

COMPILATIONS  
OF  
SOLAR-GEOPHYSICAL DATA

Abstracted from CRPL-FB-269

Issued January 1967

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ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION  
INSTITUTE FOR TELECOMMUNICATION SCIENCES AND AERONOMY  
BOULDER, COLORADO 80302

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

#### Mount Wilson Observatory Solar Magnetograms

The solar magnetograms are computer-plotter isogauss drawings. The polarities are indicated. "Plus" signifies the magnetic vector pointed toward the observer. The gauss levels are indicated. At times it is necessary to omit certain levels from a map because of the limited capacity of the computer. In such a case this fact is noted below the title material of each printed disk.

The observations are made with the magnetograph at the 150-foot tower telescope on Mount Wilson. The program is supported in part by the office of Naval Research. This instrument measures the longitudinal component of the magnetic field using the line  $\lambda 5250.216$  Fe I. A solar magnetograph is basically a flux measuring instrument. It measures the total flux over the aperture which is being used. The magnetograph apertures are square (an image slicer is used) and the raster scan lines are separated by the dimension of the aperture. This separation of the scan lines is given by the  $\Delta Y$  (DELTAY) printed on the magnetogram. The units of  $\Delta Y$  are the units of the position orientation of the scanning system which correspond to about 0.28 arc seconds. The DELTAX represents in the same units the distance along the scan line between points at which the data were digitized.

The scan is a boustrophedonic raster scan which extends for all scan lines beyond the disk. The data within about 12 arc seconds of the solar limb are not plotted. The scanning system is always oriented so that the scan lines are perpendicular to the central meridian of the sun. The cardinal points on the magnetogram refer to heliocentric coordinates so that the "N" and "S" define the rotation axis of the sun.

The contour lines are generated by connecting straight lines between points on the scan lines representing the various gauss levels. This makes the contour map look somewhat artificial, but it emphasizes the angular resolution. Frequently there are cases where the contour line is formed from only two points - both on the same scan line. In these cases two additional points are added artificially. These points are located midway between the two real points in the scanning direction and half way to each adjacent scan line. Such contours, then, are small diamond-shaped features.

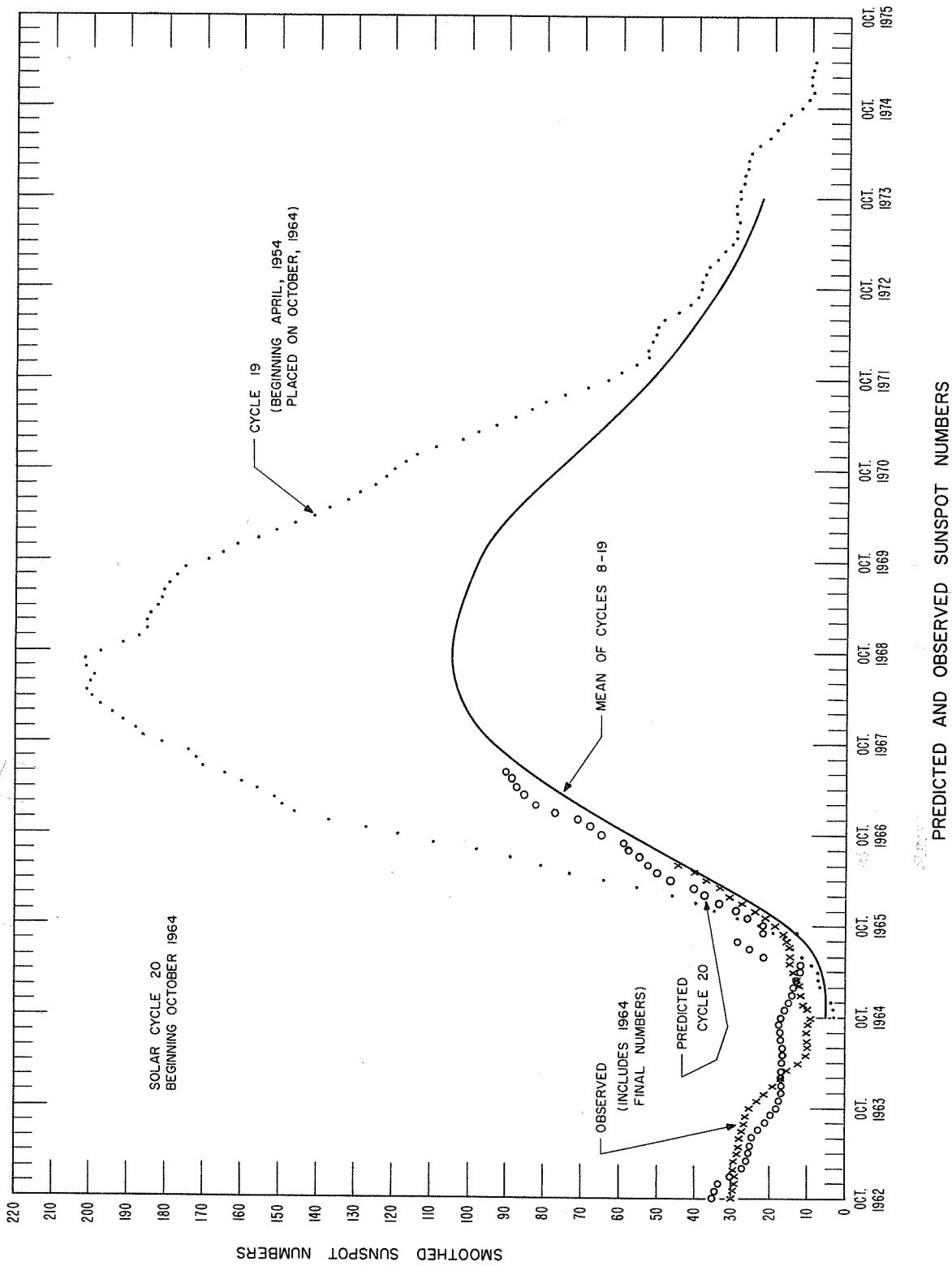
Because the magnetic field strength measured by the magnetograph is the product of the true field strength and the brightness of the image, the fields used to map the contours have been corrected for the brightness at each point. So effects of limb darkening and variable sky transparency have been corrected.

A number of errors can still be present. One of the most common of these is the zero setting of the magnetograph. At times there may be an obvious bias of the fields over the whole disk toward one or the other polarity. This will tend to show very weak features of one polarity more readily than those of the other polarity. The noise in the magnetic signal varies from day to day, but it is almost always present at the 3-gauss level. Occasionally for one reason or another a scan line may be skipped. In this case the isogauss lines will be drawn across the skipped line as if there were no scan line there. Other problems may arise from time to time. In general any feature which is present on only one day should be discounted as an artifact unless there is some particular reason to accept its reality.

Because of the difficulties with the zero offset from day to day, the polar fields will appear to vary. The polar fields can only be studied by comparing them with other weak-field regions observed on the same day.

Sometimes, because of the small scale of the reproductions, it is difficult to make out the details of the field distribution in some regions. Large scale copies of particular magnetograms may be obtained by writing to:

WORLD DATA CENTER A  
Environmental Science Services Admin.  
U. S. Department of Commerce  
Boulder, Colorado U.S.A. 80302



## RELATIVE SUNSPOT NUMBERS

ZURICH, R<sub>Z</sub>

1966

	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1	18	7	25	64	50	71	49	78	44	57	43	35
2	17	9	11	58	48	74	49	62	44	55	42	33
3	16	20	11	74	57	41	54	65	25	50	33	30
4	15	17	18	74	61	60	53	51	18	36	38	57
5	8	17	12	55	38	43	48	53	26	40	20	69
6	7	17	14	59	23	43	46	50	30	44	32	68
7	7	16	10	70	13	38	58	31	36	53	48	64
8	13	13	9	65	16	35	68	13	38	48	51	88
9	13	10	15	47	8	33	56	7	39	44	56	86
10	7	11	13	37	0	25	58	0	37	65	62	112
11	8	14	10	25	14	43	52	16	42	66	72	125
12	0	8	0	27	14	34	62	36	38	49	80	130
13	17	16	0	24	23	34	56	30	29	72	68	118
14	30	12	0	29	52	31	37	37	35	64	66	113
15	36	16	9	29	46	22	34	41	38	60	62	107
16	57	13	26	35	47	40	48	36	57	70	44	116
17	50	19	44	40	33	46	42	35	76	70	54	74
18	64	24	53	40	27	39	49	35	83	70	51	58
19	68	32	60	24	34	33	38	27	76	66	61	40
20	63	39	54	37	57	42	65	24	78	81	70	37
21	52	41	49	40	80	29	55	22	89	96	72	34
22	44	50	52	56	66	34	66	38	86	81	82	32
23	38	55	40	69	68	59	56	65	71	70	76	38
24	41	42	31	58	68	63	70	71	62	61	72	42
25	27	37	23	56	64	80	67	89	68	50	74	60
26	19	36	18	54	70	78	74	95	54	44	67	65
27	16	35	10	40	66	69	52	90	48	39	59	49
28	14	31	12	40	60	52	61	84	35	28	41	41
29	19	35	48	39	39	47	76	89	40	25	37	48
30	28		42	52	58	55	63	76	38	24	37	76
31	15		52		56		66	66		35		74
MEAN	26.7	23.5	24.5	47.5	43.7	46.4	55.7	48.8	49.3	55.3	55.7	68.2

All Zurich Sunspot Numbers, R<sub>Z</sub>, for 1966 are Provisional.AMERICAN, R<sub>A'</sub>

1966

	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1	25	0	11	32	24	56	33	77	30	53	36	32
2	21	12	12	37	37	48	37	70	28	44	36	28
3	19	14	14	34	35	41	54	69	18	42	23	21
4	13	16	16	49	19	50	51	64	16	39	12	46
5	7	17	15	40	15	39	36	46	15	34	30	65
6	1	15	14	47	17	26	30	40	20	44	37	57
7	0	14	10	49	12	22	52	23	27	41	53	70
8	1	13	10	55	11	26	45	8	36	39	47	87
9	0	12	16	36	8	27	49	0	36	45	49	99
10	0	14	15	26	0	24	44	1	48	44	59	110
11	0	15	7	19	0	26	56	17	41	73	78	116
12	0	11	0	22	5	32	47	24	32	55	66	128
13	19	12	3	16	9	18	27	31	28	72	66	115
14	30	14	1	22	22	21	19	28	31	65	45	110
15	37	13	15	31	28	24	14	33	37	57	60	95
16	31	16	21	28	24	33	33	42	47	59	47	80
17	43	13	43	28	18	36	40	38	61	66	51	59
18	43	25	46	29	14	31	40	33	58	65	53	60
19	55	24	46	16	33	27	35	29	67	73	54	46
20	55	33	41	42	56	28	46	15	63	82	68	19
21	41	36	32	38	59	32	38	17	77	78	64	34
22	34	43	29	42	51	42	43	43	63	77	69	35
23	36	55	19	58	59	58	56	66	64	64	57	39
24	31	47	17	51	59	61	59	83	57	69	54	52
25	18	47	16	47	49	66	57	89	65	47	53	56
26	14	47	10	34	61	62	65	96	39	41	51	58
27	15	32	0	22	48	44	62	95	26	16	50	62
28	14	28	12	22	41	35	75	86	26	3	40	59
29	20		36	33	40	29	71	81	35	28	47	48
30	21		41	33	37	33	75	51	36	29	45	53
31	3		32		56		75	33		35		55
MEAN	20.9	22.8	19.4	34.6	30.5	36.6	47.2	46.1	40.9	50.6	50.0	64.3

# DAILY SOLAR FLUX AT 2800 Mc/s

## OTTAWA ARO

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### OBSERVED FLUX, S

1966

	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1	82.0	79.9	81.2	106.9*	90.3	101.9	96.8	122.2	114.5	101.2	96.0	94.9
2	78.9	79.2*	78.0	106.4	92.5	101.0	95.0	116.1	104.4	101.9	98.3	97.8
3	78.5	79.8	77.1	102.1	92.4	99.7	96.0	114.8*	101.5	103.1	94.6	
4	80.5	81.3	76.7	102.5	91.0	99.1	101.4	112.7*	100.2	100.6*	93.3	107.9
5	80.0	82.9	76.0	101.9	87.0	98.7	101.6	107.4	98.9	100.0	99.6	114.2*
6	79.7	84.5	76.6	104.0	86.0	98.9	106.1	103.0	96.4	102.0*	106.6	119.1*
7	80.9	85.1	77.4	102.6*	88.2	94.1	108.9	98.7	94.4*	103.2	115.5	121.3
8	80.6	84.6	77.5	107.0*	86.2	96.6	110.6	95.0	94.8*	99.6	119.2	127.5
9	80.1	85.2	79.6	100.0	85.9	95.9	104.3	93.8	94.0	103.8	119.5	150.7
10	79.8	86.0	79.6	94.4	84.9	93.9	104.6*	91.8	92.6	106.8	124.4	162.2*
11	80.9	85.8*	79.0	93.5	86.6	93.2	105.4	90.1	95.4	110.3	128.7	168.0*
12	84.0	79.3	94.4	90.7	93.0		99.4	90.4	99.5*	115.3	128.9	162.7
13	87.2	86.1	81.0	92.6	91.0	93.1	97.2	90.8	101.1	123.4*	129.1	160.5
14	93.2	86.1	82.3	90.5	95.1	93.9	96.6	90.5	106.0	120.9	126.7	154.3
15	101.9	85.4	88.1*	95.7	97.1	91.8	97.9	91.3	110.8	121.3	125.4	149.5
16	106.0	84.7	93.8*	92.6	97.9	94.9	99.5	92.8	123.3*	121.2*	123.9	139.6
17	101.7*	84.1	106.2*	94.5	96.7	96.4	98.0	94.4	127.8	121.4*	115.9	129.0*
18	104.8*	84.1	110.6	92.1	96.4	95.1	98.1	95.1	141.3	119.5*	116.1	114.9
19	108.6*	83.0	115.5	88.2	104.6*	93.8	98.3	91.7	145.3	116.5*	113.7	116.0
20	102.3	84.7*	111.9	92.6	112.8*	91.3	98.6	99.2	144.9*	125.2	113.6	111.2
21	98.9	87.6	121.2	90.8	120.6	90.5	100.5	100.4	136.1	122.0*	113.4*	110.0
22	94.7*	87.9	105.8	92.4	118.1	93.0	103.2	103.1	130.6*	121.0*	119.5	109.0*
23	93.5	84.5*	96.8	97.8	111.1	96.0	111.3	112.2	126.6*	112.2	117.6*	114.4*
24	91.8	83.7	93.5	102.5	114.7	100.2	116.9	119.4*	125.3	107.3	116.8	114.3
25	88.1	80.9	91.6	102.6*	112.2	101.5*	122.1	123.6*	118.2*	102.0	113.7	115.4
26	85.4	84.8	85.0	100.0*	109.4	102.1*	123.7	127.5	108.9	98.9	110.2	114.7
27	82.4	84.8	83.4	95.6	105.6	97.5	120.1	130.7	102.5	93.2	114.2*	113.3
28	80.5	85.7	87.9	93.6	*	*	120.5	130.0*	97.5	95.4	107.0	111.2
29	80.7		96.4	93.1	103.2	96.5	128.9	127.3	98.3	101.1	100.7	113.0
30	78.7		99.2	91.9	98.8	97.4	124.2	123.8	95.4	97.1	97.3*	119.0
31	77.7		110.6		102.7		121.0	118.7		98.6		124.6*
MEAN	87.9	84.2	90.3	97.2	98.3	96.3	106.7	106.5	110.9	108.6	113.3	125.3

\* adjusted for burst

\*\* burst in progress

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

1966

	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1	79.3	77.6	79.7	106.8*	91.7	104.8	100.1	125.9	116.6	101.4	94.6	92.2
2	76.3	76.9*	76.7	106.3	94.0	103.9	98.2	119.6	106.3	102.0	96.7	95.1
3	75.9	77.5	75.8	102.1	94.0	102.6	99.3	118.2*	103.2	103.2	93.1	
4	77.8	79.0	75.5	102.6	92.5	102.0	104.8	116.0*	101.9	100.6*	91.7	104.8
5	77.4	80.6	74.8	102.0	88.6	101.7	105.0	110.5	100.5	100.0	97.9	110.9*
6	77.1	82.1	75.5	104.2	87.5	101.9	109.7	106.0	97.9	101.9*	104.7	115.6*
7	78.2	82.8	76.2	102.8*	89.9	96.9	112.6	101.5	95.8*	103.1	113.4	117.7
8	77.9	82.3	76.4	107.3*	87.8	99.5	114.4	97.7	96.2*	99.4	116.9	123.7
9	77.4	82.9	78.5	100.3	87.5	98.9	107.8	96.4	95.3	103.5	117.2	146.2
10	77.2	83.8	78.6	94.8	86.6	96.8	108.1*	94.3	93.9	106.5	121.9	157.3*
11	78.2	83.6*	78.0	93.9	88.3	96.1	109.0	92.5	96.6	109.8	126.1	162.8*
12	81.2	83.2	78.3	96.8	92.6	95.9	102.7	92.8	100.8*	114.8	126.2	157.6
13	84.3	83.9	80.0	93.1	92.9	96.1	100.4	93.2	102.4	122.8*	126.4	155.5
14	90.1	83.9	81.4	91.0	97.2	96.9	99.8	92.8	107.4	120.3	124.0	149.5
15	98.5	83.3	87.1*	96.3	99.2	94.7	101.0	93.7	112.0	120.6	122.6	144.9
16	102.6	82.7	92.9*	93.2	100.1	97.9	102.8	95.1	124.6*	120.3*	121.2	135.1
17	98.4*	82.1	105.1*	95.2	98.9	99.5	101.2	96.8	129.1	120.5*	113.2	124.9*
18	101.4*	82.2	109.6	92.9	98.7	98.2	101.3	97.5	142.6	118.5*	113.4	111.2
19	105.1*	81.1	114.6	89.0	107.1*	96.9	101.5	100.0	146.6	115.6*	111.0	112.3
20	99.0	82.8*	111.0	93.5	115.5*	94.3	101.8	101.6	146.0*	124.1	110.9	107.6
21	95.7	85.7	120.3	91.7	123.6	93.5	103.7	102.7	137.2	120.9*	110.7*	106.5
22	91.8*	86.0	105.1	93.4	121.0	96.1	106.5	105.5	131.5*	119.8*	116.5	105.5*
23	90.6	82.7*	96.2	98.8	113.9	99.2	114.9	114.7	127.5*	111.1	114.7*	110.6*
24	88.9	81.9	92.9	103.7	117.7	103.5	120.6	122.0*	126.0	106.1	113.8	110.5
25	85.4	79.3	91.1	103.8*	115.1	104.8*	126.0	126.3*	118.8*	100.8	110.7	111.6
26	82.7	83.1	84.7	101.3*	112.3	105.6*	127.6	130.2	109.4	97.7	107.3	110.9
27	79.9	83.2	83.1	96.0	108.5	100.8	123.8	133.4	102.9	92.0	111.1*	109.6
28	78.1	84.1	87.6	94.9	*	101.4	124.2	132.6*	97.9	94.1	104.1	107.5
29	78.3		96.1	94.5	106.8	99.8	132.9	129.8	98.6	99.7	98.0	109.3
30	76.3		99.0	93.3	101.6	100.7	128.0	126.1	95.7	95.7	94.6*	115.1
31	75.4		110.4		105.6		124.6	120.9		97.1		120.5*
MEAN	85.0	82.1	89.4	97.8	100.6	99.4	110.1	109.2	112.4	107.9	110.8	121.4

\* adjusted for burst

\*\* burst in progress

## CALCIUM PLAGUE AND SUNSPOT REGIONS

DECEMBER 1966

Dec. 1966	LAT.	MCMATH PLAGE NUMBER	RETURN OF REGION	CALCIUM PLAGUE DATA						SUNSPOT DATA		
				CMP VALUES		HISTORY	AGE (ROTA- TIONS)	DATE FIRST SEEN	DURA- TION (DAYS)	CMP VALUES		HISTORY
				AREA	INT.					AREA	COUNT	
1.1	S26	8597(1)	8563	600	1.0	b - ?	3	11/25	>9			
1.9	N21	8594(2)	New	2500	2.5	b / b	1	11/25	>9	20	2	b - d
3.2	S21	8598	New	(300)	(1.5)	b - d	1	11/30	2			
3.9	N23	8599(3)	8571	1200	1.5	b / ?	2&7	>11/30	>4			
4.6	S22	8600	New	(100)	(1.0)	b - d	1	11/30	1			
5.9	N16	8601	New	(600)	(2.5)	b - ?	1	11/30	>4	(10)	(3)	b - d
5.9	S18	8602	New	(400)	(1.5)	b - ?	1	11/30	$\geq 4$			
7.1	N11	8603(4)	8572	(900)	(2.0)	b - b	2	12/1	12			
7.8	N25	8604(4)	8572	(1900)	(3.0)	b \ b	2	12/1	13			
8.8	S34	8608	New	(300)	(3.0)	b - d	1	<12/12	>2	(10)	(2)	b - d
10.1	N06	8606(5)	8573	(1800)	(2.5)	b - b	4	12/3	13	260	1	b - b
10.7	N22	8607(5)	8573	(7500)	(3.0)	b / b	5	12/3	13	10	4	b \ d
11.1	S23	8609	New	(4000)	(3.5)	? \ b	1	<12/12	>4	750	80	b \ b
13.6	N21	8610	New	2700	3.5	b \ b	1	<12/12	>8	310	39	b \ b
13.6	S29	8611	New	300	1.0	? - d	1	<12/12	>4			
14.4	N15	8613	New	(1000)	(3.0)	b \ b	1	<12/15	>5	30	3	b \ b
14.7	N24	8615	New	(700)	(2.5)	b - b	1	<12/19	>1	(10)	(1)	b - b
15.7	N16	8616	New	(500)	(2.5)	b - ?	1	<12/19	>1	(20)	(3)	b - d
16.0	S19	8617	New	(100)	(1.0)	b - d	1	$\leq 12/19$	$\geq 1$			
17.8	N21	8612(6)	8578	(6000)	(3.5)	b \ b	3&4	12/12	13	100	39	b \ b
18.2	S16	8614	New	(200)	(1.5)	b - d	1	$\leq 12/15$	>5			
22.2	S06	8619	New	300	2.5	b \ d	1	$\leq 12/19$	$\geq 7$	(10)	(4)	b - d
22.5	N32	8618	8584	1500	2.0	b \ b	3	<12/19	$\geq 9$			
24.1	N28	8626	New	400	2.5	b / b	1	12/24	6			
25.4	N30	8620	New	800	2.5	b \ b	1	12/19	13	10	5	b - d
26.3	N26	8621	New	(800)	(2.5)	? / b	1	$\leq 12/22$	$\geq 12$	(10)	(2)	b - d
26.4	N06	8627	New	(100)	(1.5)	b - d	1	12/25	1			
26.6	S20	8622(7)	New	(600)	(2.0)	b / b	1	$\leq 12/22$	$\geq 10$			
27.3	N21	8623	8593	1100	2.5	b - b	2	$\leq 12/22$	$\geq 6$			
28.9	S27	8624(8)	New	(3600)	(3.5)	b \ b	1	12/22	$>12$	100	31	b \ b
29.2	N21	8625	8594	(2900)	(3.0)	b \ b	2	12/22	$>12$	60	7	b \ b

- (1) Region 8597 is a return of part of region 8563.
- (2) Region 8594 is primarily a new region, although it also contains remnants of old plague 8568 of the preceding rotation. There is a resurgence of activity on or before Nov. 30, with development of both plague and spot.
- (3) Region 8599 is a return of part of region 8571 and part of region 8568.
- (4) Regions 8603 and 8604 are the return of region 8572.
- (5) Regions 8606 and 8607 are the return of region 8573.
- (6) Region 8612 is a return of regions 8578 and 8579.
- (7) Region 8622 is primarily a new region that has formed near the position of region 8592 of the preceding rotation.
- (8) Region 8624 is a new plague, in the position of old region 8597.

No calcium spectroheliograms were secured at the McMath-Hulbert Observatory on Dec. 4, 5, 6, 7, 8, 9, 10, 11, 14, 16, 17, 18, 20, 21, 26 and 28, 1966.

M T. WILSON MAGNETIC CLASSIFICATIONS OF SUNSPOTS  
DECEMBER 1966

IIb

Dec. 1966	TIME MEAS. UT	LAT.	MER. DIST.	TYPE	No.	Dec. 1966	TIME MEAS. UT	LAT.	MER. DIST.	TYPE	No.
1	1600	N26	W80	af	16178	14	1840	N08	W63	(ap) 4	16185
		N18	W16	(af) 2	16177			S22	W52	(β) 3	16186
		N25	E11	(β) 2	16179			N22	W18	(βp) 3	16187
		N10	E72	(βf) 1	16182			N29	W55	(ap) 2	16188
2-6	No Obs.					15	1710	N18	E30	(βp) 3	16189
								N14	W05	(βγ) 2	16191
								N21	E42	(βf) 2*	16192
		N11	E24	(ap) 1	16183						
		N29	E32	(ap) 3	16184						
7	1715	N07	E33	(ap) 5	16185	16	1900	N09	W74	(ap) 4	16185
		S21	E44	(βf) 3	16186			S22	W61	(β) 4	16186
		N22	E77	(af) 2	16187			N23	W28	(βp) 4	16187
								N29	W67	(ap) 2	16188
								N18	E16	(βp) 3	16189
								N15	W16	(βp) 3	16191
8	2030	N11	E10	(ap) 1	16183	17	2105	N23	E33	(β) 1	16192
		N29	E18	(βp) 3	16184			S20	W75	β	16186
		N08	E18	(ap) 6	16185			N24	W44	(βp) 5	16187
		S21	E29	(β) 3	16186			N20	E07	(βp) 5	16189
		N22	E60	(β) 3	16187			N17	W31	(βp) 3	16191
		N29	E31	(β) 2	16188			N23	E20	(ap) 5	16192
9	2300	N29	E04	(βf) 1	16184*	18	1715	S22	W81	β	16186
		N08	E04	(ap) 5	16185			N23	W59	βp	16187
		S22	E17	(βf) 4	16186			N20	W13	βp	16189
		N22	E47	(β) 3	16187			N16	W47	βp	16191
		N29	E18	(βf) 4	16188			N23	E05	βp	16192
								N17	W31	β	16193
10	1635	N29	W04	(af) 1	16184	19	No Obs.	N22	W67	(βp) 4	16187
		N08	W06	(ap) 4	16185			N19	W23	(βp) 4	16189
		S22	E07	(βγ) 4	16186			N23	W11	(βp) 3	16192*
		N22	E38	(βγ) 4	16187			N17	W42	(βf) 2	16193
		N29	E07	(βγ) 3	16188						
		N18	E80	(ap) 3	16189						
11	1615	N08	W20	ap	16185	20	1920	N26	W76	ap	16194
		S23	W08	βγ	16186			S07	E19	ap	16195
		N22	E25	β	16187			N28	E54	ap	16196
		N29	W06	βf	16188						
		N19	E74	βp	16189						
12	1635	N08	W34	(ap) 3	16185	21-22	No Obs.	N29	E19	(ap) 2	16197
		S23	W21	(β) 4	16186			S26	E66	(βp) 5	16198
		N21	E11	βγ	16187			N20	E68	(βp) 5	16199
		N29	W20	(βp) 3	16188						
		N18	E59	βp	16189						
		S33	W52	(βp) 1	16190						
13	No Obs.										

\* Polarities Reversed

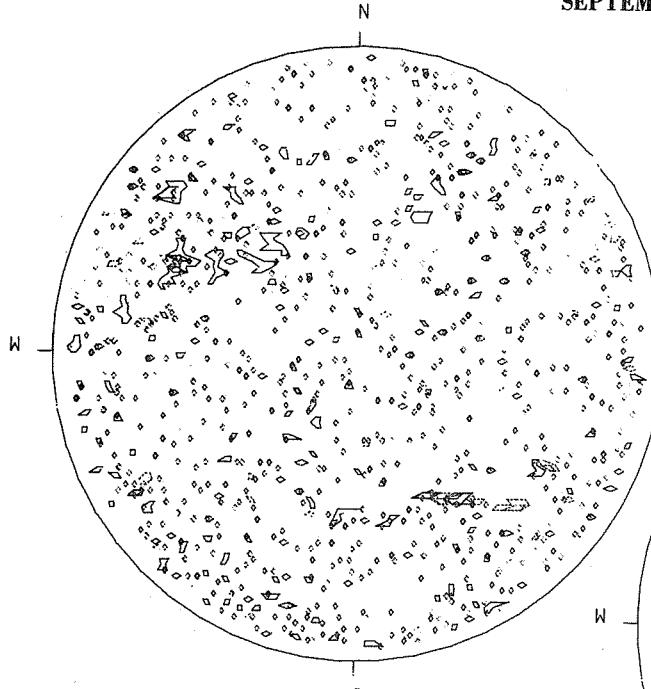
IIc

**MT. WILSON MAGNETIC CLASSIFICATIONS OF SUNSPOTS**  
**DECEMBER 1966**

Dec. 1966	TIME MEAS. UT	LAT.	MER. DIST.	TYPE	No.		TIME MEAS. UT	LAT.	MER. DIST.	TYPE	No.	
24	1615	S26 N20 N26 N26 S28	E55 E55 W09 W19 E58	( $\beta p$ ) 6 ( $\beta p$ ) 6 ( $\beta p$ ) 4 ( $\beta p$ ) 2 ( $\alpha f$ ) 2	16198 16199 16200 16201 16202	28	1705	S24	W04	(ap) 3	16198	
								N20	E01	( $\beta p$ ) 2	16199	
								N25	W66	( $\beta p$ ) 3	16200	
								S28	E07	( $\beta p$ ) 3	16202	
								29	No Obs.			
25	No Obs.						30	2345	N20	W28	ap	16199
26	No Obs.						30		S24	W32	ap	16198
27	1930	S24 N20 N25 S28	E09 E13 W50 E19	( $\alpha p$ ) 3 ( $\alpha p$ ) 2 ( $\beta p$ ) 3 ( $\beta p$ ) 2	16198 16199 16200 16202	31	1645	S23	W41	(ap) 3	16198	
								N20	W36	(ap) 1	16199	
								S22	E19	( $\beta p$ ) 4	16203	
								N18	E62	(ap) 4	16204	
								N15	E65	( $\beta$ ) 1	16205	
								N06	E79	(ap) 2	16206	

# MOUNT WILSON OBSERVATORY MAGNETOGRAMS

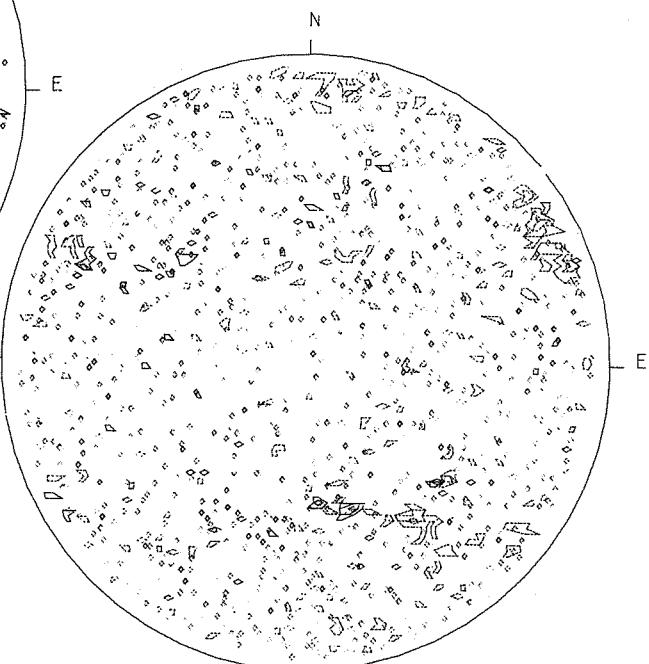
SEPTEMBER 1966



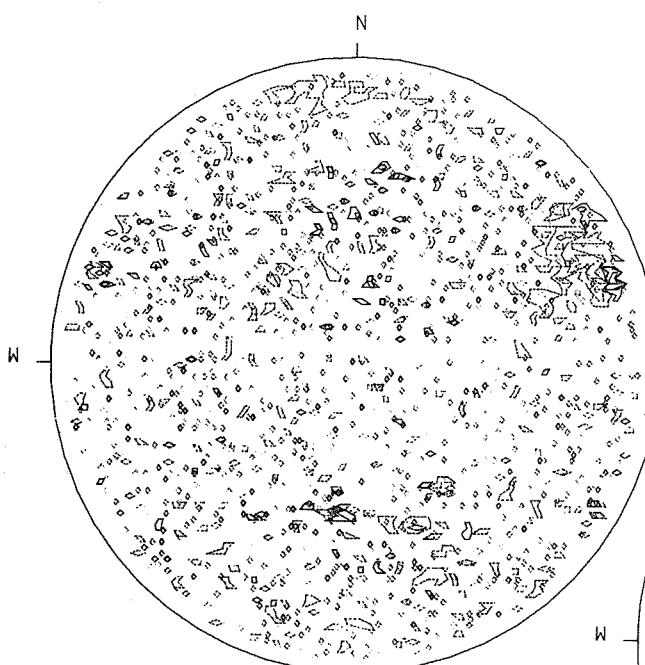
9/5/66 23.19-0.66  
DELTAY=62.0 DELTAX=50.0  
-3 LEVEL NOT PLOTTED

SOLID-PLUS  
DOTTED-MINUS  
LEVELS  
(GAUSS)  
 $\pm 3.00 \pm 15.00$   
 $\pm 6.00 \pm 25.00$   
 $\pm 10.00 \pm 40.00$

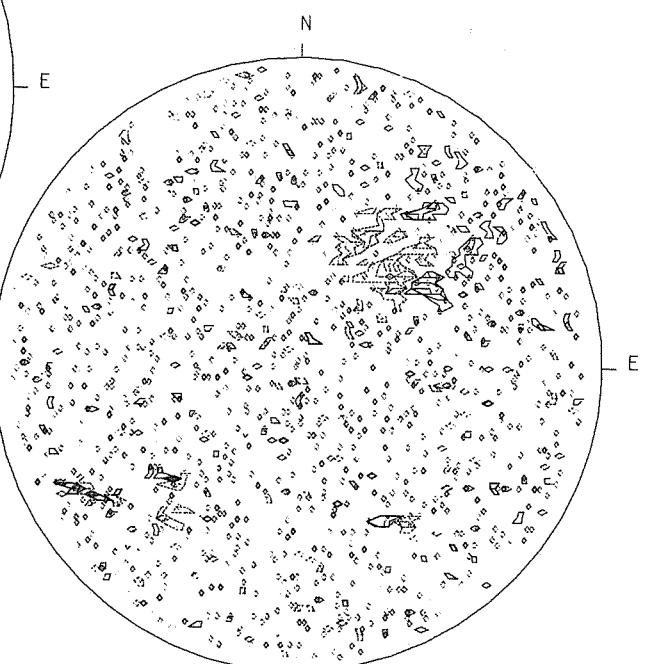
IId



9/6/66 22.39-23.83  
DELTAY=62.0 DELTAX=50.0



9/7/66 17.79-19.24  
DELTAY = 63.2 DELTAX = 54.3

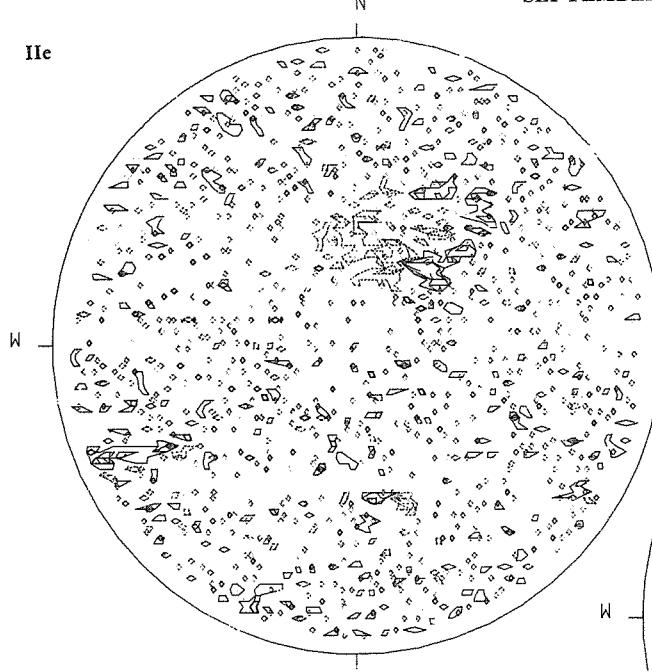


9/10/66 18.39-19.82  
DELTAY = 62.0 DELTAX = 50.0  
-3 LEVEL NOT PLOTTED

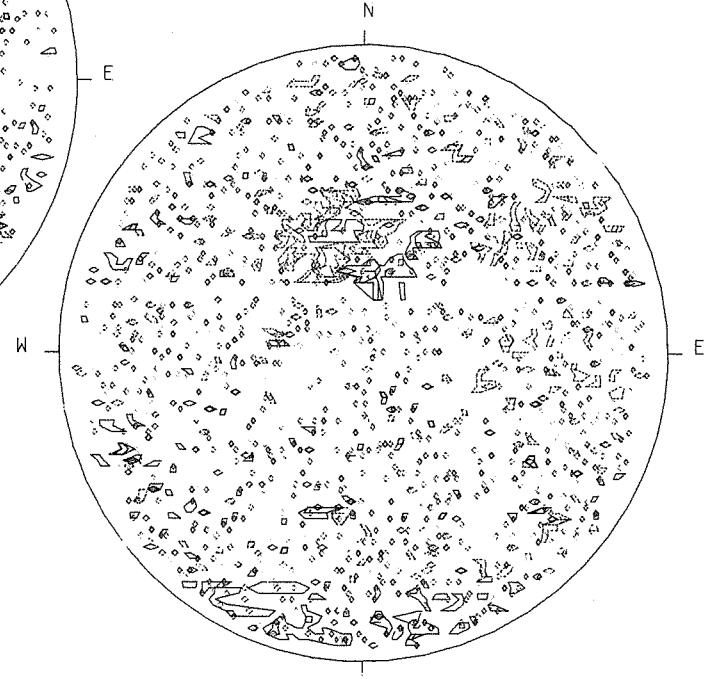
MOUNT WILSON OBSERVATORY MAGNETOGRAMS  
SEPTEMBER 1966

IIe

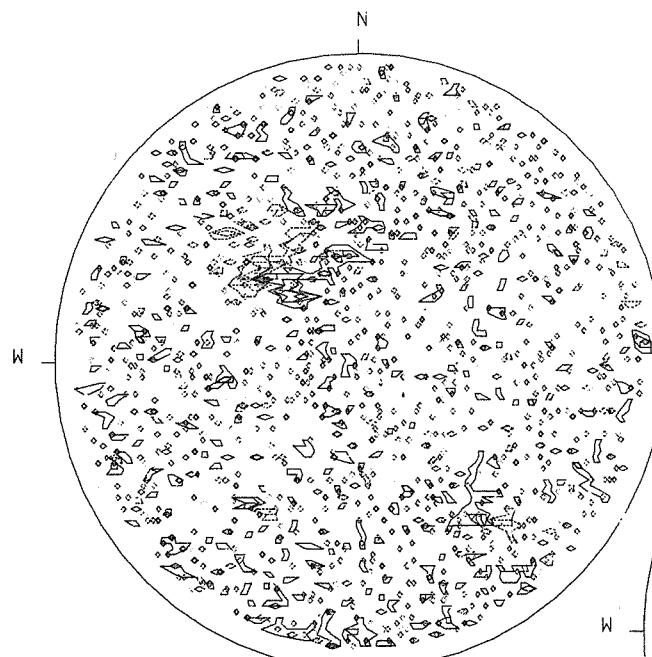
SOLID-PLUS  
DOTTED-MINUS  
LEVELS  
(GAUSS)  
 $\pm 3.00 \pm 15.00$   
 $\pm 6.00 \pm 25.00$   
 $\pm 10.00 \pm 40.00$



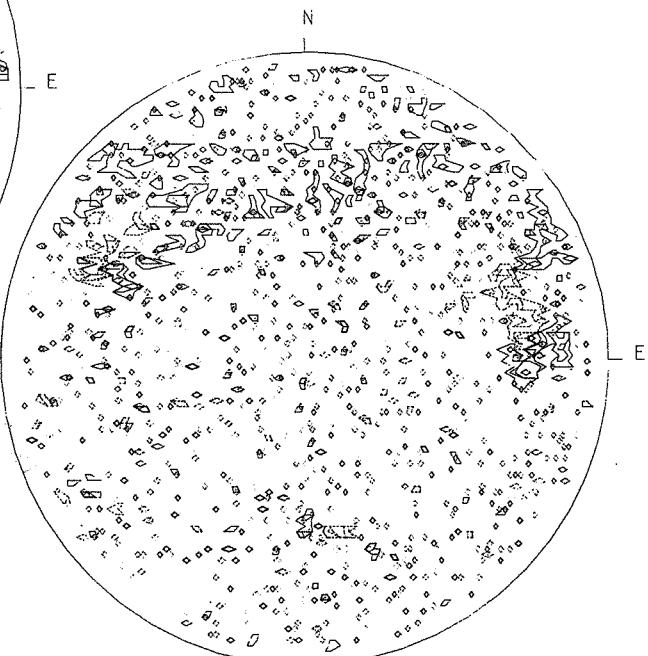
9/11/66 18.77-20.14  
DELTAY=62.0 DELTAX=53.5  
±3 LEVEL NOT PLOTTED



9/12/66 20.20-21.51  
DELTAY=63.2 DELTAX=50.5  
±3 LEVEL NOT PLOTTED



9/13/66 23.83-1.14  
DELTAY=62.0 DELTAX=56.2  
±3 LEVEL NOT PLOTTED

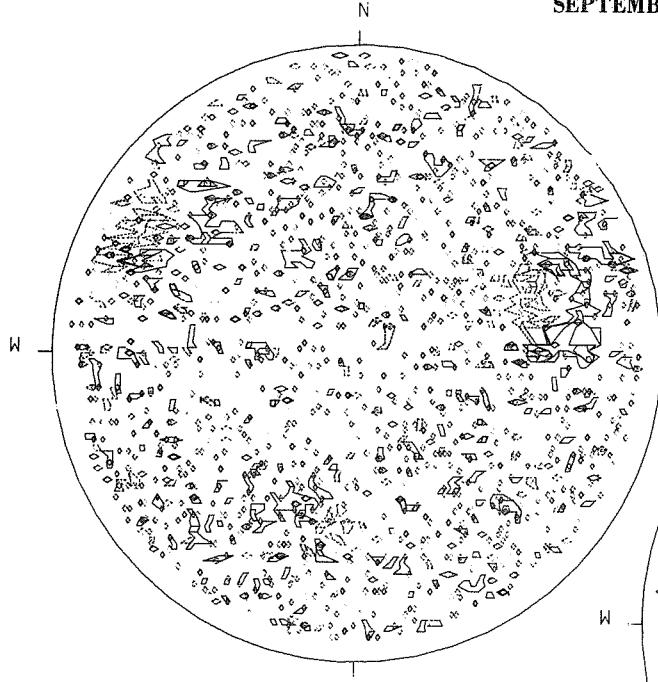


9/15/66 22.86-0.11  
DELTAY=62.0 DELTAX=58.6  
±3 LEVEL NOT PLOTTED

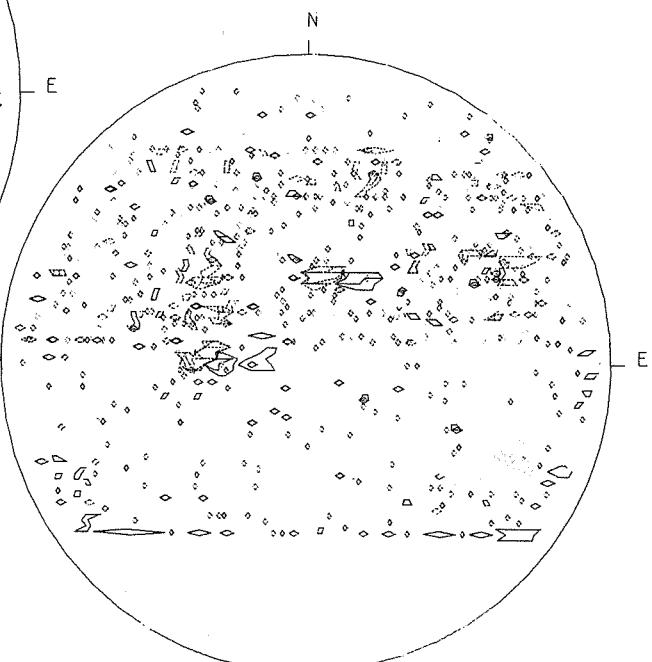
MOUNT WILSON OBSERVATORY MAGNETOGRAMS  
SEPTEMBER 1966

SOLID-PLUS  
DOTTED-MINUS  
LEVELS  
(GAUSS)  
 $\pm 3.00 \pm 15.00$   
 $\pm 6.00 \pm 25.00$   
 $\pm 10.00 \pm 40.00$

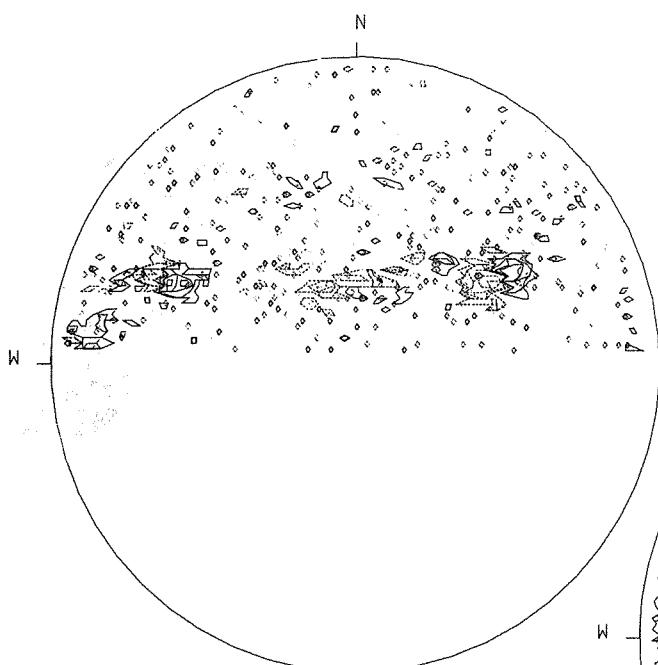
IIIf



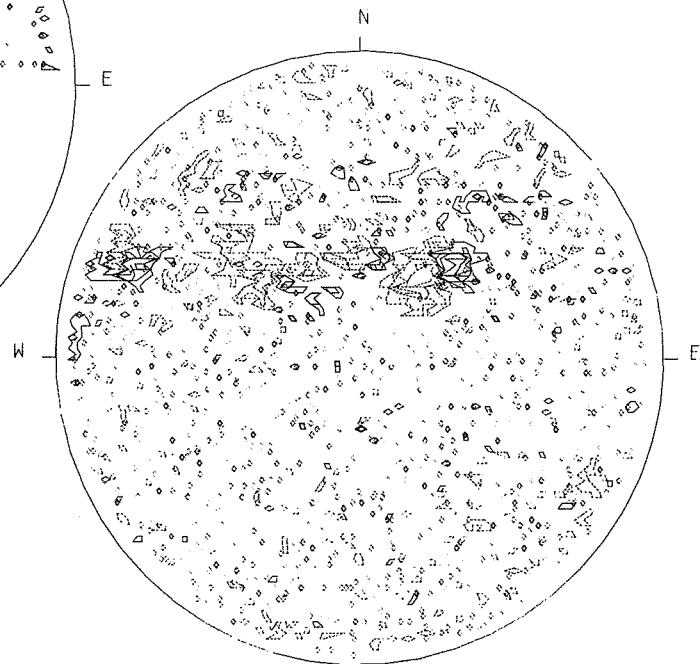
9/16/66 18.23-19.54  
DELTAY=64.5 DELTAX=53.1  
+3 LEVEL NOT PLOTTED



9/20/66 0.06-1.16  
DELTAY=64.6 DELTAX=52.8  
(DATA INCOMPLETE)



9/24/66 18.62-19.30  
DELTAY=62.0 DELTAX=50.0  
+3 LEVEL NOT PLOTTED  
(DATA INCOMPLETE)



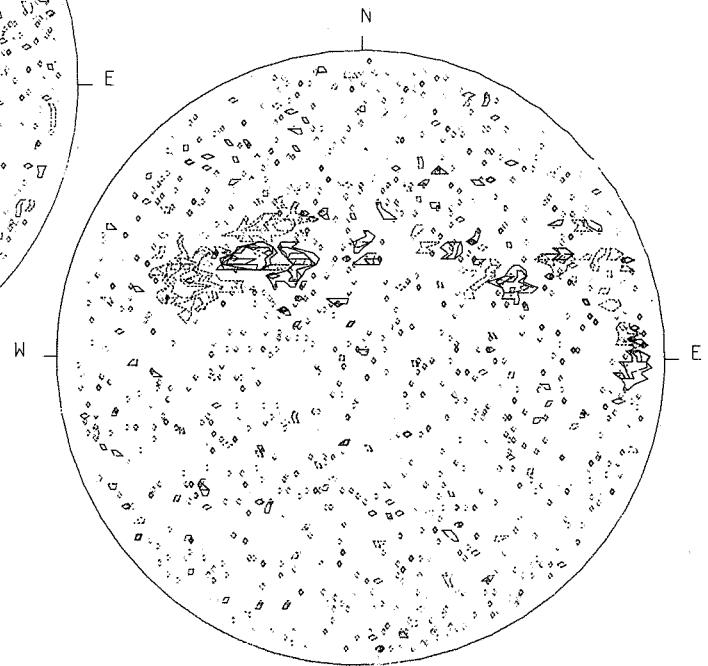
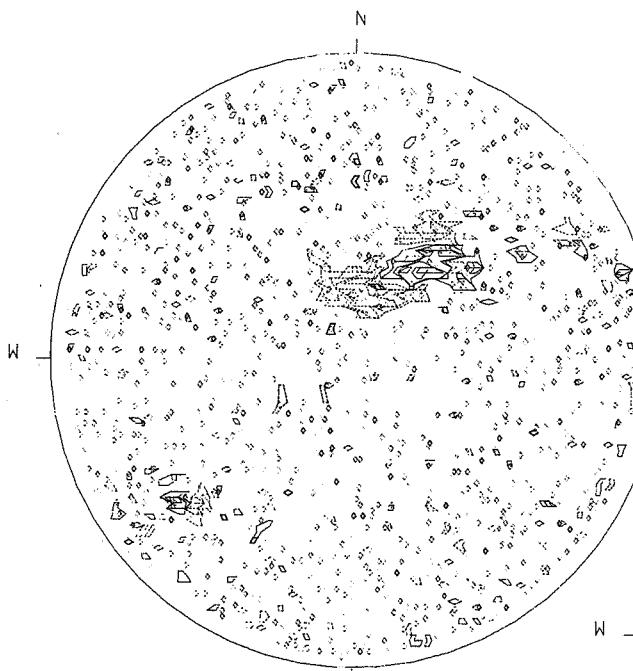
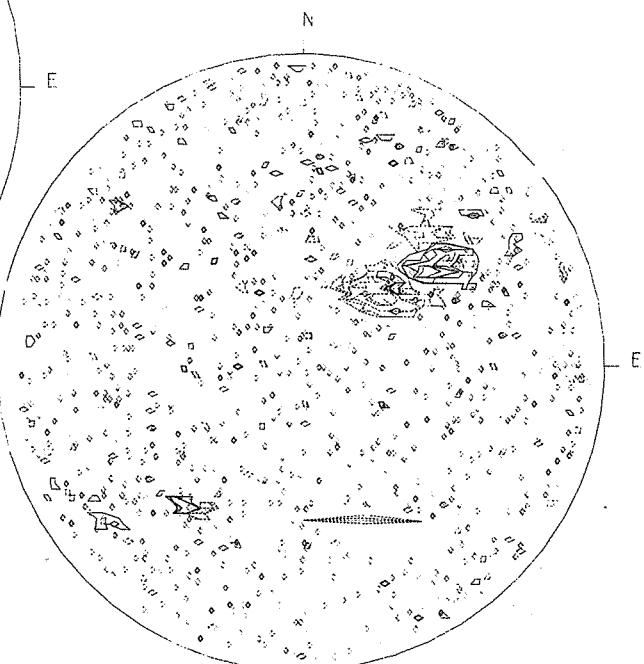
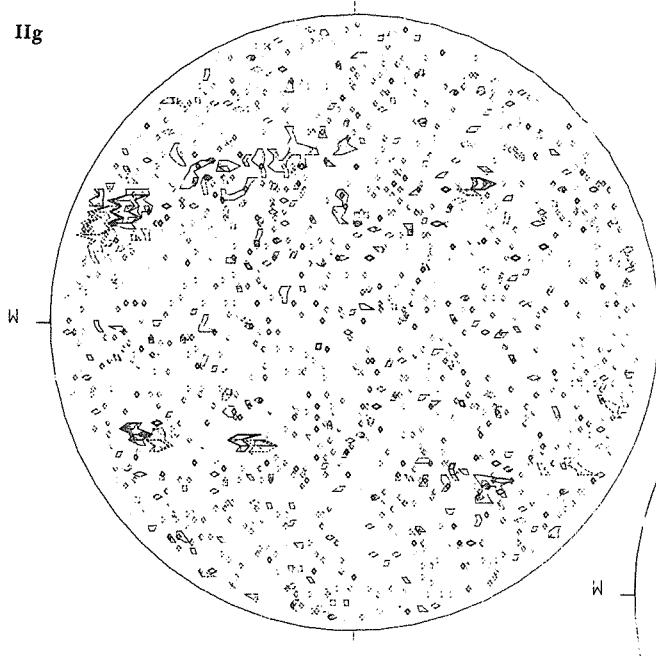
9/25/66 21.59-23.11  
DELTAY=62.0 DELTAX=50.0

