IV. SOLAR RADIO EMISSION

CO-OPERATING OBSERVATORIES

Details relating to the contributors to the first quarter of 1955 are as follows:-

OBSERVING STATION	ABBREVIATION	FREQUENCIES USED Mc/s	NORMAL OBSERVING PERIOD (Hours U.T.)
Cavendish Laboratory, Cambridge, England	Cav	81 175	10 - 15 10 - 15
Radiophysics Laboratory, Sydney, Australia	Syd	62 98 200 600 1200	20 - 08 20 - 08 20 - 08 20 - 08 20 - 08
National Research Council, Ottawa, Canada	Ott	2800	12 - 24
Cornell University, Ithaca, N.Y., U.S.A.	Cor	200	13 - 20
Tokyo Astronomical Observatory, Mitaka, Tokyo	Tok	100 200	00 - 06 00 - 06
Research Institute of Atmospherics, Nagoya University, Toyokawa, Japan	Nag	3750	00 - 08
Observing Station Nederhorst, Den Berg - Radio (Nera)	Ned	200	07 - 16
Cornell University, Solar Radio Observatory, U.S.A.F. Upper Air Research Observatory, Sunspot, New Mexico	Sun	200	16 - 23
Institutt for Teoretisk Astrofysikk, Universitetet, Blindern, Oslo, Norway	Osl	200	08 - 16

TABULATED QUANTITIES

1. FLUX DENSITY 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

$$\text{Flux Density} = 2.09 \times 10^{-32} f^2 T$$

where f is the frquency in megacycles 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 flux density 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 value, and M is inserted in this column. The intensity unit in these columns is 10^{-21} watts metre^{-2}(c/s)$^{-1}$.

CORRECTIONS

1. FLUX DENSITY

Nag 3750 October 24th, 1954 read 83 for -

4. OUTSTANDING OCCURRENCES

Ott 2800 August 9th, 1954 read 2154 for 2145

1. FLUX DENSITY

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

JANUARY 1955

	CAV	CAV	SYD	COR	TOK	NED	SUN	NED	OTT	NAG
Mc/s	81	175	200	200	200	200	200	545	2800	3750
Date										
1	3.0	-	-	20	9	-	25	-	-	88
2	2.0	-	-	13	9	-	15	-	78	87
3	1.8	-	-	11	9	9	14	27	78	88
4	1.4	4	20,-	18	10	10	21	27	83	88
5	1.7	6	-	23	15	17	29	28	90	93
6	10.0	30	17,-	21	23	66	58	30	101	108
7	3.0	10	-	25	45	30	23	31	105	113
8	1.5	8	-,15	14	14	20	15	31	-	114
9	3.0	8	16	15	10	-	19	-	103	111
10	10.0	12	15	16	7	22	12	31	98	111
11	2.3	7	23	17	11	12	14	30	100	111
12	2.5	7	19	14	8	10	-	29	100	109
13	7.0	16	15	25	9	15	-	30	97	109
14	1.5	5	12	11	11	10	-	28	96	105
15	9.0	8	-,13	37	15	21	-	-	-	103
16	3.0	-	-	14	32	-	-	-	90	101
17	1.5	-	-	13	10	15	-	29	88	97
18	1.1	-	-	11	9	9	14	27	85	96
19	1.3	-	-,15	10	8	14	8	28	85	92
20	1.2	-	18	11	8	8	-	27	80	89
21	1.3	-	16	10	8	8	10	27	77	87
22	1.2	-	16,-	10	-	8	-	26	78	85
23	1.3	-	15,-	11	-	-	8	-	78	84
24	-	-	15	12	-	12	11	28	83	91
25	-	-	15	10	-	8	5	27	83	90
26	-	-	14	10	-	-	7	-	83	90
27	-	-	15	10	9	-	-	-	78	90
28	-	-	15,-	10	8	-	-	-	81	90
29	-	-	-	10	7	7	-	27	83	89
30	-	-	14	16	8	-	19	-	-	91
31	-	-	17	62	20	48	42	31	86	93

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.

3-hourly medians at 200 Mc/s from COR, NED, OSL, SUN, TOK

JANUARY 1955

U.T.	00-03	03-06	06-09	09-12	12-15	15-18	18-21	21-24	Daily Mean
Date									
1	9	-	-	-	19	20	26	23	19
2	9	-	-	-	12	14	15	15	13
3	9	-	-	9	10	13	12	14	11
4	10	-	-	10	13	17	22	23	16
5	15	-	-	17	18	26	27	29	22
6	19	26	-	65	67	59	64	50	50
7	50	40	-	32	27	24	24	21	31
8	12	-	-	19	18	14	14	18	16
9	10	-	-	-	14	17	18	18	15
10	14	-	-	18	22	16	13	14	16
11	12	14	-	13	14	17	16	11	14
12	9	8	-	10	11	13	17	-	11
13	8	9	-	11	23	14	28	-	16
14	11	10	-	10	11	11	11	-	11
15	9	19	-	21	28	33	44	-	26
16	32	-	-	-	13	14	16	-	19
17	11	8	-	15	14	14	11	-	12
18	9	9	-	9	11	12	12	16	11
19	8	8	-	10	15	12	8	6	10
20	-	8	-	8	10	11	11	-	10
21	8	-	-	8	9	10	10	9	9
22	-	-	-	8	9	10	10	-	9
23	-	-	-	-	11	8	9	10	10
24	-	-	-	11	13	11	10	11	11
25	-	-	-	8	10	10	8	4	8
26	-	-	-	-	10	9	8	6	8
27	9	-	-	-	10	10	10	-	10
28	8	-	-	-	10	10	10	-	10
29	7	-	-	7	8	10	10	-	8
30	8	-	-	-	14	15	21	20	16
31	18	16	-	50	62	45	55	34	40

1. FLUX DENSITY

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

FEBRUARY 1955

	CAV	CAV	SYD	COR	TOK	NED	SUN	OSL	NED	SYD	SYD	OTT	NAG
Mc/s	81	175	200	200	200	200	200	200	545	600	1200	2800	3750
Date													
1	-	-	16	43	20	35	-	-	29	26	19	84	93
2	-	-	24	19	37	40	-	-	29	23	23	86	94
3	6.0	6	19	13	14	9	-	-	30	-	-	89	95
4	10.0	21	23	28	15	41	-	-	31	26	29	90	100
5	5.0	25	19	31	28	55	43	39	35	-	-	85	97
6	4.0	16	16	14	24	-	41	12	-	-	-	87	93
7	3.0	18	15	14	11	16	26	9	31	24	-	89	94
8	3.0	15	18	15	14	20	23	13	31	23	26	91	95
9	8.0	23	18	25	23	34	16	21	29	25	22	92	95
10	14.0	14	15	15	15	15	12	9	31	26	17	86	96
11	20.0	16	17	18	12	20	15	12	30	26	26	83	93
12	25.0	12	19	17	16	21	10	13	29	-	-	-	93
13	4.0	5	-	12	12	-	12	7	-	-	-	88	91
14	2.0	5	16	10	-	10	11	6	30	14	22	84	91
15	1.5	6	17	11	9	10	-	6	29	14	16	83	90
16	1.0	4	17	10	9	9	-	6	28	20	24	80	89
17	1.0	5	17	10	9	9	-	6	29	25	17	77	87
18	1.0	6	16	10	8	9	-	6	29	22	26	80	87
19	1.0	5	17	11	8	9	-	6	28	-	-	80	87
20	1.0	4	17	10	-	-	-	6	-	-	-	86	-
21	1.0	4	16	10	7	9	-	6	28	23	23	82	89
22	1.2	5	16	10	7	8	-	6	30	-	-	79	88
23	1.4	4	16	10	8	8	-	6	29	-	-	86	90
24	1.7	4	18	10	8	7	-	6	31	18	-	87	92
25	1.0	4	17	10	8	8	-	6	30	16	-	85	92
26	1.5	5	18	10	-	8	10	6	30	-	-	84	91
27	1.2	5	-	10	-	-	10	6	-	-	-	-	-
28	1.7	5	19	10	-	8	9	6	30	-	-	82	92

3-hourly medians at 200 Mc/s from COR, NED, OSL, SUN, TOK

FEBRUARY 1955

U.T.	00-03	03-06	06-09	09-12	12-15	15-18	18-21	21-24	Daily Mean
Date									
1	24	16	-	27	52	33	34	21	30
2	37	37	-	44	30	18	16	-	30
3	14	13	-	10	11	12	14	20	13
4	15	-	-	33	36	24	38	26	29
5	27	25	39	61	29	43	35	21	35
6	29	19	16	13	12	16	13	16	17
7	12	13	9	11	13	18	22	19	15
8	16	15	12	16	15	21	24	25	18
9	26	20	17	27	29	22	17	18	22
10	15	15	10	11	13	15	15	17	14
11	13	16	11	16	17	16	15	18	15
12	17	20	14	18	17	14	13	9	15
13	12	-	8	7	9	9	12	12	10
14	-	-	7	8	8	9	10	11	9
15	9	-	7	8	9	8	11	-	9
16	9	-	7	8	8	8	11	-	9
17	9	9	6	8	8	8	10	-	8
18	8	-	6	8	8	8	10	-	8
19	8	-	6	7	7	8	11	-	8
20	-	-	6	6	8	8	11	-	8
21	7	-	6	7	9	8	10	-	8
22	7	-	7	7	8	8	10	-	8
23	8	-	7	7	7	8	10	-	8
24	8	-	7	7	8	8	10	-	8
25	8	-	7	7	8	8	10	-	8
26	-	-	7	7	8	9	10	10	9
27	-	-	6	6	8	9	10	10	8
28	-	-	7	7	9	9	9	9	8

1. FLUX DENSITY

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

MARCH 1955

	CAV	CAV	SYD	COR	TOK	NED	OSL	NED	SYD	OTT	NAG
Mc/s	81	175	200	200	200	200	200	545	600	2800	3750
Date											
1	3.0	14	19	25	-	30	20	38	22	-	91
2	1.5	5	19,-	10	7	8	7	29	25	79	90
3	1.7	5	21,-	10	-	8	6	30	-	80	88
4	5.0	7	21	13	20	13	9	30	22	77	88
5	2.0	5	20	10	-	8	6	29	-	80	88
6	1.9	5	23	10	-	-	6	-	-	79	89
7	3.0	5	21	10	-	8	6	31	17	76	88
8	2.5	4	22	10	9	8	6	29	16	76	87
9	3.0	4	22	10	-	8	6	28	20	76	86
10	2.0	4	22	10	-	8	6	30	-	80	86
11	2.5	4	22	10	8	8	6	30	21	74	86
12	2.1	5	22	10	9	8	6	28	-	75	85
13	1.8	4	-	-	-	-	5	-	-	-	84
14	2.0	4	22,-	-	9	8	5	29	20	76	84
15	1.7	4	21	-	8	8	5	28	20	76	85
16	1.4	4	20	-	-	8	5	27	21	76	84
17	1.3	4	22	10	8	8	5	27	-	73	84
18	1.5	4	22	10	-	8	5	28	21	76	84
19	1.4	4	20,-	10	8	7	5	27	-	-	85
20	1.3	4	-	10	-	-	6	-	-	76	85
21	1.2	4	22	10	-	7	5	26	23	75	85
22	1.3	4	22	10	9	7	6	27	-	-	85
23	1.2	4	22,-	10	-	-	6	-	-	74	84
24	-	4	24,-	10	-	8	6	24	-	74	84
25	-	4	27	10	-	-	6	27	-	76	84
26	-	4	-	10	9	7	6	25	-	-	85
27	-	4	-	10	-	-	6	-	-	-	85
28	-	4	-	10	-	7	5	25	-	-	84
29	1.3	4	-	10	-	7	5	26	-	77	84
30	1.4	4	-	10	-	9	6	-	22	77	85
31	1.2	4	-	10	-	8	6	-	15	78	85

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.

3-hourly medians at 200 Mc/s from COR, NED, OSL, SUN, TOK

MARCH 1955

U.T.	00-03	03-06	06-09	09-12	12-15	15-18	18-21	21-24	Daily Mean
Date									
1	-	-	20	26	26	27	15	-	23
2	7	7	8	7	8	9	10	-	8
3	-	-	7	7	8	8	10	-	8
4	21	20	13	13	11	10	12	-	14
5	-	-	9	7	8	8	10	-	8
6	-	-	6	6	8	8	10	-	8
7	-	-	7	7	8	8	10	-	8
8	9	10	6	7	8	8	10	-	8
9	-	-	7	8	8	8	10	-	8
10	-	-	7	7	8	8	10	-	8
11	8	-	8	8	8	8	10	-	8
12	10	-	8	7	8	8	10	-	9
13	-	-	-	5	5	5	-	-	5
14	9	-	8	7	7	7	-	-	8
15	7	8	8	7	7	7	-	-	7
16	-	-	7	7	7	6	-	-	7
17	8	9	7	6	8	7	10	-	8
18	-	-	6	7	8	10	10	-	8
19	8	-	5	6	7	7	10	-	7
20	-	-	6	6	8	7	10	-	7
21	-	-	6	6	8	8	10	-	8
22	10	-	7	7	8	10	10	-	9
23	-	-	6	6	8	8	10	-	8
24	-	-	6	7	8	8	10	-	8
25	-	-	6	7	8	8	10	-	8
26	-	10	6	6	8	8	10	-	8
27	-	-	6	6	8	8	10	-	8
28	-	-	6	6	7	7	10	-	7
29	-	-	6	6	7	8	10	-	7
30	-	-	7	7	8	8	10	-	8
31	-	-	7	7	8	8	10	-	8

2. POLARISATION

No polarisation measurements were taken during this quarter.

3. VARIABILITY

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

JANUARY 1955

	CAV	TOK	CAV	SYD	COR	TOK	NED	SUN	NED
Mc/s	81	100	175	200	200	200	200	200	545
Date									
1	2	0	-	0	2	1	-	2	-
2	0	0	-	0	2	0	-	2	-
3	0	0	-	0	1	0	0	2	0
4	0	0	0	1,0	1	0	0	2	0
5	0	0	0	1,0	1	0	0	2	0
6	3	0	3	2,1	3	1	3	2	0
7	2	0	1	1	2	1	2	2	0
8	1	0	1	1,0	2	1	2	2	0
9	1	0	2	0	1	2	-	2	-
10	3	0	1	2,1	1	1	2	1	0
11	2	0	0	0,1	2	1	0	2	0
12	2	0	0	0	1	1	0	2	0
13	2	1	1	1,0	2	1	0	1	0
14	0	0	0	0	0	1	0	0	0
15	0	1	0	1	1	1	1	1	-
16	0	0	-	1,2	1	1	-	2	-
17	0	0	-	0	1	0	1	1	0
18	0	0	-	0	1	1	0	2	0
19	0	-	-	0	0	0	0	0	0
20	0	-	-	0	1	0	0	0	0
21	0	0	-	0	0	0	0	0	0
22	0	0	-	0	0	0	0	0	0
23	0	0	-	0	0	0	-	1	-
24	-	0	-	0	1	0	1	0	0
25	-	0	-	1,0	0	0	0	0	0
26	-	0	-	1,0	1	0	-	0	-
27	-	0	-	0	0	0	-	0	-
28	-	0	-	0	0	0	-	-	-
29	-	0	-	0	0	0	0	0	0
30	-	0	-	0,1	2	0	-	2	-
31	-	0	-	1,2	2	1	3	2	0

FEBRUARY 1955

	CAV	TOK	CAV	SYD	COR	TOK	NED	SUN	OSL	NED
Mc/s	81	100	175	200	200	200	200	200	200	545
Date										
1	-	-	-	1	2	1	3	-	-	0
2	-	0	-	1,0	2	1	3	-	-	0
3	1	-	1	1,0	1	1	1	-	-	0
4	3	0	3	2	2	2	3	-	-	0
5	1	1	2	1	2	1	3	2	2	0
6	1	0	2	1,0	2	1	-	2	2	-
7	0	0	1	0	1	1	2	2	1	0
8	0	0	1	0	2	1	2	2	1	0
9	0	0	1	1,0	1	1	1	2	0	0
10	2	1	1	1,0	0	1	1	1	0	0
11	2	0	1	1,0	1	0	1	1	0	0
12	3	0	1	-	2	1	1	1	0	0
13	0	0	0	0	0	0	-	0	0	-
14	0	0	0	1,0	0	0	0	0	0	0
15	0	0	1	0	0	0	0	-	0	0
16	0	0	0	0	0	0	0	-	0	0
17	0	0	0	0	1	0	0	-	0	0
18	0	0	0	0	0	0	0	-	0	0
19	0	0	0	0	0	0	0	-	0	0
20	0	-	0	0	0	-	-	-	0	-
21	0	0	0	0	0	0	0	-	0	0
22	0	0	0	0	0	0	0	-	0	0
23	0	-	0	0	0	0	0	-	0	0
24	0	-	0	1,0	0	1	0	-	0	0
25	0	1	0	0	0	1	0	-	0	0
26	0	1	0	0	0	1	0	0	0	0
27	0	0	1	-	0	0	-	0	0	-
28	0	0	0	0	0	0	0	0	0	0

MARCH 1955

	CAV	TOK	CAV	SYD	COR	TOK	NED	OSL	NED
Mc/s	81	100	175	200	200	200	200	200	545
Date									
1	2	0	2	0	3	0	2	2	1
2	0	-	1	0,-	1	0	0	0	0
3	0	-	0	0,-	0	0	0	0	0
4	2	0	0	0	1	1	1	1	0
5	1	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	-	0	-
7	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	-
9	0	0	0	0	0	1	0	0	0
10	0	0	0	0	0	0	0	0	0
11	0	-	0	0	0	0	0	0	0
12	0	-	1	0,-	0	0	0	0	0
13	0	0	0	-	-	0	-	0	-
14	0	0	0	0,-	-	1	0	0	0
15	0	0	0	0	-	0	0	0	0
16	0	-	0	0	-	-	0	0	0
17	0	-	0	0	0	1	0	0	0
18	0	0	0	0	0	0	0	0	0
19	0	0	0	0,-	0	0	0	0	0
20	0	0	0	-	0	0	-	0	-
21	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0
23	0	-	0	0,-	0	-	-	0	-
24	-	-	0	0,-	0	-	0	0	0
25	-	-	0	0,-	0	-	-	0	0
26	-	0	0	-	0	0	0	0	0
27	-	0	0	-	0	0	-	0	-
28	-	0	0	-	0	0	0	0	0
29	0	0	0	-	0	0	0	0	0
30	0	-	0	-	0	-	1	0	-
31	0	0	0	-	0	1	0	0	-

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.

