Observations of solar flux at the Algonquin Radio Observatory on 2800 MHz and at the Dominion Radio Astrophysical Observatory on 2700 MHz: monthly reports-July-December 1969

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OBSERVATIONS OF SOLAR FLUX AT THE ALGONQUIN RADIO OBSERVATORY ON 2800 MHz AND AT THE DOMINION RADIO ASTROPHYSICAL OBSERVATORY ON 2700 MHz MONTHLY REPORTS-JULY-DECEMBER 1969

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

OTTAWA

JANUARY 1970

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 July–December 1969. Comments on the control of these observations are made and the use of the new URANO code for describing the bursts is presented.

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OBSERVATIONS OF SOLAR FLUX AT THE ALGONQUIN RADIO OBSERVATORY ON 2800 MHz AND AT THE DOMINION RADIO ASTROPHYSICAL OBSERVATORY ON 2700 MHz MONTHLY REPORTS – JULY–DECEMBER 1969

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Control of Solar Patrol Observations

During certain months of 1969, the relative accuracy of the solar patrol flux observations made at the Algonquin Radio Observatory were checked against observations made with the original 1.2-meter reflector at Goth Hill Observatory, while the absolute level of the flux was obtained with observations made with three calibrated horn antennas. An intercomparison of these results is best shown by forming the appropriate ratios of flux levels for various months, and these are tabulated in Table I. The ratio of the ARO flux readings to those obtained with the original reflector (Goth Hill) has remained close to unity and indicates that the relative accuracy of the series which commenced in 1947 has been maintained.

TABLE I

1969	Number of days	Ratio of solar flux ARO / Goth Hill	ARO / H_1	ARO / H_2	ARO / H_3
January	7	.998	–		
February	10	1.003	–		
March	3	1.004	–		
April	7	1.000	1.064		
May	11	.997	1.058		
June	16	1.003	1.059	1.073	1.085
July	21	1.003	1.066	1.076	1.086
August	16	1.004	1.089*	1.125*	1.130*
September	17	1.007	1.064	1.077	1.084

ARO – 1.8 meter reflector
Goth Hill – 1.2 meter reflector
H_1 – Original Pyramidal Horn (1952)
H_2, H_3 – Duplicate Pyramidal Horns (1969)

* Observations made on frequency of 2700 MHz instead of 2800 MHz

The ratios of flux levels using absolute levels of solar flux obtained with three horns is shown. These horns are designated as H_1, the original horn used in 1952, and horns H_2 and H_3, recently constructed to be identical with the original horn. Intercomparison of the ratios for the new horns, H_2 and H_3, shows discrepancies of up to 2% with respect to the original horn. Even when it is granted that the original horn shows signs of mechanical deformations, such a scatter is not entirely satisfactory. The results from the newer horns have been accepted as most reliable and presented to the Working Group on Absolute Solar Flux Calibrations which met during the General Assembly of URSI in Ottawa this year. A synopsis of the situation is shown in Table II.

TABLE II

		H_1 Old horn	H_2, H_3 New horns
2800 MHz	Correction for 1968	.95	–
2800 MHz	Correction for 1969 June, July, September	.94	.92
2700 MHz	Correction for 1969 August only	–	.92
Correction to convert ARO flux at 2800 MHz to absolute value at 2700 MHz		–	.89

Change of Code for Describing Bursts

Effective May 1, 1969 the URANE code was revised and is now URANO code. As far as our monthly report is concerned we felt best to start using the revised code July 1, 1969 which is the beginning of our half-year publication.

The following pages indicate the revised URANO key* applied to different types of microwave bursts reported. There is no change in the basic descriptive burst classification which has been used in the past.

**See* International Ursigram and World Days Service (IUWDS). Synoptic Codes for Solar and Geophysical Data, Second Revised Edition, 1969. Copies may be obtained from:

P. Simon, Ursigrammes Observatoire, 92 Meudon, France
Miss J.V. Lincoln, Deputy Secretary, IUWDS Steering Committee, Environmental Science Services Administration, Boulder, Colorado, 80302 USA.

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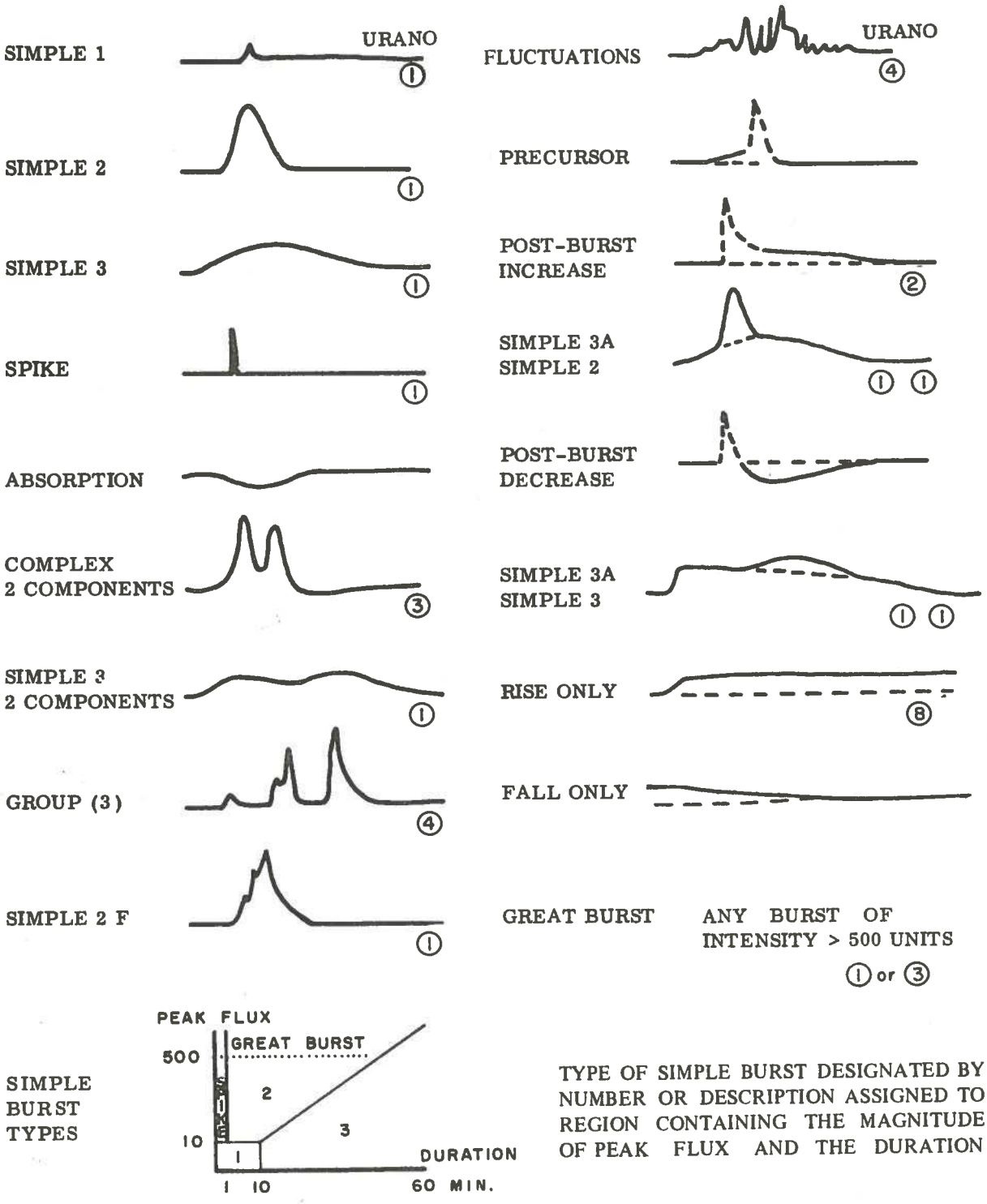

TYPE OF SIMPLE BURST DESIGNATED BY NUMBER OR DESCRIPTION ASSIGNED TO REGION CONTAINING THE MAGNITUDE OF PEAK FLUX AND THE DURATION

Figure 1 URANO code for microwave burst types – 2695 MHz – Ottawa, Canada, code effective May 1, 1969

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 ($\times 10^{-22}$) -- 2 polarizations

	OTTAWA				PENTICTON	
1969		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	145.3	144.3	146.9	149.2	141.8	146.6
2	154.2	156.8	155.0	162.1	148.7	153.8
3	162.9	162.0*	158.8	167.5*	155.4	160.7
4	162.4	163.6	162.6	169.2	155.8	161.1
5	161.4	161.1	159.8	166.6	153.4	158.6
6	156.8	159.8	158.4	165.2	152.5	157.7
7	160.2	161.2	161.0	166.7	154.8	160.1
8	157.1	159.8	159.5	165.2	154.8	160.1
9	161.8*	160.3	158.5	165.8	155.8	161.1
10	157.9*	159.0	157.0	164.4	152.1	157.3
11	153.2	152.9	151.2	158.1	148.4	153.4
12	147.1	146.6	145.5	151.4	140.7	145.3
13	139.5	140.5	139.4	145.1	136.1	140.6
14	129.4	130.0	130.1	134.3	124.7	128.8
15	122.5	122.5	122.9	126.5	117.6	121.5
16	120.0	122.1	120.0*	126.1	118.1*	122.0*
17	119.2	120.2	120.2	124.2	114.0	117.8
18	117.1	116.1	116.0	119.9	111.2	114.9
19	113.9	114.3	113.0*	118.1	108.9*	112.5*
20	112.2	111.7	112.7	115.4	108.8	112.4
21	113.3	112.1	110.7	115.7	107.9	111.4
22	110.4	111.5	109.9	115.1	107.7	111.1
23	111.9	112.9	113.7	116.5	108.8	112.3
24	111.5	112.1	111.8	115.7	106.8	110.2
25	113.2	114.1	112.7	117.8	108.0	111.5
26	114.2	115.5	116.0	119.2	111.2	114.8
27	120.3	123.1	123.6	126.9	119.2	122.9
28	131.3	131.0	129.0	135.1	124.0	127.8
29	134.3	133.0	133.9	137.1	129.4	133.4
30	138.5	142.6	142.5	147.0		
31	159.4	162.1*	165.0*	167.0*	157.7*	162.4*
Mean	135.9	136.6	136.0	141.1	131.1	135.5

