

PART B  
SOLAR - GEOPHYSICAL DATA

ISSUED  
AUGUST 1962

U. S. DEPARTMENT OF COMMERCE  
NATIONAL BUREAU OF STANDARDS  
CENTRAL RADIO PROPAGATION LABORATORY  
BOULDER, COLORADO

## SOLAR - GEOPHYSICAL DATA

### CONTENTS

#### I DAILY SOLAR INDICES

- (a) Relative Sunspot Numbers and 2800 Mc Solar Flux - June-July 1962
- (b) Graph of Sunspot Cycle

#### II SOLAR CENTERS OF ACTIVITY

- (a) Calcium Plage and Sunspot Regions - July 1962
- (b) Magnetic Classifications of Sunspots (Mt. Wilson) - July 1962
- (c-e) Final Coronal Line Emission Indices - April, May, June 1962
- (f) Provisional Coronal Line Emission Indices - July 1962

#### III SOLAR FLARES

- (a-f) Optical Observations - July 1962
- (g) Flare Patrol Observations - July 1962
- (h-n) Optical Observations - April 1962
- (o) Flare Patrol Observations - April 1962
- (p) Inospheric Effects (SWF-SEA-SCNA-SPA-Bursts) - June 1962

#### IV SOLAR RADIO WAVES

- (a) 2800 Mc - Outstanding Occurrences (ARO-Ottawa) - July 1962
- (b) 169 Mc - Interferometric Occurrences (Nançay) - July 1962
- (c) 108 Mc - Outstanding Occurrences (Boulder) - July 1962
- (d) 7.6 - 41 Mc - Spectrum Observations (HAO-Boulder) - July 1962
- (e-f) 25-580 Mc - Fort Davis - April, May, June 1962
- (g-l) 9.1 cm - Spectroheliograms (Stanford) - July 1962

#### V COSMIC RAY INDICES

- (a) Climax Neutron Monitor - June 1962
- (b) Deep River Neutron Monitor - June 1962

#### VI GEOMAGNETIC ACTIVITY INDICES

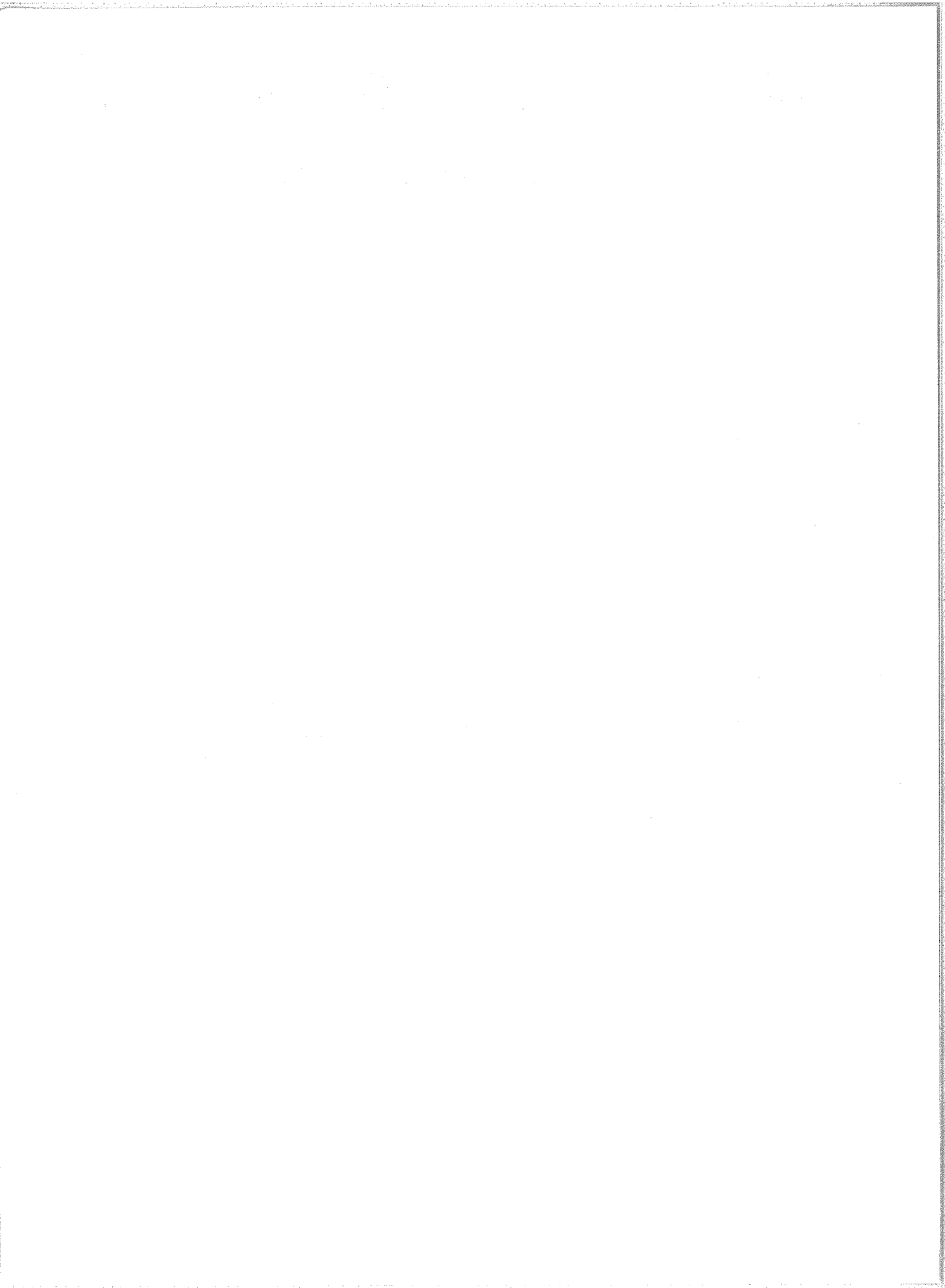
- (a) C, Kp, Ap and Selected Quiet and Disturbed Days - June 1962
- (b) Chart of Kp by Solar Rotations - 1962

#### VII RADIO PROPAGATION QUALITY INDICES

- (a) CRPL Quality Figures and Forecasts - North Atlantic and North Pacific - June 1962
- (b) Graphs Comparing Forecasts and Observed Quality - North Atlantic and North Pacific - June 1962
- (c-d) Graphs of Useful Frequency Ranges - June 1962

#### VIII ALERT PERIODS AND SPECIAL WORLD INTERVALS

- (a) Alerts and SWI - July 1962



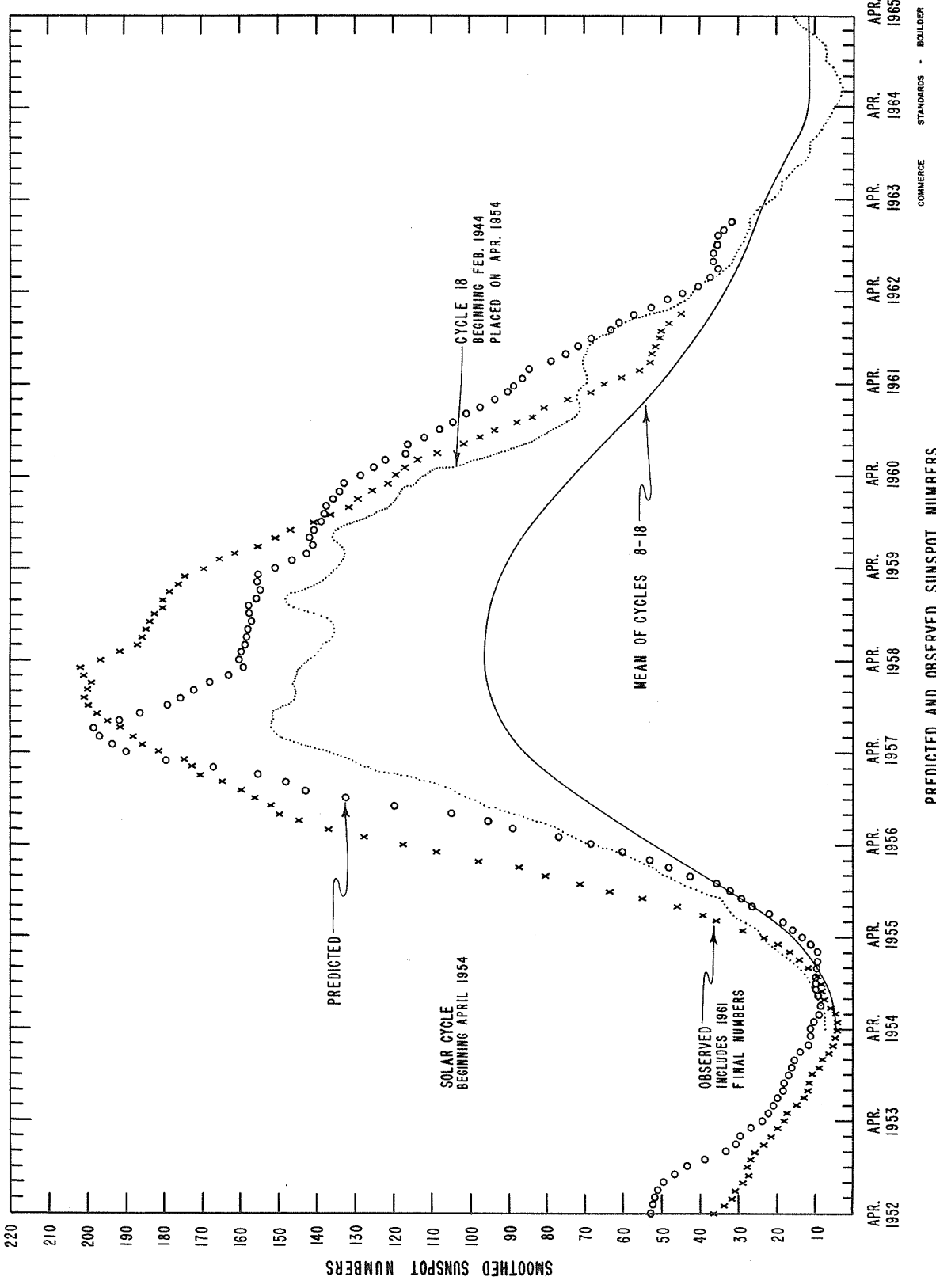
The descriptive text was republished November 1961.  
Addenda to the text were published February 1962.

## DAILY SOLAR INDICES

June 1962	American Relative Sunspot Numbers $R_A$	July 1962	Zürich Provisional Relative Sunspot Numbers $R_Z$	Daily Values Solar Flux at 2800 Mc, Ottawa, Canada Flux
1	21	1	54	*
2	17	2	39	*
3	4	3	38	*
4	2	4	30	90
5	11	5	26	88
6	31	6	20	86
7	30	7	21	88
8	29	8	16	83
9	38	9	10	80
10	33	10	13	81
11	35	11	19	83
12	25	12	11	82
13	27	13	29	86
14	44	14	33	86
15	45	15	21	85
16	48	16	26	84
17	59	17	31	84
18	57	18	23	82
19	60	19	8	80
20	41	20	14	80
21	32	21	23	79
22	27	22	23	80
23	22	23	17	78
24	30	24	13	78
25	30	25	11	74
26	35	26	9	76
27	30	27	9	74
28	31	28	9	74
29	37	29	8	73
30	43	30	7	72
		31	0	73
Mean:	32.5	Mean:	19.7	80.7

\* No observations - equipment breakdown.

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## CALCIUM PLAGE AND SUNSPOT REGIONS

JULY 1962

CMP July 1962	Lat	McMath Plage Number	Return of Region	Calcium Plage Data			Sunspot Data	
				CMP Values Area Int.	History, Age	CMP Values Area Count	History	
01.2	S20	6466	6432	2300 3	<i>l</i> — <i>l</i> 3	60 5	<i>l</i> — <i>l</i>	
02.5	N09	6467	6436	600 1	<i>l</i> — <i>l</i> 2			
03.4	N05	6469	6436	300 1.5	<i>b</i> $\wedge$ <i>d</i> 2			
03.4	S03	6471	New	400 1	<i>b</i> $\wedge$ <i>l</i> 1			
04.4	S09	6470	New	200 2	<i>l</i> — <i>l</i> 1			
06.4	N20	6478	*	200 2	<i>b</i> $\wedge$ <i>d</i>			
07.3	N07	6485	New	(200) (2)	<i>b</i> $\wedge$ <i>l</i> 1			
08.1	S10	6472	6441	1600 2	<i>l</i> — <i>l</i> 4			
08.2	N16	6475	6443	600 1.5	<i>b</i> $\wedge$ <i>d</i> 7			
08.4	N08	6479	*	600 2	<i>b</i> $\wedge$ <i>d</i>			
09.2	N17	6474	6443	(400) (1.5)	<i>l</i> $\wedge$ <i>d</i> 7			
10.9	N17	6476	6447	800 1.5	<i>l</i> — <i>l</i> 7			
11.4	N01	6490	New	(200) (2.5)	<i>b</i> $\wedge$ <i>l</i> 1			
11.6	S12	6477	6445	1400 2.5	<i>l</i> — <i>l</i> 2			
12.7	N09	6480	6452	2300 3	<i>l</i> — <i>l</i> 2	320 1	<i>l</i> — <i>l</i>	
13.2	N23	6481	6451	1000 2	<i>l</i> — <i>l</i> 7			
13.6	S14	6482	6455	500 1.5	<i>l</i> — <i>l</i> 2			
14.2	N12	6487	6453	300 1	<i>l</i> $\wedge$ <i>d</i> 3			
15.2	N01	6496	New	(200) (1.5)	<i>b</i> $\wedge$ <i>l</i> 1			
15.5	N16	6486	New	300 1	<i>l</i> — <i>l</i> 1			
16.9	N06	6488	6465	400 1	<i>l</i> $\wedge$ <i>d</i> 2			
17.2	S09	6491	New	400 2	<i>l</i> — <i>l</i> 1			
20.1	N18	6492	**	3200 3	<i>l</i> — <i>l</i> 4			
20.6	S09	6493	6460	900 2.5	<i>l</i> $\wedge$ <i>l</i> 4	20 2	<i>b</i> $\wedge$ <i>d</i>	
21.1	N07	6495	New	700 2.5	<i>b</i> $\wedge$ <i>l</i> 1			
22.5	N06	6494	New	1400 3	<i>l</i> — <i>l</i> 1	10 1	<i>b</i> $\wedge$ <i>d</i>	
27.4	N03	6497	6463	1500 3	<i>l</i> — <i>l</i> 2	40 4	<i>l</i> $\wedge$ <i>d</i>	
27.6	S06	6499	6463	500 2.5	<i>l</i> — <i>l</i> 2	50 3	<i>b</i> $\wedge$ <i>d</i>	
29.2	S20	6501	New	200 2.5	<i>b</i> $\wedge$ <i>d</i> 1			
29.8	N12	6500	6467	(400) (1.5)	<i>l</i> — <i>l</i> 3			

\* New and ephemeral

\*\* 6458, 6459

Erratum: In the June 1962 Calcium Plage and Sunspot Region Table published in  
CRPL-F 215B for July 1962, page IIa, add the following data:

19.9	N05	6465	New	(600) (3)	<i>b</i> $\wedge$ <i>l</i> 1		
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# MT. WILSON MAGNETIC CLASSIFICATIONS OF SUNSPOTS

11b

JULY 1962

July 1962	Time Meas.	Lat.	Mer. Dist.	Type		July 1962	Time Meas.	Lat.	Mer. Dist.	Type
1	2355	S00 S22	W21 W07	$\beta$ p* $\beta$ p		15	1625	N09 N11 N12	W40 W35 E58	aP $\beta$ aP
2	1630	S00 S22	W29 W18	$\beta$ p* $\beta$ p		16	2350	N10 N13	W57 W48	aP af
5	1600	S00 S22	W69 W59	$\beta$ p* ap		17	1730	N10 S11 N04	W68 W55 E58	ap aP ap
7	1735	N10	E63	ap						
8	2355	N10	E48	aP		18	1645	N10 N06	W79 E47	ap $\beta$ p**
9	1840	N09	E38	ap		23	2318	N01	E42	ap
10	2315	N09	E22	ap		24	1545	N01	E34	ap
11	1720	N18 N09	W06 E12	af $\beta$ p		27	2400	N01	W06	$\beta$ p
13	1635	N10 N12 S15	W13 W07 E46	ap $\beta$ $\beta$		28	2230	N01	W19	$\beta$ p
14	2330	N00 N09 N11 S12	W50 W30 W25 E27	a * ap $\beta$ ap		29	2320	N00	W35	ap

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\* Polarities normal for Northern Hemisphere.  
 \*\* Polarities Reversed for this Hemisphere.



# FINAL CORONAL LINE EMISSION INDICES

APRIL 1962

CMP Apr 1962	North East Quadrant (observed 7 days earlier)				South East Quadrant (observed 7 days earlier)				South West Quadrant (observed 7 days later)				North West Quadrant (observed 7 days later)			
	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>
1	42	102	7	12	29	62	16	22	47	87	34	52	51	77	22	32
2	20	53	8a	14a	14	36	12a	18a	18	36	x	x	24	63	x	x
3	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
4	4	14	22a	36a	5	8	18a	24a	x	x	5	8	x	x	16	28
5	7	8	6	7	5	8	3	5	12	20	31	39	22	39	18	24
6	x	x	x	x	x	x	x	x	7	11	8	9	15	17	10	16
7	3	4	11	15	3	4	14	16	4	8	8	10	6	8	9	10
8	9	11	25	25	6	6	21	22	2	8	21	31	9	14	43	57
9	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
10	20	23	13	19	16	21	18	28	x	x	x	x	x	x	x	x
11	x	x	x	x	x	x	x	x	15	39	12	16	14	25	19	27
12	x	x	7	x	x	x	x	x	6a	8a	6	8	18a	25a	4	6
13	27	28	7	10	18	23	11	18	6	17	5	8	24	45	6	10
14	40	48	13	14	36	57	13	16	x	x	x	x	x	x	x	x
15	61	74	16	27	32	62	13	16	x	x	x	x	x	x	x	x
16	11	22	x	x	34	42	x	x	18	45	6	9	57	76	4	7
17	x	x	x	x	x	x	x	x	29	78	6	13	101	118	15	25
18	x	x	10	14	x	x	15	18	31	70	8	21	84	109	16	30
19	83	124	57	90	38	87	29	54	x	x	x	x	x	x	x	x
20	118	193	18	28	54	90	12	25	x	x	x	x	x	x	x	x
21	61	98	13	30	59	98	9	18	36	73	22	39	50	76	16	22
22	59	90	20	32	39	76	19	28	49	81	19	45	64	110	15	24
23	x	x	x	x	x	x	x	x	35	54	5	10	55	97	1	4
24	x	x	x	x	x	x	x	x	8	17	11	13	28	36	7	9
25	21	25	12	16	9	11	14	18	24a	36a	x	x	12a	17a	x	x
26	40	48	8	21	26	34	7	13	x	x	x	x	x	x	x	x
27	25	50	2	4	14	22	8	14	x	x	x	x	x	x	x	x
28	x	x	x	x	x	x	x	x	17	22	13	28	49	174	10	12
29	x	x	x	x	x	x	x	x	17	38	13	x	49	59	x	x
30	28	42	13a	20a	14	31	11a	20a	x	x	x	x	x	x	x	x

x = no observations

a = index computed from low weight data

\* = yellow line observed

observed - stations - 00000000

# FINAL CORONAL LINE EMISSION INDICES

MAY 1962

CMP May 1962	North East Quadrant (observed 7 days earlier)				South East Quadrant (observed 7 days earlier)				South West Quadrant (observed 7 days later)				North West Quadrant (observed 7 days later)			
	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>
1	49	134	17	21	16	39	5	6	x	22	37	74a	x	84	x	x
2	37	87	21	33	9	25	11	17	x	15	21	10	56	57a	57a	77a
3	63	119	x	x	21	36	x	x	x	6	6	24	37	48	17	21
4	x	x	x	x	x	x	x	36	x	x	19	7	15	22	30	54
5	8	11	25	33	3	6	22	x	x	10	25	7	25	9	13	13
6	17	21	17	18	10	11	11	14	8	5	8	14	2	2	16	36
7	13	19	8a	10a	19	24	11a	12a	34	20	21a	26a	9	12	25a	40a
8	14	20	10	11	7	11	13	16	14	6	x	x	18	31	x	x
9	24a	36a	x	x	12a	17a	x	x	32	23	22	35	45	86	7	12
10	27a	59a	x	x	8a	11a	x	x	17	10	10a	20a	51	120	8a	10a
11	3a	4a	x	x	0a	0a	x	x	9	7	11	16	45	84	19	56
12	54	112	x	x	17	36	x	x	20	13	32	40	43	64	31	38
13	60	82	13	17	17	26	12	18	37	19	9	14	42	4	4	9
14	x	x	x	x	x	x	x	x	55	19	5	10	18	58	8	14
15	x	x	x	x	x	x	x	x	51	22	9	10	38	55	5	12
16	89	132	57a	108a	54	80	48a	98a	76	46	7	9	65	101	11	26
17	99	164	15	28	60	102	28	49	70	38	7	8	127	201	18	40
18	86	148	28	82	56	90	18	20	37	30	x	x	38	46	x	x
19	60	115	8	13	28	59	4	9	20	14	x	x	18	20	x	x
20	12	14	0	0	9	14	4	6	25	16	8	10	25	33	2	2
21	23	26	20a	36a	13	16	22a	25a	23	14	1	3	34	41	6	12
22	16	22	x	x	8	11	x	x	8	4	11	16	22	42	16	40
23	48	84	8	10	26	42	14	20	20	12	x	x	32	53	x	x
24	34	70	3a	5a	8	14	2a	2a	20	14	5	8	43	52	5	7
25	37	75	14	28	6	9	10	12	21	8	16	22	31	34	6	10
26	72	126	33	57	19	31	12	16	59	31	6	11	71	179	12	26
27	87	171	12	22	39	76	6	7	92	51	25	36	118	244	31	44
28	34	53	8	12	9	18	11	16	50	28	10	15	65	174	11	17
29	30	46	11	28	7	15	11	18	1a	0a	1a	2a	1a	1a	1a	1a
30	33	50	7	11	10	14	9	14	x	x	x	x	x	x	x	x
31	12	22	14	24	14	30	31	34	6	4	7	10	6	7	4	4