4. OUTSTANDING OCCURRENCES

Station and frequency		Date 1955	Starting time	Duration	Type	Maximum flux density Inst.	Smooth	Polarisation	Remarks
Mc/s			U.T.	Minutes		10^{-21} w m^{-2}(c/s)$^{-1}$			
Sun	200	Jan 3	2122	130.0	CD	>4.3	3.1		
Ned	200	5	0900	1.5	CD	11.0	2.0		
Ned	200	5	0906	1.5	CD	13.0	3.0		
Cav	175	5	1040	1.0	SD	1.8	1.0		
Syd	62	5	2359	1.7	CD	170.0	89.0		Also Syd 200
Sun	200	6	0006	1.5	CD	>6.4	>6.4		
Syd	200	6	0006	3.0	CD	84.2	25.0		
Syd	200	6	0023	0.2	SD	25.0	13.0		
Syd	98	6	0106	0.5	SD	72.0	28.0		
Syd	62	6	0334	0.6	CD	>78.0	>78.0		Also Syd 98, 200
Nag	3750	6	0336	0.5	SD		6.0		
Ned	545	6	0951	2.7	CD	3.5	0.3		
Ned	545	6	1157	3.5	CD	3.7	0.3		
Sun	200	6	1535	1.0	CA	>15.6	12.1		
Ott	2800	6	1555	80.0	CD		>10.4		
Sun	200	6	1629	1.5	CA	>16.3	8.5		
Ott	2800	6	1744	9.0	CD		10.4		
Sun	200	6	1750	1.8	CA	14.9	11.5		
Sun	200	6	1757	1.5	CA	>15.6	11.5		
Nag	3750	7	0503	15.0	SD		8.0		Flare (0520-0537)
Ott	2800	7	1512	1.0	SD		0.3		
Ott	2800	7	1515	7.0	SD		0.2		
Ott	2800	7	1523	7.0	SD		0.2		
Ned	200	8	0951	93.0	CD	>15.0	3.0		
Ned	200	8	1206	37.5	CD	>15.0	4.0		
Ned	200	8	1357	32.0	CD	>15.0	4.0		
Cor	200	8	1410	0.5	CA	>6.9	6.7		
Sun	200	8	1421	5.0	CD	>9.9	>9.9		
Sun	200	8	1823	50.0	CD	>9.9	>9.9		
Sun	200	8	2216	120.0	CD	>9.9	>9.9		
Syd	62	9	0114	0.8	CD	36.0	16.0		
Nag	3750	9	0220	3.0	SD		4.0		
Cav	81	9	1132	3.0	CA	1.5	0.7		
Cav	81	9	1146	0.5	SD	1.0	0.5		
Syd	62	9	2356	0.2	SD	19.0	11.0		
Syd	62	10	0104	0.7	CD	43.0	17.0		Also Syd 200
Syd	62	10	0308	1.0	CD	79.0	21.0		
Syd	62	10	0423	4.5	CD	71.0	26.0		Also Syd 200
Ned	545	10	1057	1.8	CD	12.0	2.0		
Ned	200	10	1210	40.0	CD	15.0	3.0		
Cav	175	10	1216	20.0	CD	2.4	1.5		
Cav	81	10	1230	15.0	CD	3.0	2.0		
Syd	62	10	2050	2.5	CD	172.0	66.0		
Syd	62	11	0318	2.0	CD	660.0	218.0		
Ned	200	11	0936	9.0	CD	14.0	2.0		
Ned	545	11	1015	9.5	CD	6.8	2.1		
Ned	200	11	1016	10.5	CD	9.0	3.5		
Ned	200	12	0951	23.5	CD	33.0	2.5		
Syd	62	12	2140	0.2	SD	69.0	33.0		
Syd	62	15	0055	0.4	CD	>78.0	39.0		
Syd	62	15	0351	8.7	CD	78.0	19.0		
Tok	200	15	0351	29.0	CD	25.0	20.0		
Nag	3750	15	0351	31.0	CD		44.0		
Ott	2800	15	1445	4.0	SD		4.9		
Ott	2800	16	2105	30.0	CD		>13.3		
Cor	200	16	2106	23.0	CD	>7.0	>7.0		
Sun	200	16	2107	46.5	CD	>28.7	21.3		
Syd	62	18	0027	1.2	CD	18.0	8.0		
Syd	62	18	2043	4.0	CD	59.0	28.0		
Ott	2800	18	2045	16.0	CD		1.0		
Ned	200	19	1310	75.0	CD	16.0	5.0		
Cor	200	19	1312	72.0	CD	>7.2	>7.2		
Ned	545	19	1336	47.0	CD	7.5	2.0		
Ott	2800	19	1336	27.0	CD		4.3		
Cav	81	19	1342	40.0	SD	1.6	1.0		
Cav	81	21	1239	1.0	SD	0.4	0.2		
Ott	2800	23	1844	2.0	SD		0.09		Flare (1845-1910)
Sun	200	23	2218	21.5	SD	3.7	3.1		Flare (2230-2245)
Syd	200	25	0039	0.3	CD	>76.0	40.0		
Syd	200	25	0046	1.0	CD	76.0	30.0		
Nag	3750	25	0131	2.0	CD		4.0		
Syd	200	25	0200	4.0	CD	74.0	24.0		
Syd	62	30	0223	0.3	SD	32.0	18.0		
Syd	62	30	0258	0.3	SD	25.0	15.0		
Syd	98	30	0311	0.2	SD	21.0	9.0		Also Syd 62
Syd	98	30	0356	0.5	SD	32.0	16.0		
Syd	98	30	0420	1.5	CD	37.0	10.0		
Syd	98	30	0748	0.1	SD	39.0	16.0		
Sun	200	30	1727	69.0	CA	>6.4	>6.4		Flare (1740-1807)
Cor	200	30	1732	68.0	CA	>7.8	>7.8		
Ott	2800	30	1740	50.0	CD		0.3		
Syd	62	30	2104	0.2	SD	44.0	25.0		
Syd	62	30	2110	3.2	M	976.0	116.0		Also Syd 98
Syd	62	30	2141	0.1	SD	291.0	124.0		
Syd	62	30	2158	1.5	CD	92.0	25.0		
Syd	62	30	2227	3.3	CD	976.0	177.0		Flare (2230-2240)
Sun	200	30	2227	4.3	CA	>8.5	>8.5		Also Syd 200
Syd	98	30	2228	3.0	CD	1925.0	158.0		
Syd	62	30	2319	0.3	CD	78.0	27.0		
Syd	62	30	2341	0.2	SD	57.0	21.0		
Syd	62	31	0014	1.7	CD	426.0	107.0		Also Syd 98
Syd	62	31	0105	3.3	CD	415.0	21.0		
Syd	98	31	0108	0.6	CD	18.0	7.0		
Syd	62	31	0151	0.2	SD	675.0	231.0		
Syd	62	31	0222	16.0	CD	1296.0	107.0		
Syd	98	31	0223	0.4	CD	28.0	12.0		
Syd	98	31	0228	3.0	CD	1050.0	350.0		
Syd	62	31	0307	2.2	CD	213.0	63.0		
Syd	98	31	0310	0.3	CA	24.0	10.0		
Cor	200	31	1314	0.5	CD	>7.8	7.6		

4. OUTSTANDING OCCURRENCES

Station and frequency	Date 1955	Starting time	Duration	Type	Maximum flux density Inst.	Smooth	Polar-isation	Remarks
Mc/s		U.T.	Minutes		10^{-21} w m^{-2}(c/s)$^{-1}$			
Syd 62	Jan 31	2337	2.0	CD	92.0	22.0		
Syd 62	Feb 1	0005	0.1	SA	53.0	25.0		
Syd 62	1	0010	0.7	CA	78.0	27.0		
Syd 62	1	0053	0.3	CA	46.0	20.0		
Syd 62	1	0159	16.0	CD	75.0	27.0		
Syd 98	1	0223	0.4	CD	1242.0	648.0		Also Syd 62
Syd 62	1	0230	0.3	CA	256.0	142.0		
Syd 62	1	0246	0.3	CA	799.0	284.0		
Syd 62	1	0259	0.2	SD	68.0	34.0		Also Syd 98
Syd 62	1	0308	13.5	M	320.0	24.0		
Syd 62	1	0351	2.7	M	249.0	98.0		
Syd 98	1	0505	1.2	CA	702.0	162.0		
Syd 98	1	0605	1.0	CA	351.0	81.0		
Syd 62	1	2019	0.8	CD	75.0	32.0		
Syd 62	1	2140	2.0	CD	142.0	50.0		
Syd 62	1	2159	0.2	SD	27.0	16.0		
Syd 62	1	2210	1.2	CD	888.0	277.0		
Syd 62	1	2301	7.3	CD	888.0	156.0		Also Syd 98, 200
Syd 98	2	0022	0.8	CD	44.0	16.0		Also Syd 62
Syd 98	2	0058	0.2	SA	70.0	30.0		
Syd 62	2	0159	11.0	CD	825.0	231.0		
Syd 98	2	0201	9.5	CA	81.0	16.0		
Syd 62	2	0244	10.0	CD	825.0	198.0		
Syd 98	2	0244	1.5	CA	1080.0	162.0		
Ned 200	2	1001	2.3	CD	30.0	6.0		
Ned 545	2	1001	1.6	CD	4.6	0.5		
Ned 200	2	1154	80.0	CD	>100.0	30.0		
Ned 545	2	1154	27.0	CD	19.0	3.0		
Cor 200	4	1847	0.5	CA	>7.9	7.6		
Cor 200	6	1732	5.0	CD	>8.1	5.7		
Sun 200	6	1732	1.5	SD	>7.1			
Syd 62	6	2359	0.2	SD	21.0	10.0		
Ott 2800	7	2129	3.0	SD		1.8		Flare (2125-2140)
Syd 62	7	2130	1.3	SD	>82.0	>82.0		
Syd 98	7	2130	1.2	CD	>83.0	>83.0		
Syd 62	8	0015	0.2	SD	28.0	14.0		
Syd 98	8	0112	0.2	SD	34.0	14.0		Also Syd 62
Nag 3750	8	0335	6.0	SD		4.0		
Syd 98	8	0636	2.5	CD	>70.0	39.0		Also Syd 62
Ott 2800	8	1412	3.0	SD		1.0		
Syd 62	8	2157	2.2	CD	38.0	21.0		
Syd 62	8	2344	0.2	SD	24.0	14.0		
Syd 98	10	0135	3.0	CD	1568.0	280.0		
Syd 62	10	0137	2.5	CD	>78.0	34.0		
Nag 3750	10	0137	6.0	CD		8.0		
Syd 62	10	0429	0.5	CD	64.0	27.0		
Osl 200	10	1040	22.0	CD	>26.0	9.0		
Ned 200	10	1043	8.7	CD	110.0	6.0		
Ott 2800	10	1351	2.0	SD		1.4		
Cor 200	10	1353	1.0	SD	>8.1	5.7		
Syd 62	11	0501	0.2	SD	50.0	23.0		
Syd 98	11	0547	1.2	CD	1999.0	615.0		Also Syd 62
Syd 62	11	0642	1.7	CD	20.0	11.0		Also Syd 98
Syd 98	11	2355	0.4	CD	86.0	22.0		
Syd 98	12	0225	0.7	CD	83.0	32.0		
Tok 200	12	0543	2.0	CD	110.0	40.0		
Cav 81	12	1121	2.0	CA	4.0	3.0		
Syd 62	13	0108	0.2	SD	85.0	32.0		
Syd 62	13	0126	4.0	CD	85.0	18.0		Flare (0127-0140)
Syd 98	13	0126	3.0	CD	86.0	18.0		
Ott 2800	13	2003	3.0	SD		1.2		
Syd 62	13	2123	0.4	CD	31.0	17.0		
Syd 98	13	2240	0.3	CD	23.0	15.0		
Syd 62	13	2309	0.5	CD	86.0	28.0		Also Syd 98
Syd 62	14	0155	5.0	CD	86.0	24.0		Flare (0154-0211)
Syd 98	14	0155	5.0	CD	78.0	7.0		
Nag 3750	14	0159	1.5	SD		3.0		
Syd 62	14	0300	1.5	CD	86.0	32.0		Also Syd 98
Syd 62	15	0206	1.0	CD	34.0	13.0		Flare (0208-0222)
Syd 62	15	0219	0.8	CD	49.0	19.0		
Syd 62	15	0638	2.7	SD	>86.0	>86.0		
Cor 200	17	1633	1.5	SD	>8.2	4.4		
Ott 2800	17	1636	3.0	SD		0.4		
Nag 3750	24	0102	2.5	CD		147.0		
Tok 200	24	0104	4.0	CD	360.0	100.0		Also Syd 200
Syd 62	24	0105	7.2	CD	>86.0	21.0		
Syd 98	24	0105	6.7	CD	1650.0	150.0		
Syd 62	24	0137	1.0	CD	64.0	24.0		Also Syd 98,200
Syd 98	24	0701	1.3	CD	>63.0	40.0		Also Syd 200
Nag 3750	25	0126	2.5	SD		6.0		
Cav 81	25	1208	1.0	SD	1.5	0.7		
Ott 2800	25	1313	2.5	SD		1.4		
Tok 200	26	0008	0.2	SD	50.0	25.0		
Ott 2800	27	1447	2.5	SD		0.7		
Syd 98	28	0443	0.4	SD	39.0	14.0		Also Syd 62
Ott 2800	28	2149	11.0	CD		1.6		
Nag 3750	Mar 1	0600	28.0	CD		1.1		
Cor 200	2	1545	5.5	CD	>8.7	7.9		
Ned 200	2	1545	5.6	CD	105.0	42.0		
Osl 200	2	1554	2.0	SD	>13.0			
Syd 62	2	2132	9.2	CD	85.0	17.0		Also Syd 98,200
Ned 200	3	1354	1.0	CD	9.9	2.0		
Cav 175	8	1216	3.0	CD	1.2	0.2		
Tok 200	17	0038	2.0	CD	250.0	60.0		
Cav 81	20	1251	1.5	SD	1.7	0.5		
Cav 175	20	1251	1.5	SD	2.8	0.5		
Cav 175	24	1410	2.0	SD	3.0	1.0		

Sydney, October 1955

S.F.Smerd

IV. SOLAR RADIO EMISSION

CO-OPERATING OBSERVATORIES

Details relating to the contributors to the second quarter of 1955 are as follows:-

OBSERVING STATION	ABBREVIATION	FREQUENCIES USED	NORMAL OBSERVING PERIOD
		Mc/s	(Hours U.T.)
Cavendish Laboratory, Cambridge, England	Cav	81 175	10 - 15 10 - 15
Cornell University, Ithaca, N.Y., U.S.A.	Cor	200	13 - 20
Research Institute of Atmospherics, Nagoya University, Toyokawa, Japan	Nag	3750	00 - 07
Observing Station Nederhorst, Den Berg - Radio (Nera)	Ned	200	07 - 16
Institutt for Teoretisk Astrefysikk, Universitetet, Blindern, Oslo, Norway	Osl	200	07 - 19
National Research Council, Ottawa, Canada	Ott	2800	10 - 24
Radiophysics Laboratory, Sydney, Australia	Syd	62 98 200 600 1200	20 - 08 20 - 08 20 - 08 20 - 08 20 - 08
Tokyo Astronomical Observatory, Mitaka, Tokyo	Tok	100 200	00 - 06 22 - 09

TABULATED QUANTITIES

1. FLUX DENSITY 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

$$\text{Flux Density} = 2.09 \times 10^{-32} f^2 T$$

where f is the frequency in megacycles 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 flux density 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 value, and M is inserted in this column. The intensity unit in these columns is 10^{-21} watts metre^{-2}(c/s)$^{-1}$.

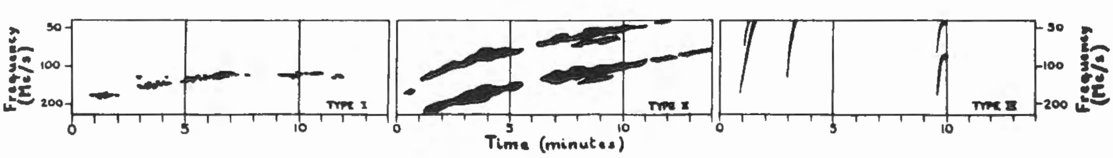
CORRECTIONS

4. OUTSTANDING OCCURRENCES

Ott 2800 January 6th, read 0.7 for >10.4 at 1555, and >10.4 for 10.4 at 1744.

All flux densities for Nag 3750 during January and February, 1956 should be divided by 10.

KEY TO TABLE 5.



The accompanying figure shows idealized examples of the three spectral types of activity, tabulated above. For further details see: J.P. Wild and L.L. McCready 1950, Aust. J. Sci. Res. A: 3, 387; J.P. Wild, J.D. Murray and W.C. Rowe 1954, Aust. J. Phys.: 7, 439.

The following symbols have been used: b = Single burst, g = Small group (<10) bursts, G = Large group (>10) bursts, s = Storm, in the sense of intermittent, but apparently connected activity.

Three qualitative classes of intensity have been subjectively assessed. They are indicated as follows:
Weak - no line; Moderate - single line; Strong - double line, under the appropriate entry.

Arrows are used in the table of activity and in the list of observing periods, to indicate continuity between two Greenwich Days.

The following example, illustrates the use of the symbols: 0132(0321 - 0453,0454.3 - 0454.7g)0627s means a weak storm from 0132 to 0627, which became moderately intense between 0321 and 0453, and contained a small group of strong bursts between 0454.3 to 0454.7.

1. FLUX DENSITY

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

APRIL 1955

	CAV	CAV	COR	NED	OSL	SYD	TOK	OTT	NAG
Mc/s	81	175	200	200	200	200	200	2800	3750
Date									
1	1.2	4	10	8	7	15	7	78	84
2	1.1	4	10	8	7	-	-	79	86
3	1.2	5	11	-	6	-	-	78	84
4	1.1	4	10	8	6	21	-	78	85
5	1.3	5	10	8	5	19	10	82	86
6	1.4	4	12	9	6	19	7	84	88
7	2.0	9	11	12	7	21	11	80	91
8	1.3	5	10	-	6	17	-	-	87
9	-	-	10	-	7	17	-	80	86
10	-	-	-	-	6	16	8	77	86
11	1.3	4	10	-	6	-	-	79	86
12	1.3	4	-	8	6	18	-	77	86
13	1.4	-	10	8	6	19	7	76	83
14	1.2	-	10	9	6	17	-	75	83
15	1.5	-	10	8	6	10	-	80	83
16	-	-	10	9	6	10	7	-	85
17	-	-	10	-	6	9	-	76	-
18	-	-	10	9	6	10	-	76	85
19	-	-	10	9	6	12	-	75	84
20	-	-	10	9	5	10	7	76	84
21	-	-	10	9	5	-	7	76	85
22	-	-	10	9	6	13	8	76	84
23	-	-	10	9	5	13	8	77	85
24	-	-	10	-	6	13	7	76	85
25	-	-	10	9	5	13	7	75	85
26	-	-	-	9	6	16	10	77	86
27	-	-	10	9	5	15	8	82	87
28	-	-	10	10	-	16	8	80	88
29	-	-	10	10	5	14	8	82	90
30	-	-	10	-	6	12	8	80	89
31									

MAY 1955

	CAV	COR	NED	OSL	SYD	TOK	OTT	NAG
Mc/s	175	200	200	200	200	200	2800	3750
Date								
1	-	14	-	10	15	-	81	89
2	-	13	16	9	14	13	80	89
3	-	14	27	12	18	14	83	90
4	-	13	11	7	17	11	83	93
5	-	13	-	7	17	9	83	91
6	-	11	12	6	18	8	83	91
7	-	11	11	5	17	-	-	89
8	-	10	-	5	-	7	-	88
9	-	10	8	5	17	7	79	88
10	-	10	8	5	17	7	78	87
11	-	10	8	5	17	-	75	86
12	-	10	8	-	17	7	75	85
13	-	10	8	-	17	7	73	84
14	-	10	9	-	17	7	72	84
15	-	10	-	-	16	-	-	85
16	6	10	8	-	16	-	74	86
17	5	10	9	-	16	7	80	87
18	-	10	9	-	19	-	78	89
19	-	10	-	-	16	-	78	90
20	-	11	8	-	17	8	86	91
21	-	13	9	-	19	8	94	99
22	-	12	-	7	19	13	92	104
23	12	14	15	10	17	10	92	99
24	5	12	11	7	17	10	91	99
25	5	11	10	6	15	9	91	96
26	4	11	11	7	16	11	92	96
27	7	19	19	11	-	13	93	100
28	5	10	15	8	-	12	87	103
29	-	10	10	6	-	-	88	100
30	-	10	10	6	-	9	79	97
31	-	10	9	6	18	-	81	93

JUNE 1955

	CAV	CAV	COR	NED	OSL	SYD	TOK	NED	SYD	SYD	OTT	NAG
Mc/s	81	175	200	200	200	200	200	545	600	1200	2800	3750
Date												
1	-	6	10	9	5	17	8	-	-	-	79	91
2	-	7	10	9	5	16	8	-	-	-	79	89
3	-	7	10	9	5	19	8	-	-	-	79	89
4	-	7	10	-	5	22	8	-	-	-	80	89
5	-	7	10	-	5	21	7	-	-	-	79	89
6	1.3	7	10	8	5	-	8	-	-	-	77	89
7	1.3	7	13	8	5	21	8	-	-	-	76	89
8	2.0	12		11	7	19	8	-	15	-	80	88
9	1.9	14	-	10	6	19	7	-	14	26	85	93
10	-	9	10	10	6	17	7	-	14	-	86	97
11	-	6	10	9	6	16	8	-	-	-	93	98
12	-	10	12	10	7	16	-	-	-	-	-	107
13	1.9	-	11	10	6	18	11	-	-	-	98	104
14	1.6	6	11	12	7	18	11	-	16	-	103	109
15	1.7	7	10	10	7	21	10	-	15	-	103	115
16	1.5	7	10	9	6	19	-	-	14	-	109	121
17	10.0	12	14	10	7	17	-	40	15	27	108	121
18	20.0	40	150	32	20	19	10	47	-	-	104	117
19	1.8	13	-	-	18	26	32	36	-	-	106	116
20	2.7	18	19	17	11	21	13	36	16	29	108	126
21	2.2	8	17	14	-	20	15	36	16	24	102	115
22	1.8	5	11	10	-	16	9	35	14	26	91	103
23	2.0	10	10	11	7	17	8	34	-	-	94	100
24	1.1	6	10	10	6	18	8	33	16	-	83	94
25	1.3	5	10	9	5	17	9	31	-	-	78	90
26	1.3	6	10	8	6	19	-	30	-	-	-	88
27	1.5	6	10	10	6	19	10	30	14	26	79	88
28	1.3	6	10	9	5	-	8	30	-	-	77	88
29	1.2	5	10	9	5	-	8	28	-	-	81	91
30	1.1	5	10	8	5	21	8	30	-	27	83	92
31												

1. FLUX DENSITY

3-hourly medians at 200 Mc/s from COR. NED. OSL. SYD. TOK.

