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 1970

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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 REPORTS JANUARY - JUNE 1970

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OTTAWA

JULY 1970

ABSTRACT

Detailed tabulations of the solar radio flux for the period January-July 1970 observed on a frequency of 2800 MHz at the Algonquin Radio Observatory and on 2700 MHz at the Dominion Radio Astrophysical Observatory are given.

Monthly Report No. 276
January, 1970

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

1970 Jan.	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	156.2*	156.0	157.9	150.9	148.3	143.4
2	149.7	149.4	150.0	144.5	141.0	136.3
3	142.5	141.8	143.5	137.1	136.9*	132.4*
4	135.5	136.0	137.2	131.5	131.1	126.8
5	131.7	130.8	130.0	126.5	124.5	120.4
6	122.5	121.6	122.1	117.6	117.9	114.0
7	115.3	116.9	120.0	113.0	---	---
8	114.1	117.2	118.3	113.3	114.0	110.2
9	119.4	123.7	126.5	119.6	123.3	119.2
10	138.8	139.1*	144.2	134.5*	---	---
11	159.7	165.6	170.9*	160.1	163.1	157.7
12	174.4	177.5	179.3	171.6	175.5	169.7
13	172.9	178.8	180.9	172.9	174.8	169.0
14	176.7	177.7*	186.2	171.8*	180.5	174.5
15	186.0	186.1*	187.6	180.0*	183.9	177.8
16	180.3	180.1*	185.7	174.3*	183.1	177.2
17	189.9	186.6	187.9	180.6	183.9	178.0
18	184.5	185.3*	190.6	179.4*	182.4	176.6
19	177.8	181.1	183.8	175.3	179.7	173.9
20	172.5	174.0*	178.4	168.4*	173.9	168.3
21	178.6	182.8	181.2*	177.0	175.7	170.1
22	167,3	165.6	167.6	160.5	160.2	155.2
23	157.5	158.3	160.6	153.4	153.7	148.9
24	149.6	148.2	149.8	143.6	144.4	139.9
25	154.3*	154.3	157.7	149.5	151.4	146.7
26	158.6	161.4	164.9	156.4	158.0	153.1
27	168.4	168.0	162.3	163.0	158.9	154.1
28	170.1*	167.0*	167.6*	162.0*	164.3*	159.4*
29	167.5	168.3*	168.8	163.3*	166.8*	161.8*
30	159.7	159.6*	161.0	154.8*	155.2*	150.5*
31	147.0*	147.7*	147.7*	143.4*	144.6*	140.4*
MEAN	157.4	158.3	160.3	153.2	156.9	151.9

*Corrected for burst.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	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	14 00E	>1 10	14 30	5.2	---
2	1	Simple 3A	17 20	1 55	18 00	2.6	1.3
	1	Simple 1	17 55	0 01	17 55.6	1.4	0.7
	1	Simple 3	21 20	0 30	21 24	5.6	2.4*
3	1	Simple 2	18 50.2	0 01	18 50.5	30.0	15.0
	1	Simple 3A	19 05	0 45	19 25	2.6	1.3
	3	Complex	19 14.8	0 02	19 16	12.0	6.0
	1	Simple 3A	20 40	0 40	21 02	2.4	1.2*
	1	Simple 2	20 59.5	0 02.5	21 01	10.0	5.0*
4	1	Simple 1	18 24.3	0 01	18 24.5	5.0	2.5
	1	Simple 2F	21 37	0 02	21 38	10.0	5.0*
5	1	Simple 3A	17 50	1 25	18 40	5.6	2.8
	3	Complex	18 04	0 04	18 04.5	16.6	5.4
	1	Simple 3F	20 30	1 00	20 35	2.2	1.1*
6	1	Simple 3	14 25	1 30	14 50	3.6	1.8
7	4	Fluctuations	15 58.5	0 02	15 59	6.6	---
10	1	Simple 1	13 47	0 05	13 49	2.8	1.4
	1	Simple 3	16 30	1 05	16 36	3.8	1.9
	1	Simple 3	18 33	0 20	18 35	2.6	1.3
	1	Simple 3	19 02	0 10	19 02.5	2.2	1.1
	1	Simple 2	20 26	0 02	20 26.5	13.0	6.5
	2	Post B.I.	20 28	0 25	---	4.4	2.2
11	1	Simple 1	14 09	0 01.2	14 09.8	2.8	1.4
	1	Simple 1	14 45	0 05	14 47	2.2	1.1
	1	Simple 3	17 30	1 00	17 50	2.4	1.2
	1	Simple 3	19 40	0 40	19 52	3.8	1.9

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Jan.			H M	H M	H M		
12	3	Complex	13 52	0 03	13 52.8	27.0	7.0
	8	Rise A	14 25	0 10	---	2.8	---
	1	Simple 1	14 30	0 05	14 33	3.6	1.8
	1	Simple 3	17 20	0 45	17 30	2.6	1.3
13	1	Simple 3	15 10	1 20	16 00	3.4	1.7
	1	Simple 1	20 12	0 08	20 14	2.2	1.1
14	1	Simple 3A	15 15	2 00	16 15	5.0	2.5
	1	Simple 1	16 06	0 05	16 08	4.6	2.3
	8	Rise	18 55	0 25	---	4.5	---
	8	Rise	19 45	0 15	---	3.0	---
15	1	Simple 3	15 05	1 00	15 30	3.2	1.6
	1	Simpel 3F	16 15	2 25	16 55	7.2	3.6
16	1	Simple 3	15 30	1 50	16 35	4.0	2.0
	8	Rise	18 50	0 30	---	4.0	---
17	1	Simple 3	14 10	0 25	14 25	3.0	1.5
	1	Simple 3	17 30	0 45	18 02	3.4	1.7
	1	Simple 3	20 40	0 40	20 45	3.8	1.9
18	1	Simple 3A	14 20	3 10	15 20	6.8	3.4
	1	Simple 2	16 41	0 01.5	16 41.2	10.0	5.0
	1	Simple 3A	20 00	1 45	21 05	3.0	1.5
	1	Simple 1	20 42.8	0 01.2	20 43	3.4	1.7
20	1	Simple 3	15 50	3 00	16 30	5.0	2.5
	1	Simple 3	20 00	1 20	20 45	3.6	1.3*
21	1	Simple 3	14 30	0 50	14 40	4.4	2.2
	1	Simple 3	18 40	3 10	20 00	4.4	2.2

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Jan.			H M	H M	H M		
22	1	Simple 3	15 00	1 30	15 40	3.2	1.6
25	1	Simple 3	13 30	1 35	14 15	5.0	2.5
	8	Rise	14 10	0 07	---	3.3	---
26	1	Simple 3F	15 15	4 30	15 27	11.6	5.8
	1	Simple 3	20 50	1 35	21 40	6.0	3.0*
27	1	Simple 3	15 05	1 25	15 10	2.8	1.4
	1	Simple 3	16 40	0 50	17 14	8.8	4.4
		1st Compt.	16 40	0 30	16 46	7.2	---
		2nd Compt.	17 10	0 20	17 14	8.8	---
	1	Simple 3	18 40	0 45	19 00	4.4	2.2
28	1	Simple 3F	13 20E	>1 20	13 35	6.8	---
	1	Simple 3	15 55	1 55	16 35	6.8	4.0
	8	Rise	18 30	0 05	---	2.5	---
	1	Simple 2F	19 17	0 11	19 20	1300.0	300.0
	2	Post B.I.	19 28	3 30	---	33.0	10.0
29	1	Simple 3F	16 15	2 35	indet.	4.6	3.4
	1	Simple 3F	19 10	2 40	20 35	8.2	4.0
		Fall	22 00	0 45	---	8.0	---*
30	1	Simple 3A	14 40	3 10	15 25	9.6	4.8
	1	Simple 2F	14 58	0 22	15 06	142.0	22.0
	1	Simple 3A	15 34	0 30	15 40	5.4	2.7
	1	Simple 2	15 34.2	0 03	15 35	15.0	4.0
	1	Simple 3AF	16 10	1 00	16 25	4.6	3.0
	1	Simple 1	16 19.8	0 02	16 21	4.4	2.2
	1	Simple 1F	16 55	0 03	16 56.7	5.0	2.5

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Jan.			H M	H M	H M		
30	1	Simple 3A	18 20	1 35	19 25	4.0	2.6
	1	Simple 1	18 22	0 04	18 23	7.8	3.9
	1	Simple 3	21 10	1 20	21 35	4.8	2.4*
31	1	Simple 1	13 34	0 05	13 36	5.2	2.6
	1	Simple 3A	13 56	1 10	14 02	8.2	4.0
	1	Simple 3A	14 10	0 40	14 31	6.8	3.4
	1	Simple 2F	14 24	0 07	14 26	12.6	4.2
	1	Simple 3A	15 10	5 30	16 00	33.0	17.0
	1	Simple 1	15 26	0 03	15 28	2.8	1.4
	1	Simple 1	16 48	0 02	16 49	4.8	2.4

*Only observed at Penticton.

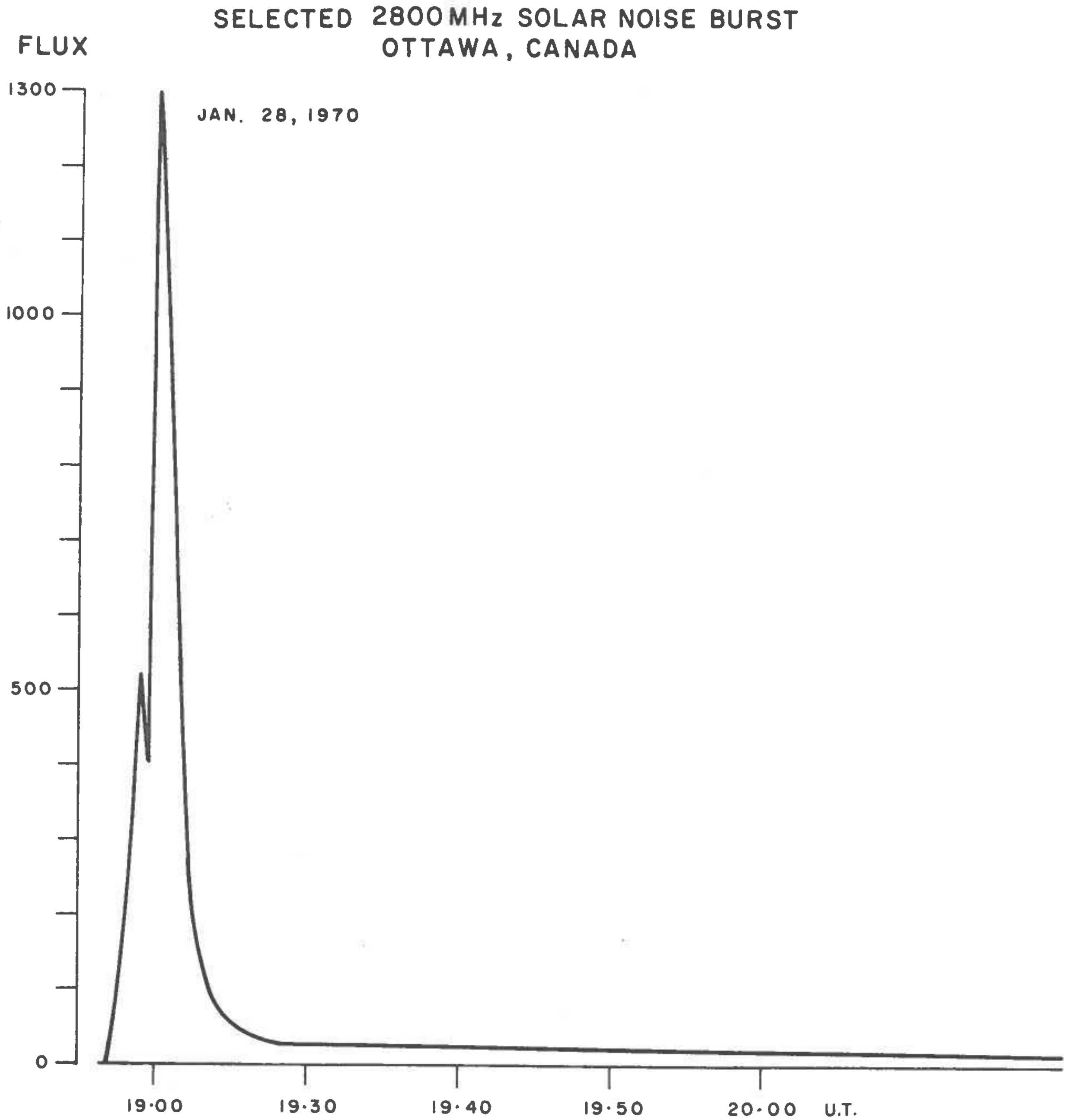
SELECTED 2800MHz SOLAR NOISE BURST
OTTAWA, CANADA
FLUX
JAN. 28, 1970
1300
1000
500
0
19·00
19·30
19·40
19·50
20·00
U.T.

