U.S. DEPARTMENT OF COMMERCE
C.R. Smith, Secretary
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
Robert M. White, Administrator
ENVIRONMENTAL DATA SERVICE
Woodrow C. Jacobs, Director

ESSA RESEARCH LABORATORIES

Solar-Geophysical Data

Number 284
for March 1968
February 1968
October 1967
& Miscellanea

DATA COMPILED BY AERONOMY AND SPACE DATA SERVICES
BOULDER, COLORADO

WASHINGTON, D.C.
APRIL 1968

SOLAR - GEOPHYSICAL DATA

Table of Contents

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

For sale through the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402. Subscription price: $8.75 annually for domestic mailing. Add $2.25 for foreign mailing. Single issue price 75 cents.

INDEX FOR 1967-1968 DATA PUBLISHED IN IER-FB

	1967 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1968 Jan	Feb	Mar
American Relative Sunspot Numbers R_A	270	271*	272	273	274	275	276	277	278	279	280	281	282	283	284
Zürich Provisional Relative Sunspot Numbers R_Z	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284
Zürich Final Sunspot Numbers R_Z	282	282	282	282	282	282	282	282	282	282	282	282			
2800 MHz - Daily Values of Solar Flux (Ottawa)	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284
2800 MHz - Daily Values of Solar Flux (Final-Ottawa)															
2800 MHz - Daily Values of Adjusted Solar Flux (ARO)	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284
2800 MHz - Daily Values of Adjusted Solar Flux (Final-Ottawa															
8800, 4995, 2695, 1415, 606 MHz Adjusted Solar Flux (AFCRL)	270	271	272	273	274	275	276	277	278	279	280	281	283	283	284
Mt. Wilson Magnetic Characteristics of Sunspots	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284
Mt. Wilson Magnetograms	271	272	273	274	275	276	277	278	279	280	281	282	283	284	
Hα (Sacramento-Peak or Boulder)	271	272	273	274	275	276	277	278	279	280	281	282	283	284	
Sunspots (Boulder)	271	272	273	274	275	276	277	278	279	280	281	282	283	284	
Calcium Plage Maps (McMath-Hulbert)	271	272	273	274	275	276	277	278	279	280	281	282	283	284	
Calcium Plage and Sunspot Regions	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284
Coronal Line Emission Indices	271	272	273	275	275	276	277	278	279	280	282	282	283	284	
Optical Observations Flares	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284
Optical Observations Flares (Including Standardized Data)	275	276	277	278	279	280	281	282	283	284					
Optical Observations Flares (Addenda)			278												
Flare Patrol Observations	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284
Flare Patrol Observations	275	276	277	278	279	280	281	282	283	284					
Solar X-Ray Radiation (NRL)	271	272	273	274	275	276	277	278	279	280	281	282	283	284	
X-Ray Graphs (NRL)	275	276	277	278	279	280	281								
Solar X-Ray Radiation (Aberdeen, S. Dakota)	---	272	273	274	---	276	277	---	279	280	---	---	---	---	---
Solar X-Ray Radiation (France)															
Solar X-Ray Radiation (ESSA-Boulder)	271	272	273	274	275	---	---	278	279	280	281	---	---	---	---
X-Ray (University of Iowa)	278	278	278	280	280	281	281	283	283	284					
X-Ray (McMath-Hulbert)			278	279	279	280	281	282							
Solar Wind Velocities (Ames Research Center)											281	281	282	283	284
Ionospheric Effects (SWF-SCNA-SEA-SPA-SES-SFD)	271	272	273	274	275	276	277	278	279	280	281	282	283	284	
30 MHz Riometer Events (Great Whale River)	271	272	---	---	---	---	---	---	---	---	---	---	---	---	---
30 MHz Riometer Events (South Pole)			273	274	275	276	277	278	279	280	281	---	---	---	---
10700, 2700, 960, 328 MHz - Outstanding Occurrences (Pennsylvania State University)	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284
8800, 4995, 2695, 1415, and 606 MHz Outstanding Occurrences (AFCRL, Sagamore Hill)*	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284
7000 MHz (Sao Paulo)											280	281	282	283	284
2800 MHz - Outstanding Occurrences (ARO-Ottawa)	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284
486 MHz - Outstanding Occurrences (Washington State Univ.)	270	271	272	273	274	275	276	277	278	279	280	281		283	284
408 MHz - Outstanding Occurrences (San Miguel)										279	280	281	282	283	284
408 MHz - Interferometric Observations (Nancay)	270	271	272	273	275	275	276	277	279	279	280	281	282	283	284
169 MHz - Interferometric Observations (Nancay)	270	271	272	273	---	---	277	277	279	279	280				284
184 MHz - Outstanding Occurrences (Boulder)	---	---	272	273	274	275	276	277	278	279	280	281	282		
107 MHz - Outstanding Occurrences (Haleakala)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
18 MHz - Bursts (Boulder)											280	281	282	283	284
18 MHz - Bursts (McMath)													282		284
10-580 MHz - (Fort Davis)	277	277	277	277	277	277	277	278	279	280	281	282	283	284	
10-210 MHz - (Culgoora)	277	277	277	277	277	277	277	278	279	280	281	282	283	284	
7.6-41 MHz - University of Colorado - Boulder)	270	271	272	273	274	275	276	278	279	280	281	282	283	284	
19-41 MHz - (AFCRL, Sagamore Hill)													283	284	
9.1 cm Spectroheliograms (Stanford)	271	272	273	274	275	276	277	278	279	280	281	282	283	284	
21 cm Spectroheliograms (Fleurs)	271	272	273	274	275	276	277	278	---	280	281	282	283	284	
21 cm Solar Scans (Fleurs)	270	271	272	273	274	275	276	277	278	280	280	281	282	283	284
43 cm Solar Scans (Fleurs)	270	271	272	273	274	275	276	277	278	280	280	281	282	283	284
Cosmic Ray Neutron Counts (Deep River)	271	272	273	274	275	276	277	278	279	280	281	282	283	284	
Cosmic Ray Neutron Counts (Alert)	271	272	273	274	275	276	277	278	279	280	281	282	283	284	
Cosmic Ray Neutron Counts (Churchill)												282		284	
Cosmic Ray Neutron Counts (Climax)	271	272	273	274	275	276	277	278	279	280	281	282	283	284	
Cosmic Ray Neutron Counts (Dallas)										280	281	282	283	284	
Solar Protons (Satellite)					282	282	282	282	283	284					
Solar Proton Events (Riometer)	284	284	284	284	284	284									
Geomagnetic Indices Ci, Cp, Kp, Ap - Selected Days	271	272	273	274	275	276	277	278	279	280	281	282	283	284	
Principal Magnetic Storms	271	272	273	274	275	276	277	278	279	280	281	282	283	284	
Sudden Commencement and Solar Flare Effects	277	277	277	280	280	280	283	283	283						
27-Day Chart of Kp Indices for Year	282	282	282	282	282	282	282	282	282	282	282	282			
27-Day Chart of C9 for Year	282	282	282	282	282	282	282	282	282	282	282	282			
High Latitude Quality Figures and Forecasts	271	272	273	274	275	276	277	278	279	280	281	282	283	284	
High Latitude Comparison Graphs	271	272	273	274	275	276	277	278	279	280	281	282	283	284	
Graphs of Transmission Frequency Range	271	272	273	274	275	276	277	278	279	280	281	282	283	284	
IUWDS Alert Decisions	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284

* Also 15400 MHz beginning in FB-280.

Table of Contents
for March 1968 Data

For explanations of the data contained herein see "Descriptive Text" published in February 1968.

ALERT PERIODS

INTERNATIONAL URSIGRAM AND WORLD DAYS SERVICE

MARCH 1968

MAR. 1968	TIME OF ISSUE UT	ADVANCE GEOPHYSICAL ALERT	WORLDWIDE GEOPHYSICAL ALERT			
			NO.	TYPE	TIMING	ELABORATION
15	1330Z	Paris Magstorm 140735Z				
27	1833Z	Boulder Soflare Importance 2B S12 W40				

RELATIVE SUNSPOT NUMBERS

ZURICH, R_Z

1967 FINAL — 1968 (PROVISIONAL)

DAY	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.
1	105	81	138	85	139	123	76	115	131	119	208	108
2	82	79	118	89	126	115	77	122	126	117	211	118
3	63	62	102	92	113	119	95	113	89	128	197	83
4	60	62	104	95	95	121	98	110	79	128	162	92
5	68	68	90	98	103	125	103	91	79	147	125	71
6	72	49	80	97	106	120	98	51	89	129	105	56
7	86	41	59	82	98	109	92	48	126	150	86	52
8	108	18	43	82	119	104	76	27	131	166	90	79
9	88	25	26	84	107	99	80	34	117	182	86	69
10	68	17	21	67	91	95	82	41	114	198	82	74
11	62	25	20	53	94	77	90	38	132	150	78	85
12	51	34	19	60	77	79	65	56	135	144	69	87
13	63	34	19	53	75	65	55	77	137	138	67	89
14	48	40	20	70	66	51	63	95	140	93	69	67
15	51	43	35	87	61	36	47	98	151	86	87	59
16	32	44	41	80	77	39	41	119	160	70	74	46
17	42	44	57	75	95	44	38	121	172	56	95	59
18	58	55	64	78	114	50	50	134	170	48	72	59
19	56	70	67	62	110	59	62	131	129	50	65	53
20	52	80	84	42	113	63	83	116	141	53	68	56
21	64	99	79	63	120	67	80	95	130	53	69	70
22	76	118	83	73	123	62	85	92	105	69	70	91
23	98	145	80	93	122	55	101	103	101	73	71	113
24	83	159	99	98	122	51	93	108	91	93	119	132
25	85	164	96	108	130	61	114	128	111	78	162	156
26	66	174	79	118	125	53	125	109	142	60	150	141
27	66	194	61	123	121	50	125	105	140	86	118	146
28	81	197	80	157	119	71	156	112	165	140	127	138
29	79	164	65	155	111	66	137	117	141	175	131	127
30	73	150	89	165	121	74	132	123	124	185		154
31		147		152	129		116		119	209		134
MEAN	69.5	86.5	67.3	91.5	107.2	76.8	88.2	94.3	126.4	115.3	107.3	92.4

1967 yearly mean = 93.8

DAILY SOLAR FLUX AT 2800 MHz
OTTAWA ARO

FLUX ADJUSTED TO 1 A.U., S_a

1967 — 1968

DAY	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.
1	158.6	136.6	174.6	125.0	176.6	160.5	139.7	140.3	140.0	171.4	254.1	162.8
2	141.0	131.8	158.0*	125.7	166.7	156.6	135.0	140.9	131.5	171.8	253.0	164.4
3	133.3	*	150.4	129.6	163.5	147.0	131.5	137.5	120.5	179.3	244.3	150.8
4	125.0	125.8	148.4	127.2	149.3*	140.9	129.9	130.5	126.3	183.8*	220.3	144.5
5	122.1	128.1	138.7	123.7	155.4*	138.7	125.7	121.8	121.6	191.2	191.4	137.8
6	119.0	122.8	130.5	116.6	155.4	133.8	129.9	119.6	130.3	209.7	172.2	136.0
7	126.2*	119.7	119.1	116.0	150.2	128.4	125.8	113.1	127.6	223.9	164.2	131.6
8	135.7	116.9	110.1	111.8	143.4	133.9	121.5	112.8	129.6	230.2	151.5	124.1
9	133.3	113.6	103.7	109.7	141.2	131.5	122.1	111.1	130.0	222.0	151.7	122.8
10	130.3	109.4	97.1	105.8	136.7	133.6	127.3	117.3	127.7	208.3	155.7	124.1
11	131.1*	106.1	96.9	107.1	136.2	131.8	136.5	124.1*	136.6	202.5	155.7	128.3*
12	129.8*	109.7	96.5	106.1	138.9*	131.7*	135.4	132.7	139.1	198.9	159.1	130.4
13	126.8	107.3	99.8	113.8	137.5*	127.6	130.8	134.7	143.0	197.2	149.1	127.8
14	133.5	108.6*	103.8	122.4*	130.0	128.0	127.8	136.9	153.4*	187.0	145.7	127.9
15	124.1	111.0	107.2	127.6	127.4	130.4	122.6	142.9	164.3	176.6	141.8*	125.9
16	126.1	113.1	111.8	130.1	132.9	126.4	118.0	151.8	181.3*	160.8	142.5	128.2
17	125.9	115.4	112.0	129.6	148.3	126.7	117.3	154.9	202.0	157.4	138.6	135.2
18	128.7	124.8	115.4	131.3	157.1	128.7	113.3	156.9	212.4*	148.5	135.2*	132.2
19	126.7	135.6*	119.0	128.6	172.3*	127.7	119.3	166.7	205.4	141.6	137.5	130.1
20	127.1	146.3	121.3	135.5	172.9	130.6	131.2	166.0	201.5	137.3	138.6	129.6
21	134.0	160.3*	122.9	140.2	178.8*	126.6	130.1	161.4	198.0	132.5	148.5	140.0
22	131.5	182.7	129.6	152.4	178.5	124.6	137.3	159.4	182.3	135.7	151.8	142.2
23	128.0	194.0*	133.1*	161.8	178.3*	123.8	139.4	156.6	164.0	137.9	156.5	145.5
24	130.5	200.9	132.4	176.4	169.9	131.8	141.3	152.6	152.9	148.6	164.6	154.4*
25	132.9	210.7	133.1	195.5	170.8	134.1	142.1	154.7	159.4	160.1	177.4*	156.0*
26	125.4	218.9*	127.8	199.9	172.0	134.4	148.2	157.9	165.3*	174.0	183.9	156.8
27	129.2	213.8	131.5	213.2	171.2	137.3	161.1*	155.0*	177.0*	185.0	175.7	159.2*
28	135.1	202.6	136.7	213.1*	169.9	134.6	177.0	157.2	184.1	213.0	170.7	157.1
29	137.5	188.3	133.4	215.7	172.7	131.7	163.4	150.3*	176.5	220.7	167.4	156.2
30	135.3	177.4	126.1	211.6	164.0	131.7	159.5*	144.4*	158.9	229.1*		160.3
31		175.4		188.9	165.7		148.6		152.6*	239.1*		155.8
MEAN	130.8	146.9	124.0	144.9	157.5	133.5	135.1	142.1	157.9	183.1	168.9	141.2

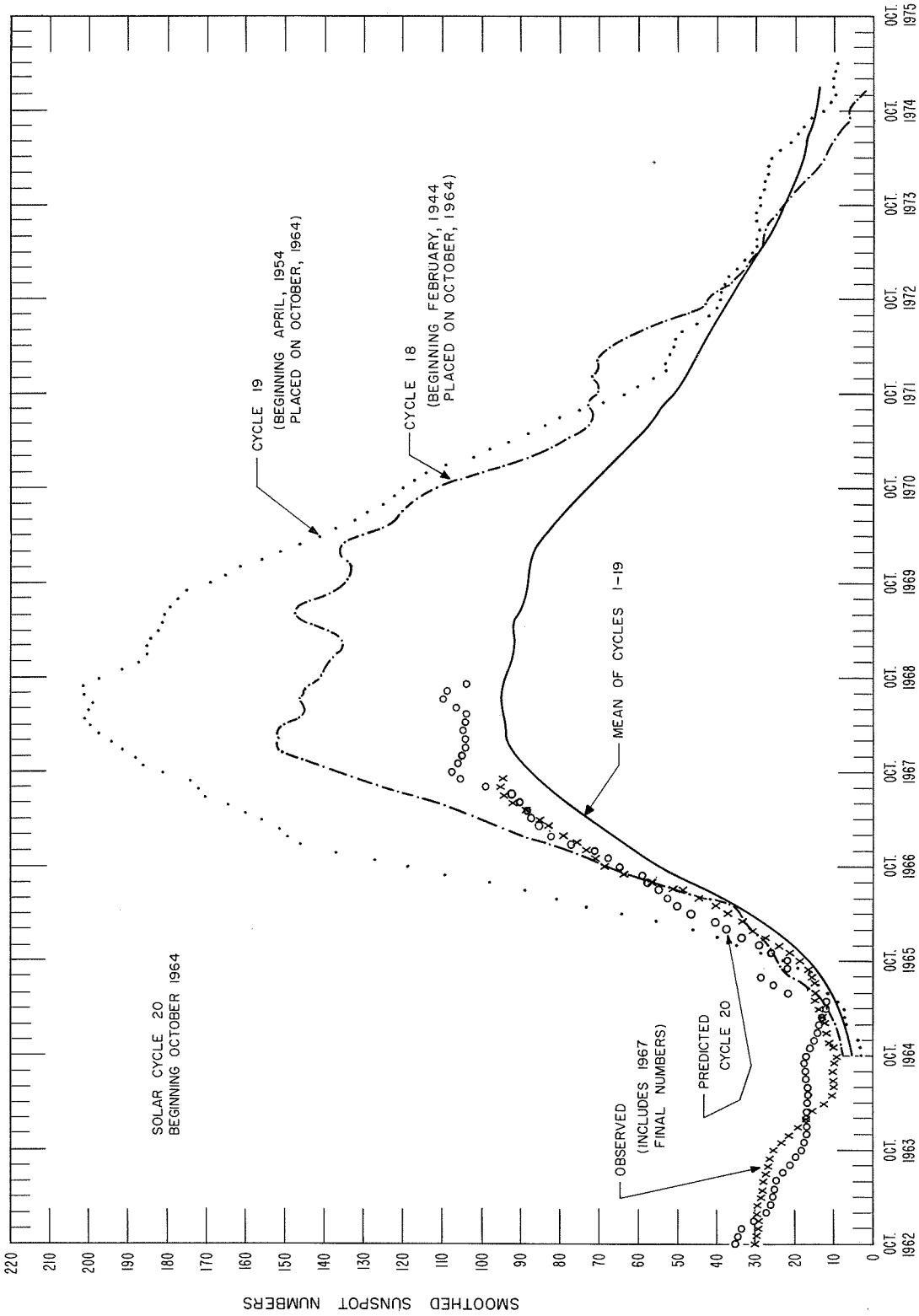
* Adjusted for Burst

DAILY SOLAR INDICES

MARCH 1968

MAR 1968	YEAR DAY	BARTELS 27-DAY CYCLE NUMBER	SUNSPOT NUMBERS		OBSERVED FLUX OTTAWA 2800	SOLAR FLUX ADJUSTED TO 1 A.U.					
			R_Z	$R_{A'}$		AFCRL 8800	AFCRL 4995	OTTAWA 2800	AFCRL 2695	AFCRL 1415	AFCRL 606
01	61	16	108	96	165.8	304	218	162.8	149.8	113.2	72.2
02	62	17	118	89	167.3	306	217	164.4	151.2	112.0	75.6
03	63	18	83	75	153.4	302	215	150.8	144.0	105.8	75.8
04	64	19	92	47	146.9	294	199	144.5	131.4	93.6	72.8
05	65	20	71	48	140.0	296	194	137.8	130.1	88.6	70.2
06	66	21	56	34	138.1	296	196	136.0	130.7	89.8	70.0
07	67	22	52	51	133.6	285	188	131.6	122.0	83.8	66.3
08	68	23	79	55	125.9	283	176	124.1	109.4	82.2	63.8
09	69	24	69	48	124.6	287	176	122.8	112.7	78.5	62.7
10	70	25	74	69	125.7	284	182	124.1	112.3	79.8	63.0
11	71	26	85	90	130.0*	290	187	128.3*	124.5	82.2	63.0
12	72	27	87	88	132.0	295	196	130.4	121.6	82.8	62.9
13	73	1	89	72	129.4	294	195	127.8	120.4	81.6	62.2
14	74	2	67	57	129.3	293	200	127.9	121.0	80.4	61.5
15	75	3	59	54	127.3	288	193	125.9	115.5	79.1	61.3
16	76	4	46	50	129.5	285	188	128.2	117.7	79.5	60.8
17	77	5	59	57	136.6	289	195	135.2	125.5	80.2	62.0
18	78	6	59	46	133.4	285	190	132.2	120.6	-- -	64.3
19	79	7	53	43	131.2	290	192	130.1	123.3	-- -	64.1
20	80	8	56	56	130.6	283	186	129.6	121.1	83.5	65.1
21	81	9	70	91	141.0	289	193	140.0	132.1	88.3	65.9
22	82	10	91	99	143.2	290	198	142.2	134.7	89.6	68.2
23	83	11	113	100	146.4	295	203	145.5	140.0	94.3	66.8
24	84	12	132	109	155.3*	298	218	154.4*	150.6	96.9	69.5
25	85	13	156	117	156.8*	305	227	156.0*	157.6	100.3	73.8
26	86	14	141	108	157.4	297	213	156.8	151.0	96.4	73.7
27	87	15	146	128	159.8*	299	218	159.2*	155.7	100.0	73.2
28	88	16	138	130	157.6	300	216	157.1	149.6	99.0	72.0
29	89	17	127	135	156.7	300	215	156.2	148.9	100.6	73.0
30	90	18	154	135	160.6	304	209	160.3	150.8	98.5	72.4
31	91	19	134	122	156.1	301	217	155.8	148.3	97.9	72.0
MEAN			92.4	80.6	142.6	294	200	141.2	133.0	91.0	67.7

* Adjusted for Burst



PREDICTED AND OBSERVED SUNSPOT NUMBERS

SMOOTHED OBSERVED SUNSPOT NUMBERS
ZURICH, R_Z

	1964	1965	1966	1967
JAN		11.7	27.7	75.0
FEB		12.0	31.3	78.8
MAR		12.5	34.5	82.2
APR		13.6	37.4	84.6
MAY		14.6	40.7	87.4
JUN		15.0	44.6	91.3
JUL		15.5	50.3	93.9*
AUG		16.4	56.6	94.6
SEP		17.4	63.1	94.4
OCT	9.6	19.7	67.6	
NOV	10.2	22.3	70.2	
DEC	11.0	24.5	72.7	

* The smoothed sunspot numbers beginning with July 1967 are calculated using 1968 provisional monthly averages.

CALCIUM PLAGE AND SUNSPOT REGIONS

MARCH 1968

MAR. 1968 CMP	LAT.	MCMATH PLAGE NUMBER	RETURN OF REGION	CALCIUM PLAGE DATA: CMP VALUES AREA	CMP VALUES INT.	HISTORY	AGE (ROTATIONS)	DATE FIRST SEEN	DURATION (DAYS)	SUNSPOT DATA: CMP VALUES AREA	CMP VALUES COUNT	HISTORY	MT. WILSON SUNSPOT NO.
1.1	S12	9236	9189	300	1.0	L - d	2	2/24	≥ 7				
1.4	N14	9225	9188	3700	3.0	L - L	2	2/23	14				
2.1	S19	9237	9195	1200	1.5	L Λ L	2	2/24	13				
3.0	N09	9239	9191	(900)	(2.0)	L ⌈ L	2	2/26	12				
3.5	N23	9243	NEW	(400)	(2.0)	b - d	1	2/29	6				
3.8	S19	9238	9193	1400	2.0	L Λ L	2	2/26	12				
3.8	S28	9242	9194	900	1.5	L Λ L	4	2/27	≥ 11				
5.1	N14	9240	9196	2500	2.0	L ⌈ L	3&4	2/27	13	10	5	b - d	16724
5.8	S23	9241	9194	1300	2.5	L Λ L	4	2/27	14	10	2	b Λ d	16715
										210	8	L ⌉ L	16716
6.0	S11	9246	NEW	400	1.0	b - d	1	3/3	6				
6.7	N20	9248	NEW	1200	2.5	b Λ d	1	3/3	8				
6.8	N30	9249	9197	500	1.5	L - d	4	3/1	10				
7.0	S09	9247	NEW	400	1.5	b ⌉ L	1	3/3	≥ 9				
7.4	S14	9256	NEW	500	3.0	b / L	1	3/7	7				
7.4	S26	9244	9198	3600	3.0	L ⌉ L	2	2/29	14				
8.2	N20	9250	NEW	2600	2.5	b Λ L	1	3/3	11				
8.2	N16	9263	NEW	(200)	(2.5)	b / L	1	≤3/10	≥ 5	(10)	(5)	b Λ L	16735
8.8	S16	9252	NEW	900	1.5	L - d	1	≤3/3	≥ 9				
9.9	N24	9253	9200	(2300)	(1.5)	L Λ L	7	3/3	14				
10.1	S18	9268	NEW	(1200)	(3.5)	b - L	1	3/14	3	(40)	(1)	b - L	16736
10.7	S08	9254	NEW	900	2.5	L - L	1	3/5	12	(10)	(8)	b Λ d	16729
10.9	N19	9261	NEW	1000	3.0	b / L	1	≤3/10	≥ 7	(40)	(18)	b Λ d	16730
11.4	S27	9260	NEW	200	2.0	b - d	1	3/8	4				
11.7	N09	9264	NEW	100	1.5	b - d	1	3/11	3				
12.6	N23	9255	9204	(2100)	(2.5)	L ⌉ L	2	3/6	13				
13.0	N14	9258	NEW	(1200)	(2.5)	L ⌉ L	1	3/6	13				
13.4	S13	9259	NEW	1300	3.5	L \ L	1	3/7	13	10	9	b Λ d	16732
16.9	N15	9262	9226	1300	2.5	L \ L	2	3/10	≥ 11	60	7	L - d	16733
17.5	N29	9271	NEW	900	1.5	b - d	1	3/17	3				
18.0	N16	9266	NEW	3200	3.0	L ⌈ L	1	≤3/13	≥ 12	140	19	b \ d	16734
										100	3	b \ L	None
18.1	S18	9265	9214	2500	3.0	L Λ L	7	<3/13	> 12	10	1	b ⌉ d	16739
19.3	N30	9267	NEW	3700	3.5	L V L	1	≤3/13	≥ 13	450	5	L Λ L	16738
19.8	S12	9269	NEW	1300	2.0	b Λ d	1	3/15	10				
21.5	N13	9281	NEW	(1700)	(3.5)	b V L	1	≤3/24	≥ 4	20	14	b Λ d	16743
22.4	S25	9282	NEW	(400)	(3.5)	b / L	1	≤3/24	≥ 5	10	7	b ⌋ L	16747
22.7	S35	9277	NEW	(300)	(1.5)	b / d	1	3/19	2				
22.8	N10	9276	NEW	(500)	(2.0)	b ⌈ L	1	3/19	9				
24.0	N07	9275	9222	(1600)	(2.5)	L Λ L	3	3/18	12				
24.4	S32	9274	9218	500	2.0	L \ d	2	3/18	7				
24.4	S16	9273	9221	3800	3.5	L ⌈ L	3	3/18	14	270	42	b Λ L	16746
25.2	N16	9278	9222	4000	2.5	L ⌈ L	3	3/18	14	10	3	b - d	None
25.4	N32	9294	NEW	(400)	3.5	b - L	1	3/31	1				
26.0	S24	9279	NEW	(1700)	(2.5)	L ⌉ L	1	3/19	13	10	2	b - d	16742
26.8	N23	9283	9222	1400	2.0	L ⌉ L	3	<3/24	> 9				
27.4	S28	9284	9224	1700	2.0	L \ L	3	<3/24	> 9				
28.3	N16	9285	9225	5400	3.0	L Λ L	3	<3/24	> 11	130	17	L Λ d	16745
										80	2	L Λ L	16748
29.8	S16	9287	NEW	1000	3.0	b Λ L	1	3/25	> 10	10	9	b - d	16751
30.9	N19	9286	NEW	4800	3.0	L ⌊ L	1	3/24	> 10	120	6	L Λ d	16750
										380	5	L Λ L	16749
31.4	S14	9288	NEW	1300	3.0	L ⌈ L	1	3/25	> 10	(10)	(8)	b ⌉ d	16752

No calcium Spectroheliograms were secured at the McMath-Hulbert Observatory on March 2, 9, 12, 21, 22, 23, 1968.

MT. WILSON CLASSIFICATION OF SUNSPOTS

MARCH 1968

Mar. 1968	TIME MEAS. UT	LAT.	MER. DIST.	TYPE	No.
1	1855	N12	W50	(βp)4	16705
		S26	W32	(β)2	16706
		N12	W08	(βp)4	16707
		S24	E51	(αp)3	16715
		S26	E65	(βp)4	16716
2	1800	N12	W70	(αp)4	16705
		S26	W46	(βγ)2	16706
		N12	W21	(βγ)4	16707
		S24	E39	(βf)4	16715
		S26	E55	(βp)5	16716
		S10	E63	(βp)2	16721
		N20	E51	(β)	16722
3	1745	N13	W76	βp)1*	16705
		S26	W59	(βp)1	16706
		N13	W25	(βγ)3	16707
		S23	E27	(αp)4	16715
		S26	E44	(βp)5	16716
		S10	E47	(αp)2	16721
4	1820	S24	W26	αp	16706
		N12	W48	(βf)3	16707
		S24	E14	(αp)3	16715
		S26	E30	(βγ)5	16716
5	1730	N12	W62	(βp)2	16707
		S24	E02	(αp)2	16715
		S26	E17	(βγ)5	16716
		N15	W48	(αp)1	16723
		N12	W08	(β)2	16724
		N18	E05	βf)1	16725**
		N23	E30	(βγ)2	16726
6					
7	No Obs.				
8					
9					
10	1805	S27	W49	(αp)5	16716
		S16	W43	(βp)2	16727
		S15	W36	(βf)2	16728
		S08	W04	(β)1	16729
		N19	E03	(βp)4	16730
		S10	E24	(αf)1	16731
		S14	E40	(βp)2	16732
		N12	E81	(αp)3	16733
11	1615	S27	W60	αp	16716
		S17	W55	β	16727
		S16	W48	β	16728
		S08	W17	βp	16729
		N18	W09	βp	16730
		S13	E26	αp	16732
		N13	E69	αp	16733
		N15	E87	αp	16734
		N14	W45	βp	16735
12	No Obs.				
13					
14	1640	S14	W09	(αf)1	16732
		N13	E28	(αp)4	16733
		N15	E43	(αp)5	16734
		S20	W55	(βp)3	16736
		N19	W49	(β)1	16737
		N29	E58	(βp)6	16738
		S18	E47	(βp)3	16739
15	1725	N13	E14	αp	16733
		N16	E28	αp	16734
		S20	W67	βp	16736
		N29	E43	βp	16738
		S18	E47	αp	16739
		S17	E49	β	16740
16	1625	N13	E02	(αp)4	16733
		N17	E15	(αp)5	16734
		N30	E32	(βγ)6	16738
		S17	E17	(αp)3	16739
17	1715	N13	W12	(αp)4	16733
		N16	WOE	(βγ)4	16734
		N29	E19	(αp)5	16738
		S19	E04	(αp)2	16739
18	No Obs.				
19					
20	1830	N14	W53	αp	16733
		N17	W38	βf	16734
		N31	W17	αp	16738
		S13	E54	βp	16741
		S24	E67	αp	16742

*Leader on the limb, only follower measured.
**Leader faint mark, only follower measured.
***Unusual configuration.
****Carries No. 16755 as part of No. 16749.

MT. WILSON CLASSIFICATION OF SUNSPOTS

MARCH 1968

Mar. 1968	TIME MEAS. UT	LAT.	MER. DIST.	TYPE	No.
21	1715	N16	W52	(αp)3	16734
		N30	W30	(βp)5	16738
		S14	E41	(αp)2	16741
		S24	E53	(βp)2	16742
		N10	E0W	(β)	16743***
		S13	E42	(βp)4	16744
		N12	E83	αp	16745
22					
23	No Obs.				
24	2230	N31	W74	αp	16738
		S24	E14	(βp)2	16742
		N12	W43	(βp)4	16743
		S13	W04	(βp)4	16744
		N13	E40	(β)2	16745
		S13	W0E	(βf)2	16746
		S24	W32	(β)3	16747
		N10	E51	(αf)3	16748
		N17	E70	αp	16749
		N13	E80	αp	16750
25	1722	S23	E03	(βp)1	16742
		N12	W52	(βf)3	16743
		S13	W16	(αp)5	16744
		N13	E30	(β)4	16745
		S13	W10	(βγ)2	16746
		S23	W41	(αp)2	16747
		N11	E42	(αp)3	16748
		N18	E61	(αp)3	16749
		N14	E68	(αp)3	16750
		S17	E50	β	16751
26	No Obs.				
27	1740	S14	W42	αp	16744
		N12	E04	βf	16745
		S14	W37	αf	16746
		S26	W68	αp	16747
		N11	E15	αp	16748
		N18	E34	αp	16749
		N16	E36	βf	16750
		S16	E25	β	16751
		S14	E46	βp	16752
		S23	E54	β	16753
		S18	E62	βp	16754
		N23	E42	αp	16755
28	2145	S13	W57	(βp)4	16744
		N12	W12	(βp)4	16745
		S25	W82	αp	16747
		N10	W0E	(αf)4	16748
		N17	E23	(βp)4	16749
		N14	E28	(αp)4	16750
		S16	E08	(βp)1	16751
		S14	E32	(βp)2	16752
		S23	E42	(βp)4	16753
		S20	E47	(αp)2	16754
		N22	E28	(αf)2	16755
		S16	E78	(αp)3	16756
29	1610	S14	W65	(βp)3	16744
		N12	W23	(βp)3	16745
		N10	W09	(αf)4	16748
		N20	E13	(βγ)5	16749****
		N15	E16	(αp)4	16750
		S17	W03	(βf)2	16751
		S13	E22	(βp)1	16752
		S22	E31	(β)4	16753
		S19	E39	(βp)3	16754
		S17	E73	(βp)3	16756
		S15	E68	(αp)3	16757
		N22	E02	(βp)1	16758
		N18	W08	(αf)1	16759
30	1645	S14	W78	(βp)3	16744
		N11	W36	(βp)3	16745
		N10	W23	(αp)4	16748
		N19	W02	(βγ)5	16749
		N14	E03	(αp)5	16750
		S17	W14	(βp)2	16751
		S14	E08	(βp)2	16752
		S22	E18	(βp)5	16753
		S19	E25	(βp)3	16754
		S17	E59	(βp)3	16756
		S14	E56	(αp)1	16757
31	1930	N10	W54	(αp)3	16745
		N10	W38	(αf)3	16748
		N18	W17	(βγ)5	16749
		N13	W12	(αp)4	16750
		S16	W30	(β)1	16751
		S23	E03	(β)5	16753
		S19	E10	(αp)2	16754
		S17	E44	(β)3	16756
		S14	E40	(αp)2	16757

The number which appears on the right-hand side of the column labeled "Type" is a coded representation of the largest magnetic field strength measured in the group.

Code	Maximum Field Strength in Gauss	Code	Maximum Field Strength in Gauss
1	100-500	6	2600-3000
2	600-1000	7	3100-3500
3	1100-1500	8	3600-4000
4	1600-2000	9	4100-4500
5	2100-2500	10	>4500

SOLAR FLARES

Partial Listing

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

MARCH 1968

OBSERVATORY	OBSERVED UT DATE 1968 MAR	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
ONDR	02	1209E	1230		N12	W19	.453	9225	1.1	21D	1N		V	1211			2.00		C
SANM	02	1410	1423	1412	S26	W37	.641		28.8	13	-N		C	1412	.48	.65			E
ATHN	02	1411E	1423	1412	S25	W40	.670		28.6	12D	-B	2		1412	.99	1.40	2.00		
SACP	02	1413E	1429	1413E	S24	W36	.620	9224	28.9	16D	1B		C		2.52	2.78			
HALE	02	1812	1835	1815	S25	E51	.785		6.6	23	-B	2	C	1815	1.24	2.00			FJL
LOCK	02	1813	1855	1817	S25	E49	.766		6.4	42	-B		C		1.30				
SACP	02	1815E	1844U	1817U	S24	E51	.783	9241	6.6	29U	1N		C		1.89	2.41			
CAPS	03	0710E	0749		S27	E45	.731	9244	6.7	39D	1B	3		0712	1.80	2.50		208	
LOCK	04	0037	0051	0044	S34	W62	.890		28.4	14	-F		C		.60				
MITK	04	0043	0048	0045	S34	W61	.883	9224	28.5	5	1F		C	0045	1.03	2.30			D
HALE	04	0043	0052	0043	S34	W62	.890		28.4	9	-N	1	C	0043	.26	.60			V
MITK	04	0215	0240	0218	S26	W65	.902	9224	28.2	25	1F		C	0218	1.44				
MANI	04	0700	0714	0703	S25	E31	.567		6.6	14	-B	2		0703	.62	.77			F
ATHN	04	0701	0733	0703	S23	E32	.567	9244	6.7	32	1N	2		0703	1.32	2.70	1.90		
SACP	04	1709	1752	1718	S25	E35	.613	9244	7.3	43	1N		C		3.08	3.39			
MCMA	04	1710	1743D	1722	S25	E38	.648	9244	7.6	33D	-B		C	1722	1.24	1.60			EH
HALE	04	1711E	1845		S25	E34	.602		7.3	94D	-B	1	P	1718	1.08	1.40			J
BOUL	04	1713	1735	1718	S27	E35	.624		7.3	22	-B		C		.70	.90			E
HUAN	04	1716E	1746		S24	E34	.597		7.3	30D	-B	1	P	1716	1.29	1.41			E
LOCK	04	1727E	1800	1727U	S26	E36	.630	9244	7.4	33D	1N		C		2.10				
MCMA	04	2003	2015D	2007	S20	W77	.968	9224	28.1	12D	-F		C	2007					E
HALE	04	2010	2025	2012	S26	W78	.971	9224	28.0	15	1F	1	C	2012	.62				T
HUAN	04	2014E	2017D		S24	W78	.971		28.0	3D	-F	1	P	2015	.45				E
MITK	05	0030	0040D	0034	S24	W82	.984	9224	27.9	10D	1N		C	0034	1.03				G
ISTA	05	0135	0755D		N12	W41	.708	9225	2.0	380D	1F								
MITK	05	0206	0209D		N12	W49	.792		1.4	3D	-F		P	0207	.93	1.40			
ISTA	05	0725E	0833		N23	W36	.724	9243	2.6	68D	1N								
MCMA	07	1250	1325D	1252	S26	W14	.391	9244	6.5	35D	1B		C	1252	1.91	2.00			EH
ATHN	07	1303E	1325	1305	S25	W19	.429	9244	6.1	22D	1B	2		1305	2.31	2.60	2.00		
CAPS	07	1325E	1327D		S26	W13	.382		6.6	2D	-N	1		1327	1.50	1.60			B
ATHN	09	1141	1149D	1143	N17	E21	.529		11.1	8D	-N	1		1143	1.32	1.60	1.60		
CAPS	09	1142E	1203		N17	E20	.519	9261	11.0	21D	1N	3		1145	1.80	2.20		171	
CAPS	13	0646E	0653D		N28	E78	.992	9267	19.1	7D	1F	1		0648	1.00				C
SACP	13	1528	1543	1533	S19	W85	.992		7.3	15	-N		C		.72				
MCMA	13	1530	1543	1534	S18	W85	.993	9256	7.3	13	-N		C	1534					E
ATHN	13	1531E	1545	1531	S15	W80	.980		7.6	14D	-N	2		1531	.66		1.90		
HUAN	13	1532E	1532D		S18	W85	.993		7.3		-N	1	P	1532	.50				
CAPS	13	1534E	1544		S17	W80	.980	9256	7.6	10D	1N	2		1538	1.60				CG
CATA	14	0945	1120	0950	S20	W52	.787		10.5	95	-N			0950	.63	1.09		195	T
CAPS	14	1023E	1029		S22	W54	.809	9268	10.4	6D	1F	1		1026	1.50	2.40		145	B
MEUD	14	1003E	1035		N14	E34	.641		17.0	32D	-N			1013	1.13	1.40			CE
ATHN	14	1005	1051D	1007	N17	E34	.661		17.0	46D	-N	1		1007	.83	1.10	1.40		
CATA	14	1005	1100	1015	N13	E36	.657		17.1	55	-B			1015	1.44	1.92		224	
CAPS	14	1023E	1053D		N13	E35	.646	9262	17.1	30D	1N	1		1025	3.50	4.60		168	B
BOUL	14	1641	1655	1646	S19	W55	.815	9268	10.6	14	1N		C		1.20	2.00			
ATHN	15	1111	1157	1116	N28	E50	.863	9267	19.2	46	1B	2		1116	.99	2.30	2.00		
HUAN	15	1151E	1207		N28	E51	.870		19.3	16D	-F	1	P	1152	.25	.37			DT
ISTA	16	0645E	0754D		S21	E29	.519	9265	18.5	69D	1B								
CAPS	16	0722E	0745		S20	E27	.487	9265	18.3	23D	1N	1		0740	3.00	3.40			CH
MANI	16	0723	0747	0726	S19	E26	.468		18.3	24	-N	2		0726	.62	.70			
BUCA	16	0725	0753	0732	S19	E29	.509		18.5	28	-N		C	0732	1.55	1.70			
ATHN	16	0726E	0743	0726	S20	E28	.500		18.4	17D	-N	2		0726	1.65	2.00	1.90		
LOCK	18	1637	1705	1643	N11	E74	.970		24.2	28	-F		C		1.30				
BOUL	18	1640	1649	1642U	N08	E72	.958	9275	24.1	9	1F		C		.80	2.20			H
MITK	19	0433	0450	0436	N35	E01	.670	9267	19.3	17	1N		C	0436	1.55	2.10			E
ISTA	21	0645E	0745D		N09	E07	.300	9281	21.8	60D	1N								
WEND	21	0902E	0909D		S24	E58	.848	9279	25.7	7D	1N		V		3.09				
ATHN	21	0904E	0909	0904	S27	E57	.844		25.7	5D	-N	1		0904	.50	1.20	1.70		
WEND	21	1028	1053		S24	E57	.839	9279	25.7	25	1F		V		3.09				
CATA	21	1030	1040D	1030	S24	E58	.848	9279	25.8	10D	1B			1030	1.04	2.03		224	T
ATHN	21	1420	1526	1426	N21	W54	.866	9266	17.5	66	1B	2		1427	1.98	4.10	2.00		
ATHN	21			1447															
HUAN	21	1422	1439D		N16	W53	.841	9266	17.6	17D	1N	2	P	1432	1.39	2.00			
SANM	21	1423E	1503D	1424	N18	W54	.856	9266	17.5	40D	1B		P	1424	1.45	2.82			E
CATA	21	1425	1515D	1437	N15	W54	.847	9266	17.6	50D	1B			1437	1.86	3.50		324	E
MEUD	21	1426E	1502		N17	W54	.853	9266	17.6	36D	1B			1434	1.65	2.90			CE
CAPS	21	1443E	1511D		N16	W54	.850		17.6	28D	1N	2		1444	2.30	4.40		196	BF

SOLAR FLARES

MARCH 1968

OBSERVATORY	OBSERVED UT DATE 1968 MAR	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
HALE	22	0309E	0351D		N10	W05	.304	9281	21.8	42D	1B	2	P	0326	2.58	2.70			FGK
ISTA	22	0700E	0820		N10	W07	.315	9281	21.8	80D	1N								
BUCA	22	0720	0813		N10	W07	.315	9281	21.8	53	1N		C	0740	2.21	2.30			
ATHN	22	0730	0810	0732	N09	W07	.300		21.8	40	-B	2		0739	.99	1.20	2.00		
ATHN	22			0739															
MANI	22	0732E	0803	0744	N10	W07	.315		21.8	31D	-N	1		0744	.83	.87			F
CATA	23	0920	1010	0935	S23	E33	.581	9279	25.9	50	1B			0935	2.32	2.87		309	
CAPS	23	0936	0953		S24	E32	.575		25.8	17	1B	3		0939	4.00	4.80		237	HJ
MANI	23	0939E	0956D	0941	S23	E33	.581		25.9	17D	1B	2		0941	1.80	2.24			J
ARCE	23	0950E	1000D		S23	E32	.569		25.8	10D	-N		C	0950	.80	1.00			E
CAPF	23	0941E	0953		S14	E31	.519	9273	25.7	12D	1N		P	0942	1.76	2.14			
MANI	24	0738	0811	0752	S11	E03	.088		24.5	33	-B	2		0752	1.03	1.03			F
CAPS	24	0738	0811		S12	E03	.102	9273	24.5	33	1B	3		0753	4.00	4.00		325	JK
CATA	24	0740E	0820D	0752	S12	E03	.102	9273	24.5	40D	1B			0752	3.76	3.79		309	E
WEND	24	0942E	1006		S23	E21	.436	9279	26.0	24D	1N		V		3.09				
CAPS	24	0946	1002D		S24	E18	.411		25.8	16D	-N	3		0948	.70	.80		163	E
CAPS	24	1232	1242D		S24	E19	.422		25.9	10D	-N	2		1234	1.80	2.00		165	H
WEND	24	1232E	1400D		S23	E20	.424	9279	26.0	88D	1N		P		3.09				
MEUD	24	1233	1245	1234	S24	E17	.401		25.8	12	-N			1234	.62	.70			EH
MCMA	24	1542	1630D	1548	S12	W03	.102	9273	24.4	48D	-N		C	1548	.72	.70			EK
HUAN	24	1543	1620		S12	W02	.095		24.5	37	-N	1	P	1550	.50	.50			E
HOUT	24	1547	1621	1550	S13	W02	.111		24.5	34	-N		C		.70	.70			IK
CAPS	24	1550	1609D		S12	E00	.089		24.7	19D	-F	3		1553	.60	.60		155	W
CAPS	24	1550	1609D		S12	E00	.089		24.7	19D	-F	3		1607	2.50	2.50			
SACP	24	1541	1745U	1647	S12	W01	.090	9273	24.6	124U	1B		C		5.17	5.10			
MCMA	24	1632	1745	1644	S12	W03	.102	9273	24.5	73	1B		C	1644	2.06	2.10			F
LOCK	24	1635	1730	1650	S12	W03	.102	9273	24.5	55	1N		C		3.00				J
HUAN	24	1635	1735		S12	W02	.095	9273	24.5	60	1B	1	C	1651	4.38	4.38			
WEND	24	1639E	1708D	1648	S12	E02	.095	9273	24.8	29D	2B		P		12.38				
BOUL	24	1640	1659	1644	S03	W03	.086	9273	24.5	19	2B		C		5.40	5.40			
HOUT	24	1642	1707	1643	S13	W03	.118		24.5	25	-N		C		1.40	1.40			
SACP	25	1443	1506	1453U	N37	W82	.999	9267	19.5	23	1N		C		.83				
SACP	25	1439	1600U	1505	S12	W14	.254	9273	24.6	81U	2B		C		5.30	5.21			
MCMA	25	1445	1600	1448	S12	W13	.239	9273	24.6	75	1B		C	1505	3.61	3.80			KUW
MCMA	25			1505															
HOUT	25	1448	1500	1449	S13	W15	.275		24.5	12	-N		C		.60	.60			E
ONDR	25	1448E	1527D		S12	W13	.239	9273	24.6	39D	1N		V	1516			2.30		CHJ
CAPS	25	1448E	1529D		S12	W14	.254	9273	24.6	41D	2B	3		1509	5.00	5.20		256	C
CAPF	25	1448E	1555	1512	S11	W13	.233	9273	24.6	67D	1N		P	1512	3.53	3.59			
HUAN	25	1500E	1502D		S12	W14	.254	9273	24.6	2D	1B	1	P	1502	2.01	2.00			
HOUT	25	1502	1519	1507	S13	W15	.275		24.5	17	-N		C		1.60	1.70			
BOUL	25	1515E	1531	1515U	S11	W14	.249	9273	24.6	16D	1N		C		2.70	2.70			E
SACP	25	1626	1653	1634	S23	E88	.997	9289	1.3	27	1F		C		.73				
MCMA	26	1825	2100D	1926	N12	E22	.483	9285	28.4	155D	1N		C	1926	2.06	2.20			FK
HUAN	26	1849E	1901D		N11	E21	.461		28.4	12D	-F	1	P	1901	.25	.25			D
LOCK	26	1855	2000	1925	N10	E17	.405		28.1	65	-F		C		1.20				
SACP	26	1915	2019	1930	N11	E18	.427		28.2	64	-N		C		1.10	1.11			
CATA	27	0915E	1105	0945	S13	W38	.614	9273	24.5	110D	1N			0945	3.07	3.95		195	
ATHN	27	0921E	1004	0921	S10	W38	.612		24.5	43D	-B	2		0921	1.65	1.90			
MEUD	27	0934	1005	0943	S11	W39	.626		24.5	31	-F			0943	.52	.60			EH
CAPS	27	0941	1000D		S11	W38	.612		24.6	19D	-F	3		0947	.30	.40		140	H
ARCE	27	1005E	1015		S10	W37	.598	9273	24.6	10D	1N		C	1005	2.13	2.70			
ONDR	27	1007E	1025		S24	E60	.865	9289	31.9	18D	1N		V	1010			2.20		CHJR
MEUD	27	1008	1025		S23	E62	.880		1.1	17	-F			1010	.26	.50			DH
ARCE	27	1010	1025D	1010	S22	E61	.871	9289	1.0	15D	1N		C	1010	1.08	2.30			H
CATA	27	1010E	1035	1010	S21	E64	.894		1.2	25D	-B			1010	.52	1.19		224	
ATHN	27	1011	1023	1015	S26	E63	.889		1.1	12	-N	2		1015	.66	1.50			
CAPS	27	1012E	1022		S24	E66	.909		1.4	10D	-F	3		1016	.70			149	CH
CATA	27	1135	1140D	1135	N18	E44	.766	9286	30.8	5D	1B			1135	1.44	2.26		214	
CAPS	27	1135E	1158D		N15	E42	.731	9286	30.6	23D	1N	1		1138	3.00	4.50		170	CF
ATHN	27	1137	1154	1139	N16	E47	.786	9286	31.0	17	1N	2		1139	2.64	4.30			
WEND	27	1138E	1157		N10	E41	.697	9286	30.6	19D	1F		V		4.13				
ATHN	27	1333	1355	1335	S23	W64	.895		22.8	22	-B	2		1335	.83	1.80			
SANM	27	1334E	1356D	1340	S23	W67	.915		22.5	22D	-F		C	1340	.32	1.04			E
CAPS	27	1336E	1358D		S24	W75	.959	9282	21.9	22D	1N	2		1338	1.00			182	J
MCMA	27	1336E	1359		S25	W70	.934	9282	22.3	23D	1B		C	1341	.72	2.10			E
MEUD	27	1338E	1340D		S24	W68	.922		22.5	2D	-F			1339	.26				CE
HUAN	27	1339E	1339D		S26	W70	.934		22.3		-N	1	P	1339	.50				ET
CATA	27	1340E	1350D	1340	S27	W66	.910		22.6	10D	-N			1340	.34			191	
MCMA	27	1410E	1411D		S22	E60	.863	9289	1.1	1D	-N		P	1411	.77	1.50			E
SANM	27	1411E	1430D	1414	S22	E59	.855		1.0	19D	-F		C	1414	.15	.31			E
SACP	27	1412U	1418U	1413U	S22	E60	.863		1.1	6U	-N		C		.19	.27			
ONDR	27	1413E	1433		S25	E58	.850	9289	31.9	20D	1N		V	1416			2.10		CHJ
MEUD	27	1414E	1415D		S23	E60	.864		1.1	1D	-F			1414	.21	.40			CD
CATA	27	1415	1420	1415	S21	E61	.871		1.2	5	-B			1415	.17	.38		209	

SOLAR FLARES

MARCH 1968

OBSERVATORY	OBSERVED UT DATE 1968 MAR	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
MCMA	27	1730	1950D	1802	S13	W43	.679	9273	24.5	140D	2B		C	1811	5.67	7.60			FHKLU
MCMA	27			1811															
LOCK	27	1756	2000	1815	S11	W41	.652	9273	24.7	124	1B		C		4.50				
BOUL	27	1758	1844	1803	S11	W43	.678	9273	24.5	46	3N		C		10.00	14.00			EK
HUAN	27	1801E	1843D		S12	W42	.665	9273	24.6	42D	1N	1	P	1807	1.91	2.04			E
SACP	27	1809E	1821D	1817U	S13	W41	.654	9273	24.7	12D	2B		P		4.68	5.26			
LOCK	27	1825	1837	1829	S26	E58	.851		1.1	12	-F		C		.90				H
BOUL	27	1825	1840	1828	S24	E60	.865	9289	1.3	15	1N		C		2.60	4.70			
LOCK	27	2000	2017	2007	S25	W68	.922		22.7	17	-N		C		.80				
BOUL	27	2000	2039	2007	S23	W71	.939	9282	22.5	39	1N		C		1.80	4.50			
HUAN	27	2005	2008D		S24	W75	.959		22.2	3D	-B	1	P	2008	.80				
MANI	28	0321	0400	0326	S13	W47	.727		24.6	39	-B	2		0326	.52	.75			F
MITK	28	0329E	0410D		S17	W53	.796	9273	24.2	41D	2F		C	0332	5.05	7.80			F
BUCA	28	0730E	0840D		S26	W80	.978		22.3	70D	-F		C	0820	.43				
CATA	28	0735E	0755	0735	S24	W83	.987	9282	22.1	20D	1N			0735	.87			168	B
ISTA	28	0745E	0854D		S24	W76	.964		22.6	69D	-N								
CATA	28	0755	0915	0810	S24	W80	.979		22.3	80	-N			0810	.23			186	
CAPS	28	0800E	0840D		S23	W80	.979	9282	22.3	40D	1F	3		0805	.30				CDJ
ARCE	28	0815E	0835D		S22	W80	.979		22.3	20D	-N		C	0815	.15	.50			
CATA	28	0735E	0925	0820	S23	E51	.784		1.1	110D	-B			0820	.58	.94		248	BK
ISTA	28	0745E	0856		S24	E51	.786		1.1	71D	-N								
CATA	28	0810	0815	0810	S21	E48	.749		31.9	5	-N			0810	.13	.21		182	K
ARCE	28	0810E	0840		S24	E49	.766		1.0	30D	-N		C	0810	.93	1.40			
ARCE	28	0910	0950D	0915	S24	E49	.766	9289	1.1	40D	1N		C	0915	1.67	2.60			H
BOUL	28	1543	1607	1549	S22	W90	.999	9282	21.9	24	1N		C		1.00	4.00			H
MCMA	28	1815	1835D	1820	S25	W88	.997	9282	22.2	20D	-N		C	1820					DH
HUAN	28	1816E	1831		S23	W88	.997		22.2	15D	-F	1	C	1826	.25				T
SACP	28	1835	1848	1842	S24	W93	1.000	9282	21.8	13	1N		C		.92				
LOCK	28	1837	1906	1842	S25	W82	.985		22.6	29	-F		C		1.00				H
MCMA	28	1838	1855D	1842	S25	W88	.997	9282	22.2	17D	-B		C	1842					EH
BOUL	28	1839	1846D	1842	S22	W90	.999	9282	22.0	7D	1F		C		.90	3.60			HI
MCMA	29	1807	1905	1814	N18	E20	.524	9286	31.3	58	-N		C	1814	.62	.70			EK
HUAN	29	1808	1910		N17	E18	.495		31.1	62	-N	2	C	1844	1.24	1.28			E
SACP	29	1809	1839	1820	N18	E18	.506		31.1	30	-N		C		1.01	1.05			
LOCK	29	1810	1900	1840	N15	E17	.461		31.0	50	-F		C		1.30				
BOUL	29	1832	1855	1839	N18	E20	.524		31.3	23	1F		C		2.80	2.80			
CATA	30	0825	0920	0840	N11	W32	.594		28.0	55	-N			0840	.93	1.16		182	T
ARCE	30	0835	0900	0840	N13	W30	.584	9285	28.1	25	1N		C	0840	1.67	2.10			
ATHN	30	0926	0947	0929	S26	E20	.456		31.9	21	-N	2		0929	1.65	1.80	1.90		
CAPS	30	0927E	0947		S21	E24	.459		1.2	20D	-N	3		0931	1.30	1.40		170	CE
WEND	30	0928E	0952		S22	E22	.441	9289	1.0	24D	1N		V		3.09				
MANI	30	0930E	0946D		S22	E23	.454		1.1	16D	-N	1		0931	.83	.94			F
ARCE	30	0930	0950D	0935	S21	E21	.421		1.0	20D	-N		C	0935	.96	1.00			
CATA	30	0930	0950	0935	S24	E25	.494		1.3	20	-N			0935	.34	.40		164	Z
CATA	30	0930	1005	0935	S23	E21	.438		1.0	35	-B			0935	.58	.65		211	Z
ONDR	30	0931E	0959D		S22	E21	.429		1.0	28D	-F		V	0936			1.40		CJ
MITK	31	0219	0230	0221	S13	E49	.750	9292	3.8	11	1N		C	0221	1.44	2.20			H
MANI	31	0221E	0229	0222	S15	E50	.763		3.8	8D	-N	2		0222	.52	.80			

Remarks

A = Eruptive prominence, base at >90°.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No spots visible in the neighborhood.
H = Flare with high velocity dark surge.
I = Very extensive active region.
J = Plage with flare shows marked intensity variations.
K = Several intensity maxima.
L = Filaments show effects of sudden activation.
M = White-light flare.
N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the calcium II lines H or K.
P = Flare shows helium D_3 in emission.
Q = Flare shows the Balmer continuum in emission.
R = Marked asymmetry in Hα line.
S = Brightening follows disappearance of filament.
T = Region active all day.
U = Close and somewhat parallel bright filaments.
V = Occurrence of an explosive phase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide Hα emission.
Y = Onset of a system of loop-type prominences.
Z = Major sunspot umbra covered by flare.

SOLAR FLARES

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

MARCH 1968

1968
MAR

01 0316E N13 E00	01 0911 S27 W25	01 0913F S25 W25	01 0915 N10 W51	01 1536 S27 W33	01 1539 S26 W32
01 1617 N11 W58	01 1619 N13 W58	01 1620 N13 W58	01 1623E N13 W58	01 1623E N12 W60	01 1639 S24 W34
01 1716 S30 W32	02 0037E N08 W61	02 0232 N07 W60	02 0310 N07 W60	02 0315E N08 W61	02 0316 N15 W12
02 0920 S25 E57	02 1255E N15 W15	02 1336F N09 W66	02 1424 N11 W24	02 1426 N12 W24	02 1445 S24 E54
02 1455 S25 E54	02 1745 N12 W22	02 1845 N12 W21	02 1916 N11 W27	02 1917 S12 W28	02 1925 S25 E49
02 1944 S25 E50	02 1946 S25 E49	02 1946 N12 E25	02 2030 S26 W50	02 2225 S29 E49	02 2236 S28 E49
02 2237 N04 W70	02 2248E N06 W71	02 2325 N13 W22	02 2338 N13 W21	03 0137 S23 E31	03 0207 S23 E30
03 0729E N11 W28	03 0733E S25 E35	03 0743E N12 W25	03 0940 N13 W25	03 1333 S24 E46	03 1340 S22 E42
03 1502 S23 E25	03 1503 S23 E25	03 1608 N10 W40	03 1609 N12 W38	03 1610E N12 W39	03 1814 N15 W34
03 2004 S24 E37	03 2233 S16 W24	03 2255 N11 W34	03 2328 S28 W44	03 2358 S26 W65	04 0022 S26 W65
04 0031 S26 W65	04 0050 S26 W65	04 0514 S15 W27	04 0552 S24 W67	04 0702 S21 E21	04 0859 S25 E35
04 0900 S28 E39	04 0919 S23 W72	04 0943 S23 W72	04 1022 S23 W73	04 1412 S15 W34	04 1534 S28 W75
04 1536 S28 W71	04 1558 S24 W85	04 1620 S24 E29	04 1620 S25 F30	04 1621 S23 E29	04 1621 S25 E30
04 1622E S24 E29	04 1843 S25 E25	04 1941 S25 E30	04 1942 S24 E26	04 1943 S24 E26	04 1943 S24 E26
04 1951 N12 W46	04 1952 N11 W48	04 2150 N15 W90	04 2213 S27 E25	04 2213 S25 E30	04 2214 S24 E23
04 2348 N14 W90	05 0002 S24 W82	05 0019 S24 W82	05 0250 S25 E22	05 0805E N25 E35	05 1253 N25 E34
05 1535 N19 W29	05 1541 N21 W31	05 1546F N20 W30	05 1614 N24 E32	05 1741 N14 E38	05 1748 S26 E16
05 1753 S24 E15	05 1753 S25 E16	05 1753 S21 E19	05 1805 N23 F32	05 1810 N23 E30	05 1810 N24 E31
05 1810 N24 E30	05 1819E N25 E32	05 2015 N24 E28	05 2307 N21 W32	06 0511 S25 E14	06 0518 S26 E14
06 0907E S26 E10	06 0907 S24 E10	06 0907 S25 E09	06 0909 S25 E05	06 0942 S23 W06	06 1012 N20 E01
06 1133 S25 E11	06 1144E S22 W08	06 1403 N23 E23	06 1619 N15 W60	06 1632 N11 W72	06 1653 N12 W75
06 1711 S26 E08	06 1716 S25 E08	06 2020 N20 W05	06 2020 N20 W06	06 2117 N13 W79	06 2125E S25 W16
06 2149E S23 W15	07 0000E S25 W16	07 0250 S26 E01	07 0314 N14 E71	07 0353 N24 E11	07 0455 N25 E10
07 0508E N25 E08	07 0642 S21 W21	07 1142F N25 E04	07 1143 N25 E07	07 1238E S26 W13	07 1340E S27 W13
07 1405 S18 W79	07 1416 N25 E08	07 1456E S28 W10	07 1540 S26 W14	07 1547 N25 E02	07 1548E N25 E02
07 2014 S18 W04	07 2026 S25 W07	07 2030E S25 W06	07 2030E S17 W03	07 2347 S23 W29	07 2347 S23 W30
08 1714 N19 E28	08 1847 N20 E28	08 2158 N19 E28	09 0039 N17 E52	09 0311 S25 W32	09 1106 S28 W33
09 1949 N19 E14	09 1953 S18 W33	09 1953 S21 W33	09 2111 N19 F13	09 2154 N19 E13	10 0142 S13 E51
10 0536 S19 W41	10 0539 S18 W39	10 0545F S20 W40	10 0850E N39 W90	10 0922E S15 W31	10 1030 N18 E33
10 1036 N21 E36	10 1405E S27 W46	10 1417F S30 W48	10 1647 S09 W06	10 1648 S08 W05	11 1421 S14 E28
11 1534E S14 E28	11 1534U S13 E28	11 1650 S13 E26	11 1829 S08 W19	11 2151 S17 E88	12 0820 N14 W60
12 0850 S14 W18	12 1325E S14 E20	12 1349E S14 E20	12 1358E N26 F87	12 1358E S14 E15	12 1535 S13 E14
12 1617 S13 E13	12 1620 S13 E13	12 1658 N14 W58	12 1707 S13 F13	12 1717 S14 E14	12 1810 N14 W58
12 1811E N15 W59	12 1815 N20 E53	12 1823F N19 E54	12 1835 S13 E12	12 1915 S13 E12	12 2107 N13 W60
12 2108 N26 W59	12 2128 S14 E11	12 2141 S15 E11	12 2233 N31 E90	12 2244 N26 W60	13 0232E N30 E83
13 0910 N16 W65	13 1340 N29 W40	13 1517 N16 W34	13 1525 N20 W35	13 1545 S17 W80	13 1547 S16 W80
13 1548 S13 E02	13 1550E S14 W80	13 1553 S13 E02	13 1635 N14 W70	13 1709E N15 W75	13 1822 N19 W33
13 1824E N21 W31	13 1837E N19 W33	13 1849 N18 W88	13 2146 S18 W88	13 2207 S18 W87	14 1255E S22 W59
14 1414 S20 W57	14 1503 S20 W58	14 1525 N17 W35	14 1550 S24 W80	14 1600E S22 W56	14 1635 N16 W78
14 1642 N29 E59	14 1711 N14 W75	14 1816 S22 W58	14 1822 N21 W32	14 1850 N18 W90	15 1330 S24 E41
15 1456 N30 E48	15 1456 N30 E49	15 1529 S19 W71	15 1609E N31 E48	15 1618 N31 E47	15 1804 N34 E45
15 1804 N31 E44	15 1816U N34 E45	15 1857 N34 E45	15 1900 N31 E44	15 1913 N31 E44	15 1913 N34 E44
15 1914E N33 E46	15 1927 N32 E45	15 2001 N33 E46	15 2107 N18 E24	15 2108 N18 E26	15 2111 N18 E26
15 2200 N28 E42	15 2204 N18 E24	15 2210 N17 E24	15 2222 N34 E43	15 2223E N33 E43	16 1128 N18 E14
16 1128 N16 E15	16 1159 N18 E14	16 1448 N28 E34	16 1449 N26 E37	16 1518E N18 E13	16 1619E S20 W87
16 1901 N17 E11	17 0742 N18 E03	17 0900E N10 W06	17 0950 S09 F13	17 1235E N10 W07	17 1346 S19 E11
17 1555 N11 E90	17 1750 N32 E17	17 1752 N35 E24	17 1812E N31 E22	17 1920 N32 E17	17 1923 N35 E23
17 1926 N29 E20	17 2105 N35 E23	17 2351F S08 E02	18 0600E N10 E80	18 1055 N15 W08	18 1056 N17 W07
18 1057E N13 W07	18 1442 N18 W08	18 1951 N17 W15	18 2029 N16 W16	18 2224 N15 W15	19 0530 N38 W03
19 0845 N17 W24	19 0925 N29 E00	19 1220 N30 W05	19 1220 N27 W02	19 1240 N35 W05	19 1240 N26 W03
19 1405 N34 W03	19 1730 S16 W02	19 1907 N34 W07	19 1910 N33 W08	19 1916 N19 W31	19 1954E N35 W06
20 0645E N35 W03	20 0748 S14 E62	20 0823 S15 E60	20 0825E S13 E64	20 0847 S15 E61	20 0910E S12 E62
20 1211E S24 E72	20 1317 S15 E60	20 1320F S30 E71	20 1350 S15 E60	20 1352E S30 E71	21 0715E S16 E47
21 0715 S27 E58	21 0715 S14 E45	21 0716 S23 E58	21 0734 S25 E68	21 0735 S25 E60	21 0745E S24 E61
21 0745E S13 E48	21 0745E S17 E42	21 0745E N10 E07	21 0950E S13 E36	21 1149 S28 E57	21 1155 S24 E58
21 1210E N10 E04	21 1225E N11 E04	21 1237 S30 E60	21 1237E S25 E59	21 1238 S25 E61	21 1246 N10 E03
21 1252 S24 E59	21 1253 S30 E60	21 1257 S28 E57	21 1410 N09 E01	21 1415 S24 E57	21 1524E S25 E56
21 1533E S29 E54	21 1534 N10 E02	21 1538 N10 E04	21 1803 N10 E01	21 1833 N30 W27	21 1913 S24 E53
22 0200E S22 E48	22 0416E N10 W06	22 0543 N10 W06	22 0738 S24 E48	22 0741 S24 E49	22 0742 S27 E49
22 0910 S22 E44	22 0915E S24 E45	22 0951 N10 W07	22 1017 S27 E50	22 1030 N10 W07	22 1101 S28 E46
22 1220 S28 E46	22 1236 S28 E46	22 1238 S24 E43	22 1339 S23 E43	22 1344E S28 E45	22 1421 N34 W41
22 1423 N33 W42	22 1435 N10 W09	22 1558 N08 W13	22 1559 N08 W13	22 1637 S23 E40	22 1637 S24 E41
22 1638 S23 E41	22 1807 N09 W14	22 1819 N28 W46	22 1907 S13 E27	22 1933 S13 E28	22 1948 S23 E39
22 1948 S23 E39	22 2006 N09 W15	22 2106 S12 E27	22 2108 S13 E28	22 2232 S15 E21	22 2232 S14 E21
22 2234 S16 E20	22 2247 S24 E40	22 2248 S23 E39	22 2250 S23 E38	22 2250 S24 E37	22 2329 S23 E30
23 0131 S24 E36	23 0204 S24 E36	23 0548E S23 E34	23 0552 S27 F35	23 0635E S27 E35	23 0640E S23 E34
23 0640E S24 E31	23 0730E S27 E35	23 0740F S24 E34	23 0920 S12 E20	23 0925 S12 E18	23 0930 S14 E19
23 1140E S12 E16	23 1245E S23 E30	23 1336 N35 W54	23 1510 S23 E28	23 1511 S23 E29	23 1825 S13 E16
23 1858 N18 W88	23 1913 S13 E11	23 1913 S12 E11	23 1913 S13 E09	23 2117 S12 E08	23 2130 S14 E15
23 2134 S25 E28	23 2245 N11 E55	23 2337 N14 E54	24 0010 S12 F07	24 0044 S12 E08	24 0353E N13 E52

SOLAR FLARES

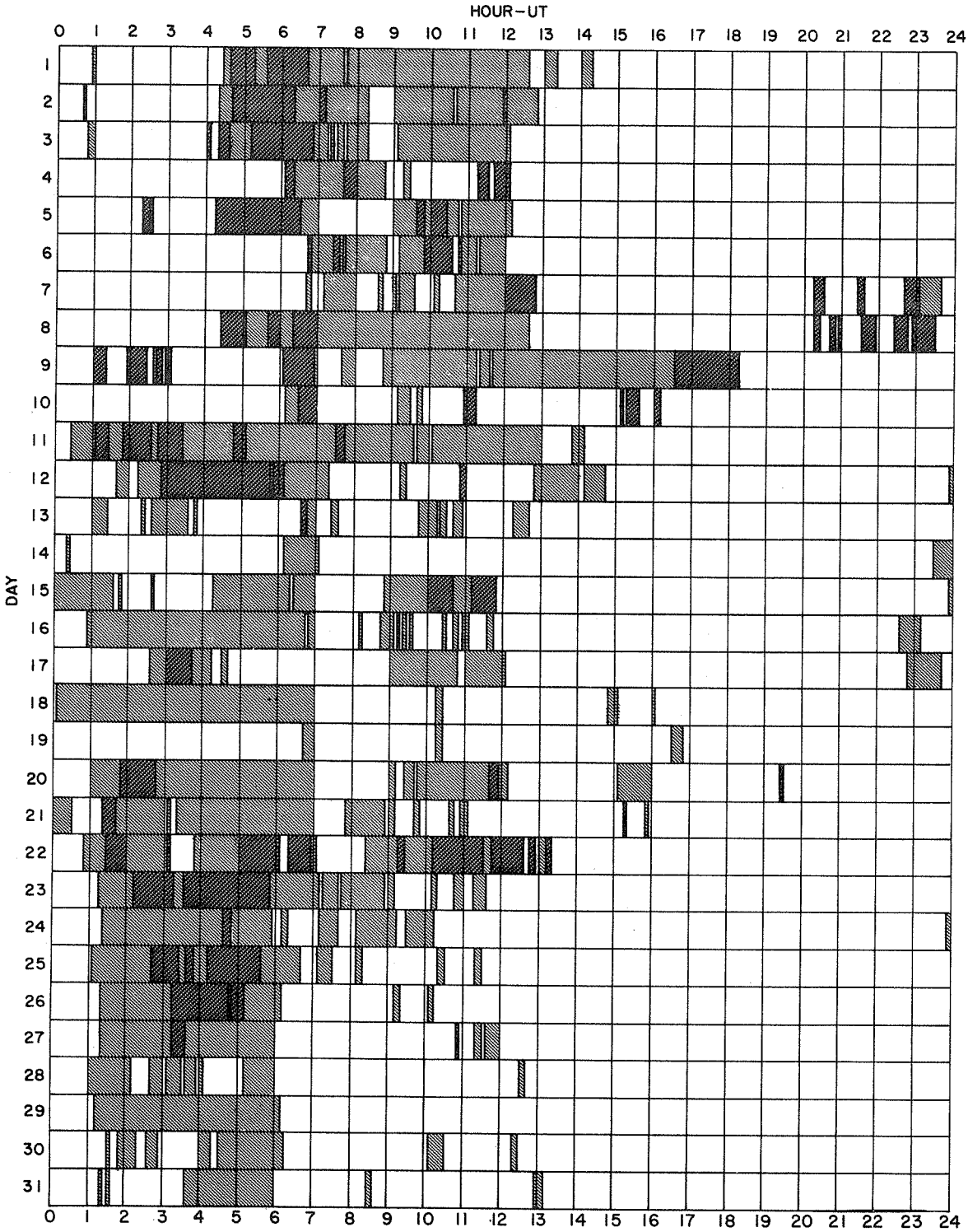
MARCH 1968

1968
MAR

24 0850E S10 E05	24 1407 S25 W28	24 1931 N38 W70	24 2045 S24 E14	24 2047 S23 E15	24 2047 S24 E15
24 2101 S12 W03	24 2123 N35 W88	24 2123 N36 W75	24 2123 N36 W75	24 2316 S24 E13	25 0214 S23 E12
25 0725E N30 W80	25 0910 N11 E32	25 1232E N12 W45	25 1301 S12 W12	25 1309 S11 W15	25 1310 S13 W12
25 1323 S12 W12	25 1336E S15 W15	25 1350 S18 W16	25 1400E S12 W12	25 1715 S14 W12	25 1718 S15 W13
25 1723E S12 W12	25 1826 S22 E86	25 2051U S12 W17	25 2051U S12 W17	26 0032 S17 E70	26 0245 N18 E56
26 0621 N18 E55	26 0622E N16 E51	26 0625E N15 E54	26 0720 S17 W27	26 0850 S13 W26	26 1000 S16 W26
26 1000 S19 W29	26 1145 S26 W53	26 1300 S15 W29	26 1415 S15 W25	26 1440 S13 W26	26 1448 S22 E73
26 1656 S13 W25	26 1656 S13 W27	26 1659 S12 W28	26 1734 S19 E72	26 1807 S13 W28	26 1816 S12 W28
26 1817 S12 W28	26 1853 S11 W30	26 1858 S11 W30	26 1925 S24 W58	26 1925 S25 W58	26 2130 S12 W30
26 2309 S16 W33	27 0417E S30 E90	27 0601E S23 W65	27 0619E S22 W69	27 0625E S26 W66	27 0855E S25 W65
27 0903E S23 W65	27 1044 S27 E67	27 1103 N23 W80	27 1105E N08 W77	27 1245E S25 W70	27 1248 S16 E72
27 1309E S20 E60	27 1311 S23 E62	27 1315 S21 E60	27 1440 S25 W71	27 1450 S22 E60	27 1516 S22 E60
27 1522 S23 E60	27 1523 S22 E60	27 1524E S22 E60	27 1537 S24 W70	27 1537 S24 W73	27 1537 S25 W71
27 1539E S24 W75	27 1600 S22 E60	27 1604 S25 W72	27 1628 S25 W72	27 1702 S22 E59	27 1738 S27 E90
27 1738 S20 W46	27 1800 S26 E58	27 1801 S22 E59	27 2201 S22 E90	27 2205 S13 W44	27 2247 S24 W73
27 2300 S25 E55	27 2325 S25 W73	28 0422 S23 E52	28 0740 N17 E37	28 0940 S16 W49	28 0940 S14 W52
28 0940 S17 W55	28 0941 S17 W56	28 1000 S23 E47	28 1010 S15 E40	28 1317 S25 W88	28 1354 S23 E47
28 1406 S24 E49	28 1459 S24 E49	28 1549 S25 W88	28 1603E S23 E46	28 1603E S25 W82	28 1725 S25 W82
28 1731 S22 E44	28 1732 S24 E49	28 1735 S23 E45	28 1740U S13 E44	28 1838 S23 E44	28 1839U S13 E44
28 1839 S24 W90	28 1914 S24 W88	28 1914 S25 W88	28 1930 S23 E44	28 2116 S21 E42	28 2157E S22 E42
28 2330 S25 W83	29 0055 S25 W90	29 0553E S14 W58	29 0606 S10 W56	29 0755 S23 E36	29 0813 S24 E37
29 1423E S16 E68	29 1423E S23 E33	29 1425 S19 E70	29 1440 S23 E33	29 1444 S23 E33	29 1445 S22 E34
29 1523 S18 E77	29 1613 S23 E32	29 1638 N18 E14	29 1638 N18 E15	29 1650E S12 W60	29 1822 S23 E31
29 1830E S22 E32	29 1900 S22 E32	29 1933E S12 W62	29 2022 N18 E13	29 2023 N18 E15	29 2030E N18 E13
29 2111 S15 E68	29 2136 S15 E68	29 2136 S15 E68	30 0025 S15 W65	30 0314E S16 E64	30 0724 S15 E58
30 0728E S14 E59	30 0734 N22 E05	30 0734E N20 E09	30 0739 N22 E02	30 0810 S14 W69	30 0850 N18 E06
30 0850 N22 E03	30 0850 N15 E04	30 0851 N18 E05	30 0910E S13 E60	30 1115 S24 E21	30 1122 S16 E58
30 1140 S14 W70	30 1151 S16 W14	30 1155 S16 W14	30 1230E S14 W70	30 1241 S15 E54	30 1243 S20 E57
30 1247E S16 E56	30 1300 S15 E57	30 1327 S15 E57	30 1627 S16 E56	30 1629 S15 E56	30 1835 N16 W07
30 1934 N17 W08	30 1956 S14 W85	30 2120 N18 W08	30 2122 N22 W01	30 2302 S13 E51	30 2312E S15 E51
31 0405 S14 E49	31 0608 S14 E47	31 0608E S14 E47	31 0611E S15 E48	31 0613 S16 E57	31 0808 S16 E50
31 1002 S16 E49	31 1228E S12 W00	31 1230 S14 E01	31 1246E S23 E10	31 1325 S22 E09	31 1325 S23 E06
31 1326 S22 E08	31 1330 S22 E09	31 1333 S23 E07	31 1341E S22 E08	31 1557 S17 W28	31 1600 S16 W29
31 1608E S16 W28	31 1610E S17 W29	31 1630 N13 W48	31 1631 N12 W49	31 1631 N14 W48	

INTERVALS OF NO FLARE PATROL OBSERVATION
For Preceding Solar Flare Table

MARCH 1968



Observatories included in total patrol:

Arcetri	Capri-F (German)	Haleakala	Istanboul	Manila	Ondrejov
Boulder	Capri-S (Swedish)	Houston	Lockheed	Meudon	Sacramento Peak
Bucharest	Catania	Huancayo	McMath-Hulbert	Mitaka	San Miguel
					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

Western Hemisphere

MARCH 1968

MAR 1968	FREQUENCY STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY $10^{-22} Wm^{-2} Hz^{-1}$ PEAK	MEAN	INT	REMARKS
1	2800 OTTA	4	1411	1411.5	3	32.0	9.0		
	1415 SGMR	3	1619.9	1620.4	1.2	8.7	3.3		
	606 SGMR	1	1620	1620.2	1.0	3.6	1.4		
2	8800 SGMR	1	1203.6	1204.5	3.4	4.3	2.0		
	4995 SGMR	3	1203.6	1204.2	1.8	17.1	8.0		
	2695 SGMR	3	1203.6	1204.3	4.6	12.3	6.0		
	606 SGMR	3	1203.8	1203.9	.4	23.3	7.0		
	15400 SGMR	45	1410.9	1412.1	4.6	95.0	22.0		
	8800 SGMR	3	1410.8	1412.3	4.8	100.0	25.0		
	4995 SGMR	3	1410.6	1412.3	5.2	39.0	9.0		
	2695 SGMR	3	1410.6	1412.2	5.5	20.3	5.5		
	1415 SGMR	3	1410.8	1412.1	5.5	23.5	4.0		
	606 SGMR	45	1410.6	1411.3	6.4	110.0	5.0		
	408 SANM	42	1411	1412.1	44	131.0	44.5		
	606 SGMR	40	1426.2	1426.3	.3	5.3	1.5		
	606 SGMR	45	1434.2	1434.7	1.1	15.0	4.5		
	7000 SAOP	4	1610.4	1612.3	4.4	85.5	42.8		
	1415 SGMR	4	1815.9	1816.2	.8	11.2	5.6		
	606 SGMR	45	1815.2	1816.2	1.7	125.0	55.0		
	8800 SGMR	1	1816.2	1816.5	1.5	5.8	2.9		
	4995 SGMR	1	1816.1	1816.7	1.1	2.6	1.3		
	2800 OTTA	1	1816	1816.5	1	2.4	1.2		
	2695 SGMR	1	1816.2	1816.6	2.0	2.1	1.0		
	408 SANM	45	2056.6	2057.1	.9	63.0	34.0		
	2695 PENT	4	2236.5	2239	11	17.0	7.0		
4	408 SANM	45	1232.8	1233.7	1.5	44.5	25.0		
	4995 SGMR	20	1659.5	1730.4	47.7	8.5	4.2		
	2695 SGMR	20	1659.6	1711.3	56.7	10.4	5.1		
	8800 SGMR	20	1704.3	1726.5	45.6	6.2	3.1		
	2800 OTTA	20	1710	1712	45	3.0	1.6		
	1415 SGMR	20	1716	1732.6	20.0	2.0	1.0		
5	408 SANM	3	1045.7	1046.3	1.2	89.0	47.0		
	408 SANM	45	1406.8	1407.5	1.2	59.0	32.0		
	10700 PENN	24	1725.8	1745.2		15.0			
6	18 MCMA	43	1425	1430	57			1	
	2800 OTTA	20	1720	1730	30	4.0	2.0		
	1415 SGMR	45	1722.3	1729.5	10.3	720.0	145.0		
	960 PENN	1	1722	1722.6	1.2	.6	0.1		
	960 PENN	45	1723.2	1726.4	4.7	9.8	2.7		
	606 SGMR	2	1724	1729.3	8.8	6.2	3.0		
	960 PENN	45	1727.9	1729.3	3.6	22.0	9.0		
	960 PENN	1	1731.8	1732	1.0	1.8	0.6		
7	408 SANM	3	1158.5	1158.8	.9	52.0	28.5		
	8800 SGMR	20	1250.2	1251.4	24.8	5.3	2.5		
	4995 SGMR	3	1250.5	1251.4	2.4	13.2	4.5		
	2695 SGMR	1	1250.7	1251.4	1.0	2.6	1.0		
	606 SGMR	1	1250	1250.9	4.0	3.2	1.5		
	2695 SGMR	29	1251.7	1251.7	52.5	2.0	1.0		
	4995 SGMR	29	1252.9	1252.9	29.1	2.8	1.4		
	18 BOUL	43	1424		273			1	
	18 MCMA	43	1438		350			1	
	8800 SGMR	20	2013.9	2018	8.1	4.8	2.5		
	4995 SGMR	20	2014.2	2014.6	8.2	2.7	1.5		
	2695 SGMR	1	2016.1	2018	6.9	.9	.5		
9	408 SANM	40	1411.2	1415.7	7.6	80.0	27.0		
	2800 OTTA	20	1953	2010	70	2.4	1.2		
	18 MCMA	42	2201	2218	22			2	
	18 BOUL	42	2210	2215	13			2	
	18 BOUL	44	2234	2236 U	6			1	
	18 MCMA	6	2234	2238	7			3	
	18 MCMA	41	2342	2247	6			1	
10	408 SANM	45	1540.4	1540.9	.9	185.0	95.0		
	18 BOUL	6	1757	1759 U	3			1	
11	408 SANM	45	1459.1	1459.6	.9	64.5	35.0		
	2800 OTTA	20	1520	1550	180	5.8	2.9		
	408 SANM	3	2020	2020.4	.9	70.5	38.0		
12	408 SANM	45	1233	1233.6	1.2	76.0	40.5		
	18 BOUL	43	1800	1834 U	92			1	
	2800 OTTA	32	1817		33	-3.4	-2.2		
	15400 SGMR	3	2105	2107.7	4.8	15.6	8.0		
	1415 SGMR	1	2107.3	2107.7	2.0	2.0	.8		
	606 SGMR	1	2107	2107.8	2.0	2.5	1.2		
	2800 OTTA	1	2117	2117.5	2	1.8	0.9		
	2695 PENT	1	2233	2234	2	5.4	2.7		
13	1415 SGMR	1	1247.7	1248	1.5	4.3	1.4		
	606 SGMR	45	1247.2	1248.1	1.6	21.1	4.2		
	2695 SGMR	1	1249.1	1249.2	1.1	1.7	.8		
	18 BOUL	44	1343 E		535			1	
	408 SANM	42	1900	1931.2	32.2	119.0	37.5		
15	18 MCMA	42	2132 U	2146 U	14			1	

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

Western Hemisphere

MARCH 1968

MAR. 1968	FREQUENCY STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY $10^{-22}Wm^{-2}Hz^{-1}$ PEAK	MEAN	INT	REMARKS
	18 MCMA	6	2219	2220	3			1	
16	2800 OTTA	2	1448	1451	7	2.4	1.2		
17	18 MCMA	6	1439	1441	3			1	
	18 MCMA	43	1529		125			2	
	18 BOUL	43	1608	1705 U	180			1	
	18 BOUL	43	2021	2041 U	162			1	
18	408 SANM	45	1117.1	1117.7	1.2	65.0	34.0		
20	2695 PENT	24	2240		120	8.0			
21	2800 OTTA	21	1237	1245	15	2.0	1.0		
	2800 OTTA	1	1237.5	1238	1.5	2.4	1.2		
	606 SGMR	1	1257.4	1257.7	1.0	3.4	1.7		
	2800 OTTA	21	1415	1440	105	4.8	2.4		
	606 SGMR	22	1415.3	1430.9	28.7	20.6	10.3		
	4995 SGMR	20	1416.8	1430.6	71.2	36.8	13.8		
	2695 SGMR	45	1416.6	1430.5	19.4	46.8	18.7		
	1415 SGMR	45	1419.2	1429.9	19.8	17.6	11.6		
	960 PENN	45	1419.3	1431.1	16				
	8800 SGMR	20	1420.3	1431	63.0	22.8	13.0		
	7000 SAOP	21	1420		24.4				
	2700 PENN	45	1420.3	1430	17.5	42.8	18.8		
	15400 SGMR	20	1422.5	1433.5	33.8	15.2	7.6		
	2800 OTTA	46	1423	1430.5	17	43.0	19.0		
			1423	1423.8	2.5	13.0			
			1425.5	1430.5	14.5	43.0			
	7000 SAOP	45	1429.5	1431.6	5.0	33.6	16.8		
	960 PENN	29	1435.3	1435.3	16				
	2695 SGMR	30	1436	1436	52.0	7.2	3.6		
	1415 SGMR	29	1436	1436	42.0	4.0	2.0		
	2700 PENN	29	1437.8	1437.8	53.2	7.1	3.1		
	2695 SGMR	45	1443.6	1445.3	6.5	49.3	15.3		
	2800 OTTA	1	1718.5	1719.5	3	3.0	1.2		
	2700 PENN	1	1718	1719.3	3.7	3.7	1.4		
	7000 SAOP	40	1727		133				
	2800 OTTA	21	1740	1845	120	6.4	3.2		
	18 BOUL	42	1756	1806 U	25			1	
	2700 PENN	20	1804.3	1837	91.5	5.0	2.5		
	960 PENN	5	1813.1	1813.8	3.6				
	960 PENN	8	1814.1	1814.2	.2				
	18 MCMA	42	1901	1916 U	15 D			2	
	18 BOUL	41	1904	1910 U	12 D			1	
	2700 PENN	3	1911.3	1914.8	6.6	37.9	8.0		
	10700 PENN	20	1913.9	1914.7	14.0	13.1	4.5		
	8800 SGMR	3	1913.4	1914.7	4.1	13.3	4.0		
	4995 SGMR	45	1913.3	1914.7	8.7	43.2	12.0		
	2800 OTTA	4	1913	1914.8	5	40.0	10.0		
	2695 SGMR	45	1913.3	1914.7	4.6	37.1	9.0		
	1415 SGMR	45	1913	1914.7	8.2	26.6	7.0		
	960 PENN	45	1913.7	1914.8	4.6				
	606 SGMR	45	1913.9	1918	16.8	96.0	15.0		
	15400 SGMR	1	1914.6	1915.4	1.8	4.0	2.0		
	7000 SAOP	4	1914.2	1915.1	2.3	15.8	7.9		
	328 PENN	5	1914.5	1914.8	1.2	29.9	11.3		
	328 PENN	45	1915.7	1916.1	1.1	276.0	165.0		
	7000 SAOP	29	1916.5		5				
	2700 PENN	29	1917.9	1917.9	10.0	2.5	1.3		
	960 PENN	29	1918.3	1918.3	14.1				
	2800 OTTA	2	1922	1924	4	3.2	1.8		
	2700 PENN	1	1923.1	1924.3	2.2	3.2	1.7		
	2800 OTTA	20	1950	2045	125	6.6	3.3		
	18 BOUL	41	2053	2059 U	14			2	
	18 BOUL	6	2112	2114 U	4			2	
	1415 SGMR	2	2201.7	2210.1	11.8	2.0	1.0		
	606 SGMR	23	2201.8	2210.4	14.7	19.6	9.0		
	2800 OTTA	23	2202	2204	30	3.2	1.6		
	2800 OTTA	4	2208	2208.8	4	14.0	7.0		
	606 SGMR	45	2208.1	2208.3	1.6	105.0	20.0		
	1415 SGMR	1	2221.3	2222.3	1.9	2.4	1.0		
	606 SGMR	3	2221.3	2222.3	4.1	33.8	8.0		
	2695 PENT	20	2230	2300	125	4.2	2.1		
22	408 SANM	40	1236.8	1237	3.8	75.5	26.0		
	8800 SGMR	1	1636.7	1637.2	1.0	3.8	1.9		
	4995 SGMR	1	1636.5	1637.1	1.8	4.1	2.0		
	2800 OTTA	1	1636	1637	1.2	4.0	2.0		
	2695 SGMR	1	1636.5	1637	.9	4.3	2.1		
	1415 SGMR	1	1636.9	1637.1	.5	2.2	1.1		
23	2700 PENN	24	1546	2010		7.7			
	2700 PENN	20	1819.3	1826.2	9.5	2.8	0.7		
	960 PENN	45	1823.2	1823.4	4				
	328 PENN	45	1823.1	1823.2	3.7	67.0	11.6		
	10700 PENN	20	2111.7	2140.8	42.9	14.3	7.5		
	2700 PENN	20	2111.6	2137.7	44.2	7.1	1.8		
	2800 OTTA	20	2130	2137	20	4.8	2.4		
24	7000 SAOP	41	1456.9		132.7				

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

Western Hemisphere

MARCH 1968

MAR 1968	FREQUENCY STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY 10^{-22} Wm^{-2} Hz^{-1} PEAK	MEAN	INT	REMARKS
	7000 SAOP	40	1456.9		6.9				
	7000 SAOP	20	1503.8		32.0	17.3	8.7		
	7000 SAOP	20	1535.8		49.2	21.4	10.7		
	2800 OTTA	21	1553	1613	235	2.8	1.4		
	7000 SAOP	40	1625		4.6				
	7000 SAOP	45	1634.9	1643.6	11.1	195.5	52.4		
	4995 SGMR	45	1634.8	1643.7	13.5	175.0	32.2		
	10700 PENN	45	1635.4	1643.6	11.9	157.8	34.2		
	8800 SGMR	45	1635.5	1643.7	14.4	210.0	28.8		
	2800 OTTA	21	1635	1655	195	11.0	5.5		
	2700 PENN	45	1637.4	1643.6	9.9	30.0	13.0		
	2695 SGMR	45	1637.1	1643.6	11.7	64.0	9.6		
	15400 SGMR	45	1639.6	1643.7	6.9	95.3	31.2		
	2800 OTTA	4	1639.5	1644	10	57.0	14.0		
	1415 SGMR	45	1641.5	1645.2	5.8	26.4D			
	960 PENN	45	1641	1643.8	6.3				
	606 SGMR	45	1641.8	1646.1	5	7.4D			
	15400 SGMR	29	1646.5	1646.5	149.8	24.6	12.3		
	7000 SAOP	29	1646		16.8				
	606 SGMR	29	1646.8	1646.8	231.2	2.2	1.1		
	10700 PENN	29	1647.3	1647.3		30.3			
	2700 PENN	29	1647.3	1647.3		11.0			
	1415 SGMR	29	1647.3	1647.3	329.7	9.7	4.6		
	960 PENN	29	1647.3	1647.3					
	4995 SGMR	29	1648.3	1648.3	132.0	18.4	9.2		
	2695 SGMR	29	1648.8	1648.8	143.7	8.0	4.0		
	8800 SGMR	29	1649.9	1649.9	134.4	18.0	9.0		
	2800 OTTA	32	2010	2045	90	-4.8	-2.4		
25	10700 PENN	3	1333.9	1334.1	3.1	9.2	3.1		
	408 SANM	27	1340	1411	90	21.5	7.5		
	408 SANM	40	1341.8	1353.3	13.2	41.5	12.0		
	7000 SAOP	20	1417.6		42.4	29.5	14.7		
	2695 SGMR	3	1443.9	1447.7	15.2	11.4	3.4		
	10700 PENN	20	1444.5	1448.7	12.6	7.6	3.8		
	4995 SGMR	3	1444.9	1448.6	9.5	21.6	7.2		
	2700 PENN	20	1444.5	1447.9	14.4	10.9	3.2		
	8800 SGMR	3	1445.8	1449	11.1	8.3	2.4		
	2800 OTTA	3	1445	1447.8	6	11.2	5.8		
	408 SANM	45	1447.4	1447.7	1.7	81.0	34.5		
	328 PENN	5	1447.7	1447.9	.7	51.9	15.9		
	2800 OTTA	29	1451		7	3.8	1.9		
	7000 SAOP	45	1500	1505.8	10.6	86.5	13.5		
	4995 SGMR	45	1500.4	1505	13.	93.0	25.0		
	2800 OTTA	21	1500	1519	200	8.2	6.0		
	15400 SGMR	20	1501.7	1508.5	44.2	15.6	5.2		
	10700 PENN	3	1501	1505	4.3	31.5	7.3		
	8800 SGMR	20	1501.5	1505.3	4.6	43.2	14.4		
	2700 PENN	45	1501	1505	9.1	27.6	9.7		
	2695 SGMR	45	1501.7	1505.1	8.8	30.2	10.1		
	2800 OTTA	46	1504.5	1505.3	13	29.0	8.4		
			1504.5	1505.3	1.5	29.0			
			1506	1508.5	11.5	16.6			
	1415 SGMR	20	1504.9	1508.7	39.9	6.6	2.2		
	10700 PENN	29	1505.3	1505.3	25.3	21.6	11.3		
	8800 SGMR	29	1506.1	1506.1	39.0	18.0	3.6		
	606 SGMR	20	1507.2	1508.7	32.0	4.1	1.3		
	7000 SAOP	29	1510.4		8.6				
	2700 PENN	29	1510.1	1510.1	149	11.5	3.5		
	2695 SGMR	29	1510.4	1510.5	60.6	11.4	2.3		
	2700 PENN	1	1511.6	1512.5	3.8	2.3	1.0		
	4995 SGMR	29	1513.4	1513.4	39.6	17.0	3.4		
	7000 SAOP	40	1519		320				
26	7000 SAOP	20	1433.6		46.5	17.5	8.7		
	18 MCMA	42	1457		15			1	
	7000 SAOP	40	1505.5		154.5				
	18 MCMA	42	1547		46			1	
	2700 PENN	1	1620.8	1621.5	1.5	3.7	1.6		
	2800 OTTA	20	1730	1945	245	5.6	2.8		
27	2800 OTTA	20	1330	1335	30 D	3.0			
	4995 SGMR	20	1331.6	1335	38.7	10.6	5.0		
	1415 SGMR	20	1331.5	1334.9	19.6	8.5	4.0		
	15400 SGMR	20	1332.3	1340.1	24.4	13.2	6.2		
	8800 SGMR	20	1332.5	1335.1	37.7	5.8	2.5		
	2695 SGMR	20	1332.7	1334.8	19.8	3.1	1.5		
	606 SGMR	20	1332.8	1334.8	35.5	6.0	2.0		
	2800 OTTA	24	1511		1	2.6			
	2800 OTTA	21	1620	1745	280	5.8	2.9		
	2700 PENN	20	1647.3	1750	248	4.0	2.5		
	1415 SGMR	23	1648.9	1832.8	311.8	14.9	8.0		
	10700 PENN	20	1650.2	1751.1	115	8.2	5.1		
	8800 SGMR	23	1650.4	1822	222.1	14.8	8.0		
	4995 SGMR	23	1650.3	1820.5	211.7	19.0	10.0		
	2695 SGMR	23	1658.2	1822	165.8	10.1	5.0		
	606 SGMR	23	1734	1837.3	257.0	22.0	12.0		
	8800 SGMR	1	1739.7	1742.1	6.7	3.7	1.8		
	4995 SGMR	1	1740.8	1742.3	4.8	2.4	1.2		
	15400 SGMR	23	1741	1819	53.5	10.0	5.0		
	4995 SGMR	20	1747.4	1751.4	7.7	4.6	2.3		

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

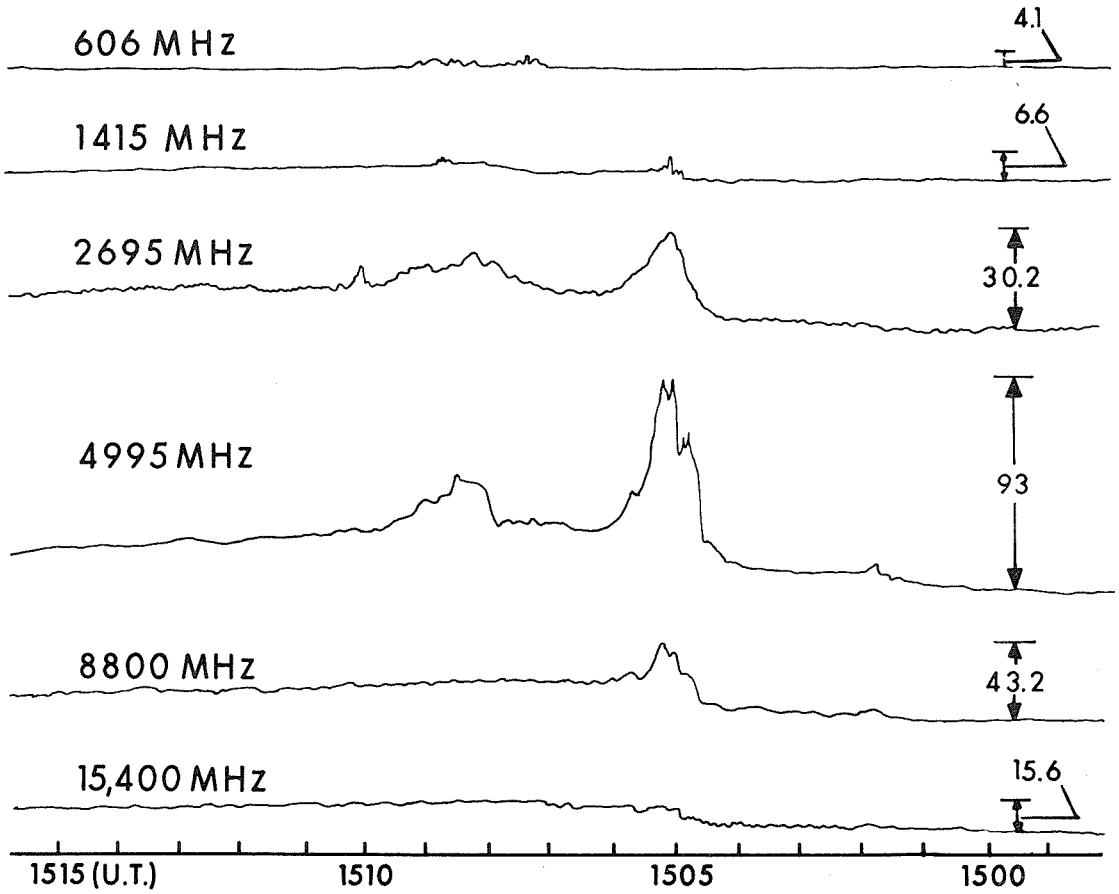
Western Hemisphere

MARCH 1968

MAR 1968	FREQUENCY STATION	TYPE	STARTING TIME UT	TIME OF MAXIMUM UT	DURATION MINUTES	FLUX DENSITY $10^{-22} Wm^{-2} Hz^{-1}$ PEAK	MEAN	INT	REMARKS
	15400 SGMR	3	1748.2	1751.3	7.1	7.6	3.0		
	8800 SGMR	3	1748.1	1751.4	6.9	8.1	4.0		
	2695 SGMR	1	1749.3	1751.2	4.7	2.3	1.2		
	1415 SGMR	1	1749.2	1751.4	4.3	2.2	1.1		
	2800 OTTA	2	1750	1751.3	5	2.6	1.3		
	606 SGMR	1	1750.1	1751.4	2.3	2.3	1.0		
	8800 SGMR	45	1757.6	1800.3	6.4	48.4	12.0		
	4995 SGMR	45	1757.5	1800.3	8.2	91.0	28.0		
	2800 OTTA	21	1757	1830	190	11.0	5.5		
	2800 OTTA	4	1757.7	1800.3	8	45.0	15.0		
	2700 PENN	3	1757.7	1801.1	4.4	40.3	18.9		
	2695 SGMR	45	1757.7	1800.1	7.3	42.4	12.0		
	10700 PENN	3	1758.6	1800.2	4.5	28.0	10.4		
	1415 SGMR	45	1758	1801.4	5.1	14.7	3.4		
	15400 SGMR	3	1759.8	1800.2	2.2	7.6	3.5		
	606 SGMR	45	1759.7	1801.3	3.8	4.4	1.0		
	2700 PENN	29	1802.1	1802.1	61.9	15.6	1.9		
	2700 PENN	45	1806.7	1815.7	15.0	34.5	9.7		
	8800 SGMR	20	1810.2	1816.3	8.8	13.0	7.0		
	4995 SGMR	4	1810.2	1816.3	9.7	31.7	8.0		
	2800 OTTA	2	1810	1810.5	2	5.2	2.6		
	2800 OTTA	4	1812.5	1816	13	34.0	11.0		
	2695 SGMR	3	1812.4	1815.5	6.6	28.6	7.0		
	1415 SGMR	45	1812.9	1814.9	5.6	12.7	3.0		
	606 SGMR	45	1814	1814.9	6.3	77.0	8.0		
	2700 PENN	29	1821.7	1821.7	23.8	6.1	1.8		
	2700 PENN	45	1825.1	1827.2	7.0	17.6	4.2		
	606 SGMR	4	1825.8	1827.3	3.9	55.0	15.0		
	408 SANM	45	1825	1827.1	3.3	99.0	42.5		
	4995 SGMR	45	1826.5	1827.3	2.1	12.2	3.0		
	2800 OTTA	4	1826.5	1827.2	2	16.0	7.5		
	2695 SGMR	45	1826.3	1827.1	2.4	17.1	4.0		
	1415 SGMR	45	1826.3	1827.8	2.5	39.6	10.0		
	2700 PENN	29	1832.1	1832.1	3.7	2.7	1.7		
	1415 SGMR	1	2203.9	2203.9	.1	5.1	2.5		
	606 SGMR	3	2203.7	2203.9	.3	16.7	7.0		
28	606 SGMR	1	1206.5	1207.3	2.8	6.4	3.0		
	408 SANM	45	1206.1	1213	8.9	38.5	25.5		
	408 SANM	29	1215	1255	50	23.5	13.5		
	606 SGMR	20	1224.9	1229.7	13.6	9.2	4.0		
	18 MCMA	42	1331		25			2	
	18 BOUL	42	1332	1341 U	24			1	
	18 MCMA	6	1534	1534	2			2	
	408 SANM	3	1720.5	1720.8	.6	199.0	101.0		
	606 SGMR	41	1723.3	1725.8	4.5	22.5	3.0		
	2800 OTTA	3	1725.8	1726	.4	18.8	9.4		
	2700 PENN	3	1725.8	1725.9	.5	18.5	5.3		
	2695 SGMR	3	1725.7	1725.9	.3	16.9	4.0		
	1415 SGMR	3	1725.8	1726.1	.2	12.3	4.0		
	2695 SGMR	1	1805.5	1806.1	1.0	1.9	1.0		
	1415 SGMR	1	1805.8	1806	.4	4.0	2.2		
	606 SGMR	3	1805.6	1806	.8	27.9	7.2		
	2700 PENN	24	1947	2136		6.7			
29	2800 OTTA	20	1415	1525	130	4.4	3.0		
	2800 OTTA	22	1830	1845	50	4.0	2.0		
	2700 PENN	24	2010	2108		5.4			
30	2695 PENT	21	0032	0040	12	2.0	1.0		
	2695 PENT	3	0034.5	0035.8	4	18.0	8.5		
	408 SANM	45	1422.7	1423.2	2.3	214.0	109.0		
	606 SGMR	3	1423	1423.1	1.1	8.1	3.6		
	18 MCMA	41	1446		5			1	
	18 MCMA	41	1455	1458 U	11			2	
	2700 PENN	20	1713.8	1734.4	64.8	3.3	1.4		
	2800 OTTA	21	1915	1935	50	1.8	0.9		
	960 PENN	8	1927.9	1928.1	.7				
	4995 SGMR	1	1935.8	1936.3	1.4	3.0	2.0		
	2695 SGMR	3	1935.9	1936.3	1.0	13.1	8.8		
	1415 SGMR	3	1935.9	1936.3	1.1	14.0	9.4		
	960 PENN	45	1935.8	1936.4	1.2				
	606 SGMR	3	1935.8	1936.3	1.1	12.3	8.2		
	18 MCMA	6	1935	1937	4			2	
	8800 SGMR	1	1936.4	1936.7	.4	3.0	2.0		
	2800 OTTA	2	1936	1936.2	1	9.2	4.6		
	2700 PENN	45	1936.1	1936.3	.9	13.3	5.7		
	2800 OTTA	20	2050	2125	90	2.6	1.8		
	2695 PENT	20	2235	2330	150	4.0	2.0		
31	8800 SGMR	20	1329.3	1333	8.2	2.2	.7		
	4995 SGMR	20	1329.8	1332.4	8.2	4.8	1.9		
	2695 SGMR	1	1329.4	1332.1	7.0	3.8	.9		
	606 SGMR	1	1330.4	1332	3.1	2.8	.8		
	15400 SGMR	20	1331.2	1332.6	8.3	2.4	.8		
	2800 OTTA	1	1331	1332	3	4.0	2.0		
	2800 OTTA	20	1600	1605	30	1.8	0.9		
	18 MCMA	6	1608	1609	3			1	

SELECTED SOLAR NOISE BURST
AFCRL SAGAMORE HILL

MARCH 1968

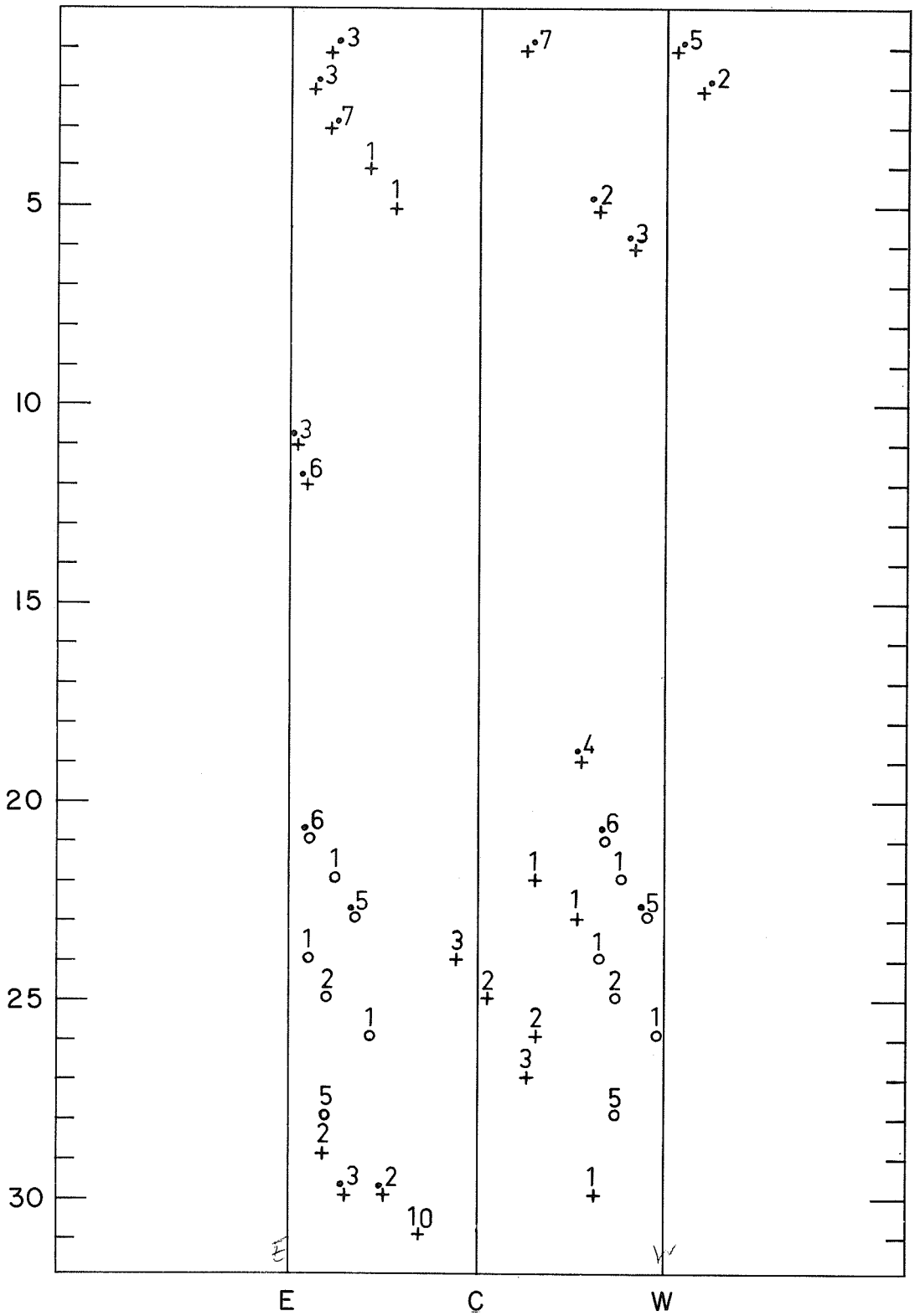


SIMPLE 3 AND COMPLEX RADIO BURST OBSERVED ON 25 MARCH, 1968 AT SAGAMORE HILL RADIO OBSERVATORY HAMILTON, MASS.