APRIL 1955

U.T. Date	00-03	03-06	06-09	09-12	12-15	15-18	18-21	21-24	Daily Mean
1	11	15	8	7	9	9	10	-	10
2	-	-	7	7	8	9	10	-	8
3	-	-	6	6	9	8	10	-	8
4	20	21	8	-	8	8	10	21	14
5	19	15	7	5	8	8	10	19	11
6	13	20	8	6	10	9	12	19	12
7	16	18	9	7	9	9	11	18	12
8	17	18	6	6	8	8	10	19	12
9	17	19	7	7	8	8	10	16	12
10	12	16	6	6	6	6	-	-	9
11	-	-	6	6	8	8	10	-	8
12	16	20	7	6	6	6	-	19	11
13	14	20	7	6	8	8	10	19	12
14	18	-	6	6	8	8	10	-	9
15	-	-	7	6	8	8	10	10	8
16	8	10	8	6	8	8	10	10	9
17	8	8	6	6	8	8	10	9	8
18	9	9	8	6	8	8	10	12	9
19	13	13	8	6	8	8	8	9	9
20	8	12	7	5	8	8	8	-	8
21	7	7	6	6	8	8	8	-	7
22	10	11	8	6	8	8	8	14	9
23	10	11	8	5	8	8	8	14	9
24	10	12	6	-	8	8	10	14	10
25	10	10	8	-	8	8	10	15	10
26	13	16	8	6	5	6	-	16	10
27	11	16	8	5	8	8	10	15	10
28	13	12	-	-	10	10	10	15	12
29	11	15	8	5	10	10	10	13	10
30	9	13	6	6	8	8	10	13	9
31									

MAY 1955

U.T. Date	00-03	03-06	06-09	09-12	12-15	15-18	18-21	21-24	Daily Mean
1	15	14	-	-	12	13	13	13	13
2	13	13	15	13	10	10	12	16	13
3	17	18	24	21	16	13	12	15	17
4	15	11	8	8	10	13	12	14	11
5	14	18	7	7	9	10	14	13	12
6	13	19	9	9	10	10	9	18	12
7	18	18	9	8	8	8	8	18	12
8	-	7	5	7	8	8	8	-	7
9	12	12	7	8	8	7	8	18	10
10	7	7	7	7	8	8	8	17	9
11	17	18	7	7	8	8	8	16	11
12	12	12	9	8	9	9	10	-	10
13	12	13	8	9	9	9	10	18	11
14	13	13	10	8	9	10	10	17	11
15	6	-	-	-	10	10	10	-	9
16	15	19	9	8	10	10	10	16	12
17	15	12	10	9	10	10	10	18	12
18	18	20	-	8	10	10	10	-	13
19	-	-	-	-	10	10	11	16	12
20	12	8	8	8	9	10	11	13	10
21	13	14	9	9	11	13	14	20	13
22	16	17	8	8	10	10	10	15	12
23	10	10	12	12	16	12	11	15	12
24	14	12	9	9	10	10	10	18	12
25	13	11	8	9	8	9	9	11	10
26	13	12	9	9	9	9	10	-	10
27	13	7	11	15	16	23	18	15	15
28	13	9	16	13	10	9	8	-	11
29	-	6	8	8	9	9	8	-	8
30	9	6	8	8	8	9	8	-	8
31	16	13	8	7	8	8	8	19	11

JUNE 1955

U.T. Date	00-03	03-06	06-09	09-12	12-15	15-18	18-21	21-24	Daily Mean
1	16	10	7	7	8	8	8	18	10
2	13	11	5	7	8	8	8	15	9
3	12	10	7	7	8	8	8	22	9
4	15	13	5	7	8	8	8	21	11
5	15	13	5	5	8	8	8	22	11
6	8	7	7	7	8	8	8	-	8
7	8	7	7	7	8	10	10	21	10
8	14	11	8	9	11	10	9	18	11
9	14	16	8	8	8	6	6	18	11
10	13	11	6	8	9	9	9	16	10
11	12	10	8	8	8	8	10	16	10
12	16	13	10	9	9	10	10	18	12
13	15	12	9	8	10	9	10	17	11
14	16	13	10	13	10	9	9	16	12
15	15	15	8	8	9	8	8	18	11
16	19	12	8	7	8	8	8	17	11
17	17	13	8	8	11	11	10	16	12
18	13	12	10	9	72	28	29	24	25
19	31	29	26	18	14	14	-	20	22
20	18	15	14	14	16	15	43	21	20
21	19	18	15	15	14	14	-	14	16
22	13	12	10	9	11	11	11	-	11
23	9	11	9	11	10	9	8	18	11
24	13	11	6	8	9	9	8	18	10
25	13	12	8	7	8	8	8	19	10
26	19	11	7	7	8	8	8	19	11
27	15	11	9	8	8	8	8	-	10
28	8	7	7	7	8	8	8	-	8
29	7	7	7	7	8	8	8	-	7
30	14	11	7	7	8	7	8	21	10

2. POLARISATION

No polarisation measurements were taken during this quarter

3. VARIABILITY

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

APRIL 1955

	CAV	TOK	CAV	COR	NED	OSL	SYD	TOK
Mc/s	81	100	175	200	200	200	200	200
Date								
1	0	0	1	0	0	0	0	0
2	0	-	0	0	0	0	0	0
3	0	-	0	1	-	0	0	-
4	0	0	0	0	0	0	0	0
5	0	0	1	0	0	0	0	0
6	0	0	0	1	0	0	0	0
7	0	0	1	1	1	0	1	0
8	0	0	0	1	-	0	0	0
9	-	0	-	0	-	0	0	0
10	-	-	-	-	-	0	0	0
11	0	-	0	0	-	0	0	0
12	0	0	0	-	0	0	0	0
13	0	0	-	0	0	0	0	0
14	0	0	-	0	0	0	0	0
15	0	0	-	0	0	0	0	0
16	-	0	-	0	0	0	0	0
17	-	-	-	0	-	0	0	0
18	-	-	-	0	0	0	0	0
19	-	-	-	0	0	0	0	0
20	-	-	-	0	0	0	0	0
21	-	0	-	0	0	0	0	0
22	-	0	-	0	0	0	0	0
23	-	0	-	0	0	0	0	0
24	-	0	-	0	-	0	0	0
25	-	0	-	0	0	0	0	0
26	-	0	-	-	0	0	0	0
27	-	0	-	0	0	0	0	0
28	-	0	-	0	0	-	1	0
29	-	0	-	1	0	0	0	0
30	-	0	-	1	-	0	0	0
31								

MAY 1955

	TOK	CAV	COR	NED	OSL	SYD	TOK
Mc/s	100	175	200	200	200	200	200
Date							
1	0	-	2	-	2	-	0
2	0	-	2	2	1	1	1
3	0	-	2	2	1	1	1
4	0	-	2	1	0	0	1
5	0	-	2	-	1	0	1
6	0	-	2	1	1	0	0
7	0	-	0	0	0	0	0
8	0	-	0	-	0	-	0
9	0	-	0	-	0	0	0
10	0	-	0	0	0	0	0
11	-	-	0	0	0	0	-
12	0	-	0	0	-	0	0
13	-	-	0	0	-	0	0
14	0	-	0	0	-	0	0
15	-	-	0	-	-	0	-
16	0	0	0	0	-	0	0
17	0	0	0	0	-	0	0
18	0	-	0	0	-	0	0
19	0	-	1	-	-	0	0
20	1	-	2	0	-	0	1
21	1	-	1	0	-	1	1
22	1	-	1	-	0	1	1
23	1	1	2	1	1	0	1
24	0	0	1	0	0	0	1
25	1	0	0	0	0	1	1
26	0	0	1	0	1	0	1
27	1	0	2	2	1	0	1
28	0	0	1	1	0	0	1
29	0	-	1	0	0	0	0
30	-	-	0	0	0	0	0
31	0	-	0	0	0	0	-

JUNE 1955

	CAV	TOK	CAV	COR	NED	OSL	SYD	TOK	NED
Mc/s	81	100	175	200	200	200	200	200	545
Date									
1	-	0	0	0	0	0	0	0	-
2	-	0	1	1	0	0	0	0	-
3	-	0	0	1	0	0	0	0	-
4	-	0	0	0	-	0	0	0	-
5	-	0	1	0	-	0	0	0	-
6	0	0	0	1	0	0	0	1	-
7	1	0	0	1	0	0	0	1	-
8	1	0	1	-	1	0	0	1	-
9	0	0	1	-	0	0	0	1	-
10	-	0	0	1	0	0	0	0	-
11	-	0	0	1	0	0	0	0	-
12	-	0	1	1	0	0	1	0	-
13	1	1	-	2	1	0	2	1	-
14	1	0	1	1	2	1	2	1	-
15	0	0	0	2	0	0	2	1	-
16	0	-	0	0	0	0	2	-	-
17	3	0	1	1	0	0	1	-	0
18	3	0	3	1	2	1	1	1	0
19	0	0	1	-	-	1	-	1	0
20	1	0	2	2	1	1	-	1	0
21	0	0	1	1	0	-	1	1	0
22	0	0	0	1	0	-	2	0	0
23	2	1	2	0	0	0	1	1	0
24	0	0	0	0	0	0	1	1	0
25	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0
28	0	-	0	1	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0
30	0	1	0	0	0	0	0	0	0
31									

4. OUTSTANDING OCCURRENCES

Station and frequency	Date 1955	Starting time	Duration	Type	Maximum Flux Density Inst.	Smooth	Polar- isation	Remarks
Mc/s		U.T.	Minutes		10^{-21} w m^{-2}(c/s)$^{-1}$			
Syd 62	Apr 2	0155	0.3	SD	53.0	25.0		Also Syd 98
Cav 175	4	1251	2.0	SD	0.2	0.1		
Syd 200	8	0026	0.2	SD	82.0	55.0		
Syd 200	8	0429	0.8	CD	49.0	22.0		
Cav 175	8	1147	2.0	SD	0.3	0.2		
Cor 200	8	1523	0.3	SD	>8.1	>8.1		
Syd 200	9	0311	0.2	SD	43.0	21.0		
Syd 200	9	0426	0.2	SD	61.0	38.0		
Syd 200	9	0627	1.8	CD	>100.0	44.0		
Syd 200	28	0415	0.2	SD	45.0	20.0		
Ned 200	28	1526	2.9	CD	12.5	3.0		
Syd 200	28	2315	0.2	SD	37.0	16.0		
Syd 200	May 11	2206	0.3	CD	37.0	18.0		
Ned 200	17	1122	2.1	CD	15.0	4.0		
Cor 200	19	1744	0.5	CD	> 4.4	3.9		
Cor 200	19	1932	0.5	CD	> 4.4	4.1		Flare
Syd 200	19	2202	0.6	CD	37.0	19.0		
Syd 200	19	2302	0.7	CD	31.0	16.0		
Syd 200	20	0007	3.5	CD	34.0	10.0		
Syd 200	20	0108	0.4	CD	70.0	34.0		
Syd 98	20	0203	3.0	M	158.0	16.0		Also Syd 62, 200
Syd 62	20	0239	6.0	M	256.0	37.0		
Syd 62	20	0442	0.3	SD	84.0	44.0		Also Syd 200
Syd 200	20	0509	29.0	M	70.0	8.0		
Syd 200	20	0655	0.3	CD	69.0	37.0		
Ned 200	20	0803	2.4	CD	80.0	14.0		
Ned 200	20	0921	4.2	CD	49.0	9.0		
Ned 200	20	1141	2.7	CD	54.0	9.0		
Ned 200	20	1232	2.4	CD	140.0	30.0		Also Cor 200
Ned 200	20	1556	3.3	CD	35.0	9.0		Flare. Also Cor 200
Cor 200	20	1909	2.5	CA	>4.4	3.8		Flare
Cor 200	20	1932	0.5	CA	>4.4	3.7		Flare
Syd 200	20	2110	44.0	M	67.0	4.0		Flare
Syd 200	21	0326	17.0	M	76.0	9.0		
Cor 200	21	1235	0.5	CD	>4.4	4.4		
Ned 200	21	1405	1.8	CD	55.0	9.0		Also Cor 200
Cor 200	21	2014	1.0	CD	>3.5	2.9		
Syd 98	21	2126	4.2	M	40.0	3.0		
Ott 2800	21	2221	7.0	SD		0.5		
Syd 98	21	2222	11.0	M	>57.0	4.0		
Syd 200	21	2228	0.3	CD	70.0	43.0		
Syd 98	21	2337	9.8	M	57.0	3.0		Also Syd 62, 200
Syd 200	22	0135	13.0	CD	88.0	33.0		
Nag 3750	22	0140	7.0	CD		0.3		
Syd 98	22	0144	0.5	SD	45.0	18.0		
Syd 62	22	0145	0.4	CD	25.0	10.0		
Nag 3750	22	0330	0.5	SD		0.3		
Syd 62	22	0330	8.5	M	>98.0	12.0		Also Syd 98, 200
Syd 98	22	0433	2.5	M	21.0	2.0		Also Syd 62
Syd 98	22	0526	0.5	CD	27.0	10.0		
Cor 200	22	1305	0.5	CD	> 4.4	3.9		
Cor 200	22	1835	0.5	CD	>3.9	3.9		
Cor 200	22	1842	1.0	CD	>3.9	3.9		
Syd 62	23	0342	10.0	M	>98.0	14.0		
Tok 100	23	0343	1.0	CD	10.0	4.0		
Tok 200	23	0343	1.5	CD	35.0	20.0		
Nag 3750	23	0343	1.0	SD		4.0		
Nag 3750	23	0352	3.0	CD		0.3		Also Syd 62
Tok 200	23	0427	1.0	CD	30.0	6.0		
Ned 545	23	0834	1.2	CD	10.0	3.0		
Ned 200	23	1015	1.0	CD	97.5	15.0		
Ned 200	23	1019	0.3	CD	160.0	25.0		
Ned 200	23	1020	0.5	CD	290.0	50.0		
Ned 200	23	1022	0.3	CD	97.5	11.0		
Ned 545	23	1035	1.6	CD	7.0	2.0		
Ned 200	23	1242	0.5	CD	35.0	3.5		
Ott 2800	23	1243	7.0	SD		0.7		
Ned 200	23	1244	1.3	CD	77.5	15.0		Also Ned 545
Ned 545	23	1247	0.2	CD	20.0	10.0		Also Ned 200
Ott 2800	23	1600	12.0	SD		1.2		
Cor 200	23	1603	1.5	CA	>4.4	3.9		
Ott 2800	23	1842	93.0	CD		0.5		
Syd 62	23	2211	0.2	SD	71.0	39.0		
Syd 62	23	2302	0.3	SD	24.0	6.0		
Syd 62	24	0323	1.7	CD	119.0	17.0		
Cor 200	24	1637	1.0	CD	> 4.3	4.3		
Cor 200	24	1708	1.0	CD	> 4.3	4.3		
Syd 200	24	2101	0.3	CD	48.0	26.0		
Syd 62	25	0010	0.2	SD	93.0	30.0		
Syd 62	25	0046	0.3	SD	93.0	45.0		

4. OUTSTANDING OCCURRENCES

Station and frequency	Date 1955	Starting time	Duration	Type	Maximum Flux Density Inst.	Smooth	Polarisation	Remarks
Mc/s		U.T.	Minutes		10^{-21} w $m^{-2}(c/s)^{-1}$			
Syd 200	May 25	0048	0.8	CD	46.0	20.0		
Syd 62	25	0103	0.2	SD	38.0	14.0		
Syd 62	25	0227	11.0	M	>1131.0	328.0		
Syd 98	25	0227	2.0	CD	375.0	38.0		
Tok 200	25	0227	2.5	CD	35.0	15.0		Also Syd 200
Nag 3750	25	0229	0.5	SD		0.4		
Syd 62	25	0312	0.2	SD	75.0	34.0		
Syd 62	25	0419	1.5	CD	1050.0	263.0		Also Syd 98, 200
Syd 62	25	0518	0.3	SD	90.0	27.0		Also Syd 200
Cor 200	25	1442	1.0	CD	>4.1	>4.1		
Ott 2800	27	1005	15.0	SD				Fade
Osl 200	27	1012	5.0	SA	13.0	3.0		
Ott 2800	27	1543	9.0	SD		8.4		
Osl 200	27	1548	0.5	SD	>65.0			Flare. Fade
Cor 200	27	1549	1.5	CA	>3.8	>3.8		
Nag 3750	30	0524	4.0	SD		0.4		
Nag 3750	June 1	0448	6.0	CD		1.9		
Ned 200	6	0722	3.0	CD	24.0	3.0		
Cor 200	6	1912	2.5	CD	>4.1	3.8		Flare. Also Ned 200
Syd 200	7	2317	26.0	M	99.0	11.0		
Cav 81	8	1248	140.0	SD	1.1	0.8		
Syd 200	9	0000	0.7	CD	75.0	39.0		
Ned 200	9	1119	0.1	SD	18.0			
Syd 200	9	2240	0.3	CD	64.0	35.0		
Syd 200	10	0640	26.0	M	58.0	2.0		
Ott 2800	10	2118	1.0	SD		2.4		
Ned 200	11	1709	0.7	SD	18.0	8.0		Flare
Syd 62	12	0118	0.2	SD	113.0	47.0		
Ned 200	12	1216	1.0	SD	>5.0			
Cor 200	12	1722	1.0	CD	>4.1	4.1		
Syd 62	12	2139	5.5	M	77.0	13.0		
Syd 62	13	0002	0.2	SD	28.0	12.0		Also Syd 98, 200
Tok 200	13	0027	2.0	CD	35.0	8.0		Also Syd 62, 98, 200
Syd 62	13	0146	0.2	SD	18.0	10.0		
Syd 200	13	0250	0.2	SD	61.0	33.0		
Syd 62	13	0256	0.2	SD	35.0	14.0		
Syd 98	13	0345	3.7	M	62.0	3.0		Also Syd 62
Nag 3750	13	0714	1.5	SD		0.6		
Ned 200	13	0731	0.3	CD	18.0			
Ned 200	13	1122	2.0	CD	55.0	19.0		
Ned 200	13	1622	0.5	CD	>5.0			Flare
Cor 200	13	1905	3.5	CA	>4.0	4.0		Flare
Ott 2800	13	2025	11.0	SD		20.5		
Syd 62	14	0046	0.7	CD	50.0	16.0		Also Syd 98
Ned 200	14	0820	3.0	CA	30.0	14.0		
Ned 200	14	0901	3.5	CD	25.0	15.0		Fade
Ned 200	14	0905	5.0	CD	15.0	5.0		Fade
Ned 200	14	0924	1.0	CD	35.0	20.0		Fade
Ned 200	14	0955	0.8	CD	47.5	15.0		
Ned 200	14	1058	0.5	CD	20.0	10.0		
Ned 200	14	1138	2.0	CD	35.0	16.0		
Ned 200	14	1144	0.5	CD	35.0	17.5		
Ned 200	14	1147	3.0	CD	15.0	7.5		
Ott 2800	14	1253	1.0	SD		0.5		
Ned 200	14	1256	2.0	CD	55.0	20.0		Also Cor 200
Cor 200	14	1426	3.0	CA	>4.0	>4.0		Also Ned 200
Ned 200	14	1644	3.0	CD	>5.0			Also Cor 200
Cor 200	14	1834	5.5	CA	>4.0	4.0		Also Ned 200
Ott 2800	14	1835	5.0	SD		2.2		
Ott 2800	14	2048	1.5	SD		1.0		
Ott 2800	14	2104	3.5	SD		1.9		Flare. Also Syd 200
Syd 98	14	2105	3.7	CD	>60.0	22.0		
Syd 200	14	2219	0.3	CD	59.0	25.0		
Syd 98	14	2220	4.2	CD	19.0	8.0		
Syd 98	14	2252	0.2	SD	29.0	12.0		
Syd 98	14	2319	6.0	CD	574.0	41.0		
Ott 2800	14	2318	11.5	CD		0.9		
Nag 3750	14	2322	5.0	SD		1.1		Also Syd 200
Syd 600	14	2324	5.0	CD	5.9	2.5		
Syd 1200	14	2324	1.0	CD	4.3	4.3		
Syd 98	15	0009	0.2	SD	33.0	16.0		
Syd 200	15	0120	0.2	CD	52.0	20.0		
Syd 1200	15	0122	0.3	CD	4.5	4.1		Also Syd 98
Syd 600	15	0123	1.8	CD	3.6	2.3		
Syd 62	15	0127	4.5	M	237.0	98.0		
Syd 62	15	0207	0.2	SD	76.0	29.0		Also Syd 98
Syd 200	15	0218	2.0	CD	37.0	16.0		
Syd 200	15	0235	5.0	CD	94.0	41.0		
Syd 600	15	0235	2.0	CD	2.3	1.4		
Syd 62	15	0236	4.5	CD	1083.0	123.0		
Syd 98	15	0236	5.0	CD	328.0	20.0		
Nag 3750	15	0359	13.7	CD		40.0		
Syd 600	15	0402	7.0	CD	>5.8	1.6		
Syd 1200	15	0402	5.0	CD	6.3	3.6		
Syd 200	15	0402	2.5	CD	66.0	20.0		

