



JAN  
- MAR 62

UNIVERSITY OF ADELAIDE SEISMOLOGICAL STATION  
ADELAIDE (MT. BONYTHON)

Latitude: 34° 58' 01" Longitude: 138° 42' 32"

Height above mean sea level: 2150'

Foundation: Sandstone

Instruments: Benioff variable reluctance seismometers with three component long and short period paper recorders.

T<sub>g</sub> = 75 sec. and T<sub>g</sub> = 0.2 sec. respectively

No.	Date 1962 JAN.	Phase	Time (G.M.T.)	Amp A <sub>Z</sub>	Δ Km.	Remarks
1	x 1	iP	NEZ 05 11 04	+	A	
2	x 1	eP	N Z 12 23 25		4420	USCGS: 27.1S, 175.4W, h about 48km. Kermadec Islands region.
3	✓ 1	eP i	NEZ <del>23 44 22</del> E 45 41			
4	x 2	iP	NEZ 02 21 40	+		
5	x 2	iP i i	NEZ 08 16 01 EZ 16 08 Z 16 23.5	+		
6	x 2	eP eL	Z 11 53 41 N Z 12 02.7		3360	USCGS: 21.8S, 169.8E, h about 56km. Loyalty Islands region.
7	x 2	iP	N Z 21 11 45	-	K	
8	x 2	iP i	NEZ 23 14 53 N Z 16 29	-		
9	x 3	iP	NEZ 01 59 28.5	-		
Power off from 063730G.M.T. to 0646 G.M.T.						
10	✓ 3	eP	N Z 11 28 55		4820	USCGS: 20.6S, 174.4W, h about 32km. Tonga Islands region.
11	x 3	iP	NEZ 13 42 35.5	+	3490	USCGS: 9.9S, 159.7E, h about 75km. Solomon Islands region.
12	✓ 3	eP eL eL	NEZ 23 56 40 N 24 04.3 Z 06.8		3390	USCGS: 21.5S, 169.9E, h about 75km. Loyalty Islands region.
13	x 4	iP	NEZ 01 21 23.5	-	5550	USCGS: 0.1S, 100.1E, h about 141km. Near coast of Sumatra.
14	✓ 4	iP eL	NEZ 04 46 40 N Z 05 12.3	-	7610	USCGS: 33.9N, 135.2E, h about 56km. Near Shikoku, Japan. Felt. Mag. 6(Berk).
15	✓ 4	iP i i eS iPcS	NEZ 07 40 43 N Z 40 53 N Z 41 43 N Z 45 31 NEZ 47 16	+	3410	USCGS: 5.0S, 130.4E, h about 222km. Banda Sea.
16	✓ 4	iP	NEZ 20 09 43	+	5550	USCGS: 1.6S, 99.6E, h about 59km. Near coast of Sumatra.
17	✓ 5	eP eL	NEZ 00 31 37 N Z 43.2		4830	USCGS: 15.5S, 177.7W, h about 24km. Fiji Is. region. Mag. 6 <sup>1</sup> / <sub>2</sub> (Pas.) 6 <sup>1</sup> / <sub>4</sub> - 6 <sup>1</sup> / <sub>2</sub> (Berk).
18	✓ 5	iP	NEZ 02 43 26	-		
19	✓ 5	eP eL	NEZ 08 16 41 N Z 32.4		5280	USCGS: 15.5S, 172.5W, h about 60km. Tonga Islands region.
20	x 5	iP	NEZ 11 57 56.5	-	3610	USCGS: 15.1S, 167.6E, h about 133km. New Hebrides Islands. Felt at Santo.

No.	Date 1962	Phase	Time (G.M.T.)	$\frac{\text{Amp}}{A_z}$	$\Delta$ Km.	Remarks
21	✓ 5 JAN.	eP ipP	NEZ Z 14 10 33 ✓ 10 40		5440	USCGS: 1.6S, 100.0E, h about 25km. Near south coast of Sumatra.
22	✗ 5	iP	NEZ 15 56 36.5	-	5440	USCGS: 1.5S, 100.1E, h about 25km. Near south coast of Sumatra.
23	✗ 6	eP eS	NEZ NEZ 22 03 47 03 57			Local.
24	✗ 7	eP isP	NEZ NEZ 13 14 38 15 15		3220	USCGS: 8.6S, 125.1E, h about 96km. Near Timor.
25	✗ 8	eP i	NEZ NEZ 01 01 08 02 53			
26	✓ 8	ePKP <sub>1</sub> iPKP <sub>2</sub> i i i eL	N Z NEZ Z Z Z N Z 01 20 04 20 10 20 22 20 38 21 12 02 13.9		16540	USCGS: 18.5N, 70.5W, h about 63km. Near south coast of Dominican Republic. 1 killed, 6 injured, damage at San Jose de Ocoa and Azua. Mag. $6\frac{1}{2}$ (Pas.) $6\frac{1}{4}$ - $6\frac{1}{2}$ (Berk) 6(Pal.)
27	✗ 8	ePKP <sub>2</sub>	Z 02 25 07		16430	USCGS: 18.5N, 17.6W, h about 50km. Dominican Republic.
28	✓ 8	iP i	NEZ EZ 05 50 23 ✓ 51 03	+	4350	USCGS: 24.2S, 177.7W, h about 133km. Tonga Islands region.
Power off from 0745 G.M.T. to 0820 G.M.T.						
29	✗ 8	iP iPP	NEZ EZ 17 09 19.5 10 21	-	3270	USCGS: 6.4S, 147.3E, h about 104km. Near north coast of New Guinea.
30	✗ 8	iP	NEZ 18 26 32	+		
31	✗ 9	eP	NEZ 11 51 30			
32	✓ 9	eP iPcP	NEZ Z 12 52 42 52 55		8620	USCGS: 42.9N, 144.8E, h about 78km. Near coast of Hokkaido, Japan.
33	✗ 10	iP i iS	NEZ NEZ NEZ 19 36 55 36 57 37 17	-	190	Local. Felt in the south east of South Australia.
34	✗ 10	eP	NEZ 22 06 55			
35	✓ 11	iP	NEZ 03 13 44	-	8990	USCGS: 28.1N, 84.8E, h about 38km. Nepal. Felt: Katmandu.
36	✗ 11	eP eS	NEZ NEZ 04 54 21 54 37			Local.
37	✓ 11	e(P)	NEZ 05 20 26			
38	✗ 12	eP iS	NEZ NEZ 07 33 32 33 39			Local.
39	✗ 13	eP	NEZ 02 25 24			
40	✗ 13	iP	NEZ 03 11 58	+	4620	USCGS: 19.1S, 177.5W, h about 542km. Fiji Is.
41	✓ 13	eP	Z 05 01 50		10380	USCGS: 52.3N, 177.4E, h about 49km. Rat Islands, Aleutian Islands.
42	✗ 13	eP	NEZ 05 40 03		(5620)	(USCGS: 12.9N, 120.8E, h about 60km. Mindoro, Philippine Islands.)
43	✗ 13	iP ipP isP iPP	NEZ NEZ NEZ Z 08 25 55 26 03.5 26 08 27 24	+	4430	USCGS: 2.9N, 124.8E, h about 25km. Celebes Sea.
44	✗ 13	iP i e	NEZ Z Z 11 11 49 11 54 12 12	-	3570	USCGS: 37.5S, 178.7E, h about 25km. North Island, New Zealand.
45	✗ 13	iP e	NEZ NEZ 13 34 41.5 35 10	-		
46	✗ 13	iP	NEZ 18 13 08	-		

No.	Date 1962 JAN.	Phase	Time (G.M.T.)	Amp A <sub>Z</sub>	Δ Km.	Remarks
47	x 14	eP	NEZ 05 50 48.5	-		
48	x 14	eP i	NEZ 08 23 23 NEZ 23 56		3420	USCGS: 5.3S, 129.0E, h about 18km. Banda Sea.
49	x 14	eP	NEZ 08 41 51			
50	x 14	eP ipP	NEZ 09 23 57 Z 24 05		3650	USCGS: 7.5S, 158.6E, h about 49km. Solomon Islands.
51	x 14	eP	NEZ 10 43 54		3550	USCGS: 9.6S, 160.0E, h about 100km. Solomon Is.
52	✓ 14	iP	NEZ 13 45 48	+	8820	USCGS: 44.9N, 140.8E, h about 193km. Off north west coast of Hokkaido, Japan.
53	x 14	iP epP	NEZ 18 48 20 Z 49 07	+	3820	USCGS: 11.4S, 166.5E, h about 229km. Santa Cruz Islands.
54	x 15	eP e	NEZ 08 40 09 Z 40 16			
55	✓ 15	ePKP <sub>2</sub>	NEZ 08 42 05		16870	USCGS: 13.0N, 60.5W, h about 78km. Off coast of Venezuela.
56	x 15	iP	NEZ 11 02 33	+		
57	x 15	iP iPcP i	NEZ 18 27 11 Z 30 12 Z 30 42	-	3290	USCGS: 6.0S, 146.8E, h about 140km. Near east coast of New Guinea. Felt: Henganofi, Medang, Lae.
58	✓ 16	iP iPP i iPcP eS iPcS eL	NEZ 11 42 46 NEZ 44 13 NEZ 44 18 EZ 45 10 N 48 22 EZ 48 56 N Z 51.3	+	4050	USCGS: 30.5S, 177.9W, h about 39km. Kermadec Islands. Mag. 6 $\frac{1}{2}$ (Pas.)
59	x 16	eP	NEZ 16 13 21		3660	USCGS: 3.0S, 129.4E, h about 221km. Ceram.
60	✓ 16	ePKP <sub>1</sub> iPKP <sub>2</sub>	N Z 18 37 19 NEZ 37 35.5		16870	USCGS: 7.8N, 36.0W, h about 30km. Mid-Atlantic Ocean.
61	x 17	iP	N Z 05 06 28	+		
62	x 17	iP	NEZ 11 37 17	+	4450	USCGS: 20.8S, 178.4W, h about 613km. Fiji Islands region.
63	x 17	iP i	NEZ 13 25 23 NEZ 30 49	-		
64	x 17	eP	NEZ 15 10 22			
65	✓ 17	eP i iPP	NEZ 15 36 48 NEZ 36 51 NEZ 38 21		4470	USCGS: 4.3N, 128.3E, h about 25km. Molucca Passage.
66	✓ 17	iP iPP	NEZ 15 50 46.5 NEZ 52 23	+	4470	USCGS: 3.9N, 126.6E, h about 74km. Molucca Passage.
67	x 17	eP	Z 16 27 46			
68	x 17	eP	N Z 17 59 55			
69	x 17	iP	NEZ 19 11 04.5	-		
70	x 17	iP	NEZ 20 20 21	-		
71	x 18	iP	NEZ 11 54 29.5			
72	x 18	eP	N Z 15 52 10		3720	USCGS: 4.2S, 153.6E, h about 127km. New Britain.
73	✓ 18	eP i i	NEZ 16 00 17 Z 03 02 Z 05 47			
74	x 18	iP iPcP	NEZ 22 06 05 N Z 09 07		3500	USCGS: 4.4S, 129.5E, h about 21km. Banda Sea.
75	x 19	iP	N Z 02 36 28	-		
76	✓ 19	iP	NEZ 19 45 26	+		

No.	Date 1962 JAN.	Phase	Time (G.M.T.)	$\frac{Amp}{A_z}$	$\Delta$ Km.	Results
77	X 19	iP NEZ	20 51 57.5	-	5340	USCGS: 10.8N, 122.4E, h about 99km. Negros, Philippine Islands.
78	X 19	iP NEZ	21 25 19.5	+	3540	USCGS: 2.9S, 139.0E, h about 76km. Near north coast of New Guinea.
79	X 20	eP NEZ	07 09 50			
80	X 20	eP N Z	20 20 48		3430	USCGS: 6.6S, 152.1E, h about 33km. Off south coast of New Britain.
81	X 21	eP N Z	07 43 44			
82	✓ 21	iP NEZ	12 58 55	-	4600	USCGS: 17.7S, 178.8W, h about 558km. Fiji Islands.
		i Z	59 12			
		i Z	13 00 09			
		iPP N Z	00 53			
		ePPP N Z	01 42			
		e N	05 52			
83	X 21	iP NEZ	15 35 04	-		
84	X 22	iP Z	10 07 58	+	5330	USCGS: 11.4N, 125.4E, h about 125km. Near coast of Samar, Philippine Islands.
85	X 22	eP NEZ	21 36 48		3550	USCGS: 4.3S, 152.5E, h about 104km. New Britain region. Felt : Rabaul.
86	X 23	iP N Z	05 19 57.5	-		
87	X 23	eP NEZ	11 26 37			
88	✓ 23	eP Z	16 11 21			
89	X 23	eP NEZ	21 49 39			
90	X 24	iP NEZ	01 53 11.5	+		
91	✓ 24	eP NEZ	04 52 48		3570	USCGS: 15.6S, 167.6E, n about 133km. New Hebrides Islands. Felt : Lamap, Santo.
		iPcP Z	55 32			
92	X 24	iP NEZ	15 50 00.5	-	6790	USCGS: 24.4N, 122.0E, h about 58km. Near east coast of Formosa.
93	X 24	eP NEZ	17 51 07			
		eS NE	56 55			
94	✓ 24	iP NEZ	22 27 02	-		
95	✓ 25	iP NEZ	01 56 36	+	3550	USCGS: 10.7S, 161.8E, h about 80km. Solomon Islands.
		i NEZ	56 42			
		eL N	06.7			
		eL Z	✓ 09.4			
96	X 25	iP NEZ	09 33 50	-	5240	USCGS: 12.3N, 142.3E, h about 145km. Mariana Is.
97	✓ 26	iP NEZ	05 33 09.5	+	7410	USCGS: 32.2N, 138.1E, h about 333km. South of Honshu, Japan.
98	✓ 26	iP NEZ	06 16 55	+	4540	USCGS: 23.4S, 176.1W, h about 214km. Tonga Islands region.
99	✓ 26	eP Z	08 34 20			
100	✓ 26	ePKP Z	08 36 49		14210	USCGS: 35.1N, 22.7E, h about 32km. Mediter- ranean Sea, west of Crete. Mag. 5-5 $\frac{1}{4}$ (Pal.).
101	X 26	iP N Z	09 41 25.5	+		
102	X 27	eP N Z	03 59 57			
103	X 27	eP NEZ	20 34 06		3340	USCGS: 5.1S, 144.2E, h about 145km. New Guinea.
104	✓ 28	iP NEZ	05 48 40	+	5210	USCGS: 17.2S, 172.0W, h about 25km. Tonga Islands. Felt : Apia. Mag. 6 $\frac{1}{4}$ (Pas.).
		ipP Z	48 54			
		eL Z	06 04.9			
105	✓ 28	eP NEZ	16 48 18		4150	USCGS: 0.0, 123.9E, h about 101km. Northern Celebes region.
		ipP NEZ	✓ 48 41			
106	X 29	iP NEZ	11 49 21.5	+	3430	USCGS: 9.1S, 157.5E, h about 114km. Solomon Is.

No.	Date 1962 JAN.	Phase	Time (G.M.T.)	$\frac{\text{Amp}}{\text{A}_z}$	$\Delta$ Km.	Remarks
107	x 29	iP <del>EZ</del>	13 31 27	-	3620	USCGS: 12.5S, 165.1E, h about 100km. Santa Cruz Islands.
108	x 30	iP <del>NEZ</del>	12 40 42.5	-		
109	x 30	iP <del>NEZ</del>	13 57 28	-	3360	USCGS: 5.3S, 146.8E, h about 158km. Off north coast of New Guinea.
110	x 30	eP <del>NEZ</del>	15 00 40			
111	x 30	iP <del>NEZ</del>	15 08 52.5	-	4930	USCGS: 16.2S, 176.0W, h about 383km. Samoa Islands region.
112	✓ 30	iP <del>NEZ</del>	15 32 10	*	6190	USCGS: 20.7N, 144.5E, h about 187km. Mariana Islands region.
113	x 30	eP <del>NEZ</del> epP <del>EZ</del>	18 37 01 37 20		3420	USCGS: 18.8S, 168.5E, h about 79km. New Hebrides Islands region.
114	x 31	iP <del>NEZ</del>	13 24 18.5	-		
E long period not functioning.						

J. Pearce

D.J. Sutton



## UNIVERSITY OF ADELAIDE SEISMOLOGICAL STATION

ADELAIDE (MT. BONYTHON)

Latitude: 34° 58' 01"

Longitude: 138° 42' 32"

Height above mean sea level:

2150'

Foundation: Sandstone

Instruments: Benioff variable reluctance seismometers with three component long and short period paper recorders.

 $T_g = 75$  sec. and  $T_g = 0.2$  sec. respectively

No.	Date 1962 FEB.	Phase	Time (G.M.T.)	$\frac{AMP}{A_z}$	$\Delta$ Km.	Remarks
1	✓ 1	iP NEZ iPcP NEZ eL N eL Z	00 47 02.5 49 25 59.7 01 01.4	-	4070	USCGS: 31.7S, 177.3W, h about 30Km. Kermadec Islands region.
2	✗ 1	iP NEZ	11 32 53	+		
3	✗ 1	eP NEZ	12 47 31			
4	✗ 1	eP N Z	19 04 30			
5	✗ 1	iP NEZ	20 27 29	-		
6	✗ 2	iP NEZ	03 38 47	+	3370	USCGS: 5.4S, 147.3E, h about 161Km. Bismark Sea.
7	✗ 2	iP NEZ	09 15 02	+		
8	✗ 2	iP Z	15 36 08	-		
9	✓ 2	iP NEZ	17 38 47.5	-		
10	✓ 3	iP NEZ iP N Z iPP N Z iS N iS N Z i N i N Z eL NEZ	00 44 36 44 46 45 40 49 46 50 04 53 50 55 53 58.6	-	3720	USCGS: 1.2S, 137.8E, h about 17Km. North of New Guinea.
11	✗ 3	iP NEZ	13 57 58.5	-		
12	✗ 4	iP NEZ	00 17 15.5	-		
13	✓ 4	iP NEZ iPP N Z iPPP EZ eL N Z	03 01 31.5 02 52 03 07 17.2	-	3920	USCGS: 4.6S, 119.0E, h about 89Km. Celebes.
14	✗ 5	iP NEZ iS NEZ	22 48 20.5 48 28.5	+		Local.
15	✓ 5	iP NEZ iPcP Z iP Z iS NE	23 06 53.5 07 13 07 25 15 57	+	7830	USCGS: 35.9N, 138.8E, h about 151Km. Central Honshu, Japan. Felt.
16	✗ 6	iP NEZ	07 19 48.5	-		
17	✓ 6	eP NEZ	07 57 36			
18	✗ 6	iP NEZ	15 43 09	-		
19	✗ 6	iP NEZ	18 08 34	+		
20	✗ 6	eP NEZ e NEZ	20 44 29.5 49 56			
21	✗ 7	iP N Z	03 34 23	-		
22	✗ 7	iP N Z	17 33 28	-		
23	✓ 8	iP NEZ e(S) N e N eL N Z	11 55 35.5 12 00 47 01 26 06.5	-	3520	USCGS: 3.2S, 141.3E, h about 87Km. New Guinea.

