

IV. SOLAR RADIO NOISE DATA

CO-OPERATING OBSERVATORIES

Details relating to the contributors to the first quarter of 1952 are as follows:-

<u>OBSERVING STATION</u>	<u>ABBREVIATION</u>	<u>FREQUENCIES USED</u>	<u>NORMAL OBSERVING PERIOD</u>
		Mc/s	(Hours U.T.)
Commonwealth Observatory, Canberra, Australia	Can	200	21 - 06
Cavendish Laboratory, Cambridge, England	Cav	81	10 - 15
		175	10 - 15
Radiophysics Laboratory, Sydney, Australia	Syd	62	19 - 07
		98	19 - 07
		600	20 - 06
		1200	20 - 06
		3000	00 - 06
		9400	00 - 06
National Research Council, Ottawa, Canada	Ott	2800	14 - 23
Laboratoire de Physique, Marcoussis, France	Mar	169	11 - 13
Cornell University, Ithaca, N.Y., U.S.A.	Cor	200	14 - 20
Tokyo Astronomical Observatory, Mitaka, Tokyo	Tok	60	00 - 08
		100	00 - 08
		200	00 - 08
Radio Astronomical Observatory, Osaka City University, Osaka, Japan	Osa	3260	23 - 08
Research Institute of Atmospherics, Nagoya University, Toyokawa, Japan	Nag	3750	23 - 08
Observing Station Nederhorst, Den Berg - Radio (Nera)	Ned	140	08 - 16
		200	08 - 16

TABULATED QUANTITIES

1. FLUX The unit for this tabulation is 10^{-22} watts metre⁻²(c/s)⁻¹. The values can readily be converted into equivalent temperature T of the sun's visible disc by the relation

$$\text{Flux} = 2.09 \times 10^{-44} \nu^2 T$$

where ν is the frequency in cycles per second.

2. POLARISATION The radio-electric (not optical) convention is adopted so that for R polarisation the vector, in a fixed plane perpendicular to the ray, rotates clockwise when viewed in the direction of propagation. The values quoted are percentage polarisation, i.e.

$$100(I_R - I_L) / (I_R + I_L)$$

where I_R and I_L are the intensities.

3. VARIABILITY The variability is described by indices on a scale 0 - 3 where 0 = quiet, and 3 = violent variability.

4. OUTSTANDING OCCURRENCES

- S = Simple rise and fall of intensity.
- C = Complex variation of intensity.
- A = Appears to be part of general activity.
- D = Distinct from (i.e. apparently superimposed upon) the general activity.
- M = Two or more peaks separated by relatively long periods of quietness.
- E = Sudden commencement of activity.

The two maximum intensity columns contain, firstly, the maximum instantaneous value, and secondly, the maximum smoothed value measured above the previous level. The second is thought to be more suitable for comparative purposes. When the occurrence consists of well separated peaks (type M) it is not always possible to estimate a smoothed maximum value, and M is inserted in this column. The intensity unit in these columns is 10^{-21} watts metre⁻²(c/s)⁻¹.

1. FLUX

Daily medians of radio-noise flux received from the sun in units of 10^{-22} watts metre⁻² (c/s)⁻¹

Date	JANUARY 1952														FEBRUARY 1952														MARCH 1952																			
	SYD	CAV	SYD	NED	MAR	CAV	CAN	COR	TOK	NED	SYD	SYD	OTT	SYD	OGA	NAG	SYD	CAV	NED	MAR	CAV	CAN	COR	TOK	NED	SYD	SYD	OTT	SYD	OGA	NAG	SYD	SYD	CAV	SYD	NED	MAR	CAV	COR	TOK	NED	SYD	SYD	OTT	SYD	OGA	NAG	SYD
1	G	-	G	-	-	6	-	-	22	37	-	-	110	-	1	7	-	5	7	8	-	7	17	-	73	86	114	92	293	G	1	G	8	3	6	7	6	6	15	25	-	-	100	84	-			
2	G	-	G	23	5	-	5	7	G	8	20	-	88	113	-	106	363	1	8	-	-	6	16	39	-	-	-	-	-	G	1	G	8	3	6	7	7	6	15	25	-	-	100	84	-			
3	G	-	G	20	3	-	4	7	G	9	23	34	77	-	-	102	-	1	9	-	-	7	-	-	-	-	-	-	G	1	G	8	3	6	8	8	6	16	25	81	82	100	84	380				
4	G	1	G	20	3	5	3	7	G	8	24	37	77	104	-	98	346	1	9	-	5	7	-	-	-	71	102	-	G	1	G	8	3	6	9	7	6	18	29	80	-	100	84	-				
5	G	1	G	19	3	-	-	7	G	8	22	34	-	-	120	96	-	1	10	-	5	8	9	-	-	7	16	31	77	G	1	G	8	3	6	8	8	6	20	31	65	84	104	86	368			
6	G	1	G	-	3	4	5	8	-	-	19	35	-	-	-	-	-	1	10	-	5	-	9	-	-	33	75	90	G	1	G	8	3	6	8	7	6	19	29	65	-	110	88	-				
7	G	1	G	18	3	4	6	7	G	9	19	30	77	-	118	98	-	1	8	-	5	-	8	-	-	12	41	77	G	1	G	8	3	6	7	7	6	20	34	65	75	-	110	90	-			
8	G	1	G	18	3	4	6	8	G	7	21	30	84	-	132	100	-	1	9	-	5	-	9	-	-	7	15	-	G	1	G	8	3	6	8	8	-	8	19	37	-	-	-	-	-			
9	G	1	G	17	3	4	6	-	G	10	-	-	90	-	132	106	-	2	9	-	5	8	9	8	7	17	38	-	G	1	G	8	3	6	9	9	-	30	30	-	-	-	-	-	-			
10	G	1	G	16	3	5	8	10	G	9	-	-	95	-	148	116	-	2	9	-	4	7	8	8	7	15	-	-	G	1	G	8	4	6	8	8	7	30	30	70	86	112	92	307				
11	G	1	G	34	-	5	10	12	G	10	22	36	97	-	148	120	-	2	9	-	5	8	9	8	7	17	-	77	G	1	G	8	4	6	8	9	8	20	20	89	-	114	94	-				
12	14	12	130	118	-	34	25	43	-	23	19	34	-	148	118	-	1	10	-	6	8	8	-	8	20	-	78	-	124	98	G	1	G	8	3	7	6	8	20	26	71	102	-	94	302			
13	23	120	475	-	60	48	66	24	-	23	39	-	-	120	-	-	1	9	-	5	7	8	-	8	19	-	82	95	124	104	348	G	1	G	8	4	7	7	11	6	20	29	75	-	-	94	-	
14	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	6	7	9	7	8	22	-	84	-	-	105	-	G	1	G	7	4	7	6	7	22	28	73	99	116	96	313	
15	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	5	7	9	8	8	17	32	-	110	122	110	255	G	1	G	8	4	7	8	8	7	22	28	73	99	116	96	313
16	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	5	7	9	8	8	17	32	-	110	122	110	255	G	1	G	8	4	7	8	8	7	22	28	73	99	116	96	313
17	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	5	7	9	8	8	17	32	-	110	122	110	255	G	1	G	8	4	7	8	8	7	22	28	73	99	116	96	313
18	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	5	7	9	8	8	17	32	-	110	122	110	255	G	1	G	8	4	7	8	8	7	22	28	73	99	116	96	313
19	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	5	7	9	8	8	17	32	-	110	122	110	255	G	1	G	8	4	7	8	8	7	22	28	73	99	116	96	313
20	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	5	7	9	8	8	17	32	-	110	122	110	255	G	1	G	8	4	7	8	8	7	22	28	73	99	116	96	313
21	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	5	7	9	8	8	17	32	-	110	122	110	255	G	1	G	8	4	7	8	8	7	22	28	73	99	116	96	313
22	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	5	7	9	8	8	17	32	-	110	122	110	255	G	1	G	8	4	7	8	8	7	22	28	73	99	116	96	313
23	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	5	7	9	8	8	17	32	-	110	122	110	255	G	1	G	8	4	7	8	8	7	22	28	73	99	116	96	313
24	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	5	7	9	8	8	17	32	-	110	122	110	255	G	1	G	8	4	7	8	8	7	22	28	73	99	116	96	313
25	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	5	7	9	8	8	17	32	-	110	122	110	255	G	1	G	8	4	7	8	8	7	22	28	73	99	116	96	313
26	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	5	7	9	8	8	17	32	-	110	122	110	255	G	1	G	8	4	7	8	8	7	22	28	73	99	116	96	313
27	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	5	7	9	8	8	17	32	-	110	122	110	255	G	1	G	8	4	7	8	8	7	22	28	73	99	116	96	313
28	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	5	7	9	8	8	17	32	-	110	122	110	255	G	1	G	8	4	7	8	8	7	22	28	73	99	116	96	313
29	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	5	7	9	8	8	17	32	-	110	122	110	255	G	1	G	8	4	7	8	8	7	22	28	73	99	116	96	313
30	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	5	7	9	8	8	17	32	-	110	122	110	255	G	1	G	8	4	7	8	8	7	22	28	73	99	116	96	313
31	7	17	120	85	-	9	28	22	16	14	-	37	97	-	160	119	-	1	9	-	5	7	9	8	8	17	32	-	110	122	110	255	G	1	G	8	4	7	8	8	7	22	28	73	99	116	96	313

0 = median level below threshold (6 units at 62 Mc/s, 8 units at 98 Mc/s, and 10 units at 200 Mc/s)

Sydney 62 Mc/s and 98 Mc/s, February - G for the whole month

2. POLARISATION

Daily medians or means of polarisation sense and percentage

Date	JANUARY 1952				FEBRUARY 1952			MARCH 1952	
	CAV	SYD	CAV	CAN	CAV	CAV	CAN	CAV	CAV
Mc/s	81	98	175	200	81	175	200	81	175
1	-	-	-	-	0	-	-	0	0
2	-	-	-	-	0	-	-	0	0
3	-	-	-	-	0	-	-	0	0
4	-	-	-	-	0	-	-	0	0
5	-	-	-	-	0	0	-	0	0
6	-	-	-	-	0	0	-	0	0
7	0	-	-	-	0	0	-	0	0
8	0	-	-	-	0	0	-	0	0
9	0	-	-	-	0	0	-	0	0
10	-	-	-	-	0	0	-	0	0
11	0	R69	0	R47	0	-	-	0	0
12	-	R75	-	R45	0	-	-	0	0
13	-	R73	-	R56	0	0	-	0	0
14	IC	R72	-	R53	0	0	-	0	0
15	L20	R65	0	R62	0	0	-	1	0
16	0	-	0	R40	0	0	-	0	0
17	0	R41	-	-	0	-	-	0	0
18	0	R50	-	-	0	0	-	0	0
19	0	-	-	-	0	-	-	0	0
20	0	-	-	-	0	-	-	0	0
21	0	-	-	-	0	0	-	0	0
22	0	-	-	-	0	0	-	0	0
23	0	-	-	-					