4. OUTSTANDING OCCURRENCES

Station and frequency		Date 1955	Starting time	Duration	Type	Maximum Flux Density Inst.	Smooth	Polar- isation	Remarks
Mc/s			U.T.	Minutes		$10^{-21} w\ m^{-2}(c/s)^{-1}$			
Syd	62	June 15	0404	0.8	CD	80.0	30.0		
Syd	98	15	0436	0.2	SD	55.0	14.0		
Syd	600	15	0442	1.5	CD	1.6	1.0		
Syd	200	15	0521	1.2	CD	63.0	20.0		
Syd	98	15	0542	0.2	SD	56.0	16.0		
Syd	98	15	0610	0.2	SD	35.0	14.0		
Ned	200	15	0953	1.0	CD	11.0	4.0		
Cor	200	15	1305	2.0	CD	>4.0	3.6		Flare. Also Ned 200
Ned	200	15	1412	1.2	CD	>5.0			
Syd	200	16	0429	15.0	CD	56.0	6.0		
Syd	200	16	0507	0.2	SD	57.0	22.0		
Syd	200	16	0636	0.6	CD	52.0	28.0		
Syd	62	17	0019	0.2	SD	77.0	30.0		
Nag	3750	17	0517	3.0	CD		0.6		Also Syd 62, 98, 200
Syd	600	17	0616	30.0	CD	>6.3	3.0		
Ned	200	17	1056	6.0	CD	140.0	40.0		Fade
Ott	2800	17	1057	9.0	CD		1.0		
Ned	200	17	1118	0.5	CD	55.0	26.5		Fade
Ned	200	17	1150	0.3	SD	45.0	21.0		
Ned	200	17	1257	1.0	SD	200.0	75.0		Flare. Also Cor 200
Ott	2800	17	1257	4.0	SD		1.2		
Cav	175	17	1317	44.0	SD	4.4	2.6		
Ott	2800	17	1837	5.0	CD		1.4		Flare
Syd	200	17	2351	0.3	CD	80.0	44.0		
Nag	3750	18	0028	0.3	SD		0.4		
Syd	200	18	0034	0.3	CD	34.0	16.0		
Syd	200	18	0107	0.2	CD	43.0	24.0		
Nag	3750	18	0159	6.0	SD		0.7		
Syd	200	18	0202	20.0	M	33.0	2.0		
Syd	200	18	0419	0.3	CA	40.0	23.0		
Osl	200	18	0433	2.0	SD	>3.0			
Tok	200	18	0433	1.5	CD	25.0	9.0		Also Ned, Syd 200
Nag	3750	18	0433	1.3	SD		9.9		
Syd	62	18	0433	1.6	CD	924.0	385.0		
Syd	98	18	0433	0.8	CA	1008.0	126.0		
Syd	200	18	0503	0.3	CA	58.0	31.0		
Ott	2800	18	1129	16.0	SD		0.6		Flare
Ned	200	18	1222	73.0	CA	40.0	32.5		Flare. Fade. Also Cor 200
Ott	2800	18	1222	53.5	CD		8.4		
Ned	545	18	1223	37.0	CD	60.0	26.0		
Osl	200	18	1235	115.0	CA	22.0	6.0		
Ned	545	18	1905	15.0	CD	>25.0			Flare. Fade
Osl	200	18	1905	7.0	CA	90.0	25.0		Also Cor, Ned 200
Ott	2800	18	1907	30.5	SD		158.0		
Nag	3750	18	2345	1.7	SD		1.8		
Nag	3750	19	0220	8.5	SD		0.7		
Syd	600	19	0225	2.0	CD	4.0	2.5		
Ott	2800	19	1421	6.5	SD		0.4		Flare
Ott	2800	19	1451	3.8	SD		0.9		Flare
Ned	545	19	1555	10.0	CD	10.0	2.0		Flare
Ott	2800	19	1642	12.5	CD		10.8		Flare
Ott	2800	19	1829	6.5	SD		0.4		Flare
Ott	2800	19	2012	6.0	SD		0.3		
Ott	2800	19	2213	7.5	CD		3.1		
Nag	3750	19	2213	4.0	SD		2.3		
Nag	3750	19	2328	5.0	CD		0.2		
Nag	3750	20	0028	9.0	SD		0.8		
Nag	3750	20	0152	46.0	SD		1.6		
Syd	62	20	0320	0.2	SD	77.0	36.0		
Syd	62	20	0510	0.2	SD	91.0	45.0		
Nag	3750	20	0616	1.3	SD		3.2		
Nag	3750	20	0622	4.5	SD		1.0		
Ott	2800	20	1051	2.5	SD		0.3		
Ned	545	20	1105	0.5	CD	15.0	4.0		
Ned	200	20	1233	4.0	CA	18.0	3.0		
Ott	2800	20	1450	5.5	SD		4.3		Flare
Ned	200	20	1530	1.5	CD	20.0	8.0		Flare
Ott	2800	20	1531	6.5	SD		0.5		
Ott	2800	20	2009	37.0	CD		1.2		
Nag	3750	21	0133	7.5	SD		2.3		
Nag	3750	21	0306	3.5	SD		0.9		
Syd	62	21	0441	0.4	SD	75.0	27.0		
Syd	62	21	2311	34.0	CD	888.0	35.0		
Nag	3750	21	2318	7.0	SD		0.4		
Nag	3750	21	2330	9.0	CD		4.0		Also Syd 98, 200
Syd	200	22	0126	0.2	SD	40.0	22.0		
Syd	200	22	0339	0.5	CD	44.0	21.0		
Syd	200	22	0504	22.0	M	39.0	2.0		
Ned	200	22	1754	3.0	CD	>5.0			
Tok	100	23	0359	0.5	CD	18.0	5.0		Also Syd 62, 98, 200
Syd	200	24	0501	0.2	SD	80.0	45.0		
Ned	200	24	1018	0.8	CD	15.0	4.0		
Ned	200	24	1158	4.0	CD	>5.0			
Ned	200	24	1219	1.0	SD	8.0	3.0		
Tok	100	30	0136	0.6	CD	25.0	5.0		

5. SPECTRAL CLASSIFICATION OF ACTIVITY

FIRST QUARTER 1955

Summary of data in frequency range 40 - 240 Mc/s, recorded at Dapto, near Sydney.

	TYPE I		TYPE II	TYPE III	Unclassified Activity and Remarks
Date 1955	Continuum	Bursts	Bursts	Bursts	
Jan. 0		2215→		2150g	
1	0153-0315s	←0345s		0006.2-0006.6g	
5				2018g	0733b
6	0419-0845s 2022→	0401-0848s 2006→		0006-0008G,0023b,0107b,0212g 0336.3-0336.8g,0355g,0704-0726s. 1958g,2001g,2020g, 2238g,2329-2342s	0056b
7	←0640s	←0640s		0232-0251s	
8				0439b	
9	0027-0243s	0027-0243s		0030g,0114g,0535b,0649b 2322→	
10	0418-0845s	0232(0437-0440,0725-0735)0845s		←(0105g,0309g,0423-0428,0826.9-0828.0G)0845s. 2051-2055g, 2344g	
11	0406-0528s	0336(0523-0525)0609s		0255b,0303(0316-0320g)0453s 2352→	
12	2155(2350→	0834-0839s 2102→		←(0342g,0355-0357,0417-0438, 0704-0819)0840s. 2127(2140.5-2140.7b,2237-2255,2326-2337→	0813.0-0816.5G
13	←0313)0352s	←(0055-0235)0352s, 0641-0742s		←0029g,0543g,0615-0618G)0742s. 2238→	
14				←0747s	
15	0320(0430-0840)0845s. 2126→	0020(0416-0427)0845s. 2126→		0127(0352-0410)0838s	
16	←0350s. 2150-2215s	←0600s		0119-0505s,0750b	
17				0558(0615-0617)0640s	
18				0028g	
Feb. 2	0227(0245-0310)0600s	0227-0815s		0200(0200-0210,0243.7-0244.9G,-0235)0412s; 0550(0753b)0754s. 2358g	
3				0040g,0127b,0527g	
4		0218-0353s; 0443-0545s			
7				0523b	
13				2309b,2335b	
14				0259.6-0301.0g	
15				0206g,0219g	0638-0641b
24			0104-0124	0203b,0207b,0246b,0358-0407s	0137-0138b
Mar. 1		0734-0805s		0608-0714s. 2130b,2139b	

Observing Periods JAN. 0 22.5→ 1 ←05.1; 2 00.4-07.8,22.3→ 3 ←05.8; 4 21.8→ 5 ←01.6,04.0-08.3,20.1→ 6 ←09.0,19.9-21.4,21.6→ 7 ←07.6,22.0→ 8 ←08.3; 9 00.6-02.7,02.8-07.9,22.6→ 10 ←08.8,20.3→ 11 ←00.7,00.8-07.0,20.1→ 12 ←09.1,20.9-22.1,22.3→ 13 ←07.7,22.5→ 14 ←07.8; 15 00.2-09.9,21.4→ 16 ←07.9,21.8→ 17 ←01.8,02.7-06.7,20.7→ 18 ←07.0,07.1-09.5; FEB. 2 02.0-08.3,20.5-21.7, 21.8→ 3 ←06.5,22.7→ 4 ←06.2; 6 22.8→ 7 ←06.1,06.2-07.0; 13 23.1→ 14 ←04.0,23.2→ 15 ←06.5,06.6-08.7; 15 21.5→ 16 ←06.9; 22 04.7-08.4,21.1-23.3,23.4→ 23 ←08.8,21.4→ 24 ←05.9,22.7→ 25 ←06.2; 27 22.8→ 28 ←08.3,21.7→ MARCH 1 ←02.6,03.0-08.3, 21.1→ 2 ←02.7,02.9-08.8,20.4→ 3 ←02.6,02.7-06.4,22.7→ 4 ←06.2; 6 23.0→ 7 ←08.4,21.4→ 8 ←03.6; 24 03.1-06.6,22.8→ 25← 05.2; 28 00.6-05.0,05.1-06.1,22.7→ 29 ←06.6,23.1→ 30 ←06.6,22.6→ 31 ←06.5.

5. SPECTRAL CLASSIFICATION OF ACTIVITY

SECOND QUARTER 1955

Summary of data in frequency range 40 – 240 Mc/s, recorded at Dapto, near Sydney.

Date 1955	TYPE I Continuum	TYPE I Bursts	TYPE II Bursts	TYPE III Bursts	Unclassified Activity and Remarks
May 20	0352–0447			0206.6–0207.3g,0224b,0226b,0239g, 0240b,0243g,0244g,0258b,0303b, 0311.0–0312.5g,0428g,0441g	
23	0230–0700 2230→			0342.7–0344.3g,0352g,0410g,0427g, 0445b,0448b,0617g 2221b,2257g,2302b,2329g	
24	←0045			0323g,0325g,0458b 2242b,2307g,2321g,2328b	
25				0010b,0012b,0014b,0046g,0048g, 0051g,0101b,0103g,0104g,0145b, 0226.3–0229.5G,0247b,0312g,0410g, 0417.7–0419.7G,0441b,0501g,0517g, 0541g 2139g,2234g	
26				0432b,0426b	
30	0521–0746	0521–0746			
31				0217b,0235g,0450g	
June 7				2224b	
8				0112g,0116g,0128.8–0132.1G,0153g, 0258b	
9			0001–0033	0034G,0036b,0037g,0118g,0247G, 0257g,0349g,0538b 2336b,2342g	
10				0301g,0450b	
14				2219g,2222g,2251g,2317g,2318G 2322G,2331g	2201b
15			0400–0408	0008g,0112b,0120g,0123g,0152g, 0206b,0216g,0222b,0234g,0237g, 0310b,0433g,0446b,0454g,0457b	
17				0528b	
18	2140→	2140→		0532.9–0534.8G 2210→	
19	←0625	←0610		←(0138g,0219–0223G,)0251 s 2247g,2326.3–2332.8G,2334–2340G	
20	2136→	2136→		0039b,0130–0137G,0321b,0329– 0333G,0359g,0510g,0514b,0515g, 0517g,0521g,0522g	
June 21	←0134	←0134	2329–2354	0105–0108g,0232g,0411g,0413b, 0415g,0417b,0419b,0441b,0453g, 2158b,2201g,2207b,2213b,2314b, 2315.6–2320.8G	
23				0208g,0359g	
30				0236g,0433b, 2344b	

Observing Periods

April 1 04.5; 4 22.9→5→00.6,04.4–07.5; 6 03.1–06.7,22.6→7→06.1; 11 22.7→12→05.5,23.6→13→06.5,22.7→14→05.1; 19 23.1→20→06.6,22.7→21→05.6,22.7–23.0→22→00.4–05.1; 25 23.1→26→07.7; May 4 23.3→5→06.0,23.1→6→05.9; 8 23.3→9→05.0; 11 03.0–03.9,04.1–06.8,22.6→12→06.7; 18 06.1–07.3,22.1→19→03.3; 20 02.0–04.6; 23 02.3–07.4,22.1→24→07.8,21.9–22.0,22.1→25→07.0,21.6→26→06.8; 30 05.2–05.3,05.5–06.7,22.4→31→06.6; June 1 01.2–06.3; 2 02.2–05.9; 7 22.1→8→05.5,05.6–06.5, 22.7→9→05.8,23.5→10→05.8; 14 02.9–04.3,21.7→15→06.5,21.8→16→06.0,22.6→17→05.3,05.4–05.8,21.9→18→05.4,21.7→19→06.4, 22.7→20→05.9,21.6→21→06.9,21.9→22→03.7,03.8–06.5,21.4→23→06.3,22.7→24→05.8; 26 23.8→27→05.9,22.9→28→06.6,21.9→29→00.0,00.1–06.1,06.3–06.:5,22.7→30→05.9,22.7–

Sydney, March 1956

S.P.Smerd

IV. SOLAR RADIO EMISSION

CO-OPERATING OBSERVATORIES

Details relating to the contributors to the third quarter of 1955 are as follows:-

OBSERVING STATION	ABBREVIATION	FREQUENCIES USED	NORMAL OBSERVING PERIOD
		Mc/s	(Hours U.T.)
Cavendish Laboratory, Cambridge, England	Cav	81 175	10 - 15 10 - 15
Cornell University, Ithaca, N.Y., U.S.A.	Cor	200	13 - 20
Research Institute of Atmospherics, Nagoya University, Toyokawa, Japan	Nag	3750	00 - 07
Observing Station Nederhorst, Den Berg - Radio (Nera)	Ned	200 545	06 - 18 05 - 19
Institutt for Teoretisk Astrofysikk, Universitetet, Blindern, Oslo, Norway	Osl	200	05 - 19
National Research Council, Ottawa, Canada	Ott	2800	11 - 24
Radiophysics Laboratory, Sydney, Australia	Syd	62 98 200	20 - 08 20 - 08 20 - 08
Tokyo Astronomical Observatory, Mitaka, Tokyo	Tok	200 3000	22 - 09 22 - 09

TABULATED QUANTITIES

1. FLUX DENSITY 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

$$\text{Flux Density} = 2.09 \times 10^{-32} f^2 T$$

where f is the frequency in megacycles 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

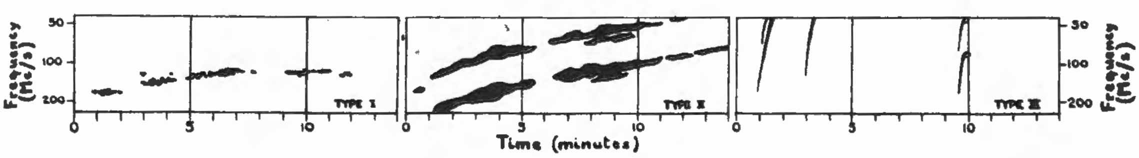
The two maximum flux density columns contain, firstly, the maximum instantaneous value, and secondly, the maximum smoothed value measured above the previous level. The second is thought to be more suitable for comparative purposes. When the occurrence consists of well separated peaks (type M) it is not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

CORRECTIONS

4. OUTSTANDING OCCURRENCES

Osl 200 March 2nd, read 1545 for 1554.

KEY TO TABLE 5.



The accompanying figure shows idealised examples of the three spectral types of activity, tabulated above. For further details see: J.P. Wild and L.L. McCready 1950, Aust. J. Sci. Res. A: 3, 387; J.P. Wild, J.D. Murray and W.C. Rowe 1954, Aust. J. Phys.: 7, 439.

The following symbols have been used: b = Single burst, g = Small group (<10) bursts, G = Large group (>10) bursts, s = Storm, in the sense of intermittent, but apparently connected activity.

Three qualitative classes of intensity have been subjectively assessed. They are indicated as follows:

Weak - no line; Moderate - single line; Strong - double line, under the appropriate entry.

Arrows are used in the table of activity and in the list of observing periods, to indicate continuity between two Greenwich Days.

The following example, illustrates the use of the symbols: 0132(0321 - 0453,0454.3 - 0454.7g)0627s means a weak storm from 0132 to 0627, which became moderately intense between 0321 and 0453, and contained a small group of strong bursts between 0454.3 to 0454.7.

