

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



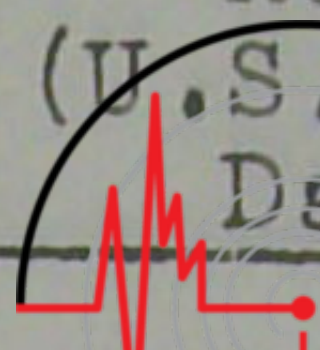
SEISMOLOGICAL BULLETIN

MACQUARIE ISLAND

Latitude: 54°29'55"S. Longitude: 158°57'22". Height 14 m.
Foundation: Weathered Basaltic Lava
Instrument: Wood-Anderson type seismograph, two component (NS & EW)
Period: 1.0 seconds
Damping: Damping coefficient 0.85.
Magnification: Static magnification 3200.

DISTANT EARTHQUAKES

Date	Phase	Time (G.M.T.)	Trace Amplitude		Period	Origin Time (G.M.T.)	Delta (deg- rees)	Region (U.S.C.G.S. Data)
			N.	E.				
1954								
Jan. 1	iPNE	13 13 31	0.4	0.4	0.8			Indonesia
	12							
	iPNE	14 18 08	1.3	1.3	0.7			New Zealand
	eLNE	14 19 22	4.0	4.0	9.0			
	MNE	14 32	21.0	23.0	7.2			
	13							
	iPNE	00 14 57	0.8	0.9	0.5	00 13 03	7.8	New Zealand
	eLNE	00 16 10	3.0	3.0	9.0			
	iSE	00 16 24		2.0	1.0			
	MNE	00 27	15.0	13.0	8.2			
Feb. 5	iPNE	09 28 49	0.2	0.3	1.0			New Britian
	11							
	iPNE	06 21 41	0.7	0.1	1.2			China
	20							
	iPNE	18 43 46	1.1	1.0	1.5	18 35 06	55.7	Indonesia
	iPcPN	18 44 34	1.1		2.0			depth 600km.
	iPNE	18 45 46	0.8	0.6	2.0			
	iSNE	18 50 46	0.6	0.7	2.5			
March 3	iPNE	06 11 58	0.5	0.6	2.5	06 02 55	51.2	New Guinea
	iSNE	06 19 12	1.3	1.0	4.0			
	23							
	iPNE	23 58 01	0.1	0.1	0.5	23 56 10	7.6	West of
	iLQN	23 59 17	3.0		1.0			Macquarie Is.
	eSE	23 59 27		0.8	1.4			
	MN	00 00	33.5		6.0			
	29							
	iPKP	06 36 07	0.2		1.0			Spain
								depth 660km.
April 27	iPNE	21 23 15	0.7	0.6	0.5			South of
	eLQNE	21 24 22						Tasmania.
	MN	21 25	53.0		9.0			
	30							
	ePKP	13 22 26	0.2		2.0			Greece.
May 20	iPNE	02 18 10						West of
	eLN	02 19 25						Macquarie Is.
	MN	02 20						
	31							
	iPNE	15 58 21		0.8	1.1			Indonesia

Date	Phase	Time (G.M.T.)	Trace Amplitude		Period	Origin Time (G.M.T.)	Delta (deg- rees)	Region (U.S.C.G.S. Data)
			N.	E.				
1954								
June	6	iPNE	16	59	53			 International Seismological Centre New Guinea New Britian depth 450km.
	7	iPNE	10	23	58	2.8	0.8	
		pP	10	25	27	0.9	2.0	
		iSNE	10	30	42	0.9	3.3	
	12	ePNE	05	42	11			Fiji depth 550km.
Sept.	2	iPNE	18	59	32	0.6	0.4	Santa Cruz depth 100km.
	4	iPNE	03	38	03	0.9	0.2	New Guinea
		eLNE	03	55				
		ME	03	57		1.2	12.5	
	13	iPNE	02	17	18	1.4	1.6	Tonga depth 150km.
	15	iPNE	18	03	00	2.0	1.0	Fiji depth 600km.
	17	ePNE	11	10	23			Fiji depth 250km.
	25	ePNE	11	17	29	0.1	0.1	West of Macquarie Is.
		eLNE	11	19				
		MNE	11	21		6.0	4.5	
Oct.	1	eLNE	03	16				Santa Cruz
		MN	03	23		1.0	15.0	
	3	eLNE	03	06	00			Santa Cruz
		ME	03	14	20		2.9	
Nov.	2	iPNE	08	34	11	1.3	1.0	Indonesia
		eLNE	08	53	00			
		MNE	08	55	10	1.3	1.3	
	15	iPE	13	38	01		0.3	Marianas depth 200km.
Dec.	19	eLNE	17	56	20			
		MN	17	57	20	1.1	0.7	
	21	iPNE	18	10	53	0.4	0.3	18 09 27 5.8
		iSNE	18	11	59	0.3	0.3	
		eLNE	18	12				
		MNE	18	13	20	0.8	0.9	

