

COMMONWEALTH OF AUSTRALIA
DEPARTMENT OF NATIONAL DEVELOPMENT
BUREAU OF MINERAL RESOURCES, GEOLOGY & GEOPHYSICS

485 Bourke Street,
MELBOURNE, VICTORIA



PROVISIONAL SEISMOLOGICAL BULLETIN

MELBOURNE

Latitude: 37° 49' 53" S. Longitude: 144° 58' 24" E. Height: 28m.
 Foundation: Silurian sand - and mudstone.
 Instrument: Milne Shaw, east-west component.
 Period: 12 seconds.
 Damping: 20 : 1
 Magnification: 250

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
1	1st Jany.	e L	10 12.02	
2	3rd "	i	14 38 00	
3	3rd "	e	17 59 15	
		e	18 01 13	
		e	02 01	
		e	04 15	
4	4th "	e	09 27 04	
5	4th "	L	11 34.3	
6	5th "	e	08 08 44	
		i	11 08	
		e S	13 04	
		i	13 25	
7	5th "	i S ?	10 29 56	
		i	30 21	
		e LQ	42 33	
8	7th "	i S	14 20 41	
		i	23 36	
		i	23 48	
9	10th "	e	14 38 25	
		e L	41 31	
10	20th "	e L	02 47.1	
11	20th "	L	16 16	
12	20th "	e	17 40 15	
		i S	47 36	
13	27th "	e	03 36 21	
		i	37 12	
		L	41.0	
14	28th "	e	12 38 54	
		L	40 44	
15	30th "	e P	21 53 21	Δ = 33.0
		i S	58 31	H = 21 46 53

Feb-March 1953

No. 53/2/1

COMMONWEALTH OF AUSTRALIA
DEPARTMENT OF NATIONAL DEVELOPMENT
BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS
485 Bourke Street,
MELBOURNE. VIC.

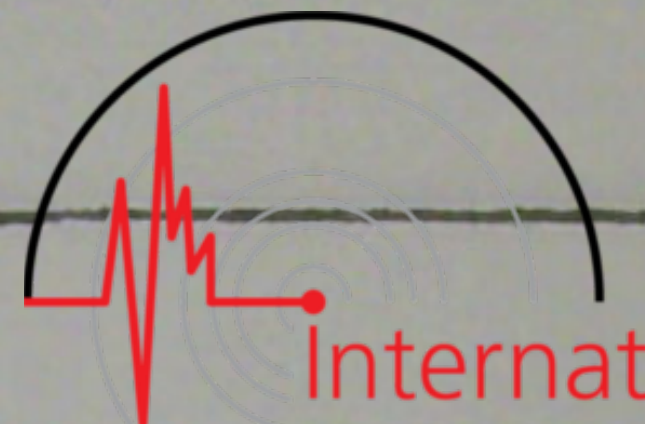


PROVISIONAL SEISMOLOGICAL BULLETIN

MELBOURNE

Latitude: $37^{\circ} 49' 53''$ S. Longitude: $144^{\circ} 58' 24''$ E. Height: 28m.
Foundation : Silurian sand - and mudstone
Instrument : Milne Shaw, east-west component
Period : 12 seconds
Damping : 20 : 1
Magnification : 250

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
16	Feb. 2nd	L e	03 45.3 47.0	
17	Feb. 2nd	e	08 51.0	
18	Feb. 2nd	i e	10 29 08 30.6	
19	Feb. 6th	i eLq	13 35 10 48.3	
20	Feb. 7th	e	07 49.2 ²	
21	Feb. 10th	e	13 52.3	
22	Feb 10th	e eL	14 07 08 08.2	
23	Feb. 13th	L	10 55.5	
24	Feb. 13th	e e	15 10 16 12 37	
25	Feb. 14th	iS i e	22 05 39 06 18 07 35	
26	Feb. 15th	e	20 18.0	
27	Feb. 19th	i i iS e(L)	13 13 18 13 31 16 46 19.1	
28	Feb. 19th	e	16 40.5	Long waves
29	Feb. 26th	e e eL	10 23 35 25 23 27.8	

International
Seismological
Centre

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
30	Feb. 26th	iP eS eLq	11 48 53 54 12 56 54	
31	Feb. 27th	e e eL	05 59 34 59 56 06 03.4	

COMMONWEALTH OF AUSTRALIA
DEPARTMENT OF NATIONAL DEVELOPMENT
BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS
485 Bourke Street,
MELBOURNE. VIC.

PROVISIONAL SEISMOLOGICAL BULLETINMELBOURNE.