# MOUNT WILSON OBSERVATORY MAGNETOGRAMS

OCTOBER 1966

IIg

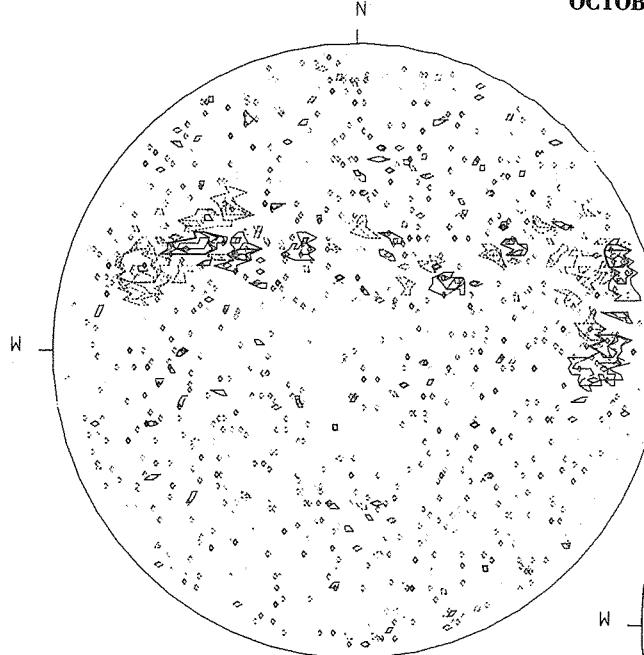
SOLID-PLUS  
DOTTED-MINUS  
LEVELS  
(GAUSS)  
 $\pm 3.00 \pm 15.00$   
 $\pm 6.00 \pm 25.00$   
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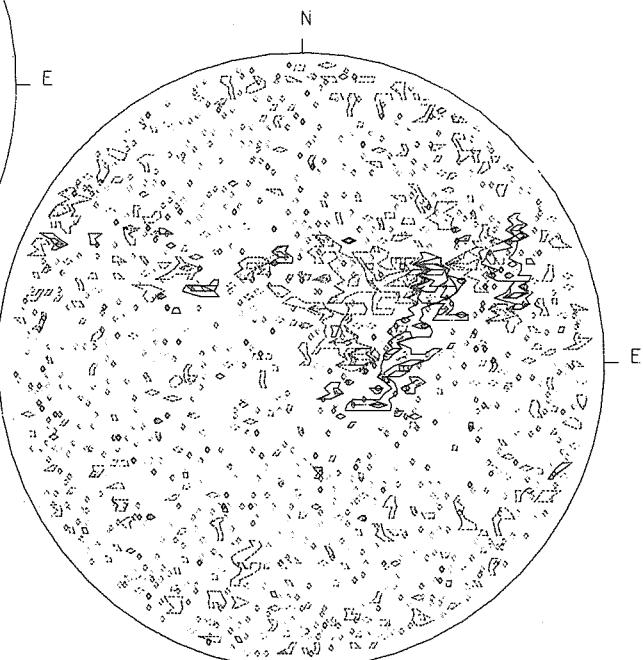
MOUNT WILSON OBSERVATORY MAGNETOGRAMS  
OCTOBER 1966

SOLID-PLUS  
DOTTED-MINUS  
LEVELS  
(GAUSS)  
 $\pm 3.00 \pm 15.00$   
 $\pm 6.00 \pm 25.00$   
 $\pm 10.00 \pm 40.00$

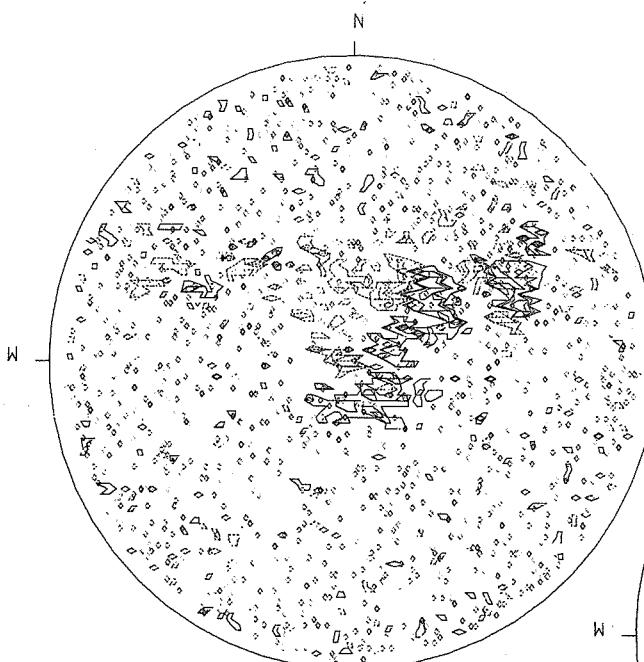
IIIb



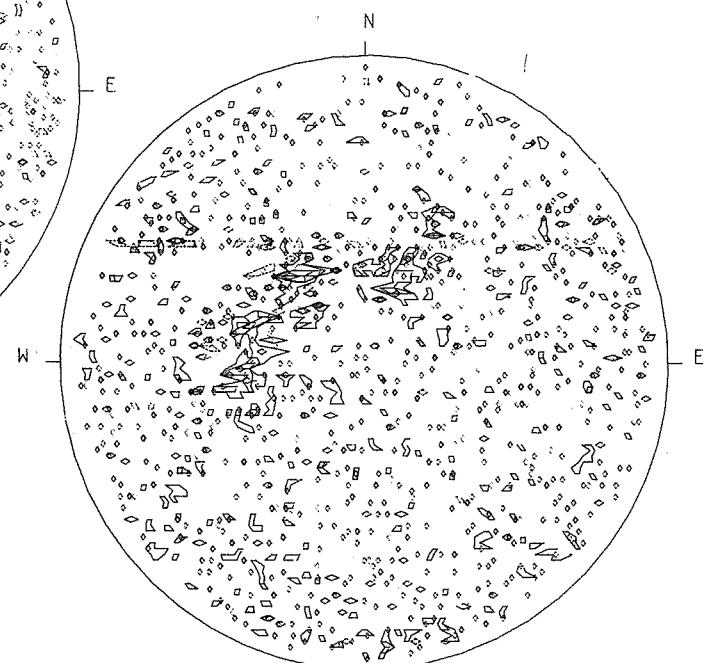
10/12/66 17.73-19.20  
DELTAY=62.0 DELTAX=50.0  
-3 LEVEL NOT PLOTTED



10/15/66 19.27-20.74  
DELTAY=62.0 DELTAX=50.0



10/16/66 18.80-20.28  
DELTAY=62.0 DELTAX=50.0  
-3 LEVEL NOT PLOTTED



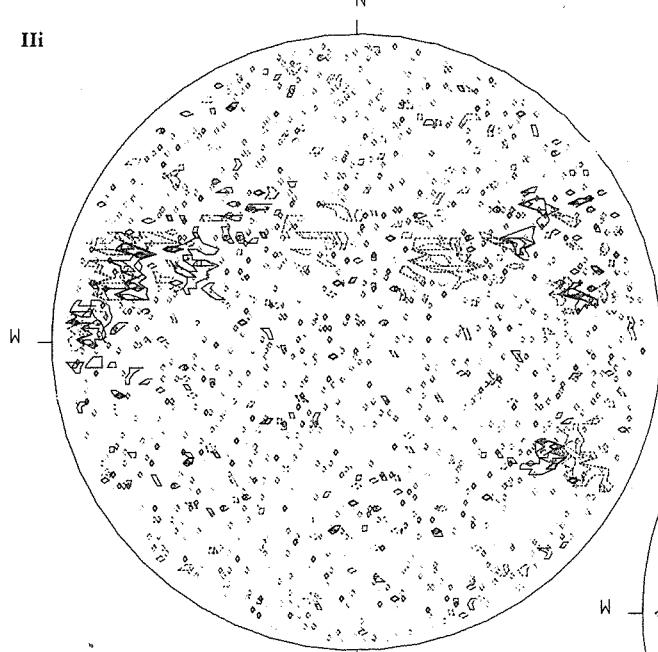
10/18/66 23.29-0.76  
DELTAY=62.0 DELTAX=50.0  
-3, -6, 10, 15 LEVEL NOT PLOTTED

# MOUNT WILSON OBSERVATORY MAGNETOGRAMS

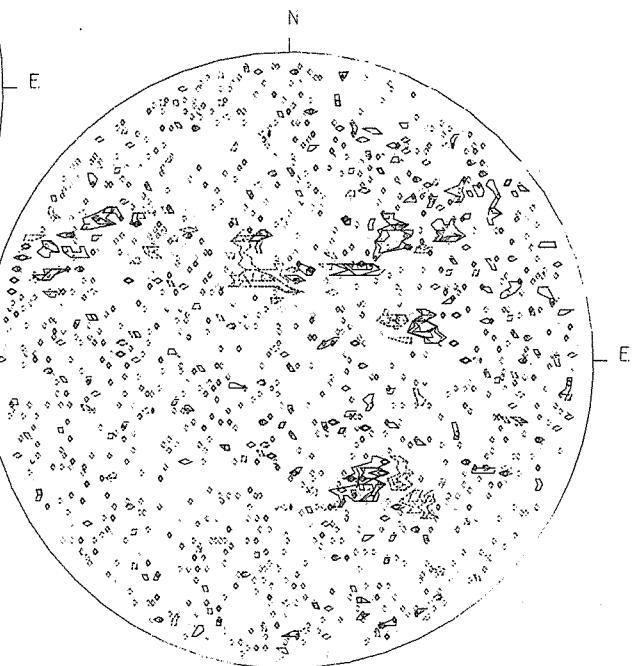
OCTOBER 1966

III

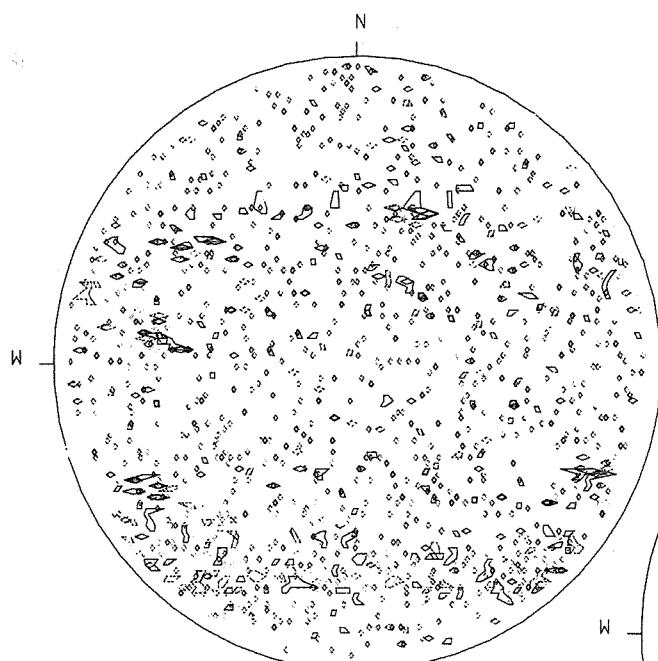
SOLID-PLUS  
DOTTED-MINUS  
LEVELS  
(GAUSS)  
 $\pm 3.00 \pm 1500$   
 $\pm 6.00 \pm 2500$   
 $\pm 10.00 \pm 4000$



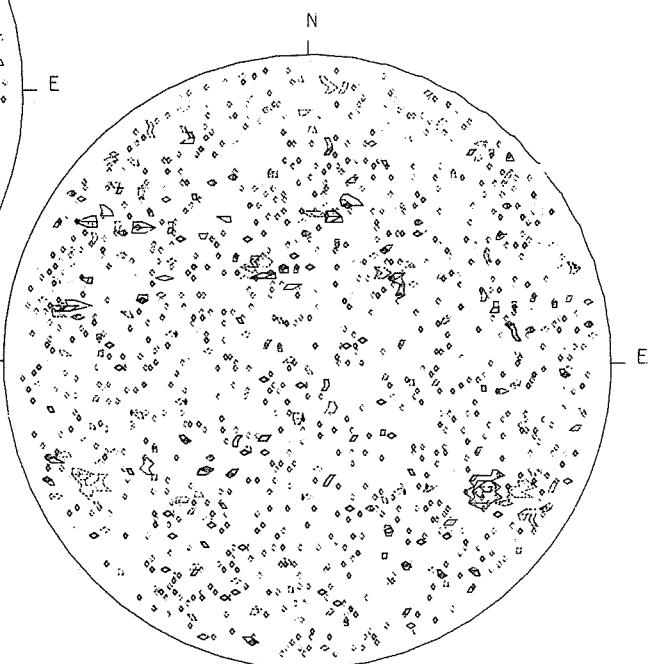
10/21/66 22.32-23.82  
 DELTAY=62.0 DELTAX=50.0  
 -3 LEVEL NOT PLOTTED



10/23/66 16.24-17.72  
 DELTAY=62.0 DELTAX=50.0  
 -3 LEVEL NOT PLOTTED



10/28/66 16.73-18.15  
 DELTAY=63.2 DELTAX=49.6  
 -3 LEVEL NOT PLOTTED



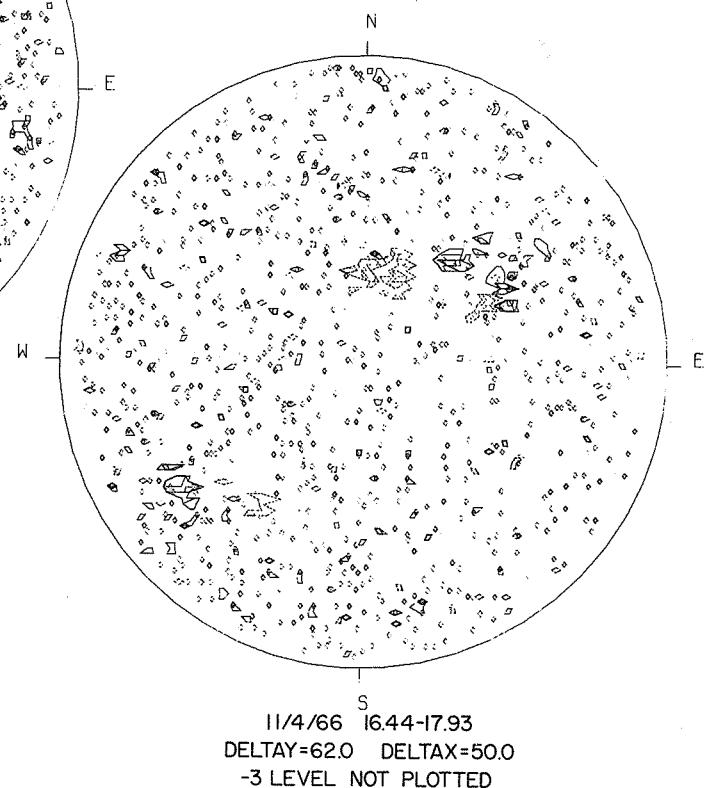
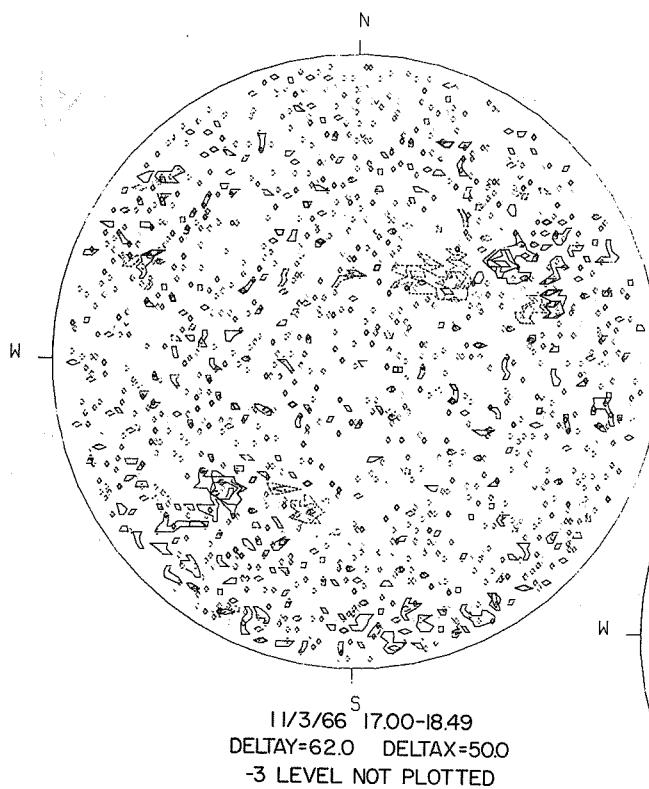
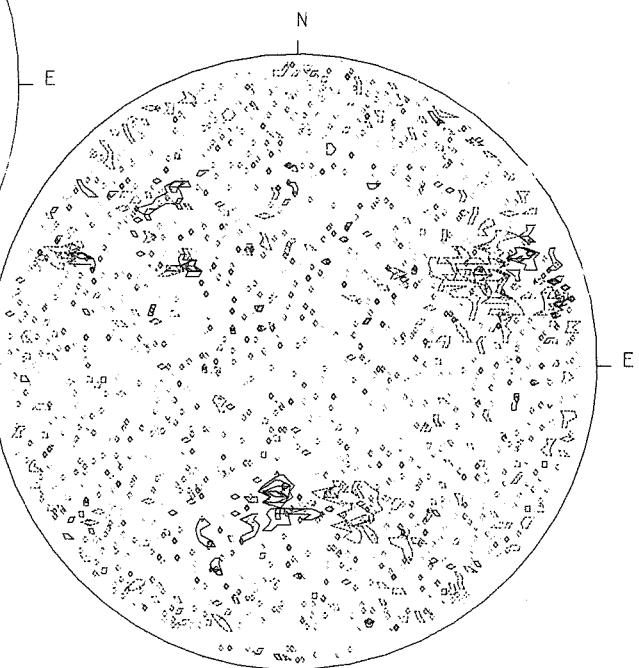
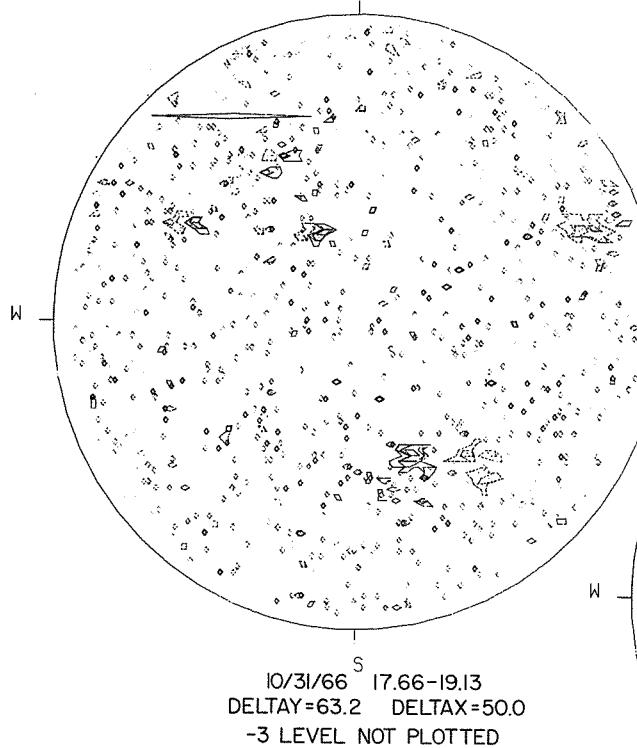
10/29/66 16.05-17.50  
 DELTAY=62.0 DELTAX=50.0  
 -3 LEVEL NOT PLOTTED

# MOUNT WILSON OBSERVATORY MAGNETOGRAMS

OCTOBER NOVEMBER 1966

SOLID-PLUS  
DOTTED-MINUS  
LEVELS  
(GAUSS)  
 $\pm 3.00 \pm 15.00$   
 $\pm 6.00 \pm 25.00$   
 $\pm 10.00 \pm 40.00$

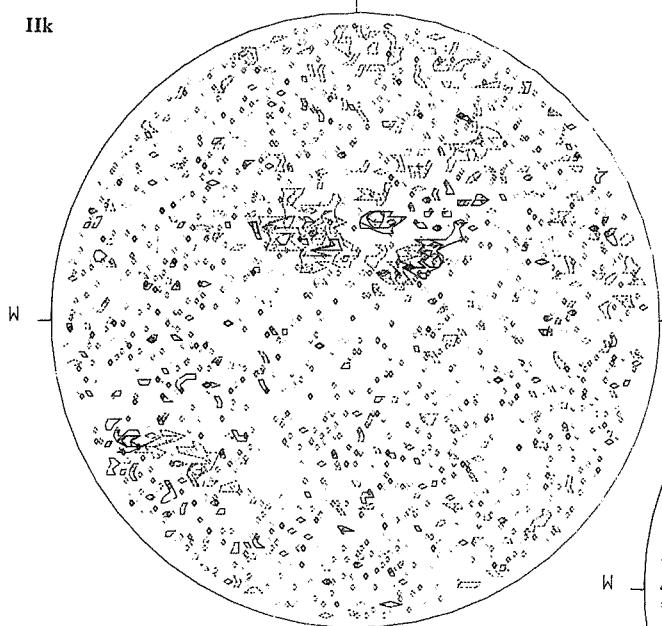
IIj



# MOUNT WILSON OBSERVATORY MAGNETOGRAMS

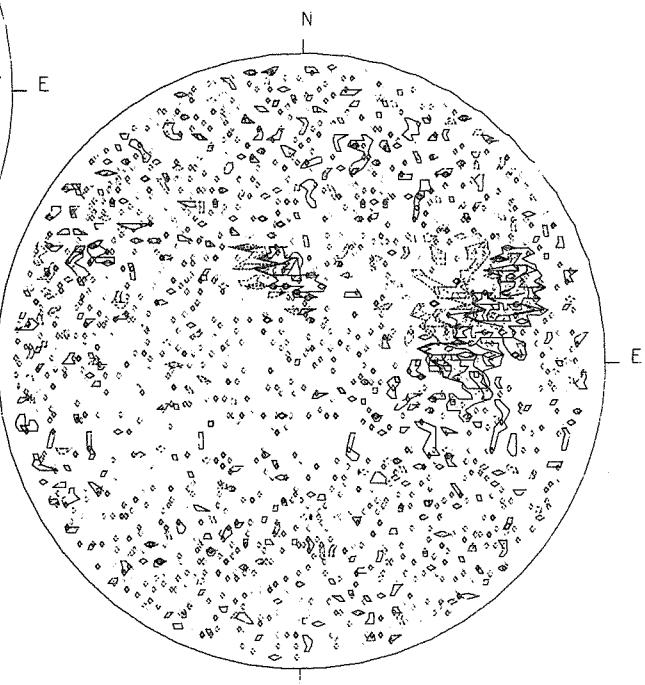
NOVEMBER 1966

IIk

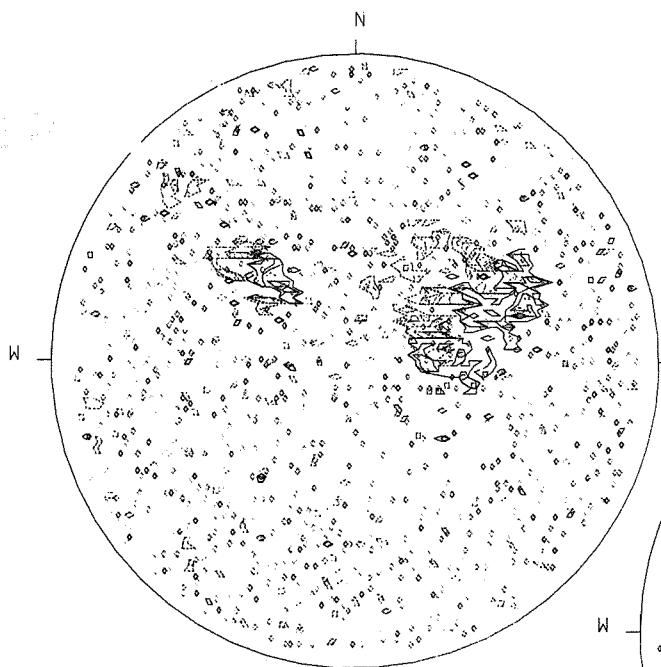


11/5/66 17.49-19.01  
DELTAY=62.0 DELTAX=50.0

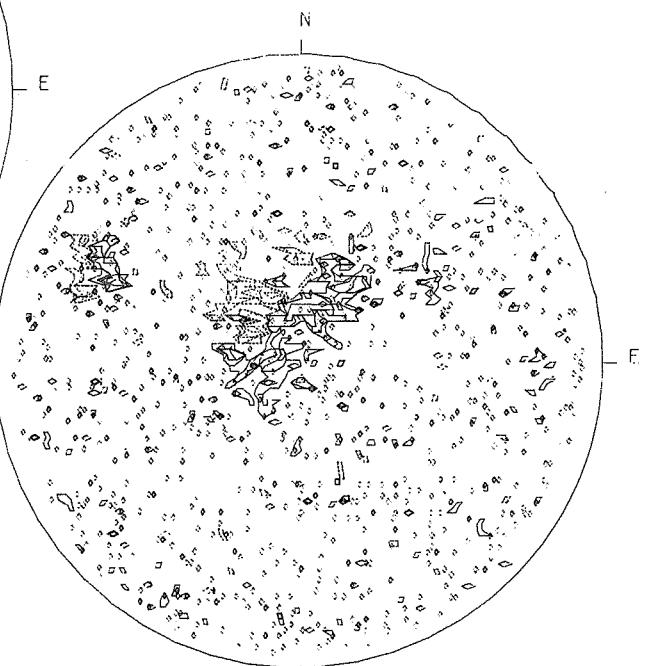
SOLID-PLUS  
DOTTED-MINUS  
LEVELS  
(GAUSS)  
 $\pm 3.00 \pm 15.00$   
 $\pm 6.00 \pm 25.00$   
 $\pm 10.00 \pm 40.00$



11/10/66 16.63-18.08  
DELTAY=63.2 DELTAX=50.0  
-3 LEVEL NOT PLOTTED



11/11/66 17.07-18.55  
DELTAY=62.0 DELTAX=50.0  
+3 LEVEL NOT PLOTTED  
(DATA INCOMPLETE)



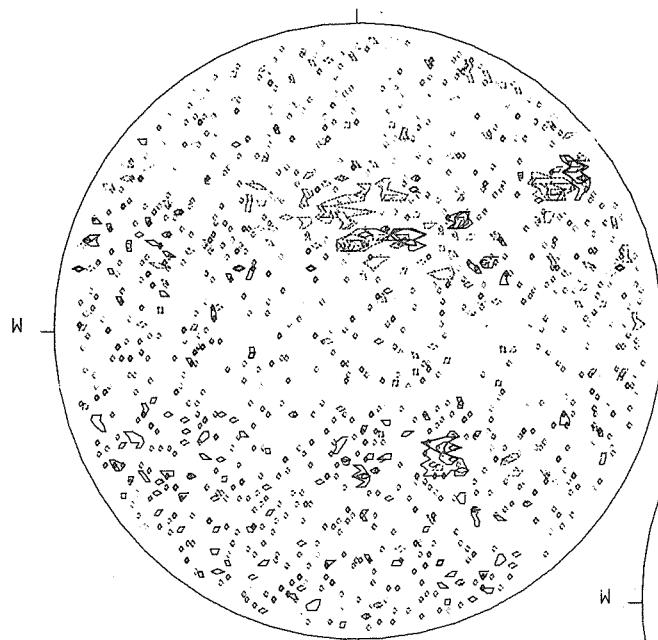
11/13/66 17.33-18.78  
DELTAY=63.2 DELTAX=50.0  
-3 LEVEL NOT PLOTTED

# MOUNT WILSON OBSERVATORY MAGNETOGRAMS

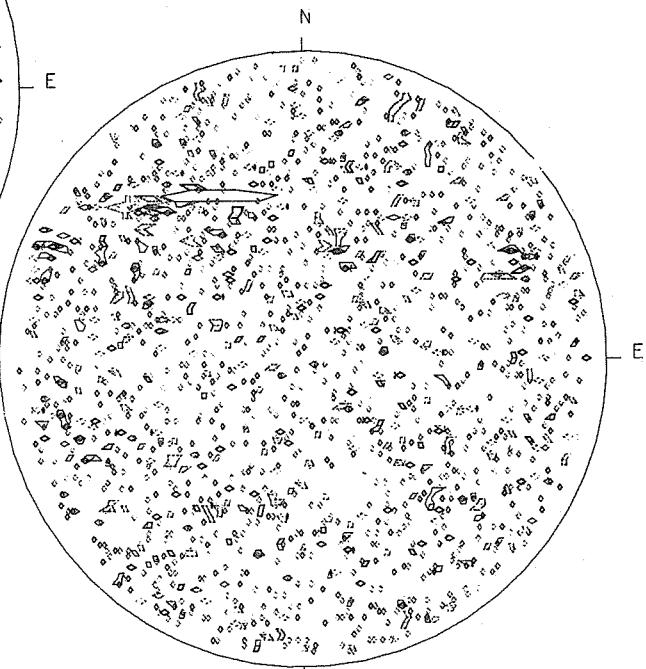
III

NOVEMBER 1966

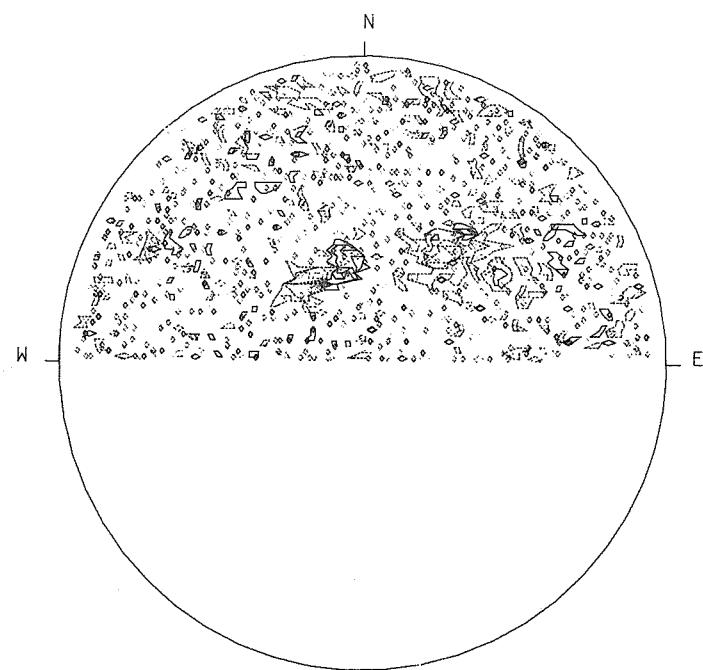
SOLID-PLUS  
DOTTED-MINUS  
LEVELS  
(GAUSS)  
 $\pm 3.00 \pm 15.00$   
 $\pm 6.00 \pm 25.00$   
 $\pm 10.00 \pm 40.00$



11/19/66 16.92-18.40  
 DELTAY=62.0 DELTAX=50.0  
 -3 LEVEL NOT PLOTTED



11/26/66 16.99-18.47  
 DELTAY=62.0 DELTAX=50.0  
 ±3,-6 LEVEL NOT PLOTTED



11/30/66 18.57-19.42  
 DELTAY=62.0 DELTAX=50.0  
 (DATA INCOMPLETE)

## SOLAR FLARES

PRELIMINARY

DECEMBER 1966

OBSERVATORY	OBSERVED UT				LOCATION				DURATION — MIN.	IM- POR- TANCE	OBS.	MEASUREMENTS					REMARKS					
	DATE 1966	START	END	MAX. PHASE	APPROX.								COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %			
					LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY													
LOCK	01	1730	1820	1755	N27	E11	.472	8594	2.6	50	-N	C	1755	1.60	1.80			20				
HALE	01	1746	1830	1752	N24	E09	.2418	8594	2.4	44	-B	3	C	1752	1.03	1.10						
HUAN	01	1747	1820	1756	N27	E10	.466	8594	2.5	33	-N	2	C	1756	1.44	1.47						
SACP	01	1747	1827	1754	N26	E10	.452	8594	2.5	40	IN	C		3.49	3.54							
HALE	02	0313	03280	0320	N18	W24	.488	8593	30.3	150	-N	1	P	0320	.52	.60						
MITK	02	0320	0335	0323	N17	W25	.492	8593	30.3	15	-F	C	0323	1.03	1.20							
ISTA	02	0745	0805		N21	E90	1.000	8605	9.1	20	-N											
HUAN	02	1424	1444		N17	W32	.580	8593	30.2	20	-N	1	C	1432	.77	.83						
CAPS	02	1426E	1460D		N16	W30	.548	8593	30.4	140	-F	1	C									
SACP	02	1426	1501	1430	N16	W32	.574	8593	30.2	35	-N		C		1.09	1.16						
SACP	02	1628	1649	1633	N13	W34	.588	8593	30.1	21	-F		C		.41	.44						
SACP	02	1802	1830	1810	N15	W36	.620	8593	30.1	28	-F		C		.50	.54						
HALE	03	0143	0209	0147	N16	W39	.661	8593	30.1	26	-F	1	C	0147	.15	.20						
HALE	03	0151	0307	0219	S10	E51	.786	8602	6.9	76	1	C	0219	.15	.30							
HALE	03	0243	0300	0248	N14	W04	.241	8594	2.8	17	-N	1	C	0248	.15	.20						
MITK	03	0312	0326	0318	S10	E51	.786	8602	7.0	14	-F	1	C	0318	.15	.30						
ARCE	03	0356	0405		N17	W40	.677	8593	30.2	9	-F		C	0359	.52	.70						
ARCE	03	0820E	0845D	0910	N19	W40	.686	8593	30.3	250	-B		C	0820	1.17	1.60						
ARCE	03	0910E	0925D		N26	E90	1.000	8606	10.1	600	2N		C	0910	2.36							
HUAN	03	1349	1414	1352	S15	E90	1.000	8609	10.3	25	-N	2	C	1352	.25							
HUAN	03	1639	1645	1640	S19	E33	.614	8602	6.2	6	-F	2	C	1640	.21	.22						
HALE	03	1744	1802	1755	N29	E88	.999	8607	10.3	18	-N	2	C	1755	.21							
SACP	03	1753	1801	1756	N27	E82	.992	8607	9.9	8	-F		C		.41							
HALE	03	1903	1913	1907	N28	E88	.999	8607	10.4	10	-N	2	C	1907	.21							
SACP	03	2212	2220	2215	N28	E84	.995	8607	10.2	8	-F		C		.41							
LOCK	03	2222	2223	2216	N26	E79	.984	8607	9.9	11	-F		C	2216	.40	1.20		10	H			
LOCK	03	2223	2230	2226	N16	E78	.979	8606	9.6	7	-F		C	2226	.30	.60		10	J			
LOCK	03	2240	2305	2252	N26	W21	.536	8594	2.4	25	-F		C	2252	.40	.50		10				
MONT	04	0951	0955		N17	W52	.806	8593	30.5	4	-N		C	0953		.80						
MONT	04	1030E	1036D		N15	W57	.849	8593	30.2	60	-N		C	1035		.90						
HUAN	04	1220E	1259		N16	W58	.859	8593	30.2	390	-N	2	C	1228	.31	.44						
SACP	04	1609E	1636	1619	N06	E75	.966	8606	10.3	270	-F		C		.33	.72						
HALE	04	1712	1720	1717	N08	E74	.962	8606	10.3	8	-N	2	C	1717	.21							
SACP	04	1713	1724	1719	N08	E77	.975	8606	10.5	11	-F		C		.25	.58						
HUAN	04	1823	1842		N16	W60	.876	8593	30.3	19	-F	1	C	1825	.36	.52						
SACP	04	1900E	1908	1905	N27	W41	.736	8594	1.7	8	-F	2	C	1905	.31	.50						
HALE	04	1949	1956	1952	N16	W62	.891	8593	30.2	7	-F	1	C	1952	.21	.50						
HALE	04	2147	2244	2157	N12	E73	.958	8606	10.4	57	-N	2	C	2157	.62							
SACP	04	2250E	2335D	2207U	N12	E72	.953	8606	10.3	1050	-F		P		.58	1.18						
SACP	04	2205E	2221D	2207U	N13	E64	.903	8606	9.7	160	-F		C		.33	.53						
HALE	04	2248	2307	2255	N18	W63	.901	8593	30.2	19	-N	1	C	2255	.26	.60						
HALE	04	2248	2308	2254	N17	W64	.907	8593	30.1	20	-N	1	C	2254	.21							
HALE	05	0327	0332D	0329	N19	W63	.902	8593	30.4	5D	-N	1	P	0329	.26	.60						
ARCE	05	0831	0930D	0838	N12	E60	.871	8606	9.9	59D	-N	1	C	0838	.46	1.00						
HUAN	05	1141	1152	1146	N28	E60	.896	8607	10.0	11	-N	1	C	1146	.25	.39						
SACP	05	1613E	1636	1624U	N13	E55	.828	8606	9.8	23D	-N		C		.58	.80						
HALE	05	1916	1929	1920	N13	E56	.838	8606	10.0	13	-N	1	C	1920	.21	.40						
SACP	05	1916	1930	1922	N13	E55	.828	8606	9.9	14	-F		C		.17	.22						
SACP	05	1925	1936	1930U	N30	E53	.851	8607	9.8	11	-N		C		.66	.95						
SACP	05	1948	2000	1953U	N29	E54	.856	8607	9.9	12	-F		C		.25	.35						
SACP	05	2118	2125	2122U	N32	E53	.858	8607	9.9	7	-F		C		.33	.48						
HALE	05	2140	2149	2142	S24	E58	.877	8609	10.3	9	-F	1	C	2142	.15	.30						
HALE	06	0036	0117D	0042	N27	E51	.827	8607	9.9	41D	-N	1	P	0042	.36	.70						
HALE	06	0103	0117D	0105	N31	E48	.817	8607	9.6	14D	-S	1	P	0105	.21	.40						
HALE	06	0217	0225	0218	N05	E51	.779	8606	9.9	8	-N	1	C	0218	.21	.30						
HALE	06	0232	0250	0241	N05	E54	.810	8606	10.2	18	-N	1	C	0241	.41	.70						
MITK	06	0339	0425	0345	N12	E49	.766	8606	9.8	46	IN	1	C	0345	1.34	2.10						
HALE	06	0446	0506	0455	N14	E52	.801	8606	10.1	20	-N	1	C	0455	.62	1.00						
HALE	06	1701E	1723	1707	N22	E88	.999	8610	13.3	22D	-N	1	P	1707	.21							
HALE	06	1732	1755	1736	N22	E88	.999	8610	13.3	23	-B	1	C	1736	.31							
HALE	06	1755	1823	1804	N16	W61	.884	8594	2.2	28	-N	1	C	1804	.41	.90						
HALE	06	1820	1846	1832	N22	E88	.999	8610	13.4	26	-N	1	C	1832	.36							
HALE	06	1905	1920D	1917	N22	E88	.999	8610	13.4	15D	-N	1	P	1917	.41							
HALE	06	1915	1920	1920U	S21	E56	.854	8609	11.0	5D	-N	1	P	1920	.26	.50						
HUAN	06	2137	2142D	S22	E57	.864	8609	11.2	5D	-F	1	P	2140	.25	.36			D				
HALE	06	2151	2201	2152	N27	E49	.810	8607	10.6	10	-B	1	C	2152	.21	.40			F			
MITK	07	0322	0350	0330	N13	E36	.615	8606	9.8	28	IN	1	C	0330	2.58	3.30						
ARCE	07	0815E	0830D		S26	W85	.997	8597	1.0	15D	IF		C	0820	.50	2.00						
ARCE	07	0815E	0840D		N21	E85	.997	8610	13.7	25D	IN		C	0825	.59	2.40						
MONT	07	0819	0850		N23	E89	1.000	8610	14.0	31	IB		C	0825	3.00							
ARCE	07	0840	0855	0845	S23	E50	.807	8609	11.1	15	-N		C	0845	.65	1.10						
ARCE	07	0950E	1000D		S24	E50	.810	8609	11.2	10D	-N		C	0950	.31	.50			D			

## SOLAR FLARES

PRELIMINARY

IIIb

DECEMBER 1966

OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IM- POR- TANCE	OBS.	MEASUREMENTS					REMARKS	
	DATE 1966	START	END	MAX. PHASE	APPROX. LAT.		CENTRAL DIST.	MCMATH REGION	PLAGE DAY	CMT DAY	COND. TYPE	TIME		MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hc	MAX. INT. %	
					MER.	DIST.						—	UT					
ARCE	07	1000E	1000D		N21	E85	.997	8610	13.8		IN	C	1000	.53	2.10			
MONT	07	1005	1040		S20	E55	.843	8609	11.5	35	1F	C	1010		2.50			
LOCA	07	1032E	1052		N22	E80	.987	8610	13.4	20D	IN	S						
MONT	07	1036	1050	1044	N23	E88	.999	8610	14.0	14	1B	C	1044		3.00			
CAPS	07	1457E	1502D		N23	E82	.992	8610	13.8	5D	IN	I					C	
LOCK	07	1633	1645	1637	N25	E75	.972	8610	13.3	12	IN	C	1637	1.00	2.90	20		
LOCK	07	1730	1745	1732	N25	E75	.972	8610	13.4	15	1B	C	1732	.90	2.60	30		
HUAN	07	1732	1739		N23	E76	.975	8610	13.4	7	-N	I	1734	.31			D	
HUAN	07	1747E	1803		S25	W88	1.000	8597	1.1	16D	-N	I	1754	.31			D	
LOCK	07	1755	1825	1801	N20	E18	.947	8604	9.1	30	-F	C	1801	.40	.40	10		
LOCK	07	1757	1813	1800	N12	E28	.503	8606	9.8	16	-N	C	1800	.80	1.00	10		
HUAN	07	1818E	1836D		S25	W88	1.000	8597	1.2	18D	-F	I	1820	.25			D	
LOCK	07	1820	1837	1824	N25	E39	.709	8607	10.7	17	-N	C	1824	.80	1.10	10		
LOCK	07	2021	2030	2023	N23	E75	.971	8610	13.5	9	-N	C	2023	.70	2.00	20		
LOCK	07	2027	2035	2030	N28	E34	.680	8607	10.4	6	-F	C	2030	.30	.40	10		
LOCK	07	2100	2121	2102	N23	E71	.954	8610	13.2	21	IN	C	2102	.90	2.40	20		
LOCK	07	2150	2225	2205	N20	E75	.970	8610	13.5	35	-F	C	2205	.30	.90	10		
LOCK	07	2233	2250	2237	N23	E71	.954	8610	13.3	17	1B	C	2237	.80	2.10	30		
LOCK	07	2246	2258U	2248	S22	E44	.746	8609	11.2	12U	-F	C	2248	.80	1.20	10		
LOCK	07	2255	2250D	2258U	N27	E34	.673	8607	10.5	3D	-N	C	2258	.80	1.00	20		
MONT	08	1209	1250D		S23	E35	.657	8609	11.1	41D	2N	C	1215		5.50			
LOCK	08	1655	1725	1703	N22	E66	.926	8610	13.7	30	1F	C	1703	.90	2.10	10	J	
LOCK	08	1803	1817	1807	N22	E66	.926	8610	13.7	14	-F	C	1807	.50	1.20	10	J	
HALE	08	1805E	1816	1807	N23	E68	.939	8610	13.9	11D	-N	I	1807	.31				
HALE	08	1835	1912	1847	N24	E58	.875	8610	13.1	37	-N	I	1847	.36	.80			
HALE	08	1842	1858	1847	N25	E59	.884	8610	13.2	14	-F	C	1847	1.00	2.00	10		
HALE	08	1859	1926	1914	N20	E58	.867	8610	13.1	27	-F	C	1914	.21	.40			
HALE	08	1910	1924	1914	S22	E32	.618	8609	11.2	14	-F	C	1914	.15	.20			
HALE	08	1912	1940	1934	N23	E63	.908	8610	13.5	28	-N	C	1934	.62			J	
LOCK	08	1920	1958	1925	N21	E65	.919	8610	13.7	38	IN	C	1925	1.00	2.20	20	J J	
LOCK	08	1945										C	1945	1.00	2.20			
SACP	08	1923	1955	1937	N24	E65	.922	8610	13.7	32	IN	C	1940		2.46			
HALE	08	1945	2008	1947	N24	E66	.928	8610	13.8	23	-N	I	1947	.52			J	
HALE	08	2105	2125D	2116	N24	E66	.928	8610	13.8	20D	-N	I	2116	.31			J J	
LOCK	08	2112	2125	2115	N21	E65	.919	8610	13.8	13	-F	C	2115	.70	1.50	10		
LOCK	08	2115	2205	2129	N29	E31	.662	8607	11.2	50	-N	C	2129	.80	1.00	20		
LOCK	08	2155	2220	2207	N21	E65	.919	8610	13.8	25	-F	C	2207	.80	1.80	10	J	
LOCK	08	2204E	2220	2215	N24	E63	.910	8610	13.6	16D	-N	I	2215	.41				
LOCK	08	2210	2240	2230	N17	E49	.779	8610	12.6	30	-F	C	2230	.80	1.30	10		
LOCK	08	2228	2240	2232	N21	E65	.919	8610	13.8	12	-F	C	2232	.70	1.50	10	J J	
HALE	08	2229	2300D	2300D	N23	E63	.908	8610	13.7	31D	-N	I	2300	.26			J J	
LOCK	08	2252	2307	2256	N22	E61	.893	8610	13.5	15	-N	C	2256	.90	1.90	20		
HALE	08	2249	2256	2253	N29	E30	.653	8607	11.2	7	-N	I	2253	.15	.20			
HALE	08	2258	2351D	2351D	N30	E31	.670	8607	11.3	53D	-N	I	2351	.31	.40			
LOCK	08	2309	2327	2316	N21	E57	.861	8610	13.2	18	IN	C	2316	1.40	2.70	20	J J	
SACP	08	2334	2344D	2339	N10	W70	.942	8599	3.7	10D	IN	C	2334	1.38	2.61			
HALE	08	2335E	2351D	2341	N24	E57	.867	8610	13.3	16D	-N	I	2341	.21	.40			
HALE	09	0016	0030	0017	N23	E63	.909	8610	13.7	14	-N	I	0017	.41				
HALE	09	0031	0036U	0032	N22	E55	.847	8610	13.1	5U	-N	C	0032	.31	.60			
HALE	09	0111	0119D	0112	N23	E63	.909	8610	13.8	8D	-N	I	0112	.15				
HALE	09	0150	0203	0156	N24	E57	.868	8610	13.4	13	-N	C	0156	.21	.40			
MITK	09	0150	0204	0154	N24	E60	.890	8610	13.6	14	-F	C	0154	.83	1.60		E	
HALE	09	0210	0225	0215	N23	E63	.909	8610	13.8	15	-N	C	0215	.31				
HALE	09	0211	0225	0212	N08	E24	.427	8606	10.9	14	-N	C	0212	.10	.12			
HALE	09	0257	0320	0307	N24	E57	.868	8610	13.4	23	-N	C	0307	.52	1.00			
MITK	09	0306	0314	0308	N22	E60	.886	8610	13.6	8	IN	P	0308	1.13	2.40		D	
HALE	09	0325	0344D	0326	N21	E48	.781	8610	12.7	9D	-F	P	0326	.15	.30			
MONT	09	0801	0806		N24	E50	.810	8610	13.1	5	-B	C	0802		.90			
ARCE	09	0808E	0830D		N22	E55	.847	8610	13.5	22D	IN	C	0808	1.33	2.40			
ARCE	09	0812E	0825D		N22	E61	.894	8610	13.9	13D	-N	C	0817	.37	.80			
MONT	09	0813	0825	0815	N23	E59	.881	8610	13.8	12	-B	C	0815		1.10			
MONT	09	0908	0919	0911	N23	E59	.881	8610	13.8	7	IN	C	0911		4.30			
ARCE	09	0912	0916	0914	N22	E59	.879	8610	13.8	4	-N	C	0914	.84	1.70			
CAPS	09	0912E	1005D		N23	E58	.873	8610	13.7	53D	IN	C	0935	1.90	3.70	165	CK	
MONT	09	0918	1030	0920	N23	E58	.873	8610	13.7	72	-N	C	0920	1.30	1.30			
ARCE	09	0925	1001	0940	N22	E59	.879	8610	13.8	36	IN	C	0940	1.30	2.60			
NERA	09	0926	0933		N22	E62	.901	8610	14.0	7	2	3	C					
MONT	09	0955	1030	1003	N24	E49	.801	8610	13.1	35	1B	C	1003		3.40			
ARCE	09	1005	1010	1005	N22	E55	.847	8610	13.5	5	-N	C	1005	.68	1.20			
ARCE	09	1015	1032D	1020	N30	E29	.654	8607	11.6	17D	-N	C	1020	.99	1.30			
MONT	09	1045	1110	1050	N28	E28	.627	8607	11.5	25	IN	C	1050		2.70			
MONT	09	1045	1110	1050	S22	E22	.510	8609	11.1	25	IN	C	1050		3.10			
CAPS	09	1046E	1049D		S21	E21	.489	8609	11.0	3D	-F	2	C	1047	1.00	1.10	157	
MONT	09	1124		1126	N23	E58	.873	8610	13.8	1B	C	1126		4.10				
MONT	09	1125		1130	S22	E22	.510	8609	11.1	IN	C	1130		2.50				
SACP	09	1420	1430	1425	N22	E44	.746	8610	12.9	10	-N	C	1420	1.01	1.25			
SACP	09	1450	1503	1453	N23	E51	.816	8610	13.4	13	-N	C	1450	1.18	1.58			
LOCK	09	1605E	1619	1605U	N23	E51	.816	8610	13.5	14D	-F	C	1605	.40	.70			

