



**U.S. DEPARTMENT OF COMMERCE**

Alexander B. Trowbridge, Secretary

**ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION**

Robert M. White, Administrator

**ENVIRONMENTAL DATA SERVICE**

Woodrow C. Jacobs, Director

ESSA RESEARCH LABORATORIES

# **Solar-Geophysical Data**

**Number 279**

**for October 1967**

**September 1967**

**May 1967**

**& Miscellanea**

**DATA COMPILED BY AERONOMY AND SPACE DATA SERVICES**

**BOULDER, COLORADO**

**WASHINGTON, D.C.**

**NOVEMBER 1967**

S O L A R   G E O P H Y S I C A L   D A T A

## Table of Contents

	Page
Data for October 1967	3-25
Data for September 1967	27-81
Data for May 1967	83-125
Miscellaneous Data	127-143
NRL X-ray Observations -- March - October 1965	
NRL Chart of X-ray Flux -- August 1966	
McMath-Hulbert X-ray - OSO-III -- April 1967	

For obtaining bulletins on a data exchange basis, send request to World Data Center A, Upper Atmosphere Geophysics, ESSA, Boulder, Colorado, 80302.

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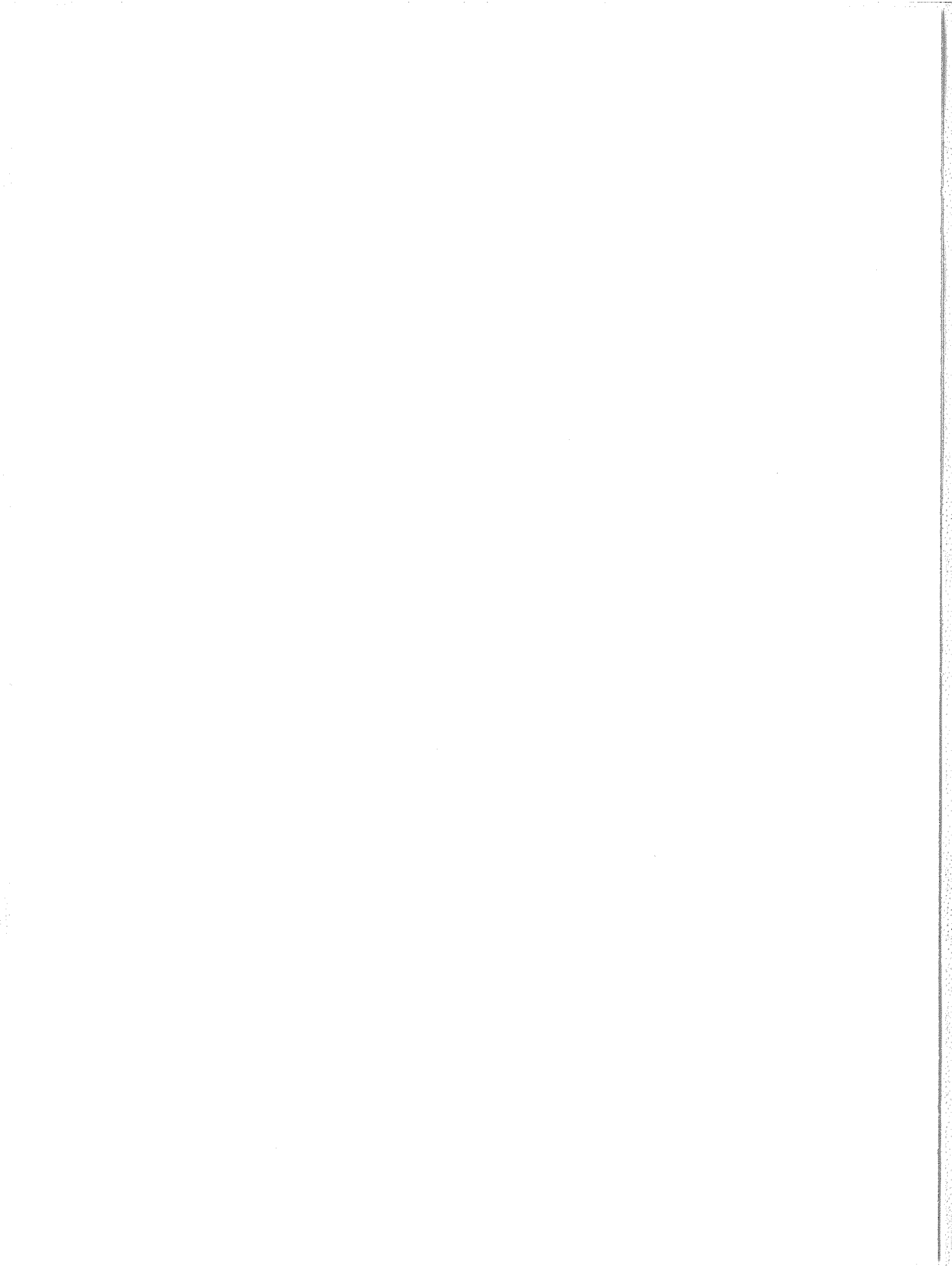
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Table of Contents  
for October 1967 Data

	Page
<u>Alert Periods</u>	
IUWDS Alert Periods	5
 <u>Daily Solar Indices</u>	
12-Month Tables Sunspot Numbers, $R_z$ , and 2800 Mc/s Flux Adjusted to 1 A.U.	6
Combined Table Sunspot Numbers and Solar Fluxes	7
Graph of Sunspot Cycle	8
Zürich Smoothed Observed Sunspot Numbers	9
 <u>Solar Centers of Activity</u>	
Calcium Plages and Sunspots	10
Magnetic Classification of Sunspots - Mt. Wilson	11-12
 <u>Solar Flares</u>	
Flares of Numerical Importance 1 or Greater	13-16
No-Flare-Patrol Chart	17
 <u>Solar Radio Waves</u>	
Outstanding Occurrences at Fixed Frequencies	19-22
408 Mc/s Solar Interferometric Chart - Nançay	24
169 Mc/s Solar Interferometric Chart - Nançay	25

For explanations of the data contained herein see "Descriptive Text" published in February 1967.





ALERT PERIODS

INTERNATIONAL URSIGRAM  
AND WORLD DAYS SERVICE

OCTOBER 1967

	TIME OF ISSUE UT	ADVANCE GEOPHYSICAL ALERT	WORLDWIDE GEOPHYSICAL ALERT			
			NO.	TYPE	TIMING	ELABORATION
1	0903	Canaries Soflare 01/0838 IMP 2B N20 E25				
6	0400			Stratwarm	Begins	Antarctica Wikes-Vostok-McMurdo region spreading poleward
7	0400			Stratwarm	Exists	Antarctica Mawson-Vostok-McMurdo region spreading poleward
8	0400			Stratwarm	Exists	Antarctica Byrd-McMurdo region extent unknown
9	0400			Stratwarm	Exists	Antarctic Mawson-Wilkes-Byrd region movement unknown
10	0400			Stratwarm	Exists	Antarctica Mirny-McMurdo-Byrd-Pole region movement unknown
11	0400			Stratwarm	Exists	Antarctica Mirny-McMurdo-Byrd-Pole region movement unknown
12	0400			Stratwarm	Exists	Antarctica McMurdo-Byrd-Pole region movement unknown
13	0400			Stratwarm	Exists	Antarctica warming persists McMurdo region
14	0400			Stratwarm	Exists	Antarctica Vostok region
15	0400			Stratwarm	Exists	Antarctica Mirny-Vostok-Pole region
16	0400			Stratwarm	Exists	Antarctica Pole region
17	0400			Stratwarm	Exists	Antarctica Pole region areal extent unknown
18	0400			Stratwarm	Exists	Antarctica Pole region areal extent unknown
19	0400			Stratwarm	Exists	Antarctica Mawson-Mirny-Byrd sector
20	0400			Stratwarm	Exists	Antarctica Vostok-Pole-Byrd sector
21	0400			Stratwarm	Exists	Antarctica Mirny-Pole-McMurdo sector
22	0400			Stratwarm	Exists	Antarctica Pole region areal extent unknown
23	0400			Stratwarm	Exists	Antarctica Pole-McMurdo region areal extent unknown
24	0400			Stratwarm	Exists	Antarctica Pole-McMurdo region areal extent unknown
25	0400			Stratwarm	Exists	Antarctica McMurdo-Pole-Byrd sector
26	0400			Stratwarm	Exists	Antarctica warming apparent over entire continent
27	0400			Stratwarm	Exists	Antarctica warming apparent over entire continent
28	0400			Stratwarm	Ends	Antarctica Springtime temperatures apparent over entire continent. Vernal circulation change progressing.
30	0015	Carnarvon tenflare 581% 29/2345Z in progress 29/2354Z				
	0140	Carnarvon tenflare 743% 30/0048Z in progress 30/0135Z				
	0304	Sydney soflare Culgoora flare two W90 N10 29/2350Z				
	0352	Toyokawa tenflare 700% 29/2343 end 30/0010Z				
	0352	Toyokawa tenflare 390% 30/0045Z in progress 30/0115Z				

# RELATIVE SUNSPOT NUMBERS

ZURICH, R<sub>Z</sub>

1966 (FINAL) 1967 (PROVISIONAL)

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	43	35	60	93	172	105	74	123	69	139	120	72
2	42	33	93	88	179	79	77	113	83	119	108	69
3	38	30	124	92	191	54	46	92	87	91	108	96
4	38	57	148	100	172	52	62	93	92	83	112	89
5	20	69	150	72	164	62	66	79	98	90	116	98
6	32	68	148	89	148	63	46	76	97	95	113	92
7	48	64	134	138	137	79	41	55	70	98	97	88
8	55	88	116	109	98	104	18	36	78	119	104	76
9	59	86	111	112	85	67	25	22	67	94	99	80
10	63	112	111	97	86	62	17	17	54	87	95	82
11	72	125	104	96	74	62	25	17	53	79	75	90
12	80	130	90	79	65	51	34	19	59	62	76	66
13	68	118	86	77	49	63	29	19	53	70	50	55
14	66	113	85	58	44	48	38	20	66	56	51	64
15	66	107	56	58	49	51	36	30	80	61	31	47
16	52	116	56	60	58	32	35	38	73	77	34	41
17	59	88	59	60	70	42	38	57	67	95	40	36
18	57	76	72	70	73	58	48	60	78	114	49	50
19	65	57	82	57	58	56	70	65	61	116	53	62
20	74	46	82	60	73	44	74	79	41	108	59	83
21	77	37	102	71	88	60	96	61	62	115	64	80
22	78	34	134	86	108	76	118	83	73	104	59	86
23	76	38	152	84	111	94	137	80	93	110	53	101
24	72	45	122	100	121	74	156	92	90	104	51	93
25	74	60	133	106	131	78	159	92	106	98	61	114
26	67	65	136	123	137	66	174	79	116	105	53	125
27	59	48	130	186	122	95	194	52	122	107	50	125
28	41	48	125	166	120	76	197	80	164	119	72	156
29	37	51	122		130	79	148	59	154	111	58	133
30	37	70	132		130	66	139	89	165	121	68	133
31		68	108		115		127		152	124		100
MEAN	57.2	70.4	108.5	92.4	108.3	65.3	82.1	62.6	87.8	99.1	72.6	86.5

1966 Yearly Mean = 47.0

## DAILY SOLAR FLUX AT 2800 Mc/s OTTAWA ARO

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

1966 1967

DAY	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.
1	94.6	92.2	124.4	151.6	194.2	158.6	136.6	174.6	125.0	176.6	160.5	139.7
2	96.7	95.1	143.0*	143.5	197.8*	141.0	131.8	158.0*	125.7	166.7	156.6	135.0
3	93.1		154.0	138.7	196.4*	133.3		* 150.4	129.6	163.5	147.0	131.5
4	91.7	104.8	160.7	137.3*	205.9*	125.0	125.8	148.4	127.2	149.3*	140.9	129.9
5	97.9	110.9*	168.2	146.8*	179.2*	122.1	128.1	138.7	123.7	155.4*	138.7	125.7
6	104.7	115.6*	160.5	148.8	177.4*	119.0	122.8	130.5	116.6	155.4	133.8	129.9
7	113.4	117.7	159.6	162.5	163.8	126.2*	119.7	119.1	116.0	150.2	128.4	125.8
8	116.9	123.7	142.9	148.3	156.1	135.7	116.9	110.1	111.8	143.4	133.9	121.5
9	117.2	146.2	144.7	145.9	157.9	133.3	113.6	103.7	109.7	141.2	131.5	122.1
10	121.9	157.3*	145.6	140.5	148.4	130.3	109.4	97.1	105.8	136.7	133.6	127.3
11	126.1	162.8*	139.8	133.7	141.6	131.1*	106.1	96.9	107.1	136.2	131.8	136.5
12	126.2	157.6	139.1	132.9	134.3	129.8*	109.7	96.5	106.1	138.9*	131.7*	135.4
13	126.4	155.5	138.1	130.0	129.1	126.8	107.3	99.8	113.8	137.5*	127.6	130.8
14	124.0	149.5	135.2	129.2	127.2	133.5	108.6*	103.8	122.4*	130.0	128.0	127.8
15	122.6	144.9	126.6	126.4	132.4	124.1	111.0	107.2	127.6	127.4	130.4	122.6
16	121.2	135.1	120.2	124.9	132.1	126.1	113.1	111.8	130.1	132.9	126.4	118.0
17	113.4	124.9*	116.9	122.2*	132.6	125.9	115.4	112.0	129.6	148.3	126.7	117.3
18	113.4	111.2	117.4	124.2	132.2	128.7	124.8	115.4	131.3	157.1	128.7	113.3
19	111.0	112.3	116.4	121.0	136.0	126.7	135.6*	119.0	128.6	172.3*	127.7	119.3
20	110.9	107.6	127.0	128.6	140.4	127.1	146.3	121.3	135.5	172.9	130.6	131.2
21	110.7*	106.5	138.2	131.8*	147.2	134.0	160.3*	122.9	140.2	178.8*	126.6	130.1
22	116.5	105.5*	139.9	146.0	149.5*	131.5	182.7	129.6	152.4	178.5	124.6	137.3
23	114.7*	110.6*	148.8*	149.3*	155.7	128.0	194.0*	133.1*	161.8	178.3*	123.8	139.4
24	113.8	110.5	146.8	162.2	161.9	130.5	200.9	132.4	176.4	169.9	131.8	141.3
25	110.7	111.6	142.7*	159.5*	169.2	132.9	210.7	133.1	195.5	170.8	134.1	142.1
26	107.3	110.9	154.3	173.3*	163.9*	125.4	218.9*	127.8	199.9	172.0	134.4	148.2
27	111.1*	109.6	158.3	176.7	162.8*	129.2	213.8	131.5	213.2	171.2	137.3	161.1*
28	104.1	107.5	156.2	180.2	180.7	135.1	202.6	136.7	213.1*	169.9	134.6	177.0
29	98.0	109.3	158.2*		178.4	137.5	188.3	133.4	215.7	172.7	131.7	163.4
30	94.6*	115.1	159.0		175.8	135.3	177.4	126.1	211.6	164.0	131.7	159.5*
31		120.5*	156.4		167.6*		175.4		188.9	165.7		148.6
MEAN	110.8	121.4	143.0	143.4	159.0	130.8	146.9	124.0	144.9	157.5	133.5	135.1

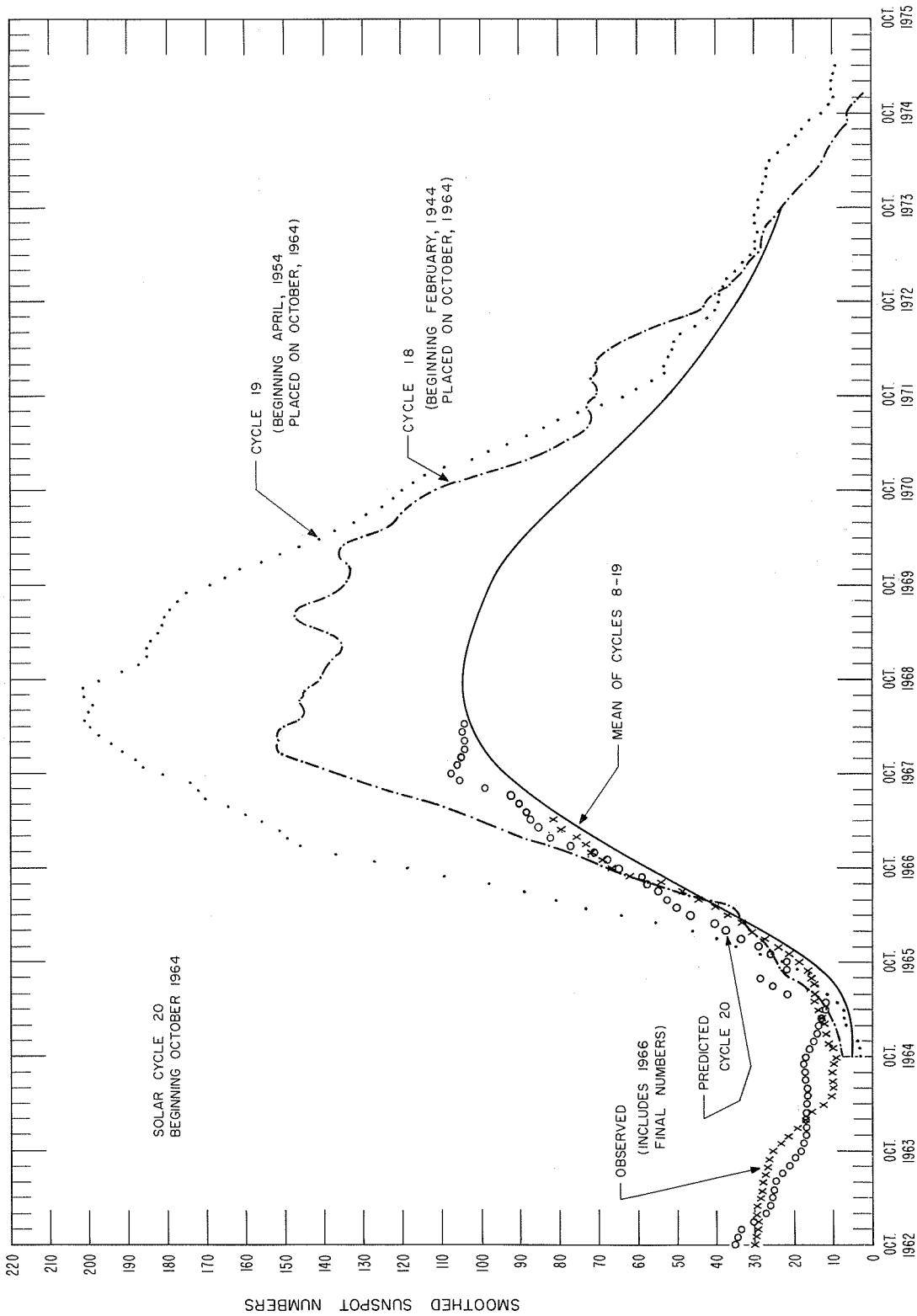
\* Adjusted for burst

# DAILY SOLAR INDICES

OCTOBER 1967

OCT. 1967	YEAR DAY	BARTELS 27-DAY CYCLE NUMBER	SUNSPOT NUMBERS		OBSERVED FLUX OTTAWA 2800	SOLAR FLUX ADJUSTED TO 1 A.U.					
			RZ	R <sub>A</sub> '		AFORL 8800	AFORL 4995	OTTAWA 2800	AFORL 2695	AFORL 1415	AFORL 606
01	274	26	72	82	139.4	314	190	139.7	126.6	87.6	64.9
02	275	27	69	73	134.9	301	180	135.0	120.3	81.1	63.4
03	276	1	96	83	131.4	301	178	131.5	118.6	81.1	63.2
04	277	2	89	110	129.9	297	174	129.9	115.8	75.3	60.8
05	278	3	98	106	125.7	300	176	125.7	114.3	75.2	59.0
06	279	4	92	99	130.0	300	180	129.9	118.4	80.5	60.9
07	280	5	88	66	125.9	298	180	125.8	115.3	78.0	58.9
08	281	6	76	54	121.8	296	172	121.5	111.9	74.4	58.2
09	282	7	80	66	122.5	299	172	122.1	110.1	74.7	58.5
10	283	8	82	97	127.7	315	183	127.3	115.4	77.1	60.9
11	284	9	90	73	137.1	316	195	136.5	128.3	78.7	61.3
12	285	10	66	66	136.0	310	186	135.4	127.8	80.8	63.5
13	286	11	55	54	131.5	301	182	130.8	120.1	81.5	62.5
14	287	12	64	45	128.5	304	180	127.8	118.3	80.3	59.2
15	288	13	47	43	123.4	300	173	122.6	110.4	73.2	55.8
16	289	14	41	36	118.8	299	170	118.0	108.3	74.5	57.4
17	290	15	36	28	118.1	298	167	117.3	105.8	74.9	57.8
18	291	16	50	34	114.2	297	166	113.3	105.6	75.7	58.3
19	292	17	62	52	120.3	298	174	119.3	109.1	77.6	60.9
20	293	18	83	52	132.4	301	181	131.2	117.6	83.9	62.3
21	294	19	80	74	131.3	295	179	130.1	115.8	83.1	61.9
22	295	20	86	90	138.7	308	192	137.3	126.3	88.1	63.1
23	296	21	101	90	140.8	307	188	139.4	125.9	87.1	63.7
24	297	22	93	98	142.9	304	184	141.3	124.2	89.3	65.6
25	298	23	114	116	143.8	312	189	142.1	129.4	92.9	67.6
26	299	24	125	134	150.0	320	207	148.2	136.6	88.7	66.2
27	300	25	125	153	163.2*	339	220	161.1*	143.7	95.9	69.8
28	301	26	156	167	179.3	346	229	177.0	159.2	105.4	74.6
29	302	27	133	145	165.7	340	218	163.4	150.0	100.4	68.7
30	303	1	133	117	161.8*	331	212	159.5*	149.3	100.8	69.8
31	304	2	100	105	150.9	322	199	148.6	140.3	97.8	68.0
MEAN			86.5	84.2	136.1	309	186	135.1	123.2	83.7	62.8

\* Adjusted for Burst



PREDICTED AND OBSERVED SUNSPOT NUMBERS

SMOOTHED OBSERVED SUNSPOT NUMBERS  
ZURICH,  $R_z$ 

	1964	1965	1966	1967
JAN		11.7	27.7	73.1
FEB		12.0	31.3	76.4
MAR		12.5	34.5	79.3
APR		13.6	37.4	81.5
MAY		14.6	40.7	
JUN		15.0	44.6	
JUL		15.5	48.8*	
AUG		16.4	55.0	
SEP		17.4	62.7	
OCT	9.6	19.7	66.8	
NOV	10.2	22.3	69.0	
DEC	11.0	24.5	71.2	

\* The smoothed sunspot numbers beginning with July 1966 are calculated using 1967 provisional monthly averages.

CALCIUM PLAGE AND SUNSPOT REGIONS

OCTOBER 1967

Oct. 1967 C.M.P.	LAT.	MCMATH PLAGE NUMBER	RETURN OF REGION	CALCIUM PLAGE DATA						SUNSPOT DATA		
				CMP VALUES		HISTORY	AGE (ROTA- TIONS)	DATE FIRST SEEN	DURA- TION (DAYS)	CMP VALUES		HISTORY
				AREA	INT.					AREA	COUNT	
1.8	N13	8999	New	2400	3.0	l $\gamma$ l	1	9/25	13	(230)	(2)	l $\gamma$ l
2.1	S18	9010	New	(200)	(2.5)	b $\gamma$ l	1	10/3	5	(10)	(4)	b $\gamma$ l
2.2	N26	9002	8957	4500	3.0	l - l	3&1	9/26	>12	10	6	l - l
2.3	S03	9009	New	(100)	(2.0)	b - d	1	10/3	1	(10)	(3)	b - d
2.4	S10	9016	New	(300)	(2.0)	b - d	1	10/5	$\geq$ 1			
3.7	S16	9004 (1)	New	2700	3.0	l $\Gamma$ l	1	<10/1	>9	110	3	l - l
3.8	N19	9003	8961	1800	2.0	l $\gamma$ l	3	<10/1	>9			
3.9	S29	9017	New	(400)	(2.5)	b $\gamma$ l	1	10/5	5	(10)	(2)	b - d
5.8	N25	9005	8963	2700	3.0	l - l	2	<10/1	>12	(20)	(7)	b - d
5.9	N11	9021 (2)	New	(1500)	(3.0)	b $\Gamma$ l	1	$\leq$ 10/9	$\geq$ 4	(10)	(13)	b $\gamma$ l
6.2	N13	9011	New	(200)	(1.0)	b - d	1	10/3	5			
6.4	S17	9006	New	(2000)	(3.0)	l $\gamma$ l	1	$\leq$ 10/1	$\geq$ 12	50	3	l $\gamma$ l
6.8	N18	9026	New	(300)	(2.0)	b - l	1	10/11	3			
7.3	S30	9012	8965	250	2.0	l $\gamma$ d	4	10/1	.11			
8.4	N12	9013 (3)	New	(1400)	(3.5)	l $\Gamma$ l	1	10/3	11	20	11	b $\Lambda$ d
8.9	N29	9007	8966	(400)	(1.5)	l $\Lambda$ l	3	10/2	13			
8.9	S22	9014	8970	(1400)	(2.5)	l $\Gamma$ l	2	10/3	$\geq$ 12	50	9	l $\gamma$ l
9.7	N14	9015 (4)	8972	1400	2.0	l $\gamma$ l	3&1	10/3	>12	20	9	b - d
10.1	S27	9019	New	1300	2.5	b $\Lambda$ ?	1	10/4	>11			
11.2	N18	9018 (5)	8973	2600	3.0	l $\gamma$ l	2	10/5	>10	30	33	b $\Lambda$ l
13.8	S16	9022	New	(300)	(1.0)	b $\gamma$ d	1	$\leq$ 10/9	$\geq$ 3			
15.5	N18	9020	{ 8980 8989 8992	(3200)	(2.5)	l - l	2	10/7	15			
16.2	S33	9024	8979	(900)	(1.5)	l $\Gamma$ l	5	10/9	13			
17.4	S27	9023	8984	(3400)	(2.5)	l $\Lambda$ l	2	10/10	14	60	13	l $\gamma$ d
17.7	N16	9025	8982	(1200)	(2.5)	l - l	4	10/11	13	(10)	(2)	b - d
18.3	S17	9028	New	1400	3.0	l $\Lambda$ l	1	10/12	12	10	1	b - d
19.5	S26	9029	New	2800	2.5	l $\gamma$ l	1	10/14	12			
19.5	N26	9027	8985	5900	3.0	l $\Gamma$ l	4&1	10/12	14			
21.2	S04	9031	New	(200)	(2.0)	l - d	1	10/14	$\geq$ 1			
22.0	N17	9032	New	2000	3.0	? $\Gamma$ l	1	$\leq$ 10/18	$\geq$ 11	250	28	b $\Lambda$ l
22.1	N29	9033	8985	(900)	(2.0)	l $\gamma$ ?	4	<10/18	>8			
22.3	S22	9036	New	500	1.0	b $\Gamma$ d	1	10/19	>7	(10)	(1)	b - d
24.1	N12	9034	8988a	3700	3.5	l $\gamma$ l	2	10/18	13	130	45	l $\gamma$ l
24.9	S20	9035	8993a	1800	2.5	l $\gamma$ l	2	10/18	13			
25.4	N38	9040	New	(100)	(2.5)	b - d	1	10/23	1			
26.6	N17	9037	8998	(4500)	(2.5)	l $\Gamma$ l	2	10/19	15	{ 40 20	16 4	l $\gamma$ d l $\Lambda$ d
27.7	S23	9038	8995	(1300)	(2.0)	l $\gamma$ l	4	10/21	13			
28.4	N18	9041 (4)	{ 8999 9002	2700	2.5	l $\gamma$ l	2	10/23	13	{ 70 60	12 1	l $\gamma$ l b $\Gamma$ l
28.4	S20	9052	New	(600)	(2.5)	b - l	1	11/2	$\geq$ 1			
29.2	S18	9042	9010	600	1.5	l $\gamma$ l	2	10/23	$\geq$ 11			
29.9	N34	9050	9002	(700)	(1.5)	l $\gamma$ d	4	10/24	$\geq$ 10			
30.2	N20	9044	New	1000	2.5	l $\Lambda$ l	1	10/25	12	20	6	b $\Lambda$ d
30.6	S16	9043	9004	1800	2.5	l - l	2	10/24	13	(10)	(1)	b - l
31.5	N16	9058	New	(300)	(3.0)	b - l	1	11/5	$\geq$ 1			

- (1) Region 9004 has formed near the position of region 8962 of the previous rotation, but at a lower latitude.
- (2) Region 9021 develops towards the west, as a new plage, in the same position as weak plage 9011.
- (3) Region 9013 is primarily a new plage, but it also contains weak remnants of region 8969.
- (4) Regions 9015 and 9041 undergo a resurgence on the disk after CMP.
- (5) Region 9018 is primarily a return of 8973, but also contains a part of region 8972.

No calcium spectroheliograms were obtained at the McMath-Hulbert observatory on October 6, 8, 15, 16, 17, 26, 27, 31, 1967.

MT. WILSON CLASSIFICATION OF SUNSPOTS

OCTOBER 1967

Oct. 1967	TIME MEAS. UT	LAT.	MER. DIST.	TYPE	No.	Oct. 1967	TIME MEAS. UT	LAT.	MER. DIST.	TYPE	No.
1	1720	N11	W68	( $\beta$ f) 1	16509	7	1700	S19	W55	( $\beta$ f) 4	16512
		N20	E03	( $\alpha$ p) 1	16510			S18	W20	( $\alpha$ p) 4	16515
		N12	W09	( $\alpha$ p) 5	16511			S26	E17	( $\alpha$ p) 4	16517
		S16	E26	( $\beta$ p) 5	16512			S22	W77	( $\beta$ ) 2	16518
		N15	W26	( $\beta$ p) 4	16514			N11	E09	( $\beta$ p) 3	16519
		S21	E62	( $\beta$ p) 4	16515						
2	1850	S20	W56	( $\beta$ p) 2	16516	8	2140	S17	W69	( $\beta$ f) 3	16512
		N22	W11	( $\alpha$ p) 2	16510			S18	W36	( $\alpha$ p) 2	16515
		N11	W23	( $\beta$ p) 5	16511			S26	W02	( $\alpha$ p) 4	16517
		S16	E12	( $\alpha$ p) 5	16512			N11	W06	( $\beta$ p) 2	16519
		N14	W41	( $\beta$ ) 5	16514			N12	W39	( $\beta$ p) 3	16522
		S21	E48	( $\beta$ p) 4	16515						
3	1830	S21	W70	( $\alpha$ f) 2	16516	9	2240	S17	W80	( $\alpha$ f) 4	16512
		S26	E81	$\alpha$ p	16517			S18	W50	( $\alpha$ p) 2	16515
		N23	W23	( $\beta$ p) 2	16510			S26	W15	( $\alpha$ p) 3	16517
		N11	W36	( $\alpha$ p) 5	16511			N12	W23	( $\alpha$ p) 1	16519
		S15	W0E	( $\alpha$ p) 4	16512			N13	W53	( $\beta$ p) 4	16522
		N15	W53	( $\beta$ p) 4	16514			N18	W03	( $\beta$ f) 3	16523
4	1745	S20	E36	( $\beta$ p) 4	16515	10	2220	N14	E15	( $\beta$ p) 3	16524
		S26	E70	( $\alpha$ p) 3	16517			S17	W64	( $\alpha$ p) 1	16515
		N22	W36	( $\beta$ p) 3	16510			S26	W28	( $\alpha$ p) 4	16517
		N10	W50	( $\alpha$ p) 5	16511			N13	W35	( $\alpha$ p) 1	16519
		S17	W14	( $\beta$ p) 4	16512			N13	W66	( $\beta$ p) 5	16522
		N14	W65	( $\beta$ ) 3	16514			N18	W16	( $\beta$ p) 2	16523
5	2120	S20	E23	( $\beta$ p) 5	16515	11	2210	N15	E03	( $\beta$ p) 5	16524
		S26	E56	( $\alpha$ p) 3	16517			S25	E77	( $\alpha$ p) 3	16525
		S20	W34	( $\beta$ $\gamma$ ) 2	16518			N23	W64	( $\beta$ f) 2	16526
		N12	E48	( $\alpha$ p) 2	16519			S26	W41	( $\alpha$ p) 3	16517
		N14	E03	( $\alpha$ p) 1	16520			N13	W79	( $\beta$ p) 4	16522
		N14	E03	( $\alpha$ p) 1	16520			N17	W33	( $\beta$ f) 1	16523
6	2340	N15	W11	( $\beta$ p) 5	16524	12	2305	N15	W11	( $\beta$ p) 5	16524
		N22	W55	( $\alpha$ p) 2	16510			S25	E64	( $\alpha$ p) 3	16525
		N10	W64	( $\alpha$ p) 4	16511			S26	W55	( $\alpha$ p) 3	16517
		S19	W29	( $\delta$ ) 5	16512			N17	W49	( $\beta$ f) 5	16523
		N13	W83	$\alpha$ p	16514			N15	W25	( $\beta$ p) 6	16524
		S20	E07	( $\beta$ p) 4	16515			S26	E50	( $\alpha$ p) 3	16525
7	1700	S26	E41	( $\alpha$ p) 4	16517	13	1900	S25	W67	( $\alpha$ p) 2	16517
		S21	W50	( $\beta$ ) 3	16518			N18	W60	( $\beta$ f) 4	16523
		N11	E35	( $\beta$ p) 1	16519			N16	W36	( $\beta$ p) 5	16524
		N23	E04	( $\beta$ f) 1	16521			S26	E39	( $\alpha$ p) 4	16525
		N22	W70	( $\alpha$ p) 2	16510						
		N10	W80	( $\alpha$ p) 3	16511						
8	2140	S18	W45	( $\delta$ ) 4	16512	14	1720	S25	W81	$\alpha$ p	16517
		S18	W11	( $\alpha$ p) 3	16515			N17	W73	( $\beta$ f) 4	16523
		S27	E26	( $\alpha$ p) 3	16517			N16	W51	( $\alpha$ p) 3	16524
		S20	W26	( $\beta$ ) 3	16518			S25	E27	( $\alpha$ p) 3	16525
		N11	E20	( $\beta$ f) 3	16519			S26	E49	( $\beta$ p) 2	16526
		N23	W09	$\alpha$ f	16521						



12  
Oct 67

MT. WILSON CLASSIFICATION OF SUNSPOTS

OCTOBER 1967

Oct. 1967	TIME MEAS. UT	LAT.	MER. DIST.	TYPE	No.	Oct. 1967	TIME MEAS. UT	LAT.	MER. DIST.	TYPE	No.	
15	2320	N17	E68	( $\beta$ p) 4	16524	25	2130	N10	W28	$\beta$	16529	
		S25	E11	( $\alpha$ p) 3	16525			N18	W57	$\alpha$ p	16530	
		S24	E32	( $\alpha$ p) 1	16526			N12	W10	$\alpha$ p	16531	
		S17	E28	( $\alpha$ f) 2	16527			N22	E18	$\alpha$ p	16533	
16	1735	N16	W79	( $\beta$ p) 4	16524	26	2140	N12	E30	$\alpha$ p	16534	
		S24	W01	( $\alpha$ p) 4	16525			N20	E09	$\beta$ p	16535	
		S17	E16	( $\beta$ f) 1	16527			N21	E55	$\beta$	16536	
17	2200	S26	W16	$\alpha$ p	16525	26	2140	N11	W45	( $\delta$ ) 6	16529	
		N14	E27	$\alpha$ p	16528			N17	W72	( $\alpha$ p) 3	16530	
		N13	E82	$\alpha$ p	16529			N13	W23	( $\alpha$ p) 2	16531	
18	1640	S26	W26	( $\alpha$ p) 4	16525	26	2140	N23	E04	( $\alpha$ p) 4	16533	
		S17	W09	( $\beta$ ) 1	16527			N12	E17	( $\alpha$ p) 4	16534	
		N13	E71	( $\alpha$ p) 2	16529			N20	W07	( $\beta$ f) 4	16535	
		N16	E44	( $\beta$ $\gamma$ ) 2	16530			N22	E43	( $\beta$ $\gamma$ ) 2	16536	
19	No Obs.					27	No Obs.	N21	E25	( $\alpha$ p) 2	16537	
								N16	E79	$\alpha$ p	16538	
20	1627	N12	E42	( $\beta$ $\gamma$ ) 4	16529	28	No Obs.					
		N17	E15	( $\beta$ p) 5	16530							
		N13	E65	( $\alpha$ p) 2	16531							
		N21	E74	( $\beta$ ) 1	16532							
21	1600	N23	E86	$\alpha$ p	16533	29	1855	N11	W85	$\beta$ f	16529	
		N13	E28	$\beta$	16529			N13	W22	$\alpha$ p	16534	
		N17	E03	$\beta$ p	16530			N21	W45	$\beta$ f	16535	
		N13	E50	$\alpha$ p	16531			N22	E06	$\beta$	16536	
		N21	E63	$\beta$	16532			N19	W15	$\beta$ f	16537	
		N23	E75	$\alpha$ p	16533			N16	E39	$\alpha$ p	16538	
		N12	E88	$\alpha$ p	16534			N18	E59	$\alpha$ p	16539	
22	1630	S26	E30	$\beta$	16540	30	2240	S19	E41	$\beta$	16541	
		N10	E15	( $\beta$ f) 4	16529			S18	E46	$\beta$ p	16542	
		N16	W10	( $\alpha$ p) 5	16530			S22	E62	$\alpha$ p	16543	
		N11	E36	( $\alpha$ p) 4	16531			S21	E70	$\alpha$ p	16544	
		N22	E59	( $\alpha$ p) 3	16533							
23	2130	N11	E73	( $\alpha$ p) 3	16534	30	2240	N11	W37	( $\alpha$ p) 3	16534	
		N10	W03	$\beta$	16529			N21	W07	( $\alpha$ p) 1	16536	
		N17	W26	$\beta$ p	16530			N18	W29	( $\beta$ $\gamma$ ) 3	16537	
		N11	E11	$\alpha$ p	16531			N14	E23	( $\alpha$ p) 5	16538	
		N23	E43	$\alpha$ p	16533			N18	E42	( $\alpha$ p) 4	16539	
		N12	E56	$\alpha$ p	16534			S28	E15	( $\beta$ f) 3	16540	
24	No Obs.	N21	E33	$\beta$	16535	31	1540	S20	E26	( $\beta$ f) 3	16541	
								S19	E31	( $\alpha$ p) 4	16542	
								S21	E48	( $\alpha$ p) 3	16543	
								S21	E60	( $\alpha$ p) 4	16544	
								N11	W46	( $\alpha$ p) 3	16534	
								N18	W35	( $\beta$ $\gamma$ ) 4	16537	
								N14	E14	( $\alpha$ p) 6	16538	
				N17	E33	( $\alpha$ p) 5	16539					
				S28	E04	( $\beta$ p) 3	16540					
				S20	E16	( $\beta$ f) 3	16541					
				S19	E21	( $\alpha$ p) 5	16542					
				S21	E38	( $\alpha$ p) 4	16543					
				S22	E49	( $\alpha$ p) 5	16544					
				S20	E27	( $\alpha$ p) 2	16545					

# SOLAR FLARES

## Partial Listing

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

OCTOBER 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION — MIN.	IM- POR- TANCE	OBS.  COND. TYPE	MEASUREMENTS					REMARKS
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MCMA PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H $\alpha$	MAX. INT. %	
					LAT.	MER. DIST.												
	1967 OCT																	
ISTA	01	0840	1000		N20	E23	.438	9002	3.1	80	2B							
BUCA	01	0840	1021		N23	E20	.426	9002	2.9	101	1N							
CATA	01	0843	1025	0847	N23	E20	.426	9002	2.9	102	1N					195	L	
CAPS	01	0850E	0934		N23	E17	.392	9002	2.6	44D	2N	2				215	H	
MONT	01	0913E	0935		N23	E19	.414	9002	2.8	22D	1B							
SALO	01	0920	0935		N08	E02	.041		1.5	15	-B				1.50			
BUCA	01	0924	0953D		N13	E05	.139	8999	1.8	29D	1N						L	
ISTA	01	0930	1020		N13	E02	.114	8999	1.5	50	1B							
ISTA	01	0930	1020		N13	E06	.150	8999	1.8	50	1B							
MONT	01	0935	1055	0955	N12	E05	.126	8999	1.8	80	2N							
CATA	01	0935	1100	0945	N12	E05	.126		1.8	85	-N					162		
CAPS	01	0939E	0946D		N13	E05	.139	8999	1.8	7D	2F	1				165	CHF	
ONDR	01	0954E	1035		N12	E03	.105		1.6	41D	2F					176	FH	
CAPS	01	1315E	1329		S17	E69	.952	9006	6.7	14D	1N	3					C	
MCMA	01	1315	1330	1317	S21	E68	.952	9006	6.7	15	-B				.90			
CATA	01	1315	1350	1320	S20	E67	.946	9006	6.6	35	1B					202		
HUAN	01	1319E	1319D		S20	E73	.973		7.0		-N	1	P				E	
CATA	02	0755	0810	0758	N15	W34	.564		29.8	15	-N					195		
BUCA	02	0755	0827D		N16	W34	.567	8998	29.8	32D	1N							
LOCK	02	2150	2215	2153	S19	E46	.789	9006	6.4	25	1N					20		
HALE	02	2153	2209	2156	S21	E46	.798	9006	6.4	16	1B	2						
HOUS	02	2154	2207D	2155	S21	E47	.807		6.4	13D	-N				.80		E	
MITK	04	0602	0634	0614	N17	W32	.544	8999	1.9	32	1N				3.90		F	
HALE	04	1651	1723	1657	N10	W73	.952	8998	29.2	32	1B	2						
MCMA	04	1652	1702	1654	N15	W68	.921	8998	29.6	10	-F						E	
HOUS	04	1655	1658	1656	N11	W75	.962		29.1	3	-F				.30		H	
CAPS	05	1112E	1132		S20	E12	.485	9006	6.4	20D	1N	2				189	F	
SALO	05	1115	1135		S22	E11	.508		6.3	20	-B							
CAPS	05	1125E	1150D		S17	W23	.541	9004	3.8	25D	1N	2				189	H	
CAPS	05	1135	1150D		S19	E13	.478	9006	6.5	15D	1N	2				196	FK	
MONT	05	1355	1425	1359	S16	W26	.562	9004	3.6	30	1N							
HOUS	05	1358	1418	1403	S16	W28	.584		3.5	20	-N					200	E	
CAPS	05	1400E	1418D		S17	W24	.551	9004	3.8	18D	2N	1				196	CF	
MCMA	05	1402E	1429		S18	W25	.571	9004	3.7	27D	1N						FH	
MONT	06	1007	1020	1010	S19	W32	.650	9004	4.0	13	1N							
CATA	06	1010	1023	1015	S18	W35	.673		3.8	13	-N					180		
MONT	06	1101	1200	1105	S20	W34	.677	9004	3.9	59	1B				1.85			
WEND	06	1104	1128		S19	W37	.701	9004	3.7	24	1F							
CAPS	06	1104E	1134D		S18	W35	.673	9004	3.8	30D	1N	3				195	C	
CATA	06	1116	1145	1116	S17	W33	.645		4.0	29	-N					174		
WEND	06	1216	1244		S18	W37	.694	9004	3.7	28	1N							
CAPS	06	1218	1330		S16	W36	.671	9004	3.8	72	1B	3				230		
MONT	06	1221	1455	1225	S20	W33	.668	9004	4.0	154	2B							
ONDR	06	1223	1337	1225	S17	W40	.719		3.5	74	2N					250	CHJ	
CATA	06	1225	1245	1227	S16	W37	.682	9004	3.7	20	1B					298		
HUAN	06	1341E	1428		S16	W40	.714		3.6	47D	-N	1					E	
CATA	06	1410	1445	1420	S25	W90	1.001	9001	29.8	35	1F					132		
MONT	06	1410E	1510D	1450	N10	E27	.453	9013	8.6	60D	1N							
HALE	07	0231	0359D	0240	S16	W47	.784	9004	3.6	88D	1B	2					K	
HALE	07	0235	0347															
HALE	07	0347																
MONT	07	1142E	1215		S18	W59	.892	9004	3.1	33D	1N							
CAPS	07	1208E	1237		S18	W50	.820	9004	3.8	29D	1N	3				176	F	
LOCK	07	1653	1710	1659	S16	W60	.895	9004	3.2	17	1N					20		
LOCK	07	2003	2010	2005	N24	W84	.990	9002	1.5	7	1N					20		
LOCK	07	2042	2106	2049	S18	W62	.912	9004	3.2	24	2N					20		
HALE	07	2045	2115	2050	S18	W62	.912	9004	3.2	30	1B	1						
HUAN	07	2049E	2051D		S18	W64	.925	9004	3.1	2D	1B	1					E	
CATA	08	0750	0805	0750	S15	W65	.926		3.5	15	-N					191		
CAPS	08	0800	0837		S16	W63	.915	9004	3.6	37	2N	3				237	FK	
MONT	08	0817E	0840		S12	W62	.901	9004	3.7	23D	2N							
CATA	08	0820	0900	0825	S12	W65	.922		3.5	40	-B					219		
CAPS	08	1310E	1347		S17	W67	.941	9004	3.5	37D	1F	3				160		
LOCK	08	1535	1544	1538	S15	W67	.938		3.6	9	-F				1.00	10		
CAPS	08	1540E	1600D		S16	W70	.955	9004	3.4	20D	1F	1				155	C	
LOCK	08	2031	2105	2040	S16	W67	.939	9004	3.8	34	1F				2.20	10		
HUAN	08	2106E	2106D		S18	W69	.952		3.7		-N	1					E	
MITK	09	0312E	0320D	0313	S22	W82	.996	9004	3.0	8D	1F						EH	
CATA	09	0925	1015	0925	N13	E25	.431	9018	11.3	50	1B					214		
CAPS	09	0933E	1003		N14	E23	.405		11.1	30D	-N	3				160	C	
MONT	10	0801E	0830		N10	W60	.861		5.8	29D	-N							
ISTA	10	0810	0835		N14	W60	.861	9021	5.8	25	1N							

For "Remarks" symbols see p 12 of February 1967 Descriptive Text.

## SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IM-POR-TANCE	OBS. COND. TYPE	MEASUREMENTS					REMARKS
	DATE	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
	1967 OCT																	
CATA	11	1245	1340	1315	N18	W05	.221		11.2	55	-N		1315	.62	.64		158	
MONT	11	1254E	1400		N17	W06	.213	9018	11.1	66D	1F	C	1254	2.06				
WEND	12	1159	1220		N16	W15	.304	9018	11.4	21	1N	V		3.09				
CATA	12	1200	1250	1215	N16	W17	.332		11.2	50	-N		1215	1.84	1.95		172	
CAPS	12	1205E	1222		N13	W18	.326	9018	11.2	17D	1N	3	1213	2.80	2.90		189	
HUAN	12	1222E	1225		N15	W16	.310		11.3	3D	-N	1	1223	.62	.62		F E	
MONT	13	1417	1440	1430	N15	W36	.594	9018	10.9	23	1N	C	1430	1.75				
HUAN	13	1420	1437	1425	N14	W38	.618		10.7	17	-N	1	1425	.88	.96			
MCMA	13	1422	1435	1426	N16	W37	.610	9018	10.8	13	-F	C	1426	.52	.70		E	
BUCA	14	0854E	0907D		N17	W46	.723		10.9	13D	-N	C	0856	.43	.60			
WEND	14	0854	0923D		N17	W44	.700	9018	11.1	29D	1N	V		3.09				
WEND	14	0934	1002		N16	W44	.698	9018	11.1	28	1N	V		4.13				
ONDR	14	0935E	0946D		N14	W45	.707		11.0	11D	-N	V	0945			2.10		
CAPS	14	0936	0958		N12	W46	.717	9018	10.9	22	1B	3	0944	2.20	3.10		204	
CATA	14	0940	1000	0945	N15	W47	.731		10.9	20	-B		0945	1.29	1.93		216	
SALO	14	0943	0957		N13	W47	.729		10.9	14	-N	V	0945	.83	1.20	1.70		
ARCE	14	0943	1002	0946	N15	W48	.743	9018	10.8	19	1N	C	0946	1.94	2.90		H	
SALO	14	0943	1040		N15	W48	.743		10.8	57	-N	V	0950	.66	1.00	1.70		
MONT	14	0950E	1000	0950	N14	W49	.753	9018	10.7	10D	1N	C	0950	1.03				
CATA	14	1225	1300	1235	N16	W45	.710	9018	11.1	35	1B		1235	2.01	2.96		218	
WEND	14	1226	1312	1234	N17	W43	.688	9018	11.3	46	2N	V		6.19				
CAPS	14	1229E	1325		N15	W45	.708	9018	11.1	56D	2N	3	1244	3.60	5.10		220	
HUAN	14	1233E	1318		N16	W46	.721	9018	11.1	45D	1N	2	1234	2.06	2.44		HJ	
MONT	14	1250E	1254D		N17	W38	.626	9018	11.7	4D	1N	C	1250	1.24			H	
LOCK	14	2122	2220	2132	N17	W46	.723		11.4	58	-F	C	2132	.90	1.40		10	
HALE	14	2148E	2158D	2150U	N17	W49	.756	9018	11.2	10D	1B	1	2150	1.75	2.70			
MONT	19	1355	1450	1406	N17	E31	.536	9032	21.9	55	1F	C	1405	2.06				
MONT	19	1400	1440	1415	N12	E62	.879	9034	24.2	40	1N	C	1415	1.03				
HUAN	19	1427E	1433		N12	E61	.870		24.2	6D	-F	1	1428	.21	.31		D	
MONT	20	0845	1020	0848	N18	E21	.407	9032	21.9	95	2B	C	0848	2.58				
MONT	20	0850	1020	0852	N17	E24	.441	9032	22.2	90	2B	C	0852	1.55				
MONT	20	1050	1140	1113	N18	E22	.420	9032	22.1	50	2B	C	1113	5.16				
CAPS	20	1107E	1137		N15	E22	.401	9032	22.1	30D	1N	3	1113	1.80	2.00		182	
CATA	20	1115	1210	1115	N17	E20	.386		22.0	55	-N		1115	1.07	1.17		186	
HUAN	20	1123E	1125D		N17	E21	.400		22.0	2D	-F	1	1123	.62	.62		E	
MONT	20	1144	1205	1148	N18	E22	.420	9032	22.1	21	1N	C	1148	1.55				
MONT	20	1126	1300	1136	N08	E41	.653	9034	23.6	94	2B	C	1136	3.61				
CAPS	20	1128	1147		N10	E50	.763		24.2	19	-B	3	1138	.90	1.40		196	
CATA	20	1130	1210	1135	N11	E47	.729		24.0	40	-N		1135	1.29	1.93		200	
WEND	20	1133	1154		N10	E46	.716	9034	23.9	21	1N	V		5.16				
WEND	20	1207	1223		N19	W86	.995	9020	14.1	16	1N	V		3.09				
HUAN	20	1217	1235	1221	N09	E45	.704		23.9	18	-N	2	1221	.34	.40		D	
CAPS	20	1219E	1250		N06	E44	.692		23.8	31D	-N	3	1225	1.00	1.50		165	
WEND	20	1220	1253D		N09	E44	.692	9034	23.8	33D	1N	V		4.13				
CATA	20	1220	1300	1230	N10	E44	.692		23.8	40	-B		1230	1.03	1.47		204	
MONT	21	1125	1215	1138	N18	E08	.256	9032	22.1	50	1N	C	1138	2.06				
MONT	21	1405	1410D	1407	N09	E35	.572		24.2	5D	-B	C	1407	.31				
CAPS	21	1405	1418		N09	E34	.558	9034	24.1	13	1N	3	1411	2.00	2.40		196	
ONDR	21	1408E	1418		N09	E34	.558		24.1	10D	1N	V	1409			2.30		
HUAN	21	1409E	1421		N08	E34	.557		24.1	12D	-N	1	C	1409	.75	.80		CH
WEND	21	1410E	1423		N09	E31	.514	9034	23.9	13D	1N	V		5.16				
HOUS	21	1412E	1420	1412U	N10	E32	.530		24.0	8D	-N	C		.40	.50		200	
LOCK	21	1945	2020	1954	N12	E59	.853		26.2	35	-F	C	1954	.90	1.60		10	
MCMA	21	1949E	1956D		N14	E58	.845	9037	26.2	7D	S	C	1950	.41	.80		E	
HALE	21	1950	2035	2005	N15	E57	.836	9037	26.1	45	1B	1	C	2005	2.06	3.80		
BUCA	22	0705E	0725		N09	E18	.313	9034	23.6	20D	1N	P	0705	2.21	2.30			
CATA	22	0705	0740	0705	N08	E19	.327		23.7	35	-N		0705	.40	.44		151	
ISTA	22	0715E	0800		N08	E18	.310		23.7	45D	-F							
CATA	22	0720	0725	0720	N13	E20	.361		23.8	5	-N		0720	.05	.06		151	
ISTA	22	0715E	0915D		N15	W04	.181		22.0	120D	-B							
BUCA	22	0730E	0845D		N16	W04	.197	9032	22.0	75D	1N	C	0745	2.76	2.80			
MONT	22	0748E	0815		N15	E02	.171		22.5	27D	-N	C	0748	.21				
MONT	22	1003	1155	1020	N07	E23	.390	9034	24.1	112	2B	C	1011	3.09				
MONT	22							9034					1030	5.16				
CAPS	22	1007	1033		N11	E24	.413	9034	24.2	26	1B	3	1011		2.30		220	
ONDR	22	1009E	1108		N10	E21	.364		24.0	59D	2N	V	1011			2.50		
CATA	22	1010	1140	1010	N10	E21	.364		24.0	90	-B		1010	1.57	1.69		222	
CATA	22			1014									1014	.51	.57		178	
CAPS	22	1358E	1409		N19	W59	.857	9025	18.2	11D	1F	3	1401	1.20	2.00		155	
MCMA	22	1358	1410	1400	N20	W58	.850	9025	18.2	12	-N	C	1400	.52	1.00		E	
CATA	22	1400	1407	1400	N18	W57	.839		18.3	7	-N		1400	1.01	1.92		186	
LOCK	22	2210	2300	2219	N10	E15	.269	9034	24.0	50	1B	C	2219	2.10	2.10		30	
HOUS	22	2211	2227	2215	N10	E14	.253		24.0	16	-N	C		.50	.50		200	

SOLAR FLARES

OCTOBER 1967

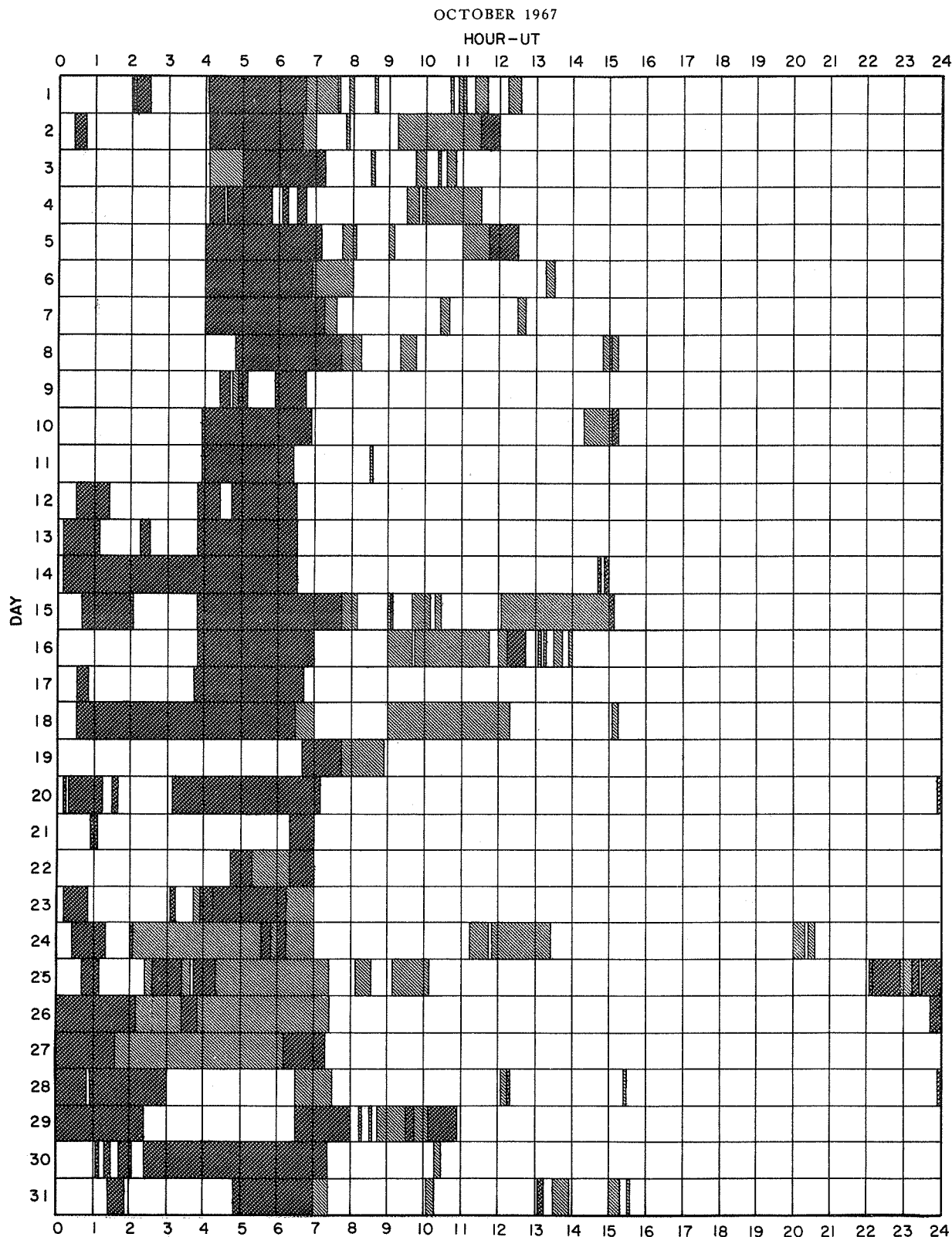
Table with columns: OBSERVATORY, OBSERVED UT (DATE, START, END, MAX. PHASE), LOCATION (APPROX. LAT., MER. DIST., CENTRAL DISTANCE, MCMATH PLAGE REGION, CMP DAY), DURATION (MIN.), IM-POR-TANCE, OBS. (COND., TYPE), MEASUREMENTS (TIME UT, MEAS. AREA Sq. Deg., CORR. AREA Sq. Deg., MAX. WIDTH Hc, MAX. INT. %), and REMARKS.

# SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION — MIN.	IM- POR- TANCE	OBS.		MEASUREMENTS					REMARKS
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY			COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H $\alpha$	MAX. INT. %	
					LAT.	MER. DIST.													
	1967 OCT																		
LOCK	28	2205	2233	2215	N13	W71	.942	9034	23.6	28	1N	C	2215	.90	2.20		20	H	
MITK	29	0258	0307	0302	N10	W80	.983	9034	23.1	9	1N	C	0302	1.13				F	
LOCK	29	1840	1905	1846	S25	E69	.957	9047	4.0	25	1F	C	1846	.80	2.20		10	H	
HALE	29	1844	1937	1849	S25	E72	.970	9047	4.2	53	1F	C	1849	.83					
LOCK	29	2252	2307	2255	N11	W90	1.000	9034	23.2	15	1B	C	2255	.80	3.20		30		
HALE	29	2252	2310	2255	N11	W89	.999		23.3	18	-B	1	C	2255	.41				
HALE	29	2346	0051D	0012	N11	W89	.999	9034	23.3	65D	2B	1	P	0012	1.34			KTY	
LOCK	29	2348	0015D	2351	N08	W90	1.000	9034	23.2	27D	2B		C	2351	2.50	10.00		30	K
LOCK	29			0015									C	0015	2.50	10.00		30	K
MONT	30	1103	1200		N20	W90	1.000	9034	23.7	57	1N	C							
MONT	30	1317	1407		N20	W90	1.000	9034	23.8	50	1N	C							
MONT	30	1415	1451D	1430	S19	E32	.634	9049	2.0	36D	1N	C	1430	1.55					
HUAN	30	1428	1527D	1444	S19	E32	.634		2.0	59D	-B	1	C	1444	1.13	1.26			
MCMA	30	1431	1515	1448	S18	E31	.616	9049	1.9	44	-B	C	1448	1.29	1.50			EH	
CAPS	30	1433	1515		S17	E33	.631	9049	2.1	42	1B	3	C	1448	3.00	3.90		228	F
LOCK	30	1959	2035	2008	N14	W90	1.000	9034	24.1	36	1N	C	2008	.80	3.20		20		
HALE	31	0202E	0204D		S20	E23	.550	9049	1.8	2D	1F	2	P	0202	2.06	2.50			
ISTA	31	0700E	0728		S24	E56	.879	9047	4.5	28D	2N								
ISTA	31	0700E	0804	0726	S29	E12	.580	9045	1.2	64D	1B								
ISTA	31	0720	0739		S27	E07	.533		31.8	19	-B								
ISTA	31	0720	0804		S27	E09	.540	9045	1.0	44	1B								
CAPS	31	0723E	0730		S27	E11	.548	9045	1.1	7D	1N	2		0725	2.20	2.50		164	B
CATA	31	0735	0810	0740	S26	E10	.530		1.1	35	-N			0740	.40	.49		166	
ISTA	31	0713	0736		N19	W34	.591	9041	28.8	23	2N								
ONDR	31	1039E	1046D		N21	E19	.419		1.9	7D	-F		V	1040			1.50	CDH	
ONDR	31	1043	1122D		N18	E17	.365	9046	1.7	39D	1F		V	1050			1.50	CHJ	
WEND	31	1123E	1207	1128	S20	E22	.540	9049	2.1	44D	2B		V		7.22				
HUAN	31	1125	1145D		S20	E20	.521	9049	2.0	20D	1N	1	P	1127	3.87	4.00			
ONDR	31	1126E	1157		N18	E20	.403	9046	2.0	31D	2N		V	1127			2.50	CJ	

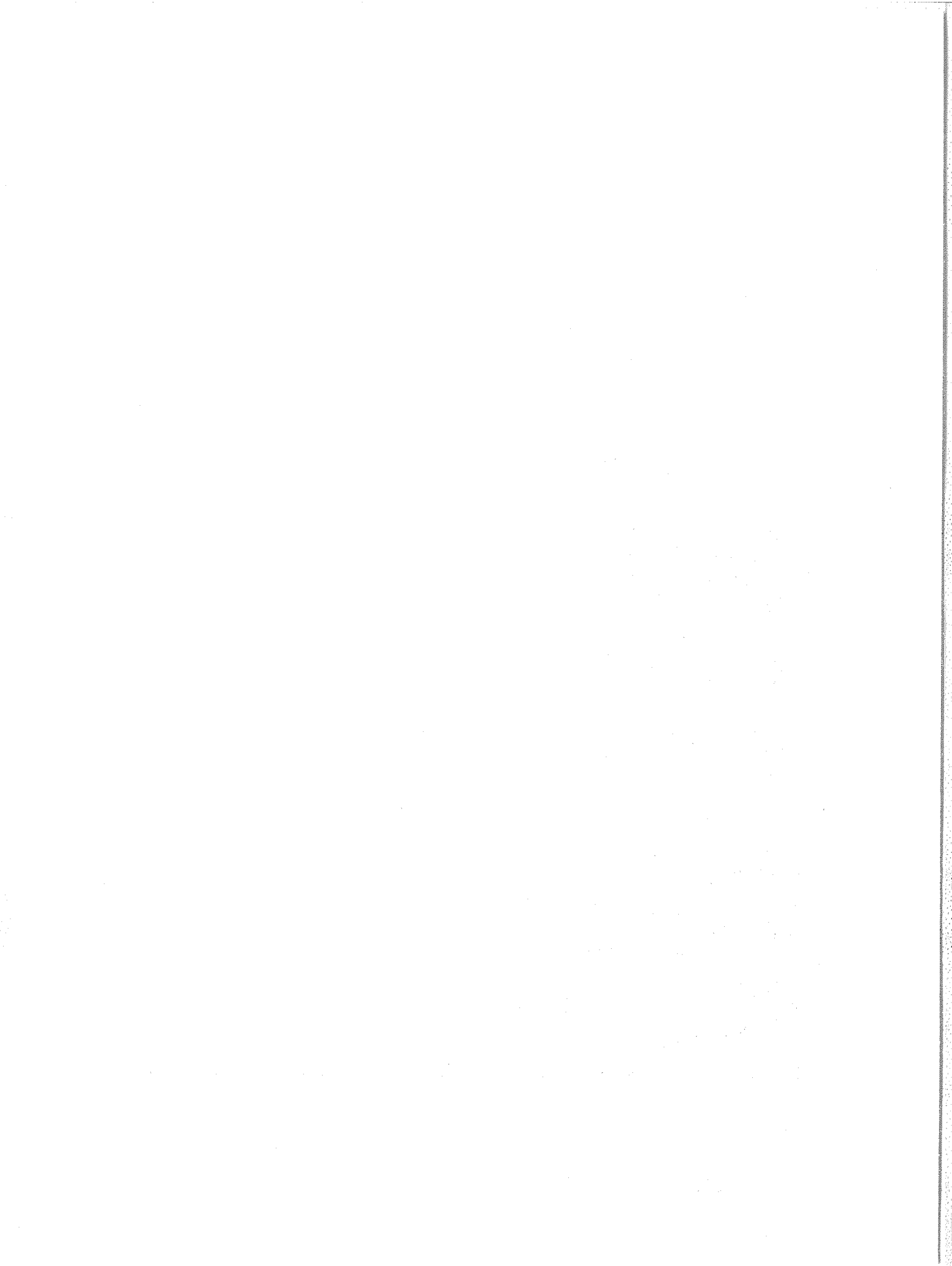
INTERVALS OF NO FLARE PATROL OBSERVATION  
For Preceding Solar Flare Table



Observatories included in total patrol:

Arcetri	Haleakala	Huancayo	Lockheed	Monte Mario
Bucharest	Herstmonceux	Istanbul	McMath-Hulbert	Salonique
Catania	Houston	Kodiakanal	Mitaka	Wendelstein

The times when there was no cinematographic or visual patrol are shown by the darker areas.  
The rest of the shaded areas are times of visual patrol only.



SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES

OCTOBER 1967

OCT. 1967	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{22} \text{ Wm}^{-2} (\text{c/s})^{-1}$		INT	REMARKS		
			UT	UT	MINUTES	PEAK	MEAN				
1	486 WASH	45	0116	0117	2	110.0		1			
	8800 SGMR	1	1316.3	1316.6	2.2	7.3	3.6				
	4995 SGMR	3	1316.3	1317	7.7	15.0	7.5				
	2800 OTTA	4	1316	1317	2	12.0	6.0				
	2695 SGMR	3	1316.3	1316.5	2.3	11.8	5.9				
	1415 SGMR	1	1316.4	1317.1	2.6	2.0	1.0				
	184 BOUL	43	1440		326						
	408 SANM	45	1803.5	1804	.7	26.0	18.0				
	486 WASH	41	1904	1917	25	170.0					
	960 PENN	45	1922.3	1923.1	1.5	4.4	1.7				
	328 PENN	45	1922.4	1922.6	1.3	92.6	28.9				
	2700 PENT	1	2241	2241.5	1	2.8	1.4				
	2	8800 SGMR	3	1124.3	1125.4	1.7	9.6		4.0	1	
		4995 SGMR	1	1124.5	1125.4	1.5	6.7		3.0		
2695 SGMR		1	1124.6	1125.5	1.3	4.8	2.0				
1415 SGMR		1	1124.2	1125.3	2.1	2.5	1.0				
606 SGMR		1	1124.6	1125.3	1.6	.9	.5				
408 SANM		45	1317.1	1322	5.9	37.5	16.0				
408 SANM		45	1347.8	1348.2	1.1	35.0	15.0				
184 BOUL		42	1540	1551	37						
2700 PENT		1	2153	2154	2	3.0	1.5				
3		408 SANM	3	1354.7	1355.2	1.3	32.0	18.5	1		
	2800 OTTA	1	1625	1626	3	1.4	0.7				
	2800 OTTA	26	1700	1745	110	-2.6	-1.3				
	2800 OTTA	20	1749	1751	17	2.4	1.2				
	408 SANM	45	1849	1849.3	1	26.5	16.0				
	408 SANM	45	1925	1926	1.3	41.5	24.5				
	408 SANM	45	1947.4	1947.9	1	23.5	17.5				
	4	184 BOUL	44	1300 E	1351	240 D				1	
408 SANM		3	1737.5	1737.9	.9	79.5	50.0				
408 SANM		45	1807.9	1808.6	1.1	81.0	43.0				
408 SANM		3	1831.3	1831.9	1	51.0	28.0				
5	2800 OTTA	20	1230	1405	240	5.4	2.7	1			
	8800 SGMR	20	1345	1359.3	153.0	13.4	6.7				
	4995 SGMR	20	1345	1359.9	153.0	10.9	5.5				
	2695 SGMR	20	1345	1359.1	153	2.0	1.0				
	2800 OTTA	20	1845	1910	85	5.4	2.7				
	960 PENN	1	1933.9	1934	.3	3.6	1.0				
	408 SANM	42	2031.9	2032.2	10.2	48.5	23.5				
	6	8800 SGMR	3	1221	1222.1	2.6	40.3		20.2	1	
4995 SGMR		3	1221	1222.2	2.6	25.6	12.8				
2800 OTTA		21	1221.5	1222	120	9.0	6.4				
2800 OTTA		3	1221.5	1222	2	10.8	6.0				
2695 SGMR		3	1221.2	1222.2	2.6	11.4	5.7				
1415 SGMR		1	1221.2	1222.1	2.8	2.3	1.2				
408 SANM		3	1226.3	1226.8	1.3	111.5	51.0				
408 SANM		40	1513.7	1514.7	5.3	26.5	21.0				
2800 OTTA		20	1605	2015	315	4.8	2.4				
408 SANM		41	1756.6	1758	2.2	31.0	26.0				
408 SANM		45	1858.9	1859.5	1.1	60.0	32.5				
408 SANM		3	1922.5	1923	.8	42.5	24.0				
2700 PENT		20	2305	2325	75 D	4.6					
7		184 BOUL	44	1302 E		298 D			1 3 2		
	184 BOUL	6	1635	1635	2						
	606 SGMR	41	1635.2	1635.7	2.0	5.2	2.0				
	2700 PENN	20	2025.6	2048.6	32.4	1.5	0.7				
	184 BOUL	6	2048	2049	2						
	2700 PENN	3	2048.9	2049.4	1.4	8.7	3.1				
	10700 PENN	1	2049.1	2049.3	1.1	5.2	1.2				
	8800 SGMR	1	2049.2	2049.5	.8	4.5	2.0				
	4995 SGMR	3	2049.1	2049.5	.9	7.8	3.0				
	2800 OTTA	3	2049	2049.3	1	9.0	4.5				
	2695 SGMR	1	2049.1	2049.6	1.0	5.5	2.0				
	1415 SGMR	1	2049.2	2049.6	1.5	3.2	1.0				
	606 SGMR	1	2049.2	2049.6	1.5	1.4	.5				
	8	408 SANM	45	1117.4	1118	1.4	55.0	30.0		1	
184 BOUL		42	1323	1342	112						
408 SANM		42	1501	1505	5	89.0	36.0				
2800 OTTA		21	2028	2040	210	5.8	2.9				
2800 OTTA		1	2034.5	2035	1	2.0	1.0				
9	8800 SGMR	1	1509.6	1509.8	2	2.0	.7	2			
	184 BOUL	6	1511	1511	1						
	606 SGMR	1	1511.3	1511.5	.6	1.3	.4				
	328 PENN	1	1936.8	1937.3	.8	25.7	5.7				
	2800 OTTA	3	1937.5	1937.6	1	25.0	12.5				
	2700 PENN	3	1937.3	1937.4	1.1	21.2	4.7				
	960 PENN	1	1937	1937.2	.6	.7	0.4				
	960 PENN	45	1941.7	1942.2	.7	1.2	0.7				
	328 PENN	45	1941.6	1941.8	.9	17.1	7.2				
10	184 BOUL	44	1305 E		660 D			2			
	2800 OTTA	1	1610	1613.5	7	1.2	0.6				
	2800 OTTA	20	1725	1840	140	3.2	1.6				



SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES

OCTOBER 1967

OCT. 1967	FREQUENCY STATION	TYPE	STARTING	TIME OF	DURATION	FLUX DENSITY		INT.	REMARKS
			TIME	MAXIMUM		$10^{-22} \text{ W m}^{-2} (\text{c/s})^{-1}$			
			UT	UT	MINUTES	PEAK	MEAN		
10	2700 PENT	24	2155		40	2.8			
11	184 BOUL	44	1305 E		657 D			2	
	2800 OTTA	24	1420		100	4.0			
	2700 PENT	1	1651.5	1651.6	1.5	1.6	0.8		
	408 SANM	40	1845 E	1949	95 D	63.0D	36.5		
	2800 OTTA	20	2027	2030	9	2.6	1.3		
12	4995 SGMR	1	1158	1200.3	4.0	4.4	2.2		
	2695 SGMR	1	1158	1200.2	5.0	7.4	3.7		
	408 SANM	40	1230	1331.2	75	65.5	17.0		
	184 BOUL	44	1306 E		655 D			1	
	2800 OTTA	20	1335	1440	165	4.4	2.2		
	408 SANM	41	1355.8	1357.6	3.4	164.0	84.5		
	606 SGMR	20	1950	1956.3	23	7.6	2.5		
	1415 SGMR	1	1951.5	1956	6.5	2.2	.7		
	408 SANM	27	2025	2051.2	35 D	53.5D	26.0		
13	184 BOUL	44	1307 E		652 D			1	
	408 SANM	27	1530	1629	100	41.0	17.5		
	2800 OTTA	21	1800	1900	200	6.8	3.4		
	408 SANM	27	1820	1847.1	72	42.0	15.0		
	4995 SGMR	20	1824.4	1904.5	157.6D	10.8	2.1		
	2700 PENN	20	1832	1920	115.0	3.8	1.8		
	2800 OTTA	1	1904	1904.5	1	1.6	0.8		
14	2695 SGMR	1	1203.6	1204.6	5.0	1.2	.5		
	2800 OTTA	24	1225		15	2.4			
	1415 SGMR	22	1226.2	1234.7	43.3	4.6	2.3		
	2695 SGMR	22	1228.4	1230.3	54.4	8.8	4.5		
	8800 SGMR	20	1230	1249	34.8	5.3	2.5		
	606 SGMR	20	1230	1249	31.0	.9	.5		
	4995 SGMR	20	1232	1303.8	40.0	1.9	1.0		
	184 BOUL	42	1314	1329	55			1	
	2695 SGMR	20	1326	1330	10.7	2.0	1.0		
	1415 SGMR	20	1326.5	1339.1	20.8	6.9	3.5		
	4995 SGMR	1	1327	1329	3.0	.7	.4		
	2695 SGMR	20	1539.5	1543	8.5	3.2	1.5		
	1415 SGMR	20	1539.5	1546.9	21.2	1.8	1.0		
	184 BOUL	42	1708	1713	25			1	
	2695 SGMR	20	1852.2	1859	10.6	3.2	1.8		
	2695 SGMR	20	1859.2	1938.5	56.5	3.8	2.0		
	4995 SGMR	20	1900	1938	66.6	3.7	2.0		
	2800 OTTA	20	1925	1935	45	3.2	1.6		
	8800 SGMR	20	1929.5	1947	32.5	4.6	2.5		
	1415 SGMR	20	1929.5	1947	32.5	1.8	1.0		
	408 SANM	45	1958.2	1959.5	1.8	67.0	36.0		
	2700 PENT	21	2120	2215	145	5.6	2.8		
	1415 SGMR	1	2122.2	2122.8	3.1	3.9	2.0		
	2700 PENT	1	2124	2124.3	1.5	4.6	2.3		
15	1415 SGMR	1	2107	2108.3	2.1	1.5	.5		
	606 SGMR	1	2107	2108	2.5	.9	.5		
16	2800 OTTA	20	1250	1315	210	4.0	3.0		
17	408 SANM	45	1615	1617.6	5	49.0	35.5		
	408 SANM	45	1621.4	1623	3	155.5	107.5		
	408 SANM	47	1625.2	1636.3	29.8	146.0	21.0		
	408 SANM	47	1816.7	1817.6	3.8	146.0	61.0		
18	408 SANM	45	1640.8	1641	.7	26.0	14.5		
	408 SANM	45	1700.5	1700.8	.8	23.0	14.0		
19	408 SANM	45	1152.5	1152.9	.8	39.5	22.0		
	408 SANM	45	1202.6	1203.4	1.1	26.5	16.0		
20	486 WASH	45	0040	0041	3	50.0			
	486 WASH	45	0100	0101	2	90.0			
	1415 SGMR	3	1134.6	1135	1.2	15.0	7.5		
	606 SGMR	3	1134.6	1135	1.4	17.6	8.8		
	408 SANM	3	1208.9	1209.5	1.8	63.5	34.0		
	408 SANM	3	1227.1	1227.9	1.1	101.0	53.0		
	408 SANM	45	1242.1	1248.7	7.1	29.5	13.0		
	2800 OTTA	20	1245	1415	230	2.6	1.3		
	408 SANM	3	1250.8	1251.3	1.3	69.0	37.0		
	408 SANM	45	1316.6	1317.5	1.8	37.0	21.0		
	184 BOUL	42	1344 E		608 D			1	
	408 SANM	45	1813.4	1813.9	1.3	22.0	13.5		
	408 SANM	45	2027.4	2028.2	1	33.5	19.0		
21	486 WASH	45	0125	0126	2	190.0			
	408 SANM	3	1006.8	1007.3	.9	58.0	31.5		
	2800 OTTA		1305		60	4.1			
	184 BOUL	42	1338 E	1405	88			1	
	2695 SGMR	20	1402.4	1409.6	10.2	4.3	2.2		
	4995 SGMR	20	1407.7	1409.4	19.1	3.6	1.8		
	408 SANM	45	1627.3	1627.8	12.1	72.5	25.5		
	408 SANM	45	1640.9	1641.5	1.2	22.5	13.5		
	2800 OTTA	1	1801.8	1802.2	1	1.8	0.9		
	2800 OTTA	20	2050	2054	70	4.0	2.4		

SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES

OCTOBER 1967

OCT. 1967	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{22} \text{ Wm}^{-2} (\text{c/s})^{-1}$		INT	REMARKS
			UT	UT	MINUTES	PEAK	MEAN		
22	2800 OTTA	24	1300		70	3.6			
	1415 SGMR	22	1357.6	1409.4	16.2	3.6	2.0		
	8800 SGMR	1	1529.1	1531.5	2.9	3.7	2.0		
	4995 SGMR	1	1530.4	1531.1	7.6	5.0	2.5		
	2695 SGMR	20	1530.9	1534	15.1	2.4	1.0		
	2800 OTTA	1	1531	1531.1	1	2.2	1.1		
	1415 SGMR	3	1531	1531.2	.9	13.2	4.0		
	606 SGMR	40	1856.8	1857.3	2.5	2.7	1.5		
	8800 SGMR	1	2038.7	2042	7	4.5	2.0		
	4995 SGMR	1	2038.6	2041.6	8.4	7.2	3.5		
	2695 SGMR	1	2038.7	2042	8.5	1.6	1.0		
	1415 SGMR	1	2040.9	2041.5	1.7	2.4	1.0		
	408 SANM	45	2050	2051	2	29.5	17.0		
	2700 PENT	20	2211	2218	100 D	8.6			
	23	408 SANM	3	1159	1159.5	1	94.0	49.5	
606 SGMR		40	1300.8	1301.4	1.6	3.8	1.5		
408 SANM		45	1300.5	1301	1.3	27.0	16.0		
1415 SGMR		45	1301.2	1301.4	1	42.0	15.0		
606 SGMR		40	1449.3	1449.6	2.0	6.6	3.0		
1415 SGMR		40	1450.3	1450.7	.9	2.8	1.5		
2700 PENN		20	1519.4	1526.3	21.7	2.9	1.5		
408 SANM		3	2032.5	2032.9	.7	94.5	50.0		
184 BOUL		6	2135	2137	8				3
24		2800 OTTA	21	1510	1530	140	2.4	1.2	
	4995 SGMR	28	1559.9	1609.7	9.8	13.2	6.6		
	8800 SGMR	21	1603.4	1615.5	75.6	13.5	6.7		
	2800 OTTA	21	1604	1616	65	8.4	4.2		
	2700 PENN	20	1604.3	1624.5	44.1	3.7	1.8		
	2700 PENN	45	1607	1610		27.9			
	2695 SGMR	28	1607.1	1609.6	12.5	9.3	4.3		
	1415 SGMR	28	1607.9	1609.8	11.9	1.6	.8		
	10700 PENN	20	1608.7	1616.1	39.3	10.1	5.2		
	8800 SGMR	3	1609.7	1610.2	2.1	8.3	2.8		
	4995 SGMR	45	1609.7	1610	7.8	39.3	13.1		
	2800 OTTA	45	1609	1610	7	34.0	8.0		
			1609	1610	3.3	34.0			
	2695 SGMR	45	1609.6	1610.2	7.0	31.0	10.3		
	1415 SGMR	3	1609.8	1610.4	2.2	10.4	5.2		
	960 PENN	1	1610.2	1610.6	.6	.5	0.2		
	2800 OTTA	45	1612.3	1612.8	3.7	16.0	.*		
	1415 SGMR	29	1612	1612	3.0	3.2	1.6		
	2695 SGMR	29	1616.6	1616.6	57.0	6.8	3.4		
	4995 SGMR	29	1617.5	1617.5	76.8	12.5	6.9		
	328 PENN	5	1611.2	1611.2	.6	9.4	1.0		
	1415 SGMR	20	2005.3	2046.1	73.3	5.9	3.0		
	606 SGMR	20	2005.2	2041.2	65.3	2.4	1.2		
	2800 OTTA	21	2030	2240	190 D	6.8			
	2700 PENT	21	2153	2156	12	3.6	1.8		
25	2800 OTTA	24	1325		15	7.4			
	408 SANM	47	1339.2		27.1	172.0	53.5		
	408 SANM	47	1420		24	170.0	94.5		
	408 SANM	40	1525	1530	11	49.0	22.5		
	408 SANM	40	1541.8	1547.8	12.2	34.0	17.0		
	2700 PENT	24	2150		10	3.4			
	486 WASH	45	2319	2321	8	90.0			
26	2800 OTTA	24	1310		85	6.7			
	2700 PENN	20	1936.6	1937.6	82.0	4.6	0.8		
	2800 OTTA	1	1937	1937.5	1.5	2.6	1.3		
27	4995 SGMR	1	1645	1647.7	6.3	7.2	3.0		
	2800 OTTA	21	1645	1705	95	3.0	1.5		
	2700 PENN	20	1645.4	1647.8	25.6	7.0	1.5		
	2695 SGMR	1	1646.3	1647.5	5.8	4.8	2.5		
	8800 SGMR	20	1647	1652	16.0	2.4	1.8		
	2800 OTTA	1	1647	1648	3	4.8	2.4		
	8800 SGMR	20	1927.1	1929.2	9.9	9.2	4.5		
	4995 SGMR	1	1927.2	1929.9	7.4	3.6	1.5		
	2800 OTTA	1	1941	1942	3	2.6	1.3		
	408 SANM	40	1951	1959	21	24.0	12.0		
	408 SANM	40	2056.6	2109.9	18.4	59.0	27.0		
	184 BOUL	41	2303	2319	35 D				1
	28	184 BOUL	42	1344		42			
408 SANM		40	1414	1441.3	31 D	61.0D	21.0		
2700 PENN		20	1506.4	1540.4	173.6	4.6	2.6		
4995 SGMR		20	1556.5	1559.2	9.5	4.3	1.4		
8800 SGMR		20	1557	1559.9	19.4	14.8	4.9		
408 SANM		43	1650	1704.2	23.6	69.0	20.0		
408 SANM		43	2030	2042.1	45 D	142.0D	25.5		
184 BOUL	42	2043		162				1	
29	408 SANM	45	1609	1610	2	71.0	38.0		
	10700 PENN	1	1743.3	1744.4	2.5	6.0	2.4		
	10700 PENN	1	1805.5	1805.7	.5	4.0	3.2		
	10700 PENN	1	1820.1	1820.4	1	3.2	1.8		
	10700 PENN	1	1833.4	1833.8	1.8	4.0	2.4		
	2700 PENN	20	1837	1855	76.0	3.3	2.3		

## SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

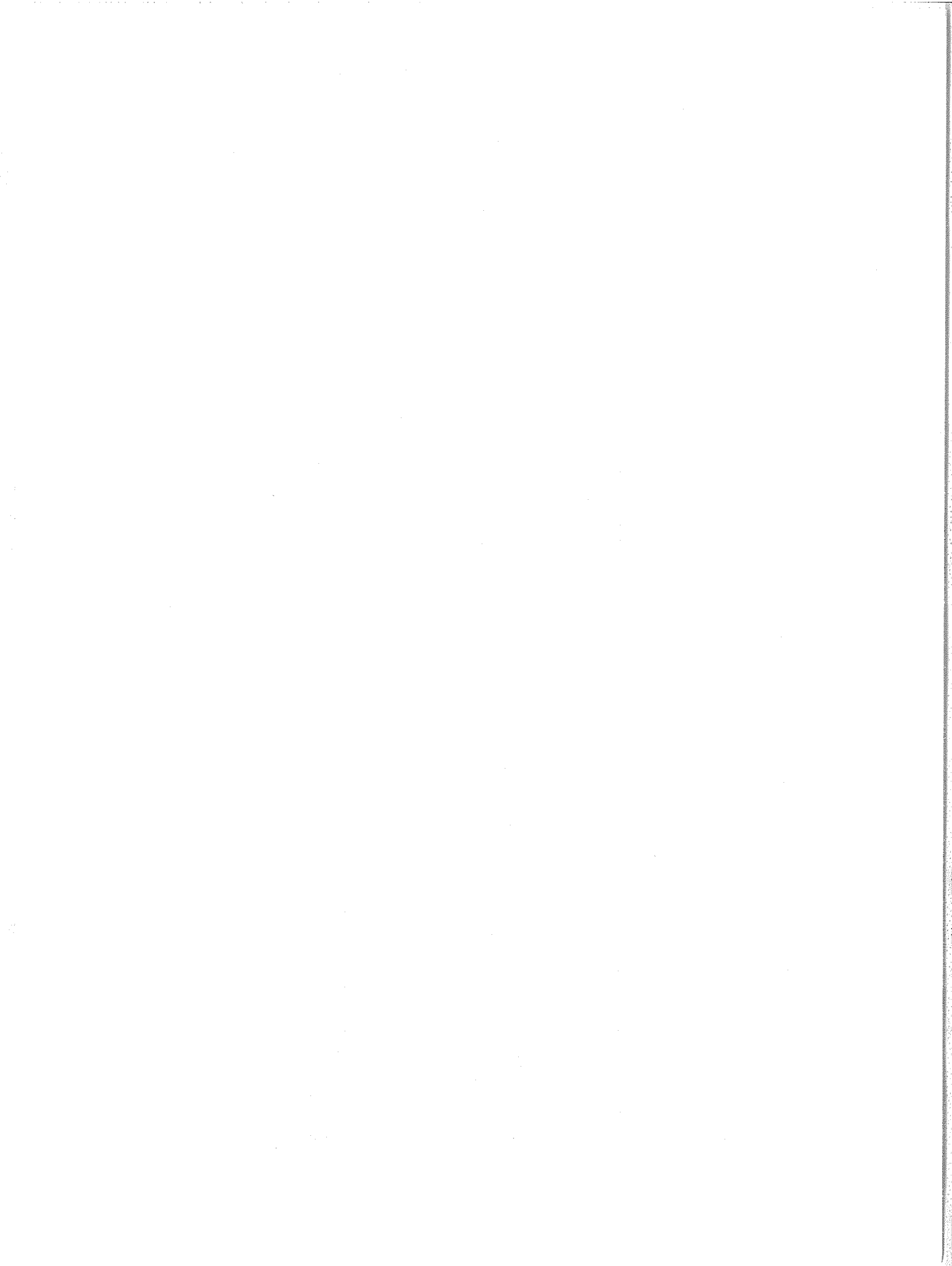
OCTOBER 1967

OCT. 1967	FREQUENCY STATION	TYPE	STARTING TIME	TIME OF MAXIMUM	DURATION	FLUX DENSITY $10^{-22} \text{ W m}^{-2} (\text{c/s})^{-1}$		INT	REMARKS			
			UT	UT	MINUTES	PEAK	MEAN					
29	8800 SGMR	3	1936.6	1937.8	4.1	12.6	4.0	2	INCOMPLETE			
	4995 SGMR	1	1936.6	1937.8	4.4	3.5	1.5					
	10700 PENN	3	1937.4	1938.3	3.1	12.3	4.1					
	10700 PENN	3	1946	1946.1	.5	12.3	8.2					
	4995 SGMR	20	2036.5	2040	8.5	5.6	2.8					
	2695 SGMR	20	2036.8	2037.4	9.2	3.2	1.6					
	1415 SGMR	20	2036.5	2040	9.1	5.1	2.0					
	606 SGMR	45	2036.2	2039.2	10.7	110.0	30.0					
	486 WASH	45	2038	2041	6	200.0D						
	408 SANM	45	2038.7	2041.2	10.6	234.0	34.0					
	184 BOUL	6	2042	2042	1							
	2700 PENT		2344	2347	8 D	490.0						
	30	184 BOUL	44	1330 E		600 D					1	
		960 PENN	40	1339		212						
328 PENN		45	1341	1356.2	25	44.0D						
2800 OTTA		21	1345	1440	80	5.4						
408 SANM		40	1354.5	1400	8.1	49.0	11.0					
328 PENN		45	1406	1424.9	28	69.0D						
408 SANM		3	1427.4	1428	1.3	42.0	23.5					
8800 SGMR		1	1441.2	1441.8	3.6	5.9	2.5					
4995 SGMR		1	1441.8	1442	2.2	1.4	.5					
2800 OTTA		1	1441.7	1443	4	3.6	1.8					
2695 SGMR		1	1441.8	1442.9	4.2	3.5	1.5					
1415 SGMR		1	1441.7	1442.3	2.1	3.8	1.8					
328 PENN		45	1443.9	1446.9	11.1	95.0D	*					
328 PENN		40	1459		175							
184 BOUL		6	1502	1503	3							
408 SANM		47	1527.4	1530.4	16.3	227.0	55.0					
606 SGMR		20	1546	1625.4	116.3	12.5	6.2					
2800 OTTA		21	1600	1825	285	8.8	4.4					
408 SANM		27	1600	1706.6	125	32.0	18.0					
10700 PENN		1	1619.4	1619.5	1.1	3.9	0.9					
2800 OTTA		1	1619.3	1619.6	3	2.8	1.4					
2700 PENN		1	1619	1619.7	6.8	3.2	1.4					
2700 PENN		20	1641.9	1754.2	100	46.9	16.2					
4995 SGMR		20	1737.1	1754	53.6	40.3	13.4					
2800 OTTA		3	1737.5	1754	45	45.0	20.0					
2695 SGMR		20	1737.5	1754.1	55.8	41.9	13.9					
1415 SGMR		20	1739.4	1753.3	40.5	13.7	4.6					
8800 SGMR		20	1746.4	1754	24.2	22.9	7.6					
10700 PENN		20	1748	1754.1	45.0	16.4	5.9					
606 SGMR		1	1751.3	1753.3	7.2	3.8	1.3					
2700 PENN		29	1821.8	1821.8	188.2	8.1	4.0					
328 PENN		45	1824	1824.8	1.4	143.0	50.0					
2800 OTTA		20	1838	1853	45	9.2	4.6					
1415 SGMR		20	1838	1852.3	38.7	4.2	2.1					
4995 SGMR		20	1839.8	1852	45.0	7.4	3.7					
606 SGMR		20	1839	1853.4	35.6	3.4	1.7					
2700 PENN		20	1843.4	1854	36.6	9.7	4.8					
2695 SGMR		20	1846.1	1853.5	35.7	5.8	2.9					
960 PENN		3	1904.6	1904.8	.3	12.9	2.3					
328 PENN		5	1904.6	1904.8	.3	73.7	25.9					
960 PENN		3	1917.5	1917.8	.6	9.5	1.1					
328 PENN		45	1917.5	1917.7	.7	51.7	19.4					
2800 OTTA		1	2105.5	2105.6	1	5.0	2.5					
2800 OTTA	1	2119	2121	4	3.0	1.5						
31	1415 SGMR	45	1117 E	1127.1U	15.5D	6.7	1.5	2	INPROGSUNRISE			
	606 SGMR	45	1117 E	1125.8U	15.5D	18.4	4.0					
	606 SGMR	45	1117 E	1127.4U	15.5D	18.4	4.0					
	408 SANM	47	1124.5	1126.6	10.6	555.0	72.5					
	606 SGMR	45	1257.8	1258.9	6.8	88.0	20.0					
	408 SANM	45	1257.9	1259.5	5.8	117.0	27.0					
	2700 PENN	1	1258.2	1259.3	2.4	6.2	2.7					
	2695 SGMR	1	1258.6	1259.2	5.9	3.1	1.0					
	1415 SGMR	45	1258.1	1258.9	5.9	13.7	4.0					
	960 PENN	1	1258.3	1259	2.1	1.3	0.6					
	184 BOUL	42	1341	1348	74							
	408 SANM	3	1345.8	1346.3	1	139.0	72.0					
	408 SANM	3	1351.2	1351.3	.5	145.0	79.0					
	408 SANM	3	1423.3	1424.1	1.7	209.0	107.0					
	2700 PENN	20	1704.6	1831.8	142.4	3.2	1.6					

SANM - Bursts recorded at 408 Mc/s by the Observatorio De Fisica Cosmica at San Miguel, Argentina.