x = no observations

a = index computed from low weight data

\* = yellow line observed

STATIONARIES - SOLAR

# FINAL CORONAL LINE EMISSION INDICES

JUNE 1962

CMP Jun 1962	North East Quadrant (observed 7 days earlier)			South East Quadrant (observed 7 days earlier)			South West Quadrant (observed 7 days later)			North West Quadrant (observed 7 days later)		
	G <sub>6</sub>	G <sub>1</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>1</sub>
1	10	15	8	7	9	6	x	x	x	x	x	x
2	7	12	x	17	26	x	30	30	50	14	34	36
3	18	28	5	29	60	1	24	48a	85a	9	14	44a
4	18	26	12	26	70	30	23a	45a	89a	10a	11a	56a
5	7	15	48	6	16	32	20	7	13	30	56	5
6	43	73	x	22	53	x	4	8	7	9	16	5
7	51	95	6	19	48	13	1a	2a	12a	34a	76a	17a
8	1	3	10	0	0	10	6a	14a	5a	13a	28a	4a
9	29	45	7	23	53	9	23	61	20	17	27	2
10	43	59	17	53	120	60	43	98	12	27	36	5
11	56	87	10	48	115	19	52	135	11	55	98	3
12	1a	2a	0a	1a	5a	2a	40	62	48	47	62	15
13	x	x	x	x	x	x	51	87	15	77	134	6
14	22	28	44	17	27	8	59	115	29	71	126	0
15	62	109	4a	24	34	4a	45	91	16	62	85	3
16	70	120	68	17	20	48	61	103	11	86	132	4
17	43	87	28a	5	8	24a	x	x	x	x	x	x
18	42	62	16a	9	14	28a	19	27	13	39	78	0
19	77	112	7	24	44	6	8	14	4	36	64	8
20	6	8	5	2	4	7	6	14	43a	27	31	36a
21	38a	53a	16a	14a	17a	18a	4a	12a	7a	27a	50a	4a
22	38a	64a	10a	3a	6a	7a	32	63	x	87	158	x
23	53	87	22	18	45	22	35	65	20	70	103	4
24	61	112	42	29	67	26	33	62	32a	45	67	9a
25	37	73	24a	18	36	18a	32	42	9	27	48	3
26	23	39	88	8	11	50	9	11	10	18	28	6
27	16	25	29	8	11	0	3	3	10a	6	8	10a
28	9	17	10	8	14	6	2	28	x	5	11	x
29	11	22	11	15	22	6	25	25	17	13	21	8
30	25	78	11	42	62	14	41	54	x	9	38	x

x = no observations

a = index computed from low weight data

\* = yellow line observed

CORONAL LINE EMISSION INDICES

# PROVISIONAL CORONAL LINE EMISSION INDICES

JULY 1962

CMP Jul 1962	North East Quadrant (observed 7 days earlier)				South East Quadrant (observed 7 days earlier)				South West Quadrant (observed 7 days later)				North West Quadrant (observed 7 days later)			
	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>	G <sub>6</sub>	G <sub>1</sub>	R <sub>6</sub>	R <sub>1</sub>
1	x	x	x	x	x	x	x	x	35	81	17	40	27	50	21	40
2	15	54	25a	72a	9	20	45a	81a	x	x	x	x	x	x	x	x
3	37	104	16a	28a	17	25	19a	23a	4a	6a	3a	4a	12a	25a	4a	6a
4	16	28	13a	16a	5	8	14a	18a	6	8	8a	14a	24	36	9a	22a
5	10a	20a	4a	5a	3a	4a	6a	7a	x	x	8a	10a	x	x	9a	10a
6	x	x	x	x	x	x	x	x	27	64	9a	16a	21	22	6a	18a
7	x	x	x	x	x	x	x	x	35	78	7a	8a	21	25	6a	8a
8	33	42	4a	8a	48	95	10a	12a	17	36	8	10	22	34	6	7
9	39	59	6a	17a	28	48	6a	7a	30	39	8a	11a	28	39	4a	6a
10	70	137	6a	22a	38	70	6a	20a	x	x	x	x	x	x	x	x
11	52	67	13a	28a	44	92	10a	44a	35	53	x	x	45	56	x	x
12	61	87	x	x	44	93	x	x	x	x	x	x	x	x	x	x
13	x	x	x	x	x	48	x	x	x	x	x	x	x	x	x	x
14	29	38	x	x	22	48	x	x	x	x	x	x	x	x	x	x
15	26	36	6	10	12	17	11	18	5	8	15	17	10	14	7	10
16	x	x	x	x	x	x	x	x	3	6	13	15	4	4	7	10
17	9a	30a	7a	12a	x	6a	3a	4a	x	x	x	x	x	x	x	x
18	33	53	6a	12a	12	17	14a	16a	x	x	x	x	x	x	x	x
19	x	x	14a	28a	x	x	22a	30a	x	x	x	x	x	x	x	x
20	71	101	3a	4a	21	48	13a	18a	27a	45a	11a	31a	65a	81a	3a	4a
21	54	67	8	16	21	48	9	12	12	22	17a	25a	56	95	11a	20a
22	36	70	8	15	7	14	7	7	4	8	x	x	31	62	x	x
23	19	34	x	x	5	8	x	x	3a	8a	11a	17a	3a	6a	9a	15a
24	x	x	x	x	x	x	x	x	3	4	8	10	5	8	10	20
25	12	22	x	x	8	11	x	x	11	20	18a	24a	9	14	18a	30a
26	x	x	x	x	x	x	x	x	33	53	10a	16a	18	53	16a	30a
27	x	x	x	x	x	x	x	x	15	28	x	x	4	10	x	x
28	x	x	x	x	x	x	x	x	4	6	9	18	18	31	11	17
29	8	12	12	30	6	10	11	17	9	11	8a	17a	16	17	8a	12a
30	17	40	15	35	5	10	8	10	3	4	5	5	4	6	5	10
31	x	x	x	x	x	x	x	x	2	2	x	x	4	6	x	x

x = no observations
a = index-computed from low weight data
\* = yellow line observed
COMMERCIAL STANDARDS - BOULDER

# SOLAR FLARES

JULY 1962

OBSERVATORY	DATE	OBSERVED TIME		MAX. PHASE	LOCATION		DURA-TION MINUTES	IM. POR-TANCE	OBS. COND.	TIME U T	MEASUREMENTS		MAX. WIDTH H <sub>g</sub>	MAX. INT. %	PROVISIONAL IONOSPHERIC EFFECT
		START	END		APPROX. LAT.	MATH. PLACE REGION					MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.			
LOCKHEED	01	0030	0050	NO FLARE	PATROL			1-							
	01	0145	0210	NO FLARE	PATROL										
	01	0315	0430	NO FLARE	PATROL										
	01	1605	1825	NO FLARE	PATROL										
LOCKHEED	01	2210	2220	NO FLARE	PATROL										
	01	2345	2354	2347	N00 W21			1-		2347	.30	.30		20	
HTE-PROVEN	02	0000	0500	NO FLARE	PATROL										
	02	1350	1405	NO FLARE	N00 W28			1-							
	02	1805	1815	NO FLARE	PATROL										
	02	1820	1835	NO FLARE	PATROL										
	02	1850	1855	NO FLARE	PATROL										
	02	1940	1950	NO FLARE	PATROL										
	02	2330	2400	NO FLARE	PATROL										
	03	0000	0440	NO FLARE	PATROL										
ATHENES	03	0835	0845		N03 W40			1-			.40	.50			
	03	2100	2114	2104	N01 W50			1-		2104	.40	.50			
HONOLULU	03	2102	2112	2104	S01 W51			1-		2104	.52	.68			
	03	2230	2255	NO FLARE	PATROL										
SAC PEAK	04	1451	1500	1455	N02 W55			1-			.14	.17			
	04	1626	1632	1628	N00 W57	6463		1-		1628	.80	1.50		17	
MCMATH	04	2004	2024	2011	N04 W58			1-		2011	.40	.60		10	
	04	2209	2231	2215	N01 W60			1-		2215	.50	.80		10	
LOCKHEED	04	2211	2222	2215	N02 W60	6463		1-		2215	.70	1.40			
	04	2305	2400	NO FLARE	PATROL										
ATHENES	05	0000	0500	NO FLARE	PATROL										
	05	0624	0629	NO FLARE	S02 W62			1-			.30	.50			
ATHENES	05	0819	0830		S09 W32			1-			.30	.40			
	05	0830	0845		S02 W32	6471		1							
CAPRI S	05	1103	1111		S02 W70			1-			.30	1.00			
	05	1716	1728	1722	N01 W71	6463		1-		1105	.40	1.00			Slow S-SWF
MCMATH	05	1853	1906		N03 W73	6463		1-		1722	.20	.60			
	05	1932	2003		N03 W75	6463		1-		1903	1.00	4.00			
HUANCAYO	05	1933	1947	1939	N03 W68	6463		1+		1939	1.50	3.70			Slow S-SWF
	05	1935	1957	1942	N05 W71	6463		2		1942	2.50	5.00			
LOCKHEED	05	2038	2048	2041	S20 W56			1-		2043	.40	.60			
	05	2039	2045	2041	S22 W59	6466		1-		2041	.30	.60			
MCMATH	05	2042	2048	2042	S22 W59	6466		1-		2042	.62	.99			
	05	2048	2111	2100	N04 W74	6463		1-		2049	.50	.50			
HONOLULU	05	2048	2111	2049	N04 W74	6463		1-		2049	.62	.99			
	05	2305	2315	NO FLARE	PATROL			1-							
MCMATH	05	2305	2400	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL			1-							
MCMATH	05	2305	2315	NO FLARE	PATROL			1-							
	05	2355	2400	NO FLARE	PATROL										

# SOLAR FLARES

JULY 1962

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION		DURA-TION MINUTES	IM-POR-TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT	
		START	END	MAX. PHASE	APPROX. LAT.				MER. DIST.	PLAGE REGION	TIME - U T		MEAS. AREA Sq. Deg.
CAPRI S CAPRI S ATHENES MCMATH LOCKHEED MCMATH	06	0040	0430	NO FLARE	PATROL		1-	2	0600	.60			
	06	0600 E	0618		N07 E90		1	3	0647	.80	2.10		
	06	0643 E	0652		S20 W65	6466	1	2		1.30	2.80		
	06	0645	0657		S28 W63	6466	1	2		.30	.50		
	06	1942 E	1948 D	1943	S04 W47	6471	1	2	1943	.30	.90	20	
	06	2244	2254	2247	N08 E80	6480	1	2	2247	.50	1.80		
MCMATH	06	2300	2325	NO FLARE	PATROL		1-	2	2247	.50			
	07	0025	0030	NO FLARE	PATROL								
	07	0050	0500	NO FLARE	PATROL								
	07	1438	1453	1442	N11 E68	6480	1-	2	1442	.30	.60		
	07	1820	1850	1827	S12 E54		1-	2		.43	.72	17	
	07	2320	2330	NO FLARE	PATROL		1-	2		.21	.29	16	
HTE-PROVEN SAC PEAK SAC PEAK MCMATH WENDEL	08	0000	0440	NO FLARE	PATROL								
	08	1535	1610		N12 E54		1-	3		.87	1.16		17
	08	1537	1551	1548	N12 E55		1-						
	08	1537	1551	1542	N12 E55		1-						
	08	1537	1615	1545	N14 E54	6480	1-	2	1545	.80	1.40		
	08	1540	1604		N13 E50	6480	1+						
WENDEL	08	1800	1825	NO FLARE	PATROL								
	08	1850	1905	NO FLARE	PATROL								
	08	2230	2245	NO FLARE	PATROL								
	08	2335	2340	NO FLARE	PATROL								
	09	0010	0025	NO FLARE	PATROL								
	09	0200	0435	NO FLARE	PATROL								
HTE-PROVEN LOCKHEED	09	1039 E	1049 D		N08 E41		1-	2	2326	2.40	2.40	10	
	10	0045	0100	NO FLARE	PATROL								
	10	0150	0430	NO FLARE	PATROL								
	10	1426	1435		N09 E28		1-						
	10	2300	2400	NO FLARE	PATROL								
	10	2321	2345	2326	N11 E15	6480	1	2	2326	2.40	2.40	10	
HTE-PROVEN HTE-PROVEN MCMATH MCMATH CAPRI S SAC PEAK HTE-PROVEN MCMATH LOCKHEED MCMATH HONOLULU LOCKHEED	11	0000	0100	NO FLARE	PATROL								
	11	0115	0545	NO FLARE	PATROL								
	11	0654	0703		N10 E19		1-						
	11	0945	1045 D		N09 E20		1-						
	11	1328	1333	1330	N09 E16	6480	1-	3	1330	.20	.20		
	11	1405	1420	1410	N08 E50	6480	1-	3	1410	.30	.60		
MCMATH	11	1501 E	1530		N12 E12		1-	3	1513	.87	.85	17	
	11	1502	1520	1505	N11 E12		1-						
	11	1503	1530	1507	N11 E14	6480	1-	2	1507	1.40	1.50		
	11	1503	1530	1507	N14 E12		1-	2	1507	1.20	1.30		
	11	2146	2152	2148	N13 E17		1-	2	2148	.40	.40	20	
	11	2150 E	2156	2150	N13 E08	6480	1-	2	2150	.30	.30		
LOCKHEED	11	2150 E	2154		N12 E08	6480	1	2	2150	3.70	3.70	20	
	11	2200	2217	2205	N16 E12	6480	1-	2	2205	.60	.60	20	

# SOLAR FLARES

JULY 1962

OBSERVATORY	DATE	OBSERVED TIME		LOCATION		DURA-TION MINUTES	IM-POR-TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	MER. DIST.				MCMATH PLAGE REGION	TIME U T	MEAS. AREA Sq. Deg.	
MCMATH	11	2201	2212	N15	E10	6480	1-	2	2206	1.10	1.20	
	11	2245	2355	PATROL								
	12	0005	0420	PATROL								
	12	0757	0805	N10	E12							
	12	0902	0910	N10	E11							
	12	1049	1055	N10	E10							
	12	1239	1250	N10	E09							
	12	1339	1400	N12	E08	6480			1350	.20	.20	
	12	1344	1358 D	N10	E09							
	12	1835	1925	PATROL								
	12	2015 E	2100 D	N12	E05	6480			2030	.20	.20	
	12	2245	2400	PATROL								
12	2250 E	2314 D	N12	E05	6480			2300	.20	.20		
13	0000	0205	PATROL									
13	0210	0235	PATROL									
13	0305	0510	PATROL									
13	0515	0555	PATROL									
13	0615 E	0650	S18	E54								
13	0647 E	0720 D	N12	W01				0710	.70	1.10		
13	0925	0940	N11	W05					1.00	1.00		
13	0951	0959	N11	W04								
13	1015	1019	N11	W04								
13	2018	2028	2022					2022	1.86	1.86		
14	0205	0520	PATROL									
14	1740	1800	PATROL									
15	0025	0035	PATROL									
15	0110	0115	PATROL									
15	0130	0255	PATROL									
15	0522	0545	N11	W32								
15	0608 E	0618	N08	W32						.70		
15	0834 E	0839	N03	W23	6487				.60	.70		
15	0837	0842	N13	W27					.50	.50		
15	1018	1024	N11	W35								
16	0200	0550	PATROL									
16	0725	0742	S13	E12								
16	1928	1937	S12	W42	6482			1930	1.70	1.80		
17	0145	0345	PATROL									
17	0420	0500	PATROL									
17	1110	1125	PATROL									
17	2000	2015	PATROL									
17	2146	2150 D	N11	E28				2146	.31	.32		
18	0145	0240	PATROL									
18	0310	0335	PATROL									
18	0345	0525	PATROL									
18	0601	0614	S06	W72					.50	1.80		

# SOLAR FLARES

JULY 1962

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION		DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT		
		START	END	APPROX. LAT.	MER. DIST.				McMATH FLARE REGION	TIME — U T	MEAS. AREA Sq. Deg.		COBR. AREA Sq. Deg.	MAX. WIDTH Hr
CAPRI S ATHENS HTE-PROVEN LOCKHEED	18	0728 E	0752 D	N09 W71 PATROL			1-	2	0733	0.40	1.50			
	18	1050	1055	S10 E28			1-	3		0.50	0.60			
	18	1132 E	1138	N05 E50			1-			0.30	0.30		10	
	18	1735	1742	N04 E46			1-							
	18	1839	1849	PATROL										
	18	2055	2100	NO FLARE										
	18	2150	2155	NO FLARE										
	18	2300	2305	NO FLARE										
	18	2345	2400	NO FLARE										
	19	0000	0225	NO FLARE										
	19	0315	0320	NO FLARE										
	19	0435	0500	NO FLARE										
	MCMATH	19	1249	1255	1251	6494		1-	3	1251	0.20	0.20		
		19	2115	2145	N05 E32									
		19	2225	2230	NO FLARE									
		19	2250	2400	NO FLARE									
		20	0000	0030	NO FLARE									
		20	0135	0140	NO FLARE									
CAPRI S CAPRI S WENDEL WENDEL LOCARNO HTE-PROVEN CAPRI S	20	0145	0220	NO FLARE										
	20	0410	0430	NO FLARE										
	20	0658 E	0717 D	N15 W05			1-	3	0702	1.40	1.50			
	20	0935 E	0951 D	N03 E25			1-	3	0939	1.10	1.20			
	20	0945 E	0959 D	N06 E27			1+				5.00			
	20	1202	1240 D	N05 E24	6494	38 D	1-				1.00			
	20	1203	1215	N06 E20	6494	12	1-	2	1207	1.20	1.30			
	20	1203	1225	N05 E25	6494	39 D	1-	3	1205	1.90	2.10			
	20	1205 E	1244	N06 E23			1		1211					
	20	1815	1820	NO FLARE										
	20	1905	1910	NO FLARE										
	20	2205	2210	NO FLARE										
HONOLULU	21	0020 E	0110	N10 W16			1-	2	0040	0.82	0.83			
	21	0145	0245	NO FLARE										
	21	0250	0300	NO FLARE										
	21	0305	0315	NO FLARE										
	21	0320	0420	NO FLARE										
	21	0425	0445	NO FLARE										
	21	0659 E	0703	N01 E80			1-	3		0.20	1.60			
	21	0659 E	0743 D	N06 E78	6497	44 D	1+				7.00			
	21	0902	0940 D	N05 E75	6497	38 D	1				3.70			
	21	0912 E	0937 D	N07 E78	6497	68 D	2				10.00			
	21	1451 E	1509 D	S02 E78	6497		1-	3	0914	1.00				
	21	2235	2400	NO FLARE			1-							
21	2323	2357	2331	6497	34	2		2331	4.00	6.00		10		
LOCKHEED	22	0000	0320	NO FLARE										
	22	0330	0345	NO FLARE										
	22	0355	0435	NO FLARE										



# SOLAR FLARES

JULY 1962

OBSERVATORY	DATE	OBSERVED TIME		MAX. PHASE	LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	TIME — U T	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END		APPROX.	LAT.	MER. DIST.					McMATH PLACE REGION	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	
ONDREJOV ATHENS ATHENS	22	0503 E	0517 D		S01 E60		6497	14 D	1	3	0505	.50	1.10	1.70	
	22	0627 E	0635 D		N05 E63				1-	4		.30	.80		
	22	0711	0713		S02 E68				1-	4					
	22	1835	1845	NO FLARE	PATROL										
HTE-PROVEN MCMATH	22	2325	2400	NO FLARE	PATROL										
	24	0000	0450	NO FLARE	PATROL										
	24	0943	0950		N00 E42				1-	3	1155	.20	.60		
	24	1154	1159	1155	N12 E77		6500		1-						
HTE-PROVEN WENDEL CAPRI S ATHENS	24	1845	1900	NO FLARE	PATROL										
	24	2050	2105	NO FLARE	PATROL										
	24	2135	2400	NO FLARE	PATROL										
	25	0000	0020	NO FLARE	PATROL										
	25	0130	0150	NO FLARE	PATROL										
	25	0827	0833		N05 W40				1-						
	25	0828 E	0850 D		N05 W58		6495		1	3	0837	.80	4.00		
	25	0829 E	0855 D		N03 W42			22 D	1-			.70	1.10		
	25	0831 E	0847	NO FLARE	PATROL				1-				.90		
	25	2315	2320	NO FLARE	PATROL										
ATHENS HTE-PROVEN MCMATH WENDEL	25	2325	2335	NO FLARE	PATROL										
	25	2345	2400	NO FLARE	PATROL										
	26	0145	0430	NO FLARE	PATROL										
	26	0827 E	0833		N08 W60				1-			.40	.70		
	26	1150	1210		S02 E15				1-						
	26	1153	1230 D	1157	S04 E14		6499		1-	3	1157	.60	.60		
	26	1158 E	1219 D		S04 E14		6499	21 D	1				3.00		
	26	2240	2400	NO FLARE	PATROL										
	27	0000	0230	NO FLARE	PATROL										
	27	0250	0350	NO FLARE	PATROL										
CAPRI S	27	0405	0425	NO FLARE	PATROL										
	27	2040	2050	NO FLARE	PATROL										
	27	2105	2110	NO FLARE	PATROL										
	27	2115	2130	NO FLARE	PATROL										
	27	2150	2220	NO FLARE	PATROL										
	27	2300		NO FLARE	PATROL										
	27	2400		NO FLARE	PATROL										
	28	0000	0450	NO FLARE	PATROL										
	28	0641 E	0700 D		N01 W75				1-	3	0648	.40	1.60		
	28	1805	1840	NO FLARE	PATROL										
LOCKHEED SAC PEAK	29	0200	0220	NO FLARE	PATROL										
	29	0240	0245	NO FLARE	PATROL										
	29	0250	0510	NO FLARE	PATROL										
	29	1715	1730	NO FLARE	PATROL										
	29	1735	1900	NO FLARE	PATROL										
	29	1813	2030	1835	N01 W30		6497	137	1	2	1835	3.20	3.20	10	
29	1901 E	1930 U	1902 E	S11 W31		6499	29 D	2	1		6.15	6.39	17		