3. VARIABILITY

Daily indices on a scale 0-3 of the variability of the solar noise

Mc/s	JANUARY 1952										FEBRUARY 1952										MARCH 1952											
	TOK	SYD	CAV	SYD	TOK	NED	MAR	CAV	CAN	GOR	TOK	NED	TOK	CAV	NED	MAR	CAV	CAN	GOR	TOK	NED	TOK	CAV	TOK	NED	MAR	CAV	GOR	TOK	NED		
Date	60	62	61	98	100	140	169	175	200	200	200	200	200	60	61	100	140	169	175	200	200	200	200	60	61	100	140	169	175	200	200	200
1	0	-	-	-	0	-	-	-	0	-	0	-	0	0	0	0	-	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	-	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	-	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	-	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	-	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	-	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	-	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	-	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	-	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	-	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	-	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	1	1	3	0	0	2	-	-	0	1	2	2	1	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0
13	2	0	3	0	0	2	-	-	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	2	0	3	0	0	2	-	-	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	1	0	2	1	2	2	-	-	1	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
16	0	1	2	0	0	1	-	-	1	3	3	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	2	1	2	0	0	1	-	-	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	1	-	-	-	1	1	-	-	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	1	-	-	-	1	2	-	-	1	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	-	-	-	0	0	-	-	0	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

4. OUTSTANDING OCCURRENCES

Station and frequency	Date 1952	Starting time	Duration	Type	Maximum intensity		Polarisation	Other frequencies on which occurrence is observed	Remarks
					Inst.	Smooth			
Mc/s		U.T.	Minutes		$10^{-21} \text{ Wm}^{-2} (\text{c/s})^{-1}$			Mc/s	
Ned 200	Jan 2	0907	1.1	CD	7	2		140	
Ned 140	2	1309	0.8	CD	20	4			
Syd 62	2	2021	6.3	CD	700	72		98, 200	
Syd 98	2	2021	7	CD	462	87	0	62, 200	
Cor 200	2	2021	9	CD	>2	>1		62, 98	
Can 200	2	2021	8	CD	42	14		62, 98	
Ned 200	4	1255	2.9	CD	3	1		140	
Ned 140	4	1255	2.7	CD	5	3		200	
Syd 62	4	2241	0.4	CD	35	16		98	
Syd 98	4	2241	0.3	SD	33	14	-	62	
Tok 60	6	0020	3	CD	6	2			
Ned 140	8	1059	0.6	CD	9	3		200	
Ned 140	9	1122	1.1	CD	19	3			
Osa 3260	10	0449	3	SD		4			
Ott 2800	10	1849	5	SD		2			
Ned 140	11	0907	1.9	CD	10	5			
Ned 140	11	1023	2.3	CD	10	5			
Ned 140	11	1311	4.1	CD	11	7			
Ned 200	11	1505	25.1	M	10	3			
Ned 140	11	1522	1.5	CD	14	6			
Syd 600	12	0540	5	CD	3	1			
Syd 600	12	0722	8	CD	5	2			
Ned 140	12	0829	3.5	CD	16	10			
Ned 140	12	1317	1.9	CD	74	26			
Ned 140	12	1320	3.1	CD	51	20			
Ned 140	12	1336	3.5	CD	80	22			
Ned 200	12	1410	2.7	CD	14	5			
Ned 140	12	1515	3.5	CD	80	35			
Ned 200	12	1518	1.1	CD	14	9			
Tok 60	13	0233	4	CD	10	4			
Tok 60	14	0031	2	CD	>14	14			
Ned 140	14	1317	1.9	CD	35	8			
Ned 140	14	1345	0.8	CD	42	10			
Ott 2800	14	1348	2	SD		1		140, 200	
Ned 140	14	1349	0.8	CD	19	8		2800, 200	

Ned	200	14	1350	1.5	CD	4	2		
Ned	140	14	1452	0.8	CD	22	9		140, 2800
Ned	140	15	0826	1.3	CD	51	10		
Ned	140	15	1107	1.9	CD	24	7		200
Ned	140	15	1343	0.8	CD	24	5		
Ned	200	16	1155	0.8	CD	17	6		
Ned	200	16	1216	0.9	CD	>16	6		
Ned	200	16	1428	15	M	35			
Ned	200	16	1459	0.9	CD	>40	9		
Ned	140	16	1515	30	M	50	8		
Tok	60	17	0512	5	CD	22	6		
Ned	140	17	0845	9.2	M	40	5		
Tok	200	18	0319	5	CD	50	4		
Ned	200	18	0908	0.9	CD	13	2		
Ned	140	18	1001	1.1	CD	4	2		
Syd	62	18	2338	0.3	SD	17	9		
Ned	200	19	1051	0.6	CD	13	3		140
Syd	62	21	0134	0.3	CD	41	22		
Syd	98	21	0622	8.3	M	62	2	-	62
Syd	62	21	0622	8.8	M	50	1		98
Ned	200	21	1109	10	M	4	3		
Ned	140	21	1118	3.5	CD	7	3		
Ott	2800	23	1839	60	CD		1		
Ned	140	25	1436	2.3	CD	86	5		200
Ned	140	25	1521	1.5	CD	>200			
Ned	140	25	1523	1.9	M	>200			200
Ned	200	25	1524	2.1	CD	10	2		140
Syd	62	25	2135	0.4	CD	40	19		
Can	200	25	2142	415	M	>17	-		
Syd	62	25	2223	5.8	CD	>1320	80		98
Syd	98	25	2224	1.5	M	>1316	188	-	62
Syd	62	25	2308	7.3	M	165	8		
Syd	98	25	2314	0.4	CD	141	73	-	
Syd	62	26	(0042)	3.3	CD	924	52		
Tok	60	26	0104	2	CD	14	2		
Syd	62	26	0156	2.3	M	38	8		98
Syd	98	26	0158	0.2	SA	40	16	-	62
Syd	98	26	0406	9	M	141	9	-	
Syd	62	26	0413	5.5	CD	297	52		
Tok	60	26	0431	6	CD	16	2		100
Tok	100	26	0432	2	CD	50	4		60
Ned	140	26	0856	1.7	CD	20	5		
Ned	140	26	1450	55	M	12	6		
Cav	81	28	1105	4	SD	-	1	-	175
Cav	175	28	1106	3	SD	1	1	-	81
Cav	175	29	1441	6	CD	-	9	-	
Cor	200	30	1553	1.5	CD	>3	>2	-	
Cav	81	31	1026	6	SD	-	1	-	175
Cav	175	31	1026	6	SD	-	2	-	81
Ned	200	31	1150	9.8	CD	8	1	-	
Ned	140	Feb 11	1022	1.5	SD	5	2		200
Ned	200	11	1022	1.1	SD	12	-		140
Can	200	13	0549	2	CD	10	-		
Ned	140	14	1245	0.8	CD	15	-		200
Ned	200	14	1245	0.8	CD	15	-		140
Syd	62	16	0134	1.3	M	211	20		98
Syd	98	16	0134	1	CD	56	15		62
Tok	60	16	0315	1	SD	26	26		100
Tok	100	16	0315	1	CD	26	4		60
Ned	140	16	1525	0.8	CD	98	-		200
Ned	200	16	1525	0.6	CD	116	-		140
Cor	200	16	1551	30	CD	>3	>1		
Ott	2800	16	1845	12	CD	-	22		
Ott	2800	20	1416	15	CD	-	1		
Ott	2800	22	1405	20	CD	-	1		
Ott	2800	24	1910	30	CD	-	<1		
Tok	200	Mar 4	0344	2	CD	60	34		
Cor	200	9	1821	1.5	CD	>3	>2		
Syd	62	10	0102	0.6	CD	44	16		98
Syd	98	10	0102	2	SD	35	18		62
Ott	2800	19	2019	4	SD	-	1		
Cav	175	20	1106	2	SD	1	1		
Tok	200	28	0145	0.5	CD	46	6		
Ned	140	28	1029	1.7	M	2	-		200
Ned	200	28	1029	1.7	M	3	-		140
Ned	140	29	0856	3.5	CD	>160	-		200
Ned	200	29	0856	1.3	CD	22	-		140
Ned	200	29	1328	1.3	CD	2	1		140
Ned	140	29	1329	1.3	CD	>90	-		200
Ned	140	31	0854	1.1	CD	14	-		

