

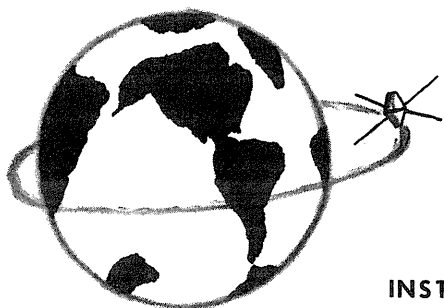
CRPL - FB - 266

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**SPACE DISTURBANCES LABORATORY**  
**SOLAR-GEOPHYSICAL DATA**

Issued: October 1966



U. S. DEPARTMENT OF COMMERCE  
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION  
INSTITUTE FOR TELECOMMUNICATION SCIENCES AND AERONOMY  
BOULDER, COLORADO  
80302

31 OCTOBER 1966

## SOLAR - GEOPHYSICAL DATA

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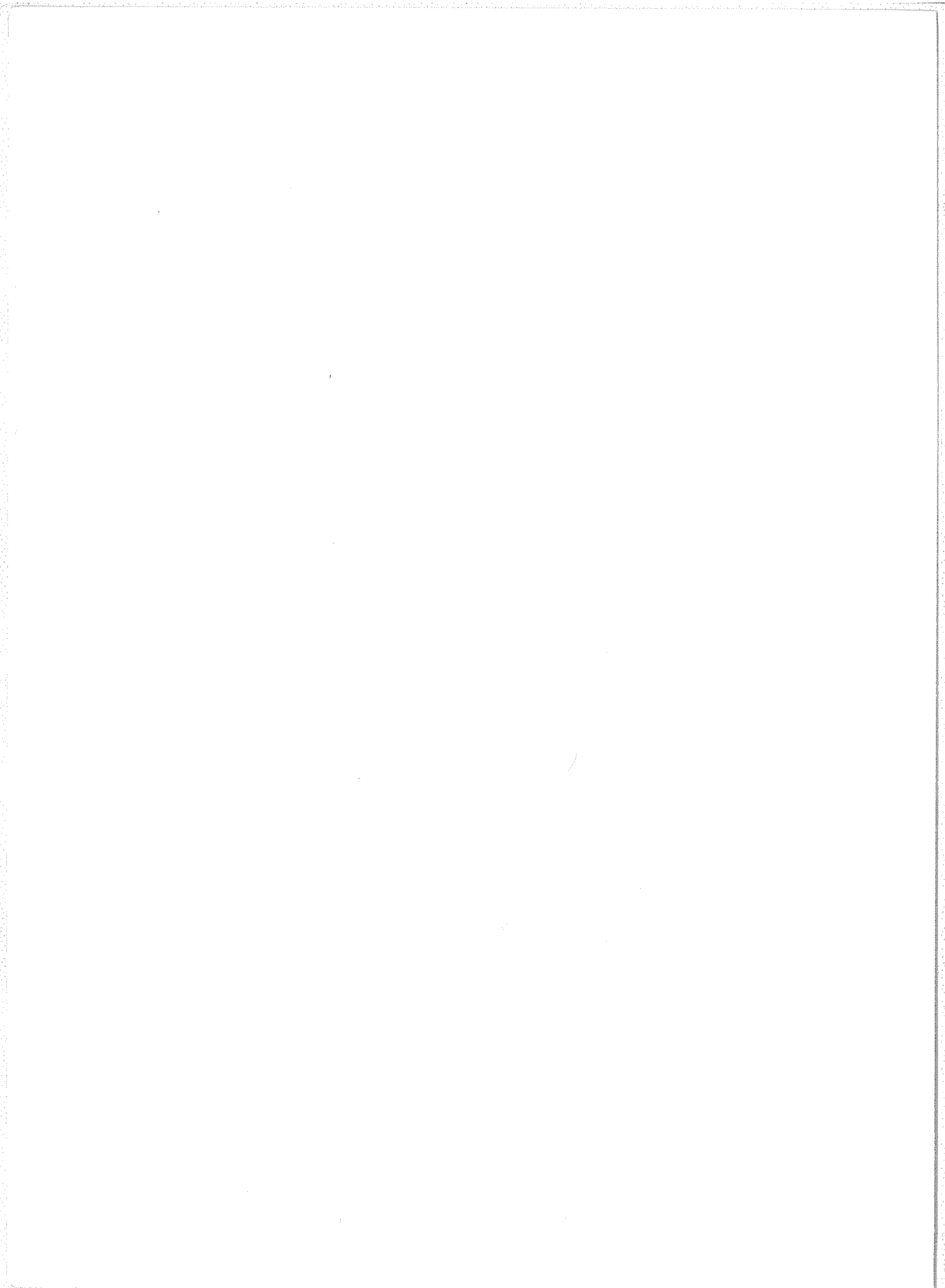
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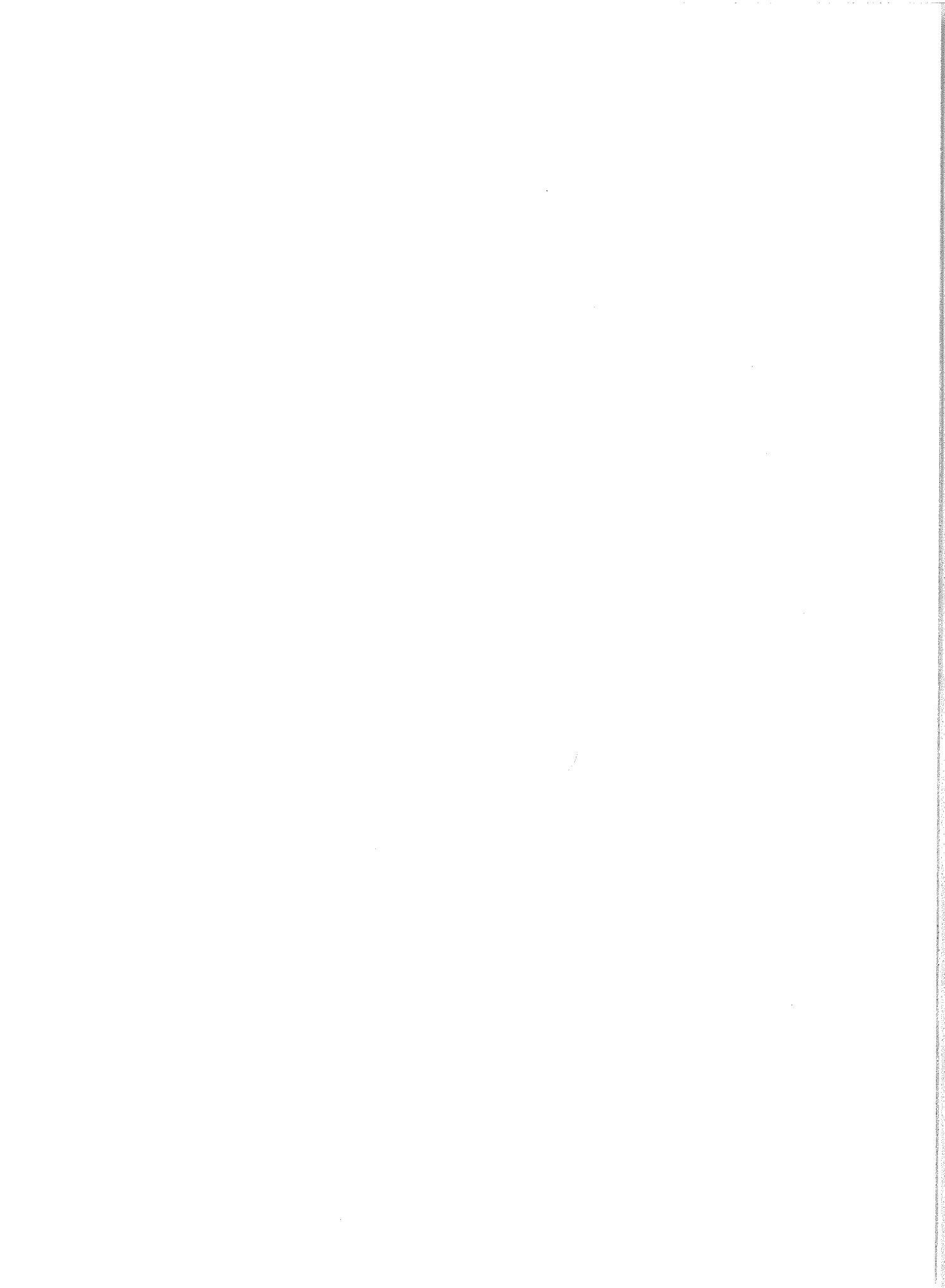
The descriptive text was republished in January 1966. Addenda have been given in the introduction to the CRPL-FB reports for April, May, August, and September 1966.

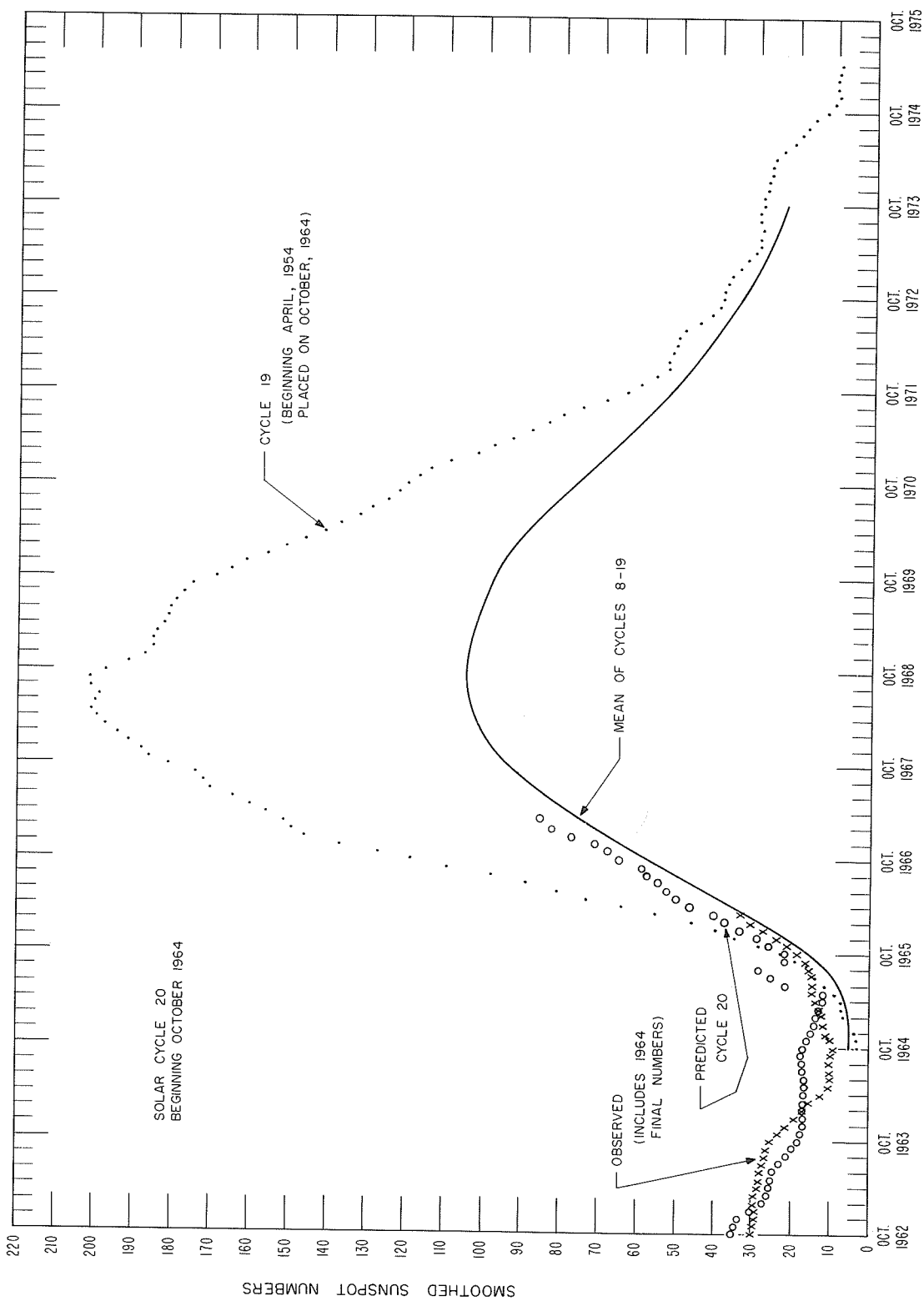
Addenda: Addenda will be found for:

February 1966 solar flares, published in CRPL-FB-262, June 1966;  
April 1966 solar flares, published in CRPL-FB-264, August 1966; and  
May 1966 solar flares, published in CRPL-FB-265, September 1966.

#### Revisions

The NRL solar radiation monitoring satellite data for July and August 1964, found in CRPL-FB-244, December 1964, has been replaced by revised data in this issue.





PREDICTED AND OBSERVED SUNSPOT NUMBERS

## RELATIVE SUNSPOT NUMBERS

ZURICH,  $R_z$ 

DAY	1965		1966									
	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1	52	29	13	18	7	25	64	50	71	49	78	44
2	63	28	8	17	9	11	58	48	74	49	62	44
3	60	20	8	16	20	11	74	57	41	54	65	25
4	62	13	8	15	17	18	74	61	60	53	51	18
5	55	13	8	8	17	12	55	38	43	48	53	26
6	39	29	8	7	17	14	59	23	43	46	50	30
7	27	40	8	7	16	10	70	13	38	58	31	36
8	7	46	15	13	13	9	65	16	35	68	13	38
9	8	38	7	13	10	15	47	8	33	56	7	39
10	13	41	7	7	11	13	37	0	25	58	0	37
11	8	40	0	8	14	10	25	14	43	52	16	42
12	9	26	0	0	8	0	27	14	34	62	36	38
13	8	17	14	17	16	0	24	23	34	56	30	29
14	7	16	0	30	12	0	29	52	31	37	37	35
15	0	10	14	36	16	9	29	46	22	34	41	38
16	7	9	22	57	13	26	35	47	40	48	36	57
17	0	7	21	50	19	44	40	33	46	42	35	76
18	0	0	20	64	24	53	40	27	39	49	35	83
19	10	0	18	68	32	60	24	34	33	38	27	76
20	12	0	15	63	39	54	37	57	42	65	24	78
21	15	0	10	52	41	49	40	80	29	55	22	89
22	26	7	11	44	50	52	56	66	34	66	38	86
23	23	0	9	38	55	40	69	68	59	56	65	71
24	16	7	8	41	42	31	58	68	63	70	71	62
25	24	0	12	27	37	23	56	64	80	67	89	68
26	17	7	23	19	36	18	54	70	78	74	95	54
27	17	0	29	16	35	10	40	66	69	52	90	48
28	9	8	64	14	31	12	40	60	52	61	84	35
29	8	8	64	19		35	48	39	47	76	89	40
30	8	15	44	28		42	52	58	55	63	76	38
31	14		38	15		52		56		66	66	
MEAN	20.1	15.8	17.0	26.7	23.5	24.5	47.5	43.7	46.4	55.7	48.8	49.3

All Zürich Sunspot Numbers,  $R_z$ , for 1965 are Final. The numbers for 1966 are Provisional.AMERICAN,  $R_A'$ 

DAY	1965		1966									
	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1	33	29	10	25	0	11	32	24	56	33	77	30
2	39	27	10	21	12	12	37	37	48	37	70	28
3	50	20	10	19	14	14	34	35	41	54	69	18
4	43	11	9	13	16	16	49	19	50	51	64	16
5	37	1	10	7	17	15	40	15	39	36	46	15
6	26	29	12	1	15	14	47	17	26	30	40	20
7	16	43	9	0	14	10	49	12	22	52	23	27
8	5	34	2	1	13	10	55	11	26	45	8	36
9	10	38	3	0	12	16	36	8	27	49	0	36
10	11	43	0	0	14	15	26	0	24	44	1	48
11	11	38	0	0	15	7	19	0	26	56	17	41
12	9	24	0	0	11	0	22	5	32	47	24	32
13	10	15	0	19	12	3	16	9	18	27	31	28
14	2	16	0	30	14	1	22	22	21	19	28	31
15	0	14	18	37	13	15	31	28	24	14	33	37
16	0	12	21	31	16	21	28	24	33	33	42	47
17	0	0	18	43	13	43	28	18	36	40	38	61
18	0	0	19	43	25	46	29	14	31	40	33	58
19	8	0	16	55	24	46	16	33	27	35	29	67
20	12	0	0	55	33	41	42	56	28	46	15	63
21	14	0	7	41	36	32	38	59	32	38	17	77
22	22	0	8	34	43	29	42	51	42	43	43	63
23	20	3	10	36	55	19	58	59	58	56	66	64
24	21	4	6	31	47	17	51	59	61	59	83	57
25	16	0	17	18	47	16	47	49	66	57	89	65
26	11	0	20	14	47	10	34	61	62	65	96	39
27	12	0	35	15	32	0	22	48	44	62	95	26
28	11	6	44	14	28	12	22	41	35	75	86	26
29	11	9	55	20		36	33	40	29	71	81	35
30	11	10	47	21		41	33	37	33	75	51	36
31	12		28	3		32		56		75	33	
MEAN	15.6	14.2	14.3	20.9	22.8	19.4	34.6	30.5	36.6	47.2	46.1	40.9

DAILY SOLAR FLUX AT 2800 Mc s  
OTTAWA ARO  
OBSERVED FLUX,S

Ic

DAY	1965		1966		FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	OCT.	NOV.	DEC.	JAN.								
1	92.0	78.8	75.4	82.0	79.9	81.2	106.9*	90.3	101.9	96.8	122.2	114.5
2	93.2	79.5	75.0	78.9	79.2*	78.0	106.4	92.5	101.0	95.0	116.1	104.4
3	96.0	81.1	74.9	78.5	79.8	77.1	102.1	92.4	99.7	96.0	114.8*	101.5
4	97.5	79.8	74.5	80.5	81.3	76.7	102.5	91.0	99.1	101.4	112.7*	100.2
5	91.6	78.0	75.4	80.0	82.9	76.0	101.9	87.0	98.7	101.6	107.4	98.9
6	85.2	80.7	76.2	79.7	84.5	76.6	104.0	86.0	98.9	106.1	103.0	96.4
7	83.6	85.2	75.3	80.9	85.1	77.4	102.6*	88.2	94.1	108.9	98.7	94.4*
8	82.8	80.4	76.7	80.6	84.6	77.5	107.0*	86.2	96.6	110.6	95.0	94.8*
9	83.3	82.0	75.0	80.1	85.2	79.6	100.0	85.9	95.9	104.3	93.8	94.0
10	80.4	84.1	75.3	79.8	86.0	79.6	94.4	84.9	93.9	104.6*	91.8	92.6
11	76.0	84.2	75.6	80.9	85.8*	79.0	93.5	86.6	93.2	105.4	90.1	95.4
12	74.8	80.8	75.9	84.0	85.4	79.3	94.4	90.7	93.0	99.4	90.4	99.5*
13	75.8	77.3	74.0	87.2	86.1	81.0	92.6	91.0	93.1	97.2	90.8	101.1
14	74.7	76.0	74.7	93.2	86.1	82.3	90.5	95.1	93.9	96.6	90.5	106.0
15	73.8	76.5	76.8	101.9	85.4	88.1*	95.7	97.1	91.8	97.9	91.3	110.8
16	72.3	74.0	77.6	106.0	84.7	93.8*	92.6	97.9	94.9	99.5	92.8	123.3*
17	72.5	74.3	78.4	101.7*	84.1	106.2*	94.5	96.7	96.4	96.0	94.4	127.8
18	72.2	75.0	78.4	104.8*	84.1	110.6	92.1	96.4	95.1	98.1	95.1	141.3
19	71.8	73.4	76.8	108.6*	83.0	115.5	88.2	104.6*	93.8	98.3	97.7	145.3
20	72.7	72.7	74.5	102.3	84.7*	111.9	92.6	112.8*	91.3	98.6	99.2	144.9*
21	73.3	72.2	74.1	98.9	87.6	121.2	90.8	120.6	90.5	100.5	100.4	136.1
22	76.2	71.8	72.3	94.7*	87.9	105.8	92.4	118.1	93.0	103.2	103.1	130.6*
23	78.7	71.3	72.7	93.5	84.5*	96.8	97.8	111.1	96.0	111.3	112.2	126.6*
24	76.3	71.2	71.2	91.8	83.7	93.5	102.5	114.7	100.2	116.9	119.4*	125.3
25	77.9	70.6	72.1	88.1	80.9	91.6	102.6*	112.2	101.5*	122.1	123.6*	118.2*
26	78.2	71.8	76.9	85.4	84.8	85.0	100.0*	109.4	102.1*	123.7	127.5	108.9
27	78.0	74.1	83.7	82.4	84.8	83.4	95.6	105.6	97.5	120.1	130.7	102.5
28	77.2	77.0	83.8	80.5	85.7	87.9	93.6		98.1	120.5	130.0*	97.5
29	76.7	73.9	84.7	80.7		96.4	93.1	103.2	96.5	128.9	127.3	98.3
30	76.2	75.1	81.9	78.7		99.2	91.9	98.8	97.4	124.2	123.8	95.4
31	78.1		80.8	77.7		110.6		102.7		121.0	118.7	
MEAN	79.6	76.8	76.5	87.9	84.2	90.3	97.2	98.3	96.3	106.7	106.5	110.9

\* adjusted for burst

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

DAY	1965		1966		FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
	OCT.	NOV.	DEC.	JAN.								
1	92.2	77.6	73.3	79.3	77.6	79.7	106.8*	91.7	104.8	100.1	125.9	116.6
2	93.3	78.2	72.9	76.3	76.9*	76.7	106.3	94.0	103.9	98.2	119.6	106.3
3	96.1	79.8	72.7	75.9	77.5	75.8	102.1	94.0	102.6	99.3	118.2*	103.2
4	97.5	78.4	72.3	77.8	79.0	75.5	102.6	92.5	102.0	104.8	116.0*	101.9
5	91.6	76.7	73.2	77.4	80.6	74.8	102.0	88.6	101.7	105.0	110.5	100.5
6	85.1	79.2	74.0	77.1	82.1	75.5	104.2	87.5	101.9	109.7	106.0	97.9
7	83.5	83.7	73.0	78.2	82.8	76.2	102.8*	89.9	96.9	112.6	101.5	95.8*
8	82.6	78.9	74.4	77.9	82.3	76.4	107.3*	87.8	99.5	114.4	97.7	96.2*
9	83.0	80.4	72.7	77.4	82.9	78.5	100.3	87.5	98.9	107.8	96.4	95.3
10	80.1	82.4	73.0	77.2	83.8	78.6	94.8	86.6	96.8	108.1*	94.3	93.9
11	75.7	82.5	73.2	78.2	83.6*	78.0	93.9	88.3	96.1	109.0	92.5	96.6
12	74.5	79.1	73.5	81.2	83.2	78.3	94.8	92.6	95.9	102.7	92.8	100.8*
13	75.4	75.7	71.7	84.3	83.9	80.0	93.1	92.9	96.1	100.4	93.2	102.4
14	74.3	74.4	72.4	90.1	83.9	81.4	91.0	97.2	96.9	99.8	92.8	107.4
15	73.3	74.8	74.4	98.5	83.3	87.1*	96.3	99.2	94.7	101.1	93.7	112.0
16	71.8	72.4	75.1	102.6	82.7	92.9*	93.2	100.1	97.9	102.8	95.1	124.6*
17	72.0	72.6	75.9	98.4*	82.1	105.1*	95.2	89.9	99.5	101.2	96.8	129.1
18	71.6	73.3	75.9	101.4*	82.2	109.6	92.9	98.7	98.2	101.3	97.5	142.6
19	71.2	71.6	74.3	105.1*	81.1	114.6	89.0	107.1*	96.9	101.5	100.0	146.6
20	72.0	70.9	72.1	99.0	82.8*	111.0	93.5	115.5*	94.3	101.8	101.6	146.0*
21	72.6	70.5	71.7	95.7	85.7	120.3	91.7	123.6	93.5	103.7	102.7	137.2
22	75.4	70.0	70.0	91.8*	86.0	105.1	93.4	121.0	96.1	106.5	105.5	131.5*
23	77.9	69.5	70.3	90.6	82.7*	96.2	98.8	113.9	99.2	114.9	114.7	127.5*
24	75.5	69.3	68.8	88.9	81.9	92.9	103.7	117.7	103.5	120.6	122.0*	126.0
25	77.0	68.8	69.7	85.4	79.3	91.1	103.8*	115.1	104.8*	126.0	126.3*	118.8*
26	77.3	69.9	74.4	82.7	83.1	84.7	101.3*	112.3	105.6*	127.6	130.2	109.4
27	77.0	72.1	80.9	79.9	83.2	83.1	96.0	108.5	100.8	123.8	133.4	102.9
28	76.2	74.9	81.0	78.1	84.1	87.6	94.9		101.4	124.2	132.6*	97.9
29	75.6	71.9	81.9	78.3		96.1	94.5	106.8	99.8	132.9	129.8	98.6
30	75.1	73.0	79.2	76.3		99.0	93.3	101.6	100.7	128.0	126.1	95.7
31	76.9		78.1	75.4		110.4		105.6		124.6	120.9	
MEAN	79.1	75.1	74.1	85.0	82.1	89.4	97.8	100.6	99.4	110.1	109.2	112.4

\* adjusted for burst



## CALCIUM PAGE AND SUNSPOT REGIONS

SEPTEMBER 1966

Sept. 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	
1.0	N27	8470	8415	700	1.5	l A l	3	8/24	12			
1.7	N22	8477	8422	700	1.5	l A l	3	8/27	11			
2.1	N36	8476	8415	600	1.5	l - l	3	8/27	12			
2.4	S23	8473	New	900	2.5	l - l	1	8/27	12	(10)	(2)	b - d
2.5	N10	8483	New	300	1.0	b - d	1	8/31	3	(10)	(3)	b - d
2.9	N22	8474	New	700	2.5	l - l	1	8/28	12	10	4	l - d
3.7	N28	8492	New	(200)	(2.0)	b - d	1	9/6	4			
4.0	S24	8493	New	(300)	(2.5)	b - d	1	9/6	2			
5.1	N21	8494	New	(300)	(1.5)	b - d	1	9/6	4			
6.0	S07	8498	New	(100)	(1.5)	b - d	1	9/7	2			
6.6	N23	8490	New	300	1.5	b - d	1	9/5	2			
7.6	S21	8484	New	800	3.0	l / l	1	9/2	12	10	8	b / l
8.7	S23	8485	8429	400	2.0	l - d	2	<9/4	>9			
8.7	N45	8499	New	400	1.5	b - d	1	9/7	3			
9.0	S16	8487	8453	500	2.0	l - l	2	<9/4	>11	(10)	(6)	b - d
9.2	N16	8488	New	(200)	(1.0)	b - d	1	<9/4	>2			
11.6	N09	8502	New	(300)	(2.0)	b - d	1	9/12	4	(10)	(5)	b - d
12.0	N32	8491(1)	8435	800	2.0	l / l	2	9/5	13	(10)	(1)	l - d
12.3	S23	8495	New	600	2.5	l / l	1	9/6	12	(10)	(2)	l - d
12.6	N20	8496	8438	2100	3.5	l / l	4	9/6	14	120	20	l - l
13.8	N29	8497	8438	1300	2.5	l A l	4	9/6	14	(10)	(3)	b - d
15.2	N17	8503	New	(200)	(1.5)	b - d	1	9/12	2			
15.4	N38	8500	New	200	1.0	b \ d	1	9/10	6			
15.4	N07	8510	New	(300)	(2.0)	b - d	1	9/17	≥3	(10)	(4)	b - d
16.3	S27	8501	New	900	3.0	l / d	1	9/10	10			
17.0	N19	8511	New	(200)	(2.0)	b / l	1	9/18	5	(10)	(3)	b / l
18.8	N31	8504	New	(100)	(1.0)	l - d	1	9/13	5			
19.5	S24	8508	8479	300	1.0	l / d	2	<9/15	>8			
20.0	N07	8505	8454	4000	3.0	l A l	2	9/13	14	650	51	l A l
20.0	N22	8506	8443	1600	2.5	l A l	4	9/13	13	(10)	(6)	b - l
21.8	N24	8509	New	(2600)	(3.5)	l A l	1	9/15	13	330	66	l A l
22.5	N42	8512(2)	8442	800	1.0	l - l	3	9/16	13			
23.2	S20	8518	New	(100)	(1.5)	b - l	1	9/27	2			
23.9	S10	8520	New	(100)	(1.0)	b - d	1	9/27	2			
24.8	N40	8515a(3)	8457	600	1.0	l - d	2	<9/22	>5			
25.0	N23	8514	8461	(2600)	(2.0)	l A l	2&4	9/18	13			
26.2	N09	8521	New	(300)	(1.5)	b - d	1	9/27	2			
27.1	N23	8516(4)	New	4000	3.5	l / l	1&4	<9/22	>11	260	63	l \ l
27.6	N39	8515b(3)	8466	500	1.0	? - d	4	<9/27	>4			
28.3	S16	8522	New	400	3.0	b / l	1	9/27	>5	10	3	b A l
29.5	N34	8523	New	400	1.5	b - d	1	9/27	>5	(10)	(2)	b - d
29.7	N23	8525	New	500	1.0	b - d	1	9/28	>4			
30.1	S20	8529	New	300	2.0	b - d	1	9/30	>2			

- (1) Region 8491 is a return of the new part of region 8435 of the previous cycle.  
(2) Region 8512 is a return of regions 8442 and 8455.  
(3) The regions 8515a and 8515b are two different regions inadvertently numbered 8515.  
(4) The region 8516 is mostly a new plage but is partly a return of region 8467.

No calcium plage observations were secured at the McMath-Hulbert Observatory on September 3, 20 and 21, 1966.