# SOLAR FLARES

JULY 1962

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT		
		START	END	APPROX. LAT.	APPROX. MER. DIST.	MCMATH PLAGE REGION				TIME UT	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.		MAX. WIDTH H <sub>z</sub>	MAX. INT. %
	JULY 1962														
	29	1950	2010	PATROL											
	29	2215	2230	PATROL											
	29	2250	2315	PATROL											
ATHENS	30	0055	0140	PATROL											
	30	0200	0600	PATROL											
	30	0745 E	0752	N44 E70				2		1.10					
	30	1650	1655	PATROL											
LOCKHEED	30	1716	1732	N29 E64											
SAC PEAK	30	1718	1727	N18 E67											
SAC PEAK	30	2109	2121 D	N18 E65											
	30	2300	2400	PATROL											
	31	0000	0040	PATROL											
	31	2300	2310	PATROL											
	31	2345	2355	PATROL											

COMMERCE - STANDARDS - BOULDER

ATHENS	ATHENS, GREECE	HAWAII, USA	NERA
BAKOU	PIRCULI, USSR	KYOTO, JAPAN	NEDEKORST den BERGH, NETHERLANDS
CAPETOWN	ROYAL OBSERVATORY, CAPE OF GOOD HOPE	KIEV GAO, USSR	KRASNAYA PAKHRA, USSR
CAPRI F	CAPRI, ITALY (GERMAN)	KIEV UNIVERSITY, USSR	SAC PEAK
CAPRI S	CAPRI, ITALY (SWEDISH)	LOS ANGELES, CALIF., USA	SACRAMENTO PEAK, N.MEX. USA
CRLEEE	SIMEIZ, USSR	MCMATH-HULBERT	STOCKHOLM, SWEDEN
HERSTMONGEU	ROYAL GREENWICH OBSERVATORY, HERSTMONGEU, ENGLAND	PONTIAC, MICH., USA	SCHAUTINSLAND, GFR
		MOSCOW-GAISH, USSR	TASHKENT, USSR
			WENDEL
			WENDELSTEIN, GFR
			HTE-PROVEN = HAUTE-PROVENCE

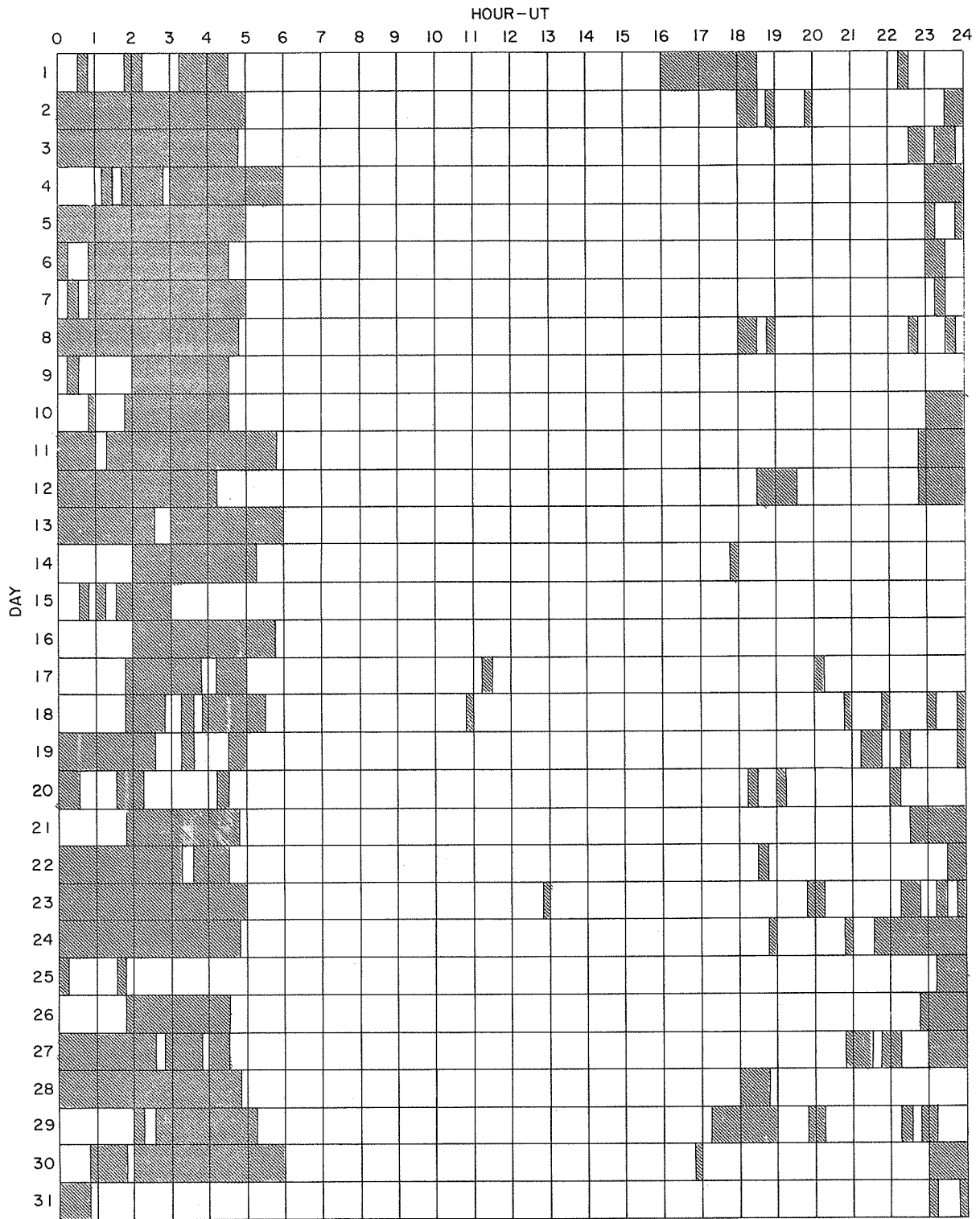
ALL VALUES IN THE MAXIMUM INTENSITY COLUMN FOR SAC PEAK ARE ARBITRARY UNITS (0-40) AND FOR LOCKHEED ARE ARBITRARY UNITS (10-40), NOT PERCENT OF CONTINUOUS SPECTRUM.

SEE DESCRIPTIVE TEXT PUBLISHED NOVEMBER 1961 FOR DEFINITION OF CORRECTED AREA VALUES LISTED FOR CLIMAX, HAWAII, LOCKHEED AND SACRAMENTO PEAK.

E = LESS THAN D = GREATER THAN U = APPROXIMATE □ = NOT REPORTED.

INTERVALS OF NO FLARE PATROL OBSERVATIONS

JULY 1962



Stations include:

COMMERCE - STANDARDS - BOULDER 3200M HRS-DC

- |                |               |                |                 |             |
|----------------|---------------|----------------|-----------------|-------------|
| Arcetri        | Herstmonceaux | Istanbul       | Meudon          | Wendelstein |
| Athenes        | Honolulu      | Kodaikanal     | Ondrejov        |             |
| Haute-Provence | Huancayo      | McMath-Hulbert | Sacramento Peak |             |

# SOLAR FLARES

APRIL 1962

OBSERVATORY	DATE APR 1962	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT	
		START	END	MAX. PHASE	APPROX. LAT.	MER. DUR.				LONGI- TUDINE	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH H <sub>g</sub>		MAX. INT. %
CAPE TOWN	01	1058	1105	1059	N09 W90		1- D	1-	2	1059	.20				
CAPRI -F	01	1341 E	1352	1341 U	N08 W90		1	1			.50				
CLIMAX	01	1732	1744	1738	S08 E20	6373	1-	1-			.90				
CLIMAX	01	1916	1925	1920	S08 E20		1-	1-			.90				
	02	0115	0150	NO FLARE	PATROL										
	03	0205	0235	NO FLARE	PATROL										
	03	0355	0425	NO FLARE	PATROL										
	03	0435	0440	NO FLARE	PATROL										
	03	0515	0525	NO FLARE	PATROL										
CAPRI -F	03	1005 E	1013	1006	N06 W41		1-	1-	1	1006	.50	1.00			
UCCLE	03	1053 E	1057	1055	N15 W45		1-	1-	4	1055					
	04	0456	0503	0358	N07 W47		1-	1-	2	0459	.19	.30	1.50	85	
TACKENT	04	0605	0635	NO FLARE	PATROL										
	04	0755 E	0859 D	0831	N07 W14		1-	1-	3			.60			
BUCHAREST	04	1420	1430	NO FLARE	PATROL										
	04	1650	1730	NO FLARE	PATROL										
	04	2125	2130	NO FLARE	PATROL										
HTE-PROVEN	05	1338	1352 D	NO FLARE	PATROL		1-	1-							
	05	1350	1400	NO FLARE	PATROL										
	05	2125	2130	NO FLARE	PATROL										
NIZMIR	06	0722	0748 D	0729	N03 W58	6382	1-	1-	2	0723	.52	1.60	.80		
CAPRI -F	06	0723 E	0730	0723	N05 W55		1-	1-		0903	1.10	1.50			
CAPE TOWN	06	0854	0925	0903	S06 W43		1-	1-							
HTE-PROVEN	06	0855	0920	0920	S08 W47		1-	1-							
NIZMIR	06	0858 E	0926 D	0900	S09 W46	6379	1-	1-	2	0908	.93	2.00	.55		
CAPRI -F	06	0907	0917	0909	S07 W41		1-	1-	1	1540	1.50	1.70			
CAPRI -F	06	1539 E	1542 D	1541	N10 W26		1-	1-	1						
	07	0140	0200	NO FLARE	PATROL										
CAPRI -F	07	0842	0902	0855	N11 W34		1-	1-	2	0857	.50	1.00			
	08	0005	0010	NO FLARE	PATROL										
	08	0605	0610	NO FLARE	PATROL										
CAPRI -F	08	1003	1020	1005	N10 W48		1-	1-	2	1005	.50	1.00			
	09	0235	0240	NO FLARE	PATROL										
	09	0255	0300	NO FLARE	PATROL										
	09	0502	0539	0507	N10 W67		1-	1-	2	0507	1.37	3.60	1.60	85	
TACKENT	09	0847 E	0951	0920	N12 W70	6385	1	1	4	0918	2.00	4.00			
UCCLE	09	0907	0936 D	0920	N10 W66	6385	1-	1-	2		1.00	2.00			
CAPRI -F	09	0929 E	1145 D	1007	N10 W67		1-	1-	3						
BUCHAREST	09	0957	1046 D	1007	N12 W70		1-	1-	3						
UCCLE	09	1059 E	1104 D	1007	N12 W70		1-	1-	3						
UCCLE	09	1114	1119	1119	N12 W70		1-	1-	3						
UCCLE	09	1339	1411 D	1411 D	N10 W70		1-	1-	3						
CAPRI -F	10	1333 E	1339	1333	N08 W90		1-	1-	2	1334	.50	1.00			

# SOLAR FLARES

APRIL 1962

OBSERVATORY	DATE APR 1962	OBSERVED TIME		MAX. PHASE	LOCATION		DURA- TION MINUTES	IM- POR- TANCE	ONS. COND.	MEASUREMENTS				PROVISIONAL IONOSPHERIC EFFECT	
		START	END		APPROX. LAT.	APPROX. MER. DIST.				McMATH PLAGE REGION	TIME U T	MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.		MAX. WIDTH H <sub>z</sub>
IKOMASAN	10	2327	0005		N11 W90	6385	38	1		2340		3.61	95		
	11	0225	0235	NO FLARE	PATROL	6385	5 D	1+			.93				
	11	0835 E	0840	0835	N08 W90	6385	7	1	2	1631	.50	2.00		.60	
	11	1631	1638	1631	N08 E90	6393	110 D	1	3	2146	.90	4.50			
BAKOU	12	0721 E	0825	0741	N10 E29	6386	64 D	1	3	0741	2.73	3.40		56	
	12	0736 E	0736	0736	N08 E90	6393	D	1	1	0855	1.03	.70			
	12	0855 E	0907 D		N10 E25	6386	12 D	1	1		.50				
	12	1121	1145	1132	N10 E24			1-							
	12	1128	1200		N11 E25			1-		1132	1.20	1.40			
	12	1141 E	1159		S09 E75			1-	3						
	12	1141 E	1159	1146	N10 E26	6393	12	1-	3		.60	3.00			
	12	1427	1439	1433	N07 E90			1-			1.50	1.50			
	12	2150	2248	2219	N10 E18			1-		2358	.20	.50			
	12	2355	2400 D		N08 E89			1-							
	ABASTUMANI	13	0145	0155	NO FLARE	PATROL			1-	3					
		13	0310	0330	NO FLARE	PATROL			1+	1	0850	1.80	1.97		58
13		0340	0350	NO FLARE	PATROL	6393	19 D	1+	1		2.90	9.50			
13		0415	0420	NO FLARE	PATROL	6393	60	1+	3		4.53	9.22		76	
13		0425	0430	NO FLARE	PATROL	6393	35	1+	2	0855	1.83	9.34		72	
13		0730	0738	0734	N12 E14			1-	2						
13		0847 E	0906 D	0850	N08 E73			1-	2						
13		0848	0948	0850	N10 E79			1-	2						
13		0850	0925	0855	N07 E75			1+	3						
13		1037	1043	1043	N06 E85			1-	2						
13		1037	1055 D		N07 E16			1-	2						
13		1042	1055 D		S12 E60			1-	2						
13	1105	1112	1109	N06 E80			1-	3							
13	1130 E			N08 E78			1-	3							
13	1316 E	1329		N06 E80			1-	3							
13	1412	1424		N06 E78			1-	3							
13	1434	1436		N07 E13			1-	3							
13	1514	1529	1516	N07 E78			1-	3							
13	1711 E	1725		N10 E14	6386	14 D	1	1							
13	2118	2147	2121	N12 E10			1-	1			.30	.30			
13	2254	2311	2257	N10 E04			1-	1			1.30	1.30			
13	2302	2340	2311	N14 E52			1-	1			.70	.90			
VOROSHILOV	14	0002	0008	0006	S07 E46			1-	2		.18			69	
	14	0006	0011	0007	N12 E02			1-	2		.45			87	
	14	0150	0200	NO FLARE	PATROL			1-							
	14	0315	0327	0318	N11 E02	6386	12	1+	2		2.25			103	
HTE-PROVEN	14	0405	0425	NO FLARE	PATROL			1-	4						
	14	0820	0845		S07 E40			1-							
	14	0911 E	0917		N10 E00			1-							
	14	0914	0920	0920	S07 E40			1-							
HTE-PROVEN	14	0920 E	0930	0920	S07 E38	6391	10	1	2	0920	2.50	3.20			
	14	0924 E	0927 D	0924	S08 E42	6391	3 D	1+			1.80			.70	



# SOLAR FLARES

APRIL 1962

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		MAX. PHASE	LOCATION		DURA. TION MINUTES	IM. POR. TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END		APPROX. LAT.	MER. DIST.				MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	MAX. WIDTH Hg	
ABASTUMANI	18 APR 1962	0538	0618 D	0546	N10 E12	6393	40 D	1+	3	5.85	6.30	65	
CRIMEE	18	0540	0630	0547	N09 E12	6393	50	1	2	4.50			
NIZAMIAH	18	0548	0554 D		N11 E15	6393	6	1	1	3.93	1.50		
BUCHARREST	18	0733	0745 D		N09 E10			1-	2	1.80			
BUCHARREST	18	0825	0905 D		N10 W52			1-	2	1.20			
BUCHARREST	18	0846	0856 D		N09 E10			1-	2	1.10			
BUCHARREST	18	0905	0930 D	0915	N09 E11			1-	2	12.40			G-SWF
CLIMAX	18	1739	2019	1807	N06 E04	6393	160	3					
CLIMAX	18	1739	2019	1851	N06 E04			3					
ABASTUMANI	19	0715	0925 D	0921 U	N10 W09			1-	2	1.44	1.50		
BUCHARREST	19	0718	0730 D	0722	N09 W07			1-	2	1.70	1.70		
CAPRI -F	19	0741	0809	0750	N11 W03			1-	2	.50	.50		
BUCHARREST	19	0742	0800 D		N11 W02			1-	2	.50	.70		
BUCHARREST	19	0849	0855 D		N10 E35			1-	2				
BUCHARREST	19	0851	0901		N10 W06			1-	3				
UCCLE	19	0851	0906		N10 E36			1-	3				
UCCLE	19	0902	0939	0909	N10 W08			1-	3				
UCCLE	19	0904	0927		N09 W08	6393	23	1-	3	1.14	1.30		
KHARKOV	19	0904	0935	0910	N10 W10	6393	31	1-	3	2.28	2.46		
BAKOU	19	0905	0931	0908	N10 W08			1-	3	1.10	1.10		
CAPTOWN	19	0905	0931 D	0908	N09 W08			1-	2				
BUCHARREST	19	0906	0933 D		N09 W08	6393	27 D	1					
BUCHARREST	19	0907	0935	0918	N06 W12			1-	3	2.50	2.50		
HTE-PROVEN	19	0912	0928		N09 W10	6393	16	1-	3				
CAPRI -F	19	0914	0919		N10 E35			1-	3				
UCCLE	19	0914	0920 D		N10 E35			1-	2				
BUCHARREST	19	0916	0920		N09 E35			1-	1	.90	1.30		
CRIMEE	19	0916	0942		N10 W09	6393	26 D	1		1.80			
CRIMEE	19	0916	0942	0923	N10 W10	6393	28 D	1		3.04	3.20		
NIZAMIAH	19	0920	0948		N06 E21	6395	37 D	1+		3.65	4.09		
BAKOU	19	0928	1005 D	0933	N04 E22	6395	22	1		1.14	1.50		
KHARKOV	19	0930	0952	0933	N06 E22	6395	14	1		2.70			
CRIMEE	19	0931	0945	0936	N05 E23			1-	3				
UCCLE	19	0931	1004		N06 E23	6395	34 D	1-					
BUCHARREST	19	0932	1006 D		N08 E20			1-					
HTE-PROVEN	19	0934	0955		N07 E22			1-		1.40	1.60		
CAPTOWN	19	0937	1006		N07 E22	6395	15	1-		1.90	2.10		
CAPRI -F	19	0941	0956	0944	S14 E40			1-					
UCCLE	19	1036	1046	1039	N14 E31			1-					
BUCHARREST	19	1039	1044 D	1128	N07 W07			1-					
UCCLE	19	1125	1134		N11 W05			1-					
UCCLE	19	1150	1155		N11 W05			1-					
UCCLE	19	1234	1304	1331	N08 E20	6395	68	1-		2.00	2.60		
UCCLE	19	1326	1434		N06 E04			1-					
UCCLE	19	1409	1444 D		N10 E04			1-					
UCCLE	19	1524	1616 D		N06 E04			1-					
UCCLE	19	1544	1621	1552	N09 W07	6393	11 D	1-		2.00	2.00		
UCCLE	19	1555	1606	1555	N05 W13			1-		.10	.10		
CAPRI -F	19	1737	1803	1744	N05 W08	6393	25	1-		3.60	3.60		
CLIMAX	19	1935	2000	1938	N08 W02			1-		.90	.90		S-SWF
CLIMAX	19	2037	2049	2040	N09 E12	6395	20 D	1+		3.61	.94	100	
IKOMASAN	19	2345	0005 D	2349									