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

1970	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	139.4	138.6	137.9	134.6	135.6	131.7
2	138.2	137.1	137.3	133.1	134.0*	130.1*
3	128.0	127.4	128.0	123.7	125.2*	121.6*
4	121.8	122.8*	123.0	119.4*	118.9	115.6
5	124.9	124.5	127.6	121.0	124.3	120.8
6	133.3	135.7	137.7	131.9	133.3	129.6
7	140.3	143.3	143.9	139.4	---	---
8	152.1	156.8	161.0	152.6	158.6	154.3
9	168.4	158.4	167.4	154.1	162.7	158.3
10	172.6	174.8*	177.7*	170.3*	175.4	170.8
11	191.4	189.2*	189.6*	184.3*	185.5*	180.7*
12	205.0*	206.4	208.3	201.0	199.4	194.2
13	201.7	202.7	203.5	197.6	199.2	194.2
14	204.4	201.2	204.4	196.2	199.1	194.1
15	201.8	206.8	205.3*	201.6	200.1*	195.1*
16	199.4	198.1	200.4	193.3	194.5*	189.8*
17	197.9	198.7	202.5	193.9	198.4	193.6
18	201.9	202.4	200.0*	197.7	195.5*	191.0*
19	197.9	203.2	206.2	198.5	200.0	195.4
20	189.7*	200.9	191.8	196.5	189.9*	185.7*
21	194.1	195.4*	196.7	191.1*	190.6*	186.4*
22	185.6	187.1*	188.9*	183.0*	188.3*	184.8*
23	185.0	187.8	189.0*	183.9	188.2	184.2
24	187.0	189.9	190.2	185.9	186.7	182.8
25	181.4	183.3*	183.4*	179.6*	179.4	175.8
26	182.2*	181.9*	181.2	178.3*	175.0	171.5
27	179.4	180.3	182.2	176.9	175.9	172.6
28	175.3	177.5	177.6*	174.1	170.5*	167.3*
Mean	174.3	175.4	176.5	171.2	173.5	169.3

*Corrected for Burst.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Feb.			H M	H M	H M		
2	1	Simple 3	18 00	1 50	18 25	6.6	3.3
	1	Simple 1	20 36	0 04	20 38	4.0	2.0
	1	Simple 3A	21 20	2 00	21 50	18.0	---*
	1	Simple 1	21 24	0 04	21 26.5	2.4	1.2*
	1	Simple 2F	21 38.5	0 09.5	21 41	55.0	18.0*
3	1	Simple 3	18 05	1 50	19 10	3.2	1.6
4	1	Simple 3	16 10	2 00	17 20	2.4	1.2
5	1	Simple 1F	14 44	0 04	14 46	5.4	2.7
6	1	Simple 1	13 42	0 04	13 43.5	2.0	1.0
	1	Simple 1F	20 28	0 03.5	20 29	2.2	1.1
8		Absorption F	14 35	1 25	15 25	-5.2	-2.4
	1	Simple 3	16 25	1 55	17 25	6.0	3.0
	1	Simple 3A	19 00	2 50	20 10	5.4	2.7
	1	Simple 3	20 50	0 30	21 00	2.4	1.2
9		Fall	13 45	0 50	---	7.2	---
	1	Simple 3	15 05	0 40	15 25	2.2	1.1
		Fall	16 00	0 20	---	3.7	---
	8	Rise	17 20	0 40	---	4.6	---
	8	Rise	18 45	0 25	---	5.7	---
	1	Simple 3	20 20	0 40	20 45	2.8	1.4
10	1	Simple 3	15 25	1 20	16 30	5.2	2.6
	8	Rise	17 00	0 10	---	3.0	---
	1	Simple 3	20 05	>3 00	20 45	8.6	---
11	1	Simple 3A	13 27	0 30	13 42	2.6	1.3
	1	Simple 1	13 29	0 02	13 29.8	4.6	2.3
	1	Simple 3F	14 15	2 55	15 45	11.6	5.8
	1	Simple 3AF	19 00	5 00	21 15	45.0	13.0
	1	Spike	21 04	---	21 04	9.0	---

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Feb.			H M	H M	H M		
12	1	Simple 3A	13 20	1 45	13 37	12.4	6.0
	1	Simple 1	13 37	0 01	13 37.9	6.8	3.4
	1	Simple 3	17 18	0 20	17 23	3.6	1.8
	1	Simple 3F	17 40	1 05	18 07	10.6	5.3
	1	Simple 3	18 56	0 25	18 58	3.6	1.3
	1	Simple 3	20 20	2 10	21 05	3.8	1.9
	1	Simple 3	23 10	0 50	23 30	8.0	4.0*
13	1	Simple 1	14 18	0 07	14 19	3.4	1.7
	1	Simple 2F	15 02	0 10	15 05.5	17.0	4.2
	3	Complex	18 15.5	0 07	18 18	21.0	5.0
	1	Simple 1	19 40.5	0 05	19 41.5	2.2	1.1
	1	Simple 3F	21 15	0 55	21 22	3.8	1.9
	1	Simple 3	22 20	1 30	22 35	21.0	10.5*
14	1	Simple 1F	13 57	0 05	13 58	9.2	4.6
	1	Simple 3	14 15	0 55	14 17	2.8	1.4
	1	Simple 3A	18 00	1 50	18 30	17.0	7.0
	1	Simple 1F	18 16	0 09	18 18	6.6	3.3
15	1	Simple 3	14 05	0 35	indet.	2.8	1.8
	1	Simple 3F	15 00	1 05	15 10	4.2	2.4
	8	Rise	16 20	0 05	---	2.8	---
	1	Simple 3	16 55 E	> 1 15	17 20	7.0	3.8
	1	Simple 3F	18 50	2 00	19 00	8.8	4.4
	1	Simple 3F	21 50	1 30	22 10	3.8	1.9*
16	1	Simple 3 incomplete	16 30	0 45	indet.	2.8	---
	1	Simple 3A	17 30	2 20	18 30	7.0	3.5
	1	Simple 3	17 59	0 10	18 01	3.6	1.3
17	1	Simple 3A	15 10	2 55	15 40	7.0	3.8
	1	Simple 1	17 47	0 02	17 48.2	3.6	1.8

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Feb.			H M	H M	H M		
17	1	Simple 2	20 18.5	0 01	20 19	11.0	5.5
	1	Simple 3	22 20	0 40	22 35	5.8	2.9*
18	1	Simple 3	17 00	0 10	17 07	2.2	1.1
	1	Simple 3AF	17 50	2 40	18 05	12.0	5.0
	1	Simple 3	18 50	0 20	19 00	3.2	1.6
	1	Simple 3F	21 20	0 40	21 35	7.2	3.6
19	1	Simple 1	13 49	0 02	13 50	2.8	1.4
	1	Simple 2F	15 07	0 09	15 10.5	13.0	3.6
	1	Simple 1F	17 12.8	0 01	17 13	6.6	3.3
	1	Simple 3	17 50	0 25	18 05	2.2	1.6
	1	Simple 3	19 10	0 45	19 30	3.2	1.6
	1	Simple 2	23 22	0 07	23 23.5	38.0	9.4*
20	1	Simple 3	13 40	1 05	14 20	3.6	1.8
	8	Rise	14 55	0 30	---	10.6	---
	1	Simple 3A	17 15	1 45	17 40	7.0	3.8
	1	Simple 2F	17 17.5	0 09	17 19.5	10.2	5.1
		Fall	19 05	0 55	---	6.4	---
21	1	Simple 1	13 02.5	0 05	13 04	5.4	1.8
	1	Simple 3A	14 30	3 30	15 06	11.4	6.4
	1	Simple 1F	15 02	0 01	15 02.5	7.4	3.7
	1	Spike	15 35	0 00.5	15 35.4	30.0	---
	1	Simple 2F	16 08.5	0 10	16 13	50.0	15.0
	1	Simple 3A	18 15	1 45	19 00	5.8	2.9
		1st Compt.	18 15	0 30	18 22	2.8	---
		2nd Compt.	18 45	1 15	19 00	5.8	---
	1	Simple 1	18 50	0 06	18 53	9.0	4.2
	1	Simple 3F	21 15	0 35	21 25	3.0	1.5

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Feb.			H M	H M	H M		
22	1	Simple 3	16 10	0 50	16 35	2.8	1.4
	1	Simple 3	18 30	2 25	indet.	3.4	2.8
	1	Simple 1	23 58	0 02	23 59	2.6	1.3*
23	1	Simple 1	14 09	0 01.5	14 09.5	2.8	1.2
	8	Rise A	15 40	0 10	---	3.4	---
	1	Simple 1	15 44	0 04	15 44.7	7.6	2.8
	1	Simple 1F	17 42	0 03	17 42.5	2.2	1.1
	1	Simple 3	19 25	2 00	19 55	5.2	2.6
	1	Simple 3	21 54	0 12	21 55	3.0	1.5*
24	1	Simple 3A	16 00	1 20	16 17	7.2	3.0
	1	Simple 1	16 09	0 02	16 10	4.0	2.0
	1	Simple 1F	16 35	0 07	16 36.4	8.6	4.0
	1	Simple 1	18 24	0 01	18 24.3	3.0	1.5
		Fall	21 03	0 07	---	2.8	---
	1	Simple 3A	21 20	2 15	22 35	4.4	2.2
	1	Simple 1	21 43	0 04	21 44	2.8	1.4
	1	Simple 3F	21 59	0 11	22 00	6.2	3.1*
25	1	Simple 3F	14 10	1 25	14 23	4.2	2.2
	1	Simple 3A	15 50	1 40	16 35	6.6	3.3
	1	Simple 1	17 45	0 01.2	17 46	2.0	1.0
	1	Simple 1	17 47	0 01	17 47.5	4.2	2.1
	1	Simple 3A	19 45	1 20	20 40	7.2	3.2
	1	Simple 1F	19 58	0 01.2	19 58.5	3.6	2.0
	1	Simple 1	20 31.7	0 02	20 32.5	2.0	1.0
	1	Simple 1	20 34	0 02	20 35.2	3.0	1.5
	1	Simple 3	22 28	0 15	22 31	5.6	2.6*
26	1	Simple 3	13 20	4 35	14 55	6.8	4.0

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
Feb.			H M	H M	H M		
27	1	Simple 3	15 45	2 15	16 30	3.0	1.5
	1	Simple 1F	18 52.5	0 08	18 54.8	5.8	2.6
	4	Fluctuations	19 07	0 10	19 10.5	8.2	---
	2	Post B.I.	19 17	0 20	---	2.0	1.0
	1	Simple 2F	23 19	0 05.5	23 19.5	46.0	34.0*
	2	Post B.I.	23 24.5	0 12	---	7.4	3.7*
28	1	Simple 3A	12 45	1 00	13 25	5.8	2.9
	3	Complex F	12 56.7	0 18	13 03.2	30.0	15.0
		1st Compt.	12 56.7	0 07.6	13 03.2	30.0	---
		2nd Compt.	13 04.3	0 01.7	13 05	20.0	---
		3rd Compt.	13 06	0 02.3	13 06.7	23.0	---
		4th Compt.	13 07.8	0 06.4	13 08.5	21.0	---
	1	Simple 3A	15 10	0 40	15 30	7.2	3.6
	1	Simple 1F	15 26	0 01.5	15 27	5.4	2.4
	1	Simple 1	16 17	0 01	16 17.5	3.0	1.5
	1	Simple 3	16 50	0 50	17 05	2.8	1.4
	1	Simple 3A	17 47	0 30	18 02	2.2	1.1
	1	Simple 1	17 48.5	0 01	17 48.9	3.6	1.8
	1	Simple 1	17 52.5	0 03	17 53.2	5.6	2.0
	1	Simple 1	18 22.3	0 01.5	18 22.9	3.0	1.5
	1	Simple 1F	18 34	0 04	18 36.3	9.0	3.6
	1	Simple 2F	19 07.8	0 09.2	19 10.2	300.0	64.0
	2	Post B.I.A.	19 17	1 40	---	6.2	3.1
	1	Simple 1	19 31	0 02	19 32.2	7.4	2.0
	1	Simple 1	20 05	0 01	20 05.5	2.2	1.1
	1	Simple 1	22 26	0 01.2	22 26.8	3.2	1.6*

*Only observed at Penticton.