3. VARIABILITY

Daily indices on a scale 0-3 of the variability of the solar noise

Date	APRIL 1952											MAY 1952											JUNE 1952										
	TOK	SYD	CAV	SYD	TOK	NED	MAR	CAV	COR	TOK	NED	TOK	CAV	SYD	TOK	NED	MAR	CAV	COR	TOK	NED	TOK	SYD	CAV	SYD	TOK	NED	MAR	CAV	COR	TOK	NED	
Me/s	60	62	81	98	100	140	169	175	200	200	200	60	81	98	100	140	169	175	200	200	200	60	62	81	98	100	140	169	175	200	200	200	
1	0	-	0	-	0	0	-	0	0	0	0	0	2	-	0	0	1	2	0	0	0	0	0	-	0	-	0	-	0	0	0	0	0
2	0	-	0	-	0	0	-	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	0	0	0	0
3	0	-	0	-	0	0	-	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	0	0	0	0
4	0	-	0	-	0	0	-	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	0	0	0	0
5	0	-	0	-	0	0	-	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	0	0	0	0
6	0	-	0	-	0	0	1	0	1	0	-	0	-	-	0	0	2	1	2	0	1	1	0	-	1	-	0	0	0	1	0	0	0
7	1	-	0	2	1	2	2	2	2	2	2	0	0	-	0	1	2	1	2	2	1	1	0	-	1	-	0	0	0	1	0	0	0
8	0	-	0	-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	0	-	0	-	0	0	0	0	0
9	0	-	0	-	0	0	0	0	0	0	0	0	1	-	0	0	1	1	1	0	1	1	0	-	0	-	0	0	0	0	0	0	0
10	0	-	0	-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	0	-	0	0	0	0	0	0	0
11	0	-	0	-	0	0	0	0	0	0	-	0	0	-	0	0	0	0	0	0	0	-	0	-	0	-	0	0	-	1	0	0	0
12	0	-	2	-	0	2	1	2	0	0	1	0	0	-	0	0	0	0	0	0	0	1	0	-	2	-	0	0	0	2	1	2	0
13	0	-	0	-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	0	-	0	0	0	0	0	0	0
14	0	-	0	-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	0	-	0	0	0	0	0	0	0
15	0	-	0	-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	0	-	0	0	0	0	0	0	0
16	0	-	0	-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	1	0	-	0	-	0	0	0	0	2	1	1
17	0	-	0	-	0	0	0	1	1	1	1	0	0	-	0	0	0	0	0	0	0	0	0	-	1	-	0	0	0	1	1	2	0
18	0	-	0	-	0	0	0	1	1	1	1	0	0	-	0	0	0	0	0	0	0	0	0	-	0	-	0	0	0	0	0	0	0
19	0	-	1	-	1	2	0	2	3	3	1	0	0	-	0	1	2	1	2	3	2	1	0	-	0	-	0	0	0	1	2	0	0
20	2	2	1	1	1	0	0	1	3	3	2	1	1	0	1	1	2	2	2	0	0	2	1	-	0	-	0	0	0	0	1	0	0
21	0	-	0	-	0	1	2	2	2	1	1	0	0	-	0	1	1	0	0	0	0	2	1	-	0	-	1	0	0	0	2	1	1
22	1	-	3	-	0	1	2	2	2	2	0	0	0	-	0	0	0	0	1	1	1	0	1	-	0	-	0	0	0	2	1	0	0
23	0	-	1	-	0	1	1	1	1	1	1	0	0	-	0	0	0	0	0	0	0	0	1	-	0	-	0	0	1	1	2	2	0
24	0	-	1	-	0	1	1	1	1	1	0	0	0	-	0	0	0	0	1	1	1	1	0	-	0	-	0	0	0	2	2	2	0
25	0	-	1	-	0	0	0	1	1	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	0	-	0	0	0	0	0	0	0
26	0	-	0	-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	2	-	0	3	2	2	0	0	3
27	0	-	0	-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	0	-	0	1	1	0	2	1	1
28	1	-	0	-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	0	-	0	0	0	0	0	0	0
29	0	-	0	-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	0	-	0	0	0	0	0	0	0
30	0	-	0	-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	0	-	0	0	0	0	0	0	0
31	0	-	0	-	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	-	0	-	0	0	0	0	0	0	0

4. OUTSTANDING OCCURRENCES

Station and frequency	Date 1952	Starting time	Duration	Type	Maximum intensity		Polarisation	Other frequencies on which occurrence is observed	Remarks
					Inst.	Smooth			
Mc/s		U.t.	Minutes		10-21 _{wm} ⁻² (e/s) ⁻¹				
Syd 62	April 7	0506	0.3	SA	39	19			
Tok 200		0607	2	CA	50	8			
Ned 140		0819	8.2	M	26	M	200		
Ned 140		0930	2.3	M	40	5			
Ned 140		0944	1.1	CA	47	7			
Ned 200	7	1415	15	M	22	2			
Nag 3750	9	0120	5	SD	-	<1			
Ott 2800	9	2119	10	SD	-	7			
Syd 98	10	2143	0.6	CD	38	14	62		
Syd 62	10	2220	0.2	SD	34	21			
Ned 200	12	0930	180	M	7	4			
Ned 140	12	1000	165	M	19	M			
Nag 3750	14	0032	6	SD	-	<1			
Cav 81	16	1144	2	SD	1	1	175		
Cav 175	16	1144	1	SD	2	1	81		
Syd 62	17	0417	0.2	SD	25	13	98		
Syd 98	17	0417	0.2	SD	46	21	62		
Ned 140	17	0923	4.1	CD	7	5	200		
Ned 140	17	0928	1.3	CD	4	2			
Ned 200	18	1216	0.4	SA	6	6	140		
Ned 140	18	1306	21.5	M	26	M			
Ned 140	18	1440	1.1	CA	6	3	200		
Ned 140	19	1312	0.8	CA	>5	3	200		
Ned 140	19	1330	33	M	>10	M			
Cav 81	19	1422	6	CD	-	>1			
Ned 200	19	1430	30	M	5	4	140		
Tok 60	20	0228	3	OD	24	5			
Tok 60	20	0422	3	OD	20	5			
Ned 140	21	1532	13.3	M	>150	M	200		
Ned 200	21	1532	1.5	CA	>30	-	140		
Syd 98	22	0040	1	M	72	12			
Syd 98	22	0427	0.2	SA	33	19			
Syd 98	22	0535	110	CD	5	5			
Syd 98	22	0542	0.2	SA	46	22	62		
Syd 62	22	0608	0.4	CA	1087	445	98		
Syd 98	22	0608	0.2	SA	42	21	62		
Ned 140	22	0813	1.5	CA	>150	-	200		
Ned 200	22	0813	0.9	CD	240	-	140		
Ned 140	22	1045	4.3	OD	32	10	200		
Ned 140	22	1051	2.7	CD	19	10			
Ned 140	22	1159	46.5	M	55	25			
Ned 200	22	1200	3.5	CD	17	15			
Ned 200	22	1221	24	CD	17	15			
Ned 140	23	1025	5.1	CD	9	4			
Ned 140	23	1129	2.3	CD	>140	-	200		

Ned	200	23	1129	1.9	CD	25	-	140
Ned	200	23	1324	2.7	CD	17	10	140
Cor	200	23	1617	1.3	CD	>12	>8	
Syd	98	23	2136	1.5	CD	264	75	62
Syd	62	23	2308	7	M	1049	56	98
Syd	98	23	2308	6	M	360	25	62
Syd	98	24	0216	0.2	SD	112	47	62
Syd	62	24	0217	0.3	CD	1010	395	98
Syd	98	24	0305	0.5	CD	96	47	
Ned	140	24	0857	1.9	M	23	M	
Ned	140	24	0957	11.7	CD	18	4	
Ned	140	24	1108	5.9	CD	>140	>140	200
Ned	200	May 7	1130	2.3	CA	12	8	140
Ned	140	7	1141	4.3	CA	>140	-	200
Ned	140	8	1411	1.3	CD	20	6	200
Ned	200	8	1439	0.4	CA	7	2	140
Ned	140	9	1024	1.5	CD	32	15	200
Ned	140	9	1217	3.9	CD	>5	>5	200
Ned	140	19	0924	0.8	CD	17	8	
Ott	2800	21	1240	195	CA	-	1	81,140,175,200
Ned	140	21	1241	26.9	CD	24	20	81,175,200,2800
Ned	200	21	1245	30	CD	7	6	81,140,175,2800
Cav	175	21	1249	35	SD	-	3	81,140,200,2800
Cav	81	21	1250	90	SD	-	2	140,175,200,2800
Cor	200	21	1250	19	CD	>20	>14	81,140,175,2800
Syd	62	23	2114	2.8	M	57	3	98,2800
Syd	98	23	2114	3	M	176	6	62,2800
Ott	2800	23	2114	3	SD	-	1	62,98
Osa	3260	30	0458	0.2	SD	-	3	
Syd	1200	June 2	0043	2	CD	4	<1	
Tok	60	2	0207	2	CD	11	3	
Ned	140	14	0855	2.3	CA	7	4	
Ned	200	14	0859	3.1	CA	16	7	
Ned	200	14	1130	16.1	CA	>20	-	
Syd	62	14	2325	1.3	CD	350	82	
Tok	60	15	0323	1	CD	11	3	
Tok	60	15	0450	1	CD	3	1	
Tok	60	15	0456	1	CD	7	1	
Syd	98	15	2131	50	CD	26	2	
Syd	62	20	2353	0.4	CD	59	22	98
Syd	98	20	2353	0.2	SD	50	24	62
Tok	60	21	0009	1	SD	14	5	62
Syd	62	21	0009	0.7	CD	34	15	60
Syd	98	21	0133	0.2	SD	56	26	62
Tok	100	21	0356	1	CD	5	4	60,62
Tok	60	21	0357	1	SD	16	13	62,100
Syd	62	21	0358	0.7	CD	264	112	60,100
Syd	62	21	2301	0.2	SD	>66	30	
Syd	98	22	2225	0.2	SD	27	14	
Syd	62	22	2226	0.5	CD	>66	28	
Nag	3750	23	0249	28	SD	-	1	
Tok	60	23	0255	4	CD	18	13	
Tok	60	23	0321	2	CD	22	16	
Syd	62	23	0358	0.2	SA	52	24	
Ned	200	23	0841	9.8	CA	>100	-	140
Ned	140	23	1125	62.1	CA	100	15	200
Ned	200	23	1125	32.7	CA	42	42	140
Cav	81	23	1350	?	-	-	-	140,2800
Ned	140	23	1351	10	CA	60	12	81,2800
Ott	2800	23	1351	12	SD	-	1	81,140
Ott	2800	23	1438	6	SD	-	1	
Ned	200	23	1517	2.7	CA	10	4	
Ott	2800	23	1958	6	CD	-	>16	
Syd	98	23	2115	125	CD	7	7	
Syd	98	23	2149	0.2	SA	54	26	
Ned	140	24	0851	1.5	CD	37	10	
Ned	200	24	0904	1.9	CA	>15	>15	
Ned	140	24	1334	5.9	CD	37	10	
Syd	98	24	2254	0.2	SA	448	187	
Syd	62	25	0251	0.2	SD	33	15	98
Syd	98	25	0251	0.2	SD	52	26	62
Ned	140	25	0957	3.5	CD	>12	5	200
Ned	200	25	0957	3.9	CA	>5	>5	140
Ott	2800	25	2150	10	SD	-	6	
Osa	3260	26	0150	1	SD	-	24	
Syd	1200	26	0604	13	CD	6	2	
Syd	98	26	0627	0.8	CD	992	354	62
Ned	140	26	1008	360	M	340	100	200
Ned	200	27	1230	52.8	CA	85	-	
Cav	175	27	1308	1	SA	3	2	
Cav	175	27	1310	1	SA	3	2	
Ned	140	27	1315	2.5	CD	>8	5	175
Cav	175	27	1316	1	SA	-	3	140
Ned	140	27	1318	20.8	CD	11	5	
Ned	140	28	1309	2.3	CD	12	10	
Cav	175	30	1056	3	SD	-	3	
Ned	140	30	1530	2.1	CD	10	5	200
Ned	200	30	1530	15	CA	14	6	140

Fade
Fade

IV. SOLAR RADIO NOISE DATA

CO-OPERATING OBSERVATORIES

Details relating to the contributors to the third quarter of 1952 are as follows:-

<u>OBSERVING STATION</u>	<u>ABBREVIATION</u>	<u>FREQUENCIES</u>	<u>NORMAL OBSERVING PERIOD</u>
		<u>USED</u>	<u>(Hours U.T.)</u>
		Mc/s	
Cavendish Laboratory, Cambridge, England	Cav	81	10 - 15
		175	10 - 15
Radiophysics Laboratory, Sydney, Australia	Syd	62	19 - 07
		98	19 - 07
		600	20 - 06
		1200	20 - 06
		3000	00 - 06
		9400	00 - 06
Meudon Observatory, Paris, France	Meu	255	08 - 14
		545	08 - 14
National Research Council, Ottawa, Canada	Ott	2800	14 - 23
Laboratoire de Physique, Marcoussis, France	Mar	169	11 - 13
Cornell University, Ithaca, N.Y., U.S.A.	Cor	200	14 - 20
Tokyo Astronomical Observatory, Mitaka, Tokyo	Tok	60	00 - 08
		100	00 - 08
		200	00 - 08
Radio Astronomical Observatory, Osaka City University, Osaka, Japan	Osa	3260	23 - 08
Research Institute of Atmospheric, Nagoya University, Toyokawa, Japan	Nag	3750	23 - 08
Observing Station Nederhorst, Den Berg - Radio (Nera)	Ned	140	08 - 16
		200	08 - 16

TABULATED QUANTITIES

1. FLUX The unit for this tabulation is 10^{-22} watts metre⁻²(c/s)⁻¹. The values can readily be converted into equivalent temperature T of the sun's visible disc by the relation

$$\text{Flux} = 2.09 \times 10^{-44} \nu^2 T$$
where ν is the frequency in cycles per second.