# SOLAR FLARES

APRIL 1962

OBSERVATORY	DATE	OBSERVED UNIVERSAL TIME		LOCATION			DURA- TION — MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	MAX. PHASE	APPROX. LAT.	MER. DIST.				McMATH PLACE REGION	TIME — UT	MEAS. AREA Sq. Deg.	
VOROSHILOV	20	0238	0246 D	0238	N12 W18	W18	1-	2	1-34			71	
VOROSHILOV	20	0316	0329	0319	N10 W16	6393	1+	2	2.25			80	
MITAKA	20	0317	0329	0322	N09 W12	6393	1+	1	1.51	1.59	2.18	115	
CRIMEE	20	0337 E	0610		N09 W16	6393	2	1	10.81				
CRIMEE	20	0454 E	0522		N08 W20	6393	2	1	3.15				
BUCHAREST	20	0722 E	0852 D		N10 W15	6393	1	2	2.40				
CAPRI -F	20	0724	0740	0732	N11 W14	6393	1	3	2.10				
CAPRI -F	20	0914	0927 D	0917	N08 W15	6393	1-	2	0.70				
CAPRI -F	20	1022	1048	1018	N09 W18	6393	1+	2	3.40				
CAPRI -F	20	1022	1048	1036	N09 W18	6393	1+	2					
UCCLE	20	1025 E	1036 D		N10 W22		1-	2					
UCCLE	20	1025	1036		N11 W17	6393	1						
ISTANBUL	20	1033	1042		N07 W17	6393	1+						
UCCLE	20	1034 E	1044		N07 W18		1-	2					
UCCLE	20	1104 E	1109 D		N13 W10		1-	2					
UCCLE	20	1104 E	1111 D		N10 W20		1-	2					
UCCLE	20	1121	1131 D		N06 W20		1-	2					
CAPRI -F	20	1124	1139 D	1126	N07 W19		1-	2	.50				
UCCLE	20	1201	1231 D		N06 W25		1-	2					
UCCLE	20	1234 E	1309 D		N06 W25		1-	2					
UCCLE	20	1319 E	1454	1239	N06 W20	6393	1-	2	3.00	4.00			
UCCLE	20	1320	1355 D	1326	N08 W20	6393	2	2	4.50	5.40			
CAPRI -F	20	1325 E	1331 D	1330	N07 W19	6393	2	2	2.58			66	
KIEV KO	20	1536 E	1547	1331	N10 W25	6393	1+	2					
UCCLE	20	1601	1639 D		N12 W25		1-	2					
UCCLE	20	1625	1629 D		S12 E22		1-	2					
CLIMAX	20	2010 E	2040		N09 W27		1-	2	1.20	1.20			S-SNF
ALMA-ATA	21	0202	0240	0204	N09 W26	6393	1+	2	4.28			96	
VOROSHILOV	21	0203	0230	0205	N11 W28	6393	1+	2	2.33			115	
ALMA-ATA	21	0426	0437	0427	N17 W36		1-	2	0.427			66	
CRIMEE	21	0501	0540		N10 W35	6393	1	1	0.503	1.34			
ALMA-ATA	21	0503	0518	0507	N10 W34		1-	1	.98			68	
BUCHAREST	21	0715 E	0750 D		N07 W32	6393	1	2	3.30	3.30			
BUCHAREST	21	0715 E	0900 D	0748	N09 W29	6393	1	2	2.60	2.60			
BUCHAREST	21	0726 E	0900 D	0806	N11 W35		1-	2	.70				
BUCHAREST	21	0750 E	0838 D	0806	N15 W39		1-	2	2.30				
CRIMEE	21	0917	0928	0920	N09 W35		1-	1	1.34				
CRIMEE	21	1104	1121		N09 W31		1-	1	1.34				
CRIMEE	21	1140	1210		N09 W32		1-	1	1.79				
CLIMAX	21	1450	1456	1452	N08 W32		1-	1	.60	.70			
CLIMAX	21	1919	1923 D		N03 W45		1-	1	.40	.50			
MITAKA	22	0225	0237 D	0229	N05 W46	6393	1	1	2.01	3.02	1.75	120	
ALMA-ATA	22	0226	0243	0232	N08 W46		1-	2	1.13			70	
BUCHAREST	22	0803 E	0815 D		N08 W51	6393	1-	2	1.70				
UCCLE	22	1018 E	1029		N10 W52		1-	2					
CRIMEE	22	1445 E	1550		N08 W51	6393	2	1	10.31				S-SNF
CLIMAX	22	1458 E	1524 D		N08 W45	6393	2	1	2.80	3.40			
IKOMASAN	23	0438 E	0502 D		N12 W55	6393	1	1	.83		1.22	110	



# SOLAR FLARES

APRIL 1962

OBSERVATORY	DATE	OBSERVED TIME		LOCATION		DURA- TION - MINUTES	IM- POR- TANCE	OBS. COND.	MEASUREMENTS			PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	MER. DIST.				PLAGE REGION	TIME - U T	MEAS. AREA Sq. Deg.	
CAPRI -F	23	1117	1137	N13	W68	6393	1	2	.90	2.10		
CAPRI -F	23	1209	1214 D	N06	W52	6393	1-	2	.50	.80		
CLIMAX	23	1946	2006	N10	W90	6393	1	2	1.00	5.00		
CAPRI -F	24	0725	0744	N10	W80	6393	1	2				
SCHAUNS	24	0730 E	0745 D	N08	E77	6403	1	2				
HTE-PROVEN	24	0735 E	0755	N15	W90		1-	2				
BUCHARST	24	0758 E	0810 D	N07	W90		1-	2				
UCCLE	24	0827 E	0907 D	S12	W30		1-	2				
UCCLE	24	0835	0907 D	N10	W87		1-	2				
UCCLE	24	0957 E	1005 D	N10	W85		1-	2				
MITAKA	25	0058 E	0115	N08	W88	6393	1	1	1.31	1.10	5.51	125
CLIMAX	25	0104	0117	N05	W83		1-	2	.40			87
VOROSHILOV	25	0105 E	0112	N07	W90		1-	2	.80			
CAPETOWN	25	0724	0740	N08	W88	6393	1	2	.40			
HTE-PROVEN	25	0830	0837	N10	E70		1-	2				
CAPETOWN	25	0833	0843	N08	E84	6403	1	2	.70	2.70		
CAPRI -F	25	0834 E	0850 D	N07	E78		1-	2	1.00			
CAPETOWN	25	0915	0940	N08	W88		1-	2	.20			
CAPETOWN	25	1050	1157	N10	W90	6393	1	3	.60			
UCCLE	25	1117 E	1128	N10	E80		1-	3				
UCCLE	25	1214 E	1235	N13	E78		1-	2	.10			
CAPETOWN	25	1218	1239	N08	W90		1-	2				
CAPETOWN	25	2300	2340	NO FLARE PATROL								
BUCHARST	26	0700 E	0731 D	N11	E60		1-	2		1.20		
HTE-PROVEN	26	0705	0732	N07	E80	6403	1	2		5.70		
BUCHARST	26	0707 E	0731 D	N10	E70	6403	2	2				
CAPETOWN	26	0711 E	0752	N10	W76	6395	1+	2				
BUCHARST	26	0717 E	0728 D	N07	E64		1-	2	1.60			
CAPRI -F	26	1008	1015	N09	E69		1-	2	1.20	1.40		
CAPETOWN	26	1008	1016	N10	W70		1-	2	.90	2.80		
UCCLE	26	1033 E	1127 D	N08	E70		1-	2		2.60		
UCCLE	26	1039 E	1106	N08	E60		1-	2	.30			
CAPETOWN	26	1157	1212	N08	W90		1-	2				
HTE-PROVEN	26	1201	1230	N03	E62		1-	2		6.40		
CAPETOWN	26	1205	1235	N06	E66	6403	2	2	2.30			
KIEY KO	26	1206 E	1230 D	N07	E62	6403	1+	2	4.13			63
CAPRI -F	26	1208	1232	N06	E63	6403	2	2	3.00	6.00		
SCHAUNS	26	1212 E	1226	N04	E65		1-	2	2.00			
SCHAUNS	26	1212 E	1250	N09	E66	6403	1	2	5.00			
UCCLE	26	1216 E	1234	N07	E65	6403	1	2	4.00	8.00		
BUCHARST	27	0140	0155	NO FLARE PATROL			1-	1		1.40		
HTE-PROVEN	27	0700 E	0715 D	N10	E66		1-	1				
BUCHARST	27	1105	1145	N08	E45		1-	2	2.29	2.50	1.70	
BUCHARST	27	1115	1155	N06	E47	6403	1	2	2.50	3.50		
CAPETOWN	27	1116	1148	N05	E48	6403	1	2	3.09			
KIEY KO	27	1123 E	1130 D	N04	E48		1-	1	3.00			
CAPRI -F	27	1125	1138	N05	E48	6403	1	2	3.00	4.50		

# SOLAR FLARES

APRIL 1962

OBSERVATORY	DATE 1962	OBSERVED UNIVERSAL TIME		LOCATION		DURA- TION - MINUTES	IM- POR- TANCE	OBS. COND.	TIME - U T	MEASUREMENTS		PROVISIONAL IONOSPHERIC EFFECT
		START	END	APPROX. LAT.	MER. DIST.					MEAS. AREA Sq. Deg.	CORR. AREA Sq. Deg.	
E HTE-PROVEN CAPRI -F CLIMAX CLIMAX	27	1346	1426	N07 E50	6403	40	2	3	1413	4.70	7.30	S-SWF
	27	1350	1438	N08 E48	6403	48	3		9.00	13.50		
	27	1404	1437	N06 E50	6403	33	1		2.40	3.10		
	27	2300	2311	N07 E44			1-		1.20	1.40		
ALMA-ATA HTE-PROVEN ISTANBUL CLIMAX	28	0045	0050	NO FLARE	PATROL							
	28	0055	0125	NO FLARE	PATROL							
	28	0243	E 0252	D	N07 E43		1-		0247	1.39		61
	28	0555	0705		N13 E48		1-					
VOROSHILOV	28	0750	0840	S08 W90	6397	50 D	2			.90	.90	
	28	2023	2042	N04 E29			1-					
UCCLE HTE-PROVEN CAPRI -F	29	0039	0053	N10 E36			1-	2		.63		69
	29	0630	0635	NO FLARE	PATROL							
E UCCLE HTE-PROVEN CAPRI -F	30	0834	0848	N13 E23			1-	3				
	30	1140	1230	N15 E20	6403	50	1		2.40	2.70		
	30	1155	1228	N12 E23	6403	33	1	2	1208	4.50	5.00	
	30	1159	E 1239	D	N12 E21	6403	40 D	3	1205	3.00	3.90	
E UCCLE HTE-PROVEN	30	1255	1320	N15 E20			1-					
	30	1303	1349	N12 E19	6403	46	1	3		5.00	6.90	
CAPRI -F UCCLE	30	1304	1315	N12 E23			1-	2	1304	.50	.60	
	30	1539	E 1550	D	N18 E80		1-	3				

These flare reports are addenda to the April 1962 flares published in CRPL-F 213, May 1962.

ATHENS	ATHENS, GREECE	HONOLULU	HAWAII, USA	NERA	NEDERHORST den BERGH, NETHERLANDS
BAKOU	PIRCULI, USSR	IKOMASAN	KYOTO, JAPAN	NIZMIR	KRASNAYA PAKHRA, USSR
CAPETOWN	ROYAL OBSERVATORY, CAPE OF GOOD HOPE	KIEV KO	KIEV GAO, USSR	SAC PEAK	SACRAMENTO PEAK, N.MEX. USA
CAPRI F	CAPRI, ITALY (GERMAN)	KIEV KY	KIEV UNIVERSITY, USSR	SALTSJOBADEN	STOCKHOLM, SWEDEN
CAPRI S	CAPRI, ITALY (SWEDISH)	LOCKHEED	LOS ANGELES, CALIF., USA	SCHAUTINSLAND, GFR	TASHKENT, USSR
CRIMEE	SIMEIZ, USSR	MCMATH	MCMATH-HULBERT PONTIAC, MICH., USA	TACHKENT	WENDELSTEIN, GFR
HERSTMONCEU	ROYAL GREENWICH OBSERVATORY, HERSTMONCEUX, ENGLAND	MOSCOU	MOSCOW-GAISH, USSR	WENDEL	HTE-PROVEN = HAUTE-PROVENCE

ALL VALUES IN THE MAXIMUM INTENSITY COLUMN FOR SAC PEAK ARE ARBITRARY UNITS (0-40) AND FOR LOCKHEED ARE ARBITRARY UNITS (10-40), NOT PERCENT OF CONTINUOUS SPECTRUM.

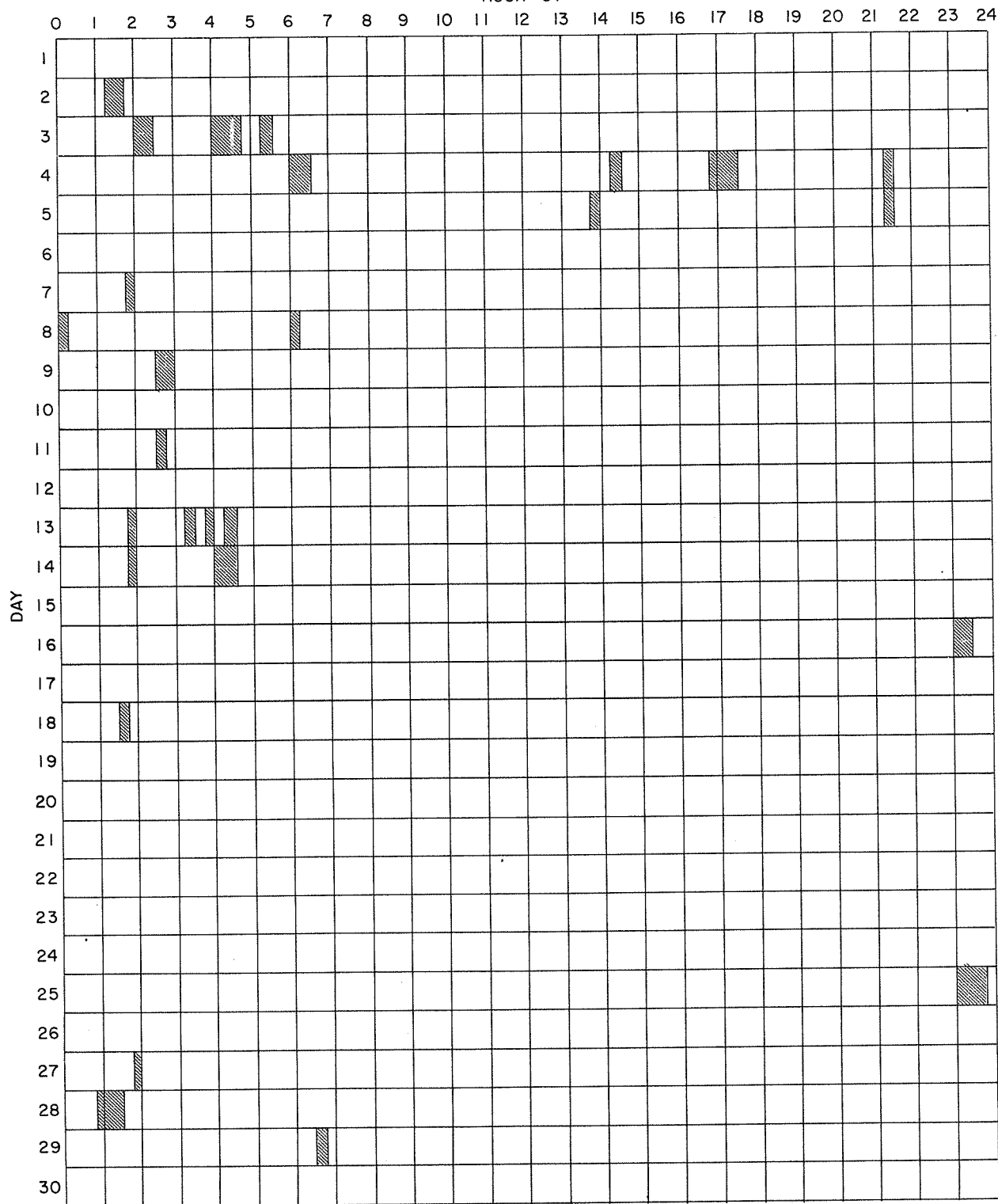
SEE DESCRIPTIVE TEXT PUBLISHED NOVEMBER 1961 FOR DEFINITION OF CORRECTED AREA VALUES LISTED FOR CLIMAX, HAWAII, LOCKHEED AND SACRAMENTO PEAK.

E = LESS THAN D = GREATER THAN U = APPROXIMATE = NOT REPORTED.

INTERVALS OF NO FLARE PATROL OBSERVATIONS

APRIL 1962

HOUR-UT



COMMERCE - STANDARDS - BOULDER

Stations include:

- |            |                |            |                |                 |
|------------|----------------|------------|----------------|-----------------|
| Abastumani | Capri-F        | Honolulu   | McMath-Hulbert | Ondrejov        |
| Alma-Ata   | Capri-G        | Ikomasan   | Meudon         | Sacramento Peak |
| Arcetri    | Climax         | Kharkov    | Mitaka         | Schauinsland    |
| Bakou      | Crimee         | Kiev Ko    | Moscou         | Tachkent        |
| Bucharest  | Haute-Provence | Kodaikanal | Nizamiah       | Uccle           |
| Capetown   | Herstmonceux   | Lockheed   | Nizmir         | Voroshilov      |
|            |                |            |                | Wendelstein     |

IONOSPHERIC EFFECTS OF SOLAR FLARES

IIIp

SHORT WAVE RADIO FADEOUTS  
 SUDDEN COSMIC NOISE ABSORPTION  
 SUDDEN ENHANCEMENTS OF ATMOSPHERICS  
 SUDDEN PHASE ANOMALIES  
 SOLAR NOISE BURSTS AT 18 Mc

JUNE 1962

JUNE 1962	UNIVERSAL TIME			SWF TYPE	IMPORTANCE					WIDE SPREAD INDEX	STATIONS	KNOWN FLARE		
	START	END	MAX		IMP	ABS	SCNA	SEA	SPA				BUR	
01	2009	2015								1	5	BO MC HA	2006	
05	2326	2330								1	5	HA BO MC		
05	2351	2358								1	5	HA BO MC	2352	
+ 06	0041	0047								1	5	HA MA	*	
+ [ 07	0000	0025	0010	SL 1+			1				5	HA A10 BO MA TO	2358	
07	0000	0029									4	TO OK		
07	0000	0030	0009		15	1					1	HA		
+ [ 07	2309	2330	2310		10	1					1	HA A11	2256	
07	2309	2330	2315							3	HA			
11	1559	1604								1	4	MC BO	1559	
12	1925	1955	1932				1+				3	A10 A1		
[ 17	0918			S 2				X			1	PU	0940E	
17	0918	1031						X			3	PU BR		
17	0952	1022							X		1	PU		
17	1717	1725								1	4	MC BO Group of bursts		
[ 20	2005	2043	2012	G 1			1				1	A3	2002	
20	2007	2035	2017		15	1					5	BO HA MC		
20	2007	2100									4	MC HU PR		
20	2010	2100	2020					18			1	BO+		
[ 25	1450	1530	1500				1				3	A5 A3	1458	
25	1458	1503									1	MC		
25	1806	1812									4	MC BO		
25	1851	1854									1	4		MC BO
26	1500	0500									1	5		MC BO HA Strongest peaks 1603, 1700, 1906, 2029, 2310

COMMERCE - STANDARDS - BOULDER

BO+ = Boulder recording GBR for SPA  
 BR = Breisach, G.F.R.

\* = No known flare patrol  
 + = Sudden Enhancement of Signal (NBA or NPM) observed by A5 or A14.