MT. WILSON MAGNETIC CLASSIFICATIONS OF SUNSPOTS

IIB

SEPTEMBER 1966

Sept. 1966	TIME MEAS. UT	LAT.	MER. DIST.	TYPE	No.	Sept. 1966	TIME MEAS. UT	LAT.	MER. DIST.	TYPE	No.
1	2250	N21	W52	( $\delta$ ) 4	16114	15	2200	N22 N07	W45 E49	( $\beta$ p) 4 ( $\beta$ $\gamma$ ) 6	16126 16132
2	No Obs.					16	1705	N22 N07 S22 N18 N21	W54 E38 W58 E38 E63	( $\beta$ p) 3 ( $\beta$ $\gamma$ ) 6 ( $\alpha$ p) 1 ( $\beta$ p) 1 ( $\beta$ $\gamma$ ) 2	16126 16132 16135 16133 16134
3	0015	N22	W67	( $\delta$ ) 4	16114						
3	2245	N22	W79	( $\delta$ ) 4	16114						
4	2240	N30 S22	W66 E28	( $\beta$ p) 2 ( $\beta$ f) 2	16122 16123	17	1925	N21 N07 N07 N21	W70 E23 W31 E49	( $\beta$ p) 3 ( $\beta$ p) 6 ( $\alpha$ p) 1 ( $\gamma$ ) 5	16126 16132 16136 16134
5	No Obs.					18	No Obs.				
6	0050	N28 S21 N32 N22	W79 E22 E74 E81	( $\beta$ f) 2 ( $\alpha$ p) 1 ( $\alpha$ p) 1 ( $\alpha$ p) 3	16122 16124 16125 16126	19	No Obs.				
6	2135	N21 S26	E71 E72	( $\beta$ p) 3 ( $\alpha$ p) 1	16126 16127	20	1820	N06 N18 N07 N21 N24	W73 W52 W14 E10 E84	( $\alpha$ f) 1 ( $\beta$ $\gamma$ ) 2 ( $\delta$ ) 6 ( $\beta$ $\gamma$ ) 5 $\alpha$ p	16136 16137 16132 16134 16138
7	2300	S21 N21 S23	W06 E60 E56	( $\alpha$ p) 2 ( $\beta$ p) 3 ( $\alpha$ p) 1	16124 16126 16127	21	1720	N18 N07 N22 N23	W64 W27 W07 E70	( $\beta$ p) 4 ( $\delta$ ) 5 ( $\beta$ $\gamma$ ) 5 ( $\beta$ f) 4	16137 16132 16134 16138
8	1740	S21 S21 S24 N20	W22 W16 E45 E50	( $\beta$ p) 2 ( $\beta$ p) 2 ( $\alpha$ p) 1 ( $\beta$ p) 5	16128 16124 16127 16126	22	1630	N18 N07 N22 N23	W78 W42 W15 E57	$\beta$ p $\delta$ $\beta$ $\gamma$ $\beta$ f	16137 16132 16134 16138
9	No Obs.					23	No Obs.				
10	0040	S20 S21 N21	W38 W33 E33	( $\beta$ p) 3 ( $\beta$ p) 2 ( $\beta$ p) 4	16128 16124 16126	24	1805	N07 N18 N22 N22	W67 W56 W43 E31	( $\delta$ ) 5 ( $\alpha$ p) 2 ( $\beta$ p) 5 ( $\beta$ $\gamma$ ) 4	16132 16139 16134 16138
10	1635	S20 S21 S17 N20	W48 W41 W24 E24	( $\beta$ p) 3 ( $\beta$ p) 3 ( $\beta$ f) 2 ( $\beta$ p) 4	16128 16124 16129 16126	25	2330	N07 N22 N22	W88 W65 E17	$\delta$ $\beta$ p $\beta$ f	16132 16134 16138
11	2145	S20 S21 S15 N21 N27	W64 W57 W42 E07 E24	( $\beta$ f) 2 ( $\beta$ p) 3 ( $\alpha$ p) 1 ( $\beta$ p) 3 ( $\alpha$ f) 1	16128 16124 16129 16126 16130	26	1645	N23 N22	W71 E07	( $\beta$ p) 4 ( $\beta$ f) 4	16134 16138
12	1905	S20 S20 S16 N21 N10	W80 W74 W57 W07 W16	$\alpha$ f $\alpha$ f $\alpha$ p ( $\beta$ p) 2 ( $\beta$ p) 1	16128 16124 16129 16126 16131	27	1635	N22 N22	W83 W07	$\alpha$ p $\beta$ f	16134 16138
13	2305	N22 N08	W20 E72	( $\beta$ p) 3 ( $\alpha$ p) 5	16126 16132	28	No Obs.				
14	1810	N22 N08	W30 E64	( $\beta$ p) 3 ( $\alpha$ p) 6	16126 16132	29	No Obs.				
						30	1810	N24 S17 S16	W46 W32 W05	( $\beta$ $\gamma$ ) 4 ( $\beta$ ) 2 ( $\beta$ p) 1	16138 16140 16141





















# SOLAR FLARES

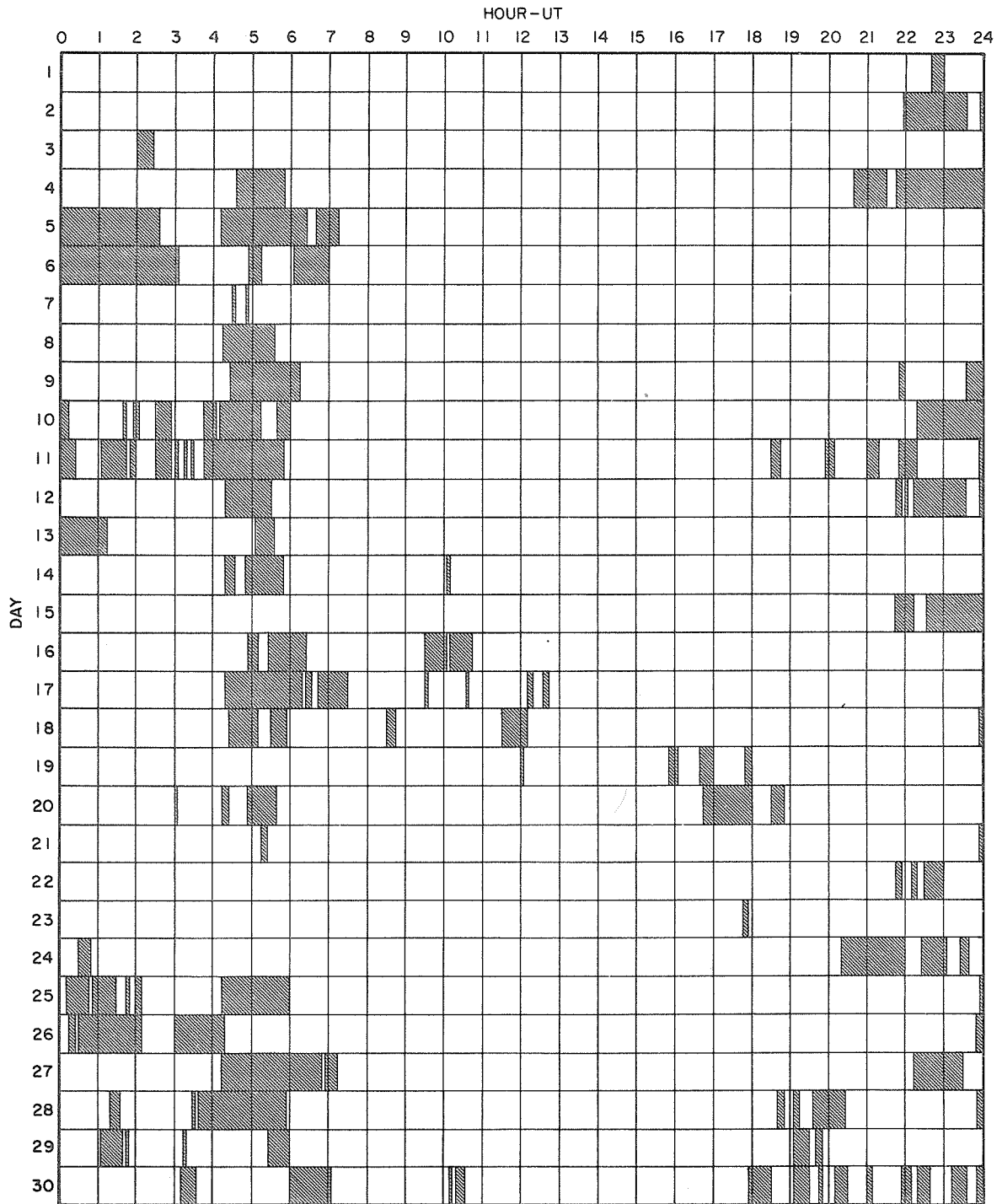
SEPTEMBER 1966

IIIj

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS				REMARKS
	DATE	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hc	
HALE	27	0158E	0203		N20	W00	.227	8516	27.1	50	SF	2	P	0158	.21	.22	
[ KAND	27	0700E	0852		N22	W90	.999	8509	20.5	1120	□						
ISTA	27	0715E	0925		N21	W90	.999	8509	20.6	1300	S						
KAND	27	0928	0940		N22	E01	.261	8516	27.5	12	SN						
HUAN	27	1409	1428		N19	W90	.999	8509	20.8	19	SF	2	C	1419	.25		D
HALE	27	1639E	1647D		N29	W32	.607	8514	25.3	80	SN	3	P	1639	.21	.32	
HUAN	27	1717E	1733D		N20	W90	.999	8509	21.0	160	SN	2	S				D
LOCK	27	1836	1900	1841	N23	W11	.330	8516	26.9	24	SF			1841	.40	.40	10
ISTA	28	0740E	0830D		S18	E90	1.001	8527	5.1	500	1F						
[ ISTA	28	0858	0945D		N25	W90	.999	8509	21.6	470	SF						
KAND	28	0906	0930D		N25	W90	.999	8509	21.6	240	□						
ISTA	28	0925	0945D		N26	W11	.372	8516	27.6	200	SF						
HALE	28	1702	1811	1706	N26	W34	.610	8516	26.2	69	SF	1	C	1706	.57	.70	
LOCK	28	2025	2035	2028	N22	W22	.439	8516	27.2	10	SF			2028	.60	.70	10
ISTA	29	0710E	0715		N27	W27	.539	8516	27.3	50	S						
KAND	29	0823	0935		N24	W28	.528	8516	27.2	72	SF						200
HUAN	29	1113	1133		N28	W31	.590	8516	27.1	20	SF	1	C	1117	.31	.33	D
KAND	29	1143E	1206		N24	W28	.528	8516	27.4	230	SF						
HUAN	29	1335	1430D		S17	W16	.479	8522	28.4	550	SF	1	C	1346	.50	.51	E
HALE	29	1645	1737	1651	S17	W17	.487	8522	28.4	52	SN	1	C	1651	.46	.50	TF
[ HALE	29	1953E	2015	1953U	N28	W36	.644	8516	27.1	220	SN	1	P	1953	.21	.30	T
HALE	29	2001	2040	2012	N24	W37	.635	8516	27.1	39	SN	1	C	2012	.36	.50	TF
[ SACP	29	2013E	2025D	2015U	N25	W37	.639	8516	27.1	120	SF				1.72	1.91	
MCMA	29	2021E	2029		N26	W37	.644	8516	27.1	80	SN	C		2022	.62	.80	E
HALE	29	2238	2258U	2239	N28	W36	.644	8516	27.2	200	SN	1	C	2239	.21	.30	T
MITK	30	0239	0345	0256	N25	W38	.651	8516	27.3	66	SF			0256	1.13	1.50	E
ISTA	30	0705E	0820		N31	E46	.758	8526	3.7	750	SF						
[ MCMA	30	1625E	1645D		S18	W05	.427	8529	30.3	200	SN			1642	.52	.60	EJ
HUAN	30	1640	1648		S18	W05	.427	8529	30.3	8	SF	1	C	1643	.25	.25	D
HUAN	30	1953E	2005D		S18	W06	.430	8529	30.4	120	SF	1	P	1955	.21	.21	D
[ LOCK	30	2053	2106	2058	S16	W36	.673	8522	28.2	13	SN	C		2058	.60	.80	D
HALE	30	2056E	2101D	2057	S15	W36	.667	8522	28.2	50	SN	1	P	2057	.31	.40	10
LOCK	30	2116	2130	2120	S18	W10	.449	8529	30.1	14	SN	C		2120	.60	.70	20
LOCK	30	2247	2305	2255	S18	W10	.449	8529	30.2	18	SN	C		2255	.70	.80	20
LOCK	30	2310	2400	2320	N24	W50	.776	8516	27.2	50	SN	C		2320	.70	1.10	10
MANI	30	2347E	2348D		N21	W33	.573	8525	28.5	10	SF			2347	.52	.83	
LOCK	30	2359	0020	0009	S16	W36	.673	8522	28.3	21	SF			0009	.30	.40	10

# INTERVALS OF NO FLARE PATROL OBSERVATIONS PROVISIONAL

SEPTEMBER 1966



Observatories included:

Arcetri	Haleakala	Huancayo	Manila	Mitaka	Tortosa
Capri-S (Swedish)	Herstmonceux	Istanboul	McMath-Hulbert	Sacramento Peak	Wendelstein





















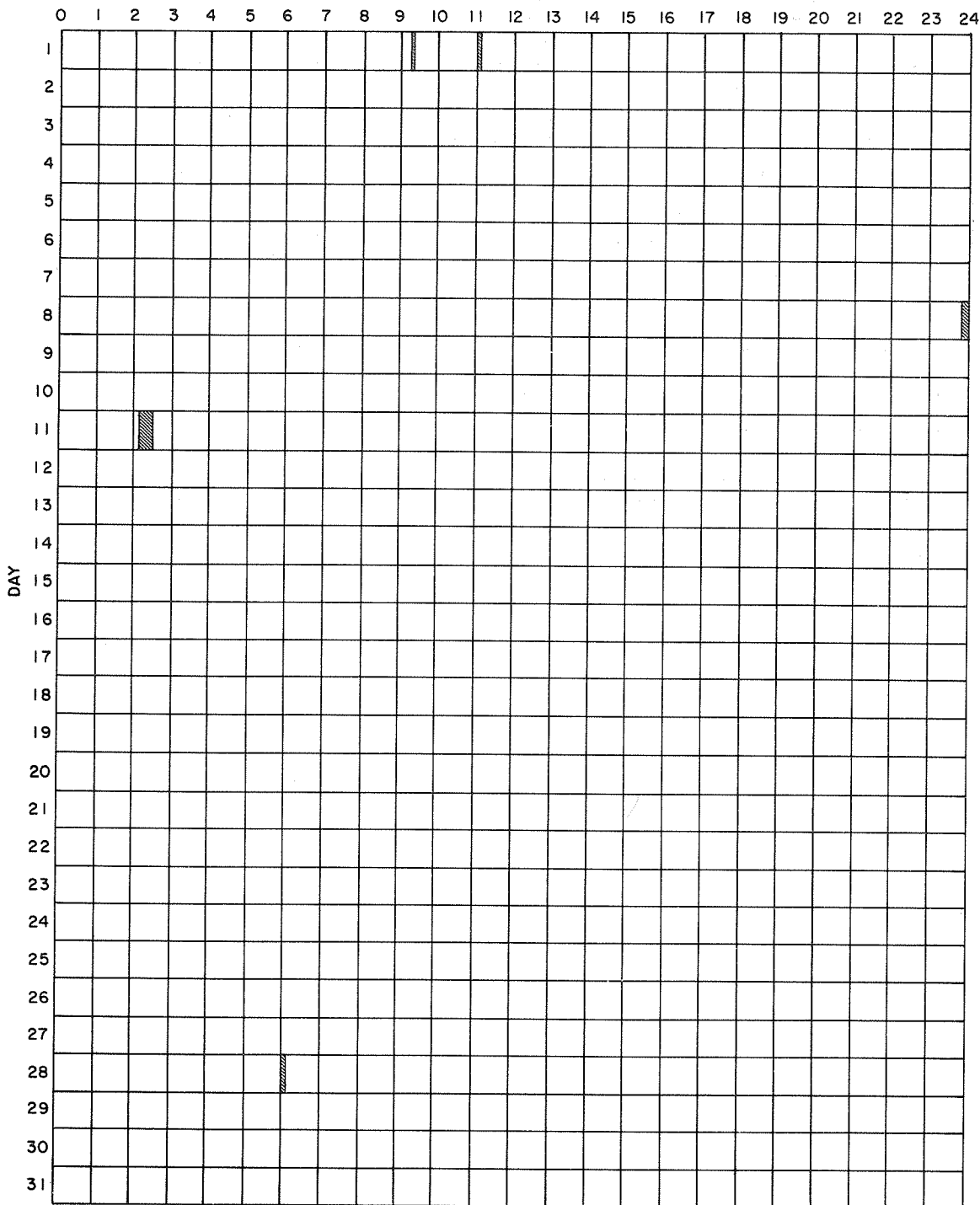


# INTERVALS OF NO FLARE PATROL OBSERVATIONS

IIIv

JUNE 1966

HOUR-UT



Observatories included:

Abastumani	Culgoora	Kandilli	Lockheed	Monte Mario	Tachkent
Arcetri	Haleakala	Kanzelhöhe	Lvov	Ondrejov	Tortosa
Bakou	Herstmonceux	Kharkov	Manila	Ottawa	Uccle
Capri-S (Swedish)	Huancayo	Kiev	McMath	Sacramento Peak	Vorochilov
Catania	Ikomasan	Kodikanal	Meudon	Salonique	Wendelstein
Climax	Istanboul	Locarno	Mitaka	Siberia	Zürich



**SOLAR RADIATION MONITORING SATELLITE  
X-RAY**

Aberdeen, South Dakota

SEPTEMBER 1966

OUTSTANDING EVENTS					
DATE	TIMES OF OBSERVATION	44-60A	8-20A	0-8A	0-3A
Sept. 12	1050 1055	$>2.1 \times 10^{-1}$	$>4.8 \times 10^{-2}$	$>1.3 \times 10^{-2}$	----
	1237 1243	----	$4.8 \times 10^{-2}$	$5.5 \times 10^{-3}$	$4.4 \times 10^{-5}$
14	1133 1142	$1.6 \times 10^{-1}$	$1.0 \times 10^{-2}$	$7.5 \times 10^{-4}$	$9.9 \times 10^{-6}$
17	1005 1010	* $>4.8 \times 10^{-1}$	* $6.3 \times 10^{-2}$	* $2.2 \times 10^{-2}$	----
18	1450 1500	* $>6.5 \times 10^{-1}$	* $3.1 \times 10^{-1}$	* $>7.9 \times 10^{-2}$	----
19	1234 1242	* $6.3 \times 10^{-1}$	* $2.2 \times 10^{-2}$	* $6.4 \times 10^{-3}$	----

\* Validity of these values doubtful due to large aspect angle.

No observations were made from September 1-10 and 20-30 because the aspect angle of the satellite made it unuseable.

Flux observed on the 8-20A band is reported here instead of the 8-12A band as previously reported. The values are directly proportional to one another.

# SOLAR RADIATION MONITORING SATELLITE

IIIx

## X-RAY

NRL

JULY 1964

### NRL SOLAR X-RAY DATA (FINAL) OBSERVING TIMES FOR JULY 1964

<p>1 0128 0200 0316 0343 0500 0531 0845 0900 1328 1343 1513 1529 1700 1713 1834 1905 2022 2036 2201 2220 2350 0007</p> <p>2 0010 0025 0138 0154 0324 0353 0438 0450 0511 0527 0657 0722 0843 0859 1710 1724 1844 1859 2030 2046 2210 2226 2348 0004</p> <p>3 0000 0017 0137 0203 0348 0403 0520 0549 0718 0733 0855 0908 1040 1051 1345 1401 1532 1545 1711 1734 1840 1922 2040 2054 2213 2236</p> <p>14 0013 0022 0158 0213 0348 0358 0516 0533 1012 1024 1154 1211 1341 1357 1519 1544 1659 1718 1842 1905 2023 2045 2207 2235 2333 2348</p>	<p>15 0020 0044 0119 0135 0153 0222 0339 0405 0535 0552 1204 1220 1351 1405 1523 1553 1710 1742 1852 1930 2149 2158 2228 2259</p> <p>16 0014 0041 0130 0142 0216 0232 0359 0419 0544 0602 1028 1043 1213 1229 1400 1416 1537 1603 1717 1752 1900 1918 1925 1939 2054 2103 2111 2126 2242 2254</p> <p>17 0024 0054 0138 0151 0225 0235 0358 0421 0555 0608 1037 1053 1222 1239 1406 1424 1543 1558 1730 1747 1911 1929 2102 2117 2215 2228 2247 2311</p> <p>18 0000 0016 0048 0103 0220 0253 0407 0433 0554 0611 1046 1102 1203 1213 1232 1245</p>	<p>18 (cont'd) 1410 1435 1543 1609 1734 1812 1920 1936 1943 1959 2111 2127 2224 2238 2314 2322</p> <p>19 0011 0022 0057 0113 0230 0302 0427 0443 1242 1257 1417 1444 1558 1633 1742 1822 1936 1951 2120 2136 2305 2333</p> <p>20 0018 0034 0052 0122 0239 0310 0425 0441 0624 0631 0920 0934 1104 1120 1251 1304 1425 1441 1611 1627 1759 1812 1940 1959 2149 2200 2241 2258 2315 2331 2330 2343</p> <p>21 0028 0042 0102 0131 0248 0319 0435 0450 0621 0635 1113 1129 1300 1316 1431 1450 1621 1636 1802 1840 1953 2027 2138 2154 2251 2307 2340 2354</p>	<p>22 0112 0141 0258 0327 1302 1311 1444 1500 1631 1644 2349 0004</p> <p>28 0035 0050 1352 1408 1534 1553 1720 1735 2113 2123 2259 2313</p> <p>29 0042 0058 0226 0242 0417 0426 1215 1231 1402 1418 1544 1603 1730 1745 1920 1952 2033 2049 2106 2134 2219 2234 2308 2325</p> <p>30 0050 0103 0237 0246 1223 1241 1409 1427 1553 1609 1616 1631 1744 1751 1929 1945 2116 2144 2302 2334</p> <p>31 0048 0114 0235 0254 0729 0743 0913 0930 1101 1114 1236 1303 1418 1452 1602 1618 1757 1827 1906 1919 2124 2154 2238 2249 2311 2344</p>
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### NRL SOLAR X-RAY DATA (FINAL) DAILY AVERAGE X-RAY FLUX FOR JULY 1964

DATE	44-60A	8-12A	0-8A
1	$2.41 \times 10^{-2}$	$< 1.2 \times 10^{-4}$	$< 1.1 \times 10^{-4}$
2	$2.19 \times 10^{-2}$	$< 2 \times 10^{-4}$	$< 1.8 \times 10^{-4}$
3	$1.90 \times 10^{-2}$	$< 4 \times 10^{-4}$	$< 4 \times 10^{-4}$
14	$1.88 \times 10^{-2}$	$< 8 \times 10^{-4}$	$< 5 \times 10^{-4}$
15	$2.19 \times 10^{-2}$	$< 2 \times 10^{-4}$	$< 1.5 \times 10^{-4}$
16	$2.69 \times 10^{-2}$	$< 1.5 \times 10^{-4}$	$< 1.2 \times 10^{-4}$
17	$2.82 \times 10^{-2}$	$< 1.2 \times 10^{-4}$	$< 1.0 \times 10^{-4}$
18	$2.90 \times 10^{-2}$	$< 1.1 \times 10^{-4}$	$< 1.0 \times 10^{-4}$
19	$2.69 \times 10^{-2}$	$< 1.5 \times 10^{-4}$	$< 1.2 \times 10^{-4}$
20	$2.28 \times 10^{-2}$	$< 2 \times 10^{-4}$	$< 1.5 \times 10^{-4}$
21	$2.02 \times 10^{-2}$	$< 5 \times 10^{-4}$	$< 3 \times 10^{-4}$
22	$1.35 \times 10^{-2}$	$< 2.5 \times 10^{-3}$	$< 1.0 \times 10^{-3}$
28	$1.98 \times 10^{-2}$	$< 2.5 \times 10^{-3}$	$< 1.2 \times 10^{-3}$
29	$2.05 \times 10^{-2}$	$< 7 \times 10^{-4}$	$< 4 \times 10^{-4}$
30	$2.17 \times 10^{-2}$	$< 3 \times 10^{-4}$	$< 2 \times 10^{-4}$
31	$2.41 \times 10^{-2}$	$< 2 \times 10^{-4}$	$< 1.5 \times 10^{-4}$

NO OUTSTANDING EVENTS WERE  
OBSERVED IN JULY 1964

The above data are revisions of data published in CRPL-FB-244, December 1964.

SOLAR RADIATION MONITORING SATELLITE  
X-RAY

NRL

AUGUST 1964

NRL SOLAR X-RAY DATA (FINAL)  
OBSERVING TIMES FOR AUGUST 1964

1	0058 0139 0244 0310 0922 0930 1104 1110 1234 1300 1426 1446 1610 1633 1803 1836 1915 1929 2004 2012 2100 2117 2143 2204 2333 2349	5	0004 0013 0135 0159 0858 0913 0930 0945 1117 1129 1135 1150 1318 1336 1502 1537 1653 1727 1806 1819 1839 1854 1951 2006 2035 2101 2139 2150 2211 2244 2358 0005	9	0026 0051 0212 0226 0852 0907 1030 1041 1209 1243 1353 1431 1541 1618 1915 1944 2102 2134 2248 2318	10	0035 0059 0858 0901 1036 1051 1221 1237 1408 1424 1557 1610 1758 1801 1939 1954 2123 2141 2307 2323	11	0044 0100 0807 0823 0903 0911 1044 1100 1231 1302 1417 1451 1602 1634 1809 1812 1949 2005 2134 2150 2307 2333 2350 2324	18	1853 1926 2055 2106 2236 2251	19	0826 0840 1010 1027 1158 1232 1342 1354 1402 1418 1731 1744 1829 1842 1911 1942 2057 2129 2235 2300	20	0021 0034 0703 0716 0832 0851 1018 1052 1202 1242 1357 1410 1538 1601 1726 1754 1912 1944 2058 2126 2244 2300	21	0030 0043 0337 0354 0533 0539 0606 0622 0702 0726 0754 0808 0844 0914 1033 1104 1212 1228 1408 1435 1604 1613 1700 1717 1734 1803 1930 1947 2107 2133 2143 2156 2254 2316	22	0711 0722 0850 0909 1039 1113 1227 1243 1607 1624 1744 1816 1945 1958 2116 2143 2154 2205 2302 2317	23	0215 0225 0355 0412 0440 0454 0544 0558 0625 0642 0719 0745 0903 0934 1053 1115 1232 1245 1253 1309 1442 1452 1622 1634 1753 1823 1940 2206 2126 2142 2312 2326	24	0552 0607 0728 0741 0909 0927 1055 1112 1242 1301 1632 1643 1817 1832	31	0553 0608 0832 0903 1404 1413 1544 1606 1722 1754 1908 1924 2053 2118
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NRL SOLAR X-RAY DATA (FINAL)  
DAILY AVERAGE X-RAY FLUX FOR AUGUST 1964

DATE	44-60A	8-12A	0-8A
1	$2.80 \times 10^{-2}$	$< 1.5 \times 10^{-4}$	$< 1.2 \times 10^{-4}$
2	$3.11 \times 10^{-2}$	$2.2 \times 10^{-4}$	$< 1.0 \times 10^{-4}$
3	$3.11 \times 10^{-2}$	$1.6 \times 10^{-4}$	$< 1.0 \times 10^{-4}$
4	$3.12 \times 10^{-2}$	$2.2 \times 10^{-4}$	$< 1.0 \times 10^{-4}$
5	$> 3.17 \times 10^{-2}$	$8.2 \times 10^{-4}$	$< 1.0 \times 10^{-4}$
6	$> 3.22 \times 10^{-2}$	$1.3 \times 10^{-3}$	$< 1.0 \times 10^{-4}$
7	$> 3.12 \times 10^{-2}$	$< 1.5 \times 10^{-4}$	$< 1.0 \times 10^{-4}$
8	$2.82 \times 10^{-2}$	$< 1.5 \times 10^{-4}$	$< 1.2 \times 10^{-4}$
9	$2.58 \times 10^{-2}$	$< 1.7 \times 10^{-4}$	$< 1.3 \times 10^{-4}$
10	$2.51 \times 10^{-2}$	$< 3 \times 10^{-4}$	$< 1.4 \times 10^{-4}$
11	$2.54 \times 10^{-2}$	$< 4 \times 10^{-4}$	$< 3 \times 10^{-4}$
12		$< 1.2 \times 10^{-3}$	$< 5 \times 10^{-4}$
18	$3.01 \times 10^{-2}$	$< 1.5 \times 10^{-3}$	$< 6 \times 10^{-4}$
19	$2.99 \times 10^{-2}$	$< 4 \times 10^{-4}$	$< 3 \times 10^{-4}$
20	$2.93 \times 10^{-2}$	$< 2 \times 10^{-4}$	$< 1.7 \times 10^{-4}$
21	$2.93 \times 10^{-2}$	$< 1.5 \times 10^{-4}$	$< 1.0 \times 10^{-4}$
22	$2.87 \times 10^{-2}$	$< 1.2 \times 10^{-4}$	$< 1.0 \times 10^{-4}$
23	$2.59 \times 10^{-2}$	$< 2 \times 10^{-4}$	$< 1.3 \times 10^{-4}$
24	$1.96 \times 10^{-2}$	$< 4 \times 10^{-4}$	$< 3 \times 10^{-4}$
31	$2.10 \times 10^{-2}$	$< 4 \times 10^{-4}$	$< 3 \times 10^{-4}$

NRL SOLAR X-RAY DATA (FINAL)  
OUTSTANDING EVENTS FOR AUGUST 1964

DATE	TIME OF OBSERVATION	44-60A	8-12A	0-8A
22	1945 1958	$3.3 \times 10^{-2}$	$3.4 \times 10^{-4}$	$< 1.1 \times 10^{-4}$

The above data are revisions of data published in CRPL-FB-244, December 1964.