2. POLARISATION The radio-electric (not optical) convention is adopted so that for R polarisation the vector, in a fixed plane perpendicular to the ray, rotates clockwise when viewed in the direction of propagation. The values quoted are percentage polarisation, i.e.

$$100(I_R - I_L) / (I_R + I_L)$$

where I_R and I_L are the intensities.

3. VARIABILITY The variability is described by indices on a scale 0 - 3 where 0 = quiet, and 3 = violent variability.

4. OUTSTANDING OCCURRENCES

S = Simple rise and fall of intensity.
C = Complex variation of intensity.
A = Appears to be part of general activity.
D = Distinct from (i.e., apparently superimposed upon) the general activity.
M = Two or more peaks separated by relatively long periods of quietness.
E = Sudden commencement of activity.

The two maximum intensity columns contain, firstly, the maximum instantaneous value, and secondly, the maximum smoothed value measured above the previous level. The second is thought to be more suitable for comparative purposes. When the occurrence consists of well separated peaks (type M) it is not always possible to estimate a smoothed maximum value, and M is inserted in this column. The intensity unit in these columns is 10^{-21} watts metre⁻²(c/s)⁻¹.

CORRECTIONS1. FLUX

OSA 3260 Feb. 6	read 122 for 121,	TOK 200 April 17	read 8 for 9
" " "	" " "	" " 25	" 7 " 8
" " "	" " "	" " 26	" 7 " 8
" " "	" " "	" " 27	" 6 " 7
" " "	" " "	" " 28	" 7 " 8
" " "	" " "	" " 29	" 7 " 8

4. OUTSTANDING OCCURRENCES

Tok 60 Jan. 14	Smooth max.	read 13 for 14
Tok 60 Feb. 16	Starting time	read 0135 for 0315
" " " "	Smooth max.	read 5 for 26
Tok 100 Feb. 16	Starting time	read 0135 for 0315

2. POLARISATION

Daily medians or means of polarisation sense & percentage

	JULY 1952			AUGUST 1952		SEPTEMBER 1952		
	CAV	SYD	CAV	CAV	CAV	CAV	SYD	CAV
Mc/s	81	98	175	81	175	81	98	175
Date								
1	R50	-	0	-	-	0	-	0
2	L20	L69	L20	0	0	0	-	0
3	0	L80	0	0	0	0	-	0
4	0	-	0	0	0	0	-	0
5	-	-	-	0	-	0	-	0
6	-	-	-	0	0	0	-	0
7	-	-	-	0	0	0	-	0
8	-	-	-	0	0	0	-	0
9	-	-	-	0	0	0	-	0
10	0	R67	0	-	-	0	-	0
11	0	R60	0	-	-	0	-	0
12	-	R67	0	0	0	0	-	0
13	-	-	0	0	0	0	-	0
14	-	-	-	0	0	-	-	0
15	-	-	-	0	0	-	-	0
16	-	-	-	0	0	0	-	0
17	-	-	-	-	0	0	-	0
18	-	-	-	-	-	0	-	0
19	-	-	-	-	-	0	-	0
20	-	-	0	-	-	-	-	0
21	-	-	0	0	0	0	-	0
22	-	-	-	0	0	0	-	0
23	-	-	-	-	-	0	-	0
24	0	-	-	-	-	0	-	0
25	0	-	0	-	-	0	-	0
26	0	-	-	0	0	L50	R64	0
27	0	-	0	0	0	-	-	0
28	-	-	-	0	0	-	-	0
29	0	-	0	0	0	-	-	0
30	-	-	-	0	0	-	-	0
31	0	-	0	-	-	-	-	0

3. VARIABILITY

Daily indices on a scale 0 - 3 of the variability of the solar noise

Date	JULY 1952													AUGUST 1952													SEPTEMBER 1952															
	TOK	SYD	CAV	SYD	TOK	NED	MAR	CAV	COR	TOK	NED	MEU	MEU	TOK	SYD	CAV	SYD	TOK	NED	MAR	CAV	COR	TOK	NED	MEU	MEU	TOK	SYD	CAV	SYD	TOK	NED	MAR	CAV	COR	TOK	NED	MEU	MEU			
	60	62	81	98	100	140	169	175	200	200	200	255	545	60	62	81	98	100	140	169	175	200	200	200	255	545	60	62	81	98	100	140	169	175	200	200	200	255	545			
1	0	0	3	0	0	2	0	2	2	2	3	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	1	3,0	1	2,0	0	1	1	2	3	1	1	3	-			
2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2,0	1	1	1	1	1	1	0	0	0	0	1	1	2,0	1	2,0	0	1	3	1	2	2	1	1	-		
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-		
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-		
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-		
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-		
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-		
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-		
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-		
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-		
11	1	1	0	0	1	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	-		
12	1	1	2,0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	-		
13	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	-		
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-		
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-		
16	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-		
17	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
18	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
19	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-		
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-		
22	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-		
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
25	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
26	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
27	0	0	1	0	0	1	1	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
28	0	0	1	0	0	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	
29	1	1	1	1	1	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	
30	1	1	1	1	1	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-
31	1	3,0	0	0	1	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	

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4. OUTSTANDING OCCURRENCES

Station and frequency	Date 1952	Starting time	Duration	Type	Maximum intensity		Polarisation	Other frequencies on which occurrence is observed	Remarks
					Inst.	Smooth			
Mc/s		U.T.	Minutes		$10^{-21} \text{ w m}^{-2} (\text{c/s})^{-1}$			Mc/s	
Ned 140	July 1	1312	16.8	CA	62	10		(200	
Ned 200	1	1314	1.5	CA	13	7		140	
Ned 200	1	1533	2.3	CA	18	6			
Syd 98	2	2108	2.8	M	42	5			
Syd 62	2	2116	0.7	CD	78	34	-		
Ott 2800	2	2118	35	SD		206			
Ned 200	3	1528	1.9	CD	13	4			
Syd 62	10	2234	1	CD	312	142			
Syd 98	10	2257	0.2	SA	30	10	-		
Syd 62	10	2340	0.3	SD	398	140		98	
Syd 98	10	2341	0.2	SA	55	18		62	
Syd 98	11	0043	0.5	CA	31	13	-		
Syd 98	11	0149	0.5	CA	31	13	-		
Syd 62	11	0542	2.3	CD	73	14			
Syd 62	11	0554	0.2	SD	27	14			
Tok 60	11	0734	2	CD	16	15		100, 200	
Tok 100	11	0734	1	CD	24	8		60, 200	
Tok 200	11	0734	1	CD	24	9		60, 100	
Ned 140	11	0920	2.7	CD	70				
Ned 200	11	1045	3.5	CD	25	5			
Ned 200	11	1345	4.3	CD	25	7			
Ott 2800	11	1612	2.5	CD		2			
Ott 2800	11	1617	1.5	CD		1			
Ott 2800	11	2124	3	SD		1			
Syd 62	11	2235	1.3	CD	49	20		98	
Syd 98	11	2235	1.2	CD	37	10	-	62	
Tok 200	12	0442	2	CD	30	10		60, 62, 98, 100, 3260	
Tok 60	12	0443	0.5	CD	11	4		62, 98, 100, 200, 3260	
Syd 62	12	0443	0.5	CD	21	13		60, 98, 100, 200, 3260	
Syd 98	12	0443	16.5	CD	303	50	0	60, 62, 100, 200, 3260	
Tok 100	12	0443	0.5	CD	16	8		60, 62, 98, 200, 3260	
Osa 3260	12	0443	1.5	SD		11		60, 62, 98, 100, 200	
Tok 60	12	0449	1	CD	7	1		100	
Tok 100	12	0449	3	CD	22	8		60	
Tok 60	12	0456	3	CD	14	4		62	
Syd 62	12	0456	4	CD	209	27		60	
Syd 62	12	0604	2.5	CD	924	287		98, 3260	
Syd 98	12	0604	3	CD	880	126	0	62, 3260	
Osa 3260	12	0605	3	SD		3		62, 98	
Ned 140	12	1100	2.3	CD	70	10		200	
Ned 140	12	1451	78.6	CD	10	10		(200, 2800	Fadeout
Ned 200	12	1451	11.7	CD	6	6		140, 2800	
Ott 2800	12	1451	6	CD		16		140, 200	Fadeout
Cor 200	12	1452	7	CD	>4	>4		140, 2800	
Ned 200	12	1517	13.3	M	45				
Ott 2800	12	1527	1.5	SD		1			
Ott 2800	12	2128	2	SD		<1			
Syd 98	13	0024	0.2	SA	38	16			
Nag 3750	13	0126	1	SD		2			
Tok 60	13	0230	2	CD	16	7		(62, 98, 200	
Tok 200	13	0230	1.5	CD	30	5		60, 62, 98	
Syd 62	13	0231	1.5	CD	291	51		60, 98, 200	
Syd 98	13	0231	0.5	CA	62	22		60, 62, 200	
Syd 62	13	0453	0.2	SD	81	35	-	98	
Syd 98	13	0524	0.2	SA	28	12	-		
Syd 98	14	0141	0.4	CD	49	20	-		
Ned 200	14	0810	1.5	CD	13				
Ned 140	14	1435	0.9	CD	30	30		(200	
Cor 200	14	1435	1	CD	>3	2		140	
Ned 200	14	1435	1.3	CD	30	30		140	
Nag 3750	15	0132	3	SD		1			
Syd 98	16	0513	3.3	CD	880	204	0		
Ott 2800	16	1445	2	SD		1			
Ott 2800	21	2107	3	SD		1			
Ott 2800	23	2148	7	SD		1			
Tok 200	28	0626	1	CD	10	3			
Ned 140	28	1300	17.1	M	400				
Ned 200	28	1315	1.7	CA	190				
Ned 140	28	1415	3.9	CD	400			(200	
Ned 200	28	1415	3.7	CA	190			140	