MONTHLY REPORT NO. 278
March, 1970

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	
1970		Observed		adj. to 1 A.U.	Observed	adj. to 1 A.U.
March	14:00	17:00	20:00	17:00	19:35	19:35
1	178.0	178.9*	174.1	175.7*	167.8	164.8
2	170.5	176.0	175.0	173.0	169.0	166.1
3	170.4	170.2	175.6	167.3	171.1	168.2
4	168.9*	168.0	171.7	165.3	162.5	159.9
5	166.0	172.6	171.4*	169.8	168.0*	165.3*
6	170.8*	170.4	170.8	167.8	166.8	164.3
7	170.5	171.0*	172.5	168.4*	172.3	169.7
8	175.3	175.3*	174.7	172.8*		**
9	166.0	166.8	163.8	164.4	162.9	160.6
10	156.0	160.4	161.8	158.3	158.2	156.1
11	157.7	158.4*	163.8	156.3*	161.9	159.8
12	166.5	166.4	164.9	164.4	158.9	157.0
13	154.4	154.3*	155.2	152.4*	153.6	151.8
14	149.5	148.9	148.1	147.3	147.9	146.3
15	145.4	146.5	145.7	144.9	142.8	141.2
16	139.5	140.4	142.1	139.0	137.6	136.2
17	133.9	135.0	136.1	133.7	132.4	131.1
18	134.1	134.7	136.0	133.5	132.1*	130.9*
19	131.8	131.2	132.7*	130.2	128.4	127.4
20	138.8	142.2	141.4	141.1	140.3	139.2
21	151.3	150.8	152.6	149.7	151.3	150.2
22	148.3	152.0*	156.2	150.9*	---	---
23	161.2	165.9*	167.6*	164.9*	164.0*	163.0*
24	168.1	170.8*	171.0	169.8*	162.6	161.6
25	168.9*	168.0	168.6	167.2	166.1	165.3
26	166.9	167.1*	B.I.P.	166.4*	163.0	162.3
27	159.6*	159.8	159.5	159.2	---	---
28	151.8	154.3	152.9	153.8	150.0	149.6
29	151.6	153.6	151.2	153.1	---	---
30	147.0	149.7	150.8	149.4	---	---
31	149.0	149.6	153.3	149.3	144.6	144.3
Mean	157.0	158.4	158.7	156.8	155.2	153.5

*Corrected for burst
** Unreliable calibration.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
March			H M	H M	H M		
1		Incomplete	12 38 E	>0 06	12 40.2	44.0	---
	2	Post B.I.A.	12 44	0 58	---	13.0	4.4
	1	Simple 1	12 51.5	0 06	12 53	3.0	1.2
	1	Simple 1	13 45.9	0 01	13 46	4.0	2.0
	3	Complex F	13 58.2	0 07.8	14 00.1	102.0	36.0
		1st Compt.	13 58.2	0 03.3	14 00.1	102.0	---
		2nd Compt.	14 01.5	0 04.5	14 01.8	99.0	---
	2	Post B.I.	14 06	0 15	---	2.8	1.4
	1	Simple 1	14 54.1	0 00.7	14 54.5	9.8	4.9
	1	Spike	15 01.1	---	15 01.1	3.6	---
	1	Simple 2	15 10.9	0 01.3	15 11.5	28.0	13.0
	2	Post B.I.F.	15 12.2	0 08	---	4.0	1.2
	1	Spike	15 21.9	0 00.5	15 22.1	6.0	---
		Pre	15 27	0 03	---	3.0	---
	1	Simple 2F	15 30	0 07	15 31	565.0	86.0
	1	Simple 3F	15 45	1 15	16 16	7.8	3.9
	1	Simple 2F	17 11	0 03	17 12	13.0	6.0
	1	Simple 2F	17 29.7	0 02	17 30	10.0	4.0
	1	Simple 3A	17 50	1 00	17 56	4.0	2.0
	1	Simple 1	18 26	0 02	18 27	4.8	2.4
	4	Fluctuations	18 41	0 06	indet.	15.0	---
	4	Fluctuations	19 48	0 06	indet.	10.0	---
	1	Simple 2F	20 03.8	0 07.2	20 05.2	310.0	46.0
	2	Post B.I.	20 11	0 10	---	9.0	3.0
	4	Fluctuations	20 19	0 09	indet.	10.5	---

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
March			H M	H M	H M		
1	1	Simple 3A	20 29	0 40	20 35	5.0	2.5
	1	Simple 1	20 29.5	0 02	20 30	5.6	2.8
	1	Simple 1	20 32	0 01.5	20 32.8	3.2	1.6
	8	Rise A	21 43	0 10	---	2.4	---
	1	Simple 1	21 45.5	0 02	21 47	2.6	1.3
	1	Simple 1	21 48.5	0 02	21 49.5	3.2	1.6
	1	Simple 3A	22 30	1 40	23 10	4.2	2.1*
	1	Simple 1	22 39	0 02	22 39.9	6.4	2.8*
	4	Fluctuations	23 15.5	0 32	23 39.8	30.0	---*
2	1	Simple 1	00 12.2	0 01	00 12.8	2.2	1.1*
	1	Simple 1F	00 35.5	0 01	00 36	4.8	2.4*
	1	Simple 2F	00 46	0 06	00 46.2	93.0	23.0*
	1	Simple 3	13 10	0 15	13 20	2.2	1.1
	3	Complex F	13 30	0 50	13 43	123.0	43.0
		1st Compt.	13 30	0 37	13 43	123.0	---
		2nd Compt.	14 07	0 13	14 13	80.0	---
	2	Post B.I.A.	14 20	2 20	---	32.0	11.0
	1	Simple 3	16 08	0 30	16 15	3.4	2.0
	1	Simple 3	20 40	0 35	20 50	2.8	1.4
	1	Simple 3A	21 50	2 00	22 40	3.0	1.5*
	1	Simple 1	22 17	0 03	22 18	4.4	2.0*
	1	Simple 1	22 25.9	0 02	22 26	4.4	2.0*
	1	Simple 1	22 50	0 02	22 50.6	2.0	1.0*
3	8	Rise	19 23	0 01	---	2.2	---
	1	Simple 2F	20 33.8	0 08.2	20 36	120.0	60.0
	2	Post B.I.	20 42	1 38	---	23.0	8.0

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
March			H M	H M	H M		
3	1	Simple 3	22 35	2 00	22 53	8.8	4.4*
4	1	Simple 3A	13 24	1 30	13 52	4.8	2.4
	1	Simple 1	13 36	0 05	13 39	4.2	2.1
	1	Simple 3	16 10	0 40	16 25	2.8	1.4
	1	Simple 3A	16 55	1 00	17 05	2.8	1.4
	1	Simple 1	17 38.7	0 01	17 38.9	3.0	1.2
	1	Simple 1	17 40	0 02	17 41.3	5.4	2.7
	3	Complex F	18 20.7	0 12.3	18 26.5	140.0	58.0
		1st Compt.	18 20.7	0 03.8	18 22.8	100.0	---
		2nd Compt.	18 24.5	0 08.5	18 26.5	140.0	---
	2	Post B.I.A.	18 33	0 30	---	7.8	3.9
	1	Simple 1	18 38	0 06	18 39	2.8	1.4
	1	Simple 1	19 15.5	0 08	19 16	3.6	1.8
	1	Simple 1	19 24.5	0 02	19 24.8	3.0	1.5
	1	Simple 3	19 30	1 30	20 15	3.2	1.6
	1	Simple 3F	22 10	1 40	22 55	8.6	3.4*
5	1	Simple 3	13 20	0 35	13 45	2.8	1.4
	8	Rise	16 18	0 03	---	6.2	---
	4	Fluctuations	16 21	0 05	16 25.7	25.0	---
	1	Simple 3	16 55E	> 0 30	17 00	2.8	---
	1	Simple 3A	18 30	1 55	19 25	5.0	2.5
	1	Simple 1F	19 08.7	0 05	19 11	8.8	4.4
	1	Simple 3	20 35	0 15	20 37	2.2	1.1*
	1	Simple 3A	13 05	3 20	14 15	16.0	4.6
	1	Simple 2F	13 18	0 14	13 24.7	84.0	14.0
	1	Spike	14 17	0 00.5	14 17.1	7.6	---
	1	Simple 1	14 57.9	0 00.7	14 58.1	2.4	1.2

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
March			H M	H M	H M		
6	1	Simple 3	17 20	0 50	17 35	2.2	1.1
	1	Simple 3	18 25	0 20	18 32	2.8	1.4
	1	Simple 3	19 10	0 20	19 18	3.2	1.6
7	8	Rise	13 30	0 15	---	4.2	---
	1	Simple 3A	15 50	>1 00	16 15	24.0	---
	1	Simple 2F	16 04.5	0 08	16 06.5	125.0	33.0
8	1	Simple 3	14 28	1 10	15 00	5.4	2.7
	1	Simple 3	15 50	2 00	16 20	4.8	2.4
	1	Simple 1F	20 03.5	0 01.5	20 04.5	3.2	1.6*
9	1	Simple 2	13 00	0 03	13 01.5	10.0	4.8
	1	Simple 1	17 48.5	0 01	17 49.1	4.4	2.2
	2	Post B.I.A.	17 49.5	0 12	---	2.4	1.2
	1	Simple 2F	17 54	0 05	17 55.2	20.0	5.0
10	1	Simple 1	13 46	0 01	13 46.4	7.6	3.8
	1	Simple 2F	17 47.5	0 09	17 52	60.0	15.0
	1	Simple 1	19 32.5	0 00.5	19 32.8	5.2	2.6
	1	Simple 1	19 33.5	0 01	19 34	4.4	2.2
	1	Simple 2F	21 57	0 08	21 58.7	75.0	19.0
	2	Post B.I.A.	22 05	0 15	---	3.0	1.5
	1	Simple 2F	22 06.2	0 02	22 07.9	12.0	5.8
	1	Simple 1F	22 09.5	0 02.5	22 11	7.4	3.7
11	1	Simple 3	12 30	0 50	12 40	2.8	1.4
	1	Simple 3	16 10	1 15	16 30	3.6	1.8
	8	Rise	19 10	0 20	---	5.1	---
13	1	Simple 3	16 10	3 10	18 00	4.8	2.8
	1	Simple 3	20 10	4 25	21 45	5.6	2.8
14	1	Simple 3	15 15	0 20	15 20	4.0	1.8
	1	Simple 3	21 02	0 10	21 02.5	2.4	1.2

*Only observed at Penticton

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
March			H M	H M	H M		
16	1	Simple 3	21 55	1 05	22 35	4.8	2.4*
17	3	Complex F	14 40.5	0 07.5	14 43.3	78.0	29.0
		1st Compt.	14 40.5	0 04	14 43.3	78.0	---
		2nd Compt.	14 44.5	0 03.5	14 45.5	54.0	---
	2	Post B.I.	14 48	0 20	---	3.6	1.8
	1	Simple 2F	16 00.7	0 01	16 01	12.0	4.0
	1	Simple 1	18 35.5	0 01	18 35.7	3.8	1.9
	3	Complex F	22 48	0 14	22 52.8	34.0	9.0*
		1st Compt.	22 48	0 06	22 52.8	34.0	---
		2nd Compt.	22 54	0 08	22 56	14.0	---
18	1	Simple 3A	16 45	1 10	17 22	3.6	1.8
	1	Simple 1F	16 56	0 08	16 58.2	9.6	4.4
	1	Simple 3	17 55	2 20	18 35	3.2	1.6
19	1	Simple 3F	20 00	0 14	20 03	7.4	2.8
20	1	Simple 2	17 00	0 18	17 07.3	64.0	23.0
	2	Post B.I.A.	17 18	2 30	---	9.0	4.5
	1	Simple 3	17 30	0 25	17 40	2.2	1.1
21	8	Rise A	00 35	0 45	---	21.0	---*
	4	Fluctuations	00 42	0 08	00 43	36.0	---*
	1	Simple 3	17 30	1 25	17 50	2.4	1.2
	1	Simple 3	20 40	2 30	20 55	2.4	1.6
22	1	Simple 3A	00 00	>1 00	00 20	10.6	---*
	1	Simple 1	00 07.5	0 04	00 09	6.6	3.3*
	1	Simple 2	00 20	0 03	00 21	10.0	5.0*
	1	Simple 3	00 30	0 20	00 38	10.0	5.0*

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
March			H M	H M	H M		
22	8	Rise A	14 05	0 08	---	3.48	---
		Incomplete	14 09E	> 0 04	---	10.0	---**
	1	Simple 3	14 15	0 30	14 30	4.0	2.0
	1	Simple 3A	15 07	0 13	15 13	2.0	1.0
	1	Simple 1	15 09.5	0 01	15 10	2.0	1.0
	1	Simple 3	15 50	1 40	16 30	3.0	1.5
	1	Simple 1	18 55	0 01	18 55.5	3.8	1.6
	1	Simple 1	19 30	0 01.5	19 30.8	4.8	2.4
	8	Rise	20 10	0 05	---	2.2	---
	1	Simple 3	20 16	0 10	20 19	2.4	1.2
	3	Complex	20 39	0 03	20 40	10.0	3.2
	1	Simple 2F	20 42.8	0 03	20 43	11.0	3.4
	1	Simple 3A	23 05	> 2 00	23 53	20.0	---*
	1	Simple 2	23 29	0 07	23 30	46.0	12.0*
23	1	Simple 1	12 14	0 03	12 16	3.6	1.8
	1	Simple 3F	12 20	0 12	12 24	6.0	3.0
	1	Simple 3F	12 55	0 11	13 00	2.2	1.1
	3	Complex F	15 44	0 11	15 47	28.0	11.0
		1st Compt.	15 44	0 05	15 47	28.0	---
		2nd Compt.	15 49	0 06	15 50	23.0	---
	2	Post B.I.A.	15 55	2 45	---	7.6	4.4
	1	Simple 1	17 09.8	0 01	17 10	4.0	2.0
	1	Simple 3A	18 45	0 30	18 49	4.6	2.3
	1	Simple 2	18 48.8	0 01	18 49.9	10.0	5.0
	1	Simple 3	19 15	1 50	19 40	5.6	4.0