1. **FLUX DENSITY**

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

	JULY 1955									AUGUST 1955									SEPTEMBER 1955									
	CAV	CAV	COR	NED	OSL	TOK	NED	OTT	NAG	CAV	CAV	COR	NED	OSL	TOK	NED	OTT	NAG	CAV	CAV	COR	NED	OSL	TOK	NED	OTT	TOK	NAG
Mc/s	81	175	200	200	200	200	545	2800	3750	81	175	200	200	200	200	545	2800	3750	81	175	200	200	200	200	545	2800	3000	3750
Date																												
1	1.1	5	10	8	5	7	30	88	95	1.5	5	-	9	6	7	30	83	93	1.7	6	13	13	8	10	33	101	-	109
2	1.3	5	10	7	5	8	30	89	98	1.5	6	-	9	6	7	30	81	93	1.4	5	12	11	8	13	33	104	-	114
3	1.6	8	-	8	6	-	31	92	99	1.7	6	-	10	6	-	30	84	94	2.2	9	22	22	13	25	33	107	-	117
4	1.5	9	-	11	7	9	31	91	104	1.9	5	-	9	6	7	31	85	96	2.1	7	-	12	9	14	33	-	-	117
5	2.9	13	-	16	9	13	31	95	105	1.4	5	-	10	6	8	32	90	99	2.5	11	-	24	15	11	34	110	-	118
6	20.0	15	12	18	11	22	33	102	106	1.6	7	-	11	7	9	33	-	104	2.3	5	15	14	9	90	34	109	-	119
7	30.0	16	24	29	17	14	32	103	106	1.4	6	-	13	6	-	33	103	115	1.8	9	18	17	11	19	33	107	-	117
8	30.0	36	18	32	18	31	32	102	106	1.6	6	17	11	7	10	36	111	120	1.7	9	12	14	9	13	30	110	-	116
9	1.5	8	11	14	7	15	32	101	105	1.6	7	17	13	9	10	36	124	128	1.6	6	11	10	7	11	33	110	-	115
10	1.2	6	10	9	7	-	-	101	105	2.3	25	46	39	23	36	37	117	129	1.8	6	11	11	7	10	32	106	-	113
11	1.4	6	10	10	7	-	30	97	105	2.0	5	45	41	22	38	40	113	124	1.9	4	10	10	6	-	31	98	-	109
12	1.6	7	10	9	6	-	30	97	102	10.5	40	87	100	58	80	41	110	118	2.2	5	10	11	7	-	31	97	106	109
13	1.6	6	10	10	6	9	28	94	101	-	6	-	15	10	15	36	-	114	2.1	6	12	11	8	10	31	97	105	109
14	1.5	5	10	9	6	8	27	90	99	1.8	4	-	-	-	-	-	101	110	1.5	6	11	10	7	11	34	94	100	105
15	1.7	5	10	9	6	8	26	89	-	1.5	4	-	11	-	9	33	96	109	1.5	4	10	9	6	9	33	89	98	102
16	1.5	5	10	9	6	8	25	85	95	1.6	4	-	10	-	9	32	91	103	1.6	-	10	9	6	10	34	85	90	98
17	1.6	5	10	-	7	8	27	83	92	1.5	4	-	9	6	9	31	87	98	1.7	4	10	8	6	8	34	85	92	95
18	1.7	6	10	9	7	8	27	81	91	1.6	4	-	9	6	8	29	79	93	1.7	4	10	8	6	-	33	84	-	95
19	2.0	6	10	10	6	8	27	82	93	1.7	4	-	9	6	8	29	79	90	1.7	4	10	8	6	9	30	85	92	94
20	1.7	6	10	10	7	9	28	82	91	1.3	4	-	12	7	9	28	78	90	1.4	4	-	9	6	8	33	84	97	97
21	1.8	6	10	10	7	10	28	78	91	1.2	4	-	10	6	-	27	77	-	1.2	4	10	9	6	8	32	81	98	97
22	1.6	6	10	9	6	8	25	77	89	1.3	4	10	10	6	10	27	79	88	1.7	4	10	9	5	8	32	80	89	93
23	1.4	6	10	8	6	8	26	76	87	1.1	4	10	9	6	10	27	77	89	1.9	-	10	9	5	9	36	81	88	93
24	1.5	5	10	8	6	-	25	73	86	1.3	4	10	8	6	9	26	76	88	2.0	5	10	9	6	10	36	-	-	93
25	1.4	6	10	8	6	-	24	74	85	1.3	9	15	14	9	8	27	76	87	1.7	4	10	9	6	-	-	87	-	96
26	1.4	4	10	-	6	8	-	74	-	1.3	5	13	12	7	9	28	80	89	1.6	-	10	9	6	9	33	87	93	96
27	1.6	5	-	9	6	8	27	-	-	1.2	5	14	13	8	10	28	-	97	1.4	-	10	9	6	8	36	91	91	97
28	1.1	5	-	9	6	8	27	76	86	1.9	8	13	13	9	-	29	85	98	1.7	-	11	9	6	10	36	93	92	98
29	1.2	5	-	9	6	8	28	79	89	1.7	5	10	9	6	9	28	86	97	1.9	-	12	11	7	10	36	97	95	100
30	1.3	5	-	9	6	7	28	81	93	1.6	5	10	9	6	10	29	91	98	-	-	15	12	8	11	40	98	-	104
31	1.5	5	-	8	6	-	28	-	92	1.6	5	11	11	7	8	32	101	104										

1. FLUX DENSITY

3-hourly medians at 200 Mc/s., from COR. NED. OSL. TOK.

U.T. Date	JULY 1955 00-03	03-06	06-09	09-12	12-15	15-18	18-21	21-24	Daily Mean
1	7	7	7	7	8	8	5	-	7
2	8	7	5	7	8	8	6	-	7
3	-	8	7	7	8	7	8	-	8
4	9	8	9	9	8	9	10	-	9
5	15	9	7	15	9	9	10	-	11
6	27	18	13	15	14	13	13	-	16
7	12	19	22	16	21	29	32	-	22
8	31	26	29	31	22	19	11	-	24
9	15	7	8	8	17	9	7	-	10
10	-	8	9	8	9	8	7	-	8
11	-	7	9	9	9	8	6	-	8
12	-	7	7	8	8	9	6	-	8
13	9	-	9	8	9	8	8	-	9
14	8	8	8	8	8	8	8	-	8
15	8	8	8	8	8	8	8	-	8
16	8	7	8	8	8	8	8	-	8
17	-	7	6	6	8	8	6	-	7
18	7	8	8	9	8	8	8	-	8
19	-	8	8	8	9	8	8	-	8
20	9	8	8	9	9	9	8	-	9
21	10	9	9	9	9	9	8	-	9
22	8	7	8	8	8	8	8	-	8
23	8	5	8	7	8	8	6	-	7
24	-	6	7	7	8	8	7	-	7
25	-	7	7	7	8	8	8	-	8
26	8	7	6	6	9	9	6	-	7
27	8	7	8	8	8	8	8	-	8
28	8	7	8	8	8	8	7	-	8
29	7	8	8	8	8	7	7	-	8
30	7	7	7	7	8	8	7	-	7
31	-	7	7	7	7	8	6	-	7

U.T. Date	AUGUST 1955 00-03	03-06	06-09	09-12	12-15	15-18	18-21	21-24	Daily Mean
1	7	7	9	9	8	8	7	-	8
2	7	6	8	8	8	8	8	-	8
3	-	8	9	8	8	8	7	-	8
4	7	9	8	8	8	8	8	-	8
5	7	8	8	8	8	8	8	-	8
6	9	8	9	10	9	9	9	-	9
7	-	10	9	10	10	12	12	-	11
8	10	8	9	8	12	11	11	-	10
9	9	10	13	12	16	15	16	-	13
10	32	36	32	31	41	33	28	-	33
11	26	39	38	34	34	30	35	-	34
12	33	80	128	95	72	77	56	24	71
13	15	11	17	16	11	10	9	-	13
14	-	-	-	-	-	11	10	-	11
15	9	11	12	11	10	10	10	-	10
16	9	9	10	10	10	10	10	-	10
17	9	9	9	8	8	8	9	-	9
18	8	7	8	8	8	7	8	-	8
19	8	7	8	7	8	8	9	-	8
20	9	11	14	11	9	8	-	-	10
21	-	8	9	10	8	8	-	-	9
22	10	10	10	10	9	8	10	--	10
23	10	10	8	8	8	10	10	-	9
24	9	8	7	7	8	8	10	-	8
25	8	8	9	12	17	13	10	-	11
26	9	9	9	9	10	12	12	-	10
27	10	7	9	12	10	12	16	-	11
28	-	8	12	14	11	10	12	-	11
29	10	9	8	8	8	8	10	-	8
30	10	8	8	8	9	8	10	-	9
31	8	6	9	10	10	8	11	-	9

U.T. Date	SEPTEMBER 1955 00-03	03-06	06-09	09-12	12-15	15-18	18-21	21-24	Daily Mean
1	10	10	12	10	11	11	14	-	11
2	-	13	10	10	10	10	12	-	11
3	25	18	22	17	20	18	21	-	20
4	14	16	16	9	8	9	-	-	12
5	11	11	31	22	20	12	-	-	18
6	100	80	15	10	18	13	17	-	36
7	19	20	12	17	15	16	18	-	17
8	12	14	14	12	12	10	11	-	12
9	11	-	9	9	9	9	11	-	10
10	10	-	9	10	10	9	11	-	10
11	-	-	8	8	9	8	10	-	9
12	-	-	9	9	9	10	10	-	9
13	9	10	9	10	10	10	12	-	10
14	10	12	9	9	9	9	11	-	10
15	10	8	7	8	8	8	10	-	8
16	10	9	7	8	9	8	10	-	9
17	8	8	6	7	8	8	10	-	8
18	-	-	7	8	8	8	10	-	8
19	8	9	7	7	8	8	10	-	8
20	8	8	8	8	8	9	10	-	9
21	8	8	8	8	8	8	10	-	8
22	8	8	7	7	8	8	10	-	8
23	9	-	8	7	8	8	10	-	8
24	-	10	7	8	8	8	10	-	9
25	-	-	7	8	8	8	10	-	8
26	10	9	7	8	8	8	10	-	9
27	8	8	8	8	8	8	10	-	8
28	10	9	7	8	9	9	11	-	9
29	10	10	8	8	11	9	11	-	10
30	11	-	9	9	10	17	14	-	12
31									

2. POLARISATION

TOK 200 September 3rd L45
" " " 6th L73

3. VARIABILITY

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

	JULY 1955							
	CAV	CAV	COR	NED	OSL	SYD	TOK	NED
Mc/s	81	175	200	200	200	200	200	545
Date								
1	0	0	0	0	0	0	0	0
2	1	0	0	0	0	1	0	0
3	2	1	-	1	0	0	0	0
4	3	2	-	2	1	2	1	0
5	2	2	-	1	2	1	1	0
6	3	3	2	1	1	2	2	0
7	3	2	3	2	2	2	2	0
8	3	3	2	1	1	1	2	0
9	0	1	1	0	0	1	1	0
10	0	0	0	1	0	0	0	-
11	0	0	1	1	0	0	0	0
12	0	0	0	0	0	0	0	0
13	0	0	0	0	0	1	0	0
14	0	0	1	0	0	0	0	0
15	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0
17	0	0	0	-	0	0	0	0
18	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0
26	0	0	0	-	0	0	0	-
27	0	0	-	0	0	0	0	0
28	0	0	-	0	0	0	0	0
29	0	0	-	0	0	0	0	0
30	0	0	-	0	0	0	0	0
31	0	0	-	0	0	0	0	0

	AUGUST 1955							
	CAV	CAV	COR	NED	OSL	SYD	TOK	NED
Mc/s	81	175	200	200	200	200	200	545
Date								
1	0	0	-	0	0	0	0	0
2	0	0	-	0	0	0	0	0
3	0	0	-	0	0	1	-	0
4	0	0	-	0	0	0	0	0
5	0	0	-	0	0	0	0	0
6	0	1	-	1	0	0	0	0
7	0	0	-	1	0	0	-	0
8	1	2	2	1	0	0	1	0
9	0	1	2	1	1	0	1	0
10	2	3	2	3	1	2	2	0
11	1	2	2	3	2	1	3	0
12	2	3	2	3	1	2	3	0
13	-	1	-	1	1	1	2	0
14	0	0	-	-	-	-	0	-
15	0	0	-	0	-	0	1	0
16	0	0	-	0	-	0	0	0
17	0	0	-	0	0	-	0	0
18	0	0	-	0	0	0	0	0
19	0	0	-	0	0	0	0	0
20	0	0	-	1	1	-	0	0
21	0	1	-	1	1	-	0	0
22	0	0	1	1	0	-	1	0
23	0	0	0	0	0	-	1	0
24	0	0	0	0	0	0	1	0
25	1	2	2	2	1	0	0	0
26	0	0	1	0	1	0	1	0
27	0	1	2	0	0	0	0	0
28	2	2	1	1	1	0	0	0
29	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	1	0
31	1	1	1	0	1	0	0	0

	SEPTEMBER 1955							
	CAV	CAV	COR	NED	OSL	SYD	TOK	NED
Mc/s	81	175	200	200	200	200	200	545
Date								
1	1	1	2	1	1	-	2	0
2	0	0	1	0	0	-	2	0
3	2	2	3	2	2	-	3	0
4	2	1	-	1	1	-	2	0
5	1	2	-	2	2	-	1	0
6	2	1	2	1	1	-	3	0
7	1	3	2	2	1	-	1	0
8	0	0	1	1	0	-	1	0
9	0	1	1	0	0	0	0	0
10	0	0	1	0	0	0	0	0
11	0	0	0	0	0	0	-	0
12	0	0	0	0	0	0	-	0
13	0	0	1	0	0	0	0	0
14	0	0	1	0	0	0	0	0
15	0	0	0	0	0	0	0	0
16	0	-	1	0	0	-	1	0
17	0	0	0	0	0	-	0	0
18	0	0	1	0	0	-	-	0
19	0	0	0	0	0	1	1	0
20	0	0	-	0	0	0	0	0
21	0	0	0	0	0	1	1	0
22	0	0	0	0	0	0	0	0
23	0	-	0	0	0	0	0	0
24	0	0	0	0	0	-	-	0
25	0	0	0	0	0	-	-	-
26	0	-	0	0	0	0	0	0
27	0	-	0	0	0	-	0	0
28	0	-	1	0	0	-	0	0
29	0	-	2	1	1	-	1	0
30	-	-	2	0	0	-	1	0
31								

4. OUTSTANDING OCCURRENCES

Station and frequency	Date 1955	Starting time	Duration	Type	Maximum Flux Density Inst.	Smooth	Polarisation	Remarks
Mc/s		U.T.	Minutes		10^{-21} w m^{-2}(c/s)$^{-1}$			
Syd 62	July 1	0237	0.2	SD	1.8	0.7		
Ned 545	1	0520	2.0	CD	>20.0	4.0		
Nag 3750	1	0520	3.3	CD		0.7		
Syd 200	2	0330	0.3	CD	94.0	45.0		
Ned 200	2	1022	0.3	SD	35.0	15.0		
Cav 81	3	0926	28.0	SD	>0.3	0.2	-	
Cav 175	3	0926	8.0	SD	1.4	0.7	-	
Cav 81	3	1020	116.0	SD	>0.7	0.6	-	
Osl 200	3	1027	8.0	CD	4.0	1.0		Also Ned 200
Ned 545	3	1027	7.0	CD	>30.0	6.0		
Ott 2800	3	1027	14.0	CD		4.4		
Ott 2800	3	1655	8.0	SD		0.5		Flare
Ned 545	3	1821	0.5	CD	18.0	4.0		
Ned 200	3	1933	8.0	CD				
Ott 2800	3	1933	3.0	SD		0.6		
Ned 545	3	1934	1.0	CD	15.0	3.0		
Syd 200	3	2029	0.5	CD	38.0	20.0		
Syd 62	3	2211	1.4	CD	146.0	37.0		Also Syd 200
Syd 62	3	2215	13.0	M	164.0	6.0		
Syd 200	3	2321	0.3	CD	65.0	30.0		
Syd 200	3	2344	5.7	M	72.0	10.0		Also Syd 62
Syd 62	4	0129	1.0	CD	51.0	10.0		Also Syd 200
Syd 200	4	0201	1.0	CD	46.0	12.0		
Syd 62	4	0205	1.0	CD	84.0	21.0		
Syd 62	4	0244	7.5	M	310.0	19.0		
Syd 200	4	0251	0.2	SD	82.0	40.0		
Syd 200	4	0337	0.3	CD	50.0	23.0		
Cav 81	4	1021	8.0	SD	>0.9	0.8	-	
Cav 175	4	1021	5.0	SD	2.1	1.4	-	
Ned 200	4	1025	4.5	CD	9.0	1.2		
Cav 81	4	1130	6.0	SD	>0.4	0.2	-	
Ott 2800	4	1535	82.0	CD		0.4		Flare. Fade.
Ott 2800	4	1711	2.0	SD		0.3		
Syd 98	4	2241	0.3	CD	387.0	129.0		Also Syd 200
Syd 200	4	2358	0.2	SD	106.0	52.0		
Syd 62	5	0102	0.6	CD	33.0	9.0		
Tok 200	5	0203	10.0	CD	40.0	20.0		Also Syd 200
Syd 62	5	0205	16.0	CD	>1351.0	73.0		
Nag 3750	5	0209	3.0	CD		17.2		
Syd 62	5	0320	1.6	CD	26.0	7.0		
Syd 62	5	0340	0.3	CD	44.0	15.0		
Syd 62	5	0403	0.2	CD	26.0	12.0		
Syd 200	5	0413	6.4	CA	77.0	10.0		Also Syd 62
Syd 62	5	0548	0.2	SD	44.0	20.0		
Syd 62	5	0601	11.0	M	91.0	2.0		
Osl 200	5	0734	3.0	CA	> 2.3			
Ned 200	5	0735	1.5	CD	65.0	15.0		
Ned 200	5	1250	5.0	CD				
Ned 200	5	1350	0.1	SD	>12.0			
Syd 62	6	0230	0.5	CD	15.0	5.0		
Syd 200	6	0403	0.2	SA	62.0	29.0		
Syd 62	6	0404	1.5	CD	767.0	183.0		Also Syd 98
Syd 98	6	0606	1.5	CD	39.0	12.0		
Ott 2800	6	1614	5.0	SD		0.4		Flare
Syd 62	7	0037	0.2	SD	17.0	7.0		
Syd 62	7	0120	0.2	SD	37.0	18.0		
Syd 62	7	0150	0.2	CD	29.0	15.0		
Syd 200	7	0200	0.7	CA	54.0	20.0		
Syd 62	7	0201	0.5	CD	811.0	183.0		Also Syd 98
Nag 3750	7	0201	4.5	SD		0.6		
Syd 62	7	0211	0.3	SD	234.0	102.0		
Syd 62	7	0332	0.2	CA	44.0	20.0		
Syd 62	7	0438	0.2	CA	73.0	29.0		
Syd 62	7	0503	1.5	CA	548.0	183.0		
Ned 200	7	0723	9.0	CD	40.0	10.0		
Tok 200	7	0724	9.0	CD	40.0	25.0		
Ned 545	7	0724	6.0	CD	>8.0	6.0		
Nag 3750	7	0724	3.0	CD		0.8		
Syd 98	8	0003	7.0	CD	645.0	43.0		Flare. Also Syd 62
Syd 200	8	0004	1.3	CA	80.0	28.0		
Nag 3750	8	0005	4.5	SD		0.7		
Syd 200	8	0117	1.0	CA	68.0	25.0		Flare. Also Syd 98
Tok 200	8	0117	8.0	CD	30.0	7.0		
Syd 62	8	0118	3.0	CD	1168.0	219.0		
Nag 3750	8	0119	0.8	CD		0.7		
Syd 62	8	0345	0.7	CD	994.0	239.0		
Nag 3750	8	0435	4.0	CD		1.5		
Syd 98	8	0436	4.5	CD	796.0	21.0		
Syd 62	8	0437	5.0	CD	>1168.0	365.0		
Ned 200	8	1746	1.5	CD	13.0	5.0		
Ned 200	8	1811	2.0	CD	15.0	5.0		
Syd 62	8	2200	7.3	M	84.0	4.0		
Syd 98	8	2207	0.2	SD	43.0	16.0		
Syd 98	8	2310	0.5	CD	989.0	172.0		Also Syd 62
Syd 62	8	2330	3.2	CD	1314.0	219.0		Flare. Also Syd 98
Ott 2800	8	2330	1.0	SD		0.6		
Syd 62	8	2339	0.2	SD	1314.0	402.0		Also Syd 98
Syd 62	8	2354	5.5	CD	1205.0	146.0		Flare
Syd 98	8	2357	1.5	CD	86.0	20.0		
Nag 3750	8	2357	5.0	SD		0.6		
Syd 62	9	0014	5.0	CD	730.0	110.0		Flare
Osl 200	9	0529	6.0	CD	>3.0			Also Ned 200
Syd 200	9	0530	0.8	CD	70.0	27.0		
Syd 98	9	0531	4.5	CD	224.0	22.0		
Ned 200	9	0953	0.8	SD	14.0	1.0		Also Ned 545
Ned 200	9	1008	1.6	CD		2.0		
Cav 81	9	1229	4.0	SD	>0.5	0.3	-	Flare
Cav 175	9	1229	2.0	SD	1.4	0.7	-	
Ott 2800	9	1353	67.0	SD		30.9		Flare. Also Cor 200, Ned 200
Osl 200	9	1406	48.0	CD	18.0	5.0		

