# Observations of solar flux at the Algonquin Radio Observatory on 2800 MC/S and at the Dominion Radio Astrophysical Observatory on 2700 MC/S: monthly reports, January-June 1971

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**Publisher's version / Version de l'éditeur:**
https://doi.org/10.4224/21276339
*Report (National Research Council of Canada. Radio and Electrical Engineering Division : ERB), 1971-08*

ERB-863

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RADIO AND ELECTRICAL ENGINEERING DIVISION



# OBSERVATIONS OF SOLAR FLUX AT THE ALGONQUIN RADIO OBSERVATORY ON 2800 MHz AND AT THE DOMINION RADIO ASTROPHYSICAL OBSERVATORY ON 2700 MHz MONTHLY REPORTS - JANUARY - JUNE 1971

A. E. COVINGTON, H. P. GAGNON, AND J. D. MOORE

OTTAWA

AUGUST 1971

## ABSTRACT

Tabulations of the daily values of solar radio flux and bursts observed on a frequency of 2800 MHz at the Algonquin Radio Observatory, and on 2700 MHz at the Dominion Radio Astrophysical Observatory are given for the period January–June 1971

## CONTENTS



## FIGURE

MONTHLY REPORT NO. 288

JANUARY, 1971

DAILY VALUES OF SOLAR FLUX AT 2800 MHz (OTTAWA-ARO)
AND 2700 MHz (PENTICTON-DRAO) -- SERIES "C"

Flux in watts/$m^2$/cycles/sec bandwidth (x $10^{-22}$) -- 2 polarizations

| 1971 | OTTAWA | | | | PENTICTON | |
|---|---|---|---|---|---|---|
| | | Observed | | adj. to 1 A.U. | Observed | adj. to 1 A.U. |
| Jan. | 14:00 | 17:00 | 20:00 | 17:00 | 19:35 | 19:35 |
| 1 | 136.7 | 135.0 | 135.5 | 130.5 | --- | --- |
| 2 | 136.1 | 139.4 | 135.4 | 134.8 | --- | --- |
| 3 | 138.2 | (139.3) | 140.4 | (134.7) | --- | --- |
| 4 | 143.3 | 145.0 | 144.8 | 140.2 | 138.7 | 134.1 |
| 5 | 150.9 | 151.1 | 148.1 | 146.1 | 143.4 | 138.7 |
| 6 | 153.4 | 151.9 | 152.3 | 146.9 | 148.5 | 143.6 |
| 7 | 156.4 | 155.3 | 155.7 | 150.2 | 150.4 | 145.4 |
| 8 | 154.7 | 154.2 | 157.4 | 149.1 | 151.6 | 146.6 |
| 9 | 158.1 | 158.1* | 158.0* | 152.8* | --- | --- |
| 10 | 157.5 | 157.3 | 156.0 | 152.1 | --- | --- |
| 11 | 153.8 | 154.1 | 152.9 | 149.0 | 151.0 | 146.0 |
| 12 | 153.8 | 155.6 | 156.0 | 150.5 | 151.2 | 140.2 |
| 13 | 154.7 | 153.2 | 155.6 | 148.1 | 149.2 | 144.3 |
| 14 | 158.5 | 159.2 | 159.0 | 153.9 | 155.5 | 150.4 |
| 15 | 157.8 | 158.9 | 159.5 | 153.7 | 154.1 | 149.0 |
| 16 | 163.7* | 161.6* | 159.3* | 156.4* | --- | --- |
| 17 | 163.4 | 160.4 | 161.8 | 155.3 | --- | --- |
| 18 | 163.3 | 165.6 | 164.9 | 160.3 | 161.1 | 155.9 |
| 19 | 171.5* | 171.3 | 171.8 | 165.8 | 167.5 | 162.1 |
| 20 | 177.4 | 174.8* | 176.8* | 169.2* | 170.6* | 165.1* |
| 21 | 185.7 | 184.6 | 186.6* | 178.7 | 181.0* | 175.2* |
| 22 | 189.9 | 186.4 | 186.7* | 180.6 | 179.1 | 173.5 |
| 23 | 187.3 | 188.8 | 185.0 | 182.9 | --- | --- |
| 24 | 182.3* | 182.7 | 183.5* | 177.0 | --- | --- |
| 25 | 177.4 | 174.0* | 175.6 | 168.6* | 172.3 | 167.0 |
| 26 | 174.2 | 170.2 | 168.0* | 164.9 | 166.1 | 161.0 |
| 27 | 172.3 | 171.9 | 170.9 | 166.7 | 167.8 | 162.8 |
| 28 | 171.2* | 171.3 | 169.5 | 166.2 | 169.2 | 164.1 |
| 29 | 165.1 | 165.7 | 165.7 | 160.7 | 161.7 | 156.8 |
| 30 | 166.9 | 168.0 | 171.0 | 163.0 | --- | --- |
| 31 | 176.4 | 175.2 | 175.2* | 170.1 | --- | --- |
| Mean | 163.0 | 162.6 | 162.5 | 157.4 | 159.5 | 154.4 |

*Corrected for burst.
( ) interpolated

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

| DATE 1971 | URANO KEY | CLASS | START U.T. | DURATION | MAXIMUM U.T. | PEAK FLUX | MEAN FLUX |
|---|---|---|---|---|---|---|---|
| Jan. | | | H M | H M | H M | | |
| 1 | 1 | Simple 3 | 17 10 | 2 40 | 18 35 | 2.4 | 1.2 |
| | 1 | Simple 3 | 20 00 | 2 10 | 20 40 | 3.8 | 1.9 |
| 3 | 1 | Simple 3 | 17 30E | >2 00 | 17 50 | 4.0 | --- |
| 6 | 1 | Simple 1 | 21 13 | 0 03 | 21 15 | 2.0 | 1.0* |
| 8 | 1 | Simple 3 | 18 15 | 1 00 | 18 25 | 4.4 | 2.0 |
| 9 | 1 | Simple 3 | 14 55 | 3 45 | 17 05 | 8.6 | 4.3 |
| | | 1st Compt. | 14 55 | 1 50 | 15 40 | 7.4 | --- |
| | | 2nd Compt. | 16 45 | 1 55 | 17 05 | 8.6 | --- |
| | 1 | Simple 3 | 19 00 | 1 30 | 19 25 | 4.8 | 2.8 |
| | 1 | Simple 3F | 20 40 | 0 45 | 21 05 | 2.2 | 1.1* |
| 10 | 1 | Simple 3 AF | 17 05 | 1 15 | 17 45 | 6.6 | 3.4 |
| | 1 | Simple 2 | 17 35.5 | 0 10 | 17 36.5 | 12.0 | 6.0 |
| | 1 | Simple 1 | 18 23 | 0 01 | 18 23.4 | 3.8 | 1.9 |
| 11 | 1 | Simple 3 | 15 00 | 0 40 | 15 26 | 4.0 | 1.6 |
| | 1 | Simple 1 | 18 23 | 0 02 | 18 24 | 2.2 | 1.1 |
| | 1 | Simple 3 | 19 20 | 0 30 | 19 27 | 7.0 | 3.4 |
| | 1 | Simple 2F | 21 48 | 0 02 | 21 48.7 | 20.0 | 10.0* |
| | 2 | Post B.I. | 21 50 | 0 25 | --- | 7.8 | 3.9* |
| 12 | 1 | Simple 3A | 21 05 | 0 45 | 21 30 | 4.8 | 2.0* |
| | 1 | Simple 1F | 21 15 | 0 01 | 21 15.7 | 2.8 | 1.4* |
| 13 | 1 | Simple 1F | 17 53 | 0 09 | 17 56 | 3.2 | 1.6 |
| | 3 | Complex | 18 53 | 0 10 | 19 01.2 | 36.0 | 10.0 |
| | | 1st Compt. | 18 53 | 0 04 | 18 54.5 | 32.0 | --- |
| | | 2nd Compt. | 18 57 | 0 03.5 | 18 58 | 10.0 | --- |
| | | 3rd Compt. | 19 00.5 | 0 02.5 | 19 01.2 | 36.0 | --- |
| | 2 | Post B.I. | 19 03 | 0 20 | --- | 3.0 | 1.5 |
| 14 | 4 | Fluctuations | 20 33 | 0 09 | 20 40 | 12.0 | --- |
| 15 | 1 | Simple 1F | 15 48.8 | 0 04 | 15 49.7 | 4.4 | 2.2 |