SOLAR FLARES

PRELIMINARY

DECEMBER 1966

OBSERV- ATORY	OBSERVED UT				LOCATION				DURA- TION MIN.	IM- POR- TANCE COND.	OBS.	MEASUREMENTS				REMARKS	
	DATE 1966 DEC	START	END	MAX. PHASE	APPROX.		MCMATH PLAGE REGION	CMT DAY			TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %		
					LAT.	MER. DIST.	CENTRAL DISTANCE										
SACP	09	1615	1625	1620	N28	E19	.552	8607	11.1	10	-N	C	1805	.66	.70		
LOCK	09	1755	1835U	1805	N21	E50	.800	8610	13.5	40U	28	C		5.20	8.80	30	
SACP	09	1759E	1907	1806	N23	E49	.798	8610	13.4	680	28	C		6.81	8.97		
SACP	09	1954	2032	2007	N12	W00	.210	8606	9.8	38	1F	C		2.25	2.20		
HUAN	09	2000E	2036		N13	W01	.227	8606	9.8	36D	-N	1	C	2005	1.05	1.05	
HALE	09	2017	2041		N12	W01	.210	8606	9.8	24	-N	3	C	2017	.72	.73	
LOCK	09	2029E	2044	2029U	N12	E01	.210	8606	9.9	15D	28	-F	C	2029	.90	.90	
HUAN	09	2003	2031		S23	E20	.500	8609	11.3	28	-F	1	C	2012	.62	.64	
HALE	09	2020	2025	2022	S24	E18	.494	8609	11.2	5	-F	2	C	2022	.31	.40	
HALE	09	2019	2037	2023	N23	E88	1.000	8212	16.4	18	-N	2	C	2023	.31		
HALE	09	2020	2035		N23	E90	1.000	8612	16.6	15	-N	1	C	2025	.36		
LOCK	09	2029E	2050	2029U	N22	E90	1.000	8612	16.6	21D	1N	C	2029	1.00	4.00		
HALE	09	2110	2114	2111	S21	E15	.443	8609	11.0	4	-F	2	C	2111	.21	.22	
LOCK	09	2235	2310	2250	N29	E19	.584	8607	11.4	35	-F	C	2250	.70	.80		
HALE	09	2246	2248	2246	S22	E17	.461	8609	11.2	2	-F	2	C	2246	.21	.22	
HALE	09	2349	2351	2349	N21	E52	.819	8610	13.9	9	-F	2	C	2349	.10	.20	
HALE	10	0117	0127	0120	S22	E15	.442	8609	11.2	10	-N	1	C	0120	.52	.60	
HALE	10	0117	0205	0125	N23	E45	.761	8610	13.4	48	-N	1	C	0128	.88	1.40	
HALE	10	0219	0231	0222	N28	E14	.519	8607	11.1	12	-N	1	C	0222	.36	.40	
HALE	10	0237	0247	0238	N22	E40	.706	8610	13.1	10	-N	1	C	0238	.26	.40	
HALE	10	0254	0310	0256	S23	E15	.654	8609	11.2	16	-N	1	C	0256	.52	.60	
HALE	10	0329	0335D	0331	N20	E37	.663	8610	12.9	6D	-B	2	P	0331	.26	.40	
MONT	10	071E	0750		N23	E45	.761	8610	13.7	9D	C		0745		.80		
MONT	10	0759	0805	0801	N21	E49	.792	8610	14.0	6	-B	C	0801		1.10		
MONT	10	0805	0820		N23	E45	.761	8610	13.7	15	-N	C	0808		.80		
MONT	10	0900	0930		N21	E48	.782	8610	14.0	30	-F	C	0905		.20		
MONT	10	0919	0950		S22	E12	.418	8609	11.3	31	-N	C	0921		1.20		
ARCE	10	0940E	0945D		S22	E11	.411	8609	11.2	5D	-N	C	0940		.87		
MONT	10	1040	1120		N23	E44	.751	8610	13.7	40	-N	C	1045		.90		
MONT	10	1120	1150		S23	E08	.408	8609	11.1	30	-N	C	1125		1.20		
MONT	10	1210E	1240		S22	E11	.411	8609	11.3	30D	1B	C	1215		1.20		
MONT	10	1216	1222		S23	E12	.432	8609	11.4	6	-F	1	C	1218	.31	.31	
MONT	10	1210E	1240D		N22	E43	.736	8610	13.7	30D	1B	C	1215		2.40		
MONT	10	1217	1338		N23	E45	.761	8610	13.9	81	1	C	1240	2.04	2.52		
CAPS	10	1227E	1320D		N24	E42	.736	8610	13.7	53D	2F	C	1230	4.00	5.90	170	
MONT	10	1220	1230		N32	E15	.577	8607	11.6	10	-B	C	1222		.70		
LOCA	10	1342	1420	1355	S23	E09	.413	8609	11.2	38	1N	V	1355	2.73	3.00		
HUAN	10	1344	1357	1351	S24	E11	.439	8609	11.4	13	-N	1	C	1351	.72	.73	
HUAN	10	1411	1416	1413	S23	E07	.403	8609	11.1	5	-F	1	C	1413	.21	.21	
SACP	10	1414E	1450	1426	S24	E08	.423	8609	11.2	36D	1F	C		2.68	2.70		
HUAN	10	1425	1448		S23	E08	.408	8609	11.2	23	-F	1	C	1430	1.65	1.66	
HUAN	10	1426	1435	1428	N29	E10	.511	8607	11.4	9	-F	1	C	1428	.46	.48	
SACP	10	1426	1438	1428	N30	E10	.526	8607	11.4	12	-F	C		.75	.79		
SACP	10	1430	1538U	1440	N23	E38	.690	8610	13.5	68U	28	C		6.40	7.47		
HUAN	10	1432	1553		N22	E40	.706	8610	13.6	81	2N	1	C	1442	4.13	5.05	
CAPS	10	1438E	1450D		N23	E38	.690	8610	13.5	12D	2N	2	C	1442	4.90	6.80	230
HUAN	10	1517	1528	1520	S24	E11	.439	8607	11.3	8	-N	1	C	1520	.37	.38	
HUAN	10	1520	1528		N28	E09	.493	8607	11.3	11	-F	1	C	1524	.25	.26	
HUAN	10	1555	1611		N29	E10	.511	8607	11.4	16	-F	1	C	1557	.21	.21	
LOCA	10	1613	1628		S24	E10	.433	8609	11.4	15	-N	1	C	1615	.79	.81	
LOCK	10	1614	1645	1617	S25	E09	.442	8609	11.4	31	-N	1	C	1617	1.10	1.20	
SACP	10	1625	1721U	1640U	N31	E12	.548	8607	11.6	56U	-F	C		1.16	1.22		
HUAN	10	1626	1648		N29	E10	.511	8607	11.4	22	-F	1	C	1634	.46	.48	
HUAN	10	1659	1706		S23	E10	.419	8609	11.5	7	-F	1	C	1701	.58	.58	
HUAN	10	1736	1742D		S23	E08	.408	8609	11.3	6D	1F	P	1740	1.65	1.66		
SACP	10	1737	1820U	1746	S24	E07	.418	8609	11.3	43U	C		2.72	2.73			
LOCK	10	1748E	1817	1748U	S25	E09	.442	8609	11.4	29D	-N	C	1748	1.40	1.50	20	
LOCK	10	1838	1850	1842	N23	E42	.731	8610	13.9	12	-N	C	1842	.60	.90	20	
SACP	10	1839	1855	1840	N23	E39	.700	8610	13.7	16	-N	C		.91	1.07		
LOCK	10	1854	1905	1859	N29	E10	.511	8607	11.5	11	-F	C	1859	.40	.50	10	
SACP	10	1857U	1910U	1900U	N29	E08	.503	8607	11.4	13U	C		.25	.25			
LOCK	10	1942	1954	1945	S24	E07	.418	8609	11.3	12	-N	C	1945	.60	.70	20	
HALE	10	1944	1954	1945	S24	E05	.411	8609	11.2	10	-N	1	C	1945	.52	.60	
LOCK	10	1959	2020	2005	N18	E90	1.000	8612	17.6	21	1F	C	2005	1.00	4.00	10	
HALE	10	2008	2140	2017	N16	E81	.989	8612	16.9	92	-N	1	C	2017	.21		
HALE	10	2008	2020	2011	S21	E04	.360	8609	11.1	12	-F	1	C	2011	.31	.32	
HALE	10	2015	2035	2020	N31	E12	.548	8607	11.7	20	-N	1	C	2020	.26	.30	
HALE	10	2023	2222		N29	E09	.507	8607	11.5	119	-N	1	C	2035	.21	.22	KL
HALE	10	2105											2105	.21	.22		
HALE	10	2120											2120	.41	.50		
HALE	10	2204											2204	.26	.30		
LOCK	10	2233	2056	2030	N23	E42	.731	8610	14.0	33	-N	C	2030	.90	1.30	20	
SACP	10	2242E	2112D	2044U	N24	E38	.696	8610	13.7	48D	-F	C		1.39	1.62		
HALE	10	2244	2140	2039	N23	E37	.680	8610	13.6	76	-S	1	C	2039	.93	1.30	
HALE	10	2249	2100	2031	S19	E07	.342	8609	11.4	31	-N	1	C	2031	.26	.30	
HALE	10	2240	2045D	2045	S25	E08	.437	8609	11.5	5D	-S	1	C	2045	.26	.30	
HALE	10	2240	2140	2100	S23	E05	.395	8609	11.2	60	-S	1	C	2100	.77	.80	
SACP	10	2250	2112D	2059	S23	E05	.395	8609	11.2	22D	1N	C		2.45	2.45		

## SOLAR FLARES

PRELIMINARY

DECEMBER 1966

OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IM- POR- TANCE	OBS.	MEASUREMENTS						REMARKS		
	DATE	START	END	MAX. PHASE	APPROX. LAT.	CENTRAL MER. DIST.	MCMATH DISTANCE	MCMAH PLAGE REGION					MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %				
1966	DEC																			
LOCK	10	2050	2120	2100	S14	E05	.252	8609	11.2	30	-N	C	2100	1.00	1.10		10			
SACP	10	2043U	2112D	2050U	N16	E80	.986	8612	16.9	290	-N	C	2103	.58	2.40		10	LJ		
LOCK	10	2048	2137	2103	N14	E85	.997	8612	17.2	49	IN	C	2140	.70	.60		20			
LOCK	10	2130	2153	2140	N23	E29	.595	8610	13.1	23	-N	C	2148	.90	1.00		10			
LOCK	10	2142	2200	2148	S14	E05	.252	8609	11.3	18	-F	C	2148	.62	.70		10			
HALE	10	2144	2205	2148	S23	E03	.390	8609	11.1	21	-N	1	C	2220	.30	.70		10		
LOCK	10	2216	2228	2220	N14	E85	.997	8612	17.3	12	-N	C	2220	.21	.70		10	L		
HALE	10	2217	2232	2219	N16	E76	.973	8612	16.6	15	-N	1	C	2230	.60	.70		20		
LOCK	10	2228	2239	2230	N23	E29	.595	8610	13.1	11	-N	1	C	2232	.31	.40		20		
HALE	10	2230	2242	2232	N24	E25	.563	8610	12.8	12	-N	1	C	2320	2.00	8.00		20		
LOCK	10	2305	2335	2320	N21	E90	1.000	8612	17.7	30	2N	C	2344	.36	.40					
HALE	10	2330	2350	2344	S23	E05	.395	8609	11.4	8	-N	1	C							
HALE	11	0002E	0045	0002E	N20	E32	.607	8610	13.4	43D	-N	2	P	0002	.15	.20				
HALE	11	0003	0102	0027	N23	E25	.555	8610	12.9	59	-N	2	C	0027	.21	.22				
HALE	11	0020	0026	0022	N20	E26	.539	8610	13.0	6	-N	2	C	0022	.21	.22				
MITK	11	0020	0033	0024	N15	E90	1.000	8612	17.8	13	IN	C	0030	.26	.30			H		
HALE	11	0022	0033	0025	N17	E81	.989	8612	17.1	11	IN	2	C	0024	1.03					
HALE	11	0117	0215	0155	N16	E81	.989	8612	17.1	58	-F	1	C	0155	.26					
HALE	11	0120	0126	0124	N20	E26	.539	8610	13.0	6	-F	1	C	0124	.15	.20				
HALE	11	0140	0157	0147	N20	E26	.539	8610	13.0	17	-F	1	C	0147	.15	.20				
HALE	11	0158	0205	0200	N22	E29	.588	8610	13.3	7	-F	1	C	0200	.15	.20				
HALE	11	0213	0222	0214	S24	E05	.409	8609	11.5	9	-F	1	C	0214	.15	.20				
HALE	11	0226	0248	0228	N28	E03	.477	8607	11.3	22	-F	2	C	0228	.15	.20				
HALE	11	0215	0222	0218	N20	E32	.607	8610	13.5	7	-N	2	C	0218	.15	.20				
HALE	11	0216	0326	0308	N24	E24	.585	8610	12.9	70	-N	2	C	0308	.10	.12				
HALE	11	0306	0326	0315	N21	E27	.559	8610	13.2	20	-F	2	C	0315	.15	.20				
HALE	11	0322	0328	0324	S24	E03	.404	8609	11.4	6	-N	2	C	0324	.15	.20				
HALE	11	0325	0332	0327	S22	E01	.369	8609	11.2	7	-F	2	C	0327	.31	.32				
MONT	11	0050	0920		N12	W23	.438	8606	9.6	30	-B	C	0855	.60						
MONT	11	1022	1030D		N23	E30	.607	8610	13.7	8D	-N	C	1024		1.00					
SACP	11	1423	1525	1458	N24	E23	.545	8610	13.3	62	IN	1	P	1459	.95	1.00			EN	
HUAN	11	1455E	1514		N25	E24	.585	8610	13.4	19D	-N	1	C		2.32	2.45				
SACP	11	1624	1708	1635	N22	E25	.546	8610	13.6	44	-F	C	1632	.70	.80					
LOCK	11	1632E	1645	1632U	N21	E27	.559	8610	13.7	13D	-F	C	1647	.50	1.50		10			
LOCK	11	1644	1651	1647	N16	E76	.973	8612	17.4	7	-F	C	1712	.90	1.00		10			
LOCK	11	1703	1727	1712	S18	W08	.331	8609	11.1	24	-F	C	1712	1.17	1.19					
SACP	11	1838	1902	1846	S27	W14	.498	8609	10.7	35D	-N	2	P	1940	3.30	3.31				
HALE	11	1940E	2015	1940E	N23	E19	.497	8610	13.2	35D	-N	2	C	1940	.15	.20				
SACP	11	1904	1941	1923	S22	W10	.402	8609	11.0	37	IN	1	C	1920	1.50	1.70		20		
LOCK	11	1914	1937	1920	S15	W08	.286	8609	11.2	26	-N	C	1921	1.96	1.98			H		
HALE	11	1940E	2019	1951D	S23	W09	.411	8609	11.1	37D	IN	1	P	1955	.31	.33			F	
LOCK	11	1948	2012	1955	S21	W09	.381	8609	11.1	39D	-B	2	C	1953	1.00	1.10		20		
HALE	11	1950	2017	1955	S15	W08	.286	8609	11.2	24	-N	2	C	1955	.31	.33				
SACP	11	2013	2051	2026	S24	W08	.421	8609	11.2	38	-N	2	C	1955	1.98	1.98				
LOCK	11	2018	2035	2025	S16	W07	.294	8609	11.3	17	-N	2	C	2025	.90	1.00		20		
HALE	11	2019	2102	2022	S24	W05	.409	8609	11.5	43	-N	2	C	2022	.21	.22				
SACP	11	2323	2356D	2353	S20	W11	.381	8609	11.1	33D	IN	C		2355	3.34	3.34				
LOCK	11	2345	2355D	2355U	S14	W08	.272	8609	11.4	10D	IN	C	2355	3.70	4.10		20			
HALE	11	2352	2359D	2354	S20	W09	.367	8609	11.3	70	-N	2	P	2354	1.24	1.30				
HALE	12	0033	0041	0036	S23	W11	.421	8609	11.2	8	-N	2	C	0036	.67	.70				
HALE	12	0033	0051	0039	N23	E20	.508	8610	13.5	18	-F	1	C	0039	.31	.40				
LOCK	12	0120	0126	0123	N23	E13	.449	8610	13.0	6	-F	1	C	0123	.46	.50				
HALE	12	0121	0142	0128	N22	E16	.460	8610	13.3	21	-N	1	C	0128	.31	.40				
HALE	12	0205	0214	0209	N22	E19	.487	8610	13.0	9	-N	2	C	0209	.26	.30				
HALE	12	0214	0313	0230	S23	W11	.421	8609	11.3	59	-F	1	C	0230	.31	.33				
MCMA	12	1550	1555	1551	S25	W18	.501	8609	11.3	5	-F	C	1551	.31	.40			D		
LOCK	12	1652	1705	1657	S20	W23	.497	8609	11.0	13	-F	C	1657	.50	.60		10			
MCMA	12	1654	1704	1655	S22	W33	.625	8609	10.2	10	-N	C	1655	.36	.40			DH		
LOCK	12	1845	1852	1849	N25	E06	.441	8610	13.2	7	-F	C	1849	.70	.80		10			
LOCK	12	1900	1911	1904	N31	W18	.585	8607	11.4	11	-F	C	1904	.40	.50		10			
SACP	12	1906	1934	1921	N27	W20	.553	8607	11.3	28	-F	C	1917	1.40	1.49		10			
LOCK	12	1912	1924	1917	S20	W23	.497	8609	11.1	12	-F	C	1917	.60	.70		10			
SACP	12	1920	2058	1951	S22	W23	.516	8609	11.1	98	1F	C		249	2.60					
MCMA	12	1953E	2000D	1950	S22	W23	.516	8609	11.1	7D	-N	P	1958	1.03	1.20			F		
LOCK	12	1925U	2000	1943	N21	E72	.958	8612	18.2	35U	-F	C	1943	.30	.80		10			
LOCK	12	2053	2106	2057	N19	E03	.337	8610	13.1	13	-N	C	2057	.50	.60		20			
HALE	12	2141	2148	2143	N24	E05	.422	8610	13.3	7	-N	2	C	2143	.72	.80				
LOCK	12	2203	2225	2214	N21	E72	.958	8612	18.3	22	-F	C	2214	.30	.80		10			
LOCK	12	2239	2248	2241	S21	W27	.550	8609	10.9	9	-F	C	2241	.90	1.10		10			
HALE	12	2302	2310	2303	N24	W00	.415	8610	13.0	8	-F	2	C	2303	.62	.70		10		
LOCK	12	2330	2343	2333	S21	W27	.550	8609	11.0	13	-F	C	2333	.80	1.00		10			
HALE	13	0017	0025	0019	S26	W20	.528	8609	11.5	8	-N	1	C	0019	.31	.40			E	
MITK	13	0110	0123	011																

## SOLAR FLARES

PRELIMINARY

DECEMBER 1966

OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IM- POR- TANCE	OBS. COND.	MEASUREMENTS						REMARKS			
	DATE 1966 DEC	START	END	MAX. PHASE	APPROX. LAT.	CENTRAL DIST.	MCMAHAN PLAGE REGION	CMT DAY	TIME		MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %							
									—	— UT											
HALE	13	0316	0334D	0319	S21	W29	.572	8609	11.0	18D	-N	1	P	0319	.41	.50					
SACP	13	1414	1449	1420	S24	W32	.627	8609	11.2	35	IN		C	2.05	2.27						
SACP	13	1626	1657	1632	S21	W36	.651	8609	11.0	31	-N		C	.66	.73						
LOCK	13	1630E	1657	1630U	S21	W37	.662	8609	10.9	27D	-F		C	1630	.80	1.10	10	E			
HUAN	13	1639E	1658D	1658D	S22	W36	.657	8609	11.0	19D	-N	1	P	1640	.70	.80					
SACP	13	1715	1754	1732	S22	W35	.646	8609	11.1	39	-N		C	1732	1.20	1.60	20				
LOCK	13	1720U	1757	1732	S20	W37	.657	8609	10.9	37U	-N		C	1730	.26	.30					
HALE	13	1725	1803	1730	S24	W31	.616	8609	11.4	38	-N	2	C	1730	1.03	1.30					
HALE	13	1725	1807	1730	S19	W34	.616	8609	11.2	42	-B	2	C	1730	1.39	1.56					
HUAN	13	1729E	1738D	1738D	S21	W38	.673	8609	10.9	9D	-B	1	P	1730	1.39	1.56					
HALE	13	1835	1920	1840	N32	W26	.654	8607	11.8	45	-N	2	C	1840	.62	.80		E			
HALE	13	1902	1916	1903	N19	E44	.736	8612	17.1	14	-N	2	C	1903	.36	.50					
SACP	13	1920	1946	1928	S22	W38	.678	8609	11.0	26	-N		C	1925	1.25	1.42					
HALE	13	1923	1937	1925	S22	W37	.668	8609	11.0	14	-N	2	C	1925	.41	.60					
LOCK	13	2000U	2012U	2005	S24	W36	.669	8609	11.1	12U	-N		C	2005	.90	1.30					
SACP	13	2001	2015	2007	S27	W33	.659	8609	11.4	14	-N		C	2006	1.07	1.21	20	F			
HALE	13	2003	2009	2006	S30	W41	.752	8609	10.8	6	-N	2	C	2006	.52	.80					
HALE	13	2023	2045	2026	S20	W37	.657	8609	11.1	22	-N	1	C	2026	.62	.80					
SACP	13	2155	2231	2209	N21	E44	.745	8612	17.2	36	-F		C	.83	1.00						
HALE	13	2156	2235	2202	N20	E43	.730	8612	17.1	39	-N	2	C	2202	.62	.90		F			
HALE	13	2203	2215	2210	S22	W37	.668	8609	11.1	12	-N	1	C	2210	.52	.70					
SACP	13	2252	2312	2258	S34	W69	.953	8608	8.8	20	-N		C	.41	.83						
HALE	13	2254E	2308	2257	S34	W66	.939	8608	9.0	14D	-B	1	P	2257	.31						
SACP	13	2300	2357D	2311	N24	E54	.846	8612	18.0	57D	28		C	4.72	6.74						
HALE	13	2303	2350	2308	N25	E58	.880	8612	18.3	47	-B	2	C	2308	3.59	7.90		FJ			
HALE	13	2308	2317	2310	N28	E45	.785	8612	17.3	9	-N	2	C	2310	.46	.80					
HALE	14	0021	0024	0022	N24	W11	.453	8610	13.2	3	-N	2	C	0022	.21	.22					
HALE	14	0039	0047	0040	S23	W36	.662	8609	11.3	8	-N	2	C	0040	.15	.20					
MITK	14	0117	0137	0124	N22	W08	.408	8610	13.5	20	IN		C	0124	2.06	2.20					
HALE	14	0119	0135	0125	N21	W08	.393	8610	13.5	16	-N	2	C	0125	1.34	1.50					
MONT	14	0242	0325	0249	S21	W41	.705	8609	11.0	43	-N	2	C	0249	.36	.50					
MONT	14	0851	0910	0910	S24	W38	.689	8609	11.5	19	-N		C	0855	.80						
MONT	14	0945	1005	1005	N23	E50	.810	8612	18.2	20	-B		C	0948	.90						
MONT	14	1146	1151	1151	S20	W48	.774	8609	10.9	5	-B		C	1148	.80						
SACP	14	1410E	1427	1419	S22	W48	.780	8609	11.0	17D	-N		C	1.35	1.72			D			
HUAN	14	1653	1658	1655	S24	W46	.768	8609	11.3	5	-F	1	C	1655	.25	.31					
SACP	14	1742	1754	1750	S20	W53	.822	8609	10.8	12	IN		C	1.73	2.34						
HALE	14	1847	1853	1849	S19	W53	.819	8609	10.8	6	-N	3	C	1849	.72	1.30					
LOCK	14	1921E	1940	1921E	S25	W47	.782	8609	11.3	19D	-N		C	1921	1.00	1.60	10				
HALE	14	1922	1934	1927	S28	W45	.776	8609	11.4	12	-N	2	C	1927	.41	.70					
SACP	14	2057	2151	2111	S27	W46	.781	8609	11.4	54	-N		C	2114	.70	1.10	10	E			
LOCK	14	2100	2132	2114	S24	W47	.778	8609	11.3	32	-F		C	2111	.62	.80					
HUAN	14	2112E	2112D	2112D	S26	W47	.786	8609	11.4	10	-N	1	P	2111							
MITK	15	0523	0606D	N20	E25	.533	8612	17.1	43D	IN		C	0530	3.20	3.80						
ARCE	15	0805E	08200	N21	W25	.542	8610	13.5	150	-N		C	0810	.90	1.00						
ARCE	15	0840	0850	0845	N17	E21	.459	8612	16.9	10	-N		C	0845	.53	.60					
SACP	15	1520	1536	1527	N10	W70	.943	8606	10.4	16	-F		C	.25	.48			D			
HUAN	15	1521	1533	1525	N10	W71	.948	8606	10.3	12	-F	2	C	1525	.21						
SACP	15	1649	1734	1700	N24	E33	.650	8612	18.2	45	-F		C	1657	1.18	1.31					
LOCK	15	1650	1725	1657	N25	E33	.657	8612	18.2	35	-F		C	1657	.90	1.30	10				
SACP	15	1935	2202	2055	N21	E26	.553	8612	17.8	147	IN		C	2050	2.06	2.18					
LOCK	15	1955	2150	2050	N20	E27	.555	8612	17.9	115	IN		C	2050	3.00	3.60	20				
LOCK	15	1958	2009	2001	S18	W62	.892	8609	11.2	11	-F		C	2001	.30	.60	10				
HALE	16	0014	0039	0015	S22	W71	.951	8609	10.7	25	-F	1	C	0015	.21						
HALE	16	0225	0246	0228	S20	W67	.928	8609	11.1	21	-B	1	C	0228	.31						
HALE	16	0232	0242	0233	N27	W63	.918	8607	11.4	10	-N	1	C	0233	.36						
HALE	16	0301	0316	0303	S27	W66	.929	8609	11.2	15	-N	1	C	0303	.21						
ARCE	16	0951E	0956D	N17	E20	.449	8612	17.9	50	-N	1	C	0951	1.56							
WEND	16	1051E	1112	N18	E08	.351	8612	17.1	21D	1F			C	4.13							
CAPS	16	1054E	1107	N20	E10	.394	8612	17.2	13D	-F	3		C	1057	.80	.90					
LOCK	16	1718	1805	1733	N19	E03	.346	8612	16.9	47	-N		C	1733	1.80	2.00	20				
HALE	16	1721	1807D	1730	N19	E04	.348	8612	17.0	46D	-B	1	P	1730	1.34	1.40					
SACP	16	1725	1752	1731	N19	E06	.356	8612	17.2	27	IN		C	2.50	2.48						
SACP	16	1759	1811	1802	N19	E05	.352	8612	17.1	12	IN		C	2.26	2.24						
SACP	16	1827	1838	1830	N21	E21	.502	8612	18.3	11	-F		C	.74	.77						
LOCK	16	1827	1844	1834	N22	E20	.503	8612	18.3	17	-F		C	1834	.70	.80	10				
LOCK	16	2001	2016	2005	N19	E03	.346	8612	17.1	15	-F		C	2005	.80	.90	10				
HALE	16	2003E	2030	2009	N20	E05	.368	8612	17.2	27D	-N	1	P	2009	.41	.43					
LOCK	16	2040	2113	2057	N19	E03	.346	8612	17.1	33	-N		C	2057	1.50	1.70	10				
HALE	16	2049	2125	2053	N17	E01	.310	8612	16.9	36	-B	1	C	2053	1.44	1.50					
LOCK	16	2126	2135	2129	N16	W16	.394	8612	15.7	9	-F	1	C	2129	.20	.20	10				
HALE	17	0008	0035	0011	N18	E01	.328	8612	17.1	27	-N	1	C	0011	.62	.70					
MITK	17	0009E	0025	N19	E02	.346															

# SOLAR FLARES

PRELIMINARY

DECEMBER 1966

III

OBSERVATORY	OBSERVED UT				LOCATION				DURATION	IM-POR-	OBS.	MEASUREMENTS					REMARKS		
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MCMATH REGION	CMT DAY	— MIN.	— DURANC	COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
					LAT.	MER. DIST.													
MITK	1966	DEC																	
CAPS	17	0811E	0834D	0354	N20	W00	.361	8612	17.2	28	1F	C	0354	1.96	2.10				
MONT	17	0811	0910	0816	N18	W01	.328	8612	17.3	230	2N	2	0818	5.00	5.20		185	F A	
MONT	17	0943	1140	1010	N21	W02	.378	8612	17.2	59	1N	C	0816		2.20				
CATA	17	0955E	1055D	1010	N21	W05	.385	8612	17.3	117	3N	C	1010		20.00				
CAPP	17	0955	1110D	1010	N21	E02	.378	8612	17.6	600	3N	C	1010	22.41	24.20				
CAPS	17	1007E	1045		N22	W03	.396	8612	17.2	750	3N	C	1008	13.52	14.40				
CAPS	17									380	2N	3	1011	6.00	6.60		220		
MEUD	17	1008E	1040D		N20	W03	.364	8612	17.2	320	18	C	1010	3.40	3.60				
MONT	17	1230	1330	1240	N21	W02	.378	8612	17.4	60	18	C	1240		3.50				
CAPP	17	1235E	1313D	1235	N20	E03	.364	8612	17.7	380	2N	C	1236	8.23	8.70				
CAPS	17	1240E	1313		N22	W02	.394	8612	17.4	330	1N	3	1242	3.80	4.00		176	FCWA F	
SACP	17	1634	1745	1649	N22	W04	.398	8612	17.4	71	1F	C			5.04	5.05		FL	
LOCK	17	1650E	1703D	1700U	N21	W06	.389	8612	17.3	130	-F	C	1700	1.40	1.50				
LOCK	17	2053	2121	2102	N23	E01	.409	8612	17.9	19	-F	C	2102	.50	.60			10	
HALE	17	2159	2216	2205	N22	W01	.393	8612	17.8	17	-F	1	2205	.21	.20			10	
LOCK	17	2200	2215	2206	N23	E01	.409	8612	18.0	15	-F	C	2206	.50	.60			10	
LOCK	17	2337	2355D	2350U	N21	W06	.389	8612	17.5	180	-F	C	2350	.50	.60			10	
HALE	17	2343	2354	2346	N17	W13	.378	8612	17.0	11	-N	1	2346	.41	.43				
HALE	18	0130	0149	0135	N28	E65	.932	8618	22.9	19	-F	1	C	0135	.15				
HUAN	18	1409	1420	1410	N24	W67	.938	8610	13.6	11	-N	2	C	1410	1.05				E H
HUAN	18	1418	1503	1425	N23	W61	.899	8610	14.0	45	1N	1	C	1425	1.22	1.95			
CAPS	18	1425E	1441D		N21	W61	.896	8610	14.0	160	-F	3	1428	1.00				155	
SACP	18	1643	1700	1650	N22	W62	.904	8610	14.0	17	-N	C		.58	.95				
LOCK	18	1643	1700	1650	N22	W60	.890	8610	14.2	17	-N	C	1650	.60	1.30				
SACP	18	1817	1916	1854	N25	W11	.475	8612	17.9	59	2N	C	1855	5.12	5.25			20	
LOCK	18	1822	1930	1855	N24	W09	.450	8612	18.1	68	-N	1	C	1843	1.80	2.00			20
HUAN	18	1841E	1853D		N27	W07	.486	8612	18.3	120	1F	1	P	2037	2.06	2.10			E
LOCK	18	2033	2044	2037	N22	W12	.439	8612	18.0	11	-F	C	2246	.80	.90			10	
LOCK	18	2243	2253	2246	N17	W27	.534	8612	16.9	10	-F	1	C		.50	.60			10
SACP	19	1419E	1444	1424U	N13	W67	.927	8613	14.6	250	1N	C		1.36	2.43				
LOCK	19	1620	1635	1623	N19	W34	.631	8612	17.1	15	-B	C	1623	1.00	1.30			30	
SACP	19	1620	1638	1624	N18	W34	.625	8612	17.1	18	-N	C		1.72	1.90				
HALE	19	1734	1740	1738	N23	W77	.980	8610	14.0	6	-B	1	C	1738	.21				
HALE	19	1746	1800	1755	N24	W66	.932	8615	14.8	14	-F	1	C	1755	.15				
HALE	19	1756	1814	1806	N31	E62	.921	8620	24.4	18	-F	1	C	1806	.21				
HALE	19	1802	1816	1810	N14	W52	.806	8616	15.9	14	-F	1	C	1810	.31	.50			
HALE	19	1827	1909	1905	N32	E63	.928	8620	24.5	62	-F	1	C	1905	.15				
HALE	19	1832	1902	1850	N22	W81	.991	8610	13.7	30	-B	1	C	1850	.21				
SACP	19	1842	1856	1849	N23	W78	.983	8610	13.9	14	-N	C	1849	.75	1.20			10 H	
HALE	19	1845	1858	1850	N22	W79	.986	8610	13.9	13	-N	C							
HALE	19	1922	2115	1928	S39	E50	.857		23.6	113	-N	1	C	1928	.21	.40			
HALE	19	1930	1947	1937	N20	W66	.928	8615	14.9	17	-N	1	C	1937	.21				
HALE	19	1955	2135	2056	N20	W66	.928	8615	14.9	100	-N	1	C	2056	.31				
HALE	19	2026	2057	2028	N14	W52	.806	8616	16.0	31	-F	1	C	2028	.15	.30			
HALE	19	2119	2204	2137	N32	E63	.928	8620	24.6	45	-N	1	C	2137	.21				
LOCK	19	2207	2225	2230	N22	W85	.997	8610	13.6	8	-F	1	C	2230	.30	1.00			10 H
LOCK	19	2307	2322	2313	N21	W68	.940	8615	14.9	15	-F	1	C	2313	.70	1.70			10 H
HALE	19	2307	2359D	2320	N20	W66	.928	8615	15.0	520	-N	1	P	2320	.26				
HALE	19	2312	2339	2325	N25	E89	1.000	8621	26.6	27	-F	1	C	2325	.15				
MITK	20	0040	0055	0044	N17	W40	.689	8612	17.0	15	-F	1	C	0044	.62	.90			E
HALE	20	0041	0055	0044	N18	W38	.671	8612	17.2	14	-N	1	C	0044	.26	.30			
HALE	20	0128	0152	0135	N21	W38	.688	8612	17.2	24	-B	1	C	0135	.26	.40			
HUAN	20	1552	1602D		N26	E78	.985	8621	26.5	10D	-F	1	P	1555	.70				
HUAN	20	1718	1723		N30	E62	.919	8620	25.4	5	-F	1	C	1720	.25				D
HALE	20	1720	1727	1722	N31	E60	.910	8620	25.2	7	-N	2	C	1722	.26				
HALE	20	1738	1750	1739	N24	W39	.715	8612	17.8	12	-N	1	C	1739	.41	.60			
HALE	20	2053	2102	2055	N30	E51	.847	8620	24.7	9	-F	1	C	2055	.21	.40			
HUAN	21	1241	1252	1243	N22	W90	1.000	8615	14.8	11	-F	2	C	1243	.21				D
HUAN	21	1511	1534		N26	E66	.936	8621	26.6	23	-F	1	C	1518	.25				D
HUAN	21	1650E	1707		N26	E66	.936	8621	26.7	17D	-F	1	P	1654	.21				D
LOCK	21	1910U	2000	1945	N19	E90	1.000	8625	28.5	50U	1F	1	C	1945	.60	2.40			10 H
HALE	21	1911	1917		N21	E90	1.000	8625	28.5	6	-F	1	C	1912	.41				
HALE	22	0222	0230	0224	N27	E55	.868	8621	26.2	8	-N	1	C	0224	.41	.80			
MITK	22	0252	0312	0255	N30	E43	.786	8620	25.3	20	1F	1	C	0255	1.34	2.20			E
HALE	22	0252	0321	0256	N30	E42	.778	8620	25.3	29	-B	1	C	0256	.93	1.50			O
ARCE	22	0848E	0848D		N19	E90	1.000	8625	29.1	50D	1N	C	0848	1.12					
ARCE	22	0850E	09400	0930	N19	E90	1.000	8625	29.1	IN	C	0930	1.45						
MONT	22	1025	1103		N21	E90	1.000	8625	29.2	38	1B	C	1000	.64					
MONT	22	1126	1230		N21	E90	1.000	8625	29.2	64	1B	C							
HALE	22	1826	1835	1828	N32	E32	.712	8620	25.2	9	-N	1	C	1828	.21	.30			
LOCK	22	1833	1850	1835	N16	E82	.992	8625	26.9	17	-F	1	C	1835	.30	1.00			10 H
LOCK	22	1927	1942	1933	N16	E82	.992	8625	29.0	15	1F	1	C	1933	.80	2.70			10 H
LOCK	22	2028	2045	2036	N16	E82	.992	8625	29.0	17	-F	1	C	2036	.30	1.00</			

## SOLAR FLARES

PRELIMINARY

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OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IM- POR- TANCE	OBS.	MEASUREMENTS					REMARKS			
	DATE	START	END	MAX. PHASE	APPROX. LAT.		CENTRAL MERC. DIST.	MMATH. PLAGE REGION	CMT DAY				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %				
HUAN	22	2040E	2140D	N20	E88	1.000	8625	29.5	60D	-F	1	P	2055	.41				E			
LOCK	22	2045	2210	2120	N16	E82	.992	8625	29.0	85	1N	C	2120	1.00	3.40		20	HK			
LOCK	22	2210	2247	2220	N16	E82	.992	8625	29.1	37	-F	C	2220	.50	1.70		10	H			
LOCK	22	2305	2355	2312	N16	E77	.978	8625	28.7	50	-F	C	2312	.30	.90		10				
SACP	22	2343	2356	2348	S28	E77	.977	8624	28.8	13	-N	C	2337	.30	.90		10				
MONT	23	0752	0850	0810	N25	E80	.990	8625	29.3	58	1N	C	0810		3.90						
ARCE	23	0810E	0815D	N23	E78	.984	8625	29.2	5D	1N	C	0810		2.90							
ARCE	23	0830	0940D	0843	N28	E26	.629	8620	25.3	70D	1N	C	0843	2.43	3.10			C			
MONT	23	0830	1020	0845	N19	E22	.501	8620	25.0	110	1N	C	0845		2.00						
CAPS	23	0840E	0902D	N29	E25	.630	8620	25.3	22D	1F	3	P	0847	2.00	2.60		150	ACF			
CATA	23	0900E	1045D	0900	N29	E25	.630	8620	25.3	105D	1N	C	0900	3.83	5.00		190				
MONT	23	1019	1030	1023	N19	E79	.986	8625	29.4	11	1N	C	1023		2.60						
ARCE	23	1025E	1025D	N23	E78	.984	8625	29.3		-N		P	1025	.52	1.50						
MONT	23	1046	1058	1050	N18	E80	.988	8625	29.4	12	1N	C	1050		2.50						
MONT	23	1110	1155	1115	S26	E75	.969	8624	29.1	45	1N	C	1120		5.00		158				
CAPS	23	1112E	1130D	S27	E70	.948	8624	28.7	18D	1F	3	C	1114	1.50							
MONT	23	1210	1225	1212	N19	E78	.983	8625	29.4	15	1F	C	1213		2.50						
MONT	23	1303	1410D	1312	N19	E78	.983	8625	29.4	71D	1N	C	1315		3.70						
MONT	23	1335	1400	1337	N20	E81	.991	8625	29.6	25	1N	C	1337		2.60						
MCMA	23	1405	1412	1406	N23	E78	.984	8625	29.4	7	-N	C	1406	.52				DH			
SACP	23	1506	1550	1509	N21	E71	.956	8625	29.0	44	1N	C	1391	2.89							
SACP	23	1613	1705	1620	S28	E75	.970	8624	29.3	52	-N	C	1655	.25	.55						
LOCK	23	1637	1730	1655	N19	E72	.960	8625	29.1	53	1N	C	1655	.90	2.60		20	H			
SACP	23	1639	1735	1706	N22	E72	.962	8625	29.1	56	1N	C	1655	1.89	4.01						
HUAN	23	1640	1714D	N22	E77	.981	8625	29.5	34D	1N	1	P	1701	1.60				E			
MCMA	23	1640	1732	1648	N24	E80	.989	8625	29.7	52	1N	C	1648	.83				EK			
MCMA	23	1644											1644	.52				EK			
HALE	23	1715E	1743	1728	N24	E71	.959	8625	29.0	28D	-B	2	P	1728	.52				ET		
HALE	23	1850	1910	1903	N23	E71	.958	8625	29.1	20	1F	2	C	1903	.83				T		
LOCK	23	1859	1906	1902	S31	E60	.895	8624	28.3	7	-F	C	1902	.40	.80		10				
HALE	23	1900	1905	1902	S26	E60	.886	8624	28.3	5	-N	2	C	1902	.31	.70			T		
LOCK	23	1925	1945	1928	N22	E70	.952	8625	29.1	20	1B	2	C	1928	.57						
LOCK	23	1925	1945	1928	N18	E67	.932	8625	28.8	20	-N	2	C	1928	.70	1.80		20			
SACP	23	1926	1941	1933	N22	E69	.948	8625	29.0	15	1N	C	2001	2.39	4.75						
HALE	23	1956	2010	2001	N21	E74	.969	8625	29.4	14	1B	2	C	2001	.93				ET		
LOCK	23	1956	2020	2003	N18	E67	.932	8625	28.9	24	-N	2	C	2003	.80	2.00		20			
SACP	23	1958	2013	2002	N22	E72	.962	8625	29.2	15	-F	C	2033	.91	1.94						
LOCK	23	2029	2100	2033	S30	E62	.906	8624	28.5	31	-F	C	2033	.80	1.80		10				
LOCK	23	2030	2210	2100	S06	E22	.980	8619	22.2	100	-N		C	2100	1.10	1.20		20			
HALE	23	2102	2111	2106	N22	E70	.952	8625	29.1	9	-N	2	C	2106	.15				T		
HALE	23	2108	2112	2109	N20	E70	.951	8625	29.1	4	-B	2	C	2109	.41				T		
LOCK	23	2108	2112	2110	N18	E67	.932	8625	28.9	4	-N		C	2110	.40	1.00		20			
SACP	23	2108	2113	2110	N22	E72	.962	8625	29.3	5	-F	C	2140	.74	1.57						
LOCK	23	2135	2238	2140	N18	E68	.938	8625	29.0	63	-F	C	2140	.70	1.80		10				
LOCK	23	2225											2225	.70	1.80						
HALE	23	2142	2230	2159	N22	E70	.952	8625	29.2	48	-N	1	C	2159	.52				T		
LOCK	23	2238	2250	2242	N17	E63	.906	8625	28.7	12	-F	C	2242	.40	.90		10				
HALE	23	2241	2252	2245	N22	E67	.937	8625	29.0	11	-N	2	C	2245	.57				T		
HALE	23	2352	2356	2353	N20	E68	.940	8625	29.1	4	-N	2	C	2353	.36				T		
HALE	24	0032	0049	0047	N21	E66	.930	8625	29.0	17	-N	2	C	0047	.41				D		
MITK	24	0039	0048	0041	N21	E73	.966	8625	29.5	9	-N		C	0041	.52				D		
HALE	24	0303	0306D	0305U	N21	E64	.918	8625	28.9	3D	-B	2	P	0305	.10				D		
MITK	24	0314	0322	0318	N22	E70	.953	8625	29.4	8	-N		C	0318	.62				F		
MITK	24	0345	0407	0353	N21	E65	.924	8625	29.0	22	1N		C	0353	1.86						
MITK	24	0444	0500D	N22	E55	.926	8625	29.1	16D	1N		C	0458	1.34							
LOCA	24	1443	1501D	1452	N21	E57	.869	8625	28.9	18D	1N	V	1452	1.26	2.90						
CAPS	24	1450E	1459D	N22	E55	.855	8625	28.7	9D	-N	1	V	1452	1.26	2.90						
LOCK	24	1640	1652	1644	N20	E56	.858	8625	28.9	12	-N		C	1644	.30	.60		10			
LOCK	24	1741	1753	1745	N20	E56	.858	8625	28.9	12	-F		C	1745	.40	.80		10			
LOCK	24	1747	1830	1800	S04	W34	.559	8619	22.2	43	-F		C	1800	.80	1.00		10			
LOCK	24	1930	2020	1945	N21	E57	.869	8625	29.1	50	-N		C	1945	1.00	1.90		20			
HUAN	24	1940	1958	1958	N22	E57	.871	8625	29.1	18	-N	1	C	1949	.57	.85			H		
LOCK	24	2325	2342D	2333	N18	E53	.828	8625	29.0	17D	-N	2	C	2333	1.10	2.00		20			
HALE	24	2332E	2336D	2332U	N22	E49	.804	8625	28.7	40	-N	2	P	2332	.31	.50					
CATA	25	0910E	0920D	0910	S30	E53	.842	8624	29.4	10D	1F	C	0910	1.66	3.10		140				
CATA	25	0930E	1040D	0945	N25	E53	.848	8625	29.4	7D	1N	C	0945	1.21	2.40		170				
MONT	25	1006E	1035D	N28	E55	.873	8625	29.5	29D	-F		C	1010		1.00						
CATA	25	1105E	1140D	1107	N23	E45	.772	8625	28.8	35D	2F		C	1107	2.94	5.60		130			
LOCK	25	1812	1823D	1823	N19	E49	.794	8625	29.4	11D	-F		C	1823	.70	1.20		10			
HUAN	25	1820	1910	1910	N22	E49	.805	8625	29.4	50	1F	1	C	1835	2.37	3.10					
HALE	25	2311	2334D	2328U	N21	E45	.763	8625	29.3	23D	-N	2	P	2328	.31	.50					
MONT	26	0905	0925	0915	N20	E40	.708	8625	29.4	20	-F		C	0915		.80			D		
HUAN	26	1349E	1359D	N21	E31	1.000	8625	19.8	10D	-N	1	C	1350	.36							
LOCK	26	2018	2110	2040	N22	E31	.627	8625	29.2	52	-N	1	C	2040	1.00	1.30		10			

# SOLAR FLARES

PRELIMINARY

DECEMBER 1966

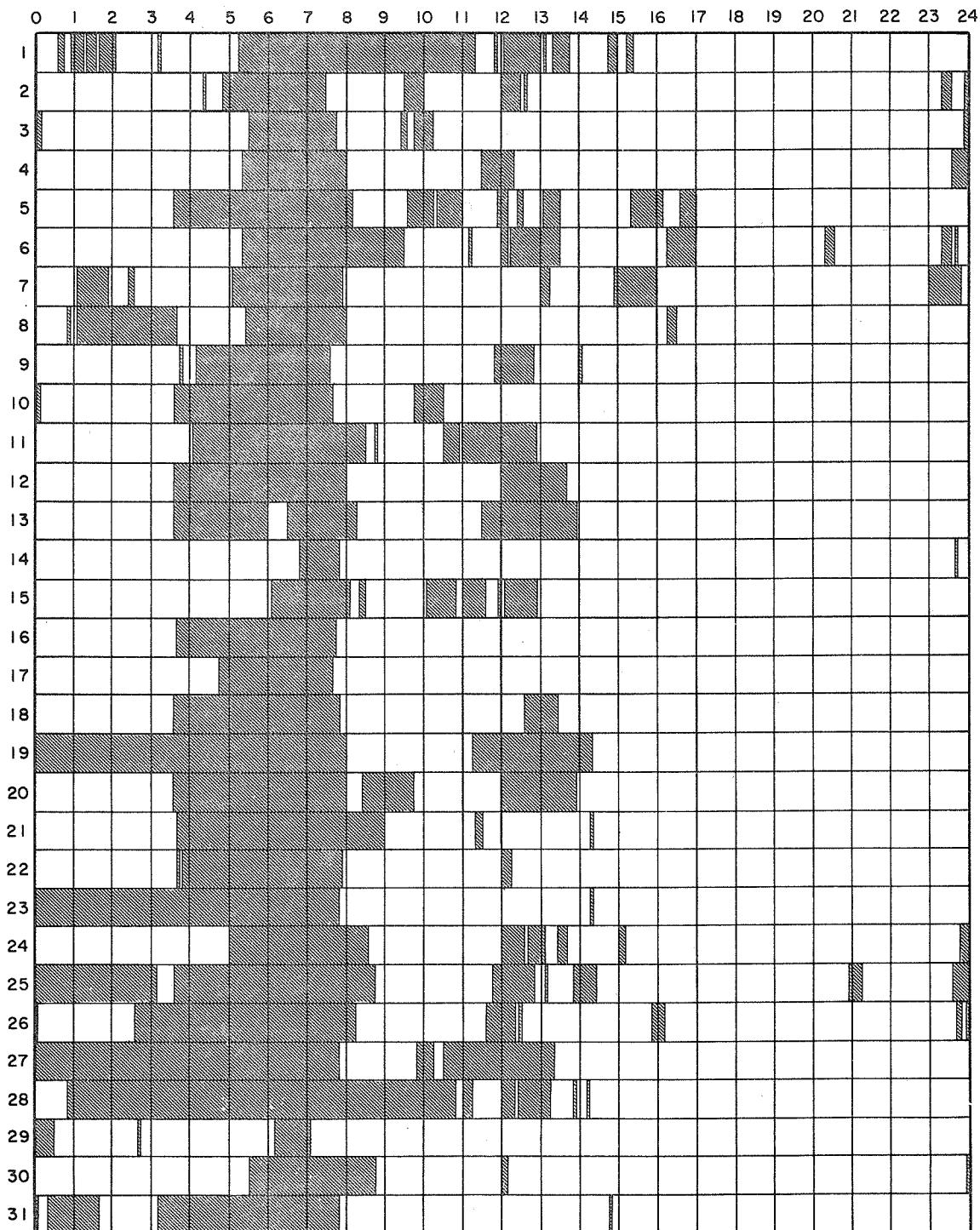
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OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IM- POR- TANCE	COND. TYPE	MEASUREMENTS				REMARKS
	DATE 1966	START	END	MAX. PHASE	APPROX.		CENTRAL DIST.	MCNATH REGION	CMF DAY	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %		
					LAT.	MER. DIST.										
CAPS	27	1006	1037		N22	E25	.565	8625	29.3	31	-N	3	1014	1.50	1.80	164
MONT	27	1016E	1039D		N21	E26	.567	8625	29.5	23D	IN	1017		2.60		
HUAN	27	1512	1516	1513	N27	W52	.648	8626	23.7	4	-N	2	1513	.50	.70	
LOCK	27	1818	1832	1822	S25	E15	.553	8624	28.9	14	-N	2	1822	.50	.60	20
LOCK	27	1834	1900	1840	S23	E14	.420	8624	28.8	26	-B	1	1840	1.50	1.70	30
SACP	27	1837U	1854	1843	S24	E14	.433	8624	28.8	17U	-C	1		3.06	3.10	
MCMA	27	1838	1848	1840	S24	E15	.441	8624	28.9	10	-N	2	1840	.93	1.00	
HUAN	27	1838	1848	1841	S23	E14	.420	8624	28.8	10	-N	2	1841	1.05	1.06	
LOCK	27	2130	2146	2140	S23	E14	.420	8624	28.9	16	-F	2	2140	.20	.20	10
SACP	28	1538	1601	1540	N23	E15	.491	8625	29.8	23	-N	1		.50	.51	
SACP	28	1542	1622	1556	N27	W29	.651	8621	26.5	40	-F	1		.58	.64	
SACP	28	1600	1641	1616	S25	W26	.554	8622	26.7	41	-F	1		.58	.61	
LOCK	28	1724	1747	1727	N26	W62	.915	8626	24.1	23	-F	1	1727	.40	.80	10
HUAN	28	1726E	1727D		N27	W61	.911	8626	24.2	1D	-N	1	1726	.57		E
SACP	28	1740	1759	1745	N19	E43	.736	8628	1.0	19	-N	1		.50	.59	
SACP	28	1744	1836D	1808	N20	E08	.404	8625	29.3	52D	IN	1		3.12	3.13	
LOCK	28	1745	1840	1811	N21	E10	.430	8625	29.5	55	-B	1	1811	1.60	1.80	20
HALE	28	1804	1832U	1813	N21	E10	.430	8625	29.5	28U	-B	1	1813	.93	1.00	
LOCK	28	1758	1830	1803	N26	W63	.921	8626	24.0	32	2B	1	1803	2.90	6.40	30
SACP	28	1758	1836D	1800	N24	W62	.912	8626	24.1	38D	2B	1		3.71	6.25	
HALE	28	1759	1825	1802	N25	W63	.920	8626	24.0	26	1B	1	1802	1.65		
LOCK	28	2053	2120	2058	N21	E10	.430	8625	29.6	27	-N	1	2058	.80	.90	20
SACP	28	2239	2259	2247	N25	W65	.931	8626	24.1	20	-F	1	2310	.41	.74	20
LOCK	28	2306	2320	2310	N21	E10	.430	8625	29.7	14	-N	1		.50	.60	20
SACP	28	2330	2359D	2338	S28	E00	.431	8624	29.0	29D	-N	1	2336	1.19	1.19	
LOCK	28	2331	2350U	2336	S25	W01	.383	8624	28.9	19U	-N	1	2336	.80	.90	20
MITK	29	0344-	0355	0348	S27	W08	.431	8624	28.6	11	-F	1	0348	1.75	1.90	
ARCE	29	1045E	1100D		N20	W01	.385	8625	29.4	15D	-F	1	1055	.64	.70	
HUAN	29	1437	1527D		N14	E37	.646	8628	1.4	50D	1F	1	1500	1.75	1.99	
CAPS	29	1439E	1448D		N16	E46	.756	8628	2.1	9D	-N	2	1442	.80	1.20	163
LOCK	29	1717	1820	1742	N23	E01	.433	8625	29.8	63	-N	1	1742	1.00	1.10	20
LOCK	29	1945	2025	2000	N32	W56	.893	8620	25.6	40	-F	1	2000	.50	1.00	10
LOCK	29	2050	2116	2101	S31	W09	.494	8624	29.2	26	-F	1	2101	.50	.60	10
SACP	29	2154	2232	2210	N20	W05	.393	8625	29.5	38	-N	1		1.80	1.80	
LOCK	29	2159	2245	2213	N22	W04	.421	8625	29.6	46	-B	1	2213	1.50	1.70	30
LOCK	29	2240	2300	2246	S26	W16	.469	8624	28.7	20	-N	1	2246	.80	.90	20
HUAN	30	1240	1251	1244	S24	E37	.663	8629	2.3	11	-F	2	1244	.31	.35	
HUAN	30	1333	1348	1341	S23	E35	.636	8629	2.2	15	-F	2	1341	.57	.63	D E
HUAN	30	1715	1723D		N19	E78	.984	8631	5.6	8D	-N	1	1721	.62		
SACP	30	1718	1728	1721	N20	E76	.978	8631	5.4	10	-F	1		.48	1.20	
MCMA	30	1750E	1755D		N22	W20	.523	8625	29.2	5D	-N	1	1755	.52	.60	E
LOCK	30	1819E	1900	1826	N19	W15	.443	8625	29.6	45D	-F	1	1826	1.30	1.40	10
SACP	30	1816	1900	1826	N21	W15	.468	8625	29.6	44	-N	1		1.46	1.50	
HUAN	30	1929	2000D		S27	W25	.560	8624	28.9	31D	-F	1	1940	.70	.75	
LOCK	30	1930	2010	1954	S29	W25	.580	8624	28.9	40	-N	1	1954	.70	.80	
SACP	30	2040	2115	2100	S23	E34	.625	8629	2.4	35	-F	1	2100	.50	.70	10
SACP	30	2041	2111	2048	S23	E33	.613	8629	2.3	30	-F	1		.66	.71	
LOCK	30	2107	2117	2110	N19	W26	.553	8625	28.9	10	-F	1		.41	.43	
LOCK	30	2130	2200	2135	S24	E27	.554	8629	1.9	30	-F	1	2135	.50	.60	10
LOCK	30	2130	2230	2140	N15	E75	.971	8631	5.5	60	-F	1	2140	.30	.90	10
LOCK	30	2135	2220	2152	N25	W22	.574	8625	29.2	45	1N	1	2152	2.50	3.00	20
LOCK	30	2213	2220	2216	S23	E32	.602	8629	2.3	7	-F	1	2216	.50	.70	10
LOCK	30	2231	2254	2235	S23	E32	.602	8629	2.3	23	1B	1	2235	2.60	3.40	30
LOCK	30	2305	2332	2313	N11	E90	1,000	8633	6.7	27	1F	1	2313	.70	2.80	10
MONT	31	0840	0858	0843	S22	E22	.480	8529	2.0	18	-N	1	0843	.90		
CAPS	31	0842	0856		S21	E28	.541	8629	2.5	14	1N	3	0849	2.10	2.50	176
ARCE	31	0844	0857	0845	S20	E27	.521	8629	2.4	13	1B	1	0845	2.07	2.40	C
MONT	31	1135	1210	1140	S22	E21	.469	8529	2.1	35	-N	1	1140	1.20		
CAPS	31	1138	1204		S19	E25	.489	8629	2.4	26	1N	2	1153	2.00	2.30	170
HUAN	31	1139E	1145D		S22	E26	.525	8629	2.4	6D	-B	1	1145	1.05	1.10	
HUAN	31	1456	1503		S23	E90	1,000	8632	7.4	7	-F	1	1500	.44		
HUAN	31	1516	1525	1518	S21	E22	.470	8629	2.3	9	-F	2	1518	.36	.37	
LOCK	31	1610	1700	1625	N27	W28	.646	8625	29.6	50	1N	1	1625	2.00	2.60	20
HUAN	31	1611	1652D		N24	W28	.619	8625	29.6	41D	1F	1	1615	1.75	1.92	
MCMA	31	1632	1704D		N23	W32	.650	8625	29.3	32D	-N	1	1635	.52	.70	
LOCK	31	1650	1710	1658	N06	E84	.995	8633	7.0	20	-F	1	1658	.40	1.40	10
LOCK	31	1647	1710	1655	S21	E22	.470	8629	2.3	23	1B	1	1655	2.50	2.80	30
HUAN	31	1649	1714D		S22	E23	.491	8629	2.4	25D	-N	1	1706	.31	.32	D EV
MCMA	31	1652	1704D	1655	S23	E24	.511	8629	2.5	12D	-B	1	1655	1.03	1.20	
LOCK	31	1828	1855	1837	S04	E53	.798	8630	4.7	27	-F	1	1837	.50	.90	10
LOCK	31	1807	1837	1820	S23	E23	.500	8629	2.5	30	-F	1	1820	.50	.60	10 H H
LOCK	31	1836	1915	1842	S23	E22	.490	8629	2.4	39	1B	1	1842	2.10	2.30	30
LOCK	31	1845	1925	1855	N14	E75	.971	8633	6.4	40	-N	1	1855	.50	1.50	
SACP	31	1847E	1913	1907	N15	E76	.975	8633	6.5	26D	-N	1		.81	1.95	
SACP	31	1847E	1920	1850	S22	E23	.491	8629	2.5	33D	-N	1		1.31	1.35	
LOCK	31	2124	2145	2127	S24	E21	.489	8629	2.5	21	-N	1	2127	.50	.60	20
LOCK	31	2230	2243	2234	S24	E21	.489	8629	2.5	13	-F	1	2234	.40	.40	10 H

