-41
	III	2212:15-2212:45	2	18-41		III	1606-1606:30	1-	16-41
13	III	1814:30-1816	3	22-41		III	1617:15-1617:30	1	23-38
	III	1928-1928:45	1	23-41		III	1620:30-1620:45	1-	28-39
14	III	2227:15-2227:45	1	26-41		III	1623-1625	1	24-37
	III	2228:15-2229	1	22-41		III	1749:15-1750:15	2	16-41
15	III	2131-2132	1	23-41		III	1755:45-1756:15	2	16-41
16	IV	1852:30-2150	3	17-41		III	1810:45-1811	1	22-41
	continuum	2150-a2400	1	21-41		III	1815:45-1816:45	2	16-41
17	III	1537-1537:30	1	21-41		continuum	1815-1824	1-	21-41
	III	1551:45-1552:15	1-	22-41		III	1825:45-1826:15	1-	26-35
	continuum	1615-1700	1-	23-41		III	1827:15-1828:15	2+	12-41
	III	1838:30-1838:45	1+	16-41		III	1905:30-1906:15	2	15-41
	III	1839-1839:15	1	16-41		continuum	1909-1921	1	21-41
	III	1844-1845	1+	16-41		III	1911:30-1912:15	2+	12-41
	III	2132:15-2132:30	1	23-35		III	2044-2044:30	1-	24-37
	continuum	2145-2155	1-	22-41		continuum	2110-2122	1-	23-41
	III	2234:45-2235	1-	22-29		III	2114:45-2117	3	12-41
	III	2304:45-2305	1+	23-41		continuum	2228-2234	1-	22-41
18	III	1544:15-1545	1-	24-41	26	III	1433-1433:15	1-	29-41
	continuum	1630-1645	1	22-41		III	1720:30-1720:45	1	22-41
	continuum	1727-1737	1	21-41		III	1759-1759:15	1-	23-35
	III	1805:30-1806	1-	27-36		III	1959:30-1959:45	1	17-30
	III	2109-2109:30	1-	25-38		III	2141:30-2142	2	14-41
19	continuum	1459-1645	1-	22-41		III	2205-2205:15	1-	23-37
	III	1858-1858:30	1-	29-41		no observ.	2220-2330		
	III	1904:15-1904:45	1-	20-41	27	III	2128:45-2129:15	1	22-37
	III	2123:30-2123:45	1	24-32	28	III	1833-1833:15	1-	24-41
21	III	2320-2320:45	1	21-41		III	1845:15-1845:30	1	23-41
	III	2337:15-2337:30	1-	31-41		III	2241:15-2241:45	1	34-41
	III	2338-2338:15	1-	30-41	29	III	1523:15-1523:45	1	31-41
24	III	1552:45-1553:30	1-	22-33	31	III	1537:15-1537:45	1+	21-41
	III	1619-1619:30	1-	26-34					
	III	1624:30-1625	1-	25-37					
	III	1640:15-1641	2	21-41					
	III	1647:15-1647:45	1	24-41					

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

JANUARY 1966

9.1 cm

STANFORD

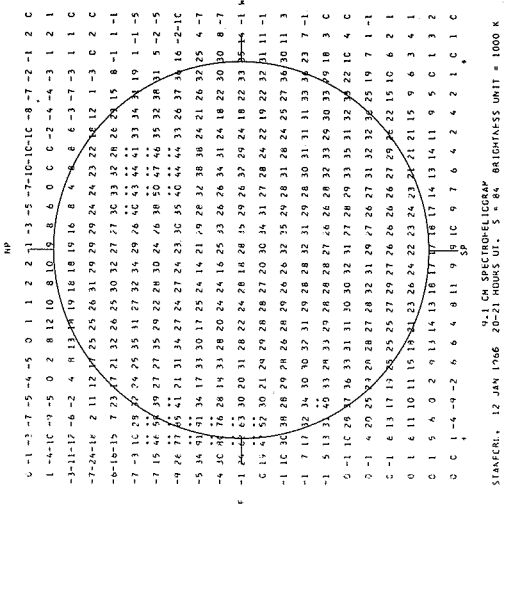
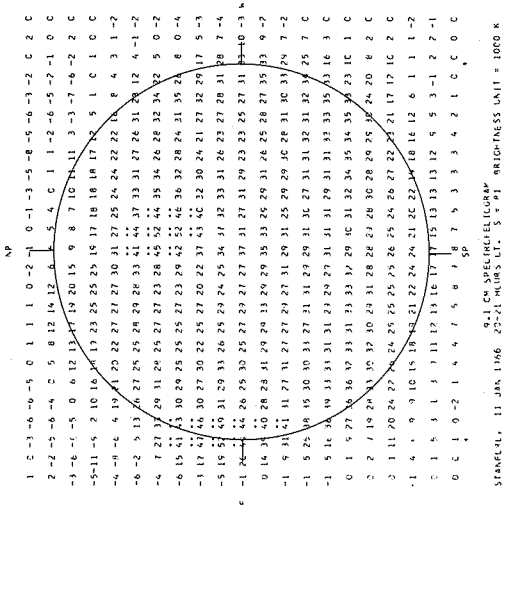
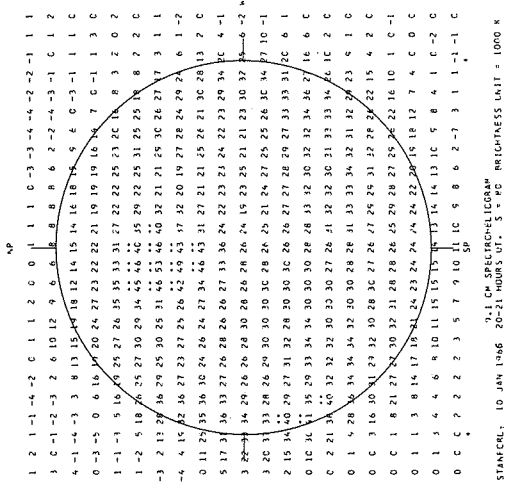
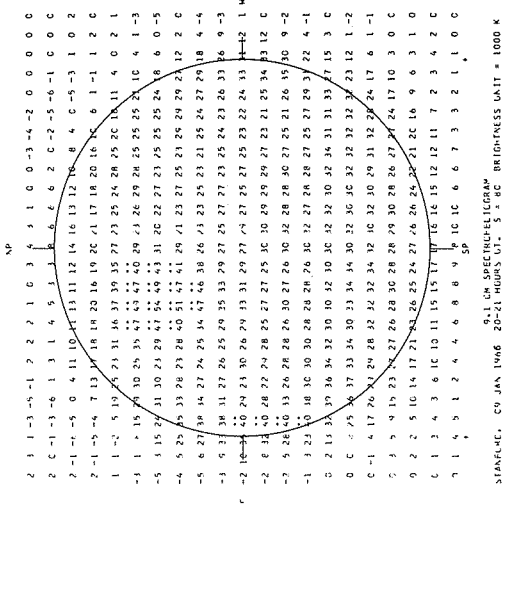
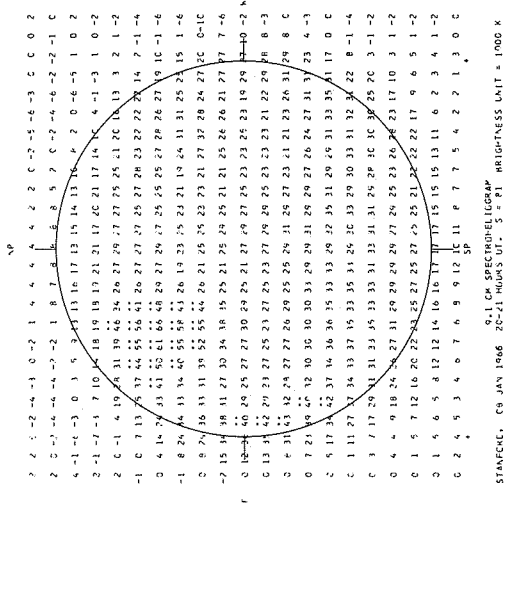
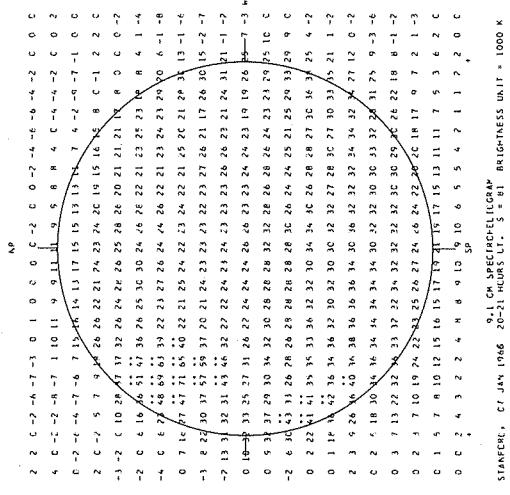