*Corrected for burst.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
July			H M	H M	H M		
1	1	Simple 1	16 26.5	0 01.5	16 26.9	3.8	1.3
	1	Simple 1	16 28.9	0 01	16 29	7.2	2.4
	1	Simple 1F	17 13	0 01	17 13.5	2.0	1.0
	1	Simple 1	20 55.2	0 01	20 55.5	4.4	2.2
	1	Simple 3	21 40	0 40	21 50	2.2	1.1
2	1	Simple 3	17 20	0 50	17 40	2.4	1.2
3	1	Simple 3A	14 00	5 30	16 10	6.4	4.8
	1	Simple 2F	15 14	0 16	15 18	88.0	35.0
	2	Post B.I.	15 30	0 20	---	4.6	2.3
	1	Simple 3	23 20	>2 25	23 55	9.4	---*
4	1	Simple 3	11 40	2 00	12 40	6.6	3.3
	1	Simple 3	14 15	1 05	14 20	3.0	1.5
5	1	Simple 3A	12 25	1 25	12 50	9.4	4.7
	1	Simple 2	12 25	0 11	21 30.5	15.0	5.6
	1	Simple 1	14 23	0 02.5	14 24	3.2	1.6
6	1	Simple 1	11 23	0 08	11 25.5	4.4	2.2
	1	Simple 1	18 48.5	0 03.5	18 49.5	3.2	1.6
	1	Simple 1	21 17	0 02	21 17.5	3.0	1.5
	1	Simple 3	23 15	2 15	23 30	7.2	3.4
7	1	Simple 1	12 00	0 05	12 02	2.4	1.2
	1	Simple 3	12 55	0 25	13 00	2.8	1.4
	1	Simple 3	15 15	0 10	15 18.5	2.2	1.1
	1	Simple 3	16 33	0 22	16 42	3.0	1.5
	1	Simple 1	16 57.5	0 01.5	16 58	3.8	1.9
	1	Simple 1	21 15	0 03	21 17	3.2	1.6
8	1	Simple 3	14 25	1 05	14 40	2.6	1.3
	1	Simple 3	17 00	1 30	17 30	3.0	1.4
	1	Simple 3	22 08	3 00	22 35	8.6	4.3

*Only observed at Penticton

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July 1969

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
July			H M	H M	H M		
9	1	Simple 3A	12 40	1 40	13 00	9.4	4.0
	1	Simple 1	12 55	0 02	12 55.8	9.4	4.7
	1	Simple 1	15 41.5	0 01.5	15 42	6.0	2.0
	1	Simple 3	18 20	0 15	18 25	2.2	1.1
	1	Simple 3A	21 50	2 00	22 20	3.6	1.8
	1	Simple 1	22 17	0 01	22 17.5	2.8	1.4
10	1	Simple 3	12 10	2 35	13 25	6.2	3.1
	1	Simple 1	20 30	0 05	20 31	1.8	0.9
11	1	Simple 1	13 24	0 01	13 24.5	2.8	1.4
	1	Simple 3	14 05	1 10	14 45	2.6	1.3
	1	Simple 1	19 59	0 07	20 01	3.2	1.6
12	1	Simple 3	14 20	2 30	14 35	5.4	2.7
	1	Simple 3A	18 20	2 10	19 20	3.0	1.5
	1	Simple 1	19 13	0 02	19 14	1.8	0.9
	1	Simple 1	20 57	0 04	20 59.2	9.6	4.8
14	1	Simple 2	14 29.5	0 04	14 31.5	11.8	5.9
	2	Post B.I.	14 33.5	0 45	---	4.0	2.0
	1	Simple 1	17 22	0 02	17 23	3.0	1.5
	1	Simple 3A	21 30	1 00	21 45	2.8	1.4
	1	Simple 1	21 40	0 02	21 41	3.0	1.5
	1	Simple 3	23 25	1 35	23 55	3.8	1.9*
15	1	Simple 3	16 55	2 15	17 45	3.0	1.5
16	1	Simple 3AF	17 10	4 50	19 20	10.8	5.4
	1	Simple 1	18 12	0 03	18 13	3.8	2.2
19	1	Simple 3A	16 50	4 20	18 20	6.2	2.0
	1	Simple 1	16 59.5	0 01.5	16 59.8	4.0	1.4*
	1	Simple 1	18 12	0 06	18 16.5	3.8	1.4
23	1	Simple 3	14 00	1 45	15 00	2.8	1.4
	1	Simple 3	20 00	2 40	20 50	2.2	1.1

*Only observed at Penticton.

MONTHLY REPORT NO. 270

July, 1969

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
July			H M	H M	H M		
29	1	Simple 3	13 40	1 25	14 20	4.0	2.0
	1	Simple 3	15 05	1 25	15 30	2.8	1.4
	1	Simple 3	17 10	2 00	18 00	3.8	1.9
30	8	Rise	15 02	0 05	---	3.8	---
31	1	Simple 3A	15 35	2 15	17 00	4.2	2.1
	1	Simple 1	17 12	0 03	17 13	2.0	1.0
	1	Simple 3	18 30	2 40	19 45	5.4	2.7

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

	OTTAWA				PENTICTON	
1969		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	171.1*	170.6	180.1	175.7	169.9	175.0
2	187.1*	186.9	186.7	192.5	180.6*	186.0*
3	182.4	183.3	183.1	188.8	175.8	181.1
4	188.3	187.5	184.8	192.9	180.9	186.1
5	181.9	182.4	177.9	187.7	171.7	176.7
6	173.0	167.1	166.8	171.9	165.6	170.4
7	160.0	158.7	158.0	163.1	153.6	157.9
8	148.0	146.2	144.2	150.3	141.8	145.8
9	146.0	141.5	141.2	145.5	137.7	141.6
10	134.9	135.6	135.9	139.3	133.0	136.6
11	129.5	132.3	131.5	135.9	129.4	132.9
12	125.7	125.2	123.2	128.6	119.2	122.4
13	119.1	120.0	118.1	123.1	114.5	117.5
14	116.7	114.5	115.1	117.5	111.2	114.1
15	113.4	112.6	112.5	115.5	108.6	111.4
16	111.4	109.6	107.7	112.3	105.9	108.5
17	106.1	105.3	105.6	107.9	101.3	103.8
18	103.0	102.6	101.4	105.2	97.7	100.1
19	101.4	101.5	101.6	103.9	97.9	100.2
20	105.7	106.9	106.7	109.5	102.6	105.1
21	113.8	113.6	114.9	116.2	109.3	111.8
22	118.0*	118.3	120.5*	121.0	115.8	118.5
23	128.3	130.3	129.4	133.2	122.9	125.6
24	139.0	142.9*	143.9	146.0*	137.7	140.7
25	147.2	151.5	151.2	154.8	144.3	147.5
26	155.3	153.2*	153.2*	156.4*	147.2	150.3
27	163.9	164.3	170.6	167.8	162.7	166.1
28	168.0	168.1*	169.8	171.5*	162.4	165.6
29	174.4	174.1	173.4	177.6	163.1	166.4
30	168.9	166.4	167.4	169.6	no cal.	---
31	163.5	160.7	160.5	163.8	no cal.	---
Mean	143.4	143.0	143.1	146.6	136.7	140.2

*Corrected for burst

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Aug.			H M	H M	H M		
1	8	Rise	11 15	0 30	---	6.4	---
	1	Simple 3F	12 55	3 35	13 52	19.0	8.0
	1	Simple 1	16 37	0 07	indet.	2.0	1.4
	1	Simple 1	17 19.5	0 02	17 20	7.8	3.4
	1	Simple 3F	20 20	2 30	21 15	12.8	5.2
2	1	Simple 3A	12 10	3 00	14 07	11.6	5.8
	1	Simple 2	13 35	0 04	13 37	31.0	15.5
	2	Post B.I.	13 39	0 17	---	8.4	4.2
	1	Simple 3	14 25	0 30	14 35	6.0	3.0
		Absorption	15 20	1 20	15 50	-5.0	-2.5
	1	Simple 3	17 20	0 55	17 30	2.6	1.3
	1	Simple 3	18 32	0 25	18 35	3.4	1.7
	1	Simple 3	19 10	0 50	19 11	4.6	2.3
	1	Simple 3	20 25	1 45	20 33	15.0	5.0
		Fall	22 12	0 18	---	6.0	---
	1	Simple 3A	23 25	> 2 20	24 45	6.0	---*
	1	Simple 2F	25 34	0 06	25 35	20.0	7.0*
3	1	Simple 3	14 10	1 45	15 00	3.6	1.8
	1	Simple 3	16 38	0 25	16 39	2.2	1.1
	1	Simple 3	19 55	1 05	20 00	3.6	1.8
5	1	Spike	18 34	---	18 34	7.0	---
6	1	Simple 3	17 50	0 50	18 05	3.0	1.5
	1	Simple 3	20 18	0 30	20 19	3.0	1.5
8	1	Simple 1	20 46	0 02	20 47	2.6	1.2
9	1	Simple 3	12 50	1 50	13 10	3.4	1.7
10	1	Simple 2	14 22	0 03.5	14 23.1	55.0	14.0
11	1	Simple 2F	12 18.2	0 02.8	12 20	62.0	21.0
		Post Burst decrease	12 21	0 49	12 30	-2.4	-1.2

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Aug.			H M	H M	H M		
11	1	Simple 1F	13 19	0 03	13 19.5	6.0	3.0
	1	Simple 2	16 09	0 02	16 09.8	17.0	8.0
12	1	Simple 1	14 33	0 05	14 33.2	1.8	0.9
	1	Simple 2	15 55	0 01	15 55.3	12.6	6.3
13	1	Simple 1	01 40	0 01	01 40.5	2.6	1.3*
	1	Simple 3	22 00	3 45	23 15	3.0	1.5
15	1	Simple 3A	20 05	2 55	21 35	6.0	3.0
	1	Simple 1	21 21	0 06	21 23.5	6.2	3.1
21	1	Simple 3	11 30	2 20	12 00	2.0	1.0
	1	Simple 1	14 12	0 09	14 16	4.2	2.1
22	1	Simple 2	11 04	0 01	11 04.5	22.0	8.0
	1	Simple 3A	11 25	2 20	11 36	7.0	3.5
	1	Simple 1	11 26	0 01	11 26.5	4.4	2.2
	1	Simple 3	13 45	0 45	13 55	2.0	1.0
	1	Simple 3A	15 54	0 20	15 57	3.6	1.8
	1	Simple 1	15 55.2	0 00.5	15 55.5	4.4	2.2
	1	Simple 3	17 25	1 00	17 40	2.2	1.1
	1	Spike	18 22	0 00.2	18 22.2	22.0	---
	1	Simple 2F	19 07.5	0 04.5	19 08.8	190.0	64.0
	2	Post B.I.	19 12	0 13	---	6.2	3.0
	1	Simple 2	19 58	0 04	20 00	11.0	5.0
	2	Post B.I.	20 02	1 40	---	4.4	2.2
23	1	Simple 3	18 45	0 55	18 55	2.2	1.1
	1	Simple 3	21 55	2 00	23 05	3.0	1.5*
24	1	Simple 3F	14 30	1 50	15 05	7.8	3.2