*Only observed at Penticton

** Peak flux for period observed.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
March			H M	H M	H M		
24	1	Simple 1	12 23	0 01	12 23.1	9.4	4.0
	8	Rise	12 35	0 20	---	3.8	---
	1	Simple 3	14 15	0 55	14 40	2.2	1.1
	1	Simple 3	15 10	0 50	15 23	2.2	1.0
	1	Simple 3A	16 20	2 05	16 45	14.0	7.6
	1	Simple 2F	16 25	0 06	16 28	22.0	10.0
	1	Simple 3	18 40	1 35	19 10	4.4	2.2
	1	Simple 3	21 40	0 25	21 45	3.8	1.9
	1	Simple 3AF	23 20	1 30	23 50	5.8	2.9*
	1	Simple 1	23 39	0 04	23 40.5	5.2	2.6*
25	1	Simple 3A	12 02	3 50	12 08	14.4	7.0
	1	Simple 1F	12 07.5	0 01	12 08	4.4	3.0
	1	Simple 1F	12 09.5	0 02	12 10.5	6.0	3.0
	1	Simple 2F	12 15	0 21	12 20.8	445.0	150.0
	2	Post B.I.A.	12 31	0 20	---	23.0	11.5
	1	Simple 1F	12 32	0 03	12 33	6.6	3.3
	1	Simple 3	16 00	0 30	16 05	2.0	1.0
	1	Simple 3A	17 00	2 00	18 00	3.2	1.6
	1	Simple 2F	17 44	0 04	17 47	11.0	5.5
	2	Post B.I.	17 48	0 10	---	5.4	2.7
	1	Simple 3	19 59	2 30	20 15	3.4	2.2
	1	Simple 3	22 33	0 17	22 36	5.4	2.4
26	1	Simple 3A	12 45	0 30	indet.	3.0	2.0
	1	Simple 2	12 50.5	0 04	12 51.9	12.0	5.0
	3	Complex	12 56	0 06	12 57	7.4	3.7

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
March			H M	H M	H M		
26	4	Fluctuations	14 51	0 15	14 53	7.4	---
	3	Complex F	17 27	0 06	17 27.8	112.0	28.0
	1	Simple 3A	20 00	2 00	20 38	16.0	8.0
	1	Simple 2F	20 05	0 12	20 08.5	420.0	92.0
	1	Simple 1	23 38	0 06	23 39.5	3.8	1.9*
27	1	Simple 3A	12 10	3 00	13 00	9.0	4.5
	3	Complex	14 21.5	0 03	14 23.2	54.0	14.0
	2	Post B.I.	14 24.5	0 14	---	4.4	2.2
28	1	Simple 3	15 05	0 30	15 20	3.4	1.7
	1	Simple 3	15 45	0 25	15 47	4.0	2.0
	1	Simple 3	21 20	0 40	21 30	3.2	1.6
29		Pre F	00 11	0 24	00 32	17.0	8.0*
	1	Simple 2F	00 35	0 40	00 40.8	$\simeq$ 870.0	---*
	2	Post B.I.	01 15	>0 25	---	15.0	---*
	1	Simple 1	18 51	0 06	18 54	3.8	1.9
	1	Simple 3	21 10	2 00	22 00	4.6	2.3
31		Pre	17 55	0 11	---	2.6	1.6
	1	Simple 2	18 06	0 05	18 07	110.0	34.0
	2	Post B.I.	18 11	0 55	---	12.0	6.0
	8	Rise	22 05	0 10	---	2.4	---
	1	Simple 2	22 15	0 09	22 18	12.0	4.6

*Only observed at Penticton.

† The peak flux of $\simeq$870 on March 29 was revised to $\simeq$1350 see Fig. 2.

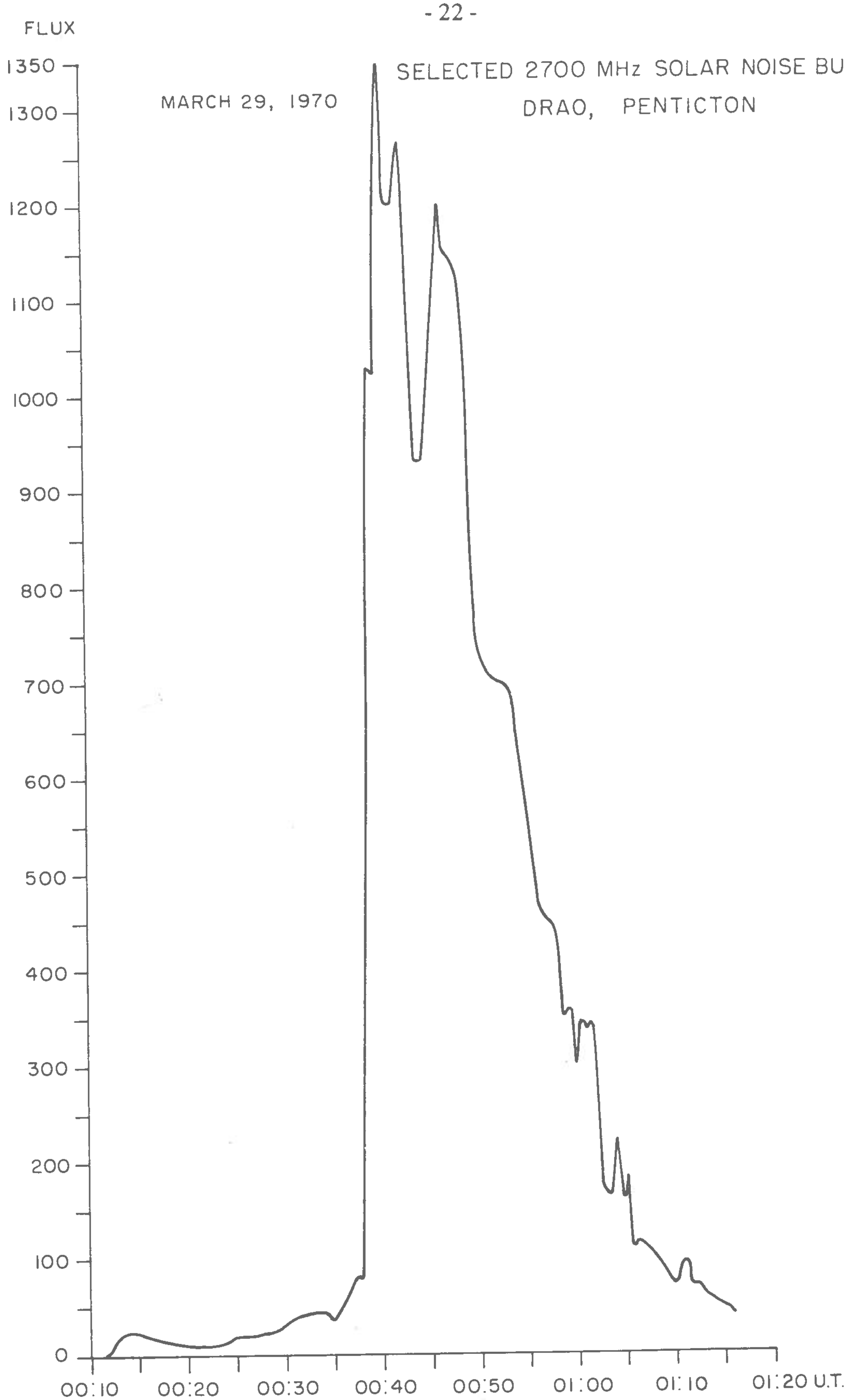
FLUX
1350
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
MARCH 29, 1970
SELECTED 2700 MHz SOLAR NOISE BURST
DRAO, PENTICTON
00:10
00:20
00:30
00:40
00:50
01:00
01:10
01:20 U.T.

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	
1970		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	159.1	161.0*	159.9	160.8*	159.7*	159.5*
2	167.7*	167.3	162.9	167.1	162.0	161.8
3	163.8*	163.5	164.2	163.5	158.2*	158.2*
4	170.7*	170.2	174.4	170.4	---	---
5	176.7*	179.2*	180.4	179.4*	---	---
6	195.9	192.5	B.I.P.	192.9	182.5*	182.9*
7	191.2	193.0*	197.6*	193.4*	193.4*	193.7*
8	202.1	202.5*	202.3*	203.1*	200.5	201.1
9	215.3*	217.8	217.7*	218.5	212.5*	213.1*
10	224.9	223.8*	214.9	224.7*	212.9	213.8
11	205.2*	205.4	207.3	206.4	---	---
12	199.0	197.5*	197.8*	198.5*	---	---
13	185.6	184.2	185.4	185.3	180.1	181.2
14	174.0	172.8*	171.2*	173.8*	168.8*	169.8*
15	166.1	162.5	160.7	163.6	156.2	157.3
16	152.0	151.1	152.5	152.2	146.5	147.5
17	147.7	146.8	147.0	148.0	144.8	146.0
18	141.8	140.6	140.1	141.9	---	---
19	136.1	134.5	135.7	135.7	---	---
20	131.7	129.9	128.2	131.2	125.1	126.4
21	125.9	125.0	125.4	126.3	122.7	123.9
22	127.8	127.2	126.2	128.6	124.1	125.5
23	128.2*	128.7	129.4	130.1	125.5	126.9
24	129.3	128.6	132.4	130.1	128.3	129.8
25	132.9	133.2	133.7*	134.8	---	---
26	136.1	133.6	134.8	135.3	---	---
27	135.4	136.1	138.9	138.0	134.4	136.3
28	144.4	146.5	148.5	148.6	144.4	146.4
29	150.1	153.8	153.3	156.1	151.1	153.4
30	149.4	151.0	153.7*	153.3	149.3*	151.5*
Mean	162.2	162.0	161.3	163.1	158.3	159.4

*Corrected for burst.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
April			H M	H M	H M		
1	1	Simple 3	15 55	2 10	16 45	4.6	2.6
	1	Simple 3A	18 40	2 00	19 35	5.4	2.7
	1	Simple 1	18 49.5	0 06	18 51	5.8	2.6
	1	Spike	18 50.4	0 00.6	18 50.5	5.4	---
2	1	Simple 1F	11 44	0 03	11 45	6.6	3.0
	1	Simple 3A	12 28	0 12	12 32	5.8	2.9
	1	Simple 2F	12 28	0 01.5	12 28.5	19.0	9.5
	1	Simple 3F	13 30	2 20	indet.	4.0	2.0
	1	Simple 3A	20 20	0 45	20 33	3.4	2.0
	1	Spike	20 53	---	20 53	7.6	---
	1	Simple 1	21 35.8	0 01.2	21.36.2	4.8	2.4
		Absorption	22 25	1 10	22 40	-5.2	-2.6
	1	Simple 1	23 53	0 03	23 54	2.8	1.4*
3	1	Simple 1	00 05	0 01	00 05.5	7.6	3.8*
	1	Simple 1	00 31.2	0 01	00 32	3.2	1.6*
	1	Simple 3	13 50	0 50	13 54	2.8	1.4
	1	Simple 3	14 40	0 25	14 55	2.4	1.2
	1	Simple 3	18 50	1 40	19 25	2.2	1.1
	1	Simple 3	22 25	2 50	23 15	5.2	2.6*
4	1	Simple 3	11 55	1 30	12 30	4.2	2.1
	1	Simple 3	13 40	1 35	13 50	2.8	1.4
	1	Simple 1	18 24	0 01	18 24.3	2.8	1.4
	1	Simple 3F	20 20	1 25	20 45	5.6	2.6
	1	Simple 1	23 31	0 02	23 32	3.2	1.6*
	1	Simple 3	23 36	1 10	23 37	3.8	1.9*

