Observations of solar flux at the Algonquin Radio Observatory on 2800 MHz and at the Dominion Radio Astrophysical Observatory on 2700 MHz: monthly report July-December 1971

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ASTROPHYSICS BRANCH

OBSERVATIONS OF SOLAR FLUX AT THE ALGONQUIN RADIO OBSERVATORY ON 2800 MHz AND AT THE DOMINION RADIO ASTROPHYSICAL OBSERVATORY ON 2700 MHz MONTHLY REPORT JULY - DECEMBER 1971

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OTTAWA

FEBRUARY 1972

ABSTRACT

Detailed tabulations of the solar radio flux for the period July–December 1971 observed on a frequency of 2800 MHz at the Algonquin Radio Observatory and on 2700 MHz at the Dominion Radio Astrophysical Observatory are given. Convenient tables of daily flux for the whole year are presented.

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JULY 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.
July	14:00	17:00	20:00	17:00	19:35	19:35
1	142.0	140.3	134.2	145.1	---	---
2	136.2	134.8	131.2	139.4	130.2	134.6
3	127.3	126.2	126.2	130.5	121.7	125.8
4	129.8	130.3	125.5	134.7	122.8	127.0
5	126.1*	130.2	128.6	134.6	124.0	128.2
6	123.7	122.8	120.8	127.0	118.5	122.5
7	118.0	118.5	115.3*	122.5	112.4*	116.2*
8	112.2	112.9*	108.9	116.7*	107.1	110.7
9	104.6	104.2	103.1	107.7	100.6	104.0
10	103.3	104.9	103.3	108.5	---	---
11	104.7*	105.1*	104.5	108.7*	---	---
12	105.6	106.1	104.1	109.6	102.3	105.7
13	104.3	107.6	105.3	111.2	104.2	107.6
14	109.9	110.3	111.0	113.9	109.1	112.7
15	120.5	121.6	121.0	125.6	118.8	122.7
16	122.3	121.3	119.7	125.3	117.3	121.2
17	119.0	117.6	115.0	121.5	---	---
18	116.9	117.1	115.5	121.0	---	---
19	122.1*	122.8*	123.1	126.9*	120.8*	124.8*
20	115.9	115.0	110.7	118.8	110.4	114.0
21	108.4	110.1	106.1	113.6	106.7	110.1
22	112.8	112.1	110.3	115.7	108.7	112.2
23	115.3	117.5	117.2	121.3	115.5	119.2
24	129.8	130.3	126.7	134.5	---	---
25	123.6	117.6	117.0	121.4	---	---
26	118.7	118.5	115.4	122.3	111.4	115.0
27	114.6	115.4	112.4	119.0	111.1	114.5
28	113.2	113.2	111.5	116.7	108.7	112.1
29	112.3	110.9	110.0	114.3	107.9	111.2
30	111.5	112.8	110.6	116.3	108.4	111.8
31	108.2	109.9	107.3	113.2	---	---
Mean	117.2	117.4	115.2	121.2	113.0	116.7

*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
July			H M	H M	H M		
1	1	Simple 3A	00 47	0 25	00 55	2.0	1.0*
	1	Simple 1F	00 49	0 02	00 50	3.2	1.6*
	1	Simple 1F	01 30.5	0 02	01 32.2	6.6	1.9*
	8	Rise	12 00	1 00	---	3.2	---
	1	Simple 2F	13 52	0 02	13 52.5	50.0	25.0
	2	Post B.I.	13 54	1 10	---	5.8	1.5
	1	Simple 3F	17 15	1 20	18 00	3.8	1.9
	1	Simple 3	20 35	2 15	21 30	6.0	3.0
2	8	Rise	00 10	1 00	---	3.8	---*
	1	Simple 3F	18 15	1 15	18 45	4.6	2.2
3	1	Simple 3	17 05	0 35	17 17	2.2	1.1
	1	Simple 3	22 05	0 35	indet.	2.0	1.4
4	8	Rise	13 00	0 50	---	4.6	---
		Fall	17 00	1 10	---	3.9	---
	1	Simple 3	20 00	3 20	21 40	2.8	1.4
5	1	Simple 3	11 05	3 45	12 35	6.6	3.3
	8	Rise	14 10	0 40	---	2.0	---
	8	Rise A	16 30	0 15	---	2.4	---
	1	Simple 3	16 34	0 10	16 39	4.4	2.8
6	1	Simple 3A	00 55	>0 45	01 05	4.4	---*
	1	Simple 1	01 20	0 04	01 22	4.0	1.8*
	1	Simple 3	15 30	1 35	16 35	2.4	1.2
	1	Simple 2	21 10	0 05	21 11.5	46.0	18.0
	2	Post B.I.	21 15	0 05	---	4.8	1.2
7	1	Simple 3A	19 00	4 30	20 00	4.4	2.2
	1	Simple 1	21 55	0 02	21 56	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
July			H M	H M	H M		
8	1	Simple 3	00 10	1 30	00 20	2.2	1.1*
	1	Simple 1	12 30.8	0 01.5	12 31	3.8	1.9
	1	Simple 1	14 16	0 04	14 18	4.2	2.1
	2	Post B.I.	14 20	0 20	---	1.6	0.8
	1	Simple 1	14 49	0 06	14 51	7.0	3.2
	2	Post B.I.	14 55	0 25	---	2.0	1.0
	1	Simple 3	15 50	1 50	15 57	8.8	4.4
	1	Simple 1	19 42	0 02	19 42.8	2.4	1.0
		Fall	19 55	0 30	---	4.2	---
10	1	Simple 3F	22 10	1 10	22 35	2.2	1.1
	8	Rise	23 53	0 07	---	1.8	---*
11	1	Simple 3	01 15	0 40	01 20	2.6	1.0*
	1	Simple 3A	12 40	4 35	14 20	3.6	1.6
	1	Simple 3	15 02	0 28	15 05	4.4	2.2
	1	Simple 3	16 25	0 20	16 30	2.4	1.0
12	1	Simple 3	01 05	0 40	01 18	2.8	1.4*
	1	Simple 3	14 50	2 00	15 35	2.4	1.2
15	1	Simple 3	12 10	1 30	12 55	3.4	1.7
	1	Simple 3	17 10	1 00	17 30	2.0	1.0
17	1	Simple 2F	12 25	0 05	12 26.5	18.0	9.0
	2	Post B.I.	12 30	0 20	---	2.0	1.0
	1	Simple 3	14 55	0 45	15 15	3.2	1.6
18	1	Simple 3	13 05	0 40	13 10	2.0	1.0
	1	Simple 3A	20 34	0 40	20 40	2.0	1.0
	1	Simple 2F	20 36	0 02	20 36.5	11.2	7.4
	8	Rise A	21 40	0 06	---	3.7	---
	1	Simple 1	21 42	0 05	21 45	9.6	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
July			H M	H M	H M		
19	8	Rise	11 25	0 20	---	2.0	---
	1	Simple 3	12 45	3 15	14 20	4.0	2.6
	1	Simple 3	16 40	1 10	17 10	2.0	1.0
	1	Simple 3A	19 15	0 35	19 20	3.0	1.5
	1	Simple 2	19 17	0 03	19 17.3	22.0	6.0
	1	Simple 1F	21 04.5	0 02	21 06	5.0	2.5
	2	Post B.I.	21 06.5	0 20	---	2.0	1.0
	1	Simple 3	22 40	1 20	23 05	2.8	1.4*
20	1	Simple 2	15 02.5	0 02	15 03	13.8	4.6
23	8	Rise	13 30	0 30	---	3.0	---
	8	Rise	14 55	0 50	---	2.4	---
	8	Rise	19 05	0 20	---	2.0	---
24	1	Simple 1	12 39	0 04	12 40	5.0	2.5
	8	Rise	13 20	0 22	---	3.8	---
	1	Simple 2F	13 54.2	0 02	13 54.8	21.0	5.2
	1	Simple 1F	14 53	0 03	14 55	2.6	1.3
	1	Simple 1	15 49	0 01	15 49.1	6.0	3.0
	1	Simple 3A	17 05	2 25	indet.	7.6	3.6
	1	Simple 2F	17 54	0 14	18 03	115.0	40.0**
	1	Simple 1	22 17	0 07	22 20	4.0	2.0
25	1	Simple 3	15 10	0 30	15 20	2.0	1.0
	1	Simple 3	18 10	1 35	19 00	2.6	1.3
26		Absorption	12 42	0 35	12 52	-4.0	-2.0
27	8	Rise	13 10	0 10	---	2.2	---
	1	Simple 3	14 30	2 30	16 05	4.4	2.2
	1	Simple 1	17 56	0 01.2	17 57	2.0	1.0
	1	Simple 3F	22 45	2 55	23 30	2.8	1.6*

*Only observed at Penticton.

