No.62/8

COMMONWEALTH OF AUSTRALIA

DEPARTMENT OF NATIONAL DEVELOPMENT

BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

203 Collins Street,
MELBOURNE. VIC.

SEISMOLOGICAL BULLETIN

TOOLANGI

Latitude: 37° 34' 17" S. Longitude: 145° 29' 26" E. Height: 604m.

Foundation: Metamorphosed Silurian Sediments.

Instruments: Benioff Variable Reluctance Seismometers, 3 components
Seismometer periods: 1 sec.
Short period recorder
Galvanometer period: 0.2 sec. nominal

Long period recorder
Galvanometer period: 14 sec.

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
AUGUST			h. m. s.	s.				km	
5	iP	Z	13 14(41)						
6	iP	NEZ	20 58 36						USCGS; 26.9S 177.1W h = 50km
	iPP	E	20 59 54						
8	iP	NEZ	22 45 53						
11	iP	NEZ	08 26 16						USCGS: 25.2N 123.3E h = 140km
	iS	NE	08 34 52						
	isS	NE	08 35 47						
11	iP	NEZ	18 19 22						USCGS: 06.6S 130.3E h = 173km
16	iP	Z	08 54 44						
17	iP	NEZ	05 13 46						USCGS: 10.6N 121.6E h = 33km
	eS	NE	05 21 16						
17	iPKP	Z	07 45 16						USCGS: 4.7S 79.4W h = 96km
17	iP	EZ	11 55 37						USCGS:15.2S 178.6W h = 391km
17	iP	NEZ	16 26 13						USCGS: 19.3S 177.5W h = 528km
17	iP	EZ	23 03 52						USCGS: 15.4S 172.7W h = 33km.
18	eP	Z	00 27 04						
18	eP	Z	09 20 39						USCGS: 10.7N 121.6E h = 44km
18	iP	NEZ	20 50 12						USCGS: 22.7S 173.1E h = 82km
19	iP	NEZ	07 50 16						
19	eP	N Z	18 40 22						USCGS: 44.6N 81.7E h = 33km
20	eP	NEZ	06 07 49¾						Regional.
	iS	N Z	08 03¼						
	iX	NEZ	08 04¼						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
AUGUST (cont'd)			h. m. s.	s.				km	
20	iP	EZ	11 28 45						USCGS: 20.9S 178.8W h = 605km
20	eP	Z	13 05 43						USCGS: 12.4S 112.1E h = 87km
20	eP	Z	15 22 27						USCGS: 01.7S 133.8E h = 33km
20	e(P)	Z	16 19 17						
20	eP	Z	19 29 08						
20	eP	Z	23 24 44						USCGS: 14.7S 166.6E h = 52km
21	iP	NEZ	06 45 17						
21	iP	NEZ	16 16 40						USCGS: 28.2S 176.7W h = 57km
21	iPKP	Z	18 39 02						USCGS: 41.4N 15.5E h = 34km
	iX	Z	39 07						
21	iP	EZ	21 12 28						USCGS: 28.7S 176.8W h = 55km
	iX	NE	12 33						
	ipP	Z	12 40						
	iX	Z	13 00						
	iX	EZ	13 24						
	eScS	N	22 47						
	eX	EZ	25 30						
21	iP	N Z	21 22 05						
	iX	EZ	22 10						
	iX	N Z	22 16						
	iX	NE	22 19						
	iX	NEZ	22 45						
	eX	NEZ	30 22						
	eX	NE	32 30						
22	iP	NEZ	11 17 06						USCGS: 49.7S 117.5E h = 33km
	iX	Z	17 10						
	iX	NE	17 23						
	iX	NE	17 28						
22	eP	NEZ	12 12 25						USCGS: 28.6S 176.7W h = 56km
22	eP	Z	17 55 11						
22	iP	NEZ	21 17 05						USCGS: 8.3N 123.8E h = 125km
	iX	NE	17 20						
23	eP	EZ	08 20 23						
23	iP	EZ	13 10 10						USCGS: 17.5S 178.7W h = 571km
23	iP	Z	15 40 24						USCGS: 22.9N 120.8E H = 17km
	iX	Z	43 21						
23	iP	EZ	16 54 43						USCGS: 21.4S 179.1W h = 587km
23	iP	Z	21 05 32						USCGS: 56.1S 26.6W h = 33km
	eX	EZ	06 02						
23	iP	Z	22 34 26						
24	iP	Z	04 05 07½						USCGS: 11.2S 165.0E h = 32km