No.	Date 1962 FEB.	Phase	Time (G.M.T.)	$\frac{Amp}{A_z}$	$\Delta$ Km.	Remarks
24	✓ 8	iP NEZ ipP Z iPcP Z	19 49 33 49 46 50 47	-	5770	USCGS: 0.7N, 98.6E, h about 43Km. Sumatra.
25	✗ 8	iP? NEZ	22 48 45			
26	✗ 9	iP NEZ	12 09 00.5	+	4080	USCGS: 24.2S, 179.5E, h about 541Km. Kermadec Islands region.
27	✓ 9	iP NEZ ipP N Z i EZ	21 58 26 58 37 58 54.5	-	4210	USCGS: 0.6N, 123.9E, h about 50Km. Celebes.
28	✗ 10	iP NEZ iS NEZ	13 05 03.5 05 20.5	-		Local.
29	✗ 10	iP NEZ	13 11 06	+		
30	✓ 10	i? Z iPKP Z	19 51 22.5 51 38		17100	USCGS: 17.9N, 62.2W, h about 70Km. Leeward Islands.
31	✗ 10	iP NEZ	20 48 39	+		
32	✓ 11	iP NEZ	02 52 31.5	+	7130	USCGS: 29.6N, 139.0E, h about 400Km. South of Honshu, Japan. Mag. $6\frac{1}{4}$ (Pas.).
33	✗ 11	eP Z	14 03 29		3710	USCGS: 4.3S, 153.5E, h about 120Km. New Ireland region.
34	✓ 11	iP NEZ ipP N Z isP N Z iPP N Z ePPP Z iPcP Z iS N isS N iScP Z ePcS NE eSS N eSSS N i N eL N Z	19 02 01 02 24 02 38 03 16 03 36 04 41 07 12 07 48 08 16 08 25 09 24 09 45 10 08 12.6	+	3690	USCGS: 4.5S, 153.5E, h about 100Km. New Ireland region. Mag. 6 (Brk.)
35	✗ 11	iP NEZ	19 55 10.5	-	3690	USCGS: 4.6S, 153.6E, h about 107Km. New Ireland region.
36	✗ 11	iP NEZ i Z ipP EZ	22 47 48 47 57 48 16	-	3720	USCGS: 4.3S, 153.7E, h about 118Km. New Ireland region.
37	✗ 12	iP NEZ	05 02 42	+	3700	USCGS: 4.5S, 153.8E, h about 107Km. New Ireland region.
38	✗ 12	iP NEZ	06 52 07	+	4230	USCGS: 2.0N, 128.1E, h about 169Km. Halmahera.
39	✗ 12	iP NEZ	13 51 12	+	3700	USCGS: 4.4S, 153.5E, h about 121Km. New Ireland region.
40	✗ 13	eP NEZ iS NEZ	20 52 00 52 37			Local.
41	✗ 14	iP NEZ	00 11 25	+		
42	✗ 14	eP NEZ e NEZ	00 39 13 44 26			
43	✓ 14	iP NEZ	02 00 03	+	3710	USCGS: 4.3S, 153.5E, h about 119Km. New Ireland region.
44	✓ 14	iP NEZ	02 17 16	+	4720	USCGS: 6.2N, 126.8E, h about 101Km. Near coast of Mindanao, P.I.
45	✗ 14	iP NEZ i NEZ	02 54 41 55 11	+	4170	USCGS: 0.1N, 123.8E, h about 96Km. Northern Celebes.

No.	Date 1962 FEB.	Phase	Time (G.M.T.)	Amp. A <sub>z</sub>	△ Km.	Remarks
46	✓ 14	eP Z e Z ePP N Z eSKS N eSKKS N eS N e N ePS N Z ePKKP Z e N eL N Z	06 49 48 50 10 54 11 07 00 28 00 52 01 08 01 38 03 08 06 08 08 10 22.9		11210	USCGS: 38.1S, 73.1W, h about 44Km. Near coast of Chile. Moderate property damage in central Chile. Mag. $7\frac{1}{4}$ (Pas.), $7\frac{1}{2}$ (Brk.).
47	x 14	iP NEZ	07 44 38	-	3710	USCGS: 4.2S, 153.4E, h about 137Km. New Ireland region. Felt : Rabaul.
48	x 14	iP NEZ i(S) N	11 51 19 57 35	-	4680	USCGS: 5.7N, 126.0E, h about 147Km. Near coast of Mindanao, P.I.
49	✓ 15	iP NEZ	14 18 13	+	4610	USCGS: 17.5S, 178.3W, h about 600Km. Fiji Islands.
50	✓ 15	iP NEZ	15 28 24	+		
51	✓ 15	eP NEZ i NEZ	15 31 58 32 04		3710	USCGS: 4.4S, 153.8E, h about 109Km. New Ireland region. Felt : Rabaul and Namatanai.
52	✓ 15	iP NEZ	15 36 26.5	-	4280	USCGS: 23.7S, 179.7W, h about 555Km. South of Fiji Islands region.
53	x 15	eP NEZ	16 48 08		3700	USCGS: 4.5S, 153.8E, h about 104Km. New Ireland region.
54	✓ 15	eP Z	17 26 02			
55	x 15	iP NEZ	21 03 37	-	4460	USCGS: 49.4N, 156.0E, h about 24Km. South of Tonga Islands region.
56	✓ 16	eP? Z	15 40 20			
57	x 17	eL N Z	03 58.9		3390	USCGS: 61.6S, 162.9E, h about 25Km. South of Macquarie Island region.
58	x 17	iP NEZ ipP Z i Z	11 13 35 13 47 14 25	-	3660	USCGS: 2.7S, 130.2E, h about 54Km. Ceram.
59	x 17	iP NEZ	13 08 00.5	-		
60	x 18	eP NEZ	00 55 12			
61	18	ePKP N Z	17 44 39		15540	USCGS: 8.1N, 74.6W, h about 70Km. Northern Colombia. Felt : Bogota and Medellin.
62	✓ 19	iP NEZ	11 12 38.5	+	4780	USCGS: 20.2S, 175.1W, h about 95Km. Tonga Islands.
63	✓ 20	iP NEZ ipP NEZ	09 26 04 26 18	+	6660	USCGS: 6.8N, 92.5E, h about 29Km. Nicobar Islands.
64	✓ 20	iP NEZ iS NEZ	10 13 30 18 17	-	3910	USCGS: 25.9S, 178.4E, h about 655Km. South of Fiji Islands region.
65	✓ 20	iP NEZ iPcP Z	16 17 38 17 51	+	8750	USCGS: 43.0N, 144.9E, h about 55Km. Near coast of Hokkaido, Japan. Felt.
66	x 20	iP NEZ	16 33 44	-		
67	✓ 20	iP NEZ	17 13 50	+	4930	USCGS: 4.0S, 104.2E, h about 25Km. Sumatra.
68	x 20	iP NEZ	20 16 42	-	2890	USCGS: 50.6S, 110.8E, h about 31Km. South of Australia.
69	x 20	eP NEZ	20 38 55			
70	✓ 20	iP Z	22 11 27	+		



No.	Date 1962 FEB.	Phase	Time (G.M.T.)	$\frac{Amo.}{A_z}$	$\Delta$ Km.	Remarks
71	20	iP NEZ	22 14 05	-	8100	USCGS: 26.1N, 96.8E, h about 25Km. Northern Burma.
72	21	iP NEZ	00 13 29	+	4380	USCGS: 21.8S, 177.1W, h about 38Km. Tonga Islands region.
73	21	eP NEZ	09 55 05		2500	USCGS: 56.8S, 146.7E, h about 25Km. About 500 miles west of Macquarie Is.
74	22	eP NEZ	09 56 52		3830	USCGS: 32.7S, 179.7W, h about 246Km. Kermadec Islands.
75	22	iP NEZ	16 26 41.5	-		
76	22	iP Z	16 48 38	+	7160	USCGS: 29.4N, 131.1E, h about 25Km. Ryukyu Islands.
77	22	eP NEZ	20 00 51			
78	22	eP EZ	22 04 52		6160	USCGS: 27.8S, 73.4E, h about 25Km. Indian Ocean.
79	23	iP NEZ i Z	07 57 24 57 36	+		
80	23	eP NEZ eS N Z	11 46 56 51 49		3270	USCGS: 6.3S, 147.0E, h about 80Km. North coast of New Guinea. Felt:Kaiapit.
81	23	eP NEZ ipP Z eL N Z	18 12 04 12 11 24.9		3710	USCGS: 4.0S, 152.6E, h about 25Km. New Ireland.
82	23	eP NEZ i? NEZ	19 37 41 39 52		5270	USCGS: 11.1N, 125.8E, h about 100Km. Samar, Philippine Islands.
83	23	eP NEZ	20 08 57		5250	USCGS: 10.9N, 125.8E, h about 98Km. Samar, Philippine Islands.
84	23	iP NEZ eS N eL N Z	20 28 06 33 28 41.2	+	3710	USCGS: 3.8S, 152.0E, h about 25Km. New Britain. Felt:Rabaul, Namatanai.
85	24	eP NEZ ipP N Z isP NEZ	06 14 37 14 53 14 55		5550	USCGS: 00.6S, 99.4E, h about 25Km. Near coast of Sumatra.
86	24	iP NEZ i NEZ	13 57 15 57 17.5	-	5260	USCGS: 9.5N, 120.9E, h about 25Km. Sulu Sea.
87	24	eP NEZ	14 33 22		3520	USCGS: 10.7S, 161.3E, h about 50Km. Solomon Islands.
88	24	iP NEZ	19 40 39	-	3330	USCGS: 5.5S, 146.1E, h about 40Km. Nth. coast of New Guinea. Felt:Kaiapit.
89	25	eP NEZ	05 14 30			
90	25	iP NEZ	06 30 55.5	-	5480	USCGS: 11.7N, 120.9E, h about 25Km. Mindoro, P.I.
91	25	eP NEZ eS NEZ	15 19 07 19 59			regional - Snowy Mts. N.S.W.
92	25	iP NEZ	18 43 01			
93	26	iP NEZ ipP EZ	08 52 03.5 52 14	+	4130	USCGS: 0.1S, 122.3E, h about 25Km. Northern Celebes.
94	26	iP Z	12 40 26	-		
95	27	eP NEZ	01 45 25		3500	USCGS: 7.1S, 155.2E, h about 25Km. Solomon Islands.
96	27	eP NEZ	06 46 14		7990	USCGS: 27.7N, 101.9E, h about 40Km. Szechwan, China.
97	27	eL N Z	13 36.2		11380	USCGS: 37.4S, 73.2W, h about 40Km. Near coast of central Chile Mag. $6\frac{1}{4}$ - $6\frac{1}{2}$ (Pas.), 6(Brk.).
98	27	iP NEZ	14 27 56	+	3670	USCGS: 2.7S, 130.1E, h about 40Km. Ceram Sea.

- 5 -

No.	Date 1962 FEB.	Phase	Time (G.M.T.)	$\frac{AmD}{A_z}$	$\Delta$ Km.	Remarks
99	28	eP      Z e      NEZ	05 26 25 26 43		3590	USCGS: 2.5S, 140.5E, h about 25Km. Near north coast of New Guinea.
100	28	eP      NEZ	09 49 28			E long period not functioning.

J. PEARCE
D.J. SUTTON.

UNIVERSITY OF ADELAIDE SEISMOLOGICAL STATION
ADELAIDE (MT. BONYTHON)

Latitude:  $34^{\circ} 58' 01''$  Longitude:  $138^{\circ} 42' 32''$   
 Height above mean sea level: 2150'  
 Foundation: Sandstone  
 Instruments: Benioff variable reluctance seismometers with three component long and short period paper recorders.  
 $T_g = 75$  sec. and  $T_g = 0.2$  sec. respectively

No.	Date 1962 March	Phase	Time (G.M.T.)	$\frac{\text{Amp}}{\text{A}_z}$	$\Delta$ Km	Remarks
1	x 1	eP eS	NEZ NEZ	01 10 48 11 22		Regional
2	✓ 1	iP	NEZ	05 02 14	- 6860	USCGS: 25.7N, 124.8E h about 52 km. Ryukyu Islands
3	✓ 1	eP eL	NEZ NZ	23 48 18	4080	USCGS: 14.0S, 172.5E h about 73 km Samoa Is. Mag. 6 (Pas. records changed between 235140 and 235350)
4	x 2	iP	NEZ	00 36 01	+ 4730	USCGS: 6.1N, 125.9E h about 100 km. Near south east coast of Mindanao, P.I.
5	x 2	iP	NEZ	03 35 03.5	+	
6	x 2	eP	NZ	04 25 11	4230	USCGS: 0.8N, 123.9E h about 194 km. Celebes
7	✓ 2	iP ePP iS	NEZ NZ NZ	13 10 52 12 32 17 05	- 4640	USCGS: 5.4N, 126.5E h about 30 km. Off south coast of Mindanao, P.I.
8	x 2	eP?	Z	20 47 12		
9	x 3	eP	NEZ	01 05 42	7950	USCGS: 28.2N, 100.8E h about 25 km. Sikang Province, China
10	x 3	eP	NEZ	05 01 10	4160	USCGS: 0.1S, 122.0E h about 25 km. Celebes
11	x 3	eP eS	NEZ NEZ	06 29 37 29 54		Local
12	x 3	iP	NEZ	10 08 24	- 4070	USCGS: 0.1N, 126.5E h about 25 km. Molucca Passage
13	✓ 3	iP i ipP isP iScP iS	NEZ NZ Z NZ Z NEZ	12 22 52 23 05 23 13 23 20 28 25 29 18	+ 4860	USCGS: 7.4N, 126.5E h about 90 km. Near east coast of Mindanao, P.I.
14	x 3	iP	NEZ	16 08 33	+ 4360	USCGS: 21.5S, 179.1W h about 613 km. Fiji Islands
15	x 3	iP	NEZ	16 22 10.5	- 5090	USCGS: 16.1S, 174.2W h about 129 km. Tonga Islands
16	x 3	iP i iS	NEZ Z NEZ	22 05 14 05 53 06 06	+	Local
17	x 3	iP	NEZ	22 29 08	-	

2.

No.	Date 1962 March	Phase	Time (G.M.T.)	$\frac{\text{Amp}}{A_z}$	$\Delta$ Km.	Remarks
18	x 4	iP NEZ iS NEZ	06 03 52.5 04 09	-	140	Local reported from Clare about 90 miles north of Adelaide
19	x 4	eP NEZ	08 33 15		4160	USCGS: 1.4S, 120.2E h about 144 km. Celebes
20	y 4	iP Z	13 00 18		6920	USCGS: 27.1N, 129.5E h about 25 km. Ryukyu Islands
21	y 4	eP Z	14 21 15		4120	USCGS: 0.9S, 121.4E h about 168 km. Celebes
22	x 4	eP NEZ	15 27 37			
23	x 5	iP NEZ ipP Z iPcP Z	03 50 44 50 57 52 25	-	5000	USCGS: 4.0S, 103.3E h about 78 km. Near south coast of Sumatra
24	x 5	eP EZ	08 58 52			
25	x 5	eP NEZ	10 28 15		9770	USCGS: 55.9S, 27.9W h about 25 km. Sandwich Islands
26	y 5	eP NZ	12 15 01			
27	x 5	eP NEZ ipP NEZ	15 08, 25 08 37		5280	USCGS: 11.3N, 126.3E h about 49 km. Leyte, Phillipine Is.
28	x 5	eP Z	16 56 05		6260	USCGS: 19.1N, 121.1E h about 14 km. Off northwest coast of Luzon, P.I.
29	x 6	iP NEZ	01 39 31	+		
30	x 6	iP NEZ iPcP NEZ	06 21 05? 06 54	+	7100	USCGS: 13.7N, 93.7E h about 18 km. Andaman Islands.
32	x 6	iP NEZ	22 15 03	+		
33	x 7	iP NEZ i EZ	01 55 40 57 07	+		
34	y 7	iP NEZ i NZ ipP NZ iS NZ i(PS) N i NZ	11 09 30 09 40 11 37 16 18 18 10 19 52	-	6050	USCGS: 19.3N, 145.3E h about 680 km. Mariana Islands Mag 7 (Pas), 6 (Brk)
35	x 7	eP NEZ	11 38 57			
36	x 7	eP NEZ	17 40 58		3660	USCGS: 2.1S, 133.9E h about 89 km. New Guinea
37	x 7	iP NEZ	22 04 22	-	4150	USCGS: 0.0, 123.9E h about 25 km. Celebes
38	y 8	eP NEZ	08 20 16		5910	USCGS: 17.9N, 146.5E h about 131 km. Mariana Islands.
39	y 8	eP NEZ	10 40 28		3760	USCGS: 35.1S, 179.7W h about 25 km. Off northeast coast of North Island New Zealand.
40	x 8	iP NEZ e EZ	20 59 53 01 18	-	4180	USCGS: 1.2N, 126.1E h about 43 km. Molucco Passage
41	y 9	iP NEZ	07 04 19.5		4560	USCGS: 18.4S, 178.7W h about 472 km. Fiji Islands
42	x 9	iP NEZ	17 36 27	-	4160	USCGS: 24.5S, 179.6W h about 586 km. Fiji Islands region
43	y 9	eP N cS NZ eL NZ	22 13 41 18 27 25. 1		3310	USCGS: 5.8S, 146.4E h about 76 km. Near east coast of New Guinea

3.

No.	Date 1962 March	Phase	Time (G.M.T.)	$\frac{\text{Amp}}{A_z}$	$\Delta$ Km	Remarks
44	x 9	eP NEZ	22 49 50			
45	x 10	iP NEZ eS NEZ	01 03 15 08 56	+	3290	USCGS: 6.5N, 129.4E h about 202 km. Banda Sea.
46	x 10	eP NEZ	03 10 45		5990	USCGS: 3.8N, 97.7E h about 25 km. Sumatra
47	x 10	eP NEZ	05 06 25		4000	USCGS: 31.2S, 178.2W h about 69 km. Kermadec Islands
48	x 10	iP NZ	09 54 10	-		
49	x 10	iP NEZ eL NZ	12 14 53.5 28. 8	-	3790	USCGS: 11.0S, 165.6E h about 25 km. Santa Cruz Islands
50	x 10	eP Z	12 35 39		6830	USCGS: 24.6N, 120.1E h about 121 km. Off west coast of Formosa
51	x 11	eP NEZ	07 25 57		4060	USCGS: 13.9S, 172.1E h about 133 km. New Hebrides Is. region
52	✓ 11	eP NEZ	15 36 46		10380	USCGS: 52.3N, 178.0E h about 135 km. Rat Islands, Aleutian Islands.
53	✓ 11	eP NEZ	16 25 14		6050	USCGS: 19.4N, 144.9E h about 428 km. Mariana Is. region
54	✓ 11	iP NEZ eS NZ eL NZ	19 27 21.5 33 57 44. 4	-	5020	USCGS: 9.0N, 126.7E h about 25 km. Near east coast of Mindanao, P.I.
55	x 11	iP NEZ	20 06 53	+	5000	USCGS: 8.7N, 126.3E h about 171 km. Mindanao, P.I.
56	x 11	eP NEZ i NZ	20 15 30 15 42			
57	v 11	eP NEZ i NZ	21 31 15 31 27		5000	USCGS: 8.7N, 126.2E h about 157 km. Mindanao, P.I
58	x 12	iP NEZ	01 15 25	-	4570	USCGS: 4.6N, 125.8E h about 44 km. Celebes Sea
59	✓ 12	ePKP NEZ ePP Z ePKS NZ eL NZ	11 59 33 02 00 03 04 12 43. 9		14820	USCGS: 8.1N, 83.0W h about 58 km. Near south coasts of Panama and Costa Rica Mag $6\frac{3}{4}$ (Pas) $6\frac{1}{4}$ - $6\frac{1}{2}$ (Pal)
60	x 12	iP NEZ	12 19 06.5	+		
61	x 13	eP NEZ e NEZ	00 49 28 54 32			
62	x 13	iP NEZ	11 37 04	+	4310	USCGS: 2.9N, 128.8E h about 152 km. Molucca Passage
63	x 13	eP NEZ	18 39 39			
64	y 13	iP NEZ	21 53 36	-		
65	x 14	iP NEZ	05 36 43	+		
66	x 14	eP NEZ ipP Z	08 35 38 35 47		5000	USCGS: 8.8N, 126.8E h about 28 km. Mindanao, P.I.
67	x 15	iP NEZ	08 35 45.5	-		
68	✓ 15	iP NEZ	13 13 53		4440	USCGS: 20.6S, 178.8W h about 623 km. Fiji Islands region.
69	x 15	iP NEZ	21 20 42.5	-	4520	USCGS: 7.1S, 106.1E h about 83 km. Near south coast of Java.

