

PART B
SOLAR - GEOPHYSICAL DATA

ISSUED
APRIL 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 - February - March 1962
- (b) Graph of Sunspot Cycle

II SOLAR CENTERS OF ACTIVITY

- (a) Calcium Plage and Sunspot Regions - March 1962
- (b) Magnetic Classifications of Sunspots (Mt. Wilson) - March 1962
- (c-e) Final Coronal Line Emission Indices - October - November - December 1961
- (f) Provisional Coronal Line Emission Indices - March 1962

III SOLAR FLARES

- (a-h) Optical Observations - March 1962
- (i) Flare Patrol Observations - March 1962
- (j) Optical Observations - December 1961
- (k) Flare Patrol Observations - December 1961
- (l) Ionosphere Effects (SWF-SEA-SCNA-SPA-Bursts) - February 1962

IV SOLAR RADIO WAVES

- (a) 2800 Mc - Outstanding Occurrences (ARO-Ottawa) - March 1962
- (b) 2800 Mc - Outstanding Occurrences (ARO-Ottawa) - Graphs - March 1, 13, 1962
- (c) 169 Mc - Interferometric Occurrences (Nançay) - March 1962
- (d) 108 Mc - Outstanding Occurrences (Boulder) - March 1962
- (e) 108 Mc - Selected Outstanding Occurrences (Boulder) - Graphs -
March 1, 13, 17, 1962
- (f-g) 7.6-41 Mc - Spectrum Observations (HAO - Boulder) - March 1962
- (h-j) 9.1 cm - Spectroheliograms (Stanford) - September, October, November 1960

V COSMIC RAY INDICES

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

VI GEOMAGNETIC ACTIVITY INDICES

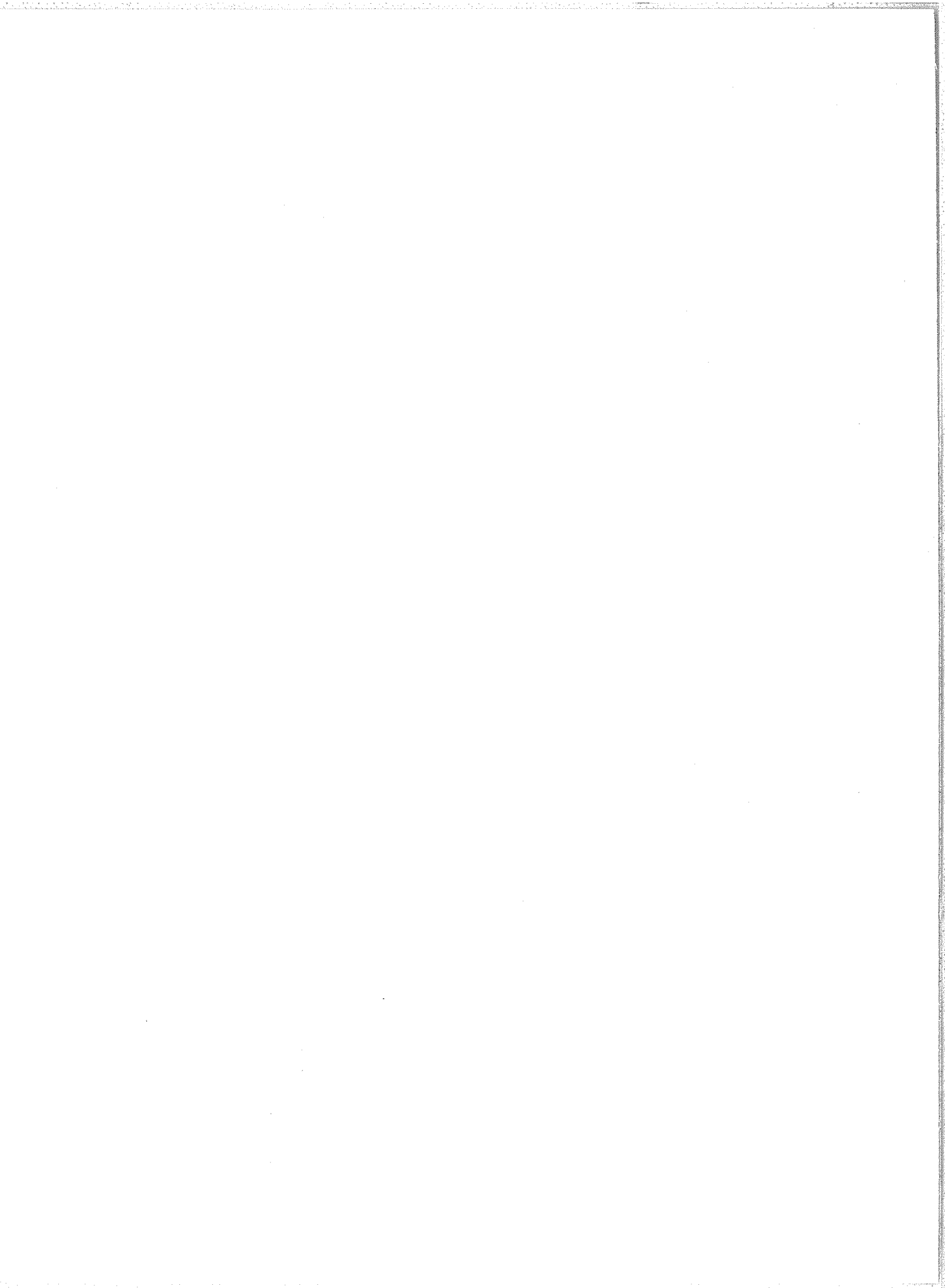
- (a) C, Kp, Ap and Selected Quiet and Disturbed Days - February 1962
- (b) Chart of Kp by Solar Rotations - 1962

VII RADIO PROPAGATION QUALITY INDICES

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

VIII ALERT PERIODS AND SPECIAL WORLD INTERVALS

- (a) Alerts and SWI - February 1962

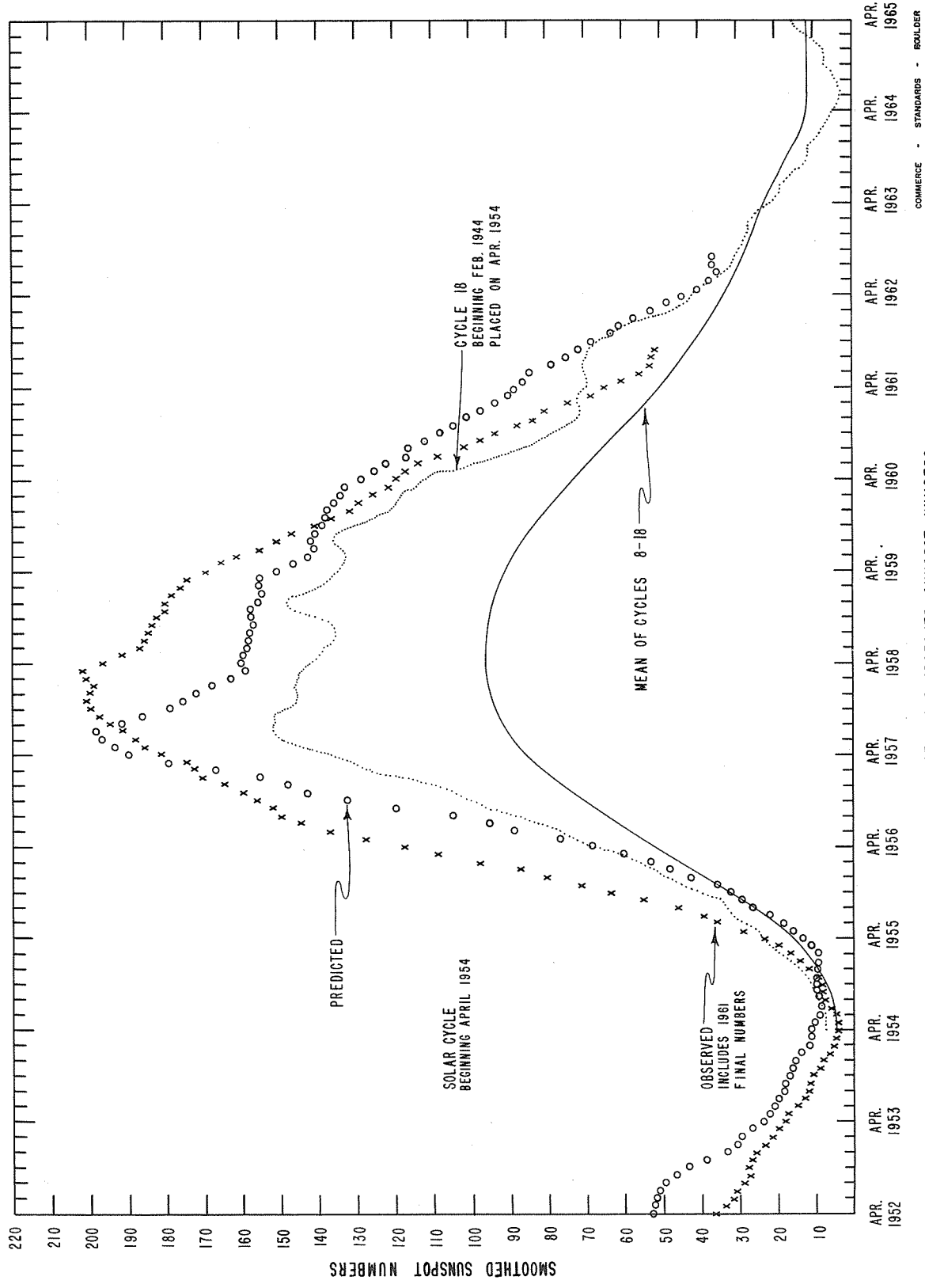


The descriptive text was republished November 1961.
Addenda to the text were published February 1962.

DAILY SOLAR INDICES

| Feb. 1962 | American Relative Sunspot Numbers R_A' |
|--------------|--|
| 1 | 70 |
| 2 | 67 |
| 3 | 47 |
| 4 | 45 |
| 5 | 42 |
| 6 | 24 |
| 7 | 33 |
| 8 | 21 |
| 9 | 19 |
| 10 | 11 |
| 11 | 3 |
| 12 | 3 |
| 13 | 8 |
| 14 | 17 |
| 15 | 18 |
| 16 | 15 |
| 17 | 15 |
| 18 | 22 |
| 19 | 33 |
| 20 | 49 |
| 21 | 56 |
| 22 | 80 |
| 23 | 82 |
| 24 | 88 |
| 25 | 58 |
| 26 | 71 |
| 27 | 77 |
| 28 | 80 |
| Mean: | 41.2 |

| Mar. 1962 | Zürich Provisional Relative Sunspot Numbers R_Z | Daily Values Solar Flux at 2800 Mc, Ottawa, Canada Flux |
|--------------|--|--|
| 1 | 74 | 121 |
| 2 | 66 | 112 |
| 3 | 58 | 100 |
| 4 | 37 | 89 |
| 5 | 15 | 86 |
| 6 | 26 | 81 |
| 7 | 28 | 80 |
| 8 | 18 | 77 |
| 9 | 15 | 79 |
| 10 | 7 | 76 |
| 11 | 0 | 78 |
| 12 | 8 | 82 |
| 13 | 12 | 81 |
| 14 | 13 | 82 |
| 15 | 22 | 84 |
| 16 | 20 | 86 |
| 17 | 28 | 94 |
| 18 | 36 | 98 |
| 19 | 61 | 116 |
| 20 | 75 | 118 |
| 21 | 86 | 127 |
| 22 | 94 | 128 |
| 23 | 84 | 130 |
| 24 | 79 | 126 |
| 25 | 74 | 128 |
| 26 | 71 | 118 |
| 27 | 48 | 117 |
| 28 | 38 | 109 |
| 29 | 37 | 103 |
| 30 | 44 | 99 |
| 31 | 38 | 92 |
| Mean: | 42.3 | 99.9 |



CALCIUM PLAGE AND SUNSPOT REGIONS

MARCH 1962

| CMP Mar. 1962 | Lat | McMath Plage Number | Return of Region | Calcium Plage Data | | | Sunspot Data | | |
|---------------------|-----|---------------------------|------------------------|-------------------------|-------|--------------|--------------------------|-----|---------|
| | | | | CMP Values Area Int. | | History, Age | CMP Values Area Count | | History |
| 04.0 | N08 | 6354 | 6334 | 3700 | 2.5 | l \ l 3 | 20 | 1 | l - l |
| 05.1 | N08 | 6355 | 6335 | 1300 | 2 | l - l 3 | 80 | 3 | l - l |
| 06.8 | N13 | 6356 | 6335 | 400 | 2 | l \ d 3 | | | |
| 06.8 | N12 | 6358 | * | 1100 | 2.5 | b / l 1 | 60 | 1 | b ^ d |
| 08.4 | S07 | 6357 | ** | 600 | 2 | l \ d 1 | | | |
| 08.4 | N07 | 6359 A | *** | (200) | (1.5) | b - d 1 | | | |
| 08.4 | N07 | 6359 B | *** | (200) | (1.5) | b - d 1 | | | |
| 11.8 | N39 | 6364 | *** | 200 | 1 | b ^ d 1 | | | |
| 11.9 | N20 | 6360 | *** | 200 | 1 | b ^ d 1 | | | |
| 12.4 | S03 | 6365 | *** | 200 | 1.5 | b ^ d 1 | | | |
| 14.4 | S17 | 6362 | *** | (200) | (1) | b \ d 1 | | | |
| 15.4 | N17 | 6361 | 6342 | (800) | (1) | l - l 7 | | | |
| 17.4 | S14 | 6363 | New | 400 | 2 | l \ d 1 | | | |
| 18.4 | N09 | 6366 | New | 2200 | 3 | l - l 1 | 50 | 1 | l - l |
| 18.4 | S06 | 6367 | 6349 | 1400 | 2 | l \ l 4 | | | |
| 19.2 | S22 | 6371 | *** | (400) | (2) | b ^ d 1 | | | |
| 20.2 | N07 | 6368 | 6348 | 1300 | 2 | l \ l 7 | (10) | (1) | l \ d |
| 22.3 | S04 | 6375 | *** | (400) | (1.5) | b ^ d 1 | | | |
| 23.5 | N08 | 6370 | 6352 | 2400 | 3 | l - l 3 | 100 | 6 | l - l |
| 24.2 | S02 | 6372 | 6351 | 1100 | 2 | l - l 2 | 20 | 1 | b / l |
| 25.0 | S13 | 6369 | 6351 | 7000 | 3 | l - l 2 | (10) | (1) | l \ d |
| 25.6 | N12 | 6373 | 6352 | 5000 | 3.5 | l - l 3 | 970 | 14 | l - l |
| 26.1 | S33 | 6376 | *** | (300) | (1.5) | b ^ d 1 | | | |
| 27.3 | N16 | 6374 | **** | 1200 | 3 | l - l 1 | (20) | (2) | l \ d |
| 31.1 | N08 | 6377 | + | 1600 | 2.5 | l - l 1 | | | |
| 31.5 | S15 | 6378 | New | 1000 | 2.5 | l - l 1 | | | |

COMMERCE - STANDARDS - BOULDER

- * New in position of 6339
 ** New in position of 6337
 *** New, small and ephemeral
 **** New in position of 6353
 + Resurgence of 6354.

MT. WILSON MAGNETIC CLASSIFICATIONS OF SUNSPOTS

11b

MARCH 1962

| Mar. 1962 | Time Meas. | Lat. | Mer. Dist. | Type | | Mar. 1962 | Time Meas. | Lat. | Mer. Dist. | Type |
|--------------|---------------|------|---------------|------------|--|--------------|---------------|-----------|---------------|------------------|
| 3 | 1705 | N10 | W72 | a f | | 29 | 2455 | N09 | W62 | β |
| | | S09 | W67 | β p* | | | | N13 | E11 | a p |
| | | N08 | E02 | β f | | | | S13 | E15 | β f+ |
| | | N07 | E12 | a p | | 30 | 1640 | N10 | W71 | β γ |
| | | N11 | E23 | a f+ | | | | N14 | W67 | a p |
| 8 | 1830 | N07 | W54 | a p | | N13 | E01 | a p | | |
| | | N12 | W25 | a p | | S13 | E05 | β p | | |
| | | N14 | W18 | a f | | S08 | E52 | | | |
| 13 | 2340 | N12 | E60 | a f | | 31 | 1905 | N10 | W80 | β γ |
| 14 | 1825 | N12 | E50 | γ | | | | N13 | W12 | β p |
| 15 | 1830 | N12 | E37 | γ | | | | N04 | W04 | a p |
| 26 | 1650 | N10 | W50 | β p | | | | S07 | E33 | a p |
| | | S11 | W29 | a p | | | | | | |
| | | N10 | W17 | β f | | | | | | |

* Reversed polarities

+ Very faint

COMMERCE - STANDARDS - BOULDER

FINAL CORONAL LINE EMISSION INDICES

OCTOBER 1961

| CMP Oct 1961 | 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 | 80 | 110 | 17 | 27 | 24 | 45 | 12 | 20 | 23 | 31 | 12a | 18a | 99 | 116 | 22a | 13a |
| 2 | 69 | 98 | 21a | 24a | 22 | 42 | 28a | 35a | x | x | x | x | x | x | x | x |
| 3 | 38 | 47 | 7 | 11 | 23 | 31 | 9 | 16 | 70 | 42a | 15 | 47 | 73 | 101 | 12 | 24 |
| 4 | 30 | 36 | 15 | 24 | 22 | 34 | 12 | 16 | 45 | 78 | 25 | 44 | 27 | 31 | 16 | 18 |
| 5 | 44 | 53 | 17 | 32 | 33 | 48 | 10 | 16 | 44 | 57 | 8 | 13 | 34 | 45 | 10 | 19 |
| 6 | 72 | 93 | 6 | 15 | 50 | 64 | 1 | 4 | 25 | 39 | 11 | 16 | 54 | 101 | 12 | 24 |
| 7 | 53a | 81a | 5a | 15a | 20a | 31a | 1a | 3a | 28 | 39 | 18 | 28 | 61 | 104 | 21 | 41 |
| 8 | 90 | 167 | 6a | 10a | 43 | 63 | 4a | 5a | 37 | 48 | 16 | 20 | 62 | 75 | 33 | 64 |
| 9 | 67 | 90 | 7 | 12 | 23 | 36 | 9 | 13 | 77 | 115 | x | x | 77 | 115 | x | x |
| 10 | 47a | 68a | 12 | 22 | 44a | 64a | 25 | 50 | 84 | 126 | 27 | 50 | 66 | 121 | 16 | 28 |
| 11 | 71 | 101 | 17 | 34 | 68 | 112 | 25 | 43 | 82 | 128 | 13 | 32 | 73 | 90 | 9 | 12 |
| 12 | 86 | 162 | x | x | 51 | 73 | x | x | 55 | 73 | 15a | 24a | 55 | 87 | 13a | 28a |
| 13 | 70 | 132 | x | x | 23 | 34 | x | x | 34 | 56 | 3 | 4 | 70 | 109 | 8 | 12 |
| 14 | 46 | 73 | 16 | 28 | 10 | 14 | 12 | 14 | 19 | 48 | 7a | 10a | 48 | 70 | 12a | 15a |
| 15 | 49 | 70 | 10 | 14 | 10 | 14 | 4 | 7 | 9a | 10a | 12a | 15a | 41a | 68a | 15a | 25a |
| 16 | x | x | x | x | x | x | x | x | 11 | 17 | 13 | 22 | 57 | 92 | 19 | 30 |
| 17 | 83 | 114 | 17 | 25 | 17 | 22 | 9 | 11 | 12 | 17 | 14 | 23 | 60 | 76 | 17 | 30 |
| 18 | 61 | 90 | 32 | 56 | 11 | 20 | 24 | 28 | 15 | 34 | 10 | 15 | 41 | 46 | 11 | 13 |
| 19 | 39a | 65a | 25 | 35 | 8a | 16a | 8 | 10 | 18 | 30 | 9 | 17 | 37 | 46 | 11 | 19 |
| 20 | 67 | 101 | 29 | 48 | 18 | 31 | 15 | 22 | x | x | x | x | x | x | x | x |
| 21 | 34 | 47 | 17 | 24 | 21 | 39 | 12 | 20 | 26 | 33 | 6 | 8 | 40 | 43 | 6 | 9 |
| 22 | 33 | 48 | 20 | 24 | 20 | 24 | 19 | 29 | x | x | x | x | x | x | x | x |
| 23 | x | x | 20a | 52a | x | x | 19a | 24a | 58 | 118 | 9 | 24 | 56 | 95 | 4 | 10 |
| 24 | 63 | 115 | 34 | 56 | 39 | 62 | 40 | 28 | 40 | 49 | x | x | 55 | 84 | x | x |
| 25 | 69 | 104 | 11 | 18 | 42 | 78 | 17 | 28 | x | x | 6 | 8 | x | x | 13 | 20 |
| 26 | 47 | 70 | 31a | 40a | 11 | 14 | 27a | 36a | x | x | x | x | x | x | x | x |
| 27 | 63 | 78 | 10 | 13 | 20 | 39 | 7 | 7 | 8 | 12 | 11 | 20 | 20 | 30 | 12 | 20 |
| 28 | 62 | 101 | 11a | 20a | 18 | 28 | 5a | 7a | 12a | 20a | 11a | 15a | 35a | 60a | 9a | 12a |
| 29 | 68a | 104a | 7a | 10a | x | x | 6a | 7a | 24 | 36 | 10a | 10a | 51 | 81 | 10a | 15a |
| 30 | 69 | 98 | 10 | 15 | 48 | 87 | 6 | 8 | 37 | 64 | 12a | 14a | 30 | 42 | 15a | 24a |
| 31 | 37 | 45 | 7 | 9 | 49 | 84 | 8 | 11 | 61 | 96 | 9 | 10 | 48 | 59 | 10 | 14 |