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
AUGUST (cont'd)			h. m. s.	s.				km	
24	iP	NEZ	06 52 46½						USCGS: 24.5S 178.8E h = 526km
	iX	EZ	52 51½						
	iX	Z	53 20½						
	iX	Z	53 49						
	i(pP)	N Z	54 21½						
	iS	NEZ	57 14						
24	iP	NEZ	09 12 19						USCGS: 15.0S 173.3W h = 33km
	iX	Z	12 45						
	eLq	N	22 ..						
24	iP	NEZ	18 21 24						USCGS: 17.9S 178.5W h = 600km
	iX	Z	21 34						
25	i(P)	Z	03 04 20						
25	eX	Z	06 32 28						
25	iP	NEZ	08 38 00						USCGS: 20.5S 178.5W h = 561km
	iPP	Z	39 39						
	iPcP	Z	40 21½						
	iS	NE	42 54½						
	eSS	N	45 55						
	iScS	NE	47 13						
	iX	E	51 15						
25	i(P)	Z	08 50 18						
25	i(P)	Z	13 52 11						
26	iP	Z	07 00 20						USCGS: 34.0N 139.2E h = 38km
26	e(P)	Z	21 04 24						
26	iP	Z	22 46 34						USCGS: 34.3N 139.3E h = 54km
26	iP	NEZ	23 37 23						USCGS: 3.7S 140.1E h = 50km
	eX	NE	48 18						
27	iP	NEZ	02 30 28						USCGS: 40.2N 137.8E h = 274km
	ipP	NE	31 39						
27	eP	Z	16 31 45						USCGS: 38.3N 142.4E h = 40km
28	i(PKP)	NEZ	11 18 52½						USCGS: 38.0N 23.1E h = 120km
	i(PKP)	NEZ	19 07						
	iPP	NEZ	21 46						
	iSKP	NEZ	22 26						
28	i(P)	Z	11 46 15						
28	iP	NEZ	15 16 55						
	iX	Z	17 05						
28	iPn	NEZ	16 30 43¼						Regional.
	iP*	NEZ	30 44¾						
	iSn	NEZ	31 09¼						
	iS*	NEZ	31 11½						
29	iP	NEZ	19 47 22						USCGS: 19.4S 171.1W h = 582km
29	eP	N Z	22 48 14						USCGS: 34.1N 139.1E h = 33km

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
AUGUST (cont'd)			h. m. s.	s.				km	
30	i(P)	N Z	02 06 03						
30	iP	NEZ	17 25 08						USCGS: 21.2S 174.4W h = 33km
	iX	N Z	25 16						
	epP	Z	25 19						
31	iP	N Z	10 40 56						USCGS: 15.4S 177.3W h = 60km
	iX	N Z	41 00						
	eX	NEZ	41 18						
31	iP	NEZ	17 15 57						USCGS: 51.3N 179.7W h = 26km
	iX	NEZ	16 17						
31	iP	EZ	17 45 20						
31	eP	Z	18 09 20						USCGS: 51.2N 179.9W h = 43km

(J.M. RAYNER)
DIRECTOR

COMMONWEALTH OF AUSTRALIA No.62/9

DEPARTMENT OF NATIONAL DEVELOPMENT

BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

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T O O L A N G I

SEISMOLOGICAL BULLETIN.

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Galvanometer period: 0.2 sec. nominal

Long period recorder
Galvanometer period: 14 sec.

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
SEPTEMBER			h. m. s.	s.				km	
1	iP	NEZ	04 57 57		+	+	−		USCGS: 15.9S 168.2E h = 244km
	ipP	Z	58 44						
	iPP	NE	59 02						
	iX	NE	05 00 13						
	iS	NEZ	02 34						
	iX	Z	04 15						
	iX	N	05 35						
	iScS	E	08 12						
1	eP	Z	08 04 21						USCGS: 51.3N 179.9W h = 42km
1	iP	NEZ	18 00 52			+	−		
1	iPKP	NEZ	19 39 18						USCGS: 35.6N 50.0E h = 21km
	iPP	Z	40 15						
	eX	Z	42 23						
	iSP	NEZ	49 58						
2	iP	EZ	05 43 55						USCGS: 27.5N 127.0E h = 58km
2	eP	Z	08 34 48						USCGS: 34.2N 139.5E h = 33km
	iX	Z	39 35						
2	iP	Z	15 28 51						USCGS: 10.2S 120.3E h = 33km
	i(SS)	Z	36 52						
	eX	NE	37 59						
	eX	E	38 14						
	eX	NE	38 41						
	eX	E	42 36						
	eX	N	43 26						
2	e(P)	Z	15 45 49						
2	iP	EZ	20 22 26						USCGS: 38.5S 179.8W h = 33km
	iX	N	27 39						
3	iP	NEZ	00 03 14		−	+	+		USCGS: 7.0S 124.8E h = 470km.
	ipP	Z	04 45½						
	ePP	Z	04 57						
	iX	Z	05 19						
	iPcP	N Z	05 30						
	esP	Z	05 42½						
	eS	N	08 17						
	eScP	Z	08 22						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
SEPTEMBER (cont'd)			h. m. s.	s.				km	
3	eX	Z	01 45 06						
	eX	Z	45 14						
3	i(P)	NEZ	06 39 46½						
3	iP	Z	17 02 00						USCGS: 34.5N 139.4E h = 33km
3	eP	EZ	22 18 46						USCGS: 56.6S 27.2W h = 33km
4	iP	NEZ	19 34 29				–		USCGS: 15.5S 167.7E h = 133km
4	iP	EZ	22 39 43½						
5	iP	NEZ	11 23 46½				–		USCGS: 3.3S 139.9E h = 110km
	iX	N	24 03½						
	i(PP)	Z	25 14						
	iPcP	N	26 17						
	iX	E	31 45						
	iX	E	31 53						
	iX	E	33 15						
	eX	E	35½						
5	iP	NEZ	19 28 59						
6	eP	N Z	05 57 09						
6	eP	EZ	10 56 09						USCGS: 21.2S 174.5W h = 110km
6	iP	Z	11 18 05½				+		USCGS: 4.0S 126.4E h = 33km
	iX	N	18 09						
	ipP	EZ	18 15						
	iPPP	Z	19 55						
6	ePn	Z	14 50 15						
	eX	N	51 26						
	iX	E	51 32						
	iX	N	51 40						
	iX	N	51 56						
	iX	E	52 05¼						
	iX	N	52 08½						
6	iP	NEZ	15 09 16				+		USCGS: 8.4S 158.8E h = 95km
	iX	Z	09 27						
7	iP	NEZ	07 48 22		+		–		USCGS: 6.3S 130E h = 180km
7	iP	NEZ	23 43 04						
7	iP	NEZ	23 58 23				+		USCGS: 8.4S 159.0E h = 95km
8	e(P)	Z	07 18 55						
8	iP	NEZ	07 32 44						USCGS: 22.4S 171.5E h = 76km
	iX	N Z	32 55½						
8	iPKP	Z	23 17						USCGS: 16.9W 60.9W h = 33km
	iPKP	Z	23 26						
	iX	Z	23 29						
	iX	E	23 33						
9	iP	N Z	01 43 50				+		USCGS: 10.3N 121.4E h = 58km
	iX	EZ	43 59						