SOLAR RADIO EMISSION
INTERFEROMETRIC OBSERVATION

MARCH 1968

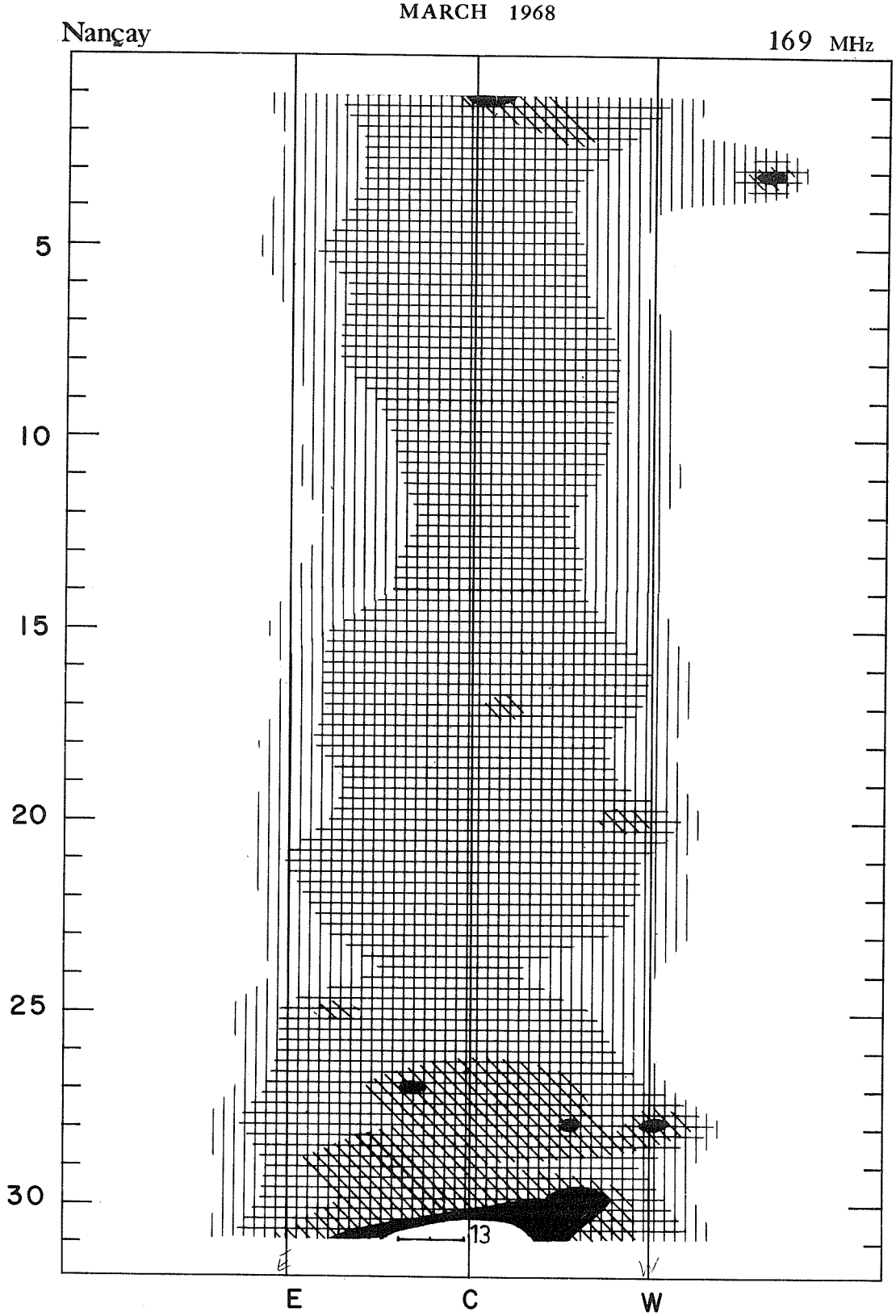
Nançay 408 MHz



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

MARCH 1968



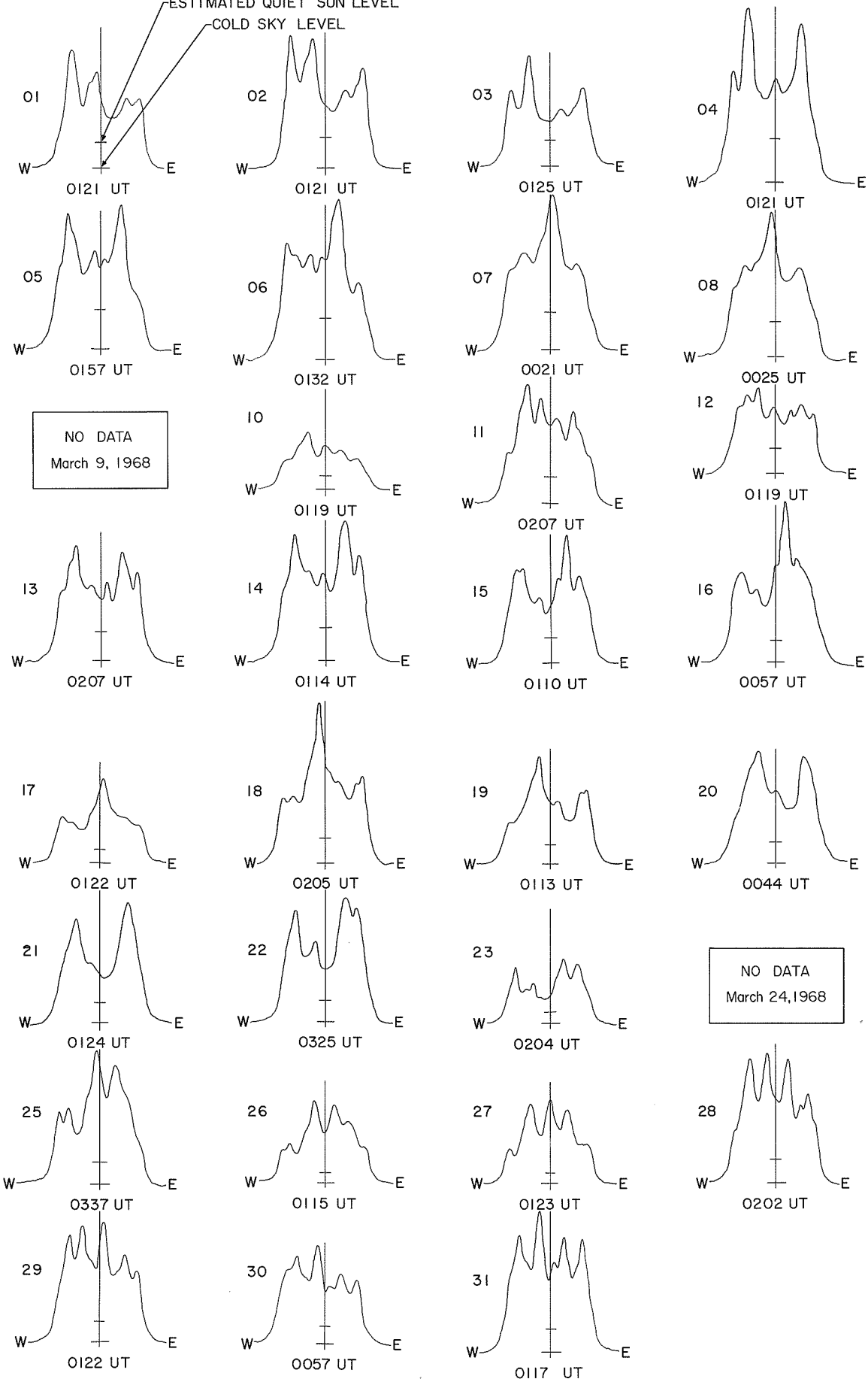
EAST-WEST SOLAR SCANS

MARCH 1968

Fleurs, Australia

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

21 cm

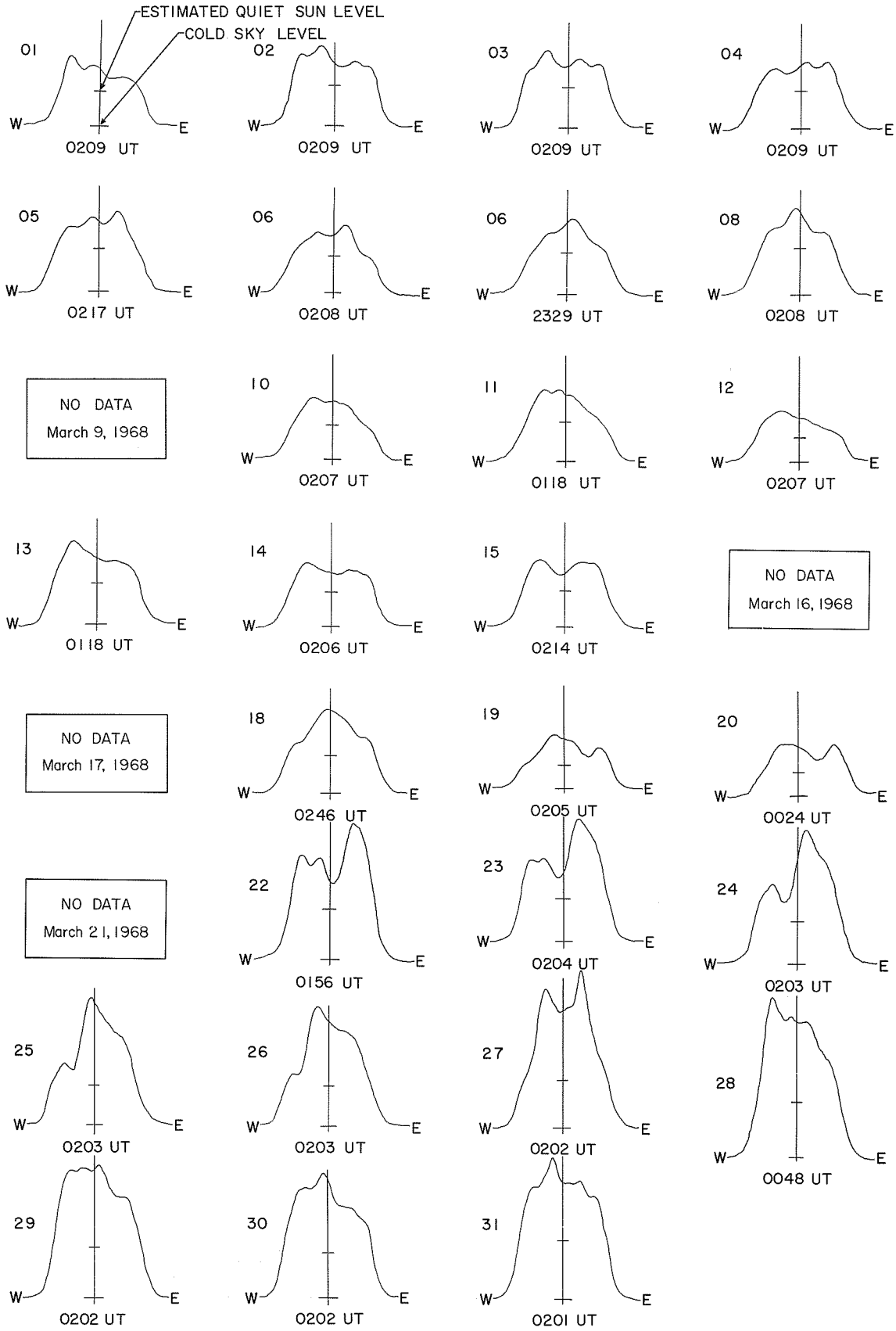


EAST-WEST SOLAR SCANS

MARCH 1968

Fleurs, Australia

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



SOLAR WIND VELOCITY
and
CO-ROTATION, DELAY TIMES
March 1968

NASA - Ames Research Center

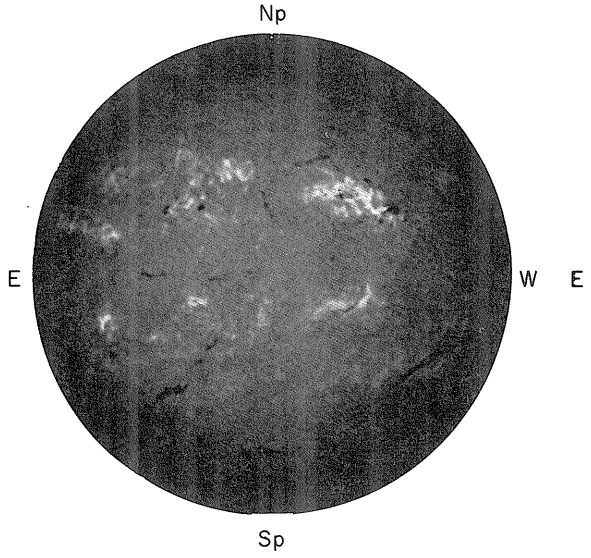
Date 1968	PIONEER VI				PIONEER VII			
	Time (Z)	Pass	U_H^+	TAU	Time (Z)	Pass	U_H^+	TAU
Mar 1	G1756	807	538.5	-10.14	G1936	563	524.8	+3.77
2	G1840	808	564.	-10.2	G1922	564	475.	+3.74
3	G1710	809	472.	-10.1	G1917	565	462.	+3.74
4								
5								
6	G1904	812	313.8	-9.92				
7	G1629	813	370.	-10.08				
8	G1856	814	479.3	-10.27	G2020	570	319.9	+3.6
9	G1853	815	470.2	-10.29	G2023	571	385.3	+3.74
10	G1929	816	659.5	-10.48	G2015	572	431	+3.81
11	G1735	817	519.2	-10.4	G1921	573	350.3	+3.71
12	G1817	818	396.3	-10.27	G2037	574	443.9	+3.86
13	G1830	819	403	-10.31	G2007	575	471.9	+3.91
14	G1649	820	338.2	-10.22	G1946	576	505.6	+3.95
15								
16	G1841	822	371.5	-10.34	G0107	577	605.3	+4.05
17	G1810	823	366.6	-10.36	G0044	578	471.2	+3.96
18	G1816	824	415.2	-10.46	G0220	579	415.2	+3.91
18					G2238	580	386	+3.88
19	G1740	825	364.4	-10.41	G1942	581	366.1	+3.86
20	G1818	826	453	-10.56	G1918	582	385.4	+3.91
21	G1829	827	553.2	-10.68	G1916	583	445.6	+4.
22					G2210	584	427	+4.
23	G1939	829	392	-10.56	G2046	585	479.9	+4.07
24	G1823	830	320.7	-10.45	G2017	586	495.4	+4.1
25	G2017	831	277.1	-10.36	G2048	587	458	+4.08
26	G1802	832	308.9	-10.48	G1913	588	508.3	+4.14
27	G1825	833	342	-10.57	G1919	589	562	+4.2
28	G1805	834	407	-10.7	G1937	590	508.3	+4.17
29	G2337	835	461	-10.82				
Mar 30	G1935	836	457.2	-10.81	G0043	591	489	+4.17
30					G2014	592	428.2	+4.12
31	G1838	837	429.2	-10.83	G2017	593	320	+3.97

Table of Contents
for February 1968 Data

For explanations of the data contained herein see "Descriptive Text" published in February 1968.

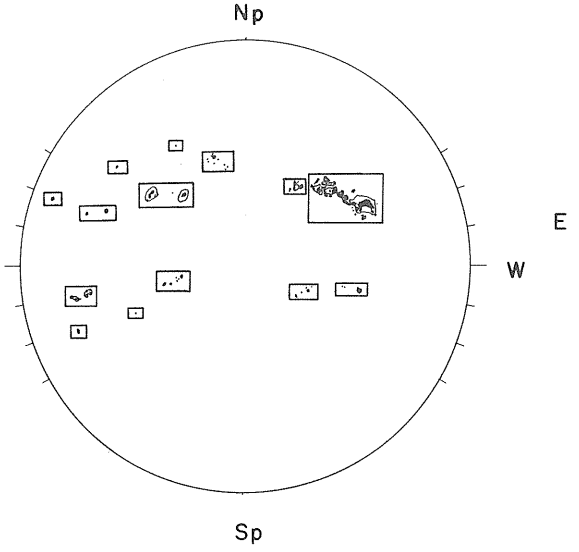
FEBRUARY 1, 1968 (P=-11.86, B_o=-6.00, L_o=147.29)

BOULDER



1546 UT

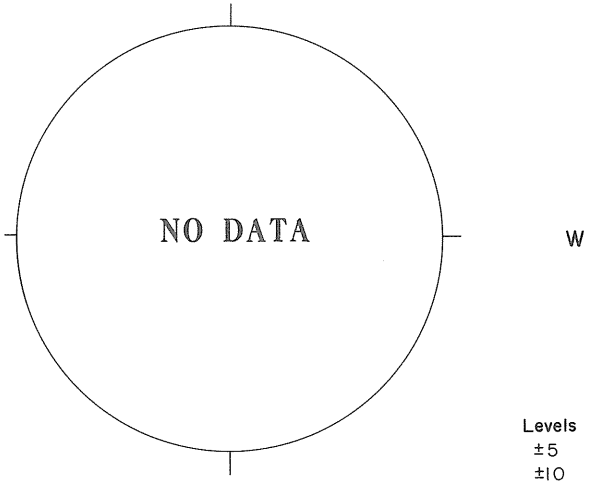
ESSA-BOULDER SUNSPOTS



1650 UT

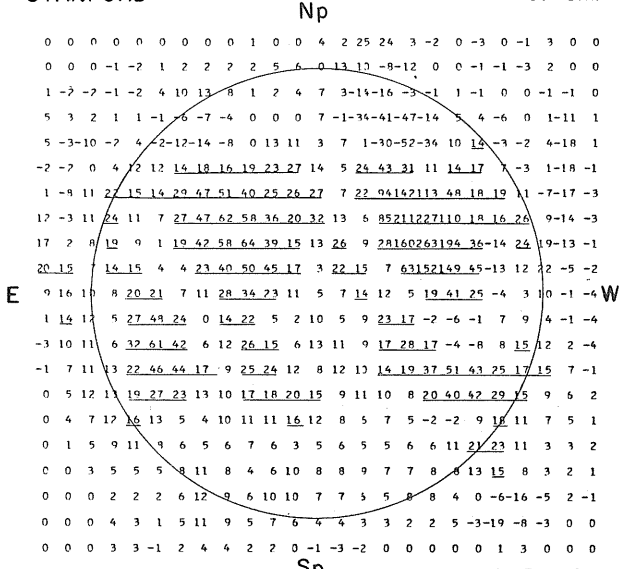
MT. WILSON MAGNETOGRAM

Solid-Plus
Dotted-Minus



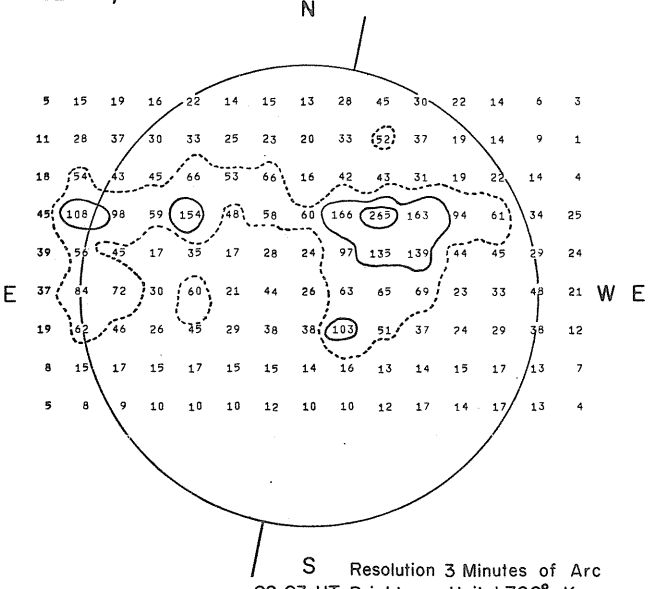
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



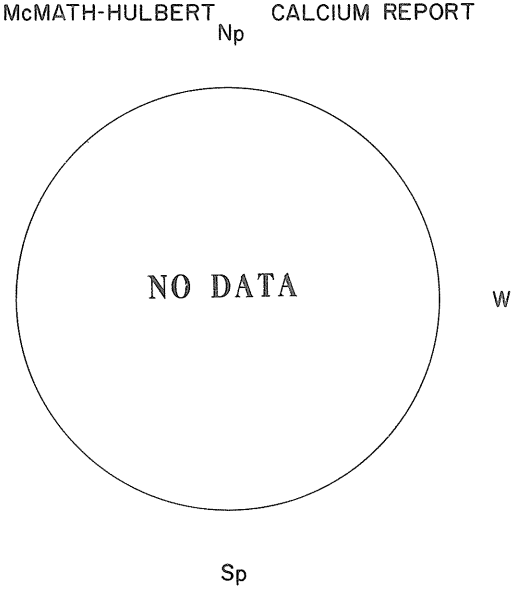
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT

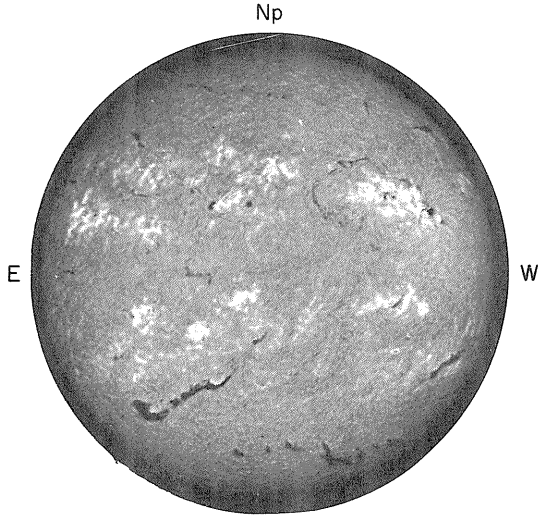


FEBRUARY 2, 1968 (P=-12.27, B_o=-6.07, L_o=134.12)

MT. WILSON

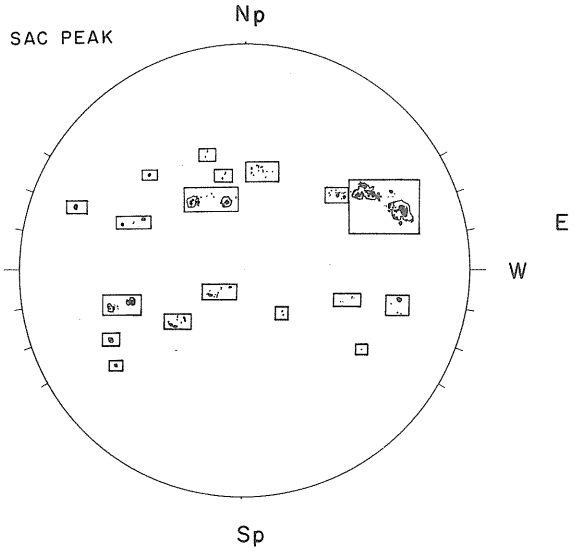
MAGNETOGRAM
Solid-Plus
Dotted-Minus

SACRAMENTO PEAK

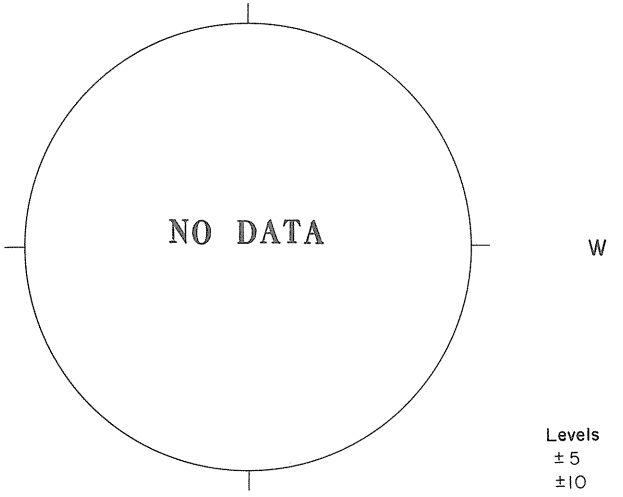


1616 UT

ESSA-BOULDER SUNSPOTS

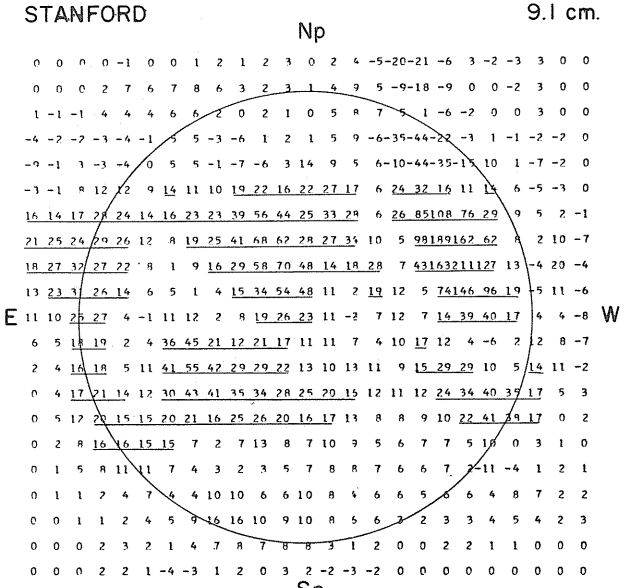


1600 UT



Levels
±5
±10
±20
±40
±80

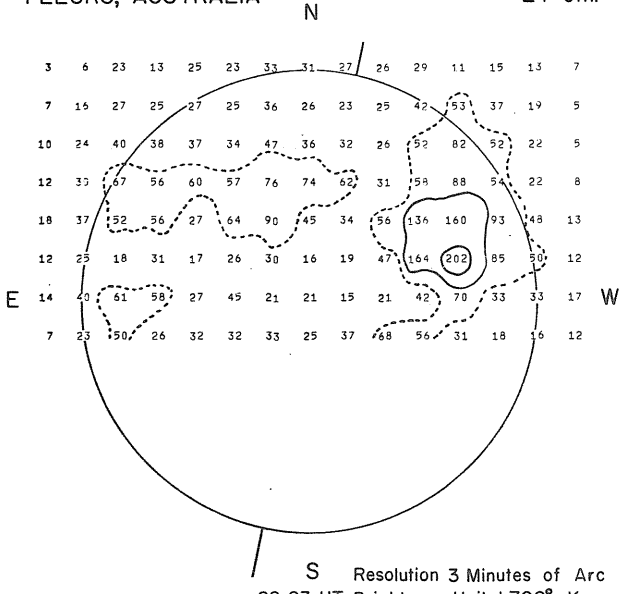
STANFORD 9.1 cm.



20-21 UT

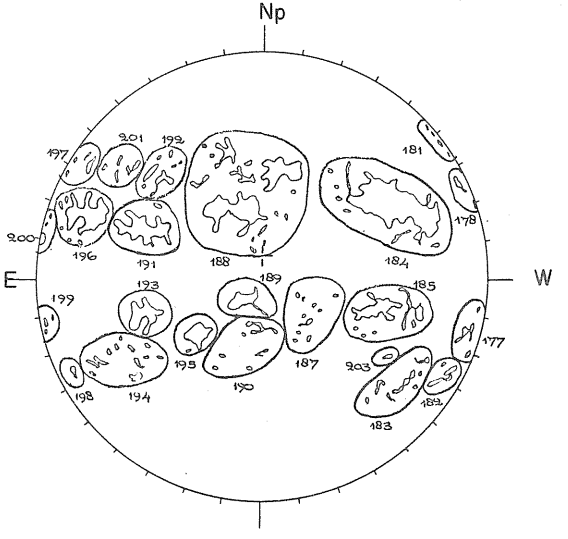
Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT

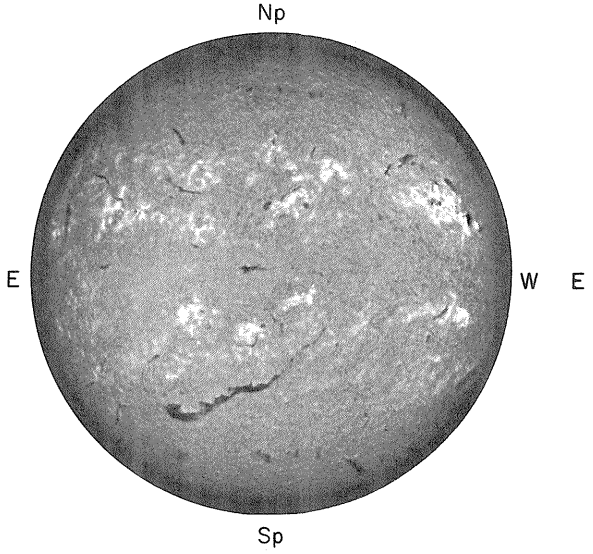


1840 UT

78-10-2.5
83-16-2.5
84-91-3.0
85-31-3.0
88-83-3.0
89-12-3.0
91-33-3.0
92-15-2.5
93-21-3.0
94-16-2.5
95-13-2.5
96-60-3.0

FEBRUARY 3, 1968 (P=-12.67, B_o=-6.14, L_o=120.95)

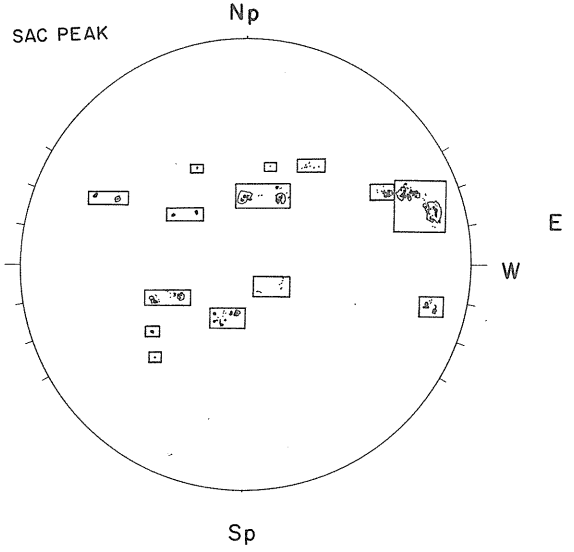
SACRAMENTO PEAK



1603 UT

ESSA-BOULDER SUNSPOTS

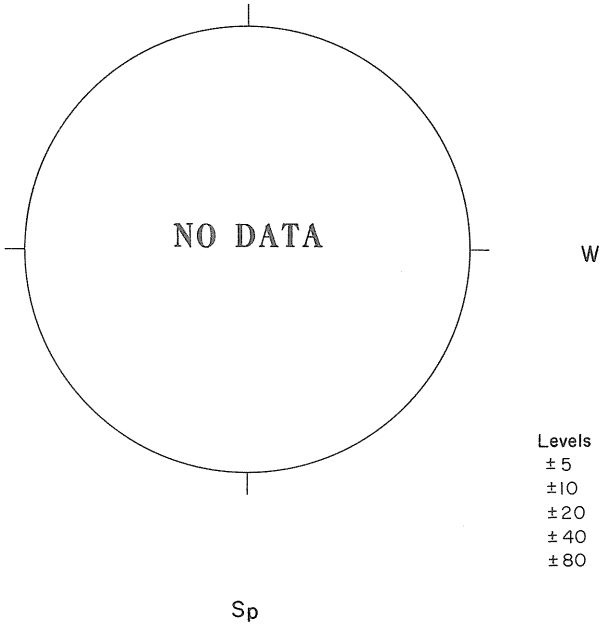
SAC PEAK



1620 UT

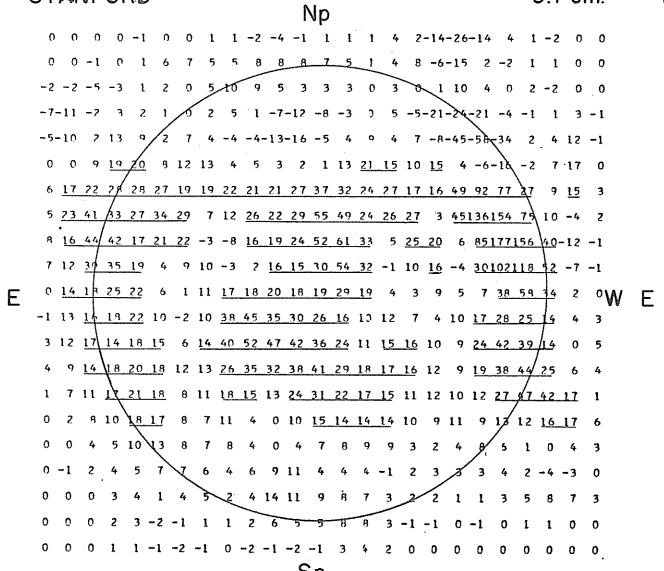
MT. WILSON MAGNETOGRAM

Solid-Plus
Dotted-Minus



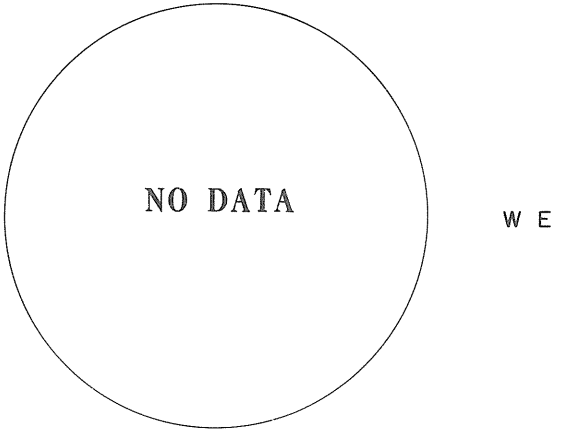
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



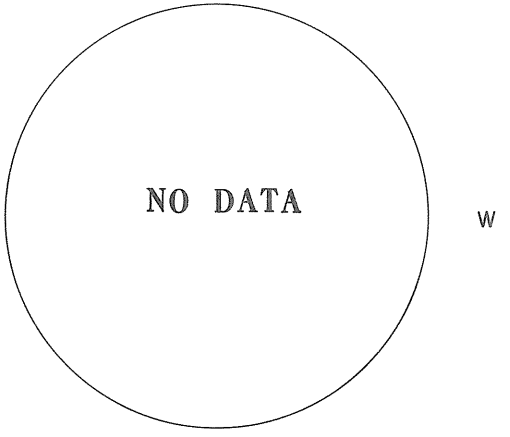
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT

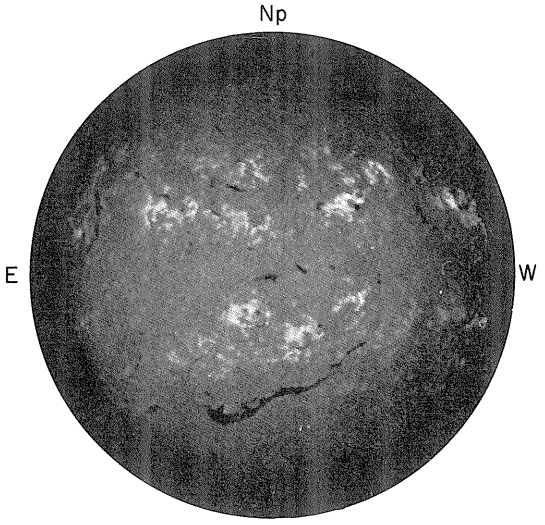


FEBRUARY 4, 1968 (P=-13.07, B_o=-6.20, L_o=107.79)

MT. WILSON

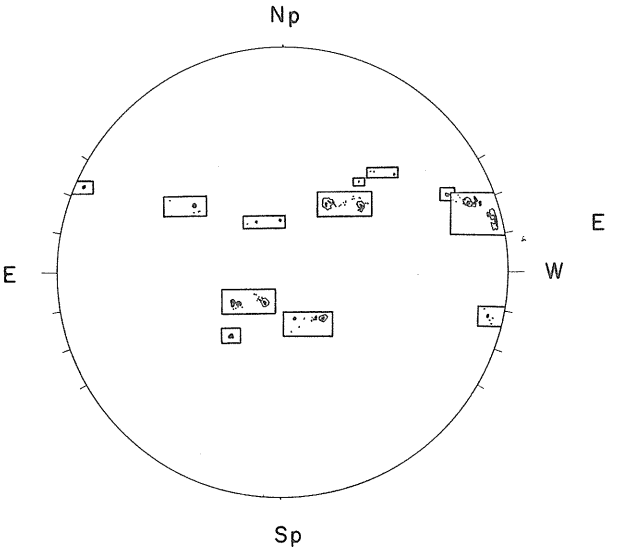
MAGNETOGRAM
Solid-Plus
Dotted-Minus

BOULDER

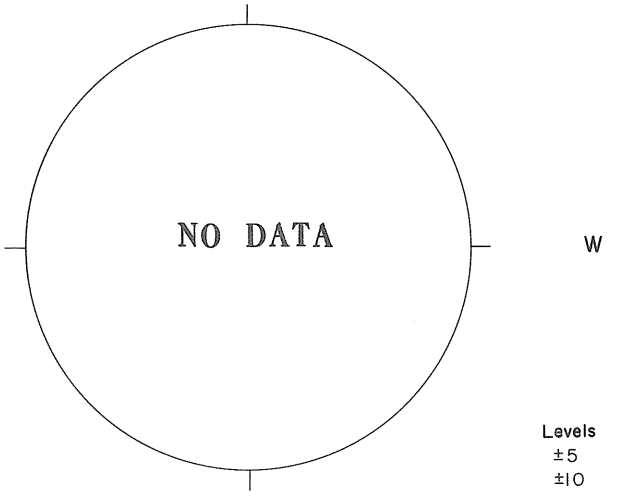


1604 UT

ESSA-BOULDER SUNSPOTS

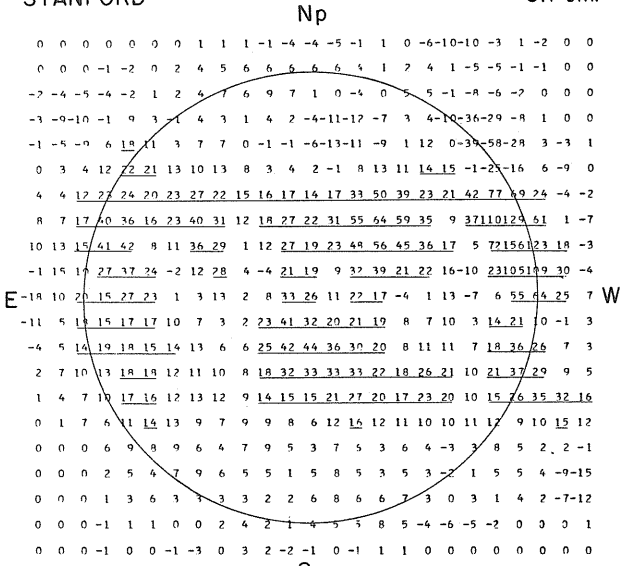


1710 UT



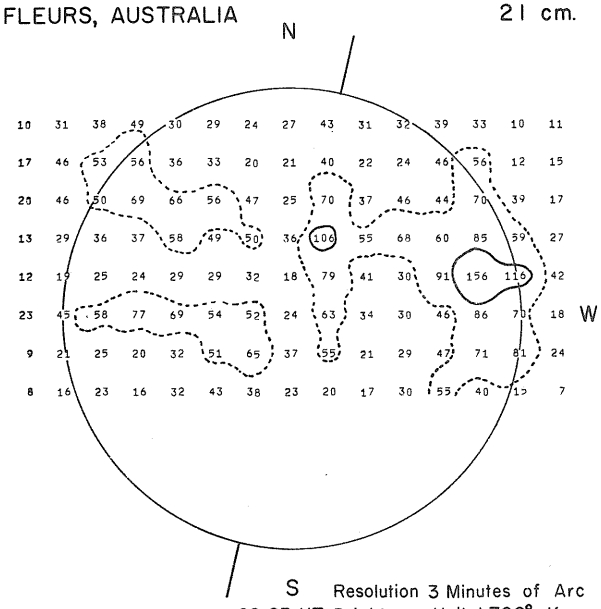
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



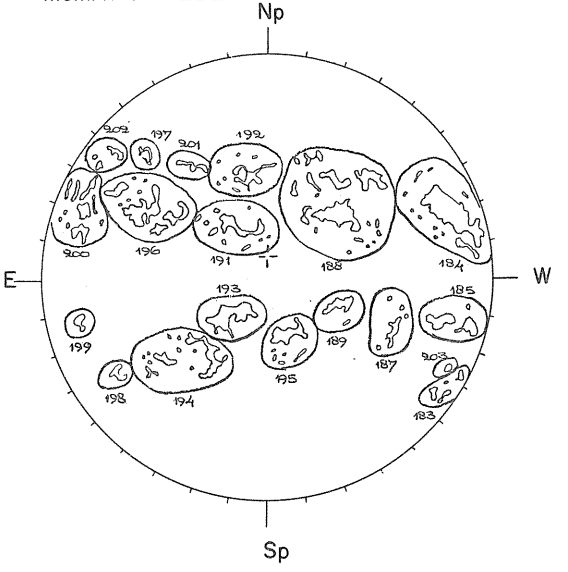
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT



1445 UT

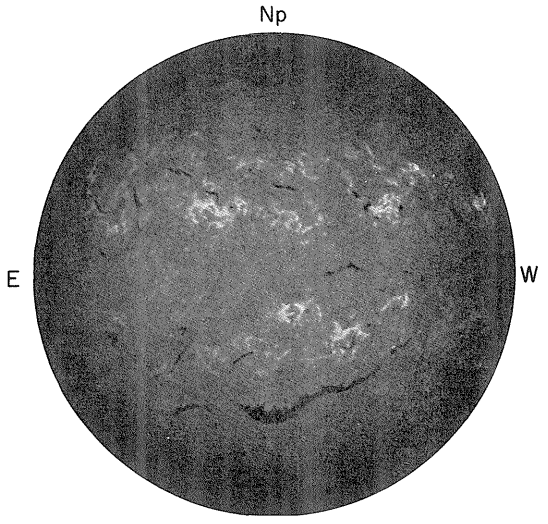
84-89-3.0
85-35-2.5
88-81-3.0
91-25-2.0
93-21-2.5
95-14-2.5
96-58-2.5
00-36-2.5
02-12-2.5

FEBRUARY 5, 1968 (P=-13.47, B_o=-6.27, L_o= 94.62)

MT. WILSON

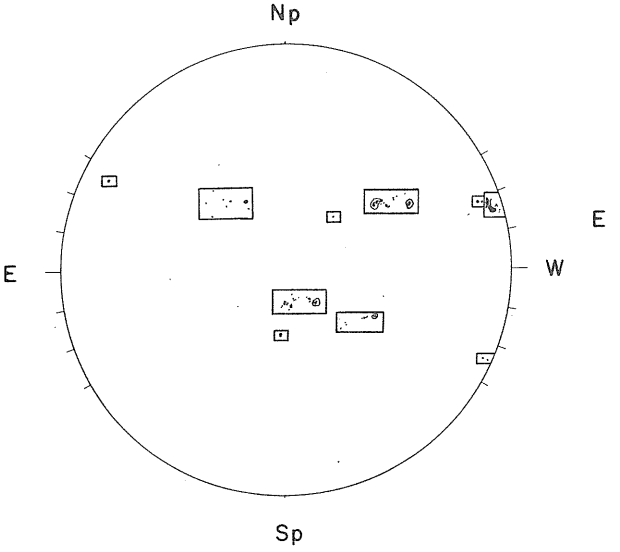
MAGNETOGRAM
Solid-Plus
Dotted-Minus

BOULDER

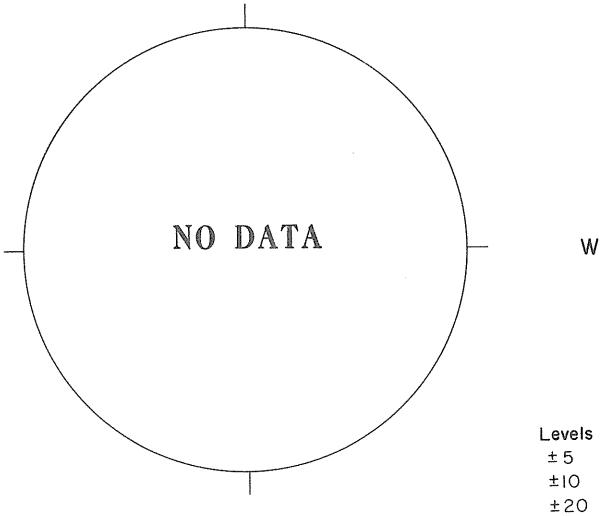


1519 UT

ESSA-BOULDER SUNSPOTS

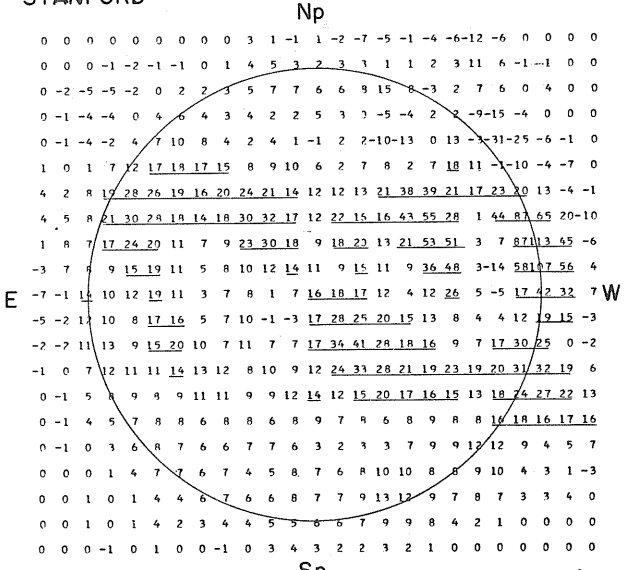


1555 UT



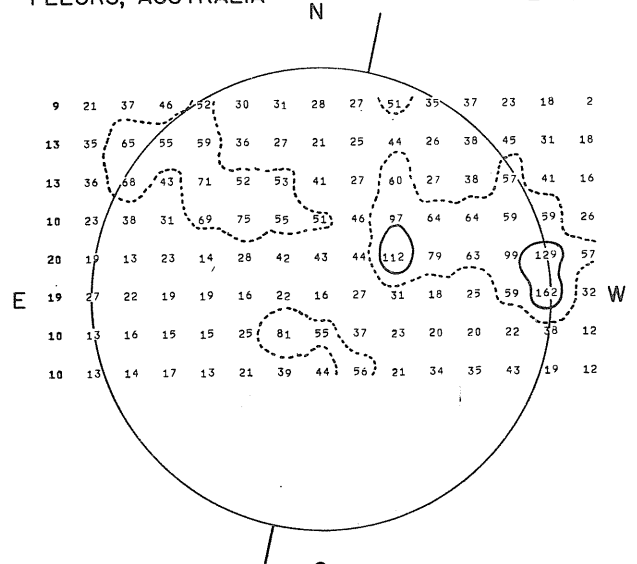
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



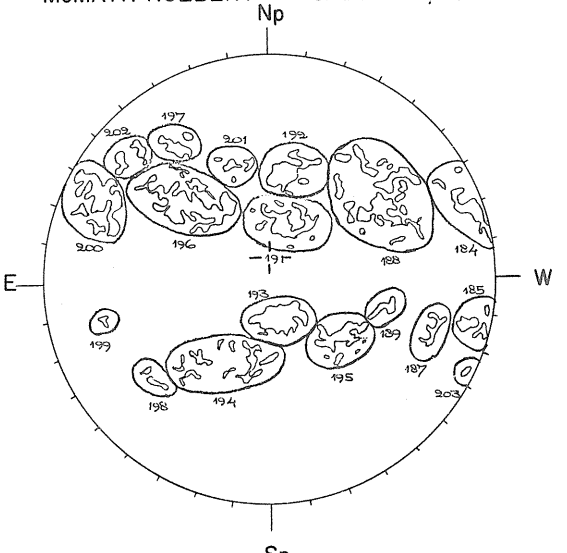
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT



1415 UT

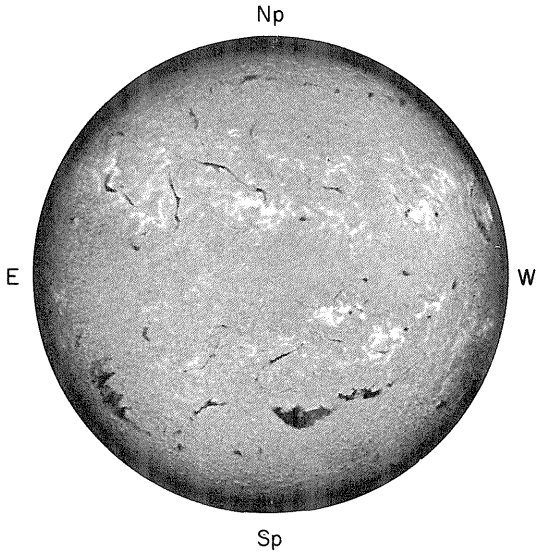
84-77-3.0
85-33-3.0
88-83-3.0
89-09-2.5
93-32-2.5
95-19-2.5
96-64-2.5
00-50-3.0
03-10-3.5

FEBRUARY 6, 1968 (P=-13.86, B_o=-6.33, L_o=81.46)

MT. WILSON

MAGNETOGRAM
Solid-Plus
Dotted-Minus

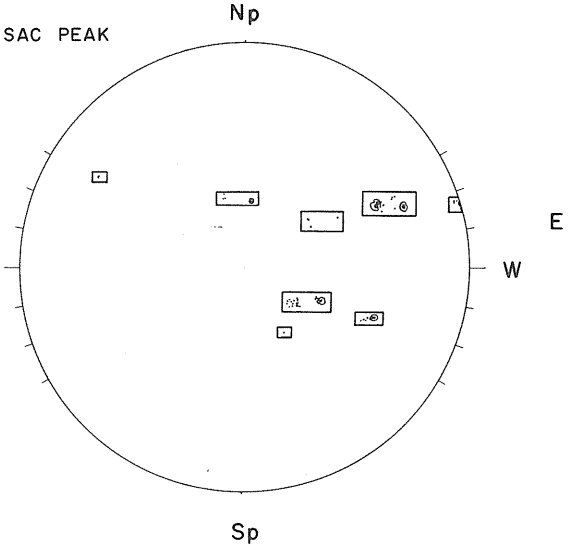
SACRAMENTO PEAK



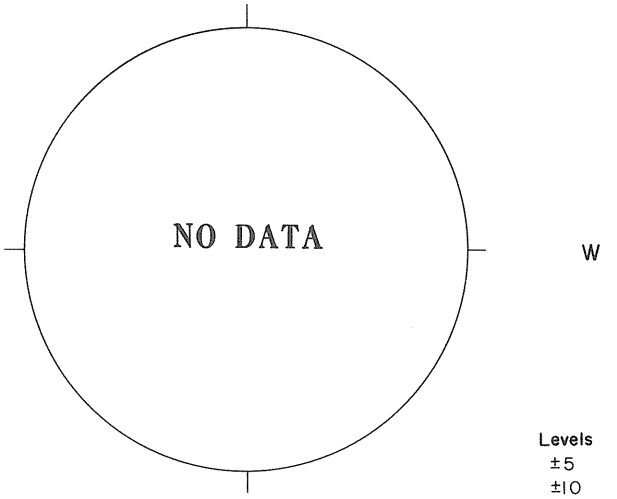
1448 UT

ESSA-BOULDER SUNSPOTS

SAC PEAK

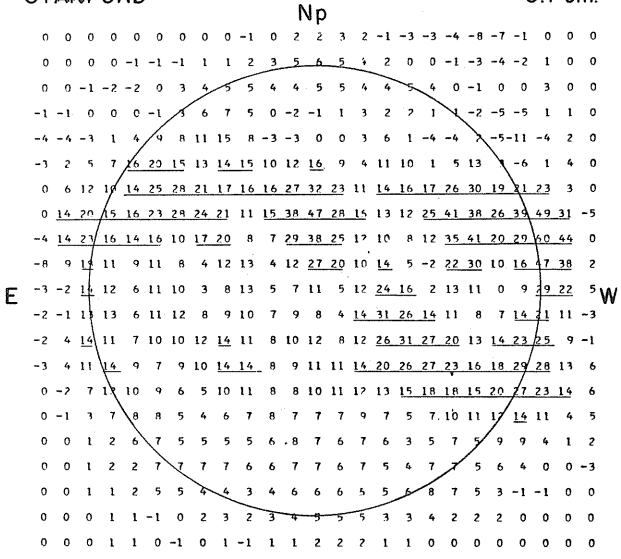


1545 UT



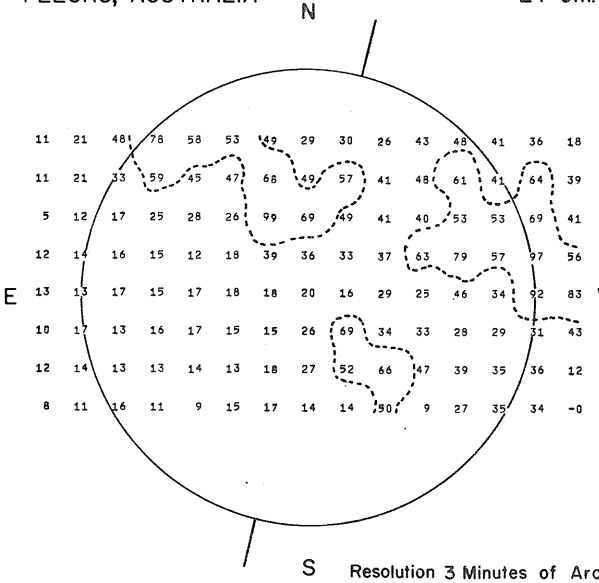
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



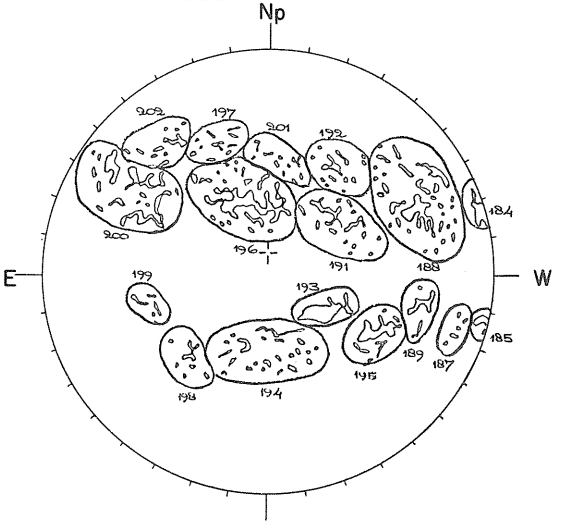
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT

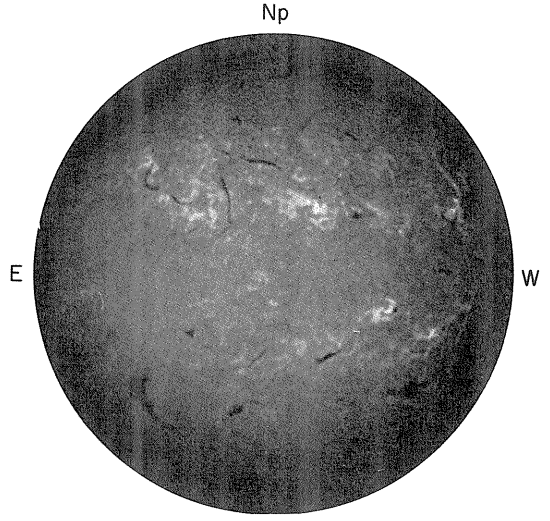


1410 UT

84-39-3.5
85-15-2.5
88-59-2.5
89-13-2.5
93-23-3.0
95-27-3.0
96-52-3.5
00-53-2.5

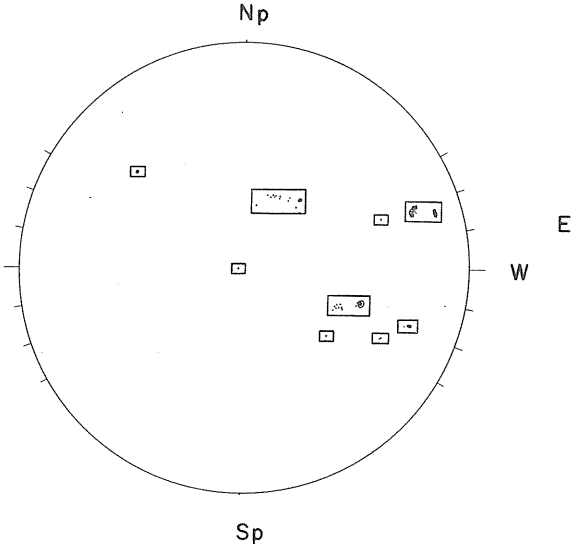
FEBRUARY 7, 1968 (P=-14.25, B_o=-6.40, L_o=68.29)

BOULDER



1720 UT

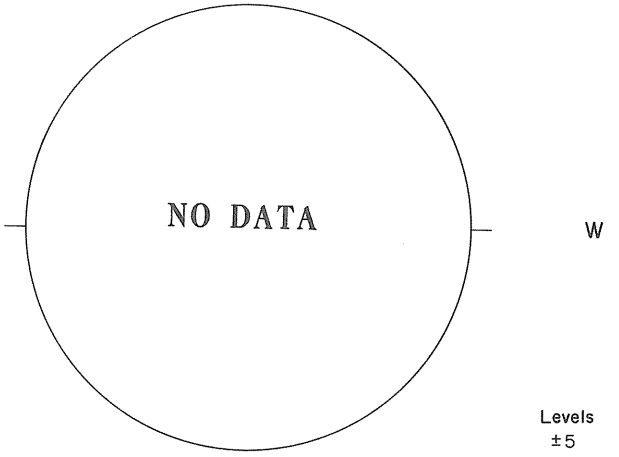
ESSA-BOULDER SUNSPOTS



1605 UT

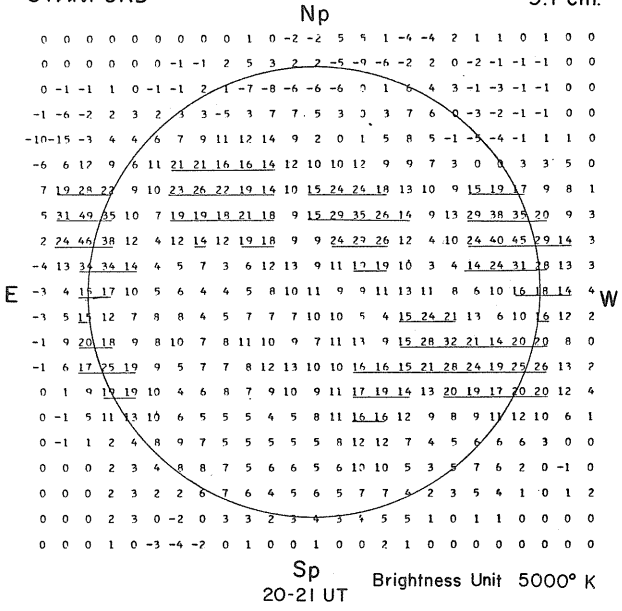
MT. WILSON MAGNETOGRAM

Solid-Plus
Dotted-Minus



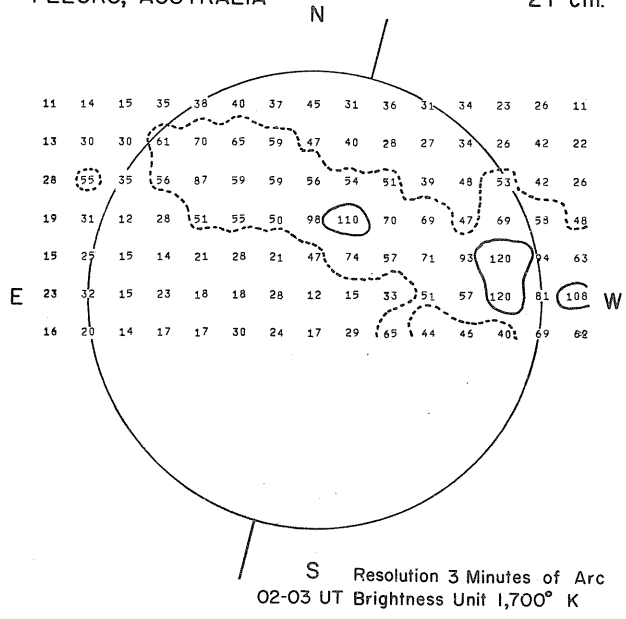
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



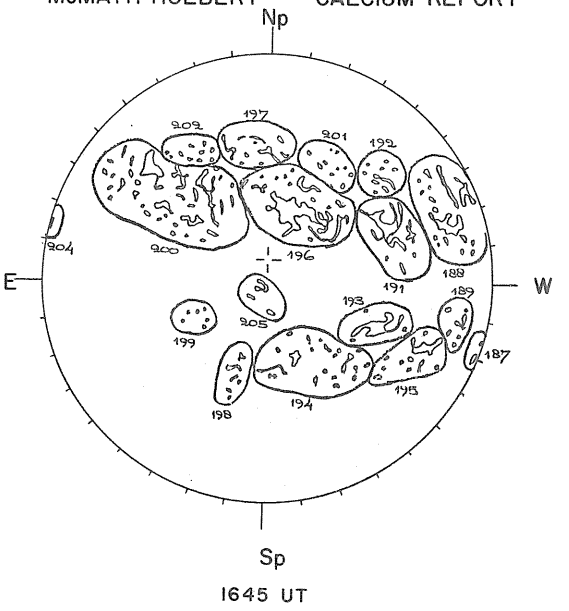
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT



1645 UT

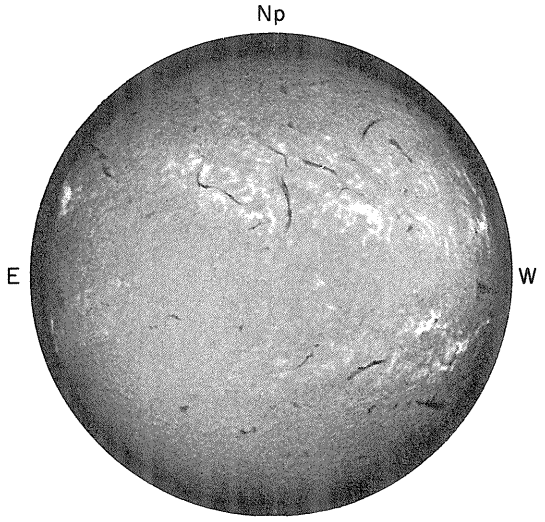
88-61-3.0
89-12-2.5
91-26-2.5
93-21-3.0
95-22-3.0
96-51-3.0
00-59-2.5
04-13-3.0

FEBRUARY 8, 1968 (P=-14.63, B_o=-6.45, L_o= 55.12)

MT. WILSON

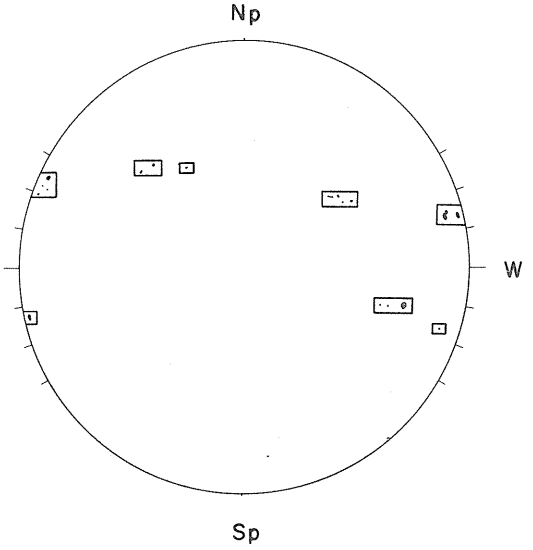
MAGNETOGRAM
Solid-Plus
Dotted-Minus

SACRAMENTO PEAK

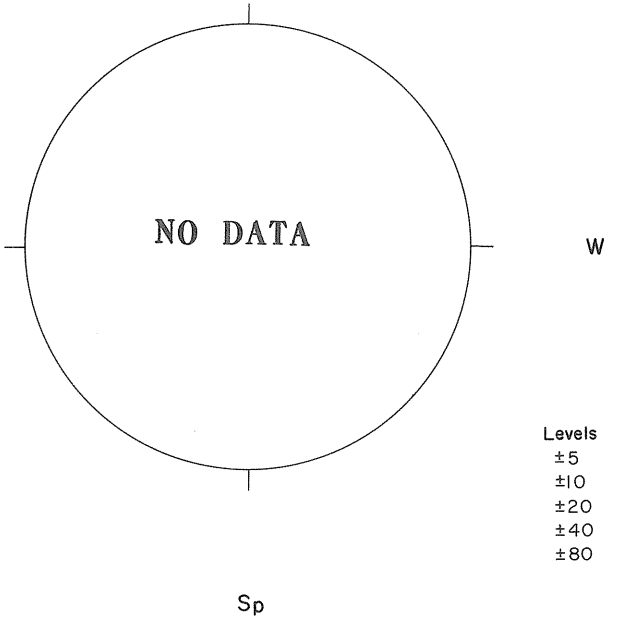


1755 UT

ESSA-BOULDER SUNSPOTS

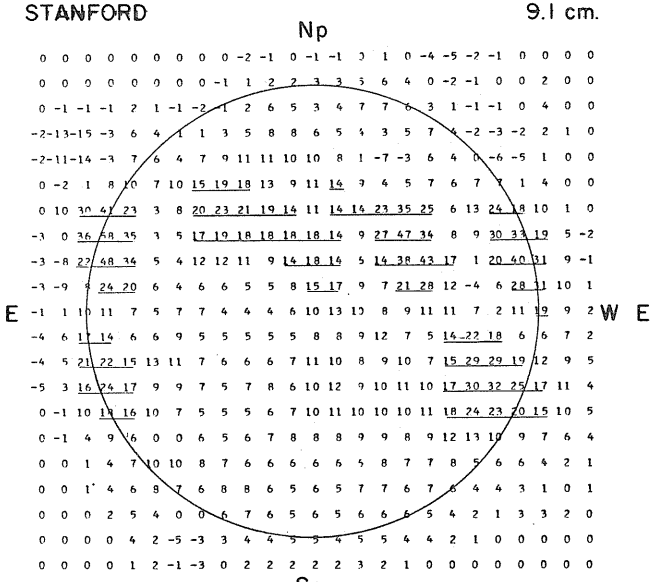


1830 UT



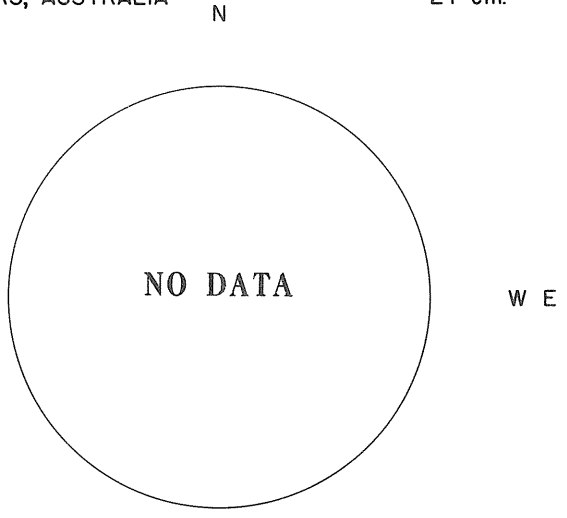
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



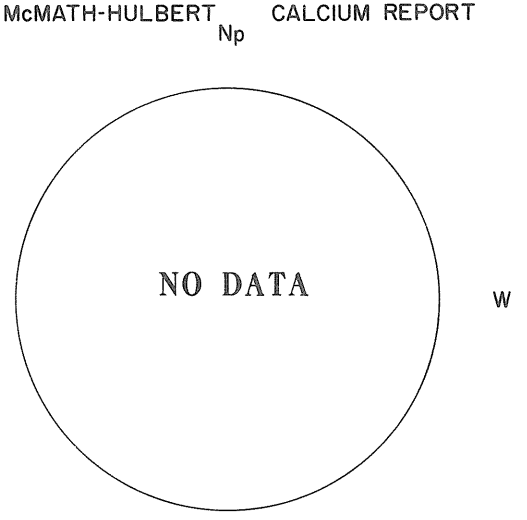
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



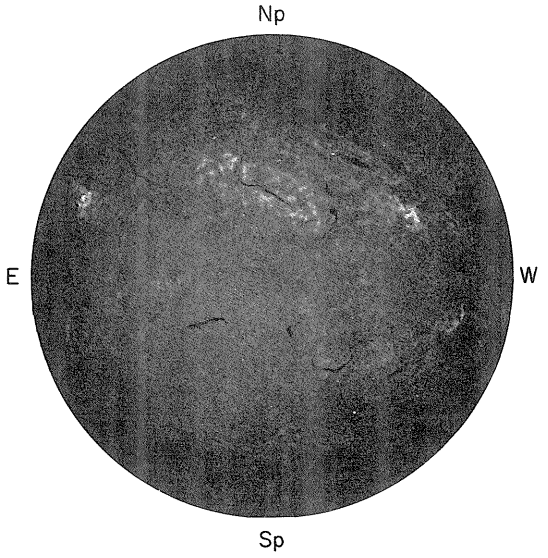
Resolution 3 Minutes of Arc
02-03 UT Brightness Unit 1,700° K

McMATH-HULBERT CALCIUM REPORT



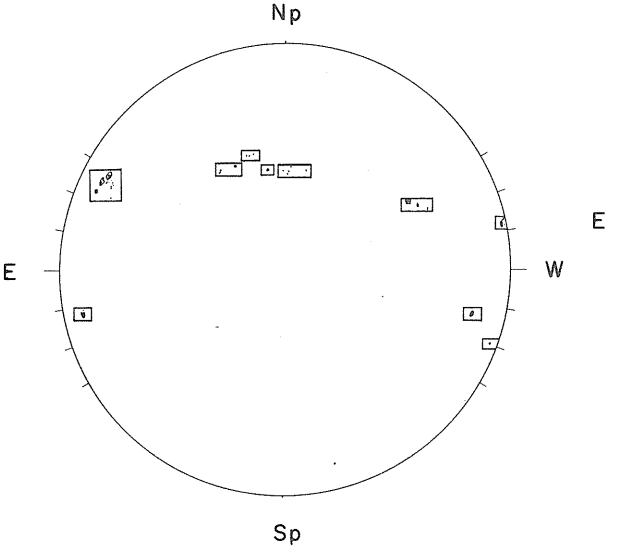
FEBRUARY 9, 1968 (P=-15.01, B_o=-6.51, L_o=41.96)

BOULDER



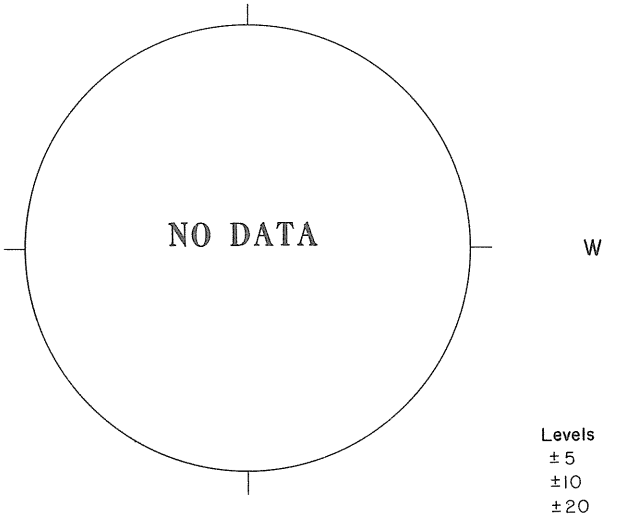
1537 UT

ESSA-BOULDER SUNSPOTS



1515 UT

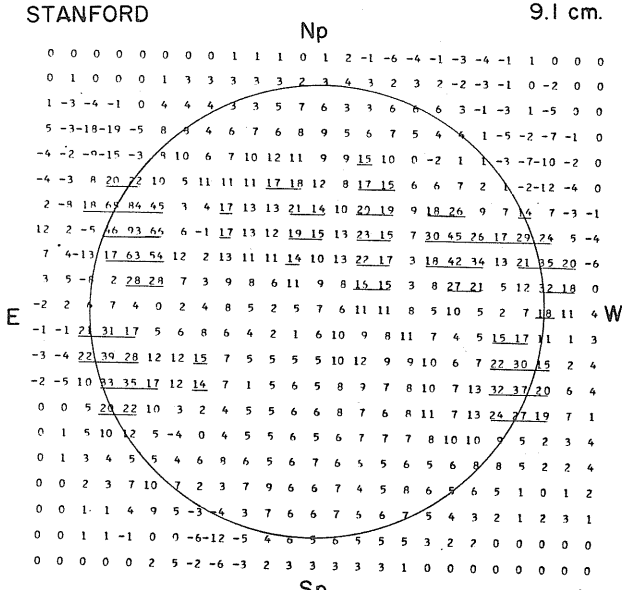
MT. WILSON



MAGNETOGRAM
Solid-Plus
Dotted-Minus

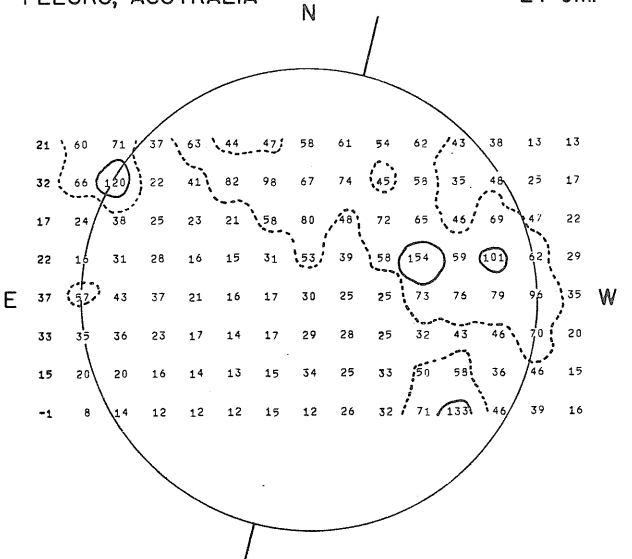
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



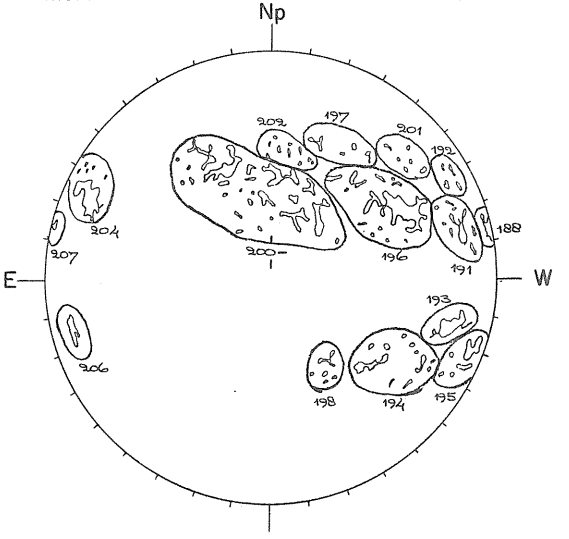
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT



1555 UT

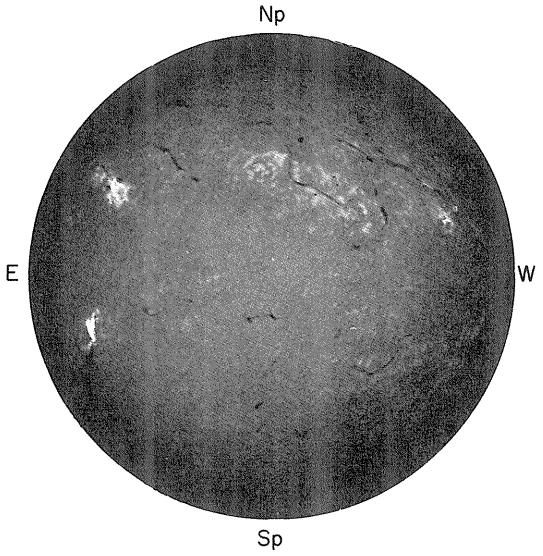
88-23-3.0
93-20-3.0
94-18-2.5
95-24-3.0
96-47-3.0
00-67-2.5
04-35-3.5
06-14-2.5

FEBRUARY 10, 1968 (P=-15.38, B_o=-6.57, L_o=28.79)

MT. WILSON

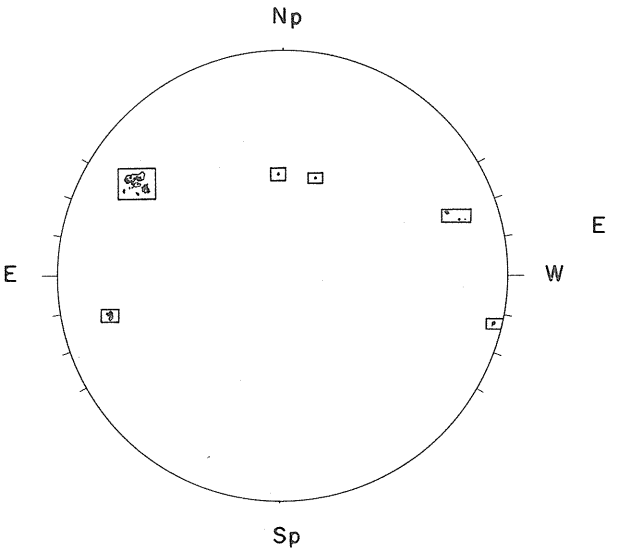
MAGNETOGRAM
Solid-Plus
Dotted-Minus

BOULDER

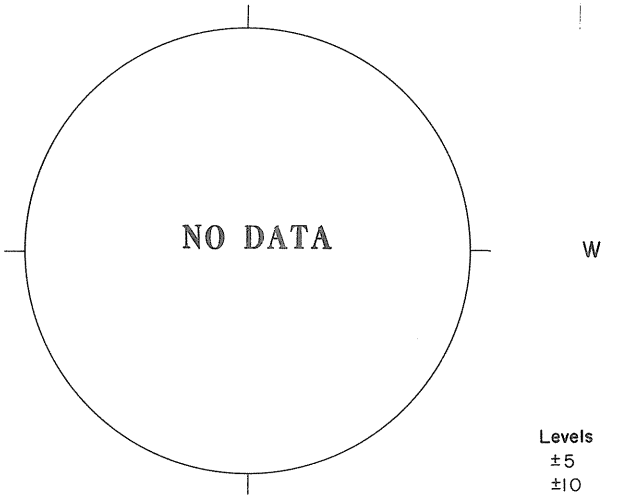


1623 UT

ESSA-BOULDER SUNSPOTS

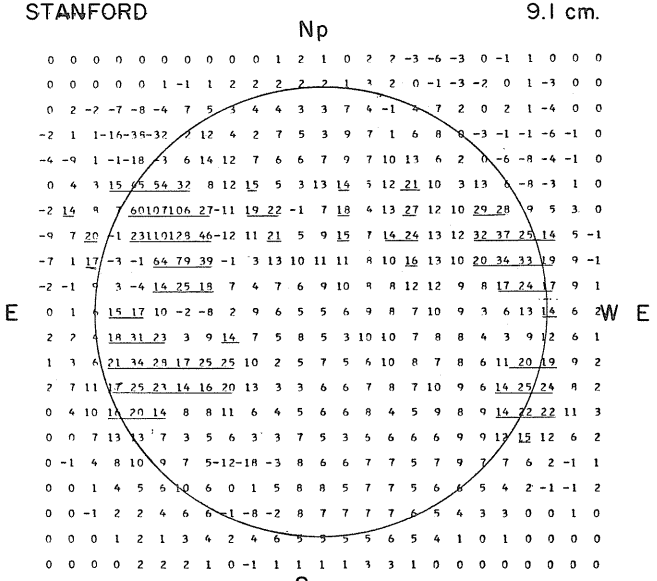


1650 UT



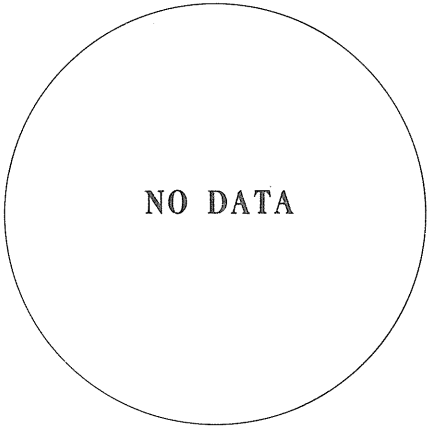
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



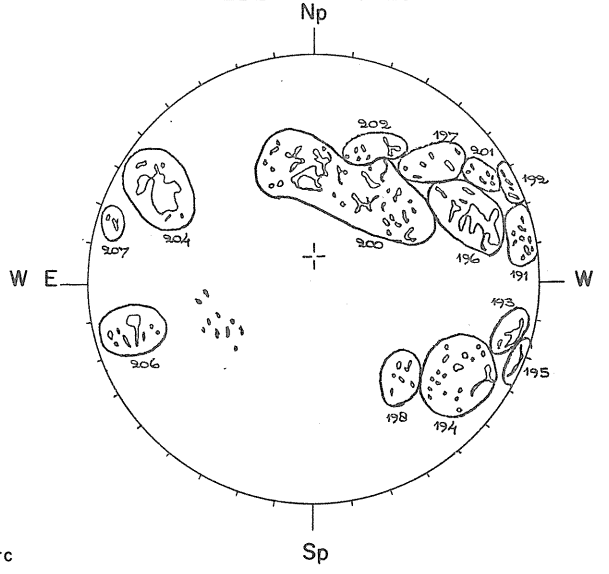
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT

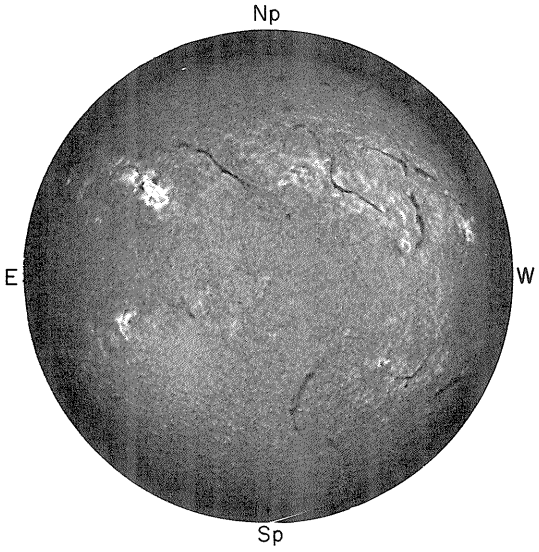


1555 UT

93-16-2.5
95-14-2.5
96-42-3.0
00-61-2.5
02-08-2.5
04-49-3.5
06-20-3.5

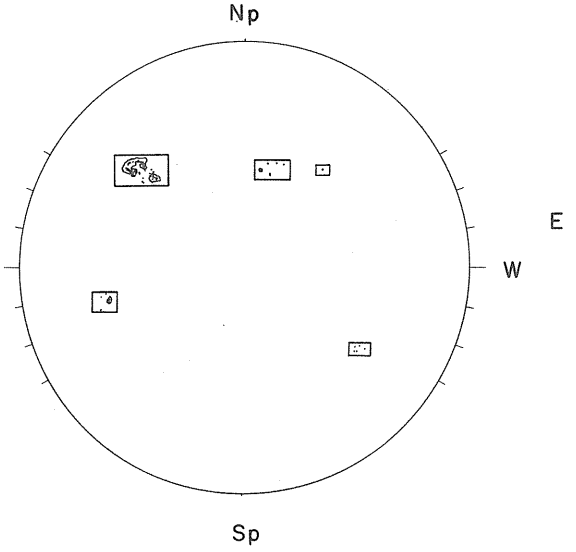
FEBRUARY 11, 1968 (P = -15.74, B_o = -6.62, L_o = 15.62)