*Only observed at Penticton

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
April			H M	H M	H M		
5	1	Simple 3A	12 10	5 10	14 48	30.0	13.0
	3	Complex F	12 22	0 04	12 25	11.8	5.9
	2	Post B.I.	12 26	0 09	---	3.2	1.6
	1	Simple 3	13 35	0 25	13 50	8.0	4.0
	1	Simple 3	15 07	0 13	15 09	4.0	2.0
	1	Simple 2F	17 45.5	0 04	17 46	54.0	14.0
	2	Post B.I.	17 49.5	0 35	---	3.2	2.0
	1	Simple 3A	19 10	0 35	19 13	4.0	1.8
	1	Spike	19 13.5	0 00.3	19 13.6	4.0	---
6	1	Simple 3A	11 34	1 00	11 50	32.0	14.0
	1	Simple 2	11 39	0 08	11 44	15.0	7.5
	3	Complex F	12 34	0 16	12 43	92.0	46.0
		1st Compt.	12 34	0 07	12 40	70.0	---
		2nd Compt.	12 41	0 09	12 43	92.0	---
	2	Post B.I.	12 50	1 10	---	30.0	8.0
	1	Simple 3	17 25	0 45	17 31	3.2	1.6
		Fall	18 20	0 40	---	5.0	---
	1	Simple 3A	19 00	6 00	indet.	30.0	16.0
	3	Complex F	20 02	1 08	20 37	140.0	72.0
		1st Compt.	20 02	0 16	20 14	88.0	---
		2nd Compt.	20 18	0 13	20 24	131.0	---
		3rd Compt.	20 31	0 39	20 37	140.0	---
	1	Simple 3	21 20	0 50	21 30	17.0	7.8
	1	Simple 1	23 18	0 02	23 19	4.0	2.0*
7	8	Rise	14 45	0 03	---	2.2	---
	1	Simple 3F	15 00	1 55	16 05	10.0	5.0
	1	Simple 3	17 00	4 40	18 45	28.0	18.0

*Only observed at Penticton

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
April			H M	H M	H M		
7	1	Simple 2	22 22	0 02	22 22.8	10.8	5.4
	2	Post B.I.	22 24	0 06	---	3.2	1.6
	1	Simple 1	23 10	0 06	23 10.5	4.6	2.3*
	1	Simple 3	23 25	1 25	24 00	5.0	2.5*
8	8	Rise	11 55	0 25	---	5.8	---
	8	Rise A	13 00	0 15	---	5.0	---
	1	Simple 1	13 07	0 03	13 08	5.0	2.5
	1	Simple 2F	13 11	0 04	13 12.2	11.6	5.8
	1	Simple 3A	15 30	3 30	16 45	9.2	5.0
	1	Simple 2F	15 52	0 08	15 55	10.0	3.4
	1	Simple 3	19 30	2 00	19 50	9.4	4.7
	8	Rise A	21 40	0 40	---	6.8	---
	1	Simple 1	22 14	0 06	22 18	3.2	1.6
	1	Simple 3A	22 50	1 55	indet.	3.4	---*
	1	Simple 2F	23 29.5	0 15	23 32	12.0	6.0*
	3	Complex F	23 49	0 32	23 59	48.0	19.4*
		1st Compt.	23 49	0 06	23 53	36.0	---
		2nd Compt.	23 55	0 26	23 59	48.0	---
9	1	Simple 3A	12 25	1 00	12 50	5.0	2.5
	1	Simple 2F	12 25	0 03.5	12 26.5	10.0	4.6
	1	Simple 3	13 25	1 35	14 15	8.0	4.0
	1	Simple 3F	18 05	2 15	19 05	6.4	3.8
	8	Rise	22 10	0 35	---	8.4	---
	1	Simple 1	22 58	0 02	22 59.5	2.6	1.3*
10	1	Simple 2F	00 03.5	0 04	00 04.5	50.0	8.0*
	1	Simple 2	01 15	0 02	01 16	18.0	9.0*

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
April			H M	H M	H M		
10	8	Rise	11 40	1 00	---	10.2	---
	1	Simple 3	12 55	0 40	13 05	3.4	1.7
	1	Simple 2F	14 50	0 01	14 50.5	20.0	10.0
	2	Post B.I.	14 51	0 06	---	2.0	1.0
	1	Simple 3	15 20	0 30	15 28	3.4	1.7
	1	Simple 2	16 28	0 10	16 31	80.0	36.0
	2	Post B.I.A.	16 38	1 15	---	14.2	7.1
	1	Spike	17 06.5	---	17 06.5	10.6	---
	1	Simple 3	18 10	0 30	18 15	4.0	2.0
		Fall	18 55	1 10	---	13.6	---
	1	Simple 3F	20 10	0 15	20 14	3.4	1.2
	8	Rise	20 50	0 15	---	3.4	---
	1	Simple 3A	21 25	2 35	22 20	7.6	3.8
	1	Simple 2	23 23	0 07	23 25	14.0	6.0*
	1	Simple 2F	23 45	0 01	23 45.1	16.0	7.6*
11	1	Simple 3	12 10	0 25	12 17	2.4	1.2
	1	Simple 3	13 40	1 15	13 55	3.4	1.7
	1	Simple 1F	15 27	0 01.5	15 27.7	2.4	1.2
12	1	Simple 3	14 55	0 20	15 01	2.8	1.4
	1	Simple 3A	16 05	4 15	indet.	17.0	---
	3	Complex	17 03.5	0 03.5	17 05	23.0	8.0
	3	Complex F	17 15.5	0 40.5	17 41.5	255.0	105.0
	1	Simple 3	21 00	0 20	indet.	2.0	1.6
	1	Simple 1	21 24.5	0 06	21 25	4.8	2.4

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
April			H M	H M	H M		
14	1	Simple 3	15 45	1 15	15 55	3.8	1.0
	1	Simple 3	19 00	2 10	19 35	4.4	2.2
15	1	Simple 3	19 40	1 25	20 25	2.6	1.3
16	1	Simple 1	19 51.7	0 01	19 52	6.2	3.1
17	1	Simple 2F	01 28	0 06	01 30	26.0	11.0*
	1	Simple 3A	20 10	1 20	20 40	2.6	1.3
	1	Simple 1	20 26	0 03	20 27.8	7.8	3.6
18	1	Simple 3	11 15	0 10	11 20	2.6	1.3
	1	Simple 1	13 16	0 05	13 17	3.8	1.9
	1	Simple 1F	22 27	0 02	22 27.7	2.6	1.0
21	8	Rise	14 10	0 20	---	2.2	---
		Fall	16 10	0 25	---	2.6	---
	8	Rise	20 20	0 12	---	2.6	---
	1	Simple 3	20 45	1 45	21 10	2.6	1.3
23	1	Simple 3	13 20	> 0 40	13 30	2.4	---
	1	Simple 1	16 19	0 04	16 21	2.4	1.2
	1	Simple 1	20 38.5	0 02	20 39.5	2.4	1.2
	1	Simple 3	22 08	0 35	22 13	2.4	1.2
24	1	Simple 3	11 35	1 45	12 30	2.6	1.3
	1	Simple 1	15 26	0 01	15 26.5	2.4	1.2
	1	Simple 1	18 41	0 02	18 42	2.4	1.2
	1	Simple 3	19 30	3 15	20 40	4.2	2.1
25	1	Simple 2	00 36.2	0 06.8	00 37.7	175.0	46.0
	2	Post B.I.	00 43	> 0 50	---	5.8	---
	1	Simple 3	19 20	1 05	19 45	2.0	1.0

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
April			H M	H M	H M		
28	1	Simple 2	11 48	0 04	11 48.1	12.0	3.0
	1	Simple 3A	17 30	2 10	18 45	3.4	2.0
	4	Fluctuations	18 10	0 17	18 13	6.8	---
	4	Fluctuations	21 15	0 12	21 17	186.0	---
	2	Post B.I.	21 27	1 30	---	6.6	3.3
29	1	Simple 3F	00 50	> 0 50	01 10	15.0	---*
	1	Simple 2F	11 03	0 03	11 04.5	39.0	15.0
	2	Post B.I.	11 06	0 04	---	3.2	1.6
	1	Simple 1	11 44	0 07	11 47	2.2	1.1
	1	Simple 3A	12 15	2 50	13 00	3.8	2.2
	1	Simple 1	12 23.6	0 01.5	12 24	8.8	4.4
	8	Rise A	15 05	0 25	---	3.1	---
	1	Simple 3F	15 21	0 10	15 25	2.6	1.8
	1	Simple 3	18 30	0 35	18 35	2.0	1.0
	1	Simple 3	21 15	0 50	21 30	3.0	1.5
	1	Simple 3	22 25	0 40	22 33	2.0	1.0
		Fall	23 15	0 25	---	3.6	---*
30	1	Simple 3	14 35	0 55	14 50	3.6	1.8
	1	Simple 3	19 25	3 25	20 35	4.6	2.3
Addendum							
March 7	8	Rise	13 30	0 15	---	4.2	---

*Only observed at Penticton.

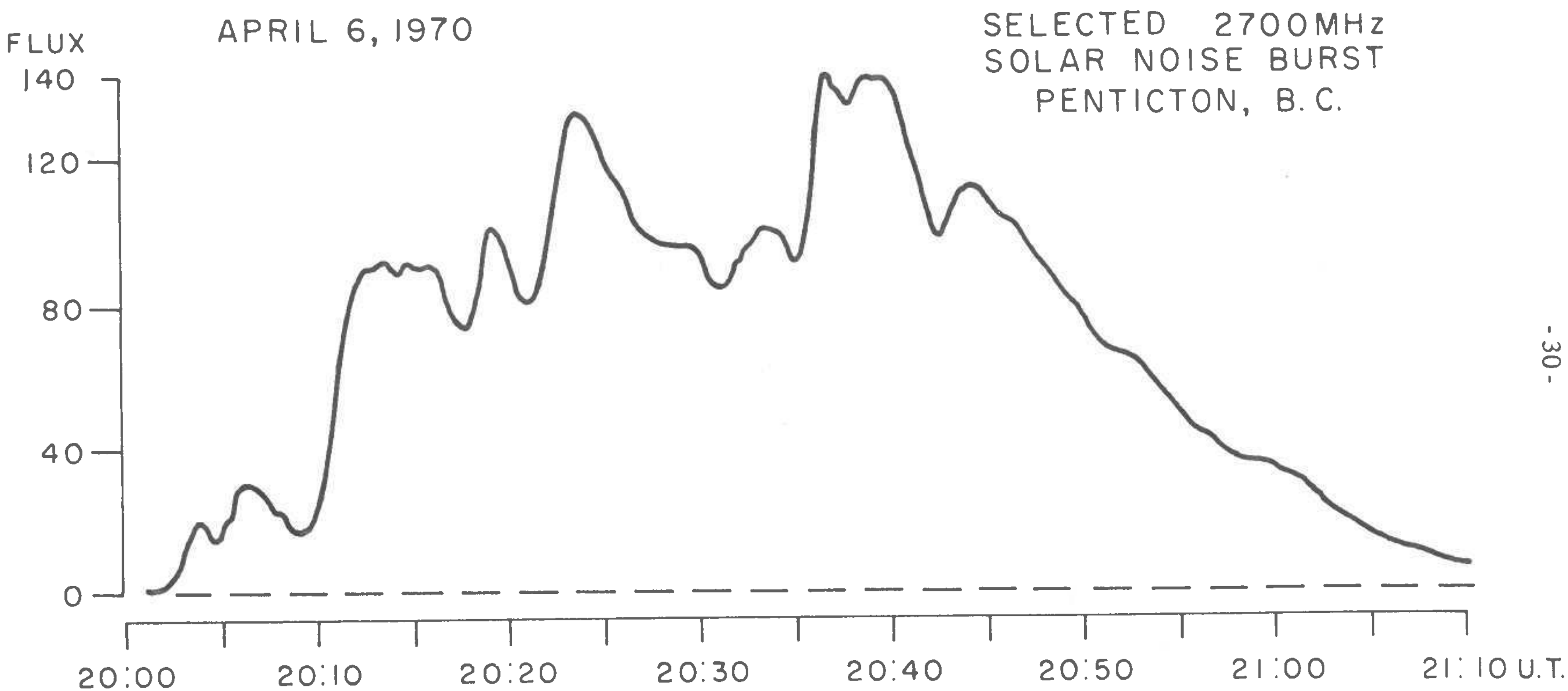
APRIL 6, 1970
SELECTED 2700MHz
SOLAR NOISE BURST
PENTICTON, B.C.
FLUX
140
120
80
40
0
20:00
20:10
20:20
20:30
20:40
20:50
21:00
21:10 U.T.

