

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

203 Collins Street,
MELBOURNE, C.1. VICTORIA



SEISMOLOGICAL BULLETIN

MACQUARIE ISLAND

Latitude : $54^{\circ}29'55''S$ Longitude : $158^{\circ}57'22''E$ Height: 14 metres
Foundation : Weathered Basaltic Lava

Instruments:-

1. Wood-Anderson type seismometers, two horizontal components (NS,EW)
Period : 1.0 seconds
Damping : 0.9 critical
Static Magnification : 3200
2. Grenet Vertical Seismometer
Pendulum Period : 1.3 seconds
Galvanometer Period : 0.8 seconds

Recording : Photographic. 30mm./minute

Note: Grenet Vertical Seismograph in use from 19th February 1956.

Date	Phase	Time GMT			Period sec.	Trace Amplitude millimetres			Remarks	Region (USCGS)
		h	m	s		N	E	Z		
1956 Jan. 1	iPNE	23	17	38	$1\frac{1}{2}$	0.8	0.4			Timor I. region
9	iPN	12	12	01	2	0.4				Fiji I. region
	iSNE		16	49	3	1.1	0.9			
	iScSNE		21	09	4	1.1	0.6			
10	iPN	08	59	40	2	0.2				Tonga Region
	eLNE	09	05							
	MN		13.0		17	4.5				
	ME		.4		15		5.5			
30	ePNE	08	47	56	2	0.7	0.3			New Zealand
	eLNE		52							
Feb. 18	iPNE	07	46	16	2	0.8	0.6		H 07 34 24 Δ 86.5 h 0.07	South of Honshu
	iSNE		56	10	5	1.6	0.9			
	iPSN		58	20	6	1.0				
	iSSN		59	19	8	0.6				
19	ePZ	14	55	00	$1\frac{1}{2}$			0.2		Fiji I. region
Mar. 3	iPZ	00	13	42				0.5		Samoa I. region
19	iPZ	17	44	48	1			0.3		New Britain
	ipPZ		45	00	2			0.6		
	iPcPZ		46	10	1					
21	i(P)Z	17	52	26	2			0.5		
	eLNE		55		6					
	MNE		56.7		4	1.8	0.7			

SEISMOLOGICAL BULLETIN
MACQUARIE ISLANDInternational
Seismological
Centre

Date	Phase	Time GMT			Period sec.	Trace Amplitude millimetres			Remarks	Region (USC)
		h	m	s		N	E	Z		
1956										
Apr. 7	iPZ	18	10	06	1			0.3		Kermadec I.
10	iPZ	13	27	00	2			1.1		Sumatra
20	iPZ	15	25	06	1			0.9		Banda Sea
May 1	iPNEZ	11	07	05	$\frac{1}{2}$	0.1	0.1	1.0		
	i(LQ)NEZ			37						
	i(S)NEZ			54	2	5.2	4.5	6.8		
5	ePZ	03	30	34	$1\frac{1}{2}$			0.1		Somoa region
	ipPZ			53	2			0.3		
19	iPZ	01	39	16	1			0.4		Solomon I.
22	iPZ	03	09	22	$1\frac{1}{2}$			0.6		Samoa I.
22	ipPZ	13	46	03	2			0.6		New Ireland
23	iPNEZ	20	55	50	3	2.8	2.0	3.2	H20 48 28	Fiji I.
	ipPZ		57	12	3			3.5	Δ 4390	
	iPPZ			45	3			2.8	h 0.06	
	isPE		58	04	3		2.0			
	iPPPN			44	4	1.8				
	iSNEZ	21	01	44	4	2.4	4.0	1.2		
	eSSN		05	21	15	2.5				
26	iPNZ	20	28	06	$1\frac{1}{2}$	0.5				Fiji I.
	i(pP)Z		30	00	2			1.0		
	iZ		32	52	2			1.2		
28	iPZ	13	33	41	2			1.4		Celebes
30	iPZ	15	48	31	$\frac{1}{2}$			0.4		Tonga region
Jun. 9	e(SS)N	23	50	15						Afghanistan
13	iPZ	12	17	43	1					Celebes
Jul. 4	iPNEZ	00	46	49	$1\frac{1}{2}$	0.3	0.4			Suva area
17	iPNEZ	07	42	54	$1\frac{1}{2}$				h 0.07	Banda Sea
	ipPZ		44	26						
	eSNE		50(00)		3					
18	iPNEZ	06	28	49	$\frac{1}{2}$	0.1	0.2	2.9		Banda Sea
	eSNE		36	22	7	0.9	1.2			
	eScSE		38	29	7		0.7			
24	iPZ	18	07	03						Molucca Passage
	ipPZ		07	11				0.8		
28	iPZ	02	10	36	$1\frac{1}{2}$			0.2		New Britain region
Aug. 4	iPZ	09	57	44	$1\frac{1}{2}$			0.3		New Britain
9	iPNEZ	23	08	24	3	0.6	0.8	1.2		Samoa I. region
15	iPZ	11	01	31	$1\frac{1}{2}$			1.2		Celebes
	ipPZ			51	1			0.4		