SACRAMENTO PEAK



1559 UT

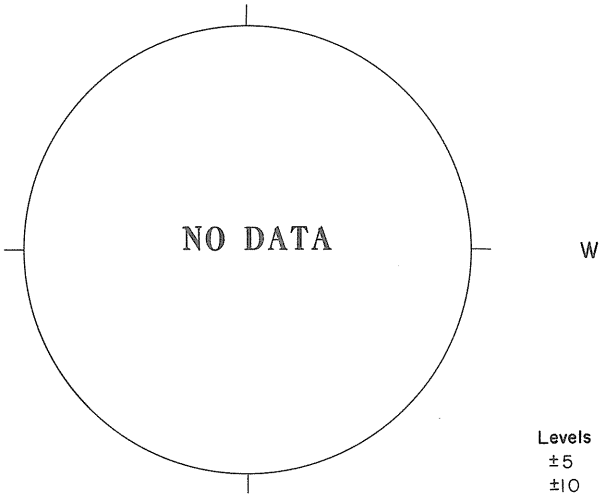
ESSA-BOULDER SUNSPOTS



1800 UT

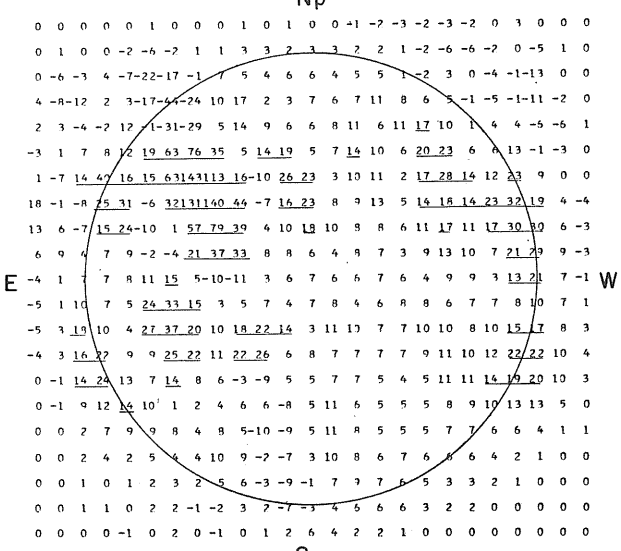
MT. WILSON MAGNETOGRAM

Solid-Plus
Dotted-Minus



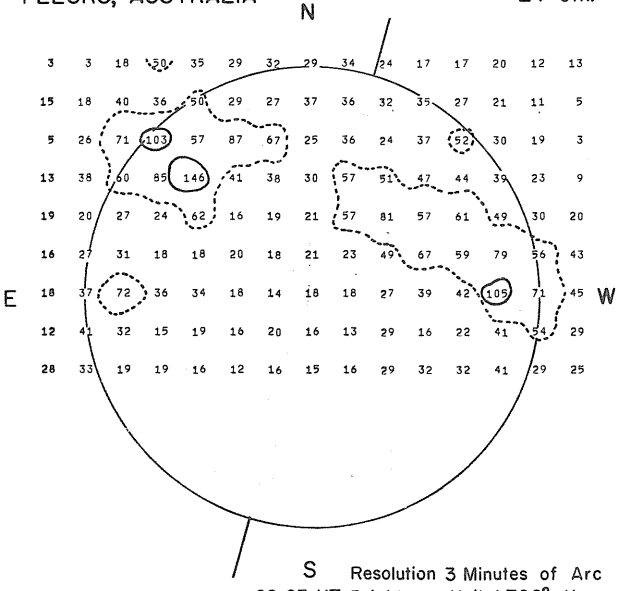
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



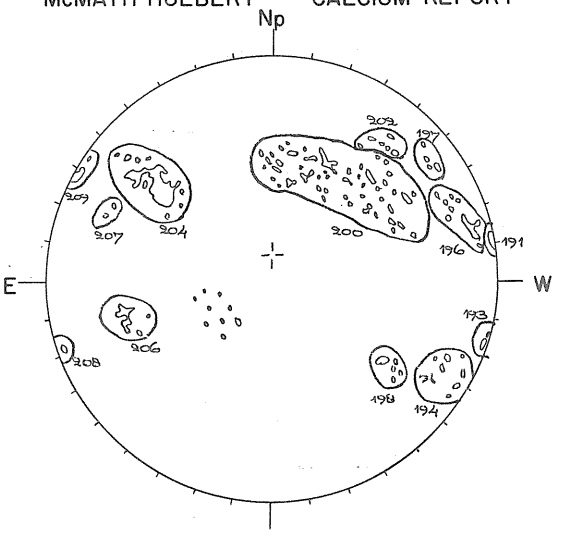
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

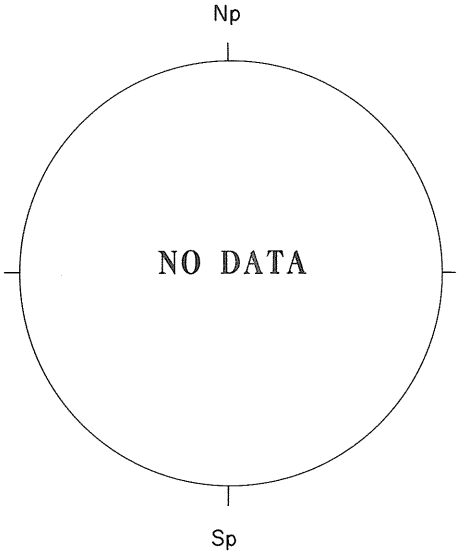
McMATH-HULBERT CALCIUM REPORT

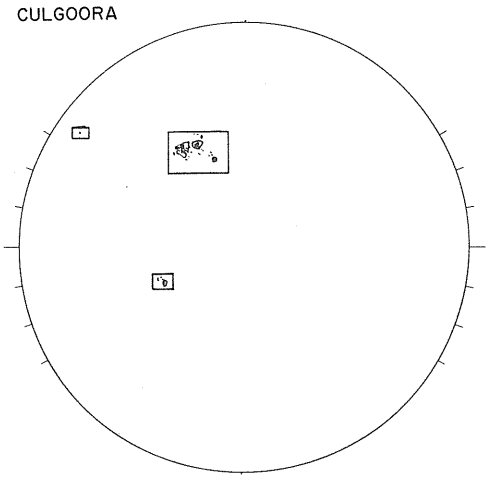


1440 UT

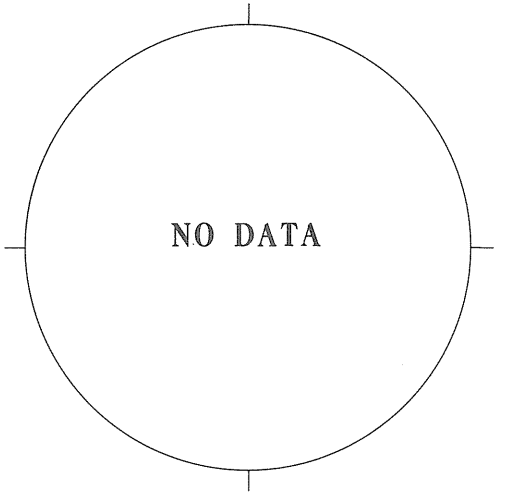
96-25-3.0
00-51-2.5
02-07-3.0
04-48-3.5
06-13-3.0
09-13-3.0

FEBRUARY 12, 1968 (P=-16.10, B_o=-6.67, L_o=2.45)

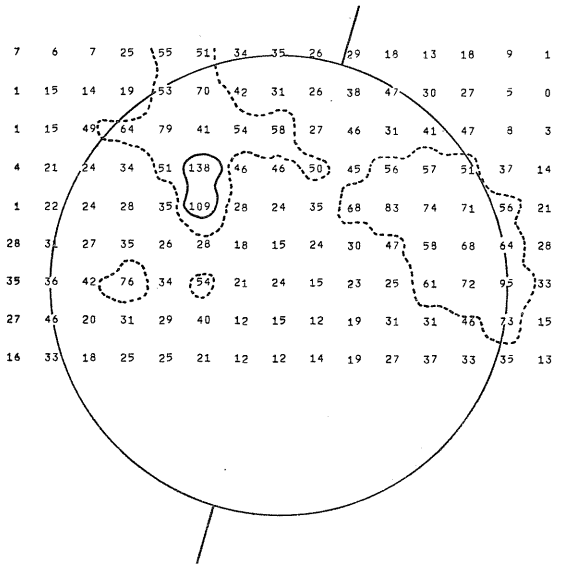


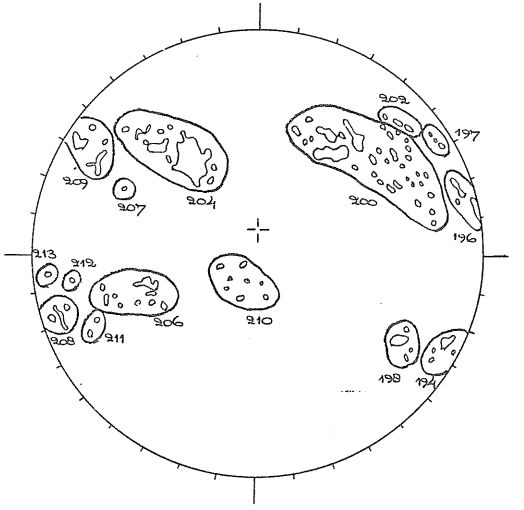


0140 UT FEB. 13



0	0	0	0	0	0	0	0	-1	0	2	-2	-1	1	1	1	-1	-3	-3	-3	-1	-1	0	0	0
0	0	0	0	1	-1	-2	-5	-7	4	5	5	5	4	3	2	1	-1	-4	-4	-1	2	4	-1	0
0	-1	-3	-1	2	5	-4	-16	-13	0	10	4	3	5	8	5	6	5	0	-4	-2	1	9	0	0
-2	-2	2	-3	-2	0	7	-16	-41	-22	7	12	2	2	9	6	7	11	8	-1	-3	-2	11	2	0
-2	-4	-1	9	6	2	8	12	4	-1	4	10	7	7	9	8	9	8	11	11	3	-3	1	6	-1
1	2	4	12	25	18	3	21	58	60	30	2	10	15	15	5	13	10	3	16	15	2	2	1	0
5	13	10	6	27	33	3	2	62	137	119	22	-13	22	23	3	12	16	4	14	27	15	9	-2	0
7	13	25	17	5	25	26	-8	261	222	129	47	-9	13	22	6	10	16	9	10	22	27	22	6	-4
6	3	27	22	2	7	13	-8	-2	56	71	44	5	7	10	9	7	8	11	10	14	30	32	11	-2
2	1	14	17	9	2	1	2	4	6	1	-2	10	10	7	6	4	4	10	6	5	22	31	14	2
-3	0	7	10	8	8	7	8	16	6	-16	-6	8	6	7	10	3	2	7	2	0	14	19	9	3
-2	3	13	11	6	7	11	24	32	16	0	11	15	8	7	11	4	2	6	6	0	5	14	8	1
1	9	20	21	13	5	7	24	30	27	9	13	20	13	5	8	7	5	8	9	8	11	11	3	0
0	9	20	24	19	10	3	11	23	19	6	11	18	11	5	7	6	7	8	7	12	16	11	6	3
0	3	15	22	21	12	5	7	9	5	3	7	7	7	6	7	3	4	6	8	13	19	16	9	5
0	1	8	15	14	10	7	5	5	5	4	5	-3	-8	1	8	5	6	8	8	11	14	12	6	4
0	0	3	7	10	10	7	5	5	4	6	7	1	1	7	8	6	6	7	7	7	8	5	3	2
0	0	1	4	6	6	5	4	5	7	10	8	1	-1	5	8	6	4	6	5	4	2	1	-1	-2
0	0	0	3	4	5	5	4	3	4	8	8	4	0	2	7	8	5	4	3	2	-2	-2	-2	0
0	0	0	1	2	4	2	2	2	3	5	6	4	0	1	2	3	4	-1	-1	0	0	0	0	0
0	0	0	0	1	2	0	-1	1	1	1	2	0	-1	-6	-8	-1	0	0	0	0	0	0	0	0

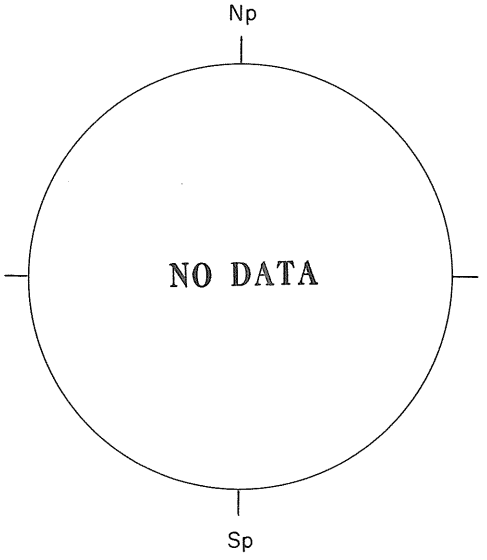


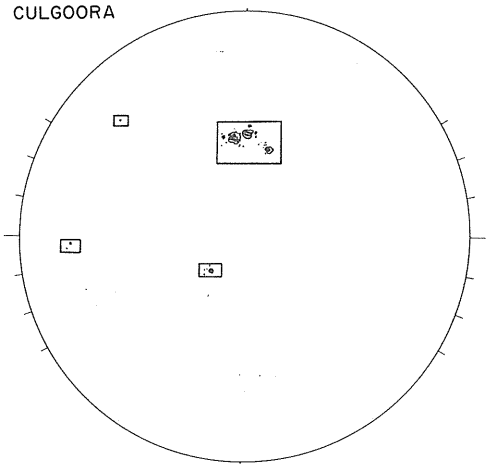


1430 UT

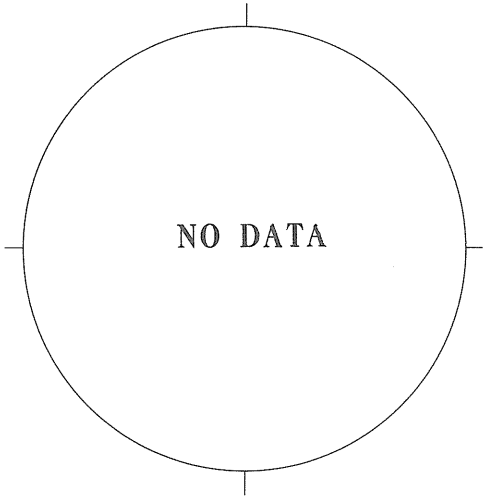
96-30-3.0
98-11-3.0
00-53-2.5
02-06-2.5
04-53-3.5
06-16-3.0
08-16-2.5
09-23-3.0
13-03-2.5

FEBRUARY 13, 1968 (P=-16.46, B_o=-6.72, L_o=349.29)

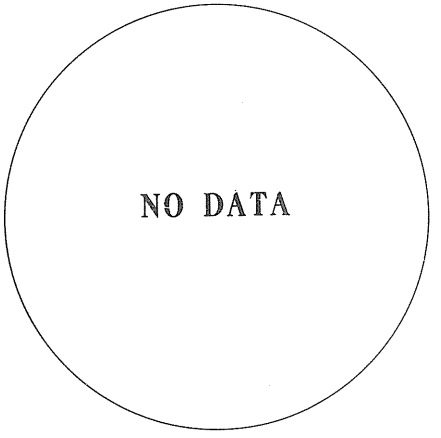


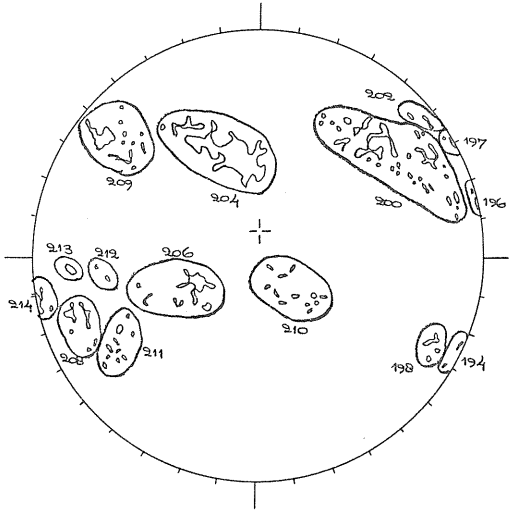


0140 UT FEB. 14



0	0	0	0	0	-1	0	0	0	0	-2	1	2	2	1	1	0	-2	-3	-2	0	-1	0	0	0
0	0	0	0	0	0	3	6	3	-1	-6	-1	4	5	4	3	3	2	0	-2	-1	-2	-1	0	0	0
0	-1	-2	-3	-3	-1	4	8	1	-14	-12	1	7	5	2	4	6	3	1	0	-4	-5	1	0	0
0	-2	-6	-2	3	2	2	5	8	-4	-23	-14	6	9	2	3	9	6	3	3	-1	-3	2	0	0
-3	-1	0	0	8	14	8	4	12	10	4	-3	2	5	7	7	8	9	8	2	1	6	6	2	-1
-3	1	5	7	10	16	18	12	4	19	48	54	27	7	7	16	14	4	10	10	2	7	13	1	0
3	5	9	19	17	14	18	21	13	4	38	97	89	24	-7	15	21	5	9	15	8	11	16	3	0
-3	9	14	18	24	17	6	16	18	-5	12	81	104	45	-1	8	16	7	9	13	12	17	17	6	-3
-8	5	14	15	20	16	3	6	11	-4	-3	32	58	38	12	4	5	8	8	6	8	20	24	11	-2
-9	0	10	11	12	12	4	2	3	3	2	6	12	13	8	10	4	2	6	3	2	14	22	13	0
-2	2	9	10	7	7	6	3	6	13	12	8	0	-2	8	9	8	5	3	1	1	7	13	13	6
1	9	18	17	9	9	9	2	7	22	26	15	8	13	14	8	7	8	7	2	4	8	8	7	2
-1	9	26	27	16	13	14	3	1	14	30	19	8	17	25	16	5	7	9	4	6	10	9	5	1
-1	6	20	31	25	10	11	10	2	7	20	14	4	13	24	13	7	7	6	6	10	14	10	5	2
0	2	11	25	23	13	10	8	4	3	9	6	3	7	10	9	6	6	6	6	10	14	10	5	2
0	0	5	15	16	13	8	7	7	5	4	4	4	5	5	-1	3	8	7	7	10	13	9	4	1
0	0	2	7	11	12	10	6	5	5	4	6	8	8	5	7	7	6	7	6	7	7	5	3	2
0	0	1	2	8	9	9	7	6	5	5	8	12	9	9	8	3	4	6	4	4	4	1	-1	1
0	0	0	2	5	6	6	6	6	4	3	6	8	9	5	0	-2	3	6	2	1	1	-1	-1	0
0	0	0	1	3	4	4	3	3	2	3	4	5	8	5	-1	-4	-1	2	2	0	0	0	0	0
0	0	0	1	2	2	1	1	0	0	1	2	1	2	4	0	-1	0	0	0	0	0	0	0	0





1435 UT

00-55-2.5
04-66-3.5
06-16-3.5
08-14-2.5
09-25-3.0
13-03-2.5

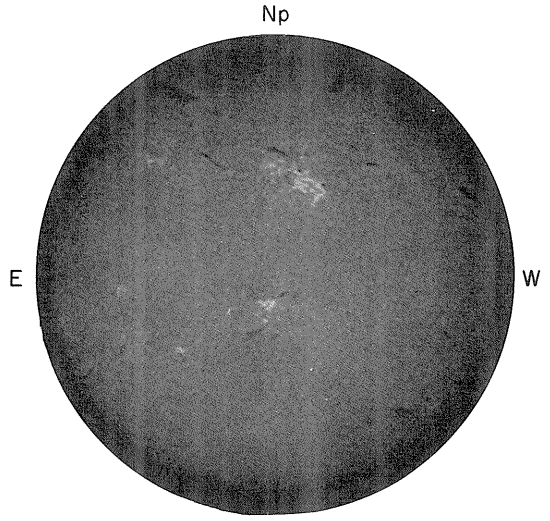
43
Feb 68

FEBRUARY 14, 1968 (P=-16.81, B_o=-6.77, L_o=336.12)

MT. WILSON

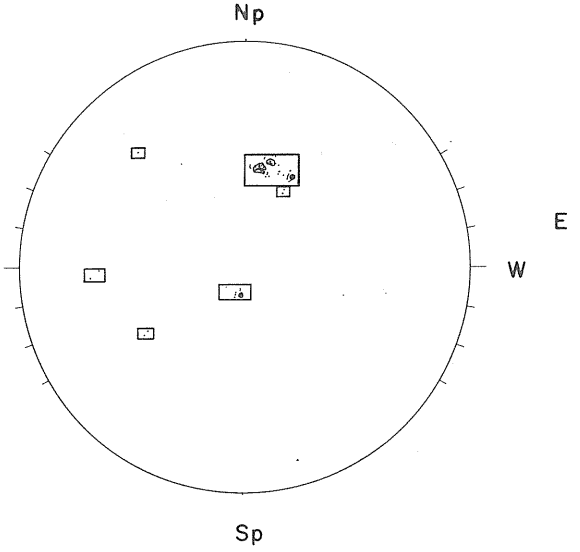
MAGNETOGRAM
Solid-Plus
Dotted-Minus

BOULDER

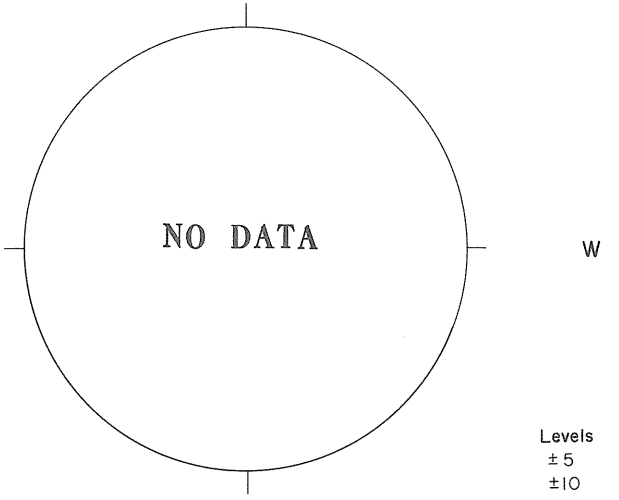


1615 UT

ESSA-BOULDER SUNSPOTS

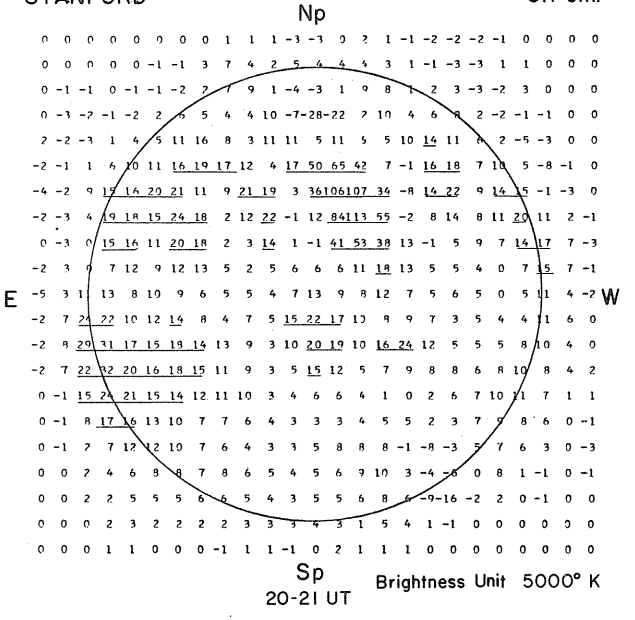


1510 UT



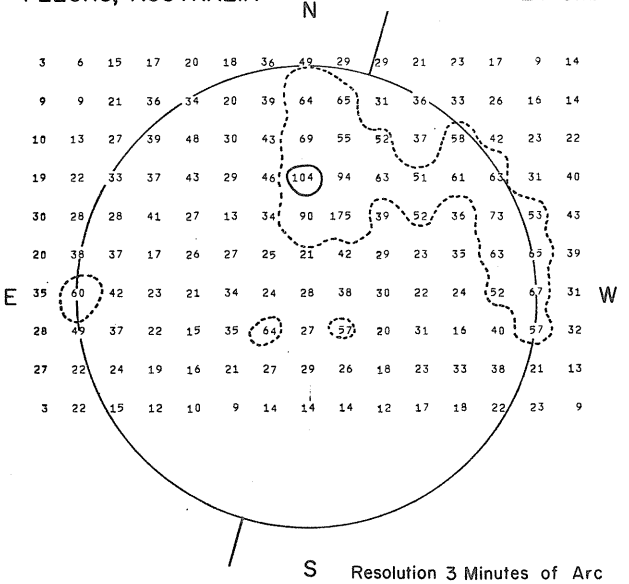
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



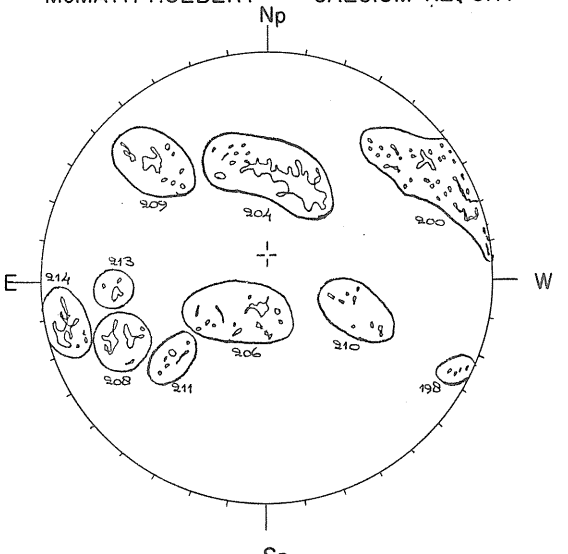
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT

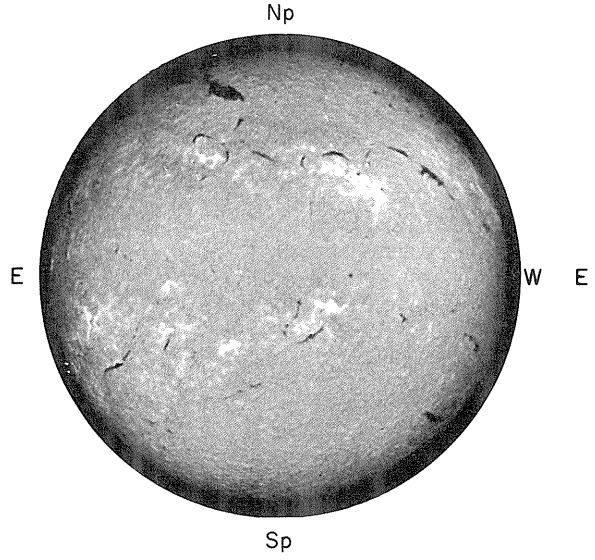


1625 UT

00-44-2.5
04-63-3.5
06-12-3.0
08-19-2.5
09-22-3.0
13-05-2.5

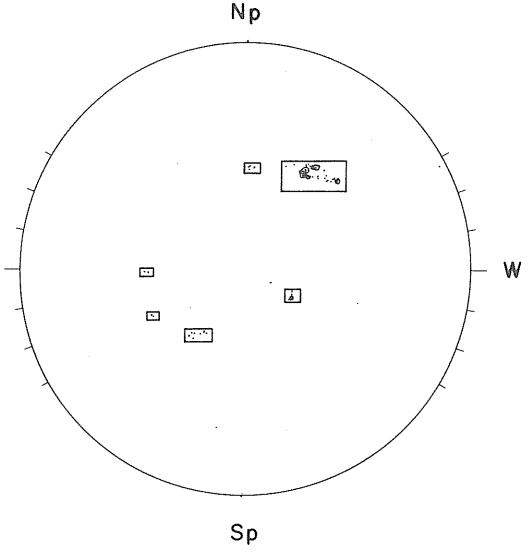
FEBRUARY 15, 1968 (P=-17.15, B_o=-6.81, L_o=322.95)

SACRAMENTO PEAK



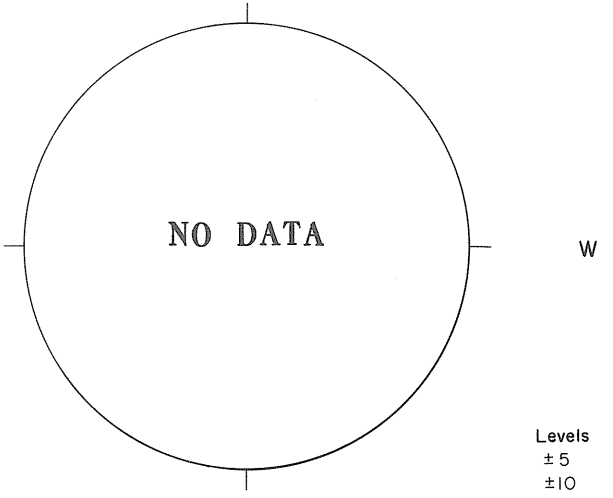
1754 UT

ESSA-BOULDER SUNSPOTS



1650 UT

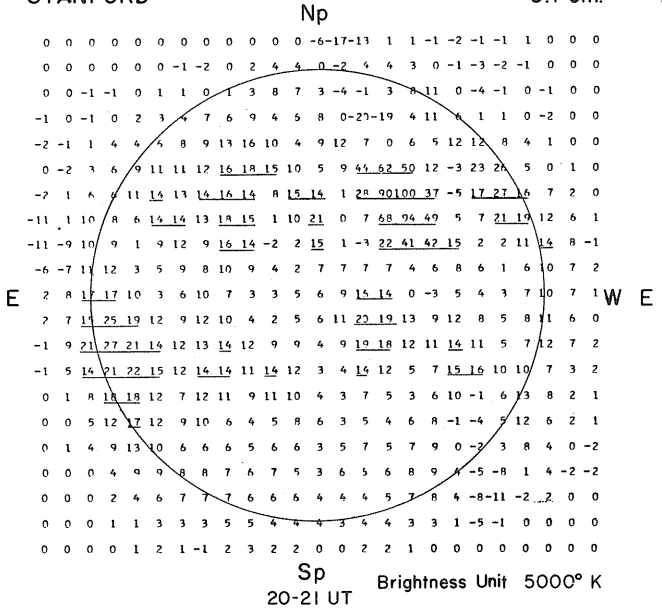
MT. WILSON



MAGNETOGRAM
Solid-Plus
Dotted-Minus

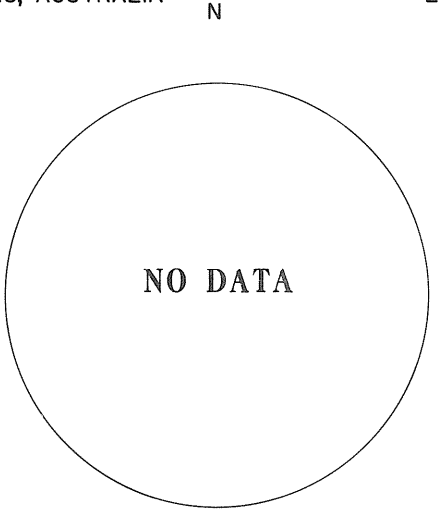
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



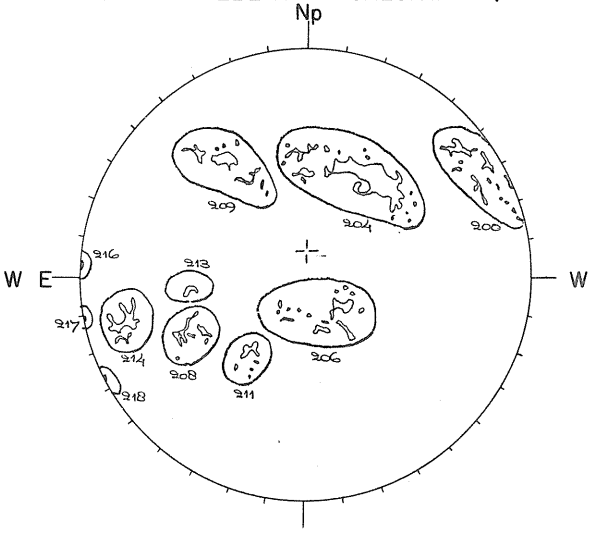
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT



1410 UT

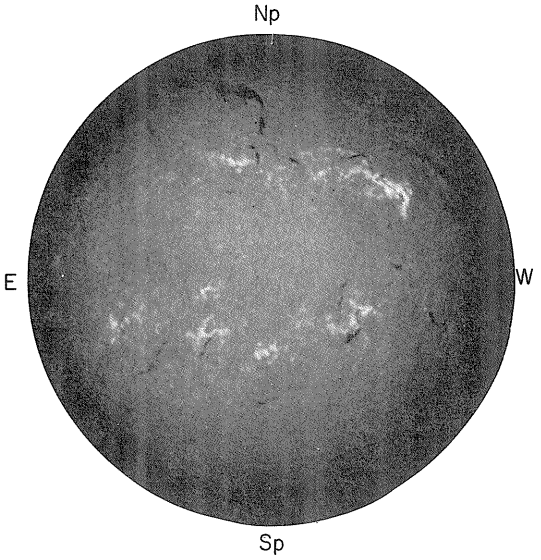
00-32-2.5
04-62-3.5
06-21-3.0
09-21-2.5
11-07-2.5
13-03-2.5

FEBRUARY 16, 1968 (P=-17.49, B_o=-6.86, L_o=309.78)

MT. WILSON

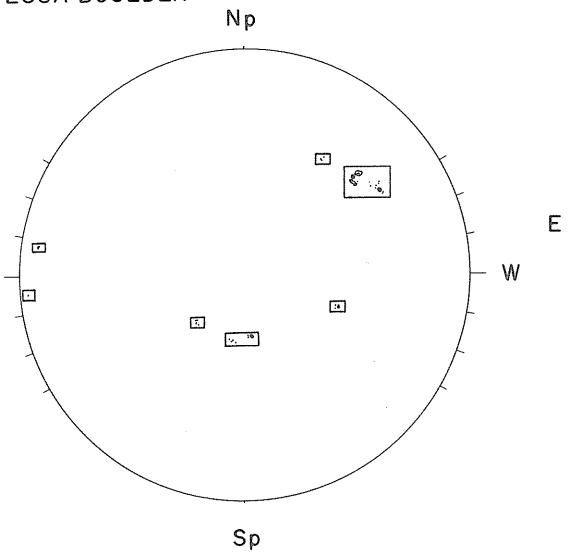
MAGNETOGRAM
Solid-Plus
Dotted-Minus

BOULDER

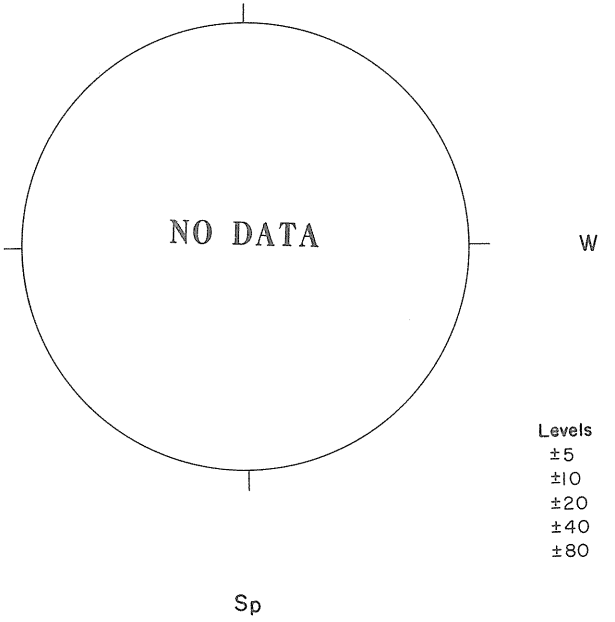


1641 UT

ESSA-BOULDER SUNSPOTS

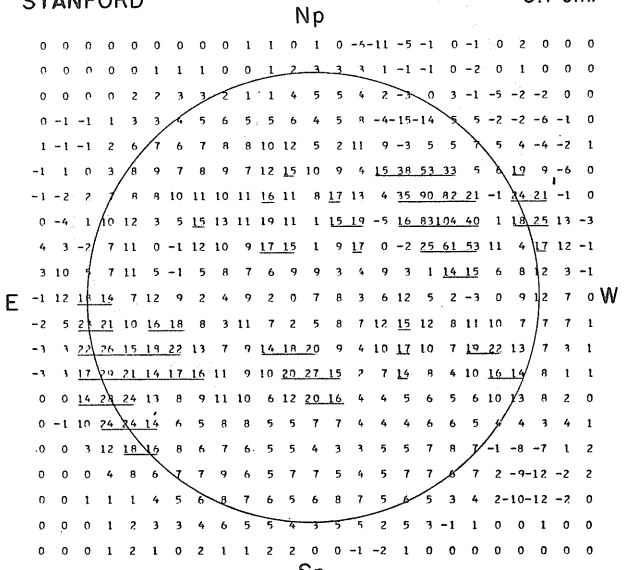


1735 UT



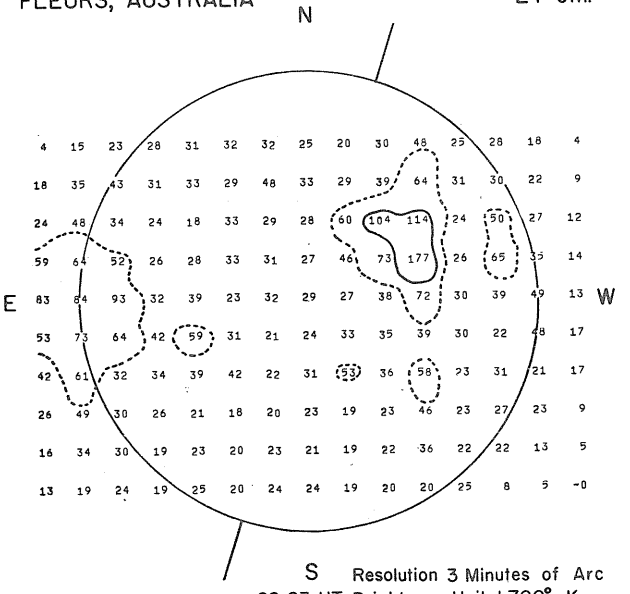
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



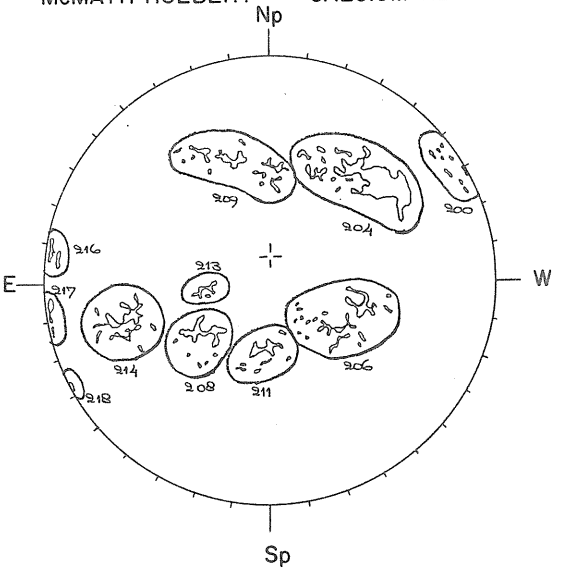
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT



1420 UT

04-69-3.5
06-20-3.0
08-13-2.5
09-22-3.0
11-11-2.5
14-26-2.5
17-14-3.0

FEBRUARY 17, 1968 (P = -17.83, B_o = -6.90, L_o = 296.61)

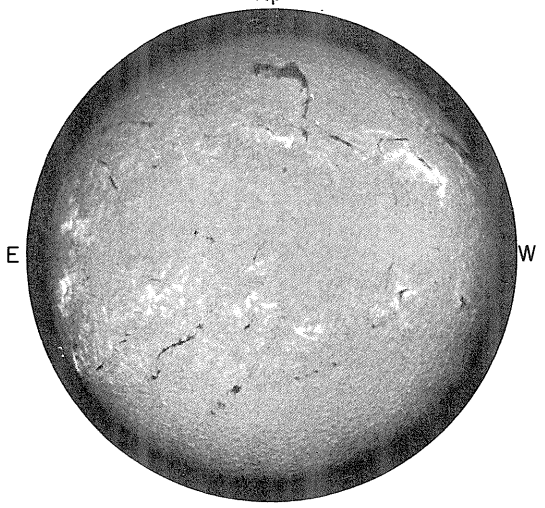
MT. WILSON

Np

MAGNETOGRAM
Solid-Plus
Dotted-Minus

SACRAMENTO PEAK

Np



E W

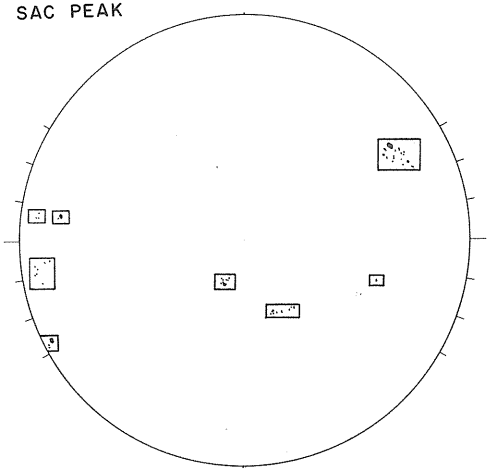
Sp

1523 UT

ESSA-BOULDER

SAC PEAK

Np

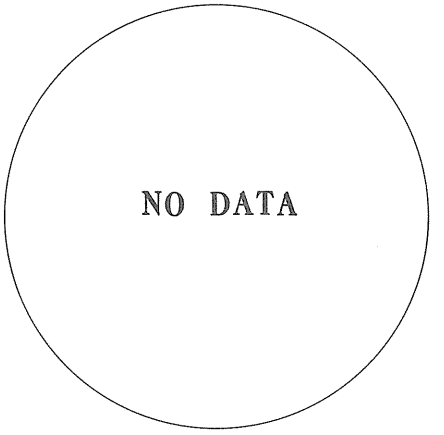


E W

Sp

1520 UT

SUNSPOTS



E W

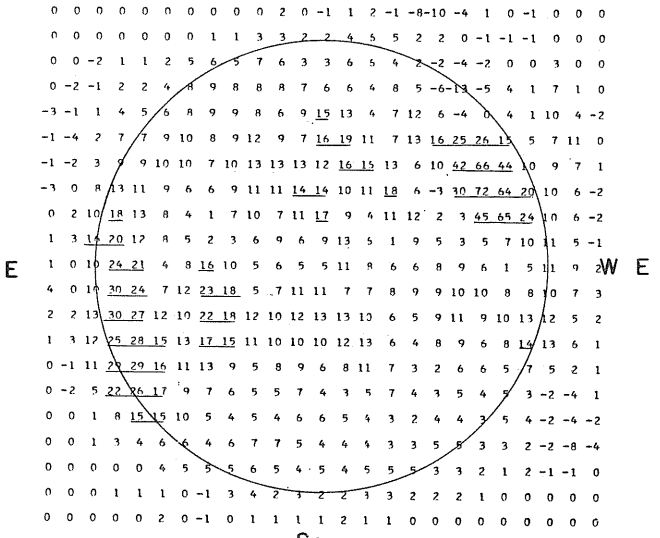
Sp

Levels
±5
±10
±20
±40
±80

STANFORD

9.1 cm.

Np



E W E

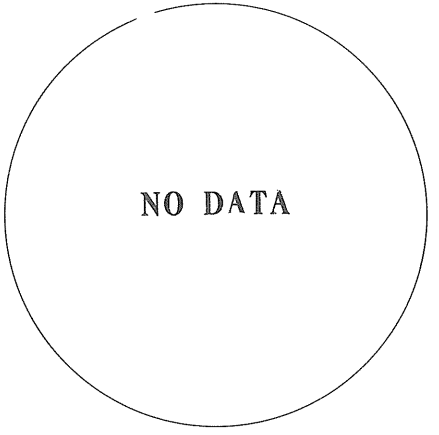
Sp

20-21 UT

Brightness Unit 5000° K

FLEURS, AUSTRALIA

N



S

02-03 UT

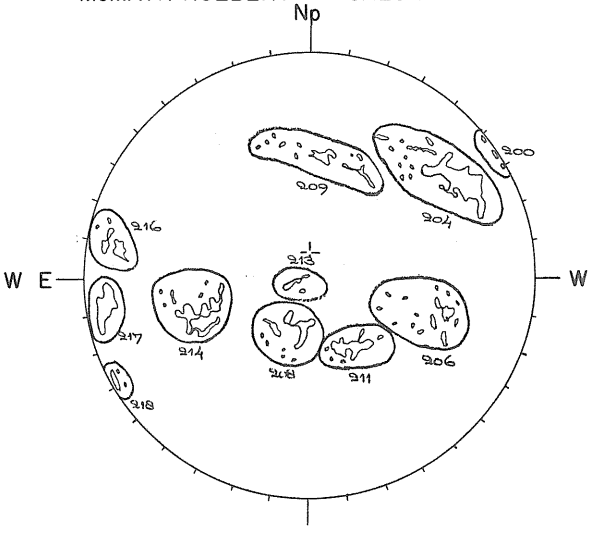
21 cm.

Resolution 3 Minutes of Arc
Brightness Unit 1,700° K

McMATH-HULBERT

CALCIUM REPORT

Np



W E W

Sp

1510 UT

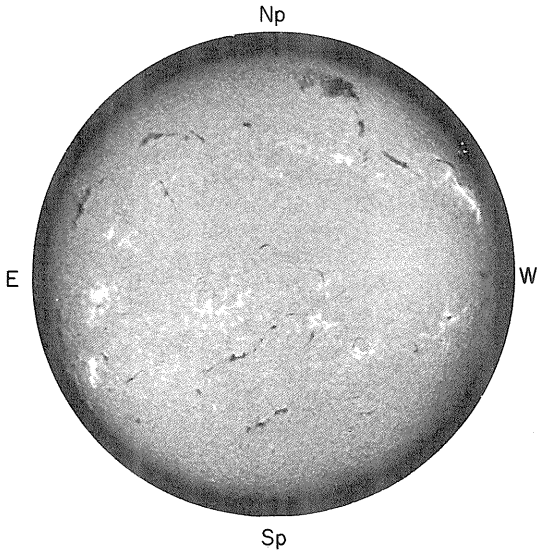
04-67-3.5
08-16-2.5
09-22-3.0
11-15-2.5
14-28-2.5
16-21-2.5
17-33-3.0
18-17-3.0

FEBRUARY 18, 1968 (P=-18.15, B_o=-6.93, L_o=283.44)

MT. WILSON

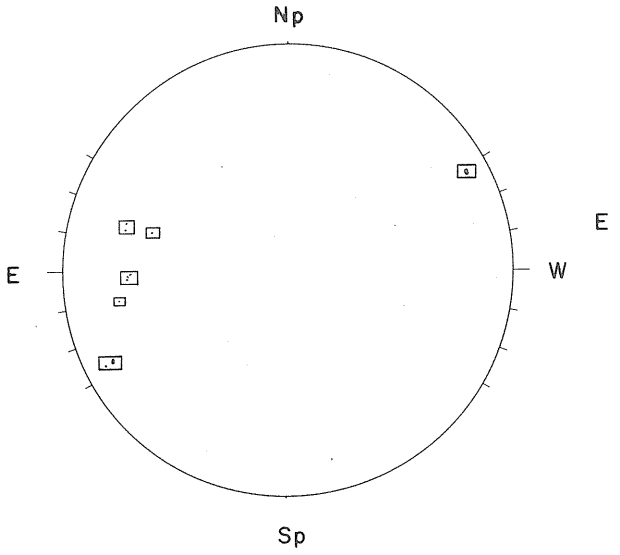
MAGNETOGRAM
Solid-Plus
Dotted-Minus

SACRAMENTO PEAK

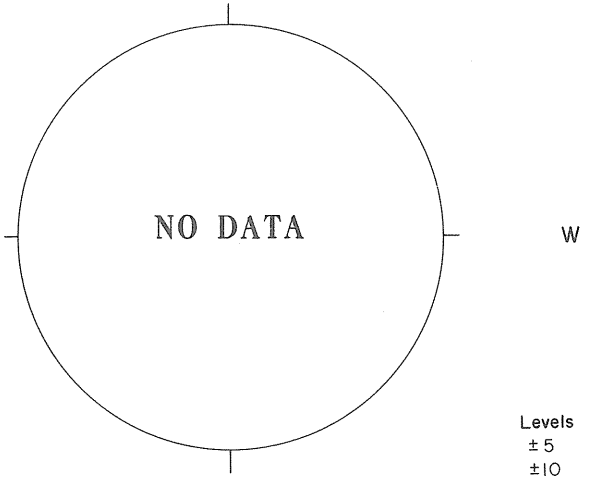


2102 UT

ESSA-BOULDER SUNSPOTS

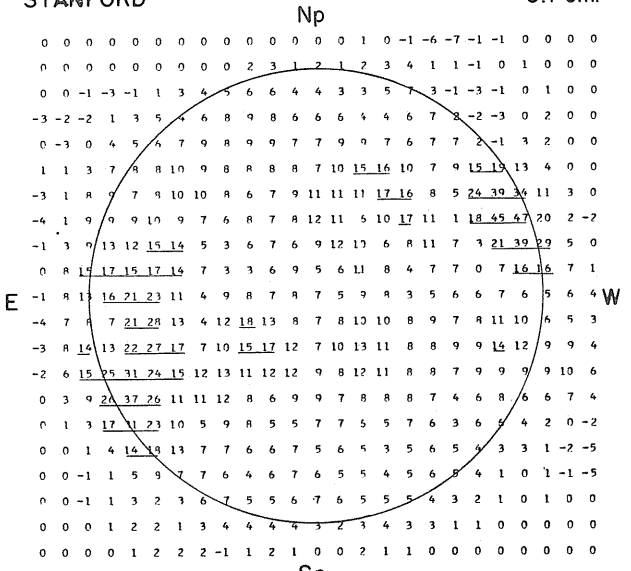


2110 UT



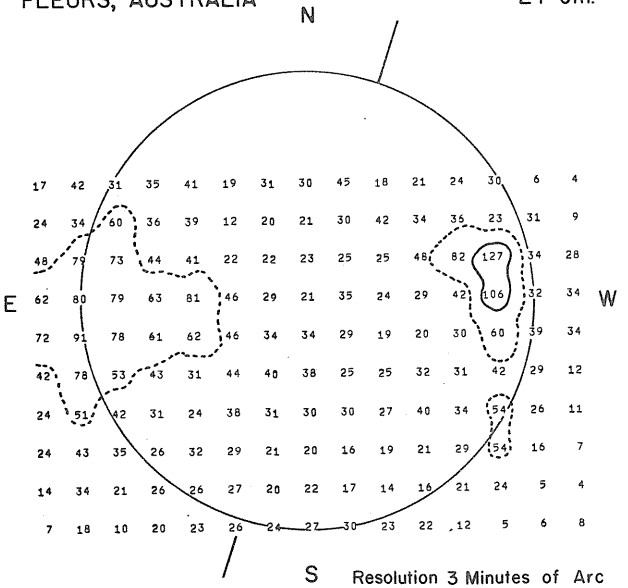
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



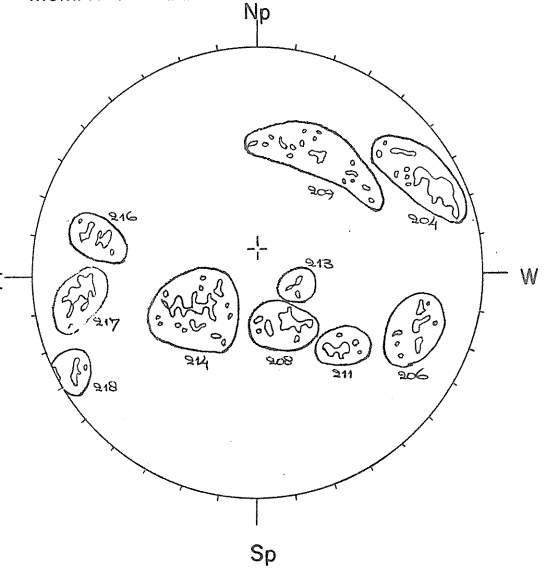
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT

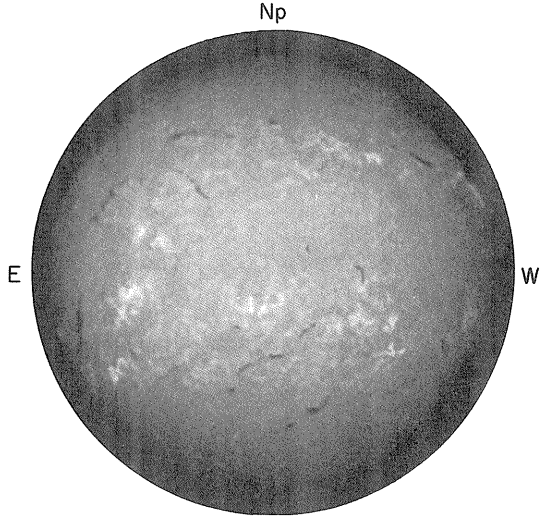


1445 UT

04-68-4.0
08-16-2.5
09-21-3.5
11-15-2.5
14-31-3.0
16-20-2.5
17-31-3.0
18-27-3.0

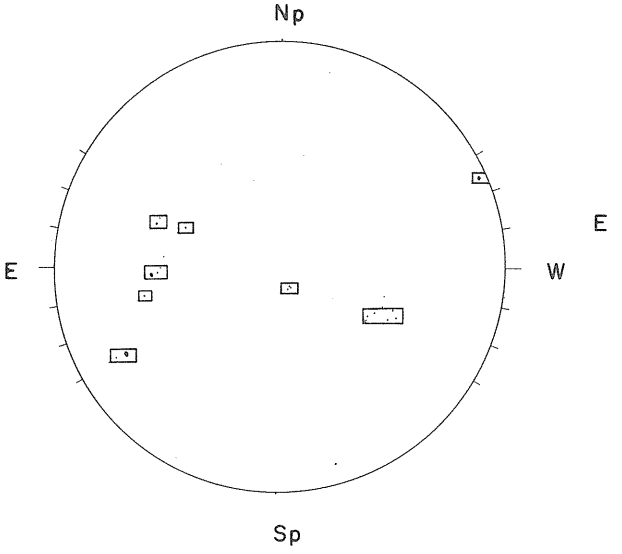
FEBRUARY 19, 1968 (P = -18.47, B_o = -6.97, L_o = 270.28)

BOULDER



1612 UT

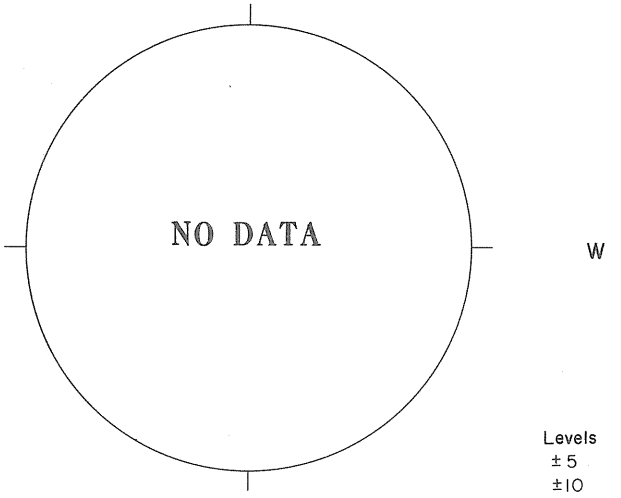
ESSA-BOULDER SUNSPOTS



1650 UT

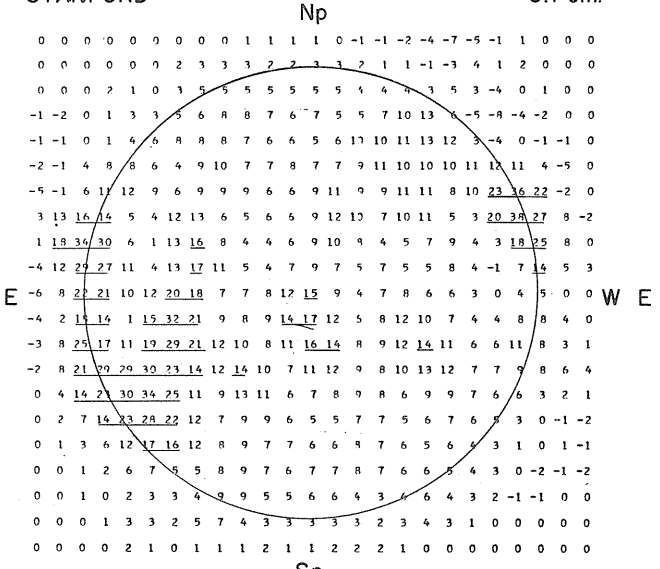
MT. WILSON

MAGNETOGRAM
Solid-Plus
Dotted-Minus



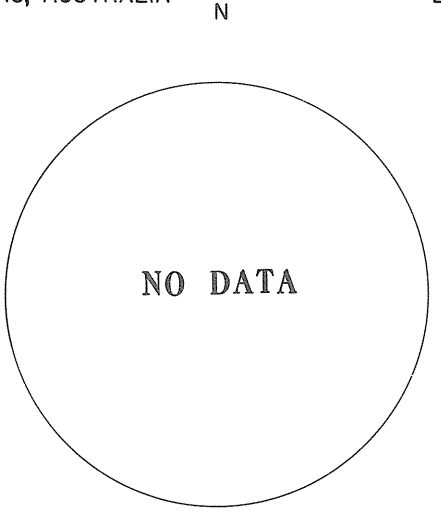
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



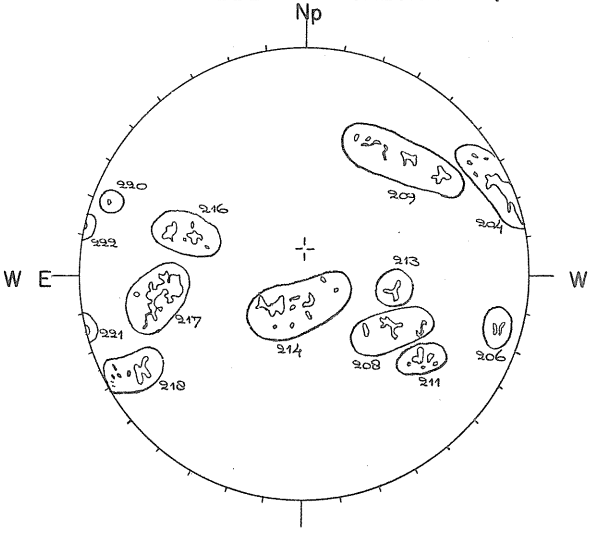
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT

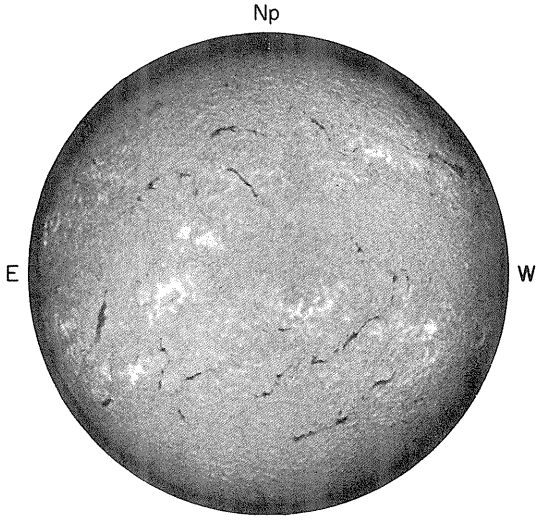


1630 UT

04-49-3.5
08-13-2.5
09-18-3.0
14-24-3.0
16-16-2.5
17-28-3.0
18-20-2.5

FEBRUARY 20, 1968 (P=-18.79, B_o=-7.01, L_o=257.11)

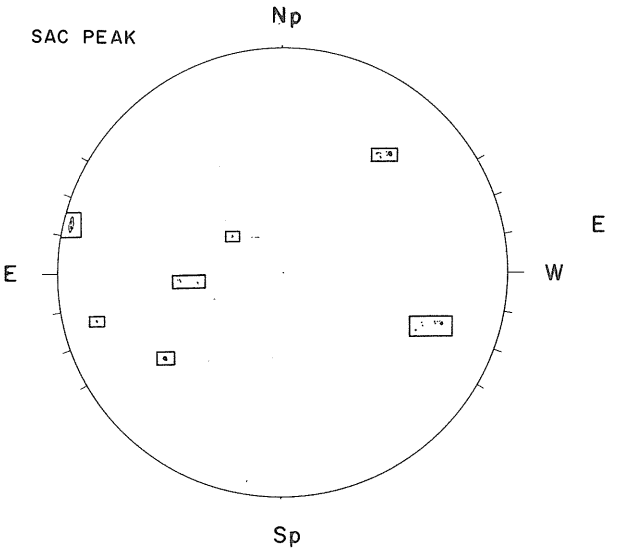
SACRAMENTO PEAK



1602 UT

ESSA-BOULDER SUNSPOTS

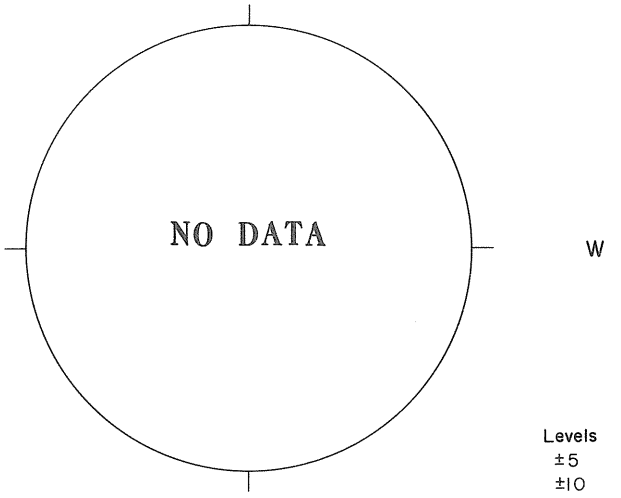
SAC PEAK



1610 UT

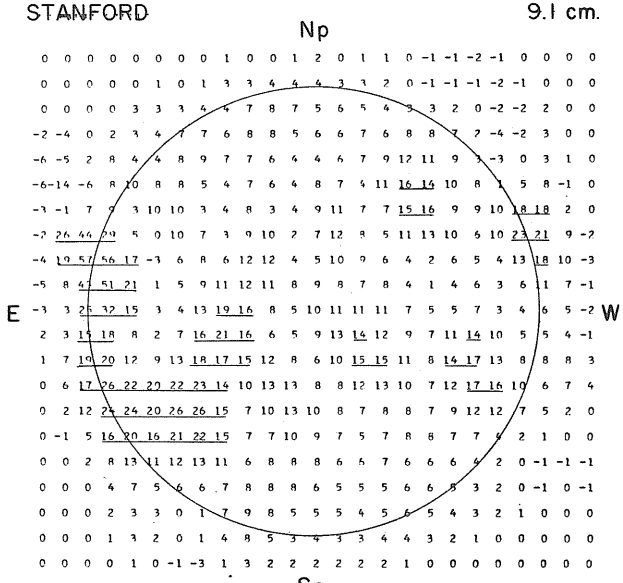
MT. WILSON

MAGNETOGRAM
Solid-Plus
Dotted-Minus



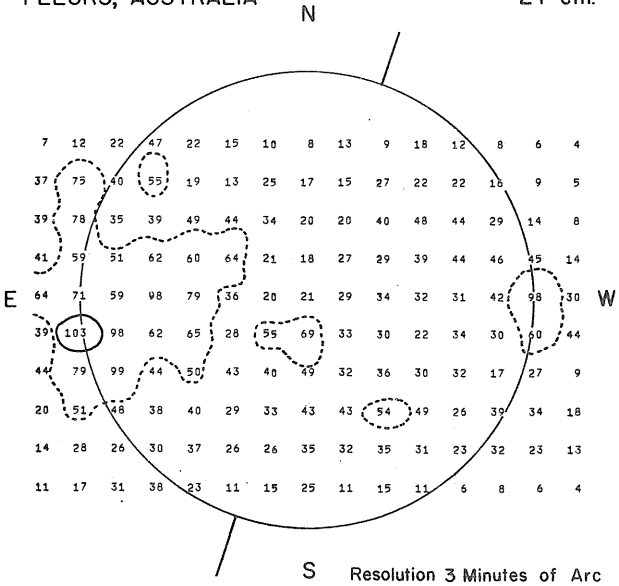
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



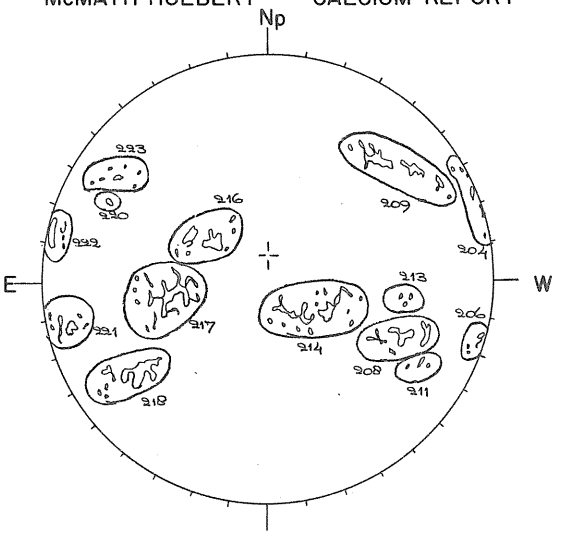
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT

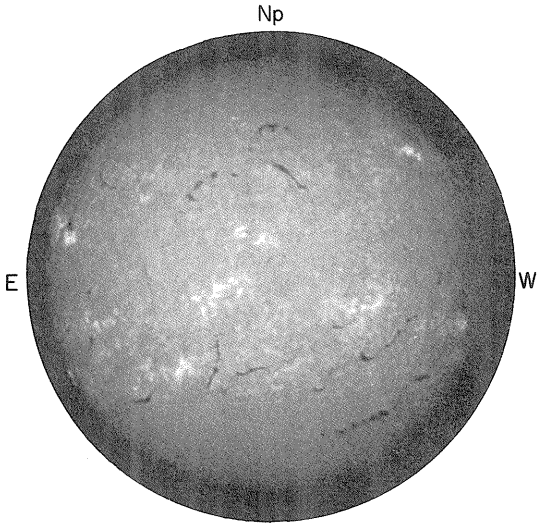


1750 UT

04-19-2.5
08-18-3.0
09-24-3.5
14-22-2.5
16-14-2.5
17-26-3.0
18-27-3.0
22-28-3.0

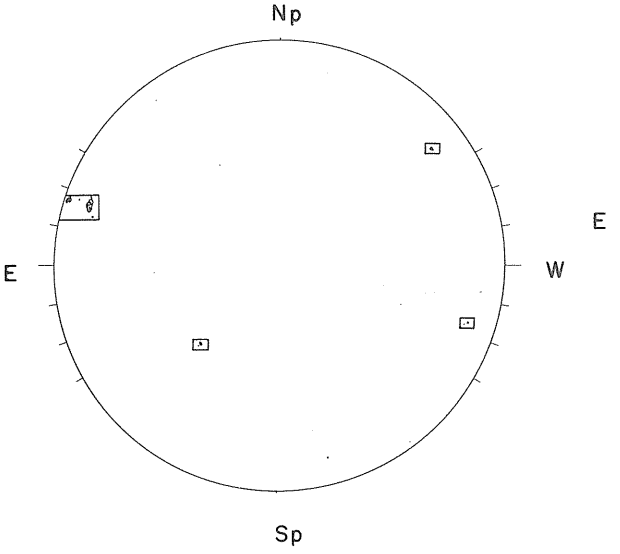
FEBRUARY 21, 1968 (P=-19.10, B_o=-7.04, L_o=243.94)

BOULDER



1842 UT

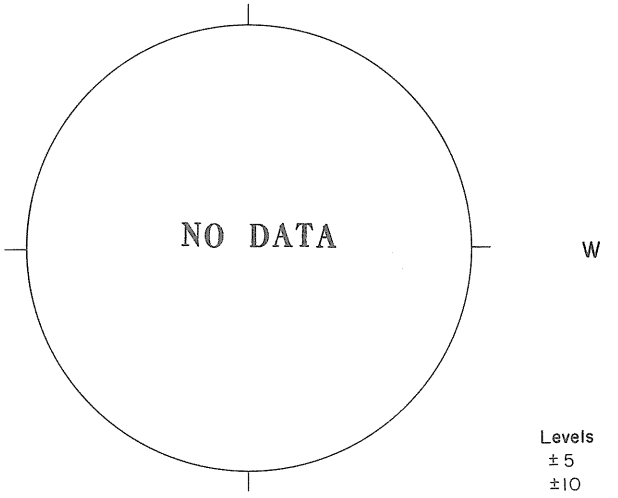
ESSA-BOULDER SUNSPOTS



2010 UT

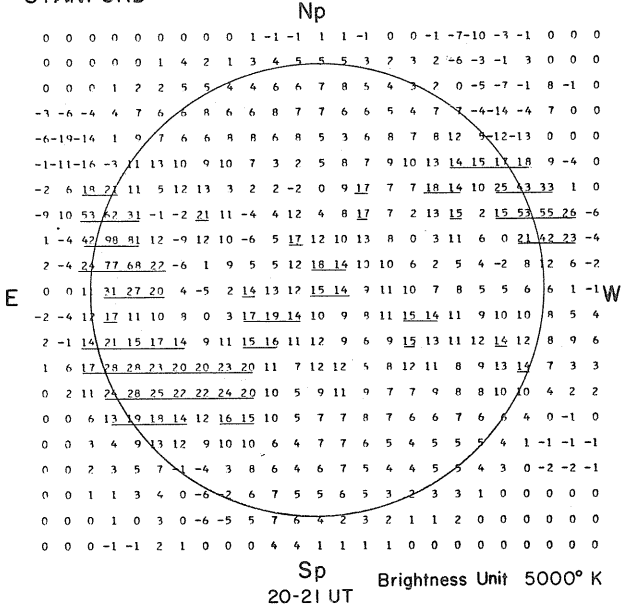
MT. WILSON MAGNETOGRAM

Solid-Plus
Dotted-Minus



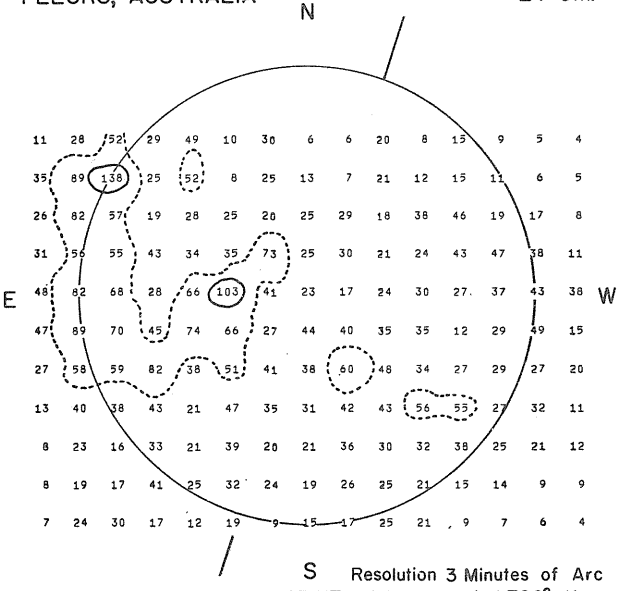
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



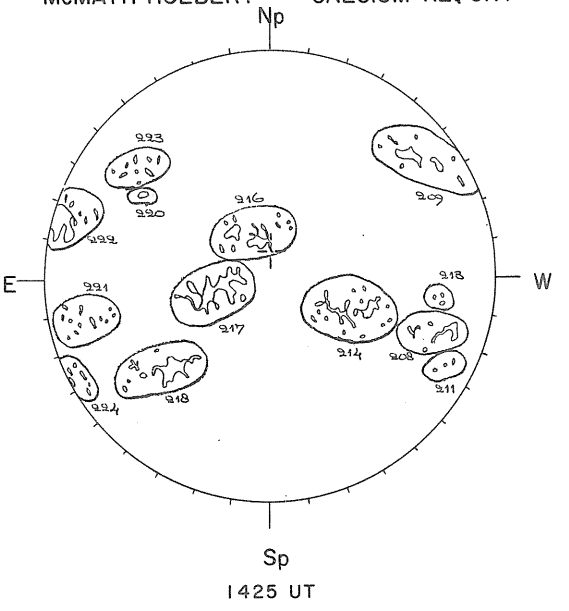
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT

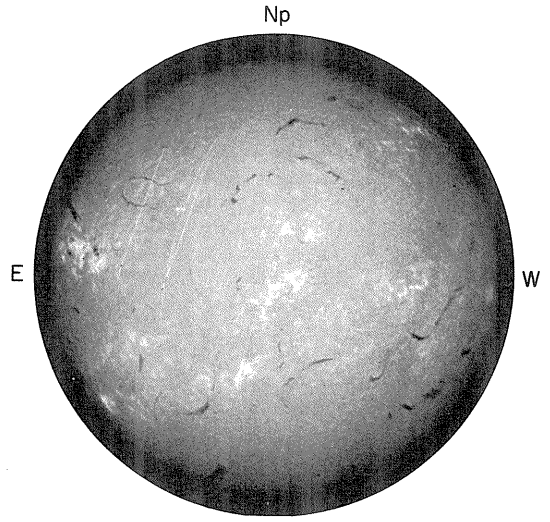


1425 UT

08-16-2.5
09-19-3.0
16-18-2.5
17-29-2.5
18-27-2.5
22-46-2.5

FEBRUARY 22, 1968 (P = -19.40, B_o = -7.07, L_o = 230.77)

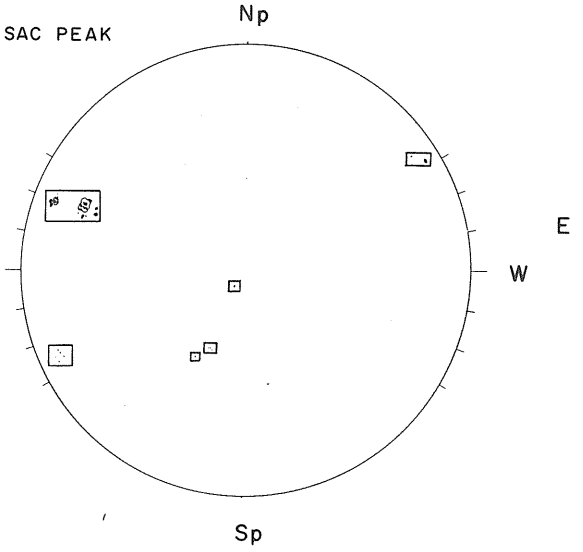
BOULDER



1728 UT

ESSA-BOULDER SUNSPOTS

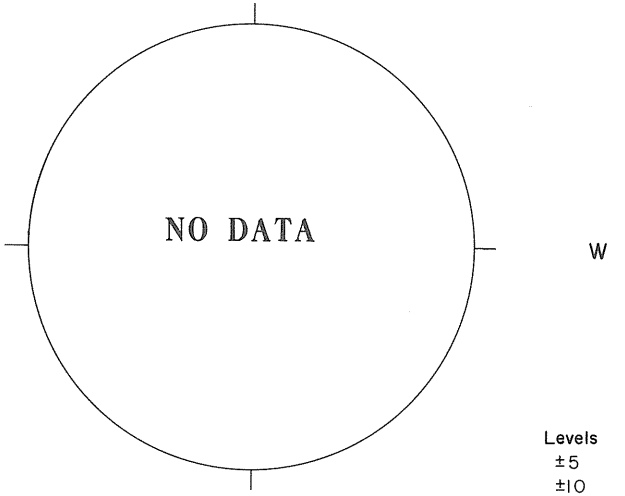
SAC PEAK



1930 UT

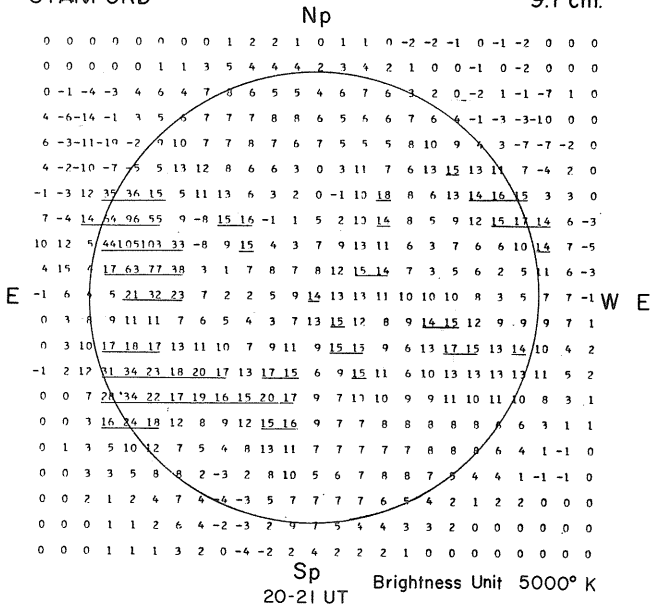
MT. WILSON

MAGNETOGRAM
Solid-Plus
Dotted-Minus



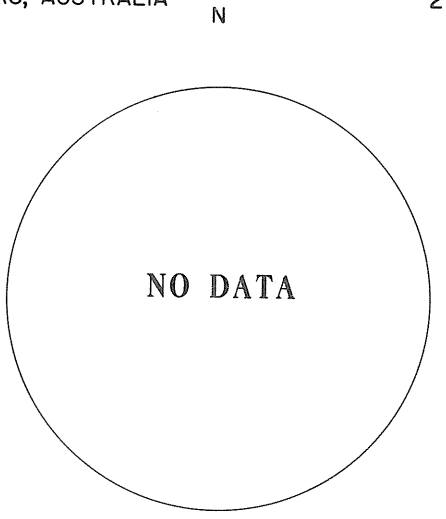
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



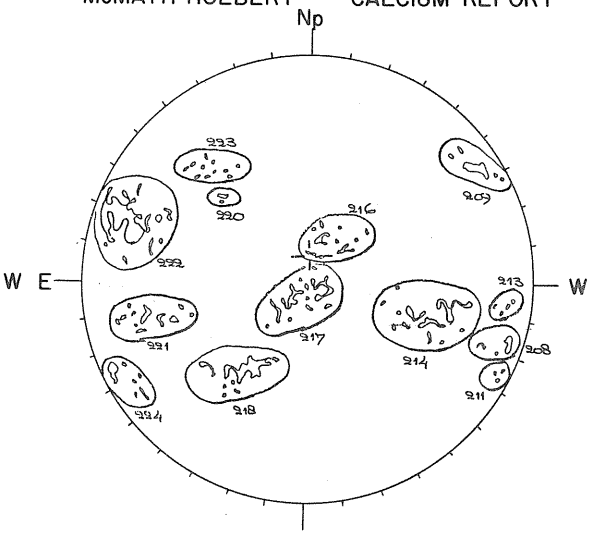
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT

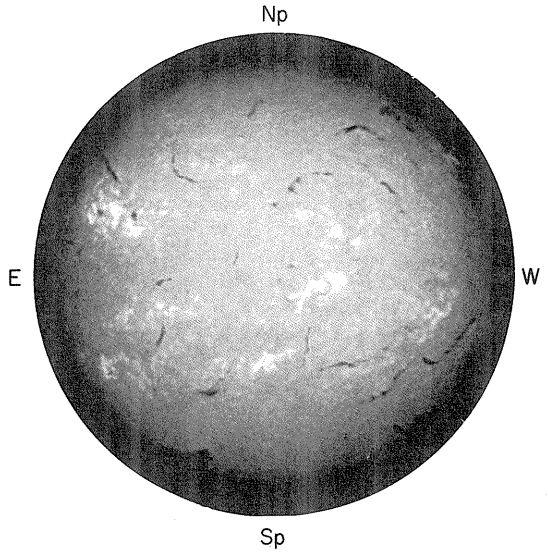


08-11-2.5
09-19-3.0
17-20-2.5
18-26-2.5
22-73-2.5
24-17-2.5

1350 UT

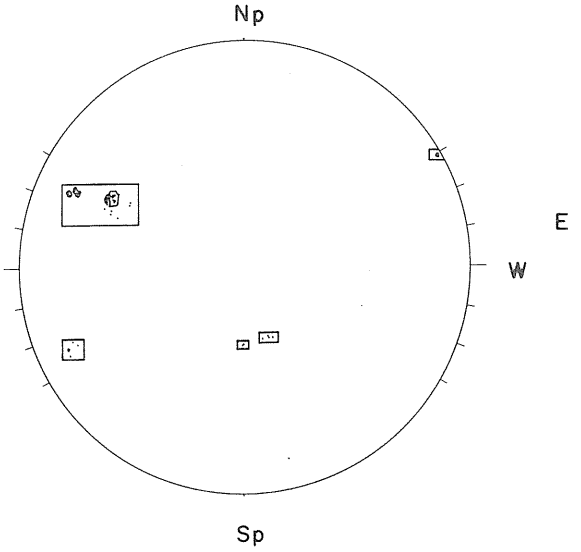
FEBRUARY 23, 1968 (P=-19.70, B_o=-7.09, L_o=217.60)

BOULDER



1432 UT

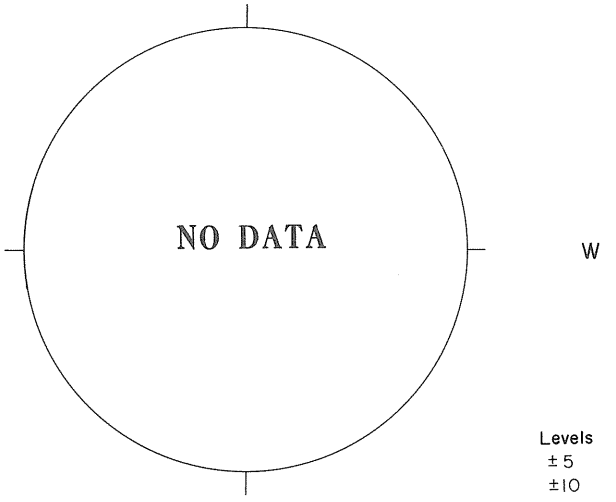
ESSA-BOULDER SUNSPOTS



1525 UT

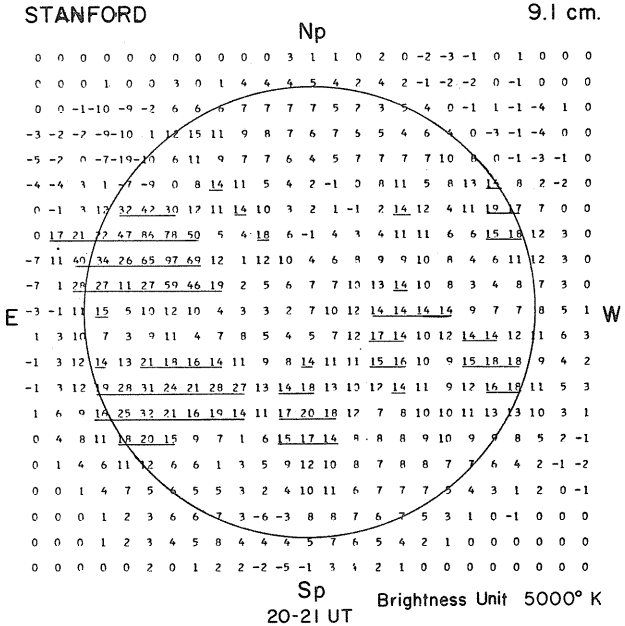
MT. WILSON MAGNETOGRAM

Solid-Plus
Dotted-Minus



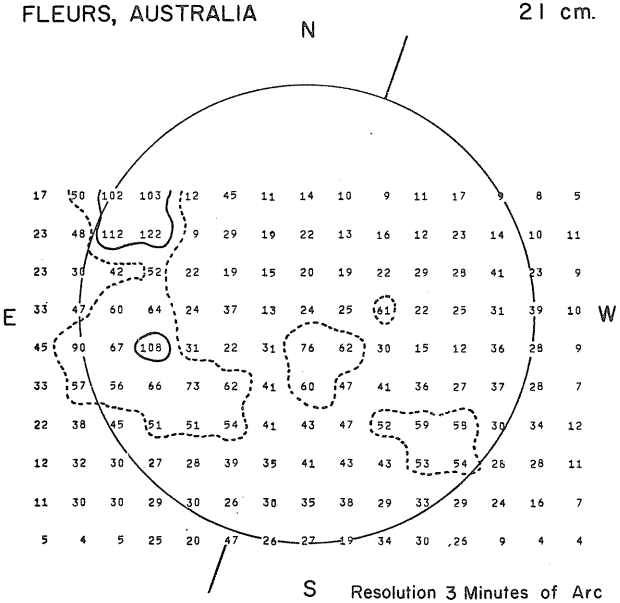
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



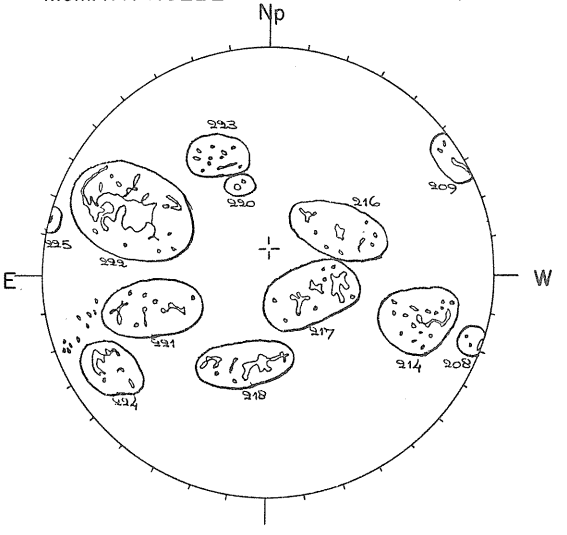
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT



09-14-3.0
14-14-2.5
16-11-2.5
17-18-3.0
18-21-3.0
22-78-3.0
24-18-3.0
25-03-2.5

1550 UT

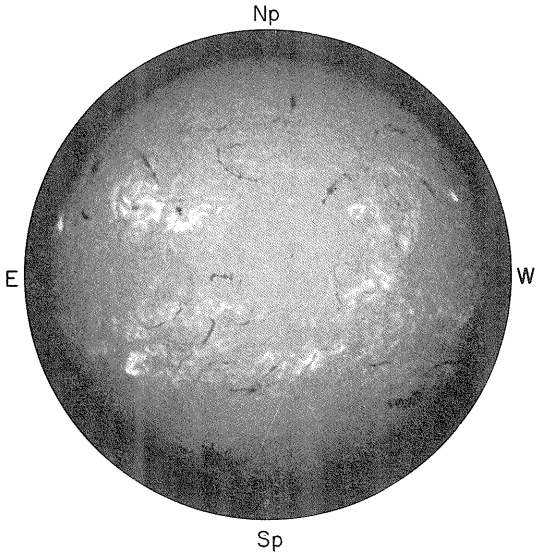
53
Feb 68

FEBRUARY 24, 1968 (P=-19.99, B_o=-7.12, L_o= 204.43)

MT. WILSON

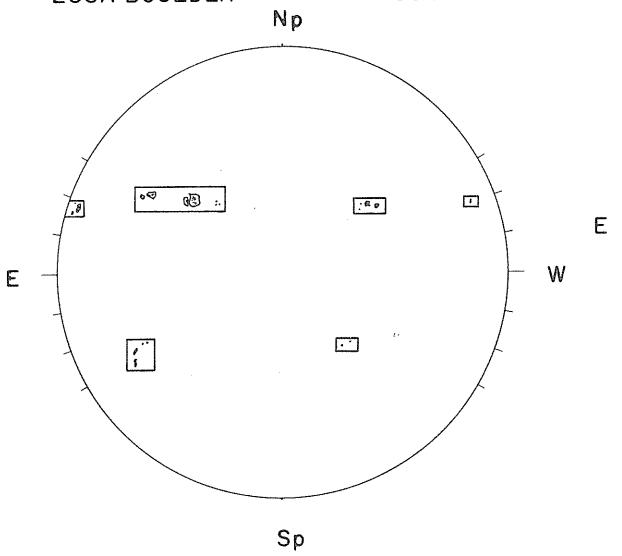
MAGNETOGRAM
Solid-Plus
Dotted-Minus

BOULDER

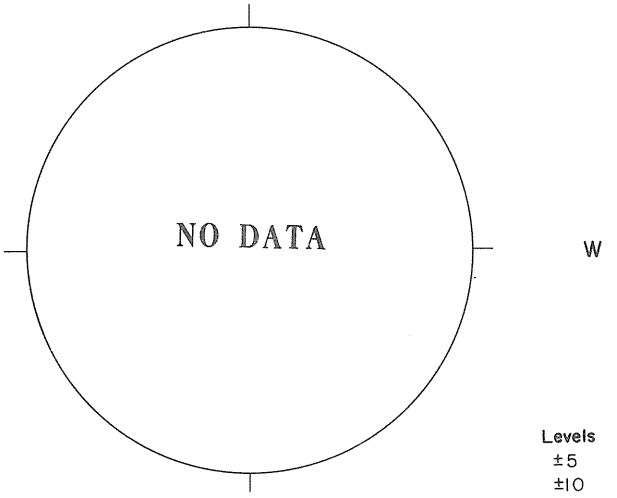


1743 UT

ESSA-BOULDER SUNSPOTS

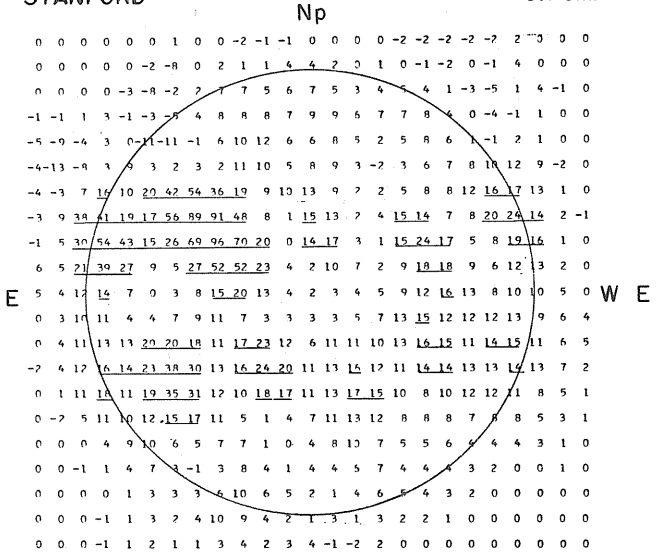


1615 UT



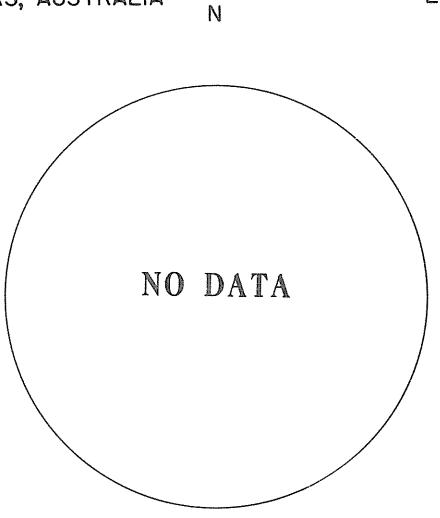
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



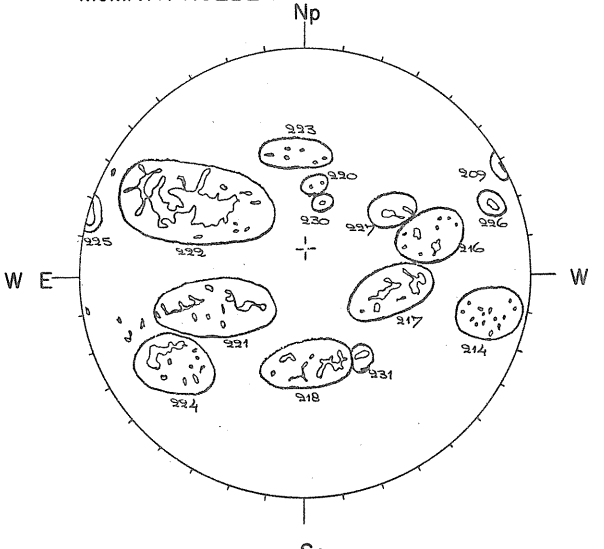
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT

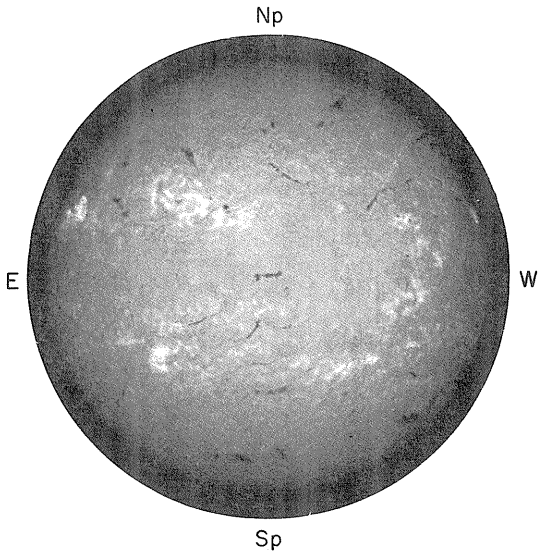


16-08-2.5
17-17-2.5
18 17 2.5
22-94-3.0
24-22-3.0
25-33-3.5
26-04-3.5
27-07-3.0
31-03-2.5

1335 UT

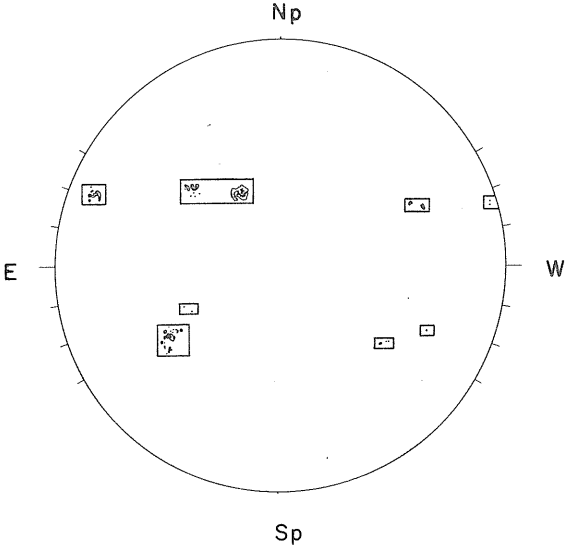
FEBRUARY 25, 1968 (P=-20.28, B_o=-7.14, L_o= 191.26)

BOULDER



1635 UT

ESSA-BOULDER SUNSPOTS

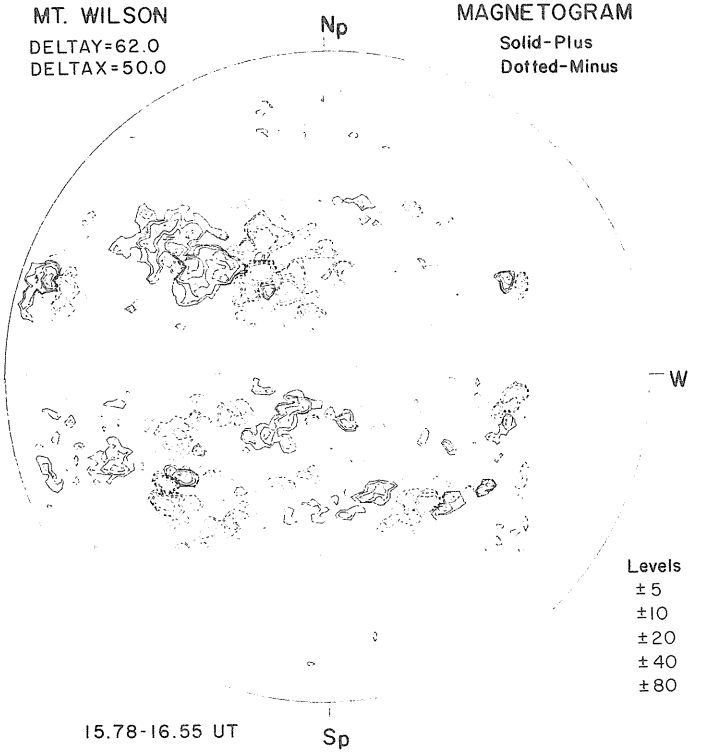


1730 UT

MT. WILSON MAGNETOGRAM

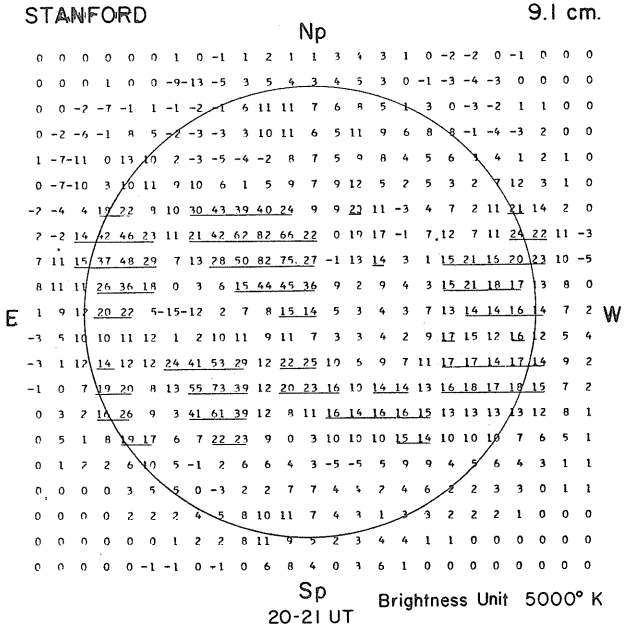
DELTAY=62.0
DELTAX=50.0

Solid-Plus
Dotted-Minus



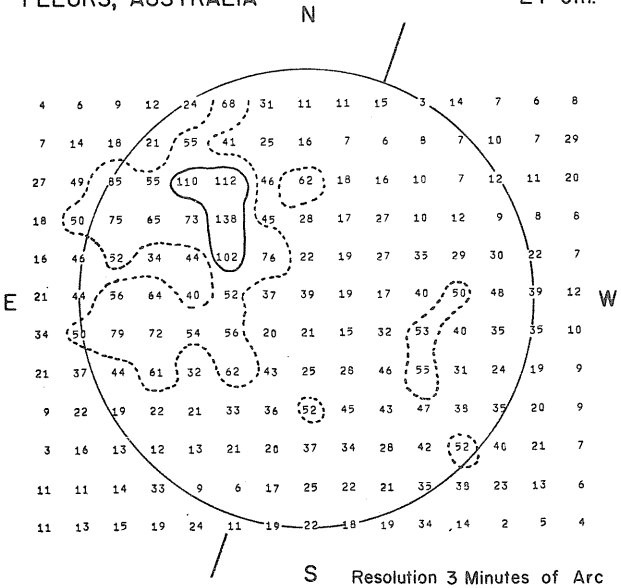
15.78-16.55 UT

STANFORD 9.1 cm.