INTERVALS OF NO FLARE PATROL OBSERVATIONS  
PROVISIONAL

DECEMBER 1966

HOUR-UT



Observatories included:

Arcetri	Catania	Huancayo	Lockheed	Mitaka	Tortosa
Arosa	Haleakala	Istanbul	McMath-Hulbert	Monte Mario	Wendelstein
Capri-F (German)	Herstmonceux	Locarno	Meudon	Sacramento Peak	Zürich

# SOLAR FLARES

SEPTEMBER 1966

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OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IM- POR- TANCE	OBS.	MEASUREMENTS				REMARKS	
	DATE 1966	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MCMATH REGION	CMT DAY	COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
					LAT.	MER. DIST.											
SEPT																	
MANI	01	0034E	0041D	0038	N21	W46	.725	8461	28.6	7D	-B	P	0038	.31	.46		
HALE	01	0045E	0104	0046	N22	W46	.728	8461	28.6	19D	-B	1	P	0046	.31	.50	
HALE	01	0104E	0109D	0106	N26	W39	.664	8461	29.1	5D	-N	1	P	0106	.21	.30	
MANI	01	0159	0224	0205	N23	W37	.628	8461	29.3	25	-N			0205	.62	.80	
MITK	01	0200	0221	0203	N24	W37	.632	8461	29.3	21	-N	C	0203	1.13	1.50		
MITK	01	0208E	0222		N24	W37	.632	8461	29.3	14D	-N	C	0213	1.34	1.70	E	
MANI	01	0308	0315	0310	N23	W48	.751	8461	28.5	7	-N			0310	.15	.24	
HALE	01	0317	0340U	0323	N22	W45	.717	8461	28.8	23U	-N	1	P	0323	.83	1.20	
HALE	01	0344E	0348D	0345U	N21	W47	.736	8461	28.6	4D	-N	1	P	0345	.21	.30	
MITK	01	0409	0425	0414	N21	W49	.758	8461	28.5	16	-F	C	0414	1.34	2.00		
TACH	01	0409	0433	0414	N23	W50	.772	8461	28.4	24	-N	C	0414	.91	1.40	3.00 69	
MANI	01	0414E	0420		N20	W49	.756	8461	28.5	6D	-N			0414	.21	.21	
MANI	01	0624	0638	0631	N22	W49	.760	8461	28.6	14	-F			0631	.72	1.10	
ISTA	01	0655	0700		N21	W48	.747	8461	28.7	5	-N						
MANI	01	0712	0721	0715	N27	W40	.679	8461	29.3	9	-N			0715	.21	.28	
KAND	01	0715	0728		N21	W45	.714	8461	28.9	13	-F						
CAPS	01	0719	0728		N20	W50	.767	8461	28.6	9	-F	3		0725	.20	.30	155
CAPS	01	0728	0744	0737	N23	W40	.675	8461	29.3	12	-N	3		0735	.40	.50	157
MANI	01	0734	0746	0737	N26	W47	.683	8461	29.2	5	-N			0737	.36	.49	
ISTA	01	0734	0747		N21	W41	.668	8461	29.2								
ISTA	01	0752	0757		N22	W42	.683	8461	29.2								
KAND	01	0840	1340		N24	W42	.689	8461	29.2	300	-N						
CAPS	01	0853E	0859		N24	W45	.722	8461	29.0	6D	-N	3		0854	.30	.40	170
CAPS	01	1020	1032D		N23	W39	.652	8461	29.5	12D	-N	3		1026	.80	1.00	175
MONT	01	1052	1105		N23	W53	.801	8261	28.5	13	-N	C					
CAPS	01	1053E	1103		N20	W49	.756	8461	28.8	10D	-F	3		1055	.40	.70	157
KAND	01	1053	1340		N23	W48	.751	8461	28.9	167	IN			1056			
ABST	01	1054E	1343	1056	N21	W53	.798	8461	28.5	169D	1F	C		1056	1.53	2.45	DJK
ABST	01	1144	1159	1145	N26	W46	.738	8461	29.0	15	-B	C		1145	1.08	1.59	EJK 80
MONT	01	1145	1151		N27	W45	.731	8461	29.1	6	-B	C					
KAND	01	1145	1301		N26	W41	.686	8461	29.4	76	18			1153			
CAPS	01	1146E	1158		N24	W45	.722	8461	29.1	12D	-B	3		1147	1.20	1.90	201
CAPS	01	1217E	1223D		N24	W45	.722	8461	29.1	6D	-F	3		1219	.30	.50	157
HUAN	01	1237	1246	1239	N26	W45	.728	8461	29.2	9	-F	2		1239	.31	.38	DH
MCMA	01	1237	1247	1241	N26	W46	.738	8461	29.1	10	-B	C		1241	.26	.40	
CAPS	01	1239	1248		N24	W45	.722	8461	29.2	9	-B	3		1241	.80	1.30	216
MCMA	01	1305	1312	1307	N22	W54	.809	8461	28.5	7	-N	C		1307	.26	.50	
HUAN	01	1306	1313	1308	N22	W53	.800	8461	28.6	7	-F	2		1308	.31	.40	
MCMA	01	1320	1342	1328	N22	W54	.809	8461	28.5	22	-N	C		1328	.62	1.10	
HUAN	01	1321	1337	1328	N23	W53	.801	8461	28.6	16	-N	2		1328	.50	.65	
CAPS	01	1325E	1339D		N18	W55	.815	8461	28.4	14D	IN	3		1327	2.00	3.40	176
LOCK	01	1520	1542	1528	N23	W56	.829	8461	28.4	22	-N	C		1528	1.20	2.00	20
MCMA	01	1522	1538	1527	N22	W54	.809	8461	28.6	16	-B	C		1527	.83	1.40	DV
CAPS	01	1522	1539		N18	W55	.815	8461	28.5	17	B	3		1529	1.90	3.20	210
LOCA	01	1527	1547	1532	N21	W52	.788	8461	28.7	20	-F	V		1532	.85	1.30	
LOCK	01	1633	1641	1637	N23	W56	.829	8461	28.5	8	-N	C		1637	.40	.70	10
MCMA	01	1635	1640	1637	N22	W54	.809	8461	28.6	5	-F	C		1637	.26	.50	
LOCK	01	1640	1655	1645	N24	W46	.733	8461	29.2	15	-F	C		1645	.50	.80	10
MCMA	01	1643	1650	1645	N26	W46	.738	8461	29.2	7	-F	C		1645	.26	.40	
LOCK	01	1724	1800	1736	N23	W56	.829	8461	28.5	36	-N	C		1736	1.00	1.70	
MCMA	01	1727	1820	1731	N22	W55	.818	8461	28.6	53	-B	C		1731	.36	.60	
LOCK	01	1854	1900	1857	N23	W56	.829	8461	28.6	6	-F	C		1857	.30	.50	10 D
MCMA	01	1855	1859	1857	N22	W55	.818	8461	28.7	4	-N	C		1857	.31	.50	
MCMA	01	2009	2115D	2025	N25	W47	.746	8461	29.3	660	-N	C					
LOCK	01	2025	2042D	2042	N26	W48	.759	8461	29.3	17D	-N	C		2042	.83	1.40	E
HUAN	01	2035	2058	2041	N25	W49	.766	8461	29.2	23	-N	2		2041	1.00	1.60	20 E
HALE	01	2037	2105U	2041	N24	W51	.784	8461	29.0	28U	-B	1	P	2041	.80	1.00	
CULG	01	2117	2134	2122	S26	E07	.557	8473	2.4	17	-N	C		2122	.41	.48	G
MCMA	01	2130	2141	2133	N22	W56	.828	8461	28.7	11	-N	C		2133	.41	.70	
LOCK	01	2145	2210	2152	N24	W50	.774	8461	29.2	25	-N	C		2152	.80	1.30	10 E
MCMA	01	2147	2148D		N25	W47	.746	8461	29.4	10	-B	P		2147	.41	.60	
MANI	02	0008	0026	0014	N22	W59	.854	8461	28.6	18	IN			0014	1.40	2.52	
CULG	02	0008	0034	0013	N21	W60	.861	8461	28.5	26	-N	C		0013	.62	1.14	
LOCK	02	0008	0040	0013	N22	W58	.845	8461	28.7	32	-N	C		0013	1.00	1.90	20
CULG	02	0043	0055	0046	N26	W51	.768	8461	29.2	12	-F	C		0046	.21	.32	
HALE	02	0204	0242D	0208	N26	W51	.788	8461	29.3	380	IB	2	P	0208	1.55	2.40	L
HALE	02	0206E	0210D	0208	N25	W51	.786	8461	29.3	4D	-B	2	P	0208	1.03	1.70	
MANI	02	0208E	0229	0214	N23	W50	.772	8461	29.3	21D	IN			0214	2.58	4.10	
VORO	02	0209	0216	0210	N25	W52	.795	8461	29.2	7	-F	C		0210	1.08	1.75	61 EH
HALE	02	0237	0241	0239	N21	W60	.861	8461	28.6	4	-N	1	P	0239	.10	.20	
MANI	02	0256	0304	0258	N22	W53	.800	8461	29.1	8	-F	C		0258	.36	.59	
HALE	02	0351U	0412	0353	N24	W53	.803	8461	29.2	21U	-N	1	P	0353	.62	1.00	
MANI	02	0358	0407	0400	N22	W54	.809	8461	29.1	9	-N			0400	.67	1.12	
CATA	02	0602E	0610D	0604	N37	W47	.788	8460	29.7	80	IN			0604	1.66	2.76	190
MANI	02	0541E	0753D	0557	N22	W57	.837	8461	29.0	132D	28			0557	5.16	8.90	
ABST	02	0542	0956	0558	N24	W56	.830	8461	29.0	254	38	C		0601	18.01	18.00	96.40 113
TACH	02	0543	0815	0551	N24	W57	.839	8461	29.0	152	3N	C		0557	6.01	7.20	

## SOLAR FLARES

SEPTEMBER 1966

OBSERVATORY	OBSERVED UT				LOCATION				DURATION — MIN.	IM- POR- TANCE	OBS.	MEASUREMENTS					REMARKS					
	DATE 1966	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MOMATH REGION				COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %				
CAPS	02	0548E	0925	0602	N23	W55	.820	8461	29.1	217D	38	3	V	0600		17.80	651	FIKK				
IKOM	02	0610	0640D		N22	W58	.845	8461	28.9	30D	28		P	0625	4.33	7.70	1.75	F				
CULG	02	0611E	0716D	0611	N24	W56	.830	8461	29.1	650	38		P	0611	11.48	18.92		FL				
MONT	02	0631	0930		N26	W57	.841	8461	29.0	179	28		C			5.00						
KHAR	02	0645E	0808		N20	W60	.881	8461	28.8	83D	3N		P	0722	11.34	20.50	3.00	BEHKLO				
MEUD	02	0657E	0745		N20	W60	.861	8461	28.8	48D	2N		P	0700	3.61	7.50		UE				
KODA	02	0731E	0758D		N23	W56	.829	8461	29.1	27D	28		C	0734	4.51	8.06						
ARCE	02	0758E	0905D		N22	W54	.809	8461	29.3	67D	1B		C	0758	2.75	4.70						
HERS	02	0804E	0813D	0804	N21	W60	.861	8461	28.8	90	-N		P	0804	.41	.70		BE				
MONT	02	0825	0930		N21	W65	.900	8461	28.5	65	2B		C			5.00		O				
ARCE	02	0826E			N22	W54	.809	8461	29.3	1N			P	0826	1.20	2.00		C				
ARCE	02	0830	0905	0830	N18	W64	.892	8461	28.6	35	2B		C	0826	2.73	6.20						
KAND	02	1120E	1140D		N24	W59	.856	8461	29.0	20D			C	0830	4.69	11.10						
KAND	02	1125	1140D		N23	W66	.907	8461	28.5	15D								D				
KAND	02	1130	1140D		N24	W55	.821	8461	29.4	100								L				
ATHN	02	1304E	1307	1304	N26	W61	.873	8461	29.0	30	-N	2	P	1304	.66	1.40	1.50	D				
HUAN	02	1305E	1307		N26	W62	.881	8461	28.9	20	-F	2	P	1306	.25	.38						
HUAN	02	1359	1414		N22	W66	.907	8461	28.6	15	-F	1	C	1403	.31	.50						
MCMA	02	1403	1412	1404	N21	W68	.920	8461	28.5	9	-F		C	1404	.26	.60		D				
MCMA	02	1430	1450	1432	N28	W25	.522	8470	31.7	20	-F		C	1432	.21	.20		D				
ATHN	02	1545E	1555D	1546	N24	W69	.927	8461	28.5	100	-N	2	C	1546	.33	.90						
HUAN	02	1545	1558	1551	N20	W65	.900	8461	28.8	13	-F	2	C	1551	.25	.39						
MCMA	02	1755	1817	1758	N21	W68	.920	8461	28.6	22	-B		C	1758	.41	1.00		DH				
HUAN	02	1801E	1818		N20	W66	.907	8461	28.8	17D	-F	1	P	1805	.25	.40						
LOCK	02	1813	1837	1825	N32	W59	.866	8460	29.3	24	-F		C	1825	.50	1.00	10	L				
HALE	02	2114E	2152D	2137U	N23	W68	.920	8461	28.8	38D	-F	1	P	2137	.41							
LOCK	02	2222	2247		N23	W67	.916	8461	28.9	25	-N		C	2235	.90	2.00	20	H				
CULG	02	2330	2337	2335	N24	W64	.894	8461	29.2	7	-B		C	2335	.41							
LOCK	02	2331	2338	2335	N26	W66	.909	8461	29.0	7	-N		C	2335	.50	1.10	20					
CULG	03	0148	0203	0155	N23	W71	.938	8461	28.8	15	-N		C	0155	.21							
MANI	03	0241E	0247		N21	W04	.247	8474	2.8	60	-F		P	0242	1.16	1.20						
MANI	03	0414	0421	0416	N20	W73	.949	8461	28.7	7	-F		P	0416	.19	.42						
CULG	03	0433	0442	0435	N11	W09	.168	8483	2.5	9	-F		C	0435	.21	.21						
ATHN	03	0445E	0502	0447	N23	W74	.954	8461	28.6	17D	-N	2	P	0447	.66			H				
MANI	03	0448	0512	0454	N21	W70	.932	8461	29.0	24	-N		C	0454	.83	1.74						
CULG	03	0606	0616	0607	N24	W77	.967	8461	28.5	10	-N		C	0607	.21							
MANI	03	0606	0625	0614	N22	W70	.932	8461	29.0	19	-F		C	0614	.41	.87						
CATA	03	1013E	1100D	1043	N22	W75	.958	8461	28.8	47D	-N		P	1043	.74			151				
CAPS	03	1014E	1108D		N15	W75	.960	8461	28.8	54D	1N	3	P	1018	.80			175				
CATA	03	1042E	1100D	1049	N21	W85	.992	8461	28.1	180	-N		P	1049	.17			182				
ATHN	03	1048E	1105D	1055	N22	W78	.971	8461	28.6	17D	-N	2	P	1055	.33	3.00						
MONT	03	1413	1427		N25	W77	.967	8461	28.8	14	-N		C	1428	.57			D				
HUAN	03	1417	1445D		N32	W71	.940	8460	29.3	28D	-F	1	C	1539	.80	1.20	30	E				
LOCK	03	1534	1545	1539	N25	W47	.746	8467	31.1	11	-B		C	1538	.57	.71		TJ				
HUAN	03	1537	1543		N24	W48	.753	8467	31.1	6	-N	1	C	1538	.31			ET				
HALE	03	1622E	1626	1624	N19	W80	.979	8461	28.7	4D	-N	1	P	1624	.26			TJ				
HALE	03	1622E	1713	1656	N23	W78	.971	8461	28.8	51D	-F	2	P	1656	.26			ET				
HALE	03	1759	1811	1804	N19	W84	.990	8461	28.4	12	-N	1	C	1804	.15							
HALE	03	1920	1939	1937U	N22	W81	.982	8461	28.7	19	-N	1	C	1937	.21							
HALE	03	2052U	2113D	2057	N22	W84	.990	8461	28.6	21D	-N	1	P	2057	.21							
HALE	03	2252E	2305D	2301	N19	W84	.990	8461	28.7	13D	-B	1	P	2301	.41			TJ				
LOCK	03	2255	2310	2300	N19	W85	.992	8461	28.6	15	-F		C	2300	.30	1.00	10	ET				
CULG	03	2259E	2313	2259	N19	W89	.998	8461	28.3	14D	-N	1	P	2259	.21							
HALE	03	2333E	0010U	2353	N22	W84	.990	8461	28.7	37U	1B		P	2353	.52			ET				
LOCK	03	2346	2351	2348	N24	W85	.991	8461	28.6	5	-F	1	C	2348	.30	1.00	10	H				
CULG	04	0002	0008	0004	N19	W88	.997	8461	28.4	6	-N		C	0004	.21							
LOCK	04	0042	0048	0044	N24	W85	.991	8461	28.7	6	-F		P	0044	.30	1.00	10	H				
CULG	04	0405	0519	0438	N20	W90	.999	8461	28.4	74	1N		P	0438	4.43							
MANI	04	0410	0427D	0419	N22	W84	.990	8461	28.9	17D	38		P	0419	5.00	13.20						
MITK	04	0415E	0423D		N21	W90	.999	8461	28.4	8D	3N		C	0418	5.57			FH				
IKOM	04	0420	0515D		N22	W83	.987	8461	29.0	55D	1N		P	0425	.62			D				
HALE	04	0425E	0432D	0426U	N21	W87	.996	8461	28.7	7D	B	1	P	0426	2.58			DY				
TACH	04	0430E	0500D	0431	N20	W86	.994	8461	28.7	30D	2F		C	0431	3.65			YZ				
ISTA	04	0600E	0745		N21	W90	.999	8461	28.5	105D	1		C	0935	.68	3.80		A B				
ARCE	04	0935E			N21	W90	.999	8461	28.6		1N		P									
MCMA	04	1255E	1259D		N22	W90	.999	8461	28.8	4D	-F		P									
ATHN	04	1338E	1351	1339	N28	W59	.860	8467	31.1	13D	-B	2	P	1339	.33	.60	2.00	D D				
HUAN	04	1353E	1402		N30	W62	.885	8467	30.9	9D	-F	1	P	1355	.21	.31						
HUAN	04	1434E	1502		N23	W90	.999	8461	28.9	28D	-F	1	P	1440	.21							
LOCK	04	1740	1802	1750	N28	W64	.896	8467	30.9	30D	22		P	1750	.80	1.70	10	E				
MCMA	04	1747	1807		N29	W65	.904	8467	30.9	20	-N		P	1750	.52	1.20						
LOCK	04	1755	1807	1759	N24	W85	.991	8461	29.4	12	-N		C	1759	.30	1.00	20	E H D E				
MCMA	04	1756E	1759D		N22	W90	.999	8461	29.0	3D	-N		P									
HUAN	04	1756	1803		N23	W90	.999	8461	29.0	7	-N	1	C	1759	.31							
HALE	04	1756	1810	1757	N22	W87	.995	8461	29.2	14	N	1	C	1757	.36							

## SOLAR FLARES

SEPTEMBER 1966

III

OBSERVATORY	OBSERVED UT				LOCATION				DURATION — MIN.	IMPORTANCE	OBS.	MEASUREMENTS					REMARKS	
	DATE 1966	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH REGION	CMP DAY			COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %
LOCK	04	2140	2210	2153	N24	W85	.991	8461	29.5	30	-F	C	2153	.30	1.00		10	
CULG	04	2149	2227	2202	N29	W73	.949	8467	30.4	38	-N	C	2202	.41				
LOCK	04	2152	2220	2203	N29	W69	.928	8467	30.7	28	1N	C	2203	.90	2.10		20	
LOCK	04	2317	2344	2330	N29	W70	.934	8467	30.7	27	-F	C	2330	.50	1.20		10	
CULG	05	0038	0049	0042	N29	W70	.934	8467	30.8	11	-N	C	0042	.21				
	05	0100	0140	NO FLARE PATROL														
HALE	05	0348	0407	0356	N29	W71	.939	8467	30.8	19	-N	1	C	0356	.21			
CULG	05	0350	0410	0353	N28	W69	.928	8467	31.0	20	-N	C	0358	.31				
CULG	05	0511	0526	0515	N28	W71	.939	8467	30.9	15	-N	C	0515	.31				
KAND	05	0812	1020	N30	W75	.958	8467	30.7	128	-N								
KAND	05	1109	1226D	N22	E90	.999	8496	12.2	77D	28								
MEUD	05	1256	1302	1256	N28	W76	.963	8467	30.8	6	-N						D	
MEUD	05	1309	1315	1309	N29	W72	.944	8467	31.1	6	-F						D	
LOCK	05	1608	1635	1615	N26	W79	.974	8467	30.7	27	-F	C	1615	.30	.90		10	
MCMA	05	1611E	1620D	1616	N28	W78	.970	8467	30.8	9D	-N	P	1616	.41	1.50		D	
LOCK	05	1650	1700	1655	N27	W74	.954	8467	31.2	10	-N	C	1655	.30	.80		10	
HALE	05	1651	1704	1653	N29	W75	.958	8467	31.1	13	-N	1	C	1653	.21			
MEUD	05	1656E	1715	N30	W72	.945	8467	31.3	19D	-N								
LOCK	05	1747	1815	1753	N27	W77	.967	8467	31.0	28	-N	C	1753	.40	1.20		20	
HALE	05	1749	1814	1751	N30	W78	.970	8467	30.9	25	-N	1	C	1751	.26			
MCMA	05	1752E	1816	N28	W79	.974	8467	30.8	24D	-N	C	1753	.41	1.50				
LOCK	05	1923	1932	1926	N27	W77	.967	8467	31.0	9	-F							
HALE	05	1924	1930	1925	N30	W75	.958	8467	31.2	6	-N	1	C	1925	.31			
MCMA	05	1925	1930	1925	N28	W80	.977	8467	30.8	5	-N	C	1926	.52				
LOCK	05	2020	2045	2025	N27	W74	.954	8467	31.3	25	-N	C	2025	.40	1.10		20	
HUAN	05	2023	2052	2033	N28	W79	.974	8467	30.9	29	-F	2	C	2033	.57			
HALE	05	2031	2100	2034	N30	W78	.970	8467	31.0	29	-N	1	C	2034	.36			
LOCK	05	2116	2125	2119	N27	W77	.967	8467	31.1	9	-F							
LOCK	05	2240	2253	2245	N26	W80	.978	8467	30.9	13	-F	C	2245	.40	1.20		10	
HALE	05	2242	2250	2244	N26	W81	.981	8467	30.9	8	-N	1	C	2244	.26			
LOCK	05	2332	2351	2340	N26	W80	.978	8467	31.0	19	-F	C	2340	.40	1.20		10	
	06	0040	0100	NO FLARE PATROL														
	06	0120	0305	NO FLARE PATROL														
MITK	06	0329	0343	0331	N22	E90	.999	8496	12.9	14	1F	C	0331	.83				
MITK	06	0420	0423	0421	N22	E90	.999	8496	12.9	3	1F	C	0421	1.13				
MANI	06	0422E	0426D	N21	E85	.992	8496	12.6	4D	-N							1.00	
MEUD	06	0758	0810	0758	N30	W85	.990	8467	31.0	12	-F		0758	.21				
ISTA	06	0750E	0820	N21	E88	.997	8496	12.9	30D	-								
KAND	06	0810E	1045	N22	E83	.987	8496	12.6	155D	-								
ARCE	06	0950E	1005D	N24	E88	.997	8496	13.0	15D	1N	C	0950	.58	2.90				
MEUD	06	1019	1027	1020	N21	E80	.979	8496	12.4	8	-N	C	1020	.52				
ARCE	06	0825E	0840D	N32	E86	.992	8497	12.8	150	-F	C	0825	.26	1.10				
ARCE	06	0855E	0910D	N29	W90	.998	8467	30.6	150	-N	C	0900	.32	1.80				
ATHN	06	1220E	1231	1225	N28	W82	.983	8467	31.4	11D	-N	2	C	1225	.50			
HUAN	06	1220	1232	1221	N28	W88	.996	8467	30.7	12	-F	2	C	1221	.21			D
ATHN	06	1222	1227	1224	N19	E85	.992	8496	12.9	5	-F	2	C	1224	.33			D
HUAN	06	1453	1505	N22	E88	.978	8496	12.6	12	-F	1	C	1455	.21			E	
MCMA	06	1453	1516	1454	N22	E80	.978	8496	12.6	23	-N	C	1454	.26			D	
HALE	06	1632	1646	1641	N23	E76	.963	8496	12.4	14	-N	3	C	1641	.21			
MCMA	06	1739E	1740D	N34	E78	.970	8497	12.6	16D	-F	P	1739	.62					
HALE	06	1941	1959	1946	N23	E75	.958	8496	12.4	18	-N	2	C	1946	.21			
HALE	07	0309	0314	0311	N24	E66	.908	8496	12.1	5	-N	1	C	0311	.10			
ARCE	07	0840	0855D	0850	N28	E46	.744	8491	10.8	150	-F	C	0850	.74	1.10			
ARCE	07	0850E	0915D	N22	E67	.914	8496	12.4	25D	-N	C	0850	.32	.70				
MCMA	07	1258	1305	1300	N22	E65	.900	8496	12.4	7	-N	C	1300	.26	.50			
CAPS	07	1258E	1306	N21	E64	.892	8496	12.3	8D	-F	3	C	1259	.30			150	
NEUD	07	1259	1303	1300	N21	E63	.885	8496	12.3	4	-N	C	1300	.46	1.00			
ONDR	07	1259E	1303D	N23	E64	.893	8496	12.3	4D	-N	V	1259				CDH		
KIEV	07	1259E	1305D	1301	N23	E73	.949	8496	13.0	6D	-F	C	1301	1.03			DI	
LOCK	07	1510	1522	1516	N21	E64	.892	8496	12.4	12	-F	C	1516	.60	1.30			
LOCK	07	2105	2153	2125	N21	E60	.861	8496	12.4	48	-N	C	2125	1.30	2.60			
CULG	07	2109E	2159	2119	N23	E65	.900	8496	12.8	500	-B	P	2119	1.03			EL	
MCMA	07	2112E	2139D	2120	N23	E62	.878	8496	12.5	27D	-B	C	2120	1.03	2.40		E	
HUAN	07	2116	2125D	N23	E60	.863	8496	12.4	9D	-N	1	P	2122	1.13	1.75			
HALE	07	2116	2146	2121	N24	E62	.879	8496	12.5	30	-B	1	C	2121	1.24	2.60		
LOCK	07	2315	2330	2321	N21	E56	.826	8496	12.2	15	-F	C	2321	.20	.40		10	
	LOCK	08	0020	0055	0045	N21	E54	.808	8496	12.1	35	-F	C	0045	.40	.70		
CULG	08	0035	0055	0044	N22	E57	.836	8496	12.3	20	-N	C	0044	.21	.34			
HALE	08	0040	0048	0044	N21	E55	.817	8496	12.2	8	-F	1	C	0044	.26	.50		F
CULG	08	0249E	0305D	0257	N22	E57	.836	8496	12.4	16D	-N	P	0257	.21	.34			
HALE	08	0250	0301	0253	N22	E51	.780	8496	11.9	11	-N	1	C	0253	.26	.40		
HALE	08	0302	0320	0307	N22	E51	.780	8496	12.0	18	-N	1	C	0307	.15	.30		
CULG	08	0450	0457	0454	N24	E60	.863	8496	12.7	7	-N	1	C	0454	.21	.40		
CULG	08	0518	0550	0535	N25	E60	.864	8496	12.7	32	-N	C	0535	.41	.80			
TACH	08	0534	0545D	0537	N25	E61	.872	8496	12.8	110	-N	C	0537	1.55	3.00	2.60	60	

## SOLAR FLARES

SEPTEMBER 1966

OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IM- POR- TANCE	OBS.	MEASUREMENTS				REMARKS		
	DATE	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY			COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %
ARCE	08	0913E	0926D	S22	W15	.541	8484	7.3	13D	-F	C	0915	.36	.40		H		
MEUD	08	1104	1112	1106	S22	W07	.501	8484	7.9	8	-F	1106	.26	.30		E		
MEUD	08	1143	1203	1145	S22	W15	.541	8484	7.4	20	-F	1145	.36	.40		E		
HUAN	08	1615	1627	1620	N21	E52	.788	8496	12.6	12	-N	1	C	1620	.58	.74		
[MCMA]	08	1615	1650	1620	N22	E51	.780	8496	12.5	35	1B	C	1620	1.24	2.00		ELV	
LOCK	08	1650	1715	1700	N20	E51	.777	8496	12.5	25	-F	C	1700	.40	.60	10		
[LOCK]	08	1807	1947	1911	N20	E50	.766	8496	12.5	100	-N	C	1911	1.20	1.90	20		
[MCMA]	08	1907	1940	1910	N22	E51	.780	8496	12.6	33	-B	C	1910	1.03	1.60		EV	
HUAN	08	1916E	1920D	N21	E52	.788	8496	12.7	4D	-N	1	P	1916	.62	.79		E	
[MCMA]	08	2003E	2006D	N36	E51	.815	8497	12.7	3D	-F	1	P	2005	.31	.42		D	
[MCMA]	08	2003	2011	2006	N36	E52	.823	8497	12.7	8	-F	C	2006	.41	.70		OD	
[LOCK]	08	2328	2350D	S19	W26	.597	8484	7.0	7D	-F	C	2335	.40	.50	10			
[HALE]	08	2333	2005	2337	S20	W24	.589	8484	7.2	32	-N	1	C	2337	.41	.50		
CULG	08	2336	2400D	2357	N22	W50	.770	8494	5.2	24D	-N	C	2357	.52	.75			
[LOCK]	08	2344	0020	2355	N20	E50	.766	8496	12.7	36	1N	C	2355	1.40	2.20	20		
[HALE]	08	2345	0016	2356	N23	E48	.751	8496	12.6	31	-B	1	C	2356	.72	1.10		
CULG	09	0026	0043	0029	N24	W50	.773	8494	5.3	17	-N	C	0029	.41	.60		L	
LOCK	09	0028	0046	0033	N23	E48	.751	8496	12.6	18	-F	C	0033	.80	1.20	10		
HALE	09	0143	0203	0144	S18	W26	.588	8484	7.1	20	-F	1	C	0144	.21	.30		
HALE	09	0210	0234	0212	S18	W28	.608	8484	7.0	24	-F	1	C	0212	.10	.11		
CULG	09	0325	0400	0330	S18	W28	.608	8484	7.0	35	-F	1	C	0330	.10	.11		
BUCA	09	0624	0634	0625	S21	W26	.617	8484	7.3	10	-F	C	0626	.41	.52			
[ISTA]	09	0724	0745D	N21	W29	.518	8484	7.1	21D	1N	C	0729	2.25	2.90				
[MONT]	09	0720	0735	S15	W45	.764	8484	5.9	15	-B	C			2.00				
[NERA]	09	0724	0730	S22	W28	.644	8484	7.2	24	-B	C							
[ATHN]	09	0724E	0744	0727	S23	W27	.645	8484	7.3	20D	-N	2	0727	.93	1.20	1.70	202	
[CAT]	09	0726E	0746D	0731	S23	W27	.645	8484	7.3	20D	-B	0731	1.02	1.31				
[KAND]	09	0726	0747	S22	W24	.609	8484	7.5	21	-N	C							
[CAPS]	09	0730E	0740D	S24	W20	.600	8484	7.8	10D	-F	2	P	0822	.56	.70			
[BUCA]	09	0815	0820D	S20	W30	.645	8484	7.1	9D	-F	C							
[KAND]	09	0820	1006	S20	W30	.645	8484	7.1	106	-N	2	C						
[ATHN]	09	1057	1105	1059	S22	E38	.736	8495	12.3	8	-N	2	1059	.39	.50	1.50		
[MEUD]	09	1058	1106	1100	S23	E35	.715	8495	12.1	8	-N	C	1100	.31	.40		D	
ARCE	09	1328	1350D	1333	S23	W24	.620	8484	7.8	22D	-N	C	1333	.35	.40		C	
MCMA	09	1350	1420D	N20	W35	.694	8484	7.0	30D	-N	C	1415	1.12	1.50		CK		
[MCMA]	09	1422	1505	1434	S22	W35	.708	8484	7.0	43	-B	C	1434	.31	.40		E	
HUAN	09	1428	1455	S20	W36	.703	8484	6.9	28	-N	1	C	1436	.41	.48			
[ATHN]	09	1429E	1459	1430	S20	W32	.664	8484	7.2	30D	-N	C	1430	.83	1.10	1.70	166	
[CAPS]	09	1436E	1459	S21	W34	.691	8484	7.1	23D	-N	3	C	1437	.40	.60			
ATHN	09	1507	1517D	1509	N21	E38	.632	8496	12.5	10D	-N	2	1509	.50	.60	1.30		
HALE	09	1727	1737	1727	N22	E31	.549	8496	12.1	10	-N	3	C	1727	.31	.40		E
[LOCK]	09	1934	1952	1937	N22	E32	.562	8496	12.2	18	-N	C	1937	.60	.70	10		
[HALE]	09	1937E	1955	N22	E30	.537	8496	12.1	18D	-N	2	P	1937	.26	.30		E	
HALE	09	1950	2000	1955	S19	W36	.696	8484	7.1	10	-F	1	C	1955	.31	.40		
[LOCK]	09	2213	2250	2224	N22	E35	.599	8496	12.6	37	-N	C	2224	1.20	1.60	20		
[HALE]	09	2220	2242	2225	N23	E32	.567	8496	12.3	22	-N	2	C	2225	.83	1.00		
HALE	10	0212	0222D	0216	S19	W42	.755	8484	6.9	10D	-N	1	P	0216	.31	.50		L
CULG	10	0500	0512	0507	N22	E31	.549	8496	12.5	12	-N	C	0507	.62	.68		D	
IKOM	10	0600	0655D	S20	W45	.788	8484	6.9	55D	-F	V	0645	.31	.50				
[ATHN]	10	0603	0647	0608	N23	E32	.567	8496	12.7	44	1N	2	0608	2.15	2.60	1.45		
[CAPS]	10	0606E	0640D	N22	E31	.549	8496	12.6	34D	1F	3	P	0635	2.20	2.60	170		
[SIBE]	10	0612E	0650D	N21	E33	.570	8496	12.7	38D	1F	P	0626	3.41	4.50	55	CJ		
[IKOM]	10	0613	0634D	N22	E30	.537	8496	12.5	21D	-N	V	0613	.52	.60	1.51	95		
[CAT]	10	0618E	0705D	0635	N21	E31	.544	8496	12.6	47D	-N	V	0635	1.26	1.53	164		
BAKO	10	0656E	0702D	0657	N30	E28	.570	8496	12.4	6D	1B	P	0657	5.67	6.83	50		
ATHN	10	1220E	1302	1243	N23	E35	.604	8496	13.1	42D	1N	2	1243	1.98	2.40	1.70	CDHJ	
[OND]	10	1224	1238	1235	S21	W49	.827	8484	6.8	14	-N	V	1235	2.40	2.80	1.80		
[ATHN]	10	1225	1238	1227	S21	W47	.810	8484	7.0	13	-N	2	1227	.50	.80	1.60		
[CAPS]	10	1233E	1250D	S18	W45	.778	8484	7.1	2D	-N	3	C	1331	.40	.50	173		
ATHN	10	1259	1311	1259	S22	W38	.736	8484	7.7	12	-N	2	1259	.33	.50	1.50		
[ATHN]	10	1259	1412	1305	N23	E37	.628	8496	13.3	73	-B	2	1305	.50	.60	2.00		
[HUAN]	10	1259	1413	N21	E31	.544	8496	12.9	74	-F	1	C	1320	.21	.22		D	
[MCMA]	10	1300E	1435	N22	E30	.537	8496	12.8	95D	-N	C	1300	.62	.70		BPK		
[CAPS]	10	1327E	1401D	N23	E31	.555	8496	12.9	34D	-N	3	C	1331	.40	.50	173	DJ	
MCMA	10	1308E	1322D	S18	W22	.549	8487	8.9	14D	-F	C	1308	.52	.60		E		
[ATHN]	10	1419	1430	1424	S21	W47	.810	8484	7.1	11	-N	2	1424	.99	1.60	1.60		
[HUAN]	10	1421	1431	1425	S21	W51	.843	8484	6.8	10	-N	2	C	1425	.31	.43		D
MEUD	10	1421	1432	1425	S22	W53	.862	8484	6.6	11	-N	C	1425	.46	.90			
MCMA	10	1423	1430	1426	S22	W52	.855	8484	6.7	7	-N	C	1426	.31	.60		D	
[CAPS]	10	1424E	1430D	S22	W52	.855	8484	6.7	6D	-B	3	C	1426	.80	1.60	208		
ATHN	10	1427	1435	1428	N23	E37	.628	8496	13.4	8	-N	2	1428	.66	.80	1.80	EH	
MCMA	10	1510	1540	1518	S22	W52	.855	8484	6.7	30	-N	C	1518	.72	1.50			
[ATHN]	10	1514E	1521	1514	S21	W47	.810	8484	7.1	7D	-N	2	1514	.66	1.10	1.50		
[HUAN]	10	1514	1523	1518	S21	W51	.843	8484	6.8	9	-F	2	C	1518	.25	.34		D
MEUD	10	1515	1522	1519	S22	W53	.862	8484	6.7	7	-N	C	1519	.36	.70			
[LOCK]	10	1515E	1527	1519	S24	W53	.869	8484	6.7	12D	-N	C	1519	.40	.80	20		
MCMA	10	1607	1730	1615	N22	E30	.537	8496	12.9	83	-N	C	1615	1.03	1.20		EJ	

# SOLAR FLARES

III

SEPTEMBER 1966

OBSERVATORY	OBSERVED UT				LOCATION				DURATION — MIN.	IM- POR- TANCE	OBS.	MEASUREMENTS					REMARKS	
	DATE 1966	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION				MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %			
SEPT																		
LOCK	10	1607	1641	1624	S24	W53	.869	8484	6.7	34	=N	C	1624	.80	1.50	20	H	
MCMA	10	1609	1630	1611	S22	W52	.855	8484	6.8	21	=B	C	1611	.26	.50		DHK	
HUAN	10	1609	1632	1625	S21	W52	.851	8484	6.8	23	=N	1	C	1625	.50	.70		
ATHN	10	1610E	1618	1610	S21	W47	.810	8484	7.1	8D	=N	1	C	1610	.50	.80		
LOCK	10	1718	1727	1723	S24	W53	.869	8484	6.7	9	=N	C	1723	.60	1.10	20		
MCMA	10	1721	1726	1723	S22	W52	.855	8484	6.8	5	=B	C	1723	.26	.50		D	
HUAN	10	1721	1726	1723	S21	W53	.859	8484	6.7	5	=N	1	C	1723	.25	.35		D
LOCK	10	1800	1820	1807	S25	E22	.625	8495	12.4	20	=F	C	1807	.50	.70	10		
MCMA	10	1813	1940	1830	N22	E28	.511	8496	12.9	87	IB	C	1830	1.86	2.10	30	F	
LOCK	10	1814	1915	1834	N22	E24	.461	8496	12.6	61	IB	C	1834	3.50	3.90			
HUAN	10	1819	1935D	N22	E25	.473	8496	12.6	76D	1F	1	C	1837	1.88	1.92		E	
MCMA	10	1942	1955	1945	S22	W53	.862	8484	6.8	13	=N	C	1945	.41	.80		EH	
LOCK	10	2037	2055	2042	S24	W54	.877	8484	6.8	18	=F	C	2042	.40	.80	10		
MCMA	10	2041	2046	2042	S22	W53	.862	8484	6.9	5	=N	C	2042	.26	.50		DH	
CULG	10	2207	2220	2211	S21	W56	.801	8484	6.7	13	=N	C	2211	.31	.60			
LOCK	10	2208	2222	2214	S24	W54	.877	8484	6.9	14	=F	C	2214	.60	1.10	10		
MCMA	10	2210	2215	2212	S22	W54	.870	8484	6.9	5	=N	C	2212	.31	.60		D	
CULG	10	2240	2301	2243	S20	W50	.831	8484	7.2	21	=N	P	2243	.41	.72		F	
LOCK	10	2242	2312	2254	S22	W52	.855	8484	7.0	30	=F	C	2254	.70	1.30	10		
CULG	11	0015	0042	0024	N28	E19	.461	8496	12.4	27	=N	C	0024	.21	.22		L	
	11	0125	0145	NO FLARE PATROL														
	11	0150	0155	NO FLARE PATROL														
CULG	11	0203	0232	0212	N28	W68	.922		6.0	29	=N	C	0212	.21				
BUCA	11	0715E	0802D	0737	S22	W60	.911	8484	6.8	47D	=B	C	0737	.67	1.60			
ATHN	11	0732E	0745	0734	S23	W61	.919	8484	6.7	13D	=B	3	0734	.50	1.30	2.00		
CAPS	11	0737E	0744	S21	W60	.908	8484	6.8	7D	=B	3	0740	.70			201		
BUCA	11	0833E	0906D	S20	W53	.855	8484	7.4	33D	=N	C	0840	.44	.80				
CAPS	11	1302E	1324	S22	E12	.523	8495	12.4	22D	=N	3	C	1312	1.40	1.70			
MCMA	11	1303E	1327	1305	S25	E11	.559	8495	12.4	24D	=N	C	1305	1.03	1.20		160	
ATHN	11	1305E	1321	1307	S25	E12	.563	8495	12.4	16D	=N	2	C	1307	1.32	1.60		EH
HUAN	11	1308E	1332	S24	E11	.545	8495	12.4	24D	=N	1	P	1308	1.38	1.45		EH	
MEUD	11	1434	1440	1437	S22	W60	.911	8484	7.1	6	=F	C	1437	.31			E	
LOCK	11	1933	2000	1942	N21	E06	.258	8496	12.3	27	=F	C	1942	.30			10	
LOCK	11	2100	2145	2124	N23	E08	.301	8496	12.5	45	=F	C	2124	.70	.80		10	
LOCK	11	2224	2247	2232	N23	E08	.301	8496	12.5	23	=N	C	2232	.80	.90		10	
CULG	11	2227E	2246	2231	N22	E07	.280	8496	12.5	19D	=N	P	2231	.41	.42			
CULG	11	2335	2345	2340	S19	E66	.940	8501	16.9	10	=N	C	2340	.21				
CULG	12	0207	0224	0212	N28	W69	.928		6.9	17	=B	C	0212	.21				
CULG	12	0318	0358D	0325	N22	W05	.268	8496	11.8	40D	=N	P	0325	1.03	1.05		F	
TACH	12	0322	0345	0323	N24	E05	.300	8496	12.5	23	=B	C	0323	1.64	1.70			
HALE	12	0322	0350	0323	N22	E03	.260	8496	12.4	28	=B	2	C	0323	1.34	1.40		V
KAND	12	0712E	1229D	N08	E90	1.000	8505	19.0	317D	□	2	C	0830	.23				
ARCE	12	0825E	0840D	N06	E90	1.000	8505	19.1	15D	=N	C	1020	.58			CY		
ARCE	12	1015E	1100D	N06	E90	1.000	8505	19.2	45D	1N	C					ACJ		
OND'R	12	0858	1041	N15	E90	.999	8505	19.1	103	2B	C							
MONT	12	0925	N13	E90	1.000	8505	19.1			C								
ARCE	12	0930	0940	0930	N13	E80	.981	8505	18.4	10	1F	C	0930	1.44	4.60		C	
ATHN	12	0945E	1035	0948	N12	E90	1.000	8505	19.2	50D	1N	2	C	0948	.99			AC
ARCE	12	0950			N13	E90	1.000	8505	19.2		1N	C	0950	.74				
NERA	12	0925	1030D	N20	E90	.999	8506	19.1	65D	2	2	C	0936	.23			AC	
BUCA	12	0934E	0945D	N17	E87	.996	8506	18.9	11D	=B	C	0955	1.38					
ARCE	12	0955	1015D	N18	E90	.999	8506	19.2	20D	2N	C					AC		
OND'R	12	1242	1438	N36	W00	.481	8497	12.5	116	2F	C	1254						
MCMA	12	1247	1318	1255	N36	W00	.481	8497	12.5	31	=N	C	1255	1.03	1.20	1.30	CFGHI	
CAPS	12	1300E	1316D	N38	E03	.513	8497	12.8	16D	1F	3	C	1303	3.00	3.60	150	E	
	13	0110	0115	NO FLARE PATROL														
ARCE	13	0845E	0910D	0900	S20	W90	1.001	8484	6.6	25D	=N	C	0900	.26				
ATHN	13	0850E	0857	0851	N25	E17	.408		14.6	7D	=N	2	C	0851	.50	.50	1.50	
KAND	13	0930	1020	S20	W90	1.001	8484	6.6	50	18	C							
CAPS	13	1027E	1039D	N10	E85	.994	8505	19.8	12D	=F	3	1033	.20			153		
KAND	13	1155	1300	S25	W32	.705	8495	11.1	65	1N	C							
MONT	13	1256	1315	S39	E43	.875	8501	16.8	19	1N	C							
LOCK	13	1708	1735	1717	N23	W15	.364	8496	12.6	27	=F	C	1717	.40	.40			
MCMA	13	1713	1728	1715	N23	W17	.386	8496	12.4	15	=F	C	1715	.26	.30		D	
LOCK	13	1808	1819	1811	N24	W11	.339	8496	12.9	11	=F	C	1811	.40	.40		10	
HUAN	13	2051	2101	2054	N06	E81	.986	8505	19.9	10	=F	1	C	2054	.25			
HALE	13	2052	2100	2054	N06	E79	.980	8505	19.8	8	=N	1	C	2054	.21			
MCMA	13	2130	2134	2132	S18	W72	.968	8487	8.5	4	=N	1	C	2132	.26			D
CULG	13	2210	2220	2214	N06	E80	.963	8505	19.9	10	=N	1	C	2214	.21			
HALE	13	2210	2220	2212	N06	E79	.980	8505	19.8	10	=N	1	C	2212	.21			
HUAN	13	2212	2218	N07	E80	.982	8505	19.9	6	=F	1	C	2214	.21			D	
CULG	13	2322	2341D	2324	N06	E80	.983	8505	20.0	190	=N	P	2324	.21				
LOCK	13	2340	0030	2400	S24	W20	.599	8495	12.5	50	=F	C	2400	.80	1.00		10	
HALE	14	0310	0355	0314	N07	E75	.963	8505	19.8	45	1B	2	C	0314	.83			ETV
TACH	14	0311	0342	0314	N06	E80	.983	8505	20.1	31	1B	2	C	0314	.91			EL
CULG	14	0316E	0346	0316	N07	E79	.979	8505	20.1	300	=N	P	0316	.83			F	