SOLAR RADIO EMISSION SPECTROHELIOGRAMS

JANUARY 1966

9.1 cm

STANFORD



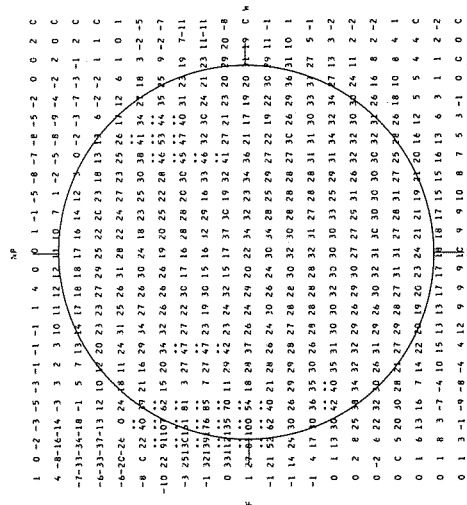
IVm



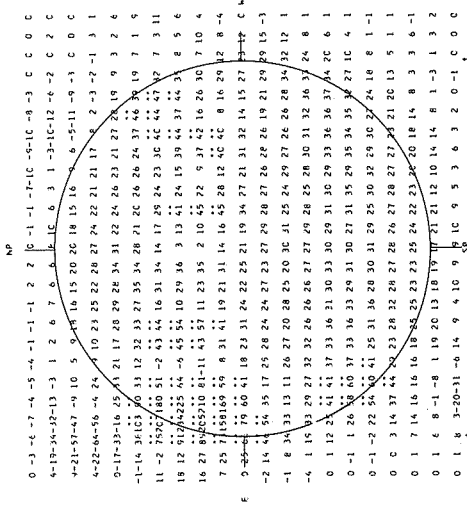
SOLAR RADIO EMISSION SPECTROHELIOGRAMS

JANUARY 1966

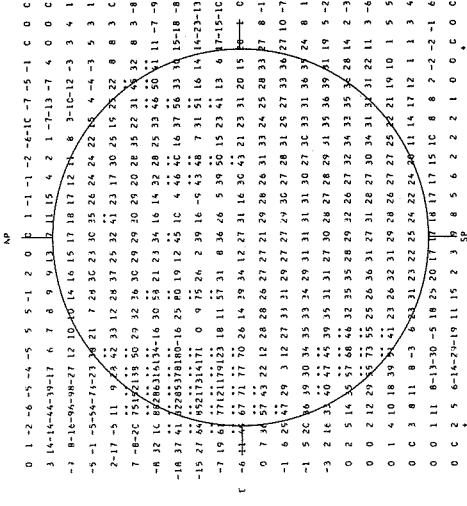
STANFORD



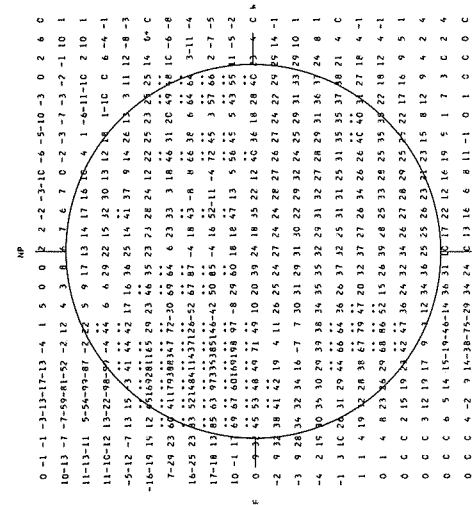
9-11 CM SPECTROHELIOGRAM STANFORD, 13 JAN 1966 20-21 HOURS UT. S = 87. BRIGHTNESS UNIT = 1000 K



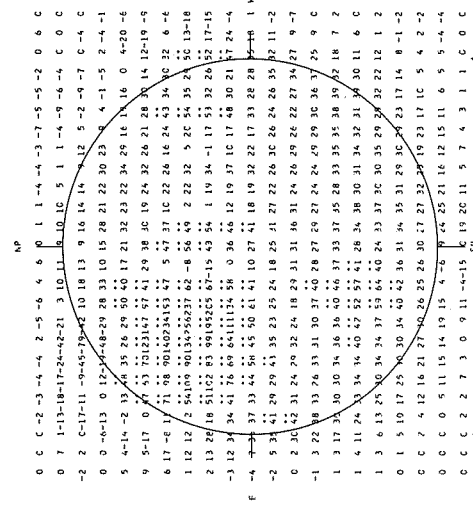
9-11 CM SPECTROHELIOGRAM STANFORD, 14 JAN 1966 20-21 HOURS UT. S = 43. BRIGHTNESS UNIT = 1000 K



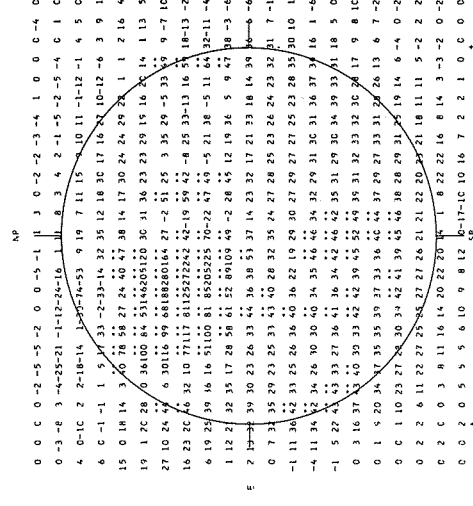
9-11 CM SPECTROHELIOGRAM STANFORD, 15 JAN 1966 20-21 HOURS UT. S = 127. BRIGHTNESS UNIT = 1000 K



9-11 CM SPECTROHELIOGRAM STANFORD, 16 JAN 1966 20-21 HOURS UT. S = 106. BRIGHTNESS UNIT = 1000 K



9-11 CM SPECTROHELIOGRAM STANFORD, 17 JAN 1966 20-21 HOURS UT. S = 107. BRIGHTNESS UNIT = 1000 K



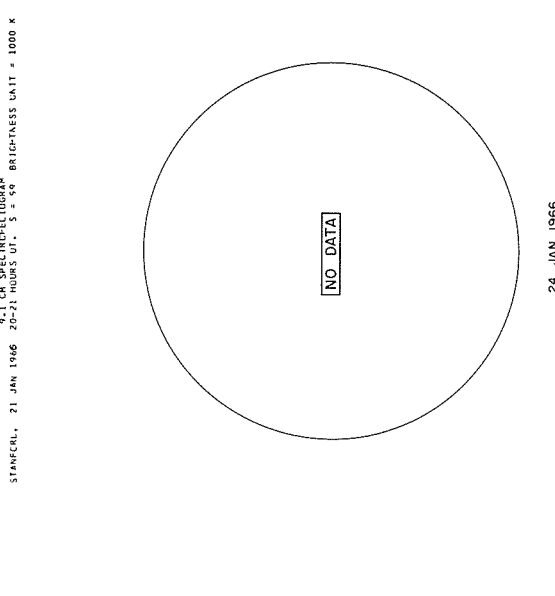
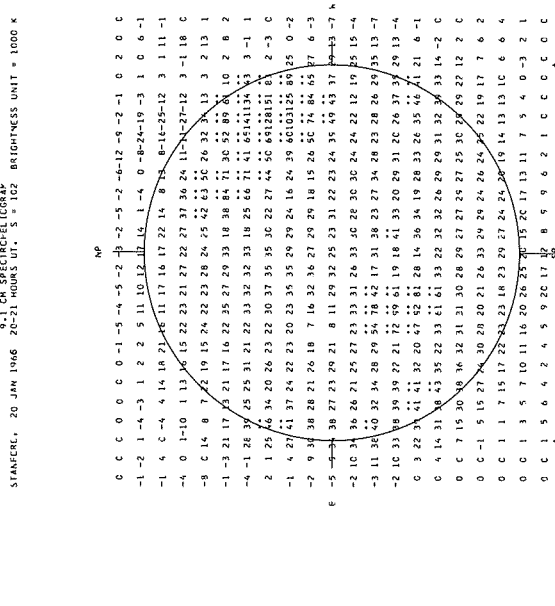
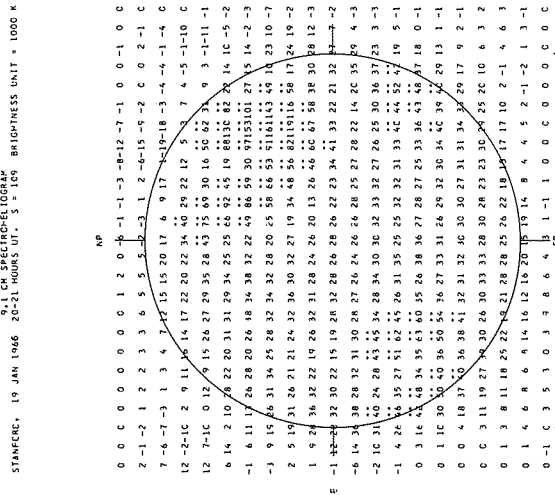
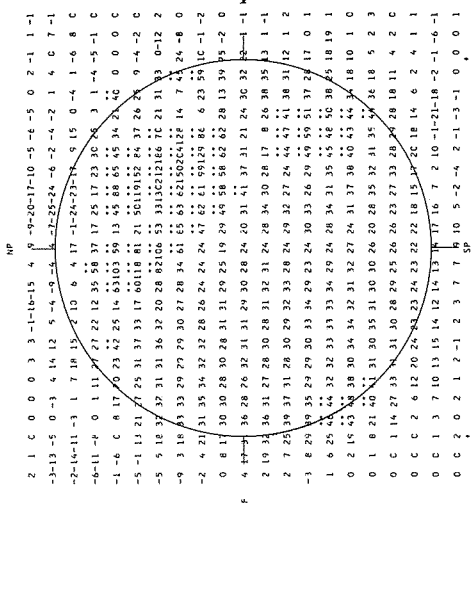
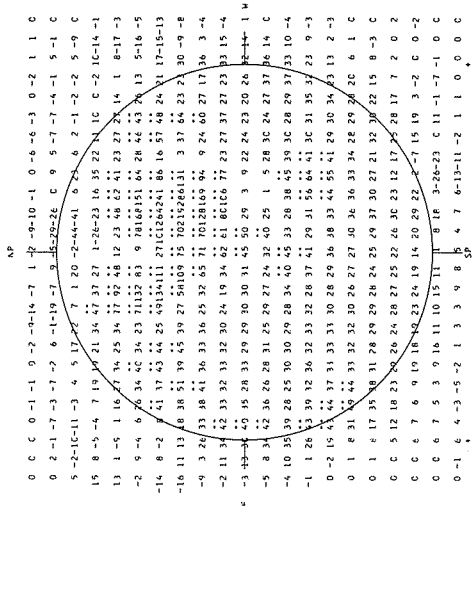
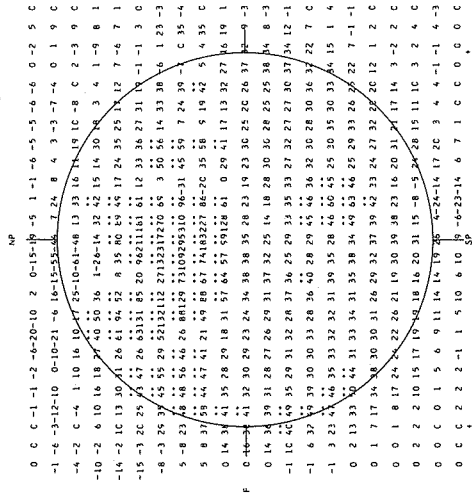
9-11 CM SPECTROHELIOGRAM STANFORD, 18 JAN 1966 20-21 HOURS UT. S = 109. BRIGHTNESS UNIT = 1000 K