COMMERCE - STANDARDS - BOULDER

x = no observations

a = index computed from low weight data

* = yellow line observed

FINAL CORONAL LINE EMISSION INDICES

NOVEMBER 1961

| CMP Nov 1961 | 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 | | R ₆ | | G ₆ | | R ₆ | | G ₆ | | R ₆ | | G ₆ | | R ₆ | | |
| | G ₁ | R ₁ | G ₁ | R ₁ | G ₁ | R ₁ | G ₁ | R ₁ | G ₁ | R ₁ | G ₁ | R ₁ | G ₁ | R ₁ | G ₁ | R ₁ | |
| 1 | 30 | 34 | 6 | 7 | 42 | 77 | 77 | 9 | 9 | 23 | 28 | 28 | 20 | 22 | 25 | 18 | 28 |
| 2 | 31 | 38 | 5 | 9 | 32 | 41 | 7 | 9 | 9 | 27 | 36 | 12 | 12a | 40 | 67 | 20a | 60a |
| 3 | 37a | 52a | 5a | 7a | 17a | 20a | 4a | 7a | 7a | 30a | 70a | 8a | 10a | 29a | 40a | 6a | 10a |
| 4 | 62 | 88 | 8 | 11 | 35 | 46 | 6 | 17 | 17 | 19a | 28a | 17a | 20a | 64a | 96a | 19a | 52a |
| 5 | x | x | x | x | x | x | x | x | x | 13a | 72a | 9a | 12a | 31a | 44a | 10a | 15a |
| 6 | 64 | 84 | 7a | 10a | 64 | 112 | 5a | 5a | 5a | 78 | 140 | 19 | 28 | 54 | 95 | 23 | 36 |
| 7 | 62 | 73 | 11a | 16a | 79 | 140 | 16a | 28a | 28a | 56 | 84 | 11a | 11a | 38 | 53 | 13a | 16a |
| 8 | 13 | 58 | 6 | 7 | 56 | 92 | 10 | 22 | 22 | 48 | 62 | 13 | 24 | 58 | 98 | 16 | 28 |
| 9 | 55 | 76 | x | x | 46 | 89 | x | x | x | 23 | 31 | 5a | 5a | 54 | 87 | 14a | 27a |
| 10 | 44 | 62 | 19a | 40a | 33 | 44 | 7a | 8a | 8a | 19 | 25 | 9 | 14 | 50 | 70 | 25 | 38 |
| 11 | 34a | 48a | 16a | 30a | 6a | 8a | 9a | 10a | 10a | 17 | 19 | 17 | 23 | 59 | 108 | 24 | 35 |
| 12 | 54 | 106 | 21a | 30a | 8 | 11 | 12a | 15a | 15a | 14 | 18 | 11a | 12a | 50 | 82 | 15a | 22a |
| 13 | 66 | 123 | 14a | 18a | 8 | 11 | 6a | 8a | 8a | 10 | 16 | 10 | 13 | 42 | 52 | 10 | 16 |
| 14 | 118 | 151 | 14 | 19 | 14 | 25 | 9 | 12 | 12 | x | x | x | x | x | x | x | x |
| 15 | 74 | 120 | 28 | 46 | 11 | 17 | 13 | 16 | 16 | x | x | x | x | x | x | x | x |
| 16 | 45 | 89 | 10a | 12a | 13 | 25 | 8a | 12a | 12a | 17 | 17 | 11 | 18 | 49 | 90 | 17 | 28 |
| 17 | 21a | 24a | 8a | 10a | 8a | 12a | 8a | 10a | 10a | 22 | 29 | 8a | 10a | 40 | 48 | 7a | 10a |
| 18 | 18a | 20a | 12a | 15a | 12a | 16a | 12a | 15a | 15a | 29 | 40 | 4 | 9 | 36 | 47 | 2 | 13 |
| 19 | 19a | 28a | 8a | 10a | 15a | 18a | 7a | 10a | 10a | x | x | x | x | x | x | x | x |
| 20 | 47 | 65 | 16 | 32 | 38 | 70 | 15 | 18 | 18 | x | x | 17 | 20 | 27a | 31a | 17 | 20 |
| 21 | 37 | 53 | 13a | 16a | 19 | 31 | 13a | 16a | 16a | 15 | 17 | 9a | 12a | 35 | 39 | 6a | 8a |
| 22 | 37 | 47 | 10a | 20a | 14 | 17 | 12a | 18a | 18a | x | x | x | x | x | x | x | x |
| 23 | 20 | 25 | 5a | 5a | 11 | 14 | 7a | 10a | 10a | 15 | 21 | 14 | 16 | 28 | 33 | 10 | 13 |
| 24 | 28 | 37 | 5 | 11 | 22 | 38 | 10 | 12 | 12 | 20 | 23 | 11a | 12a | 29 | 39 | 12a | 20a |
| 25 | 34 | 37 | 9 | 15 | 30 | 34 | 11 | 17 | 17 | x | x | x | x | x | x | x | x |
| 26 | 31 | 38 | 5a | 5a | 28 | 37 | 7a | 10a | 10a | x | x | x | x | x | x | x | x |
| 27 | 26 | 29 | 6 | 8 | 29 | 48 | 6 | 10 | 10 | 24 | 31 | 17 | 21 | 26 | 31 | 11 | 15 |
| 28 | x | x | x | x | x | x | x | x | x | 23 | 31 | 7 | 8 | 27 | 30 | 14 | 20 |
| 29 | x | x | x | x | x | x | x | x | x | 49 | 126 | 10 | 13 | 57 | 100 | 11 | 21 |
| 30 | 67 | 126 | 25 | 40 | 19 | 31 | 7 | 16 | 16 | 27 | 48 | 15 | 20 | 64 | 132 | 25 | 48 |

COMMERCE - STANDARDS - BOULDER

x = no observations

a = index computed from low weight data

* = yellow line observed

FINAL CORONAL LINE EMISSION INDICES

DECEMBER 1961

| GMP Dec 1961 | 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 | 84 | 108 | 11a | 25a | 33 | 61 | 5a | 5a | x | 83 | x | x | x | 93 | x | x | x |
| 2 | 80 | 122 | 16 | 13 | 36 | 59 | 11 | 11 | x | 15 | x | x | x | 15 | x | x | x |
| 3 | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 4 | 43a | 67a | 20a | 30a | 11a | 76a | 10a | 10a | 10a | x | x | x | 10 | x | x | x | x |
| 5 | 34 | 48 | 10a | 11a | 21 | 31 | 7a | 10a | 10a | 19 | 56 | 19 | 40 | 95 | 23 | 36 | 36 |
| 6 | x | x | x | x | x | x | x | x | x | 20 | 20 | 28 | 28 | 59 | 21 | 28 | 28 |
| 7 | 55 | 108 | 12 | 16 | 33 | 52 | 7 | 10 | 18 | 12 | 12 | 18 | 40 | 76 | 9 | 12 | 12 |
| 8 | 43 | 78 | 10 | 24 | 17 | 21 | 10a | 15a | 18 | 6 | 6 | 18 | 56 | 56 | 14 | 24 | 24 |
| 9 | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 10 | x | x | x | x | x | x | x | x | x | 8 | 8 | 35 | 26 | 40 | 18 | 37 | 37 |
| 11 | 72 | 118 | 17 | 32 | 16 | 28 | 11 | 16 | 18 | 24 | 24 | 18 | 13 | 54 | 15 | 24 | 24 |
| 12 | 41 | 48 | 10 | 27 | 11 | 14 | 2 | 5 | 8 | 18 | 6 | 8 | 36 | 42 | 4 | 6 | 6 |
| 13 | 56 | 123 | 18 | 46 | 13 | 20 | 8 | 10 | 20 | 11 | 33 | 47 | 32 | 78 | 49 | 115 | 115 |
| 14 | 40 | 59 | 29 | 60 | 10 | 11 | 16 | 20 | 20 | 17 | 17 | 22 | 29 | 60 | 11 | 15 | 15 |
| 15 | x | x | x | x | x | x | x | x | x | 15 | 17 | 11a | 29 | 34 | 15a | 32a | 32a |
| 16 | 41 | 67 | 6 | 9 | 22 | 34 | 7 | 9 | 9 | 19 | 22 | 26a | 23 | 28 | 3a | 4a | 4a |
| 17 | x | x | x | x | x | x | x | x | x | 21 | 42 | 28a | 21 | 31 | 4a | 10a | 10a |
| 18 | 35 | 52 | x | x | 18 | 24 | x | x | x | 14 | 20 | 28a | 24 | 28 | 5a | 10a | 10a |
| 19 | 42 | 53 | 16 | 26 | 16 | 33 | 33 | 56 | 56 | 14 | 26 | x | 15 | 20 | x | x | x |
| 20 | 37 | 39 | 59 | 120 | 11 | 25 | 22 | 26 | 26 | 47 | 140 | x | 22 | 39 | x | x | x |
| 21 | 41 | 53 | 25 | 44 | 16 | 45 | 15 | 20 | 20 | 18 | 40 | 30 | 23 | 49 | 16 | 30 | 30 |
| 22 | 28 | 42 | 13 | 18 | 16 | 28 | 12 | 18 | 18 | 13 | 24 | 22 | 21 | 56 | 17 | 45 | 45 |
| 23 | x | x | x | x | x | x | x | x | x | 13 | 20 | 12 | 30 | 52 | 11 | 20 | 20 |
| 24 | 25 | 40 | 33 | 55 | 8 | 14 | 24 | 30 | 30 | 30 | 45 | 12 | 27 | 45 | 5 | 6 | 6 |
| 25 | 36 | 40 | 14 | 21 | 29 | 36 | 12 | 16 | 16 | 25 | 40 | 19 | 9 | 14 | 4 | 7 | 7 |
| 26 | 38 | 53 | 3 | 6 | 32 | 44 | 3 | 7 | 7 | 69 | 120 | 28a | 75 | 109 | 18a | 25a | 25a |
| 27 | 122 | 200 | 42 | 65 | 99 | 165 | 43 | 60 | 60 | 62 | 109 | 32 | 89 | 137 | 42 | 78 | 78 |
| 28 | 48 | 76 | 24 | 37 | 41 | 56 | 19 | 27 | 27 | 14 | 28 | 5 | 22 | 38 | 7 | 15 | 15 |
| 29 | 62 | 81 | 16 | 28 | 52 | 81 | 14 | 32 | 32 | x | x | x | x | x | x | x | x |
| 30 | 71 | 115 | 27a | 44a | 45 | 84 | 13a | 36a | 36a | x | x | x | x | x | x | x | x |
| 31 | 70 | 112 | 20a | 40a | 34 | 59 | 15a | 22a | 22a | 34 | 40 | 10 | 43 | 72 | 8 | 11 | 11 |

COMMERCE - STANDARDS - BOULDER

x = no observations a = index computed from low weight data * = yellow line observed

PROVISIONAL CORONAL LINE EMISSION INDICES

MARCH 1962

| CMP Mar 1962 | North East Quadrant (observed 7 days earlier) | | | | South East Quadrant (observed 7 days earlier) | | | | North West Quadrant (observed 7 days later) | | | | South West Quadrant (observed 7 days later) | | | |
|--------------------|--|----------------|----------------|----------------|--|----------------|----------------|----------------|--|----------------|----------------|----------------|--|----------------|----------------|----------------|
| | G ₆ | R ₆ | R ₁ | R ₁ | G ₆ | R ₆ | R ₁ | R ₁ | G ₆ | R ₆ | R ₁ | R ₁ | G ₆ | R ₆ | R ₁ | R ₁ |
| 1 | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 2 | 8 | 22 | 35 | 15 | 8 | 12 | 15 | 25 | 4 | 8 | 15 | 25 | 15 | 11 | 15 | 15 |
| 3 | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 4 | x | x | x | 70 | x | x | x | 18 | x | x | x | x | x | x | x | x |
| 5 | 15 | 26 | 70 | x | 3 | 6 | 6 | 6 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 25 |
| 6 | 6 | 13 | 25 | 8 | 2 | 4 | 4 | 11 | 4 | 11 | 20 | x | x | x | x | x |
| 7 | 5 | x | x | 6 | 5 | 10 | x | x | 9 | 10 | x | x | x | x | x | x |
| 8 | 9 | 8 | 15 | 12 | 7 | 20 | 8 | 8 | 7 | 8 | 12 | 15 | 13a | 10a | 18a | 18a |
| 9 | 5 | 7 | 10 | 8 | 5 | 8 | x | 9 | 3 | 3 | 15 | 32 | 8 | 29 | 39 | 39 |
| 10 | x | x | x | x | x | x | x | x | 30 | 30 | 15 | 8 | 16 | 6 | 8 | 8 |
| 11 | 10a | 11a | 16a | 16a | 6a | 6a | 6a | 11a | 2 | 4 | 13a | 12 | 2 | 19 | 25 | 25 |
| 12 | x | x | x | x | x | x | x | x | 3 | 6 | x | 28a | 10 | 26a | 37a | 37a |
| 13 | 10 | 17 | x | x | 5 | x | x | x | 5 | x | x | x | 8 | x | x | x |
| 14 | x | x | x | x | x | x | x | x | 5 | x | x | x | x | 3 | 5 | 5 |
| 15 | x | x | x | x | x | x | x | x | 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 | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 18 | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 19 | 16 | 10 | 12 | 12 | 6 | 13 | 13 | 12 | 15 | 8a | 17 | 20a | 33a | 9 | 15 | 15 |
| 20 | x | x | x | x | x | x | x | x | x | 15 | x | x | 44 | 13a | 20a | 20a |
| 21 | 38 | x | x | x | 26 | 29 | x | x | 13a | 13a | x | x | 32a | x | x | x |
| 22 | 43 | 7 | 15 | 36a | 35 | 43 | 8 | x | 4 | 4 | 24 | 26a | 5 | 18 | 32 | 60a |
| 23 | 55 | 19a | 36a | 10 | 40* | 59 | 28a | x | 13 | 13 | 44a | 20 | 8 | 18 | 32 | 32 |
| 24 | 11 | 8 | 10 | 5 | 19* | 40 | 7 | 10 | 12 | 12 | 10 | 30 | x | 16 | 27 | 27 |
| 25 | 8 | 5 | 5 | 5 | 5* | 12 | 5 | 5 | 49 | 49 | 5 | 40 | 77* | 25 | 40 | 40 |
| 26 | 49 | 48a | 95a | 95a | 28 | 50 | 46a | 98a | x | x | x | x | x | x | x | x |
| 27 | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 28 | 11 | 5 | 7 | x | 5 | 6 | 4 | 5 | x | x | x | x | x | x | x | x |
| 29 | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 30 | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| 31 | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |

COMMERCE - STANDARDS - BOULDER

x = no observations a = index computed from low weight data * = yellow line observed

SOLAR FLARES

MARCH 1962

| OBSERVATORY | DATE MAR 1962 | OBSERVED UNIVERSAL TIME | | LOCATION | | DURA- TION -- MINUTES | IM- POR- TANCE | OBS. COND. | TIME -- UT | MEASUREMENTS | | MAX. WIDTH H α | MAX. INT. % | PROVISIONAL IONOSPHERIC EFFECT |
|-------------|---------------------|----------------------------|----------|--|---------------------------|--------------------------------|----------------------|---------------|------------------|---------------------------|---------------------------|-----------------------------|-------------------|--------------------------------------|
| | | START | END | APPROX. LAT. -- MER. DIST. | MCMATH PLACE REGION | | | | | MEAS. AREA Sq. Deg. | CORR. AREA Sq. Deg. | | | |
| LOCKHEED | 01 0016 | 0045 | 0022 | S07 W30 | REPORT | 1- | 2 | 0022 | 1.10 | 1.10 | 1.10 | 10 | | |
| | 01 0115 | 0915 | NO FLARE | S07 W30 | REPORT | | | | | | | | | |
| | 01 0930 | 1200 | NO FLARE | S09 W36 | REPORT | | | | | | | | | |
| CAPRI S | 01 1203 E | 1227 | | S14 W56 | 6351 | 24 D | 2 | 1209 | 2.40 | 3.00 | 3.00 | | | |
| MCMATH | 01 1306 E | 1337 | | S14 W55 | 6351 | 1- | 2 | 1306 | .90 | 1.50 | 1.50 | | | |
| | 01 1634 | 1720 D | 1644 | S13 W56 | 6351 | 2 | 2 | 1643 | 8.09 | 10.97 | 10.97 | 34 | | |
| SAC PEAK | 01 1636 | 1730 | | S14 W56 | 6351 | 2+ | 1 | 1643 | 5.00 | 9.00 | 9.00 | | | |
| MCMATH | 01 1645 E | 1725 | 1646 | S13 W57 | 6351 | 40 D | 2 | 1646 | 4.10 | 5.70 | 5.70 | 30 | | |
| LOCKHEED | 01 1816 | 1838 | 1821 | S09 W41 | 6351 | 1- | 1 | 1821 | .30 | .30 | .30 | 10 | S-SWF | |
| LOCKHEED | 01 1844 | 1848 | 1846 | S09 W41 | 6351 | 1- | 1 | 1846 | .20 | .30 | .30 | | | |
| MCMATH | 01 1943 | 1948 | 1944 | S13 W59 | 6351 | 1- | 1 | 1944 | .20 | .30 | .30 | | | |
| LOCKHEED | 01 1948 | 2000 | 1953 | S09 W41 | 6351 | 1- | 1 | 1953 | .20 | .20 | .20 | 10 | | |
| MCMATH | 01 1952 | 2000 D | 1954 | S09 W42 | 6351 | 1- | 1 | 1954 | .20 | .30 | .30 | | | |
| LOCKHEED | 01 2005 | 2020 | 2010 | S14 W50 | 6351 | 1- | 1 | 2010 | .30 | .40 | .40 | 10 | | |
| LOCKHEED | 01 2124 | 2206 | 2158 | S08 W42 | 6351 | 42 | 2 | 2136 | 3.18 | 3.59 | 3.59 | 22 | | |
| SAC PEAK | 01 2131 | 2141 | 2136 | S09 W43 | 6351 | 1- | 1 | 2136 | .20 | .30 | .30 | 20 | | |
| MCMATH | 01 2152 | 2213 | 2158 | S08 W44 | 6351 | 1- | 2 | 2158 | .70 | .80 | .80 | 10 | | |
| LOCKHEED | 01 2218 | 2231 | 2222 | S09 W50 | 6351 | 1- | 1 | 2222 | .50 | .60 | .60 | 10 | | |
| LOCKHEED | 01 2341 | 0010 | 2347 | S08 W45 | 6351 | 1- | 1 | 2347 | .70 | .80 | .80 | 10 | | |
| MITAKA | 01 2352 | 2400 | 2354 | S08 W42 | 6351 | 8 | 1 | 2354 | 1.18 | 1.60 | 1.60 | 96 | | |
| | 02 0130 E | 0143 | 0131 | S08 W45 | 6351 | 13 D | 1 | 0131 | 1.01 | 1.35 | 1.35 | 134 | | |
| MITAKA | 02 0430 | 0445 | NO FLARE | S08 W45 | REPORT | | | | | | | | | |
| | 02 0500 | 0915 | NO FLARE | REPORT | REPORT | | | | | | | | | |
| | 02 1030 | 1300 | NO FLARE | REPORT | REPORT | | | | | | | | | |
| SAC PEAK | 02 1850 | 1911 | 1854 | S08 W86 | 6351 | 1- | 2 | | .62 | | | 17 | | |
| | 03 0000 | 0030 | NO FLARE | REPORT | REPORT | | | | | | | | | |
| | 03 0530 | 0700 | NO FLARE | REPORT | REPORT | | | | | | | | | |
| WENDEL | 03 0759 E | 0805 D | | S11 W81 | 6351 | 1- | 2 | | | | | | | |
| BUCHAREST | 03 0800 E | 1000 D | | S15 W80 | 6351 | 1- | 2 | | | | | | | |
| MCMATH | 03 1327 | 1337 | 1329 | S14 W86 | 6351 | 1- | 2 | 1329 | .20 | .60 | .60 | 10 | | |
| LOCKHEED | 03 1612 | 1627 | 1615 | S14 W80 | 6351 | 1- | 2 | 1615 | .20 | .80 | .80 | 10 | | |
| LOCKHEED | 03 1654 | 1716 | 1702 | S13 W80 | 6351 | 1- | 2 | 1702 | 1.20 | 1.20 | 1.20 | 10 | | |
| MCMATH | 03 1656 | 1715 D | 1700 | S14 W80 | 6351 | 1- | 2 | 1700 | .30 | 1.00 | 1.00 | 10 | | |
| LOCKHEED | 03 2018 | 2050 | 2027 | S13 W90 | 6351 | 1- | 2 | 2027 | .20 | 1.00 | 1.00 | 10 | | |
| LOCKHEED | 03 2032 | 2045 | 2037 | N13 W77 | 6351 | 1- | 2 | 2037 | .30 | .80 | .80 | 10 | | |
| | 04 0040 | 0053 | 0045 | S12 W90 | 6351 | 1- | 1 | 0045 | .20 | 1.00 | 1.00 | 20 | | |
| LOCKHEED | 04 0103 | 0115 | 0110 | S12 W90 | 6351 | 1- | 1 | 0110 | .30 | 1.50 | 1.50 | 20 | | |
| IKOMASAN | 04 0151 E | 0453 | | S10 W90 | 6351 | 182 D | 1 | 0217 | | | | 6.18 | 100 | |
| MITAKA | 04 0205 E | 0220 D | | S11 W90 | 6351 | 15 D | 2 | | | | | | | |
| MITAKA | 04 0309 E | 0320 | | S11 W90 | 6351 | 11 D | 2 | | | | | | | |
| MITAKA | 04 0426 E | 0441 | NO FLARE | S11 W90 | 6351 | 15 D | 2 | | | | | | | |
| | 04 0600 | 0945 | NO FLARE | REPORT | REPORT | | | | | | | | | |
| BUCHAREST | 04 0819 E | 0821 D | | S10 W90 | 6351 | 1- | 3 | | | | | | | |
| | 04 1300 | 1315 | NO FLARE | REPORT | REPORT | | | | | | | | | |
| | 04 1345 | 1400 | NO FLARE | REPORT | REPORT | | | | | | | | | |
| LOCKHEED | 04 2007 | 2014 | 2012 | S12 W90 | 6351 | 1- | 1 | 2012 | .20 | 1.00 | 1.00 | 20 | | |
| | 05 0000 | 0015 | NO FLARE | REPORT | REPORT | | | | | | | | | |
| | 05 0030 | 0100 | NO FLARE | REPORT | REPORT | | | | | | | | | |
| | 05 0245 | 0515 | NO FLARE | REPORT | REPORT | | | | | | | | | |

SOLAR FLARES

MARCH 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 Hr | MAX. INT. % | |
| CAPRI S | 05 | 0545 | 0715 | NO FLARE | REPORT | | | 1- | 1 | | | | | |
| | 05 | 0945 | 1430 | NO FLARE | REPORT | | | | | | | | | |
| | 05 | 1441 E | 1447 D | NO FLARE | N08 W09 | | | | | | 1.00 | 1.10 | | |
| | 05 | 1845 | 1930 | NO FLARE | REPORT | | | | | | | | | |
| | 05 | 2300 | 2400 | NO FLARE | REPORT | | | | | | | | | |
| | 06 | 0000 | 1400 | NO FLARE | REPORT | | | | | | | | | |
| | 06 | 1415 | 1500 | NO FLARE | REPORT | | | | | | | | | |
| | 06 | 1545 | 1730 | NO FLARE | REPORT | | | | | | | | | |
| | 06 | 1945 | 2000 | NO FLARE | REPORT | | | | | | | | | |
| | 06 | 2215 | 2245 | NO FLARE | REPORT | | | | | | | | | |
| 06 | 2300 | 2315 | NO FLARE | REPORT | | | | | | | | | | |
| 06 | 2330 | 2400 | NO FLARE | REPORT | | | | | | | | | | |
| 07 | 0000 | 0030 | NO FLARE | REPORT | | | | | | | | | | |
| 07 | 0130 | 0215 | NO FLARE | REPORT | | | | | | | | | | |
| 07 | 0300 | 0630 | NO FLARE | REPORT | | | | | | | | | | |
| 07 | 0815 | 0830 | NO FLARE | REPORT | | | | | | | | | | |
| 07 | 1645 | 1700 | NO FLARE | REPORT | | | | | | | | | | |
| 07 | 1652 | 1715 | 1657 | N07 W39 | | | | 1- | 2 | .20 | .20 | | 10 | |
| 07 | 2240 | 2255 | 2247 | N07 W02 | | | | 1- | 1 | .10 | .10 | | 20 | |
| 08 | 0445 | 0645 | NO FLARE | REPORT | | | | | | | | | | |
| 08 | 1600 | 1615 | NO FLARE | REPORT | | | | | | | | | | |
| 08 | 1830 | 1845 | NO FLARE | REPORT | | | | | | | | | | |
| 08 | 1844 | 1910 | 1852 | N14 W21 | | | | 1- | 2 | .40 | .40 | | 10 | |
| 08 | 2041 | 2112 | 2049 | N13 W03 | | | | 1- | 2 | .40 | .40 | | 10 | |
| 08 | 2044 | 2052 | 2048 | N14 W23 | 6358 | | | 1- | 2 | .30 | .30 | | 10 | |
| 08 | 2110 | 2200 | 2128 | N07 W69 | | | | 1- | 2 | 2.50 | 4.70 | | 10 | |
| 08 | 2113 | 2131 D | 2128 | N06 W70 | 6354 | | | 1- | 1 | .70 | 1.70 | | | |
| 09 | 0030 | 0315 | NO FLARE | REPORT | | | | | | | | | | |
| 09 | 0400 | 0515 | NO FLARE | REPORT | | | | | | | | | | |
| 09 | 0530 | 0845 | NO FLARE | REPORT | | | | | | | | | | |
| 09 | 1245 | 1500 | NO FLARE | REPORT | | | | | | | | | | |
| 09 | 1545 | 1815 | NO FLARE | REPORT | | | | | | | | | | |
| 10 | 0145 | 0745 | NO FLARE | REPORT | | | | | | | | | | |
| 10 | 1629 | 1710 | 1634 | N07 W90 | | | 41 | 1 | 2 | .80 | 3.90 | | 10 | |
| 10 | 1936 | 2030 | 1941 | N09 W54 | 6354 | | | 1- | 2 | .30 | .40 | | 10 | |
| 10 | 2040 | 2130 | 2110 | N07 W90 | | | | 1- | 2 | .30 | 1.50 | | 10 | |
| 11 | 0300 | 0400 | NO FLARE | REPORT | | | | | | | | | | |
| 11 | 0415 | 0430 | NO FLARE | REPORT | | | | | | | | | | |
| 11 | 0500 | 0800 | NO FLARE | REPORT | | | | | | | | | | |
| 11 | 0830 | 1445 | NO FLARE | REPORT | | | | | | | | | | |
| 11 | 1640 | 1653 | 1647 | N10 W65 | | | | 1- | 2 | .10 | .20 | | 10 | |
| 11 | 1852 | 1955 U | 1908 | N11 E90 | | | | 1- | 2 | .20 | 1.00 | | 10 | |
| 11 | 2026 | 2055 U | 2032 | N11 E90 | | | | 1- | 2 | .20 | 1.00 | | 10 | |
| 11 | 2112 | 2140 | 2120 | N11 E90 | | | | 1- | 2 | .30 | 1.50 | | 10 | |
| 11 | 2315 | 2400 | NO FLARE | REPORT | | | | | | | | | | |