## SOLAR FLARES

SEPTEMBER 1966

OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IM- POR- TANCE	OBS.	MEASUREMENTS						REMARKS	
	DATE 1966	START	END	MAX. PHASE	APPROX.		CENTRAL LAT.	MER. DIST.	MCMAH- PLAGE REGION	CMB DAY	COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %		
SEPT																			
HALE	14	0402	0417D	0417D	N10	E73	.952	8505	19.6	15D	-N	2	P	0417	.31			T	
CULG	14	0500	0512D	0505	N05	E75	.964	8505	19.8	12D	-N		P	0505	.41			F	
CULG	14	0544	0559	0548	S24	W21	.607	8495	12.7	15	-F		C	0548	.21	.25			
ATHN	14	0551E	0559	0552	S25	W18	.597	8495	12.9	8D	-N	2	C	0552	.33				
BUCA	14	0939E	0948D	0941	N05	E69	.931	8505	19.6	9D	-N		C	0939	.38				
MEUD	14	0940	0942D	0940	N05	E74	.959	8505	20.0	2D	-N		C	0941	.21			D	
ARCE	14	0940E	0950D	0940	N05	E73	.954	8505	19.9	10D	-N		C	0940	.61	1.50		EC	
MONT	14	1012	1055	S19	W90	1.001	8484	7.7	43	3D	-							A	
HERS	14	1013E	1047D	1025	S22	W90	1.001	8484	7.7	91	28		V					AC	
KAND	14	1014	1145	S20	W90	1.001	8484	7.7	64	1N	2	C	1020	.66				D	
ATHN	14	1016	1120	S22	W90	1.001	8484	7.7	18	1N		C	1020	.35					
ARCE	14	1020E		S21	W90	1.001	8484	7.7	4	B									
MEUD	14	1021E	1036D	S20	W90	1.001	8484	7.7	15D	-N									
BUCA	14	1126	1156	N05	E69	.931	8505	19.7	30	4D	-B		C	1026	.83				
BUCA	14	1225E	1307D	N05	E69	.931	8505	19.7	42D	-B			C	1141	.38				
KAND	14	1241	1259	N03	E71	.944	8505	19.9	18	1N	1	C	1228	.76					
ATHN	14	1306E	1312	1307	N08	E75	.962	8505	20.2	6D	-N	1	C	1307	.33				
MCMA	14	1332	1336	1333	N06	E70	.937	8505	19.8	4	B		C	1333	.26	.70	1.50	D	
CAPS	14	1333E	1335	N09	E68	.922	8505	19.7	2D	-F	3			1334				J	
CAPS	14	1354	1358	N05	E69	.931	8505	19.8	4	1F	3			1356	1.20			157	
ATHN	14	1355E	1414	1357	N06	E72	.948	8505	20.0	19D	-N	1	C	1357	.50	1.80		150	
MCMA	14	1357	1410	1359	N06	E70	.937	8505	19.8	13	-N		C	1359	.31	.80		D	
ATHN	14	1416	1436	1420	N06	E73	.953	8505	20.1	20	1N	1	C	1420	.83	1.90	1.68	FJ	
CAPS	14	1418	1424D	N06	E69	.930	8505	19.8	6D	1N	3			1420	.52	1.40		EE	
MCMA	14	1418	1427	1420	N08	E70	.935	8505	19.8	9	-N		C	1420	.52	1.40		TE	
HUAN	14	1509	1514	1511	S23	W27	.645	8495	12.6	5	-F	2	C	1511	.37	.42		DE	
LOCK	14	1510E	1515	1510U	S24	W27	.654	8495	12.6	5D	-F		C	1510	.70	.90	10	TEF	
HALE	14	1613E	1659	1618	N04	E70	.938	8505	19.9	46D	-N	2	P	1618	.21				
HALE	14	1640	1725	1706	N05	E64	.896	8505	19.5	45	1B	3	C	1706	.93				
MCMA	14	1658	1702D	1700	N06	E70	.937	8505	20.0	4D	-N		C	1700	.26	.70			
MEUD	14	1702E	1706D	N05	E66	.911	8505	19.7	4D	-N				1706	.46				
HUAN	14	1705E	1718	N04	E66	.912	8505	19.7	13D	-N	1	P	1707	.72					
HALE	14	1706	1713	1707	N11	E71	.940	8505	20.0	7	-N	3	C	1707	.41			TEV	
HALE	14	1739	1821	1802	N05	E64	.896	8505	19.5	42	-N	2	C	1802	.26				
HALE	14	1825	1853	1831	N06	E64	.895	8505	19.6	28	-B	2	C	1831	.52				
LOCK	14	1825	1905	1837	N22	W30	.537	8496	12.5	4D	-N		C	1837	1.10	1.30		20	
HALE	14	1827	1856	1841	N23	W30	.543	8496	12.5	29	-N	1	C	1841	1.44	1.70			
HALE	14	2021	2039	2026	N05	E63	.888	8505	19.6	18	-N	1	C	2026	.41	.90		T	
HUAN	14	2032E	2036D	N04	E64	.897	8505	19.7	4D	-F	1	P	2033	.50	.78		D		
LOCK	14	2050	2123	2100	S30	E20	.668	8505	16.4	33	-F		C	2100	.50	.70	10	F	
HALE	14	2148	2200D	2152	N04	E65	.904	8505	19.8	12D	-N		P	2152	.83			TF	
HALE	14	2148	2245	2154	N06	E63	.887	8505	19.6	57	-N	1	C	2154	.62	1.40			
LOCK	14	2335	0020D	2348	N21	E66	.907	8506	19.9	45D	-N		P	2348	.31			F	
LOCK	14	2338	0002	2349	N21	E64	.892	8506	19.8	24	-N		C	2349	.80	1.70	10		
LOCK	15	0034	0045	0037	N06	E59	.853	8505	19.4	11	-N		C	0037	.40	.80		10	
LOCK	15	0047	0118D	0055	S28	E15	.617	8501	16.2	31D	-N		C	0055	1.00	1.30		20	
HALE	15	0049	0108	0053	S26	E14	.586	8501	16.1	19	-N	1	C	0053	.62	.80		F	
MANI	15	0052E	0057D	S18	E17	.504	8501	16.3	5D	-N			C	0052	.62	.66		FF	
HALE	15	0110	0135	0116	S28	E15	.617	8501	16.2	25	-N	1	C	0116	.41	.50			
HALE	15	0203	0225	0208	S26	E11	.572	8501	15.9	22	-N	1	C	0208	.52	.60			
HALE	15	0256	0304	0257	N05	E57	.836	8505	19.4	8	-N	1	C	0257	.21	.40			
MANI	15	0308E	0316D	N22	E90	.999	8509	21.9	8D	-N	1	C	0308	.35	1.13				
HALE	15	0338	0347	0339	N05	E57	.836	8505	19.4	9	-N	1	C	0339	.31	.60			
MANI	15	0436E	0451D	N21	W38	.632	8496	12.3	15D	-F			C		.36	.47			
ARCE	15	0800E	1000D	N22	W40	.660	8496	12.3	120D	-N			C	0810	.67	.90		H	
HUAN	15	1440	1448	1444	N20	E80	.979	8509	21.6	8	-F	1	C	1444	.25			D	
LOCK	15	1515	1535	1520	N21	W42	.680	8596	12.5	20	-F		C	1520	.80	1.10		E	
HUAN	15	1517	1530D	N21	W40	.656	8496	12.6	13D	-F	2		C	1521	.36	.40			
ATHN	15	1519	1529	1522	N23	W39	.651	8496	12.7	10	-N	1	C	1522	.37	.50	1.30	D	
MCMA	15	1519	1530	1521	N20	W40	.653	8496	12.6	11	-F		C	1521	.26	.30			
LOCK	15	1605	1635	1623	N22	E80	.978	8509	21.7	30	-F		C	1623	.40	1.20	10		
HALE	15	1616	1639	1625	N21	E76	.963	8509	21.4	23	-B	1	C	1625	.41				
HUAN	15	1621	1635	N20	E80	.979	8509	21.7	14	-F	1	C	1624	.25			D		
HALE	15	1802E	1819	1804	N21	E44	.703	8496	12.5	17D	-N	1	C	1804	.26	.40			
MCMA	15	1803	1810	N20	E40	.652	8496	12.8	7	-F	1	C	1804	.26	.30				
HALE	15	1821	1829	1822	N05	E52	.785	8505	19.7	8	-B	1	C	1822	.52	.80		E	
MCMA	15	1822E	1900	N07	E56	.824	8505	20.0	38D	-N			C	1822	.62	1.10			
HALE	15	1823	1845	1825	N09	E55	.813	8505	19.9	22	-B	1	C	1825	.41	.70			
HUAN	15	1828E	1830D	N08	E58	.843	8505	20.1	2D	1F	1	P	1828	1.40	1.85				
LOCK	15	1912	1950	1920	N03	E51	.777	8505	19.6	38	-N	1	C	1920	.60	1.00	10		
HALE	15	1917	1925	1918	N04	E51	.775	8505	19.6	8	-N	1	C	1918	.21	.30			
MCMA	15	1919E	1927	N04	E52	.786	8505	19.7	8D	-N			C	1919	.41	.70			
MCMA	15	1937	2030	1939	N04	E52	.786	8505	19.7	53	-N			C	1939	.41	.70		EK
MCMA	15	2019	2033	2023	N03	E51	.777	8505	19.7	14	-F				2022	.41	.70		
LOCK	15	2021	2028	2024	N04	E51	.775	8505	19.7	7	-N	1	C	2024	.50	.80	10		
LOCK																			

## SOLAR FLARES

IIIp

SEPTEMBER 1966

OBSERVATORY	OBSERVED UT				LOCATION				DURATION — MIN.	IM- POR- TANCE — MIN.	OBS.	MEASUREMENTS				REMARKS		
	DATE 1966	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMAHON PLAGE REGION	CMP DAY			MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %			
LOCK	15	2104	2117	2107	N06	E51	.773	8505	19.7	13	=N	C	2107	.70	1.10	10		
LOCK	15	2322	2335	2325	N05	E50	.763	8505	19.7	13	=N	C	2325	.90	1.40	20		
VORO	16	0120	0218	0137	N07	E50	.761	8505	19.8	58	2F	C	0137	5.40	8.42	59	EJK	
HALE	16	0121	0212	0125	N05	E45	.704	8505	19.4	51	=B	I	0125	.62	.90	TEI		
HALE	16	0121	0220	0125	N09	E49	.749	8505	19.7	59	=B	I	0121	.98	1.50	TE		
CULG	16	0124E	0210	0135	N05	E50	.763	8505	19.8	46D	1N	P	0135	1.86	2.40	F		
IKOM	16	0130	0133	N07	E50	.761	8505	19.8	3	1N	V					E		
MANI	16	0132E	0200	0137	N04	E49	.753	8505	19.7	28D	2N	C	0137	3.51	5.20	D		
MITK	16	0239	0254	0240	N21	E70	.932	8509	21.4	15	=N	C	0240	.62		TIF		
HALE	16	0250	0420D	0255	N05	E46	.717	8505	19.6	90D	=N	I	0255	.41	.60	E		
MITK	16	0427	0449	0446	N05	E47	.729	8505	19.7	22	=N	C	0446	1.34	1.90			
ISTA	16	0705	0725	N06	E45	.703	8505	19.7	20	-								
KAND	16	0714	1330D	N03	E45	.707	8505	19.7	376D	-F								
MANI	16	0715E	0733D	N04	E48	.741	8505	19.9	18D	-F								
CATA	16	0717E	0732D	0719	N05	E44	.692	8505	19.6	150	=N		0716	.52	.78	178		
KIEV	16	0750E	0755D	0750	N20	E75	.959	8509	22.0	5D	=F	C	0719	.19	.26	65	DG	
ISTA	16	0750	0758	N21	E72	.944	8509	21.7	8	1			0750	2.58				
BUCA	16	0750E	0829D	N21	E68	.920	8509	21.4	39D	-F		C	0813	.20				
ATHN	16	0751E	0758	0753	N20	E70	.932	8509	21.6	7D	=N	I	0753	.41		1.70	EJ	
BUCA	16	0756E	0901D	N06	E43	.678	8505	19.6	65D	=N		C	0811	1.25	1.60			
ARCE	16	0822E	0828D	N05	E42	.667	8505	19.5	6D	=N		C	0822	.93	1.20			
KAND	16	0847E	1330D	N18	E72	.944	8509	21.8	283D	1N						J		
BUCA	16	0857E	0914D	N20	E67	.913	8509	21.4	17D	-F		C	0901	.47				
ATHN	16	0858E	0907	0900	N19	E69	.926	8509	21.5	9D	=N	I	0900	.33		1.50		
ATHN	16	0910E	0917D	0912	N33	W46	.763	8491	12.9	7D	=N	I	0912	.66	1.00	1.50	DG	
KHAR	16	0912	0920	N33	W67	.919	8491	11.4	8	1N	V							
KAND	16	0912	0923	N38	W58	.871	8491	12.0	11	=B						C		
ARCE	16	0915	0925	N37	W45	.772	8491	13.0	10	IN	C	0915	1.40	2.20				
SALT	16	0912E	0916	N51	W03	.693	8500	16.2	4D	=N	I	0913	1.00	1.50				
KAND	16	0914	1330	N24	W51	.784	8496	12.6	256	1N	V		0929		2.30			
KHAR	16	0944	0952	N19	E68	.920	8509	21.5	8	1N		V	0947		2.80		DH	
ATHN	16	0944	1005	0948	N20	E70	.932	8509	21.7	21	=N	I	0948	.69		1.40	J	
BUCA	16	0947E	1005D	N21	E67	.914	8509	21.4	18D	1N	C	0950	1.16					
BUCA	16	1040E	1059D	N21	E67	.914	8509	21.5	19D	1N	C	1049	1.34					
ATHN	16	1047E	1100	1050	N20	E70	.932	8509	21.7	13D	=N	I	1050	1.09		2.00		
BUCA	16	1138E	1219D	N21	E66	.907	8509	21.4	41D	1N	C	1152	1.16			J		
CAPS	16	1140E	1159D	N21	E70	.932	8509	21.7	19D	=N	I	1145	.20			157		
ATHN	16	1145	1210	1150	N20	E70	.932	8509	21.7	25	=N	I	1150	.72		1.80	D	
BUCA	16	1205E	1220D	N06	E41	.653	8505	19.6	15D	=F	C	1214	.58	.80		BELV		
BUCA	16	1238E	1302D	N06	E40	.639	8505	19.5	24D	=F	C	1246	.76	1.00				
BUCA	16	1237E	1254D	N21	E65	.900	8509	21.4	17D	1N	C	1243	.76					
HUAN	16	1240	1252	1244	N21	E70	.932	8509	21.8	12	=F	I	1244	.21			D	
CAPS	16	1243E	1249D	N21	E70	.932	8509	21.8	6D	=N	I	1245	.20			D		
MCMA	16	1243E	1310	N22	E70	.932	8509	21.8	27D	1N	C	1243	.72	1.80		DVW		
ATHN	16	1244E	1255	1250	N20	E69	.926	8509	21.7	11D	=N	I	1250	.72		1.60	E	
HUAN	16	1419	1434	N04	E40	.642	8505	19.6	15	=F	I	1431	1.08	1.25				
NERA	16	1425	1437	N22	E65	.900	8506	21.5	12	2	2	C	1430	.92	1.40	1.90		
MCMA	16	1427	1500D	1435	N22	E70	.932	8509	21.9	33D	=B	C	1435	.62	1.60		DVW	
MCMA	16	1440			N22	E69	.926	8509	21.9	30	1N	C	1440	1.13	1.60			
CAPS	16	1429E	1439D	N21	E70	.932	8509	21.9	10D	=B	I	C						
HUAN	16	1430	1441	1435	N21	E68	.920	8509	21.7	11	=B	I	1435	.50		2.10	DH	
ONDR	16	1438E	1443D	N20	E67	.913	8509	21.6	5D	1N	V		1440			H		
MCMA	16	1428	1440	1431	N05	E41	.654	8505	19.7	12	=F	C	1431	.83	1.10			
ATHN	16	1428	1445	1430	N06	E47	.728	8505	20.1	17	=N	I	1430	.92	1.40	1.90		
MCMA	16	1612	1642	N22	E69	.926	8509	21.9	30	1N	I	C				EL		
MCMA	16			1627									1627	1.03	2.60			
LOCK	16	1622	1642	1627	N22	E67	.914	8509	21.7	20	1N	C	1627	1.40	3.10			
HALE	16	1623E	1641	1632	N22	E63	.886	8509	21.4	18D	=N	I	1632	.36	.80		TE	
HUAN	16	1625	1639	N22	E67	.914	8509	21.7	14	=N	I	C	1633	.31			D	
LOCK	16	1615	2215	1710	N04	E36	.587	8505	19.4	36D	28		C	1845	4.10	5.30		L
LOCK	16			1845														
LOCK	16			2110														
HALE	16	1623	2120	1702	N05	E34	.557	8505	19.2	297	=B	I	1702	1.24	1.50		TFIJL	
HUAN	16	1640	1725D	N03	E35	.575	8505	19.3	45D	1F	I	P	1700	1.70	1.85			
MCMA	16	1640	2148D	1702	N06	E40	.639	8505	19.7	308D	1N	C	1702	1.86	2.40		FKLU	
MCMA	16	1812			N22	E40	.638	8505	19.6	5D	1N	C	1812	2.37	3.00			
HUAN	16	1800E	1940D	N02	E37	.605	8505	19.5	1000	=N	I	P	1820	1.29	1.41			
MCMA	16	1740	1838	1744	N22	E68	.920	8509	21.8	58	1B	C	1744	.52	1.30		EV	
MCMA	16	1828			N22	E68	.587	8505	21.6	58		C	1828	1.55	3.70			
HALE	16	1818	1840	1821	N22	E66	.907	8509	21.7	22	1N	I	C	1821	.83			T
HUAN	16	1824	1836	N22	E67	.914	8509	21.8	12	=B	I	C	1828	.74	1.22			
LOCK	16	1830E	1840	1830U	N22	E67	.914	8509	21.8	10D	1N	C	1830	1.00	2.20			
HALE	16	1927	1938	1929	N21	E66	.907	8509	21.8	11	=N	I	C	1929	.46			TF
LOCK	16	1935	2005	1941	N24	W58	.847	8496	12.5	30	1N	I	C	1941	1.30	2.30		
HALE	16	1936	2000	1941	N24	W55	.821	8496	12.7	24	=F	I	C	1941	.62	1.10		F
HUAN	16	1938	1951	N24	W58	.847	8496	12.5	13	=N	I	C	1941	.70	.98		E	
HALE	16	1945	2142	1955	N22	E62	.878	8509	21.5	117	=N	I	C	1955	.31	.70		TFK

## SOLAR FLARES

SEPTEMBER 1966

OBSERVATORY	OBSERVED UT				LOCATION				DURATION — MIN.	IM-POR-TANCE	OBS.	MEASUREMENTS					REMARKS				
	DATE	START	END	MAX. PHASE	APPROX.	CENTRAL DISTANCE	MCMATH REGION	CMP DAY				COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %			
					LAT.	MER. DIST.	—	—						—	—	—	—				
LOCK	16	2035	2053	2043	N22	E67	.914	8509	21.9	18	-F	C	2043	.70	1.50		10	H			
LOCK	16	2058	2115	2102	N21	E64	.893	8509	21.7	17	-N	C	2102	.50	1.10		10	A DT			
MCMC	16	2118	2148D	2129	N27	E90	.998		23.6	300	1B	C	2129								
HUAN	16	2207	2210D	N22	W60	.862	8496	12.4	3D	-F	1	P	2210	.37	.54						
HALE	16	2258	2356D	2330	N22	E63	.886	8509	21.7	58D	-F	1	P	2330	.62	1.40					
LOCK	16	2330	0018	2350	N04	E34	.559	8505	19.5	48	-N	C	2350	.90	1.10		10				
CULG	17	0031	0038	0033	N09	E34	.555	8505	19.6	7	-F	C	0033	.31	.36			L			
HALE	17	0109	0135	0111	N21	E62	.877	8509	21.7	26	-F	1	C	0111	.52	1.10					
HALE	17	0238	0301	0251	N04	E29	.485	8505	19.3	23	-N	1	C	0241	.21	.22					
CULG	17	0345	0352	0346	N09	E34	.555	8505	19.7	7	-F	C	0346	.31	.36			L L			
CULG	17	0432	0442	0435	N09	E34	.555	8505	19.7	10	-N	C	0435	.31	.36						
CULG	17	0451	0525	0514	N20	E61	.869	8509	21.8	34	-N	C	0514	.52	.95						
CULG	17	0500	0525	0509	N21	E60	.861	8509	21.7	25	-N	C	0509	.62	1.18			D			
TACH	17	0503E	0527D	0509	N23	E62	.879	8509	21.9	240	1	C	0509	.83	1.60	2.30	81				
ATHN	17	0505E	0526	N20	E59	.852	8509	21.6	210	-B	1	C	0553	.21	.45	2.00					
CULG	17	0545	0602	0553	N26	W64	.895	8496	12.4	17	-N	C	0553	.17	.30	1.30		L L			
ATHN	17	0556E	0604	0556	N24	W62	.879	8496	12.6	80	F	3	C	0634	.41	.46					
CULG	17	0633	0642	0634	N09	E29	.481	8505	19.4	9	-N	C	0644	.41	.46						
KAND	17	0650E	1020D	N25	W65	.901	8496	12.4	2100	38											
ISTA	17	0830	0845	N07	E30	.496	8505	19.6	15	-			1016			13.30					
CATA	17	0832E	0845D	0833	N05	E30	.499	8505	19.6	130	-N		0833	.98	1.14		184				
MEUD	17	0833	0843	0835	N05	E29	.483	8505	19.5	10	-N		0835	.52	.60			E			
ATHN	17	0833	0847	0836	N07	E30	.496	8505	19.6	14	-N	3	0836	1.02	1.20	1.60					
KAND	17	0650E	1020D	N18	E58	.843	8509	21.6	2100	52	IN	3	0840	1.09	2.20	1.70					
ATHN	17	0831	0923	0840	N23	E60	.863	8509	21.9	100	IN	3	C	0852	1.31	2.20					
ISTA	17	0835	0905	N22	E61	.870	8509	21.9	30	1			0855	3.96	7.50	2.00	2.10	EHO			
CATA	17	0950E	1036D	1008	N23	W64	.893	8496	12.6	280	4N		1012	13.61	42.10		238				
KIEV	17	0952E	1010D	0956	N25	W70	.933	8496	12.2	460	1B		1008	1.61	3.81	7.22	65	EI BFH			
ONDRA	17	0958E	1038	N24	W60	.864	8496	12.9	400	2F	V		1000				2.50				
CAPS	17	1022E	1138D	N24	W68	.921	8496	12.3	760	28	2		1015	2.96	6.00		265				
BUCA	17	1118	1201D	N05	E28	.468	8505	19.6	43D	-F	2	C	0958	4.05				F FF CF			
CAPS	17	1119E	1138D	N04	E29	.485	8505	19.6	190	-N	2	C	1005	1.96	4.30						
LOCK	17	1654	1705	1658	N03	E28	.442	8505	19.7	11	-F	C	1658	.50	.60			G			
LOCK	17	1800	1830	1810	N21	E55	.817	8509	21.9	30	-F	C	1810	.60	1.00						
HUAN	17	2034	2116	N21	E55	.817	8509	22.0	42	-F	1	C	2045	.37	.40			10			
LOCK	17	2040	2105	2048	N09	E20	.340	8505	19.4	25	-N	C	2048	1.20	1.30		20	E			
HALE	17	2045	2055	2049	N10	E18	.309	8505	19.2	11	-B	1	C	2049	.83	.90			I E		
HUAN	17	2046	2056	2048	N10	E21	.358	8505	19.4	10	-N	1	C	2048	.62	.62					
LOCK	17	2133	2146	2140	N09	E20	.340	8505	19.4	13	-F	C	2140	.50	.60			10			
HALE	17	2159	2209	2203	N10	E18	.309	8505	19.3	10	-F	1	C	2203	.52	.52			I		
LOCK	17	2159	2212	2204	N09	E20	.340	8505	19.4	13	-F	C	2204	.60	.70						
CULG	17	2201	2211	2203	N08	E21	.356	8505	19.5	10	-N	C	2203	.41	.52			10			
CULG	17	2208	2224	2217	N21	W73	.949	8496	12.4	16	-N	C	2217	.21							
HALE	17	2215	2225	2218	N22	W71	.938	8496	12.6	10	-B	1	C	2218	.36						
CULG	17	2314	2324	2316	N21	W73	.949	8496	12.5	10	-N	1	C	2316	.21						
HALE	17	2316	2327	2317	N22	W71	.938	8496	12.6	11	-B	1	C	2317	.41						
CULG	17	2334	0008D	2359	N07	E23	.388	8505	19.7	34D	1N	P	2359	6.50	6.93			FL			
LOCK	17	2337	0017	2359	N08	E19	.323	8505	19.4	40	-N	C	2359	1.50	1.70		20	I J			
HALE	17	2340	0025	2345	N08	E26	.435	8505	19.9	45	-B	1	C	2345	.93	1.00			H		
CULG	17	2355	0008D	2358	N10	E21	.358	8505	19.6	13D	-B	1	P	2358	1.75	1.78			EIT		
HALE	17	2356	0012	2359	N10	E18	.309	8505	19.3	16	-B	1	C	2359	1.44	1.50					
VORO	18	0001	0008		N10	E20	.342	8505	19.5	7	-N	P	0001	.27	.29		60	E			
HALE	18	0017	0025	0021	N22	W73	.949	8496	12.5	8	-F	1	C	0021	.21						
CULG	18	0159	0205	0202	N24	W75	.958	8496	12.5	6	-N	1	C	0202	.41						
HALE	18	0200	0205	0202	N24	W75	.958	8496	12.5	5	-N	1	C	0240	.41	.42			L		
CULG	18	0233	0304	0240	N09	E18	.308	8505	19.5	31	-N	1	C	0235	.21	.22					
HALE	18	0234	0242	0235	N04	E18	.312	8505	19.5	8	-N	1	C	0241	.46	.50			E		
HALE	18	0234	0300	0241	N10	E18	.309	8509	19.5	26	-B	1	C	0308	.21	.22					
HALE	18	0307	0311	0308	N04	E18	.312	8505	19.5	4	-N	1	C	0319	.72	.80					
HALE	18	0314	0353	0319	N05	E17	.293	8505	19.4	39	-B	1	C					E EIT			
HALE	18	0257	0423D	0415	N22	E47	.739	8509	21.6	86D	-B	2	P	0415	1.13	1.70					
TACH	18	0330	0430	0414	N24	E49	.764	8509	21.8	60	-N	C	0407	1.19	1.60	4.40	87	E KF			
ABST	18	0402E	0908D	0412	N24	E48	.754	8509	21.8	306D	1N	C	0412	2.52	3.86			EK			
CULG	18	0404	0407D	0405	N22	E51	.780	8509	22.0	30	-N	P	0405	.41	.64						
MANI	18	0404E	0423D	0411	N21	E48	.747	8509	21.8	19D	-N	C	0411	.83	1.30						
BUCA	18	0735E	0839D		N22	E44	.706	8509	21.6	64D	-N	C	0813	.66	.90						

# SOLAR FLARES

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SEPTEMBER 1966

OBSERVATORY	OBSERVED UT				LOCATION				DURATION — MIN.	IM-POR-TANCE COND. TYPE	OBS.	MEASUREMENTS				REMARKS						
	DATE 1966	START	END	MAX. PHASE	APPROX. LAT.	CENTRAL MERC. DIST.	MCMAHON PLAGE REGION	CMT DAY					—	—	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %			
								—				—	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %					
ATHN	18	0805	0820	0807	N21	E43	.692	8509	21.6	15	=N	2		0807	.33	.50	1.40					
ISTA	18	0805	0820		N21	E48	.747	8509	21.9	15	=											
ATHN	18	0830E	0843	0833	N21	E41	.668	8509	21.4	130	=N	2		0833	1.32	1.80	1.30					
KAND	18	0833	0934		N20	E43	.689	8509	21.6	61	=N			0845		2.20						
BUCA	18	0844E	0926D	0902	N22	E43	.694	8509	21.6	420	=B											
ATHN	18	0845	0911	0850	N21	E41	.668	8509	21.4	26	=N	2		0850	1.49	1.90	1.60					
WEND	18	0845E	0913		N22	E45	.717	8509	21.7	14	=N											
MEUD	18	0854	0908		N21	E45	.714	8509	21.7													
KIEV	18	0900E	0920D	0901	N20	E46	.724	8509	21.8	200	=F			C	0901	3.09	4.00		60			
MANI	18	0900E	0924D	0908	N21	E45	.714	8509	21.8	240	=N			C	0908	2.27	3.50					
BUCA	18	0913E	0919D		N11	E16	.280	8505	19.6	60	=F			C	0915	.83	.90					
BUCA	18	0946E	1059D		N23	E43	.697	8509	21.6	730	=N			C	1011	.99	1.40					
BUCA	18	1021E	1051D		N10	E17	.293	8505	19.7	300	=F			C	1021	.33	.34					
BUCA	18	1109E	1248D		N09	E15	.258	8505	19.6	990	=N			C	1119	.99	1.00					
BUCA	18	1202E	1300D		N10	E14	.244	8505	19.6	580	=F			C	1227	.50	.50					
MCMA	18	1258	1304	1259	N09	E11	.192	8505	19.4	6	=N			C	1259	.62	.63					
MEUD	18	1258	1305	1300	N08	E12	.297	8505	19.4	7	=N			C	1300	.77	.80					
CAPS	18	1259E	1302D		N11	E18	.312	8505	19.9	30	=N	3		C	1300	.80	.80		176			
BUCA	18	1259E	1312D	1259	N10	E12	.211	8505	19.4	130	=B			C	1259	.50	.50					
MCMA	18	1340E	1350D		N29	W79	.974	8496	12.6	100	=F			C	1344	.31	.50					
ATHN	18	1410	1430D	1420	N28	W78	.971	8496	12.7	200	=N	1		C	1420	.66						
LOCA	18	1450E	1520D	1505	N22	E45	.717	8509	15.2	300	=N			S	1505	1.05	1.50					
MEUD	18	1452	1515	1457	N20	E40	.654	8509	21.6	23	=B			C	1457	3.09	4.20					
MCMA	18	1452	1610	1500	N23	E42	.686	8509	21.8	78	=B			C	1500	2.48	3.50					
CAPS	18	1454E	1522		N23	E44	.709	8509	21.9	280	=B	3		C	1502	2.30	3.20		354			
ATHN	18	1512	1535	1515	N20	E40	.654	8509	21.6	23	=B	2		C	1515	1.38	1.90	2.00				
MCMA	18	1516	1550	1528	N06	E13	.224	8505	19.6	34	=N			C	1528	.31	.32					
MEUD	18	1517	1520	1517	N05	E15	.260	8505	19.8	3	=F			C	1517	.26	.30					
CAPS	18	1518E	1535		N08	E15	.257	8505	19.8	170	=F	3		C	1524	1.00	1.10					
ATHN	18	1524	1535	1525	N08	E16	.274	8505	19.8	11	=N	2		C	1525	.76	.80	1.60				
MCMA	18	1944	2001	1948	N21	E41	.668	8509	21.9	17	=N			C	1948	.52	.70					
HALE	18	1945	1954	1947	N22	E39	.648	8509	21.7	9	=B	1		C	1947	.62	.80					
CLMX	18	2029E	2045D	2033	N00	E10	.213	8505	19.6	160	=N			C	2033	.20	.21					
HALE	18	2032	2040	2034	N11	E12	.216	8505	19.8	8	=B	2		C	2034	.26	.30					
CULG	18	2111	2122	2118	N19	E30	.522	8509	21.1	11	=N			C	2118	.21	.23					
CULG	18	2259	2305	2301	N05	E10	.177	8505	19.7	6	=N			C	2301	.21						
HALE	18	2314	2323	2317	N20	E28	.500	8509	21.1	9	=N	1		C	2317	.46	.50					
HALE	18	2351	2354D	2353	N07	E09	.155	8505	19.7	30	=B	1		P	2353	.36	.40					
CULG	18	2352E	2354D	2352	N04	E09	.165	8505	19.7	20	=N			P	2352	.21						
HALE	19	0127	0259D	0157	N30	E11	.424	8506	19.9	920	=N	1		C	0157	1.24	1.40					
CULG	19	0121	0238	0158	N19	E25	.454	8509	20.9	77	=N			C	0158	1.24	1.32					
HALE	19	0204	0213	0208	N20	E36	.604	8509	21.8	9	=N	1		C	0208	.36	.50					
HALE	19	0222	0252	0231	N07	E03	.052	8505	19.3	30	=N	1		C	0231	.31	.32					
CULG	19	0245	0259	0249	N22	E37	.624	8509	21.9	14	=N			C	0249	.21	.24					
CULG	19	0302	0330	0305	N19	E23	.427	8509	20.9	28	=N			C	0305	.41	.44					
CULG	19	0306	0333	0319	N24	E34	.597	8509	21.7	27	=N			C	0319	.31	.37					
CULG	19	0319	0336	0325	N21	E32	.558	8509	21.5	17	=N			C	0325	.31	.36					
CULG	19	0546	0552	0548	N10	E06	.115	8505	19.7	6	=N			C	0548	.62						
ATHN	19	0658	0709	0700	N10	E05	.100	8505	19.7	11	=N	3		C	0700	.17	.20	1.40				
KAND	19	0700	0707		N07	E03	.052	8505	19.5	7	=F											
ATHN	19	0713	0719	0714	N21	E33	.570	8509	21.8	6	=N	3		C	0714	.33	.40	1.50				
ONDRA	19	0745E	0757		N33	W85	.990	8497	12.9	120	=B			V	0750			3.20				
ISTA	19	0745E	0800		N30	W80	.977	8497	12.6	15D	=											
ATHN	19	0745E	0804	0745	N30	W80	.977	8497	13.3	19D	=N	2		C	0745	.50		1.70				
KAND	19	0745	0804		N23	W90	.999	8496	12.6	19	=N											
ISTA	19	0825	0830		N09	E07	.125	8505	19.9	5	=N											
MEUD	19	0825	0833	0830	N08	E05	.088	8505	19.7	8	=N			C	0830	.83	.83					
MANI	19	0828	0837	0830	N09	E06	.108	8505	19.8	9	=N			C	0830	.72	.73					
ISTA	19	0837	0900D		N22	E33	.575	8509	21.8	230	=D											
MEUD	19	0838	0850	0843	N20	E35	.592	8509	22.0	12	=N			C	0843	.52	.60					
ATHN	19	0840E	0843	0843	N22	E32	.563	8509	21.8	19D	=N	2		C	0843	1.32	1.80	1.60				
MANI	19	0840	0904	0844	N20	E36	.604	8509	22.1	24	=N			C	0844	.62	.77	1.70				
ONDRA	19	0842E	0855D		N21	E33	.570	8509	21.8	130	=N			V	0843							
KAND	19	0850E	1233		N20	E36	.604	8509	22.1	223D	=N											
KAND	19	0850E	1233		N06	E05	.089	8505	19.7	223D	=N											
MEUD	19	0858	0910	0901	N08	E03	.054	8505	19.6	12	=F			C	0901	.21	.22					
KAND	19	0940	1233		N23	W90	.999	8496	12.7	173	=N											
KAND	19	0946	1011		N22	W90	.999	8496	12.7	25	=N											
CAPS	19	0949E	1002D		N19	W90	.999	8496	12.7	13D	=N	1		C	0956	.50			170			
MEUD	19	0953	1003	0956	N23	W90	.999	8496	12.7	10	=N			C	0956	.26						
ONDRA	19	0950E	1008D		N29	W90	.998	8497	12.7	18D	=N			V	0956							
KIEV	19	0950E	1010D	0959	N27	W90	.998	8497	12.7	20D	=F			C	0959	5.16						
MEUD	19	1157	1240	1157	N21	E30	.532	8509	21.7	43	=B											
MEUD	19	1208																				
ATHN	19	1157	1244	1218	N22	E29	.525	8509	21.7	47	=B	1		V	1208	2.48						

## SOLAR FLARES

SEPTEMBER 1966

OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IM-POR-TANCE	COND.	TYPE	TIME — UT	MEASUREMENTS				REMARKS						
	DATE 1966 SEPT	START	END	MAX. PHASE	APPROX. LAT. DIST.	CENTRAL MER. DIST.	MCMAHON PLAGE REGION	CMT DAY							MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %						
AROS	19	1210E	1250D	1222	N23	E28	.519	8509	21.6	40D	28	P	1222	8.04	9.00									
MEUD	19	1311	1323	1314	N30	W90	.998	8497	12.8	12	-N	C	1314	.46		DH								
MCMA	19	1323E	1348		N31	W88	.996	8497	13.0	25D	-N	C	1324	.52										
ARCE	19	1335E	1352D		N33	W88	.995	8497	13.0	17D	1N	C	1343	1.11										
MEUD	19	1411	1415	1411	N08	E02	.038	8505	19.7	4	-N		1411	.36	.40			E						
MEUD	19	1414	1421	1416	N20	E31	.540	8509	21.9	7	-N		1416	.62	.70			D						
MEUD	19	1449	1452	1450	N20	E31	.540	8509	21.9	3	-F		1450	.36	.40			E						
MEUD	19	1502	1507	1503	N08	E01	.023	8505	19.7	5	-F		1503	.36	.40			D						
HUAN	19	1503	1508D		N11	E01	.069	8505	19.7	50	-F	1	P	1505	.21	.21								
MEUD	19	1524	1532	1524	N22	W90	.999	8496	12.9	8	-N		1524	.36				E						
MEUD	19	1528	1535D		N20	E14	.321	8509	20.7	7D	-N		1528	.52	.53			F						
MEUD	19	1535	1542D	1537	N20	E20	.395	8509	21.1	7D	-N		1537	.36	.40			E						
SACP	19	1641	1829	1810	N24	E19	.420	8509	21.1	108	1N	C	1814	3.07	3.09			TF						
HALE	19	1803E	1850	1814	N25	E25	.497	8509	21.6	47D	18	1	P	1807	2.78	3.20			EH					
MCMA	19	1807E	1827		N23	E28	.519	8509	21.9	200	-N	C	1807	.63	1.00									
SACP	19	1840	1901	1854	N10	W00	.050	8505	19.8	21	1N	C			2.23	2.20								
HALE	19	1926	1943	1938	N22	E27	.500	8509	21.8	17	-N	1	C	1938	.21	.22			TK					
HALE	19	2111	2318	2122	N21	E25	.467	8509	21.8	127	-N	1	C	2122	.52	.60			T					
HALE	19	2206			N21	E25								2206	.41	.50			T					
HALE	19	2252												2252	.41	.50								
CULG	19	2133	2152	2138	N03	W07	.141	8505	19.4	19	-F	1	C	2138	.72				F					
HALE	19	2135	2345	2159	N09	W07	.125	8505	19.4	130	18	1	C	2259	2.37	2.40			F					
CULG	19	2152	2247	2156	N05	W08	.143	8505	19.3	55	-N	C	2156	1.75										
SACP	19	2153	2242	2159	N06	W08	.140	8505	19.3	49	1N	C		3.87	3.79									
HUAN	19	2206E	2210D		N09	W08	.142	8505	19.3	4D	1F	1	P	2207	2.27	2.28			D					
HUAN	19	2206E	2210D		N21	E26	.480	8509	21.9	40	-F	1	P	2207	.37	.38								
HALE	19	2225	2247	2230	N25	E15	.389	8509	21.1	22	-F	1	C	2230	.15	.20								
HALE	19	2225	2320D	2253	N10	W03	.072	8505	19.7	55D	-8	1	P	2253	1.24	1.24			L					
CULG	19	2245	2304	2253	N10	W03	.072	8505	19.7	19	-N	C	2253	1.03				FV						
HALE	19	2318	2320D	2318	N23	E20	.421	8509	21.5	20	-N	1	P	2318	.41	.50								
HALE	19	2338E	2400D	2338E	N09	W03	.061	8505	19.8	22D	-N	2	P	2338	.31	.32			F					
HALE	19	2338E	2400D	2400D	N22	E22	.437	8509	21.6	22D	-N	1	P	2400	1.75	2.00			E					
MITK	19	2347	0010	2349	N22	E22	.437	8509	21.6	23	1N	C	2349	2.17	2.40									
VORO	20	0019	0028	0020	N24	E23	.466	8509	21.7	9	-B	C	0020	1.71	1.93		84	EJ						
MITK	20	0021	0038	0022	N22	E23	.449	8509	21.7	17	18	C	0022	3.71	4.20			EJ						
IKOM	20	0024	0034D		N22	E25	.474	8509	21.9	100	1N	V	0024	3.09	3.50	1.74	115	EJ						
HALE	20	0025E	0045		N25	E22	.463	8509	21.7	200	-8	1	C	0025	1.34	1.50			E					
MITK	20	0040	0108	0053	N24	E22	.454	8509	21.7	28	1N	C	0053	3.61	4.00			E						
HALE	20	0041	0105	0045	N25	E20	.441	8509	21.5	24	-N	1	C	0045	.31	.32								
HALE	20	0110	0132	0112	N21	E23	.442	8509	21.8	22	-N	2	C	0112	.83	.90								
MITK	20	0110	0135	0113	N21	E24	.455	8509	21.8	25	1N	C	0113	1.86	2.10									
HALE	20	0222E	0231		N21	E24	.455	8509	21.9	90	5D	-N	V	0223	.41	.50								
HALE	20	0222	0236	0223	N22	E23	.449	8509	21.8	14	-B	2	C	0223	.41	.50								
HALE	20	0248	0255	0250	N23	E10	.318	8509	20.9	7	-N	2	C	0250	.31	.32								
SIBE	20	0255E	0317D	0304	N22	E18	.389	8509	21.5	22D	2F	P	0304	9.86	11.00		51	C						
MITK	20	0255E	0323D		N24	E20	.431	8509	21.6	28D	2F	V						FI						
HALE	20	0255	0330	0257	N24	E16	.388	8509	21.3	35	18	2	P	0257	2.27	2.50			F					
HALE	20	0259E	0327		N26	E19	.441	8509	21.5	28D	1N	C	0304	5.01	5.50	1.50	66	FI						
HALE	20	0332	0415	0337	N09	W09	.158	8505	19.5	43	18	2	C	0337	3.20	3.20	2.50		FI					
TACH	20	0332	0423	0336	N11	W09	.168	8505	19.5	51	18	2	C	0336	4.37	4.50	2.50	99	FH					
SIBE	20	0334E	0400D	0337	N10	W10	.179	8505	19.4	26D	2F	P	0337	10.06	10.40		55	C						
MITK	20	0347E	0400D		N00	W10	.212	8505	19.4	13D	-N	V												
MITK	20	0506	0511		N21	E22	.429	8509	21.9	5	-F	V	0620	.31	.32			D						
IKOM	20	0620E	0625D		N22	E22	.437	8509	21.9	5D	-F	V	0620	3.09										
WEND	20	0636E	0655D		N23	E21	.433	8509	21.9	19D	1N	V	0639	.99	1.10	2.00								
ATHN	20	0639E	0655	0639	N21	E20	.404	8509	21.8	16D	-8	1	V	0645			1.80		DH					
ONDR	20	0640E	0655		N23	E23	.457	8509	22.0	15D	-8	1	V	0643	.41	.46		206						
CATA	20	0641E	0711D	0643	N17	E23	.415	8509	22.0	30D	-8	1	V	0643	.50	.50								
BUCA	20	0645E	0707D		N22	E21	.425	8509	21.9	22D	-N	C	0645	.98	1.00			BJ						
BUCA	20	0750E	0810D		N08	W06	.105	8505	19.9	20D	-N	P	0751											
NERA	20	0821	0835		N21	E20	.404	8509	21.8	14	2	2	V	0827	1.98	2.10	2.00							
ATHN	20	0823	0839D	0827	N22	E18	.389	8509	21.7	16D	1B	1	V	0827	1.98	2.10	2.00							
MEUD	20	0823	0840	0826	N21	E18	.379	8509	21.7	17	1N	V	0827	5.57	6.10			CHJ						
ONDR	20	0823E	0840	0827	N25	E20	.441	8509	21.8	17D	18	V	0828	1.00	1.10		5.30	EF						
BUCA	20	0824E	0846D	0828	N25	E16	.399	8509	21.6	22D	18	C	0828	3.61	4.00									
MONT	20	0824	0900		N21	E20	.404	8509	21.9	36	2N	C	0827	2.50										
SALT	20	0825E	0842		N19	E19	.374	8509	21.8	17D	1N	3	C	0835	1.20	1.30			B					
ARCE	20	0825	0845	0827	N23	E19	.410	8509	21.8	40	2F	C	0827	5.57	6.10			HFC						
CAPS	20	0827E	0840		N22	E19	.400	8509	21.8	13D	-8	2	C	0835	1.00	1.10		228	C					
KIEV	20	0833E	0840D	0833	N24	E18	.409	8509	21.7	70	1N	C	0833	1.55	1.70		65	DI						
CATA	20	0840E	0925D	0900	N24	E18	.409	8509	21.7	45D	-N	V	0900	1.46	1.62		169							
ONDR	20	0848	0928	0900	N30	E18	.476	8509	21.7	40	2F	C	0900			2.00		CFHJL						
WEND	20	0850	0909		N22	E18	.389	8509	21.7	19	1N	V	0903	3.11	3.60									
WEND	20	0851	0920		N29	E19																		

# SOLAR FLARES

SEPTEMBER 1966

III

OBSERVATORY	OBSERVED UT				LOCATION				DURATION — MIN.	IM- POR- TANCE	OBS.	MEASUREMENTS					REMARKS			
	DATE 1966	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MONTH REGION	CMP DAY	COND. TYPE		TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %				
										—	—	—	—	—	—	—				
KIEV	20	0857E	0920D	0900	N26	E17	.421	8509	21.6	23D	2F	C	0900	15.47	15.40		60	HI		
ATHN	20	0928	0946	0931	N19	E18	.361	8509	21.7	18	-N	1	0932	.33	.30	1.60				
WEND	20	0929	1004		N22	E21	.425	8509	22.0	35	1N			3.09						
BUCA	20	0930E	0958D		N22	E19	.400	8509	21.8	28D	-N		C	0931	.50	.50				
NERA	20	0930	0955D		N10	W10	.179	8505	19.6	25D	1	2	V	0947						
OND'R	20	0932	1012		N09	W17	.291	8505	19.1	40	-N	1	0935	.99	1.00	1.90		CDEJ		
ATHN	20	0933	1007	0935	N05	W12	.210	8505	19.5	34	-N	1		3.09		1.50				
WEND	20	0934	1005D		N08	W13	.224	8505	19.4	31D	1N		C	0945	.51	.50		DC		
ARCE	20	0935	1000D	0945	N07	W15	.257	8505	19.3	25D	-N		C	0946	1.31	1.30		F		
BUCA	20	0936	1007	0946	N10	W13	.228	8505	19.4	31	-B			0951	1.97	2.00				
BUCA	20																			
CAPS	20	0942E	0952D		N07	W16	.274	8505	19.2	10D	-N	1	C	0948	1.03	1.10		65	DI	
KIEV	20	0945E	1000D	0948	N08	W17	.290	8505	19.1	15D	1F		C	0955	1.00	1.04				
CATA	20	0952E	1015D	0955	N09	W15	.258	8505	19.3	23D	-N			1039	.29	.32		195		
CATA	20	1035E	1045D	1039	N20	E20	.395	8509	21.9	10D	-B		C	1039	1.03	1.10		254		
KIEV	20	1035E	1046D	1039	N22	E20	.412	8509	21.9	11D	1F		C	1039	1.03	1.10		65	DI	
MONT	20	1035	1110		N20	E19	.382	8509	21.9	35	-B		C	1040	3.09					
WEND	20	1036E	1050		N22	E20	.412	8509	21.9	14D	1N		C	1040	.50	.50				
BUCA	20	1037E	1052D	1040	N21	E19	.391	8509	21.9	15D	-N		V	1040			2.00		CDJ	
OND'R	20	1040E	1049		N23	E20	.422	8509	21.9	9D	-N		V	1040						
NERA	20	1045E	1055		N10	W10	.179	8505	19.7	10D	2	2								
WEND	20	1046	1136		N10	W14	.244	8505	19.4	50	38		C	1052	14.95	3.86		251		
CATA	20	1048E	1110D	1052	N10	W15	.261	8505	19.3	22D	18		C	1052	5.00					
MONT	20	1048	1120		N08	E11	.190	8505	21.3	32	28		C	1051	4.27	4.40			F	
BUCA	20	1048E	1141D	1051	N11	W15	.264	8505	19.3	53D	18		C	1051	6.00	6.30		176		
SALT	20	1050E	1121D		N10	W10	.179	8505	19.7	31D	2N	3	C	1051	13.41	13.40		70	HIU	
KIEV	20	1051E	1135D	1051	N09	W14	.242	8505	19.4	44D	2N		V	1059			2.50		CFJ	
OND'R	20	1053E	1125	1059	N09	W18	.308	8505	19.1	32D	2N		C	1055	1.98	2.00	1.90			
ATHN	20	1054E	1116	1055	N05	W10	.177	8505	19.7	22D	-N	1	P	1101	2.84	2.90	2.60			
KHAR	20	1058E	1123		N08	W16	.274	8505	19.3	25D	1N		C	1118	.33	.40			H	
BUCA	20	1115E	1148D		N27	E34	.614		23.0	33D	-N				1125	.81	1.10			G
BUCA	20																			
WEND	20	1116	1146		N22	E54	.809	8514	24.5	30	1N				3.09					
WEND	20	1129	1231D		N18	E44	.697	8514	23.8	62D	1N				3.09					
BUCA	20	1222E	1300D		N21	E18	.379	8509	21.9	38D	-B		C	1248	.99	1.10				
WEND	20	1224	1242		N07	W08	.138	8505	19.9	18	1N				3.09					D
BUCA	20	1225E	1246D		N06	W06	.106	8505	20.1	21D	-N		C	1229	.33	.34				
WEND	20	1229	1300		N23	E19	.410	8509	21.9	31	1N				3.09					
KIEV	20	1244E	1254D	1247	N22	E20	.412	8509	22.0	10D	1B	1	C	1247	1.55	1.60		68	DI	
CAPS	20	1248E	1257D		N24	E19	.420	8509	22.0	9D	-B	1	V	1249	1.00	1.10		216	CDJ	
OND'R	20	1249E	1255		N23	E19	.410	8509	22.0	6D	-N		V	1250			2.80			
ATHN	20	1249E	1258D	1249	N11	E18	.312	8509	21.9	9D	-N	1	P	1249	.66	.70	1.90			
KHAR	20	1250E	1255		N20	E18	.370	8509	21.9	5D	1N		P	1253	3.40	3.70	2.70		Q	
MEUD	20	1307E	1312		N18	W50	.764	8511	16.8	5D	-N			1307	.15	.20				
WEND	20	1310E	1338		N14	E16	.295	8509	21.7	28D	1N				3.09					
MEUD	20	1316	1339		N23	E18	.399	8509	21.9	23	1N				3.09					
WEND	20	1324	1330	1326	N20	E17	.357	8509	21.8	6	-N			1326	.31	.33				
MEUD	20	1324	1336		N18	W50	.764	8511	16.8	12	1N				3.09					
WEND	20	1324	1333	1326	N17	W52	.784	8511	16.7	8	-N			1326	.31	.50				
ARCE	20	1330E	1345		N18	W52	.785	8511	16.7	15D	-N		C	1330	.38	.60			D	
SACP	20	1336	1422	1350	N22	E17	.377	8509	21.7	46	-F	1	C	1330	.55	.60				
KIEV	20	1347E	1352D	1349	N22	E20	.412	8509	22.1	5D	1F		C	1349	1.29	1.28				
MEUD	20	1347	1352		N20	E16	.345	8509	21.8	5	-N			1349	1.55	1.60				
ATHN	20	1404	1412D	1406	N11	E17	.296	8509	21.9	8D	-B	1	V	1406	.50	.50	2.00			
OND'R	20	1405	1420	1414	N23	E18	.399	8509	21.9	15	-B		V	1414			3.20		CDHJR	
MEUD	20	1406	1420	1407	N20	E16	.345	8509	21.8	14	-B								H	
MEUD	20		1413											1413	.31	.33				
WEND	20	1407	1420		N22	E18	.389	8509	21.9	13	1N				3.09					
HUAN	20	1411	1419	1413	N21	E18	.379	8509	21.9	8	-N	2	C	1413	.31	.31			E	
CAPS	20	1413E	1417D		N22	E18	.389	8509	21.9	40	-F	1	C	1416	.40	.40			160	
ARCE	20	1415E	1430D		N22	E15	.354	8509	21.7	15D	-N		C	1415	.32	.30			DM	
WEND	20	1447	1507		N22	E18	.389	8509	22.0	20	1N				4.13					
ARCE	20	1448	1458	1450	N20	E16	.345	8509	21.8	10	-N			1450	.62	.63			H	
ARCE	20	1450	1500D	1450	N21	E18	.379	8509	22.0	10D	-N		C	1450	1.28	1.40			C	
OND'R	20	1451E	1455D		N22	E15	.354	8509	21.7	4D	1N		V	1454			2.40		CJ	
ARCE	20	1515	1530D	1520	N22	E15	.354	8509	21.8	15D	-N		C	1520	.99	1.10			C	
MEUD	20	1517	1526	1519	N21	E14	.332	8509	21.7	9	-N			1519	.52	.53				
WEND	20	1522	1545D		N24	E14	.368	8509	21.7	23D	1N				3.09					
MEUD	20	1600	1605D	1603	N20	E15	.333	8509	21.8	5D	-F		P	1615	.15	.20				
WEND	20	1603	1624		N22	E17	.377	8509	21.9	21	1N				3.09					
MEUD	20	1615	1620D		N20	E15	.333	8509	21.8	5D	-N									
MEUD	20		1650	1735	NO FLARE PATROL															
LOCK	20	1738E	2100	1805	N03	W15	.267	8505	19.6	20D	2B	C	1805	7.00	7.00		30			
SACP	20	1801E	2125D	1804U	N05	W15	.260	8505	19.6	20D	2B	S		11.69	11.48					
HUAN	20	1803E	1905D		N07	W13	.223	8505	19.8	62D	2N	1	P							