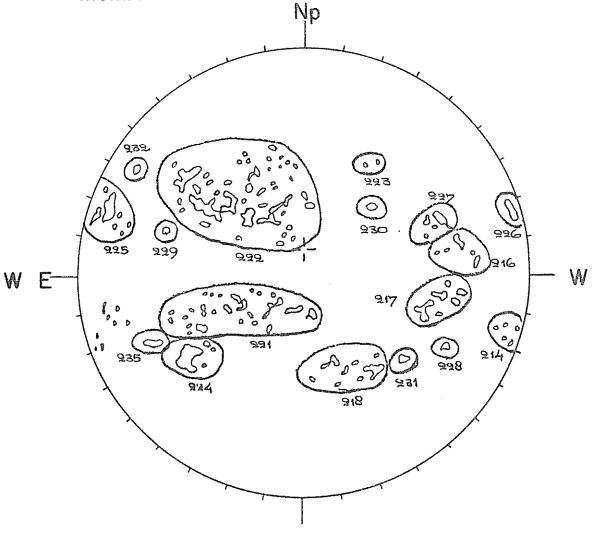
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT



1340 UT

17-16-2.5
18-17-2.5
22-85-3.5
24-18-3.0
25-40-3.5
26-09-4.0
27-10-2.5
31-03-2.5

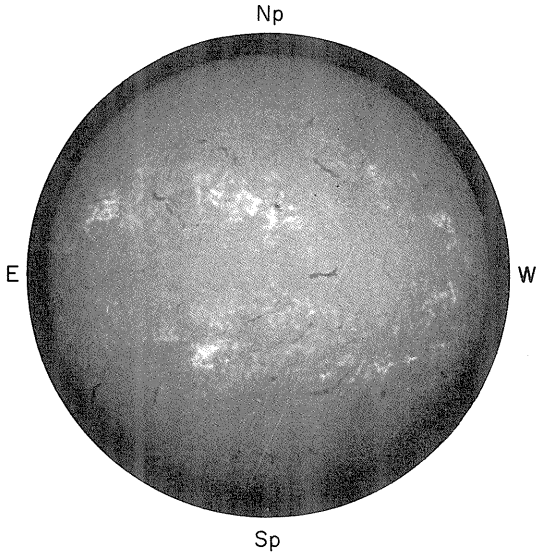
55
Feb 68

FEBRUARY 26, 1968 (P=-20.56, B_o=-7.16, L_o=178.09)

MT. WILSON

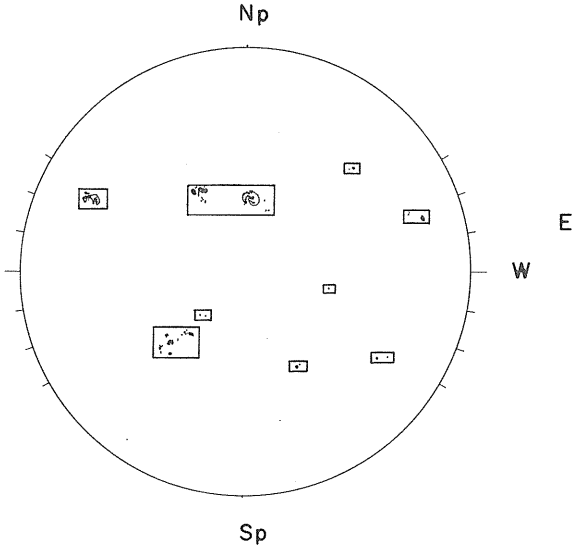
MAGNETOGRAM
Solid-Plus
Dotted-Minus

BOULDER

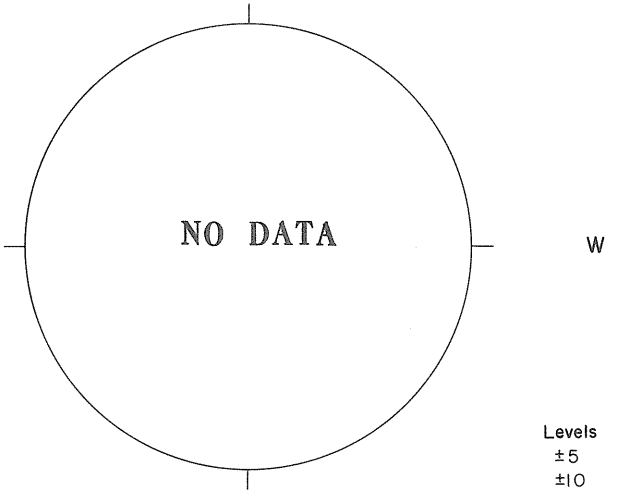


1815 UT

ESSA-BOULDER SUNSPOTS

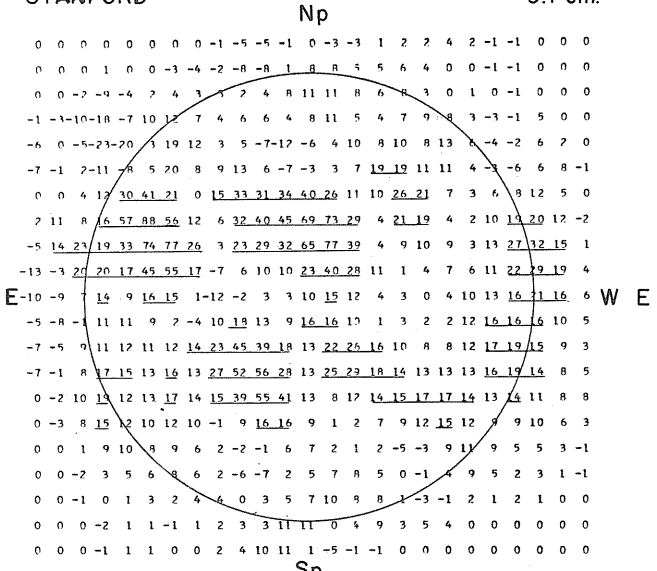


1510 UT



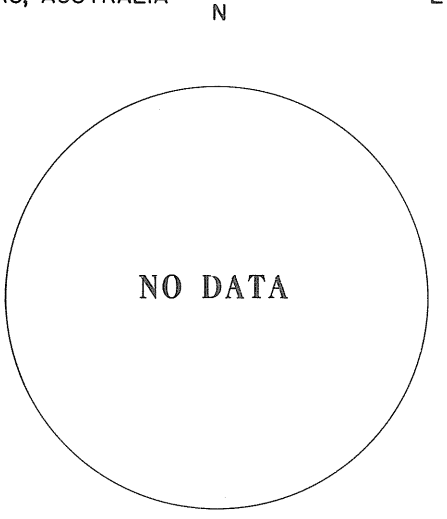
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



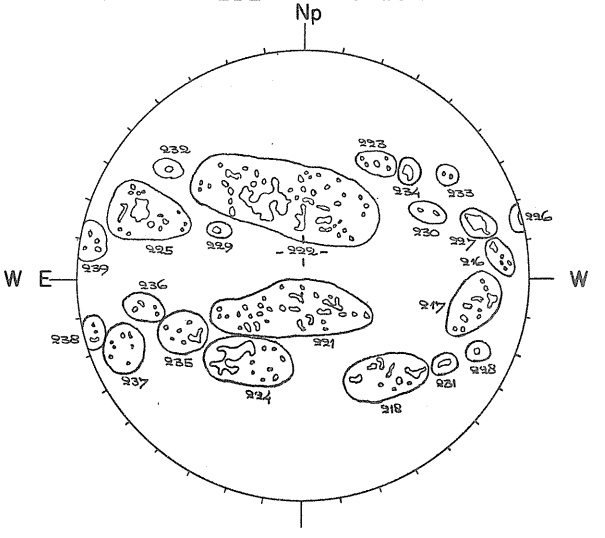
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT

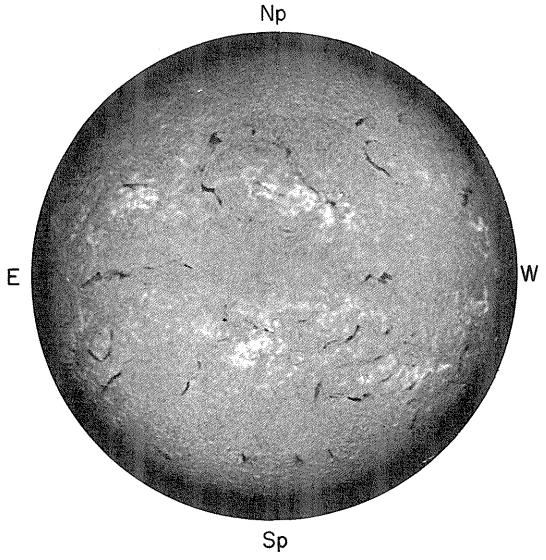


17-16-2.5
18-17-2.5
22-68-3.5
24-23-3.5
25-32-3.0
26-06-3.5
28-02-3.0
31-03-3.0
34-05-2.5

1505 UT

FEBRUARY 27, 1968 (P=-20.83, B_o=-7.18, L_o=164.92)

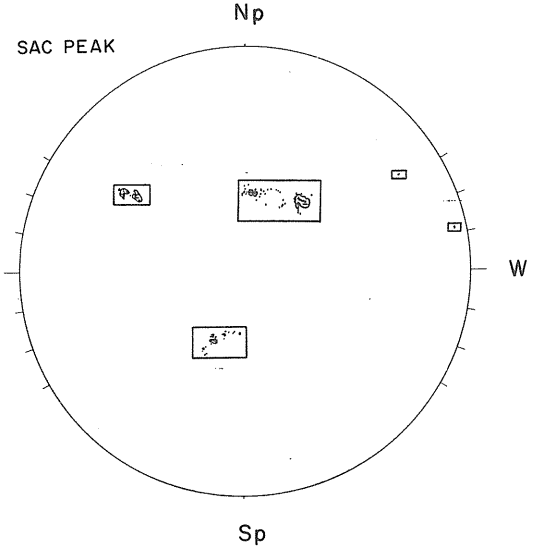
SACRAMENTO PEAK



1609 UT

ESSA-BOULDER SUNSPOTS

SAC PEAK

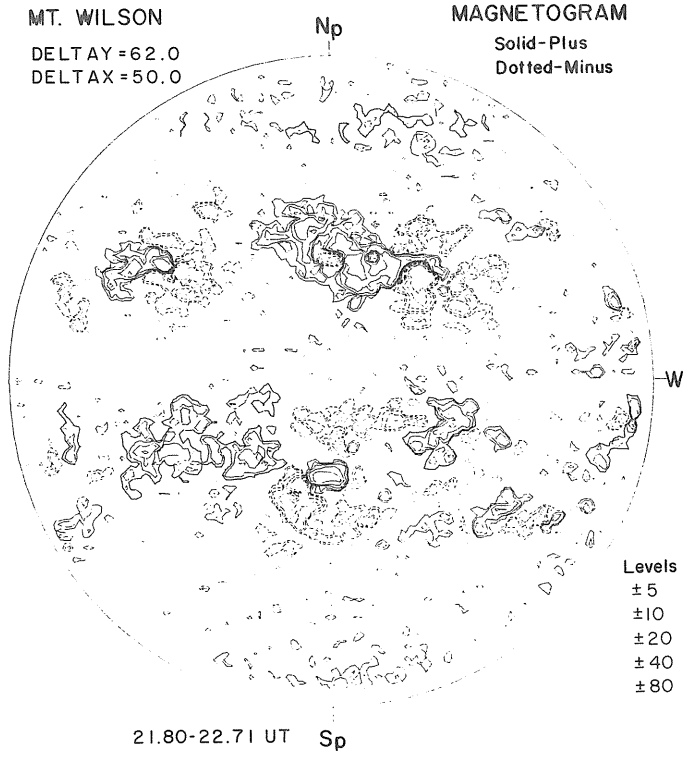


1545 UT

MT. WILSON MAGNETOGRAM

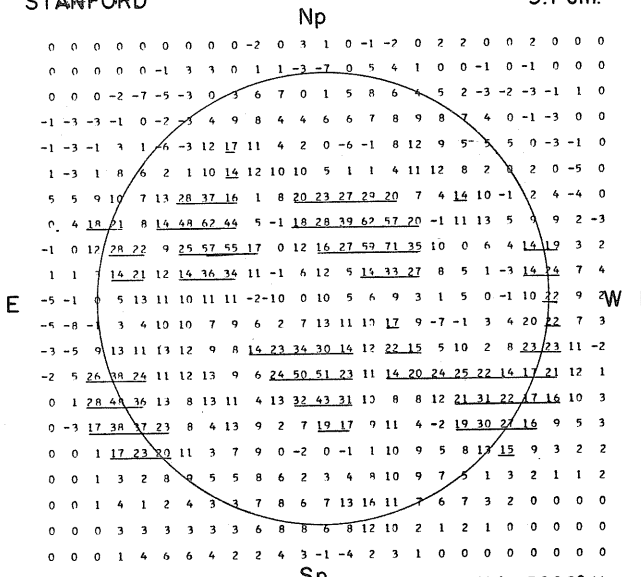
DELTAY=62.0
DELTAX=50.0

Solid-Plus
Dotted-Minus



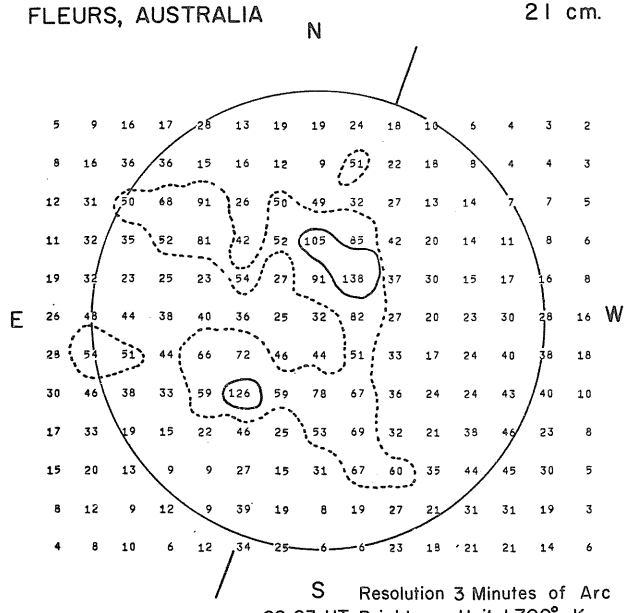
21.80-22.71 UT

STANFORD 9.1 cm.



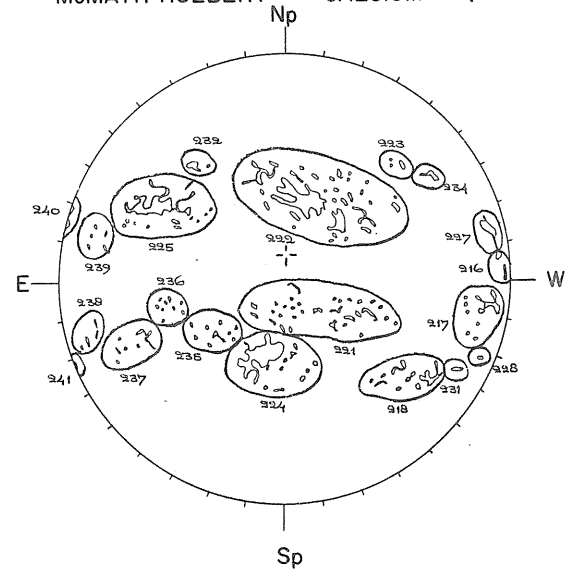
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT



17-16-2.5
18-20-2.5
22-61-3.5
24-32-3.0
25-35-3.0
27-14-3.0
31-03-2.5

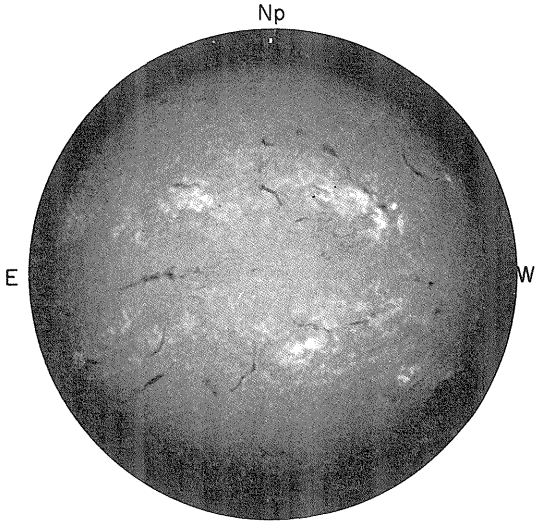
1710 UT

FEBRUARY 28, 1968 (P=-21.10, B_o=-7.20, L_o=151.74)

MT. WILSON

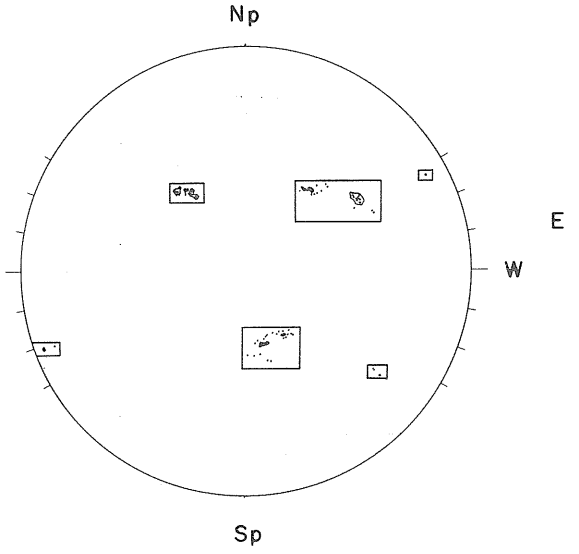
MAGNETOGRAM
Solid-Plus
Dotted-Minus

BOULDER

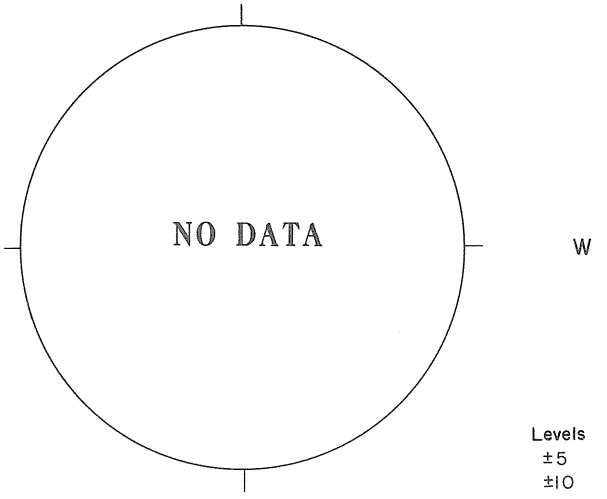


2226 UT

ESSA-BOULDER SUNSPOTS

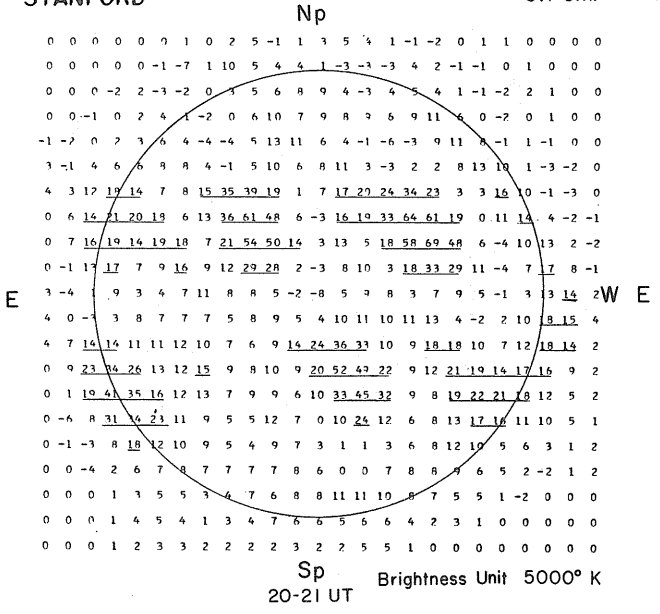


2230 UT



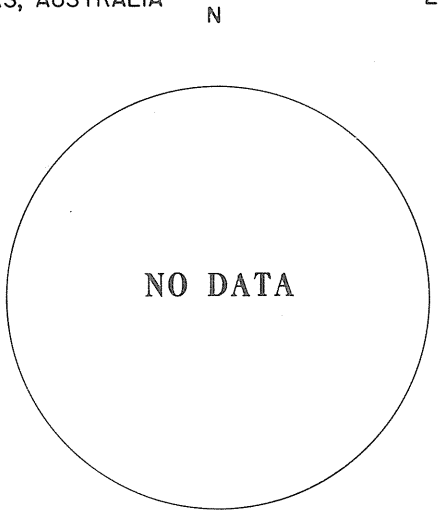
Levels
±5
±10
±20
±40
±80

STANFORD 9.1 cm.



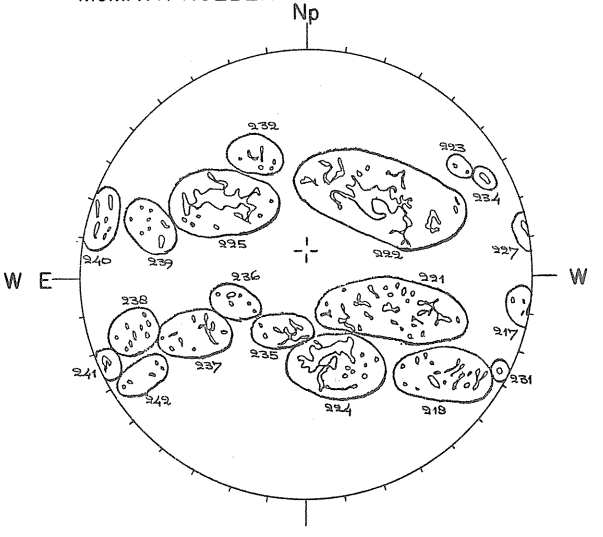
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT

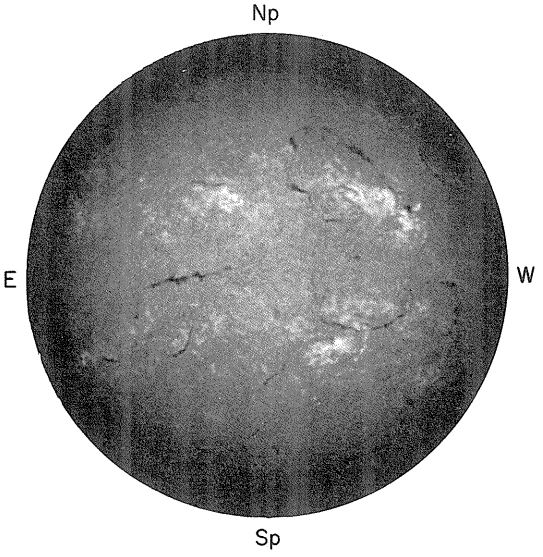


1500 UT

18-21-3.0
21-23-2.5
22-68-3.5
24-31-3.5
25-37-3.0
27-11-2.5
34 05 3.5

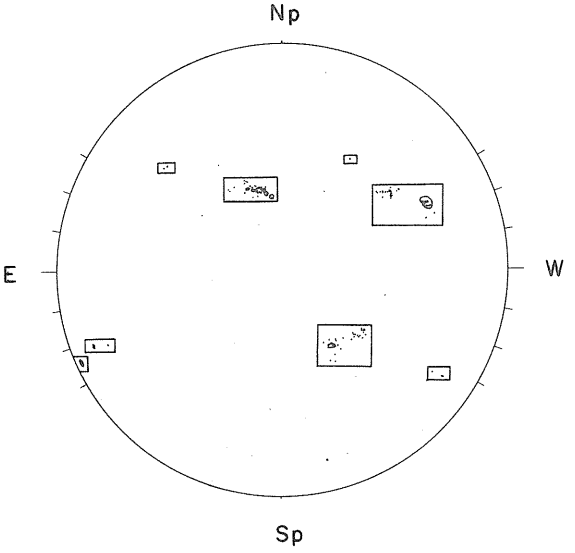
FEBRUARY 29, 1968 (P = -21.36, B_o = -7.21, L_o = 138.57)

BOULDER



1502 UT

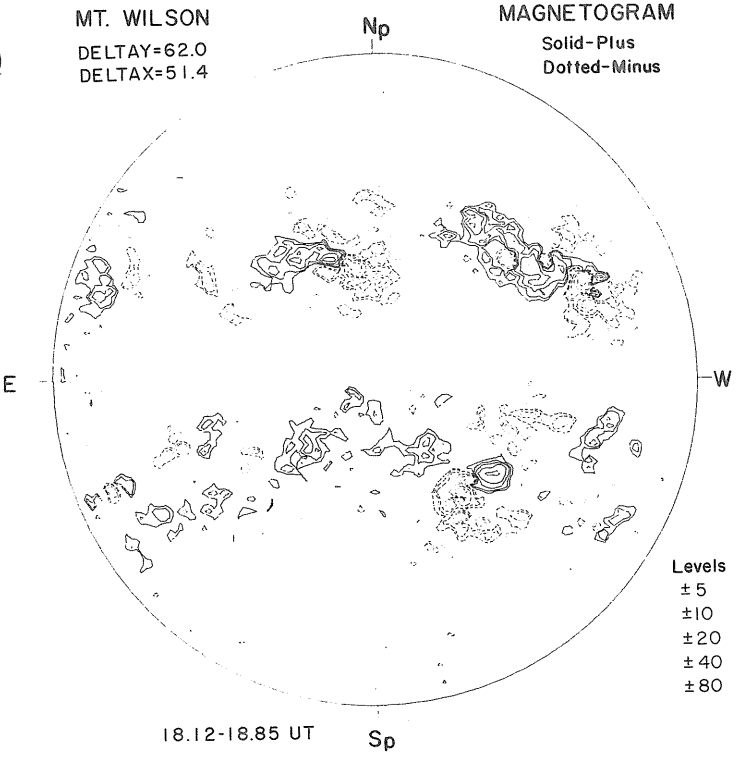
ESSA-BOULDER SUNSPOTS



1615 UT

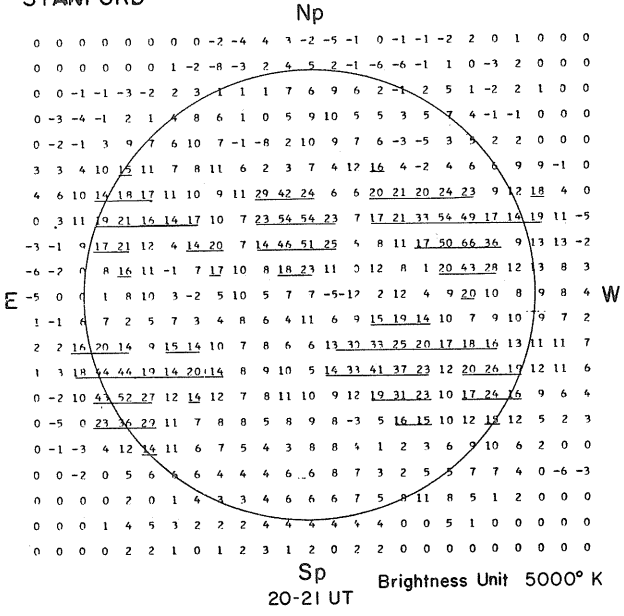
MT. WILSON
DELTAY=62.0
DELTAX=51.4

MAGNETOGRAM
Solid-Plus
Dotted-Minus



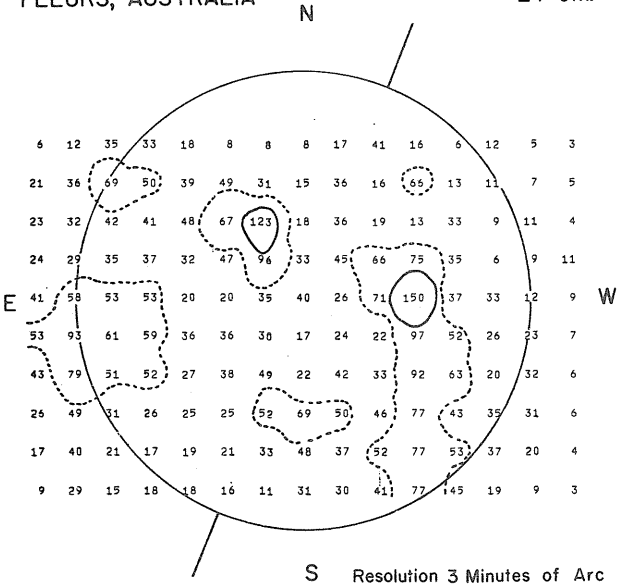
18.12-18.85 UT

STANFORD 9.1 cm.



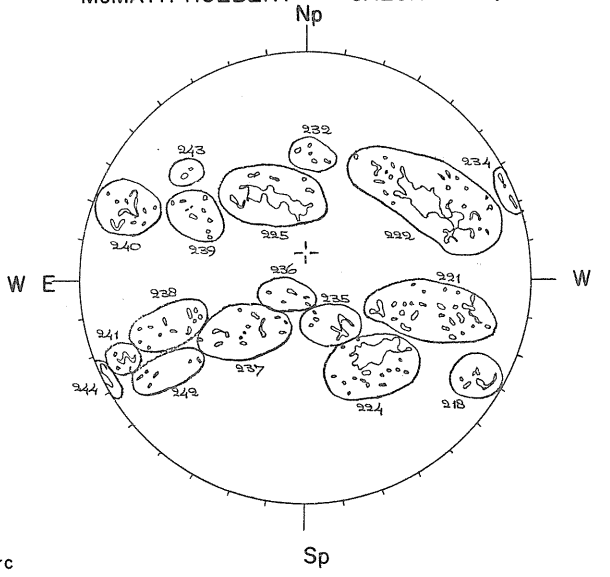
20-21 UT Brightness Unit 5000° K

FLEURS, AUSTRALIA 21 cm.



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

McMATH-HULBERT CALCIUM REPORT



1900 UT

CORONAL LINE EMISSION INDICES

FEBRUARY 1968

CMP Feb. 1968	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_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1	G_6	G_1	R_6	R_1
1	63	100	0	0	104	163	0	0	99	155	20	41	97	136	9	20
2	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
3	x	x	x	x	x	x	x	x	96	145	24	32	140	178	48	86
4	x	x	x	x	x	x	x	x	121	199	32	92	180	243	48	86
5	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
6	158	194	36	75	98	117	x	x	x	x	x	x	x	x	x	x
7	193	258	49	79	118	161	10	26	96	125	6	19	147	164	28	48
8	162	198	x	x	87	90	x	x	73	89	7	11	97	110	25	42
9	118	164	x	x	64	87	x	x	x	x	x	x	x	x	x	x
10	x	x	x	x	x	x	x	x	40	49	13	18	140	183	11	14
11	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
12	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
13	79	98	4	14	50	75	9	18	x	x	x	x	x	x	x	x
14	107	152	13	24	65	105	33	62	x	x	x	x	x	x	x	x
15	100	170	16	45	50	85	24	54	x	x	x	x	x	x	x	x
16	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
17	80	112	20	43	95	132	42	77	x	x	x	x	x	x	x	x
18	160	258	21	29	170	208	40	95	x	x	x	x	x	x	x	x
19	102	148	x	x	155	193	x	x	x	x	x	x	x	x	x	x
20	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
21	91	117	17	32	121	151	26	55	x	x	x	x	x	x	x	x
22	76	87	31	55	99	110	42	57	96	116	22	47	80	101	21	30
23	x	x	x	x	x	x	x	x	77	90	19	36	64	77	23	33
24	74	109	14	22	108	144	29	55	x	x	x	x	x	x	x	x
25	x	x	x	x	x	x	x	x	70	91	x	x	27	59	x	x
26	x	x	x	x	x	x	x	x	78	98	20	28	80	112	19	29
27	x	x	x	x	x	x	x	x	78	116	42	90	75	107	27	41
28	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
29	x	x	x	x	x	x	x	x	93	131	34	56	103	164	23	33

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.

SUDDEN IONOSPHERIC DISTURBANCES

SHORT WAVE RADIO FADEOUTS — SUDDEN PHASE ANOMALIES
SUDDEN COSMIC NOISE ABSORPTION — SUDDEN ENHANCEMENTS OF SIGNAL
SUDDEN ENHANCEMENTS OF ATMOSPHERICS — SUDDEN FREQUENCY DEVIATIONS

FEBRUARY 1968

FEB 1968	UNIVERSAL TIME START	END	MAX	WIDE SPREAD INDEX	SWF TYPE	IMP	IMPORTANCE ABS SCNA	SEA	SPA	SES	SFD	STATIONS	KNOWN FLARE
01	0649	0711	0659	1					27			MA(M23-27,G18-11)	*
01	0930	1030	0937	5					85			DE(AA17-85) UM(C15-72)	0925
01	0932	1041	0948	1						3		UM	
01	1045	1125		1				1				KE	1055
01	1100	1230	1110	5					126			DE(AA17-126) UM(C15-34)	
01	1059		1110	1						2		UM	
01	1119	1135	1124	1			16 1					RO	1115E
01	1119	1127		1				1-				RO	
01	1122		1131	1					39			UM(C15-39)	
01	1122		1131	1						2		UM	
01	1437	1550	1450	5					54			UM(S21-54,C15-34)	1435
												DE(AA17-25)	
01	1436	1452	1437	1							02	BO(WWI8-0.2)	
01	1759	1830	1805	5	S	1+						HU BO WS TR BE MC	1754
01	1759	1845	1805	3				3				A1 A19	
01	1800	1920	1806	5					50			HA(L20-50) UM(C15-34)	
01	1803	1845	1806	3						3		A21 DV	
01	1802	1818	1803	5							30	BO(WWI11-3.0)	
												HA(WWVH5-1.2)	
01	1917	1936	1923	5	SL	1						TR BE BO WS HU MC	1915
01	1917	2000	1920	1				2+				A1	
01	1920	2040	1925	5					68			HA(B60-68,L20-58)	
												UM(S21-62,C15-17)	
01	1919	2010	1922	5						3		A21 UM DV	
01	1917	1925	1918	1							22	BO(WWI11-2.2)	
			1919								27	BO(WWI11-2.7)	
01	2044	2140	2059	5	G	1+						MC BE HU WS	2043
01	2040	2110	2050	1				2				A1	
01	2045	2150	2047	1					25			HA(L20-25)	
01	2047	2112	2049	3						1		DV A21	
01	2300	2303	2301	5							07	HA(WWVH10-0.7,	2320E
												WWVH10-0.5)	
												BO(WWI8-0.2)	
02	0003	0022	0006	1					35			MA(G18-35)	0000E
02	0228	0326	0230	5	S	1+						MA CA	0225
02	0240	0310		1				1				KE	
02	0228	0250	0232	1					25			MA(G18-25)	
02	0220U	0300	0221U	1						1-		DV	
02	0228	0326	0300	5	G	1+						MA OK TO	
02	0228	0440	0300	5					105			MA(M23-105,G18-47)	
												UM(C15-34)	
02	0300	0333		1						3-		DV	
02	0450	0520	0500	1					29			MA(G18-29)	*
02	0528	0630	0538	5					300			MA(M23-300) DE(AA17-35)	0500E
02	0542	0605	0546	5	S	1						MA OK CA HK	0541
02	0546	0615	0548	1			43 2					MA	
02	0542	0605	0546	5								A17 KE	
02	0543	0635	0551	5					72			UM(C15-72) MA(G18-50)	
02	0542	0546	0551U	5						2+		TY UM	
02	0920	0940		1				1				KE	0910
02	0920	1030	0930	5					87			DE(AA17-87) UM(C15-50)	
02	0916	0950	0926	1						3		UM	
02	1040	1230	1050	5					100			DE(AA17-100) UM(C15-17)	1035
												SL(R16-40)	
02	1055	1155		5				2				KE PO	1035
02	1054U	1210	1108	5					194			SL(R16-194) UM(C15-89)	
02	1055	1215	1110	1						3		UM	
02	1310	1330	1322	1	G	1						MC	1257
02	1300	1330		5				2				KE PO	
02	1304	1319	1309	5					86			SL(R16-86) UM(S21-38,	
												C15-28)	
02	1303	1330	1308	1						3		UM	
03	0321	0343	0328	1	S	1						MA	0321
03	0326	0419	0338	5					84			MA(M23-84,G18-22)	
												UM(C15-34)	
03	0327	0345D	0329	5						1		DV UM	
03	0419	0440	0420	1	S	1						MA	0419
03	0419	0441	0426	5					21			MA(G18-21) UM(C15-17)	
03	0420	0450	0424	1						1		UM	
03	0803	0816	0809	1			40 2					MA	0800E
03	0800			1				2				KE	
03	0750		0811	5					72			UM(C15-72) DE(AA17-66)	
												MA(M23-18)	

SUDDEN IONOSPHERIC DISTURBANCES

FEBRUARY 1968

FEB 1968	UNIVERSAL TIME START	END	MAX	WIDE SPREAD INDEX	SWF TYPE	IMP	IMPORTANCE ABS	SCNA	SEA	SPA	SES	SFD	STATIONS	KNOWN FLARE
03	0750		0811	1							3		UM	
03	1045			1					1				KE	*
03	1045	1130	1054	1						28			UM(C15-28)	
03	1045	1130	1054	1							2		UM	
03	1338	1355		1	SL	1-							HU	1333
03	1335	1421	1339	1			21	1					RO	
03	1334	1345		1					1				RO	
03	1339	1405	1345	5						94			SL(R16-94) UM(S21-77, C15-56)	
03	1336	1416	1344	1							3		UM	
04	0346	0400	0352	1	G	1-							MA	0347
04	0411	0420	0415	3	S	1-							MA OK	0410
04	2350		2404	1						35			MA(M23-35,G18-20)	2355E
05	0822	0834	0830	5			20	1					MA RO	0818
05	0815	0915		1					2+				KE	
05	0821	0910	0830	5						39			UM(C15-39) MA(G18-30)	
05	0821	0910	0830	1							3		UM	
06	0941	0958		1	S	1-							JU	
06	0935	1030	0945	5						54			DE(AA17-54) UM(C19-28)	
06	1558	1606	1559	1								04	BO(WWI11-0.4)	1558
			1600									03	BO(WWI11-0.3)	
07	1035	1115		1	SL	1							SW	
07	1235	1318	1239	1			10	1					RO	1240
07	1817	1834	1824	1	SL	1-							BE	1816
08	1827	1830	1829	1								10	HA(WWVH10-1.0)	1824
09	1652	1715U	1655U	1	G	1-							HU	1704E
09	1651	1804	1658	1						23			UM(S21-23,C19-11)	
09	1651	1721	1655	1							2		UM	
10	1020	1110		1				1					KE	1025E
10	1357	1415U		1	SL	1-							HU	1330E
10	1350	1410	1359	5						55			DE(AA17-55) UM(S21-46, C19-28) SL(R16-50)	
10	1357	1453	1405	1							3		UM	
10	1605	1837U	1626	1	G	2+							TR	1558
10	1605	1645	1616	1								03	BO(WWI8-0.3)	
			1621									02	BO(WWI8-0.2)	
10	1632	1639	1635	5	S	1-							WS HU	1558
10	1615	1815	1638	1						69			UM(S21-69)	
10	1915	1940	1920	5	S	1+							BE TR WS BO HU MC	1915
10	1914	2043	1926	3			40	2					BO MC	
10	1916	1950	1923	3					2				A6 BO	
10	1915	2025	1927	5						112			UM(S21-112,C19-36) AN(M23-79) HA(L20-79)	
10	1916	2010	1927	5							3+		A21 UM DV	
10	1914	1924	1915	1								09	BO(WWI11-0.9)	
			1916									11	BO(WWI11-1.1)	
10	2005	2035	2013	1						57			UM(C19-57)	
10	1955	2130	2100	1							2+		A21	
10	2056	2117	2059	1			17	1					BO	2055
10	2056		2104U	1					1				BO	
10	2056	2125	2100	5						30			AN(M23-30) HA(L20-14)	
10	2055	2105	2056	1								02	BO(WWI8-0.2)	
11	0339	0409	0345	3	S	1+							OK MA	0337
11	2044		2050	1						32			UM(C19-32)	2040
11	2056	2115	2102	1						21			UM(C19-21)	
11	2056	2115	2102	1							1		UM	
12	0340	0355	0348	1	SL	1-							MA	0335E
12	0336	0405	0339	1						50			MA(G18-50)	
14	1035	1200	1045	5						87			DE(AA17-87) SL(R16-65)	1038
14	1536	1550U	1538	1	S	1-							HU	1535E
14	1535	1735	1541	1						35			UM(S21-35,C22-12)	
14	1535	1603	1540	1							2		UM	
14	1534	1540	1535	1								16	BO(WWI11-1.6)	
			1535									22	BO(WWI11-2.2)	
15	0033	0113	0043	1	SL	1							MA	0032

SUDDEN IONOSPHERIC DISTURBANCES

FEBRUARY 1968

FEB 1968	UNIVERSAL TIME START	END	MAX	WIDE SPREAD INDEX	SWF TYPE	IMP	IMPORTANCE ABS SCNA	SEA	SPA	SES	SFD	STATIONS	KNOWN FLARE
15	0032	0120	0049	5					40			MA(M23-40,G18-18)	
												HA(L20-14)	
15	0039	0040	0039	1							06	HA(WWVH5-0.6,	
												WWVH10-0.2)	
15	0258	0318	0306	1	SL	1-						MA	0258
15	0302	0340	0308	1					51			MA(M23-51,G18-29)	
15	1501	1530	1511	5	SL	1+						BE HU TR WS MC JU	1450
15	1501	1700	1513	5					62			UM(S21-62,C22-32)	
												DE(AA17-40)	
15	1503	1550	1513	1						3		UM	
15	1500	1510	1501	1							03	BO(WWI9-0.3)	
16	1602	1618	1611	5	SL	1-						TR WS	1600
16	1604	1709	1610	1					54			UM(S21-54,C22-24)	
16	1604	1700	1610	1						3		UM	
16	1603	1614	1604	1							02	BO(WWI9-0.2)	
			1606								04	BO(WWI9-0.4)	
16	2011	2040	2020	5	G	1						WS TR MC HU	2008
16	2010	2050	2020	1					18			HA(L20-18)	
16	2012	2013	2012	5							06	HA(WWVH5-0.6,	
												WWVH10-0.5)	
												BO(WWI11-0.3)	
17	0252	0311	0255	3	S	1-						MA OK	0252
17	0256	0400	0302	5					100			MA(M23-100) WO(G18-68)	
17	0246	0320	0252	1						1-		DV	
17	0252	0253	0253	1							05	HA(WWVH5-0.5,	
												WWVH10-0.4)	
17	0254	0255	0254	1							04	HA(WWVH5-0.4)	
17	1255	1307		1	S	1						JU	1255
17	1255	1315	1303	5					86			SL(R16-86) UM(S21-38,	
												C22-24) DE(AA17-65)	
17	1256	1324	1302	1						3		UM	
17	2345		2355	1					22			HA(L20-22)	2345
17	2345	2346	2346	1							04	HA(WWVH10-0.4,	
												WWVH5-0.3)	
18	1832	1908	1851	1	G	1						BE	1830
18	1920	2320	1930	1					25			HA(L20-25)	1920
18	1928	2000	1935	1						1+		A21	
18	1925	1928	1927	1							07	HA(WWVH5-0.7,	
												WWVH10-0.4)	
19	0314	0428	0317	1	S	2						MA	0313
19	0315	0337	0323	1			25 1					MA	
19	0313	0500	0324	5					105			MA(M23-105) WO(G18-87)	
20	0500	0530	0509	5	SL	1						MA CA	*
20	1110	1200		1				*				TA	
20	1117	1154	1120	1					60			UM(C22-60)	
20	1117	1154	1120	1						2		UM	
20	2114	2150	2123	5					80			UM(C22-80) HA(L20-14)	2053
21	2005	2400	2030	1					43			HA(L20-43)	2010
21	2020	2050	2040	1						1+		DV	
23	2122	2200	2127	1					25			BO(R16-25)	2120
24	2315	2350	2320	5					29			MA(M23-29) HA(L20-22)	2316E
25	0141	0150	0145	1	S	1-						MA	0141
25	0322	0443	0326	1	S	2						MA	0321
25	0345	0424	0402	3	G	1+						OK MA	0343
25	0358	0414	0403	1			26 1					MA	
25	0354	0455	0405	1					52			MA(M23-52)	
25	0730	0749	0741	1			15 1					MA	0729
25	0730	0800	0735	1					33			MA(R16-33)	
25	2100	2140	2100	1					29			BO(R16-29)	2056
25	2200	2221	2207	1	SL	1-						BE	2143
25	2146	2211	2148	1					14			HA(L20-14)	
25	2150	2151	2150	5							08	HA(WWVH10-0.8,	
												WWVH5-0.6)	
												BO(WWI11-0.3)	
25	2218	2232	2224	1	SL	1-						BE	2205
25	2215	2245	2222	1					22			HA(L20-22)	

SUDDEN IONOSPHERIC DISTURBANCES

FEBRUARY 1968

FEB 1968	UNIVERSAL TIME START	END	MAX	WIDE SPREAD INDEX	SWF TYPE IMP	IMPORTANCE ABS SCNA	SEA	SPA	SES	SFD	STATIONS	KNOWN FLARE
26	0255	0301	0258	1		76 2					MA	0245
26	0623	0634	0628	1	SL 1-						MA	0611
26	0614	0621	0616	1		55 1					MA	
26	0620	0655		5			1				KE A17	
26	0810	0855		1			1				KE	0817
26	1300	1330	1304	5				27			DE(AA17-27) UM(C15-17)	1254
26	1733	1734	1733	1						06	HA(WWVH5-0.6)	1725
26	2115	2152	2120	1				101			MA(G18-101)	
26	2255	2256	2255	1						02	HA(WWVH10-0.2, WWVH5-0.2)	2255
27	1150	1235	1200	1				50			WO(G18-50)	
27	1330	1425	1334	1				15			UM(S21-15,C15-11)	1330E
27	2005	2035	2008	3					1		A21 A1	1948
28	1855	1913	1858	1	S 1-						WS	1854
28	1852	1919	1855	1		10 1					BO	
28	1852	1922	1855	1				18			HA(L20-18)	
28	1936	2000	1938	5	S 1-						TR MC WS	1931
28	1936	2010	1941	1		18 1					BO	
28	1935	2005	1938	1				22			HA(L20-22)	
28	1936	1941	1937	1						03	BO(WWI11-0.3)	
29	1731	1805U	1745	1		14 1					BO	1734
29	1737	1808	1739	1			1-				BO	
29	1850	2040	1907	1				87			MA(M23-87)	1859

M = NPM G = NPG R = GBR O = Omega
C = NWC AA = NAA L = WWVL
A = NBA S = NSS B = WWVB

Hawaii - SCNA-SEA out of operation.

Errata: The January 1968 table appearing in FB-283 reported an SPA of 147°, reported by Sao Paulo (UM). The transmitter appeared as Omega, 12 MHz; the correct frequency should be Omega, 13 MHz, located at Aldra, Norway.

SOLAR X-RAYS BY SATELLITE

FEBRUARY 1968

DAILY AVERAGES FOR FEBRUARY 1968

DATE	8-20 XE-3	0-8 XE-4
1	41.54	39.86
2	42.85	40.93
3	36.69	28.65
4	27.60	19.46
5	26.06	16.53
6	23.26	13.73
7	25.98	16.42
8	18.25	11.40
9	19.18	13.86
10	17.63	12.65
11	15.72	8.50
12	16.77	12.26
13	11.05	4.76
14	11.76	4.91
15	10.92	6.42
16	13.16	6.49
17	8.99	4.30
18	9.76	7.80
19	16.93	12.73
20	10.80	4.99
21	17.16	10.94
22	18.11	14.06
23	14.65	9.76
24	18.46	11.37
25	22.03	14.00
26	23.82	17.87
27	17.38	11.82
28	17.91	12.30
29	15.52	10.38

OUTSTANDING EVENTS FOR FEBRUARY 1968

DATE	STA	START UT	END UT	8-20 XE-3	0-8 XE-4	0-3 XE-5	COMMENTS
1	NRL	0403	0458	49.71	66.88	5.35	INCREASING
1	NRL	1714	1758	47.50	46.92	5.96	PEAK 1719
1	NRL	2232	2322	81.79	136.76	19.62	READ 2240
2	NRL	0507	0602	158.15	564.39	251.93	PEAK 0546
3	NRL	0320	0414	81.79	276.51	117.72	PEAK 0339
8	NRL	0302	0401	39.95	67.73		PEAK 0350
8	NRL	1816	1906	28.41	36.93	2.35	DECREASING
9	NRL	0530	0629	47.50	66.88	8.06	INCREASING
10	NRL	1904	1954	97.82	463.93	285.79	READ 1916
10	NRL	1904	1954	186.02	338.54	104.92	READ 1932
11	NRL	0113	0212	26.64	27.59		PEAK 0133
11	NRL	0702	0755	28.41	30.24	2.95	DECREASING
11	NRL	0702	0755	26.16	26.95	2.65	INCREASING
13	NRL	0240	0339	18.31	17.56		PEAK 0300
15	NRL	0055	0153	17.21	19.85	1.44	DECREASING
16	NRL	1947	2035	57.73	126.78	28.15	PEAK 2015
17	NRL	2306	2359	21.83	19.85D		INCREASING
19	NRL	0614	0712	25.66	13.83	0.24	DECREASING
19	NRL	0926	1026	21.67	19.30	4.69	INCREASING
19	NRL	2030	2045	17.63	15.88	1.32	INCREASING
19	NRL	2121	2209	23.61D	19.85	1.32	PEAK 2143
20	NRL	0459	0557	65.75	206.64	62.27	READ 0512
20	NRL	0459	0557	81.79	176.69	32.41	READ 0525
20	NRL	2116	2200	23.61D	19.85D	7.20	READ 2135
21	NRL	0658	0758	49.74	96.83	15.35	READ 0720
21	NRL	0658	0758	57.73	96.83	11.09	READ 0729
21	NRL	1935	2016	23.61	19.85D		INCREASING
22	NRL	0528	0628	27.29	31.02	3.85	PEAK 0554
25	NRL	0828	0931	36.27	46.92	5.05	INCREASING
26	NRL	0537	0640	65.75	166.71	53.74	PEAK 0627
28	NRL	0802	0903	22.79	12.27	0.24	DECREASING

SOLAR X-RAYS BY SATELLITE

FEBRUARY 1968

OBSERVING TIMES FOR FEBRUARY 1968

DATE	STA	START UT	END UT	DATE	STA	START UT	END UT	DATE	STA	START UT	END UT
1	NRL	0048	0143	12	NRL	0109	0208	21	NRL	0658	0758
1	NRL	0222	0320	12	NRL	0244	0342	21	NRL	1332	1430
1	NRL	0403	0458	12	NRL	0420	0519	21	NRL	1510	1519
1	NRL	0511	0609	12	NRL	0535	0632	21	NRL	1837	1858
1	NRL	0647	0746	12	NRL	1644	1727	21	NRL	1935	2016
1	NRL	1714	1758					21	NRL	2018	2034
1	NRL	2232	2322	13	NRL	0240	0339	21	NRL	2111	2155
				13	NRL	0708	0805				
2	NRL	0507	0602	13	NRL	1838	1912	22	NRL	0528	0628
2	NRL	0642	0740	13	NRL	2241	2248	22	NRL	1831	1854
2	NRL	1829	1903	13	NRL	2324	2400	22	NRL	1930	2010
								22	NRL	2012	2029
3	NRL	0229	0239	14	NRL	0000	0019	22	NRL	2106	2151
3	NRL	0320	0414	14	NRL	0100	0159	22	NRL	2344	2400
3	NRL	0502	0556	14	NRL	0734	0829				
3	NRL	0638	0736	14	NRL	1722	1814	23	NRL	0000	0038
				14	NRL	2237	2244	23	NRL	0114	0216
4	NRL	0457	0551	14	NRL	2320	2400	23	NRL	0429	0530
4	NRL	0633	0732					23	NRL	1558	1650
4	NRL	1013	1100	15	NRL	0000	0014	23	NRL	1728	1732
4	NRL	1151	1248	15	NRL	0055	0153	23	NRL	1827	1849
				15	NRL	0933	1029	23	NRL	1925	2002
5	NRL	0317	0415	15	NRL	1925	2016	23	NRL	2006	2024
5	NRL	0452	0633	15	NRL	2231	2239	23	NRL	2101	2145
5	NRL	1032	1126	15	NRL	2315	2400				
								24	NRL	0452	0550
6	NRL	0142	0203	16	NRL	0000	0012	24	NRL	1302	1401
6	NRL	0245	0411	16	NRL	0051	0149	24	NRL	1440	1448
6	NRL	0447	0546	16	NRL	0504	0600				
6	NRL	1414	1508	16	NRL	1947	2035	25	NRL	0828	0931
6	NRL	1552	1600	16	NRL	2311	2400	25	NRL	1323	1423
6	NRL	1738	1816					25	NRL	1500	1511
6	NRL	1857	1901	17	NRL	0046	0143	25	NRL	1818	1839
				17	NRL	1653	1746	25	NRL	1915	1952
7	NRL	0212	0239					25	NRL	1956	2015
7	NRL	0307	0415	17	NRL	2042	2054	25	NRL	2051	2134
7	NRL	0443	0541	17	NRL	2130	2218				
7	NRL	1931	2020	17	NRL	2221	2230	26	NRL	0537	0640
7	NRL	2102	2105	17	NRL	2306	2359	26	NRL	1625	1658
								26	NRL	1734	1808
8	NRL	0302	0401	18	NRL	2036	2050	26	NRL	1810	1834
8	NRL	0438	0612	18	NRL	2126	2212	26	NRL	1910	1920
8	NRL	1816	1906	18	NRL	2302	2354				
								27	NRL	0429	0524
9	NRL	0122	0221	19	NRL	0018	0040	27	NRL	1624	1722
9	NRL	0258	0357	19	NRL	0120	0212	27	NRL	1730	1802
9	NRL	0530	0629	19	NRL	0614	0712	27	NRL	1806	1830
9	NRL	1838	1930	19	NRL	0926	1026	27	NRL	1906	1943
				19	NRL	2030	2045				
10	NRL	0118	0217	19	NRL	2121	2209	28	NRL	0310	0408
10	NRL	0253	0352	19	NRL	2210	2221	28	NRL	0802	0903
10	NRL	0743	0838	19	NRL	2257	2348	28	NRL	1620	1650
10	NRL	1904	1954					28	NRL	1725	1757
				20	NRL	0459	0557	28	NRL	1801	1825
11	NRL	0113	0212	20	NRL	1804	1858	28	NRL	1901	1940
11	NRL	0702	0755	20	NRL	2022	2039				
11	NRL	1625	1707	20	NRL	2116	2200	29	NRL	0150	0253
				20	NRL	2204	2215	29	NRL	1609	1645
				20	NRL	2251	2342	29	NRL	1720	1751
								29	NRL	1829	1907

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

FEBRUARY 1968

DATE	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE
				DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
02 01	0000	0006	HARV										
	0000	0037	BOUL										
	0000	0700	CULG				0000	0335	1				I
			CULG				0009	0014	1	0009	0014	1	IIIG
			CULG				0043.5	0046	2	0042.5	0047	2	IIIG
			CULG							0138	0139	1	IIIG
			CULG							0214	0340	1	IIIN
			CULG				0459	0459.5	2	0455	0500	2	IIIG
			CULG							0511.5	0512	1	IIIG
			CULG				0646	0657	1	0646	0655	2	IIIG
	1200	2200	SGMR							1247.6	1249.5		IIIG
			SGMR							1302	1535		CONT
			SGMR							1307	1308		IIIB
			SGMR							1309	1311		II
			SGMR							1345.6	1346.3		IIIB
			SGMR							1356.3	1400		II
	1400	2400	HARV				1405	1917	3				IC
			HARV	1420	2000	1							IN
			HARV				1446	1723	2				IIIN
			SGMR							1446.3	1449		IIIG
	1354	2400	BOUL							1446.5	1448	2	III
			SGMR							1452.3	1453		IIIB
			BOUL							1513.9	1531	2	IIIGG
			SGMR							1530	1531		IIIB
			BOUL							1559.8	1601.1	2	III
			BOUL							1623.9	1627	2	IIIG
			BOUL							1725	2411.7	2	CONT
			HARV	1754	1755	2							IIIG
			HARV	1802	1803	3	1802	1804	3				IIIGG,V
			HARV				1804	1810	2				UNCL
			BOUL							1810.9	1815.7	2	IIIG
			HARV				1811	1816	2	1811	1815	2	IIIGG
			SGMR							1811	1811.6		IIIB
			SGMR							1811	1823.3		CONT
			SGMR							1813.6	1815		IIIG
			HARV				1820	1823	1	1820	1823	1	IIIGG
			HARV				1820	1824	2				II
			BOUL							1820	1825	2	IIIG
			SGMR							1820.3	1823.3		IIIG
			HARV	1917	1923	3	1917	1924	3	1917	1924	3	IIIGG,V
			HARV				1917	2000	1				I
			BOUL							1917.5	1923.4	3	III
			SGMR							1917.6	1918.6		IIIB
			SGMR							1917.6	1924.3		CONT
			HARV	1919	1923	3	1921	1924	3				II
			SGMR							1923.5	1924.3		IIIB
			BOUL							1923.6	1928	3	IIIG
			HARV	2000	2200	1							I
			HARV				2000	2400	1				IN
			BOUL							2019.8	2027.3	2	IIIG
			BOUL							2056	2057.4	2	IIIG
	2100	2400	CULG							2236	2400	1	IIIS
			BOUL							2300.8	2303.2	2	IIIG
			HARV				2301	2303	1				IIIG
			HARV	2331	2332	1	2331	2335	1				IIIG
			BOUL							2331.4	2335	2	IIIG
			CULG							2331.5	2333	1	IIIG
			CULG				2334.5		2	2334.5	2335	2	IIIB
02 02	0000	0006	HARV										
	0000	0030	BOUL										
	0000	0636	CULG							0001	0600	1	IIIS
			CULG				0009.5	0010	1				IIIG
			CULG				0049	0050	1	0049	0050	2	IIIG,V
			CULG				0252	0252.5	1	0252	0253	2	IIIG
			CULG				0257	0301.5	2	0257.5	0301.5	3	IIIG,V,U
			CULG							0307.5	0308.5	2	UNCLF
			CULG				0441.5	0443.5	1	0441.5	0443.5	2	IIIG
			CULG				0542	0544.5	2	0542.5	0545	3	IIIG,V
			CULG				0545.5	0548	2				II
	1200	2200	SGMR							1245	1515		CONT
			SGMR							1246	1246.5		IIIB
			SGMR							1258	1259.3		IIIB
	1358	2400	BOUL							1415 E	1525	3	CONT
			SGMR							1425.3	1426		IIIB
			SGMR							1427	1429		IIIG
			SGMR							1431	1432		IIIB
			BOUL							1525	2410 D	2	CONT
			HARV	1841	1843	2	1841	1843	2				IIIG
			BOUL							1912.6	1914.1	3	IIIG
			HARV	2030	2350	1	1402	2400	1				IN
			BOUL							2307.4	2314.8	3	IIIGG
	2046	2400	CULG				2307.5	2308	2	2307.5	2308.5	3	IIIG,V
			HARV				2308		2	2308		2	IIIG
			CULG				2312	2313.5	2	2312	2314	3	IIIG,V
			HARV				2312	2314	3	2312	2313	1	IIIG
			CULG				2353	2353.5	1	2353	2354	2	IIIG
			BOUL							2353	2358.3	3	IIIG
			CULG				2358		1	2358		2	IIIB

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

FEBRUARY 1968

DATE	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE
				DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
02 03	0000	0006	HARV				0004	0006	1				IIIG
	0000	0652	CULG				0004.5	0006	2	0004.5	0006.5	3	IIIG
	0000	0034	BOUL							0004.5	0006.5	3	IIIG
			CULG				0051.5		1	0051.5		2	IIIB
			CULG							0054.5	0435	1	IIIN
			CULG				0115	0123.5	1	0115	0123.5	2	IIIG
			CULG				0123.5		2	0123.5		2	IIIB,DP,RS
			CULG				0205	0208	1	0205	0208	1	IIIG
			CULG				0215	0216.5	2	0215	0216.5	2	IIIG
			CULG				0232.5	0233	1	0232.5	0233	1	IIIG,DP,RS
			CULG				0257	0259	1	0257	0259	1	IIIG
	1200	2200	SGMR							1336	1340		IV
	1400	2400	HARV				1408	2400	2				I
	1352	2400	BOUL							1414.8	1419.9	2	IIIG
			HARV				1415	1417	2				IIIG
			SGMR							1415	1421		IIIG
			BOUL							1440	2057	1	CONT
			HARV				1443	1858	2				IIIN
			BOUL							1535.7	1538	3	IIIG
			BOUL							1751.5	1751.9	2	III
			HARV	1800	2218	1							IN
			BOUL							1857.8	1858.6	3	IIIG
			SGMR							1858	1859		IIIB
			SGMR							1913.8	1914.3		IIIB
			SGMR							1941	1941.6		IIIB
	----		BOUL							2057	2350 D	2	CONT
	2032	2400	CULG							2139.5	2400	1	IIIN
			HARV	2218	2400	1							I
			HARV				2328		1				IIIG
			CULG				2328		1	2328	2328.5	1	IIIB
			BOUL							2328.2	2328.7	3	III
02 04	0000	0006	HARV										
	0000	0033	BOUL										
	0000	0650	CULG							0000	0457	1	IIIN
			CULG				0101.5		1	0101.5		1	IIIB
			CULG				0537.5	0540.5	1	0537.5	0540.5	1	IIIG
	1200	2200	SGMR							1322	1410		CONT
			SGMR							1347	1348.8		II
	1400	2400	HARV				1402	1831	1				I
			SGMR							1419	1419.5		IIIB
	1358	2400	BOUL							1419 E	2001	1	CONT
			HARV	1757	2246	1	1831	2400	1				IN
			HARV				1822	1824	1				IIIG
			HARV				1944	2055	1				IIIN
			BOUL							1953.9	2001	3	IIIGG
			HARV				1955	2000	2				IIIGG
			BOUL							2001	2134	1	CONT
			BOUL							2134	2302	1	CONT
			BOUL							2302	2345 D	2	CONT
	2201	2400	CULG							2311.5		1	IIIB
			CULG				2324	2328	2	2324	2328.5	2	IIIG,V
			BOUL							2324.1	2329.5	3	IIIGG
			HARV	2325		1	2324	2325	3	2325		1	IIIGG
			HARV	2327	2328	1	2327	2329	3	2328		1	IIIGG
			HARV	2330	2331	2	2330	2331	1				IIIGG
			CULG							2343		1	IIIB
02 05	0000	0006	HARV										
	0000	0033	BOUL										
	0000	0656	CULG				0042.5		1	0042.5	0049	1	IIIG
			CULG				0050.5		2	0050.5		2	IIIB
			CULG				0130	0150	2	0130	0155	2	IIIG
			CULG							0213.5		1	IIIB
			CULG				0256		1				IIIB
			CULG							0256	0312	1	IIIN
			CULG							0325	0402	1	IIIN
			CULG							0523	0524	1	IIIG
			CULG							0605		1	IIIB
	1200	2200	SGMR							1326.3	1327.6		IIIB
			SGMR							1353	1354		IIIB
	1400	2400	HARV				1506	1507	1				UNCL
			SGMR							1506.3	1507.5		IIIB
			HARV				1512		2				IIIG
			HARV				1515		1				IIIG
			HARV				1528		2	1528		2	IIIG
			SGMR							1554.6	1555.5		IIIB
	1354	2400	BOUL							1554.7	1555.9	3	III
			HARV				1555		2	1555		1	UNCL
			BOUL							1601.1	1601.3	1	III
			SGMR							1626.6	1629		IIIG
			BOUL							1651.8	1652	1	III
			BOUL							1718.8	1722.1	3	IIIG
			HARV				1719	1721	2	1720		2	IIIGG
			SGMR							1720	1721		IIIB
			BOUL							1730.8	1731.7	2	IIIG
			BOUL							1758.5	1758.9	1	III
			BOUL							1808.1	1808.4	1	III
			BOUL							1839	1921	1	CONT
			HARV	1842	2122	1	1404	2000	1				IN

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

FEBRUARY 1968

DATE	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE
				DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
02 05			BOUL							2010.4	2010.8	2	III
			BOUL							2055.6	2055.9	1	III
			BOUL							2117.9	2118.1	1	III
			BOUL							2156.2	2158.5	1	IIIG
			BOUL							2313	2313.3	2	III
	2041	2400	CULG							2351		1	IIIB
			CULG							2359		1	IIIB
02 06	0000	0007	HARV										
	0000	0033	BOUL										
	0000	0700	CULG				0235.5	0238	1	0236	0239	2	IIIG
			CULG							0515		1	IIIB
	1200	2200	SGMR										B
	1348	2400	BOUL							1528.4	1529.2	2	III
	1400	2400	HARV				1559	1600	3				IIIG
			BOUL							1613.5	1614.3	2	IIIG
			BOUL							1636.5	1636.9	2	III
			HARV				1708		2				IIIG
			BOUL							1710.6	1710.9	2	III
			HARV				1712		2				IIIG
			BOUL							1925.9	1926.4	1	IIIG
			BOUL							2015.5	2015.7	1	III
			BOUL							2023.3	2023.6	2	III
			HARV	2045		1							IIIG
			HARV	2140	2141	1	2130	2141	2				IIIG
	2038	2400	CULG							2155		1	IIIB
			BOUL							2156.2	2156.5	1	III
			HARV	2335	2336	2							IIIG
			BOUL							2344.5	2346	1	IIIG
02 07	0000	0008	HARV										
	0000	0035	BOUL										
	0000	0638	CULG							0056.5	0057.5	1	IIIG
			CULG							0126.5			IIIB
			CULG							0226		1	IIIB
	1200	2200	SGMR										B
	1400	2400	HARV				1620		1	1620		1	IIIG
	1354	2400	BOUL							1620.2	1621.4	2	IIIG
			HARV				1821		2				U
	2044	2400	CULG										
02 08	0000	0008	HARV										
	0000	0031	BOUL										
	0000	0627	CULG				0109	0110	2	0109	0110	2	IIIG,V,U
			CULG				0314.5	0318	1	0314.5	0318	2	IIIG
			CULG				0358	0359	2	0358	0359	2	IIIG,V
	1200	2200	SGMR							1359	1419		CONT
			SGMR							1359.3	1401		IIIB
	1353	2400	BOUL							1359.4	1410.7	2	IIIGG
	1400	2400	HARV				1402	1405	3				II
			SGMR							1403	1404		IIIB
			SGMR							1409.3	1410.3		IIIB
			BOUL							1425.2	1431.3	1	IIIGG
			BOUL							1755.1	1755.8	1	IIIG
	2043	2400	CULG										
02 09	0000	0009	HARV										
	0000	0034	BOUL										
	0000	0648	CULG										
	1200	2200	SGMR										B
	1400	2400	HARV	2014	2019	1	2008	2126	1				IN
	2036	2400	CULG										
	1354	2400	BOUL							2106.6	2106.8	1	III
			BOUL							2125	2300.5	2	CONT
			BOUL							2300.5E	2335	1	CONT
02 10	0000	0010	HARV										
	0000	0035	BOUL										
	0000	0653	CULG										
	1200	2200	SGMR							1545	1800		CONT
	1357	2400	BOUL							1617.3	1624.9	3	IIIGG
	1400	2400	HARV				1618	1619	2	1618	1619	2	IIIGG
			SGMR							1618	1620		IIIB
			SGMR							1618	1640		CONT
			HARV				1620	1625	1				UNCL
			SGMR							1623.3	1625.3		II
			BOUL							1624.9	1632.2	3	II
			HARV				1626	1634	2	1626	1634	2	II
			SGMR							1626.3	1638		IIGB
			HARV	1627	1714	2							IVN
			BOUL							1631.3	1639.9	3	IIIGG
			BOUL							1632.2	1715	3	IV
			HARV				1638	1640	1	1638	1640	1	II
			SGMR							1638.3	1639		IIIB
			BOUL							1648	1648.5	3	III
			SGMR							1648	1649		IIIB
			BOUL							1715	1801.1	1	IV
			HARV	1738	1739	2	1738	1741	2				IIIG
			BOUL							1801	1845	1	CONT
			BOUL							1808.2	1808.8	3	III

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

FEBRUARY 1968

DATE	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE
				DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
02 10			SGMR							1808.3	1809.3		IIIB
			HARV	2034	2036	3	2035	2036	2				IIIGG
	2044	2400	CULG										
			HARV	2152	2153	3	2152	2153	2				IIIG
02 11	0000	0010	HARV										
	0000	0033	BOUL							0013.7	0014.1	2	III
	0000	0656	CULG				0014		1	0014		1	IIIB
	1200	2200	SGMR										B
	1358	2400	BOUL							1630.1	1630.3	2	III
			BOUL							1659	1659.4	1	III
			BOUL							1820.4	1820.6	1	III
			BOUL							1840.4	1840.7	1	III
	1730	2400	HARV				1913	1914	2				IIIG
			HARV	2017	2018	2	2017	2018	2				IIIG
			HARV	2038	2040	3	2038	2040	2				IIIGG
			HARV	2046		2	2046		2				IIIG
			HARV				2049	2050	1				IIIG
			BOUL							2108.7	2109	2	III
			HARV	2319	2320	1	2319	2320	2				IIIG
	2038	2400	CULG				2319.5		1				IIIB,U
02 12	0000	0010	HARV										
	0000	0040	BOUL										
	0000	0700	CULG										
	1400	2400	HARV				1444	1447	1				IIIG
			HARV				1645	1653	2				IIIGG
	1353	2400	BOUL							1648.4	1651.9	2	IIIG
	1400	2400	HARV				1657	1658	1				IIIG
			BOUL							1730.9	1731.5	1	III
			HARV				1731		1	1731		2	IIIG
			HARV				1743	1745	1				IIIG
			BOUL							1744.3	1744.8	2	III
			HARV				1921	2352	2				IIIN
			HARV				1950	1953	2	1950	1953	2	IIIGG
	1200	2200	SGMR							1950	1952		IIIB
			BOUL							1950.6	1952.3	3	IIIG
	2039	2400	CULG							2152		1	IIIB
			HARV	2305	2306	2	2305	2306	3				IIIG
			CULG				2352	2353	1	2352	2353	1	IIIG
			BOUL							2352.1	2353.1	2	IIIG
02 13	0000	0010	HARV										
	0000	0041	BOUL										
	0000	0655	CULG				0132		1				IIIB
			CULG				0242		1				IIIB,U
	1200	2200	SGMR										B
	1400	2400	HARV				1814		2	1814		2	IIIG
	1354	2400	BOUL							1814.1	1814.6	2	IIIG
			HARV				2110	2111	2				IIIG
	2044	2400	CULG				2110.5		2				IIIB
			BOUL							2110.6	2110.9	2	III
			HARV				2130	2356	1				IIIN
			HARV	2238		1	2236	2239	2				IIIGG
			HARV	2241	2242	1	2241	2242	2				IIIGG
			HARV	2255	2300	1	2255	2301	2	2259		1	IIIGG
			BOUL							2255.8	2259.6	3	IIIG
			CULG				2259		2	2259		2	IIIB
02 14	0000	0011	HARV										
	0000	0041	BOUL										
	0000	0656	CULG				0043	0045	2	0044	0045.5	3	IIIG,V,U
			CULG				0347.5		2	0347.5	0348	2	IIIG
			CULG				0416.5	0420	2	0416.5	0421.5	2	IIIGG,V
	1400	2400	HARV				1414	1417	2				IIIG
			HARV				1450	1453	2	1452		1	IIIGG
	1353	2400	BOUL							1450.2	1453.2	2	IIIG
			HARV				1456	1509	1				IIIN
			HARV				1534	1537	3	1534	1537	3	IIIGG,V
	1200	2200	SGMR							1534	1537		IIIB
			BOUL							1534.5	1537.1	3	IIIG
			HARV				1537	1540	1				UNCL
			SGMR							1537	1545		IV
			BOUL							1537.1	1555	2	IV
			BOUL							1706.1	1706.4	2	III
			SGMR							1734	1735		IIIB
			BOUL							1736.6	1738.4	2	IIIG
			BOUL							1803.8	1804.8	2	IIIG
			HARV				1804	2255	1	1804	1937	1	IIIN
			BOUL							1810.7	1813.9	2	IIIG
			SGMR							1813.3	1814.3		IIIB
			BOUL							1823.3	1823.6	2	III
			BOUL							1851.3	1851.5	1	IIIG
			BOUL							1936.8	1937.8	2	IIIG
			SGMR							1937.3	1938		IIIB
			BOUL							2053.5	2054.3	3	IIIG
	2037	2400	CULG				2053.5	2057.5	1				IIIG
			HARV	2056		1	2053	2056	2	2053	2055	2	IIIGG
			BOUL							2103.1	2103.8	3	III
			BOUL							2254.5	2255.8	2	IIIG

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

FEBRUARY 1968

DATE	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE
				DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
02 14			BOUL							2300.4	2300.7	2	III
02 15	0000	0012	HARV										
	0000	0048	BOUL							0028.8	0029	2	III
	0000	0700	CULG				0029		1	0028.5	0029	2	IIIG
			CULG				0049.5	0050	1	0049.5	0050	1	IIIG
			CULG				0214.5	0216	2	0214.5	0216	2	IIIG,V
			CULG				0244	0245	2	0244	0245.5	2	IIIG
			CULG				0259	0313	2	0259	0315	2	IIIGG
			CULG				0407	0407.5	1	0407	0407.5	1	IIIG
	1200	2200	SGMR							1400	1700		CONT
	1400	2400	HARV				1409	1411	1				IIIGG
			SGMR							1409.5	1412		IIIG
			HARV				1456	1714	1				IIIN
			HARV				1505	1515	2				II
			HARV				1507	1526	2				IVN
	1353	2400	BOUL							1509	1547	1	CONT
			BOUL							1521	1526	3	IIIGG
			SGMR							1521.3	1523		IIIB
			SGMR							1524.3	1526.3		IIIG
			HARV				1525	1526	1				IIIG
			BOUL							1623.4	1632.3	1	IIIGG
			BOUL							1946	1946.3	1	III
			BOUL							1950.3	1954.1	3	III
			HARV				1952	1954	2	1952	1954	2	IIIGG
			SGMR							1952	1954		IIIG
			BOUL							2014	2103	1	CONT
			HARV				2016	2017	2	2017		2	IIIG
			BOUL							2017.1	2018	3	IIIG
			SGMR							2017.5	2018.3		IIIB
			SGMR							2055.6	2057		IIIB
			BOUL							2055.7	2057.2	3	IIIG
	2037	2400	CULG							2056		1	IIIB
			HARV				2056	2057	2	2056		2	IIIG,U
			BOUL							2218.9	2219.3	1	III
			BOUL							2248.1	2251.4	2	IIIG
			HARV	2257		1	2257		2				IIIG
			CULG				2257		1				IIIB
			HARV				2305	2327	1	2309		1	IIIN
			BOUL							2309.3	2312	2	IIIG
			CULG				2309.5		1	2309.5		2	IIIB
			CULG							2312		1	IIIB
			BOUL							2315.6	2319.2	1	IIIG
			BOUL							2326.6	2326.9	1	III
02 16	0000	0012	HARV				0003	0011	1				IIIN
	0000	0650	CULG				0010.5	0011	1	0010.5	0011	2	IIIG
	0000	0041	BOUL							0010.6	0010.9	2	III
	0000	0650	CULG				0044.5		1	0044.5		1	IIIB
			CULG				0201.5		1	0201.5		2	IIIB
	1400	2400	HARV				1418	1420	2	1418	1419	2	IIIGG
	1353	2400	BOUL							1418.3	1418.9	3	IIIG
	1200	2200	SGMR							1418.3	1420		IIIB
			SGMR							1428	1429		IIIB
			BOUL							1442.8	1443.6	3	III
			HARV				1443	1444	2				IIIGG
			BOUL							1508.2	1508.4	1	III
			BOUL							1537.8	1539	2	IIIG
			HARV	1602	1604	1	1601	1608	2	1602	1605	2	IIIGG
			BOUL							1602.2	1606.1	3	IIIGG
			SGMR							1603	1605		IIIG
			HARV				1615	1618	1				UNCL
			BOUL							1615.4	1618.5	2	IIIG
			BOUL							1627.8	1631.4	3	IIIG
			HARV				1628		2				IIIG
			HARV				1712	1713	3	1712	1713	3	IIIG
			SGMR							1712.5	1714		IIIB
			BOUL							1712.6	1714.8	3	III
			BOUL							1723.3	1723.5	2	III
			BOUL							1752.4	1752.7	2	III
			BOUL							1800.9	1807.1	2	IIIG
			HARV				1803	2318	1				IN
			BOUL							1820.1	1824.9	3	IIIG
			SGMR							1821	1822.3		IIIB
			BOUL							1945.5	1945.8	2	III
			BOUL							1950.9	1952.3	2	IIIG
			SGMR							1951.3	1952		IIIB
			BOUL							2004.8	2005.1	2	III
			BOUL							2010.5	2021	3	IIIGG
			SGMR							2010.6	2022.3		CONT
			BOUL							2011	2039	2	CONT
			HARV	2013	2016	1	2011	2018	2	2011	2018	2	IIIGG
			BOUL							2101.1	2102.7	2	IIIG
			BOUL							2130.4	2134.5	2	IIIG
			BOUL							2158.6	2200.8	3	IIIG
			BOUL							2257.2	2304.9	3	IIIGG
	2059	2400	CULG				2257.5		1	2257.5	2301.5	1	IIIG,V
			BOUL							2347.7	2348.9	2	IIIG
			HARV	2348	2349	1	2347	2349	2				IIIGG
			HARV				2350	2353	2				II

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

FEBRUARY 1968

DATE	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE
				DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
02 17	0000	0013	HARV										
	0000	0035	BOUL							0020	0023.3	3	III
	0000	0500	CULG				0022		1	0022		2	IIIB
			CULG				0251	0255.5	2	0251	0256.5	2	IIIG.V.U
			CULG				0259.5	0306.5	2	0259.5	0306.5	2	II HB
	0557	0700	CULG										
	1357	2400	BOUL							1406.4	1407.8	2	IIIG
	1200	2200	SGMR							1406.6	1407.3		IIIB
	1350	2400	HARV	1414	1417	1	1414	1418	2				IIIG
			BOUL							1414.4	1414.9	1	III
			HARV				1431	1432	2				IIIG
			BOUL							1445.6	1445.9	2	III
			HARV	1446		1	1445	1446	2				IIIG
			BOUL							1612.5	1637	1	CONT
			BOUL							1627.6	1631.7	3	IIIGG
			HARV				1628	1629	2	1628	1629	1	IIIG
			SGMR							1628	1630		IIIB
			HARV				1649	1651	1				IIIG
			BOUL							1809.4	1810.1	2	III
			HARV	1924		2	1924	1925	2	1924	1925	2	IIIG
			SGMR							1924.3	1926		IIIB
			BOUL							1924.4	1925.7	3	III
			SGMR							2017.3	2018.3		IIIB
			BOUL							2017.3	2025.7	2	IIIG
	2055	2400	CULG										
02 18	0000	0015	HARV										
	0000	0701	CULG										
	1458	2400	BOUL							1524.7	1527.2	2	IIIG
			BOUL							1543	1611	3	CONT
	1200	2200	SGMR							1548	1612		CONT
	1350	2400	HARV				1550	1553	1	1551	1552	1	IIIG
			SGMR							1551	1553.5		IIIG
			SGMR							1602.3	1605		IIIG
			HARV				1606	1607	1	1606	1607	1	IIIG
			SGMR							1606.3	1608		IIIG
			BOUL							1615.4	1619.7	2	IIIG
			BOUL							1725.6	1728.1	1	IIIG
	2057	2400	CULG										
02 19	0000	0015	HARV										
	0000	0040	BOUL										
	0000	0702	CULG				0146	0148.5	1	0146	0148.5	1	IIIG
	1200	2200	SGMR							1232.5	1235		IIIB
	1350	2400	HARV										
	1353	2400	BOUL							1529.8	1532.3	2	IIIG
			BOUL							1706.2	1728.5	1	CONT
			BOUL							1718	1724.5	2	IIIGG
	2109	2400	CULG										
			BOUL							2152.6	2153.2	1	III
			BOUL							2247.4	2253.8	2	IIIG
02 20	0000	0015	HARV										
	0000	0700	CULG				0154.5	0158.5	1	0154.5	0158.5	1	IIIG
	1345	2400	HARV										
	1200	2200	SGMR							1453.3	1455		IIIG
	1537	2359	BOUL										
	2059	2400	CULG										
02 21	0000	0016	HARV										
	0000	0705	CULG				0159.5		1				IIIB
			CULG				0432.5		1				IIIB
	1345	2400	HARV				1522	1547	1				I
	1318	2400	BOUL							1613.8	1617.1	2	IIIG
			BOUL							1735.5	1735.7	2	III
	1200	2200	SGMR							2016.6	2040		CONT
			BOUL							2016.8	2024	3	IIIGG
			HARV				2018	2028	2				UNCL
			SGMR							2020	2022		II
			BOUL							2024	2040	1	CONT
			SGMR							2025	2030.6		II
			BOUL							2025.2	2038	3	II
	2055	2400	CULG										
			BOUL							2153.9	2154.1	1	III
			BOUL							2314.8	2315.7	1	III
			BOUL							2330	2330.3	1	III
02 22	0000	0016	HARV										
	0000	0100	BOUL										
	0000	0700	CULG										
	1354	2400	BOUL							1450.4	1451	1	III
			BOUL							1510.3	1510.5	1	III
			BOUL							1523.8	1524.1	1	III
			BOUL							1530.8	1531	1	III
			BOUL							1556.8	1557.3	2	III
			BOUL							1615.5	1620.6	2	IIIG
	1200	2200	SGMR							1618	1619		IIIB
			BOUL							1721.9	1722.3	1	III
			BOUL							1733.8	1738.5	1	IIIG
			BOUL							1759.9	1800.7	2	III

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

FEBRUARY 1968

DATE	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE
				DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
02 22			BOUL							1811.6	1815.5	2	IIIG
			SGMR							1933	1934		IIIB
			BOUL							1935.9	1937.4	2	IIIG
			SGMR							1937	1938		IIIB
			SGMR							1939	1940		IIIB
	1345	2400	HARV				1948	2017	2				IIIN
			BOUL							1948	1955.5	3	IIIG
			BOUL							2005	2009.5	2	IIIG
			BOUL							2016.5	2024	2	IIIG
			SGMR							2016.6	2017.3		IIIB
			BOUL							2045.7	2046.8	1	IIIG
	2101	2358	CULG										
			BOUL							2101.2	2109.4	3	IIIG
			BOUL							2215.2	2215.4	2	III
			BOUL							2222	2222.5	1	III
			BOUL							2335.2	2335.5	1	III
02 23	0000	0017	HARV										
	0000	0102	BOUL										
	0021	0425	CULG				0107		1				IIIB
			CULG				0231	0232	1				IIIG
			CULG				0239	0243	1				IIIG
	0652	0701	CULG										
	1200	2200	SGMR							1203	1204		IIIB
			SGMR							1311.3	1312		IIIB
			SGMR							1330.6	1331.3		IIIB
	1328	2400	BOUL							1335.7	1339.3	2	IIIG
			SGMR							1336	1344		CONT
			SGMR							1414	1415		IIIB
			BOUL							1414.2	1415.3	2	IIIG
			BOUL							1541.2	1544.1	2	IIIG
			BOUL							1557.8	1558	2	III
			BOUL							1634	1639	1	IIIG
			BOUL							1713.4	1713.7	1	III
			BOUL							1843.5	1848.6	1	IIIG
			BOUL							1913.1	1915	1	III
			BOUL							1925.2	1925.7	2	IIIG
			BOUL							2031.3	2033.7	1	IIIG
			BOUL							2124.2	2124.4	1	III
			BOUL							2157.6	2157.9	1	III
			BOUL							2215.5	2219.1	1	IIIG
			BOUL							2243.7	2253.3	3	IIIGG
	1345	2400	HARV				2247	2250	1	2248	2249	1	IIIGG
	2100	2400	CULG				2248.5	2249.5	1	2248.5	2249	1	IIIG
			BOUL							2256.1	2258.2	2	IIIG
			BOUL							2322.1	2324.5	1	IIIG
			BOUL							2330.7	2331.6	1	IIIG
			BOUL							2418.4	2418.7	1	III
02 24	0000	0018	HARV										
	0000	0700	CULG				0159.5		1				IIIB
	1200	2200	SGMR							1237	1238		IIIB
			SGMR							1345.6	1346.3		IIIB
	1309	2400	BOUL							1347	1349.4	2	IIIG
			BOUL							1400.1	1400.8	2	IIIG
			BOUL							1405.9	1408.7	2	IIIG
			SGMR							1406.3	1409.3		IIIG
	1345	2400	HARV				1408	1409	1				IIIG
			BOUL							1416.1	1416.4	2	III
			SGMR							1416.3	1417.3		IIIB
			BOUL							1422	1422.2	2	III
			BOUL							1428.2	1431	2	IIIG
			BOUL							1437.6	1440.7	3	IIIG
			SGMR							1438.3	1439.6		IIIB
			BOUL							1451.6	1457.3	3	IIIGG
			HARV				1452	1456	2	1452	1454	2	IIIGG
			SGMR							1452	1506		CONT
			BOUL							1503.8	2435 D	1	CONT
			SGMR							1521.3	1522		IIIB
			BOUL							1521.5	1525.5	3	IIIG
			SGMR							1525	1526		IIIB
			BOUL							1620.7	1621.4	3	IIIG
			HARV				1621		1	1621		1	IIIG
			SGMR							1621	1622		IIIB
			HARV				1628	1632	1				IIIG
			SGMR							1628	1633		IIIG
			BOUL							1814.8	1815.3	3	III
			SGMR							1815	1816		IIIB
			HARV				1820	1828	1	1820	1828	1	IIIGG
			SGMR							1820.3	1821		IIIB
			BOUL							1820.5	1830.7	3	IIIGG
			SGMR							1823.3	1825.6		IIIG
			SGMR							1823.3	1841		CONT
			SGMR							1826.5	1829		IIIG
			BOUL							1830.7	1834.5	2	IIIGG
			HARV	1838	1840	1	1838	1841	2	1839	1840	2	IIIGG
			BOUL							1838.7	1841.2	3	IIIG
			SGMR							1839	1841		IIIG
			BOUL							1933.6	1940.1	2	IIIG
			HARV				1938	1941	1				IIIG

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

FEBRUARY 1968

DATE	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE
				DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
02 24			SGMR										
			HARV	1956		2				1939	1940		IIIB
			BOUL										IIIG
			HARV				2000	2002	2	1959.9	2004.2	3	IIIGG
			SGMR							2001	2002	2	IIIGG
			BOUL							2022	2023		IIIB
			HARV	2051	2053	2	2052	2053	1	2022.3	2024.7	3	IIIG
			HARV	2057		2							IIIG
			BOUL										IIIG
			BOUL							2057.6	2058.4	3	IIIG
			BOUL							2108.2	2110.2	3	IIIG
			HARV				2154	2200	1	2153.8	2157.3	2	IIIGG
			BOUL										IIIG
			BOUL							2225.5	2227.9	2	IIIG
	2059	2400	CULG				2313.5	2315	1	2313.1	2316.5	3	IIIGG
			HARV	2314	2316	1	2313	2316	1				IIIG
													IIIG
02 25	0000	0019	HARV										
	0000	0738	CULG				0022.5		1				IIIB
			CULG				0042	0042.5	1				IIIG
			CULG				0046		1				IIIB
			CULG				0219.5		1				IIIB
			CULG				0313	0324	1				IIIG
			CULG				0359.5		1				IIIB
			CULG				0400	0422	1				II
	1322	2400	BOUL							1352 E	1505.7	1	CONT
			BOUL							1447.2	1450.2	3	IIIG
	1345	2400	HARV				1449	1450	2				IIIG
	1200	2200	SGMR							1449	1451.3		IIIG
			SGMR							1459	1504		CONT
			BOUL							1459.9	1502.7	3	IIIGG
			HARV				1500	1503	2				IIIG
			BOUL							1505.7	2425 D	1	CONT
			SGMR							1752.6	1753		IIIB
			BOUL							1907.9	1908.4	3	IIIG
			SGMR							1908	1909		IIIB
	2100	2400	CULG										
02 26	0000	0019	HARV										
	0000	0700	CULG				0059	0102	1	0101		1	IIIG
			CULG				0221	0221.5	1				IIIG
			CULG				0254	0306	1	0301.5		1	IIIG
			CULG				0359	0409.5	1				IIIG
	1200	2300	SGMR							1250.3	1251.3		IIIG
			SGMR							1310	1311		IIIB
			SGMR							1310	2100		CONT
	1314	2400	BOUL							1331 E	2440 D	2	CONT
			SGMR							1331.3	1332		IIIB
	1345	2400	HARV				1348	2400	2				I
			SGMR							1351	1400		CONT
			SGMR							1425	1427		IIIG
			SGMR							1433	1434		IIIB
			SGMR							1443	1444		IIIB
			HARV				1457	2143	2				IIIN
			HARV	1507	1508	1	1507	1508	2	1508		2	IIIG
			SGMR							1507	1508		IIIB
			SGMR							1518	1519		IIIB
			BOUL							1525	1527	3	IIIG
			HARV				1539	1540	2	1539	1540	2	IIIG
			BOUL							1539	1540	3	IIIG
			HARV				1608	1609	2	1609		2	IIIG
			BOUL							1608.4	1609.3	3	IIIG
			SGMR							1608.6	1609.4		IIIB
			SGMR							1623	1623.5		IIIB
			SGMR							1650	1651		IIIB
			SGMR							1723	1727		IIIG
			BOUL							1723.1	1723.6	3	III
			SGMR							1750	1751		IIIB
			HARV				1809	1813	2	1809	1813	2	IIIGG
			BOUL							1809.7	1818.4	3	IIIGG
			HARV				1825	1826	1				IIIG
			BOUL							1828	1828.5	3	III
			SGMR							2025	2027		IIIG
	2105	2400	CULG										
			HARV	2352		2							IIIG
02 27	0000	0020	HARV				0000	0020	1				I
	0000	0100	BOUL										
	0000	0701	CULG				0111.5		1	0111.5		1	IIIB
			CULG				0243.5	0246.5	1				IIIG
			CULG				0250	0255	1	0250		1	IIIB
			CULG				0301		1				IIIB
			CULG				0304	0306.5	1	0304	0306.5	1	IIIGG
			CULG				0317		1	0317		1	IIIB
			CULG				0321		1	0321		1	IIIB
			CULG				0326.5	0328	1				IIIG
			CULG				0438		1				IIIB
	1100	2300	SGMR							1330	2300		CONT
	1317	2355	BOUL							1330 E	2441 D	2	CONT
			SGMR							1331	1331.5		IIIB

SOLAR RADIO EMISSION
SPECTRAL OBSERVATIONS

FEBRUARY 1968

DATE	TIMES OF OBSERVATION		STATION	EVENTS									SPECTRAL TYPE
				DECIMETRIC BAND			METRIC BAND			DEKAMETRIC BAND			
	START UT	END UT		START UT	END UT	INT.	START UT	END UT	INT.	START UT	END UT	INT.	
02 27	1345	2400	HARV				1348	1800	2				IC
			SGMR							1412	1413		IIIG
			SGMR							1423	1423.4		IIIB
			SGMR							1759	1800		IIIB
			HARV				1800	2400	1				IC
			HARV				1848	2219	2	1848	2219	2	IIIN
			SGMR							1859	1900		IIIB
			BOUL							1859.6	1903.8	3	IIIG
			SGMR							1903	1904		IIIG
			HARV				1929	1930	2	1929	1930	2	IIIG
			SGMR							1929	1933		IIIG
			BOUL							1938	1938.5	3	III
			SGMR							1938	1938.5		IIIB
			SGMR							1946.5	1947.3		IIIB
			BOUL							1947	1947.3	3	III
			HARV				1949	1957	2				II
			CULG				2045		1				IIIB
			SGMR							2045	2045.5		IIIB
			BOUL							2045.2	2045.5	3	III
	2037	2400	CULG				2117.5		1	2117.5		1	IIIB
			SGMR							2117.5	2118		IIIB
			BOUL							2117.5	2118.1	3	III
			HARV				2118		2	2118		2	IIIG
			HARV				2215	2216	2				IIIG
			CULG				2329		1				IIIB
			CULG				2334		1				IIIG
02 28	0000	0021	HARV				0000	0021	1				IC
	0000	0311	CULG				0041	0210	1				I
			CULG				0108	0109	1				IIIG
			CULG				0134	0135	1				IIIG
	0325	0649	CULG				0423.5	0424.5	1				IIIG
			CULG				0558.5	0646	1				I
	1312	2400	BOUL							1334 E	2055	1	CONT
	1345	2400	HARV				1347	1920	2				IC
	1100	2300	SGMR							1826.3	1831		IIIG
			SGMR							1911	1912		IIIB
			SGMR							1915	1918.3		IIIG
			BOUL							1915.4	1917.3	3	IIIG
			HARV				1920	2040	1				IC
			BOUL							1940.9	1944.2	3	IIIG
			SGMR							1943.3	1944.5		IIIB
			HARV				1944		2	1944		2	IIIG
			HARV				2040	2400	1				I
			BOUL							2055	2400 D	1	CONT
			BOUL							2208	2210.9	2	IIIG
	2041	2400	CULG				2345		1	2345		1	IIIB
02 29	0000	0022	HARV				0000	0022	1				I
	0000	0100	BOUL										
	0000	0700	CULG				0055.5		1	0055.5		1	IIIG
			CULG				0109		1	0109		1	IIIG
			CULG				0116	0117	2	0116	0117	2	IIIG
			CULG				0206.5		1	0206.5		1	IIIB
			CULG				0225		1	0225		1	IIIB
			CULG				0352	0352.5	1	0352	0352.5	1	IIIG
	1318	2400	BOUL							1340 E	2232	2	CONT
	1100	2300	SGMR							1344.6	1347		IIIG
	1345	2400	HARV				1345	1448	1				I
			SGMR							1829	1830.3		IIIG
			SGMR							1835.3	1836.3		IIIB
			SGMR							1843.6	1844.8		IIIB
			SGMR							1903.6	1905.6		IIIG
	2037	2146	CULG										
			BOUL							2232	2447 D	1	CONT

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

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

COSMIC RAY INDICES
(Neutron Monitors)
FEBRUARY 1968

FEB. 1968	CHURCHILL DAILY AVERAGE COUNTS PER HOUR	DEEP RIVER DAILY AVERAGE COUNTS PER HOUR	CLIMAX DAILY AVERAGE COUNTS PER HOUR	DALLAS DAILY AVERAGE COUNTS PER HOUR
1	6078.08	6550.0	3909.5	6013.91
2	5948.67	6434.8	3841.0	5965.12
3	6023.83	6559.9	3907.0	6036.83
4	5962.17	6526.9	3893.7	6015.08
5	5985.42	6543.5	3915.0 (38)	6031.66 (18)
6	6036.08	6569.6	3912.1	6061.54
7	6057.92	6614.4	3930.6 (32)	6100.29
8	6125.08	6680.4	3981.0 (8)	6138.08
9	6153.04	6720.9	4019.6	6173.71
10	6175.50	6771.5	4043.0	6205.71
11	6138.63	6726.3	4042.7	6199.38
12	6101.17	6681.6	3997.7 (36)	6133.96
13	6064.04	6647.6	3965.3 (22)	6095.58
14	6095.46	6633.1	3950.9 (38)	6041.25
15	6064.13	6587.9	3920.8	6019.83
16	6094.66	6611.5	3952.7	6063.92
17	6076.00	6603.2	3929.3	6047.58
18	6054.33	6603.1	3928.5	6062.50
19	6027.79	6547.9	3890.0	6019.58
20	5963.54	6524.1	3867.8	5992.08
21	5978.08	6537.7	3875.3	5999.25
22	6022.71	6570.1	3900.2	6026.29
23	6009.54	6549.1	3881.6	6011.04
24	6012.71	6558.2	3887.7	6019.50
25	5998.71	6543.8	3871.9	5990.54
26	5990.21	6531.8	3853.8	5981.50
27	6034.33	6566.7	3875.6	6008.17
28	6052.54	6606.0	3940.9	6078.96
29	--	6551.1	3912.5	6044.75

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

Churchill Super Neutron Monitor, Scaling Factor 120.

Deep River Neutron Monitor, Scaling Factor 300.