IVa

**SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES**

JULY 1962

ARO-OTTAWA

2800 MC.

July 1962	Type	Start UT	Duration Hrs:Mins	Maximum			Remarks
				Time UT	Peak Flux	Mean Flux	
4	3 Simple 3	1920	3 10	2053	3	1.5	
5	3 Simple 3 f	1711	33	1714	1.4	0.7	
5	3 Simple 3 f	1934	20	1941	3	1.5	
	5 Absorption	1954	40		-2	-1.3	

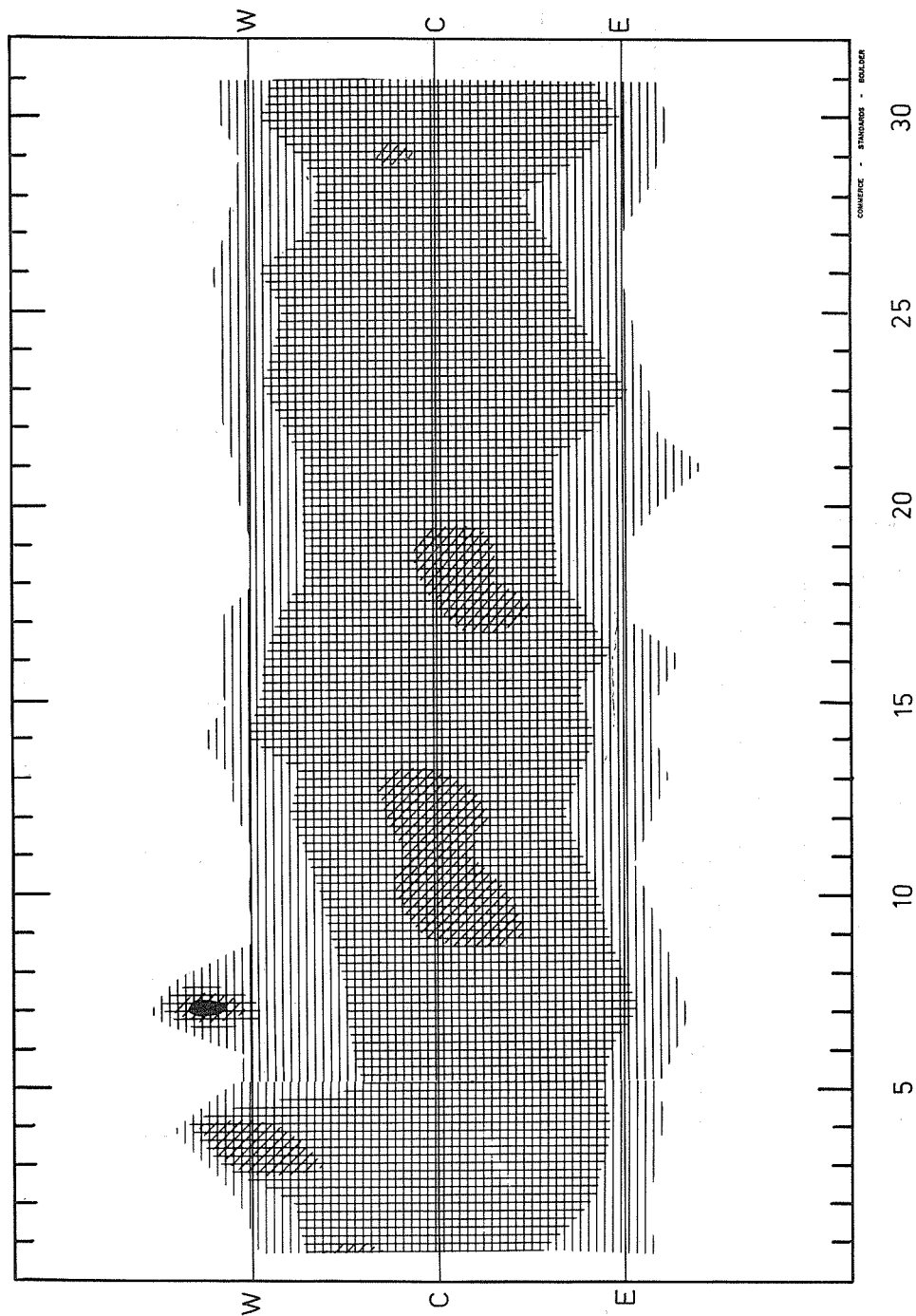
COMMERCE - STANDARDS - BOULDER

SOLAR RADIO EMISSION  
INTERFEROMETRIC OBSERVATIONS

169 Mc

JULY 1962

Nançay



JULY 1962

## SOLAR RADIO EMISSION

JULY 1962

BOULDER

108 Mc.

July 1962	Type	Start UT	Time of Maximum UT	Duration Minutes	Intensity
3	3	2100.8	2101.1	1.0	2
4	7	2019.5	2041.9	92.6	1
12	3	1336.0	1337.0	2.0	2
21	3	1303.9	1304.2	1.0	2
21	3	1716.4	1717.3	1.0	2
25	3	1743.4	1744.0	0.7	2
29	3	1824.7	1825.1	0.7	2

COMMERCE - STANDARDS - BOULDER

## NOMINAL TIMES OF OBSERVATION

JULY 1962

BOULDER

108 Mc.

July 1962	U.T.		July 1962	U.T.	
1	1140-0210	I 1810-2250	16	1145-0206	I 1728-0015
2	1140-0210		17	1150-0206	
3	1141-1630; 1730-1926; 1942-0209	I 1905-1926; 2051-0153	18	1151-0205	I 1915-2252; 0003-0250
4	1141-1413; 1425-0205	I 2203-0205	19	1152-0204	I 1933-2127; 2209-2215
5	1142-1230; 1245-2021; 2036-0209		20	1152-0204	
6	1142-0209	I 2332-0006	21	1153-0203	
7	1143-0208	I 2115-0208	22	1154-0202	I 0018-0055
8	1144-2023; 2036-0208	I 1632-2253; 0107-0208	23	1155-0015	I 1155-1204; 1702-0015
9	1144-0208		24	1156-0201	I 0115-0201
10	1145-1633; 1644-0207		25	1157-0200	I 1811-2024; 2057-2134; 2150-2226; 2330-0120
11	1145-0208	I 1145-1317; 2118-0118	26	1157-0159	I 1742-2351
12	1146-2133; 2238-0207	I 1758-2331	27	1158-0159	I 1959-2022
13	1147-1442; 1712-2154; 2213-0207	I 1734-2300	28	1159-0158	I 2028-2055
14	1241-0207		29	1200-0157	I 2159-2215
15	1148-0207	I 1955-0207	30	1201-0156	I 1646-1725; 1837-2126; 2209-0021
			31	1202-0155	I 1800-0155

COMMERCE - STANDARDS - BOULDER

# SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

IVd

JULY 1962

HAO BOULDER

7.6-41 MC

Date	Bursts					Bursts			
1962	Type	Time (U.T.)	Intensity	Frequency Range (Mc)	1962	Type	Time (U.T.)	Intensity	Frequency Range (Mc)
1 Jul 2	III	2225.30-2226.30	1+	10.5-41	20 Jul	III	1644.30-1645	1-	22-41
	III	1741.30-1742.15	1	20-41		III	1725-1725.30	1	22-41
	III	1743.30-1745	1-	25-41		III	1858.30-1859.15	1-	30-39
	III	1747.30-1748.45	1-	20-41		III	2301.45-2302.45	1+	21-41
	III	2351.30-2351.45	1-	21-31		III	2303.15-2304.15	1+	17-41
3	III	1609-1609.45	1	24-41	21	III	2307-2307.30	1	21-41
	III	2102.15-2102.45	1+	20-41		III	2451.30-2452.45	1+	18-41
4	III	1700.15-1700.30	1	22-41		III	1959-1959.15	1-	24-37
	III	1745.15-1746.30	1	21-41	III	2003-2003.15	1-	27-37	
	III	2008-2008.45	1	32-41	III	2038.45-2040.15	1-	25-37	
5	III	2016.30-2017	1+	21-41	22	III	1702-1702.15	1-	28-38
	III	1429-1430.45	2-	11-41		III	2134.45-2135.15	1-	18-41
	III	1706.30-1707	1	24-41	23	III	d 1412.30-1413	1-	22-41
	III	1749.45-1752.30	2	7.6-41		III	1554-1555.30	3	19-41
	III	2322.45-2323.30	1-	21-41		III	1609.15-1609.45	2	13-41
6	III	2342.45-2343.15	1-	21-41	III	1717.15-1717.45	1-	22-30	
	III	2344.15-2344.45	1-	19-34	III	1812.45-1813.15	1	22-41	
	III	2345.45-2346.30	1-	21-34	III	1834.15-1834.45	1	23-41	
	III	1418.30-1419.45	1+	8-41	III	1909.30-1910	1	22-41	
	III	1704.30-1705.15	1	16-41	III	2021-2021.15	1-	22-41	
	III	1936.45-1937.15	1	21-41	III	2023.45-2024	1-	22-41	
	III	2009.30-2010.15	1	21-35	III	2026.30-2027	1	7.5-41	
	III	2103.15-2103.45	1	20-41	III	2148.30-2148.45	1-	20-41	
	III	2105.15-2106	1-	20-38	III	2320.15-2320.30	1	16-41	
	III	2106.15-2107	1	16-38	29	III	1842.15-1843	1	22-41
III	2107.30-2108.15	1-	23-38	III		1844-1845	1-	27-41	
20	III	2341.45-2342.15	1-	15.5-33	III	1851.30-1853	1-	26-41	
	III	1416.45-1417.30	1+	20-41	III	2525-2525.30	1-	22-36	
	III	1455-1456.15	1+	16-33	III	2526.45-2527.15	1-	29-39	
	III	1604-1605.30	2	8-41					

d = harmonic structure

COMMERCE - STANDARDS - BOULDER



SOLAR RADIO EMISSION  
SPECTRUM OBSERVATIONS

APRIL-MAY 1962

Fort Davis

25-580,2100-3900 Mc

1962	OBSERVING HOURS	IMPORTANT BURSTS			FREQUENCY RANGE MC.	REMARKS
		TYPE	TIMES U.T.	INT.		
Apr. 1	1315-2400					
Apr. 2	1315-2400					
Apr. 3	1315-2400					
Apr. 4	1315-2400					
Apr. 5	1300-2400					
Apr. 6	1300-2400	IIIG	2345-2346	1	320-100	
Apr. 7	1300-2400					
Apr. 8	1300-2400					
Apr. 9	1300-2400					
Apr. 10	1300-2400	IIIG IIIG	2250-2252 2317-2322	2 1-3+	250-50 500-25	Weak I throughout day
Apr. 11	1300-1620 1626-2400					Weak I throughout day
Apr. 12	1300-2400	Unc1 IIIG IIIG IV <sup>XX</sup> IIIG	1647-1651 1719-1722 2148-2156 2201-2213 2210-2213	1 2-3 1-3 2-3 3	80-50 350-25 450-25 580-100 580-25	1647: Unclassified, resembles Type II IV <sup>XX</sup> Continuum with Type III structure
Apr. 13	1300-2400					
Apr. 14	1300-2400	IIIG IIIG	1400-1406 1913-1931	2 1-3+	200-150 250-25	Weak I throughout day
Apr. 15	1300-2400					Weak I throughout day
Apr. 16	1300-2400					Weak I throughout day. ~1640-~2200. Many III 75-25 Mc/s
Apr. 17	1300-2400	IIIG IIIG	1524-1527 2007-2008	3 3	350-25 140-25	Weak I throughout day. ~1700-~2100. Many weak III 75-25 Mc/s
Apr. 18	1300-2400	I II IV <sup>XX</sup>	1300-2400 1844.4-1853 1839-1942	1-2 2 2-3	250-25 75-25 580-170	~1520-~2000. Many III 75-25 Mc/s IV <sup>XX</sup> continuum with Type III structure
Apr. 19	1300-2400	IIIG IIIG	2339-2342 2344-2346	2 2	450-25 350-50	Weak I throughout day
Apr. 20	1300-1640 1651-2400	IIIG II	2000-2002 2004.6-2019	2 3	580-100 300-25	Weak I throughout day
Apr. 21	1300-2400	IIIG IIIG II	1920-1926 2007-2011 2021.8-2032	2 1-3 2	580-25 320-25 120-30	Weak I throughout day
Apr. 22	1300-2400	IIIG II IIIG IIIG	1511-1514 1554.3-1603 1715-1717 1820-1821	1-3 3 2 1	180-25 90-25 180-25 240-100	
Apr. 23	1300-2400					
Apr. 24	1300-2400					Weak I throughout day
Apr. 25	1300-2400	IIIG	2156-2157	3+	>100-25	Weak I throughout day
Apr. 26	1300-2400	I	1310-~1506	1	220-150	Weak I throughout day
Apr. 27	1300-2400	IIIG IIIG II IIIG	1353-1357 1412-1416 1414.5-1427 2300-2305	1 3+ 3 2	300-25 580-25 240-25 500-25	Weak I starts after Type II burst.
Apr. 28	1300-2400	IIIG IIIG	1556-1559 2024-2032	2 2-3+	300-25 300-25	Weak I throughout day
Apr. 29	1300-2400					
Apr. 30	1300-2400					
May 1	1245-2400	II IV	1919.7-1940 1918-2012	3+ 1-2	150-25 3000-180	
May 2	1245-2400	IIIG IIIG IIIG	1529-1522 1727-1729 2347-2350	1 2 3+	80-50 150-25 580-25	
May 3	1245-2400					
May 4	1245-2400					
May 5	1246-2400					
May 6	1245-2400					
May 7	1245-2400					
May 8	1245-2400					
May 9	1245-2400					
May 10	1246-2400					
May 11	1247-2400	IIIG	2302-2306	2	450-125	

**SOLAR RADIO EMISSION  
SPECTRUM OBSERVATIONS**

IVf

Fort Davis

MAY-JUNE 1962

25-580, 2100-3900 Mc

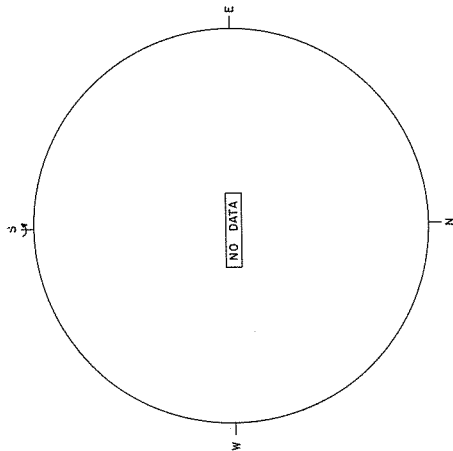
1962	OBSERVING HOURS	IMPORTANT BURSTS			FREQUENCY RANGE MC.	REMARKS
		TYPE	TIMES U.T.	INT.		
May 12	1246-2400					Weak I throughout day
May 13	1246-2400					Weak I throughout day
May 14	1246-2400					
May 15	1245-2400					
May 16	1246-2400					
May 17	1246-2400					
May 18	1246-2355	IIIG II	1532-1533 1533.3-1538	2 3	280-25 240-50	
May 19	1246-2400					
May 20	1246-2400					
May 21	1246-2400					Weak I throughout day
May 22	1230-2400					Weak I throughout day
May 23	1230-2400					Weak I throughout day
May 24	1230-2110					Weak I throughout day
May 25	1230-2400					Weak I throughout day. ~ 1540->1823 Many III. 100-25 Hz/s
May 26	1230-2400	I	1230-2400	1	250-100	
May 27	1230-2400	IIIG	1517-1519	3+	500-25	Weak I during day
May 28	1230-2400	II IIIG	1640.3-1645 1852-1853	2 2	240-50 150-25	
May 29	1230-2400					
May 30	1230-2400	IIIG IIIG	1633-1639 1936-1942	2 1-2	220-25 200-25	Weak I throughout day
May 31	1230-2400					Weak I throughout day
June 1	1230-2400					Weak I during day
June 2	1230-2400					
June 3	1230-2400					
June 4	1230-2400					
June 5	1230-2400	IIIG	2352-2356	2-3	300-25	
June 6	1233-2400					
June 7	1234-2400					
June 8	1233-2400					
June 9	1233-2400					
June 10	1234-2400					
June 11	1233-2400	IIIG	1600-1604	3+	580-25	
June 12	1233-2400					
June 13	1233-2400					
June 14	1233-2120 2126-2400					
June 15	1236-2400					
June 16	1236-2400					
June 17	1236-2400	IIIG	1718-1720	3	450-25	
June 18	1236-2400					
June 19	1236-2400					
June 20	1222-2400					
June 21	1222-2400					
June 22	1222-2400					
June 23	1223-2400					
June 24	1222-2400	I	~1900-~1930	1	200-125	Weak I throughout day
June 25	1222-2400	I IIIG IIIG	1222-~1450 1521-1523 1808-1810	1 1 3	200-100 240-100 180-25	Weak I throughout day
June 26	1223-2400	IIIG I	2028-2029 ~2035-~2150	3 1	580-25 200-100	Weak I throughout day
June 27	1222-1926 2022-2400	IIIG	1353-1359	1-	240-100	Weak I throughout day
June 28	1222-2400					Weak I throughout day
June 29	1222-2400					Weak I throughout day
June 30	1222-2400					Weak I throughout day

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

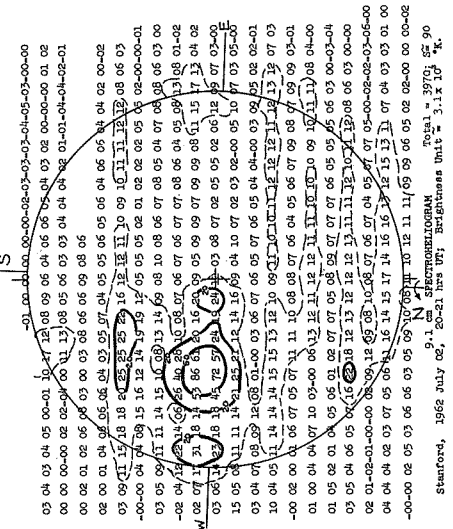
1962

STANFORD

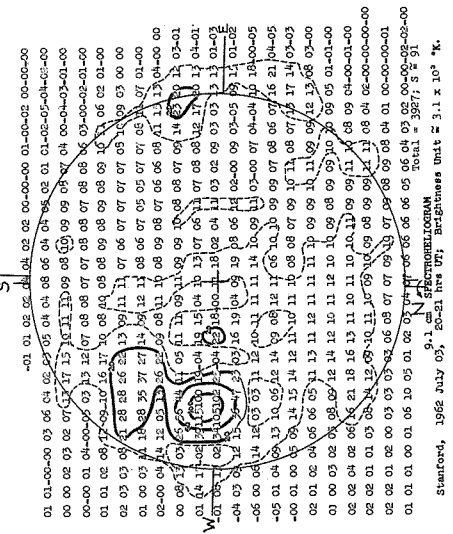
9.1 cm



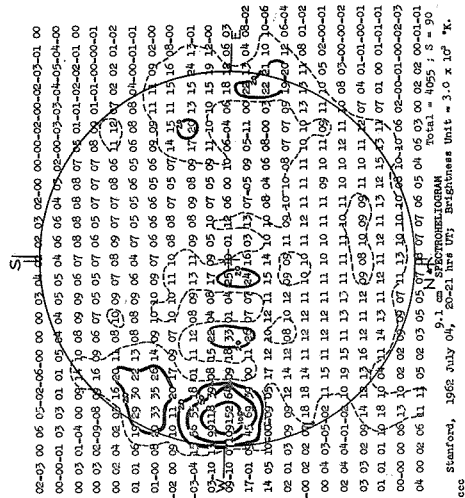
1962 JULY 01



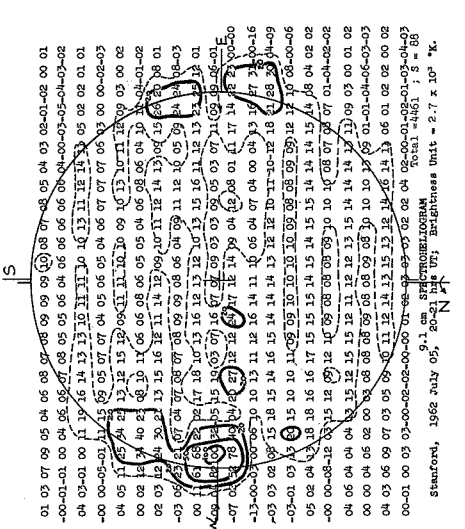
Stanford, 1962 July 02, 20-21 hrs UT; Brightness Unit = 3.1 x 10<sup>-7</sup> K.



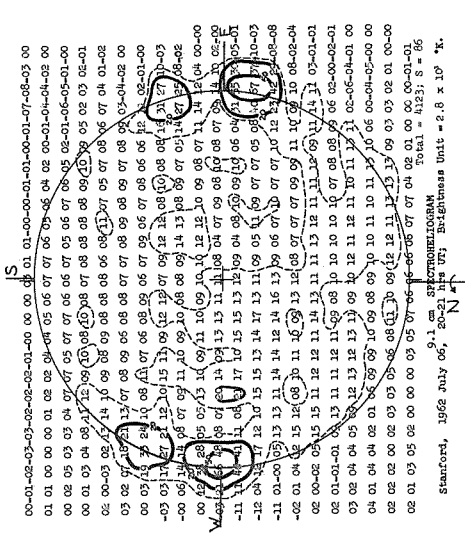
Stanford, 1962 July 03, 20-21 hrs UT; Brightness Unit = 3.1 x 10<sup>-7</sup> K.



Stanford, 1962 July 04, 20-21 hrs UT; Brightness Unit = 3.0 x 10<sup>-7</sup> K.



Stanford, 1962 July 05, 20-21 hrs UT; Brightness Unit = 2.7 x 10<sup>-7</sup> K.