Explanation of Type Code:

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

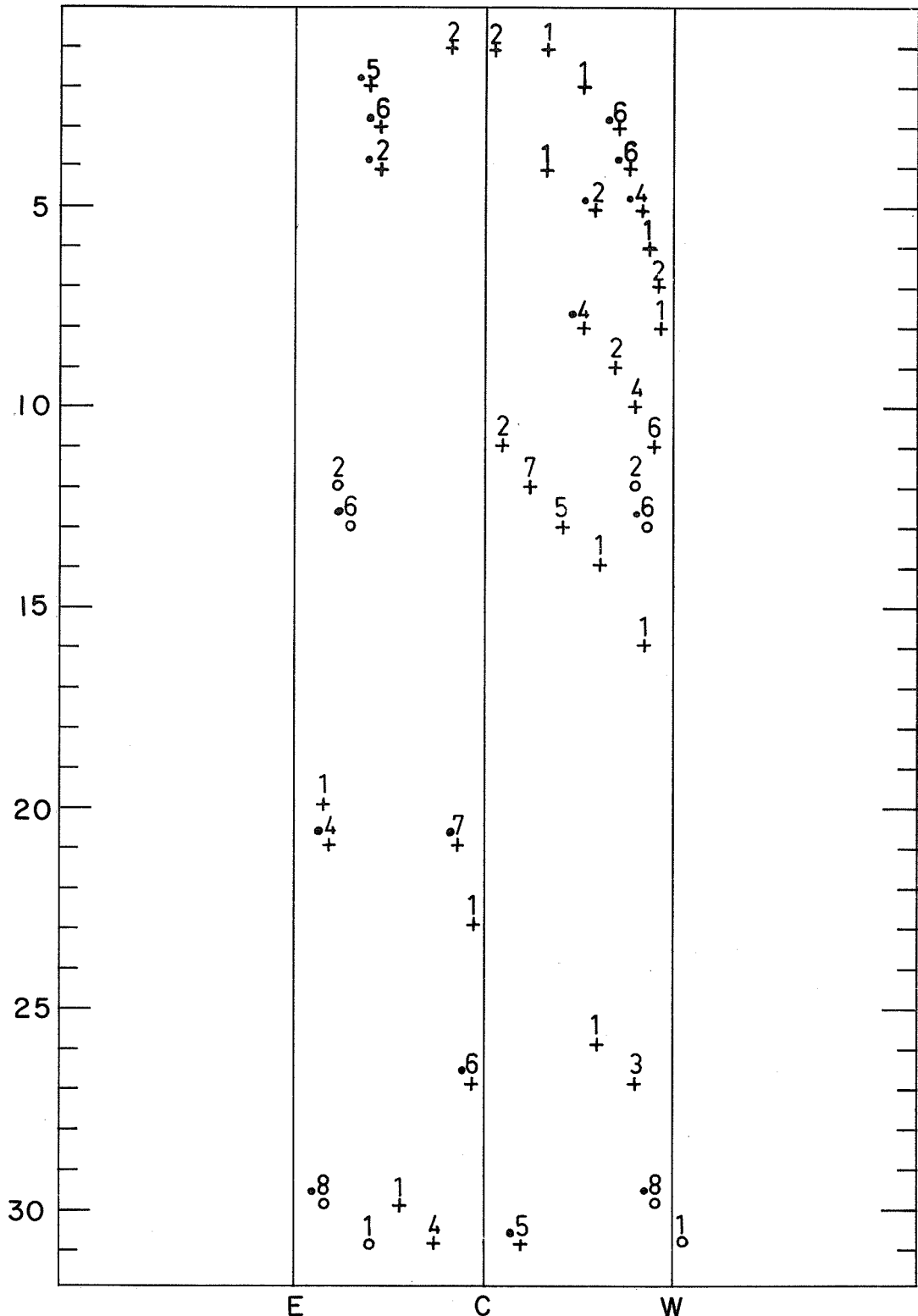


# SOLAR RADIO EMISSION INTERFEROMETRIC OBSERVATION

OCTOBER 1967

Nançay

408 Mc/s



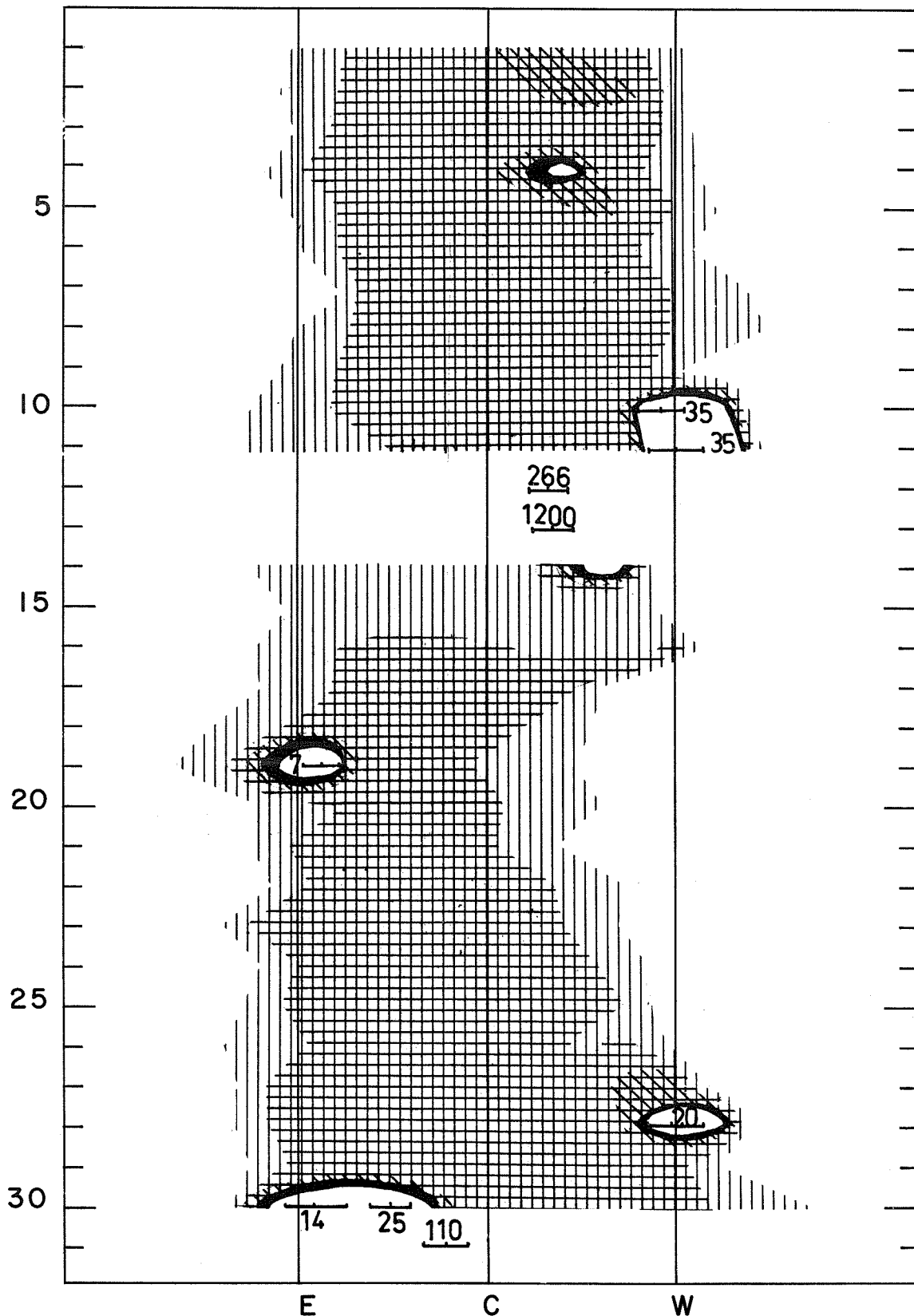
The positions of E and W were inadvertently switched in labeling the July 408 Mc/s Nançay chart in IER-FB-276, August 1967. Because of the distance between the main lobes there is sometimes an ambiguity about the position East or West of the Center of Activity. The two possible positions are indicated by circles on the chart.

# SOLAR RADIO EMISSION INTERFEROMETRIC OBSERVATION

OCTOBER 1967

Nançay

169 Mc/s



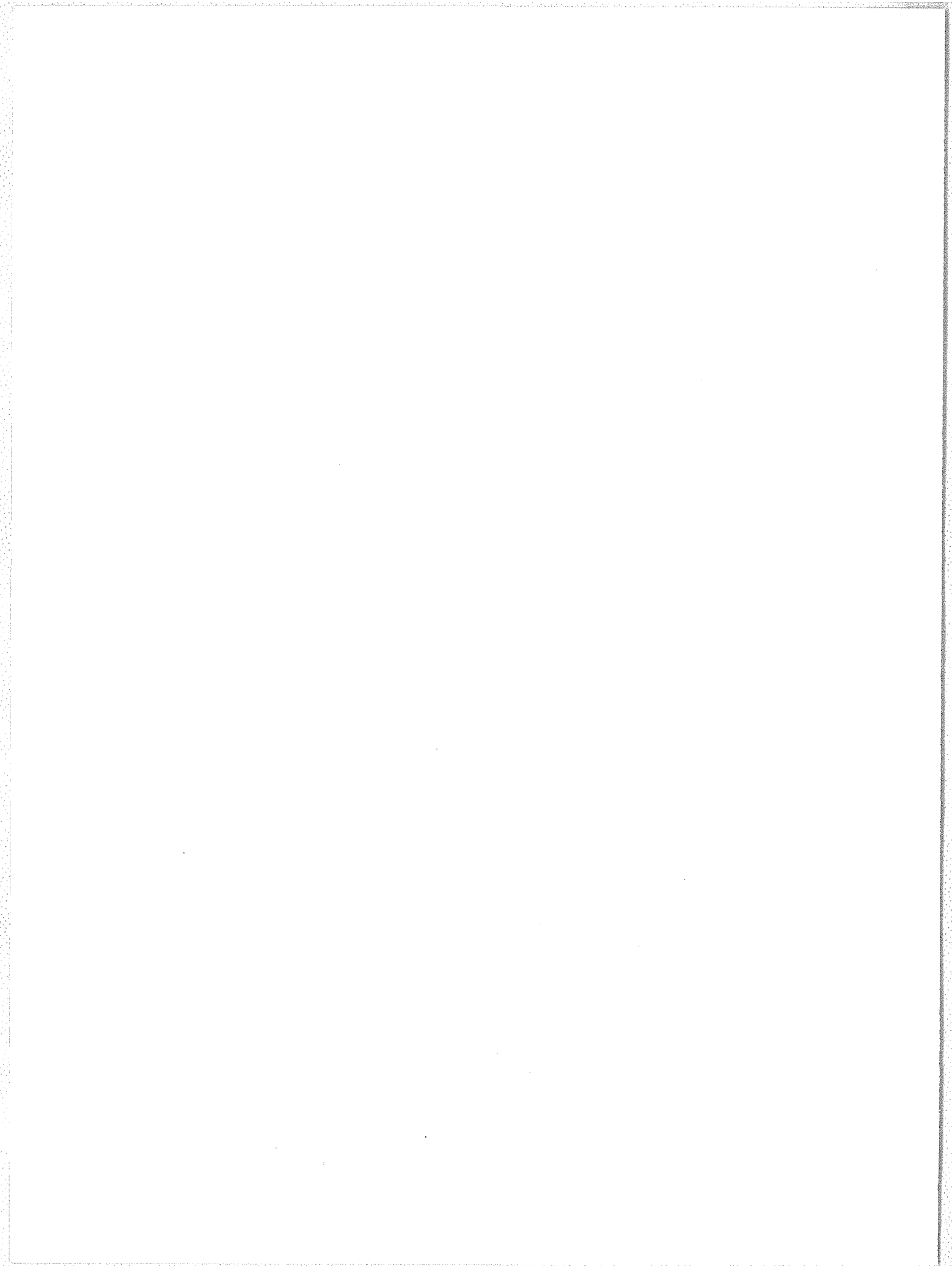
The Fleurs East-West Solar Scans have not been received at time of publication. The Scans for October will be published in the white section of the next issue.

Table of Contents  
for September 1967 Data

	Page
<u>Daily Solar Activity Centers</u>	
H $\alpha$ , Sunspots, 9.1 and 21 cm Spectroheliograms, Magnetograms and Calcium Plages	29-58
<u>Coronal Line Emission Indices</u>	59
<u>Sudden Ionospheric Disturbances</u>	
SWF, SCNA, SEA, SPA, SES, SFD	60
<u>Ionospheric Absorption Events</u>	
Riometer - South Pole	61
<u>Solar X-ray Radiation</u>	
Outstanding Events and NRL Daily Averages	62
Observing Times	63
<u>Solar Radio Waves</u>	
Spectral Observations	64-68
408 Mc/s Solar Interferometric Chart - Nançay	70
169 Mc/s Solar Interferometric Chart - Nançay	71
<u>Cosmic Rays</u>	
Neutron Monitors Daily Values - Deep River, Climax	72
Chart of Variations - Deep River, Alert	73
<u>Geomagnetic Indices</u>	
Table of Indices Kp, Ci, Cp, Ap	74
Chart of Kp by Solar Rotations and 12-Month Table of Daily Average Ap	75
Principal Magnetic Storms	76-77
<u>Radio Propagation Indices</u>	
North Atlantic and North Pacific Quality Figures and Forecasts	78
Charts of North Atlantic Short-term Forecasts and Quality and High Latitude Advance Forecasts	79
Transmission Frequency Ranges - North Atlantic Path	80-81

For explanations of the data contained herein see "Descriptive Text" published in February 1967.





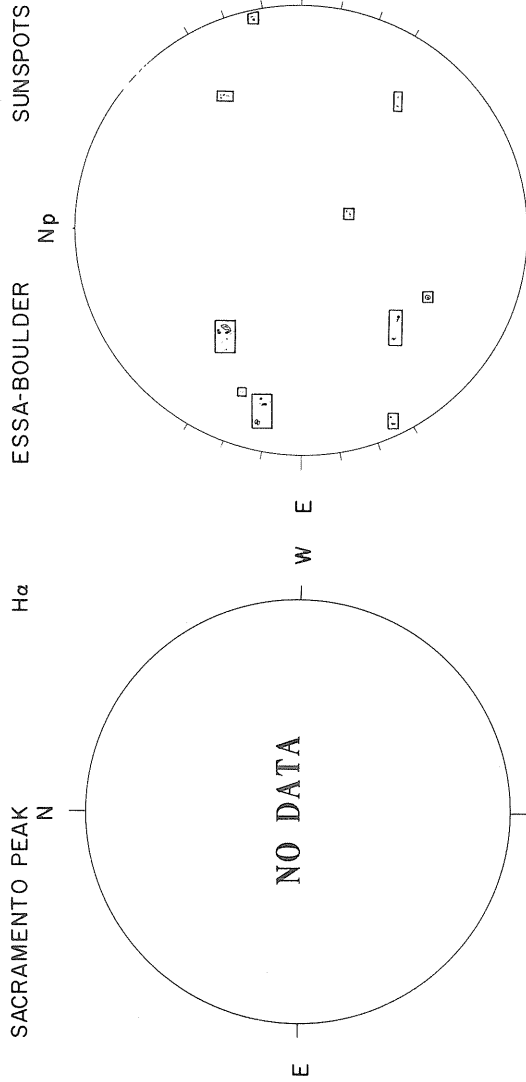
# SEPTEMBER 1, 1967 (P=20.95, B<sub>0</sub>=7.19, L<sub>0</sub>=4.35)

MT. WILSON

Np

MAGNETOGRAM

Solid-Plus  
Dotted-Minus



ESSA-BOULDER

SUNSPOTS

Np

H $\alpha$

- Levels
- ±5
- ±10
- ±20
- ±40
- ±80

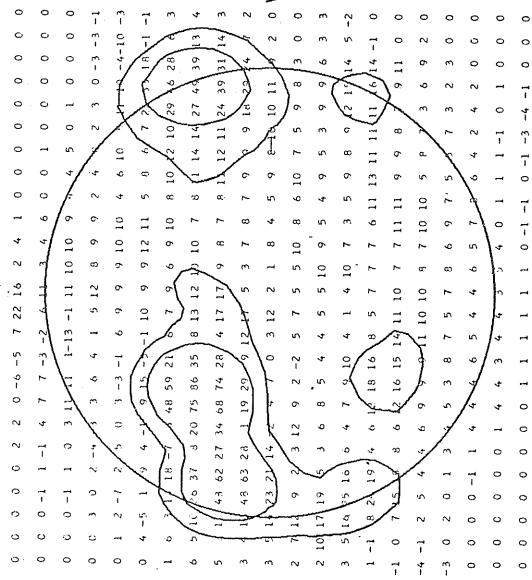
STANFORD

FLEURS, AUSTRALIA

21 cm.

McMATH-HULBERT

CALCIUM REPORT



FLEURS, AUSTRALIA

21 cm.

McMATH-HULBERT

CALCIUM REPORT

- 42-39-2.5
- 48-27-2.5
- 49-08-3.0
- 52-16-2.5
- 53-07-2.5
- 55-13-3.0
- 56-21-2.5
- 57-50-3.0
- 60-14-2.5
- 61-53-2.5
- 62-09-3.0

No spectroheliograms have been produced at Fleurs for the month of September, 1967.

Sp  
20-21 UT  
Brightness Unit 5,000<sup>0</sup> K

S  
02-03 UT  
Resolution 3 Minutes of Arc  
Brightness Unit 1,700<sup>0</sup> K

Sp  
1245 UT

SEPTEMBER 2, 1967 (P=21.20, B<sub>o</sub>=7.20, L<sub>o</sub>=351.14)

30  
Sept 67

MAGNETOGRAM  
Solid-Plus  
Dotted-Minus

Np

MT. WILSON

SACRAMENTO PEAK N

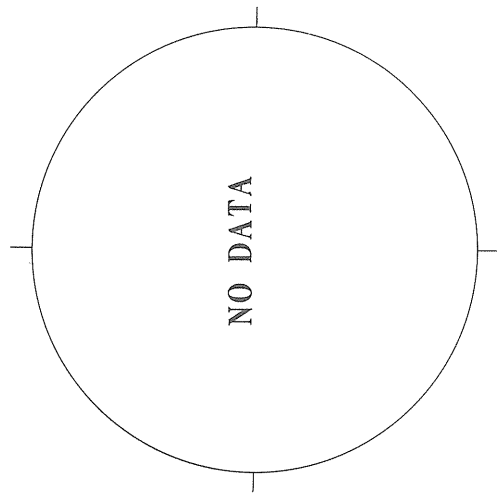
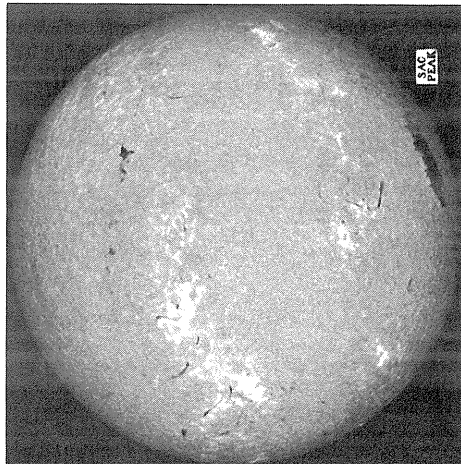
H $\alpha$

ESSA-BOULDER

SUNSPOTS

SAC PEAK

Np



NO DATA

Levels  
±5  
±10  
±20  
±40  
±80

S

2225 UT

STANFORD

9.1 cm.

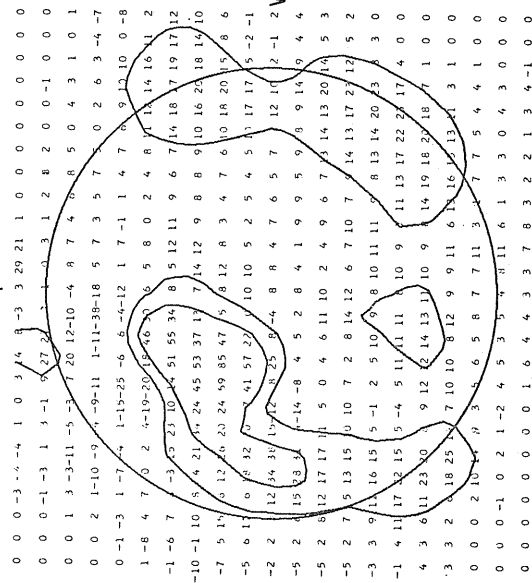
FLEURS, AUSTRALIA

21 cm.

McMATH-HULBERT

N

CALCIUM REPORT



52-12-2.5  
55-18-3.0  
56-17-2.5  
57-48-3.0  
59-12-2.5  
60-16-2.5  
61-63-3.0  
62-16-2.5

Brightness Unit 5,000° K

Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

Sp  
1325 UT

Sp  
20-21 UT

SEPTEMBER 3, 1967 (P=21.45, B<sub>0</sub>=7.22, L<sub>0</sub>=337.93)

MT. WILSON

Np

MAGNETOGRAM

Solid-Plus  
Dotted-Minus

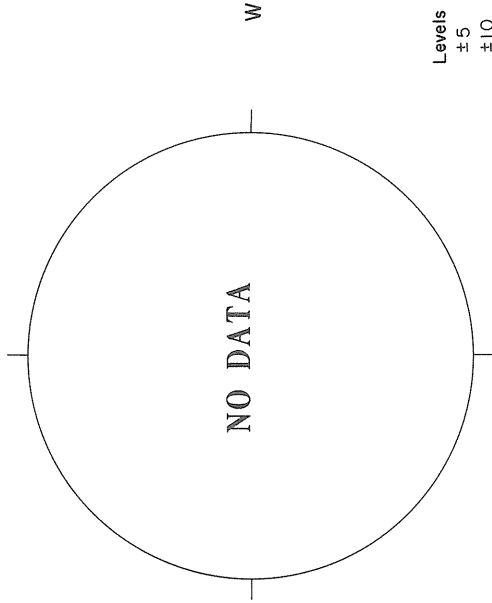
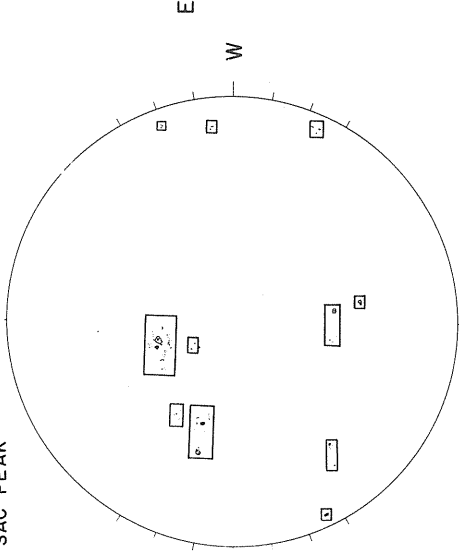
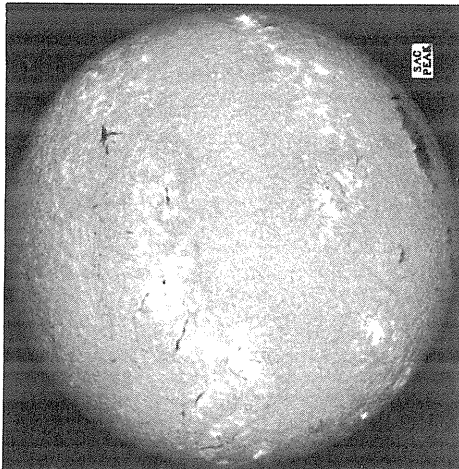
SACRAMENTO PEAK N

ESSA-BOULDER

Np

SUNSPOTS

SAC PEAK

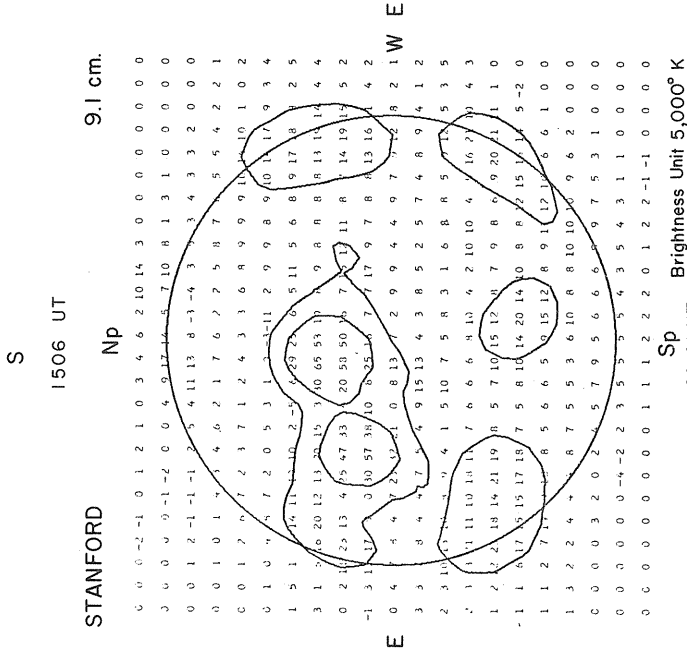


Levels  
±5  
±10  
±20  
±40  
±80

STANFORD  
1506 UT  
Np  
9.1 cm.  
FLEURS, AUSTRALIA N

Sp  
1415 UT  
21 cm.

McMATH-HULBERT  
Np  
CALCIUM REPORT  
Sp



0 0 0 -2 -1 0 1 2 1 0 3 4 6 2 10 14 3 0 0 0 0 0 0 0 0  
 3 0 0 0 9 -1 -2 0 0 4 9 17 14 5 7 10 8 1 3 1 0 0 0 0 0  
 0 0 1 2 -1 -1 -1 2 5 4 11 13 8 -3 -4 3 3 4 3 3 2 0 0 0  
 0 0 1 0 1 7 5 4 6 2 1 7 6 7 7 5 8 7 5 5 4 2 2 1  
 0 0 1 2 0 7 2 3 7 1 2 4 3 3 6 9 9 9 11 11 10 1 0 2  
 0 1 0 7 5 7 2 0 5 3 1 3 3 11 2 9 9 8 9 10 11 9 3 4  
 1 5 1 14 11 10 2 5 7 29 24 0 5 11 5 6 8 9 17 8 2 5  
 3 1 7 6 20 12 13 20 15 3 10 65 53 10 0 8 8 8 13 14 4 4  
 0 2 10 25 13 4 5 47 33 20 53 50 15 7 11 11 8 14 19 15 2 2  
 -1 3 1 17 0 30 57 39 10 8 35 7 7 17 9 7 8 13 16 1 4 2  
 0 5 7 4 7 2 12 1 0 8 13 2 9 9 4 4 9 7 2 2 8 2 1 W E  
 3 3 3 8 4 7 5 6 9 15 13 4 3 8 5 2 5 7 4 8 9 4 1 2  
 2 3 10 17 1 0 4 1 5 10 7 5 8 3 1 6 8 8 5 1 5 3 5  
 2 1 1 11 10 14 11 7 6 6 6 8 10 4 2 10 10 4 16 2 10 4 3  
 1 2 2 18 14 21 19 8 5 7 10 15 12 8 7 9 8 9 20 11 1 1 0  
 -1 1 6 17 5 15 17 18 7 5 8 16 14 20 14 8 8 2 15 1 1 5 -2 0  
 1 1 2 7 11 10 10 8 5 6 6 5 15 12 8 9 1 17 11 6 6 1 0 0  
 1 3 2 2 4 7 8 7 5 5 3 6 10 8 10 10 10 9 6 2 0 0 0  
 0 0 0 0 3 2 0 2 5 7 9 5 6 6 6 6 9 7 5 3 1 0 0 0  
 0 0 0 0 0 -4 -2 2 3 5 3 3 3 3 4 3 5 4 3 1 1 0 0 0 0  
 0 0 0 0 0 0 0 0 1 1 2 2 2 2 0 1 2 2 -1 -1 0 0 0 0

31  
Sept 67

S Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

Sp  
20-21 UT  
Brightness Unit 5,000° K

1300 UT

MAGNETOGRAM  
Solid-Plus  
Dotted-Minus

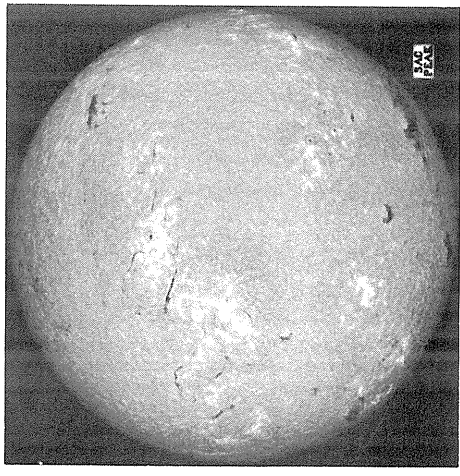
Np

MT. WILSON

SEPTEMBER 4, 1967 (P=21.70, B<sub>0</sub>=7.23, L<sub>0</sub>=324.72)

SACRAMENTO PEAK N

H $\alpha$

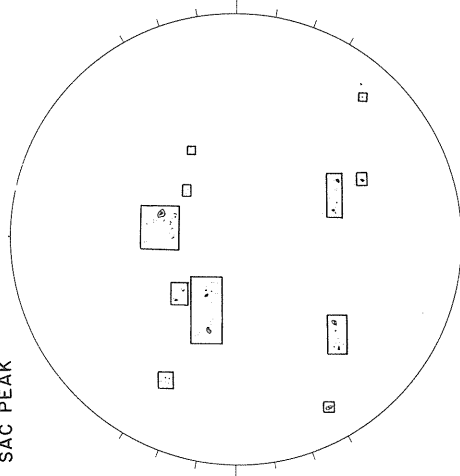


E

ESSA-BOULDER

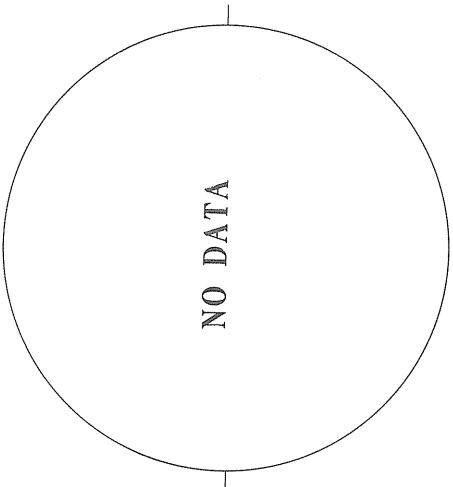
SUNSPOTS

Np



E

W



W

Levels  
±5  
±10  
±20  
±40  
±80

S

1430 UT

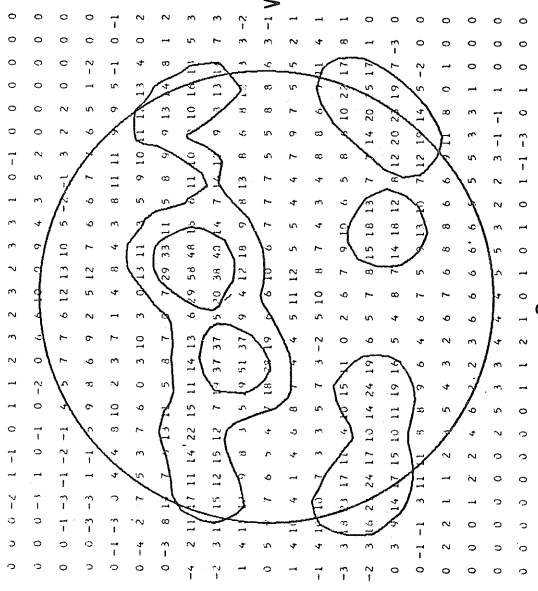
STANFORD

Np

9.1 cm.

FLEURS, AUSTRALIA

N



W

E

Sp

1515 UT

FLEURS, AUSTRALIA

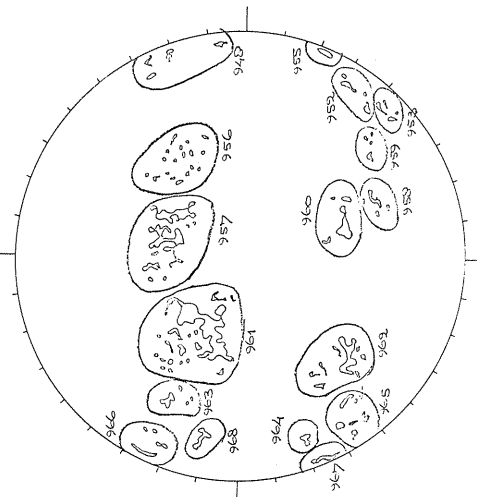
N

21 cm.

Sp

McMATH-HULBERT CALCIUM REPORT

Np



W

E

S Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

Brightness Unit 5,000° K

Sp

20-21 UT

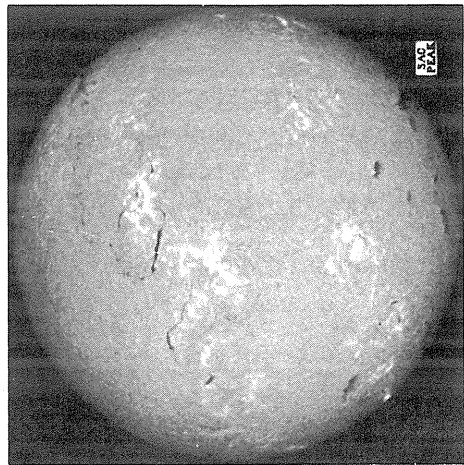
Sp

1250 UT

55-10-30  
56-20-2.5  
57-50-3.0  
60-12-2.5  
61-60-3.0  
62-30-2.5  
64-06-2.5

SEPTEMBER 5, 1967 (P=21.93, B<sub>0</sub>=7.24, L<sub>0</sub>=311.52)

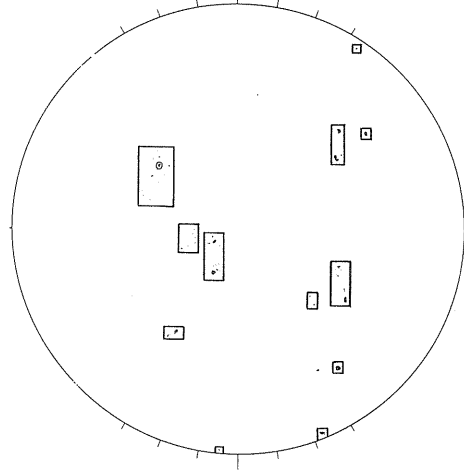
SACRAMENTO PEAK N



H $\alpha$

ESSA-BOULDER

SUNSPOTS



Sp

1430 UT

FLEURS, AUSTRALIA N

21 cm.

McMATH-HULBERT

0.06-0.81 UT

CALCIUM REPORT

Sp

1315 UT

STANFORD

1511 UT

9.1 cm.

Sp

20-21 UT

Brightness Unit 5,000° K

Resolution 3 Minutes of Arc

02-03 UT Brightness Unit 1,700° K

S

W

E

N

0 0 0 0 -1 0 1 -1 0 2 4 4 4 3 3 4 5 2 0 0 0 0 0 0 0 0

0 0 0 0 -2 2 1 0 1 4 6 8 8 7 9 12 8 0 -5 -1 0 0 0 0 0

0 0 0 -2 -2 2 3 5 8 6 7 9 7 10 13 9 2 -3 0 2 0 0 0 0

0 0 -1 -1 -2 0 3 7 10 13 7 4 7 5 6 9 9 9 6 5 2 1 0 0

0 0 -1 0 2 3 5 7 10 9 1 5 7 6 3 4 1 4 13 13 9 6 2 0 0

0 -2 -1 0 4 9 7 6 5 4 0 4 10 3 3 7 0 0 7 11 9 4 1 2

0 -1 3 10 13 6 5 10 8 6 7 7 -9 16 3 13 11 0 5 1 1

-2 4 10 9 13 9 17 16 11 13 6 3 6 5 50 46 7 9 12 12 1 7 2 4

-1 7 15 17 4 7 16 14 15 27 34 19 22 40 37 15 13 13 10 12 5 3

0 6 15 8 5 4 9 10 6 20 42 37 4 5 9 11 8 11 11 7 11 0 4 2

1 6 11 6 5 5 4 1 13 24 10 11 6 3 7 7 5 8 8 -1 W E

2 4 7 2 2 5 4 6 7 15 12 12 13 3 1 7 5 6 8 2 -4 2

3 1 1 1 1 3 4 9 10 1 0 6 11 6 2 3 6 3 5 8 2 1

1 0 4 1 19 10 9 5 4 9 16 11 4 5 6 4 10 12 5 2 12 10 8 3

-1 1 34 25 13 12 11 7 14 21 18 0 8 7 9 16 18 6 5 20 4 16 6 1

-1 0 3 15 7 16 18 13 9 20 15 6 5 5 20 19 10 14 20 20 0 2 0

-1 -1 0 3 4 12 7 10 11 6 4 7 6 11 8 11 19 0 0 0 0 0 0

0 1 2 1 2 4 1 5 3 5 7 6 6 6 5 7 7 6 8 3 -2 0 0

0 0 0 0 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 1 0 0 0

6 0 0 0 0 -1 0 1 3 2 3 2 3 3 3 3 3 3 3 2 1 0 0 0

0 0 0 0 0 0 0 0 -2 -2 0 1 1 1 2 1 2 1 -2 -1 0 0 0 0

Sp

Brightness Unit 5,000° K

Resolution 3 Minutes of Arc

02-03 UT Brightness Unit 1,700° K

S

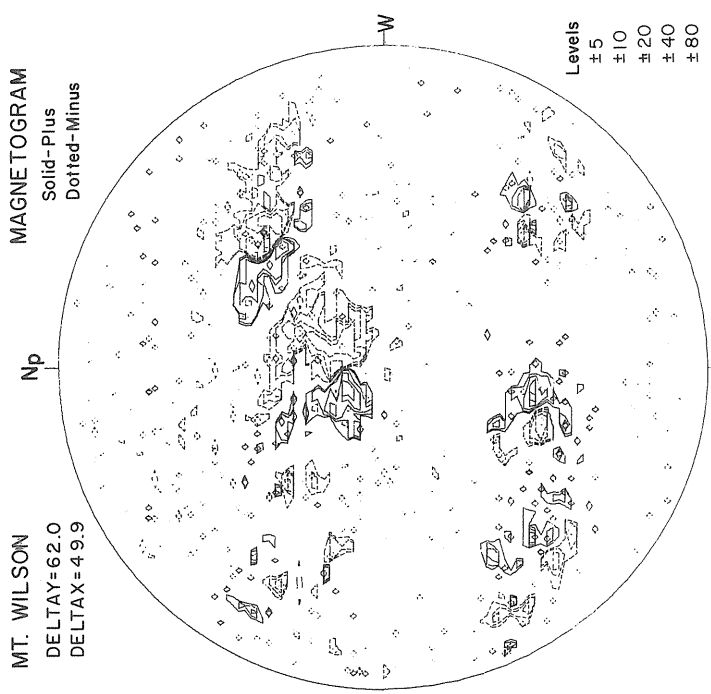
W

E

N

MT. WILSON  
DELTA Y=62.0  
DELTA X=49.9

MAGNETOGRAM  
Solid-Plus  
Dotted-Minus



Levels  
±5  
±10  
±20  
±40  
±80

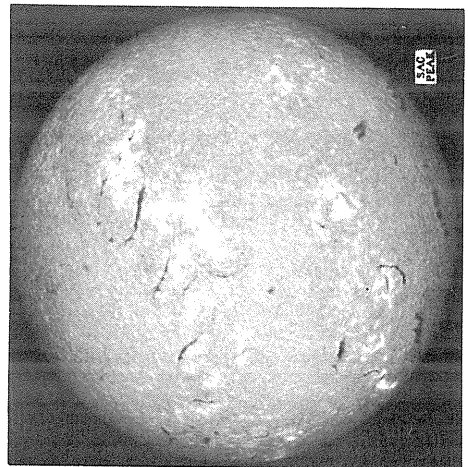
52-08-3.0  
57-47-3.0  
60-10-3.0  
61-58-3.0  
62-25-2.5  
63-06-2.5  
70-13-3.5

SEPTEMBER 6, 1967 (P=22.17, B<sub>0</sub>=7.24, L<sub>0</sub>=298.31)

34  
Sept 67

SACRAMENTO PEAK  
N

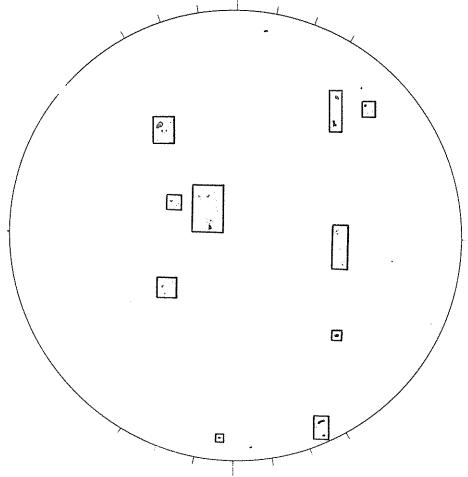
H $\alpha$



ESSA-BOULDER

Np

SUNSPOTS



Sp

1600 UT

FLEURS, AUSTRALIA

N

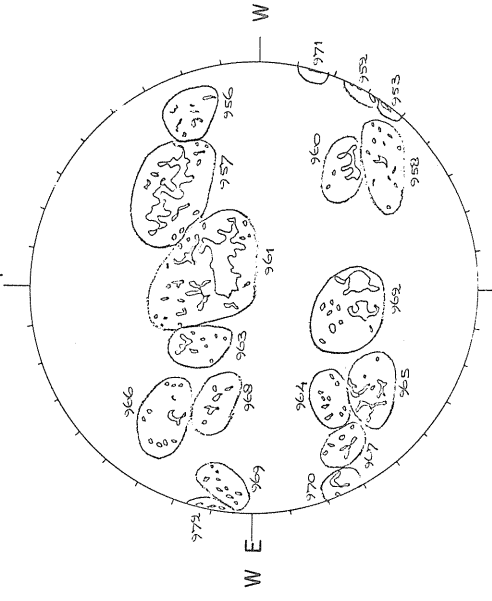
21 cm.

18.23-18.97 UT

McMATH-HULBERT

Np

CALCIUM REPORT



Sp

1310 UT

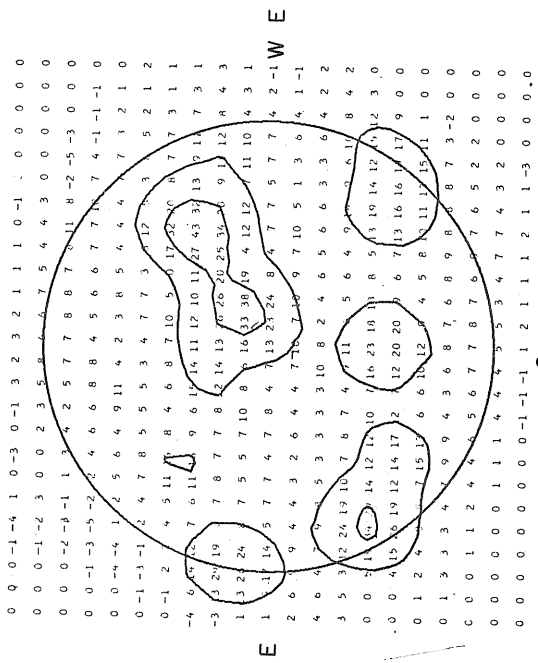
S Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

STANFORD

1551 UT

Np

9.1 cm.



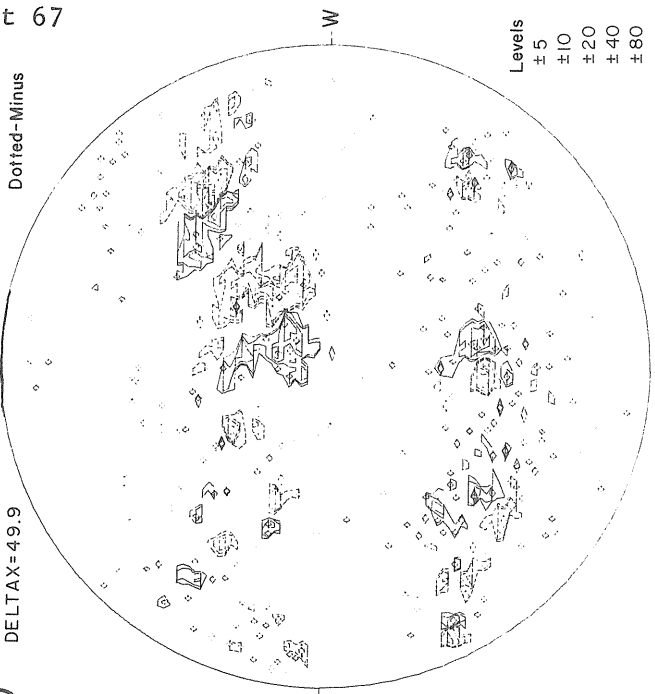
Sp

20-21 UT

Brightness Unit 5,000° K

MAGNETOGRAM  
Solid-Plus  
Dotted-Minus

MT. WILSON  
DELTA Y=62.0  
DELTA X=49.9



Levels  
±5  
±10  
±20  
±40  
±80

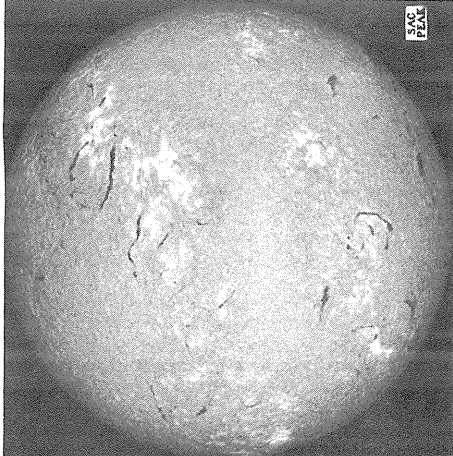
52-09-2.5  
57-45-3.0  
58-10-2.5  
60-11-3.0  
61-54-3.0  
62-31-3.0  
63-06-2.5  
65-18-2.5  
67-09-2.5  
68-07-2.5  
69-08-2.5  
70-12-3.0

SEPTEMBER 7, 1967

(P=22.39, B<sub>0</sub>=7.25, L<sub>0</sub>=285.10)

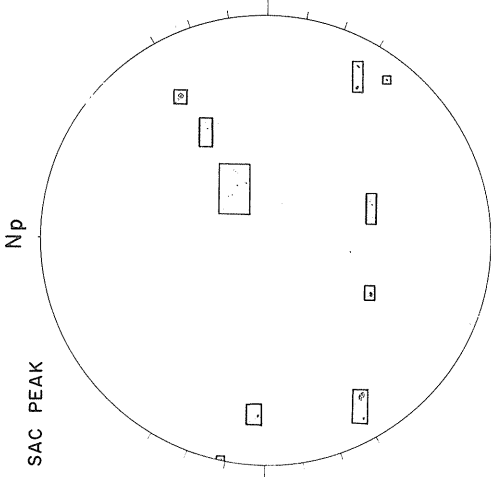
SACRAMENTO PEAK  
N

H<sub>α</sub>



ESSA-BOULDER

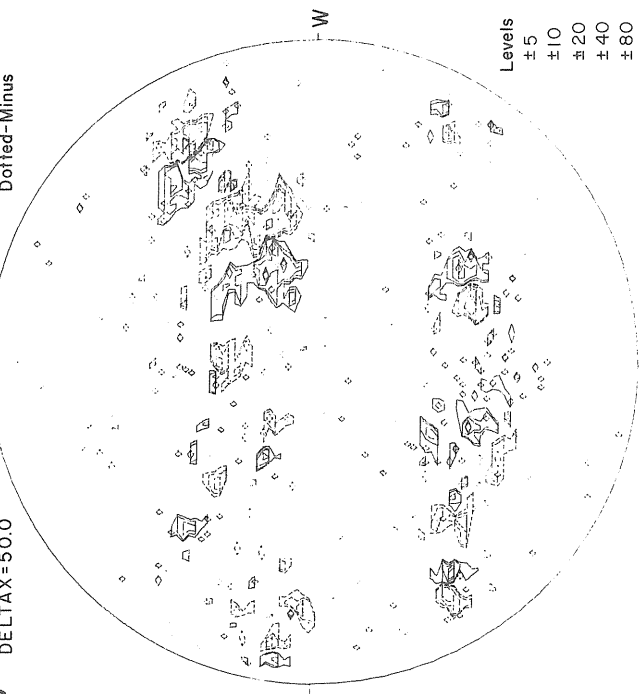
SUNSPOTS



MT. WILSON  
DELTA Y=62.0  
DELTA X=50.0

MAGNETOGRAM

Solid-Plus  
Dotted-Minus



Levels  
±5  
±10  
±20  
±40  
±80

STANFORD  
1421 UT

9.1 cm.

FLEURS, AUSTRALIA  
N

21 cm.

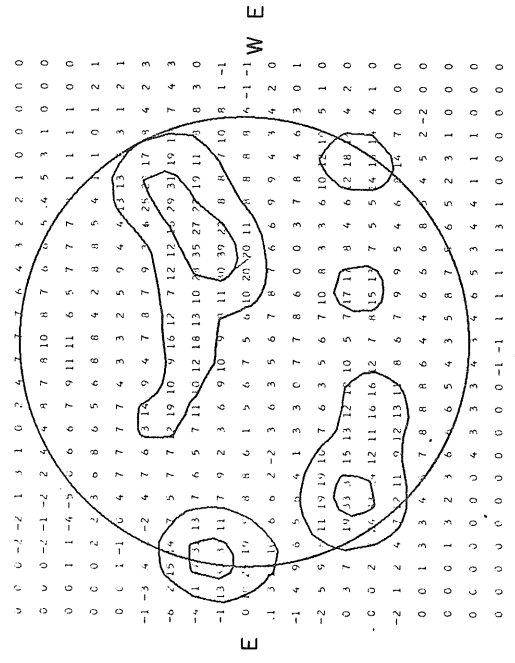
McMATH-HULBERT  
CALCIUM REPORT

18.41-19.15 UT

1419 UT

21 cm.

McMATH-HULBERT  
CALCIUM REPORT



9.1 cm.

FLEURS, AUSTRALIA  
N

21 cm.

McMATH-HULBERT  
CALCIUM REPORT

18.41-19.15 UT

1419 UT

21 cm.

McMATH-HULBERT  
CALCIUM REPORT

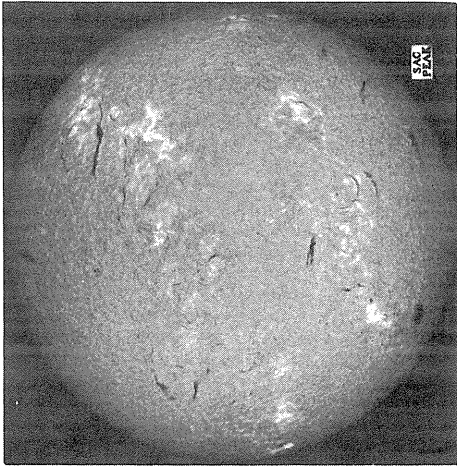
57-46-3.0  
60-16-2.5  
61-55-3.0  
62-24-3.0  
63-11-2.5  
70-14-2.5



MT. WILSON  
DELTA Y = 62.0  
DELTA X = 50.0

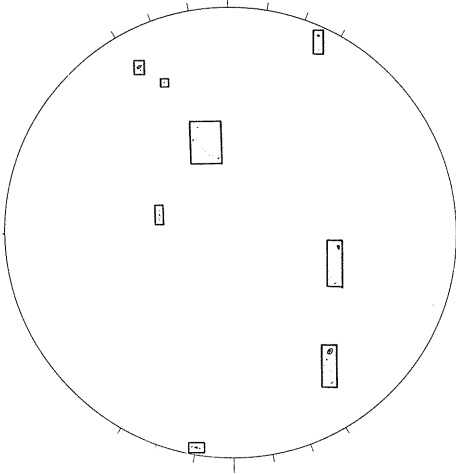
SEPTEMBER 8, 1967 (P=22.62, B<sub>0</sub>=7.25, L<sub>0</sub>=271.90)

SACRAMENTO PEAK  
N



H $\alpha$

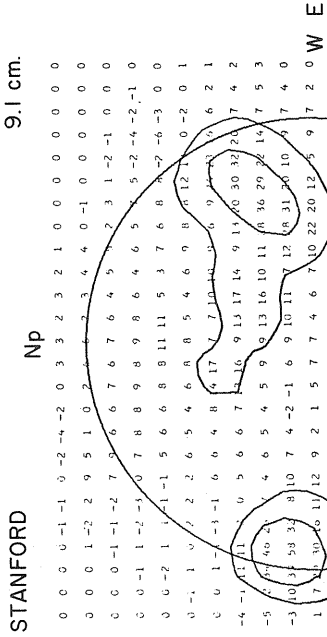
ESSA-BOULDER  
Np



Sp  
1400 UT

FLEURS, AUSTRALIA  
N

9.1 cm.



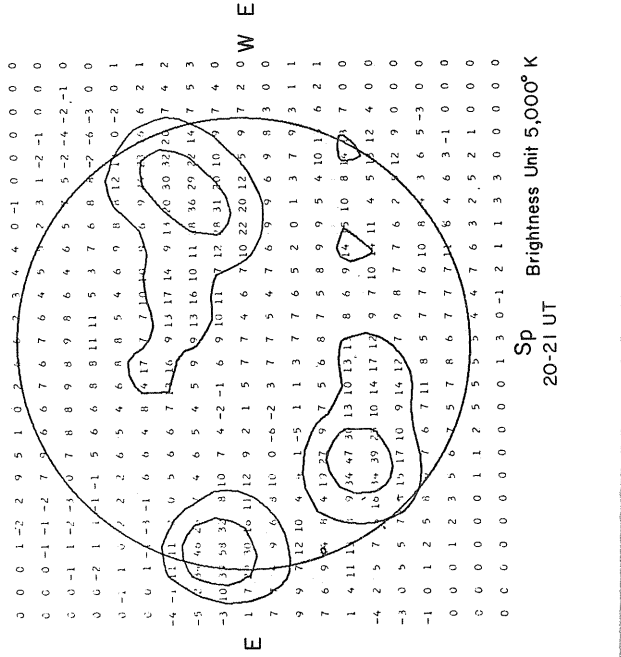
9.1 cm.

21 cm.

McMATH-HULBERT  
Np

20.78-21.53 UT Sp

CALCIUM REPORT

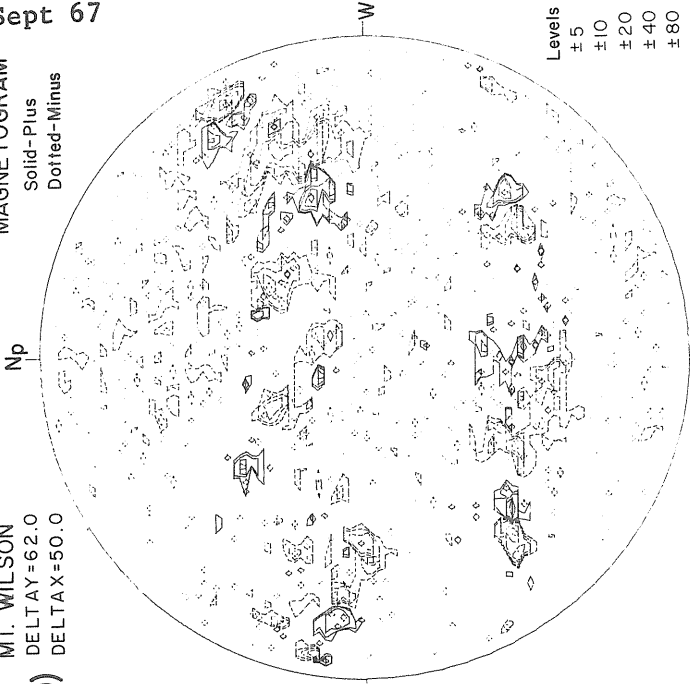


Brightness Unit 5,000<sup>o</sup> K  
Sp  
20-21 UT

S Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700<sup>o</sup> K

MAGNETOGRAM

Solid-Plus  
Dotted-Minus



Levels  
±5  
±10  
±20  
±40  
±80

57-39-25  
61-53-30  
62-26-25  
63-20-25  
70-19-30  
73-12-30

Sp  
1330 UT

SEPTEMBER 9, 1967

(P=22.83, B<sub>0</sub>=7.25, L<sub>0</sub>=258.69)

MT. WILSON

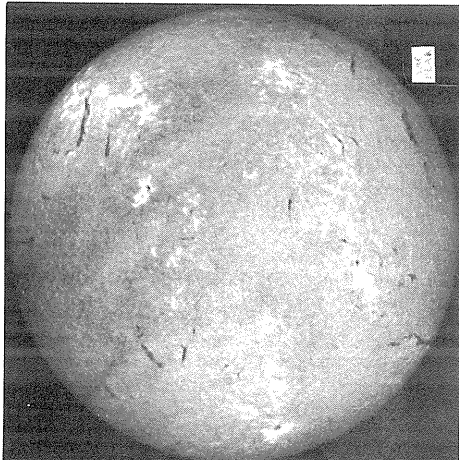
Np

MAGNETOGRAM

Solid-Plus  
Dotted-Minus

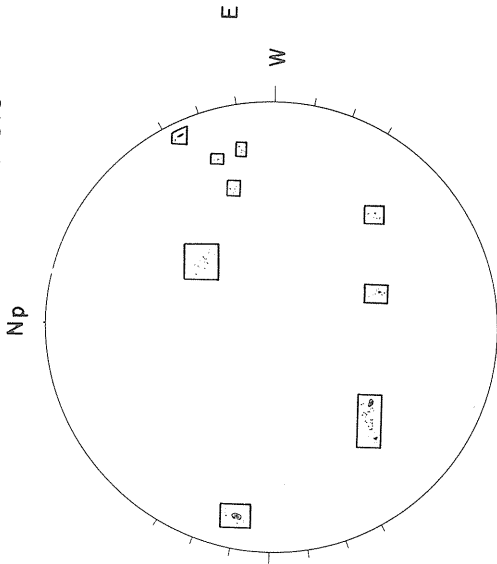
SACRAMENTO PEAK  
N

H $\alpha$



ESSA-BOULDER  
Np

SUNSPOTS



NO DATA

Levels  
± 5  
± 10  
± 20  
± 40  
± 80

1601 UT

STANFORD

9.1 cm.

FLEURS, AUSTRALIA

21 cm.

1530 UT

McMATH-HULBERT

Np

CALCIUM REPORT

57-28-30  
60-09-25  
61-52-30  
62-25-35  
63-18-25  
70-22-25  
73-18-30

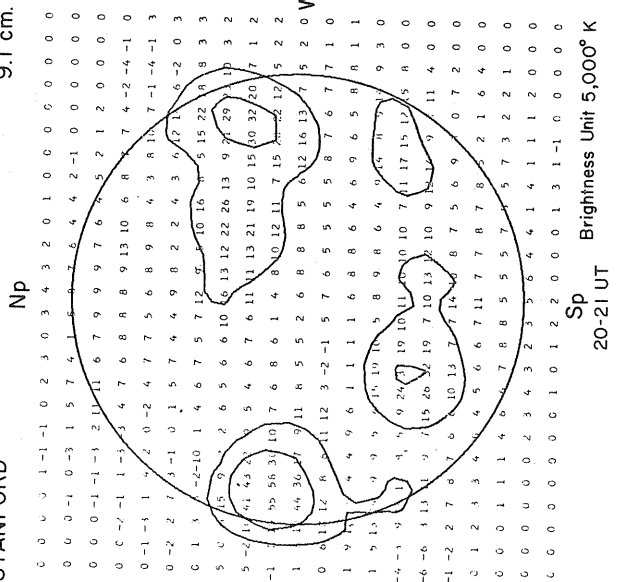
Sp

Sp

Sp

20-21 UT

Brightness Unit 5,000° K



Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

Brightness Unit 5,000° K

MT. WILSON

Np

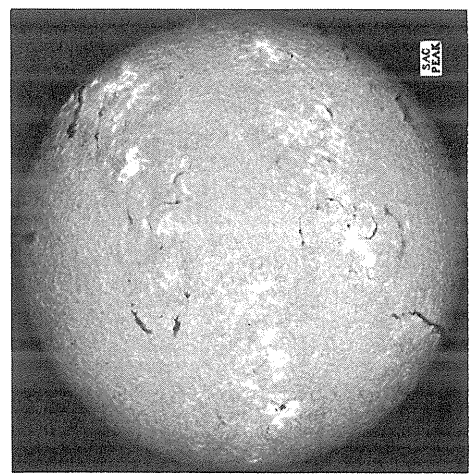
SEPTEMBER 10, 1967 (P=23.04, B<sub>0</sub>=7.25, L<sub>0</sub>=245.49)

ESSA-BOULDER

SUNSPOTS

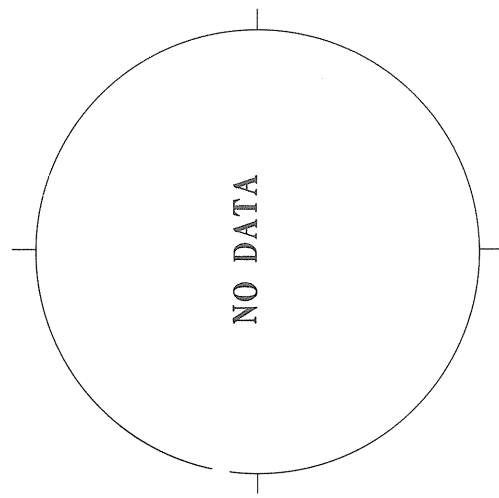
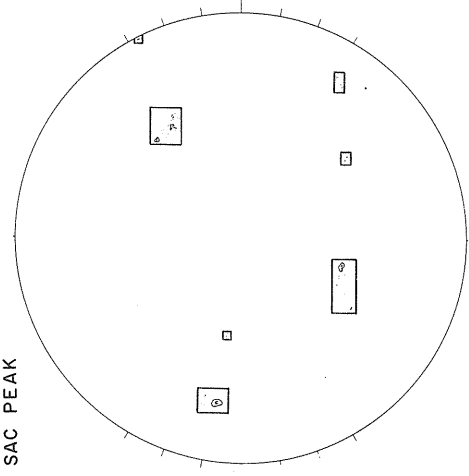
SACRAMENTO PEAK  
 N

H $\alpha$



SAC PEAK

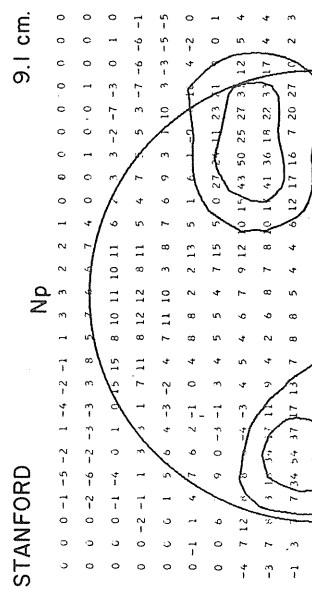
Np



NO DATA

Levels  
 ±5  
 ±10  
 ±20  
 ±40  
 ±80

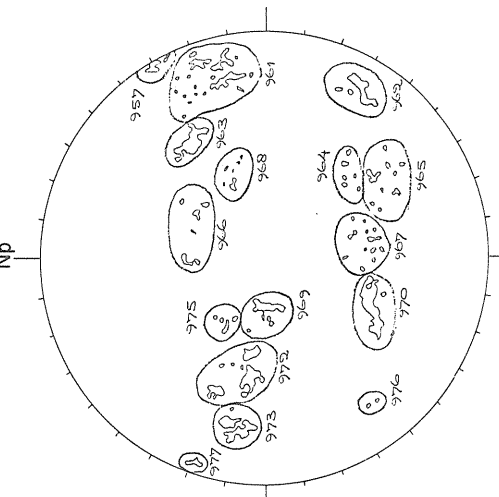
STANFORD  
 Np  
 1425 UT



FLEURS, AUSTRALIA  
 Sp  
 1430 UT



McMATH-HULBERT  
 Np  
 1538 UT



S Resolution 3 Minutes of Arc  
 02-03 UT Brightness Unit 1,700° K

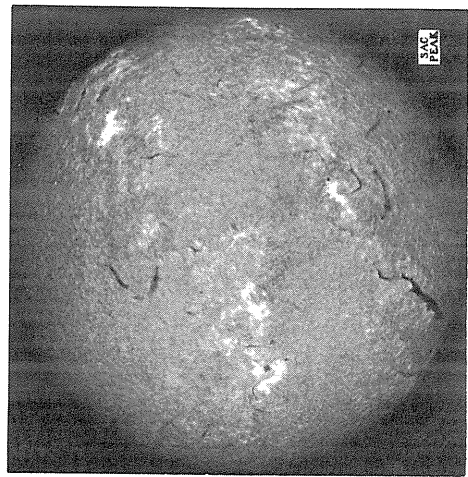
Sp Brightness Unit 5,000° K  
 20-21 UT

SEPTEMBER 11, 1967

(P=23.24, B<sub>0</sub>=7.24, L<sub>0</sub>=232.28)

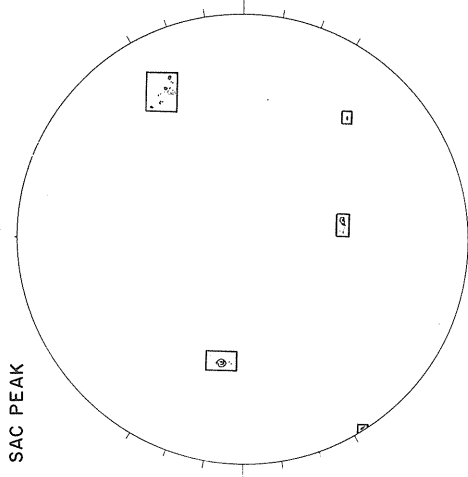
SACRAMENTO PEAK N

H $\alpha$



ESSA-BOULDER Np

SUNSPOTS



S

1453 UT

STANFORD

9.1 cm.

FLEURS, AUSTRALIA N

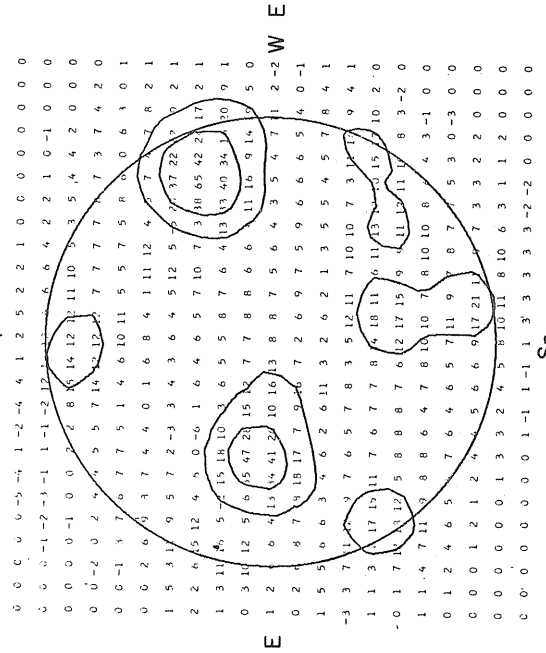
1405 UT

21 cm.

18.88-19.63 UT Sp

McMATH-HULBERT Np

CALCIUM REPORT



Sp 20-21 UT

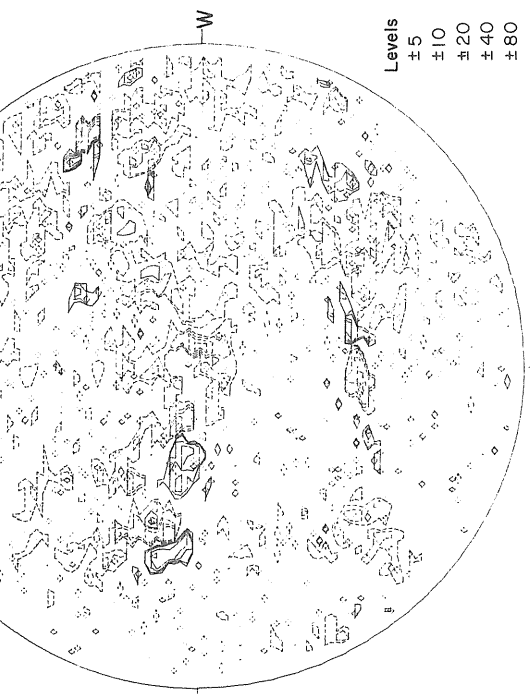
Brightness Unit 5,000° K

S Resolution 3 Minutes of Arc

02-03 UT Brightness Unit 1,700° K

MT. WILSON  
DELAY=62.0  
DELTA X=49.9

MAGNETOGRAM  
Solid-Plus  
Dotted-Minus



Levels  
±5  
±10  
±20  
±40  
±80

61-36-25  
62-22-30  
63-20-35  
69-08-25  
70-25-35  
72-22-30  
73-21-35

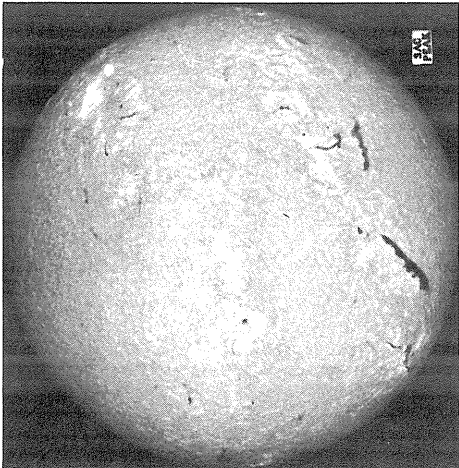
SEPTEMBER 12, 1967

(P=23.44, B<sub>0</sub>=7.24, L<sub>0</sub>=219.08)

40  
Sept 67

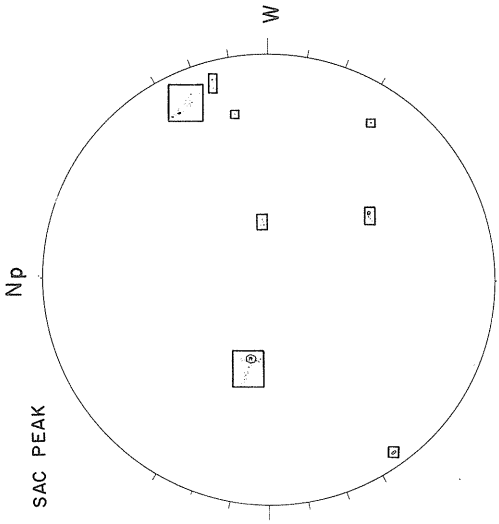
SACRAMENTO PEAK  
N

H $\alpha$



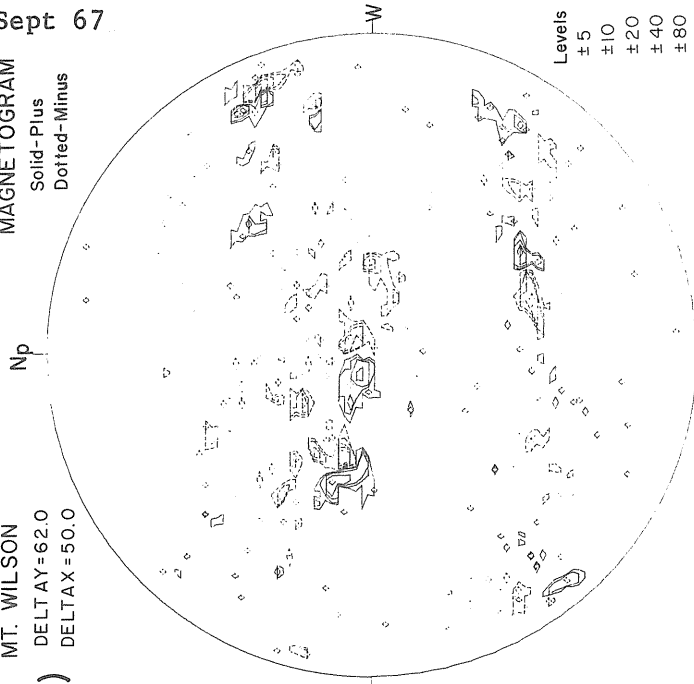
ESSA-BOULDER

SUNSPOTS



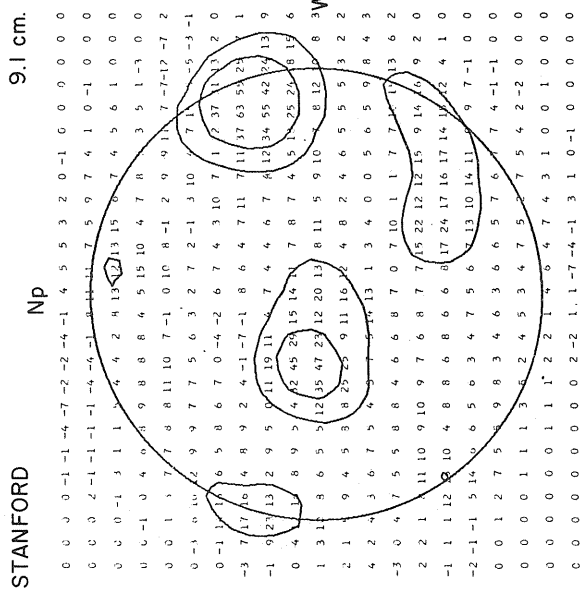
MT. WILSON  
DELAY=62.0  
DELTA X=50.0

MAGNETOGRAM  
Solid-Plus  
Dotted-Minus



1433 UT

STANFORD



Brightness Unit 5,000° K

Sp

20-21 UT

1425 UT

FLEURS, AUSTRALIA

21 cm.

McMATH-HULBERT CALCIUM REPORT



Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

Sp

1300 UT

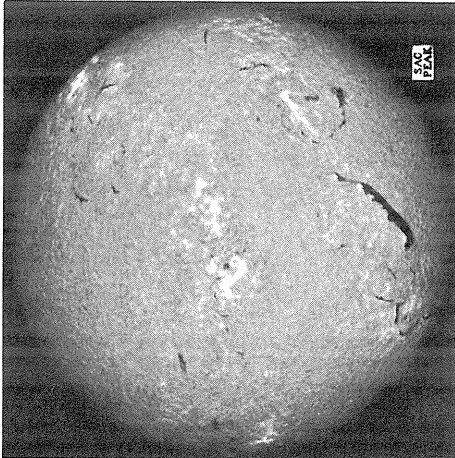
SEPTEMBER 13, 1967

(P=23.63, B<sub>0</sub>=7.23, L<sub>0</sub>=205.88)

MT. WILSON

DELTA TAY=62.0  
DELTA TAX=50.1

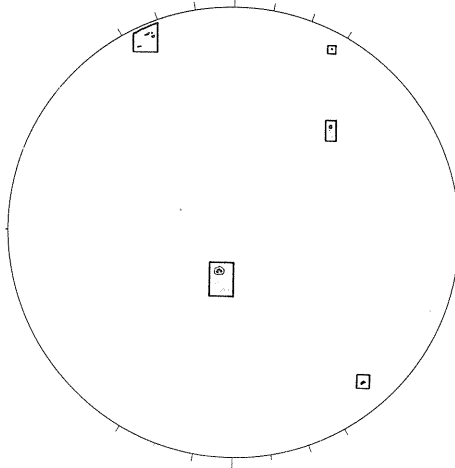
SACRAMENTO PEAK  
N



H $\alpha$

ESSA-BOULDER

Np



SUNSPOTS

E

W

Sp

1345 UT

FLEURS, AUSTRALIA

N

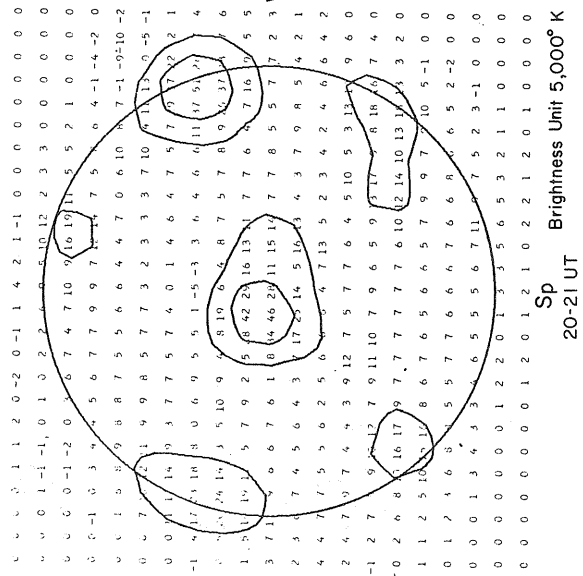
21 cm.