**Possible interference

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1971	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
July			H M	H M	H M		
28	8	Rise	11 25	0 05	---	2.5	---
		Fall	12 38	0 12	---	2.0	---
	1	Simple 3	12 50	0 45	13 12	1.8	0.9
	4	Fluctuations	15 13	0 11	15 13.5	2.8	---
	3	Complex	19 02.2	0 06	19 03	3.4	2.0
	3	Complex	21 11	0 10	21 12	61.0	13.0
		1st Compt.	21 11	0 02.8	21 12	61.0	---
		2nd Compt.	21 13.8	0 07.2	21 14	21.0	---
30	1	Simple 3	14 40	1 45	15 20	3.8	1.9
31	1	Simple 3F	15 00	1 20	15 25	2.6	1.3
	1	Simple 3A	16 55	2 55	17 55	4.0	2.0
	4	Fluctuations	17 44	0 02	17 45.8	4.2	---

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.
Aug.	14:00	17:00	20:00	17:00	19:35	19:35
1	108.9	106.5	104.4	109.7	---	---
2	105.1	106.0	104.4	109.2	---	---
3	104.3	103.3	102.5	106.4	99.6	102.6
4	102.0	103.4	101.7*	106.4	99.6*	102.5*
5	104.5	103.9	100.9	106.9	98.6	101.5
6	102.7	102.0	99.3	105.0	97.5	100.3
7	99.4	99.8	99.7	102.6	---	---
8	106.4	105.6*	106.5	108.6*	---	---
9	107.2	109.0	107.3*	112.1	102.6*	105.5*
10	106.9	106.8	105.0	109.7	102.3	105.1
11	103.6	101.9	100.7	104.7	100.3	103.0
12	99.6	99.4	98.0	102.1	95.4	98.0
13	99.7	99.3	97.6	101.9	95.7	98.2
14	98.7	98.1	96.1	100.7	---	---
15	95.2	94.8	93.5	97.3	---	---
16	97.1	96.4	95.6	98.8	93.7	96.0
17	99.8	101.1	101.2	103.6	99.1	101.6
18	109.1	107.8	111.8	110.5	108.1	110.8
19	124.0	123.2	126.5	126.2	123.7	126.7
20	139.2	137.8	140.3	141.1	135.0	138.2
21	147.7	146.9	146.2	150.3	---	---
22	146.9*	147.8	145.6*	151.2	---	---
23	145.7*	145.4	144.3	148.6	140.6	143.7
24	154.9	154.2	148.7	157.6	145.9	149.1
25	140.9*	140.4	140.3	143.5	135.3	138.3
26	137.2	135.9	134.5	138.8	130.6	133.3
27	134.2	132.5*	131.2	135.3*	127.6	130.3
28	123.2	121.2	116.8	123.6	---	---
29	110.9*	109.8	105.8	112.0	---	---
30	105.6	101.4	98.7	103.3	97.9	99.8
31	94.5	94.5	91.8	96.3	90.3	92.0
Mean	114.7	114.1	112.8	116.9	110.4	113.2

*Corrected for burst.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Aug.			H M	H M	H M		
3	1	Simple 1	16 17	0 02	16 18	1.6	0.8
		Absorption	16 45	0 45	17 05	-3.2	-1.6
4	8	Rise	16 58	0 10	---	2.2	---
	1	Simple 3	18 10	3 10	19 50	2.4	1.2
5	8	Rise	11 00	0 10	---	2.2	---
	1	Simple 3F	17 15	0 35	17 25	2.2	1.0
6	1	Simple 3	11 05	2 30	11 35	5.8	3.2
8	8	Rise	12 30	0 20	---	1.8	---
		Fall	15 15	0 20	---	1.8	---
	1	Simple 3	15 35	4 20	16 30	4.4	3.0
9	1	Simple 3A	18 00	3 20	18 35	5.6	2.8
	1	Simple 1	18 24	0 04	18 25.2	4.6	2.0
10	1	Simple 3	21 45	0 30	21 55	1.8	0.9
11	1	Simple 3F	14 25	2 25	14 40	9.6	4.8
19	1	Simple 3	14 15E	>1 25	14 20	3.0	---
	1	Simple 3	17 30	1 30	18 15	3.2	1.8
	8	Rise	19 00	0 40	---	3.0	---
	1	Simple 3	23 50	>2 05	25 30	8.6	---*
20	1	Simple 1F	17 19	0 07	17 20.7	8.2	2.0
		Spike	19 15	---	19 15	8.8	---
	8	Rise F	21 50	0 35	---	2.8	---
	1	Simple 3	23 15	1 30	24 05	2.0	1.0*
21	1	Simple 1	14 23	0 01	14 23.1	7.0	3.5
		Spike	19 02.2	---	19 02.2	8.4	---
	1	Simple 3A	21 15	0 30	21 25	2.0	1.0
	1	Simple 1	21 18	0 03	21 19	2.2	1.0

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Aug.			H M	H M	H M		
22	1	Simple 3F	19 45	0 55	20 03	8.8	4.0
	1	Simple 3	21 57	1 20	22 30	2.8	1.2
23	1	Simple 3A	13 10	3 30	15 25	3.2	1.6
	1	Simple 1F	15 12	0 03	15 13.5	8.4	3.0
		Spike	17 07	---	17 07	3.0	---
	1	Simple 3A	17 10	1 45	17 55	3.2	1.8
	1	Simple 1F	18 20.3	0 01	18 20.8	4.2	2.1
	1	Simple 3F	20 15	0 45	20 30	7.8	2.6
24	1	Simple 3AF	14 20	1 35	14 55	5.4	2.7
	1	Simple 1F	14 42	0 01	14 42.2	4.2	2.1
	1	Simple 3	16 00	0 50	16 20	4.0	2.0
	1	Simple 3	19 55	1 05	20 20	3.6	1.8
	1	Simple 3	22 00	0 35	22 10	3.6	1.8
	1	Simple 1F	23.34	0 02.5	23 34.5	4.4	1.6*
25	1	Simple 3A	11 25	2 00	12 25	4.2	2.4
	1	Simple 1	12 40	0 01	12 40.5	8.4	2.8
	1	Simple 3	13 45	1 35	indet.	2.8	2.0
		Spike	16 28.2	---	16 28.2	2.8	---
	8	Rise	18 30	0 03	---	2.8	---
	1	Simple 3	21 50	1 15	22 00	2.0	1.0
26	1	Simple 1F	22 16.5	0 02	22 16.8	3.4	1.7
27	1	Simple 3F	11 50	1 10	12 30	5.6	2.8
	1	Simple 3A	14 58	0 30	15 10	2.8	1.4
	1	Simple 2	14 59	0 02	14 59.2	23.0	6.0
	1	Simple 3A	16 15	0 35	16 25	5.6	2.8
	1	Simple 1F	16 16	0 03	16 17.5	7.6	3.8
	1	Simple 3	17 35	1 25	17 50	2.8	1.6

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Aug.			H M	H M	H M		
28	1	Simple 3F	00 20	> 1 30	01 00	21.0	---*
29	1	Simple 3	00 20	1 20	01 05	7.0	3.5*
	1	Simple 3A	13 50	2 30	14 10	6.0	3.0
		Absorption	15 40	0 40	15 45	-7.4	-3.5
30	1	Simple 3	13 45	0 15	13 50	4.6	2.0
	1	Simple 3A	14 50	1 30	15 05	15.6	5.4
	1	Simple 2F	14 55	0 06	14 58.7	12.4	6.2
	1	Simple 3	21 00	1 40	21 15	13.2	6.6
31	1	Simple 1	12 16	0 02	12 16.9	8.4	2.8

*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

1971	OTTAWA				PENTICTON	
	Observed			adj. to 1 A.U.	Observed	adj. to 1 A.U.
Sept.	14:00	17:00	20:00	17:00	19:35	19:35
1	90.2	88.7	88.5*	90.3	86.2*	87.8*
2	89.5	88.5	86.7	90.1	85.1	86.6
3	89.4	91.0	88.9	92.5	87.5	89.0
4	90.6	91.1*	91.1	92.6*	----	----
5	94.2*	93.7	96.3	95.2	----	----
6	102.3*	100.2*	100.2*	101.8*	----	----
7	105.7	105.7	104.7	107.3	102.3	103.8
8	103.5	102.0	102.1*	103.5	98.4*	99.9*
9	98.2	96.9	93.8	98.3	92.3	93.6
10	92.6	90.5	89.2	91.8	86.8	88.0
11	89.7	88.2	87.9	89.3	----	----
12	91.3	90.4	90.1	91.6	----	----
13	97.2	97.6	97.9	98.9	95.9	97.1
14	106.4	106.7	106.4	108.1	103.5	104.8
15	109.0	112.3*	112.1	113.5*	109.9	111.1
16	112.4	111.3	111.6	112.5	110.0	111.2
17	114.7	115.3	113.3	116.5	111.1	112.2
18	116.7*	115.6	112.0	116.6	----	----
19	111.7	112.1	109.4	113.1	----	----
20	108.9	109.4	105.9**	110.3	106.0	106.8
21	110.2	108.3*	108.6	109.2*	106.0	106.8
22	111.1	109.5	111.3	110.3	105.3	106.0
23	106.7	107.3	106.7	108.1	104.8	105.5
24	104.6	105.7	104.0	106.3	104.5*	105.1*
25	108.9	108.7	107.2	109.2	----	----
26	108.1	111.3	110.5	111.9	----	----
27	115.8	116.1	115.3	116.6	110.8	111.2
28	115.4	116.1	113.6	116.6	112.7	113.2
29	115.4	114.5*	113.6	114.8*	112.0	112.3
30	116.4	116.6	111.6	116.9	110.7	111.0
Mean	104.2	104.0	103.0	105.1	102.0	103.0