4.

No.	Date 1962 March	Phase	Time (G.M.T.)	$\frac{\text{Amp}}{A_z}$	$\Delta$ Km	Remarks
70	X 15	eP NEZ	23 04 32		3620	USCGS: 10.5S, 162.6E h about 100 km. Solomon Islands
71	X 16	eP NEZ e NEZ	04 24 24 24 52			
72	Y 16	iP NEZ	15 32 18.5	+	3630	USCGS: 21.7S, 173.0E h about 216 km. New Hebrides Is. Region
73	X 16	iP NZ	19 38 53.5	-		
74	✓ 16	iP NEZ ipP NZ isP NZ eS NZ e(ScS)N eL NZ	19 49 26 49 38 49 43 54 51 59 54 20 00. 7	-	3810	USCGS: 10.8S, 165.7E h about 25 km. Santa Cruz Is. Region
75	Y 17	iP NEZ	07 06 44	+		
76	X 17	eP NEZ e NE	12 01 55 02 42			Regional
77	X 17	eP NEZ	18 04 10		4720	USCGS: 17.7S, 177.4W h about 73 km. Tonga Is. region
78	X 17	iP NEZ ipP Z	19 05 12 05 20	-	5240	USCGS: 9.8N, 122.5E h about 25 km. Near east coast of Negros Island, P.I.
79	✓ 17	ePKP <sub>1</sub> EZ ePKP <sub>2</sub> NEZ eL NZ	21 07 25 07 52 37. 7		17320	USCGS: 10.6N, 43.7W h about 25 km. North Atlantic Ocean
80	X 17	eP EZ	21 35 17		3330	USCGS: 22.3S, 169.7E h about 100 km. Loyalty Islands region
81	X 18	iP NEZ i Z e Z	00 47 36 47 50 49 55	+		
82	✓ 18	eP NEZ eS N eL NZ	03 12 47 18 06 54. 3		3510	USCGS: 16.5S, 168.2E h about 14 km. New Hebrides Is. Felt.
83	X 18	iP NEZ	15 03 19	-	5040	USCGS: 9.1N, 126.4E h about 44 km. Mindanao, P.I.
84	✓ 18	e Z ePKP Z	15 49 50 50 28		17870	USCGS: 40.6N, 19.6E h about 25 km. Southern Albania. 15 dead, 154 injured
85	✓ 18	iP NEZ	20 29 20	+		
86	X 19	eP NEZ eS N eL NEZ	04 54 38 58 48 05 00. 7		2550	USCGS: 57.3S, 147.2E h about 25 km. About 900 miles south of Tasmania
87	✓ 19	iP NEZ i NZ isP Z i NZ iPP NZ eS NZ iScP Z	06 01 39 01 44 02 04 02 12 03 06 07 16 07 30	-	4210	USCGS: 0.3N, 123.5E h about 53 km. Near south coast of Minahossa Peninsula, Celebes Islands.
88	X 19	iP NEZ	08 48 50.5	+		
89	X 19	iP NEZ	15 40 55.5	-	3820	USCGS: 31.8S, 179.9E h about 469 km. Kermadec Is. region.

5.

No.	Date 1962 March	Phase	Time (G.M.T.)	$\frac{\text{Amp}}{A_z}$	$\Delta$ Km	Remarks
90	✓ 19	iP NEZ	21 05 31	-	4980	USCGS: 4.3S, 103.1E h about 100 km. Near south coast of Sumatra
91	✓ 19	eP NEZ iS NEZ	21 38 57 39 26			Local
92	✗ 20	eP Z	16 53 33			
93	✓ 20	eP NEZ iS NEZ	17 10 07 10 30.5			Local
94	✗ 20	eP NZ	23 22 40		8710	USCGS: 32.0N, 94.6E h about 25 km. Tibet
95	✗ 21	eP NEZ	08 00 02			
96	✗ 21	iP NEZ	20 44 17			
97	✓ 21	iP NEZ iS NEZ	23 04 16.5 09 21	+	4150	USCGS: 5.9S, 113.0E h about 631 km. Java Sea.
98	✗ 21	iP NEZ iS NEZ	23 16 45 21 49.5	+		
99	✓ 22	iP NEZ iPcP Z iS NEZ	00 26 09.5 28 14 31 15	+	4160	USCGS: 5.9S, 112.9E h about 611 km. Java Sea
100	✓ 22	iP NEZ iS NEZ	00 44 01.5 49 06	+	4140	USCGS: 6.0S, 113.0E h about 595 km. Java Sea
101	✗ 22	iP NEZ	01 32 25.5	-		
102	✓ 22	iP NEZ iS NZ eL NZ e NZ	15 19 30.5 24 42 28. 1 53.05	+	3530	USCGS: 3.2S, 142.3E h about 25 km. Near north coast of New Guinea. Mag. $5\frac{3}{4}$ (Brk.)
103	✗ 22	iP NEZ	16 22 59	+	3630	USCGS: 2.1S, 139.3E h about 44 km. Near north coast of New Guinea
104	✗ 22	iP NEZ	17 52 42	-	3640	USCGS: 2.0S, 139.4E h about 32 km. Near north coast of New Guinea
105	✓ 22	eP NZ	<del>19 00 52</del>			
106	✗ 22	iP NEZ	19 53 52	-	3630	USCGS: 2.1S, 139.0E h about 57 km. Near north coast of New Guinea
107	✗ 23	iP NEZ	00 22 35.5	-	4610	USCGS: 17.4S, 178.9W h about 576 km. Fiji Islands
108	✗ 23	iP NEZ	06 22 56	+		
109	✗ 23	eP NZ	15 15 12		4160	USCGS: 22.8S, 179.4E h about 608 km. Fiji Islands region.
110	✓ 24	eP NEZ ipP NZ isP NZ i NZ iS NZ e N e N	13 05 31 05 58 06 06 06 19 10 18 10 51 11 33		3300	USCGS: 5.7S, 145.0E h about 111 km. Near north coast of New Guinea
111	✓ 24	eP NEZ i NEZ i NEZ	15 31 42 31 47 31 52		3630	USCGS: 2.1S, 138.8E h about 84 km. Near north coast of New Guinea.
112	✗ 24	eP NEZ	20 28 21			

6.

No.	Date 1962 March	Phase	Time (G.M.T.)	Amp A <sub>Z</sub>	Δ. Km	Remarks
113	X 25	eP NEZ	05 34 38.5		3320	USCGS: 5.8S, 130.7E h about 38 km. Banda Sea
114	✓ 25	eP NEZ	06 30 18.5			
115	✓ 25	eP Z	07 24 27			
116	X 25	eP NEZ	08 48 06			
117	X 25	eP Z	11 06 58		3770	USCGS: 11.3S, 165.7E h about 85 km. Santa Cruz Islands
118	X 25	eP Z	11 57 32		10100	USCGS: 49.5S, 8.7W h about 25 km. About 600 miles north west of Bouvet Island.
119	✓ 25	iP NEZ	13 50 35	-	8330	USCGS: 28.2N, 96.1E h about 25 km. Eastern India - Tibet border region
120	X 25	eP NEZ	14 29 52			
121	X 25	eP NEZ eS NEZ	18 17 09 17 31			Local
122	X 25	eP NEZ	19 27 01			
123	X 25	iP NEZ	20 49 49	-		
124	X 25	iP NEZ	21 00 36	+	7770	USCGS: 27.8N, 99.6E h about 25 km. Sikang Province China
125	✓ 25	iP NEZ	21 51 58	-	3220	USCGS: 1.6N, 127.2E h about 60 km. Halmahera
126	X 25	eP NEZ	22 19 58			
127	X 26	eP NEZ	03 17 51		3970	USCGS: 0.5S, 127.6E h about 55 km. Halmahera region
128	X 26	eP NEZ i Z	15 25 12 25 37			
129	X 26	eP NEZ i Z i Z iPcP EZ	15 26 48 26 53 26 57 29 45		3390	USCGS: 5.5S, 148.1E h about 122 km. New Britain region.
130	✓ 26	eP EZ eL NZ	16 46 23 17 23.7		10990	USCGS: 40.6S, 73.3W h about 32 km. Near coast of southern Chile
131	✓ 27	iP NEZ iPP NEZ	05 28 52 30 04	+	3560	USCGS: 3.9S, 129.1E h about 96 km. Ceram region.
132	X 27	iP NEZ	14 57 16.5		4550	USCGS: 20.3S, 177.6W h about 510 km. Tonga Islands
133	✓ 27	eP NZ i NEZ iS NEZ	17 56 12 57 17 58 00	+		Regional
134	✓ 28	eP NEZ i NZ cS N	04 14 34 14 42 22 04		5880	USCGS: 1.4N, 97.5E h about 74 km. Near south coast of Sumatra
135	X 28	iP NEZ	06 23 34	+	3950	USCGS: 28.7S, 179.9W h about 375 km. Kermadec Islands
136	X 28	eP NEZ	07 32 09			Regional
137	✓ 28	eP NZ	09 35 42			
138	X 28	iP NEZ	14 19 36.5	-	3970	USCGS: 32.7S, 178.0W h about 104 km. Kermadec Islands



No.	Date 1962 March	Phase	Time (G.M.T.)	Amp A <sub>Z</sub>	△ Km	Remarks
139	X 28	iP NEZ	18 54 37	-		
140	✓ 29	iP NEZ ipP NZ isP NZ ipP Z eS N eL NZ	20 16 02 16 11 16 16 17 21 21 42 31. 1	+	3980	USCGS: 0.5S, 127.4E h about 25 km. Halmahera region
141	X 29	eP NEZ ipP NEZ	22 43 40 43 54		2660	USCGS: 20.1S, 169.0E h about 51 km. Loyalty Islands
142	X 30	iP NEZ	02 38 01.5	-		
143	X 30	eP NZ	05 46 40			
144	X 30	eP NEZ	08 05 34			
145	X 30	iP NEZ	14 16 39.5	+		
146	✓ 30	iP NEZ	14 30 10.5	-	4030	USCGS: 28.7S, 179.0W, h about 292 km. Kermadec Islands
147	X 30	eP NEZ	19 56 36			
148	X 31	eP NEZ	02 20 17			
149	X 31	eP NEZ e NEZ	07 39 33 45 10			
150	X 31	eP NEZ e NEZ	07 52 59 55 06.5		5260	USCGS: 9.8N, 121.6E h about 156 km. Negros Is., P.I. region
151	X 31	eP NEZ	11 05 38			
152	X 31	eP NEZ i NZ	12 14 55 15 12			
153	X 31	iP NEZ	15 42 42	-		
154	✓ 31	iP NEZ e NEZ	16 41 37 46 51	+		
155	X 31	eP NEZ	21 00 17	+		
31	6	E long period not functioning eP NEZ 15 04 51				

J. PEARCE.

D.J. SUTTON.

APR  
- JUN 62

UNIVERSITY OF ADELAIDE SEISMOLOGICAL STATION

ADELAIDE (MT. BONYTHON)

Latitude: 34° 58' 01"

Longitude: 138° 42' 32"

Height above mean sea level:

2150'

Foundation: Sandstone

Instruments: Benioff variable reluctance seismometers with three component long and short period paper recorders.

$T_g = 75$  sec. and  $T_g = 0.2$  sec. respectively

No.	Date 1962 APRIL	Phase	Time (G.M.T.)	$\frac{\text{Amp}}{A_z}$	$\Delta$ Km.	Remarks
1	X 1	eP NEZ esP NEZ e NEZ	02 24 24 24 42 29 35		3130	USCGS: 7.6S, 130.9E h about 30 km. Tanimbar Is. region
2	✓ 1	eP Z	03 43 17.5	-		
3	✓ 1	eP NEZ	03 50 58			
4	X 1	eP NEZ	08 25 05	+		
5	✓ 1	eP NEZ iS NEZ	09 39 37 <del>39</del> 47.5			Local
6	X 1	eP NEZ	10 49 04			
7	✓ 1	eP NEZ esP NZ iS N esS N eL NZ	12 17 18 17 48 22 18 22 54 31. 6		3430	USCGS: 4.2S, 143.6E h about 80 km. Near north coast of New Guinea. Felt.
8	X 1	eP NEZ	14 05 23	-		
9	✓ 1	iP NEZ	15 43 14.5	-	3390	USCGS: 17.9S, 167.2E h about 53 km. New Hebrides Is. region
10	X 1	eP EZ	22 05 51			records changed from 0022 to 002630 GMT
11	X 2	iP NEZ	04 46 25.5	-		
12	X 2	eP NEZ	06 11 05			
13	X 2	eP NZ	11 10 17			
14	X 2	eP NEZ e NEZ	18 39 55 40 05		3290	USCGS: 6.1S, 146.7E h about 60 km. Near north coast of New Guinea
15	X 3	eP NEZ	15 46 19		3400	USCGS: 4.5S, 143.2E h about 80 km. Near north coast of New Guinea. Felt: Ambunti and Dreikikir
16	✓ 3	iP NEZ i NZ ipP NZ isP NZ ePP NZ eS N	16 31 40 31 46 31 50 31 56 32 52 37 03		3800	USCGS: 10.6S, 164.9E h about 36 km. Santa Cruz Is. region Mag. 5½ (Pal.)

2.

No.	Date 1962 APRIL	Phase	Time (G.M.T.)	$\frac{\text{Amp}}{\Delta_Z}$	$\Delta$ Km.	Remarks
17	X 3	eP NEZ	18 44 11		3370	USCGS: 20.8S, 169.4E h about 40 km. Loyalty Islands
18	X 4	iP NEZ i Z	03 36 32 36 38	-		
19	X 4	iP NZ	11 02 46	-		
20	✓ 5	eP? NEZ	05 14 39			
21	X 5	eP NEZ	18 18 41		5000	USCGS: 5.2S, 102.1E h about 36 km. Off coast of Sumatra
22	✓ 6	iP NEZ	04 33 10	-	4600	USCGS: 17.7S, 178.8W h about 593 km. Fiji Islands
23	✓ 6	iP NEZ	06 57 04	-	3430	USCGS: 4.2S, 143.3E h about 63 km. New Guinea
24	X 6	iP NEZ	14 19 34	-	4200	USCGS: 24.0S, 179.5W h about 538 km. South of Fiji Islands region
25	✓ 6	eP NEZ	15 14 14			
26	✓ 6	iP Z	17 03 07	-	9880	USCGS: 26.7S, 113.2W h about 33 km. Easter Is. region
27	X 7	eP NEZ	04 37 49			
28	✓ 7	iP NEZ eS NZ	06 29 50 36 28	-	5010	USCGS: 10.0N, 144.4E h about 50 km. Caroline Islands region Mag. 6 (Pas.)
29	X 7	eP NEZ	08 24 41.5	+		
30	✓ 7	eP NEZ	10 39 52		4850	USCGS: 15.2S, 177.6W h about 446 km. Fiji Is. region
31	X 7	iP NEZ	19 51 04.5	+	3520	USCGS: 10.3S, 161.4E h about 75 km. Solomon Is. region
32	X 7	eP NEZ	21 02 44		3160	USCGS: 7.3S, 130.4E h about 25 km. Tanimbar Is. region
33	✓ 7	ePKP NEZ	23 24 06		17090	USCGS: 15.0N, 60.5W h about 77 km. Windward Islands
34	X 8	eP NEZ	05 22 52		4710	USCGS: 20.3S, 175.7W h about 70 km. Tonga Islands
35	✓ 9	iP NEZ i Z e NZ	09 00 24 03 10 05 46	-	3260	USCGS: 8.6S, 124.1E h about 46 km Sawoe Sea
36	X 9	eP NZ	10 31 52		5000	USCGS: 8.7N, 126.5E h about 100 km. Near coast of Mindanao, P.I.
37	X 9	iP NEZ	22 42 15	-	5480	USCGS: 12.8N, 124.9E h about 44 km. Near coast of Samar P.I.
38	X 10	iP NEZ	17 14 56	-	5480	USCGS: 16.4S, 175.3W h about 330 km. Fiji Is. region
39	✓ 10	iPKP Z eSKP <sub>1</sub> NZ eSKP <sub>2</sub> Z	21 56 25 59 45 59 56	+	14540	USCGS: 37.9N, 20.1E h about 35 km. Ionian Sea. Mag 5-5 $\frac{1}{4}$ (Pal.)

3.

No.	Date 1962 APRIL	Phase	Time (G.M.T.)	$\frac{\text{Amp}}{A_z}$	$\Delta$ Km.	Remarks
40	11	* eP NEZ	09 29 46		6940	USCGS: 26.9N, 127.1E h about 25 km. Ryukyu Islands
41	11	✓ eP NEZ	11 05 56		5020	USCGS: 9.0N, 126.9E h about 31 km. Off east coast of Mindanao, P.I.
42	11	* eP NZ	19 03 28			
43	11	* eP NZ	20 20 18			
44	12	✓ iP NEZ i NZ iPcP NZ e Z e NZ eS NEZ eL NZ	01 04 10 04 20 04 26 04 38 04 54 13 34 21. 9	-	8090	USCGS: 38.2N, 142.3E h about 68 km. Near east coast of Honshu, Japan. Mag. 7-7 $\frac{1}{4}$ (Pas.) 6 $\frac{3}{4}$ -7 (Pal.)
45	12	✓ eP NEZ	05 59 58		3620	USCGS: 14.3S, 166.8E h about 104 km. New Hebrides Is.
46	12	* iP NEZ iP Z	11 27 35 27 48	-	4330	USCGS: 10.4S, 105.0E h about 84 km. South of Java.
47	12	* eP NEZ iS NEZ i EZ	13 12 05 12 38 12 47			Local
48	12	* eP NEZ i NZ	16 31 06 31 10			
49	13	* eP NEZ	02 26 34		4220	USCGS: 1.0N, 122.3E h about 37 km. Celebes
50	13	✓ eP NEZ eS NEZ	09 43 44 44 03			Local
51	13	✓ eP Z	10 50 48			
52	13	✓ iP NZ	18 49 21	-	10550	USCGS: 49.1N, 87.2E h about 28 km. Kazakh SSR - China border
53	13	* eP NEZ	20 54 08			Regional
54	14	* iP NZ	00 46 14	-		
55	14	* iP NEZ	07 32 15	+		
56	15	* iP NEZ	11 44 23.5	-	5710	USCGS: 13.7N, 120.6E h about 40 km. Luzon, P.I.
57	15	* eP NEZ	14 01 39			
58	15	* eP NZ	20 34 54		3300	USCGS: 6.8S, 149.5E h about 36 km. New Britain
59	15	* eP NEZ iPcP Z	22 43 51 43 53	-	9770	USCGS: 56.6S, 26.2W h about 25 km. Sandwich Islands
No records for 16th						
60	17	✓ iP EZ	10 44 27.5	-		
61	17	✓ eP Z	12 01 30		8100	(USCGS: 26.1N, 95.1E h about 153 km. East Pakistan)
62	17	* iP EZ	12 55 38.5	+		

4.