McMATH-HULBERT

Np

19.42-20.05 UT

CALCIUM REPORT



9.1 cm.

1452 UT

STANFORD

Np

W

E

Sp

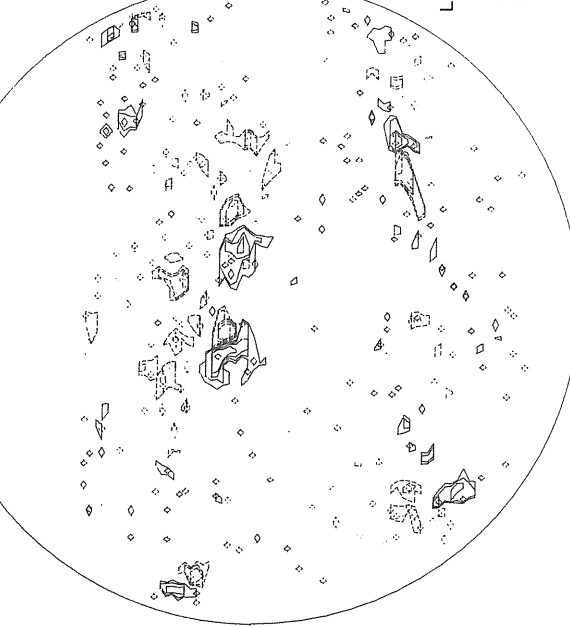
20-21 UT

Brightness Unit 5,000° K

S Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

MAGNETOGRAM

Solid-Plus  
Dotted-Minus



Levels  
±5  
±10  
±20  
±40  
±80

63-28-30  
69-07-25  
70-17-30  
72-23-25  
73-22-30

SEPTEMBER 14, 1967 (P=23.82, B<sub>0</sub>=7.22, L<sub>0</sub>=192.67)

42  
Sept 67

Np

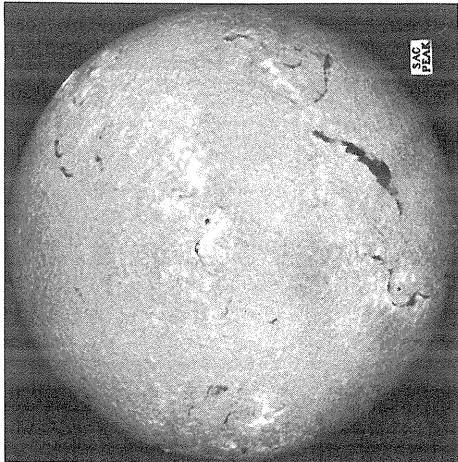
MT. WILSON

MAGNETOGRAM

Solid-Plus  
Dotted-Minus

SACRAMENTO PEAK  
N

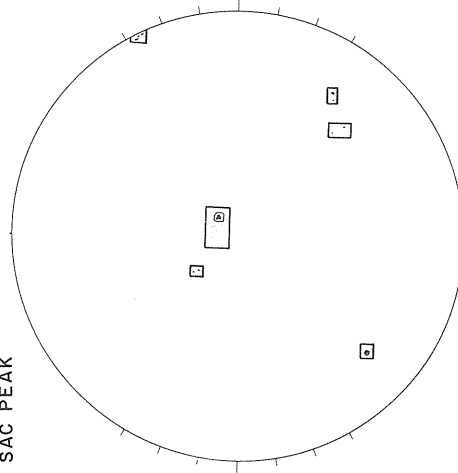
H $\alpha$



ESSA-BOULDER  
SAC PEAK

Np

SUNSPOTS



Sp

1420 UT

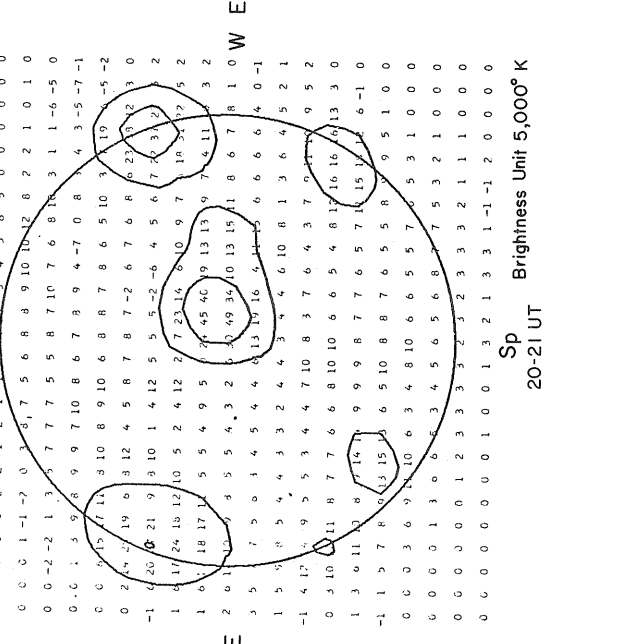
FLEURS, AUSTRALIA N

21 cm.

McMATH-HULBERT

Sp

CALCIUM REPORT



S Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

Sp Brightness Unit 5,000° K

20-21 UT

Levels  
±5  
±10  
±20  
±40  
±80

63-26-3.5  
70-14-3.5  
72-26-2.5  
73-24-3.5  
80-19-2.5

NO DATA

W

E

W

E

E

W

W

E

E

Sp

1355 UT

Sp Brightness Unit 5,000° K

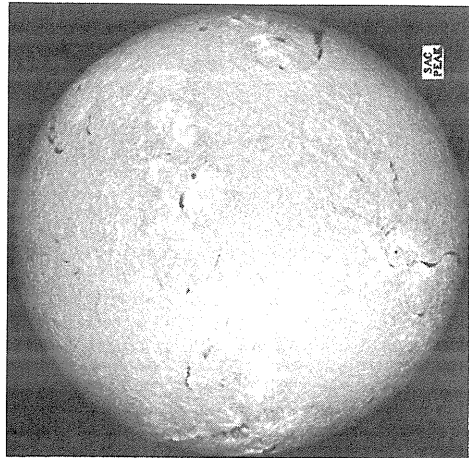
20-21 UT

SEPTEMBER 15, 1967

(P=24.00, B<sub>0</sub>=7.21, L<sub>0</sub>=179.47)

MT. WILSON  
 DELTAY=62.0  
 DELTAX=49.9

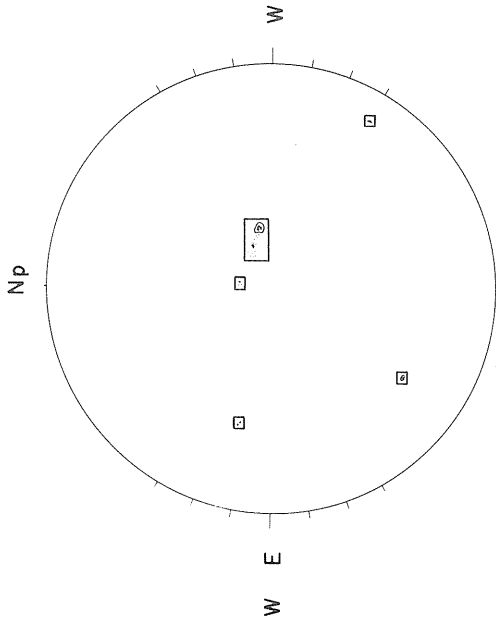
SACRAMENTO PEAK  
 N



H $\alpha$

ESSA-BOULDER

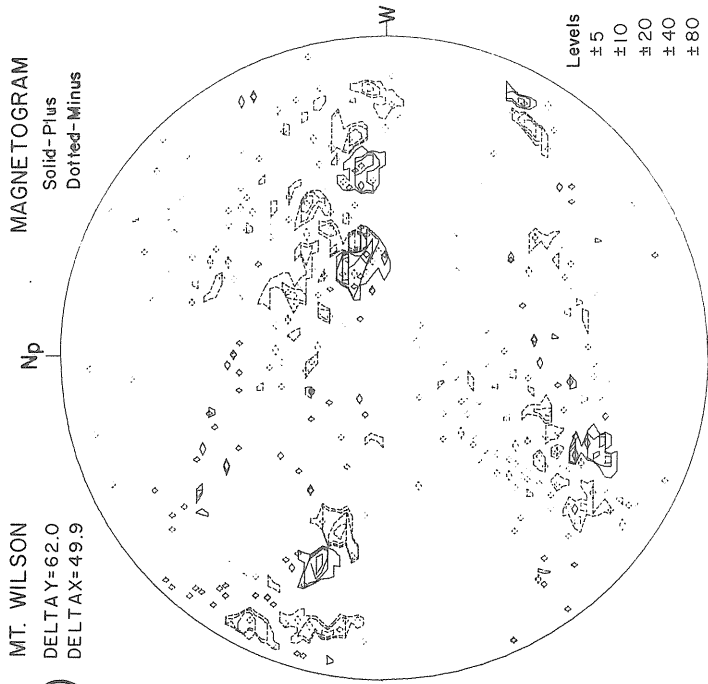
SUNSPOTS



1330 UT  
 FLEURS, AUSTRALIA  
 N

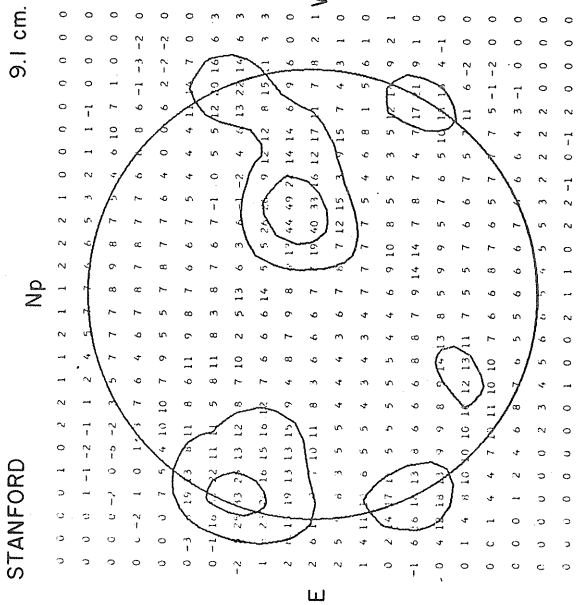
21 cm.

MAGNETOGRAM  
 Solid-Plus  
 Dotted-Minus



Levels  
 ±5  
 ±10  
 ±20  
 ±40  
 ±80

STANFORD  
 1439 UT  
 Np



Brightness Unit 5,000°K

9.1 cm.

20-21 UT  
 Sp

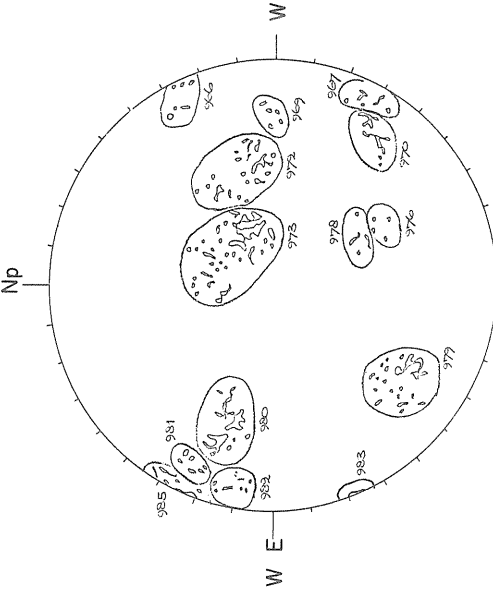
Brightness Unit 1,700°K

20.93-21.68 UT  
 Sp

McMATH-HULBERT  
 Np

21 cm.

CALCIUM REPORT



70-15-3.0  
 72-20-2.5  
 73-23-3.0

1450 UT  
 Sp

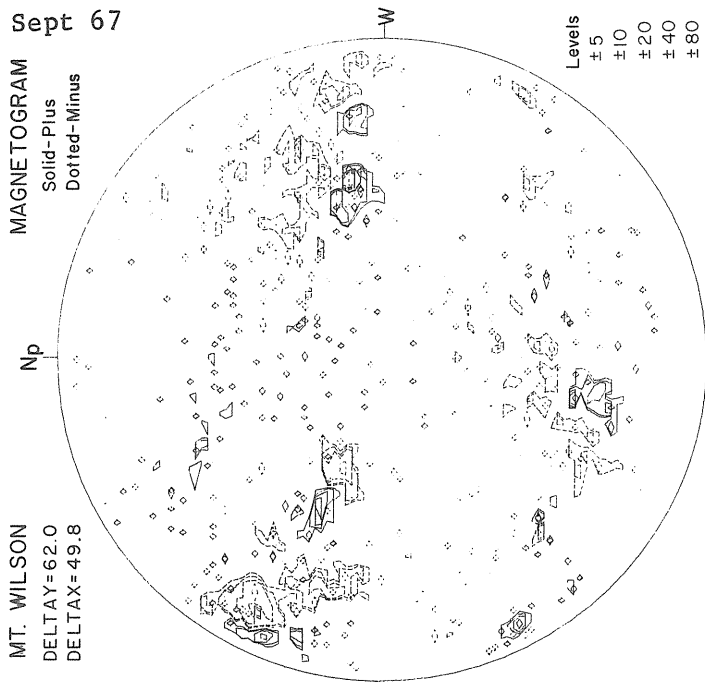
Resolution 3 Minutes of Arc  
 02-03 UT Brightness Unit 1,700°K



44  
sept 67

MAGNETOGRAM  
Solid-Plus  
Dotted-Minus

MT. WILSON  
DELTA Y=62.0  
DELTA X=49.8



Levels  
±5  
±10  
±20  
±40  
±80

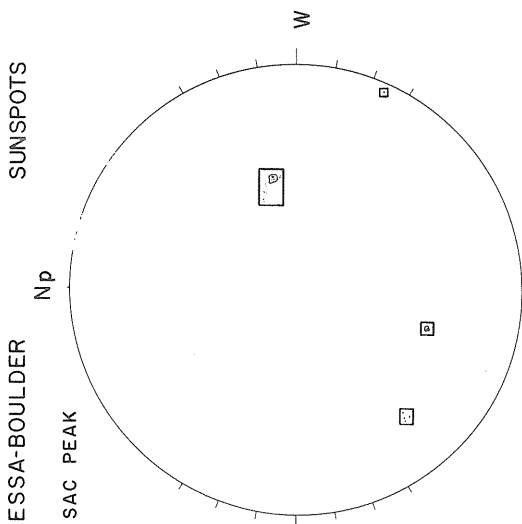
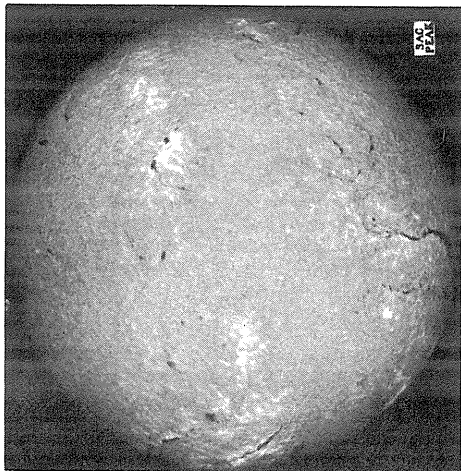
70-11-2.5  
72-18-2.5  
73-21-3.0  
80-16-2.5  
83-11-2.5  
84-09-3.0  
85-47-2.5

SEPTEMBER 16, 1967 (P=24.17, B<sub>0</sub>=7.19, L<sub>0</sub>=166.27)

SUNSPOTS

ESSA-BOULDER  
SAC PEAK

SACRAMENTO PEAK N  
Ha



Sp

1400 UT

FLEURS, AUSTRALIA N

21 cm.

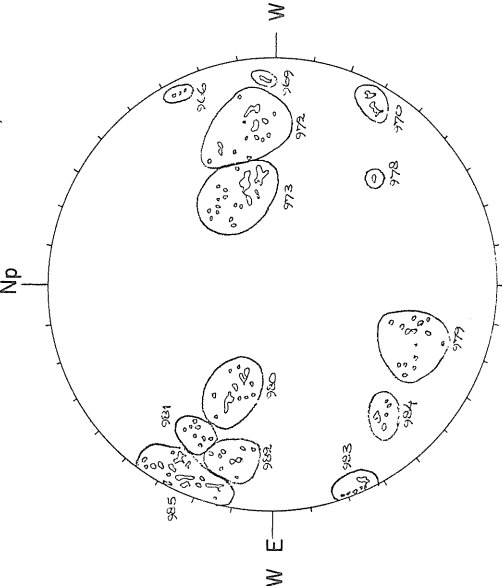
McMATH-HULBERT CALCIUM REPORT

20.99-21.74 UT Sp

Np

Sp

1320 UT



9.1 cm.

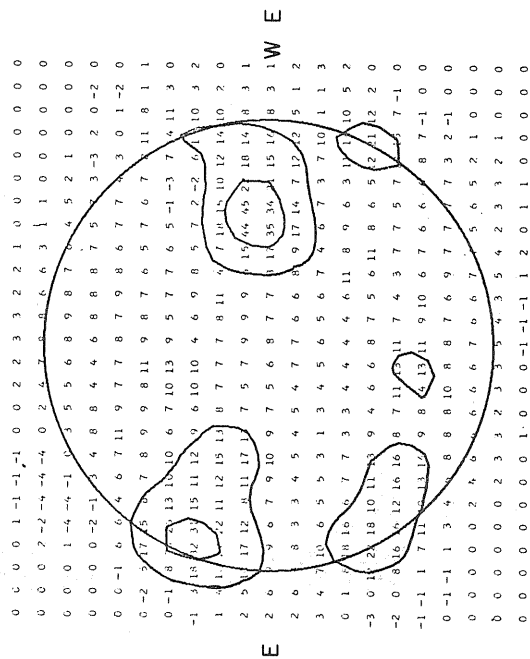
1509 UT

STANFORD

Np

Sp

20-21 UT



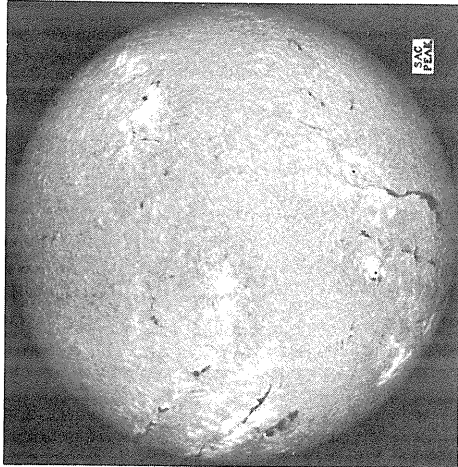
S Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

Brightness Unit 5,000° K

SEPTEMBER 17, 1967 (P=24.34, B<sub>0</sub>=7.18, L<sub>0</sub>=153.07)

SACRAMENTO PEAK N

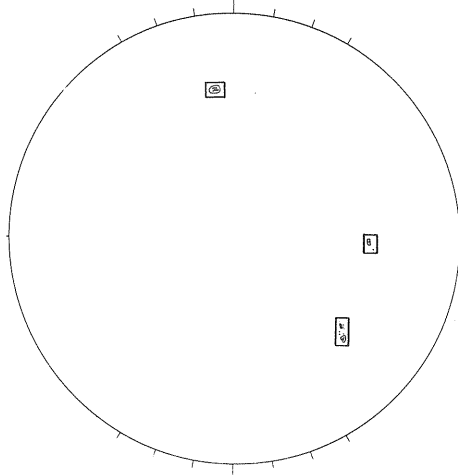
H $\alpha$



ESSA-BOULDER

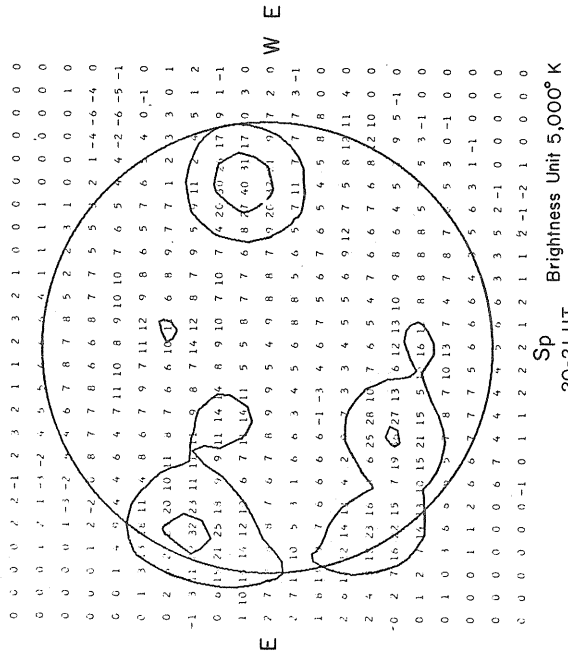
SUNSPOTS

Np



STANFORD 1545 UT  
Np  
1330 UT  
FLEURS, AUSTRALIA N

9.1 cm.



Brightness Unit 5,000° K

20-21 UT

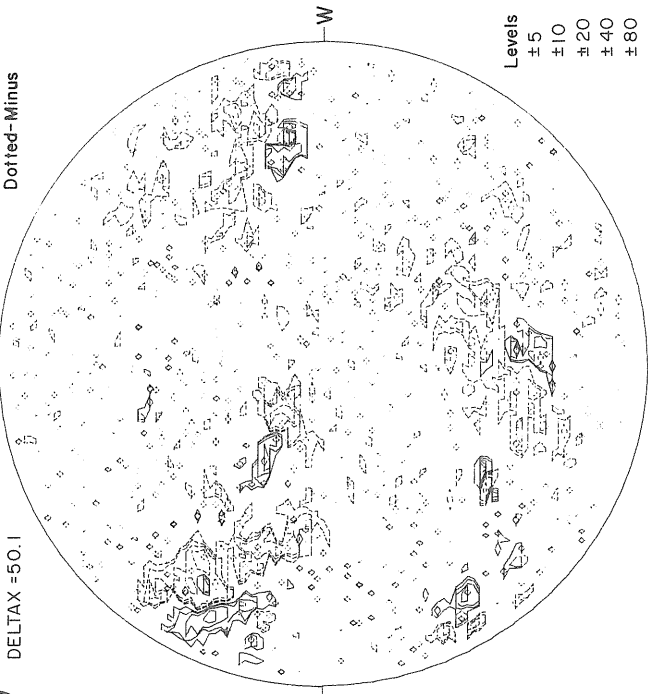
Sp

MT. WILSON  
DELAY=62.0  
DELTA=50.1

MAGNETOGRAM

Solid-Plus  
Dotted-Minus

Levels  
±5  
±10  
±20  
±40  
±80



17.59-18.35 UT Sp

21 cm.

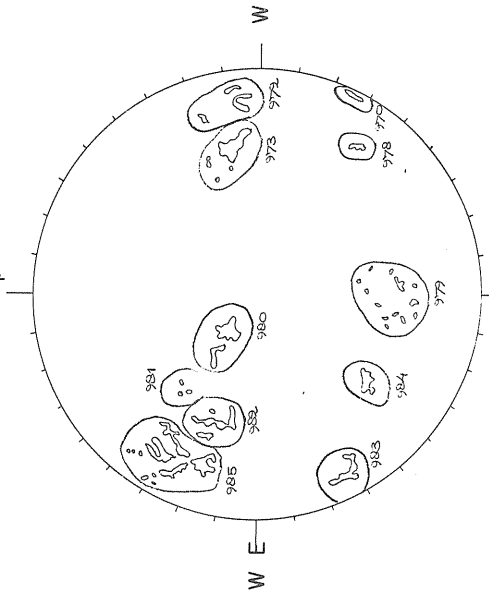
McMATH-HULBERT CALCIUM REPORT

N

Np

Sp

1625 UT



73-20-3.0  
80-15-2.5  
83-19-2.5  
84-10-3.0  
85-48-2.5

S Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

MAGNETOGRAM  
Solid-Plus  
Dotted-Minus

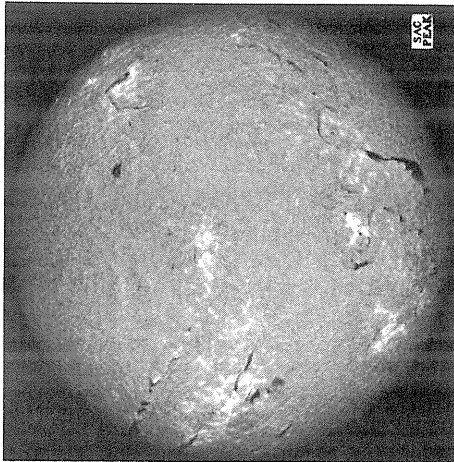
Np

MT. WILSON

SEPTEMBER 18, 1967 (P=24.50, B<sub>0</sub>=7.16, L<sub>0</sub>=139.86)

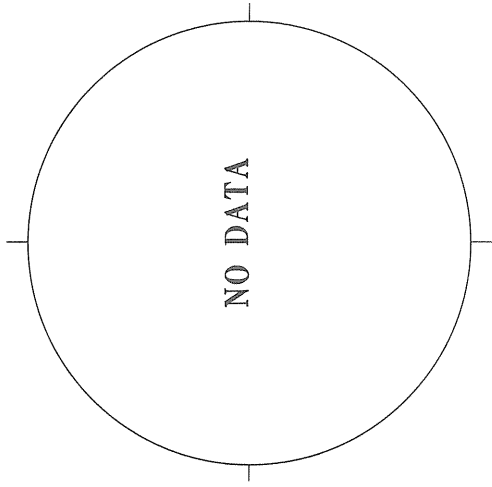
SACRAMENTO PEAK N

H $\alpha$



ESSA-BOULDER

SUNSPOTS



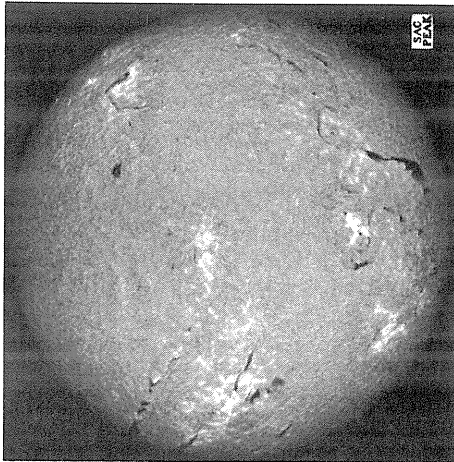
Np

Np

SAC PEAK

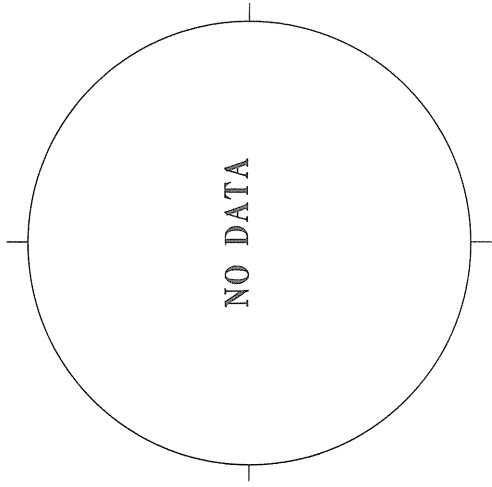
SACRAMENTO PEAK N

H $\alpha$



ESSA-BOULDER

SUNSPOTS



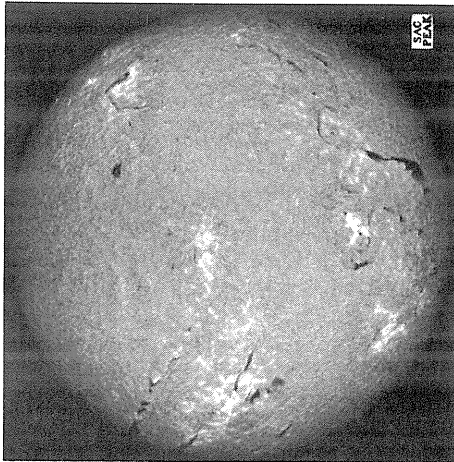
Np

Np

SAC PEAK

SACRAMENTO PEAK N

H $\alpha$



S

Sp

Sp

Np

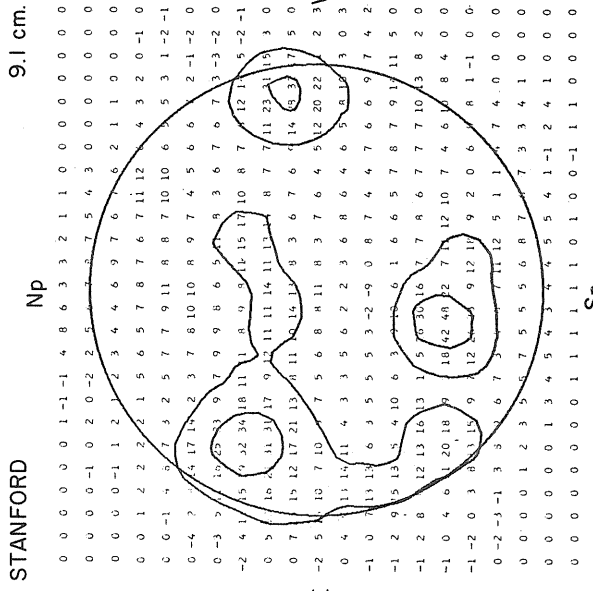
Np

1424 UT

1445 UT

21 cm.

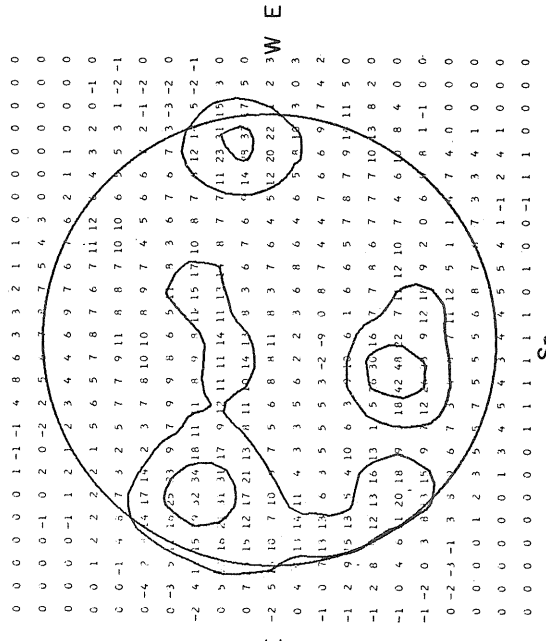
McMATH-HULBERT CALCIUM REPORT



FLEURS, AUSTRALIA N

21 cm.

McMATH-HULBERT CALCIUM REPORT



FLEURS, AUSTRALIA N

21 cm.

McMATH-HULBERT CALCIUM REPORT

- 73-22-30
- 78-04-2.5
- 80-23-2.5
- 82-18-2.5
- 83-25-2.5
- 84-16-3.5
- 85-57-2.5

S Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

Sp Brightness Unit 5,000° K

20-21 UT

1250 UT

SEPTEMBER 19, 1967 (P=24.65, B<sub>0</sub>=7.14, L<sub>0</sub>=126.66)

MT. WILSON

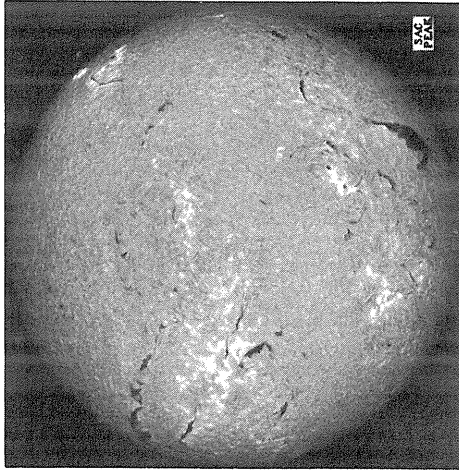
Np

MAGNETOGRAM

Solid-Plus  
Dotted-Minus

SACRAMENTO PEAK  
N

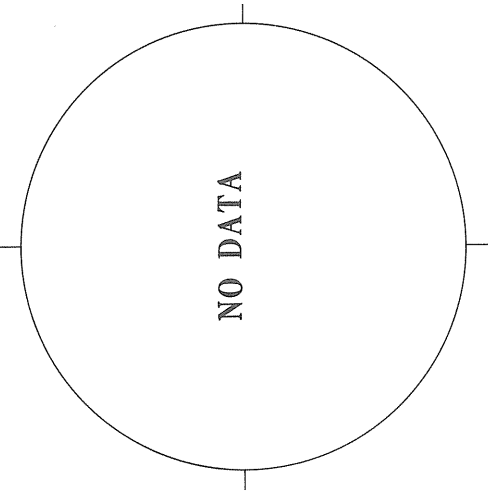
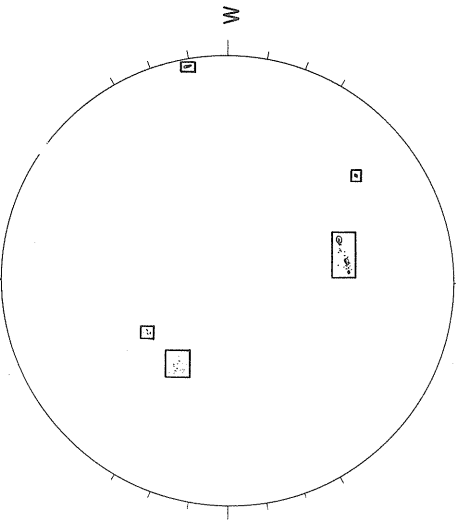
H $\alpha$



ESSA-BOULDER

SUNSPOTS

Np



Levels  
±5  
±10  
±20  
±40  
±80

S

1445 UT

STANFORD

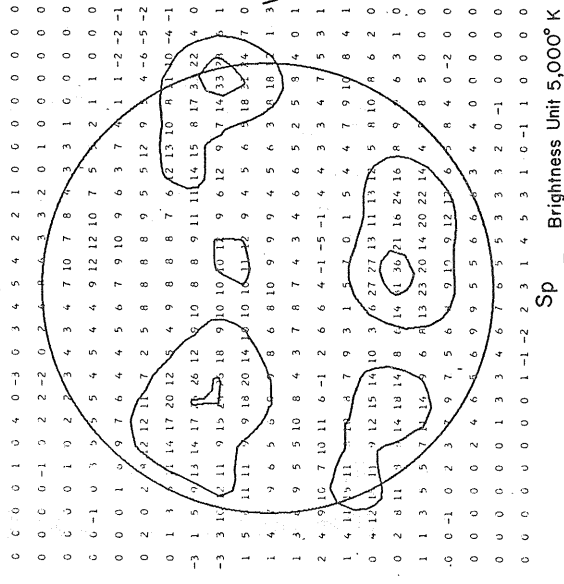
9.1 cm.

FLEURS, AUSTRALIA

21 cm.

McMATH-HULBERT

CALCIUM REPORT



72-12-3.5  
73-23-3.0  
80-22-2.5  
82-17-2.5  
83-27-2.5  
84-19-3.0  
85-56-2.5

47  
Sept 67

S Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

Sp  
1445 UT

Sp  
20-21 UT  
Brightness Unit 5,000° K

SEPTEMBER 20, 1967 (P=24.80, B<sub>0</sub>=7.12, L<sub>0</sub>=113.46)

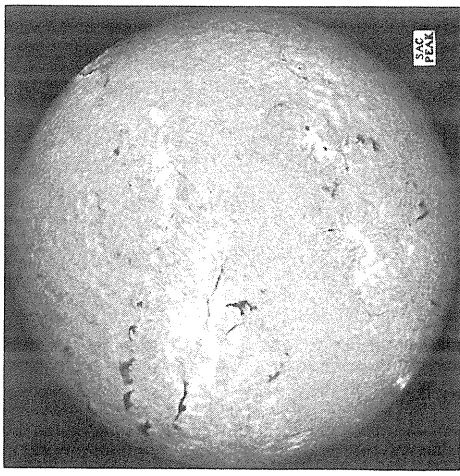
MT. WILSON  
 DELTAY=62.0  
 DELTAX=49.8

MAGNETOGRAM  
 Solid-Plus  
 Dotted-Minus

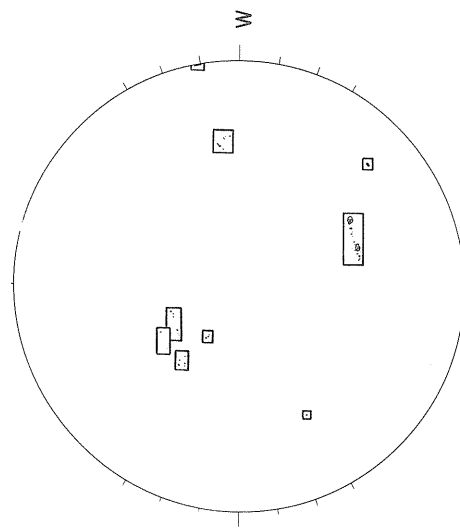
Sept 1967

48

SACRAMENTO PEAK  
 N

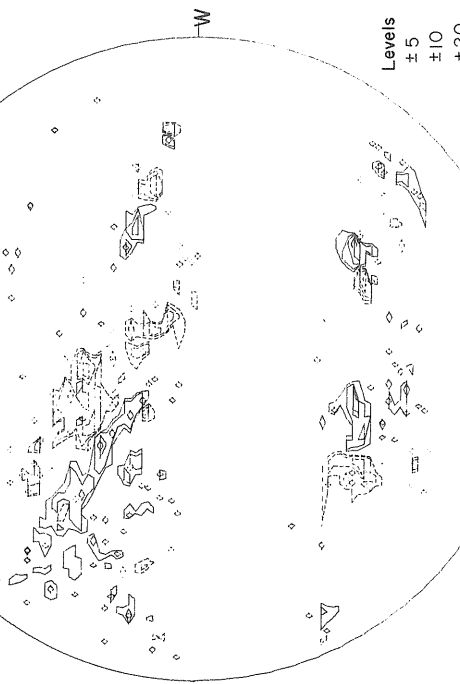


ESSA-BOULDER  
 Np



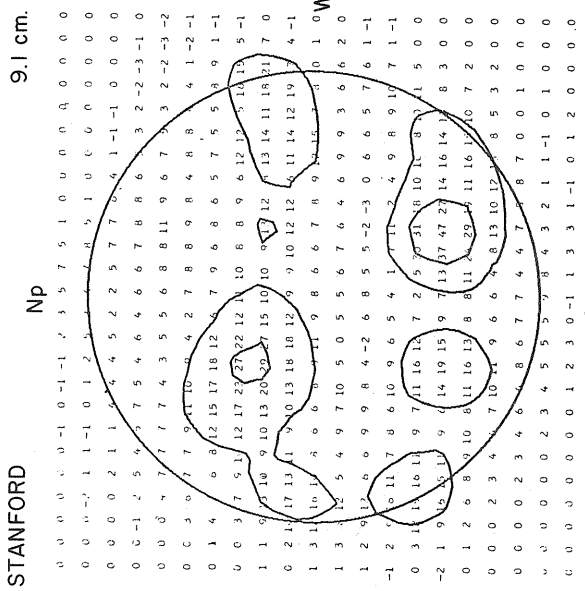
SUNSPOTS

Np



Levels  
 ±5  
 ±10  
 ±20  
 ±40  
 ±80

STANFORD  
 S 1352 UT  
 Np



FLEURS, AUSTRALIA  
 N

Sp 1740 UT

21 cm.

McMATH-HULBERT  
 Np

CALCIUM REPORT  
 Sp 1400 UT

73-16-2.5  
 80-25-2.5  
 83-25-2.5  
 84-23-3.0  
 85-63-2.5  
 89-05-3.0

S Resolution 3 Minutes of Arc  
 02-03 UT Brightness Unit 1,700° K

Sp 20-21 UT  
 Brightness Unit 5,000° K

SEPTEMBER 21, 1967

(P=24.94 B<sub>0</sub>=7.09, L<sub>0</sub>=100.26)

MT. WILSON

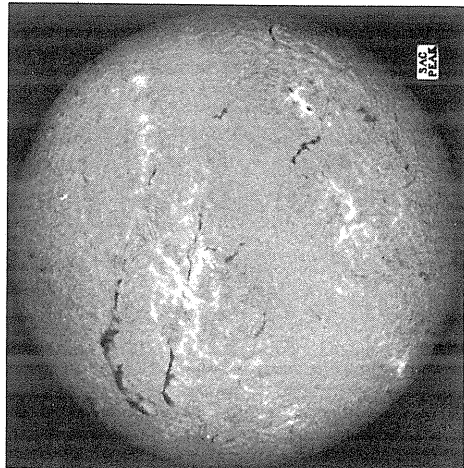
Np

MAGNETOGRAM

Solid-Plus  
Dotted-Minus

SACRAMENTO PEAK  
N

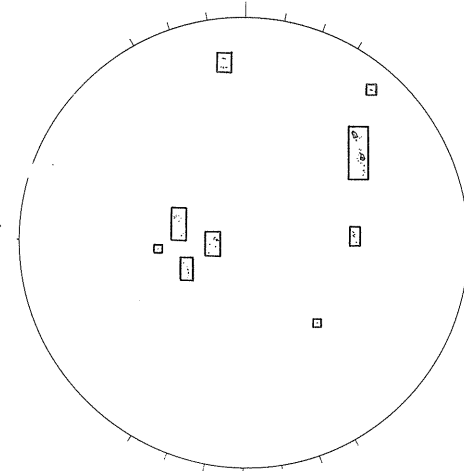
H $\alpha$



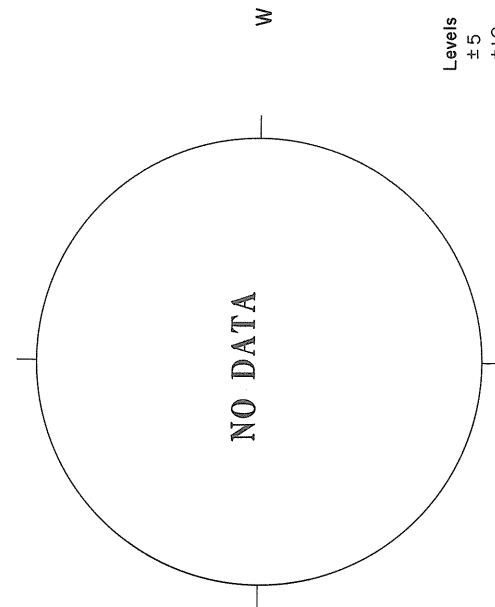
ESSA-BOULDER

Np

SUNSPOTS



NO DATA



Levels  
±5  
±10  
±20  
±40  
±80

S

1448 UT

STANFORD

9.1 cm.

FLEURS, AUSTRALIA

Sp

1655 UT

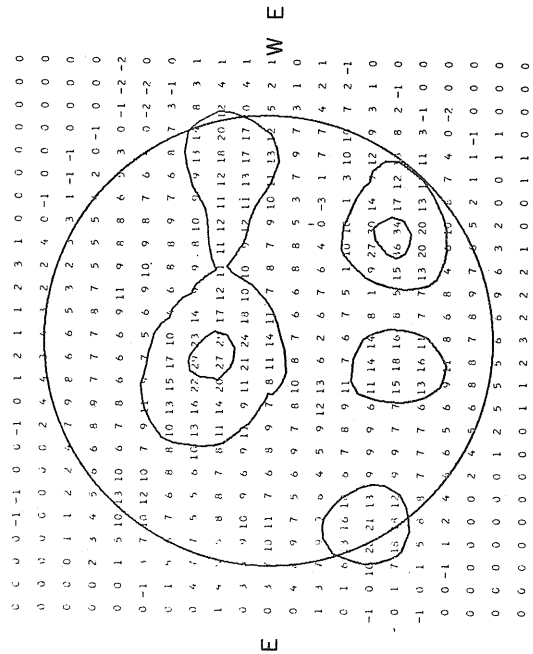
21 cm.

McMATH-HULBERT  
Np

CALCIUM REPORT

Sp

2010 UT



80-22-25  
82-11-25  
83-28-25  
84-19-35  
85-65-30  
89-08-30  
91-03-25

49  
Sept 67

S Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

Sp Brightness Unit 5,000° K

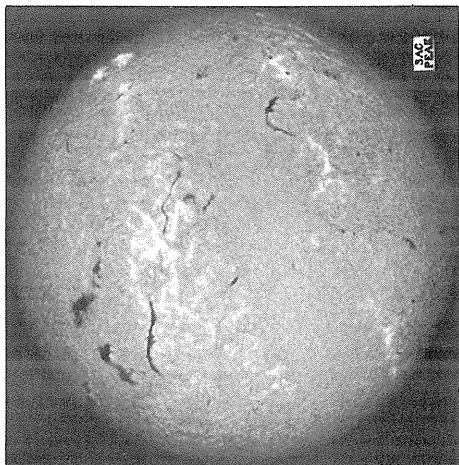
20-21 UT

SEPTEMBER 22, 1967 (P=25.08, B<sub>0</sub>=7.06, L<sub>0</sub>=87.06)

50  
Sept 67

SACRAMENTO PEAK N

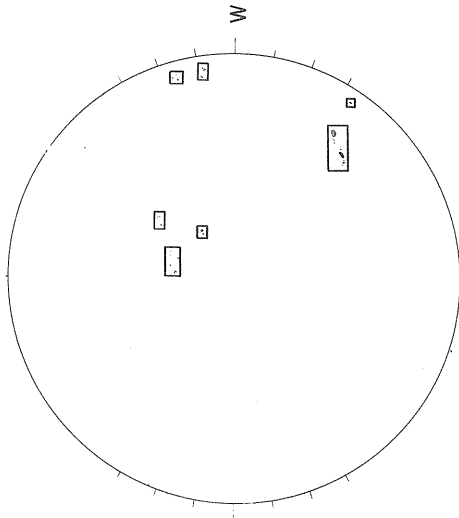
H $\alpha$



ESSA-BOULDER

Np

SUNSPOTS



Sp

1505 UT

FLEURS, AUSTRALIA

N

21 cm.

18.94-19.64 UT Sp

McMATH-HULBERT

Np

CALCIUM REPORT

18.94-19.64 UT Sp

21 cm.

9.1 cm.

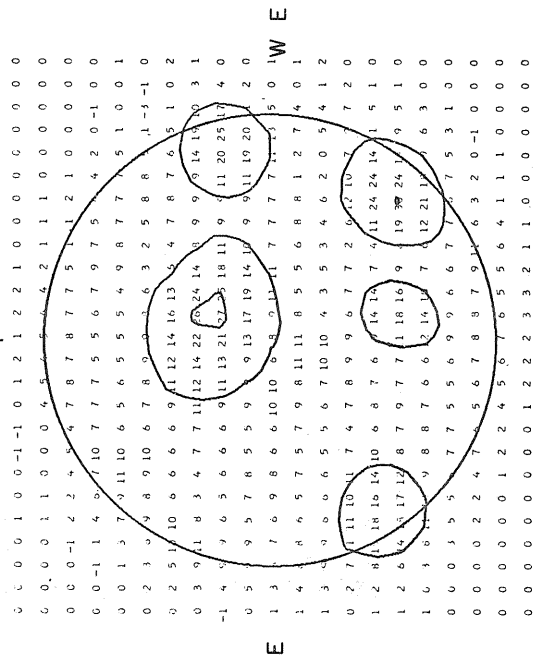
STANFORD

1457 UT

Np

9.1 cm.

STANFORD



Sp

20-21 UT

Brightness Unit 5,000° K

S

Resolution 3 Minutes of Arc

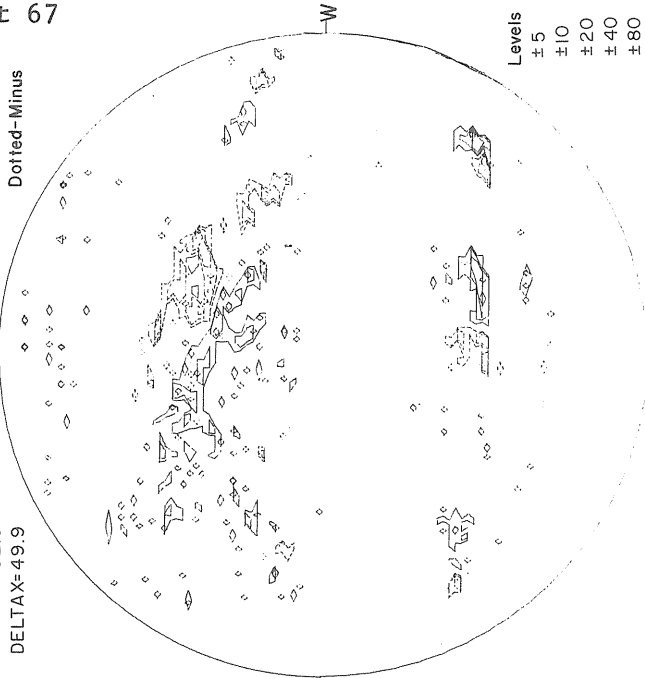
02-03 UT Brightness Unit 1,700° K

MT. WILSON  
DELTA Y = 62.0  
DELTA X = 49.9

MAGNETOGRAM

Solid-Plus  
Dotted-Minus

Np



Levels  
±5  
±10  
±20  
±40  
±80

83-29-2.5  
84-26-3.0  
85-72-3.0  
87-16-2.5  
89-08-3.0  
92-06-3.0

W

W

E

Sp

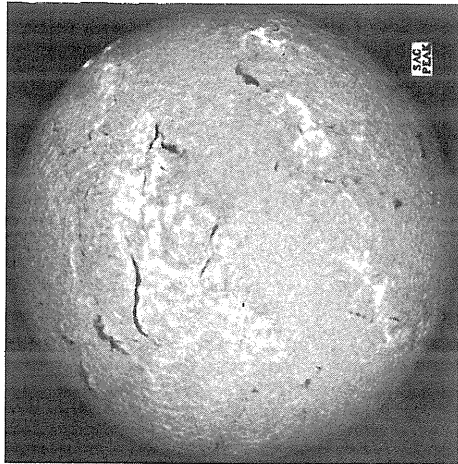
1320 UT

SEPTEMBER 23, 1967 (P=25.20, B<sub>0</sub>=7.03, L<sub>0</sub>=73.86)

MT. WILSON  
 DELTAY=62.0  
 DELTAX=50.1

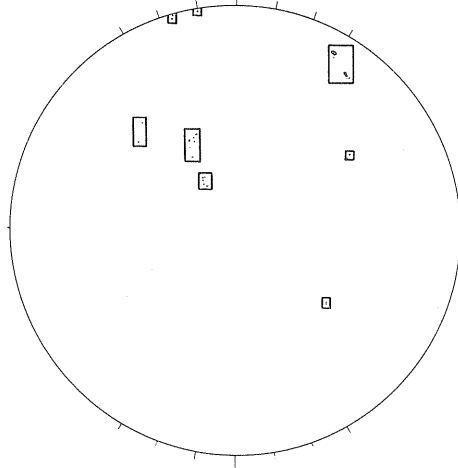
SACRAMENTO PEAK  
 N

H $\alpha$



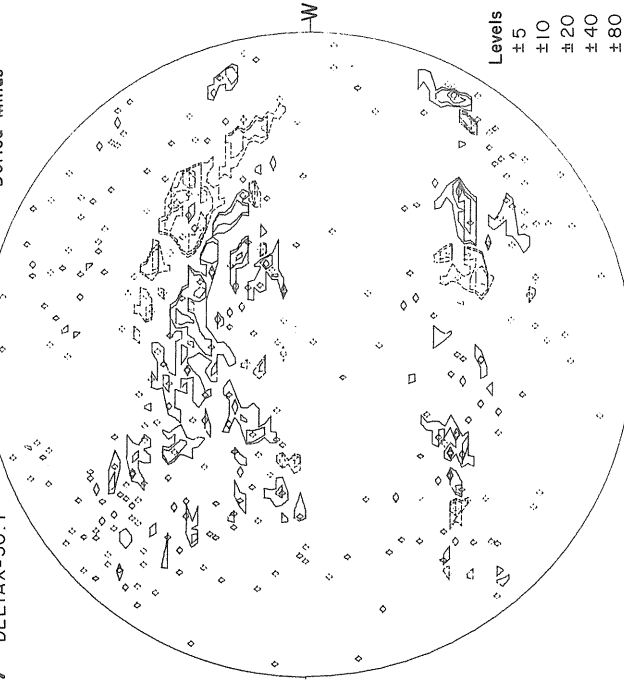
ESSA-BOULDER

SUNSPOTS



MAGNETOGRAM

Solid-Plus  
 Dotted-Minus



STANFORD

1504 UT

Np

9.1 cm.

FLEURS, AUSTRALIA

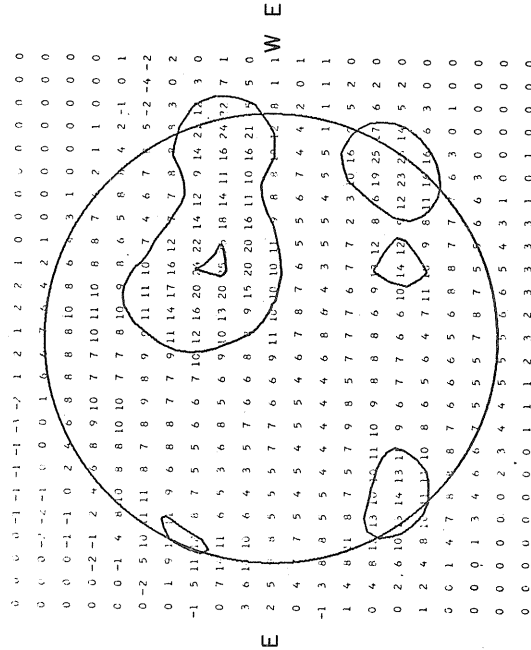
1855 UT

21 cm.

McMATH-HULBERT  
 Np

23:55-0:31 UT Sp

CALCIUM REPORT



83-28-3.0  
 84-23-3.5  
 85-71-3.0  
 87-15-2.5  
 89-10-3.0  
 92-07-3.5

51  
 Sept 67

S Resolution 3 Minutes of Arc  
 02-03 UT Brightness Unit 1,700° K

Brightness Unit 5,000° K

20-21 UT

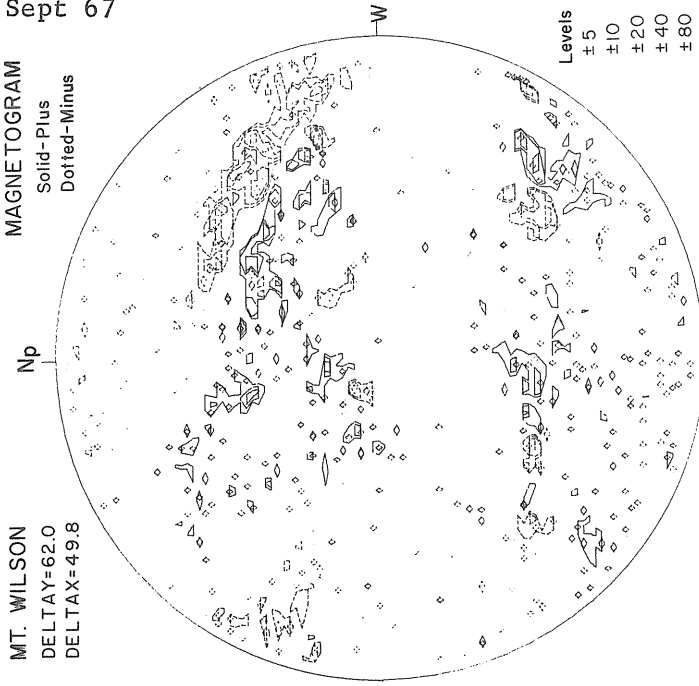
1310 UT



52  
Sept 67

MAGNETOGRAM  
Solid-Plus  
Dotted-Minus

MT. WILSON  
DELTA Y=62.0  
DELTA X=49.8



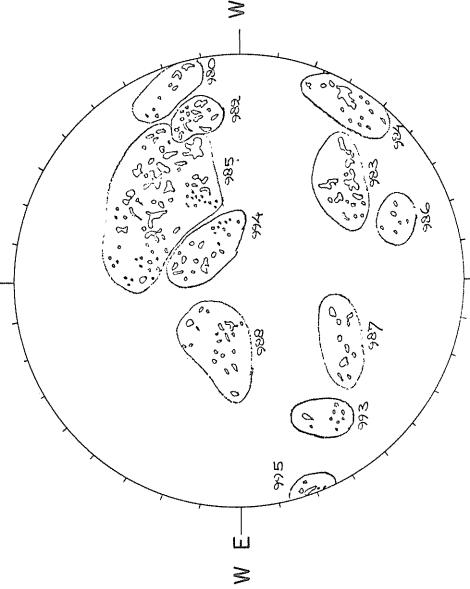
Levels  
±5  
±10  
±20  
±40  
±80

23.88-0.64 UT Sp

McMATH-HULBERT  
Np

21 cm.

83-20-30  
84-21-35  
85-73-30



Sp  
1310 UT

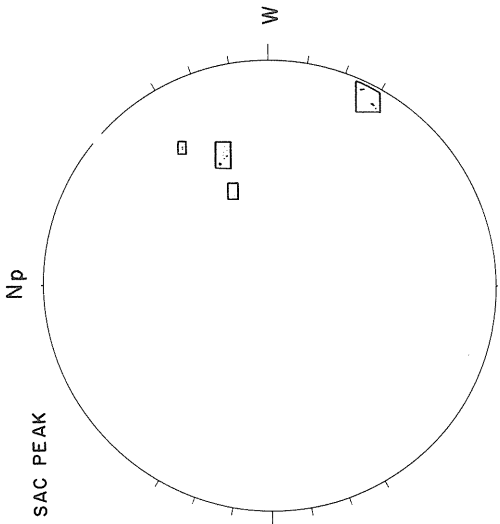
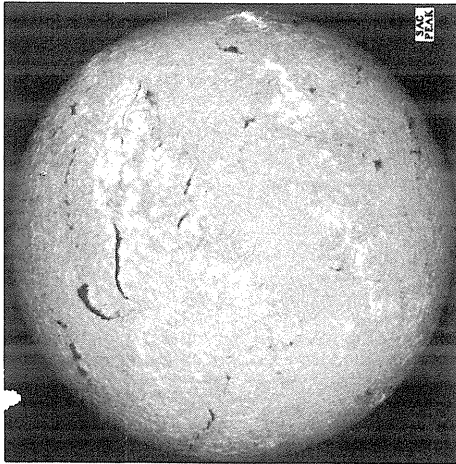
SEPTEMBER 24, 1967 (P=25.33, B<sub>0</sub>=7.00, L<sub>0</sub>=60.66)

SUNSPOTS

ESSA-BOULDER  
SAC PEAK

H $\alpha$

SACRAMENTO PEAK  
N



Sp

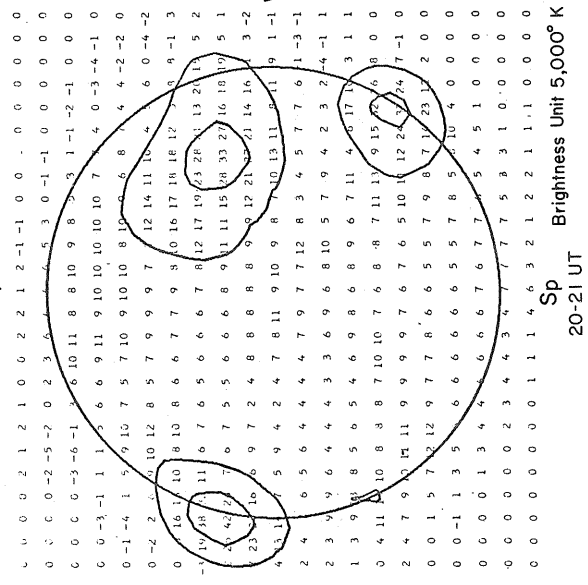
1400 UT

FLEURS, AUSTRALIA  
N

9.1 cm.

S  
1504 UT

STANFORD  
Np



S Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

SEPTEMBER 25, 1967 (P=25.44, B<sub>0</sub>=6.97, L<sub>0</sub>=47.47)

MT. WILSON

Np

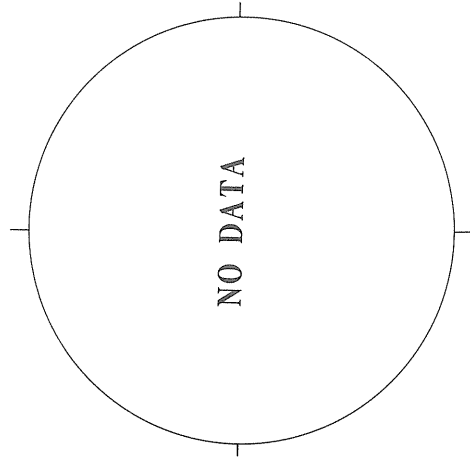
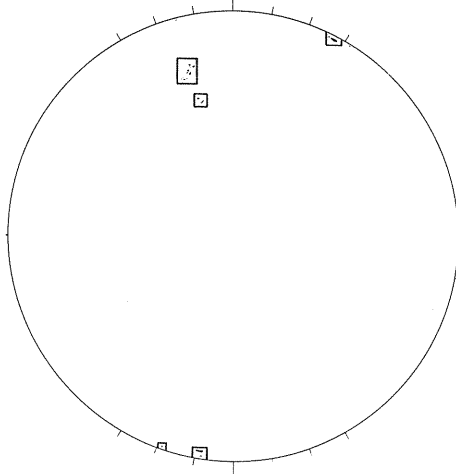
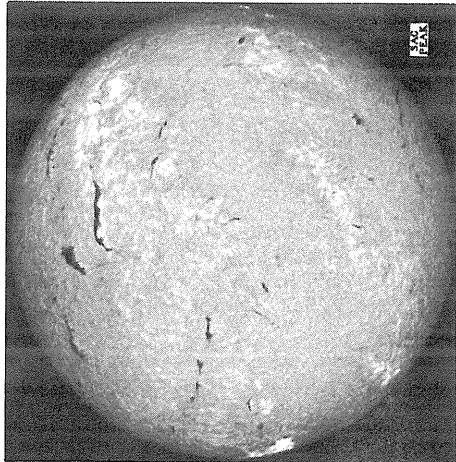
MAGNETOGRAM  
Solid-Plus  
Dotted-Minus

SACRAMENTO PEAK  
N

H $\alpha$

ESSA-BOULDER  
Np

SUNSPOTS  
Np



Levels  
± 5  
± 10  
± 20  
± 40  
± 80

S

2247 UT

STANFORD

9.1 cm.

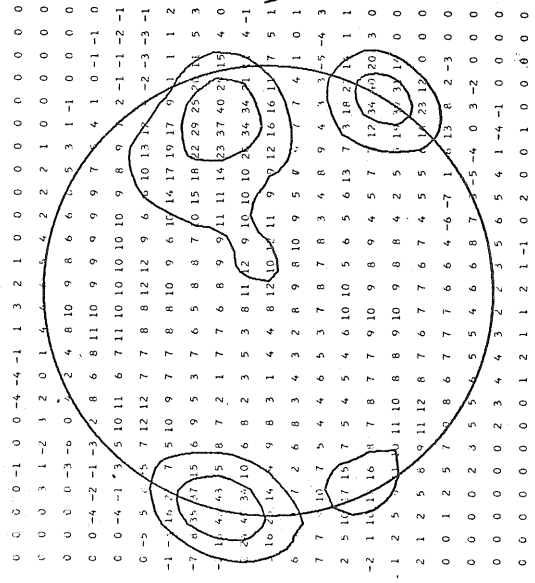
FLEURS, AUSTRALIA  
N

1450 UT

21 cm.

McMATH-HULBERT  
Np

CALCIUM REPORT  
Sp



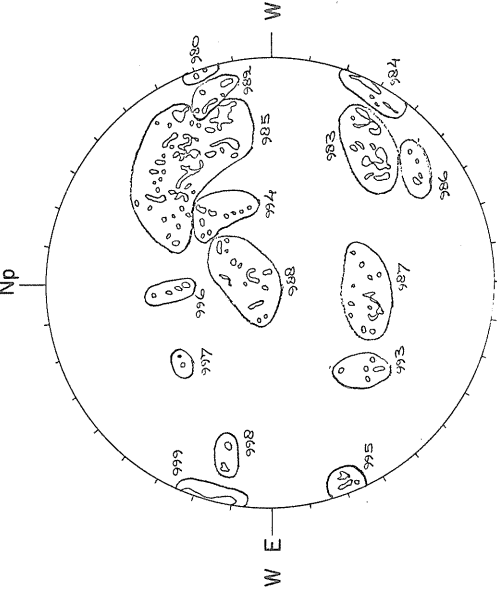
W E

N

21 cm.

McMATH-HULBERT  
Np

CALCIUM REPORT  
Sp



83-27-2.5  
84-23-3.5  
85-76-3.5  
87-14-3.0  
97-01-3.0  
98-05-3.0  
99-26-3.5

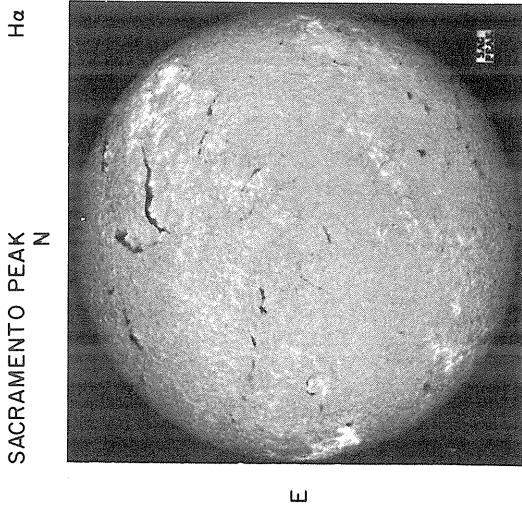
S Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

Sp  
20-21 UT  
Brightness Unit 5,000° K

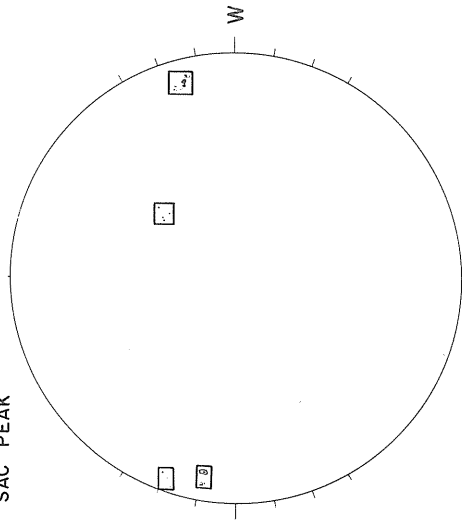
Sp  
1310 UT

MT. WILSON  
DELTA Y=62.0  
DELTA X=49.9

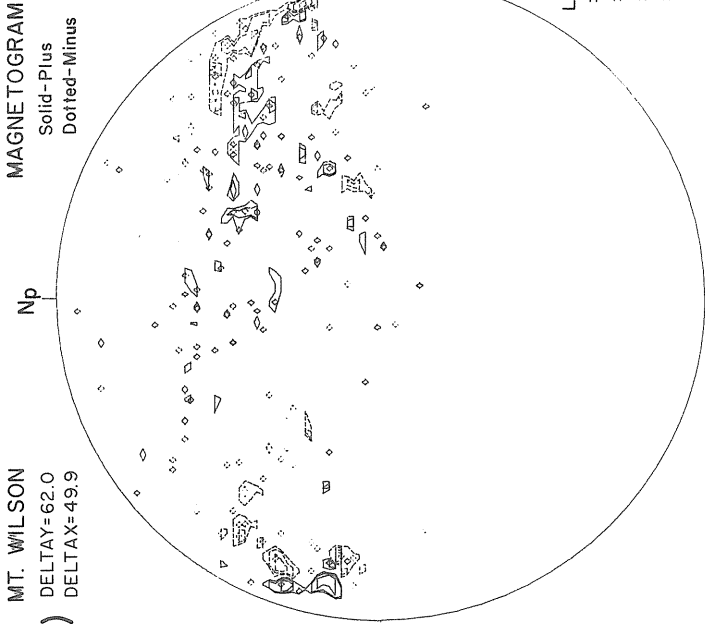
SEPTEMBER 26, 1967 (P=25.55, B<sub>0</sub>=6.93, L<sub>0</sub>=34.27)



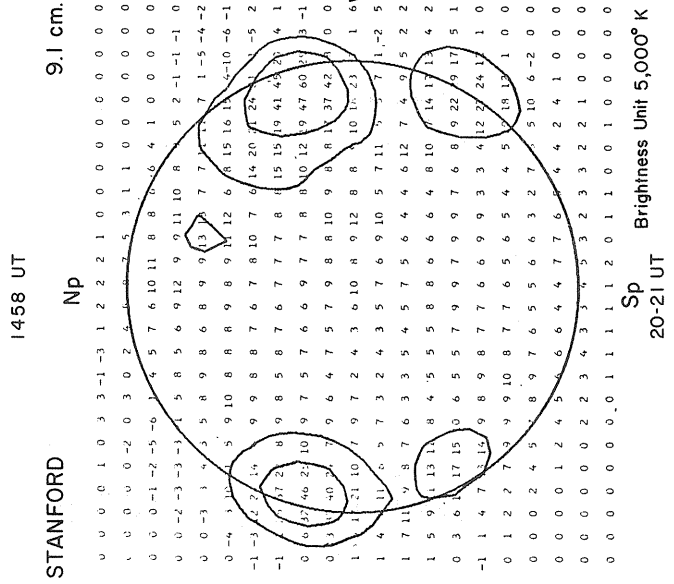
SACRAMENTO PEAK  
H $\alpha$



SUNSPOTS



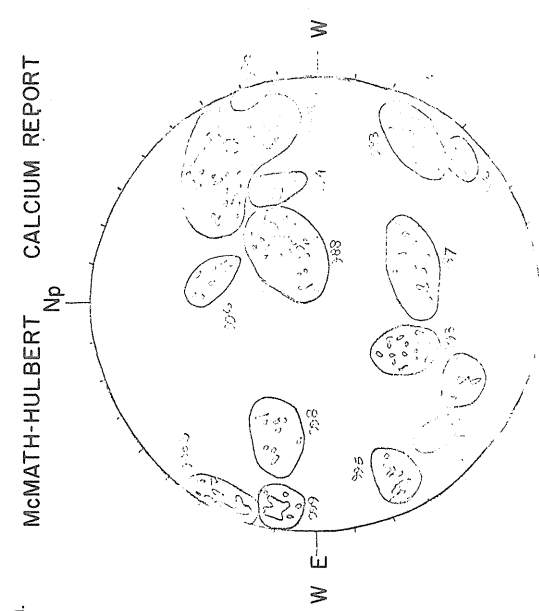
Levels  
±5  
±10  
±20  
±40  
±80



1458 UT  
FLEURS, AUSTRALIA

21 cm.

0.61-1.09 UT Sp  
McMATH-HULBERT  
CALCIUM REPORT



83-18-2.5  
85-62-3.5  
95-15-2.5  
99-33-3.0  
02-24-2.5

S Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

Sp  
1325 UT

Sp  
20-21 UT  
Brightness Unit 5,000° K

SEPTEMBER 27, 1967

(P=25.65, B<sub>o</sub>=6.90, L<sub>o</sub>=21.07)

MT. WILSON

Np

MAGNETOGRAM

Solid-Plus  
Dotted-Minus

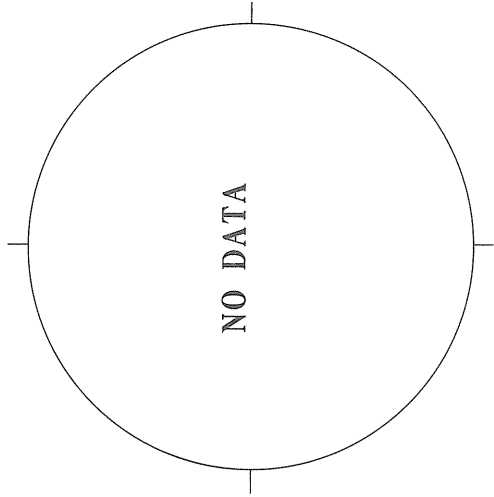
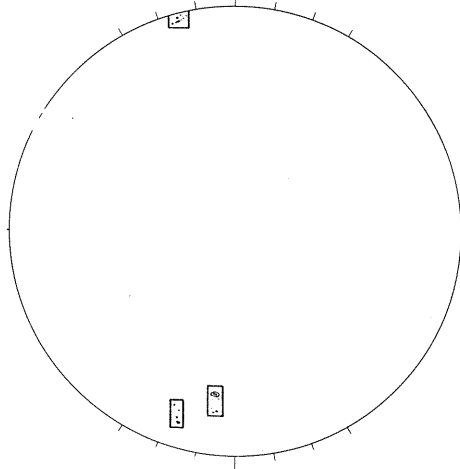
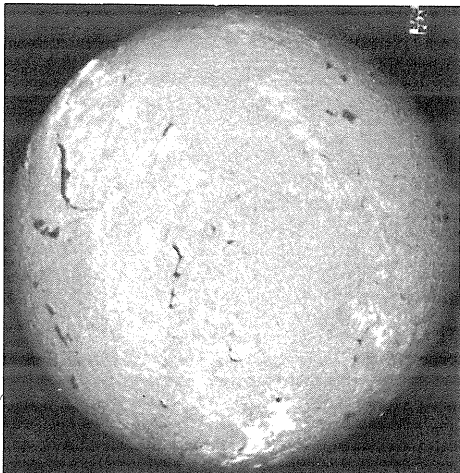
SACRAMENTO PEAK  
N

H $\alpha$

ESSA-BOULDER

SUNSPOTS

Np



NO DATA

Levels  
±5  
±10  
±20  
±40  
±80

S

1627 UT

STANFORD

9.1 cm.

FLEURS, AUSTRALIA

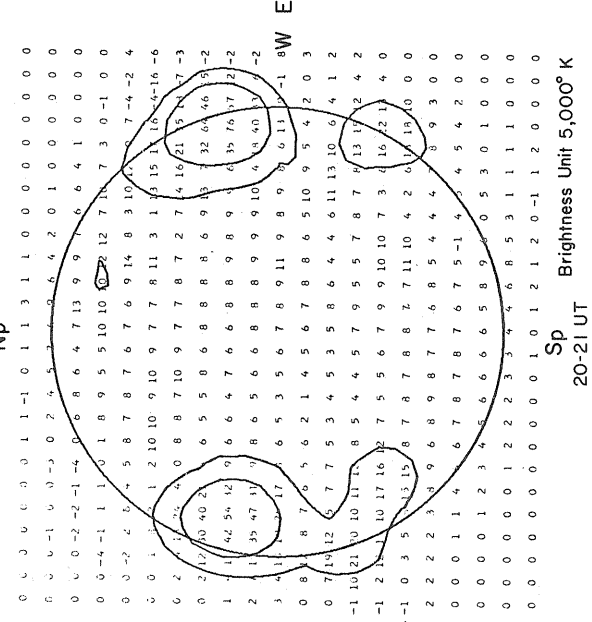
N

21 cm.

McMATH-HULBERT

Np

CALCIUM REPORT



S

1500 UT

Sp

5,000<sup>o</sup> K

MOUNT WILSON

Np

21 cm.

McMATH-HULBERT

Np

CALCIUM REPORT

S

02-03 UT

Sp

1,700<sup>o</sup> K

RESOLUTION 3 MINUTES OF ARC

BRIGHTNESS UNIT

1,700<sup>o</sup> K

NO DATA

SEPTEMBER 28, 1967

(P=25.75, B<sub>o</sub>=6.86, L<sub>o</sub>=7.87)

MT. WILSON

Np

MAGNETOGRAM

Solid-Plus  
Dotted-Minus

56

Sept 67

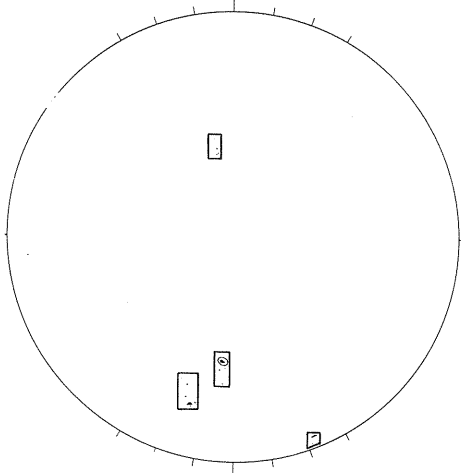
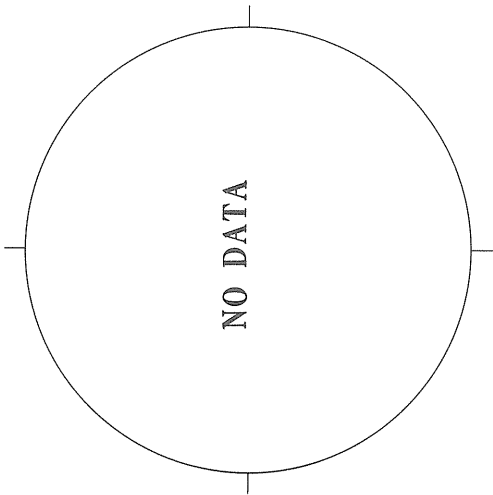
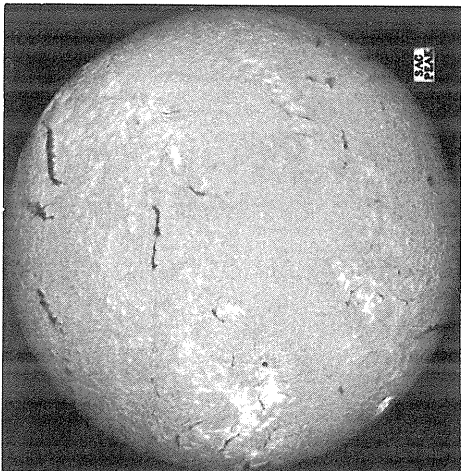
SACRAMENTO PEAK  
N

H $\alpha$

ESSA-BOULDER

Np

SUNSPOTS



Levels  
±5  
±10  
±20  
±40  
±80

STANFORD

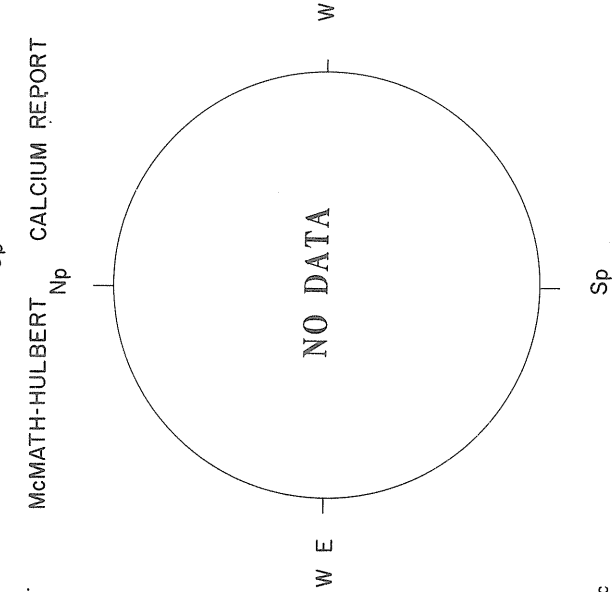
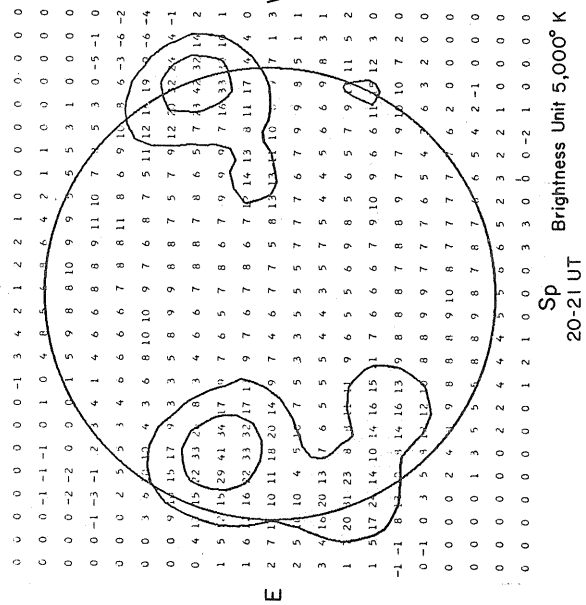
1506 UT

9.1 cm.

FLEURS, AUSTRALIA

21 cm.

Sp  
McMATH-HULBERT  
Np  
CALCIUM REPORT

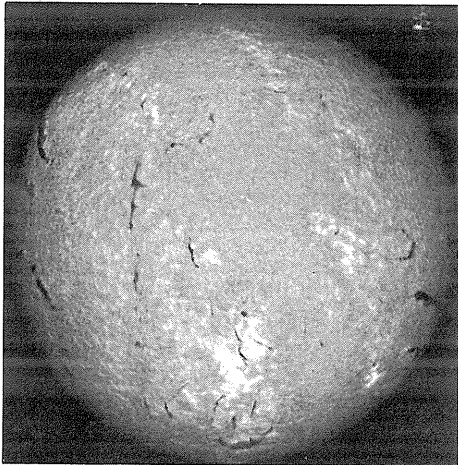


Sp  
20-21 UT

S  
Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

SEPTEMBER 29, 1967 (P=25.83, B<sub>0</sub>=6.82, L<sub>0</sub>=354.68)

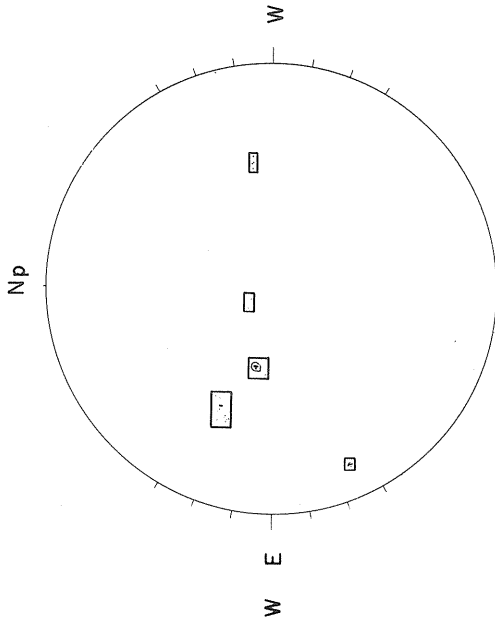
SACRAMENTO PEAK N



H $\alpha$

ESSA-BOULDER

SUNSPOTS



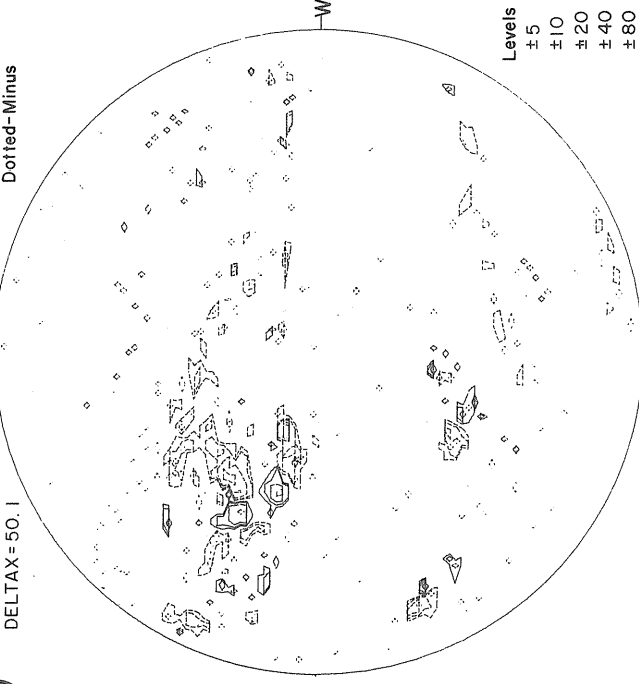
Np

SUNSPOTS

MT. WILSON  
DELTA Y = 62.0  
DELTA X = 50.1

MAGNETOGRAM

Solid-Plus  
Dotted-Minus



Levels  
±5  
±10  
±20  
±40  
±80

1507 UT

STANFORD

9.1 cm.

FLEURS, AUSTRALIA

1425 UT

21 cm.