## SOLAR FLARES

SEPTEMBER 1966

OBSERV- ATORY	OBSERVED UT				LOCATION				DURA- TION MIN.	IM- POR- TANCE	OBS.	MEASUREMENTS					REMARKS	
	DATE	START	END	MAX. PHASE	APPROX. LAT.	CENTRAL MER. DIST.	MCMATH PLAGE REGION	CMP DAY				COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %
HALE	20	2349	0015	2350	N19	W57	.834	8511	16.7	26	=N	2	C	2350	.41	.70		
LOCK	20	2347	2357	2350	N22	E13	.333	8509	22.0	10	=N	2	C	2350	.50	.70		
HALE	20	2350	2354	2351	N22	E12	.323	8509	21.9	4	=N	2	C	2351	.31	.32		20
LOCK	21	0050	0103	0053	N21	E06	.260	8509	21.5	13	=N	1	C	0053	.70	.70		10
MITK	21	0051	0058	0053	N21	E05	.254	8509	21.4	7	=F	1	C	0053	.52	.52		D
HALE	21	0147	0151	0149	N10	W19	.326	8505	19.6	4	=F	1	C	0149	.41	.42		T
HALE	21	0204	0209	0205	N03	W18	.315	8505	19.7	5	=F	1	C	0205	.31	.32		T
HALE	21	0204	0213	0205	N03	W18	.315	8505	19.7	9	=F	1	C	0205	.41	.42		T
HALE	21	0243	0248	0245	N22	E08	.289	8509	21.7	5	=N	1	C	0245	.21	.22		T
HALE	21	0315	0325	0319	N10	W19	.326	8505	19.7	10	=N	1	C	0319	.46	.50		T
HALE	21	0346	0356	0350	N21	E08	.274	8509	21.8	10	=N	1	C	0350	.21	.22		T
MITK	21	0415	0426	0419	N23	E08	.304	8509	21.8	11	=N	1	C	0419	.93	1.00		TEE
TACH	21	0416	0427	0418	N25	E08	.333	8509	21.8	11	=F	1	C	0418	.91	2.90	2.20	45
BUCA	21	0650E	0705D		N25	E79	.975	8516	27.2	150	=N	1	C	0652	.33			
BUCA	21	0737	0757D		N19	W60	.861	8511	16.8	200	=B	1	C	0739	.33	.70		
BUCA	21	0829E	0859D		N22	E06	.276	8509	21.8	300	=F	1	C	0842	.66	.70		
BUCA	21	0916E	0953D		N19	W61	.869	8511	16.8	370	=F	1	C	0931	.25	.50		D
ABST	21	0927E	0954D	0931	N19	W68	.920	8511	16.3	270	=B	1	C	0931	3.16	6.02		E
ARCE	21	0930E	1000D		N23	E78	.971	8516	27.2	300	=F	1	C	0930	1.34	4.00		J
BUCA	21	0928E	1125D		N22	E01	.258	8509	21.5	117D	=B	1	C	0935	1.64	1.70		
ATHN	21	0929	0951	0934	N21	E07	.267	8509	21.9	22	=B	1	C	0934	2.64	2.80	2.00	94
SIBE	21	0929E	0958D	0934	N23	E02	.276	8509	21.5	290	=N	1	C	0934	3.41	4.00		C
MONT	21	0929	1010		N21	E03	.245	8509	21.6	41	=N	1	C		5.00			
NERA	21	0930E	0938D	0933	N22	E05	.270	8509	21.8	80	=B	2	C	0935	1.75	1.80		
MEUD	21	0930	0945	0935	N21	E07	.267	8509	21.9	15	=B	2	C	0937	1.50	1.50		260
CAPS	21	0930	0959		N22	E06	.276	8509	21.8	29	=B	3	V	0934	5.16	4.90		CH
OND'R	21	0930E	1007	0934	N22	E05	.270	8509	21.8	370	=B	1	C	0945	1.66	1.70		
WEND	21	0931	1000		N23	E06	.291	8509	21.8	29	=N	1	C					
ARCE	21	0945E	1000D		N21	E08	.274	8509	22.0	150	=N	1	C				Z	
ARCE	21	0945E	1000D		N21	W01	.241	8509	21.3	150	=B	1	C	0945	.58	.60		
WEND	21	1002	1032		N23	E07	.297	8509	21.9	30	=N	1	C	3.09				
MONT	21	1020			N22	E05	.270	8509	21.8			1	C		2.00			
WEND	21	1002	1030		N09	W25	.420	8505	19.5	28	=N	1	C	1014	3.09			
BUCA	21	1011E	1031D		N10	W26	.436	8505	19.5	200	=N	1	C	1014	.33	.40		
WEND	21	1022	1046		N23	E77	.967	8516	27.2	24	=N	1	C	1028	4.13			
ATHN	21	1025	1041	1028	N23	E82	.985	8516	27.6	16	=B	1	C	1028	.33	1.90	170	D
CAPS	21	1027E	1033		N22	E80	.979	8516	27.4	60	=N	3	C	1029	.70			CD
MEUD	21	1027	1035	1030	N22	E75	.959	8516	27.1	8	=N	1	C	1030	.31			H
OND'R	21	1029	1039		N25	E80	.978	8516	27.4	10	=F	1	V	1031		1.60		
BUCA	21	1034E	1243D		N23	E78	.971	8516	27.3	129D	=N	1	P	1037	.83			
ATHN	21	1408	1413	1410	N21	E05	.254	8509	22.0	5	=N	2	C	1410	.50	1.50		D
MEUD	21	1409	1413	1410	N21	E04	.249	8509	21.9	4	=F	1	C	1410	.26	.30		
LOCK	21	1641	1651	1646	N22	E78	.971	8516	27.5	10	=F	1	C	1646	.30	.80		T
LOCK	21	1645	1656	1649	N42	E60	.892	8516	26.2	11	=F	1	C	1649	.40	.80		T
LOCK	21	1649	1708	1653	N22	E03	.262	8509	21.9	19	=B	1	C	1653	.40	.40		30
SACP	21	1811	2033	1832	N27	E40	.680	8514	24.8	142	=N	1	C		3.75	4.32		
LOCK	21	1814	2005	1831	N25	E41	.682	8514	24.8	111	=N	1	C	1831	3.10	4.30		L
SACP	21	1830	1911	1848	N23	W00	.274	8509	21.8	41	=F	1	C	1848	.86	.83		H
SACP	21	1833	1910	1848	N23	W01	.275	8509	21.7	37	=B	1	C	1848	.70	.70		30
LOCK	21	1912	1945	1932	N23	W01	.275	8509	21.7	33	=F	1	C		.60	.58		
LOCK	21	1914	1943	1919	N23	W01	.275	8509	21.7	29	=N	1	C	1919	.70	.70		20
LOCK	21	1919		1929								1	C	1929	.70	.70		20
HUAN	21	1933E	1935D		N22	W01	.258	8509	21.7	20	=F	1	P	1933	.25	.25		DHT
LOCK	21	1958	2030	2008	N23	W01	.275	8509	21.9	32	=N	1	C	2008	1.00	1.00		20
HALE	21	2010E	2018	2011	N24	W01	.291	8509	21.8	80	=N	1	C	2011	.31	.32		
LOCK	21	2051	2106	2055	N23	W04	.282	8509	21.6	15	=N	1	C	2055	.60	.60		20
HALE	21	2051	2110	2054	N22	W04	.266	8509	21.6	19	=N	1	C	2054	.21	.22		T
LOCK	21	2105	2135	2113	N23	W01	.275	8509	21.8	30	=N	1	C	2113	.80	.80		20
SACP	21	2106	2144	2113	N24	W02	.293	8509	21.7	38	=F	1	C	2113	1.02	1.00		T
HALE	21	2108	2119	2113	N24	W02	.293	8509	21.7	11	=N	1	C	2113	.41	.42		L
CULG	21	2108E	2122	2113	N24	W02	.293	8509	21.7	140	=N	1	P	2113	.52			
LOCK	21	2216	2250	2219	N23	W01	.275	8509	21.9	34	=N	1	C	2219	.30	.30		20
CULG	21	2319E	0019	2329	N10	W33	.541	8505	19.5	60D	=N	1	C	2329	.83	.96		
SACP	21	2322	2350D	2327	N09	W34	.555	8505	19.4	28D	=N	1	P	2322	2.23	2.37		
LOCK	21	2325	0005	2332	N11	W34	.556	8505	19.4	40	=N	1	C	2332	1.20	1.40		20
VORO	21	2326	2351	2328	N09	W34	.555	8505	19.4	25	=N	1	C	2328	.45	.53		EK
HALE	21	2327	2355D	2331	N10	W34	.555	8505	19.4	28D	=N	1	P	2331	.72	.90		T
MANI	21	2331	2352	2352	N13	W23	.397	8505	20.3	21	=F	1	C	2335	.72	.86		
LOCK	21	2325	2400	2347	N24	W05	.302	8509	21.6	35	=N	1	C	2347	1.00	1.10		20
HALE	21	2333	2344	2334	N22	W13	.334	8509	21.0	11	=N	1	C	2334	.21	.22		T
CULG	21	2340	0301	2348	N24	W05	.302	8509	21.6	201	=N	1	P	2348	.62			
SACP	21	2340	2350D	2347	N24	W07	.312	8509	21.5	10D	=N	1	P	2348	1.55	1.52		
HALE	22	0020	0039	0022	N27	E71	.939	8516	27.3	19	=N	1	C	0022	.72			L
CULG	22	0237	0301	0243	N10	W36	.584	8505	19.4	24	=N	1	C	0243	.52	.60		
HALE	22	0241	0248	0243	N11	W34	.556	8505	19.6	7	=N	1	C	0243	.52	.60		
HALE	22	0249	0307	0259	N18	W75	.959	8511	16.5	18	=N	1	C	0259	.26			
HALE	22	0322	0342	0327	N22	W16	.366	8509	20.9	20	=N	1	C	0327	.21	.22		

# SOLAR FLARES

SEPTEMBER 1966

IIIv

OBSERVATORY	OBSERVED UT				LOCATION				DURA- TION MIN.	IM- POR- TANCE	OBS.	MEASUREMENTS					REMARKS			
	DATE 1966	START	END	MAX. PHASE	APPROX. LAT.	CENTRAL MER. DIST.	MCMATH DISTANCE	PLAGE REGION	CMP DAY				MEAS. AREA Sr. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %				
													1	P	TIME — UT					
HALE	22	0349	04130	0351	N18	W75	.959	8511	16.5	240	-N	1	C	0351	.21					
CULG	22	0410	0434	0414	N14	E53	.793	8514	26.1	24	-N		C	0414	.41	.64				
BUCA	22	0617E	06580		N19	W74	.954	8511	16.7	410	-N		P	0632	.33					
BUCA	22	0705E	07200		N19	W75	.959	8511	16.7	150	-N		C	0708	.25					
BUCA	22	0725E	07510		N23	W12	.337	8509	21.4	260	-N		C	0731	.33	.34				
BUCA	22	0813E	08520		N23	W04	.282	8509	22.0	390	-N		C	0816	.25	.30				
ATHN	22	0820E	0830	0822	N21	W07	.267	8509	21.8	100	-N	2	C	0822	.33	.30	1.40			
BUCA	22	0835E	08470		N23	W15	.366	8509	21.2	120	-N		P	0841	.66	.70				
BUCA	22	0924E	09290		N19	W76	.964	8511	16.7	50	-N		C	0926	.17					
ATHN	22	0925	0932	0927	N20	W75	.959	8511	16.8	7	-N	2	P	0927	.33	.50	1.80			
MEUD	22	0926	0932	0928	N21	E60	.862	8516	26.9	6	-F			0928	.21					
ARCE	22	0930	0945	0930	N21	E64	.893	8516	27.2	15	-N		C	0930	.47	1.10	DC			
ARCE	22	0935E	09450		N18	W75	.959	8511	16.8	100	-N		C	0940	.51	1.40				
BUCA	22	1007E	10210		N23	E63	.886	8516	27.1	140	-N		C	1009	.50	1.10				
BUCA	22	1019E	10280		N19	W76	.964	8511	16.7	90	-N		C	1023	.33					
BUCA	22	1101E	11090		N23	W19	.411	8509	21.0	80	-N		P	1105	.25	.30				
BUCA	22	1205E	12140		N12	W39	.626	8505	19.6	90	-N		C	1211	.33	.40				
BUCA	22	1213E	12270		N29	E72	.945	8516	27.9	140	IN		P	1213	.66					
BUCA	22	1226E	12390		N12	W40	.639	8505	19.5	130	-F		C	1228	.33	.40				
BUCA	22	1236E	13020		N19	W78	.972	8511	16.7	240	-N		P	1242	.33					
ARCE	22	1340E	14000		N26	E66	.909	8516	27.5	200	-N		C	1340	.29	.60				
ATHN	22	1405E	1415		N23	E67	.914	8516	27.6	100	-N	2	C	1405	.43					
SACP	22	1453	1534	1501	N21	W15	.344	8509	21.5	41	-F			1500	1.21	1.19	E			
MEUD	22	1455	1510		N21	W14	.333	8509	21.6	15	-F			1500	.41	.43				
ATHN	22	1457	1513	1500	N21	W06	.261	8509	22.2	16	-N	2	P	1500	.99	1.00	1.50			
HUAN	22	1500E	1514		N21	W15	.344	8509	21.5	140	-F	1	P	1502	.57	.57	EEFC			
ARCE	22	1500	1530	1500	N22	W10	.305	8509	21.9	30	-N		C	1500	1.46	1.50				
MCMC	22	1502E	1540	1505	N21	W16	.356	8509	21.4	380	-N		C	1505	.72	.80				
MCMC	22	1552E	1600	1555	N23	E63	.888	8516	27.4	80	-N		C	1555	.36	.70				
LOCK	22	1600	1630	1610	N36	W38	.709	8506	19.8	30	-F		C	1610	.30	.30	10			
LOCK	22	1615	1700	1630	N02	W43	.684	8505	19.5	45	-F		C	1630	.40	.60	10			
HUAN	22	1623	1638	1632	N03	W40	.643	8505	19.7	15	-F	2	C	1632	.21	.23	D			
LOCK	22	1651	1707	1656	N25	E58	.849	8516	27.1	16	-F		C	1656	.60	1.10	10			
MCMC	22	1655	1705	1657	N23	E61	.871	8516	27.3	10	-N		C	1657	.52	1.00	E			
SACP	22	1728	1807	1743	N10	W42	.664	8505	19.6	39	-F		C	1741	.80	1.00	10			
LOCK	22	1735	1755	1741	N11	W41	.651	8505	19.7	20	-N		C	1741	.80	1.00	MH			
MCMC	22	1740	1747	1742	N05	E43	.679	8505	19.5	7	-N		C	1742	.41	.60	EH			
LOCK	22	1802	1822	1817	N18	W79	.976	8511	16.8	20	-F		C	1817	.30	.90	10			
HALE	22	2126	22070	2136	N26	E60	.866	8516	27.4	410	-N	1	P	2136	.36	.70				
LOCK	22	2156	2210	2200	N23	E58	.847	8516	27.3	14	-N		C	2200	.50	.90	20			
HALE	22	2158E	22070	2159	N23	E57	.838	8516	27.2	90	-N	1	P	2159	.41	.80				
LOCK	22	2237	2249	2244	N19	W80	.979	8511	16.9	12	-F		C	2244	.30	.90	10			
LOCK	22	2247	2312	2255	N10	W48	.738	8505	19.3	25	-N		C	2255	.80	1.20	20			
VORO	22	2253	2342	2300	N08	W50	.761	8505	19.2	49	-N		C	2300	.72	1.09	50			
HALE	22	2300E	23160	2303	N09	W49	.749	8505	19.3	160	-B	1	P	2303	.31	.50	EJ			
LOCK	22	2337	2344	2340	N19	E56	.825	8516	27.2	7	-F		C	2340	.30	.50				
LOCK	23	0010	00230	0023	N22	E45	.718	8516	26.4	130	-N		C	0023	.60	.90	10			
SACP	23	0030	0050	0041	N11	W46	.714	8505	19.6	20	-F		C	0041	.88	1.04				
CULG	23	0031	0046	0041	N10	W47	.726	8505	19.5	15	-N		C	0041	.31	.42				
LOCK	23	0035	0051	0039	N24	E53	.803	8516	27.0	16	-N		C	0039	.50	.90	20			
VORO	23	0036	0049	0042	N24	E56	.831	8516	27.2	13	-N		C	0042	.63	1.12				
MANI	23	0037E	0049	0040	N23	E57	.838	8516	27.3	120	-N		C	0040	.52	.89				
CULG	23	0321E	0331D	0325	N10	W47	.726	8505	19.6	100	-N		C	0325	.62	.84				
ISTA	23	0730E	08100		N25	E54	.814	8516	27.4	400	-						L			
BUCA	23	1047E	11030		N24	E51	.784	8516	27.3	160	-N		P	1047	.66	1.10	B			
CAPS	23	1418	15000		N25	E50	.777	8516	27.3	420	3			1435	1.00	1.60	160			
ATHN	23	1418	1507	1423	N24	E51	.784	8516	27.4	49	1N	2		1423	1.65	2.70				
SACP	23	1418	1530	1450	N25	E50	.777	8516	27.3	72	1F		C	1421	1.70	2.15				
MEUD	23	1419	1545	1421	N23	E50	.772	8516	27.3	86	-N		C	1421	.83	1.20				
MCMC	23	1419	1545	1421	N23	E47	.749	8514	25.6	77	1F		C	1424	2.04	2.10				
SACP	23	1444	1601	1507	N21	E27	.744	8514	25.6	200	-F		C	1500	.52	.53				
CULG	23	1450	15100		N20	E20	.396	8514	25.1	200	-F		C	1503	.77	.90				
MCMC	23	1457	1530	1503	N22	E26	.488	8514	25.6	33	-F		C	1503	2.46	3.11				
SACP	23	1542	1601	1559	N25	E49	.767	8516	27.3	19	1F		P	1559	2.97	4.60	1.75			
ATHN	23	1553E	16000	1559	N23	E49	.762	8516	27.3	70	1N	1		1556	.50	.80	200			
CAPS	23	1553	16000		N25	E51	.786	8516	27.5	70	-B	3		1556	1.06	1.50	20			
LOCK	23	1553	1630	1601	N23	E47	.742	8516	27.2	37	-N		C	1601	1.00	1.50				
MCMC	23	1553	1640	1600	N23	E50	.772	8516	27.4	47	18		C	1600	2.06	3.20				
HUAN	23	1600E	1627D		N24	E51	.784	8516	27.5	270	-N	1	P	1602	1.06	1.31				
LOCK	23	1814	1840	1820	N19	W57	.835	8506	19.5	26	-F		C	1820	.70	1.30	10			
LOCK	23	1725	1800	1740	N25	E50	.777	8516	27.5	35	-F		C	1740	.40	.60	10			
LOCK	23	1730	17500	1750	N23	E34	.593	8516	26.3	200	-N		C	1750	.50	.70	10			
MCMC	23	1735E	18200	1800	N23	E50	.772	8516	27.5	450	1B		C	1800	1.55	2.40	F			
MCMC	23													1820	1.86	2.90				
LOCK	23	1817	1838	1820	N23	E47	.742	8516	27.3	21	-B	2	C	1820	1.00	1.50	30			
HUAN	23	1818	1830	1820	N24	E48	.754	8516	27.4	12	-B	2	C	1820	1.05	1.30				
LOCK	23	1855	2010	1910	N27	E16	.424	8514	25.0	75	-F		C	1910	1.00	1.10	10			
LOCK	23	1919	1945																	

## SOLAR FLARES

SEPTEMBER 1966

OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IM- POR- TANCE	OBS.	MEASUREMENTS					REMARKS		
	DATE 1966	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MOMATH REGION	CMP DAY	COND.	TYPE	TIME	MEAS. AREA	CORR. AREA	MAX. WIDTH	MAX. INT.			
					LAT.	MER. DIST.						—	Sq. Deg.	Sq. Deg.	H $\alpha$	%			
LOCK	23	2140	2205	2149	N22	E42	.684	8516	27.1	25	-N	C	2149	.70	1.00		10		
LOCK	23	2200	2220	2204	N26	E31	.575	8516	26.2	20	-F	C	2204	.30	.40		10		
LOCK	23	2351	0100	0002	N26	E14	.394	8514	25.0	69	IN	C	0002	3.50	3.90		20		
LOCK	23		0011	0001	N21	W50	.769	8506	20.2	16	-N	C	0001	.40	.60		20		
CULG	24	0053	0104	0058	N27	W64	.897		19.2	11	-N	C	0058	.31	.60				
KODA	24	0210	0222	0214	N21	E37	.621	8516	26.9	12	-N	V	0215	1.38	1.80	1.76		D	
MANI	24	0210	0225	0215	N23	E44	.709	8516	27.4	15	-B	C	0215	1.03	1.45				
MANI	24	0617E	0623		N04	W58	.846	8505	19.9	60	-F	C	0617	.15	.27				
ISTA	24	0725E	0855		N23	E48	.752	8516	27.9	90D	-								
ATHN	24	0808	0820	0810	N24	E38	.645	8516	27.2	12	-N	3	0810	.66	.90	1.50			
MEUD	24	1036	1042	1038	N19	W38	.627	8509	21.6	70	-N	P	1038	.66	.80			E	
BUCA	24	1037E	1044D		N20	W38	.630	8509	21.6	160	-N	C	1058	.99	1.30				
BUCA	24	1049E	1105D		N23	W38	.641	8509	21.6	18	-F	C	1058	.52	.60				
ATHN	24	1358	1410D	1400	N22	E36	.613	8516	27.3	120	-B	2	1400	.76	1.00	1.40			
CAPS	24	1409	1414		N28	E34	.621	8516	27.1	5	-F	3							
MEUD	24	1409	1415	1409	N24	E36	.622	8516	27.3	6	-F	P	1409	.15	.20				
HUAN	24	1412	1435		N19	W57	.835	8506	20.3	23	-P	1	1416	.50	.67				
MEUD	24	1413	1420	1414	N18	W54	.808	8506	20.5	7	-F	C	1414	.21	.30				
MCMA	24	1814	1834	1818	N18	W58	.843	8506	20.4	20	-N	2	1816	.52	1.00				
MCMA	24	1908	1940	1911	N28	W41	.695	8509	21.7	32	-N	1	1911	.41	.60				
HALE	24	1909	1917	1910	N28	W42	.706	8509	21.6	8	-N	C	1910	.26	.40				
HALE	24	1920	1925	1921	N25	E30	.557	8516	27.1	5	-N	1	1921	.26	.30				
CULG	24	2355	0009	0001	N20	W51	.778	8509	21.2	14	-N	1	2357	1.24	1.30				
HALE	24	2357	0004	2358	N20	W50	.767	8509	21.2	7	-F	1	C	2358	.21	.30			T
HALE	25	0352	0414D	0358	N19	E27	.483	8516	27.2	22D	-N	1	P	0358	1.24	1.40			F
ATHN	25	0543E	0547	0544	N22	E27	.501	8516	27.3	4D	-N	2	P	0544	.17	.40	1.50		
ATHN	25	0628	0634	0630	N21	E28	.507	8516	27.4	6	-N	2	P	0630	.66	.80	1.50		
KAND	25	0945	1050D		N23	E25	.483	8516	27.3	65D	-N	1	C	1031	.90				
BUCA	25	0955E	1048D		N22	E21	.426	8516	27.0	5D	-N	1	C	0959	.83	.90			
BUCA	25												C	1011	.99	1.10			
ARCE	25	0959	1020D	1005	N25	E25	.499	8516	27.3	21D	-F	1	C	1005	1.21	1.40			C
ATHN	25	1002	1022	1005	N22	E26	.488	8516	27.4	20	-N	1	P	1005	.72	.80	1.60	165	
CAPS	25	1005E	1024		N21	E23	.443	8516	27.1	19D	-B	3	C	1005	.60	.70			
BUCA	25	1013E	1102D		N11	W78	.974	8505	19.6	49D	-N	1	C	1023	.58				
KAND	25	1028	1044		N10	W90	1.000	8505	18.7	16	-D	1	C	1106	.58	.90			
BUCA	25	1103E	1144D		N22	W52	.791	8509	21.6	41D	-B	1	C	1107	.26	.40			
MEUD	25	1106	1114	1107	N19	W52	.787	8509	21.6	6	-F	C	1210	.33					
BUCA	25	1144E	1210D	1210	N11	W79	.978	8505	19.6	26D	-N	1	P	1636	.25				D
HUAN	25	1634	1639	1636	N10	W90	1.000	8505	18.9	5	-N	2	P	0001	2.58	2.75			
CULG	25	2350	0124D	0001	N26	E15	.404	8516	27.1	94D	-N	1	C						
CULG	26	0346	0354	0348	N21	E18	.381	8516	27.5	8	-N	1	C	0348	.31	.33			
CULG	26	0428	0439	0432	N10	W70	.935	8505	20.9	11	-N	1	C	0432	.41				L
CULG	26	0557	0621	0602	N19	E30	.523	8516	28.5	24	-N	1	C	0602	.52	.57			
ATHN	26	0619	0655	0629	N20	E30	.528	8516	28.5	36	-N	1	C	0629	.31	.34			
ARCE	26	0635E	0659	0640	N22	E13	.336	8516	27.2	24D	-N	2	C	0640	1.32	1.40	1.60		
ARCE	26	0810E	0825D		N21	E11	.303	8516	27.2	15D	-N	1	C	0820	1.02	1.10			
CAPS	26	0947E	0952D		N05	W90	1.000	8505	19.6	5D	-N	3	C	0825	.23			182	D
ISTA	26	0949E	0952		N05	W90	1.000	8505	19.7	3D	-N	1	C	0949					
ARCE	26	0950E			N05	W90	1.000	8505	19.7	-	-N	1	C	0950	.15				
MONT	26	0958	1020		N13	E10	.200	8516	27.2	22	-N	1	C			3.00			
ISTA	26	1009	1018D		N25	E11	.357	8516	27.2	9D	-B	1	C						
BUCA	26	1012E	1152D		N20	E09	.271	8516	27.1	100D	-B	2	C	1013	.99	1.00			E
ATHN	26	1016	1040D	1025	N22	E11	.316	8516	27.3	24D	-B	2	C	1025	1.49	2.00			
BUCA	26	1100E	1156D	1134	N21	W86	.994	8509	20.0	56D	-N	1	C	1134	.17	.20			
HUAN	26	1249E	1312		N20	W85	.992	8509	20.2	23D	-N	2	P	1255	.25				
ATHN	26	1520	1526	1522	N22	W80	.979	8509	20.6	6	-N	1	C	1522	.75		1.50		
HUAN	26	1520	1535	1524	N21	W85	.992	8509	20.3	15	-N	2	C	1524	.25				
MCMA	26	1635	1644	1638	N05	W88	.999	8505	20.1	9	-B	1	C	1638					
CAPS	26	1527E	1540		N05	W90	1.000	8505	19.9	13D	-N	3	C	1528				170	
SACP	26	1632	1650	1640	N19	W84	.991	8509	20.4	18	-N	1	C		.60				
LOCK	26	1634	1646	1636	N18	W83	.988	8509	20.5	12	-N	1	C	1636	.60	2.00	20		
HUAN	26	1635	1645	1638	N20	W88	.997	8509	20.1	10	-B	2	C	1638	.37				
LOCK	26	1725	1820	1735	N23	W73	.949	8509	21.3	55	-F	2	C	1735	1.00	2.70	10		
HALE	26	1933	1957	1941	N19	W84	.991	8509	20.5	24	-N	1	C	1941	.31				
HALE	27	0158E	0203		N20	W00	.227	8516	27.1	5D	-F	2	P	0158	.21	.22			
KAND	27	0700E	0852		N22	W90	.999	8509	20.5	112D	-	1	C						
ISTA	27	0715E	0925		N21	W90	.999	8509	20.6	130D	-	1	C						
BUCA	27	0922E	0947D	0925	N21	W04	.252	8516	27.1	25D	-B	1	C	0925	.50	.50			
CATA	27	0925E	0940D	0926	N21	W02	.246	8516	27.2	15D	-N	3	C	0926	.31	.32			
ATHN	27	0926	0935	0930	N19	W01	.210	8516	27.3	9	-N	3	C	0930	.66	.70	1.50	164	
KAND	27	0928	0940		N22	E01	.261	8516	27.5	12	-N	1	C						
BUCA	27	1018E	1041D	1033	N21	W04	.252	8516	27.1	23D	-B	1	C	1033	.39	.40			
MEUD	27	1027	1032	1028	N21	W04	.252	8516	27.1	5	-N	2	C	1028	.52	.53			
ATHN	27	1027	1035	1030	N21	E01	.244	8516	27.5	8	-N	2	C	1030	1.49	1.50	1.50		D
HUAN	27	1409	1428		N19	W90	.999	8509	20.8	19	-F	2	C	1419	.25				D
HA																			

# SOLAR FLARES

SEPTEMBER 1966

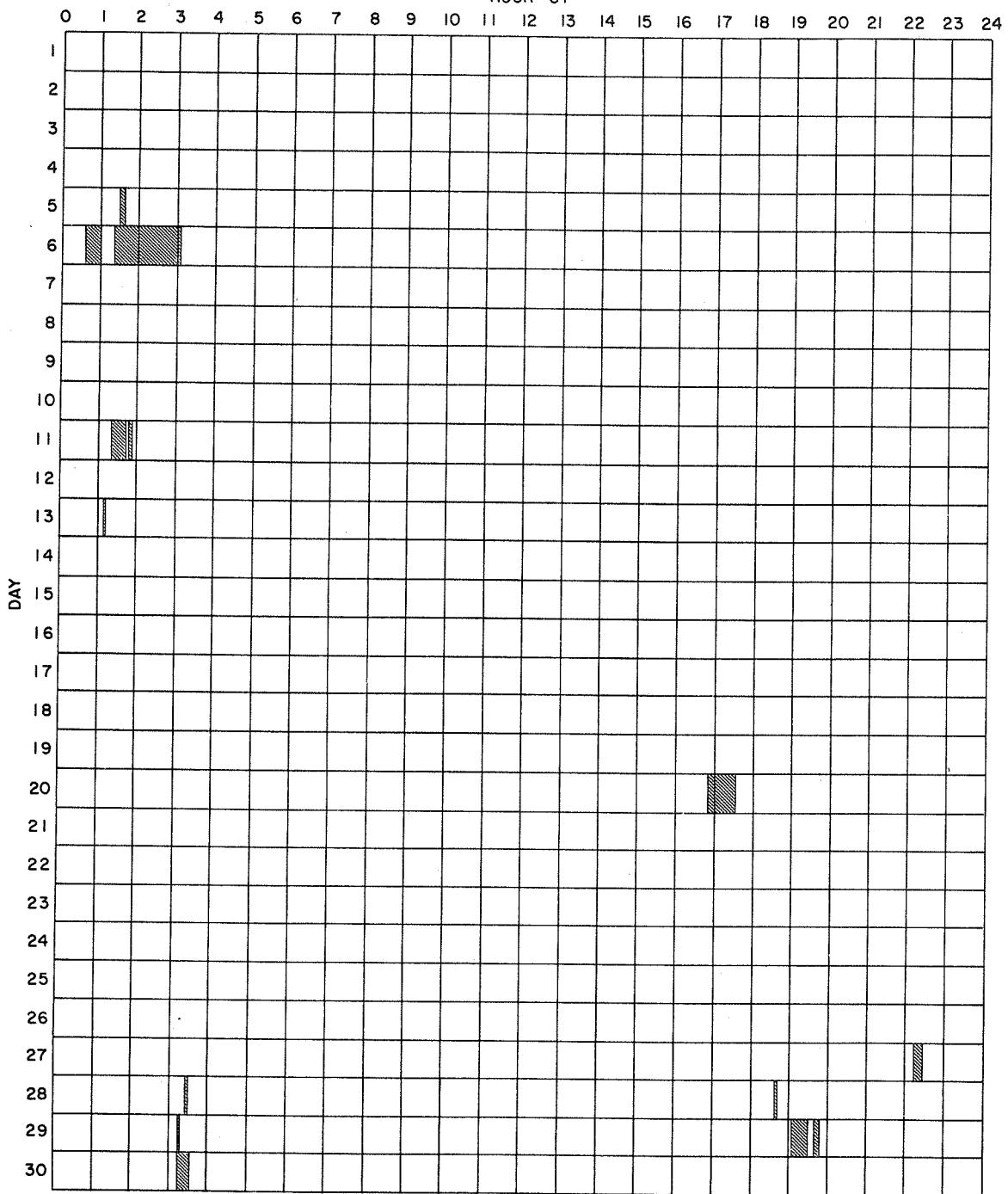
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OBSERVATORY	OBSERVED UT				LOCATION				DURATION	IM-POR-	OBS.	MEASUREMENTS				REMARKS			
	DATE 1966	START	END	MAX. PHASE	APPROX. LAT.	CENTRAL MERC. DIST.	MCMATH PLAGE REGION	CMP DAY				— MIN.	TANCE	COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha
<b>SEPT</b>																			
ISTA	28	0325	0330	NO FLARE PATROL	S18	E90	1.001	8527	5.1	50D	1F		C	0835	.39	.40			
BUCA	28	0740E	0830D		N26	W14	.396	8516	27.3	25D	=F								
ISTA	28	0830E	0855D	0835	N26	W90	.999	8509	21.6	47D	=F								
KAND	28	0858	0945D		N25	W90	.999	8509	21.6	24D	□								
BUCA	28	0906	0930D		N25	W90													
BUCA	28	0925	0945D		N26	W11	.372	8516	27.6	20D	=N		C	0929	.66	.70			
HALE	28	0926E	0950D	0929	N25	W14	.383	8516	27.3	24D	=F	1	C	1706	.57	.70			
LOCK	28	1702	1811	1706	N26	W34	.610	8516	26.2	69								TF	
LOCK	28	1840	1845	NO FLARE PATROL	N22	W22	.439	8516	27.2	10	=F		C	2028	.60	.70		10	
	29	0315	0320	NO FLARE PATROL	N27	W27	.539	8516	27.3	5D	=								
ISTA	29	0710E	0715		N26	W28	.528	8516	27.2	72	=F							200	
KAND	29	0823	0935		N26	W30	.558	8516	27.1	77D	IB		C	0905	1.97	2.30			
BUCA	29	0838E	0955D	0905	N25	W28	.521	8516	27.3	18D	1F	2	P	0906	1.98	2.20	1.30		
ATHN	29	0903E	0921	0906	N23	W28	.540	8516	27.2	78D	=N		P	1013	.33	.40			
BUCA	29	1105E	1123D	1013	N24	W29	.590	8516	27.1	20	=F	1	C	1117	.31	.33		D	
HUAN	29	1113	1133		N28	W31													
ATHN	29	1140E	1201	1142	N26	W25	.569	8516	27.6	21D	=N	2	C	1142	1.65	1.80	1.40		
KAND	29	1143E	1206		N24	W28	.528	8516	27.4	23D	=F								
ATHN	29	1229E	1241D	1230	N24	W25	.492	8516	27.6	12D	=N	2	C	1230	.83	.90	1.70		
HUAN	29	1335	1430D		S17	W16	.479	8522	28.4	55D	=F	1	C	1346	.50	.51			
HALE	29	1645	1737	1651	S17	W17	.487	8522	28.4	52	=N	1	C	1651	.46	.50			
	29	1905	1930	NO FLARE PATROL	N28	W36												TF	
HALE	29	1940	1950	NO FLARE PATROL	N28	W36	.644	8516	27.1	22D	=N	1	P	1953	.21	.30			
HALE	29	1953E	2015	1953U	N28	W36	.635	8516	27.1	39	=N	1	C	2012	.36	.50			
SACP	29	2001	2040	2012	N24	W37	.639	8516	27.1	12D	=F		P		1.72	1.91			
MCMA	29	2013E	2025D	2015U	N25	W37	.644	8516	27.1	8D	=N		C	2022	.62	.80		E	
HALE	29	2238	2258U	2239	N28	W36	.644	8516	27.2	20U	=N	1	C	2239	.21	.30			
IKOM	29	2310E	2313D		N25	W37	.639	8516	27.2	3D	=F		V	2310	.83	1.10		D	
IKOM	30	0045E	0130		N22	W37	.626	8516	27.3	45D	=F		V	0045	.62	.80			
MITK	30	0239	0345	0256	N25	W38	.651	8516	27.3	66	=F		C	0256	1.13	1.50			
VORO	30	0248	0314D	0252	N24	W38	.647	8516	27.3	26D	=N		P	0252	.99	1.27		50	
	30	0315	0335	NO FLARE PATROL	N31	E46	.758	8526	3.7	75D	=F							DE EH	
ISTA	30	0705E	0820		N26	W34	.611	8516	27.9	34D	=N		C	1054	.23	.30			
BUCA	30	1047E	1121D	1054	N26	W34	.611	8516	27.9	6D	=F		C	1203	.23	.30			
BUCA	30	1203E	1209D		N29	E37	.661	8526	3.3	6D	=F		C	1642	.52	.60			
MCMA	30	1625E	1645D		S18	W05	.427	8529	30.3	20D	=N		C	1643	.25	.25		G E D	
HUAN	30	1640	1648		S18	W05	.427	8529	30.3	8	=F	1	C	1955	.21	.21			
HUAN	30	1953E	2005D		S18	W06	.430	8529	30.4	12D	=F	1	C	2056	.60	.80			
LOCK	30	2053	2106	2058	S16	W36	.673	8522	28.2	13D	=N	1	C	2057	.31	.40		10	
LOCK	30	2056E	2101D	2057	S15	W36	.667	8522	28.2	5D	=N	1	C	2120	.60	.70		20	
LOCK	30	2116	2130	2120	S18	W10	.449	8529	30.1	14	=N		C	2255	.70	.80			
LOCK	30	2247	2305	2255	S18	W10	.449	8529	30.2	18	=N		C	2320	.70	1.10		20	
MANI	30	2310	2400	2320	N24	W50	.776	8516	27.2	50	=N		C	2347	.52	.83			
LOCK	30	2347E	2348D		N21	W33	.573	8525	28.5	1D	=F		C	0009	.30	.40		10	
	30	2359	0020	0009	N16	W36	.673	8522	28.3	21	=F								
The following Report of Solar Flares was received too late to include in the above table.																			
UCCL	02	0812E	0829D		N23	E75	.958		8.0	17D			P	0829	3.09			E	
UCCL	05	1507E	1510D		N33	W75	.959	8567	31.0	3D	1N		P	1509	.26			E	
UCCL	06	1238E	1243D		N33	W90	.998	8567	30.8	5D			P	1239	.21			D	
UCCL	06	1440E	1503D		N33	W90	.998	8567	30.9	23D			P	1502	.21			D	
UCCL	07	1259	1304	1301	N23	E65	.900	8596	12.4	5	=B		C	1301	.31			D	
UCCL	09	0815	0820		N23	E47	.740	8596	12.9	5	=N		C	1437	1.03	2.10		D	
UCCL	09	1431E	1457D		S19	W38	.716	8484	6.8	26D	1N		P						
UCCL	14	1332E	1333D		N05	E75	.964	8505	20.2	1D			P	1332	.31			BD	
UCCL	14	1418	1432		N05	E75	.964	8505	20.2	14	=N		P	1422	.72			E	
UCCL	18	0845	0907		N22	E47	.739	8509	21.9	22	1N		C	0905	1.03	2.40		EH	
UCCL	19	0827	0831		N12	E08	.161	8505	20.0	4	=F		C	0830	.31	.40			
UCCL	19	1214E	1238	1225	N28	E30	.577	8509	21.8	24D	2N		P	1225	5.16	7.30		EK	
UCCL	19	1415	1419	1418	N22	E32	.563	8509	22.0	4	=N		C	1418	1.03	1.60		E	
UCCL	20	1034	1044	1038	N22	E19	.400	8509	21.9	10	=N		C	1038	.52	.60		DF DE	
UCCL	20	1048	1118	1051	N10	W15	.261	8505	19.3	30	28		C	1051	8.25	8.80			
UCCL	20	1642	1642	1650D	N23	E15	.366	8509	21.8	8D	=B		P						
UCCL	20	1642	1650D		N07	W15	.257	8505	19.6	8D	=B		P						
UCCL	21	0930	0949	0933	N23	E02	.276	8509	21.2	19	2P		C	0937	4.13	4.80		D E	
UCCL	21	0930	1008	0933	N24	E05	.302	8509	21.8	38	=B		C	0933	.41	.50			
UCCL	22	1457E	1502D		N22	W15	.355	8516	21.5	16D	2N		P		3.09	7.30		E	
UCCL	23	1554	1610D		N23	E50	.772	8516	27.4	16D	2N		P					D	
UCCL	26	1015E	1018D		N19	E08	.248	8516	27.0	3D			P						

**INTERVALS OF NO FLARE PATROL OBSERVATIONS  
PROVISIONAL**

SEPTEMBER 1966

HOUR-UT



Observatories included:

Abastumani	Bucharest	Haleakala	Kandilli	Lockheed	Monte Mario	Tortosa
Arcetri	Capri-S (Swedish)	Herstmonceux	Kharkov	Manila	Ondrejov	Vorochilov
Arosa	Catania	Huancayo	Kiev	McMath-Hulbert	Sacramento Peak	Wendelstein
Athenes	Climax	Ikomasan	Kodiakanal	Meudon	Siberie	Zürich
Bakou	Gulgoora	Istanbul	Locarno	Mitaka	Tachkent	

SOLAR RADIATION MONITORING SATELLITE  
X-RAY

IIIz

OCTOBER 1966

NRL

NRL SOLAR X-RAY DATA (Preliminary)  
Observing Times for October 1966

27	1652	1703	30	1523	1531
	1835	1848		1704	1718
				1849	1901
28	1622	1631		2038	2045
	1804	1818		2224	2232
			31	1456	1500
29	1534	1620		1634	1647
	1734	1748		1818	1831
	1919	1932		2006	2015
	2108	2115		2153	2201
	2255	2302		2341	2345

NRL SOLAR X-RAY DATA (PRELIMINARY)  
DAILY AVERAGE VALUES FOR OCTOBER 1966

Date	44-60 A $\times 10^{-1}$	8-20 A $\times 10^{-3}$	0-8 A $\times 10^{-4}$
27	1.28		
28	1.18	4.35	
29	1.35	7.16	4.50
30	1.24	4.47	2.00
31	1.16	3.22	1.45

1. No Events were observed during October 1966
2. Aspect Angle greater than  $25^{\circ}$  for Oct 1-28

## SOLAR RADIATION MONITORING SATELLITE X-RAY

NOVEMBER 1966

NRL

NRL SOLAR X-RAY DATA (PRELIMINARY)  
OUTSTANDING EVENTS FOR NOVEMBER 1966

Date	Start	Stop	8-20 A x10 <sup>-3</sup>	0-8 A x10 <sup>-4</sup>	0-3 A x10 <sup>-5</sup>	Comments
2	1718	1731	14.90	23.6	4.03	
5	2108	2115	15.14	19.9	1.69	INCREASING
6	0035	0042	15.69	13.7	2.23	DECREASING
6	1335	1344	32.59	43.2	12.65	
7	1820	1827	19.99	24.4	5.40	INCREASING
7	2007	2015	31.46	31.2	3.19	
7	2152	2204	23.18	15.1	0.53	
14	1259	1313	63.89	28.8	6.08	
15	1935	1946	36.10	18.9	6.83	
16	2234	2244	32.49	17.0	1.90	
21	1817	1830	45.40	23.6	2.18	
22	1605	1610	56.75	35.4	6.53	
22	1930	1944	0.00	52.7	4.46	
26	1212	1222	27.02	21.9	2.04	DECREASING

NRL SOLAR X-RAY DATA  
(PRELIMINARY)  
DAILY AVERAGE VALUES  
FOR NOVEMBER 1966

**NRL SOLAR X-RAY DATA (Preliminary)**  
**Observing Times for November 1966**

NRL

**SOLAR RADIATION MONITORING SATELLITE IIIbb  
X-RAY**

DECEMBER 1966

**NRL SOLAR X-RAY DATA (Preliminary)  
Outstanding Events for December 1966**

Date	Start	Stop	8-20 A $\times 10^{-3}$	0-8 A $\times 10^{-4}$	0-3 A $\times 10^{-5}$	Comments
6	1557	1610	12.28	6.60	<0.64	
7	1528	1539	13.34	9.51	1.51	
12	1440	1452	24.13	14.13	1.02	
13	1410	1421	21.77	21.31	8.47	INCREASING
17	1025	1037	—	81.62	24.32	DECREASING

**NRL SOLAR X-RAY DATA (Preliminary)  
Daily Averages for December 1966**

**NRL SOLAR X-RAY DATA  
Observing Times for December 1966**

Date	44-60 $\times 10^{-1}$	8-20 $\times 10^{-3}$	0-8 $\times 10^{-1}$
1	1.37	5.38	1.15
2	1.57	6.94	2.12
3	1.48	5.94	2.17
4	1.58	5.71	2.41
5	1.76	6.94	3.10
6	1.91	7.46	3.36
7	2.11	9.65	6.52
8	2.09	10.86	6.00
9	—	24.34	13.34
10	—	32.27	24.09
11	—	29.79	18.70
12	—	20.05	9.39
13	2.45	15.31	5.89
14	2.35	14.50	5.76
15	2.41	18.72	6.61

Aspect Angle Greater than 25° for Dec 16-31

1	0939	0952	8	1128	1135
	1128	1136		1315	1324
	1316	1322		1456	1509
	1500	1510		1643	1649
	1644	1656			
			9	1058	1105
2	1058	1106		1243	1253
	1245	1252		1438	1440
	1430	1440		1611	1621
	1614	1626			
	1759	1809	10	1028	1035
				1212	1223
3	1026	1036		1356	1409
	1214	1220		1541	1551
	1400	1410			
	1544	1557	11	1142	1151
	1728	1737		1329	1339
				1511	1520
4	1144	1149	12	1111	1121
	1329	1339		1256	1308
	1513	1526		1440	1452
	1658	1708			
5	1113	1119	13	1041	1050
	1259	1307		1226	1236
				1410	1421
6	1043	1050	14	1012	1020
	1229	1238		1155	1207
	1413	1426		1339	1352
	1557	1610			
7	1158	1204	15	0941	0949
	1343	1355		1125	1136
	1528	1539		1309	1320
	1714	1719		1456	1500

IIIcc

## IONOSPHERIC EFFECTS OF SOLAR FLARES

NOVEMBER 1966

NOV 1966	UNIVERSAL TIME			WIDE SPREAD INDEX	SWF TYPE IMP	IMPORTANCE					BUR	STATIONS	KNOWN FLARE
	START	END	MAX			SCNA	SEA	SPA	SES	SFD			
02	1726	1830	1738	5					99			BO(WWVB60-170, WWVL20-80,NSS88-35) UM(NPM26-38)	1702
03	0655	0718	0708	1					36		1	MA(NPG18-36) BO	0631E 1854
03	1902	1905		1								HA(WWVH10-0.5)	
05	2134	2138	2135	1							05		
06	0213	0215		1							1	MA	
06	0217	0236	0218	1	S 1-							MA	0226E
06	0219	0238	0225	1					30		02	MA(NPG18-30) BO(WWI8-0-2)	1334E
06	1436	1444	1439	1								HA	*
06	2118	2121		1							1+	HA	2127E
06	2129	2132		1							1+	HA	
07	0731	0742	0733	1					43		1	MA(NPG18-43)	0739E
07	0734	0737		1								MA	
07	1810	1940	1855	5	G 1+							MC HU	*
07	1830	1853		1								UM	
07	1830	1945	1855	5					99	2		BO(WWVL20-200,NSS88-75, WWVB60-70,NBA24-20) UM(NSS21-31)	
08	0044	0045	0044	1							05		
08	2009	2010		1							1	HA(WWVH10-0.5) HA	0739E
10	2230	2238	2235	5					18			MA(NPG18-18) BO (WWVL20-14,NPM26-14, WWVB60-14,NSS88-14)	2222
14	1222		1250U	1	G 1							HU	1224E
15	0022	0202	0035	1								MA(NPG18-50)	0023
15	1932	2002	1939	5					50			BO(WWVB60-28,WWVL20-8) HA(WWVL20-7)	1918E
16	1752	1754		1							1	BO	1753
17	0013	0021	0017	1							05	BO(WWI8-0-5)	
17	0133	0233	0144	1	G 1							MA	0146E
17	0134	0227	0149	1					29			MA(NPG18-29)	
18	0510	0512		1							1	MA	0515E
19	1830	1925	1847	1								UM	
19	1832	2015	1848	5					66	2		UM(NPM26-66,NBA24-13) HA(WWVL20-22)	1828
20	1632		1640	1					33			UM(NPM26-33,NBA24-17)	
22	1830	1935	1907	5	G 1							MC HU	
22	1832	1945	1855	5					30			UM(NBA24-30) MA (NPG18-22)	1835E
24	2211	2213		5							1	HA BO	2212
25	1523	1533	1524	1							04	BO(WWI8-0-4)	*
25	1525	1630	1537	1								UM(NBA24-13)	
26	0001	0003	0001	1							02	BO(WWI8-0-2)	*
27	1825	1827		1							1	BO	
27	2149	2151	2150	1							02	HA(WWVH10-0-2)	1820
27	2152	2242	2155	1								HA(WWVL20-14)	
29	1511	1514	1511	1							02	BO(WWI8-0-2)	*
30	0445	0523	0456	1								MA(NPG18-25)	
30	1628	1645	1631	1								BO(WWI8-0-9)	0446
30	1630	1655	1645	1								UM	1627
30	1630	1730	1645	5							2+	UM(NPM26-42)	
30	2050	2053	2051	1							03	BO(WWVL20-30,NSS88-40) HA(WWVH5-0-3)	

No SWF observations were made at Boulder after November 14 because of equipment failure.  
 No report of SCNA-SEA-BUR received from McMath during the month of November.