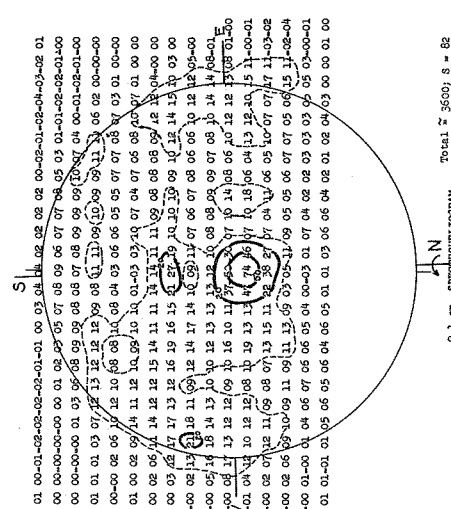
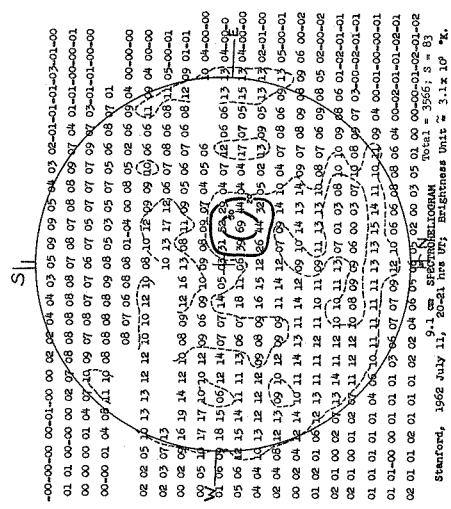
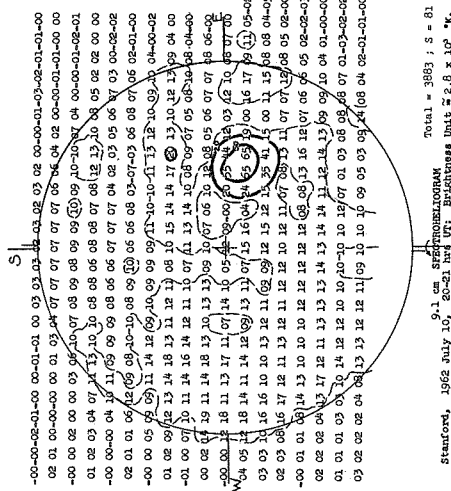
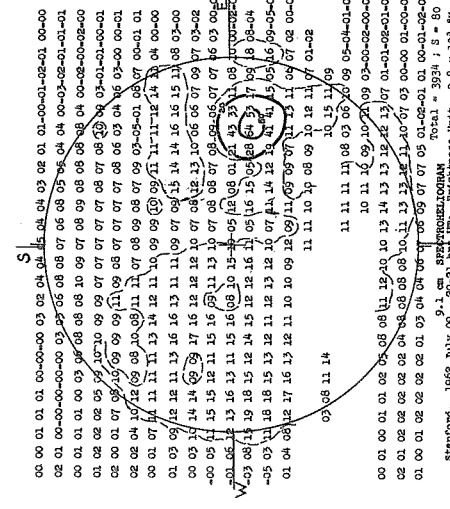
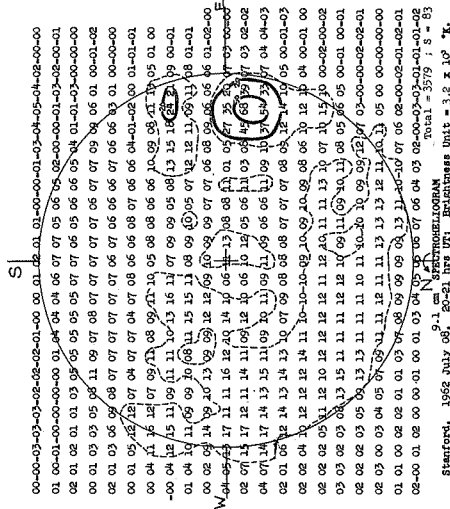
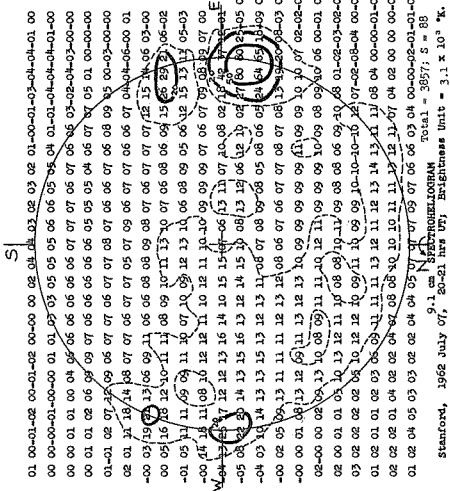
Stanford, 1962 July 06, 20-21 hrs UT; Brightness Unit = 2.8 x 10<sup>-7</sup> K.

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

JULY 1962

STANFORD

9.1 cm

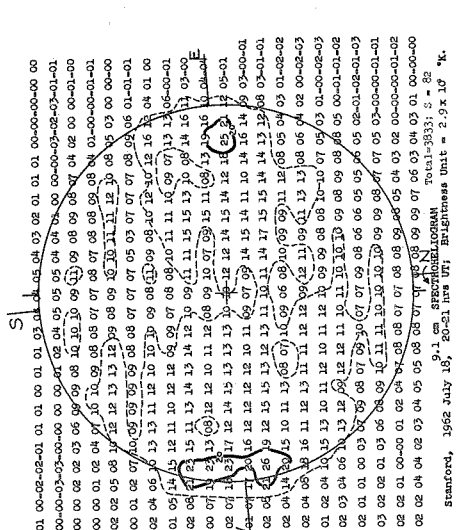
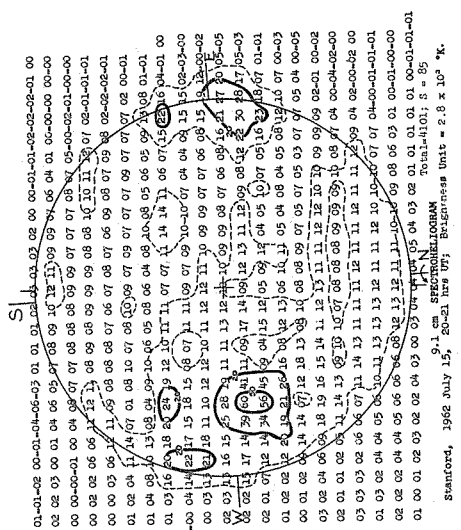
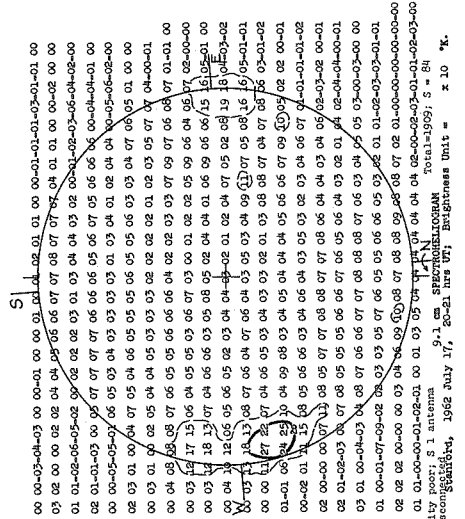
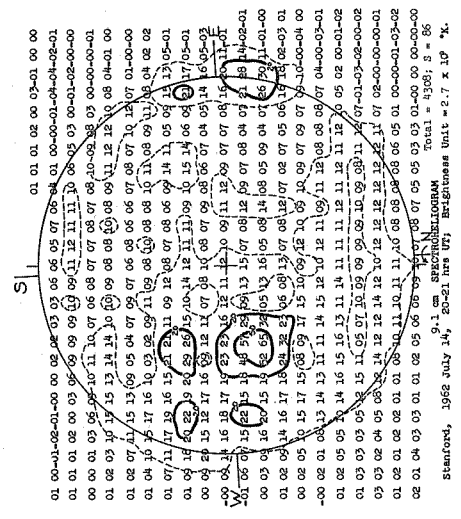
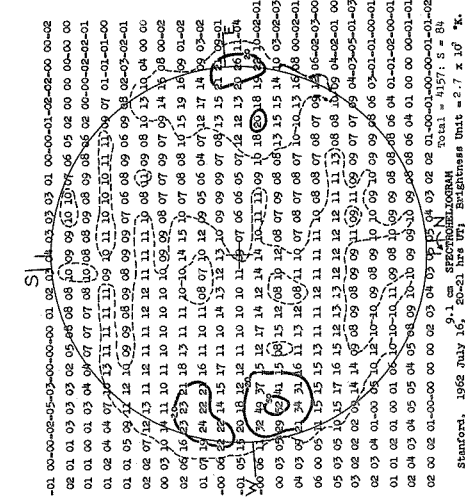
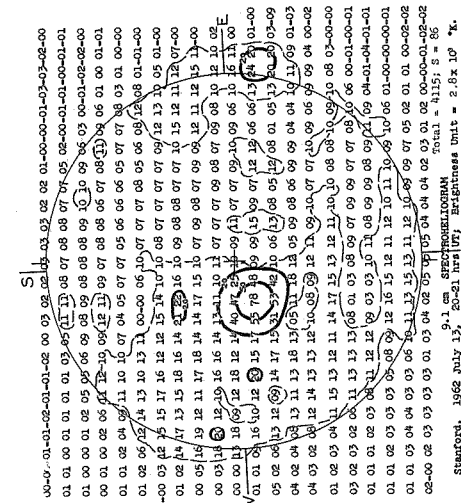


SOLAR RADIC EMISSION SPECTROHELIOGRAMS

JULY 1962

STANFORD

9.1 cm

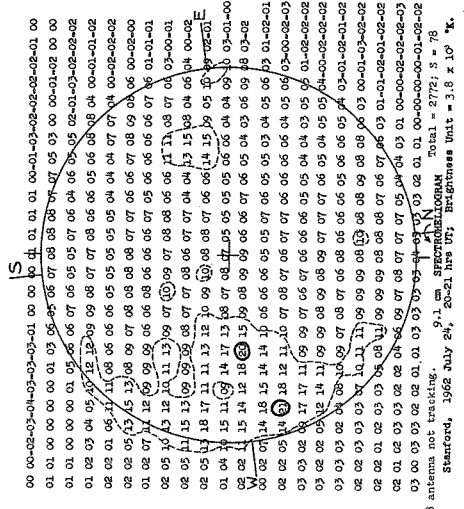
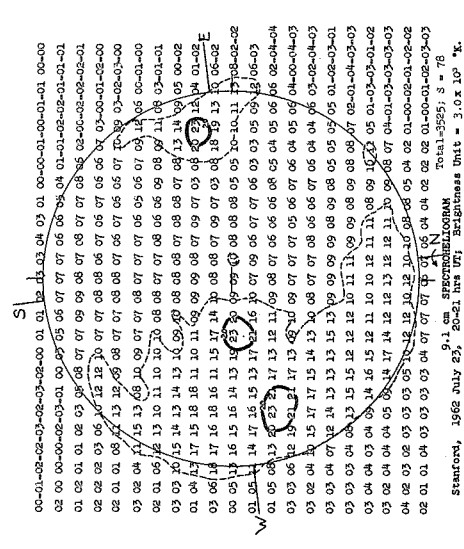
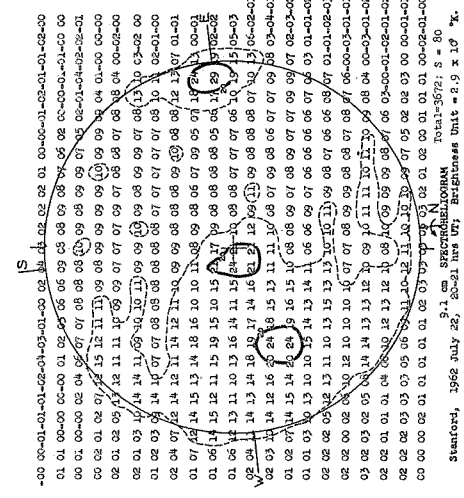
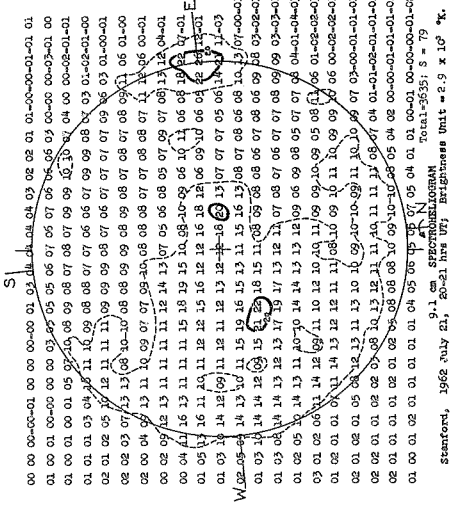
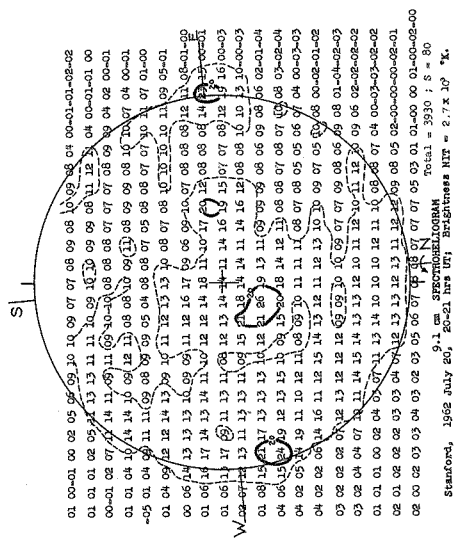
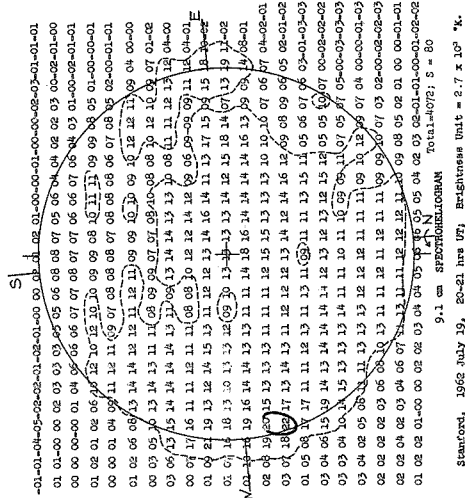


SOLAR RADIO EMISSION SPECTROHELIOGRAMS

JULY 1962

STANFORD

9.1 cm

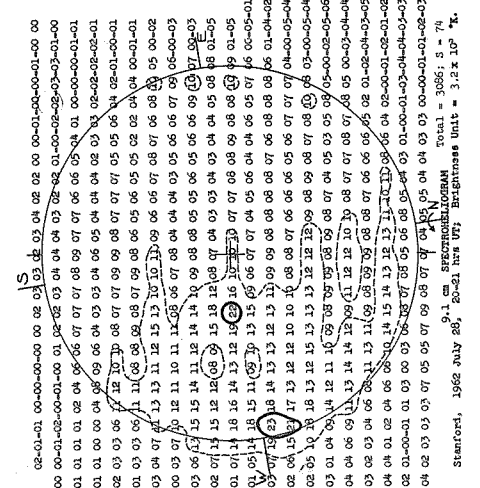
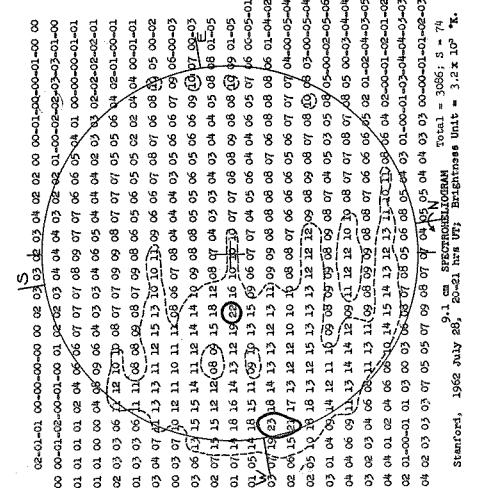
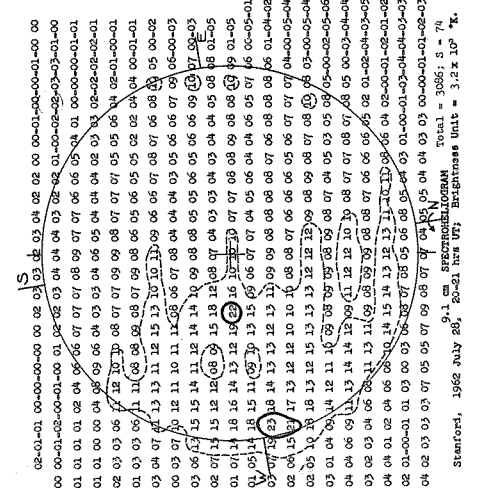
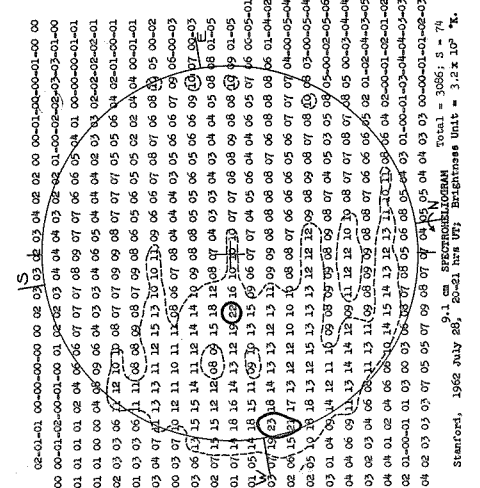
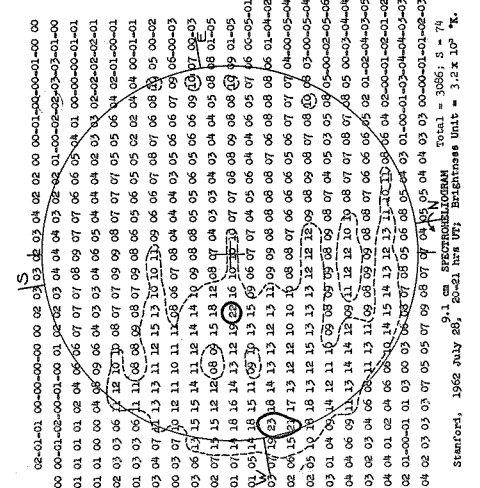
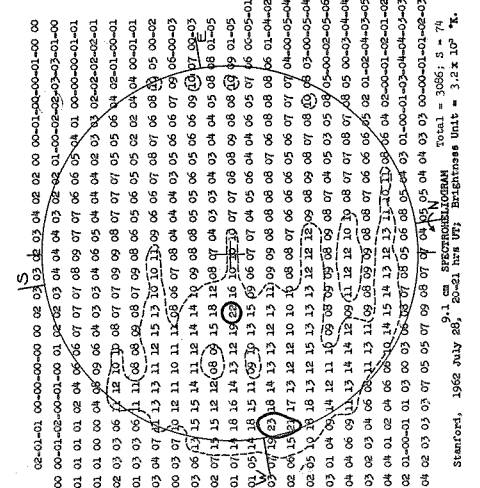
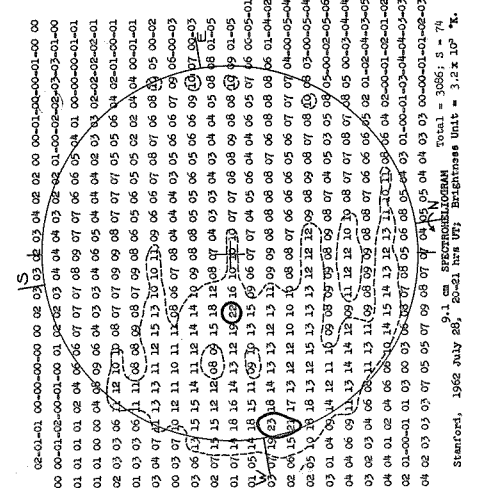
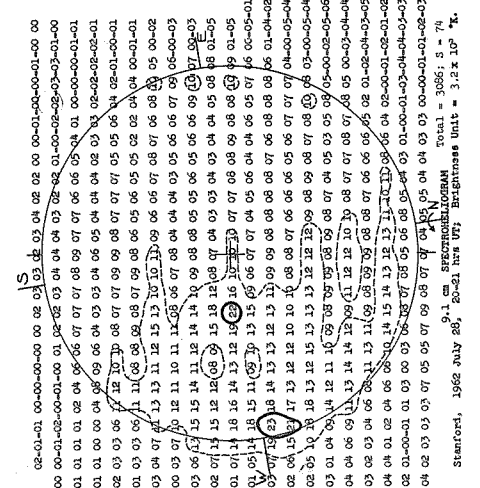
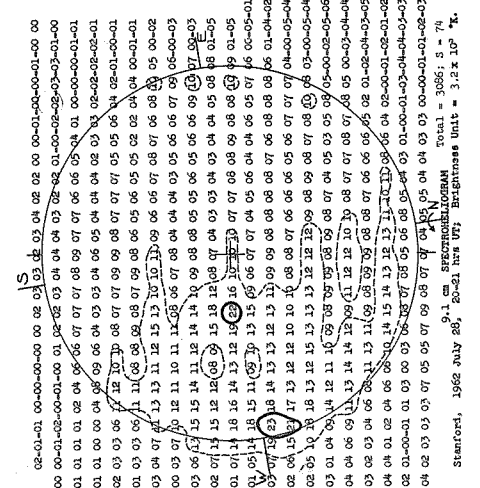
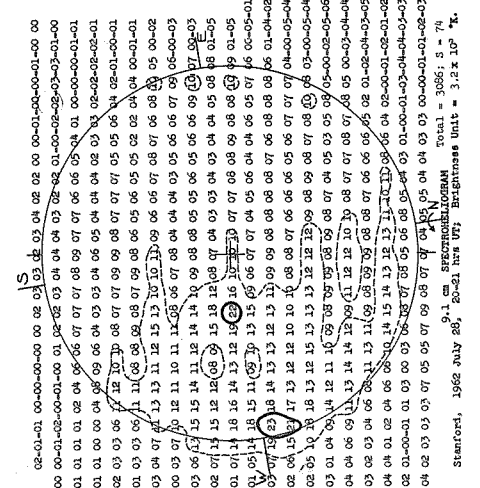
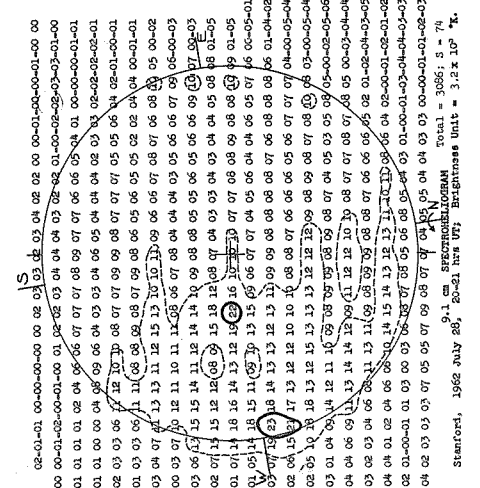
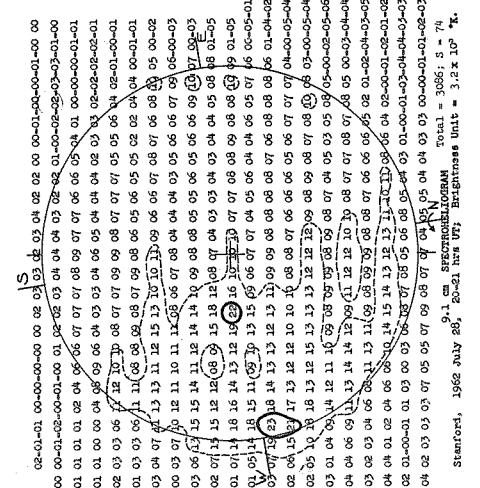
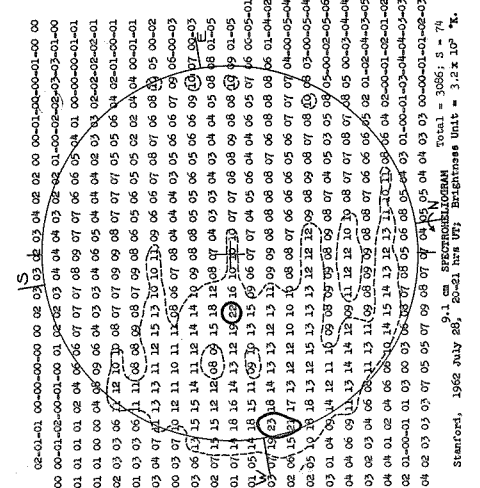
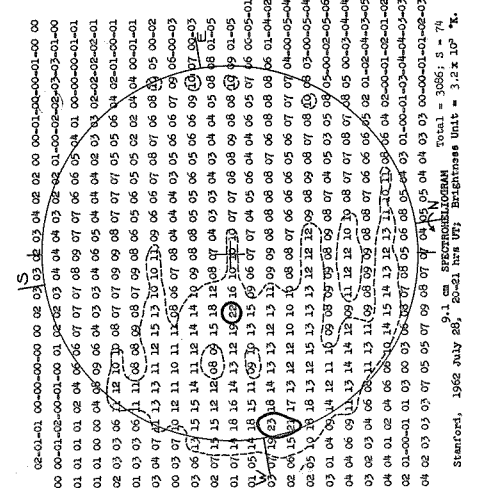
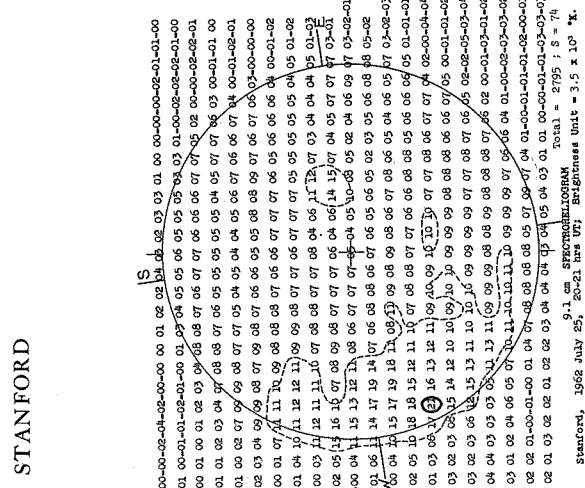
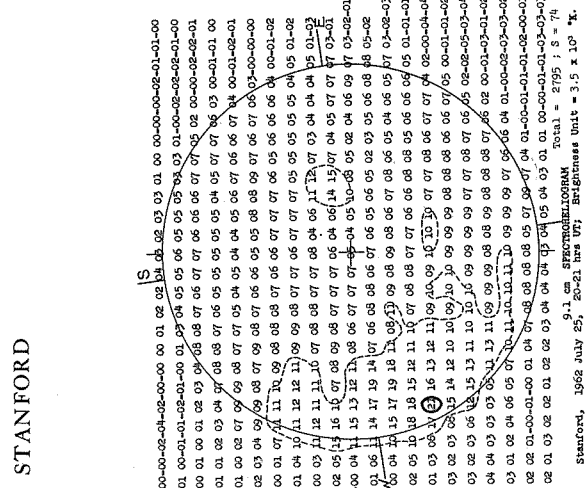
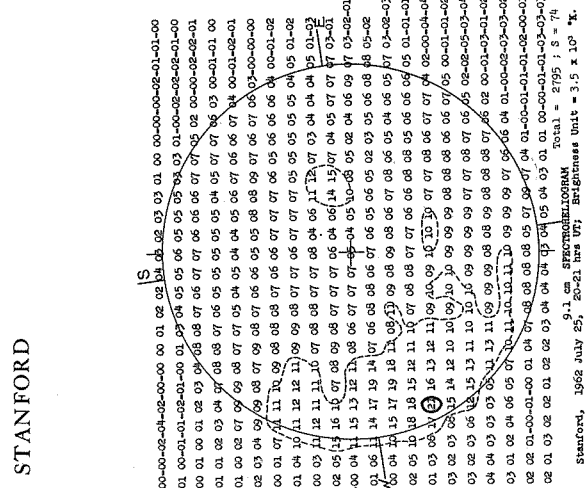
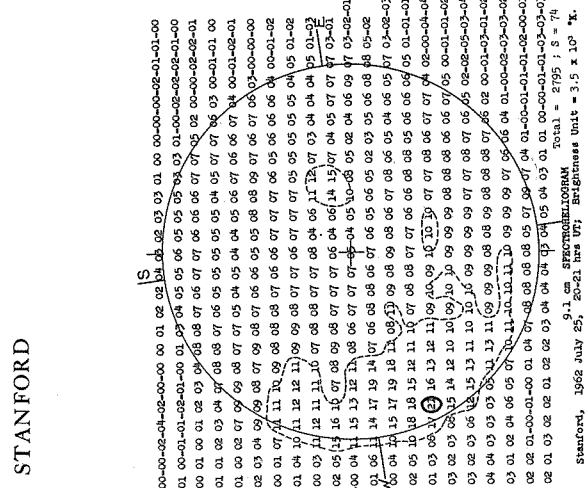
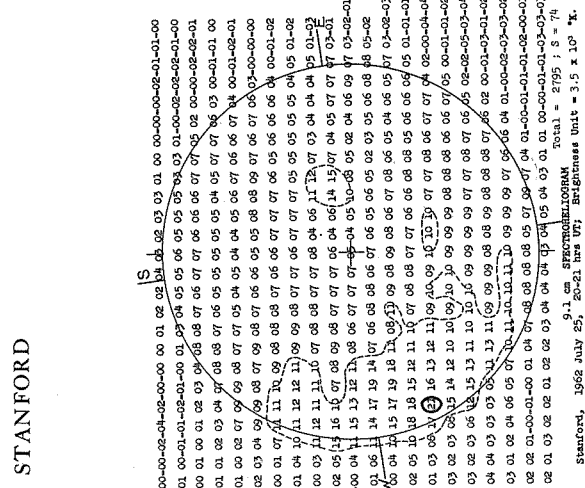
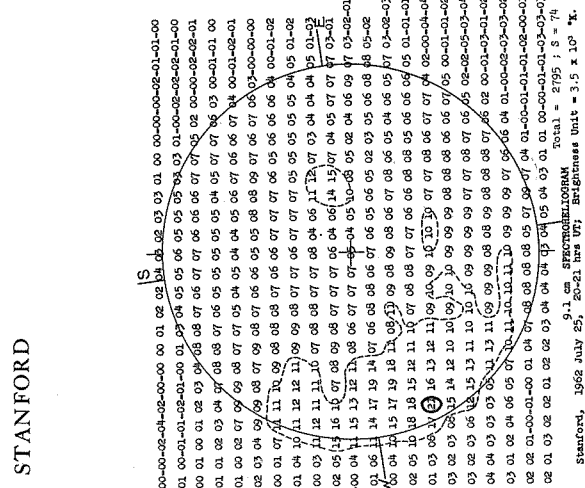
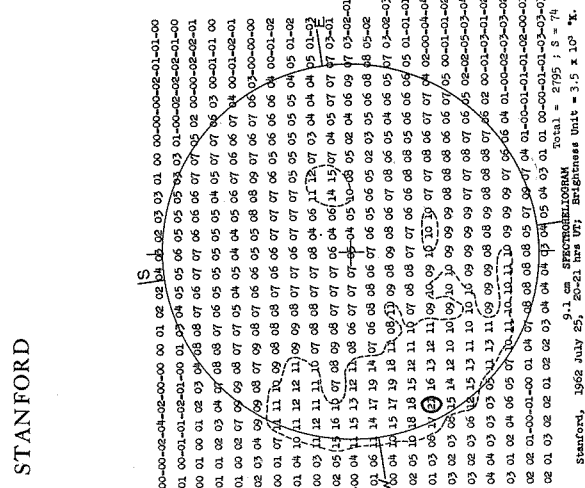