*Corrected for burst.
**Calibration in heavy rainstorm.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Sept.			H M	H M	H M		
24		Spikes	16 37	0 00.5	16 37.5	9.8	---
		Absorption	19 15	0 48	19 30	-4.0	-2.0
25	1	Simple 1	20 41	0 04	20 41.8	7.0	3.5
	2	Post B.I.	20 45	0 25	---	2.8	1.4
27	1	Simple 1	11 58	0 01	11 58.3	2.4	1.3
	1	Simple 3	13 02	0 30	13 10	3.0	1.5
	1	Simple 1	15 46	0 08	15 49.5	1.6	0.8
	1	Simple 3F	18 00	1 40	18 25	6.0	3.6
	1	Simple 1F	20 05	0 03	20 06	1.2	0.6*
	1	Simple 3	21 05	0 28	21 25	2.0	1.0
28	1	Simple 1	00 24	0 03	00 24.9	8.6	4.3*
	1	Simple 3A	18 55	0 35	19 00	2.6	1.3
	4	Fluctuations	18 57	0 06	18 57.8	11.6	---
29	1	Simple 3	16 15	3 45	Indet.	2.4	1.8
	8	Rise	21 25	0 25	---	2.4	---
30	1	Simple 3	17 35	0 15	17 40	2.8	1.4

*Only observed at Penticton

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Sept.			H M	H M	H M		
15	8	Rise	14 48	0 25	---	3.5	---
	1	Simple 3	15 10	2 40	15 35	5.8	2.9
	1	Simple 3A	22 45	1 00	23 10	3.6	1.8*
	1	Simple 1	23 03.8	0 01	23 04.3	2.8	1.4*
16	1	Simple 3	14 05	1 30	14 10	3.0	1.5
	1	Simple 3	17 25	1 45	17 35	2.0	1.0
	1	Simple 3	21 38	0 45	Indet.	1.8	1.5
17	1	Simple 3A	14 00	2 15	14 13	12.8	6.4
	3	Complex F	14 20	0 23	14 22.5	11.6	4.0
		1st Compt.	14 20	0 05	14 22.5	11.6	---
		2nd Compt.	14 25	0 18	14 28	8.6	---
	1	Simple 3AF	15 44	0 20	15 54	3.6	1.8
	1	Simple 1F	15 44	0 03	15 45.8	6.2	3.1
	1	Simple 3	21 00	0 30	21 18	1.6	0.8
18	1	Simple 2F	13 28	0 12	13 36	31.0	12.0
	2	Post B.1A	13 40	3 20	---	8.0	4.0
	1	Simple 3	14 18	0 15	14 20	2.0	1.0
21	1	Simple 3	12 40	1 30	12 53	3.8	1.9
	1	Simple 3A	15 09	2 40	16 25	3.0	1.8
	3	Complex	15 09.5	0 03	15 10	30.0	7.5
		Spike	15 13	0 00.5	15 13	11.6	2.9
	1	Simple 1	23 07	0 02	23 07.5	2.2	1.1*
22	8	Rise	13 20	0 20	---	2.0	---
	1	Simple 3	17 00	1 00	17 20	1.8	0.9
23	1	Simple 3A	16 02	1 55	16 25	1.6	0.8
	1	Simple 1F	16 03	0 02	16 03.8	7.4	3.7

*Only observed at Penticton

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Sept.			H M	H M	H M		
1	1	Simple 2F	19 28	0 22	19 41	120.0	48.0
	2	Post B.I.	19 50	0 40	---	13.8	3.9
4	1	Simple 3	15 35	2 05	17 10	4.0	2.0
5	1	Simple 1F	00 45	0 02	00 45.7	2.2	1.1*
	1	Simple 3	13 10	2 25	13 40	3.4	1.7
		Spike	16 16.2	---	16 16.2	3.4	---
		Spike	16 17.1	---	16 17.1	3.4	---
6	1	Simple 3F	12 30	2 10	13 50	2.6	1.6
	1	Simple 3	15 20	2 30	16 40	4.2	2.4
	1	Simple 3	19 10	2 40	Indet.	2.6	1.6
8	1	Simple 3	18 40	3 10	20 20	5.6	2.8
10	1	Simple 1F	23 42	0 02	23 43.3	2.0	0.8*
12	1	Simple 1F	16 17	0 06	16 19.9	5.8	2.2
13	1	Simple 3A	23 40	0 50	23 53	4.4	2.2*
	1	Simple 1F	23 55	0 02.5	23 56	7.0	3.5*
	1	Simple 1F	24 05	0 07	24 06.5	3.6	1.8*
	1	Simple 1F	24 14	0 05	24 16	7.6	3.8*
14	1	Simple 3A	13 30	1 25	14 10	3.2	1.6
	1	Simple 1F	14 10	0 06	14 11.5	4.2	2.4
	1	Simple 3A	15 55	1 05	16 35	3.2	1.6
	1	Simple 1	15 55.5	0 04	15 56	3.8	1.9
	3	Complex F	23 39	0 25	23 54.8	32.0	9.2*
		1st Compt.	23 39	0 07	23 41	31.0	---
		2nd Compt.	23 46	0 07	23 47	9.0	---
		3rd Compt.	23 53	0 11	23 54.8	32.0	---

*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

1971	OTTAWA				PENTICTON	
		Observed		adj. to 1 A.U.	Observed	adj. to 1 A.U.
Oct.	14:00	17:00	20:00	17:00	19:35	19:35
1	113.1	114.4	111.1*	114.6	109.8	110.0
2	114.4	114.1	112.7	114.2	-----	-----
3	B.I.P.	113.3*	113.6	113.4*	-----	-----
4	108.6	109.1	107.2	109.1	104.7	104.7
5	107.5	106.1	103.8	106.1	100.7	100.7
6	102.8	102.5	101.8	102.4	98.6	98.5
7	99.1	98.4	97.7	98.3	94.3	94.2
8	100.0	98.3	98.5	98.1	95.6	95.4
9	98.3	99.8	98.2	99.5	-----	-----
10	95.9	95.7	94.1	95.4	-----	-----
11	97.1	94.9	93.6	94.5	-----	-----
12	95.8	95.3	94.0	94.9	91.3	90.9
13	92.0	91.5	91.2	91.0	88.8	88.4
14	90.8	90.4	90.6	89.9	88.2	87.8
15	89.9	90.3	89.6	89.8	87.1	86.6
16	91.9	89.9	89.5	89.3	-----	-----
17	94.0*	95.4	94.6	94.7	-----	-----
18	99.0	99.9	99.9	99.1	97.0	96.2
19	108.0	110.7	111.3	109.8	106.6	105.7
20	117.3*	116.6*	115.1*	115.6*	110.1*	109.1*
21	120.8*	120.4*	120.0*	119.3*	115.1*	114.1*
22	125.9*	123.4*	123.5*	122.2*	118.1*	116.9*
23	124.1	125.2	124.4	123.9	-----	-----
24	128.1*	127.1*	127.0	125.7*	-----	-----
25	128.7	125.8	124.1	124.3	121.4	119.9
26	121.8	120.7	121.6	119.3	119.3	117.9
27	118.1*	117.6	118.1	116.1	115.1	113.6
28	115.1	112.0	111.4	110.5	107.3	105.9
29	107.4	106.6	104.8	105.1	102.2	100.8
30	109.1	109.0	109.7	107.5	-----	-----
31	108.1	107.8	107.1	106.2	-----	-----
Mean	107.4	107.2	106.4	106.4	103.6	102.9