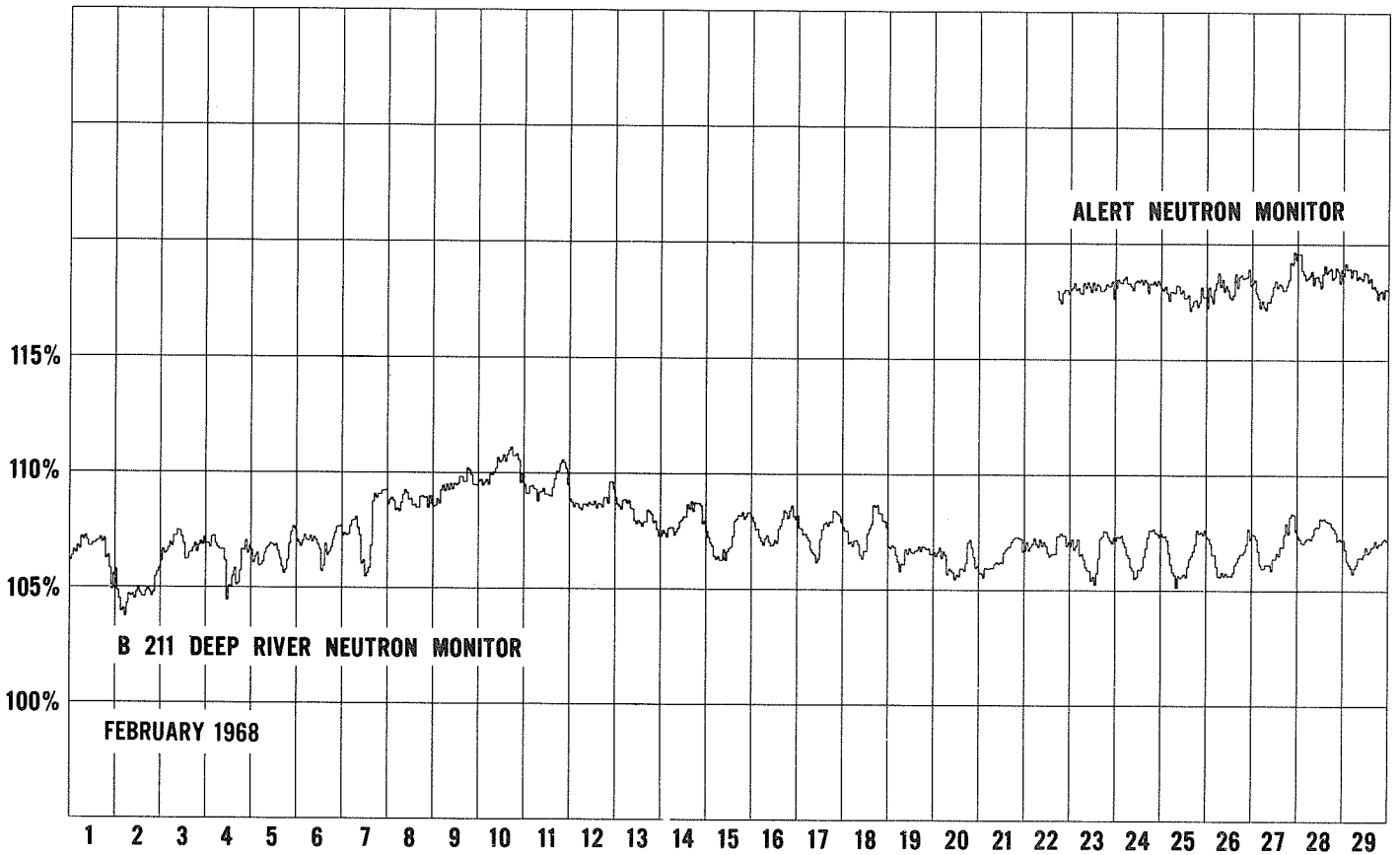
Climax IGC Station B305, Scaling Factor 100.

Dallas Super Neutron Monitor, Scaling Factor 120.

COSMIC RAY INDICES

(Pressure Corrected Hourly Totals)

FEBRUARY 1968



The Alert graph has been raised to cancel the accumulative effect of a slow drift of the barometer.

GEOMAGNETIC ACTIVITY INDICES

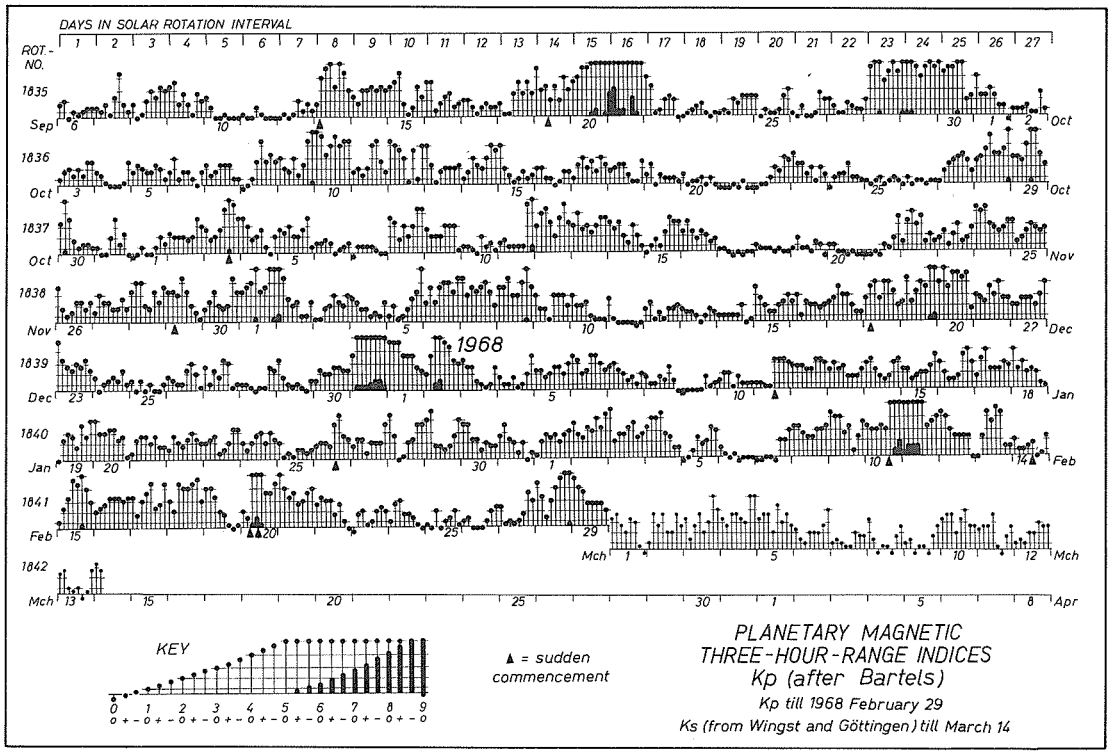
FEBRUARY 1968

DAY		Kp THREE-HOUR RANGE INDICES 1	2	3	4	5	6	7	8	SUM	Ci	Cp	Ap
1	Q	1-	2	3-	2+	3-	2	3-	3	18	0.5	0.5	10
2		4-	3-	2+	3+	3	4	3+	4+	27-	1.0	1.0	19
3		5-	2	3-	3-	3+	4-	2+	3-	24	1.0	0.9	16
4		4+	4	4	4+	3-	2+	1+	1+	23+	0.9	0.9	17
5	Q	0	0+	1	2+	2-	2	3+	3	14-	0.6	0.4	8
6	QQ	1+	1-	0+	1-	0	0+	0+	0+	4	0.0	0.0	2
7	QQ	0	0	0+	0+	0	2	2	3	8-	0.3	0.1	4
8		3+	3+	3-	2+	2+	3	3	3+	23+	0.8	0.8	14
9		4+	4	4	3-	3+	1	2+	4-	25+	0.9	1.0	19
10	D	3+	3	3	3+	3	5	6-	6+	33-	1.6	1.4	36
11	D	5+	6	6	6	5	3+	4-	4	39+	1.4	1.6	51
12		4+	4	3	2+	2+	2+	2+	0+	21	0.6	0.8	14
13		0+	2+	4+	4-	5-	4+	1+	1+	22+	0.9	1.0	18
14	QQ	2	1	1	1+	2-	0+	1-	2+	10+	0.2	0.2	5
15	D	1	2+	3+	5-	4+	5+	4	3	28	1.2	1.2	25
16		2	2+	3-	3+	3+	3+	3	3+	23+	0.8	0.8	14
17		3+	2-	3	4-	4+	2+	3-	4+	25+	1.1	1.0	18
18		3	2	4+	4	4	4+	5-	3	29+	1.2	1.2	24
19		4	4	3+	2	2-	1-	0+	1-	17-	0.6	0.7	12
20	D	2	1+	5+	6	5+	4-	4-	4+	32-	1.5	1.4	35
21		5	4	3+	4-	3-	3	4-	4	29+	1.0	1.2	24
22		3-	3+	3	3	2-	3-	1	0+	18-	0.4	0.6	10
23	Q	0	2-	2	1-	1	2	2+	2	12-	0.1	0.2	5
24	Q	1	3-	3	2-	2-	1+	1-	0+	12+	0.2	0.3	7
25	QQ	1-	0+	2	0+	1	1+	2	1-	8+	0.2	0.1	4
26	QQ	1	1+	0+	0+	0+	1	2	2+	9-	0.2	0.2	4
27	Q	2+	1-	1	1-	1	2-	4-	3	14	0.6	0.4	8
28	D	4+	3+	1+	3	4	5-	5	5+	31	1.4	1.3	30
29		5-	4	4-	3-	3-	3-	3-	2	25	0.8	1.0	18
										MEAN	0.76	0.77	16

Preliminary storm sudden commencements (ssc) occurred February 10 at 1621UT, February 14 at 1253UT, February 20 at 0703UT and February 20 at 1117UT.

Errata: The mean values for January 1968 for Ci and Cp published on page 92 of IER-FB-283 should have read 0.64 and 0.61 respectively.

GEOMAGNETIC ACTIVITY INDICES



DAILY AVERAGE INDICES Ap

DAY	1967 MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	1968 JAN.	FEB.
1	5	18	14	4	17	4	25	10	3	33	26	10
2	4	12	25	9	7	2	22	5	10	18	35	19
3	8	5	87	7	4	3	6	7	23	8	9	16
4	6	15	12	13	6	8	6	4	9	7	7	17
5	11	11	10	36	16	8	4	7	11	13	10	8
6	8	12	6	46	8	6	4	6	4	21	16	2
7	5	8	16	22	12	9	9	7	3	20	8	4
8	2	5	5	15	4	11	9	12	18	26	6	14
9	12	5	5	14	3	7	11	18	10	10	3	19
10	8	5	7	7	3	13	3	33	4	6	5	36
11	2	4	10	6	21	24	3	13	17	3	10	51
12	2	4	13	5	8	8	4	19	22	6	13	14
13	5	2	14	6	7	6	29	9	17	5	9	18
14	5	3	10	14	7	10	14	13	11	4	12	5
15	2	4	6	9	8	6	14	8	10	10	10	25
16	3	10	6	6	4	8	11	5	9	8	13	14
17	4	10	11	9	4	19	5	10	2	11	13	18
18	23	7	7	4	7	14	12	7	3	19	10	24
19	26	20	8	5	4	9	18	4	3	30	13	12
20	13	7	6	4	5	11	44	3	2	32	15	35
21	10	7	6	4	5	6	85	1	5	16	8	24
22	4	18	3	5	3	5	10	6	13	12	9	10
23	4	21	9	4	14	5	4	8	8	16	10	5
24	3	29	11	4	8	7	6	4	20	5	10	7
25	4	8	130	24	11	14	6	3	11	3	4	4
26	4	3	146	24	6	10	4	3	9	7	13	4
27	18	3	20	19	4	7	5	10	8	9	9	8
28	8	3	55	10	12	6	36	25	17	5	14	30
29	6	5	45	9	12	8	45	25	15	6	16	18
30	11	3	42	14	17	10	35	15	13	9	11	
31	3		43		2	11		7		59	8	
MEAN	7	9	25	12	8	9	16	10	10	14	11	16

PRINCIPAL MAGNETIC STORMS

FEBRUARY 1968

DATE 1968 MO. DA.	STORM TIME UT START	STORM TIME UT END MO. DA. HR.	OBS.	GEO-MAG. LAT.	SUDDEN COMMENCEMENT TYPE	AMPLITUDES D(')	AMPLITUDES H(γ)	AMPLITUDES Z(γ)	C FIGURE DEGREE OF ACTIVITY	MAXIMAL ACTIVITY ON K-SCALE 0 TO 9 MO. DA.	3-HOUR PERIOD	K INDEX	RANGES D (')	RANGES H (γ)	RANGES Z (γ)	STORM NUMBERS
02 02	08--	02 04 23	COLL	64.6N	••	••	••	••	MS	02 03	6	6				6
										02 04	4	6	95	990	490	6
	1042	02 03 01	HUAN	0.6S	••	••	••	••	M	02 02	6,7	5	7	304	20	6
02 03	1015	02 04 18	HYDE	7.6N	••	••	••	••	M	02 03	6	5	2	98	21	6
02 04	0101	02 04 15	HRMN	33.3S	SC	+ 2	+ 9	+10	M	02 04	4	5	21	100	55	6
02 07	17--	02 10 14	COLL	64.6N	••	••	••	••	MS	02 10	4	6	183	940	780	7
	1714	02 08 09	MBOR	21.3N	SC	--	+13	--	M	02 08	1	4	--	40	--	7
	1713	02 09 00	HYDE	7.6N	SC	- 0.2	+11	- 1	M	02 08	2,8	4	1	81	16	7
	1700	02 09 11	KGLN	57.3S	••	••	••	••	M	02 09	1	4	--	--	--	7
02 08	18--	02 10 12	NEWP	55.1N	••	••	••	••	M	02 09	1,3	5	26	88	78	7
02 10	1622	02 12 13	COLL	64.6N	SC *	-15	+20	-15	MS	02 10	6	7				8
										02 11	3,4	7	231	1640	1230	8
	08--	02 11 23	SITK	60.0N	••	••	••	••	S	02 11	3,4	9	170	1580	1030	8
	1621	02 12 08	NEWP	55.1N	SC *	14	16	6	MS	02 11	3,4	7	60	435	386	8
	1621	02 11 14	FRED	49.6N	SC *	6	23	9	MS	02 11	4	6	30	124	132	8
	1622	02 12 12	BOUL	49.0N	SC *	+10	+ 3	- 3	MS	02 11	4	6	35	110	110	8
	06--	02 12 19	IRKU	40.8N	••	••	••	••	MS	02 11	5	7	34	199	77	8
	1621	02 12 08	TUCS	40.4N	SC *	- 6	+ 6	0	MS	02 10	8	6	20	120	35	8
										02 11	4	6				8
	1621	02 11 12	SJUA	29.9N	SC	+ 0.6	+23	+ 4	MS	02 10	6	6	10	156	46	8
	1620	02 11 22	MBOR	21.3N	SC *	- 1.8	+26	- 8	MS	02 10	6	6	6	140	30	8
	1621	02 12 03	HONO	21.1N	SC	+ 1	+ 3	+ 3	M	02 10	8	5	8	160	40	8
										02 11	3	5				8
	1621	02 12 03	HYDE	7.6N	SC	- 0.4	+25	- 1	MS	02 10	6,7	6	6	183	17	8
										02 11	4					8
	1620	02 11 22	HUAN	0.6S	SC *	6	26	7	MS	02 10	6	7	12	425	41	8
	1621	02 11 13	PMOR	18.6S	SC	0.4	25	21	MS	02 11	5	6	12	180	80	8
	1622	02 11 22	HRMN	33.3S	SC *	+ 1	+20	+12	MS	02 10	6,7	6	32	156	142	8
	1621	02 11 14	GNAN	43.2S	SC *	+ 5 *	+30	+21 *	MS	02 10	7	7	30	157	196	8
	1621	02 11 15	TOOL	46.7S	SC *	+ 1.5*	+37	+ 6	MS	02 11	4,5	6	33	207	115	8
	1621	02 11 03	KGLN	57.3S	SC	--	--	--	S	02 10	8	8	--	--	--	8
02 13	05--	02 13 19	COLL	64.6N	••	••	••	••	MS	02 13	5	6	102	890	740	9
	07--	02 13 18	IRKU	40.8N	••	••	••	••	M	02 13	6	5	12	106	22	9
	0300	02 13 20	HYDE	7.6N	••	••	••	••	M	02 13	5,6	4	3	112	15	9
02 14	1253	02 15 23	HYDE	7.6N	SC	- 0.2	+ 8	- 1	M	02 15	4,5,6	5	4	154	9	10
	22--	02 15 24	HRMN	33.3S	••	••	••	••	M	02 15	4,5	5	30	114	65	10
	1253	02 16 02	KGLN	57.3S	SC	--	--	--	M	02 15	6	5	--	--	--	10
02 15	08--	02 19 12	COLL	64.6N	••	••	••	••	MS	02 15	4	7	204	1240	820	10
										02 17	5	7				10
	02--	02 16 17	IRKU	40.8N	••	••	••	••	M	02 15	4,5,6	5				10
										02 16	6	5	22	97	31	10
	0741	02 15 21	HUAN	0.6S	••	••	••	••	M	02 15	5,6,7	5	8	171	24	10
	03--	02 15 18	GNAN	43.2S	••	••	••	••	M	02 15	4,5	5	18	67	105	10
02 17	09--	02 19 05	IRKU	40.8N	••	••	••	••	M	02 17	5	5				11
										02 18	3,6,7	5	19	87	28	11
	18--	02 18 01	HRMN	33.3S	••	••	••	••	M	02 17	7	5	7	45	61	11
02 18	0725	02 19 09	NEWP	55.1N	SC	4	10	••	M	02 18	3,4	5	21	118	111	11
	0415	02 19 09	HYDE	7.6N	••	••	••	••	M	02 18	4,5,6,7	4	4	111	18	11
	0735	02 18 22	HUAN	0.6S	••	••	••	••	M	02 18	6	5	10	293	40	11
02 20	06--	02 22 01	COLL	64.6N	••	••	••	••	S	02 20	4,5	8	174	1830	830	12
	07--	02 21 14	SITK	60.0N	••	••	••	••	MS	02 20	4,5	7	80	710	440	12
	07--	02 21 08	NEWP	55.1N	••	••	••	••	MS	02 20	4	6	25	177	133	12
	06--	02 21 06	FRED	49.6N	••	••	••	••	M	02 20	5	5	19	102	47	12
	0704	02 22 01	BOUL	49.0N	SC	- 2	+ 2	0	M	02 20	4,5	5	21	120	50	12
	0704	02 21 23	IRKU	40.8N	SC	- 0.5	+22	+ 4	MS	02 20	4	7	22	209	39	12
	0700	02 22 06	TUCS	40.4N	••	••	••	••	M	02 20	4,5	5	12	120	10	12
	0703	02 20 18	MBOR	21.3N	SC	--	+ 9	--	MS	02 20	4	6	5	110	30	12
	0703	02 20 16	HONO	21.1N	SC	--	+ 8	+ 5	M	02 20	4,5	5	4	73	35	12
	0705	02 22 00	HYDE	7.6N	SC	- 0.1	+18	- 3	MS	02 20	4,5	6	3	133	25	12
	1119	-- -- --	HYDE	7.6N	SI	- 1.0	+89	- 9								12
	0703	02 21 01	HUAN	0.6S	SC	1	5	4	MS	02 20	5	6	8	252	25	12
	0703	02 20 16	APIA	16.1S	SC	0	+10	- 6	M	02 20	4	5	8	45	37	12
	0703	02 21 23	PMOR	18.6S	SC	0.4	19	18	MS	02 20	4	7	6	130	130	12
	0704	02 21 03	HRMN	33.3S	SC *	+ 3	+11	+ 4	MS	02 20	4,5	6	32	107	95	12
	0702	02 20 15	GNAN	43.2S	SC	+ 2	+23	+10	MS	02 20	4,5	6	16	148	116	12
	0703	02 20 16	TOOL	46.7S	SC	+ 0.8	+37	+ 4	MS	02 20	4	7	21	236	37	12
	0704	02 22 01	KGLN	57.3S	SC	--	--	--	MS	02 20	5	6	--	--	--	12
02 27	18--	02 29 21	IRKU	40.8N	••	••	••	••	MS	02 28	5	6	20	113	40	13
02 27	19--	02 29 22	MBOR	21.3N	••	••	••	••	MS	02 28	7	6	2	100	30	13
	1800	02 29 14	HYDE	7.6N	••	••	••	••	MS	02 28	6	7	4	183	33	13
	19--	02 29 14	TOOL	46.7S	••	••	••	••	M	02 28	5	5	20	171	50	13
02 28	1154	03 01 19	COLL	64.6N	••	••	••	••	MS	02 28	5	6	261	1120	840	13
										03 01	6	6				13
	11--	02 29 13	SITK	60.0N	••	••	••	••	MS	02 28	5	7	70	620	510	13
	12--	02 29 09	NEWP	55.1N	••	••	••	••	M	02 28	7	5	26	109	178	13
	1200	02 29 03	HUAN	0.6S	••	••	••	••	MS	02 28	6	7	7	266	57	13
	18--	02 29 14	HRMN	33.3S	••	••	••	••	M	02 28	8	5	28	125	125	13
	12--	02 29 13	GNAN	43.2S	••	••	••	••	MS	02 28	8	6	15	69	100	13
	1--	02 29 12	KGLN	57.3S	••	••	••	••	MS	02 28	7	7	--	--	--	13

RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

FEBRUARY 1968

North Atlantic, North Pacific

FEB. 1968	WHOLE DAY INDICES: NORTH ATLANTIC	WHOLE DAY INDICES: NORTH PACIFIC	WHOLE DAY INDICES: AVERAGE HIGH LATITUDE	ADVANCE FORECASTS (JC-REPORTS) FOR WHOLE DAY	NORTH ATLANTIC 6-HOURLY QUALITY FIGURES: 00 TO 06	06 TO 12	12 TO 18	18 TO 24	NORTH ATLANTIC SHORT-TERM FORECASTS ISSUED ABOUT ONE HOUR IN ADVANCE OF: 00	06	12	18	NORTH PACIFIC 6-HOURLY QUALITY FIGURES: 00 TO 06	06 TO 12	12 TO 18	18 TO 24	GEOMAGNETIC INDICES: K_{FR} HALF DAY (1)	(2)	A_{FR} OB-SERVED	PRE-DICTED	K_{SI} HALF DAY (1)	(2)	A_{SI}
01	7-	6	6	6	7o	7-	7o	7o	6	6	7	6	6	6	6	6	2	3	10	11	1	2	6
02	6+	6	6	6	7-	6o	7-	6+	6	6	7	6	6	6	6	6	3	3	15	15	3	3	18
03	7-	6	6	5	6+	6o	7o	7-	6	6	7	6	6	6	6	6	3	2	10	27	2	3	12
04	7-	6	6	5	6+	6o	7o	7-	6	6	7	6	6	5	6	5	3	2	13	21	(4)	2	18
05	7-	6	6	6	7-	6+	7o	7o	6	6	7	7	6	6	6	6	1	2	5	15	0	2	3
06	7-	6	6	6	7-	6o	7o	7-	6	6	7	7	6	6	6	6	1	0	1	11	0	0	0
07	7-	6	6	6	7-	7o	7-	7-	6	6	7	6	6	6	6	6	0	2	4	7	0	1	2
08	7-	6	6	7	6+	6+	7-	7-	6	6	7	7	6	6	6	6	3	3	11	7	2	3	11
09	7-	6	6	7	6o	6+	7o	7-	6	6	7	6	6	6	6	6	(4)	3	20	11	(4)	2	21
10	6+	6	6	6	7-	6o	7-	6-	6	6	7	6	6	6	5	5	3	(4)	24	11	3	(4)	32
11	5o	5	5	6	4+	4-	6-	6o	5	3	6	5	5	5	5	5	(5)	3	35	11	(7)	(4)	145
12	6-	6	6	6	5-	5-	7-	7-	5	4	6	6	5	6	6	6	3	2	11	7	3	2	11
13	6o	6	6	6	6o	5+	7-	6+	6	6	6	6	6	6	6	6	3	3	18	7	2	3	21
14	7-	6	6	6	7-	6o	7o	7o	6	6	7	6	6	5	6	6	1	1	4	7	0	0	2
15	7-	5	6	6	7o	6+	7-	6+	6	6	6	6	6	6	5	5	3	(4)	20	7	2	(4)	29
16	6+	6	6	6	6+	5o	7o	7-	6	6	7	6	6	6	6	6	2	3	11	7	2	3	15
17	7-	6	6	6	7-	6-	7-	7-	6	6	7	7	5	6	6	6	3	3	15	11	2	4	24
18	7-	6	6	6	7-	6+	7-	7-	6	6	6	6	6	6	6	6	3	3	19	11	3	3	28
19	7-	6	6	6	6+	6o	7o	7-	6	6	7	7	6	6	6	6	3	1	8	7	2	0	7
20	7-	6	6	6	7-	6-	7-	7-	7	7	7	6	6	6	6	6	3	(4)	22	7	(4)	(4)	50
21	6+	6	6	6	6+	6-	7o	7-	6	5	6	7	6	6	6	6	(4)	3	16	7	(4)	2	16
22	7-	6	6	6	7-	6o	7-	7-	6	6	7	7	6	6	6	6	3	2	8	12	3	1	10
23	7-	6	6	6	7-	6+	7-	7o	7	6	7	7	6	6	6	6	1	2	5	15	1	1	3
24	7-	6	6	6	7-	6+	7o	7-	7	6	7	7	6	6	6	6	2	1	6	10	2	0	5
25	7-	6	6	6	7o	6+	7o	7o	7	6	7	7	6	6	6	6	1	1	2	10	0	0	1
26	7-	6	6	6	7-	7-	7o	7o	7	7	7	7	6	6	6	6	1	1	2	7	0	0	1
27	7-	6	6	7	7-	6+	7o	7-	7	6	7	7	6	6	6	6	1	2	7	7	0	2	4
28	6+	6	6	7	6o	7-	7o	6o	6	6	7	6	6	6	5	6	3	(4)	17	7	2	(5)	33
29	6o	6	6	6	6-	5o	7-	7-	6	6	7	6	6	6	6	6	3	2	14	20	(4)	2	17
QUIET			P	22					17	19	24	17											
			S	7					11	9	5	12											
			U	0					0	0	0	0											
			F	0					0	0	0	0											
DISTURBED			P	0					0	0	0	0											
			S	0					1	1	0	0											
			U	0					0	0	0	0											
			F	0					0	0	0	0											

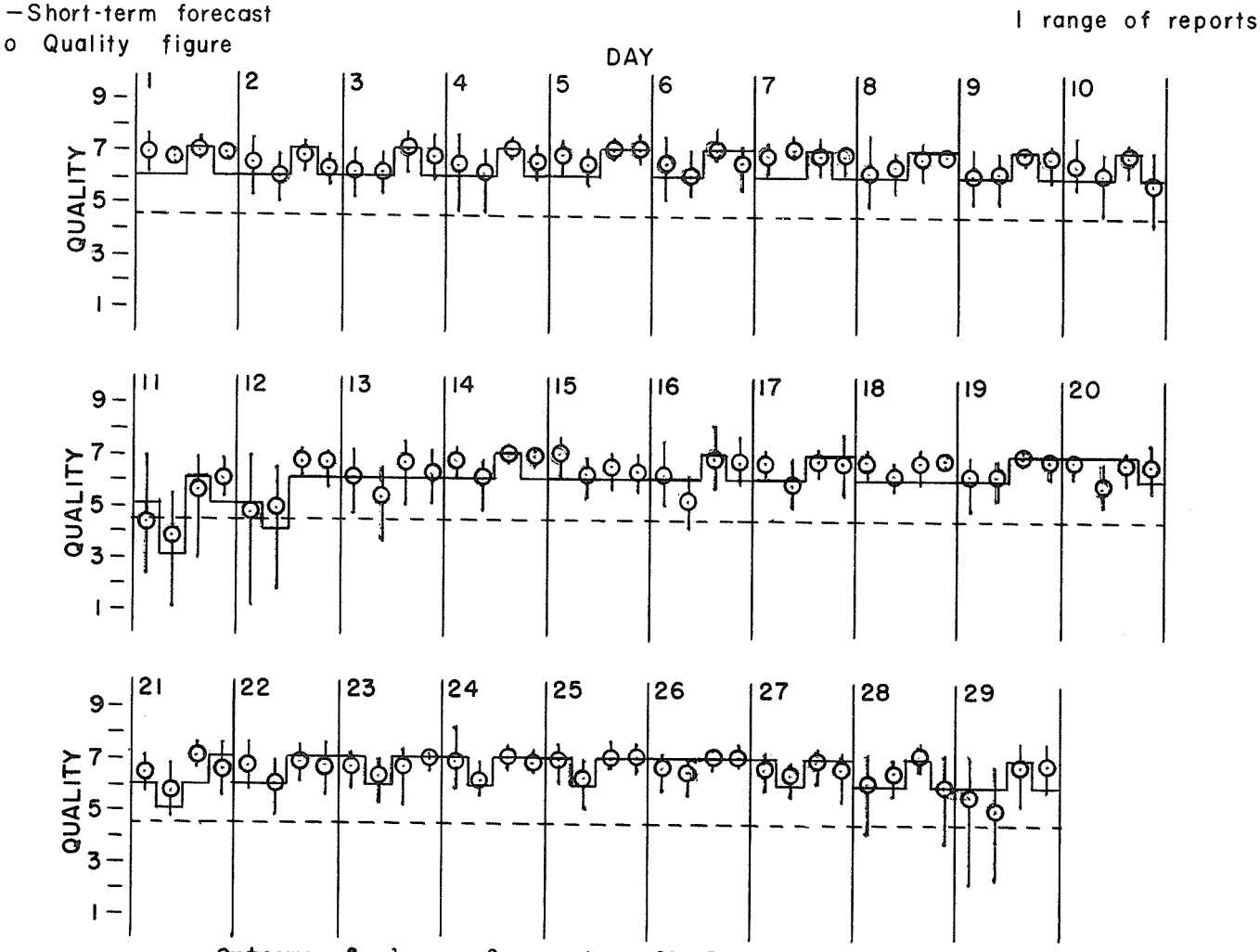
1) THE ADVANCE JC-FORECASTS ARE SCORED AGAINST THE AVERAGE HIGH LATITUDE WHOLE-DAY INDICES.

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

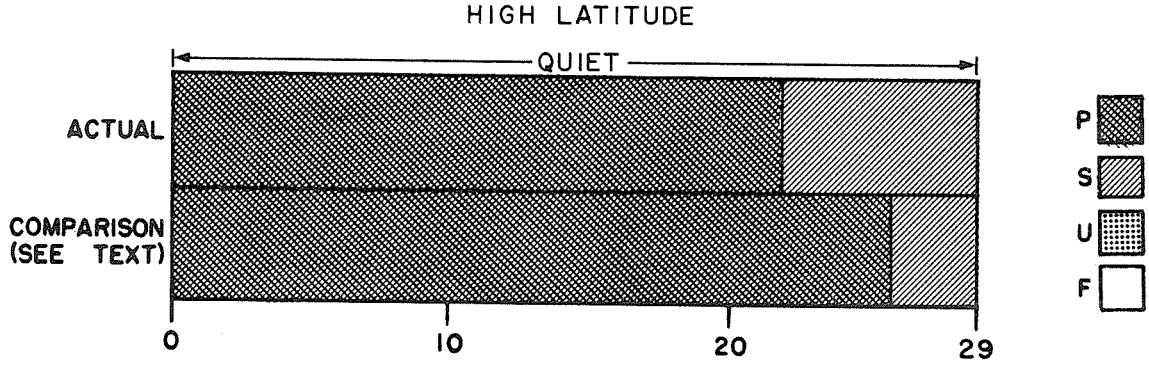
RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

FEBRUARY 1968

North Atlantic

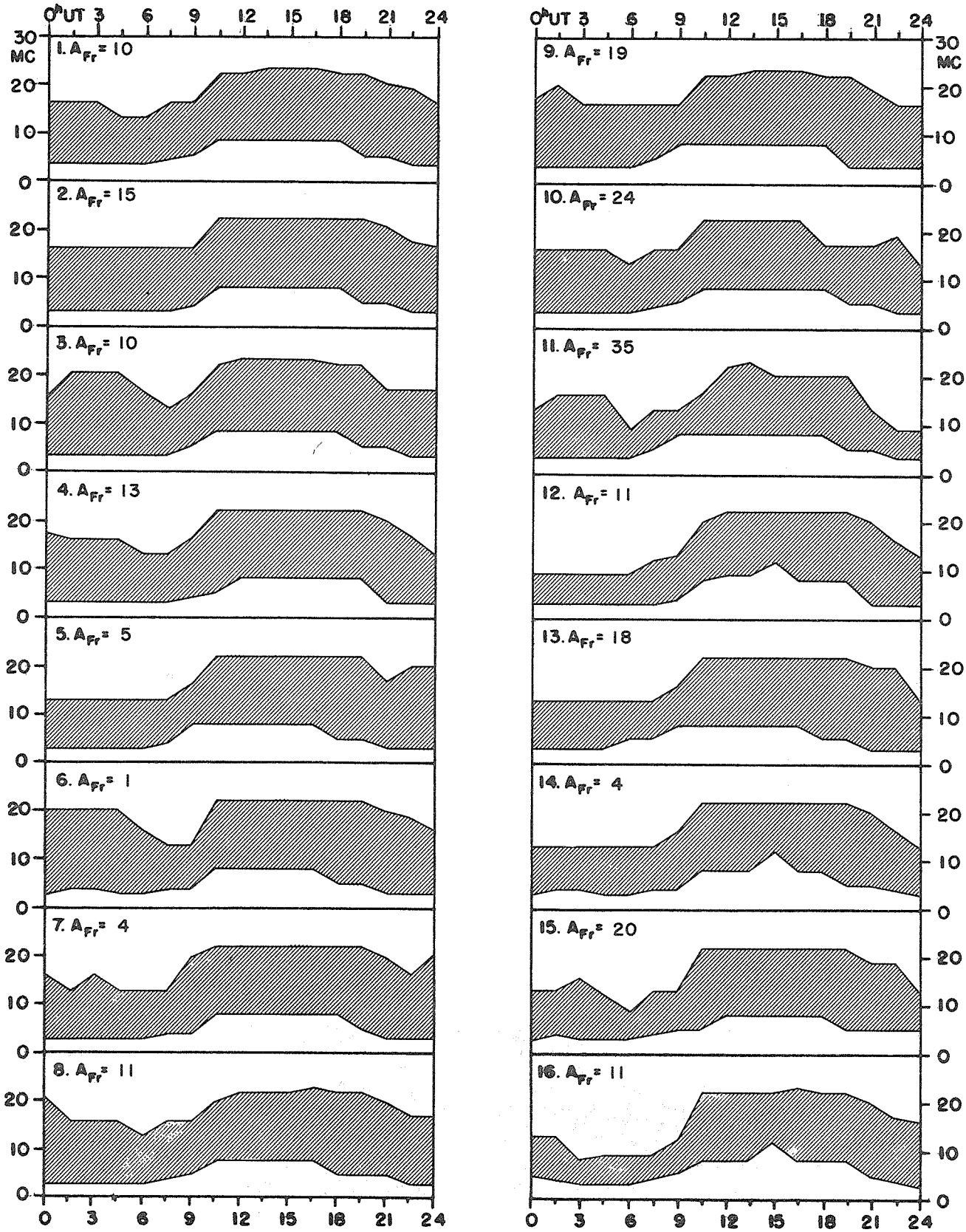


Outcome of advance forecasts - final estimates (1 to 7 days ahead)-
High Latitude radio propagation conditions



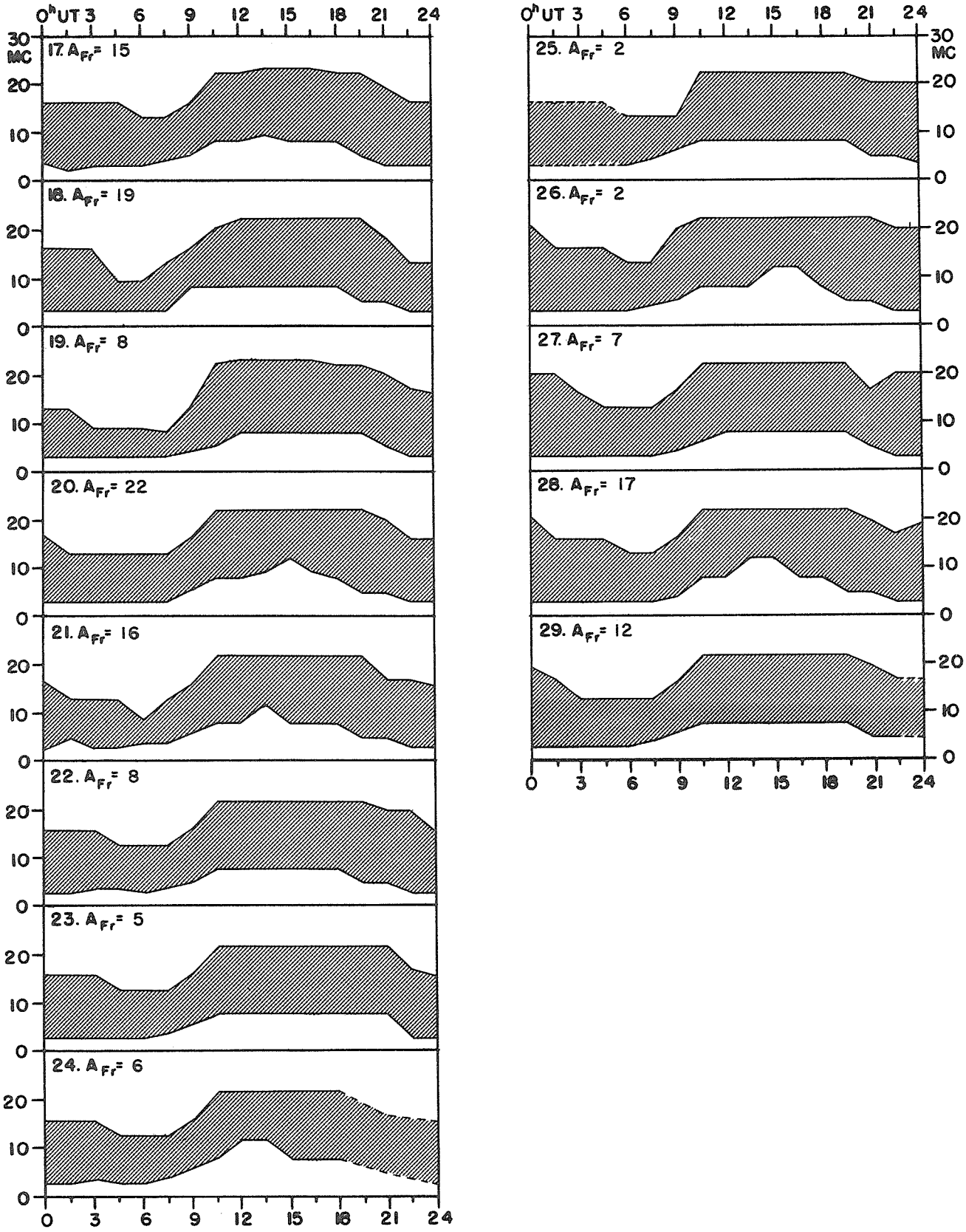
TRANSMISSION FREQUENCY RANGES--NORTH ATLANTIC PATH

FEBRUARY 1968



TRANSMISSION FREQUENCY RANGES--NORTH ATLANTIC PATH

FEBRUARY 1968



Adapted from Observations by Deutsche Bundespost

Table of Contents
for October 1967 Data

For explanations of the data contained herein see "Descriptive Text" published in February 1968.

SOLAR FLARES

Original Reports and Statistical Summaries

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
CATA	01	0650	0715	0700	S16	W53	.840	8993	27.3	25	-N			0700	.18	.32		158	
CATA	01	0655	0705	0655	S22	E69	.958	9006	6.5	10	-F			0655	.15			138	
CATA	01	0715	0740	0720	N13	E02	.114	8999	1.5	25	-F			0720	.11	.12		138	
GRP 9222	01	0719	0842	0740	N14	W21	.373	8998	29.7	83	-N				.78				2 2 1
ISTA	01	0717	0722		N15	W19	.348	8998	29.9	5	-F								
CATA	01	0720	0843	0740	N14	W21	.373	8998	29.7	83	-N			0740	.78	.85		178	
ISTA	01	0740	0805		N14	W22	.388	8998	29.7	25	-N								
ISTA	01	0740	0840		N13	W20	.353	8998	29.8	60	-N								
CATA	01	0720	0815	0725	N11	W63	.885	8988	26.6	55	-N			0725	.11			184	
GRP 9224	01	0720	0735	0726	S20	E73	.973	9006	6.8	15	-N				.83				4 4 2
BUCA	01	0715E	0735		S19	E74	.975	9006	6.9	20D	-N		C	0724	.55				
CATA	01	0720	0740	0725	S22	E69	.958	9006	6.5	20	-N			0725	.20			174	
ISTA	01	0720	0730		S20	E72	.969	9006	6.7	10	-F								
CRON	01	0723	0733	0726	S20	E75	.979	9006	6.9	10	1N		C		1.10	3.30			
CATA	01	0820	0830	0820	N12	W65	.900	8988	26.5	10	-N			0820	.07			166	
CATA	01	0830	0855	0835	N21	W63	.886	8988	26.6	25	-N			0835	.21			166	
GRP 9227	01	0840	0921	0846	N23	E20	.426	9002	2.9	41	1N				3.80				11 10 9
MEUD	01	0836	0915		N22	E18	.393	9002	2.7	39	1N		C	0847	2.37	2.50			F
CANA	01	0838	0924	0841	N23	E21	.437	9002	2.9	46	1N		C		2.00	2.20			EI
CRON	01	0838	0930	0845	N24	E23	.470	9002	3.1	52	2N		C		4.40	5.30			E
ISTA	01	0840	1000		N20	E23	.438	9002	3.1	80	2B								
KHAR	01	0840E	0900D		N23	E21	.437	9002	2.9	20D	2N		P	0848	5.00	5.60	2.10		EHLOW
BUCA	01	0840	1021		N23	E20	.426	9002	2.9	101	1N		C	0852	3.88	4.20			L
ATHN	01	0841	0917	0845	N23	E23	.461	9002	3.1	36	2B	2		0845	4.29	5.20			
CATA	01	0843	1025	0847	N23	E20	.426	9002	2.9	102	1N			0847	4.62	5.10		195	
KIEV	01	0846	0903	0850	N22	E21	.429	9002	2.9	17	1F		C	0850	2.58	3.00		60	DI
CAPS	01	0850E	0934		N23	E17	.392	9002	2.6	44D	2N	2		0852	5.10	5.60		215	H
MONT	01	0913E	0935		N23	E19	.414	9002	2.8	22D	1B		C	0913	2.58				
CATA	01	0905	0930	0920	N11	W66	.908	8988	26.4	25	-N			0920	.11			151	
GRP 9229	01	0910	0943	0920	N15	W23	.407	8998	29.7	33	-N				.50				2 2 2
CATA	01	0905	0955	0920	N14	W22	.388	8998	29.7	50	-F			0920	.33	.36		129	
SALO	01	0915	0930		N15	W23	.407	8998	29.7	15	-B		V	0920	.66	.70	1.60		
GRP 9230	01	0922	0935	0931	N10	E04	.089	9002	1.7	13	-B				.95				2 2 2
SALO	01	0920	0935		N08	E02	.041	9002	1.5	15	-B		V	0925	.50	.50	1.50		
CRON	01	0924	0935D	0931	N11	E06	.127	9002	1.8	11D	-N		C		1.40	1.40			E
GRP 9231	01	0931	1040	0952	N12	E05	.126	8999	1.8	69	1N				3.30				7 7 5
BUCA	01	0924	0953D		N13	E05	.139	8999	1.8	29D	1N		P	0953	2.88	2.90			L
CANA	01	0930	1028	0955	N12	E04	.115	8999	1.7	58	1N		C		2.70	2.70			EHIL
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		C	0955	4.13				
CATA	01	0935	1100	0945	N12	E05	.126	8999	1.8	85	-N			0945	1.79	1.82		162	
CAPS	01	0939E	0946D		N13	E05	.139	8999	1.8	7D	2F	1		0944	5.00	5.50		165	CHF
ONDR	01	0954E	1035		N12	E03	.105	8999	1.6	41D	2F		V	0956			1.90		FH
GRP 9231	01	0953	1025	1009	N13	E04	.129	8999	1.7	32	1N				3.26				2 2 2
ABSI	01	0953	1024	1009	N13	E05	.139	8999	1.8	31	1N		P	1009	4.04	3.90			EFJK
MEUD	01	1004E	1025D		N12	E03	.105	8999	1.6	21D	1N		C	1004	2.48	2.40			F
GRP 9232	01	1015	1029		N11	E03	.091	8999	1.7	14	-B				.90				3 3 2
ISTA	01	0930	1020		N13	E02	.114	8999	1.5	50	1B								
SALO	01	1015	1025		N07	E03	.052	8999	1.7	10	-B		V	1020	.50	.50	1.60		
CAPS	01	1022E	1043D		N13	E05	.139	8999	1.8	21D	-N	2		1025	1.30	1.40		165	
GRP 9233	01	1031	1047	1035	N13	W66	.908	8988	26.5	16	-N				.65				4 4 4
ABSI	01	1030	1044	1032	N12	W68	.922	8988	26.3	14	1N		P	1032	1.17	2.70			D
CATA	01	1030	1105	1040	N10	W65	.901	8988	26.6	35	-N			1040	.29			162	
MONT	01	1031	1040	1035	N10	W65	.901	8988	26.6	9	-N		C	1035	.72				
CANA	01	1031	1040	1032	N21	W64	.894	8988	26.6	9	-F		C		.40	.80			
MONT	01	1045	1053D		S14	E32	.615	9004	3.8	8D	-N		C	1047	.41				

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9235	01	1100	1120	1104	S16	E29	.596	9004	3.6	20	-N				.40				5 5 5
CANA	01	1055	1118	1058	S17	E29	.605	9004	3.6	23	-F		C		.30	.40			IK
CANA	01	1055	1118	1107	S17	E29	.605	9004	3.6	23	-F		C						
CAPS	01	1100	1123		S15	E29	.588	9004	3.6	23	-N	3		1108	.50	.60		175	E
CATA	01	1100	1130	1105	S15	E30	.599	9004	3.7	30	-N			1105	.29	.37		162	
ATHN	01	1102E	1116	1102	S19	E28	.612	9004	3.6	14D	-B	1		1102	.33	.40			
SALU	01	1105	1115		S14	E28	.569	9004	3.6	10	-N		V	1110	.58	.70	1.40		
CAPE	01	1134	1148	1136	N18	E16	.330	9002	2.7	14	-F		C	1136	.54	.60			
CANA	01	1151	1157	1153	S22	E69	.958	9006	6.7	6	-N		C		.20	.60			
CAPE	01	1201	1425		N23	E14	.360	9002	2.6	144	-N		P	1300	.81	.90			
MONT	01	1205	1215		N10	W65	.901	8988	26.6	10	-N		C	1209	.41				
CATA	01	1230	1250	1235	S16	E28	.586	9004	3.6	20	-N			1235	.18	.22		195	
CATA	01	1245	1310	1245	S20	E66	.941	9006	6.5	25	-N			1245	.11			153	
CATA	01	1255	1500	1300	S20	W54	.861	8993	27.5	125	-F			1300	.21	.43		145	
GRP 9243	01	1316	1329	1318	S20	E68	.951	9006	6.7	13	-N				.74				9 9 9
CANA	01	1315	1326	1316	S21	E68	.952	9006	6.7	11	-N		C		.40	1.10			H
CAPS	01	1315E	1329		S17	E69	.952	9006	6.7	14D	1N	3		1320	1.30			176	C
MCMA	01	1315	1330	1317	S21	E68	.952	9006	6.7	15	-B		C	1317	.26	.90			D
CAPE	01	1315	1333		S19	E68	.950	9006	6.7	18	1N			1319	1.00				K
CATA	01	1315	1350	1320	S20	E67	.946	9006	6.6	35	1B			1320	1.31			202	
MEUD	01	1316	1319	1316	S20	E64	.929	9006	6.4	3	-N		C	1316	.31				D
SACP	01	1316E	1328	1320	S20	E65	.935	9006	6.4	12D	-N		C		1.11	2.03			
HUAN	01	1319E	1319D		S20	E73	.973	9006	7.0		-N	1	P	1319	.31				E
ATHN	01	1319	1329	1320	S23	E67	.950	9006	6.6	10	-N	2		1320	.66				
GRP 9244	01	1334	1402	1341	S17	E27	.584	9004	3.6	28	-N				.52				8 8 8
CATA	01	1330	1405	1340	S16	E28	.586	9004	3.7	35	-B			1340	.39	.48		209	
SACP	01	1330	1412	1350	S17	E27	.584	9004	3.6	42	-N		C		.70	.75			
CANA	01	1331	1405	1334	S17	E29	.605	9004	3.7	34	-F		C		.30	.40			I
MCMA	01	1332E	1415		S18	E27	.593	9004	3.6	43D	-N		C	1338	.41	.50			EL
CAPS	01	1337	1351		S15	E28	.577	9004	3.7	14	-N	3		1345	.90	1.20		176	E
MEUD	01	1337E	1353D		S17	E25	.563	9004	3.4	16D	-N		C	1337	.31	.40			E
ATHN	01	1338	1401	1340	S18	E27	.593	9004	3.6	23	-N	2		1340	.50	.50			
HUAN	01	1348E	1357D		S17	E28	.594	9004	3.7	9D	-N	1	P	1350	.62	.67			E
GRP 9245	01	1430	1504		S17	E27	.584	9004	3.6	34	-F				.28				3 2 2
MCMA	01	1425	1520		S18	E26	.583	9004	3.6	55	-F		C	1448	.26	.30			D
CAPS	01	1435	1448		S16	E27	.575	9004	3.6	13	-F	3		1438	.30	.30		160	D
SALU	01	1500	1540		S18	E27	.593	9004	3.7	40	-F		V	1520	.50	.60	1.30		
CANA	01	1447	1514	1452	N22	E53	.801	9005	5.6	27	-F		C		.10	.20			
SALU	01	1500	1540		N15	W26	.451	8998	29.7	40	-N		V	1520		.80	1.50		
GRP 9248	01	1541	1547	1543	S21	W58	.893	8993	27.3	6	-F				.30				2 2 2
HOUS	01	1541	1546	1543	S20	W60	.904	8993	27.2	5	-N		C		.30	.60		200	
CAPS	01	1543E	1547D		S22	W55	.875	8993	27.5	4D	-F	3		1543	.30	.60		160	CD
MCMA	01	1619	1635	1621	S21	E66	.942	9006	6.6	16	-F		C	1621	.31	1.00			D
GRP 9250	01	1648	1750	1649	S21	E68	.952	9006	6.8	62	-F				.28				2 2 2
HUAN	01	1647E	1712D		S20	E70	.960	9006	6.9	25D	-F	1	P	1648	.25				D
MCMA	01	1648	1750	1649	S21	E66	.942	9006	6.7	62	-N		C	1649	.31	1.00			DK
MCMA	01	1648	1750	1735	S21	E66	.942	9006	6.7	62	-N								
HOUS	01	1755	1820	1804	N15	W29	.494	8998	29.6	25	-F		C		.40	.50		100	E
HALE	01	1915	1928	1919	N12	W27	.456	8998	29.8	13	-N	1	C	1919	.31	.32			J
LOCK	01	2105	2115	2110	N09	W73	.952	8988	26.4	10	-F		C	2110	.20	.50		10	
GRP 9254	01	2106	2121	2112	N16	W28	.484	8998	29.8	15	-N				.94				5 4 4
MCMA	01	2036	2100D	2039	N15	W26	.451	8998	29.9	24D	-B		C	2039	.26	.30			DH
SACP	01	2043	2121	2112	N15	W27	.466	8998	29.8	38	-N		C		1.38	1.41			
LOCK	01	2102	2123	2110	N16	W29	.498	8998	29.7	21	-N		C	2110	.90	1.00		20	
HALE	01	2108	2122	2112	N15	W27	.466	8998	29.9	14	-N	1	C	2112	.98	1.10			J
HOUS	01	2108	2119	2112	N16	W28	.484	8998	29.8	11	-N		C		.50	.60		200	EJK
HOUS	01	2108	2119	2115	N16	W28	.484	8998	29.8	11	-N		C						

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9255	01	2237	2316	2244	N15	W29	.494	8998	29.8	39	-B				.78				2 2 2
SACP	01	2236	2322	2244	N15	W29	.494	8998	29.8	46	-N		C		1.19	1.23			
HALE	01	2238	2310	2243	N15	W28	.480	8998	29.8	32	-B	1	C	2243	.36	.40			JL
GRP 9256	01	2239	2252	2244	S20	E59	.898	9006	6.4	13	-N				.27				2 2 2
SACP	01	2236	2250	2243	S19	E59	.895	9006	6.4	14	-F		C		.39	.64			
HALE	01	2242	2253	2244	S20	E58	.891	9006	6.3	11	-B	1	C	2244	.15	.30			
HALE	01	2259	2327	2304	S17	E21	.523	9004	3.5	28	-B	1	C	2304	.05	.10			D
GRP 9258	01	2332	2351	2340	S15	E27	.566	9004	4.0	19	-N				.99				4 4 4
LOCK	01	2330	2345	2335	S15	E27	.566	9004	4.0	15	-N		C	2335	.80	1.00		20	
SACP	01	2332	2350	2340	S14	E27	.557	9004	4.0	18	-N		C		.89	.94			
HALE	01	2335	2353	2340	S14	E27	.557	9004	4.0	18	-B	1	C	2340	1.03	1.20			L
MANI	01	2342E	2354	2344	S16	E26	.564	9004	3.9	12D	-F	2		2344	1.24	1.50			
GRP 9259	01	2348	0026	2355	S21	E60	.907	9006	6.5	38	-N				.68				4 4 4
LOCK	01	2345	0005U	2350	S21	E60	.907	9006	6.5	20U	-F		C	2350	.80	1.70		10	
SACP	01	2346	2356D	2354	S20	E60	.904	9006	6.5	10D	-N		C		.99	1.64			
HALE	01	2350	0027	2352	S21	E60	.907	9006	6.5	37	-B	1	C	2352	.52				L
MANI	01	2350	0021	2355	S21	E59	.900	9006	6.4	31	-N	2		2355	.41	.80			
SACP	02	0001E	0031D	0003	S20	E61	.911	9006	6.6	30D	-N		C		1.00	1.68			
HALE	02	0055	0103	0058	N15	W29	.494	8998	29.9	8	-B	1	C	0058	.83	1.00			J
GRP 9261	02	0123	0211	0127	S17	E19	.503	9004	3.5	48	-N				.75				3 3 3
CRON	02	0122	0134	0124	S17	E23	.542	9004	3.8	12	-N		C		.50	.60			E
HALE	02	0124	0203	0129	S17	E22	.532	9004	3.7	39	-B	1	C	0129	1.24	1.50			E
MANI	02	0124	0241	0127	S17	E12	.446	9004	3.0	77	-N	2		0127	.52	.57			
CRON	02	0126	0150	0130	S19	E26	.592	9004	4.0	24	-F		C		.30	.40			
HALE	02	0226	0308	0231	N16	W30	.512	8998	29.9	42	-N	1	C	0231	.36	.40			L
HALE	02	0331	0345	0334	N16	W29	.498	8998	30.0	14	-B	1	C	0334	.62	.70			J
HALE	02	0355	0403	0359	N16	W30	.512	8998	29.9	8	-B	1	P	0359	1.44	1.70			V
GRP 9265	02	0523	0548	0529	N17	W32	.543	8998	29.8	25	-N				1.41				3 3 3
CRON	02	0521	0550	0526	N17	W32	.543	8998	29.8	29	1N		C		1.90	2.30			
ABST	02	0524	0545	0530	N16	W33	.554	8998	29.8	21	-N		P	0530	1.35	1.50		68	D
SIBE	02	0527E	0533D	0530	N17	W30	.516	8998	30.0	6D	-F		P	0530	.99	1.20		58	
ISTA	02	0602	0613		N16	W31	.526	8998	29.9	11	-F								
GRP 9267	02	0714	0728	0717	N17	W33	.557	8998	29.8	14	-F				.54				2 2 2
CAPE	02	0712	0726	0718	N17	W32	.543	8998	29.9	14	-F		C	0718	.72	.90			
CATA	02	0715	0730	0715	N16	W33	.554	8998	29.8	15	-F			0715	.35	.42		146	
GRP 9268	02	0733	0750	0739	N16	W33	.554	8998	29.8	17	-N				.76				3 3 3
CRON	02	0731	0747	0737	N17	W32	.543	8998	29.9	16	-N		C		.50	.60			
CAPE	02	0732	0753	0741	N17	W32	.543	8998	29.9	21	-N		C	0741	.87	1.00			
CATA	02	0735	0750	0740	N15	W34	.564	8998	29.8	15	-N			0740	.90	1.11		159	
GRP 9269	02	0756	0815	0801	N16	W34	.567	8998	29.8	19	1N				2.27				6 6 6
CRON	02	0755	0805	0758	N17	W34	.570	8998	29.8	10	1N		C		2.50	3.00			
CATA	02	0755	0810	0758	N15	W34	.564	8998	29.8	15	-N			0755	1.42	1.74		195	
BUCA	02	0755	0827D		N16	W34	.567	8998	29.8	32D	1N		C	0758	3.32	4.00			
MANI	02	0756	0812	0759	N15	W33	.551	8998	29.9	16	-B	2		0759	.72	.88			
CAPE	02	0756	0817	0758	N16	W34	.567	8998	29.8	21	1N		C	0758	2.35	2.90			H
ATHN	02	0758	0818	0810	N16	W35	.581	8998	29.7	20	1N	2		0810	3.30	4.00			
CATA	02	0815	0820	0815	N14	W15	.283	8999	1.2	5	-F			0815	.13	.14		148	
CATA	02	0825	0830	0825	S18	E61	.907	9006	6.9	5	-N			0825	.11			155	
CATA	02	0835	0840	0835	N13	W17	.307	8999	1.1	5	-F			0835	.11	.12		136	
GRP 9273	02	0923	0931	0925	N16	W34	.567	8998	29.8	8	-N				.40				3 3 3
CAPE	02	0920	0932	0925	N16	W33	.554	8998	29.9	12	-F		C	0925	.32	.40			V
ATHN	02	0924	0932	0924	N15	W35	.578	8998	29.8	8	-N	2		0924	.66	.80			
CATA	02	0925	0930	0925	N16	W34	.567	8998	29.8	5	-N			0925	.23	.29		160	
GRP 9274	02	0931	0948	0936	N17	W34	.570	8998	29.8	17	-F				.81				2 2 2
CANA	02	0928	0944	0935	N16	W34	.567	8998	29.8	16	-F		C		.40	.50			
CAPE	02	0933	0951	0937	N17	W34	.570	8998	29.8	18	-F		C	0937	1.22	1.50			H
GRP 9275	02	1002	1007	1003	N16	W35	.581	8998	29.8	5	-F				.24				2 2 2
CATA	02	1000	1005	1000	N15	W35	.578	8998	29.8	5	-N			1000	.15	.19		151	
CAPE	02	1004	1009	1006	N17	W34	.570	8998	29.9	5	-F		C	1006	.32	.40			

SOLAR FLARES
OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
CATA	02	1015	1030	1020	S20	W66	.940	8993	27.5	15	-N			1020	.13			158	
GRP 9277	02	1109	1130	1123	S20	W69	.956	8993	27.3	21	-F				.56				3 2 2
CATA	02	1035	1110	1040	S20	W66	.940	8993	27.5	35	-N			1040	.20			162	
CANA	02	1109	1138	1119	S20	W74	.976	8993	26.9	29	-F		C		.40	1.10			
CAPE	02	1109	1142	1126	S21	W68	.952	8993	27.4	33	1N		C	1126	.72	2.40			JT
CATA	02	1210	1215	1210	N16	W35	.581	8998	29.9	5	-F			1210	.23	.29		148	
CATA	02	1210	1225	1210	S20	E52	.845	9006	6.4	15	-F			1210	.11	.22		140	
MCMA	02	1225	1234	1228	S22	W70	.962	8993	27.3	9	-F		C	1228	.31	1.00			D
GRP 9281	02	1255	1304	1259	S23	W69	.959	8993	27.4	9	-F				.20				2 2 2
CAPE	02	1252	1306	1259	S21	W67	.947	8993	27.5	14	-N		C	1259	.18	.60			T
MCMA	02	1257	1302	1258	S24	W70	.965	8993	27.3	5	-F		C	1258	.21	.70			D
GRP 9282	02	1300	1332	1329	S20	E52	.845	9006	6.4	32	-N				.26				3 2 2
SALU	02	1300	1330		S18	E54	.855	9006	6.6	30	-N		V	1320	.41	.80	1.30		
MONT	02	1300E	1307D		S21	E53	.856	9006	6.5	7D	-N		C	1300	1.55				
CANA	02	1328	1333	1329	S20	E50	.828	9006	6.3	5	-N		C		.10	.20			
GRP 9283	02	1329	1340	1332	N15	W34	.564	8998	30.0	11	-N				.96				3 3 3
CANA	02	1328	1340	1330	N16	W37	.607	8998	29.8	12	-F		C		.90	1.10			
CAPE	02	1328E	1341D	1333	N16	W38	.620	8998	29.7	13D	-N		C	1333	1.45	1.80			H
MCMA	02	1330	1340	1332	N14	W28	.477	8998	30.5	10	-N		C	1332	.52	.80			E
CANA	02	1421	1427	1422	N23	W07	.303	9002	2.1	6	-F		C		.40	.40			
GRP 9285	02	1507	1526	1509	S22	E52	.852	9006	6.5	19	-N				.36				4 4 4
CANA	02	1504	1526	1507	S22	E51	.844	9006	6.5	22	-N		C		.20	.40			
MCMA	02	1506	1530	1508	S22	E53	.860	9006	6.6	24	-N		C	1508	.52	1.00			D
HOUS	02	1507	1523	1509	S21	E52	.849	9006	6.5	16	-F		C		.20	.40		100	
ATHN	02	1509	1525	1510	S23	E50	.840	9006	6.4	16	-N	1		1510	.50	.90			
GRP 9286	02	1630	1647	1636	S20	E50	.828	9006	6.4	17	-N				.35				5 5 4
SACP	02	1628	1650	1637	S19	E49	.816	9006	6.4	22	-N		C		.50	.67			
CANA	02	1630	1643	1636	S22	E49	.828	9006	6.4	13	-N		C		.20	.40			
LOCK	02	1630	1645	1636	S19	E49	.816	9006	6.4	15	-F		C	1636	.40	.70		10	
HOUS	02	1630	1647	1636	S18	E50	.821	9006	6.4	17	-F		C		.10	.20		100	
MCMA	02	1630	1648		S22	E52	.852	9006	6.6	18	-N		C	1635	.31	.60			E
HOUS	02	1700	1706	1702	N16	W38	.620	8998	29.9	6	-F		C		.30	.40		100	
GRP 9288	02	1704	1722	1707	S21	E52	.849	9006	6.6	18	-F				.29				3 3 3
HOUS	02	1703	1716	1707	S21	E52	.849	9006	6.6	13	-F		C		.10	.20		100	
MCMA	02	1704	1730		S22	E53	.860	9006	6.7	26	-N		C	1710	.26	.50			E
HUAN	02	1711E	1721D		S21	E52	.849	9006	6.6	10D	-F	1	P	1715	.50	.71			T
CANA	02	1812	1836	1817	N18	W11	.269	9002	1.9	24	-F		C		.20	.20			
HOUS	02	1826	1835	1827	N13	W41	.654	8998	29.7	9	-F		C		.20	.30		100	
GRP 9291	02	1842	1849	1844	N16	W40	.646	8998	29.8	7	-F				.77				3 3 3
MCMA	02	1842	1849	1843	N16	W38	.620	8998	29.9	7	-N		C	1843	.41	.50			E
SACP	02	1842E	1850U	1844	N15	W40	.644	8998	29.8	8U	-F		C		1.59	1.78			
HOUS	02	1843	1847	1844	N16	W41	.658	8998	29.7	4	-F		C		.30	.40		100	
GRP 9292	02	1922	1947	1924	N13	W42	.667	8998	29.7	25	-F				.36				2 2 2
HOUS	02	1921	1943	1923	N12	W41	.653	8998	29.7	22	-F		C		.30	.40		100	E
MCMA	02	1922	1950	1925	N13	W42	.667	8998	29.7	28	-N		C	1925	.41	.60			E
MCMA	02	1923	1950	1930	S18	E11	.453	9004	3.6	27	-N		C	1930	.41	.50			E
GRP 9294	02	1955	2027	2009	S21	E49	.824	9006	6.5	32	-N				.61				3 3 3
LOCK	02	1952	2030	2008	S19	E49	.816	9006	6.5	38	-F		C	2008	.90	1.50		10	
MCMA	02	1957	2028D	2008	S22	E50	.836	9006	6.6	31D	-B		C	2008	.52	1.00			E
HOUS	02	2006E	2022	2010	S21	E48	.815	9006	6.4	16D	-N		C		.40	.70		200	E
GRP 9294	02	2025	2036	2030	S21	E51	.840	9006	6.7	11	-F				.38				2 2 2
SACP	02	2025E	2030D	2030U	S20	E50	.828	9006	6.6	5D	-F		P		.50	.68			
HUAN	02	2029E	2036D		S21	E51	.840	9006	6.7	7D	-F	1	P	2030	.25	.35			D
HOUS	02	2115	2137	2118	N24	W13	.364	9002	1.9	22	-F		C		.10	.10		100	
HOUS	02	2122	2130	2125	S21	W70	.961	8993	27.6	8	-F		C		.10	.30		100	

SOLAR FLARES
OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9297	02	2152	2212	2155	S20	E46	.794	9006	6.4	20	1N				1.25				3 3 3
LOCK	02	2150	2215	2153	S19	E46	.789	9006	6.4	25	1N		C	2153	1.30	2.30		20	
HALE	02	2153	2209	2156	S21	E46	.798	9006	6.4	16	1B	2	C	2156	1.96	3.30			
HOUS	02	2154	2207D	2155	S21	E47	.807	9006	6.4	13D	-N		C		.50	.80		200	E
GRP 9298	02	2308	2321	2315	N24	W15	.383	9002	1.8	13	-F				.20				2 2 2
LOCK	02	2308	2320	2312	N23	W14	.361	9002	1.9	12	-F		C	2312	.30	.30		10	
HOUS	02	2317E	2321	2317U	N24	W15	.383	9002	1.8	4D	-F		C		.10	.10		100	
SACP	02	2316	2332	2320	S24	E78	.990	9014	8.8	16	-N		C		.79				
GRP 9300	02	2344	2359	2350	S18	E09	.442	9004	3.7	15	-F				1.09				2 2 2
SACP	02	2342	2351D	2351	S18	E09	.442	9004	3.7	9D	-F		C		1.68	1.71			
LOCK	02	2345	2359	2348	S18	E08	.437	9004	3.6	14	-F		C	2348	.50	.60		10	
GRP 9301	03	0019	0042	0022	N22	W10	.312	9002	2.3	23	-N				.78				3 3 3
LOCK	03	0017	0040	0020	N23	W14	.362	9002	2.0	23	-N		C	0020	.90	1.00		20	
HALE	03	0021	0049	0024	N22	W13	.339	9002	2.0	28	-B	1	C	0024	1.13	1.20			
MANI	03	0029E	0038		N22	W02	.267	9002	2.9	9D	-F	1		0030	.31	.32			
HALE	03	0023	0043	0033U	S17	E41	.730	9006	6.1	20	-F	1	C	0033	.21	.30			
HALE	03	0124	0143	0127	N23	W13	.352	9002	2.1	19	-F	1	C	0127	.26	.30			
HALE	03	0125	0137	0127	S16	E41	.725	9006	6.1	12	-F	1	C	0127	.21	.30			
HALE	03	0143	0156	0147	N16	W43	.683	8998	29.8	13	-F	1	C	0147	.31	.40			
HALE	03	0216	0222	0217	S17	E42	.740	9006	6.2	6	-F	1	C	0217	.31	.50			
HALE	03	0237	0241	0238	S17	E42	.740	9006	6.3	4	-N	1	C	0238	.31	.50			
HALE	03	0308	0324	0315	N23	W13	.352	9002	2.2	16	-N	1	C	0315	.26	.30			
HALE	03	0343	0353D	0348	N23	W15	.372	9002	2.0	10D	-F	1	P	0348	.21	.22			
ATHN	03	0452E	0506	0452	N15	W15	.291	9002	2.1	14D	-N	2		0452	.50	.70			
ATHN	03	0523	0538	0526	S20	W80	.992	8993	27.2	15	-N	2		0526	.66				
ATHN	03	0538	0550	0540	N15	W15	.291	9002	2.1	12	-N	2		0540	.50	.70			
CRON	03	0555	0602	0559	S20	W90	1.001	8993	26.5	7	-N		C		.40	1.60			I
CRON	03	0557	0621	0606	N12	E90	1.000	9015	10.0	24	-F		C		.40	1.60			
CRON	03	0651	0656	0652	N11	W90	1.000	8988	26.5	5	-N		C		.10	.40			
GRP 9316	03	0657	0727	0701	S20	W85	.999	8993	26.9	30	-B				.70				2 2 2
ATHN	03	0653E	0741	0656	S20	W80	.992	8993	27.3	48D	1B	2		0656	.99				
CRON	03	0700	0712	0706	S20	W90	1.001	8993	26.5	12	-N		C		.40	1.60			I
CAPE	03	0704	0716	0708	N16	W51	.774	8998	29.5	12	-F		C	0708	.51	.80			T
GRP 9318	03	0716	0731	0723	S21	W85	.999	8993	26.9	15	-N				.50				3 3 3
CAPE	03	0707	0735	0722	S21	W81	.995	8993	27.2	28	-N		C	0722	.63				
CRON	03	0717	0728	0721	S21	W90	1.001	8993	26.6	11	1F		C		.50	2.00			
CATA	03	0725	0730	0725	S22	W85	.999	8993	26.9	5	-N			0725	.37			193	
CRON	03	0731	0743	0736	S20	W90	1.001	8993	26.6	12	-N		C		.40	1.60			I
CRON	03	0753	0756	0754	N17	W52	.786	8998	29.4	3	-F		C		.10	.20			
GRP 9320	03	0754	0813	0759	S16	E02	.386	9004	3.5	19	-F				1.01				2 2 2
BUCA	03	0753E	0813D		S16	E02	.386	9004	3.5	20D	-F		C	0757	.66	.70			
CAPE	03	0754	0812	0759	S16	E02	.386	9004	3.5	18	-F		C	0759	1.36	1.50			
ATHN	03	0757	0813	0800	S20	W35	.689	8995	30.7	16	-N	2		0800	.99	1.50			
ISTA	03	0810	0940		S28	E80	.995	9014	9.3	90	-N								
CAPE	03	0820	0839	0825	N17	W18	.349	9002	2.0	19	-F		C	0825	.81	.90			F
ISTA	03	0835	0905		S18	W13	.466	9010	2.4	30	-N								
CATA	03	0840	0852	0840	S20	W90	1.001	8993	26.6	12	-F			0840	.09			135	
GRP 9326	03	0900	1038	0925	S19	W90	1.001	8993	26.6	98	-N				.15				2 2 1
MONT	03	0900E	0930		S18	W90	1.001	8993	26.6	30D	-N		C						
CATA	03	0917	1145	0925	S20	W90	1.001	8993	26.6	148	-N			0925	.15			158	

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9326	03	0943	1036	1019	S21	W82	.996	8993	27.3	53	-N				.59				2 2 2
CAPE	03	0943	1039	1019	S20	W83	.997	8993	27.2	56	-N		C	1019	.87				
CAPE	03	0943	1039	1003	S20	W83	.997	8993	27.2	56	1N		C	1003	1.13				T
CAPS	03	1016E	1033		S22	W80	.993	8993	27.4	17D	-N	2		1017	.30			170	Y
ISTA	03	0910	0935		S25	E74	.980	9014	8.9	25	-B								
GRP 9328	03	0919	0933	0924	S16	E36	.672	9006	6.1	14	-N				.76				5 5 5
CANA	03	0916	0930	0917	S17	E36	.678	9006	6.1	14	-F		C		.40	.60			K
CANA	03	0916	0930	0923	S17	E36	.678	9006	6.1	14	-F		C						
CATA	03	0917	0935	0925	S15	E36	.666	9006	6.1	18	-N			0925	1.19	1.66		193	
CAPE	03	0917	0933	0925	S16	E37	.683	9006	6.2	16	-N			0925	.68	.90			V
CRON	03	0922E	0926D	0923U	S17	E36	.678	9006	6.1	4D	-N		C		1.10	1.50			
SALU	03	0925	0935		S17	E36	.678	9006	6.1	10	-N		V	0930	.41	.50	1.50		
GRP 9329	03	0944	0954	0946	S16	E37	.683	9006	6.2	10	-F				.63				2 2 2
CAPE	03	0943	0953	0946	S16	E37	.683	9006	6.2	10	-F		C	0946	.77	1.00			
CATA	03	0945	0955	0945	S15	E36	.666	9006	6.1	10	-N			0945	.48	.68		159	
GRP 9330	03	1117	1124	1119	N16	W55	.815	8998	29.3	7	-F				.47				3 3 3
CANA	03	1115	1121	1117	N17	W56	.825	8998	29.3	6	-F		C		.40	.70			
CAPE	03	1117	1125	1120	N15	W55	.814	8998	29.3	8	-F		C	1120	.54	.90			HLT
CATA	03	1120	1125	1120	N17	W54	.806	8998	29.4	5	-F			1120	.46	.80		146	
GRP 9330	03	1043	1228	1211	N16	W48	.742	8998	29.8	105	-F				.55				2 2 2
CAPE	03	1035	1055	1043	N18	W54	.807	8998	29.4	20	-F		C	1043	.63	1.10			T
CATA	03	1050	1240	1100	N16	W48	.742	8998	29.9	110	-F			1100	.20	.25		148	
CAPE	03	1155	1216	1206	N15	W56	.824	8998	29.3	21	-F		C	1206	.87	1.50			HLT
CATA	03	1210	1230	1215	N14	W35	.576	8998	30.9	20	-F			1215	.23	.29		129	
CATA	03	1125	1210	1130	S14	E05	.362	9004	3.9	45	-F			1130	.18	.19		138	
GRP 9332	03	1145	1205	1150	S22	W89	1.000	8993	26.8	20	-N				.23				2 2 1
CATA	03	1145	1200	1150	S20	W90	1.001	8993	26.7	15	-N			1150	.23			170	
MCMA	03	1157E	1210		S23	W88	1.000	8993	26.9	13D	-N		C	1159					B
CAPE	03	1211	1218	1214	S16	E38	.693	9006	6.4	7	-F		C	1214	.72	1.00			
MCMA	03	1231	1243	1233	S23	W90	1.001	8993	26.8	12	-N		C	1233					D
CAPE	03	1336	1355	1346	S23	E70	.964	9014	8.8	19	1F		C	1346	.90	4.00			
ATHN	03	1510	1515	1511	S23	E35	.710	9006	6.3	5	-F	1		1511	.17	.30			
ATHN	03	1512	1519D	1514	S18	W90	1.001	8993	26.9	7D	-N	1		1514	.50				
GRP 9338	03	1622	1643	1627	S21	E38	.724	9006	6.5	21	-N				.75				5 5 5
SACP	03	1618	1646	1630	S20	E38	.718	9006	6.5	28	-B		C		1.39	1.65			
LOCK	03	1620	1650	1625	S21	E39	.734	9006	6.6	30	-N		C	1625	1.00	1.50		20	
CANA	03	1623	1635	1627	S22	E38	.731	9006	6.5	12	-N		C		.50	.70			
MCMA	03	1625	1645	1628	S21	E38	.724	9006	6.5	20	-B		C	1628	.57	.90			E
HOUS	03	1626	1639	1627	S21	E39	.734	9006	6.6	13	-N		C		.30	.40		200	E
BOUL	03	1647	1738	1714	S19	W90	1.001	8993	26.9	51	1N		C		.70	2.80			
GRP 9340	03	1750	1816	1757	N17	W23	.419	8999	2.0	26	-N				1.79				4 4 4
MCMA	03	1750	1810	1753	N17	W23	.419	8999	2.0	20	-N		C	1753	1.13	1.20			E
SACP	03	1750	1816	1800	N17	W22	.405	8999	2.1	26	1N		C		2.67	2.69			
HALE	03	1750	1827	1757	N16	W24	.427	8999	1.9	37	-B	1	C	1757	1.75	1.90			
HOUS	03	1758E	1811	1759	N19	W24	.445	8999	1.9	13D	-N		C		1.60	1.80		200	E
GRP 9341	03	1802	1823	1800	S18	W45	.775	8995	30.4	21	-B				1.12				2 2 2
LOCK	03	1747	1820	1755	S21	W38	.724	8995	30.9	33	-B		C	1755	1.40	1.50		30	
LOCK	03	1800	1812	1803	S16	W49	.804	8995	30.1	12	-F		C	1803	.80	1.40		10	
HALE	03	1803	1826	1805	S18	W46	.784	8995	30.3	23	-N	1	C	1805	.83	1.30			
HALE	03	1805	1818	1806	N14	W59	.852	8998	29.3	13	-F	1	C	1806	.15	.30			
GRP 9343	03	1851	1930	1856	S22	E35	.703	9006	6.4	39	-F				.22				3 3 3
MCMA	03	1850	1950	1858	S21	E36	.705	9006	6.5	60	-N		C	1858	.26	.40			EHK
HOUS	03	1851	1907	1854	S22	E35	.703	9006	6.4	16	-F		C		.10	.10		100	
HALE	03	1852	1933	1855	S22	E35	.703	9006	6.4	41	-F	1	C	1855	.31	.40			
GRP 9344	03	1944	1949	1947	N15	W62	.877	8998	29.2	5	-F				.18				2 2 2
HOUS	03	1943	1948	1946	N15	W62	.877	8998	29.2	5	-F		C		.10	.20		100	H
HALE	03	1945	1950	1948	N14	W62	.877	8998	29.2	5	-F	1	C	1948	.26	.50			

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9345	03	2008	2025	2017	N15	W61	.869	8998	29.3	17	-F				.21				2 2 2
HALE	03	2008E	2025	2016	N14	W60	.860	8998	29.3	17D	-F	1	P	2016	.31	.60			
HOUS	03	2017E	2024	2017U	N15	W62	.877	8998	29.2	7D	-F		C		.10	.20		100	H
GRP 9346	03	2043	2123	2048	S19	W90	1.001	8993	27.1	40	-F				.45				2 2 2
LOCK	03	2040	2135	2048	S19	W90	1.001	8993	27.1	55	-F		C	2048	.50	2.00		10	H
BOUL	03	2045	2111	2048	S19	W90	1.001	8993	27.1	26	-N		C		.40	1.60			I
HALE	03	2117	2134	2121U	N14	W60	.860	8998	29.4	17	-F	1	P	2121	.26	.50			
GRP 9348	03	2118	2136	2128	S19	W90	1.001	8993	27.1	18	-F				.38				3 3 3
LOCK	03	2040	2135	2125	S19	W90	1.001	8993	27.1	55	-F		C	2125	.50	2.00		10	H
BOUL	03	2118	2137	2130	S19	W90	1.001	8993	27.1	19	-N		C		.40	1.60			I
HUAN	03	2130E	2131D		S20	W90	1.001	8993	27.1	1D	-F	1	P	2130	.25				D
GRP 9349	03	2204	2229	2208	S19	W90	1.001	8993	27.2	25	-F				.35				2 2 2
LOCK	03	2200	2243	2207	S19	W90	1.001	8993	27.2	43	-F		C	2207	.30	1.20		10	H
BOUL	03	2208	2215	2209	S19	W90	1.001	8993	27.2	7	-N		C		.40	1.60			I
HALE	03	2218	2233	2229	N12	W60	.860	8998	29.4	15	-N	1	C	2229	.31	.60			
GRP 9351	03	2224	2241	2230	S19	W90	1.001	8993	27.2	17	-F				.35				2 2 2
LOCK	03	2200	2243	2230	S19	W90	1.001	8993	27.2	43	-F		C	2230	.30	1.20		10	H
BOUL	03	2224	2238	2229	S19	W90	1.001	8993	27.2	14	-N		C		.40	1.60			I
LOCK	03	2322	2350	2329	S19	W90	1.001	8993	27.2	28	-F		C	2329	.20	.80		10	H
GRP 9353	03	2339	0015	2356	N14	W62	.877	8998	29.3	36	-N				.73				3 3 3
SACP	03	2338	0004	2356	N13	W62	.877	8998	29.3	26	-N		C		.79	1.21			
LOCK	03	2340	0025	2355	N15	W63	.885	8998	29.3	45	-F		C	2344	1.00	2.00		10	
HALE	04	0005E	0015		N14	W60	.860	8998	29.5	10D	-N	2	P	0005	.41	.80			
HALE	04	0032	0047	0037U	N13	W62	.877	8998	29.4	15	-N	1	C	0037	.21	.40			
CRON	04	0052	0100	0055	S19	W90	1.001	8993	27.3	8	-F		C		.20	.80			I
CRON	04	0114	0123	0116	S18	W90	1.001	8993	27.3	9	-F		C		.20	.80			I
CRON	04	0130	0202	0140	S16	W90	1.000	8993	27.3	32	1N		C		.50	2.00			I
CRON	04	0131	0143	0135	N14	W64	.893	8998	29.3	12	-F		C		.30	.60			HI
CRON	04	0159	0208	0200	N16	W65	.900	8998	29.2	9	-F		C		.10	.20			HI
CRON	04	0238	0256	0241	S16	W90	1.000	8993	27.4	18	1N		C		.50	2.00			I
CRON	04	0323	0332	0326	S16	W90	1.000	8993	27.4	9	-N		C		.40	1.60			I
CRON	04	0347U	0354	0352	S16	W90	1.000	8993	27.4	7U	-F		C		.20	.80			I
CRON	04	0359	0409	0401	S16	W90	1.000	8993	27.4	10	-F		C		.20	.80			I
CRON	04	0403	0415	0405	N14	W64	.893	8998	29.4	12	-F		C		.40	.80			HI
CRON	04	0413	0420	0416	S16	W90	1.000	8993	27.4	7	-F		C		.20	.80			I
CRON	04	0438	0452	0440	N14	W67	.915	8998	29.2	14	-N		C		.40	.90			HI
CRON	04	0442	0451	0444	S16	W90	1.000	8993	27.4	9	-F		C		.20	.80			I
GRP 9368	04	0601	0633	0610	N18	W31	.534	8999	1.9	32	1N				2.61				2 2 2
ATHN	04	0559	0632	0606	N18	W30	.521	8999	2.0	33	1N	3		0606	1.92	2.20			
MITK	04	0602	0634	0614	N17	W32	.544	8999	1.9	32	1N		C	0614	3.30	3.90			F
GRP 9369	04	0728	0741	0731	N16	W67	.914	8998	29.3	13	-F				.80				2 2 1
CRON	04	0726	0742	0731	N16	W67	.914	8998	29.3	16	-F		C		.80	1.70			HI
CATA	04	0730	0740	0730	N15	W66	.908	8998	29.4	10	-N			0730	.13			160	
CATA	04	0730	0930	0730	S17	W08	.421	9004	3.7	120	-N			0730	.39	.43		162	
GRP 9371	04	0826	0839	0829	N14	W68	.921	8998	29.3	13	-N				.23				5 5 5
CANA	04	0823	0832	0826	N14	W68	.921	8998	29.2	9	-F		C		.40	.90			
CRON	04	0824	0838	0830	N14	W69	.928	8998	29.2	14	-F		C		.10	.20			HI
MANI	04	0827E	0839	0829	N12	W67	.915	8998	29.3	12D	-N	3		0829	.21	.42			
ATHN	04	0827	0839	0828	N15	W68	.921	8998	29.3	12	-N	2		0828	.33				
CATA	04	0830	0845	0830	N14	W67	.915	8998	29.3	15	-N			0830	.09			182	
CRON	04	0843	0844D	0844U	S16	W90	1.000	8993	27.6	1D	-F		C		.20	.80			I

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
CATA	04	0850	0910	0855	S20	W90	1.001	8993	27.6	20	-F			0855	.46			148	
CATA	04	0945	1015	0950	S22	E22	.585	9006	6.1	30	-N			0950	.11	.15		159	
CATA	04	1000	1005	1000	S18	W30	.622	9010	2.2	5	-N			1000	.07	.10		159	
HOUS	04	1431	1442	1432	S22	E19	.561	9006	6.0	11	-F		C		.10	.10		100	K
HOUS	04	1431	1442	1439	S22	E19	.561	9006	6.0	11	-F		C						
ATHN	04	1435	1447	1437	N25	E23	.480	9005	6.3	12	-N	2		1437	.33	.40			
CANA	04	1458	1504	1500	N04	E51	.775	9013	8.4	6	-F		C		.20	.30			
GRP 9379	04	1608	1622	1611	S17	W14	.459	9004	3.6	14	-F				.46				3 3 3
HUAN	04	1555	1626		S17	W10	.432	9004	3.9	31	-F	2	C	1602	.37	.37			E
MCMA	04	1608	1630D	1613	S17	W15	.467	9004	3.5	22D	-N		C	1613	.72	.80			EH
HUAN	04	1608	1621	1611	S17	W15	.467	9004	3.5	13	-F	2	C	1611	.31	.32			D
HOUS	04	1610E	1615	1610U	S18	W16	.488	9004	3.5	5D	-F		C		.30	.30		100	
HALE	04	1641E	1703		S14	W14	.420	9004	3.6	22D	-N	2	P	1643	.41	.50			
GRP 9381	04	1646	1703	1651	S18	W35	.674	9010	2.1	17	-F				.19				4 4 4
HALE	04	1641E	1702		S19	W35	.681	9010	2.1	21D	-N	2	P	1651	.15	.20			
HUAN	04	1646	1652D		S18	W35	.674	9010	2.1	6D	-F	2	P	1649	.21	.24			D
MCMA	04	1647	1710	1651	S19	W34	.671	9010	2.1	23	-N		C	1651	.31	.40			D
HOUS	04	1649	1658	1650	S17	W37	.689	9010	1.9	9	-F		C		.10	.10		100	
GRP 9382	04	1653	1708	1656	N12	W72	.946	8998	29.3	15	-N				.83				3 3 2
HALE	04	1651	1723	1657	N10	W73	.952	8998	29.2	32	1B	2	C	1657	1.24				
MCMA	04	1652	1702	1654	N15	W68	.921	8998	29.6	10	-F		C	1654	.41	1.10			E
HOUS	04	1655	1658	1656	N11	W75	.962	8998	29.1	3	-F		C		.10	.30		100	H
HALE	04	1654	1740	1659	S16	W10	.417	9004	4.0	46	-F	2	C	1659	.21	.22			
GRP 9384	04	1744	1824		N22	W35	.603	9002	2.1	40	-N				.33				3 3 3
HUAN	04	1738E	1838D		N22	W39	.651	9002	1.8	60D	-F	1	P	1745	.25	.28			D
MCMA	04	1745	1900D		N23	W28	.523	9002	2.6	75D	-N		C	1805	.52	.60			D
HALE	04	1750	1810		N20	W38	.632	9002	1.9	20	-N	2	P	1750	.21	.30			
GRP 9385	04	1907	1925	1909	S17	W14	.459	9004	3.7	18	-N				.37				5 5 5
LOCK	04	1904	1917	1907	S17	W14	.459	9004	3.7	13	-F		C	1907	.30	.30		10	J
HUAN	04	1907	1919	1910	S17	W13	.452	9004	3.8	12	-F	1	C	1910	.33	.34			D
SACP	04	1907	1921	1910	S17	W13	.452	9004	3.8	14	-N		C		.50	.50			
MCMA	04	1907	1945D	1909	S17	W17	.484	9004	3.5	38D	-N		C	1909	.52	.50			E
HALE	04	1909	1922	1910	S16	W12	.431	9004	3.9	13	-N	1	C	1910	.21	.22			
GRP 9386	04	1953	2009	1959	S19	W35	.681	9010	2.2	16	-N				.30				5 5 5
MCMA	04	1949	2009		S19	W35	.681	9010	2.2	20	-N		C	2003	.26	.40			D
HALE	04	1950	2013	2000	S19	W35	.681	9010	2.2	23	-B	2	C	2000	.31	.40			E
LOCK	04	1955	2005	1958	S19	W36	.691	9010	2.1	10	-F		C	1958	.30	.40		10	
SACP	04	1956	2009	1958	S21	W35	.695	9010	2.2	13	-F		C		.39	.46			
HUAN	04	1957	1959D		S19	W35	.681	9010	2.2	2D	-N	1	P	1959	.25	.29			D
GRP 9387	04	2022	2051	2036	S19	W36	.691	9010	2.1	29	-F				.21				2 2 2
HALE	04	2013	2055	2037	S19	W37	.701	9010	2.1	42	-N	2	C	2037	.21	.30			
MCMA	04	2030	2046	2034	S19	W35	.681	9010	2.2	16	-F		C	2034	.21	.30			D
GRP 9388	04	2037	2102	2044	N23	W35	.608	9002	2.2	25	-N				.68				5 5 4
LOCK	04	2036	2053	2041	N24	W35	.613	9002	2.2	17	-F		C	2041	.30	.40		10	
SACP	04	2036	2102	2043	N22	W38	.640	9002	2.0	26	-N		C		1.29	1.44			
MCMA	04	2037	2059D	2043	N23	W28	.523	9002	2.8	22D	-N		C	2043	.93	1.10			E
HALE	04	2039	2114	2041	N23	W35	.608	9002	2.2	35	-N	2	C	2041	.21	.30			
HOUS	04	2046E	2100	2050	N24	W37	.636	9002	2.1	14D	-F		C		.20	.30		100	
HALE	04	2121	2149	2127	S19	W36	.691	9010	2.2	28	-F	2	C	2127	.21	.30			
LOCK	04	2135	2200	2143	S16	W16	.463	9004	3.7	25	-F		C	2143	.70	.80		10	
LOCK	04	2135	2200	2152	S16	W16	.463	9004	3.7	25	-F		C	2152	.70	.80		10	
HALE	04	2314	2323	2316	S19	W37	.701	9010	2.2	9	-N	2	C	2316	.52	.70			
GRP 9392	04	2349	2359	2355	S18	W39	.715	9010	2.1	10	-F				.36				2 2 2
LOCK	04	2347	2359	2352	S17	W39	.709	9010	2.1	12	-F		C	2352	.30	.40		10	
HALE	04	2351	2359D	2357	S19	W38	.711	9010	2.1	8D	-N	2	P	2357	.41	.60			

SOLAR FLARES
OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9393	05	0019	0037	0025	S17	W18	.492	9004	3.7	18	-F				.48				2 2 2
LOCK	05	0015	0040	0023	S16	W18	.481	9004	3.7	25	-F		C	0023	.60	.70		10	
HALE	05	0022	0034	0027	S17	W18	.492	9004	3.7	12	-N	1	C	0027	.36	.40			TE
HALE	05	0041	0054	0044	S19	W40	.731	9010	2.0	13	-F	1	C	0044	.26	.40			T
HALE	05	0057	0119	0102	S19	W40	.731	9010	2.0	22	-F	1	C	0102	.31	.50			T
HALE	05	0212	0247	0223	S19	W40	.731	9010	2.1	35	-F	1	C	0223	.36	.50			TW
CRON	05	0246	0254	0249	S23	W75	.981	9001	29.5	8	-F		C		.20	.60			I
CRON	05	0325U	0339U	0332U	S23	W75	.981	9001	29.5	14U	-F		C		.20	.60			I
HALE	05	0355	0400D	0359	S15	W14	.432	9004	4.1	5D	-N	1	P	0359	.31	.32			T
CAPE	05	0708	0725	0714	S19	E16	.500	9006	6.5	17	1F		C	0714	2.55	2.90			F
CRON	05	0814	0835	0819	S23	W75	.981	9001	29.7	21	-F		C		.40	1.10			I
CRON	05	0836	0858	0839	S23	W75	.981	9001	29.7	22	-F		C		.40	1.10			I
GRP 9403	05	0903	0927	0905	S17	W23	.541	9004	3.7	24	-N				.85				2 2 2
CAPE	05	0901E	0936		S17	W22	.531	9004	3.7	35D	-N		P	0907	1.36	1.60			FK
CAPE	05	0901E	0936		S17	W23	.541	9004	3.7	35D	-N			0923	1.04	1.20			
ATHN	05	0904	0918	0905	S17	W24	.551	9004	3.6	14	-N	2		0905	.33	.40			
CAPE	05	1013	1021	1016	S17	W26	.571	9004	3.5	8	-F		C	1016	.72	.90			H
GRP 9405	05	1040	1106	1044	S18	W23	.551	9004	3.7	26	1N				2.55				4 3 3
CAPE	05	1038	1114	1044	S18	W21	.532	9004	3.9	36	1N		C	1044	4.26	5.00			
CANA	05	1040	1104	1043U	S18	W23	.551	9004	3.7	24	-N		C		1.40	1.70			
ATHN	05	1042	1056	1044	S17	W22	.531	9004	3.8	14	1N	2		1044	1.98	2.40			
SALU	05	1100	1110		S18	W24	.561	9004	3.7	10	-N		V	1100	1.32	1.50	1.40		
GRP 9406	05	1116	1142	1120	S20	E12	.485	9006	6.4	26	-N				1.40				5 5 5
CAPS	05	1112E	1132		S20	E12	.485	9006	6.4	20D	1N	2		1121	2.00	2.30		189	F
CANA	05	1115	1128	1117	S19	E12	.472	9006	6.4	13	-N		C		1.10	1.30			E
SALU	05	1115	1135		S22	E11	.508	9006	6.3	20	-B		V	1120	1.32	1.50			
CAPE	05	1117	1159	1120	S20	E13	.492	9006	6.4	42	-N		C	1120	.95	1.10			FK
ATHN	05	1121	1154	1123	S21	E13	.505	9006	6.4	33	1N	2		1123	1.65	2.40			
GRP 9406	05	1126	1152	1137	S20	E13	.492	9006	6.5	26	-N				2.29				4 4 3
CAPE	05	1117	1159	1139	S20	E13	.492	9006	6.4	42	-N			1139	1.76	2.00			
ATHN	05	1121	1154	1135	S21	E13	.505	9006	6.4	33	1N	2							
CANA	05	1132	1145	1137	S19	E12	.472	9006	6.4	13	-N		C		1.10	1.30			E
CAPS	05	1135	1150D		S19	E13	.478	9006	6.5	15D	1N	2		1144	4.00	4.60		196	FK
GRP 9407	05	1123	1134		S30	E47	.848	9014	9.0	11	-F				.58				2 2 2
ATHN	05	1121	1133	1122	S31	E48	.859	9014	9.1	12	-N	2		1122	.66	1.20			
SALU	05	1125	1135		S28	E45	.824	9014	8.9	10	-F		V	1130	.50	.90	1.30		
GRP 9408	05	1129	1144	1133	S19	W25	.580	9004	3.6	15	-N				1.64				4 4 3
CAPS	05	1125E	1150D		S17	W23	.541	9004	3.8	25D	1N	2		1132	3.00	3.40		189	H
CAPE	05	1128	1144	1134	S17	W24	.551	9004	3.7	16	-N		C	1134	1.27	1.50			
CANA	05	1129	1138	1130	S24	W26	.639	9004	3.5	9	-F		C		.20	.20			
ATHN	05	1134	1142	1136	S16	W26	.562	9004	3.5	8	-N	2		1136	.66	.80			
CAPE	05	1149	1159	1149	S26	E51	.859	9014	9.3	10	-F		C	1149	.45	.90			
CANA	05	1335	1353D	1337	N24	E06	.316	9005	6.0	18D	-F		C		.20	.20			
GRP 9411	05	1354	1424	1403	S17	W25	.561	9004	3.7	30	1N				2.75				6 6 6
CAPE	05	1350	1419	1401	S18	W23	.551	9004	3.9	29	1N		C	1401	3.44	4.20			FHV
SACP	05	1354E	1432	1407	S17	W25	.561	9004	3.7	38D	1N		C		2.49	2.65			
MONT	05	1355	1425	1359	S16	W26	.562	9004	3.6	30	1N		C	1359	2.58				
HOUS	05	1358	1418	1403	S16	W28	.584	9004	3.5	20	-N		C		1.20	1.50		200	E
CAPS	05	1400E	1418D		S17	W24	.551	9004	3.8	18D	2N	1		1404	5.00	6.00		196	CF
MCMA	05	1402E	1429		S18	W25	.571	9004	3.7	27D	1N		C	1402	1.80	2.20			FH
GRP 9412	05	1524	1535	1527	S17	W26	.571	9004	3.7	11	-N				.42				4 4 4
LOCK	05	1522	1533	1526	S16	W26	.562	9004	3.7	11	-N		C	1526	.70	.80		20	
CANA	05	1524	1534	1525	S18	W27	.591	9004	3.6	10	-N		C		.40	.50			
MCMA	05	1525	1537	1528	S18	W25	.571	9004	3.8	12	-N		C	1528	.36	.40			E
HOUS	05	1526	1535	1527	S17	W26	.571	9004	3.7	9	-N		C		.20	.20		200	
GRP 9413	05	1748	1805	1755	S15	W27	.564	9004	3.7	17	-F				.48				2 2 2
LOCK	05	1745	1805	1755	S15	W29	.587	9004	3.6	20	-F		C	1755	.70	.80		10	
HALE	05	1751	1804	1754	S15	W25	.542	9004	3.9	13	-N	1	C	1754	.26	.30			TE