COMMERCE - STANDARDS - BOULDER

SOLAR FLARES

MARCH 1962

| OBSERVATORY | DATE | OBSERVED UNIVERSAL TIME | | LOCATION | | DURA- TION — MINUTES | IM- POR- TANCE | OBS. COND. | MEASUREMENTS | | | | PROVISIONAL ICNOSPHERIC EFFECT | | | |
|-------------|--------|-------------------------|----------|-----------------|---------------|-------------------------------|----------------------|---------------|---------------------------|-----------------|---------------------------|----------------------------|--------------------------------------|---------------------|-------------------|--|
| | | START | END | APPROX. LAT. | MER. DIST. | | | | MCNATH PLAGE REGION | TIME — UT | MEAS. AREA Sq. Deg. | COORR. AREA Sq. Deg. | | MAX. WIDTH Hr | MAX. INT. % | |
| LOCKHEED | 12 | 0000 | 0030 | NO FLARE | REPORT | | 1- | | | | | | | | | |
| | 12 | 0215 | 0345 | NO FLARE | REPORT | | | | | | | | | | | |
| | 12 | 0630 | 0745 | NO FLARE | REPORT | | | | | | | | | | | |
| | 12 | 0815 | 0945 | NO FLARE | REPORT | | | | | | | | | | | |
| | 12 | 1015 | 1330 | NO FLARE | REPORT | | | | | | | | | | | |
| | 12 | 2227 | 2240 | 2230 | N11 E79 | | 1- | 2 | 2230 | 0.30 | 0.80 | | | 20 | | |
| | 13 | 0330 | 0645 | NO FLARE | REPORT | | | | | | | | | | | |
| | 13 | 1230 | 1245 | NO FLARE | REPORT | | | | | | | | | | | |
| | 13 | 1300 | 1330 | NO FLARE | REPORT | | | | | | | | | | | |
| | 13 | 1345 | 1400 | NO FLARE | REPORT | | | | | | | | | | | |
| | 13 | 1410 E | 1420 D | | N10 E67 | 6366 | 10 D | 1 | | | | 3.00 | | | | |
| | 13 | 1448 E | 1601 D | | N08 E66 | 6366 | 73 D | 2+ | | | | 15.00 | | | | |
| 13 | 1454 E | 1610 D | | N11 E67 | 6366 | 76 D | 2+ | | | | | | | | | |
| 13 | 1503 E | 1555 | 1505 | N27 E65 | 6366 | 52 D | 2 | 1505 | 2.20 | 5.10 | | | | | S-SWF | |
| 13 | 1615 | 1700 | NO FLARE | REPORT | | | | | | | | | | | | |
| 14 | 0000 | 0030 | NO FLARE | REPORT | | | | | | | | | | | | |
| 14 | 0215 | 0600 | NO FLARE | REPORT | | | | | | | | | | | | |
| 14 | 1500 | 1630 | NO FLARE | REPORT | | | | | | | | | | | | |
| 15 | 0015 | 0745 | NO FLARE | REPORT | | | | | | | | | | | | |
| 15 | 0930 | 1400 | NO FLARE | REPORT | | | | | | | | | | | | |
| 15 | 1316 E | 1322 D | | N12 E38 | 6366 | 22 D | 1 | 1319 | 1.00 | 1.40 | | | | | | |
| 16 | 0356 E | 0418 | 0358 | N12 E30 | 6366 | | 1- | | | | | | | | | |
| 16 | 0530 | 0630 | NO FLARE | REPORT | | | | | | | | | | | | |
| 16 | 2245 | 2315 | NO FLARE | REPORT | | | | | | | | | | | | |
| 17 | 0100 | 0115 | NO FLARE | REPORT | | | | | | | | | | | | |
| 17 | 0130 | 0500 | NO FLARE | REPORT | | | | | | | | | | | | |
| 17 | 0522 E | 0532 D | | S10 E90 | 6369 | 10 D | 1 | 0522 | | | | | | | | |
| 17 | 0530 | 0630 | NO FLARE | REPORT | | | | | | | | | | | | |
| 17 | 0705 E | 0716 | NO FLARE | REPORT | | | | | | | | | | | | |
| 17 | 1035 E | 1150 D | | N09 E13 | 6366 | 75 D | 1- | | | | 1.50 | | | | | |
| 17 | 1042 E | 1052 D | | N13 E12 | 6366 | 10 D | 1 | 1044 | 3.90 | 4.30 | 1.80 | | | | | |
| 17 | 1230 | 1300 | NO FLARE | REPORT | | | | | | | | | | | | |
| 17 | 1305 | 1316 | 1310 | N11 E12 | 6366 | | 1- | | | | 0.30 | | | | | |
| 17 | 1321 | 1333 | 1323 | N12 E10 | 6366 | | 1- | | | | 0.60 | | | | | |
| 17 | 1846 | 1901 U | 1851 | S14 E90 | 6366 | | 1- | | | | 0.70 | | | | | |
| 17 | 1934 | 1959 | 1941 | S09 E90 | 6369 | 25 | 1- | | | | 0.10 | | | 20 | | |
| 17 | 1936 | 2003 | 1944 U | S14 E90 | 6369 | 27 | 2 | 1944 | 1.10 | 5.50 | 0.50 | | | | | |
| 17 | 1938 | 1940 | 1940 | S10 E90 | 6369 | | 1- | | | | 0.62 | | | | | |
| 17 | 1950 | 1954 | 1952 | S09 E90 | 6369 | | 1- | | | | 0.45 | | | | | |
| 17 | 2131 | 2143 | 2133 | N11 E02 | 6370 | | 1- | | | | 0.60 | | | | | |
| 17 | 2238 | 2246 | 2240 | N10 E75 | 6370 | | 1- | | | | 0.58 | | | | | |
| 18 | 0515 | 0530 | NO FLARE | REPORT | | | | | | | | | | | | |
| 18 | 1540 | 1620 | 1643 | N10 E60 | 6370 | | 1- | | | | 0.80 | | | | | |
| 18 | 1640 | 1646 | 1646 | N10 E59 | 6370 | | 1- | | | | 0.10 | | | | | |
| 18 | 1649 | 1730 | 1730 | N10 E59 | 6370 | | 1- | | | | 0.30 | | | | | |

SOLAR FLARES

MARCH 1962

| OBSERVATORY | DATE MAR 1962 | OBSERVED TIME | | MAX. PHASE | LOCATION | | DURA- TION - MINUTES | IM- POR- TANCE | OBS. COND. | TIME - U T | MEASUREMENTS | | MAX. WIDTH H _c | MAX. INT. % | PROVISIONAL IONOSPHERIC EFFECT |
|-------------|---------------------|---------------|--------|------------|----------------------------------|----------------------------|-------------------------------|----------------------|---------------|------------------|---------------------------|---------------------------|---------------------------------|-------------------|--------------------------------------|
| | | START | END | | APPROX. LAT. MER. DIST. | MC MATH FLARE REGION | | | | | MEAS. AREA Sq. Deg. | CORR. AREA Sq. Deg. | | | |
| MCMATH | 18 | 1945 | 2000 | 1950 | N09 E90 | 6373 | 1- | 2 | 1950 | 0.20 | | | | | |
| MCMATH | 18 | 2052 | 2104 | 2100 | N08 E90 | 6373 | 1- | 2 | 2100 | 0.20 | | | | 17 | |
| SAC PEAK | 18 | 2102 | 2112 | 2108 | N10 E57 | | 1- | 3 | | 0.47 | 0.70 | | | 25 | |
| SAC PEAK | 18 | 2102 | 2256 | 2114 | N12 W04 | 6366 | 1 | 3 | 2112 | 3.90 | 3.88 | | | | |
| MCMATH | 18 | 2103 | 2131 | 2113 D | N13 W05 | 6366 | 28 D | 2 | 2112 | 3.00 | 3.00 | | | | |
| MCMATH | 18 | 2106 | 2115 | 2109 | N10 E56 | 6370 | 1- | 2 | 2109 | 0.30 | 0.60 | | | | |
| SAC PEAK | 18 | 2238 | 2252 | 2242 | N10 E56 | | 1- | 3 | | 0.58 | 0.83 | | | 17 | |
| I KOMASAN | 19 | 0100 | 0125 | 0107 | N08 E90 | 6373 | 25 D | 1 | 0107 | | | | | 85 | |
| | 19 | 0245 | 0300 | NO FLARE | REPORT | | | | | | | | | | |
| | 19 | 0530 | 0630 | NO FLARE | REPORT | | | | | | | | | | |
| | 19 | 1645 | 1815 | NO FLARE | REPORT | | | | | | | | | | |
| | 19 | 1945 | 2400 | NO FLARE | REPORT | | | | | | | | | | |
| | 20 | 0000 | 0615 | NO FLARE | REPORT | | | | | | | | | | |
| WENDEL | 20 | 1125 | 1141 | D | N08 E62 | 6373 | 16 D | 1 | | | 3.00 | | | | |
| WENDEL | 20 | 1153 | E 1159 | D | N13 W26 | | 1- | 2 | | | | | | | |
| WENDEL | 20 | 1251 | E 1300 | D | N11 W30 | | 1- | 2 | | | | | | | |
| WENDEL | 20 | 1255 | E 1304 | D | N10 E30 | | 1- | 2 | | | | | | | |
| WENDEL | 20 | 1256 | E 1315 | D | N08 E61 | 6373 | 19 D | 1 | | | 3.00 | | | | |
| WENDEL | 20 | 1333 | E 1346 | D | N07 E58 | | 1- | 2 | | | | | | | |
| WENDEL | 20 | 1354 | E 1401 | D | N10 E29 | | 1- | 2 | | | | | | | |
| MCMATH | 20 | 1617 | E 1628 | 1620 | S11 E53 | 6369 | 1- | 2 | 1620 | 0.70 | 1.30 | | | | |
| MCMATH | 20 | 1625 | 1631 | 1627 | N12 E28 | 6370 | 1- | 2 | 1627 | 0.30 | 0.40 | | | | |
| MCMATH | 20 | 1713 | 1722 | 1716 | N10 E60 | 6373 | 1- | 2 | 1716 | 0.40 | 0.80 | | | | |
| | 20 | 2115 | 2400 | NO FLARE | REPORT | | | | | | | | | | |
| | 21 | 0000 | 0045 | NO FLARE | REPORT | | | | | | | | | | |
| | 21 | 0100 | 0645 | NO FLARE | REPORT | | | | | | | | | | |
| WENDEL | 21 | 0854 | E 0904 | D | N11 W31 | | 1- | 2 | | | | | | | |
| WENDEL | 21 | 1205 | E 1213 | D | N11 W30 | | 1- | 2 | | | | | | | |
| | 21 | 1218 | 1239 | D | S10 E38 | 6369 | 21 D | 1 | | | 4.00 | | | | |
| ONDREJOV | 21 | 1219 | 1232 | D | S08 E38 | 6369 | 13 D | 1 | 1221 | | 9.00 | | | 2.80 | |
| WENDEL | 21 | 1234 | 1315 | D | N10 E20 | 6370 | 41 | 2 | | | | | | | |
| ONDREJOV | 21 | 1240 | E 1314 | D | N10 E19 | 6370 | 34 | 2 | 1251 | | | | | 3.10 | |
| WENDEL | 21 | 1318 | E 1328 | D | S12 E44 | | 1+ | 1 | | | | | | | |
| SAC PEAK | 21 | 1608 | 1616 | 1610 | S04 E41 | | 1- | 2 | | 0.29 | 0.31 | | | | |
| WENDEL | 21 | 1621 | E 1628 | D | N10 E16 | | 1- | 2 | | | | | | | |
| WENDEL | 21 | 1623 | E 1633 | D | S12 E42 | 6366 | 1- | 1 | 1814 | 0.30 | 0.50 | | | | |
| MCMATH | 21 | 1812 | 1819 | 1814 | REPORT | | 1- | 1 | | | | | | | |
| | 21 | 1900 | 1930 | NO FLARE | REPORT | | | | | | | | | | |
| | 21 | 2100 | 2145 | NO FLARE | REPORT | | | | | | | | | | |
| | 21 | 2215 | 2230 | NO FLARE | REPORT | | | | | | | | | | |
| | 21 | 2300 | 2315 | NO FLARE | REPORT | | | | | | | | | | |
| | 22 | 0000 | 0045 | NO FLARE | REPORT | | | | | | | | | | |
| | 22 | 0130 | 0630 | NO FLARE | REPORT | | | | | | | | | | |
| | 22 | 0900 | 0915 | NO FLARE | REPORT | | | | | | | | | | |
| ONDREJOV | 22 | 0918 | E 0925 | D | S17 E28 | | 1- | 1 | 0918 | | | | | 2.30 | |
| ONDREJOV | 22 | 1019 | E 1056 | D | N05 E39 | 6373 | 1 | 3 | 1033 | | | | | 2.50 | |
| SALTSJOBADN | 22 | 1050 | E 1202 | D | N07 E39 | 6373 | 2 | 3 | 1100 | 4.00 | 5.00 | | | | |

SOLAR FLARES

MARCH 1962

| OBSERVATORY | DATE | OBSERVED UNIVERSAL TIME | | LOCATION | | | DUR. OF EXPOSURE - MINUTES | DIRECTION | OBS. COND. | MEASUREMENTS | | | PROVISIONAL IONOSPHERIC EFFECT |
|-------------|------|-------------------------|------|--------------|-------------|--------|----------------------------|-----------|------------|--------------|-----------------------|-----------------------|--------------------------------|
| | | START | END | APPROX. LAT. | MAGN. PLAGE | REGION | | | | TIME - UT | MEAS. AREA - Sq. Dps. | COBB. AREA - Sq. Dps. | |
| SAC PEAK | 22 | 1145 | 1200 | NO FLARE | REPORT | | | 1- | 3 | .54 | .52 | | 15 |
| | 22 | 1438 | 1444 | 1440 | N09 E15 | | | 1- | 3 | 1.55 | 1.57 | | 18 |
| | 22 | 1558 | 1610 | 1602 | N07 E29 | | | 1- | 3 | .87 | .85 | | 17 |
| | 22 | 1916 | 1920 | 1918 | S08 E22 | | | 1- | 2 | 1.24 | 1.36 | | |
| | 22 | 1928 | 1952 | D | N06 E35 | | | 1- | 2 | 1.44 | 1.59 | | |
| | 22 | 2108 | 2110 | D | N07 E35 | | | 1- | 3 | 1.88 | 1.90 | | 19 |
| | 22 | 2136 | 2154 | U | N08 E34 | | | 1- | 1 | 1.00 | 1.10 | | 10 |
| | 22 | 2137 | 2205 | D | N08 E36 | | | 1- | 1 | 1.00 | 1.10 | | 10 |
| | 22 | 2220 | 2310 | U | N07 E36 | | | 3 | 3 | 14.81 | 16.17 | | 24 |
| | 22 | 2302 | 2308 | E | N06 E25 | 6370 | | 1- | 3 | .87 | .89 | | 19 |
| LOCKHEED | 23 | 0000 | 0100 | NO FLARE | REPORT | | | 1- | 2 | .80 | .80 | | 10 |
| | 23 | 0130 | 0630 | NO FLARE | REPORT | | | 1- | 2 | .82 | .83 | | 10 |
| | 23 | 0645 | 0815 | NO FLARE | REPORT | | | 1- | 2 | .50 | .50 | | 20 |
| | 23 | 0830 | 1400 | NO FLARE | REPORT | | | 1- | 2 | .20 | .20 | | 10 |
| | 23 | 1910 | 1920 | D | S13 E07 | | | 1- | 2 | .70 | .70 | | 10 |
| | 23 | 2115 | 2133 | E | S13 E09 | | | 1- | 2 | .70 | .70 | | 20 |
| | 23 | 2118 | 2135 | E | N10 E21 | | | 1- | 2 | .40 | .40 | | 20 |
| | 23 | 2233 | 2243 | | S08 E06 | | | 1- | 2 | .80 | .80 | | 10 |
| | 24 | 0009 | 0034 | | N06 E20 | | | 1- | 2 | .82 | .83 | | 20 |
| | 24 | 0010 | 0040 | D | N05 E18 | | | 1- | 2 | .50 | .50 | | 20 |
| WENDEL | 24 | 0104 | 0128 | 0111 | N11 E19 | | | 1- | 2 | | | | |
| | 24 | 0145 | 0600 | NO FLARE | REPORT | | | 1 | 2 | 3.00 | 4.00 | | 10 |
| | 24 | 0638 | 0653 | E | N08 E12 | 6373 | 15 D | 1 | 2 | 3.00 | 4.00 | | 10 |
| | 24 | 0638 | 0702 | E | N06 E16 | 6373 | 24 D | 1+ | 2 | 7.00 | 7.00 | | 20 |
| | 24 | 0723 | 0809 | | N06 E17 | 6373 | 46 | 1+ | 2 | 6.00 | 6.00 | | 20 |
| | 24 | 0724 | 0817 | | N07 E12 | 6373 | 53 | 1+ | 2 | | | | |
| | 24 | 0845 | 0900 | | NO FLARE | REPORT | | | 2 | 2.00 | 2.00 | | 20 |
| | 24 | 1215 | 1230 | | NO FLARE | REPORT | | | 2 | .70 | .70 | | |
| | 24 | 1551 | 1635 | U | S15 W03 | 6369 | 44 | 1- | 2 | .40 | .40 | | 10 |
| | 24 | 1559 | 1630 | U | S13 W02 | 6373 | | 1- | 2 | .40 | .40 | | 10 |
| MCMATH | 24 | 1559 | 1630 | U | S13 W02 | 6373 | | 1- | 2 | .40 | .40 | | 10 |
| | 24 | 1753 | 1808 | | N09 E08 | | | 1- | 1 | .35 | .35 | | 17 |
| | 24 | 1754 | 1804 | | N15 E11 | | | 1- | 3 | .30 | .30 | | 10 |
| | 24 | 1840 | 1852 | | N08 E14 | | | 1- | 1 | 1847 | 1846 | | 10 |
| | 24 | 1840 | 1907 | | N09 E13 | | | 1- | 2 | 1846 | 1846 | | 10 |
| | 24 | 1841 | 1855 | | N09 E15 | 6373 | | 1- | 1 | .30 | .30 | | 10 |
| | 24 | 1953 | 2005 | | N09 E13 | | | 1- | 1 | .30 | .30 | | 10 |
| | 24 | 2115 | 2126 | | N09 E13 | | | 1- | 1 | .33 | .33 | | 17 |
| | 24 | 2202 | 2212 | | N08 E42 | | | 1- | 3 | .40 | .40 | | 20 |
| | 24 | 2204 | 2215 | E | N09 E13 | | | 1- | 1 | .30 | .30 | | 10 |
| HONOLULU | 24 | 2259 | 2308 | | N09 E13 | | | 1- | 1 | .30 | .30 | | 10 |
| | 24 | 2315 | 2334 | | N09 E05 | | | 1- | 1 | .30 | .30 | | 20 |
| | 24 | 2339 | 0028 | | N09 E11 | | | 1- | 1 | .30 | .30 | | 20 |
| | 24 | 2339 | 0028 | | N09 E11 | | | 1- | 1 | .40 | .40 | | 20 |
| | 24 | 2348 | 2356 | | N08 E12 | | | 1- | 3 | .31 | .31 | | 18 |
| | 25 | 0142 | 0240 | D | S14 W08 | 6360 | 58 D | 1 | 2 | 3.13 | 3.13 | | |
| | 25 | 0330 | 0600 | | NO FLARE | REPORT | | | | | | | |
| | 25 | 0845 | 0900 | | NO FLARE | REPORT | | | | | | | |