*Corrected for burst

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Oct.			H M	H M	H M		
1	1	Simple 3	19 55	0 15	19 58	2.0	1.0
2	1	Simple 3	12 00	0 55	12 15	4.2	2.1
	1	Simple 3	13 00	0 55	13 15	2.0	1.0
3	1	Simple 3A	12 15	6 25	12 50	10.2	5.2
		Great Burst	13 31	0 39	13 46	520.0	≈ 210.0
	2	Post B.I.A.	14 10	2 25	-----	19.2	8.0
	3	Complex F	14 24	0 11	14 26	53.0	18.0
		1st Compt.	14 24	0 06	14 26	53.0	----
		2nd Compt.	14 30	0 05	14 32	12.8	----
	1	Simple 3	20 25	0 17	20 29	3.4	1.4
9	8	Rise	14 20	0 10	-----	1.8	----
		Fall	16 25	0 25	-----	1.4	----
10	1	Simple 1	15 33	0 04	15 34.5	2.0	1.0
16	1	Simple 1	18 07.5	0 02	18 08.2	0.8	0.4
17	1	Simple 3	13 10	2 30	13 55	1.4	0.7
	8	Rise	16 00	0 07	-----	1.7	----
	1	Simple 3	18 00	0 50	18 15	3.4	1.5
19	1	Simple 3AF	12 40	3 10	13 33	11.4	5.0
	1	Simple 2F	13 12.5	0 19	13 14	76.0	12.7
	8	Rise	16 20	0 35	-----	2.6	----
	1	Simple 3	17 00	0 55	17 17	4.0	2.0
	1	Simple 3	18 05	0 55	18 20	3.6	1.8
	8	Rise	20 05	0 10	-----	1.9	----
	1	Simple 3F	21 00	0 55	21 15	3.2	2.0*
	8	Rise	22 05	0 07	-----	3.8	----*

*Only observed at Penticton

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Oct.			H M	H M	H M		
20	1	Simple 3AF	12 45	7 55	INDET.	10.8	5.4
	1	Simple 3F	13 00	1 30	13 10	8.2	4.1
	1	Simple 1	15 50.2	0 03	15 51.5	2.2	1.1
	1	Simple 3	17 44	0 15	17 46	2.6	1.3
	8	Rise	20 45	0 35	-----	2.8	---*
21	1	Simple 3	12 45	2 25	13 10	6.6	3.0
	1	Simple 3F	15 35	7 25	21 05	10.0	5.0
22	1	Simple 3	12 50	3 00	13 40	4.6	2.3
	1	Simple 3A	16 10	5 20	16 45	8.6	3.6
	1	Simple 3	20 24	0 25	20 26	2.6	1.3
23	1	Simple 1	20 41	0 01.5	20 41.5	6.4	3.2
24	1	Simple 3A	13 42	1 28	14 05	2.0	1.0
	1	Simple 1	14 16	0 06	14 18.5	4.2	2.1
	1	Simple 3F	16 10	1 10	16 42	2.2	1.1
	1	Simple 1	17 24.5	0 01	17 24.8	4.6	2.3
25	1	Simple 2	13 06	0 15	13 08.5	13.8	3.6
	1	Simple 3	16 03	0 18	16 10	1.8	0.9
27	1	Simple 3AF	12 40	3 05	14 11	4.6	3.0
	1	Simple 1	15 00	0 06	15 04	1.4	0.7
	1	Simple 1	16 48	0 02	16 49	2.8	1.4
	1	Simple 1F	17 14	0 07	17 15	2.6	1.1
		Fall	20 30	0 30	-----	2.0	---
28		Spike	15 42.5	0 00.5	15 42.9	30.0	---
	1	Simple 1F	16 56	0 01	16 56.2	6.6	3.3
	1	Simple 3	21 25	1 30	21 40	2.0	1.0*

*Only observed at Penticton

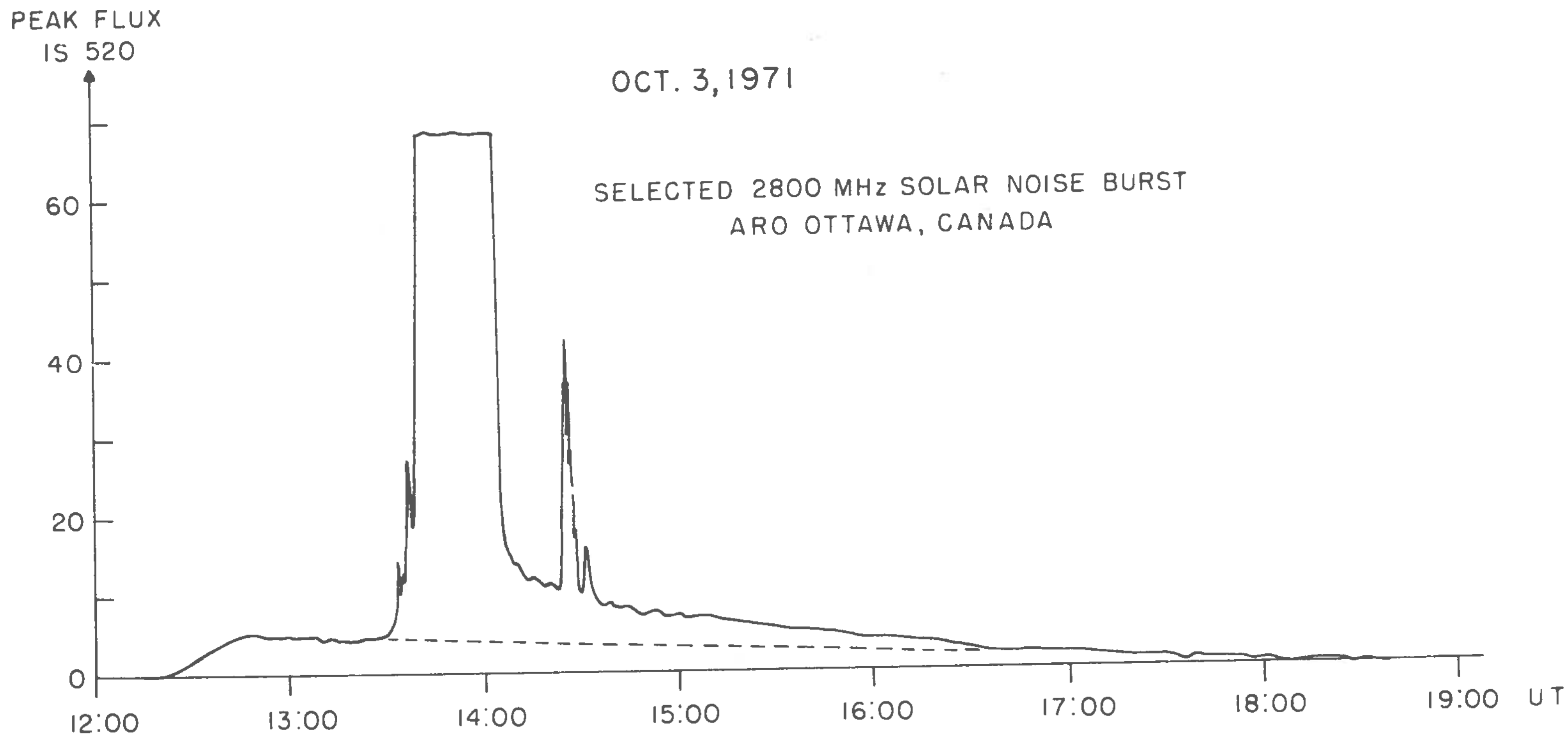
PEAK FLUX
IS 520
OCT. 3, 1971
SELECTED 2800 MHz SOLAR NOISE BURST
ARO OTTAWA, CANADA
60
40
20
0
12:00
13:00
14:00
15:00
16:00
17:00
18:00
19:00
UT

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

	OTTAWA				PENTICTON	
1971	Observed			adj. to 1 A.U.	Observed	adj. to 1 A.U.
Nov.	14:00	17:00	20:00	17:00	19:35	19:35
1	112.7	111.2	110.6	109.5	107.0	105.4
2	114.5	113.5	113.3	111.7	111.3	109.5
3	116.2	117.1	115.0	115.2	112.4	110.6
4	114.4*	114.8*	113.7	112.8*	111.7*	109.8*
5	116.9	118.0	118.5	116.0	116.0	114.0
6	112.3	111.5	108.4	109.5	-----	-----
7	107.4	106.5	105.6	104.6	-----	-----
8	105.9	102.7	102.7	100.7	100.5	98.6
9	99.5	103.6	103.1*	101.6	101.8	99.9
10	104.9	104.8*	104.4	102.7*	102.6	100.5
11	105.6	106.7	104.7	104.6	-----	-----
12	108.2	104.8	105.1	102.6	103.1	100.9
13	105.9	105.5	104.0	103.3	-----	-----
14	104.9	105.3	102.6	103.1	-----	-----
15	105.6	103.4	102.2*	101.1	101.7*	99.5*
16	106.3	107.1	105.9	104.7	103.6	101.3
17	108.6	107.9	106.4*	105.4	104.0*	101.6*
18	108.5	106.6	104.5	104.1	102.5	100.1
19	110.0	110.2	106.4	107.6	104.9	102.4
20	115.1	115.8	114.2	113.0	-----	-----
21	118.1	117.7*	116.7	114.9*	-----	-----
22	119.9	121.8*	121.6*	118.8*	120.7*	117.7*
23	124.9	123.5	122.5	120.4	119.5	116.5
24	124.7	124.8*	121.7	121.6*	118.9*	115.8*
25	124.6	124.9*	122.1	121.7*	121.3	118.1
26	133.4	132.2*	-----	128.8*	130.1	126.7
27	133.8	131.7	131.4	128.1	-----	-----
28	130.0	129.1*	127.6*	125.6*	-----	-----
29	124.9	120.5	120.2*	117.2	120.9*	117.6*
30	118.7	117.4*	115.4	114.1*	115.4	112.2
Mean	114.5	114.0	112.1	111.5	110.9	108.5