SOLAR RADIO EMISSION SPECTROHELIOGRAMS

JULY 1962

9.1 cm

STANFORD

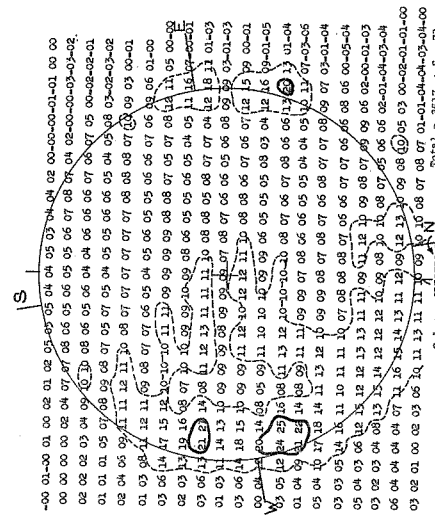


SOLAR RADIO EMISSION SPECTROHELIOGRAMS

JULY 1962

STANFORD

9.1 cm



Stanford, 1962 July 21, 20-21 hrs UT; Brightness Unit =  $2.7 \times 10^3$  K.

EMERSON - FRANKLIN - BOSTON



## COSMIC RAY INDICES

Climax Neutron Monitor

IGC STATION B 305

JUNE 1962

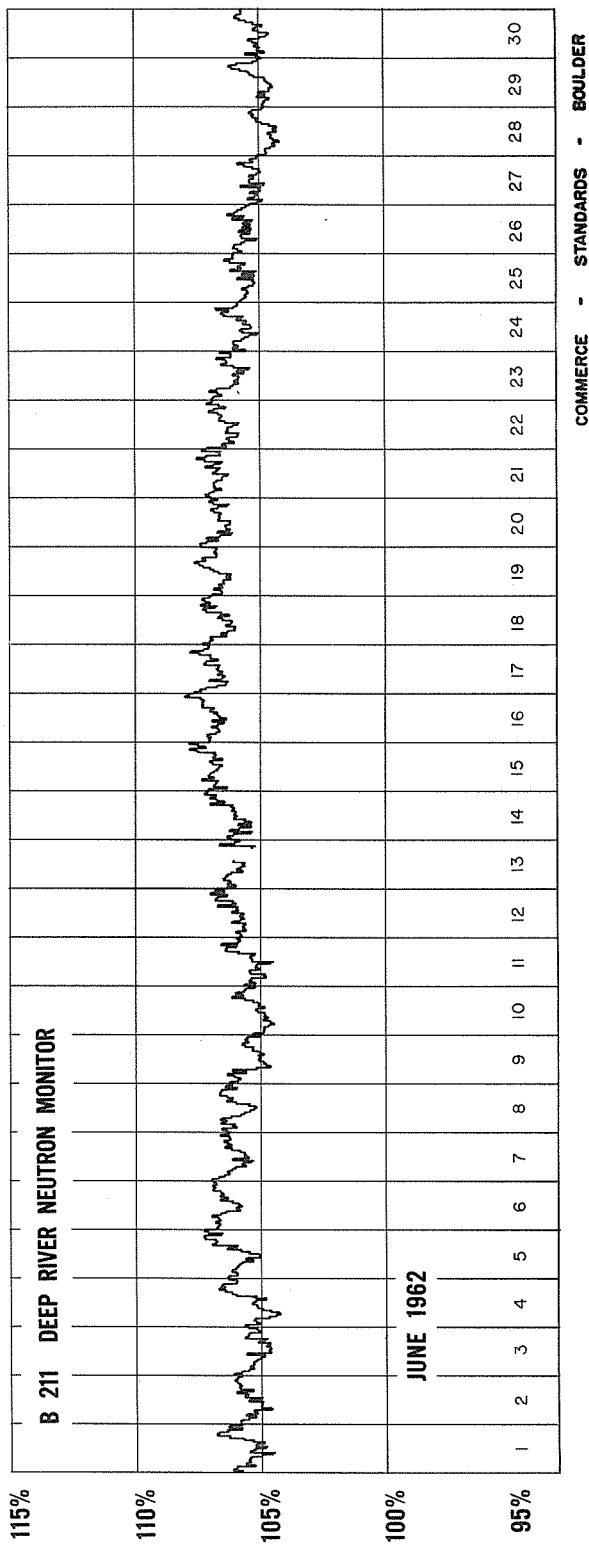
June 1962	Daily average counts/hr*	June 1962	Daily average counts/hr*
1	3054.7	16	3117.8
2	3063.4	17	3107.9
3	3071.2	18	3098.6
4	3080.8	19	3086.7
5	3086.9	20	3079.3
6	3096.9	21	3084.8
7	3085.9	22	3087.4
8	3095.2	23	3079.3
9	3088.4	24	3059.7
10	3076.0	25	3061.0
11	3067.4	26	3060.8
12	3078.7	27	3064.0
13	3087.3	28	3050.8
14	3100.3	29	3049.5
15	3115.8	30	3049.2

COMMERCE - STANDARDS - BOULDER

\*Scaling Factor 128

+ = Number of section hours

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



GEOMAGNETIC ACTIVITY INDICES

JUNE 1962

June 1962	C	Values Kp								Sum	Ap	Final Selected Days
		Three hour Gr. interval										
		1	2	3	4	5	6	7	8			
1	0.7	3-	2o	3o	3-	2o	1o	2o	2o	17+	9	Five Quiet
2	0.2	1+	1+	1-	2-	1-	1-	2-	2-	10-	5	
3	0.3	1-	0o	0+	1-	2-	2-	1+	3-	9o	5	
4	1.0	4-	2o	2+	3-	2+	3-	3o	3+	22o	13	
5	0.8	2o	1+	2+	2o	1o	2-	3+	4-	17+	10	
6	0.7	3+	2+	3+	2-	1+	1+	2+	2+	18o	10	
7	0.8	1+	2o	4-	3-	2o	2-	2o	1-	16o	9	
8	0.1	0o	1-	1+	1-	1-	1-	1o	1o	6o	3	
9	1.2	3-	4o	3+	4-	4-	3-	4o	5-	29-	22	
10	1.0	5-	4-	3+	4o	3o	2-	2o	1o	23+	17	
11	0.3	1o	2o	2o	1+	2-	1-	1+	2o	12o	6	Five Disturbed
12	0.4	2+	1-	2+	2+	3-	2o	2o	1o	15+	8	
13	0.2	1+	1+	2+	2-	1-	1-	1o	1-	10-	5	
14	0.3	1o	3-	2-	2-	2-	1+	2+	3o	15+	8	
15	0.8	3-	3+	2o	2o	3o	3-	3o	1o	20-	11	
16	0.3	3+	1o	1o	1o	1+	1+	1o	1-	11-	6	27
17	0.0	0+	0o	0o	0+	0+	1-	1-	1-	3o	2	28
18	0.1	2-	1-	0+	0+	0+	0+	0+	0o	4o	2	
19	0.2	1-	1o	1o	1-	2o	2-	1+	1o	9+	4	
20	0.2	1+	1o	1+	1o	1-	1-	1o	1o	8o	4	
21	0.7	1o	1o	0+	3o	3o	4-	4o	2+	18+	12	Ten Quiet
22	0.6	3-	4-	3-	2-	1+	1+	3-	2o	18o	10	
23	1.0	3-	2+	3+	3-	2+	3o	4+	3-	23+	15	
24	0.4	2o	1+	2o	2-	1+	2-	2o	2o	14o	6	
25	0.3	2o	2+	3-	1+	1+	1-	1+	1o	13-	6	
26	0.4	1-	1-	2o	1+	1+	2+	2+	3o	14-	7	11
27	1.1	3o	3+	4-	3o	4o	3-	4o	3+	27o	19	13
28	1.2	3-	3-	3+	4-	4-	2o	3-	4+	25o	17	16
29	0.8	3o	3+	3o	3-	3+	2+	3-	3-	23o	14	17
30	0.9	2+	4-	3+	3o	2o	4-	2-	2-	21+	13	18
												19
												20
Mean:	0.57									Mean:	9	

DAYS IN SOLAR ROTATION INTERVAL

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

ROT. =  
NR.

1761

Mch 18

1762

Apr 14

1763

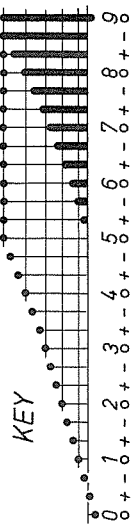
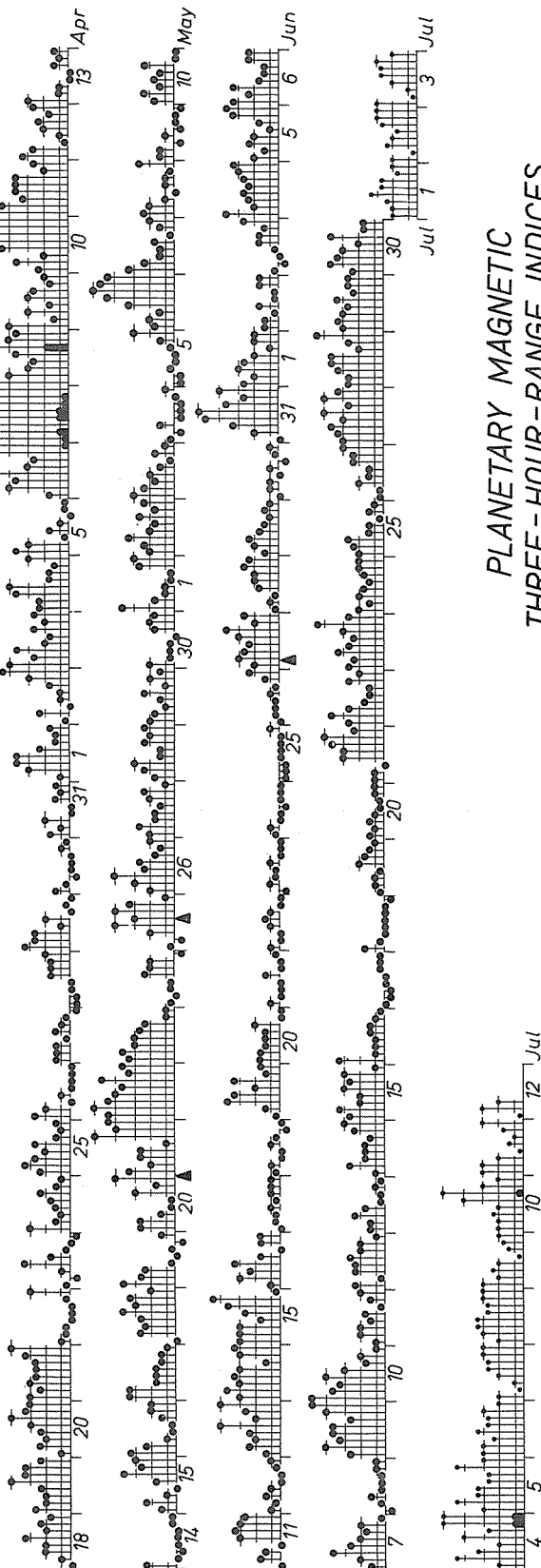
May 11

1764

Jun 7

1765

Jul 4



▲ = sudden commencement

PLANETARY MAGNETIC  
THREE-HOUR-RANGE INDICES

Kp till 1962 June 30  
(Ks from Wingst and Göttingen till July 12)

J.B.

CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

JUNE 1962

NORTH PACIFIC

NORTH ATLANTIC

JUNE 1962	NORTH ATLANTIC 6-HOURLY QUALITY FIGURES				SHORT-TERM FORECASTS ISSUED ABOUT ONE HOUR IN ADVANCE OF:		WHOLE DAY INDEX		ADVANCE FORECASTS (J-REPORTS) FOR WHOLE DAY, ISSUED IN ADVANCE BY:		GEOMAGNETIC KFR		NORTH PACIFIC 12-HOURLY QUALITY FIGURES		SHORT-TERM FORECASTS ISSUED AT:		WHOLE DAY INDEX		ADVANCE FORECASTS (J-REPORTS) FOR WHOLE DAY, ISSUED IN ADVANCE BY:		GEOMAGNETIC KSI											
	00	06	12	18	00	06	12	18	DAY	INDEX	1-7	1-7	1-3	1-7	0700	1900	0000	1800	DAY	INDEX	1-7	1-7	1-3	1-7	HALF DAY (1)	DAY (2)						
	TO	TO	TO	TO							DAYS	DAYS	DAYS	DAYS	TO	TO					FINAL	JPS	SDW	J	(1)	(2)	FINAL	JPS	SDW	J	(1)	(2)
01	6-	50	6+	7-	6	5	6	6	60	5	5	5	5	3	2	1	1	5	5	6	6	6	6	3	2	6	6	6	6	3	2	
02	6+	5+	7-	7-	6	5	6	6	6+	5	5	5	5	0	2	1	1	6	6	6	6	6	6	2	1	6	6	6	6	2	0	
03	60	6-	7-	6+	6	5	7	6	6+	6	6	6	6	3	3	3	3	6	6	6	6	6	6	3	3	6	6	6	6	3	2	
04	6+	6-	7-	7-	6	6	6	6	7-	6	6	6	6	3	3	3	3	6	6	6	6	6	6	3	3	6	6	6	6	2	2	
05	7-	6-	7-	7-	6	5	6	6	7-	6	6	6	6	3	3	3	3	6	6	6	6	6	6	3	3	6	6	6	6	2	2	
06	6-	50	7-	7-	6	5	7	7	6+	6	6	6	6	3	2	2	2	6	6	6	6	6	6	3	2	6	6	6	6	3	2	
07	7-	6+	7-	6+	6	6	7	7	6+	6	6	6	6	3	2	2	2	6	6	6	6	6	6	3	2	6	6	6	6	2	2	
08	7-	6+	7-	7-	7	6	7	7	7-	6	6	6	6	1	1	1	1	6	6	6	6	6	6	1	1	6	6	6	6	1	1	
09	6+	6-	60	6+	7	6	7	6	60	6	6	6	6	(4)	(4)	(4)	(4)	6	6	6	6	6	6	(4)	(4)	6	6	6	6	(4)	(4)	
10	60	50	60	60	6	5	6	7	6-	6	6	6	6	(4)	(4)	(4)	(4)	6	6	6	6	6	6	(4)	(4)	6	6	6	6	(4)	(4)	
11	6+	60	6+	7-	7	5	7	7	6+	6	6	6	6	3	2	2	2	6	6	6	6	6	6	2	2	6	6	6	6	2	2	
12	6+	60	6+	7-	6	6	6	6	6+	6	6	6	6	2	2	2	2	6	6	6	6	6	6	2	2	6	6	6	6	2	2	
13	7-	6+	7-	6+	6	6	6	6	7-	6	6	6	6	2	1	1	1	6	6	6	6	6	6	2	1	6	6	6	6	2	1	
14	7-	7-	7-	7-	6	7	6	7	7-	6	6	6	6	2	2	2	2	6	6	6	6	6	6	2	2	6	6	6	6	2	2	
15	6+	6+	6+	6+	7	6	7	6	6+	6	6	6	6	3	2	2	2	6	6	6	6	6	6	3	2	6	6	6	6	3	2	
16	6	7-	7-	6+	6	6	7	6	7-	6	6	6	6	2	1	1	1	6	6	6	6	6	6	2	1	6	6	6	6	2	1	
17	6+	6+	6+	7-	6	6	7	6	7-	6	6	6	6	0	1	1	1	6	6	6	6	6	6	0	0	6	6	6	6	0	0	
18	6+	60	6+	7-	7	6	7	7	6+	7	7	7	7	1	1	1	1	6	6	6	6	6	6	1	1	6	6	6	6	1	1	
19	7-	6+	7-	7-	6	6	6	6	7-	6	6	6	6	2	1	1	1	6	6	6	6	6	6	1	1	6	6	6	6	1	1	
20	7-	6+	7-	7-	7	6	7	7	7-	6	6	6	6	2	1	1	1	6	6	6	6	6	6	1	1	6	6	6	6	1	1	
21	7-	60	7-	6+	6	6	7	7	6+	6	6	6	6	2	3	3	3	6	6	6	6	6	6	2	3	6	6	6	6	2	3	
22	6+	5+	7-	7-	6	5	7	7	6+	6	6	6	6	3	2	2	2	6	6	6	6	6	6	3	2	6	6	6	6	3	2	
23	7-	7-	7-	7-	6	6	7	6	7-	6	6	6	6	3	3	3	3	6	6	6	6	6	6	3	3	6	6	6	6	3	3	
24	6+	6-	7-	6+	6	6	7	7	6+	6	6	6	6	2	2	2	2	6	6	6	6	6	6	2	2	6	6	6	6	2	2	
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26	7-	6+	7-	7-	7	6	7	7	7-	6	6	6	6	1	3	3	3	6	6	6	6	6	6	1	3	6	6	6	6	1	3	
27	60	5+	7-	6+	6	6	7	7	6+	6	6	6	6	(4)	(4)	(4)	(4)	6	6	6	6	6	(4)	(4)	6	6	6	6	(4)	(4)		
28	6-	50	60	7-	6	5	6	6	60	6	6	6	6	3	3	3	3	6	6	6	6	6	3	3	6	6	6	6	3	3		
29	6+	6-	60	6+	6	5	7	6	60	6	6	6	6	(4)	(4)	(4)	(4)	6	6	6	6	6	(4)	(4)	6	6	6	6	(4)	(4)		
30	7-	60	6+	60	6	6	6	6	6+	6	6	6	6	3	3	3	3	6	6	6	6	6	6	3	3	6	6	6	6	(4)	(4)	
Score: Quiet Periods	P	17	23	16	16					16	16	16	16																			
	S	13	7	14	14					14	14	14	14																			
	U	0	0	0	0					0	0	0	0																			
	F	0	0	0	0					0	0	0	0																			
Disturbed Periods	P	0	0	0	0					0	0	0	0																			
	S	0	0	0	0					0	0	0	0																			
	U	0	0	0	0					0	0	0	0																			
	P	0	0	0	0					0	0	0	0																			

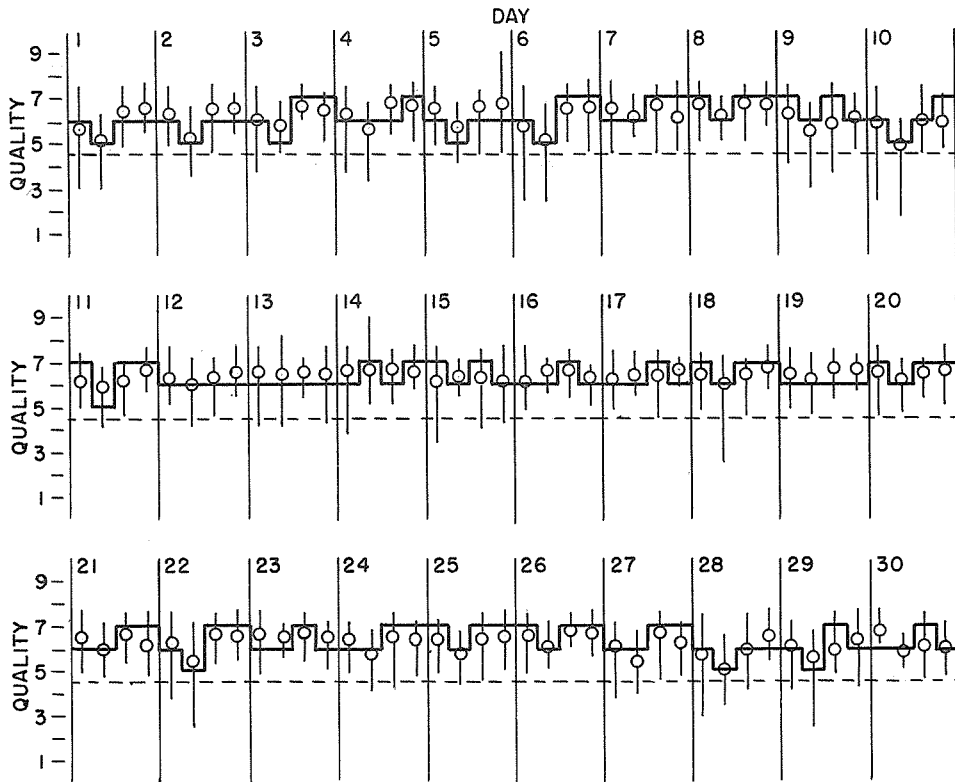
CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

NORTH ATLANTIC

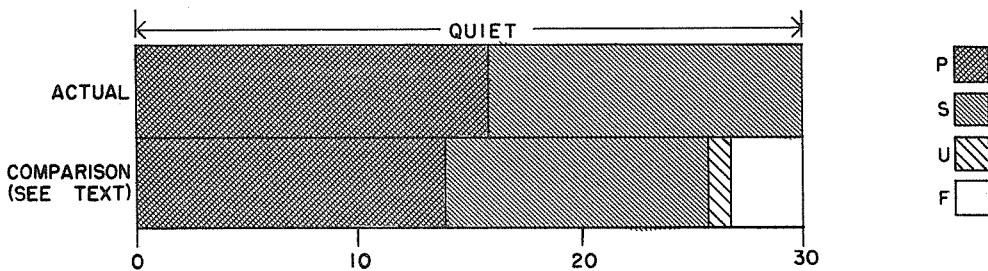
JUNE 1962

— Short-term forecast  
 ○ Quality figure

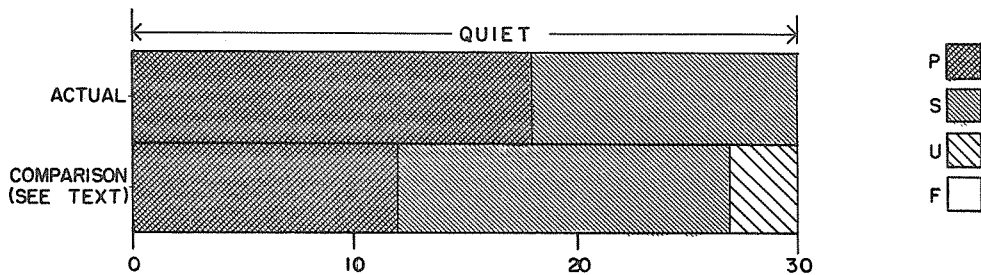
| Range of reports



OUTCOME OF ADVANCED FORECASTS      FINAL ESTIMATE  
 NORTH ATLANTIC

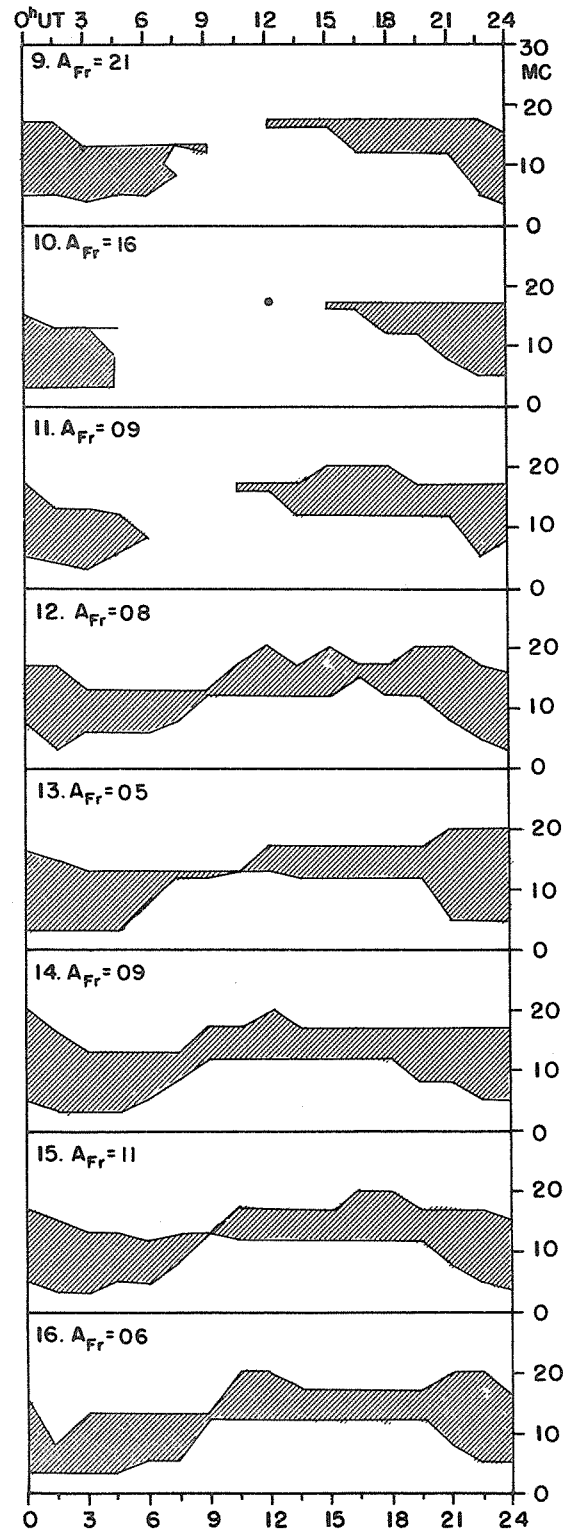
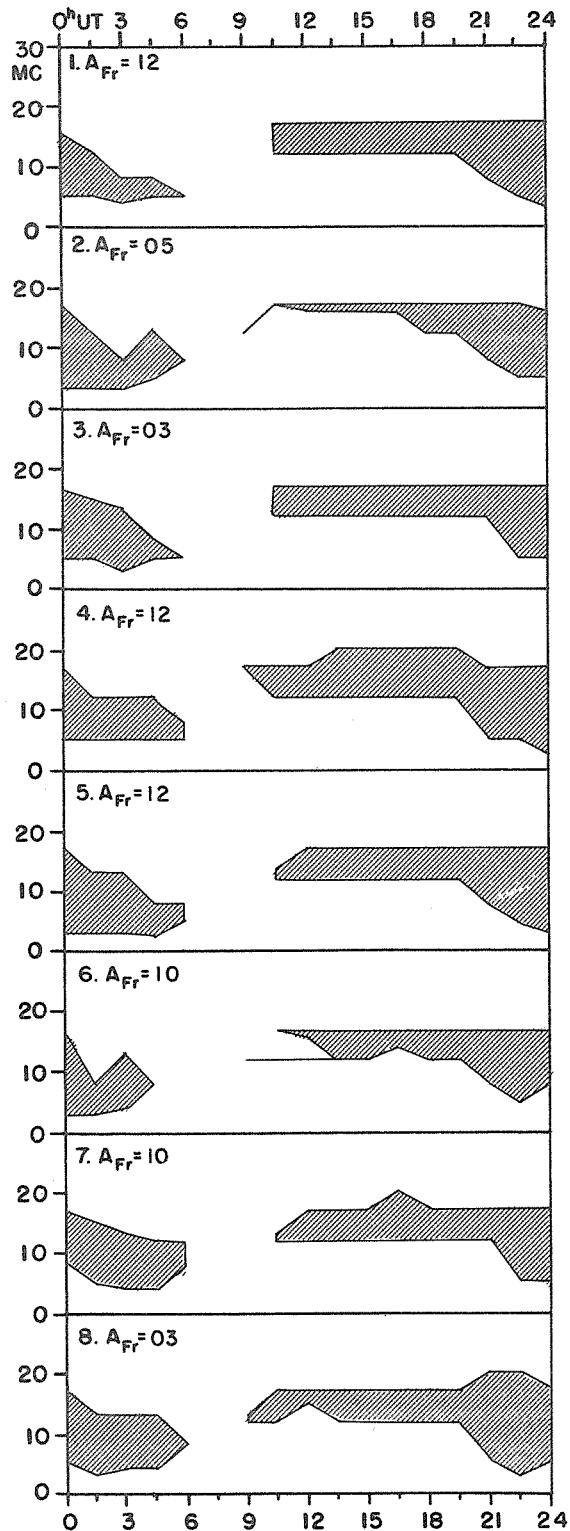


NORTH PACIFIC



USEFUL FREQUENCY RANGES -- NORTH ATLANTIC PATH

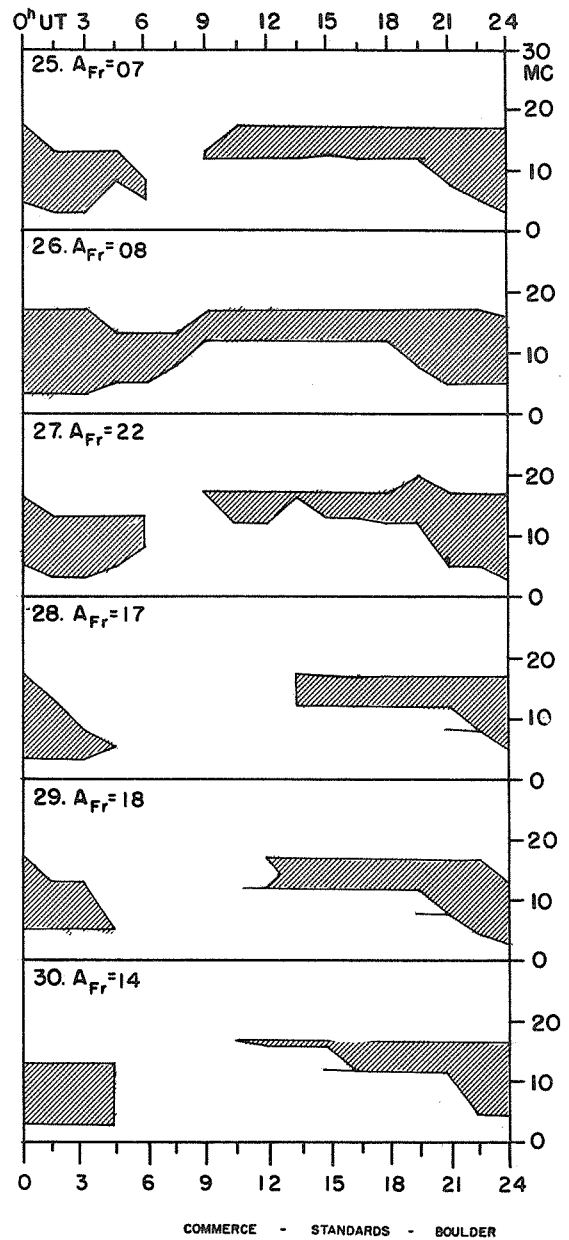
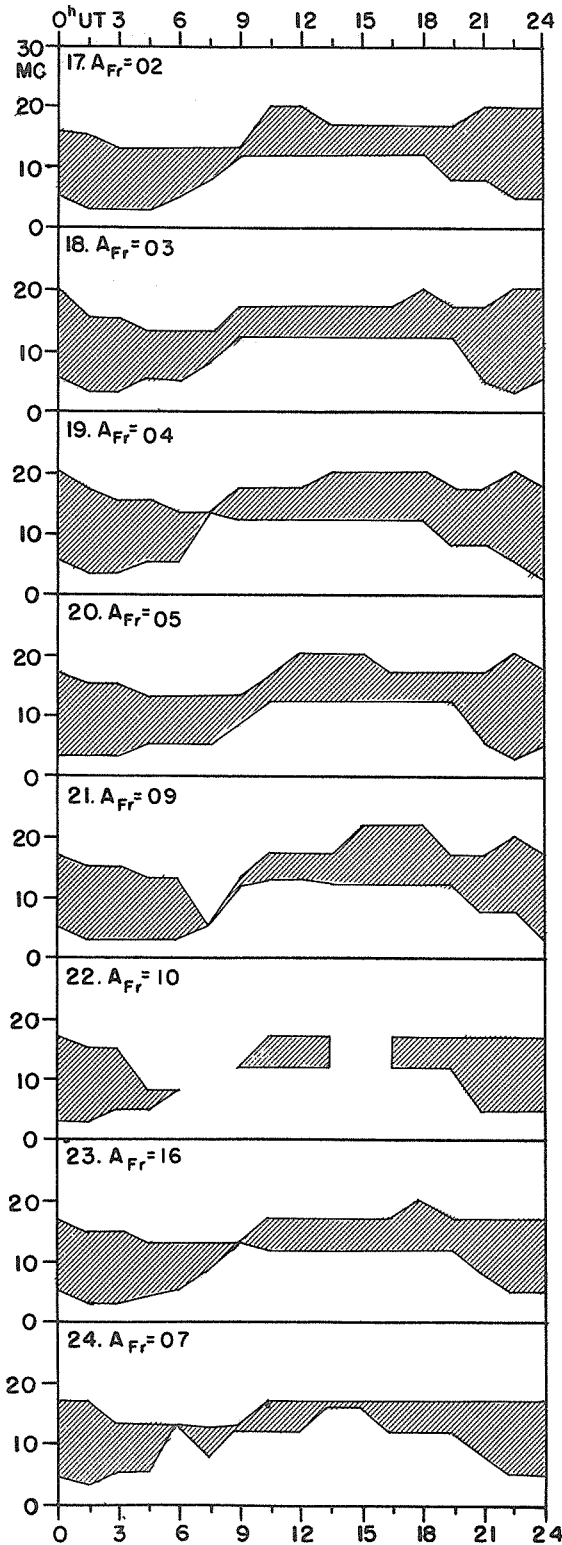
JUNE 1962



USEFUL FREQUENCY RANGES -- NORTH ATLANTIC PATH

VIIId

JUNE 1962



Adapted from Observations by Deutsches Bundespost



## ALERT PERIODS AND SPECIAL WORLD INTERVALS

## INTERNATIONAL WORLD DAY SERVICE

JULY 1962

Issued July 1962 Day/Time U.T.	Advance Geophysical Alert	No.	World-Wide Geophysical Alert	Special World Intervals
06/0232	Climax, Solar Flare, Two 05/1937Z			
26/1600		169	Magnetic Storm 25/22XXZ	Start
27/1600		170		Finish
29/1840	Lockheed, Solar Flare, Two 29/1815Z			

COMMERCE - STANDARDS - BOULDER

Erratum:

It has just come to our attention that in CRPL-F 200 Part B April 1961 on p.VIIIa, the World-wide Geophysical Alert No. 115 is incorrectly dated. The "Finish Special World Interval" statement was issued March 28 at 1600 UT.