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

| DATE 1971 | URANO KEY | CLASS | START U.T. | DURATION | MAXIMUM U.T. | PEAK FLUX | MEAN FLUX |
|---|---|---|---|---|---|---|---|
| Jan. | | | H M | H M | H M | | |
| 16 | 1 | Simple 3A | 13 15 | 5 00 | 14 30 | 24.0 | 14.0 |
| | 1 | Simple 1 | 14 16.8 | 0 04 | 14 19 | 5.0 | 2.5 |
| | 1 | Simple 2 | 17 11.5 | 0 03 | 17 12 | 17.4 | 4.3 |
| | 1 | Simple 3F | 19 25 | 2 00 | 20 00 | 3.0 | 1.5 |
| | | Fall | 20 55 | 0 15 | --- | 2.4 | ---* |
| 18 | 3 | Complex F | 16 57 | 0 03 | 16 58.1 | 12.6 | 4.2 |
| | 2 | Post B.I. | 17 00 | 0 07 | --- | 2.2 | 1.1 |
| | 1 | Simple 2 | 17 17.5 | 0 01 | 17 17.8 | 14.0 | 7.0 |
| | 2 | Post B.I. | 17 18.5 | 0 06 | --- | 3.4 | 1.7 |
| | 1 | Simple 3 | 17 30 | 1 10 | 18 10 | 5.0 | 2.5 |
| | 1 | Simple 3 | 18 40 | 1 05 | 18 53 | 10.6 | 5.2 |
| | 1 | Simple 3A | 20 30 | 0 55 | 20 41 | 4.8 | 2.8 |
| | 1 | Simple 1 | 20 38 | 0 01 | 20 38.8 | 2.4 | 1.2 |
| 19 | 1 | Simple 3 | 13 50 | 0 20 | 13 55 | 5.4 | --- |
| | 1 | Simple 3A | 14 42 | 0 20 | 14 45 | 2.6 | 1.3 |
| | 1 | Simple 1 | 14 42.5 | 0 01 | 14 43 | 2.8 | 1.4 |
| | 3 | Complex | 15 34 | 0 08 | 15 34.9 | 40.0 | 20.0 |
| | | 1st Compt. | 15 34 | 0 02.5 | 15 34.9 | 40.0 | --- |
| | | 2nd Compt. | 15 36.5 | 0 05.5 | 15 37.8 | 37.0 | --- |
| | 2 | Post B.I. | 15 42 | 1 00 | --- | 9.8 | 4.6 |
| | 1 | Simple 3 | 16 55 | 1 00 | 17 25 | 5.6 | 2.4 |
| 20 | 1 | Simple 3 | 14 20 | 0 20 | 14 25 | 2.6 | 1.3 |
| | 1 | Simple 3 | 16 30 | 1 00 | 16 40 | 2.8 | 1.4 |
| | 1 | Simple 3 | 17 30 | 1 15 | 18 05 | 2.2 | 1.1 |
| | 1 | Simple 3 | 19 00 | 1 05 | 19.15 | 2.8 | 1.4 |
| 21 | 3 | Complex F | 13 19 | 0 09 | 13 21 | 160.0 | 56.0 |
| | | 1st Compt. | 13 19 | 0 01.3 | 13 19.5 | 130.0 | --- |
| | | 2nd Compt. | 13 20.3 | 0 07.7 | 13 21 | 160.0 | --- |
| | 2 | Post B.I.F. | 13 28 | 0 20 | --- | 8.6 | 4.0 |

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

| DATE 1971 | URANO KEY | CLASS | START U.T. | DURATION | MAXIMUM U.T. | PEAK FLUX | MEAN FLUX |
|---|---|---|---|---|---|---|---|
| Jan. | | | H M | H M | H M | | |
| 21 | 1 | Simple 3F | 14 20 | 2 20 | 14 30 | 3.8 | 1.8 |
| | 1 | Simple 3 | 19 05 | 1 20 | 19 55 | 2.0 | 1.6 |
| | 1 | Simple 3 | 20 40 | 0 30 | 20 50 | 3.6 | 2.0 |
| | 1 | Simple 1 | 21 54 | 0 06 | 21 54.8 | 7.0 | 3.4* |
| 22 | 1 | Simple 3A | 19 00 | 2 05 | 19 10 | 6.0 | 3.0 |
| | 1 | Simple 1 | 19 01.5 | 0 02 | 19 02 | 4.2 | 2.1 |
| | 1 | Simple 3 | 19 23 | 0 30 | 19 26 | 11.6 | 5.4 |
| 23 | 1 | Simple 3A | 15 00 | 1 15 | 15 40 | 3.6 | 1.8 |
| | 1 | Simple 2 | 15 35 | 0 03 | 15 36 | 17.6 | 6.0 |
| | 1 | Simple 3 | 16 50 | 0 55 | 17 10 | 2.4 | 1.2 |
| | 1 | Simple 3 | 18 10 | 1 30 | 19 00 | 2.8 | 1.4 |
| | 1 | Simple 3 | 22 00 | 0 30 | 22 10 | 2.8 | 2.0* |
| | 1 | Simple 1 | 22 45.5 | 0 05 | 22 46 | 4.0 | 2.0* |
| | 1 | Simple 1 | 23 14 | 0 04 | 23 16 | 5.2 | 2.6* |
| 24 | 1 | Simple 3 | 13 40 | 1 50 | 14 48 | 10.4 | 5.0 |
| | 1 | Simple 3 | 16 18 | 0 12 | 16 20 | 3.4 | 1.7 |
| | 1 | Simple 3A | 17 05 | 0 55 | 17 35 | 7.0 | 4.0 |
| | 1 | Simple 1 | 17 22 | 0 04 | 17 23 | 2.8 | 1.4 |
| | 1 | Simple 2F | 18 05 | 0 27 | 18 17 | 33.0 | 20.0 |
| | 2 | Post B.I.A | 18 32 | 2 00 | --- | 12.2 | 6.0 |
| | 1 | Simple 2 | 18 46.5 | 0 04.5 | 18 48.5 | 12.2 | 6.0 |
| | 1 | Simple 3 | 19 45 | 0 15 | 19 52 | 6.0 | 3.0 |
| | 1 | Simple 3A | 20 36 | >3 00 | 22 30 | 18.0 | --- |
| | 1 | Simple 2F | 20 40 | 0 15 | 20 47.5 | 52.0 | 26.0 |
| | 2 | Post B.I. | 20 55 | 1 05 | --- | 24.0 | 11.0 |
| | | Incomplete | 23 03 | >0 33 | 23 24 | 2375.0 | ---* |

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

| DATE 1971 | URANO KEY | CLASS | START U.T. | DURATION | MAXIMUM U.T. | PEAK FLUX | MEAN FLUX |
|---|---|---|---|---|---|---|---|
| Jan. | | | H M | H M | H M | | |
| 25 | 1 | Simple 3 | 14 55 | 3 10 | 16 20 | 5.0 | 2.5 |
| | 1 | Simple 3 | 18 10 | 2 20 | 19 35 | 3.0 | 1.5 |
| | 1 | Simple 3 | 20 40 | 0 20 | 20 45 | 2.0 | 1.4* |
| | | Fall | 22 15 | 0 20 | --- | 2.8 | ---* |
| 26 | 1 | Simple 1 | 13 27.5 | 0 02.5 | 13 28 | 6.4 | 3.6 |
| | 1 | Simple 3 | 13 37 | 0 06 | 13 39 | 3.0 | 1.5 |
| | 1 | Simple 3A | 14 25 | 1 35 | 15 40 | 3.8 | 1.9 |
| | 1 | Simple 1 | 14 35 | 0 02.5 | 14 35.4 | 5.0 | 2.0 |
| | 1 | Simple 3A | 16 55 | 0 30 | 17 10 | 2.6 | 1.3 |
| | 1 | Simple 1 | 17 06 | 0 02.5 | 17 07.9 | 4.6 | 2.2 |
| | 1 | Simple 3 | 19 00 | 0 25 | 19 10 | 2.4 | 1.2 |
| | 1 | Simple 3 | 19 50 | 0 25 | 19 53 | 2.4 | 1.2 |
| | 1 | Simple 1 | 22 02 | 0 02 | 22 03 | 2.8 | 1.4* |
| 27 | 1 | Simple 3 | 17 35 | 1 10 | 18 10 | 3.4 | 1.7 |
| 28 | 1 | Simple 3 | 13 35 | 1 15 | 13 55 | 3.0 | 1.5 |
| | 1 | Simple 1 | 20 32.5 | 0 04 | 20 32.7 | 2.8 | 1.4 |
| 29 | 1 | Simple 1 | 15 34.8 | 0 06 | 15 35 | 4.0 | 1.4 |
| | 1 | Simple 3 | 16 35 | 0 15 | 16 39 | 2.8 | 1.4 |
| | 1 | Simple 3 | 22 45 | 0 20 | 22 55 | 4.4 | 2.2* |
| 30 | 1 | Simple 3 | 18 05 | 0 45 | 18 10 | 2.8 | 1.4** |
| | 1 | Simple 3 | 21 05 | 1 05 | 21 25 | 2.6 | 1.3* |
| 31 | 1 | Simple 3F | 14 58 | 0 20 | 15 00 | 2.0 | 1.0 |
| | 1 | Simple 3 | 16 05 | 1 10 | 16 15 | 2.0 | 1.0 |
| | 1 | Simple 3A | 17 30 | 2 45 | 18 25 | 10.0 | 5.0 |
| | 1 | Simple 1 | 17 42 | 0 02 | 17 42.6 | 2.2 | 1.0 |
| | 1 | Simple 1 | 19 15.5 | 0 01 | 19 15.9 | 4.8 | 2.4 |

*Only observed at Penticton.