No.	Date 1962 APRIL	Phase	Time (G.M.T.)	$\frac{\text{Amp}}{A_z}$	$\Delta$ Km.	Remarks
63	17	eP e	EZ EZ 15 20 59 27 06		3240	USCGS: 7.0S, 129.1E h about 140 km. Banda Sea
64	17	iP	EZ 17 48 57	+	3110	USCGS: 42.6S, 174.0E h about 25 km. South Is. New Zealand
65	17	eP	Z 21 05 38			
66	17	ePKP	Z 22 54 18		15320	USCGS: 1.5S, 14.9W h about 25 km. Mid-Atlantic Ocean

Z and E short period records only on 17th

E long period not functioning throughout

No more records for April from 0625 GMT on 18th

Standard equipment being installed

J. PEARCE

D.J. SUTTON



UNIVERSITY OF ADELAIDE SEISMOLOGICAL STATION

ADELAIDE (MT. BONYTHON)

Latitude: 34° 58' 01" Longitude: 138° 42' 32"

Height above mean sea level: 2150'

Foundation: Sandstone

Instruments: World-wide standard seismograph system Benioff short period seismometers

To = 1.0 secs. T<sub>g</sub> = 0.75 secs.

Sprengnether long period seismometers

To = 30 secs. T<sub>g</sub> = 100 secs.

No.	Date 1962 MAY	Phase	Time (G.M.T.)	Δ Km.	Remarks
1	✓ 7	iP NEZ	05 02 50.5 D	3440	USCGS: 4.1S, 143.7E h = 113 km. Near north coast of New Guinea
2	✓ 7	eP NZ	08 17 12	6050	USCGS: 19.3N, 145.4E h = 116 km. Mariana Islands
3	✓ 7	iP NEZ ipP NEZ iS NEZ i NE eL NEZ	17 52 01 52 10 18 02 06 06 52 ✓ 12. 8	8900	USCGS: 45.3N, 146.7E h = 25 km. Kurile Islands Mag. 6 <sup>3</sup> / <sub>4</sub> (Pas.) 7 (Brk) 6-6 <sup>1</sup> / <sub>4</sub> (Pal.)
4	✗ 7	eP NEZ	18 44 31		
5	✓ 7	iP NEZ	19 16 07.5 C	9440	USCGS: 59.5S, 25.6W h = 25 km. Sandwich Islands
6	✗ 8	iP NEZ	07 57 57.5 D	5490	USCGS: 14.4N, 145.1E h = 70 km. Mariana Islands. Felt Guam.
7	✗ 8	iP NEZ	08 04 46 D	4680	USCGS: 17.9S, 177.7W h = 409 km. Fiji Islands
8	✗ 8	eP NEZ eS NEZ	19 33 28 35 11		Regional
9	✗ 9	(eP) NEZ	05 47 31		
10	✓ 10	iP NEZ	00 32 54 C	2880	USCGS: 41.8S, 171.6E h = 54 km. South Island, New Zealand
11	✗ 10	iP NEZ i EZ eL NEZ	04 37 06 37 10.5 45. 9		
12	✗ 10	eL NEZ	05 59. 7		
13	✗ 10	iP NEZ i NEZ	17 46 12 D 47 26		
No Z long period on 11th					
14	✓ 11	eP NEZ e(S) N e N i N	04 58 43 03 44 08 42 10 19	3200	USCGS: 6.4S, 143.6E h = 37 km. New Guinea

2.

No.	Date 1962 MAY	Phase	Time (G.M.T.)	Δ Km.	Remarks
15	11	eP NEZ eL NE	07 11 54 22. 3	3260	USCGS: 6.6S, 147.7E h = 42 km. Near north coast of New Guinea
16	11	eP NEZ iS NZ iScP Z	12 12 47 17 37 17 49	3900	USCGS: 14.3S, 170.4E h = 623 km Near Hebrides Islands region
17	11	eP NEZ	13 42 34	4160	USCGS: 28.5S, 177.6W h = 115 km. Kermadec Islands
18	11	ePKP NEZ ePP E iSKS E iSKKKS NE i E i E i N eL E eL N	14 30 51 32 48 37 54 39 44 44 20 50 00 15 04 12 13. 6 14.00	3930	USCGS: 17.0N, 99.7W h = 25 km. Near coast of Mexico. 4 dead, many injured and extensive property damage in south central Mexico. Seismic sea wave with max. amplitude about 2½ ft. was reported at Acapulco. Mag 7 (Pas.) 7-7¼ (Brk.)
19	11	eP NEZ	19 50 04		
20	12	eP NEZ	20 42 51	4650	USCGS: 17.7S, 178.2W h = 600 km Fiji Islands
21	12	iP NEZ	22 25 43		D
22	13	eP NEZ	10 52 59	3640	USCGS: 3.2S, 129.0E h = 41 km. Ceram
23	14	iP NEZ i EZ iPP Z eScP NEZ eL NEZ	10 39 48 40 31 40 57 46 17 51. 3	3510	USCGS: 9.0S, 118.7E h = 30 km. Soembawa
24	15	eP? NEZ	02 36 04		
25	15	eP NEZ iS NEZ	05 29 46 34 36	3230	USCGS: 7.3S, 128.3E h = 34 km. Banda Sea. Mag. 7-7¼ (Pas.) 7½ (Brk.)
26	15	eP NEZ e NEZ	06 48 58 55 19	3240	USCGS: 7.2S, 128.3E h = 52 km. Banda Sea.
27	15	eP NEZ	07 37 09	3110	USCGS: 8.2S, 129.2E h = 57 km. Arafura Sea
28	15	eP NEZ	07 49 26		
29	15	eP NEZ e NEZ	10 01 18 07 07	3250	USCGS: 7.2S, 128.2E h = 30 km. Banda Sea
30	15	eP NEZ i NEZ eS NE e NEZ eL NEZ	17 00 02 00 43 04 52 05 37 07. 9	3230	USCGS: 7.4S, 128.0E h = 34 km. Banda Sea
31	15	eP NEZ	18 03 21		
32	15	eP NEZ	18 25 13		
33	15	eP NEZ	21 37 04	3250	USCGS: 7.2S, 128.1E h = 38 km. Banda Sea
34	16	eP NEZ	02 46 08		
35	16	eP NEZ iSP Z	05 23 23 23 42	3710	USCGS: 13.6S, 167.3E h = 52 km. New Hebrides Islands

3.

No.	Date 1962 May	Phase	Time (G.M.T.)	$\Delta$ km.	Remarks
36	16	iP NEZ ipP Z	08 25 27 D 25 39	3950	USCGS: 0.9S, 127.0E h = 34 km. Spice Islands.
37	16	eP NEZ isP Z i Z e NEZ	14 40 30 40 43 41 18 47 08	3240	USCGS: 7.3S, 128.1E h = 34 km. Banda Sea.
38	16	eP Z eL NEZ	17 39 48 48. 4	3720	USCGS: 13.4S, 167.3E h = 35 km. New Hebrides Islands
39	16	iP NEZ iS NEZ	21 41 56.5 42 10.5	140	USCGS: 35.6S, 137.7E h = 25 km. Near coast of southern Australia Felt Kangaroo Island and many Adelaide suburbs
		Z long period not functioning on 16th			
40	17	iP NEZ i NEZ iS NEZ	15 58 48 58 50 59 02		Local, reported Kingscote, Kangaroo Island
41	18	eP Z	05 19 46		
42	18	e ZNE e ZNE	23 16.0 39.0		
43	19	eP Z	02 56 23		
44	19	iPKP Z i Z iPP ZE i Z iSKS E iSKKKS E iPPS ZE i ZN i N eL ZE	15 17 14 17 19 19 00 20 22 24 21 26 00 30 36 36 22 50 36 57.0	3930	USCGS: 17.2N, 99.5W h = 20 km. Near coast of Mexico. 3 dead, 16 injured and extensive property damage in south central Mexico. Mag. 7-7 $\frac{1}{4}$ (Pas.)
45	19	iP ZNE i ZNE i ZNE	23 43 29 43 35.5 44 11		Local
46	20	iP ZNE i ZNE	16 57 33.5 57 39	4750	USCGS: 6.2N, 125.8E h = 133 km. Near coast of Mindanao, P.I.
47	21	iP ZNE iS NE iPKKS E iL NE	12 15 12 25 25 37 04 39 20	9100	USCGS: 37.3N, 96.0E h = 25 km Chinghai Province, China Mag. 7-7 $\frac{1}{4}$ (Pas.) 6 $\frac{1}{2}$ -6 $\frac{3}{4}$ (Pal.)
48	21	iP NEZ iS NEZ	21 22 46 28 34	4570	USCGS: 20.0S, 177.5W h = 379 km. Fiji Islands region Mag. 6 $\frac{3}{4}$ -7 (Pas.)
49	22	eL NEZ	05 06.9		
50	22	iP NEZ ipP NEZ iS NE eL NEZ	08 13 11.5 13 46 18 24 21.0	3750	USCGS: 12.3S, 166.6E h = 151 km. Santa Cruz Islands Mag. 6 $\frac{1}{2}$ -6 $\frac{3}{4}$ (Pas.) 5 $\frac{3}{4}$ -6 (Pal.)
51	22	iP Z iS NEZ eL NEZ	22 09 59 15 00 20.0	3570	USCGS: 5.5S, 152.0E h = 100 km. New Britain. Felt Palmalmal



4.

No.	Date 1962 MAY	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
52	23 ✓	iP Z e NEZ	07 16 56 52.0	3230	USCGS: 7.3S, 128.4E h = 25 km. Banda Sea
53	23 ✓	e NZ i NZ	20 57 20 21 13 22	2160	USCGS: 48.2S, 119.4E h = 25 km. About 1200 miles south of Australia
54	24 ✗	i Z	23 28 22		Probably Q.B.
55	25 ✗	e N eL EZ	04 38.0 43.0		
56	25 ✗	iP NEZ	17 28 19	4060	USCGS: 24.1S, 179.1E h = 576 km. Fiji Islands region
57	26 ✓	eP NEZ eL NEZ	09 57 13 10 04. 5		
58	26 ✓	iP NEZ	19 54 13	6490	USCGS: 6.7N, 94.6E h = 60 km. Nicobar Islands
59	27 ✓	iP NEZ	05 37 11	3630	USCGS: 3.2S, 129.5E h = 82 km. Ceram
60	27 ✓	eL NZ	14 54. 5		
61	27 ✓	eP NZ	17 53 20		
62	27 ✓	iP NEZ	19 47 19	C	
63	28 ✓	eP NEZ	10 20 31	7290	USCGS: 31.1N, 140.9E h = 158 km. South of Honshu, Japan
64	28 ✗	eP EZ	16 14 47	3870	USCGS: 10.8S, 165.8E h = 25 km Santa Cruz Islands
65	28 ✓	eP NEZ esP Z e NEZ	21 51 14 51 30 56 50	3240	USCGS: 7.0S, 128.9E h = 65 km. Banda Sea.
66	29 ✓	eL Z	22 34. 2		
67	30 ✓	iP NEZ	17 04 45	4680	USCGS: 18.9S, 177.9W h = 480 km. Fiji Islands
68	31 ✗	iP NEZ	05 19 45	4960	USCGS: 7.7N, 124.0E h = 40 km. Mindanao, P.I.
69	31 ✓	iP NEZ eS NEZ i NEZ isS NE eSS NZ eSSS NZ eL E eL NZ	06 37 45 45 18 45 27 46 55 49 04 51 48 54. 4 56. 0	C 6320	USCGS: 22.1N, 142.6E h = 257 km. Volcano Is. region. Mag. 6½ (Pas.)
70	31 ✗	iP NEZ	08 44 33.5	C 4200	USCGS: 30.8S, 177.3W h = 42 km. Kermadec Islands

J. PEARCE
D.J. SUTTON

UNIVERSITY OF ADELAIDE SEISMOLOGICAL STATION
ADELAIDE (MT. BONYTHON)

 Latitude:  $34^{\circ} 58' 01''$  Longitude:  $138^{\circ} 42' 32''$ 

Height above mean sea level: 2150'

Foundation: Sandstone

 Instruments: World-wide standard seismograph system Benioff  
short period seismometers

 $T_0 = 1.0$  secs.  $T_g = 0.75$  secs.

Sprengnether long period seismometers

 $T_0 = 30$  secs.  $T_g = 100$  secs.

No.	Date 1962 JUNE	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
1	1	eP NEZ	09 07 47	3250	USCGS: 6.9S, 129.2E h = 140 km. Banda Sea
2	2	iP NEZ eL NEZ	05 42 08.5 D 53. 8	<del>3540</del>	USCGS: 3.5S, 145.3E h = 42 km. Bismark Sea
3	2	eL NEZ	17 47. 0		
4	3	eP NEZ eS NEZ	00 21 18 21 41		Local
5	3	eP NEZ	13 48 31	3300	USCGS: 6.4S, 148.1E h = 32 km New Britain region
6	3	eP NEZ	14 32 18	4180	USCGS: 23.7S, 179.7W h = <sup>u</sup> 438 km. Fiji Islands region
7	3	eL NZ	16 22. 7		
8	5	iP NEZ	14 59 34 D		
9	5	iP NEZ e NEZ	16 49 36.5 D 55 31	3220	USCGS: 7.1S, 129.2E h = 124 km. Banda Sea
10	5	iP? NEZ	21 24 18 D		
11	6	eP NEZ	05 59 40		
12	6	eP NEZ	08 28 02		
13	7	eP NEZ	02 35 35		
14	7	eP Z eS NEZ	10 15 56 15 34		Regional ?
15	8	iP NEZ	01 38 58.5 D	4600	USCGS: 18.1S, 178.4W h = 603 km. Fiji Islands
16	8	iP NZ	19 25 56 D	5250	USCGS: 11.3N, 126.0E h = 60 km. Timor Sea
17	8	eP NEZ	21 02 12	9820	USCGS: 55.7S, 26.2W h = 25 km. Sandwich Islands
18	9	iP NEZ	07 48 31 D	5020	USCGS: 9.ON, 126.6E h = 65 km. Mindanao, Phillipine Islands
19	9	iP NEZ	06 12 00.5 C	4140	(USCGS: 21.1S, 178.3E h = 339 km. Fiji Islands)

2.

No.	Date 1962 JUNE	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
20	9 X	eL Z	15 35. 2		
21	10 X	eL EZ	16 34. 6		
No short period records on 10th - recorder stuck					
22	11 ✓	iP NEZ	04 42 11 C	4570	USCGS: 19.6S, 177.7W h = 370 km. Fiji Islands
23	11 X	eP NEZ	17 08 53	3750	USCGS: 10.6S, 164.7E h = 132 km. Santa Cruz Islands region
24	12 X	eP? NEZ	07 32 49		
25	12 X	eP? NEZ	07 48 11		
26	12 X	iP NEZ	13 52 03.5 C	3740	USCGS: 13.2S, 167.2E h = 233 km. New Hebrides Islands
No short period records on 13th and 14th, recorder stuck					
27	14 ✓	eS E e E eSS E eL NEZ	08 16 17 20 08 22 26 29. 2	10320	USCGS: 54.3N, 169.1E h = 34 km. Near Islands, Aleutian Islands Mag 6-6 $\frac{1}{4}$ (Pas.) 5 $\frac{3}{4}$ (Brk)
28	14 X	eL NEZ	22 44. 2		
29	15 X	eP NEZ	02 19 06		
30	15 X	iP NEZ	12 02 43 D	3710	USCGS: 13.3S, 167.0E h = 211 km. New Hebrides Islands
31	16 ✓	eP Z	05 31 38	6930	USCGS: 26.6N, 126.4E h = 38 km. Ryukyu Islands
32	16 X	iP NEZ i Z ipP Z	06 34 34 C 34 42 35 09.5	4180	USCGS: 0.2S, 122.8E h = 177 km. Celebes region
33	16 X	eP NEZ eS NEZ	16 36 42 37 18		Local
34	17 ✓	eP Z	04 38 55	7990	USCGS: 40.1S, 45.7E h = 15 km. Indian Ocean, north of Crozet Islands
35	17 ✓	eP Z eL NEZ	04 52 28 05 01. 8	9990	USCGS: 33.3N, 76.2E h = 22 km. Kashmir region
36	17 X	eP NEZ e(S) NE eL NEZ	13 29 02 34 35 38. 9	3790	USCGS: 10.7S, 165.3E h = 106 km. Santa Cruz Islands region
37	17 X	eP NEZ	14 39 31	10100	USCGS: 43.2N, 88.0E h = 50 km. Sinkiang Province, China
38	17 X	eP NEZ eS NEZ	17 33 07 33 10		Local
39	18 X	iP NEZ	11 28 26 D		
40	18 X	eP NEZ iS NEZ	22 02 49 03 27		Local
41	18 ✓	iP NEZ iPcP Z iS NE iScP Z eL NEZ	23 48 58 C 51 44 54 00 55 27 24 01. 5	3590	USCGS: 4.8S, 151.8E h = 47 km. New Britain region. Mag 6 $\frac{3}{4}$ (Pas.)

3.

No.	Date 1962 JUNE	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks	
42	19 ✓	eL NEZ	03 49. 6			
43	19 ✓	iP NEZ	16 46 24.5 C	4500	USCGS: 20.9S, 177.8W h = 405 km. Fiji Islands region	
44	20 ✓	iP NEZ iPP NEZ	06 22 09 C 23 18	3330	USCGS: 6.9S, 126.6E h = 272 km. Banda Sea	
45	21 ✓	iP NEZ	03 30 25.5 C	4710	USCGS: 4.9N, 122.7E h = 600 km. Celebes Sea	
46	21 ✓	eP? NEZ	06 00 21			
47	21	iP NEZ	08 46 15.5 D	4680	USCGS: 20.8S, 175.6W h = 67 km. Tonga Islands region	
48	21 ✓	eP EZ iPP Z eL NEZ	22 58 45 59 38 06. 9	3160	USCGS: 7.4S, 130.1E h = 52 km. Tanimbar Islands region	
		No long period records on 22nd				
49	22 ✓	eP EZ	11 59 46	7430	USCGS: 32.2N, 142.4E h = 25 km. Off coast of Honshu, Japan	
50	22 ✓	iP NEZ	15 01 33 D	3220	USCGS: 6.9S, 147.0E h = 70 km. Near north coast of New Guinea. Felt Lae	
51	23 ✓	iP NEZ eS NE iSP Z iPS NE i EZ eL NEZ	09 54 50 D 10 03 08 03 18 03 24 09 54 13. 3	6780	USCGS: 25.7N, 128.5E h = 36 km. Ryukyu Islands. Mag. $5\frac{3}{4}$ (Brk)	
52	23 ✓	eP NEZ	10 08 06	6260	USCGS: 19.1N, 121.4E h = 40 km. Near coast of Luzon, Phillipine Islands	
53	23 ✗	eP NEZ	16 32 03			
54	23 ✓	eP NZ	21 39 35			
55	24 ✓	iP NEZ	01 32 27.5 C	7830	USCGS: 25.6N, 101.1E h = 35 km. Yunnan Province, China	
56	24 ✗	eP NZ e NEZ	03 07 43 09 46	3210	USCGS: 6.8S, 146.8E h = 50 km. New Guinea, Felt Lae and Kaiapi+	
57	25 ✓	iP NEZ iPP Z	01 38 20.5 D 40 06	4360	USCGS: 20.8S, 179.2W h = 645 km. Fiji Islands region	
58	25 ✓	iP NEZ iS NEZ eL NEZ	11 20 37 C 28 51 39. 4	6760	USCGS: 24.3N, 122.6E h = 33 km. Off coast of Formosa Mag. $5\frac{3}{4}$ (Pas.), $5\frac{1}{2}$ (Brk)	
59	25 ✗	eP NEZ	12 57 18	4450	USCGS: 3.7N, 126.6E h = 25 km. Molucca Passage	
60	26 ✗	eP NEZ	08 11 47	3500	USCGS: 4.8S, 146.9E h = 82 km. Bismark Sea	
61	26 ✓	eP NEZ	10 00 34	3270	USCGS: 7.1S, 149.6E h = 59 km. New Britain region	
62	27 ✓	eP NEZ eS NE eL NZ	03 36 11 41 07 45. 3	3340	USCGS: 6.1S, 148.8E h = 55 km. New Britain region. Felt Kandrian	
63	27 ✓	eP Z eL NEZ	13 44 53 53. 6	3550	USCGS: 48.0S, 99.6E h = 25 km. Indian Ocean, south west of Australia	

4.