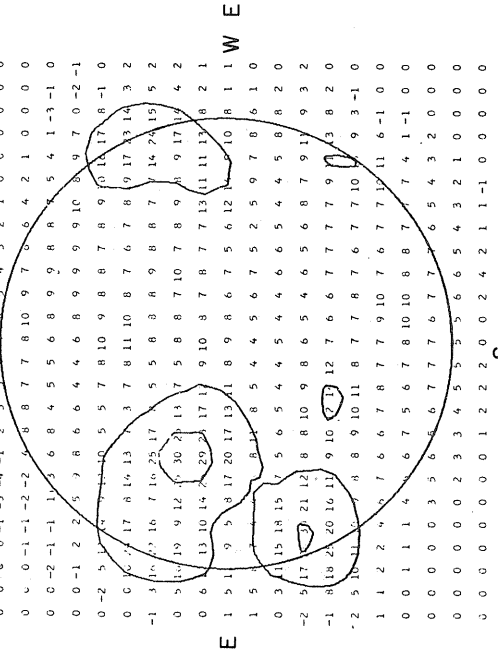
McMATH-HULBERT

CALCIUM REPORT

23.87-0.71 UT Sp

Np

CALCIUM REPORT



E

W E

W E

W

Sp

Brightness Unit 5,000° K

S

Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

Sp

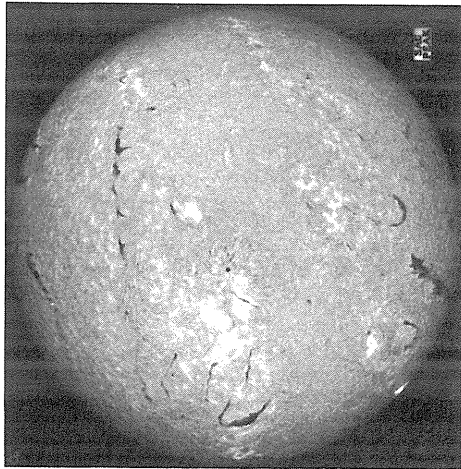
58  
Sept 67

MAGNETOGRAM  
Solid-Plus  
Dotted-Minus

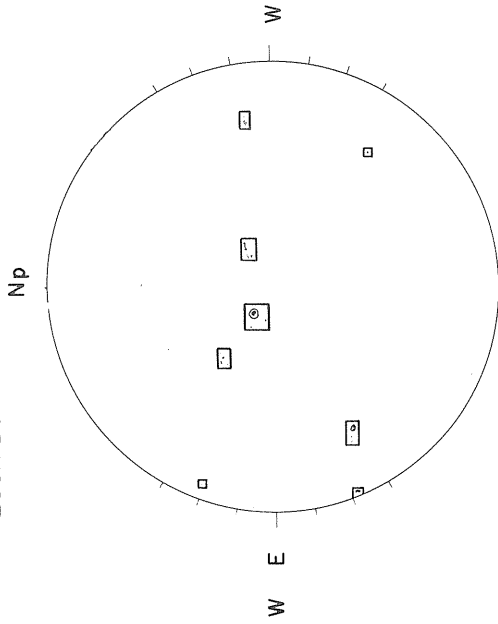
MT. WILSON  
DELTA Y = 62.0  
DELTA X = 49.9

SEPTEMBER 30, 1967 (P=25.92, B<sub>0</sub>=6.77 L<sub>0</sub>=341.48)

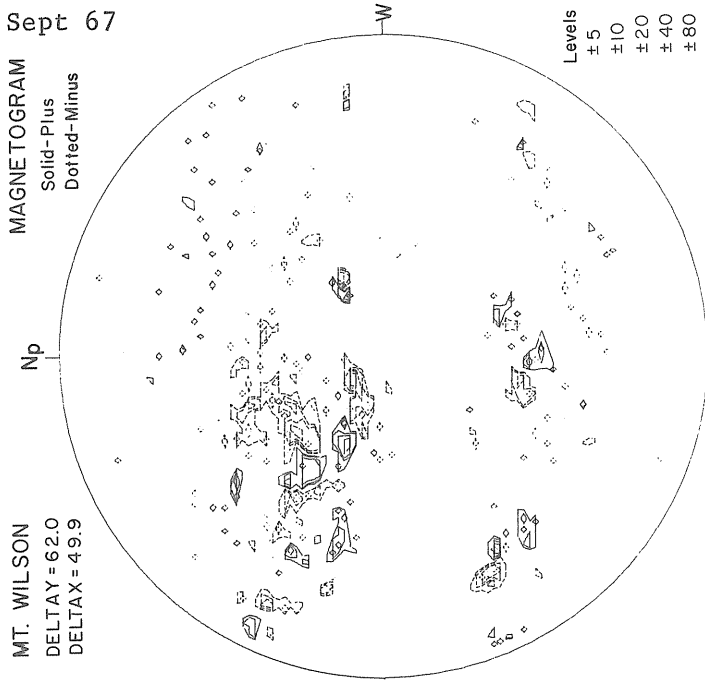
SACRAMENTO PEAK N  
H $\alpha$



ESSA-BOULDER  
SUNSPOTS



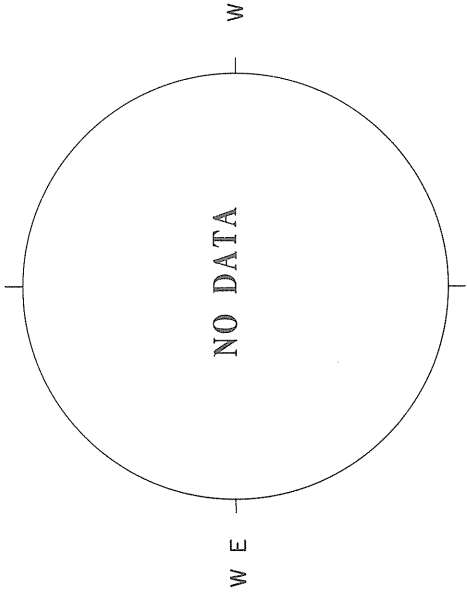
Levels  
± 5  
± 10  
± 20  
± 40  
± 80



18.54-19.29 UT Sp

McMATH-HULBERT  
CALCIUM REPORT

21 cm.

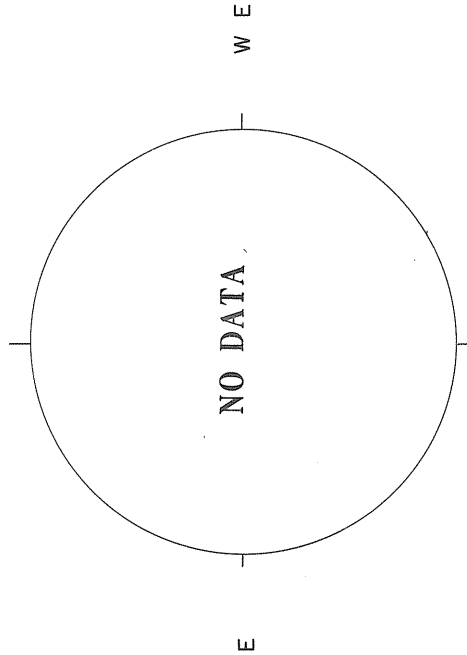


Sp

1520 UT

FLEURS, AUSTRALIA N

9.1 cm.



S

1432 UT

Np

STANFORD

Sp  
20-21 UT  
Brightness Unit 5,000° K

S  
Resolution 3 Minutes of Arc  
02-03 UT Brightness Unit 1,700° K

FINAL CORONAL LINE EMISSION INDICES

SEPTEMBER 1967

CMP Sept. 1967	North East Quadrant (observed 7 days earlier)			South East Quadrant (observed 7 days earlier)			South West Quadrant (observed 7 days later)			North West Quadrant (observed 7 days later)		
	G <sub>6</sub>	G <sub>1</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>1</sub>
1	79	96	x	96	119	x	x	x	x	x	x	x
2	68	86	x	56	71	x	x	x	x	86	116	17
3	x	x	x	x	x	x	x	x	x	76	98	54
4	114	153	x	37	45	x	x	x	x	69	85	37
5	x	x	x	x	x	x	x	x	x	39	50	35
6	x	x	x	x	x	x	x	x	x	28	42	40
7	103	162	x	56	127	x	x	x	x	x	x	x
8	100	138	89	63	151	18	32	x	x	x	x	x
9	x	x	x	x	x	x	x	x	x	79	123	24
10	x	x	x	x	x	x	x	x	x	74	124	31
11	x	x	x	x	x	x	x	x	x	x	x	x
12	68	116	32	90	164	18	24	x	x	x	x	x
13	x	x	x	x	x	x	x	x	x	x	x	x
14	x	x	x	x	x	x	x	x	x	x	x	x
15	x	x	x	x	x	x	x	x	x	45	69	11
16	58	69	32	62	88	13	16	56	72	56	72	10
17	56	66	46	77	106	19	35	96	152	111	132	14
18	65	96	x	59	81	0	0	111	132	108	156	24
19	126	180	65	124	207	0	0	108	156	x	x	x
20	135	206	x	76	88	24	51	x	x	x	x	x
21	x	x	x	x	x	x	x	82	112	x	x	x
22	x	x	x	x	x	x	x	66	99	66	99	x
23	88	145	21	74	102	15	24	54	78	54	78	0
24	81	102	19	65	82	16	27	45	49	45	49	x
25	x	x	x	x	x	x	x	x	x	x	x	x
26	43	72	x	40	88	x	x	45	72	45	72	x
27	x	x	x	x	x	x	x	40	50	40	50	0
28	x	x	x	x	x	x	x	61	102	61	102	x
29	68	78	16	86	135	13	17	48	62	48	62	x
30	70	84	18	78	97	22	51	x	x	x	x	x

Beginning May 1967 these values have been based upon Pic-du-Midi and Kislovodsk only. Though Climax and Sacramento Peak were observing during this period, the spectra have not yet been reduced. A digital conversion system is in preparation.





RIOMETER EVENTS

SEPTEMBER 1967

South Pole

30 Mc/s

SEPT. 1967	START UT	END UT	MAX UT	MAX. ABS. .10B	NO. OF PKS	SEPT. 1967	START UT	END UT	MAX UT	MAX. ABS. .10B	NO. OF PKS
01	0219	0235	0225	4	2	17	0329	0356	0332	9	2
01	1119	1936	1458	13	17	18	0718				
01	2349		2353			19		0244	0124	21	30
02		0208		40	7	19	0842		1452		
02	1534	1514	1118	16	11	20		0424		15	18
02	1753	1851	1809	5	2	20	0718	1808	1512	17	35
03	1101	1633	1148	3	6	21	0009	1143	1014	26	32
04	0222	0653	0258	22	5	21	1401				
04	1254	1729	1413	5	7	22		0101	0019	9	15
05	1031	1655	1241	3	4	22	0358	0425	0408	16	2
06	0046	0609	0214	29	12	23	1117		1627		
06	1957	2211	2020	3	5	24		0250		4	6
07	1715	1903	1741	5	4	24	0953	2348	2217	12	21
08	1150	1855	1357	4	14	25	2316		2328		
09	0005	0424	0035	16	13	26		0019		12	3
09	0935	2007	1150	5	7	26	2205	2358	2237	6	4
13	1532		2332			27	1426	1901	1524	5	4
14		0256		27	21	28	1138	1824	1153	24	7
14	1003	1734	1433	9	22	28	2147	2236	2206	6	2
14	1046					29	0617	0756	0707	11	4
15		0409	0007	80	12	29	1020		2223		
15	0644	1925	0905	4	8	30		0421		15	33
16	1038	1837	1426	7	19	30	0638	1812	1108	22	20

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 RADIATION MONITORING SATELLITE X-RAY

SEPTEMBER 1967

OUTSTANDING EVENTS FOR SEPTEMBER 1967							
DATE	STA	START	END	8-20 XE-3	0-8 XE-4	0-3 XE-5	COMMENTS
9 1	NRL	0812	0942	49.71	56.90	3.25	PEAK 0920
915	ABRD	2235	2247	11.40U	10.40U	1.74U	FLUX DECREASING DECREASING
915	NRL	2236	2248	11.61	10.80	1.44	
919	NRL	0040	0047	34.56	23.02	3.45	
922	ABRD	0418	0421	23.00U	20.80U	.	FLUX DECREASING
922	BOUL	2230	2241	9.7	12.6	1.5	FLUX DECREASING
922	ABRD	2231	2243	10.60U	13.00U	.95U	FLUX DECREASING
925	NRL	1645	1720	23.92	30.24	4.75	INCREASING
925	ABRD	2245	2257	18.30U	16.30U	2.75U	
925	NRL	2251	2300	18.77	18.85	1.04	
926	ABRD	0034	43	16.40U	12.40U	1.10E	DECREASING PEAK 0425
926	ABRD	0217	223	15.40U	14.40U	2.20U	
926	NRL	0228	325	21.11	26.33	1.74	
926	NRL	0405	447	17.18	28.67	4.15	
927	NRL	2005	2011	11.70	13.70	2.06	
928	NRL	1628	1702	17.64	18.13	2.35	PEAK 1648
929	ABRD	0231	0237	7.94U	11.40U	4.94U	PEAK 1159 PEAK 1220
929	NRL	1145	1235	11.00	4.45	4.75	
929	NRL	1145	1235	12.69	20.86	5.35	
929	NRL	1714	1728	17.95	11.16	.68	
929	ABRD	1716	1723	17.60U	9.48U	.65U	

DAILY AVERAGES FOR SEPTEMBER 1967			
DATE	44-60 XE-1	8-20 XE-3	0-8 XE-4
9 1	3.00	32.84	23.21
9 2		16.06	6.80
9 3	1.81	13.81	6.01
9 4	1.92	14.93	7.58
9 5	1.92	12.69	6.80
9 6	1.71	11.57	5.23
9 7	1.49	9.88	4.58
9 8	1.76	6.51	2.58
9 9	1.76	13.82	9.15
910	1.60	10.67	5.08
911	1.38	7.82	2.37
912	1.60	10.22	4.45
913	1.62	10.89	4.23
914	1.71	12.13	5.23
915	1.86	9.40	4.06
916	2.10	5.97	2.55
917	1.92	6.78	2.96
918	2.16	9.80	5.84
919	2.62	10.28	5.73
920	2.38	7.64	2.83
921	1.90	7.55	2.76
922	1.73	6.18	3.42
923	1.46	6.03	2.38
924	2.19	11.10	5.00
925	2.14	11.96	6.28
926	2.25	13.19	10.17
927	2.01	12.38	7.25
928	1.79	8.99	4.53
929	1.66	9.88	4.90
930	1.68	11.01	4.51

SOLAR RADIATION MONITORING SATELLITE  
X-RAY

SEPTEMBER 1967

OBSERVING TIMES FOR SEPTEMBER 1967														
DATE	STA	START UT	END UT	ASPECT ANGLE	DATE	STA	START UT	END UT	ASPECT ANGLE	DATE	STA	START UT	END UT	ASPECT ANGLE
9 1	NRL	0812	0942	0.0	919	NRL	0040	0047	-27.0	926	ABRD	0402	0404	19.1
					919	NRL	0540	0630	0.0	926	NRL	0405	0447	0.0
9 2	NRL	0730	0835	0.0	919	NRL	1851	1901	-29.7	926	NRL	1702	1714	20.2
					919	NRL	2038	2040	-30.4	926	BOUL	1845	1855	20
9 3	NRL	0500	0720	0.0	919	BOUL	2219	2227	-31	926	ABRD	1846	1856	19.1
9 3	NRL	0730	0900	0.0						926	NRL	1848	1859	19.3
					920	NRL	0008	0011	-31.8	926	BOUL	2028	2040	18
9 4	NRL	0640	0745	0.0	920	NRL	1235	1320	0.0	926	ABRD	2029	2041	18.3
					920	NRL	1710	1755	0.0	926	NRL	2033	2043	17.8
9 5	NRL	0735	0815	0.0	920	NRL	1822	1832	-30.7	926	NRL	2053	2105	0.0
					920	NRL	2003	2017	-30.5	926	NRL	2148	2228	0.0
9 6	NRL	0720	0845	0.0	920	ABRD	2147	2158	-31.5	926	BOUL	2214	2224	17
					920	NRL	2150	2200	-31.2	926	ABRD	2215	2226	16.7
9 7	NRL	0430	0730	0.0	920	NRL	2338	2346	-31.5					
9 7	NRL	0915	1040	0.0						927	ABRD	0002	0013	15.7
					921	NRL	0124	0134	-32.0	927	NRL	0008	0014	15.7
9 8	NRL	0410	0620	0.0	921	ABRD	0305	0310	-32.4	927	ABRD	0147	0154	14.8
					921	NRL	0415	0510	0.0	927	NRL	0252	0348	0.0
9 9	NRL	0455	0650	0.0	921	NRL	0545	0548	0.0	927	ABRD	0331	0335	14.2
					921	NRL	1750	1831	0.0	927	BOUL	0333	0337	11
910	NRL	0040	0205	0.0	921	ABRD	1935	1944	-23.4	927	NRL	0430	0513	0.0
910	NRL	0800	0855	0.0	921	NRL	1940	1947	-23.2	927	NRL	1632	1644	13.0
					921	ABRD	2116	2128	-22.7	927	ABRD	1816	1825	11.9
911	NRL	0300	0615	0.0	921	NRL	2128	2130	-23.3	927	NRL	1819	1824	12.0
					921	ABRD	2302	2313	-22.8	927	ABRD	2001	2011	10.9
912	NRL	0440	0510	0.0	921	NRL	2311	2315	-23.2	927	NRL	2005	2011	10.5
912	NRL	0540	0635	0.0						927	BOUL	2143	2153	9
912	NRL	0720	0815	0.0						927	ABRD	2144	2155	9.8
					922	ABRD	0048	0059	-23.2	927	NRL	2152	2155	9.2
913	NRL	0755	0845	0.0	922	NRL	0053	0100	-23.0	927	NRL	2330	2344	0.0
913	NRL	1950	2020	0.0	922	ABRD	0235	0241	-23.0	927	ABRD	2331	2341	8.2
913	NRL	2100	2150	0.0	922	NRL	0418	0421	-22.8					
913	ABRD	2154	2201	-35.6	922	NRL	1700	1735	0.0	928	NRL	0022	0026	0.0
913	NRL	2230	2300	0.0	922	NRL	1815	1845	0.0	928	ABRD	0117	0125	7.1
913	ABRD	2335	2347	-35.2	922	NRL	1903	1915	-10.0	928	NRL	0121	0126	7.0
					922	ABRD	1905	1909	-10.0	928	ABRD	0301	0306	6.0
914	ABRD	0120	0132	-34.6	922	BOUL	2045	2057	-10	928	NRL	1602	1613	6.0
914	ABRD	0306	0316	-32.9	922	ABRD	2046	2059	-9.3	928	NRL	1628	1702	0.0
914	NRL	1645	1730	0.0	922	NRL	2048	2059	-9.3	928	NRL	1744	1815	0.0
914	NRL	1810	1830	0.0	922	BOUL	2230	2241	-10	928	NRL	1744	1815	0.0
914	ABRD	2124	2130	-22.1	922	ABRD	2231	2243	-9.7	928	ABRD	1746	1753	5.0
914	BOUL	2303	2316	-22	922	NRL	2237	2244	-8.9	928	BOUL	1746	1754	5
914	ABRD	2305	2317	-22.2						928	BOUL	1928	1949	3
					923	ABRD	0018	0027	-9.7	928	ABRD	1930	1941	4.0
915	ABRD	0050	0100	-21.5	923	ABRD	0204	0211	-8.3	928	NRL	1931	1942	3.5
915	ABRD	0236	0246	-22.0	923	NRL	0207	0212	-8.3	928	BOUL	2113	2121	3
915	NRL	0310	0320	0.0	923	NRL	1653	1659	3.5	928	ABRD	2114	2125	3.0
915	NRL	0400	0450	0.0	923	NRL	1755	1810	0.0	928	NRL	2120	2123	3.0
915	NRL	0530	0610	0.0	923	NRL	1832	1846	5.5	928	ABRD	2300	2312	2.0
915	NRL	1900	1920	0.0	923	ABRD	1835	1842	5.0	928	NRL	2305	2315	3.0
915	NRL	1955	2030	0.0	923	NRL	1850	1920	0.0					
915	NRL	2051	2104	-15.0	923	ABRD	2016	2028	6.0	929	ABRD	0048	0058	1.0
915	ABRD	2235	2247	-14.3	923	NRL	2017	2030	6.0	929	NRL	0050	0056	1.5
915	BOUL	2235	2245	-15	923	ABRD	2200	2213	6.0	929	BOUL	0134	0139	1
915	NRL	2236	2248	-15.2	923	NRL	2205	2213	6.0	929	ABRD	0231	0237	1.0
					923	ABRD	2347	2357	6.0	929	BOUL	0414	0419	1
					923	NRL	2353	2400	6.0	929	ABRD	0415	0417	1.0
916	ABRD	0019	0030	-14.3						929	NRL	1145	1235	0.0
916	NRL	0025	0032	-15.3	924	ABRD	0134	0142	6.5	929	NRL	1532	1542	3.5
916	ABRD	0206	0216	-14.8	924	NRL	0137	0142	6.5	929	NRL	1714	1728	3.5
916	NRL	0212	0217	-16.0	924	NRL	1804	1835	17.4	929	ABRD	1716	1723	4.0
916	NRL	2030	2034	-13.2	924	NRL	1910	1945	0.0	929	BOUL	1717	1723	3
916	ABRD	2204	2215	-13.5	924	ABRD	1944	1957	17.3	929	ABRD	1858	1910	4.0
916	NRL	2209	2218	-13.7	924	NRL	1953	1959	17.1	929	NRL	1910	1911	3.0
916	ABRD	2350	2400	-14.0	924	ABRD	2130	2142	17.5	929	BOUL	2042	2050	3
916	NRL	2358	0002	-14.5	924	NRL	2139	2143	17.0	929	ABRD	2043	2053	2.0
					924	ABRD	2316	2327	17.2	929	NRL	2049	2053	3.0
					924	NRL	2323	2330	16.9	929	ABRD	2232	2240	2.0
										929	NRL	2235	2245	3.0
917	ABRD	0136	0145	-15.0										
917	NRL	0140	0147	-15.3										
917	ABRD	0322	0327	-16.1	925	ABRD	0103	0112	16.7	930	ABRD	0016	0026	1.0
917	NRL	0620	0715	0.0	925	NRL	0107	0118	16.7	930	NRL	0020	0028	1.5
917	NRL	1951	2003	-16.6	925	NRL	1645	1720	0.0	930	NRL	0148	0155	0.0
917	ABRD	2134	2145	-16.2	925	NRL	1732	1745	22.8	930	BOUL	0200	0208	2.0
917	NRL	2135	2148	-17.2	925	NRL	1800	1831	0.0	930	ABRD	0204	0209	1
917	ABRD	2319	2330	-18.3	925	NRL	1916	1928	22.5	930	NRL	0240	0333	0.0
917	NRL	2322	2331	-18.5	925	ABRD	1916	1928	22.3	930	ABRD	0344	0348	2.0
					925	BOUL	2058	2110	20	930	BOUL	0345	0350	3
918	ABRD	0104	0114	-20.0	925	ABRD	2101	2111	21.7	930	NRL	0415	0458	0.0
918	NRL	0111	0117	-20.0	925	NRL	2105	2110	21.5	930	NRL	1503	1511	9.6
918	ABRD	0254	0258	-21.1	925	ABRD	2245	2257	20.5	930	NRL	1645	1657	10.0
918	NRL	1005	1045	0.0	925	BOUL	2245	2255	21	930	ABRD	1828	1840	9.8
918	NRL	1920	1933	-24.0	925	NRL	2251	2300	20.5	930	NRL	1830	1839	10.0
918	BOUL	2103	2114	-25						930	NRL	2018	2025	9.3
918	NRL	2104	2116	-24.6	926	ABRD	0034	0043	19.8	930	NRL	2205	2213	9.2
918	BOUL	2246	2259	-26	926	NRL	0036	0043	19.8	930	ABRD	2013	2024	9.8
918	NRL	2252	2301	-26.0	926	NRL	0135	0148	0.0	930	ABRD	2159	2209	9.4
					926	ABRD	0217	0223	19.7	930	ABRD	2346	2356	9.5
					926	NRL	0228	0325	0.0	930	NRL	2349	2358	9.6

X-ray data reported by NRL for September 1967 include data from Satellite OGO-4. The observing times for this satellite are those which have the aspect angle listed as 0.0.

## SOLAR RADIO EMISSION SPECTRAL OBSERVATIONS

SEPTEMBER 1967

DATE	TIMES OF OBSERVATION		STATION	IMPORTANT BURSTS									SPECTRAL TYPE		
	START UT	END UT		DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND					
				START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.			
09 01	0000	0100	BOUL												
	0000	0110	HARV												
	0000	0416	CULG				0039			0039		1		IIIB	
	0539	0700	CULG												
	1237	0000	BOUL							1433.2	1433.4	2		III	
	1300	2400	HARV				1649		3	1649		3		IIIB	
			BOUL							1649	1649.6	3		III	
			BOUL							1755	1755.1	2		III	
			BOUL							1902.5	1902.7	2		III	
			BOUL							1930.2	1931.8	1		IIIG	
			BOUL							2201.9	2203	3		III	
			HARV				2202	2203	1	2202	2203	2		IIIG	
		2102	0000	CULG				2202.5	2203	1	2202.5	2203	1		IIIG
				BOUL							2205.9	2206.1	1		III
				BOUL							2211.3	2215.8	2		IIIG
			BOUL							2327.2	2333.2	3		IIIGG	
			CULG				2328	2333	1	2328	2333	1		IIIG	
			CULG				2330.5		1					UNCLF,RS	
09 02	0000	0110	HARV												
	0000	0115	CULG												
	0000	0112	BOUL							0019.3	0019.5	2		III	
	0535	0713	CULG												
	1249	0000	BOUL							1711.6	1714.5	2		IIIG	
			BOUL							1723.5	1724.2	3		IIIG	
			BOUL							1851.5	1852.5	2		IIIG	
			BOUL							2023.5	2024.4	3		IIIG	
			BOUL							2035	2125	1		CONT	
			BOUL							2037.1	2038.4	2		IIIG	
			BOUL							2111.5	2112.6	2		IIIG	
			BOUL							2121.1	2121.9	2		IIIG	
			BOUL							2148.9	2151.1	3		IIIG	
		2107	0000	CULG				2151		1	2151		1		IIIB
		1300	2400	HARV				2247	2248	1					IIIG
			BOUL							2247.1	2250.5	3		IIIG	
			CULG				2247.5	2248	1	2247.5	2248	1		IIIG	
			BOUL				2247.5	2248	1	2314.9	2315	1		III	
09 03	0000	0057	CULG												
	0000	0110	HARV												
	0000	0100	BOUL							0004.5	0004.6	1		III	
			BOUL							0021.5	0021.6	1		III	
			BOUL							0044.2	0044.7	2		IIIG	
	0213	0701	CULG				0301.5	0302.5	2	0301.5	0302.5	2		IIIG	
			CULG				0314	0315	1						IIIG
			CULG							0342		1		IIIB	
			CULG				0443.5		1	0443.5		1		IIIB	
			CULG				0611	0618	1						IIIG
		1237	0000	BOUL							1343.6	1343.8	1		III
				BOUL							1548.8	1556.7	2		IIIG
				BOUL							1620.4	1626.5	2		IIIG
				BOUL							1805.4	1805.5	1		III
				BOUL							1845.1	1845.5	3		III
			BOUL							1902.3	1906.4	2		IIIG	
			BOUL							1926.7	1926.8	1		III	
			BOUL							2022	2022.6	3		III	
	1300	2400	HARV				2115	2304	1					IIIN	
	2101	0000	CULG				2121	2121.5	1					IIIG	
			BOUL							2149.2	2149.4	2		III	
			BOUL							2240.1	2247.7	2		IIIG	
			CULG				2247.5		1	2247.5		1		IIIB	
			BOUL							2304.1	2304.6	3		III	
09 04	0000	0056	BOUL												
	0000	0100	HARV												
	0000	0407	CULG				0016	0018	1					IIIG	
			CULG				0121.5		2	0121.5		2		IIIB	
			CULG				0243		1	0243		1		IIIG	
		0602	0706	CULG							1316.5	1316.6	2		III
		1243	0000	BOUL							1355.1	1357.2	3		IIIG
				BOUL							1429.1	1429.5	2		III
				BOUL							1628	1628.2	1		III
				BOUL							1646.1	1649.2	1		III
				BOUL							1737.4	1737.6	1		III
				BOUL							1916.5	1916.6	1		III
				BOUL							2018.5	2023.8	3		III
		1300	2400	HARV				2019	2022	2	2019	2022	2		IIIGG
		2059	2307	CULG							2102.8	2102.9	2		III
			BOUL							2123.6	2123.7	1		III	
			BOUL							2228.6	2233.8	3		IIIG	
			HARV				2229		2					IIIG	
	2311	0000	CULG							2313.8	2314.3	2		IIIG	
			BOUL							2320.7	2325.1	2		IIIG	



SOLAR RADIO EMISSION  
SPECTRAL OBSERVATIONS

SEPTEMBER 1967

DATE	TIMES OF OBSERVATION		STATION	IMPORTANT BURSTS									SPECTRAL TYPE									
	START UT	END UT		DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND												
				START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.										
09 10			BOUL																			
09 11	0000	0045	HARV									2248.3	2249.5	1								IIIG
	0000	0035	BOUL																			IIIG
	0000	0700	CULG				0027	0028	1			0025.7	0030.6	2								IIIG
	1237	0000	BOUL									0027	0028	1								IIIG
			BOUL									1432.6	1436.1	2								IIIG
	1300	2400	HARV				2048		1			2047.8	2048.9	3								IIIG
	2100	0000	BOUL									2048		1								IIIG
			CULG									2116	2119	1								UNCLF
			BOUL									2153.5	2153.7	1								III
			BOUL									2323.1	2324.9	3								IIIG
	2100	0000	CULG				2324		1			2324		1								IIIB
			BOUL									2340	0020	1								CONT
09 12	0000	0037	BOUL																			III
	0000	0045	HARV	0017			0017		3			0016.5	0017	2								IIIG
	0000	0700	CULG				0243	0244.5	2			0243	0245	2								IIIG.V
	1300	2400	HARV				1407		2													IIIG
	1237	0000	BOUL																			IIIG
			BOUL									1426.5	1437	1								CONT
			BOUL									1429.1	1429.7	1								IIIG
			BOUL									1614.3	1614.7	2								III
			HARV				1634	1635	1													IIIG
			BOUL									1634.6	1636.9	2								IIIG
			HARV				1812	1813	2			1813		2								IIIG
			BOUL									1813	1813.5	1								IIIG
			BOUL									1821.5	1821.9	1								III
	2101	0000	CULG				2205	2206	2													IIIG
			BOUL									2205.6	2208.5	2								IIIG
09 13	0000	0027	BOUL																			
	0000	0045	HARV																			
	0000	0701	CULG				0157.5	0158.5	1													IIIG
	1300	2400	HARV	1309			1309	1310	2			1309		1								IIIG
	1238	0000	BOUL									1309.5	1311.1	2								IIIG
			BOUL									1351.6	1353.8	1								IIIG
			HARV				1355	1420	1													IN
			BOUL									1409.5	1409.8	1								III
			BOUL									1440.8	1441.8	2								IIIG
			HARV	1544			1544		1			1544		1								IIIG
			BOUL									1544.2	1544.6	3								III
			BOUL									1553.4	1553.7	1								III
			CULG									1718.9	1719.2	1								III
	2102	0000																				
09 14	0000	0037	BOUL																			
	0000	0045	HARV																			
	0000	0703	CULG																			
	1241	0000	BOUL																			
			BOUL									1910.7	1911.1	2								III
	1300	2400	HARV				2007	2008	1			2003.4	2007.8	3								IIIG
			BOUL									2007		1								IIIG
	2114	0000	CULG									2053.2	2059	2								IIIG
09 15	0000	0035	BOUL																			
	0000	0045	HARV																			
	0000	0657	CULG																			
	1238	0000	BOUL																			
	1300	2400	HARV																			
	2127	0000	CULG																			
09 16	0000	0030	HARV																			
	0000	0040	BOUL																			
	0000	0211	CULG																			
	0438	0639	CULG																			
	1234	0000	BOUL																			
	1300	2400	HARV																			
	2101	2241	CULG																			
	2331	2354	CULG																			
09 17	0000	0030	HARV																			
	0000	0032	BOUL																			
	0000	0034	BOUL																			
	0425	0631	CULG																			
	1244	0000	BOUL									1244	1433	3								IV
	1315	2400	HARV																			
	1244	0000	BOUL									1923.4	1924.6	1								IIIG
			BOUL									2009	2044	1								CONT
			BOUL									2034	2034.5	3								III
	2106	0000	CULG				2318		1			2317.7	2318.4	2								III
																						IIIG
09 18	0000	0030	HARV																			
	0000	0647	CULG				0205.5	0206	1													
	1240	0000	BOUL																			
			BOUL																			
	2102	0000	CULG									1627.6	1630.5	2								IIIG
	1315	2340	HARV	2311	2340	2	2300	2340	2			2300.7	2304.5	3								IIIG
			BOUL									2302		1								IIIB
			CULG																			IC
			BOUL									2326	2335.4	1					</			

SOLAR RADIO EMISSION  
SPECTRAL OBSERVATIONS

SEPTEMBER 1967

DATE	TIMES OF OBSERVATION		STATION	IMPORTANT BURSTS									SPECTRAL TYPE	
	START UT	END UT		DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND				
				START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.		
09 18			CULG BOUL				2337	0016	1	2337 2338	0016 2345	1 3	UNCLF II	
09 19	0000 0000 0000 1240 1315 2102	0030 0037 0642 0000 2400 0000	HARV BOUL CULG CULG BOUL BOUL BOUL HARV CULG BOUL HARV BOUL				0323.5 0530	0324.5	1 2	1324.2 1523.4 1919	1325.4 1523.6 2131	1 1 1	IIIG UNCLF IIIG III CONT IN	
							2040	2315	1					
							2315	2400	2	2206.3	2206.5	1	III IC	
										2320.2	2322.8	1	IIIG	
09 20	0000 0000 0000 1315 1238	0028 0103 0700 2400 0000	HARV BOUL CULG HARV BOUL BOUL HARV BOUL HARV BOUL HARV CULG				0000 1415	0028 1608	2 1				IC	
							1608	1700	1		1435 1443.3	1435.2 1446.5	1 2	IN III IIIG
							1700	1803	1	1624.9	1625.1	1	I III	
							2020	2400	1	1754.1	2110	1	IN CONT IN	
09 21	0000 0000 0000 0110 0411 1250 1315	0025 0048 0105 0328 0628 0000 2400	HARV BOUL CULG CULG CULG BOUL HARV BOUL BOUL CULG	1550	1554	1	1550	1554	1	1319.9 1550 1550 1619.8	1320.2	1 2 3 2	III IIIG IIIG IIIG	
09 22	0000 0000 0000 0322 1247 1315 2048	0025 0050 0144 0549 0000 2400 0000	HARV BOUL CULG CULG BOUL HARV CULG											
09 23	0000 0000 0000 0000 2036 0342 1315	0025 0056 0057 0204 0000 0642 2400	HARV BOUL BOUL CULG CULG CULG HARV CULG BOUL BOUL BOUL CULG							0003.5		1	IIIB	
							2324	2325	1	2139 2204.8 2244.4 2322.2 2324	2141 2205 2244.7 2324.8 2325	1 1 2 2 1	UNCLF III III IIIG IIIG	
09 24	0000 0000 1315 1247	0020 0722 2400 0000	HARV CULG HARV BOUL BOUL CULG							1636.5 1737.5 2143	1636.8 1737.8 2145	2 2	III III UNCLF	
09 25	0000 0000 0000 0324 1315 1247	0020 0100 0152 0633 2400 0000	HARV BOUL CULG CULG HARV BOUL BOUL BOUL BOUL CULG							1610 1719 1834.9 1947	1610.4 1721.2 1836.2 2048	2 1 1 1	III IIIG IIIG CONT	
09 26	0000 0000 0000 0000 1247	0020 0641 0055 0641 0000	HARV CULG BOUL CULG BOUL BOUL BOUL BOUL BOUL BOUL				0019 0019 0212	0020	2 1 1	0019.4 0212 1515.9 1602.8 1640.2 1814 1819.1 1850 1934.7	0019.9 0213 1516.3 1603.1 1640.5 1830 1825.1 2030 1939	1 2 1 1 2 1 2 1 3	IIIG IIIG III III III III CONT IIIG CONT IIIGG	



SOLAR RADIO EMISSION  
SPECTRAL OBSERVATIONS

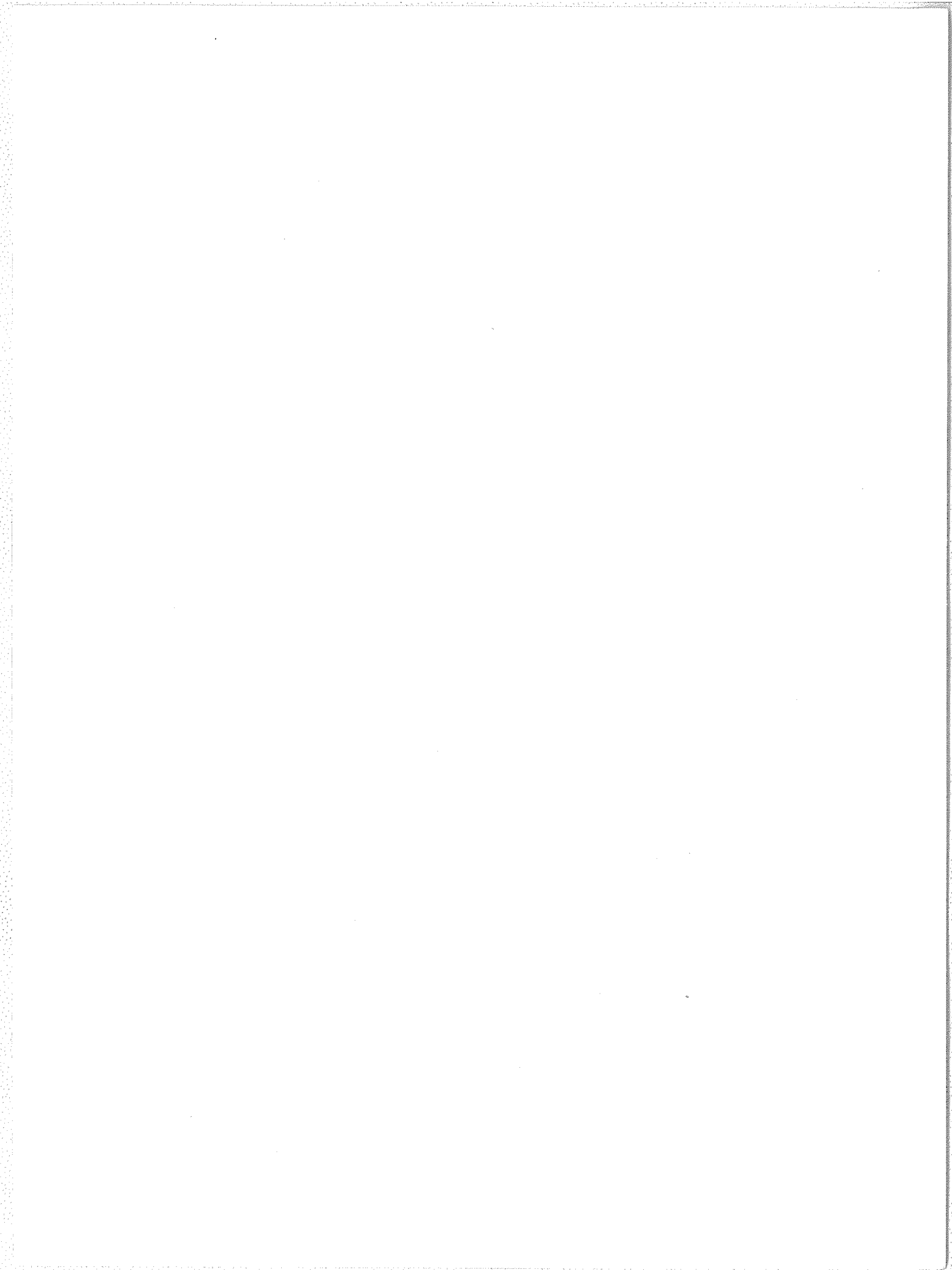
SEPTEMBER 1967

DATE	TIMES OF OBSERVATION		STATION	IMPORTANT BURSTS									SPECTRAL TYPE	
	START UT	END UT		DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND				
				START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.		
09 26	1315	2400	HARV				1935	1938	3	1935	1938	3	IIIGG	
			BOUL							1959.6	2000	3	III	
			HARV				2000			2000		2	IIIG	
			BOUL							2050.9	2051.2	2	III	
			BOUL							2108.1	2108.4	2	III	
			BOUL							2202.5	2202.8	2	III	
	2057	0000	CULG				2239		1	2239		1	IIIB	
			HARV				2239	2251	2				IIIN	
			BOUL							2239	2239.5	3	III	
			BOUL							2239.5	2335	1	CONT	
			CULG				2359	0001.5	2	2359	0001.5	2	IIIB	
			BOUL							2359.3	0002	3	III	
09 27	0000	0020	HARV	0000	0001	2	0000	0001	2				IIIGG	
	0000	0100	BOUL											
	0000	0634	CULG				0312.5	0315.5	1	0312.5	0315.5	1	IIIG	
	1313	2400	HARV				1313	1314	2				IIIG	
	1247	0000	BOUL								1313.8'	1314.1	2	III
			BOUL								1522.8	1523	1	III
			BOUL								1549	2105	1	CONT
			BOUL								1553.7	1556.1	2	IIIG
			BOUL								1610.4	1612	3	IIIG
			HARV				1611	1612	2	1611	1612	2	IIIGG	
			BOUL							1712.1	1714.3	2	IIIGG	
			BOUL							1907.7	1908.2	2	IIIG	
			HARV				1908	1918	2	1908	1918	2	IIIG	
			BOUL							1914	1918.1	2	IIIG	
	2105	2137	CULG											
2200	2246	BOUL							2155.7	2155.9	1	III		
2348	0000	CULG							2219	2345	1	CONT		
09 28	0000	0020	HARV											
	0000	0052	BOUL											
	0000	0118	CULG											
	0250	0309	CULG											
	0505	0659	CULG											
	1248	0000	BOUL								1333	1333.3	1	III
			BOUL								1356	2205	1	CONT
			BOUL								1510.1	1510.8	2	IIIG
			HARV				1726		1					IIIG
			CULG											
			BOUL								2136.1	2136.4	3	III
	1315	2400	BOUL								2249.5	2249.8	1	III
BOUL										2257.7	2259	1	IIIG	
BOUL										2333.5	2333.7	1	III	
BOUL										2345	0019 D	1	CONT	
BOUL														
BOUL														
BOUL														
BOUL														
09 29	0000	0015	HARV				0113.5	0114	2	0113.5	0114	2	IIIG	
	0000	0055	BOUL											
	0000	0116	CULG											
	0528	0654	CULG											
	1248	0000	BOUL							1248 E	0020 D	1	CONT	
	1315	2400	HARV				1420	2400	1					IN
			BOUL							1530	1534	2	IIIG	
BOUL									1547.8	1557.4	3	II		
2205	2350	BOUL								1827.5	1829.5	3	III	
		BOUL								2023.3	2023.7	3	III	
		BOUL				2225.5		1	2226.5	2231	1	IIIG		
		CULG							2225.9	2233.7	3	IIIG		
		BOUL				2226	2231	2					IIIGG	
		HARV												
		BOUL												
09 30	0000	0015	HARV				0000	0015	1				IN	
	0000	0058	BOUL											
	0429	0630	CULG											
	1315	2400	HARV				1320	2200	1				IN	
	1518	0000	BOUL								1518 E	0007 D	1	CONT
			BOUL								1817.6	1817.9	3	III
			BOUL								1858.8	1900.2	3	IIIG
			BOUL								1944.8	1945.7	3	IIIG
BOUL										2040	2042	3	IIIG	
2304	2327	CULG												

In IER-FB-278, pp 74-78, some events observed at Culgoora in August 1967 were reported with a spectral type of IIII. This should have read IIIN to indicate intermittent activity of type III.

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

B = Single burst	U = U-shaped burst of Type III
G = Small group (< 10) of bursts	RS = Reverse slope burst
GG = Large group (> 10) of bursts	DP = Drifting pairs
C = Underlying continuum (particularly with type I)	DC = Drifting Chains
S = Storm in the sense of intermittent but apparently connected activity	H = Herringbone
N = Intermittent activity in this period.	CONT = Continuum
	UNCLF = Unclassified activity

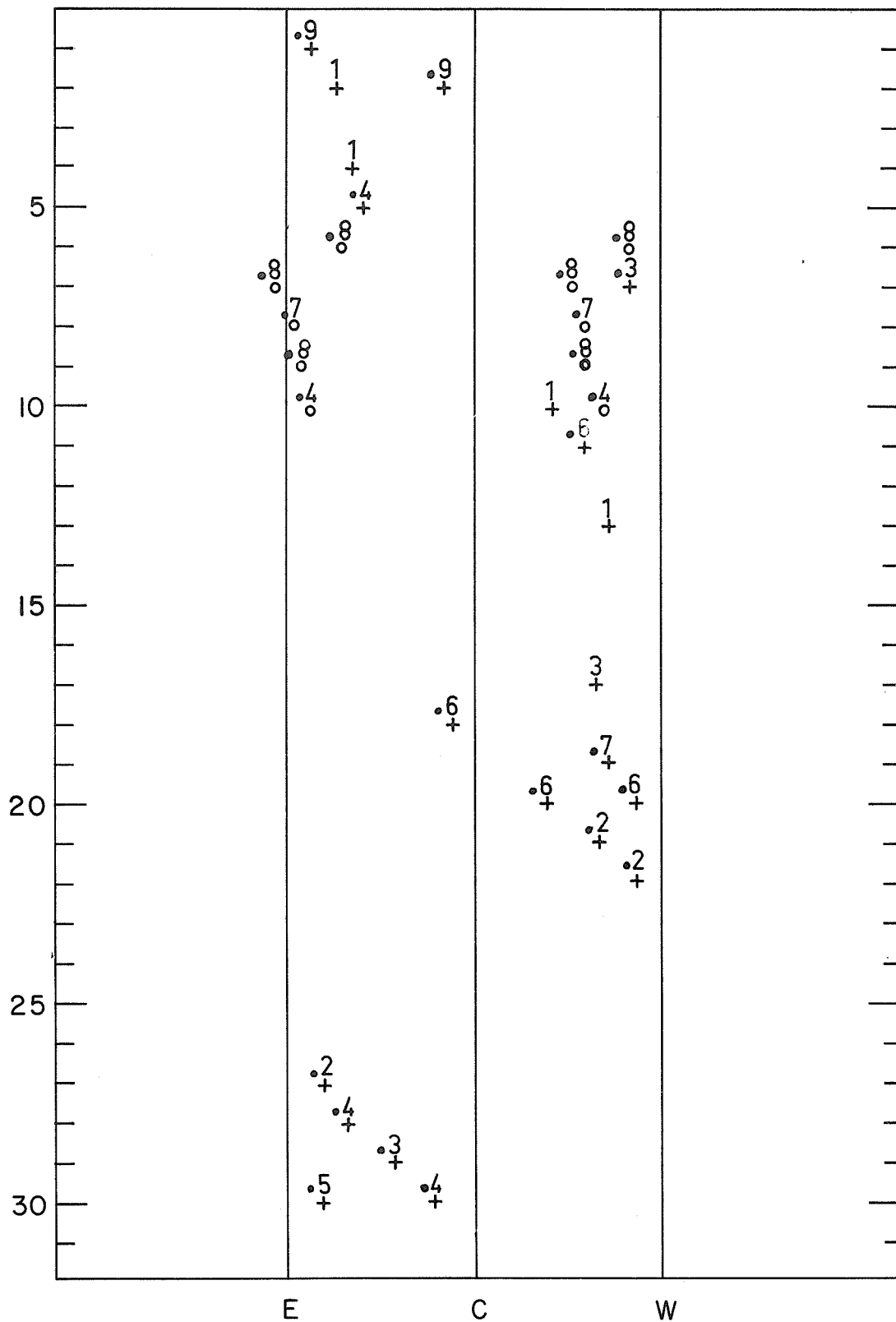


# SOLAR RADIO EMISSION INTERFEROMETRIC OBSERVATION

SEPTEMBER 1967

Nançay

408 Mc/s



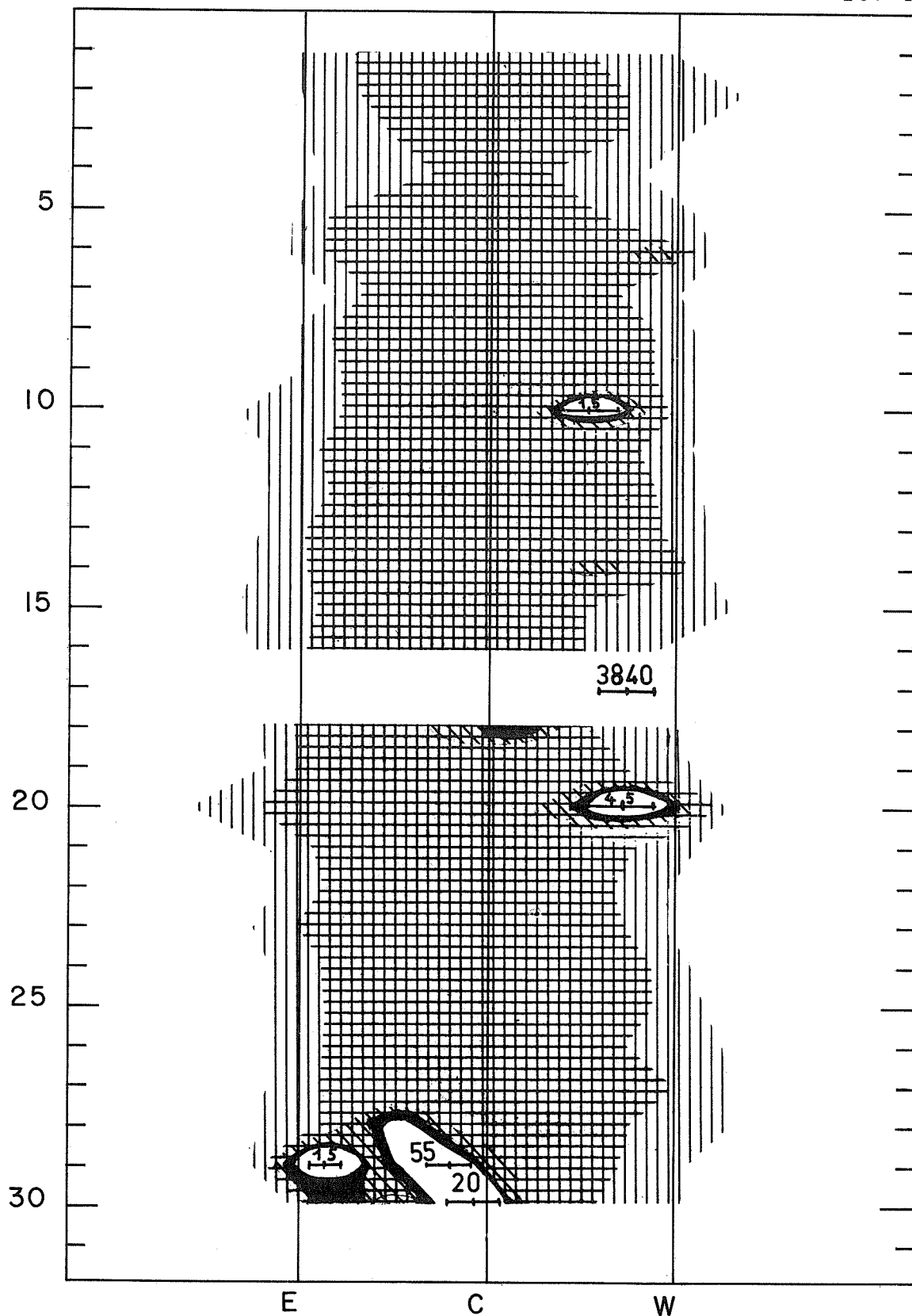
Because of the distance between the main lobes there is sometimes an ambiguity about the position East or West of the Center of Activity. The two possible positions are indicated by circles on the chart.

# SOLAR RADIO EMISSION INTERFEROMETRIC OBSERVATION

SEPTEMBER 1967

Nancay

169 Mc/s



72  
Sept 67

COSMIC RAY INDICES  
(Neutron Monitors)

SEPTEMBER 1967

SEPT. 1967	CHURCHILL	DEEP RIVER	CLIMAX	DALLAS
	DAILY AVERAGE COUNTS PER HOUR	DAILY AVERAGE COUNTS PER HOUR	DAILY AVERAGE COUNTS PER HOUR	DAILY AVERAGE COUNTS PER HOUR
1	*	6612.2	3934.0	*
2		6586.5	3935.7	
3		6590.3	3934.6	
4		6582.9	3939.4 (32)	
5		6578.8	-- (0)	
6		6592.8	-- (0)	
7		6611.7	-- (0)	
8		6590.6	-- (0)	
9		6615.6	-- (0)	
10		6664.0	-- (0)	
11		6641.0	3971.1 (14)	
12		6638.5	3967.9	
13		6637.0	3977.0	
14		6602.0	3957.6	
15		6612.4	3955.8	
16		6619.8	3969.6	
17		6642.7	3985.0	
18		6599.5	3953.0	
19		6636.2	3972.3	
20		6542.3	3915.2	
21		6463.5	3895.5	
22		6535.9	3913.7	
23		6552.2	3918.7	
24		6582.7	3925.0	
25		6629.8	3954.8	
26		6597.6	3942.3 (32)	
27		6629.0	3963.0 (2)	
28		6643.3	4017.2 (30)	
29		6643.3	4038.3	
30		6654.4	4011.8	

\* The data for September 1967 from Dallas and Churchill have not been processed. It will be published when it becomes available.

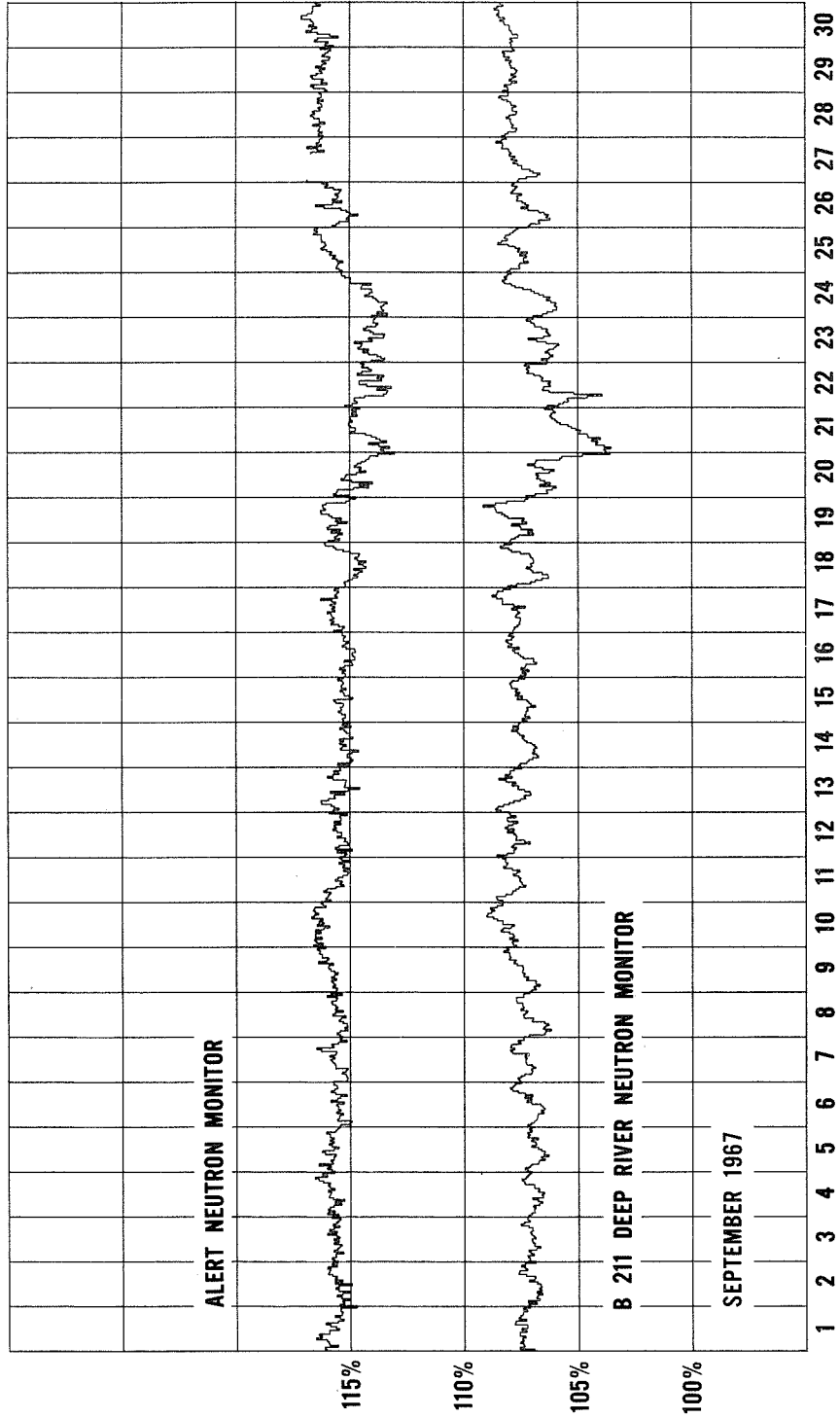
( ) Number of section hours for which data are available if less than 40.

Deep River Neutron Monitor, Scaling Factor 300.

Climax IGC Station B305, Scaling Factor 100.

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

SEPTEMBER 1967



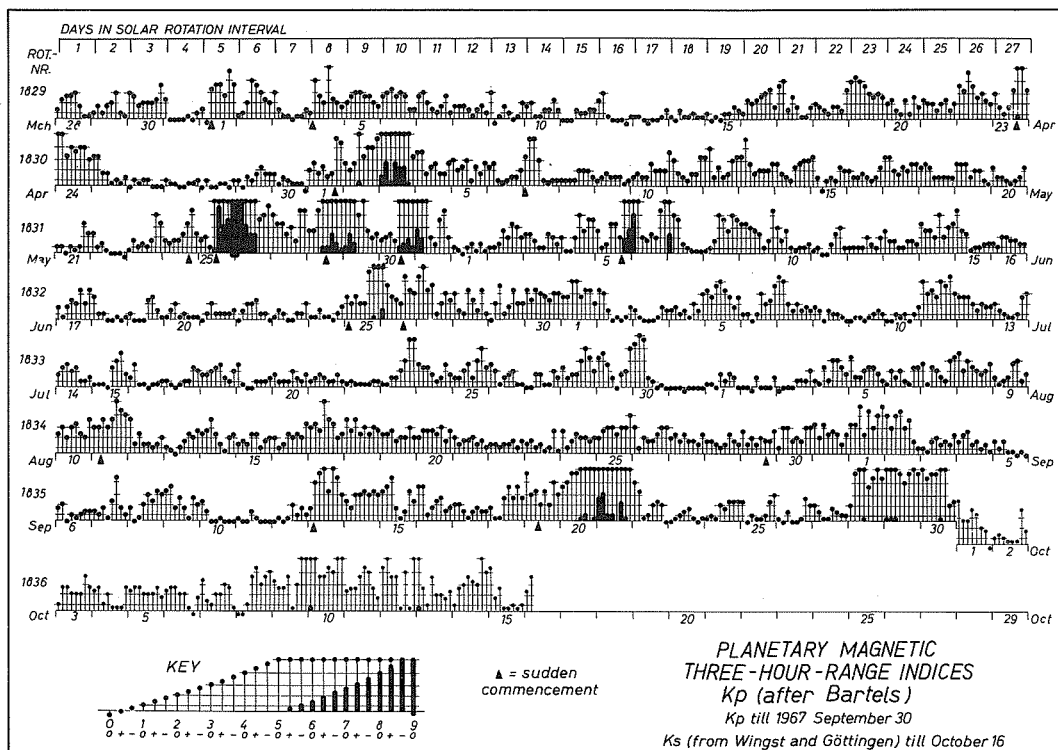
GEOMAGNETIC ACTIVITY INDICES

SEPTEMBER 1967

DAY	Kp								SUM	Ci	Cp	Ap
	THREE-HOUR RANGE INDICES											
	1	2	3	4	5	6	7	8				
1	3+	3+	5-	2+	4+	3	4	5-	29-	1.2	1.2	25
2	4	3	4	4+	3	4-	2-	1	25-	1.1	1.1	22
3	Q	1	1-	2-	2	1+	2-	1+	12	0.3	0.3	6
4		2-	2+	3-	1+	2-	1	1+	13-	0.3	0.3	6
5	QQ	2-	1	2-	1-	1-	0+	1-	7	0.1	0.1	4
6	Q	2-	2	0+	1	1-	1	1+	9+	0.2	0.2	4
7		1+	1	2-	1-	2+	4+	2-	14	0.6	0.5	9
8		2-	0+	1-	2	3	2+	3+	16+	0.8	0.5	9
9		3+	4-	2-	3-	2-	1-	3-	18+	0.7	0.6	11
10	QQ	2+	1+	0+	0+	1-	0+	0+	6	0.1	0.1	3
11	QQ	1-	0+	0+	1+	1-	0+	0+	4+	0.0	0.0	3
12	QQ	0+	1-	0+	1-	2	1	2-	8-	0.1	0.1	4
13		2-	4	5-	5	3+	5	4+	31	1.4	1.3	29
14		2+	2-	3	3	3+	3	3+	23-	1.0	0.8	14
15		3+	4-	4+	2-	1-	1+	3+	21-	0.9	0.8	14
16		4-	4-	1	2-	2+	3-	1+	18	0.7	0.6	11
17	Q	2	2	1+	1-	1+	2-	1+	12-	0.3	0.2	5
18		2-	1-	1-	3-	4-	3-	4-	18+	0.8	0.7	12
19		5-	3	3+	2	3+	2	4	25+	1.1	1.0	18
20	D	4-	4	5-	5-	5+	6-	5	38+	1.6	1.5	44
21	D	7	7+	6-	6-	5	7-	5+	48-	1.8	1.8	85
22		4	3+	1-	1	2	2+	2	16-	0.6	0.5	10
23	QQ	0+	1-	1	1+	2-	1-	0+	7-	0.1	0.1	4
24		1-	1	1-	2	2-	2+	2+	13	0.6	0.3	6
25		2+	0+	1	1-	1-	1	2+	11+	0.4	0.3	6
26	Q	1-	0+	1+	0+	0+	1-	3-	8+	0.2	0.2	4
27	Q	2	1+	1-	1-	2-	1+	1	10-	0.1	0.2	5
28	D	2	5-	5	5+	4-	4+	5	34+	1.4	1.4	36
29	D	5+	5+	5+	5-	4	5-	5	39	1.5	1.5	45
30	D	5	4+	5-	5-	5+	5	2	33+	1.3	1.4	35
MEAN										0.71	0.65	16

Preliminary storm sudden commencements (ssc) occurred September 13 at 0345UT and on September 19 at 0959UT.

### GEOMAGNETIC ACTIVITY INDICES



### DAILY AVERAGE INDICES Ap

DAY	1966			1967								
	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.
1	6	31	17	18	4	5	18	14	4	17	4	25
2	3	14	6	7	2	4	12	25	9	7	2	22
3	4	17	4	10	2	8	5	87	7	4	3	6
4	26	9	19	2	11	6	15	12	13	6	8	6
5	36	9	20	3	15	11	11	10	36	16	8	4
6	22	7	7	6	7	8	12	6	46	8	6	4
7	8	6	4	28	30	5	8	16	22	12	9	9
8	5	7	4	60	46	2	5	5	15	4	11	9
9	9	3	3	12	8	12	5	5	14	3	7	11
10	3	9	4	4	2	8	5	7	7	3	13	3
11	2	6	3	16	11	2	4	10	6	21	24	3
12	10	8	2	2	2	2	4	13	5	8	8	4
13	8	7	20	26	4	5	2	14	6	7	6	29
14	4	2	48	61	4	5	3	10	14	7	10	14
15	14	4	18	9	7	2	4	6	9	8	6	14
16	20	4	8	9	64	3	10	6	6	4	8	11
17	6	11	9	4	15	4	10	11	9	4	19	5
18	4	12	5	5	5	23	7	7	4	7	14	12
19	4	12	3	5	5	26	20	8	5	4	9	18
20	4	8	7	13	5	13	7	6	4	5	11	44
21	2	6	12	9	6	10	7	6	4	5	6	85
22	2	3	14	4	7	4	18	3	5	3	5	10
23	2	2	8	5	14	4	21	9	4	14	5	4
24	11	6	12	2	4	3	29	11	4	8	7	6
25	22	4	14	5	15	4	8	130	24	11	14	6
26	15	10	24	4	11	4	3	146	24	6	10	4
27	6	6	34	4	5	18	3	20	19	4	7	5
28	5	19	14	12	4	8	3	55	10	12	6	36
29	4	15	7	4	6	6	5	45	9	12	8	45
30	13	28	6	3	11	11	3	42	14	17	10	35
31	34		3	2		3		43		2	11	
MEAN	10	9	11	11	11	7	9	25	12	8	9	16



PRINCIPAL MAGNETIC STORMS

SEPTEMBER 1967

DATE 1967	STORM TIME		OBS	GEO- MAG. LAT.	SUDDEN COMMENCEMENT				C FIGURE OF AC- TIVITY	MAXIMAL ACTIVITY ON K-SCALE 0 TO 9			RANGES			STORM NUMBERS	
	MO. DA.	UT START			UT END MO. DA. HR.	TYPE	AMPLITUDES			MO. DA.	3-HOUR PERIOD	K INDEX	D (°)	H (γ)	Z (γ)		
							D(°)	H(γ)									Z(γ)
09 01	03-- 05--	09 02 03 09 02 18	HUAN KGLN	0.6S 57.3S	..	..	..	..	MS	09 01	5	6	8	200	22	44	
					..	..	..	..	M	09 01	5,7,8	4	--	--	--	44	
					..	..	..	..	M	09 02	1,6	4				44	
09 06	1700	09 07 21	HYDE	7.6N	..	..	..	..	M	09 07	6	4	8	110	33	45	
09 13	0345 0345 0344 0345  0340 0345 0345 0345 0345 0344 0345 0346 0345 0345 0345 0345 04-- 0344 0351 03--	09 15 10 09 14 03 09 13 24 09 15 09  09 13 23 09 13 22 09 14 01 09 15 09 09 13 21 09 14 01 09 13 23 09 14 01 09 14 15 09 15 08 09 13 24 09 13 20 09 13 20 09 13 23 09 15 12	COLL BOUL IRKU TUCS  MBOR HONO ALIB HYDE GUAM ANNA HUAN TVAN APIA PILR HRMN GNAN TOOL AMBE KGLN	64.6N 49.0N 40.8N 40.4N  21.3N 21.1N 9.5N 7.6N 4.0N 1.5N 0.6S 1.1S 16.1S 20.2S 33.3S 43.2S 46.7S 47.7S 57.3S	SC *	- 4	+64	--	MS	09 13	6	7	147	1530	610	46	
					SC *	- 1	+15	- 2	M	09 13	6	5	20	140	40	46	
					SC *	- 0.7	+ 5	- 2	MS	09 13	3	6	19	139	27	46	
					SC	- 1	+10	- 1	M	09 13	3,6	5	14	100	10	46	
					SC	--	+11	--	M	09 15	3	5				46	
					SC	--	+ 4	+ 2	M	09 13	6	5	7	90	60	46	
					SC	--	+ 4	+ 2	M	09 13	3	5	7	64	32	46	
					SC	- 0.2	1.8	- 4	MS	09 13	3,4,6	5	7	201	59	46	
					SC	- 0.3	+20	- 3 *	MS	09 13	6	6	8	197	32	46	
					SC *	--	19	06	M	09 13	3,4	5	1	60	10	46	
					SC	- 0.4	20	+ 7	MS	-- --	--	--	5	249	55	46	
					SC	1	11	4	MS	09 13	6	6	6	224	25	46	
					SC	+ 0.2	26	+21	MS	-- --	--	--	3	274	158	46	
					SC	+ 0	+ 8	- 4	M	09 13	3	5	5	77	23	46	
					SC *	--	17	--	M	09 13	3,6	5	11	93	40	46	
					SC	+ 1	+11	+ 9	MS	09 13	3	6	17	172	93	46	
					SC	..	..	..	MS	09 13	6	6	20	66	99	46	
					SC *	+ 1	+16	+ 3	M	09 13	3,6	5	18	108	58	46	
					SC *	1	27.8	..	M	09 13	3,4,6	4	12	101	--	46	
					SC	..	..	..	MS	09 13	6	6	--	--	--	46	
					09 17	1730	09 19 06	HYDE	7.6N	..	..	..	..	M	09 18	5,6,7	3
09 18	10-- 09-- 09-- 09--	09 22 06 09 19 02 09 20 00 09 22 21	COLL MBOR HUAN KGLN	64.6N 21.3N 0.6S 57.3S	..	..	..	..	MS	09 21	6	7	225	1240	1100	47	
					..	..	..	..	M	09 19	7	3	2	40	10	47	
					..	..	..	..	M	09 18	5,6	5	4	217	41	47	
					..	..	..	..	MS	09 21	6	7	--	--	--	47	
09 19	1957 1958 1958 1900 1958 1958 1958 1958 1959  1959  1958 1959 1959 1957  1959 1959 1959 1957  1959 1959 1958 2000	09 22 05 09 22 06 09 22 06 09 22 06 09 22 06 09 22 06 09 22 06 09 22 06 09 22 06  09 22 02  09 21 19 09 22 06 09 22 06 09 22 06 09 22 00  09 21 24 09 22 06  09 22 05 09 22 01	SITK FRED BOUL TUCS SJUA MBOR HONO ALIB  HYDE  GUAM ANNA TVAN PHOR  PILR HRMN GNAN TOOL AMBE	60.0N 49.6N 49.0N 40.4N 29.9N 21.3N 21.1N 9.5N  7.6N  4.0N 1.5N 1.1S 18.6S  20.2S 33.3S 43.2S 46.7S 47.7S	SC *	+ *	+ *	- *	S	09 21	1,2	8	130	1240	500	47	
					SC *	+ 1	41	- 3	MS	09 21	1,2	6	44	185	131	47	
					SC *	- 1	+22	- 3	MS	09 21	1,2,3,4	6	30	180	90	47	
					SC	..	..	..	MS	09 21	1,2,3,4	6	19	150	15	47	
					SC *	- 0.3	14	3	MS	09 21	1	6	10	128	36	47	
					SC	- 0.5	+22	- 3	MS	09 20	6	6	5	90	20	47	
					SC *	+ 1	+11	+ 3	MS	09 21	1	6	15	183	52	47	
					SC	- 0.2	1.7	- 3	MS	09 20	6	6	8	179	64	47	
					SC	- 0.2	+14	- 1	MS	09 21	1	6	7	180	39	47	
					SC	--	05	05	MS	09 21	1,2	6	1	70	10	47	
					SC	- 0.3	16	+ 8	MS	-- --	--	--	6	246	126	47	
					SC	--	14	+18	MS	-- --	--	--	4	306	162	47	
					SC	0.2	5	6	MS	09 20	5,6	6	5	180	80	47	
					SC	0.5	17	--	MS	09 21	3,4	6				47	
					SC	0	+15	+ 9	MS	09 20	1	6	12	222	50	47	
					SC *	+ 4 *	+ 6	+19 *	MS	09 21	1	6	31	128	99	47	
					SC	- 1	+ 5	--	MS	09 20	6,8	6	23	170	128	47	
					SC	3.4	18.6	..	M	09 21	4,5,6	6	24	206	87	47	
					SC	..	..	..	M	09 20	4	5	5			47	
					SC	..	..	..	M	09 21	2,3,4	5	23	135	--	47	
					09 20	0210 1737 02-- 0132	09 22 06 -- -- -- 09 21 24 09 22 07	IRKU HYDE HUAN APIA	40.8N 7.6N 0.6S 16.1S	SC *	- 1.1	+ 6	- 3	MS	09 20	6	7
SI	- 0.7	+77	- 5	MS						09 20	6	7	6	506	42	47	
..	..	..	..	MS						09 20	6	7	6	280	39	47	
..	..	..	..	MS						09 21	1	6				47	
09 27	2230 2300	10 01 03 09 30 18	MBOR HYDE	21.3N 7.6N	..	..	..	..	M	09 28	6	5	3	70	10	48	
					..	..	..	..	MS	09 28	4	6	6	155	42	48	
09 28	04--  05-- 04-- 0538  0400  04-- 04-- 0535 04--	10 01 16  10 01 14 09 30 19 10 01 18 09 30 18  09 30 19  09 30 18 09 30 19 09 30 19 09 30 19	COLL  SITK FRED BOUL IRKU  TUCS  HONO ALIB GUAM ANNA	64.6N  60.0N 49.6N 49.0N 40.8N  40.4N  21.1N 9.5N 4.0N 1.5N	..	..	..	..	MS	09 28	3	7	208	1410	1000	48	
					..	..	..	..	S	09 29	4	7				48	
					..	..	..	..	S	09 30	5	7				48	
					..	..	..	..	S	09 28	4	8	200	1280	.650	48	
					..	..	..	..	S	09 29	3	8				48	
					..	..	..	..	M	09 29	1,2,3	5	21	126	127	48	
					..	..	..	..	MS	09 29	3	6	30	120	100	48	
					..	..	..	..	MS	09 28	4	6	24	140	56	48	
					..	..	..	..	MS	09 30	5	6				48	
					..	..	..	..	M	09 28	3,4,8	5	15	110	20	48	
					..	..	..	..	M	09 29	2,3	5				48	
					..	..	..	..	M	09 30	2,3	5				48	
					..	..	..	..	M	09 29	4	5	7	116	29	48	
..	..	..	..	M	09 28	3,4,7	5	7	146	60	48						
..	..	..	..	M	09 30	5	5	1	40	10	48						
..	..	..	..	M	-- --	--	--	5	218	79	48						

The sudden commencement storm which occurred on February 15 and was listed in IER-FB-272, April 1967 p 80, was erroneously reported as occurring at Sitka on February 14.