*Only observed at Penticton

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Aug.			H M	H M	H M		
24	1	Simple 3A	16 25	3 25	17 35	8.2	4.8
	1	Simple 3	16 48	0 15	16 53	5.8	2.9
	1	Simple 3	19 00	0 30	19 10	2.6	1.3
	1	Simple 3	19 50	0 50	20 20	2.0	1.0
	1	Simple 3	20 45	0 55	21 00	4.0	2.0
	8	Rise	22 00	0 10	---	2.2	---
25	1	Simple 3	12 40	1 10	13 05	3.4	1.7
	1	Simple 1	16 47.7	0 00.5	16 47.9	2.8	1.4
	1	Simple 1	17 33.9	0 01	17 34	2.6	1.3
	1	Simple 1	17 37	0 01	17 37.5	2.0	1.0
	4	Fluctuation	18 05	0 25	18 10	2.6	---
	1	Simple 1	20 21.5	0 00.5	20 21.6	4.8	2.4
	1	Simple 3AF	22 10	2 40	22 40	5.2	2.6
	1	Simple 1	23 16.5	0 02	23 17	2.8	1.4
26	1	Simple 1	01 28.5	0 01.5	01 29	8.4	4.2*
	1	Simple 3	14 35	0 35	14 55	2.8	1.4
	1	Simple 3	16 20	2 00	17 25	2.8	1.4
	1	Simple 3A	19 03	0 23	19 10	4.6	2.3
	1	Simple 1F	19 05	0 02.5	19 05.8	3.6	1.8
	1	Simple 3	19 35	2 35	20 05	5.2	2.6
	1	Simple 3	22 20	0 50	22 45	2.6	1.3
27	1	Simple 1	00 30	0 03	00 31	4.0	2.0*
	1	Simple 3A	14 00	0 35	14 10	3.6	1.8
	1	Simple 1	14 01.5	0 01	14 01.8	2.0	1.0
	1	Simple 1	20 33	0 01	20 33.6	2.0	1.0

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Aug.			H M	H M	H M		
27	1	Simple 1	21 06	0 02	21 07.5	3.4	1.7
	1	Simple 3	22 40	1 00	22 44	2.6	1.4
28	1	Simple 3	00 05	>1 30	00 50	5.2	---*
	1	Simple 1	12 01.8	0 01	12 02.2	7.0	3.5
	1	Simple 3	16 10	1 25	16 15	3.0	1.5
	1	Simple 3	23 15	1 15	23 50	1.8	0.9*
29	1	Simple 3AF	14 28	0 10	14 37	3.0	1.5
	1	Simple 1F	14 30.5	0 01	14 31	3.0	2.0
	3	Complex	20 49	0 09	20 50.5	8.2	2.1
	1	Simple 3	23 05	1 40	23 25	5.0	2.5*
31	1	Simple 3	20 05	2 25	21 00	3.0	1.5

*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 ($\times 10^{-22}$) -- 2 polarizations

	OTTAWA				PENTICTON	
1969		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	156.8	153.5	154.4*	156.3	152.3	155.0
2	152.2	152.5	153.0	155.2	147.6	150.3
3	146.5	149.2	145.9	151.7	141.3	143.7
4	148.0*	148.0	150.0	150.5	144.6	147.1
5	137.0	136.0	135.9	138.2	132.1	134.2
6	132.4	133.6	134.0	135.7	129.8	131.9
7	128.9	126.4*	122.4*	128.3*	120.1*	121.9*
8	122.2	122.3	123.6	124.1	119.7	121.5
9	117.9	115.7	113.7	117.3	110.8	112.4
10	115.4	115.0	114.1	116.6	110.5	112.0
11	115.4	117.5	117.2	119.0	113.2	114.7
12	118.1	119.2	120.8	120.7	113.7	115.2
13	131.5	129.5	129.2	131.2	124.5	126.1
14	127.3	128.1	128.5	129.8	122.6	124.2
15	134.6	133.8	131.1	135.3	126.6	128.0
16	134.4*	132.7*	131.9	134.2*	126.9	128.3
17	130.8	132.0	133.7*	133.3*	127.4*	128.7*
18	133.2	133.2	130.7	134.4	128.9	130.1
19	130.5	130.3	129.6	131.5	127.9	129.1
20	133.8	135.4	135.6	136.5	132.6	133.7
21	136.4*	136.7	136.9	137.8	133.0	134.1
22	136.3	139.5	138.2	140.5	134.1	135.0
23	143.4*	144.5	146.7	145.5	144.3	145.3
24	157.5	158.7	154.0	159.7	149.3	150.2
25	167.4	168.5	165.4	169.3	160.4	161.2
26	156.9*	158.1*	157.4	158.9*	151.0	151.8
27	154.8	150.7	150.9	151.3	---	---
28	145.7	142.1	142.8	142.7	---	---
29	140.3	139.5	137.7	139.9	132.1	132.5
30	136.7	136.6*	134.2	137.0	129.3	129.7
Mean	137.4	137.3	136.7	138.7	131.7	133.1

*Corrected for burst.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Sept.			H M	H M	H M		
1	1	Simple 1F	12 58	0 05	12 59.5	4.2	2.1
	1	Simple 3AF	18 00	4 10	20 00	6.6	3.0
	1	Simple 1	19 09	0 02	19 10.5	3.4	1.2
2	1	Simple 3A	12 00	2 55	indet.	5.0	3.2
	1	Simple 1F	12 29.7	0 01.3	12 30	2.8	1.8
	1	Simple 3	21 40	1 30	22 00	7.0	3.5
3	1	Simple 3	12 00	0 20	12 05	2.4	1.2
	1	Simple 1	23 41	0 08	23 44.5	7.2	2.6*
4	1	Simple 2	12 34	0 05	12 36	25.0	12.0
	2	Post B.I.	12 39	0 16	---	4.6	2.8
	1	Simple 3	13 30	1 10	14 00	2.4	1.2
	1	Simple 3F	15 45	1 05	16 10	2.2	1.1
	1	Simple 3	17 15	1 35	18 05	2.4	1.2
	1	Simple 3	19 08	0 12	19 11	3.6	1.3
		Fall	21 15	0 35	---	4.8	---
5	1	Simple 2	22 07	0 05	22 08	15.2	7.6
	2	Post B.I.	22 12	1 50	---	3.8	1.9
6	1	Simple 3	16 10	0 40	16 28	2.0	1.0
7	1	Simple 3	11 40	2 00	indet.	4.2	2.8
	1	Simple 1	15 16.3	0 01	15 17	2.0	1.0
	1	Simple 3	17 00	0 30	17 15	1.6	0.8
	1	Simple 3	18 30	4 00	20 15	6.8	2.3
8	1	Simple 3	20 50	3 20	21 30	2.0	1.0
9	1	Simple 1F	13 06	0 07	13 10	8.4	2.8
11	8	Rise A	13 10	0 10	---	2.2	---
	1	Simple 1	13 14	0 04	13 15	2.0	1.0
	8	Rise	15 20	0 40	---	2.2	---
	1	Simple 3	20 00	1 05	20 45	3.2	1.6

*Only observed at Penticton.

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OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Sept.			H M	H M	H M		
11		Fall	21 10	0 40	---	2.0	---
	1	Simple 3	22 55	1 00	23 10	2.0	1.0
12	1	Simple 1	12 42	0 03	12 43.1	3.0	1.0
	1	Simple 3	15 10	2 05	15 17	3.4	1.7
	1	Simple 3	22 15	2 05	22 23	3.8	1.9*
13	1	Simple 1F	15 25	0 03	15 26	6.0	3.0
15	1	Simple 1	00 33	0 02	00 34	6.8	3.4*
	1	Simple 3A	12 15	1 55	12 35	12.0	6.0
	1	Simple 2F	12 25	0 05	12 27	108.0	36.0
	1	Simple 3	14 40	3 25	indet.	4.0	2.2
16	1	Simple 3A	00 01	0 50	00 27	4.0	2.0*
	1	Simple 1	00 02	0 05	00 03.5	5.6	2.8*
	1	Simple 3F	12 10	0 40	12 35	5.2	2.6
	1	Simple 3	13 08	0 20	13 14	2.6	1.8
	1	Simple 3A	13 30	2 10	13 40	2.0	1.6
	1	Simple 1	13 32	0 02	13 33	2.0	1.0
	1	Simple 3F	16 23	1 10	16 45	2.0	1.2
	1	Simple 3A	20 40	1 15	21 15	4.4	2.2
	1	Simple 2	20 44.2	0 04.5	20 45	25.0	7.0
	3	Complex	20 50	0 03.5	20 51	3.2	1.6
17	1	Simple 1	12 11	0 00.5	12 11.2	4.4	2.2
	1	Simple 1F	14 42	0 01	14 42.8	8.4	4.2
	1	Simple 1	18 04	0 02	18 04.8	2.2	1.1
	1	Simple 1	18 09	0 04	18 10	4.4	2.0
	1	Simple 3 AF	19 00	2 00	19 28	5.2	2.6
	1	Simple 2	19 00	0 01.5	19 00.5	15.0	5.0
	1	Simple 1	21 24	0 01	21 24.2	2.2	1.1
19	1	Simple 3	13 14	0 25	13 15	4.2	2.0

*Only observed at Penticton.