Latitude: $37^{\circ} 49' 53''$ S. Longitude: $144^{\circ} 58' 24''$ E. Height: 28m.
Foundation : Silurian sand - and mudstone
Instrument : Milne Shaw, east-west component
Period : 12 seconds
Damping : 20 : 1
Magnification: 250

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
32	March 3rd	eP 1S	11 32 47 37 30	$\Delta = 28^{\circ} 3$ H = 11 26 55
33	March 5th	1(SKS) e (S)	21 25 16 25 39	
34	March 6th	e	04 38.7 ~	T = 18sec.
35	March 9th	1S 1	10 15 48 18 26	
36	March 10th	1S eL	06 09 42 12.9	
37	March 14th	eS 1(SS)	17 16 11 19 33	
38	March 16th	eS	08 33 32	
39	March 18th	1(PP) e e	19 29 02 40 56 46 37	
40	March 19th	1(P')	08 47 20	
41	March 20th	e	00 02.1	T = 14 sec.
42	March 28th	e	03 05.1	T = 20 sec.

COMMONWEALTH OF AUSTRALIA
DEPARTMENT OF NATIONAL DEVELOPMENT
BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS
485 Bourke Street,
MELBOURNE. VIC.



PROVISIONAL SEISMOLOGICAL BULLETIN

MELBOURNE.

Latitude: $37^{\circ} 49' 53''$ S. Longitude: $144^{\circ} 58' 24''$ E. Height: 28m.
Foundation : Silurian sand - and mudstone
Instrument : Milne Shaw, east-west component
Period : 12 seconds
Damping : 20 : 1
Magnification 250

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
43	April 1st	e(L)	08 05.0	
44	" 2nd	iPPP iS i i	04 04 02 07 53 10 06 10 28	
45	" 3rd	(L)	04 38	
46	" 6th	iP iPP eS L _q	00 42 57 44 16 48 12 49 34	
47	" 8th	e(S)	00 16 11	
48	" 14th	e	13 53 23	
49	" 21st	e e e	17 46.5 48.8 49.1	
50	" 22nd	(L)	10 18	
51	" 23rd	eP e i i iS	16 31 11 31 51 34 01 34 51 36 37	
52	" 26th	e	12 28.0	
53	" 29th	e i e	03 45 12 45 54 47 25	
54	" 30th	iP i i i i iS	06 32 40 33 08 34 27 35 37 36 33 37 10	

COMMONWEALTH OF AUSTRALIA
DEPARTMENT OF NATIONAL DEVELOPMENT
BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS
485 Bourke Street,
MELBOURNE. VIC.



PROVISIONAL SEISMOLOGICAL BULLETIN

MELBOURNE.

Latitude: $37^{\circ} 49' 53''$ S. Longitude: $144^{\circ} 58' 24''$ E. Height: 28m.
Foundation : Silurian sand - and mudstone
Instrument : Milne Shaw, east-west component
Period : 12 seconds
Damping : 20 : 1
Magnification: 250

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
55	May 6th	iSKS iS isS ePS e eSS L	17 41 01 41 47 42 27 43 34 45 50 48 27 58.5	U.S.C.G.S.: $36\frac{1}{2}^{\circ}$ S., 73° W. H = 17 16 48 h = about 100 km.
56	May 11th	eP i iPP iS iSS iSSS L	10 22 23 22 33 22 55 26 52 28 09 28 48 30 46	U.S.C.G.S. : $21\frac{1}{2}^{\circ}$ S., 169° E. H = 10 16 36
57	May 13th	L	12 10.4	
58	May 18th	e e (SKKS)	08 32 41 43 54	U.S.C.G.S. : $28\frac{1}{2}^{\circ}$ N., 44° W. H = 08 12 12
59	May 31st	eP e eS i e(SS) i e(ScS) i	05 07 29 08 01 13 16 13 41 15 59 17 28 17 48 19 23	

COMMONWEALTH OF AUSTRALIA
DEPARTMENT OF NATIONAL DEVELOPMENT
BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS
485 Bourke Street,
MELBOURNE. VIC.

PROVISIONAL SEISMOLOGICAL BULLETINMELBOURNE.