No.	Date 1962 JUNE	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
64	28 ✓	iP NZ	04 39 42 ✓ C	9210	USCGS: 20.0N, 155.6W h = 25 km. Hawaii Island, Hawaii Slight damage on Hawaii. Mag $5\frac{3}{4}$ (Brk) $5\frac{1}{4}$ - $5\frac{1}{2}$ (Pal.)
65	28 ✓	eP NZ ePP Z	11 25 09 26 43	4340	USCGS: 7.7S, 107.9E h = 94 km. Near coast of Java
66	28 ✓	iP NEZ	18 57 33 C	4120	USCGS: 0.2S, 124.3E h = 58 km. Northern Celebes
67	28 ✓	iP NEZ	20 55 19 ✓ D	4920	USCGS: 17.6S, 175.2W h = 244 km. Tonga Islands region
68	29 ✓	iP NEZ e NEZ	13 55 10.5 D 00 46	3210	USCGS: 7.9S, 127.3E h = 80 km. Banda Sea
69	29 ✓	iP NZ	17 12 41 D		
70	29 ✓	eP Z eL NEZ	21 06 40 20. 2	5110	USCGS: 41.8S, 79.7E h = 33 km. South Indian Ocean
71	30 ✓	eP NEZ eS NE eL NEZ	19 39 10 46 39 56. 4 ✓	5960	USCGS: 16.5N, 122.0E h = 40 km. Near coast of Luzon, Phillipine Islands

J. PEARCE
D.J. SUTTON

JUL 62  
 -SEPT

UNIVERSITY OF ADELAIDE SEISMOLOGICAL STATION

ADELAIDE (MT. BONYTHON)

Latitude: 34° 58' 01" Longitude: 138° 42' 32"

Height above mean sea level: 2150'

Foundation: Sandstone

Instruments: World-wide standard seismograph system Benioff short period seismometers

To = 1.0 secs. T<sub>g</sub> = 0.75 secs.

Sprengnether long period seismometers

To = 30 secs. T<sub>g</sub> = 100 secs.

No.	Date 1962 JULY	Phase	Time (G.M.T.)	Δ Km.	Remarks
1	1 ✓	iP NEZ	01 38 33 D	3660	USCGS: 14.1S, 167.2E h = 156 km. New Hebrides Islands
2	1 ✗	iP NEZ	03 49 05.5 D	8100	USCGS: 30.1N, 102.8E h = 25 km. Sikang Province, China
3	1 ✗	eP NEZ	09 26 07		
4	1 ✓	eP Z	19 17 14		
5	2 ✓	iP NEZ	08 39 23 C	3860	USCGS: 10.3S, 165.9E h = 50 km. Santa Cruz Is. mag 6¼ (Brk)
		iS NEZ	44 46		
		e EZ	47 44		
		e EZ	49 26		
		eScS E	49 38		
6	2 ✗	iP NEZ	12 30 49.5		Local - Felt at Oodlawirra, 140 miles north of Adelaide
		iS NEZ	31 17		
7	2 ✗	eP NEZ	15 49 18		Local - reported from Wirrina 150 miles north of Adelaide
8	3 ✓	e NEZ	18 31 16	6880	USCGS: 54.6S, 132.3W h = 25 km. South Pacific Ocean
		eP Z	32 27		
		e NE	37 00		
		e NEZ	39 48		
		eL NEZ	51 24		
9	3 ✓	iPKP Z	21 36 42 D	16430	USCGS: 4.3N, 31.6W h = 23 km. Mid-Atlantic Ocean
10	4 ✓	eP NEZ	05 09 17		
11	4 ✗	iP NEZ	14 28 27.5 C		
12	4 ✗	iP NEZ	20 29 57 C		
13	5 ✓	iP NEZ	07 39 20 D	3830	USCGS: 11.3S, 166.5E h = 33 km. Santa Cruz Is. Felt: Vanikoro
14	5 ✓	eP NEZ	10 39 02	3790	USCGS: 0.6S, 139.0E h = 25 km. New Guinea
15	5 ✓	eP NEZ	17 51 39	7280	USCGS: 30.9N, 141.4E h = 23 km. South of Honshu, Japan

No long period records on 5th

No short period records on 6th - recorder stuck

2.

No.	Date 1962 JULY	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
16	6	✓ eP Z i NEZ iPP Z i NEZ i NE iSKS NE iSP NEZ iSS NE	23 18 36 19 28 22 27 23 17 28 47 29 28 30 50 35 58	10,600	USCGS: 36.6N, 70.4E h = 203 km. Hindu Kush. Felt Afghanistan, Pakistan, Tadzhik SSR. Minor damage
17	7	✓ eP NEZ iS NEZ	04 31 00 31 55		Regional
18	7	✓ eP Z i NEZ eS E eSS NE eL NEZ	06 25 56 26 08 36 57 43 11 58. 8	10,320	USCGS: 51.3N, 178.6E h = 60 km Rat Islands, Aleution Islands
19	7	✗ iP NEZ i NEZ e NEZ	11 53 19.5 D 53 45 58 38	3230	USCGS: 7.3S, 128.3E h = 30 km. Banda Sea
20	7	✓ eP EZ	19 10 56	3710	USCGS: 11.3S, 164.8E h = 25 km. Santa Cruz Islands
21	8	✓ eP Z epP Z	03 35 10 35 3	10,320	USCGS: 51.5N, 178.5E h = 60 km. Rat Islands, Aleutian Islands
22	8	✗ eP Z	04 16 57	9930	USCGS: 55.5S, 30.1W, h = 25 km. Sandwich Islands
23	8	✓ eP NEZ	12 09 06	4270	USCGS: 22.0S, 179.8W, h = 600 km. Fiji Islands
24	8	✗ eP NEZ	17 27 18	4210	USCGS: 0.3S, 121.8E h = 58 km. Celebes
25	8	✗ eP EZ	22 13 54		
26	8	✗ eP NEZ	23 02 06	4270	USCGS: 28.1S, 176.5W h = 25 km. Kermadec Islands region
27	9	✓ e(P) NEZ	07 35 50		
28	9	✗ eP NEZ	10 04 30	2780	USCGS: 56.0S, 158.1E h = 25 km. Macquarie Islands region
29	10	✗ eP NEZ	13 03 11	4500	USCGS: 22.3S, 177.2W h = 333 km. Tonga Islands
30	11	✓ eP NEZ	07 05 10		
31	11	✓ iP NEZ ipP Z isP Z eS NE e Z	12 49 18 D 49 27 49 33 56 19 13 00 11	5470	USCGS: 11.9N, 122.1E h = 25 km. Panay, Phillipine Islands
32	12	✓ iP NEZ	09 40 23.5 C	4600	USCGS: 17.9S, 178.7W h = 545 km. Fiji Islands region
33	12	✗ eP NEZ	16 43 53		
34	12	✗ eP NEZ iS NEZ	16 54 54 55 36		Local
35	13	✓ iP NEZ	03 40 24 C	5290	USCGS: 10.4N, 122.6E h = 66 km. Panay, Phillipine Islands
36	13	✓ iP NEZ i NEZ iPP NZ eS NE e NZ	03 40 35 40 42 42 25 47 12 50 46	5310	USCGS: 10.2N, 121.7E h = 157 km. Panay, Phillipine Islands Felt: Dipolong, Roxas City, Ilolio, Cuyo, Palawan

3.

No.	Date 1962 JULY	Phase	Time (G.M.T.)	△ Km.	Remarks	
37	13 ✓	eP Z	22 32 34	10380	USCGS: 56.2N, 164.0E h = 59 km. Komandorskie Island region	
38	14 ✗	eP NEZ	02 36 35			
39	14 ✓	eP Z	16 11 25	9490	USCGS: 30.4N, 79.5E h = 40 km. Tibet-India border.	
40	14 ✓	iP Z	20 50 32 C	9550	USCGS: 50.1N, 155.7E h = 60 km. Kurile Islands	
41	15 ✓	eP Z	06 58 49	8260	USCGS: 39.8N, 140.9E h = 103 km Honshu, Japan	
42	15 ✓	iP NEZ	08 12 42 D			
43	15 ✓	iP NEZ	08 28 27 C			
44	15 ✗	eP Z	09 42 34	6510	USCGS: 14.7N, 146.3E h = 25 km. Mariana Islands region.	
45	16 ✓	eP NEZ iS NEZ eL NEZ eT NEZ	02 08 53 12 03 13. 2 23 43	1940	USCGS: 52.1S, 138.9E h = 14 km. South of Tasmania	
46	16 ✗	eP Z	07 57 13	4620	USCGS: 17.8S, 178.4W h = 519 km. Fiji Islands region	
47	16 ✗	iP NEZ	08 34 52 D	3790	USCGS: 11.8S, 166.4E h = 57 km. Santa Cruz Islands	
48	16 ✓	iP NEZ i NEZ	09 32 21 C 34 56	3710	USCGS: 13.0S, 167.2E h = 180 km. Santa Cruz Islands region	
49	17 ✓	eP NEZ eL NZ	17 32 18 59. 2	8650	USCGS: 43.1N, 144.5E h = 30 km. Hokkaido, Japan	
50	18 ✗	iP NEZ	02 39 16.5 C			
51	18 ✓	eP NEZ e NEZ eL NEZ	05 59 57 05 43 10. 2	3400	USCGS: 9.6S, 119.8E h = 68 km. Sumba Island	
52	18 ✓	eP NEZ iS NEZ	06 50 45 50 50		Local	
53	18 ✓	iP NEZ i(PF)NEZ eS NEZ	09 29 20.5 D 30 50 33 57	3610	USCGS: 7.2S, 119.9E h = 588 km. Flores Sea	
54	18 ✗	iP NEZ i NZ	10 19 14 D 20 30	5650	USCGS: 15.3N, 148.1E h = 16 km. Mariana Islands region.	
55	18 ✗	eP <del>NZ</del>	10 37 06			
56	18 ✓	eP NEZ iS NEZ	13 48 24 48 40		Local - reported from Bute 80 miles from Adelaide	
57	18 ✗	eP NEZ	14 49 15	4650	USCGS: 21.5S, 175.8W h = 218 km. Tonga Islands region	
58	19 ✓	eP NEZ iPcP Z	00 58 45 01 01 28	3640	USCGS: 5.1S, 153.6E h = 49 km. New Britain region	
59	20 ✓	eP NEZ iS NEZ	07 34 11 34 43		Local	
60	20 ✓	eP NEZ	13 28 08			
		No records for 21st				
61	22 ✗	eP Z	12 28 43			



4.

No.	Date 1962 JULY	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
62	22 ✓	iP NEZ e Z	13 43 12 C 43 48	3570	USCGS: 8.4S, 158.8E h = 107 km. Solomon Islands
63	22 ✗	eP NEZ	18 16 24	4150	USCGS: 24.0S, 180.0 h = 634 km. South of Fiji Islands
No long period records on 22nd					
64	23 ✗	iP NEZ i Z i Z i NZ iS NEZ i NEZ i NZ i Z	07 04 02.5 C 04 05.5 04 09.5 04 29 04 30.5 04 34 04 36 05 23		Local
65	23 ✗	eP NEZ i Z i Z i NZ iS NEZ i NEZ i NZ i Z	07 08 12 08 15 08 19 08 39 08 40 08 43 08 46 09 32		Local
66	24 ✓	eP NEZ	16 31 52	5290	USCGS: 10.3N, 121.5E h = 21 km. Sulu Sea
67	24 ✗	iP NEZ	18 34 47.5 D		
68	24 ✓	ePKP Z iS PKP Z	21 27 13 27 47	14490	USCGS: 15.5N, 92.5W, h = 129 km. Mexico-Guatemala border region Mag 5.6 (Brk), 5½ (Pal.)
69	25 ✗	eP NEZ	15 47 25		
70	26 ✓	ePKP i Z i Z ePKS NEZ eSKKS NE eScSP NE i NEZ iSSS NEZ i N eL NEZ	08 34 04 08 34 09.5 36 31 37 29 43 22 46 36 54 52 59 08 09 11 28 17. 0	14830	USCGS: 7.5N, 82.7W h = 21 km. South of Panama. Felt: Balboa Heights. Mag 6¾ (Pas.) 7 (Brk)
71	27 ✗	eP EZ	01 26 25	6290	USCGS: 21.7N, 144.4E h = 100 km. North of Mariana Islands
72	27 ✗	eP NEZ	02 36 04		
73	27 ✗	eP NEZ	06 18 14	3630	USCGS: 14.8S, 167.6E h = 205 km. New Hebrides Islands. Felt: Santo
74	27 ✗	iP NEZ i EZ iPcP Z	19 32 52 33 06 35 26	3730	USCGS: 13.2S, 167.1E h = 286 km. Santa Cruz Islands region
75	28 ✓	iP NEZ eS NE e E eL N eL E	00 13 40 20 28 24 08 25. 2 27. 7	5180	USCGS: 16.2S, 173.2W h = 40 km Samoa Islands Region. Felt: Apia
76	28 ✗	iP NEZ	06 50 32 C		
77	28 ✗	eP Z	14 33 29		

5.

No.	Date 1962 JULY	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
78	28 ✓	iP EZ	23 59 28 C		
79	29 ✓	eP NZ	03 47 27 D	6840	USCGS: 25.5N, 125.4E h = 184 km. Ryukyu Islands
80	29 ✓	iP NEZ	18 25 33	3110	USCGS: 41.4S, 173.2E h = 75 km. South Island, New Zealand
81	30 ✓	iP NEZ iPcP Z iS NEZ iSS E i E	17 23 10 C 25 52 28 20 30 04 30 48	3530	USCGS: 3.3S, 143.9E h = 25 km. Near north coast of New Guinea. Felt. Mag. $6\frac{3}{4}$ -7 (Pas) 7 (Brk) (Pal.)
82	30 ✓	iPKP NEZ i(P) NEZ iSKKS E e Z e E iPSP Z iSPS NEZ i NEZ i N i NE i NE	20 38 10 41 08 47 35 50 40 51 26 53 00 59 18 21 07 54 11 20 14 52 22 11	15100	USCGS: 5.0N, 76.3W h = 45 km. Western Colombia. 47 killed, 300 injured in Caldas Province; property damage over 400,000 sq. mile area. Felt at Balboa Height CZ. Mag $6\frac{3}{4}$ (Pas.) (Brk) 6 (Pal.)
83	31 ✓	eP NZ eL NEZ	02 25 32 02 34 9	3550	USCGS: 3.2S, 144.1E h = 20 km. Near North coast of New Guinea
84	31 ✓	eP NZ	05 22 43		
85	31 ✓	e(P) NZ	11 11 41		

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UNIVERSITY OF ADELAIDE SEISMOLOGICAL STATION
ADELAIDE (MT. BONYTHON)

Latitude: 34° 58' 01" Longitude: 138° 42' 32"

Height above mean sea level: 2150'

Foundation: Sandstone

 Instruments: World-wide standard seismograph system Benioff  
short period seismometers

 To = 1.0 secs.  $T_g = 0.75$  secs.

Sprengnether long period seismometers

 To = 30 secs.  $T_g = 100$  secs.

No.	Date Aug. 1962	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
1	1 ✓	iP NEZ iPcP Z iS NEZ iL NEZ	04 43 21.5 46 17 48 37 52. 5	C 3540	USCGS: 3.2S, 143.7E h = 33 km. Near north coast of New Guinea. Felt. Mag. $6\frac{1}{2}$ - $6\frac{3}{4}$ (Pas.) 7 (Brk) $6\frac{1}{2}$ (Pal.)
2.	1 ✓	iP NEZ	16 00 09	D	
3.	2 ✗	eP NEZ	13 33 06	3610	USCGS: 4.8S, 152.1E h = 79 km. New Britain region
4.	2 ✗	iP NEZ	18 57 11	C 3640	USCGS: 4.5S, 125.0E h = 563 km. Banda Sea
5.	3 ✓	iPKP NEZ iPP NZ e Z iPS NE e N i(SS) E	09 14 51 15 57 25 17 25 45 31 50 33 00	C 13010	USCGS: 23.2S, 67.5W h = 71 km. Northern Chile - Argentine border. Felt: Mag. $7-7\frac{1}{4}$ (Pas) 6.8 (Brk).
6.	3 ✗	iP NEZ	10 11 09.5	C	
7.	3 ✗	iP NEZ	10 22 38.5	C 3440	USCGS: 23.3S, 171.2E h = 39 km. Loyalty Islands region
8.	4 ✓	eP NEZ	05 47 23	4980	USCGS: -17.4S, 174.7W h = 135 km. Tonga Islands
9.	4 ✓	eP NZ	16 30 55		
10.	5 ✗	iP NEZ eL NEZ	15 15 05.5 25. 0	D 3650	USCGS: 13.7S, 166.6E h = 60 km. New Hebrides Islands
11.	6 ✗	e(S) NZ eL NEZ	02 24 56 59. 7		
12.	6 ✗	iP NEZ	07 09 45	D	
13.	6 ✓	iP Z eL NZ	08 53 55 09 27. 5	9530	USCGS: 58.4S, 25.5W h = 54 km. Sandwich Islands
14.	6 ✗	iP Z	15 33 40	D 3570	USCGS: 15.5S, 167.6E h = 159 km. New Hebrides Islands
15.	6 ✓	iP NEZ i EZ iS EZ i NZ eL NEZ	20 59 16 21 00 57 05 00 08 14 10. 1	C 4270	USCGS: 26.9S, 177.1W h = 50 km. Kermadec Islands region Mag. 6 (Brk) $5\frac{1}{2}$ (Pal.)