SOLAR FLARES
OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP .DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9414	05	1846	1915	1856	S17	W27	.582	9004	3.8	29	-B				.87				6 5 5
LOCK	05	1842	1905	1852	S17	W27	.582	9004	3.8	23	-N		C	1852	1.00	1.20		20	
HALE	05	1849	1911	1855	S18	W25	.571	9004	3.9	22	-B	1	C	1855	.77	.90			TJE
HUAN	05	1853E	1901D		S18	W26	.581	9004	3.8	8D	-B	1	P	1854	.77	.82			E
MCMA	05	1855E	1905		S18	W27	.591	9004	3.8	10D	-B		C	1855	.52	.60			E
SACP	05	1900E	1915D	1900U	S18	W26	.581	9004	3.8	15D	-N		P		1.28	1.38			
HOUS	05	1914	1938	1921	S15	W28	.575	9004	3.7	24	-F		C		.10	.10		100	
HALE	05	1925	1932	1928	S22	W48	.819	9010	2.2	7	-F	1	C	1928	.21	.40			T
GRP 9416	05	2039	2050	2043	S18	W28	.601	9004	3.8	11	-F				.47				3 3 3
LOCK	05	2037	2046	2040	S17	W28	.592	9004	3.8	9	-F		C	2040	.40	.50		10	
HALE	05	2041	2050	2043	S18	W27	.591	9004	3.8	9	-F	1	C	2043	.41	.50			TE
SACP	05	2045E	2053	2045U	S18	W28	.601	9004	3.8	8D	-N		P		.60	.65			
BOUL	05	2145	2157	2148	N18	W85	.993	8998	29.5	12	-N		C		.20	.70			
HOUS	05	2148	2206D	2153	S15	W28	.575	9004	3.8	18D	-F		C		.10	.10		100	
GRP 9419	05	2216	2233	2220	S17	W27	.582	9004	3.9	17	-F				.78				4 4 3
HOUS	05	2215	2226	2219	S16	W28	.584	9004	3.8	11	-F		C		.10	.10		100	
LOCK	05	2215	2232	2219	S17	W27	.582	9004	3.9	17	-N		C	2219	.90	1.10		20	
SACP	05	2216	2246	2221	S18	W26	.581	9004	4.0	30	-N		C		1.09	1.17			
HALE	05	2218	2227	2221	S17	W27	.582	9004	3.9	9	-F	1	C	2221	.36	.40			T
HOUS	05	2306E	2309	2306U	S19	W29	.620	9004	3.8	3D	-F		C		.10	.10		100	
GRP 9421	06	0015	0053	0025	S18	W28	.601	9004	3.9	38	-N				1.38				3 3 3
LOCK	06	0015	0040U	0025	S19	W28	.609	9004	3.9	25U	-N		C	0025	1.20	1.50		20	
HALE	06	0015	0053	0027	S19	W28	.609	9004	3.9	38	-B	2	C	0027	.93	1.20			JUT
SACP	06	0024E	0036D	0024U	S17	W28	.592	9004	3.9	12D	1N		C		2.01	2.19			
HALE	06	0203	0240	0205	S19	W33	.660	9004	3.6	37	-B	1	C	0205	.41	.50			FJ
HALE	06	0254	0308	0255	S21	E06	.471	9006	6.6	14	-N	1	C	0255	.26	.30			J
CRON	06	0259	0307	0301	N18	W81	.983	8998	30.0	8	-F		C		.30	1.00			
CRON	06	0409	0420	0413	N24	E40	.671	9007	9.2	11	-N		C		.20	.30			
CRON	06	0611	0626	0623	S22	W90	1.001	9001	29.5	15	-F		C		.40	1.60			
CATA	06	0700	0705	0700	S17	W33	.645	9004	3.8	5	-N			0700	.25	.33		174	
CRON	06	0748	0757	0751	S22	W90	1.001	9001	29.6	9	-F		C		.40	1.60			
GRP 9429	06	0755	0817	0755	S15	W37	.676	9004	3.6	22	-F				.39				2 2 1
CATA	06	0755	0813	0755	S17	W37	.688	9004	3.6	18	-F			0755	.39	.54		150	
ISTA	06	0755	0820		S12	W37	.658	9004	3.6	25	-F								
GRP 9430	06	0840	0848	0843	S16	W33	.638	9004	3.9	8	-F				.41				2 2 1
ISTA	06	0840	0845		S12	W33	.611	9004	3.9	5	-F								
MONT	06	0842	0850	0843	S19	W32	.650	9004	4.0	8	-N		C	0843	.41				
GRP 9431	06	0858	0910	0903	S18	W34	.663	9004	3.8	12	-N				.73				4 4 4
MONT	06	0856	0910	0903	S19	W32	.650	9004	4.0	14	-N		C	0903	.72				
CAPS	06	0858	0911		S16	W33	.638	9004	3.9	13	-N	3		0906	.70	.90		176	H
CANA	06	0859	0904	0902	S19	W34	.670	9004	3.8	5	-F		C		.80	1.10			
CATA	06	0900	0915	0905	S18	W35	.673	9004	3.8	15	-B			0905	.68	.92		206	
GRP 9432	06	1009	1021	1013	S19	W36	.690	9004	3.7	12	-N				1.35				4 4 4
MONT	06	0952	1005	0953	S20	W50	.827	9004	2.7	13	-F		C	0953	.31				
MONT	06	1007	1020	1010	S19	W32	.650	9004	4.0	13	1N		C	1010	2.06				
CANA	06	1008	1018	1012	S19	W34	.670	9004	3.9	10	-F		C		.80	1.10			
CAPE	06	1009E	1022D	1013	S18	W34	.663	9004	3.9	13D	-N		P	1013	1.19	1.60			
CATA	06	1010	1023	1015	S18	W35	.673	9004	3.8	13	-N			1015	1.35	1.85		180	
MONT	06	1033	1045	1035	S23	E03	.494	9006	6.7	12	-F		C	1035	.52				
MONT	06	1058	1105	1100	N11	E28	.470	9013	8.6	7	-N		C	1100	.31				
GRP 9435	06	1102	1135	1115	S18	W36	.684	9004	3.8	33	1N				3.37				5 5 3
CANA	06	1059	1127	1112	S18	W38	.704	9004	3.6	28	-N		C						
CAPE	06	1102	1143D	1116	S18	W37	.694	9004	3.7	41D	2N			1116	5.12	7.00			
CAPS	06	1104E	1134D		S18	W35	.673	9004	3.8	30D	1N	3		1115	1.90	2.40		195	C
WENU	06	1104	1128		S19	W37	.701	9004	3.7	24	1F		V		3.09				
CATA	06	1116	1145	1116	S17	W33	.645	9004	4.0	29	-N			1116	.90	1.18		174	

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9435	06	1101	1137	1103	S19	W37	.701	9004	3.7	36	-N				1.59				5 5 4
ABST	06	0843	1130	1103	S21	W36	.704	9004	3.7	167	1F		C	1103	1.80	2.40			EJFK
MONT	06	0923	0945	0925	S18	W34	.663	9004	3.8	22	-N		C	0925	.52				
CANA	06	1059	1127	1101	S18	W38	.704	9004	3.6	28	-N		C		.40	.60			K
MONT	06	1101	1200	1105	S20	W34	.677	9004	3.9	59	1B		C	1105	2.06				
ATHN	06	1102	1124	1102	S17	W37	.688	9004	3.7	22	-B	1		1102	1.32	1.80			
CAPE	06	1102	1143	1103	S18	W38	.704	9004	3.6	41	-N		C	1103	1.19	1.60			FK
CAPE	06	1117	1142	1129	S28	E36	.754	9014	9.2	25	-F		C	1129	.59	.90			
CATA	06	1130	1225	1135	S25	W90	1.001	9001	29.7	55	-F			1135	.29			138	
GRP 9438	06	1220	1309	1224	S17	W37	.688	9004	3.7	49	1N				3.09				7 7 6
WEND	06	1216	1244		S18	W37	.694	9004	3.7	28	1N		V		5.16				
CAPE	06	1217E	1231D	1223	S16	W37	.682	9004	3.7	14D	1N		P	1223	2.94	4.00			V
CAPS	06	1218	1330		S16	W36	.671	9004	3.8	72	1B	3		1226	2.30	2.90		230	
CANA	06	1219	1244D	1221	S17	W38	.698	9004	3.7	25D	-N		C		1.40	1.90			
MONT	06	1221	1455	1225	S20	W33	.668	9004	4.0	154	2B		C	1225	3.61				
ONDR	06	1223	1337	1225	S17	W40	.719	9004	3.5	74	2N		V	1225			2.50		CHJ
CATA	06	1225	1245	1227	S16	W37	.682	9004	3.7	20	1B			1227	3.11	4.33		298	
CATA	06	1227	1237	1230	S25	W90	1.001	9001	29.8	10	-N			1230	.09			170	
GRP 9440	06	1329	1428		S17	W88	.698	9004	3.7	59	-N				2.31				2 2 2
SACP	06	1317E	1417	1320	S17	W36	.677	9004	3.9	60D	1N		C		3.65	4.20			
HUAN	06	1341E	1428		S16	W40	.714	9004	3.6	47D	-N	1	C	1348	.97	1.11			E
SACP	06	1344	1404	1348	S25	W81	.996	9001	30.5	20	-N		C		.78				
CATA	06	1410	1445	1420	S25	W90	1.001	9001	29.8	35	1F			1420	.55			132	
MONT	06	1410E	1510D	1450	N10	E27	.453	9013	8.6	60D	1N		C	1450	2.06				
GRP 9444	06	1454	1513	1459	S18	W39	.715	9004	3.7	19	-N				.40				5 5 5
HOUS	06	1448	1510	1456	S19	W39	.721	9004	3.7	22	-F		C		.20	.30		100	
SACP	06	1452	1533	1459	S18	W38	.704	9004	3.8	41	-N		C		.39	.46			
MONT	06	1453	1510		S19	W40	.730	9004	3.6	17	-N		C	1500	.62				
CATA	06	1455	1500	1500	S19	W37	.701	9004	3.8	5	-N			1500	.15	.22		164	
ATHN	06	1500	1510	1501	S17	W39	.709	9004	3.7	10	-N	1		1501	.66	.90			
GRP 9445	06	1551	1559	1554	S17	W44	.759	9004	3.4	8	-F				.48				3 3 3
LOCK	06	1548	1600	1552	S16	W46	.775	9004	3.2	12	-F		C	1552	.50	.80		10	H
HUAN	06	1552	1559		S18	W44	.764	9004	3.4	7	-F	1	C	1555	.25	.30			D
SACP	06	1553	1559	1555	S17	W44	.759	9004	3.4	6	-N		C		.69	.86			
SACP	06	1559	1617	1605	S15	W41	.719	9004	3.6	18	-F		C		.98	1.17			
HALE	06	1622	1654	1632	S17	W35	.667	9004	4.1	32	-B	1	C	1632	.21	.30			J
HALE	06	1706	1735	1709	S19	W09	.454	9006	6.0	29	-B	2	C	1709	.21	.22			J
LOCK	06	1710	1727	1720	S16	W46	.775	9004	3.3	17	-F		C	1720	.50	.80		10	H
SACP	06	1736	1748	1743	S19	W39	.721	9004	3.8	12	-F		C		.59	.71			
GRP 9450	06	1800	1816	1803	S17	W46	.779	9004	3.3	16	-N				.51				2 2 2
LOCK	06	1757	1811	1801	S16	W46	.775	9004	3.3	14	-F		C	1801	.70	1.10		10	H
HALE	06	1802	1821	1804	S17	W45	.769	9004	3.4	19	-B	1	C	1804	.31	.50			HJ
GRP 9451	06	1909	1921	1912	S18	W43	.754	9004	3.6	12	-N				.36				4 4 4
LOCK	06	1906	1920	1910	S18	W43	.754	9004	3.6	14	-F		C	1910	.20	.30		10	
HALE	06	1909	1923	1912	S19	W43	.760	9004	3.6	14	-B	1	C	1912	.21	.30			HJ
HUAN	06	1910	1912D		S18	W42	.745	9004	3.6	2D	-F	1	P	1912	.25	.30			D
SACP	06	1911	1920	1913	S18	W42	.745	9004	3.6	9	-N		C		.78	.97			
GRP 9452	06	1921	1942	1925	N18	E55	.817	9018	10.9	21	-N				.68				3 3 3
LOCK	06	1919	1937	1924	N16	E57	.834	9018	11.1	18	-F		C	1924	.60	1.00		10	
SACP	06	1922	1942	1925	N20	E54	.809	9018	10.9	20	-N		C		.68	.91			
HALE	06	1922	1948	1927	N18	E53	.797	9018	10.8	26	-N	1	C	1927	.77	1.30			F
GRP 9453	06	2011	2036	2015	S19	W42	.750	9004	3.7	25	-N				.43				2 2 2
HALE	06	2009	2036	2015	S20	W42	.755	9004	3.7	27	-B	1	C	2015	.26	.40			FJ
SACP	06	2013	2023	2014	S19	W40	.730	9004	3.8	10	-F		C		.59	.71			
SACP	06	2025	2030D	2026	S16	W44	.755	9004	3.6	5D	-N		C		1.19	1.46			
HALE	06	2022	2040	2024	N16	W34	.568	9005	4.3	18	-N	1	C	2024	.21	.30			

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9455	06	2024	2037	2027	S28	E27	.685	9014	8.9	13	-N				.58				3 3 3
LOCK	06	2020	2037	2025	S28	E27	.685	9014	8.9	17	-N		C	2025	.50	.70		20	
SACP	06	2025	2039	2028	S27	E27	.675	9014	8.9	14	-N		C		.98	1.13			
HALE	06	2026	2034	2028	S28	E27	.685	9014	8.9	8	-N	1	C	2028	.26	.40			
GRP 9456	06	2221	2237	2225	S17	W44	.759	9004	3.6	16	-N				.63				3 3 3
SACP	06	2218E	2224D	2224	S16	W44	.755	9004	3.6	6D	-N		C		1.18	1.46			
LOCK	06	2220	2234	2225	S16	W45	.765	9004	3.6	14	-F		C	2225	.40	.60		10	
HALE	06	2224	2240	2225	S18	W44	.764	9004	3.6	16	-N	1	C	2225	.31	.50			JL
GRP 9457	06	2300	2352	2308	S16	W45	.765	9004	3.6	52	-N				1.79				3 3 3
SACP	06	2257	0017D	2306	S16	W44	.755	9004	3.7	80D	1N		C		3.24	4.01			
LOCK	06	2300	2333	2308	S16	W45	.765	9004	3.6	33	-N		C	2308	1.00	1.50		20	
HALE	06	2302	2345	2310	S17	W46	.779	9004	3.5	43	-B	1	C	2310	1.13	1.80			J
GRP 9458	06	2316	2330	2320	S28	E26	.677	9014	8.9	14	-N				.84				3 3 2
LOCK	06	2314	2330	2319	S28	E27	.685	9014	9.0	16	-N		C	2319	.60	.80		20	
HALE	06	2317	2332	2320	S28	E25	.670	9014	8.8	15	-N	1	C	2320	.21	.30			K
SACP	06	2320E	2329	2320U	S27	E26	.668	9014	8.9	9D	-N		C		1.07	1.22			
LOCK	07	0011	0026	0018	S28	E28	.692	9014	9.1	15	-N		C	0018	.70	1.00		20	
HALE	07	0036	0255	0039	S19	W50	.823	9004	3.3	139	-F	2	C	0039	.72	1.30			
CRON	07	0141U	0154	0144U	S29	E23	.666	9014	8.8	13U	-N		C		.30	.40			
HALE	07	0157	0205	0200	S19	W07	.444	9006	6.6	8	-F	1	C	0200	.93	1.00			
CRON	07	0209	0214	0211	N10	W82	.988	8999	30.9	5	-N		C		.30	1.00			
CRON	07	0219	0223	0220	N24	W74	.955	9002	1.5	4	-N		C		.30	.80			
GRP 9465	07	0231	0359	0240	S16	W47	.784	9004	3.6	88	1B				2.27				1 1 1
HALE	07	0231	0359D	0240	S16	W47	.784	9004	3.6	88D	1B	2	P	0240	2.27	3.60			K
HALE	07	0231	0359D	0235	S16	W47	.784	9004	3.6	88D	-B	2	P	0235	.83	1.30			
HALE	07	0231	0359D	0347	S16	W47	.784	9004	3.6	88D	-B	2	P	0347	1.13	1.80			
GRP 9466	07	0501	0511	0506	S29	E24	.673	9014	9.0	10	-N				1.21				3 3 3
ATHN	07	0458E	0511	0458	S28	E24	.662	9014	9.0	13D	-N	2		0458	1.32	1.60			
ABST	07	0503	0600	0506	S28	E24	.662	9014	9.0	57	1N		C	0506	1.80	2.40		62	EFJ
MANI	07	0504E	0510		S30	E25	.690	9014	9.1	6D	-N	2		0505	.52	.73			
GRP 9467	07	0506	0615		S17	W47	.788	9004	3.7	69	1F				4.13				3 2 1
ABST	07	0503	0516	0503	S17	W49	.807	9004	3.5	13	-F		C	0503	.90	1.50		58	D
TACH	07	0508E	0615D		S16	W46	.774	9004	3.8	67D	2F		V	0603	4.13	6.60	2.10	75	E
MANI	07	0600E	0612D		S17	W47	.788	9004	3.7	12D	-F	1		0602	.83	1.42			
GRP 9468	07	0507	0548	0509	N21	W75	.960	9002	1.6	41	-F				.93				2 2 2
ABST	07	0506	0555	0509	N23	W71	.940	9002	1.9	49	-F		C	0509	1.35	1.40		65	D
CRON	07	0507	0515	0509	N24	W77	.968	9002	1.4	8	-N		C		.50	1.40			
CRON	07	0532	0540	0535	N12	W81	.985	9002	1.2	8	-N		C		.30	1.00			
GRP 9469	07	0621	0632	0621	S31	E25	.700	9014	9.1	11	-F				.60				2 2 2
ATHN	07	0621E	0631	0621	S32	E25	.710	9014	9.1	10D	-N	2		0621	.99	1.20			
MANI	07	0628E	0633		S29	E24	.673	9014	9.1	5D	-F	1		0629	.21	.29			
CRON	07	0647	0701	0651	S05	W57	.848	9004	3.0	14	-F		C		.30	.50			H
GRP 9471	07	0807	0843	0833	S14	W50	.805	9004	3.6	36	-N				1.06				3 2 2
CATA	07	0800	0850	0805	S16	W50	.812	9004	3.6	50	-N			0805	1.11	1.95		159	
CAPS	07	0813	0836		S16	W48	.794	9004	3.7	23	-N	3		0815	1.00	1.50		176	
CRON	07	0831	0843	0833	S10	W51	.803	9004	3.5	12	-F		C		.10	.20			
CAPS	07	0938E	0944		S19	W15	.491	9006	6.3	6D	-F	3		0940	.30	.40		166	E
MONI	07	1052	1120	1102	S20	W70	.960	9010	2.2	28	-F		C	1102	.52				
GRP 9474	07	1130	1156	1134	S17	W58	.882	9004	3.1	26	1F				1.93				4 4 4
CAPE	07	1115E	1131		S16	W51	.821	9004	3.6	16D	-N		P	1118	1.04	1.80			T
KIEV	07	1130	1142	1132	S17	W60	.897	9004	3.0	12	1F		C	1132	1.55			60	DI
KHAR	07	1130E	1155D		S16	W57	.872	9004	3.2	25D	2F		P	1140	2.84	5.80	1.80		D
CAPE	07	1130	1151	1136	S17	W57	.875	9004	3.2	21	1N			1136	1.76	3.60			
CAPE	07	1130	1151	1133	S17	W57	.875	9004	3.2	21	1N		C	1133	1.31	2.70			HKT
MONI	07	1142E	1215		S18	W59	.892	9004	3.1	33D	1N		C	1145	1.55				
GRP 9475	07	1210	1231	1213	S17	W54	.851	9004	3.5	21	-N				1.06				2 2 2
CAPS	07	1208E	1237		S18	W50	.820	9004	3.8	29D	1N	3		1217	1.70	2.60		176	F
CAPE	07	1212	1225	1213	S16	W57	.872	9004	3.2	13	-N		C	1213	.41	.80			

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
CAPE	07	1235	1242	1236	N26	E22	.480	9007	9.2	7	-F		C	1236	.77	.90			C
CAPE	07	1316	1320	1317	S15	W58	.877	9004	3.2	4	-F		C	1317	.27	.60			
CAPE	07	1349	1418	1355	S16	W59	.887	9004	3.2	29	1F		C	1355	1.50	3.10			HK
CAPE	07	1349	1418	1405	S16	W59	.887	9004	3.2	29	-F			1405	.63	1.30			
CAPE	07	1349	1418	1415	S16	W59	.887	9004	3.2	29	-F			1415	.54	1.10			
CAPE	07	1411	1418	1413	S21	W80	.993	9010	1.6	7	-N		C	1413	.32				T
GRP 9480	07	1427	1442	1430	S21	W76	.983	9010	1.9	15	-F				.49				2 2 2
MONT	07	1425	1450	1430	S20	W72	.968	9010	2.2	25	-F		C	1430	.62				
CAPE	07	1428	1434	1430	S21	W80	.993	9010	1.6	6	-F		C	1430	.36				T
GRP 9481	07	1438	1507	1444	S24	E19	.582	9014	9.0	29	-F				.55				2 2 2
SACP	07	1438	1458	1444	S28	E18	.623	9014	9.0	20	-F		C		.69	.76			
MONT	07	1444	1515	1500	S19	E19	.523	9014	9.0	31	-F		C	1500	.41				
GRP 9482	07	1528	1546	1537	S16	W58	.880	9004	3.3	18	-N				.33				3 3 3
SACP	07	1526	1549	1538	S16	W58	.880	9004	3.3	23	-N		C		.30	.45			
LOCK	07	1530	1545	1535	S14	W59	.883	9004	3.2	15	-N		C	1535	.30	.60		20	H
CAPS	07	1535E	1544		S18	W56	.869	9004	3.4	9D	-N	3		1540	.40	.80		164	D
GRP 9483	07	1625	1648	1632	S17	W59	.890	9004	3.3	23	-N				.99				2 2 2
LOCK	07	1623	1645	1633	S16	W59	.887	9004	3.3	22	-N		C	1633	1.00	2.00		20	
SACP	07	1626	1651	1630	S18	W58	.885	9004	3.3	25	-N		C		.98	1.51			
GRP 9484	07	1654	1711	1701	S16	W60	.895	9004	3.2	17	-B				1.24				2 2 2
LOCK	07	1653	1710	1659	S16	W60	.895	9004	3.2	17	1N		C	1659	1.50	3.20		20	
SACP	07	1654	1712	1702	S16	W59	.887	9004	3.3	18	-B		C		.98	1.54			
HALE	07	1726	1732	1729	N23	W84	.990	9002	1.4	6	-N	3	C	1729	.26				
GRP 9486	07	1800	1811	1803	N12	E49	.750	9018	11.4	11	-F				.36				2 2 2
SACP	07	1759	1810	1802	N13	E49	.751	9018	11.4	11	-F		C		.30	.36			
HALE	07	1800	1812	1803	N11	E49	.750	9018	11.4	12	-F	2	C	1803	.41	.60			H
SACP	07	1925	1949	1930	S16	W57	.872	9004	3.5	24	-F		C		.69	1.03			
GRP 9488	07	2004	2012	2006	N23	W83	.988	9002	1.6	8	-N				.55				2 2 2
LOCK	07	2003	2010	2005	N24	W84	.990	9002	1.5	7	1N		C	2005	.70	2.40		20	
SACP	07	2004	2014	2006	N22	W81	.983	9002	1.8	10	-N		C		.39				
GRP 9489	07	2044	2110	2050	S18	W62	.912	9004	3.2	26	1B				2.76				4 4 4
LOCK	07	2042	2106	2049	S18	W62	.912	9004	3.2	24	2N		C	2049	3.00	6.30		20	
SACP	07	2044	2110	2050	S19	W61	.908	9004	3.3	26	2B		C		3.64	6.07			
HALE	07	2045	2115	2050	S18	W62	.912	9004	3.2	30	1B	1	C	2050	2.27				
HUAN	07	2049E	2051D		S18	W64	.925	9004	3.1	2D	1B	1	P	2049	2.11				
HALE	07	2058	2130	2108	S25	E16	.574	9014	9.1	32	-F	1	C	2108	.31	.40			H
HOUS	07	2137	2145D	2139	N21	W79	.976	9002	2.0	8D	-F		C		.20	.60		100	
HALE	08	0031	0133	0040U	N14	W25	.434	9011	6.1	62	-F	1	C	0040	.41	.50			
HALE	08	0144	0225	0148	N22	W80	.979	9002	2.1	41	-F	1	C	0148	.31				
HALE	08	0152	0208	0153U	S29	E13	.609	9014	9.1	16	-F	2	C	0153	.21	.30			
HALE	08	0339	0342	0340	S15	W55	.853	9004	4.0	3	-F	2	C	0340	.21	.40			
GRP 9496	08	0341	0353	0342	N10	E05	.107	9013	8.5	12	-F				.83				2 2 2
HALE	08	0340	0358D	0342	N10	E05	.107	9013	8.5	18D	-N	2	P	0342	.62	.62			
MITR	08	0341	0347	0342	N10	E05	.107	9013	8.5	6	-F		C	0342	1.03	1.00			E
CRON	08	0621	0628	0623U	S17	W68	.946	9004	3.2	7	-F		C		.10	.20			
ISTA	08	0720	0735		N11	E02	.088	9013	8.5	15	-F								
GRP 9499	08	0744	0754	0747	S16	W65	.928	9004	3.4	10	-N				.67				5 5 4
ISTA	08	0740	0750		S13	W64	.917	9004	3.5	10	-N								
CAPS	08	0742	0750		S18	W65	.931	9004	3.4	8	-N	3		0748	1.00			170	
CAPE	08	0743	0752	0745	S17	W66	.935	9004	3.4	9	-N		C	0745	.67	1.90			V
CRON	08	0744	0754U	0745U	S19	W67	.944	9004	3.3	10U	-F		C		.70	1.70			
CATA	08	0750	0805	0750	S15	W65	.926	9004	3.5	15	-N			0750	.29			191	

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9500	08	0758	0843	0818	S14	W63	.912	9004	3.6	45	2N				2.77				4 4 4
CAPE	08	0756	0835	0810	S17	W63	.917	9004	3.6	39	2N		C	0810	3.81	9.30			FT
CAPS	08	0800	0837		S16	W63	.915	9004	3.6	37	2N	3		0811	4.00			237	FK
MONT	08	0817E	0840		S12	W62	.901	9004	3.7	23D	2N		C	0817	2.58				
CATA	08	0820	0900	0825	S12	W65	.922	9004	3.5	40	-B			0825	.68			219	
CAPE	08	1005	1017	1011	S17	W70	.956	9004	3.2	12	-F		C	1011	.50	1.60			F
SALU	08	1130	1135		S27	E04	.553	9014	8.8	5	-N		V	1130	.58	.70	1.40		
GRP 9503	08	1309	1342	1313	S17	W66	.935	9004	3.6	33	-F				1.20				2 2 2
CAPE	08	1309	1337	1313	S16	W65	.928	9004	3.7	28	-N			1313	.50	1.30			FKTV
CAPS	08	1310E	1347		S17	W67	.941	9004	3.5	37D	1F	3		1315	1.90			160	
CATA	08	1355	1410	1400	N15	E36	.593	9018	11.3	15	-F			1400	.20	.24		138	
GRP 9505	08	1428	1501	1444	S16	W67	.939	9004	3.6	33	-F				.36				2 2 2
CATA	08	1425	1430	1425	S13	W69	.947	9004	3.4	5	-N			1425	.13			157	
SACP	08	1430	1501	1447	S17	W65	.929	9004	3.7	31	-F		C		.39	.72			
CATA	08	1435	1500	1440	S15	W68	.944	9004	3.5	25	-N			1440	.33			174	
CAPE	08	1502	1510	1506	S18	W70	.957	9004	3.4	8	1F		C	1506	.63	2.30			
GRP 9507	08	1533	1555	1542	S16	W68	.945	9004	3.5	22	-F				1.00				5 5 5
CAPE	08	1526	1546D	1541	S17	W69	.951	9004	3.5	20D	-N		C	1541	1.30				F
SACP	08	1534	1605	1548	S17	W67	.941	9004	3.6	31	-F		C		.50	.95			
LOCK	08	1535	1544	1538	S15	W67	.938	9004	3.6	9	-F		C	1535	.40	1.00		10	
LOCA	08	1535	1600D	1540	S17	W67	.941	9004	3.6	25D	1N		V	1540	1.68				
CAPS	08	1540E	1600D		S16	W70	.955	9004	3.4	20D	1F	1		1545	1.10			155	C
LOCA	08	1537	1600	1539	N14	W34	.563	9011	6.1	23	-F		V	1539	1.16	1.30			H
GRP 9509	08	1910	1917	1912	S18	W73	.970	9004	3.3	7	-N				.55				2 2 2
LOCK	08	1909	1916	1911	S17	W72	.965	9004	3.4	7	-N		C	1911	.50	1.50		20	
SACP	08	1910	1917	1913	S19	W74	.975	9004	3.2	7	-N		C		.60	1.41			
GRP 9510	08	2030	2123	2045	S17	W68	.946	9004	3.8	53	1F				1.24				3 2 2
SACP	08	2028	2140	2050	S17	W69	.951	9004	3.7	72	1N		C		1.58	3.13			
LOCK	08	2031	2105	2040	S16	W67	.939	9004	3.8	34	1F		C	2040	.90	2.20		10	
HUAN	08	2106E	2106D		S18	W69	.952	9004	3.7		-N	1	P	2106	.57				E
HALE	08	2148	2200	2155	S27	W01	.550	9014	8.8	12	-F	2	C	2155	.26	.30			
GRP 9512	08	2325	2339	2331	S18	W73	.970	9004	3.5	14	-N				.35				2 2 2
SACP	08	2325	2338	2332	S19	W74	.975	9004	3.4	13	-N		C		.39	.95			
LOCK	08	2325	2340	2330	S16	W72	.964	9004	3.6	15	-N		C	2330	.30	.90		10	
HALE	09	0037	0045	0037	N13	W41	.655	9011	6.0	8	-N	1	C	0037	.21	.30			
HALE	09	0107	0116	0109	N13	W41	.655	9011	6.0	9	-N	1	C	0109	.10	.11			
HALE	09	0229	0255	0229	S28	W04	.567	9014	8.8	26	-B	1	C	0229	.36	.40			
GRP 9516	09	0310	0333	0313	S21	W84	.998	9004	2.8	23	-F				.51				2 2 2
CRON	09	0310	0333D	0312	S19	W85	.999	9004	2.8	23D	-N		C		.40	1.40			H
MITK	09	0312E	0320D	0313	S22	W82	.996	9004	3.0	8D	1F		C	0313	.62				EH
HALE	09	0345	0354	0347	S27	W07	.559	9014	8.6	9	-N	1	C	0347	.15	.20			
CRON	09	0458	0503	0500	N13	W39	.629	9011	6.3	5	-F		C		.20	.30			
CRON	09	0508	0523	0510	N24	W90	.999	9002	2.5	15	1F		C		.50	2.00			
CRON	09	0512	0535	0515	S14	W79	.988	9004	3.3	23	-F		C		.20	.60			
CRON	09	0525	0531	0526	N22	W85	.993	9003	2.9	6	-F		C		.20	.70			
CRON	09	0758	0802	0800	S19	W85	.999	9004	3.0	4	-F		C		.10	.30			
MONT	09	0827	0850	0830	N13	E24	.416	9018	11.2	23	-N		C	0830	.72				
CATA	09	0845	0900	0850	S15	W90	1.000	9004	2.6	15	-F			0850	.37			132	
GRP 9525	09	0924	1015	0925	N15	E28	.482	9018	11.5	51	-N				1.48				3 3 3
CRON	09	0922	0927D	0925	N17	E35	.585	9018	12.0	5D	-N		C		1.20	1.50			
CATA	09	0925	1015	0925	N13	E25	.431	9018	11.3	50	1B			0925	1.94	2.16		214	
CAPS	09	0933E	1003		N14	E23	.405	9018	11.1	30D	-N	3		0936	1.30	1.40		160	C
CATA	09	1040	1045	1040	N19	E05	.235	9015	9.8	5	-F			1040	.40	.42		145	

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
LOCK	09	1642	1657	1647	N10	W52	.783	9021	5.8	15	-F		C	1647	.40	.60		10	H
LOCK	09	1751	1757	1754	S16	W83	.996	9004	3.5	6	-F		C	1754	.10	.30		10	
BOUL	09	1854	1905	1856	S23	E90	1.001	9023	16.5	11	-N		C		.30	1.20			I
HALE	09	1937	1954	1937	N12	W52	.784	9011	5.9	17	-N	1	C	1937	.10	.20			
BOUL	09	1940U	2022	1959U	S23	E90	1.001	9023	16.6	42U	-N		C		.30	1.20			I
HALE	09	1943	1949	1943	N13	W45	.705	9011	6.4	6	-N	1	C	1943	.10	.11			
GRP 9533	09	2042	2055	2046	S23	W87	1.000	9004	3.3	13	-F				.25				2 2 2
HOUS	09	2036	2053	2039	S15	W85	.998	9004	3.5	17	-F		C		.20	.70		100	
HOUS	09	2036	2044	2041	S27	W81	.996	9004	3.8	8	-F		C		.10	.30		100	
BOUL	09	2047	2056	2051	S24	W90	1.001	9004	3.1	9	-N		C		.20	.80			I
GRP 9534	09	2053	2111	2056	N15	W51	.775	9021	6.0	18	-B				.69				2 2 1
SACP	09	2052	2102	2055	N24	W47	.748	9021	6.3	10	-F		C		.39	.49			
HALE	09	2054	2111	2055	N12	W52	.784	9021	6.0	17	-B	1	C	2055	.10	.20			
SACP	09	2054	2111	2056	N11	W54	.804	9021	5.8	17	-N		C		.30	.39			
GRP 9535	09	2238	2248	2241	S18	W87	1.000	9004	3.4	10	-F				.35				2 2 2
LOCK	09	2237D	2248	2240	S17	W83	.996	9004	3.7	11D	-F		C	2240	.40	1.40		10	H
HOUS	09	2238	2247	2242	S19	W90	1.001	9004	3.2	9	-F		C		.30	1.20		100	
GRP 9536	09	2244	2258	2249	N14	E17	.316	9018	11.2	14	-F				.29				3 3 3
LOCK	09	2244	2257	2249	N15	E17	.323	9018	11.2	13	-F		C	2249	.40	.40		10	
HOUS	09	2244	2302	2248	N14	E16	.301	9018	11.1	18	-N		C		.20	.20		200	
MANI	09	2245	2255	2249	N14	E19	.346	9018	11.4	10	-F	2		2249	.26	.28			
GRP 9537	10	0108	0116	0111	N14	E15	.287	9018	11.2	8	-F				.54				2 2 2
HALE	10	0108	0115	0111	N14	E14	.272	9018	11.1	7	-F	1	C	0111	.46	.50			JT
MANI	10	0112E	0116D		N14	E16	.302	9018	11.3	4D	-F	2		0114	.62	.64			
HALE	10	0117	0121	0117	N25	W48	.761	9026	6.5	4	-F	1	C	0117	.15	.20			
CRON	10	0117E	0128	0121	S15	W90	1.000	9004	3.3	11D	-F		C		.20	.80			I
CRON	10	0130	0145	0132	S15	W90	1.000	9004	3.3	15	-F		C		.20	.80			I
HALE	10	0159	0216	0201	N12	W57	.834	9011	5.8	17	-F	1	C	0201	.62	1.10			T
CRON	10	0210	0218	0214	S24	W80	.994	9017	4.1	8	-F		C		.10	.30			
CATA	10	0705	0730	0710	N15	E12	.254	9018	11.2	25	-F			0710	.27	.28		137	
CATA	10	0715	0750	0720	N14	W59	.852	9011	5.9	35	-N			0720	.39	.76		170	
CRON	10	0800	0814	0802	S15	W90	1.000	9004	3.6	14	-F		C		.20	.80			I
GRP 9546	10	0806	0833		N15	W59	.853	9021	5.9	27	-N				.52				2 2 1
MONT	10	0801E	0830		N10	W60	.861	9021	5.8	29D	-N		C	0801	.52				
ISTA	10	0810	0835		N14	W60	.861	9021	5.8	25	1N								
ISTA	10	0810	0835		N24	W55	.825	9021	6.2	25	-N								
GRP 9547	10	1105	1125	1110	N23	W57	.841	9005	6.2	20	-N				.51				2 2 2
MONT	10	1105	1129	1110	N23	W56	.832	9005	6.3	24	-N		C	1110	.52				
CAPS	10	1109E	1121		N22	W57	.840	9005	6.2	12D	-N	3		1110	.50	.90		160	
CATA	10	1215	1324	1225	N16	W62	.878	9011	5.9	69	-B			1225	.78			227	
CATA	10	1420	1440	1425	N16	W62	.878	9011	5.9	20	-N			1425	.64			162	
GRP 9550	10	1539	1546	1541	N13	W63	.886	9011	5.9	7	-F				.25				2 2 2
CANA	10	1538	1545	1540	N14	W63	.886	9011	5.9	7	-F		C		.20	.40			
HOUS	10	1540	1546	1541	N12	W63	.886	9011	5.9	6	-N		C		.30	.60		200	
GRP 9551	10	1612	1629	1619	N14	W66	.908	9011	5.7	17	-N				.35				3 3 3
SACP	10	1610	1633	1615	N13	W63	.886	9011	5.9	23	-N		C		.50	.77			
HUAN	10	1612	1625		N13	W66	.908	9011	5.7	13	-F	2	C	1615	.25	.40			D
HOUS	10	1613	1629	1623	N15	W69	.928	9011	5.5	16	-N		C		.30	.70		200	
GRP 9552	10	1829	1851	1833	N13	W65	.901	9011	5.9	22	-N				.76				4 4 4
LOCK	10	1826	1841	1830	N14	W66	.908	9011	5.8	15	-F		C	1830	.50	1.10		10	
HALE	10	1830	1848	1831	N10	W60	.861	9011	6.3	18	-N	1	C	1831	.31	.60			TVW
SACP	10	1830	1904	1836	N13	W65	.901	9011	5.9	34	-N		C		1.08	1.75			
HUAN	10	1831	1851	1833	N13	W67	.915	9011	5.7	20	-N	2	C	1833	1.13	1.84			

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9553	10	2013	2019	2015	N14	W66	.908	9011	5.9	6	-N				.33				2 2 2
HOUS	10	2013	2018	2014	N13	W69	.928	9011	5.7	5	-N		C		.30	.70		200	
HALE	10	2013	2020	2015	N14	W62	.878	9011	6.2	7	-N	1	C	2015	.36	.80			T
HOUS	10	2118	2132	2121	N13	W69	.928	9011	5.7	14	-F		C		.40	.90		100	
LOCK	10	2215	2230	2220	N14	W66	.908	9011	6.0	15	-F		C	2220	.80	1.70		10	
GRP 9556	11	0107	0121	0111	S28	E76	.987	9023	16.7	14	-F				.26				2 2 2
HALE	11	0104	0124	0109	S27	E74	.981	9023	16.6	20	-N	1	C	0109	.31				
CRON	11	0109	0118	0112	S29	E78	.992	9023	16.9	9	-F		C		.20	.70			
HALE	11	0118	0145	0127	N15	E01	.154	9018	11.1	27	-N	2	C	0127	.72	.72			FJLT
HALE	11	0157	0224	0201	N13	W35	.576	9013	8.5	27	-N	2	C	0201	.72	.90			FGJ
CRON	11	0521	0525	0523	S29	E78	.992	9023	17.1	4	-F		C		.20	.60			
CRON	11	0600	0612	0606	N14	W01	.137	9018	11.2	12	-F		C		.20	.20			
GRP 9561	11	0734	0833	0748	N15	W04	.168	9018	11.0	59	-F				.21				2 2 2
CATA	11	0725	0850	0750	N14	W03	.146	9018	11.1	85	-F			0750	.21	.21		143	
CRON	11	0743	0815	0746	N15	W04	.168	9018	11.0	32	-F		C		.20	.20			
CRON	11	0747	0755	0750	N14	W75	.961	9011	5.7	8	-N		C		.40	1.10			
GRP 9563	11	1003	1023	1012	N15	W05	.175	9018	11.0	20	-N				.66				5 5 5
SALO	11	1000	1015		N12	W07	.157	9018	10.9	15	-N		V	1010	.83	.90	1.60		
ARCE	11	1000E	1020E		N15	W06	.184	9018	11.0	20D	-N		C	1015	.63	.60			
CANA	11	1005	1030	1008	N17	W03	.195	9018	11.2	25	-F		C		.60	.60			HI
CATA	11	1005	1035	1010	N19	W04	.232	9018	11.1	30	-N			1010	.44	.46		158	
CATA	11	1010	1030	1015	N15	W05	.175	9018	11.0	20	-N			1015	.66	.67		151	
ATHN	11	1013E	1022D	1014	N13	W03	.130	9018	11.2	9D	-N	2		1014	.56	.60			
CANA	11	1046	1049	1047	N15	W03	.162	9018	11.2	3	-F		C		.20	.20			
GRP 9565	11	1053	1058	1055	N15	W80	.981	9011	5.5	5	-F				.24				2 2 2
CAPS	11	1053E	1057		N11	W78	.975	9011	5.6	4D	-F	1		1053	.30			155	
ATHN	11	1055E	1059D	1055	N18	W81	.983	9011	5.4	4D	-N	2		1055	.17				
CANA	11	1123	1130	1124	N16	W06	.199	9018	11.0	7	-F		C		.20	.20			
GRP 9567	11	1133	1144	1137	N14	W05	.161	9018	11.1	11	-F				.29				3 3 3
CANA	11	1131	1145	1135	N15	W06	.184	9018	11.0	14	-F		C		.30	.30			I
HUAN	11	1135	1142	1137	N14	W06	.170	9018	11.0	7	-F	2	C	1137	.25	.25			D
ATHN	11	1138E	1146	1138	N13	W04	.137	9018	11.2	8D	-N	2		1138	.33	.30			
GRP 9568	11	1158	1205	1159	N15	W06	.184	9018	11.0	7	-N				.39				3 3 3
CANA	11	1156	1204	1158	N15	W06	.184	9018	11.0	8	-F		C		.30	.30			I
MONT	11	1159	1205		N16	W05	.191	9018	11.1	6	-N		C	1201	.21				
HUAN	11	1159	1205	1200	N14	W07	.181	9018	11.0	6	-N	2	C	1200	.67	.67			E
GRP 9569	11	1207	1224	1214	N15	W07	.194	9018	11.0	17	-F				.29				3 3 3
CATA	11	1205	1230	1215	N15	W08	.205	9018	10.9	25	-N			1215	.31	.32		168	
CANA	11	1206	1217	1209	N15	W07	.194	9018	11.0	11	-F		C		.20	.20			I
HUAN	11	1209	1226	1213	N14	W07	.181	9018	11.0	17	-F	2	C	1213	.25	.25			D
CANA	11	1211	1215	1213	N17	W07	.222	9018	11.0	4	-F		C		.30	.30			I
HOUS	11	1340E	1349	1344	N13	W81	.984	9011	5.5	9D	-F		C		.30	1.00		100	
GRP 9571	11	1345	1419	1353	N16	W02	.174	9018	11.4	34	-F				.82				4 4 4
CATA	11	1245	1340	1315	N18	W05	.221	9018	11.2	55	-N			1315	.62	.64		158	
MONT	11	1254E	1400		N17	W06	.213	9018	11.1	66D	1F		C	1254	2.06				
CANA	11	1344	1400	1348	N16	E02	.174	9018	11.7	16	-F		C		.30	.30			I
CATA	11	1345	1425	1400	N16	W03	.178	9018	11.3	40	-F			1400	.59	.60		140	
HUAN	11	1349	1419	1352	N16	E01	.172	9018	11.7	30	-F	2	C	1352	.31	.31			D
CANA	11	1411	1430	1416	N11	W03	.099	9018	11.4	19	-F		C		.50	.50			I
CANA	11	1511	1521	1514	N17	W08	.231	9018	11.0	10	-F		C		.20	.20			I
BOUL	11	1518E	1543	1521	N12	E90	1.000	9028	18.4	25D	-N		C		.30	1.20			
BOUL	11	1548	1552D	1551	S21	W90	1.001	9006	4.9	4D	-N		C		.20	.80			
GRP 9575	11	1650	1700	1652	N15	W08	.205	9018	11.1	10	-N				.88				4 4 4
CANA	11	1648	1653	1650	N15	W07	.194	9018	11.2	5	-F		C		.60	.60			I
HALE	11	1651	1658	1652	N15	W08	.205	9018	11.1	7	-B	2	C	1652	.52	.52			JLV
SACP	11	1651	1702	1654	N15	W08	.205	9018	11.1	11	-N		C		1.28	1.26			
HUAN	11	1651	1707	1652	N15	W07	.194	9018	11.2	16	-F	1	C	1652	1.13	1.13			E

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9576	11	1659	1737	1707	N18	W11	.275	9018	10.9	38	-N				.26				3 2 2
HALE	11	1657	1740	1705	N18	W13	.298	9018	10.7	43	-B	2	C	1705	.21	.22			T
LOCK	11	1700	1720	1708	N19	W12	.298	9018	10.8	20	-F		C	1708	.30	.30		10	
SACP	11	1726	1751	1732	N18	W08	.245	9018	11.1	25	-F		C		.30	.29			
BOUL	11	1726U	1737	1731U	N10	E90	1.000	9028	18.5	11U	-N		C		.30	1.20			
HALE	11	1831	1848	1832	N14	E51	.774	9020	15.6	17	-N	1	C	1832	.52	.80			GJLV
HALE	11	1903	1930	1909	N11	W77	.971	9011	6.0	27	-B	1	C	1909	.41				FGJK
BOUL	11	2000	2017	2002	N13	E90	1.000	9025	18.6	17	-N		C		.30	1.20			I
GRP 9581	11	2028	2055	2031	N18	W10	.264	9018	11.1	27	-F				.39				4 4 4
LOCK	11	2026	2050	2031	N18	W10	.264	9018	11.1	24	-F		C	2031	.40	.40		10	
HALE	11	2027	2053	2030	N18	W10	.264	9018	11.1	26	-B	1	C	2030	.31	.32			T
HUAN	11	2028	2057		N18	W10	.264	9018	11.1	29	-F	1	C	2045	.45	.45			E
SACP	11	2029	2058	2031	N18	W10	.264	9018	11.1	29	-F		C		.39	.39			
GRP 9582	11	2157	2216	2201	N11	W46	.716	9013	8.5	19	-N				.56				3 3 3
HUAN	11	2156	2211	2159	N12	W47	.728	9013	8.4	15	-F	2	C	2159	.41	.41			E
SACP	11	2157	2214	2202	N11	W45	.704	9013	8.5	17	-F		C		.60	.70			
HALE	11	2157	2224	2203	N10	W46	.715	9013	8.5	27	-B	1	C	2203	.67	1.00			FGJKL
HALE	11	2200	2230	2207	N13	W80	.981	9011	5.9	30	-N	1	C	2207	.21				GJ
CRON	12	0046	0108	0050	N16	W90	1.000	9005	5.3	22	-F		C		.20	.80			
MANI	12	0047	0107	0050	N16	W10	.241	9018	11.3	20	-F	2		0050	.41	.42			E
CRON	12	0118	0128	0121	S40	E90	1.002	9023	18.8	10	-F		C		.30	1.20			
HALE	12	0222	0253	0226	N16	W12	.265	9018	11.2	31	-N	1	C	0226	.36	.40			
CRON	12	0252	0310	0256	N15	W85	.994	9011	5.7	18	-F		C		.20	.70			
ATHN	12	0528E	0600D	0531	N25	W40	.678	9015	9.2	32D	-N	2		0531	.99	1.10			
GRP 9590	12	0703	0740	0713	N11	W50	.762	9013	8.5	37	-F				.47				2 2 2
CAPE	12	0703	0740	0713	N10	W50	.762	9013	8.5	37	-N		C	0713	.58	.90			F
CATA	12	0720	0740	0725	N11	W49	.751	9013	8.6	20	-F			0725	.35	.54		146	
ATHN	12	0745E	0805D	0745	N21	W40	.662	9015	9.3	20D	-N	2		0745	.66	.80			
GRP 9592	12	0828	0851	0835	N24	W83	.988	9005	6.1	23	-F				.30				1 1 1
CRON	12	0828	0851	0835	N24	W83	.988	9005	6.1	23	-F		C		.30	1.00			K
CRON	12	0828	0851	0840	N24	W83	.988	9005	6.1	23	-F		C						
GRP 9593	12	0850	0910	0851	N16	W49	.754	9013	8.7	20	-N				.56				3 3 2
ATHN	12	0850E	0858D	0852	N15	W50	.764	9013	8.6	8D	-N	2		0852	.66	1.00			
CATA	12	0850	0900	0850	N14	W54	.805	9013	8.3	10	-N			0850	.13	.23		162	
ARCE	12	0900E	0920E		N18	W42	.677	9013	9.2	20D	-N		C	0905	.46	.60			E
ARCE	12	0920E	0930E		N24	W82	.986	9005	6.2	10D	-N		P	0920	.25	.90			
GRP 9595	12	1200	1229	1215	N15	W17	.324	9018	11.2	29	-N				2.58				4 4 3
WEND	12	1159	1220		N16	W15	.304	9018	11.4	21	1N		V		3.09				
CATA	12	1200	1250	1215	N16	W17	.332	9018	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	F
HUAN	12	1222E	1225		N15	W16	.310	9018	11.3	3D	-N	1	P	1223	.62	.62			E
GRP 9595	12	1158	1219	1202	N14	W17	.317	9018	11.2	21	-N				1.29				3 3 3
CANA	12	1156	1217	1200	N15	W16	.310	9018	11.3	21	-N		C		.90	.90			EI
CAPE	12	1158	1218	1204	N15	W17	.324	9018	11.2	20	1N		C	1204	2.25	2.40			F
ATHN	12	1200	1222	1203	N13	W18	.326	9018	11.1	22	-N	2		1203	.72	.80			
CATA	12	1305	1340	1310	N20	W44	.706	9015	9.2	35	-N			1310	.42	.61		155	
GRP 9597	12	1339	1344	1341	N22	E30	.545	9020	14.8	5	-F				.20				2 2 2
CANA	12	1338	1341	1339	N21	E28	.514	9020	14.7	3	-F		C		.10	.10			
SACP	12	1340	1346	1342	N23	E31	.564	9020	14.9	6	-N		C		.30	.32			
GRP 9598	12	1355	1422	1401	N16	W18	.346	9018	11.2	27	-F				.93				4 4 4
CANA	12	1353	1415	1358	N16	W17	.332	9018	11.3	22	-F		C		.40	.40			I
CAPE	12	1355	1416	1401	N16	W18	.346	9018	11.2	21	1F		C	1401	2.10	2.20			F
CATA	12	1355	1450	1405	N17	W17	.340	9018	11.3	55	-N			1405	.59	.63		153	
MCMA	12	1357	1408	1359	N16	W18	.346	9018	11.2	11	-F		C	1359	.62	.70			E

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9599	12	1437	1511	1441	N17	W32	.546	9018	10.2	34	-F				1.61				2 1 1
CAPE	12	1437	1511	1441	N16	W19	.360	9018	11.2	34	-F		C	1441	1.61	1.70			FH
HUAN	12	1458	1505	1459	N17	W44	.699	9018	9.3	7	-F	2	C	1459	.21	.24			DT
GRP 9600	12	1528	1542	1531	N21	E27	.501	9020	14.7	14	-F				1.00				3 3 2
CANA	12	1527	1540	1528	N21	E28	.514	9020	14.7	13	-F		C		.10	.10			
CAPE	12	1529	1538D	1533	N21	E27	.501	9020	14.7	9D	-F		C	1533	1.30	1.50			C
SACP	12	1529	1543	1532	N22	E27	.508	9020	14.7	14	-N		C		.69	.71			
GRP 9601	12	1616	1626	1618	N17	W45	.711	9015	9.3	10	-N				.58				2 2 2
SACP	12	1615	1630	1618	N17	W44	.699	9015	9.4	15	-N		C		.78	.92			
HUAN	12	1617	1622	1618	N17	W45	.711	9015	9.3	5	-N	2	C	1618	.37	.41			D
SACP	12	1914	1933	1922	N16	W46	.721	9015	9.4	19	-F		C		1.47	1.76			
GRP 9603	12	2229	2249	2234	N19	E21	.409	9020	14.5	20	-F				.35				2 2 2
LOCK	12	2228	2243	2233	N18	E22	.415	9020	14.6	15	-F		C	2233	.20	.20		10	
SACP	12	2229	2255	2235	N20	E20	.405	9020	14.4	26	-N		C		.50	.49			
SACP	12	2335	2354D	2344	N17	W25	.450	9018	11.1	19D	-N		C		1.49	1.51			
GRP 9605	13	0700	0718	0651	N16	W35	.584	9018	10.7	18	-N				2.59				2 2 1
CAPE	13	0545	0706	0651	N14	W27	.465	9018	11.2	81	1N		C	0651	2.59	2.90			H
ISTA	13	0700	0730		N16	W32	.543	9018	10.9	30	-F								
ISTA	13	0720	0830		N18	W54	.809	9018	9.3	70	-N								
CAPS	13	0810E	0903		N15	E90	1.000	9027	20.1	53D	2N	3		0825				110	
CANA	13	0903	0909	0905	N15	W35	.581	9018	10.8	6	-F		C		.70	.90			
CANA	13	0912	0921	0916	N15	W35	.581	9018	10.8	9	-F		C		.50	.60			H
GRP 9609	13	1110	1127	1118	N15	W35	.581	9018	10.8	17	-N				.49				6 6 5
CAPE	13	1102	1130	1119	N14	W35	.578	9018	10.8	28	-N		C	1119	.54	.70			CH
MONT	13	1105	1125		N15	W35	.581	9018	10.8	20	-N		C	1116	.52				
KHAR	13	1106	1125	1116	N16	W36	.597	9018	10.8	19	1N		V				1.80		DH
CATA	13	1115	1130	1120	N15	W35	.581	9018	10.8	15	-F			1120	.57	.70		135	
ATHN	13	1117	1125	1118	N18	W35	.590	9018	10.8	8	-N	2		1118	.33	.40			
HUAN	13	1117	1126	1119	N14	W37	.605	9018	10.7	9	-F	2	C	1119	.50	.53			E
CAPE	13	1123	1145	1132	N15	W33	.554	9018	11.0	22	-N		C	1132	.27	.30			
GRP 9610	13	1201	1219	1204	N14	W36	.592	9018	10.8	18	-F				.45				6 6 6
CANA	13	1157	1210	1158	N13	W35	.576	9018	10.9	13	-F		C		.70	.90			
CAPE	13	1158	1216	1201	N12	W36	.588	9018	10.8	18	-F		C	1201	.86	1.10			
MONT	13	1159	1201D	1200	N12	W33	.546	9018	11.0	2D	-F		C	1200	.31				
HUAN	13	1200	1206D		N12	W37	.602	9018	10.7	6D	-F	1	C	1202	.31	.33			E
ATHN	13	1205	1215	1206	N16	W36	.597	9018	10.8	10	-N	2		1207	.33	.40			
CATA	13	1205	1235	1205	N17	W37	.613	9018	10.7	30	-F			1205	.20	.25		145	
GRP 9611	13	1239	1259	1244	N16	W34	.570	9018	11.0	20	-F				.19				2 2 2
CAPE	13	1237	1253	1243	N16	W33	.557	9018	11.1	16	-F		C	1243	.27	.30			
CATA	13	1240	1305	1245	N16	W34	.570	9018	11.0	25	-N			1245	.11	.14		158	
GRP 9612	13	1318	1326	1320	N16	W36	.597	9018	10.9	8	-F				.37				2 2 2
CAPE	13	1315	1325	1318	N15	W36	.594	9018	10.9	10	-F		C	1318	.40	.50			F
ATHN	13	1320	1327	1321	N17	W36	.600	9018	10.9	7	-N	2		1321	.33	.40			
ATHN	13	1335	1343	1336	N17	W68	.922	9013	8.5	8	-N	2		1336	.33				
GRP 9614	13	1354	1411	1359	N16	W33	.557	9018	11.1	17	-N				.80				3 3 3
CAPE	13	1350	1410	1358	N15	W33	.554	9018	11.1	20	-N		C	1358	.80	1.00			F
CATA	13	1355	1415	1400	N15	W33	.554	9018	11.1	20	-B			1400	.29	.35		246	
ATHN	13	1357	1408	1400	N17	W32	.547	9018	11.2	11	-N	1		1400	1.32	1.50			
ATHN	13	1405	1413	1406	S22	W62	.919	9014	8.9	8	-N	1		1406	.66	1.50			
GRP 9616	13	1421	1437	1426	N15	W37	.607	9018	10.8	16	-N				.88				7 7 7
MONT	13	1417	1440	1430	N15	W36	.594	9018	10.9	23	1N		C	1430	1.75				
SACP	13	1419	1436	1424	N15	W37	.607	9018	10.8	17	-N		C		.89	.97			
HUAN	13	1420	1437	1425	N14	W38	.618	9018	10.7	17	-N	1	C	1425	.88	.96			
CAPE	13	1421	1438	1426	N14	W37	.605	9018	10.8	17	-N		C	1426	1.04	1.30			K
MCMA	13	1422	1435	1426	N16	W37	.610	9018	10.8	13	-F		C	1426	.52	.70			E
CANA	13	1423E	1433	1424	N16	W37	.610	9018	10.8	10D	-F		C		.40	.50			
ATHN	13	1424	1437	1426	N16	W37	.610	9018	10.8	13	-N	1		1426	.66	.70			
GRP 9617	13	1726	1740	1732	N14	W39	.632	9018	10.8	14	-N				.33				3 3 3
HALE	13	1724	1744	1732	N15	W38	.621	9018	10.9	20	-N	2	C	1732	.21	.30			E
BOUL	13	1725	1741	1731	N14	W39	.632	9018	10.8	16	-N		C		.40	.50			
SACP	13	1730	1734	1732	N14	W39	.632	9018	10.8	4	-N		C		.39	.43			

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9618	13	1831	1843	1833	N12	W39	.629	9018	10.8	12	-N				.64				4 4 4
SACP	13	1830	1836	1833	N11	W39	.627	9018	10.8	6	-N		C		.83	.91			
LOCK	13	1831	1843	1834	N13	W39	.630	9018	10.8	12	-F		C	1834	.60	.80		10	
BOUL	13	1831	1850	1833	N12	W38	.615	9018	10.9	19	-N		C		.40	.50			
HALE	13	1832	1835D	1833	N11	W39	.627	9018	10.8	3D	-N	1	P	1833	.72	.90			C
GRP 9618	13	1815	1915	1825	N15	W35	.581	9018	11.1	60	-N				1.15				3 3 3
HALE	13	1808	1835D		N16	W35	.584	9018	11.1	27D	-N	1	P	1825	.88	1.10			EFZ
SACP	13	1818U	1840U	1826U	N15	W36	.594	9018	11.1	22U	-F		C		1.57	1.70			
BOUL	13	1820	1915	1824	N15	W35	.581	9018	11.1	55	-N		C		1.00	1.20			E
GRP 9619	13	1855	1934	1907	N15	W33	.554	9018	11.3	39	-B				1.93				2 2 2
HUAN	13	1850E	1925D		N15	W33	.554	9018	11.3	35D	-B	1	P	1906	1.50	1.59			
SACP	13	1900	1934U	1907U	N14	W33	.551	9018	11.3	34U	1N		C		2.35	2.50			
GRP 9620	13	1928	1952	1934	S29	E35	.750	9023	16.4	24	-F				.35				2 2 2
LOCK	13	1928	1950	1935	S29	E35	.750	9023	16.4	22	-F		C	1935	.30	.50		10	
BOUL	13	1931U	1953	1933	S29	E35	.750	9023	16.4	22U	-N		C		.40	.60			E
MCMA	13	1938E	1948D		N16	W35	.584	9018	11.2	10D	-F		C	1940	.72	.90			EL
BOUL	13	2106	2121	2109	S08	W08	.278	9022	13.3	15	-F		C		.20	.20			
GRP 9623	13	2125	2139	2131	N15	W41	.659	9018	10.8	14	-N				.43				3 3 3
LOCK	13	2123	2140	2131	N16	W42	.673	9018	10.7	17	-F		C	2131	.50	.70		10	
BOUL	13	2127	2140	2131	N16	W41	.661	9018	10.8	13	-N		C		.30	.40			
SACP	13	2129E	2136	2130	N14	W41	.657	9018	10.8	7D	-N		C		.50	.56			
GRP 9624	13	2140	2200	2146	N16	E88	.998	9027	20.5	20	-F				.30				2 2 2
SACP	13	2139	2203	2147U	N17	E85	.994	9027	20.3	24	-F		C		.39				
BOUL	13	2141	2157	2144	N14	E90	1.000	9027	20.7	16	-F		C		.20	.80			
LOCK	13	2153	2207	2158	N16	W35	.584	9018	11.3	14	-F		C	2158	.30	.40		10	
LOCK	13	2352	0006	2357	N14	W42	.670	9018	10.8	14	-F		C	2357	.40	.60		10	
	14	0025	0035	NO FLARE PATROL															
CRON	14	0038	0045	0039	N14	E83	.990	9027	20.3	7	-F		C		.30	1.00			
CRON	14	0139	0156	0143	S11	W82	.993	9014	7.9	17	1N		C		.70	2.40			
CRON	14	0356	0412	0401	N15	W55	.816	9015	10.0	16	-F		C		.40	.70			
GRP 9630	14	0749	0833	0755	N17	W44	.700	9018	11.0	44	-B				.69				4 4 4
BUCA	14	0725	0740		N17	W45	.711	9018	10.9	15	-F		C	0732	.77	1.10			
CATA	14	0745	1205	0755	N18	W44	.702	9018	11.0	260	-B			0755	.39	.54		209	
CAPS	14	0748	0810		N15	W43	.684	9018	11.1	22	-B	3		0758	1.20	1.70		204	DK
BUCA	14	0753	0849D		N17	W45	.711	9018	11.0	56D	-N		C	0756	.66	.90			
ARCE	14	0800E	0840E		N17	W45	.711	9018	11.0	40D	-N		C	0800	.50	.70			B
GRP 9631	14	0822	0834	0823	N15	W44	.696	9018	11.0	12	-N				.34				3 3 2
ISTA	14	0650	0835		N16	W44	.698	9018	11.0	105	-N								
CAPS	14	0821	0833		N15	W43	.684	9018	11.1	12	-N	3		0824	.50	.70		176	D
ATHN	14	0822	0834	0823	N15	W45	.708	9018	11.0	12	-N	2		0823	.17	.20			
GRP 9632	14	0853	0913	0900	N17	W50	.767	9018	10.6	20	-N				3.09				5 4 1
CATA	14	0850	0900	0855	N18	W69	.929	9018	9.2	10	-N			0855	.09			166	
BUCA	14	0854E	0907D		N17	W46	.723	9018	10.9	13D	-N		C	0856	.43	.60			
ATHN	14	0854	0926	0856	N15	W45	.708	9018	11.0	32	-N	2		0856	.33	.50			
WEND	14	0854	0923D		N17	W44	.700	9018	11.1	29D	1N		V		3.09				
CAPE	14	0908	0910	0909	N17	W47	.734	9018	10.9	2	-N		C	0909	.36	.50			H
CANA	14	0856	0902U	0859	N44	E39	.778	9025	17.3	6U	-F		C		.40	.60			

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9634	14	0938	1000	0945	N14	W47	.730	9018	10.9	22	1N				1.98				13 13 12
KHAR	14	0930E	1010D		N16	W47	.733	9018	10.9	40D	1N		P	0950	3.40	4.90	2.40		EHLO
WEND	14	0934	1002		N16	W44	.698	9018	11.1	28	1N		V		4.13				
ONDR	14	0935E	0946D		N14	W45	.707	9018	11.0	11D	-N		V	0945			2.10		DH
CANA	14	0935	0946D	0939	N15	W47	.731	9018	10.9	11D	-N		C		1.10	1.60			
CAPS	14	0936	0958		N12	W46	.717	9018	10.9	22	1B	3		0944	2.20	3.10		204	
ABST	14	0939	1203	0944	N15	W49	.754	9018	10.7	144	1N		C	0944	2.70	4.02		60	DK
CAPE	14	0939	1001	0945	N14	W47	.730	9018	10.9	22	1N		C	0945	1.97	2.90			CHV
KIEV	14	0940	0950	0944	N15	W49	.754	9018	10.7	10	1N		C	0944	2.06			85	DHI
CATA	14	0940	1000	0945	N15	W47	.731	9018	10.9	20	-B			0945	1.29	1.93		216	
ARCE	14	0943	1002	0946	N15	W48	.743	9018	10.8	19	1N		C	0946	1.94	2.90			H
SALO	14	0943	0957		N13	W47	.729	9018	10.9	14	-N		V	0945	.83	1.20	1.70		
SALO	14	0943	1040		N15	W48	.743	9018	10.8	57	-N		V	0950	.66	1.00	1.70		
ATHN	14	0944	1004	0946	N12	W47	.728	9018	10.9	20	-N	2		0946	1.16	1.70			
MONT	14	0950E	1000	0950	N14	W49	.753	9018	10.7	10D	1N		C	0950	1.03				
CAPE	14	1115	1121	1115	N17	W45	.711	9018	11.1	6	-N		C	1115	.67	1.00			
GRP 9635	14	1225	1306	1232	N16	W44	.698	9018	11.2	41	1N				3.11				8 7 7
CANA	14	1225	1245	1227	N16	W46	.721	9018	11.1	20	1N		C		1.80	2.60			
ATHN	14	1225	1251	1231	N14	W45	.707	9018	11.1	26	1N	2		1231	2.97	4.30			
CATA	14	1225	1300	1235	N16	W45	.710	9018	11.1	35	1B			1235	2.01	2.96		218	
CAPE	14	1226	1310	1231	N16	W45	.710	9018	11.1	44	1N		C	1231	3.14	4.50			FVH
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	HJ
HUAN	14	1233E	1318		N16	W46	.721	9018	11.1	45D	1N	2	C	1234	2.06	2.44			H
MONT	14	1250E	1254D		N17	W38	.626	9018	11.7	4D	1N		C	1250	1.24				
GRP 9636	14	1300	1408	1346	S23	E53	.860	9029	18.5	68	-N				.50				4 4 4
CATA	14	1242	1440	1250	S24	E53	.863	9029	18.5	118	-N			1250	.25	.51		151	
HUAN	14	1317	1416		S26	E52	.863	9029	18.5	59	-F	1	C	1347	.25	.36			DH
CAPS	14	1344	1410D		S21	E51	.837	9029	18.4	26D	-N	3		1355	.50	.90		165	D
ATHN	14	1346E	1358	1346	S22	E55	.872	9029	18.7	12D	-N	2		1346	.99	1.60			
GRP 9637	14	1350	1403	1352	N16	W48	.744	9018	11.0	13	-N				.59				3 3 3
CAPE	14	1329	1407	1351	N17	W49	.756	9018	10.9	38	-N		C	1351	.54	.80			
HUAN	14	1349	1401	1352	N16	W47	.733	9018	11.1	12	-N	2	C	1352	.25	.31			DH
ATHN	14	1350	1401	1352	N14	W49	.753	9018	10.9	11	-N	2		1352	.99	1.40			
HUAN	14	1418	1424	1419	N16	W49	.755	9018	10.9	6	-N	1	C	1419	.25	.31			D
HUAN	14	1437	1444D		N16	W51	.776	9018	10.8	7D	-F	1	P	1444	.45	.57			E
HUAN	14	1454	1506		N16	W51	.776	9018	10.8	12	-F	1	C	1456	.21	.26			D
GRP 9641	14	1524	1653	1603	N16	W50	.766	9018	10.9	89	-N				.55				3 2 2
SACP	14	1524	1653	1526U	N16	W49	.755	9018	11.0	89	-N		C		.60	.74			
HUAN	14	1525E	1526D		N15	W50	.765	9018	10.9	1D	-N	1	P	1525	.50	.62			CE
LOCK	14	1637	1650	1640	N17	W50	.767	9018	10.9	13	-F		C	1640	.30	1.00		10	
GRP 9642	14	1542	1608	1556	S23	E50	.837	9029	18.4	26	-F				.45				2 2 2
SACP	14	1542	1608	1556	S25	E50	.845	9029	18.4	26	-F		C		.39	.55			
CAPS	14	1545E	1600D		S21	E50	.829	9029	18.4	15D	-N	3		1547	.50	.90		170	
MCMA	14	1710E	1733	1721	S26	E50	.849	9029	18.5	23D	-N		C	1721	.26	.50			D
GRP 9644	14	1724	1746	1731	N17	W49	.756	9018	11.1	22	-N				.38				4 4 4
HALE	14	1717	1754	1732	N17	W49	.756	9018	11.0	37	-B	2	C	1732	.31	.50			
LOCK	14	1725	1740	1730	N17	W50	.767	9018	11.0	15	-F		C	1730	.30	1.00		10	
MCMA	14	1725	1755D	1733	N17	W50	.767	9018	11.0	30D	-B		C	1733	.52	.80			EH
CANA	14	1727	1734	1729	N17	W48	.745	9018	11.1	7	-N		C		.40	.60			
MCMA	14	1746	1800	1750	S26	E50	.849	9029	18.5	14	-F		C	1750	.26	.50			D
GRP 9646	14	1758	1811	1803	N15	W65	.901	9018	9.9	13	-F				.22				3 3 3
MCMA	14	1757	1812	1803	N16	W63	.887	9018	10.0	15	-F		C	1803	.26	.50			D
LOCK	14	1758	1812	1803	N13	W65	.901	9018	9.9	14	-F		C	1803	.20	.40		10	
HALE	14	1758	1810	1802	N16	W66	.909	9018	9.8	12	-F	2	C	1802	.21				C
GRP 9646	14	1801	1829	1808	N17	W50	.767	9018	11.0	28	-N				.26				2 2 2
MCMA	14	1800	1834	1804	N17	W50	.767	9018	11.0	34	-N		C	1804	.31	.50			DHK
HALE	14	1801	1824	1812	N17	W50	.767	9018	11.0	23	-N	2	C	1812	.21	.30			
HALE	14	1840	1854	1845	N18	W51	.779	9018	11.0	14	-F	1	C	1845	.21	.30			
GRP 9648	14	1851	1905	1859	S27	E50	.853	9029	18.5	14	-N				.34				2 2 2
MCMA	14	1848	1905	1855	S26	E50	.849	9029	18.5	17	-N		C	1855	.36	.70			E
HALE	14	1853	1905	1902	S27	E50	.853	9029	18.5	12	-N	1	C	1902	.31	.60			

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9649	14	1924	1958	1936	N17	W49	.756	9018	11.1	34	-N				1.09				3 3 3
MCMA	14	1920	1942D		N17	W51	.777	9018	11.0	22D	-B		C	1934	.83	1.30			FH
HALE	14	1924	1959	1936	N16	W49	.755	9018	11.1	35	-N	1	P	1936	1.24	1.90			F
LOCK	14	1929	1957	1935	N17	W48	.745	9018	11.2	28	-F		C	1935	1.20	1.80		10	
GRP 9650	14	2017	2041	2020	N16	W51	.776	9018	11.0	24	-N				.20				3 2 1
LOCK	14	2017	2030	2020	N17	W52	.788	9018	10.9	13	-F		C	2020	.20	.30		10	
MCMA	14	2026E	2037D		N17	W51	.777	9018	11.0	11D	-B		C						
SACP	14	2037E	2056D	2052	N15	W51	.775	9018	11.0	19D	-N		C		.99	1.26			
MCMA	14	2026E	2037D		S26	W90	1.001	9014	8.1	11D	-N		P						D
LOCK	14	2058	2105	2100	N16	W55	.817	9018	10.7	7	-F		C	2100	.30	.50		10	
GRP 9653	14	2117	2230	2155	N17	W49	.756	9018	11.2	73	1N				1.77				3 3 3
SACP	14	2117	2230	2159	N17	W51	.777	9018	11.1	73	1B		C		2.66	3.41			
LOCK	14	2122	2220	2132	N17	W46	.723	9018	11.4	58	-F		C	2132	.90	1.40		10	
HALE	14	2148E	2158D	2150U	N17	W49	.756	9018	11.2	10D	1B	1	P	2150	1.75	2.70			
SACP	14	2226	2312	2234	N15	E70	.935	9027	20.2	46	-F		C		.59	1.08			
LOCK	14	2234	2244	2237	N16	W56	.826	9018	10.7	10	-F		C	2237	.40	.70		10	
SACP	14	2308	2352	2323	N19	W71	.940	9015	9.6	44	-F		C		.30	.57			
LOCK	15	0012	0022	0015	N16	W52	.787	9018	11.1	10	-F		C	0015	.30	.50		10	
GRP 9658	15	0025	0034	0028	S24	W87	1.000	9014	8.5	9	-F				.30				2 2 2
LOCK	15	0020	0030D	0025	S24	W83	.998	9014	8.8	10D	-F		C	0025	.30	1.00		10	
CRON	15	0029	0034	0031	S23	W90	1.001	9014	8.3	5	-N		C		.30	1.20			
HALE	15	0337	0348	0338	S22	E46	.798	9029	18.6	11	-F	1	C	0338	.31	.50			
CRON	15	0400	0435	0405	S23	W90	1.001	9014	8.4	35	-F		C		.20	.80			
CRON	15	0535	0544	0537	N23	W67	.917	9018	10.2	9	-F		C		.30	.70			
GRP 9662	15	0644	0950	0651	N16	W62	.879	9018	10.6	186	-F				1.45				4 2 2
ABSI	15	0644	0950	0651	N16	W55	.817	9018	11.2	186	1F		C	0651	1.80	3.10		56	FK
ATHN	15	0647E	0710D	0650	N16	W58	.845	9018	10.9	23D	-N	2		0650	1.09	1.90			
CATA	15	0820	0830	0820	N17	W55	.818	9018	11.2	10	-N			0820	.13	.24		178	
CRON	15	0838	0852	0842	N14	W80	.981	9018	9.4	14	-F		C		.30	.90			
CRON	15	0809	0820	0813	S23	W90	1.001	9014	8.6	11	-F		C		.20	.80			
CRON	15	0833	0847	0836	N18	W08	.249	9020	14.8	14	-F		C		.20	.20			
GRP 9665	15	0954	1018	0956	N16	W57	.836	9018	11.1	24	-F				.71				5 5 4
CATA	15	0950	1045	0955	N18	W56	.828	9018	11.2	55	-F			0955	.39	.74		148	
CANA	15	0951	1015	0955	N16	W57	.836	9018	11.1	24	-F		C		.60	1.10			
ATHN	15	0954	1010D	0958	N16	W56	.826	9018	11.2	16D	-N	2		0958	.83	1.20			
ONDR	15	0955E	1007		N14	W57	.835	9018	11.1	12D	-F		V	0956			1.60		CD
CAPS	15	1000	1015		N16	W57	.836	9018	11.1	15	-F	2		1005	1.00	1.80		155	
GRP 9666	15	1010	1033	1010	N16	W58	.845	9018	11.1	23	-N				.63				2 2 2
MONT	15	1009	1020	1010	N15	W58	.844	9018	11.1	11	-N		C	1010	1.03				
CATA	15	1010	1045	1010	N17	W57	.836	9018	11.1	35	-N			1010	.23	.44		195	
CATA	15	1205	1225	1205	N19	W59	.855	9018	11.1	20	-F			1205	.07	.16		143	
CATA	15	1325	1340	1330	S24	E40	.756	9029	18.6	15	-N			1330	.07	.12		159	
GRP 9669	15	1340	1357	1341	S27	E21	.625	9023	17.1	17	-N				.66				2 2 1
ATHN	15	1340	1354	1342	S27	E22	.632	9023	17.2	14	-N	2		1342	.66	.90			
CATA	15	1340	1400	1340	S26	E20	.606	9023	17.1	20	-N			1340	.11	.15		162	
CANA	15	1407	1415	1409	N17	W82	.987	9015	9.4	8	-F		C		.20	.70			
GRP 9671	15	1627	1652	1631	N16	W59	.854	9018	11.3	25	-N				.69				4 4 4
CANA	15	1626	1700	1627	N16	W59	.854	9018	11.3	34	-N		C		.90	1.70			E
LOCK	15	1627	1648	1631	N17	W60	.863	9018	11.2	21	-N		C	1631	.60	1.20		20	
SACP	15	1628	1656	1636	N16	W59	.854	9018	11.3	28	-N		C		.89	1.29			
HALE	15	1630E	1645	1631	N16	W57	.836	9018	11.4	15D	-N	1	P	1631	.36	.70			
GRP 9672	15	1904	1916	1907	S26	E16	.580	9023	17.0	12	-F				.87				3 3 3
LOCK	15	1903	1917	1907	S27	E15	.587	9023	16.9	14	-F		C	1907	.60	.70		10	
HALE	15	1904	1913	1907	S26	E17	.586	9023	17.1	9	-F	1	C	1907	.83	1.00			
SACP	15	1904	1917	1907U	S26	E17	.586	9023	17.1	13	-N		C		1.19	1.28			

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
CRON	16	0305	0311	0308	S24	E04	.501	9023	16.4	6	-F		C		.20	.20			H
CRON	16	0340	0355	0345	S26	E06	.535	9023	16.6	15	-F		C		.10	.10			H
CRON	16	0344	0357	0348	N16	E44	.698	9027	19.5	13	-F		C		.20	.30			L
CRON	16	0459	0508	0500	S25	E03	.514	9023	16.4	9	-F		C		.10	.10			H
GRP 9677	16	0529	0543	0533	S25	E05	.518	9023	16.6	14	-F				.43				2 2 2
CRON	16	0529	0545	0533	S25	E03	.514	9023	16.5	16	-F		C		.20	.20			H
ATHN	16	0532E	0540	0532	S25	E06	.520	9023	16.7	8D	-N	2		0532	.66	.80			
ATHN	16	0615E	0626	0615	S25	E06	.520	9023	16.7	11D	-N	2		0615	.66	.80			
CRON	16	0705	0723	0708	S26	E03	.529	9023	16.5	18	-F		C		.20	.20			
GRP 9680	16	0731	0816	0735	S18	E24	.553	9028	18.1	45	-N				1.32				2 2 1
ATHN	16	0731	0747	0735	S18	E24	.553	9028	18.1	16	-N	2		0735	1.32	1.60			
ISTA	16	0745E	0844		S17	E23	.533	9028	18.0	59D	-N								
GRP 9681	16	0747	0802	0751	S25	E03	.514	9023	16.5	15	-F				.20				2 2 1
ISTA	16	0745E	0914		S23	E03	.484	9023	16.5	89D	-F								
CRON	16	0748	0756	0751	S25	E02	.513	9023	16.5	8	-F		C		.20	.20			H
ISTA	16	0804	0808		S24	E04	.501	9023	16.6	4	-F								
ISTA	16	0827	0841		S25	E03	.514	9023	16.6	14	-F								
ISTA	16	0907E	1001		N18	W08	.250	9020	15.8	54D	-B								
CANA	16	0932	0945	0934	N17	W73	.951	9018	10.9	13	-N		C		.60	1.50			
CANA	16	1012	1015D	1013U	N13	E53	.795	9027	20.4	3D	-F		C		.40	.70			
ATHN	16	1016	1025	1018	S05	E55	.829	9031	20.6	9	-N	2		1018	.66	1.20			
GRP 9686	16	1028	1049	1037	S25	E04	.516	9023	16.7	21	-N				.77				4 4 3
KHAR	16	1025E	1058D		S23	E03	.484	9023	16.7	33D	1F		V	1043			1.60		DH
CATA	16	1030	1055	1040	S25	E03	.514	9023	16.7	25	-B			1040	.37	.43		214	
CANA	16	1034E	1039	1034U	S25	E03	.514	9023	16.7	5D	-N		C		.30	.40			
ATHN	16	1036E	1045	1036	S25	E05	.518	9023	16.8	9D	-N	2		1036	1.65	1.90			
CATA	16	1105	1135	1115	S25	E03	.514	9023	16.7	30	-N			1115	.42	.51		178	
ATHN	16	1143E	1152	1143	N25	E43	.712	9027	19.7	9D	-N	2		1143	.99	1.30			
GRP 9689	16	1146	1205	1151	S25	E01	.512	9023	16.6	19	-N				1.01				4 4 4
ATHN	16	1143	1200	1146	S25	E05	.518	9023	16.9	17	-N	2		1146	1.65	1.90			
MONT	16	1145	1201D		S27	W04	.545	9023	16.2	16D	-N		C	1155	1.03				
CAPS	16	1145	1205		S23	E00	.482	9023	16.5	20	-F	3		1155	.80	1.00		158	
CATA	16	1150	1215	1155	S25	E03	.514	9023	16.7	25	-N			1155	.55	.65		166	
GRP 9690	16	1214	1224	1214	S24	E02	.498	9023	16.7	10	-N				.91				2 2 2
ATHN	16	1214E	1222	1214	S25	E05	.518	9023	16.9	8D	-N	2		1214	1.32	1.60			
CAPS	16	1217E	1225D		S23	W01	.482	9023	16.4	8D	-N	3		1217	.50	.60		160	E
ATHN	16	1228E	1239	1228	S30	E30	.718	9028	18.8	11D	-N	2		1228	.99	1.50			
GRP 9692	16	1404	1432	1426	S26	E01	.527	9023	16.7	28	-F				.43				2 2 2
SACP	16	1404	1430	1426	S26	E00	.527	9023	16.6	26	-F		C		.20	.21			
ATHN	16	1425	1433	1425	S25	E01	.512	9023	16.7	8	-N	2		1425	.66	.80			
SACP	16	1442	1450	1445	N18	W76	.966	9018	10.9	8	-F		C		.89	1.95			
HUAN	16	1449	1502		S26	E00	.527	9023	16.6	13	-F	1	C	1451	.21	.21			D
GRP 9695	16	1756	1830	1802	N18	W80	.981	9018	10.7	34	-F				.47				2 2 2
SACP	16	1750	1849	1801	N17	W79	.977	9018	10.8	59	-F		C		.48	1.20			
HALE	16	1802	1810	1803	N18	W80	.981	9018	10.8	8	-N	1	C	1803	.46				GJ
LOCK	16	2006	2014	2009	N15	W83	.990	9018	10.6	8	-F		C	2009	.10	.30		10	
BOUL	16	2115	2125	2119	N10	E90	1.000	9034	23.6	10	-F		C		.20	.80			
GRP 9698	16	2121	2133	2125	N16	W81	.984	9018	10.8	12	-N				.20				3 3 3
LOCK	16	2120	2131	2126	N15	W79	.978	9018	11.0	11	-F		C	2126	.30	.90		10	
HALE	16	2122	2132	2123	N17	W77	.970	9018	11.1	10	-B	1	C	2123	.21				V
LOCK	16	2125	2133	2128	N15	W83	.990	9018	10.7	8	-F		C	2125	.10	.30		10	
BOUL	16	2127E	2130U	2127U	N16	W85	.994	9018	10.5	3U	-F		C		.10	.30			
CRON	17	0128	0138	0132	N15	W85	.992	9018	10.7	10	-F		C		.20	.70			

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9700	17	0304	0322	0309	N18	W84	.989	9018	10.8	18	-N				.46				2 2 2
CRON	17	0257	0325	0304	N19	W85	.991	9018	10.7	28	-N		C		.50	1.70			K
CRON	17	0257	0325	0310	N19	W85	.991	9018	10.7	28	-N		C						
HALE	17	0311	0318	0313	N17	W83	.987	9018	10.9	7	-N	1	C	0313	.41				J
CRON	17	0440	0505	0443	N18	W85	.992	9018	10.8	25	-N		C		.50	1.70			
ATHN	17	0615	0622	0617	N14	E41	.649	9027	20.3	7	-N	2		0617	.66	.90			
GRP 9703	17	0634	0812	0638	N17	W87	.996	9018	10.7	98	-F				.50				2 2 1
CRON	17	0634	0648	0638	N18	W85	.992	9018	10.9	14	-F		C		.50	1.70			
ISTA	17	0640E	0812		N16	W88	.997	9018	10.7	92D	-N								
CRON	17	0828	0850	0834	N18	W85	.992	9018	11.0	22	1F		C		1.40	4.70			
GRP 9705	17	0948	1004	0953	N15	E22	.381	9027	19.1	16	-F				.80				2 2 2
CANA	17	0948E	1002	0949	N13	E22	.375	9027	19.1	14D	-F		C		.60	.60			
ATHN	17	0955E	1006	0957	N17	E22	.390	9027	19.1	11D	-N	2		0957	.99	1.10			
CATA	17	1015	1020	1015	N16	W90	.999	9018	10.7	5	-N			1015	.09			174	
ATHN	17	1015	1024	1016	N25	E10	.323	9025	18.2	9	-N	2		1016	.66	.80			
GRP 9708	17	1033	1053		S24	W11	.566	9023	16.6	20	-N				.63				4 4 4
CANA	17	1030	1047	1032	S25	W13	.588	9023	16.5	17	-N		C		.50	.60			
CATA	17	1030	1055	1030	S24	W13	.575	9023	16.5	25	-N			1030	.35	.42		195	
SALO	17	1035	1055		S24	W09	.558	9023	16.8	20	-N		V	1040	1.16	1.30	1.60		
CAPS	17	1036	1054		S23	W10	.548	9023	16.7	18	-B	3		1044	.50	.60		200	E
ATHN	17	1055	1106	1056	N18	W38	.616	9020	14.6	11	-N	2		1056	.99	1.20			
ATHN	17	1355	1405	1357	N18	E22	.395	9027	19.2	10	-N	2		1357	1.65	1.90			
HUAN	17	1416	1421	1418	N18	W90	.999	9018	10.8	5	-F	1	C	1418	.21				D
GRP 9712	17	1504	1515	1505	S24	W13	.575	9023	16.7	11	-N				.76				3 3 3
CANA	17	1459	1508	1500	S24	W15	.586	9023	16.5	9	-N		C		.50	.60			
SACP	17	1503	1515	1504	S24	W13	.575	9023	16.7	12	-N		C		.78	.83			
ATHN	17	1510	1522	1511	S25	W10	.575	9023	16.9	12	-N	2		1511	.99	1.10			
HOUS	17	1739	1758	1745	N18	W90	.999	9018	11.0	19	-F		C		.10	.40		100	
GRP 9714	17	2103	2121	2108	N16	E55	.810	9032	22.0	18	-N				.54				3 3 2
LOCK	17	2102	2122	2110	N16	E57	.829	9032	22.2	20	-F		C	2110	.30	.50		10	
SACP	17	2103	2123	2108	N17	E54	.800	9032	21.9	20	-N		C		.78	1.06			
HOUS	17	2104	2118	2105	N14	E55	.810	9032	22.0	14	-N		C		.10	.20		200	
HOUS	17	2155	2221	2157	N14	E28	.468	9027	20.0	26	-F		C		.10	.10		100	
GRP 9716	18	0141	0158	0144	N19	W90	.999	9018	11.3	17	-N				.30				1 1 1
CRON	18	0141	0158	0144	N19	W90	.999	9018	11.3	17	-N		C		.30	1.20			K
CRON	18	0141	0158	0149	N19	W90	.999	9018	11.3	17	-N		C						
CRON	18	0245	0255	0247	N19	W90	.999	9018	11.4	10	-F		C		.10	.40			
ISTA	18	0745E	0930D		S17	W06	.398	9028	17.9	105D	-N								
ISTA	18	0855	0905		S25	W21	.600	9023	16.8	10	-B								
ATHN	18	1028	1040	1030	N15	E38	.622	9032	21.3	12	-N	2		1030	.66	.90			
CAPS	18	1100	1127	1112	N19	W90	.999	9018	11.7	27	-B	3							
ATHN	18	1234	1257	1234	N15	E45	.709	9032	21.9	23	-N	2		1234	.99	1.30			
HUAN	18	1250	1303	1253	S23	E08	.496	9028	19.1	13	-F	2	C	1253	.25	.26			D
CANA	18	1251	1258	1254	N14	W23	.409	9020	16.8	7	-F		C		.30	.30			
CATA	18	1300	1355	1305	N16	E47	.734	9032	22.1	55	-N			1305	.15	.23		157	
HUAN	18	1401	1413		N11	E80	.982	9034	24.6	12	-F	1	C	1404	.21				D
HUAN	18	1516	1522	1517	N23	W07	.319	9025	18.1	6	-F	2	C	1517	.45	.45			E
HUAN	18	1523	1529	1524	N17	E44	.701	9032	21.9	6	-F	2	C	1524	.31	.36			DH

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9729	18	1536	1545	1538	S23	E06	.489	9028	19.1	9	-F				.33				2 2 2
LOCK	18	1535	1545	1538	S23	E05	.486	9028	19.0	10	-F		C	1538	.40	.50		10	
HUAN	18	1537	1541D	1538	S23	E07	.492	9028	19.2	4D	-F	2	C	1538	.25	.26			D
HUAN	18	1632	1643		N20	W18	.385	9025	17.3	11	-F	1	C	1635	.21	.21			D
GRP 9731	18	1702	1732	1709	N20	W18	.385	9025	17.4	30	-F				.15				3 3 3
HUAN	18	1700	1736		N20	W18	.385	9025	17.4	36	-F	1	C	1705	.25	.25			D
HOUS	18	1703	1730	1708	N21	W18	.394	9025	17.4	27	-F		C		.10	.10		100	
LOCK	18	1703	1730	1709	N20	W17	.373	9025	17.4	27	-F		C	1709	.10	.10		10	L
CRON	19	0251	0307	0254	N13	E90	1.000	9037	25.9	16	-N		C		.40	1.60			
CRON	19	0652	0711	0657U	N22	W15	.373	9025	18.2	19	-F		C		.70	.80			
ATHN	19	0745E	0808D	0745	N17	E38	.628	9032	22.2	23D	-N	3		0745	.33	.40			
GRP 9735	19	0758	0817	0803	N10	E64	.895	9034	24.1	19	-N				.38				5 5 4
CAPE	19	0755	0819	0801	N12	E65	.902	9034	24.2	24	-N		C	0801	.27	.60			
ONDR	19	0755E	0823		N09	E62	.879	9034	24.0	28D	-F		V	0802			1.60		CDH
CRON	19	0758	0815	0804	N09	E67	.917	9034	24.4	17	-N		C		.60	1.20			
CATA	19	0800	0810	0805	N10	E64	.895	9034	24.1	10	-F			0805	.31			148	
ATHN	19	0800E	0818D	0800	N12	E60	.862	9034	23.8	18D	-N	2		0800	.33	.60			
CANA	19	0845	0854	0849	N17	E38	.628	9032	22.2	9	-F		C		.10	.10			H
ATHN	19	0855E	0859D	0855	N16	E40	.650	9032	22.4	4D	-N	2		0855	.17	.20			
CAPS	19	0903	0953		N17	E90	1.000	9037	26.1	50	2N	3		0908				132	
CANA	19	0912	0919	0914	N16	E36	.599	9032	22.1	7	-F		C		.30	.40			
GRP 9740	19	0916	0930	0917	S16	W17	.460	9028	18.1	14	-N				.44				2 2 2
CANA	19	0912	0920	0914	S17	W17	.472	9028	18.1	8	-N		C		.50	.60			
CATA	19	0920	0940	0920	S15	W17	.448	9028	18.1	20	-N			0920	.37	.42		162	
CATA	19	1010	1020	1010	S14	W16	.426	9028	18.2	10	-F			1010	.13	.15		138	
CATA	19	1105	1115	1110	N10	E62	.879	9034	24.1	10	-N			1110	.31			164	
MONT	19	1355	1450	1406	N17	E31	.536	9032	21.9	55	1F		C	1405	2.06				
GRP 9744	19	1400	1440	1415	N12	E62	.879	9034	24.2	40	1N				1.03				2 1 1
MONT	19	1400	1440	1415	N12	E62	.879	9034	24.2	40	1N		C	1415	1.03				
HUAN	19	1427E	1433		N12	E61	.870	9034	24.2	6D	-F	1	P	1428	.21	.31			D
HUAN	19	1538	1545D		N15	E31	.528	9032	22.0	7D	-F	1	P	1539	.21	.21			DT
LOCK	19	1547	1615	1550	N15	E32	.542	9032	22.1	28	-F		C	1550	.30	.40		10	
GRP 9747	19	1556	1608	1600	N13	E61	.871	9034	24.2	12	-F				.34				3 3 3
CAPS	19	1555	1600D		N15	E65	.902	9034	24.5	5D	-F	2		1557	.50			158	
HUAN	19	1557	1605		N13	E60	.862	9034	24.2	8	-F	1	C	1600	.21	.30			D
LOCK	19	1557	1610	1600	N10	E59	.853	9034	24.1	13	-F		C	1600	.30	.50		10	
GRP 9748	19	1639	1655	1641	N19	E90	.999	9037	26.4	16	-F				.15				2 2 2
CANA	19	1637	1655	1640	N18	E90	1.000	9037	26.4	18	-F		C		.20	.80			
HOUS	19	1641	1655	1642	N19	E90	.999	9037	26.4	14	-F		C		.10	.40		100	
MCMA	19	1710	1745	1720	N12	E58	.844	9034	24.1	35	-F		C	1720	.52	.90			
HOUS	19	1723	1733	1726	N10	E90	1.000	9034	26.5	10	-F		C		.20	.80		100	H
HUAN	19	1803	1811		N16	E30	.518	9032	22.0	8	-N	1	C	1805	.31	.32			D
GRP 9752	19	1855	1935	1901	N16	E31	.532	9032	22.1	40	-N				.68				3 3 3
LOCK	19	1855	1920	1904	N15	E32	.542	9032	22.2	25	-F		C	1904	.40	.50		10	
HUAN	19	1855	1940	1858	N16	E30	.518	9032	22.0	45	-N	2	C	1858	.50	.52			
MCMA	19	1857E	1945		N16	E30	.518	9032	22.0	48D	-B		C	1904	1.13	1.20			E
GRP 9753	19	1933	1955	1944	N18	E90	1.000	9037	26.6	22	-F				.20				2 2 2
LOCK	19	1925	2000	1940	N16	E90	1.000	9037	26.6	35	-F		C	1940	.30	1.20		10	
HOUS	19	1940	1950	1948	N19	E90	.999	9037	26.6	10	-F		C		.10	.40		100	
GRP 9754	19	2021	2035	2024	N17	E29	.509	9032	22.0	14	-F				.33				2 2 2
HOUS	19	2021	2034	2024	N17	E28	.495	9032	21.9	13	-F		C		.20	.20		100	
HUAN	19	2026E	2035		N16	E29	.504	9032	22.0	9D	-N	1	P	2026	.45	.47			E
HOUS	19	2024	2031	2025	N12	E63	.887	9034	24.6	7	-F		C		.10	.20		100	