Ned	200	28	1524	0.9	CD	89			
Ned	140	28	1525	3.5	CD	260			
Cor	200	28	1632	3.5	CD	>10	8		(255, 545
Meu	255	28	1633	9	SA	50	35		(200, 545
Meu	545	28	1634	4	SD	200	70		(200, 255
Cor	200	28	1640	2	CD	>10	6		255
Syd	98	28	2239	2	CD	171	37	-	62
Syd	62	28	2325	0.5	CD	19	8		
Syd	98	29	0019	0.5	CD	735	265	-	
Nag	3750	29	0056	7.5	SD		1		
Syd	98	29	0440	2	M	37	2	-	(62
Syd	62	29	0442	0.2	SD	24	13		98
Syd	98	29	0548	0.4	CD	32	14	-	62
Meu	255	29	0708	1	SD	105	60		
Tok	60	29	0734	1	CD	25	6		
Ned	140	29	0836	4.3	M	45			200
Tok	60	29	0849	1	CD	22	10		(140, 200
Ned	140	29	0850	17.2	M	340			(60, 200
Ned	200	29	0850	10.5	M	60			(60, 140
Ned	140	29	1036	23.8	M	500			(255, 545
Meu	255	29	1049	5	SD	120	75		(140, 545
Meu	545	29	1049	1.5	SD	40	30		(140, 255
Ned	140	29	1315	5.3	CD	190			200
Ned	140	29	1420	2.3	CD	460			
Ned	140	29	1525	1.9	CD	230			
Syd	98	29	2100	3	M	29	14	-	62
Syd	98	29	2121	2.8	M	47	4	-	(62
Syd	62	29	2123	0.2	SD	197	74		98
Syd	62	29	2138	0.5	CD	263	100		98
Syd	98	29	2138	0.2	CD	>59	29	-	(62
Syd	62	29	2206	0.2	SD	24	13		
Syd	98	29	2210	1	M	166	80	-	
Syd	62	29	2230	0.5	CD	75	33		98
Syd	62	29	2253	0.2	CD	68	22		
Syd	98	29	2306	0.2	SD	59	28	-	62
Syd	62	30	0020	0.2	SD	67	28		
Tok	60	30	0119	1	CD	35	25		(62, 98
Syd	62	30	0119	0.3	SD	837	178		(60, 98
Syd	98	30	0119	0.2	CD	53	23	-	(60, 62
Tok	60	30	0141	1	SD	30	15		(62, 98
Syd	62	30	0141	0.4	CD	102	33		(60, 98
Syd	98	30	0141	0.5	CD	158	69	-	(60, 62
Tok	60	30	0228	1	SD	28	10		(62, 98
Syd	62	30	0228	0.3	CD	57	26		(60, 98
Syd	98	30	0228	5	M	40	3	-	(60, 62
Syd	62	30	0644	0.3	CD	110	43		98
Ned	140	30	0948	1.5	CD	500			
Ned	140	30	1114	3.1	CD	>400			
Ned	140	30	1242	1.9	CD	>400			
Syd	62	30	2215	0.8	CD	401	134		98
Syd	98	30	2231	0.2	CD	66	28	-	62
Syd	98	31	0032	3	M	66	4	-	(62, 3750
Nag	3750	31	0032	0.3	SD		41		(62, 98
Syd	62	31	0035	0.4	CD	261	102		(98, 3750
Syd	98	31	0107	0.2	SD	62	30	-	
Tok	60	31	0211	1	SD	25	20		(62, 98
Syd	62	31	0211	0.7	SD	837	324		(60, 98
Syd	98	31	0212	0.3	CD	377	113	-	(60, 62
Syd	62	31	0219	4.3	M	39	2		
Syd	62	31	0230	6.8	M	183	5		98
Syd	600	31	0249	6	CD	3	41		(62, 98, 3260, 3750
Syd	62	31	0250	5.3	M	312	17		(98, 600, 3260, 3750
Syd	98	31	0250	5	M	482	10	-	(62, 600, 3260, 3750
Osa	3260	31	0250	0.5	SD		3		(62, 98, 600, 3750
Nag	3750	31	0250	0.8	SD		3		(62, 98, 600, 3260
Syd	62	31	0306	0.3	CD	63	29		98
Syd	98	31	0328	1.3	CD	27	7	-	62
Syd	62	31	0343	1	CD	560	155		98
Tok	60	31	0435	1	SD	22	15		(62, 98, 200
Syd	62	31	0435	1.2	SD	926	334		(60, 98, 200
Syd	98	31	0435	0.8	CD	1089	326	-	(60, 62, 200
Tok	200	31	0435	0.5	CD	8	2		(60, 62, 98
Syd	98	31	0439	0.2	SD	100	48	-	
Syd	98	31	0453	1.5	M	85	12	-	62
Syd	62	31	0551	2	CD	578	73		98
Syd	98	31	0608	11.8	M	671	36	-	62
Tok	60	31	0618	2.5	CD	25	10		(100
Tok	100	31	0618	2	CD	8	2		60
Tok	60	31	0816	1	SD	22	15		
Ned	200	31	0907	2.7	CD	16	10		140

Syd	62	30	2145	0.3	CD	310	115		98	
Syd	62	30	2201	0.3	CD	66	29			
Nag	3750	31	0246	1.9	SD		1			
Syd	62	31	0331	1.5	CD	41	13			
Nag	3750	31	0518	1.2	SD		1			
Tok	100	31	0652	1.5	SD	3	2		{60,62,98	
Tok	60	31	0653	4	CD	20	20		{62,98,100	
Syd	98	31	0653	0.5	CD	47	25		{60,62,100	
Syd	62	31	0654	0.5	CD	124	44		{60,98,100	
Tok	60	31	0710	1	CD	10	6			
Syd	98	31	2103	0.2	CD	899	291			
Syd	62	Sept 1	0001	2.3	CD	82	23		{3750	
Nag	3750	1	0003	1	SD		1		{62	
Syd	62	1	0157	0.2	CD	59	30			
Syd	98	1	0252	4.8	CD	67	2	0	62	
Syd	62	1	0334	5.8	CD	885	64		{60,98,3750	
Tok	60	1	0338	3	CD	22	20		{62,98,3750	
Syd	98	1	0338	1.2	CD	61	30		{60,62,3750	
Nag	3750	1	0338	4	CD		1		{60,62,98	
Syd	62	1	0349	1.5	CD	107	41		{60	
Tok	60	1	0350	4	CD	9	6		{62	
Ned	140	1	1236	3.9	CD	>500	>500		{200	Fadeout
Ned	200	1	1236	3.9	CD	>400	>400		{140	Fadeout
Cav	81	1	1332	3	SD		1		{175	
Cav	175	1	1332	3	SD		>1		{81	
Syd	98	2	0043	4	SD	60	13			
Syd	62	2	0229	3.5	M	44	4		{60	
Tok	60	2	0230	5	M	10	4		{62	
Syd	98	2	0339	0.2	SD	28	16			
Syd	62	2	0353	4.3	CD	78	22			
Syd	62	2	0631	0.3	SD	304	120			
Ned	140	2	1439	0.8	CD	24				
Tok	60	3	0716	1	CD	18	3		{98	
Syd	98	3	0716	0.2	SD	56	29		{60	
Ned	140	3	1009	1.5	CD	18	3			
Ned	140	3	1153	1.3	CD	19	3			
Syd	98	3	2214	0.2	CD	28	15			
Syd	98	4	0054	4.5	M	46	4			
Syd	98	4	0108	1.5	M	61	8			
Syd	62	5	0307	0.4	CD	51	22			
Syd	98	5	0308	0.2	SD	48	23			
Tok	60	13	0543	1	CD	16	3			
Nag	3750	16	0039	1	SD		4			
Ott	2800	21	1217	8	SD		7			
Ott	2800	22	1804	10	SD		2			
Ned	140	23	1302	0.8	SD	50	25		{200	
Ned	200	23	1305	1.3	CD	8	4		{140	
Ned	140	24	1217	0.8	SD	7	3		{200	Fadeout
Ned	140	24	1413	5.9	CD	300			{200	
Ned	200	24	1413	5.9	CD	20			{140	
Ned	200	25	0920	1.1	CD	30	15		{140	
Syd	98	26	0342	13.5	CD	1053	167	0	{60,62,100,200,600	
Syd	600	26	0344	60	CD	37	5		{60,62,98,100,200	
Tok	60	26	0347	13	CD	>30	>30		{62,98,100,200,600	
Syd	62	26	0347	27	CD	489	70		{60,98,100,200,600	
Tok	100	26	0347	5	CD	30	15		{60,62,98,200,600	
Tok	200	26	0347	6	CD	>100	16		{60,62,98,100,600	
Tok	100	26	0354	4	CD	30	25		{60,62,98,200,600	
Tok	200	26	0400	20	CA	26	10		{60,62,100,600	
Tok	60	26	0401	15	CA	22	20		{62,100,200,600	
Tok	100	26	0410	20	SA	3	3		{60,62,200,600	
Syd	3000	26	0445	30	CD	29	10		{9400	
Syd	9400	26	0448	24	SD	44	8		{3000	
Ned	200	26	0819	1.9	CD	12	3			
Ned	140	26	1151	1.9	CA	45				
Syd	98	27	0213	0.2	SD	17	10			
Tok	200	27	0328	3	CD	28	4		{60,62,98	
Tok	60	27	0329	3	CD	18	10		{62,98,200	
Syd	62	27	0329	4.5	CD	55	5		{60,98,200	
Syd	98	27	0330	4	CD	410	62		{60,62,100,200	
Tok	60	27	0333	1	CD	20	8		{62,98,100,200	
Tok	100	27	0333	0.6	CD	12	4		{60,62,98,200	
Tok	200	27	0333	0.6	CD	33	14		{60,62,98,100	
Tok	60	30	0118	4	CD	20	2			
Ned	140	30	1346	1.1	CA	18	10		200	

IV. SOLAR RADIO NOISE DATA

CO-OPERATING OBSERVATORIES

For details refer to No. 99 of the Quarterly Bulletin. In the list given there is to be inserted:

Radiophysics Laboratory, Sydney, Australia	Syd	200 Mc/s	19 - 07 U.T.
Tokyo Astronomical Observatory, Mitaka, Tokyo	Tok	3000 Mc/s	00 - 08 U.T.