SOLAR FLARES

MARCH 1962

| OBSERVATORY | DATE | OBSERVED TIME | | MAX PHASE | LOCATION | | MATH PLACE REGION | DURA-TION MINUTES | IM. POR-TANCE | OBS. COND. | TIME U T | MEASUREMENTS | | MAX. WIDTH Arc | MAX. INT. % | PROVISIONAL IONOSPHERIC EFFECT |
|-------------|------|---------------|------|-----------|--------------|------------|-------------------|-------------------|---------------|------------|----------|---------------------|---------------------|----------------|-------------|--------------------------------|
| | | START | END | | APPROX. LAT. | NET. DIST. | | | | | | MEAS. AREA Sq. Deg. | CORR. AREA Sq. Deg. | | | |
| MCMATH | 25 | 0930 | 1245 | NO FLARE | REPRT | N07 W02 | 6373 | 31 D | 1 | 2 | 1254 | 4.00 | 4.00 | | | |
| SAC PEAK | 25 | 1254 | 1325 | D | N07 W02 | N07 W03 | 6373 | 61 D | 2 | 3 | | 5.92 | 5.92 | | 23 | |
| WENDEL | 25 | 1405 | 1506 | 1436 | N06 W02 | N07 W04 | 6373 | 36 D | 1+ | | | 1.50 | 8.00 | | | |
| MCMATH | 25 | 1411 | 1415 | D | N07 W04 | N08 E02 | 6373 | | 1- | | 1414 | .30 | 1.50 | | 10 | |
| LOCKHEED | 25 | 1606 | 1625 | 1608 | N08 E01 | N08 E02 | 6373 | | 1- | | 1608 | .43 | .43 | | 17 | |
| SAC PEAK | 25 | 1606 | 1626 | 1616 | N08 E02 | N08 E02 | 6373 | | 1- | | 1617 | .30 | .30 | | | |
| MCMATH | 25 | 1614 | 1628 | D | N12 W36 | N11 W35 | 6370 | | 1- | | 1623 | .60 | .70 | | 18 | |
| LOCKHEED | 25 | 1616 | 1632 | 1623 | N10 W37 | N08 E00 | 6370 | | 1- | | 1908 | 1.40 | 1.70 | | 10 | |
| MCMATH | 25 | 1902 | 1928 | 1910 | N11 W35 | N08 W00 | 6370 | 37 | 1- | | 1909 | 1.55 | 1.55 | | 23 | |
| SAC PEAK | 25 | 1902 | 1928 | 1910 | N08 W01 | N08 W01 | 6373 | | 1- | | 1913 | .47 | .50 | | 20 | |
| LOCKHEED | 25 | 1903 | 1940 | 1913 | N08 W00 | N08 W01 | 6373 | | 1- | | 1911 | .40 | .40 | | 19 | |
| LOCKHEED | 25 | 1906 | 1928 | 1912 | N08 W01 | N08 W00 | 6373 | | 1- | | 2013 | .30 | .30 | | 10 | |
| SAC PEAK | 25 | 1908 | 1924 | 1924 | N08 W01 | N08 W00 | 6373 | | 1- | | 2017 | .50 | .50 | | | |
| MCMATH | 25 | 2011 | 2029 | 2013 | S14 W22 | REPRT | | | 1- | | 0029 | 1.00 | 1.00 | | 10 | |
| LOCKHEED | 25 | 2014 | 2025 | 2017 | REPRT | REPRT | | | 1- | | | | | | | |
| LOCKHEED | 26 | 0010 | 0050 | 0029 | NO FLARE | NO FLARE | | | | | | | | | | |
| LOCKHEED | 26 | 0100 | 0130 | NO FLARE | NO FLARE | NO FLARE | | | | | | | | | | |
| LOCKHEED | 26 | 0200 | 0430 | NO FLARE | NO FLARE | NO FLARE | | | | | | | | | | |
| WENDEL | 26 | 0300 | 0615 | NO FLARE | NO FLARE | NO FLARE | | | | | | | | | | |
| CAPRI S | 26 | 0809 | 0827 | D | N07 W13 | N07 W06 | 6373 | 18 D | 1+ | | 0814 | 1.00 | 5.00 | | | |
| WENDEL | 26 | 0821 | 0832 | D | N10 W21 | N07 W12 | 6373 | | 1- | | | | | | | |
| WENDEL | 26 | 0906 | 0927 | D | N07 W08 | N07 W08 | 6373 | 21 | 1- | | | | | | | |
| WENDEL | 26 | 1011 | 1024 | D | N10 W19 | N10 W18 | 6373 | 14 D | 1- | | 1146 | | 3.00 | | | |
| ONDREJOV | 26 | 1144 | 1211 | D | N10 W18 | N06 W12 | 6373 | | 1- | | 1300 | .20 | .20 | | | |
| WENDEL | 26 | 1145 | 1159 | D | N06 W12 | N09 W25 | 6373 | | 1- | | 1429 | .30 | .40 | | | |
| WENDEL | 26 | 1257 | 1312 | 1300 | N09 W25 | N08 W26 | 6373 | | 1- | | | .76 | .76 | | 18 | |
| MCMATH | 26 | 1424 | 1439 | 1428 | N09 W25 | N09 W25 | 6370 | | 1- | | | .87 | .87 | | 20 | |
| SAC PEAK | 26 | 1426 | 1434 | 1428 | N09 W49 | N09 W48 | 6370 | | 1- | | | .72 | .72 | | 19 | |
| SAC PEAK | 26 | 1426 | 1440 | 1428 | N09 W48 | N10 W49 | 6370 | | 1- | | 1535 | .70 | 1.30 | | | |
| WENDEL | 26 | 1431 | 1440 | D | N08 W51 | N08 W51 | 6370 | | 1- | | 1534 | .80 | 1.40 | | | |
| SAC PEAK | 26 | 1530 | 1546 | 1536 | N08 W51 | N08 W50 | 6370 | | 1- | | | .27 | .33 | | 17 | |
| MCMATH | 26 | 1533 | 1553 | 1535 | N08 W50 | N08 W50 | 6370 | | 1- | | 1617 | .20 | .30 | | | |
| CAPRI S | 26 | 1534 | 1545 | 1545 | N08 W51 | N08 W51 | 6370 | | 1- | | 1617 | .20 | .30 | | | |
| SAC PEAK | 26 | 1614 | 1618 | 1616 | N08 W51 | N08 W51 | 6370 | | 1- | | 1651 | .40 | .40 | | 10 | |
| SAC PEAK | 26 | 1616 | 1620 | 1617 | N08 W51 | N08 W51 | 6370 | | 1- | | 1852 | .20 | .20 | | | |
| LOCKHEED | 26 | 1616 | 1620 | 1617 | N06 W15 | N06 W15 | 6373 | | 1- | | 1938 | .30 | .30 | | 10 | |
| LOCKHEED | 26 | 1643 | 1658 | 1651 | N09 W52 | N09 W52 | 6370 | | 1- | | 2002 | .20 | .20 | | | |
| MCMATH | 26 | 1850 | 1900 | 1852 | N11 W52 | N11 W52 | 6370 | | 1- | | 2003 | .50 | .70 | | 10 | |
| MCMATH | 26 | 1935 | 1946 | 1938 | N09 W54 | N09 W54 | 6370 | | 1- | | 2108 | .29 | .39 | | 16 | |
| LOCKHEED | 26 | 1958 | 2007 | 2002 | N11 W52 | N11 W52 | 6370 | | 1- | | 2127 | .40 | .60 | | 10 | |
| LOCKHEED | 26 | 2010 | 2033 | 2033 | N11 W52 | N11 W52 | 6370 | | 1- | | 2129 | .50 | .50 | | 10 | |
| MCMATH | 26 | 2048 | 2054 | 2052 | N07 W16 | N07 W16 | 6373 | | 1- | | 0030 | 1.13 | 1.14 | | 20 | |
| SAC PEAK | 26 | 2103 | 2116 | 2108 | S13 W24 | S13 W24 | | | 1- | | | | | | | |
| LOCKHEED | 26 | 2103 | 2116 | 2108 | | | | | 1- | | | | | | | |
| LOCKHEED | 26 | 2121 | 2137 | 2127 | | | | | 1- | | | | | | | |
| MCMATH | 26 | 2124 | 2134 | 2129 | | | | | 1- | | | | | | | |
| SAC PEAK | 26 | 2124 | 2134 | 2126 | | | | | 1- | | | | | | | |
| HONOLULU | 27 | 0018 | 0040 | D | 0030 | 0030 | | | 1- | | | | | | | |

SOLAR FLARES

MARCH 1962

| OBSERVATORY | DATE MAR 1962 | OBSERVED UNIVERSAL TIME | | MAX PHASE | LOCATION | | DURA- TION -- MINUTES | IM- POR- TANCE | OBS. COND. | TIME -- U T | MEASUREMENTS | | MAX. WIDTH He | MAX. INT. % | PROVISIONAL IONOSPHERIC EFFECT |
|--|---------------------|----------------------------|------|--------------|-----------------|---------------|--------------------------------|----------------------|---------------|-------------------|---------------------------|---------------------------|---------------------|-------------------|--------------------------------------|
| | | START | END | | APPROX. LAT. | MER. DIST. | | | | | MCMATH PLACE REGION | MEAS. AREA Sq. Deg. | | | |
| WENDEL [SAC PEAK MCMATH MCMATH LOCKHEED IKOMASAN | 27 | 0814 | E | 0822 | D | N11 W62 | 6 D | 1- | 1 | | .31 | .33 | | 16 | |
| | 27 | 0945 | | 1245 | U | NO FLARE | | 1- | 2 | 1613 | .30 | .50 | | | |
| | 27 | 1611 | | 1612 | | N07 W37 | | 1- | 2 | 2108 | .20 | .30 | | | |
| | 27 | 2107 | | 2108 | | N07 W39 | 6373 | 1- | 2 | 2327 | .40 | .50 | | 10 | |
| | 27 | 2320 | | 2327 | | N06 W39 | | 1- | 2 | 2327 | .72 | .72 | 1.50 | 100 | |
| MCMATH MCMATH SAC PEAK | 28 | 0630 | | 1245 | | NO FLARE | | 1- | 2 | 1433 | .30 | .40 | | | |
| | 28 | 1315 | | 1345 | | NO FLARE | | 1- | 1 | 1815 | .20 | .30 | | | |
| | 28 | 1421 | E | 1500 | D | N09 E30 | 6377 | 1- | 3 | | .21 | .27 | | 17 | |
| | 28 | 1812 | E | 1820 | | N09 W50 | 6373 | | | | | | | | |
| | 28 | 2335 | | 2339 | | N10 W42 | | | | | | | | | |
| SAC PEAK | 29 | 0100 | | 0615 | | NO FLARE | | 1- | 3 | | .31 | | | 20 | |
| | 29 | 0645 | | 0745 | | NO FLARE | | | | | | | | | |
| | 29 | 0900 | | 0915 | | NO FLARE | | | | | | | | | |
| | 29 | 1130 | | 1230 | | NO FLARE | | | | | | | | | |
| | 29 | 1245 | | 1345 | | NO FLARE | | | | | | | | | |
| SAC PEAK SAC PEAK SAC PEAK MCMATH SAC PEAK SAC PEAK MCMATH LOCKHEED MCMATH MCMATH MCMATH SAC PEAK SAC PEAK SAC PEAK SAC PEAK | 29 | 1404 | | 1421 | | N1408 N09 W90 | | 1- | 3 | | | | | | |
| | 29 | 2200 | | 2245 | | NO FLARE | | | | | | | | | |
| | 30 | 0000 | | 0015 | | NO FLARE | | | | | | | | | |
| | 30 | 0145 | | 1230 | | NO FLARE | | | | | | | | | |
| | 30 | 1330 | | 1400 | | NO FLARE | | | | | | | | | |
| | 30 | 1431 | | 1446 | | 1438 N11 W69 | | 1- | 3 | | .58 | 1.05 | | 22 | |
| | 30 | 1458 | | 1516 | | N12 W67 | | 1- | 3 | | .87 | 1.51 | | 17 | |
| | 30 | 1523 | | 1543 | | N07 W65 | | 1- | 3 | | .29 | .47 | | 17 | |
| | 30 | 1555 | E | 1618 | D | S19 W87 | 6369 | 1- | 1 | 1556 | .20 | .35 | | 18 | |
| | 30 | 1604 | | 1626 | | N07 W65 | | 1- | 3 | | .21 | .35 | | 18 | |
| | 30 | 1651 | | 1753 | | N08 W68 | | 1- | 3 | | .91 | 1.71 | | 23 | |
| | 30 | 1707 | | 1736 | | N07 W66 | 6373 | 1- | 1 | 1713 | .20 | .50 | | 10 | |
| | 30 | 1709 | | 1735 | | N12 W90 | 6373 | 1- | 2 | 1714 | .40 | .70 | | | |
| | 30 | 1804 | | 1812 | | N08 W66 | 6373 | 1- | 2 | 1808 | .20 | .50 | | | |
| | 30 | 1842 | | 1856 | D | N07 W66 | 6373 | 1- | 1 | 1844 | .20 | .50 | | | |
| 30 | 2032 | E | 2050 | D | S19 W90 | 6369 | 1- | 1 | 2038 | .50 | .72 | | | | |
| 30 | 2034 | | 2054 | | S17 W90 | | 1- | 3 | | .60 | 1.80 | | 19 | | |
| 30 | 2042 | E | 2050 | | S19 W90 | | 1- | 1 | 2042 | .60 | 1.00 | | 10 | | |
| 30 | 2137 | E | 2202 | D | N07 W68 | 6373 | 1- | 1 | 2148 | .40 | 1.00 | | 18 | | |
| 30 | 2146 | | 2203 | | N08 W78 | | 1- | 3 | | .87 | 1.98 | | 18 | | |
| 30 | 2210 | | 2224 | | N08 W69 | | 1- | 3 | | .58 | 1.16 | | 24 | | |
| 30 | 2245 | | 2257 | | N10 W75 | | 1- | 3 | | .68 | 1.36 | | 19 | | |
| IKOMASAN IKOMASAN WENDEL NERA WENDEL WENDEL CAPRI S | 31 | 0513 | E | 0540 | D | N08 W90 | 6370 | 1 | 1 | 0523 | .52 | 3.00 | 1.18 | 80 | S-SWF |
| | 31 | 0538 | E | 0542 | D | N09 W70 | | 1- | 1 | 0538 | | | | 80 | |
| | 31 | 0835 | E | 0850 | | N08 W71 | 6373 | 1 | 1 | | | | | | |
| | 31 | 0840 | E | 0846 | | N10 W78 | 6373 | 1+ | 1 | | | | | | |
| | 31 | 0902 | E | 0912 | D | N12 W73 | | 1- | 3 | | | | | | |
| WENDEL WENDEL CAPRI S | 31 | 0940 | E | 1057 | D | N08 W73 | 6373 | 1 | 1 | 1049 | .70 | 3.00 | | | |
| | 31 | 1044 | E | 1100 | D | N10 W78 | 6370 | 1 | 1 | 1138 | .60 | 4.20 | | | |
| | 31 | 1133 | E | 1205 | D | N10 W79 | 6370 | 1 | 2 | | | | | | |

SOLAR FLARES

MARCH 1962

| OBSERVATORY | DATE MAR 1962 | OBSERVED TIME | | MAX. PHASE | LOCATION | | DURA TION MINUTES | IM- POR- TANCE | OBS. COND. | MEASUREMENTS | | | PROVISIONAL IONOSPHERIC EFFECT |
|-------------|---------------------|---------------|--------|------------|-----------------|---------------------------|-------------------------|----------------------|---------------|---------------------------|---------------------------|---------------------------------|--------------------------------------|
| | | START | END | | APPROX. LAT. | MCMATH PLAGE REGION | | | | MEAS. AREA Sq. Dsp. | CORR. AREA Sq. Dsp. | MAX. WIDTH H _g | |
| CAPRI S | 31 | 1230 | 1245 | NO FLARE | REPORT | 6370 | 87 D | 1+ | 3 | 1430 | .80 | 4.80 | |
| LOCKHEED | 31 | 1314 E | 1441 D | | N10 W80 | 6373 | 32 | 1 | 2 | 1645 | 1.00 | 2.90 | 20 |
| SAC PEAK | 31 | 1638 | 1710 | 1645 | N10 W85 | 6373 | 19 | 1 | 3 | 1646 | 2.74 | | 22 |
| MCMATH | 31 | 1642 | 1701 | 1646 | N08 W90 | 6373 | 31 D | 1 | 1 | 1646 | .80 | | |
| LOCKHEED | 31 | 1643 E | 1714 | 1646 | N08 W85 | 6373 | 32 | 1 | 2 | 1905 | 1.20 | 3.50 | 20 |
| MCMATH | 31 | 1858 | 1930 | 1905 | N10 W85 | 6373 | 56 | 1+ | 1 | 1905 | 2.50 | | 22 |
| SAC PEAK | 31 | 1859 | 1926 | 1905 | N08 W90 | 6373 | 27 | 1 | 3 | 2014 | 2.31 | | |
| MCMATH | 31 | 2008 | 2019 | 2014 | N08 W86 | 6373 | 29 | 1- | 3 | 2036 | .93 | | 22 |
| SAC PEAK | 31 | 2013 | 2102 | 2027 | N08 W90 | 6373 | 29 | 1- | 1 | 2036 | 1.20 | | |
| MCMATH | 31 | 2025 | 2054 | 2036 | N08 W86 | 6373 | 29 | 1- | 2 | 2038 | .60 | 1.80 | 20 |
| LOCKHEED | 31 | 2030 | 2050 | 2038 | N10 W85 | 6373 | 176 D | 1 | 1 | 2050 | 1.11 | 3.44 | |
| HONOLULU | 31 | 2042 E | 2338 D | 2050 | N14 W89 | 6373 | 28 D | 1 | 1 | 2138 | 1.20 | | |
| MCMATH | 31 | 2125 E | 2153 D | 2138 | N08 W86 | 6373 | 22 | 1 | 2 | 2139 | .90 | 2.70 | 20 |
| LOCKHEED | 31 | 2130 | 2152 | 2139 | N10 W85 | 6373 | 22 | 1- | 3 | 2139 | 1.82 | | 23 |
| SAC PEAK | 31 | 2131 | 2151 | 2139 | N08 W90 | 6373 | 22 | 1- | 3 | 2139 | 1.82 | | 22 |
| SAC PEAK | 31 | 2327 | 2343 | 2335 | N08 W90 | 6373 | 22 | 1- | 2 | 2337 | 1.16 | | 20 |
| LOCKHEED | 31 | 2330 | 2347 | 2337 | N10 W85 | 6370 | 38 | 1- | 2 | 2346 | .60 | 1.80 | 110 |
| IKOMASAN | 31 | 2332 | 0010 | | N09 W90 | 6370 | | 1 | | | | | |

COMMERCE - STANFORDS - BOULDER

Note: Beginning with this issue of the CEPL-F Part B the intervals of no flare patrol observations have been entered chronologically with the flare-subflare listing. Because some observatories report flares, but not hours of operation, flares may be reported during these periods.

| | | | | | |
|-------------|------------------------------|----------|--------------------------|------|------------------------------|
| ATHENS | ATHENS, GREECE | HONOLULU | HAWAII, USA | NERA | NEDERHORST den BERGH, |
| BAKOU | FIRCULLI, USSR | IKOMASAN | KYOTO, JAPAN | | NETHERLANDS |
| CAPETOWN | ROYAL OBSERVATORY, | KIEV KO | KIEV GAO, USSR | | KRASNAYA PAKHRA, USSR |
| | CAPE OF GOOD HOPE | KIEV KY | KIEV UNIVERSITY, USSR | | SACRAMENTO PEAK, N. MEX. USA |
| CAPRI F | CAPRI, ITALY (GERMAN) | LOCKHEED | LOS ANGELES, CALIF., USA | | STOCKHOLM, SWEDEN |
| CAPRI S | CAPRI, ITALY (SWEDISH) | MCMATH | MCMATH-HULBERT | | SCHAUTINSLAND, GFR |
| CRIMEE | SIMEIZ, USSR | | PONTIAC, MICH., USA | | TASHKENT, USSR |
| HERSTHONGUE | ROYAL GREENWICH OBSERVATORY, | MOSCOU | MOSCOW-GAISH, USSR | | WENDELSTEIN, GFR |
| | HERSTHONGUEUX, ENGLAND | | | | |

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.

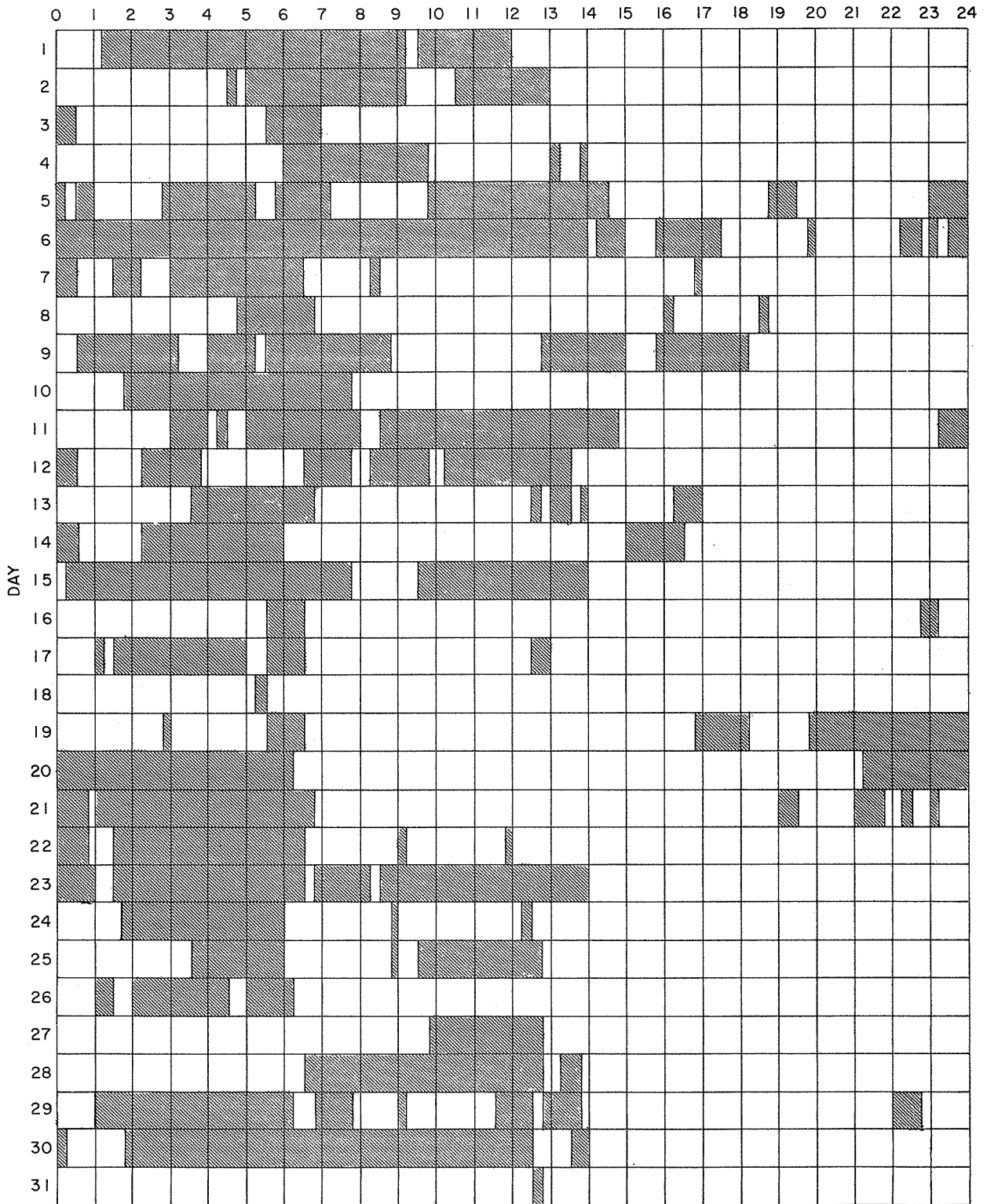
SEE DESCRIPTIVE TEXT PUBLISHED NOVEMBER 1961 FOR DEFINITION OF CORRECTED AREA VALUES LISTED FOR CLIMAX, HAWAII, LOCKHEED AND SACRAMENTO PEAK.

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

INTERVALS OF NO FLARE PATROL OBSERVATIONS

MARCH 1962

HOURLY-UT



COMMERCE - STANDARDS - BOULDER

Stations Include:

- | | | | |
|-----------------|----------|----------------|-----------------|
| Arcetri | Honolulu | Lockheed | Ondrejov |
| Capri (Swedish) | Huancayo | McMath-Hulbert | Sacramento Peak |
| Herstmonceux | Ikomasan | Mitaka | Wendelstein |

SOLAR FLARES

DECEMBER 1961

| OBSERVATORY | DATE | OBSERVED UNIVERSAL TIME | | LOCATION | | | DURA- TION — MINUTES | IM- POR- TANCE | OBS. COND. | MEASUREMENTS | | | | PROVISIONAL IONOSPHERIC EFFECT |
|-------------|------|-------------------------|--------|-----------------|---------------|----------------------------|-------------------------------|----------------------|---------------|--------------|---------------------------|---------------------------|---------------------|--------------------------------------|
| | | START | END | APPROX. LAT. | MER. DIST. | MAGNIT. PLAGE REGION | | | | TIME | MEAS. AREA Sq. Deg. | COBR. AREA Sq. Deg. | MAX. WIDTH Hr | |
| HUANCAYO | 01 | 1816 | 1840 | N10 | W10 | 6280 | 24 | 1 | 2 | 1821 | 1.30 | 1.40 | 4.50 | |
| □ CAPETOWN | 03 | 0912 | 0952 | N12 | W39 | 6280 | 40 | 1 | | 0921 | 2.00 | 2.60 | | 58 |
| □ BAKOU | 03 | 0925 | 0949 | N13 | W39 | 6280 | 24 | 1 | 3 | 0930 | 2.37 | 3.23 | | |
| ALMA-ATA | 04 | 0506 | 0531 | N11 | W50 | 6280 | 25 | 1 | | 0512 | 1.80 | | | 70 |
| □ CAPETOWN | 04 | 1310 | 1343 | N16 | E05 | 6285 | 33 | 1 | | 1315 | 3.50 | 3.60 | | |
| □ CAPETOWN | 09 | 1134 | 1241 D | S08 | W76 | 6282 | 67 D | 1 | | 1142 | .80 | | | |
| □ CAPETOWN | 09 | 1134 | 1241 D | S08 | W76 | 6282 | 33 | 1 | | 1252 | 1.20 | | | |
| □ HUANCAYO | 09 | 1503 | 1658 | S07 | W90 | 6282 | 115 | 2 | 2 | 1519 | 2.00 | 5.60 | | |
| □ HUANCAYO | 09 | 1503 | 1658 | S07 | W90 | 6282 | 1628 | 2 | | | | | | |
| □ CAPETOWN | 10 | 0633 E | 0715 | S08 | W90 | 6282 | 42 D | 1 | | 0639 | .50 | | | |
| BAKOU | 22 | 0739 E | 0810 D | S00 | E68 | 6301 | 31 D | 1+ | 2 | 0803 | 3.65 | 9.26 | | 65 |
| MEUDON | 22 | 1013 | 1100 | S10 | E60 | 6301 | 47 | 1 | | | | | | |
| IKOMASAN | 24 | 0010 | 0045 | N13 | W12 | 6299 | 35 | 1 | | 0014 | 3.61 | | 1.30 | 120 |
| IKOMASAN | 26 | 0143 E | 0151 D | S15 | E14 | 6301 | 8 D | 1 | | 0145 | 2.58 | | 1.28 | 100 |
| HUANCAYO | 28 | 1823 | 1836 D | N20 | W02 | 6303 | 13 D | 1+ | 2 | 1829 | 4.00 | 5.50 | 2.50 | |
| MITAKA | 29 | 0052 | 0107 | N12 | W02 | 6302 | 15 | 1 | 2 | 0057 | 1.47 | 1.53 | 3.49 | 183 |

COMMERCE - STANDARDS - BOULDER

These flare reports are addenda to the December 1961 flares published in ORPL-F 209 Part B, January 1962.