# IONOSPHERIC EFFECTS OF SOLAR FLARES

IIIz

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

AUGUST 1966

AUG 1966	UNIVERSAL TIME			WIDE SPREAD INDEX	SWF TYPE IMP	IMPORTANCE							STATIONS	KNOWN FLARE			
	START	END	MAX			ABS	SCNA	SEA	SPA	SES	SFD	BUR					
01	2013	2019		5									1	MC BO HA (SERIES OF BURSTS)			
01	2013	2019												1	MC BO HA	2030	
01	2035	2037		5										1	MC BO HA	2030	
01	2043	2045		5										1	MC BO HA	2030	
01	2045	2047		5										1	MC BO HA		
01	2110	2113		5										1	BO HA		
01	2130	2132		5										1	BO MC HA	2133	
01	2234	2239		5										1	HA BO		
02	2122	2130	2125	1									15	BO(WWV10-1.5)			
02	2126	2139	2130	1			8	1							BO		
04	0444	0507	0450	1	G 1-										MA	0442	
04	0444	0507	0453	1						12					MA(NPG18-12)		
04	0445	0502	0451	1			35	1							MA		
04	1801	1802		4										1	MC BO		
04	1811	1812		4										1	MC BO		
04	1921	1922		4										1	BO MC		
04	2118	2158	2136	5	G 1+										BE AN	2117	
05	2316	2328	2318	1			17	1-							MA		
05	2320	2322		2										1	HA		
06	0326	0339	0331	5	G 1-										MA AN	0324	
06	0346	0358	0347	5						1-					MA AN		
06	0756	0806	0801	5							14				MA AN	0740	
06	1900	2030	1914	1						2-					A3	0740	
06	1901	1907	1904	1									10		BO(WWV10-1.0)	1900	
11	1935	1936		5										1	MC BO HA		
11	1937	1939		5										1	MC BO HA		
11	1943	1948		5										2	MC BO HA (DOUBLE BURST)		
12	1633	1634		5										1	MC BO RO		
12	1636	1638		5										1	BO MC RO		
12	1638	1642		5										1	MC RO		
12	1742	1743		5										1	MC BO RO		
12	1756	1802		5										1	MC BO RO (SERIES OF BURSTS)		
12	1756	1802															
12	2116	2117		5										1	HA BO		
14	1822	1824		4										1	BO MC		
14	1824	1825		4										1	BO MC		
14	1825	1828		4										1	BO MC		
14	1842	1843		1										1	MC		
14	1905	1906		1										1	MC		
15	1112	1135	1126	1						1-					RO		
15	1115	1232	1136	1			28	1							RO		
15	2152	2154		5										1	BO HA		
16	2110	2113		5													
16	2123	2131	2124	1						03				1	BO MC HA	2123	
16	2252	0004	2255	1									10		BO(WWV19-0.3)	2123	
16															MA(NPG18-10)	2246	
17	0030	0045	0035	5	G 1+										OK MA TO		
17	0030	0210	0033	1									05		BO(KKE42-0.5)	0028	
17	0031	0047	0036	1			15	1							MA		
17	0031	0115	0037	5						53					MA(NPG18-53)		
17															HA(WWV20-22)		
18	1818	1833	1824	2	SL 1-										MC BE	1818	
18	1820	1845	1840	1									2		UM		
18	1820	1930	1840	5						47					UM(NPM26-47,NBA24-13)		
18															HA(WWV20-11)		
19	0434	0455	0441	1			8	1							MA	0436	
19	0435	0458	0438	1											MA		
19	0437	0458	0442	1	S 1						18				MA(NPG18-18)		
19	1534	1536		4										1	MC BO		
19	1534	1738		4										1	BO MC (NOISE STORM)		
19	1546	1549		4										1	BO MC		
19	1734	1736		4										1	MC BO		
20	1843	2010	1905	1							52				UM(NPM26-52,NBA24-9)		
20	1854	1910	1856	2	SL 1-										MC BE		
21	1504	1506		4										1	BO MC		
21	1514	1516		4										1	BO MC		
21	1609	1704		4										1	BO MC (NOISE STORM)		
23	1625	1628		4										1	MC BO		
23	1630	1631		1										1	MC		
23	1631	1633		1										1	MC (DOUBLE BURST)	1623E	
23	1754	1815		5	SL 1-										MC TR	1746	
24	1336	2400D		4										1	MC BO (NOISE STORM)		





IONOSPHERIC EFFECTS OF SOLAR FLARES

AUGUST 1966

AUG ▲ 1966	UNIVERSAL TIME			WIDE SPREAD INDEX	SWF TYPE IMP	IMPORTANCE						STATIONS	KNOWN FLARE	
	START	END	MAX			ABS	SCNA	SEA	SPA	SES	SFD			BUR
31	0040	0440	0258	5	G 3								HA(WWVB60-108, WWVL20-47) OK AN GH MA NZ	0038
31	0040	0449	0051	1		30	2						MA	
31	1315	2400D		5									MC BO (NOISE STORM)	1307
31	1606	1607		1									MC	
31	1607	1610		1									MC (DOUBLE BURST)	
31	1831	1835	1832	1						05			BO(WWI9-0.5)	1830
31	1836	1920	1906	5	G 2								MC BE HU	
31	1848		1900	5				42					UM(NPM26-42,NSS24-8)	1847
31	1850	1856	1851	1							06		HA(WWVL20-22)	
31	1904	1909	1905	1							02		BO(WWI9-0.6)	
31	1905	1935	1912	1						1+			BO(WWI9-0.2)	1905
31	2019	2022		5								1+	UM	
31	2230	0030	2345	1				15					BO MC	2013
													AN(NPM26-15)	

Manila data for SCNA, SEA and BUR were not received in time for inclusion in the above table.

\*\* in ABS column signifies number in SCNA is db. of absorption and not importance on 1- to 3+ scale.

# RIOMETER EVENTS

IIIdd

AUGUST 1966

GREAT WHALE RIVER

30 Mc/s

AUG. 1966	START UT	END UT	MAX UT	MAX. ABS. .1DB	NO. OF PKS	AUG. 1966	START UT	END UT	MAX UT	MAX. ABS. .1DB	NO. OF PKS
01	0048	1300	0358	26	5	19	0112	2050	1152	38	13
03	0308	1040	0519	23	4	20	0247	1018	0253	10	6
03	1420	1837	1659	8	1	21	0223	0840	0550	3	1
04	0340	1937	1235	25	4	22	0000	0000	0000	0	0
04	2330					23	0900	*	1209	31	5
05		*	0847	23	5	23	2230				
06	0049	1120	0605	11	6	24		0734	0132	32	10
06	2110					24	1138	2250	1214	22	3
07		1020	0401	12	10	25	0058	1350	1211	16	7
08	2056					25	1759	2158	2125	7	3
09		1420	0555	11	6	26	0040	0810	0605	40	11
09	1850					26	1206	1310	1238	3	2
11			0339			27	*	1124	0637	5	3
13		1420		31	25	27	1524	2343	1715	8	1
13	1900					28	0716		1750		
14		*	0312	25	18	29		0048		14	2
15	0520	1600	0652	11	3	29	0910	*	2205	25	7
16	0127	0954	0643	10	2	30	*		2036		
17	0235	0620	0404	4	1	31		0910		18	8
18	0333	1410	1045	12	5						

\* Time not known due to equipment failure or other cause.

This tabulation shows all events starting on any day of this month.  
See previous month table for events which may not have ended by  
the first day of this month.

MAX is the time of event maximum.

ABS is absorption.

PKS is peaks.

No data: zeros for all values of a day.



SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES

AUGUST 1966

DATE	FREQUENCY	STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ Wm}^{-2} (\text{c/s})^{-1}$		INT.	REMARKS	
				UT	UT	MINUTES	PEAK	MEAN			
1	10700	PENN	3	1143.2	1144.1	5.2	78.7	9.8			
	8800	SGMR	45	1143.2	1143.7	4.8	79.0	25.0			
	4995	SGMR	45	1143.2	1143.6	4.3	41.6	8.0			
	2800	OTTA	3	1143	1143.7	1.5	34.0	11.0			
	2700	PENN	3	1143.5	1144.1	4.1	26.9	4.5			
	2695	SGMR	45	1143.5	1143.8	4	24.7	4.0			
	1415	SGMR	3	1143.2	1143.7	1.4	16.8	4.0			
	960	PENN	3	1143.5	1143.8	3.5	11.7	1.5			
	606	SGMR	45	1143.2	1143.7	1.2	87.6	30.0			
	2800	OTTA	30	1144.5		10	4.4	2.2			
	2800	OTTA	1	1146	1147	1.5	5.2	2.6			
	1415	SGMR	3	1151	1151	.3	8.2	1.0			
	2800	OTTA	21	1215	1244	275	3.6	1.8			
	8800	SGMR	3	1236.3	1236.6	.7	19.8	3.0			
	4995	SGMR	3	1236.2	1236.5	1.1	16.0	2.0			
	2800	OTTA	1	1236.3	1236.7	1.5	5.0	2.5			
	2695	SGMR	1	1236.4	1236.8	1.1	4.8	.5			
	8800	SGMR	29	1237	1241	5	7.9	1.0			
	4995	SGMR	29	1237.3	1241	4.7	6.4	1.0			
	2695	SGMR	29	1237.5	1241.2	7.5	2.9	.5			
	2800	OTTA	1	1240.7	1241	1.5	3.6	1.8			
	1415	SGMR	3	1240.5	1241	.7	31.3	6.0			
	606	SGMR	1	1240.5	1240.8	1	6.3	1.0			
	2800	OTTA	1	1303.9	1304	.4	7.0	3.5			
	960	PENN	3	1826.8	1828.7	2.5	13.5	2.9			
	328	PENN	5	1826.7	1827.8	2.9	22.0	11.0			
	960	PENN	1	1831.5	1833	2.7	4.3	2.1			
	960	PENN	3	1842.3	1844.2	12.7	21.7	3.4			
	328	PENN	5	1842.3	1844.3	14	51.3	9.9			
	960	PENN	3	1902.4	1903.6	4	76.0	23.3			
	328	PENN	5	1902	1903.6	4.6	35.5	10.8			
	2800	OTTA	1	2040.8	2041.1	.5	3.2	1.6			
	2	8800	SGMR	3	1756.8	1757.6	13.2	3.8	1.2		
		4995	SGMR	3	1757.2	1757.6	11.8	3.8	1.2		
		486	WASH		2333		3	120.0			
	3	2800	OTTA	26	1240		140	5.6			
	4	2800	OTTA	21	2145	2225	160	2.6	1.3		
		2800	OTTA	2	2147	2142.5	2.5	2.4	1.2		
		2800	OTTA	1	2200	2201	2	1.6	0.8		
	6	2800	OTTA	20	1730	1935	280	3.0	2.0		
7	2800	OTTA	20	1540	1640	120	1.8	0.9			
	2800	OTTA	21	2113	2121	60	3.4	1.7			
	2800	OTTA	1	2117.5	2118.3	2	2.4	1.2			
	606	SGMR	41	2129.1	2131.4	2.4	84.2	5.0			
8	4995	SGMR	20	1614.8	1615.7	12.2	7.0	2.6			
	2800	OTTA	21	1615	1618	60	5.0	2.5			
	2800	OTTA	3	1615.5	1615.7	.5	10.0	5.0			
	2695	SGMR	22	1615	1617.5	15	5.8	3.5			
	2700	PENN	24	1905	1907.5	178.6	2.5	2.5			
	4995	SGMR	20	1907.2	1908.4	10.8	7.4	4.0			
	2800	OTTA	3	1907	1908.5	3	12.0	8.0			
	2700	PENN	20	1907.7	1908.5	16.8	9.5	4.8			
	2695	SGMR	3	1906.5	1908.5	7	14.0	5.8			
	1415	SGMR	1	1907.8	1908.6	4.2	3.8	1.7			
	2800	OTTA	29	1910		57	6.0	3.0			
	2695	SGMR	29	1913.5	1913.5	7	2.3	1.4			
	2700	PENN	3	1939.2	1940.6	5.5	12.0	6.0			
2800	OTTA	20	2340	2350	80	2.6	1.6				
9	2800	OTTA	1	1726	1726.5	1	1.8	0.9			
10	2800	OTTA	20	1200	1300	180 D	3.8	1.9			
	2800	OTTA	21	1605	1842	255	5.2	2.6			
				1605	1730	130	2.4				
				1815	1842	125	5.2				
	8800	SGMR	20	1822	1831.7	58	11.9	4.0			
	4995	SGMR	20	1819.8	1823.8	60.2	6.5	2.0			
	2800	OTTA	2	1821	1824	4	1.6	1.0			
	2700	PENN	20	1818.1	1824.9	44	5.1	2.4			
	2695	SGMR	20	1819.1	1824	60.9	7.1	2.5			
	1415	SGMR	20	1821	1826	39	4.5	2.0			
12	2800	OTTA	26	1230		420	14.0				
	8800	SGMR	40	1559	1607.6	31	11.4	3.5			
	4995	SGMR	40	1546	1602.7	44	6.9	2.0			
	2695	SGMR	40	1546.6	1549.4	43.4	8.2	3.0			
	1415	SGMR	20	1546	1605.4	24	5.3	2.0			
13	1415	SGMR	3	1708.7	1708.8	.5	8.8	3.8			
	606	SGMR	1	1708.1	1708.7	.9	2.5	1.2			
	1415	SGMR	41	1712.8	1713.3	1.7	3.8	1.3			
	606	SGMR	41	1712.9	1714	1.6	2.8	1.2			
14	1415	SGMR	3	1035.2	1040.6	8.3	29.5	16.9			
	606	SGMR	45	1027.4	1041.3	21.6	1501.0	204.9			

SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES

IVb

AUGUST 1966

DATE	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{Wm}^{-2} (\text{G/s})^{-1}$		INT.	REMARKS	
			UT	UT	MINUTES	PEAK	MEAN			
15	2800 OTTA	21	1825	1838	90					
	2800 OTTA	2	1830	1830.3		5.0	2.5			
	2800 OTTA	1	1835	1836.2	.5 3	4.6 4.0	2.3 2.0			
	2800 OTTA	20	1512	1519	15	3.0	1.5			
	960 PENN	1	2051.6	2051.8	.3	7.0	3.5			
	328 PENN	5	2051.7	2051.8	.3	22.0	11.0			
	960 PENN	3	2107	2107.5	.9	43.1	9.8			
	328 PENN	5	2106.7	2107.6	1.1	108.2	48.8			
	16	2700 PENN	20	1203.8	1206	32	6.5	3.2		
		2800 OTTA	21	1355	1430	100	8.8	4.4		
2800 OTTA		2	1426	1427	4	12.0	6.0			
10700 PENN		20	1426	1426.6	25	6.9	3.5			
2700 PENN		20	1425.4	1427.4	30	10.3	5.1			
1415 SGMR		40	1426.3	1427.2	4.2	8.2	2.0			
606 SGMR		40	1426.3	1427.3	3.8	12.2	3.0			
960 PENN		1	1534.6	1535	1.2	4.5	2.2			
328 PENN		5	1534.8	1535.4	1.2	56.9	18.7			
2700 PENN		24	1623	1741	285	3.7	1.9			
606 SGMR		3	1624.1	1624.2	1.9	9.2	1.5			
2800 OTTA		21	1625	1800	510	12.0	6.0			
960 PENN		1	1627	1627.3	1.2	4.5	2.2			
328 PENN		5	1627.2	1627.4	1	13.5	6.8			
960 PENN		1	1647.4	1648.2	1.4	5.6	2.8			
328 PENN		5	1647.2	1648.4	2	25.1	12.5			
10700 PENN		20	1744.6	1752.6	136	14.6	7.3			
8800 SGMR		20	1745	1752	35	14.8	3.0			
4995 SGMR		20	1745	1752.8	35	17.7	4.0			
2800 OTTA		46	1747.5	1758	27	107.0	18.0			
			1747.5	1753.8	8	40.0				
			1755.5	1758	19	107.0				
2700 PENN		45	1748.2	1758	178	187.0	8.0			
2695 SGMR		45	1745	1758	35	116.0	20.0			
1415 SGMR		40	1745	1753.3	33	46.6	12.0			
960 PENN		20	1747	1752	28	4.7	2.3			
606 SGMR		40	1745	1758.5	195	64.2	14.0			
486 WASH			1744	1752	134 U	120.0D				
328 PENN		5	1743.6	1752	61	25.9	11.9			
8800 SGMR		20	1824.8	1831.7	115.2	5.9	1.0			
4995 SGMR		20	1827.5	1839.5	26.5	8.9	2.0			
2800 OTTA		4	1827	1832	28	29.0	12.0			
2695 SGMR		22	1825	1831.9	105	30.2	6.5			
1415 SGMR		20	1819	1830.6	17	30.2	8.0			
1415 SGMR		29	1836	1840	144	17.2	2.0			
2800 OTTA		1	1937	1937.5	1	4.0	2.0			
2800 OTTA		1	2343	2344.5	3	3.4	1.7			
17		2800 OTTA	20	2025	2047	75	4.6	2.0		
		960 PENN	45	2044.4	2048	5.3	34.3	7.6		
		486 WASH		2048	2048	2	120.0D			
	328 PENN	5	2047.8	2048.2	1.2	26.3	13.1			
	2800 OTTA	21	2320	2345	120	12.0	6.0			
	2800 OTTA	4	2357.5	2358	1.5	16.0	11.0			
	2800 OTTA	29	2359		6	4.2	2.1			
	18	2800 OTTA	21	1400	1506	135	6.6	3.3		
		10700 PENN	45	1453	1456.3	44	939.4	89.4		
		4995 SGMR	45	1452.7	1456.6	7.6	423.0	124.0		
2800 OTTA		4	1453	1456.5	13	300.0	106.0			
2700 PENN		45	1453.4	1456.6	46	225.3	30.2			
2695 SGMR		45	1451.8	1456.5	8.5	457.0	95.0			
1415 SGMR		45	1453.3	1458.7	6.4	300.0	54.5			
960 PENN		45	1454.4	1502.8	42	87.3	11.5			
606 SGMR		45	1454	1502.5	10.8	1825.0	534.0			
4995 SGMR		29	1500.3	1500.3	105.7	23.7	11.9			
2695 SGMR		29	1500.3	1500.3	105.7	20.6	10.3			
1415 SGMR		29	1459.7	1459.7	55.9	93.8	46.6			
606 SGMR		29	1504.8	1504.8	100.8	464.0	232.0			
328 PENN		5	1500	1503.8	22	52.1	11.7			
2800 OTTA		1	1702	1702.6	1	2.0	1.0			
486 WASH			1702		3	95.0				
2800 OTTA			1752.8	1752.8		7.0				
4995 SGMR		1	1801	1801.1	.9	3.5	1.8			
2800 OTTA		1	1800.8	1801	1	3.8	1.9			
2695 SGMR		1	1800.5	1800.9	.8	6.3	3.2			
1415 SGMR		3	1800.6	1801.2	1.2	8.2	4.1			
4995 SGMR		21	1858.6	1947	72.4	14.2	6.8			
4995 SGMR		3	1907.8	1908.1	1	10.3	5.1			
2695 SGMR		1	1907.8	1908	.5	3.2	1.5			
2800 OTTA		21	1910	1950	85	7.0	3.5			
2695 SGMR		21	1922	1950.8	45.5	8.3	4.2			
2800 OTTA		2	1940.5	1940.6	1	5.0	2.5			
2695 SGMR		1	1939	1939.5	1.5	5.3	2.6			
486 WASH			1937		2	35.0				
19		1415 SGMR	1	1147.4	1148.8	1.7	6.3	1.0		
	606 SGMR	1	1147.4	1148	1.7	7.3	1.0			
	8800 SGMR	3	1157.4	1157.5	2.6	159.3	40.0			
	4995 SGMR	1	1157.5	1157.8	2.5	7.4	1.0			
	8800 SGMR	29	1200	1200	6	11.1	3.0			

SPIKE

SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES

AUGUST 1966

DATE	FREQUENCY STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY $10^{-22} \text{ Wm}^{-2} (\text{c/s})^{-1}$		INT.	REMARKS
						PEAK	MEAN		
	4995 SGMR	29	1200	1200	6	1.3	.5		
	2800 OTTA	24	1208		4	13.6			
	8800 SGMR	3	1206.9	1209.2	5.1	269.0	60.0		
	4995 SGMR	3	1206.9	1208.3	4.2	131.0	20.0		
	2800 OTTA	4	1208	1209	4	51.4	25.7		
	2695 SGMR	3	1208	1209.2	4	73.6	15.0		
	1415 SGMR	45	1208	1209	3	709.0	80.0		
	8800 SGMR	29	1212	1212	80	32.9	7.0		
	4995 SGMR	29	1211	1211	81	26.8	5.0		
	2695 SGMR	29	1212	1212	80	17.2	3.0		
	1415 SGMR	29	1211	1211	120	3.1	.5		
	8800 SGMR	20	1410.6	1411.4	27.4	12.4	2.0		
	4995 SGMR	20	1410	1411.3	28	10.1	1.5		
	2695 SGMR	1	1410	1411.2	5	3.3	.5		
	1415 SGMR	1	1411.1	1411.3	.5	3.1	.5		
	606 SGMR	45	1411	1411	.7	80.7	15.0		
	2800 OTTA	21	1515	1540	30	4.6	2.3		
	2695 SGMR	3	1522	1525.3	7	30.0	5.0		
	2800 OTTA	28	1523		2	2.8			
	8800 SGMR	3	1525	1525.7	1.6	20.6	4.0		
	4995 SGMR	3	1524.9	1525.2	5.1	20.2	4.0		
	2800 OTTA	3	1524.8	1525.2	5	22.0	11.0		
	1415 SGMR	40	1523	1528.6	6	12.6	3.0		
	606 SGMR	3	1523	1525.3	2.6	112.0	20.0		
	2800 OTTA	1	1716.7	1717.3	1.5	2.8	1.4		
	2695 SGMR	20	1714.5	1717.4	11.5	50.0	15.0		
	486 WASH		1717		1	100.0			
	2800 OTTA	20	1800	1820	35	4.2	2.1		
	606 SGMR	20	1804.4	1806.3	10.6	39.2	7.0		
	486 WASH		1758		27	115.0			
	2800 OTTA	1	2112	2113.2	2	5.6	2.8		
	2800 OTTA	46	2152	2156.5	8.5	13.2	5.3		
			2152	2156.5	5	13.2			
			2157	2158	3.5	12.4			
	2700 PENN	3	2153.6	2156.8	6.4	13.0	6.5		
	1415 SGMR	20	2154.6	2156.6	9.4	20.7	5.0		
	960 PENN	1	2155	2156.4	3.5	2.4	1.2		
	606 SGMR	20	2154.6	2156.6	9.4	11.2	3.0		
	2800 OTTA	29	2200.5	2200.5	30	7.6	3.8		
	2800 OTTA	1	2210	2211	2	4.8	2.4		
	486 WASH		2250		2	65.0			
	486 WASH		2257		1	55.0			
20	1415 SGMR	20	1047.8	1050.8	10.2	169.3	50.0		
	606 SGMR	22	1047.8	1048.4	12.2	140.8	40.0		
	2800 OTTA	21	1205	1325	250	9.8	4.9		
	8800 SGMR	3	1234.8	1235.8	4.2	12.2	1.5		
	4995 SGMR	1	1234.5	1235.7	4.5	5.6	.5		
	2800 OTTA	3	1235	1235.8	3	9.0	4.5		
	2700 PENN	3	1234.4	1235.8	3.4	12.4	3.0		
	2695 SGMR	3	1231.5	1235.6	8	9.1	1.0		
	1415 SGMR	1	1234.5	1235.7	3	4.1	.5		
	960 PENN	3	1236.2	1236.4	.8	12.8	3.4		
	606 SGMR	41	1234.7	1236.8	2.9	12.4	2.0		
	8800 SGMR	3	1247.5	1247.7	5.5	12.2	1.5		
	4995 SGMR	3	1247.3	1247.7	6.7	8.7	1.0		
	2800 OTTA	45	1247.5	1247.8	1.5	7.6	3.8		
	2700 PENN	3	1247.6	1247.7	2.6	11.1	1.9		
	2695 SGMR	3	1247	1247.7	6	14.3	2.0		
	1415 SGMR	41	1245.8	1248.5	4.2	15.6	2.0		
	960 PENN	3	1248.2	1248.4	.8	9.8	2.7		
	606 SGMR	41	1247	1247.6	2	31.0	5.0		
	2800 OTTA	3	1324	1324.4	1	7.6	3.8		
	2700 PENN	3	1324.3	1324.4	.3	11.8	5.9		
	960 PENN	3	1324	1324.4	.5	99.8	49.9		
	2800 OTTA	1	1326	1326.5	3	2.8	1.4		
	2700 PENN	3	1325.5	1326.3	4.3	8.3	4.1		
	960 PENN	3	1325.9	1326	.4	44.8	15.0		
	960 PENN	3	1342.4	1342.8	.6	87.7	38.3		
	10700 PENN	3	1347.8	1348.1	3.2	39.6	7.2		
	8800 SGMR	45	1347.9	1348.2	4.1	39.8	8.0		
	4995 SGMR	45	1347.8	1348.5	4.7	17.3	4.0		
	2800 OTTA	45	1348	1348.2	3	34.0	17.0		
	2700 PENN	3	1347.9	1348.1	3.7	50.8	7.2		
	2695 SGMR	45	1347.9	1348.1	4.1	65.9	12.0		
	1415 SGMR	45	1347.8	1348.2	2.2	37.0	6.0		
	960 PENN	3	1347.8	1348.5	2.5	130.6	27.0		
	606 SGMR	3	1348	1348.2	1	7.8	1.0		
	8800 SGMR	41	1410	1414	7	12.2	3.0		
	4995 SGMR	41	1410.2	1413.8	5.8	8.7	1.0		
	2800 OTTA	1	1410	1410.6	1.5	4.8	2.4		
	2700 PENN	1	1410.2	1410.6	1.2	4.7	2.4		
	2695 SGMR	41	1410	1414	6	20.8	4.0		
	1415 SGMR	41	1409.6	1414	5.4	14.4	2.0		
	960 PENN	3	1410.4	1410.5	.2	76.8	38.4		
	606 SGMR	41	1410.3	1413.3	3.9	83.7	16.0		
	10700 PENN	1	1413.1	1413.8	1.2	6.1	3.0		
	2800 OTTA	45	1413.4	1414	2	10.4	5.2		
	2700 PENN	3	1413.3	1414	3.3	14.2	3.0		
	960 PENN	45	1413.3	1413.6	.8	26.8	12.0		
	10700 PENN	3	1449.8	1450	3.4	12.2	2.1		
	8800 SGMR	3	1447.3	1450.2	6.5	8.1	1.0		
	4995 SGMR	3	1447.3	1450.2	6.7	8.0	1.0		
	2800 OTTA	40	1447	1450	7	5.6	2.8		
	2700 PENN	3	1448	1450.1	6.4	8.3	1.8		
	2695 SGMR	41	1447.2	1450.1	5.8	10.4	1.0		
	1415 SGMR	41	1449.6	1452.8	3.6	12.3	2.0		

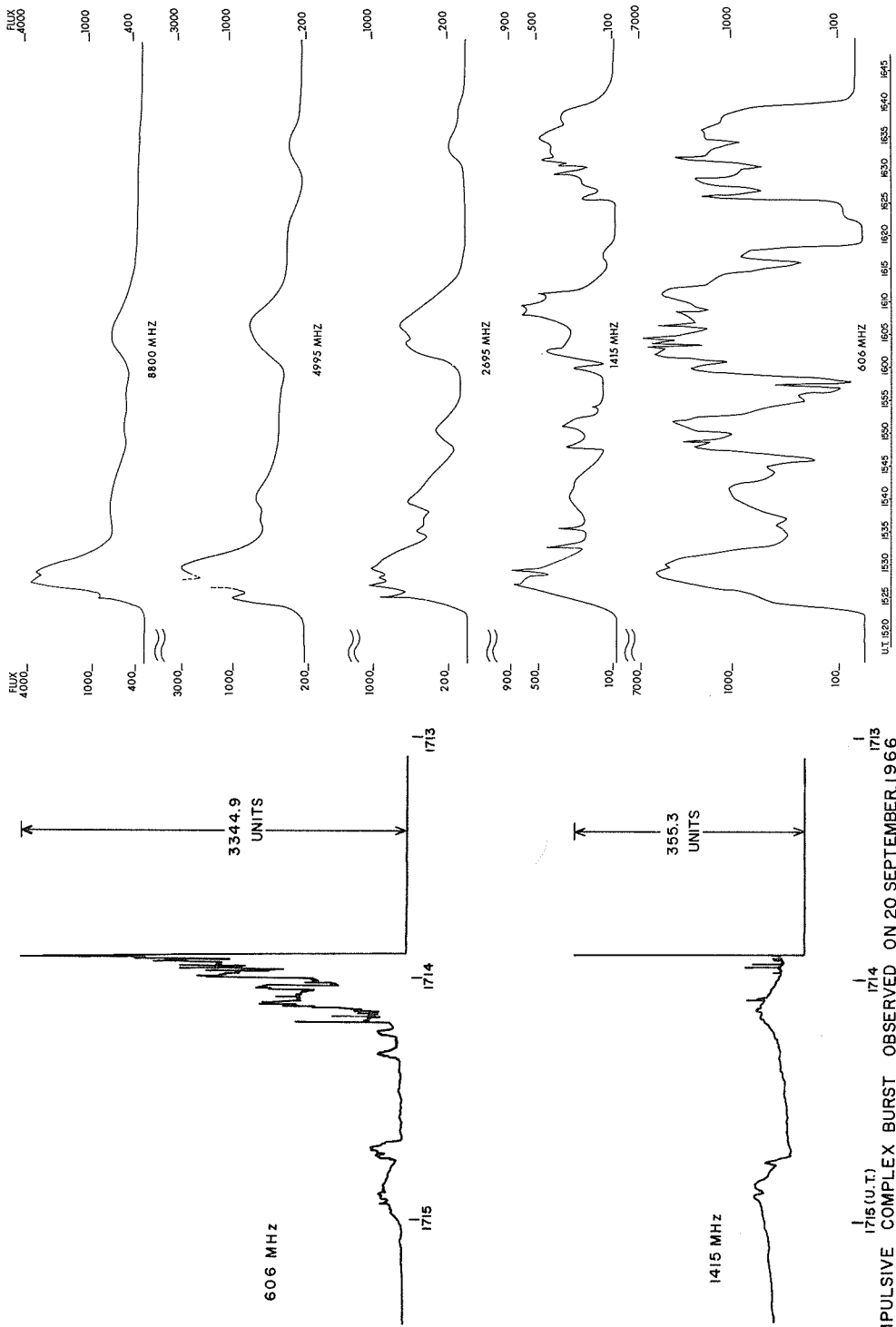
SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES

IVd

SEPTEMBER 1966

DATE	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} (\text{c/s})^{-1}$		INT.	REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
	960 PENN	40	1450	1450.1	2.9	26.8	5.5		
	606 SGMR	41	1447.2	1452.6	6.3	537.2	8.0		
	606 SGMR	45	1452.2	1452.6	.8	537.2	55.0		
	1415 SGMR	45	1459.2	1459.3	.4	20.6	2.0		
	606 SGMR	45	1459.2	1459.4	.4	483.6	40.0		
	10700 PENN	3	1524.8	1525.1	1	15.9	8.0		
	8800 SGMR	3	1524.8	1525.1	7.2	20.3	3.0		
	4995 SGMR	3	1524.8	1525.1	7.2	38.1	3.0		
	2800 OTTA	3	1525	1525.2	4	11.4	5.7		
	2700 PENN	3	1524.8	1525.1	2.2	16.5	5.0		
	2695 SGMR	3	1524.8	1525.1	7.2	20.8	2.0		
	1415 SGMR	1	1524.3	1525.1	1.2	4.9	.1		
	606 SGMR	1	1524.6	1524.7	.9	3.1	.1		
	486 WASH		1615		2	100.0			
	10700 PENN	24	1630	1900	344	52.2	26.1		
	2800 OTTA	21	1625	1830	345	20.2	10.1		
	2800 OTTA	3	1641	1641.3	1	10.4	5.2		
	1415 SGMR	45	1636.2	1643.1	22.8	355.3	17.8		
	10700 PENN	3	1702.8	1704.4	5.8	13.0	6.5		
	2800 OTTA	46	1701.8	1704.7	9	23.8	8.0		
			1701.8	1702.7	1.5	10.4			
			1703.5	1704.7	7.5	23.8			
	2700 PENN	45	1702	1704.2	7.7	26.0	11.8		
	2700 PENN	1	1702.8	1704.4	5.8	5.9	3.0		
	1415 SGMR	46	1701	1704	7	205.7	20.0		
	960 PENN	1	1702.8	1704.2	2.8	1.2	0.6		
	10700 PENN	3	1710.2	1714	33	84.8	16.1		
	8800 SGMR	45	1703.4	1714	70.6	162.4	40.0		
	4995 SGMR	45	1703.8	1714.9	36.2	90.0	30.0		
	2800 OTTA	45	1711.5	1715	39	225.0U	3.2		
			1711.5	1713	2	32.6			
			1714	1715	8	225.0U			
			1722	1724.5	28	53.4			
	2700 PENN	45	1712.2	1714.8	35	257.6	30.9		
	2695 SGMR	45	1641	1714.3	79	261.6	60.0		
	1415 SGMR	46	1708.5	1713.9	25.5	1084.6	50.0		
	960 PENN	45	1711.6	1713.8	7.6	125.6	8.3		
	606 SGMR	45	1712.3	1713.9	32.7	3344.9	33.5		
	486 WASH		1712	1714	290 U	120.0D			
	328 PENN	5	1712.2	1713.9	3.4	341.7	45.2		
	2700 PENN	24	1733	1804	282	21.3	10.6		
	1415 SGMR	29	1734	1734	56	24.7	4.0		
	606 SGMR	29	1745	1745	45	9.3	2.0		
	328 PENN	5	1749.8	1749.8	.3	100.0	50.0		
	606 SGMR	40	1830	2049.2	259 D	18.6	5.0		
	4995 SGMR	3	2021.7	2021.9	1.3	13.8	3.0		
	2800 OTTA	1	2021.5	2022	1	5.8	2.6		
	2695 SGMR	3	2021.6	2022	1.4	8.5	2.0		
	486 WASH		2308		2	95.0			
21	2800 OTTA	20	1300	1325	50	2.6	1.3		
	2800 OTTA	2	1410	1410.9	2	4.4	2.2		
	2800 OTTA	20	1515	1520	40	2.2	1.1		
	2800 OTTA	20	1825	1850	140	4.4	3.5		
22	2800 OTTA	1	1339	1339.3	5	2.2	1.1		
	2800 OTTA	20	1450	1455	180	4.4	3.5		
23	2800 OTTA	24	1420		8	3.6			
	10700 PENN	20	1553.3	1555.2	41	33.4	7.3		
	2800 OTTA	3	1553	1555	5	23.6	11.8		
	2700 PENN	20	1552.2	1555	32	17.3	3.8		
	2800 OTTA	29	1558	1558	52	6.0	3.0		
	10700 PENN	3	1817	1817.7	1	24.6	12.3		
	2800 OTTA	20	1720	1800	150	4.8	2.4		
24	2800 OTTA	20	1810	1940	200	4.6	2.3		
25	2800 OTTA	20		0030	130	3.8	1.9		
	960 PENN	45	1920.5	1921	.8	28.4	9.2		
	328 PENN	45	1920.2	1921.1	1.2	11.2	4.6		
26	10700 PENN	45	1522.6	1522.9	3	42.4	13.1		
	4995 SGMR	45	1523	1523.5	1.8	30.7	9.4		
	2800 OTTA	45	1523	1523.2	3	13.4	6.7		
	2700 PENN	45	1522.5	1522.8	2.3	9.5	4.2		
	2695 SGMR	45	1523	1523.1	1.7	11.9	6.5		
	2800 OTTA	21	1730		270	5.1	4.0		
	4995 SGMR	1	1738.5	1739.1	2.3	6.1	2.3		
	2800 OTTA	1	1739	1739.5	1	4.6	2.3		
	2695 SGMR	1	1738.3	1739.2	2.3	4.2	1.4		
	2800 OTTA	20	2235	2241	60	3.4	1.7		
27	2800 OTTA	20	1235	1455	585	17.0	8.5		
	4995 SGMR	20	1630	1700	90	2.0	.5		
	2695 SGMR	20	1630	1700	90	3.0	1.0		
	1415 SGMR	20	1630	1700	90	4.0	1.0		
	606 SGMR	20	1630	1700	90	3.0	1.0		
29	2800 OTTA	20	1227	1230	10	3.6	1.8		
	2800 OTTA	1	1546	1547.3	3	7.4	3.7		
	2800 OTTA	21	1940	1950	80	3.6	1.8		
	2800 OTTA	1	2006	2007	4	1.6	0.8		
	2800 OTTA	20	2305	2320	45	1.6	0.8		
30	2800 OTTA	21	2300	2315	40	3.0	1.5		
	2800 OTTA	3	2306.5	2307.5	4	9.2	4.6		

SELECTED SOLAR NOISE BURSTS  
AFCRL SAGAMORE HILL



1715 (U.T.)  
IMPULSIVE COMPLEX BURST OBSERVED ON 20 SEPTEMBER, 1966  
SAGAMORE HILL RADIO OBSERVATORY (AFCRL) HAMILTON, MASS.

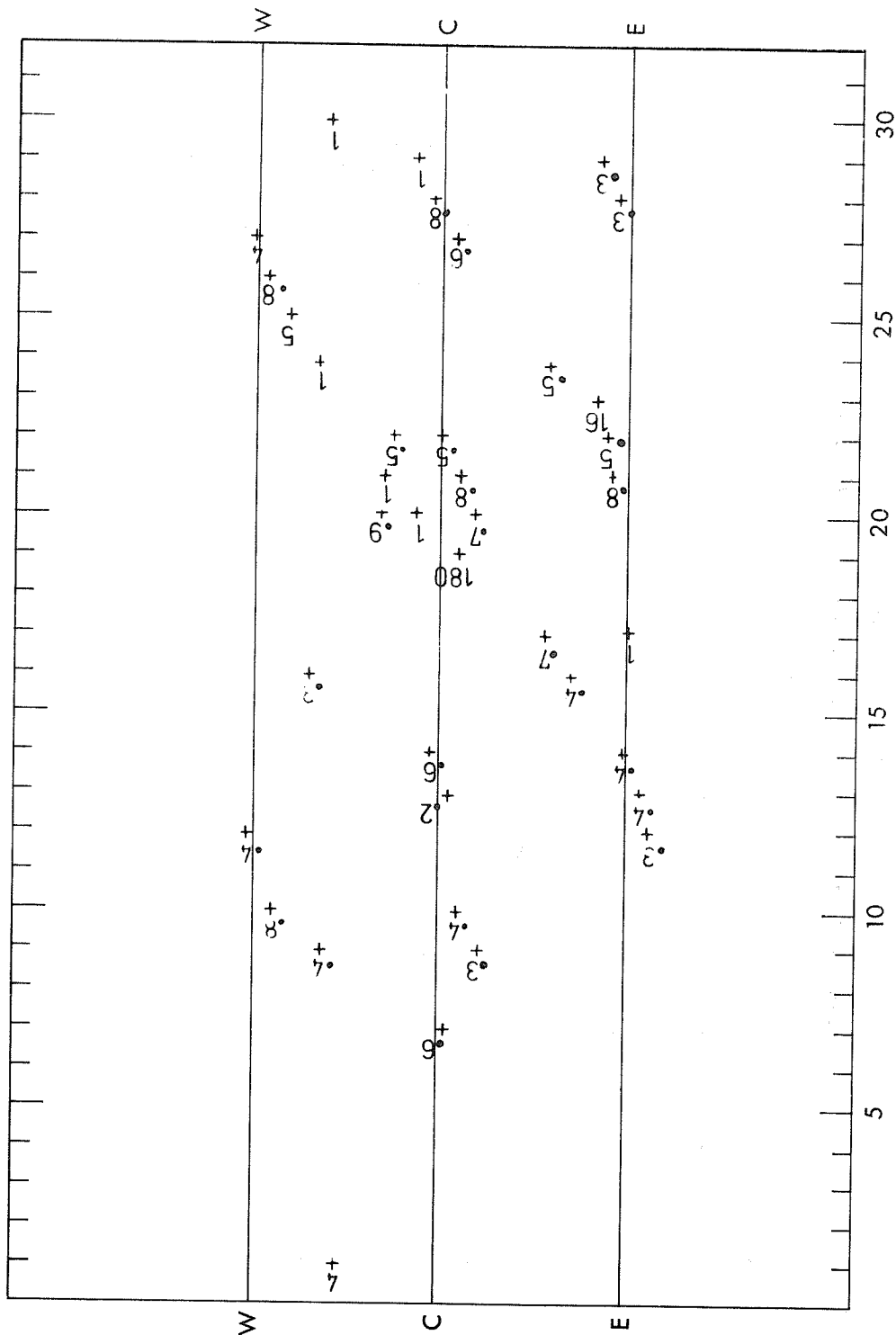
COMPLEX RADIO BURST OF THE SOLAR PROTON EVENT  
28 AUGUST, 1966 SAGAMORE HILL RADIO OBSERVATORY (AFCRL) HAMILTON, MASS.

# SOLAR RADIO EMISSION INTERFEROMETRIC OBSERVATIONS

SEPTEMBER 1966

NANÇAY

408 Mc/s

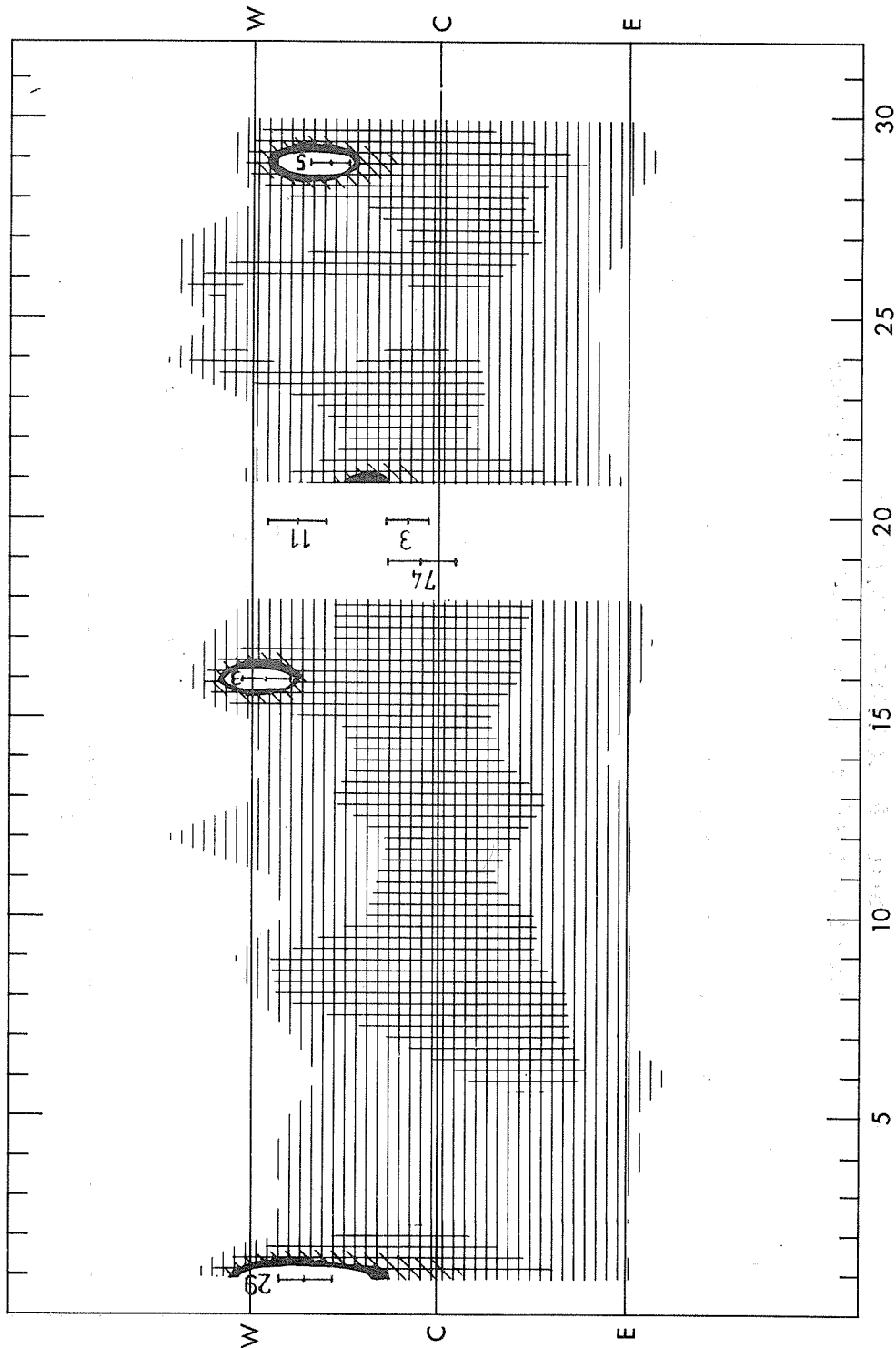


# SOLAR RADIO EMISSION INTERFEROMETRIC OBSERVATIONS

SEPTEMBER 1966

NANÇAY

169 Mc/s



**SOLAR RADIO EMISSION  
SPECTRAL OBSERVATIONS**

IVh

SEPTEMBER 1966

UNIVERSITY OF COLORADO

7.6-41 Mc/s

Date Sep 1966	Bursts				Date Sep 1966	Bursts			
	Type	Time (U.T.)	Inten- sity	Frequency Range (Mc/s)		Type	Time (U.T.)	Inten- sity	Frequency Range (Mc/s)
1 Sep	continuum	b1225-1352	1-	20-41	4 Sep	III	1250-1251	1+	13-38
	III	1402-1403	2	16-41		III	1253-1253:45	1	12-41
	III	1403-1404	2	16-41		III	1254:45-1255	1	12-31
	III	1414:30-1415	2	16-41		III	1301:30-1302	1	18-41
	III	1441-1442	2+	13-41		III	1302:30-1304:15	1+	14-41
	2 Sep	continuum	1352-1746	1	21-41	II	1452-1528	1	20-41
		continuum	1746-2111	1-	22-41	III	1557:30-1558	1-	21-41
		continuum	2111-a0050	1+	22-41	III	1659:45-1700:15	1-	9-29
		III	0003-0004:45	2+	16-41	III	1727:30-1727:45	1-	20-33
		III	1300:30-1301	1	20-41	III	1749-1749:30	1	25-41
III		1303:45-1304:15	1-	22-29	III	1807:30-1807:45	1-	17-31	
III		1307:15-1307:30	1	20-41	III	1810:15-1811	1-	16-35	
no observ.		1330-1759			III	1955:15-1955:30	1	16-38	
III		1814-1814:15	1+	21-41	III	2042-2042:15	1-	27-41	
III		1815-1815:15	1-	27-41	III	2122:30-2123:15	1-	21-41	
3 Sep	III	1815:30-1815:45	1-	24-35	III	2243:45-2244	1-	19-41	
	III	1909:15-1909:30	2	20-41	III	2258:15-2303:30	1	14-41	
	III	1912:30-1913	2	21-41	III	2309:30-2310	1	22-41	
	III	1931:15-1931:45	1-	24-41	III	2310:30-2310:45	1-	30-41	
	III	2053:30-2053:45	1	22-41	III	2338-2339	1	11-40	
	III	2104:45-2105	1-	21-39	III	2340:30-2341	1	13-24	
	III	2229:15-2229:30	1+	21-41	no observ.	1800-2159			
	III	2230-2230:30	1	21-41	5 Sep	1259-1259:15	1-	26-33	
	III	2232-2232:45	1	21-41	7 Sep	1259:30-1300:30	1	20-35	
	III	2233:15-2235:15	1+	11-41	III	1431:30-1431:45	1-	24-41	
4 Sep	III	2240-2240:30	1+	22-41	III	1433:45-1434:15	1-	22-38	
	III	2246:45-2247:15	1	21-41	III	1437-1438:30	2	20-41	
	III	2255:30-2256	1-	24-41	III	1453:45-1455	2	21-41	
	III	2311:30-2312	1-	26-34	III	1455:45-1456:45	1	23-41	
	III	2320-2320:30	1	22-41	III	1502:45-1503	1+	22-41	
	III	2322:30-2322:45	1	28-41	III	1504:15-1505	2	16-41	
	III	2334-2335	1+	20-41	III	1505:30-1507:30	2	23-41	
	III	2336-2336:45	1+	21-41	III	1701:15-1701:30	1	26-41	
	III	0009:15-0009:45	2	13-41	III	1702:45-1703	1-	23-41	
	III	0034:45-0035	2	22-41	III	1705:15-1705:30	1	20-41	
3 Sep	III	1329-1330	2	15-41	III	1707:45-1708:15	1	25-41	
	III	1444:30-1445:30	1+	23-41	III	1712-1712:15	1-	21-41	
	III	1510-1510:15	1-	25-41	III	1713:45-1714	1-	21-41	
	III	1511:30-1511:45	1	25-41	III	1716:45-1717:15	1	24-41	
	III	1528:45-1529	1	16-41	III	1717:30-1717:45	1-	25-41	
	III	1607:45-1608	1-	29-41	III	1718:15-1718:30	1-	25-39	
	III	1641:45-1642	1-	25-35	III	1719-1719:15	1-	22-41	
	III	1717:30-1718	1-	25-41	III	1719:45-1720	1-	26-41	
	III	2247:15-2247:45	1-	24-41	III	1732-1732:15	1-	20-41	
	III	2313:15-2313:30	1	22-41	III	1736:15-1736:30	1	22-41	
4 Sep	III	2328:15-2328:45	1	20-41	III	1739:15-1739:30	1-	27-41	
	III	2344-2344:30	1	7.6-41	III	1745:30-1745:45	1-	25-35	
	III	2347-2348:45	1	21-39	III	1800-1800:15	1-	24-34	
	III	2350:30-2350:45	1-	22-31	III	1800:30-1801	1	22-39	
	III	0020:15-0020:30	1-	22-35	III	1802:45-1803	1	22-41	
	III	0036-0036:15	1-	33-41	III	1809:15-1809:45	1+	12-41	
	III	0042:15-0045:30	1	22-41	III	1813:45-1814	2	9-41	
	III	1243:30-1244:30	1	13-36	III	1844:15-1844:30	1-	24-38	
	III	1245-1245:15	1	25-38	III	1845:30-1845:45	1-	25-38	
	III	1247:15-1248:15	1	13-41	III	1852:15-1852:30	1	20-41	
III	1248:45-1249:30	1	11-41						



**SOLAR RADIO EMISSION  
SPECTRAL OBSERVATIONS**

SEPTEMBER 1966

UNIVERSITY OF COLORADO

7.6-41 Mc/s

Date Sep 1966	Bursts				Date Sep 1966	Bursts			
	Type	Time (U.T.)	Inten- sity	Frequency Range (Mc/s)		Type	Time (U.T.)	Inten- sity	Frequency Range (Mc/s)
7 Sep	III	1853:30-1854	1-	22-36	8 Sep	III	1705:15-1705:30	1	19-32
	III	1856:30-1857	1	24-38		III	1716-1716:15	2	16-41
	III	1906:45-1907:15	2	7.6-41		III	1730:15-1730:30	1-	21-34
	III	1909:30-1910:15	1	23-41		III	1732-1732:15	1	21-38
	III	1911:15-1912	1	24-36		III	1734-1735	1+	16-41
	III	1920:30-1920:45	1-	27-41		III	1735:45-1736:15	1+	16-41
	III	1922:15-1922:30	1-	24-41		III	1745:45-1746	1-	25-36
	III	1923:45-1924	1-	24-41		III	1749:15-1749:30	1	22-39
	III	1954:30-1955	1+	22-41		III	1755:15-1755:30	1-	23-36
	III	1956-1956:15	1	23-36		III	1756-1756:15	1-	23-38
	III	1957-1958:15	2	7.6-41		III	1756:30-1756:45	1	19-41
	III	2001:15-2001:45	2	7.6-41		III	1757:15-1757:30	1	21-41
	III	2003:30-2004	1+	21-41		III	1802-1802:30	1+	7.6-41
	III	2004:45-2005:30	1	22-41		III	1841:30-1841:45	1-	21-34
	continuum	2007-2018:30	1+	21-41		III	1842:15-1842:30	1-	21-34
	III	2052:45-2053:30	1+	21-41		III	1843:30-1843:45	1-	21-34
	III	2058:15-2058:45	1	20-41	III	1844-1844:15	1-	21-34	
	III	2100-2100:15	1	21-39	III	1845:15-1845:30	1-	23-36	
	III	2103:45-2104:15	2	12-41	III	1854-1854:15	1	14-38	
	III	2104:30-2104:45	1-	23-38	III	1906-1906:15	1	7.6-41	
	III	2105:30-2107:45	2	16-41	III	1950:30-1950:45	1-	22-36	
	III	2109:30-2110	1	7.6-41	III	1954:30-1956:30	1	13-40	
	III	2110:30-2111	2	7.6-41	III	1957-1957:15	1	12-41	
	III	2111:15-2111:30	1	18-41	III	2021-2021:30	1-	25-38	
	III	2112:15-2113	2	7.6-41	III	2023:15-2023:30	1-	20-36	
	III	2113:15-2114	2	12-41	III	2029-2029:30	1	16-41	
	III	2128-2128:15	2	17-41	III	2033:15-2033:30	1	13-39	
	III	2128:30-2130:15	2	12-41	III	2037-2037:15	1-	24-39	
	III	2139:30-2140	1-	22-39	III	2100-2100:30	1-	25-36	
	continuum	2204:45-2220	1+	16-41	III	2101:30-2102	1-	23-38	
	III	2300:30-2301	1+	25-41	III	2108-2108:15	1-	21-37	
	III	2308-2308:15	1-	22-38	III	2132-2133	1+	15-41	
III	2319:45-2320:30	1	23-36	III	2258:15-2258:30	1	16-41		
III	2321-2321:15	1-	23-33	III	2300-2300:15	1-	21-41		
III	0009:45-0010	1-	26-38	III	2300:45-2301:15	2	16-41		
8 Sep	III	0021:30-0022:30	1+	16-41	III	2310:30-2311	1	21-40	
	III	1253:15-1253:45	1	13-37	III	2313:15-2314	1	22-41	
	III	1304:15-1304:30	1-	21-38	III	2320:45-2322:45	2	7.6-41	
	III	1324:45-1325	1	18-39	III	2323:30-2323:45	1	22-41	
	III	1337-1337:15	1	25-40	III	1309-1309:45	1+	15-41	
	III	1351:45-1352	1-	22-39	III	1330:15-1331	1-	17-41	
	III	1352:15-1355:15	2	12-41	III	1333:15-1334	1	13-41	
	III	1457:15-1457:30	1-	23-30	III	1334:15-1336:15	2	12-41	
	III	1518:30-1518:45	1-	27-36	III	1338:30-1338:45	1-	28-37	
	III	1519:30-1519:45	1-	22-30	III	1507:15-1507:45	1-	35-41	
	III	1543:15-1543:45	2	11-41	III	1528:30-1530:30	1	12-41	
	III	1547:30-1547:45	1-	7.6-41	III	1600-1600:30	1-	20-41	
	III	1548:30-1548:45	1	16-41	III	1719:45-1720:15	1	7.6-41	
	III	1602-1602:15	1-	23-38	III	1720:45-1721:15	1-	7.6-39	
	III	1608:30-1608:45	1-	21-30	III	1721:45-1722	1-	24-39	
	III	1617-1617:15	1-	22-39	III	1724:15-1724:30	1-	7.6-41	
	III	1617:30-1617:45	1-	22-39	III	1725:45-1726:15	1+	7.6-41	
	III	1630:30-1630:45	1	26-39	III	1854-1854:45	1-	18-37	
	III	1639:45-1640	1-	27-34	III	1919-1919:30	1+	11-41	
	III	1640:30-1645:45	1-	28-40	III	1932-1932:30	2	7.6-41	
	9 Sep	III	1351:45-1352	1-	22-39	III	1330:15-1331	1-	17-41
		III	1352:15-1355:15	2	12-41	III	1333:15-1334	1	13-41
		III	1457:15-1457:30	1-	23-30	III	1334:15-1336:15	2	12-41
		III	1518:30-1518:45	1-	27-36	III	1338:30-1338:45	1-	28-37
III		1519:30-1519:45	1-	22-30	III	1507:15-1507:45	1-	35-41	
III		1543:15-1543:45	2	11-41	III	1528:30-1530:30	1	12-41	
III		1547:30-1547:45	1-	7.6-41	III	1600-1600:30	1-	20-41	
III		1548:30-1548:45	1	16-41	III	1719:45-1720:15	1	7.6-41	
III		1602-1602:15	1-	23-38	III	1720:45-1721:15	1-	7.6-39	
III		1608:30-1608:45	1-	21-30	III	1721:45-1722	1-	24-39	
III		1617-1617:15	1-	22-39	III	1724:15-1724:30	1-	7.6-41	
III		1617:30-1617:45	1-	22-39	III	1725:45-1726:15	1+	7.6-41	