*Corrected for burst

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Nov.			H M	H M	H M		
1	1	Simple 3	18 00	1 40	18 12	1.6	0.8
3	1	Simple 3	15 09	0 40	15 12	2.2	1.1
	1	Simple 2F	19 12	0 04	19 14	16.8	7.0
4	1	Simple 3A	13 10	2 30	13 35	3.4	1.7
	1	Simple 1F	13 23	0 02	13 24.2	4.0	1.8
	1	Simple 3	16 00	4 00	18 30	5.4	2.7
		Spike	20 10	0 00.5	20 10.1	4.4	---
5	1	Simple 1	13 16.9	0 01	13 17	2.8	1.0
9	1	Simple 3A	17 35	1 30	17 42	2.2	1.1
		Spikes	17 40	0 00.8	17 40.4	6.6	---
	1	Simple 3	19 40	1 00	19 55	2.2	1.1
10	1	Simple 1	14 11	0 08	14 13.5	2.2	1.1
	1	Simple 3	16 20	1 00	16 35	4.4	2.2
	1	Simple 3A	17 50	1 10	18 25	2.0	1.0
	1	Simple 1	17 57.5	0 01.5	17 57.7	2.2	1.1
12	1	Simple 1	18 27.5	0 02	18 29	6.0	3.0
	2	Post B.I.A.	18 29.5	1 50	----	3.2	1.6
	1	Simple 1	18 31	0 01	18 31.5	3.4	1.4
13	1	Simple 3	13 05	1 35	13 55	2.0	1.2
	1	Simple 3	15 10	1 20	15 50	2.2	1.1
	1	Simple 3	16 35	0 30	17 00	1.6	0.8
	1	Simple 3F	17 25	1 50	18 00	1.6	1.0
	1	Simple 3	19 30	1 05	19 55	2.2	1.1
15	1	Simple 3A	18 35	2 25	19 25	4.4	2.2
	1	Simple 1	18 58.5	0 02	18 59.5	4.4	2.2
	4	Fluctuations	19 02	0 09	Indet.	18.0	---
		Spike	22 22.5	----	22 22.5	4.0	---*
		Spike	22 31.4	----	22 31.4	3.0	---*

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Nov.			H M	H M	H M		
16	1	Simple 3	17 20	2 30	18 35	3.6	1.8
	1	Simple 1	19 45	0 01	19 45.5	2.4	1.0
	1	Simple 1	22 31.5	0 01	22 32	1.0	0.5*
17	1	Simple 1F	15 04.3	0 01	15 04.5	5.8	2.9
	1	Simple 3A	17 45	3 00	19 05	7.8	3.9
	1	Simple 3F	17 55	0 20	18 05	6.2	3.0
	1	Simple 1	19 02	0 01	19 02.5	2.4	1.2
19	8	Rise	13 30	0 10	---	3.4	---
	1	Simple 1	13 51	0 06	13 54	4.0	2.0
	1	Simple 1	14 13	0 06	14 15	2.4	1.2
	1	Simple 2F	14 28.5	0 28.5	14 36.5	25.0	16.8
	2	Post B.I.	14 57	0 20	---	5.2	2.4
	1	Simple 1F	18 04	0 04	18 05	9.2	2.4
		Spike	19 43.9	0 00.4	19 44	5.3	---
20	1	Simple 1F	14 32.5	0 06	14 36.5	3.0	1.4
	4	Fluctuations	17 46	0 02	17 47	2.3	---
	1	Simple 3A	20 30	1 10	21 03	2.8	1.4
	3	Complex F	20 39	0 09	20 45.1	14.6	4.6
		1st Compt.	20 39	0 05	20 42	6.4	---
		2nd Compt.	20 44	0 04	20 45.1	14.6	---
21	1	Simple 3A	15 35	2 05	16 45	2.2	1.1
		Spike	15 44.6	0 00.5	15 44.8	1.6	0.8
22		Great Burst	15 11	1 00	15 25.5	940.0	318.0**
	2	Post B.I.	16 11	1 45	---	60.0	19.4
	1	Simple 3	18 25	2 45	19 25	3.4	1.7
	1	Simple 1	20 48	0 01.5	20 48.8	4.8	2.4
23	8	Rise	13 17	0 30	---	4.2	---

*Only observed at Penticton
**Peak of spikes 2700 flux units

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Nov.			H M	H M	H M		
24	1	Simple 3	14 35	5 15	Indet.	3.8	1.9
	1	Simple 1	17 09	0 01	17 09.5	0.9	0.5
	1	Simple 1	17 12	0 01	17 12.2	1.2	0.8
		Spikes	18 56.8	0 00.3	18 57.1	1.4	---
	1	Simple 1F	19 33.4	0 01.2	19 34	1.6	0.7
	1	Simple 3	20 25	0 15	20 30	1.2	0.6
	1	Simple 2	22 33	≈ 0 13	22 38	11.0	--- * **
25	1	Simple 3A	14 48	2 40	16 20	3.8	1.9
	1	Simple 3A	14 48	0 20	14 53	2.2	1.1
		Spike	14 52.5	0 00.5	14 52.8	7.4	---
	1	Simple 3	18 00	1 40	19 00	2.2	1.1
	1	Simple 3	20 05	0 30	20 20	2.0	1.0
26	1	Simple 3A	15 10	2 20	16 10	4.6	3.8
	1	Simple 3	16 13	0 15	16 17	5.6	2.2
	8	Rise F	18 00	0 35	-----	3.2	---
	1	Simple 3	18 35	0 40	18 50	1.8	0.9
	1	Simple 3	20 24	1 35	20 29	6.8	3.2*
27	1	Simple 3	15 50	0 35	16 12	6.0	1.5
	1	Simple 3F	17 50	1 50	18 45	2.2	1.1
	1	Simple 2	21 38	0 01	21 38.2	≈ 11.0	5.5*
28	1	Simple 3	14 00	0 30	14 17	2.2	1.1
	1	Simple 3F	14 35	3 40	16 15	4.8	3.4
	1	Simple 3	18 25	3 35	20 00	4.6	2.0
29		Fall	16 15	0 15	-----	2.2	---
		Fall	16 50	0 15	-----	1.8	---
	1	Simple 3	17 10	3 10	18 00	2.8	2.0
	1	Simple 3	20 40	0 45	20 52	1.8	0.9*
30	1	Simple 3	16 40	0 35	Indet.	1.8	0.9
	1	Simple 3	20 45	0 20	20 50	1.4	0.7*
	1	Simple 3F	21 12	0 50	21 37	3.2	1.6*