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

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.

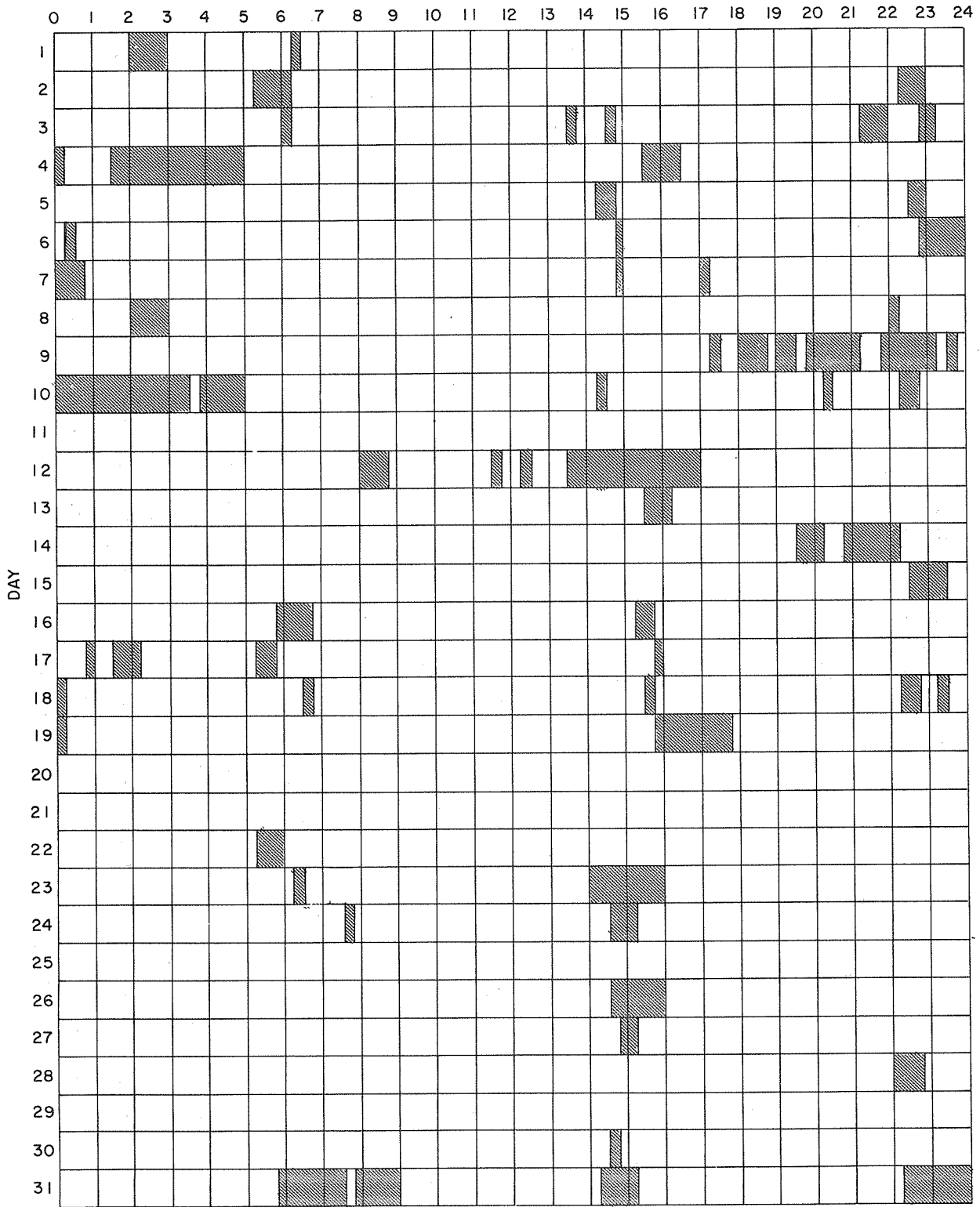
E = LESS THAN D = GREATER THAN U = APPROXIMATE □ = NOT REPORTED.

INTERVALS OF NO FLARE PATROL OBSERVATIONS

IIIk

DECEMBER 1961

HOUR-UT



COMMERCE - STANDARDS - BOULDER ISSUE 1955-B

Stations include:

- | | | | | | | |
|------------|-----------------|--------------|----------------|----------|-----------------|-------------|
| Abastumani | Capetown | Honolulu | Kiev KO | Meudon | Nizmir | Uccle |
| Alma-Ata | Capri (Swedish) | Herstmonceux | Kodaikanal | Mitaka | Ondrejov | Voroshilov |
| Arcetri | Climax | Huancayo | Lockheed | Moscou | Sacramento Peak | Wendelstein |
| Bakou | Crimee | Ikomasan | McMath-Hulbert | Nizamiah | Tachkent | |

IONOSPHERIC EFFECTS OF SOLAR FLARES

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

FEBRUARY 1962

| FEBRUARY 1962 | UNIVERSAL TIME | | | SWF TYPE | IMPORTANCE | | | | | WIDE SPREAD INDEX | STATIONS | KNOWN FLARE | |
|------------------|----------------|-------|-------|-------------|------------|-----|------|-----|-----|-------------------------|----------|-------------------------|----------------|
| | START | END | MAX | | IMP | ABS | SCNA | SEA | SPA | | | | BUR |
| [01 | 0333 | 0421 | 0343 | | | | 2 | | | | 5 | TY TA | 0333E |
| -01 | 0336 | 0401 | | S 1+ | | | | | | | 5 | OK CA TO | |
| [01 | 0553 | 0623 | 0600 | | | | 1 | | | | 1 | TY | 0550E |
| -01 | 0554 | 0613 | | SL 1- | | | | | | | 1 | OK | |
| 01 | 0650 | 0742 | 0654 | | | | 1 | | | | 1 | TY | 0647E 1634 |
| [01 | 1634 | 1735U | 1642 | | | | 2 | | | | 3 | A5 A1 A9 | |
| -01 | 1640 | | | S 1 | | | | | | | 4 | MC BE HU PR WS | |
| [01 | 1656 | 1738 | 1704 | | | | 1+ | | | | 3 | A9 A1 | 1655 1634 |
| -01 | 1657 | 1720 | | S 1+ | | | | | | | 5 | MC BE BO FM HU MC PR WS | |
| * 01 | 1815 | 1850U | 1830U | | | | 2 | | | | 3 | A5 A1 | 1818 1508 |
| * [04 | 1526 | 1640 | 1546 | | | | | 34 | | | | BO | |
| -04 | 1535 | 1615 | 1545 | | | | 1+ | | | | 5 | A5 A1 NE | |
| 04 | 1728 | 1810 | 1733 | | | | | | 9 | | | BO | 1726 |
| 06 | 2211 | 2213 | | | | | | | | 1 | 5 | HA BO | |
| 17 | 1940 | 2100 | | | | | | 16 | | | | BO+ | |
| 19 | 1245 | 1355 | | SL 2 | | | | | | | 5 | HU PR SW | 1304E |
| [20 | 0554 | 0613 | | S 1 | | | 1 | | | | 4 | OK CA | |
| -20 | 0557 | 0630 | 0606 | | | | | | | | 5 | TY TA | 0550 |
| [21 | 2159 | 2201 | | | | | | | | 1 | 5 | HA BO | |
| -21 | 2206 | 2209 | | | | | | | | 1 | 5 | HA BO | 2158E |
| 22 | 1410 | 1438 | | SL 1 | | | | | | | 4 | HU PR | |
| [23 | 1750 | 1950 | 1847 | | | 35 | 2 | | | | 5 | BO HA MC | 1746 |
| -23 | 1810 | 1940 | 1830 | | | | | 20 | | | | BO+ | |
| * [23 | 1815 | 1950 | | SL 3- | | | | | | | 5 | MC BE BO FM HU PR WS | |
| -23 | 1816 | 2000 | | | | | | 2 | | | 4 | BO MC | |
| 24 | 0915 | 0940 | | | | | | 2 | | | 3 | JU KU | 0918E 1029E |
| 24 | 1033 | 1103 | | | | | | 2 | | | 1 | KU | |
| 24 | 1146 | 1211 | | | | | | 2 | | | 1 | KU | |
| 27 | 2233 | 2300 | 2240 | | | | | 1 | | | 1 | TY | 2300 |
| 27 | 2300 | 2318 | 2308 | | | | | 1 | | | 1 | TY | |
| [28 | 0644 | 0716 | | S 2+ | | | | | | | 5 | OK CA TO | 0650E |
| -28 | 0649 | 0754 | 0700 | | | | | 2 | | | 5 | TY NE | |

COMMERCE - STANDARDS - BOULDER

+ = No known flare patrol
 * = Sudden Enhancement of Signal 18 kc - NBA observed by A5.
 JU = Juhlesruh, G.D.R.

SOLAR RADIO EMISSION OUTSTANDING OCCURRENCES

MARCH 1962

-ARO-OTTAWA

2800 MC.

| MARCH 1962 | TYPE | START UT | DURATION HRS: MINS | MAXIMUM | | | REMARKS |
|---------------|-----------------------|----------|-----------------------|----------------|--------------|--------------|--|
| | | | | TIME UT MAX | PEAK FLUX | NEAR FLUX | |
| 1 | 3 Simple 3 | 1255 | 55 | 1318 | 3 | 1.5 | |
| 1 | 3 Simple 3 A f | 1529 | 6 31 | Indet. | 7 | 5 | |
| | 2 Simple 2 f | 1530 | 1.2 | 1530.6 | 30 | 3 | |
| | 6 Complex f | 1635 | 22 | 1642.5 | 425 | 81 | |
| | 4 Post Increase | | 28 | | 8 | 4 | |
| | 1 Simple 1 | 1844 | 0.9 | 1844.3 | 1 | 0.5 | |
| | 1 Simple 1 | 1845.2 | 1 | 1845.5 | 3 | 1.5 | |
| | 1 Simple 1 f | 1924.5 | 4.5 | 1926 | 3 | 1.5 | |
| | 1 Simple 1 | 1953 | 3 | 1955.2 | 2 | 1 | |
| | 1 Simple 1 | 2034.3 | 3.7 | 2035 | 3 | 1.5 | |
| 13 | 6 Complex f | 1447.5 | 19.5 | 1450.5 | 470 | 85 | |
| | 4 Post Increase A | | 6 23 | | 12 | 5 | |
| | 6 Complex f | 1517.3 | 4.2 | 1520 | 3 | 1.5 | |
| | 1 Simple 1 | 1605 | 14 | 1608.5 | 6 | 3 | |
| 17 | 3 Simple 3 A | 1939 | 1 41 | 2000 | 2 | 1 | |
| | 1 Simple 1 | 1939 | 3 | 1940.2 | 6 | 1.8 | |
| 18 | 3 Simple 3 A f | 1340 | 4 00 | 1533 | 7 | 4.5 | |
| | 2 Simple 2 f | 1450 | 21 | 1457 | 45 | 6 | |
| 18 | - Record Incomplete A | 1802 | > 4 38 | Indet. | 10 | - | Maximum flux reached during this period. |
| | 1 Simple 1 | 1911.3 | 2.4 | 1912.1 | 3 | 1.5 | |
| | 1 Simple 1 f | 2102.3 | 3.2 | 2104 | 3 | 1.5 | |
| 19 | - Rise A | 1338 | | | 13 | - | Level rose and remained at a higher level than previously throughout balance of the observing period. Maximum flux reached during this period. |
| | 2 Simple 2 | 2120 | 1 | 2120.7 | 20 | 10 | |
| 22 | 3 Simple 3 A | 2132 | 26 | 2145 | 6 | 4.7 | |
| | 2 Simple 2 | 2136 | 7 | 2138 | 18 | 9 | |
| 22 | - Record Incomplete | 2214 | > 36 | 2230 | 35 | - | Maximum flux reached during this period |
| 23 | 3 Simple 3 A | 2110 | 35 | 2127 | 3 | 1.5 | |
| | 2 Simple 2 f | 2117.5 | 6.5 | 2119.5 | 34 | 17 | |
| 24 | 1 Simple 1 | 1323 | 4 | 1324.5 | 2 | 1 | |
| 24 | 3 Simple 3 | 1353 | 16 | 1354 | 4 | 2 | |
| 25 | 3 Simple 3 A f | b1208 | > 4 40 | 1425 | 16 | - | |
| | 2 Simple 2 | b1208 | > 4 | 1209.5 | 9 | | |
| | 1 Simple | 1223 | 4 | 1224 | 4 | 2 | |
| | 2 Simple 2 | 1234 | 12 | 1237 | 90 | 13 | |
| | 1 Simple 1 f | 1357 | 5 | 1358.5 | 5 | 2.5 | |
| 25 | 3 Simple 3 f | 1901 | 29 | 1907 | 3 | 1.5 | |
| 27 | 2 Simple 2 f | 1448.3 | 4.7 | 1450 | 9 | 5 | |
| 30 | 1 Simple 1 | 2211.5 | 2 | 2212.5 | 2 | 1.3 | |

COMMERCE - STANDARDS - BOULDER

HOURS OF OBSERVATION: JANUARY, FEBRUARY, MARCH 1962

OBSERVING PERIOD:

January 13:30 UT - 21:30 UT (approx)

February 12:45 UT - 22:00 UT (approx)

March 12:10 UT - 22:40 UT (approx)

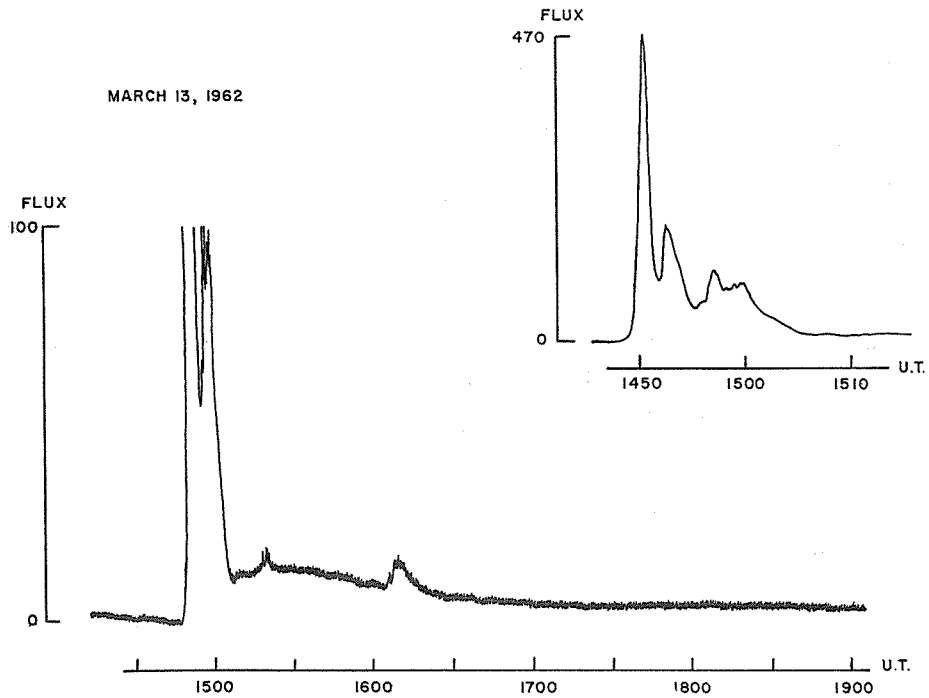
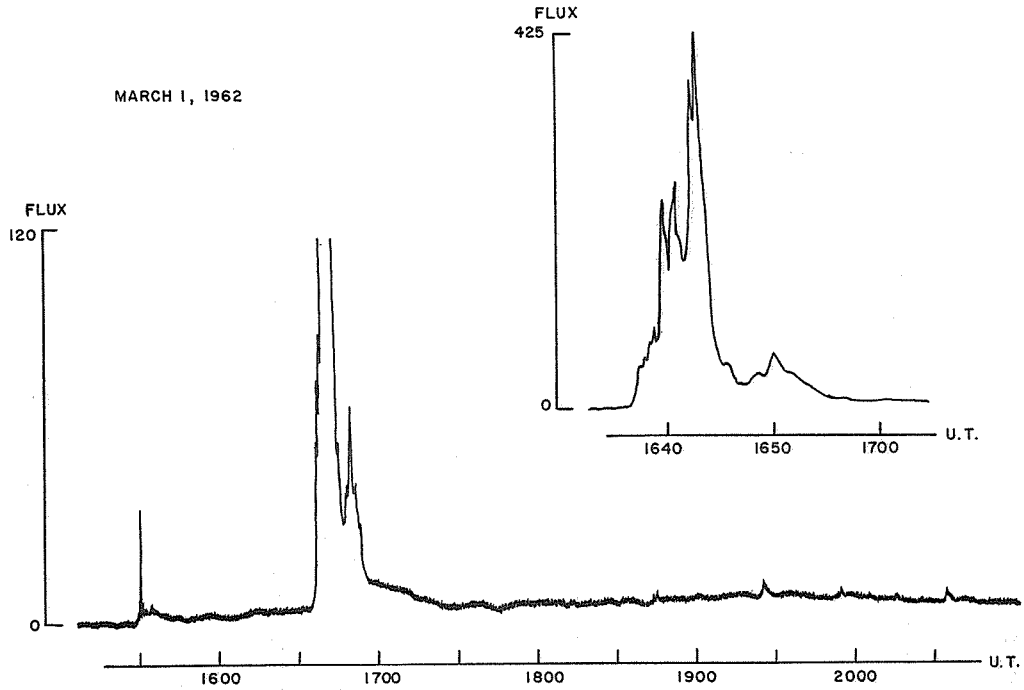
with the following exceptions:

February 6 - no observation 16:05 - 16:45
18:20 - 20:00
20:25 - Sunset

February 7 - no observation 13:30 - 15:10

SELECTED 2800 MC/S SOLAR NOISE BURST
OTTAWA, CANADA

IVb

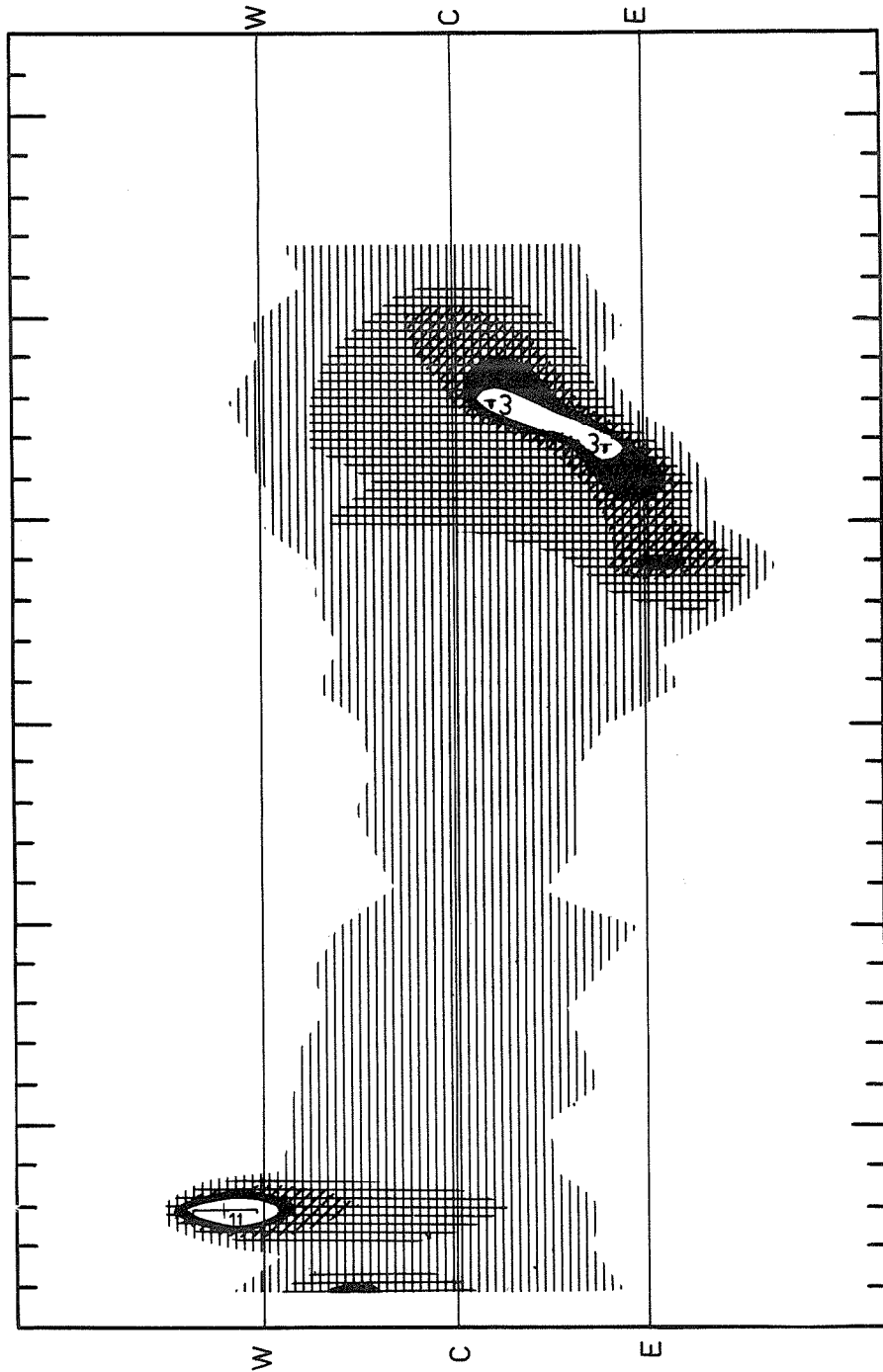


SOLAR RADIO EMISSION
INTERFEROMETRIC OBSERVATIONS

169 Mc

MARCH 1962

Nancay



COMPTON - STANDARDS - BOULDER

SOLAR RADIO EMISSION

MARCH 1962

BOULDER

108 Mc.

| Mar. 1962 | Type | Start UT | Time of Maximum UT | Duration Minutes | Intensity |
|-----------|------|----------|--------------------|------------------|-----------|
| 1 | 9a | 1636.5 | ~1645 | 12.0 | 3 |
| 1 | 9b | 1648.5 | - | 52 | 1 |
| 1 | 3 | 2033.5 | 2034.2 | 1.5 | 2 |
| 2 | 3 | 1353.5 | 1354.2 | 1.0 | 2 |
| 2 | 3 | 2342.2 | 2343.0 | 2.5 | 3 |
| 3 | 7 | 1514 | 1601 | 86 | 1 |
| 12 | 3 | 1336.0 | 1336.5 | 1.0 | 2 |
| 13 | 8 | 1450 | 1452.3 | 22 | 2 |
| 16 | 3 | 1936.8 | 1937.0 | 0.7 | 2 |
| 17 | 1 | 1558.0 | 1640.5 | 65 | 2 |
| 17 | 2 | 2302.1 | 2303.1 | 2.4 | 2 |
| 17 | 9a | 2306.2 | 2307.5 | 5.0 | 3 |
| 17 | 9b | 2315 | 2350 | 79.0 | 2 |
| 18 | 3 | 1419.9 | 1420.0 | 2 | 3 |
| 20 | 3 | 1408.1 | 1408.8 | 1.1 | 1 |
| 20 | 3 | 1707.9 | 1708.0 | 1.1 | 2 |
| 22 | 3 | 1426.5 | 1426.9 | 1.5 | 2 |
| 22 | 3 | 1559.6 | 1600.5 | 1.0 | 2 |
| 22 | 3 | 1605.0 | 1605.0 | 1.0 | 3 |
| 22 | 2 | 1738.1 | 1738.9 | 3.0 | 2 |
| 22 | 3 | 1957.3 | 1957.3 | 0.8 | 3 |
| 22 | 3 | 2300.7 | 2301.5 | 1.0 | 2 |
| 22 | 3 | 2302.4 | 2303.7 | 2.2 | 3 |
| 24 | 3 | 2134.5 | 2135.1 | 1.0 | 2 |
| 25 | 3 | 1906.1 | 1906.2 | 1.8 | 2 |
| 26 | 2 | 1423.6 | 1425.9 | 5.8 | 2 |