**SOLAR RADIO EMISSION  
SPECTRAL OBSERVATIONS**

IVj

SEPTEMBER 1966

UNIVERSITY OF COLORADO

7.6-41 Mc/s

Date Sep 1966	Bursts				Date Sep 1966	Bursts			
	Type	Time (U.T.)	Inten- sity	Frequency Range (Mc/s)		Type	Time (U.T.)	Inten- sity	Frequency Range (Mc/s)
9 Sep	III	1934:15-1934:45	1-	22-37	10 Sep	III	1429-1429:30	1+	17-37
	III	1935:15-1938:30	2+	7.6-41		III	1435:30-1435:15	1-	20-33
	III	1953-1953:15	1-	26-34		III	1438-1438:15	1-	24-32
	III	2014-2014:45	1+	7.6-41		III	1442:30-1442:45	1-	29-36
	III	2016-2016:45	1-	20-38		III	1454:45-1455:15	1	21-41
	III	2017:30-2019:45	1	13-41		III	1458-1458:15	1	16-37
	III	2020:30-2021	1	9-41		III	1514:45-1516:30	2	11-41
	III	2036-2036:15	1-	23-38		III	1517-1518	1-	28-41
	III	2036:30-2037:15	1	7.6-41		III	1518-1520:45	2	7.6-41
	III	2037:45-2038	1-	26-38		III	1525:15-1526:15	1	21-37
	III	2042:15-2043:15	1	13-38		III	1532:45-1533:15	1	21-40
	III	2045:15-2045:45	1	7.6-41		III	1542:15-1543:30	2	7.6-41
	III	2055-2055:30	1	21-39		III	1605:15-1608:30	2	7.6-41
	III	2104:30-2105:45	1+	7.6-41		III	1609:30-1610:15	1+	20-41
	III	2109-2109:45	1	9-41		III	1611:30-1612:15	1+	24-41
	III	2119:45-2120	1	13-41		III	1614:30-1615:45	1-	16-41
	III	2120:15-2120:45	1-	20-41		III	1620:45-1621	1-	26-41
	III	2126:15-2127:15	2	7.6-41		III	1622:45-1624	1+	7.6-41
	III	2130-2130:30	2	7.6-41		III	1624:30-1625:15	2	7.6-41
	III	2135-2135:45	1-	20-38		III	1625:30-1628	1	7.6-41
	III	2150:15-2151:30	1+	12-41		III	1632-1633:15	1	24-41
	III	2155:15-2155:30	1-	30-41		III	1638-1638:15	1-	20-41
	III	2203:15-2203:45	1	15-41		III	1639:15-1639:45	1	16-41
	III	2216:30-2217	1-	21-33		III	1644:15-1644:30	1-	24-38
	III	2222:45-2224:15	1+	16-41		III	1701:30-1701:45	1-	23-36
	III	2226-2226:30	1	16-41		III	1702:15-1702:30	1-	26-38
	III	2227-2227:45	1+	10-41		III	1703:45-1704	1-	29-37
	III	2229:15-2230	1	23-41		III	1710:45-1711:15	1-	22-41
	III	2230:30-2230:45	1	21-37		III	1714:15-1714:30	1-	20-40
	III	2231:15-2232:15	1+	16-41		III	1717-1717:15	1-	21-39
	III	2243-2243:15	1-	26-41		III	1719-1719:30	1-	22-38
	III	2246:15-2246:30	1-	30-38		III	1721-1725:30	2	7.6-41
	III	2246:45-2247	1+	24-37		III	1725:45-1727:15	2	7.6-41
	III	2247:15-2247:45	1+	16-41		III	1738:45-1739	1-	24-38
	III	2248-2248:30	1	24-41		III	1747:30-1748	1	23-41
	III	2250:30-2251	1-	24-40		III	1750:15-1750:30	1-	23-41
	III	2316-2317	2	16-41		III	1751-1752	1+	7.6-41
	III	2337:30-2338:30	1+	17-41		III	1753:30-1754:15	1	25-41
	III	2356:15-2356:30	1+	20-41		III	1755-1755:30	1	25-41
	III	2356:45-2357	1	23-40		III	1756:30-1757	1+	21-41
	III	2357:30-2358	1+	17-41		III	1801:15-1803:45	1+	7.6-41
	III	0016-0016:15	1-	27-41		III	1805:15-1806	1+	7.6-41
	III	0016:30-0018	1+	17-41		III	1816-1816:15	1-	21-41
	III	0033:15-0033:30	1-	21-38		III	1817-1817:15	1-	23-39
	III	0034:45-0035	1-	25-37		III	1829:45-1830	1-	21-41
III	0041:15-0042:15	1+	13-41	III	1837:45-1838:15	1	7.6-41		
III	0043:15-0043:45	1+	16-41	III	1844-1845:15	1+	7.6-41		
III	1248-1248:30	1-	17-32	III	1848-1848:30	1	22-38		
III	1327:45-1328:15	1-	28-38	III	1851:15-1851:45	1-	35-41		
III	1345:45-1346:15	1	17-35	III	1857:30-1858	1	21-41		
III	1420:30-1421	1	28-41	III	1931:30-1932:15	1	23-41		
continuum	1422:30-1429	1-	24-41	III	1934:15-1935	1-	23-40		
III	1422:30-1424	1+	11-41	III	1941:30-1945	1+	7.6-41		
III	1426:15-1427:30	1+	11-41	III	1946:30-1947:15	1-	23-37		
III	1428-1428:15	1	19-41	III	1954:30-1955	1	9-41		

**SOLAR RADIO EMISSION  
SPECTRAL OBSERVATIONS**

SEPTEMBER 1966

UNIVERSITY OF COLORADO

7.6-41 Mc/s

Date Sep 1966	Bursts				Date Sep 1966	Bursts			
	Type	Time (U.T.)	Inten- sity	Frequency Range (Mc/s)		Type	Time (U.T.)	Inten- sity	Frequency Range (Mc/s)
10 Sep	III	1957-1957:30	1-	24-41	14 Sep	III	1837:30-1838:15	1	25-41
	III	2009:15-2010	1	16-41		III	2354:15-2355	1-	25-41
	III	2020:15-2020:45	1	9-39	15 Sep	continuum	b1249-a0030	1-	20-41
	III	2035:30-2035:45	1-	24-41		16 Sep	continuum	b1255-1815	1-
	III	2038-2038:15	1	22-41	III		1255:15-1255:30	1+	22-28
	III	2039:30-2040:45	1+	7.6-41	III	1257:30-1258:30	1	16-41	
	III	2109:30-2110	1-	22-41	III	1305-1305:30	1+	16-41	
	III	2110:15-2110:30	1-	22-40	III	1313:30-1314	1+	17-41	
	III	2111:15-2113:30	1+	9-41	III	1427:15-1428:30	2	12-41	
	III	2116:30-2117	1+	16-41	III	1556:15-1558	2	22-40	
	III	2201:30-2202	1	30-41	III	1619-1621:30	1+	10-41	
	III	2209:30-2213:30	1+	7.6-41	III	1624-1625:15	2	13-41	
	III	2214:45-2215	1-	22-34	III	1714:15-1715:30	1+	11-41	
III	2225:45-2226	1-	22-37	III	1729:15-1730	1+	10-39		
III	2312:45-2313	1-	22-39	III	1756:30-1759:15	1+	7.6-41		
11 Sep	III	2314-2314:15	1-	26-41	III	1759:45-1800:15	1+	21-41	
	III	2317:30-2317:45	1	24-41	continuum	1815-1855	1	20-41	
	III	0008-0008:30	1	22-41	II	1815-1820	1	24-41	
	III	0021:15-0021:45	1+	16-41	II	1827:15-1836	1+	21-41	
	III	0032:15-0032:30	1	16-41	III	1833:30-1833:45	1+	9-41	
12 Sep	III	1245-1245:15	1-	26-39	II	1838-1843:15	1+	20-31	
	III	1324:45-1325	1-	30-40	continuum	1855-a0030	1	22-41	
	III	1357-1357:15	1-	26-39	III	2051-2051:30	1	12-41	
	continuum	1359:30-a0032	1	22-41	III	2117:30-2118:15	2	10-41	
no observ.	1900-0000			III	2147:45-2149	1+	16-41		
13 Sep	III	1237:30-1237:45	1	24-38	III	2316:15-2317:15	1+	13-41	
	III	1324:15-1325	1+	21-41	III	2346:30-2347:45	1+	12-41	
	III	1410:15-1410:30	1-	27-41	III	2359:45-0000:45	1+	15-41	
	III	1525:15-1525:45	1-	22-37	continuum	1245-a0031	1-	22-41	
	III	1533:45-1534	1-	23-31	III	1534-1534:45	1+	12-41	
	III	1543:45-1544:15	1-	26-33	III	1842:45-1843:15	1+	7.6-41	
	III	1545:30-1545:45	1-	28-35	III	2048-2050	2	7.6-41	
	III	1556:30-1557	1-	28-38	III	2144:30-2145	1+	16-41	
	III	1600-1600:30	1-	25-41	III	2358:15-2359:15	2	16-41	
	III	1613-1613:15	1-	31-37	continuum	1235-a0033	1-	20-41	
	III	1614:30-1614:45	1-	31-41	II	1505:30-1513:30	2	24-41	
	III	1621-1622:15	1	12-41	II	1526:15-1538:15	1+	22-41	
	III	1634-1634:15	1-	32-38	III	2031-2032:30	2	11-41	
III	1650:15-1650:30	1-	19-33	III	2053:45-2054:30	1+	12-41		
III	1723-1723:15	1-	20-41	III	2214:30-2216	2	11-41		
14 Sep	III	1733-1733:15	1-	21-41	III	2241:15-2242:15	2	22-41	
	III	1734-1734:15	1-	33-41	III	2305:45-2307:30	2	16-41	
	III	1748:45-1749	1-	16-41	III	2339:30-2340:15	2	19-41	
	III	1848:45-1849:30	1-	21-37	III	0004:15-0005:15	2	20-41	
	III	1937:15-1937:30	1-	27-37	III	0012:45-0013:30	2	17-41	
	III	2031:30-2032	1+	9-41	continuum	b1236-1340	1-	18-41	
	III	2032:45-2033	1	21-41	III	1322:15-1325:45	2	16-41	
	III	2334:30-2334:45	1-	22-41	continuum	1340-1750	1	18-41	
	III	2338:45-2339:15	1	23-41	III	1410:45-1413:30	2	16-41	
	III	2344-2344:15	1-	22-38	II	1536:30-1543:30	1	20-41	
	III	1535-1535:15	1-	29-41	II	1546-1549:15	1	21-41	
	III	1537:15-1537:30	1-	24-38	III	1609:45-1610:30	1+	12-41	
	III	1538:30-1539:15	1-	25-34	III	1655:45-1656:30	1+	10-41	
III	1545:30-1546	1-	24-29	continuum	1750-2110	1-	13-41		
III	1755:15-1756:45	1-	24-41	III	1850:30-1857:15	2	10-41		

**SOLAR RADIO EMISSION  
SPECTRAL OBSERVATIONS**

IVI

SEPTEMBER 1966

UNIVERSITY OF COLORADO

7.6-41 Mc/s

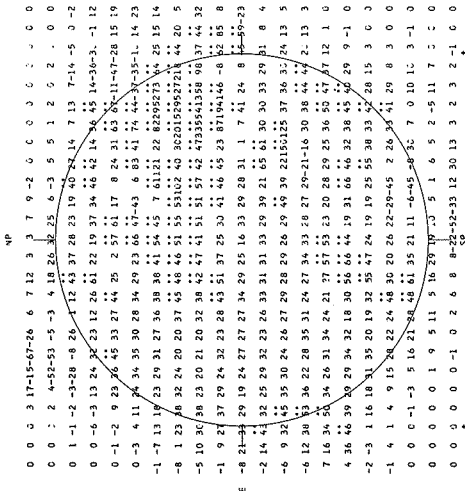
Date Sep 1966	Bursts				Date Sep 1966	Bursts			
	Type	Time (U. T.)	Inten- sity	Frequency Range (Mc/s)		Type	Time (U. T.)	Inten- sity	Frequency Range (Mc/s)
19 Sep	III	2014-2015:30	2	12-41	23 Sep	III	1856:45-1857	1	16-41
	continuum	2110-2127:15	1+	11-41		continuum	1905:30-1934:45	1-	22-41
	continuum	2127:15-2206:30	1-	18-41	III	2228:30-2228:45	1-	20-37	
	continuum	2206:30-2214	1+	13-41	24 Sep	continuum	1833-1843:30	1-	26-41
continuum	2214-a0030	1	20-41	III		2242:45-2243	1-	22-32	
20 Sep	III	2250-2253:30	2	14-41	25 Sep	III	2244:30-2244:45	1-	19-31
	III	2256:30-2257:30	2	14-41		III	2246:15-2246:45	1+	25-41
	III	1231:15-1232:45	1-	18-33		III	2354-2354:15	1-	26-39
	continuum	1303-1713	1-	20-41		III	1308:30-1312:45	1+	14-41
	III	1506-1510:45	1	12-41	IV	1312-1340	1-	22-41	
	III	1558:45-1559:30	1+	12-41	II	1316:30-1335:45	1+	16-41	
21 Sep	III	1650:45-1652	1+	12-41	III	1333:45-1334	1+	16-41	
	continuum	1713-1731	1+	10-41	III	1418-1418:15	2	22-41	
	continuum	1731-1843	1	20-41	III	1919-1919:30	1-	25-32	
	continuum	1843-a0029	1-	20-41	III	1923-1923:30	1	21-39	
	III	1904:45-1905:15	1	10-41	III	2033:30-2034	1	11-41	
	III	2041:45-2042:15	1+	16-41	III	2127:15-2128:15	1-	25-31	
	III	1256-1257	1-	19-41	continuum	2201:30-2213	1-	25-41	
	continuum	1303-2355	1-	20-41	26 Sep	no observ.	1936-0030		
	III	1617:15-1619:45	1+	10-41	27 Sep	IV	1313-1443:15	2	20-41
	III	1656:15-1657:15	1+	11-41	28 Sep	III	1410:15-1410:45	1	25-41
III	1823:30-1824:45	1	9-41	III		1518:30-1518:45	1-	24-36	
III	1853:15-1854:30	1+	9-41	III		1648:45-1649	1	22-40	
III	1906:45-1907:15	1	13-41	III		2008-2008:15	1	26-40	
III	1924:45-1925:45	1+	7.6-41	no observ.		2053-2229			
22 Sep	III	1930:15-1932:15	2	7.6-41	29 Sep	no observ.	1504-0030		
	III	2023:15-2024	1	9-39	30 Sep	no observ.	1435-0030		
	III	2025:15-2026	1	9-41					
	III	2027:15-2028:30	1+	9-41					
	III	1502:45-1503:15	1	25-41					
	III	1516-1516:15	1	21-41					
	continuum	1516:15-1635	1-	20-41					
	III	1611:15-1611:45	1+	12-41					
	II	1618:30-1622	1	21-41					
	III	1717-1717:45	1+	16-41					
	III	1718-1718:15	1	30-41					
	III	1718:30-1718:45	1	16-41					
	III	1725:30-1727	2	9-41					
	III	1734-1734:15	1	27-41					
III	1737-1737:30	1	9-41						
23 Sep	III	1739:30-1743:30	1	9-41					
	III	1803-1803:15	1-	20-41					
	continuum	1836:45-1842	1-	25-41					
	III	1919-1919:45	1	7.6-41					
	continuum	1919:45-1925:15	1-	26-41					
	III	1935:30-1936:15	1+	10-41					
	III	2051:45-2052:15	1+	13-41					
	III	2106-2106:15	1-	24-41					
	III	2204:15-2205	1	22-41					
	III	2215:45-2216:15	1-	24-41					
	III	2252-2253	2	16-41					
	III	2253:45-2254	1	32-39					
	III	0015-0015:30	1-	22-41					
III	1703:30-1704:15	1+	14-41						
III	1856-1856:15	1	16-41						

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

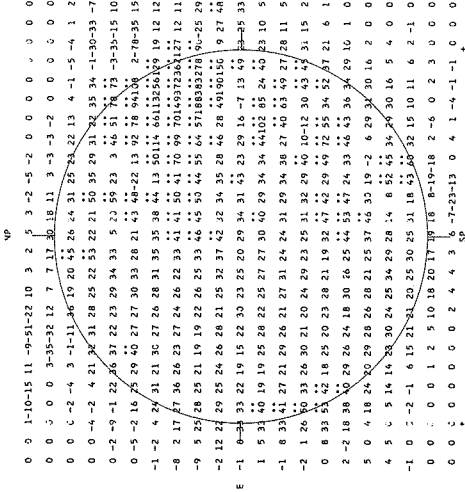
STANFORD

SEPTEMBER 1966

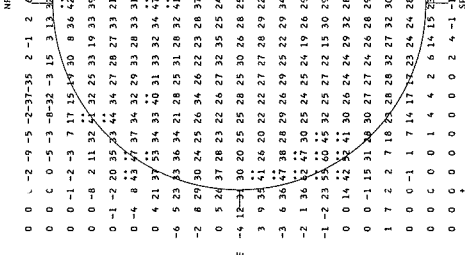
9.1 cm



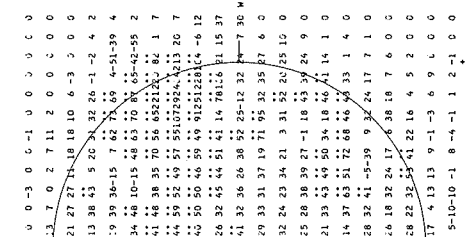
9.1 CM SPECTROHELIOGRAM STANFORD, 01 SEP 1966. 20-21 HRS UT. S = 115(NIC) BRIGHTNESS UNIT = 100. K



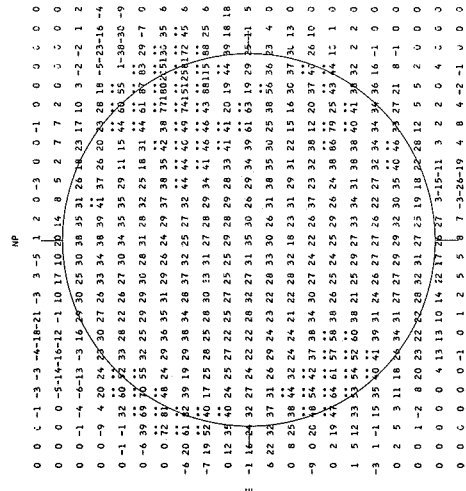
9.1 CM SPECTROHELIOGRAM STANFORD, 02 SEP 1966. 20-21 HRS UT. S = 104 BRIGHTNESS UNIT = 1000 K



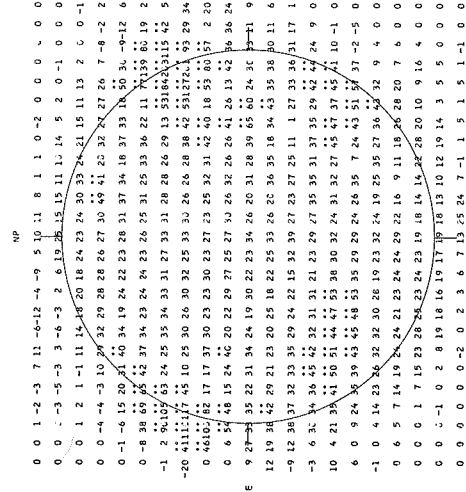
9.1 CM SPECTROHELIOGRAM STANFORD, 03 SEP 1966. 20-21 HRS UT. S = 102 BRIGHTNESS UNIT = 1000 K



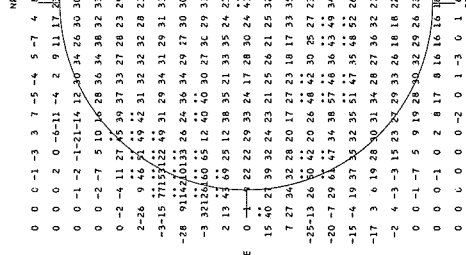
9.1 CM SPECTROHELIOGRAM STANFORD, 04 SEP 1966. 20-21 HRS UT. S = 100 BRIGHTNESS UNIT = 100. K



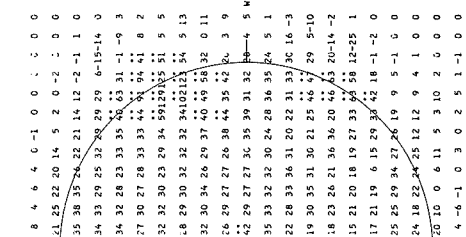
9.1 CM SPECTROHELIOGRAM STANFORD, 05 SEP 1966. 20-21 HRS UT. S = 99 BRIGHTNESS UNIT = 1000 K



9.1 CM SPECTROHELIOGRAM STANFORD, 06 SEP 1966. 20-21 HRS UT. S = 96 BRIGHTNESS UNIT = 1000 K



9.1 CM SPECTROHELIOGRAM STANFORD, 07 SEP 1966. 20-21 HRS UT. S = 96 BRIGHTNESS UNIT = 1000 K



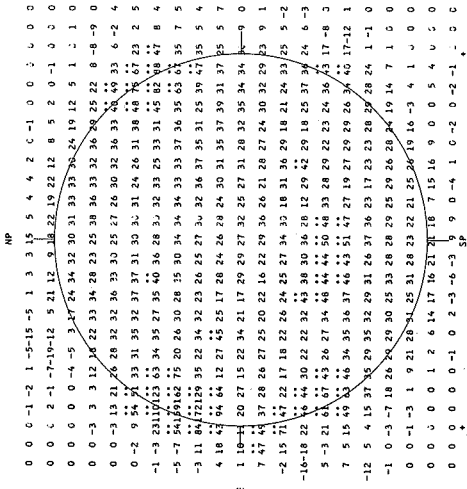
9.1 CM SPECTROHELIOGRAM STANFORD, 08 SEP 1966. 20-21 HRS UT. S = 96 BRIGHTNESS UNIT = 1000 K

# SOLAR RADIO EMISSION SPECTROHELIOGRAMS

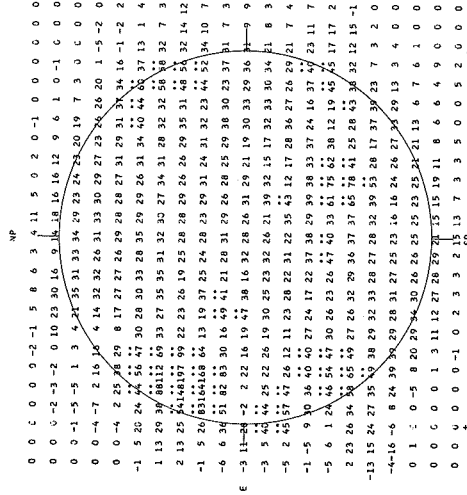
SEPTEMBER 1966

STANFORD

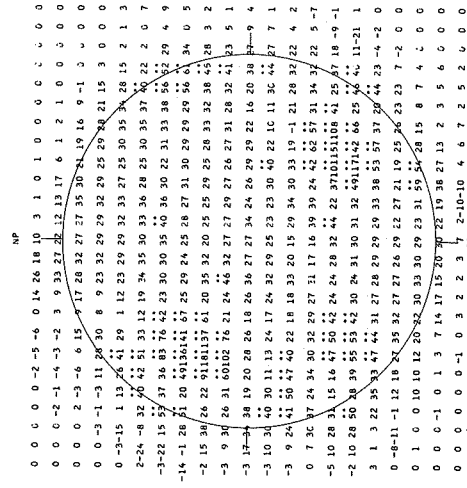
9.1 cm



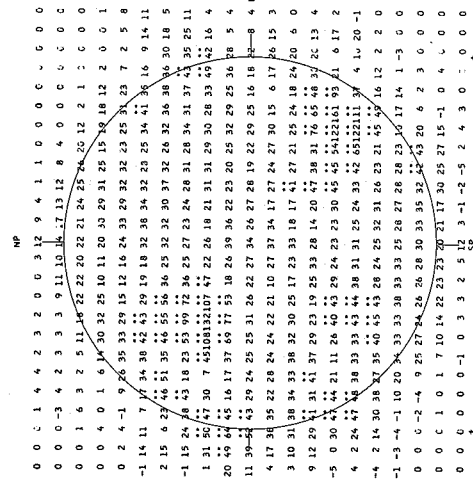
9.1 CM SPECTROHELIOGRAM  
STANFORD, 07 SEP 1966 20:21 HOURS UT. S = 93. BRIGHTNESS UNIT = 1000 K



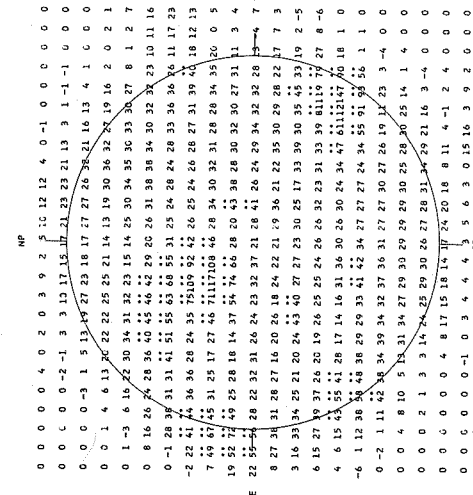
9.1 CM SPECTROHELIOGRAM  
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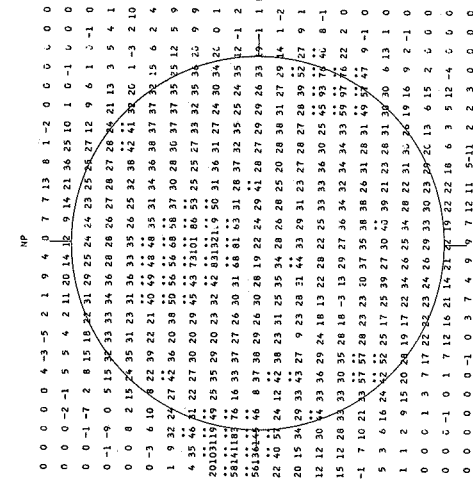
9.1 CM SPECTROHELIOGRAM  
STANFORD, 09 SEP 1966 20:21 HOURS UT. S = 94. BRIGHTNESS UNIT = 1000 K



9.1 CM SPECTROHELIOGRAM  
STANFORD, 10 SEP 1966 20:21 HOURS UT. S = 93. BRIGHTNESS UNIT = 1000 K



9.1 CM SPECTROHELIOGRAM  
STANFORD, 11 SEP 1966 20:21 HOURS UT. S = 95. BRIGHTNESS UNIT = 1000 K

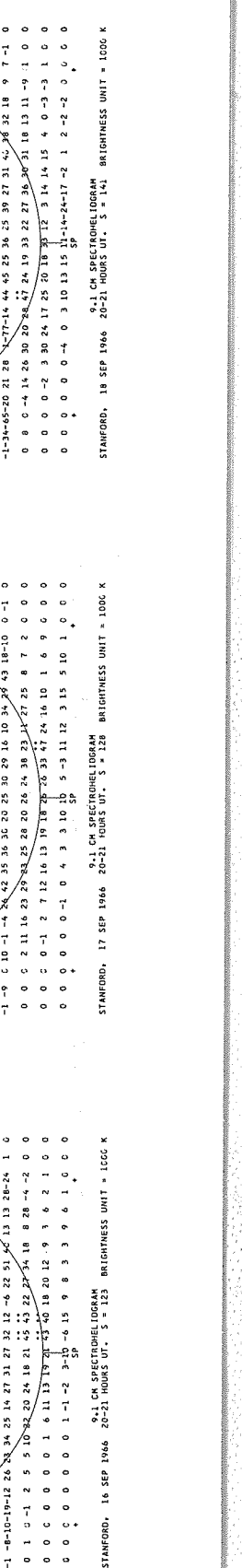
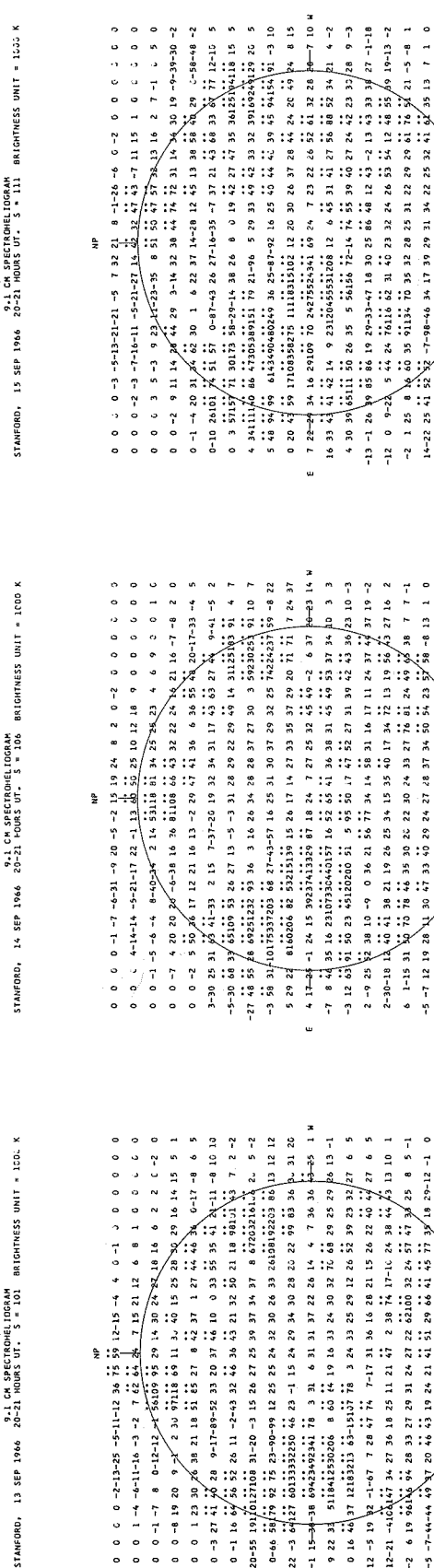
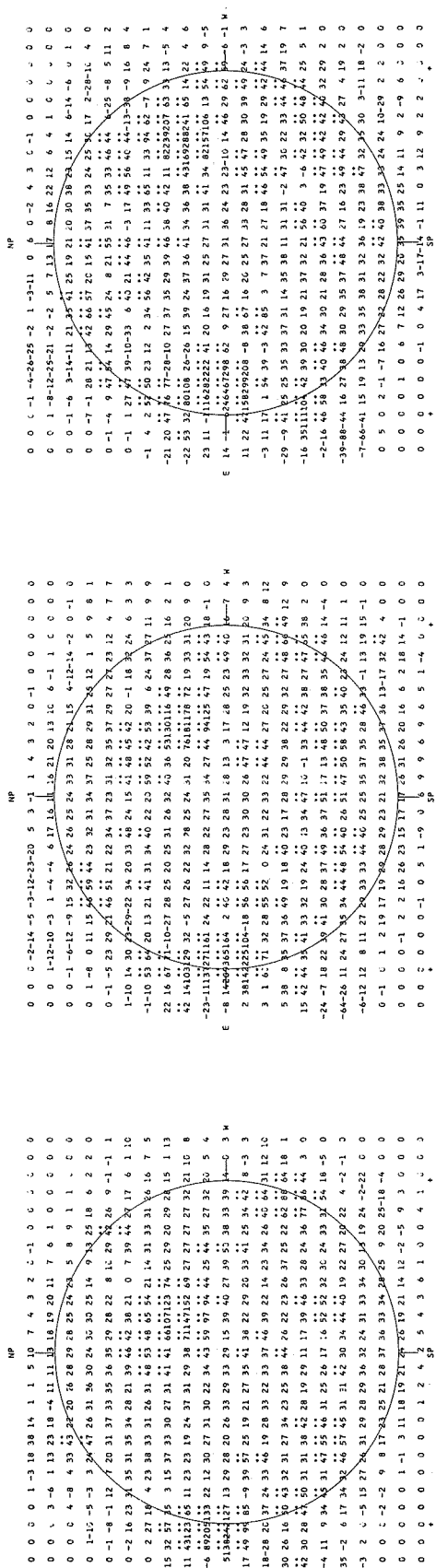