TABULATED QUANTITIES

For details refer to No. 99 of the Quarterly Bulletin.

CORRECTIONS

1. FLUX The following approximate correction factors emerge from a statistical comparison of the data.

Station and Frequency	Correction Factor	Period in 1952
Ned 140	0.4	Year
Mar 169	1.4	Year
Tok 200	1.3	July, Aug., Oct., Nov.
Ned 200	0.7	June, July, Aug., Nov.
Syd 3000	0.8	April, to July, Sept.
Tok 3000	0.8	Oct., to Dec.
Osa 3260	0.7	Year
Syd 9400	0.8	Feb., July, Oct.

The relative recordings from Cor 200 have been multiplied by 8 throughout 1952, as in previous years. A correction factor of 0.89 may be applied to make the data conform with the flux from the quiet sun, given as 7.1 ± 0.9 by Cornell for November.

4. OUTSTANDING OCCURRENCES The relative intensities for Cor 200 have been multiplied by 0.8 throughout 1952, a similar correction to that for the flux applies here.

1. FLUX

Daily medians of radio-noise flux received from the sun in units of 10^{-22} watts metre⁻²(c/s)⁻¹

OCTOBER 1952	CAV	NED	MAR	CAV	SYD	COR	TOK	NED	MFU	MFU	SYD	SYD	OTT	SYD	TOK	OSA	NAG	SYD	
Mc/s	81	140	169	175	200	200	200	200	255	545	600	1200	2800	3000	3000	3260	3750	9400	
Date																			
1	1	7	4	5	8	8	5	10	-	-	19	31	67	52	91	95	88	322	
2	1	6	3	5	8	7	6	10	-	-	22	33	67	-	85	95	90	-	
3	1	6	4	5	8	9	5	10	-	-	18	33	69	56	66	-	90	302	
4	1	7	4	5	10	-	5	10	-	-	21	35	77	-	87	-	96	-	
5	1	-	3	7	10	-	4	-	-	-	-	35	73	-	89	-	-	-	
6	1	7	3	8	-	8	5	8	-	-	18	35	75	62	93	-	96	314	
7	1	7	-	5	8	8	6	10	-	-	19	35	73	-	-	-	96	-	
8	1	7	4	6	7	8	5	10	10	21	20	37	71	62	96	110	94	302	
9	1	6	2	5	8	8	4	10	10	20	20	34	71	-	88	110	92	-	
10	1	6	3	5	8	8	4	10	10	-	19	35	70	61	82	110	92	295	
11	1	6	3	5	7	8	-	10	10	-	21	31	-	-	-	-	92	-	
12	9	-	4	8	6	9	4	-	-	-	19	35	73	-	-	-	-	-	
13	1	7	4	5	8	8	5	10	-	-	20	34	71	60	78	110	92	328	
14	1	7	3	5	9	8	6	10	-	-	18	33	68	-	98	-	90	-	
15	1	7	3	4	8	8	5	10	-	-	17	31	67	69	94	-	90	318	
16	-	7	3	5	7	9	5	10	-	-	-	-	67	-	70	110	88	-	
17	-	7	4	5	8	9	5	10	10	20	19	34	66	61	95	106	88	300	
18	1	7	3	5	-	8	5	10	10	20	21	33	65	-	93	103	88	-	
19	1	-	3	5	-	8	5	-	-	-	-	32	69	-	95	-	-	-	
20	-	6	3	5	7	8	5	10	10	20	24	34	69	64	95	119	94	331	
21	-	8	5	10	9	12	4	16	13	20	25	36	73	-	86	119	98	-	
22	-	7	-	6	17	13	-	14	-	-	25	36	80	67	-	-	104	318	
23	-	13	7	9	11	12	5	14	15	-	23	39	80	-	90	121	106	-	
24	1	8	-	7	12	10	6	15	12	24	23	39	81	68	103	-	104	276	
25	-	10	-	14	14	12	7	22	10	-	22	39	-	-	86	128	104	-	
26	-	-	-	5	7	8	-	-	10	-	22	37	77	-	-	-	-	-	
27	-	-	3	4	7	8	5	-	10	-	22	37	75	70	96	-	100	288	
28	-	-	3	-	7	8	-	-	10	20	24	37	77	-	81	-	-	-	
29	-	7	3	-	6	8	-	10	10	20	24	35	75	68	-	125	96	322	
30	-	8	3	4	8	8	5	9	10	20	23	34	73	-	94	-	94	-	
31	-	8	3	-	7	7	5	10	10	21	24	33	71	59	90	-	94	296	

Sydney 62 Mc/s, and Sydney 98 Mc/s - G for the whole month

NOVEMBER 1952	SYD	CAV	SYD	NED	MAR	CAV	SYD	COR	TOK	NED	MFU	MFU	SYD	SYD	OTT	SYD	TOK	OSA	NAG	SYD	
Mc/s	62	81	98	140	169	175	200	200	200	200	255	545	600	1200	2800	3000	3000	3260	3750	9400	
Date																					
1	G	-	G	7	3	3	6	9	4	9	10	20	23	33	67	-	86	-	92	-	
2	G	-	G	-	3	3	6	8	4	-	10	20	23	32	-	-	-	-	-	-	
3	G	-	G	-	2	4	-	8	5	-	10	20	21	28	63	59	82	-	-	315	
4	G	-	G	10	2	4	6	8	5	9	-	-	21	33	62	-	84	97	86	-	
5	G	-	G	10	2	-	7	9	4	9	10	20	22	34	67	48	76	-	86	294	
6	G	-	G	10	3	4	6	8	-	10	10	20	23	32	64	-	80	103	86	-	
7	G	-	G	10	2	4	5	9	4	10	10	20	22	36	65	60	83	106	88	276	
8	G	-	G	10	3	-	5	9	5	9	-	-	22	37	-	-	89	110	94	-	
9	G	-	G	-	3	5	4	7	6	-	-	-	20	41	65	-	87	-	-	-	
10	G	-	G	10	3	-	5	-	5	9	10	20	21	36	65	61	80	110	90	326	
11	G	1	G	11	3	4	6	9	6	10	10	20	23	36	67	-	77	106	90	-	
12	G	-	G	11	3	4	6	10	5	10	12	22	22	38	68	55	70	-	90	340	
13	G	-	G	11	3	4	7	-	7	10	10	20	21	35	69	-	-	-	88	-	
14	G	-	G	13	3	4	10	-	6	11	12	24	20	35	69	66	83	-	90	311	
15	-	1	G	22	3	8	7	-	-	19	16	28	21	34	-	-	89	-	94	-	
16	-	1	-	-	3	5	-	-	-	-	12	35	19	34	-	70	91	-	-	330	
17	G	1	G	10	3	4	15	-	-	11	12	22	22	36	78	-	-	123	104	-	
18	G	-	G	13	3	4	12	12	-	15	18	29	22	38	82	-	102	134	108	-	
19	G	-	G	12	3	4	9	19	-	12	13	27	21	37	97	81	-	-	114	336	
20	G	1	G	13	4	4	12	10	-	12	11	20	23	36	84	-	115	141	114	-	
21	G	1	G	16	8	6	15	13	6	19	17	20	23	39	87	78	109	-	114	331	
22	G	-	G	13	4	-	39,7	15	11	11	10	20	23	40	82	77	110	-	114	325	
23	G	1	G	-	3	5	7	9	7	-	11	20	24	39	82	72	87	-	108	294	
24	G	2	G	15	8	11	8	10	5	20	17	20	23	38	82	-	99	-	106	-	
25	G	1	G	17	9	9	10	14	7	18	34	-	23	37	83	69	116	132	108	316	
26	G	-	G	12	7	8	23,12	18	6	14	10	-	23	34	75	-	107	125	104	-	
27	G	1	G	29	6	9	20	-	7	33	15	-	22	32	67	-	92	-	98	-	
28	G	1	G	14	8	6	22	10	7	17	15	-	-	-	68	69	92	-	96	293	
29	G	1	G	7	6	-	5	9	6	12	10	-	22	35	-	-	88	110	-	-	
30	G	1	G	-	6	5	7	9	5	-	10	-	21	33	-	-	-	-	88	-	

DECEMBER 1952	CAV	SYD	NED	MAR	CAV	SYD	COR	TOK	NED	MFU	MFU	SYD	SYD	OTT	SYD	TOK	OSA	NAG	SYD	
Mc/s	81	98	140	169	175	200	200	200	200	255	545	600	1200	2800	3000	3000	3260	3750	9400	
Date																				
1	1	G	10	4	-	-	8	5	10	11	-	19	32	67	60	82	-	86	318	-
2	1	G	7	4	5	25,9	8	6	9	11	-	20	30	-	-	84	108	84	-	-
3	1	G	8	4	6	6	8	5	9	12	-	20	29	67	66	85	-	84	328	-
4	1	G	8	4	5	-	8	6	9	10	-	20	30	65	-	78	-	86	-	-
5	1	G	9	4	5	7	8	6	9	12	-	20	38	67	59	85	-	90	284	-
6	1	G	9	4	5	7	9	-	10	12	-	-	-	-	-	-	119	90	-	-
7	1	G	-	4	6	8	10	5	-	12	-	-	-	-	-	-	94	-	-	-
8	1	G	8	3	4	11	10	6	11	12	24	22	32	73	58	94	-	96	313	-
9	-	G	8	4	-	12	9	6	11	11	23	21	35	77	-	95	-	96	-	-
10	2	G	10	4	4	11	9	7	11	12	24	22	33	79	66	98	-	96	290	-
11	-	22,6	23	6	-	-	9	-	17	-	-	-	-	84	-	-	121	96	-	-
12	1	G	14	5	4	10	10	7	12	13	25	22	-	82	76	-	125	100	300	-
13	1	G	13	6	7	9	9	-	11	13	25	-	-	-	-	-	119	106	-	-
14	-	G	-	6	-	8	9	5	-	12	24	-	-	-	-	109	-	-	-	-
15	1	G	9	6	7	9	9	6	15	12	23	27	36	88	85	119	143	108	326	-
16	-	G	11	4	-	11	7	5	12	12	23	25	36	88	78	118	-	112	332	-
17	1	G	8	4	-	14	9	6	11	12	22	25	38	90	96	116	-	114	293	-
18	1	G	7	3	-	11	16	-	9	-	-	27	43	88	-	-	-	114	-	-
19	1	G	6	3	4	10	9	5	10	12	-	25	41	-	81	118	-	114	324	-
20	1	G	7	3	5	9	9	-	9	12	-	22	41	-	-	-	-	108	-	-
21	1	G	-	3	4	8	9	6	-	-	-	23	39	-	-	114	-	-	-	-
22	1	G	6	3	4	9	8	5	8	12	-	23	39	73	86	99	130	98	322	-
23	1	G	7	3	4	7	8	6	8	11	23	21	32	73	-	105	-	96	-	-
24	-	G	7	3	-	7,25	8	6	7	11	21	21	33	71	-	101	116	94	-	-
25	1	G	-	3	4	10,5	-	-	-	11	21	19	35	-	-	-	-	94	-	-
26	1	G	-	3	4	9	10	6	-	11	21	20	34	69	-	-	-	90	-	-
27	1	G	-	3	-	7	8	-	-	12	22	19	30	-	-	-	-	86	-	-
28	1	G	-	3	-	7	9	6	-	-	-	19	29	-	-	-	-	-	-	-
29	1	G	6	3	-	7	9	6	7	12	23	18	28	62	65	-	-	82	324	-
30	1	G	4	3	4	7	9	6	7	11	23	23	27	62	-	-	-	82	-	-
31	1	G	5	3	4	7	10	7	9	11	23	21	29	71	-	-	-	84	-	-