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September, 1969

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Sept.			H M	H M	H M		
19	1	Simple 3	13 54	0 25	13 57	2.8	1.4
21	1	Simple 3	12 50	3 20	13 25	5.4	2.7
23	1	Simple 3	12 55	2 40	14 35	5.8	2.9
	1	Simple 3	21 50	1 50	22 15	4.6	2.3
24	1	Simple 3A	17 40	1 20	17 44	15.0	3.8
	1	Spike	17 53.5	---	17 53.5	9.0	---
25	1	Simple 3A	14 10	2 40	14 32	11.2	5.6
	1	Simple 2F	14 23.6	0 08	14 25	78.0	20.0
26	1	Simple 3	12 35	0 25	12 40	2.8	1.4
	1	Simple 3	13 00	1 50	13 20	6.6	3.6
	1	Simple 3	15 10	3 50	15 55	6.0	3.0
27	1	Simple 3	21 00	0 10	21 02	2.8	2.0
30	1	Simple 3	15 50	3 35	16 20	5.8	2.9

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	
1969		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	132.2	133.6	135.3	133.9	130.2	130.5
2	142.0	143.1	142.3	143.2	138.9	139.0
3	134.4	132.4	132.0	132.5	128.5	128.6
4	128.8	132.2	130.9	132.2	126.8	126.8
5	140.8	140.9*	139.9	140.9*	136.2	136.2
6	142.5*	143.3	145.3	143.2	140.1	140.0
7	144.8	145.1	144.0	145.0	140.7	140.6
8	148.0	150.4	147.9	150.1	141.4	141.1
9	143.1	142.1	141.0	141.7	134.4	134.0
10	137.8	137.1*	139.5	136.7*	134.0	133.6
11	132.8	130.6	130.1*	130.1	123.4*	122.9*
12	128.0*	128.5	128.6	128.0	120.9	120.4
13	124.5	124.9	123.1	124.3	118.2	117.6
14	119.7	119.7	121.5	119.1	117.8	117.2
15	121.7	118.4	119.4	117.7	113.2	112.5
16	115.3	116.2	116.3	115.4	113.0	112.2
17	122.1	123.2	122.4	122.3	118.4	117.6
18	129.2	129.8	131.0	128.8	128.1	127.1
19	144.4	147.0	154.4*	145.8	147.8	146.6
20	163.1	163.4	164.0	161.9	160.7	159.3
21	170.8	178.6	182.1	177.0	174.6*	173.0*
22	186.7	188.1	191.7	186.2	177.4	175.6
23	194.4*	195.1	200.9	193.1	194.2*	192.3*
24	207.4*	206.8	210.0	204.5	202.9	200.7
25	205.7	206.5*	207.5	204.0*	201.8	199.4
26	205.8	207.1	205.6	204.6	201.5	199.1
27	204.9	203.4*	200.6	200.8*	196.4	193.8
28	192.1*	192.1	189.8	189.6	183.8	181.4
29	175.6	174.9	173.6	172.5	171.2	168.8
30	166.7	164.0	161.4	161.7	155.0	152.8
31	152.8	156.2	153.8	153.9	149.0*	146.8*
Mean	153.5	154.0	154.3	152.9	149.0	148.0

*Corrected for burst.

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OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	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	14 10	1 55	15 00	3.4	1.7
2	1	Simple 3A	12 15	1 30	12 45	5.4	2.7
	3	Complex	12 15	0 15	12 23.8	26.0	6.5
		1st Compt.	12 15	0 08	12 22	15.0	---
		2nd Compt.	12 23	0 07	12 23.8	26.0	---
	1	Simple 3	12 45	0 10	12 47	6.0	3.0
	1	Simple 1	13 10.5	0 01.5	13 11	5.0	2.5
	1	Simple 3	18 31	0 23	18 36	2.4	1.2
	1	Simple 1	19 32	0 02	19 33.2	4.8	2.4
	1	Simple 3	21 30	2 30	22 35	4.8	2.4*
3	1	Simple 3F	14 05	2 15	15 30	3.0	2.0
	1	Simple 2F	17 14	0 05	17 16.9	14.0	7.0
	2	Post B.I.	17 19	0 20	----	2.4	1.2
	1	Simple 1	21 05	0 02	21 05.8	2.4	1.2
5		Absorption	15 15	1 15	15 55	-4.2	-2.1
	1	Simple 3	16 30	1 45	17 15	6.8	3.4
	1	Simple 3	20 50	2 10	22 25	3.2	1.6
6	1	Simple 3	12 45	3 55	14 40	5.2	3.0
	1	Simple 3	16 50	1 50	17 25	2.6	1.3
7	1	Simple 3	14 40	2 00	15 00	4.0	2.0
		Absorption	17 10	1 00	17 45	-3.4	-1.7
	8	Rise	22 00	0 10	---	3.4	---*
8	4	Group	15 11	0 05	15 14.5	2.2	---
	1	Simple 1	15 11	0 02	15 12	2.0	1.0
	1	Simple 1	15 13	0 02	15 14.5	2.2	1.1
	1	Simple 2	16 30	0 05	16 31.2	~185.0	---
	2	Post B.I.	16 35	0 20	---	4.8	2.4
	1	Simple 3F	20 10	1 15	20 40	4.0	2.0*
	1	Simple 1	22 31	0 08	22 36	2.8	1.4*

*Only Observated at Penticton.

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October, 1969

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Oct.			H M	H M	H M		
9	1	Simple 3	14 25	1 50	15 10	8.0	4.0
	1	Simple 3	18 55	1 05	19 05	2.6	1.3
	4	Fluctuations	20 10.5	0 10	20 10.8	5.4	---
	1	Simple 3	20 50	2 20	21 00	8.4	4.2
10	1	Simple 3	13 00	0 30	13 10	2.2	1.1
	1	Simple 3A	16 05	2 40	17 35	2.8	1.8
	1	Simple 3	17 02	0 10	17 07	2.6	1.3
	1	Simple 3F	18 14	0 12	18 15.2	2.8	1.4
	8	Rise	19 05	0 25	---	2.6	---
	3	Complex	23 57	0 04	23 58.4	20.0	5.0*
		1st Compt.	23 57	0 01	23 57.2	8.2	---
		2nd Compt.	23 58	0 03	23 58.4	20.0	---
11	1	Simple 3	18 10	3 30	18 50	4.6	2.3
	1	Simple 2	23 26	0 08	23 28	76.0	28.0*
	2	Post B.I.	23 34	0 25	---	5.2	2.6*
12	1	Simple 3	12 50	4 00	15 00	6.2	4.0
13	1	Simple 1	12 46	0 02	12 47	3.4	1.7
	1	Simple 1F	19 46.8	0 10	19 47	8.8	3.0
	3	Complex	21 05	0 12	21 05.5	9.4	4.0
		1st Compt.	21 05	0 04.2	21 05.5	9.4	---
		2nd Compt.	21 09.2	0 01.8	21 10	7.0	---
		3rd Compt.	21 11	0 06	21 12	6.6	---
	1	Simple 2F	23 33	0 05	23 34.5	105.5	35.0*
	2	Post B.I.	23 38	0 10	---	6.0	3.0*
14	1	Simple 1	18 47	0 01.5	18 47.8	2.2	1.1
16	1	Simple 3F	22 22	0 35	22 33	4.0	2.0*

*Only observed at Penticton.

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October, 1969

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Oct.			H M	H M	H M		
19	1	Simple 1	14 37	0 04	14 37.3	4.8	2.0
	1	Simple 3A	15 15	1 00	15 50	4.2	2.1
	1	Simple 1	16 04	0 03	16 04.2	6.4	2.0
	3	Complex	16 32	0 10	16 36.2	40.0	10.0
		1st Compt.	16 32	0 03	16 34	8.8	---
		2nd Compt.	16 35	0 07	16 36.2	40.0	---
	1	Simple 2	17 29	0 11	17 30	60.0	10.0
	1	Simple 3	18 00	1 00	18 30	2.6	1.3
	1	Simple 1	19 388	0 01	19 38.4	4.0	2.0
	1	Simple 3A	19 58	0 15	20 00	2.2	1.1
	1	Simple 1	20 04	0 01	20 04.1	3.8	1.9
	1	Simple 2	21 05.5	0 03.5	21 05.9	15.0	4.0
	1	Simple 2F	23 28	0 01	23 28.3	17.0	4.5*
20	1	Simple 3	14 20	1 20	14 27	5.4	2.4
	1	Simple 1	17 37	0 02	17 37.8	2.6	1.3
	1	Simple 1	17 45.8	0 06	17 46.2	5.2	2.6
	8	Rise	22 50	0 20	---	5.6	---*
21	1	Simple 3	13 05	0 40	13 15	2.8	1.4
	1	Simple 1	13 47	0 03.5	13 48.5	2.0	1.0
	1	Simple 3	17 30	3 30	17 55	6.4	3.6
22	1	Simple 2	12 33	0 05	12 33.9	48.0	12.0
	1	Simple 3	14 30	0 30	14 40	6.2	2.8
	8	Rise	17 55	0 10	---	3.6	---
	1	Simple 1F	20 20.2	0 00.5	20 20.5	3.4	1.7
	1	Simple 3A	22 25	1 00	22 45	6.0	3.0*
	1	Simple 1	22 39	0 03	22 40	3.6	1.8*

*Only observed at Penticton.