4. OUTSTANDING OCCURRENCES

Station and frequency		Date 1955		Starting time	Duration	Type	Maximum Flux Density Inst.	Smooth	Polarisation	Remarks
Mc/s				U.T.	Minutes		10^{-21} w m^{-2}(c/s)$^{-1}$			
Cav	81	July	9	1408	44.0	SD	>1.5	0.7	-	
Cav	175		9	1408	23.0	CD	>2.8		-	
Syd	200		13	0415	6.0	M	>70.0	15.0		
Ned	200		14	1853	6.0	CD	3.0	0.8		
Nag	3750		28	0254	0.8	SD		0.5		
Syd	62		30	0207	0.2	SD	80.0	27.0		
Cav	175	Aug.	1	1142	1.0	SD	1.6	1.1	-	
Syd	200		3	0518	0.3	CD	56.0	23.0		
Ned	200		3	1202	1.5	CD	1.7	0.3		
Syd	62		4	0033	0.3	CD	37.0	18.0		
Syd	62		5	0307	0.7	CD	99.0	38.0		
Ned	200		5	1653	4.0	CD	2.6	0.9		Also Ned 545
Cav	175		6	1410	2.0	SD	1.1	0.7	-	
Ott	2800		6	1520	6.0	SD		1.0		
Ott	2800		6	2030	4.0	SD		0.8		Flare
Ott	2800		8	1320	7.0	SD		2.5		Flare. Fade
Ott	2800		8	2048	4.0	SD		1.7		Fade
Tok	200		9	0251	0.6	CD	16.0	4.0	0	
Tok	200		9	0421	2.0	CD	>40.0	40.0	0	} Flare. Also Osl 200
Nag	3750		9	0421	7.0	CD		8.7		
Syd	62		9	0622	1.7	CD	657.0	219.0		Also Syd 98
Ned	200		9	0622	5.0	CD	>14.0			
Ned	545		9	0622	10.0	CD	10.0	2.0		
Tok	200		9	0623	2.5	CD	>40.0	40.0	0	
Syd	62		9	0705	1.0	CD	548.0	183.0		Flare. Also Ned 200
Ned	545		9	0705	7.0	CD	7.5	1.5		
Tok	200		9	0706	1.5	CD	35.0	20.0	0	
Tok	200		9	0735	6.0	CD	>40.0	40.0	0	} Fade. Also Ned 200
Ned	545		9	0735	8.0	CD	>7.5	2.5		
Ned	200		9	1122	2.0	CD	>3.5	1.5		
Cav	175		9	1126	6.0	SD	1.6	0.9	-	
Ott	2800		9	1130	40.0	SD		1.6		
Ned	545		9	1132	3.0	CD	>10.0	2.4		
Ned	200		9	1208	1.5	CD	>3.5	1.2		Also Ned 545
Ned	200		9	1325	1.0	CD	>3.5	1.7		
Ott	2800		9	1355	25.0	CD		0.4		
Ott	2800		9	2002	17.0	SD		2.2		Flare
Ned	545		10	0823	1.5	CD	7.0	0.7		
Cav	81		10	0912	12.0	SD	0.4	0.2	-	
Syd	62		11	2240	0.2	CD	51.0	20.0		
Tok	200		12	0031	0.5	CD	>40.0	30.0	0	
Tok	200		12	0151	2.0	CD	>50.0	>45.0	0	
Ned	545		12	1818	2.0	CD	>8.0	1.8		Also Ned 200
Ned	200		13	0711	1.0	CD	>5.0			
Syd	62		15	0154	0.5	CD	876.0	292.0		
Tok	200		15	0155	0.6	CD	>50.0	16.0	0	
Syd	98		21	0331	0.2	SD	53.0	22.0		
Cav	175		21	1322	4.0	SD	1.3	0.9	-	
Cav	175		22	1418	3.0	SD	1.4	1.0	-	
Cav	175		25	1240	38.0	SD	1.3	0.4	-	Also Cav 81
Ned	545		25	1556	1.5	CD	3.0			
Ned	200		25	1557	2.0	CD	>5.0			
Cav	81		26	1133	2.0	SD	0.4	0.3	-	
Cav	175		26	1235	1.5	SD	1.3	0.7	-	
Nag	3750		28	0028	5.0	SD		0.6		
Cav	175		29	1352	2.0	SD	1.1	0.8	-	
Cav	175		30	1105	3.0	SD	1.3	0.9	-	
Cav	81		30	1307	0.5	SD	0.3	0.2	-	
Ott	2800		30	1410	2.0	SD		0.4		Flare
Cav	81		31	1201	1.0	SD	>0.6	0.4	-	Also Ned 545
Cav	81		31	1242	1.0	SD	0.4	0.2	-	Also Cav 175
Cav	81	Sept.	1	1224	0.8	SD	>0.5	0.3	-	
Ott	2800		2	1847	8.0	SD		2.2		Flare. Fade
Cav	81		7	1216	3.0	SD	>0.5	0.3	-	
Cav	81		7	1238	4.0	CD	>0.5	0.3	-	
Cav	175		7	1238	0.5	SD	1.3	0.8	-	
Cav	81		9	1304	1.0	SD	>0.4	0.3	-	
Nag	3750		10	0448	4.0	SD		0.6		
Cav	81		11	1111	3.0	SD	>0.3	0.2	-	
Cav	81		16	1111	2.0	SD	>0.4	0.3	-	
Cav	81		16	1132	0.5	SD	0.4	0.2	-	
Ned	200		16	1608	2.5	CD	4.0	0.7		Also Ned 545
Ned	200		18	1422	2.0	CD	>4.5	1.6		
Ned	200		18	1539	4.0	CD	>4.5	1.2		
Ott	2800		18	1820	27.0	CD		0.2		Flare
Ott	2800		18	2106	3.0	SD		1.7		
Tok	200		19	0146	2.5	CD	14.0	2.0		} Also Tok 3000
Nag	3750		19	0146	13.0	CD		1.1		
Syd	62		19	0147	2.5	CD	51.0	18.0		
Tok	200		19	0532	0.8	CD	7.0	2.0		
Ned	545		19	0928	5.0	CD	6.0	1.0		
Osl	200		19	0929	11.5	CD	6.0	2.0		
Ned	200		19	1927	14.0	CD	>4.5	2.5		
Syd	62		20	0116	0.2	SD	18.0	7.0		
Syd	62		20	0253	0.2	SD	88.0	37.0		
Tok	3000		21	0043	4.0	SD	12.1	2.3		Also Nag 3750
Ned	200		21	0855	16.0	CD	>4.5	0.5		
Ned	545		21	0858	1.0	SD	5.5	0.7		
Ned	200		22	0926	15.0	CD	>5.0	0.8		
Ned	545		22	0935	1.0	SD	6.0	1.0		
Ned	200		24	1150	23.0	CD	>4.5	1.0		
Ned	200		25	1300	45.0	CD	>4.5	2.0		
Ned	200		27	1543	46.0	CD	>4.5			
Ott	2800		27	1631	6.0	SD		8.7		Flare
Ned	200		28	1111	1.0	CD	>4.5	1.8		Flare. Fade

5. SPECTRAL CLASSIFICATION OF ACTIVITY

Summary of data in frequency range 40 - 240 Mc/s., recorded at Dapto, near Sydney.

	TYPE I		TYPE II	TYPE III	Unclassified Activity and Remarks
Date 1955	Continuum	Bursts	Bursts	Bursts	
July 1				0018g,0236b	
3				2310(2320.9g,2327g,2343.3-2349.3G→	
4	 2145→	0159-0416s 2145→		←0124-0126G,0129-0130G,0205.0-0205.9G,0243g,0251g,0330g,0353b,0444b)0547s 2214(2241.2-2242.3g,2245g,2248b,2357b→	
5	 2150→	←(0035,0415)0437s 2150→	0215-0224	←0101.2-0102.5g,0203.3-0212.7G,0227g,0309g,0321g,0332b,0340g,0358.7b,0359.5b,0402g,0403g,0408g,0409g,0409.7-0412.4G,0415b,0416g,0549b,0602g)0614s 2201→	
6	←0142s 2329→	←0603s 2329→		←(0229g,0403.6-0405.3G)0601s 2329→	0505b
7	←0628s 2245→	←0628s 2245→	0206-0213	←(0201G,0437g,0500g,0505G)0608s 2245(2343g,2359g→	
8	←0551s	←0551s		←0002.6-0009.8G,0117.1-0125.6G,0345G,0436.0-0441.1G)0551s	
9				0312b,0530.7-0535.7G,0545b	
13				0416g	
15				0328g	
Aug. 3				0519g,0524b	
4				0034g	
5				0308g	
8				0421g,0622.7g,0623.4g,0624.2g	
9		2235→			
10		←0705s		0315-0558s	
11	 2253→	 2253→		0124b 2253→	
12	←(0311-0610)0610s 2204→	←(0311-0610)0610s 2204→		←(0020b,0535b,0538g)0610s 2204→	
13	←0430s	←0430s		←0542s	
14					2322b
15				0155-0156g	
21				2358b	
25				0017G	
28					2246b
30				0339g,0527b,0547g,0654g	0113b,0400b
31				0336b,0418b 2302g	0429g
Sept. 1				0214g	0633b
2				0212b	
4				2252b,2330g	
5	 2234→	 2234→		0252g,0318b 2234→	
6	←(0051-0526)0721s 2149-2214s	←(0051-0526)0721s 2149-2214s		←(0053b)0708s 2323b	
7				0151b,0523b	
8				0603b	
10			0509-0520		
13					0545g
16				0152b,0202b	
18		2349b			
19		0537b	0152-0202	0146-0148G,0526g,0529g,0532g	0542b
20		0102-0151s		0252g	

Observing Periods JULY 1-05.4; 3 22.6-23.8-4-02.1-06.5,21.6-5-06.5,21.8-6-06.1,23.6-7-06.4,22.8-8-05.9; 9 00.9-02.8,03.0-06.7; 10 22.9-11-05.9: 12 04.7-06.6,21.7-13-06.5,22.0-14-06.6,22.7-15-06.2; 17 23.1-18-05.9,22.8-19-02.5,21.7-22.5; 20 21.6-21-02.2,05.2-05.9,23.3-22-05.8; 24 23.6-25-05.8,21.4-21.6,23.1-26-01.8; 27 01.1-04.4,22.9-23.8-28-01.9-06.0,22.9-29-05.9; 31 23.3-AUG. 1-03.0,03.1-05.9,22.7-2-01.8,02.2-06.7,22.8-3-06.6,22.7-4-05.3,05.4-05.8, 22.7-5-05.8; 8 04.7-08.4; 9 00.3-04.5,04.6-07.2,22.6-10-07.1,23.4-11-06.3,22.9-12-06.5,22.1-13-05.7; 14 23.0-15-05.9,06.1-06.2; 17 22.7-18-06.3,22.6-19-05.6,05.7-06.2; 21 23.1-22-06.3,22.5-23-06.3,22.7-24-04.7,05.0-05.6,22.7-25-05.9; 26 01.0-05.9; 28 22.7-29-07.5; 30 00.9-07.3,22.7-31-07.6,22.9-SEPT. 1-00.5,01.3-06.6,22.6-2-06.1; 4 22.8-5-05.2,22.4-6-07.3,21.3-7-01.1,01.2-07.3,22.5-8-06.2,22.7-9-04.2,04.3-06.2; 10 01.1-06.8; 11 22.8-12-06.2,22.6-13-07.6,21.2-14-07.9; 15 22.9-16-03.0,03.1-06.2; 18 23.3-23.7,23.8-19-07.3,21.7-20-04.6; 22 23.8-23-05.8; 25 22.7-23.0,23.1-26-05.8; 29 22.8-30-06.1

Sydney, June 1956

S.F.Smerd

IV. SOLAR RADIO EMISSION

CO-OPERATING OBSERVATORIES

Details relating to the contributors to the fourth quarter of 1955 are as follows:-

OBSERVING STATION	ABBREVIATION	FREQUENCIES USED	NORMAL OBSERVING PERIOD
		Mc/s	(Hours U.T.)
Cavendish Laboratory, Cambridge, England	Cav	81 175	10 - 15 10 - 15
Cornell University, Ithaca, N.Y., U.S.A.	Cor	200	13 - 20
Research Institute of Atmospherics, Nagoya University, Toyokawa, Japan	Nag	3750	00 - 07
National Bureau of Standards Central Radio Propagation Laboratory, Boulder, Colorado	NBS	460	13 - 23
Observing Station Nederhorst, Den Berg - Radio (Nera)	Ned	200 545	06 - 18 05 - 19
Institutt for Teoretisk Astrefysikk, Universitetet, Blindern, Oslo, Norway	Osl	200	08 - 14
National Research Council, Ottawa, Canada	Ott	2800	12 - 21
Radio physics Laboratory, Sydney, Australia	Syd	62 98 200	20 - 08 20 - 08 20 - 08
Tokyo Astronomical Observatory, Mitaka, Tokyo	Tok	200 3000	00 - 06 00 - 06

TABULATED QUANTITIES

1. FLUX DENSITY 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

$$\text{Flux Density} = 2.09 \times 10^{-32} f^2 T$$

where f is the frequency in megacycles 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 flux density 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 value, and M is in serted in this column. The intensity unit in these columns is 10^{-21} watts metre^{-2}(c/s)$^{-1}$.

CORRECTIONS

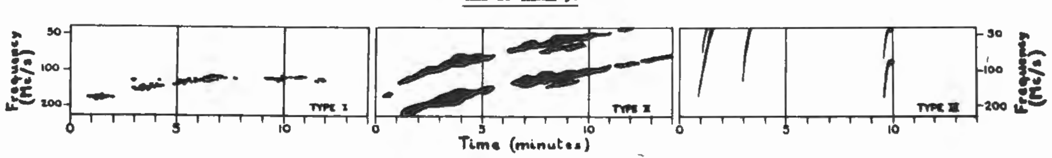
1. FLUX DENSITY The following approximate correction factors (less than 0.9 and greater than 1.1) seem indicated by a smooth spectrum drawn through yearly means of monthly minima.

Station and Frequency	Correction Factor	Period in 1955
Cav 175	1.5	Year
Syd 200	0.5	Jan.-June
Cor 200	0.8	Year
Osl 200	1.4	Feb.-Nov.
Syd 600	2.0	Feb.,Mar.,June
Syd 1200	2.0	Feb.,June

The relative readings from Cor 200 have been multiplied by 7.1 throughout 1955, those from Sun 200 for Jan., and Feb.

4. OUTSTANDING OCCURRENCES The relative flux density readings from Cor 200 have been multiplied by 0.71 throughout 1955, those from Sun 200 for Jan., and Feb.

KEY TO TABLE 5.



The accompanying figure shows idealized examples of the three spectral types of activity, tabulated above. For further details see: J.P. Wild and L.L. McCready 1950, Aust. J. Sci. Res. A: 3, 387; J.P. Wild, J.D. Murray and W.C. Rowe 1954, Aust. J. Phys.: 7, 439.

The following symbols have been used: b = Single burst, g = Small group (<10) bursts, G = Large group (>10) bursts, s = Storm, in the sense of intermittent, but apparently connected activity.

Three qualitative classes of intensity have been subjectively assessed. They are indicated as follows:
Weak - no line; Moderate - single line; Strong - double line, under the appropriate entry.

Arrows are used in the table of activity and in the list of observing periods, to indicate continuity between two Greenwich Days.

The following example, illustrates the use of the symbols: 0132(0321 - 0453,0454.3 - 0454.7g)0627s means a weak storm from 0132 to 0627, which became moderately intense between 0321 and 0453, and contained a small group of strong bursts between 0454.3 to 0454.7.

1. FLUX DENSITY

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

OCTOBER 1955	CAV	CAV	COR	NED	OSL	TOK	NBS	NED	OTT	TOK	NAG
Mc/s	81	175	200	200	200	200	460	545	2800	3000	3750
Date											
1	2.0	6	39	14	10	13	32	42	97	104	105
2	15.0	8	14	22	24	95	29	46	101	-	115
3	1.7	8	18	16	12	18	-	45	113	117	117
4	2.7	-	21	17	12	19	30	46	118	118	120
5	6.5	-	18	18	14	18	29	47	-	120	121
6	-	-	14	19	15	23	30	46	-	122	122
7	-	-	19	18	13	17	31	47	125	121	125
8	-	-	20	25	15	21	30	48	112	120	122
9	-	-	13	15	-	-	30	47	115	-	118
10	-	5	22	11	7	13	38	46	120	114	117
11	-	6	14	20	18	-	29	45	114	-	120
12	-	6	10	11	7	-	29	44	-	108	116
13	-	6	10	11	7	-	28	42	99	99	109
14	-	6	10	10	6	-	28	40	96	96	104
15	-	6	-	10	6	-	27	42	86	-	102
16	-	5	-	10	6	-	27	42	86	94	100
17	-	-	10	10	6	-	26	38	79	86	97
18	-	-	-	10	6	-	25	38	85	85	96
19	-	4	12	10	7	-	26	43	87	87	95
20	-	4	10	10	7	-	25	40	88	89	97
21	-	4	10	11	7	-	26	41	94	90	-
22	-	6	-	11	6	-	-	40	96	-	101
23	-	-	-	13	13	-	-	42	104	-	105
24	-	-	39	28	23	-	29	44	113	-	113
25	-	6	20	20	13	-	30	46	134	123	128
26	-	-	22	20	15	-	30	49	139	134	139
27	-	6	87	128	110	-	34	-	138	140	142
28	-	4	109	66	51	-	62	51	140	146	148
29	-	-	174	54	53	-	67	56	144	150	151
30	-	-	18	16	14	-	33	53	140	-	153
31	-	-	39	22	38	-	33	50	149	145	146

NOVEMBER 1955	CAV	CAV	COR	NED	OSL	NBS	NED	OTT	TOK	NAG
Mc/s	81	175	200	200	200	460	545	2800	3000	3750
Date										
1	2.4	8	25	22	20	37	52	153	146	152
2	1.2	10	21	26	20	32	53	135	139	146
3	-	5	13	14	10	31	48	121	-	136
4	0.9	4	12	14	10	31	49	116	128	126
5	1.0	-	-	12	9	30	50	109	114	119
6	1.4	8	-	26	23	32	50	108	-	118
7	2.1	12	39	30	25	35	52	116	113	121
8	7.5	32	62	50	39	35	52	121	116	128
9	2.3	12	68	66	51	35	50	125	125	130
10	8.0	28	73	80	58	35	49	131	133	136
11	12.0	48	80	76	55	34	-	134	134	136
12	15.0	50	76	82	61	-	48	140	135	141
13	-	32	50	42	38	-	-	131	-	146
14	12.0	12	23	21	16	32	52	127	-	138
15	16.5	6	91	42	37	45	56	131	-	132
16	-	4	20	20	17	34	52	134	-	134
17	-	4	34	26	20	33	49	131	-	131
18	-	-	19	20	15	32	48	128	123	130
19	2.6	-	-	12	9	30	49	131	133	134
20	1.6	-	-	11	-	30	50	132	-	133
21	1.8	-	10	10	7	30	48	124	138	131
22	1.6	-	10	10	7	30	46	122	128	129
23	1.4	-	10	9	7	29	46	123	-	131
24	1.3	3	-	10	7	29	48	124	125	130
25	1.4	-	10	10	8	29	46	128	124	131
26	1.8	5	-	10	8	29	50	135	130	140
27	1.2	5	-	10	9	32	51	136	136	142
28	1.7	5	-	17	13	35	48	135	135	139
29	2.2	5	-	18	14	31	48	132	136	142
30	2.2	18	60	-	-	35	-	144	137	141

DECEMBER 1955	CAV	CAV	COR	NED	TOK	NBS	NED	OTT	TOK	NAG
Mc/s	81	175	200	200	200	460	545	2800	3000	3750
Date										
1	1.8	11	23	24	-	35	44	136	138	142
2	10.0	14	68	38	-	40	45	138	141	143
3	15.0	18	-	65	-	38	45	134	137	142
4	20.0	14	-	46	-	36	-	145	-	146
5	2.3	6	17	18	20	36	-	147	138	149
6	1.8	-	13	13	12	34	-	148	142	149
7	1.3	5	13	12	10	34	-	143	145	145
8	1.1	3	12	11	12	34	43	140	139	139
9	1.1	4	12	12	18	33	43	138	141	142
10	0.9	5	-	10	12	32	43	134	138	140
11	14.0	16	-	24	12	35	50	146	-	146
12	2.2	11	14	16	13	34	48	141	145	150
13	1.4	4	11	13	12	34	42	133	146	144
14	1.7	7	11	13	12	-	42	136	143	142
15	1.4	6	17	12	12	32	39	137	137	142
16	8.0	14	29	28	31	32	38	139	-	139
17	2.1	-	24	33	24	32	42	136	-	146
18	2.2	14	57	64	26	-	41	133	-	139
19	1.6	6	17	15	20	-	38	132	-	134
20	1.3	4	13	15	18	33	38	131	-	136
21	1.2	3	10	12	15	33	40	119	-	139
22	1.3	4	11	10	13	30	37	122	126	131
23	1.1	3	10	12	10	30	38	117	120	123
24	1.1	4	-	10	13	-	36	115	116	121
25	1.1	4	-	11	13	-	39	115	-	118
26	1.0	4	-	14	15	30	38	114	116	120
27	1.1	4	-	12	-	-	39	123	119	127
28	1.1	4	-	11	10	-	43	123	127	131
29	1.0	4	-	11	14	-	43	124	-	129
30	1.2	4	10	10	14	32	48	135	-	131
31	-	-	-	11	13	32	48	129	-	134

1. FLUX DENSITY

3-hourly medians at 200 Mc/s., from COR, NED, OSL, TOK.