**Rise only at Penticton 18:05 to 18:10. Peak flux 2.3

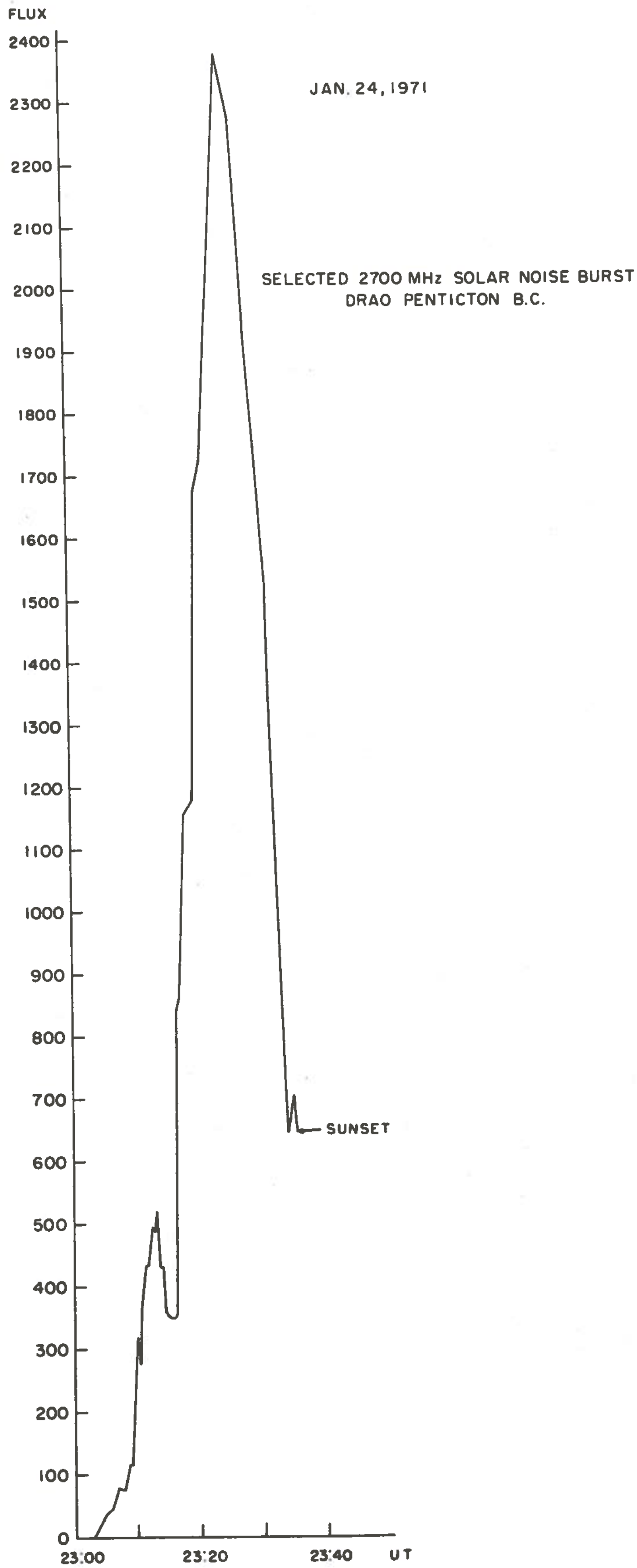
FLUX
2400
2300
2200
2100
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
JAN. 24, 1971
SELECTED 2700 MHz SOLAR NOISE BURST
DRAO PENTICTON B.C.
SUNSET
23:00
23:20
23:40
UT

**Figure 1**

DAILY VALUES OF SOLAR FLUX AT 2800 MHz (OTTAWA-ARO)
AND 2700 MHz (PENTICTON-DRAO) -- SERIES "C"

Flux in watts/$m^2$/cycles/sec bandwidth (x $10^{-22}$) -- 2 polarizations

| 1971 | OTTAWA | | | | PENTICTON | |
|---|---|---|---|---|---|---|
| | Observed | | | adj. to 1 A.U. | Observed | adj. to 1 A.U. |
| Feb. | 14:00 | 17:00 | 20:00 | 17:00 | 19:35 | 19:35 |
| 1 | 170.6 | 170.5 | 172.6 | 165.6 | 169.7 | 164.8 |
| 2 | 164.2 | 165.3 | 166.6 | 160.5 | 163.6 | 158.9 |
| 3 | 160.2 | 159.3 | 158.5 | 154.7 | 155.1 | 150.6 |
| 4 | 156.5* | 152.9* | 152.8* | 148.6* | 150.4* | 146.2* |
| 5 | 146.3 | 148.9 | 148.1 | 144.7 | 143.3 | 139.3 |
| 6 | 149.4 | 147.8 | 145.3 | 143.7 | --- | --- |
| 7 | 141.6 | 137.1 | 138.7 | 133.4 | --- | --- |
| 8 | 129.5 | 126.6 | 125.1 | 123.2 | 122.6 | 119.3 |
| 9 | 114.1 | 113.5 | 113.5 | 110.4 | 110.9 | 107.9 |
| 10 | 112.0 | 112.4 | 111.1 | 109.5 | 106.9 | 104.1 |
| 11 | 113.2 | 112.6 | 112.1 | 109.7 | --- | --- |
| 12 | 113.4 | 113.5 | 113.1 | 110.5 | 113.2 | 110.3 |
| 13 | 115.8 | 116.1 | 116.3 | 113.2 | --- | --- |
| 14 | --- | 117.7 | 119.1 | 114.8 | --- | --- |
| 15 | 120.1 | 120.1* | 120.9 | 117.1* | 118.0 | 115.1 |
| 16 | 128.7 | 133.0 | 132.9 | 129.8 | 129.1 | 126.0 |
| 17 | 134.7 | 135.9 | 133.0 | 132.6 | 130.9 | 127.8 |
| 18 | 132.4 | 133.5 | 131.1 | 130.4 | 129.8 | 126.8 |
| 19 | 140.3 | 141.8* | 141.2 | 138.5* | 137.6 | 134.4 |
| 20 | 139.3 | 139.3* | 139.9 | 136.2* | --- | --- |
| 21 | 135.4 | 139.2 | 138.1 | 136.1 | --- | --- |
| 22 | 141.8 | 146.8 | 148.0 | 143.6 | 143.3 | 140.1 |
| 23 | 146.6 | 146.3 | 145.9* | 143.2 | 143.8* | 140.7* |
| 24 | 150.6 | 150.7 | 148.9 | 147.5 | 146.7 | 143.6 |
| 25 | 148.1 | 149.4 | 147.9 | 146.4 | 144.3 | 141.4 |
| 26 | 146.0 | 146.1 | 143.1 | 143.2 | 141.4 | 138.6 |
| 27 | 143.6 | 142.7 | 141.5 | 140.0 | --- | --- |
| 28 | 142.8 | 139.2 | 139.6 | 136.6 | --- | --- |
| Mean | 138.4 | 137.8 | 137.3 | 134.4 | 136.9 | 133.5 |

*Corrected for burst.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

| DATE 1971 | URANO KEY | CLASS | START U.T. | DURATION | MAXIMUM U.T. | PEAK FLUX | MEAN FLUX |
|---|---|---|---|---|---|---|---|
| Feb. | | | H M | H M | H M | | |
| 1 | 1 | Simple 1 | 19 03 | 0 07 | 19 05 | 2.2 | 1.1 |
| | 1 | Simple 3 | 20 00 | 1 00 | 20 20 | 2.4 | 1.2 |
| 2 | 1 | Simple 1 | 17 37 | 0 01 | 17 37.1 | 3.4 | 1.7 |
| | 1 | Simple 3 | 18 35 | 0 20 | 18 50 | 2.0 | 1.0 |
| | 1 | Simple 1 | 19 35.5 | 0 07 | 19 36 | 2.8 | 1.4 |
| | 1 | Simple 3 | 22 10 | 0 55 | 22 35 | 3.4 | 1.7* |
| 3 | 1 | Simple 2F | 15 24 | 0 08 | 15 28 | 29.0 | 14.0 |
| | 2 | Post B.I.A. | 15 32 | 1 10 | --- | 12.0 | 7.0 |
| | 1 | Simple 1 | 16 06 | 0 03 | 16 07.7 | 8.6 | 4.0 |
| | 1 | Simple 3 | 18 20 | 0 55 | 18 35 | 2.6 | 1.3 |
| 4 | 1 | Simple 3 | 13 50 | 2 20 | 14 40 | 4.4 | 3.0 |
| | 1 | Simple 3 | 16 20 | 1 10 | indet. | 4.4 | --- |
| | 1 | Simple 3F | 18 00 | 1 15 | 18 25 | 5.8 | 3.2 |
| | 1 | Simple 3 | 19 30 | 0 40 | 19 53 | 5.6 | 2.8 |
| | 3 | Complex | 21 06 | 0 08 | 21 10.5 | 12.8 | 8.0 |
| | 2 | Post B.I. | 21 14 | 0 40 | --- | 5.8 | 2.0 |
| 5 | 1 | Simple 3A | 14 25 | 2 00 | 15 10 | 5.2 | 2.8 |
| | 1 | Simple 2 | 15 45.8 | 0 03 | 15 46 | 42.0 | 10.0 |
| | 1 | Simple 2F | 22 21 | 0 06 | 22 23.5 | 158.0 | 64.0*** |
| | 2 | Post B.I. | 22 27 | 1 00 | --- | 15.0 | 5.0* |
| 7 | 1 | Simple 1F | 18 51.5 | 0 02 | 18 51.9 | 3.0 | 1.5 |
| 11 | 1 | Simple 3 | 18 16 | 0 45 | 18 18 | 2.0 | 1.0 |
| | 1 | Simple 3 | 20 35 | > 2 00 | 22 00 | 5.2 | --- |
| 14 | 1 | Simple 3 | 16 50 | 0 45 | indet. | 2.0 | 0.8 |
| | 8 | Rise | 17 35 | 0 15 | --- | 2.0 | --- |
| | 1 | Simple 3 | 19 25 | 1 45 | 20 40 | 2.4 | 1.2 |