No.	Date Aug. 1962	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
16.	7 X	eP NEZ	08 52 24	4430	USCGS: 4.8N, 127.8E h = 33 km. Molucca Passage
17.	8 Y	iP NEZ	01 36 57.5 D		
18.	8 X	eP NEZ	07 12 39		
19.	8 Y	eP NEZ	07 17 32		Local?
		eS NEZ	17 37		
20.	8 X	iP NEZ	09 26 27 D	4610	USCGS: 16.4S, 179.5W h = 493 km. Fiji Islands
21.	8 X	eP Z	12 06 33	3440	USCGS: 17.8S, 168.0E h = 30 km. New Hebrides Islands. Felt: Port Vila.
22.	8 X	eP NEZ	12 29 43		
23.	8 X	eP EZ	13 41 29	3490	USCGS: 18.0S, 168.1E h = 33 km. New Hebrides Islands. Felt: Port Vila.
24.	8 X	eP NEZ	17 25 18	5980	USCGS: 18.8N, 144.8E h = 385 km. Mariana Islands.
25.	8 X	eP EZ	23 30 21		
		eS E	39 54		
26.	9 X	iP NEZ	02 42 43 C		
27.	10 X	eP Z	14 15 32		
28.	10 X	iP NEZ	20 12 18 D		
29.	11 Y	iP EZ	01 54 25.5 D	4460	USCGS: 20.0S, 178.8W, h = 638 km. Fiji Islands
		iS NE	59 49		
		i(SS)NE	02 03 23		
30.	11 X	eL NEZ	07 10. 8		
31.	11 Y	iP NZ	08 25 49	6850	USCGS: 25.2N, 123.3E h = 140 km. Off N.E. coast of Formosa Mag. 6 (Pas) 5-5½ (Pal.)
		iPcP NZ	26 27		
		iS NEZ	33 59		
		isS NE	34 50		
		eSS NE	38 12		
		e NE	41 22		
		No short period records on 11th after 0328 GMT			
32.	12 Y	eP Z	03 43 35	3830	USCGS: 11.3S, 166.5E h = 43 km. Santa Cruz Islands
33.	13 Y	e(S) NEZ	07 14 51		
		eL NEZ	36. 2		
34.	13 X	iP NEZ	14 51 50 D	4240	USCGS: 1.9N, 127.5E h = 33 km. Molucca Passage
35.	14 Y	iP NEZ	01 15 57 D	2580	USCGS: 49.9S, 163.0E h = 43 km. About 300 miles North of Macquarie Island
		iS NE	20 12		
		eL NEZ	22. 9		
36.	15 Y	iP NEZ	08 36 49 D	4680	USCGS: 4.7N, 122.6E h = 620 km. Celebes Sea.
37.	15 Y	iP NEZ	12 48 11 D		
38.	15 Y	eP NEZ	20 22 09	4350	USCGS: 21.2S, 179.3W h = 600 km. Fiji Islands
39.	16 X	iP NEZ	08 28 10 D		
		i Z	28 17		

No.	Date Aug. 1962	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
40	17	iP NEZ i NZ ipP Z isP EZ eS NE i(SS)NE i Z	05 13 09.5 C 13 11 13 19 13 24 20 10 23 38 23 51	5330	USCGS: 10.6N, 121.6E h = 33 km. Panay Region, Phillipine Is.
41	17	eP NEZ	16 26 50	4610	USCGS: 19.3S, 177.5W h = 528 km. Fiji Islands
42	18	iP NEZ	04 08 15.5 D	4320	USCGS: 21.9S, 179.3W h = 516 km. Fiji Islands region
43	18	eP Z	09 20 04	5350	USCGS: 10.7N, 121.6E h = 44 km. Panay Region, Phillipine Is.
44	19	eP Z eL NEZ	18 39 58 19 14. 1	10480	USCGS: 44.6N, 81.7E h = 33 km. Northwest Sinkiang Province Mag $5\frac{3}{4}$ -6 (Pal)
45	19	iP Z	21 26 58 D	4410	USCGS: 4.5N, 123.1E h = 552 km. Celebes Sea
46	20	eP EZ	03 05 35		
47	20	eP Z	03 55 43		
48	20	eP NEZ	11 29 24	4410	USCGS: 20.9S, 178.8W h = 605 km. Tonga Islands region
49	20	eP NEZ eL E	13 04 51 15. 2	3640	USCGS: 12.4S, 112.1E h = 87 km. 340 miles south of Java
50	20	eP NZ	15 21 55	3710	USCGS: 1.7S, 133.8E h = 33 km. Western New Guinea
51	20	eP NEZ iS NEZ	16 33 18 33 56		Local
52	20	eP NEZ iS NEZ	19 23 34.5 23 39		Local
53	20	eP NEZ	22 34 12		
54	21	eP NEZ eL NEZ	16 17 25 29. 5	4250	USCGS: 28.2S, 176.7W h = 57 km Kermadec Islands region
55	21	eP NEZ i EZ eS E e(SS)N i NEZ i NE	21 13 15 13 47 19 09 21 58 22 40 45 58	4230	USCGS: 28.7S, 176.8W h = 55 km Kermadec Islands region
56	22	eP NEZ eL NEZ	04 42 40 05 50. 9	6760	USCGS: 26.1N, 142.5E h = 29 km Volcano Islands region
57	22	eP NEZ epP NEZ isP Z eL NEZ	11 16 42 16 50 16 58 22 08	2360	USCGS: 49.7S, 117.5E h = 33 km About 1200 miles S.W. of Aust.
58	22	iP NEZ ePcP Z	21 16 30 18 13	D 4900	USCGS: 8.3N, 123.8E h = 125 km. Mindanao, Phillipine Islands
59	23	iP NEZ	15 39 54	D 6670	USCGS: 22.9N, 120.8E h = 17 km. Near south coast of Formosa
60	23	iP NEZ iPcP Z	21 05 42 K 05 44	D 9820	USCGS: 56.1S, 26.6W h = 33 km Sandwich Islands

No.	Date Aug. 1962	Phase	Time (G.M.T.)	△ Km	Remarks
61	24 ✓	iP NEZ i Z i Z iPcP Z iS NEZ	06 53 28 D 53 38 53 52 55 39 58 27	4020	USCGS: 24.5S, 178.8E h = 526 km. Fiji Islands region
62	24 ✓	eP Z eS NE e NEZ i N eL N eL Z	09 12 55 19 52 23 18 24 49 25. 0 28. 3	5250	USCGS: 15.0S, 173.3W, h = 33 km Samoa Islands region. Felt: Apia Mag. $5\frac{1}{4}$ - $5\frac{1}{2}$ (Pal)
63	24 ✓	eP NZ	16 41 23		
64	24 ×	eP NZ iS NZ	23 29 45 30 23		Local
65	25 ×	eP NZ iS NZ	06 29 21 29 38		Local
66	25 ✓	iP NZ i Z iS NEZ iScS NEZ	08 38 38 38 46 44 00 47 38	4450	USCGS: 20.5S, 178.5W h = 561 km. Fiji Islands
67	26 ✓	eP NZ eS E eL NEZ	07 00 02 09 02 22. 2	7610	USCGS: 34.0N, 139.2E h = 38 km Near east coast of Honshu Japan Felt: Tokio
68	26 ×	eP Z epP Z	08 05 44 06 21	4270	USCGS: 0.1N, 121.3E h = 185 km Northern Celebes
69	26 ✓	iP Z i Z e NZ	23 36 55 C 37 42 44 14	3450	USCGS: 3.7S, 140.1E h = 50 km New Guinea
70	27 ✓	iP NZ	02 30 12 D	8300	USCGS: 40.2N, 137.8E h = 274 km Sea of Japan
No EW SP after 1805 GMT on 24th up to 0129 GMT on 28th					
71	28 ✓	iPKP NEZ iPP NEZ e(Sc SPKP) NEZ iSS NE eL N	11 18 54 C 22 05.5 34 13 38 14 54. 9	14330	USCGS: 38.0N, 23.1E h = 120 km Greece, 1 killed, 11 injured and moderate property damage. Felt: Southern Italy, Sicily, Crete, Malta, Southern Yugoslavia Mag $6\frac{3}{4}$ (Pas.)
72	29 ✓	iP EZ	16 55 27.5 D		
73	30 ✓	iP EZ e(s) N eL NEZ	17 25 49.5 D 35 49 38. 8		
74	31	eP NEZ ipP Z	10 41 31 41 48	4930	USCGS: 15.4S, 177.3W h = 60 km. Fiji Islands region
75	31 ×	eL NEZ	11 54. 8		
76	31 ✓	eP Z eSKS N eS E eSP NZ eSS NE eSSS E eL NEZ	17 15 57 26 27 27 00 28 20 33 16 36 54 49. 8	10330	USCGS: 51.3N, 179.7W h = 26 km Rat Islands, Aleutian Islands Mag $6\frac{3}{4}$ (Pas) $6-6\frac{1}{4}$ (Pal)
No NS Short period from 1832 GMT on 28th to 0224 GMT on 31st					

UNIVERSITY OF ADELAIDE SEISMOLOGICAL STATION
ADELAIDE (MT. BONYTHON)

 Latitude:  $34^{\circ} 58' 01''$  Longitude:  $138^{\circ} 42' 32''$ 

Height above mean sea level: 2150'

Foundation: Sandstone

Instruments: World-wide standard seismograph system Benioff short period seismometers

 $T_0 = 1.0$  secs.  $T_g = 0.75$  secs.

Sprengnether long period seismometers

 $T_0 = 30$  secs.  $T_g = 100$  secs.

No.	Date 1962 SEPT.	Phase	Time (G.M.T.)	$\Delta$ km.	Remarks
1	1	✓ iP NEZ iS NE i NE iPcS E iScS NE	04 58 24 D 03 20 03 54 04 52 08 24.5	3610	USCGS: 15.9S, 168.2E h = 244 km. New Hebrides Islands
2	1	✓ eL NEZ	08 37. 6		
3	1	✓ iP NEZ	12 05 39.5 D		
4	1	✗ eL EZ	16 53. 0		
5	1	✓ iP NEZ	18 01 33 D		
6	1	✓ i Z e NEZ iPP EZ i NE iPS NEZ iPSP Z i Z i(SS)NE i Z eL N eL EZ	19 35 08 38 48 39 28 45 52 48 58 50 10 52 22 55 12 59 18 06. 5 07. 3	12030	USCGS: 35.6N, 50.0E h = 21 km. Northwest Iran, Over 10,000 killed, many injured and extensive property damage. Mag $7\frac{1}{4}$ (Pas), $7\frac{3}{4}$ (Brk), 7 (Pal).
7	2	✓ eP Z	05 43 28		
8	2	✓ eP NEZ e(S) NE eL NEZ	15 28 01 33 40 35. 8		
9	2	✗ eP NEZ	20 23 18	3690	USCGS: 38.5S, 179.8W h = 33 km. Off coast of North Island, New Zealand.
10	3	✓ iP EZ iPP EZ	00 02 29.5 C 03 53	3400	USCGS: 7.0S, 124.8E h = 470 km. Banda Sea
11	3	✓ eP NEZ	19 03 35		
12	5	✓ eP NEZ	03 38 24		
13	5	✗ iP NEZ e(ScP)NEZ eL NEZ	11 23 20 D 29 37 33. 4	3500	USCGS: 3.3S, 139.9E h = 110 km. New Guinea

No.	Date 1962 SEPT.	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
14	6 ✓	eP NEZ ipP NEZ ePcS NE eL NE	11 17 24 17 33 23 48 25. 0	3640	USCGS: 4.0S, 126.4E h = 33 km. Ceram Sea
15	6 ✗	iP NEZ iS NEZ	14 48 54 49 00	D 52	Local - Felt Barossa Valley and some Adelaide suburbs
16	6 ✓	iP NEZ ipP NZ iPP Z i NZ	15 09 23 09 49 10 36 12 26	C 3570	USCGS: 8.4S, 158.8E h = 95 km. Solomon Is. region. Felt: East New Georgia
17	7 ✓	iP NEZ e NEZ	07 47 41 53 36	D 3290	USCGS: 6.3S, 130.0E h = 180 km. Banda Sea region
18	7 ✓	iP NEZ	23 58 29.5	D 3590	USCGS: 8.4S, 159.0E h = 95 km. Solomon Islands region
19	8 ✓	eP NEZ eL NEZ	07 33 21 40 40	3470	USCGS: 22.4S, 171.5E h = 76 km. Loyalty Islands region
20	9 ✓	iP NEZ	01 43 13.5	C 5330	USCGS: 10.3N, 121.4E h = 58 km. Near coast of Panay, Phillipine Islands
21	9 ✗	eP NEZ	11 32 19.5	5340	USCGS: 10.5N, 121.8E h = 33 km. Near coast of Panay, Phillipine Islands
22	10 ✓	iP NEZ i Z iPP Z iPcP EZ iScP Z iS NE eScS NE i N	15 50 36.5 51 20 52 28 52 35 55 20 55 54 59 35 16 03 48	C 4370	USCGS: 21.1S, 179.2W h = 640 km. Fiji Islands. Mag $6\frac{1}{2}$ (Pas.)
23	10 ✗	eL NEZ	18 14. 9		
24	11 ✗	iP Z	07 43 36	D	
25	12 ✗	eP NEZ	07 24 39		
26	12 ✓	eP NEZ i Z eL NEZ	18 25 04 27 08 33. 8	3460	USCGS: 4.4S, 145.4E h = 32 km. Near north coast of New Guinea Felt: Bogia and Manam Island
27	12 ✓	iP NEZ i Z e(PS) NE eL NE eL Z	21 10 22.5 11 57 23 18 37. 9 46. 9	D 10670	USCGS: 36.5N, 69.2E h = 50 km. Hindu Kush. Mag: $6\frac{1}{2}$ - $6\frac{3}{4}$ (Pas.) 6 (Pal.)
28	13 ✓	ePKP NEZ	14 54 48	16710	USCGS: 11.6N, 61.3W h = 73 km. North of Trinidad. Felt.
29	13 ✗	iP NEZ	19 23 25.5	D	
30	14 ✗	eP NEZ	10 05 34		
31	14 ✗	eP NEZ	11 15 58	1920	USCGS: 51.4S, 146.3E h = 33 km. South of Tasmania
32	14 ✓	iP NEZ i Z	18 25 05.5 26 23	C 4570	USCGS: 19.9S, 177.6W h = 350 km. Fiji Islands
33	15 ✗	iP NEZ	12 16 41		
34	15 ✓	iP NEZ eSKS N eiS NEZ eSS N	23 03 20 13 41 14 44 19 23	9390	USCGS: 48.5N, 156.8E h = 33 km. Kurile Islands. Mag $6\frac{1}{2}$ (Pas.) 6 (Pal.)



No.	Date 1962 SEPT.	Phase	Time (G.M.T.)	Δ Km.	Remarks
No Z Short Period record on 16th					
35	16	X eP	NE 21 55 53		
36	17	✓ eP	NEZ 03 41 44		
37	17	X iP	NEZ 05 06 50.5	4620	USCGS: 17.7S, 178.6W h = 576 km. Fiji Islands
38	17	✓ eP	Z 07 27 11		
39	17	X eP	NEZ 16 41 25	6560	USCGS: 23.5N, 121.7E h = 33 km. Off east coast of Formosa
40	17	✓ iP	NEZ 18 02 25.5	4380	USCGS: 21.0S, 179.1W h = 601 km. Fiji Islands
		ePP	EZ 04 16		
		i	Z 06 43		
		iScP	Z 07 09.5		
		eS	NE 07 41		
		eSS	NE 11 08		
41	18	✓ ePKP	NEZ 00 48 24	14820	USCGS: 7.5N, 82.3W h = 33 km South of Panama. Felt: Chiriqui Province. Mag. 7 (Pas.) (Brk) 6 $\frac{1}{2}$ -6 $\frac{3}{4}$ (Pal.)
		ePP	Z 50 52		
		i(SS)	NEZ 01 09 15		
		i(SSS)	NEZ 13 47		
		eL	N 23. 9		
		eL	NEZ 31. 5		
42	18	✓ iP	NEZ 06 17 48.5	4300	USCGS: 2.3N, 126.9E h = 33 km. Molucca Passage
		eS	N 23 40		
		eL	NEZ 30. 2		
43	19	✓ eP	NEZ 07 56 59	5140	USCGS: 11.5N, 141.0E h = 61 km. Mariana Islands region
		eL	NZ 08 13. 8		
44	19	X eP	NEZ 18 12 55	3320	USCGS: 9.9S, 120.5E h = 34 km. Soemba Island
45	20	X eP	NEZ 16 44 33	3340	USCGS: 4.7S, 139.4E h = 33 km. West New Guinea
		e	NEZ 54 33		
		i(ScS)	E 54 54		
46	21	Y eP	NEZ 02 51 04		
47	21	Y iP	NEZ 08 50 50	C 4370	USCGS: 21.2S, 179.0W h = 624 km. Tonga Islands region
48	21	X iP	NEZ 15 01 53	D 4610	USCGS: 17.7S, 178.7W h = 536 km. Fiji Islands region
49	22	✓ iP	NEZ 07 02 59.5	C 8070	USCGS: 26.5N, 97.0E h = 33 km. Northern Burma
		ipP	Z 03 07		
		iPcP	Z 03 13		
		eS	NEZ 12 28		
		eL	NEZ 23. 8		
50	22	Y eP	NEZ 07 32 15		
51	22	X eP	NEZ 15 14 30		
		eL	NEZ 23. 5		
52	23	Y eP	NEZ 07 06 17	4180	USCGS: 23.7S, 179.9E h = 549 km. Fiji Islands region
53	24	Y eP	NEZ 05 36 44	5040	USCGS: 9.2N, 126.6E h = 33 km. Off east coast of Mindanao, P.I.
		isP	NZ 36 57		
54	24	Y eP	Z 14 50 18	8620	USCGS: 42.8N, 145.3E h = 33 km. Near east coast of Hokkaido, Japan
		eL	NEZ 15 17. 8		
55	24	eP	NEZ 22 08 12	4170	USCGS: 0.2N, 124.0E h = 155 km. Celebes region

4.

No.	Date 1962 SEPT.	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
56	25 ✓	eP Z eS NEZ eL NEZ	00 31 51 40 44 51. 8	7280	USCGS: 55.6S, 124.3W h = 67 km. South Pacific Ocean
57	25 X	eP EZ eL NEZ	14 58 13 15 13. 3	5160	USCGS: 11.7N, 138.6E h = 33 km. Mariana Islands
58	25 X	iP NEZ i Z	18 33 34 C 37 56	3620	USCGS: 3.6S, 128.3E h = 33 km. Ceram Island region
59	25 ✓	eP Z	22 22 42		
60	26 X	iP Z	02 13 28.7 D		
61	26 ✓	iP NEZ eL NEZ	12 52 11 D 13 02. 8	4280	USCGS: 27.5S, 176.4W h = 33 km. Kermadic Islands region
62	26 X	eP NEZ	17 45 15		
63	27 ✓	iP NEZ ipP NEZ	13 04 12 D 04 41	4860	USCGS: 4.6S, 104.4E h = 144 km. Southern Sumatra
64	27 ✓	iP NEZ	13 32 08.5 D	4650	USCGS: 17.6S, 178.9W h = 507 km. Fiji Islands
65	27 X	eL NEZ	18 43. 1		
66	28 X	iP NEZ i Z i NEZ	06 21 22 D 21 32 21 38		
67	28 ✓	eP Z	19 15 17		
68	29 X	eP NEZ e NEZ eS NEZ	01 33 38 35 10 35 27		Regional - Felt at Bowral and Moss Vale
69	29 ✓	ePKP NEZ iSP NZ ePKKP NEZ	15 35 25 45 19 46 03	12750	USCGS: 27.0S, 63.6W h = 575 km. Santiago Del Estero Province, Argentine. Mag $6\frac{1}{2}$ (Pas.) $6\frac{1}{4}$ (Pal.)
70	30 ✓	eP NZ	06 52 31	5420	USCGS: 13.5N, 146.2E h = 94 km. Mariana Islands
71	30 ✓	eP NEZ	10 54 38	3590	USCGS: 5.2S, 152.7E h = 33 km. New Britain region. Felt: Rabaul Doilene, and Karlai.
72	30 X	iP NEZ	11 04 52 D	3450	USCGS: 5.9S, 151.0E h = 50 km. Near southern coast of New Britain Island, Felt: Rabaul, Doilene and Karlai.
73	30 ✓	e(P) Z	13 35 48		
74	30 X	e(S) NE eL NEZ	16 59 50 17 03. 9		
75	30 ✓	iP NEZ ipP Z	22 06 59 D 07 13	6230	USCGS: 18.6N, 120.9E h = 51 km Near north coast of Luzon, P.I. Felt: Vigan, Aparri and Laoag.
76	30 X	eP EZ	23 19 50		

J. PEARCE
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OCT 62  
-DEC 62

UNIVERSITY OF ADELAIDE SEISMOLOGICAL STATION

ADELAIDE (MT. BONYTHON)

Latitude: 34° 58' 01" Longitude: 138° 42' 32"

Height above mean sea level: 2150'

Foundation: Sandstone

Instruments: World-wide standard seismograph system Benioff short period seismometers

To = 1.0 secs. T<sub>g</sub> = 0.75 secs.

Sprengnether long period seismometers

To = 30 secs. T<sub>g</sub> = 100 secs.