Latitude : 37° 49' 53" S. Longitude: 144° 58' 24" E.
Height: 28m.
Foundation : Silurian sand - and mudstone
Instrument : Milne Shaw, east-west component
Period : 12 seconds
Damping : 20 : 1
Magnification : 250

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
60	June 10	eS e eL	18 36 53 37 28 40.6	U.S.C.G.S.: 4°S 128°E. H=18 23 43
61	" 18	iS e eSSS	10 16 34 17 56 18 54	U.S.C.G.S.: 6½°S 155°E. H=10 04 48
62	" 26	e(S) e e(SS)	04 00 53 01 19 02 34	
63	" 26	eP ePP eS	05 49 31 50 57 55 01	U.S.C.G.S.: 8°S 124°E. H=05 42 50

MACQUARIE ISLAND

Latitude : 54° 29' 55" S. Longitude: 158° 57' 22" E.
Height: 14m.
Foundation : Weathered Basaltic Lava
Instrument : Wood-Anderson type seismograph, two components
Period : 0.75 seconds
Damping :
Magnification : 2900

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
35	June 2	iPg NE iSg NE	13 45 52 46 38	
36	" 5	iPg E iSg E	21 19 44 21 19	

MACQUARIE ISLAND (cont'd)

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
37	June 10	iPg E iSg E	18 46 32 47 07	
38	" 13	iPg NE iSg NE	00 42 02 42 45	
39	" 15	iPg NE iSg NE	03 21 16 21 29	
40	" 18	iPg NE iSg NE	08 11 07 11 32	
41	" 18	iPg N iSg N	18 17 57 18 19	
42	" 21	iPg E iSg E	01 31 29 31 54	
43	" 22	iPg N iSg N	04 54 29 55 08	
44	" 25	1P NE 1PcP E PP NE oS NE Lq N	10 54 35 56 22 57 06 11 02 14 08 05	
45	" 26	1Pg NE iSg NE	19 31 29 31 41	
46	" 28	iPg E iSg E	11 55 42 56 25	

HEARD ISLAND

No tremors were reported during June, 1953.

P B Nye
(P.B. NYE)
Director

COMMONWEALTH OF AUSTRALIA
DEPARTMENT OF NATIONAL DEVELOPMENT
BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS
485 Bourke Street,
MELBOURNE. VIC.

PROVISIONAL SEISMOLOGICAL BULLETINMELBOURNE.

Latitude: $37^{\circ} 49' 53''$ S. Longitude: $144^{\circ} 58' 24''$ E. Height: 28m.
Foundation : Silurian sand - and mudstone
Instrument : Milne Shaw, east-west component
Period : 12 seconds
Damping : 20 : 1
Magnification: 250

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
64	July 2nd	eP (pP) iS sS	07 02 35 03 20 07 01 08 04	U.S.C.G.S.: $18\frac{1}{2}^{\circ}$ S., 169° E. H = 06 56 51 h = 200 km. ca.
65	" 12th	eP eS e eSS SSS	06 50 11 55 58 56 11 58 36 59 09	U.S.C.G.S.: 2° S., $139\frac{1}{2}^{\circ}$ E. H = 06 43 05
66	" 26th	e(S)	17 10 08	

MACQUARIE ISLAND

Latitude: $54^{\circ} 29' 55''$ S. Longitude: $158^{\circ} 57' 22''$ E. Height: 14m.
Foundation : Weathered Basaltic Lava
Instrument : Wood-Anderson type seismograph, two components
Period : 0.75 seconds
Damping :
Magnification : 2900

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
47	July 2nd	iP NE pP NE PP NE PPP E iS NE SS E SSS E SSS N ScS N	07 03 42 04 35 05 16 05 41 08 02 11 47 12 30 12 34 14 13	U.S.C.G.S.: $18\frac{1}{2}^{\circ}$ S., 169° E. H = 06 56 51 h = 200 km. ca
48	" 4th	ePg NE iSg NE	23 40 19 41 11	
49	" 6th	iPg NE iSg NE	13 49 51 50 05	

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
50	July 6th	iPg NE iSg NE	19 49 56 50 37	
51	" 6th	iP NE iS NE	19 54 17 59 40	
52	" 16th	iPg NE iSg NE	09 56 41 57 06	
53	" 19th	iPg NE iSg NE	21 58 27 59 00	
54	" 20th	iPg NE iSg NE	19 17 50 18 22	
56	" 28th	iPg NE iSg NE	07 05 44 06 07	
Additional for May 1953.				
32A	May 6th	iPg N iSg	02 43 27 43 47	
32B	" 9th	iPg E iSg E	23 01 35 02 07	

HEARD ISLAND

Latitude: $53^{\circ} 01' 12''$ S. Longitude: $73^{\circ} 23' 11''$ E. Height: 10m.
 Foundation : Solid lave rock
 Instrument : Wood-Anderson type seismograph, two components
 Period : 0.75 seconds
 Damping : 20 : 1
 Magnification: 2800

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
5	July 2nd	eP pP eS	07 08 32 09 26 10 19	U.S.C.G.S.: $181^{\circ} 03' S.$ $169^{\circ} 07' E.$ H = 06 56 51 h = 200 km ca

(P. B. NYE)
Director.