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

STANFORD

JANUARY 1966

9.1 cm



STANFORD, 19 JAN 1966 20-21 HOURS UT. S = 169 BRIGHTNESS UNIT = 1000 K

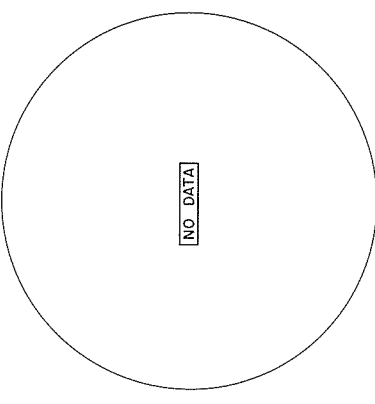
STANFORD, 20 JAN 1966 20-21 HOURS UT. S = 102 BRIGHTNESS UNIT = 1000 K

STANFORD, 21 JAN 1966 20-21 HOURS UT. S = 99 BRIGHTNESS UNIT = 1000 K

STANFORD, 22 JAN 1966 20-21 HOURS UT. S = 93 BRIGHTNESS UNIT = 1000 K

STANFORD, 23 JAN 1966 20-21 HOURS UT. S = 94 BRIGHTNESS UNIT = 1000 K

STANFORD, 24 JAN 1966 20-21 HOURS UT. S = 99 BRIGHTNESS UNIT = 1000 K



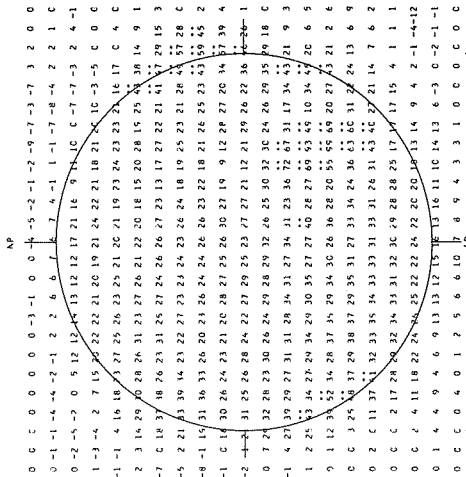
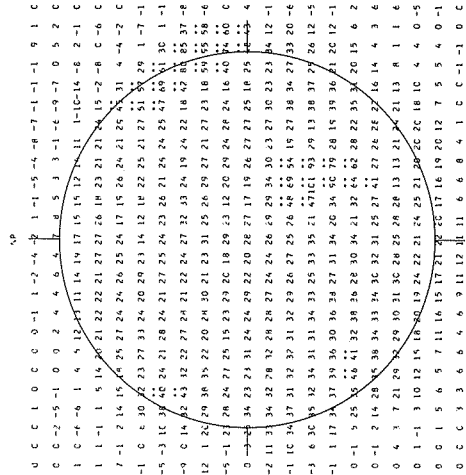
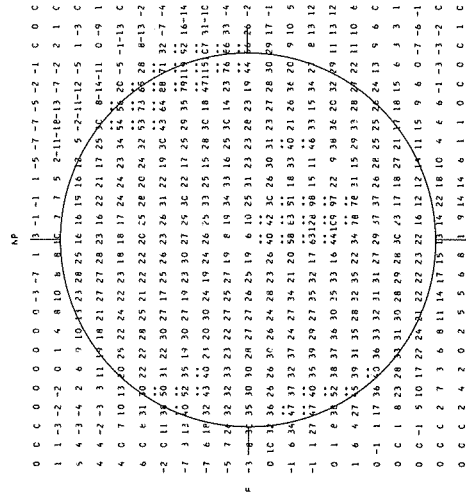
24 JAN 1966

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

STANFORD

JANUARY 1966

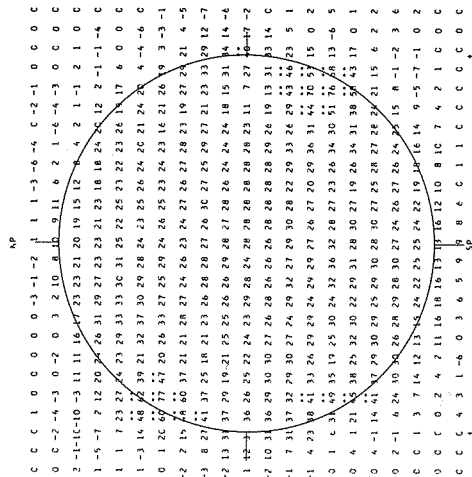
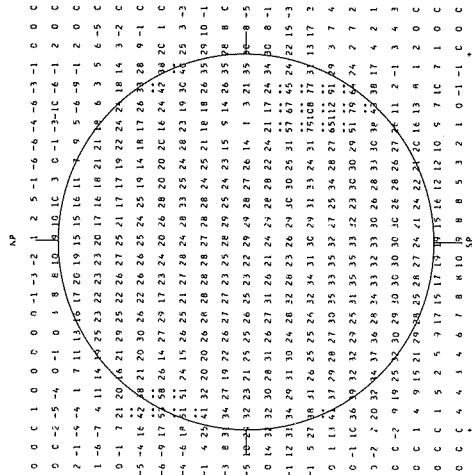
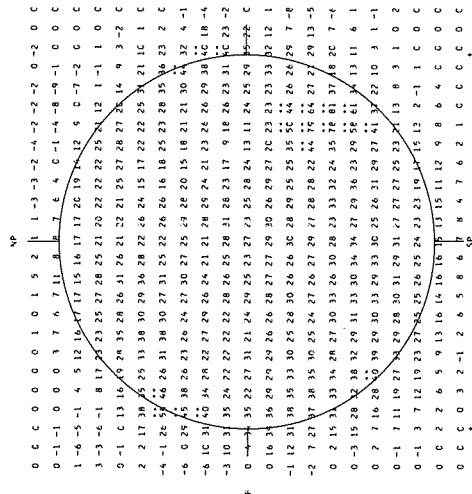
9.1 cm



STANFORD, 25 JAN 1966 20:21 HOURS UT. S = 88° BRIGHTNESS UNIT = 1000 K

STANFORD, 26 JAN 1966 20:21 HOURS UT. S = 85° BRIGHTNESS UNIT = 1000 K

STANFORD, 27 JAN 1966 20:21 HOURS UT. S = 82° BRIGHTNESS UNIT = 1000 K



STANFORD, 28 JAN 1966 20:21 HOURS UT. S = 81° BRIGHTNESS UNIT = 1000 K

STANFORD, 29 JAN 1966 20:21 HOURS UT. S = 81° BRIGHTNESS UNIT = 1000 K

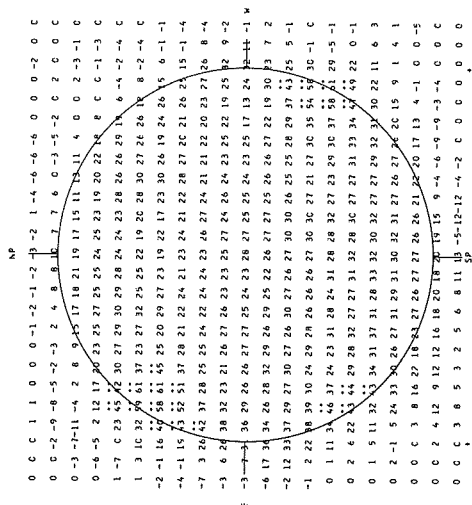
STANFORD, 30 JAN 1966 20:21 HOURS UT. S = 82° BRIGHTNESS UNIT = 1000 K