No.	Date 1962 Oct.	Phase	Time (G.M.T.)	ΔKm.	Remarks
1	1 ✓	iP NEZ i NEZ	04 03 53 D 04 02	4620	USCGS: 17.5S, 178.9W h = 550 km. Fiji Islands
2	1 ✗	eP NEZ	08 00 56	6460	USCGS: 6.5N, 95 1E h = 33 km. Nicobar Islands region
3	1 ✓	eP NEZ eL NEZ	10 03 15 11. 5	3470	USCGS: 17.5S, 167.1E h = 33 km. New Hebrides Islands, Felt Port Vila
4	1 ✗	iP Z	10 05 45	9190	USCGS: 47.3N, 151.5E h = 127 km. Kurile Islands
5	1 ✗	i(P)? NEZ	10 07 13 D		
6	1 ✗	eL NEZ	13 05. 5		
7	1 ✗	eL NEZ	15 01. 4		
8	1 ✗	iP NEZ eL NEZ	15 13 44 D 25. 8	3520	USCGS: 5.5S, 151.9E h = 49 km. New Britain. Felt: Rabaul
9	1 ✓	eP NEZ eL NEZ	20 50 30 21 03. 8	4870	USCGS: 19.6S, 174.5W h = 143 km. Fiji Islands region
10	2 ✓	eP NEZ	02 45 25		
11	2 ✓	iP NEZ	08 42 46 D	4520	USCGS: 17.6S, 178.7W h = 616 km. Fiji Islands region
12	2 ✓	eP NEZ	12 42 57	4130	USCGS: 0.6S, 122.9E h = 33 km. Northern Celebes
13	2 ✗	eP NEZ	19 38 51	5170	USCGS: 10.4N, 126.9E h = 125 km. Leyte, Philippine Islands
14	2 ✗	eP NEZ	19 59 14	3300	USCGS: 2.1N, 126.2E h = 35 km. Molucca Passage
15	3 ✓	eP NZ	18 01 37		
16	6 ✓	eP NEZ iPP NEZ i Z iS NEZ iL N eL EZ	04 29 47 30 42 31 58 34 48 37. 2 38. 3	3450	USCGS: 17.4S, 167.7E h = 33 km. New Hebrides Islands. Felt: Port Vila

No.	Date 1962 Oct.	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
17	6 ✓	iP NEZ	05 48 48.5 C	6870	USCGS: 26.2N, 126.9E h = 122 km. Ryukyu Islands
18	6 ✓	eP Z eS NE	08 02 40 07 44	3470	USCGS: 17.4S, 167.9E h = 33 km. New Hebrides Islands, Felt.
19	6 ✓	eP NEZ eS E i N	08 09 54 14 56 17 40	3500	USCGS: 17.2S, 168.0E h = 33 km. New Hebrides Islands
20	6 ✓	iP NEZ i Z ipP NZ iPcP Z iS NEZ i NZ i Z iScP NZ i N	11 07 15.5 C 07 30 08 04 09 51 12 20 12 25 12 55 13 18 16 39	3730	USCGS: 13.3S, 167.3E h = 209 km. New Hebrides Islands
21	6 ✗	iP NZ	12 12 49 C		
22	6 ✓	eP NEZ ipP EZ iS NEZ i N	23 37 42 37 50 42 52 45 28	3440	USCGS: 17.5S, 167.6E h = 42 km. New Hebrides Islands
23	7 ✓	iP NEZ	05 33 26.5 C		
24	7 ✗	iP Z	16 13 02 D	9610	USCGS: 57.8S, 25.5W h = 33 km. Sandwich Islands
25	7 ✗	eP E eS E	23 55 55 56 13		Local
No Z or N short period records from 2222 GMT on 7th to 0044 G.M.T. on 9th					
26	8 ✓	eP N iS NE eL E	22 06 34 14 52 20. 9	6730	USCGS: 24.3N, 121.7E h = 29 km. Near east coast of Formosa Mag 6 (Pas), 6 $\frac{1}{4}$ (Pal)
27	9 ✓	iP NEZ	06 05 16 D		
28	9 ✓	iP NEZ iPP Z i Z iS NEZ eL NE eL Z	20 21 10 22 17 22 46 26 28 29. 0 31. 4	3640	USCGS: 3.2S, 148.2E h = 33 km. Bismark Sea. Mag 6 $\frac{1}{4}$ , (Pas)
29	10 ✗	iP NZ	03 37 18 D		
30	11 ✓	iP NEZ	02 41 51 C		
31	11 ✓	iP NEZ	05 01 41 D		
32	11 ✗	eP Z	11 19 03		
33	11 ✗	iP NEZ i EZ i Z e NEZ	13 40 16 C 40 32 42 39 47 56		
34	11 ✓	iP NEZ eL NZ	22 01 06 D 15 00		
35	12 ✗	iP NEZ	06 20 59 D		
36	12 ✗	eP NEZ iS NEZ	06 47 46 47 50		Local?

3.

No.	Date 1962 Oct.	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
37	12 <sup>✓</sup>	iP NEZ	10 55 44.5 D	4650	USCGS: 17.9S, 178.0W h = 600 km. Fiji Islands Region
38	13 <sup>✓</sup>	eP NEZ	06 44 18		
39	13 <sup>✓</sup>	iP NEZ	08 34 26 C	4320	USCGS: 38.2S, 175.9E h = 184 km. Near north coast of North Is. New Zealand
40	13 <sup>✓</sup>	eP NEZ eS NE eL NE	18 54 23 59 44 02. 3	3730	USCGS: 12.6S, 166.6E h = 33 km. Santa Cruz Islands region
41	13 <sup>✓</sup>	iP NEZ	23 10 17.5 D		No Z long period on 13th
42	14 <sup>✓</sup>	iP NEZ e E eL NEZ	00 36 47 42 48 46. 5	3840	USCGS: 33.4S, 179.3W h = 33 km. Kermadec Islands region
43	14 <sup>✓</sup>	iP NEZ	01 47 40 D	5660	USCGS: 1.5N, 99.0E h = 100 km. Near west coast of Sumatra
44	14 <sup>✓</sup>	eL NEZ	05 20. 8		
45	14 <sup>✓</sup>	iP NEZ	14 15 07 D	3940	USCGS: 1.0S, 127.2E h = 33 km. Halmahira Island region
46	14 <sup>✓</sup>	eP NEZ	15 19 50	7400	USCGS: 31.8N, 131.5E h = 33 km. Near south coast of Kyushu, Japan
47	15 <sup>✓</sup>	eL NEZ	05 32. 8		
48	15 <sup>✓</sup>	eP? NEZ	07 19 49		
49	15 <sup>✓</sup>	eP NEZ eL NEZ	14 06 42 18. 8	3920	USCGS: 33.1S, 178.5W, h = 89 km. Kermadec Islands
50	15 <sup>✓</sup>	iP NEZ iS NE eL NE	23 42 04 46 49 48 40	2910	USCGS: 43.5S, 169.8E h = 33 km. Near coast of South Island, New Zealand
51	16 <sup>✓</sup>	eL NEZ	03 02. 9		
52	16 <sup>✓</sup>	eL NEZ	05 36. 4		
53	16 <sup>✓</sup>	eP NEZ	06 34 17		
54	16 <sup>✓</sup>	iP NEZ	07 26 03 C	7080	USCGS: 28.3S, 62.5E h = 33 km. South of Mascarene Islands
55	16 <sup>✓</sup>	iP NEZ	09 56 47	3510	USCGS: 18.9S, 169.4E h = 261 km. New Hebrides Islands
56	16 <sup>✓</sup>	iP NEZ	18 53 04 D		
57	18 <sup>✓</sup>	iP NEZ ipP Z eL NEZ	04 12 31.0 12 40 24. 0	3630	USCGS: 8.9S, 117.0E h = 33 km. Sumbawa
58	18 <sup>✓</sup>	iP NEZ	08 52 59 D	9070	USCGS: 46.5N, 149.6E h = 140 km. Kurile Islands
59	18 <sup>✓</sup>	eL Z	16 37. 0		
60	19 <sup>✓</sup>	iP NEZ	01 40 42 D	3620	USCGS: 3.4S, 129.1E h = 58 km. Ceram
61	19 <sup>✓</sup>	iP NEZ eL Z	10 53 21 11 09. 9	5240	USCGS: 10.6N, 125.2E h = 50 km. Leyte, Philippine Islands
62	19 <sup>✓</sup>	iP Z	11 21 39 C		
63	19 <sup>✓</sup>	iP NEZ	17 20 33 D	3790	USCGS: 32.9S, 179.9E h = 192 km. Kermadec Islands region

No.	Date 1962 Oct.	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
64	19	iP NEZ i NEZ iPcP Z eS NE	23 48 29 49 11 51 26 53 13	D 3340	USCGS: 5.7S, 130.3E h = 177 km. Banda Sea
65	20	iP NEZ eL NEZ	05 36 30 48. 8	D 3240	USCGS: 6.7S, 130.1E h = 167 km. Banda Sea
66	21	iP NEZ	12 39 35	C 4210	USCGS: 1.5N, 127.2E h = 111 km. Halmahera Island region
67	21	iP NEZ	23 23 43	D 9860	USCGS: 55.9S, 27.8W h = 33 km. Sandwich Islands region
68	22	iP NEZ	01 16 51	D 4640	USCGS: 18.1S, 177.9W h = 612 km. Fiji Islands region
69	22	eL E	04 48. 9		
Records left running from 21st-23rd hence only a few hours of the 22nd					
70	25	eP EZ eL NEZ	03 45 05 03 55. 9	3420	USCGS: 17.8S, 167.7E h = 33 km. New Hebrides Islands. Felt:
71	25	iP NEZ i(S) NEZ eL NEZ	09 41 34 47 26 50. 9	C 4410	Port Vila USCGS: 3.0N, 126.7E h = 33 km. Molucca Passage
72	25	eP NEZ	12 44 15	4720	USCGS: 15.4S, 179.0W h = 392 km. Fiji Islands region
73	25	iP NEZ iS NE i EZ iSS NE eL NEZ	20 12 04 16 56 17 24 18 16 19. 0	C 3150	USCGS: 61.4S, 154.9E h = 33 km. Southwest of Macquarie Islands
No E short period record from 0715 GMT on 26th - 2235 GMT on 27th					
74	26	eP NZ eS NE e NE eL N eL EZ	07 26 41 31 50 34 20 36. 0 37. 5	3420	USCGS: 17.7S, 167.5E h = 33 km. New Hebrides Is. Felt: Pt. Vila
75	26	iP NZ eL NEZ	16 11 27 44. 0	D 9880	USCGS: 55.5S, 26.5W h = 33 km Sandwich Islands
76	26	iP NZ	20 30 03	D 4160	USCGS: 0.1N, 124.1E h = 112 km. Northern Celebes
77	26	iP NZ ipP Z	22 21 58 22 08	9860	USCGS: 55.7S, 26.5W h = 33 km. Sandwich Islands
78	27	eL NEZ	06 31. 0		
79	28	eP Z	12 15 32	5860	USCGS: 14.8N, 119.7E, h = 115 km. Off west coast of Luzon, P.I.
80	28	iP NEZ	15 07 28	C 4170	USCGS: 0.1N, 123.6E h = 61 km. Northern Celebes
81	28	eP Z	18 47 13		
82	29	eL EZ	07 55. 5		
83	29	eL NEZ	17 49. 7		
84	29	eP Z	17 53 24		
85	29	eL NEZ	21 43. 6		

5.

No.	Date 1962 Oct.	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
86	30 ✓	eP NEZ eL NEZ	01 58 50 20. 4	9010	USCGS: 54.2S, 9.1E h = 33 km. Bouvet Island region
87	30 ✗	eL Z	09 34. 3		
88	30 ✗	eP NEZ eS N eL NZ	15 46 35 51 29 54. 6		
89	30 ✗	eL NEZ	16 33. 5		
90	31 ✓	eL NEZ	12 33. 8		

J. PEARCE

D.J. SUTTON

UNIVERSITY OF ADELAIDE SEISMOLOGICAL STATION
ADELAIDE (MT. BONYTHON)

Latitude: 34° 58' 01" Longitude: 138° 42' 32"

Height above mean sea level: 2150'

Foundation: Sandstone

Instruments: World-wide standard seismograph system Benioff short period seismometers

 To = 1.0 secs.  $T_g = 0.75$  secs.

Sprengnether long period seismometers

 To = 30 secs.  $T_g = 100$  secs.

No.	Date 1962 NOV.	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
1	1 ✓	eP NEZ	09 53 47	4200	USCGS: 23.7S, 179.6W h = 525 km. Fiji Islands region
2	1 ✓	eP NEZ i NZ iPP NZ iS NEZ iSS E eL E eL NZ	15 40 29 40 37 41 53 46 14 48 47 49. 5 51. 0	4120	USCGS: 1.9N, 133.0E h = 56 km. Off coast of western New Guinea
3	1 ✓	eP NEZ i NZ iPP NEZ iS NEZ iSS E eL E eL NZ	17 59 29 59 36 18 00 53 05 14 07 51 08. 8 09. 7	4120	USCGS: 1.9N, 132.8E h = 36 km. North of western New Guinea
4	2 ✗	eP NEZ iS NEZ	06 12 48.5 12 57		Local ?
5	2 ✗	eL NEZ	07 08. 8		
6	2 ✓	iP NEZ iS NEZ eL NEZ	14 52 57 58 09 15 02. 0	D 3470	USCGS: 10.0S, 117.8E h = 33 km. South of Sumbawa
7	2 ✓	iP NEZ	15 18 55	D 3470	USCGS: 10.2S, 117.6E h = 33 km South of Sumbawa
8	2 ✗	eP NZ	19 47 53		
9	3 ✗	iP NEZ e NE eL NEZ	01 06 48.5 12 23 16. 4	C 3600	USCGS: 7.9S, 158.3E h = 86 km. Solomon Islands
10	3 ✓	eP Z eL NEZ	03 18 56 32. 0	3440	USCGS: 10.3S, 117.8E h = 33 km. South of Sumbawa
11	3 ✓	iP NEZ	05 06 47	D 3400	USCGS: 10.3S, 117.8E h = 33 km. South of Sumbawa
12	3 ✗	eP NEZ	10 09 16		
13	3 ✗	iP NEZ	14 34 35.5	D 3610	USCGS: 15.0S, 167.4E h = 134 km. New Hebrides Islands. Felt at Santo



No.	Date 1962 NOV.	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
14	3 ✓	eP Z	15 44 31	3570	USCGS: 2.6S, 139.5E h = 94 km Near coast of New Guinea
15	3 ✓	eL NEZ	18 21. 5		
16	3 ✓	eP EZ eL NEZ	19 12 31 54. 0	4940	USCGS: 4.5S, 103.4E h = 33 km. Southern Sumatra
17	3 ✓	eP EZ	20 32 41	3690	USCGS: 2.8S, 129.2E h = 41 km. Ceram
No N short period record from 1725 GMT on 3rd to 0050 on 5th globe gone					
18	4 ✓	eP Z	05 19 46		
19	4 ✓	eP EZ	19 37 12		
20	4 ✓	eP EZ eL NE	23 06 59 38. 0	10670	USCGS: 43.2S, 75.6W h = 33 km. Off coast of southern Chile, Mag $5\frac{3}{4}$ -6 (Pas.) $5\frac{1}{2}$ (Pal.)
No Z long period record on 4th globe gone					
21	5 ✓	iP NEZ	15 47 59	D	
22	5 ✓	eL NEZ	21 29. 4		
23	6 ✓	iP NZ	12 52 02	C	
24	6 ✓	eP NEZ	20 57 19	5330	USCGS: 10.5N, 121.9E h = 33 km. Near west coast of Panay, Philippine Islands
25	6 ✓	iP NEZ	21 33 14	D	3620 USCGS: 4.9S, 152.7E h = 68 km. Near coast of New Ireland. Felt.
26	6 ✓	iP NEZ	22 04 27	C	
27	7 ✓	iP NEZ	04 05 10	C	5370 USCGS: 13.3N, 144.8E h = 121 km. Mariana Islands. Felt.
28	7 ✓	eP NEZ iS NEZ	11 14 24 14 52		Local
29	7 ✓	iP NEZ	12 12 19.5	D	
30	7 ✓	iP NEZ isP Z eS NE e NE	16 09 17 10 10 14 13 19 27	D	3570 USCGS: 7.8S, 119.8E h = 156 km. Flores Sea
31	8 ✓	eP NZ eL NEZ	01 07 42 23. 9		
32	8 ✓	eP NEZ	07 14 33		
33	8 ✓	eP NEZ eL NEZ	07 54 57 08 03. 3	3340	USCGS: 20.1S, 168.6E h = 33 km. Loyalty Islands region
34	8 ✓	iP NEZ	10 09 48	D	3610 USCGS: 14.7S, 167.1E h = 86 km. New Hebrides Islands
35	9 ✓	eP NZ	04 55 46	5180	USCGS: 10.4N, 126.2E h = 33 km. Off east coast of Samar Phil- ippine Islands
36	9 ✓	eL NEZ	16 35. 0		
37	9 ✓	eP NEZ	18 08 36	3320	USCGS: 5.4S, 132.5E h = 33 km. Banda Sea
38	10 ✓	eP NEZ i NEZ	01 45 17 45 35	8750	USCGS: 43.8N, 147.2E h = 60 km. Kurile Islands region. Mag $5\frac{1}{2}$ (Pal.)