COMMONWEALTH OF AUSTRALIA
DEPARTMENT OF NATIONAL DEVELOPMENT
BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS
485 Bourke Street,
MELBOURNE. VIC.

PROVISIONAL SEISMOLOGICAL BULLETIN

MELBOURNE

Latitude: $37^{\circ} 49' 53''$ S. Longitude: $144^{\circ} 58' 24''$ E. Height: 28m.
Foundation : Silurian sand - and mudstone
Instrument : Milne Shaw, east-west component
Period : 12 seconds
Damping : 20 : 1
Magnification : 250

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
67	Aug. 2	S L	17 30 25 34.3	U.S.C.G.S.: H = 17 19 59 Loyalty Island Region
68	" 13	1P 1pP 1 1 1 1S 1	09 29 02 29 31 29 43 31 11 32 29 33 33 34 03	U.S.C.G.S.: $21\frac{1}{2}^{\circ}$ S., 1700 E. H = 09 23 23 h = 150 km. ca.
69	" 15	e e	05 45 22 47 35	
70	" 22	e	00 32 59	U.S.C.G.S.: 6° S., 1470 E. H = 00 21 06
71	" 25	eS L	02 16 14 19.0	U.S.C.G.S.: 5° S., 1520 E. H = 02 04 13
72	" 29	e L	16 15 52 17.8	

MACQUARIE ISLAND

Latitude: $54^{\circ} 29' 55''$ S. Longitude: $158^{\circ} 57' 22''$ E. Height:
 Foundation : Weathered Basaltic Lava
 Instrument : Wood-Anderson type seismograph, two components
 Period : 0.75 seconds
 Damping :
 Magnification : 2900



No.	Date 1953	Phase	Time (G.M.T.)	Remarks
57	Aug. 6th	iPg NE iSg NE	04 56 55 56 57	
58	" 15th	iPg E iSg E	12 38 32 38 33	
59	" 21st	iPg NE iSg NE	18 43 06 43 08	
60	" 25th	iPg NE iSg NE	12 26 35 26 37	
61	" 26th	iPn NE iSn E iSn N iS [*] N iS [*] E i NE Sg N Sg E	09 59 00 59 52 59 53 10 00 05 00 06 00 13 00 14 00 16	Max. amplitude 80 mm Felt by all party members
62	" 28th	iPg NE iSg NE	07 46 58 47 03	
63 ✓	" 29th	iP NE iPP NE iPPP N iS NE iSS E eLR E PcP NE ScS N	16 09 32 31 09 48 09 59 12 50 13 21 13 34 14 03 21 20	

HEARD ISLAND

No earthquakes reported during August 1953.

P. B. NYC
 (P. B. NYC)
 Director

MACQUARIE ISLAND

Latitude: $54^{\circ} 29' 55''$ S. Longitude: $158^{\circ} 57' 22''$ E. Height: 11m.
 Foundation : Weathered Basaltic Lava
 Instrument : Wood-Anderson type seismograph, two components
 Period : 0.75 seconds
 Damping :
 Magnification : 2900

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
64	Sept. 1st	iPg NE iSg NE	08 28 23 31	
65	" 5th	iPg NE iSg NE	06 02 20 21	
67	" 14th	iPg NE iSg NE	13 19 40 42	
69	" 29th	eP NE pP NE PP E iS NE iPcP E eSSS NE iScS N	01 41 14 42 04 42 07 44 51 44 59 46 15 51 39	
70	" 29th	iPg iSg	08 31 29 34	

HEARD ISLAND

No earthquake reported during September, 1953.

P B Nye.
 (P. B. NYE)
 Director. *[Signature]*

COMMONWEALTH OF AUSTRALIA
DEPARTMENT OF NATIONAL DEVELOPMENT
BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS
485 Bourke Street,
MELBOURNE. VIC.