# SOLAR RADIO EMISSION SPECTROHELIOGRAMS

STANFORD

JANUARY 1966

9.1 cm

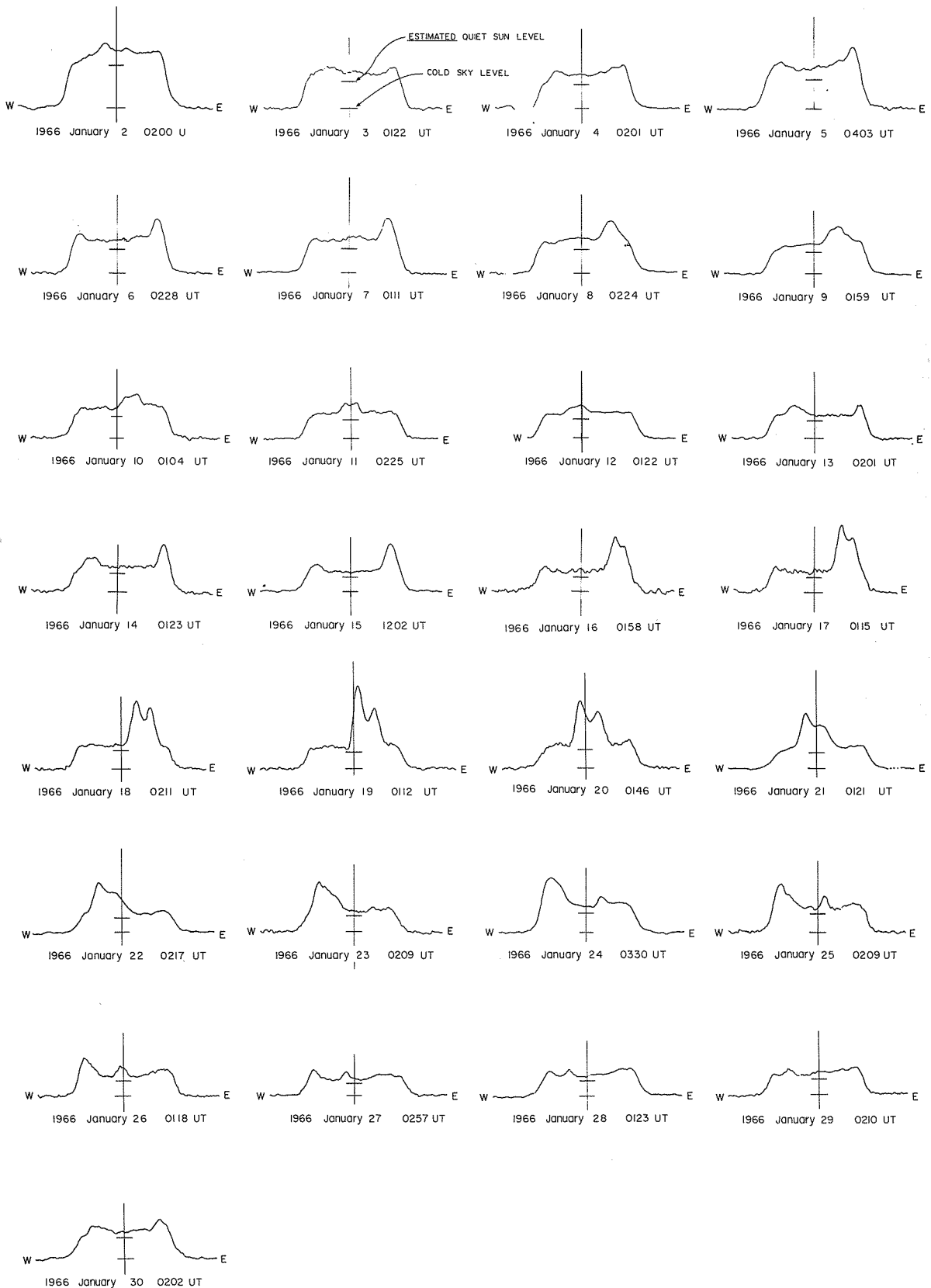


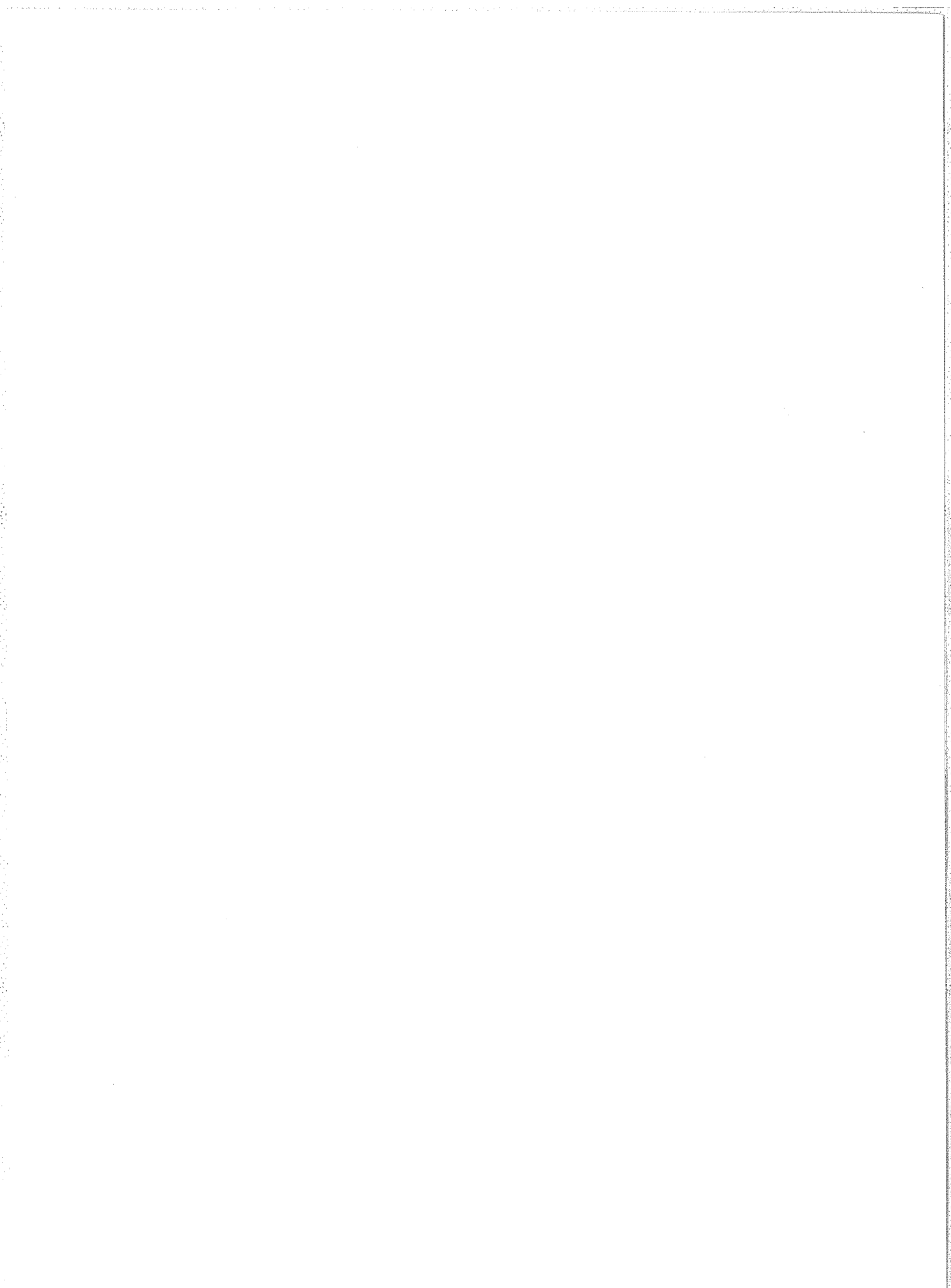
STANFORD, 31 JAN 1966 20-21 HOURS UT. S = 78 BRIGHTNESS UNIT = 1000 K

## EAST - WEST SOLAR SCANS

FLEURS, AUSTRALIA

JANUARY 1966

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



## COSMIC RAY INDICES

### (Neutron Monitors)

DECEMBER 1965

DEC. 1965	CHURCHILL	DEEP RIVER	CLIMAX	DALLAS
	DAILY AVERAGE COUNTS PER HOUR	DAILY AVERAGE COUNTS PER HOUR	DAILY AVERAGE COUNTS PER HOUR	DAILY AVERAGE COUNTS PER HOUR
1	6563.1	7082.6	3354.4	6492.0
2	6552.1	7072.9	3348.0	6468.4
3	6573.6	7096.2	3343.9	6470.4
4	6587.2	7133.3	3340.3	6479.8
5	6560.6	7120.4	3337.6	6480.3
6	6555.5	7129.1	3337.4	6485.0
7	6556.0	7117.7	3339.1	6487.6
8	6572.4	7117.1	3350.9	6493.8
9	6531.0	7084.4	3346.2	6465.1
10	6549.0	7096.0	3361.6	6461.4 (22)
11	6524.9	7071.4	3349.9	6437.1
12	6519.8	7068.3	3351.3	6473.5
13	6558.3	7100.0	3384.4	6508.7 (23)
14	6581.0	7107.2	3383.3	6489.0
15	6598.2	7127.8	3391.6	6505.5
16	6618.3	7141.7	3384.5	6498.9 (21)
17	6618.7	7154.3	3376.5	6501.0
18	6602.2	7152.6	3379.7	6493.7
19	6577.6	7145.8	3371.2	6511.0
20	6593.9	7142.7	3366.1	6500.4 (20)
21	6597.4	7142.2	3369.0	6501.5
22	6572.4	7109.7	3357.4	6455.0
23	6582.4	7104.8	3378.9	6465.8
24	6591.8	7109.1	3369.9	6481.3
25	6558.6	7080.1	3364.8	6478.4
26	6553.9	7083.0	3362.0	6477.8
27	6579.9	7080.3	3352.0	6468.3
28	6577.9	7086.0	3361.5	6473.1
29	6568.7	7074.5	3351.8	6463.4
30	-	7072.5	3356.4	6445.0
31	-	7067.3	3351.0	6433.1