9.1 CM SPECTROHELIOGRAM  
STANFORD, 12 SEP 1966 20:21 HOURS UT. S = 94. BRIGHTNESS UNIT = 1000 K

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

SEPTEMBER 1966

STANFORD

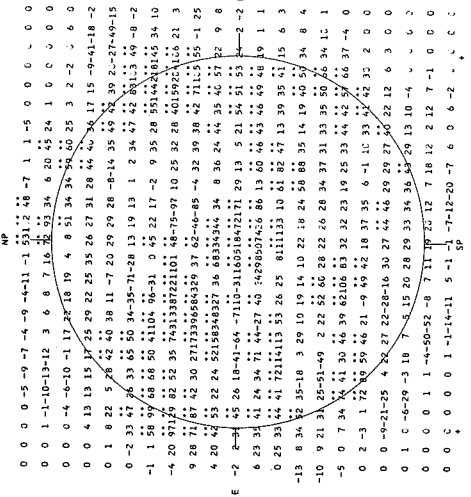


SOLAR RADIO EMISSION SPECTROHELIOGRAMS

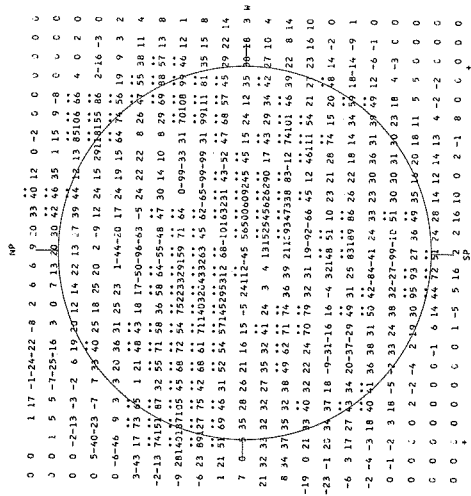
STANFORD

SEPTEMBER 1966

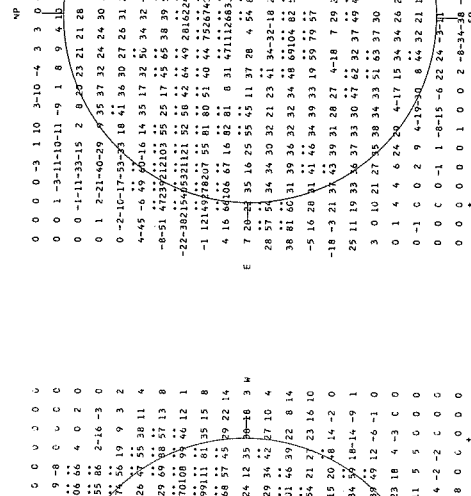
9.1 cm



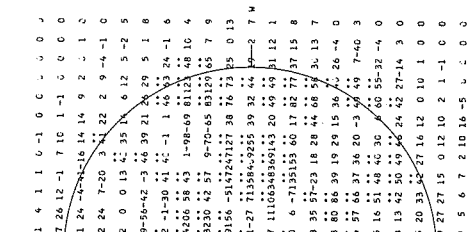
9.1 CM SPECTROHELIOGRAM  
STANFORD, 22 SEP 1966 20-21 HOURS UT. S = 145 BRIGHTNESS UNIT = 100C K



9.1 CM SPECTROHELIOGRAM  
STANFORD, 23 SEP 1966 20-21 HOURS UT. S = 127 BRIGHTNESS UNIT = 100C K



9.1 CM SPECTROHELIOGRAM  
STANFORD, 24 SEP 1966 20-21 HOURS UT. S = 125 BRIGHTNESS UNIT = 100C K



9.1 CM SPECTROHELIOGRAM  
STANFORD, 25 SEP 1966 20-21 HOURS UT. S = 136 BRIGHTNESS UNIT = 100C K

IVp

9.1 CM SPECTROHELIOGRAM  
STANFORD, 22 SEP 1966 20-21 HOURS UT. S = 133 BRIGHTNESS UNIT = 100C K

9.1 CM SPECTROHELIOGRAM  
STANFORD, 23 SEP 1966 20-21 HOURS UT. S = 127 BRIGHTNESS UNIT = 100C K

9.1 CM SPECTROHELIOGRAM  
STANFORD, 24 SEP 1966 20-21 HOURS UT. S = 125 BRIGHTNESS UNIT = 100C K

9.1 CM SPECTROHELIOGRAM  
STANFORD, 25 SEP 1966 20-21 HOURS UT. S = 136 BRIGHTNESS UNIT = 100C K

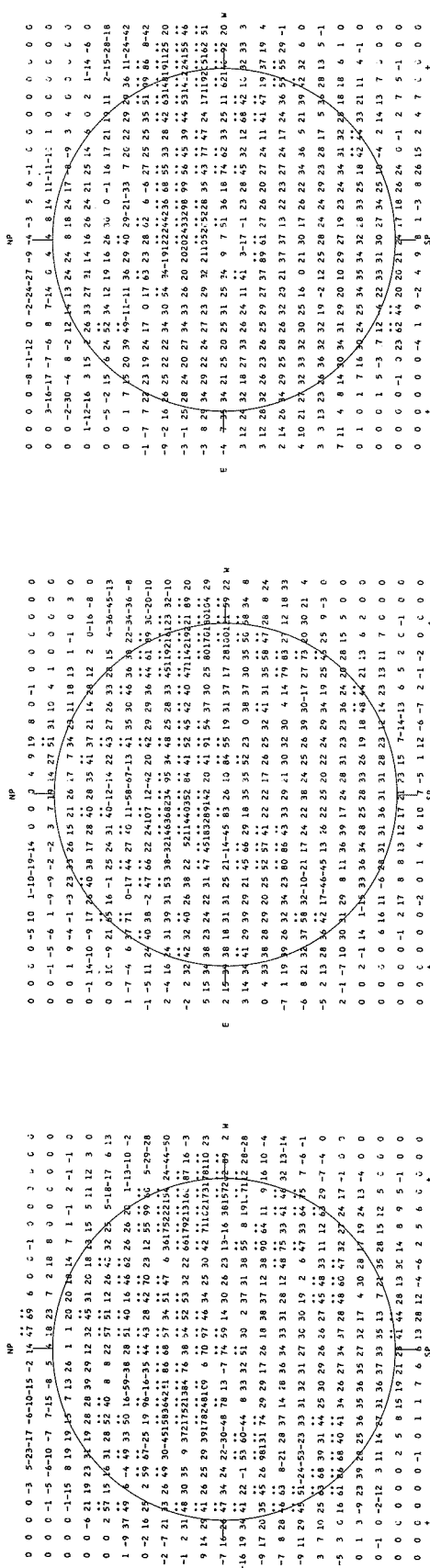


STANFORD

SEPTEMBER 1966

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

9.1 cm



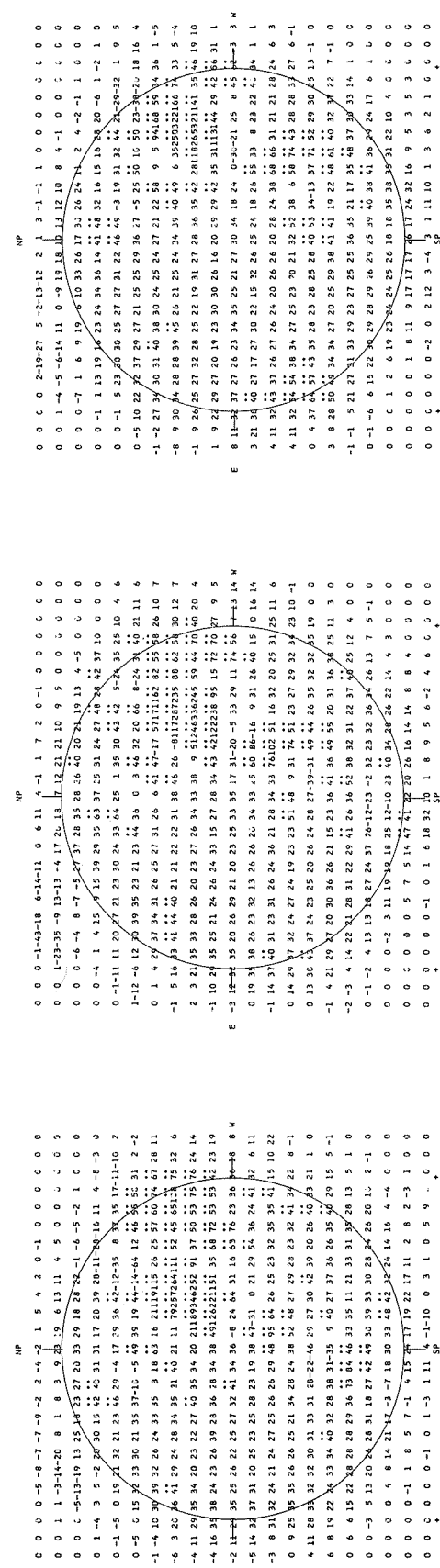
9.1 CM SPECTROHELIOGRAM  
 STANFORD, 25 SEP 1966 20-21 HOURS UT. S = 11N BRIGHTNESS UNIT = 100C K

9.1 CM SPECTROHELIOGRAM  
 STANFORD, 26 SEP 1966 20-21 HOURS UT. S = 109 BRIGHTNESS UNIT = 1000 K

9.1 CM SPECTROHELIOGRAM  
 STANFORD, 27 SEP 1966 20-21 HOURS UT. S = 100 BRIGHTNESS UNIT = 1200 K

9.1 CM SPECTROHELIOGRAM  
 STANFORD, 29 SEP 1966 20-21 HOURS UT. S = 98 BRIGHTNESS UNIT = 1000 K

9.1 CM SPECTROHELIOGRAM  
 STANFORD, 30 SEP 1966 20-21 HOURS UT. S = 92 BRIGHTNESS UNIT = 1200 K



9.1 CM SPECTROHELIOGRAM  
 STANFORD, 28 SEP 1966 20-21 HOURS UT. S = 98 BRIGHTNESS UNIT = 1000 K

9.1 CM SPECTROHELIOGRAM  
 STANFORD, 29 SEP 1966 20-21 HOURS UT. S = 98 BRIGHTNESS UNIT = 1000 K

9.1 CM SPECTROHELIOGRAM  
 STANFORD, 30 SEP 1966 20-21 HOURS UT. S = 92 BRIGHTNESS UNIT = 1200 K

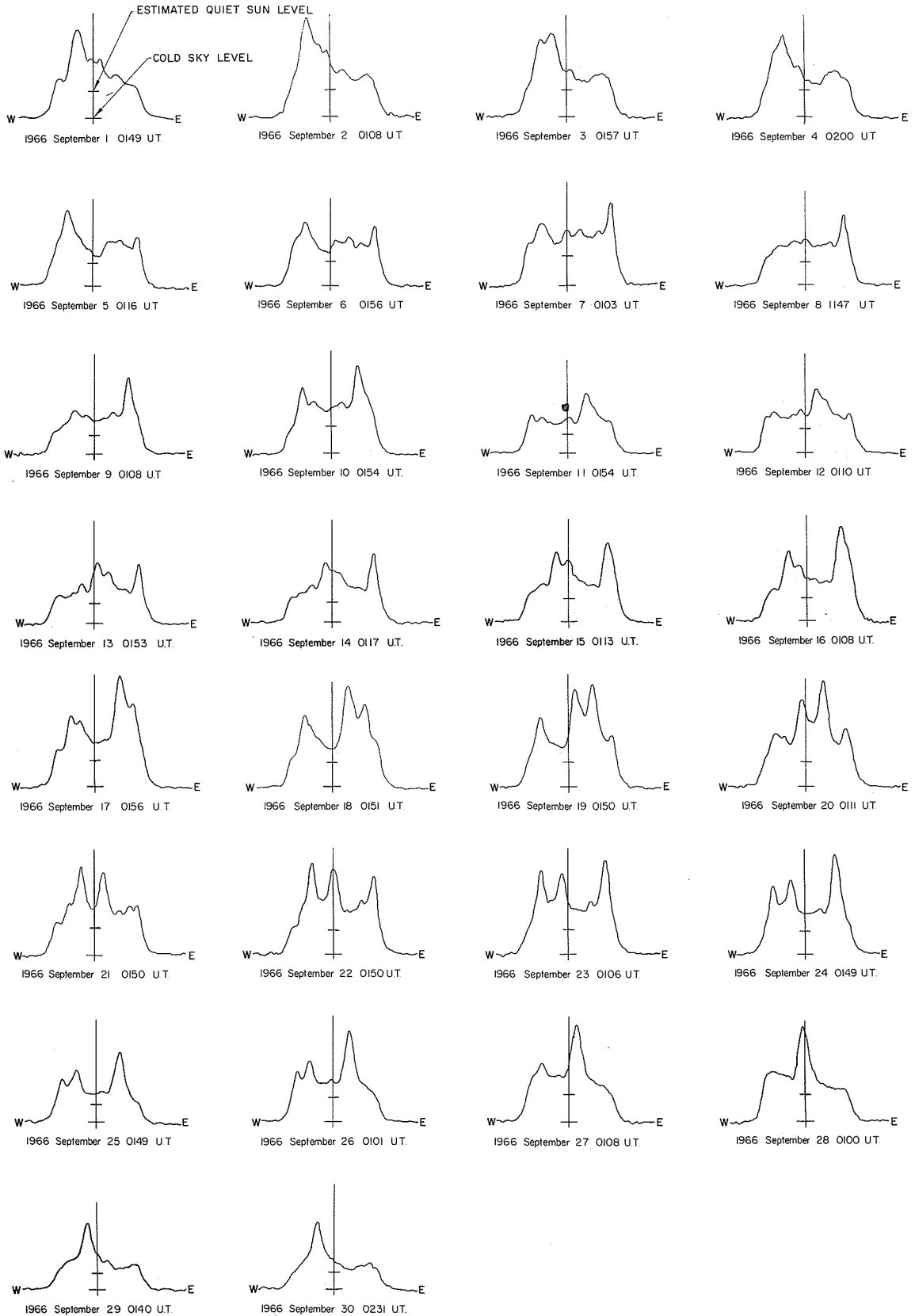
9.1 CM SPECTROHELIOGRAM  
 STANFORD, 29 SEP 1966 20-21 HOURS UT. S = 98 BRIGHTNESS UNIT = 1000 K

FLEURS, AUSTRALIA

# EAST - WEST SOLAR SCANS September 1966

IVr

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

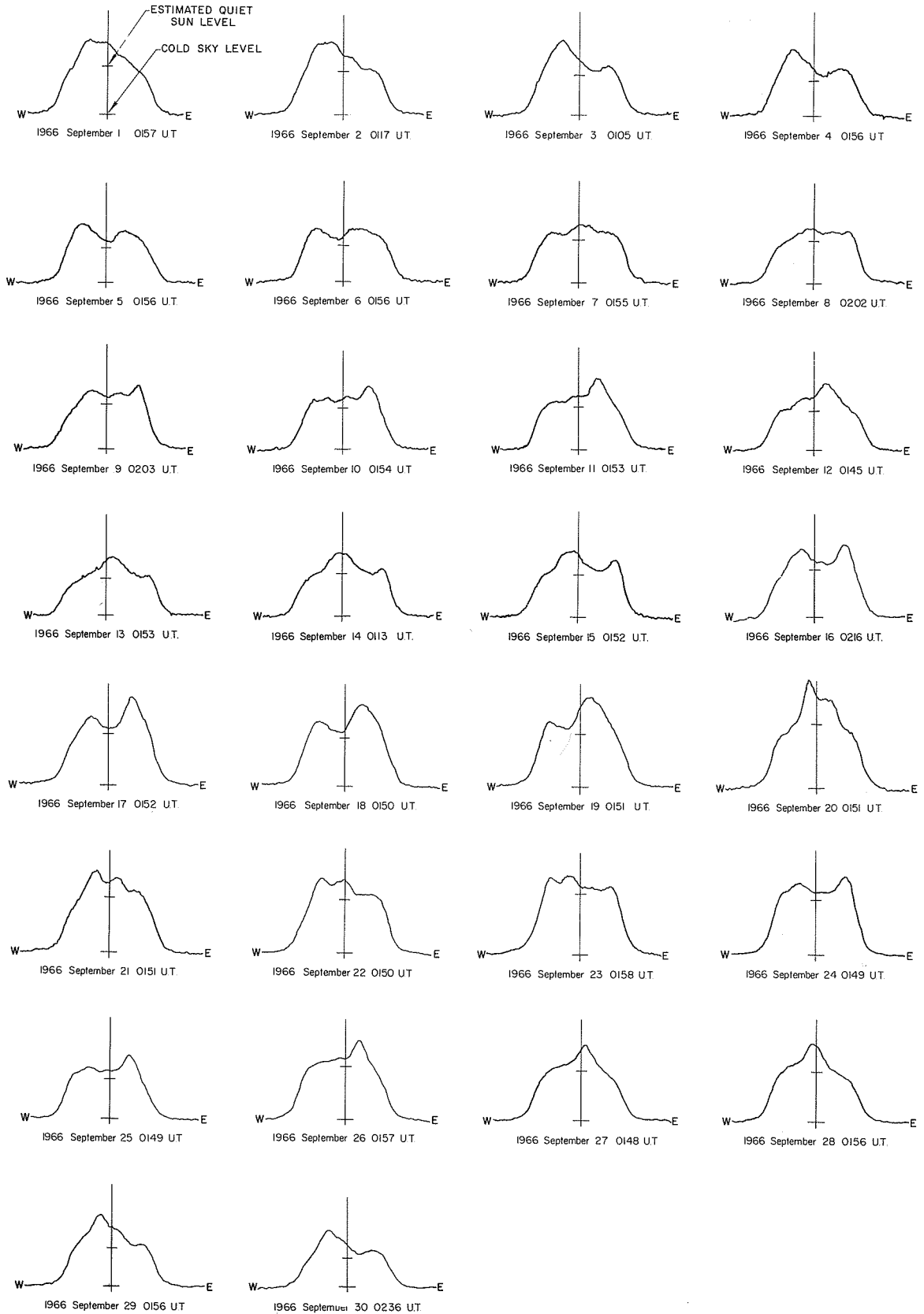


FLEURS, AUSTRALIA

EAST - WEST SOLAR SCANS

September 1966

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



# SOLAR RADIO EMISSION SPECTROHELIOGRAMS

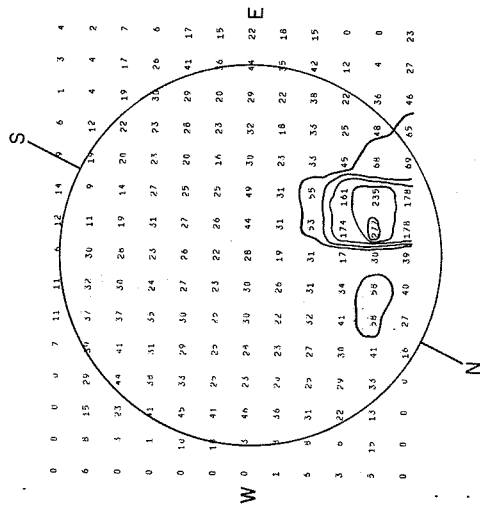
FLEURS, AUSTRALIA

APRIL 1966

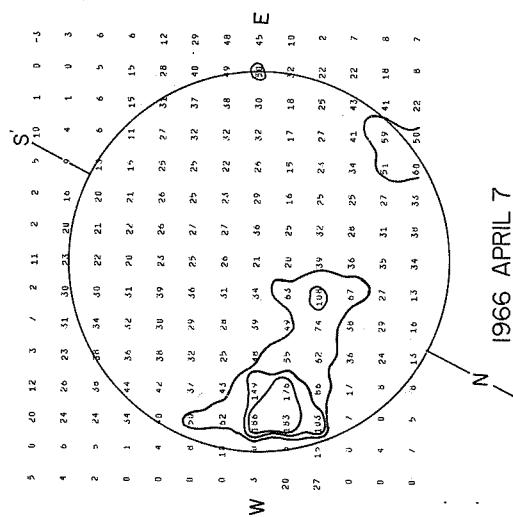
21 cm

Resolution: about 3 minutes of arc.

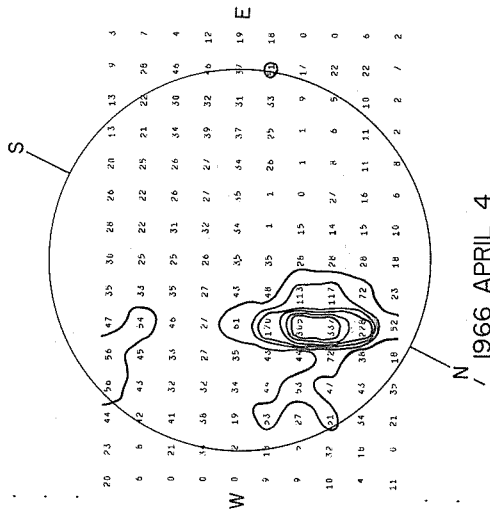
Unit of Brightness temperature: 1700°K



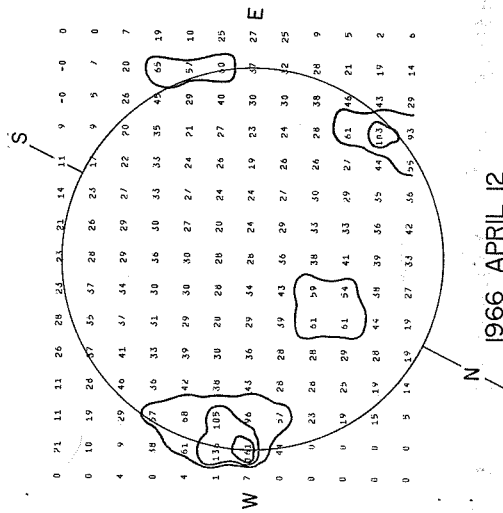
1966 APRIL 1



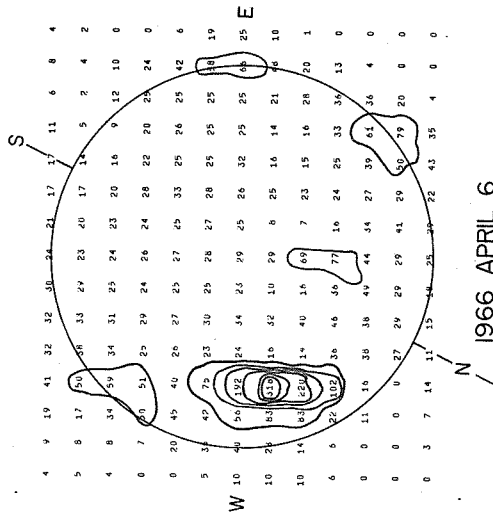
1966 APRIL 2



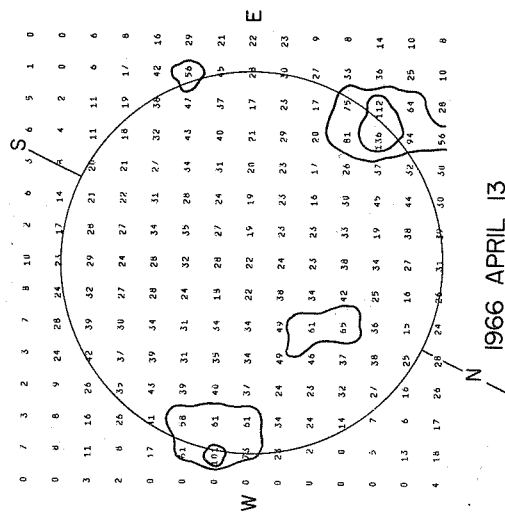
1966 APRIL 4



1966 APRIL 6



1966 APRIL 13



1966 APRIL 13

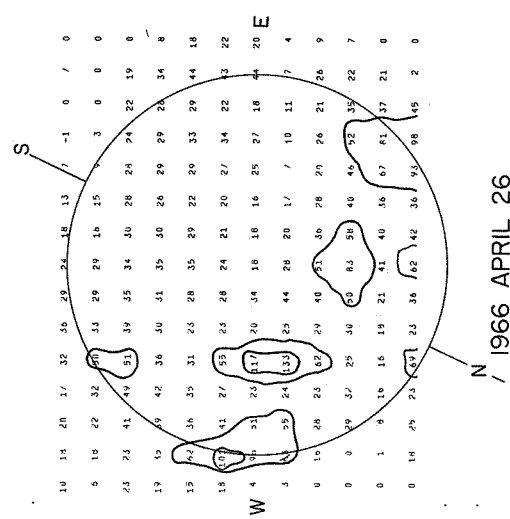
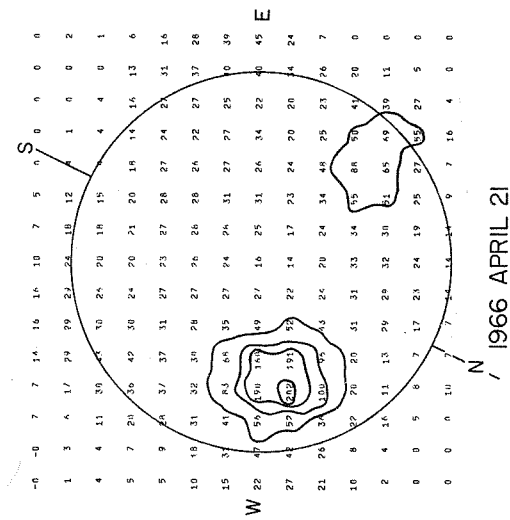
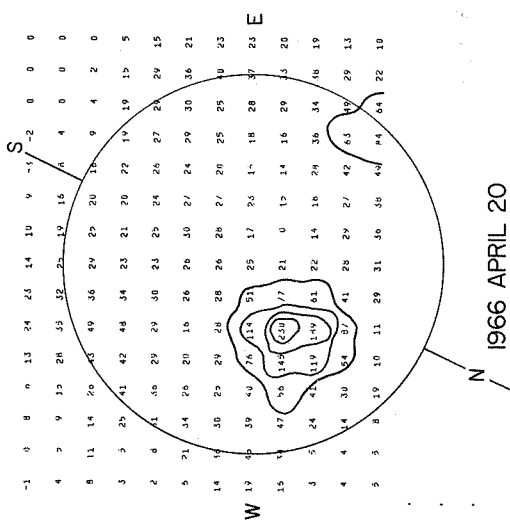
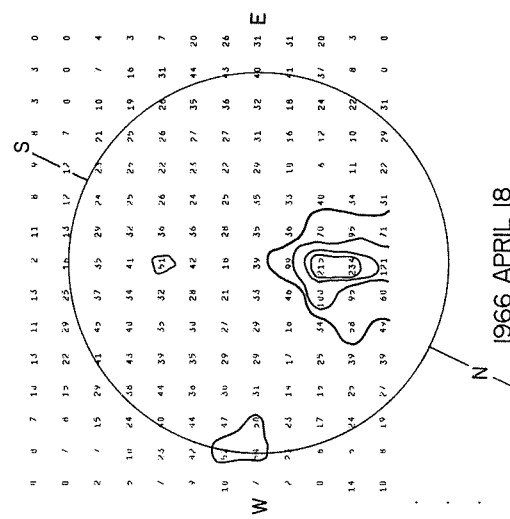
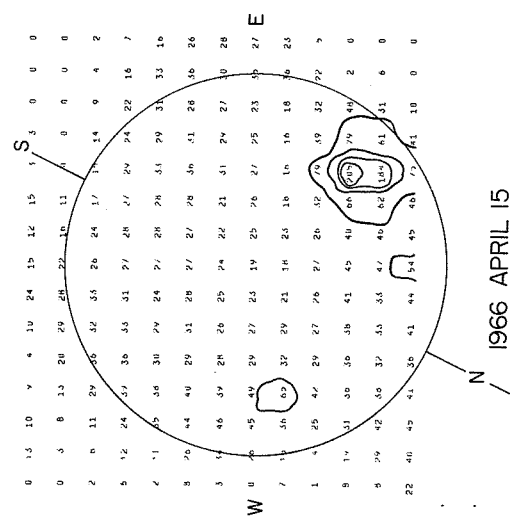
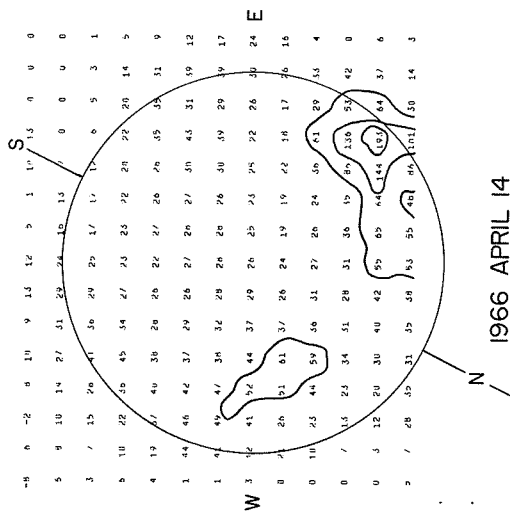
# SOLAR RADIO EMISSION SPECTROHELIOGRAMS