*Only observed at Penticton
**In sunset oscillations

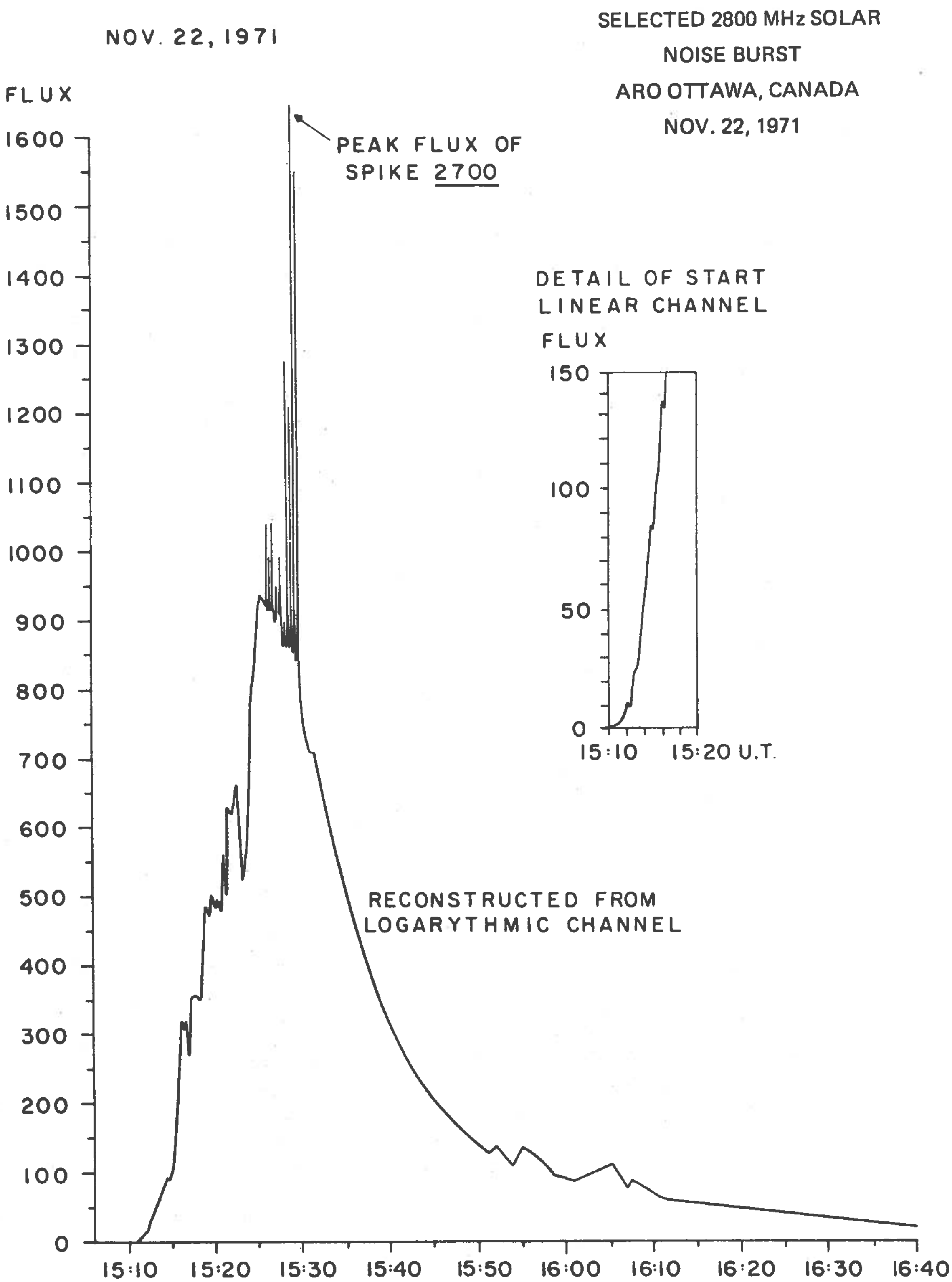
NOV. 22, 1971
SELECTED 2800 MHz SOLAR
NOISE BURST
ARO OTTAWA, CANADA
NOV. 22, 1971
FLUX
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
PEAK FLUX OF
SPIKE 2700
DETAIL OF START
LINEAR CHANNEL
FLUX
150
100
50
0
15:10
15:20 U.T.
RECONSTRUCTED FROM
LOGARYTHMIC CHANNEL
15:10
15:20
15:30
15:40
15:50
16:00
16:10
16:20
16:30
16:40

Figure 2

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.
Dec.	14:00	17:00	20:00	17:00	19:35	19:35
1	121.7	120.3*	117.0	116.9*	115.5	112.3
2	116.0	112.5*	112.9	109.4*	111.1*	108.0*
3	115.3	113.0	111.2*	109.7	109.1*	105.9*
4	110.4	109.4	107.2	106.2	----	----
5	117.8	115.0*	113.8	111.7*	----	----
6	115.3	115.1	113.5	111.8	113.2	109.9
7	116.1	116.5*	115.6	113.0*	114.3	110.9
8	120.6	118.2	117.0	114.7	115.6	112.1
9	125.2	124.9	123.6	121.2	122.7	119.0
10	128.7*	126.2*	124.9	122.4*	124.1*	120.4*
11	128.1*	126.1*	124.4	122.2*	----	----
12	130.2	128.0	126.4	124.0	----	----
13	122.1	122.5*	121.9	118.7*	120.5*	116.8*
14	121.3	122.3*	121.9*	118.5*	120.2*	116.5*
15	121.2*	121.1*	120.7	117.3*	119.0*	115.3*
16	123.0	121.5	120.5	117.6	119.9	116.1
17	135.3	135.5	134.5	131.2	132.8	128.6
18	135.8	139.1	138.4	134.6	----	----
19	138.8	138.8	137.5	134.4	----	----
20	138.8	139.7	138.1	135.2	135.3	131.0
21	143.1	140.2	139.0	135.7	136.1*	131.7*
22	144.6	143.8*	142.2	139.2*	140.1	135.6
23	139.3	137.4	138.4	132.9	135.3	130.8
24	135.2	133.8	130.8	129.4	130.5	126.2
25	132.7*	131.1	131.1	126.8	----	----
26	124.4	124.3	122.7	120.2	----	----
27	125.0	124.3*	123.4	120.2*	----	----
28	119.1	117.1	116.0	113.2	----	----
29	117.0	116.5	117.1	112.7	113.5	109.8
30	116.0	116.2	113.0	112.4	111.6	107.9
31	110.6	110.4	108.6	106.8	105.3	101.8
Mean:	125.4	124.5	123.3	120.7	121.2	117.5

*Corrected for burst

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Dec.			H M	H M	H M		
1	8	Rise	13 35	0 05	-- --	1.8	---
	1	Simple 3F	14 00	4 10	14 15	5.8	2.9
	1	Simple 3	19 20	0 50	19 30	1.4	0.7
2	1	Simple 3	14 10E	> 1 00	14 15	5.4	---
	1	Simple 3A	15 20	2 45	15 55	2.2	1.8
	1	Simple 3A	16 30	0 25	16 40	2.2	1.1
	1	Simple 1	16 36	0 02.5	16 37.7	2.8	1.8
	1	Simple 3	18 32	1 35	18 35	2.8	1.4
	1	Simple 3	20 10	0 30	20 15	1.0	0.5
	1	Simple 3	21 00	1 10	21 50	2.4	1.7*
	1	Simple 1	22 18	0 03	22 18.3	3.2	1.8*
3	1	Simple 3	16 00	1 10	16 20	2.2	1.1
		Spike	17 32.5	---	17 32.5	9.0	---
	1	Simple 3	17 40	1 15	18 10	2.4	1.2
	1	Simple 3	19 29	1 20	19 30	2.8	1.2
5	1	Simple 3	15 00	4 25	18 05	4.2	2.0
7	1	Simple 3	14 15	0 40	14 45	1.4	0.8
	8	Rise	15 05	0 01	-- --	1.2	---
	1	Simple 3F	15 25	1 10	16 05	2.4	1.2
	1	Simple 3F	16 26	2 25	18 10	4.2	2.1
	1	Simple 3	20 05	1 15	20 25	2.0	1.0
8	1	Simple 1	14 52	0 07	14 53	2.2	1.1
	1	Simple 3A	15 41	1 05	15 47	3.4	1.7
	1	Simple 1	15 43	0 03	15 44.5	4.2	2.1
	1	Simple 3	18 35	0 25	Indet.	1.0	0.7
9	1	Simple 1	14 35	0 06	14 37	1.8	0.9
	1	Simple 3	19 25	1 55	20 25	2.0	1.0

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Dec.			H M	H M	H M		
10	1	Simple 3	13 53	0 25	13 54	2.4	1.2
	1	Simple 3	15 30	2 50	16 00	3.6	2.0
	1	Simple 3	18 40	1 30	19 20	2.0	1.0
	1	Simple 3	20 25	0 35	20 35	1.8	0.9*
11	1	Simple 3	14 10E	> 2 00	15 35	2.8	1.4
	1	Simple 3F	16 40	2 00	17 15	8.2	4.1
	1	Simple 3	18 50	1 30	19 20	3.0	1.8
	8	Rise	20 35	0 35	-- --	4.0	---*
13	1	Simple 3	16 20	3 40	17 00	5.8	2.9
	1	Simple 1F	21 03.5	0 03	21 04.2	2.4	1.2*
14	1	Simple 3F	15 00	2 20	16 05	6.6	3.0
	1	Simple 3A	18 00	2 45	19 15	5.2	2.6
	1	Simple 3	18 10	0 10	18 15	2.2	1.1
	1	Simple 1	19 03	0 03	19 04	4.6	2.3
15	1	Simple 3	13 40	6 30	15 35	9.4	5.2
18	4	Fluctuations	18 35	0 04	18 36.1	2.8	---
	1	Simple 2F	19 21.8	0 05	19 22.7	77.0	18.0**
19	1	Simple 3A	19 15	1 55	20 35	2.0	1.0
	1	Simple 1	20 27	0 04	20 28	5.4	1.8
20	1	Simple 2	18 48	0 01	18 48.3	22.0	10.0
21	1	Simple 3	14 20	2 05	14 55	4.8	2.4
	1	Simple 3F	17 10	4 10	17 50	8.6	5.6
22	1	Simple 3	15 15	1 20	15 50	3.0	1.5
	1	Simple 3	16 50	1 50	17 15	2.4	1.8
	8	Rise A	19 30	0 15	-- --	2.0	---
	1	Simple 1	19 38	0 07	19 39.2	3.4	1.6
23	1	Simple 3F	14 30	2 05	15 32	7.6	3.4
	1	Simple 3	17 55	1 05	18 10	2.2	1.1
		Spike	19 42.7	----	19 42.7	7.8	---

*Only observed at Penticton.