MONTHLY REPORT NO. 273

October, 1969

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Oct.			H M	H M	H M		
23	1	Simple 3 AF	13 15	2 10	13 55	16.0	7.8
	1	Simple 1	14 14	0 04	14 16	3.6	1.8
	1	Simple 1	17 36.5	0 00.8	17 37	2.0	1.0
	1	Simple 3A	18 25	1 25	18 45	8.2	4.6
	1	Simple 2F	18 27	0 02	18 27.5	13.0	4.0
	1	Simple 3	22 55	0 30	23 00	9.6	4.8*
24	1	Simple 3A	13 23	1 35	14 00	6.4	3.2
	1	Simple 1	14 34.5	0 01	14 35.2	6.6	3.3
	1	Simple 2F	21 12	0 04	21 14.2	130.0	44.0
	2	Post B.I.	21 16	1 00	---	16.2	4.0
25	1	Simple 2	13 25.9	0 01	13 26	17.0	4.0
	1	Simple 2F	15 34.5	0 03	15 35.1	14.0	7.0
	1	Simple 3F	16 20	3 00	18 10	7.4	3.7
	1	Simple 3	20 00	1 00	20 15	3.2	1.6
	1	Simple 3	21 10	0 20	21 15	3.2	1.6*
26	1	Simple 3	13 43.5	0 11	13 44	7.4	3.7
	1	Simple 2	16 32	0 06	16 33	154.0	52.0
	2	Post B.I.A	16 38	2 30	---	16.8	6.6
	1	Simple 3	18 10	0 18	indet.	3.0	2.0
	1	Simple 3	20 50	1 30	21 30	3.8	1.4*
27	8	Rise	13 18	0 25	---	6.2	---
	1	Simple 2F	14 32	0 05	14 33	20.0	8.0
		Post decrease	14 37	0 40	14 48	-4.6	-2.3
	1	Simple 3F	15 40	2 00	16 05	7.2	3.6
	1	Simple 3	17 45	1 15	18 00	7.2	3.6
	1	Simple 3F	20 50	1 15	20 56	30.0	12.0
	1	Simple 3	22 05	0 25	22 13	5.0	2.5*

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Oct.			H M	H M	H M		
28	1	Simple 3A	12 45	2 10	13 00	4.4	2.2
	1	Simple 1	12 52	0 03	12 53.7	7.4	3.7
	1	Simple 3	15 10	0 40	15 30	3.2	1.6
	1	Simple 1F	15 53	0 06	15 56	8.6	4.3
	1	Simple 3	16 06	0 25	16 09	4.4	2.2
	8	Rise	19 50	0 10	---	4.6	---
	8	Rise	21 15	0 10	---	5.0	---*
	1	Simple 3	21 50	1 30	22 20	5.0	2.6*
29	1	Simple 1	14 51	0 03	14 52	3.4	1.4
	1	Simple 2	15 19	0 02	15 19.5	16.6	6.0
	2	Post B.I.	15 21	0 40	---	2.8	1.4
30	1	Simple 3	20 05	2 05	20 45	3.0	1.5
31	8	Rise	14 45	0 10	---	3.2	---
	1	Simple 3	15 19	0 20	15 20	4.0	2.0
	1	Simple 3	16 40	3 20	17 25	6.0	3.0

*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 ($\times 10^{-22}$) -- 2 polarizations

	OTTAWA				PENTICTON	
1969		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	143.4	141.5	140.3	139.4	136.6	134.6
2	153.9	141.2	136.4	138.9	133.1	131.0
3	132.1	128.8	129.5	126.7	126.9	124.9
4	133.7	131.8	130.1	129.6	126.6	124.4
5	131.8	132.3	132.3	130.0	127.5*	125.3*
6	133.6	134.3	133.0	131.9	129.8	127.5
7	138.0*	138.3	138.2	135.8	132.6	130.2
8	134.0	132.9	131.9	130.4	127.6	125.2
9	131.1	130.2	130.2	127.7	126.7	124.3
10	128.2	125.3	126.0	122.8	122.1	119.7
11	123.9	124.5	122.9	122.0	120.0	117.6
12	123.6	124.9	123.8	122.3	119.8	117.3
13	127.9	129.3*	128.4	126.6*	123.8	121.2
14	137.0	137.0*	140.1	134.1*	134.2	131.4
15	135.9	141.0	141.5	137.9	134.5	131.5
16	149.2	148.8	150.8	145.5	143.8	140.6
17	164.2	163.9	175.0	160.1	166.6	162.8
18	188.5	181.4*	181.4	177.2*	172.4	168.4
19	186.6	189.8	195.9*	185.2	185.8*	181.3*
20	194.5*	193.5*	193.3*	188.9*	182.5*	178.1*
21	202.8	203.1	202.0	198.2	189.1	184.6
22	212.2	210.6*	211.4*	205.3*	199.1	194.1
23	216.4	214.9	213.6	209.5	199.7	194.7
24	204.0	206.1	205.1	200.7	191.2*	186.2*
25	192.0	190.7	182.3*	185.7	180.5*	175.8*
26	185.5	180.0	183.2	175.3	177.3	172.7
27	181.8	177.6	172.2*	172.8	169.0*	164.4*
28	162.6*	161.2	(160.4)	156.8	156.2	152.0
29	146.0	145.4	141.0	141.5	138.5	134.8
30	143.7	140.4	136.6	136.5	132.9	129.2
Mean	157.9	156.7	156.3	153.2	150.2	146.9

*Corrected for burst
( ) Extrapolated.

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November, 1969

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	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 30	0 50	18 42	4.4	2.0
4	1	Simple 3A	15 10	0 30	15 20	2.0	1.0
	1	Simple 1	15 14	0 03	15 16	8.4	2.8
	1	Simple 1F	15 19.5	0 03.5	15 21.5	4.2	2.4
	1	Simple 2F	15 27	0 02	15 28.5	10.0	2.6
	1	Simple 3	15 55	0 13	16 00	2.0	1.0
	1	Simple 3A	20 22	0 25	20 25	3.6	1.8
	1	Spike	20 29.2	0 00.8	20 29.8	6.0	3.0
	1	Simple 3A	21 26	>2 00	22 20	10.8	---*
	1	Simple 1	21 26.5	0 01.5	21 27	7.4	5.0*
	2	Post B.I.A.	21 28	0 12	---	4.2	2.1*
	1	Simple 2	21 29.5	0 01	21 29.6	12.0	6.0*
5	1	Simple 3AF	17 20	1 00	18 00	5.0	2.0
	3	Complex F	17 57.5	0 06	18 01.3	75.0	23.0
		1st Compt.	17 57.5	0 03.2	18 00.3	48.0	---
		2nd Compt.	18 00.7	0 02.8	18 01.3	75.0	---
	1	Simple 3	18 50	1 10	19 15	2.4	1.2
6	1	Simple 3	16 32	0 20	16 34	2.6	1.0
	8	Rise	21 15	0 10	---	2.2	---*
7	1	Simple 3	13 30	1 00	14 00	2.0	1.0
	1	Simple 1F	15 00	0 05	15 01	8.6	2.8**
	1	Simple 3F	17 40	1 05	18 15	2.0	1.0
	1	Simple 1	21 28	0 01.5	21 29	2.2	1.1*
9	1	Simple 3F	21 25	1 10	21 55	2.2	1.1*
10	1	Simple 1	13 42	0 03	13 43.1	4.0	2.0
	1	Simple 3	16 35	1 35	17 00	2.4	1.2

*Only observed at Penticton

**Possible interference

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November, 1969

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Nov.			H M	H M	H M		
12	1	Simple 3	15 00	1 20	15 50	2.2	1.1
	1	Simple 1F	16 29.2	0 03	16 30.6	9.4	3.8
13	1	Simple 3	16 15	1 25	16 50	3.6	1.8
14	1	Simple 3	15 30	1 30	16 35	6.0	4.4
	1	Simple 3	17 25	0 55	17 50	2.2	1.1
15	1	Simple 3	16 00	0 10	16 03	2.4	1.2
	8	Rise	16 15	0 20	---	5.0	---
16	8	Rise	14 53	0 06	---	2.0	---
	8	Rise	17 30	0 04	---	2.0	---
	1	Simple 3	17 50	0 50	18 00	2.4	1.2
	1	Simple 2F	21 42	0 04	21 43	10.8	5.4*
17	1	Simple 3A	14 15	1 40	indet.	2.6	2.0
	1	Simple 1F	15 38	0 04	15 39.5	9.0	4.5
	1	Simple 3	15 55	0 25	16 10	2.4	1.2
	1	Simple 3AF	16 30	3 35	18 20	20.0	8.0
	1	Simple 2	17 03.5	0 01.5	17 04	12.0	6.0
	1	Simple 1	17 20	0 02	17 20.8	4.0	2.0
	3	Complex F	17 37.5	0 10.5	17 45	128.0	63.0
		1st Compt.	17 37.5	0 03.5	17 39	33.0	---
		2nd Compt.	17 41	0 07	17 45	128.0	---
	2	Post B.I.AF	17 48	0 25	---	12.0	6.0
	1	Simple 1	17 51	0 02	17 51.5	3.0	1.5
18	1	Simple 3A	16 00	4 00	17 25	38.0	14.0
	1	Simple 2F	16 35	0 35	16 55	1070.0	290.0
	1	Simple 1	17 26.5	0 01.5	17 27	6.4	3.2
	1	Simple 3	18 24	0 22	18 30	3.8	2.6
	3	Complex F	18 49	0 20	18 58	15.2	5.6**
		1st Compt.	18 49	0 06	18 52	7.6	---
		2nd Compt.	18 55	0 14	18 58	15.2	---

*Only observed at Penticton

** 2800 MHz 15.2, 2700 MHz 22.8

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OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Nov.			H M	H M	H M		
19	1	Simple 3	14 20	1 50	15 45	7.6	3.8
	8	Rise	17 00	0 35	---	6.1	---
	1	Simple 1	18 04.5	0 01.5	18 05.5	5.6	2.8
	1	Simple 2	18 07	0 05	18 07.5	140.0	37.0
	1	Simple 3A	18 47	2 40	19 20	18.0	9.0
	3	Complex F	18 47	0 26	18 54	40.0	18.0
		1st Compt.	18 47	0 10	18 54	40.0	---
		2nd Compt.	18 57	0 07	19 00	30.0	---
		3rd Compt.	19 04	0 09	19 18	20.0	---
	1	Simple 3A	20 00	1 00	20 20	8.8	4.4
	1	Simple 2	20 10.5	0 09	20 13	56.0	16.0
20	1	Simple 3AF	13 55	3 25	14 10	10.0	7.0
	1	Simple 3F	14 45	0 30	14 58	7.4	3.7
	1	Simple 2	16 19.5	0 06.5	16 21.5	405.0	115.0
	2	Post B.I.A	16 26	0 45	---	20.0	10.0
	1	Simple 1	17 04	0 02	17 05	8.4	4.2
	1	Simple 3A	17 20	1 00	17 50	3.6	1.8
	1	Simple 1	17 42.2	0 01	17 43	3.0	1.5
	1	Simple 3	19 15	2 10	19 30	3.6	2.4
21	8	Rise	13 20	0 05	---	6.2	---
	1	Simple 3	14 45	0 25	14 58	2.2	1.1
	1	Simple 3F	15 30	1 10	15 46	5.4	3.6
	1	Simple 3	17 37	1 10	17 50	3.0	2.0
	1	Simple 3	20 35	0 35	20 55	3.6	1.8*
	1	Simple 3A	21 20	>1 00	21 35	21.0	---*
	3	Complex	21 30.5	0 03	21 32	18.0	11.0*