FLEURS, AUSTRALIA

APRIL 1966

21 cm

Resolution: about 3 minutes of arc.  
Unit of Brightness temperature: 1700°K



# SOLAR RADIO EMISSION SPECTROHELIOGRAMS

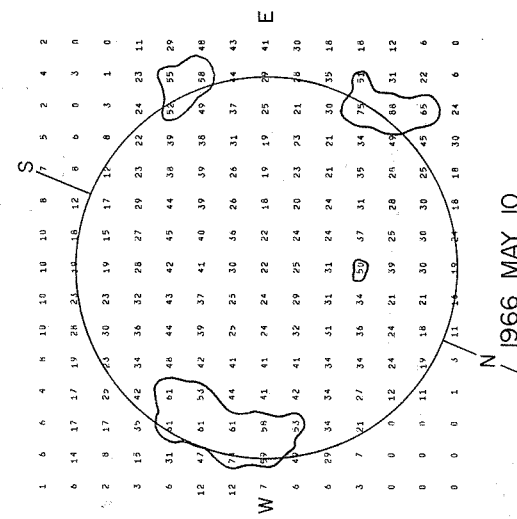
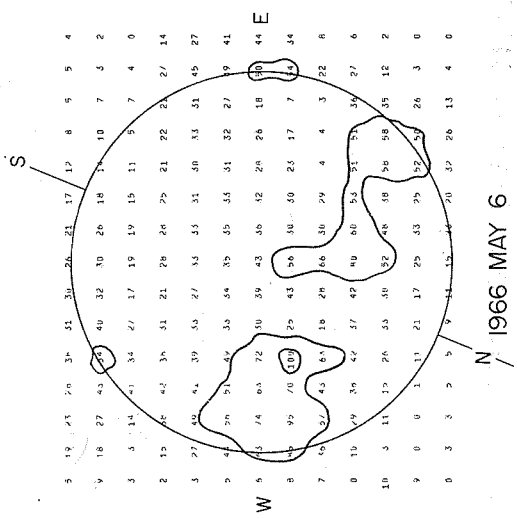
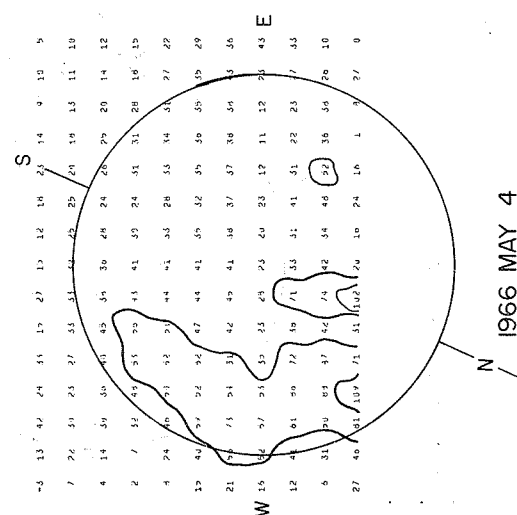
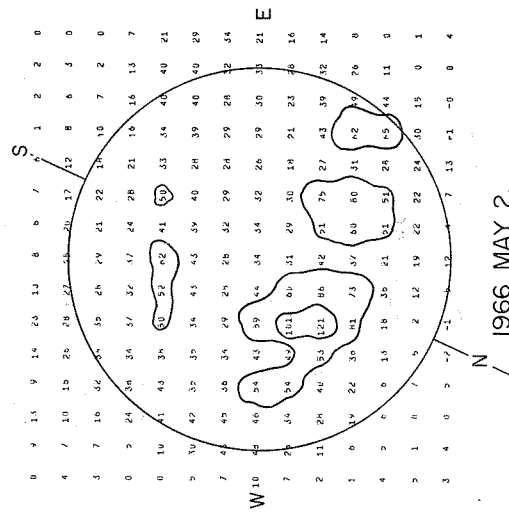
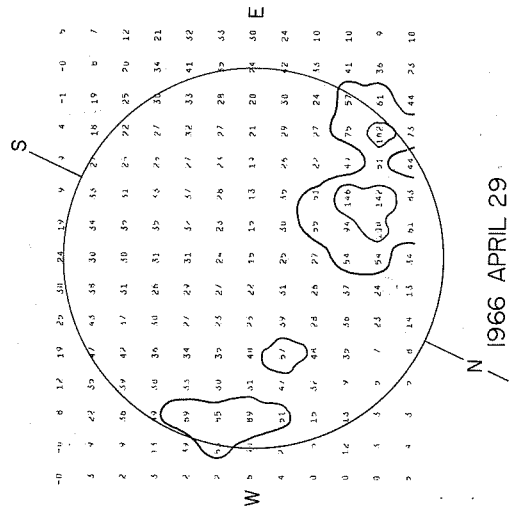
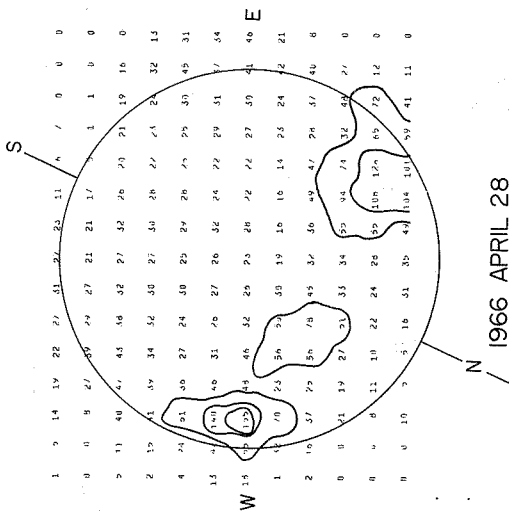
FLEURS, AUSTRALIA

APRIL 1966 MAY 1966

21 cm

Resolution: about 3 minutes of arc.

Unit of Brightness temperature: 1700°K



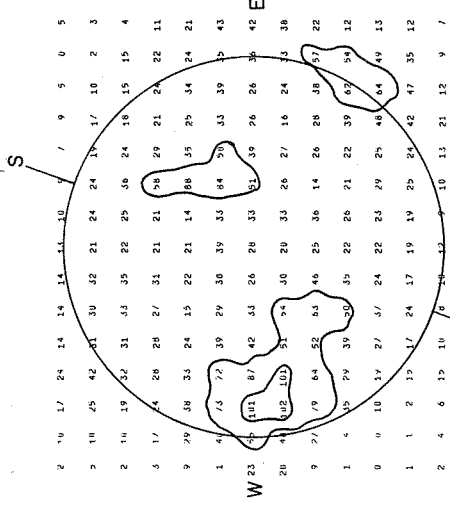
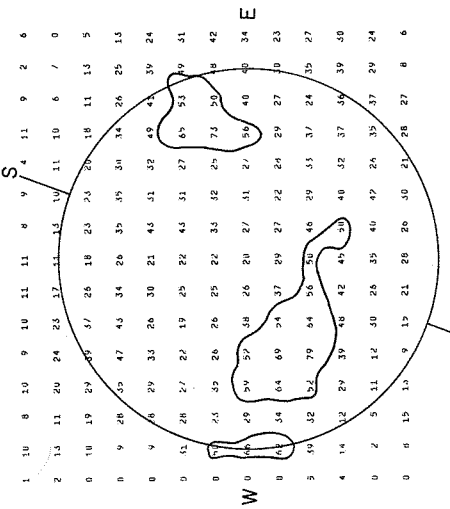
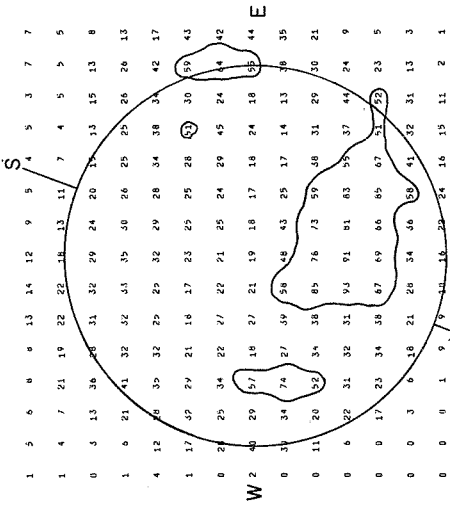
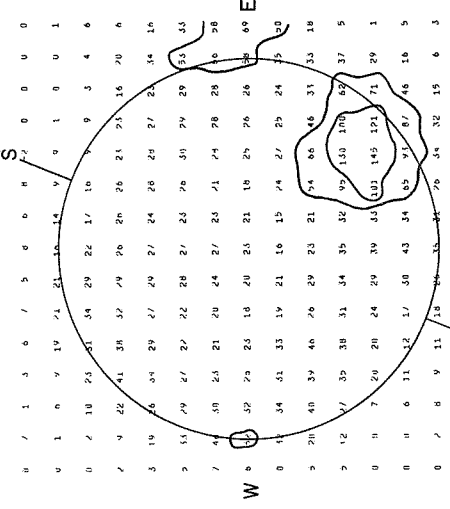
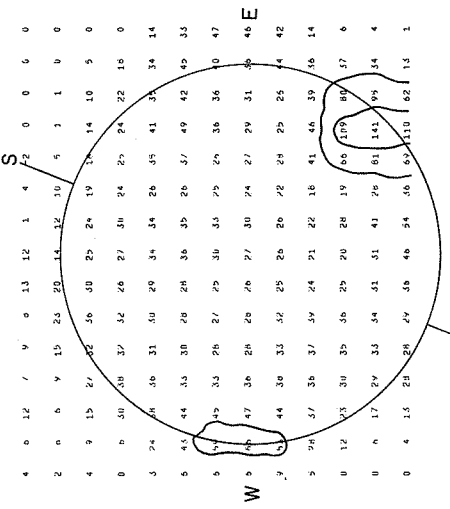
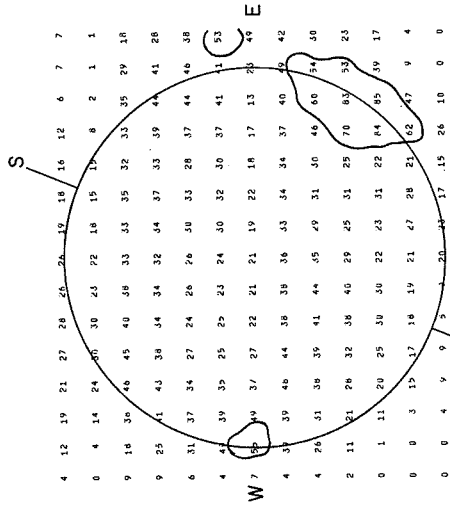
SOLAR RADIO EMISSION SPECTROHELIOGRAMS

FLEURS, AUSTRALIA

MAY 1966

21cm

Resolution: about 3 minutes of arc.  
Unit of Brightness temperature: 1700°K



# SOLAR RADIO EMISSION SPECTROHELIOGRAMS

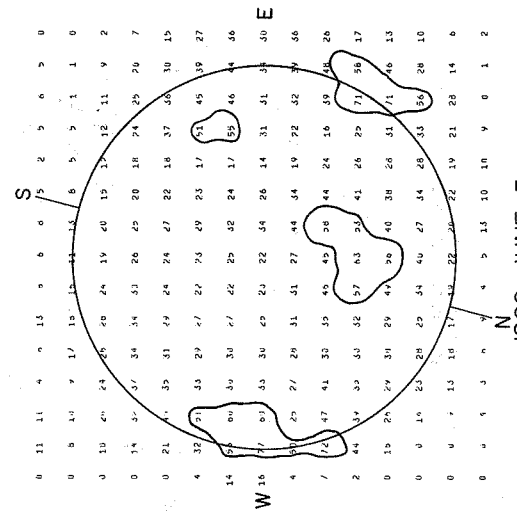
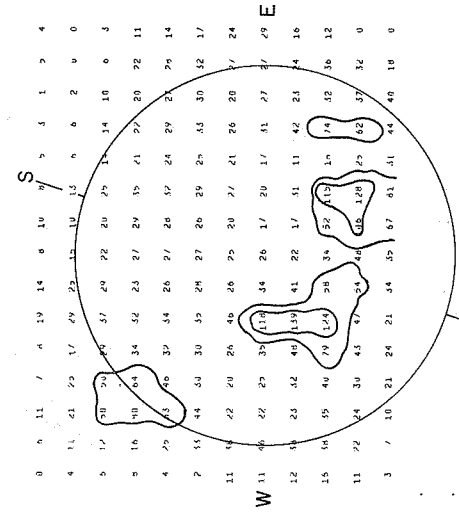
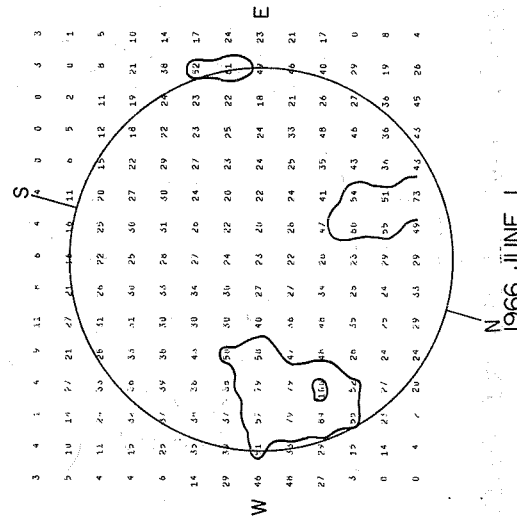
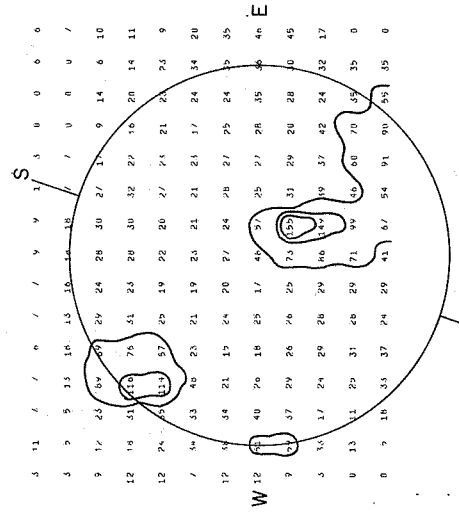
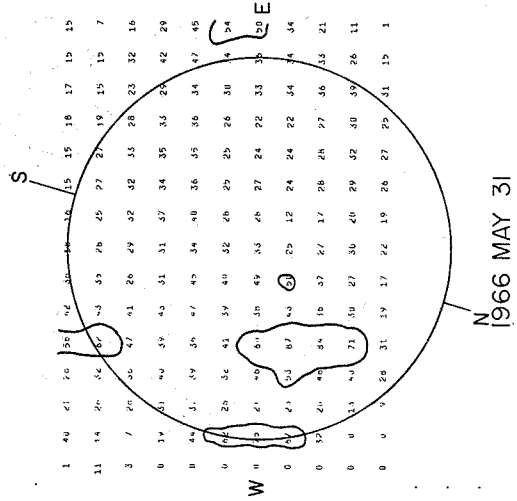
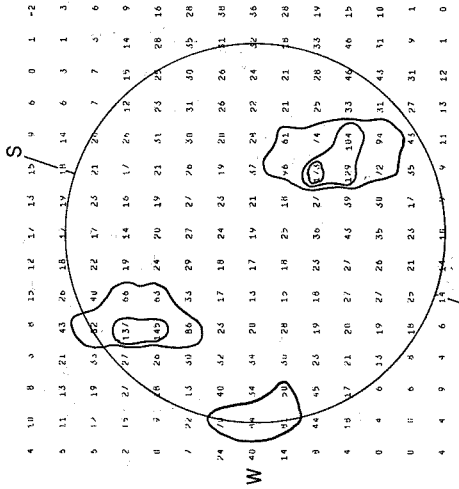
FLEURS, AUSTRALIA

MAY 1966 JUNE 1966

21 cm

Resolution: about 3 minutes of arc.

Unit of Brightness temperature: 1700°K





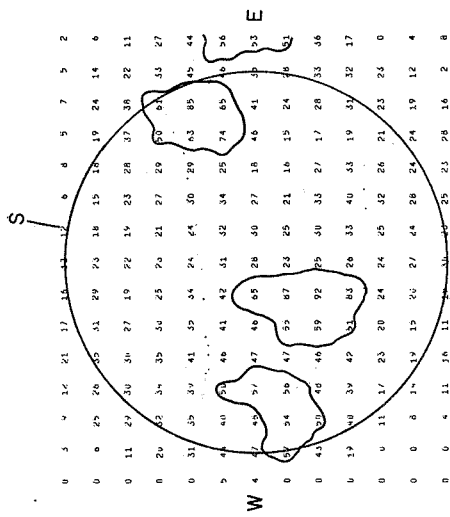
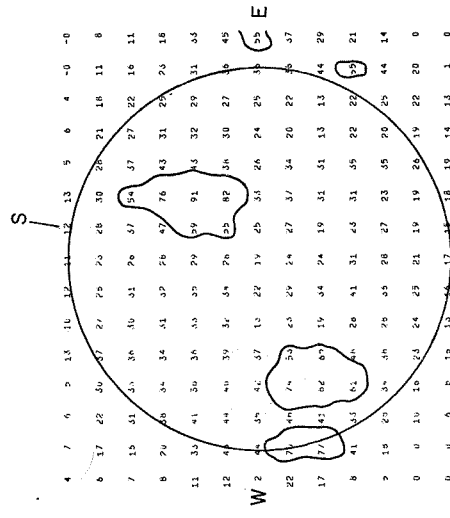
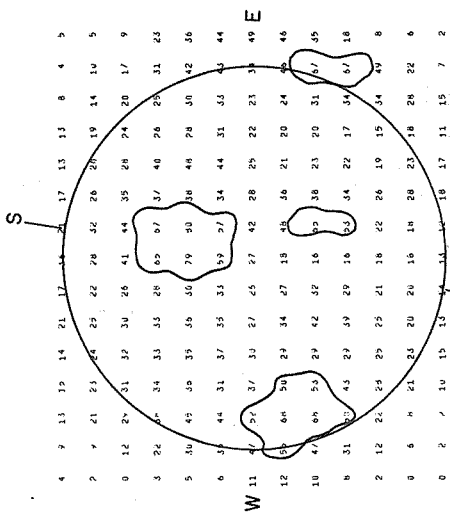
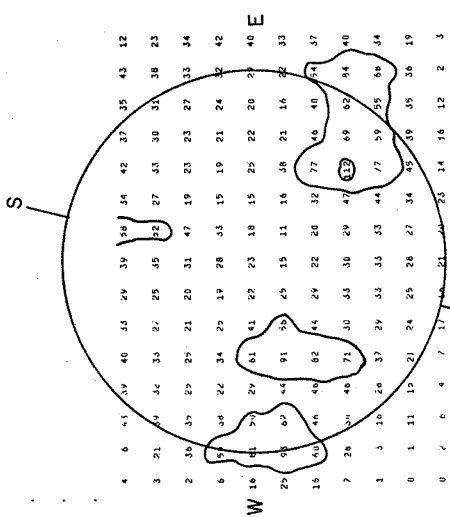
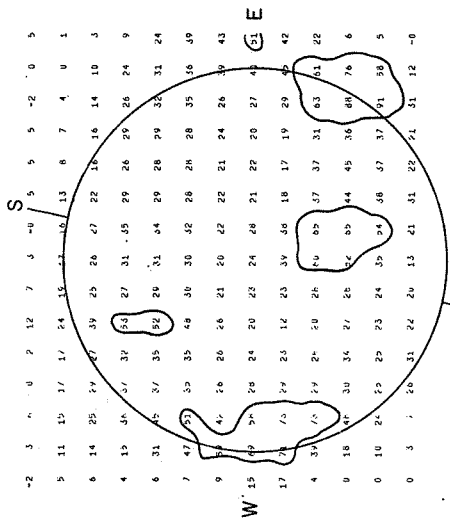
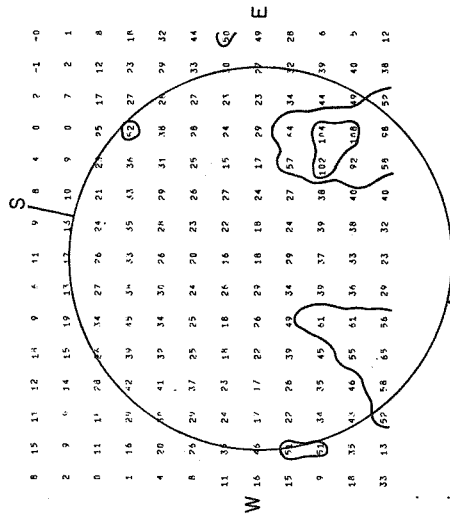
# SOLAR RADIO EMISSION SPECTROHELIOGRAMS

FLEURS, AUSTRALIA

21 cm

Resolution: about 3 minutes of arc.  
Unit of Brightness temperature: 1700°K

JUNE 1966

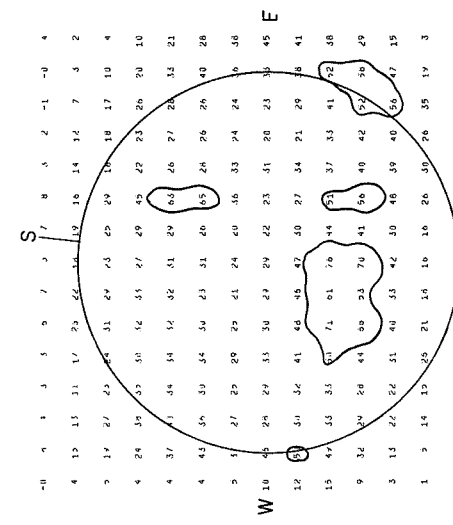
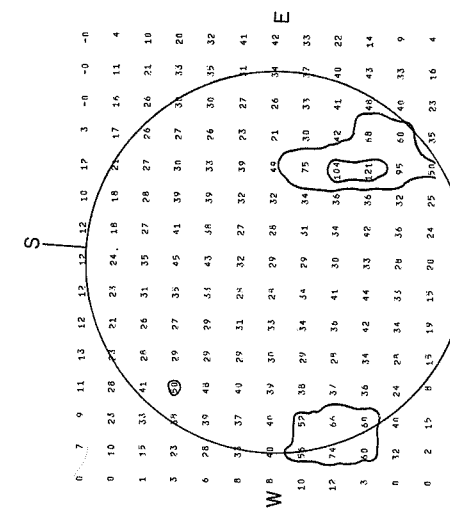
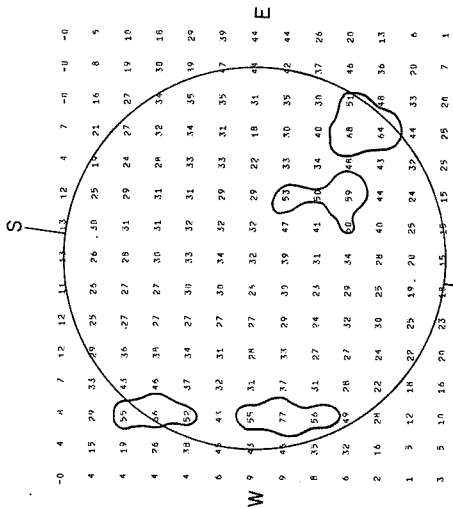
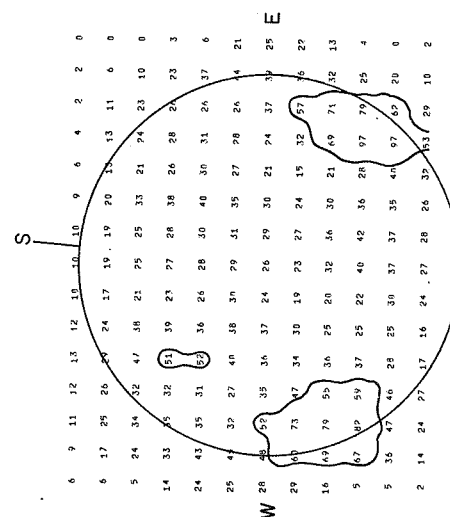
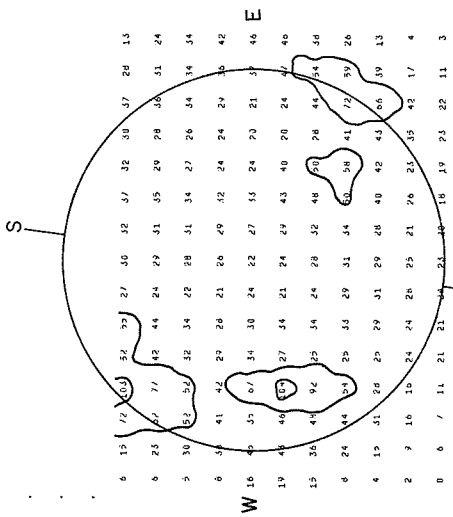


# SOLAR RADIO EMISSION SPECTROHELIOGRAMS

FLEURS, AUSTRALIA

JUNE 1966

2/cm  
Resolution: about 3 minutes of arc.  
Unit of Brightness temperature: 1700°K



## COSMIC RAY INDICES (Neutron Monitors)

AUGUST 1966

AUG. 1966	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	*	6820.8	4076.4	*
2		6868.8	4105.5	
3		6894.0	4109.7	
4		6797.6	4051.9	
5		6793.4	4068.9	
6		6854.5	4108.0	
7		6845.3	4118.8	
8		6867.1	4125.8	
9		6871.0	4144.6	
10		6872.6	4138.9	
11		6873.5	4150.0	
12		6894.2	4146.8	
13		6891.2	4149.0	
14		6866.0	4132.6	
15		6855.6	4118.8 (39)	
16		6864.7	4123.1	
17		6884.8	4132.9	
18		6885.4	4149.6	
19		6877.8	4145.2	
20		6872.2	4134.6	
21		6877.7	4139.7	
22		6887.3	4137.6	
23		6818.5	4090.6	
24		6814.8	4091.4	
25		6836.3	4105.1	
26		6861.3	4123.0	
27		6875.3	4132.1	
28		6891.0	4138.9	
29		6884.9	4134.5	
30		6755.7	4077.7	
31		6460.3	3874.9	

\* The data for August 1966 from Dallas and Churchill have not been processed. It will be published when it becomes available.

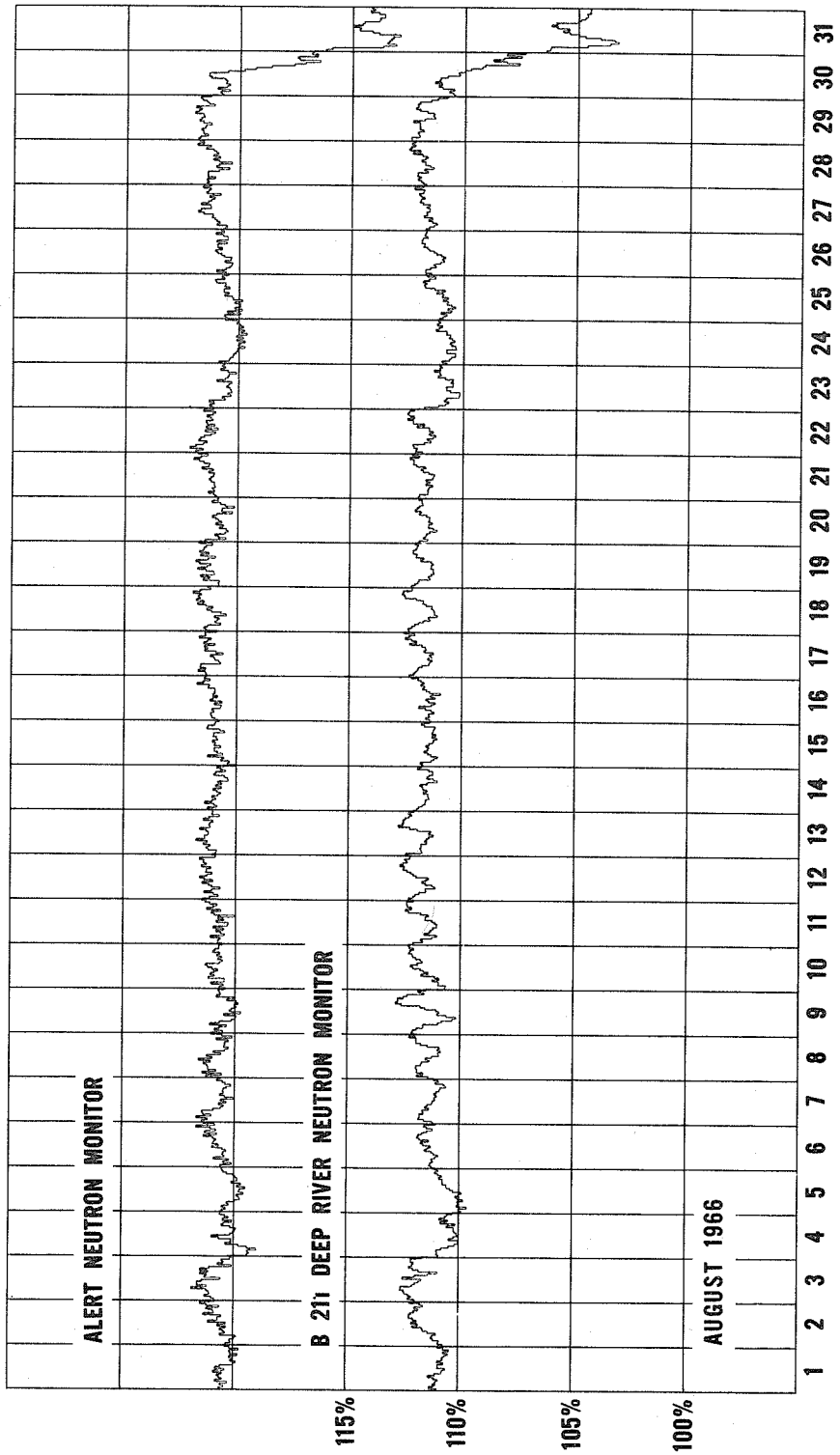
( ) Number of hours for which data are available if less than 24 (or number of section hours if less than 40 for Climax).

Deep River Neutron Monitor, Scaling Factor 300.

Climax IGC Station B305, Scaling Factor 100.