No.	Date 1962 NOV.	Phase	Time (G.M.T.)	ΔKm.	Remarks
39	10 ✓	eP NEZ e(S) NE	21 21 08 30 27		
40	13 ✓	eP NEZ	13 27 52		
41	13 ✓	iP NEZ	22 00 37.5	D 9760	USCGS: 56.9S, 29.0W h = 33 km. Sandwich Islands
42	14 ✓	eP NEZ	07 59 15	7800	USCGS: 35.7N, 140.8E h = 61 km. Central Honshu, Japan
43	14 ✓	eP NEZ	15 47 17		
44	14 ✓	eP NEZ iS NEZ e Z eSS NE eL NEZ	22 06 24 12 06 14 30 14 42 17. 3	4160	USCGS: 0.3S, 123.0E h = 92 km. Northern Celebes
45	15 ✓	eP Z	10 37 56		
46	15 ✓	iP NEZ	11 37 25.5	C 4530	USCGS: 21.0S, 178.4W h = 590 km. Tonga Islands
47	15 ✓	iP NEZ i EZ eL NEZ	16 31 06 31 29 39. 4	D 3200	USCGS: 6.9S, 146.7E h = 40 km. New Guinea
48	16 ✓	iP NEZ	02 26 45.5	D 4640	USCGS: 18.0S, 178.4W h = 612 km. Fiji Islands region
49	16 ✓	eP NEZ i NEZ iS NE iSS NE e(SSS) E i NE eL NE	07 31 15 31 25 41 59 47 44 51 20 54 50 55. 5	9590	USCGS: 32.3S, 111.1W h = 43 km. Easter Island region. Mag. $6\frac{1}{2}$ - $6\frac{3}{4}$ (Pas) 6 (Pal.)
50	16 ✓	iP NEZ eS NE eL NEZ	21 20 38 29 14 34. 2	C 7180	USCGS: 13.5N, 93.2E h = 33 km. Andaman Islands Mag 6- $6\frac{1}{4}$ (Pas.)
51	17 ✓	iP NEZ	00 32 33	D	
52	17 ✓	iP NEZ	01 20 47.5	D 3760	(USCGS: 2.7S, 126.9E h = 37 km. Molucca Passage)
53	17 ✓	iP NEZ iS NEZ	14 28 22.5 33 50	D 4530	USCGS: 2.8N, 121.7E h = 609 km. Celebes Sea
Z long period seismometer stuck from 2009 on 17th - 0130 on 20th					
54	18 ✓	iP NEZ iPP NZ	06 50 13 51 34	D 4080	USCGS: 0.2S, 125.1E h = 56 km. Molucca Sea
55	18 ✓	eP Z	22 12 44		
56	20 ✓	eP NEZ	12 52 12		
57	21 ✓	eL NZ	07 42. 8		
58	21 ✓	iP NEZ	19 47 04.7	C 4370	USCGS: 21.1S, 179.2W h = 626 km. Fiji Islands region
59	22 ✓	eP NEZ	07 43 49	3390	USCGS: 18.2S, 167.6E h = 33 km. New Hebrides Islands
60	22 ✓	iP NEZ	08 43 59.5	C 4520	USCGS: 20.6S, 178.5W h = 605 km. Fiji Islands region
61	22 ✓	eL NEZ	11 07. 7		
62	22 ✓	eP NEZ eL NEZ	20 40 01 50. 5	4010	USCGS: 30.2S, 178.6W h = 298 km. Kermadec Islands region

No.	Date 1962 NOV.	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
63	23 <sup>v</sup>	eP NEZ	09 31 47		
64	23 <sup>x</sup>	eP NEZ	10 48 07	3440	USCGS: 4.0S, 142.3E h = 100 km. Bismark Sea
		No time pips from	0615 GMT on	24th -	2025 GMT on 26th
65	26 <sup>v</sup>	eP NEZ	23 02 08		
66	26 <sup>x</sup>	eP Z	23 32 45		
67	27 <sup>v</sup>	iP NEZ i EZ iPcP NZ eS NE	07 03 01.2 D 03 15 03 39.5 11 11	6850	USCGS: 25.1N, 122.9E h = 148 km. Ryukyu Islands
68	27 <sup>v</sup>	iP NEZ ipP Z	12 16 25.4 16 37	5860	USCGS: 14.9N, 119.9E h = 35 km. Near west coast of Luzon, P.I.
69	27 <sup>x</sup>	eP NEZ eS NEZ	14 37 54 38 28		Local
70	27 <sup>v</sup>	eP NEZ eS NE eSS NE eL NEZ	16 58 59 05 48 09 14 12. 5	5240	USCGS: 12.2N, 143.8E h = 33 km. Mariana Islands
71	28 <sup>v</sup>	iP NEZ eS NE eL NEZ	02 44 19.5 D 51 11 55. 4	5230	USCGS: 12.1N, 143.7E h = 33 km. Mariana Islands
72	28 <sup>x</sup>	eP NEZ eS NEZ	06 07 55 08 03		Local
73	28 <sup>x</sup>	eL NEZ	09 32. 3		
74	28 <sup>v</sup>	iP NEZ iPcP EZ	15 36 14.6 C 36 55	6860	USCGS: 9.9N, 93.4E h = 53 km. Andaman Islands
75	29 <sup>v</sup>	eP NEZ	04 05 29	4100	USCGS: 29.4S, 177.9W h = 140 km. Kermadec Islands
76	29 <sup>x</sup>	iP? NEZ	07 38 00.5 D		
77	29 <sup>v</sup>	eP NEZ epP EZ	09 11 36 11 46	4610	USCGS: 22.3S, 175.9W h = 33 km. Tonga Islands
78	29 <sup>x</sup>	iP NEZ	12 53 15.5 D	5450	USCGS: 13.9N, 145.4E h = 100 km. Mariana Islands
79	29 <sup>v</sup>	iP NEZ i EZ ipP EZ iS NE i NEZ eL NEZ	19 13 02.5 D 13 05 13 13 18 16 19 49 20. 6	3530	USCGS: 17.3S, 168.5E h = 33 km. New Hebrides Islands Felt Port Vila and Tongoa.
80	30 <sup>x</sup>	eP NEZ eS NEZ	07 54 16 54 46		Local
81	30 <sup>x</sup>	iP Z ePcP Z	16 13 22.0 D 13 46	8010	USCGS: 24.2N, 94.5E h = 175 km. Burma
82	30 <sup>v</sup>	iP NEZ ipP Z eL Z	17 00 50.6 D 01 02 10. 0	4380	USCGS: 3.2N, 127.1E h = 58 km. Molucca Passage
83	30 <sup>x</sup>	eP NEZ eL NEZ	23 14 13 22. 0	3330	USCGS: 5.5S, 145.9E h = 79 km. Near north coast of New Guinea Felt: Gembogl

J. PEARCE

D.J. SUTTON

16 APR 1963

UNIVERSITY OF ADELAIDE SEISMOLOGICAL STATION
ADELAIDE (MT. BONYTHON)

Latitude: 34° 58' 01" Longitude: 138° 42' 32"

Height above mean sea level: 2150'

Foundation: Sandstone

 Instruments: World-wide standard seismograph system Benioff  
short period seismometers

 To = 1.0 secs.  $T_g = 0.75$  secs.

Sprengnether long period seismometers

 To = 30 secs.  $T_g = 100$  secs.

No.	Date 1962 DEC	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
1	1 X	eL NEZ	02 36. 0		
2	1 ✓	iP NEZ iPcP NEZ eL NEZ	04 24 06.7 D 26 25 33. 7	4110	USCGS: 29.7S, 177.7W h = 52 km. Kermadec Islands
3	1 ✓	iP NEZ i NZ	21 09 47.9 D 09 58	4610	USCGS: 17.7S, 178.7W h = 620 km. Fiji Islands region
4	2 Y	iP NEZ eL NEZ	05 37 13.5 D 45 9	3500	USCGS: 9.9S, 159.9E h = 34 km. Solomon Islands. Felt:Honiara
5	2 Y	iP EZ	22 44 15.0		
6	4 X	iP NEZ	09 52 27.1 D		
7	4 X	eP NEZ eS NEZ eL NEZ	10 40 37 45 39 49. 9	3390	USCGS: 6.1S, 149.9E h = 83 km. New Britain Island Felt at Kandrian
8	4 ✓	iP NEZ eL NEZ	16 48 33.7 D 58. 8	5190	USCGS: 16.5S, 172.8W h = 33 km. Samoa Islands region. Mag 5-5¼ (Pal)
9	4 ✓	iP NEZ	17 38 09.4 C		
10	4 ✓	eP EZ	17 59 46	3520	USCGS: 3.8S, 131.4E h = 33 km. Ceram Island region
11	4 ✓	iP NEZ	19 38 34.2 C	4710	USCGS: 4.9N, 122.8E h = 627 km. Celebes Sea
12	4 ✓	eL NEZ	20 39. 4		
13	5 ✓	eL NZ	00 31. 2		
14	5 Y	iP NEZ	05 18 11.5 C		
15	6 ✓	eP Z	02 24 05	7260	USCGS: 30.7N, 142.0E h = 33 km. South of Honshu, Japan
16	6 Y	iP NEZ	06 52 05.4 D		
17	6 ✓	eP NEZ	18 01 43	3530	USCGS: 3.7S, 131.4E h = 33 km. Ceram Island region
18	6 X	eP NEZ	18 43 06		

No.	Date 1962 DEC	Phase	Time (G.M.T.)	Δ Km.	Remarks
19	7	iP NEZ i NEZ ipP NZ iPP NZ iS NEZ iPS E isS NE i N iSS E i E ePKPPKP Z	14 13 28.6 D 13 40 15 05 15 45 21 44 23 00 24 26 25 30 25 54 30 52 42 25	7080	USCGS: 29.2N, 139.2E h = 411 km. Bonin Islands region. Mag 6 $\frac{3}{4}$ -7 (Brk)
20	8	iP NEZ	00 03 52.2 D	5730	USCGS: 13.9N, 120.6E h = 178 km. Near west coast of central Luzon, P.I.
21	8	iP NEZ ipP Z isP NEZ eS NE eSS N e N eL EZ	18 26 58.3 C 27 11 27 15 33 56 36 50 38 43 41. 2	5210	USCGS: 15.2S, 173.7W h = 33 km. Tonga Islands region
22	8	ePKP NEZ ePP N e N eSKS NE eSKKS NE i NE iPKKP N ePS N i E i NE iSS E iSSS E i E	21 44 58 46 14 47 58 50 56 52 09 53 00 55 29 56 00 56 52 58 44 22 01 36 06 06 09 20	12910	USCGS: 25.8S, 63.4W h = 620 km. Salta-Santiago Del Estero Provinces border, Argentina
No time pips from 0522 GMT on 7th-1949 GMT on 8th					
ZLP record ran off page on 8th					
23	8	iP Z	23 08 15.5 D	10400	USCGS: 50.5N, 176.8W h = 33 km. Andreanof Islands, Aleution Is.
No time pips from 0014 GMT on 9th - 0021 GMT on 10th					
24	10	iP NEZ ipP Z	05 06 49.8 D 07 00	7060	USCGS: 28.3S, 62.7E h = 53 km. Indian Ocean
25	10	eP NEZ e(S) E eL NEZ	17 03 21 09 42 13. 9	4280	USCGS: 27.2S, 176.8W h = 88 km. Kermadec Islands region
26	11	eP EZ	14 01 25 D	4510	USCGS: 19.7S, 178.4W h = 630 km. Fiji Islands
27	11	iP NEZ	17 59 14.1 D	4330	USCGS: 24.8S, 177.6W h = 98 km. Tonga Islands
28	11	eP NEZ i Z	18 37 38 37 47		
29	11	eP NEZ	23 40 26	4430	USCGS: 3.5N, 126.9E h = 63 km. Molucca Passage
30	12	iP NEZ isP NEZ iPP NZ iPPP NZ i NZ iPcP NZ iS NEZ	10 15 16.9 D 15 46 16 25 16 56 17 12 18 02 20 28	3670	USCGS: 4.8S, 153.8E h = 94 km. New Britain

No.	Date 1962 DEC.	Phase	Time (G.M.T.)	Δ Km.	Remarks
(Continued from previous page)					
		i NEZ	20 54		
		iPcS NE	21 36		
		i NE	22 14		
		iSS NEZ	22 34		
		i NE	23 30		
		eL EZ	25 03		
		eL N	26 08		
31	12 ✓	iP NE eL NZ	14 09 02.7 D 36. 7	9360	USCGS: 60.3S, 25.9W h = 33 km. Sandwich Is. region
32	12 ✓	iP NEZ i NEZ ipP NEZ eL NEZ	23 06 03.9 D 06 21 06 25 22. 2	6190	USCGS: 4.6N, 96.5E h = 138 km. Sumatra
33	13 ✗	iP NEZ	00 35 10.0 C	6670	USCGS: 7.2N, 93.1E h = 33 km. Nicobar Islands
34	13 ✗	iP NEZ	08 20 02.3 D	3670	USCGS: 4.7S, 153.8E h = 112 km. New Britain
35	13 ✗	iP NEZ	16 53 24.4 D	4320	USCGS: 2.8N, 127.9E h = 33 km. Halmahera region
36	13 ✗	iP NEZ	23 30 17.0 D	6370	USCGS: 20.4N, 122.0E h = 147 km. Batan Islands, P.I.
37	14 ✗	iP NEZ	09 00 16.1 D	3670	USCGS: 4.8S, 153.8E h = 117 km. Solomon Islands
38	15 ✗	iP NEZ	02 45 00.4 C	4610	USCGS: 17.3S, 178.9W h = 509 km. Fiji Islands
39	15 ✗	iP NEZ	02 56 53.7 D		
40	15 ✗	eL NEZ	04 54. 3		
41	15 ✗	eP NEZ	04 58 55		
42	15 ✗	eP NEZ	13 15 15		
43	15 ✗	iP NEZ	14 29 02.5 D	3630	USCGS: 4.6S, 152.1E h = 53 km. New Britain. Felt: Rabaul
44	16 ✗	iP NEZ	05 31 47.6 D	3520	USCGS: 3.1S, 139.5E h = 43 km. Near north coast of New Guinea
45	17 ✓	iP NEZ i NEZ iScP NEZ iS NEZ iSS E eL NE	11 07 13.5 07 25 12 20 12 47 15 52 19. 3	4410	USCGS: 2.1N, 122.9E h = 393 km. Celebes Sea
46	17 ✗	eP NEZ	12 36 54	4160	USCGS: 0.2N, 124.3E h = 126 km. Halmahera region
47	17 ✗	eP NEZ e(sP)NEZ	22 08 54 09 47	3490	USCGS: 8.2S, 120.5E h = 151 km. Flores region
48	18 ✓	iP EZ ipP EZ e N	10 40 50.1 D 41 40 49 24	4210	USCGS: 28.3S, 178.2W h = 214 km. Kermadec Islands
49	18 ✗	iP EZ	11 36 35.3 C	4110	USCGS: 24.7S, 180.0 h = 486 km. Fiji Islands region.
50	18 ✗	iP EZ i Z	12 44 29.0 44 43	4270	USCGS: 2.7N, 129.1E h = 96 km. Halmahera region

No Z long period and the N short period shorted out on the 18th  
No records for the 19th while modifications being installed

No.	Date 1962 DEC.	Phase	Time (G.M.T.)	Δ Km.	Remarks
51	20 X	iP Z	19 41 45.6 C	5870	USCGS: 17.8N, 144.6E h = 33 km. Mariana Islands
		No long period records for 20th			
52	21 ✓	iP NEZ	09 25 44.2 D		
53	21 ✓	iP NEZ e E e N e NE	09 45 05.2 D 10 07 50 09 22 14 39	8470	USCGS: 42.4N, 142.3E h = 27 km. Near south coast of Hokkaido, Japan
54	21 X	eP NEZ	17 42 24.5	3690	USCGS: 4.6S, 153.8E h = 95 km. New Britain region
55	21 ✓	iP NEZ i Z	18 29 54.1 C 30 03	5840	USCGS: 15.3N, 121.7E h = 55 km. Near west coast of Luzon, P.I. Felt: Manila
Instruments running at night only during installation of modifications from 17th - 21st Dec.					
56	22 ✓	iP NEZ ipP Z iS NE eL NEZ i NE	00 58 34.9 D 58 46 03 31 06. 5 41 40	3370	USCGS: 22.0S, 170.1E h = 33 km. Loyalty Is. region, Mag $6\frac{1}{2}$ - $6\frac{3}{4}$ (Pas.)
E short period on 22nd shorted out					
57	22 X	eP NZ isP NZ eL Z	09 31 55 32 11 43. 0	4180	USCGS: 0.9N, 125.8E h = 33 km. Molucca Sea
58	22 Y	iP NZ i NZ eL NEZ	10 49 20.4 C 49 37 59. 8		
59	22 X	iP NZ	14 17 16.4 C	4580	USCGS: 4.7N, 125.7E h = 18 km. Near south coast of Mindanao, P.I.
60	22 ✓	eP NZ eSKS NEZ eS E eSP NZ eSS NE eSSS E eL NE eL Z	15 34 11 44 40 45 31 47 00 52 14 55 56 16 03. 9 11. 5	10920	USCGS: 52.5N, 168.8W h = 47 km. Fox Islands, Aleutian Islands Mag $6\frac{1}{4}$ (Pas.)
61	22 Y	iP NZ	19 42 25.5 C		
62	22 Y	iP NZ eS NZ	23 34 15.2 C 39 16	3540	USCGS: 5.1S, 151.2E h = 105 km. New Britain region. Felt: Rabaul
63	23 Y	eL NEZ	04 00. 5		
64	24 Y	eL NEZ	23 05 00		
65	25 Y	iP NEZ	01 45 41.0 D		
66	25 Y	eL Z	07 38. 9		
67	25 X	eP NEZ iS NEZ	09 03 28 04 27		Regional
68	25 Y	eL NEZ	12 51. 3		
69	25 X	eP NEZ	18 36 44		

No.	Date 1962 DEC.	Phase	Time (G.M.T.)	$\Delta$ km.	Remarks
70	26 ✓	eP NEZ eSKS NE iS NEZ ePS N eSS NE eL E eL NZ	22 38 32 48 52 49 25 50 36 55 32 02. 4 23 08. 5	10250	USCGS: 53.9N, 168.7E h = 33 km. Kormandorskie Islands Mag 6½ (Pas) (Pal)
71	26 ✓	eP NEZ ipP NEZ	23 38 18 38 26	10360	USCGS: 23.9N, 65.4E h = 34 km. Arabian Sea
72	26 ✓	eP EZ ipP EZ	23 59 24 59 34	10250	USCGS: 54.0N, 168.8E h = 33 km. Kormandorskie Islands
73	27 ✕	eP? NEZ	07 12 43		
74	27 ✕	eP NEZ	08 33 46	5540	USCGS: 12.5N, 120.9E h = 33 km. Near coast of Mindoro, P.I.
75	27 ✕	eP NEZ e NEZ eL Z	12 55 06 12 55 44 13 07. 7	3860	USCGS: 9.1S, 113.1E h = 40 km. Off coast of Java
76	27 ✓	eP NEZ iPcP EZ eL NEZ	14 08 14 11 12 16. 7	3390	USCGS: 4.9S, 145.1E h = 35 km. Near north coast of New Guinea
77	27 ✕	eP NZ	16 03 14		
78	27 ✓	iP NEZ eL Z	18 30 16.2 C 52. 7	8270	USCGS: 39.9N, 142.0E h = 36 km. Near west coast of southern Honshu, Japan
79	27 ✕	eP Z	20 11 04		
80	28 ✕	eP NEZ eS NEZ	04 09 24 10 16		Regional
81	28 ✕	iP NEZ	07 54 53.2 D		
82	29 ✓	iP NEZ i Z iScP Z eS NE eL NEZ	04 19 31.4 C 22 38 25 26 25 28 31. 0	4300	USCGS: 2.4N, 127.1E h = 33 km. Halmahera region
83	29 ✓	eP NEZ epP NZ	08 17 27 17 36	10370	USCGS: 23.9N, 65.2E h = 33 km. Afghanistan
84	29 ✕	eP NEZ iS NEZ	10 02 42 03 58		Regional
85	29 ✕	ePP Z eSP NEZ eSS NEZ eL NEZ	11 01 16 D 10 52 17 28 35. 9	13210	USCGS: 20.0S, 69.9W h = 46 km. Northern Chile. Felt: Arequipa, Peru. Mag 6¾ (Pas) 6½ (Brk) 6 (Pal).
86	29 ✓	iP NEZ ipP EZ iPP EZ i EZ es NEZ eSSS NEZ eL NEZ	14 54 43.2 54 56 56 09 57 19 15 00 26 03 18 06. 0	4030	USCGS: 31.2S, 177.9W h = 43 km. Kermadec Is. region Mag 6-6¼ (Pas)
87	29 ✕	eP NEZ	18 21 01	4040	USCGS: 31.6S, 177.8W h = 33 km. Kermadec Islands region
88	29 ✕	eP NEZ	18 26 44	4050	USCGS: 31.5S, 177.6W h = 33 km. Kermadec Islands region
89	29 ✕	eP Z	18 32 47		



6.

No.	Date 1962 DEC.	Phase	Time (G.M.T.)	$\Delta$ Km.	Remarks
90	29	✓ eP NEZ	19 47 37		
		No short period records for 30th			
91	30	✓ eP NEZ	18 22 46	3670	USCGS: 4.7S, 153.7E h = 116 km. New Britain. Felt at Rabaul
		ipP Z	23 16		
		eS NEZ	27 57		
		iSS EZ	30 14		
		eL NEZ	32. 5		
92	31	✗ eP NEZ	02 54 55	3470	USCGS: 8.1S, 120.9E h = 33 km. Flores Sea
93	31	✓ iP NEZ	11 10 02.4 D	5630	USCGS: 0.1S, 99.3E h = 33 km. Near coast of Sumatra
		eL NE	23. 4		
		eL Z	29. 7		
94	31	✗ iP NEZ	15 41 49.3 C		
		i EZ	41 57		
		eL NEZ	50. 3		
95	31	✓ eP EZ	17 25 39		
		e(s) NE	30 48		
		eL NEZ	35. 2		
96	31	✗ eP NEZ	18 37 33	5850	USCGS: 15.3N, 121.5E h = 67 km. Luzon, Phillipine Is.
97	31	✓ iP NEZ	19 46 25.6 D	3450	USCGS: 22.7S, 171.4E h = 39 km. Loyalty Islands region
		eS NE	51 44		
		eL NEZ	54. 8		

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