COMMERCE - STANDARDS - BOULDER

NOMINAL TIMES OF OBSERVATION

MARCH 1962

BOULDER

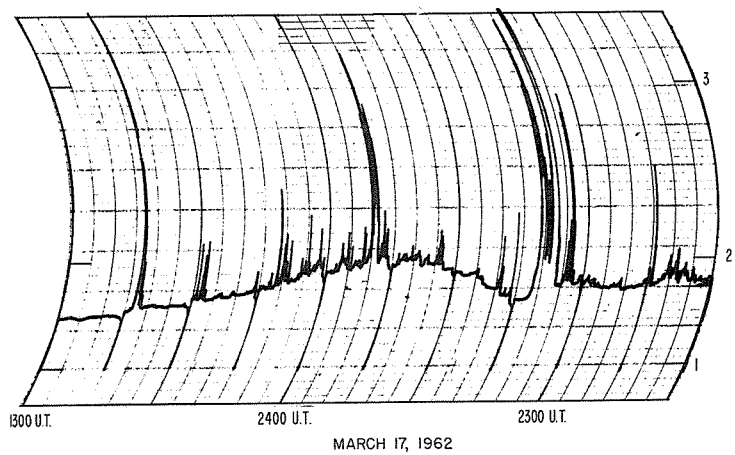
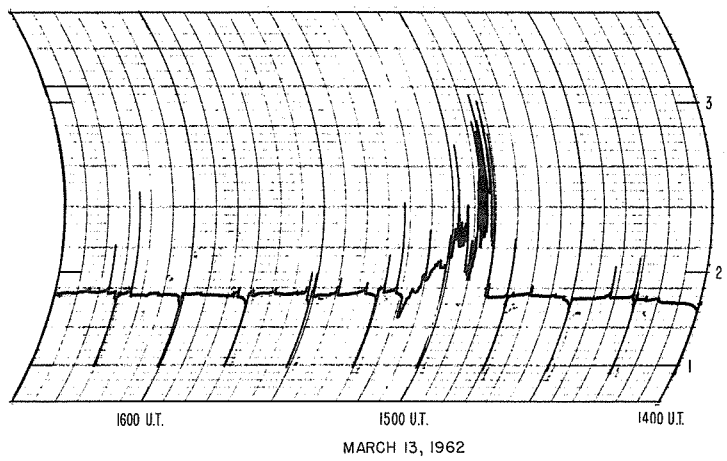
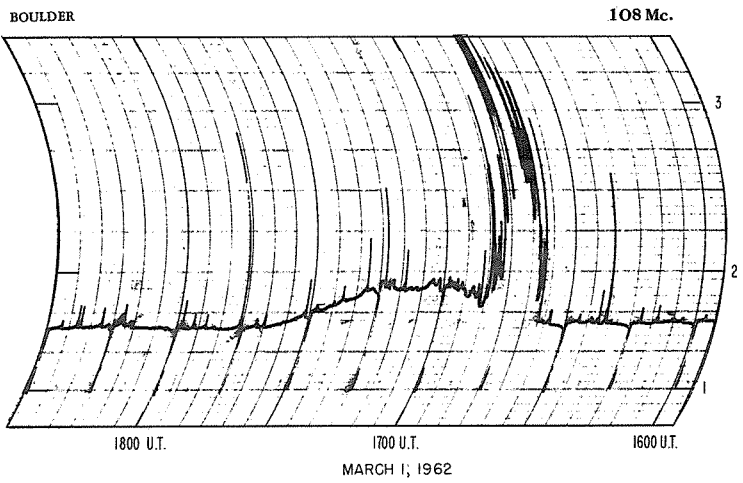
108 Mc.

| Mar. 1962 | U.T. | Mar. 1962 | U.T. |
|-----------|-------------------------|-----------|-----------------------|
| 1 | 1339-0016 | 16 | 1316-0032 |
| 2 | 1337-0017 | 17 | 1314-0033 |
| 3 | 1336-0018 | 18 | 1312-0034 |
| 4 | 1334-0019 | 19 | 1311-0035 |
| 5 | 1333-0020 | 20 | 1309-0036 |
| 6 | 1331-0021 | 21 | 1307-0037 |
| 7 | 1330-0022 | 22 | 1306-0038 |
| 8 | 1328-0023 | 23 | 1304-0039 I 1955-2200 |
| 9 | 1327-1600; 1650-0024 | 24 | 1303-0040 |
| 10 | 1320-0025 I 1320-0025 | 25 | 1301-0041 |
| 11 | 1645-0026 | 26 | 1259-0042 |
| 12 | 1322-0028 | 27 | 1258-0043 |
| 13 | 1320-0029 | 28 | 1256-0044 |
| 14 | 1319-0030 | 29 | 1254-0045 |
| 15 | 1317-0031 | 30 | 1253-0046 |
| | | 31 | 1251-0047 |

COMMERCE - STANDARDS - BOULDER

SOLAR NOISE BURSTS

MARCH 1962



SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

IVf

MARCH 1962

HAO BOULDER

7.6-41 Mc

| Date 1962 | Bursts | | | Frequency Range (mc) | Date 1962 | Bursts | | | Frequency Range (mc) |
|--------------|-----------|----------------------|-----------------|-------------------------|------------------|-----------------|-----------------|----------------|-------------------------|
| | Type | Time (U.T.) | Inten- sity | | | Type | Time (U.T.) | Inten- sity | |
| 1 Mar | III | 1534.30-1534.45 | 1- | 21 - 41 | 15 Mar | III | 1804.15-1804.45 | 1- | 23 - 41 |
| | III | 1547-1548.15 | 1+ | 21 - 41 | | III | 1956.30-1957.35 | 1+ | 23 - 41 |
| | III | 1607.30-1608 | 1 | 24 - 35 | | III | 2146.30-2146.45 | 1- | 24 - 39 |
| | III | 1621.30-1622.15 | 1+ | 22 - 41 | | III | 2221.30-2222 | 1 | 26 - 36 |
| | III | 1625-1626.30 | 2 | 16.5-41 | | III | 2233.45-2234.30 | 1- | 24 - 40 |
| | III | 1634.30-1635 | 1 | 24 - 41 | 16 | III | 2307.15-2307.30 | 1 | 25 - 41 |
| | II | 1637.15-1641.30-1705 | 3+ | 12 - 41 | | continuum | 1921.15-1930.45 | 1+ | 11 - 41 |
| | IV | 1700-2005 | 2 | 22 - 41 | | III | 1924.45-1926.30 | 2 | 12 - 41 |
| | III | 1707.45-1709.15 | 1+ | 15.5-41 | | III | 2255-2256 | 1- | 25 - 41 |
| | III | 1707.45-1709.15 | 1+ | 15.5-41 | | III | 2309-2309.15 | 1 | 29 - 41 |
| | III | 1916.45-1917.45 | 1+ | 22 - 41 | 17 ^c | III | 2410.30-2410.45 | 1- | 31 - 41 |
| | III | 1953.30-1954.15 | 1 | 18.5-41 | | III | 1422.15-1422.30 | 1- | 25 - 37 |
| | continuum | 2000-2355 | 1- | 24 - 41 | | III | 1423.30-1424 | 1 | 22 - 41 |
| | III | 2028.30-2029.15 | 1- | 24 - 41 | | III | 1533.15-1534.15 | 1+ | 23 - 41 |
| | III | 2035.30-2036 | 1- | 23 - 34 | | III | 1558.15-1559.15 | 1- | 26 - 41 |
| | III | 2108-2108.45 | 1 | 19 - 41 | | III | 1608.30-1609 | 1 | 29 - 41 |
| | III | 2157.30-2159 | 1- | 22 - 41 | | III | 1609.30-1609.45 | 1- | 29 - 41 |
| | III | 2207.30-2208 | 1 | 25 - 34 | | III | 1610-1610.15 | 1 | 27 - 41 |
| | III | 2340-2340.15 | 1 | 22 - 41 | | III | 1624.30-1625 | 1- | 22 - 41 |
| | III | 2350.30-2352 | 1- | 25 - 41 | | III | 1638-1642.30 | 1 | 19 - 41 |
| 2 | continuum | 1354-1500 | 1- | 27 - 41 | 18 | III | 1643.45-1644.15 | 1 | 32 - 41 |
| | III | 1354-1354.45 | 1- | 24 - 41 | | III | 1645.15-1645.45 | 1- | 26 - 37 |
| | III | 1356-1356.30 | 1- | 24 - 41 | | III | 1653.30-1654.15 | 1 | 21 - 37 |
| | III | 1402.30-1403 | 1 | 21 - 39 | | III | 1721.15-1721.45 | 1- | 24 - 41 |
| | III | 1407-1408 | 1- | 23 - 41 | | III | 1725-1725.30 | 1- | 25 - 41 |
| | III | 1505.30-1506 | 1- | 25 - 41 | | III | 1837.15-1839 | 1+ | 12 - 41 |
| | III | 1849.30-1850.30 | 1 | 19 - 41 | | III | 1931.30-1932 | 1- | 27 - 34 |
| | III | 2000.15-2000.45 | 1- | 29 - 41 | | III | 2001.30-2002.15 | 1- | 23 - 37 |
| | III | 2337.30-2338 | 1- | 25 - 41 | | III | 2002.30-2003 | 1 | 23 - 41 |
| | III | 2342.15-2345 | 1+ | 22 - 41 | | III | 2003.30-2004.15 | 1- | 24 - 38 |
| | III | 2345.30-2345.45 | 1 | 23 - 41 | continuum | 2100-2400 | 1- | 23 - 41 | |
| | III | 2346-2346.15 | 1- | 24 - 41 | III | 2142.30-2143 | 1 | 26 - 41 | |
| | III | 2356.30-2357.15 | 1- | 23 - 40 | III | 2146.45-2148.45 | 1 | 24 - 41 | |
| | III | 1551.30-1551.45 | 1 | 29 - 38 | III | 2207-2208.45 | 1 | 19 - 36 | |
| | continuum | 1850-1925 | 1- | 24 - 41 | III | 2224.30-2225 | 1+ | 21 - 41 | |
| | 4 | III | 1955.15-1956.30 | 1 | 22 - 41 | III | 2306.30-2306.45 | 1+ | 22 - 37 |
| | | III | 1958-1959.30 | 1+ | 11 - 41 | III | 2307-2311 | 2 | 14.5-41 |
| | | III | 2055.30-2056 | 1 | 21 - 38 | III | 2429.30-2430 | 1 | 25 - 40 |
| | | III | 1608.15-1608.45 | 1- | 29 - 41 | III | 2442.30-2443 | 1+ | 23 - 41 |
| | | III | 1645.45-1646.15 | 1 | 21 - 41 | III | 4420.15-4421.30 | 1+ | 21 - 41 |
| III | | 1804.45-1805 | 1- | 25 - 35 | 19 | continuum | 41524-1700 | 1- | 22 - 41 |
| III | | 1945-1946.45 | 1+ | 21 - 41 | | continuum | 2125-2440 | 1- | 25 - 41 |
| III | | 2152.15-2153 | 1 | 19 - 41 | | continuum | 41524-2400 | 1- | 24 - 41 |
| III | | 2312.30-2312.45 | 1- | 22 - 41 | | III | 1650.30-1651.15 | 1+ | 7.6-41 |
| III | | 1532.45-1533.15 | 1- | 23 - 38 | | III | 1955.45-1956.30 | 1+ | 25 - 41 |
| 6 | III | 1622.15-1622.30 | 1+ | 27 - 41 | 20 | continuum | 41528-2450 | 1- | 24 - 41 |
| | III | 1627.45-1628.15 | 1- | 18 - 34 | | III | 1838.15-1838.45 | 1+ | 24 - 41 |
| | III | 1828-1828.15 | 1- | 28 - 41 | | III | 2033-2034.15 | 1+ | 12 - 41 |
| | continuum | 1935-2115 | 1- | 19 - 41 | | III | 2338.30-2339 | 1+ | 23 - 41 |
| | III | 2014.30-2014.45 | 1- | 29 - 41 | | III | 2358-2359 | 1+ | 24 - 41 |
| | III | 2103.45-2104.15 | 1- | 22 - 35 | 21 | continuum | 41535-2435 | 1- | 26 - 41 |
| | continuum | 2359-2410 | 1- | 24 - 41 | | III | 1810.45-1812.15 | 1+ | 13 - 41 |
| | III | 1514.30-1518.30 | 1- | 21 - 41 | | III | 1850.45-1851.45 | 1+ | 13 - 41 |
| | continuum | 1519-1550 | 1- | 22 - 41 | | III | 2123.15-2123.30 | 1+ | 24 - 41 |
| | III | 1631.15-1631.45 | 1 | 21 - 41 | | III | 2300-2300.15 | 1+ | 24 - 41 |
| 10 | III | 1737.15-1737.45 | 1- | 23 - 41 | 22 ^{XA} | III | 4426.30-4427.15 | 1+ | 21 - 41 |
| | III | 1832.45-1833 | 1 | 23 - 41 | | III | 4432.30-4433 | 1 | 26 - 41 |
| | III | 1335-1335.30 | 1- | 25 - 41 | | III | 4452-4452.15 | 1 | 27 - 41 |
| | III | 1530-1530.15 | 1- | 30 - 41 | | continuum | 41505-2445 | 1- | 24 - 41 |
| | III | 1537.15-1537.45 | 1- | 24 - 41 | | III | 1509.15-1510 | 1+ | 27 - 41 |

^c = many faint type III's not reported

^{XA} = no observations 2210-2253

SOLAR RADIO EMISSION SPECTRUM OBSERVATIONS

MARCH 1962

HAO BOULDER

7.6-41 MC

| Date 1962 | Bursts | | | Frequency Range (mc) | Date 1962 | Bursts | | | Frequency Range (mc) | |
|--------------|-----------------|-----------------|-----------------|-------------------------|-----------------|-----------------|-----------------|-----------------|-------------------------|---------|
| | Type | Time (U.T.) | Inten- sity | | | Type | Time (U.T.) | Inten- sity | | |
| 22 Mar | III | 1613.30-1644.15 | 1+ | 25 - 41 | 24 Mar | III | 2154-2154.30 | 1 | 21 - 41 | |
| | III | 1732-1732.30 | 1 | 12 - 41 | | III | 2158.15-2159 | 2 | 21 - 41 | |
| | III | 1735-1738 | 1 | 12 - 41 | | III | 2159-2200 | 1+ | 16.5-41 | |
| | III | 1738.15-1739.45 | 1 | 12 - 41 | | III | 2513.45-2514 | 1 | 26 - 41 | |
| | III | 1740-1742.15 | 1 | 12 - 41 | | III | 1611.45-1612 | 1+ | 24 - 41 | |
| 23 | continuum | III | 2351.15-2355 | 1+ | 22 - 41 | 25 | III | 1617.45-1618 | 1 | 24 - 41 |
| | | III | 1523-1547.30 | 1 | 22 - 41 | | III | 1902.30-1904.30 | 2 | 8.5- 41 |
| | | III | 1551-1551.30 | 1- | 24 - 38 | | III | 1905.15-1909.45 | 2+ | 7.6- 41 |
| | | III | 1559.30-1559.45 | 1- | 25 - 38 | | III | 1415.15-1415.30 | 1 | 25 - 41 |
| | | III | 1704-1704.30 | 1- | 24 - 38 | | III | 1424.30-1425.15 | 1 | 26 - 41 |
| | III | 1737.45-1738.15 | 1- | 24 - 41 | 26 | III | 1615.15-1615.45 | 1 | 31 - 41 | |
| | III | 1741.30-1742 | 1 | 24 - 41 | | III | 1615.45-1616.15 | 1- | 31 - 41 | |
| | III | 1801.15-1801.30 | 1- | 25 - 41 | | III | 1606.30-1607 | 1 | 22 - 41 | |
| | III | 1916.30-1917 | 1 | 23 - 39 | | 29 30 | III | 1342-1342.30 | 1 | 23 - 41 |
| | III | 1942-1942.15 | 1 | 25 - 41 | | | III | 1507.45-1508.30 | 1- | 21 - 41 |
| | III | 1947.45-1948 | 1 | 26 - 32 | III | | 1508.30-1509.30 | 1+ | 16.5-41 | |
| | III | 2113.30-2114 | 1 | 20 - 41 | III | | 1537.30-1540 | 1 | 21 - 38 | |
| | III | 2119-2119.30 | 1 | 24 - 41 | III | | 1605.30-1606.15 | 1 | 16.5-41 | |
| | 24 ^c | III | 2143.45-2144.15 | 1- | 27 - 41 | III | 1707.30-1708 | 1 | 22 - 41 | |
| | | III | 2149.15-2149.45 | 1 | 22 - 41 | III | 1714.15-1714.45 | 1- | 24 - 34 | |
| III | | 2150.45-2151.15 | 1- | 22 - 41 | 31 | III | 1758-1759.15 | 1 | 24 - 41 | |
| III | | 2208-2208.30 | 1 | 20 - 41 | | III | 1825.15-1826 | 1+ | 22 - 41 | |
| III | | 2218.45-2219.15 | 1- | 21 - 38 | | III | 1833.45-1835 | 2 | 7.6- 41 | |
| III | | 2227-2227.30 | 1+ | 21 - 41 | | III | 1936.30-1937.15 | 2 | 11 - 41 | |
| III | | 2230-2230.15 | 1- | 25 - 41 | | III | 1937.15-1938.30 | 2 | 11 - 41 | |
| III | | 2259.15-2259.30 | 1- | 33 - 41 | III | 1939.30-1940.15 | 1 | 12 - 41 | | |
| III | | 2309-2309.30 | 1 | 30 - 41 | III | 1940.15-1941 | 1+ | 12 - 41 | | |
| III | | 1541.45-1542 | 1- | 24 - 41 | III | 2051.45-2053.15 | 2 | 13 - 41 | | |
| III | | 1550.30-1550.45 | 1+ | 23 - 41 | III | 2130.30-2131.30 | 2 | 13 - 41 | | |
| III | | 1555.30-1555.45 | 1- | 25 - 41 | III | 2134.15-2135 | 1+ | 13 - 41 | | |
| III | | 1603.15-1603.45 | 1 | 20 - 41 | III | 2247.15-2248 | 1+ | 22 - 41 | | |
| III | | 1612-1612.30 | 1 | 20 - 41 | III | 2248.15-2249 | 1+ | 22 - 41 | | |
| III | | 1615.15-1616 | 1+ | 23 - 41 | III | 2249-2249.30 | 2 | 21 - 41 | | |
| III | | 1638.45-1639 | 1- | 25 - 41 | III | 2250.30-2251.15 | 1- | 24 - 41 | | |
| III | | 1639.30-1640 | 1 | 25 - 41 | III | 2251.30-2252 | 1 | 24 - 41 | | |
| III | | 1653.30-1654.30 | 1+ | 26 - 41 | III | 2341.30-2342.15 | 1 | 28 - 41 | | |
| III | | 1832.15-1832.45 | 1+ | 24 - 41 | III | 2458.15-2458.45 | 1- | 25 - 33 | | |
| III | | 1837.15-1837.45 | 1 | 22 - 41 | III | 2459-2459.30 | 1 | 25 - 33 | | |
| III | 1937.30-1938 | 1 | 21 - 41 | III | 2500-2500.15 | 1 | 25 - 32 | | | |
| III | 1939-1939.30 | 1 | 22 - 41 | III | 1639.30-1639.45 | 1- | 22 - 37 | | | |
| III | 2016.45-2017 | 1 | 25 - 41 | III | 1647.30-1650.45 | 2 | 12 - 41 | | | |
| III | 2023.30-2024 | 1 | 27 - 41 | III | 2045.15-2046.30 | 1+ | 14.5-41 | | | |
| III | 2034.15-2034.45 | 1 | 24 - 41 | III | 2046.30-2046.45 | 1 | 24 - 41 | | | |
| III | 2057.45-2058 | 1 | 21 - 41 | III | 2047-2048.30 | 1+ | 23 - 41 | | | |
| III | 2113.45-2114.15 | 1 | 21 - 38 | III | 2324.30-2325 | 1 | 24 - 41 | | | |
| III | 2133-2134 | 2 | 21 - 41 | III | 2440.45-2442 | 2 | 23 - 41 | | | |
| | | | | | III | 2444.30-2446 | 2 | 24 - 41 | | |

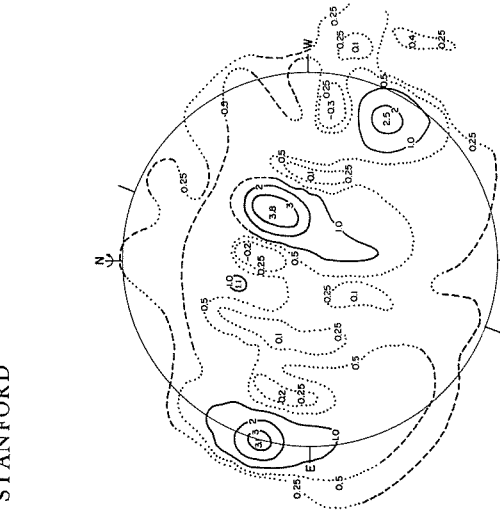
^c = many faint type III's not reported

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

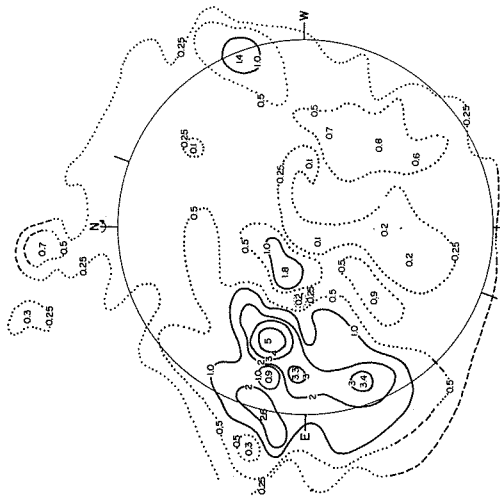
SEPTEMBER 1960

STANFORD

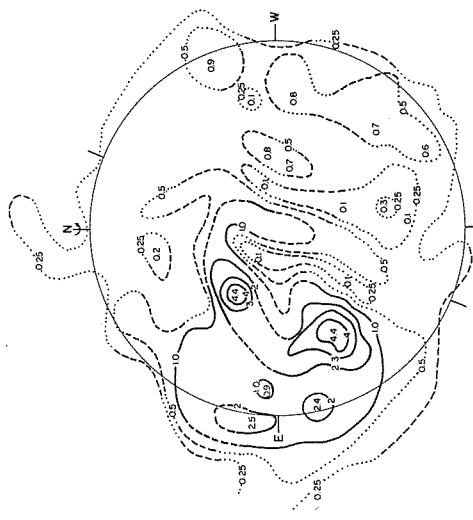
9.1 cm



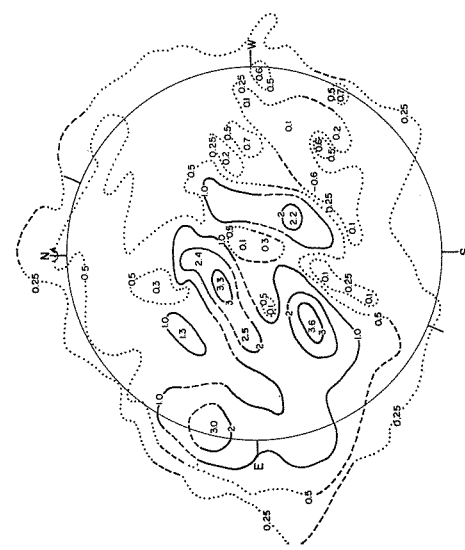
1960 SEPTEMBER 1, 20^h-21^h UT
CONTOUR BRIGHTNESS UNIT = 79,000 *K



