

MAWSON FEB. - DEC 1963

COMMONWEALTH OF AUSTRALIA

DEPARTMENT OF NATIONAL DEVELOPMENT

BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

203 Collins Street,  
MELBOURNE. VIC.

FINAL SEISMOLOGICAL BULLETIN 1963

MAWSON - ANTARCTICA

FEBRUARY - DECEMBER, 1963

April

Latitude: 67° 36.3 S Longitude: 62° 52.9 E Height: 6 Metres.

Foundation: Felspar Porphyry.

Instruments: Benioff Short Period Vertical  $T_s$  1.0 sec.

$T_g$  0.2 sec.

Benioff Long Period Horizontals (Two Components)

$T_s$  1.0 sec.

$T_g$  70 sec.

NOTE:

The Microseismic level is very much reduced when the ocean freezes from approximately May to December, thus enabling the instrument magnifications to be greatly increased during this period.

Date	Phase	Time (G.M.T.)	Per.	Amplitude			$\Delta$	Remarks
				$A_N$	$A_E$	$A_Z$		
<b>FEBRUARY 1963</b>								
		h. m. s.	s.				km	
✓ 12	iP	Z 23 18 58					+	USCGS: 17.8S 178.6W h = 583km
✓ 13	eP	Z 18 26 23						USCGS: 9.9S 160.8E h = 29km
- 14	eP	Z 07 15 58						USCGS: 7.2S 128.2E h = 197km
	eS	E 25 14						
✓ 24	eP	Z 17 46 35						USCGS: 31.7S 176.5W h = 33km
✓ 25	iP	Z 08 20 13.8					-	USCGS: 28.1S 65.4W h = 32km
✓ 26	iP	Z 20 26 02.3						USCGS: 7.5S 146.2E h = 171km
	eS	NE 35 55		+	-	+		
✓ 27	eP	Z 04 42 24						USCGS: 6.0S 149.4E h = 52km
	eS	NE 52 29						
<b>MARCH 1963</b>								
✓ 10	eP	Z 11 03 33						USCGS: 29.9S 71.2W h = 70km
- 16	ePKP	Z 09 04 04						USCGS: 46.5N 154.7E h = 26km
	ePP	Z 06 31						
✓ 23	eP	Z 07 51 27						
- 24	eP	Z 02 18 17						
- 25	eP	Z 22 57 (42)						USCGS: 9.7S 120.4E h = 33km
- 26	iP	Z 09 59 45.1						USCGS: 9.7N 96.5E h = 30km
	eS	NE 10 09 04					+	USCGS: 29.7S 177.8W h = 45km
	e(PFS)	NE 10 14						
✓ 26	eP	Z 13 03 01						USCGS: 29.9S 177.6W h = 60km P.T.O.

Date	Phase	Time (G.M.T.)	Per.	Amplitude			△	Remarks
				A <sub>N</sub>	A <sub>E</sub>	A <sub>Z</sub>		
<u>MARCH (continued)</u>			h. m. s.	s.			km	
26	eP	Z	13.36 28					USCGS: 29.8S 177.9W h = 42km
28	ePKP	Z	00 35 25					USCGS: 66.3N, 19.6W h = 15km
	e(SKKP)	EZ	46 45					
28	iP	Z	11 23 55.0				+	USCGS: 30.2S 177.8W h = 38km
28	iP	Z	23 40 40.5				+	USCGS: 29.6S 177.5W h = 54km
29	iP	Z	19 14 20.8				-	
29	iP	Z	21 28 05.6				-	USCGS: 30.2S 177.7W h = 60km
	epP	Z	28 23					
30	eX	Z	00 29 58					
30	iP	Z	02 05 13.6				+	USCGS: 19.1S 169.1E h = 160km
	epP	Z	05 54					
	iS	NE	14 54.5	-	-			
31	eP	Z	05 42 14					USCGS: 29.9S 177.7W h = 48km
31	eP	Z	07 19 55					USCGS: 6.1S 149.0E h = 60km
31	eP	Z	19 34 16					USCGS: 30.0S 178.0W h = 50km
<u>APRIL 1963</u>								
1	iP	Z	02 32 16.2				+	USCGS: 6.0S 149.0E h = 64km
1	eP	Z	08 42 08					USCGS: 29.2S 176.6W h = 38km
1	eX	Z	11 02 42					
1	eX	Z	11 04 14					
2	iPKP	Z	16 38 24.4				+	USCGS: 53.2N 171.7W h = 142km
6	iP	Z	07 14 41.0				-	USCGS: 17.5S 178.9W h = 526 km
6	eP	Z	18 13 24					USCGS: 32.1S 178.1E h = 197km
7	iP	Z	04 09 18.8				+	USCGS: 24.5S 177.0W h = 114km
	eX	Z	11 40					
7	eP	Z	09 42 47					USCGS: 53.7N 170.1W h = 202km
7	ePKP	Z	15 47 32					
	iX	Z	47 41.2					USCGS: 4.9S 103.2E h = 72km
7	eP	Z	22 46 57					
	eS	NE	55 53					
	ePKPKP	Z	23 15 06					USCGS: 17.7S 178.7W h = 538km
9	iP	Z	02 13(59.4)				-	
10	eP	Z	01 13 33					USCGS: 9.2S 125.0E h = 33km
10	eP	Z	08 01 45					
	ePcP	Z	02 06					
11	iP	Z	16 52 08.1				-	USCGS: 60.2S 18.7W h = 33km
12	eP	Z	08 52 11					USCGS: 39.0S 176.7E h = 106km
12	ePKP	Z	13 57 45					USCGS: 51.6N 175.0W h = 33km
12	iPKP	Z	20 07 45.3				+	USCGS: 79.6W 5.1E h = 33km
12	eP	Z	21 00 57.5					USCGS: 16.7S 173.7W h = 33km
13	eP	Z	00 03 12					
13	eP	Z	02 34 34					USCGS: 6.2S 76.5W h = 125km
	epP	Z	35 07					