*Only observed at Penticton

** Peak of spikes 530 flux units

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

| DATE 1971 | URANO KEY | CLASS | START U.T. | DURATION | MAXIMUM U.T. | PEAK FLUX | MEAN FLUX |
|---|---|---|---|---|---|---|---|
| | | | H M | H M | H M | | |
| 14 | 1 | Simple 3 | 21 10 | 1 45 | 22 10 | 2.2 | 1.1* |
| | 8 | Rise | 23 10 | 0 15 | --- | 7.0 | ---* |
| 15 | 1 | Simple 3A | 16 50 | 2 40 | 17 35 | 3.0 | 1.5 |
| | 1 | Simple 1 | 16 57 | 0 02 | 16 58 | 2.8 | 1.4 |
| | 1 | Simple 2 | 20 07 | 0 03 | 20 07.5 | 11.6 | 3.8 |
| | 1 | Simple 3A | 22 15 | 1 05 | 22 50 | 4.0 | 2.0* |
| | 1 | Simple 1 | 22 17.9 | 0 02 | 22 18 | 2.0 | 1.0* |
| 16 | 1 | Simple 1 | 00 06 | 0 02 | 00 07 | 5.0 | 2.5* |
| | 1 | Simple 1F | 13 38 | 0 04 | 13 39.5 | 9.4 | 2.6 |
| | 1 | Simple 2 | 13 43 | 0 03 | 13 43.9 | 27.0 | 13.5 |
| | 2 | Post B.I. | 13 46 | 0 12 | --- | 6.8 | 2.0 |
| | 1 | Simple 3F | 15 20 | 0 50 | 15 30 | 3.6 | 2.0 |
| | 1 | Simple 2 | 16 39.8 | 0 01 | 16 40 | 10.0 | 3.4 |
| | 4 | Group | 18 45 | 0 11 | 18 45.5 | 11.6 | --- |
| | 1 | Simple 2 | 18 45 | 0 03 | 18 45.5 | 11.6 | 2.9 |
| | 1 | Simple 1 | 18 48.5 | 0 01 | 18 48.9 | 6.0 | 3.0 |
| | 1 | Simple 1 | 18 50.5 | 0 07 | 18 51.2 | 7.6 | 2.5 |
| | 1 | Simple 2F | 21 28 | 0 10 | 21 28.5 | 14.2 | 3.6 |
| | 4 | Group | 22 24 | 0 19 | 22 31.8 | 69.0 | ---* |
| | 3 | Complex F | 22 24 | 0 04 | 22 25.5 | 22.0 | 10.0* |
| | 1 | Simple 2 | 22 30 | 0 05 | 22 31.8 | 69.0 | 25.0* |
| | 2 | Post B.I. | 22 35 | 0 08 | --- | 4.8 | 2.2* |
| 17 | 1 | Simple 3 | 15 59 | 1 10 | 16 00 | 5.2 | 1.8 |
| | 1 | Simple 1 | 20 47 | 0 01 | 20 47.1 | 5.8 | 2.4 |
| | 1 | Simple 1 | 20 51.8 | 0 03 | 20 52.5 | 5.8 | 2.8 |

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

| DATE 1971 | URANO KEY | CLASS | START U.T. | DURATION | MAXIMUM U.T. | PEAK FLUX | MEAN FLUX |
|---|---|---|---|---|---|---|---|
| Feb. | | | H M | H M | H M | | |
| 17 | 1 | Simple 1F | 22 08.5 | 0 01.5 | 22 09 | 5.2 | 2.6* |
| | 1 | Simple 1 | 22 23 | 0 01 | 22 23.5 | 2.8 | 1.4* |
| | 1 | Simple 1F | 23 15.3 | 0 02 | 23 16 | 7.4 | 4.0* |
| | 4 | Fluctuations | 23 19.5 | 0 04.5 | 23 21.5 | 3.8 | --- |
| 18 | 1 | Simple 1 | 12 53.8 | 0 01 | 12 54 | 9.0 | 4.5 |
| 19 | 8 | Rise | 15 30 | 0 25 | --- | 2.9 | --- |
| | 1 | Simple 3A | 16 05 | 2 10 | 17 05 | 5.8 | 2.9 |
| | 1 | Simple 2 | 17 18 | 0 02 | 17 18.5 | 11.2 | 5.6 |
| | 2 | Post B.I. | 17 20 | 0 06 | --- | 2.0 | 1.0 |
| | 1 | Simple 3A | 20 05 | 1 30 | 20 20 | 4.6 | 2.3 |
| | 1 | Simple 2 | 20 17 | 0 03 | 20 17.5 | 14.8 | 4.9 |
| | 1 | Simple 3 | 22 10 | >2 00 | 23 05 | 7.6 | ---* |
| 20 | 1 | Simple 3A | 16 20 | 2 30 | 17 55 | 3.0 | 1.8 |
| | 1 | Simple 1 | 18 19 | 0 01 | 18 19.5 | 6.4 | 2.2 |
| 21 | 1 | Simple 1 | 21 30 | 0 04 | 21 32 | 6.6 | 3.3 |
| | 2 | Post B.I. | 21 34 | 0 25 | --- | 2.6 | 1.3 |
| 22 | 8 | Rise | 14 20 | 0 10 | --- | 4.4 | --- |
| | 1 | Simple 3 | 15 45 | 0 30 | 15 55 | 2.0 | 1.0 |
| | 1 | Simple 3 | 16 20 | 0 30 | 16 35 | 2.4 | 1.2 |
| 23 | 1 | Simple 3 | 16 35 | 4 50 | 18 05 | 8.8 | 4.8 |
| 24 | 1 | Simple 3 | 16 25 | 1 35 | 17 05 | 2.4 | 1.2 |
| 27 | 1 | Simple 2F | 14 51 | 0 03 | 14 52 | 60.0 | 7.6** |
| | 1 | Simple 1 | 23 28 | 0 05 | 23 31 | 2.8 | 1.4* |
| 28 | 1 | Simple 3 | 17 40 | 1 15 | 18 25 | 2.4 | 1.2 |
| | 1 | Simple 3 | 19 10 | 2 40 | 20 45 | 2.4 | 1.2 |

*Only observed at Penticton

**Peak of Spikes > 150 flux units.

DAILY VALUES OF SOLAR FLUX AT 2800 MHz (OTTAWA-ARO) AND 2700 MHz (PENTICTON-DRAO) -- SERIES "C"