**Peak flux of fluctuations: 263.0

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Dec.			H M	H M	H M		
23	1	Simple 3A	19 45	> 2 00	21 50	9.0	---*
	1	Simple 1	20 51	0 03	20 52.5	2.4	1.2*
24	1	Simple 1	22 43	0 02	22 44	9.4	3.2*
25	1	Simple 3	13 25	3 00	13 57	11.2	5.6
	1	Simple 3F	19 00	1 30	19 30	3.6	1.8
26	1	Simple 1	15 03	0 01	15 03.5	1.8	0.9
	1	Simple 1	17 57.5	0 01	17 58	1.0	0.5
27	1	Simple 3	14 45	3 15	15 00	2.4	1.8
	1	Simple 1	21 35	0 04	21 35.5	3.6	1.2*
29	1	Simple 3A	19 16	0 16	19 26	2.2	1.1
	1	Simple 1	19 18	0 04	19 20	3.2	1.6
30	1	Simple 3	18 30	0 55	18 50	1.4	0.7
	1	Simple 2F	20 24	0 07	20 26.5	12.2	4.6
	1	Simple 2	22 54	0 01.5	22 54.5	17.0	6.0*

*Only observed at Penticton.

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

FLUX IN WATTS/M^2/CYCLES/SECOND BANDWIDTH (x 10^{-22}) - 2 POLARIZATIONS

1971 OBSERVED VALUES AT 1700 U.T. 1971

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	135.0	170.5	131.6	100.6	93.8	107.0	140.3	106.5	88.7	114.4	111.2	120.3
2	139.4	165.3	128.0	107.7	98.0	105.2	134.8	106.0	88.5	114.1	113.5	112.5
3	139.3	159.3	123.8	109.0	104.4	104.8	126.2	103.3	91.0	113.3	117.1	113.0
4	145.0	152.9	117.9	107.6	110.7	104.3	130.3	103.4	91.1	109.1	114.8	109.4
5	151.1	148.9	115.5	108.2	115.8	103.2	130.2	103.9	93.7	106.1	118.0	115.0
6	151.9	147.8	110.8	107.1	123.4	102.0	122.8	102.0	100.2	102.5	111.5	115.1
7	155.3	137.1	106.8	113.0	128.7	98.6	118.5	99.8	105.7	98.4	106.5	116.5
8	154.2	126.6	105.5	109.8	130.2	98.9	112.9	105.6	102.0	98.3	102.7	118.2
9	158.1	113.5	106.0	108.6	135.7	97.9	104.2	109.0	96.9	99.8	103.6	124.9
10	157.3	112.4	108.4	109.4	133.1	94.6	104.9	106.8	90.5	95.7	104.8	126.2
11	154.1	112.6	110.9	123.5	132.6	93.1	105.1	101.9	88.2	94.9	106.7	126.1
12	155.6	113.5	116.7	129.1	127.5	90.5	106.1	99.4	90.4	95.3	104.8	128.0
13	153.2	116.1	113.9	138.8	122.4	90.8	107.6	99.3	97.6	91.5	105.5	122.5
14	159.2	117.7	112.9	140.2	119.7	91.1	110.3	98.1	106.7	90.4	105.3	122.3
15	158.9	120.1	111.5	138.2	115.5	88.5	121.6	94.8	112.3	90.3	103.4	121.1
16	161.6	133.0	115.7	138.6	113.5	88.0	121.3	96.4	111.3	89.9	107.1	121.5
17	160.4	135.9	117.3	138.8	110.3	90.2	117.6	101.1	115.3	95.4	107.9	135.5
18	165.6	133.5	115.2	136.0	108.6	92.4	117.1	107.8	115.6	99.9	106.6	139.1
19	171.3	141.8	110.0	137.2	107.2	91.6	122.8	123.2	112.1	110.7	110.2	138.8
20	174.8	139.3	107.2	135.4	103.5	91.2	115.0	137.8	109.4	116.6	115.8	139.7
21	184.6	139.2	113.4	127.6	99.5	92.2	110.1	146.9	108.3	120.4	117.7	140.2
22	186.4	146.8	113.2	119.2	91.1	95.3	112.1	147.8	109.5	123.4	121.8	143.8
23	188.8	146.3	108.9	116.2	87.4	91.9	117.5	145.4	107.3	125.2	123.5	137.4
24	182.7	150.7	108.5	107.8	86.6	101.9	130.3	154.2	105.7	127.1	124.8	133.8
25	174.0	149.4	108.8	104.7	90.0	106.6	117.6	140.4	108.7	125.8	124.9	131.1
26	170.2	146.1	108.2	103.5	91.2	112.1	118.5	135.9	111.3	120.7	132.2	124.3
27	171.9	142.7	108.9	100.3	101.2	118.5	115.4	132.5	116.1	117.6	131.7	124.3
28	171.3	139.2	106.5	96.2	104.2	126.8	113.2	121.2	116.1	112.0	129.1	117.1
29	165.7		103.7	94.4	105.5	136.5	110.9	109.8	114.5	106.6	120.5	116.5
30	168.0		101.1	93.4	107.3	143.9	112.8	101.4	116.6	109.0	117.4	116.2
31	175.2		103.1		108.6		109.9	94.5		107.8		110.4
Mean:	162.6	137.8	111.9	116.7	109.9	101.7	117.4	114.1	104.0	107.2	114.0	124.5

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

FLUX IN WATTS/M^2/CYCLES/SECOND BANDWIDTH (x 10^{-22}) - 2 POLARIZATIONS

1971 ADJUSTED TO 1 ASTRONOMICAL UNIT AT 1700 U.T. 1971

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	130.5	165.6	129.2	100.5	95.3	110.1	145.1	109.7	90.3	114.6	109.5	116.9
2	134.8	160.5	125.8	107.6	99.6	108.3	139.4	109.2	90.1	114.2	111.7	109.4
3	134.7	154.7	121.7	109.0	106.2	107.8	130.5	106.4	92.5	113.4	115.2	109.7
4	140.2	148.6	116.0	107.7	112.6	107.3	134.7	106.4	92.6	109.1	112.8	106.2
5	146.1	144.7	113.7	108.3	117.9	106.2	134.6	106.9	95.2	106.1	116.0	111.7
6	146.9	143.7	109.1	107.3	125.6	105.0	127.0	105.0	101.8	102.4	109.5	111.8
7	150.2	133.4	105.2	113.2	131.1	101.5	122.5	102.6	107.3	98.3	104.6	113.0
8	149.1	123.2	104.0	110.1	132.7	101.8	116.7	108.6	103.5	98.1	100.7	114.7
9	152.9	110.4	104.5	108.9	138.3	100.9	107.7	112.1	98.3	99.5	101.6	121.2
10	152.1	109.5	107.0	109.8	135.8	97.5	108.5	109.7	91.8	95.4	102.7	122.4
11	149.0	109.7	109.5	124.1	135.3	96.0	108.7	104.7	89.3	94.5	104.6	122.2
12	150.5	110.5	115.3	129.7	130.2	93.3	109.6	102.1	91.6	94.9	102.6	124.0
13	148.1	113.2	112.5	139.6	125.0	93.7	111.2	101.9	98.9	91.0	103.3	118.7
14	153.9	114.8	111.7	141.0	122.3	94.0	113.9	100.7	108.1	89.9	103.1	118.5
15	153.7	117.1	110.3	139.2	118.0	91.3	125.6	97.3	113.5	89.8	101.1	117.3
16	156.4	129.8	114.5	139.6	116.1	90.8	125.3	98.8	112.5	89.3	104.7	117.6
17	155.3	132.6	116.1	139.9	112.8	93.1	121.5	103.6	116.5	94.7	105.4	131.2
18	160.3	130.4	114.2	137.2	111.2	95.4	121.0	110.5	116.6	99.1	104.1	134.6
19	165.8	138.5	109.1	138.4	109.8	94.6	126.9	126.2	113.1	109.8	107.6	134.4
20	169.2	136.2	106.3	136.8	106.0	94.2	118.8	141.1	110.3	115.6	113.0	135.2
21	178.7	136.1	112.6	128.9	102.0	95.2	113.6	150.3	109.2	119.3	114.9	135.7
22	180.6	143.6	112.4	120.5	93.4	98.4	115.7	151.2	110.3	122.2	118.8	139.2
23	182.9	143.2	108.2	117.5	89.7	94.9	121.3	148.6	108.1	123.9	120.4	132.9
24	177.0	147.5	107.8	109.1	88.9	105.3	134.5	157.6	106.3	125.7	121.6	129.4
25	168.6	146.4	108.3	106.0	92.3	110.1	121.4	143.5	109.2	124.3	121.7	126.8
26	164.9	143.2	107.8	104.8	93.7	115.9	122.3	138.8	111.9	119.3	128.8	120.2
27	166.7	140.0	108.5	101.7	103.9	122.5	119.0	135.3	116.6	116.1	128.1	120.2
28	166.2	136.6	106.2	97.5	107.0	131.1	116.7	123.6	116.6	110.5	125.6	113.2
29	160.7		103.4	95.8	108.5	141.1	114.3	112.0	114.8	105.1	117.2	112.7
30	163.0		100.9	94.8	110.3	148.8	116.3	103.3	116.9	107.5	114.1	112.4
31	170.1		102.9		111.6		113.2	96.3		106.2		106.8
Mean:	157.4	134.4	110.8	117.5	112.4	104.9	121.2	116.9	105.1	106.4	111.5	120.7