PRINCIPAL MAGNETIC STORMS

SEPTEMBER 1967

DATE 1967 MO. DA.	STORM TIME		OBS.	GEO- MAG. LAT.	SUDDEN COMMENCEMENT			C FIGURE OF AC- TIVITY	MAXIMAL ACTIVITY ON K-SCALE 0 TO 9			RANGES			STORM NUMBERS	
	UT START	UT END MO. DA. HR.			TYPE	AMPLITUDES			MO. DA.	3-HOUR PERIOD	K INDEX	D (°)	H (γ)	Z (γ)		
						D(°)	H(γ)									Z(γ)
09 28	04--	09 30 20	HUAN	0.6S	..	..	..	..	MS	09 28	6	6	7	346	48	48
	04--	09 30 19	TVAN	1.1S	..	..	..	..	M	-- --	-	-	4	245	151	48
	0449	09 30 14	APIA	16.1S	..	..	..	..	M	09 28	2	5	3	115	22	48
	05--	09 30 18	PMOR	18.6S	..	..	..	..	MS	09 28	4	6	10	170	70	48
	04--	09 30 20	PILR	20.2S	..	..	..	..	MS	09 28	6,7	5	12	112	40	48
										09 29	2,8	5				48
	04--	09 30 18	HRMN	33.3S	..	..	..	..	MS	09 28	4	6	19	118	93	48
	05--	09 30 18	GNAN	43.2S	..	..	..	..	MS	09 28	4	6	20	116	139	48
	02--	09 30 20	TOOL	46.7S	..	..	..	..	MS	09 29	3	6	24	136	72	48
	1700	09 30 21	AMBE	47.7S	..	..	..	..	M	09 29	3,4	5	34	121	--	48
	05--	10 01 20	KGLN	57.3S	..	..	..	..	MS	09 29	1	7	--	--	--	48

# RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

SEPTEMBER 1967

## North Atlantic, North Pacific

SEP. 1967	WHOLE DAY INDICES			ADVANCE FORECASTS (JC- REPORTS) FOR WHOLE DAY	NORTH ATLANTIC								NORTH PACIFIC				GEOMAGNETIC INDICES								
	NORTH ATLANTIC	NORTH PACIFIC	AVERAGE HIGH LATITUDE		6-HOURLY QUALITY FIGURES				SHORT-TERM FORECASTS ISSUED ABOUT ONE HOUR IN ADVANCE OF				6-HOURLY QUALITY FIGURES				K <sub>FR</sub>		A <sub>FR</sub>		K <sub>SI</sub>		A <sub>SI</sub>		
					00 TO 06	06 TO 12	12 TO 18	18 TO 24	00 TO 06	06 TO 12	12 TO 18	18 TO 24	00 TO 06	06 TO 12	12 TO 18	18 TO 24	HALF DAY (1)	HALF DAY (2)	OB- SERVED	PRE- DICTED	HALF DAY (1)	HALF DAY (2)			
01	6+	6	6	7	6+	6-	7-	7-	7-	7	6	7	6	6	6	6	6	(4)	(4)	23	12	(4)	(4)	28	
02	6o	6	6	7	6o	5+	6+	7-	7-	6	5	6	6	6	6	6	6	(4)	2	15	7	(4)	2	23	
03	7-	6	6	7	7-	6+	7-	7-	7-	6	6	7	7	6	6	6	6	1	2	6	7	1	2	5	
04	7-	6	6	7	7-	6+	7-	7-	7-	7	6	6	7	6	6	6	6	2	1	6	7	2	1	5	
05	7-	6	6	7	7-	7-	7-	7-	7-	7	6	7	7	5	6	6	6	1	1	3	12	1	0	4	
06	7-	6	6	7	7-	7-	7-	7-	7-	7	7	7	7	6	6	5	6	1	1	4	12	1	1	2	
07	7-	6	6	7	7-	7-	7-	7-	7-	7	6	7	7	6	6	6	6	2	2	7	7	1	1	4	
08	7-	6	6	7	7-	7-	7-	7-	7-	7	7	7	7	5	6	6	5	1	3	8	5	1	2	6	
09	7-	6	6	7	6+	7-	7-	7-	7-	7	6	7	7	6	6	6	6	3	1	11	5	3	2	10	
10	7-	6	6	7	6+	7-	7-	7-	7-	7	6	7	7	6	6	6	6	1	0	2	9	0	0	0	
11	7-	6	6	7	7-	7-	7-	7-	7-	7	7	7	7	6	6	6	6	0	0	1	9	0	0	0	
12	7-	6	6	7	7-	6+	7o	7-	7-	7	7	7	7	6	6	6	6	1	2	4	9	0	0	1	
13	7-	5	6	7	7-	6+	7-	7-	7-	7	6	6	6	6	5	5	6	(4)	(4)	22	15	(4)	(4)	28	
14	6+	6	6	6	7-	5o	7o	7-	7-	6	6	7	6	6	6	6	6	3	3	13	17	2	3	16	
15	6+	6	6	6	6+	6-	7-	7-	7-	6	6	7	7	6	6	6	6	(4)	2	16	9	3	1	14	
16	6+	6	6	7	6o	5o	7-	7-	7-	6	6	7	6	6	6	6	6	2	2	8	7	1	2	6	
17	7-	6	6	7	7-	7-	7-	7-	7-	6	6	7	7	6	6	6	5	2	1	5	5	1	1	3	
18	7-	6	6	7	7-	6+	7-	7-	7-	7	7	7	7	6	6	6	6	2	3	8	5	1	2	7	
19	6+	6	6	7	6o	6-	7-	7-	7-	7	6	7	6	6	6	6	6	3	3	15	7	2	3	14	
20	6o	5	6	7	6+	6-	7-	6-	6-	6	6	6	6	6	5	5	6	(4)	(4)	31	9	(5)	(5)	54	
21	(4+)	5	5	5	4-	3o	6-	5-	5-	5	3	5	5	5	6	6	5	(6)	(4)	48	12	(7)	(5)	107	
22	6-	5	5	6	5o	5o	6+	7-	7-	4	5	6	7	5	5	5	5	2	1	7	9	2	2	7	
23	6+	6	6	7	7-	6-	7-	7-	7-	7	6	7	7	6	6	6	6	1	1	3	7	1	1	3	
24	7-	6	6	7	7-	7-	6+	7-	7-	7	6	7	7	6	6	6	6	1	2	6	7	1	1	3	
25	7-	6	6	7	7-	7-	6+	7-	7-	7	6	7	7	6	6	6	6	1	2	4	9	0	1	3	
26	7-	6	6	7	7-	7-	7-	7-	7-	7	6	7	7	6	6	6	6	0	1	3	11	1	1	3	
27	7-	6	6	6	7-	7-	7-	7-	7-	7	6	7	7	5	6	6	6	1	2	5	15	0	1	2	
28	6+	5	6	7	7-	6-	6+	6+	6+	7	6	6	6	6	5	5	6	(4)	(4)	27	11	(6)	(4)	73	
29	5+	5	5	7	5o	4o	6o	6-	6-	5	4	6	6	5	5	5	5	(5)	(4)	32	11	(6)	(4)	81	
30	5o	5	5	7	4+	4o	6o	6-	6-	5	4	6	6	5	5	5	6	(4)	3	25	11	(5)	(4)	52	
QUIET				P S U F	4 24 2 0									20	14	24	24								
DISTURBED				P S U F	0 0 0 0									0	3	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

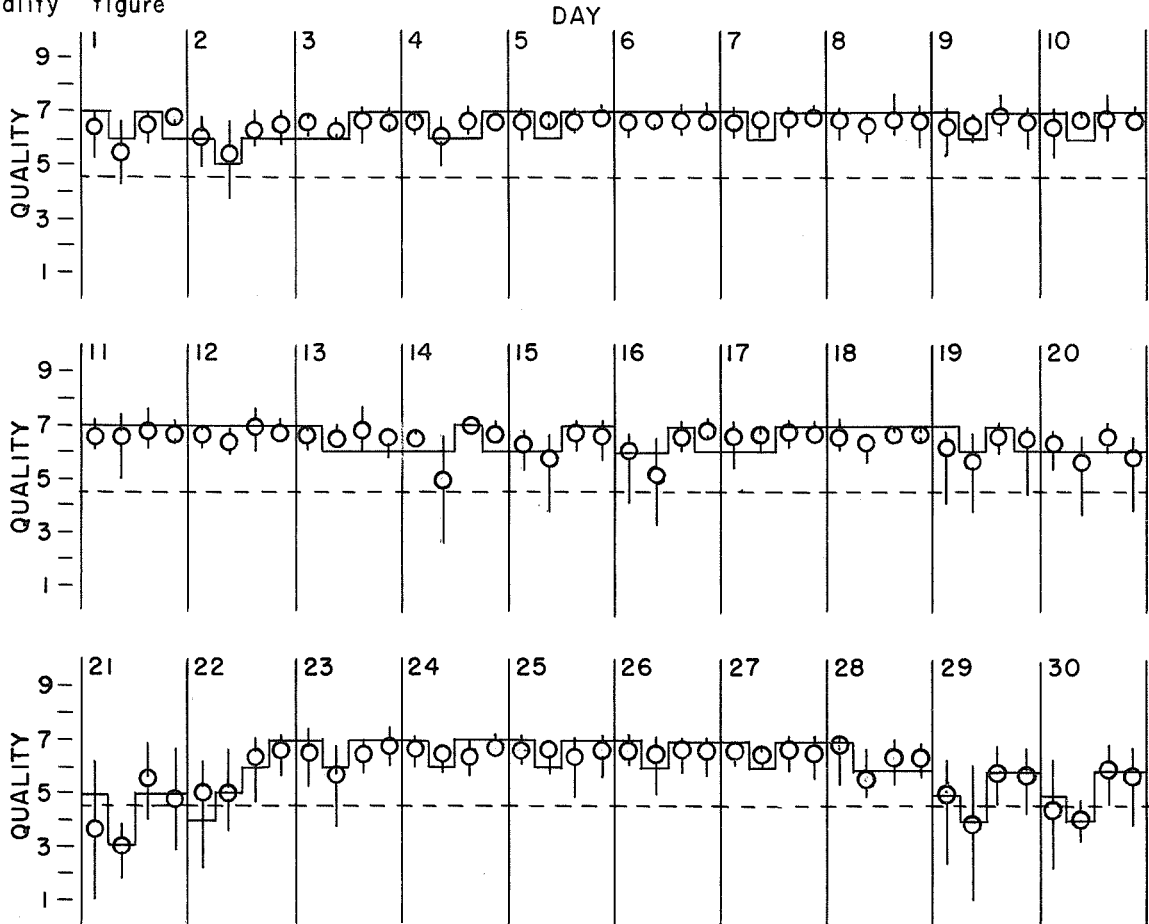
SEPTEMBER 1967

North Atlantic

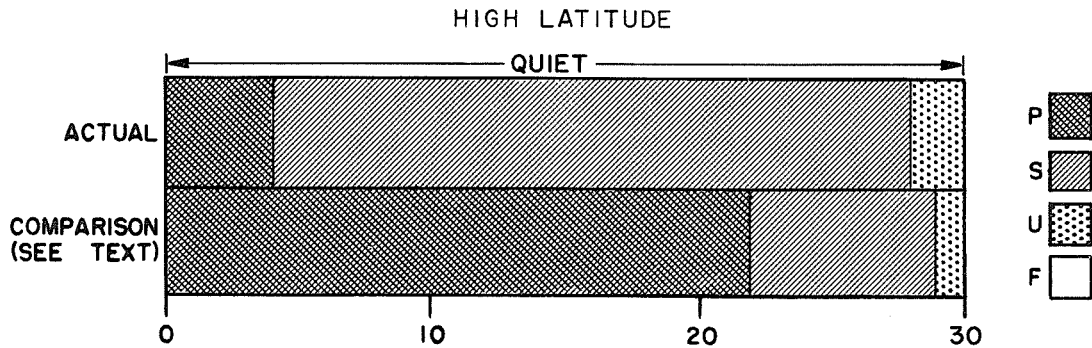
- Short-term forecast

| range of reports

o Quality figure

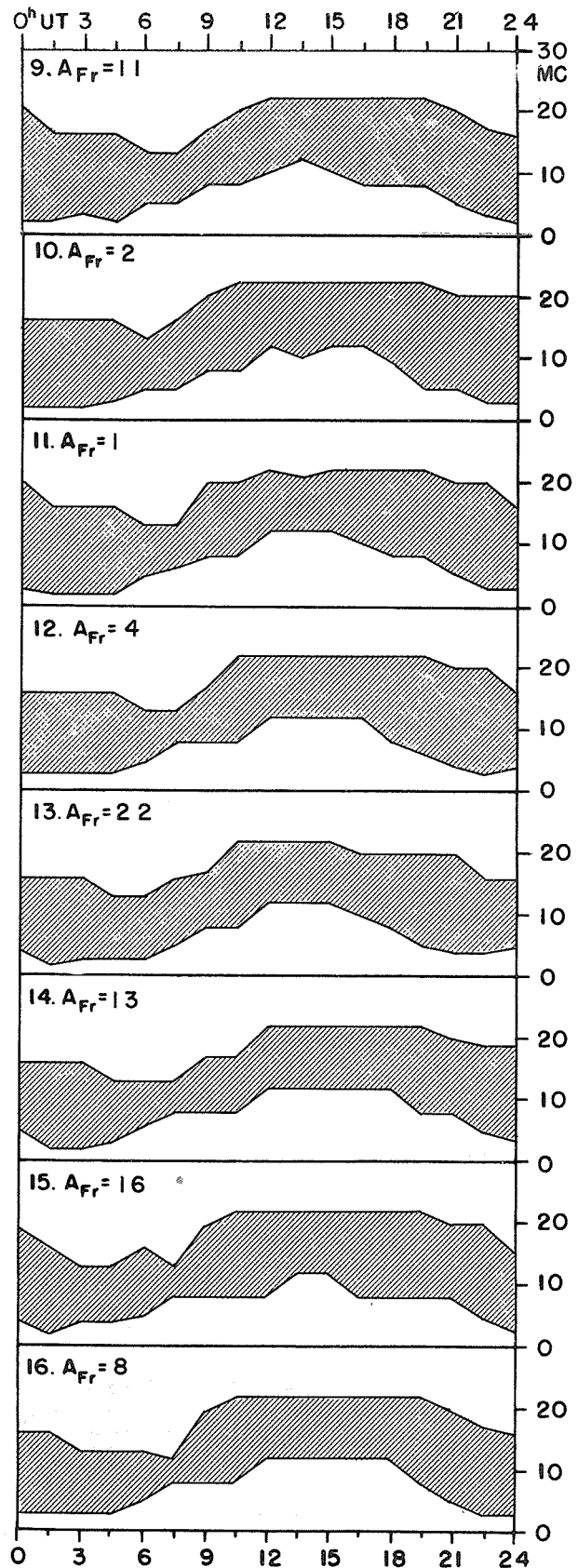
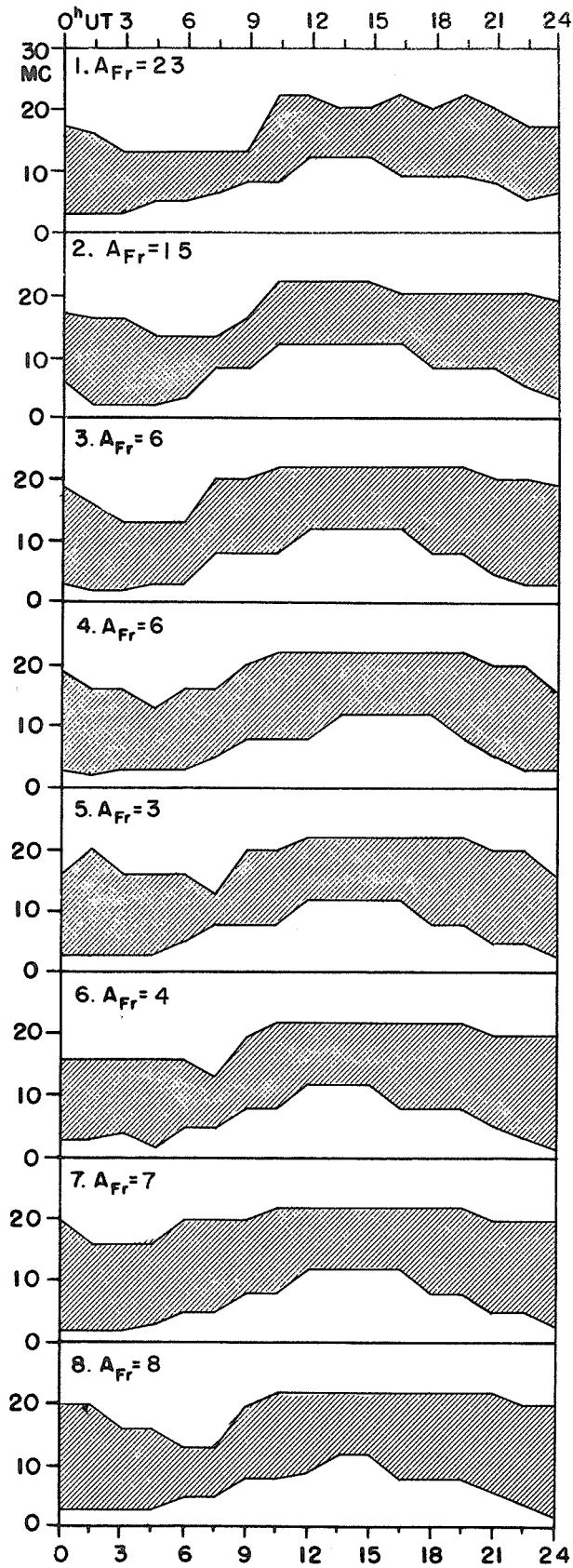


Outcome of advance forecasts - final estimates (1 to 7 days ahead) - High Latitude radio propagation conditions



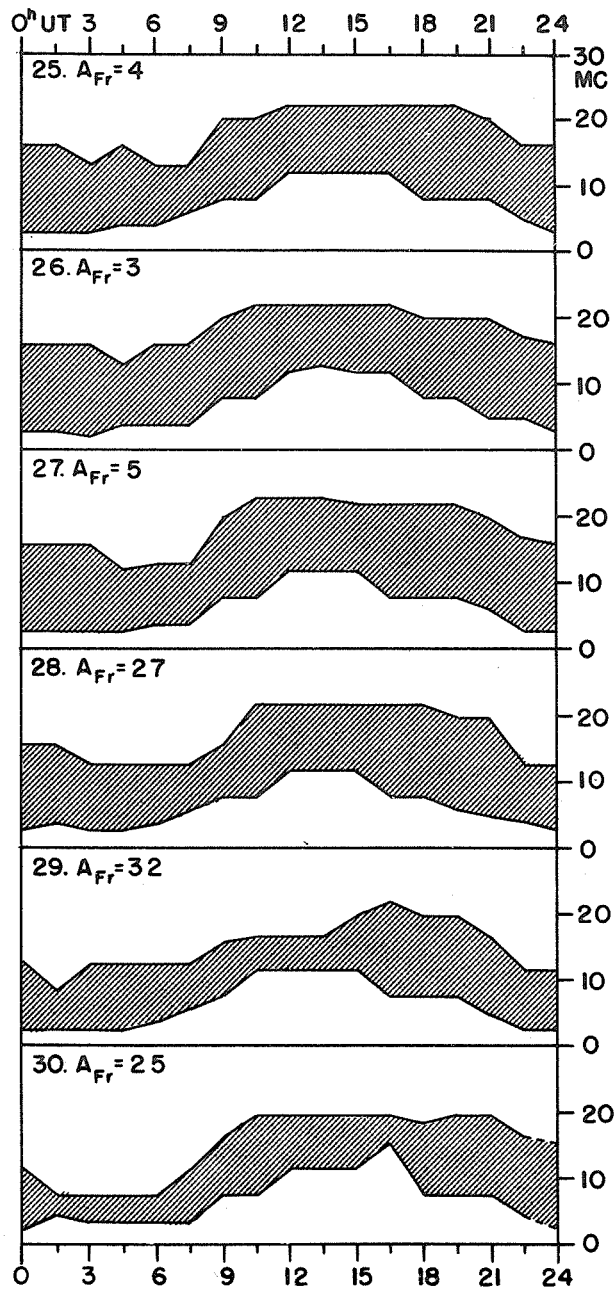
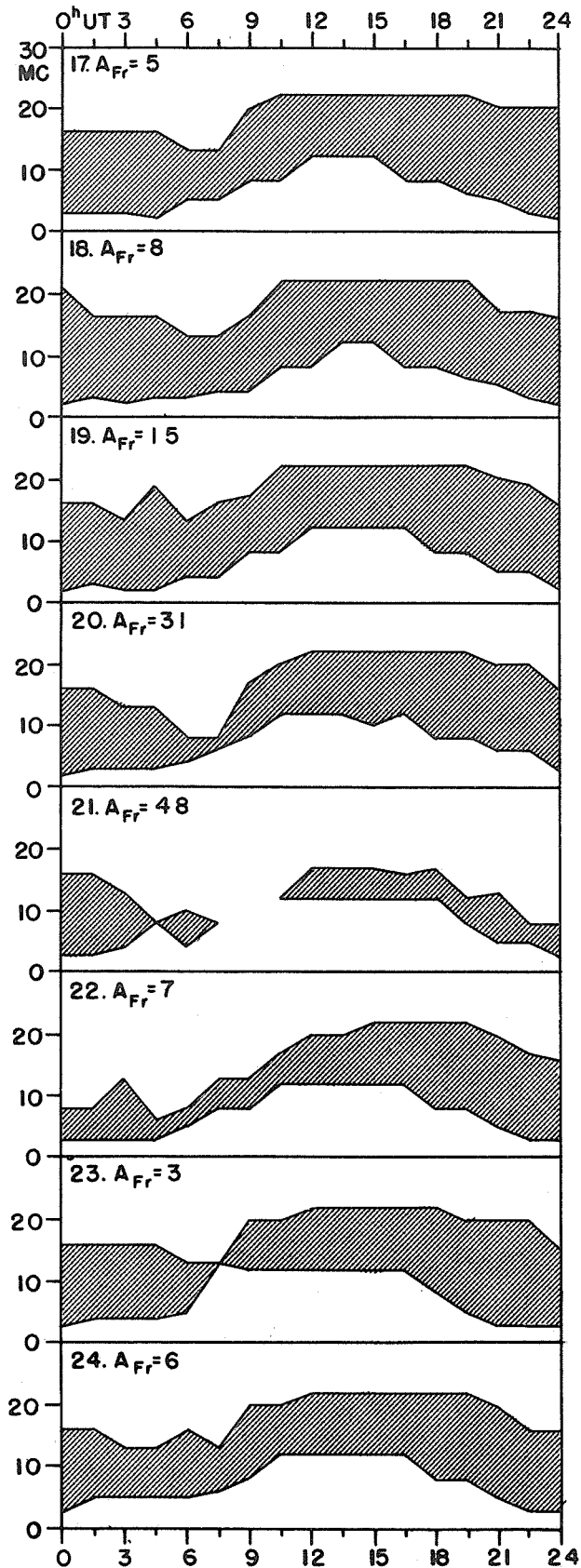
TRANSMISSION FREQUENCY RANGES--NORTH ATLANTIC PATH

SEPTEMBER 1967

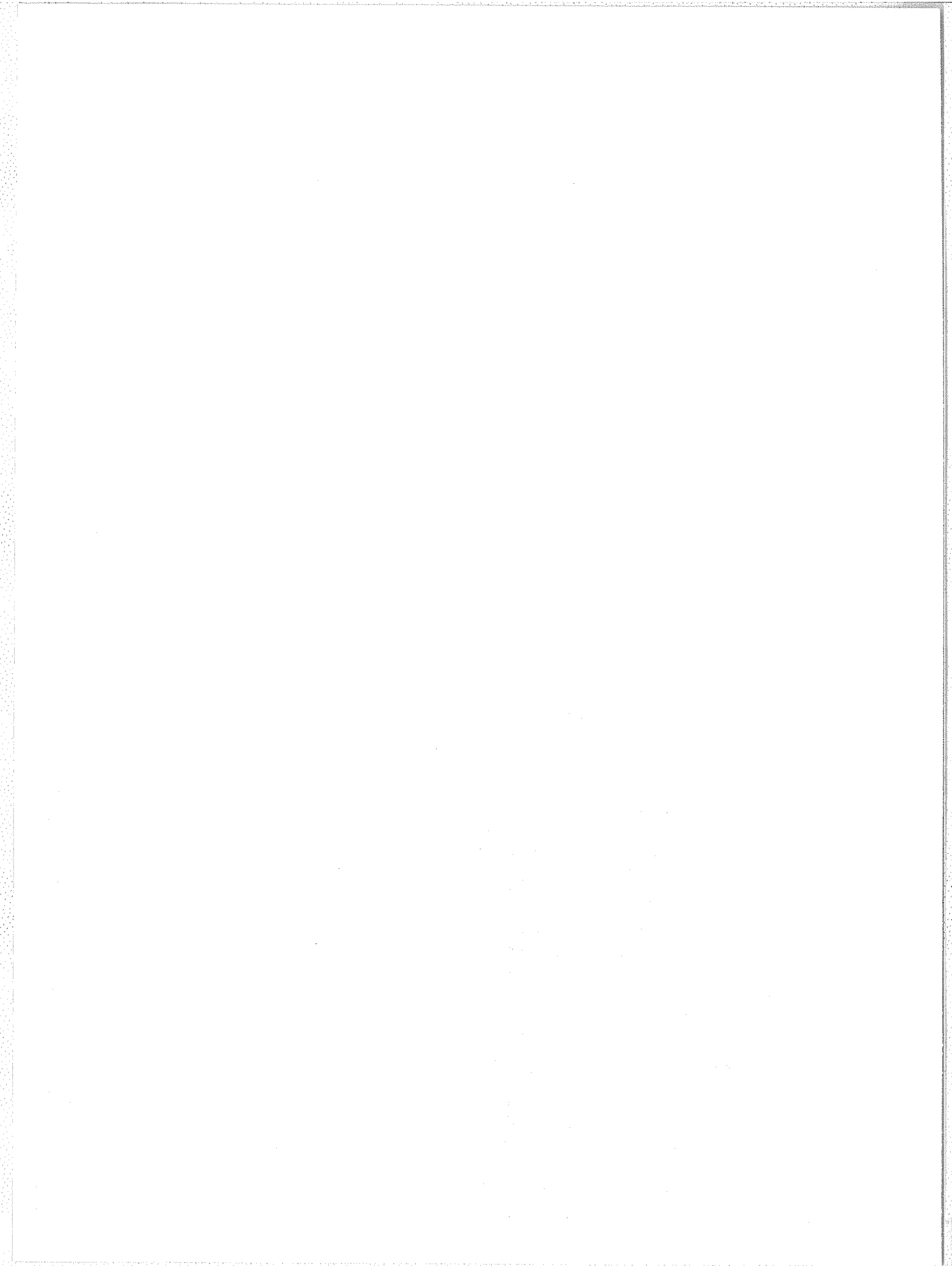


# TRANSMISSION FREQUENCY RANGES--NORTH ATLANTIC PATH

SEPTEMBER 1967



Adapted from Observations by Deutsches Bundespost



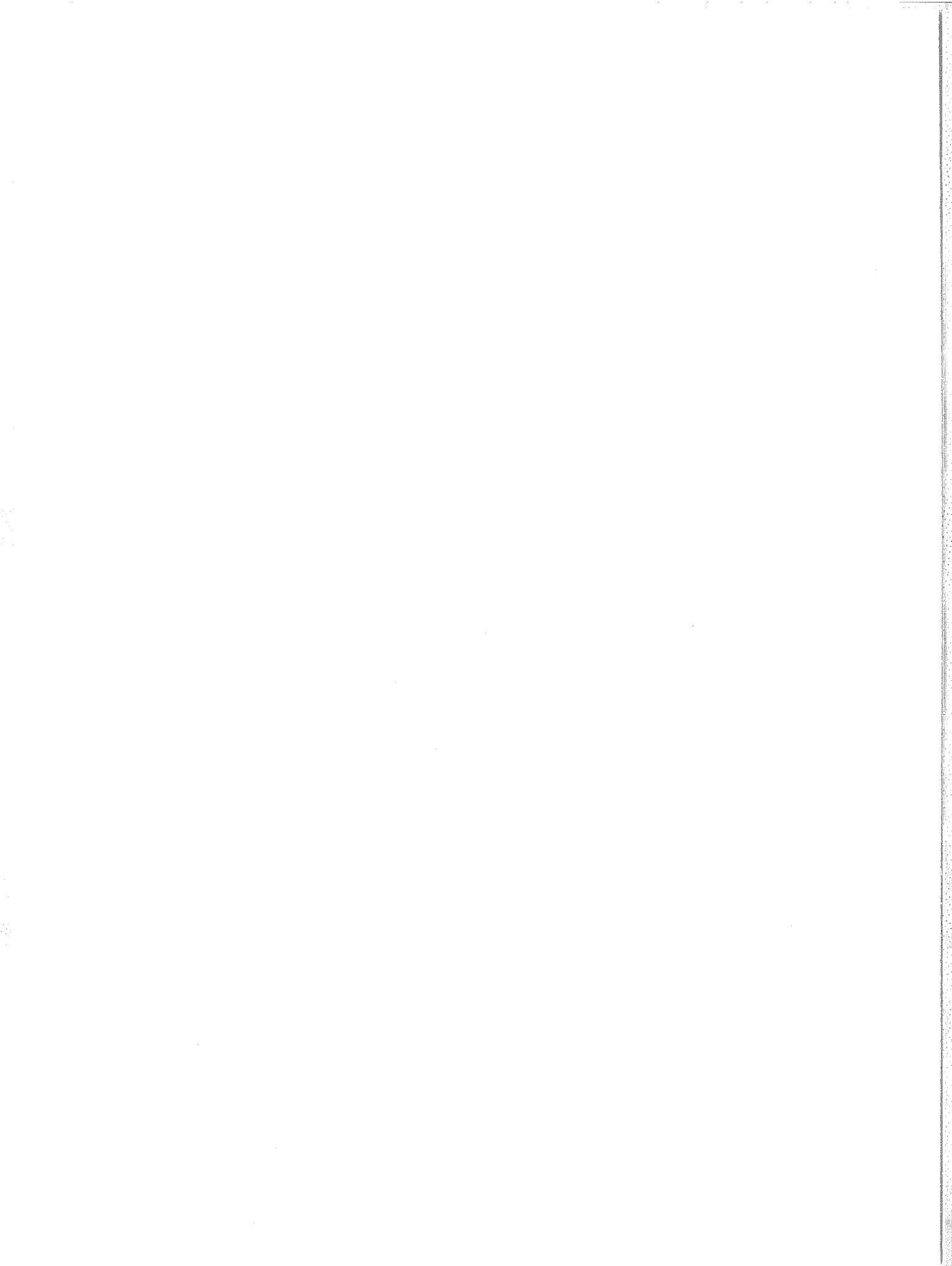
IER-FB-279

Table of Contents  
for May 1967 Data

	Page
<u>Solar Flares</u>	
Standardized Data and Individual Reports	85-118
No-Flare-Patrol Chart	119
<u>Solar X-ray Radiation</u>	
NRL Chart of X-ray Flux	121-122
McMath-Hulbert -- OSO-III	123-125

For explanations of the data contained herein see "Descriptive Text" published in February 1967.





# SOLAR FLARES

Original Reports and Statistical Summaries

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IMPOR- TANCE	OBS.		MEASUREMENTS					REMARKS
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MC MATH PLAGE REGION	CMP DAY			COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hg	MAX. INT. %	
					LAT.	MER. DIST.													
	1967 MAY																		
GRP 5438	01	0119	0143	0123	S21	E34	.603	8791	3.6	24	-N								
					S22	E34	.608	8791	3.6	38	-N	C					6 6 6		
					S21	E34	.603	8791	3.6	12	-F	C							
					S20	E33	.585	8791	3.5	27	-N	C	0120	1.03	1.30				
					S20	E33	.585	8791	3.5	41	-B	3	C	0123	1.29	1.60			
					S20	E37	.634	8791	3.8	10	1F	C	0125	2.46	3.20	54	T		
					S20	E34	.597	8791	3.6	15D	-N	2	C	0125	.72	.90			
GRP 5439	01	0241	0249	0243	N16	E80	.989	8798	7.1	8	-N						1 1 1		
					N16	E80	.989	8798	7.1	8	-N	2	C	0243	.21				
GRP 5440	01	0247	0306	0252	N27	W38	.745	8785	28.3	19	-F						3 3 3		
					N27	W39	.754	8785	28.2	24	-N	3	C	0248	.52	.80		E	
					N26	W36	.721	8785	28.4	19	-F	2	C	0254	.72	1.04		F	
					N27	W39	.754	8785	28.2	9D	1F	P	0255	3.23	4.90	57	C		
GRP 5441	01	0316	0355	0323	S22	E32	.584	8791	3.5	39	-N						5 5 5		
					S22	E34	.608	8791	3.7	25	1F	2	C	0320	3.80	4.70	64	T	
					S20	E31	.560	8791	3.5	39	-B	2	C	0321	1.03	1.26			
					S21	E32	.578	8791	3.5	64	1B	3	C	0321	1.70	2.10			
					S25	E31	.592	8791	3.5	21	-N						200	EIJ	
					S22	E34	.608	8791	3.7	36D	-N	P		.70	.90				
GRP 5442	01	0517	0555	0526	S22	E31	.572	8791	3.5	38	1N						5 5 5		
					S22	E34	.608	8791	3.8	36D	-N	P		2.30	1.13				
					S23	E32	.590	8791	3.6	23	1N	2	C	0531	2.64	3.20	1.70		
					S23	E32	.590	8791	3.6	23	1N	2	C	0531	2.64	3.20	1.70		
					S20	E30	.548	8791	3.5	25	-B	2	C	0524	1.24	1.48		W	
					S23	E30	.567	8791	3.5	27D	2F	P	0521	5.13	6.30	73	CT		
					S24	E30	.574	8791	3.5	71D	1F	C	0534	1.55	2.00	60	DI		
GRP 5443	01	0740	0830	0752	N20	E30	.617	8796	3.6	50	1N						1 1 1		
					N20	E30	.617	8796	3.6	50	1N	C	0752	3.32	3.90				
GRP 5444	01	0746	0816	0758	S21	E30	.554	8791	3.6	30	1N						7 7 5		
					S20	E30	.548	8791	3.6	19	1N	C	0752	2.54	3.00		FT		
					S21	E32	.578	8791	3.7	45D	1N	C	0800	2.48			O		
					S20	E30	.548	8791	3.6	39D	1N	1	C		2.10				
					S21	E29	.542	8791	3.5	19D	1F	C	0755	1.55	2.00	50	DI		
					S21	E31	.566	8791	3.7	28	-N	C		.90	1.10	200	IJ		
					S22	E30	.560	8791	3.6	18D	1N	V	0757			2.60	CJ		
					S23	E30	.567	8791	3.6	20D	2F	P	0807	5.69	6.90	61	CT		
GRP 5445	01	0757	0812	0759	S23	E35	.625	8791	4.0	15	-F						2 2 2		
					S24	E41	.697	8791	4.4	12	-F	C	0759	.46	.60				
					S22	E29	.549	8791	3.5	17D	-F	2	C		.52	.62			
GRP 5446	01	0826	0840	0831	S21	W40	.673	8788	28.4	14	-N						1 1 1		
					S21	W40	.673	8788	28.4	14	-N	C	0831	1.37	1.90				
					S21	E34	.603	8791	3.9	17	-F						3 3 3		
					S21	E35	.615	8791	4.0	20	-F	C	0835	.50	.90				
					S22	E35	.620	8791	4.0	15U	-N	C		.40	.50	200	I		
					S20	E31	.560	8791	3.7	11D	-F	1	C	0840	.41	.49			
GRP 5448	01	0834	0849	0837	N19	E35	.663	8795	4.0	15	-F						1 1 1		
					N19	E35	.663	8795	4.0	15	-F	C	0837	1.10	1.40				
GRP 5449	01	1024	1053	1028	N27	W44	.795	8785	28.1	29	1N						2 2 2		
					N27	W41	.770	8785	28.4	16D	1N	2	C	1029	1.40	2.20	189	E	
					N27	W47	.820	8785	27.9	41	1N	C	1026	1.79	3.10		F		
GRP 5450	01	1101	1130	1107	S20	E27	.510	8791	3.5	29	1N						2 2 2		
					S20	E28	.523	8791	3.6	30D	-N	3	C	1107	2.67	1.40	164	C	
					S20	E25	.485	8791	3.3	27	1F	V		1.20	1.40				
GRP 5451	01	1138	1204	1146	S25	W43	.722	8788	28.3	26	-F						1 1 1		
					S25	W43	.722	8788	28.3	26	-F	C	1146	.27	.40		C		
GRP 5452	01	1320	1440	1340	N17	E02	.363	8796	1.7	80	1N						2 2 1		
					N20	E00	.410	8796	1.6	80	1N								
					N13	E03	.300	8796	1.8	29	-F	C	1340	.93	.91	1.70			
GRP 5453	01	1320	1440	1340	S15	W42	.678	8784	28.4	80	1N						1 1 0		
					S15	W42	.678	8784	28.4	80	1N	V	1340			1.70			
GRP 5454	01	1343	1423	1347	S19	E28	.516	8791	3.7	40	1N						6 6 3		
					S13	E27	.471	8791	3.6	80	2N	S	1340	2.09		1.80			
					S20	E28	.523	8791	3.7	66	-N	C		1.50	1.55				
					S20	E30	.548	8791	3.8	30D	-N	1	C	1345	.50	.52		E	
					S20	E26	.498	8791	3.5	24D	1N	2	C	1348	3.00	3.50	194	CJ	
					S19	E29	.529	8791	3.7	19D	1N	V	1350			2.40			
					S20	E27	.510	8791	3.6	20D	1N	S	1350	1.76	2.05				
GRP 5455	01	1352	1407	1356	N17	E76	.978	8798	7.3	15	1N						2 2 2		
					N14	E77	.980	8798	7.3	26D	1N	C	1351	1.20	5.72				
					N20	E75	.976	8798	7.2	3	-N	C		.28	.67				
GRP 5456	01	1355	1407	1357	S18	W34	.588	8788	29.0	12	-F						2 2 1		
					S15	W29	.508	8788	29.4	8	-F	C	1355	1.00	.18		CH		
					S21	W38	.650	8788	28.7	13D	-F	2	C	1358	1.00	1.30			
GRP 5457	01	1611	1624	1613	N14	W05	.323	8796	1.3	13	-F						1 1 1		
					N14	W05	.323	8796	1.3	13	-F	C		.37	.36				

For "Remarks" symbols see p 12 of February 1967 Descriptive Text.

SOLAR FLARES  
MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION — MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS					REMARKS
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MG MATH PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %	
					LAT.	MER. DIST.												
GRP 5458	01	1613	1635	1616	N12	E72	.958	8798	7.1	22	1F							1 1 1
LOCK	01	1613	1635	1616	N12	E72	.958	8798	7.1	22	1F	C	1623	1.00	2.70		10	1 1 1
GRP 5459	01	1613	1635	1623	N12	E72	.958	8798	7.1	22	1F	C	1623	1.00	2.70		10	1 1 1
LOCK	01	1613	1635	1623	N12	E72	.958	8798	7.1	22	1F	C	1623	1.00	2.70		10	1 1 1
GRP 5460	01	1630	1645	1635	N28	W46	.816	8785	28.2	15	-N			.63				3 3 3
LOCK	01	1625	1652	1634	N29	W47	.829	8785	28.2	27	-N	C	1634	1.10	2.00		20	3 3 3
HUAN	01	1632	1640		N27	W47	.820	8785	28.2	8	-N	1	1634	.45	.62			E
ATHN	01	1634	1642	1636	N28	W45	.809	8785	28.3	8	-N	1	1632	.33	.60	1.60		E
GRP 5461	01	1800	1830	1810	S18	W48	.754	8788	28.2	30	-F			.60				1 1 1
LOCK	01	1800	1830	1810	S18	W48	.754	8788	28.1	30	-F	C	1810	.60	1.00		10	1 1 1
GRP 5462	01	1852	1908	1857	N15	W08	.857	8796	1.2	16	-N			1.15				2 2 2
LOCK	01	1851	1907	1856	N15	W08	.354	8796	1.2	16	-F	C	1856	.80	1.40		10	2 2 2
SACP	01	1852	1909	1858	N14	W07	.333	8796	1.3	17	-N	C		1.50	1.47			H
GRP 5463	01	2206	2220	2211	N16	E71	.956	8798	7.2	14	-F			.60				1 1 1
LOCK	01	2206	2220	2211	N16	E71	.956	8798	7.2	14	-F	C	2211	.60	1.60		10	1 1 1
GRP 5464	02	0103	0130	0110	S26	E55	.838	8794	6.2	27	-F			.40				1 1 1
LOCK	02	0103	0130	0110	S26	E55	.838	8794	6.2	27	-F	C	0110	.40	.70		10	1 1 1
GRP 5465	02	0144	0149	0145	N21	E79	.988	8798	8.0	5	-N			.30				1 1 1
CRON	02	0144	0149	0145	N21	E79	.988	8798	8.0	5	-N	C		.30	.90		200	1 1 1
GRP 5466	02	0712	0720	0714	N29	W55	.885	8785	28.2	8	-N			.39				V
UCCL	02	0712	0721	0715	N30	W60	.918	8785	27.8	9	-N	C		.39	.90			D
ATHN	02	0713E	0719	0713	N28	W50	.846	8785	28.6	60	-N	2	0713	.39	.70	1.50		V
GRP 5467	02	0746	0800	0746	S20	E18	.402	8791	3.7	14	-N			.31				1 1 1
IKOM	02	0746	0800D		S20	E18	.402	8791	3.7	14D	-N	V	0746	.31	.30			D
GRP 5468	02	0806	0823	0811	N27	W55	.879	8785	28.2	17	-B			.85				4 4 4
BUCA	02	0655	0823		N27	W60	.911	8785	27.8	88	1N	C	0811	1.76	3.80			
MANI	02	0755	0810D	0757	N26	W52	.854	8785	28.4	15D	-B	2	0757	.41	.72			
ATHN	02	0805	0816D	0808	N28	W50	.846	8785	28.6	110	-B	2	0808	.83	1.50	2.00		200
CRON	02	0806	0823	0813	N26	W58	.896	8785	28.0	17	-B	C		.40	.80			EJ
GRP 5469	02	0835	0855	0840	N28	W57	.895	8785	28.1	20	-N			.38				200
CRON	02	0834U	0845	0839	N28	W57	.895	8785	28.1	11U	-N	C		.20	.40		200	2 2 2
BUCA	02	0835	0905		N28	W57	.895	8785	28.1	30	-F	C	0840	.55	1.10			
GRP 5470	02	0840	1000	0930	S17	E17	.360	8791	3.6	80	2B	S						2 1 0
SALO	02	0840	1000		S13	E14	.283	8791	3.4	80	2B	S						
UCCL	02	0912E	0916D	0913	S20	E20	.425	8791	3.9	40	-N	P	0930			1.80		D
GRP 5471	02	0840	1000	0930	S12	W38	.621	8788	29.5	80	1N	S						1 1 0
SALO	02	0840	1000		S12	W38	.621	8788	29.5	80	1N	S	0930			1.60		
GRP 5472	02	1038	1042	1039	S22	E14	.382	8791	3.5	4	-N			.25				1 1 1
ATHN	02	1038	1042	1039	S22	E14	.382	8791	3.5	4	-N	2	1039	.25	.25	1.70		
GRP 5473	02	1040	1050	1041	N28	W52	.861	8785	28.5	10	-B			.66				1 1 1
ATHN	02	1040	1050	1041	N28	W52	.861	8785	28.5	10	-B	2	1041	.66	1.20	2.00		
GRP 5474	02	1043	1053	1044	N26	W60	.909	8785	27.9	10	-N			.50				1 1 1
ATHN	02	1043	1053	1044	N26	W60	.909	8785	27.9	10	-N	2	1044	.50	1.10	1.50		
GRP 5475	02	1155	1201	1156	S22	W54	.821	8788	28.4	6	-N			.50				1 1 1
ATHN	02	1155	1201	1156	S22	W54	.821	8788	28.4	6	-N	2	1156	.50	.60	1.90		
GRP 5476	02	1208	1215	1209	S20	E18	.402	8791	3.9	7	-N			.50				1 1 1
ATHN	02	1208	1215	1209	S20	E18	.402	8791	3.9	7	-N	2	1209	.50	.60	1.60		
GRP 5477	02	1245	1305	1247	S22	W54	.821	8788	28.5	20	-N			.50				1 1 1
ATHN	02	1245	1305	1247	S22	W54	.821	8788	28.5	20	-N	2	1247	.50	.60	1.80		
GRP 5478	02	1324	1338	1326	S21	E14	.370	8791	3.6	14	-N			.91				2 2 2
SACP	02	1324	1344	1326	S22	E13	.373	8791	3.5	20	-N	C		.65	.65			
ATHN	02	1325E	1332	1326	S20	E14	.358	8791	3.6	7D	-N	2	1326	1.16	1.20	1.80		
GRP 5479	02	1418	1444	1426	N18	E61	.899	8798	7.2	26	1N			1.62				2 2 2
SACP	02	1418	1444	1425	N17	E61	.897	8798	7.2	26	1N	C		1.41	2.27			
ATHN	02	1422E	1448D		N16	E60	.888	8798	7.1	26D	1N	1	1426	1.82	4.00	1.40		
ATHN	02	1425	1444	1426	N21	E61	.905	8798	7.2	19	-N	1	1426	.50	1.00	1.40		
GRP 5480	02	1803	1831	1810	N27	W62	.923	8785	28.1	28	-F			.49				3 3 3
LOCK	02	1800	1837	1810	N26	W61	.915	8785	28.2	37	-N	C	1810	.70	1.50		20	
HOUA	02	1806	1824	1809	N27	W62	.923	8785	28.1	18	-F	C		.52	1.10		100	
HUAN	02	1807E	1811D		N28	W62	.925	8785	28.1	40	-F	1	1810	.25				D
GRP 5481	02	1926	2005	1932	S20	W42	.693	8788	29.7	39	-F			.40				3 3 3
LOCK	02	1924	2005	1930	S20	W43	.704	8788	29.6	41	-F	C	1930	.60	.90		10	J
HALE	02	1928	2004D	1933	S20	W41	.682	8788	29.7	36D	-N	2	1933	.36	.50			
HUAN	02	1931E	1936D		S20	W43	.704	8788	29.6	5D	-F	1	1932	.25	.29			D
GRP 5482	02	1939	2012	1949	S21	E10	.334	8791	3.6	33	-B			.70				4 4 4
LOCK	02	1937	2010	1950	S20	E10	.320	8791	3.6	33	-N	C	1950	.80	.90		20	J
HALE	02	1941	2004D	1950	S21	E09	.326	8791	3.5	23D	-B	3	1950	.62	.70			E
MUMA	02	1944E	2020		S21	E09	.326	8791	3.5	36D	-B	C	1944	.62	.70			E
HUAN	02	1947E	2007		S21	E10	.334	8791	3.6	20D	-N	1	1950	.77	.77			E
GRP 5483	02	2113	2115	2114	S18	W45	.721	8788	29.5	2	-F			.52				1 1 1
CULG	02	2113	2115	2114	S18	W45	.721	8788	29.5	2	-F	C		.52	.70			
GRP 5484	02	2151	2317	2245	S19	W46	.735	8788	29.5	86	-N			.71				2 2 2
CULG	02	2151	2323	2249	S20	W47	.748	8788	29.4	92	-N	C		.62	.90			
LOCK	02	2215	2310	2240	S18	W45	.721	8788	29.6	55	-F	C	2240	.80	1.20		10	JK

SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IM-POR-TANCE	OBS.		MEASUREMENTS					REMARKS
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL	MCMATH			CMP	COND.	TYPE	TIME	MEAS. AREA	CORR. AREA	MAX. WIDTH	
1967																		
MAY																		
					LAT.	MER. DIST.	DISTANCE	PLAGE REGION	DAY			UT	Sq. Deg.	Sq. Deg.	H $\alpha$	%		
GRP 5485	02	2317	2343	2322	S20	W44	.715	8788	29.7	26	-N		.64				5 5 5	
CULG	02	2316	2344	2323	S21	W46	.740	8788	29.5	28	-N	C	.52	.75				
HOUS	02	2317	2337	2321	S19	W45	.724	8788	29.6	20	-F	C	.62	.90		100		
LOCK	02	2317	2345	2323	S20	W46	.737	8788	29.5	28	-N	C	2323	1.00	1.50	20		
HALE	02	2319	2345	2323	S20	W43	.704	8788	29.7	26	-N	2 C	2323	.67	1.00			
IKOM	02	2322E	2333D		S19	W38	.642	8788	30.1	110	-F	V	2322	.41	.60		E	
GRP 5486	03	0038	0051	0041	S22	E08	.336	8791	3.6	13	-F		.54				D	
LOCK	03	0035	0049	0040	S22	E08	.336	8791	3.6	14	-F	C	0040	.50	.60	10	2 2 2	
HALE	03	0040	0052	0042	S22	E08	.336	8791	3.6	12	-F	2 C	0042	.57	.60			
GRP 5487	03	0156	0209	0200	S22	E07	.330	8791	3.6	13	-N		.69				3 3 3	
CULG	03	0054	0209	0204	S23	E06	.340	8791	3.5	75	-N	C	.41	.42			H	
IKOM	03	0156E	0206D		S22	E08	.336	8791	3.7	10D	-F	V	0156	1.03	1.10	80	D	
HALE	03	0156	0208	0159	S22	E07	.330	8791	3.6	12	-N	2 C	0159	.62	.70			
GRP 5488	03	0242	0248	0243	N17	E55	.850	8798	7.2	6	-N		.52				1 1 1	
MITK	03	0242	0248	0243	N17	E55	.850	8798	7.2	6	-N	C	0243	.52	1.00		E	
GRP 5489	03	0336	0350	0340	S22	E07	.330	8791	3.7	14	-F		.52				1 1 1	
HALE	03	0336	0350	0340	S22	E07	.330	8791	3.7	14	-F	2 C	0340	.52	.52			
GRP 5490	03	0440	0452	0442	S22	E05	.320	8791	3.6	12	-N		.50				1 1 1	
ATHN	03	0440	0452	0442	S22	E05	.320	8791	3.6	12	-N	2	0442	.50	.50	1.70		
GRP 5491	03	0517	0532	0522	S22	E07	.330	8791	3.7	15	-N		.32				2 2 2	
ATHN	03	0517	0532	0519	S22	E05	.320	8791	3.6	15	-B	2	0517	.33	.30	2.00		
IKOM	03	0523E	0530D		S22	E08	.336	8791	3.8	7D	-N	V	0524	.31	.30		D	
GRP 5492	03	0602	0613	0605	S22	E06	.324	8791	3.7	11	-N		.61				2 2 2	
ATHN	03	0602	0613	0605	S22	E04	.316	8791	3.6	11	-N	2	0605	.50	.50	1.80		
IKOM	03	0605E	0607D		S22	E08	.336	8791	3.9	2D	-N	V	0605	.72	.80	1.10	100	
GRP 5493	03	0938	1012	0949	S21	E04	.300	8791	3.7	34	1N	2	0948	1.19	2.30	170	4 4 3	
CAPS	03	0935E	0959D		S22	E04	.316	8791	3.7	24D	1N	2	0945	.66	.70	1.60		
ATHN	03	0938	0955	0945	S22	E03	.313	8791	3.6	17	-N	2	0945	.66	.70	1.60		
KHAR	03	0940	1055D		S19	E04	.267	8791	3.7	75D	1F	V	0953			2.60		
MANI	03	0949E	1000D	0951	S21	E05	.304	8791	3.8	11D	-F	2	0951	.72	.75		CEHK	
ATHN	03	1009	1022	1011	S22	E03	.313	8791	3.6	13	-N	2	1011	.83	.90	1.60		
ATHN	03	1035	1050	1040	S21	E01	.293	8791	3.5	15	-N	2	1040	.66	.70	1.60		
GRP 5494	03	1140	1147	1143	S22	E03	.313	8791	3.7	7	-F		.27				2 2 2	
HUAN	03	1139	1146	1142	S22	E02	.311	8791	3.6	7	-F	2 C	1142	.21	.21		D	
ATHN	03	1141	1147	1144	S22	E03	.313	8791	3.7	6	-F	2	1144	.33	.30	1.30		
GRP 5495	03	1140	1240	1200	N18	W26	.556	8796	1.5	60	1N						1 1 0	
SALO	03	1140	1240	1200	N18	W26	.556	8796	1.5	60	1N	S	1200			1.40		
GRP 5496	03	1140	1240	1200	N25	E56	.879	8798	7.7	60	3B						1 1 0	
SALO	03	1140	1240	1200	N25	E56	.879	8798	7.7	60	3B		1200			1.80		
GRP 5497	03	1319	1334	1324	S22	E02	.311	8791	3.7	15	-N		.35				2 2 2	
SACP	03	1319	1336	1321	S21	E02	.294	8791	3.7	17	-N		.19	.18				
ATHN	03	1327E	1332		S22	E01	.310	8791	3.6	5D	-N	1	1327	.50	.50	1.40		
GRP 5498	03	1340	1349	1343	S22	E02	.311	8791	3.7	9	-N		.73				4 4 4	
UCCL	03	1340	1346	1341	S20	E03	.280	8791	3.8	6	-N	C	1341	1.55	1.70		E	
ATHN	03	1340	1349	1343	S22	E01	.310	8791	3.6	9	-B	1	1343	.66	.70	2.00		
SACP	03	1340	1349	1344	S22	E03	.313	8791	3.8	9	-N	C		.37	.36			
HUAN	03	1341	1353	1344	S22	E01	.310	8791	3.6	12	-N	2 C	1344	.35	.35		E	
GRP 5499	03	1400	1510	1420	N24	E29	.640	8798	5.8	70	1N		.66				2 1 1	
SALO	03	1400	1510	1420	N26	E30	.666	8798	5.8	70	1N	S	1420			1.30		
ATHN	03	1437	1443	1438	N21	E27	.593	8798	5.6	6	-N	1	1438	.66	.80	1.60		
GRP 5500	03	1403	1448	1409	S17	W01	.226	8791	3.5	45	1N		.66				2 2 1	
SALO	03	1400	1520	1430	S12	W02	.144	8791	3.4	80	1N	S	1420			1.50		
ATHN	03	1406	1415	1409	S22	E00	.309	8791	3.6	9	-F	1	1409	.66	.70	1.30		
GRP 5501	03	1411	1432	1414	N33	W90	1.001	8785	26.8	21	1F		.83				1 1 1	
ATHN	03	1411	1432	1414	N33	W90	1.001	8785	26.8	21	1F	1	1414	.83				
GRP 5502	03	1436	1453	1442	S21	E01	.293	8791	3.7	17	-N		.60				5 5 4	
HUAN	03	1435	1454	1442	S22	E00	.309	8791	3.6	19	-N	2	C	1442	.41	.41		D
MCMA	03	1435	1455	1442	S22	E00	.309	8791	3.6	20	-N	C	1442	.77	.70		E	
SACP	03	1437	1454	1442	S21	E02	.294	8791	3.8	17	-N	C		.56	.55			
ATHN	03	1438	1449	1442	S22	E00	.309	8791	3.6	11	-B	1	1442	.66	.70	2.00		
UCCL	03	1440E	1445D		S20	E03	.280	8791	3.8	5D	-N	P					E	
GRP 5503	03	1537	1926	1645	N25	E51	.842	8798	7.5	229	2B		5.53				7 5 5	
SACP	03	1535	1934U	1642	N24	E47	.805	8798	7.2	239U	2N		9.49	13.63				
HUAN	03	1537	1830		N20	E52	.833	8798	7.6	173	2B	1	C	1636	4.54	6.25		
LOCK	03	1540E	1918	1648	N24	E50	.830	8798	7.4	218D	2B	C	1648	6.50	11.70	30	KL	
ARCE	03	1618	1728D	1650	N26	E52	.853	8798	7.6	70D	2B	C	1650	4.47	8.70			
ATHN	03	1647E	1700D		N31	E52	.871	8798	7.6	13D	1B	1	1647	2.64	4.90			
LOCA	03	1703E	1715	1703	N24	E53	.854	8798	7.7	12D	3N	S	1703	7.15	13.50			
HALE	03	1723E	1835U	1723U	N26	E50	.838	8798	7.5	72U	2B	3	P	1723	5.26	9.70		IF
GRP 5504	03	1538	1641	1552	N22	E50	.823	8798	7.4	63	2B		4.88				7 7 6	
SALO	03	1520	1620	1550	N23	E55	.866	8798	7.8	60	2B	S	1530			1.70		
SACP	03	1535	1934U	1551	N24	E47	.805	8798	7.2	239U	2N	C		8.31	11.06			
MCMA	03	1536	1906D	1549	N22	E52	.839	8798	7.6	210D	2B	C	1549	3.09	5.40		FIL	
HUAN	03	1537	1830		N20	E52	.833	8798	7.6	173	2B	1	C	1555	2.63	4.22		HIW
LOCK	03	1540E	1918	1600	N24	E50	.830	8798	7.4	218D	2B	C	1648	6.50	11.70	30	KL	
ARCE	03	1542	1622	1550	N19	E47	.784	8798	7.2	40	2B	C	1550	4.15	6.70		CFH	
ATHN	03	1550E	1700D		N19	E50	.812	8798	7.4	70D	2B	1	1551	4.62	8.40	2.00		

# SOLAR FLARES

## MAY 1967

OBSERVATORY	OBSERVED UT			LOCATION					DURATION MIN.	IM-POR-TANCE	OBS. COND. TYPE	MEASUREMENTS					REMARKS	
	DATE	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH FLAGE REGION				CMP DAY	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha		MAX. INT. %
1967 MAY																		
GRP 5505	03	1542	1707	1550	N17	W50	.805	8796	29.9	85	1B						1 1 1	
ARCE	03	1542	1707	1550	N17	W50	.805	8796	29.9	85	1B	C	1550	2.55	4.30		CW	
GRP 5506	03	1542	1707	1618	N17	W50	.805	8796	29.9	85	2B			5.06			1 1 1	
ARCE	03	1542	1707		N17	W50	.805	8796	29.9	85	2B		1618	5.06	8.60			
GRP 5507	03	1616	1637	1619	S21	E01	.293	8791	3.8	21	-N			.86			4 4 4	
LOCK	03	1614	1645	1620	S16	E01	.209	8791	3.8	31	-N	C	1620	1.10	1.20	10		
SACP	03	1616	1634U	1619	S22	E02	.311	8791	3.8	18U	-N	C		1.21	1.19			
HUAN	03	1616	1635	1620	S22	W01	.310	8791	3.6	19	-N	2	C	1620	.50	.49		D
MCMA	03	1617	1632	1618	S22	E00	.309	8791	3.7	15	-N	C	1618	.62	.70		EK	
GRP 5508	03	1624	1634	1630	S22	W01	.310	8791	3.6	10	-N			.83			2 2 1	
MCMA	03	1617	1632	1629	S22	E00	.309	8791	3.7	15	-N							
ARCE	03	1630	1636	1631	S21	W02	.294	8791	3.5	6	-N	C	1631	.83	.90			
GRP 5509	03	1657	1728	1710	S17	W55	.823	8788	29.6	31	-F			.30			1 1 1	
LOCK	03	1657	1728	1710	S17	W55	.823	8788	29.6	31	-F	C	1710	.30	.50	10		
GRP 5510	03	1708	1728	1714	S21	W02	.294	8791	3.6	20	-F			.96			3 3 2	
SACP	03	1707U	1726U	1710	S20	W01	.276	8791	3.6	19U	-F	2	C		1.11	1.09		
HUAN	03	1708	1722		S22	W02	.311	8791	3.6	14	-N	C	1715	.21	.21		D	
LOCK	03	1708	1735	1716	S20	W02	.278	8791	3.6	27	-N	C	1716	.80	.90	10		
GRP 5511	03	1800	1813	1805	S23	W57	.850	8788	29.5	13	-F			.70			1 1 1	
LOCK	03	1800	1813	1805	S23	W57	.850	8788	29.5	13	-F	C	1805	.70	1.30	10		
GRP 5512	03	2055	2115	2101	N10	W32	.571	8796	1.5	20	-F			.34			2 2 2	
SACP	03	2054	2109	2100	N08	W32	.561	8796	1.5	15	-F	C		.37	.39			
LOCK	03	2056	2120	2102	N12	W31	.570	8796	1.5	24	-F	C	2102	.30	.40	10		
GRP 5513	03	2115	2124	2118	S24	W63	.897	8788	29.2	9	-F			.20			1 1 1	
LOCK	03	2115	2124	2118	S24	W63	.897	8788	29.2	9	-F	C	2118	.20	.40	10		
GRP 5514	03	2225	2310	2230	N09	W32	.566	8796	1.5	45	-F						1 1 0	
LOCK	03	2225	2310	2230	N09	W32	.566	8796	1.5	45	-F	C						
GRP 5515	03	2225	2310	2250	N09	W32	.566	8796	1.5	45	-F			.30			1 1 1	
LOCK	03	2225	2310	2250	N09	W32	.566	8796	1.5	45	-F	C	2250	.30	.40	10		
GRP 5516	03	2303	2320	2307	S23	W61	.881	8788	29.4	17	-F			.20			1 1 1	
LOCK	03	2303	2320	2307	S23	W61	.881	8788	29.4	17	-F	C	2307	.20	.40	10		
GRP 5517	04	0036	0105	0042	S22	W62	.888	8788	29.4	29	-N			.41			2 2 2	
LOCK	04	0030	0105	0033	S23	W64	.903	8788	29.2	35	-F	C	0033	.40	.80	10		
LOCK	04	0030	0105	0038	S23	W64	.903	8788	29.2	35	-F	C	0038	.40	.80	10		
HALE	04	0042	0102D	0050	S21	W60	.872	8788	29.5	20D	-N	1	P	0050	.41	.80		
GRP 5518	04	0115	0134	0120	S27	W66	.920	8788	29.1	19	-N			.47			2 2 2	
SACP	04	0114	0132	0121	S28	W65	.915	8788	29.2	18	-N	C		.49	.81			
LOCK	04	0115	0135	0119	S25	W67	.924	8788	29.0	20	-N	C	0119	.50	1.10	20		
GRP 5519	04	0120	0307	0214	N30	E25	.662	8798	5.9	107	2N			5.13			2 2 2	
CULG	04	0113E	0254D	0216	N30	E24	.655	8798	5.9	101D	2N	P		4.02	5.46		CFS	
HALE	04	0126	0320D	0212	N33	E25	.692	8798	5.9	114D	2N	1	P	0212	4.38	6.10		CFGS
HALE	04	0303	0320D	0314	N27	E28	.657	8798	6.2	17D	1N	1	P	0314	1.86	2.40		F
GRP 5520	04	0440	0455	0440	S21	W08	.322	8791	3.6	15	-F			1.13			1 1 1	
IKOM	04	0440	0455D		S21	W08	.322	8791	3.6	15D	-F	V	0440	1.13	1.20		E	
GRP 5521	04	0555	0617	0605	S21	W08	.322	8791	3.6	22	-F			1.24			1 1 1	
IKOM	04	0555E	0617D		S21	W08	.322	8791	3.6	22D	-F	V	0605	1.24	1.30		E	
GRP 5522	04	0810	0819	0812	N15	W37	.659	8796	1.6	9	-N			.66			1 1 1	
ATHN	04	0810	0819	0812	N15	W37	.659	8796	1.6	9	-N	1		.66	.90	1.60		
GRP 5523	04	0859	0917	0901	S20	W09	.315	8791	3.7	18	-N			.71			5 5 5	
MANI	04	0857E	0918	0859	S22	W09	.344	8791	3.7	21D	-N	2		1.13	1.20			
MONT	04	0858	0915	0900	S20	W08	.307	8791	3.8	17	-F	C	0900	.50			O	
UCCL	04	0859	0907D	0902	S20	W08	.307	8791	3.8	8D	-F	P	0902	1.03	1.20		EHJ	
CRON	04	0900	0914	0904	S20	W11	.331	8791	3.5	14	-N	C		.30	.32	200		
ARCE	04	0900	0920	0900	S19	W10	.309	8791	3.6	20	-N	C	0900	.58	.60			
GRP 5524	04	1030	1140	1050	S18	W13	.326	8791	3.5	70	-F			1.20			2 1 1	
MONT	04	1030	1130	1050	S23	W12	.381	8791	3.5	60	-F	C	1050	1.20			O	
SALO	04	1115	1150		S13	W14	.285	8791	3.4	35	1N	V	1130			1.50		
GRP 5525	04	1115	1150	1130	N28	E43	.790	8798	7.7	35	1N					1.50		1 1 0
SALO	04	1115	1150		N28	E43	.790	8798	7.7	35	1N	V	1130			1.50		
GRP 5526	04	1115	1150	1130	S13	W66	.912	8788	29.5	35	1N						1 1 0	
SALO	04	1115	1150		S13	W66	.912	8788	29.5	35	1N	V	1130			1.40		
GRP 5527	04	1115	1150	1130	N20	W41	.729	8787	1.4	35	1N						1 1 0	
SALO	04	1115	1150		N20	W41	.729	8787	1.4	35	1N	V	1130			1.30		
GRP 5528	04	1208	1237	1210	N23	E18	.532	8795	5.9	29	1N			1.90			4 4 2	
SALO	04	1150	1230		N30	E18	.616	8795	5.8	40	2B	V	1200			1.60		
HUAN	04	1206	1243	1211	N22	E17	.511	8795	5.8	37	-N	2	C	1211	.80	.83		E
MONT	04	1209	1212D	1210	N21	E15	.483	8795	5.6	3D	-F	C	1210	.30			O	
CAPS	04	1211E	1227D		N20	E20	.514	8795	6.0	16D	1F	1		3.00	3.50		155	
GRP 5529	04	1400	1424	1406	S21	W11	.345	8791	3.8	24	-N			.44			2 2 2	
SACP	04	1359	1420	1406	S21	W11	.345	8791	3.8	21	-N	C		.56	.55			
HUAN	04	1400	1427	1405	S21	W10	.337	8791	3.8	27	-F	2	C	1405	.31	.31		E
GRP 5530	04	1537	1543	1538	N13	W41	.696	8796	1.6	6	-F			.31			1 1 1	
HUAN	04	1537	1543	1538	N13	W41	.696	8796	1.6	6	-F	2	C	1538	.31	.36		E

# SOLAR FLARES

MAY 1967

OBSERV- ATORY	OBSERVED UT				LOCATION					DURA- TION — MIN.	IM- POR- TANCE	OBS.		MEASUREMENTS				REMARKS	
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY			COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H $\alpha$		MAX. INT. %
					LAT.	MER. DIST.													
	1967																		
	MAY																		
GRP 5531	04	1637	1648	1642	N15	W42	.715	8796	1.5	11	-N						1 1 1		
HALE	04	1637	1648	1642	N15	W42	.715	8796	1.5	11	-N	3	C	1642	.31	.40		CDHV	
GRP 5532	04	1732	1742	1735	S25	W06	.373	8791	4.3	10	-F						1 1 1		
LOCK	04	1732	1742	1735	S25	W06	.373	8791	4.3	10	-F		C	1735	.80	.90	10		
GRP 5533	04	1813	1832	1823	S25	W16	.440	8791	3.6	19	-F						2 2 2		
LOCK	04	1813	1824D	1824U	S25	W16	.440	8791	3.6	11D	-F		C	1824	.80	.90	10		
HUAN	04	1813	1832		S24	W16	.428	8791	3.6	19	-F	2	C	1821	.31	.31		E	
GRP 5534	04	2039	2113	2043	N10	W52	.805	8796	1.0	34	-F						1 1 1		
HUAN	04	2039	2113		N10	W52	.805	8796	1.0	34	-F	1	C	2043	.25	.33		D	
GRP 5535	04	2240	2256	2250	N12	W51	.800	8796	1.1	16	-N						1 1 1		
IKOM	04	2240	2256		N12	W51	.800	8796	1.1	16	-N		V	2250	.52	.80		EO	
GRP 5536	04	2321	2334	2326	N11	W52	.807	8796	1.1	13	-F						1 1 1		
SACP	04	2321	2334	2326	N11	W52	.807	8796	1.1	13	-F		C		.75	.99			
GRP 5537	05	0001	0007	0003	N18	E82	.994	8803	11.2	6	-F						1 1 1		
SACP	05	0001	0007	0003	N18	E82	.994	8803	11.2	6	-F		C		.56				
GRP 5538	05	0240	0304	0243	S23	W21	.469	8791	3.5	24	-F						3 3 2		
MANI	05	0236	0252	0241	S23	W22	.468	8791	3.5	16	-F	2		0241	1.29	1.48			
MITK	05	0238	0312	0240	S22	W22	.470	8791	3.5	34	1F		C	0240	2.17	2.40		F	
HALE	05	0245	0307	0249	S23	W20	.458	8791	3.6	22	-N	2	C	0249	.31	.31		F	
GRP 5539	05	0245	0254	0247	N12	W43	.714	8796	1.9	9	-N						1 1 1		
MANI	05	0245	0254	0247	N12	W43	.714	8796	1.9	9	-N	2		0247	.15	.22			
GRP 5540	05	0434	0442	0436	N13	W48	.772	8796	1.6	8	-N						1 1 1		
ATHN	05	0434	0442	0436	N13	W48	.772	8796	1.6	8	-N	2		0436	.39	.60	1.90		
GRP 5541	05	0510	0521	0511	N12	W48	.769	8796	1.6	11	-N						1 1 1		
ATHN	05	0510	0521	0511	N12	W48	.769	8796	1.6	11	-N	2		0511	.33	.50	2.00		
GRP 5542	05	0649	0709	0651	N18	E24	.532	8798	7.1	20	-N						1 1 0		
ONDR	05	0649E	0709		N18	E24	.532	8798	7.1	20D	-N		V	0651			2.00	CH	
GRP 5543	05	0651	0704	0654	N18	W30	.598	8796	3.0	13	-N						1 1 1		
MANI	05	0651E	0704	0654	N18	W30	.598	8796	3.0	13D	-N	2		0654	.26	.32			
GRP 5544	05	0709	0723	0712	S18	W79	.979	8788	29.4	14	-N						3 3 2		
ATHN	05	0709	0720	0711	S16	W78	.976	8788	29.4	11	-N	2		0711	.38		1.90		
CRON	05	0709	0723	0711	S20	W80	.983	8788	29.3	14	-N		C		.40	1.20	200		
ONDR	05	0711E	0725		S19	W80	.983	8788	29.3	14D	-F		V	0713			1.60	CDH	
GRP 5545	05	0712	0722	0713	S24	W68	.930	8791	30.2	10	-N						1 1 1		
MANI	05	0712E	0722	0713	S24	W68	.930	8791	30.2	10D	-N	2		0713	.31	.65			
	05	1010	1015	NO FLARE PATROL															
GRP 5546	05	1110	1150	1120	N26	E30	.664	8798	7.7	40	1N						1 1 0		
SALO	05	1110	1150		N26	E30	.664	8798	7.7	40	1N		V	1120			1.60		
GRP 5547	05	1110	1150	1120	S15	W80	.983	8788	29.5	40	3N						1 1 0		
SALO	05	1110	1150		S15	W80	.983	8788	29.5	40	3N		V	1120			1.40		
GRP 5548	05	1110	1150	1120	S17	E02	.231	8791	5.6	40	1N						1 1 0		
SALO	05	1110	1150		S17	E02	.231	8791	5.6	40	1N		V	1120			1.50		
GRP 5549	05	1110	1150	1120	S13	W24	.430	8791	3.7	40	1N						1 1 0		
SALO	05	1110	1150		S13	W24	.430	8791	3.7	40	1N		V	1120			1.40		
GRP 5550	05	1110	1150	1120	N14	W60	.884	8796	1.0	40	1N						1 1 0		
SALO	05	1110	1150		N14	W60	.884	8796	1.0	40	1N		V	1120			1.40		
GRP 5551	05	1316	1326	1318	S20	W26	.501	8791	3.6	10	-F						1 1 1		
HUAN	05	1316	1326	1318	S20	W26	.501	8791	3.6	10	-F	2	C	1318	.21	.21		D	
GRP 5552	05	1408	1410	1410	S22	W28	.540	8791	3.5	2	-F						1 1 1		
HUAN	05	1408	1410D		S22	W28	.540	8791	3.5	20	-F	2	P	1410	.25	.26		D	
	05	1410	1420	NO FLARE PATROL															
	05	1540	1600	NO FLARE PATROL															
GRP 5553	05	2343	2352	2343	N13	W58	.866	8796	1.6	9	-N						1 1 1		
HALE	05	2343	2352	2343	N13	W58	.866	8796	1.6	9	-N	1	C	2343	.15	.30		F	
GRP 5554	06	0108	0115		N20	E20	.511	8798	7.5	7	-N						1 1 1		
MANI	06	0108E	0115		N20	E20	.511	8798	7.5	7D	-N	2			1.44	1.69		F	
GRP 5555	06	0432	0538	0437	S21	W35	.618	8791	3.6	66	3N						6 3 3		
CRON	06	0409	0459	0414	S22	W37	.646	8791	3.4	50	2B		C		5.90	7.70	300	E	
HALE	06	0426	0432D		S20	W34	.601	8791	3.6	6D	-B	1	P	0432	.21	.30			
TACH	06	0433	0545D	0437	S19	W33	.583	8791	3.7	72D	3F		V	0437	12.77	15.80	3.00	123	
SIBE	06	0437	0545D	0441	S20	W35	.613	8791	3.6	68D	3N		C	0441	11.39	14.30		80	
KODA	06	0450	0524	0503	S21	W34	.606	8791	3.7	34	2N		P	0458	4.51	5.70	2.12		
ATHN	06	0525E	0529D		S23	W35	.629	8791	3.6	4D	1B	1		0526	3.63	4.50	2.00		
GRP 5556	06	0657	0703	0701	N14	W61	.891	8796	1.7	6	-F						1 1 1		
CAPS	06	0657E	0703D		N14	W61	.891	8796	1.7	6D	-F	2		0701	.40		159	J	
GRP 5557	06	1309	1310	1310	N14	W67	.932	8796	1.5	1	-F						1 1 1		
HUAN	06	1309E	1310D		N14	W67	.932	8796	1.5	1D	-F	1	P	1310	.25			D	
GRP 5558	06	1400	1450	1420	N18	W67	.936	8796	1.6	50	2N						1 1 0		
SALO	06	1400	1450		N18	W67	.936	8796	1.6	50	2N		S	1420		1.40			
GRP 5559	06	1400	1450	1420	S14	W58	.849	8791	2.2	50	1N						1 1 0		
SALO	06	1400	1450		S14	W58	.849	8791	2.2	50	1N		S	1420		1.30			
GRP 5560	06	1546	1558	1548	S23	W35	.629	8791	4.0	12	-F						1 1 1		
LOCK	06	1546	1558	1548	S23	W35	.629	8791	4.0	12	-F		C	1548	.10	.10	10		
GRP 5561	06	1600	1608	1603	S18	W63	.893	8791	1.9	8	-F						1 1 1		
HUAN	06	1600	1608	1603	S18	W63	.893	8791	1.9	8	-F	2	C	1603	.25	.25		D	

### SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IMPOR-TANCE	OBS. COND. TYPE	MEASUREMENTS					REMARKS	
	DATE	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION				CMP DAY	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα		MAX. INT. %
GRP	5562	06 1618	1634	1623	N19	W71	.958	8796	1.4	16	-F							2 2 2
HUAN	06 1618	1632	1623	N19	W70	.953	8796	1.4	14	-F	2	C	1623	.31				D
HOUS	06 1621E	1635U	1622	N19	W72	.963	8796	1.3	14U	-F		C		.31	.70		100	E
GRP	5563	06 1730	1805	1756	N15	W69	.944	8796	1.6	35	-F			.40				1 1 1
LOCK	06 1730	1805	1756	N15	W69	.944	8796	1.6	35	-F		C	1756	.40	1.00		10	
GRP	5564	06 1855	1918	1856	N17	W71	.956	8796	1.5	23	-N			.41				2 1 1
HOUS	06 1855E	1916D	1856U	N19	W72	.963	8796	1.4	21D	-N		C		.41	1.10		200	I
LOCK	06 1908	1920	1912	N15	W69	.944	8796	1.6	12	-F		C	1912	.30	.80		10	
GRP	5565	06 1908	1938	1915	N22	E08	.451	8798	7.4	30	-F			.30				1 1 1
LOCK	06 1908	1938	1915	N22	E08	.451	8798	7.4	30	-F		C	1915	.30	.32		10	
GRP	5566	06 2035	2045	2036	N14	W72	.959	8796	1.5	10	-N			.38				4 4 4
HOUS	06 2035E	2039D	2036U	N14	W74	.968	8796	1.3	4D	-N		C		.41	1.10		200	
HALE	06 2035	2045	2036	N15	W72	.960	8796	1.5	10	-N	1	C	2036	.21				
SACP	06 2035	2046	2036	N13	W71	.953	8796	1.5	11	-N		C		.57	1.12			
MCPA	06 2036	2045	2037	N14	W72	.959	8796	1.5	9	-N		C	2037	.31	1.10			E
GRP	5567	07 0055	0113	0102	N18	W72	.962	8796	1.6	18	-F			.60				1 1 1
LOCK	07 0055	0113	0102	N18	W72	.962	8796	1.6	18	-F		C	0102	.60	1.70		10	
GRP	5568	07 0150	0218	0205	S22	W43	.714	8791	3.9	28	-N			.42				2 2 2
CULG	07 0148	0218D	0205	S23	W43	.718	8791	3.8	30D	-N		P		.52	.70			
HALE	07 0152	0217	0205	S21	W42	.699	8791	3.9	25	-F	1	C	0205	.31	.40			
GRP	5569	07 0246	0251	0247	N28	W83	.997	8796	30.9	5	-F			.20				1 1 1
CRON	07 0246	0251	0247	N28	W83	.997	8796	30.9	5	-F		C		.20	.70		100	V
GRP	5570	07 0305	0322	0311	S24	W38	.668	8791	4.3	17	-F			.41				1 1 1
HALE	07 0305	0322	0311	S24	W38	.668	8791	4.3	17	-F	1	C	0311	.41	.60			
GRP	5571	07 0410	0417	0410	S21	W43	.710	8791	3.9	7	-N			.21				1 1 1
HALE	07 0410	0417	0410	S21	W43	.710	8791	3.9	7	-N	1	C	0410	.21	.30			
GRP	5572	07 0504	0517	0507	N22	W22	.551	8798	5.6	13	-N			.52				2 2 1
CULG	07 0457E	0515D	0502	N22	W22	.551	8798	5.6	18D	-N		P		.52	.60			
ATHN	07 0510	0517	0512	N22	W21	.542	8798	5.6	7	-N	2		0512		.60			
GRP	5573	07 0505	0528	0515	S23	W48	.769	8791	3.6	23	-N							1 1 0
ATHN	07 0505	0528	0515	S23	W48	.769	8791	3.6	23	-N	2		0515		1.50			
GRP	5574	07 0954	1006	1000	N18	W90	1.000	8796	30.7	12	-F			.11				1 1 1
CAPE	07 0954	1006	1000	N18	W90	1.000	8796	30.7	12	-F		C	1000	.11				CT
GRP	5575	07 1111	1126	1115	S17	W74	.960	8791	1.9	15	1N			.92				1 1 1
CAPE	07 1111	1126	1115	S17	W74	.960	8791	1.9	15	1N		C	1115	.92	3.30			
GRP	5576	07 1122	1138	1129	N45	W74	.989	8797	1.9	16	1F			1.24				1 1 1
CAPE	07 1122	1138	1129	N45	W74	.989	8797	1.9	16	1F		C	1129	1.24	7.10			C
GRP	5577	07 1246	1303	1251	N21	W85	.998	8796	1.2	17	-N			.35				2 2 2
CAPE	07 1242	1304	1250	N21	W90	1.000	8796	30.8	22	-N		C	1250	.37				V
ATHN	07 1250	1302	1252	N20	W80	.990	8796	1.5	12	-N	2		1252	.33		1.40		
GRP	5578	07 1331	1401	1338	N18	W84	.997	8796	1.3	30	-N			.62				4 4 4
SACP	07 1326	1358	1334U	N18	W82	.994	8796	1.4	32	-F		C		.37				
CAPE	07 1327	1400	1340	N21	W90	1.000	8796	30.8	33	-N		C	1340	.41				
CAPE	07 1333	1356	1339	N18	W90	1.000	8796	30.8	23	-N		C	1339	.37				T
ATHN	07 1333	1402	1335	N20	W80	.990	8796	1.6	29	-N	2		1335	.50		1.40		
ATHN	07 1335	1350	1338	N17	W85	.998	8796	1.2	15	-N	2		1338	.66		1.40		
LOCA	07 1340E	1405	1340	N15	W82	.993	8796	1.4	25D	1N		V	1340	1.05				A
GRP	5579	07 1410	1424	1416	N16	W76	.977	8796	1.9	14	-F			.28				1 1 1
SACP	07 1410	1424E	1416	N16	W76	.977	8796	1.9	14D	-F		C		.28	.67			
GRP	5580	07 1502	1510	1505	S24	W26	.535	8791	5.7	8	-F			.99				1 1 1
ATHN	07 1502E	1510	1505	S24	W26	.535	8791	5.7	8D	-F	1		1505	.99	1.10	1.20		
GRP	5581	07 1514	1535	1516	N12	W77	.978	8796	1.9	21	-F			.20				1 1 1
LOCK	07 1514	1535	1516	N12	W77	.978	8796	1.9	21	-F		C	1516	.20	.60		10	
GRP	5582	07 1607	1625	1610	S22	W54	.824	8791	3.6	18	-N			.39				2 2 2
SACP	07 1605	1630U	1610	S22	W55	.832	8791	3.5	25U	-F		C		.28	.39			
ATHN	07 1608	1620	1610	S21	W52	.803	8791	3.8	12	-N	1		1610	.50	.80	1.70		
GRP	5583	07 1758	1811	1800	S23	W56	.843	8791	3.5	13	-N			.29				2 2 2
SACP	07 1757	1812	1759	S22	W57	.850	8791	3.5	15	-N		C		.28	.39			
LOCK	07 1758	1810	1800	S24	W55	.836	8791	3.6	12	-N		C	1800	.30	.50		10	
GRP	5584	08 0015	0029	0022	S23	W57	.852	8791	3.7	14	-F			.52				1 1 1
CULG	08 0015	0029	0022	S23	W57	.852	8791	3.7	14	-F		C		.52	.90			
GRP	5585	08 0613	0641	0627	S22	W60	.874	8791	3.8	28	1N			1.70				1 1 1
CAPS	08 0613E	0641D		S22	W60	.874	8791	3.8	28D	1N			0627	1.70	3.40		164	
GRP	5586	08 1125	1401	1135	S22	W60	.874	8791	4.0	156	2N			4.52				6 5 5
MONT	08 1120	1337D	1135	S21	W60	.873	8791	4.0	137D	2B		C	1140	2.20				OL
KHAR	08 1124	1216D		S22	W58	.858	8791	4.1	52D	3F		P	1133	8.51	17.60	2.40		EHLWZ
ATHN	08 1124	1239	1136	S25	W60	.878	8791	4.0	75	2B	2		1136	3.53	7.00	2.00		
MEUD	08 1127	1221D	1133	S21	W62	.888	8791	3.8	54D	1N		C	1206	2.58	5.00			
CAPE	08 1128	1424D	1136	S21	W60	.873	8791	4.0	176D	2N		C	1136	5.78	12.30			FJLHH
SACP	08 1236E	1255U	1242E	S22	W57	.850	8791	4.2	19U	1N		P		2.56	3.69			



SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IMPROVANCE	OBS.		MEASUREMENTS					REMARKS	
	DATE	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MC MATH PLAGE REGION			CMP DAY	COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H $\alpha$		MAX. INT. %
GRP 5587	1967 MAY 08	1127	1434	1204	S22	W59	.866	8791	4.1	187	2N				6.29				4 4 3
MEUD	08	1127	1221D	1206	S21	W62	.888	8791	3.8	54D	1N								
CAPS	08	1141E	1443D		S23	W58	.860	8791	4.1	182D	3N	2	C	1202	10.00	19.00		204	IKL
CAPF	08	1200E	1425		S22	W57	.850	8791	4.2	145D	2N		V	1204	4.22	8.12			H
UCCL	08	1204E	1232D		S20	W60	.872	8791	4.0	28D	3B		P	1205	4.64				EHJ
GRP 5588	08	1314	1443	1316	S22	W60	.874	8791	4.1	89	1N				1.23				4 4 4
ATHN	08	1257	1311	1300	S23	W61	.883	8791	4.0	14	-N	2	C	1300	.66	1.30	1.90		
SACP	08	1259U	1445	1335	S23	W60	.876	8791	4.0	106U	1N		C		2.69	4.08			
HERS	08	1308E	1315D	1312	S19	W59	.863	8791	4.1	7D	-N		P	1312	.72	1.50			D
LOCA	08	1320E	1440	1320	S22	W58	.858	8791	4.2	80D	1N		V	1320	.85	1.70			H
GRP 5589	08	1340	1450	1400	N26	W17	.556	8798	7.3	70	1N								1 1 0
SALO	08	1340	1450		N26	W17	.556	8798	7.3	70	1N		S	1400			1.20		
GRP 5590	08	1342	1439	1405	S20	W59	.864	8791	4.1	57	1N				2.66				4 3 3
LOCA	08	1320E	1440	1403	S22	W58	.858	8791	4.2	80D	1N		V	1403	2.31	4.50			W
SALO	08	1340	1450		S16	W56	.833	8791	4.4	70	1N		S	1400			1.30		
UCCL	08	1343E	1412D		S20	W60	.872	8791	4.1	29D	3N		P	1410	4.64				J
HOUS	08	1400	1426	1405	S21	W61	.881	8791	4.0	26	1F		C		1.03	2.00		100	EH
GRP 5591	08	1443	1526	1452	S23	W56	.843	8791	4.4	43	-N				.76				2 2 2
HOUS	08	1443	1516	1448	S20	W61	.880	8791	4.0	33	-N		C		.41	.80		200	E
CAPS	08	1443E	1529D		S24	W57	.853	8791	4.3	46D	-N	1	C	1455	.70	1.30		190	E
HOUS	08	1459	1522	1506	S24	W50	.792	8791	4.9	23	-F				.41	.70		100	
GRP 5592	08	1516	1522	1518	N20	W19	.500	8798	7.2	6	-F				.60				1 1 1
LOCK	08	1516E	1522	1518	N20	W19	.500	8798	7.2	6D	-F		C	1518	.60	.70		10	
GRP 5593	08	1631	1642	1633	N20	W20	.509	8798	7.2	11	-F				.36				3 3 3
HOUS	08	1630	1647	1633	N21	W19	.511	8798	7.3	17	-F		C		.21	.20		100	
SACP	08	1631	1638	1634	N20	W20	.509	8798	7.2	7	-N		C		.37	.38			
LOCK	08	1631	1642	1633	N20	W20	.509	8798	7.2	11	-F		C	1633	.50	.60		10	
GRP 5594	08	2042	2120	2052	S19	E30	.547	8805	11.1	38	-F				.30				1 1 1
LOCK	08	2042	2120	2052	S19	E30	.547	8805	11.1	38	-F		C	2052	.30	.40		10	
GRP 5595	08	2250	0005	2330	S25	E82	.988	8807	15.1	75	-F				.40				1 1 1
LOCK	08	2250	0005	2330	S25	E82	.988	8807	15.1	75	-F		C	2330	.40	1.40		10	H
GRP 5596	09	0004	0015	0008	S25	W26	.546	8794	7.1	11	-N				.80				1 1 1
LOCK	09	0004	0015	0008	S25	W26	.546	8794	7.1	11	-N		C	0008	.80	1.60		20	
GRP 5597	09	0046	0054	0048	S26	E83	.991	8809	15.3	8	-F				.40				1 1 1
CRON	09	0046	0054	0048	S26	E83	.991	8809	15.3	8	-F		C		.40	1.40		100	
GRP 5598	09	0456	0509	0457	S27	E80	.983	8807	15.2	13	-N				.33				1 1 1
ATHN	09	0456	0509	0457	S27	E80	.983	8807	15.2	13	-N	1	C	0457	.33		1.50		
GRP 5599	09	0700	0723	0713	S27	E76	.970	8807	15.0	23	-F				1.10				1 1 1
BUCA	09	0700	0723		S27	E76	.970	8807	15.0	23	-F		C	0713	1.10				E
GRP 5600	09	0731	0812	0745	S28	E76	.971	8807	15.0	41	-F				.66				1 1 1
BUCA	09	0731	0812		S28	E76	.971	8807	15.0	41	-F		C	0745	.66				
GRP 5601	09	0733	0835	0751	N25	W50	.831	8798	5.6	62	-F				.81				2 2 2
CAPE	09	0731	0825D	0750	N23	W50	.823	8798	5.6	54D	-F		C	0750	.96	1.70			
BUCA	09	0735	0835		N26	W49	.826	8798	5.6	60	-F		C	0751	.66	1.20			
GRP 5602	09	1012	1021	1012	N25	W20	.564	8798	7.9	9	-F								1 1 0
KHAR	09	1012E	1021D		N25	W20	.564	8798	7.9	9D	-F		V	1012			1.20		D
GRP 5603	09	1547	1558	1551	N22	W29	.616	8798	7.5	11	-F				1.02				3 3 3
LOCK	09	1542	1603	1552	N22	W30	.626	8798	7.4	21	-F		C	1552	1.30	1.70		10	
MEUD	09	1549	1554	1550	N22	W29	.616	8798	7.5	5	-F		C	1550	.83	1.00			
SACP	09	1549	1556	1552	N22	W28	.606	8798	7.6	7	-N		C		.92	1.00			
GRP 5604	09	1946	1957	1948	S25	E72	.953	8807	15.2	11	-N				.19				1 1 1
SACP	09	1946	1957	1948	S25	E72	.953	8807	15.2	11	-N		C		.19	.37			
GRP 5605	09	2200	2205	2202	N23	W30	.634	8798	7.7	5	-F				.46				1 1 1
SACP	09	2200	2205	2202	N23	W30	.634	8798	7.7	5	-F		C		.46	.51			
GRP 5606	10	0029	0039	0032	N21	W33	.648	8798	7.5	10	-N				.41				1 1 1
CULG	10	0029	0039	0032	N21	W33	.648	8798	7.5	10	-N		C		.41	.52			
GRP 5607	10	0138	0152	0142	S21	W88	.999	8791	3.5	14	-N				.21				1 1 1
MANI	10	0138E	0152	0142	S21	W88	.999	8791	3.5	14D	-N	2			.21	.64			
GRP 5608	10	0207	0214	0209	N21	W33	.648	8798	7.6	7	-N				.52				1 1 1
CULG	10	0207	0214	0209	N21	W33	.648	8798	7.6	7	-N		C		.52	.65			
GRP 5609	10	0741	0758	0744	S21	W85	.995	8791	3.9	17	1N				.50				2 2 2
CAPE	10	0738	0802	0743	S20	W88	.999	8791	3.7	24	1N		C	0743	.69				T
CRON	10	0743	0753	0745	S21	W82	.989	8791	4.2	10	-F		C		.30	1.00		100	J
GRP 5610	10	0804	0840	0817	S20	W86	.996	8791	3.9	36	1N				.92				4 4 3
CAPE	10	0804	0842	0821	S20	W90	1.000	8791	3.6	38	1F		C	0821	1.10				J
MANI	10	0813E	0829	0816	S19	W82	.989	8791	4.2	16D	-N	2			.19	.63			
ARCE	10	0815E	0845		S20	W85	.995	8791	4.0	30D	1N		C	0815	.55	2.20			
BUCA	10	0817	0845		S22	W87	.998	8791	3.8	28	1F		C	0838	1.10				
GRP 5611	10	0852	0907	0853	S22	W85	.995	8791	4.0	15	1F				1.10				1 1 1
BUCA	10	0852	0907		S22	W85	.995	8791	4.0	15	1F		C	0853	1.10				
GRP 5612	10	0910	0919	0914	S22	W85	.995	8791	4.0	9	-F				.33				1 1 1
BUCA	10	0910	0919		S22	W85	.995	8791	4.0	9	-F		C	0914	.33				
GRP 5613	10	1047	1100	1047	N19	E56	.860	8806	14.6	13	-N				.66				1 1 1
ATHN	10	1047E	1100		N19	E56	.860	8806	14.6	13D	-N	2			.66	1.30	1.30		