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
HOUS	19	2026	2043	2031	N19	E90	.999	9037	26.6	17	-F		C		.10	.40		100	
BOUL	19	2124E	2148	2131	N18	E90	1.000	9037	26.6	24D	-F		C		.30	1.20			
LOCK	19	2245	2252	2247	N15	E27	.472	9032	22.0	7	-F		C	2247	.30	.30		10	
LOCK	19	2303	2314	2305	N11	E62	.879	9034	24.6	11	-F		C	2305	.40	.80		10	
GRP 9760	20	0004	0035	0010	N16	E27	.477	9032	22.0	31	1B				1.88				3 3 3
SACP	20	0002	0024D	0011	N16	E26	.463	9032	22.0	22D	1B		C		2.23	2.27			
MANI	20	0006	0037	0009	N15	E27	.472	9032	22.0	31	-B	2		0009	1.13	1.29			
MITK	20	0015E	0032		N17	E27	.482	9032	22.0	17D	1N		C	0016	2.27	2.60			F
	20	0105	0115	NO FLARE PATROL															
MITK	20	0127	0131	0128	N17	E27	.482	9032	22.1	4	-N		C	0128	1.13	1.30			
	20	0130	0140	NO FLARE PATROL															
MITK	20	0226	0235	0228	N17	E24	.441	9032	21.9	9	1N		C	0228	1.86	2.10			
GRP 9763	20	0600	0623	0607	N12	E53	.796	9034	24.2	23	-F				.94				2 2 2
ABSI	20	0600E	0628D	0605	N14	E52	.786	9034	24.1	28D	-N		P	0605	.99	1.57			D
MANI	20	0606E	0618	0608	N10	E53	.795	9034	24.2	12D	-F	2		0608	.88	1.41			
ABSI	20	0610E	0628D	0614	N18	E24	.447	9032	22.1	18D	-N		P	0614	1.08	1.19			D
TACH	20	0656E	0700		N14	E52	.786	9034	24.2	4D	-N		V	0656	.91	1.50	3.10	63	D
CRON	20	0737	0745	0739	N55	W67	.953	9020	15.3	8	-F		C		.40	1.00			H
MONT	20	0743E	0755D		N09	E45	.704	9034	23.7	12D	2B		C	0743	3.61				
MONT	20	0743E	0755D		N18	E21	.407	9032	21.9	12D	2B		C	0743	4.13				
MANI	20	0812	0822	0815	N11	E52	.785	9034	24.2	10	-F	3		0815	.21	.33			
MONT	20	0823E	0845		N08	E43	.679	9034	23.6	22D	-N		C	0830	1.03				
GRP 9771	20	0846	1020	0848	N17	E24	.441	9032	22.2	94	1N				2.58				3 2 1
MONT	20	0845	1020	0848	N18	E21	.407	9032	21.9	95	2B		C	0848	2.58				
CANA	20	0847U	0853U	0848	N16	E25	.449	9032	22.2	6U	-F		C		.30	.30			I
MONT	20	0850	1020	0852	N17	E24	.441	9032	22.2	90	2B		C	0852	1.55				
ARCE	20	0905	1000E	0930	N17	E21	.400	9032	22.0	55D	-N		C	0930	1.19	1.30			
CANA	20	0924	0935	0929	N17	E37	.615	9034	23.2	11	-N		C		.50	.50			EI
GRP 9773	20	1014	1046	1021	N09	E46	.716	9034	23.9	32	-N				.70				3 3 3
CATA	20	1010	1105	1020	N10	E47	.728	9034	23.9	55	-N			1020	.70	1.03		172	
CAPS	20	1014E	1042		N09	E45	.704	9034	23.8	28D	-N	3		1026	1.00	1.40		182	
CANA	20	1019	1030	1022	N09	E45	.704	9034	23.8	11	-N		C		.40	.60			E
GRP 9773	20	1006	1041	1010	N08	E43	.679	9034	23.6	35	-B				.41				2 2 2
MONT	20	1005	1045		N08	E42	.666	9034	23.6	40	-B		C	1007	.52				
CANA	20	1006	1036	1010	N08	E44	.691	9034	23.7	30	-N		C		.30	.40			
CANA	20	1013	1019	1016	N13	E78	.975	9037	26.3	6	-N		C		.30	.90			
MONT	20	1024	1030	1026	N18	E22	.420	9032	22.1	6	-F		C	1026	.72				
GRP 9776	20	1110	1141	1115	N17	E21	.400	9032	22.0	31	1N				2.44				6 6 5
MONT	20	1050	1140	1113	N18	E22	.420	9032	22.1	50	2B		C	1113	5.16				
CANA	20	1107	1127	1109	N17	E21	.400	9032	22.0	20	-N		C		1.10	1.20			EI
CAPS	20	1107E	1137		N15	E22	.401	9032	22.1	30D	1N	3		1113	1.80	2.00		182	
KIEV	20	1110	1130	1116	N16	E22	.407	9032	22.1	20	1N		C	1116	3.09	4.00		60	EI
CATA	20	1115	1210	1115	N17	E20	.386	9032	22.0	55	-N			1115	1.07	1.17		186	
HUAN	20	1123E	1125D		N17	E21	.400	9032	22.0	2D	-F	1	P	1123	.62	.62			E
MONT	20	1144	1205	1148	N18	E22	.420	9032	22.1	21	1N		C	1148	1.55				
GRP 9777	20	1130	1152	1136	N10	E47	.728	9034	24.0	22	1N				2.41				6 6 6
MONT	20	1126	1300	1136	N08	E41	.653	9034	23.6	94	2B		C	1136	3.61				
CANA	20	1127	1141	1131	N11	E48	.740	9034	24.1	14	-N		C		.90	1.30			
CAPS	20	1128	1147		N10	E50	.763	9034	24.2	19	-B	3		1138	.90	1.40		196	
CATA	20	1130	1210	1135	N11	E47	.729	9034	24.0	40	-N			1135	1.29	1.93		200	
WENU	20	1133	1154		N10	E46	.716	9034	23.9	21	1N		V		5.16				
KIEV	20	1135	1150	1140	N10	E49	.751	9034	24.2	15	1N		C	1140	2.58			60	DI
CANA	20	1150	1207	1153	S20	E58	.886	9035	24.8	17	-N		C		.60	1.20			

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
CANA	20	1202	1209	1204	N17	E90	1.000	9037	27.3	7	-N		C		.20	.80			
WEND	20	1207	1223		N19	W86	.995	9020	14.1	16	1N		V		3.09				
GRP 9781	20	1218	1247	1223	N09	E45	.704	9034	23.9	29	-N				1.82				5 5 4
CANA	20	1213	1236	1217	N09	E44	.692	9034	23.8	23	-F		C		.80	1.10			
CANA	20	1216	1227	1218	N12	E53	.796	9034	24.5	11	-N		C		.30	.50			
HUAN	20	1217	1235	1221	N09	E45	.704	9034	23.9	18	-N	2	C	1221	.34	.40			D
CAPS	20	1219E	1250		N06	E44	.692	9034	23.8	31D	-N	3		1225	1.00	1.50		165	
CATA	20	1220	1300	1230	N10	E44	.692	9034	23.8	40	-B			1230	1.03	1.47		204	
WEND	20	1220	1253D		N09	E44	.692	9034	23.8	33D	1N		V		4.13				
GRP 9782	20	1246	1257	1248	N17	E23	.427	9032	22.3	11	-F				.67				2 2 2
MONT	20	1245	1300	1249	N18	E24	.447	9032	22.3	15	-N		C	1249	1.03				
HUAN	20	1246	1253	1247	N16	E21	.393	9032	22.1	7	-F	2	C	1247	.31	.31			D
GRP 9783	20	1257	1313	1300	N14	E77	.971	9037	26.3	16	-F				.39				4 4 3
CANA	20	1249	1306	1255	N13	E78	.975	9037	26.4	17	-N		C		.30	.90			
HUAN	20	1257	1307	1259	N14	E78	.975	9037	26.4	10	-F	2	C	1259	.46				E
MCMA	20	1300E	1300D		N14	E75	.962	9037	26.2		-F		P	1300					E
CATA	20	1300	1325	1300	N13	E75	.962	9037	26.2	25	-N			1300	.40			186	
GRP 9784	20	1414	1427	1416	N17	E20	.386	9032	22.1	13	-F				.43				4 4 4
CATA	20	1405	1440	1410	N17	E17	.346	9032	21.9	35	-N			1410	.15	.17		155	
CATA	20	1410	1430	1415	N17	E20	.386	9032	22.1	20	-N			1415	.15	.17		166	
HUAN	20	1415	1419	1416	N17	E20	.386	9032	22.1	4	-F	2	C	1416	.21	.21			D
MCMA	20	1415	1425	1416	N16	E20	.379	9032	22.1	10	-F		C	1416	.31	.30			D
MONT	20	1415	1435		N18	E20	.394	9032	22.1	20	-N		C	1420	1.03				
GRP 9785	20	1517	1535	1525	S17	W34	.649	9028	18.1	18	-F				.47				2 2 2
SACP	20	1516	1544	1525	S17	W34	.649	9028	18.1	28	-N		C		.68	.77			
HUAN	20	1517	1525		S17	W34	.649	9028	18.1	8	-F	1	C	1519	.25	.27			D
GRP 9786	20	1524	1539	1531	N09	E42	.666	9034	23.8	15	-N				.76				4 4 3
CAPS	20	1521	1541		N08	E42	.666	9034	23.8	20	-N	3		1528	1.20	1.60		165	
HUAN	20	1522	1539		N08	E43	.679	9034	23.9	17	-N	1	C	1527	.45	.51			E
HOUS	20	1524	1535D	1526	N08	E42	.666	9034	23.8	11D	-F		C		.20	.30		100	
LOCA	20	1530	1538	1535	N10	E42	.667	9034	23.8	8	-N		V	1535	.63	.90			
GRP 9787	20	1556	1618	1601	N08	E42	.666	9034	23.8	22	-F				.36				4 4 4
LOCK	20	1555	1615	1559	N08	E42	.666	9034	23.8	20	-F		C	1559	.50	.70		10	
CAPS	20	1557	1600D		N08	E42	.666	9034	23.8	3D	-N	3		1558	.50	.70		170	E
HOUS	20	1557	1621	1603	N08	E42	.666	9034	23.8	24	-F		C		.20	.30		100	
HUAN	20	1607E	1617		N08	E43	.679	9034	23.9	10D	-F	1	C	1609	.25	.28			D
GRP 9788	20	1658	1721	1704	N08	E42	.666	9034	23.9	23	-F				.40				3 3 3
HUAN	20	1657	1717		N08	E42	.666	9034	23.9	20	-F	1	C	1658	.21	.23			D
SACP	20	1658	1725	1704	N08	E41	.653	9034	23.8	27	-N		C		.68	.78			
MCMA	20	1705E	1713D		N07	E42	.666	9034	23.9	8D	-F		P	1706	.31	.40			E
GRP 9789	20	1722	1737	1727	N16	E16	.324	9032	21.9	15	-F				.36				4 4 3
LOCK	20	1720	1737	1726	N15	E19	.358	9032	22.1	17	-F		C	1726	.20	.20		10	
SACP	20	1722	1740	1729	N17	E18	.359	9032	22.1	18	-F		C		.68	.68			
HOUS	20	1723	1733	1725	N17	E08	.240	9032	21.3	10	-F		C		.10	.10		100	
HUAN	20	1723	1736		N16	E18	.351	9032	22.1	13	-N	1	C	1727	.21	.21			D
GRP 9790	20	1836	1856	1841	N08	E41	.653	9034	23.9	20	-N				.54				5 5 5
HUAN	20	1817	1831		N09	E41	.653	9034	23.8	14	-F	1	C	1820	.31	.35			D
SACP	20	1818	1904	1842	N09	E40	.640	9034	23.8	46	-N		C		.98	1.10			
LOCK	20	1833	1857	1839	N07	E41	.653	9034	23.8	24	-F		C	1839	.70	.90		10	
BOUL	20	1835	1855U	1839	N09	E41	.653	9034	23.8	20U	-N		C		.40	.50			
HOUS	20	1837	1855	1842	N08	E42	.666	9034	23.9	18	-N		C		.30	.40		200	
HUAN	20	1838	1850		N08	E41	.653	9034	23.9	12	-F	1	C	1840	.25	.28			D
MCMA	20	1929	1948D	1933	N08	E40	.640	9034	23.8	19D	-F		C	1933	.31	.40			E
GRP 9792	20	1931	1959	1936	N16	E18	.351	9032	22.2	28	-F				.45				3 3 3
LOCK	20	1929	1947	1933	N15	E19	.358	9032	22.2	18	-F		C	1933	.40	.40		10	
SACP	20	1931	2010	1937	N17	E16	.333	9032	22.0	39	-F		C		.69	.68			
MCMA	20	1932	1946D	1937	N16	E18	.351	9032	22.2	14D	-F		C	1937	.25	.30			E
GRP 9793	20	2000	2007	2002	N08	E41	.653	9034	23.9	7	-F				.45				2 2 2
LOCK	20	1959	2009	2002	N07	E41	.653	9034	23.9	10	-F		C	2002	.50	.70		10	
HOUS	20	2000	2004	2002	N09	E40	.640	9034	23.8	4	-F		C		.40	.50		100	
GRP 9794	20	2126	2151	2133	N08	E40	.640	9034	23.9	25	-N				.69				3 3 3
SACP	20	2124	2150	2134	N08	E39	.627	9034	23.8	26	-N		C		1.08	1.19			
LOCK	20	2125	2155	2132	N07	E41	.653	9034	24.0	30	-F		C	2132	.70	.90		10	
HOUS	20	2129	2147	2132	N08	E39	.627	9034	23.8	18	-N		C		.30	.40		200	

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9795	20	2241	2310	2245	N19	E13	.318	9032	21.9	29	-F				.85				2 2 2
LOCK	20	2241	2300	2245	N20	E12	.319	9032	21.8	19	-F		C	2245	.80	.90		10	
SACP	20	2249	2319	2300	N17	E14	.307	9032	22.0	30	-N		C		.89	.87			
SACP	21	0000E	0020D	0006U	N08	E37	.599	9034	23.8	20D	-N		C		1.71	1.86			
GRP 9797	21	0034	0045	0037	N17	E13	.296	9032	22.0	11	-F				.76				2 2 2
CRON	21	0033	0050	0037	N16	E11	.261	9032	21.8	17	-F		C		.90	.90			
MITK	21	0034	0039	0036	N17	E14	.308	9032	22.1	5	-N		C	0036	.62	.70			D
CRON	21	0044	0058	0050	N03	E37	.601	9034	23.8	14	-N		C		.50	.60			
CRON	21	0145	0155	0149	N46	E34	.767	9040	23.6	10	-F		C		.60	1.00			H
CRON	21	0330	0338	0335	N55	E11	.770	9033	22.0	8	-F		C		.30	.50			H
GRP 9801	21	0439	0449	0441	N16	E12	.273	9032	22.1	10	-N				.51				2 2 2
CRON	21	0439	0448	0441	N16	E11	.261	9032	22.0	9	-N		C		.80	.80			
MANI	21	0444E	0450D		N16	E12	.273	9032	22.1	6D	-N	2		0444	.21	.22			
GRP 9802	21	0532	0544	0537	N13	E37	.605	9034	24.0	12	-N				.41				2 2 2
CRON	21	0532	0544	0537	N17	E39	.641	9034	24.2	12	-N		C		.50	.60			
MANI	21	0538E	0540D		N09	E35	.572	9034	23.9	2D	-N	2		0538	.31	.38			
MITK	21	0546	0553	0548	N17	E10	.262	9032	22.0	7	-N		C	0548	.52	.50			D
CRON	21	0646	0655	0648	N17	E67	.917	9037	26.3	9	-F		C		.50	1.10			
CRON	21	0836	0852	0841	N14	E38	.621	9034	24.2	16	-F		C		.30	.40			
CANA	21	0949	1009	0951	N11	E41	.655	9034	24.5	20	-N		C		.30	.40			
MONI	21	1053	1120	1100	N18	E08	.256	9032	22.1	27	-N		C	1100	.83				
MONI	21	1125	1215	1138	N18	E08	.256	9032	22.1	50	1N		C	1138	2.06				
HUAN	21	1254	1304		N16	E08	.228	9032	22.1	10	-F	1	C	1258	.31	.31			E
HUAN	21	1313	1320		N16	E08	.228	9032	22.2	7	-F	1	C	1315	.25	.25			D
GRP 9811	21	1345	1402	1348	N11	E31	.518	9034	23.9	17	-F				.24				4 3 3
CATA	21	1226	1405	1226	N12	E34	.562	9034	24.1	99	-N			1226	.21	.26		159	
CAPE	21	1320	1327	1324	N12	E31	.520	9034	23.9	7	-F		C	1324	.27	.30			T
CANA	21	1339	1401	1343	N10	E24	.410	9034	23.4	22	-F		C		.20	.20			
MONI	21	1351	1400	1353	N12	E34	.562	9034	24.1	9	-F		C	1353	.31				
GRP 9812	21	1407	1422	1410	N09	E34	.558	9034	24.1	15	-N				1.84				10 10 7
CANA	21	1403	1416	1405	N09	E35	.572	9034	24.2	13	-N		C		.90	1.10			
MONI	21	1405	1410D	1407	N09	E35	.572	9034	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	
SACP	21	1405	1424	1410	N11	E33	.546	9034	24.1	19	-N		C		1.28	1.34			
ONDR	21	1408E	1418		N09	E34	.558	9034	24.1	10D	1N		V	1409			2.30		CH
CAPE	21	1408E	1429	1410	N09	E34	.558	9034	24.1	21D	-N		P	1410	1.30	1.60			
HUAN	21	1409E	1421		N08	E34	.557	9034	24.1	12D	-N	1	C	1409	.75	.80			E
ATHN	21	1409	1427	1412	N07	E33	.542	9034	24.1	18	-N	1		1412	1.49	1.80			
WEND	21	1410E	1423		N09	E31	.514	9034	23.9	13D	1N		V		5.16				
HOUS	21	1412E	1420	1412U	N10	E32	.530	9034	24.0	8D	-N		C		.40	.50		200	
GRP 9813	21	1718	1731	1721	S17	E30	.604	9035	24.0	13	-N				.35				4 4 4
SACP	21	1717	1730	1720	S16	E28	.574	9035	23.8	13	-F		C		.48	.52			
HOUS	21	1718	1725	1720	S16	E37	.675	9035	24.5	7	-N		C		.20	.20		200	
LOCK	21	1718	1731	1722	S17	E29	.593	9035	23.9	13	-F		C	1722	.30	.40		10	
HALE	21	1718	1739	1721	S17	E26	.561	9035	23.7	21	-B	1	C	1721	.41	.50			GHL
HUAN	21	1740	1745		N15	E06	.195	9032	22.2	5	-F	1	C	1742	.21	.21			D
GRP 9815	21	1801	1818	1805	N10	E31	.516	9034	24.1	17	-N				.43				3 3 3
LOCK	21	1800	1820	1805	N10	E32	.530	9034	24.1	20	-N		C	1805	.30	.40		20	
HALE	21	1801	1817	1805	N10	E31	.516	9034	24.1	16	-B	1	C	1805	.41	.50			J
SACP	21	1801	1817	1805	N11	E31	.518	9034	24.1	16	-N		C		.59	.61			
GRP 9816	21	1951	2033	2005	N15	E57	.836	9037	26.1	42	1B				2.82				3 3 3
SACP	21	1945	2039	2005	N15	E58	.845	9037	26.2	54	2B		C		4.00	5.70			
HALE	21	1950	2035	2005	N15	E57	.836	9037	26.1	45	1B	1	C	2005	2.06	3.80			
BOUL	21	1959	2025	2005	N14	E57	.836	9037	26.1	26	1N		C		2.40	4.50			E
GRP 9819	21	1945	2020	1954	N13	E59	.854	9037	26.2	35	-F				.66				2 2 2
LOCK	21	1945	2020	1954	N12	E59	.853	9037	26.2	35	-F		C	1954	.90	1.60		10	
MCMA	21	1949E	1956D		N14	E58	.845	9037	26.2	7D	-N		C	1950	.41	.80			E

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9817	21	2052	2144	2058	N10	E30	.501	9034	24.1	52	-N				1.54				3 3 3
BOUL	21	2052	2125	2055	N09	E30	.499	9034	24.1	33	-F		C		1.00	1.20			
SACP	21	2052	2146	2056	N11	E29	.488	9034	24.0	54	1N		C		2.43	2.50			
HALE	21	2102E	2200	2102	N11	E30	.503	9034	24.1	58D	-B	1	C	2102	1.19	1.40			FJK
GRP 9818	21	2059	2120	2105	N17	E01	.201	9032	21.9	21	-B				.95				2 2 2
SACP	21	2059	2120	2104	N17	E01	.201	9032	21.9	21	-N		C		1.27	1.24			
HALE	21	2102E	2120	2105	N16	E01	.184	9032	22.0	18D	-B	1	C	2105	.62	.62			J
GRP 9819	21	2222	2235	2225	N17	E01	.201	9032	22.0	13	-F				.74				2 2 2
LOCK	21	2221	2233	2225	N16	E01	.184	9032	22.0	12	-F		C	2225	.50	.50		10	
SACP	21	2222	2236	2224	N17	E00	.201	9032	21.9	14	-N		C		.98	.96			
SACP	21	2247	2314	2259	N15	E04	.180	9032	22.2	27	-F		C		.20	.19			
GRP 9821	21	2302	2323	2307	N22	W51	.788	9025	18.1	21	-F				.68				4 4 4
HALE	21	2300	2337	2304	N21	W50	.776	9025	18.2	37	-N	1	C	2304	.52	.80			J
SACP	21	2302	2314	2307	N21	W50	.776	9025	18.2	12	-F		C		1.17	1.50			
LOCK	21	2303	2315	2306	N23	W50	.780	9025	18.2	12	-F		C	2306	.40	.60		10	
MANI	21	2311E	2327	2312	N21	W52	.795	9025	18.1	16D	-N	1		2312	.62	1.00			
GRP 9822	21	2332	2340	2334	N17	E00	.201	9032	22.0	8	-F				1.13				3 3 3
LOCK	21	2331	2341	2335	N16	E01	.184	9032	22.1	10	-F		C	2335	1.00	1.00		10	
SACP	21	2332	2342	2334	N17	E00	.201	9032	22.0	10	-F		C		1.76	1.73			
MITK	21	2333	2336	2334	N17	E00	.201	9032	22.0	3	-N		C	2334	.62	.60			E
CRON	22	0211	0220	0215	N33	W54	.841	9025	18.0	9	-F		C		.10	.20			
HALE	22	0230	0245	0233	N11	E23	.398	9034	23.8	15	-B	2	C	0233	.21	.22			
GRP 9825	22	0256	0307	0300	N15	E01	.169	9032	22.2	11	-N				.65				3 3 3
HALE	22	0251	0309	0300	N16	E01	.186	9032	22.2	18	-B	2	C	0300	.31	.31			V
CRON	22	0257	0304	0300	N14	E01	.152	9032	22.2	7	-N		C		.70	.70			H
MITK	22	0259	0302D		N16	E01	.186	9032	22.2	3D	-N		P	0301	.93	.90			
GRP 9826	22	0347	0359	0351	N23	W55	.827	9025	18.0	12	-F				.92				2 2 2
MITK	22	0347	0358	0350	N22	W55	.826	9025	18.0	11	-F		C	0350	1.03	1.80			G
CRON	22	0347	0400	0351	N24	W54	.820	9025	18.1	13	-N		C		.80	1.40			
CRON	22	0350	0409	0355	N09	E14	.248	9034	23.2	19	-F		C		.80	.80			
CRON	22	0413	0416	0414	N10	E24	.410	9034	24.0	3	-F		C		.20	.20			
GRP 9829	22	0430	0441	0431	N11	E24	.413	9034	24.0	11	-F				.57				2 2 2
MITK	22	0429	0447D	0431	N11	E24	.413	9034	24.0	18D	-N		C	0431	.93	1.00			F
CRON	22	0430	0435	0431	N10	E24	.410	9034	24.0	5	-F		C		.20	.20			
	22	0445	0450	NO FLARE PATROL															
GRP 9830	22	0616	0642	0619	N11	E23	.398	9034	24.0	26	-B				1.07				4 4 4
MANI	22	0614E	0632	0615	N10	E22	.379	9034	23.9	18D	-B	1		0615	.83	.88			E
CAPE	22	0616	0659	0618	N10	E23	.395	9034	24.0	43	-N		C	0618	1.49	1.60			FV
ATHN	22	0617	0646	0621	N12	E27	.462	9034	24.3	29	-B	2		0621	1.26	1.40			
CRON	22	0618	0630	0621	N10	E21	.364	9034	23.8	12	-N		C		.70	.80			
GRP 9831	22	0656	0719	0659	N11	E20	.352	9034	23.8	23	-N				1.10				7 6 6
CAPE	22	0648	0717	0657	N08	E19	.327	9034	23.7	29	-N		C	0657	1.39	1.50			F
CRON	22	0652	0710	0657	N18	E18	.369	9034	23.6	18	-N		C		.80	.80			
ATHN	22	0653	0730	0657	N10	E23	.395	9034	24.0	37	-N	2		0657	1.19	1.30			
MANI	22	0655	0705	0658	N10	E22	.379	9034	23.9	10	-F	2		0658	.62	.66			
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	9034	23.7	35	-N			0705	.40	.44		151	
ISTA	22	0715E	0800		N08	E18	.310	9034	23.7	45D	-F								
CATA	22	0720	0725	0720	N13	E20	.361	9034	23.8	5	-N			0720	.05	.06		151	
ISTA	22	0715E	0755		N18	E51	.781	9037	26.1	40D	-N								
GRP 9833	22	0743	0809	0751	N16	W03	.192	9032	22.1	26	-N				.26				7 7 5
ISTA	22	0715E	0915D		N15	W04	.181	9032	22.0	120D	-B								
BUCA	22	0730E	0845D		N16	W04	.197	9032	22.0	75D	1N		C	0745	2.76	2.80			
MANI	22	0745	0750	0747	N17	W03	.208	9032	22.1	5	-N	1		0747	.21	.21			
MONT	22	0748E	0815		N15	E02	.171	9032	22.5	27D	-N		C	0748	.21				
ATHN	22	0750	0800D	0752	N18	W02	.222	9032	22.2	10D	-N	2		0752	.39	.40			
CRON	22	0751	0801	0753	N14	W07	.192	9032	21.8	10	-F		C		.10	.10			
CAPE	22	0756E	0803D		N16	W03	.192	9032	22.1	7D	-F		P	0802	.40	.40			
CAPE	22	0912	0918	0915	N16	W02	.188	9032	22.2	6	-F		C	0915	.80	.80			
ISTA	22	0845	0905		N10	E22	.379	9034	24.0	20	-N								

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9835	22	0911	0932	0917	N14	E49	.755	9037	26.1	21	-N				1.17				6 6 5
MONT	22	0901E	0938	0915	N15	E45	.710	9037	25.8	37D	-N		C	0915	1.03				
KHAR	22	0910E	0938		N13	E49	.754	9037	26.1	28D	1F		P	0920	2.84	4.30	2.10		DH
CAPE	22	0912	0932	0917	N13	E49	.754	9037	26.1	20	-N		C	0917	.58	.90			
CRON	22	0913	0926	0916	N11	E49	.752	9037	26.1	13	-N		C		.40	.60			
ONDR	22	0915E	0927		N12	E49	.753	9037	26.1	12D	-F		V	0917			1.40		CH
ATHN	22	0915	0930	0918	N18	E50	.771	9037	26.1	15	-N	2		0918	.99	1.50			
GRP 9836	22	1008	1115	1010	N11	E23	.398	9034	24.1	67	1B				3.19				6 6 4
CAPE	22	0948	1123	1010	N11	E22	.383	9034	24.1	95	1B		C	1010	2.87	3.10			F
CANA	22	1002	1028	1005	N10	E21	.364	9034	24.0	26	-N		C		.90	1.00			K
CANA	22	1002	1028	1017	N10	E21	.364	9034	24.0	26	-N		C						
CANA	22	1006	1050	1010	N13	E27	.465	9034	24.4	44	-F		C		.60	.70			K
CANA	22	1006	1050	1012	N13	E27	.465	9034	24.4	44	-F		C						
CAPS	22	1007	1033		N11	E24	.413	9034	24.2	26	1B	3		1011		2.30		220	
KHAR	22	1009	1030D		N13	E22	.391	9034	24.1	21D	2N		P	1013	6.81	7.50	3.20		HOQ
ONDR	22	1009E	1108		N10	E21	.364	9034	24.0	59D	2N		V	1011			2.50		CFH
CATA	22	1010	1140	1010	N10	E21	.364	9034	24.0	90	-B			1010	1.57	1.69		222	
CATA	22	1010	1140	1014	N13	E23	.406	9034	24.1	90	-N			1014	.51	.57		178	
GRP 9836	22	1003	1155	1020	N11	E25	.429	9034	24.3	112	1N				3.25				2 2 2
MONT	22	1003	1155	1020	N07	E23	.390	9034	24.1	112	2B		C	1011	3.09				
MONT	22	1003	1155		N07	E23	.390	9034	24.1	112	2B		C	1030	5.16				
KHAR	22	1015E	1105D		N14	E27	.469	9034	24.5	50D	1F		P	1025	3.40	4.00	1.90		DH
GRP 9836	22	1040	1052	1043	N13	E17	.316	9034	23.7	12	-F				1.05				2 2 2
CANA	22	1038	1046	1041	N18	E17	.357	9034	23.7	8	-F		C		.80	.80			
CAPE	22	1041	1057	1045	N08	E17	.294	9034	23.7	16	-N		C	1045	1.30	1.40			JT
CATA	22	1005	1045	1010	S18	W59	.888	9028	18.0	40	-N			1010	.15			166	
SALO	22	1155	1215		N07	W15	.259	9032	21.4	20	-N		V	1200	.66	.70	1.50		
GRP 9839	22	1205	1239	1216	N10	E16	.284	9034	23.7	34	-N				1.02				6 6 6
CATA	22	1140	1350	1220	N18	E15	.332	9034	23.6	130	-N			1220	.88	.91		170	
ATHN	22	1154	1242	1210	N10	E10	.190	9034	23.2	48	-N	2		1210	.99	1.10			
CAPS	22	1202E	1236		N06	E18	.308	9034	23.9	34D	-N	3		1215	.50	.60		165	
CANA	22	1209	1242	1217	N18	E16	.344	9034	23.7	33	-F		C		.90	.90			I
MONT	22	1210	1230D	1215	N05	E17	.291	9034	23.8	20D	-N		C	1215	1.55				
CAPE	22	1211	1236		N08	E15	.261	9034	23.6	25	-N		C	1220	1.30	1.40			JT
CAPE	22	1211	1236		N08	E15	.261	9034	23.6	25	-F		C	1226	.98	1.00			
CAPE	22	1238	1300	1249	N14	E23	.411	9034	24.3	22	-F		C	1244	1.79	2.00			F
CATA	22	1320	1416	1335	N06	E17	.291	9034	23.8	56	-N			1335	.15	.16		151	
CAPE	22	1239	1254	1243	N19	E55	.821	9037	26.7	15	1F		C	1243	1.21	2.10			
GRP 9841	22	1358	1414	1401	N16	W13	.286	9032	21.6	16	-N				.46				4 4 4
CAPE	22	1356	1414	1402	N16	W12	.274	9032	21.7	18	-F		C	1402	.80	.80			H
MCMA	22	1357	1415	1402	N16	W15	.312	9032	21.5	18	-N		C	1402	.26	.26			EH
ATHN	22	1359	1411	1400	N17	W12	.285	9032	21.7	12	-N	2		1400	.50	.50			
CATA	22	1400	1416	1400	N15	W12	.263	9032	21.7	16	-N			1400	.27	.28		178	
GRP 9842	22	1359	1409	1400	N19	W58	.849	9025	18.2	10	-N				.86				5 5 5
CAPS	22	1358E	1409		N19	W59	.857	9025	18.2	11D	1F	3		1401	1.20	2.00		155	G
MCMA	22	1358	1410	1400	N20	W58	.850	9025	18.2	12	-N		C	1400	.52	1.00			E
CAPE	22	1358	1410	1359	N19	W57	.840	9025	18.3	12	-N		C	1359	.58	1.10			CFV
ATHN	22	1359	1408	1401	N18	W58	.848	9025	18.2	9	-N	2		1401	.99	.80			
CATA	22	1400	1407	1400	N18	W57	.839	9025	18.3	7	-N			1400	1.01	1.92		186	
GRP 9843	22	1413	1424	1416	N15	E39	.636	9037	25.5	11	-N				.34				5 5 4
CANA	22	1411	1418	1414	N14	E38	.621	9037	25.4	7	-N		C		.30	.40			
CAPS	22	1412	1425		N14	E37	.608	9037	25.4	13	-N	3		1420	.30	.40		160	
ATHN	22	1413	1423D	1415	N17	E42	.678	9037	25.7	10D	-N	2		1415		.90			
MCMA	22	1415	1425	1418	N14	E38	.621	9037	25.4	10	-N		C	1418	.31	.40			DH
CAPE	22	1415	1428	1418	N14	E38	.621	9037	25.4	13	-N		C	1428	.45	.60			CH
CAPE	22	1430	1449	1436	N10	E19	.332	9034	24.0	19	-F		C	1436	.18	.20			
GRP 9845	22	1530	1543	1534	N11	E19	.336	9034	24.1	13	-N				.48				6 6 5
CANA	22	1527E	1532D	1530U	N10	E19	.332	9034	24.1	5D	-N		C		.20	.20			
LOCK	22	1530	1541	1533	N10	E18	.316	9034	24.0	11	-N		C	1533	.50	.60		20	
CAPS	22	1530E	1548		N10	E20	.348	9034	24.1	18D	-B	3		1532	1.00	1.10		205	
MCMA	22	1530	1544	1533	N11	E18	.320	9034	24.0	14	-N		C	1533	.52	.50			E
MCMA	22	1532	1605	1538	N13	E22	.391	9034	24.3	33	-F		C	1538	.26	.30			D
HOUS	22	1533	1539	1534	N10	E19	.332	9034	24.1	6	-F		C		.10	.10		100	
SACP	22	1538E	1538D	1538U	N11	E18	.320	9034	24.0		-N		P		.20	.20			

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9846	22	1616	1652	1623	N11	E18	.320	9034	24.0	36	-N				.97				4 4 4
LOCK	22	1615	1648	1622	N11	E19	.336	9034	24.1	33	-N		C	1622	1.10	1.20		20	
MCMA	22	1615	1650	1622	N12	E18	.325	9034	24.0	35	-B		C	1622	.83	.90			E
HOUS	22	1618	1649	1623	N11	E18	.320	9034	24.0	31	-N		C		.40	.40		200	
SACP	22	1619E	1702U	1625U	N11	E18	.320	9034	24.0	43U	-N		C		1.55	1.53			
GRP 9846	22	1629	1716	1635	N12	E19	.341	9034	24.1	47	-B				1.43				2 2 2
CANA	22	1629E	1700	1635U	N11	E20	.352	9034	24.2	31D	-N		C		1.00	1.10			E
HALE	22	1633E	1732		N12	E18	.325	9034	24.0	59D	-B	2	P	1633	1.86	2.00			
HALE	22	1644	1701	1648	S10	W09	.305	9036	22.0	17	-B	2	C	1648	.46	.50			
GRP 9848	22	1646	1658	1650	N16	W14	.299	9032	21.6	12	-F				.40				4 4 4
LOCK	22	1644	1657	1649	N16	W15	.312	9032	21.6	13	-N		C	1649	.50	.60		20	
SACP	22	1644	1700	1649	N16	W14	.299	9032	21.6	16	-N		C		.59	.58			
MCMA	22	1646	1657	1650	N17	W15	.322	9032	21.6	11	-F		C	1650	.31	.30			E
HOUS	22	1649	1657	1650	N16	W13	.286	9032	21.7	8	-F		C		.20	.20		100	
GRP 9849	22	1723	1740	1727	N16	W09	.239	9032	22.0	17	-N				.69				6 6 5
CANA	22	1720	1732	1725	N16	W07	.220	9032	22.2	12	-N		C		.40	.40			E
SACP	22	1720U	1745U	1727U	N16	W09	.239	9032	22.0	25U	-N		C		.68	.67			
LOCK	22	1722	1740	1727	N15	W09	.227	9032	22.0	18	-N		C	1727	.80	.80		20	
MCMA	22	1724	1738	1727	N16	W10	.250	9032	22.0	14	-F		C	1727	.72	.80			E
HOUS	22	1725	1738	1727	N15	W08	.216	9032	22.1	13	-F		C		.20	.20		100	
HALE	22	1726	1745		N16	W09	.239	9032	22.1	19	-N	2	P	1726	.83	.82			
GRP 9850	22	1745	1755	1749	N11	E22	.383	9034	24.4	10	-F				.41				4 4 4
SACP	22	1744U	1754U	1749U	N11	E21	.367	9034	24.3	10U	-F		C		.59	.58			
LOCK	22	1744	1755	1747	N10	E23	.395	9034	24.5	11	-F		C	1747	.40	.40		10	
HOUS	22	1745	1753	1748	N11	E22	.383	9034	24.4	8	-F		C		.20	.20		100	
HALE	22	1745	1759	1750	N11	E22	.383	9034	24.4	14	-N	2	C	1750	.46	.50			
HOUS	22	1837	1846	1841	N16	W59	.855	9025	18.4	9	-F		C		.10	.20		100	
HOUS	22	1852	1858	1854	N13	W48	.742	9027	19.2	6	-F		C		.10	.10		100	
GRP 9853	22	1857	1940	1908	N09	E14	.248	9034	23.8	43	-F				.77				5 4 4
MCMA	22	1856	1950D		N11	E16	.289	9034	24.0	54D	-N		C	1902	.62	.70			E
LOCK	22	1857	1930	1903	N07	E14	.242	9034	23.8	33	-F		C	1903	.70	.70		10	
HOUS	22	1859	1915	1902	N08	E14	.245	9034	23.8	16	-F		C		.30	.30		100	
HALE	22	1901E	1958U		N08	E13	.228	9034	23.8	57U	-N	2	P	1901	1.44	1.50			
SACP	22	1917E	1948U	1920D	N09	E12	.216	9034	23.7	31U	-F		P		.68	.67			
GRP 9854	22	2040	2052	2043	N08	E15	.261	9034	24.0	12	-F				.15				2 2 2
HOUS	22	2039	2051	2041	N08	E11	.195	9034	23.7	12	-F		C		.10	.10		100	
LOCK	22	2041	2052	2045	N08	E18	.310	9034	24.2	11	-F		C	2045	.20	.20		10	
HOUS	22	2120	2133	2122	N12	E18	.325	9034	24.2	13	-F		C		.10	.10		100	
GRP 9856	22	2211	2253	2217	N10	E14	.253	9034	24.0	42	1B				2.08				3 3 2
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	9034	24.0	16	-N		C		.50	.50		200	E
HALE	22	2212	2313D	2217	N10	E14	.253	9034	24.0	61D	1B	1	P	2217	2.06	2.10			
	23	0010	0030	NO FLARE PATROL															
GRP 9857	23	0126	0135	0130	N14	W51	.776	9027	19.2	9	-N				.41				2 2 2
CRON	23	0125	0137	0130	N14	W52	.787	9027	19.2	12	-N		C		.50	.80			H
HALE	23	0126	0132	0130U	N13	W50	.765	9027	19.3	6	-N	1	P	0130	.31	.50			
HALE	23	0132E	0137	0133	N08	E16	.278	9034	24.3	5D	-F	1	P	0133	.21	.22			
GRP 9859	23	0202	0235	0210	N09	E07	.137	9034	23.6	33	-N				.81				2 2 2
HALE	23	0158	0235	0210	N09	E08	.153	9034	23.7	37	-N	1	C	0210	.62	.62			E
CRON	23	0205	0235	0210	N08	E06	.114	9034	23.5	30	-N		C		1.00	1.00			
CRON	23	0215	0223	0220	S25	W90	1.001	9023	16.3	8	-F		C		.40	1.60			
GRP 9861	23	0255	0311	0258	N08	E06	.114	9034	23.6	16	-N				.51				3 3 3
HALE	23	0254	0315D	0257	N08	E06	.114	9034	23.6	21D	-N	1	P	0257	.52	.52			E
CRON	23	0255	0313	0258	N07	E06	.108	9034	23.6	18	-N		C		.60	.60			
MANI	23	0256	0306	0259	N10	E05	.120	9034	23.5	10	-F	2		0259	.41	.42			
HALE	23	0327	0338E	0331U	N13	E39	.632	9037	26.1	11D	-F	1	P	0331	.15	.20			
HALE	23	0337E	0344		N08	E06	.114	9034	23.6	7D	-N	1	P	0338	.31	.32			E
CRON	23	0440	0510	0445	S14	W73	.966	9028	17.7	30	-F		C		.20	.50			

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9865	23	0459	0511	0502	N19	W57	.840	9027	18.9	12	-F				.36				2 2 2
CRON	23	0458	0515	0503	N17	W56	.829	9027	19.0	17	-N		C		.40	.70			
MANI	23	0459	0507	0500	N20	W58	.850	9027	18.9	8	-F	2		0500	.31	.56			
GRP 9866	23	0535	0552	0542	N14	E09	.216	9034	23.9	17	1B				3.66				2 2 2
CRON	23	0534	0550	0540	N13	E08	.192	9034	23.8	16	1B		C		3.80	3.90			
ATHN	23	0536	0554	0543	N14	E10	.228	9034	24.0	18	1N	2		0543	3.51	3.60			
CRON	23	0727	0749U	0730U	N08	E27	.453	9034	25.3	22U	-N		C		.50	.60			
CATA	23	0740	0750	0745	N30	E43	.736	9037	26.5	10	-N			0745	.39	.55		166	
GRP 9869	23	0852	0915	0900	N17	W19	.375	9032	21.9	23	-F				1.34				4 4 4
BUCA	23	0850E	0915D		N16	W19	.367	9032	21.9	25D	-N		P	0858	1.66	1.80			
MANI	23	0851	0914D	0859	N17	W17	.348	9032	22.1	23D	1F	1		0859	2.06	2.18			
MONT	23	0856	0915	0857	N17	W19	.375	9032	21.9	19	-N		C	0857	1.03				
CRON	23	0858E	0910U	0903U	N18	W21	.409	9032	21.8	12U	-F		C		.60	.70			
MONT	23	0920	1030	0925	N20	E41	.675	9037	26.5	70	1N		C	0925	1.55				
MONT	23	1016	1100	1030	N10	E07	.146	9034	24.0	44	-N		C	1030	1.03				
CATA	23	1045	1100	1050	N09	E25	.424	9034	25.3	15	-F			1050	.27	.31		145	
GRP 9873	23	1115	1144	1120	N19	E39	.648	9037	26.4	29	-N				1.03				2 1 1
MONT	23	1115	1135	1120	N27	E40	.693	9037	26.5	20	-N		C	1120	1.03				
CANA	23	1135U	1152	1142U	N11	E37	.602	9037	26.3	17U	-F		C		.20	.20			
GRP 9874	23	1116	1133		N10	E05	.120	9034	23.8	17	-N				.71				2 2 2
CATA	23	1112	1135	1115	N12	E06	.156	9034	23.9	23	-N			1115	.76	.78		170	
SALO	23	1120	1130		N08	E03	.071	9034	23.7	10	-N		V	1120	.66	.70	1.40		
GRP 9875	23	1118	1128	1120	N11	E24	.414	9034	25.3	10	-F				.33				2 2 2
CATA	23	1115	1125	1120	N12	E24	.417	9034	25.3	10	-N			1120	.25	.28		155	
SALO	23	1120	1130		N10	E24	.411	9034	25.3	10	-F		V	1120	.41	.50	1.30		
GRP 9876	23	1205	1240	1215	N16	E38	.626	9037	26.4	35	-N				.86				2 1 1
CATA	23	1205	1350	1215	N21	E41	.679	9037	26.6	105	-N			1215	.86	1.18		162	
CATA	23	1205	1240	1205	N11	E36	.589	9037	26.2	35	-N			1205	.20	.24		164	
CAPS	23	1257E	1310		N20	E40	.664	9037	26.5	13D	-N	3		1302	1.00	1.30		164	E
GRP 9877	23	1216	1226	1217	N10	E25	.426	9034	25.4	10	-N				.24				3 3 3
CANA	23	1212	1218	1214	N10	E26	.441	9034	25.5	6	-F		C		.20	.20			
MONT	23	1216	1220	1218	N10	E26	.441	9034	25.5	4	-N		C	1218	.21				
CATA	23	1220	1240	1220	N11	E24	.414	9034	25.3	20	-N			1220	.31	.35		151	
GRP 9878	23	1300	1310	1301	N11	E23	.398	9037	25.3	10	-B				.91				4 4 4
ATHN	23	1257	1311	1259	N12	E22	.387	9037	25.2	14	-B	2		1259	1.65	1.70			
CATA	23	1300	1315	1300	N12	E23	.402	9037	25.3	15	-B			1300	.74	.81		216	
MONT	23	1301	1306	1302	N10	E25	.426	9037	25.4	5	-B		C	1302	.62				
MCMA	23	1301	1308	1302	N10	E22	.380	9037	25.2	7	-N		C	1302	.62	.70			E
ATHN	23	1321	1326	1322	N17	E08	.244	9034	24.2	5	-N	2		1322	1.32	1.30			
GRP 9880	23	1332	1340	1335	N10	E24	.411	9037	25.4	8	-F				.52				6 6 6
ATHN	23	1319	1340	1323	N12	E22	.387	9037	25.2	21	-N	2		1323	.50	1.40			
SACP	23	1327	1346	1333	N10	E24	.411	9037	25.4	19	-N		C		.70	.71			
CANA	23	1333E	1335D	1334U	N09	E25	.424	9037	25.4	2D	-F		C		.40	.40			
MONT	23	1333	1337	1335	N10	E25	.426	9037	25.4	4	-N		C	1335	.52				
HUAN	23	1334	1339		N10	E23	.395	9037	25.3	5	-F	1	C	1337	.57	.57			E
MCMA	23	1335	1340	1336	N10	E22	.380	9037	25.2	5	-F		C	1336	.41	.40			E
GRP 9881	23	1352	1420	1416	N20	E39	.652	9037	26.5	28	-N				.63				2 1 1
LOCA	23	1352E	1415		N20	E40	.664	9037	26.6	23D	-N		S	1352	.63	.80			
ATHN	23	1414	1425	1416	N20	E38	.640	9037	26.4	11	-N	2		1416	1.32	1.80			
LOCA	23	1352E	1403		S15	W76	.978	9028	17.9	11D	-N		S	1352					G
GRP 9883	23	1448	1500	1450	N10	E21	.364	9037	25.2	12	-N				.84				6 6 5
ATHN	23	1445	1457	1447	N10	E20	.348	9037	25.1	12	-B	2		1447	1.32	1.40			
LOCA	23	1447	1459	1450	N10	E21	.364	9037	25.2	12	-N		V	1450	.53	.50			
MCMA	23	1448	1500	1451	N10	E22	.380	9037	25.3	12	-N		C	1451	1.03	1.00			EHL
HOUS	23	1449	1457	1451	N10	E20	.348	9037	25.1	8	-F		C		.10	.10		100	
SANM	23	1449	1502	1451	N11	E22	.383	9037	25.3	13	-N		C	1451	.65	.70			
SACP	23	1451D	1504	1452	N11	E21	.367	9037	25.2	13D	-N		C		.68	.68			
GRP 9884	23	1454	1506	1458	N22	E39	.659	9037	26.5	12	-F				.35				2 2 2
CAPS	23	1450E	1459		N20	E40	.664	9037	26.6	9D	-N	3		1455	.40	.50		160	D
HOUS	23	1457	1513	1458	N23	E37	.641	9037	26.4	16	-F		C		.30	.40		100	

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
SACP	23	1520	1730	1623	S15	W76	.978	9028	17.9	130	1B		C		1.12	2.81			
MCMA	23	1525	1533	1527	N10	W01	.085	9034	23.6	8	-N		C	1527	.31	.30			E
SACP	23	1616	1702	1629	N10	W03	.098	9034	23.5	46	-F		C		.81	.80			
GRP 9888	23	1742	1752	1745	N09	E21	.361	9034	25.3	10	-F				.77				4 4 3
LOCK	23	1740	1753	1744	N08	E21	.359	9034	25.3	13	-F		C	1744	.70	.80		10	
SACP	23	1740	1754	1746	N10	E21	.364	9034	25.3	14	-F		C		1.01	1.01			
HOUS	23	1743	1750	1744	N09	E20	.345	9034	25.2	7	-F		C		.10	.10		100	
BOUL	23	1743	1751	1746	N09	E22	.377	9034	25.4	8	-N		C		.60	.60			H
HOUS	23	1745	1755	1748	N20	E36	.615	9037	26.4	10	-N		C		.20	.30		200	
LOCK	23	1852	1910	1857	N20	E38	.640	9037	26.6	18	-F		C	1857	.60	.80		10	
MCMA	23	1936	1948	1938	N10	W02	.090	9034	23.7	12	-F		C	1938	.83	.90			E
LOCK	23	2350	0002	2353	N17	E31	.538	9037	26.3	12	-F		C	2353	.60	.70		10	
CRON	24	0104	0115	0108	N18	E82	.987	9044	30.2	11	-F		C		.40	1.40			
GRP 9894	24	0129	0137	0132	N11	E16	.290	9034	25.3	8	-N				.46				2 2 2
MANI	24	0128	0133D	0131	N12	E19	.342	9034	25.5	5D	-B	2		0131	.62	.65			E
CRON	24	0130	0137	0132	N09	E13	.233	9034	25.0	7	-F		C		.30	.30			
CRON	24	0423	0450	0425	S11	W90	1.000	9023	17.4	27	-F		C		.30	1.20			K
CRON	24	0423	0450	0439	S11	W90	1.000	9023	17.4	27	-F		C						
CRON	24	0527	0542	0529	N18	E79	.978	9044	30.2	15	-F		C		.40	1.20			K
CRON	24	0527	0542	0536	N18	E79	.978	9044	30.2	15	-F		C						
CRON	24	0608	0623	0613	N11	E13	.244	9034	25.2	15	-N		C		.50	.50			H
CRON	24	0616	0626	0620U	N12	E14	.266	9034	25.3	10	-F		C		.40	.40			
CRON	24	0644	0658	0650	S15	W90	1.000	9023	17.5	14	-N		C		.40	1.60			
GRP 9900	24	0645	0658	0648	S15	W86	.999	9028	17.8	13	-B				.44				2 2 2
MANI	24	0645	0659	0648	S14	W85	.998	9028	17.9	14	-B	2		0648	.52	1.55			
CAPE	24	0648E	0656		S15	W86	.999	9028	17.8	8D	-N		P	0648	.36				
GRP 9901	24	0741	0832	0749	N20	E29	.528	9037	26.5	51	1N				2.67				7 6 6
CAPS	24	0735E	0836		N19	E27	.496	9037	26.3	61D	1B	3		0752	3.80	4.60		220	FK
KODA	24	0740	0820	0747	N21	E34	.596	9037	26.9	40	1F		V	0745	1.93	2.40	1.64		JL
CATA	24	0742	0840	0750	N21	E27	.509	9037	26.3	58	1N			0750	2.84	3.35		200	
BUCA	24	0745E	0748D		N20	E26	.490	9037	26.3	3D	1N		P	0748	3.32	3.80			
MANI	24	0745	0814	0750	N20	E30	.541	9037	26.6	29	-N	2		0750	1.34	1.60			
ATHN	24	0757E	0850D		N20	E30	.541	9037	26.6	53D	1N	2		0801	2.77	3.30			
MONT	24	0823E	0945D		N20	E30	.541	9037	26.6	82D	1B		C	0840	4.13				
CRON	24	0804	0820	0808	S14	W90	1.000	9028	17.6	16	-F		C		.30	1.20			I
CRON	24	0846	0908	0849	S14	W90	1.000	9028	17.6	22	-F		C		.30	1.20			I
GRP 9904	24	1037	1053	1040	N20	E29	.528	9037	26.6	16	-N				4.13				2 2 1
CANA	24	1037E	1050	1037U	N19	E28	.509	9037	26.5	13D	-F		C		.80	.90			
MONT	24	1037	1055	1043	N20	E29	.528	9037	26.6	18	1B		C	1043	4.13				
GRP 9905	24	1056	1117	1100	N09	W11	.201	9034	23.6	21	1N				1.44				5 5 5
CANA	24	1043	1055	1046	N12	W04	.137	9034	24.1	12	-F		C		.30	.30			
CANA	24	1050	1104	1056	N09	W11	.201	9034	23.6	14	-F		C		1.20	1.20			
MONT	24	1054	1130	1102	N10	W14	.254	9034	23.4	36	1N		C	1102	1.03				
ATHN	24	1055	1110	1057	N08	W12	.212	9034	23.6	15	1N	2		1057	1.98	2.10			
CATA	24	1055	1125	1105	N09	W11	.201	9034	23.6	30	1N			1105	2.17	2.23		195	
SALO	24	1105	1115		N06	W10	.173	9034	23.7	10	-N		V	1110	.83	.90	1.10		
CATA	24	1130	1150	1135	N19	E24	.457	9037	26.3	20	-N			1135	.78	.93		159	
CANA	24	1231	1240	1232	N10	E09	.176	9034	25.2	9	-F		C		.50	.50			
GRP 9908	24	1243	1310		N11	W06	.145	9034	24.1	27	-N				1.51				2 2 2
MONT	24	1243	1245D		N11	W06	.145	9034	24.1	2D	-N		C	1245	.52				
CAPS	24	1250E	1310D		N10	W05	.121	9034	24.2	20D	1N	1		1252	2.50	2.50		160	

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9909	24	1303	1333	1308	N10	W06	.133	9034	24.1	30	-N				1.48				4 4 4
CATA	24	1230	1345	1305	N11	W06	.145	9034	24.1	75	1N			1305	2.40	2.44		178	
SANM	24	1301E	1340		N10	W07	.147	9034	24.0	39D	-N		P	1305	.65	.65			
CANA	24	1305	1325	1311	N11	W05	.133	9034	24.2	20	-N		C		1.20	1.20			
ATHN	24	1309E	1323	1309	N08	W07	.131	9034	24.0	14D	-N	1		1309	1.65	1.60			
HOUS	24	1412	1434	1414	S12	W90	1.000	9028	17.8	22	-N		C		.40	1.60		200	
HOUS	24	1455	1515	1458	S12	W90	1.000	9028	17.9	20	1N		C		.80	3.20		200	H
GRP 9912	24	1510	1524	1512	N11	W07	.157	9034	24.1	14	-N				.72				3 3 3
MCMA	24	1509	1527D	1512	N10	W08	.161	9034	24.0	18D	-N		C	1512	.83	.90			F
SACP	24	1510	1522	1512	N12	W06	.157	9034	24.2	12	-N		C		1.01	.99			
HUAN	24	1511	1523		N12	W07	.169	9034	24.1	12	-F	1	C	1513	.31	.31			E
GRP 9913	24	1518	1526	1520	N10	E07	.147	9037	25.2	8	-F				.51				2 2 2
SACP	24	1517	1526	1520	N09	E07	.138	9037	25.2	9	-N		C		.71	.70			
MCMA	24	1519	1525	1520	N10	E06	.133	9037	25.1	6	-F		C	1520	.31	.30			E
GRP 9914	24	1536	1611	1540	N19	E24	.457	9037	26.5	35	-F				.48				5 5 5
HOUS	24	1533	1614	1541	N19	E23	.444	9037	26.4	41	-F		C		.40	.50		100	
SACP	24	1536	1610U	1542	N20	E23	.452	9037	26.4	34U	-F		C		.71	.72			
MCMA	24	1538	1609		N20	E25	.477	9037	26.5	31	-N		C	1541	.52	.60			E
LOCK	24	1538E	1610	1538U	N17	E25	.457	9037	26.5	32D	-F		C	1538	.50	.60		10	
HUAN	24	1545E	1610D		N21	E27	.509	9037	26.7	25D	-F	1	C	1547	.25	.26			D
HUAN	24	1600	1610D		N19	E23	.444	9037	26.4	10D	-F	1	C	1604	.31	.31			D
GRP 9915	24	1607	1648	1613	N09	W13	.233	9034	23.7	41	1B				2.87				5 5 5
MCMA	24	1605	1710		N10	W10	.191	9034	23.9	65	1B		C	1616	2.06	2.10			E
HUAN	24	1607	1627		N09	W13	.233	9034	23.7	20	1N	1	P	1617	2.89	2.92			
SACP	24	1607	1658U	1614U	N09	W14	.249	9034	23.6	51U	2B		C		5.59	5.49			
HOUS	24	1608	1638	1611	N09	W15	.265	9034	23.5	30	-N		C		1.80	1.90		200	
LOCK	24	1608	1645	1613	N09	W13	.233	9034	23.7	37	-B		C	1613	2.00	2.00		30	
LOCK	24	1617	1623	1619	N18	E27	.490	9037	26.7	6	-F		C	1619	.20	.20		10	
GRP 9917	24	1725	1757	1740	N19	E22	.431	9037	26.4	32	-N				.63				3 3 3
HALE	24	1718	1750	1740	N19	E21	.418	9037	26.3	32	-N	1	C	1740	.46	.50			
MCMA	24	1722	1755	1740	N20	E23	.452	9037	26.4	33	-N		C	1740	.52	.60			EK
SACP	24	1734	1805U	1740	N19	E21	.418	9037	26.3	31U	-N		C		.92	.92			
GRP 9917	24	1721	1753	1725	N19	E24	.457	9037	26.5	32	-F				.30				2 2 1
LOCK	24	1720	1750	1725	N17	E24	.443	9037	26.5	30	-F		C	1725	.30	.30		10	
MCMA	24	1722	1755	1724	N20	E23	.452	9037	26.4	33	-N								
GRP 9918	24	1923	1938	1928	N19	E20	.405	9037	26.3	15	-N				.83				5 5 5
MCMA	24	1922	1940	1927	N20	E22	.439	9037	26.5	18	-N		C	1927	.41	.50			EH
SACP	24	1922	1940	1928	N19	E19	.393	9037	26.2	18	-N		C		1.02	1.02			
HUAN	24	1924	1931		N19	E19	.393	9037	26.2	7	-F	1	C	1927	.88	.88			ET
BOUL	24	1925	1942	1929	N19	E19	.393	9037	26.2	17	-F		C		1.20	1.30			H
HALE	24	1929E	1930D		N20	E21	.427	9037	26.4	1D	-N	1	C	1930	.62	.70			
GRP 9919	24	2014	2109	2043	S21	W02	.442	9035	24.7	55	1F				3.44				4 4 3
SACP	24	2014U	2215U	2050U	S20	W01	.425	9035	24.8	121U	2F		C		5.81	5.86			
HOUS	24	2035	2100	2038	S19	W02	.411	9035	24.7	25	-F		C		.60	.70		100	
LOCK	24	2037E	2200	2037U	S22	W01	.457	9035	24.8	83D	1N		C	2037	3.00	3.30		20	L
BOUL	24	2041E	2118D	2046U	S21	W02	.442	9035	24.7	37D	-N		C		1.50	1.70			E
GRP 9920	24	2157	2217	2203	N10	W11	.207	9034	24.1	20	-N				1.28				3 3 3
LOCK	24	2155	2220	2205	N10	W12	.222	9034	24.0	25	-N		C	2205	1.20	1.20		20	
HOUS	24	2155	2209	2159	N08	W16	.278	9034	23.7	14	-F		C		.40	.40		100	
HOUS	24	2158	2215	2202	N11	W09	.185	9034	24.2	17	-N		C		.20	.20		200	
SACP	24	2159	2216U	2201	N11	W10	.199	9034	24.2	17U	-N		C		2.04	2.01			
HALE	24	2321	2347	2325	S17	W04	.383	9035	24.7	26	-F	1	C	2325	.15	.20			
HALE	24	2334	2340	2335	N20	E20	.414	9037	26.5	6	-F	1	C	2335	.21	.22			
CRON	25	0044	0101	0046	N11	W90	1.000	9025	18.3	17	-F		C		.20	.80			K
CRON	25	0044	0101	0054	N11	W90	1.000	9025	18.3	17	-F		C						
CRON	25	0046	0059	0050	N22	W90	.999	9025	18.3	13	-N		C		.20	.80			
CRON	25	0227	0247	0230	N11	W90	1.000	9025	18.4	20	-F		C		.20	.80			
CRON	25	0237	0247	0242	S21	E85	.999	9045	31.5	10	-F		C		.20	.70			
ATHN	25	0712	0725	0713	N08	W22	.375	9034	23.6	13	-N	2		0713	.50	.50			

SOLAR FLARES
OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
CRON	25	0743	0753	0747	S18	E80	.991	9043	31.3	10	-F		C		.20	.60			
ATHN	25	0753	0758	0754	N08	W21	.359	9034	23.8	5	-N	2		0754	.33	.40			
GRP 9930	25	0832	0851	0832	N09	W26	.440	9034	23.4	19	-B				.52				2 2 2
ATHN	25	0831	0853	0832	N07	W28	.468	9034	23.3	22	-B	2		0832	.83	.90			
CAPS	25	0832	0849		N10	W23	.396	9034	23.6	17	-B	3		0835	.20	.20		196	D
GRP 9931	25	1018	1028	1021	N10	W17	.302	9034	24.2	10	-F				.74				2 2 2
CANA	25	1017	1022	1019	N10	W17	.302	9034	24.2	5	-F		C		.40	.40			
CAPE	25	1019	1033	1022	N10	W17	.302	9034	24.2	14	-N		C	1022	1.07	1.10			HV
GRP 9932	25	1033	1045	1035	N15	W29	.503	9034	23.3	12	-N				.49				2 2 2
ATHN	25	1032	1046	1035	N10	W30	.502	9034	23.2	14	-N	2		1035	.66	.70			
CAPE	25	1034	1043	1035	N19	W28	.510	9034	23.3	9	-N		C	1035	.31	.40			
ATHN	25	1235E	1250	1240	N10	W30	.502	9034	23.3	15D	-N	2		1240	.66	.70			
GRP 9934	25	1335	1442	1349	N09	W24	.409	9034	23.8	67	1N				5.07				5 5 4
CAPS	25	1305	1427		N10	W23	.396	9034	23.8	82	2N	2		1347	9.00	10.00		204	FHK
CAPE	25	1316	1449	1350	N09	W24	.409	9034	23.8	93	2N		C	1330	5.69	6.30			FJKH
SACP	25	1327E	1444	1348	N09	W23	.393	9034	23.8	77D	1B		C		3.53	3.53			
MCMA	25	1338E	1510D	1350	N09	W25	.424	9034	23.7	92D	1B		C	1350	2.06	2.30			F
HOUS	25	1341	1420	1346	N07	W23	.390	9034	23.8	39	-N		C		1.00	1.10		200	E
GRP 9934	25	1327	1421	1335	N11	W24	.414	9034	23.8	54	-N				2.47				5 5 3
HOUS	25	1327	1341	1333	N07	W23	.390	9034	23.8	14	-N		C		.30	.30		200	
MONT	25	1327	1352D	1335	N08	W27	.454	9034	23.5	25D	1B		C	1335	3.09				
LOCA	25	1327	1425	1335	N19	W23	.445	9034	23.8	58	-N		V	1335	1.68	1.80			
CAPE	25	1328	1449	1340	N09	W18	.314	9034	24.2	81	-N		C	1340	.36	.40			
ATHN	25	1333E	1419	1333	N10	W30	.502	9034	23.3	46D	1N	2		1333	2.64	3.00			
GRP 9934	25	1407	1439	1412	N10	W24	.411	9034	23.8	32	1N				6.76				2 2 1
CAPE	25	1316	1449	1411	N09	W23	.393	9034	23.8	93	2N		C	1411	6.76	7.40			
CAPE	25	1403	1418	1411	N12	W18	.327	9034	24.2	15	-N		C	1411	1.43	1.50			J
ATHN	25	1410	1429	1412	N10	W28	.472	9034	23.5	19	-N	2		1410	.99	1.10			
GRP 9935	25	1444	1505	1451	N10	W31	.517	9034	23.3	21	-N				.70				5 5 5
CAPE	25	1443	1519	1501	N10	W30	.502	9034	23.4	36	-N			1501	.86	1.00			K
CAPS	25	1444	1458		N11	W30	.504	9034	23.4	14	-N	1		1450	1.20	1.40		160	E
SACP	25	1444E	1512	1447	N10	W30	.502	9034	23.4	28D	-N		C		.40	.42			
HOUS	25	1445	1457	1449	N08	W31	.514	9034	23.3	12	-N		C		.30	.30		200	
ATHN	25	1445	1458	1447	N10	W32	.531	9034	23.2	13	-N	2		1447	.72	.80			
CAPE	25	1521	1529	1524	N19	E31	.549	9041	28.0	8	-F		C	1524	.45	.50			
LOCK	25	1536	1545	1539	N11	W25	.430	9034	23.8	9	-F		C	1539	.40	.40		10	
GRP 9938	25	1559	1629	1615	N11	W26	.445	9034	23.7	30	-F				.55				2 2 2
HUAN	25	1558	1605	1601	N10	W25	.427	9034	23.8	7	-F	2	C	1601	.45	.46			E
LOCK	25	1600	1626	1615	N11	W26	.445	9034	23.7	26	-F		C	1615	.60	.70		10	
HUAN	25	1611	1631	1614	N10	W26	.442	9034	23.7	20	-N	2	C	1614	.50	.50			E
GRP 9939	25	1654	1701	1657	N10	W25	.427	9034	23.8	7	-F				.50				3 3 3
HOUS	25	1654	1700	1656	N10	W25	.427	9034	23.8	6	-F		C		.40	.40		100	
LOCK	25	1654	1704	1658	N11	W26	.445	9034	23.8	10	-F		C	1658	.60	.70		10	J
SACP	25	1655	1700	1656	N10	W25	.427	9034	23.8	5	-F		C		.51	.51			
HOUS	25	1815	1823	1816	N09	W78	.976	9027	19.9	8	-F		C		.30	.90		100	
HUAN	25	1850	1854D		N10	W26	.442	9034	23.8	4D	-F	2	C	1854	.21	.21			DH
GRP 9942	25	1916	1926	1919	N19	E42	.685	9041	29.0	10	-F				.33				3 3 3
HOUS	25	1915	1925	1919	N19	E42	.685	9041	29.0	10	-F		C		.20	.30		100	
LOCK	25	1915	1927	1920	N17	E43	.691	9041	29.0	12	-F		C	1920	.50	.70		10	
SACP	25	1917	1925	1919	N20	E42	.688	9041	29.0	8	-N		C		.30	.35			
HUAN	25	1948	2009	1950	N10	W31	.517	9034	23.5	21	-F	2	C	1950	.31	.32			E
GRP 9944	25	2107	2115	2109	N10	W35	.574	9034	23.3	8	-N				.58				4 4 4
HUAN	25	2043	2107		N10	W30	.502	9034	23.6	24	-F	2	C	2046	.21	.21			D
SACP	25	2106	2116	2108	N10	W35	.574	9034	23.3	10	-N		C		.51	.54			
LOCK	25	2106	2117	2110	N09	W36	.587	9034	23.2	11	-N		C	2110	.70	.80		20	
HOUS	25	2108	2118	2109	N10	W37	.602	9034	23.1	10	-N		C		.90	1.10		200	

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9945	25	2129	2149	2132	N10	W35	.574	9034	23.3	20	-B				1.11				4 4 4
LOCK	25	2128	2144	2130	N09	W36	.587	9034	23.2	16	-B		C	2130	1.00	1.20		30	
HOUS	25	2129	2140	2133	N10	W37	.602	9034	23.1	11	-N		C		.90	1.10		200	
SACP	25	2129	2145U	2131	N09	W34	.559	9034	23.3	16U	-B		C		1.41	1.51			
HALE	25	2131	2205D	2133	N11	W35	.575	9034	23.3	34D	-N	1	C	2133	1.13	1.40			T
SACP	25	2150U	2235U	2204	N09	W33	.544	9034	23.4	45U	1N		C		2.21	2.33			
	25	2250	2255	NO FLARE PATROL															
GRP 9946	25	2312	0000	2328	N10	W29	.487	9034	23.8	48	1B				2.85				3 3 3
HALE	25	2312E	2332D	2329U	N10	W28	.472	9034	23.9	20D	1B	1	C	2329	1.86	2.10			EF
SACP	25	2314E	2355D	2328	N10	W26	.442	9034	24.0	41D	2B		C		5.14	5.22			
MANI	25	2317E	0000	2327	N10	W33	.546	9034	23.5	43D	1N	2		2327	1.55	1.85			F
MANI	25	2317E	0000	2347	N10	W33	.546	9034	23.5	43D	1N	2		2347	1.75	2.09			
MANI	26	0205	0216	0209	N09	W28	.471	9034	24.0	11	-N	2		0209	.52	.57			
GRP 9948	26	0607	0634	0615	N10	W39	.629	9034	23.3	27	1B				2.66				4 4 4
CAPE	26	0601	0737	0714	N10	W39	.629	9034	23.3	96	1B		C	0714	3.67	4.70			JV
MANI	26	0608	0633	0614	N10	W34	.560	9034	23.7	25	1B	2		0614	2.06	2.50			
ATHN	26	0611	0643	0614	N10	W42	.668	9034	23.1	32	1B	1		0614	2.31	2.90			
KODA	26	0612E	0627	0616	N09	W40	.641	9034	23.3	15D	1B		V	0621	2.58	4.20	2.64		EJK
ATHN	26	0742	0744	0744	N10	W39	.629	9034	23.4	2	-N	1		0744	.99	1.30			
CANA	26	0810	0815	0812	N15	E52	.789	9044	30.2	5	-F		C		.20	.30			
MONT	26	0830	0838	0831	N20	E50	.775	9044	30.1	8	-N		C	0831	.83				
ARCE	26	0855	0905E		N09	W42	.667	9034	23.2	10D	-N		C	0855	.63	.80			E
CANA	26	0926	0932	0928	N15	E52	.789	9044	30.3	6	-F		C		.20	.30			
GRP 9954	26	0935	1011	0947	N11	W33	.548	9034	23.9	36	1N				3.00				8 8 5
CAPS	26	0930	1023		N10	W35	.574	9034	23.8	53	2N	3		0951	4.20	5.10		220	FIW
CANA	26	0932	1015	0938	N14	W34	.569	9034	23.8	43	-N		C		1.10	1.30			EK
CANA	26	0932	1015	0947	N14	W34	.569	9034	23.8	43	-N		C		1.10	1.30			EK
MEUD	26	0933E	1010D		N11	W31	.519	9034	24.1	37D	-N		C						
ARCE	26	0935E	1000E		N10	W33	.546	9034	23.9	25D	-N		C	0940	.63	.70			
KHAR	26	0935E	1020D		N09	W34	.559	9034	23.8	45D	2F		P	0939	5.10	6.50	1.90		EO
CANA	26	0935	0952	0938	N13	W28	.481	9034	24.3	17	-F		C		.20	.20			K
CANA	26	0935	0952	0941	N13	W28	.481	9034	24.3	17	-F		C						
CAPE	26	0939E	0957	0946	N10	W29	.487	9034	24.2	18D	-N		C	0946	.80	.90			
MONT	26	0940	1010	0950	N13	W33	.552	9034	23.9	30	1B		C	0950	3.09				
ATHN	26	0950	1011	0954	N10	W40	.642	9034	23.4	21	-N	2		0954	1.32	1.80			
GRP 9955	26	1011	1036	1015	N10	W39	.629	9034	23.5	25	1N				5.00				5 5 3
CAPE	26	0923	1032	1002	N10	W34	.560	9034	23.8	69	1N		C	1002	2.46	3.00			FKT
CAPS	26	0930	1023		N10	W35	.574	9034	23.8	53	2N	3		1014	9.00	10.80		196	
CAPE	26	1005	1025	1015	N10	W42	.668	9034	23.3	20	1N		C	1015	2.92	3.90			FJTU
ONDR	26	1012E	1032		N09	W41	.654	9034	23.3	20D	2F		V	1017			2.00		FJK
MONT	26	1012	1100	1015	N11	W43	.682	9034	23.2	48	1B		C	1015	3.09				
ATHN	26	1015	1031	1016	N10	W40	.642	9034	23.4	16	-N	2		1016	.99	1.30			
CAPE	26	1152	1204	1153	N10	W45	.705	9034	23.1	12	-N		C	1153	.45	.60			TV
CAPE	26	1227	1317	1245	N08	W34	.558	9034	24.0	50	-N		C	1245	1.17	1.40			FT
GRP 9958	26	1247	1306	1251	N19	E49	.763	9044	30.2	19	-F				.56				3 3 3
CANA	26	1245	1300	1249	N16	E49	.758	9044	30.2	15	-F		C		.60	.90			
MONT	26	1248	1310	1252	N20	E48	.755	9044	30.1	22	-N		C	1252	.83				
HUAN	26	1249	1307D		N20	E50	.775	9044	30.3	18D	-F	1	C	1255	.25	.31			D
CAPE	26	1326	1336	1329	S23	W56	.878	9036	22.4	10	-F		C	1329	.27	.60			C
CATA	26	1347	1445	1347	N19	E49	.763	9044	30.2	58	-N			1347	1.07	1.68		172	
GRP 9961	26	1429	1440	1435	N10	W42	.668	9034	23.5	11	-N				1.07				5 5 4
CAPE	26	1418	1433	1426	N09	W39	.628	9034	23.7	15	1N		C	1426	1.84	2.30			T
CATA	26	1425	1445	1435	N10	W44	.693	9034	23.3	20	-N			1435	.42	.61		182	
CAPE	26	1426	1503	1434	N11	W44	.694	9034	23.3	37	-N		C	1434	.50	.70			T
CAPS	26	1430E	1442		N10	W40	.642	9034	23.6	12D	-N	3		1435	1.60	1.90		182	E
HOUS	26	1431	1441	1434	N10	W43	.681	9034	23.4	10	-F		C		.40	.50		100	
MEUD	26	1433	1438		N10	W40	.642	9034	23.6	5	-F		C						E
CAPE	26	1430	1443	1434	N20	W01	.260	9037	26.5	13	-F		C	1434	.67	.70			

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9963	26	1633	1640	1636	N10	W41	.655	9034	23.6	7	-F				.97				3 3 3
LOCK	26	1632	1642	1636	N12	W41	.657	9034	23.6	10	-F		C	1636	.90	1.20		10	
SACP	26	1633	1642	1636	N09	W41	.654	9034	23.6	9	-N		C		1.31	1.47			
HOUS	26	1634	1637	1636U	N09	W42	.667	9034	23.5	3	-F		C		.70	.90		100	
GRP 9964	26	1706	1721	1709	N19	E06	.262	9037	27.2	15	-F				.33				2 2 2
LOCK	26	1706	1719	1710	N18	E06	.247	9037	27.2	13	-F		C	1710	.40	.40		10	
HALE	26	1706	1722	1708	N20	E07	.284	9037	27.2	16	-F	1	C	1708	.26	.30			
HALE	26	1707	1717	1708	N18	E05	.240	9037	27.1	10	-F	1	C	1708	.21	.22			
GRP 9965	26	1722	1736	1725	N11	W40	.643	9034	23.7	14	-F				.34				2 2 2
HUAN	26	1721	1732		N10	W41	.655	9034	23.6	11	-F	1	C	1726	.31	.35			E
HALE	26	1722	1739	1725	N11	W38	.617	9034	23.9	17	-F	1	C	1725	.36	.50			
HUAN	26	1918	1925D		N10	W44	.693	9034	23.5	7D	-F	1	C	1922	.21	.24			D
GRP 9967	26	1936	1951	1939	N20	W01	.260	9037	26.7	15	-F				.78				4 4 4
LOCK	26	1933	1955	1939	N20	W03	.264	9037	26.6	22	-F		C	1939	.80	.80		10	
SACP	26	1936	1948	1940	N20	W04	.268	9037	26.5	12	-N		C		1.09	1.08			
HOUS	26	1937	1942	1938	N20	E05	.272	9037	27.2	5	-F		C		.40	.40		100	
HALE	26	1938	1957D	1939U	N20	W03	.264	9037	26.6	19D	-F	1	P	1939	.83	.90			
HALE	26	1948	1955	1950	N08	W35	.572	9034	24.2	7	-F	1	C	1950	.21	.30			
GRP 9969	26	2015	2026	2017	N20	W04	.268	9037	26.5	11	-F				.85				2 2 2
LOCK	26	2012	2025	2015	N20	W03	.264	9037	26.6	13	-F		C	2015	.70	.70		10	
SACP	26	2017	2027	2018	N20	W05	.272	9037	26.5	10	-F		C		1.00	.98			
BOUL	26	2135	2149	2138	N20	W04	.268	9037	26.6	14	-F		C		.60	.60			
GRP 9971	26	2139	2144	2140	N09	W44	.693	9034	23.6	5	-F				.63				3 3 3
LOCK	26	2138	2144	2140	N10	W45	.705	9034	23.5	6	-F		C	2140	.50	.70		10	
HOUS	26	2139E	2143	2141	N09	W44	.693	9034	23.6	4D	-F		C		.30	.40		100	
SACP	26	2139	2146	2140	N09	W44	.693	9034	23.6	7	-N		C		1.09	1.27			
GRP 9972	26	2204	2216	2210	N14	W30	.513	9034	24.7	12	-F				.45				2 2 2
LOCK	26	2203	2217	2210	N14	W30	.513	9034	24.7	14	-F		C	2210	.30	.40		10	
SACP	26	2205	2214	2209	N13	W30	.510	9034	24.7	9	-N		C		.60	.63			
SACP	26	2205	2218	2208	N15	W71	.942	9032	21.6	13	-N		C		.51	.97			
GRP 9974	26	2205	2225	2209	N22	W04	.300	9037	26.6	20	-F				1.30				4 4 3
BOUL	26	2204E	2211D	2208U	N21	W05	.288	9037	26.5	7D	-F		C		1.10	1.10			
SACP	26	2204	2231	2209	N20	W05	.272	9037	26.5	27	-N		C		1.80	1.77			
LOCK	26	2205	2230	2210	N20	W05	.272	9037	26.5	25	-N		C	2210	1.00	1.00		20	
HOUS	26	2206	2215	2208	N20	E05	.272	9037	27.3	9	-F		C		.30	.30		100	
LOCK	26	2217	2330	2250	N31	W17	.508	9037	25.7	73	-F		C	2250	1.50	1.80		10	L
LOCK	26	2225	2240	2230	N14	W30	.513	9034	24.7	15	-F		C	2230	.30	.40		10	
GRP 9976	26	2247	2339	2249	N16	W71	.942	9032	21.6	52	-F				.66				2 2 2
SACP	26	2247	2337	2249	N15	W71	.942	9032	21.6	50	-N		C		.61	1.17			
LOCK	26	2255	2340	2310	N16	W70	.936	9032	21.7	45	-F		C	2310	.70	1.70		10	
GRP 9977	26	2300	2346	2330	N14	W30	.513	9034	24.7	46	-F				.40				2 1 1
LOCK	26	2300	2345U	2308	N14	W30	.513	9034	24.7	45U	-F		C	2308	.40	.50		10	K
LOCK	26	2300	2345U	2330	N14	W30	.513	9034	24.7	45U	-F		C	2330	.40	.50		10	K
SACP	26	2341	2346	2342	N14	W54	.808	9034	22.9	5	-N		C		.56	.74			
GRP 9978	26	2344	2358	2347	N19	W06	.262	9037	26.5	14	-N				.83				3 3 3
LOCK	26	2325	2345U	2330	N18	W07	.254	9037	26.5	20U	-F		C	2330	.50	.50		10	
MANI	26	2343	0003	2345	N20	W05	.272	9037	26.6	20	-N	2		2345	.46	.48			
SACP	26	2344	2352	2348	N20	W06	.278	9037	26.5	8	-N		C		1.53	1.50			
GRP 9979	27	0219	0232	0225	N10	W42	.668	9034	23.9	13	1N				1.51				3 3 3
MANI	27	0219E	0230	0220	N10	W41	.655	9034	24.0	11D	-F	2		0220	.83	1.22			
CRON	27	0219E	0232	0226	N10	W41	.655	9034	24.0	13D	1N		C		2.10	2.70			
KODA	27	0225E	0234	0228	N10	W45	.706	9034	23.7	9D	1N		V	0226	1.61	2.20	1.88		EH
CRON	27	0500	0520	0502U	N17	W75	.962	9032	21.6	20	-F		C		.40	1.10			
ATHN	27	0520E	0529	0520	N07	W49	.752	9034	23.5	9D	-N	1		0520	.99	1.40			
GRP 9982	27	0531	0549	0538	N20	W09	.300	9037	26.6	18	-N				2.41				3 3 2
MANI	27	0530	0547	0540	N20	W08	.292	9037	26.6	17	-F	2		0540	.46	.49			
ATHN	27	0532	0555	0535	N19	W11	.305	9037	26.4	23	-N	1		0535	1.16	1.20			
TACH	27	0535E	0545		N21	W08	.307	9037	26.6	10D	1N		V	0536	3.65	3.80	2.60	87	E

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP 9983	27	0636	0658	0641	N20	W09	.300	9037	26.6	22	-F				2.41				2 2 1
CAPE	27	0634	0658	0642	N19	W10	.295	9037	26.5	24	1N		C	0642	2.41	2.50			F
MANI	27	0637	0651D	0639	N20	W08	.292	9037	26.7	14D	-F	2		0639	.41	.43			
CAPE	27	0841	0847	0843	N14	W27	.471	9034	25.3	6	-F		C	0843	.76	.90			
CAPE	27	0851	0915	0902	N19	E40	.662	9044	30.4	24	-F		C	0902	.58	.80			
CATA	27	0900	0905	0900	N09	W50	.763	9034	23.6	5	-B			0900	1.07	1.71		212	
GRP 9987	27	0918	0946	0920	N10	W51	.775	9034	23.6	28	-N				1.48				10 10 10
CAPS	27	0914E	0952		N09	W57	.836	9034	23.1	38D	1B	3		0921	2.20	3.50		246	K
MONT	27	0916	1015	0920	N10	W52	.785	9034	23.5	59	1B		C	0920	2.06				
ABST	27	0917E	0950D	0919	N10	W51	.775	9034	23.6	33D	1N		C	0919	1.35	2.16			EJ
WEND	27	0917E	0938		N09	W49	.752	9034	23.7	21D	1N		V		3.09				
CAPE	27	0918	0937	0919	N09	W50	.763	9034	23.6	19	-N		C	0919	1.07	1.70			FJT
BUCA	27	0918E	0953D		N10	W50	.764	9034	23.6	35D	1N		C	0924	1.76	2.70			
CRON	27	0919	0931	0921	N18	W49	.762	9034	23.7	12	-N		C		.90	1.40			E
ARCE	27	0920	0945	0923	N09	W51	.774	9034	23.6	25	-N		C	0923	1.03	1.60			
SALO	27	0922	0937		N08	W48	.741	9034	23.8	15	-N		V	0930	.83	1.10	1.40		
LOCA	27	0930E	0945		N09	W50	.763	9034	23.6	15D	-N		S	0930	.53	.80			
GRP 9988	27	0920	0932		N20	E90	1.000	9048	3.1	12	1N				.83				2 2 2
ARCE	27	0920	0930		N19	E90	1.000	9048	3.1	10	1N		C	0923	.46	2.60			
CAPS	27	0920E	0933		N20	E90	1.000	9048	3.1	13D	1N	3		0923	1.20			115	
CAPE	27	0950	1011	0954	N19	E20	.408	9041	28.9	21	-N		C	0954	1.79	2.00			F
GRP 9990	27	1019	1051	1026	N20	W11	.318	9037	26.6	32	-N				2.07				4 4 4
CAPE	27	1012	1111	1026	N21	W11	.331	9037	26.6	59	-N		C	1026	1.84	1.90			FK
CAPE	27	1012	1111	1056	N21	W11	.331	9037	26.6	59	1N		C	1056	2.10	2.20			
WEND	27	1019	1046		N20	W10	.309	9037	26.7	27	1N		V		3.09				
CAPS	27	1022E	1041		N19	W10	.295	9037	26.7	19D	1N	3		1026	2.30	2.30		182	
MONT	27	1023	1045	1025	N19	W13	.325	9037	26.5	22	-N		C	1025	1.03				
CAPE	27	1054	1103	1056	N19	E20	.408	9041	29.0	9	-F		C	1056	.89	1.00			H
GRP 9992	27	1107	1129	1110	N09	W46	.717	9034	24.0	22	1N				1.74				5 5 5
WEND	27	1106	1125		N08	W46	.717	9034	24.0	19	1N		V		3.09				
ABST	27	1107E	1119D	1109	N08	W48	.741	9034	23.9	12D	1N		C	1109	1.89	2.80			EJ
CAPE	27	1107	1129	1110	N09	W46	.717	9034	24.0	22	1B		C	1110	1.89	2.70			FV
MONT	27	1108	1135	1110	N10	W44	.693	9034	24.2	27	-B		C	1110	1.03				
CAPS	27	1110E	1125		N10	W45	.706	9034	24.1	15D	-N	3		1114	.80	1.10		190	
CAPE	27	1120	1130	1122	N20	W19	.405	9037	26.0	10	-F		C	1122	.36	.40			
CAPE	27	1147	1205D	1155	N21	W19	.415	9037	26.1	18D	-N		C	1155	.50	.50			H
GRP 9995	27	1206	1225	1208	N19	E20	.408	9041	29.0	19	-F				.39				2 2 2
MONT	27	1206	1225	1208	N18	E20	.399	9041	29.0	19	-N		C	1208	.52				
HUAN	27	1207E	1209D		N19	E19	.396	9041	28.9	2D	-F	1	P	1209	.25	.25			D
GRP 9996	27	1236	1258	1242	N20	W13	.337	9037	26.6	22	-N				2.04				2 2 2
CAPE	27	1234	1301	1240	N19	W14	.336	9037	26.5	27	1N		C	1240	3.04	3.20			F
MONT	27	1237	1255	1243	N20	W11	.318	9037	26.7	18	-N		C	1243	1.03				
CAPE	27	1238	1302	1249	N11	W57	.836	9034	23.3	24	-N		C	1249	.50	.90			
GRP 9998	27	1428	1441	1429	S18	E85	.998	9047	3.0	13	-F				.53				2 2 2
CAPE	27	1428	1438	1428	S18	E90	1.000	9047	3.4	10	-F		C	1428	.36				A
SACP	27	1428	1443	1429	S18	E80	.990	9047	2.6	15	1N		C		.70				
GRP 9999	27	1442	1456	1448	N09	W53	.796	9034	23.6	14	-N				2.30				4 4 3
WEND	27	1438E	1452		N09	W52	.785	9034	23.7	14D	1N		V		3.09				
CAPE	27	1444	1507	1448	N09	W53	.796	9034	23.6	23	1N		C	1448	2.51	4.20			K
CAPE	27	1444	1507	1458	N09	W53	.796	9034	23.6	23	-N		C	1458	1.07	1.80			
SACP	27	1444	1455	1446	N09	W52	.785	9034	23.7	11	-N		C		1.21	1.55			
HUAN	27	1448E	1450		N09	W53	.796	9034	23.6	2D	-B	1	P	1448	.62	.80			
SACP	27	1456	1505	1457	N09	W53	.796	9034	23.6	9	-N		C		1.30	1.71			
HUAN	27	1615	1623		N10	W55	.816	9034	23.6	8	-F	1	C	1617	.21	.28			D
GRP10001	27	1645	1715	1653	N11	W50	.764	9034	23.9	30	-N				.95				4 4 4
LOCK	27	1644	1740	1654	N11	W50	.764	9034	23.9	56	-N		C	1654	1.00	1.60		20	
SACP	27	1646	1713D	1649	N10	W51	.775	9034	23.9	27D	-N		C		1.59	2.02			
HUAN	27	1648E	1657		N10	W51	.775	9034	23.9	9D	-N	1	C	1649	.41	.52			E
HOUS	27	1650E	1708U	1656	N11	W52	.786	9034	23.8	18U	-F		C		.80	1.30		100	
HUAN	27	1727E	1751		N12	W46	.719	9034	24.3	24D	-F	1	C	1732	.25	.30			D

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
LOCK	27	1832	1855	1838	N21	E16	.381	9041	29.0	23	-F		C	1838	.30	.30		10	
GRP10003	27	1846	1859	1849	N19	W17	.371	9037	26.5	13	-F				.60				2 2 2
LOCK	27	1845	1900	1850	N18	W17	.361	9037	26.5	15	-F		C	1850	.50	.60		10	
SACP	27	1846	1857	1848	N19	W17	.371	9037	26.5	11	-N		C		.70	.70			
LOCK	27	1926	1940	1931	N09	W58	.845	9034	23.5	14	-F		C	1931	.70	1.30		10	
GRP10005	27	1942	1953	1945	S21	E87	1.000	9047	3.3	11	-F				.47				3 3 3
LOCK	27	1940	1954	1944	S22	E90	1.001	9047	3.6	14	-F		C	1944	.30	1.20		10	
BOUL	27	1942	1952	1945	S22	E90	1.001	9047	3.6	10	-N		C		.30	1.20			
SACP	27	1944	1952	1946	S21	E82	.995	9047	3.0	8	1F		C		.80				
BOUL	27	1946	1950	1947	S20	E90	1.000	9047	3.6	4	-F		C		.10	.40			
GRP10006	27	1945	1956	1949	N16	W80	.982	9032	21.8	11	1F				.76				2 2 2
LOCK	27	1941	1957	1948	N16	W78	.975	9032	22.0	16	1F		C	1948	.60	2.80		10	
SACP	27	1948	1954	1950	N15	W81	.985	9032	21.7	6	1F		C		.91				
GRP10007	27	2002	2012	2005	N13	W34	.567	9037	25.3	10	-F				.27				3 3 3
LOCK	27	2001	2010	2005	N12	W34	.564	9037	25.3	9	-F		C	2005	.30	.40		10	
HOUS	27	2002	2006D	2005	N13	W35	.580	9037	25.2	4D	-F		C		.20	.20		100	
BOUL	27	2003	2014	2005	N13	W33	.553	9037	25.4	11	-F		C		.30	.40			
LOCK	27	2029	2034	2030	S21	W90	1.000	9036	21.1	5	-F		C	2030	.30	1.20		10	
GRP10009	27	2030	2036	2031	S19	E87	1.000	9047	3.4	6	-N				.53				3 3 3
SACP	27	2029	2037	2031	S17	E82	.994	9047	3.0	8	1N		C		.90				
HOUS	27	2030	2035	2031	S20	E90	1.000	9047	3.6	5	-N		C		.30	1.20		200	
BOUL	27	2030	2036	2032	S21	E90	1.000	9047	3.6	6	-N		C		.40	1.60			
LOCK	27	2111	2121	2114	N21	W23	.462	9037	26.2	10	-F		C	2114	.40	.40		10	
GRP10011	27	2147	2204	2149	N09	W57	.836	9034	23.6	17	-F				.35				2 2 2
SACP	27	2147	2204	2149	N09	W56	.826	9034	23.7	17	-N		C		.50	.68			
HOUS	27	2148E	2149D	2149U	N08	W58	.845	9034	23.6	1D	-F		C		.20	.30		100	
SACP	27	2250	2300	2253	N08	W57	.836	9034	23.7	10	-F		C		.70	.98			
GRP10013	27	2325	0000	2335	N10	W62	.880	9034	23.3	35	-F				.56				2 2 2
LOCK	27	2325	0000U	2340	N09	W63	.888	9034	23.3	35U	-F		C	2340	.40	.80		10	
SACP	27	2325	2356D	2330	N10	W60	.863	9034	23.5	31D	-N		C		.71	1.05			
GRP10014	28	0144	0159	0148	N22	W27	.519	9037	26.0	15	-F				1.36				2 2 2
MANI	28	0144	0156	0149	N20	W23	.455	9037	26.3	12	-F	2		0149	.62	.70			
CRON	28	0144	0201	0146	N23	W30	.562	9037	25.8	17	1N		C		2.10	2.50			EH
GRP10015	28	0410	0427	0414	N21	W29	.537	9037	26.0	17	-N				1.53				2 2 2
CRON	28	0405	0432	0411	N21	W28	.525	9037	26.1	27	-N		C		1.00	1.20			EHK
CRON	28	0405	0432	0419	N21	W28	.525	9037	26.1	27	-N		C						
MITK	28	0415	0422	0416	N21	W29	.537	9037	26.0	7	1N		C	0416	2.06	2.40			
GRP10016	28	0631	0638	0632	N21	W29	.537	9037	26.1	7	-F				.80				2 2 2
CAPE	28	0630	0638	0632	N21	W29	.537	9037	26.1	8	-N		C	0632	1.30	1.50			HV
CRON	28	0631	0638	0632	N21	W29	.537	9037	26.1	7	-F		C		.30	.40			EHI
CAPE	28	0635	0659	0639	N18	E11	.293	9041	29.1	24	-F		C	0639	.89	.90			
CAPE	28	0729	0740	0732	N20	E11	.319	9041	29.1	11	-F		C	0732	.80	.80			
GRP10019	28	0746	0807	0754	N21	W30	.549	9037	26.1	21	-N				.51				3 3 3
MONT	28	0738	0810	0753	N21	W31	.562	9037	26.0	32	-N		C	0753	.52				
CAPE	28	0749	0805	0754	N21	W30	.549	9037	26.1	16	-N		C	0754	.72	.90			HV
CRON	28	0752	0806	0756	N22	W30	.556	9037	26.1	14	-F		C		.30	.40			HI
GRP10020	28	0748	0832	0815	N11	W65	.903	9034	23.5	44	1N				2.43				3 3 2
CAPE	28	0739	1058	0822	N10	W66	.910	9034	23.4	199	2N			0822	4.21	10.50			FK
CRON	28	0756	0835	0801	N13	W69	.930	9034	23.2	39	-N		C		.20	.50			
CRON	28	0804	0835	0809	N10	W65	.903	9034	23.5	31	-F		C		.70	1.50			E
KODA	28	0810E	0828	0815	N11	W63	.888	9034	23.6	18D	-N		V	0812	.64	1.40	1.72		D
CRON	28	0816	0822	0819	S21	E80	.991	9047	3.3	6	-F		C		.10	.30			
CAPE	28	0821	0916	0843	N18	E10	.283	9041	29.1	55	-F		C	0843	1.17	1.20			
GRP10023	28	0846	0920	0856	N16	W90	1.000	9032	21.6	34	-F				.22				3 3 3
CAPE	28	0841	0917	0858	N16	W90	1.000	9032	21.6	36	-F		C	0858	.27				
CATA	28	0845	0930	0855	N16	W90	1.000	9032	21.6	45	-N			0855	.18			160	
CRON	28	0851	0912	0854	N17	W90	1.000	9032	21.6	21	-F		C		.20	.80			

SOLAR FLARES
OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP10024	28	0915	0932	0922	N10	W69	.931	9034	23.2	17	1N				3.32				3 3 2
CAPE	28	0739	1058	0925	N10	W67	.917	9034	23.3	199	2N			0925	4.93	12.90			
KHAR	28	0854E	0934D		N08	W70	.937	9034	23.1	40D	1F		P	0915	1.70	4.50	2.30		D
MONT	28	0915	0930	0918	N11	W70	.937	9034	23.1	15	-N		C	0918	.52				
GRP10024	28	0848	1030	0855	N10	W68	.924	9034	23.3	102	-B				1.53				3 2 2
CATA	28	0845	1030	0855	N10	W65	.903	9034	23.5	105	1B			0855	2.03			222	
MONT	28	0850	0855D	0855	N11	W72	.948	9034	23.0	5D	-N		C	0855	1.03				
SALO	28	0945	1000		N10	W66	.910	9034	23.5	15	-N		V	0950	.83	1.70	1.30		
GRP10025	28	0920	0946	0924	N19	W24	.460	9037	26.6	26	-N				.96				2 2 2
CATA	28	0920	0950	0925	N19	W24	.460	9037	26.6	30	-N			0925	.74	.84		174	
CAPE	28	0920	0942	0923	N19	W24	.460	9037	26.6	22	-N		C	0923	1.17	1.30			FKT
CAPE	28	0920	0942	0927	N19	W24	.460	9037	26.6	22	-N		C	0927	1.12	1.30			
GRP10026	28	0946	1003	0949	N21	W28	.525	9037	26.3	17	-F				.81				5 5 5
CANA	28	0942	0957	0943	N20	W28	.518	9037	26.3	15	-F		C		.40	.50			H
SALO	28	0945	0955		N20	W16	.371	9037	27.2	10	-F		V	0950	.33	.40	1.20		
ABST	28	0946E	0952D	0948	N21	W32	.574	9037	26.0	6D	-F		C	0948	1.08	1.33			D
CAPE	28	0947	0958	0948	N21	W31	.562	9037	26.1	11	-N		C	0948	1.65	2.00			HV
CATA	28	0950	1020	0950	N21	W31	.562	9037	26.1	30	-N			0950	.60	.71		182	
CAPE	28	0947	0952	0948	S24	E80	.992	9047	3.4	5	-F		C	0948	.36				
GRP10028	28	0956	1004	1000	S20	E90	1.000	9047	4.2	8	-F				.45				2 2 2
CANA	28	0952	1000	0957	S21	E90	1.000	9047	4.2	8	-F		C		.40	1.60			
CAPE	28	1000	1007	1002	S19	E90	1.000	9047	4.2	7	-N		C	1002	.50				V
KHAR	28	1002E	1010D		S17	E87	1.000	9047	3.9	8D	1N		P	1004			4.20		DH
CAPE	28	1048	1109	1101	N08	W02	.066	9041	28.3	21	-F		C	1101	1.21	1.20			H
CATA	28	1125	1145	1135	N13	W67	.917	9034	23.5	20	-N			1135	.11			170	
GRP10032	28	1146	1223	1206	S21	E77	.984	9047	3.3	37	-N				1.01				3 3 3
CAPE	28	1146	1231	1206	S21	E77	.984	9047	3.3	45	-N			1206	.86				K
ATHN	28	1205E	1220D	1205	S23	E75	.979	9047	3.1	15D	-N	1		1205	.66				
CAPS	28	1211E	1218		S20	E78	.986	9047	3.4	7D	1N	2		1211	1.50			164	B
CAPE	28	1150	1227	1201	N12	W70	.936	9034	23.2	37	-F		C	1201	.67	2.00			F
GRP10034	28	1154	1215	1157	S24	E90	1.001	9047	4.2	21	-N				.40				1 1 1
CANA	28	1154	1215	1157	S24	E90	1.001	9047	4.2	21	-N		C		.40	1.40			K
CANA	28	1154	1215	1201	S24	E90	1.001	9047	4.2	21	-N		C						
CAPE	28	1243	1304	1249	S18	E72	.964	9047	2.9	21	1F		C	1249	.86				T
GRP10036	28	1459	1552	1510	S21	E33	.661	9045	31.1	53	-N				1.37				4 4 4
MCMA	28	1406	1600D		S24	E37	.721	9045	31.4	114D	1N		C	1500	3.09	4.10			FK
HUAN	28	1456E	1525D		S20	E34	.664	9045	31.2	29D	-N	1	C	1506	1.03	1.15			E
SANM	28	1502	1521D	1508	S19	E30	.615	9045	30.9	19D	-F		P	1508	.65	.85			E
CANA	28	1510E	1543	1511U	S21	E30	.631	9045	30.9	33D	-N		C		.70	.90			
GRP10036	28	1406	1530	1451	S22	E40	.736	9045	31.6	84	1F				3.57				3 2 2
MONT	28	1406	1521D		S25	E45	.797	9045	1.0	75D	2N		C	1521	4.13				
HOUS	28	1409	1413	1411	S20	E42	.745	9045	31.7	4	-F		C		.20	.30		100	
LOCK	28	1530E	1530D	1530E	S20	E33	.654	9045	31.1		1F		C	1530	3.00	3.90		10	
GRP10036	28	1302	1614	1444	S22	E35	.688	9045	31.2	192	1F				5.54				2 2 2
SACP	28	1302	1614	1444U	S22	E35	.688	9045	31.2	192	1F		C		2.83	3.25			
CAPE	28	1406	1446D		S21	E34	.671	9045	31.1	40D	2F		P	1445	8.24	10.90			CFL
GRP10037	28	1330	1349	1332	N19	W26	.486	9037	26.6	19	-F				.85				2 2 2
HUAN	28	1329	1346D		N19	W26	.486	9037	26.6	17D	-F	1	C	1334	.62	.64			E
CAPE	28	1330	1349	1332	N19	W26	.486	9037	26.6	19	-N		C	1332	1.07	1.20			FT
SACP	28	1351	1448	1418	N13	W68	.924	9034	23.5	57	-F		C		.61	1.08			
CAPE	28	1426	1433	1427	N11	W05	.138	9041	28.2	7	-F		C	1427	1.43	1.40			C
GRP10040	28	1455	1516	1500	S17	E72	.963	9047	3.0	21	-N				1.95				4 4 2
SACP	28	1448	1526	1500	S16	E70	.952	9047	2.9	38	-N		C		.80	1.65			
WEND	28	1456E	1505		S18	E70	.954	9047	2.9	9D	1F		V		3.09				
MCMA	28	1458	1503D	1500	S18	E73	.968	9047	3.1	5D	-B		P	1500	.31	1.20			E
HUAN	28	1459	1501D		S16	E76	.978	9047	3.3	2D	-F	1	P	1500	.35				E
HOUS	28	1459	1506	1501	N37	W80	.982	9033	22.6	7	-F		C		.20	.60		100	