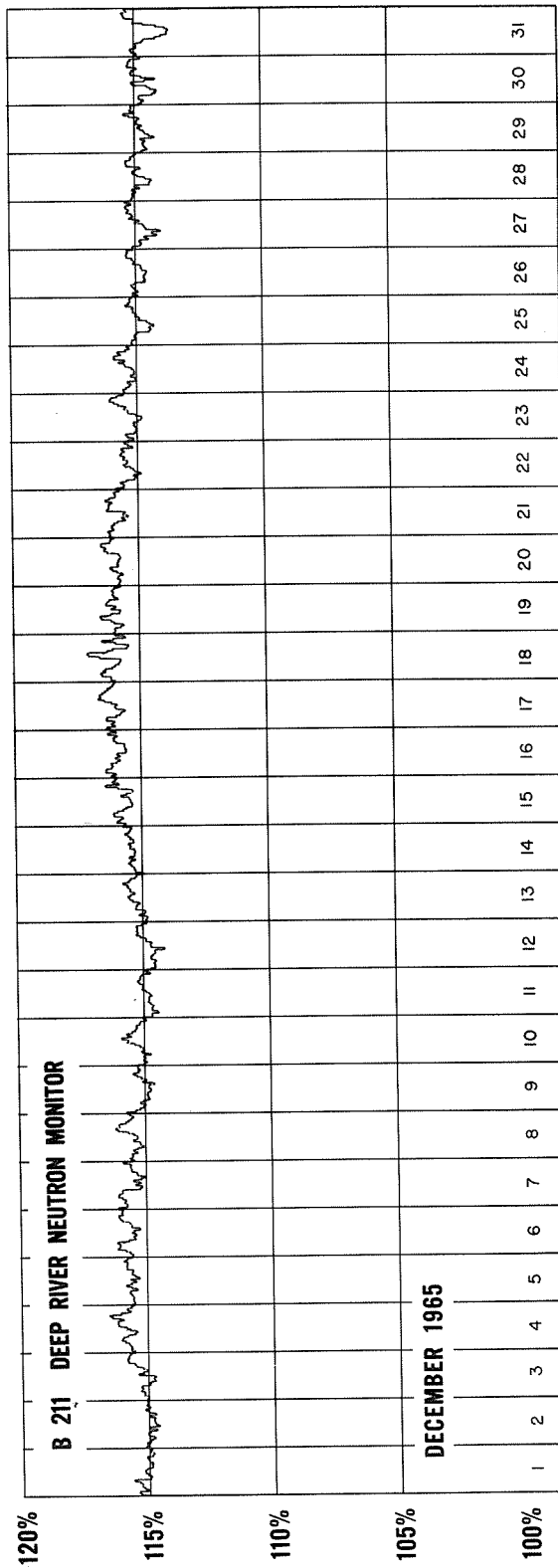
( ) Number of hours for which data are available if less than 24 (or number of section hours if less than 40 for Climax).

Churchill Super Neutron Monitor, Scaling Factor 120.

Climax IGC Station B305, Scaling Factor 128.

Dallas Super Neutron Monitor, Scaling Factor 120.

**COSMIC RAY INDICES**  
 (Pressure Corrected Hourly Totals)





## GEOMAGNETIC ACTIVITY INDICES

DECEMBER 1965

DEC.	Three-hour range indices Kp								Sum	Prel. Ci	Cp	Ap
	1	2	3	4	5	6	7	8				
1D	3-	1o	2+	2+	4+	4o	4+	4o	25o	1.2	1.0	19
2	3o	3+	2-	2+	1+	2o	2+	1+	17+	0.6	0.5	9
3q	1+	0o	0o	0+	0+	1-	0+	2-	5-	0.2	0.0	2
4	2o	1+	2-	2o	3o	3+	3+	2+	19o	0.8	0.6	11
5q	1+	1+	0+	1-	0+	0+	0o	1-	5o	0.0	0.0	3
6q	1o	0+	1-	0+	0+	1-	1o	1o	5+	0.0	0.1	3
7	1+	1o	2+	1o	1-	0o	0o	0o	6+	0.1	0.1	3
8	0+	0+	1-	0o	0+	2o	2o	2-	7+	0.3	0.1	4
9	2o	1o	1o	2o	3+	0+	1o	1o	12-	0.4	0.3	6
10	2-	0+	0+	1-	2-	3-	3o	4+	15-	0.7	0.5	10
11	3-	3+	2+	1+	1o	3-	2+	3o	19-	0.8	0.6	10
12	3o	3-	1+	2-	3-	2o	3o	1o	17+	0.7	0.5	10
13	2+	3-	2+	1o	2o	2-	1-	0+	13o	0.3	0.3	6
14Q	0o	1o	0o	0+	1-	1-	0+	1+	4+	0.2	0.0	2
15Q	1-	0+	0o	0+	0+	0o	0o	0o	2-	0.0	0.0	1
16Q	1-	0o	0o	0+	0+	0o	0o	0o	1+	0.0	0.0	1
17Q	0o	0o	0o	1-	0+	1o	0o	1-	3-	0.0	0.0	2
18D	0o	1-	3-	2+	3-	4-	4-	3-	18+	1.1	0.7	12
19	4+	1-	2-	0+	0o	1-	2-	2-	11o	0.6	0.4	7
20	3-	0+	0+	0o	0+	1o	2o	2o	9-	0.4	0.2	4
21Q	0+	1o	1-	0+	0+	2-	0o	0o	4+	0.1	0.0	2
22	1-	2-	1+	2+	2+	2o	1-	2o	13o	0.5	0.3	6
23q	3-	1-	0+	0+	0o	0o	0+	0o	4+	0.0	0.0	3
24	1+	1o	0+	1-	1+	1o	3-	5-	13o	0.8	0.5	9
25D	4-	4+	3-	2-	2-	2+	1-	2o	19o	0.7	0.7	12
26D	2-	2-	4-	5-	4o	3+	2+	4-	25o	1.2	1.0	19
27	2-	2+	2o	3o	2+	2-	3-	3o	19-	0.6	0.6	10
28D	3o	3o	3+	2+	3o	4o	3o	3o	25-	0.9	0.9	16
29	1+	2-	1o	2o	2-	3+	2o	2+	15+	0.6	0.4	8
30	2-	3-	1-	2-	2+	2-	1o	0o	12-	0.2	0.3	6
31q	0o	1+	1o	1+	1-	1-	1o	0+	6+	0.1	0.1	3
Means:										0.45	0.35	7
No. of days :										31	31	31

Errata: The Ci value for November 29, 1965 which was illegible in CRPL-FB-257 should read 01.