Sydney 62 Mc/s - G for the whole month

G = median level below threshold (6 units at 62 Mc/s, 8 units at 98 Mc/s)

Two values are given, where these differ significantly, for the two Eastern observing periods (i.e. before sunset and after sunrise) in one day U.T.

2. POLARISATION

Daily medians or means of polarisation sense & percentage

	OCTOBER 1952		NOVEMBER 1952		DECEMBER 1952		
	CAV	CAV	CAV	CAV	CAV	SYD	CAV
Mc/s	81	175	81	175	81	98	175
Date							
1	0	0	-	0	0	-	0
2	-	0	-	0	0	-	0
3	0	0	-	0	0	-	0
4	-	-	-	-	0	-	0
5	-	0	-	0	-	-	0
6	0	0	-	0	0	-	0
7	-	-	-	0	0	-	0
8	0	0	-	-	0	-	0
9	0	0	-	0	-	-	0
10	0	0	-	-	0	-	0
11	0	0	0	0	-	140	-
12	0	0	0	0	0	-	-
13	0	0	-	-	0	-	0
14	0	0	-	-	0	-	0
15	0	0	0	0	0	-	0
16	-	0	-	-	-	-	-
17	0	0	-	-	0	-	-
18	0	0	-	-	0	-	0
19	-	-	-	-	0	-	-
20	0	0	-	-	0	-	0
21	-	0	0	0	-	-	-
22	-	0	-	-	0	-	0
23	-	0	0	0	0	-	0
24	0	0	-	-	-	-	-
25	0	0	-	-	-	-	-
26	-	-	-	0	-	-	-
27	0	0	0	0	-	-	-
28	-	0	-	0	-	-	-
29	-	0	-	-	0	-	0
30	-	0	0	0	0	-	0
31	-	0	-	-	0	-	0

4. OUTSTANDING OCCURRENCES

Station and frequency	Date 1952	Starting time	Duration	Type	Maximum intensity		Polarisation	Other frequencies on which occurrence is observed	Remarks
					Inst.	Smooth			
Mc/s		U.T.	Minutes		$10^{-21} \text{ W m}^{-2} (\text{c/s})^{-1}$				
Syd 62	Oct 1	0228	0.2	SD	31	16			
Syd 98	1	0308	0.2	CD	50	25	-	200	
Syd 62	1	0313	0.2	SD	31	15		200	
Syd 200	1	0317	0.6	CD	70	17		62	
Syd 200	2	0033	0.2	SD	24	10		98	
Nag 3750	2	0036	30	SD		< 1		98	
Syd 200	2	0043	1.6	CD	> 37	11		98, 3750	
Syd 98	2	0044	2.5	CD	> 59	21	0	200, 3750	
Tok 200	2	0043	0.6	CD	60	15		98, 3750	
Syd 98	2	0200	0.2	SD	54	28	-		
Syd 62	2	0551	4.3	CD	48	12		200	
Syd 200	2	0554	2.3	CD	9	3		62	
Syd 98	2	0623	0.3	SD	31	16	-	62	
Syd 62	2	0706	0.3	CD	34	16		98	
Cav 175	2	1022	0.5	SD	1	1	-		
Ned 140	2	1041	2.3	CD	50	7		175	
Cav 175	2	1042	0.5	SD	1	1	-	140	
Ned 140	2	1107	1.1	SD	10	5		81, 175	
Cav 81	2	1108	1	SD	-	2	-	140, 175	
Cav 175	2	1108	1	SD	1	1	-	81, 140	
Syd 200	2	2241	14.7	M	12	< 1			
Syd 62	2	2247	0.3	CD	29	14			
Syd 62	2	2328	2	CD	431	127		98, 200, 600	
Syd 98	2	2328	1.6	CD	489	107	-	62, 200, 600	
Syd 200	2	2328	2.2	CD	24	6		62, 98, 600	
Syd 600	2	2328	2	CD	2	< 1		62, 98, 200	
Syd 200	3	0018	9.5	M	113	10		60, 62, 98, 600	
Tok 60	3	0018	4	CD	30	15		62, 98, 200, 600	
Syd 62	3	0018	3	CD	134	20		60, 98, 200, 600	
Syd 98	3	0118	1	CD	63	22	-	60, 62, 200, 600	

Tok	200	Oct 3	0118	3	CD	60	2		{ 60,62,98,600
Syd	600	3	0119	7	CD	4	1		{ 60,62,98,200
Tok	60	3	0123	3	CD	12	4		{ 200,600,3750
Tok	200	3	0124	1	CD	30	4		{ 60,600,3750
Nag	3750	3	0124	11	SD		<1		{ 60,200,600
Syd	200	3	0128	6.5	CD	200	8		{ 60,600,3750
Syd	62	3	0342	0.2	SD	20	10		
Syd	62	3	0441	7	CD	>66	22		
Syd	200	3	0450	1.2	CD	174	43		{ 60,98,100,600
Tok	60	3	0451	3	CD	>30	30		{ 98,100,200,600
Tok	100	3	0451	4	CD	22	16		{ 60,98,200,600
Tok	200	3	0451	1.2	CD	65	24		{ 60,98,100,600
Syd	600	3	0451	7	CD	4	1		{ 60,98,100,200
Syd	98	3	0451	5.5	CD	250	52	0	{ 60,100,200,600
Syd	200	3	0456	0.6	CD	26	11		{ 60,100
Tok	60	3	0457	1	CD	>30	3		{ 100,200
Tok	100	3	0457	1	CD	20	4		{ 60,200
Tok	200	3	0457	0.5	CD	25	1.5		{ 60,100
Syd	200	3	0738	1.7	CD	20	8		
Ned	140	3	0932	3.3	CD	>10	>10		200
Ned	140	3	0936	1.9	CD	>10	>10		
Ned	200	3	1455	1.5	CD	30	15		140
Ned	200	3	1457	1.5	CD	40	20		140
Syd	98	3	2128	4.3	CD	469	74	0	62,200
Syd	200	3	2225	0.5	CD	7	3		
Syd	98	3	2320	4.5	CD	50	20	-	62,200
Tok	60	4	0113	1	CD	30	2		{ 62,98
Syd	62	4	0113	0.2	SD	50	22		{ 60,98
Syd	98	4	0113	0.3	SD	25	13	-	{ 60,62
Tok	60	4	0156	1	CD	22	10		
Syd	98	4	0201	5.5	CD	334	34	0	{ 60,100,200
Tok	60	4	0201	4	CD	35	15		{ 98,100,200
Syd	200	4	0201	4	CD	42	13		{ 60,98,100
Tok	100	4	0202	2	CD	30	2		{ 60,98,200
Tok	100	4	0228	0.6	CD	20	4		{ 60,62,98,200,3750
Tok	60	4	0230	1.5	CD	30	9		{ 62,98,100,200,3750
Syd	62	4	0232	1.3	CD	486	165		{ 60,98,100,200,3750
Syd	98	4	0232	0.3	CD	171	63	-	{ 60,62,100,200,3750
Nag	3750	4	0233	0.3	SD		1		{ 60,62,98,100,3750
Syd	200	4	0234	0.5	CD	7	4		{ 60,62,98,100,3750
Tok	60	4	0346	1	CD	>30	30		{ 62,98,100
Tok	100	4	0347	1	CD	16	6		{ 60,62,98
Syd	62	4	0350	0.7	CD	201	67		{ 60,98,100
Syd	98	4	0350	0.2	CD	44	19	-	{ 60,62,100
Syd	200	4	0402	7.5	M	14	4		
Syd	62	4	0418	6	CD	>53	9		{ 60,98
Tok	60	4	0419	4	CD	25	15		{ 62,98
Syd	98	4	0419	2	CD	23	7	-	{ 60,62
Syd	62	4	0537	1	CD	48	21		98
Syd	98	4	0554	0.5	CD	36	13	-	
Syd	98	4	0557	0.3	SD	50	23	-	62
Syd	62	4	0633	1	CD	37	11		
Syd	62	4	0646	3.8	M	14	1		
Ned	140	4	0951	0.6	CD	25	-		
Ned	140	4	1001	1.3	CD	20	-		
Ned	140	4	1121	17.6	M	320	-		{ 200
Ned	200	4	1129	7	CD	10	4		{ 140
Ned	140	4	1311	1.3	CD	30	15		
Ned	140	4	1318	0.4	CD	17	-		
Ned	140	4	1458	3.1	CD	35	-		
Ned	140	4	1534	1.9	CD	>400	-		{ 200
Ned	200	4	1534	1.9	CD	55	4		{ 140
Cav	81	4	1356	3	CA	-	2	-	
Cav	175	4	1400	3	SD	-	1	-	
Cav	81	4	1447	4	SD	4	3	-	{ 175
Cav	175	4	1447	4	SD	5	4	-	{ 81
Syd	62	4	2046	0.2	SD	23	12		
Syd	98	4	2110	1.2	CD	29	7	-	62
Syd	62	4	2212	0.4	CD	49	16		
Syd	200	4	2309	2.2	CD	23	6		
Syd	62	4	2332	0.2	SD	35	14		98
Syd	62	5	0116	2.5	CD	34	7		
Tok	60	5	0145	8	M	20	4		{ 62,98,200
Syd	62	5	0145	7.5	CD	70	14		{ 60,98,200
Syd	200	5	0148	4.5	CD	26	5		{ 60,62,98
Syd	98	5	0151	1.5	CD	>50	25	-	{ 60,62,200
Syd	98	5	0157	0.2	CD	25	13	-	
Syd	98	5	0201	0.2	CD	34	15	-	
Syd	200	5	0707	10.8	CD	29	4	-	
Cav	81	5	1123	5	SD	-	4	-	{ 175