Figure 3

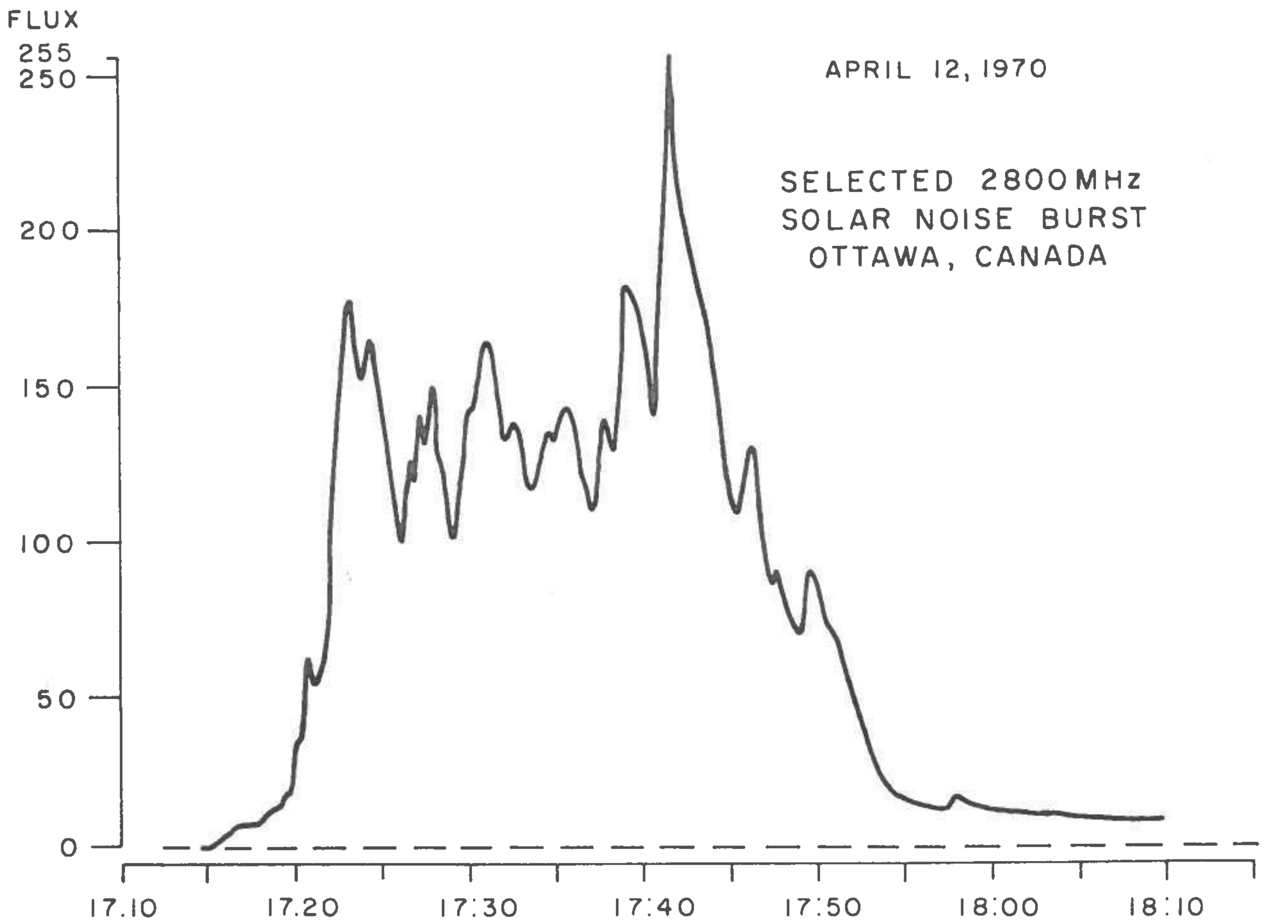
FLUX
255
250
200
150
100
50
0
APRIL 12, 1970
SELECTED 2800 MHz
SOLAR NOISE BURST
OTTAWA, CANADA
17.10
17.20
17:30
17:40
17:50
18:00
18:10

Figure 4

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

1970	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	156.2	157.0	156.7*	159.5	153.0	155.4
2	159.3	158.2*	160.4	160.7*	--	--
3	158.3	160.8	161.6	163.5	--	--
4	163.0	159.6	163.4	162.3	159.0	161.7
5	165.2	164.9	168.5	167.9	160.6	163.5
6	162.3	160.4	157.9	163.3	155.4	158.2
7	159.2	159.4	160.0	162.4	156.3	159.3
8	153.3	153.8	152.2	156.7	149.5*	152.3*
9	152.1	152.0*	152.6	154.9*	--	--
10	159.0	159.6	161.1	162.8	--	--
11	172.1*	172.7	170.4	176.2	168.2*	171.6*
12	177.3	176.6	179.9	180.3	172.4	176.0
13	189.7	189.1	190.7	193.1	182.7	186.5
14	192.2*	192.6	195.6	196.8	185.6	189.7
15	197.2	201.9	204.3*	206.3	192.1*	196.3*
16	203.3*	201.4	201.5*	206.0	196.9*	201.4*
17	198.6	192.6	197.5	197.0	190.8	195.2
18	195.0	190.0	191.5	194.6	185.8	190.3
19	194.7	192.8	191.3	197.4	184.7	189.1
20	179.1	179.6	180.6*	183.9	175.6*	179.8*
21	170.6	170.6	171.4	174.9	167.0	171.2
22	167.1	166.1	164.7	170.3	160.9	164.9
23	161.5	159.6	159.2	163.7	--	--
24	158.4	158.5*	158.7*	162.6*	--	--
25	157.2	156.5	154.5	160.6	152.7	156.7
26	156.7	158.5	159.1*	162.8	155.4	159.6
27	150.9	151.1	150.9	155.2	147.3	151.3
28	146.5	149.8	151.6*	153.8	--	--
29	154.8	154.2	156.3*	158.5	151.8	156.1
30	159.8	159.2	157.8	163.7	--	--
31	159.8	160.7	158.9	165.2	--	--
Mean	168.7	168.4	169.1	172.2	168.4	172.1

* Corrected for burst

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
May			H M	H M	H M		
1	1	Simple 3A	14 15	2 25	15 02	14.6	7.3
	1	Simple 3	14 24	0 30	14 29	7.6	3.8
	1	Simple 1	18 24	0 08	18 28	2.6	1.3
	1	Simple 3	18 45	2 35	20 15	7.0	3.5
2	1	Simple 3	15 40	3 20	16 40	4.4	2.2
	1	Simple 1F	22 12	0 01.5	22 12.8	7.0	3.5
3	8	Rise	15 20	0 23	---	2.6	---
	8	Rise	19 30	0 15	---	2.6	---
4	1	Simple 3	15 50	0 50	16 10	3.4	1.7
	1	Simple 1	19 29.5	0 01	19 30	9.0	4.5
	1	Simple 3	20 00	0 30	20 10	2.6	1.3
	1	Simple 3	21 20	0 20	21 30	2.6	1.3
	8	Rise	22 55	0 20	---	6.0	---
	8	Rise A	22 35	0 25	---	3.0	---*
	1	Simple 1	23 47.5	0 06	23 48	3.2	2.0*
5	1	Simple 1	00 17.2	0 01	00 17.5	3.6	1.8*
	1	Simple 3	13 40	0 20	13 48	2.6	1.3
	1	Simple 3A	14 25	0 40	14 42	2.4	1.2
	1	Simple 1	14 35	0 01	14 35.4	4.6	2.0
	8	Rise	17 30	0 15	---	2.7	---
	3	Complex	18 29.5	0 08.5	18 34	7.8	3.9
	2	Post B.I.	18 38	0 20	---	2.0	1.0
	1	Simple 3A	20 58	0 32	21 05	2.6	1.3
	1	Simple 1F	20 59.8	0 01.5	21 00	2.8	1.4
	1	Simple 1F	21 01	0 01	21 01.3	8.6	4.3
	1	Simple 1	23 12	0 06	23 14.3	3.4	1.7*

*Only observed at Penticton

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
May			H M	H M	H M		
6	1	Simple 2F	12 26	0 02	12 26.8	30.0	13.0
	1	Simple 1	15 25.9	0 01.5	15 26	2.4	1.2
	1	Simple 1F	18 04.5	0 02.5	18 06.5	3.8	1.6
	3	Complex F	22 39	0 09	22 42.8	27.0	9.0
	2	Post B.I.	22 48	0 15	---	3.2	1.6
7	1	Simple 3A	00 50	0 22	00 56	6.4	3.2*
	1	Simple 1	00 53	0 03	00 55	8.8	4.4*
	1	Simple 1	01 34.9	0 01	01 35	3.2	1.6*
	8	Rise	11 10	0 10	---	2.6	---
	1	Simple 3	14 10 E	> 0 35	14 15	2.2	---
	1	Simple 3A	15 40	1 20	16 12	3.4	1.7
	1	Simple 2F	15 50.5	0 06	15 52	10.0	4.8
	1	Simple 1	16 02.5	0 02.5	16 03.5	4.8	2.4
	1	Simple 3	18 15	1 25	18 30	2.6	1.3
	1	Simple 3F	19 47	0 30	19 50	2.0	1.0
	1	Simple 3	20 25	0 35	20 32	6.2	2.9
	1	Simple 1F	22 27	0 02	22 28	9.0	4.5
	1	Simple 1F	23 29.5	0 06.5	23 30.2	4.8	2.4*
8	1	Simple 3 AF	16 50	0 50	17 10	3.0	1.8
	1	Simple 1	17 18.5	0 01.5	17 18.8	7.0	2.6
	1	Simple 3	18 45	1 05	18 55	6.2	3.1
	1	Simple 1	19 53.2	0 01	19 53.7	5.8	2.6
	1	Simple 3A	21 34	0 15	21 38	3.8	1.9
	1	Simple 1	21 34	0 00.8	21 34.3	3.2	1.8

* Only observed at Penticton

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
			H M	H M	H M		
May							
9	1	Spike	00 31	---	00 31	7.0	---*
	1	Simple 1	00 57	0 03	00 58	5.4	3.0*
	2	Post B.I.	01 00	0 40	---	2.4	1.8*
	1	Simple 2	15 59.5	0 02.5	16 00.7	67.0	22.0
	2	Post B.I.	16 02	0 04	---	5.2	2.6
	1	Simple 3A	16 15	1 00	16 40	2.2	1.1
	1	Simple 2F	17 00.8	0 01	17 01.2	20.0	8.0
	1	Simple 3	18 00	1 50	18 20	6.6	2.8
10	1	Simple 3 AF	18 00	1 00	18 22	2.4	1.2
	1	Spike	18 50.4	0 00.5	18 50.7	>162.0	---
11	8	Rise	11 05	0 20	---	4.2	---
	1	Simple 3	13 55	3 00	14 25	9.0	4.5
		Absorption	19 24	0 36	19 36	-12.0	-6.4
12	1	Simple 3	20 48	0 12	20 53	2.2	1.1
	1	Simple 3	21 30	0 30	21 45	3.0	1.5
13	1	Simple 3A	16 54	0 16	16 56	4.0	2.0
	1	Simple 1	16 58	0 02	16 58.5	2.8	1.4
14	1	Simple 1	11 43	0 01	11 43.6	3.6	1.4
	1	Simple 3F	12 35	3 55	13 20	7.0	3.4
	1	Simple 1	17 45	0 01	17 45.5	3.2	1.6
	1	Simple 3	22 15	2 15	22 45	7.6	3.8
15	1	Simple 3	12 25	1 45	13 00	3.2	1.6
	1	Simple 3A	14 15	1 10	14 45	3.0	1.5
	1	Simple 1	14 55	0 01	14 55.8	5.0	2.5
	2	Post B.I.	14 56	0 07	---	2.2	1.6
	1	Simple 3	17 15	1 10	18 05	3.0	1.5

* Only observed at Penticton

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
May			H M	H M	H M		
15	1	Simple 3A	19 05	3 00	20 00	10.4	5.2
	1	Simple 3A	19 08	0 11	19 12	5.0	2.5
	1	Simple 1	19 10	0 02	19 11	7.0	3.5
	1	Simple 1F	22 06	0 05	22 07	8.6	3.0
	1	Simple 3	23 30	1 55	24 05	3.4	1.7*
16	1	Simple 3	12 30	1 40	13 30	5.2	3.0
	1	Simple 3A	14 45	0 50	15 00	4.8	2.4
	1	Simple 1	14 45.8	0 01.5	14 46	8.8	4.0
	1	Simple 1	14 49	0 03	14 50.5	4.8	2.4
	1	Simple 3A	17 20	2 50	19 05	7.8	3.8
	1	Simple 2	17 25.5	0 02	17 26	11.4	5.0
	1	Simple 3	18 05	0 10	18 10	2.0	1.0
		Fall	21 10	0 10	---	3.4	---
	1	Simple 3A	21 25	1 40	21 40	16.6	8.3
	1	Simple 2F	21 27.5	0 04	21 29	21.0	10.0
17	1	Simple 3	00 15	1 05	00 55	3.4	1.7*
	1	Simple 3	14 05	1 50	14 37	7.2	3.6
18	1	Simple 3A	18 38	0 15	18 42	3.2	1.6
	1	Simple 2	18 38.5	0 02	18 39.5	13.0	5.0
	1	Simple 3A	22 10	2 40	23 20	5.6	2.8
	4	Fluctuations	22 13	0 05	22 16	5.2	---
19	1	Simple 3	01 00	0 30	01 07	4.4	2.0*
20	1	Simple 3	17 10	1 05	17 35	2.4	1.2
	1	Simple 3A	19 25	0 45	19 34	3.8	1.9
	1	Simple 1	19 37	0 06	19 38.5	6.6	3.0
	1	Simple 2F	21 39	0 01	21 39.2	13.0	6.5