SOLAR FLARES  
MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS					REMARKS	
	DATE 1967 MAY	START	END	MAX. PHASE	APPROX. LAT. MER. DIST.		CENTRAL DISTANCE	MCMAH PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hc	MAX. INT. %		
GRP 5639	12	2117	2132	2120	N25	W71	.962	8798	7.6	15	-N								4 3 3
HOUS	12	2106E	2121	2107	N31	W75	.981	8798	7.3	15D	-F								
HALE	12	2115E	2130	2120	N23	W71	.960	8798	7.6	15D	-N	1	C	2120	.28	.60		100	
CULG	12	2118	2136	2120	N23	W70	.956	8798	7.6	18	-N	1	C		.21				
HUAN	12	2134E	2140D		N23	W69	.951	8798	7.7	6D	-F	1	P	2138	.41				D
GRP 5640	12	2157	2216	2202	N23	W70	.956	8798	7.7	19	1N				.21				6 6 6
CULG	12	2151	2217	2200	N23	W70	.956	8798	7.7	26	-N		C		.76				
SACP	12	2153	2215	2201	N23	W69	.951	8798	7.7	22	1F		C		.52				
HOUS	12	2156	2207	2200	N25	W70	.958	8798	7.7	11	1N		C		1.12	2.26			
HUAN	12	2156	2216	2200	N23	W68	.946	8798	7.8	20	-N	1	C		.83	2.10		200	I
HALE	12	2201	2205D		N23	W71	.960	8798	7.6	4D	-N	1	P	2200	.50				
MANI	12	2202	2223	2208	N22	W70	.955	8798	7.7	21	1F	2		2202	.41				
GRP 5641	12	2328	2351	2342	N22	W70	.955	8798	7.7	23	-F			2208	1.19	2.66			
MANI	12	2321E	2340D		N22	W70	.955	8798	7.7	19D	-F	2			.37				2 2 2
SACP	12	2335	2351	2342	N22	W70	.955	8798	7.7	16	-F		C		.46	1.04			
GRP 5642	13	0024	0036	0029	S16	W03	.232	8804	12.8	12	-F				.28	.57			
CULG	13	0023	0035	0028	S16	W05	.242	8804	12.6	12	-N		C		.45				3 3 3
SACP	13	0024	0037	0029	S17	W03	.249	8804	12.8	13	-F		C		.50	.50			
LOCK	13	0025	0035	0029	S16	W02	.229	8804	12.9	10	-F		C	0029	.46	.45			
GRP 5643	13	0120	0143	0124	N24	W70	.957	8798	7.8	23	-N				.40	.41		10	
CULG	13	0117	0155	0123	N23	W70	.956	8798	7.8	38	-N		C		.45				4 4 4
LOCK	13	0118	0140	0122	N23	W67	.941	8798	8.0	22	-F		C	0122	.41				
SACP	13	0119	0144D	0124D	N23	W70	.956	8798	7.8	25D	-N		C		.30	.80		10	
CRON	13	0124	0132	0127	N25	W74	.974	8798	7.5	8	-F		C		.67	1.36			
GRP 5644	13	0228	0244	0232	N21	W75	.975	8798	7.5	16	1F				.40	1.10		100	E
CRON	13	0228	0244	0232	N21	W75	.975	8798	7.5	16	1F		C		.70	2.00		100	
GRP 5645	13	0948	1025	1000	N24	W79	.988	8798	7.5	37	-F				.70				1 1 1
CAPE	13	0948	1025	1000	N24	W79	.988	8798	7.5	37	-F		C	1000	.23	1.32			
GRP 5646	13	1029	1038	1030	S26	E22	.519	8807	15.1	9	-F				.23				2 2 2
CAPE	13	1028	1040	1030	S26	E23	.529	8807	15.2	12	-F		C	1030	.54	.60			F
MEUD	13	1029	1035		S26	E20	.500	8807	14.9	6	-F		C	1030	.55	.60			E
GRP 5647	13	1244	1250	1245	S24	W26	.542	8804	11.6	6	-N				.52	.60			1 1 1
CAPE	13	1244	1250	1245	S24	W26	.542	8804	11.6	6	-N		C	1245	.60	.70			
GRP 5648	13	1244	1256	1245	N23	E56	.869	8810	17.7	12	-F				.15				1 1 1
MEUD	13	1244	1256	1245	N23	E56	.869	8810	17.7	12	-F		C	1245	.15	.30			D
GRP 5649	13	1619	1632	1622	N24	W80	.990	8798	7.7	13	-N				.45				2 2 2
HUAN	13	1619	1626		N24	W82	.994	8798	7.5	7	-F	1	C	1621	.25				D
SACP	13	1619	1637	1622	N23	W78	.985	8798	7.8	18	-N		C		.65				
GRP 5650	13	1718	1727	1720	N22	W78	.985	8798	7.9	9	-F				.10				1 1 1
LOCK	13	1718	1727	1720	N22	W78	.985	8798	7.9	9	-F		C	1720	.10	.30		10	
GRP 5651	13	1744	1758	1747	N19	W83	.995	8798	7.5	14	-N				.41				2 2 2
HUAN	13	1743	1751		N18	W88	1.000	8798	7.1	8	-N	1	C	1746	.31				
LOCK	13	1744	1805	1747	N17	W77	.980	8798	8.0	21	-F		C	1747	.30	.90		20	
LOCK	13	1751	1823	1808	N24	W78	.986	8798	7.9	32	-F		C	1808	.20	.60		10	
GRP 5652	13	2237	2320	2250	S24	W06	.373	8807	13.5	43	-F				.40				1 1 1
LOCK	13	2237	2320	2250	S24	W06	.373	8807	13.5	43	-F		C	2250	.40	.42		10	
GRP 5653	13	2319	2335	2321	S22	E20	.458	8809	15.5	16	-F				.20				1 1 1
LOCK	13	2319	2335	2321	S22	E20	.458	8809	15.5	16	-F		C	2321	.20	.21		10	
GRP 5654	14	1257	1301	1258	N24	W90	1.000	8798	7.8	4	-F				.21				1 1 1
HUAN	14	1257	1301	1258	N24	W90	1.000	8798	7.8	4	-F	2	C	1258	.21				D
GRP 5655	14	1357	1440	1403	S18	E68	.929	8813	19.7	43	-N				.48				2 2 2
SACP	14	1357	1440	1403	S18	E66	.916	8813	19.5	43	-N		C		.56	.95			
CAPS	14	1403E	1408D		S18	E70	.940	8813	19.8	5D	-F	3			.40			150	CE
GRP 5656	14	1445	1453	1447	S27	E06	.421	8807	15.1	8	-F				.25				1 1 1
HUAN	14	1445	1453	1447	S27	E06	.421	8807	15.1	8	-F	2	C	1447	.25	.25			D
GRP 5657	14	1534	1626	1547	S25	E07	.394	8807	15.2	52	1N				3.15				7 7 5
SALO	14	1530	1610	1550	S18	E07	.287	8807	15.2	40	1N		V	1550			1.20		
MCMA	14	1534E	1546D		S28	E06	.436	8807	15.1	12D	-N		C	1544	.77	.80			E
CAPS	14	1535E	1603D		S27	E12	.451	8807	15.5	28D	1N	2		1544	2.40	2.70		193	E
LOCK	14	1535	1625	1547	S28	E06	.436	8807	15.1	50	1N		C	1547	2.10	2.30		20	
SACP	14	1535	1630U	1549	S27	E08	.429	8807	15.2	55U	1N		C		3.74	3.79			
ATHN	14	1542E	1640	1546	S24	E02	.363	8807	14.8	58D	1N	1		1546	4.58	4.90			1.80
CAPF	14	1546E	1600D		S23	E07	.363	8807	15.2	14D	1N		P	1547	2.94	3.13			
GRP 5658	14	1559	1653	1608	S27	E08	.429	8807	15.3	54	1N				2.45				2 2 2
HUAN	14	1533	1645		S27	E10	.439	8807	15.4	72	1N	1	C	1604	3.25	3.30			
HALE	14	1559	1700	1611	S26	E06	.405	8807	15.1	61	-N	2	C	1611	1.65	1.80			IF
GRP 5659	14	1900	1920	1906	S17	E37	.629	8809	17.6	20	-F				.26				2 2 2
HUAN	14	1859	1910		S16	E37	.625	8809	17.6	11	-F	1	C	1902	.21	.23			D
LOCK	14	1900	1930	1910	S17	E37	.629	8809	17.6	30	-F		C	1910	.30	.40		10	J
GRP 5660	14	2043	2050	2045	S15	E82	.989	8816	21.0	7	-N				.20				1 1 1
LOCK	14	2043	2050	2045	S15	E82	.989	8816	21.0	7	-N		C	2045	.20	.70		20	H
GRP 5661	14	2109	2115	2111	S15	E82	.989	8816	21.0	6	-F				.20				1 1 1
LOCK	14	2109	2115	2111	S15	E82	.989</												

# SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS				REMARKS
	DATE	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hg	
1967 MAY																	
GRP 5663	14	2355	0030	0015	S24	E47	.767	8809	18.5	35	-F						1 1 1
LOCK	14	2355	0030	0015	S24	E47	.767	8809	18.5	35	-F						10
GRP 5664	15	0102	0127	0105	S12	E85	.995	8816	21.4	25	-F	C	0015	.40	.60		2 2 2
LOCK	15	0102	0114	0105	S11	E90	1.000	8816	21.8	12	-F			.44			H
SACP	15	0113	0139	0122	S13	E79	.981	8816	21.0	26	-F	C	0105	.30	1.20		10
GRP 5665	15	0228	0241	0231	S13	E81	.987	8816	21.2	13	-N			.57	1.44		1 1 1
CRON	15	0228	0241	0231	S13	E81	.987	8816	21.2	13U	-N			.20			1 1 1
GRP 5666	15	0535	0555		S15	E80	.984	8816	21.2	30	-F	C		.20	.70		200
MANI	15	0535E	0555		S15	E80	.984	8816	21.2	20D	-F	1		.52			1 1 1
GRP 5667	15	0701	0716	0710	S11	E80	.984	8816	21.3	15	1N			.52	1.38		2 2 2
BUCA	15	0656	0716	0710	S10	E79	.981	8816	21.2	20	1N			.66			2 2 2
CAPE	15	0706	0715	0710	S11	E80	.984	8816	21.3	9	-F	C	0710	.77			CV
												C	0710	.55	3.17		CV
GRP 5668	15	0807	0824	0816	S14	E80	.984	8816	21.3	17	1N			.44			2 2 2
BUCA	15	0800	0827	0816	S12	E79	.981	8816	21.3	27	1N	C	0816	.55			2 2 2
ATHN	15	0814	0821	0816	S15	E81	.987	8816	21.4	7	-N	2	0816	.33		1.60	
GRP 5669	15	0857	0919	0902	S13	E79	.981	8816	21.3	22	1N			.71			4 4 4
CAPE	15	0854	0921	0905	S13	E80	.984	8816	21.4	27	1N	C	0905	.78	4.50		T
ATHN	15	0855	0911	0859	S14	E80	.984	8816	21.4	16	-N	2	0859	.33		1.80	
BUCA	15	0857	0924	0904	S12	E78	.977	8816	21.2	27	1B	C	0904	.55			
CAPF	15	0900	0920D		S13	E79	.981	8816	21.3	20D	1N	P	0900	1.18			
GRP 5670	15	0924	0944	0929	S15	E81	.987	8816	21.5	20	1N			.77			7 6 4
ATHN	15	0922	0935	0926	S14	E80	.984	8816	21.4	13	-B	2	0926	.50		2.00	
BUCA	15	0922	0953	0926	S14	E78	.977	8816	21.2	31	1B	C	0926	.55			
CAPE	15	0924	0951	0927	S16	E85	.995	8816	21.8	27	-N	C	0927	.51			CV
ONDR	15	0925E	0936		S15	E76	.969	8816	21.1	11D	-N	V	0925			2.10	CD
SALO	15	0925	1025		S14	E83	.992	8816	21.6	60	3N	S	0935			1.40	
CAPS	15	0928E	0939D		S15	E80	.984	8816	21.4	11D	1N	2	0934	1.50			J
KHAR	15	0929E	0949D		S15	E82	.989	8816	21.5	20D	2N	P	0929			3.30	DM
GRP 5671	15	0931	1000	0940	S14	E80	.984	8816	21.4	29	-N			.81			2 2 2
CAPE	15	0924	0951	0937	S16	E85	.995	8816	21.8	27	-N	C	0937	1.28			W
BUCA	15	0937	1008	0942	S12	E74	.960	8816	21.0	31	-N	C	0942	.33			
GRP 5672	15	1009	1031	1012	S13	E79	.981	8816	21.3	22	1N			.58			2 2 2
BUCA	15	1008	1038		S12	E78	.977	8816	21.3	30	1F	C	1012	.55			
CAPE	15	1010	1024	1012	S13	E80	.984	8816	21.4	14	1N	C	1012	.60	3.10		J
GRP 5673	15	1058	1114	1101	S14	E79	.981	8816	21.4	16	-N			.31			2 2 2
CAPE	15	1057	1111	1100	S13	E80	.984	8816	21.5	14	-N	C	1100	.32	8.10		J
CANA	15	1058	1116	1101	S14	E78	.977	8816	21.3	18	-N	C		.30	.90		200
GRP 5674	15	1131	1157	1136	S14	E78	.977	8816	21.3	26	-N			.30			1 1 1
CANA	15	1131	1157	1136	S14	E78	.977	8816	21.3	26	-N	C		.30	.90		200
GRP 5675	15	1200	1230	1220	S12	E24	.431	8809	17.3	30	1N						1 1 0
SALO	15	1200	1230		S12	E24	.431	8809	17.3	30	1N	S	1220			1.30	
GRP 5676	15	1328	1341	1333	S12	E75	.965	8816	21.2	13	-F			.27			1 1 1
CAPE	15	1328	1341	1333	S12	E75	.965	8816	21.2	13	-F	C	1333	.27	1.00		T
GRP 5677	15	1400	1407	1402	S12	E75	.965	8816	21.2	7	-N			.33			2 2 2
CANA	15	1400	1406	1402	S12	E77	.973	8816	21.4	6	-N	C		.20	.60		200
SACP	15	1400	1407	1402	S11	E72	.950	8816	21.0	7	-F	C		.46	.93		
GRP 5678	15	1547	1603	1551	N15	W44	.731	8803	12.4	16	-F			.10			1 1 1
LOCK	15	1547	1603	1551	N15	W44	.731	8803	12.4	16	-F	C	1551	.10	.20		10
GRP 5679	15	1706	1716	1708	S23	W02	.349	8809	15.6	10	-F			.20			1 1 1
LOCK	15	1706	1716	1708	S23	W02	.349	8809	15.6	10	-F	C	1708	.20	.21		10
GRP 5680	15	1853	1920	1858	N09	W37	.625	8803	13.0	27	-F			.20			1 1 1
LOCK	15	1853	1920	1858	N09	W37	.625	8803	13.0	27	-F	C	1858	.20	.30		10
GRP 5681	15	2229	2230		S15	E70	.940	8816	21.2	1	-F			.36			1 1 1
MANI	15	2229E	2230D		S15	E70	.940	8816	21.2	1D	-F	1		.36	.72		1 1 1
GRP 5682	16	0014	0035	0017	N28	E24	.620	8810	17.8	21	-F			.20			1 1 1
LOCK	16	0014	0035	0017	N28	E24	.620	8810	17.8	21	-F	C	0017	.20	.30		10
GRP 5683	16	0019	0032	0022	S16	E18	.378	8809	17.4	13	-F			.10			1 1 1
LOCK	16	0019	0032	0022	S16	E18	.378	8809	17.4	13	-F	C	0022	.10	.11		10
GRP 5684	16	0201	0212	0203	S17	E15	.352	8809	17.2	11	-N			.50			1 1 1
CRON	16	0201	0212	0203	S17	E15	.352	8809	17.2	11	-N	C		.50	.52		200
GRP 5685	16	0446	0531	0447	N16	W78	.982	8803	10.3	45	-N			.33			2 1 1
ATHN	16	0446E	0514	0447	N16	W78	.982	8803	10.3	28D	-N	1	0447	.33		1.30	
MANI	16	0508E	0513		N19	W72	.961	8803	10.8	5D	-F	2		.31	.65		
ATHN	16	0514	0531	0525	N16	W78	.982	8803	10.4	17	-N	1	0525	.33		1.30	
GRP 5686	16	0535	0554	0539	N17	E27	.546	8810	18.3	19	-B			.93			4 4 4
IKOM	16	0530E	0548D	0535	N17	E30	.581	8810	18.5	18D	-N	V	0540	1.55	1.90	.98	130
ATHN	16	0531	0550	0538	N17	E30	.581	8810	18.5	19	-N	1	0538	1.32	1.50	1.80	EG
MANI	16	0538E	0600	0541	N23	E21	.541	8810	17.8	22D	-N	1	0541	.46	.55		
CRON	16	0541	0553	0543	N12	E25	.482	8810	18.1	12	-N	C		.40	.50		200
GRP 5687	16	0701	0718	0706	S15	E14	.319	8809	17.3	17	1N			2.26			2 2 2
ATHN	16	0658	0718	0708	S15	E13	.307	8809	17.3	20	-N	1	0708	.99	1.00	1.80	
CAPE	16	0703	0718	0704	S15	E15	.331	8809	17.4	15	1N	C	0704	3.53	3.70		J
GRP 5688	16	0713	0723	0714	N17	E26	.534	8810	18.3	10	-N			.50			1 1 1
ATHN	16	0713	0723	0714	N17	E26	.534	8810	18.3	10	-N	1	0714	.50	.60	1.40	

SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS					REMARKS
	DATE 1967 MAY	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H $\alpha$	MAX. INT. %	
GRP 5689	16	0749	0756	0751	S23	W18	.452	8807	15.0	7	-N		.57				2 2 2	
CAPE	16	0745	0753	0748	S22	W18	.441	8807	15.0	8	-N	C	0748	.83	.90		V	
CRON	16	0753	0758	0754	S24	W17	.454	8807	15.1	5	-N	C		.30	.32	200		
GRP 5690	16	0947	0958	0950	N15	E24	.493	8810	18.2	11	-N		.37				3 3 3	
MANI	16	0946	1002D	0950	N13	E24	.477	8810	18.2	16D	-N	2	0950	.36	.41			
ATHN	16	0947	0955	0950	N15	E25	.505	8810	18.3	8	-N		0950	.33	.40	1.60		
CAPE	16	0949	0957	0951	N17	E24	.511	8810	18.2	8	-N	C	0951	.41	.50		T	
GRP 5691	16	1030	1040	1034	N17	E47	.770	8810	20.0	10	-N		.46				1 1 1	
CAPE	16	1030	1040	1034	N17	E47	.770	8810	20.0	10	-N	C	1034	.46	.70			
GRP 5692	16	1036	1041	1036	N15	E55	.840	8817	20.6	5	1F		1.14				1 1 1	
CAPE	16	1036	1041	1036	N15	E55	.840	8817	20.6	5	1F	C	1036	1.14	2.10			
GRP 5693	16	1121	1128	1124	S23	W18	.452	8807	15.1	7	-N		.47				2 2 2	
CAPE	16	1120	1129	1124	S22	W20	.461	8807	15.0	9	-F	C	1124	.60	.70			
ATHN	16	1122	1127	1123	S23	W16	.433	8807	15.3	5	-N	2	1127	.33	.40	1.40		
GRP 5694	16	1243	1257	1244	N17	E46	.759	8810	20.0	14	-N		.60				1 1 1	
CAPE	16	1243	1257	1244	N17	E46	.759	8810	20.0	14	-N	C	1244	.60	.90		K	
GRP 5695	16	1243	1257	1252	N17	E46	.759	8810	20.0	14	-F		.37				1 1 1	
CAPE	16	1243	1257	1252	N17	E46	.759	8810	20.0	14	-F	C	1252	.37	.60			
GRP 5696	16	1325	1337	1328	S23	W21	.482	8807	15.0	12	-F		.42				3 3 3	
HUAN	16	1325	1337	1327	S24	W21	.493	8807	15.0	12	-F	1	C	1327	.21	.21		D
SACP	16	1325	1337	1329	S24	W21	.493	8807	15.0	12	-F	C		.19	.19			
CAPE	16	1326	1338	1328	S22	W21	.472	8807	15.0	12	-F	C	1328	.87	1.00			
GRP 5697	16	1631	1651	1639	S24	W23	.513	8807	15.0	20	-N		.15				1 1 1	
HALE	16	1631	1651	1639	S24	W23	.513	8807	15.0	20	-N	1	C	1639	.15	.20		
GRP 5698	16	1708	1718	1709	S25	W23	.523	8807	15.0	10	-N		.24				3 3 3	
LOCK	16	1707	1714D	1709	S26	W21	.514	8807	15.1	7D	-F	C	1709	.30	.40	10		
HALE	16	1707	1720	1709	S24	W23	.513	8807	15.0	13	-N	2	C	1709	.21	.21		
HUAN	16	1709	1716		S24	W24	.524	8807	14.9	7	-N	1	P	1709	.21	.21		D
GRP 5699	17	0948	1027	0951	N17	E10	.372	8810	18.2	39	1N		1.47				2 2 1	
CAPE	17	0947	1013	0951	N16	E10	.357	8810	18.2	26	-N	C	0951	1.47	1.60		JLT	
KHAR	17	0949	1040D	0951	N17	E10	.372	8810	18.2	51D	1F	V	0951			1.80	D	
GRP 5700	17	1100	1150	1120	N20	E08	.403	8810	18.1	50	1N						1 1 0	
SALO	17	1100	1150		N20	E08	.403	8810	18.1	50	1N	V	1120			1.20		
GRP 5701	17	1300	1329	1312	N22	E66	.933	8818	22.5	29	-F		.41				1 1 1	
CAPE	17	1300	1329	1312	N22	E66	.933	8818	22.5	29	-F	C	1312	.41	1.10			
GRP 5702	17	1312	1338	1317	S20	E43	.713	8816	20.8	26	-N		.61				6 6 6	
CANA	17	1308U	1315	1309	S17	E53	.809	8816	21.5	7D	-F	C		.30	.50	100		
CAPE	17	1311	1339	1316	S18	E43	.706	8816	20.8	28	1N	C	1316	1.47	2.10		F	
CANA	17	1311	1334	1314	S19	E43	.709	8816	20.8	23	-N	C		.30	.40	200	E	
SACP	17	1311	1343	1327	S21	E41	.695	8816	20.6	32	-N	C		.37	.43			
MOMA	17	1313	1328D	1316	S21	E41	.695	8816	20.6	15D	-N	C	1316	.41	.60		E	
CAPS	17	1313	1331D		S20	E45	.735	8816	20.9	18D	-B	2	1315	.50	.70	216	E	
HUAN	17	1313	1334	1315	S20	E42	.702	8816	20.7	21	-F	2	C	1315	.31	.36		E
GRP 5703	17	1521	1529	1526	N24	E82	.994	8818	23.8	8	-F		.10				1 1 1	
LOCK	17	1521	1529	1526	N24	E82	.994	8818	23.8	8	-F	C	1526	.10	.30	10		
GRP 5704	17	1958	2040	2010	N20	E86	.999	8818	24.3	42	1N		.20				2 2 1	
LOCK	17	1958	2040	2010	N14	E82	.992	8818	24.0	42	-F	C	2010	.20	.70	10		
MOMA	17	2003E	2029D		N25	E90	1.000	8818	24.6	26D	1N	C						
GRP 5705	17	2040	2051	2045	S17	E50	.779	8816	21.6	11	-N		.81				2 2 2	
SACP	17	2038	2049	2045	S17	E50	.779	8816	21.6	11	-N	C		1.12	1.43			
LOCK	17	2042	2052	2044	S16	E49	.767	8816	21.5	10	-F	C	2044	.50	.80	10		
GRP 5706	18	0119	0137	0129	N24	E77	.982	8818	23.8	18	-N		.40				1 1 1	
LOCK	18	0119	0137	0129	N24	E77	.982	8818	23.8	18	-N	C	0129	.40	1.20	20		
GRP 5707	18	0355	0500	0407	N24	E90	1.000	8818	24.9	65	-F		1.70				1 1 1	
SIBE	18	0355E	0500D	0407	N24	E90	1.000	8818	24.9	65D	-F	P	0407	1.70		64	C	
GRP 5708	18	0719	0739	0722	S26	W39	.698	8809	15.4	20	1F		2.91				2 2 1	
CAPE	18	0717	0747	0723	S26	W40	.708	8809	15.3	30	1F	C	0723	2.91	4.10		F	
MEUD	18	0720	0730	0721	S25	W38	.682	8809	15.5	10	-F	C	0721	.41	.50		E	
GRP 5709	18	0750	0824	0758	N25	E88	1.000	8818	24.9	34	1N		.39				2 2 2	
CAPE	18	0750	0813	0756	N28	E90	1.000	8818	25.1	23	-N	C	0756	.23	.33		T	
CATA	18	0800E	0835D	0800	N22	E85	.998	8818	24.7	35D	1N		0800	.55		164		
GRP 5710	18	0851	1238	0911	N22	E85	.998	8818	24.7	227	1N		1.24				4 2 2	
IKOM	18	0520	0600D		N25	E90	1.000	8818	25.0	40D	1N	V						
CATA	18	0600E	1200D	0625	N19	E85	.998	8818	24.6	360D	1N		0625	.78		178		
IKOM	18	0630E	0730D	0640	N25	E90	1.000	8818	25.0	60D	1N	V						
CAPE	18	1142	1238	1157	N25	E84	.997	8818	24.8	56	1N	C	1157	1.70			FT	
MOMA	18	1225E	1235D		N25	E90	1.000	8818	25.3	10D	-N	P					A	
GRP 5711	18	0857	0939	0928	N25	E84	.997	8818	24.7	42	2B		.97				2 2 1	
SALO	18	0830	0950		N25	E87	1.000	8818	24.9	80	2B	S				1.50		
ARCE	18	0923E	0928D		N25	E80	.990	8818	24.4	50	1N	P	0928	.97	3.00			
GRP 5712	18	1028	1055	1038	S21	E29	.557	8816	20.6	27	-N		1.38				3 3 3	
CAPE	18	1028	1055	1036	S20	E30	.562	8816	20.7	27	-N	C	1036	1.38	1.70		C	
UCLL	18	1037E	1041D		S21	E30	.569	8816	20.7	4D	-F	P	1037	.77	1.20		E	
CAPS	18	1037E	1052D		S21	E27	.533	8816	20.5	15D	1N	1	1040	2.00	2.40	173		

# SOLAR FLARES

MAY 1967

OBSERV- ATORY	OBSERVED UT				LOCATION					DURA- TION MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS				REMARKS		
	DATE	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hq		MAX. INT. %	
1967 MAY																			
GRP 5713	18	1323	1328	1325	S18	E41	.684	8816	21.6	5	-F							1 1 1	
HUAN	18	1323	1328	1325	S18	E41	.684	8816	21.6	5	-F	2	C	1325	.45	.53		D	
GRP 5714	18	1347	1406	1351	N25	E81	.992	8818	24.6	19	1B				1.85			2 2 1	
HUAN	18	1346	1405	1350	N24	E80	.990	8818	24.6	19	-N	2	C	1350	.37			D	
CAPE	18	1347	1407	1351	N25	E81	.992	8818	24.6	20	1B				1.85			T	
GRP 5715	18	1547	1610	1558	S25	E31	.609	8816	21.0	23	-F				.10			1 1 1	
LOCK	18	1547	1610	1558	S25	E31	.609	8816	21.0	23	-F				.10	.11		10	
GRP 5716	18	1712	1740	1727	N32	E01	.564	8810	18.8	28	-F				.30			1 1 1	
LOCK	18	1712	1740	1727	N32	E01	.564	8810	18.8	28	-F				.30	.40		10	
GRP 5717	18	1724	1736	1725	N24	E78	.985	8818	24.6	12	-F				.35			1 1 1	
HUAN	18	1724	1736	1725	N24	E78	.985	8818	24.6	12	-F	1	C	1725	.35			D	
GRP 5718	18	1748	1756	1750	N24	E78	.985	8818	24.6	8	-F				.31			1 1 1	
HUAN	18	1748	1756	1750	N24	E78	.985	8818	24.6	8	-F	1	C	1750	.31			D	
GRP 5719	18	1815	1829	1818	S18	E39	.660	8816	21.7	14	-F				.30			1 1 1	
LOCK	18	1815	1829	1818	S18	E39	.660	8816	21.7	14	-F				.30	.40		10	
GRP 5720	18	1854	1917	1900	S18	W18	.400	8809	17.4	23	-N				1.62			4 4 4	
LOCK	18	1849	1926	1901	S18	W16	.377	8809	17.6	37	-N				1.80	2.00		20	
SACP	18	1855	1913	1901	S18	W18	.400	8809	17.4	18	1N				2.24	2.24			
HUAN	18	1856	1910		S17	W18	.390	8809	17.4	14	-N	1	P	1901	1.39	1.40		E	
MCMA	18	1856E	1918D	1858	S17	W18	.390	8809	17.4	22D	-N				1.03	1.10		EHU	
GRP 5721	18	1910	1929	1923	N26	E82	.994	8818	24.9	19	-F				.40			2 2 1	
LOCK	18	1910	1929	1923	N26	E73	.970	8818	24.3	19	-F				.40	1.20		20	
MCMA	18	1910E	1918D		N25	E90	1.000	8818	25.5	8D	-F				.40				
GRP 5722	18	1933	2001	1949	S17	E39	.656	8816	21.7	28	-F				.71			2 2 2	
LOCK	18	1933	2001	1949	S17	E39	.656	8816	21.7	28	-F				.30	.40		10	
SACP	18	1935	1942	1937	S17	E39	.656	8816	21.7	7	-F				1.12	1.26			
GRP 5723	18	1934	1952	1937	N24	E80	.990	8818	24.8	18	1N				1.72			3 3 2	
HOUS	18	1933	1953	1935	N23	E78	.985	8818	24.7	20	1N				1.75	5.20		200	
SACP	18	1934	1951	1938	N25	E76	.979	8818	24.5	17	1N				1.68	4.18			
MCMA	18	1935E	1947D		N25	E85	.998	8818	25.2	12D	1N				1.937			Y	
GRP 5724	18	2122	2134	2123	N24	E84	.997	8818	25.2	12	-N				.10			2 2 1	
LOCK	18	2120	2136	2124	N24	E77	.982	8818	24.7	16	-F				.10	.30		10	
MCMA	18	2123	2131		N24	E90	1.000	8818	25.6	8	-N				.10			D	
GRP 5725	18	2207	2234	2211	S18	W21	.436	8809	17.3	27	-N				.52			1 1 1	
CULG	18	2207E	2234	2211	S18	W21	.436	8809	17.3	27D	-N				.52	.55		L	
GRP 5726	18	2246	2253	2248	S13	E10	.251	8813	19.7	7	-F				.10			1 1 1	
LOCK	18	2246	2253	2248	S13	E10	.251	8813	19.7	7	-F				.10	.11		10	
GRP 5727	18	2328	0030	2358	N23	E71	.959	8818	24.3	62	-N				.41			2 2 2	
LOCK	18	2328	0030	2358	N23	E69	.950	8818	24.2	62	-F				.40	1.10		20	
MANI	18	2337	0017	2345	N23	E72	.963	8818	24.4	40	-N	1			.41	1.00			
GRP 5728	19	0012	0042	0018	N24	E20	.540	8817	20.5	30	-N				.91			2 2 2	
LOCK	19	0011	0055	0019	N23	E18	.511	8817	20.4	44	-N				1.40	1.70		20	
HOUS	19	0012	0029	0016	N24	E21	.548	8817	20.6	17	-N				.41	.50		200	
GRP 5729	19	0143	0158	0146	S19	W22	.459	8809	17.4	15	-N				.62			1 1 1	
CULG	19	0143	0158D	0146	S19	W22	.459	8809	17.4	15D	-N				.62	.66		L	
GRP 5730	19	0208	0405	0401	S28	E32	.642	8816	21.5	117	1N				2.17			1 1 1	
CULG	19	0208	0405D	0401	S28	E32	.642	8816	21.5	117D	1N				2.17	2.63		CFS	
GRP 5731	19	0545	0557	0546	N25	E70	.956	8818	24.5	12	-N				1.09			3 3 2	
KIEV	19	0544E	0610D	0546	N23	E68	.944	8818	24.3	26D	1B				1.55			80	
IKOM	19	0546E	0550D		N25	E72	.965	8818	24.6	4D	-N				.62			D	
ONDR	19	0546E	0552D		N27	E70	.958	8818	24.5	6D	-N						2.30		CD
GRP 5732	19	0611	0642	0616	N25	E80	.990	8818	25.3	31	1N				.47			4 4 4	
ATHN	19	0611	0625	0614	N25	E79	.988	8818	25.2	14	1N	2			.50	1.80			
IKOM	19	0614E	0620D		N25	E85	.998	8818	25.6	6D	-F				.52			D	
CATA	19	0615E	0710D	0615	N25	E80	.990	8818	25.3	55D	1N				.64			186	
MANI	19	0618E	0630	0622	N25	E77	.982	8818	25.0	12D	-N	2			.21	.52			
MANI	19	0706	0712		N25	E77	.982	8818	25.1	6	-F	3			.21	.52			
GRP 5733	19	0818	0821	0818	N25	E90	1.000	8818	26.1	3	-N				.12			1 1 1	
ARCE	19	0818E	0821D		N25	E90	1.000	8818	26.1	3D	-N				.12	.70			
GRP 5734	19	0840	1010	0855	N23	E85	.998	8818	25.7	90	2N							1 1 0	
SALO	19	0840	1010		N23	E85	.998	8818	25.7	90	2N						1.40		
GRP 5735	19	0856	0905	0858	S15	W24	.452	8809	17.6	9	-F				.36			1 1 1	
ATHN	19	0856	0905	0858	S15	W24	.452	8809	17.6	9	-F	2			.36	.40		1.40	
GRP 5736	19	1000	1012	1001	N27	W55	.870	8806	15.3	12	-N				.66			1 1 1	
ATHN	19	1000E	1012D		N27	W55	.870	8806	15.3	12D	-N	1			.66	1.30		1.40	
GRP 5737	19	1029	1036	1030	N25	E80	.990	8818	25.4	7	-F				.20			1 1 1	
CANA	19	1029	1036	1030	N25	E80	.990	8818	25.4	7	-F				.20	.70		100	
GRP 5738	19	1104	1114	1107	N23	E65	.928	8818	24.3	10	1B				2.10			4 4 2	
CANA	19	1104U	1110	1106	N23	E65	.928	8818	24.3	6U	-N				.40	.90		200	
BUCA	19	1104	1116		N24	E66	.935	8818	24.4	12	1N				2.65				
KIEV	19	1105	1110D	1106	N21	E62	.906	8818	24.1	5D	1B				1.55			90	
ATHN	19	1109E	1118		N23	E67	.939	8818	24.5	9D	-N	1			.50	1.40		2.00	
GRP 5739	19	1120	1210	1130	N26	E86	.999	8818	25.9	50	3N							1 1 0	
SALO	19	1120	1210		N26	E86	.999	8818	25.9	50	3N						1.40		

SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION — MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS					REMARKS	
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H $\alpha$	MAX. INT. %		
					LAT.	MER. DIST.													
GRP 5740	19	1155	1200	1156	N25	E20	.551	8817	21.0	5	-B							1 1 1	
ATHN	19	1155	1200	1156	N25	E20	.551	8817	21.0	5	-B	1	1156	.33	.90	2.00			
GRP 5741	19	1230	1241	1231	N23	E66	.933	8818	24.5	11	-N							2 2 2	
HUAN	19	1229	1236	1230	N24	E67	.940	8818	24.5	7	-F	2	C	1230	.46				E
ATHN	19	1231	1246	1232	N22	E64	.920	8818	24.3	15	-B	1		1232	.33	.90	2.00		
GRP 5742	19	1250	1300	1251	S16	W29	.525	8809	17.4	10	-N				1.29				3 3 3
HUAN	19	1248	1300	1250	S17	W29	.531	8809	17.4	12	-N	2	C	1250	.70	.73			E
CAPS	19	1250	1255D		S15	W30	.533	8809	17.3	5D	1N	2		1251	2.50	3.00	176		E
ATHN	19	1251	1255D	1252	S17	W28	.518	8809	17.4	4D	-N	1		1252	.66	.50	1.50		E
GRP 5743	19	1252	1307	1257	N24	E65	.929	8818	24.4	15	18				1.09				8 8 7
HUAN	19	1239	1320	1256	N25	E67	.941	8818	24.6	41	-B	2	C	1256	1.13				
ONDR	19	1247E	1302D	1257	N27	E66	.939	8818	24.5	15D	18						8.10		HJK
ATHN	19	1248	1255D	1252	N22	E64	.920	8818	24.3	7D	-B	1	V	1257			2.00		
HOUS	19	1253	1308	1255	N23	E65	.928	8818	24.4	15	-N				.66	1.90			
CAPF	19	1254	1302		N23	E64	.922	8818	24.3	8	1N				.62	1.40		200	
KIEV	19	1255	1305	1257	N21	E64	.919	8818	24.3	10	1B				1.46			110	DI
CAPS	19	1255E	1306		N28	E65	.935	8818	24.4	11D	1N	2	C	1257	1.55			200	J
MCMA	19	1300E	1300D		N25	E66	.936	8818	24.5		-N				1.80				
GRP 5744	19	1412	1423	1413	N24	E65	.929	8818	24.5	11	-N				.41	1.20			3 3 3
HUAN	19	1411	1428	1413	N23	E64	.922	8818	24.4	17	-N				.41	.90		200	I
HUAN	19	1412	1420	1414	N24	E65	.929	8818	24.5	8	-N	2	C	1414	.50				D
MCMA	19	1412	1420	1413	N24	E66	.935	8818	24.5	8	-N				.31	.80			D
GRP 5745	19	1503	1512	1505	N24	E68	.945	8818	24.7	9	-N				.71				6 6 5
ATHN	19	1503	1510	1505	N22	E64	.920	8818	24.4	7	-B	1			.83	1.90	2.00		
SACP	19	1503	1511	1506	N24	E64	.923	8818	24.4	8	-N				1.12	1.95			
MCMA	19	1503	1512	1504	N24	E65	.929	8818	24.5	9	-B				.52	1.40			D
HUAN	19	1503	1516	1505	N24	E65	.929	8818	24.5	13	-N	2	C	1504	.55				
HOUS	19	1504E	1513	1504	N25	E83	.996	8818	25.9	9D	-N				.52	1.70		200	I
ONDR	19	1505E	1511		N27	E65	.933	8818	24.5	6D	1N				.52				CJ
GRP 5746	19	1523	1612	1537	N24	E65	.929	8818	24.5	49	1B				1.69			2.50	7 6 5
CAPS	19	1515E	1543D		N25	E62	.913	8818	24.3	28D	1B	2			1.70			256	J
HUAN	19	1524	1620	1535	N24	E64	.923	8818	24.4	56	1B	2	C	1538	1.65				
LOCK	19	1525	1600	1540	N24	E60	.898	8818	24.1	35	1N				1.60	3.40		20	
HOUS	19	1527	1554U	1537	N23	E64	.922	8818	24.4	27D	1N								
HOUS	19	1527	1554U	1532	N23	E64	.922	8818	24.4	27U	1N				1.44	3.10		200	EIJ
MCMA	19	1528E	1620	1538	N24	E75	.975	8818	25.3	52D	2B				2.06	7.00			CFU
ONDR	19	1531E	1606		N26	E66	.937	8818	24.6	35D	2N							2.80	CJ
ARCE	19	1603E	1615D		N22	E65	.926	8818	24.5	12D	1N				1.52	3.20			
GRP 5747	19	1603	1615	1605	N28	W60	.906	8806	15.2	12	-F				.23				1 1 1
ARCE	19	1603E	1615D		N28	W60	.906	8806	15.2	12D	-F				.23	.50			
GRP 5748	19	1716	1745	1718	N24	E74	.972	8818	25.3	29	-N				.63				4 4 4
MCMA	19	1713	1750	1716	N23	E77	.981	8818	25.5	37	-N				.41	1.70			
HUAN	19	1714	1725D		N24	E73	.968	8818	25.2	11D	-F	1	P	1717	.57				E
SACP	19	1715	1736	1721	N26	E74	.973	8818	25.3	21	1N				1.03	2.40			
LOCK	19	1723	1750	1730	N23	E70	.954	8818	25.0	27	-F				.50	1.40		10	
GRP 5749	19	1748	1823	1759	S15	W33	.573	8809	17.3	35	-N				.27				3 3 3
HALE	19	1747	1820D	1750	S14	W34	.582	8809	17.2	33D	-B	1	C	1750	.21	.30			H
LOCK	19	1748	1845	1815	S16	W33	.578	8809	17.3	57	-F				.30	.40		10	
LOCK	19	1748	1845	1825	S16	W33	.578	8809	17.3	57	-F				.30	.40		10	
MCMA	19	1749	1805	1751	S16	W33	.578	8809	17.3	16	-N				.31	.40			EH
GRP 5750	19	2028	2051	2033	S16	W33	.578	8809	17.4	23	-N				.48				3 3 3
LOCK	19	2026	2053	2030	S16	W33	.578	8809	17.4	27	-F				.50	.60		10	
MCMA	19	2029	2046		S16	W33	.578	8809	17.4	17	-N				.41	.50			E
HUAN	19	2030	2055	2035	S17	W33	.583	8809	17.4	25	-N	1	C	2035	.52	.56			E
GRP 5751	19	2039	2100	2041	N28	W68	.950	8806	14.8	21	-N				.31				1 1 1
MCMA	19	2039	2100	2041	N28	W68	.950	8806	14.8	21	-N				.31	.90			D
GRP 5752	19	2156	2206	2201	S08	E21	.370	8816	21.5	10	-F				.20				1 1 1
LOCK	19	2156	2206	2201	S08	E21	.370	8816	21.5	10	-N				.20	.21		10	
GRP 5753	19	2157	2204	2159	N26	E57	.882	8818	24.2	7	-F				.45				2 2 2
HUAN	19	2157	2203		N25	E57	.879	8818	24.2	6	-F	1	C	2158	.25	.37			D
SACP	19	2157	2205	2200	N26	E56	.874	8818	24.1	8	-N				.65	.98			
GRP 5754	19	2304	2311	2306	N26	E57	.882	8818	24.2	7	-N				.64				2 2 2
SACP	19	2304	2311	2307	N27	E55	.870	8818	24.1	7	-N				.75	1.12			
IKOM	19	2305E	2308D		N25	E59	.893	8818	24.4	30	-F				.52	1.10			D
GRP 5755	20	0117	0125	0119	S13	E10	.254	8816	20.8	8	-F				.20				1 1 1
LOCK	20	0117	0125	0119	S13	E10	.254	8816	20.8	8	-F				.20	.21		10	
GRP 5756	20	0443	0453	0445	N24	E68	.945	8818	25.3	10	-B				.33				1 1 1
ATHN	20	0443	0453D	0445	N24	E68	.945	8818	25.3	10D	-B	2			.33		2.00		
GRP 5757	20	0707	0718		N25	E59	.893	8818	24.7	11	-F				.26				1 1 1
MANI	20	0707	0718		N25	E59	.893	8818	24.7	11	-F				.26	.50			
GRP 5758	20	0750	0848	0810	N27	E73	.970	8818	25.8	58	-N				.63				3 2 2
BUCA	20	0750	0840		N28	E73	.971	8818	25.8	50	-F				.77				
ARCE	20	0810E	0900		N27	E75	.977	8818	26.0	50D	-N				.48	1.40			
MONT	20	0827E	0845		N25	E70	.956	8818	25.6	18D	1N				1.00				0
GRP 5759	20	0845	0850	0845	S14	E08	.247	8816	21.0	5	-F				.52				1 1 1
MEUD	20	0845E	0850		S14	E08	.247	8816	21.0	5D	-F				.52	.50			E



# SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION — MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS					REMARKS
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY				TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H <sub>c</sub>	MAX. INT. %	
					LAT.	MER. DIST.												
	1967 MAY																	
GRP 5760	20	0911	0945	0914	N22	E52	.831	8818	24.3	34	-N							
MEUD	20	0909	0918D	0912	N24	E50	.820	8818	24.1	9D	-N	C	0912	.21				
MONT	20	0912	0945		N20	E53	.833	8818	24.4	33	-N	C	0915	.20	.30		D 2 2 2	
GRP 5761	20	0911	0953	0938	N22	E55	.856	8818	24.5	42	1N			.91				
ARCE	20	0910	1000	0940	N22	E53	.839	8818	24.4	50	-N	C	0940	.32	.60		HO 2 2 2	
MONT	20	0912	0945		N21	E57	.869	8818	24.7	33	1N	C	0935	1.50			E 0 4 4 4	
GRP 5762	20	0933	0945	0936	N25	E59	.893	8818	24.8	12	-B			.90				
MONT	20	0930	0945		N27	E79	.988	8818	26.3	15	-N	C	0935	.70			O 4 4 4	
ATHN	20	0934	0944	0936	N27	E52	.847	8818	24.3	10	-B	2		.33	.60	2.00		
UCCL	20	0936	0938D		N24	E53	.845	8818	24.4	2D	-B	P	0936	.77				
CAPS	20	0937E	0947D		N22	E51	.822	8818	24.2	10D	1N	2		1.80	3.00		E J 4 4 3	
GRP 5763	20	1006	1032	1009	N24	E54	.853	8818	24.5	26	1B			1.50				
MONT	20	1005	1100	1010	N21	E57	.869	8818	24.7	55	1B			1.50			HO 4 4 3	
CAPS	20	1006E	1012		N25	E53	.848	8818	24.4	6D	1B	2	C	1010	1.80	3.00	230	CJ
CAPE	20	1006	1025	1008	N25	E54	.856	8818	24.5	19	1B	C	1008	1.21	2.30		IJV	
UCCL	20	1007E	1007D		N25	E50	.824	8818	24.2		-N	P						
GRP 5764	20	1103	1125	1107	N27	E66	.938	8818	25.4	22	-N			.64				
CAPE	20	1103	1125	1107	N27	E66	.938	8818	25.4	22	-N	C	1107	.64	1.80		FI 1 1 1	
GRP 5765	20	1137	1146	1138	N26	E52	.844	8818	24.4	9	-N			.93				
ATHN	20	1136	1145	1138	N27	E54	.862	8818	24.5	9	-N	2		.66	1.30	1.80		
UCCL	20	1137	1144D	1138	N25	E50	.824	8818	24.2	7D	1N	P	1138	1.03				
CAPE	20	1137	1146	1139	N25	E52	.840	8818	24.4	9	-N	C	1139	1.10	2.00		IT 1 1 1	
GRP 5766	20	1312	1320	1314	N27	E64	.928	8818	25.4	8	-F			.25				
HUAN	20	1312	1320		N27	E64	.928	8818	25.4	8	-F	1	C	1314	.25			D 3 3 3
GRP 5767	20	1416	1423	1419	N24	E50	.820	8818	24.3	7	-F			.42				
MCMA	20	1416	1421	1418	N24	E50	.820	8818	24.3	5	-F	1	C	1418	.26	.50		D 3 3 3
HUAN	20	1416	1423		N25	E51	.832	8818	24.4	7	-F	1	C	1418	.21			
CAPS	20	1417	1425		N24	E50	.820	8818	24.3	8	-N	2		1.422	1.40	176	D 6 6 6	
GRP 5768	20	1510	1617	1525	N23	E51	.825	8818	24.5	67	1B			2.10				
LOCK	20	1508E	1605	1528	N23	E51	.825	8818	24.5	57D	1N	C	1528	2.00	3.40	20		
CAPS	20	1509	1610	1523	N22	E51	.822	8818	24.5	61	2B	2	C	1529	3.50	6.00	318	JV
SACP	20	1514	1552D	1520	N24	E50	.820	8818	24.4	38D	1B	C		1.68	2.29			
CAPF	20	1520E	1615D		N22	E52	.831	8818	24.5	55D	1N	V	1524	2.35	4.33			
MCMA	20	1520E	1638		N24	E50	.820	8818	24.4	78D	1B	C	1528	1.34	2.50		E 6 6 6	
HUAN	20	1527E	1615		N23	E52	.834	8818	24.5	48D	1N	1	P	1527	1.75	2.39		E 1 1 1
GRP 5769	20	1514	1529	1520	S15	E11	.290	8816	21.5	15	-N			.37				
SACP	20	1514	1529	1520	S15	E11	.290	8816	21.5	15	-N	C		.37	.36			
GRP 5770	20	1653	1702	1655	N23	E50	.817	8818	24.5	9	-N			.61				
HALE	20	1601E	1700	1602U	N22	E53	.839	8818	24.6	59D	-B	1	P	1602	.77	1.40		4 4 4
LOCK	20	1652	1702	1656	N23	E50	.817	8818	24.5	10	-F	C	1656	.80	1.40	10		
HUAN	20	1653	1658D		N23	E49	.808	8818	24.4	5D	-B	1	P	1655	.55	.73		
MCMA	20	1653	1703D		N24	E50	.820	8818	24.5	10D	-B	P	1654	.31	.60		D	
HALE	20	1654	1702	1655	N24	E49	.812	8818	24.4	8	-N	2	C	1655	.77	1.30		
GRP 5771	20	1734	1806	1750	N28	E56	.879	8818	24.9	32	1F			1.08				
LOCK	20	1718	1825	1745	N37	E64	.945	8818	25.5	67	1F	C	1745	1.50	3.50	10		
HUAN	20	1750	1801		N24	E48	.803	8818	24.3	11	-F	1	C	1754	.25	.32		D
LOCK	20	1758	1810	1803	N27	E64	.928	8818	25.5	12	-F	C	1803	.40	.90	10		
GRP 5772	20	1826	1839	1829	N24	E48	.803	8818	24.4	13	-B			.88				
LOCK	20	1825	1840	1829	N24	E49	.812	8818	24.4	15	-N	C	1829	1.10	1.90	20	4 4 4	
HUAN	20	1826	1834	1828	N24	E49	.812	8818	24.4	8	-B	2	C	1828	.77	1.01		
HALE	20	1827	1844	1828	N24	E48	.803	8818	24.4	17	-B	2	C	1828	.98	1.60		
SACP	20	1828E	1829D	1829D	N24	E47	.794	8818	24.3	1D	-N	P		.65	.85			
GRP 5773	20	1855	1912	1859	N30	W25	.643	8810	18.9	17	-F			.40				
LOCK	20	1855	1912	1859	N30	W25	.643	8810	18.9	17	-F	C	1859	.40	.50	10	1 1 1	
GRP 5774	20	1936	1948	1940	N24	E49	.812	8818	24.5	12	-N			.41				
LOCK	20	1935	1947	1939	N24	E49	.812	8818	24.5	12	-F	C	1939	.50	.90	10	2 2 2	
HALE	20	1937	1949	1940	N24	E48	.803	8818	24.4	12	-B	2	C	1940	.31	.50		
GRP 5775	20	2003	2013	2005	N24	E48	.803	8818	24.4	10	-B			.83				
LOCK	20	2003	2011	2005	N24	E49	.812	8818	24.5	8	-B	C	2005	1.20	2.00	30	4 4 4	
HALE	20	2003	2014	2005	N25	E47	.798	8818	24.4	11	-B	2	C	2005	1.03	1.70		
HUAN	20	2005E	2005D		N24	E48	.803	8818	24.4		-N	1	P	2005	.45	.59		D
MCMA	20	2005E	2010D		N24	E48	.803	8818	24.4	5D	-B	P	2005	.62	1.10		D 2 2 2	
GRP 5776	20	2044	2058	2046	N25	E59	.893	8818	25.3	14	-N			.72				
HUAN	20	2044	2050D		N25	E60	.899	8818	25.4	6D	-F	1	P	2046	.50	.78		E
HALE	20	2044	2058	2046	N24	E57	.876	8818	25.1	14	-B	2	C	2046	.93	2.00		
GRP 5777	20	2046	2059	2050	N24	E49	.812	8818	24.5	13	-N			.61				
LOCK	20	2042	2059	2051	N24	E49	.812	8818	24.5	17	-F	C	2051	.80	1.40	10	4 4 4	
MCMA	20	2044	2056		N24	E52	.837	8818	24.8	12	-F	P	2050	.83	1.50			
HUAN	20	2049	2056D		N24	E47	.794	8818	24.4	7D	-F	1	P	2050	.45	.58		EK
HALE	20	2049	2103	2050	N23	E46	.781	8818	24.3	14	-B	2	C	2050	.36	.60		E 2 2 2
GRP 5778	20	2206	2217	2209	N22	E46	.777	8818	24.4	11	-N			.31				
LOCK	20	2206	2215	2209	N22	E47	.786	8818	24.4	9	-F	C	2209	.40	.60	10		
HALE	20	2206	2218	2208	N22	E44	.758	8818	24.2	12	-N	2	C	2208	.21	.30		E 1 1 1
GRP 5779	20	2229	2252	2234	N27	W72	.966	8806	15.5	23	1F			.90				
LOCK	20	2229	2252	2234	N27	W72	.966	8806	15.5	23	1F	C	2234	.90				

# SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS					REMARKS	
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H $\alpha$	MAX. INT. %		
					LAT.	MER. DIST.													
GRP 5780	20	2316	2342	2330	N27	W82	.994	8806	14.8	26	1F							1 1 1	
LOCK	20	2316	2342	2330	N27	W82	.994	8806	14.8	26	1F	C	2330	1.10	3.70		10	H	
GRP 5781	20	2353	0025	0005	N27	E66	.938	8818	25.9	32	1N			.92				2 2 2	
LOCK	20	2353	0025	0001	N27	E67	.944	8818	26.0	32	1N	C	0001	1.00	2.50		10	E	
IKOM	21	0005E	0018D	0008	N27	E65	.933	8818	25.9	13D	1N	V	0008	.83	2.30			1 1 1	
GRP 5782	21	0032	0055	0040	N19	E52	.821	8818	24.9	23	-F			.60				1 1 1	
LOCK	21	0032	0055	0040	N19	E52	.821	8818	24.9	23	-F	C	0040	.60	1.10		10	2 2 2	
GRP 5783	21	0118	0129	0121	N27	E57	.883	8818	25.3	11	-N			.68				2 2 2	
LOCK	21	0118	0128	0121	N26	E56	.873	8818	25.3	10	-F	C	0121	.60	1.10		10		
SACP	21	0118	0130	0120	N27	E57	.883	8818	25.3	12	-N	C		.76	1.17			2 2 2	
GRP 5784	21	0239	0249	0242	N26	E49	.819	8818	24.8	10	-B			.44				2 2 2	
HALE	21	0238	0253	0243	N27	E47	.806	8818	24.6	15	-N	2	C	0243	.21	.40		200	T
CRON	21	0239	0250	0241	N27	E42	.763	8818	24.3	11	-N	C		.30	.50			E	
HALE	21	0241	0248	0242	N24	E65	.928	8818	26.0	7	-B	2	C	0242	.36				T
GRP 5785	21	0330	0341	0331	N24	E42	.747	8818	24.3	11	-N			1.26				3 3 2	
HALE	21	0329	0340	0330	N24	E42	.747	8818	24.3	11	-B	2	C	0330	.46	.70		200	T
CRON	21	0330	0339	0332	N23	E42	.742	8818	24.3	9	-N	C		.20	.30			72	
TACH	21	0330	0343	0331	N24	E41	.738	8818	24.2	13	1N	V	0331	2.06	3.10	2.50		E	
GRP 5786	21	0434	0445	0445	N25	E44	.771	8818	24.5	11	-N			.36				1 1 1	
HALE	21	0434	0445D	0445U	N25	E44	.771	8818	24.5	11D	-N	2	P	0445	.36	.60			T
GRP 5787	21	0648	0705	0652	S15	E03	.231	8816	21.5	17	-N			.72				3 3 3	
MITK	21	0647E	0658D	0652	S16	E03	.247	8816	21.5	11D	-N	C	0652	1.13	1.20		200	E	
CRON	21	0648	0703	0653	S15	E03	.231	8816	21.5	15	-N	C		.50	.52			E	
MANI	21	0649	0706	0652	S15	E04	.235	8816	21.6	17	-N	2		.52	.53			1 1 1	
GRP 5788	21	0704	0709	0705	N24	E62	.910	8818	25.9	5	-N			.40				1 1 1	
CRON	21	0704	0709	0705	N24	E62	.910	8818	25.9	5	-N	C		.40	.90		200	E	
GRP 5789	21	0725	0738	0729	N24	E63	.916	8818	26.0	13	-N			.36				1 1 1	
MANI	21	0725	0738	0729	N24	E63	.916	8818	26.0	13	-N	2		.36	.75				
GRP 5790	21	0757	0805	0759	N26	E63	.920	8818	26.1	8	-N			.63				3 2 2	
MANI	21	0756	0807	0759	N25	E63	.918	8818	26.1	11	-N	2		.46	.96				
CRON	21	0757	0803	0759	N26	E66	.937	8818	26.3	6	-N	C	0759	.40	1.00		200		
CRON	21	0803	0818	0805	N26	E58	.888	8818	25.7	15	-N	C		.40	.80		200	D	
ARCE	21	0815E	0855		N19	E48	.784	8818	24.9	40D	-N	C	0815	.42	.70				
ARCE	21	0815E	0940		N25	E60	.899	8818	25.8	85D	1F	C	0840	1.03	2.30				
GRP 5791	21	0914	0923	0916	S14	E07	.239	8816	21.9	9	-N			.33				1 1 1	
ATHN	21	0914	0923	0916	S14	E07	.239	8816	21.9	9	-N	2		.33	.30	1.50			
GRP 5792	21	0947	1003	0951	N24	E56	.868	8818	25.6	16	-N			.93				4 4 4	
CAPS	21	0946E	0959		N20	E47	.778	8818	24.9	13D	-N	2		.80	1.20		182	J	
ATHN	21	0946	1002	0949	N25	E62	.912	8818	26.1	16	-B	2		.66	1.60	2.00			
MEUD	21	0947E	1010		N27	E60	.903	8818	25.9	23D	1N	C	0956	1.13	2.50			CE	
ARCE	21	0950	1000	0950	N23	E64	.921	8818	26.2	10	-N	C	0950	.61	1.20				
ATHN	21	1009	1014	1010	N25	E40	.734	8818	24.4	5	-N	2		.50	.70	1.50			
GRP 5793	21	1035	1058	1042	N23	E44	.762	8818	24.7	23	1N			1.71				5 5 5	
MONT	21	1025	1105		N25	E50	.823	8818	25.2	40	2F	C	1030	2.90				HO	
LOCA	21	1038	1055	1040	N23	E42	.742	8818	24.6	17	-N	V	1040	.63	1.00			H	
ATHN	21	1041	1058	1044	N24	E42	.747	8818	24.6	17	1B	2		1.65	2.80	2.00			
ARCE	21	1045E	1058D		N21	E45	.762	8818	24.8	13D	-N	P	1045	1.16	1.80				
CAPS	21	1047E	1056D		N21	E41	.722	8818	24.5	9D	1N	2		2.20	3.10		189	E	
ATHN	21	1100	1113	1101	N25	E44	.771	8818	24.8	13	-B	2		.25	.40	2.00			
GRP 5794	21	1042	1049	1043	S20	E42	.704	8819	24.6	7	-N			.52				1 1 1	
UCCL	21	1042	1049	1043	S20	E42	.704	8819	24.6	7	-N	C	1043	.52				IJ	
GRP 5795	21	1138	1141	1139	N25	E40	.734	8818	24.5	3	1B			.64				2 2 2	
ATHN	21	1137	1141	1138	N26	E40	.740	8818	24.5	4	-B	2		.50	.70	2.00			
UCCL	21	1139	1141	1140	N24	E40	.728	8818	24.5	2	1N	C	1140	.77					
GRP 5796	21	1159	1211	1200	N29	E54	.868	8818	25.5	12	-N			.25				1 1 1	
ATHN	21	1159	1211	1200	N29	E54	.868	8818	25.5	12	-N	2		.25	.50	1.80			
GRP 5797	21	1203	1207	1205	N28	E63	.923	8818	26.2	4	-N			.17				1 1 1	
ATHN	21	1203	1207	1205	N28	E63	.923	8818	26.2	4	-N	2		.17	.30	1.50			
GRP 5798	21	1239	1307	1244	N24	E46	.785	8818	25.0	28	-N			1.34				3 3 2	
MOMA	21	1238	1248D		N25	E42	.753	8818	24.7	10D	-N	C	1245	1.03	1.50			E	
ATHN	21	1239	1330D	1243	N25	E42	.753	8818	24.7	51D	-B	1		.99	1.50	2.00			
CAPS	21	1241	1314D		N24	E44	.766	8818	24.8	33D	1N	1						F	
ATHN	21	1253	1259		N24	E60	.897	8818	26.0	6	-N	1		.66	1.60	1.60			
GRP 5799	21	1249	1322	1304	N26	E61	.907	8818	26.1	33	1N			2.81				4 4 4	
SACP	21	1238	1334	1302	N26	E59	.894	8818	26.0	56	1N	C		2.85	4.53				
ATHN	21	1300	1316	1302	N25	E61	.905	8818	26.1	16	1B	2		1.65	4.20	2.00			
HUAN	21	1301E	1315		N27	E62	.916	8818	26.2	14D	1N	1	P	1305	1.75				E
CAPS	21	1303E	1313D		N26	E60	.901	8818	26.0	10D	2N	1		1305	5.00				C
GRP 5800	21	1304	1329	1314	N26	E43	.767	8818	24.8	25	1B			1.59				2 2 2	
HUAN	21	1301E	1327		N24	E44	.766	8818	24.8	26D	-N	1	P	1315	1.19	1.47			E
ATHN	21	1306	1330D	1313	N27	E41	.755	8818	24.6	24D	1B	1		1313	1.98	3.10	1.90		



# SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION				DURATION — MIN.	IM- POR- TANCE	OBS.		MEASUREMENTS					REMARKS	
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MCMATH PLAGE REGION			CMP DAY	COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha		MAX. INT. %
					LAT.	MER. DIST.													
	1967 MAY																		
GRP 5801	21	1336	1408	1344	S17	E05	.272	8816	21.9	32	-N		.50				3 3 3		
HUAN	21	1331	1422	1401	S17	E03	.264	8816	21.8	51	-N		.75						
SACP	21	1341	1350D	1344	S18	E06	.293	8816	22.0	90	-N	2	.41	.73			D		
ATHN	21	1343E	1353		S16	E05	.256	8816	21.9	10D	-B	1	.33	.30	2.00				
GRP 5802	21	1415	1432	1420	N27	E58	.890	8818	25.9	17	-F		.25				1 1 1		
HUAN	21	1415	1432		N27	E58	.890	8818	25.9	17	-F	1	.25	.38			D		
GRP 5803	21	1439	1500	1444	N30	E39	.755	8818	24.5	21	1B		1.47				4 4 3		
LOCA	21	1437	1454	1442	N29	E42	.774	8818	24.8	17	-N		.85	1.30					
ONDR	21	1440	1501	1445	N32	E38	.760	8818	24.5	21	1B	V	1442			2.70	CHJL		
SACP	21	1440	1510	1443	N29	E34	.706	8818	24.2	30	1B	C	1445	2.81	3.30				
HUAN	21	1443E	1455D		N28	E40	.752	8818	24.6	12D	-N	1	.75	.94					
GRP 5804	21	1535	1603	1539	N23	E57	.873	8818	25.9	28	1B		1.90				3 3 3		
SACP	21	1534	1600	1539	N23	E58	.881	8818	25.0	26	1B	C		2.06	3.16				
LOCK	21	1535	1610	1540	N25	E56	.871	8818	25.8	35	1N	C	1540	2.50	5.00		20	HL	
HUAN	21	1536	1600		N22	E58	.878	8818	26.0	24	-B	1	1539	1.13	1.74				
GRP 5805	21	1613	1628	1617	N26	E59	.894	8818	26.1	15	1F		1.11				2 2 2		
LOCK	21	1613	1627	1616	N24	E60	.897	8818	26.2	14	1F	C	1616	1.00	2.10		10	H	
SACP	21	1613	1629	1618	N28	E57	.886	8818	26.0	16	-F	C		1.22	1.91				
GRP 5806	21	1630	1641	1633	N26	E57	.881	8818	26.0	11	-F		.42				3 3 3		
HALE	21	1630	1640	1630	N27	E56	.876	8818	25.9	10	-N	2	1630	.41	.90			T	
LOCK	21	1630	1641	1635	N25	E56	.871	8818	25.9	11	-F	C	1635	.60	1.20		10	H	
HUAN	21	1634E	1637D		N27	E58	.890	8818	26.0	3D	-F	1	1634	.25	.38			D	
GRP 5807	21	1654	1745	1704	S18	E02	.278	8816	21.9	51	-N		.67				2 2 1		
HALE	21	1650	1715	1702	S18	E03	.280	8816	21.9	25	-N	2	1702	.67	.70				
LOCK	21	1657	1815	1705	S17	E01	.259	8816	21.8	78	-N	C					K		
GRP 5808	21	1709	1756	1713	N28	E50	.835	8818	25.5	47	-N		.54				2 2 2		
HALE	21	1708	1815U	1710	N31	E52	.861	8818	25.6	67D	-N	2	1710	.31	.60			T	
LOCK	21	1709	1736	1715	N28	E52	.850	8818	25.6	27	-F	C	1715	.40	.80		10		
HALE	21	1806	1838	1808	N23	E44	.762	8818	25.1	32	-B	2	1808	.36	.60			T	
GRP 5809	21	1709	1801	1736	S31	W77	.978	8809	15.9	52	-F		.56				1 1 1		
SACP	21	1709	1801	1736	S31	W77	.978	8809	15.9	52	-F	C		.56	1.40				
GRP 5810	21	1728	1753	1736	N26	E53	.851	8818	25.7	25	-N		1.41				3 3 2		
HALE	21	1728	1742	1731	N26	E60	.901	8818	26.2	14	-B	2	1731	.31	.70			TE	
LOCK	21	1728	1800	1737	N24	E50	.820	8818	25.5	32	1F	C	1737	1.50	2.70		10		
SACP	21	1729	1756	1740	N28	E49	.827	8818	25.4	27	-N	C		1.32	1.82				
GRP 5811	21	1736	1750	1739	N09	E81	.989	8821	27.8	14	-N		.46				3 3 3		
LOCK	21	1735	1745	1738	N06	E82	.991	8821	27.9	10	-F	C	1738	.50	1.70		10		
HALE	21	1736	1751	1739	N09	E81	.989	8821	27.8	15	-N	1	1739	.41					
SACP	21	1736	1754	1739	N11	E81	.989	8821	27.8	18	-B	C		.47					
GRP 5812	21	1740	1809	1747	S17	E01	.259	8816	21.8	29	-N		.83				3 3 3		
LOCK	21	1657	1815	1746	S17	E01	.259	8816	21.8	78	-N	C	1746	.90	.93		20	K	
HALE	21	1740	1800	1746	S18	E01	.276	8816	21.8	20	-N	2	1746	.93	1.00				
SACP	21	1740	1813	1749	S17	E00	.259	8816	21.7	33	-N	C		.66	.64				
GRP 5813	21	1829	1948	1851	S16	W03	.247	8816	21.5	79	-N		1.37				3 3 3		
HALE	21	1827	2003	1910	S15	W04	.235	8816	21.5	96	-B	2	1910	1.03	1.10				
LOCK	21	1828	1950	1855	S16	W03	.247	8816	21.5	82	-N	C	1855	1.40	1.45		20	K	
SACP	21	1832	1931	1847	S16	W03	.247	8816	21.5	59	-N	C		1.69	1.66				
GRP 5814	21	1855	1911	1903	N26	E53	.851	8818	25.8	16	-N		.81				2 2 2		
HALE	21	1847	1855	1848	N24	E44	.766	8818	25.1	8	-B	2	1848	.26	.40			TE	
HALE	21	1854	1909	1902	N28	E56	.879	8818	26.0	15	-B	2	1902	.36	.80			T	
LOCK	21	1855	1912	1904	N25	E55	.863	8818	25.9	17	-F	C	1904	1.00	1.90		10		
GRP 5815	21	1901	1912	1904	S15	W60	.871	8809	17.3	11	-F		.70				1 1 1		
LOCK	21	1901	1912	1904	S15	W60	.871	8809	17.3	11	-F	C	1904	.70	1.30		10		
GRP 5816	21	1919	2024	1926	N24	E39	.719	8818	24.7	65	2N		6.38				4 3 3		
LOCK	21	1918	2030	1926	N25	E37	.706	8818	24.6	72	2F	C	1926	6.50	9.80		30	H	
SACP	21	1919	2012	1926	N25	E39	.725	8818	24.7	53	2B	C		7.38	8.81				
HALE	21	1921	2025	1926	N24	E39	.719	8818	24.7	64	2B	2	1926	5.26	7.60			TUH	
MCMA	21	2010E	2030D		N23	E42	.742	8818	25.0	20D	-N	P	2016	.93	1.40			BE	
GRP 5817	21	1924	2000	1926	S17	E00	.259	8816	21.8	36	-N		.41				2 2 1		
LOCK	21	1828	1950	1925	S16	W03	.247	8816	21.5	82	-N	C					K		
HALE	21	1924	2009	1927	S17	E03	.264	8816	22.0	45	-N	2	1927	.41	.42				
GRP 5818	21	2051	2214	2101	N24	E44	.766	8818	25.2	83	-N		.71				2 2 2		
LOCK	21	2050	2155	2100	N25	E52	.840	8818	25.8	65	-F	C	2100	1.00	1.80		10		
HALE	21	2052	2233	2102	N23	E35	.673	8818	24.5	101	-N	2	2102	.41	.60			T	
GRP 5819	21	2143	2215	2157	S27	W84	.994	8809	15.6	32	1N		.93				2 2 2		
LOCK	21	2137	2214	2155	S21	W82	.990	8809	15.8	37	1F	C	2155	1.00	3.40		10	HL	
SACP	21	2149	2215	2158	S33	W86	.997	8809	15.5	26	-N	C		.85					
GRP 5820	21	2150	2203	2153	N25	E46	.789	8818	25.4	13	-N		.63				4 4 4		
MCMA	21	2112E	2145D		N23	E40	.723	8818	24.9	33D	-N	C	2120	.62	.80			E	
SACP	21	2149	2208	2155	N29	E56	.882	8818	26.1	19	-F	C		.86	1.30				
HUAN	21	2150	2158	2153	N24	E43	.757	8818	25.1	8	-N	1	2153	.37	.46			D	
HALE	21	2150	2202	2151	N24	E43	.757	8818	25.1	12	-N	2	2151	.67	1.00			T	
GRP 5821	21	2155	2225	2203	N12	E82	.992	8821	28.1	30	-F		.30				1 1 1		
LOCK	21	2155	2225	2203	N12	E82	.992	8821	28.1	30	-F	C	2203	.30	1.00		10		

SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS					REMARKS
	DATE 1967 MAY	START	END	MAX. PHASE	APPROX. LAT. MER. DIST.	CENTRAL DISTANCE	MC MATH PLAGE REGION	CMP DAY	TIME UT				MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H $\alpha$	MAX. INT. %		
GRP 5822	21	2232	2253	2238	N25 E55	.863	8818	26.1	21	-N			.76				2 2 2	
LOCK	21	2232	2253	2237	N22 E56	.863	8818	26.1	21	-F	C	2237	.90	1.80		10		
CULG	21	2234E	2245D	2239	N27 E53	.854	8818	25.9	11D	-N	P		.62	1.20			L	
GRP 5823	21	2236	2248	2240	N24 E28	.611	8818	24.0	12	-N			.92				4 4 4	
CULG	21	2234E	2245D	2240	N23 E26	.582	8818	23.9	11D	-N	P		1.03	1.25			L	
LOCK	21	2236	2249	2240	N23 E29	.612	8818	24.1	13	-F	C	2240	.90	1.20		10		
SACP	21	2236	2246	2240	N24 E27	.601	8818	24.0	10	-N	C		1.32	1.43				
HALE	21	2237	2248	2241	N24 E28	.611	8818	24.0	11	-F	1 C	2241	.41	.50			T	
GRP 5824	21	2238	2255	2245	N12 E82	.992	8821	28.1	17	-F			.50				1 1 1	
LOCK	21	2238	2255	2245	N12 E82	.992	8821	28.1	17	-F	C	2245	.50	1.70		10		
GRP 5825	21	2330	2350	2337	N23 E54	.850	8818	26.0	20	-F			.90				1 1 1	
LOCK	21	2330	2350	2337	N23 E54	.850	8818	26.0	20	-F	C	2337	.90	1.60		10		
GRP 5826	21	0001	0030	0013	N24 E54	.853	8818	26.1	29	1B			2.52				9 7 7	
HALE	21	2347	2357D	2357U	N27 E45	.789	8818	25.4	10D	-N	1 P	2357	.31	.50			T	
LOCK	21	2352	0110	0011	N28 E60	.905	8818	26.5	78	3B	C	0011	7.00	14.70		30	HL	
MANI	21	2357	0027	0008	N27 E57	.883	8818	26.3	30	1B	1		2.17	4.07				
SACP	22	0000E	0027	0012	N24 E54	.852	8818	26.1	27D	2B	C	0008	4.15	5.92				
MITK	22	0001	0023	0010	N22 E54	.846	8818	26.1	22	2N	C	0010	2.89	5.50				
HALE	22	0005	0023	0011	N23 E52	.833	8818	25.9	18	2B	2	C	0011	3.51	6.30			IV
HOUS	22	0007E	0017D	0010	N22 E53	.838	8818	26.0	10D	1B	C		1.96	3.40		300		
IKOM	22	0010E	0027D		N23 E53	.841	8818	26.0	17D	1B	V	0020	1.44	2.70		130	D	
CULG	22	0021E	0054	0021	N25 E53	.847	8818	26.0	33D	1N	P		1.24	2.28			L	
CRON	22	0023E	0028	0023	N23 E55	.857	8818	26.1	5D	1N	C		1.30	2.40		200		
GRP 5827	22	0011	0024	0012	N33 E74	.977	8818	27.6	13	1N			1.36				2 2 2	
SACP	22	0010	0024	0012	N33 E75	.980	8818	27.6	14	1N	C		1.89					
HALE	22	0011	0012D	0012U	N33 E72	.970	8818	27.4	10	1N	2	P	0012	.83				G
GRP 5828	22	0036	0107	0058	N25 E43	.761	8818	25.3	31	-N			.52				2 2 2	
CULG	22	0033	0115	0058	N25 E40	.733	8818	25.0	42	-N	C		.41	.90				
HALE	22	0038	0053	0044	N23 E52	.833	8818	25.9	15	-N	2	C	0044	.41	.70			
HALE	22	0056	0058	0057	N25 E39	.724	8818	25.0	2	-N	2	C	0057	.21	.30			
GRP 5829	22	0111	0205	0115	N25 E47	.797	8818	25.6	54	-N			.67				2 2 2	
HALE	22	0111	0205	0115	N24 E42	.747	8818	25.2	54	-N	2	C	0115	.31	.50			
IKOM	22	0112E	0125D		N25 E52	.839	8818	25.9	13D	-F	V	0115	1.03	1.90			D	
GRP 5830	22	0150	0157	0152	N24 E53	.844	8818	26.1	7	-B			1.02				5 5 5	
SACP	22	0150	0152D	0151	N24 E53	.844	8818	26.1	2D	-B	P		.85	1.19				
MITK	22	0150	0155	0151	N23 E55	.857	8818	26.2	5	-N	C	0151	.93	1.80				
IKOM	22	0150E	0156D	0152	N23 E53	.841	8818	26.1	6D	1B	V	0152	1.24	2.20		120	D	
CULG	22	0150	0157	0153	N25 E53	.847	8818	26.1	7	1B	C		1.24	2.28				
MANI	22	0150	0159	0153	N23 E53	.841	8818	26.1	9	-N	2		.83	1.48				
GRP 5831	22	0239	0254	0243	N24 E52	.836	8818	26.0	15	-N			.63				6 6 6	
CULG	22	0237	0255	0243	N25 E52	.839	8818	26.0	18	-N	C		.83	1.44			L	
HALE	22	0238	0254	0242	N23 E52	.833	8818	26.0	16	-N	2	C	0242	.62	1.10			LV
KODA	22	0241	0248	0242	N25 E48	.806	8818	25.7	7	-B	V	0245	.96	1.60		3.08	D	
CRON	22	0242E	0247D	0243U	N22 E54	.846	8818	26.2	5D	-N	C		.40	.70		200		
IKOM	22	0243E	0258D		N23 E53	.841	8818	26.1	15D	-N	V	0243	.62	1.10		95	D	
MANI	22	0245E	0255		N23 E52	.833	8818	26.0	10D	-N	2		.36	.64				
GRP 5832	22	0343	0416	0352	N27 E47	.806	8818	25.7	33	-N			.68				3 2 2	
HALE	22	0328	0420	0342	N26 E46	.793	8818	25.6	52	-N	3	C	0342	.52	.80			F
HALE	22	0342	0420	0353	N28 E46	.802	8818	25.6	38	-N	3	C	0353	.36	.60			
MANI	22	0344	0412	0350	N26 E48	.810	8818	25.8	28	-N	2		.83	1.40				
CULG	22	0415	0434	0418	N29 E39	.748	8818	25.1	19	-N	C	0350	.41	.60			L	
GRP 5833	22	0411	0423	0412	N11 E75	.969	8821	27.8	12	-N			.26				1 1 1	
HALE	22	0411	0423	0412	N11 E75	.969	8821	27.8	12	-N	2	C	0412	.26				
GRP 5834	22	0539	0611	0541	N24 E28	.609	8818	24.3	32	-N			.72				3 3 3	
CULG	22	0516	0620	0600	N26 E28	.627	8818	24.3	64	-N	C		.83	1.04				
IKOM	22	0535E	0608D		N24 E28	.609	8818	24.3	33D	-N	V	0537	.72	.90			D	
MANI	22	0542	0605	0545	N22 E28	.592	8818	24.3	23	-N	2		.62	.77				
GRP 5835	22	0754	0804	0754	N21 E37	.680	8818	25.1	10	-F			.41				1 1 1	
IKOM	22	0754E	0804D		N21 E37	.680	8818	25.1	10D	-F	V	0754	.41	.60			D	
GRP 5836	22	0805	0817	0809	N27 E41	.754	8818	25.4	12	-N			.39				2 2 2	
CRON	22	0805	0818	0807	N28 E42	.768	8818	25.5	13	-N	C		.30	.50		200		
ARCE	22	0808E	0815		N26 E40	.739	8818	25.3	7D	-N	C	0811	.48	.70				
GRP 5837	22	1106	1130	1115	S32 W90	1.000	8809	15.7	24	1F			.64				1 1 1	
CAPE	22	1106	1130	1115	S32 W90	1.000	8809	15.7	24	1F	C	1115	.64				CT	
GRP 5838	22	1114	1140	1127	S15 W71	.946	8820	17.1	26	-N			.46				1 1 1	
CAPE	22	1114	1140	1127	S15 W71	.946	8820	17.1	26	-N	C	1127	.46	1.40				
GRP 5839	22	1215	1250	1227	N28 E43	.777	8818	25.7	35	1N			4.12				1 1 1	
CAPE	22	1215	1250	1219	N28 E47	.810	8818	26.0	35	1N	C	1219	2.22	3.80			I	
CAPE	22	1222	1305	1227	N29 E39	.748	8818	25.4	43	1N	C	1227	1.90	2.80			I	
GRP 5840	22	1227	1236	1229	N25 E34	.676	8818	25.1	9	-N			.46				1 1 1	
CAPE	22	1227	1236	1229	N25 E34	.676	8818	25.1	9	-N	C	1229	.46	.60			I	
GRP 5841	22	1237	1300	1243	S14 W13	.303	8816	21.6	23	-F			.92				1 1 1	
CAPE	22	1237	1300	1243	S14 W13	.303	8816	21.6	23	-F	C	1243	.92	1.00				

# SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IM- POR- TANCE	OBS.		MEASUREMENTS					REMARKS
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY			COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H $\alpha$	MAX. INT. %	
					LAT.	MER. DIST.													
	1967 MAY																		
GRP 5842	22	1255	1312	1258	N29	W60	.907	8810	18.0	17	-F						1 1 1		
CAPE	22	1255	1312	1258	N29	W60	.907	8810	18.0	17	-F	C	1258	.46	1.10				
GRP 5843	22	1349	1401	1352	N29	E41	.765	8818	25.7	12	-F			.28			2 2 2		
HUAN	22	1349	1400		N28	E41	.759	8818	25.7	11	-F	1 C	1352	.25	.31		D		
MCMA	22	1349	1402	1352	N29	E40	.757	8818	25.6	13	-F	C	1352	.31	.50		D		
GRP 5844	22	1439	1459	1442	N24	E38	.708	8818	25.5	20	-N			.62			3 3 3		
CAPS	22	1422E	1509D		N24	E43	.756	8818	25.8	47D	-N	2	1453	1.00	1.50	176	CEJ		
CANA	22	1438	1452	1441	N24	E34	.669	8818	25.2	14	-N	C		.60	.80	200			
HUAN	22	1439	1456	1442	N25	E36	.695	8818	25.3	17	-F	2 C	1442	.25	.29		D		
GRP 5845	22	1529	1558	1535	N30	E40	.763	8818	25.6	29	-N			.73			4 4 4		
LOCK	22	1528	1605	1540	N31	E39	.761	8818	25.6	37	-N	C	1540	1.00	1.50	20			
HUAN	22	1530	1554	1532	N30	E40	.763	8818	25.6	24	-N	2 C	1532	.50	.62		D		
MCMA	22	1530	1555	1532	N29	E40	.757	8818	25.6	25	-B	C	1532	.41	.60		D		
CAPS	22	1533E	1545D		N28	E40	.751	8818	25.6	12D	-N	1	1535	1.00	1.50	175	CEJ		
GRP 5846	22	1701	1725	1706	S14	W16	.341	8816	21.5	24	-F			.80			1 1 1		
LOCK	22	1701	1725	1706	S14	W16	.341	8816	21.5	24	-F	C	1706	.80	.90	10			
GRP 5847	22	1703	1716	1708	N29	E38	.740	8818	25.6	13	-N			.52			4 4 4		
HUAN	22	1701	1716	1709	N28	E37	.724	8818	25.5	15	-N	2 C	1709	.37	.44		E		
LOCK	22	1701	1716	1706	N31	E39	.761	8818	25.6	15	-N	C	1706	1.00	1.50	20			
HALE	22	1702	1720	1709	N29	E36	.723	8818	25.4	18	-N	2 C	1709	.46	.70				
MCMA	22	1707	1713	1709	N29	E40	.757	8818	25.7	6	-N	C	1709	.26	.40		D		
GRP 5848	22	1757	1839	1806	S27	W60	.888	8820	18.2	42	-N			.15			1 1 1		
HALE	22	1757	1839	1806	S27	W60	.888	8820	18.2	42	-N	1 C	1806	.15	.30		GJ		
GRP 5849	22	1813	1840	1816	N30	E42	.779	8818	25.9	27	-N			.21			1 1 1		
HALE	22	1813	1840	1816	N30	E42	.779	8818	25.9	27	-N	2 C	1816	.21	.30		J		
GRP 5850	22	1814	1824	1816	N27	W64	.927	8810	18.0	10	-F			.61			3 3 2		
LOCK	22	1811	1827	1816	N25	W65	.929	8810	17.9	16	-N	C	1816	.50	1.20	20			
HALE	22	1815	1822	1816	N28	W63	.923	8810	18.0	7	-F	1 C	1816	.15					
HOUS	22	1815	1822	1817	N27	W64	.927	8810	18.0	7	-F	C		.72	1.60	100			
GRP 5851	22	1850	1915	1855	N22	E24	.551	8818	24.6	25	-F			.50			1 1 1		
LOCK	22	1850	1915	1855	N22	E24	.551	8818	24.6	25	-F	C	1855	.50	.60	10			
GRP 5852	22	1925	1940	1928	N29	E24	.622	8818	24.6	15	-F			.40			1 1 1		
LOCK	22	1925	1940	1928	N29	E24	.622	8818	24.6	15	-F	C	1928	.40	.50	10			
GRP 5853	22	1957	2012	2002	N27	W65	.932	8810	18.0	15	-F			.30			1 1 1		
LOCK	22	1957	2012	2002	N27	W65	.932	8810	18.0	15	-F	C	2002	.30	.70	10			
GRP 5854	22	2000	2041	2003	N29	E42	.774	8818	26.0	41	-N			.41			1 1 1		
HALE	22	2000	2041	2003	N29	E42	.774	8818	26.0	41	-N	2 C	2003	.41	.60		J		
GRP 5855	22	2046	2110	2050	N24	E36	.688	8818	25.6	24	-F			.15			1 1 1		
HALE	22	2046	2110	2050	N24	E36	.688	8818	25.6	24	-F	1 C	2050	.15	.20		J		
GRP 5856	22	2126	2147	2131	N28	E34	.698	8818	25.4	21	-N			.42			2 2 2		
CULG	22	2122	2151	2129	N27	E27	.628	8818	24.9	29	-F	C		.62	.90				
HALE	22	2130	2142	2133	N29	E41	.765	8818	26.0	12	-N	1 C	2133	.21	.30		J		
GRP 5857	22	2243	2328	2248	N25	E39	.724	8818	25.9	45	-N			.26			1 1 1		
HALE	22	2243	2328	2248	N25	E39	.724	8818	25.9	45	-N	1 C	2248	.26	.40		J		
GRP 5858	23	0005	0015	0005	N30	E39	.754	8818	25.9	10	-N			.15			1 1 1		
HALE	23	0005E	0015		N30	E39	.754	8818	25.9	10D	-N	2 P	0005	.15	.20				
GRP 5859	23	0022	0049	0027	N25	E39	.723	8818	25.9	27	-N			.99			4 3 3		
SACP	23	0021	0036U	0022	N26	E38	.720	8818	25.9	15U	-N	C		1.31	1.55				
CULG	23	0021	0055	0030	N27	E26	.618	8818	25.0	34	-N	C		1.24	1.68				
HALE	23	0023	0041	0028	N25	E37	.704	8818	25.8	18	-B	2 C	0028	.41	.60		FI		
CRON	23	0039	0050	0044	N22	E54	.846	8818	27.1	11	-N	C		.40	.70	200			
GRP 5860	23	0104	0125	0110	N28	E38	.732	8818	25.9	21	-F			.62			3 3 2		
HALE	23	0057	0125	0105	N30	E39	.754	8818	26.0	28	-N	2 C	0105	.15	.20				
IKOM	23	0105E	0115D		N28	E40	.750	8818	26.0	10D	-F	V	0110	.62	.90		D		
MANI	23	0110	0124	0115	N27	E36	.708	8818	25.7	14	-F	2	0115	.62	.89				
GRP 5861	23	0145	0235	0150	N28	E40	.750	8818	26.1	50	-F			.52			1 1 1		
IKOM	23	0145E	0235		N28	E40	.750	8818	26.1	50D	-F	V	0150	.52	.80		E		
GRP 5862	23	0310	0319	0312	N27	E12	.515	8818	24.0	9	-N			.31			2 2 2		
HALE	23	0305	0439	0415	N25	E27	.608	8818	25.2	94	-N	2 C	0415	.10	.11				
HALE	23	0310	0317	0311	N28	E08	.511	8818	23.7	7	-F	2 C	0310	.10	.11		C		
CULG	23	0310	0320D	0312	N28	E07	.508	8818	23.7	10D	-N	P		.41	.46		L		
GRP 5863	23	0325	0328	0325	N25	E36	.694	8818	25.8	3	-B			.21			1 1 1		
HALE	23	0325	0328	0325	N25	E36	.694	8818	25.8	3	-B	2 C	0325	.21	.30				
GRP 5864	23	0412	0418	0413	N09	E61	.881	8821	27.8	6	-N			.15			1 1 1		
HALE	23	0412	0418	0413	N09	E61	.881	8821	27.8	6	-N	2 C	0413	.15	.30				
GRP 5865	23	0427	0453	0429	N28	E33	.688	8818	25.7	26	-N			.41			3 3 3		
CULG	23	0424E	0508D	0426	N29	E32	.687	8818	25.6	44D	-N	P		.52	.70				
HALE	23	0425	0444	0427	N29	E31	.679	8818	25.5	19	-B	2 C	0427	.31	.40		FI		
MANI	23	0431	0446	0435	N27	E35	.699	8818	25.8	15	-F	2	0435	.41	.59				
GRP 5866	23	0709	0736	0712	N15	E69	.941	8821	28.5	27	2N			3.36			1 1 1		
CAPE	23	0709	0736	0712	N15	E69	.941	8821	28.5	27	2N	C	0712	3.36	9.80		FI		
GRP 5867	23	0740	0826	0805	N27	E34	.689	8818	25.9	46	1N			.41			2 2 1		
SALO	23	0740	0830	0800	N28	E35	.706	8818	25.9	50	1N	S	0800			1.20			
CAPE	23	0803	0821	0809	N26	E33	.673	8818	25.8	18	-N	C	0809	.41	.60		IT		

# SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS					REMARKS	
	DATE 1967 MAY	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H $\alpha$	MAX. INT. %		
GRP 5868	23	0814	0830	0821	N30	W50	.841	8810	19.6	16	-F							1 1 1	
CAPE	23	0814	0830	0821	N30	W50	.841	8810	19.6	16	-F	C	0821	.18	.30			C	
GRP 5869	23	0819	0837	0824	N18	E90	1.000	8824	30.1	18	-N							2 2 2	
CAPE	23	0816	0834	0822	N21	E90	1.000	8824	30.1	18	-F	C	0822	.26				CT	
MANI	23	0822	0839	0826	N14	E90	1.000	8824	30.1	17	-N	2	0836	.41					
GRP 5870	23	0902	0906	0904	N25	E37	.704	8818	26.2	4	-F				.10	.34			
CAPE	23	0902	0906	0904	N25	E37	.704	8818	26.2	4	-F	C	0904	.78	1.10			1 1 1	
GRP 5871	23	0927	0948	0928	N25	E34	.675	8818	25.9	21	-N				.50			2 2 2	
CANA	23	0927	0947	0928	N24	E33	.658	8818	25.9	20	-N	C		.40	.50	200			
CAPE	23	0927	0948	0928	N25	E34	.675	8818	25.9	21	-N	C	0928	.60	.80			IT	
GRP 5872	23	0958	1023	1001	N23	E23	.550	8818	25.1	25	-N				1.29			1 1 1	
CAPE	23	0958	1023	1001	N23	E23	.550	8818	25.1	25	-N	C	1001	1.29	1.60			I	
GRP 5873	23	1040	1053	1042	N24	E32	.648	8818	25.8	13	-N				.66			1 1 1	
ATHN	23	1040	1053	1042	N24	E32	.648	8818	25.8	13	-N	2	1042	.66	.90	1.50			
GRP 5874	23	1100	1112	1101	N25	E33	.665	8818	25.9	12	-N				.50			1 1 1	
ATHN	23	1100	1112	1101	N25	E33	.665	8818	25.9	12	-N	2	1101	.50	.50	1.60			
GRP 5875	23	1106	1127	1116	N15	E68	.935	8821	28.6	21	1N				1.21			1 1 1	
CAPE	23	1106	1127	1116	N15	E68	.935	8821	28.6	21	1N	C	1116	1.21	3.30			FI	
GRP 5876	23	1200	1228	1204	N24	E30	.628	8818	25.8	28	-N				1.04			3 3 3	
CAPE	23	1131	1208	1140	N30	E22	.617	8818	25.1	37	-F	C	1140	.32	.40			HI	
CAPE	23	1158	1228	1205	N15	E30	.560	8818	25.7	30	1N	C	1205	1.75	2.30	1.50		FIT	
ATHN	23	1201	1220D	1204	N25	E34	.675	8818	26.1	19D	-N	2	1204	.53	.70				
UCCL	23	1202	1218D	1203	N25	E31	.646	8818	25.8	16D	-B	P	1203	.52	1.00			I	
GRP 5877	23	1221	1237	1224	N27	W77	.982	8810	17.7	16	-N				.53			2 2 2	
HOUS	23	1220	1232	1223	N27	W77	.982	8810	17.7	12	-F	C		.31	.90	100			
CAPE	23	1221	1241	1225	N27	W77	.982	8810	17.7	20	-N	C	1225	.74	3.90			CI	
GRP 5878	23	1235	1304	1242	N25	E27	.608	8818	25.5	29	-N				1.12			4 4 4	
UCCL	23	1227E	1240D	1239	N25	E25	.589	8818	25.4	13D	-N	P	1239	.77	1.50			FIJ	
ATHN	23	1238E	1254	1238	N24	E36	.687	8818	26.2	16D	-N	2	1238	.83	1.00	1.50			
MCMA	23	1238	1300		N24	E25	.579	8818	25.4	22	-F	C	1246	.93	1.20			E	
CAPE	23	1238	1408D	1244	N26	E26	.608	8818	25.5	90D	1N	C	1244	1.93	2.40			I	
GRP 5879	23	1331	1406	1342	N30	E30	.679	8818	25.8	35	-N				.55	.70		3 3 3	
CAPE	23	1331	1408D	1337	N28	E31	.670	8818	25.9	37D	1N	C	1337	.91	2.30			IT	
CAPE	23	1341	1408D	1352	N34	E24	.673	8818	25.4	27D	-N	C	1352	1.53	2.00			I	
HUAN	23	1343E	1403		N28	E32	.679	8818	26.0	20D	-F	1	P	1343	.45	.53			E
UCCL	23	1345E	1400D		N32	E31	.704	8818	25.9	15D	-N	P	1345	.52	1.00			8	
GRP 5880	23	1428	1449	1434	N28	E28	.644	8818	25.7	21	-F	2	C	1434	.50	.56			1 1 1
HUAN	23	1428	1449	1434	N28	E28	.644	8818	25.7	21	-F	2	C	1434	.50	.56			E
GRP 5881	23	1522	1543	1530	N26	E27	.617	8818	25.7	21	-N				.37			3 3 3	
HUAN	23	1501	1522	1504	N29	E32	.687	8818	26.0	21	-F	2	C	1504	.45	.53			D
CANA	23	1519	1530D	1526	N26	E25	.599	8818	25.5	11D	-N	C		.20	.30	200			
HUAN	23	1525	1543	1533	N26	E24	.590	8818	25.4	18	-N	2	C	1533	.25	.27			D
MCMA	23	1531E	1536D		N26	E29	.635	8818	25.8	5D	-F	C	1532	.21	.30			D	
GRP 5882	23	1706	1714	1709	N23	E90	1.000	8824	30.5	8	-N				.20			1 1 1	
LOCK	23	1706	1714	1709	N23	E90	1.000	8824	30.5	8	-N	C	1709	.20	.80	20		H	
GRP 5883	23	1720	1745	1735	N23	E90	1.000	8824	30.5	25	-F				.30			1 1 1	
LOCK	23	1720	1745	1735	N23	E90	1.000	8824	30.5	25	-F	C	1735	.30	1.20	10			
GRP 5884	23	1745	1807	1754	N22	E90	1.000	8824	30.5	22	-F				.20			1 1 1	
LOCK	23	1745	1807	1754	N22	E90	1.000	8824	30.5	22	-F	C	1754	.20	.80	10			
GRP 5885	23	1756	1809	1758	N21	E25	.551	8818	25.6	13	-N				.44			2 2 2	
HALE	23	1740	1753	1742	N24	E25	.579	8818	25.6	13	-N	2	C	1742	.26	.30			
SACP	23	1753	1804	1754	N16	E28	.543	8818	25.8	11	-F	C		.46	.49				
GRP 5886	23	1759	1813	1801	N26	E19	.549	8818	25.2	14	-N	2	C	1801	.15	.20			
HUAN	23	1804	2013	1814	N30	E25	.639	8818	25.6	129	2B				6.33			5 5 5	
HALE	23	1802	2146		N30	E25	.639	8818	25.6	224	2B	1	P	1816	4.38	4.95			FHK
SACP	23	1803	1831	1812	N29	E24	.621	8818	25.6	28	2B	2	C	1812	4.54	5.80			FI
LOCK	23	1803	1835D	1817	N31	E25	.649	8818	25.6	32D	2B				9.38	10.50			
LOCK	23	1803	2200	1814	N31	E25	.649	8818	25.6	237	2B	C	1814	8.00	10.40	30		K	
LOCK	23	1803	2200	2020	N31	E25	.649	8818	25.6	237	2B	C	1814	8.00	10.40	30		K	
HOUS	23	1807	1811D	1810	N27	E25	.609	8818	25.6	4D	2N	C		5.36	6.60	200		EI	
GRP 5887	23	1836	2146	1845	N27	E25	.609	8818	25.7	190	2B				7.84			3 3 3	
HUAN	23	1802	2146		N27	E25	.609	8818	25.6	224	2B	1	P	1848	7.22	7.91			
SACP	23	1835	1932D	1844	N28	E24	.611	8818	25.6	57D	3B	C		11.35	12.42				
HALE	23	1836	1915D	1843	N27	E25	.609	8818	25.6	39D	2B	2	P	1843	4.95	6.20			FI
GRP 5888	23	1850	2122	1955	N27	E28	.635	8818	25.9	152	2B				6.50			3 2 1	
HUAN	23	1802	2146		N28	E28	.644	8818	25.9	224	2B	1	P	1959	6.50	7.35			
HOUS	23	1937	2057	1951	N26	E28	.626	8818	25.9	80	2B								
HALE	23	2058	2104	2100	N26	E17	.534	8818	25.1	6	-N	2	C	2100	.21	.21			
HALE	23	2058	2108	2059	N19	W14	.421	8818	22.8	10	-N	2	C	2059	.15	.20			

# SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS					REMARKS
	DATE	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	MC MATH PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H $\alpha$	MAX. INT. %	
	1967 MAY																	
GRP 5889	23	1910	1935	1920	N20	E90	1.000	8824	30.5	25	-F							1 1 1
LOCK	23	1910	1935	1920	N20	E90	1.000	8824	30.5	25	-F	C	1920	.50	2.00		10	H
GRP 5890	23	1935	2127	1946	N27	E28	.635	8818	25.9	112	2B			9.02				2 2 2
SACP	23	1932	2156U	1947	N28	E28	.644	8818	25.9	144U	2B	C		8.75	9.80			
HOUS	23	1937	2057	1944	N26	E28	.626	8818	25.9	80	2B	C		9.28	11.60		300	EIJ
GRP 5891	23	2028	2116	2108	N23	E90	1.000	8824	30.6	48	1N			.53				2 2 2
LOCK	23	1950	2120	2108	N20	E90	1.000	8824	30.6	90	1N	C	2108	.90	3.60		20	K
LOCK	23	1950	2120	2015	N20	E90	1.000	8824	30.6	90	1N	C						K
LOCK	23	1950	2120	2040	N20	E90	1.000	8824	30.6	90	1N	C						K
HALE	23	2106	2111	2108	N25	E89	1.000	8824	30.6	5	-F	2 C	2108	.15				
GRP 5892	23	2112	2137	2113	N27	E27	.626	8818	25.9	25	1B			2.68				3 2 2
HOUS	23	2112	2137	2113	N26	E28	.626	8818	26.0	25	1N	C		2.58	3.20		200	EI
CULG	23	2112E	2306D	2112	N27	E26	.618	8818	25.8	114D	1B	1 P		2.78	3.51			LU
IKOM	23	2252	2335D		N25	E27	.608	8818	26.0	43D	-N			.52	.60		100	D
GRP 5893	23	2123	2145	2130	N23	E18	.505	8818	25.2	22	-N			.21				2 2 2
HOUS	23	2121	2145	2135	N22	E18	.493	8818	25.2	24	-N			.21	.20		200	
HALE	23	2124	2130D	2125	N24	E18	.517	8818	25.2	6D	-N	2 C	2125	.21	.21			
GRP 5894	23	2129	2233	2216	N27	E25	.609	8818	25.8	64	1N			1.14				2 2 2
HALE	23	2045E	2235D		N28	E28	.644	8818	26.0	110D	1N	2 P	2045	2.06	2.70			FBI
MANI	23	2213	2231	2216	N26	E22	.573	8818	25.6	18	-N	2	2216	.21	.26			Z
GRP 5895	23	2145	2230	2200	S35	W90	1.000	8820	17.2	45	1F			.80				1 1 1
LOCK	23	2145	2230U	2200	S35	W90	1.000	8820	17.2	45U	1F	C	2200	.80	3.20		10	
GRP 5896	23	2319	2325	2322	N23	E77	.981	8821	29.7	6	-N			.19				1 1 1
SACP	23	2319	2325	2322	N23	E77	.981	8821	29.7	6	-N	C		.19	.47			
GRP 5897	23	2337	2350	2340	N21	E83	.995	8824	30.2	13	-F			.37				1 1 1
SACP	23	2337	2350D	2340	N21	E83	.995	8824	30.2	13D	-F	C		.37				
GRP 5898	23	2346	2357	2348	N21	E15	.455	8818	25.1	11	-N			.50				3 3 3
SACP	23	2346	2350D	2348	N22	E16	.476	8818	25.2	4D	-N	C		.37	.38			
CULG	23	2346	2357	2349	N21	E15	.455	8818	25.1	11	-N	C		.52	.55			
IKOM	23	2348E	2355D		N21	E15	.455	8818	25.1	7D	-F	V	2348	.62	.70		75	D
GRP 5899	23	2359	0045	0006	S35	W90	1.000	8820	17.2	46	1N			1.00				1 1 1
LOCK	23	2359	0045U	0006	S35	W90	1.000	8820	17.2	46U	1N	C	0006	1.00	4.00		20	
GRP 5900	24	0003	0015	0007	N25	E87	.999	8824	30.5	12	1N			2.05				2 2 1
SACP	24	0003	0012	0005	N25	E86	.999	8824	30.5	9	1N	C		2.05				
MANI	24	0006E	0018	0008	N24	E87	.999	8824	30.5	12D	-N	2	0008	.36	1.11			
GRP 5901	24	0005	0120	0030	N23	E06	.428	8818	24.5	75	-N			.67				2 2 2
CULG	24	0005	0120	0025	N23	E07	.432	8818	24.5	75	-N	C		.62	.66			
IKOM	24	0015E	0055D		N22	E05	.409	8818	24.4	40D	-F	V	0035	.72	.80		80	D
GRP 5902	24	0214	0235	0215	N21	E75	.973	8824	29.7	21	-F			.18				2 2 2
HALE	24	0213E	0230		N22	E72	.961	8824	29.5	17D	-F	2 P	0213	.10				
MANI	24	0215E	0240		N20	E77	.979	8824	29.9	25D	-F	2	0217	.26	.64			
GRP 5903	24	0257	0332	0300	N26	E89	1.000	8824	30.8	35	-F			.57				1 1 1
HALE	24	0257	0332	0300	N26	E89	1.000	8824	30.8	35	-F	1 C	0300	.57				F
GRP 5904	24	0258	0418	0322	N23	E11	.452	8818	24.9	80	1N			2.46				7 7 6
CULG	24	0226	0252	0227	N27	E16	.538	8818	25.3	26	-N	C		.62	.72			
CULG	24	0231	0448D	0321	N23	E08	.436	8818	24.7	137D	1B	P		1.96	2.09			FK
HALE	24	0257	0427	0323	N23	E11	.452	8818	24.9	90	-N	2 C	0323	1.24	1.40			F
MANI	24	0302	0430	0320	N23	E11	.452	8818	25.0	88	1B	2	0320	2.37	2.71			
MITK	24	0302	0420D		N21	E11	.424	8818	25.0	78D	1N	V						
CRON	24	0308	0333	0321	N21	E14	.446	8818	25.2	25	-N							
CRON	24	0308	0333	0313	N21	E14	.446	8818	25.2	25	-N	C		1.30	1.50		200	EIJ
KODA	24	0310	0403	0320	N23	E11	.452	8818	25.0	53	1N	V	0314	1.93	2.20	1.92		EL
SIBE	24	0323E	0427D	0327	N23	E10	.446	8818	24.9	64D	2N	P	0327	5.31	5.67		113	EFT
HALE	24	0428	0446D		N26	E15	.518	8818	25.3	18D	-F	3 P	0446	.41	.50			
HALE	24	0443	0446D		N26	E09	.485	8818	24.9	3D	-N	2 P	0446	.72	.80			F
GRP 5905	24	0337	0413	0342	N23	E07	.432	8818	24.7	36	1N			2.75				3 3 2
IKOM	24	0255E	0415D	0337	N22	E08	.421	8818	24.7	80D	1B	V	0337	3.09	3.40	1.52	130	E0
CRON	24	0337	0409	0341	N23	E08	.436	8818	24.8	32	1N	C		2.40	2.70		200	EI
HALE	24	0337	0416	0349	N23	E06	.428	8818	24.6	39	-N	2 C	0349	.62	.70			
GRP 5906	24	0407	0425	0414	N24	E89	1.000	8824	30.8	18	-N			.46				1 1 1
HALE	24	0407	0425	0414	N24	E89	1.000	8824	30.8	18	-N	1 C	0414	.46				F
GRP 5907	24	0530	0545	0535	N21	E75	.973	8824	29.9	15	-F			.26				1 1 1
MANI	24	0530	0545	0535	N21	E75	.973	8824	29.9	15	-F	2	0535	.26	.64			
GRP 5908	24	0610	0642	0620	S16	W36	.619	8816	21.6	32	-N			1.08				5 5 5
CULG	24	0605	0631D	0618	S16	W38	.644	8816	21.4	26D	-N	P		.93	1.17			
CRON	24	0612	0637	0616	S13	W37	.620	8816	21.5	25	-N	C		.50	.60		200	E
BUCA	24	0614	0645	0618	S16	W37	.632	8816	21.5	31	1F	C	0618	2.21	2.80			
CATA	24	0615E	0645D	0624	S16	W37	.632	8816	21.5	30D	-N		0624	1.25	1.60		184	
MANI	24	0622E	0635D	0624	S18	W32	.579	8816	21.9	13D	-N	2		.52	.64			
GRP 5909	24	0623	0629	0625	S22	E37	.660	8819	27.0	6	-N			.77				1 1 1
MANI	24	0623E	0629		S22	E37	.660	8819	27.0	6D	-N	2	0625	.77	1.03			





# SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IM-POR-TANCE	OBS.		MEASUREMENTS					REMARKS	
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MCMMATH PLAGE REGION			CMP DAY	COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H $\alpha$		MAX. INT. %
					LAT.	MER. DIST.													
GRP 5929	24	1305	1336	1310	N31	E23	.633	8818	26.3	31	-N		.52				3 2 2		
HUAN	24	1305	1315	1309	N30	E23	.623	8818	26.3	10	-F	2 C	1309	.25	.28		D		
CAPE	24	1305	1356	1311	N31	E23	.633	8818	26.3	51	-N	C	1311	.78	1.00		IT		
SACP	24	1354	1412	1358	N28	E15	.544	8818	25.7	18	-F	C		.46	.49				
GRP 5930	24	1425	1436	1426	N26	E17	.532	8818	25.9	11	-N		.55				4 4 4		
ATHN	24	1417E	1425	1417	N12	E02	.238	8818	24.7	8D	-N	2	1417	.66	.70	1.60			
ATHN	24	1417E	1435	1417	N25	E06	.458	8818	25.0	18D	-N	2	1417	.60	.60	1.50			
HUAN	24	1424	1435	1425	N27	E19	.559	8818	26.0	11	-N	2 C	1425	.25	.26		D		
HOU5	24	1424	1439	1426	N27	E20	.567	8818	26.1	15	-N	C		.52	.60		200		
MCMA	24	1425	1435	1426	N28	E18	.564	8818	26.0	10	-F	C	1426	.26	.30		D		
ATHN	24	1426	1440	1428	N28	E18	.564	8818	26.0	14	-N	2	1428	.50	.60	1.70			
GRP 5931	24	1434	1439	1436	N24	E69	.949	8824	29.8	5	-F		.65				1 1 1		
SACP	24	1434	1439	1436	N24	E69	.949	8824	29.8	5	-F	C		.65	1.28				
GRP 5932	24	1439	1515	1450	N24	E08	.451	8818	25.2	36	-N		2.02				8 8 8		
HUAN	24	1410	1530	1445	N24	E08	.451	8818	25.2	80	-B	2 C	1445	1.19	1.21		E		
SACP	24	1440	1511	1449	N25	E07	.462	8818	25.1	31	-N	C		1.40	1.43				
HOU5	24	1442	1507	1448	N25	E08	.466	8818	25.2	25	-N	C		1.13	1.20	200	E		
MCMA	24	1442	1515	1446	N25	E07	.462	8818	25.1	33	-B	C	1446	.72	.80		E		
CAPS	24	1444	1510D		N23	E07	.432	8818	25.1	26D	1B	2	1450	2.00	2.20	266	EJ		
ATHN	24	1446E	1515D		N25	E06	.458	8818	25.1	29D	-N	2	1500	1.65	1.80	1.80			
LOCA	24	1448	1516	1455	N24	E10	.461	8818	25.4	28	-N	V	1455	.85	1.00				
WEND	24	1450E	1506		N25	E12	.486	8818	25.5	16D	1B	V		3.09					
WEND	24	1450E	1517D		N24	E06	.443	8818	25.1	27D	1N	V		4.13					
GRP 5933	24	1510	1518	1511	S45	E46	.859	8819	28.1	8	-F		.30				1 1 1		
CANA	24	1510	1518	1511	S45	E46	.859	8819	28.1	8	-F	C		.30	.60	100			
GRP 5934	24	1536	1544	1539	N24	E67	.939	8821	29.7	8	-N		.94				1 1 1		
SACP	24	1536	1544	1539	N24	E67	.939	8821	29.7	8	-N	C		.94	1.76				
GRP 5935	24	1603	1611	1604	N28	E79	.988	8824	30.6	8	-N		.37				4 4 4		
HOU5	24	1602	1611	1603	N26	E80	.990	8824	30.7	9	-N	C		.31	1.00	200			
SACP	24	1603	1608	1604	N29	E78	.986	8824	30.5	5	-F	C		.56					
LOCK	24	1603	1613	1606	N26	E77	.982	8824	30.4	10	-F	C	1606	.40	1.20	10			
HALE	24	1603	1613	1604	N29	E80	.990	8824	30.7	10	-N	2 C	1604	.21					
GRP 5936	24	1715	1735	1715	S24	E70	.946	8825	30.0	20	-F		.30				1 1 1		
LOCK	24	1715E	1735	1715U	S24	E70	.946	8825	30.0	20D	-F	C	1715	.30	.70	10			
GRP 5937	24	1805	1900	1816	N22	W02	.418	8818	24.6	55	-N		1.90				4 4 4		
HUAN	24	1803	1902	1815	N22	W01	.401	8818	24.7	59	-N	2 C	1815	.83	.83				
LOCK	24	1804	1900	1820	N22	W01	.401	8818	24.7	56	-N	C	1820	1.20	1.30	20			
HOU5	24	1805	1844U	1808	N24	W02	.434	8818	24.6	39U	1N	C		4.74	5.10	200	EI		
MCMA	24	1806	1858	1821	N23	W02	.418	8818	24.6	52	-B	C	1821	.83	1.00		E		
GRP 5938	24	1812	1852	1827	N24	E02	.434	8818	24.9	40	1B		1.63				3 2 2		
HALE	24	1806	1850	1826	N24	W03	.435	8818	24.5	44	-N	2 C	1826	.83	.90		F		
SACP	24	1818	1854	1828	N23	W02	.418	8818	24.6	36	1B	C		2.43	2.45				
LOCK	24	1858	1940U	1911	N25	E12	.486	8818	25.7	42U	-F	C	1911	1.00	1.20	10			
GRP 5939	24	1958	2021	2002	N25	E06	.458	8818	25.3	23	-N		.76				2 2 2		
LOCK	24	1955	2016	2000	N24	W03	.435	8818	24.6	21	-F	C	2000	.50	.60	10			
LOCK	24	1956	2017	2004	N27	E12	.513	8818	25.7	21	-F	C	2004	.40	.50	10			
MCMA	24	2000	2025	2003	N25	E07	.462	8818	25.4	25	-N	C	2003	.62	.60		E		
GRP 5940	24	2043	2059	2046	S22	E65	.915	8825	29.7	16	-N		.49				4 4 4		
LOCK	24	2026	2110	2045	S22	E53	.823	8825	28.8	44	-F	C	2045	.60	1.10	10			
HUAN	24	2043E	2052D		S22	E70	.945	8825	30.1	9D	-F	1 P	2046	.25			D		
MCMA	24	2043	2052	2046	S24	E70	.946	8825	30.1	9	-N	C	2046	.26	.90		D		
SACP	24	2043	2101	2048	S21	E68	.933	8825	30.0	18	-N	C		.85	1.53				
GRP 5941	24	2115	2200	2125	S15	W46	.735	8816	21.4	45	-F		.80				1 1 1		
LOCK	24	2115	2200	2125	S15	W46	.735	8816	21.4	45	-F	C	2125	.80	1.20	10			
GRP 5942	24	2134	2159	2147	S23	E62	.896	8825	29.5	25	-N		.53				2 2 2		
LOCK	24	2120	2200	2145	S22	E53	.823	8825	28.9	40	-N	C	2145	.80	1.40	10	K		
LOCK	24	2120	2200	2130	S22	E53	.823	8825	28.9	40	-N	C	2130	.80	1.40	10	K		
MCMA	24	2147	2158	2148	S24	E70	.946	8825	30.2	11	-F	C	2148	.26	.90		D		
GRP 5943	24	2203	2226	2208	S22	E61	.888	8825	29.5	23	1N		1.07				2 2 2		
MANI	24	2158E	2223		S21	E68	.933	8825	30.0	25D	1N	3	2200	1.24	2.62				
LOCK	24	2207	2228	2215	S22	E53	.823	8825	28.9	21	-F	C	2215	.90	1.60	10			
GRP 5944	24	2218	2229	2225	S20	E90	1.000	8828	31.7	11	-F		.30				1 1 1		
LOCK	24	2218	2229	2225	S20	E90	1.000	8828	31.7	11	-F	C	2225	.30	1.20	10			
GRP 5945	24	2228	2309	2235	N28	E13	.532	8818	25.9	41	-B		.82				4 4 4		
LOCK	24	2228	2300U	2231	N27	E13	.519	8818	25.9	32U	-N	C	2231	.90	1.10	20			
MANI	24	2235E	2306	2236	N28	E15	.544	8818	26.1	31D	-B	3	2236	.41	.49				
MCMA	24	2236E	2249D		N25	E12	.486	8818	25.8	13D	-B	P	2237	.83	1.00		EL		
CULG	24	2238E	2311D	2307	N30	E13	.559	8818	25.9	33D	-N		1.13	1.32					
GRP 5946	24	2358	0008	0000	N27	E13	.519	8818	26.0	10	-N		.36				1 1 1		
MANI	24	2358	0008		N27	E13	.519	8818	26.0	10	-N	3	0000	.36	.44				
GRP 5947	25	0040	0055	0040	N29	E11	.534	8818	25.9	15	-F		.80				1 1 1		
LOCK	25	0040E	0055	0040U	N29	E11	.534	8818	25.9	15D	-F	C	0040	.80	1.00	10			
GRP 5948	25	0040	0110	0045	S22	E53	.823	8825	29.0	30	-F		.90				1 1 1		
LOCK	25	0040E	0110	0045	S22	E53	.823	8825	29.0	30D	-F	C	0045	.90	1.60	10			

SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION	IMPOR-TANCE	OBS. COND. TYPE	MEASUREMENTS					REMARKS	
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY				MIN.	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha		MAX. INT. %
					LAT.	MER. DIST.													
GRP 5949	25 1967	0041	0052	0044	S17	E90	1.000	8828	31.8	11	1F		.70				1 1 1		
LOCK	25	0041	0052	0044	S17	E90	1.000	8828	31.8	11	1F	C	0044	.70	2.80		10	H	
GRP 5950	25	0055	0105	0057	N14	E54	.826	8821	29.1	10	-F		.30					1 1 1	
LOCK	25	0055	0105	0057	N14	E54	.826	8821	29.1	10	-F	C	0057	.30	.50		10		
GRP 5951	25	0102	0108	0105	N30	E08	.536	8818	25.6	6	-F		.30					1 1 1	
LOCK	25	0102	0108	0105	N30	E08	.536	8818	25.6	6	-F	C	0105	.30	.40		10		
GRP 5952	25	0105	0113	0107	N19	E68	.938	8824	30.1	8	-N		.21					1 1 1	
MANI	25	0105E	0113		N19	E68	.938	8824	30.1	8D	-N	3	0107	.21	.44				
GRP 5953	25	0126	0154	0135	N30	E14	.563	8818	26.1	28	-N		.77					2 2 2	
CULG	25	0124	0158	0136	N30	E13	.557	8818	26.0	34	-N		.83	.96					
CRON	25	0128	0149	0133	N29	E14	.550	8818	26.1	21	-N	C		.70	.80		200		
GRP 5954	25	0221	0304	0228	S22	E16	.434	8819	26.3	43	1N		2.98					5 4 4	
CULG	25	0219	0319	0227	S21	E14	.403	8819	26.1	60	1B	C		2.58	2.75				
CRON	25	0220	0252	0227	S32	E17	.565	8819	26.4	32	-N	C		1.50	1.80		200		
SIBE	25	0222	0307	0227	S20	E15	.400	8819	26.2	45	2N	C	0227	5.88	6.27		90	T	
MANI	25	0223	0313	0232	S20	E16	.410	8819	26.3	50	1N	3	0232	1.96	2.13				
KODA	25	0239E	0250	0241	S19	E16	.398	8819	26.3	11D	1F	V	0242	1.93	2.10	1.52		D	
GRP 5955	25	0337	0416	0357	N15	E32	.584	8821	27.6	39	-F		1.36					3 3 3	
HALE	25	0335	0409D	0406	N15	E32	.584	8821	27.5	34D	-F	1	P 0406	1.24	1.50				
CULG	25	0336	0437D	0404	N15	E33	.596	8821	27.6	61D	-N	P	P 0404	2.37	2.76				
CULG	25	0336	0437D	0354	N15	E33	.596	8821	27.6	61D	-N	P	P 0354	1.24	1.44			FKLW	
MANI	25	0339	0403	0342	N15	E31	.571	8821	27.5	24	-F	2	P 0342	.46	.58				
GRP 5956	25	0528	0540	0531	N18	E63	.906	8824	30.0	12	1F		1.00					1 1 1	
CRON	25	0528	0540	0531	N18	E63	.906	8824	30.0	12	1F	C		1.00	2.20		100		
GRP 5957	25	0632	0720	0645	N28	E12	.525	8818	26.2	48	1B		4.55					6 6 6	
CULG	25	0631	0652D	0646	N30	E09	.540	8818	25.9	21D	2B	P		5.78	6.72			FL	
CRON	25	0633	0718U	0645U	N26	E16	.524	8818	26.5	45U	1N	C		4.00	4.70		200	E	
MANI	25	0633	0720	0650	N28	E12	.525	8818	26.2	47	2B	3	P 0650	6.19	7.38				
CAPS	25	0634E	0715D		N26	E10	.488	8818	26.0	41D	1B	1	P 0637	3.50	4.00		246	CFJL	
ABST	25	0637E	0700D	0645	N28	E10	.516	8818	26.0	23D	1B	P	P 0645	4.49	4.80		76	CE	
CATA	25	0645E	0715D	0646	N29	E12	.539	8818	26.2	30D	1B		0646	3.33	3.90		316		
GRP 5958	25	0817	0824	0820	S21	E21	.473	8819	26.9	7	-N		.57					4 4 3	
CRON	25	0814	0820	0818	S21	E18	.442	8819	26.7	6	-N	C		.60	.70		200	E	
CAPS	25	0817	0823D		S21	E21	.473	8819	26.9	6D	-N	1	P 0821	.80	.90		179		
MANI	25	0818E	0829		S20	E21	.463	8819	26.9	11D	-F	2	P 0820	.31	.34				
UCCL	25	0818	0823D		S22	E22	.494	8819	27.0	5D	-N	P							
GRP 5959	25	0847	0856	0850	S19	E18	.420	8819	26.7	9	1N		1.00					2 2 1	
CANA	25	0846	0857	0850	S21	E19	.452	8819	26.8	11	-N	C		1.00	1.10		200		
SALO	25	0848	0855		S16	E16	.365	8819	26.6	7	1N	V	P 0850			1.10			
GRP 5960	25	0940	0952	0944	N22	W04	.404	8818	25.1	12	-N		.75					3 3 3	
MANI	25	0938	0948D	0941	N21	W03	.386	8818	25.2	10D	-N	1	P 0941	.41	.45				
CAPS	25	0941	0959D		N20	W02	.368	8818	25.3	18D	-F	1	P 0945	.80	.90		160	J	
UCCL	25	0942E	0948D		N25	W06	.456	8818	25.0	6D	-N	P	P 0947	1.03	1.40			EHI	
GRP 5961	25	1041	1140	1051	N23	W04	.420	8818	25.1	59	1N		4.00					5 5 5	
CAPE	25	1039	1104D		N24	W07	.445	8818	24.9	25D	2N	P	P 1048	4.80	5.30			IFK	
CAPS	25	1041E	1205D		N20	W04	.373	8818	25.1	84D	2N	1	P 1048	5.00	5.40		201	CFJ	
CANA	25	1042	1111	1051	N28	W07	.504	8818	24.9	29	1N	C		3.40	4.00		200	E	
CATA	25	1044E	1154D	1054	N22	E05	.407	8818	25.8	70D	1B		1054	3.66	4.00		347		
LOCA	25	1049E	1130D	1052	N22	W06	.411	8818	25.0	41D	1B	S	P 1052	3.16	3.50				
GRP 5962	25	1106	1150	1112	N24	W08	.449	8818	24.9	44	1N		2.39					3 3 2	
SALO	25	1102	1120		N27	W08	.493	8818	24.9	18	2N	V	P 1110			1.40			
MCMA	25	1105E	1215D		N22	W05	.407	8818	25.1	70D	1B	C	P 1108	2.58	2.80		200	BFL	
CANA	25	1111	1154	1119	N24	W12	.470	8818	24.6	43	1N	C		2.20	2.50			E	
GRP 5963	25	1129	1212	1129	S19	E18	.420	8819	26.8	43	-F		1.10					1 1 1	
BUCA	25	1129	1212		S19	E18	.420	8819	26.8	43	-F	C	P 1129	1.10	1.20				
GRP 5964	25	1129	1236	1130	N23	W02	.416	8818	25.3	67	2N		4.47					3 3 3	
ATHN	25	1105E	1230		N23	E08	.434	8818	26.1	85D	2B	2	P 1130	5.94	6.60	2.00			
BUCA	25	1129	1253		N24	W07	.445	8818	25.0	84	2N	C	P 1130	5.54	6.10			F	
HUAN	25	1136	1225		N23	W08	.434	8818	24.9	49	1F	1	P 1141	1.92	1.95			E	
GRP 5965	25	1258	1410	1305	N21	E61	.897	8824	30.1	72	-N		.45					2 2 2	
MCMA	25	1258	1410	1305	N21	E60	.889	8824	30.0	72	-N	C	P 1305	.52	1.20			E	
HUAN	25	1300	1359		N20	E61	.895	8824	30.1	59	-F	1	C 1323	.37	.59			D	
GRP 5966	25	1259	1315	1302	S21	E17	.432	8819	26.8	16	-F		.25					1 1 1	
HUAN	25	1259	1315	1302	S21	E17	.432	8819	26.8	16	-F	2	C 1302	.25	.25			D	
GRP 5967	25	1300	1351		N19	W61	.893	8817	21.0	51	-F							1 1 0	
CAPS	25	1300E	1351D		N19	W61	.893	8817	21.0	51D	-F	1							
GRP 5968	25	1430	1505	1436	S21	E18	.442	8819	27.0	35	-F		.31					1 1 1	
MCMA	25	1430	1505		S21	E18	.442	8819	27.0	35	-F	C	P 1436	.31	.40			D	
GRP 5969	25	1437	1500	1439	S17	E90	1.000	8828	1.4	23	-N							1 1 0	
MCMA	25	1437	1500	1439	S17	E90	1.000	8828	1.4	23	-N	C						A	
GRP 5970	25	1450	1506	1453	S24	E58	.869	8825	30.0	16	-N		.32					3 3 3	
CANA	25	1449	1506	1454	S25	E57	.863	8825	29.9	17	-N	C		.30	.60		200		
HUAN	25	1450	1504	1453	S23	E59	.875	8825	30.0	14	-F	2	C 1453	.25	.37			D	
MCMA	25	1450																	



# SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IMPOR-TANCE	OBS. COND. TYPE	MEASUREMENTS					REMARKS
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MCMMATH PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H $\alpha$	MAX. INT. %	
					LAT.	MER. DIST.												
1967 MAY																		
GRP 5971	25	1510	1531	1515	N19	W15	.427	8818	24.5	21	-B			1.23				6 6 5
ONDR	25	1507E	1528D		N26	W16	.524	8818	24.4	210	-N	V	1508			2.20		DH
HOUS	25	1509U	1530	1515	N17	W14	.392	8818	24.6	210	-N	C		1.75	1.90		200	E
MCMA	25	1510	1531	1518	N18	W14	.405	8818	24.6	21	-B	C	1518	.72	.80			E
ATHN	25	1511	1531	1517	N17	W14	.392	8818	24.6	20	-B	1	1517	1.65	1.80	2.00		E
HUAN	25	1511	1533	1517	N18	W15	.414	8818	24.5	22	-B	2	1517	.95	.95			E
CANA	25	1512	1527D	1515	N18	W15	.414	8818	24.5	150	-N	C		1.10	1.20		200	
GRP 5972	25	1531	1552	1534	N24	W15	.491	8818	24.5	21	-N	C		.74				4 4 4
SACP	25	1530	1550	1536	N25	W15	.504	8818	24.5	20	-N	C		.85	.88			
ATHN	25	1531E	1542D	1533	N23	W14	.470	8818	24.6	110	-N	1	1533	1.16	1.30	1.50		E
HUAN	25	1531	1555	1534	N26	W16	.524	8818	24.4	24	-N	2	1534	.57	.59			E
MCMA	25	1532	1550	1534	N23	W15	.478	8818	24.5	18	-N	C	1534	.36	.40			E
GRP 5973	25	1607	1641	1613	N23	W12	.457	8818	24.8	34	-N	C		.61				3 3 3
MCMA	25	1557	1620	1600	N26	E05	.469	8818	26.0	23	-N	C	1600	.31	.31			E
SACP	25	1606	1633	1612	N23	W15	.478	8818	24.5	27	-N	C		.66	.67			E
MCMA	25	1607	1640	1616	N23	W15	.478	8818	24.5	33	-N	C	1616	.36	.40			E
HUAN	25	1607	1650	1611	N23	W15	.478	8818	24.5	43	-N	2	1611	.50	.50			E
GRP 5974	25	1640	1706	1644	S23	E58	.867	8825	30.0	26	-N	C		.63				3 3 3
MCMA	25	1640	1700	1644	S23	E58	.864	8825	30.0	20	-N	C	1644	.41	.90			E
HALE	25	1640	1721	1644	S24	E59	.877	8825	30.1	41	-N	2	1644	.52	1.10			E
SACP	25	1641	1657	1643	S22	E58	.865	8825	30.0	16	-N	C		.95	1.39			
GRP 5975	25	1704	1725	1706	N27	E03	.480	8818	25.9	21	-F	C		.69				4 4 4
SACP	25	1703	1726	1708	N28	E03	.495	8818	25.9	23	-F	C		1.32	1.36			
HUAN	25	1704	1717	1706	N28	E03	.495	8818	25.9	13	-F	2	1706	.45	.47			E
MCMA	25	1704	1735	1705	N24	E02	.432	8818	25.9	31	-N	C	1705	.52	.60			EL
HALE	25	1705	1723	1706	N27	E04	.482	8818	26.0	18	-F	3	1706	.46	.50			
GRP 5976	25	1751	1800	1754	N26	W16	.524	8818	24.5	9	-N	C		.40				4 4 4
SACP	25	1750	1804	1755	N26	W16	.524	8818	24.5	14	-N	C		.38	.39			
HUAN	25	1751	1758		N27	W16	.536	8818	24.5	7	-F	1	1753	.31	.32			E
MCMA	25	1751	1759	1753	N23	W16	.486	8818	24.5	8	-N	C	1753	.31	.31			E
LOCK	25	1751	1800	1755	N27	W15	.530	8818	24.6	9	-F	C	1755	.60	.70		10	E
GRP 5977	25	1843	1911	1849	S21	E14	.403	8819	26.8	28	-F	C		.51				3 3 3
LOCK	25	1840	1910	1853	S21	E13	.394	8819	26.8	30	-F	C	1853	.80	.90		10	
MCMA	25	1844	1855	1847	S21	E15	.412	8819	26.9	11	-F	C	1847	.41	.50			E
HUAN	25	1844	1927	1847	S20	E14	.391	8819	26.8	43	-N	2	1847	.31	.31			D
GRP 5978	25	1857	1909	1859	N22	W14	.457	8818	24.7	12	-F	C		.69				3 3 3
HUAN	25	1856	1910	1859	N22	W14	.457	8818	24.7	14	-F	2	1859	.75	.77		10	
LOCK	25	1857	1908	1900	N22	W15	.465	8818	24.7	11	-F	C	1900	.90	1.00			E
MCMA	25	1857	1908	1859	N21	W14	.444	8818	24.7	11	-N	C	1859	.41	.50			E
GRP 5979	25	1907	1913	1908	N29	E65	.934	8824	30.7	6	-N	C		.52				1 1 1
MCMA	25	1907	1913	1908	N29	E65	.934	8824	30.7	6	-N	C	1908	.52	1.40			E
GRP 5980	25	1925	2020	1928	N23	W17	.494	8818	24.5	55	-B	C		1.46				2 2 2
HUAN	25	1925	2002D		N23	W17	.494	8818	24.5	37D	-B	1	1927	1.51	1.56			E
LOCK	25	1925	2020	1929	N23	W17	.494	8818	24.5	55	-N	C	1954	1.40	1.70		20	K
GRP 5981	25	1925	2011	1955	N22	W16	.473	8818	24.6	46	-B	C		1.30				4 4 4
MCMA	25	1924	2012D	1945	N21	W14	.444	8818	24.8	48D	-B	C	1945	1.03	1.20			F
LOCK	25	1925	2020	1954	N23	W17	.494	8818	24.5	55	-N	C	1954	1.40	1.70		20	K
HOUS	25	1948D	2005	1950	N23	W16	.486	8818	24.6	17D	-B	C		1.55	1.70		300	E
LOCK	25	1950	2025	2000	N23	W17	.494	8818	24.6	35	-F	C	2000	.90	1.10		10	
SACP	25	1955E	2004	1956	N23	W17	.494	8818	24.6	9D	-N	C		1.23	1.27			
GRP 5982	25	1927	1939	1931	S24	E57	.861	8825	30.1	12	-F	C		.38				2 2 2
LOCK	25	1925	1940	1931	S25	E57	.863	8825	30.1	15	-F	C	1931	.50	1.00		10	
HUAN	25	1928	1938		S23	E56	.851	8825	30.0	10	-F	1	1930	.25	.35			D
GRP 5983	25	2000	2019	2000	N24	E06	.441	8818	26.3	19	-N	C		.58				2 3 3
SACP	25	1956	2020	2001	N28	E02	.494	8818	26.0	24	-F	C		.75	.77			
MCMA	25	1957E	2012D	1958	N25	E03	.449	8818	26.1	15D	-N	C	1958	.41	.50			EL
HOUS	25	2007	2018	2010	N20	E14	.431	8818	26.9	11	-N	C		.83	.90		200	E
GRP 5984	25	2022	2037	2029	N29	E62	.918	8824	30.5	15	-F	C		.80				1 1 1
LOCK	25	2022	2037	2029	N29	E62	.918	8824	30.5	15	-F	C	2029	.80	1.80		10	
GRP 5985	25	2043	2130	2055	N26	E06	.472	8818	26.3	47	1N	C		2.48				4 4 4
LOCK	25	2033	2145	2056	N20	E04	.373	8818	26.2	72	1N	C	2056	4.00	4.80		20	
MCMA	25	2043	2125	2054	N27	E06	.486	8818	26.3	42	1B	C	2054	2.06	2.20			FL
HOUS	25	2045	2123	2050	N28	E03	.495	8818	26.1	38	-N	C		1.13	1.30		200	EIJ
HUAN	25	2049	2120	2052	N30	E05	.528	8818	26.2	31	-N	2	2052	1.24	1.30			E
HOUS	25	2050	2102	2056	N32	E09	.568	8818	26.5	12	-N	C		1.13	1.30		200	
HUAN	25	2101	2125	2102	N22	E12	.443	8818	26.8	24	-N	2	2102	.37	.38			D
GRP 5986	25	2101	2121	2103	N11	E25	.467	8821	27.8	20	-B	C		.56				2 2 2
LOCK	25	2101	2120	2104	N10	E25	.461	8821	27.8	19	-N	C	2104	.80	.90		20	
MCMA	25	2101	2121	2102	N12	E24	.460	8821	27.7	20	-B	C	2102	.31	.31			D
GRP 5987	25	2116	2127	2119	S24	E56	.853	8825	30.1	11	-N	C		.61				2 2 2
LOCK	25	2114	2132	2119	S24	E55	.845	8825	30.0	18	-F	C	2119	.90	1.60		10	
MCMA	25	2117	2121	2118	S23	E56	.851	8825	30.1	4	-N	C	2118	.31	.70			D







# SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IMPOR-TANCE	OBS. COND. TYPE	MEASUREMENTS				REMARKS		
	DATE 1967 MAY	START	END	MAX. PHASE	APPROX. LAT. MER. DIST.	CENTRAL DISTANCE	MC-MATH PLAGE REGION	CMP DAY	TIME UT				MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H $\alpha$	MAX. INT. %			
GRP 6049	27	1231	1257	1236	N12 E02	.232	8821	27.7	26	1N				4.26				3 3 3	
MCMA	27	1151E	1247D		N12 E01	.231	8821	27.6	56D	1N		C	1235	1.96	2.00			EK	
CAPE	27	1231	1257	1235	N13 E02	.249	8821	27.7	26	2N		C	1235	6.82	7.10			F	
CAPS	27	1235E	1245D		N12 E04	.240	8821	27.8	10D	1N	3	C	1237	4.00	4.10			C	
	07	1310	1323	NO FLARE PATROL															
GRP 6050	27	1258	1328	1306	N23 E48	.795	8824	31.1	30	-N				1.14				6 6 5	
CAPE	27	1250	1343	1302	N23 E47	.786	8824	31.1	53	1N		C	1302	1.53	2.40			C	
MEUD	27	1256	1320		N23 E48	.795	8824	31.1	24	-N		C	1303	.72	1.00				
MCMA	27	1257	1323	1302	N23 E46	.776	8824	31.0	26	-N		C	1302	.62	1.00			E	
CAPS	27	1303	1326D		N23 E50	.813	8824	31.3	23D	1N	3	C	1314	2.00	3.40			E	
SACP	27	1306	1329	1309	N22 E47	.782	8824	31.1	23	-N		C		.85	1.08				
AROS	27	1310E	1318D		N23 E47	.786	8824	31.1	8D	-N		V		.99					
GRP 6051	27	1300	1306	1300	N23 W47	.786	8818	24.0	6	-N				.99				1 1 1	
ATHN	27	1300E	1306D	1300	N23 W47	.786	8818	24.0	6D	-N	2		1300	1.09	1.40		1.70		
GRP 6052	27	1310	1321	1312	N21 E78	.983	8830	2.4	11	-N				2.00				5 5 3	
CAPS	27	1309E	1326D		N21 E76	.976	8830	2.2	17D	1N	3		1312	.52				C	
MEUD	27	1310	1318	1312	N22 E77	.980	8830	2.3	8	-N		C	1312	.75					
SACP	27	1310	1321	1312	N21 E78	.983	8830	2.4	11	-N		C							
MCMA	27	1310	1322	1312	N22 E80	.988	8830	2.5	12	-B		C	1312					E	
AROS	27	1310E	1318D		N21 E78	.983	8830	2.4	8D	-N		V							
GRP 6053	27	1332	1349	1337	N27 W26	.613	8818	25.6	17	1N				3.20				2 2 2	
CAPE	27	1326	1352	1338	N28 W26	.622	8818	25.6	26	-N		C	1338	.74	1.00			I	
CAPE	27	1330	1406	1344	N29 W32	.683	8818	25.2	36	1N		C	1344	2.91	4.00			I	
SACP	27	1333	1345	1336	N27 W26	.613	8818	25.6	12	-N		C		.57	.61				
CAPE	27	1352	1405D	1355	N26 W21	.559	8818	26.0	13D	1N		C	1355	2.17	2.60			I	
GRP 6054	27	1345	1405	1352	N22 E36	.671	8824	30.3	20	-N				1.32				2 2 2	
CAPE	27	1345	1405	1351	N23 E36	.677	8824	30.3	20	-N		C	1351	1.43	1.90			V	
CAPS	27	1349E	1355D		N21 E35	.654	8824	30.2	6D	-F	3		1353	1.20	1.60				
GRP 6055	27	1402	1413	1402	N23 E75	.973	8831	2.2	11	-N				.44				1 1 1	
ATHN	27	1402E	1413	1402	N23 E75	.973	8831	2.2	11D	-N	2		1402	.44			1.80		
GRP 6056	27	1451	1500	1453	N26 W27	.612	8818	25.6	9	-N				.73				4 4 4	
SACP	27	1450	1459	1452	N27 W27	.621	8818	25.6	9	-N		C		.75	.83				
MCMA	27	1451	1459	1452	N27 W28	.630	8818	25.5	8	-N		C	1452	.62	.80			E	
CAPS	27	1451E	1459		N26 W25	.594	8818	25.7	8D	-B	3		1453	.70	.80			CJ	
ATHN	27	1453	1503	1455	N24 W26	.584	8818	25.7	10	-N	2		1455	.83	1.00		1.60		
GRP 6057	27	1509	1519	1512	N26 W27	.612	8818	25.6	10	-N				.85				4 4 3	
ONDR	27	1509E	1518D		N27 W29	.639	8818	25.5	9D	-N		V	1511	.75	.83		2.30		
SACP	27	1509	1518	1512	N27 W28	.630	8818	25.5	9	-N		C		.83				D	
CAPS	27	1509E	1520D		N26 W25	.594	8818	25.8	11D	-N	3		1514	.80	1.00			188	
ATHN	27	1510	1521	1512	N24 W26	.584	8818	25.7	11	-N	2		1512	.99	1.20		1.70		
GRP 6058	27	1523	1535	1525	N26 W25	.594	8818	25.8	12	-B				.80				1 1 1	
CAPS	27	1523E	1535D		N26 W25	.594	8818	25.8	12D	-B	3		1525	.80	1.00			220	
GRP 6059	27	1532	1554	1541	N21 E74	.968	8831	2.2	22	1N				2.00				1 1 1	
CAPS	27	1532E	1554D		N21 E74	.968	8831	2.2	22D	1N	3		1541	2.00				C	
GRP 6060	27	1555	1605	1557	N20 E31	.603	8824	30.0	10	-N				.85				1 1 1	
SACP	27	1555	1605	1557	N20 E31	.603	8824	30.0	10	-N		C		.85	.92				
GRP 6061	27	1709	1724	1713	N25 W25	.584	8818	25.8	15	-N				.46				2 2 2	
SACP	27	1706	1727	1710	N25 W25	.584	8818	25.8	21	-N		C		.66	.71				
HALE	27	1712	1721	1715	N24 W25	.574	8818	25.8	9	-F	2	C	1715	.26	.30				
GRP 6062	27	1729	1751	1735	N22 W45	.762	8818	24.4	22	-F				.46				1 1 1	
HALE	27	1729	1751	1735	N22 W45	.762	8818	24.4	22	-F	2	C	1735	.46	.70				
GRP 6063	27	1848	1923	1859	N28 E39	.737	8824	30.7	35	-N				.31				1 1 1	
HALE	27	1848	1923	1859U	N28 E39	.737	8824	30.7	35	-N	2	P	1859	.31	.50				
GRP 6064	27	1851	1902	1854	N27 W42	.758	8818	24.6	11	-F				.30				2 2 2	
HALE	27	1849	1902	1853	N26 W42	.753	8818	24.6	13	-F	2	C	1853	.26	.40				
HUAN	27	1852	1901		N27 W42	.758	8818	24.6	9	-F	1	C	1854	.33	.41			E	
GRP 6065	27	1917	1932	1922	N11 W01	.214	8821	27.7	15	-F				.26				1 1 1	
HALE	27	1917	1932	1922	N11 W01	.214	8821	27.7	15	-F	2	C	1922	.26	.30				
GRP 6066	27	1940	1950	1943	S19 E17	.412	8825	29.1	10	-F				.15				1 1 1	
HALE	27	1940	1950	1943	S19 E17	.412	8825	29.1	10	-F	2	C	1943	.15	.20				
GRP 6067	27	1947	1954	1949	N28 E38	.729	8824	30.7	7	-N				.26				1 1 1	
HALE	27	1947	1954	1949	N28 E38	.729	8824	30.7	7	-N	2	C	1949	.26	.40				
GRP 6068	27	2013	2024	2017	N10 W06	.221	8821	27.4	11	-F				.21				1 1 1	
HALE	27	2013	2024	2017	N10 W06	.221	8821	27.4	11	-F	2	C	2017	.21	.21				
GRP 6069	27	2051	2056	2053	N20 E90	1.000	8831	3.6	5	-N								1 1 0	
MCMA	27	2051	2056	2053	N20 E90	1.000	8831	3.6	5	-N		C	2053						
GRP 6070	27	2114	2155	2127	N26 E20	.551	8821	29.4	41	-B				1.42				4 4 4	
LOCK	27	2110	2150	2128	N26 E20	.551	8821	29.4	40	-B		C	2128	1.00	1.20		30		
MCMA	27	2114	2200	2124	N26 E20	.551	8821	29.4	46	-B		C	2124	.93	1.10			E	
CULG	27	2116E	2151D	2127	N26 E20	.551	8821	29.4	35D	1N	1	P		1.96	2.28			CFL	
SACP	27	2116	2157	2129	N26 E20	.551	8821	29.4	41	-N		C		1.78	1.89				
GRP 6071	27	2201	2225	2207	N33 W24	.657	8818	26.1	24	-B				.63				2 2 2	
MCMA	27	2200	2214D	2206	N31 W24	.637	8818	26.1	14D	-B		C	2206	.46	.60			E	
LOCK	27	2202	2225	2208	N34 W24	.668	8818	26.1	23	-N		C	2208	.80	1.00			20	
GRP 6072	27	2256	2300	2300	N28 W25	.614	8818	26.1	4	-F				.60				1 1 1	
LOCK	27	2256	2300D	2300U	N28 W25	.614	8818	26.1	4D	-F		C	2300	.60	.80			10	

SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION				DURATION MIN.	IM-POR-TANCE	OBS. COND. TYPE	MEASUREMENTS					REMARKS	
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MCMATH PLAGE REGION				CMP DAY	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hg		MAX. INT. %
					LAT.	MER. DIST.												
1967 MAY																		
GRP 6073	27	2312	2325	2314	N16	W05	.309	8821	27.6	13	-N						1 1 1	
MANI	27	2312	2325		N16	W05	.309	8821	27.6	13	-N	1	2314	.26	.27			
GRP 6074	27	2353	0015	2357	N26	W27	.612	8818	26.0	22	1N			1.55			1 1 1	
IKOM	27	2353E	0015		N26	W27	.612	8818	26.0	22	1N	V	2357	1.55	2.00	110	E	
GRP 6075	28	0022	0110	0038	N28	W29	.647	8818	25.8	48	1N			2.72			4 3 3	
SACP	28	0022	0048D	0035U	N28	W31	.665	8818	25.7	26D	1B	C		3.28	3.72			
CRON	28	0027E	0104	0035	N28	W30	.656	8818	25.8	37D	1N	C		2.70	3.60	200		
MANI	28	0035E	0110	0043	N29	W27	.639	8818	26.0	35D	1N	1	0043	2.17	2.80			
IKOM	28	0102	0115		N28	W27	.630	8818	26.0	13	1N	V	0102	1.75	2.30	120	E	
GRP 6076	28	0345	0403	0348	N19	E25	.527	8824	30.0	18	-F			.36			1 1 1	
HALE	28	0345	0403	0348	N19	E25	.527	8824	30.0	18	-F	2	C	0348	.36	.40		
GRP 6077	28	0352	0404	0357	N28	E90	1.000	8831	3.9	12	1N			.47			2 2 2	
HALE	28	0352	0403	0356	N28	E89	1.000	8831	3.8	11	-N	2	C	0356	.26			
MANI	28	0356E	0404	0357	N28	E90	1.000	8831	3.9	8D	1N	2	0357	.67	2.18			
GRP 6078	28	0354	0429	0358	N30	W35	.715	8818	25.5	35	-N			.26			1 1 1	
HALE	28	0354	0429D	0358	N30	W35	.715	8818	25.5	35D	-N	2	P	0358	.26	.40		
GRP 6079	28	0455	0535	0458	N25	W48	.802	8818	24.6	40	-N			.59			2 2 2	
CULG	28	0455	0505	0458	N23	W49	.803	8818	24.5	10	-N	C		.52	.71			
ATHN	28	0457E	0604	0457	N27	W47	.801	8818	24.7	67D	-N	2	0457	.66	1.10	1.90		
GRP 6080	28	0527	0712	0546	N28	W33	.683	8818	25.8	105	3B			13.11			8 7 6	
WEND	28	0525E	0651		N28	W32	.674	8818	25.8	86D	3B	V		15.47				
SIBE	28	0529	0641	0543	N28	W32	.674	8818	25.8	72	2N	C	0543	8.72	11.00	133	T	
ATHN	28	0531E	0700	0545	N29	W30	.664	8818	26.0	89D	3B	2	0545	18.48	22.80	2.00		
ONDR	28	0536E	0630D	0539	N29	W34	.699	8818	25.7	54D	2B	V	0538			7.10	CFH	
CATA	28	0539E	0810D	0543	N28	W33	.683	8818	25.8	151D	2B		0543	6.38	8.80	389		
TACH	28	0551E	0640D	0552	N26	W33	.667	8818	25.8	49D	4B	V	0552	19.59	25.60	3.40	306	
CAPS	28	0552E	0735		N28	W31	.665	8818	25.9	103D	3B	3	0554	10.00	13.00		460	
CAPE	28	0645E	0723		N31	W35	.722	8818	25.7	38D	-N	P	0646	.84	1.20		BIT	
GRP 6081	28	0529	0642	0559	N28	W34	.692	8818	25.7	73	3B			10.47			3 3 3	
SIBE	28	0529	0641	0558	N28	W32	.674	8818	25.8	72	2N	C	0558	9.49	11.96	136	T	
CULG	28	0533E	0647D	0602	N27	W36	.703	8818	25.5	74D	3B	P		10.83	14.70		FZ	
CRON	28	0551E	0639	0558	N29	W33	.690	8818	25.8	48D	3B	C		11.10	15.30	300		
GRP 6082	28	0530	0535	0530	N29	W32	.682	8818	25.8	5	1N			2.63			2 2 2	
MANI	28	0529E	0810D		N28	W31	.665	8818	25.9	161D	1N	1	0530	2.06	2.74			
CRON	28	0530E	0535D	0530	N29	W33	.690	8818	25.8	5D	1N	C		3.20	4.40	200	E	
GRP 6083	28	0707	0805	0735	N25	W42	.747	8818	25.1	58	2N			3.75			6 6 5	
BUCA	28	0627	0743		N29	W34	.699	8818	25.7	76	2B	C	0627	4.98	6.70			
CAPE	28	0714	0830	0751	N25	W44	.766	8818	25.0	76	2N	C	0751	3.77	5.90		FI	
SIBE	28	0717	0814	0749	N24	W43	.752	8818	25.1	57	1F	C	0749	1.90	2.76	64	T	
CAPS	28	0718	0820		N23	W42	.737	8818	25.2	62	2B	3	0755	5.00	7.50	277	F	
WEND	28	0719	0742		N24	W45	.770	8818	24.9	23	1N	V		3.09				
ONDR	28	0729E	0802		N23	W43	.747	8818	25.1	33D	1N	V	0754			2.70	CFK	
GRP 6084	28	0718	0819	0730	N23	W47	.785	8818	24.8	61	1N			2.42			5 5 5	
CRON	28	0715	0810	0726	N23	W45	.766	8818	24.9	55	1N	C		1.40	2.20	200		
BUCA	28	0716	0824		N23	W47	.785	8818	24.8	68	1N	C	0733	3.32	5.10			
MONT	28	0720E	0820	0725	N22	W50	.809	8818	24.6	60D	2B	C	0725	2.90			EO	
CAPE	28	0721	0800	0732	N22	W48	.790	8818	24.7	39	-N	C	0732	.87	1.40		IT	
ATHN	28	0725E	0840	0732	N27	W45	.784	8818	24.9	75D	2B	2	0732	3.63	6.00	2.00		
GRP 6085	28	0730	0809	0749	N24	W42	.742	8818	25.2	39	1N			2.83			4 4 4	
CAPE	28	0730	0800	0743	N27	W38	.721	8818	25.5	30	-F	C	0743	.52	.70		I	
LOCA	28	0735E	0806D	0745	N23	W44	.756	8818	25.0	31D	1N	S	0745	2.94	4.50			
WEND	28	0755E	0821D		N23	W42	.737	8818	25.2	26D	1F	V		5.16				
ARCE	28	0758E	0810D		N23	W44	.756	8818	25.0	12D	1B	C	0758	2.70	4.10			
GRP 6086	28	0900	1000	0915	N26	W37	.706	8818	25.6	60	1N			2.00			1 1 1	
MONT	28	0900	1000		N26	W37	.706	8818	25.6	60	1N	C	0915	2.00			0	
GRP 6087	28	0955	1011	1001	S24	E22	.518	8825	30.1	16	-F			1.61			1 1 1	
CAPE	28	0955	1011	1001	S24	E22	.518	8825	30.1	16	-F	C	1001	1.61	1.90			
GRP 6088	28	1015	1025	1020	N32	W37	.746	8818	25.7	10	1N						1 1 0	
SALO	28	1015	1025		N32	W37	.746	8818	25.7	10	1N	S	1020			1.40		
GRP 6089	28	1037	1053	1045	S23	E22	.508	8825	30.1	16	-F			.78			1 1 1	
CAPE	28	1037	1053	1045	S23	E22	.508	8825	30.1	16	-F	C	1045	.78	.90			
GRP 6090	28	1112	1126	1120	N24	W85	.997	8817	22.1	14	-F			.28			1 1 1	
CAPE	28	1112	1126	1120	N24	W85	.997	8817	22.1	14	-F	C	1120	.28				
GRP 6091	28	1122	1133	1126	S22	W20	.477	8819	27.0	11	-F			.46			1 1 1	
CAPE	28	1122	1133	1126	S22	W20	.477	8819	27.0	11	-F	C	1126	.46	.50		VH	
GRP 6092	28	1131	1149	1138	S23	E21	.498	8825	30.1	18	-F			.78			1 1 1	
CAPE	28	1131	1149	1138	S23	E21	.498	8825	30.1	18	-F	C	1138	.78	.90			
GRP 6093	28	1218	1225	1220	S20	E50	.792	8828	1.3	7	-F			.32			1 1 1	
CAPE	28	1218	1225	1220	S20	E50	.792	8828	1.3	7	-F	C	1220	.32	.50			
GRP 6094	28	1258	1312	1302	S21	W25	.521	8819	26.7	14	-F			1.38			1 1 1	
CAPE	28	1258	1312	1302	S21	W25	.521	8819	26.7	14	-F	C	1302	1.38	1.60			
GRP 6095	28	1259	1318	1304	N17	E90	1.000	8831	4.3	19	-N			.52			1 1 1	
CAPE	28	1259	1318	1304	N17	E90	1.000	8831	4.3	19	-N	C	1304	.52			A	
GRP 6096	28	1320	1338	1327	N08	W11	.247	8821	27.7	18	-F			.69			1 1 1	
CAPE	28	1320	1338	1327	N08	W11	.247	8821	27.7	18	-F	C	1327	.69	.70		V	
GRP 6097	28	1341	1355	1346	N30	W32	.690	8818	26.2	14	-N			.64			1 1 1	
CAPE	28	1341	1355	1346	N30	W32	.690	8818	26.2	14	-N	C	1346	.64	.90		I	



# SOLAR FLARES

## MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IM- POR- TANCE	OBS. COND. TYPE	MEASUREMENTS					REMARKS	
	DATE	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Ha	MAX. INT. %		
	1967 MAY																		
GRP 6098	28	1451	1526	1457	N26	E83	.995	8831	3.8	35	-N								5 5 4
LOCA	28	1448	1530	1458	N25	E82	.993	8831	3.8	42	-N	V	1458		.35				
SACP	28	1449	1548	1454	N28	E85	.998	8831	4.0	59	-N	C			.53				
HOU5	28	1452	1515	1455	N26	E80	.989	8831	3.6	23	-N	V			.19				
MCMA	28	1453	1510	1457	N27	E88	1.000	8831	4.2	17	-N	C	1457		.21	.70		200	J
CAPF	28	1500E	1505D		N26	E80	.989	8831	3.6	5D	-N	V	1502		.46				D
GRP 6099	28	1508	1520	1511	N19	E17	.441	8824	29.9	12	-F				.57				1 1 1
SACP	28	1508E	1520	1511	N19	E17	.441	8824	29.9	12D	-F	C			.57	.57			
GRP 6100	28	1529	1553	1533	N28	E85	.998	8831	4.0	24	-N				.30				2 2 1
LOCK	28	1525E	1555	1530U	N28	E82	.994	8831	3.8	30D	-F	C	1530		.30	1.00		10	
MCMA	28	1533	1550		N27	E88	1.000	8831	4.2	17	-N	C	1536		.33				D
GRP 6101	28	1600	1634	1606	N25	W55	.860	8818	24.5	34	-N				.50				2 2 2
LOCK	28	1600	1620U	1606	N25	W56	.867	8818	24.5	20U	-F	C	1606		.15	1.00		10	
HALE	28	1600	1634	1606U	N25	W54	.852	8818	24.6	34	-N	1	C	1606		.21	.30		
GRP 6102	28	1709	1722	1711	N20	E15	.435	8824	29.8	13	-B				.21				1 1 1
HALE	28	1709	1722	1711	N20	E15	.435	8824	29.8	13	-B	2	C	1711		.21	.21		
GRP 6103	28	1714	1752	1722	S20	W24	.501	8819	26.9	38	-N				.70				4 4 4
HALE	28	1711	1804	1721	S21	W24	.510	8819	26.9	53	-N	2	C	1721		.41	.50		
SACP	28	1714	1745	1722	S20	W25	.513	8819	26.8	31	-F	C			1.12	1.16			
MCMA	28	1715	1742D	1724	S20	W26	.525	8819	26.8	27D	-N	C	1724		.77	.90			E
HUAN	28	1716	1747	1721	S20	W22	.479	8819	27.1	31	-F	2	C	1721		.50	.51		E
GRP 6104	28	1718	1741	1734	N27	E80	.989	8831	3.7	23	-N				.26				1 1 1
HALE	28	1718	1741	1734	N27	E80	.989	8831	3.7	23	-N	2	C	1734		.26			
GRP 6105	28	1730	1757	1738	N31	W54	.870	8818	24.7	27	-F				.15				1 1 1
HALE	28	1730	1757	1738	N31	W54	.870	8818	24.7	27	-F	2	C	1738		.15	.30		
GRP 6106	28	1738	1812	1744	N14	W12	.330	8821	27.8	34	-N				.21				1 1 1
HALE	28	1738	1812	1741	N15	W11	.334	8821	27.9	34	-F	2	C	1741		.15	.20		
HALE	28	1739	1800	1744	N13	W14	.339	8821	27.7	21	-N	2	C	1744		.21	.21		
GRP 6107	28	1744	1756	1747	N20	E87	.999	8831	4.3	12	-N				.41				4 4 3
HALE	28	1742	1800	1748	N20	E81	.990	8831	3.8	18	-N	2	C	1748		.26			
HUAN	28	1745	1753	1747	N19	E88	1.000	8831	4.3	8	-F	1	C	1747		.21			D
SACP	28	1745	1754	1747	N21	E88	1.000	8831	4.3	9	-N	1	N	C		.75			
MCMA	28	1746E	1750D		N20	E90	1.000	8831	4.5	4D	-N	P	1747						D
GRP 6108	28	1808	1818	1810	N26	W33	.667	8818	26.3	10	-N				.34				2 2 2
HALE	28	1807	1823	1809	N25	W33	.660	8818	26.3	16	-N	2	C	1809		.46	.60		
HUAN	28	1809	1813	1810	N26	W33	.667	8818	26.3	4	-F	2	C	1810		.21	.23		D
GRP 6109	28	1856	1902	1857	N12	W16	.352	8821	27.6	6	-N				.23				2 2 2
HUAN	28	1856	1902	1857	N11	W15	.330	8821	27.7	6	-F	2	C	1857		.25	.25		D
MCMA	28	1856	1902	1857	N12	W16	.352	8821	27.6	6	-N	C	1857		.21	.21			D
GRP 6110	28	2004	2014	2007	S19	E13	.373	8825	29.8	10	-F				.48				2 2 2
SACP	28	2004	2013	2006	S19	E13	.373	8825	29.8	9	-F	C			.65	.65			
HUAN	28	2008E	2014		S19	E13	.373	8825	29.8	6D	-F	1	P	2008		.31	.31		E
GRP 6111	28	2130	2150	2135	N16	W19	.429	8821	27.5	20	-F				1.20				1 1 1
LOCK	28	2130	2150	2135	N16	W19	.429	8821	27.5	20	-F	C	2135		1.20	1.30		10	
GRP 6112	28	2139	2147	2141	N21	E39	.696	8824	31.8	8	-F				.90				1 1 1
LOCK	28	2139	2147	2141	N21	E39	.696	8824	31.8	8	-F	C	2141		.90	1.40		10	
GRP 6113	28	2139	2150	2141	N32	W37	.746	8818	26.1	11	-F				.25				1 1 1
HUAN	28	2139	2150	2141	N32	W37	.746	8818	26.1	11	-F	2	C	2141		.25	.30		D
GRP 6114	28	2332	2334	2333	N27	W39	.730	8818	26.1	2	-N				.31				1 1 1
MANI	28	2332E	2334		N27	W39	.730	8818	26.1	20	-N	1		2333		.31	.45		
GRP 6115	29	0012	0036	0020	N14	W17	.384	8821	27.7	24	-N				.96				3 3 3
SACP	29	0010	0034	0017	N14	W16	.372	8821	27.8	24	-F	C			.85	.84			
LOCK	29	0014	0034	0020	N14	W18	.396	8821	27.7	20	-N	C	0020		.90	1.00		10	
CULG	29	0022E	0040D	0022	N13	W17	.374	8821	27.7	18D	-N	P			1.13	1.21			
GRP 6116	29	0030	0100	0045	N19	E82	.992	8831	4.2	30	-N				.40				1 1 1
LOCK	29	0030	0100	0045	N19	E82	.992	8831	4.2	30	-N	C	0045		.40	1.40		10	
GRP 6117	29	0042	0105	0052	N14	W18	.396	8821	27.7	23	-N				.70				1 1 1
LOCK	29	0042	0105	0052	N14	W18	.396	8821	27.7	23	-N	C	0052		.70	.80		10	
GRP 6118	29	0134	0140	0137	N20	E80	.988	8831	4.1	6	-N				.26				2 2 2
LOCK	29	0134	0136D	0136D	N19	E82	.992	8831	4.2	2D	-F	C	0136		.30	1.00		10	
HALE	29	0134	0140	0137	N21	E77	.979	8831	3.8	6	-N	1	C	0137		.21			J
GRP 6119	29	0237	0313	0248	N21	E77	.979	8831	3.9	36	-B				.31				1 1 1
HALE	29	0237	0313	0248	N21	E77	.979	8831	3.9	36	-B	1	C	0248		.31			DJ
GRP 6120	29	0321	0337	0323	N28	E05	.492	8821	29.5	16	-N				.62				2 2 2
CRON	29	0321	0334	0322	N28	E04	.489	8821	29.4	13	-F	C			.30	.32		100	
HALE	29	0321	0339	0323	N27	E05	.477	8821	29.5	18	-N	1	C	0323		.93	1.10		
GRP 6121	29	0326	0339	0330	N25	W38	.708	8818	26.3	13	-B				.70				CFGV
CULG	29	0324	0333	0329	N24	W39	.712	8818	26.2	9	-N	C			.72	.98			2 2 2
HALE	29	0327	0344	0330	N25	W36	.688	8818	26.4	17	-B	1	C	0330		.67	.90		IJL
HALE	29	0327	0348	0342	N27	W37	.711	8818	26.4	21	-B	1	C	0342		.10	.11		D

# SOLAR FLARES

## MAY 1967

OBSERV- ATORY	OBSERVED UT				LOCATION				DURA- TION — MIN.	IM- POR- TANCE	OBS.		MEASUREMENTS				REMARKS		
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MCMAH PLAGE REGION			CMP DAY	COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.		MAX. WIDTH H $\alpha$	MAX. INT. %
					LAT.	MER. DIST.													
GRP 6122	29	0450	0520	0459	N29	W46	.801	8818	25.8	30	-N			.83				5 5 4	
ATHN	29	0445	0500D	0455	N30	W45	.798	8818	25.8	150	1B	2	0455	1.32	2.10	2.00			
CULG	29	0447	0507D	0504	N28	W47	.805	8818	25.7	200	-N			.62	1.02				
CRON	29	0453E	0521	0502	N30	W47	.814	8818	25.7	280	-N			.70	1.20		200		
ONDR	29	0453	0523		N28	W47	.805	8818	25.7	30	1N		0457			2.20		CH	
MANI	29	0454	0515	0458	N29	W44	.784	8818	25.9	21	-N	1	0458	.67	1.05				
GRP 6123	29	0528	0545	0533	N19	E04	.349	8821	29.5	17	-F			4.30				3 3 2	
CRON	29	0528	0541	0530	N18	E10	.366	8821	30.0	13	-N			.60	.62			200	
ONDR	29	0532E	0544		N18	E06	.341	8821	29.7	120	-F					1.50		E	
MANI	29	0533E	0550	0538	N22	W05	.400	8821	28.9	170	-F	1	0532					C	
GRP 6124	29	0623	0648	0630	N21	E71	.955	8831	3.6	25	-N			.36	.28			1 1 1	
MANI	29	0623	0648	0630	N21	E71	.955	8831	3.6	25	-N	3	0630	.36	.80			1 1 1	
GRP 6125	29	0742	0805	0745	N20	E78	.982	8831	4.2	23	1F			.98				3 3 3	
CRON	29	0727	0741	0729	N18	E78	.981	8831	4.2	14	-N			.20	.60			200	
MANI	29	0738E	0805	0744	N20	E76	.975	8831	4.0	270	1F	1	0744	1.29	3.05				
IKOM	29	0745	0750D		N21	E80	.988	8831	4.3	50	1F		0745	1.44				D	
GRP 6126	29	0821	0954	0842	N20	W40	.701	8818	26.3	93	1F			3.41				1 1 1	
CAPE	29	0821	0954	0831	N23	W42	.736	8818	26.2	93	1F		0831	2.95	4.20			CFIKL	
CAPE	29	0821	0954	0841	N23	W42	.736	8818	26.2	93	1N		0841	1.90	2.70				
CAPE	29	0821	0954	0904	N21	W41	.716	8818	26.3	93	-N		0904	1.29	1.80				
CAPE	29	0821	0954	0917	N22	W41	.721	8818	26.3	93	-N		0917	.64	.90			C	
CAPE	29	0822	0915	0842	N16	W37	.647	8818	26.6	53	-F		0842	.46	.60				
CRON	29	0826	0833	0826	N20	W40	.701	8818	26.4	7	-F			.20	.30			100	
GRP 6127	29	0929	0957	0938	N20	E77	.979	8831	4.2	28	1N			1.66				2 2 1	
CAPE	29	0929	0957	0938	N20	E78	.982	8831	4.2	28	1N		0938	1.66					
MEUD	29	0933E	0936D		N20	E75	.972	8831	4.0	30	-N							C	
GRP 6128	29	0934	0957	0941	N14	W17	.384	8821	28.1	23	-F			1.24				1 1 1	
CAPE	29	0934	0957	0941	N14	W17	.384	8821	28.1	23	-F		0941	1.24	1.30			CH	
GRP 6129	29	1012	1014	1013	N20	E77	.979	8831	4.2	2	-F			.84				1 1 1	
CAPE	29	1012	1014D	1013	N20	E77	.979	8831	4.2	2D	-F		1013	.84					
GRP 6130	29	1134	1141	1136	N29	W51	.841	8818	25.7	7	-F			.51				3 3 2	
ATHN	29	1133	1142	1135	N28	W55	.867	8818	25.4	9	-N	2	1135	.50	.50	1.80			
MEUD	29	1134	1137	1134	N28	W48	.813	8818	25.9	3	-F		1134	.52	.70				
SALO	29	1135	1145		N32	W50	.845	8818	25.7	10	1F		V 1140			1.30		1 1 0	
GRP 6131	29	1400	1420	1410	N15	W25	.492	8821	27.7	20	1F								
SALO	29	1400	1420		N15	W25	.492	8821	27.7	20	1F		V 1410			1.50			
GRP 6132	29	1423	1455	1431	N29	W65	.933	8818	24.7	32	1N			.71				3 3 2	
SALO	29	1420	1510		N28	W68	.947	8818	24.5	50	2N		V 1430			1.40			
MCMA	29	1421E	1440		N29	W58	.891	8818	25.2	190	-N		P 1430	.72	1.70			E	
CAPS	29	1427	1438D		N29	W70	.957	8818	24.4	110	-N	2	1432	.70				E	
GRP 6133	29	1425	1448	1430	N28	W50	.829	8818	25.9	23	1N			.69				3 3 2	
SALO	29	1420	1510		N30	W48	.821	8818	26.0	50	2N		V 1430			1.40			
HUAN	29	1427	1433	1429	N30	W47	.814	8818	26.1	6	-N	2	C 1429	.87				E	
ATHN	29	1429	1440	1432	N25	W55	.859	8818	25.5	11	-N	2	1432	.50	.60	1.70			
GRP 6134	29	1457E	1516	1502	N20	E06	.372	8824	30.1	19	1N			1.89				7 7 6	
SALO	29	1450	1520	1455	N23	E08	.427	8824	30.2	30	2N		V 1500			1.50			
SACP	29	1458	1517	1502	N19	E05	.353	8824	30.0	19	-N		C 1502	1.99	1.97				
HUAN	29	1458	1522	1502	N19	E05	.353	8824	30.0	24	-B	2	C 1502	1.34	1.34			E	
MCMA	29	1459	1507D		N20	E05	.368	8824	30.0	80	-B		P 1502	.72	.80			EL	
ATHN	29	1459	1513	1502	N18	E05	.337	8824	30.0	14	-B	2	1502	1.71	1.80	2.00			
CAPS	29	1500	1510		N20	E08	.382	8824	30.2	10	1N	3	1504	3.80	4.20			182	
UCCL	29	1505E	1512D		N19	E05	.353	8824	30.0	70	1F		P 1505	1.80	2.20			EJ	
GRP 6135	29	1511	1526	1518	S18	E01	.292	8825	29.7	15	-N			.66				5 5 4	
SALO	29	1500	1620		S18	W02	.293	8825	29.5	80	1N		V 1600			1.30			
HUAN	29	1509	1529	1518	S18	E02	.293	8825	29.8	20	-F	2	C 1518	.57	.57			E	
CAPS	29	1512E	1524		S18	E03	.296	8825	29.9	120	-N		1518	1.20	1.30			170	
SACP	29	1512	1526	1518	S18	E02	.293	8825	29.8	14	-F		C 1518	.46	.46			CEL	
MCMA	29	1516E	1517D		S19	E02	.310	8825	29.8	10	-N		P 1517	.41	.41			E	
GRP 6136	29	1531	1538	1534	N10	W28	.500	8821	27.5	7	-F			.25				1 1 1	
HUAN	29	1531	1538	1534	N10	W28	.500	8821	27.5	7	-F	2	C 1534	.25	.26			D	
GRP 6137	29	1537	1549	1541	N29	W54	.863	8818	25.6	12	-F			.21				1 1 1	
HUAN	29	1537	1549	1541	N29	W54	.863	8818	25.6	12	-F	2	C 1541	.21	.29			D	
GRP 6138	29	1613	1616	1613	N28	W50	.829	8818	25.9	3	-F			.26				1 1 1	
MEUD	29	1613	1616	1613	N28	W50	.829	8818	25.9	3	-F		C 1613	.26	.40			D	
GRP 6139	29	1732	1741	1735	N19	E70	.948	8831	4.0	9	-N			.26				2 2 2	
HALE	29	1732	1740	1734	N19	E68	.937	8831	3.8	8	-B	1	C 1734	.31				J	
HUAN	29	1732	1742	1735	N19	E72	.958	8831	4.1	10	-F	1	C 1735	.21				D	
GRP 6140	29	1739	1819	1751	N21	W44	.747	8818	26.4	40	-N			1.21				5 5 5	
LOCK	29	1710	1820	1751	N23	W45	.765	8818	26.3	70	-F		C 1751	1.20	1.80			10	
HALE	29	1718	1828	1751	N21	W43	.737	8818	26.5	70	1B	1	C 1751	1.65	2.40			FIJTV	
SACP	29	1737	1908	1750	N19	W45	.749	8818	26.4	91	-N		C 1750	1.61	1.98				
HUAN	29	1740	1808	1750	N20	W45	.753	8818	26.4	28	-N	2	C 1750	.75	.88			E	
MCMA	29	1746E	1800D	1751	N20	W44	.743	8818	26.4	140	-N		C 1751	.83	1.30			E	
GRP 6141	29	1832	1844	1833	N14	W25	.484	8821	27.9	12	-N			.45				2 2 2	
HUAN	29	1831	1843	1833	N15	W27	.517	8821	27.7	12	-N	2	C 1833	.37	.38			E	
HALE	29	1832	1845	1833	N12	W23	.443	8821	28.0	13	-N	1	C 1833	.52	.60			JV	