U.T.	OCTOBER 1955								
Date	00-03	03-06	06-09	09-12	12-15	15-18	18-21	21-24	Daily Mean
1	13	-	12	10	28	41	48	-	25
2	-	95	68	24	16	11	14	-	38
3	22	16	11	12	20	16	15	-	16
4	15	19	16	12	30	12	13	-	17
5	13	21	18	16	16	17	16	-	17
6	19	27	20	15	17	14	13	-	18
7	15	18	14	15	19	19	19	-	17
8	21	-	19	21	21	17	16	-	19
9	-	-	15	16	14	12	13	-	14
10	13	13	9	9	10	10	43	-	15
11	-	-	47	22	13	12	14	-	22
12	-	-	9	9	9	9	10	-	9
13	-	-	8	9	9	9	10	-	9
14	-	-	8	8	9	8	10	-	9
15	-	-	8	8	9	9	-	-	9
16	-	-	8	8	8	8	-	-	8
17	-	-	7	8	9	9	10	-	9
18	-	-	8	8	8	8	-	-	8
19	-	-	8	9	9	11	11	-	10
20	-	-	8	9	9	9	10	-	9
21	-	-	9	10	10	9	10	-	10
22	-	-	8	9	9	9	-	-	9
23	-	-	12	15	15	13	-	-	14
24	-	-	24	21	39	33	34	-	30
25	-	-	14	14	20	16	21	-	17
26	-	-	17	19	22	21	21	-	20
27	-	-	209	142	65	48	129	-	119
28	-	-	50	50	86	100	124	-	82
29	-	-	50	47	106	189	189	-	116
30	-	-	19	14	16	18	19	-	17
31	-	-	33	32	32	36	39	-	34

U.T.	NOVEMBER 1955								
Date	00-03	03-06	06-09	09-12	12-15	15-18	18-21	21-24	Daily Mean
1	-	-	27	22	19	25	31	-	25
2	-	-	38	24	21	22	19	-	21
3	-	-	11	13	12	12	15	-	13
4	-	-	12	13	11	12	13	-	12
5	-	-	12	11	11	-	-	-	11
6	-	-	22	31	22	-	-	-	25
7	-	-	24	25	36	36	42	-	33
8	-	-	45	29	38	60	53	-	45
9	-	-	68	60	39	77	67	-	62
10	-	-	42	69	67	60	70	-	61
11	-	-	69	66	71	79	78	-	73
12	-	-	62	74	74	77	76	-	73
13	-	-	42	41	42	52	50	-	45
14	-	-	24	25	18	25	21	-	25
15	-	-	36	36	59	90	112	-	67
16	-	-	25	20	38	21	80	-	25
17	-	-	20	25	24	34	32	-	27
18	-	-	20	19	17	20	17	-	19
19	-	-	12	10	11	-	-	-	11
20	-	-	12	11	10	-	-	-	11
21	-	-	9	9	9	10	10	-	9
22	-	-	10	9	9	10	10	-	10
23	-	-	8	8	9	10	10	-	9
24	-	-	10	8	9	-	-	-	9
25	-	-	10	9	9	10	10	-	10
26	-	-	10	9	9	-	-	-	9
27	-	-	10	10	10	-	-	-	10
28	-	-	15	15	15	-	-	-	15
29	-	-	24	16	15	-	-	-	18
30	-	-	32	20	71	62	46	-	46
31									

U.T.	DECEMBER 1955								
Date	00-03	03-06	06-09	09-12	12-15	15-18	18-21	21-24	Daily Mean
1	-	-	28	24	21	21	24	-	24
2	-	-	38	39	69	67	43	-	51
3	-	-	-	72	103	-	-	-	88
4	-	-	-	53	31	-	-	-	42
5	23	16	-	18	18	19	17	-	19
6	13	12	-	12	14	12	12	-	13
7	11	10	-	14	13	14	12	-	12
8	12	12	-	10	12	12	12	-	12
9	18	-	-	11	12	12	11	-	12
10	12	11	-	9	10	-	-	-	11
11	-	12	-	23	28	-	-	-	21
12	12	13	-	15	19	14	11	-	14
13	13	12	-	13	12	11	11	-	12
14	12	11	-	19	11	10	10	-	12
15	13	12	-	12	12	15	23	-	14
16	32	31	-	31	25	15	40	-	24
17	24	-	-	32	33	23	16	-	26
18	24	30	-	60	77	50	41	-	47
19	21	20	-	29	17	18	15	-	20
20	19	16	-	13	13	14	13	-	15
21	15	14	-	12	11	10	10	-	12
22	13	-	-	13	12	10	10	-	12
23	11	10	-	12	12	10	10	-	11
24	13	-	-	10	9	-	-	-	11
25	13	14	-	12	11	-	-	-	13
26	15	-	-	14	13	-	-	-	14
27	-	-	-	13	11	-	-	-	12
28	10	-	-	12	11	-	-	-	11
29	14	-	-	12	10	-	-	-	12
30	14	-	-	11	11	10	10	-	11
31	13	-	-	11	13	-	-	-	12

2. POLARISATION

No polarisation measurements were received for this quarter.

3. VARIABILITY

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

	OCTOBER 1955								NOVEMBER 1955							DECEMBER 1955						
	CAV	CAV	COR	NED	OSL	TOK	NBS	NED	CAV	CAV	COR	NED	OSL	NBS	NED	CAV	CAV	COR	NED	TOK	NBS	NED
Mc/s	81	175	200	200	200	200	460	545	81	175	200	200	200	460	545	81	175	200	200	200	460	545
Date																						
1	1	0	2	2	2	1	1	0	2	1	2	2	1	0	0	2	1	2	1	-	0	0
2	3	-	1	1	2	2	1	0	1	0	2	2	1	0	0	1	2	1	2	-	0	0
3	3	-	2	1	1	2	2	0	-	1	1	1	1	1	0	1	2	-	2	-	0	0
4	3	-	2	2	1	2	0	0	0	0	1	1	0	0	1	3	1	-	1	-	0	-
5	3	-	2	1	0	2	0	0	0	-	-	1	0	0	0	2	1	1	1	1	0	-
6	-	-	1	1	0	2	0	0	1	2	-	2	1	0	0	0	-	2	0	0	0	-
7	-	-	2	1	0	1	1	0	1	2	2	1	1	0	0	0	0	1	0	1	0	-
8	-	-	2	1	1	1	0	0	2	2	1	1	1	0	0	0	0	1	0	0	1	0
9	-	-	2	1	-	-	0	0	3	2	2	1	0	2	0	0	0	0	0	1	0	0
10	-	0	2	0	1	1	0	0	2	2	2	2	0	0	0	0	0	-	0	0	0	0
11	-	0	1	1	1	-	0	0	3	3	1	2	0	2	-	2	0	-	1	1	0	0
12	-	0	1	0	0	-	0	0	3	2	1	1	0	2	0	1	0	2	1	1	0	0
13	-	0	1	0	0	-	0	0	-	2	2	1	1	-	-	0	0	0	0	1	0	0
14	-	0	0	0	0	-	0	0	2	1	1	1	1	0	0	0	0	1	1	1	0	0
15	-	0	-	0	0	-	0	0	3	1	1	1	0	2	1	0	0	1	0	1	0	0
16	-	0	-	0	0	-	0	0	-	0	1	1	0	1	1	2	1	2	2	2	0	0
17	-	-	0	0	0	-	0	0	-	0	2	1	0	2	0	1	-	2	1	-	1	0
18	-	-	-	0	0	-	0	0	-	-	2	1	1	2	0	1	0	3	2	2	1	0
19	-	0	1	0	0	-	0	0	1	-	-	0	1	0	0	1	0	2	1	2	0	0
20	-	0	1	0	0	-	0	0	0	-	-	0	-	0	0	0	0	2	0	1	0	0
21	-	0	1	1	1	-	0	0	0	-	1	0	0	0	0	0	0	1	0	1	1	0
22	-	0	-	0	0	-	-	0	0	-	0	0	0	0	0	0	0	2	0	1	0	0
23	-	-	-	1	1	-	-	0	0	-	1	0	0	0	0	0	0	1	0	1	0	0
24	-	-	2	2	1	-	0	0	0	0	-	0	0	0	0	0	0	-	0	1	0	0
25	-	0	2	1	1	-	1	0	1	-	0	0	0	1	0	0	0	-	0	1	0	0
26	-	-	2	1	2	-	1	0	0	0	-	0	0	0	0	0	0	-	0	-	0	0
27	-	2	2	2	0	-	0	-	0	0	-	0	0	1	0	0	0	-	0	-	0	0
28	-	1	2	3	1	-	3	0	0	0	-	0	0	2	0	0	0	-	0	0	0	0
29	-	-	2	2	2	-	1	0	0	0	-	1	0	1	0	0	0	-	0	1	1	0
30	-	-	2	1	1	-	1	0	1	1	2	-	-	1	-	0	0	0	0	-	0	0
31	-	-	3	2	2	-	0	0								-	-	-	0	1	0	0

4. OUTSTANDING OCCURRENCES

Station and frequency	Date 1955	Starting time	Duration	Type	Maximum Flux Density Inst.	Maximum Flux Density Smooth	Polar-isation	Remarks
Mc/s		U.T.	Minutes		10^{-21}w m^{-2}(c/s)$^{-1}$			
NBS 460	Oct. 1	1806	135.0	CD		1.1		
NBS 460	1	1811	1.1	SD	11.0			
Ott 2800	1	1935	35.0	SD		0.3		
Nag 3750	2	0045	3.8	CD		7.0		Fade
Ned 545	2	0703	4.0	CD	>9.0	1.8		
Ned 545	2	1317	3.0	CD	>9.0	2.2		Also NBS 460
Ott 2800	2	1458	17.0	SD		0.3		
Ott 2800	2	1928	122.0	SD		0.5		
Ott 2800	2	2013	3.0	SA		0.3		
Tok 3000	3	0327	5.0	SD	12.5	0.8		Also Nag 3750
Cav 81	3	1054	120.0	CA	0.8	0.6		
Ott 2800	3	1232	1.0	SD		0.3		
Cav 81	3	1300	90.0	CA	1.5	1.3		Also NBS 460, Ned 545
Cav 81	4	1022	90.0	CA	1.3	0.9		
Cav 81	4	1314	105.0	CA	1.5	1.2		
Ott 2800	5	1258	6.0	SD		0.6		
Syd 98	6	0403	1.5	M	1575.0	60.0		
Tok 200	6	0406	1.0	CD	>35.0	>35.0		
Tok 3000	6	0518	3.0	SD	13.0	0.8		Also Nag 3750
NBS 460	6	1640	0.5	SD	6.0			Flare
Cor 200	8	1625	5.5	CA	>6.5	6.3		
Ned 200	9	1358	5.0	CD	>18.0	9.0		
NBS 460	11	1427	48.0	SD	4.7	0.1		
Cor 200	12	1517	0.5	CD	>6.8	6.8		Also Osl 200
Syd 98	20	2355	2.5	CD	49.0	10.0		
Syd 98	21	0043	0.2	SD	31.0	15.0		
Ott 2800	21	1942	78.0	SD		0.8		
NBS 460	24	2015	31.0	CD	5.4	0.2		
Ned 200	25	0853	2.0	CD	14.0	3.0		
Ned 545	25	1158	2.0	CD	6.0	0.5		
Ott 2800	25	1545	3.0	CD		1.0		
Ott 2800	25	1622	18.0	SD		0.7		
NBS 460	25	1816	6.0	SA	3.3	0.3		
NBS 460	25	1842	14.0	CD	23.0	3.2		
Ott 2800	25	1854	5.5	SD		4.4		Flare. Fade
NBS 460	25	1909	10.0	SA	4.5	0.9		
NBS 460	25	2325	0.3	SD	23.0			
Syd 62	26	0320	32.0	CD	1022.0	183.0		
Tok 3000	26	0354	2.0	CD	14.6	0.4		
NBS 460	26	1513	7.0	SA	4.5	0.4		
Ott 2800	26	1528	82.0	SD		0.9		Flare
Ott 2800	26	1728	2.5	SD		6.2		Also NBS 460
Ott 2800	26	1913	5.0	SD		0.3		
Ott 2800	26	1953	0.8	SD		8.0		Fade
NBS 460	26	1953	32.0	CD	>65.0	1.1		
Cor 200	26	2006	37.0	CD	>19.7	>19.7		
Nag 3750	26	2349	0.6	SD		14.0		
Ned 200	27	1010	3.0	CD	68.0	14.0		
Ott 2800	27	1224	2.0	SD		0.5		
Ott 2800	27	1314	6.0	CD		17.5		Fade
Ned 200	27	1318	2.0	CD	38.0	10.0		
NBS 460	27	2140	5.0	M	7.8	0.8		
Syd 62	28	0242	0.2	SD	44.0	21.0		
Nag 3750	28	0528	1.5	SD		3.1		Also Tok 3000
Cor 200	28	1616	2.0	CD	>19.7	>19.7		Sub-Flare
Cor 200	28	1651	0.5	CD	>19.7	>19.7		Sub-Flare
Cor 200	28	1847	1.0	CD	>19.7	>19.7		Sub-Flare
Ott 2800	28	1956	62.0	CD		16.4		Flare. Fade
NBS 460	28	2008	153.0	CD	>77.0	31.0		
Ott 2800	28	2058	47.0	SD		6.4		
Ott 2800	29	1352	26.0	SD		0.8		Flare
NBS 460	29	1518	0.6	SD	>99.0			
NBS 460	29	1642	0.5	SD	>56.0			
Ott 2800	29	1928	42.0	SD		0.5		Flare
NBS 460	29	2128	2.0	CD	>130.0	3.3		Sub-Flare
Osl 200	30	1315	1.3	SA	30.0	14.0		
Ned 200	30	1326	2.0	CD	>18.0	5.0		
NBS 460	30	1410	0.4	SD	23.0			
NBS 460	30	2234	73.0	CD	33.0	5.6		
Tok 3000	31	0132	6.0	CD	16.2	1.0		Also Nag 3750
Osl 200	31	0725	2.0	CA	16.0	4.0		
Cor 200	31	1436	2.0	CA	>19.7	>19.7		
NBS 460	31	1620	1.0	SD	11.0			
Tok 3000	Nov. 1	0513	5.0	CD	15.4	0.8		
Nag 3750	1	0605	1.3	CD		1.1		
Cav 81	1	1212	3.5	CA	5.1			
Cav 175	1	1250	6.0	M	5.0	4.0		
Cor 200	1	1700	10.0	CD	>5.9	>5.9		
Tok 3000	2	0033	41.0	SD	15.1	1.2		
Tok 3000	2	0228	0.2	SD	14.5	0.6		
NBS 460	3	1947	13.0	CD	15.0	0.3		Also Ott 2800. Flare. Fade
Tok 3000	4	0605	1.0	SD	13.2	0.4		
Ott 2800	4	1735	9.0	CD		0.4		
Syd 200	4	2249	3.5	CD	51.0	18.0		Also Syd 62
Syd 62	5	0004	1.2	CD	53.0	11.0		
Cav 81	5	0948	2.5	M	0.3	0.3		
Cav 81	5	1104	2.0	SD	0.7	0.5		
Cav 81	5	1126	1.5	SD	0.3	0.2		
Osl 200	5	1247	1.0	SD	>3.0	>1.4		
Cav 81	5	1326	1.0	SD	0.4	0.3		
Ott 2800	5	1631	9.5	SD		0.4		
Syd 62	6	0120	0.5	CD	418.0	152.0		
Syd 62	6	0341	0.2	CD	51.0	23.0		
Cav 81	6	0949	2.0	SD	0.4	0.2		
Cav 81	6	1100	150.0	CA	0.9	0.9		Also Cav 175