* Only observed at Penticton

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
May			H M	H M	H M		
22	8	Rise A	00 20	0 25	---	9.0	---
	1	Simple 3	00 23	0 10	00 26	5.2	2.6
	1	Simple 1	00 36	0 08	00 40	4.2	2.1
	1	Simple 1F	17 01.5	0 01.5	17 02.2	2.6	1.3
	1	Simple 1	18 11	0 00.7	18 11.3	2.8	1.4
	3	Complex	18 58.5	0 05	19 00	8.6	4.3
	1	Simple 1	20 33	0 01	20 33.2	2.8	1.4
	1	Simple 1	21 14	0 04	21 14.5	3.0	1.2
	1	Simple 2	21 59	0 01	21 59.2	14.0	7.0
	2	Post B.I.	22 00	0 16	---	6.6	3.3
23	1	Simple 2	00 05	0 02	00 05.5	10.6	5.3
	2	Post B.I.	00 07	0 07	---	3.4	1.7
	1	Simple 2	00 50.5	0 01.5	00 51	14.0	7.0
	2	Post B.I.	00 52	0 04	---	5.0	2.5
	1	Simple 2	14 36.2	0 03.8	14 37	15.0	7.5
	2	Post B.I.	14 40	0 14	---	4.8	2.4
	1	Simple 3	20 10	3 50	22 00	3.4	1.7
24	1	Simple 1	12 04	0 02	12 04.1	6.2	3.1
	1	Simple 3	15 14	0 16	15 16	3.4	1.7
	1	Simple 3	15 52	0 16	15 55	3.6	1.0
	1	Simple 3 AF	19 00	1 30	19 30	2.0	1.0
	1	Simple 1F	19 02	0 07	19 03	9.0	4.5
	8	Rise	22 00	0 10	---	2.0	---
25	1	Simple 3	14 10	0 30	14 20	2.2	1.1
	1	Simple 3	16 05	0 55	16 08	3.0	1.5

* Only observed at Penticton

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
May			H M	H M	H M		
26	1	Simple 3	01 05	0 30	01 07	2.6	1.3*
	1	Simple 1	11 00	0 04	11 00.5	2.6	1.3
	1	Simple 1	11 22	0 05	11 23	2.4	1.2
	1	Simple 1	12 35	0 07	12 38	2.6	1.3
	1	Simple 3	15 05	1 15	15 20	2.8	1.4
	1	Simple 2	19 58	0 01	19 58.5	10.0	4.6
	2	Post B.I.	19 59	0 15	---	2.6	1.3
27	1	Simple 3	00 20	1 00	00 42	2.6	1.3*
	1	Simple 1	12 20.5	0 05	12 23.5	4.2	2.1
	1	Simple 3	16 40	1 50	17 45	3.6	1.8
28	1	Simple 1F	01 20	0 04	01 22	4.0	2.0*
	1	Simple 3	17 00	4 00	19 25	5.8	2.9
	1	Simple 3A	22 10	0 12	22 15	2.0	1.0
	4	Fluctuations	22 16.2	0 03	22 16.8	4.0	---
29	3	Complex F	11 19	0 05	11 22.5	60.0	15.0**
	1	Simple 2F	11 26	0 04	11 27	102.0	34.0**
	1	Simple 1F	12 22	0 02.5	12 23.2	5.2	3.0
	1	Simple 2F	13 43.7	0 01.5	13 44	10.0	3.0
	1	Simple 2	16 42.8	0 01.2	16 43	13.0	7.0
	2	Post B.I.	16 44	0 10	---	4.8	1.6
	1	Simple 3AF	17 10	0 28	17 15	4.0	2.2
	3	Complex F	17 17	0 07	17 18	34.0	17.0
		1st Compt.	17 17	0 03	17 18	34.0	---
		2nd Compt.	17 20	0 04	17 20.2	28.0	---

* Only observed at Penticton

**Possible interference.
Intensity is only approximate since antenna was not properly focussed.

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
May			H M	H M	H M		
29	1	Simple 3A	18 10	2 40	18 55	4.0	2.0
	1	Simple 3A	18 33	0 15	18 38	5.2	2.6
	1	Simple 1	18 34.5	0 03	18 36	8.4	4.8
	1	Simple 1	19 02	0 02	19 03	2.6	1.3
	1	Simple 3	21 20	1 20	21 35	3.0	1.5
	1	Simple 1	22 48	0 04	22 49.2	7.4	3.7
	1	Simple 2F	23 58	0 05	24 05	49.0	15.0*
	2	Post B.I.	24 03	1 00	---	4.0	2.0*
30	8	Rise	20 10	0 15	---	2.0	---
	8	Rise F	22 50	0 10	---	2.6	---
31	1	Simple 2	00 51	0 02	00 52	10.6	5.3*
	1	Simple 2F	11 08	0 04	11 10	10.2	5.1
	4	Fluctuations	11 15	0 04	11 18	25.0	---
	1	Simple 2F	11 19	0 03	11 19.2	78.0	20.0
	1	Simple 2F	12 52	0 02	12 53	23.0	11.5
	1	Simple 1	18 17.3	0 00.8	18 17.5	2.2	1.1
	1	Simple 3A	18 19	0 45	18 22	2.8	1.4
	1	Simple 1	18 34	0 03	18 34.5	2.0	1.0

* 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

1970	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	144.1	141.5	142.4	145.6	139.2	143.2
2	141.2	137.8	139.2	141.8	135.2	139.1
3	131.1	129.6	130.0	133.4	125.2	128.8
4	127.6	128.0	129.5	131.7	126.5	130.2
5	129.2	129.0*	127.4*	132.9*	123.8*	127.5*
6	126.1	126.2	127.4*	130.0	---	---
7	---	130.6*	129.9	134.5*	---	---
8	132.0	130.3	131.7	134.2	127.9	131.7
9	133.0	134.0	135.6	138.2	131.2	135.3
10	140.8	141.5	145.3	145.9	140.0	144.3
11	161.5	164.4	162.9	169.5	163.4	168.5
12	165.4	166.5	171.0	171.7	166.9	172.1
13	195.0	194.1*	194.5*	200.3*	---	---
14	201.7*	201.0*	201.4*	207.4*	---	---
15	197.3*	202.7	202.7	209.2	198.7	205.1
16	190.4	192.4	192.3	198.6	186.5	192.5
17	185.4*	184.7	185.0	190.6	183.3*	189.2*
18	182.8	176.0	176.9	181.8	174.2	179.9
19	166.7	169.5*	165.5	175.1*	162.0	167.3
20	158.4	158.1	155.1	163.3	---	---
21	157.6	155.5	157.6	160.6	---	---
22	145.6	145.3*	144.1	150.1*	138.9	143.5
23	140.7	139.1	137.5	143.7	137.7	142.2
24	137.5	137.8	139.3	142.3	136.3	140.8
25	142.5	144.5	143.9	149.3	140.7*	145.3*
26	141.0	146.4	150.1	151.4	144.9	149.8
27	153.4	154.7	153.6	160.0	---	---
28	154.9	155.2	B.I.P.	160.5	---	---
29	161.6	162.5*	166.5	168.0*	167.0*	172.7*
30	166.5	169.1	175.8	174.8	168.8	174.5
Mean	155.6	154.9	155.7	159.9	150.8	155.6

*Corrected for burst.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	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	11 00	2 50	12 10	7.4	3.7
	1	Simple 1	22 27	0 02	22 28	2.2	1.1
2	1	Simple 1	13 50	0 03	13 52	5.6	3.0
	4	Fluctuations	16 46	0 05	16 50.3	10.8	---*
3	1	Simple 2	20 33.5	0 01	20 34	16.0	8.0
4	8	Rise A	18 40	0 30	---	2.4	---
	1	Simple 1	19 03	0 06	19 05.8	6.8	3.0
5	1	Simple 3	16 00	8 30	19 00	8.4	4.2
6	1	Simple 3	19 10	3 10	indet.	3.0	2.0
7	1	Simple 3	15 00	5 40	16 30	5.0	2.5
	8	Rise	22 25	0 35	---	4.8	---
8	1	Simple 1F	12 13	0 05	12 13.6	2.2	1.1
		Absorption	21 10	0 40	21 20	-2.0	-1.0
9	4	Fluctuations	15 09.8	0 01.2	15 10	55.0	---
	1	Simple 2F	15 11.8	0 06.2	15 13.5	42.0	14.0
	2	Post B.I.	15 18	0 06	---	2.2	1.1
	1	Simple 3	20 20	2 10	21 25	2.0	1.0
10	8	Rise	00 25	0 20	---	4.0	---*
	1	Simple 1F	15 37.2	0 04	15 38	4.4	2.2
	8	Rise	19 05	0 35	---	2.0	---
	1	Simple 3F	20 30	1 45	21 35	2.6	1.3
	8	Rise	23 00	0 45	---	3.0	---*
	1	Simple 3	00 30	1 00	01 05	3.0	1.5

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
June			H M	H M	H M		
11	1	Simple 1	15 46.5	0 01	15 47	2.8	1.4
	1	Spike	16 11	---	16 11	5.0	---
	1	Simple 1	19 01	0 01.5	19 01.5	6.8	3.4
		Fall	20 30	0 15	---	2.6	---
	1	Simple 3	22 10	2 00	23 40	2.6	1.3
12	1	Simple 1	14 13	0 01	14 13.3	2.0	1.0
	1	Simple 3A	14 25	1 35	14 50	12.0	5.8
	1	Simple 2	15 35	0 03	15 35.8	37.0	9.0
	1	Simple 2	16 15	0 03	16 16	24.0	12.0
	2	Post B.I.	16 18	0 06	---	4.2	2.1
	8	Rise A	17 00	0 55	---	6.2	---
	1	Simple 1	17 28	0 03	17 29	4.2	2.1
	1	Spike	18 49	---	18 49	7.2	---
	1	Simple 1F	19 25	0 05	19 25.1	5.8	2.9
	1	Simple 2F	19 38	0 02	19 39	51.0	13.0
	1	Simple 3F	21 00	4 00	22 00	19.0	9.5
13	8	Rise A	01 15	>0 30	---	9.3	---*
	1	Simple 2F	01 21	0 07	01 22.2	10.8	5.2*
		Incomplete	10 50.5E	> 0 03	10 51	46.0	---
	1	Simple 3A	11 05	1 15	indet.	5.4	3.4
	1	Simple 1	11 18.5	0 02	11 19.5	5.6	2.8
	1	Simple 2	11 22.5	0 01.5	11 23	13.0	4.2
	1	Simple 2	11 36	0 03	11 36.5	60.0	28.0
	2	Post B.I.	11 39	0 07	---	6.6	3.3
	1	Simple 2	11 53	0 05	11 54.1	18.0	8.0

*Only observed at Penticton

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
June			H M	H M	H M		
13	3	Complex F	12 28	0 11	12 32.6	490.0	95.0
		1st Compt.	12 28	0 03	12 29.5	112.0	---
		2nd Compt.	12 31	0 08	12 32.6	490.0	---
	2	Post B.I.A.	12 39	0 21	---	9.0	4.0
	1	Simple 1	12 53.3	0 02	12 53.9	8.4	4.2
	8	Rise A	13 10	0 40	---	14.0	---
	1	Simple 2F	13 35	0 07	13 37.5	17.4	8.0
	1	Simple 1	13 43	0 01	13 43.1	8.0	4.0
	1	Simple 3 AF	14 16	0 11	14 18	6.6	3.3
	1	Simple 2	14 20	0 02	14 20.5	30.0	15.0
	1	Simple 1	14 35	0 02	14 36	2.6	1.3
	1	Simple 3A	15 00	2 40	16 00	9.0	4.5
	1	Simple 1	15 35	0 02	15 36	4.0	2.0
	1	Simple 2	16 50.2	0 01	16 50.5	23.0	8.0
	3	Complex F	17 50	0 10	17 52	107.0	40.0
		1st Compt.	17 50	0 05	17 52	107.0	---
		2nd Compt.	17 55	0 05	17 56.9	55.0	---
	2	Post B.I.	18 00	0 07	---	10.0	5.0
	1	Simple 1F	18 15.8	0 02	18 16.2	6.6	3.0
	1	Simple 3A	18 45	2 35	19 45	6.2	4.0
	1	Simple 2	18 58	0 01	18 58.5	10.6	5.3
	1	Simple 1	20 03.5	0 01	20 04	2.4	1.2
	1	Simple 3AF	20 55	0 17	20 56	3.6	1.8
	1	Simple 2	21 05	0 02	21 05.2	10.6	5.3