DAILY AVERAGE INDICES, Ap

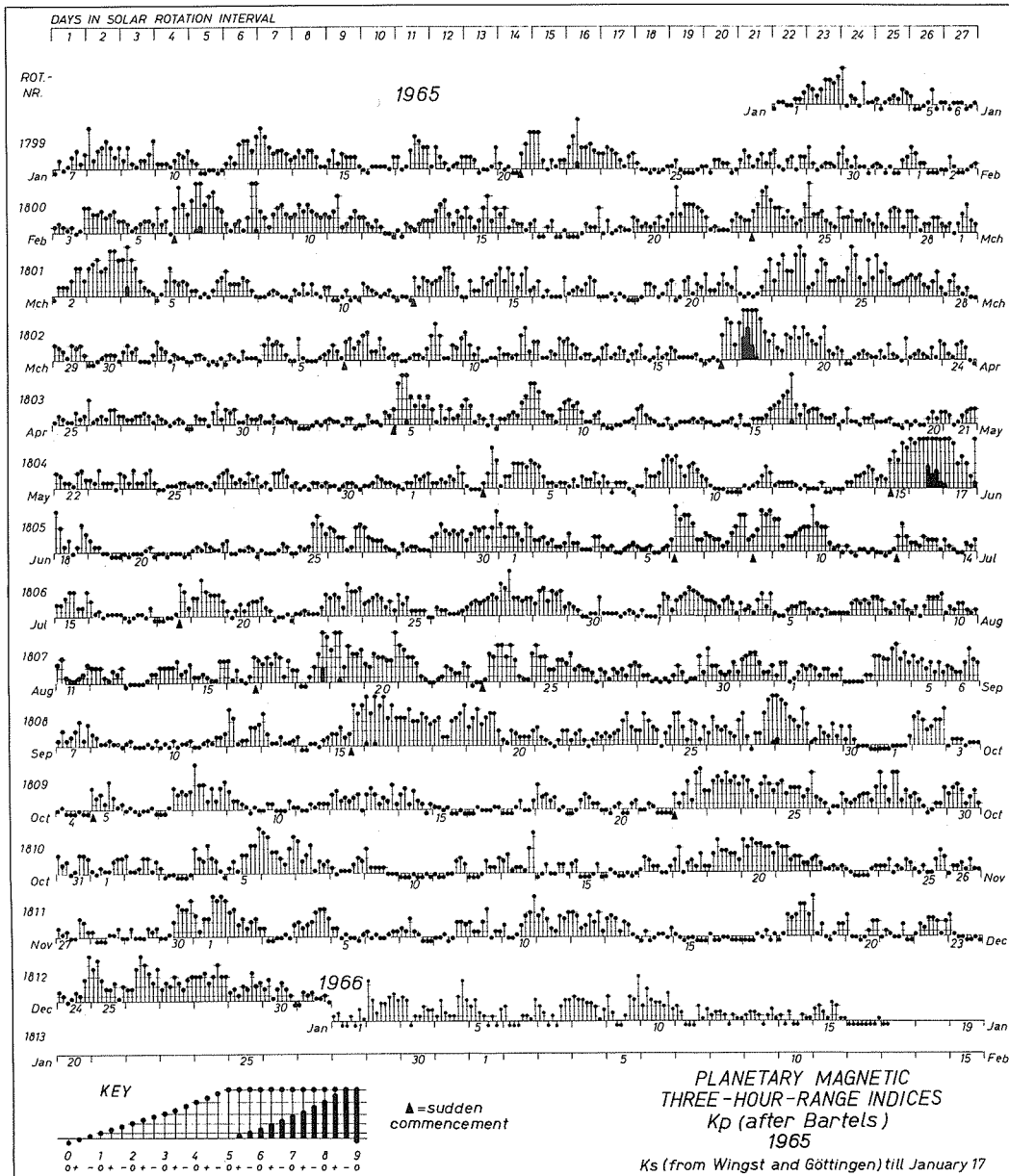
VIb

1965

1965

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
1	3	4	7	4	4	5	13	5	6	2	4	19
2	11	2	8	2	2	6	5	11	5	16	5	9
3	7	5	26	3	3	9	5	6	4	3	1	2
4	4	10	21	6	4	11	3	7	16	1	8	11
5	2	5	7	4	26	6	3	4	9	8	13	3
6	2	14	4	7	6	5	19	3	9	2	17	3
7	4	31	7	8	5	3	8	6	7	6	9	3
8	13	17	2	4	11	9	21	6	4	15	4	4
9	7	10	4	11	12	12	12	7	3	4	5	6
10	5	12	2	6	7	2	14	4	3	3	0	10
11	2	10	4	8	2	5	2	6	4	3	3	10
12	12	4	4	7	4	3	5	6	11	6	3	10
13	13	4	10	5	3	2	5	3	6	8	10	6
14	6	11	6	5	3	6	4	8	3	6	3	2
15	6	12	12	4	4	19	10	6	15	2	2	1
16	3	6	4	4	18	73	4	7	35	2	1	1
17	10	2	5	11	5	34	2	11	18	2	4	2
18	5	4	2	68	4	11	6	21	16	6	6	12
19	4	4	4	14	2	2	13	27	17	4	10	7
20	7	5	5	10	4	2	5	17	5	2	17	4
21	10	17	8	3	5	2	3	12	5	1	10	2
22	20	5	8	5	6	4	4	5	5	14	4	6
23	7	18	25	5	5	3	13	9	10	19	2	3
24	2	11	12	5	6	3	7	14	10	14	4	9
25	2	14	20	4	3	11	6	13	12	11	5	12
26	3	7	13	6	4	10	4	7	9	7	4	19
27	6	9	9	5	6	6	8	6	20	6	4	10
28	5	6	5	3	5	3	15	3	27	15	2	16
29	5		6	5	3	11	12	6	7	5	3	8
30	4		2	5	3	14	4	8	3	8	12	6
31	3		4		4		3	11		6		3
Mean:	6	9	8	8	6	10	8	9	10	7	6	7

GEOMAGNETIC ACTIVITY INDICES



R	Rot-Nr.	1 <sup>st</sup> day	C9
123 211 223	19	J 9	66 665 45 12 32 674
431 227 211	63	F 5	7 556 52 211 412
232 211 211	M 4		65 753 2 3 3
224 444 211	1775	M 31	56 542 2 234 411 432 32
122 444 553	76	A 27	566 45 13 445 53
223 225 642	77	M 24	21 245 323 3 47 32 111 12 253 32 15
122 221 112	78	J 20	32 15 643 23 4 553 343
122 244 421	79	J 17	42 63 563 44 65 442 333 2 12 126
123 222 232	1780	A 13	2 26 676 252 224 643 442 212 214 425 427
236 552 211	81	S 9	425 427 667 164 787 576 675 3 12 34 25
233 433 434	82	O 6	134 25 666 44 114 2 742 76 2 44 36
321 112 232	83	N 2	44 36 766 44 114 2 254 25 366
222 221 111	84	N 29	25 366 654 42 2 321 533 42 13 41
111 222 221	1785	O 26	13 41 75 52 115 521 642 13 41
112 111 112	19	J 22	13 41 253 632 33 645 42 462 232 36 454
133 321 113	F 18		36 454 2 462 22 764 352 24 233 23 23
212 211 111	64	M 16	23 23 665 43 6 76 533 134 214 11 224
111 211 111	1789	A 12	11 224 554 2 33 664 353 12 55 56
112 111 111	1790	M 9	55 56 652 11 56 321 227
112 221 111	91	J 5	11 227 632 11 21 43 113 113 52 115
111 111 111	92	J 2	52 115 543 11 2 564 212 442 11
111 112 211	93	J 29	442 11 64 3 2 64 232 232
111 111 211	94	A 25	232 11 352 22 365 42 42 72 211
111 112 111	95	S 21	72 21 6 52 365 344 4 422 363 4
111 111 111	96	O 18	363 4 115 4 3 12 21 253 12 32 11
112 111 111	97	N 14	32 11 5 3 3 32 11 3 11 22 24
112 222 222	1798	D 11	12 24 4 2 32 42 32 42 3
211 112 221	19	J 7	142 13 3 11 3 123 52 31 464
122 211 122	F 3		12 464 333 3 3 11 4 5 342 211 65 111
121 112 111	65	M 2	65 11 12 13 122 635 42 11
111 111 111	1802	M 29	11 11 2 2 3 12 11 37 43 11 11 11
111 112 55	03	A 25	11 11 6 133 21 5 11 11 11
42 132 111	04	M 22	11 11 23 11 2 3 11 576 3 11 11
211 221 232	05	J 18	3 11 33 13 43 11 525 34 11 2 13 1
111 111 112	06	J 15	2 11 3 1 4 21 243 1 3 11 11 11 212
111 111 222	07	A 11	1 1 2 2 3 56 43 243 2 123 11 422 2 11 3
221 111 235	08	S 7	2 11 3 1 4 654 4 11 22 325 6 1 4 2 14
411 111 221	09	O 4	2 1 4 1 2 1 1 454 3 1 4 12 11 24
213 311 221	1810	O 31	11 24 4 2 1 2 1 34 2 1 1 352
111 111 221	11	N 27	11 352 3 1 23 21 32 1 235 342
14	12	D 24	235 342 1 4 13 11 233 11 11
	19	J 20	preliminary
	66	F 16	
		M 15	

Symbol	1	2	3	4	5	6	7	8	■	
R =	0	1	16	31	46	61	81	101	131	171
		15	30	45	60	80	100	130	170	
C9 =	0	1	2	3	4	5	6	7	8	9
Cp =	0.0	0.2	0.4	0.6	0.8	1.0	1.2	1.5	1.9	2.0
		0.1	0.3	0.5	0.7	0.9	1.1	1.4	1.8	2.5
Ap =	0	5	8	11	14	18	25	41	92	141
	4	7	10	13	17	24	40	91	140	400

### DAILY GEOMAGNETIC CHARACTER FIGURES C9 AND SUNSPOT NUMBERS R

For explanation and previous years see J. Bartels:  
 „Abhandlungen der Akademie der Wissenschaften, Göttingen,  
 Beiträge zum I.G.J., Heft 3 (1958)“  
 (may be requested from Geophysikalisches Institut,  
 Herzberger Landstrasse 180, 34 Göttingen (Germany).)

CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

NORTH ATLANTIC, NORTH PACIFIC

DECEMBER 1965

DEC. 1965	WHOLE DAY INDICES			ADVANCE FORECASTS (Jc-REPORTS) FOR WHOLE DAY	NORTH ATLANTIC				NORTH PACIFIC				GEOMAGNETIC INDICES									
	NORTH ATLANTIC	NORTH PACIFIC	AVERAGE HIGH LATITUDE		6-HOURLY QUALITY FIGURES		SHORT-TERM FORECASTS ISSUED ABOUT ONE HOUR IN ADVANCE OF:		6-HOURLY QUALITY FIGURES		K <sub>FR</sub>		A <sub>FR</sub>		K <sub>SI</sub>		A <sub>SI</sub>					
					00 TO 06	06 TO 12	12 TO 18	18 TO 24	00 TO 06	06 TO 12	12 TO 18	18 TO 24	00 TO 06	06 TO 12	12 TO 18	18 TO 24	HALF DAY (1)	HALF DAY (2)	OB-SERVED	PRE-DICTED	HALF DAY (1)	HALF DAY (2)
01	6+	6	6	6	6+	6-	7-	6+	6	6	7	6	6	6	6	2	(4)	15	5	2	(4)	19
02	6-	6	6	5	6-	5+	7-	6-	6	5	6	6	7	6	7	3	1	8	<u>11</u>	2	1	8
03	6-	6	6	5	6o	4+	7-	6+	6	6	7	6	6	6	6	0	0	1	11	0	0	0
04	6o	6	6	6	6-	6-	6+	6+	6	5	7	6	6	6	6	1	3	8	7	0	2	5
05	6o	6	6	6	6o	5+	7-	6+	6	6	7	7	6	6	6	1	1	2	5	1	0	1
06	6+	6	6	6	6o	6-	7-	6+	6	6	7	7	6	6	6	1	1	2	3	0	0	1
07	6o	7	7	6	6-	5o	7-	6+	6	6	7	7	7	6	6	1	0	2	3	1	0	2
08	6+	6	6	6	6-	6+	7-	7-	6	5	7	6	6	6	6	1	2	5	3	0	1	2
09	6+	6	6	6	6+	6o	7-	7-	6	6	7	6	6	6	6	2	1	5	7	1	1	3
10	6o	6	6	6	6o	6-	7-	6o	6	6	7	7	6	6	6	0	3	6	<u>7</u>	0	2	4
11	6+	6	6	6	6o	6o	7-	6+	5	5	7	6	6	6	5	2	2	8	4	2	2	6
12	6o	6	6	6	6o	5o	7-	7-	5	5	7	7	6	6	6	2	1	6	2	1	2	5
13	6o	6	6	6	6o	5+	7-	6o	5	5	7	7	6	6	7	2	0	3	2	2	1	7
14	6o	6	6	6	6-	5+	7-	7-	6	5	7	7	6	6	6	0	0	1	5	0	0	1
15	6o	6	6	6	6-	6-	7-	6+	6	5	7	7	6	6	6	0	0	0	7	0	0	0
16	6o	6	6	6	5o	6-	7-	7-	6	5	7	7	6	6	6	0	0	0	<u>7</u>	0	0	0
17	6o	6	6	6	6o	6-	7-	7-	6	6	7	7	6	6	6	0	1	1	11	0	0	1
18	6+	6	6	6	6+	6-	7-	7-	6	6	7	6	6	6	6	2	3	10	11	1	2	7
19	6+	6	6	6	6-	5+	7-	7-	6	5	7	7	6	6	6	2	1	7	8	1	1	3
20	6o	6	6	6	6-	5+	7-	6o	6	5	7	7	6	6	7	1	1	2	5	0	1	2
21	6o	6	6	6	5+	6-	7-	6+	6	5	7	6	6	6	5	1	0	2	3	0	0	1
22	6o	6	6	6	5+	6-	7-	7-	6	5	7	7	6	6	6	2	2	6	3	1	1	4
23	6+	6	6	6	6o	6-	7-	7-	6	6	7	7	6	7	6	1	0	1	<u>5</u>	0	0	1
24	6+	6	6	6	6o	6-	7-	7-	6	6	7	7	6	6	6	1	3	10	<u>3</u>	0	2	4
25	6+	6	6	6	6+	5+	7-	7-	6	5	7	6	6	6	6	3	1	10	4	2	1	7
26	6o	5	6	6	6o	6-	6+	7-	6	5	6	6	6	5	5	3	3	15	5	3	3	19
27	6o	6	6	6	6o	5+	7-	6+	6	6	7	6	6	6	6	2	2	9	7	2	2	8
28	6+	6	6	6	6+	6-	6+	7-	6	6	7	6	6	6	5	3	3	13	11	2	2	11
29	6o	6	6	6	6-	6-	7-	6+	6	6	7	7	6	6	6	2	2	5	7	2	2	5
30	6o	6	6	6	5o	6o	7-	7-	6	5	7	6	6	6	6	2	1	5	<u>12</u>	2	1	7
31	6o	6	6	5	6-	5+	7-	6+	6	6	6	6	6	6	6	1	0	2	27	1	0	2
QUIET				P	27					24	17	27	16									
				S	4					7	13	4	15									
				U	0					0	0	0	0									
				F	0					0	0	0	0									
DISTURBED				P	0					0	0	0	0									
				S	0					0	0	0	0									
				U	0					0	0	0	0									
				F	0					0	1	0	0									

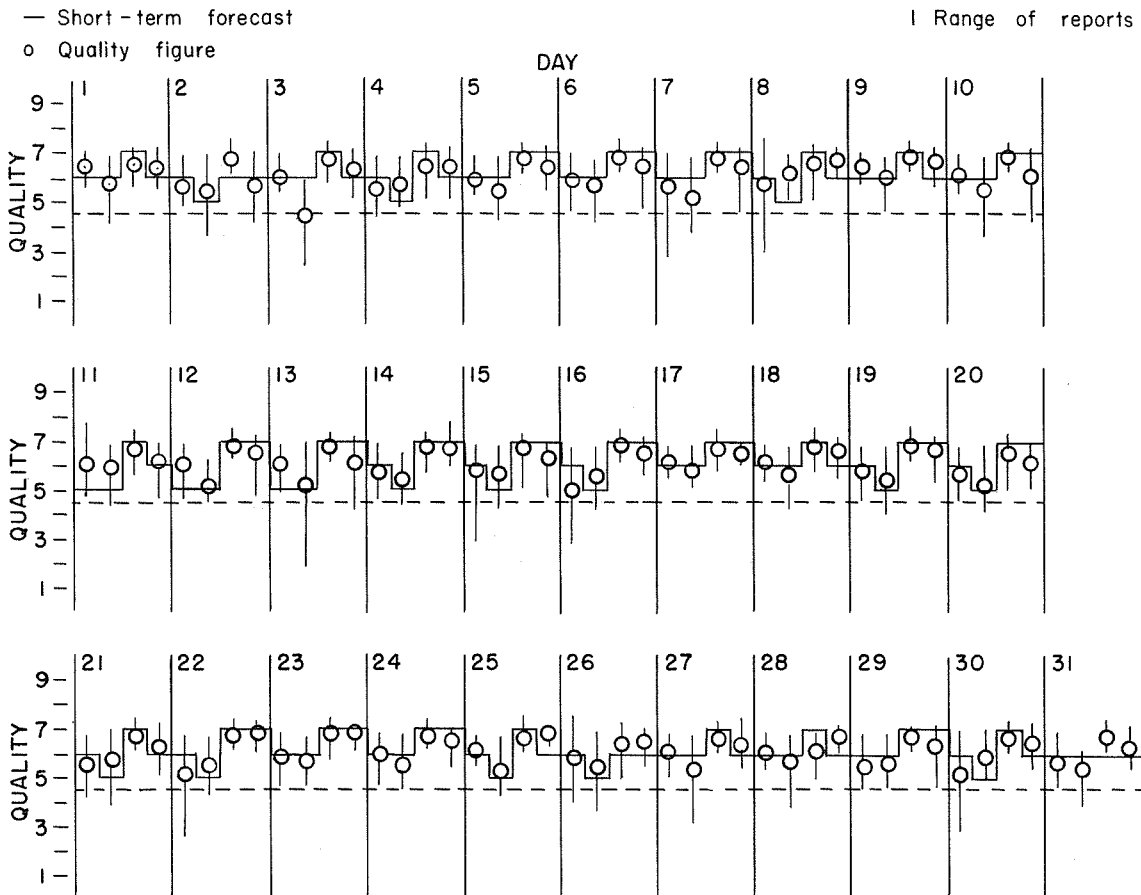
1) THE ADVANCE Jc-FORECASTS ARE SCORED AGAINST THE AVERAGE HIGH LATITUDE WHOLE-DAY INDICES.

2) THE PREDICTED A<sub>FR</sub> INDICES ARE ISSUED EACH WEDNESDAY FOR THE COMING SEVEN DAYS. THE VALUE FOR THE FIRST DAY OF EACH PREDICTION PERIOD IS UNDERScoreD.

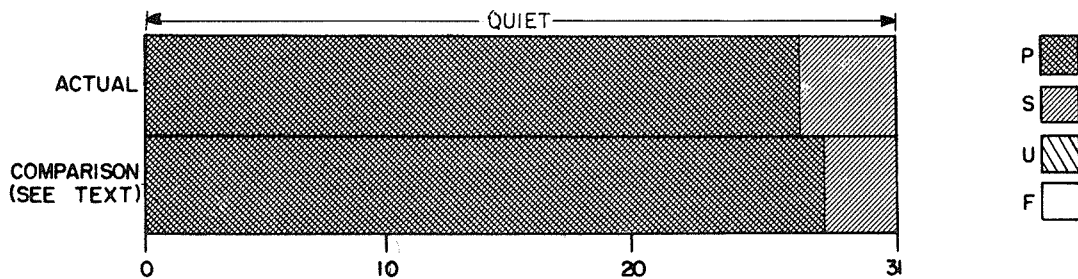
# CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS VIIIb