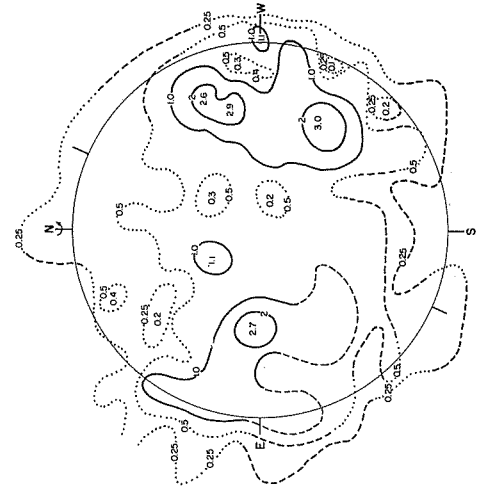
1960 SEPTEMBER 6, 19^h-20^h UT
CONTOUR BRIGHTNESS UNIT = 77,000 *K



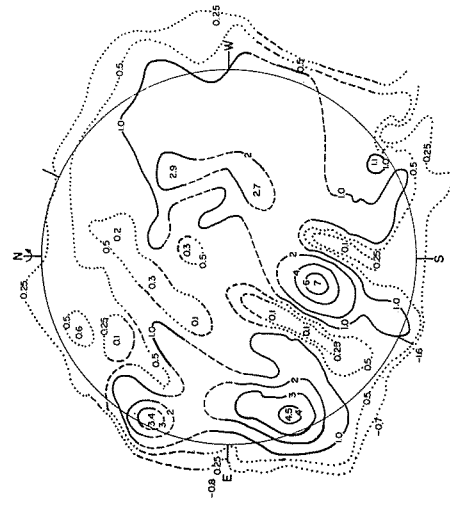
1960 SEPTEMBER 7, 19^h-20^h UT
CONTOUR BRIGHTNESS UNIT = 74,000 *K



1960 SEPTEMBER 6, 19^h-20^h UT
CONTOUR BRIGHTNESS UNIT = 78,000 *K



1960 SEPTEMBER 12, 20^h-21^h UT
CONTOUR BRIGHTNESS UNIT = 79,000 *K

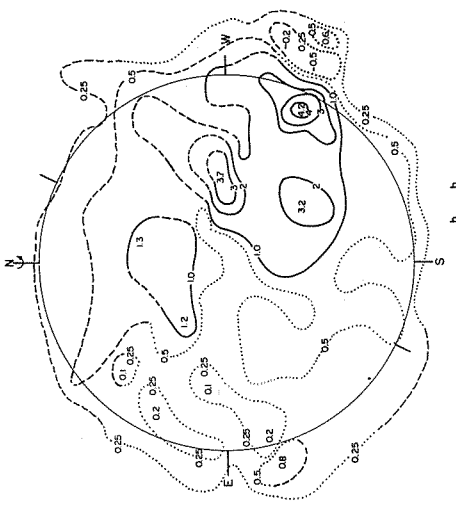
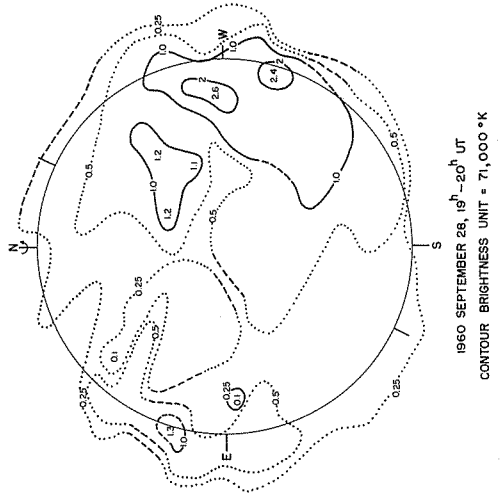
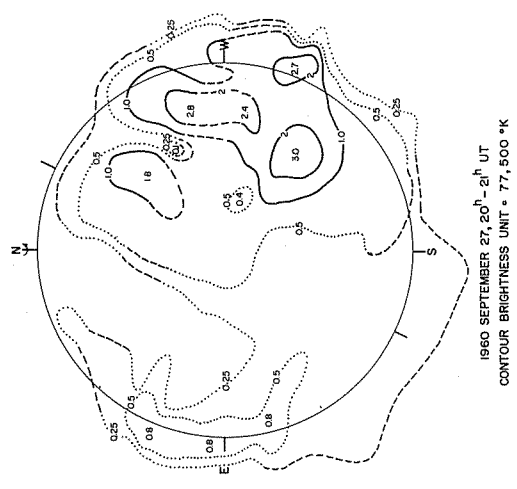
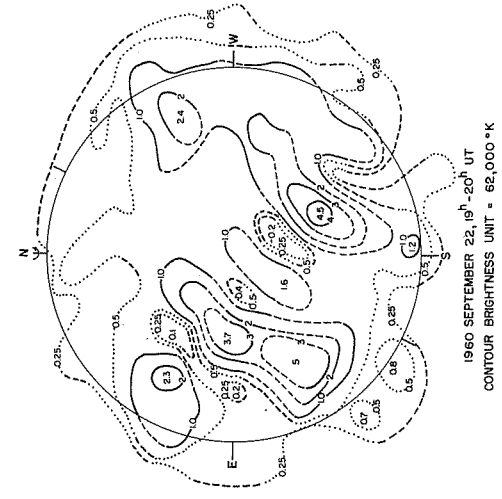
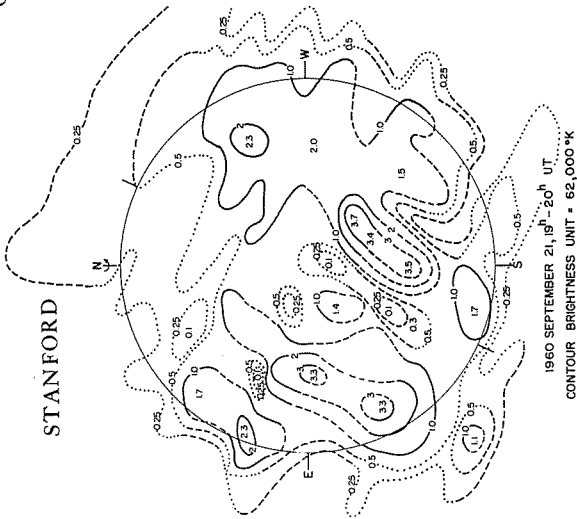


1960 SEPTEMBER 20, 19^h-20^h UT
CONTOUR BRIGHTNESS UNIT = 62,000 *K

OLAR RADIO EMISSION SPECTROHELIOGRAMS
SEPTEMBER 1960

9.1 cm

STANFORD



Footnotes:
Pencil-beam observations were made during this period on only a few days, but E-W fan-beam observations are available for many other days.
In some of the pencil-beam maps for the period September to November 1960, there occurred a small spurious response lying in the E-W plane. This was caused by a small phase shift adjustment in the phasing of the I-2 array and was corrected in the month of January 1961.

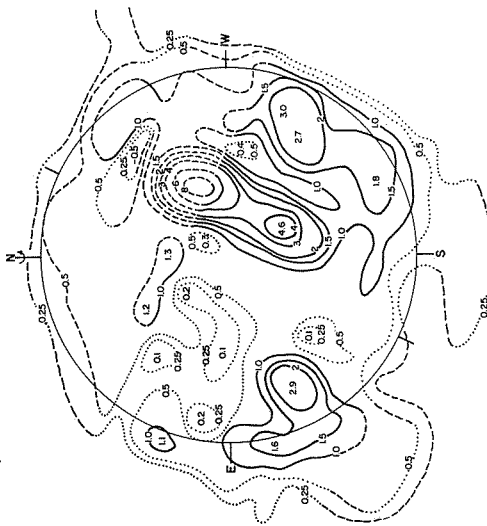
STANFORD - STANFORD - STANFORD

SOLAR RADIO EMISSION SPECTROHELIOGRAMS

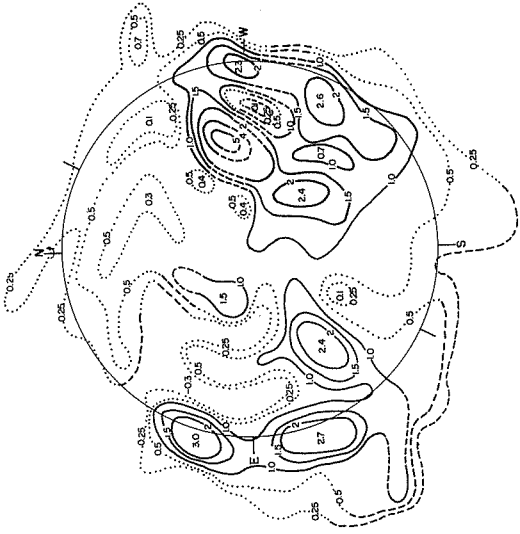
OCTOBER-NOVEMBER 1960

STANFORD

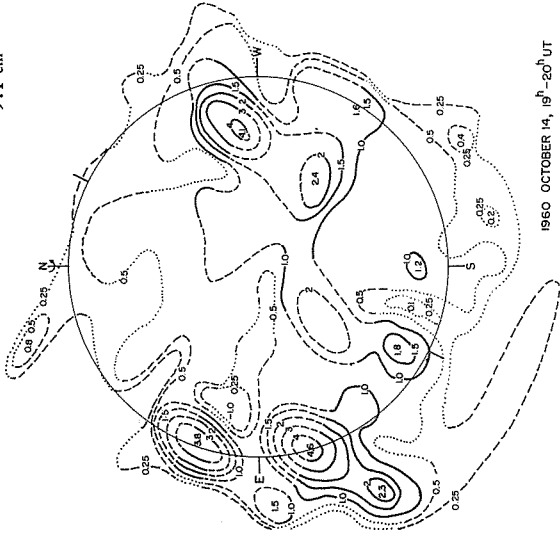
9.1 cm



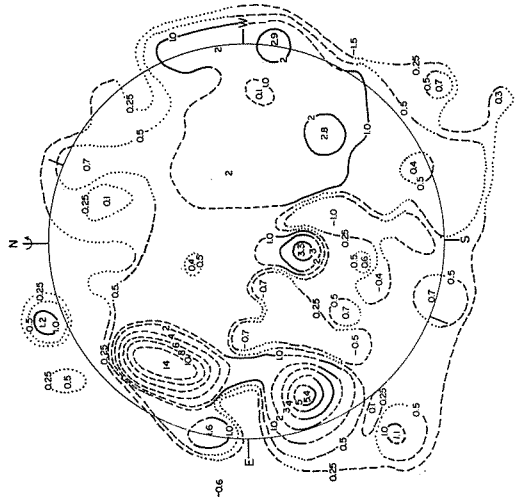
1960 OCTOBER 12, 19^h-20^h UT
CONTOUR BRIGHTNESS UNIT = 50,000 *K



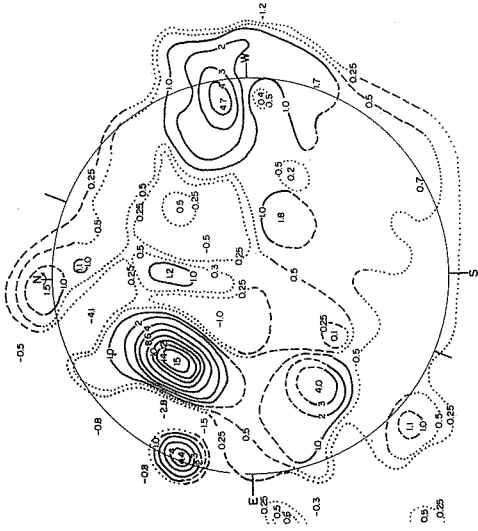
1960 OCTOBER 13, 19^h-20^h UT
CONTOUR BRIGHTNESS UNIT = 56,000 *K



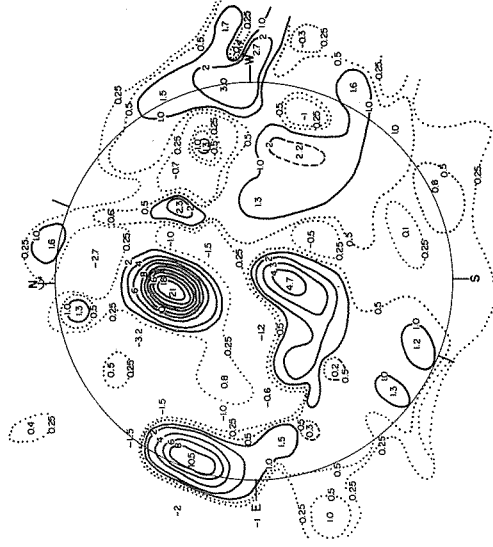
1960 OCTOBER 14, 19^h-20^h UT
CONTOUR BRIGHTNESS UNIT = 52,000 *K



1960 NOVEMBER 8, 20^h-21^h UT
CONTOUR BRIGHTNESS UNIT = 59,000 *K



1960 NOVEMBER 9, 19^h-20^h UT
CONTOUR BRIGHTNESS UNIT = 62,000 *K



1960 NOVEMBER 11, 19^h-20^h UT
CONTOUR BRIGHTNESS UNIT = 63,000 *K

Va

COSMIC RAY INDICES
Climax Neutron Monitor
IGC STATION B 305

FEBRUARY 1962

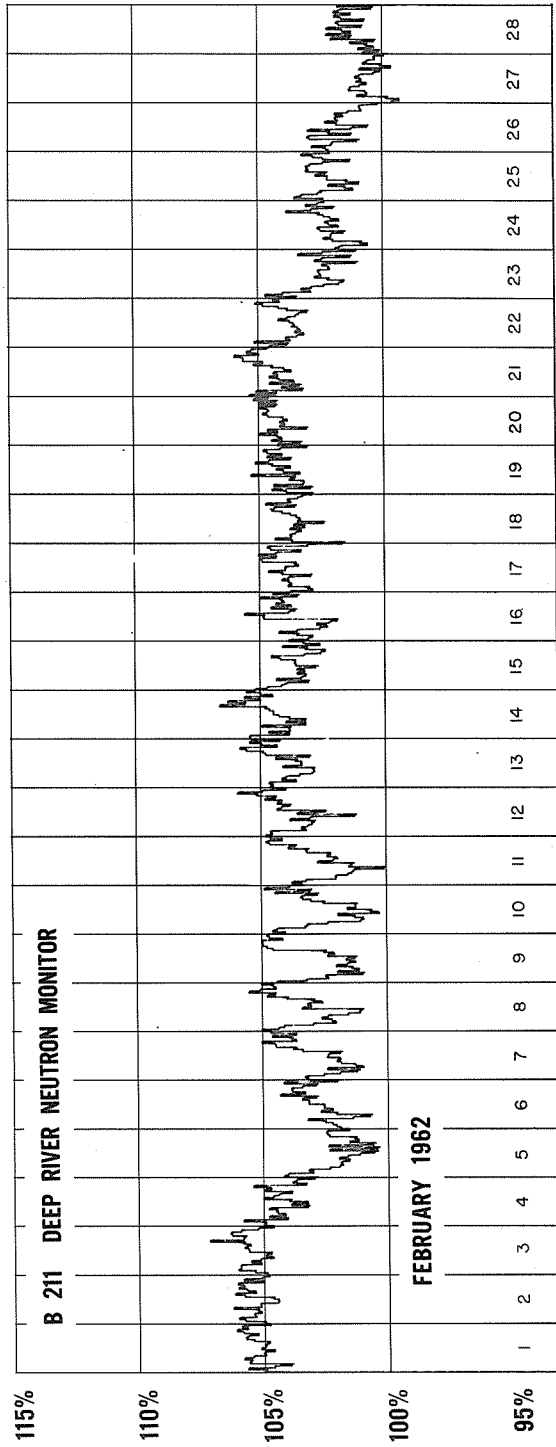
| Feb. 1962 | Daily average counts/hr.* | Feb. 1962 | Daily average counts/hr.* |
|--------------|---------------------------------|--------------|---------------------------------|
| 1 | 3103.7 | 15 | 3072.0 |
| 2 | 3102.1 | 16 | 3076.0 |
| 3 | 3112.6 | 17 | 3095.6 |
| 4 | 3109.4 | 18 | 3087.4 |
| 5 | 3017.1 | 19 | 3086.1 |
| 6 | 3019.7 | 20 | 3099.9 |
| 7 | 3029.4 | 21 | 3115.2 |
| 8 | 3035.9 | 22 | 3091.9 |
| 9 | 3031.5 | 23 | 3064.4 |
| 10 | 3010.9 | 24 | 3055.7 |
| 11 | 3029.1 | 25 | 3058.2 |
| 12 | 3081.7 | 26 | 3029.3 |
| 13 | 3080.6 | 27 | 3024.5 |
| 14 | 3079.2 | 28 | 3012.5 |

COMMERCE - STANDARDS - BOULDER

*Scaling Factor 128

COSMIC RAY INDICES

(Pressure Corrected Hourly Totals)



COMMERCE - STANDARDS - BOULDER

GEOMAGNETIC ACTIVITY INDICES

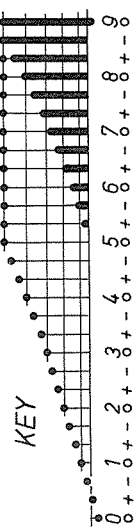
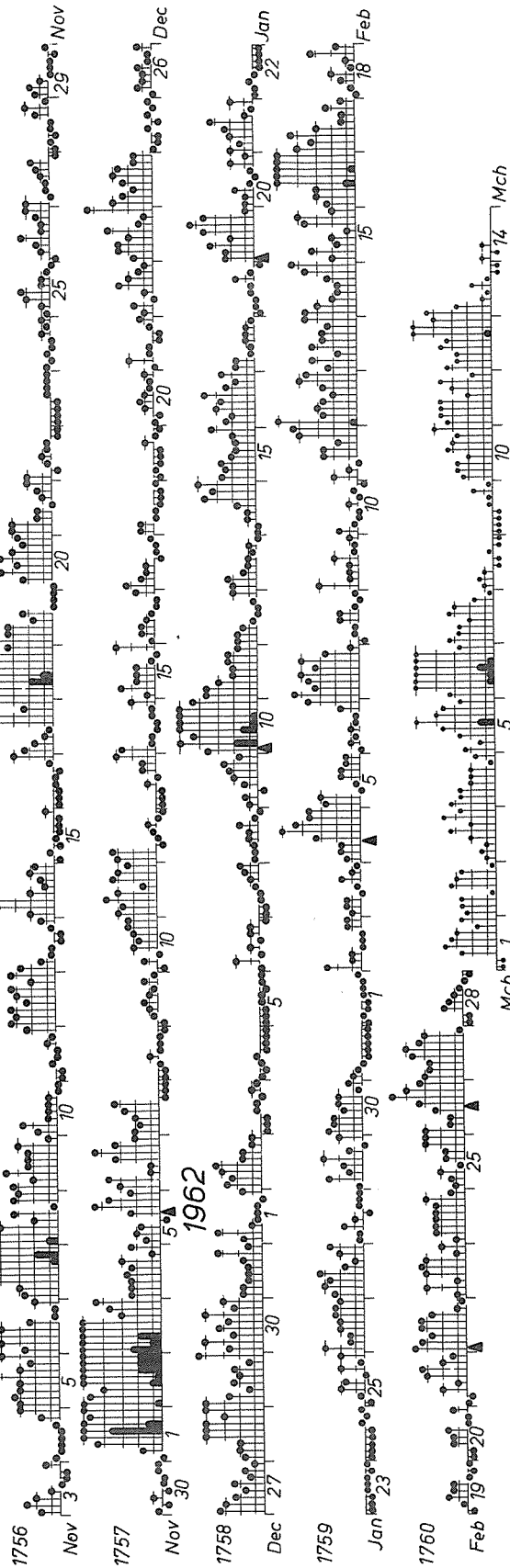
FEBRUARY 1962

| Feb. 1962 | C | Values Kp | | | | | | | | Sum | Ap | Final Selected Days | |
|--------------|------|-------------------------|----|----|----|----|----|----|----|-------|----|---------------------------|----|
| | | Three hour Gr. interval | | | | | | | | | | | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| 1 | 0.0 | 0o | 0+ | 0o | 0o | 0+ | 0+ | 0+ | 1- | 2o | 1 | Five Quiet | |
| 2 | 0.1 | 3- | 1o | 1o | 0+ | 0+ | 0+ | 1+ | 1+ | 8+ | 4 | | |
| 3 | 0.1 | 1o | 1+ | 1+ | 0+ | 1- | 2- | 1o | 1- | 8o | 4 | | |
| 4 | 1.4 | 1+ | 2- | 2- | 3+ | 5o | 4+ | 4- | 4- | 25- | 20 | | |
| 5 | 0.4 | 3- | 3o | 0+ | 1- | 2- | 2- | 1+ | 1+ | 13- | 7 | | |
| 6 | 0.4 | 0+ | 1o | 1- | 1o | 1- | 1- | 2- | 4- | 10- | 6 | | |
| 7 | 1.1 | 4+ | 3+ | 4- | 4o | 3+ | 4o | 3- | 1o | 26+ | 20 | | |
| 8 | 0.1 | 0o | 1- | 1- | 2- | 2- | 1- | 0+ | 1- | 6+ | 3 | | |
| 9 | 0.1 | 3o | 1o | 1o | 1o | 2o | 1- | 1- | 1o | 10+ | 6 | | |
| 10 | 0.0 | 2- | 1- | 0+ | 0+ | 1o | 0+ | 1- | 0o | 5o | 3 | | |
| 11 | 0.9 | 2o | 1o | 0+ | 3- | 3- | 2- | 4o | 4+ | 19- | 13 | Five Disturbed | |
| 12 | 1.0 | 5+ | 3- | 3o | 3- | 2o | 3- | 4o | 4- | 26o | 20 | | |
| 13 | 0.9 | 2+ | 3+ | 2- | 3+ | 3- | 3- | 2+ | 4- | 22o | 13 | | |
| 14 | 0.9 | 4- | 3o | 2o | 2- | 2- | 2+ | 4- | 4+ | 22+ | 15 | | |
| 15 | 0.9 | 2o | 3+ | 2- | 2o | 1o | 4- | 4o | 2o | 20- | 12 | | |
| 16 | 1.5 | 2+ | 3o | 3o | 6- | 5o | 5+ | 5o | 5o | 34+ | 28 | | |
| 17 | 0.8 | 4o | 3+ | 4+ | 3o | 1+ | 1+ | 2+ | 1+ | 21o | 14 | | |
| 18 | 0.4 | 0+ | 1- | 1+ | 2o | 1- | 1o | 3+ | 2- | 11o | 6 | | |
| 19 | 0.0 | 0o | 1- | 2- | 1+ | 1+ | 0+ | 0o | 0+ | 6- | 3 | | |
| 20 | 0.0 | 0o | 0o | 1+ | 1+ | 2- | 0+ | 0+ | 1+ | 6+ | 3 | | |
| 21 | 0.4 | 0+ | 0o | 2o | 1o | 3o | 3+ | 2o | 1+ | 13o | 7 | Ten Quiet | |
| 22 | 0.8 | 4- | 3+ | 3- | 3+ | 3+ | 3- | 1o | 1- | 21- | 13 | | |
| 23 | 0.6 | 1o | 3o | 1o | 3o | 3+ | 3o | 1o | 2o | 17+ | 10 | | |
| 24 | 0.6 | 1o | 2+ | 2+ | 2+ | 2+ | 2+ | 3o | 1+ | 17o | 9 | | |
| 25 | 0.5 | 1o | 1+ | 2o | 1- | 2- | 2- | 3o | 3o | 14+ | 8 | | |
| 26 | 1.2 | 3o | 1+ | 1+ | 2+ | 3+ | 5- | 4o | 3+ | 23+ | 17 | | |
| 27 | 1.0 | 3o | 3- | 3- | 4- | 4o | 3+ | 3o | 1- | 23o | 17 | | |
| 28 | 0.0 | 0o | 0o | 2- | 1+ | 1o | 1- | 0+ | 0o | 5o | 2 | | |
| | | | | | | | | | | | | | 9 |
| | | | | | | | | | | | | | 10 |
| | | | | | | | | | | | | 19 | |
| | | | | | | | | | | | | 20 | |
| | | | | | | | | | | | | 28 | |
| Mean: | 0.58 | | | | | | | | | Mean: | 10 | | |

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.