4. OUTSTANDING OCCURRENCES

Station and frequency	Date 1955	Starting time	Duration	Type	Maximum Flux Density Inst.	Maximum Flux Density Smooth	Polarisation	Remarks
Mc/s		U.T.			10^{-21} w $m^{-2}(c/s)^{-1}$			
Ott 2800	Nov. 6	1653	2.0	SD		0.5		
NBS 460	6	1744	4.0	CD	9.0	2.1		
Syd 62	7	0004	26.2	M	34.0	0.7		
Syd 62	7	0050	29.2	M	76.0	0.4		
Syd 62	7	0139	0.3	CD	760.0	210.0		
Tok 3000	7	0406	2.0	SD	11.7	0.4		
Ott 2800	7	1607	11.0	CD		0.9		Fade
Cor 200	8	1746	0.5	CD	>19.7	>19.7		
Cor 200	8	1855	2.5	CD	>19.7	>19.7		Fade
NBS 460	8	1855	10.0	SA	4.7	0.2		
Ott 2800	8	1855	6.0	SD		4.8		
Cor 200	8	2023	1.0	CD	>19.7	>19.7		
NBS 460	8	2029	111.0	CD	9.7	0.4		
Syd 62	9	0102	0.5	CD	86.0	28.0		
Syd 62	9	0139	4.7	M	1050.0	38.0		Also Syd 200
Syd 62	9	0151	1.0	CD	180.0	40.0		
Syd 62	9	0213	18.2	M	938.0	28.2		
Syd 62	9	0326	1.0	CD	547.0	113.0		
Syd 62	9	0342	9.5	M	844.0	38.0		
Syd 62	9	0410	17.0	M	>844.0	40.2		
Syd 62	9	0457	13.0	M	844.0	56.0		
Syd 62	9	0600	12.2	M	844.0	14.4		
Syd 62	9	0732	0.2	SD	19.0	9.0		
Syd 62	9	0756	0.6	CD	45.0	19.0		
Cav 81	9	1113	170.0	CA	0.6	0.4		
Cav 175	9	1135	160.0	CA	4.8	3.0		
Ned 200	9	1320	5.0	CD	>320.0	75.0		Flare. Fade
Osl 200	9	1321	4.5	CD	53.0	12.0		
Ned 545	9	1321	1.5	SD	>9.0			
Ott 2800	9	1321	6.0	SD		15.5		
NBS 460	9	1605	4.0	M	17.0	1.2		Sub-Flare
Cor 200	9	1606	2.5	CA	>19.7	>19.7		
Ott 2800	9	1606	3.0	SD		1.4		
Cor 200	9	1656	1.0	CA	>19.7	>19.7		
Cor 200	9	1909	3.5	CD	>19.7	>19.7		Sub-Flare
NBS 460	9	1909	3.4	CD	24.0	2.5		
Ott 2800	9	1922	86.0	SD		0.5		
NBS 460	9	2052	4.0	M	15.0	0.9		Also Syd 62
Syd 62	9	2147	26.3	M	629.0	16.0		Sub-Flare
Syd 62	9	2239	11.0	M	192.0	26.0		
Syd 62	9	2311	10.5	CD	925.0	148.0		Also NBS 460
Syd 62	9	2356	38.2	M	796.0	7.7		
Syd 62	10	0052	12.6	M	65.0	1.2		
Syd 62	10	0221	2.6	M	159.0	15.0		
Syd 62	10	0348	17.5	M	>925.0	34.0		
Nag 3750	10	0530	2.0	SD		0.7		Also Tok 3000
Ned 545	10	0910	2.0	CD	>12.0	2.5		Flare
Ned 200	10	0911	1.5	CD	>250.0	40.0		
Ned 200	10	1441	3.0	CD	130.0	28.0		Also Cor 200
Cor 200	10	1653	2.5	CA	>19.7	>19.7		
Cor 200	10	1822	3.0	CA	>19.7	>19.7		
Ott 2800	10	1844	46.0	SD		0.4		Sub-Flare. Fade
Cor 200	10	1845	1.0	CA	>19.7	>19.7		
Cav 81	11	1012	3.0	SD	5.6	4.7		
Ned 200	11	1113	2.0	CD	62.0	10.0		
Cav 81	11	1243	0.5	SD	4.0	2.7		
Ned 200	11	1323	2.0	CD	>80.0			Flare
Ott 2800	11	1733	7.0	SD		0.9		
NBS 460	11	1937	1.0	SD	18.0			
Syd 62	11	2042	0.4	CA	100.0	44.0		
Syd 62	11	2111	15.0	M	1203.0	139.0		Sub-Flare
NBS 460	11	2239	24.0	M	16.0	0.2		
Syd 62	12	0035	0.5	CA	833.0	259.0		
Syd 62	12	0125	0.6	CA	70.0	22.0		
Syd 62	12	0228	2.0	CA	463.0	93.0		
Nag 3750	12	0229	7.0	SD		1.0		
Tok 3000	12	0230	1.5	SD	14.1	0.6		
Syd 62	12	0403	0.3	CA	61.0	28.0		
Cav 175	12	1015	120.0	CA	10.0	5.0		
Cav 81	12	1030	180.0	CA	10.0			
Osl 200	12	1128	7.0	CD	>170.0	>50.0		Also Ned 200. Flare. Fade
Ned 545	12	1128	10.0	CD	>12.0			
NBS 460	12	1539	14.0	M	15.0	0.5		
Ott 2800	12	1945	60.0	SD		0.7		
Syd 62	12	2113	0.2	CD	70.0	28.0		
Syd 62	12	2133	0.7	CD	352.0	148.0		
Nag 3750	13	0255	3.0	SD		4.0		
Ned 200	13	1056	1.0	SD	>95.0			Flare
Ott 2800	13	1557	3.0	CD		0.9		
Ott 2800	13	1657	3.0	SD		0.3		
Ott 2800	13	1700	3.5	SD		0.4		
Nag 3750	14	0004	1.3	CD		1.6		Flare
Ned 200	14	1029	2.0	CD	25.0	7.0		
Ned 200	14	1050	1.0	CD	17.5	8.0		
Ned 200	14	1250	2.0	CD	>25.0	7.0		
Nag 3750	15	0427	3.0	SD		9.6		
Syd 200	15	0439	2.0	CD	72.0	30.0		Also Nag 3750
Nag 3750	15	0445	0.7	SD		2.0		Flare. Fade
Cav 81	15	1000	120.0	SD	10.0			
Ott 2800	15	1250	17.0	CD		15.3		Flare. Fade
Cav 81	15	1256	120.0	SD	10.0			Flare. Fade
Ott 2800	15	1605	13.0	SA		0.4		
Ott 2800	15	1618	27.0	SA		0.3		Flare
Ott 2800	15	1645	24.0	SA		0.4		Also NBS 460. Flare
Ott 2800	15	1734	5.0	CA		56.5		Also Cor 200. Fade

4. OUTSTANDING OCCURRENCES

Station and frequency	Date 1955	Starting time	Duration	Type	Maximum Flux Density Inst.	Smooth	Polarisation	Remarks
Mc/s		U.T.			10^{-21} w $m^{-2}(c/s)^{-1}$			
NBS 460	Nov. 15	1736	5.7	CD	>130.0	21.0		
NBS 460	15	2204	2.0	CD	74.0	23.0		
Ott 2800	16	1759	22.0	SD		0.5		Sub-Flare
Ott 2800	16	1821	12.0	SD		0.6		
NBS 460	16	1834	4.0	CD	8.6	1.9		Also Ott 2800. Flare
Ott 2800	16	1845	13.0	SD		1.0		
NBS 460	16	2148	2.8	SD	6.1	1.2		
Nag 3750	17	0102	0.5	SD		3.0		
Nag 3750	17	0508	14.0	CD		1.2		
Ned 545	17	0841	1.0	SD	9.5	1.0		
Ott 2800	17	1543	1.5	CD		9.9		Also NBS 460. Fade
NBS 460	17	2056	0.4	SD	81.0			
Syd 62	17	2220	0.3	CD	62.0	29.0		
Syd 98	18	0125	0.2	SD	75.0	28.0		
Nag 3750	18	0129	9.0	SD		1.0		Also Tok 3000
Syd 62	18	0134	0.2	SD	35.0	18.0		
Syd 62	18	0148	0.7	CD	26.0	13.0		
Syd 62	18	0223	0.3	SD	70.0	29.0		
Syd 98	18	0229	6.0	CD	197.0	11.0		
Tok 3000	18	0238	3.5	CD	18.3	6.0		Also Nag 3750. Fade
Nag 3750	18	0422	7.0	SD		1.6		Also Tok 3000. Fade
Ned 545	18	0839	2.0	CD	>10.0	2.0		Flare. Fade
Ned 200	18	0840	5.0	CD	>95.0	28.0		
Cor 200	18	1436	5.0	CA	>5.7	>5.7		Sub-Flare
NBS 460	18	1436	2.0	SD	37.0			
Ned 200	18	1437	1.0	CD	46.0	20.0		
Ned 545	18	1437	2.0	CD	6.3	1.0		
Ott 2800	18	1437	3.5	SD		2.9		
Nag 3750	19	0330	3.0	SD		2.5		Fade
Ott 2800	19	1912	23.0	SD		0.3		
Cav 81	23	1102	0.5	SD	0.3	0.2		
Syd 62	24	0444	5.0	CD	29.0	11.0		
Syd 62	24	0506	3.5	CD	46.0	15.0		
Ned 200	24	0814	0.5	SD	42.0	7.0		Also Ned 545
Syd 62	24	2247	1.0	CD	182.0	76.0		Also Syd 98
Nag 3750	25	0433	0.7	SD		1.4		
Tok 3000	25	0437	2.0	SD	12.7	0.3		Also Nag 3750
Nag 3750	25	0501	2.0	SD		1.6		
Ott 2800	25	1614	6.0	SD		0.3		
Syd 98	25	2035	2.0	CD	27.0	9.0		
Nag 3750	26	0515	87.0	CD		8.6		Also Tok 3000
Ott 2800	26	1649	3.4	CD		1.8		
Ott 2800	26	1858	11.5	SD		0.3		
Ott 2800	26	1954	0.8	SD		11.6		
Syd 62	26	2344	0.8	CD	65.0	23.0		
Cav 81	27	1000	90.0	CA	0.5	0.4		
NBS 460	27	1602	0.7	SD	14.0			
NBS 460	27	1710	21.0	SA	6.2	0.6		Flare. Fade
Ott 2800	27	1710	8.5	SD		8.5		
Ott 2800	27	1751	2.0	SA		0.3		Flare. Fade
NBS 460	27	1803	0.1	SD	16.0			Flare
NBS 460	27	2215	3.0	SA	6.0	0.6		
Tok 3000	28	0146	2.0	CD	13.7	0.2		
Ned 200	28	0928	2.0	CD	32.0			Also Ned 545
Ned 200	28	1116	1.0	CD	96.0	20.0		Also Ned 545
NBS 460	28	2101	0.7	SD	14.0			
Syd 98	28	2252	0.3	CD	21.0	11.0		
NBS 460	28	2310	1.6	CD	>130.0			
Nag 3750	28	2310	1.5	SD		0.7		
Syd 98	29	0035	0.2	CD	27.0	14.0		
Ned 545	29	1227	2.5	CD	>10.5	2.0		Also Ned 200
Ott 2800	29	1519	3.0	SD		0.9		Also NBS 460
Syd 62	29	2321	0.2	SD	56.0	27.0		
Syd 62	29	2344	0.3	SD	37.0	20.0		
Syd 62	30	0012	0.5	CD	93.0	32.0		
Syd 98	30	0018	1.0	CD	39.0	18.0		Also Syd 62
Syd 62	30	0101	0.2	SD	81.0	44.0		
Syd 62	30	0328	0.2	CD	60.0	37.0		
Tok 3000	30	0539	3.0	CD	14.8	1.1		Also Syd 98, Nag 3750
Syd 62	30	0541	1.0	CD	78.0	41.0		
Cav 81	30	1057	214.0	CA	1.5	1.2		
Cav 175	30	1242	0.5	SD	7.2	5.3		
NBS 460	30	1944	0.7	SD	17.0			
Tok 3000	Dec. 1	0337	2.5	SD	15.3	1.5		
Tok 3000	1	0436	3.0	SD	15.1	1.3		Also Nag 3750
Cav 81	1	1132	120.0	CD	0.6	0.4		
Tok 3000	2	0432	5.0	CD	15.5	1.5		
Syd 200	2	2101	0.2	SD	50.0	23.0		
Cav 175	3	1107	140.0	CA	>12.0	10.0		Flare. Fade
Ned 545	3	1108	20.0	CD	35.0	17.0		
Ned 545	3	1136	34.0	CD	34.0	16.0		
Ned 545	3	1217	53.0	CD	>40.0	16.0		
Cav 175	3	1326	2.0	SD	7.0	4.0		
Cav 175	4	1023	105.0	CA	6.5	4.1		
Ott 2800	4	1504	5.0	SD		2.4		Flare. Fade
Ott 2800	4	1753	2.5	SD		0.6		
Cav 81	5	1100	160.0	CD	1.2			
NBS 460	5	1512	0.2	SD	8.2			
Tok 3000	6	0135	3.0	CD	15.2	1.0		
Nag 3750	6	0140	2.0	CD		0.9		
Cav 81	6	1308	1.0	SD	0.4	0.2		
Cor 200	7	1639	7.5	CD	>6.3	5.9		Also NBS 460
Cor 200	8	1512	0.5	CD	>6.2	>6.2		
NBS 460	8	2101	38.0	CD	11.0	1.6		
Syd 98	8	2138	1.0	CD	30.0	10.0		

4. OUTSTANDING OCCURRENCES

Station and frequency	Date	Starting time	Duration	Type	Maximum Flux Density Inst.	Smooth	Polar-isation	Remarks
Mc/s	1955	U.T.			10^{-21} w m^{-2}(c/s)$^{-1}$			
Syd 98	Dec. 8	2149	0.2	SD	30.0	15.0		
Syd 98	9	0442	1.0	CD	70.0	25.0		
Ned 545	10	1232	1.0	CD	11.0	1.5		
Syd 98	12	0512	0.5	CD	70.0	30.0		
Ott 2800	12	1613	5.0	SD		0.3		
Syd 62	12	2355	2.7	CD	78.0	37.0		Also Syd 98
Syd 98	13	0002	0.2	SD	30.0	12.0		
Tok 3000	14	0243	4.0	CD	15.4	1.0		Also Nag 3750
Cav 81	14	0912	110.0	CA	1.5			
Cav 175	14	0937	24.0	SD	1.5	0.9		
Cav 81	14	1336	1.5	SD	0.5	0.4		
Syd 62	15	0313	0.5	CD	98.0	37.0		
Nag 3750	15	2346	2.0	SD		0.6		
Nag 3750	16	0012	1.5	CD		1.0		
Nag 3750	16	0542	0.5	SD		0.9		
Ned 200	16	1414	2.0	CD	32.0	12.5		
NBS 460	17	1943	15.0	M	7.6	0.8		
Tok 200	18	0156	18.0	CD	>30.0	4.0		
Cor 200	20	1613	0.3	CA	>4.7	>4.7		
Syd 98	20	2052	0.2	SD	36.0	16.0		
Ned 545	21	1241	0.5	SD	14.0	5.0		Also Ned 200
Ned 200	21	1429	0.5	SD	33.5	13.5		Also Ned 545
Cor 200	21	1534	0.5	CA	>5.0	>5.0		
Syd 62	22	2334	0.2	SD	72.0	31.0		
Syd 62	23	0018	0.3	CD	388.0	152.0		
Ned 545	24	0930	1.5	CD	8.0	1.2		
Ned 200	25	1432	1.0	SD	>27.0			Fade
Ned 545	25	1432	4.0	CD	7.0	0.8		
Ott 2800	25	1433	6.0	SD		0.5		
NBS 460	29	1808	0.2	SD	14.0			
Ott 2800	29	1830	8.0	SD		0.9		Fade

5. SPECTRAL CLASSIFICATION OF ACTIVITY

Summary of data in frequency range 40 - 240 Mc/s., recorded at Dapto, near Sydney.

	TYPE I		TYPE II	TYPE III	Unclassified Activity and Remarks
Date 1955	Continuum	Bursts	Bursts	Bursts	
Oct. 5	 2214→	 2214→		0611-0716s 2214→	
6	←(0553-0615)0615s	←(0553-0615)0615s		←(0403.5g,0406.2g,0408g,0409g) 0615s 2214b	
7	0252-0548s	0252-0548s		0042(0255-0336,0436g)0548s	
9	0037-0305s	0037-0305s		0037-0708s	
10	2242(2242-2358→	2242(2242-2358→		0125b,0127b,0348b	
11	←0705-0735)0735s	←0705-0735)0735s			
12				0136b,0701b	
Nov. 3					2323b
4					0345b
6		 2250→		0221b,0339b,0342g,0618b 2250→	0555b,0604b
7		←0408s		←(0005g,0007b,0029g,0035g,0055g, 0059b,0135-0139-0140G)0408s	
8		 2316→		2316(2319b,2328G,2330g,2344g, 2355g→	2343g
9		←0800s 2229→		←0104g,0138-0142-0143G,0151b, 0214b,0218g,0222-0224-0225G, 0227g,0231b,0326g,0342b,0343g, 0346g,0348g,0350g,0411G,0419- 0421G,0426g,0457-0501G,0503- 0507G,0508G,0612b,0655g,0732g, 0756g)0800s 2229(2229-2250G,2313-2317.4- 2319.3-2321G,2356g→	0317g 2258b
10		←0630 2316→		←0004g,0024b,0035b,0052g,0105g, 0221-0224G,0348b,0358.5-0400.8G, 0406g,0509g,0529g)0630s 2316→	
11		←0610s		←0610s	
13		0150-0633s 2334→		0150(0505g)0633s 2334→	

5. SPECTRAL CLASSIFICATION OF ACTIVITY

Summary of data in frequency range 40 - 240 Mc/s., recorded at Dapto, near Sydney.

	TYPE I		TYPE II	TYPE III	Unclassified Activity and Remarks
Date 1955	Continuum	Bursts	Bursts	Bursts	
Nov. 14		←0630s 2247→		←0630s	
15		←(0005-0737)0816s 2150→	0441-0505 2205-2208	0424-0430G,0437-0441G 2150→	
16		←0755s		←0640s	
17		2315→			
18		←(0132-0134)0552s	0242-0253	0049b,0130(0139b,0202g,0238-0240g)0552s	
21				0558b	
24		2245-2347s	0442-0513	2246-2248g,2306b,2349g,	
25				0124g,0126b,0152b,0157b,0243g, 0333-0335G,0502g,0504g,0505g, 0509b,0518b,0519b,0538g,0541g, 0544b,0546g	0057g,0515g
26		0208g		0033b,0210b	
28		2133→		0705g,0749b,0804b 2133→	
29		←(0631-0648)0845s		←(0602-0648)0845s 2314b	
30		0102(0708-0729)0836s 2220→	0544-0549	0018g,0034g,0244b,0305b,0314g, 0320g,0326g,0347b,0426b,0452b, 0541G,0705b,0711b,0724b,0726b, 0728g,0731b 2225(2321g→	2250—
Dec. 1		←0603s 2252→		←0058g)0603s 2252→	—0315s
2		←0551s		←(0315b,0426g)0551s	
4		2330→		2330→	
5		←0549s 2250→		←0549s	
6		←0829s		0200b,0715b,0753b	
8					2256b
9				0442b,0443b,0444g,0447b	
11		2357→			
12		←0105s,0230-0821s		0129-0154s,0335g,0427g,0511-0513G,0641g 2344b,2356g,2358-2359g	2252b,2254g, 2257g
13		0324(0335-0430-0459-0524)0653s		0004g,0336(0442g,0618b,0718.4-0719.8g,0722g)0800s	0559g
16		0114-0253s		0230b	
18				2306b,2323g	
22				0534g	0244g
23				0115g,0146g	0157b

Observing Periods OCT. 3 23.3-4-02.3,03.6-04.7; 5 04.3-07.7,21.2-6-01.2,02.3-06.3,22.6-7-05.8; 9 00.6-02.1,02.2-05.1,05.4-07.1, 23.3-10-06.2,22.7-11-06.0,22.3-12-02.9,03.0-07.4,21.4-13-06.4,22.6-14-00.5,00.6-05.7; 16 22.7-17-05.4,22.1-18-03.7; NOV. 3 01.6-05.5,23.3-4-06.1; 6 02.1-06.4,22.8-7-04.2; 8 23.3-9-08.4,22.3-10-06.5,22.8-11-06.2; 13 01.8-06.6,23.6-14-06.5,22.7-15-08.5,21.8-16-08.2; 17 23.3-18-05.9; 20 02.2-06.3; 22 01.5-03.8; 23 02.4-08.4, 22.2-24-06.5,22.7-25-05.8; 27 23.6-28-03.5,03.6-08.5,21.5-29-08.8,23.1-30-08.6,22.3-DEC. 1-06.1,22.8-2-05.8; 4 23.5-5-05.8,22.8-6-08.5,22.0-7-08.5; 8 01.2-06.4,22.6-9-05.8; 11 22.7-23.8,23.9-12-08.6,22.6-13-09.1,21.6-14-04.6; 15 01.7-04.1,22.8-22.9; 16 01.2-03.9; 18 22.9-19-05.6,05.7-06.2; 21 02.1-03.1,03.9-04.6,05.3-08.8; 22 01.8-06.3,23.0-23-02.7; 28 23.1-29-05.8,22.6-30-05.7

Sydney, August 1956

S.F.Smerd