Flux in watts/m$^2$/cycles/sec bandwidth (x $10^{-22}$) -- 2 polarizations

| March 1971 | OTTAWA Observed 14:00 | OTTAWA Observed 17:00 | OTTAWA Observed 20:00 | OTTAWA adj. to 1 A.U. 17:00 | PENTICTON Observed 19:35 | PENTICTON adj. to 1 A.U. 19:35 |
|---|---|---|---|---|---|---|
| 1 | 131.8 | 131.6 | 130.7 | 129.2 | 128.5 | 126.2 |
| 2 | 129.1 | 128.0 | 126.2 | 125.8 | 124.2 | 122.1 |
| 3 | 124.7 | 123.8 | 122.4 | 121.7 | 122.3 | 120.2 |
| 4 | 117.0 | 117.9* | 116.2 | 116.0* | 116.3 | 114.4 |
| 5 | 116.3 | 115.5 | 114.5 | 113.7 | 112.5 | 110.7 |
| 6 | 111.2 | 110.8 | 109.7 | 109.1 | --- | --- |
| 7 | 109.3 | 106.8 | 105.4 | 105.2 | --- | --- |
| 8 | 104.5 | 105.5 | 104.2 | 104.0 | 101.5 | 100.1 |
| 9 | 106.6 | 106.0 | 105.2 | 104.5 | 102.9 | 101.5 |
| 10 | 108.0 | 108.4 | 107.8 | 107.0 | 105.4 | 104.0 |
| 11 | 110.6 | 110.9 | 113.1 | 109.5 | 109.5 | 108.1 |
| 12 | 113.8 | 116.7 | 116.8 | 115.3 | 114.2 | 112.8 |
| 13 | 115.0 | 113.9 | 112.8 | 112.5 | --- | --- |
| 14 | 113.0 | 112.9 | 111.2 | 111.7 | --- | --- |
| 15 | 114.1 | 111.5 | 111.9 | 110.3 | 108.3 | 107.1 |
| 16 | 115.4 | 115.7 | 114.1 | 114.5 | 112.0 | 110.9 |
| 17 | 115.9 | 117.3 | 114.9 | 116.1 | 112.2 | 111.1 |
| 18 | 112.5 | 115.2 | 113.8 | 114.2 | 112.0 | 111.0 |
| 19 | 111.7 | 110.0 | 109.7 | 109.1 | 107.3 | 106.4 |
| 20 | 107.7 | 107.2* | 109.7 | 106.3* | --- | --- |
| 21 | 113.2* | 113.4 | 112.2 | 112.6 | --- | --- |
| 22 | 112.0 | 113.2 | 110.4 | 112.4 | 107.9 | 107.1 |
| 23 | 109.5 | 108.9 | 108.4 | 108.2 | 105.9 | 105.3 |
| 24 | 108.4 | 108.5 | 107.4 | 107.8 | 103.9 | 103.3 |
| 25 | 108.3 | 108.8 | 106.4 | 108.3 | 104.0 | 103.5 |
| 26 | 107.5 | 108.2 | 107.7 | 107.8 | 104.9 | 104.5 |
| 27 | 108.3 | 108.9 | 105.7 | 108.5 | --- | --- |
| 28 | 106.2 | 106.5 | 105.8 | 106.2 | --- | --- |
| 29 | 103.6* | 103.7 | 103.2* | 103.4 | 101.1 | 100.8 |
| 30 | 101.3* | 101.1 | 100.2 | 100.9 | 97.4 | 97.2 |
| 31 | 101.4 | 103.1 | 103.0 | 102.9 | 99.2 | 99.0 |
| Mean | 111.9 | 111.9 | 111.0 | 110.8 | 109.3 | 108.1 |

*Corrected for burst.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

| DATE 1971 | URANO KEY | CLASS | START U.T. | DURATION | MAXIMUM U.T. | PEAK FLUX | MEAN FLUX |
|---|---|---|---|---|---|---|---|
| Mar. | | | H M | H M | H M | | |
| 2 | 8 | Rise | 22 30 | 0 20 | --- | 2.2 | ---* |
| 3 | 1 | Simple 3 | 21 45 | 2 20 | 22 55 | 3.2 | 1.6* |
| 4 | 1 | Simple 3 | 15 05 | 0 35 | 15 08 | 2.4 | 1.6 |
| | 1 | Simple 3 | 15 40 | 3 50 | 16 10 | 2.4 | 1.8 |
| 8 | | Absorption | 20 40 | 1 25 | 21 15 | -4.4 | -2.2 |
| 9 | 1 | Simple 1 | 17 42 | 0 01 | 17 42.5 | 1.8 | 0.9 |
| 13 | 1 | Simple 3A | 23 20 | > 1 30 | 24 00 | 9.8 | ---* |
| | 1 | Simple 2F | 23 47 | 0 13 | 23 53.5 | 35.0 | 11.0* |
| 15 | 1 | Simple 3 | 21 20 | > 3 40 | 22 30 | 6.0 | ---* |
| 16 | 1 | Simple 3 | 18 00 | 2 40 | 18 45 | 3.0 | 1.4 |
| 19 | 1 | Simple 1 | 00 55.5 | 0 01 | 00 56 | 3.0 | 1.5* |
| | 8 | Rise | 22 25 | 0 15 | --- | 2.2 | ---* |
| 20 | 1 | Simple 3 | 16 15 | 0 50 | 16 25 | 2.4 | 1.2 |
| | 8 | Rise | 17 25 | 0 25 | --- | 2.0 | --- |
| | 1 | Simple 1 | 20 14 | 0 03 | 20 15 | 2.2 | 1.0 |
| 21 | 1 | Simple 3 | 13 40 | 1 15 | 14 20 | 2.4 | 1.2 |
| | 1 | Simple 1 | 20 35 | 0 03 | 20 36 | 2.2 | 1.1 |
| 24 | 1 | Simple 3 | 20 45 | 2 15 | 21 15 | 3.2 | 1.6 |
| 27 | 1 | Simple 1 | 13 33.5 | 0 02.5 | 13 34.5 | 2.6 | 1.3 |
| 28 | 1 | Simple 3F | 12 20 | 0 25 | 12 23 | 4.0 | 2.0 |
| | 1 | Simple 3 | 12 49 | 0 40 | 12 50 | 2.2 | 1.1 |
| 29 | 1 | Simple 3A | 13 30 | 2 35 | 14 19 | 8.4 | 4.0 |
| | 1 | Simple 2 | 14 11.9 | 0 05 | 14 13 | 54.0 | 20.0 |
| | 1 | Simple 3A | 17 00 | 3 30 | indet. | 2.0 | 1.7 |
| | 1 | Simple 3A | 19 44 | 0 15 | 19 48 | 4.0 | 1.6 |
| | 1 | Simple 1 | 19 45 | 0 01 | 19 45.5 | 5.2 | 2.6 |
| | 1 | Simple 3 | 22 05 | 3 20 | 24 15 | 3.4 | 1.7* |
| 30 | 1 | Simple 3 | 12 40 | 3 20 | 14 40 | 3.8 | 2.0 |
| 31 | 8 | Rise | 16 10 | 0 15 | --- | 2.6 | --- |
| | 4 | Fluctuations | 17 21 | 0 06 | 17 24 | 13.5 | --- |

*Only observed at Penticton.

DAILY VALUES OF SOLAR FLUX AT 2800 MHz (OTTAWA-ARO)
AND 2700 MHz (PENTICTON-DRAO) -- SERIES "C"

Flux in watts/$m^2$/cycles/sec bandwidth (x $10^{-22}$) -- 2 polarizations

| | OTTAWA | | | | PENTICTON | |
|---|---|---|---|---|---|---|
| 1971 | | Observed | | adj. to 1 A.U. | Observed | adj. to 1 A.U. |
| April | 14:00 | 17:00 | 20:00 | 17:00 | 19:35 | 19:35 |
| 1 | 103.4* | 100.6 | 102.8 | 100.5 | 98.0 | 97.9 |
| 2 | 106.8 | 107.7 | 107.6 | 107.6 | 105.7 | 105.6 |
| 3 | 107.9 | 109.0 | 106.6 | 109.0 | --- | --- |
| 4 | 107.7 | 107.6 | 106.7 | 107.7 | --- | --- |
| 5 | 108.8 | 108.2 | 108.1 | 108.3 | 104.9 | 105.0 |
| 6 | 106.4 | 107.1* | 107.2* | 107.3* | 105.3* | 105.5* |
| 7 | 112.1 | 113.0 | 111.3 | 113.2 | 108.7 | 108.9 |
| 8 | 111.4 | 109.8 | 108.7 | 110.1 | 106.7 | 107.0 |
| 9 | 109.4 | 108.6 | 106.4 | 108.9 | --- | --- |
| 10 | 110.5 | 109.4 | 109.8 | 109.8 | --- | --- |
| 11 | 116.9 | 123.5 | 128.1 | 124.1 | --- | --- |
| 12 | 130.8 | 129.1 | 129.3 | 129.7 | --- | --- |
| 13 | 138.1* | 138.8* | 137.0 | 139.6* | 136.4 | 137.2 |
| 14 | 140.6* | 140.2 | 139.9* | 141.0 | 137.9 | 138.7 |
| 15 | 138.5* | 138.2* | 136.6 | 140.0* | 133.8 | 134.7 |
| 16 | 138.6 | 138.6 | 136.1 | 139.6 | 134.6 | 135.5 |
| 17 | 139.2* | 138.8 | 136.4* | 139.9 | --- | --- |
| 18 | 134.6 | 136.0* | 136.5 | 137.2* | --- | --- |
| 19 | 136.0* | 137.2* | 137.3* | 138.4* | 135.8* | 137.0* |
| 20 | 135.4 | 135.4 | 134.3* | 136.8 | 129.2* | 130.5* |
| 21 | 130.4 | 127.6 | 125.0 | 128.9 | 121.9 | 123.1 |
| 22 | 121.7 | 119.2 | 118.5 | 120.5 | 116.4 | 117.7 |
| 23 | 117.5* | 116.2* | 116.4 | 117.5* | 112.6 | 113.8 |
| 24 | 107.4 | 107.8* | 109.2 | 109.1* | --- | --- |
| 25 | 104.6* | 104.7 | 105.3 | 106.0 | --- | --- |
| 26 | 102.8 | 103.5 | 104.3 | 104.8 | 101.4 | 102.7 |
| 27 | 101.4 | 100.3 | 100.0 | 101.7 | 97.4 | 98.8 |
| 28 | 99.7 | 96.2 | 95.1 | 97.5 | 93.0 | 94.3 |
| 29 | 93.6 | 94.4 | 94.0 | 95.8 | 91.4 | 92.8 |
| 30 | 93.9 | 93.4 | 91.9 | 94.8 | 90.3 | 91.7 |
| Mean | 116.9 | 116.7 | 116.2 | 117.5 | 113.1 | 113.9 |