SEISMOLOGICAL BULLETIN
MACQUARIE ISLAND

Date	Phase	Time GMT			Period sec.	Trace Amplitude millimetres			Remarks	Region (USCGS)
		h	m	s		N	E	Z		
1956 Sep. 13	eLNE MNE	14	05.8		9					
			07.4		6	1.6	1.6			
13	eLNE MN ME	14	35.8		9					South of Tasmania
			37.6		6	2.8				
			37.3		6		2.0			
15	iPNEZ iNE iZ	09	35	47		2.1			Near Macquarie I	
			57			3.0	11.0			
			50	20				0.1		
16	iPZ	13	34	06				0.2		Tonga
29	iPZ	09	16	02	1			0.2		Nicobar I.
29	iPZ ipPZ	23	33	55						Central Honshu
			34	15						
Oct. 11	iSKSN eSN esSN i(sPS)N eSSN	02	48	44	10	1.				Japan
			49	34		0.5				
			50	33						
			51	55	16	0.5				
			57	06						
13	iPZ	19	02	43						New Britain
19	iPZ	12	07	06	1	0.1				Fiji I.
20	iLN MN	11	37	02	9	1.6				
			37.5		7	3.4				
22	iPZ	12	43	35	1			0.2		Papua
23	iPZ	08	53	14						Philippine I.
26	iPZ	09	03	55	1			0.2		Banda Sea
26	iPZ	22	58	14	1			0.2		New Hebrides
27	iPNZ iSNEZ eLE	19	39	52		0.1		0.5		
			40	23	1	0.6	2.0			
			40.5		12		2.			
28	iPZ eLNE	03	34	19	$\frac{1}{2}$			0.3		Kermadec I.
			41							
28	ePZ	10	56	40	1			0.1		Philippine I.
Nov. 6	iPZ ipPZ	14	21	57	1			0.8		Banda Sea
			22	11	1			0.2		
13	iPZ	10	00	38	2			1.3		South of Australia
16	iZ	08	57	46	$1\frac{1}{2}$			0.3		
20	iZ	12	09	30						Celebes
22	e(L)NE	08	21.0						Z out of action	
25	iPZ	18	15	18	$1\frac{1}{2}$			0.5		New Hebrides

SEISMOLOGICAL BULLETIN
MACQUARIE ISLAND

Date	Phase	Time GMT h m s	Period sec.	Trace Amplitude millimetres			Remarks	Region (USCGS)
				N	E	Z		
1956 Nov. 26	iPZ eLE	23 36 26 44.4						Loyalty I.

Minor local shocks :-

Jan. 6d 13h 48m, 7d 04h 14m, 7d 06h 07m, 7d 16h 38m, 8d 14h 41m,
 10d 03h 52m, 14d 03h 03m, 15d 12h 06m, 18d 05h 43m, 20d 02h 39m,
 Feb. 1d 02h 03m, 3d 19h 17m, 5d 14h 30m, 12d 21h 14m, 26d 20h 17m,
 Mar. 2d 07h 09m, 4d 19h 02m, 5d 06h 58m, 6d 23h 38m, 9d 21h 04m,
 12d 21h 33m, 16d 11h 18m, 17d 16h 30m, 28d 05h 36m, 29d 20h 14m,
 Apr. 4d 00h 58m, 9d 17h 51m, 14d 21h 13m, 19d 00h 52m, 21d 08h 09m,
 24d 00h 02m, 24d 03h 41m,
 May 5d 07h 09m, 6d 08h 04m, 10d 17h 23m,
 Jun. 2d 09h 15m, 10d 03h 50m, 11d 12h 39m, 12d 12h 02m, 16d 04h 50m,
 27d 05h 54m,
 Jul. 6d 05h 56m, 21d 00h 40m,
 Aug. 2d 17h 49m, 5d 21h 42m, 26d 14h 31m,
 Sep. 13d 06h 59m, 16d 00h 49m, 16d 04h 32m,
 Oct. 15d 17h 58m, 18d 13h 06m, 23d 09h 18m, 23d 23h 21m, 26d 02h 25m,
 Nov. 4d 07h 08m, 4d 07h 39m, 4d 08h 23m, 6d 11h 36m, 10d 04h 42m,
 17d 12h 24m, 19d 14h 21m, 23d 07h 28m.

(P. B. NYE.)
DIRECTOR