▲ = sudden commencement

PLANETARY MAGNETIC
THREE-HOUR-RANGE INDICES

Kp till 1962 February 28
(Ks from Wingst and Göttingen till March 14)

J.B.

CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS

FEBRUARY 1962

NORTH PACIFIC

NORTH ATLANTIC

| DATE FEBRUARY 1962 | NORTH ATLANTIC 6-HOURLY QUALITY FIGURES | | | SHORT-TERM FORECASTS ISSUED ABOUT ONE HOUR IN ADVANCE OF: | | | WHOLE DAY INDEX | ADVANCE FORECAST: (J-REPORTS) FOR WHOLE DAY, ISSUED IN ADVANCE BY: | | | GEOMAGNETIC K _{FR} | NORTH PACIFIC 12-HOURLY QUALITY FIGURES | | | SHORT-TERM FORECASTS ISSUED AT: | | WHOLE DAY INDEX | ADVANCE FORECASTS (U-REPORTS) FOR WHOLE DAY, ISSUED IN ADVANCE BY: | | | GEOMAGNETIC K _{SI} | | | | | | | | | | | | | | | | | | | | | |
|--------------------------|---|----------------|----------------|---|----------------|----------------|-----------------------|---|-------------|-----|--------------------------------|---|--------------------|--------------------|---------------------------------------|-------------------------|-----------------------|---|-----|-----|--------------------------------|--------------------|------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | 00 TO 06 | 06 TO 12 | 12 TO 18 | 00 TO 06 | 06 TO 12 | 12 TO 18 | | 1-7 DAYS DRS DAYS | FINAL J5 | SOW | | J | 0700 TO 1900 | 1800 TO 0700 | 0600 1800 | 1-7 DAYS DRS DAYS | | FINAL J5 | SDW | Jp | | HALF DAY (1) | DAY (2) | | | | | | | | | | | | | | | | | | | |
| 01 | 5+ | 4+ | 6+ | 5 | 5 | 6 | 5+ | 6 | 6 | 6 | 0 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |
| 02 | 6+ | 6+ | 6+ | 5 | 4 | 6 | 6+ | 6 | 6 | 6 | 1 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 1 | 0 | | | | | | | | | | | | | | | | | | | | | |
| 03 | 5+ | 5+ | 7- | 5 | 4 | 6 | 6+ | 6 | 6 | 6 | 1 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |
| 04 | 6- | 5+ | 7- | 5 | 5 | 6 | 6+ | 6 | 6 | 6 | (4) | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 1 | (4) | | | | | | | | | | | | | | | | | | | | | |
| 05 | 5- | 5- | 7- | 5 | 5 | 7 | 6- | 6 | 6 | 6 | 2 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | |
| 06 | 5- | 3+ | 6+ | 5 | 5 | 6 | 6- | 6 | 6 | 6 | 1 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 3 | 2 | | | | | | | | | | | | | | | | | | | | | |
| 07 | 6- | 4- | 6- | 5 | 5 | 6 | 6- | 6 | 6 | 6 | (4) | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 5 | 3 | 0 | | | | | | | | | | | | | | | | | | | | | |
| 08 | 5- | 4+ | 7- | 5 | 4 | 6 | 6+ | 6 | 6 | 6 | 1 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 5 | 3 | 0 | | | | | | | | | | | | | | | | | | | | | |
| 09 | 5+ | 5- | 7- | 5 | 5 | 6 | 6- | 6 | 6 | 6 | 2 | 5 | 6 | 7 | 6 | 6 | 6 | 6 | 6 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | |
| 10 | 6- | 5- | 6+ | 5 | 4 | 6 | 6- | 6 | 6 | 6 | 1 | 6 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | |
| 11 | 5+ | 5- | 6+ | 6 | 5 | 7 | 6 | 6- | 6 | 6 | 2 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 1 | 2 | | | | | | | | | | | | | | | | | | | | | |
| 12 | 5+ | 4- | 6+ | 5 | 4 | 6 | 6+ | 6 | 6 | 6 | 3 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 3 | 2 | | | | | | | | | | | | | | | | | | | | | |
| 13 | 4+ | 4+ | 6+ | 5 | 4 | 6 | 6 | 5- | 6 | 6 | 3 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | |
| 14 | 4+ | 4- | 7- | 5 | 4 | 6 | 6- | 6 | 6 | 6 | 3 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | |
| 15 | 4+ | 4+ | 6+ | 4 | 4 | 6 | 6 | 5- | 6 | 6 | 2 | 5 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | |
| 16 | 4+ | 4+ | 5+ | 4 | 4 | 5 | 5 | (4+) | 5 | 5 | 3 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | (4) | (5) | | | | | | | | | | | | | | | | | | | | | |
| 17 | 3+ | 3+ | 6+ | 4 | 3 | 6 | 5 | (4) | 5 | 5 | 3 | 6 | 5 | 4 | 6 | 6 | 6 | 6 | 6 | 3 | 1 | | | | | | | | | | | | | | | | | | | | | |
| 18 | 4+ | 3+ | 7- | 4 | 4 | 6 | 6 | 5+ | 6 | 6 | 1 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | |
| 19 | 5+ | 4+ | 7- | 5 | 4 | 7 | 6 | 6- | 6 | 6 | 1 | 6 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 1 | 0 | | | | | | | | | | | | | | | | | | | | | |
| 20 | 5+ | 4- | 7- | 5 | 4 | 6 | 6- | 6- | 6 | 6 | 1 | 6 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 1 | 1 | | | | | | | | | | | | | | | | | | | | | |
| 21 | 6+ | 5+ | 7- | 5 | 4 | 7 | 6 | 6+ | 6 | 6 | 1 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 1 | 2 | | | | | | | | | | | | | | | | | | | | | |
| 22 | 6- | 5+ | 7- | 5 | 4 | 7 | 5 | 6+ | 5 | 5 | 3 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | |
| 23 | 6- | 6- | 7- | 5 | 5 | 7 | 6 | 6+ | 5 | 5 | 2 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | |
| 24 | 6+ | 5+ | 7- | 6 | 6 | 7 | 7 | 6+ | 5 | 5 | 2 | 6 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 2 | 2 | | | | | | | | | | | | | | | | | | | | | |
| 25 | 6+ | 6- | 7- | 6 | 6 | 5 | 7 | 6+ | 6 | 6 | 1 | 6 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 0 | 2 | | | | | | | | | | | | | | | | | | | | | |
| 26 | 6+ | 6- | 7- | 6 | 6 | 7 | 6 | 6+ | 6 | 6 | 2 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 3 | 3 | | | | | | | | | | | | | | | | | | | | | |
| 27 | 6+ | 5- | 6- | 6 | 5 | 6 | 6- | 6- | 6 | 6 | 3 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 0 | 3 | | | | | | | | | | | | | | | | | | | | | |
| 28 | 4+ | 4+ | 7- | 6+ | 5 | 4 | 6 | 5+ | 6 | 6 | 1 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 3 | 1 | | | | | | | | | | | | | | | | | | | | | |
| Score: Quiet Periods | P | 13 | 6 | 18 | 18 | | | | 15 | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S | 8 | 7 | 10 | 9 | | | | 11 | 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | U | 0 | 0 | 0 | 0 | | | | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | F | 0 | 1 | 0 | 0 | | | | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Disturbed Periods | P | 3 | 10 | 0 | 0 | | | | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | S | 4 | 3 | 0 | 1 | | | | 2 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | U | 0 | 1 | 0 | 0 | | | | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | F | 0 | 0 | 0 | 0 | | | | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Score: Quiet Periods | | | | | | | | | | | | | | | | | | | | | | 10 | 11 | | | | | | | | | | | | | | | | | | | |
| Score: Disturbed Periods | | | | | | | | | | | | | | | | | | | | | | 15 | 13 | | | | | | | | | | | | | | | | | | | |
| Score: Quiet Periods | | | | | | | | | | | | | | | | | | | | | | 8 | 10 | 9 | | | | | | | | | | | | | | | | | | |
| Score: Disturbed Periods | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| Score: Quiet Periods | | | | | | | | | | | | | | | | | | | | | | 0 | 1 | 1 | | | | | | | | | | | | | | | | | | |
| Score: Disturbed Periods | | | | | | | | | | | | | | | | | | | | | | 0 | 1 | 1 | | | | | | | | | | | | | | | | | | |
| Score: Quiet Periods | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| Score: Disturbed Periods | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| Score: Quiet Periods | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | | | | | |
| Score: Disturbed Periods | | | | | | | | | | | | | | | | | | | | | | 0 | | | | | | | | | | | | | | | | | | | | |

COMMENCE - STANDARDS - BOULDER

() Represent disturbed values
All times are Universal Time (U.T.)

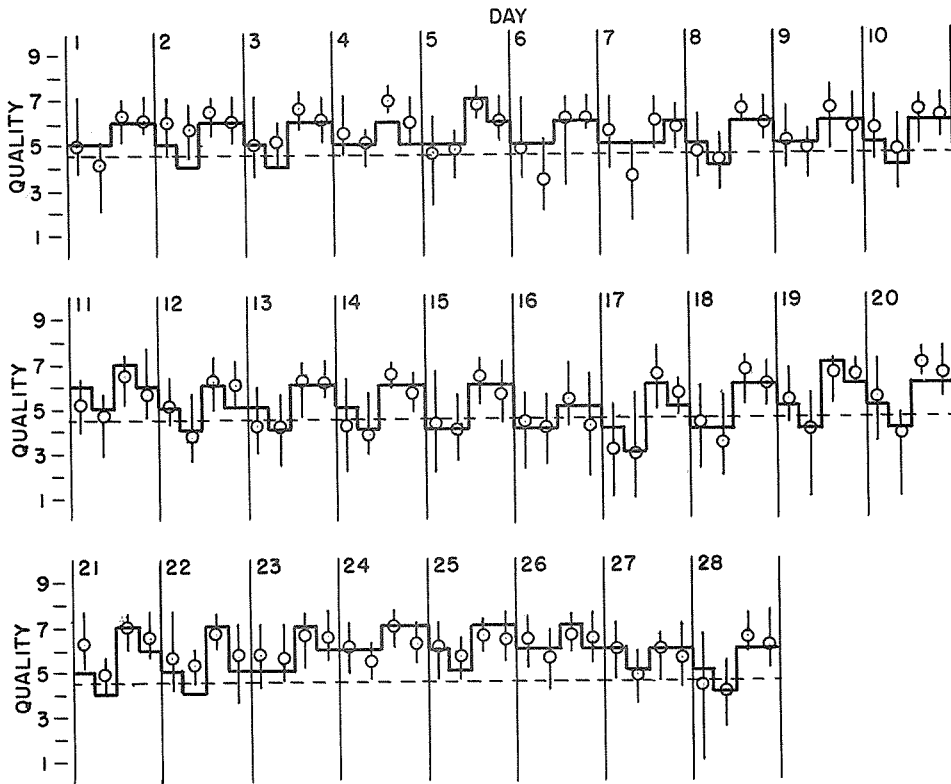
CRPL RADIO PROPAGATION QUALITY FIGURES AND FORECASTS
NORTH ATLANTIC

VIIb

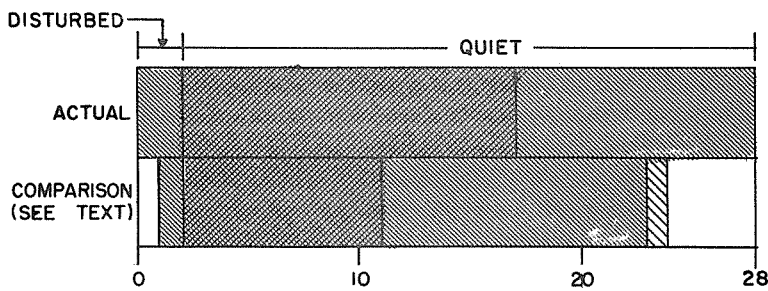
FEBRUARY 1962

— Short-term forecast
o Quality figure

| Range of reports

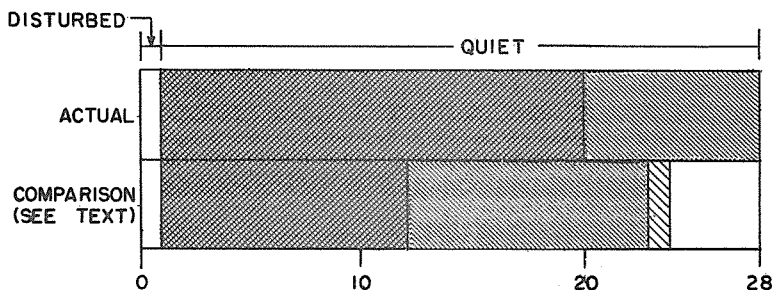


OUTCOME OF ADVANCED FORECASTS FINAL ESTIMATE
NORTH ATLANTIC



P
S
U
F

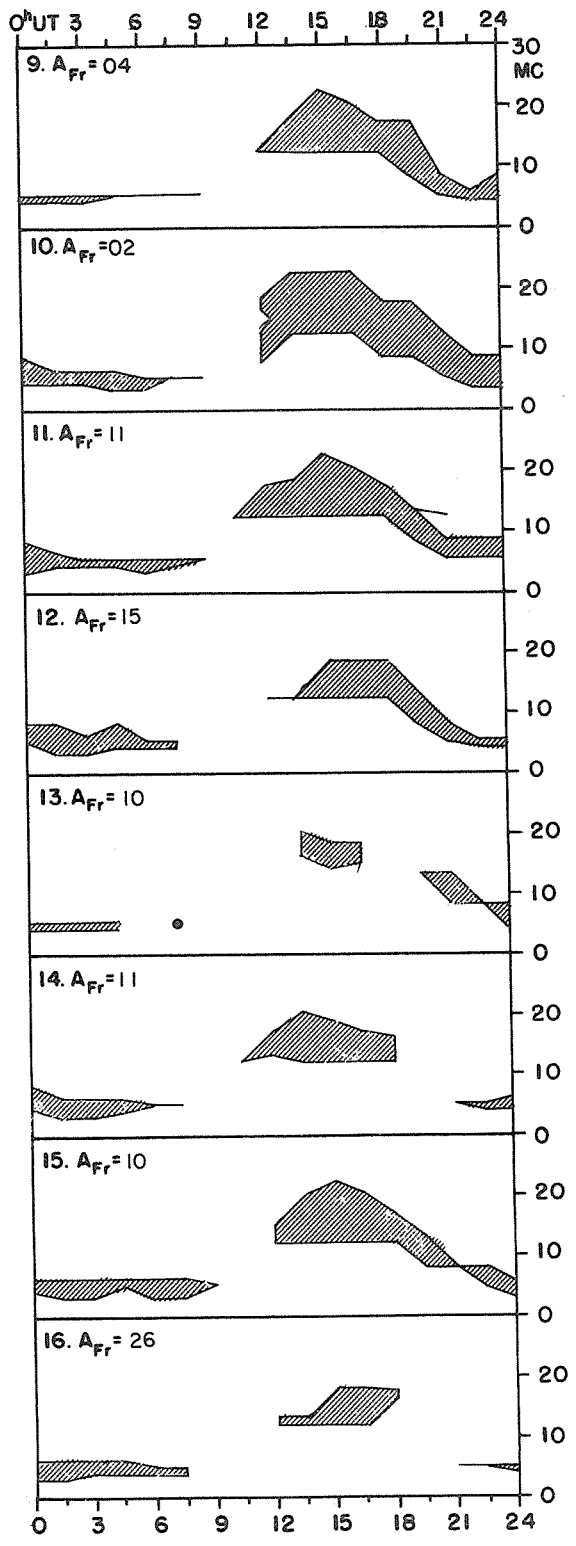
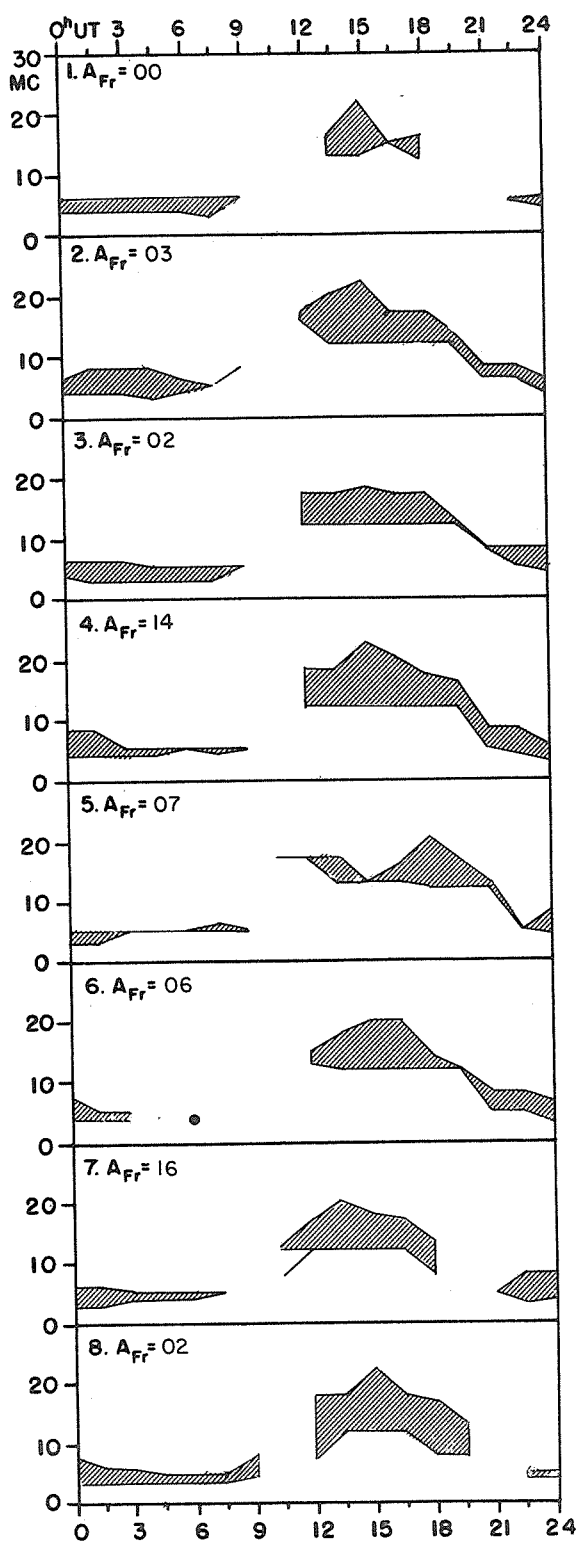
NORTH PACIFIC



P
S
U
F

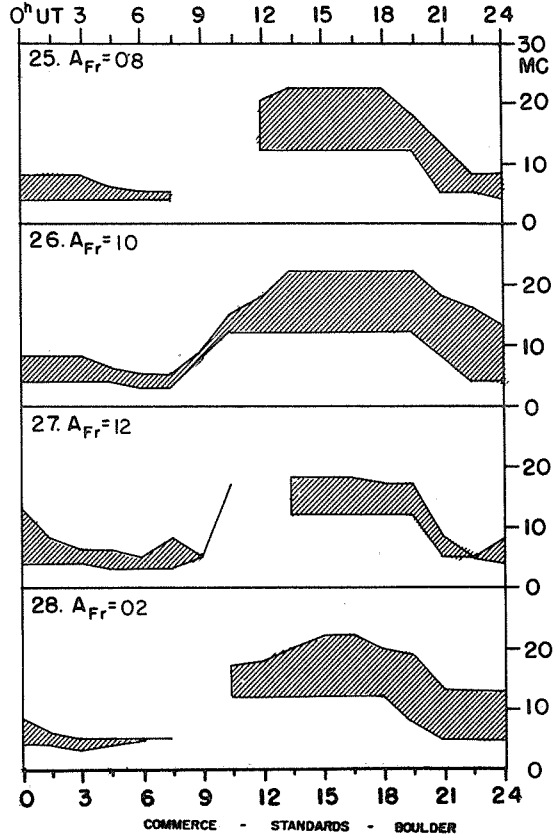
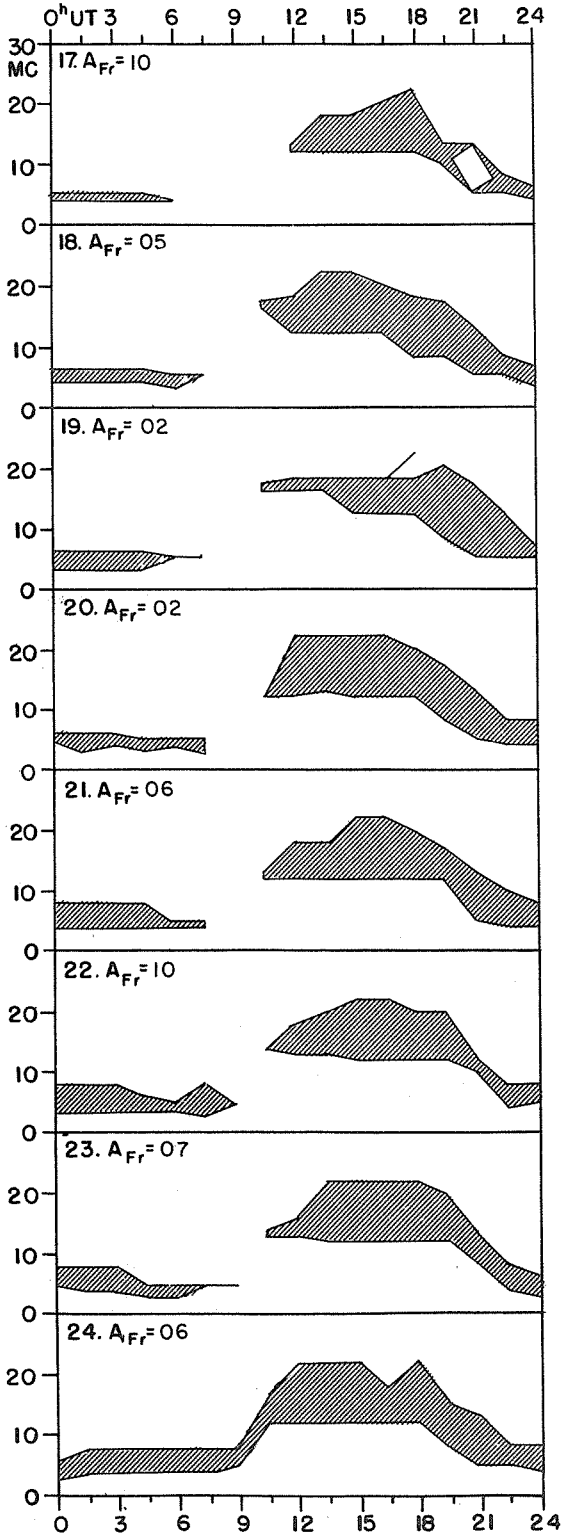
USEFUL FREQUENCY RANGES -- NORTH ATLANTIC PATH

FEBRUARY 1962



USEFUL FREQUENCY RANGES -- NORTH ATLANTIC PATH

FEBRUARY 1962



Adapted from Observations by Deutsches Bundespost

ALERT PERIODS AND SPECIAL WORLD INTERVALS

INTERNATIONAL WORLD DAY SERVICE

MARCH 1962

| Issued March 1962 Day/Time U.T. | Advance Geophysical Alert | No. | World-Wide Geophysical Alert | Special World Intervals |
|---------------------------------------|--|-----|------------------------------|-------------------------|
| 01/1710 | McMath, Solar Flare, Two Plus 01/1640Z | | | |
| 02/1600 | | 162 | | Start (Predicted) |
| 03/1600 | | 163 | | Finish (Predicted) |
| 06/1600 | | 164 | Magnetic Storm, 06/02XXZ | |
| 13/1855 | Climax Solar Flare, One Plus, 13/1502Z | | | |
| 23/0320 | Sac Peak, Solar Flare, Two, 22/2235Z | | | |
| 25/1730 | Sac Peak, Solar Flare, Two, 25/1406Z | | | |
| 31/1735 | Lockheed, Solar Flare, Two 31/1545Z | | | |