Fade
Fade

Fade
Fade

Cav	175	Oct 5	1123	5	SD	-	1	-	181	
Syd	200	6	0127	39	CD	10	2	-	62	
Syd	62	6	0130	0.2	SD	35	18	-	200	
Syd	62	6	0141	6	CD	56	7	-	3750	
Nag	3750	6	0142	0.2	SD	-	1	-	62	
Syd	3000	6	0216	6	SD	12	5	-	9400	
Syd	9400	6	0217	3	SD	52	13	-	3000	
Syd	200	6	0336	6.2	CD	6	2	-	60,62	
Tok	60	6	0337	5	CD	10	2	-	62,200	
Syd	62	6	0339	3.2	CD	14	3	-	60,200	
Ned	140	6	1055	1.1	CD	10	5	-		
Cor	200	6	1832	8.5	CD	> 4	> 3	-		
Syd	200	7	0118	1.5	CD	11	11	-		
Nag	3750	7	0118	2	CD	-	3	-	3750	
Syd	200	7	0215	4.7	CD	> 29	11	-	200	
Nag	3750	7	0216	3	SD	-	9	-	62,98,600,3750	
Syd	98	7	0216	8.8	CD	60	20	0	62,98,200,600	
Syd	600	7	0216	15	CD	13	3	-	62,200,600,3750	
Syd	62	7	0221	3.3	CD	> 58	21	-	62,98,200,3750	
Syd	200	7	2355	0.4	CD	22	8	-	98,200,600,3750	
Cav	81	8	0942	1	SD	1	1	-		
Cav	175	8	1115	1	SD	1	1	-		
Syd	98	12	2219	0.2	SD	65	31	-	62	
Syd	98	13	0133	2	CD	> 77	6	-	62	
Cav	175	17	1402	2	SD	5	3	-		
Cav	81	19	1028	2	SD	1	1	-		
Syd	200	22	2245	0.2	CA	18	8	-		
Cav	175	23	1334	3	SD	7	5	-		
Ned	140	23	1456	1.1	CD	46	-	-		
Nag	3750	25	0111	24	CD	-	< 1	-		
Ned	140	25	0901	1.1	CA	10	-	-		
Ned	140	30	1047	1.1	CD	10	-	-	200	
Ned	200	30	1047	1.1	CD	10	-	-	140	
Nag	3750	Nov 8	0020	17	SD	-	4	-		
Cav	81	13	1005	2	SD	4	2	-	175	
Cav	175	13	1005	1.5	SD	5	4	-	81	
Ned	140	15	0915	90	M	28	4	-		Fade
Ned	140	15	1230	30	M	6	3	-		Fade
Ned	200	15	1308	2.7	CA	8	3	-		Fade
Ned	140	15	1330	90	M	32	10	-	200	Fade
Nag	3750	17	0058	1.2	SD	-	4	-		
Ned	140	17	0952	2.3	CD	> 400	-	-	200	
Ned	200	17	1438	3.9	CD	7	5	-	140	
Nag	3750	19	0021	25	CD	-	4	-		
Nag	3750	19	0138	70	CD	-	4	-		
Mor	545	19	1352	132	CD	43	17	-		
Syd	200	19	2106	1.5	CD	23	8	-		
Nag	3750	20	0047	1.7	SD	-	6	-		
Syd	200	20	0156	0.2	SD	15	7	-		
Ned	200	21	0858	1.9	CA	17	5	-		
Ned	140	21	0950	2.7	CD	19	-	-		
Ned	200	21	1129	2.7	CA	18	-	-		
Ned	200	21	1249	3.9	CA	18	10	-		
Syd	600	21	2345	70	CD	12	2	-	62,98,200,1200,3000,9400	Fade
Syd	1200	21	2345	15	CD	28	20	-	62,98,200,600,3000,9400	Fade
Syd	3000	21	2346	14	SD	130	68	-	62,98,200,600,1200,9400	Fade
Syd	200	21	2350	1.7	CD	177	58	-	62,98,600,1200,3000,9400	Fade
Syd	9400	21	2350	10	SD	76	40	-	62,98,200,600,1200,3000	Fade
Syd	98	21	2351	100	CD	405	107	R.H.	62,200,600,1200,3000,9400	Fade
Syd	62	21	2354	82	CD	948	54	-	98,200,600,1200,3000,9400	Fade
Nag	3750	22	0241	3	SD	-	4	-		
Nag	3750	22	0331	0.5	SD	-	4	-		
Ott	2800	22	1839	4	CD	-	4	-		
Ned	200	24	1000	360	M	15	4	-		
Cav	81	24	1133	1	SD	1	1	-		
Cav	175	24	1135	2.5	SD	2	1	-		
Cav	175	24	1158	1.5	SD	3	1	-		
Cav	175	24	1320	1	SD	1	1	-		
Syd	62	25	0231	0.3	CD	68	32	-	98	
Syd	98	25	0231	0.4	CD	223	99	-	62	
Syd	200	25	0327	3	CD	12	4	-		
Ned	200	25	0830	30	M	55	-	-		
Ned	200	25	1115	7.5	M	12	-	-		
Syd	200	25	2307	11	CD	13	3	-		
Nag	3750	26	0154	6	SD	-	6	-		
Syd	200	26	0601	27	CD	12	4	-		
Syd	200	26	2139	26	CD	27	4	-		
Ned	200	27	0820	105	M	15	-	-		
Ned	200	27	1215	165	M	36	10	-		
Nag	3750	28	0223	4	CD	-	6	-		

Ned	200	Nov 28	1056	3.9	CD	12	7		
Cav	81	28	1214	2	SD	-	2	-	
Cav	81	28	1316	4	SA	-	2	-	
Syd	200	29	0443	1.2	CD	12	4		
Syd	200	29	0528	0.7	CD	15	6		
Meu	255	29	2040	5.9	CA	36	15		
Syd	200	30	0338	0.2	CD	8	4		
Cav	81	30	1418	5	SD	-	2	-	175
Cav	175	30	1418	4	SD	2	1	-	81
Syd	200	Dec 5	2143	3	M	21	2	-	62,98
Syd	62	5	2145	0.4	SD	63	27	-	98,200
Syd	98	5	2145	0.4	CD	25	13	-	62,200
Cor	200	7	2041	1	CD	> 4	> 4	-	62
Syd	62	7	2023	0.2	SD	47	21	-	200
Syd	62	7	2053	0.3	CD	58	27	-	
Syd	62	7	2148	2.6	CD	68	29	-	98
Tok	60	8	0221	1	CD	30	15	-	62,98
Syd	98	8	0221	0.8	CD	66	24	-	60,62
Syd	62	8	0221	1	CD	> 68	53	-	60,98
Syd	98	9	2139	55	CD	44	12	R.H.	
Syd	200	11	0316	6.5	CD	110	40		62,98
Syd	62	11	0316	12.5	CD	68	48		98,200
Syd	98	11	0317	5	CD	892	156	0	62,200
Syd	200	12	0252	4.5	M	11	1		62,98
Syd	62	12	0252	4	CD	69	15		98,200
Syd	98	12	0252	1.3	CD	28	9	-	62,200
Syd	62	12	0420	0.2	SD	48	22		
Ned	200	12	1000	6.1	CD	16	6		140
Ned	140	12	1004	2.4	CD	90	13		
Ned	140	12	1338	0.8	SD	60	-		
Syd	200	12	2007	7.6	M	9	< 1		
Syd	98	12	2013	0.5	CD	68	28	-	62
Syd	62	12	2041	1	SD	> 79	72	-	98
Syd	98	13	0057	0.2	SD	44	25	-	
Syd	62	13	0225	10.3	M	7	3	-	98
Syd	62	13	0300	9	M	85	4		
Syd	98	13	0309	0.2	SD	28	16	-	
Syd	98	13	0318	1	M	118	17	-	
Syd	62	13	0335	0.3	SD	85	49		
Syd	62	13	0400	0.4	SD	> 85	62		
Syd	62	13	0530	0.3	CD	75	44		
Syd	98	13	0610	0.2	SD	38	22	-	
Syd	98	13	0706	4.5	M	555	15	-	62
Ned	200	13	1011	5.6	CD	11	2		
Syd	200	15	0429	2	M	12	2		
Ned	200	15	0815	13	M	10	3		
Ned	200	15	1012	7	CD	32	15		140
Ned	140	15	1020	3.2	CD	28	6		
Ned	200	15	1031	0.8	CD	15	-		140
Syd	600	16	0513	7	CD	4	1		200,1200
Syd	1200	16	0514	4	CD	4	1		200,600
Syd	200	16	0515	3.2	CD	112	33		600,1200
Syd	200	16	0549	0.2	SD	11	7		
Syd	600	16	0619	10	CD	3	1		
Syd	98	16	0752	1.7	CD	704	94	-	200
Ned	140	16	0954	5.6	CD	19	-		
Ned	140	16	1114	1.2	CD	60	20		
Syd	98	16	2005	0.3	CD	38	21	-	
Syd	62	17	1945	0.3	SD	63	28		
Syd	200	17	2240	10	CD	21	6		
Syd	200	20	2348	1.9	M	23	4		
Cav	175	21	1228	1.5	SD	4	3	-	
Syd	98	23	0510	3.5	M	28	1	-	
Syd	98	23	2132	5.8	M	33	1	-	62
Syd	200	25	0050	1.2	CD	18	8		
Syd	98	25	0216	0.3	CD	82	43	-	
Syd	200	25	0320	6	CD	69	10	-	
Syd	98	25	0324	0.3	CD	> 81	45	-	
Syd	200	25	0547	7	M	87	5		
Syd	62	25	0552	0.5	CD	341	131		98
Syd	200	25	0737	0.2	SD	15	6		
Syd	62	26	2041	0.2	CD	32	17	-	98,200
Syd	98	26	2041	0.2	SD	58	35	-	62,200
Syd	200	26	2041	1	CD	10	4	-	62,98
Syd	200	27	0729	0.5	CD	19	6		98
Syd	98	27	0731	2.3	M	33	1	-	200
Ned	140	29	1408	1	CD	22	5		