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP10042	28	1531	1554	1539	N13	W71	.942	9034	23.3	23	-N				.62				5 5 5
LOCK	28	1530	1557	1540	N13	W71	.942	9034	23.3	27	1N		C	1540	1.00	2.40		20	H
CANA	28	1532	1543	1536	N14	W71	.942	9034	23.3	11	-N		C		.70	1.70			
SACP	28	1532	1606	1541	N13	W69	.930	9034	23.5	34	-B		C		.60	1.08			
MCMA	28	1538E	1550		N13	W70	.936	9034	23.4	12D	-N		P	1542	.52	1.50			E
HOUS	28	1540E	1541D	1540U	N11	W73	.953	9034	23.2	1D	-F		C		.30	.70		100	
GRP10043	28	1644	1728	1650	N20	E20	.418	9044	30.2	44	-F				.38				4 4 4
LOCK	28	1640	1710	1650	N19	E21	.422	9044	30.3	30	-F		C	1650	.50	.60		10	
MCMA	28	1643	1646D		N20	E20	.418	9044	30.2	3D	-N		C	1645	.41	.50			E
HALE	28	1645E	1734	1648U	N20	E20	.418	9044	30.2	49D	-N	1	P	1648	.41	.50			
HOUS	28	1648	1728	1651	N20	E20	.418	9044	30.2	40	-F		C		.20	.20		100	
MCMA	28	1724E	1740D		N20	E20	.418	9044	30.2	16D	-N		C	1726	1.03	1.10			
GRP10044	28	1652	1725	1706	N22	E19	.426	9044	30.1	33	-F				.57				4 3 3
CANA	28	1639	1646	1644	N20	E21	.430	9044	30.3	7	-N		C		.50	.60			E
SACP	28	1643	1726	1706	N20	E19	.406	9044	30.1	43	-N		C		1.31	1.32			
HOUS	28	1701	1723	1703	N24	E18	.436	9044	30.1	22	-F		C		.20	.20		100	
HALE	28	1709E	1721D	1710U	N23	E17	.415	9044	30.0	12D	-F	1	P	1710	.21	.22			
HALE	28	1734E	1851	1739U	N17	E71	.942	9048	3.1	77D	-F	1	P	1739	.21				
HALE	28	1828E	1837	1832U	S20	E71	.961	9047	3.1	9D	-F	1	P	1832	.15				
GRP10047	28	1830	1848	1835	N12	W05	.152	9041	28.4	18	-F				.46				2 2 2
LOCK	28	1822	1850	1830	N17	E04	.222	9041	29.1	28	-F		C	1830	.70	.70		10	
LOCK	28	1836	1847	1840	N10	W08	.165	9041	28.2	11	-F		C	1840	.50	.50		10	
HALE	28	1838	1846	1839	N10	W08	.165	9041	28.2	8	-N	1	C	1839	.21	.22			
GRP10048	28	1845	1904	1852	N13	W71	.942	9034	23.5	19	1N				1.25				3 3 3
LOCK	28	1840	1905	1851	N13	W71	.942	9034	23.5	25	1N		C	1851	1.00	2.40		20	
SACP	28	1846	1904	1851	N12	W71	.942	9034	23.5	18	1N		C		1.21	2.31			
HALE	28	1849	1903	1855	N15	W71	.942	9034	23.5	14	1N	1	C	1855	1.55				
HALE	28	1922	1935	1928	N19	W29	.525	9037	26.6	13	-N	1	C	1928	.52	.60			
HALE	28	1950	1957	1952	S21	E73	.970	9047	3.3	7	-F	1	C	1952	.21				
HALE	28	2017	2035	2019	S17	E71	.958	9047	3.2	18	1N	1	C	2019	.93				
GRP10052	28	2102	2121	2115	N07	W67	.918	9034	23.9	19	-B				.46				2 2 2
HALE	28	2101	2122	2115	N07	W67	.918	9034	23.9	21	-B	1	C	2115	.41				
LOCK	28	2103	2120	2115	N06	W66	.911	9034	23.9	17	-N		C	2115	.50	1.10		20	
GRP10053	28	2142	2207	2146	N18	E01	.229	9041	29.0	25	-F				.75				2 2 2
SACP	28	2142	2202	2146	N18	E00	.229	9041	28.9	20	-N		C		.80	.79			
LOCK	28	2155	2212	2200	N17	E01	.212	9041	29.0	17	-F		C	2200	.70	.70		10	
GRP10054	28	2149	2206	2152	N07	W67	.918	9034	23.9	17	-B				.80				3 3 3
LOCK	28	2148	2210	2153	N06	W66	.911	9034	24.0	22	1B		C	2153	1.10	2.30		30	H
HALE	28	2150E	2152D	2151U	N07	W67	.918	9034	23.9	2D	-B	1	P	2151	.41				
SACP	28	2150	2202	2151	N06	W67	.918	9034	23.9	12	-B		C		.90	1.57			
LOCK	28	2205	2233	2215	N13	W71	.942	9034	23.6	28	1N		C	2215	.90	2.20		20	H
LOCK	28	2316	2340	2325	N13	W71	.942	9034	23.6	24	-F		C	2325	.80	1.90		10	H
	28	2355	0000	NO FLARE PATROL															
	29	0015	0105	NO FLARE PATROL															
CRON	29	0212	0236	0216	N19	E17	.373	9044	30.4	24	-F		C		.20	.20			
CRON	29	0222	0234	0224	N11	W80	.983	9034	23.1	12	-F		C		.30	.90			
CRON	29	0224	0237	0228	N18	E01	.231	9041	29.2	13	-F		C		.50	.50			
CRON	29	0243	0256	0245	N19	E17	.373	9044	30.4	13	-F		C		.20	.20			
CRON	29	0248	0251	0249	S20	E59	.891	9047	2.5	3	-F		C		.10	.20			
GRP10061	29	0258	0308	0301	N09	W80	.983	9034	23.1	10	1N				.97				2 2 2
CRON	29	0257	0309	0300	N07	W80	.983	9034	23.1	12	1N		C		.80	2.40			E
MITK	29	0258	0307	0302	N10	W80	.983	9034	23.1	9	1N		C	0302	1.13				F
CRON	29	0313	0323	0315	N13	W80	.982	9034	23.1	10	-N		C		.60	1.80			
CRON	29	0324	0352	0328	N12	W85	.995	9034	22.8	28	1N		C		1.20	4.10			IK
CRON	29	0324	0352	0345	N12	W85	.995	9034	22.8	28	1N								

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
CRON	29	0521	0525	0523	S21	E58	.886	9047	2.6	4	-F		C		.10	.20			
CRON	29	0633	0644	0636	N18	W80	.982	9034	23.3	11	-F		C		.20	.60			
CRON	29	0721	0729	0724	S20	E55	.861	9047	2.4	8	-F		C		.20	.50			
GRP10067	29	0832	0904	0836	N19	W07	.273	9041	28.8	32	-F				1.39				4 4 3
ABSI	29	0826E	0845D	0838	N18	W06	.251	9041	28.9	19D	1F		C	0838	2.52	2.62			E
CANA	29	0832E	0900	0836U	N20	W08	.295	9041	28.8	28D	-F		C		.70	.70			
CATA	29	0835	0916	0835	N19	W08	.281	9041	28.8	41	-N			0835	.96	1.00		186	
MEUD	29	0835	0856		N18	W07	.258	9041	28.8	21	-N		C						E
CANA	29	0917	0932	0919	S20	E49	.810	9047	2.1	15	-F		C		.10	.20			
CATA	29	0950	1010	0955	S19	E65	.928	9047	3.3	20	-N			0955	.29			195	
CATA	29	1000	1010	1000	N07	W75	.964	9034	23.8	10	-N			1000	.20			159	
CANA	29	1022E	1033	1023U	N16	W09	.248	9041	28.8	11D	-F		C		.20	.20			
CAPE	29	1046	1050	1047	N09	W80	.983	9034	23.4	4	-F		C	1047	.50				
GRP10073	29	1145	1158	1147	N10	W79	.979	9034	23.6	13	-N				.59				3 3 3
CAPE	29	1144	1159	1146	N10	W79	.979	9034	23.6	15	-N		C	1146	.89				V
HUAN	29	1145	1155	1147	N10	W80	.983	9034	23.5	10	-F	2	C	1147	.37				E
CAPS	29	1145E	1201		N09	W77	.972	9034	23.7	16D	-N	3		1148	.50			160	E
GRP10074	29	1216	1224	1218	N16	W11	.269	9041	28.7	8	-F				.38				3 3 3
CAPE	29	1215	1225	1219	N14	W17	.328	9041	28.2	10	-F		C	1219	.36	.40			
HUAN	29	1216	1223	1218	N18	W07	.258	9041	29.0	7	-F	2	C	1218	.45	.45			E
SANM	29	1216	1225	1218	N17	W08	.252	9041	28.9	9	-N		C	1218	.32	.33			
CANA	29	1255	1303	1301	S20	E49	.810	9047	2.2	8	-F		C		.10	.20			
CANA	29	1311E	1315D	1313U	S24	E72	.969	9047	3.9	4D	-F		C		.40	1.10			
HUAN	29	1312	1318	1313	N19	W11	.307	9041	28.7	6	-F	2	C	1313	.25	.25			D
GRP10078	29	1316	1334	1324	S22	E69	.954	9047	3.7	18	-N				.61				3 3 3
HUAN	29	1316	1331	1323	S22	E70	.958	9047	3.8	15	-N	2	C	1323	.50				E
CAPE	29	1316	1335	1324	S22	E68	.949	9047	3.7	19	-N		C	1324	.67	2.10			
SANM	29	1317	1335	1324	S22	E68	.949	9047	3.7	18	-N		C	1324	.65				
CAPE	29	1320	1345	1325	S19	E77	.983	9047	4.3	25	-F		C	1325	.45				
CAPE	29	1330	1340	1333	N14	W18	.342	9041	28.2	10	-F		C	1333	.40	.40			
CAPE	29	1331	1341	1334	N09	W80	.983	9034	23.6	10	-F		C	1334	.22				
CAPE	29	1341	1349	1343	N13	W85	.995	9034	23.2	8	-F		C	1343	.67				
GRP10083	29	1400	1406	1402	N19	W08	.281	9041	29.0	6	-F				.53				2 2 2
CAPE	29	1359	1408	1402	N19	W07	.273	9041	29.1	9	-F		C	1402	.80	.80			
HUAN	29	1400	1404	1401	N18	W08	.266	9041	29.0	4	-F	2	C	1401	.25	.25			D
HUAN	29	1543	1556		N19	W12	.317	9041	28.8	13	-F	1	C	1545	.25	.25			D
GRP10085	29	1657	1711	1700	N05	W90	1.000	9034	23.0	14	-N				.26				2 2 2
LOCK	29	1656	1710	1700	N04	W90	1.000	9034	23.0	14	-N		C	1700	.30	1.20		20	
HALE	29	1658	1712	1700	N05	W90	1.000	9034	23.0	14	-N	1	C	1700	.21				
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	1	P	1849	.83				
GRP10088	29	1903	1922	1912	N13	W22	.395	9041	28.1	19	-N				.46				2 2 2
LOCK	29	1903	1923	1911	N13	W23	.409	9041	28.1	20	-N		C	1911	.50	.60		20	H
HALE	29	1906E	1920	1912	N13	W21	.380	9041	28.2	14D	-N	1	P	1912	.41	.42			
HALE	29	2037	2055	2044U	N11	W83	.991	9034	23.6	18	-F	1	C	2044	.21				
HALE	29	2041	2047	2041	S18	E41	.724	9047	1.9	6	-F	1	C	2041	.15	.20			
GRP10091	29	2159	2215	2204	N11	W81	.986	9034	23.8	16	-F				.33				2 2 2
HUAN	29	2159	2205D		N11	W83	.991	9034	23.7	6D	-F	1	P	2202	.25				D
HALE	29	2159	2215	2204	N11	W79	.979	9034	24.0	16	-F	1	C	2204	.41				

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP10092	29	2159	2220	2206	S17	E41	.719	9047	2.0	21	-F				.31				2 2 2
HUAN	29	2157	2205D		S18	E41	.724	9047	2.0	8D	-F	1	C	2201	.21	.25			D
LOCK	29	2200	2220	2206	S16	E41	.714	9047	2.0	20	-F		C	2206	.40	.60		10	
GRP10093	29	2252	2309	2255	N11	W90	1.000	9034	23.2	17	-B				.61				2 2 2
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	9034	23.3	18	-B	1	C	2255	.41				
LOCK	29	2306	2322	2311	S16	E41	.714	9047	2.0	16	-F		C	2311	.30	.40		10	
GRP10095	29	2330	0002	2338	S17	E41	.719	9047	2.1	32	-F				.46				2 2 2
LOCK	29	2327	0005	2340	S16	E41	.714	9047	2.1	38	-F		C	2340	.30	.40		10	
HALE	29	2333	2359	2336	S18	E41	.724	9047	2.1	26	-N	1	C	2336	.62	.90			
GRP10096	29	2347	0039	0011	N10	W90	1.000	9034	23.2	52	1B				1.92				3 3 2
HALE	29	2346	0051D	0012	N11	W89	.999	9034	23.3	65D	2B	1	P	0012	1.34				KTY
LOCK	29	2348	0015D	0015	N08	W90	1.000	9034	23.2	27D	2B		C	0015	2.50	10.00		30	K
LOCK	29	2348	0015D	2351	N08	W90	1.000	9034	23.2	27D	2B		C	2351	2.50	10.00		30	K
CRON	30	0003	0027	0005	N12	W90	1.000	9034	23.3	24	-N		C		.30	1.20			K
CRON	30	0003	0027	0010	N12	W90	1.000	9034	23.3	24	-N								
HALE	29	2348	2354	2349	N14	W14	.286	9041	28.9	6	-F	1	C	2349	.15	.20			
CRON	30	0152	0225	0155	S19	E48	.797	9047	2.7	33	-F		C		.10	.20			K
CRON	30	0152	0225	0209	S19	E48	.797	9047	2.7	33	-F		C						
CRON	30	0227	0237	0229	N12	W81	.986	9034	24.0	10	1F		C		.90	3.00			
GRP10100	30	0411	0426	0416	S19	E43	.748	9047	2.4	15	-F				.20				1 1 1
CRON	30	0411	0426	0416	S19	E43	.748	9047	2.4	15	-F		C		.20	.30			
CRON	30	0415	0425	0416	S19	E46	.778	9047	2.6	10	-F		C		.20	.30			
CRON	30	0530	0541	0534	N22	W12	.357	9041	29.3	11	-F		C		.10	.10			
CAPE	30	0605	0620		S25	E65	.938	9047	4.1	15	-F		P	0610	.44	1.30			B
CAPE	30	0628	0659	0634	N22	W11	.349	9041	29.4	31	-F		C	0634	.44	.50			
ABSI	30	0631	0735	0634	S17	E35	.653	9047	1.9	64	-F		C	0634	.90	1.10		55	DJ
CAPE	30	0658	0725	0714	S25	E65	.938	9047	4.2	27	1F		C	0714	.88	2.60			
GRP10106	30	0700	0716	0706	N27	E56	.846	9048	3.5	16	-F				1.28				2 2 1
CAPE	30	0659	0716	0706	N26	E55	.836	9048	3.4	17	1F		C	0706	1.28	2.40			
CRON	30	0700	0715	0702	N27	E59	.870	9048	3.7	15	-F		C		.10	.20			
CRON	30	0702	0714	0706	N27	E55	.838	9048	3.4	12	-F		C		.10	.20			
CAPE	30	0758	0852	0828	S25	E64	.932	9047	4.1	54	2N		C	0828	2.34	6.70			
GRP10107	30	0758	0852	0811	S25	E65	.938	9047	4.2	54	1N				1.20				1 1 1
CAPE	30	0758	0852	0811	S25	E65	.938	9047	4.2	54	1N		C	0811	1.20	3.40			
CAPE	30	0758	0852	0806	S24	E64	.930	9047	4.1	54	1F		C	0806	1.90	5.40			K
CAPE	30	0803	0823	0808	N13	W90	1.000	9034	23.6	20	-F		C	0808	.35				K
CAPE	30	1014	1029	1020	N20	W06	.284	9044	30.0	15	-N		C	1020	1.02	1.10			F
MONT	30	1103	1200		N20	W90	1.000	9034	23.7	57	1N		C						
CANA	30	1110	1117	1113	S14	E28	.551	9047	1.6	7	-F		C		.10	.10			
GRP10112	30	1216	1257	1225	S18	E30	.605	9047	1.8	41	-F				.20				3 2 2
CATA	30	1210	1305	1225	S20	E31	.631	9047	1.8	55	-N			1225	.15	.20		166	
HUAN	30	1221	1238		S19	E32	.634	9047	1.9	17	-F	2	C	1223	.25	.28			D
CANA	30	1300	1307	1302	S16	E27	.555	9047	1.6	7	-F		C		.10	.10			
CAPE	30	1229	1306	1246	S25	E61	.915	9047	4.1	37	2N		C	1246	2.57				
CAPE	30	1229	1306	1234	S27	E64	.936	9047	4.3	37	1F		C	1234	1.56				HK
GRP10114	30	1317	1356	1320	N18	W90	1.000	9034	23.8	39	1N				.80				3 3 1
CAPE	30	1316	1334	1320	N16	W90	1.000	9034	23.8	18	1F		C	1320	.80				
MONT	30	1317	1407		N20	W90	1.000	9034	23.8	50	1N		C						
SANM	30	1317	1407		N18	W90	1.000	9034	23.8	50	1N		C						A
CAPE	30	1404	1419	1412	N18	W22	.428	9041	28.9	15	-F		C	1412	.50	.50			
CAPE	30	1412	1429	1417	N15	W22	.407	9041	28.9	17	-F		C	1417	.80	.90			

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	MCMATH PLAGE REGION	CMP DAY	DURATION — MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
GRP10117	30	1430	1516	1445	S18	E32	.627	9049	2.0	46	1B				2.30				7 7 7
CAPE	30	1421	1503D	1451	S18	E31	.616	9049	1.9	42D	1N		C	1451	2.53	3.30			FT
HUAN	30	1428	1527D	1444	S19	E32	.634	9049	2.0	59D	-B	1	C	1444	1.13	1.26			
ZURI	30	1430	1515	1445	S19	E31	.624	9049	1.9	45	2N		P	1445	5.88	7.90			
MCMA	30	1431	1515	1448	S18	E31	.616	9049	1.9	44	-B		C	1448	1.29	1.50			EH
SANM	30	1431	1520	1444	S18	E31	.616	9049	1.9	49	-B		C	1444	1.45	1.90			E
CAPS	30	1433	1515		S17	E33	.631	9049	2.1	42	1B	3		1448	3.00	3.90		228	F
CANA	30	1434	1505	1438	S18	E32	.627	9049	2.0	31	-N		C		.80	1.00			K
GRP10117	30	1431	1510	1438	S18	E32	.627	9049	2.0	39	-N				1.20				3 3 2
MONT	30	1415	1451D	1430	S19	E32	.634	9049	2.0	36D	1N		C	1430	1.55				
LOCA	30	1428	1514	1440	S18	E31	.616	9049	1.9	46	-N		V	1440	.85	1.10			
CANA	30	1434	1505	1445	S18	E32	.627	9049	2.0	31	-N		C						
GRP10118	30	1435	1450	1438	N21	W21	.441	9041	29.0	15	-F				.97				2 2 1
CANA	30	1432	1440	1435	N21	W21	.441	9041	29.0	8	-F		C		.20	.20			
CAPE	30	1437	1459	1440	N21	W20	.429	9041	29.1	22	-N		C	1440	.97	1.10			
LOCK	30	1630	1642	1635	N20	W22	.444	9041	29.0	12	-F		C	1635	.70	.80		10	
GRP10120	30	1707	1754	1724	N21	W21	.441	9041	29.1	47	-F				.59				3 3 3
MCMA	30	1707	1810	1728	N22	W22	.462	9041	29.1	63	-F		C	1728	.72	.80			E
SACP	30	1714D	1800U	1719U	N20	W20	.420	9041	29.2	46U	-F		C		.80	.81			
HUAN	30	1721E	1732		N20	W20	.420	9041	29.2	11D	-F	1	C	1723	.25	.25			D
MCMA	30	1830	1920D		N20	W20	.420	9041	29.3	50D	-F		C	1900	.62	.70			H
LOCK	30	1959	2035	2008	N14	W90	1.000	9034	24.1	36	1N		C	2008	.80	3.20		20	
LOCK	30	2058	2105	2100	N12	W90	1.000	9034	24.1	7	-F		C	2100	.30	1.20		10	
CRON	30	2355E	0002	2359	N09	W90	1.000	9034	24.2	7D	2N		C		1.80	7.20			E
HALE	30	2356	2358D		S29	E13	.586	9045	1.0	2D	-F	1	P	2358	.15	.20			
GRP10126	31	0007	0027	0012	S23	E49	.821	9047	3.7	20	-B				.51				2 2 2
LOCK	31	0007	0022	0012	S23	E50	.829	9047	3.8	15	-N		C	0012	.70	1.20		20	
HALE	31	0015E	0032	0024	S22	E47	.799	9047	3.5	17D	-B	2	P	0024	.31	.50			
GRP10127	31	0202	0225	0207	S19	E25	.560	9049	2.0	23	-F				2.06				2 2 1
HALE	31	0202E	0204D		S20	E23	.550	9049	1.8	2D	1F	2	P	0202	2.06	2.50			
CRON	31	0202	0225	0207	S18	E26	.561	9049	2.0	23	-F		C		.30	.40			
GRP10128	31	0247	0335	0253	N20	W25	.483	9041	29.2	48	-F				1.28				4 4 4
MITK	31	0245	0355	0255	N21	W25	.490	9041	29.2	70	-F		C	0255	1.65	1.90			
CRON	31	0247	0315	0252	N21	W28	.527	9041	29.0	28	-F		C		1.30	1.50			
MANI	31	0250	0329	0253	N21	W25	.490	9041	29.2	39	-F	3		0253	.93	1.24			
HALE	31	0250E	0339	0305	N17	W20	.395	9041	29.6	49D	-B	2	P	0305	1.24	1.30			F
GRP10129	31	0303	0325	0306	N24	E44	.727	9048	3.4	22	-B				1.04				2 2 2
HALE	31	0301	0340D	0305	N24	E43	.716	9048	3.4	39D	-B	2	P	0305	.98	1.40			FHW
CRON	31	0304	0309	0306	N23	E45	.734	9048	3.5	5	-N		C		1.10	1.60			E
GRP10130	31	0325	0340	0329	S21	E48	.804	9047	3.7	15	-N				.46				2 2 2
HALE	31	0324	0340D	0330	S21	E48	.804	9047	3.7	16D	-B	2	P	0324	.52	.90			F
CRON	31	0325	0339	0328	S21	E47	.795	9047	3.7	14	-F		C		.40	.60			
CRON	31	0524	0536	0527	S21	E48	.804	9047	3.8	12	-F		C		.60	1.00			
GRP10132	31	0658	0728	0712	S21	E56	.870	9047	4.5	30	1F				.67				2 2 1
CAPE	31	0658	0727	0712	S18	E56	.863	9047	4.5	29	-F		C	0712	.67	1.30			I
ISTA	31	0700E	0728		S24	E56	.879	9047	4.5	28D	2N								
ISTA	31	0700E	0811		N22	E48	.762	9048	3.9	71D	-F								
ISTA	31	0713	0736		N19	W34	.591	9041	28.8	23	2N								
GRP10135	31	0718	0740	0725	S27	E11	.548	9045	1.1	22	1N				1.78				7 6 5
ISTA	31	0700E	0804	0726	S29	E12	.580	9045	1.2	64D	1B								
CAPE	31	0714	0750	0721	S27	E10	.544	9045	1.1	36	1F		C	0721	2.12	2.50			
CRON	31	0715	0720	0716	S25	E06	.501	9045	31.8	5	-F		C		.40	.50			
ATHN	31	0716	0737	0719	S29	E12	.580	9045	1.2	21	-N	2		0719	1.32	1.60			
ABST	31	0716E	0750	0722	S27	E14	.563	9045	1.4	34D	1F		P	0722	2.25	2.60		53	D
CRON	31	0719	0731	0723	S27	E11	.548	9045	1.1	12	-N		C		1.00	1.20			E
ISTA	31	0720	0804		S27	E09	.540	9045	1.0	44	1B								
ISTA	31	0720	0739		S27	E07	.533	9045	31.8	19	-B								
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	9045	1.1	35	-N			0740	.40	.49		166	

SOLAR FLARES

OCTOBER 1967

OBSERVATORY	OBSERVED UT DATE 1967 OCT	START	END	MAX. PHASE	LOCATION APPROX. LAT.	MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY	DURATION MIN.	IMPORTANCE	OBS. COND.	TYPE	MEASUREMENTS TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	REMARKS
ATHN	31	0743	0751	0745	S21	E58	.885	9047	4.7	8	-N	2		0745	.33	.40			
GRP10137	31	0830	0842	0834	S22	E46	.790	9047	3.8	12	-N				.82				7 7 4
CAPE	31	0825	0842	0834	S21	E45	.777	9047	3.7	17	1N			0834	1.56	2.50			FI
MONT	31	0825	0850	0836	S23	E46	.795	9047	3.8	25	-N		C	0836	.52				
CANA	31	0826	0834	0828	S23	E49	.821	9047	4.0	8	-F		C		.10	.20			
ABST	31	0831	0847D	0834	S24	E45	.791	9047	3.7	16D	-F		P	0834	.90	1.50		46	D
CRON	31	0832	0838	0834	S21	E44	.767	9047	3.7	6	-N		C		.30	.50			
ISTA	31	0834	0840		S23	E44	.777	9047	3.7	6	-N								
CATA	31	0835	0840	0835	S20	E46	.781	9047	3.8	5	-N			0835	.15	.25		195	
ONDR	31	0834E	0842D		N20	E42	.691	9048	3.5	8D	-F		V	0836			1.70		CH
GRP10139	31	0843	0849	0846	S19	E59	.888	9047	4.8	6	-N				.19				6 6 4
CANA	31	0837	0843	0840	S20	E59	.890	9047	4.8	6	-F		C		.20	.40			
CAPE	31	0842	0853	0845	S19	E59	.888	9047	4.8	11	-N		C	0845	.35	.70			I
CRON	31	0844	0849	0846	S19	E56	.865	9047	4.6	5	-N		C		.10	.20			
ISTA	31	0844	0850		S20	E60	.897	9047	4.9	6	-N								
KHAR	31	0845	0849	0846	S19	E60	.895	9047	4.9	4	-F		V	0845			1.80		D
CATA	31	0845	0850	0845	S17	E58	.876	9047	4.7	5	-B			0845	.09	.18		204	
CAPE	31	0913	0920	0914	S19	E59	.888	9047	4.8	7	-F		C	0914	.40	.80			I
GRP10141	31	0931	0952	0934	S19	E59	.888	9047	4.8	21	-F				.31				2 2 2
CATA	31	0930	0945	0930	S18	E58	.878	9047	4.7	15	-N			0930	.11	.22		172	
CAPE	31	0931	0958	0938	S19	E59	.888	9047	4.8	27	-F		C	0938	.50	1.00			I
GRP10142	31	0957	1019	1003	S20	E34	.662	9047	3.0	22	-F				.43				2 2 2
CATA	31	0955	1010	1000	S19	E20	.510	9047	1.9	15	-N			1000	.29	.34		151	
CAPE	31	0959	1028	1006	S21	E48	.804	9047	4.0	29	-F		C	1006	.57	.90			IJ
GRP10143	31	1023	1043	1028	S19	E53	.841	9047	4.4	20	-F				.62				1 1 1
CAPE	31	1023	1034	1028	S19	E53	.841	9047	4.4	11	-F		C	1028	.62	1.20			HI
CAPE	31	1028	1043	1029	S19	E58	.881	9047	4.8	15	-F		C	1029	.44	.90			I
GRP10144	31	1028	1035	1030	S24	E44	.782	9047	3.7	7	-F				.28				2 2 2
CAPE	31	1028	1036	1030	S22	E44	.772	9047	3.7	8	-F		C	1030	.22	.30			I
ATHN	31	1028	1034	1029	S26	E43	.784	9047	3.7	6	-N	2		1029	.33	.50			
GRP10145	31	1031	1116	1041	S21	E21	.541	9047	2.0	45	-N				2.13				3 3 3
CAPE	31	1026	1210	1048	S20	E20	.521	9047	1.9	104	1N		C	1048	4.07	4.70			IJK
ATHN	31	1032	1047	1034	S24	E19	.559	9047	1.9	15	-N	2		1034	1.32	1.60			
CANA	31	1035	1050	1040	S20	E23	.550	9047	2.2	15	-F		C		1.00	1.20			
ONDR	31	1039E	1046D		N21	E19	.419	9046	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
CAPE	31	1052	1125	1058	N16	E32	.551	9048	2.9	33	-F		C	1058	1.24	1.50			F
CAPE	31	1108	1132	1116	N21	W26	.502	9041	29.5	24	-F		C	1116	.88	1.00			
GRP10150	31	1122	1200	1128	S20	E21	.530	9047	2.0	38	2B				6.21				6 6 6
CAPE	31	1026	1210	1131	S19	E20	.510	9047	1.9	104	2N			1131	6.60	7.70			IV
ATHN	31	1050	1212	1123	S23	E19	.547	9047	1.9	82	2B	2		1123	4.95	6.10			
CANA	31	1120E	1144	1125U	S19	E21	.520	9047	2.0	24D	2B		C		4.40	5.20			
KHAR	31	1121	1200	1132	S18	E22	.519	9047	2.1	39	2N		P	1130	10.21	12.00	2.30		EHOQ
WEND	31	1123E	1207	1128	S20	E22	.540	9047	2.1	44D	2B		V		7.22				
HUAN	31	1125	1145D		S20	E20	.521	9047	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
CAPE	31	1137	1149	1141	S19	E57	.873	9047	4.8	12	-N		C	1141	.62	1.30			IVH
ATHN	31	1139	1209	1144	S30	E06	.573	9045	31.9	30	-N	2		1144	1.65	1.90			
GRP10154	31	1200	1206	1201	S19	E53	.841	9047	4.5	6	-F				.39				2 2 2
ATHN	31	1200	1204	1200	S20	E54	.852	9047	4.5	4	-F	2		1200	.50	.90			
CAPE	31	1200	1208	1201	S18	E52	.829	9047	4.4	8	-F		C	1201	.27	.50			I
GRP10155	31	1244	1310	1254	S17	E22	.509	9047	2.2	26	-F				.64				2 2 2
CAPE	31	1243	1322	1257	S17	E22	.509	9047	2.2	39	-F		C	1257	.97	1.10			IK
CAPE	31	1243	1322	1314	S16	E22	.498	9047	2.2	39	-F			1314	1.33	1.50			
CANA	31	1245	1257	1250	S17	E22	.509	9047	2.2	12	-F		C		.30	.30			
CAPE	31	1301	1350	1314	N19	E20	.412	9046	2.0	49	-F		C	1314	.67	.70			F

SOLAR FLARES

OCTOBER 1967

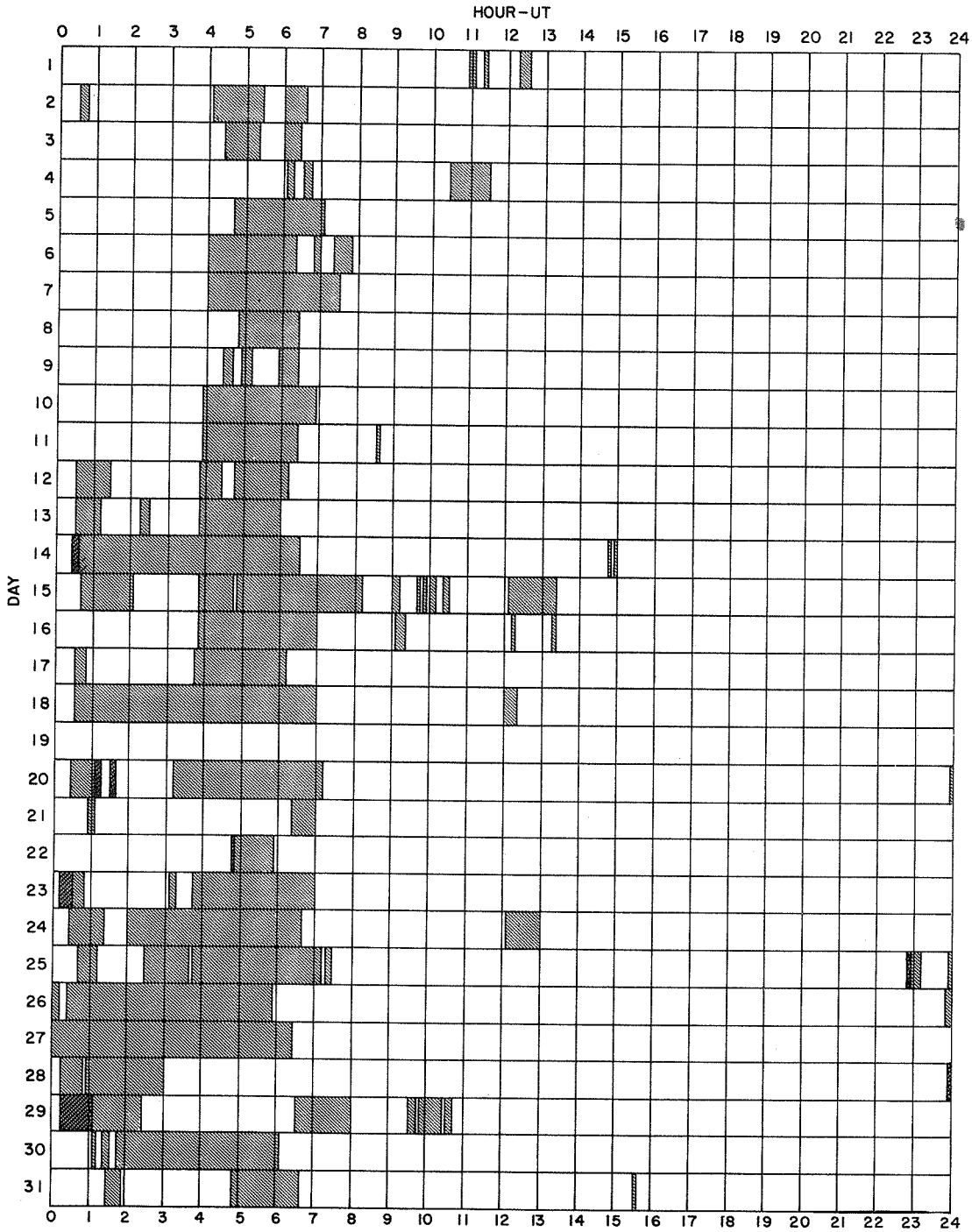
OBSERVATORY	OBSERVED UT				LOCATION					DURATION — MIN.	IMPORTANCE	OBS.		MEASUREMENTS					REMARKS
	DATE 1967 OCT	START	END	MAX. PHASE	APPROX. LAT.	APPROX. MER. DIST.	CENTRAL DISTANCE	McMATH PLAGE REGION	CMP DAY			COND.	TYPE	TIME — UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hα	MAX. INT. %	
GRP10157	31	1322	1345	1336	S19	E53	.841	9047	4.5	23	-F				1.82				2 2 1
CAPE	31	1314	1353	1337	S19	E53	.841	9047	4.5	39	1F		C	1337	1.82	3.40			FI
CANA	31	1330	1337	1334	S19	E53	.841	9047	4.5	7	-F		C		.10	.20			
GRP10158	31	1325	1339	1332	S18	E24	.540	9047	2.4	14	-F				.26				2 2 2
CAPE	31	1322	1417	1407	S17	E21	.498	9047	2.1	55	-F			1407	1.24	1.40			
CAPE	31	1322	1417	1344	S17	E22	.509	9047	2.2	55	-F		C	1344	1.06	1.20			IKH
CANA	31	1327	1342	1332	S17	E22	.509	9047	2.2	15	-F		C		.30	.30			
CAPE	31	1330	1336	1331	S22	E42	.753	9047	3.7	6	-F		C	1331	.22	.30			IJ
CAPE	31	1346	1421	1401	N29	E31	.619	9048	2.9	35	-F		C	1401	.50	.60			
CAPE	31	1413	1441	1432	S19	E50	.814	9047	4.3	28	1F			1432	1.68	2.90			IK
GRP10161	31	1438	1448	1441	S18	E21	.509	9047	2.2	10	-F				.81				2 2 2
CAPE	31	1437	1449	1441	S17	E21	.498	9047	2.2	12	-N		C	1441	1.20	1.40			HI
HUAN	31	1438	1446	1441	S18	E21	.509	9047	2.2	8	-F	2	C	1441	.41	.43			
GRP10162	31	1519	1529	1521	N15	W90	1.000	9037	24.9	10	-F				.49				2 2 2
CAPE	31	1519	1528	1521	N15	W90	1.000	9037	24.9	9	-F		C	1521	.40				AV
HUAN	31	1519E	1530D		N15	W90	1.000	9037	24.9	11D	-N	1	P	1523	.57				
GRP10163	31	1911	1924	1913	S20	E34	.662	9047	3.3	13	-N				.21				3 3 3
HOUS	31	1910	1920	1912	S20	E34	.662	9047	3.3	10	-F		C		.20	.30		100	
SACP	31	1911	1928	1914	S20	E34	.662	9047	3.3	17	-N		C		.21	.23			
HALE	31	1912	1924	1913	S20	E33	.651	9047	3.3	12	-B	2	C	1913	.21	.30			
GRP10164	31	2118	2145	2121	S17	E13	.423	9047	1.9	27	-N				1.13				3 3 3
LOCK	31	2117	2140	2122	S17	E13	.423	9047	1.9	23	-N		C	2122	.80	.90		20	
SACP	31	2118	2149	2121	S17	E13	.423	9047	1.9	31	-N		C		1.31	1.32			
HALE	31	2120	2139D	2121	S17	E12	.416	9047	1.8	19D	-N	2	P	2121	1.29	1.40			

A = Eruptive prominence, base at >90°.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No spots visible in the neighborhood.
H = Flare with high velocity dark surge.
I = Very extensive active region.
J = Plage with flare shows marked intensity variations.
K = Several intensity maxima.
L = Filaments show effects of sudden activation.
M = White-light flare.
N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the calcium II lines H or K.
P = Flare shows helium D_3 in emission.
Q = Flare shows the Balmer continuum in emission.
R = Marked asymmetry in Hα line.
S = Brightening follows disappearance of filament (same position).
T = Region active all day.
U = Close and somewhat parallel bright filaments (|| or Y shape).
V = Occurrence of an explosive phase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide Hα emission.
Y = Onset of a system of loop-type prominences.
Z = Major sunspot umbra covered by flare.

INTERVALS OF NO FLARE PATROL OBSERVATION

For Preceding Solar Flare Table

OCTOBER 1967



Observatories included in total patrol:

Abastumani	Capetown	Houston	Locarno	Monte Mario	Tachkent
Arcetri	Capri-S (Swedish)	Huancayo	Lockheed	Ondrejov	Wendelstein
Arosa	Carnarvon	Istanboul	Manila	Sacramento Peak	Zürich
Boulder	Catania	Kharkov	McMath-Hulbert	Salonique	
Bucharest	Haleakala	Kiev	Meudon	San Miguel	
Canary Islands	Herstmonceux	Kodaikanal	Mitaka	Siberie	

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 X-RAY FLARES (2-12A°)
SATELLITE EXPLORER 33

October 1967

Date 1967	Onset UT	Maximum UT	Peak-Ratio to Quiet Sun	Remarks
17 Oct	2313	2344	4^-	Slow rise, complex structure
20 Oct.	> 0000	< 0018	> 5	Onset and peak not observed
	0224	0229	7	Rapid rise, rapid decay
	0601	0616	5	Complex structure
	1131	1137	5	
21 Oct.	2053	2107	7	Complex structure
22 Oct.	0616	0623	8	
	1005	1015	20	
	1616	1627	4^-	
	2211	2220	16	
23 Oct.	0534	0542	4^-	
24 Oct.	1609	1618	8	
25 Oct.	1326	1358	4	Slow rise, slow decay
	2129	2135	4^-	
	2151	2205	10	Complex structure
	2307	2331	9	
26 Oct.	0608	0617	11	
	1013	1018	4	
	-	-	-	Also numerous small flares
27 Oct.	0819	0859	4	Complex structure
	0919	0922	5	
	0947	0959	4^-	
	1109	1114	4^-	
	-	-	-	Also numerous small flares
28 Oct.	0752	0822	4^-	Complex structure
	0841	0906	5	
	-	-	-	Also numerous small flares
29 Oct.	0216	0229	4^-	
	0257	0326	20	Slow decay
	1140	1150	4	
	2330	2404	34	Complex structure
31 Oct.	1124	1134	4	
	1520	1839	4^-	A remarkably slow rise and slow decay

*See "Notes": on page 131 of IER-FB-283 published March 1968.

SOLAR PROTONS BY SATELLITE
EXPLORER 34 (1967-51A)

OCTOBER 1967

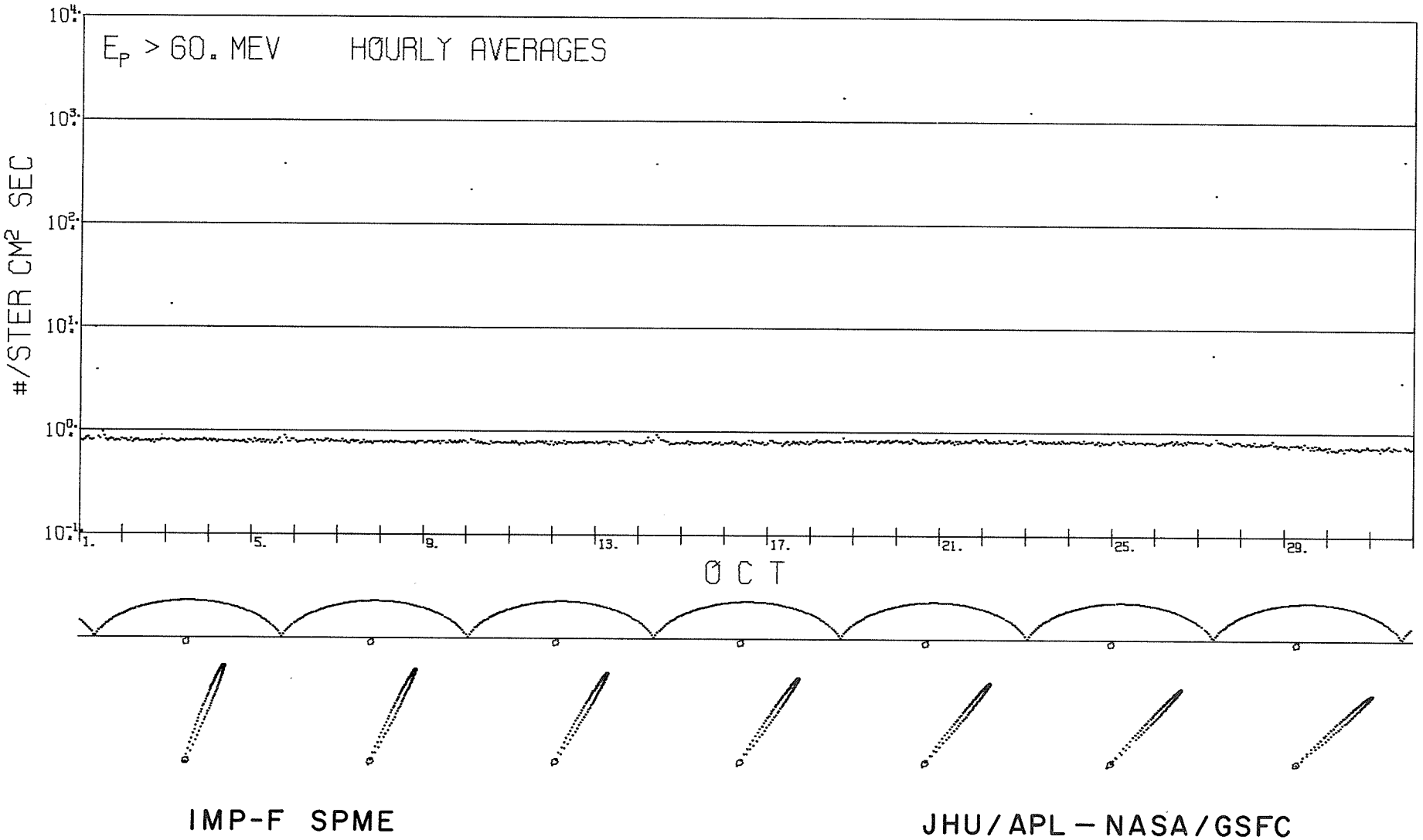
PROTON ENERGY GREATER THAN 60 MEV. HOURLY AVERAGES. IMP F SOLAR PROTON MONITOR. JHU/APL AND GSFC

YEAR 1967

DATE	DAY OF YEAR	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
10 1.	274	0.80	0.79	0.81	0.84	0.86	0.82	0.81	0.81	9.84	3.87	0.87	0.84	0.96	0.88	0.81	0.79	0.82	0.83	0.81	0.79	0.81	0.80	0.79	0.84
10 2	275	0.81	0.83	0.79	0.78	0.83	0.78	0.80	0.81	0.82	0.78	0.79	0.78	0.80	0.79	0.80	0.78	0.80	0.76	0.81	0.81	0.78	0.82	0.82	0.82
10 3	276	0.80	0.81	16.7	0.82	0.80	0.79	0.77	0.79	0.82	0.79	0.79	0.81	0.81	0.80	0.80	0.80	0.81	0.81	0.82	0.81	0.80	0.83	0.81	0.79
10 4	277	0.81	0.78	0.81	0.80	0.77	0.80	0.80	0.79	0.79	0.78	0.79	0.80	0.79	0.78	0.80	0.79	0.79	0.78	0.78	0.80	0.78	0.75	0.82	0.81
10 5	278	0.77	0.83	0.78	0.80	0.82	0.78	0.81	0.77	0.80	0.81	0.76	0.79	0.76	0.77	0.81	0.84	0.76	382.	0.91	0.85	0.79	0.79	0.84	0.83
10 6	279	0.80	0.77	0.79	0.79	0.78	0.78	0.81	0.80	0.81	0.82	0.80	0.76	0.82	0.80	0.80	0.79	0.80	0.84	0.83	0.79	0.82	0.80	0.79	0.81
10 7	280	0.79	0.79	0.83	0.78	0.81	0.78	0.76	0.81	0.81	0.79	0.80	0.81	0.76	0.77	0.82	0.77	0.78	0.77	0.79	0.76	0.79	0.79	0.79	0.79
10 8	281	0.80	0.77	0.79	0.79	0.78	0.80	0.79	0.78	0.80	0.78	0.79	0.78	0.78	0.78	0.79	0.78	0.79	0.77	0.78	0.76	0.78	0.80	0.80	0.80
10 9	282	0.78	0.78	0.80	0.81	0.80	0.77	0.79	0.79	0.81	0.75	0.80	0.79	0.76	0.77	0.81	0.78	0.77	0.80	0.78	0.78	0.81	0.79	0.82	0.81
10 10	283	0.77	218.	0.83	0.82	0.82	0.78	0.80	0.77	0.79	0.76	0.77	0.76	0.74	0.80	0.78	0.78	0.78	0.79	0.78	0.77	0.78	0.79	0.77	0.78
10 11	284	0.77	0.80	0.77	0.81	0.78	0.75	0.78	0.77	0.76	0.80	0.78	0.77	0.79	0.77	0.77	0.80	0.81	0.79	0.80	0.77	0.80	0.76	0.75	0.80
10 12	285	0.75	0.79	0.76	0.78	0.78	0.76	0.82	0.76	0.79	0.79	0.78	0.78	0.78	0.78	0.79	0.78	0.78	0.80	0.77	0.79	0.79	0.79	0.79	0.77
10 13	286	0.80	0.78	0.79	0.78	0.81	0.80	0.80	0.76	0.80	0.79	0.79	0.78	0.78	0.81	0.81	0.81	0.79	0.77	0.78	0.75	0.76	0.80	0.78	0.78
10 14	287	0.77	0.77	0.78	0.79	0.81	0.88	0.82	0.79	0.83	385.	0.94	0.88	0.84	0.83	0.82	0.81	0.81	0.76	0.76	0.76	0.77	0.79	0.79	0.77
10 15	288	0.79	0.77	0.79	0.82	0.75	0.80	0.79	0.77	0.78	0.78	0.78	0.78	0.80	0.79	0.78	0.80	0.81	0.76	0.77	0.79	0.77	0.81	0.75	0.75
10 16	289	0.79	0.78	0.79	0.79	0.81	0.78	0.81	0.78	0.76	0.74	0.77	0.78	0.76	0.83	0.76	0.83	0.80	0.81	0.79	0.79	0.77	0.80	0.76	0.76
10 17	290	0.78	0.84	0.83	0.80	0.80	0.79	0.79	0.79	0.75	0.77	0.80	0.82	0.76	0.78	0.81	0.79	0.80	0.78	0.82	0.80	0.79	0.77	0.82	0.77
10 18	291	0.79	0.82	0.81	0.84	0.80	0.81	0.83	0.80	0.82	0.83	0.83	0.81	0.81	0.81	0.82	0.81	0.80	1700	0.89	0.81	0.82	0.82	0.84	0.83
10 19	292	0.80	0.84	0.81	0.84	0.82	0.82	0.84	0.80	0.81	0.84	0.82	0.83	0.84	0.79	0.82	0.83	0.81	0.80	0.83	0.84	0.80	0.81	0.83	0.83
10 20	293	0.84	0.82	0.83	0.80	0.81	0.81	0.83	0.79	0.80	0.87	0.84	0.83	0.80	0.81	0.79	0.81	0.79	0.82	0.80	0.81	0.81	0.82	0.86	0.80
10 21	294	0.84	0.83	0.80	0.82	0.84	0.85	0.80	0.82	0.78	0.84	0.79	0.83	0.81	0.81	0.83	0.82	0.79	0.83	0.85	0.85	0.86	0.83	0.81	0.83
10 22	295	0.82	0.86	0.84	0.80	0.81	0.80	0.84	0.80	0.81	0.85	0.82	0.82	0.82	0.84	0.80	0.79	0.81	0.85	0.85	0.80	0.81	0.82	0.83	0.84
10 23	296	0.79	1248	0.86	0.84	0.82	0.82	0.80	0.83	0.83	0.81	0.84	0.80	0.82	0.81	0.80	0.83	0.80	0.80	0.83	0.81	0.84	0.83	0.81	0.82
10 24	297	0.81	0.83	0.83	0.82	0.82	0.83	0.81	0.80	0.85	0.80	0.81	0.82	0.81	0.83	0.79	0.79	0.83	0.78	0.82	0.78	0.80	0.81	0.78	0.79
10 25	298	0.82	0.83		0.83	0.80	0.79	0.85	0.81	0.81	0.82	0.81	0.80	0.83	0.80	0.81	0.81	0.81	0.80	0.78	0.82	0.82	0.80	0.81	0.81
10 26	299	0.80	0.77	0.78	0.79	0.81	0.79	0.81	0.82	0.83	0.85	0.79	0.82	0.85	0.80	0.82	0.78	0.83	0.80	0.85	0.83	0.84	0.82	0.83	0.84
10 27	300	0.81	0.82	0.83		0.80	0.79	0.78	0.82	5.63	200.	0.89	0.84	0.81	0.84	0.80	0.80	0.78	0.78	0.78	0.81	0.80	0.83	0.83	0.82
10 28	301	0.79	0.79	0.77	0.80	0.81	0.77	0.78	0.83	0.77	0.76	0.77	0.80	0.77	0.79	0.78	0.80	0.81	0.84	0.78	0.78	0.75	0.76	0.78	0.75
10 29	302	0.77	0.76	0.74	0.77	0.77	0.77	0.77	0.78	0.76	0.76	0.73	0.80		0.76	0.72	0.76	0.71	0.76	0.73	0.76	0.73	0.72	0.72	0.74
10 30	303	0.69	0.74	0.70	0.71	0.69	0.69	0.71	0.72	0.71	0.68	0.72	0.73	0.71	0.74	0.73	0.72	0.73	0.70	0.71	0.72	0.73	0.74	0.75	0.73
10 31	304	0.72	0.73	0.73	0.73	0.72	0.68	0.74	0.71	0.73	0.75	0.77	0.72	0.71	0.74	0.73	0.71	0.72	3.15	437.	0.76	0.73	0.74	0.72	0.72

SOLAR PROTONS BY SATELLITE
EXPLORER 34 (1967-51A)

OCTOBER 1967



SOLAR PROTONS BY SATELLITE
EXPLORER 34 (1967-51A)

OCTOBER 1967

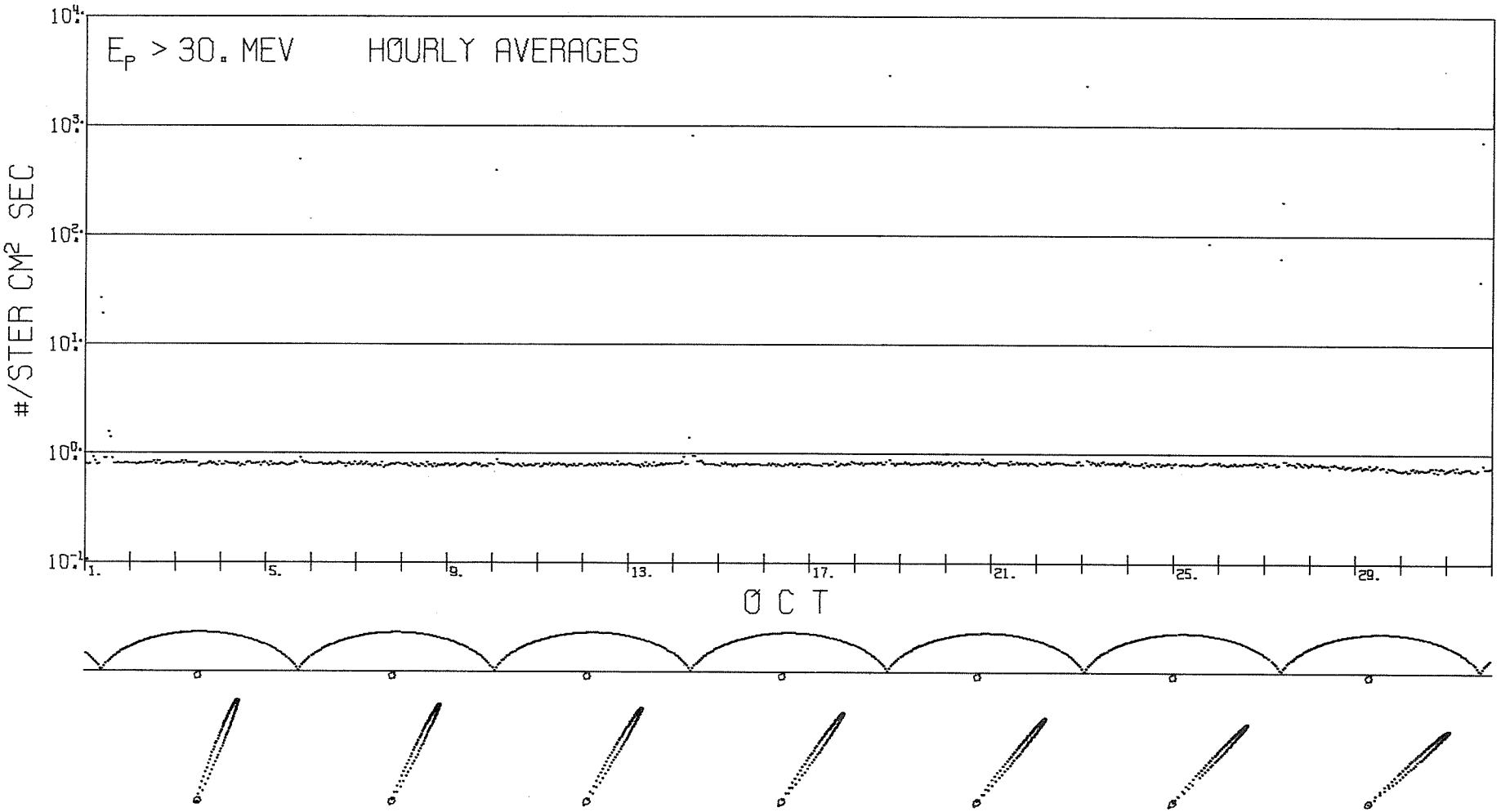
PROTON ENERGY GREATER THAN 30 MEV. HOURLY AVERAGES. IMP F SOLAR PROTON MONITOR. JHU/APL AND GSFC

YEAR 1967

DATE	DAY OF YEAR	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
10 1	274	0.80	0.78	0.81	1.00	0.91	0.84	0.78	0.79	26.3	19.1	0.91	0.91	1.57	1.41	0.90	0.80	0.80	0.82	0.81	0.80	0.81	0.82	0.82	0.81
10 2	275	0.80	0.80	0.80	0.78	0.80	0.82	0.80	0.80	0.82	0.81	0.82	0.81	0.84	0.81	0.84	0.84	0.79	0.80	0.81	0.81	0.82	0.82	0.80	0.81
10 3	276	0.81	0.81	0.82	0.84	0.81	0.85	0.81	0.81	0.82	0.82	0.82	0.81	0.75	0.79	0.78	0.78	0.79	0.82	0.83	0.81	0.81	0.78	0.77	0.83
10 4	277	0.79	0.79	0.84	0.82	0.81	0.81	0.81	0.80	0.79	0.81	0.76	0.78	0.77	0.82	0.83	0.83	0.80	0.80	0.80	0.82	0.82	0.78	0.82	0.83
10 5	278	0.80	0.78	0.83	0.79	0.81	0.78	0.78	0.80	0.81	0.81	0.79	0.77	0.79	0.81	0.80	0.83	0.81	493.	0.91	0.85	0.82	0.83	0.81	0.80
10 6	279	0.80	0.81	0.80	0.81	0.82	0.81	0.79	0.80	0.79	0.80	0.82	0.79	0.80	0.81	0.83	0.81	0.80	0.80	0.76	0.80	0.81	0.79	0.79	0.83
10 7	280	0.79	0.81	0.83	0.79	0.80	0.83	0.78	0.79	0.76	0.78	0.79	0.78	0.77	0.83	0.74	0.77	0.78	0.79	0.80	0.80	0.79	0.81	0.81	0.80
10 8	281	0.78	0.80	0.79	0.77	0.75	0.81	0.79	0.79	0.76	0.76	0.80	0.79	0.76	0.83	0.78	0.78	0.76	0.80	0.76	0.79	0.77	0.79	0.77	0.80
10 9	282	0.81	0.78	0.79	0.79	0.81	0.76	0.78	0.79	0.80	0.81	0.78	0.77	0.78	0.81	0.82	0.82	0.78	0.80	0.76	0.77	0.78	0.75	0.80	0.80
10 10	283	0.79	394.	0.89	0.81	0.81	0.80	0.80	0.79	0.80	0.79	0.77	0.76	0.79	0.81	0.77	0.76	0.80	0.77	0.77	0.79	0.79	0.77	0.77	0.81
10 11	284	0.80	0.76	0.78	0.80	0.81	0.78	0.82	0.77	0.81	0.78	0.80	0.82	0.79	0.80	0.79	0.76	0.79	0.78	0.77	0.80	0.77	0.78	0.80	0.80
10 12	285	0.77	0.77	0.78	0.80	0.78	0.78	0.80	0.77	0.82	0.78	0.81	0.80	0.82	0.79	0.79	0.82	0.79	0.79	0.85	0.79	0.80	0.81	0.79	0.79
10 13	286	0.82	0.80	0.79	0.78	0.77	0.78	0.76	0.80	0.77	0.83	0.77	0.80	0.77	0.83	0.77	0.78	0.79	0.82	0.79	0.80	0.81	0.80	0.81	0.81
10 14	287	0.81	0.81	0.82	0.82	0.85	0.93	0.80	0.80	1.40	814.	0.95	0.95	0.85	0.86	0.87	0.84	0.80	0.80	0.80	0.81	0.80	0.80	0.79	0.79
10 15	288	0.78	0.81	0.80	0.84	0.80	0.80	0.80	0.78	0.80	0.77	0.80	0.80	0.80	0.80	0.82	0.80	0.79	0.80	0.80	0.80	0.80	0.80	0.78	0.79
10 16	289	0.79	0.79	0.82	0.79	0.81	0.80	0.77	0.81	0.78	0.78	0.77	0.81	0.78	0.82	0.82	0.79	0.79	0.81	0.76	0.80	0.80	0.82	0.80	0.82
10 17	290	0.81	0.79	0.78	0.78	0.79	0.79	0.78	0.82	0.82	0.82	0.79	0.80	0.81	0.84	0.77	0.79	0.81	0.80	0.78	0.80	0.82	0.80	0.84	0.83
10 18	291	0.82	0.81	0.80	0.83	0.79	0.81	0.82	0.82	0.82	0.83	0.82	0.81	0.83	0.83	0.81	0.81	0.85	2922	0.88	0.82	0.82	0.79	0.82	0.81
10 19	292	0.83	0.82	0.86	0.82	0.83	0.80	0.80	0.81	0.81	0.81	0.82	0.82	0.83	0.81	0.83	0.82	0.84	0.84	0.82	0.85	0.82	0.84	0.81	0.82
10 20	293	0.84	0.85	0.84	0.79	0.83	0.84	0.78	0.85	0.84	0.83	0.82	0.83	0.84	0.82	0.82	0.83	0.83	0.80	0.84	0.89	0.84	0.84	0.85	0.81
10 21	294	0.81	0.79	0.80	0.83	0.83	0.84	0.83	0.83	0.83	0.81	0.86	0.81	0.81	0.85	0.82	0.84	0.82	0.84	0.83	0.81	0.84	0.84	0.81	0.80
10 22	295	0.79	0.84	0.81	0.82	0.82	0.84	0.85	0.82	0.82	0.83	0.84	0.83	0.83	0.83	0.82	0.81	0.82	0.80	0.81	0.80	0.80	0.85	0.87	0.80
10 23	296	0.80	2335	0.88	0.86	0.82	0.86	0.84	0.81	0.84	0.80	0.84	0.87	0.81	0.84	0.82	0.84	0.84	0.81	0.82	0.83	0.81	0.83	0.86	0.84
10 24	297	0.84	0.79	0.82	0.81	0.80	0.80	0.80	0.83	0.78	0.85	0.80	0.79	0.81	0.82	0.79	0.84	0.84	0.78	0.82	0.81	0.81	0.84	0.82	0.77
10 25	298	0.82	0.83		0.81	0.82	0.82	0.81	0.82	0.81	0.79	0.82	0.80	0.80	0.80	0.80	0.82	0.83	0.85	84.9	0.82	0.81	0.83	0.83	0.82
10 26	299	0.84	0.81	0.82	0.81	0.79	0.80	0.81	0.80	0.83	0.80	0.81	0.82	0.80	0.83	0.81	0.82	0.83	0.82	0.84	0.84	0.79	0.83	0.82	0.79
10 27	300	0.85	0.85	0.81		0.82	0.83	0.78	0.80	62.5	205.	0.87	0.86	0.82	0.83	0.82	0.81	0.79	0.85	0.83	0.80	0.79	0.84	0.82	0.79
10 28	301	0.80	0.83	0.80	0.80	0.80	0.82	0.79	0.81	0.79	0.79	0.74	0.81	0.80	0.81	0.79	0.77	0.77	0.80	0.76	0.77	0.78	0.79	0.74	0.76
10 29	302	0.76	0.77	0.79	0.74	0.76	0.77	0.76	0.81	0.74	0.75	0.77	0.81		0.75	0.76		0.72	0.76	0.74	0.76	0.74	0.73	0.71	0.72
10 30	303	0.70	0.72	0.72	0.70	0.70	0.75	0.76	0.72	0.74	0.71	0.73	0.72	0.71	0.71	0.73	0.75	0.75	0.70	0.76	0.69	0.75	0.75	0.74	0.70
10 31	304	0.71	0.73	0.74	0.76	0.72	0.77	0.71	0.70	0.73	0.72	0.74	0.75	0.74	0.72	0.71	0.70	0.72	39.0	723.	0.80	0.74	0.75	0.75	0.76

SOLAR PROTONS BY SATELLITE
EXPLORER 34 (1967-51A)

OCTOBER 1967



IMP-F SPME

JHU/APL – NASA/GSFC

141
Oct 67

SOLAR PROTONS BY SATELLITE
EXPLORER 34 (1967-51A)

OCTOBER 1967

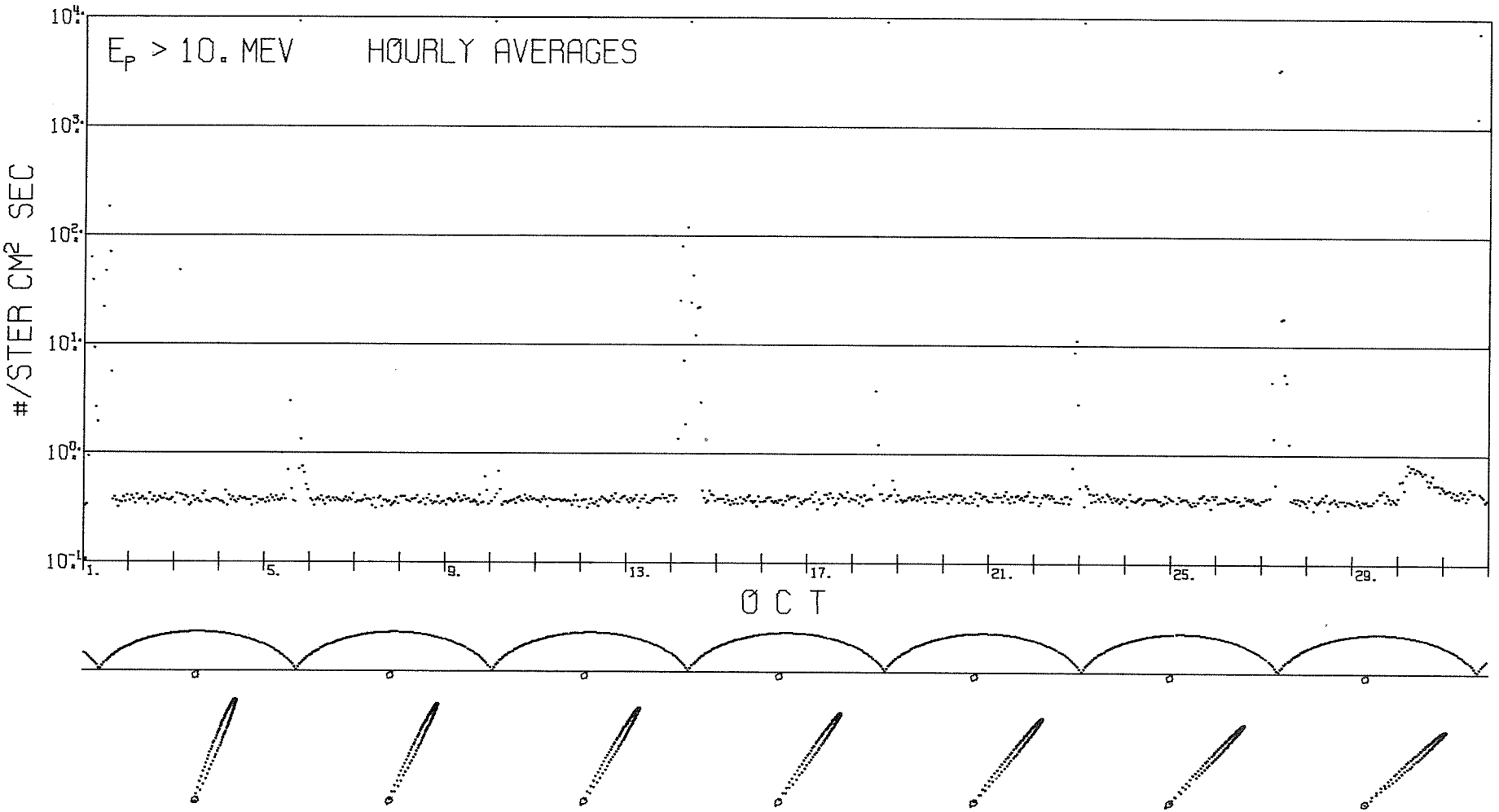
PROTON ENERGY GREATER THAN 10 MEV. HOURLY AVERAGES. IMP F SOLAR PROTON MONITOR. JHU/APL AND GSFC

YEAR 1967

DATE	DAY OF YEAR	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
10 1	274	0.33	0.34	0.94	62.5	38.8	9.11	2.64	1.93	119	09 8827	21.8	47.0	183.	70.5	5.60	0.37	0.40	0.37	0.32	0.36	0.35	0.40	0.36	0.41
10 2	275	0.37	0.40	0.38	0.35	0.41	0.37	0.38	0.40	0.37	0.37	0.34	0.43	0.37	0.39	0.35	0.36	0.39	0.38	0.38	0.42	0.37	0.36	0.38	0.39
10 3	276	0.35	0.43	48.1	0.42	0.41	0.37	0.40	0.39	0.33	0.35	0.40	0.36	0.38	0.36	0.35	0.42	0.44	0.37	0.36	0.35	0.37	0.38	0.38	0.37
10 4	277	0.36	0.36	0.35	0.45	0.33	0.41	0.37	0.39	0.37	0.35	0.37	0.39	0.38	0.39	0.37	0.37	0.37	0.33	0.39	0.40	0.35	0.38	0.37	0.37
10 5	278	0.35	0.39	0.36	0.41	0.39	0.37	0.40	0.37	0.36	0.38	0.41	0.38	0.70	2.99	0.47	0.36	0.36	31683	0.72	1.35	0.76	0.66	0.52	0.46
10 6	279	0.38	0.37	0.33	0.37	0.39	0.37	0.40	0.36	0.34	0.38	0.39	0.37	0.38	0.36	0.39	0.38	0.36	0.36	0.37	0.39	0.37	0.39	0.37	0.42
10 7	280	0.35	0.37	0.36	0.36	0.38	0.41	0.38	0.38	0.37	0.33	0.39	0.31	0.39	0.41	0.32	0.37	0.37	0.35	0.37	0.33	0.34	0.36	0.39	0.34
10 8	281	0.40	0.40	0.40	0.37	0.37	0.36	0.38	0.38	0.38	0.41	0.35	0.36	0.38	0.34	0.39	0.41	0.37	0.35	0.36	0.36	0.40	0.34	0.36	0.36
10 9	282	0.34	0.38	0.39	0.37	0.36	0.38	0.43	0.39	0.36	0.37	0.41	0.38	0.39	0.35	0.36	0.37	0.36	0.34	0.42	0.35	0.36	0.61	0.46	0.35
10 10	283	0.36	11074	0.40	0.43	0.68	0.47	0.34	0.36	0.37	0.35	0.37	0.37	0.38	0.35	0.39	0.41	0.37	0.36	0.42	0.39	0.37	0.41	0.38	0.39
10 11	284	0.38	0.37	0.36	0.38	0.40	0.38	0.32	0.39	0.38	0.37	0.37	0.38	0.38	0.37	0.37	0.38	0.36	0.37	0.37	0.34	0.37	0.42	0.37	0.32
10 12	285	0.37	0.38	0.38	0.32	0.35	0.39	0.35	0.34	0.36	0.33	0.38	0.40	0.38	0.37	0.36	0.37	0.41	0.39	0.43	0.36	0.36	0.39	0.40	0.41
10 13	286	0.38	0.36	0.39	0.37	0.39	0.42	0.32	0.37	0.39	0.39	0.42	0.36	0.35	0.37	0.38	0.39	0.40	0.40	0.38	0.43	0.40	0.40	0.36	0.42
10 14	287	0.42	0.37	0.39	1.38	25.6	80.8	7.18	1.87	120.	20859	24.6	43.8	12.2	21.6	22.1	2.94	0.46	0.40	0.36	0.37	0.46	0.43	0.41	0.37
10 15	288	0.39	0.39	0.39	0.39	0.36	0.42	0.38	0.35	0.37	0.35	0.39	0.35	0.40	0.35	0.39	0.37	0.40	0.42	0.37	0.36	0.37	0.33	0.41	0.37
10 16	289	0.36	0.37	0.39	0.40	0.40	0.37	0.36	0.38	0.36	0.38	0.38	0.34	0.37	0.42	0.39	0.40	0.40	0.41	0.33	0.40	0.37	0.35	0.37	0.39
10 17	290	0.38	0.40	0.43	0.37	0.45	0.31	0.38	0.35	0.36	0.43	0.43	0.40	0.45	0.41	0.34	0.36	0.40	0.43	0.42	0.40	0.40	0.45	0.37	0.39
10 18	291	0.39	0.38	0.43	0.36	0.41	0.34	0.42	0.38	0.39	0.39	0.38	0.52	3.76	1.23	0.44	0.43	0.38	35955	0.40	0.42	0.42	0.58	0.48	0.38
10 19	292	0.42	0.38	0.37	0.38	0.38	0.41	0.41	0.39	0.40	0.42	0.38	0.42	0.40	0.41	0.36	0.41	0.46	0.41	0.37	0.41	0.37	0.40	0.39	0.40
10 20	293	0.41	0.41	0.36	0.43	0.39	0.41	0.44	0.43	0.37	0.42	0.38	0.40	0.37	0.36	0.42	0.37	0.39	0.45	0.35	0.44	0.40	0.42	0.42	0.38
10 21	294	0.37	0.37	0.41	0.44	0.41	0.41	0.41	0.37	0.43	0.46	0.39	0.36	0.42	0.37	0.41	0.43	0.39	0.41	0.39	0.42	0.43	0.46	0.37	0.37
10 22	295	0.42	0.41	0.35	0.37	0.41	0.44	0.42	0.43	0.40	0.42	0.40	0.38	0.37	0.37	0.40	0.37	0.42	0.42	0.36	0.40	0.76	8.61	11.1	2.88
10 23	296	0.49	31152	0.34	0.52	0.49	0.44	0.37	0.44	0.38	0.44	0.40	0.38	0.42	0.38	0.45	0.42	0.40	0.37	0.41	0.39	0.40	0.37	0.38	0.40
10 24	297	0.40	0.34	0.44	0.38	0.38	0.37	0.39	0.40	0.41	0.36	0.37	0.40	0.40	0.39	0.40	0.40	0.39	0.38	0.38	0.35	0.37	0.43	0.38	0.41
10 25	298	0.39	0.39		0.37	0.42	0.39	0.39	0.39	0.40	0.38	0.36	0.35	0.38	0.35	0.37	0.41	0.42	0.43	0.37	0.40	0.39	0.33	0.43	0.40
10 26	299	0.43	0.36	0.37	0.37	0.37	0.41	0.40	0.39	0.39	0.39	0.42	0.38	0.39	0.35	0.36	0.41	0.39	0.40	0.39	0.40	0.37	0.37	0.38	0.36
10 27	300	0.39	0.39	0.40		0.41	4.70	1.42	0.53	3324	3478	17.6	18.0	5.58	4.65	1.28	0.39	0.38	0.40	0.37	0.40	0.36	0.39	0.39	0.37
10 28	301	0.34	0.39	0.42	0.32	0.38	0.37	0.38	0.39	0.42	0.39	0.44	0.32	0.37	0.39	0.40	0.37	0.35	0.39	0.38	0.38	0.36	0.38	0.38	0.37
10 29	302	0.37	0.36	0.39	0.36	0.34	0.38	0.37	0.38	0.36	0.36	0.36	0.38		0.40	0.45	0.45	0.47	0.38	0.44	0.41	0.37	0.40	0.39	0.37
10 30	303	0.41	0.58	0.59	0.49	0.68	0.83	0.73	0.79	0.79	0.72	0.76	0.75	0.71	0.67	0.71	0.60	0.54	0.59	0.66	0.54	0.54	0.54	0.47	0.53
10 31	304	0.50	0.47	0.47	0.49	0.44	0.47	0.41	0.45	0.41	0.47	0.42	0.46	0.39	0.42	0.50	0.46	0.46	1256	7381	0.45	0.44	0.42	0.38	0.40

SOLAR PROTONS BY SATELLITE
EXPLORER 34 (1967-51A)

OCTOBER 1967



IMP-F SPME

JHU/APL — NASA/GSFC

143
Oct 67

Table of Contents
for Miscellaneous Data

For explanation of the data contained herein see "Descriptive Text" published in February 1968.

POLAR CAP ABSORPTION EVENTS

JANUARY - MAY 1967

Date	Onset Time	Time of Peak Absorption	Peak Absorption (db)	Duration (> hrs)	Probable Flare				Magnetic Activity	Comments*
					Time	Importance	Position Lat	Position Long		
1967										
28 Jan	0915	29/0000	7	>130 (to start of new event)	No major flare known				No major magnetic activity	Type IV(?) 0755-0820 Major ground level neutron event
2 Feb	by 2000	3/0000 - 1000	2.5	> 50	2/1818 2/1857 [Many 1F to 1N 22^h Feb 1 - 03^h Feb 2]	1F 1N	S25 S24	W57 E28	No major magnetic activity	Type IV(?) 1841-1930
11 Mar	by 2020	12/0100 - 0600	1.2	> 60	No major flare known				No major magnetic activity	Long duration noise storm including March 11
24 May	by 0130	25/0700 - 1300	11.0	> 72	23/1803 23/1836 23/1935	2B 2B 2B	N30 N27 N27	E25 E25 E28	SC 24/1726 SC 25/1021 SC 25/1235	Strong radio noise 23/1835 to 24/0400
28 May	by 0640	28/0800 - 1800	3.5	> 48	28/0527	3B	N28	W33	SC 28/1303 SC 30/1426	Type IV(?) 0530-0700

*Intense and prolonged outbursts of solar radio noise are frequently observed by 30 MHz riometers in association with intense flares. In cases where other observations have also been available, this has usually been found to be Type IV (continuum) noise. When there are no other observations known, such events are denoted by Type IV (?)

COSMIC RAY INDICES
(Neutron Monitor)

Dallas, Texas, U.S.A.
October 1966-March 1967

Daily Average Counts per Hour

	Oct 1966	Nov 1966	Dec 1966	Jan 1967	Feb 1967	Mar 1967
1	6075.3	6287.3	6314.3	6205.8	6143.0	6236.1
2	6071.3	6299.2	6279.1	6201.6	6193.7	6231.3
3	6064.8(21)	6274.9	6266.5	6218.0	6148.3	6165.5
4	6106.5	6218.0	6252.4	6246.0	6094.6	6137.1
5	6176.0	6216.6	6230.8	6243.6	6111.0	6111.5
6	6206.9	6209.1	6237.0	6241.5	6064.2	6120.0
7	6213.6	6234.7	6235.6	6219.7	6091.6	6116.2
8	6199.1(22)	6248.6	6264.0	6212.0	6052.5	6143.4
9	6194.3	6228.7	6304.6	6115.7	6000.0	6100.6
10	6186.3	6243.5	6328.7	6113.2	6030.2	6099.9
11	6196.7	6234.9	6350.4	6164.7	6065.6	6106.5
12	6174.5	6237.1	6365.8	6146.4	6110.2	6123.5
13	6156.9	6220.0	6294.0	6085.0	6110.4	6132.3
14	6172.7	6248.4	6205.1	6049.3	6132.9	6143.8
15	6251.4	6257.5	6157.7	6043.8	6146.0	6177.5
16	6170.7	6287.8	6154.5	6110.5	6065.5	6190.5
17	6159.7	6252.5	6192.6	6132.5	6050.3	6167.6
18	6234.0	6188.7	6131.2	6144.7	6085.4	6164.1
19	6300.9	6251.9	6135.8	6161.5	6073.7	6192.8
20	6307.7	6257.5	6178.3	6183.7	6110.4	6177.8
21	6297.3	6251.9	6190.8	6188.3	6146.1	6235.1
22	6287.6	6261.4	6172.0	6171.1	6184.0	6240.8
23	6298.4	6259.8	6240.7	6134.0	6205.2	6221.4
24	6270.6	6249.0	6279.1	6130.2	6222.9	6245.5
25	6270.8	6254.4	6194.0	6131.8	6203.0	6243.6
26	6181.4	6253.5	6184.7	6152.2	6195.6	6250.2(18)
27	6117.8	6287.6	6183.0	6157.7	6201.5	6263.2(9)
28	6123.0	6309.6	6189.6	6208.7	6238.7	6195.1
29	6182.9	6311.9	6193.5	6178.9		6194.5
30	6253.6	6298.2	6182.5	6173.8		6211.8
31	6267.7		6186.6	6170.8		6224.7

Dallas Super Neutron Monitor, Scaling Factor 120.

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

The Neutron Monitor data from Dallas for April-Sept. 1966 were published on page 124 in IER-FB-275. Current data are published monthly in the white section of FB on the second month after observation.

COSMIC RAY INDICES
(Neutron Monitor)

Ft. Churchill, Canada
January-March 1967

Daily Average Counts per Hour

	Jan 1967	Feb 1967	Mar 1967
1	6220.6	6176.8	6218.2
2	6205.2	6208.0	6236.3
3	6205.2	6189.7	6177.0
4	6224.4	6177.2	6156.2
5	6258.1	6144.1	6122.2
6	6262.5	6065.1	6140.1
7	6165.8	6096.5	6154.1
8	6102.3	5976.9	6156.5
9	6032.8	5962.5	6144.6
10	6028.6	6020.3	6127.1
11	6117.2	6044.9	6140.8
12	6162.8	6085.5	6148.1
13	6082.6	6115.8	6163.2
14	5964.9	6140.0	6184.3
15	6013.2	6179.2	6212.2
16	6129.0	5991.7	6221.7
17	6147.6	5962.9	6173.3
18	6176.1	6026.5	6170.0
19	6206.6	6060.5	6203.4
20	6205.0	6103.1	6187.7
21	6183.0	6150.0	6238.2
22	6183.6	6190.3	6248.6
23	6140.7	6198.5	6260.9
24	6166.3	6189.6	6260.1
25	6167.1	6167.1	6292.8
26	6174.5	6183.5	6300.7
27	6191.2	6208.6	6258.7
28	6485.0	6217.6	6209.8
29	6193.2		6219.8
30	6154.2		6211.0
31	6168.3		6234.5

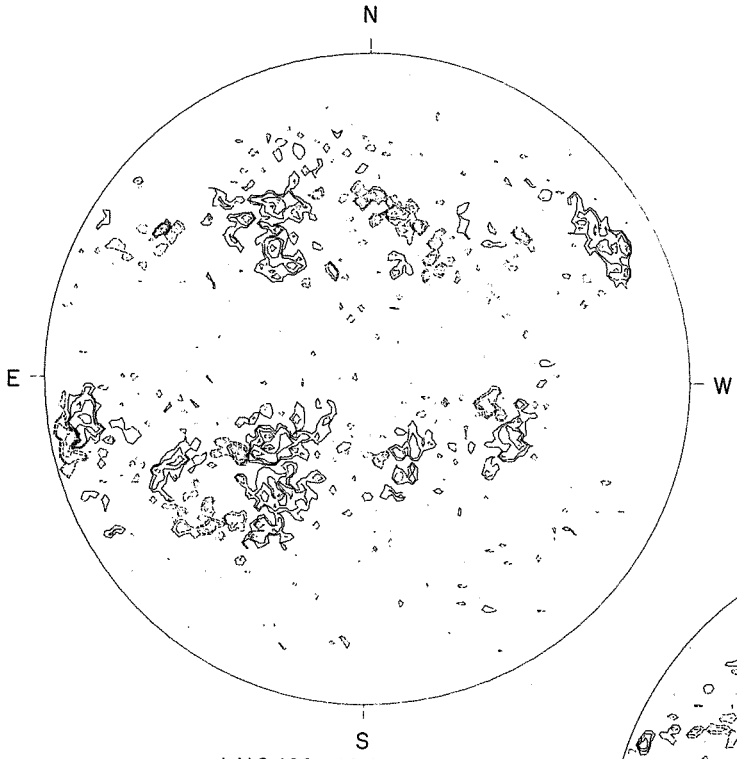
Ft. Churchill Super Neutron Monitor, Scaling Factor 120.

The Neutron Monitor data from Ft. Churchill for April-December 1966 were published on page 116 in IER-FB-274. Current data are published monthly in the white section of FB on the second month after observation.

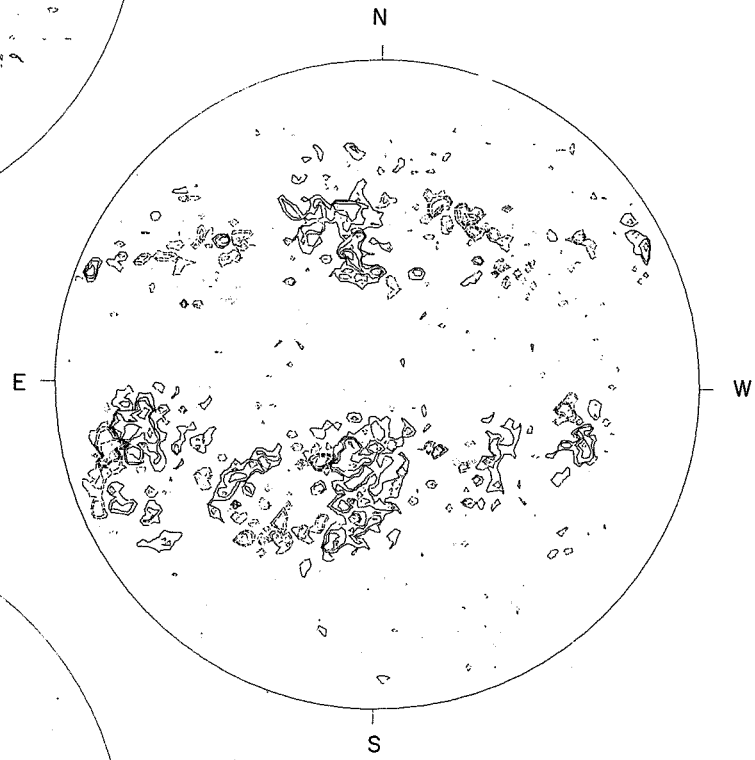
MOUNT WILSON OBSERVATORY MAGNETOGRAMS

JANUARY 1968

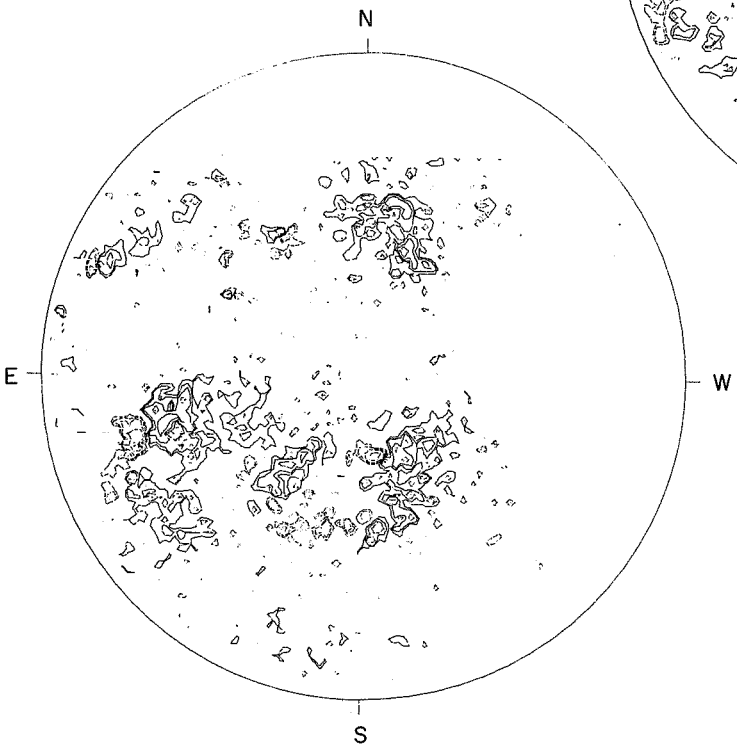
SOLID-PLUS
DOTTED-MINUS
LEVELS
(GAUSS)
± 5
±10
±20
±40
±80



1/18/68 16.85-18.16 UT
DELTAY=62.0 DELTAX=56.2



1/19/68 17.66-18.95 UT
DELTAY=62.0 DELTAX=57.0



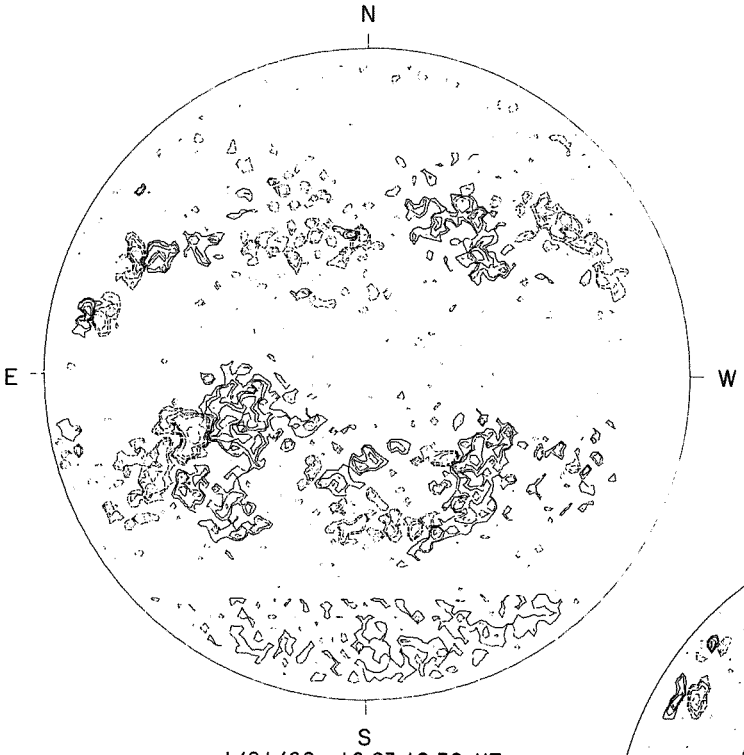
1/20/68 16.49-18.00 UT
DELTAY=61.3 DELTAX=55.4

These Mt. Wilson Magnetograms were received too late for publication in their regular positions in IER-FB-283.

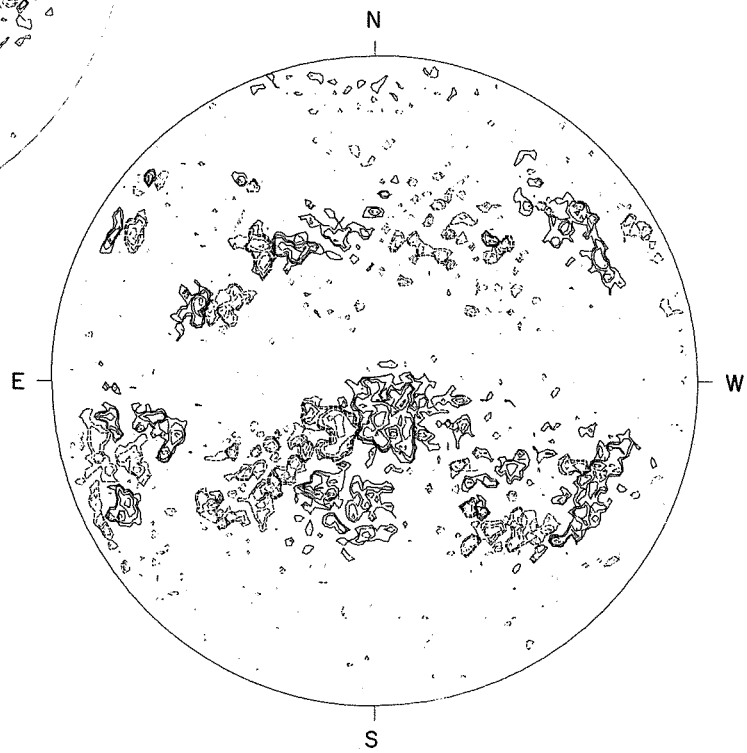
MOUNT WILSON OBSERVATORY MAGNETOGRAMS

JANUARY 1968

SOLID-PLUS
DOTTED-MINUS
LEVELS
(GAUSS)
± 5
±10
±20
±40
±80



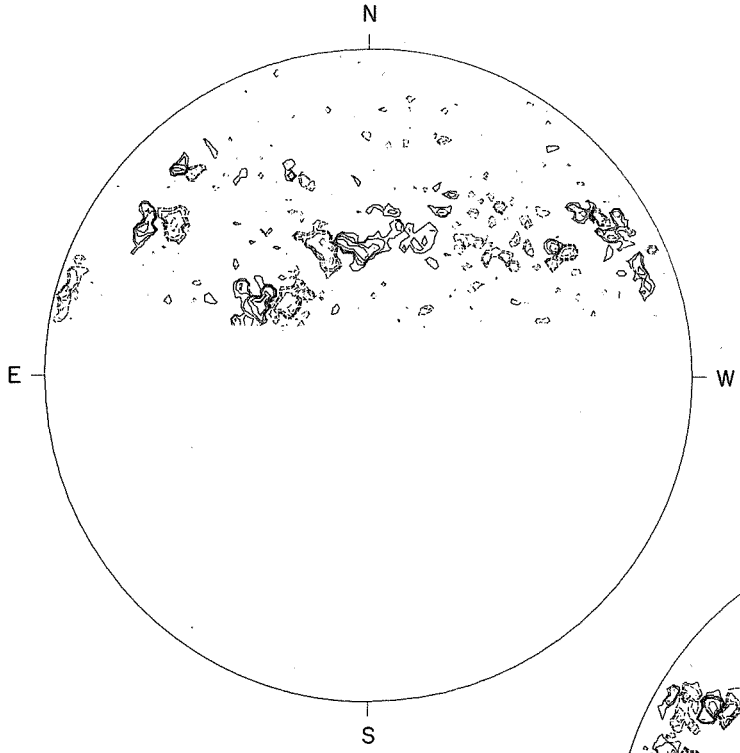
1/21/68 16.83-18.32 UT
DELTAY=60.9 DELTAX=56.2



1/23/68 16.55-18.02 UT
DELTAY=62.0 DELTAX=50.5

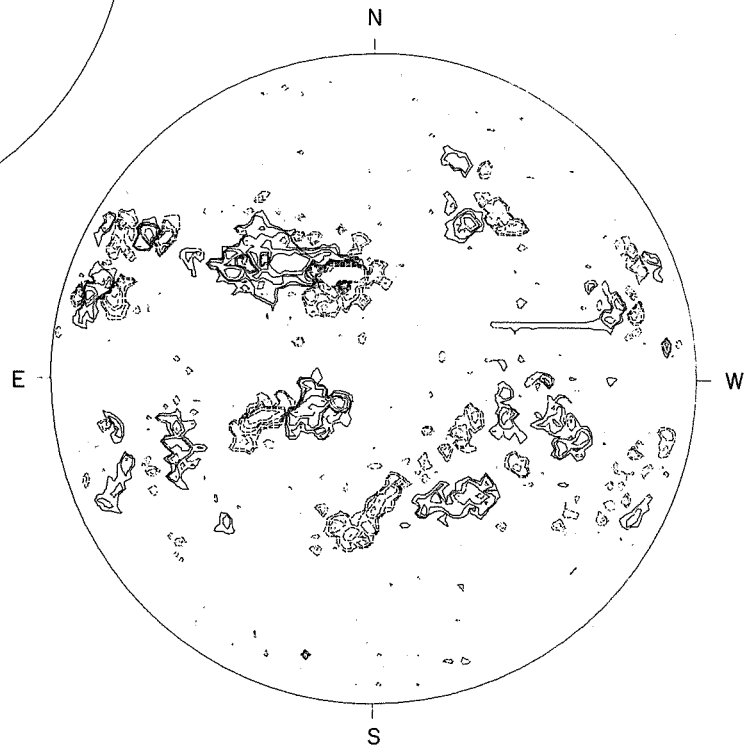
MOUNT WILSON OBSERVATORY MAGNETOGRAMS

JANUARY 1968



1/24/68 16.96-17.53
DELTAY=62.0 DELTAX=53.5

SOLID-PLUS
DOTTED-MINUS
LEVELS
(GAUSS)
± 5
±10
±20
±40
±80



1/29/68 21.39-22.89
DELTAY=62.0 DELTAX=59.6

USCOMM - ESSA - ASHEVILLE - - 4/30/68 - - 1000