*Corrected for bursts.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

| DATE 1971 | URANO KEY | CLASS | START U.T. | DURATION | MAXIMUM U.T. | PEAK FLUX | MEAN FLUX |
|---|---|---|---|---|---|---|---|
| April | | | H M | H M | H M | | |
| 1 | 1 | Simple 3A | 12 45 | 2 50 | 13 25 | 11.8 | 5.9 |
| | 4 | Fluctuations | 13 07 | 0 35 | 13 36.5 | 43.0 | --- |
| | 1 | Simple 3 | 18 40 | 1 10 | 19 05 | 2.2 | 1.0 |
| | 8 | Rise | 20 04 | 0 03 | --- | 2.1 | --- |
| 2 | 1 | Simple 3 | 14 45 | 0 25 | 14 55 | 2.2 | 1.1 |
| | 1 | Simple 3 | 20 45 | 4 45 | 22 40 | 10.4 | 5.2* |
| 3 | 1 | Simple 3 | 16 50 | 1 50 | 17 25 | 2.2 | 1.1 |
| 6 | 1 | Simple 3 | 14 05 | 3 25 | indet. | 2.8 | 2.0 |
| | 1 | Simple 3 | 18 50 | 1 40 | 19 10 | 2.4 | 1.2 |
| 7 | 8 | Rise | 20 05 | 0 55 | --- | 2.2 | --- |
| | 1 | Simple 3 | 23 00 | 2 30 | 23 40 | 5.6 | 2.6* |
| 8 | 8 | Rise | 21 00 | 0 30 | --- | 2.0 | --- |
| 12 | 1 | Simple 3 | 14 25 | 2 00 | 14 35 | 2.6 | 1.3 |
| 13 | 1 | Simple 3 | 13 25 | 4 05 | 13 50 | 5.2 | 2.6 |
| 14 | 1 | Simple 3 | 13 30 | 1 35 | indet. | 2.6 | 1.3 |
| | 1 | Simple 3F | 17 05 | 2 30 | 18 15 | 2.6 | 1.3 |
| | 1 | Simple 3AF | 19 35 | 2 30 | 20 25 | 5.2 | 2.6 |
| | 4 | Fluctuations | 20 49 | 0 07 | 20 50.2 | 57.0 | --- |
| | 1 | Simple 3A | 21 20 | 0 45 | 21 38 | 5.0 | 2.5 |
| | 1 | Simple 1 | 21 35 | 0 02.5 | 21 35.5 | 3.4 | 1.7 |
| | 1 | Simple 3A | 22 30 | 2 20 | 23 40 | 3.8 | 1.9* |
| | 1 | Simple 1 | 23 24 | 0 02 | 23 25 | 2.4 | 1.2* |
| 15 | 1 | Simple 3 | 11 35 | 5 40 | 14 45 | 7.0 | 3.8 |
| | 1 | Simple 3 | 22 20 | 2 50 | 24 20 | 3.0 | 1.5* |
| 16 | 1 | Simple 3 | 16 40 | 2 40 | 17 25 | 3.4 | 1.7 |
| | 8 | Rise | 22 05 | 1 45 | --- | 4.6 | ---* |

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

| DATE 1971 | URANO KEY | CLASS | START U.T. | DURATION | MAXIMUM U.T. | PEAK FLUX | MEAN FLUX |
|---|---|---|---|---|---|---|---|
| April | | | H M | H M | H M | | |
| 17 | 1 | Simple 3 | 12 35 | 2 00 | 13 05 | 4.4 | 2.2 |
| | 1 | Simple 3 | 14 40 | 1 20 | 15 15 | 3.2 | 1.6 |
| | 1 | Simple 3F | 18 50 | 2 50 | 20 30 | 5.2 | 2.6 |
| | 1 | Simple 3 | 21 55 | 0 20 | 22 00 | 2.6 | 1.3 |
| 18 | 1 | Simple 3 | 12 35 | 0 25 | 12 40 | 2.6 | 1.2 |
| | 1 | Simple 3A | 14 50 | 4 10 | 17 15 | 6.0 | 3.0 |
| | 1 | Simple 3 | 16 05 | 0 25 | 16 08 | 5.0 | 2.4 |
| | 1 | Simple 1 | 17 06.5 | 0 03 | 17 07.1 | 4.0 | 2.0 |
| | 1 | Simple 3 | 19 30 | 0 25 | 19 45 | 2.6 | 1.3 |
| | 1 | Simple 3A | 22 30 | 2 30 | 24 00 | 3.8 | 1.9 |
| | 1 | Simple 1 | 22 37 | 0 05 | 22 38 | 4.2 | 1.8 |
| | 1 | Simple 1 | 23 14 | 0 04 | 23 15 | 6.8 | 3.0* |
| 19 | 1 | Simple 1 | 11 30 | 0 08 | 11 34 | 3.4 | 1.7 |
| | 1 | Simple 3A | 12 00 | 5 30 | 13 25 | 8.6 | 4.3 |
| | 1 | Simple 1 | 15 07 | 0 05 | 15 08 | 4.0 | 2.0 |
| | 1 | Simple 1F | 17 11 | 0 02 | 17 11.3 | 4.0 | 2.0 |
| | 1 | Simple 3 | 18 30 | 2 45 | 19 20 | 5.8 | 2.9 |
| | 1 | Simple 1F | 21 28 | 0 05 | 21 30 | 7.2 | 3.2 |
| | 1 | Simple 1F | 22 19 | 0 06 | 22 21 | 4.8 | 2.0 |
| 20 | 1 | Simple 3A | 12 05 | 1 55 | 12 23 | 7.4 | 3.7 |
| | 1 | Simple 2 | 12 17 | 0 06 | 12 19.8 | 77.0 | 15.0 |
| | 1 | Simple 3 | 15 21.3 | 0 02 | 15 21.8 | 3.2 | 1.2 |
| | 1 | Simple 3A | 19 00 | 4 05 | 20 05 | 17.0 | 7.0 |
| | 1 | Simple 2F | 19 24 | 0 40 | 19 45.2 | 45.0 | 14.0 |
| 21 | 1 | Simple 2 | 11 15.5 | 0 02.5 | 11 17 | 19.0 | 9.5 |
| | 2 | Post B.I. | 11 18 | 0 06 | --- | 5.6 | 2.8 |

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

| DATE 1971 | URANO KEY | CLASS | START U.T. | DURATION | MAXIMUM U.T. | PEAK FLUX | MEAN FLUX |
|---|---|---|---|---|---|---|---|
| April | | | H M | H M | H M | | |
| 21 | 1 | Simple 3 | 12 30 | 1 40 | 12 50 | 3.2 | 1.6 |
| 22 | 1 | Simple 3 | 14 20 | 2 20 | 15 30 | 2.8 | 1.4 |
| | 1 | Simple 2 | 16 55.7 | 0 04.3 | 16 56.5 | 45.0 | 15.0 |
| | 2 | Post B.I. | 17 00 | 1 20 | --- | 2.6 | 2.0 |
| | 1 | Simple 3A | 22 00 | 2 25 | 22 10 | 2.6 | 1.8 |
| | 1 | Simple 1 | 22 02.5 | 0 02 | 22 03 | 4.4 | 2.2 |
| | 1 | Simple 1F | 22 05.5 | 0 02.5 | 22 06 | 3.8 | 2.0 |
| 23 | 1 | Simple 3 | 12 00 | 7 40 | 15 15 | 5.2 | 3.0 |
| 24 | 1 | Simple 3 | 14 25 | 4 20 | 17 05 | 3.8 | 1.9 |
| 25 | 1 | Simple 3 | 11 45 | 3 45 | 11 50 | 2.2 | 1.1 |
| | 1 | Simple 1 | 18 14.3 | 0 01 | 18 14.7 | 2.4 | 1.2 |
| | 1 | Simple 1 | 18 52.9 | 0 01 | 18 53 | 3.4 | 1.7 |