Addenda to SFD report for October 1966:

Day	Start	End	Max	Freq.	Dev.	Stations	Flare Time
01	0012	0023	0014	03		BO(WWI11-0-3)	
01	1625	1633	1626	03		BO(WWI11-0-3)	1550
16	1902	1914	1903	03		BO(WWI9-0-3)	1901
16	2312	2315	2313	02		BO(WWI8-0-2)	2253
20	2038	2050	2040	04		BO(WWI8-0-4)	2037E
23	1344	1354	1347	02		BO(WWI8-0-2)	1334

## RIOMETER EVENTS

IIIdd

NOVEMBER 1966

Great Whale River

30 Mc/s

NOV. 1966	START UT	END UT	MAX. UT	MAX. ABS. .1DB	NO. OF PKS	NO. OF PKS
02	1150	2150	1238	44	5	17
03	0035		1420			0042
04		0904		65	21	1537
04	1545	2237	2029	14	2	2014
05	0148	2300	1325	25	9	0016
06	0144	2146	0357	17	7	0805
07	0054		1426			0723
08		0656		8	8	1320
08	1520		2023			1640
09		0530		13	3	1341
09	1453					0224
11		2252	1045	27	7	1010
12	0134	1317	1051	13	3	0435
12	1850		2049			0236
13		0623		15	4	0314
13	*	2340	1917	6	4	0000
14	1430	2232	1540	4	1	0000
15	1044	2240	1328	5	1	0332
16	0210	1100	0825	6	8	1635
16	1427	2050	1555	5	4	2047
						0940
						1218
						1705
						0510
						0850
						2100
						1200
						2130
						1919
						0200
						2058
						0839
						2306
						2234
						1415
						57
						6

\* 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**

IVa

DECEMBER 1966

DATE	FREQUENCY STATION	TYPE	STARTING TIME		DURATION	FLUX DENSITY		INT.	REMARKS
			UT	UT		10 <sup>-22</sup> Wm <sup>-2</sup> (c/s) <sup>-1</sup>	PEAK		
1	486 WASH	5	1648	1650	4.5	45.0			
	2800 OTTA	20	1745	1800	85	2.4	1.2		
	2695 SGMR	20	1745	1749	55	5.3	1.0		
	1415 SGMR	20	1745	1747.9	55	5.0	1.0		
	606 SGMR	20	1745	1749	32	17.6	3.5		
	606 SGMR	45	1746.6	1750	12.4	22.7	5.0		
3	2700 PENT	20	2120	2125	20	2.4	1.2		
4	2700 PENT	4	2146	2150	7	8.6	4.3		
	2800 OTTA	29	2152		50	3.4	1.7		
5	2800 OTTA	20	1505	1630	230	6.4	3.2		
6	2800 OTTA	20	1525	1610	225	3.8	1.9		
7	1415 SGMR	40	1730	1731.8	4	4.6	1.0		
	606 SGMR	3	1731	1731.6	3	88.9	10.0		
	8800 SGMR	1	1758.6	1758.9	1.8	6.9	1.0		
	4995 SGMR	1	1758.6	1759.8	1.8	6.0	1.0		
	2695 SGMR	1	1759.1	1759.8	.9	2.6	.5		
	606 SGMR	3	2101.5	2101.6	2.1	42.4	10.0		
9	8800 SGMR	3	1515.8	1516.1	1.2	38.5	7.5		
	4995 SGMR	3	1515.8	1516.1	2.2	12.3	3.0		
	2695 SGMR	1	1515.8	1516.1	1.2	7.3	1.5		
	1415 SGMR	1	1515.8	1516.1	1.2	2.6	.5		
	1415 SGMR	40	1542.5	1543.2	9.5	6.0	2.0		
	-10700 PENN	24	1738.4	1756.4	18	12.3	6.1		
	2700 PENN	24	1743.5	1756.2	12.7	2.1	1.0		
	-10700 PENN	45	1757.1		3 D	180.0D	90.0D		CALIBRATION
	-10700 PENN	45	1807.5	1808.8	4.3	127.5	77.3		
	-8800 SGMR	45	1756	1800.2	34	236.0	60.0		
	4995 SGMR	45	1756	1800.2	32	262.5	65.0		
	2800 OTTA	46	1756	1809	19	158.0	60.0		
			1756	1802	10.5	140.0			
			1806.5	1809	8.5	158.0			
	-2700 PENN	45	1756.2		11	47.0D	30.0D		CALIBRATION
	-2700 PENN	45	1807.3	1809.3	9	131.6	50.9		
	2695 SGMR	45	1756 U	1800.2	32 U				
	1415 SGMR	45	1756	1808.5	25	69.2	8.0		
	960 PENN	45	1759.4		1 D				
	960 PENN	45	1807.6	1809	6.5	26.9	6.2		CALIBRATION
	606 SGMR	45	1756	1808.6	31	425.0	7.0		
	486 WASH	45	1800	1808	30	125.0D			OFF SCALE
	-10700 PENN	29	1811.9	1811.9	25	46.0	16.0		
	-2800 OTTA	30	1815		205	17.0	8.5		
	-2700 PENN	29	1816.3	1816.3	144 D	14.4	4.6		
	1415 SGMR	29	1821	1821	109	8.5	4.2		
	606 SGMR	29	1827	1827	73	6.8	3.4		
	-8800 SGMR	22	1955	1959.3	18.5U	14.0	4.5		
	4995 SGMR	22	2000.3	2022	26 U	12.3	4.0		
	2800 OTTA	20	2000		70	4.4	2.2		
10	2800 OTTA	21	1425	1443	225	13.4	6.7		
	-10700 PENN	3	1434.3	1439.9	15.2	16.4	9.2		
	-8800 SGMR	22	1434	1435.3	19	16.5	3.5		
	4995 SGMR	22	1434	1435.3	U	24.6	5.0		
	2800 OTTA	45	1434	1435.5	5	16.4	8.2		
			1434	1435.5	2	16.4			
			1436	1437.5	3	6.6			
	-2700 PENN	3	1433.5	1434.9	4.4	20.7	10.9		
	2695 SGMR	22	1434	1435.3	U	21.3	4.0		
	1415 SGMR	22	1434	1435.3	U	3.4	1.0		
	-2700 PENN	29	1438	1438	320 D	10.2	4.9		
	-2800 OTTA	1	1531	1532	2	2.2	1.1		
	-2800 OTTA	1	1614	1615	4	1.6	0.8		
	-2800 OTTA	20	1735	1745	30	3.6	1.8		
	606 SGMR	22	1730	2028	U	41.5	15.0		
	-2700 PENT	21	2005	2105	130	8.8	4.4		
	-2800 OTTA	1	2036	2037	3	1.4	0.7		
	-2800 OTTA	1	2055	2059	8	6.4	4.6		
	-2800 OTTA	20	2140	2145	25	1.8	0.9		
11	2800 OTTA	22	1630	1747	120	5.6	2.8		
	4995 SGMR	28	1913.4	1919.8	6.4	21.5	7.0		
	-10700 PENN	3	1919	1919.8	14	22.4	5.4		
	-8800 SGMR	22	1917.2	1920.1	39.8	38.8	5.0		
	4995 SGMR	3	1919.8	1920.1	1.7	63.4	8.0		
	-2800 OTTA	3	1919.5	1920.2	1.5	17.0	8.5		
	-2700 PENN	20	1918.8	1919.9	15.2	15.1	2.8		
	2695 SGMR	3	1919	1920.2	18	13.0	3.0		
	4995 SGMR	29	1921.5	1921.5	35.5	23.9	6.0		
	-2800 OTTA	29	1921		15	6.6	3.3		
	2695 SGMR	29	1921.7	1921.7	35.3	5.1	1.0		
	2695 SGMR	20	1950	1957.5	8	11.8	2.0		
	-10700 PENN	3	2019.4	2020.6	3.4	15.2	7.1		
	-8800 SGMR	20	2019.9	2020.9	7.1	25.3	4.0		
	4995 SGMR	20	2019.9	2020.9	7.1	22.7	4.0		
	-2800 OTTA	21	2019	2023	45	6.4	3.2		
	-2800 OTTA	3	2019	2021	3	8.0	4.0		

**SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES**

DECEMBER 1966

DATE	FREQUENCY STATION	TYPE	STARTING	TIME OF	DURATION	FLUX DENSITY		INT.	REMARKS
			UT	MAXIMUM		PEAK	MEAN		
12	-2700 PENN	20	2019.6	2020.6	12.8	10.8	3.1		
	-2695 SGMR	20	2020	2021.2	7	10.8	2.0		
	4995 SGMR	3	1336.5	1336.8	.9	10.7	1.5		
	-8800 SGMR	20	1418	1423.2	32	8.4	3.0		
	-4995 SGMR	20	1417.7	1422	38.3	11.6	4.0		
	-2800 OTTA	20	1415	1422	45	5.6	2.8		
	-2700 PENN	20	1416	1421.3	40	6.3	3.2		
	-2695 SGMR	20	1418	1423	42	6.5	2.0		
	-1415 SGMR	20	1422	1423.5	8	1.1	.5		
	-2800 OTTA	21	1905	1910	105	2.2	1.1		
13	-2800 OTTA	20	1935	1947	75	6.0	3.0		
	-2700 PENN	20	1937	1948	36	5.9	2.8		
	-8800 SGMR	3	1414.5	1414.9	1.5	18.0	3.5		
	-10700 PENN	3	1414.6	1415	2	11.0	3.4		
	-4995 SGMR	3	1413	1414.8	5	43.8	8.5		
	-2800 OTTA	3	1414.5	1415	2.5	20.0	10.0		
	-2700 PENN	3	1414.6	1415.4	2.3	15.5	7.6		
	-2695 SGMR	3	1414	1414.9	11	19.6	4.0		
	-2800 OTTA	30	1417		70	5.0	2.5		
	-2700 PENN	29	1417	1417	40	3.9	1.8		
14	-8800 SGMR	45	1459	1501.1	6	12.0	5.0		
	-4995 SGMR	45	1458.8	1459.1	12.2	17.6	6.6		
	-2800 OTTA	45	1459	1459.3	3	11.8	5.9		
	-2695 SGMR	45	1459	1459.3	1.5	11.8			
	-2800 OTTA	45	1459	1459.2	21	18.2	6.1		
	-2800 OTTA	29	1507		25	2.4	1.2		
	-10700 PENN	3	1727.2	1727.6	1.2	7.9	3.9		
	-8800 SGMR	4	1727	1727.4	1	12.0	3.0		
	-4995 SGMR	4	1727	1727.3	1	13.2	3.3		
	-2800 OTTA	1	1727	1727.5	1	2.8	1.4		
15	-2700 PENN	1	1727.2	1727.9	1.8	3.6	1.8		
	-2695 SGMR	4	1727	1727.4	4.5	3.6	.9		
	-10700 PENN	1	1729.2	1729.8	1.9	6.8	3.4		
	-10700 PENN	3	1733	1733.8	1.2	8.4	4.2		
	-2700 PENN	1	1733.7	1733.8	.5	2.3	1.1		
	-8800 SGMR	3	1916	1917	3	11.3	5.6		
	-4995 SGMR	40	1915	1924	32	13.2	3.3		
	-2800 OTTA	21	1830	1840	35	2.4	1.2		
	-2800 OTTA	1	1900	1901	2	3.4	1.7		
	-2800 OTTA	20	1920	1925	10	2.0	1.0		
16	-2695 SGMR	40	1847	1933.7	69	30.0	8.5		
	-2700 PENT	20	2100		65	5.8	3.8		
	-2800 OTTA	20	1700	E	1718	100	D	4.4	2.2
	-606 SGMR	41	1806.8		1807.1	.7	106.2	5.0	
	-606 SGMR	29	1807.5		1807.5	22.5	.5		
	-2700 PENT	21	1950		2110	135	8.0	4.0	
	-2800 OTTA	2	2038.7		2040.5	6	6.2	3.1	
	-2700 PENN	24	1955		2048	55	D	5.1	2.0
	-1415 SGMR	3	2054.5		2054.8	.5	11.0	2.0	
	-606 SGMR	3	2054.5		2054.8	.5	13.2	3.0	
17	-1415 SGMR	45	2101.5		2101.6	2.5	29.4	6.0	
	-606 SGMR	45	2101.5		2101.6	2.5	56.7	8.0	
	-4995 SGMR	20	1720	U	1726	69	U	13.2	2.0
	-2800 OTTA	20	1710		1732	70	5.2	2.6	
	-2695 SGMR	20	1720	U	1739.5	80	U	10.0	2.0
	-2800 OTTA	20	1920		1930	30		2.0	1.0
	-2700 PENT	20	2037		2105	60		3.4	1.7
	-8800 SGMR	4	1235.4		1236.6	2.6	19.8	6.6	
	-4995 SGMR	4	1235		1236.6	9	39.0	12.0	
	-2695 SGMR	4	1235		1236.7	9	25.7	7.8	
18	-8800 SGMR	1	1633		1633.4	1	6.6	1.3	
	-4995 SGMR	22	1632.6		1633.2	39.4	11.7	2.5	
	-2800 OTTA	21	1630		1640	65	9.2	4.6	
	-2800 OTTA	1	1636		1637	4	7.0	3.5	
	-2800 OTTA	1	1702		1703.5	3	4.2	2.1	
	-2695 SGMR	22	1632		1636.6	40	12.6	3.0	
	-2800 OTTA	1	1408.4		1408.5	1.5	3.0	1.5	
	-8800 SGMR	20	1834		1840	16	3.3	.8	
	-4995 SGMR	20	1834		1840	16	4.0	1.0	
	-2800 OTTA	20	1755		1837	180	6.6	3.3	
19	-2700 PENN	20	1824		1838	80	6.0	1.6	
	-2695 SGMR	20	1834		1840	36	5.2	1.2	
	-1415 SGMR	22	1830.5		1837.1	35.5	9.0	2.0	
	-8800 SGMR	20	1416		1421	11	5.0	.5	
	-4995 SGMR	20	1412.5		1418.2	45.5	12.9	2.0	
	-2800 OTTA	4	1413		1418	8	15.0	7.5	
	-2700 PENN	24	1412		1428	150	D	2.7	
	-2700 PENN	3	1414.5		1417.7	10	12.3	4.3	
	-2695 SGMR	20	1405		1418	45.4	16.8	2.0	
	-1415 SGMR	20	1410		1419	20	10.0	1.0	
20	-2800 OTTA	30	1421		180	5.2	2.6		
	-2700 PENN	1	1433.6		1434.6	2	2.1	1.1	
	-2700 PENN	1	1439.2		1440	1.4	.7	0.4	

SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES  
DECEMBER 1966

DATE	FREQUENCY STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY $10^{-12} \text{Wm}^{-2} (\text{c/s})^{-1}$		INT.	REMARKS
						PEAK	MEAN		
	-2700 PENN	1	1442	1442.4	.8	.1	0.1		
	-2700 PENN	20	1506.2	1507.6	9.1	1.2	0.6		
	-2700 PENN	1	1534.4	1535.4	3.4	1.6	0.8		
	-2700 PENN	1	1547.9	1548.7	3	1.1	0.5		
	-10700 PENN	1	1621.3	1621.8	1.1	6.2	3.4		
	-8800 SGMR	3	1620	1622	4.5	12.6	1.0		
	-4995 SGMR	3	1620.5	1622	4.1	17.2	2.0		
	-2800 OTTA	1	1620.5	1622	2.5	6.6	3.3		
	-2700 PENN	3	1620.4	1621.8	3.8	8.7	2.3		
	-2695 SGMR	1	1620	1622	3	6.3	1.0		
20	606 SGMR	40	1530.6	1531.5	1.3	13.8	2.0		
	1415 SGMR	41	1543	1543.6	.7	16.5	2.0		
21	-8800 SGMR	3	1451	1454.3	5	6.0	1.5		
	-4995 SGMR	3	1450.5	1454.3	8.5	12.0	3.0		
	-2700 PENN	3	1451	1454.4	5.8	24.4	7.9		
	-2695 SGMR	3	1450.5	1454.2	8.5	29.4	8.0		
	-1415 SGMR	3	1450.5	1454	7.5	9.8	2.5		
	-606 SGMR	4	1445	1450.7	13	9.8	2.5		
	-2700 PENN	29	1456.8	1456.8	21	1.7	0.4		
	-1415 SGMR	3	1937	1939.3	3	2.5	.6		
	-606 SGMR	40	1937	1939.3	3.5	16.4	4.1		
22	606 SGMR	40	1401.9	1402.1	.4	5.6	2.0		
	-2700 PENN	20	1615.6	1619.5	44	3.8	1.1		
	-2800 OTTA	20	1616	1621	50	5.2	2.6		
	-2800 OTTA	1	1955	1957	3	1.6	0.8		
	-2800 OTTA	29	1958		22	1.0	0.5		
23	-8800 SGMR	3	1311.1	1312	5.9	19.8	3.0		
	-4995 SGMR	3	1311	1312	6	26.2	4.0		
	-2695 SGMR	3	1311.4	1312.3	5.6	25.3	4.0		
	-1415 SGMR	3	1311.3	1311.8	3.7	10.5	2.0		
	-606 SGMR	40	1311.6	1311.8	2.9	5.3	1.0		
	-10700 PENN	1	1405.2	1406	1.8	5.5	2.8		
	-8800 SGMR	1	1405.5	1406.3	1.1	4.0	.5		
	-4995 SGMR	1	1405.4	1406.2	1.8	3.9	.5		
	-2700 PENN	1	1405.3	1406.3	1.9	3.3	1.6		
	-2695 SGMR	1	1405.2	1406.4	4.6	2.9	.5		
	-2800 OTTA	21	1415	1450	110	4.0	2.0		
	-10700 PENN	45	1505.2	1507	5.6	202.7	52.4		
	-8800 SGMR	3	1505.1	1506.9	8.9	145.6	30.0		
	-4995 SGMR	3	1505.4	1506.8	8.6	36.8	8.0		
	-2800 OTTA	4	1505.5	1506.4	25	29.0	17.0		
	-2700 PENN	45	1505.3	1506.5	7.7	27.4	6.2		
	-2695 SGMR	4	1505.2	1506.4	8.8	30.1	6.0		
	-1415 SGMR	4	1505	1506.1	6	38.7	8.0		
	-606 SGMR	1	1506.2	1506.3	.2	1.3	.5		
	-2800 OTTA	30	1508		12	4.2	2.1		
	-2800 OTTA	1	1508.9	1509.3	1.5	2.4	1.2		
	-2800 OTTA	21	1639	1740	105	3.2	1.6		
	-10700 PENN	3	1638.5	1640.2	4	45.7	16.6		
	-2800 OTTA	3	1639	1640	3	12.6	6.3		
	-2700 PENN	3	1638.7	1640.2	3.4	11.5	5.1		
	-10700 PENN	29	1642.5	1710.9	36	19.3	12.3		
	-2800 OTTA	20	1707	1710	4.5	2.0	1.0		
	-2800 OTTA	1	1722.5	1722.7	1	.8	0.4		
	-2700 PENN	29	1642.1	1710.4	36	3.2	2.1		
	-2800 OTTA	1	2029	2030.5	2.5	2.0	1.1		
	-2800 OTTA	29	2031.5		30	1.0	0.5		
24	-8800 SGMR	1	1445.6	1447.4	3.5	2.4	1.2		
	-4995 SGMR	3	1445.6	1447	13.1	12.3	6.5		
	-2800 OTTA	1	1445.5	1447.5	3.5	5.8	2.9		
	-2700 PENN	1	1445.6	1447.5	3.4	5.6	3.2		
	-2695 SGMR	3	1445.6	1447.2	6.2	16.8	8.4		
	-2800 OTTA	29	1449		45	3.6	1.8		
	-2700 PENN	29	1449	1449	57	3.1	1.3		
	-2695 SGMR	29	1451.8	1451.8	41.2	6.7	3.4		
25	-2700 PENN	20	1819.4	1821.8	58	2.6	1.0		
	-2800 OTTA	1	1820	1821.5	4	1.6	0.8		
27	606 SGMR	41	1511.7	1511.9	.9	3.5	1.9		
	-2700 PENN	20	1835.7	1843.4	11.5	3.7	1.0		
	-2800 OTTA	1	1842.5	1843	1	1.8	0.9		
28	-2800 OTTA	1	1759.5	1800.2	1	1.4	0.9		
	-2800 OTTA	21	1804	1805.5	15	1.4	0.7		
	-2800 OTTA	2	1806	1806.8	2	2.2	1.1		
	-2695 SGMR	1	1806	1807	3	3.3	.5		
	-1415 SGMR	20	1804	1808	13	1.8	.1E		
29	486 WASH	5	1842		1	125.0D			
30	-4995 SGMR	1	1342.8	1342.9	.7	5.2	1.5		
	-2695 SGMR	1	1342.7	1342.9	.8	6.5	2.0		
	-1415 SGMR	3	1342.5	1342.9	.8	8.8	2.5		
	-606 SGMR	3	1342.2	1342.8	1.1	41.0	12.5		
	-2800 OTTA	20	1450	1455	35	2.2	1.1		

OFF SCALE

IVc

IVd

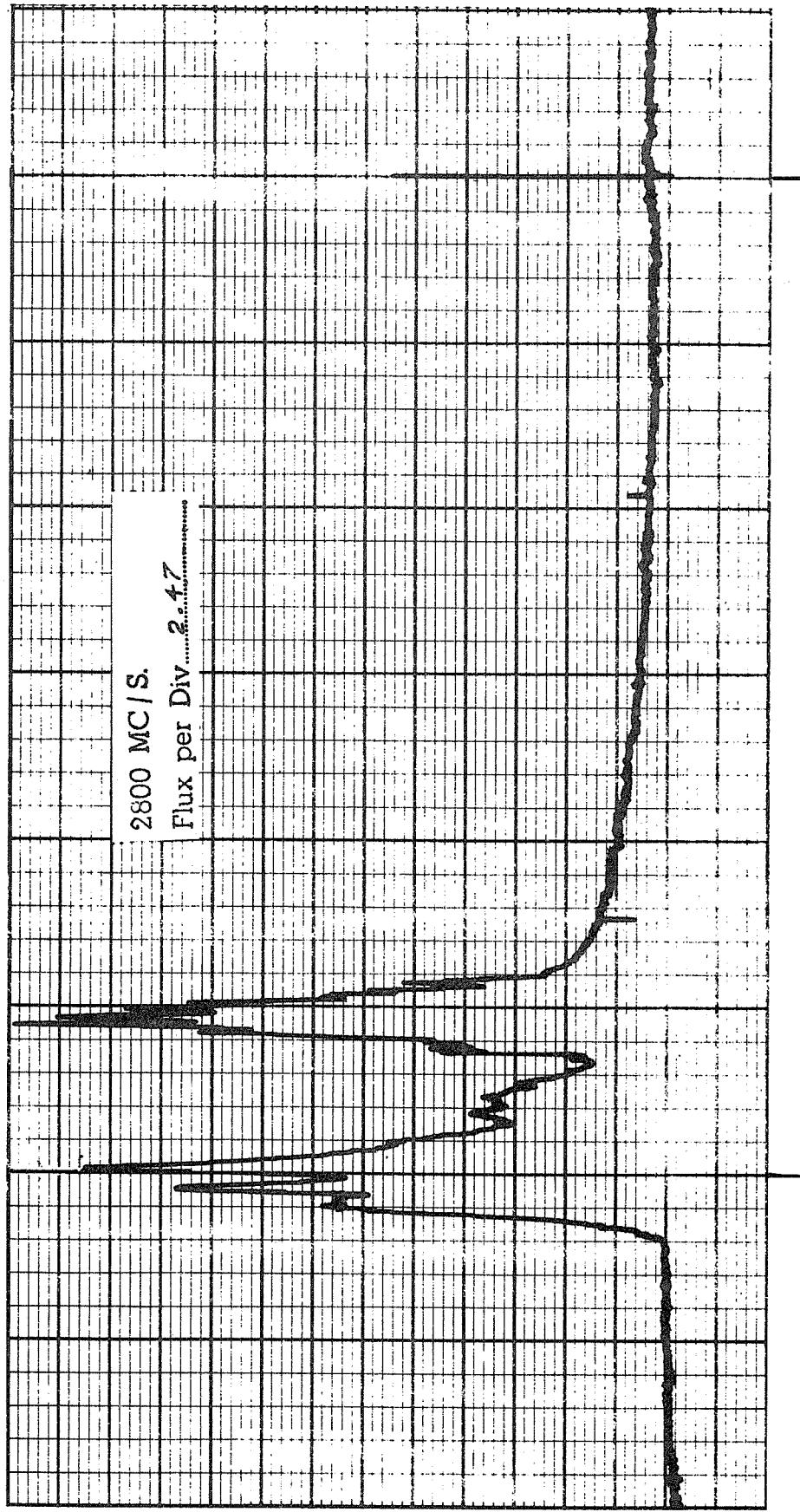
**SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES**

DECEMBER 1966

DATE	FREQUENCY STATION	TYPE	STARTING	TIME OF	DURATION	FLUX DENSITY		INT	REMARKS
			UT	UT		MINUTES	PEAK		
31	2700 PENT	1	2114.8	2115	2		1.6		
	2700 PENT	1	2144.5	2145	3		2.6		
	2700 PENT	46	2232	2235	6		85.0		
			2232	2234.2	2.5		52.0		
			2234.5	2235	3.5		85.0		
			2234	2235	3		125.0D		
	486 WASH	5							OFF SCALE
	606 SGMR	41	1242.9	1244.4	2.3		4.5		
	—1415 SGMR	41	1506.8	1508	3.2		18.3		
	—606 SGMR	40	1506.7	1508	3.3		15.7		
	—1415 SGMR	20	1512.1	1513.3	1.5		4.1		
	—606 SGMR	20	1512.1	1513.1	1.7		6.0		
	2800 OTTA	1	1516.5	1517.5	2.5		1.2		
	—2800 OTTA	21	1605		120		3.4		
	—10700 PENN	45	1653.6	1654	1.8		52.1		
	—2800 OTTA	4	1653.5	1654.2	4		46.0		
	—2700 PENN	45	1652.4	1654.1	4		45.1		
	—1415 SGMR	22	1653.6	1654.7	6.3		13.7		
	—960 PENN	1	1653.4	1654.7	2.8		1.7		
	—606 SGMR	23	1653.7	1654.4	6.8		9.0		
	—606 SGMR	3	1653.9	1653.9	.1		15.8		
	—2800 OTTA	21	1840	1843	20		3.4		
	—10700 PENN	3	1841	1841.7	1		7.9		
	—2800 OTTA	4	1841.2	1841.7	1.5		23.0		
	—2700 PENN	45	1840.4	1841.7	2.4		22.0		
	—1415 SGMR	3	1841.4	1841.7	1.2		17.4		
	—960 PENN	1	1841.3	1841.4	1.9		3.4		
	—606 SGMR	45	1840.8	1841.7	2.4		57.8		
	—10700 PENN	29	1842	1842	30		3.7		
	—2700 PENN	29	1842.8	1842.8	33		2.0		
	—606 SGMR	29	1843.2	1843.2	7.8		1.0		

SELECTED SOLAR NOISE BURST  
ARO-OTTAWA

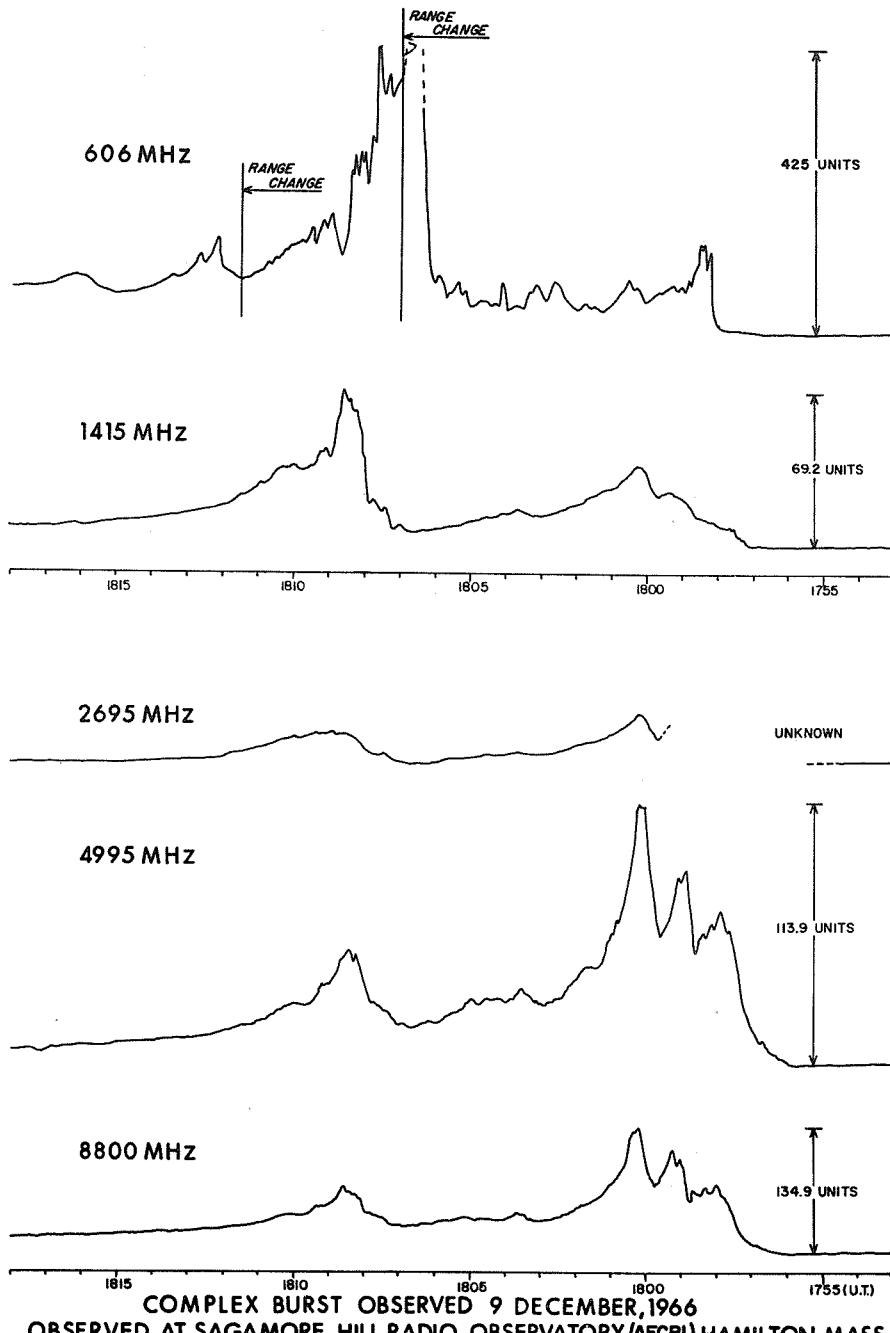
Dec. 9, 1966      A.R.O.



IVf

SELECTED SOLAR NOISE BURST  
AFCRL SAGAMORE HILL

DECEMBER 1966

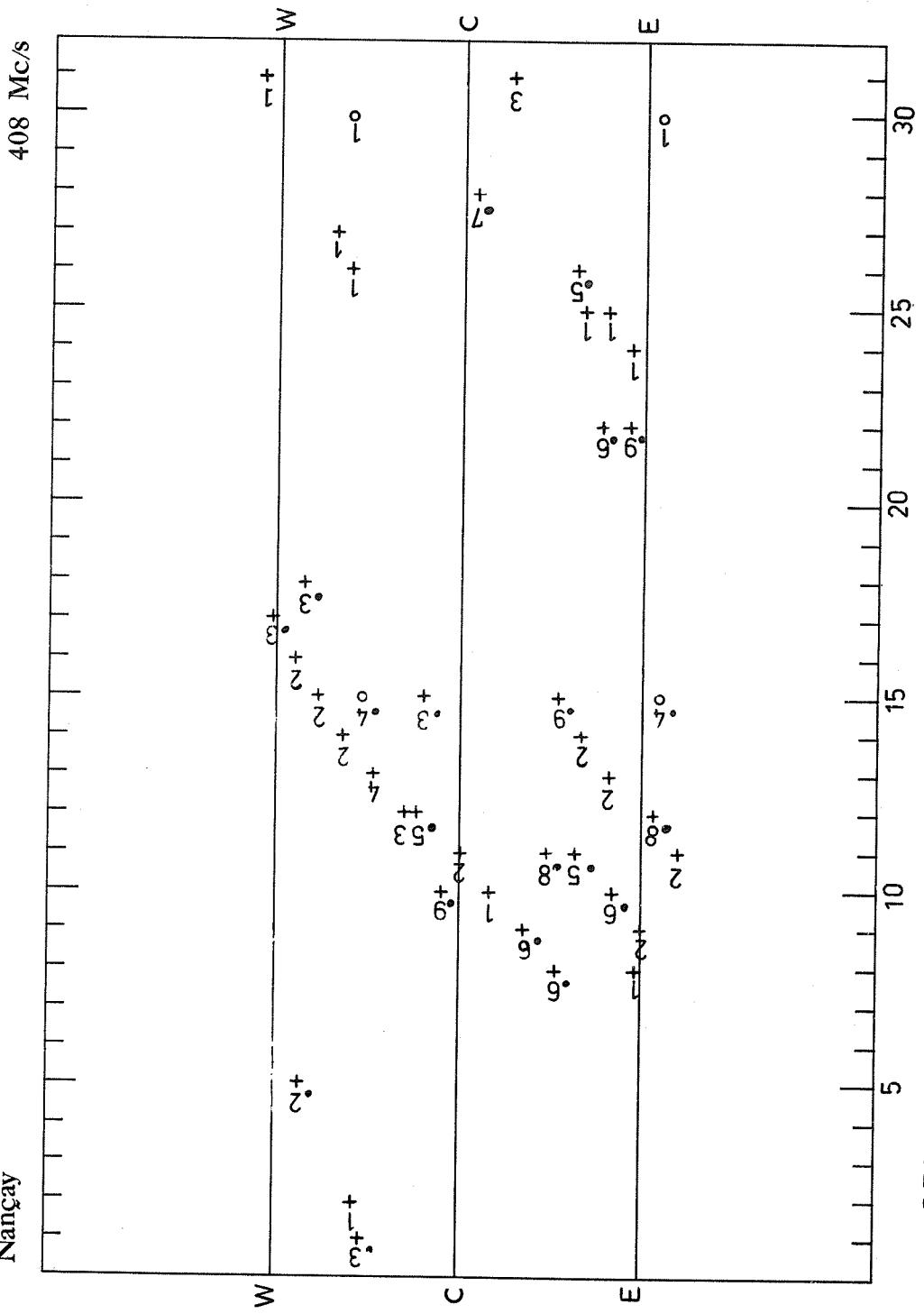


COMPLEX BURST OBSERVED 9 DECEMBER, 1966  
OBSERVED AT SAGAMORE HILL RADIO OBSERVATORY (AFCRL) HAMILTON, MASS.

## SOLAR RADIO EMISSION INTERFEROMETRIC OBSERVATION

DECEMBER 1966

Nancay



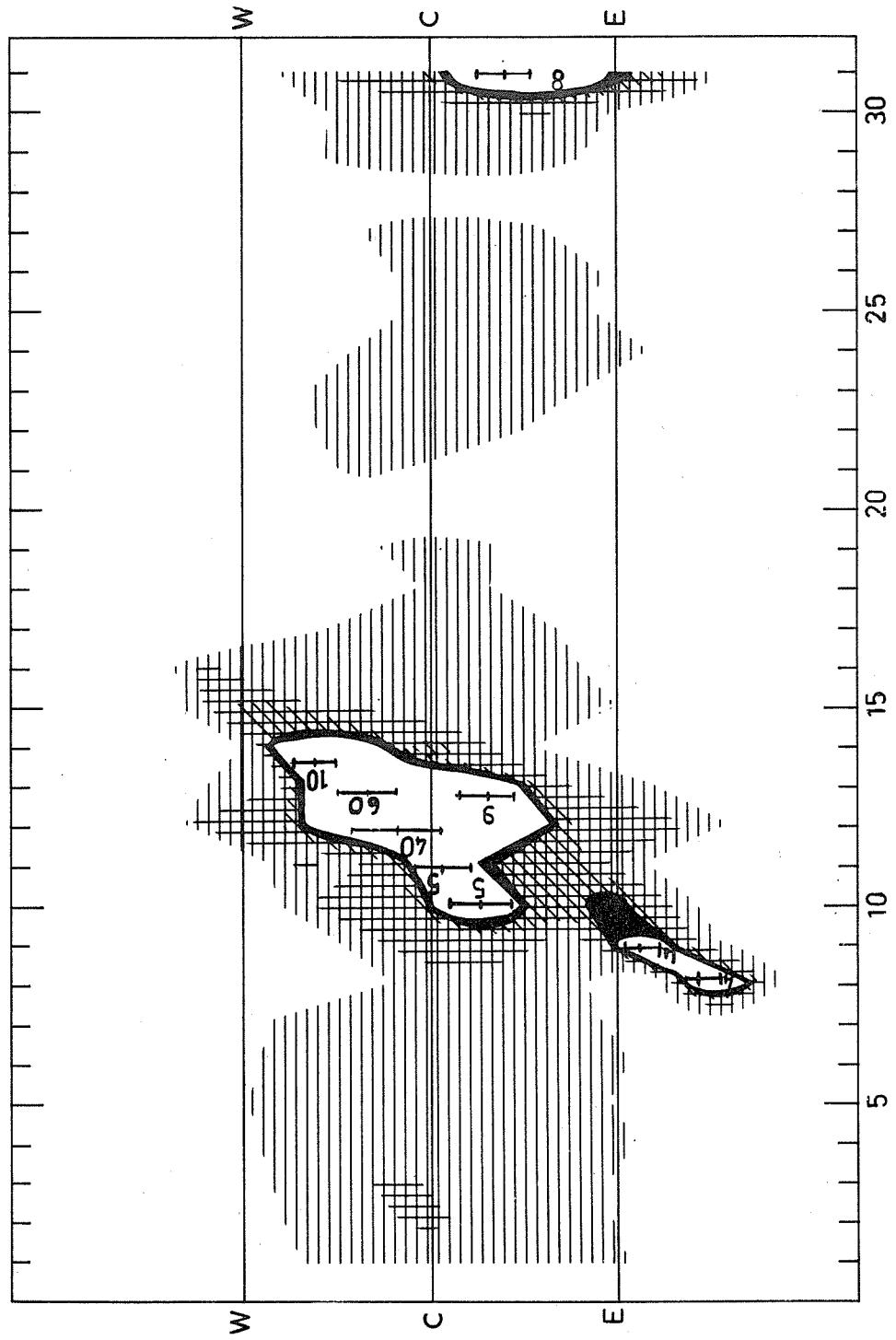
IVh

SOLAR RADIO EMISSION  
INTERFEROMETRIC OBSERVATION

DECEMBER 1966

Nançay

169 Mc/s



DECEMBER 1966

# SOLAR RADIO EMISSION SPECTRAL OBSERVATION

IVi

DECEMBER 1966

University of Colorado

7.6-41 Mc/s

Date Dec. 1966	Bursts				Date Dec. 1966	Bursts			
	Type	Time (U.T.)	Inten- sity	Frequency Range (Mc/s)		Type	Time (J.T.)	Inten- sity	Frequency Range (mc/s)
Dec 1	IV	1747:15-1802	2	17-41	Dec 10	III	1623:15-1623:15	1-	30-41
	III	1748:17-1748:15	3	17-41		III	1707:15-1707:15	1+	22-41
	III	1748:15-1749:45	3	17-41		III	1748:15-1748:30	1-	25-39
2	III	1811:15-1811:30	2	29-41		III	1808:30-1808:30	1-	28-39
	III	1811:45-1812	1	27-40		continuum	1828:15-1855	1-	28-41
3	III	1812:30-1812:45	1	25-35		III	1828:15-1828:15	1	22-38
	III	1535:15-1535:45	3	21-41		continuum	1855:20-2000	1+	28-41
	III	1537:45-1538:15	3	20-41		III	1910:30-1911	3	22-41
4	III	1810:15-1810:30	1	24-38		III	1931:30-1932:15	3	24-41
	III	1713:45-1714:30	2	24-39		III	1934:45-1935:15	3	22-41
5	III	1755:30-1755:45	1+	21-38		III	1943:15-1943:30	2	33-41
	III	1653:45-1654	1+	24-39		III	1943:30-1943:45	2	33-41
	III	1848:15-1848:30	1-	26-35		III	2048:20-2048:30	2	22-41
6	III	1412:15-1412:15	1+	27-40		continuum	2105:20-2145	1-	26-40
	III	1414:15-1414:15	1-	28-39		III	2115:30-2116:30	1	26-39
	III	1424:30-1424:45	1	27-38		III	2137:15-2137:30	1	27-37
	III	1844:15-1844:45	2	22-40		III	2138:15-2138:30	1+	28-41
	III	1845:0-1845:15	2	22-40		III	2138:30-2139	1+	28-41
	III	1846:15-1846:30	2	22-41		III	2140:20-2140:30	2	22-41
	III	1846:30-1846:45	2	23-39		III	2140:45-2141	1	27-38
7	III	2101:45-2102:15	2	22-40		III	2221:45-2222:15	2	22-40
	III	1707:30-1707:45	1	24-37		III	2222:30-2222:45	2	22-40
	III	1708:17-1708:15	1	24-37		III	2225:30-2225:45	1+	25-40
	III	1710:17-1710:30	2	22-41		III	2227:30-2227:45	1	25-40
	III	1821:15-1821:30	1	24-40		III	2229:20-2229:45	3	22-41
	III	1831:45-1832:15	1+	24-40		III	2229:45-2230:15	3	25-41
	III	1832:15-1832:30	1	24-36		III	2230:30-2230:45	3	26-41
	III	1851:15-1851:30	2	24-40		III	2230:45-2231:15	3	26-34
	III	2028:20-2028:30	3	16-41		III	2231:15-2233:15	2	28-34
	III	2028:30-2029	3	16-41	11	continuum	b1455:20-2130	1-	28-41
	III	2029-2029:30	3	16-41		III	1456:15-1456:45	2	27-41
	III	2029:30-2029:45	3	16-41		III	1457:15-1457:30	3	26-41
	III	2030:15-2030:30	1+	23-38		III	1459:15-1459:30	3	26-41
	III	2030:30-2030:45	1	23-37		III	1459:30-1459:45	2	27-41
	III	2030:45-2031	1	23-37		III	1500:15-1500:15	2	28-41
	III	2031:30-2031:45	1	23-36		III	1501:30-1501:45	2	27-38
	III	2257:22-2257:15	1	24-40		III	1512:45-1513:15	2	24-41
8	III	1543:30-1543:45	1+	31-41		III	1522:45-1523	2	30-41
	III	2048:30-2049	1	26-37		continuum	b1523:20-2120	1-	26-41
9	III	1514:15-1514:30	1-	34-41		III	1524:30-1524:45	1	28-41
	III	1807-1807:15	1-	27-41		III	1542:30-1542:45	1	27-38
	III	2000:30-2000:45	1+	30-40		III	1544:30-1544:45	1	27-40
	III	2001-2001:30	1+	30-40		III	1556:15-1556:30	1	26-40
	III	2001:45-2002:30	1+	27-40		III	1658:30-1658:45	1+	26-38
	III	2126:45-2127:15	3	22-41		III	1736:15-1736:30	1	22-38
10	III	1532:30-1532:45	2	28-41		III	1750:45-1751	1+	31-40
	III	1548:45-1549	2	28-41		III	1759:30-1759:45	1	28-41
	III	1551:15-1551:30	3	27-41		III	1836:45-1837	2	25-39
	III	1551:45-1552	1+	30-40		III	2033:30-2033:45	1+	26-40
	III	1558:15-1558:30	2	25-38		III	2108:45-2109	2	26-39
	III	1605-1605:15	1	26-41		III	2244-2244:15	1	27-39
	III	1606:30-1606:45	1	27-39	14	III	1718-1718:15	1-	25-39
	III	1609:30-1609:45	1	27-39	15	III	1539:15-1539:30	2	23-41
	III	1609:45-1610	1	27-39		III	2236-2236:15	3	21-40
	III	1618:30-1618:45	1-	26-39	20	continuum	1452:45-1516	1	24-41

# SOLAR RADIO EMISSION SPECTRAL OBSERVATION

DECEMBER 1966

University of Colorado

7.6-41 Mc/s

Date Dec. 1966	Bursts				Date Dec. 1966	Bursts			
	Type	Time (J.T.)	Intensity	Frequency Range (kc/s)		Type	Time (J.T.)	Intensity	Frequency Range (kc/s)
Dec 20	III	1452:45-1453:15	2	28-41	Dec 20	III	2313:15-2313:45	1+	21-38
	III	1454-1454:15	2	26-41		continuum	1451-1456:45	1+	28-41
	III	1455:45-1456	1+	29-37		III	1454:15-1454:45	2	24-41
	III	1507:15-1507:45	2	25-41		II	1505:30-1510:15	1+	28-41
	III	1513-1513:15	1+	28-41		III	1513:15-1515:30	1+	26-41
	continuum	1516-1523	2	24-41		III	1705:30-1705:45	3	16-41
	III	1519-1519:15	3	26-41		III	1705:30-1707	2	24-41
	III	1602:15-1603:30	2	25-41		III	1718:45-1719:15	2	27-39
	III	1603:45-1604:15	1+	26-39		III	1719:15-1719:45	2	25-40
	III	1608-1608:15	1-	28-41		III	1816:30-1817	1+	23-40
	III	1617-1617:30	1	29-37		III	1817-1817:30	1+	21-41
	III	1633-1633:30	1+	25-41		III	1817:45-1818:15	1+	25-40
	continuum	1650:15-1717:30	1	26-41		III	1818:15-1818:30	1+	26-40
	III	1650:15-1650:30	2	21-41		III	1819-1820:30	1+	26-40
	III	1650:30-1650:45	2	22-41		III	1820:30-1821:15	2	24-41
	III	1650:45-1651:15	2	27-41		III	1822:30-1823	1+	21-41
	III	1706-1706:15	1+	28-41		III	1826:30-1826:45	1-	21-39
	III	1706:30-1706:45	1+	28-41		III	1828-1828:15	1-	25-40
	III	1709:45-1710	2	26-41		III	1911:30-1912	3	16-41
	III	1742:45-1743	2	27-41		III	1911:30-1912:45	3	16-41
	III	1743-1743:30	2	27-41		III	2100-2100:15	-2	21-41
	III	1744:30-1745	2	25-41		III	2149:45-2151	2	26-40
	III	1745-1745:30	3	16-41		III	2151-2151:15	2	26-40
	III	1745:30-1747:15	2	19-41		III	2151:15-2151:45	1+	26-40
	III	1752:45-1753:30	2	24-41		III	2151:45-2152:15	1+	26-40
	continuum	1753:45-1754:30	2	24-39		III	2153:15-2153:30	1	26-40
	III	1811:15-1950	1-	26-41		III	2247:30-2247:45	1	31-38
	III	1811:15-1811:30	1	25-41		III	1931:30-1931:45	1+	25-40
	III	1812:30-1813:15	1+	26-41		III	1931:45-1932:15	2	25-40
	III	1818:15-1819	2	21-41		III	1932:15-1932:30	2	25-40
	III	1825:30-1825:45	1	27-41		III	2303:15-2303:45	1-	26-39
	III	1826:30-1827:30	2	22-41		III	2311-2311:15	1-	27-38
	III	1827:30-1828:15	2	22-41		III	1506-1509:15	1+	24-41
	III	1832:30-1833	2	22-39		III	1506:15-1506:45	2	24-41
	III	1850:45-1851	1	23-37		III	1852:30-1852:45	2	20-41
	III	1851:30-1851:45	1+	22-37		III	1852:45-1853	2	26-41
	III	1854:15-1854:30	1	28-40		III	1855:15-1855:30	1+	27-41
	III	1915:30-1915:45	2	22-41		III	2023:15-2023:30	1	30-41
	III	2031-2032	2	21-41		III	2108-2108:15	1+	22-41
	III	2035:45-2036	1-	27-41		III	2108:15-2108:30	1+	22-41
	III	2058:15-2058:30	1-	30-41		III	2108:30-2109	1+	22-41
	III	2113:30-2114	1	28-39		III	2140:30-2141:15	1+	27-41
	III	2114-2114:30	1	28-39		III	2143-2143:30	1	22-41
	III	2115:30-2116:30	1	28-39		III	2143:30-2143:45	1	22-41
	III	2116:30-2116:45	2	26-41		III	2144:15-2144:30	2	21-41
	III	2116:45-2117	1+	28-40		III	2144:30-2145	2	22-41
	III	2150-2150:30	2	26-41		III	2145:15-2145:45	2	30-41
	III	2150:30-2150:45	2	20-41		III	2245-2245:30	1	26-41
	III	2150:45-2151:30	2	20-41		III	2246:15-2246:45	1	26-41
	III	2220:15-2220:30	1+	26-41		III	1440:30-1440:45	1-	28-41
	III	2220:30-2220:45	2	26-41		III	1622-1622:30	1+	25-41
	III	2222:30-2225:15	2	22-41		III	1622:30-1623:15	1	26-41
	III	2223-2223:45	3	22-41		III	1624-1624:15	1-	28-41
	III	2251:30-2251:45	1+	26-41		III	1659:45-1700	1	27-37
	III	2301-2301:15	1-	27-37		III	1700:15-1700:30	1	27-38

**SOLAR RADIO EMISSION  
SPECTRAL OBSERVATION**

IVk

DECEMBER 1966

University of Colorado

7.6-41 Mc/s

Date Dec. 1966	Bursts				Date Dec. 1966	Bursts			
	Type	Time (U.T.)	Intensity	Frequency Range (Mc/s)		Type	Time (U.T.)	Intensity	Frequency Range (Mc/s)
Dec 24	III	1720:45-1721:15	1	26-41	Dec 30	III	2106:30-2106:45	2	19-41
	III	1722:15-1722:30	1+	22-41		III	2107:15-2107:45	2	19-41
	III	1722:30-1722:45	1+	22-41		III	2108:30-2108:45	1+	22-36
	III	1722:45-1723:30	1+	22-41		III	2127-2127:45	2	22-41
	III	1723:30-1724:30	1+	22-41		III	2128:45-2129:15	2	22-41
	III	1831:30-1831:45	1+	26-41		*III	2141-2141:15	1+	28-41
	III	2118:30-2119:45	1+	22-41		*III	2141:45-2142:15	1+	30-41
	no observ.	1735:30-1735:45	1+	26-40		*III	2142:30-2143	1+	22-41
		1936:30-1936:45	1	27-37		*III	2143:30-2149:30	2	20-41
	III	2139-2139:15	2	22-41		III	2213-2213:45	1	22-40
25	III	2139:15-2139:45	2	22-41		III	2229:45-2230	1	27-40
	III	2139:45-2141:15	2	22-41		*III	2233-2233:30	1	30-41
	III	2142-2142:15	1	24-41		*III	2233:45-2237:15	2	22-41
	III	1953:15-1953:30	1	22-37		*IV	2237:15-2257	2	26-41
	III	2150:30-2150:45	2	25-40	31	III	2301:45-2302	1	25-41
28	III	2150:45-2151:30	2	26-41		III	2307:45-2308	1-	30-37
	III	1532:45-1533	1+	25-41		III	2308:45-2309	1-	30-37
	III	1526:30-1527	1+	25-40		III	2309:30-2309:45	1-	28-39
	III	1558+1600:30	2	26-41		II	1609:15-1619:30	1+	22-41
29	continuum	1707:15-1805	1	28-41		II	1629:30-1644:30	1	25-41
	III	1707:15-1707:30	2	22-41		III	1653-1658:30	2+	17-41
	III	1707:30-1708:15	2	22-41		II	1658:30-1706:30	1	28-41
	III	1708:15-1709	1+	22-41		IV	1709-1802	1	24-41
	III	1709:15-1709:45	1+	26-41		III	1841-1845	2	16-41
	III	1709:45-1710:15	1	27-41		III	1850:15-1850:30	1	26-41
	III	1710:45-1711	1	31-39		III	1850:45-1851:15	1	22-41
	III	1740-1740:30	1+	24-40		III	1851:30-1851:45	1	22-41
	III	1740:45-1741	1	27-40		III	1915-1915:15	1+	23-41
	III	1814:45-1815:30	1	28-41		III	2013:45-2014:15	1+	23-41
30	III	1855:45-1856:15	1	23-37		III	2014:15-2014:30	1+	23-41
	III	1921-1921:15	1	29-39		III	2014:30-2015	1+	23-41
	III	1923:45-1924	1	28-38		III	2015-2015:15	1+	23-41
	no observ.	1935-2000				III	2122:45-2124:15	1	21-41
		2045-2045:30	1+	26-41		III	2137:15-2137:45	1-	26-41
	III	2144:15-2144:45	1+	29-41		III	2137:45-2138:15	1	26-41
	III	2145:15-2145:30	1	28-37		III	2138:45-2139:45	1+	22-41
	III	2145:45-2146	1	27-32					
	III	1727:45-1728	1-	25-39					
	III	1841:30-1841:45	1-	30-39					
	III	2019:30-2019:45	2	20-41					
	III	2056:15-2056:30	1-	22-37					
	III	2057:15-2057:30	1-	31-39					
	III	2058:15-2058:30	1-	28-38					
	III	2059:15-2059:30	1-	28-37					

\* Identification uncertain



# SOLAR RADIO EMISSION SPECTROHELIograms

STANFORD

DECEMBER 1966

9.1 cm

NP

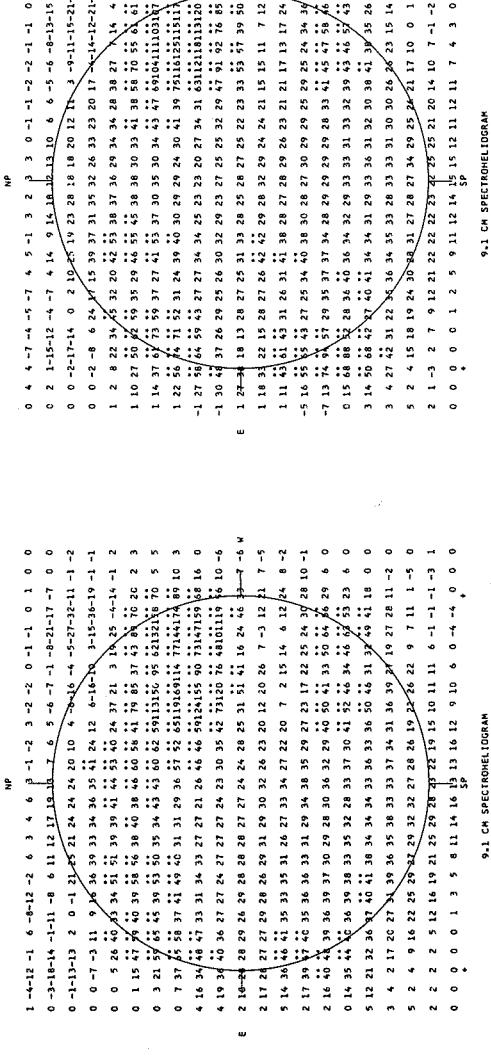


# SOLAR RADIO EMISSION SPECTROHELIograms

DECEMBER 1966

9.1 cm

## STANFORD



STANFORD, 19 DEC 1966 9.1 CM SPECTROHELIogram 20-21 HOURS UT. S = 116 BRIGHTNESS UNIT = 1000 K

STANFORD, 20 DEC 1966 9.1 CM SPECTROHELIogram 20-21 HOURS UT. S = 111 BRIGHTNESS UNIT = 1000 K

STANFORD, 21 DEC 1966 9.1 CM SPECTROHELIogram 20-21 HOURS UT. S = 111 BRIGHTNESS UNIT = 1000 K

SP

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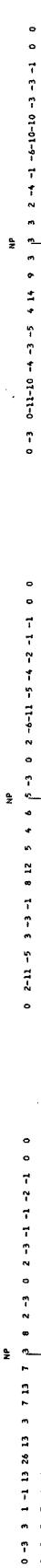
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# SOLAR RADIATION EMISSION SPECTROHELIOPHOTOGRAMS