PROVISIONAL SEISMOLOGICAL BULLETINMELBOURNE

Latitude: $37^{\circ} 49' 53''$ S. Longitude: $144^{\circ} 58' 24''$ E. Height: 28m.
Foundation : Silurian sand - and mudstone
Instrument : Milne Shaw, east-west component
Period : 12 seconds
Damping : 20 : 1
Magnification : 250

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
73	Sept. 1st	eS	17 47 57	
74	" 2nd	i	08 04 04	
75	" 4th	eS i	07 46 44 47 12	U.S.C.G.S.: 50° N., $156\frac{1}{2}^{\circ}$ E. H = 07 23 05 h = 60 km ca.
76	" 14th	eP i(PP) PPP eS G SS	00 32 29 34 53 35 40 39 14 41.2 41 46	U.S.C.G.S.: $18\frac{1}{2}^{\circ}$ S., $178\frac{1}{2}^{\circ}$ E. H = 00 26 36 h = 60 km.
77	" 15th	e(S) e	11 12 54 15 01	U.S.C.G.S.: 9° S., $156\frac{1}{2}^{\circ}$ E. H = 11 01 34
78	" 23rd	e e e e	02 27.9 37.9 38 09 38 35	U.S.C.G.S.: $50\frac{1}{2}^{\circ}$ N., 156° E. H = 02 14 36 h = 60 km.
79	" 26th	eS e	19 47 24 50 00	U.S.C.G.S.: 3° S., $148\frac{1}{4}^{\circ}$ E. H = 19 35 00
80	" 28th	e(S)	03 53 39	
81	" 29th	iP ipP sP iS SP sP ScS	01 41 49 42 41 43 21 46 05 46 38 47 38 51 59	U.S.C.G.S.: $36\frac{1}{2}^{\circ}$ S., 177° E. H = 01 36 45 h = 300 km.

COMMONWEALTH OF AUSTRALIA
DEPARTMENT OF NATIONAL DEVELOPMENT
BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS
485 Bourke Street,
MELBOURNE VIC.

PROVISIONAL SEISMOLOGICAL BULLETINMELBOURNE.

Latitude: $37^{\circ} 49' 53''$ S. Longitude: $144^{\circ} 58' 24''$ E. Height: 28m.
Foundation : Silurian sand - and mudstone
Instrument : Milne Shaw, east-west component
Period : 12 seconds
Damping : 20 : 1 ca.
Magnification: 250

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
82	Oct. 1st	e L	23 34 07 58.4	
83	" 2nd	iS	01 12 47	Near Macquarie Is.
84	" 4th	e	14 53 07	
85	" 5th	e(S) i i L	23 27.5 29 02 30 04 30.4	
86	" 6th	e e i L	21 50 31 50 59 52 20 52.7	
87	" 6th	eS	23 04 21	
88	" 11th	eS L	13 32 05 44.6	
89	" 13th	e	14 06 29	
90	" 24th	e(P) ePP e e(S) e(SS)	23 25.7 26 26 27 41 31.1 31 21	
91	Nov. 4th	eP i i iPPP i(PcP) i iS	03 55 28 55 46 56 04 56 41 58 24 59 28 04 00 32	
92	" 4th	eP eS i L	12 34 14 39 24 39 41 41.3	
93	" 11th	eS e	00 04 09 04 38	



International
Seismological
Centre

No.	Date 1953	Phase	Time (G.M.T.)	Remarks
94	Nov. 13th	iP	16 27 24	
95	" 13th	iP eS	19 22 05 27 31	
96	" 16th	e(P) eS	17 23 15 28 06	
97	" 17th	e(S)	09 56 03	
98	" 17th	e e	14 00 56 07 37	
99	" 20th	iP e(S)	03 16 54 20 19	Near Macquarie Is.
100	" 21st	iP iS	18 48 25 48 45	Near Benalla, Vic.
101	" 25th	iP	17 42 45	
102	" 25th	iP eS	18 00 13 09 30	
103	" 26th	iP eS	00 14 56 24 17	
104	" 26th	iP iS	08 25 34 35 01	
105	" 27th	iP	23 08 06	
106	Dec. 1st	iP eS e e i	21 28 16 32 54 35 58 36 09 37 49	
107	" 2nd	iP iS i	04 31 37 37 08 39 39	
108	" 2nd	e	06 36 34	
109	" 3rd	i	15 07 03	
110	" 4th	iP	21 24 04	
111	" 6th	iP	08 45 56	
112	" 6th	iP	17 31 46	
113	" 7th	e e e	02 24 45 31 34 34 25	
114	" 12th	e e(SKS) e e LR	17 51 55 17 19 18 01 40 08 23 28	



No.	Date 1953	Phase	Time (G.M.T.)	Remarks
115	Dec. 19th	i	23 40 25	
116	" 20th	i	21 31 33	
117	" 25th	eS	02 15 31	

Macquarie Island 1953 will be published in separate bulletin.

Heard Island.

No earthquakes reported Oct. - Dec. 1953.

P. B. Nye
(P. B. NYE)
Director.