## DAILY VALUES OF SOLAR FLUX AT 2800 MHz (OTTAWA-ARO) AND 2700 MHz (PENTICTON-DRAO) -- SERIES "C"

Flux in watts/m$^2$/cycles/sec bandwidth (x $10^{-22}$) -- 2 polarizations

| 1971 | OTTAWA | | | | PENTICTON | |
|---|---|---|---|---|---|---|
| | Observed | | | adj. to 1 A.U. | Observed | adj. to 1 A.U. |
| May | 14:00 | 17:00 | 20:00 | 17:00 | 19:35 | 19:35 |
| 1 | 95.3 | 93.8 | 92.4 | 95.3 | 91.9 | 93.4 |
| 2 | 98.9 | 98.0 | 97.9 | 99.6 | 96.2 | 97.7 |
| 3 | 103.9 | 104.4 | 104.6 | 106.2 | 104.7 | 106.5 |
| 4 | 110.6* | 110.7 | 109.9 | 112.6 | 109.8 | 111.7 |
| 5 | 115.9* | 115.8 | 115.6* | 117.9 | 113.9 | 116.0 |
| 6 | 122.4 | 123.4 | 124.7 | 125.6 | 118.9 | 121.0 |
| 7 | 130.3 | 128.7 | 132.8 | 131.1 | 127.7 | 130.1 |
| 8 | 129.1 | 130.2 | 130.9 | 132.7 | 126.5 | 128.9 |
| 9 | 135.5 | 135.7 | 134.6 | 138.3 | 131.4 | 133.9 |
| 10 | 132.9 | 133.1* | 132.8 | 135.8* | 128.3 | 130.9 |
| 11 | 132.8 | 132.6* | 132.5* | 135.3* | 127.6* | 130.2* |
| 12 | 128.9 | 127.5 | (125.8) | 130.2 | 122.0 | 124.6 |
| 13 | 122.7 | 122.4 | 123.5* | 125.0 | 119.8* | 122.3* |
| 14 | 120.1 | 119.7 | 117.2* | 122.3 | 114.9* | 117.4* |
| 15 | 115.9 | 115.5 | 112.2 | 118.0 | --- | --- |
| 16 | 113.7 | 113.5 | 111.4 | 116.1 | --- | --- |
| 17 | 112.2 | 110.3 | 109.7 | 112.8 | 106.4 | 108.8 |
| 18 | 110.0 | 108.6 | 107.3 | 111.2 | 105.5 | 108.0 |
| 19 | 106.6 | 107.2* | 107.5 | 109.8* | 104.4 | 106.9 |
| 20 | 103.8 | 103.5 | 104.0 | 106.0 | 101.4 | 103.8 |
| 21 | 99.5 | 99.5 | 98.0 | 102.0 | 95.1 | 97.5 |
| 22 | 92.3 | 91.1 | 89.9 | 93.4 | --- | --- |
| 23 | 87.9 | 87.4 | 86.1 | 89.7 | --- | --- |
| 24 | 86.3 | 86.6 | 86.1 | 88.9 | --- | --- |
| 25 | 91.7 | 90.0 | 89.3 | 92.3 | 87.9 | 90.2 |
| 26 | 91.2 | 91.2 | 92.5 | 93.7 | 90.9 | 93.4 |
| 27 | 101.5 | 101.2 | 100.5 | 103.9 | 99.0 | 101.7 |
| 28 | 105.1 | 104.2 | 104.1 | 107.0 | 102.2 | 105.0 |
| 29 | 104.3 | 105.5 | 104.4 | 108.5 | --- | --- |
| 30 | 107.8 | 107.3 | 106.3 | 110.3 | --- | --- |
| 31 | 107.1 | 108.6 | 106.1 | 111.6 | 104.7 | 107.6 |
| Mean | 110.2 | 109.9 | 109.4 | 112.4 | 109.6 | 112.0 |

*Corrected for burst

( ) Extrapolated

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

| DATE 1971 | URANO KEY | CLASS | START U.T. | DURATION | MAXIMUM U.T. | PEAK FLUX | MEAN FLUX |
|---|---|---|---|---|---|---|---|
| May | | | H M | H M | H M | | |
| 3 | 1 | Simple 2F | 14 11.7 | 0 07.3 | 14 13 | 150.0 | 33.0 |
| | Post Burst Decrease | | 14 19 | 0 50 | 14 30 | -2.0 | -0.8 |
| | 1 | Simple 1F | 19 10 | 0 05 | 19 13 | 2.8 | 1.4 |
| 4 | 1 | Simple 3 | 13 05 | 2 10 | 13 08 | 4.2 | 2.0 |
| | 1 | Simple 3 | 23 35 | 1 25 | 23 50 | 2.8 | 1.4* |
| 5 | | Incomplete | 01 34 | > 0.08 | 01 40.5 | 40.0 | ---* |
| | 1 | Simple 1 | 11 38 | 0 07 | 11 41 | 2.8 | 1.2 |
| | 1 | Simple 3A | 12 10 | 4 20 | 12 30 | 14.8 | 7.0 |
| | 3 | Complex | 12 11.5 | 0 06.5 | 12 13.5 | 13.6 | 6.8 |
| | 1 | Simple 1 | 12 20 | 0 02 | 12 20.8 | 8.6 | 4.0 |
| | 1 | Simple 3 | 17 20 | 3 40 | 19 10 | 3.6 | 1.8 |
| | 1 | Simple 3A | 21 05 | 1 45 | 22 00 | 5.0 | 3.0 |
| | 1 | Simple 1 | 21 11 | 0 05 | 21 12 | 3.0 | 1.5 |
| | 1 | Simple 3 | 22 55 | 0 30 | 23 05 | 4.2 | 2.1* |
| | 1 | Simple 3 | 23 50 | 1 45 | 24 30 | 4.6 | 1.3* |
| 6 | 1 | Simple 3 | 11 20 | 2 05 | 12 10 | 4.2 | 2.1 |
| | 1 | Simple 3 | 15 15 | 0 40 | 15 17 | 2.8 | 2.0 |
| | 1 | Simple 3 | 19 40 | 1 50 | 21 00 | 2.4 | 1.2 |
| | 8 | Rise | 23 20 | 0 18 | --- | 2.0 | ---* |
| 7 | 8 | Rise | 00 50 | 0 10 | --- | 3.0 | ---* |
| | 8 | Rise | 18 30 | 1 05 | --- | 4.8 | --- |
| | 1 | Simple 3 | 20 10 | 1 00 | 20 30 | 3.8 | 1.9 |
| | 1 | Simple 3 | 21 45 | 0 55 | 21 49 | 4.8 | 2.4 |
| 8 | 1 | Simple 3 | 00 56 | 0 11 | 01 01 | 2.4 | 1.2* |
| | 1 | Simple 3 | 21 05 | 1 30 | 21 20 | 2.4 | 1.2 |

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

| DATE 1971 | URANO KEY | CLASS | START U.T. | DURATION | MAXIMUM U.T. | PEAK FLUX | MEAN FLUX |
|---|---|---|---|---|---|---|---|
| May | | | H M | H M | H M | | |
| 10 | 1 | Simple 3F | 16 25 | 1 55 | 16 53 | 4.0 | 2.0 |
| 11 | 1 | Simple 1 | 01 32 | 0 06 | 01 35 | 3.2 | 1.6* |
| | 1 | Simple 3 | 11 55 | 1 40 | 12 55 | 2.8 | 1.4 |
| | 1 | Simple 3 | 15 15 | 1 05 | 15 45 | 2.4 | 1.2 |
| | 1 | Simple 3A | 16 30 | 7 40 | 20 05 | 8.6 | 4.8 |
| | 1 | Simple 1F | 16 40 | 0 01.5 | 16 40.5 | 5.0 | 2.8 |
| | 1 | Simple 1F | 18 06 | 0 07 | 18 09 | 4.2 | 2.1 |
| | 1 | Simple 1 | 21 39 | 0 03.5 | 21 40.2 | 5.8 | 2.4 |
| | 1 | Simple 2 | 22 14 | 0 02 | 22 14.5 | 12.4 | 3.4 |
| | 1 | Simple 3 | 23 40 | 0 30 | 23 45 | 2.8 | 1.4* |
| 12 | 8 | Rise A | 01 15 | 0 15 | --- | 6.0 | ---* |
| | 1 | Simple 2 | 01 29 | 0 02 | 01 29.2 | 13.6 | 6.0* |
| | 1 | Simple 3F | 17 45 | 0 30 | 18 00 | 8.8 | 4.4 |
| 13 | 1 | Simple 3A | 18 25 | 5 20 | indet. | 4.6 | 2.3 |
| | 1 | Simple 3 | 18 30 | 0 18 | 18 37 | 6.2 | 3.0 |
| | 1 | Simple 2F | 19 04 | 1 00 | 19 23 | 260.0 | 92.0 |
| | 2 | Post B.I. | 20 04 | 0 45 | --- | 16.0 | 4.0 |
| 14 | 3 | Complex F | 14 11 | 0 17 | 14 15 | 225.0 | 65.0 |
| | | 1st Compt. | 14 11 | 0 05 | 14 15 | 225.0 | --- |
| | | 2nd Compt. | 14 16 | 0 12 | 14 17.2 | 168.0 | --- |
| | 2 | Post B.I.A. | 14 28 | 2 00 | --- | 23.0 | 8.0 |
| | 1 | Simple 1 | 15 06 | 0 08 | 15 09 | 4.6 | 2.3 |
| | 1 | Simple 3F | 17 37 | 0 18 | 17 49 | 3.0 | 1.8 |
| | 1 | Simple 2 | 17 56 | 0 15 | 17 59 | 13.0 | 3.6 |