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Nov.			H M	H M	H M		
22	1	Simple 3F	14 45	1 35	14 55	11.0	5.0
	1	Simple 3F	16 30	2 25	17 00	11.0	5.0
	1	Simple 3	19 00	0 30	19 02	2.8	1.4
	1	Simple 3A	19 50	0 40	20 10	3.4	1.7
	1	Simple 1	19 52	0 04	19 55	3.4	1.7
	1	Simple 3A	20 55	1 45	21 45	15.8	7.9*
	1	Simple 2F	21 24.2	0 05	21 26.3	31.0	8.0*
	1	Simple 2	21 40.5	0 03	21 41.5	12.8	6.4*
23	1	Simple 3F	14 55	1 50	15 52	23.0	11.5
		1st compt.	14 55	0 25	14 58	5.0	---
		2nd compt.	15 20	1 25	15 52	23.0	---
	1	Simple 3	20 15	1 40	20 30	5.4	3.8
24	8	Rise	15 20	0 15	---	5.4	---
	1	Simple 3	16 45	1 10	16 57	12.8	6.4
	1	Simple 3	18 10	1 45	19 10	4.2	2.1
	1	Simple 3A	20 10	>1 50	21 40	7.2	---
	1	Simple 1	20 28	0 02	20 28.2	5.8	2.9
25	1	Simple 3A	15 45	0 55	16 10	3.6	1.8
	1	Simple 1	15 51	0 04.5	19 52.5	6.0	3.0
		Fall	18 10	0 20	---	5.4	---
	1	Simple 3	18 30	0 40	18 50	2.2	1.1
	1	Simple 3	19 10	2 10	20 15	5.4	2.7
	1	Simple 2	22 20	0 13	22 23.5	34.0	17.0*
26	1	Simple 3	14 30	0 45	14 45	3.6	1.8
	1	Simple 3	15 35	1 00	16 05	2.8	1.4
	1	Simple 3A	16 55	0 30	17 15	3.6	1.8
	1	Simple 2	17 07	0 05	17 08.2	25.0	8.0

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Nov.			H M	H M	H M		
26	1	Simple 3A	17 45	1 20	indet.	3.8	2.8
	1	Simple 1	17 55.5	0 02.5	17 56	5.4	2.7
	1	Spike	18 52	---	18 52	9.0	---
27	1	Simple 3A	14 20	1 35	15 10	5.6	2.8
	1	Simple 3	14 48	0 12	14 51	3.4	1.7
	3	Complex F	15 24	0 06	15 26.2	18.0	5.0
	2	Post B.I.	15 30	0 07	---	3.4	1.7
	1	Simple 1	16 28.5	0 07	16 30	2.8	1.4
	1	Simple 2F	19 29	0 14	19 32.2	945.0	273.0
	2	Post B.I.	19 43	2 05	---	10.0	5.0
28	1	Simple 3A	13 30	3 00	14 40	7.8	3.9
	1	Simple 2	13 53	0 05	13 55	15.0	7.0
	1	Simple 1	14 26	0 05	14 29.5	4.2	2.1
	3	Complex	14 45	0 25	15 04	34.0	13.0
		1st Compt.	14 45	0 11	14 52	8.4	---
		2nd Compt.	14 56	0 07	15 00	28.0	---
		3rd Compt.	15 03	0 07	15 04	34.0	---
	2	Post B.I.	15 10	0 20	---	5.0	2.2
	1	Simple 3A	19 50	>2 30	21 35	42.0	---
	1	Simple 1	19 59	0 05	20 01	5.0	2.4
	1	Simple 1	20 07	0 05.5	20 07.5	6.0	3.0
	3	Complex	20 17	0 10	20 20	9.2	4.2
		1st Compt.	20 17	0 05	20 20	9.2	---
		2nd Compt.	20 22	0 05	20 24	5.4	---
	4	Fluctuations	20 32	0 02	20 33	4.4	---
	1	Simple 2	20 59	0 13	21 02.2	49.0	20.0*
30	1	Simple 3A	17 00	0 30	17 15	3.6	1.8
	1	Simple 2	17 04.2	0 09	17 06.7	230.0	56.0

*Only observed at Penticton.

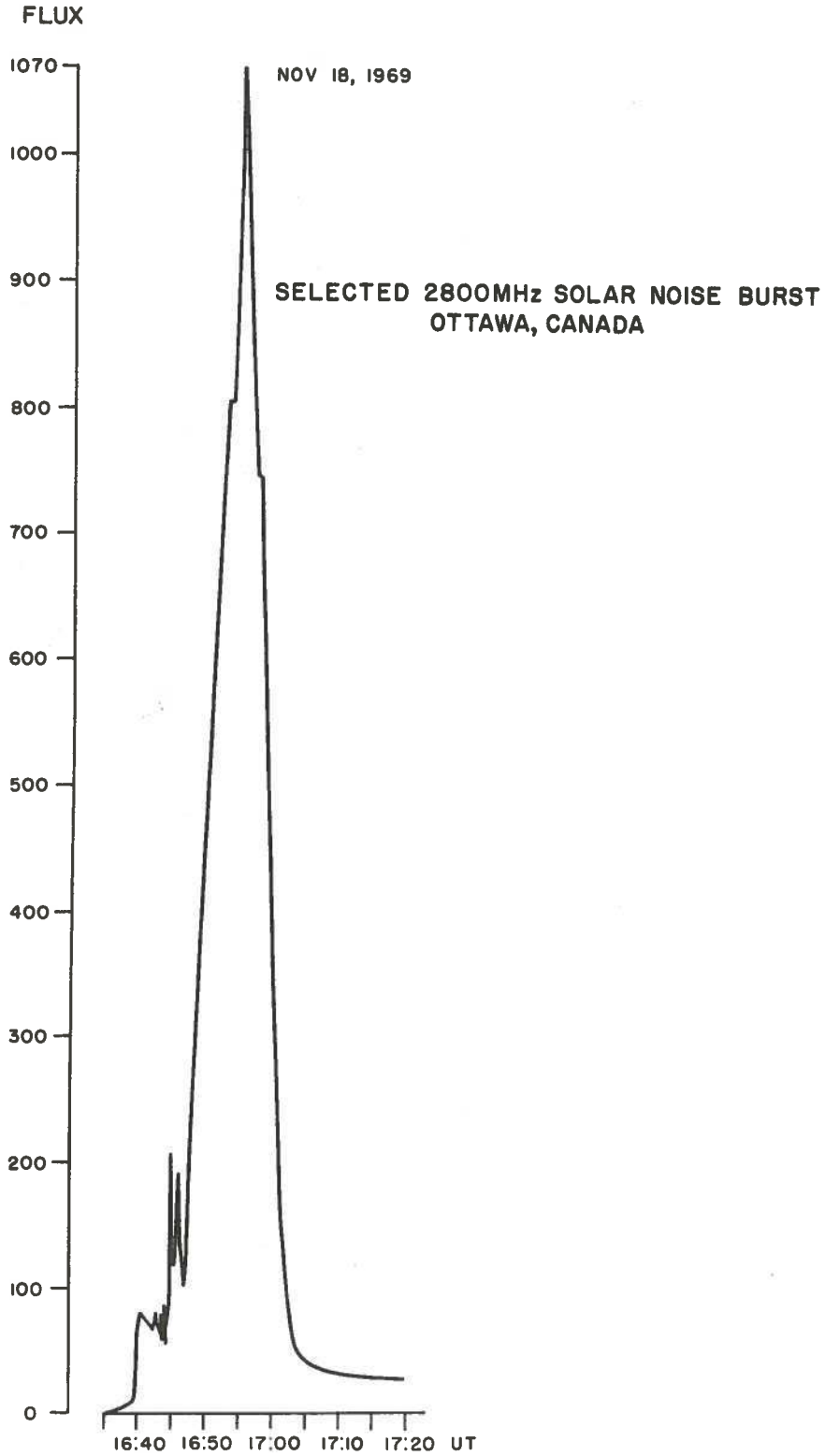

Figure 2 Selected 2800 MHz solar noise bursts, Ottawa, Canada

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	
1969		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	136.7	133.9	132.9	130.2	130.4	126.7
2	136.5	135.3	135.8*	131.5	133.7*	130.0*
3	137.2	135.6	138.2	131.7	135.6	131.7
4	139.3	143.0	139.3	138.9	137.2	133.2
5	140.2*	137.3*	136.6	133.3*	133.6	129.7
6	128.3	127.1*	130.0	123.4*	126.5	122.8
7	124.8	124.4	123.2	120.7	119.4	115.8
8	115.1	115.6	115.3*	112.1	112.0*	108.6*
9	118.0	119.7	118.5	116.1	115.2	111.7
10	119.2	118.4	118.8*	114.8	115.3	111.8
11	121.5	121.7*	120.9	117.9*	117.7	114.1
12	126.4	126.2	126.8	122.3	124.6	120.7
13	132.2	133.7	131.7	129.6	129.2	125.2
14	137.5	136.9	137.6	132.7	136.3	132.1
15	140.6	140.2	140.1	135.9	136.0	131.8
16	142.9	141.4	143.0	136.9	138.6	134.2
17	147.1	148.9	146.1	144.1	142.5	137.9
18	147.0	148.9	147.3	144.1	142.5	137.9
19	152.3	152.1	150.7	147.2	146.9	142.2
20	157.7	159.3	159.3	154.2	157.0	152.0
21	165.2	165.6	164.6	160.3	153.9	149.0
22	164.3	168.4	171.5	163.0	167.1	161.8
23	163.4	161.6	165.1	156.3	158.9	153.7
24	157.2	158.1	156.1	152.9	153.4	148.3
25	159.6	158.8	158.7	153.6	153.1	148.0
26	157.9	156.2	156.5	151.0	150.4	145.4
27	152.5	151.9	153.8	146.9	145.1	140.3
28	149.9	154.1	156.7	149.0	150.8	145.8
29	156.4	158.6	156.8	153.4	150.8	145.8
30	160.2	163.3	163.4*	157.9	157.7*	152.5*
31	154.8	156.5*	159.1	151.3*	154.3	149.2
Mean	143.3	143.6	143.7	139.1	139.5	135.2

*Corrected for burst.