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

**AUGUST 1966**



GEOMAGNETIC ACTIVITY INDICES

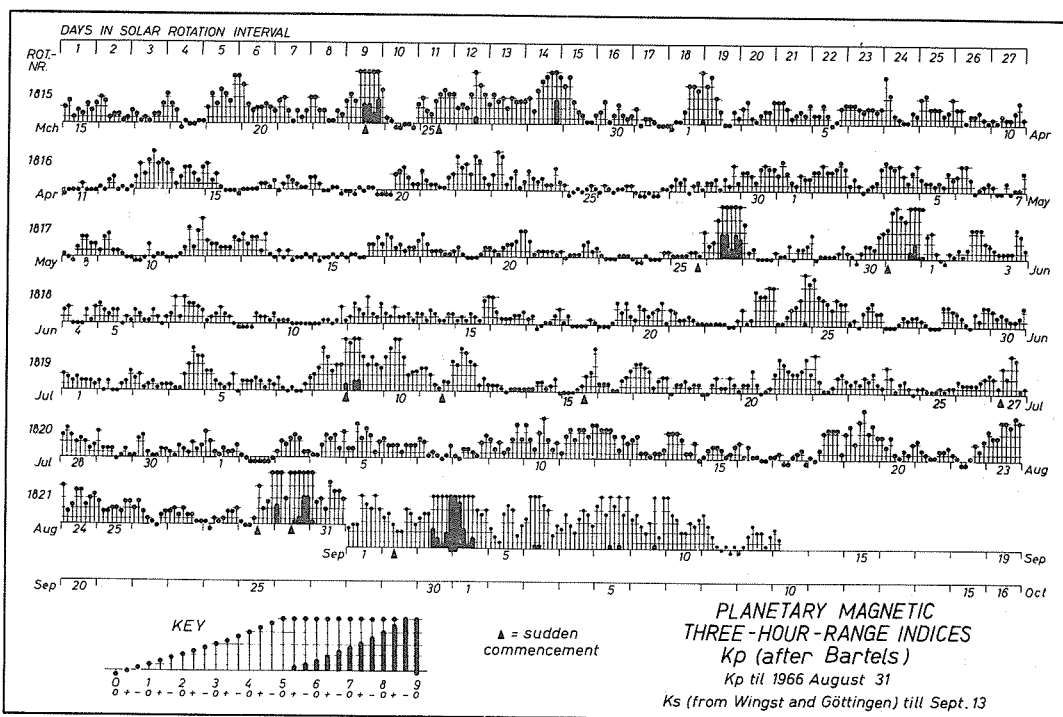
AUGUST 1966

DAY	Kp								SUM	Ci	Cp	Ap
	THREE-HOUR RANGE INDICES											
	1	2	3	4	5	6	7	8				
1		3	2	1	1-	1+	1	2-	12-	0.4	0.3	6
2	QQ	1-	0+	0	0	0	0	0+	1+	0.0	0.0	1
3		1	2	2-	2+	3-	2+	1	14	0.7	0.3	7
4		1-	1-	2-	3-	2+	3-	1+	15	0.6	0.4	8
5		1+	1+	4-	2+	3+	3-	1	18-	0.7	0.6	10
6		2+	2-	2-	2-	1	2-	2-	13+	0.4	0.3	6
7	Q	2+	2	1-	1	1-	0+	1-	9+	0.3	0.2	5
8	Q	1-	0+	1+	1+	1	1-	2	10	0.4	0.2	5
9		2+	1+	2	1	1+	2+	4-	16+	0.7	0.5	9
10		4-	2+	1+	3	4	2+	1+	20	0.7	0.7	12
11		1	3-	3+	2+	3+	3+	3-	22+	1.0	0.8	14
12		4-	3+	3+	3+	3-	1+	3-	22+	1.0	0.8	14
13		2+	3-	1	1	1-	1	1+	11	0.3	0.3	6
14		3	3	3	2+	1	1	2	16-	0.5	0.5	9
15	Q	1-	1+	2-	2-	1+	1-	1	10	0.2	0.2	5
16	QQ	2	1-	2-	1-	1-	0+	0+	7	0.1	0.1	4
17	QQ	1-	1	0	0	1-	1	1+	5-	0.1	0.0	2
18		1-	0+	1+	3	3+	3+	3+	16+	0.6	0.6	10
19	D	3	4-	2	4	5-	3	4-	27-	1.1	1.0	20
20		3-	2-	3-	1	1-	1+	1	13	0.4	0.3	7
21	Q	2+	1+	1	1-	1-	1+	1+	10+	0.2	0.2	5
22	QQ	1	1-	0	0	1-	2	1+	8	0.2	0.1	4
23	D	3+	3-	3-	4	4	4-	4+	29-	1.1	1.1	22
24	D	4	2-	2+	4-	4-	2+	3	24	0.9	0.9	16
25		3-	2-	2-	2	2	2-	3-	17	0.6	0.5	8
26		2	3-	2-	1	1-	0+	1+	11+	0.3	0.3	6
27	Q	2-	2	1+	2	1+	1+	1-	11	0.2	0.2	5
28	QQ	1-	0	1	1-	1	2-	2-	9-	0.2	0.1	4
29		1-	0+	0+	1	4	2	3-	16	1.0	0.8	13
30	D	7-	5	3	5	5+	6-	7+	45+	1.8	1.8	82
31	D	5+	3-	3	2	4+	4-	4-	28-	1.2	1.1	23
MEAN										0.58	0.49	11

For the Kp values the integers represent the former values given with a zero following the number; i.e., 0 = 0<sub>0</sub>, 1 = 1<sub>0</sub>, etc.

Preliminary storm sudden commencements (ssc) occurred August 29 at 1315 UT and August 30 at 1112 UT.

# GEOMAGNETIC ACTIVITY INDICES



## DAILY AVERAGE INDICES Ap

DAY	1965				1966							
	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.
1	6	2	4	19	2	3	3	18	8	12	5	6
2	5	16	5	9	8	3	3	13	12	10	4	1
3	4	3	1	2	6	11	10	7	5	7	4	7
4	16	1	8	11	11	13	9	8	12	4	14	8
5	9	8	13	3	4	18	5	6	6	5	5	10
6	9	2	17	3	2	8	4	7	7	4	5	6
7	7	6	9	3	7	4	2	10	4	9	4	5
8	4	15	4	4	8	4	3	10	5	4	22	5
9	3	4	5	6	8	3	4	5	5	3	36	9
10	3	3	0	10	7	7	10	5	2	2	25	12
11	4	3	3	10	2	12	6	2	10	3	8	14
12	11	6	3	10	2	5	6	3	6	7	15	14
13	6	8	10	6	2	6	14	15	7	5	3	6
14	3	6	3	2	3	2	64	8	2	4	4	9
15	15	2	2	1	5	4	7	4	2	6	8	5
16	35	2	1	1	0	5	7	3	5	6	6	4
17	18	2	4	2	2	4	6	4	7	4	11	2
18	16	6	6	12	5	3	4	3	5	3	4	10
19	17	4	10	7	3	14	20	2	3	6	5	20
20	5	2	17	4	15	17	10	5	8	7	6	7
21	5	1	10	2	23	4	8	5	4	4	14	5
22	5	14	4	6	27	14	7	13	4	3	8	4
23	10	19	2	3	14	28	67	10	2	17	6	22
24	10	14	4	9	14	19	2	6	2	16	6	16
25	12	11	5	12	11	10	14	3	5	16	4	8
26	9	7	4	19	14	3	20	3	78	6	6	6
27	20	6	4	10	3	4	13	1	5	4	11	5
28	27	15	2	16	7	2	42	4	5	5	10	4
29	7	5	3	8	6		12	6	4	6	5	13
30	3	8	12	6	2		6	10	6	6	6	82
31		6		3	2		3		48		5	23
MEAN	10	7	6	7	7	8	13	7	9	6	12	11

RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

NORTH ATLANTIC, NORTH PACIFIC

AUGUST 1966

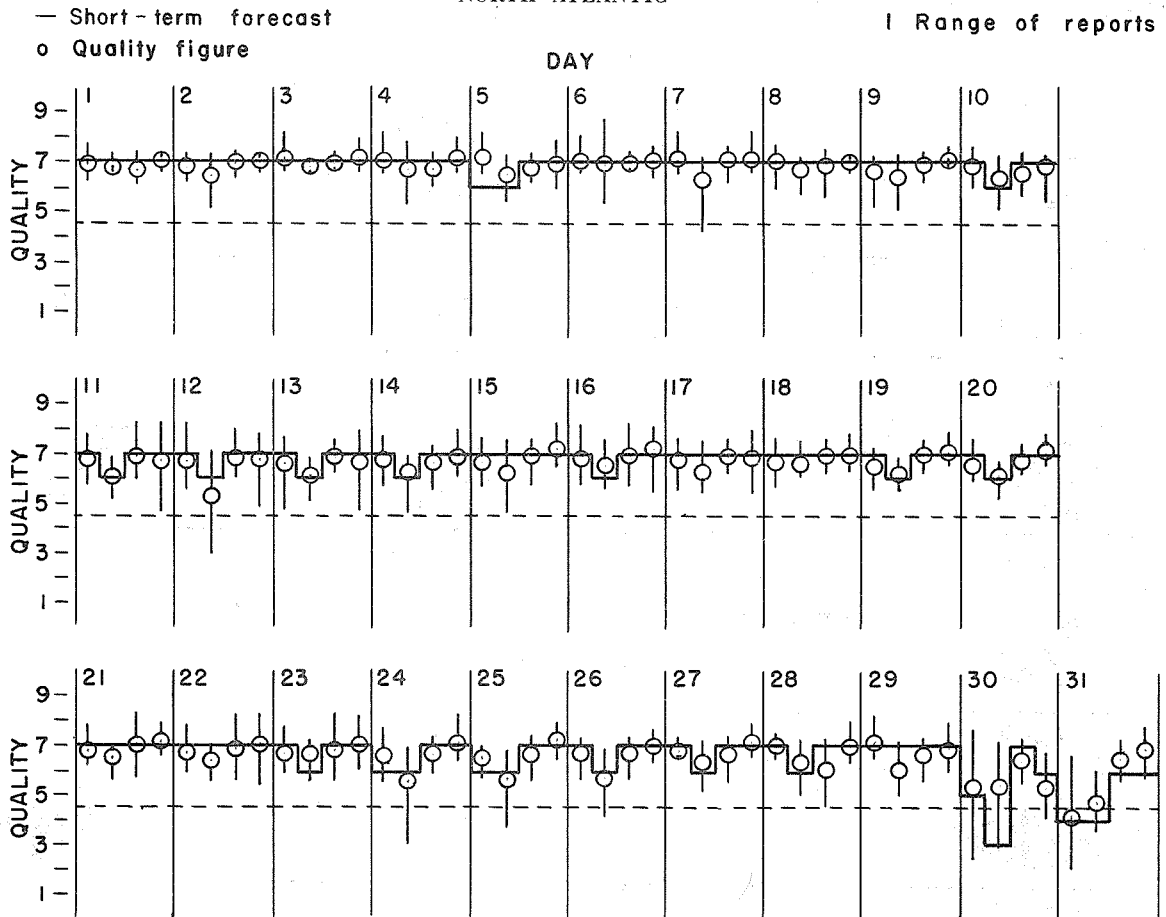
AUG. 1966	WHOLE DAY INDICES			ADVANCE FORECASTS (JC-REPORTS) FOR WHOLE DAY	NORTH ATLANTIC				NORTH PACIFIC				GEOMAGNETIC INDICES										
	NORTH ATLANTIC	NORTH PACIFIC	AVERAGE HIGH LATITUDE		6-HOURLY QUALITY FIGURES				SHORT-TERM FORECASTS ISSUED ABOUT ONE HOUR IN ADVANCE OF:				K <sub>FR</sub>		A <sub>FR</sub>		K <sub>SI</sub>		A <sub>SI</sub>				
					00 TO 06	06 TO 12	12 TO 18	18 TO 24	00	06	12	18	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	7-	6	6	7	7o	7-	7-	7o	7	7	7	7	6	6	6	6	2	1	7	4	2	1	6
02	7-	6	6	7	7-	6+	7o	7o	7	7	7	7	6	6	6	6	0	0	1	4	0	0	0
03	7o	6	7	7	7o	7-	7o	7o	7	7	7	7	6	6	6	6	2	2	7	2	2	1	5
04	7-	6	6	7	7o	7-	7-	7o	7	7	7	7	6	6	6	6	1	2	7	5	2	2	7
05	7-	6	6	7	7o	7-	7-	7o	6	6	7	7	6	6	6	6	2	2	9	8	2	2	10
06	7o	6	7	7	7o	7o	7o	7o	7	7	7	7	6	6	6	6	2	1	5	8	1	1	3
07	7o	6	7	7	7o	6+	7o	7+	7	7	7	7	6	6	6	6	2	1	6	8	1	0	3
08	7o	6	7	7	7o	7-	7-	7o	7	7	7	7	6	6	6	6	1	2	7	5	0	1	2
09	7-	6	6	7	7-	6+	7o	7o	7	7	7	7	6	6	6	6	2	2	7	5	2	2	7
10	7-	6	6	7	7-	6+	7-	7-	7	6	7	7	6	6	5	6	3	2	11	2	2	2	10
11	7+	6	6	7	7-	6o	7o	7-	7	6	7	7	6	6	5	6	3	3	14	11	3	2	15
12	6+	6	6	7	7-	5+	7o	7-	7	6	7	7	6	6	6	6	3	2	13	11	(4)	2	17
13	7-	6	6	7	7-	6+	7o	7-	7	6	7	7	6	5	6	5	2	1	5	8	2	1	5
14	7-	6	6	7	7-	6+	7-	7o	7	6	7	7	5	5	6	6	3	1	11	5	2	0	6
15	7-	6	6	7	7-	6+	7o	7+	7	7	7	7	6	6	5	6	2	1	7	5	2	1	7
16	7-	6	6	7	7-	7-	7o	7+	7	6	7	7	6	5	6	7	2	1	4	7	1	0	2
17	7-	6	6	7	7-	6+	7o	7o	7	7	7	7	6	6	6	6	1	0	1	7	0	0	0
18	7-	6	6	7	7-	7-	7o	7o	7	7	7	7	6	6	6	6	2	2	8	7	1	3	9
19	7-	6	6	7	7-	6+	7o	7o	7	6	7	7	6	6	6	6	3	3	15	10	(4)	3	29
20	7-	6	6	7	7-	6o	7-	7+	7	6	7	7	6	6	6	6	2	1	7	10	2	0	5
21	7-	6	6	7	7-	7-	7o	7o	7	7	7	7	6	6	6	6	1	1	4	5	1	1	4
22	7-	6	6	7	7-	6+	7o	7o	7	7	7	7	6	6	6	6	1	1	4	5	0	1	2
23	7-	6	6	7	7-	7-	7-	7o	7	6	7	7	6	6	6	6	3	(4)	18	9	3	3	17
24	7-	6	6	7	7-	6-	7-	7o	6	6	7	7	6	6	6	6	3	3	16	9	2	2	10
25	7-	6	6	6	7-	6-	7-	7o	6	6	7	7	6	6	6	6	2	2	7	11	2	2	8
26	7-	6	6	6	7-	6-	7-	7o	7	6	7	7	6	6	6	6	2	1	5	7	2	0	4
27	7-	6	6	7	7-	6+	7-	7o	7	6	7	7	7	6	6	6	2	1	4	7	2	1	4
28	7-	6	6	7	7o	6+	6o	7o	7	6	7	7	6	6	5	1	2	4	5	0	1	2	2
29	7-	6	6	7	7o	6+	7-	7o	7	7	7	7	6	6	5	1	3	9	5	0	2	5	5
30	6-	5	5	7	5+	5+	7-	5+	5	3	7	6	5	6	5	6	(4)	(5)	43	7	(5)	(5)	44
31	6-	5	5	7	4+	5-	7-	7o	4	4	6	6	5	5	5	6	3	3	16	7	3	3	15
QUIET				P	6					27	18	29	29										
				S	23					3	12	2	2										
				U	2					0	1	0	0										
				F	0					0	0	0	0										
DISTURBED				P	0					1	0	0	0										
				S	0					0	0	0	0										
				U	0					0	0	0	0										
				F	0					0	0	0	0										

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

2) THE PREDICTED AFR INDICES ARE ISSUED EACH WEDNESDAY FOR THE COMING SEVEN DAYS. THE VALUE FOR THE FIRST DAY OF EACH PREDICTION PERIOD IS UNDERScoreD.

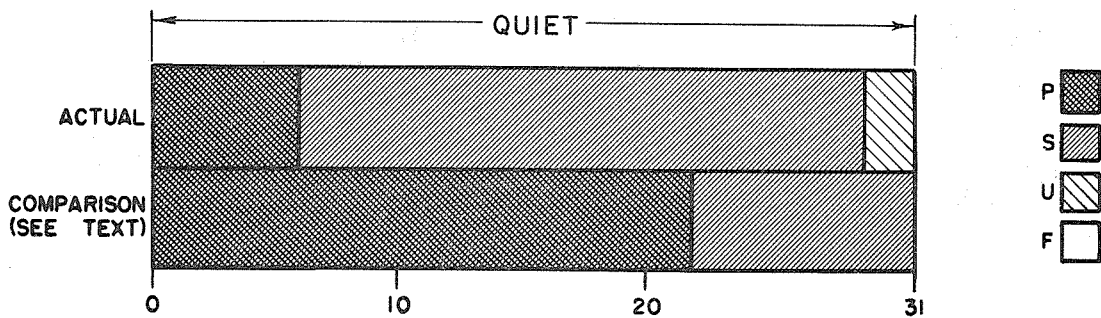
AUGUST 1966

NORTH ATLANTIC



Outcome of advance forecasts - final estimates (1 to 7 days ahead) - High Latitude radio propagation conditions

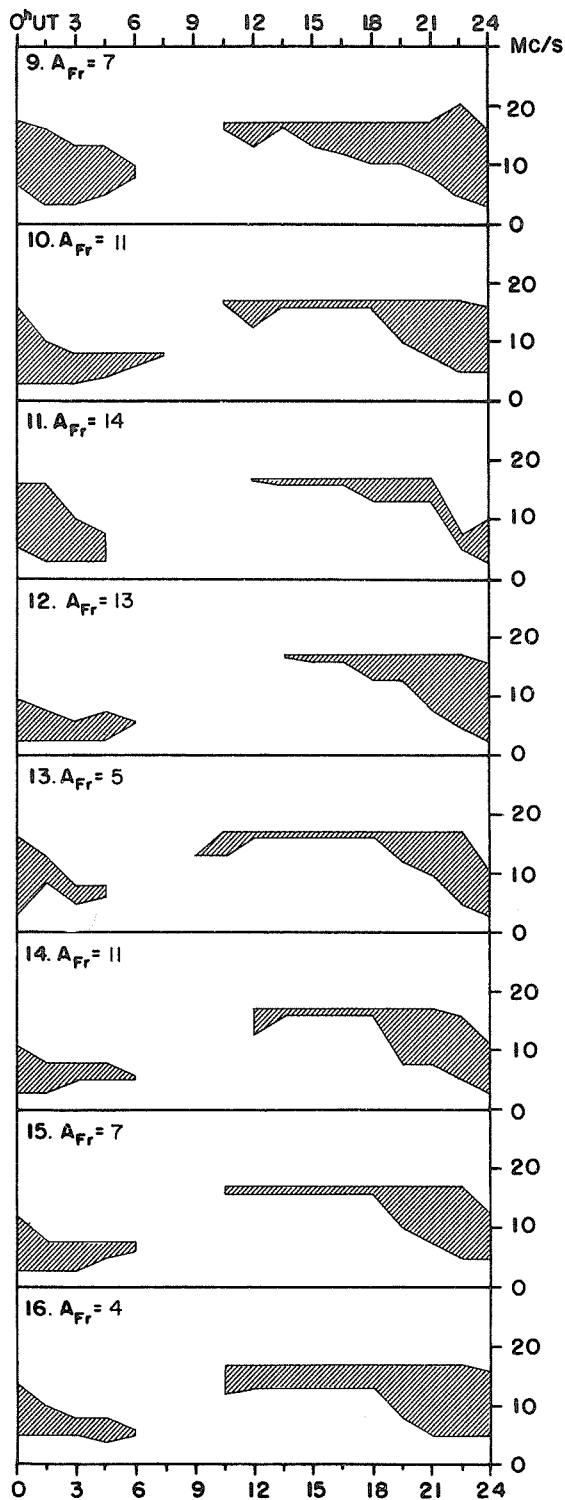
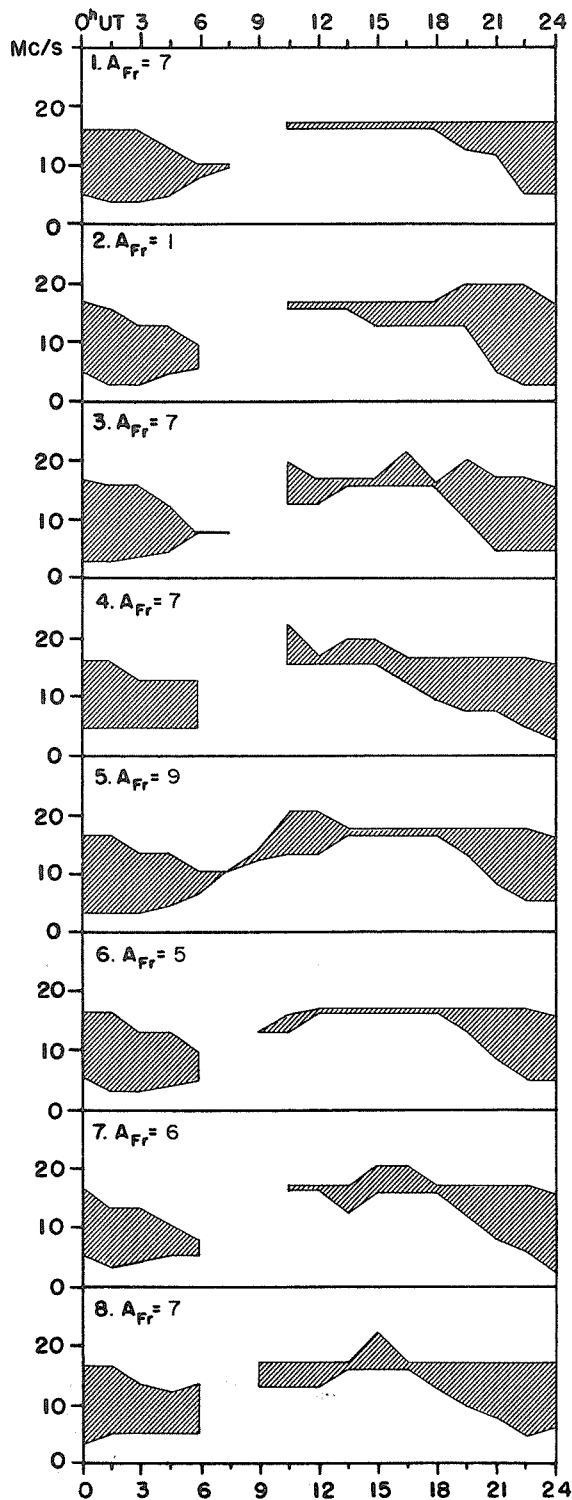
HIGH LATITUDE





USEFUL FREQUENCY RANGES -- NORTH ATLANTIC PATH

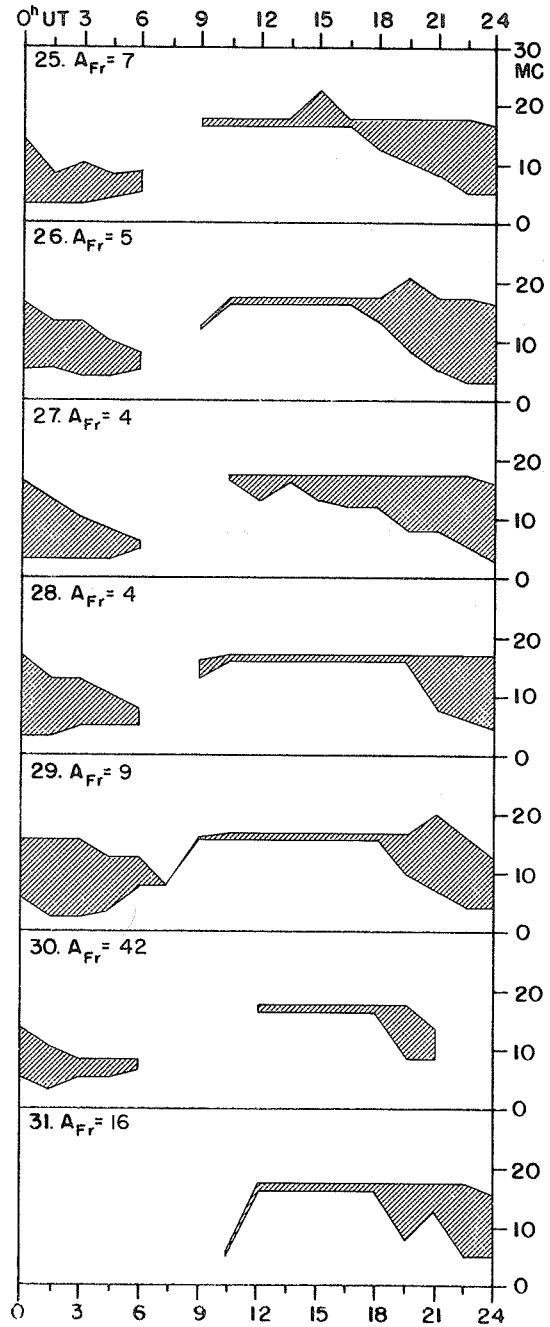
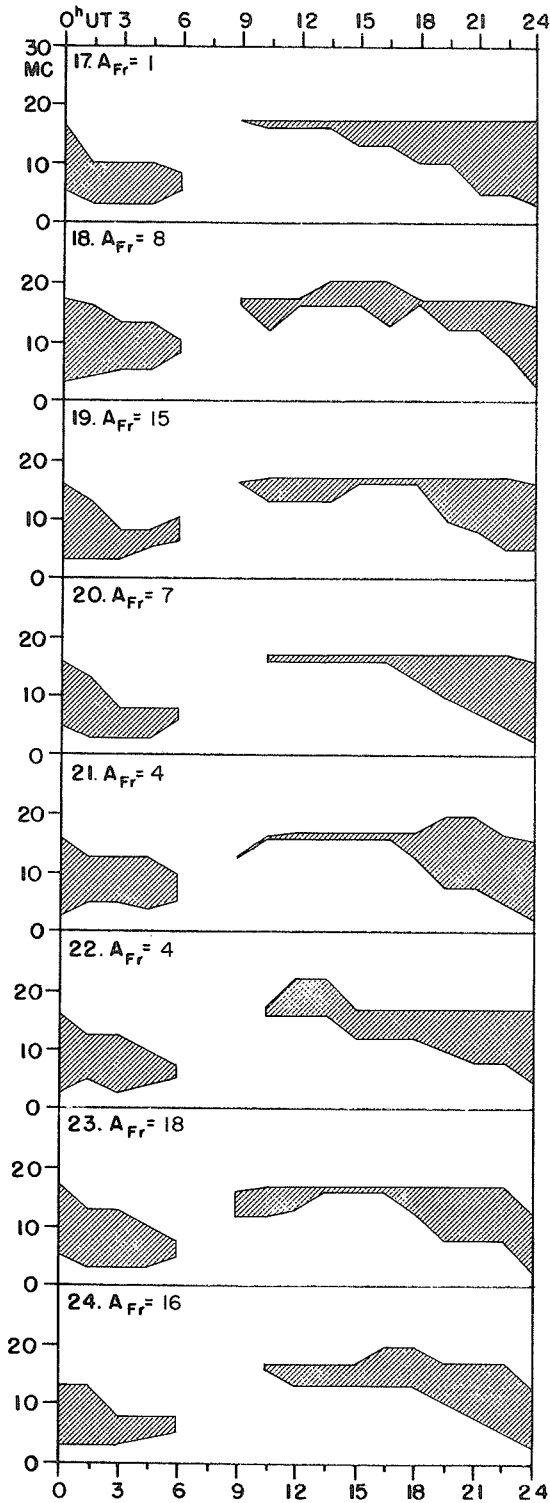
AUGUST 1966



# USEFUL FREQUENCY RANGES -- NORTH ATLANTIC PATH

VIIId

AUGUST 1966



Adapted from Observations by Deutsches Bundespost

## ALERT PERIODS

INTERNATIONAL URSIGRAM  
AND WORLD DAYS SERVICE

SEPTEMBER 1966

Sep. 1966	TIME OF ISSUE UT	ADVANCE GEOPHYSICAL ALERT	WORLDWIDE GEOPHYSICAL ALERT			
			NO.	TYPE	TIMING	ELABORATION
1	0400		393	Solar Activity	Exists	
2	0400 1245	Athens, Solar Flare 02/0538Z	394	Solar Activity	Exists	
3	0400		395 396	Cosmic Event Magnetic Storm	Exists Expected	Polar Cap Absorption
4	0010 0400	AGIWARN, Magnetic Storm 03/10xxZ	397 398	Solar Activity Magnetic Storm	Exists 03/10xxZ	Aurora Probable
	1220 1438*	Manila, Solar Flare 04/0410Z ADALERTPRESTO TENFLARE Toyokawa 040410Z				
5	0400		399	Magnetic Storm	Expected	
6	0400		400	Magnetic Storm	Expected	
12	1135*	ADALERTPRESTO TENFLARE NERA 120925Z				
13	0400		401	Solar Activity	Exists	East Limb
14	0400		402	Solar Activity	Exists	
15	0400		403	Solar Activity	Exists	
16	0400		404	Solar Activity	Exists	Beta-gamma Spot
17	0400		405	Solar Activity	Exists	
18	0400		406	Solar Activity	Exists	Delta Configuration Spot
19	0400 1248	McMath, Solar Flare 19/1210Z	407	Solar Activity	Exists	
20	0400		408	Solar Activity	Exists	
21	0400		409	Solar Activity	Exists	Flares
22	0400		410	Solar Activity	Exists	
23	0400		411	Solar Activity	Exists	
24	0400		412	Solar Activity	Exists	

\* Time when Alert was relayed  
by AGIWARN