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

| DATE 1971 | URANO KEY | CLASS | START U.T. | DURATION | MAXIMUM U.T. | PEAK FLUX | MEAN FLUX |
|---|---|---|---|---|---|---|---|
| May | | | H M | H M | H M | | |
| 14 | 3 | Complex | 18 22 | 1 40 | 18 32 | 90.0 | 47.0 |
| | | 1st Compt. | 18 22 | 0 32 | 18 32 | 90.0 | ---- |
| | | 2nd Compt. | 18 54 | 1 08 | 19 05 | 87.0 | --- |
| | 2 | Post B.I. | 20 02 | 2 00 | --- | 8.4 | 4.0 |
| 17 | 1 | Simple 1 | 20 15 | 0 05 | 20 16.5 | 2.0 | 1.0 |
| 18 | 1 | Simple 3A | 14 05 | 1 40 | 15 05 | 5.0 | 2.5 |
| | 1 | Simple 1F | 14 15 | 0 03 | 14 17 | 6.2 | 2.1 |
| 19 | 1 | Simple 3A | 16 15 | 0 55 | 16 45 | 2.2 | 1.1 |
| | 1 | Simple 1 | 16 40 | 0 03 | 16 41.5 | 5.8 | 2.9 |
| | 1 | Simple 2 | 21 15.5 | 0 03 | 21 17.1 | 17.6 | 6.0 |
| | 2 | Post B.I. | 21 18.5 | 0 15 | --- | 4.0 | 2.0 |
| 26 | 1 | Simple 3 | 14 14 | 1 35 | 14 40 | 3.0 | 1.8 |
| 27 | 1 | Simple 3A | 12 05 | 2 20 | 12 40 | 5.6 | 2.8 |
| | 4 | Fluctuations | 12 34 | 0 13 | 12 42.5 | 32.0 | ---** |
| 28 | 1 | Simple 3 | 13 55 | 1 50 | 14 30 | 2.2 | 1.1 |
| 29 | 1 | Simple 1 | 12 09.5 | 0 03 | 12 10.2 | 6.4 | 2.2 |
| | 1 | Simple 1 | 12 14 | 0 02 | 12 15 | 7.0 | 3.0 |
| | 1 | Simple 1F | 15 45.5 | 0 02.5 | 15 47 | 2.4 | 1.2 |
| 30 | 1 | Simple 1F | 22 12 | 0 01.2 | 22 12.8 | 2.2 | 1.1 |
| 31 | 1 | Simple 3 | 17 00 | 1.10 | 17 30 | 2.0 | 1.0 |

**Possible inteference

DAILY VALUES OF SOLAR FLUX AT 2800 MHz (OTTAWA-ARO)
AND 2700 MHz (PENTICTON-DRAO) -- SERIES "C"

Flux in watts/$m^2$/cycles/sec bandwidth (x $10^{-22}$) -- 2 polarizations

| 1971 | OTTAWA | | | | PENTICTON | |
|---|---|---|---|---|---|---|
| | Observed | | | adj. to 1 A.U. | Observed | adj. to 1 A.U. |
| June | 14:00 | 17:00 | 20:00 | 17:00 | 19:35 | 19:35 |
| 1 | 109.4 | 107.0 | 106.4 | 110.1 | 105.0 | 108.0 |
| 2 | 107.5 | 105.2 | 103.5 | 108.3 | 102.6 | 105.6 |
| 3 | 105.0 | 104.8 | 105.5 | 107.8 | 104.0 | 107.0 |
| 4 | 107.0 | 104.3 | 103.3 | 107.3 | 101.8 | 104.8 |
| 5 | 103.9 | 103.2 | 102.4 | 106.2 | ---- | ---- |
| 6 | 102.1 | 102.0 | 100.8 | 105.0 | ---- | ---- |
| 7 | 100.2 | 98 6 | 97.7 | 101.5 | 96.8 | 99.6 |
| 8 | 99.8 | 98.9 | 97.0 | 101.8 | 95.6 | 98.4 |
| 9 | 96.3 | 97.9 | 96.6 | 100.9 | 95.0 | 97.9 |
| 10 | 95.9 | 94.6 | 93.6 | 97.5 | 91.6 | 94.4 |
| 11 | 93.9 | 93.1 | 92.2 | 96.0 | 89.8 | 92.6 |
| 12 | 92.0 | 90.5 | 90.0 | 93.3 | ---- | ---- |
| 13 | 91.7 | 90.8 | 89.3 | 93.7 | ---- | ---- |
| 14 | 92.0 | 91.1 | 90.3 | 94.0 | 88.3 | 91.1 |
| 15 | 89.4 | 88.5 | 87.7 | 91.3 | 86.0 | 88.8 |
| 16 | 89.0 | 88.0 | 86.6 | 90.8 | 84.8 | 87.5 |
| 17 | 91.2 | 90.2 | 90.2 | 93.1 | 88.5 | 91.3 |
| 18 | 92.0 | 92.4 | 91.1 | 95.4 | 89.1 | 92.0 |
| 19 | 91.8 | 91.6 | 90.7 | 94.6 | ---- | ---- |
| 20 | 91.1 | 91.2 | 89.4 | 94.2 | ---- | ---- |
| 21 | 93.0 | 92.2 | 91.4 | 95.2 | 90.0 | 93.0 |
| 22 | 94.3 | 95.3 | 92.3 | 98.4 | 91.2 | 94.2 |
| 23 | 92.8 | 91.9 | 91.7 | 94.9 | 89.6 | 92.6 |
| 24 | 101.7* | 101.9 | 100.7 | 105.3 | 98.5 | 101.8 |
| 25 | 105.3 | 106.6 | 105.7 | 110.1 | 103.2 | 106.6 |
| 26 | 116.1 | 112.1 | 112.4 | 115.9 | ---- | ---- |
| 27 | 117.8 | 118.5 | 117.9 | 122.5 | ---- | ---- |
| 28 | 123.8 | 126.8* | 127.0 | 131.1* | 124.1 | 128.3 |
| 29 | 133.1 | 136.5 | 135.3 | 141.1 | 131.4 | 135.9 |
| 30 | 144.1 | 143.9 | 139.7 | 148.8 | 138.6 | 143.3 |
| Mean | 102.1 | 101.7 | 100.6 | 104.9 | 99.3 | 102.5 |

*Corrected for burst

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

| DATE 1971 | URANO KEY | CLASS | START U.T. | DURATION | MAXIMUM U.T. | PEAK FLUX | MEAN FLUX |
|---|---|---|---|---|---|---|---|
| June | | | H M | H M | H M | | |
| 1 | 1 | Simple 3 | 20 30 | 3 00 | 21 20 | 3.8 | 1.9 |
| 3 | 1 | Simple 3F | 17 45 | 1 45 | 18 25 | 8.0 | 3.6 |
| 7 | 1 | Simple 3 | 20 30 | 2 20 | 21 45 | 3.8 | 1.9 |
| 24 | 8 | Rise | 00 10 | 1 40 | --- | 6.0 | ---* |
| | 1 | Simple 3 | 13 25 | 2 15 | 14 30 | 3.2 | 1.6 |
| | 1 | Simple 3A | 20 10 | 4 50 | 22 05 | 2.8 | 1.4 |
| | 1 | Simple 3 | 21 38 | 0 13 | 21 42 | 1.8 | 0.9 |
| | 1 | Simple 3F | 22 30 | 0 30 | 22 45 | 1.8 | 1.0 |
| 25 | | Fall | 11 20 | 0 40 | --- | 7.2 | --- |
| | 1 | Simple 3 | 14 25 | 1 05 | 15 15 | 3.0 | 1.5 |
| 26 | 1 | Simple 3 | 22 00 | 3 00 | 22 50 | 3.6 | 2.6 |
| 27 | 8 | Rise | 13 25 | 0 25 | --- | 2.1 | --- |
| | 1 | Simple 3 | 20 05 | 1 55 | 20 45 | 2.8 | 1.4 |
| 28 | 1 | Simple 3A | 11 40 | 2 00 | 12 25 | 6.2 | 3.1 |
| | 1 | Simple 1 | 12 18 | 0 02 | 12 18.5 | 5.8 | 2.9 |
| | 1 | Simple 3 | 16 20 | 1 10 | 17 05 | 2.6 | 1.3 |
| 29 | 1 | Simple 1 | 11 14.9 | 0 02 | 11 15 | 4.4 | 2.0 |
| | 1 | Simple 2F | 12 32 | 0 08 | 12 36 | 21.0 | 6.0 |
| | 1 | Simple 3A | 15 35 | 0 35 | 15 40 | 2.2 | 1.1 |
| | 1 | Simple 1 | 15 40.8 | 0 01 | 15 41 | 5.2 | 2.6 |
| | 1 | Simple 3F | 21 25 | 0 45 | indet. | 2.2 | 1.1 |
| | 1 | Simple 3A | 22 20 | 1 25 | 23 00 | 3.8 | 1.9 |
| | 1 | Simple 2F | 22 37 | 0 05.5 | 22 38 | 180.0 | 60.0 |
| 30 | 1 | Simple 1 | 00 19 | 0 03 | 00 20.3 | 3.8 | 1.9* |
| | 1 | Simple 3 | 00 55 | 0 20 | 01 03 | 2.8 | 1.4* |
| | 1 | Simple 3A | 13 15 | 0 45 | 13 30 | 2.6 | 1.3 |
| | 1 | Simple 2F | 13 23 | 0 04 | 13 25 | 10.8 | 5.0 |
| | 1 | Simple 3 | 15 00 | 1 10 | 15 18 | 2.6 | 1.3 |
| | | Fall | 17 58 | 0 35 | --- | 2.4 | --- |
| | 1 | Simple 1F | 21 46 | 0 06 | 21 49.5 | 7.6 | 2.0 |

*Only observed at Penticton.