Note: Due to all day heavy wet snow fall, all 3 calibrations of Ottawa-ARO, Dec. 11 had to be corrected.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Dec.			H M	H M	H M		
1	1	Simple 1	20 09	0 04	20 11	2.0	1.0*
2	1	Simple 3A	17 30	3 30	18 25	6.6	3.3
	1	Simple 2F	17 46	0 10	17 50	13.6	5.0
4	1	Simple 3	20 10	>2 00	21 35	3.4	---*
5	1	Simple 3A	13 45	1 05	14 33	5.6	2.8
	1	Simple 1	14 26.5	0 03	14 28	4.2	2.1
	1	Simple 3	15 10	3 40	16 25	5.6	2.8
	1	Simple 3	21 10	0 30	21 25	2.2	1.8*
6	1	Simple 3	14 30	4 20	16 25	13.0	6.4
	1	Simple 1	21 05	0 02	21 05.2	4.2	2.0*
8	1	Simple 3	18 30	2 30	19 37	5.4	2.7
10	1	Simple 3F	19 35	0 45	20 00	2.2	1.1
11	1	Simple 3A	15 40	1 40	16 00	2.4	1.2
		Absorption	16 13	>0 25	16 30	-6.4	---
12	1	Simple 1	14 10	0 02	14 10.2	2.2	1.1
	1	Simple 2	17 41	0 13	17 45	80.0	26.0
	2	Post B.I.	17 54	2 05	---	7.2	4.2
13	1	Simple 2	13 40.5	0 03.5	13 42	48.0	12.0
	1	Simple 1	13 45	0 04	13 47	2.2	1.1
	1	Simple 3	14 40	0 35	15 05	2.2	1.1
	1	Simple 1	15 24	0 01	15 24.5	2.2	1.1
	1	Simple 1F	15 30	0 01	15 30.5	3.0	1.5
	1	Simple 2	22 08	0 06	22 08.9	68.0	11.3*
	1	Simple 3A	17 05	1 35	17 20	4.6	2.3
	3	Complex	17 08	0 08	17 12	6.2	3.1
	1	Simple 1	17 53	0 01	17 53.3	8.0	4.0

*Only observed at Penticton.

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December, 1969

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Dec.			H M	H M	H M		
17	1	Simple 3A	15 20	0 12	15 25	2.2	1.1
	1	Simple 1F	15 22	0 01.5	15 23	3.2	1.6
	1	Simple 3	15 35	1 45	16 30	4.4	2.6
	1	Simple 1	21 09	0 01	21 10	2.8	1.4*
18	1	Simple 2F	14 45	1 00	15 15	76.0	30.0
	2	Post B.I.	15 45	1 20	---	8.4	4.2
	1	Simple 3	17 35	1 30	18 30	2.8	2.0
20	1	Simple 1	16 27	0 01.2	16 27.9	3.6	1.8
	1	Simple 2	20 13	0 03	20 14	30.0	10.0
22	1	Simple 1	19 26	0 04	19 28	2.8	1.4
25	1	Simple 1	21 39	0 03	21 40.5	3.8	1.9*
26	1	Simple 1	13 53.9	0 01	13 54.1	2.8	1.4
	1	Simple 3	14 50	0 20	14 51	2.4	1.2
	1	Simple 3F	20 55	0 30	21 10	2.4	1.2*
27	1	Simple 3A	16 05	0 20	16 25	2.0	1.0
	1	Simple 1	16 09	0 02	16 09.9	2.8	1.4
28	1	Simple 2	13 22	0 01	13 22.5	17.0	8.5
	1	Simple 1	13 30.5	0 01	13 31	6.0	3.0
	8	Rise	15 10	0 25	---	3.4	---
	1	Simple 3	17 40	2 00	18 25	3.4	1.7
	1	Simple 3	21 05	0 20	21 10	2.2	1.1*
29	8	Rise	15 14	0 01	---	2.8	---
	1	Simple 3	20 30	1 30	20 40	2.2	1.8*
	1	Simple 1	22 12	0 01	22 12.5	3.0	1.5*

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1969	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Dec.			H M	H M	H M		
30	1	Simple 3A	19 00	2 55	19 45	10.0	5.0
	1	Simple 2	19 12.5	0 06	19 14.6	13.0	6.5
	3	Complex F	19 14	0 28	19 24.5	102.0	33.0
		1st Compt.	19 14	0 08	19 19	78.0	---
		2nd Compt.	19 22	0 20	19 24.5	102.0	---
31	8	Rise A	14 27	0 12	---	2.8	---
	1	Simple 1	14 30	0 04	14 32	2.8	1.4
	1	Simple 3AF	15 00	1 45	15 45	2.6	1.3
	1	Simple 1	15 07	0 04	15 07.2	4.2	2.0
	1	Simple 3F	17 45	1 40	17 55	5.2	2.6
	1	Simple 1F	22 25	0 04	22 26.8	6.2	3.4*

*Only observed at Penticton.

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

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

1969 OBSERVED VALUES AT 1700 U.T. 1969

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	144.7	133.7	168.6	188.9	123.0	110.1	144.3	170.6	153.5	133.6	141.5	133.9
2	146.9	143.2	154.6	191.6	125.8	117.8	156.8	186.9	152.5	143.1	141.2	135.3
3	149.0	143.3	150.4	189.8	129.7	129.6	162.0	183.3	149.2	132.4	128.8	135.6
4	159.8	141.8	146.2	177.1	133.2	154.5	163.6	187.5	148.0	132.2	131.8	143.0
5	168.0	142.9	138.1	175.5	151.4	172.6	161.1	182.4	136.0	140.9	132.3	137.3
6	181.9	142.5	141.5	162.3	135.8	190.7	159.8	167.1	133.6	143.3	134.3	127.1
7	189.2	144.2	140.2	153.9	127.4	215.7	161.2	158.7	126.4	145.1	138.3	124.4
8	189.3	138.0	139.3	147.2	135.9	231.5	159.8	146.2	122.3	150.4	132.9	115.6
9	189.6	137.0	143.8	143.4	132.9	228.7	160.3	141.5	115.7	142.1	130.2	119.7
10	175.1	133.1	139.6	148.3	135.0	236.2	159.0	135.6	115.0	137.1	125.3	118.4
11	174.3	132.3	138.2	150.0	147.2	239.2	152.9	132.3	117.5	130.6	124.5	121.7
12	168.7	127.9	140.2	154.7	157.0	229.6	146.6	125.2	119.2	128.5	124.9	126.2
13	162.6	129.4	135.6	171.5	150.9	221.6	140.5	120.0	129.5	124.9	129.3	133.7
14	158.5	128.2	140.5	178.3	154.3	216.6	130.0	114.5	128.1	119.7	137.0	136.9
15	159.4	128.0	163.6	179.9	155.4	194.3	122.5	112.6	133.8	118.4	141.0	140.2
16	157.9	131.1	176.7	165.9	155.8	169.3	122.1	109.6	132.7	116.2	148.8	141.4
17	154.0	137.6	202.1	153.5	160.4	152.3	120.2	105.3	132.0	123.2	163.9	148.9
18	149.1	142.7	212.8	145.5	158.6	149.0	116.1	102.6	133.2	129.8	181.4	148.9
19	136.0	153.5	210.2	145.1	153.9	142.3	114.3	101.5	130.3	147.0	189.8	152.1
20	132.2	162.7	215.4	147.8	155.3	140.3	111.7	106.9	135.4	163.4	193.5	159.3
21	136.3	173.0	232.4	155.6	166.5	135.2	112.1	113.6	136.7	178.6	203.1	165.6
22	138.2	188.9	224.1	146.2	173.1	128.8	111.5	118.3	139.5	188.1	210.6	168.4
23	128.8	205.7	207.0	142.5	168.4	127.4	112.9	130.3	144.5	195.1	214.9	161.6
24	135.0	210.2	196.6	143.0	167.1	124.8	112.1	142.9	158.7	206.8	206.1	158.1
25	138.4	211.3	182.0	145.9	164.2	116.4	114.1	151.5	168.5	206.5	190.7	158.8
26	146.7	198.7	192.0	141.9	159.4	113.3	115.5	153.2	158.1	207.1	180.0	156.2
27	135.6	200.9	178.4	133.1	149.5	110.4	123.1	164.3	150.7	203.4	177.6	151.9
28	133.6	184.0	178.0	133.0	139.4	114.4	131.0	168.1	142.1	192.1	161.2	154.1
29	133.2		182.5	126.3	119.3	119.7	133.0	174.1	139.5	174.9	145.4	158.6
30	130.0		183.3	127.2	113.5	132.3	142.6	166.4	136.6	164.0	140.4	163.3
31	130.2		185.9		108.9		162.1	160.7		156.2		156.5
Mean	152.7	155.2	172.3	155.5	145.4	162.2	136.6	143.0	137.3	154.0	156.7	143.6

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

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

ADJUSTED TO 1 ASTRONOMICAL UNIT AT 1700 U.T.