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

FLUX IN WATTS/M^2/CYCLES/SECOND BANDWIDTH (x 10^{-22}) - 2 POLARIZATIONS

1971 OBSERVED VALUES AT 1935 U.T. 1971

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	----	169.7	128.5	98.0	91.9	105.0	----	----	86.2	109.8	107.0	115.5
2	----	163.6	124.2	105.7	96.2	102.6	130.2	----	85.1	----	111.3	111.1
3	----	155.1	122.3	----	104.7	104.0	121.7	99.6	87.5	----	112.4	109.1
4	138.7	150.4	116.3	----	109.8	101.8	122.8	99.6	----	104.7	111.7	----
5	143.4	143.3	112.5	104.9	113.9	----	124.0	98.6	----	100.7	116.0	----
6	148.5	----	----	105.3	118.9	----	118.5	97.5	----	98.6	----	113.2
7	150.4	----	----	108.7	127.7	96.8	112.4	----	102.3	94.3	----	114.3
8	151.6	122.6	101.5	106.7	126.5	95.6	107.1	----	98.4	95.6	100.5	115.6
9	----	110.9	102.9	----	131.4	95.0	100.6	102.6	92.3	----	101.8	122.7
10	----	106.9	105.4	----	128.3	91.6	----	102.3	86.8	----	102.6	124.1
11	151.0	----	109.5	----	127.6	89.8	----	100.3	----	----	----	----
12	151.2	113.2	114.2	----	122.0	----	102.3	95.4	----	91.3	103.1	----
13	149.2	----	----	136.4	119.8	----	104.2	95.7	95.9	88.8	----	120.5
14	155.5	----	----	137.9	114.9	88.3	109.1	----	103.5	88.2	----	120.2
15	154.1	118.0	108.3	133.8	----	86.0	118.8	----	109.9	87.1	101.7	119.0
16	----	129.1	112.0	134.6	----	84.8	117.3	93.7	110.0	----	103.6	119.9
17	----	130.9	112.2	----	106.4	88.5	----	99.1	111.1	----	104.0	132.8
18	161.1	129.8	112.0	----	105.5	89.1	----	108.1	----	97.0	102.5	----
19	167.5	137.6	107.3	135.8	104.4	----	120.8	123.7	----	106.6	104.9	----
20	170.6	----	----	129.2	101.4	----	110.4	135.0	106.0	110.1	----	135.3
21	181.0	----	----	121.9	95.1	90.0	106.7	----	106.0	115.1	----	136.1
22	179.1	143.3	107.9	116.4	----	91.2	108.7	----	105.3	118.1	120.7	140.1
23	----	143.8	105.9	112.6	----	89.6	115.5	140.6	104.8	----	119.5	135.3
24	----	146.7	103.9	----	----	98.5	----	145.9	104.5	----	118.9	130.5
25	172.3	144.3	104.0	----	87.9	103.2	----	135.3	----	121.4	121.3	----
26	166.1	144.3	104.9	101.4	90.9	----	111.4	130.6	----	119.3	130.1	----
27	167.8	141.4	----	97.4	99.0	----	111.1	127.6	110.8	115.1	----	----
28	169.2	----	----	93.0	102.2	124.1	108.7	----	112.7	107.3	----	----
29	161.7	----	101.1	91.4	----	131.4	107.9	----	112.0	102.2	120.9	113.5
30	----	----	97.4	90.3	----	138.6	108.4	97.9	110.7	----	115.4	111.6
31	----	----	99.2	----	104.7	----	----	90.3	----	----	----	105.3
Mean:	159.5	136.9	109.3	113.1	109.6	99.3	113.0	110.4	102.0	103.6	110.9	121.2

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

FLUX IN WATTS/M^2/CYCLES/SECOND BANDWIDTH (x 10^{-22}) - 2 POLARIZATIONS

ADJUSTED TO 1 ASTRONOMICAL UNIT AT 1935 U.T.

1971

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	----	164.8	126.2	97.9	93.4	108.0	----	----	87.8	110.0	105.4	112.3
2	----	158.9	122.1	105.6	97.7	105.6	134.6	----	86.6	----	109.5	108.0
3	----	150.6	120.2	----	106.5	107.0	125.8	102.6	89.0	----	110.6	105.9
4	134.1	146.2	114.4	----	111.7	104.8	127.0	102.5	----	104.7	109.8	----
5	138.7	139.3	110.7	105.0	116.0	----	128.2	101.5	----	100.7	114.0	----
6	143.6	----	----	105.5	121.0	----	122.5	100.3	----	98.5	----	109.9
7	145.4	----	----	108.9	130.1	99.6	116.2	----	103.8	94.2	----	110.9
8	146.6	119.3	100.1	107.0	128.9	98.4	110.7	----	99.9	95.4	98.6	112.1
9	----	107.9	101.5	----	133.9	97.9	104.0	105.5	93.6	----	99.9	119.0
10	----	104.1	104.0	----	130.9	94.4	----	105.1	88.0	----	100.5	120.4
11	146.0	----	108.1	----	130.2	92.6	----	103.0	----	----	----	----
12	146.2	110.3	112.8	----	124.6	----	105.7	98.0	----	90.9	100.9	----
13	144.3	----	----	137.2	122.3	----	107.6	98.2	97.1	88.4	----	116.8
14	150.4	----	----	138.7	117.4	91.1	112.7	----	104.8	87.8	----	116.5
15	149.0	115.1	107.1	134.7	----	88.8	122.7	----	111.1	86.6	99.5	115.3
16	----	126.0	110.9	135.5	----	87.5	121.2	96.0	111.2	----	101.3	116.1
17	----	127.8	111.1	----	108.8	91.3	----	101.6	112.2	----	101.6	128.6
18	155.9	126.8	111.0	----	108.0	92.0	----	110.8	----	96.2	100.1	----
19	162.1	134.4	106.4	137.0	106.9	----	124.8	126.7	----	105.7	102.4	----
20	165.1	----	----	130.5	103.8	----	114.0	138.2	106.8	109.1	----	131.0
21	175.2	----	----	123.1	97.5	93.0	110.1	----	106.8	114.1	----	131.7
22	173.5	140.1	107.1	117.7	----	94.2	112.2	----	106.0	116.9	117.7	135.6
23	----	140.7	105.3	113.8	----	92.6	119.2	143.7	105.5	----	116.5	130.8
24	----	143.6	103.3	----	----	101.8	----	149.1	105.1	----	115.8	126.2
25	167.0	141.4	103.5	----	90.2	106.6	----	138.3	----	119.9	118.1	----
26	161.0	138.6	104.5	102.7	93.4	----	115.0	133.3	----	117.9	126.7	----
27	162.8	----	----	98.8	101.7	----	114.5	130.3	111.2	113.6	----	----
28	164.1	----	----	94.3	105.0	128.3	112.1	----	113.2	105.9	----	----
29	156.8	----	100.8	92.8	----	135.9	111.2	----	112.3	100.8	117.6	109.8
30	----	----	97.2	91.7	----	143.3	111.8	99.8	111.0	----	112.2	107.9
31	----	----	99.0	----	107.6	----	----	92.0	----	----	----	101.8
Mean:	154.4	133.5	108.1	113.9	112.0	102.5	116.7	113.2	103.0	102.9	108.5	117.5