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
June			H M	H M	H M		
13	8	Rise	21 35	0 18	---	3.6	---
	3	Complex F	22 02	0 12	22 10.3	147.0	57.0
		1st Compt.	22 02	0 07	22 04	137.0	---
		2nd Compt.	22 09	0 05	22 10.3	147.0	---
	2	Post B.I.	22 14	0 16	---	10.0	3.3
	1	Simple 3A	22 35	0 30	22 50	2.6	1.3
	1	Simple 2F	22 36	0 02	22 37.1	13.0	4.0
14	1	Simple 2F	00 15.5	0 06.5	00 16.5	324.0	88.0*
	2	Post B.I.F.	00 22	0 06	---	7.2	3.6*
	8	Rise	01 05	0 35	---	10.6	---*
	1	Simple 1F	12 21.8	0 04	12 23	6.8	3.4
	1	Simple 3A	13 10	3 45	14 45	18.0	8.8
	1	Simple 2F	13 20.5	0 24.5	13 26	695.0	221.0
	2	Post B.I.	13 45	0 20	---	27.0	13.0
	1	Simple 1	16 30	0 03	16 30.5	3.4	1.7
	1	Simple 3A	17 00	3 10	17 40	20.0	8.5
	1	Simple 2F	17 01	0 11	17 04.5	510.0	104.0
	2	Post B.I.	17 12	0 12	---	12.0	5.4
	4	Fluctuations	17 29	0 08	17 34	19.0	---
		Fall	20 25	0 40	---	9.2	---
	8	Rise	21 25	0 45	---	12.8	---
	1	Simple 1F	23 10	0 02	23 11	8.4	4.0
	1	Simple 3	23 25	> 2 20	24 00	17.6	---*

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
			H M	H M	H M		
June							
15	1	Simple 3 AF	10 55	4 50	13 30	41.0	14.0
	1	Simple 2	11 04	0 05	11 05.5	53.0	18.0
	1	Simple 2F	13 15	0 13	13 19	595.0	124.0
	1	Simple 1	14 42	0 02	14 43	3.4	1.7
	8	Rise	16 17	0 15	---	5.4	---
	1	Simple 1	16 20	0 03	16 21.5	4.2	2.1
	1	Simple 2	16 25	0 15	16 28.5	92.0	23.0
	1	Simple 2	18 37	0 04	18 38.3	72.0	20.0
	2	Post B.I.A.	18 41	0 35	---	8.8	4.0
	1	Simple 2	18 57.8	0 01	18 58	12.0	6.0
	1	Simple 3 AF	21 35	1 25	22 30	5.2	2.6
	1	Simple 1	22 21	0 07	22 22	9.6	3.0
	1	Simple 3 AF	23 00	2 20	23 50	12.0	5.0*
	1	Simple 3	24 40	0 10	24 42	3.6	1.8*
16	1	Simple 2	11 15.9	0 01	11 16	13.0	6.0
	1	Simple 3A	11 30	2 35	12 20	9.4	5.0
	1	Simple 1	12 16	0 03	12 18	7.0	3.5
	1	Simple 2	13 55	0 02	13 55.9	14.0	7.0
	1	Simple 3A	16 00	1 50	16 43	7.0	3.5
	1	Simple 1	16 57.5	0 01	16 58	2.8	1.4
	1	Simple 1	17 16.5	0 01	17 17	2.2	1.1
	1	Simple 1	18 22.8	0 01	18 23	3.6	1.8
	1	Simple 3	20 44	0 18	20 46	2.2	1.1
	1	Simple 3	22 20	1 30	23 27	4.2	2.1

*Only observed at Penticton

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
June			H M	H M	H M		
17	1	Simple 2	01 23.5	0 04.5	01 25	32.0	11.0*
	2	Post B.I.	01 28	0 10	---	4.6	2.3*
	1	Simple 1	10 51	0 02	10 51.8	7.2	3.6
	1	Simple 1	11 33	0 02	11 34	3.6	1.3
	1	Simple 3	11 50	2 20	12 05	12.0	6.0
	1	Simple 3	15 43	0 20	15 45	6.2	2.8
	1	Simple 2	19 00	0 02	19 00.8	22.0	11.0
	2	Post B.I.	19 02	1 20	---	9.2	5.0
	1	Simple 3	21 20	1 25	21 40	3.6	1.3
	1	Simple 3	22 45	1 05	23 35	3.6	1.3*
18	1	Simple 1	00 13	0 01.5	00 13.5	8.2	4.1*
	1	Simple 2	01 42	0 04	01 43	43.0	11.0
	1	Simple 2	12 51	0 03	12 51.5	42.0	16.0
	2	Post B.I.	12 54	0 35	---	4.0	2.0
		Fall	15 10	0 40	---	6.4	---
	1	Simple 1	16 56.5	0 02	16 57	7.2	3.0
	1	Simple 1	18 40	0 05	18 41	4.6	2.0
		Fall	21 30	0 30	---	4.0	---
	1	Simple 3A	22 35	2 05	23 50	3.6	1.8
	1	Simple 1	23 03	0 05	23 05	3.6	1.8
	1	Simple 2	23 42	0 07	23 43	13.0	6.0*
19	1	Simple 1	01 08	0 01	01 08.2	3.6	1.3*
	1	Simple 1	14 26	0 04	14 28	2.8	1.4
	1	Simple 3A	16 10	1 10	16 30	3.4	1.7
	1	Simple 1	16 33	0 02	16 34	4.6	2.3

*Only observed at Penticton.

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
June			H M	H M	H M		
19	1	Simple 3A	21 50	2 35	22 37	16.8	8.8
	1	Simple 1	21 59.5	0 02	22 01	6.0	3.0
	1	Simple 1	22 04	0 05	22 05.5	7.0	5.0
	1	Simple 1F	22 33	0 01	22 33.1	5.6	2.8
	1	Simple 1	22 35	0 01	22 35.5	7.6	4.4
	1	Simple 1	23 08.5	0 03	23 09.5	3.0	1.5
	1	Simple 2	24 06.8	0 01.5	24 07	22.0	8.0*
20	1	Simple 3	15 25	2 55	16 15	2.6	1.3
	8	Rise	23 30	0 25	---	3.6	---*
21	1	Simple 3	13 00	0 50	13 02	3.8	1.9
22	1	Simple 3	12 47	1 00	12 50	4.4	2.2
	1	Simple 3	15 50	2 20	16 20	2.8	2.0
	1	Simple 1F	20 27	0 08	20 30	2.0	1.0
23	1	Simple 1F	00 31.8	0 05	00 32	6.6	2.2*
25	1	Simple 3	15 05	0 55	15 13	6.0	3.0
	1	Simple 2F	18 34	0 06	18 36	104.0	35.0
	2	Post B.I.	18 40	1 05	---	19.0	9.5
27	1	Simple 3	12 45	1 05	12 47	7.2	3.6
	1	Simple 3	14 39	0 10	14 40	2.4	1.2
	1	Simple 2F	16 59	0 09	17 01	32.0	14.0
	2	Post B.I.	17 08	0 35	---	6.2	3.0
	1	Simple 2F	21 19	0 04	21 19.5	12.4	6.0
	1	Simple 1	23 11.5	0 01.5	23 12.5	4.4	2.2

*Only observed at Penticton

OUTSTANDING EVENTS - SOLAR RADIATION AT 2700 & 2800 MHz

DATE 1970	URANO KEY	CLASS	START U.T.	DURATION	MAXIMUM U.T.	PEAK FLUX	MEAN FLUX
June			H M	H M	H M		
28	3	Complex F	01 03.5	0 07.5	01 07	52.0	26.0*
		1st Compt.	01 03.5	0 01.5	01 04	24.0	---
		2nd Compt.	01 05	0 06	01 07	52.0	---
	2	Post B.I.	01 11	0 35	---	7.2	3.6*
	3	Complex F	19 52	0 31	20 01.5	410.0	70.0
		1st Compt.	19 52	0 10	20 01.5	410.0	---
		2nd Compt.	20 02	0 02	20 02.8	317.0	---
		3rd Compt.	20 04	0 02	20 04.5	307.0	---
		4th Compt.	20 06	0 02.5	20 07	230.0	---
		5th Compt.	20 08.5	0 14.5	20 10	256.0	---
	2	Post B.I.	20 23	1 35	---	11.6	5.8
29	1	Simple 3A	11 30	2 30	12 20	19.0	9.0
	1	Simple 2	12 09	0 07	12 11.3	195.0	65.0
	1	Simple 3	14 40	3 10	16 15	9.0	4.5
	1	Simple 3	18 00	2 00	19 00	5.6	2.8
30	1	Simple 2F	00 04.5	0 05	00 05.2	26.0	9.0*
	1	Simple 3A	00 12	0 03	00 21	3.6	1.8*
	4	Fluctuations	00 17	0 13	00 21.5	3.6	---*
	1	Simple 2	01 22	0 06	01 26	14.0	6.0*
	2	Post B.I.	01 28	0 17	---	3.6	1.8*
	1	Simple 1	15 34.2	0 01	15 34.8	7.0	3.5
	8	Rise	16 00	0 15	---	3.0	---
	1	Simple 1	16 23.3	0 01	16 23.5	2.6	1.3
	1	Simple 3A	17 40	1 40	18 30	6.8	3.4
	1	Simple 1F	17 57.2	0 04	17 57.8	3.4	1.5
	1	Simple 2	18 20	0 01.5	18 20.2	10.2	3.0
	1	Simple 1	21 35	0 01	21 35.8	3.4	1.7

*Only observed at Penticton

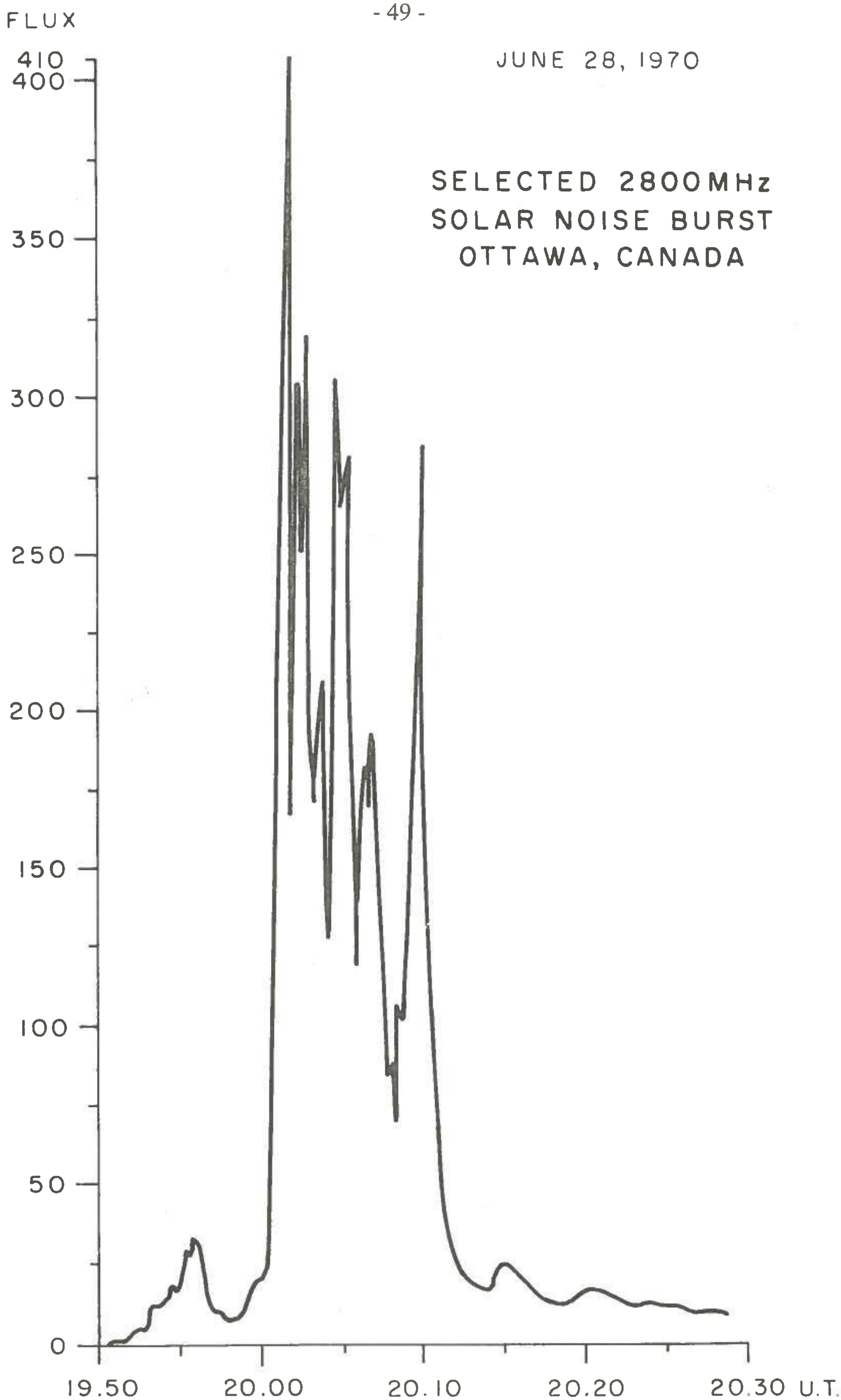
FLUX
JUNE 28, 1970
SELECTED 2800MHz
SOLAR NOISE BURST
OTTAWA, CANADA
410
400
350
300
250
200
150
100
50
0
19.50
20.00
20.10
20.20
20.30 U.T.

Figure 5