1969 1969

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	139.9	129.8	165.6	188.7	125.0	113.3	149.2	175.7	156.3	133.9	139.4	130.2
2	142.1	139.0	152.0	191.4	127.8	121.2	162.1	192.5	155.2	143.2	138.9	131.5
3	144.1	139.1	147.8	189.8	131.9	133.4	167.5	188.8	151.7	132.5	126.7	131.7
4	154.5	137.8	143.9	177.3	135.5	159.0	169.2	192.9	150.5	132.2	129.6	138.9
5	162.5	138.9	135.9	175.7	154.1	177.8	166.6	187.7	138.2	140.9	130.0	133.3
6	175.9	138.5	139.4	162.6	138.2	196.4	165.2	171.9	135.7	143.2	131.9	123.4
7	183.0	140.3	138.1	154.2	129.8	222.2	166.7	163.1	128.3	145.0	135.8	120.7
8	183.1	134.3	137.3	147.6	138.5	238.4	165.2	150.3	124.1	150.1	130.4	112.1
9	183.3	133.3	141.8	143.8	135.4	235.8	165.8	145.5	117.3	141.7	127.7	116.1
10	169.3	129.6	137.8	148.9	137.7	243.5	164.4	139.3	116.6	136.7	122.8	114.8
11	168.5	128.9	136.4	150.8	150.1	246.6	158.1	135.9	119.0	130.1	122.0	117.9
12	163.1	124.6	138.5	155.5	160.3	236.7	151.4	128.6	120.7	128.0	122.3	122.3
13	157.2	126.2	134.0	172.5	154.1	228.7	145.1	123.1	131.2	124.3	126.6	129.6
14	153.3	125.0	139.0	179.4	157.7	223.5	134.3	117.5	129.8	119.1	134.1	132.7
15	154.1	124.8	161.8	181.2	158.8	200.5	126.5	115.5	135.3	117.7	137.9	135.9
16	152.8	128.0	174.9	167.1	159.4	174.7	126.1	112.3	134.2	115.4	145.5	136.9
17	149.1	134.3	200.1	154.7	164.1	157.2	124.2	107.9	133.3	122.3	160.1	144.1
18	144.3	139.4	210.9	146.8	162.4	153.9	119.9	105.2	134.4	128.8	177.2	144.1
19	131.6	150.0	208.5	146.4	157.6	147.0	118.1	103.9	131.5	145.8	185.2	147.2
20	128.0	159.1	213.7	149.3	159.0	144.9	115.4	109.5	136.5	161.9	188.9	154.2
21	131.9	169.2	230.8	157.2	170.7	139.7	115.7	116.2	137.8	177.0	198.2	160.3
22	133.9	184.7	222.5	147.8	177.4	133.1	115.1	121.0	140.5	186.2	205.3	163.0
23	124.8	201.4	205.8	144.1	172.8	131.6	116.5	133.2	145.5	193.1	209.5	156.3
24	130.8	205.8	195.4	144.7	171.4	128.9	115.7	146.0	159.7	204.5	200.7	152.9
25	134.1	207.1	181.1	147.7	168.5	120.2	117.8	154.8	169.3	204.0	185.7	153.6
26	142.2	194.7	191.2	143.7	163.7	117.2	119.2	156.4	158.9	204.6	175.3	151.0
27	131.5	197.1	177.7	135.0	153.5	114.2	126.9	167.8	151.3	200.8	172.8	146.9
28	129.6	180.5	177.5	134.9	143.2	118.3	135.1	171.5	142.7	189.6	156.8	149.0
29	129.2		182.0	128.2	122.6	123.8	137.1	177.6	139.9	172.5	141.5	153.4
30	126.1		182.9	129.1	116.7	136.8	147.0	169.6	137.0	161.7	136.5	157.9
31	126.4		185.5		111.9		167.0	163.8		153.9		151.3
Mean	147.7	151.5	170.6	156.5	148.7	167.3	141.1	146.6	138.7	152.9	153.2	139.1

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

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

1969 OBSERVED VALUES AT 1935 U.T. 1969

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	138.3	133.7	162.0	180.9	118.5	107.6	141.8	169.9	152.3	130.2	136.6	130.4
2	139.9	---	150.7	182.5	124.0	114.4	148.7	180.6	147.6	138.9	133.1	133.7
3	145.3	138.5	147.3	180.3	126.6	127.8	155.4	175.8	141.3	128.5	126.9	135.6
4	160.5	136.4	141.9	172.5	129.3	149.6	155.8	180.9	144.6	126.8	126.6	137.2
5	164.3	138.0	136.0	165.2	146.2	171.1	153.4	171.7	132.1	136.2	127.5	133.6
6	178.8	144.9	137.8	155.3	132.4	191.7	152.5	165.6	129.8	140.1	129.8	126.5
7	181.5	139.9	132.3	146.0	124.8	209.5	154.8	153.6	120.1	140.7	132.6	119.4
8	185.4	134.0	135.5	141.9	132.0	233.2	154.8	141.8	119.7	141.4	127.6	112.0
9	186.2	133.4	138.8	140.4	129.3	227.3	155.8	137.7	110.8	134.4	126.7	115.2
10	171.7	131.0	138.0	143.7	132.1	233.6	152.1	133.0	110.5	134.0	122.1	115.3
11	166.9	126.1	132.4	145.4	140.7	229.4	148.4	129.4	113.2	123.4	120.0	117.7
12	164.2	122.6	134.5	149.6	151.4	220.4	140.7	119.2	113.7	120.9	119.8	124.6
13	157.7	127.1	131.9	171.0	146.2	215.6	136.1	114.5	124.5	118.2	123.8	129.2
14	157.8	124.0	135.5	179.7	151.4	209.1	124.7	111.2	122.6	117.8	134.2	136.3
15	155.4	123.1	160.1	171.8	155.0	183.6	117.6	108.6	126.6	113.2	134.5	136.0
16	149.9	128.3	172.9	160.0	151.3	162.2	118.1	105.9	126.9	113.0	143.8	138.6
17	150.7	132.5	198.0	149.6	155.1	146.6	114.0	101.3	127.4	118.4	166.6	142.5
18	---	138.9	201.6	141.1	146.0	144.8	111.2	97.7	128.9	128.1	172.4	142.5
19	131.0	149.3	205.6	148.5	150.8	138.2	108.9	97.9	127.9	147.8	185.8	146.9
20	131.2	160.2	211.6	---	150.1	136.1	108.8	102.6	132.6	160.7	182.5	157.0
21	132.2	---	226.0	146.3	161.8	133.0	107.9	109.3	133.0	174.6	189.1	153.9
22	131.8	---	215.7	141.4	169.0	123.6	107.7	115.8	134.1	177.4	199.1	167.1
23	125.9	---	194.1	141.3	167.9	122.6	108.8	122.9	144.3	194.2	199.7	158.9
24	132.9	207.3	186.1	135.6	166.2	120.4	106.8	137.7	149.3	202.9	191.2	153.4
25	134.3	203.2	178.8	138.9	156.8	111.7	108.0	144.3	160.4	201.8	180.5	153.1
26	141.3	194.6	188.0	138.1	153.4	109.9	111.2	147.2	151.0	201.5	177.3	150.4
27	133.8	194.1	172.3	126.2	---	106.7	119.2	162.7	---	196.4	169.0	145.1
28	128.4	176.5	---	126.2	131.0	110.2	124.0	162.4	---	183.8	156.2	150.8
29	130.6		176.7	123.7	114.3	115.6	129.4	163.1	132.1	171.2	138.5	150.8
30	126.7		177.4	120.6	105.9	130.4	---	---	129.3	155.0	132.9	157.7
31	126.7		179.0		104.4		157.7	---		149.0		154.3
Mean	148.7	147.4	166.6	150.5	140.8	157.9	131.1	136.7	131.7	149.0	150.2	139.5

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

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

ADJUSTED TO 1 ASTRONOMICAL UNIT AT 1935 U.T.

1969 1969

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	133.7	129.8	159.1	180.7	120.4	110.7	146.6	175.0	155.0	130.5	134.6	126.7
2	135.3	---	148.1	182.3	126.0	117.7	153.8	186.0	150.3	139.0	131.0	130.0
3	140.5	134.5	144.8	180.3	128.8	131.5	160.7	181.1	143.7	128.6	124.9	131.7
4	155.2	132.6	139.6	172.7	131.5	153.9	161.1	186.1	147.1	126.8	124.4	133.2
5	158.9	134.1	133.8	165.4	148.8	176.2	158.6	176.7	134.2	136.2	125.3	129.7
6	172.9	140.8	135.7	155.6	134.8	197.5	157.7	170.4	131.9	140.0	127.5	122.8
7	175.5	136.1	130.3	146.3	127.2	215.8	160.1	157.9	121.9	140.6	130.2	115.8
8	179.3	130.4	133.6	142.3	134.5	240.2	160.1	145.8	121.5	141.1	125.2	108.6
9	180.1	129.8	136.9	140.8	131.8	234.3	161.1	141.6	112.4	134.0	124.3	111.7
10	166.0	127.6	136.2	144.3	134.7	240.8	157.3	136.6	112.0	133.6	119.7	111.8
11	161.4	122.8	130.7	146.1	144.5	236.5	153.4	132.9	114.7	122.9	117.6	114.1
12	158.8	119.4	132.9	150.3	154.6	227.2	145.3	122.4	115.2	120.4	117.3	120.7
13	152.5	123.9	130.3	172.0	149.3	222.5	140.6	117.5	126.1	117.6	121.2	125.2
14	152.6	120.9	134.0	180.8	154.7	215.8	128.8	114.1	124.2	117.2	131.4	132.1
15	150.3	120.0	158.3	173.0	158.4	189.5	121.5	111.4	128.0	112.5	131.5	131.8
16	145.1	125.2	171.2	161.1	154.8	167.4	122.0	108.5	128.3	112.2	140.6	134.2
17	145.9	129.3	196.0	150.8	158.7	151.3	117.8	103.8	128.7	117.6	162.8	137.9
18	---	135.7	199.8	142.4	149.5	149.6	114.9	100.1	130.1	127.1	168.4	137.9
19	126.8	145.9	204.0	149.8	154.4	142.8	112.5	100.2	129.1	146.6	181.3	142.2
20	127.0	156.7	209.9	---	153.7	140.6	112.4	105.1	133.7	159.3	178.1	152.0
21	128.0	---	224.4	147.8	165.8	137.4	111.4	111.8	134.1	173.0	184.6	149.0
22	127.7	---	214.2	143.0	173.2	127.7	111.1	118.5	135.0	175.6	194.1	161.8
23	122.0	---	192.9	142.9	172.3	126.6	112.3	125.6	145.3	192.3	194.7	153.7
24	128.8	202.9	185.0	137.2	170.5	124.4	110.2	140.7	150.2	200.7	186.2	148.3
25	130.1	199.1	177.9	140.6	160.9	115.4	111.5	147.5	161.2	199.4	175.8	148.0
26	136.9	190.7	187.2	139.9	157.5	113.6	114.8	150.3	151.8	199.1	172.7	145.4
27	129.8	190.4	171.6	128.0	---	110.3	122.9	166.1	---	193.8	164.4	140.3
28	124.5	173.1	---	128.0	134.5	113.9	127.8	165.6	---	181.4	152.0	145.8
29	126.7		176.2	125.6	117.5	119.5	133.4	166.4	132.5	168.8	134.8	145.8
30	122.9		177.0	122.4	108.9	134.8	---	---	129.3	152.8	129.2	152.5
31	123.0		178.6		107.3		162.4	---		146.8		149.2
Mean	143.9	143.8	165.0	151.5	144.0	162.8	135.5	140.2	133.1	148.0	146.9	135.2