DECEMBER 1965

## NORTH ATLANTIC

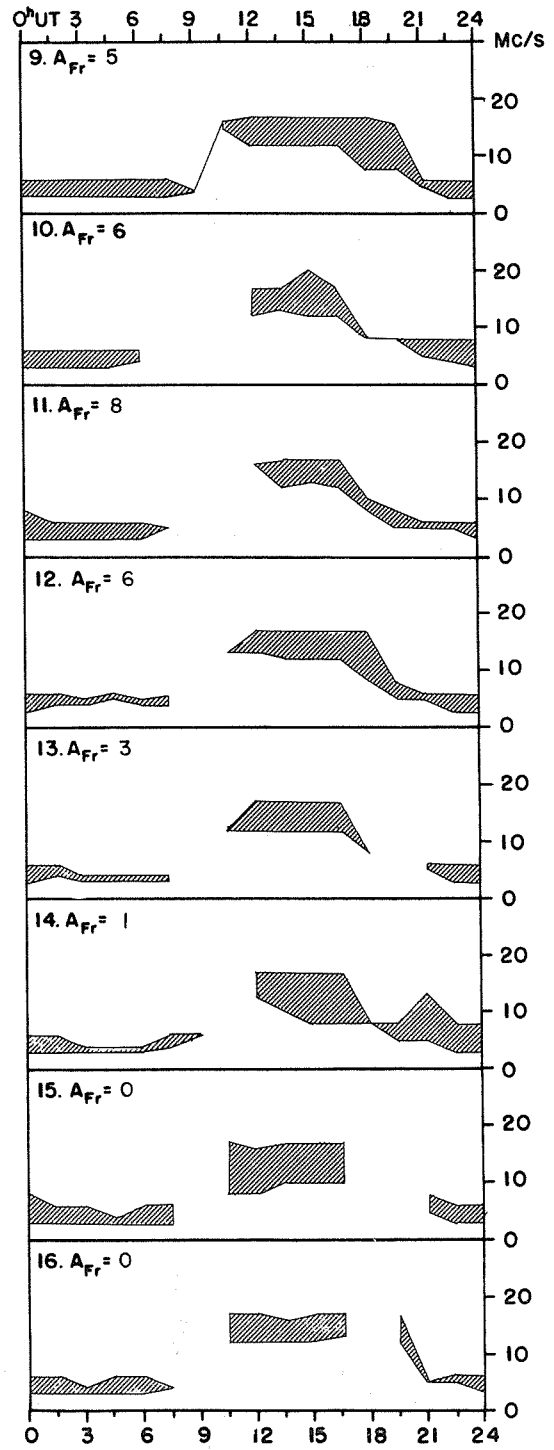
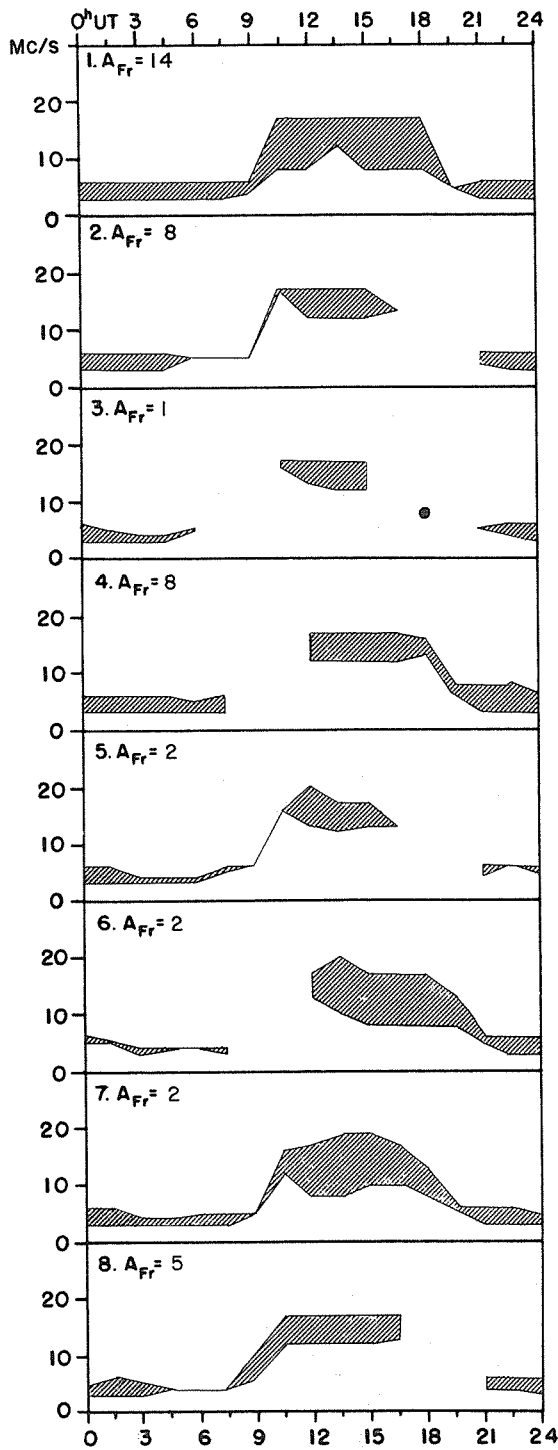


## HIGH LATITUDE



USEFUL FREQUENCY RANGES -- NORTH ATLANTIC PATH

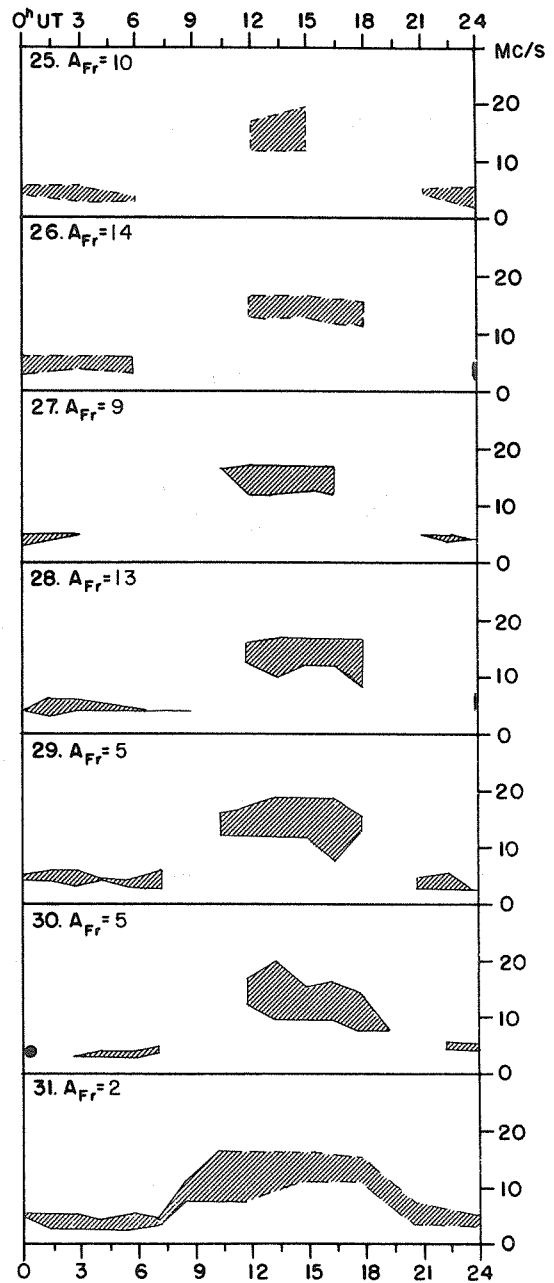
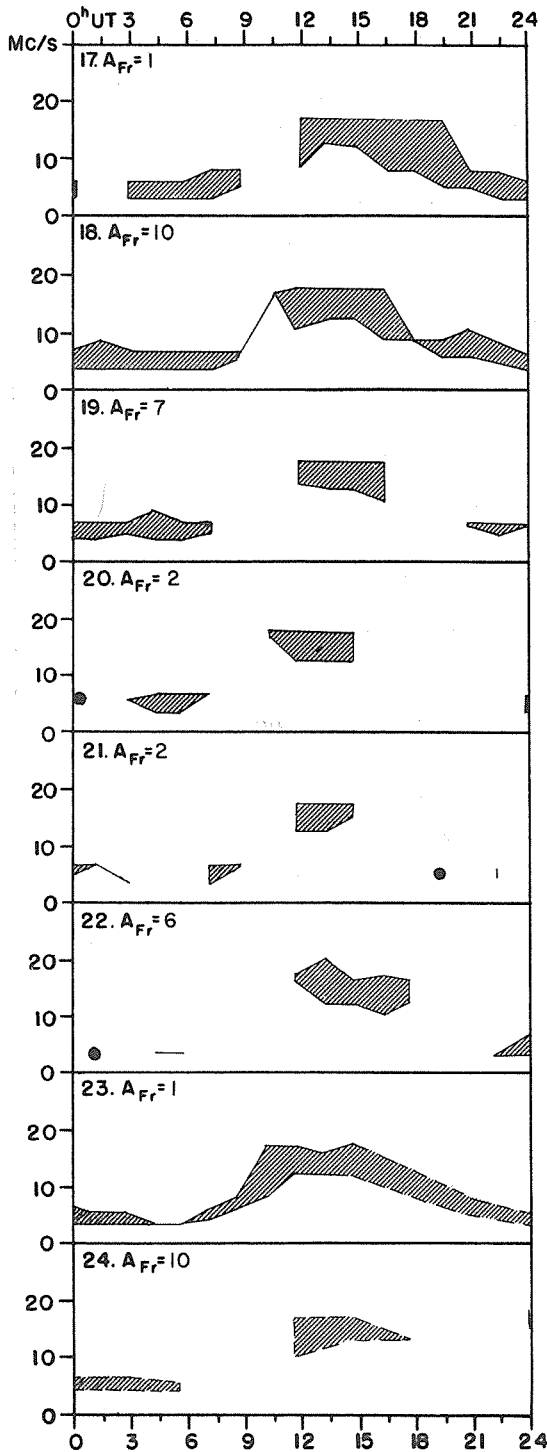
DECEMBER 1965



# USEFUL FREQUENCY RANGES -- NORTH ATLANTIC PATH

VIIId

DECEMBER 1965



Adapted from Observations by Deutsches Bundespost



VIIIa

## ALERT PERIODS

INTERNATIONAL URSIGRAM  
AND WORLD DAYS SERVICE

JANUARY 1966

JAN. 1966	TIME OF ISSUE UT	ADVANCE GEOPHYSICAL ALERT	WORLDWIDE GEOPHYSICAL ALERT				
			NO.	TYPE	TIMING	ELABORATION	
13	0400	ADALERT PRESTO TENFLARE, NERA 17/1032Z	296	Solar Activity	Exists	East Limb	
14	0400		297	Solar Activity	Exists	East Limb	
15	0400		298	Solar Activity	Exists	Gamma Spot	
16	0400		299	Solar Activity	Exists		
17	0400 1331*		300	Solar Activity	Exists		
18	0400		301	Solar Activity	Exists		
			302	Magnetic Storm	Expected		
19	0044 0135*		Lockheed, Solar Flare 18/2255Z ADALERT PRESTO TENFLARE, Toyokawa 18/2300Z				
	0400			303	Solar Activity	Exists	
				304	Magnetic Storm	Expected	
20	0400			305	Solar Activity	Exists	
			306	Magnetic Storm	Expected		
21	0400	307	Solar Activity	Exists			
		308	Magnetic Storm	Expected			
22	0400	309	Solar Activity	Exists	Beta Gamma Spot		
23	0400	310	Solar Activity	Exists			
24	0400	311	Solar Activity	Exists			
25	0400	312	Solar Activity	Exists			

\* Time Relayed by AGIWARN