DECEMBER 1966

9.1 cm

STANFORD



STANFORD, 25 DEC 1966 9.1 CM SPECTROHELIOPHOTOGRAM BRIGHTNESS UNIT = 1000 K 20-21 HOURS UT. S = 115

NP

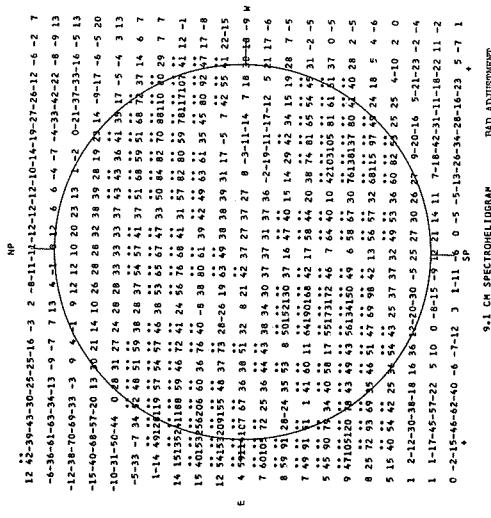
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# SOLAR RADIO EMISSION SPECTROHELIOPHOTOGRAMS

STANFORD

DECEMBER 1966

9.1 cm



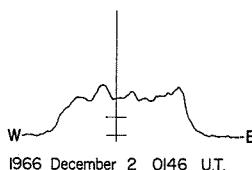
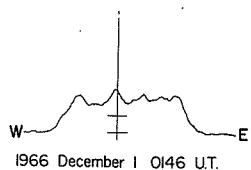
STANFORD, 31 DEC 1966 9.1 CM SPECTROHELIOPHOTOGRAPH 20-21 HOURS UT. S = 125 BRIGHTNESS UNIT = 1000 K

## EAST - WEST SOLAR SCANS

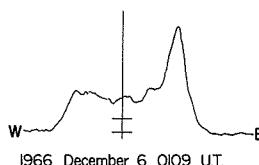
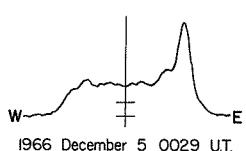
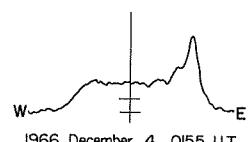
December 1966

FLEURS, AUSTRALIA

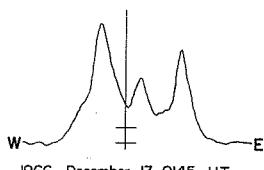
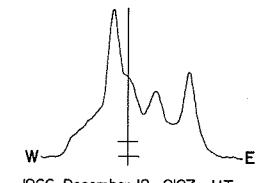
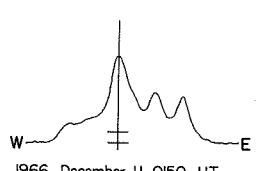
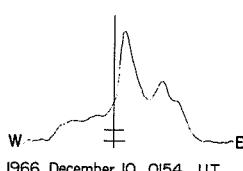
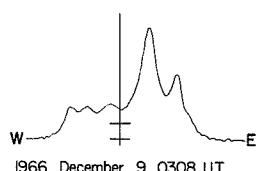
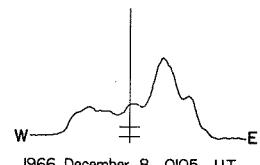
21 cm  
 Fan - Beam with 2 minutes of arc  
 E - W Resolution



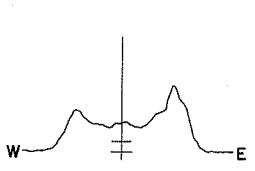
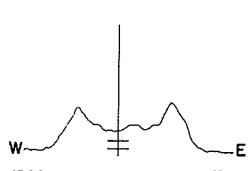
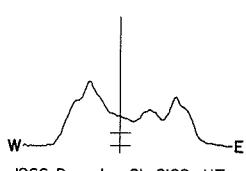
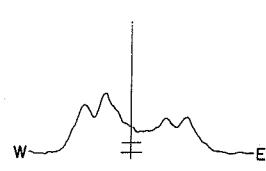
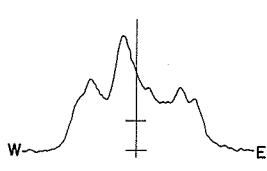
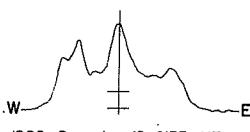
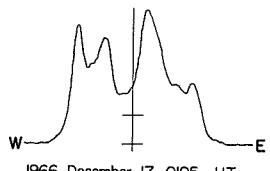
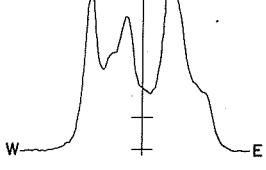
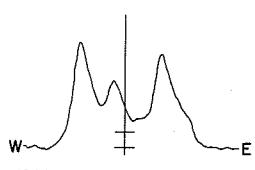
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1966 December 3



NO DATA  
1966 December 7



NO DATA  
1966 December 14

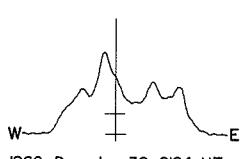
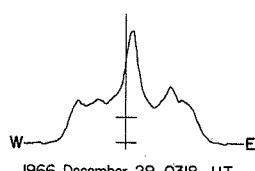
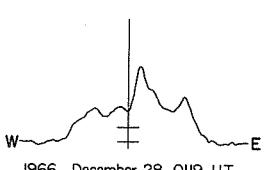


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1966 December 24

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1966 December 25

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1966 December 27



NO DATA  
1966 December 31

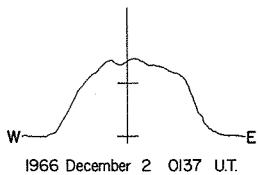
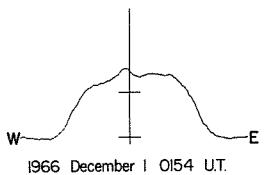
FLEURS, AUSTRALIA

EAST - WEST SOLAR SCANS

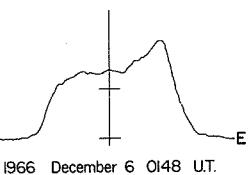
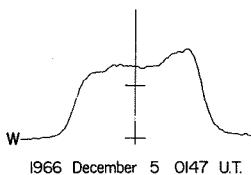
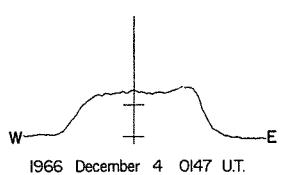
December 1966

IVs

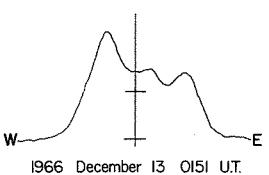
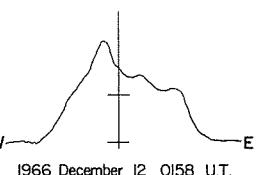
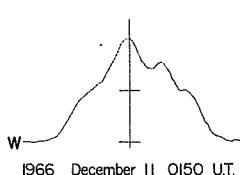
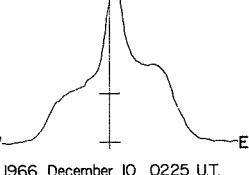
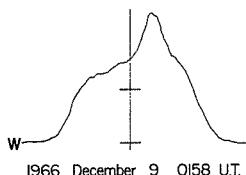
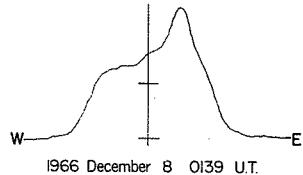
43 cm  
Fan-Beam with 4 minutes of arc  
E-W Resolution



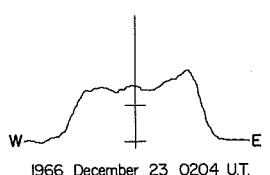
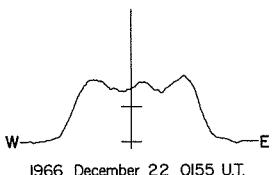
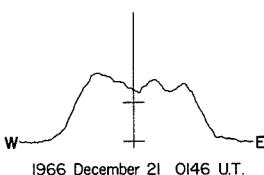
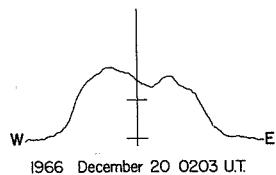
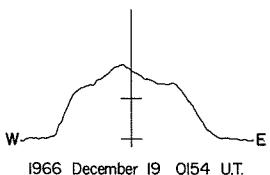
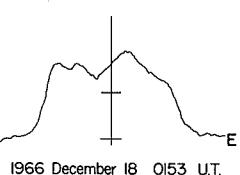
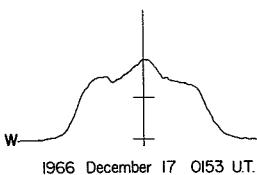
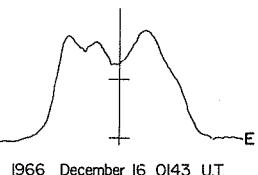
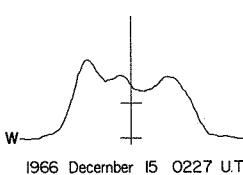
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1966 December 3



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1966 December 7



NO DATA  
1966 December 14

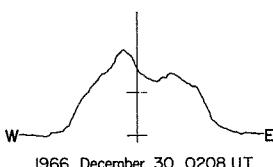
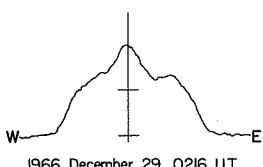
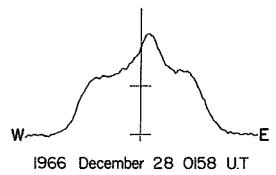


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1966 December 24

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1966 December 27



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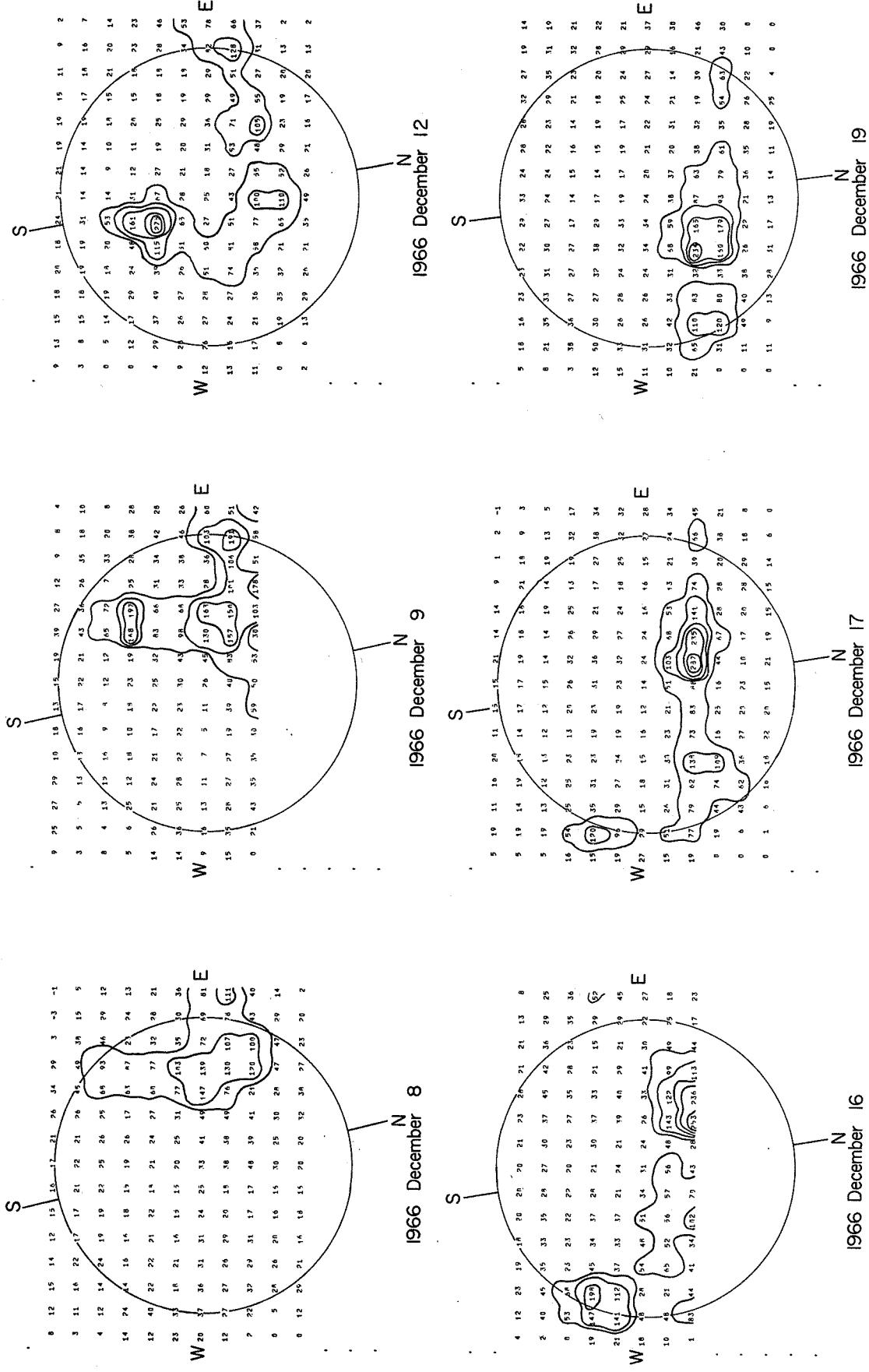
# SOLAR RADIO EMISSION SPECTROHELIograms

FLEURS, AUSTRALIA

DECEMBER 1966

IVt

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

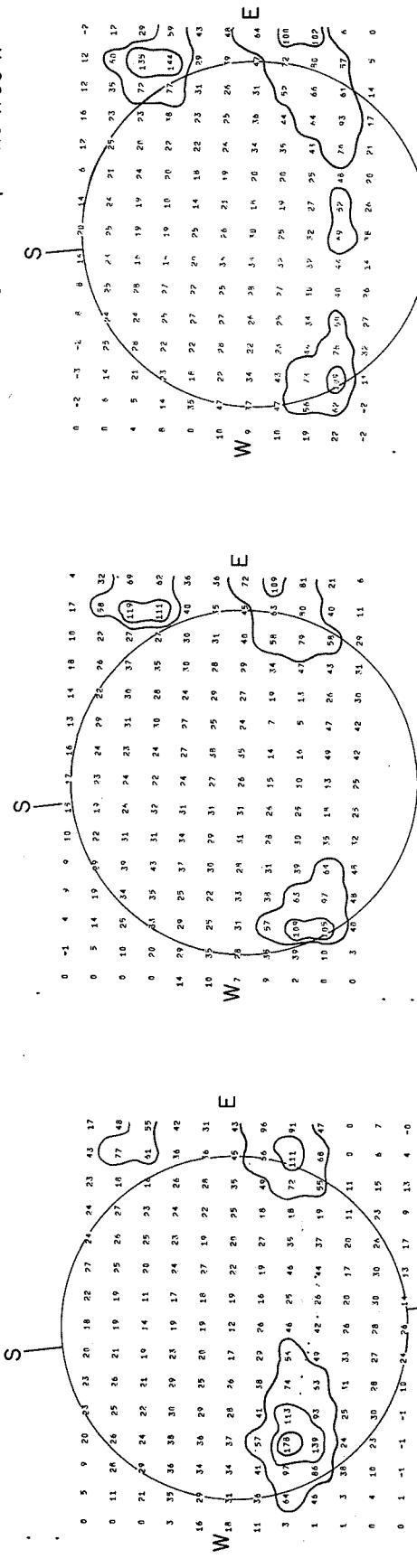


FLEURS, AUSTRALIA

SOLAR RADIO EMISSION SPECTROHELIOPHOTOGRAMS

DECEMBER 1966

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



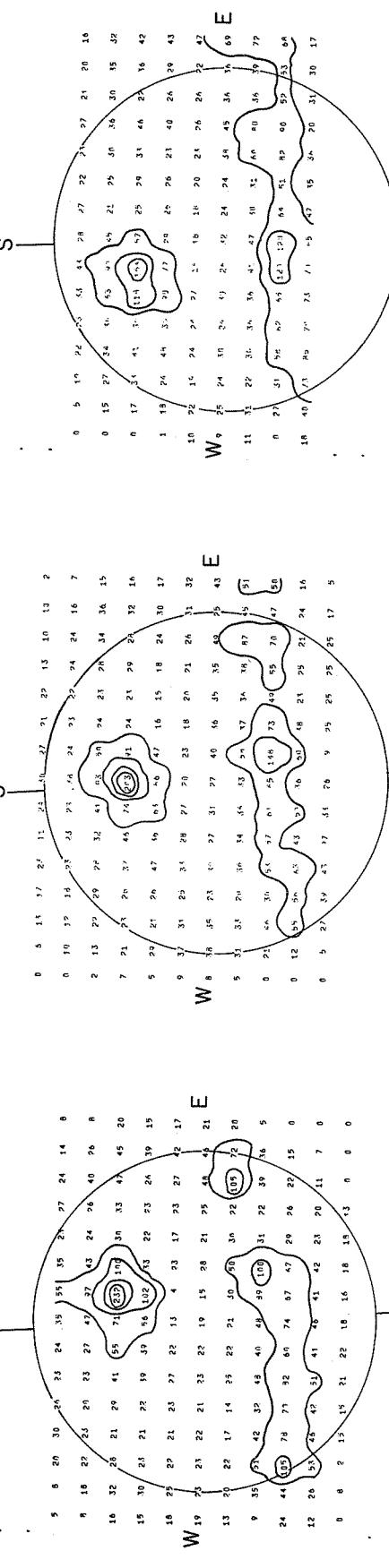
N

1966 December 22

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1966 December 23

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**COSMIC RAY INDICES**  
**(Neutron Monitors)**

NOVEMBER 1966

NOV. 1966	CHURCHILL	DEEP RIVER	CLIMAX	DALLAS
	DAILY AVERAGE COUNTS PER HOUR			
1		6803.4	4110.2	
2		6783.0	4090.8	
3		6794.8	4088.0	
4		6806.6	4085.5	
5		6788.9	4085.2	
6		6808.0	4092.5	
7		6810.1	4100.4*	
8		6807.5	4120.7	
9		6820.0	4118.5	
10		6784.8	4089.1	
11		6798.3	4091.0	
12		6815.3	4086.9	
13		6799.7	4063.3	
14		6816.1	4075.9	
15		6840.5	4096.8	
16		6842.8	4119.0	
17		6783.1	4078.2	
18		6718.0	4012.6	
19		6819.8	4065.3	
20		6813.9	4061.3	
21		6812.5	4082.1*	
22		6822.7		
23		6811.2		
24		6808.0		
25		6820.2	4110.0	
26		6822.9	4102.2	
27		6845.5	4105.8	
28		6839.8	4191.1	
29		6858.7	4108.2	
30		6864.6	4111.5	

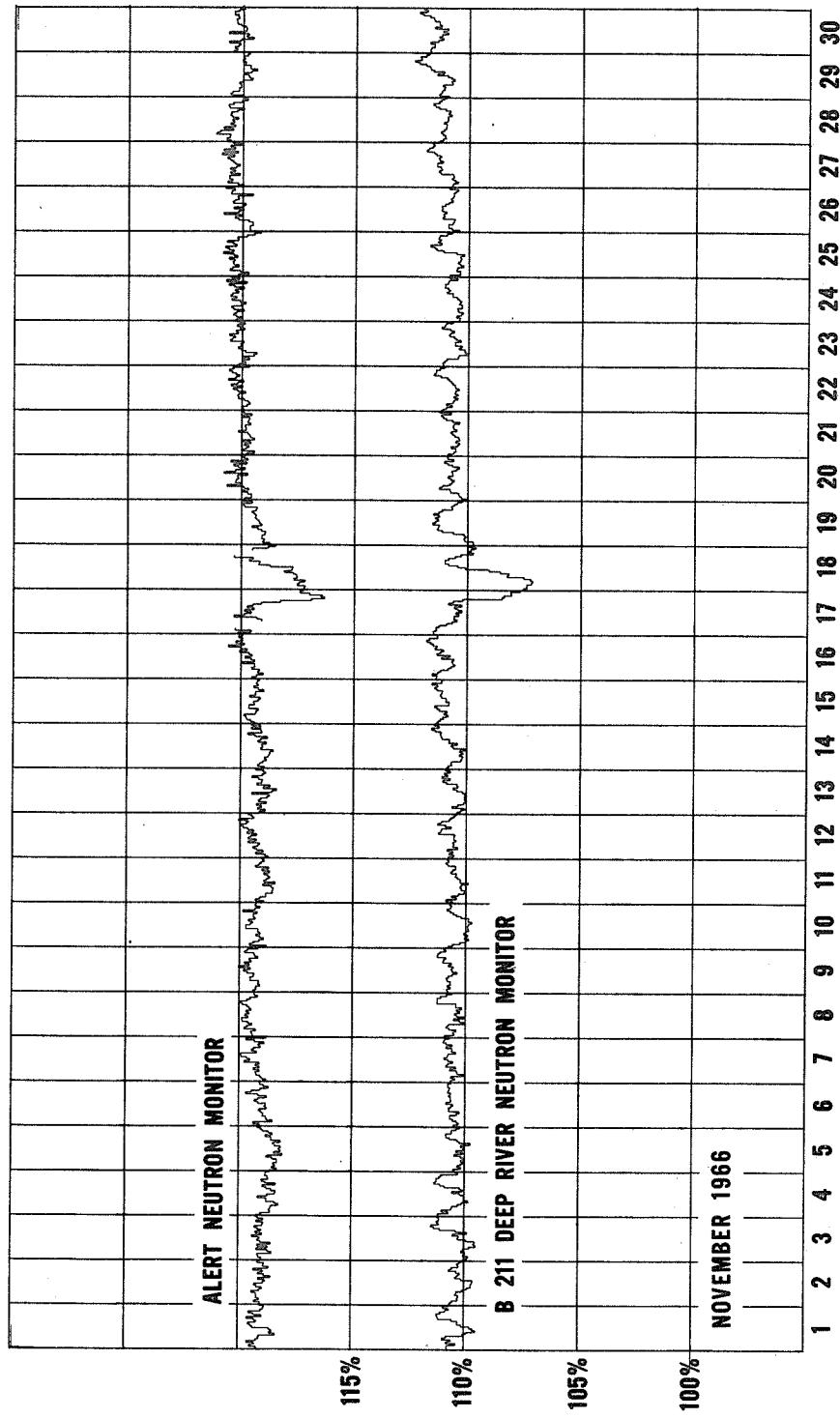
\* number of section hours for which data are available is less than 40.

Deep River Neutron Monitor, Scaling Factor 300

Climax IGC Station B305, Scaling Factor 100

COSMIC RAY INDICES  
(Pressure Corrected Hourly Totals)

NOVEMBER 1966



## GEOMAGNETIC ACTIVITY INDICES

NOVEMBER 1966

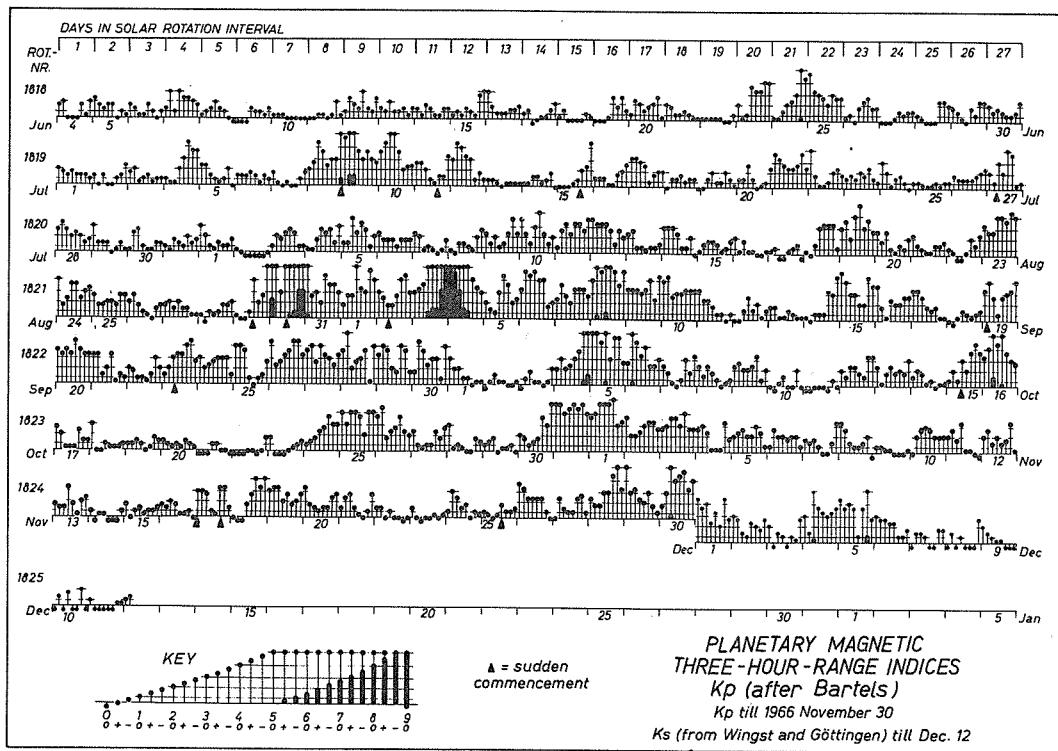
DAY		Kp								SUM	Ci	Cp	Ap
		THREE-HOUR RANGE INDICES											
		1	2	3	4	5	6	7	8				
1	D	4-	4	5-	5-	5-	5	3	3+	33	1.4	1.3	31
2		4-	2	2	2+	3	3+	3+	3-	22+	0.8	0.8	14
3	D	3-	3	4-	4-	3	4	3-	3-	25+	0.9	0.9	17
4		3-	3	2+	1-	1-	1-	3+	2-	15	0.6	0.5	9
5		2	2+	3-	2	2	3	2+	1	17+	0.7	0.5	9
6		1	3-	2	2	2-	2	2	1	14+	0.4	0.3	7
7	Q	2-	1+	2-	1	0+	0+	1+	3+	11	0.5	0.3	6
8		3+	3-	1+	1	1	1+	2	0	13-	0.3	0.3	7
9	QQ	1	1	1-	1-	0+	0+	0+	1-	5	0.0	0.1	3
10		0+	2	3-	3	3-	2	2	2	17-	0.6	0.5	9
11		2	3-	2-	3+	1-	1-	0+	0	11+	0.3	0.3	6
12		2	3-	1+	2	1+	2-	3+	1-	15	0.5	0.4	8
13		2-	1+	1+	3+	2-	1-	2	2+	14+	0.5	0.4	7
14	QQ	1	0	1-	1-	0	0	0	1	3+	0.0	0.0	2
15	Q	2-	0+	1	1+	1-	1	1	1+	8+	0.1	0.1	4
16	Q	2-	1+	2	2-	1-	1-	1	0+	9+	0.2	0.2	4
17		3	3	3-	1	1-	3+	3+	1+	18+	0.8	0.6	11
18		0+	0	0	2-	3-	4	3+	4	16	1.0	0.7	12
19		3	3+	3+	2	3-	2-	2	3-	21-	0.6	0.7	12
20		3+	2-	1+	1	1+	1+	2+	3-	15	0.6	0.4	8
21		1+	2+	3-	1+	1-	0+	1	3-	12+	0.3	0.3	6
22	QQ	1+	1+	0+	1	0+	0+	0	0+	5	0.1	0.0	3
23	QQ	1+	0+	0	0+	0+	1-	0+	1-	4	0.0	0.0	2
24	Q	1	3	2+	1+	2-	0+	1	1-	11+	0.2	0.3	6
25	QQ	1	1-	0+	1-	2-	1	1	1+	8-	0.2	0.1	4
26		4-	3+	2+	2+	2+	2+	1	0+	18-	0.7	0.6	10
27	Q	0+	2+	1+	1	1	2+	3-	1	12	0.4	0.3	6
28	D	2+	2-	2-	3	3	4+	5	3+	24+	1.1	1.0	19
29	D	5	3	3+	2+	2	3	2-	1	21+	0.9	0.9	15
30	D	2-	3	5+	4	4+	5-	3+	4	30+	1.4	1.2	28
										MEAN	0.54	0.47	9

The Kp values given as integers represent the values normally given with a small zero following the number, i.e., 0=0o, 1=1o, etc., because the table is prepared by computer and lower case symbols are not available.

Preliminary storm sudden commencements (ssc) occurred November 17 at 0016UT and 1720UT and November 25 at 1339UT.

# GEOMAGNETIC ACTIVITY INDICES

VIB



## DAILY AVERAGE INDICES Ap

	1965	1966	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.
1			19	2	3	3	18	8	12	5	6	22	6	31
2			9	8	3	3	13	12	10	4	1	15	3	14
3			2	6	11	10	7	5	7	4	7	92	4	17
4			11	11	13	9	8	12	4	14	8	112	26	9
5			3	4	18	5	6	6	5	5	10	13	36	9
6			3	2	8	4	7	7	4	5	6	24	22	7
7			3	7	4	2	10	4	9	4	5	14	8	6
8			4	8	4	3	10	5	4	22	5	42	5	7
9			6	8	3	4	5	5	3	36	9	19	9	3
10			10	7	7	10	5	2	2	25	12	19	3	9
11			10	2	12	6	2	10	3	8	14	7	2	6
12			10	2	5	6	3	6	7	15	14	5	10	8
13			6	2	6	14	15	7	5	3	6	4	8	7
14			2	3	2	64	8	2	4	4	9	10	4	2
15			1	5	4	7	4	2	6	8	5	20	14	4
16			1	0	5	7	3	5	6	6	4	10	20	4
17			2	2	4	6	4	7	4	11	2	9	6	11
18			12	5	3	4	3	5	3	4	10	3	4	12
19			7	3	14	20	2	3	6	5	20	17	4	12
20			4	15	17	10	5	8	7	6	7	21	4	8
21			2	23	4	8	5	4	4	14	5	10	2	6
22			6	27	14	7	13	4	3	8	4	6	2	3
23			3	14	28	67	10	2	17	6	22	17	2	2
24			9	14	19	2	6	2	16	6	16	12	11	6
25			12	11	10	14	3	5	16	4	8	13	22	4
26			19	14	3	20	3	78	6	6	6	22	15	10
27			10	3	4	13	1	5	4	11	5	18	6	6
28			16	7	2	42	4	5	5	10	4	22	5	19
29			8	6			6	4	6	5	13	17	4	15
30			6	2			10	6	6	6	82	16	13	28
31			3	2			48		5	23			34	
MEAN			7	7	8	13	7	9	6	9	11	21	10	9

## RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

NORTH ATLANTIC, NORTH PACIFIC

NOVEMBER 1966

NOV. 1966	WHOLE DAY INDICES			ADVANCE FORECASTS (Jc- REPORTS) FOR WHOLE DAY	NORTH ATLANTIC				NORTH PACIFIC				GEOMAGNETIC INDICES			
	6-HOURLY QUALITY FIGURES		SHORT-TERM FORECASTS ISSUED ABOUT ONE HOUR IN ADVANCE OF:		6-HOURLY QUALITY FIGURES		K <sub>FR</sub>		A <sub>FR</sub>		K <sub>SI</sub>		A <sub>SI</sub>			
	NORTH ATLANTIC	NORTH PACIFIC	AVERAGE HIGH LATITUDE		00 TO 06 12 18 24	00 TO 06 12 18 24	00 TO 06 12 18 24	00 TO 06 12 18 24	HALF DAY (1)	OB-SERVED (2)	PREDICTED	HALF DAY (1)	DAY (2)			
01	6o	5	6	6	6o 6- 7- 6+ 6 4 6 6	6- 6- 7- 6+ 6 5 7 7	5 6 5 6 6 (4) 3	18 12 (4) (4)	12 12 2 2	2 2	40 8					
02	6-	6	6	6	5- 6- 7- 6+ 6 5 6 6	6 5 6 6 6 3 3	5 6 6 6 3 3	14 6 3	6 6 2	2 1	16 5					
03	6+	6	6	6	6+ 5+ 7- 6+ 6 6 7 7	6 6 6 6 6 5 2	6 6 6 6 2 1	6 6 2	6 6 2	1 5	10					
04	6o	6	6	6	6- 6- 7- 7- 6 6 7 7	6 6 6 6 6 5 2	6 6 6 6 2 1	6 6 2	6 6 2	1 5	10					
05	6+	6	6	7	6+ 6- 7- 7- 6 6 7 7	5 6 6 6 6 2 2	8 3	2 2	2 2	2 2	10					
06	6o	6	6	7	5+ 6- 7- 6+ 6 5 7 7	6 6 5 6 1 1	4 3	2 1	4 5	1 1	6 4					
07	6+	6	6	7	6o 6- 7o 7- 6 6 7 7	6 6 6 6 1 1	5 7 1	1 1	5 7 1	1 1	4 4					
08	6+	6	6	7	6- 6- 7o 7- 6 6 7 7	6 6 6 6 1 1	2 7 0	0 0	2 7 0	0 0	1 1					
09	6+	6	6	7	6- 6o 7- 7- 6 5 7 7	6 6 6 6 1 1	10 7	2 2	10 7	2 2	11					
10	6+	6	6	6	6+ 6- 7- 7o 6 5 7 7	6 6 6 6 2 2	10 7	2 2	10 7	2 2	11					
11	7-	6	6	6	7- 6+ 7o 7- 6 5 7 7	6 6 6 6 2 0	5 12	2 0	7 15	2 1	5 4					
12	7-	6	6	6	6+ 6+ 7o 7o 6 6 7 7	6 6 6 6 2 2	6 6 2	2 2	6 6 2	2 2	1 6					
13	7-	6	6	6	7- 6o 7- 7- 6 6 7 7	6 6 6 6 2 2	1 0	1 4	0 0	0 0	0 1					
14	7-	6	6	6	7- 6o 7o 7- 6 6 7 7	6 6 6 6 1 1	2 4	0 0	2 4	0 0	0 1					
15	7-	6	6	6	7- 6+ 7- 7- 6 6 7 7	6 6 6 6 1 1	2 4	0 0	2 4	0 0	0 1					
16	7-	6	6	6	7- 6o 7o 7o 6 6 7 7	6 6 6 6 2 1	3 6	2 1	7 7	2 2	0 4					
17	6+	6	6	7	6o 6o 7o 7- 6 6 7 7	6 6 6 6 2 2	0 3	3 7	8 7	0 2	2 6					
18	7-	5	6	7	6+ 6o 7o 7o 6 6 7 7	6 5 5 6 2 2	8 12	2 2	6 12	2 2	12 4					
19	7-	6	6	6	7- 6o 7o 6+ 6 6 7 7	6 5 5 6 2 2	6 12	2 2	6 12	2 2	12 4					
20	7-	6	6	6	6+ 6+ 7- 7- 6 6 7 7	6 7 7 6 2 2	6 12	1 1	6 12	1 1	1 2					
21	7-	6	6	6	7- 7- 7- 7- 6 6 7 7	6 6 7 6 2 1	6 12	1 0	2 6	0 0	0 0					
22	7-	6	6	6	7- 6+ 7o 7- 6 6 7 7	6 6 6 6 1 0	1 0	2 6	0 0	0 0	0 0					
23	7-	6	6	6	7- 6+ 7- 7- 6 6 7 7	6 6 6 6 0 1	1 6	0 0	1 6	0 0	0 0					
24	7-	6	6	7	6+ 6o 7- 7o 6 6 7 7	6 6 6 6 2 1	6 4	1 1	6 4	1 1	0 3					
25	7-	6	6	7	7- 6o 6+ 7- 6 6 7 7	6 6 6 6 1 2	4 7	0 0	4 7	0 0	1 2					
26	6+	6	6	6	6+ 6o 7- 7- 6 6 7 7	6 6 6 6 3 1	7 15	2 1	4 17	1 1	3 3					
27	7-	6	6	6	7- 6o 7o 7o 6 6 7 7	5 6 6 6 1 1	4 17	1 1	15 15	2 3	14 14					
28	6+	6	6	6	6+ 6+ 7- 6o 6 6 7 7	5 6 5 6 2 1	(4) 1	15 15	11 10	(4) 2	16 16					
29	6+	6	6	6	6o 6- 7o 6o 6 6 7 7	6 6 6 6 3 1	11 10	(4) 2	18 10	(4) (4)	49					
30	6-	5	5	6	5+ 6- 6+ 6o 6 5 6 6	5 5 6 6 3 3	18 10	(4) (4)								
QUIET			P	20	18 21 28 24 12 8 2 6 0 0 0 0 0 1 0 0											
DISTURBED			P	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0											

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

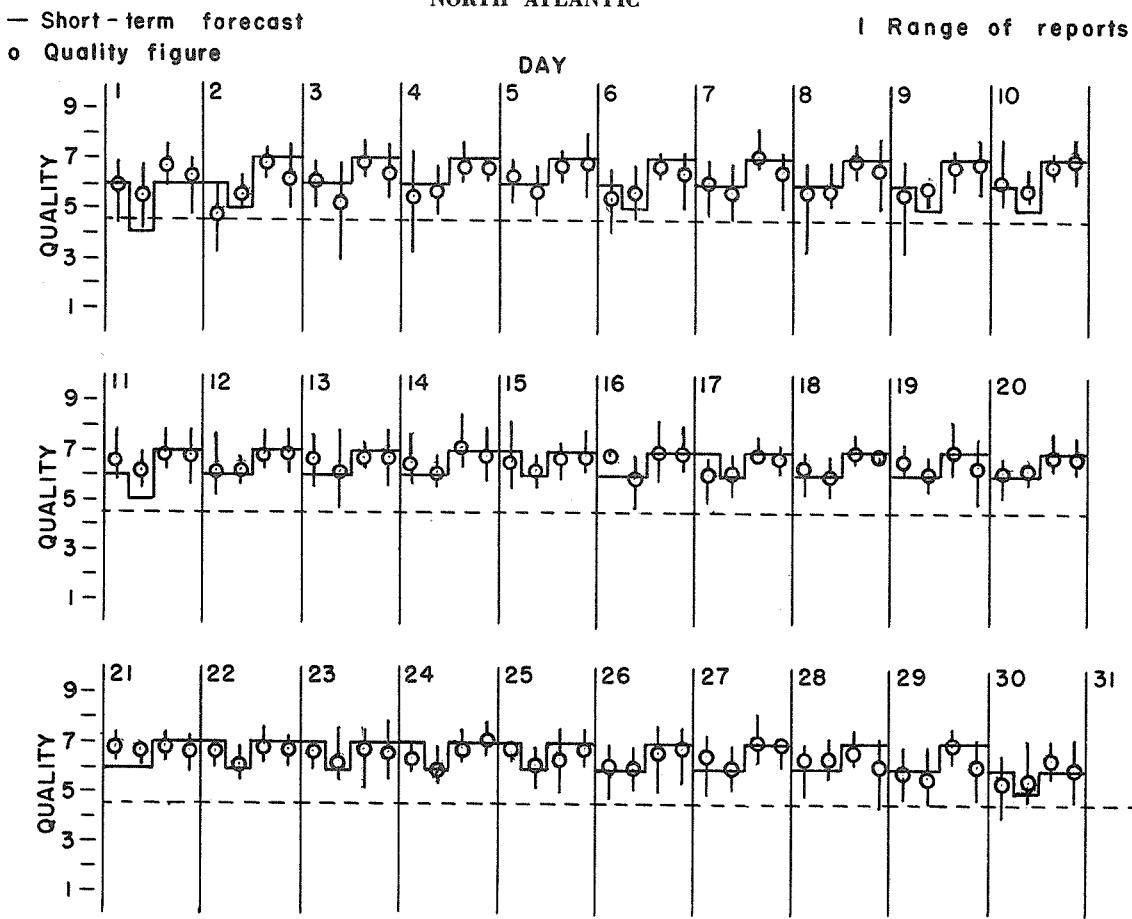
2) THE PREDICTED AFR INDICES ARE ISSUED EACH WEDNESDAY FOR THE COMING SEVEN DAYS. THE VALUE FOR THE FIRST DAY OF EACH PREDICTION PERIOD IS UNDERSCORED.

# RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

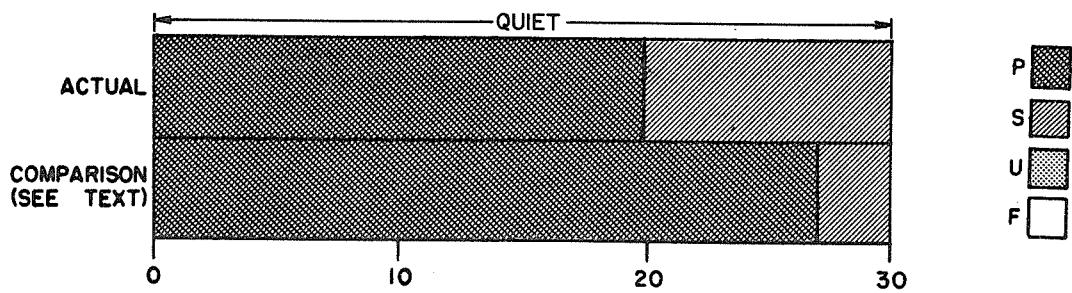
VIIb

NOVEMBER 1966

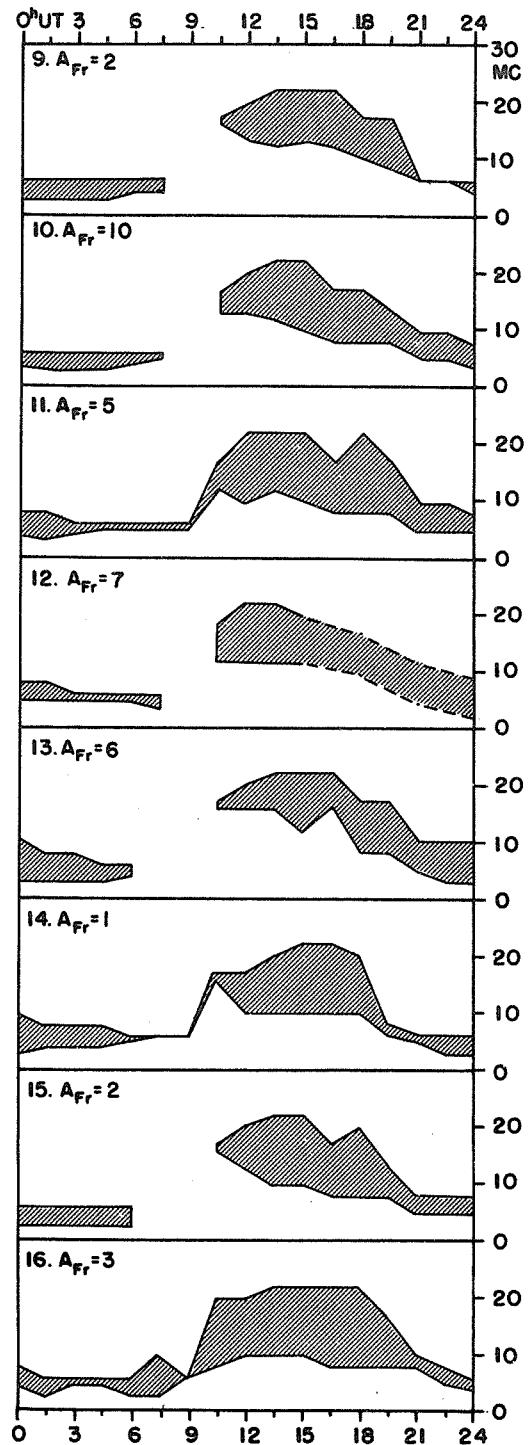
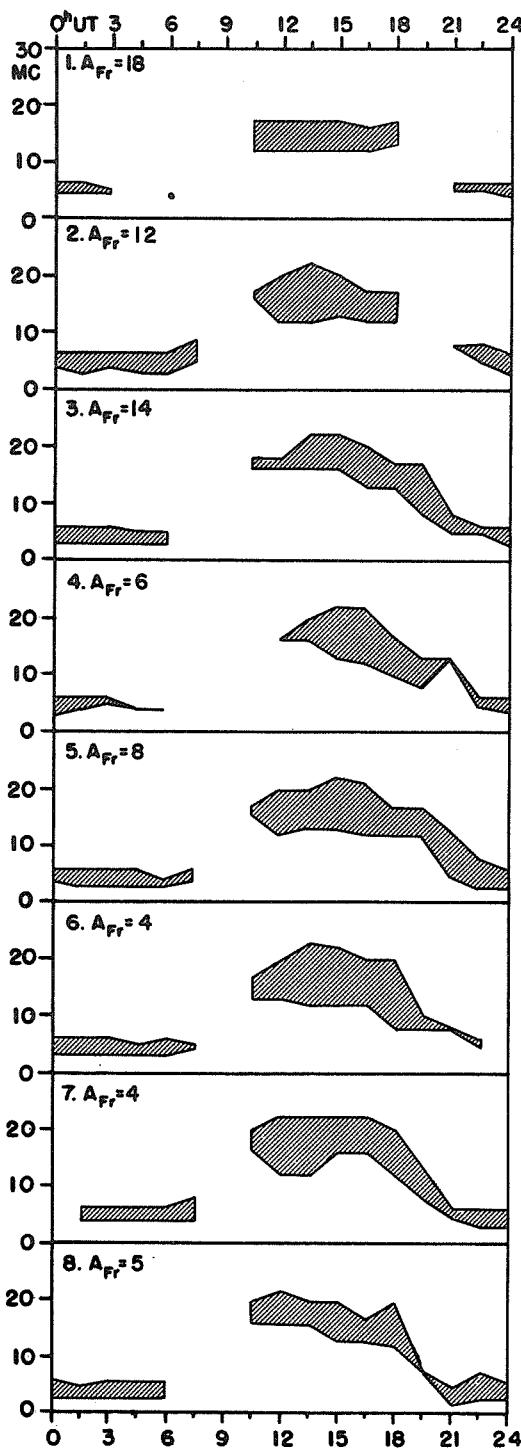
## NORTH ATLANTIC



## HIGH LATITUDE



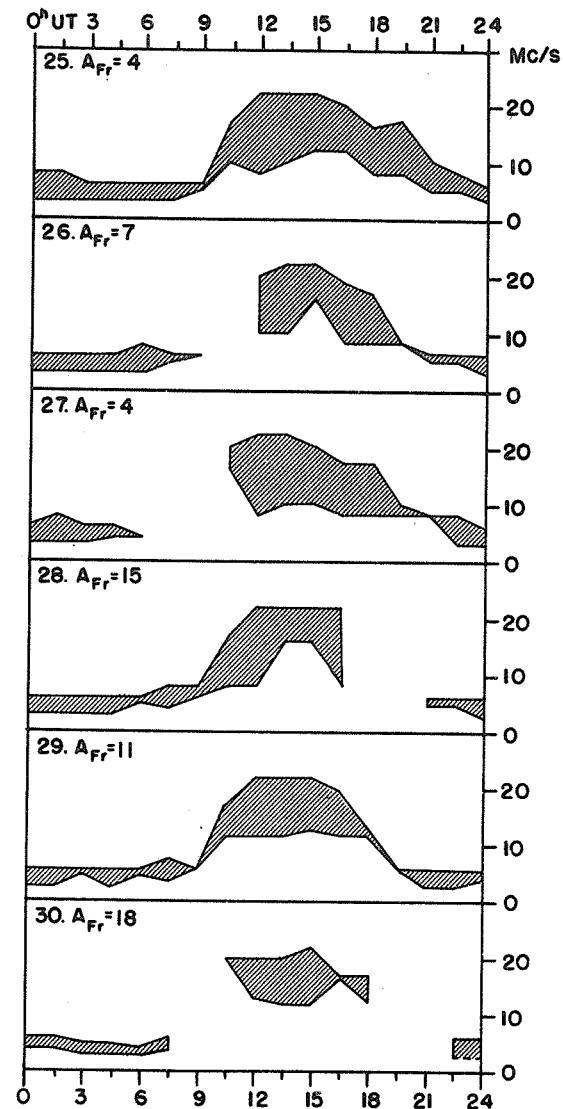
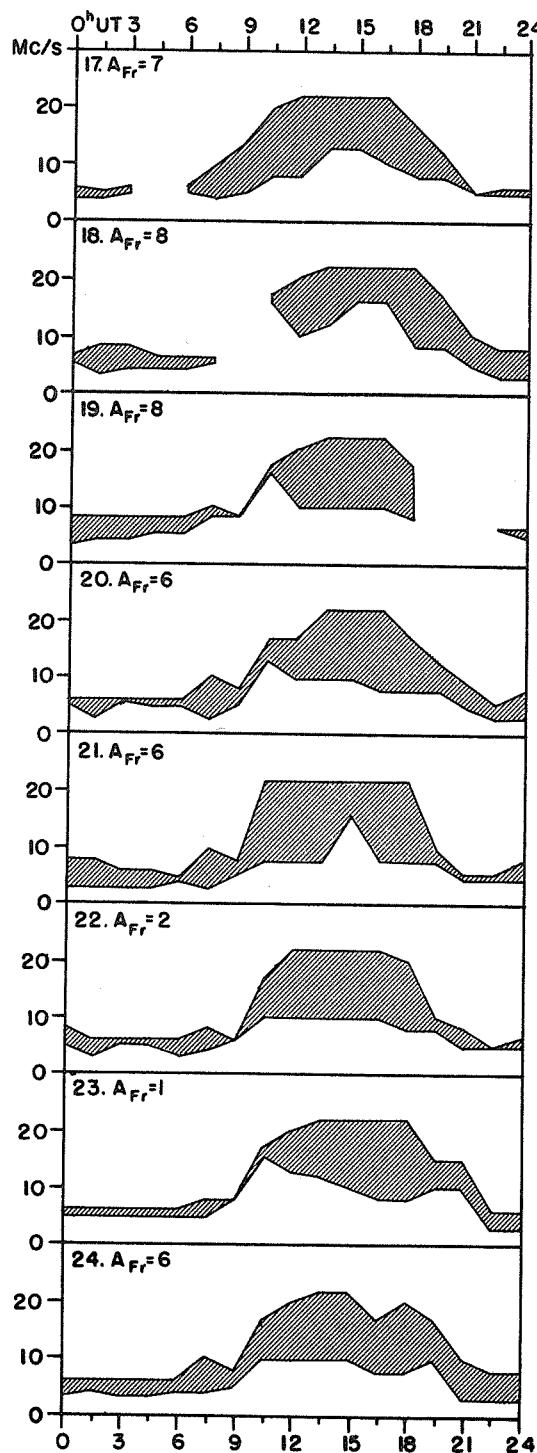
VIIc

USEFUL FREQUENCY RANGES--NORTH ATLANTIC PATH  
NOVEMBER 1966

USEFUL FREQUENCY RANGES--NORTH ATLANTIC PATH

VIIId

NOVEMBER 1966



Adapted from Observations by Deutsche Bundespost

VIIIa

## ALERT PERIODS

INTERNATIONAL URSIGRAM  
AND WORLD DAYS SERVICE

DECEMBER 1966

Dec. 1966	TIME OF ISSUE UT	ADVANCE GEOPHYSICAL ALERT	WORLDWIDE GEOPHYSICAL ALERT			
			NO.	TYPE	TIMING	ELABORATION
9	1825	Sac Peak, Solar Flare 09/1804Z	440	Solar Activity	Exists	Flares
10	0400		441	Solar Activity	Exists	Flares
11	0400		442	Solar Activity	Exists	
12	0400		443	Solar Activity	Exists	
13	0400		444	Solar Activity	Exists	
14	0400		445	Solar Activity	Exists	
15	0400		446	Magnetic Storm	Exists	
16	0400		447	Solar Activity	Exists	
17	0400		448	Solar Activity	Exists	
18	0400		449	Solar Activity	Exists	