SOLAR FLARES

MAY 1967

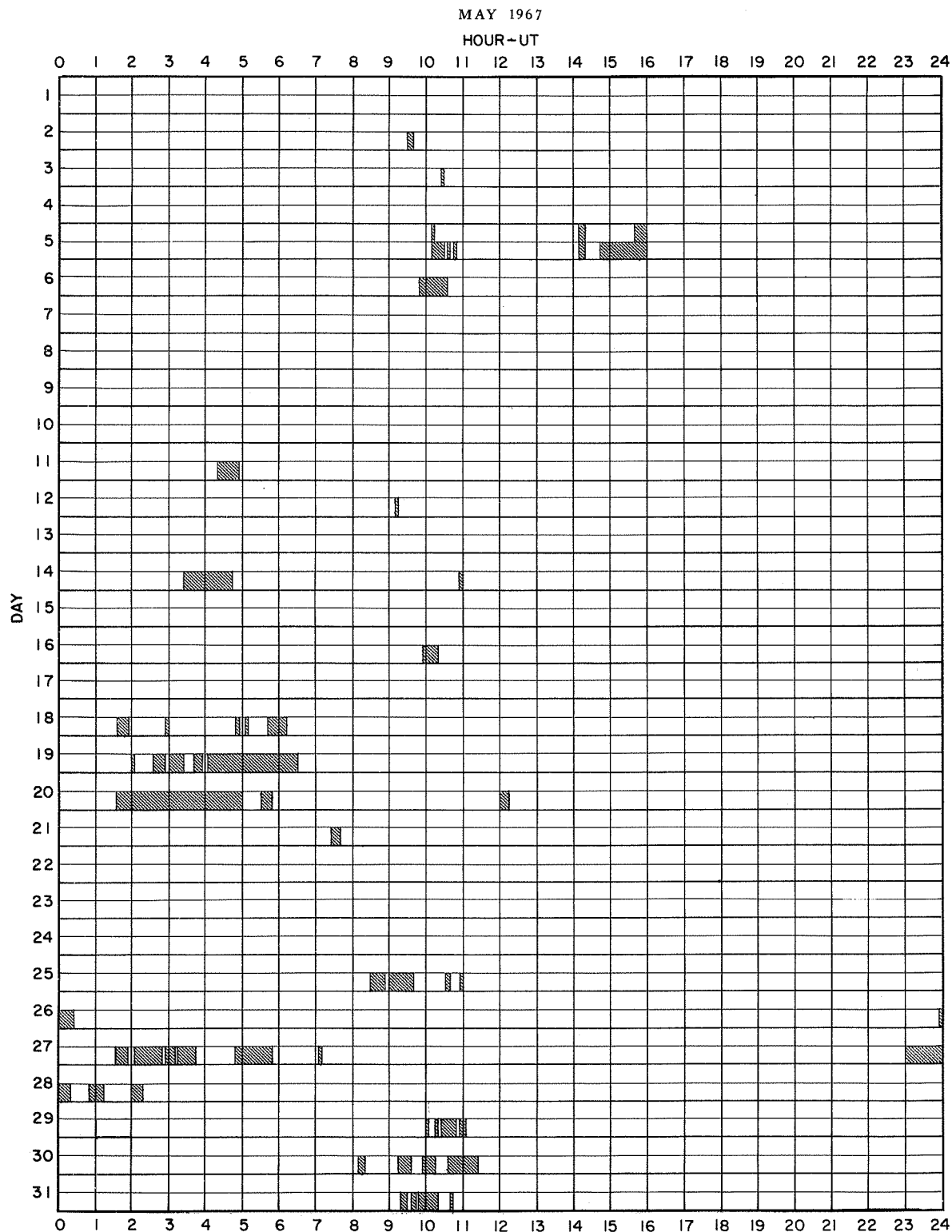
OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IMPOR- TANCE	OBS. COND. TYPE	MEASUREMENTS				REMARKS	
	DATE	START	END	MAX. PHASE	APPROX.		CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H $\alpha$		MAX. INT. %
					LAT.	MER. DIST.												
1967 MAY																		
GRP 6166	30	1435	1445	1438	N30	W60	.905	8818	26.1	10	-N						2 2 2	
HUAN	30	1435	1444	1438	N30	W59	.899	8818	26.2	9	-N	2	C	1438	.45	.73	E	
MCMA	30	1435	1445	1437	N30	W60	.905	8818	26.1	10	-N		C	1437	.62	1.50	E	
GRP 6167	30	1510	1535	1513	N22	W85	.997	8818	24.3	25	-B						1 1 1	
ATHN	30	1510	1535	1513	N22	W85	.997	8818	24.3	25	-B	2		1513	.76		2 2 2	
GRP 6168	30	1550	1609	1601	S22	E19	.470	8828	1.1	19	-F					2.00	2 2 2	
LOCK	30	1543	1611	1601	S22	E19	.470	8828	1.1	28	-F		C	1601	.50	.60	10	HK
LOCK	30	1543	1611	1548	S22	E19	.470	8828	1.1	28	-F		C	1601	.50	.60	10	HK
HUAN	30	1556	1606	1601	S22	E19	.470	8828	1.1	10	-F	2	C	1601	.25	.25		D
GRP 6169	30	1553	1609	1558	N27	E55	.864	8831	3.8	16	-F				.43		2 2 2	
LOCK	30	1550	1617	1557	N26	E54	.853	8831	3.7	27	-F		C	1557	.60	1.10	10	
HUAN	30	1556	1601	1558	N27	E55	.864	8831	3.8	5	-F	2	C	1558	.25	.36		D
GRP 6170	30	1629	1640	1630	N23	W85	.997	8818	24.3	11	-N				.53		1 1 1	
ATHN	30	1629	1640	1630	N23	W85	.997	8818	24.3	11	-N	2		1630	.53		1.60	1 1 1
GRP 6171	30	1654	1704	1700	N26	W78	.984	8818	24.9	10	-N				.21		1 1 1	
HOUS	30	1654U	1704U	1700	N26	W78	.984	8818	24.9	10U	-N		C		.21	.60	200	
GRP 6172	30	1727	1752	1731	N24	E56	.864	8831	3.9	25	-N				.65		5 4 4	
LOCK	30	1726	1740D	1732	N24	E55	.856	8831	3.9	14D	-N		C	1732	1.00	1.90	20	
HUAN	30	1727	1749	1732	N23	E57	.869	8831	4.0	22	-N	2	C	1732	.57	.85		E
HALE	30	1727	1752	1729	N23	E54	.845	8831	3.8	25	-B	2	C	1729	.31	.60		E
MCMA	30	1728	1755	1732	N24	E57	.871	8831	4.0	27	-N		C	1732	.72	1.40		E
SACP	30	1743E	1753D	1743E	N25	E56	.866	8831	3.9	10D	-N		C		.61	.89		
GRP 6173	30	1743	1753	1744	N24	W70	.952	8818	25.5	10	-B				.31		1 1 1	
HALE	30	1743	1753	1744	N24	W70	.952	8818	25.5	10	-B	1	C	1744	.31			IJ
GRP 6174	30	1835	1910	1850	S25	W21	.522	8825	29.2	35	-F				.50		1 1 1	
LOCK	30	1835	1910U	1850U	S25	W21	.522	8825	29.2	35U	-F		C	1850	.50	.60	10	
GRP 6175	30	1851	1859	1855	N24	E45	.769	8831	3.2	8	-B				.10		1 1 1	
HALE	30	1851	1859	1855	N24	E45	.769	8831	3.2	8	-B	1	C	1855	.10	.20		IJ
GRP 6176	30	1858	1908	1904	N25	W82	.993	8818	24.6	10	-N				.31		2 2 2	
HALE	30	1856	1908	1903	N25	W81	.991	8818	24.7	12	-B	1	C	1903	.31			IJV
LOCK	30	1900	1908	1904	N24	W82	.993	8818	24.6	8	-F		C	1904	.30	1.00	10	H
GRP 6177	30	1910	1934	1913	N22	E55	.851	8831	3.9	24	-N				.55		3 3 3	
HALE	30	1907	1909D	1909	N22	E58	.874	8831	4.1	2D	-B	1	C	1909	.41	.80		V
LOCK	30	1907	1945U	1910	N20	E57	.862	8831	4.1	38U	-N		C	1910	1.00	1.90	20	
HUAN	30	1916	1923		N24	E51	.823	8831	3.6	7	-F	1	C	1919	.25	.34		D
GRP 6178	30	1923	1937	1926	N22	E56	.859	8831	4.0	14	-N				.45		3 3 3	
HUAN	30	1923	1930		N21	E57	.865	8831	4.1	7	-F	1	P	1925	.57	.83		E
MCMA	30	1924E	1930D	1925	N24	E57	.871	8831	4.1	6D	-N		C	1925	.41	.80		E
HALE	30	1927E	1952	1927	N22	E55	.851	8831	3.9	25D	-B	1	C	1927	.36	.70		E
GRP 6179	30	1958	2034	2000	N22	E57	.867	8831	4.1	36	-B				.31		1 1 1	
HALE	30	1958	2034	2000	N22	E57	.867	8831	4.1	36	-B	1	C	2000	.31	.60		IJK
GRP 6180	30	2011	2018	2012	N23	E44	.755	8831	3.1	7	-B				.21		1 1 1	
HALE	30	2011	2018	2012	N23	E44	.755	8831	3.1	7	-B	1	C	2012	.21	.30		IJ
GRP 6181	30	2024	2051	2029	N27	W77	.981	8818	25.1	27	1N				.44		2 2 2	
HALE	30	2022	2058	2030	N26	W74	.971	8818	25.3	36	1N	1	C	2030	.62			IJ
HUAN	30	2025	2043		N27	W80	.989	8818	24.9	18	-F	1	C	2028	.25		10	D
GRP 6182	30	2056	2112	2103	N13	W44	.717	8821	27.6	16	-N				.42		4 4 4	
HALE	30	2048	2115	2101	N10	W43	.697	8821	27.6	27	-N	1	C	2101	.46	.60		J
HUAN	30	2100	2105	2101	N20	W44	.742	8821	27.6	5	-F	1	C	2101	.31	.37		E
LOCK	30	2100U	2112U	2106U	N12	W46	.737	8821	27.4	12U	-F		C	2106	.50	.80	10	
SACP	30	2102E	2117D	2103	N09	W44	.706	8821	27.6	15D	-N		C		.40	.47		
GRP 6183	30	2230	2306	2231	N28	E48	.812	8831	3.5	36	-N				1.19		1 1 1	
MANI	30	2230E	2306		N28	E48	.812	8831	3.5	36D	-N	1		2231	1.19	1.94		
GRP 6184	30	2339	2349	2340	N09	W46	.730	8821	27.5	10	-N				.62		1 1 1	
HALE	30	2339	2349	2340	N09	W46	.730	8821	27.5	10	-N	1	C	2340	.62	.90		FJ
GRP 6185	31	0423	0455	0434	S23	W57	.862	8819	26.9	32	-N				.62		1 1 1	
CULG	31	0423	0455	0434	S23	W57	.862	8819	26.9	32	-N		C		.62	1.20		
GRP 6186	31	0448	0456	0450	N29	W70	.956	8818	26.0	8	-B				.33		1 1 1	
ATHN	31	0448	0456	0450	N29	W70	.956	8818	26.0	8	-B	1		0450	.33		2.00	1 1 1
GRP 6187	31	0539	0557	0541	N28	W04	.486	8824	30.9	18	-N				.99		1 1 1	
ATHN	31	0539	0557	0541	N28	W04	.486	8824	30.9	18	-N	1		0541	.99	1.10	1.80	1 1 1
GRP 6188	31	0737	0747	0739	N29	W06	.505	8824	30.9	10	-N				.39		3 3 3	
ATHN	31	0737	0744	0739	N28	W06	.491	8824	30.9	7	-N	1		0739	.66	.70	1.90	
MEUD	31	0738E	0738D		N30	W03	.514	8824	31.1		-N		C	0738	.31	.30		C
MANI	31	0739E	0749	0741	N28	W08	.497	8824	30.7	10D	-N	2		0741	.21	.24		
GRP 6189	31	0839	0850	0844	N24	E42	.740	8831	3.5	11	-N				1.08		5 5 5	
MEUD	31	0836	0842D	0838	N28	E45	.786	8831	3.7	6D	-N		C	0838	.46	.70		E
MANI	31	0837	0850	0845	N23	E51	.819	8831	4.2	13	-F	2		0845	1.03	1.85		
CRON	31	0841	0849	0846	N23	E37	.684	8831	3.1	8	-N		C		1.10	1.50	200	
CANA	31	0841	0850	0845	N23	E37	.684	8831	3.1	9	-N		C		.80	1.10	200	H
CAPS	31	0844E	0848D		N23	E40	.715	8831	3.4	40	1F	1		0847	2.00	2.80		C
GRP 6190	31	0938	0942	0939	N28	E46	.795	8831	3.9	4	-N				.42		2 2 2	
ARCE	31	0936E	0943D		N28	E47	.803	8831	3.9	7D	-N		P	0937	.58	.90		
MEUD	31	0940E	0941D		N28	E45	.786	8831	3.8	10	-F		C	0940	.26	.40		C

# SOLAR FLARES

MAY 1967

OBSERVATORY	OBSERVED UT				LOCATION					DURATION MIN.	IM- POR- TANCE	OBS.		MEASUREMENTS					REMARKS
	DATE	START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH FLARE REGION	CMP DAY			COND.	TYPE	TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H $\alpha$	MAX. INT. %	
1967 MAY																			
GRP 6191	31	1124	1136	1126	N29	W81	.992	8818	25.4	12	-N								
ATHN	31	1123E	1138	1123	N28	W80	.989	8818	25.5	15D	-N	1	1123	.66		1.80			5 5 4
CANA	31	1124	1138	1126	N31	W80	.990	8818	25.5	14	1N		C	.90	3.00		200		
MCMA	31	1125	1133	1127	N28	W85	.998	8818	25.1	8	-N		C	.90			163	E	
CAPS	31	1125	1134		N30	W80	.990	8818	25.5	9	1N	3	1130	1.50				E	
MEUD	31	1125	1138D		N30	W80	.990	8818	25.5	13D	-N		C	.83					
GRP 6192	31	1208	1221	1210	N27	W11	.496	8824	30.7	13	-N			.21					2 2 1
HUAN	31	1208	1215	1210	N27	W11	.496	8824	30.7	7	-F	2	C	.21	.21				D
CAPS	31	1210E	1227		N27	W10	.491	8824	30.8	17D	-N	3		.21					H
GRP 6193	31	1227	1235	1229	N23	E38	.694	8831	3.4	8	-F			.25					1 1 1
HUAN	31	1227	1235	1229	N23	E38	.694	8831	3.4	8	-F	2	C	.25	.29				D
GRP 6194	31	1252	1300	1254	N28	E42	.760	8831	3.7	8	-N			.41					1 1 1
MCMA	31	1252	1300	1254	N28	E42	.760	8831	3.7	8	-N		C	.41	.60				E
GRP 6195	31	1303	1316	1306	N19	W19	.457	8824	30.1	13	-N			.63					2 2 2
CAPS	31	1302E	1311		N19	W17	.437	8824	30.3	9D	-N	3	1305	.80	.90		167		CF
HUAN	31	1304E	1320		N19	W20	.468	8824	30.0	16D	-F	1	P	.45	.46				E
GRP 6196	31	1357	1414	1400	N27	E43	.764	8831	3.8	17	-N			.67					3 3 3
HUAN	31	1356	1411	1359	N28	E45	.786	8831	4.0	15	-N	2	C	.41	.53				D
MCMA	31	1357	1401D	1359	N28	E42	.760	8831	3.7	4D	-N		C	.41	.60				E
CAPS	31	1357E	1417D		N25	E42	.745	8831	3.7	20D	-F	2		1.20	1.80				J
GRP 6197	31	1358	1407	1400	N19	W20	.468	8824	30.1	9	-F			.25					1 1 1
HUAN	31	1358	1407	1400	N19	W20	.468	8824	30.1	9	-F	2	C	.25	.25				D
GRP 6198	31	1431	1440	1434	N30	E43	.780	8831	3.8	9	-F			.21					1 1 1
HUAN	31	1431	1440	1434	N30	E43	.780	8831	3.8	9	-F	1	C	.21	.27				D
GRP 6199	31	1546	1600	1548	N24	E37	.690	8831	3.4	14	-F			.36					2 2 2
SACP	31	1546	1556D	1548	N24	E36	.680	8831	3.4	10D	-F		C	.40	.46				D
HUAN	31	1546	1600	1547	N23	E38	.694	8831	3.5	14	-F	2	C	.31	.36				2 2 2
GRP 6200	31	1630	1710	1634	N27	E39	.768	8831	3.6	40	-N			.31					2 2 2
HUAN	31	1630	1640D	1632	N25	E38	.706	8831	3.5	10D	-F	1	P	.35	.41				DH
MCMA	31	1630	1710	1635	N28	E40	.743	8831	3.7	40	-N		C	.26	.40				D
MCMA	31	1630	1710	1650	N28	E40	.743	8831	3.7	40	-N			.83	1.30				E
GRP 6201	31	1745	1825	1751	N24	E44	.759	8831	4.0	40	-N			.68					4 4 4
HOUS	31	1744U	1805U	1748U	N22	E43	.740	8831	4.0	21U	-N		C	.83	1.20		200		E
SACP	31	1744	1810U	1754	N25	E43	.754	8831	4.0	26U	-F		C	.91	1.11				
HUAN	31	1745E	1754D		N22	E45	.760	8831	4.1	9D	-F	1	P	.31	.39				D
MCMA	31	1745	1825	1752	N28	E45	.786	8831	4.1	40	-N		C	.67	1.10				E
GRP 6202	31	1842	1852	1844	N28	E41	.752	8831	3.9	10	-N			.92					2 2 2
HUAN	31	1842	1849		N27	E40	.737	8831	3.8	7	-N	1	C	.80	.97				E
MCMA	31	1842	1855	1844	N29	E42	.766	8831	3.9	13	-N		C	1.03	1.60				1 1 1
GRP 6203	31	1923	1929	1926	N28	E42	.760	8831	4.0	6	-N			.30					1 1 1
SACP	31	1923	1929	1926	N28	E42	.760	8831	4.0	6	-N		C	.30	.37				2 2 2
GRP 6204	31	1944	2007	1946	N28	E41	.752	8831	3.9	23	-N			.64					2 2 2
HUAN	31	1943	2004	1945	N27	E40	.737	8831	3.8	21	-N	1	C	.45	.55				E
MCMA	31	1945	2010D	1946	N29	E42	.766	8831	4.0	25D	-N		C						E
MCMA	31	1945	2010D	2000	N29	E42	.766	8831	4.0	25D	-N			.83	1.30				E
GRP 6205	31	2038	2047	2041	N24	E43	.749	8831	4.1	9	-F			.37					1 1 1
HUAN	31	2038E	2047D		N24	E43	.749	8831	4.1	9D	-F	1	P	.37	.46				E
GRP 6206	31	2104	2150	2108	N28	E40	.743	8831	3.9	46	1N			1.44					1 1 1
MCMA	31	2104	2150D	2108	N28	E40	.743	8831	3.9	46D	1N		C	1.44	2.10				E
GRP 6207	31	2301	2310	2302	N25	E37	.696	8831	3.7	9	-N			.77					2 2 2
IKOM	31	2300	2310		N27	E38	.718	8831	3.8	10	-F		V	.83	1.20		90		E
SACP	31	2302	2310	2303	N23	E35	.663	8831	3.6	8	-N		C	.70	.79				1 1 1
GRP 6208	31	2350	0006	2350	N23	E33	.642	8831	3.5	16	-F			.72					1 1 1
IKOM	31	2350E	0006D		N23	E33	.642	8831	3.5	16D	-F		V	.72	.90				D

INTERVALS OF NO FLARE PATROL OBSERVATION  
For Preceding Solar Flare Table



Observatories included in total patrol:

Abastumani	Bakou	Culgoora	Ikomason	Lockheed	Monte-Mario	Tachkent
Anacapri-F (German)	Bucharest	Haleakala	Kharkov	McMath-Hulbert	Ondrejov	Uccle
Anacapri-S (Swedish)	Canarvon	Herstmonceux	Kiev	Manila	Sacramento Peak	Wendelstein
Arcetri	Canary Islands	Houston	Kodaikanal	Meudon	Salonique	Zürich
Arosa	Catania	Huancayo	Locarno	Mitaka	Siberie	

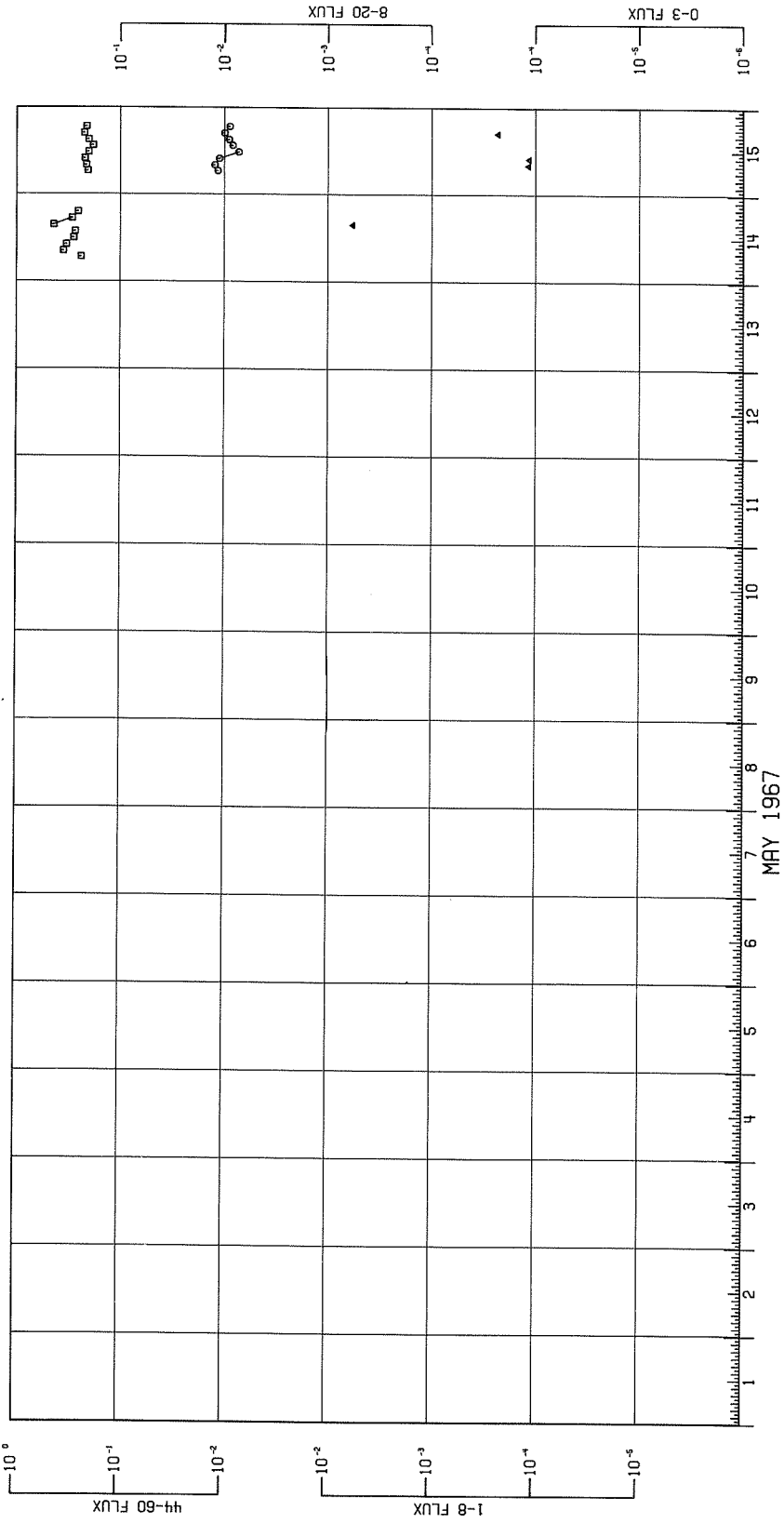
Below the line for each day is plotted times when there was no cinematographic patrol; above the line, times when there was no cinematographic or visual patrol.



# SOLAR RADIATION MONITORING SATELLITE X - RAY

MAY 1967

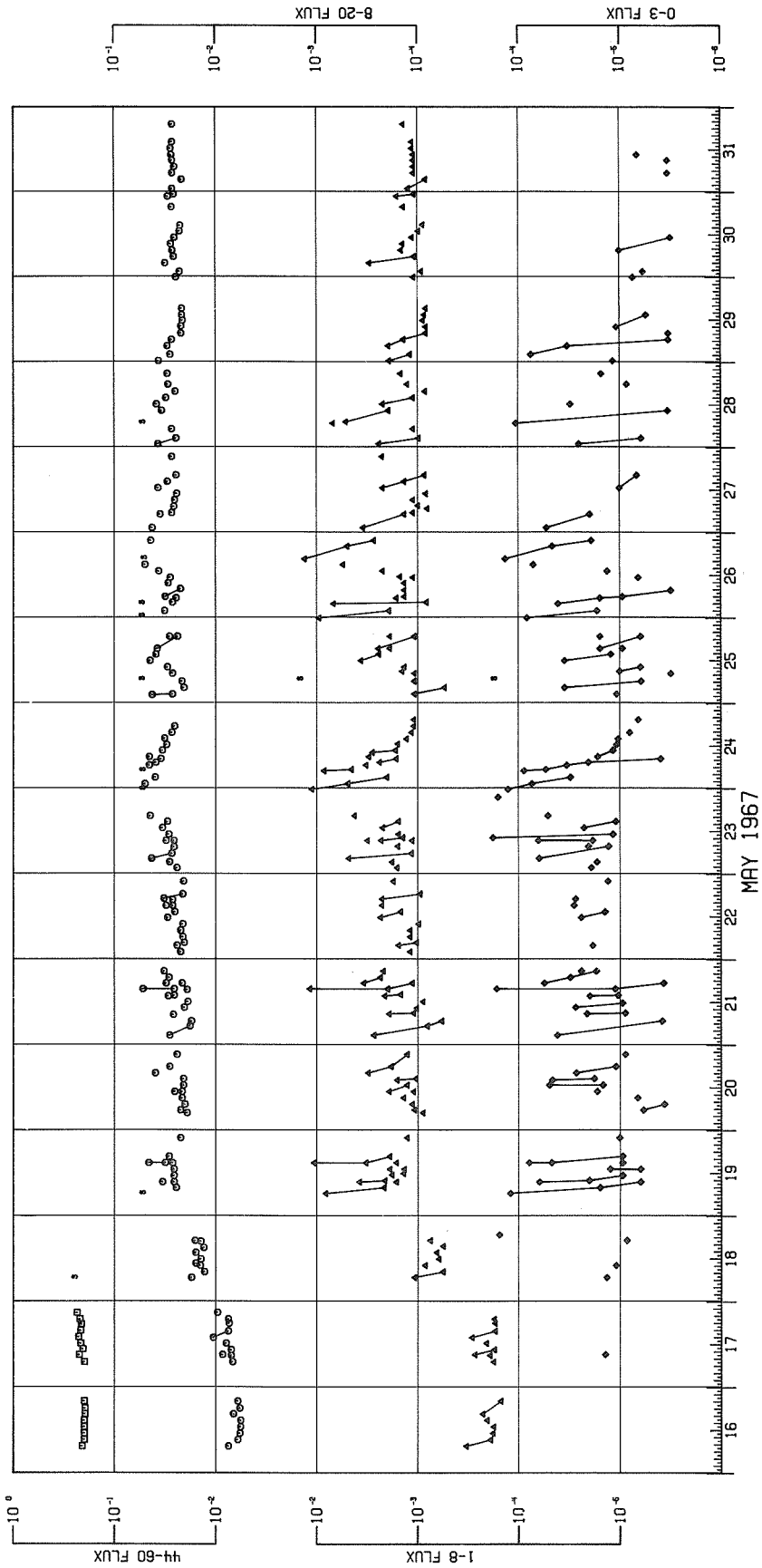
NRL



# SOLAR RADIATION MONITORING SATELLITE X-RAY

MAY 1967

NRL



SATELLITE OSO-III, X-RAY

Times of Observation

May 1967

McMath-Hulbert

May 1967	Observing Hours		Lowest Flux E(8,12) ergs cm <sup>-2</sup> sec <sup>-1</sup>	Remarks*	May 1967	Observing Hours		Lowest Flux E(8,12) ergs cm <sup>-2</sup> sec <sup>-1</sup>	Remarks*
	Start U.T.	End U.T.				Start U.T.	End U.T.		
1	0615	0715	0.0026		12	0821	0928	0.0014	
1	0750	0850	.0029	(6)	12	0957	1104	.0013	(8)
1	0926	1026	.0027		12	1133	1140	.0013	
1	1101	1202	.0028		13	0018	0125	.0014	
1	1237	1337	.0028	(8)	13	0153	0300	.0013	
1	1413	1513	-	(8)	13	0329	0435	.0013	
1	1548	1610	.0027		13	0505	0612	.0014	
2	0609	0709	.0023		13	0640	0748	.0013	
2	0745	0845	.0023	(4)	13	0816	0923	.0013	(8)
2	0920	1020	.0035		14	0013	0121	.0014	
2	1056	1156	.0027		14	0148	0256	.0014	
2	1231	1332	.0025	(8)	14	0324	0432	.0015	
3	0603	0703	.0027	(4)	14	0500	0608	.0018	(4)
3	0739	0839	.0022	(8)	14	0635	0743	.0021	
3	0914	1015	.0021		14	0811	0918	.0020	
3	1050	1150	.0022	(8)	15	0008	0116	.0020	
3	1225	1326	-	(8)	15	0144	0252	.0018	(4)
4	0557	0658	.0033		15	0319	0428	.0020	
4	0733	0833	.0033		15	0455	0602	.0018	
4	0908	1009	.0029		15	0631	0739	.0018	
5	0415	0516	.0029		15	0806	0915	.0019	(6,8)
5	0551	0651	.0024		16	0003	0112	.0019	
5	0727	0827	.0038		16	0139	0247	.0016	
5	0902	1003	.0035		16	0315	0423	.0016	
5	1038	1139	.0041		16	0451	0558	.0016	
5	1213	1315	.0034		16	0626	0734	.0018	
6	0409	0511	.0022	(4)	16	2358	2506	.0016	
6	0545	0647	.0022	(2)	17	0134	0242	.0015	
6	0721	0822	.0025		17	0310	0418	.0016	
6	0856	0958	.0033		17	0445	0555	.0019	
6	1032	1134	.0030		17	0621	0729	.0020	(8)
6	1207	1309	.0027	(8)	17	2316	2326	.0028	
6	1343	1357	.0028		17	2354	2501	.0028	
7	0539	0641	.0032		18	0130	0237	.0029	
7	0715	0817	.0030		18	0305	0411	.0036	(7)
7	0850	0953	.0035		18	0441	0548	.0054	
7	1026	1128	-	(8)	18	0617	0723	.0041	
8	0357	0459	.0029		18	2233	2320	.0073	(2)
8	0533	0636	.0032	(4)	18	2349	2456	.0106	(4)
8	0709	0812	.0028		19	0125	0231	.0063	
8	0844	0947	.0027		19	0301	0407	.0063	
8	1020	1123	.0026	(8)	19	0436	0543	.0073	(4)
9	0216	0320	.0027		19	0612	0718	.0106	(2,8)
9	0352	0455	.0027		19	2228	2315	.0073	(4)
9	0527	0631	.0023		19	2345	2450	.0063	(4)
9	0704	0805	.0031		20	0120	0226	.0063	(7)
9	0838	0942	.0022		20	0256	0401	.0063	(6)
9	1014	1117	-	(8)	20	0432	0536	.0062	(5)
9	1149	1158	.0026		20	0607	0713	.0062	(8,9)
10	0210	0314	.0017		20	2220	2309	.0084	(6)
10	0346	0450	.0015		20	2340	2444	.0073	(4)
10	0521	0626	.0015		21	0116	0202	.0063	
10	0657	0801	.0015	(4)	21	0251	0356	.0073	(6)
10	0832	0937	.0019		21	0427	0530	.0052	(6)
10	1008	1113	.0017	(8)	21	0603	0707	.0052	(3)
11	0204	0310	.0013		21	2218	2303	.0084	(6)
11	0340	0445	.0013		21	2335	2439	.0095	(7)
11	0516	0621	.0013		22	0110	0214	.0084	(7)
11	0651	0757	.0013		22	0246	0350	.0073	(5)
11	0827	0932	.0013		22	0422	0525	.0073	
11	1002	1108	.0014	(8)	22	1923	1946	.0073	
11	1138	1146	.0013		22	2018	2021	.0073	
12	0159	0305	.0013		22	2154	2257	.0073	
12	0334	0441	.0013		22	2330	2433	.0084	(6)
12	0510	0616	.0013		23	0105	0208	.0084	
12	0646	0751	.0013		23	0241	0344	.0095	



124  
May 67

SATELLITE OSO-III, X-RAY

Times of Observation

May 1967

McMath-Hulbert

May 1967	Observing Hours		Lowest Flux E (8,12) ergs cm <sup>-2</sup> sec <sup>-1</sup>	Remarks*	May 1967	Observing Hours		Lowest Flux E (8,12) ergs cm <sup>-2</sup> sec <sup>-1</sup>	Remarks*
	Start U.T.	End U.T.				Start U.T.	End U.T.		
23	0427	0519	0.0127	(2)	27	1816	1916	0.0084	
23	1915	1940	-	(Saturated)	27	1951	2052	.0084	
23	2014	2047	-	(Saturated)	27	2127	2227	.0084	(6)
23	2048	2116	.0757	(1,2)	27	2302	2403	.0095	(7,8)
23	2149	2252	.0283	(1,2)	28	0038	0139	.0084	(2)
23	2325	2427	.0189	(1,2)	28	0214	0312	.0073	(6)
24	0101	0203	.0145	(1,6)	28	1709	1735	.0095	(4)
24	0236	0338	.0136	(1,7)	28	2121	2221	.0095	(7,8)
24	0424	0521	.0188	(1,2)	28	2257	2357	.0095	(6,8)
24	1911	1934	.0095		29	0032	0133	.0095	(2)
24	2007	2110	.0084	(6)	29	0208	0308	.0084	(6)
24	2144	2246	.0095	(4)	29	1657	1728	.0073	
24	2319	2421	.0084		29	1804	1904	.0073	(7)
25	0055	0157	.0095	(4)	29	1939	2040	.0073	(2)
25	0231	0332	.0073	(2)	29	2115	2215	.0084	
25	0406	0508	.0095		29	2251	2351	.0084	(7)
25	1903	1928	.0095		30	0026	0126	.0073	(6)
25	2003	2104	.0073	(7)	30	0202	0302	.0062	(6)
25	2138	2240	.0084	(8)	30	1653	1723	.0073	
25	2333	2349	.0230	(1)	30	1758	1859	.0084	
26	0008	0015	.0167	(1,8)	30	1934	2034	.0095	(6)
26	0118	0126	.0105	(8)	30	2110	2210	.0095	(6,8)
26	0244	0303	.0199	(1,4,8)	30	2245	2345	.0084	(5,8)
26	1903	1922	.0283	(1)	31	0021	0127	.0084	
26	1957	2059	.0188	(1,2)	31	1503	1541	.0084	
26	2133	2233	.0138	(6)	31	1617	1717	.0095	(6)
26	2308	2409	.0116	(6)	31	1753	1853	.0095	(6)
27	0044	0145	.0127	(6,8)	31	1928	2028	.0095	(4)
27	0219	0311	.0199	(1,4)	31	2104	2204	.0167	(1,4)
27	1710	1741	.0095	(2)	31	2239	2339	.0156	(1,6)

Remarks\*

1. High flux level during entire interval  $\geq 0.005$  ergs cm<sup>-2</sup> sec<sup>-1</sup> above daily base level.
2. Flux decreasing during at least part of interval. Decreases by  $\geq 0.002$  ergs cm<sup>-2</sup> sec<sup>-1</sup>.
3. Flux increasing during at least part of interval. Increases by  $\geq 0.002$  ergs cm<sup>-2</sup> sec<sup>-1</sup>.
4. Flux increases and then decreases during interval, with amplitude  $\geq 0.002$  ergs cm<sup>-2</sup> sec<sup>-1</sup>.
5. Flux decreases and then increases during interval, with amplitude  $\geq 0.002$  ergs cm<sup>-2</sup> sec<sup>-1</sup>.
6. Moderate flux variations during interval, with total amplitude between 0.002 and 0.005 ergs cm<sup>-2</sup> sec<sup>-1</sup>.
7. Strong flux variations during interval, with total amplitude greater than 0.005 ergs cm<sup>-2</sup> sec<sup>-1</sup>.
8. Record marred by particle interference.
9. Flux increases sharply at end of interval, amplitude  $\geq 0.002$  ergs cm<sup>-2</sup> sec<sup>-1</sup>.
10. Flux decreases sharply at beginning of interval, amplitude  $\geq 0.002$  ergs cm<sup>-2</sup> sec<sup>-1</sup>.

SATELLITE OSO-III, X-RAY

Outstanding Events (Preliminary)

May 1967

May 1967	Start U.T.	Max. U.T.	End U.T.	Base Level at Start E(8,12)ergs cm <sup>-2</sup> sec <sup>-1</sup>	Max. Flux E(8,12) ergs cm <sup>-2</sup> sec <sup>-1</sup>
6	0420	0457U	0610	0.0022	>0.1220
18	0305E	0348	0411D	.0029U	.0178
18	2349E	2400	2456D	.0073U	.0240
19	0612E	0612E	0718D	.0073U	≥.0231
20	0135	0147		.0063	.0127
		0213	0226D		.0127
21	2349	2408		.0095	.0475
		2413	2439D		.0412
22	0110E	0116	0148D	-	.0178
23	0427E	0427E	0519D	-	≥.0189
23	1915E	-	2603D	-	>.1220
24	0252	0303		.0136	.0444
		0329	0521D		.0504
24	2235E	2235E	2246D	.0095	.0156
25	0231E	0231E	0307	.0073U	≥.0156
25	2030	2056	2104D	.0073	.0167
26	0244E	0256	0303D	-	.0252
27	0219E	0232	0311D	-	.0314
27	2314	2316	2337	.0095	.0178
28	0041E	0041E	0120U	-	≥.0423
28	2128U	2143		.0095	.0148
		2159			.0148
		2211	2221D		.0167
29	1844U	1856		.0073	.0127
		1901	1904D		.0127
29	2314	2317	2337	.0095	.0148
31	2000	2003	2028D	.0106	.0156
31	2104E	2120U	2204D	<.0167	.0210

The description of the X-ray data from OSO-III reported by McMath-Hulbert appeared in IER-FB-278, September 1967, p. 121. Data for March 1967 appeared on pp 122-123. April 1967 data is in the Miscellanea Section of this issue.

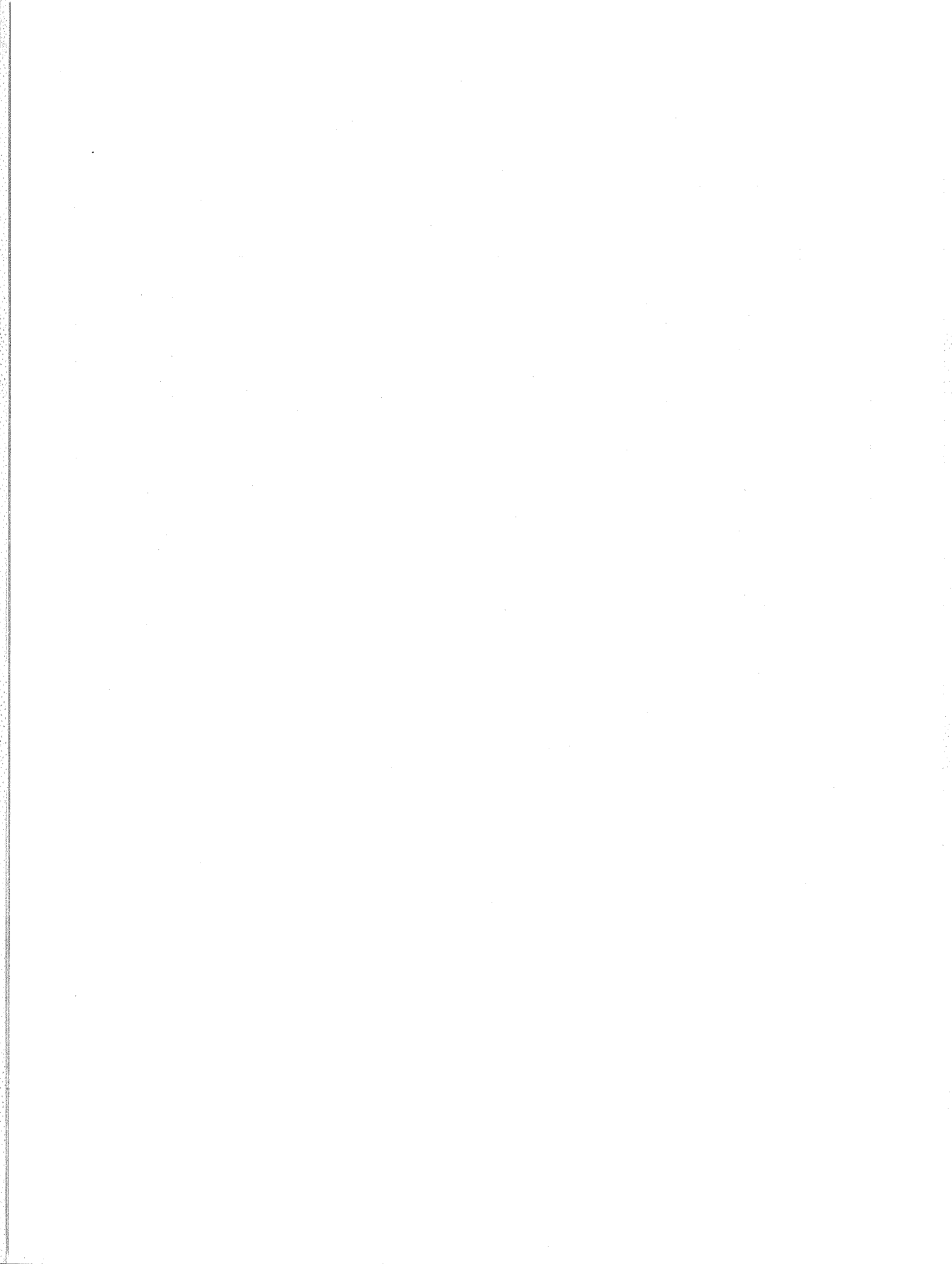
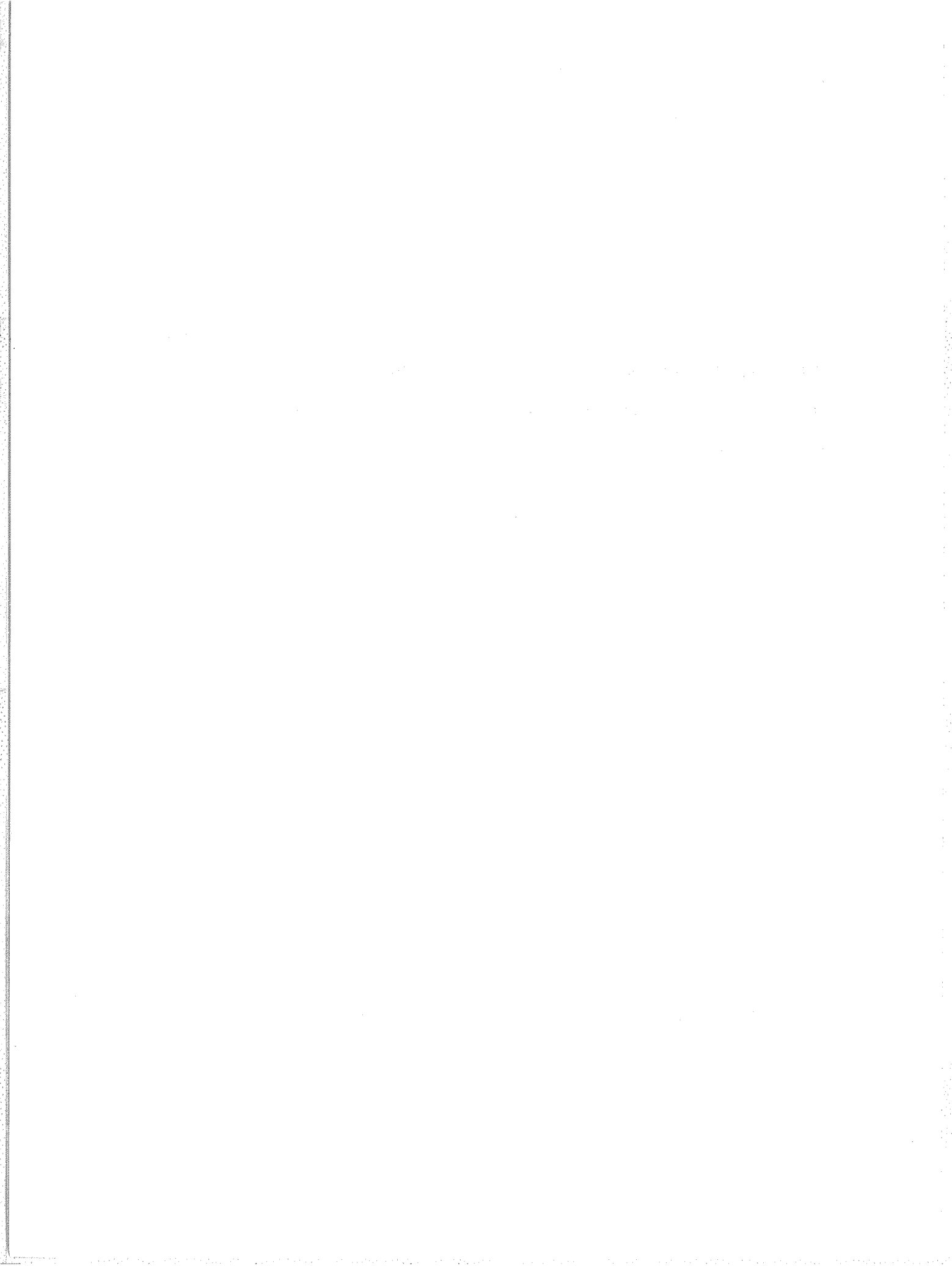


Table of Contents  
for Miscellaneous Data

	Page
NRL X-ray Observations -- March - October 1965	129-139
NRL Chart of X-ray Flux -- August 1966	140-141
McMath-Hulbert X-ray - OSO-III -- April 1967	142-143

For explanations of the data contained herein see "Descriptive Text" published in February 1967.



# SOLAR RADIATION MONITORING SATELLITE X-RAY

MARCH 1965

NRL

## Outstanding Events for March 1965

DATE	START	STOP	44-60 $\times 10^{-2}$	8-20 $10^{-4}$	8-12 $10^{-4}$	1-8 $\times 10^{-5}$	D-3 $\times 10^{-5}$
26	949	1005	15.80	11.10	6.57	183.00	27.90

## DAILY AVERAGE VALUES FOR MARCH 1965

Date	44-60 $\times 10^{-2}$	8-20 $\times 10^{-4}$	8-12 $\times 10^{-4}$
10	5.05	0.0000	0.0000
11	4.80	0.0000	0.0000
12	5.11	4.4740	1.5740
13	4.99	0.0000	0.0000
14	4.88	0.0000	0.0000
15	4.75	0.0000	0.0000
16	4.50	1.7800	0.9410
17	4.58	0.0000	0.0000
18	5.09	9.8900	2.5625
19	6.66	0.0000	0.0000
20	5.94	0.0000	0.0000
21	5.67	0.0000	0.0000
22	5.76	0.0000	0.0000
23	5.79	4.3300	1.5505
24	5.02	2.6667	1.0240
25	5.29	4.9060	1.3298
26	6.58	9.9150	4.3400
27	4.91	5.4300	2.4850
28	4.53	0.0000	0.0000
29	4.79	0.0000	0.0000
30	5.41	0.0000	0.0000
31	5.17	0.0000	0.0000

## Observing Times for March 1965

10	0615 0629	1402 1413	1805 1819	1351 1416
	0802 0818	1529 1557	2343 2357	2246 2300
	1124 1259	1715 1741		
	1308 1318	1901 1916	20 0053 0101	25 0031 0047
	1319 1330		0128 0143	0139 0151
	1451 1520	15 0042 0052	0236 0247	0326 0339
	1636 1652	0111 0125	0424 0436	0513 0529
	1653 1718	0224 0236	0609 0625	0832 0842
	1822 1838	0333 0344	0756 0810	0940 0955
	2008 2022	0519 0533	0931 0939	1016 1041
		1215 1232	1125 1137	1126 1140
		1401 1422	1257 1312	1159 1232
		1550 1605	1443 1508	1400 1411
		1736 1750	1508 1522	1543 1557
			1629 1645	2255 2311
			2352 2407	
11	0146 0200			
	0256 0303			
	0331 0346			
	0439 0450			
	0626 0639	16 0235 0249		
	0958 1014	0343 0354		
	1133 1142	0529 0543	21 0103 0110	26 0804 0816
	1317 1328	0716 0732	0138 0153	0949 1005
	1332 1341	0855 0901	0245 0257	1038 1052
	1516 1532	0902 0918	0432 0447	1137 1147
	1646 1702	1225 1245	1045 1057	1234 1239
	1832 1848	1411 1432	1135 1149	1426 1434
		1559 1615	1315 1346	
		1623 1638	1501 1513	27 0959 1015
		1735 1751	1638 1654	1049 1103
12	0155 0210			1238 1251
	0305 0313			1406 1432
	0342 0356			
	0449 0501	17 0058 0114	22 0149 0202	
	0640 0650	0245 0259	0255 0308	28 0103 0115
	0822 0838	0352 0404	0443 0457	0209 0220
	0959 1007	0540 0553	0805 0812	0543 0559
	1008 1024	1047 1055	0914 0924	0823 0838
	1332 1352	1241 1255	1153 1200	0856 0912
	1524 1538	1426 1445	1325 1345	0913 0922
	1655 1721	1609 1625	1506 1519	1057 1113
	2028 2041	1757 1809	1531 1540	1230 1258
			1649 1703	1417 1441
				1603 1617
				2325 2340
13	0131 0137	18 0218 0227		
	0314 0323	0549 0604		
	0458 0511	0736 0752	23 0011 0027	
	1009 1016	1245 1305	0203 0212	
	1017 1033	1433 1502	0306 0319	29 0552 0609
	1153 1201	1612 1635	0453 0504	0922 0933
	1204 1211	1941 1953	0639 0655	1107 1123
	1342 1402	2334 2346	0825 0839	1255 1306
	1716 1731		0920 0934	
	1851 1914	19 0117 0129	1013 1019	30 0029 0042
		0228 0237	1106 1121	0215 0228
		0412 0425	1148 1208	0407 0412
		0555 0556	1342 1353	0416 0432
		1026 1041	2238 2250	0934 0944
		1110 1126		1121 1132
		1248 1302		
		1304 1318	24 0021 0037	31 0223 0237
		1432 1445	0130 0140	0947 0956
		1450 1503	0316 0329	1128 1142
		1619 1645	0649 0705	2307 2313
			1007 1019	
			1203 1221	

# SOLAR RADIATION MONITORING SATELLITE X-RAY

APRIL 1965

NRL

Outstanding Events for April 1965

Date	Start	Stop	44-60 $\times 10^{-1}$	8-20 $\times 10^{-4}$	8-12 $\times 10^{-4}$	1-8 $\times 10^{-5}$	D-3 $\times 10^{-5}$
14	552	610	14.50	21.60	12.40	121.00	
14	740	751	13.10	21.80	12.80	110.00	
14	813	829	9.37	21.60	7.05	55.20	41.90
15	2107	2120	8.25	12.70	6.04		
15	2338	2353	9.04	22.20	7.76	54.80	12.40
15	2344	2357	10.50	21.50	7.43	137.00	23.70
16	1027	1037	19.90			174.00	
16	1058	1108	10.30	24.30	9.67		
29	1902	1913	5.40	4.05	3.38		

Daily Average Values for April 1965

Date	44-60 $\times 10^{-2}$	8-20 $\times 10^{-4}$	8-12 $\times 10^{-4}$
1	4.63		
2	4.70		
3	4.81		
4	4.24		
5	4.70		
6	4.30		
7	4.34		
8	4.04		
9	4.13		
10	4.90	3.2750	1.3200
11	5.60	5.5521	1.6479
12	5.51	5.2303	1.6798
13	5.36	4.5973	1.5500
14	7.70	10.8194	4.5861
15	6.10	8.8762	2.5517
16	5.99	9.8579	2.7042
17	5.29	5.1200	1.5033
18	5.33	6.5993	1.5221
19	5.39	6.1242	1.3800
20	5.28	4.5722	1.2067
21	5.26	5.5245	1.2695
22	5.26	4.7387	1.0680
23	5.51	5.4209	1.0985
24	5.21	3.7118	0.9525
25	5.00	2.8127	0.8561
26	4.90	2.8660	0.8245
27	4.72	2.3542	0.8064
28	4.79	2.1011	0.7946
29	4.97	2.4145	1.1592
30	4.95	2.2171	1.3179





SOLAR RADIATION MONITORING SATELLITE  
X-RAY

MAY 1965

NRL

Outstanding Events for May 1965

Date	Start	Stop	44-60 $\times 10^{-2}$	8-20 $\times 10^{-4}$	8-12 $\times 10^{-4}$	1-8 $\times 10^{-5}$
1	1721	1735	6.73	13.10	3.35	
2	58	100	10.00	0.00	9.63	284.00
2	1241	1243	12.00	17.00	9.28	70.00
8	1515	1521	5.51	10.40	7.17	
9	1522	1532	5.58	9.03	6.32	
12	2310	2314	5.11	7.61	6.92	
14	252	302	8.74	12.00	5.01	
17	1312	1317	8.82	19.90	39.40	

Daily Average Values for May 1965

Date	44-60 $\times 10^{-2}$	8-20 $\times 10^{-4}$	8-12 $\times 10^{-4}$
1	5.42	6.3107	1.7066
2	6.38	8.0970	3.1090
3	4.74	4.5080	2.1460
4	4.25	3.6700	2.5473
5	3.84	4.1380	2.9900
6	4.27	3.5825	4.1025
7	3.99	4.4100	3.9525
8	4.76	7.2206	2.1924
9	4.82	5.9522	2.3863
10	4.97	4.8722	2.0263
11	4.43	3.3267	3.0200
12	4.56	3.8394	2.1663
13	5.82	5.5075	3.1137
14	6.42	6.6133	5.0733
15	7.79	10.3600	3.8180
16	9.38	14.1000	3.9620
17	8.74	20.2750	19.3475
18	7.34	14.9450	20.9250
19	6.65	0.0000	4.5500

Aspect angle greater than 25° for May 14-31.



## SOLAR RADIATION MONITORING SATELLITE X-RAY

JUNE 1965

NRL

Outstanding Events for June 1965

Date	Start	Stop	44-60 $\times 10^{-2}$	8-12 $\times 10^{-4}$	8-12 $\times 10^{-4}$	1-8 $\times 10^{-5}$	D-3 $\times 10^{-5}$
23	1553	1607	10.90			210.00	8.56
23	2244	2256	13.80	18.70	5.01		
28	1459	1511	7.37	8.33	3.44		

Daily Average Values for June 1965

Date	44-60 $\times 10^{-2}$	8-20 $\times 10^{-4}$	8-12 $\times 10^{-4}$
18	6.01		
19	5.44		
20	5.83	9.9600	3.6300
21	7.45	6.5567	4.1567
22	7.96	7.1260	3.0640
23	10.55	12.3810	2.8842
24	9.05	9.5333	2.0044
25	8.29	9.0580	1.9110
26	7.52	7.7883	2.5067
27	6.99	6.1980	2.2460
28	6.73	6.2950	2.1710
29	6.16	6.1450	1.8100
30	6.42	7.9786	2.6000

Aspect angle greater than 25° for June 1-23

Observing Times for June 1965

18	1651	1703	24	2244	2256	26	0629	0641
	1836	1851		0151	0206		0723	0734
	2024	2034		0338	0353		1239	1251
19	0804	0810	25	0526	0539	27	1442	1448
	1702	1714		0704	0714		1624	1637
	1845	1901		0716	0726		1810	1823
				0847	0854			
20	0814	0820	25	0906	0916	29	0306	0319
	0953	1005		1031	1041		0732	0743
	1712	1725		1048	1104		0922	0927
	1856	1909		1217	1232		1451	1459
				1234	1250		1820	1831
21	1535	1545	25	1401	1417	28	0500	0516
	1720	1734		1549	1618		0559	0608
	1911	1919		1735	1804		0743	0753
				1927	1945		1459	1511
22	0645	0653	25	1947	1957	29	1642	1658
	0828	0840		1957	2011		1832	1840
	1547	1556		2107	2132			
	1730	1745		2253	2306			
	1916	1928						
23	0412	0426	25	0348	0402	30	0251	0306
	0838	0846		0713	0724		0435	0440
	1021	1037		0857	0908		0618	0627
	1039	1054		0912	0927		0802	0812
	1207	1221		1041	1057		1333	1340
	1224	1240		1244	1259		1517	1527
	1351	1408		1412	1427		1704	1717
	1538	1607		1558	1628			
	1725	1755		1745	1800			
	1912	1936		1800	1825			
	1936	1951		1941	1954			
	2058	2112		2118	2140			
				2304	2315			

SOLAR RADIATION MONITORING SATELLITE  
X-RAY

JULY 1965

NRL

Outstanding Events for July 1965

Date	Start	Stop	44-60 $\times 10^{-2}$	8-20 $\times 10^{-4}$	8-12 $\times 10^{-4}$	1-8 $\times 10^{-5}$	D-3 $\times 10^{-5}$
3	833	843	6.97			50.60	1.26
6	1247	1256	9.22	13.40	5.27	36.90	15.60
9	600	609	14.50	18.20	10.00	56.60	10.50
9	1706	1720	9.97	17.90	4.03	35.40	0.88
11	1131	1148	14.00	16.90	9.48	43.30	1.52
11	1149	1159	13.80	13.70	7.70	35.40	9.21
13	1210	1222	11.10	12.20	6.34	31.80	10.00
15	150	203	12.60	15.90	8.92	45.80	0.91
15	511	522	12.90	15.90	8.87	64.50	15.60
15	1227	1242	10.50	11.90	5.86	51.50	26.30
27	2321	2336	5.57	3.66	2.60		

Daily Average Values for July 1965

Date	44-60 $\times 10^{-2}$	8-20 $\times 10^{-4}$	8-12 $\times 10^{-4}$
1	6.20	8.0158	1.9117
2	6.60	9.3550	2.7467
3	7.04	9.9600	2.3859
4	7.15	9.0367	2.0008
5	7.44	8.7702	1.8967
6	8.45	11.9750	3.0519
7	11.13	14.6200	7.6643
8	10.19	16.7833	5.3969
9	10.89	16.3069	5.8464
10	10.01	15.1405	4.9738
11	10.84	15.3208	5.9076
12	9.74	14.8152	4.3827
13	9.62	14.1333	4.0244
14	8.87	12.7286	2.9607
15	9.90	13.8692	4.7077
16	8.30	11.2629	2.3371
17	7.33	7.6219	1.6233
18	6.92	5.5900	1.2072
19	7.18	5.6860	1.1760
20	7.65	10.1875	2.0850
21	7.29	6.4960	1.4160
22	6.87	4.8230	1.1430
23	6.40	4.3660	1.1280
24	5.92	3.1000	0.8767
25	5.60	2.7725	0.8554
26	5.44	2.5740	0.8762
27	5.49	3.0000	1.1890
28	5.58	3.0980	0.9134
29	5.81	3.0417	0.8538
30	5.88	3.3900	1.0842
31	5.91	3.1217	1.0070

SOLAR RADIATION MONITORING SATELLITE  
X-RAY

JULY 1965

NRL

Observing Times for July 1965

1	0203 0212 0444 0450 0628 0636 1341 1352 1528 1542 1713 1726		0541 0551 0725 0734 0909 0923 1254 1307 1434 1505 1627 1637		1343 1359 1532 1545 2159 2210 2342 2357		0225 0240 1130 1145 1317 1330	
2	0209 0223 0454 0501 0638 0647 1352 1402 1537 1550 1723 1731	8	0040 0053 0121 0136 0225 0239 0407 0423 0551 0600 0602 0615 0734 0747 0935 0951 1303 1318 1449 1505 1656 1711 1810 1823 2306 2316		13	0025 0040 0128 0142 0310 0318 0318 0330 0453 0504 0636 0645 0838 0854 1208 1222 1353 1418 1551 1603 1723 1735	21	0058 0104 0244 0250 0955 1007 1140 1155 1328 1337
3	0218 0243 0403 0417 0504 0511 0647 0657 0833 0843 0846 0900 1017 1030 1032 1043 1355 1413 1546 1612 1743 1757 1915 1929		0050 0103 0131 0147 0233 0236 0236 0249 0416 0424 0424 0437 0600 0609 0743 0752 0758 0815 0945 1000 1314 1328 1502 1514 1642 1658 1706 1720 2316 2327		14	0136 0139 0140 0153 0319 0327 0502 0513 0645 0655 1218 1233 1402 1418 1546 1601	22	0106 0114 0246 0300 1004 1018 1150 1205 1338 1344
4	0146 0159 0414 0429 0514 0521 0522 0534 0656 0705 0840 0854 1023 1039 1209 1224 1412 1425 1556 1611 1737 1751 1754 1806 1808 1818 2101 2113	9	0242 0246 0246 0259 0425 0434 0436 0445 0609 0615 0616 0619 0625 0637 0809 0824 1140 1148 1322 1338 1510 1523		15	0001 0016 0144 0150 0150 0203 0328 0337 0511 0522 0654 0705 0712 0728 0952 0958 1043 1050 1227 1242 1414 1427 1555 1611 2225 2240 2312 2323	23	0111 0424 0925 0941 1015 1028 1159 1215
5	0012 0023 0156 0209 0237 0253 0340 0342 0344 0356 0425 0439 0522 0530 0534 0544 0706 0715 0850 0903 1033 1048 1221 1234 1239 1244 1406 1421 1422 1435 1606 1632 1742 1800 1815 1827 2111 2122	10	0007 0020 0109 0121 0258 0310 0436 0444 0446 0459 0618 0628 0802 0811 0818 0834 1131 1148 1149 1200 1333 1349 1520 1536 1702 1717 2150 2200 2334 2347		16	0153 0201 0336 0347 0521 0532 1053 1103 1237 1252 1427 1438 2319 2334	24	0308 0319 1023 1038 1210 1224 2112 2120
6	0108 0116 0205 0219 0355 0405 0532 0539 0543 0555 0859 0907 1245 1256 1430 1446 1618 1642	11	0007 0020 0109 0121 0258 0310 0436 0444 0446 0459 0618 0628 0802 0811 0818 0834 1131 1148 1149 1200 1333 1349 1520 1536 1702 1717 2150 2200 2334 2347		17	0104 0119 0201 0210 0346 0357 0536 0541 1012 1018 1102 1114 1159 1201 1246 1302 1435 1444 2331 2344	25	0129 0145 0849 0859 1033 1049 1221 1232
7	0357 0400	12	0015 0030 0120 0133 0301 0307 0445 0453 0627 0638 0643 0658 0829 0844 1159 1210		18	0114 0129 0209 0221 0352 0406 1111 1125 1257 1310	26	0141 0153 0330 0338 0901 0910 1043 1058 1232 1241
					19	0127 0139 0217 0231 0403 0416 1123 1135 1305 1322	27	0007 0018 0150 0202 0818 0835 0909 0921 1053 1109 2321 2336
					20	0045 0054	28	0016 0028 0205 0213 0919 0932 1103 1117 2145 2201
							29	0217 0222 0838 0854 0927 0942 1113 1127 2010 2023 2154 2211
							30	0042 0047 0223 0233 0758 0803 0938 0952 1123 1137 2204 2220 2306 2310
							31	0050 0057 0803 0813 0947 0959 1135 1144 2030 2044 2308 2321

SOLAR RADIATION MONITORING SATELLITE  
X-RAY

AUGUST 1965

NRL

Outstanding Events for August 1965

Date	Start	Stop	44-60 $\times 10^{-2}$	8-20 $\times 10^{-4}$	8-12 $\times 10^{-4}$	1-8 $\times 10^{-5}$	D-3 $\times 10^{-5}$
7	7	20	10.40	16.20	5.40	49.90	11.20
10	941	947	9.90	15.70	5.34	32.40	15.60
30	1915	1927	9.09	12.90	3.00		

Daily Average Values for August 1965

Date	44-60 $\times 10^{-2}$	8-20 $\times 10^{-4}$	8-12 $\times 10^{-4}$
1	6.72	6.5110	1.4184
2	8.34	12.7250	2.5569
3	9.39	15.9500	3.4217
4	9.76	15.9714	3.2857
5	9.87	15.8000	3.5983
6	9.24	13.4600	2.6620
7	9.40	13.6143	3.0057
8	9.04	14.1833	2.8767
9	8.79	12.5200	2.4920
10	9.03	14.2571	3.1443
11	9.17	14.4857	3.1871
12	8.59	11.3500	2.3325
13	8.32	9.4971	1.8314
14	8.19	8.0100	1.4800
15	7.99	7.2000	1.3625
16	8.22	9.3375	1.7225
17	8.15	9.8133	1.8567
18	7.74	9.5267	1.6883
19	7.42	6.6900	1.5200
20	6.98	7.2340	1.5340
21	6.61	6.7867	1.3200
22	5.86	6.4300	1.3567
23	5.72	6.0325	1.3100
24	5.35	4.8975	1.2450
25	5.29	3.6667	1.1850
26	5.23	3.5040	1.2525
27	5.60	3.5950	1.1287
28	5.96	3.3240	1.4240
29	6.14	3.6533	1.3500
30	6.59	5.2640	1.9350
31	6.09	3.8370	1.8830

Observing Times for August 1965

1	0053 0812 0956 2226 2316	0102 0825 1012 2240 2329		2228 2245		0648 2008 2153	0653 2030 2205		1949 2141	2004 2149		
2	0106 0734 0821 1007 2047	0118 0748 0835 1021 2104		0600 0659 0745 2017 2105 2249	0610 0710 0800 2027 2118 2302	15	0513 0657 2018 2204	0520 0702 2031 2215	24	0308 0454 1814 2000	0316 0507 1828 2013	
3	0117 0833 1017 2059 2153 2335	0125 0845 1030 2114 2204 2351		10	0042 0608 0754 0941 1844 2115 2302	0048 0620 0802 0947 1851 2128 2314	16	0521 0707 2035 2214	0526 0711 2041 2227	25	0319 1643 1823 2013	0333 1650 1838 2023
4	0128 0840 1027 1926 2110 2201 2345	0134 0855 1039 1937 2124 2214 2359		11	0618 0803 1854 1941 2038 2123 2311	0632 0819 1901 1950 2046 2138 2322	17	0347 1852 2039	0353 1904 2051	26	0145 0331 0514 1650 1833	0151 0343 0517 1701 1847
5	0704 0851 1038 1934 2119 2356	0717 0906 1048 1948 2133 2411		12	0445 0632 0813 1906 1952 2133 2322	0451 0637 0820 1941 2001 2148 2333	18	0357 0542 0727 1901 2046 2237	0402 0546 0730 1914 2100 2245	27	0154 0338 1658 1843	0159 0343 1712 1858
6	0625 0715 0901 2044 2221	0642 0729 0916 2047 2234		13	0450 0637 0823 1732 1959 2142 2336	0502 0652 0837 1734 2011 2157 2341	19	0407 0507 0551 1911 2056 2248	0418 0516 0606 1925 2110 2253	28	0203 0347 1708 1853 2046	0209 0352 1722 1907 2050
7	0007 0450 0540 0724 0911 2046	0020 0504 0547 0739 0925 2057		14	0505 0510		20	0417 0600 1739 1921 2106	0421 0605 1747 1936 2120	29	0215 1716 1903	0223 1732 1917
							21	0150 0424 1932	0204 0436 1944	30	0221 0407 1544 1728 1915	0236 0422 1554 1742 1927
							22	0621 1755 1940 2131	0622 1808 1954 2138	31	0047 0231 0417 1554 1735 1926	0055 0246 0421 1604 1752 1939

# SOLAR RADIATION MONITORING SATELLITE X-RAY

SEPTEMBER 1965

NRL

## Observing Times for September 1965

1	0241	0254
	1603	1614
	1746	1801
2	0016	0032
	0107	0113
	0251	0257
	0437	0442
	1611	1625
	1950	1954
3	0115	0125
	0215	0225
	0301	0307
	1620	1636
	1811	1820
30	2101	2117

## Daily Average Values for September 1965

Date	44-60 $\times 10^{-2}$	8-20 $\times 10^{-4}$	8-12 $\times 10^{-4}$
1	6.20	4.4533	1.8300
2	5.79	3.9767	2.1600
3	5.94	5.2400	3.2900

Aspect angle greater than 25° for Sept. 1-30.

No outstanding events observed.

## SOLAR RADIATION MONITORING SATELLITE X-RAY

OCTOBER 1965

NRL

Outstanding Events for October 1965

Date	Start	Stop	44-60 ×10 <sup>-1</sup>	8-20 ×10 <sup>-4</sup>	8-12 ×10 <sup>-4</sup>	1-8 ×10 <sup>-4</sup>	D-3 ×10 <sup>-5</sup>
4	1442	1456	5.76	34.80	15.70		
9	1657	1712	7.30	24.80	8.10	123.00	39.30
9	1859	1914	6.75	23.50	6.59	95.10	40.60
9	1901	1916	6.97	23.10	6.56	99.00	47.00
12	705	718	3.43	13.00	3.66	60.40	29.00
12	747	800	7.03	22.40	13.80	161.00	
12	845	853	4.17	22.30	8.60	66.60	15.40
12	845	851	4.16	21.80	9.11	74.50	1.24

Daily Average Values for October 1965

Date	44-60 ×10 <sup>-2</sup>	8-20 ×10 <sup>-4</sup>	8-12 ×10 <sup>-4</sup>
4	5.76	24.6500	10.3500
5	4.70	10.7500	4.0950
6	4.60	8.0533	3.8200
7	5.10	8.1756	2.6217
8	5.43	10.1750	2.6150
9	5.55	14.6464	3.7846
10	4.75	13.6625	3.3308
11	3.66	5.9677	1.7800
12	3.22	6.9305	2.3845
13	2.96	6.4890	1.6052
14	3.07	8.0012	1.7156
15		3.7600	
16		3.3800	0.7730
17		4.1000	0.6943
18		3.8275	0.6640
19		3.1300	0.6410
20		4.9100	0.8877
21		9.1633	1.5233
22		16.3667	4.6333
23		15.5000	2.4900
24		16.7000	2.5300
25		11.2000	2.0350
26		6.7333	1.6233
27		5.2367	1.1570
28		3.2133	0.5850
29		4.6300	1.7500
30		10.7000	
31		0.8800	

Observing Times for October 1965

4	1043	1106		1854	1910		1059	1107	
	1442	1456		1919	1934		1626	1639	
	1615	1623		2043	2056		1811	1827	
				2227	2241				
5	2004	2021				11	0013	0026	
							0652	0653	
							0835	0843	
							1019	1028	
							1219	1233	
							1348	1400	
							1409	1419	
							1531	1547	
							1718	1733	
							1733	1744	
							1904	1917	
							1918	1933	
							2051	2105	
							2237	2250	
						12	0023	0036	
							0335	0345	
							0421	0427	
							0518	0532	
							0599	0616	
							0702	0704	
							0705	0718	
							0747	0800	
							0845	0853	
							1028	1038	
							1041	1056	
							1355	1410	
							1540	1556	
							1728	1743	
							1743	1757	
							1915	1942	
							2100	2115	
							2246	2302	
						13	0033	0044	
							0712	0716	
							0757	0810	
							0856	0903	
							1041	1047	
							1406	1420	
							1739	1807	
							1925	1939	
							1939	1956	
							2256	2310	
						14	0618	0636	
							0906	0913	
							1050	1056	
							1234	1244	
							1600	1628	
							1747	1802	
							1802	1818	
							1934	1949	
							1949	1958	
							2120	2135	
							1707	1723	
							1723	1736	
						15	0906	0922	
8	0622	0638					16	1636	1651
	0705	0722					1821	1837	
	0802	0812							
	0812	0825					17	0749	0756
	0853	0907					1502	1510	
	0946	0958					1646	1701	
	1129	1143					1832	1846	
	1148	1202							
	1615	1619					18	0942	0950
	1850	1904					1510	1520	
	2029	2101					1656	1709	
							1842	1854	
							19	1520	1531
							1705	1712	
							1852	1903	
							20	1532	1544
							1716	1731	
							1902	1910	
							21	1355	1400
							1539	1554	
							1724	1740	
							22	1404	1413
							1553	1604	
							1740	1749	
							23	1414	1424
							1598	1614	
							24	1423	1436
							1610	1624	
							1796	1807	
							25	1434	1446
							1618	1634	
							26	1259	1305
							1443	1457	
							1628	1640	
							27	1308	1316
							1457	1506	
							1644	1648	
							28	1317	1328
							1502	1516	
							1648	1700	
							29	1328	1340
							30	1523	1537
							31	1532	1546

Aspect angle greater than 25° for Oct 1-8 and 29-31.

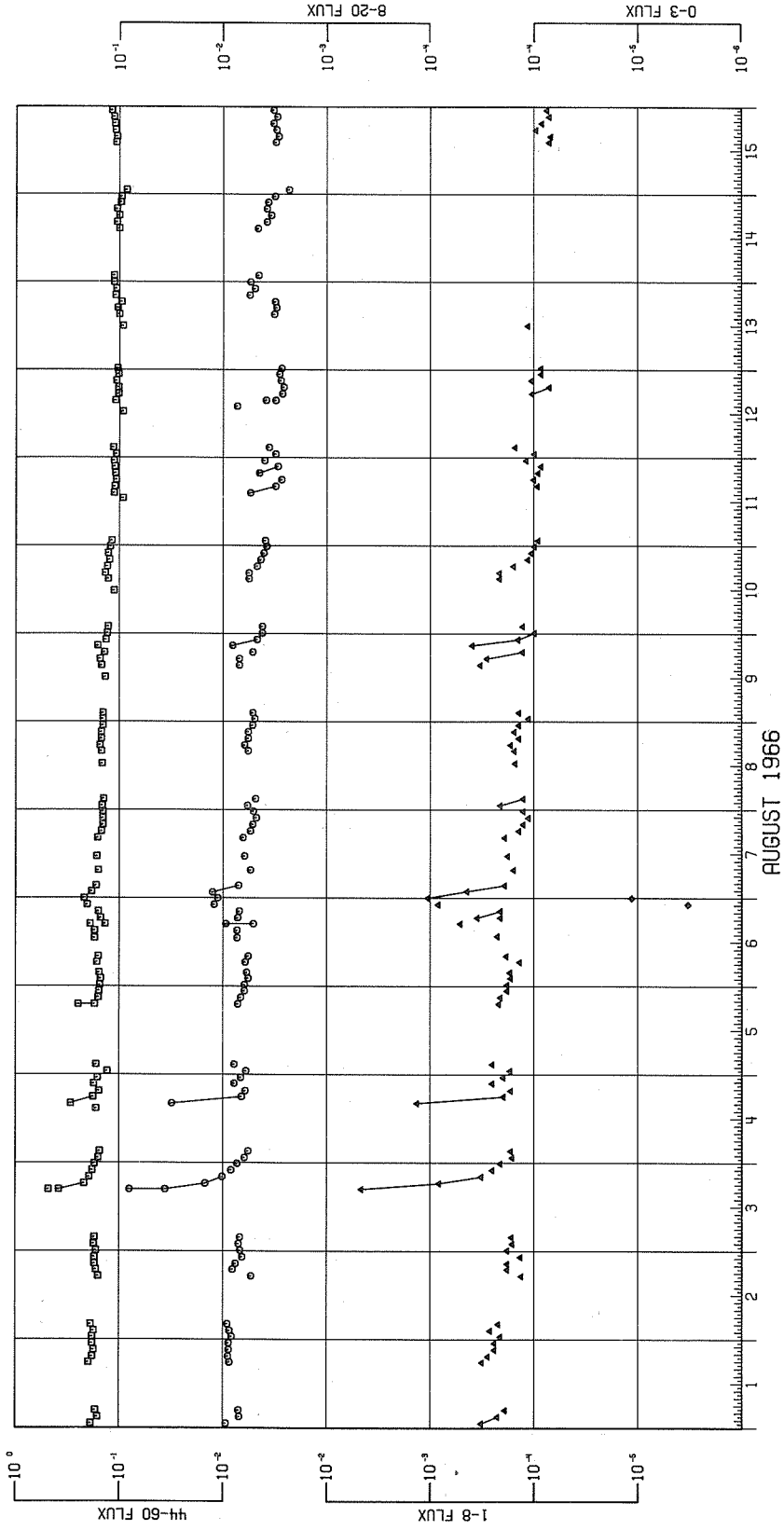
44-60 detector failed on Oct 15.



SOLAR RADIATION MONITORING SATELLITE  
X-RAY

AUGUST 1966

NRL

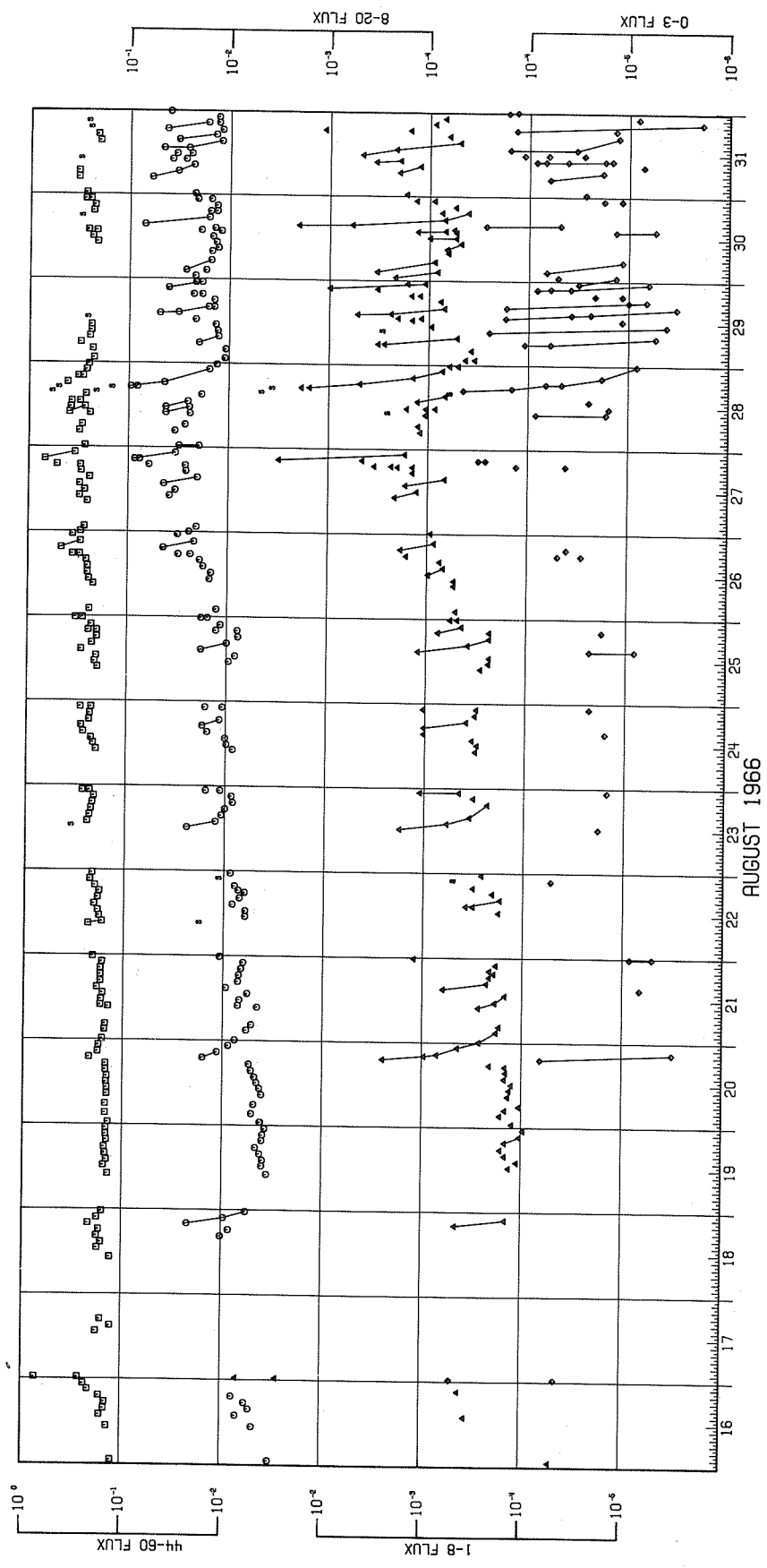


AUGUST 1966

# SOLAR RADIATION MONITORING SATELLITE X-RAY

AUGUST 1966

NRL



142  
Misc.  
Apr 67

SATELLITE OSO-III, X-RAY

Times of Observation

April 1967

McMath-Hulbert

Apr. 1967	Observing Hours		Lowest Flux E(8,12) ergs cm <sup>2</sup> sec <sup>-1</sup>	Remarks*	Apr. 1967	Observing Hours		Lowest Flux E(8,12) ergs cm <sup>2</sup> sec <sup>-1</sup>	Remarks*
	Start U.T.	End U.T.				Start U.T.	End U.T.		
1	0101	0202	0.0148	(4)	19	1344	1445	0.0027	
1	2054	2110	.0105		19	1519	1620	.0027	
1	2145	2246	.0095	(2)	19	1655	1756	.0030	
1	2320	0022	.0095	(4)	19	1830	1932	.0027	
2	0056	0157	.0084	(4)	19	2006	2107	.0029	
2	2047	2105	.0156	(1,2)	19	2142	2225	.0028	(8)
2	2139	2240	.0095	(5)	20	1217	1304	.0025	
2	2315	0016	.0084	(6)	20	1338	1439	.0023	
3	0051	0152	.0136	(1,7)	20	1514	1615	.0025	
4	1902	1919	.0031		20	1649	1751	.0025	
4	1954	2055	.0033		20	1825	1926	.0027	
4	2130	2230	.0030		20	2001	2037	.0027	
4	2305	2357	.0030		21	1032	1123	.0029	
5	1853	1913	.0022		21	1157	1258	.0030	
5	1949	2049	.0021		21	1333	1434	.0033	(4)
5	2124	2225	.0025		21	1509	1609	.0032	
5	2300	2351	.0024		21	1644	1745	.0031	(6)
6	1846	1908	.0019		21	1820	1921	.0039	
6	1943	2043	.0021		21	1955	2028	.0033	
6	2119	2219	.0022		22	1023	1117	.0028	
6	2255	2345	.0022		22	1152	1253	.0027	
7	1841	1902	.0026	(3)	22	1327	1428	.0026	
7	1938	2038	.0029		22	1503	1604	.0027	
7	2113	2213	.0030		22	1639	1740	.0024	
7	2249	2337	.0028		22	1814	1915	.0024	
8	1656	1721	.0038	(3)	22	1950	2026	.0025	
8	1757	1857	.0028		23	1017	1112	.0028	
8	1932	2032	.0027		23	1146	1247	.0028	
8	2108	2150	.0039	(2)	23	1322	1423	.0026	
9	1650	1715	.0033		23	1458	1558	.0027	
9	1751	1851	.0037	(7)	23	1633	1734	.0026	(8)
9	1927	2027	.0037	(4)	23	1809	1910	.0027	(8)
9	2102	2143	.0043	(2)	23	1945	2020	.0027	
10	1643	1710	.0037	(2)	24	1010	1106	.0030	
10	1921	2021	.0034	(9)	24	1141	1242	.0032	
10	2057	2140	.0039	(4)	24	1517	1553	.0035	
11	1636	1704	.0040		24	1628	1728	.0034	(8)
11	1739	1839	.0036		24	1804	1859	.0037	(4,8)
11	1915	2015	.0033		25	1147	1236	.0063	
11	2050	2133	.0034	(4)	25	1312	1412	.0040	
12	1448	1523	.0036		25	1447	1548	.0036	(8)
12	1558	1658	.0035	(3)	25	1623	1723	.0037	(8)
12	1734	1834	.0054		25	1758	1825	.0035	(8)
12	1909	1943	.0063	(4)	26	0819	0919	.0037	(6)
13	1442	1517	.0034		26	0955	1055	.0032	
13	1552	1653	.0035		26	1130	1231	.0039	(2)
13	1728	1828	.0037	(9)	26	1306	1406	.0037	(6)
13	1904	1938	.0054	(9)	26	1442	1542	.0036	(8)
14	1436	1512	.0083		26	1617	1717	.0034	(8)
14	1547	1647	.0063	(2)	27	0813	0914	.0029	
14	1722	1823	.0054	(2)	27	0949	1049	.0031	
14	1858	1933	.0054	(9)	27	1125	1225	.0032	(9)
15	1429	1506	.0031		27	1300	1400	.0032	
15	1541	1642	.0031		27	1436	1536	.0032	
15	1717	1818	.0032	(4)	27	1612	1712	.0033	(2,8)
15	1852	1953	.0035		27	1747	1813	.0033	
15	2028	2108	.0035		28	0808	0908	.0036	(4)
16	1243	1325	.0095	(1,2)	28	0943	1043	.0034	
16	1400	1501	.0063		28	1119	1219	.0033	
16	1536	1637	.0054		28	1255	1355	.0038	
16	1711	1740	.0044	(2)	28	1430	1530	.0038	(8)
17	1235	1320	.0033		28	1606	1706	.0038	(8)
17	1355	1456	.0032		29	0802	0902	.0037	
17	1530	1552	.0031		29	0938	1038	.0037	
18	1227	1314	.0027		29	1113	1213	.0033	
18	1349	1450	.0027		29	1249	1349	.0032	
18	1525	1626	.0027		29	1424	1524	.0035	(6)
18	1700	1801	.0027		30	0756	0856	.0040	
18	1836	1937	.0026		30	0932	1032	.0036	(4)
18	2012	2113	.0028		30	1107	1207	.0033	(7)
18	2147	2232	.0026		30	1243	1343	.0036	(6)
19	1224	1309	.0025		30	1419	1519		(4,8)

\* See Remarks on page 124.

SATELLITE OSO-III, X-RAY  
Outstanding Events (Preliminary)

April 1967

Apr. 1967	Start U.T.	Max. U.T.	End U.T.	Base Level at Start E(8,12)ergs cm <sup>-2</sup> sec <sup>-1</sup>	Max. Flux E(8,12) ergs cm <sup>-2</sup> sec <sup>-1</sup>
1	0117	0127	0202D	0.0148	0.0514
2	2139E	2139E	2203	.0095U	≥.0156
8	2108E	2108E	2150D	.0030U	≥.0084
9	1751	1756	1851D	.0037U	.0106
10	1643E	1643E	1710D	.0037U	≥.0095
11	2106	2112	2133D	.0034	.0625
12	1613	1658D	1658D	.0035	≥.0084
13	1932	1938D	1938D	.0054	≥.0116
14	1722E	1722E	1823D	.0054U	≥.0136
26	1130E	1130E	1231D	.0035U	≥.0136
26	1306E	1306E	1339	.0036U	≥.0084
27	1612E	1612E	1648	.0033U	≥.0095
30	1148	1158	1207D	.0033	.0103

The description of the X-ray data from OSO-III reported by McMath-Hulbert appeared in IER-FB-278, September 1967, p. 121. Data for March 1967 appeared on pp 122-123.