LOCAL EARTHQUAKES

Date	Phase	Time (G.M.T.)	Trace Amplitude		Origin Time (G.M.T.)	Delta (de- grees)	Remarks
			N.	E.			
1954							
Jan. 15	iP NE	05 15 22	1.0	1.0			
Feb. 8	iP NE	16 33 02		0.1			
	iS NE	16 33 06	0.6	0.6			
11	iNE	15 54 04	✖				Not scaleable into phases.
March 1	iP NE	15 21 53	0.6	1.5	15 21 33	1.0	
	iS NE	15 22 07	1.5	3.0			
3	iNE	19 45 51	✖				Felt on Mac- quarie Is.
21	iP NE	10 41 41	0.2	0.3		0.1	
	iS NE	10 41 44	0.3	0.5			
21	iNE	19 48 27	✖				Small and not separable into phases.
April 4	iP NE	20 14 15	0.1	0.1			
	iS NE	20 14 20	✖				
13	iNE	00 02 51	✖				Felt on Mac- quarie Is.
30	iNE	17 05 33	0.5	0.5			Small and not scaleable into phases.
30	iP NE	20 15 27	0.2	0.3	20 14 53	1.9	
	iE	20 15 30		0.4			
	iS NE	20 15 52	2.0	3.0			
May 9	iNE	16 20 25	0.3	0.2			Not scaleable into phases.
19	iP NE	19 07 16				0.2	
	iS NE	19 07 21	0.5	0.9			
21	iP NE	07 32 04	0.2	0.2	07 31 46	0.9	
	iS NE	07 32 16					
29	iNE	05 46 35	✖				Felt on Mac- quarie Is.
June 11	iP NE	06 13 05	0.1	0.1	06 12 38	1.4	
	iS NE	06 13 24	✖				
26	iNE	13 11 07	✖				Not scaleable into phases.
July 18	iP NE	17 23 48	1.0	0.2	17 23 23	1.3	
	iS NE	17 24 06	✖				

✖ Trace disappears owing to rapidity of motion



Date	Phase	Time (G.M.T.)	Time Amplitude		Origin Time (G.M.T.)	Delta (de- grees)	Remarks
			N.	E.			
1954							
July 19	iPNE	21 55 20	0.1	0.1	21 54 55	1.3	
	iSNE	21 55 38		H			
27	iPNE	09 03 17	0.1	0.1	09 03 06	0.5	
	iSNE	09 03 23		H			
Aug. 1	iNE	14 31 27		H			Not scaleable into phases
Sept. 1	iNE	08 44 36		H			ditto
4	iNE	22 02 51		H			ditto
12	iNE	04 02 13	0.9	0.9			ditto
17	iNE	16 16 11		H			ditto
18	iNE	19 04 20	0.2	0.9			ditto
28	iNE	11 59 36		H			ditto
Oct. 9	iPNE	04 01 26	1.0	1.6	04 01 08	0.9	
	iSNE	04 01 38		H			
9	iPNE	04 25 09	2.6		04 24 54	0.7	
	iSNE	04 25 17		H			
10	iNE	05 09 19	0.4	0.2			Not scaleable into phases
10	iNE	05 10 01	1.2	0.6			ditto
10	iNE	05 11 26	0.5	0.5			ditto
16	iNE	10 02 28	1.0	1.0			ditto
17	iNE	13 58 47		H			ditto
17	iNE	14 04 34		H			ditto
23	iPNE	03 27 56	0.7	0.3			
	iSNE	03 27 57					
Nov. 5	iPNE	04 18 57	0.9	0.9	04 18 40	0.9	
	iSNE	04 19 08		H			
9	iPNE	14 28 56	0.1	0.1	14 28 18	2.4	
	iSNE	14 29 25	0.9	0.9			
	iSSNE	14 29 40	1.3	1.3			
13	iPNE	22 01 01	0.3	0.3			
	iSNE	22 01 03	2.5				
15	iPNE	07 52 12	0.4	0.2		0.3	
	iSNE	07 52 15		0.7			
Dec. 17	iNE	10 59 23		H			
Dec. 11	iPNE	20 13 36	0.1	0.1			
17	iNE	13 27 26		H			
18	iPNE	08 37 42	0.5			0.1	
	iSNE	08 37 44		H			

H Trace disappears owing to rapidity of motion.

(P.B. NYE)
Director

International
Seismological
Centre