Date 1962	Phase	Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
SEPTEMBER (cont'd)		h. m. s.	s.				km	
9	iP NEZ	03 02 25						USCGS: 17.9S 178.6W h = 625km
	iX EZ	02 35½						
10	iP NEZ	15 49 59		-	-	+		USCGS: 21.1S 179.2W h = 640km
	iX Z	50 42½						
	ipP Z	51 42½						
	iX Z	51 49						
	iPcP Z	52 09½						
	isP Z	52 46						
10	iS NEZ	15 54 45½						
	iScP Z	55 03½						
	eSS NE	57 58						
	eX NE	58 18						
	iScS NE	59 07½						
10	i(P) NEZ	15 59 34						
10	eP EZ	17 56 59						USCGS: 17.5S 173.6W h = 33km
	eX Z	57 14						
10	iP EZ	18 14 09						
10	i(P) EZ	20 42 12						
10	iPKP Z	22 11 13						USCGS: 12.3N 86.7W h = 178km
11	i(P) NEZ	01 58 53						
11	iP EZ	02 32 17						USCGS: 15.2S 173.4W h = 33km
11	iP N Z	18 01 45½						USCGS: 26.9N 142.7E h = 33km
	iX Z	01 58						
12	e(P) Z	14 26 01						
	iX EZ	26 06						
12	eP Z	18 25 18						USCGS: 4.4S 145.4E h = 32km
	iX NE	25 30						
	iX N Z	25 41						
	ePP NEZ	26 34						
	eLq N Z	32 18						
12	eP Z	21 10 49						USCGS: 36.5N 69.2E h = 50km.
	eX Z	14 50						
	iPP NEZ	15 03						
12	i(P) N Z	21 27 17½						
13	iPKP NEZ	14 54 32½				-		USCGS: 11.6N 61.3W h = 73km
	ipPKP N Z	54 53						
13	eP EZ	15 38 19						
13	iP NEZ	19 22 44½				-		
14	i(P) Z	10 31 13						
14	iP NEZ	11 15 13½						USCGS: 51.4S 146.3E h = 33km
14	eP Z	15 59 19						USCGS: 17.9S 176.5E h = 33km

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
SEPTEMBER (cont'd)			h. m. s.					km	
14	iP	NEZ	18 24 27		-	-	+		USCGS: 19.9S 177.6W h = 350km
	iX	Z	24 58½						
	i(pP)	NEZ	25 43½						
	iScP	Z	29 54½						
15	iP	N Z	01 04 30						USCGS: 13.3N 141.9E h = 45km
	iX	N Z	04 38						
15	eP	Z	07 49 24						
	iX	EZ	49 57						
	iX	N Z	50 14¾						
	iX	Z	50 16½						
	iX	N Z	50 19						
15	iP	NEZ	11 01 46½						
15	iP	N Z	23 03 27						USCGS: 48.5N 156.8E h = 33km
	iX	N Z	03 28½						
	iX	N Z	03 33						
16	iP	NEZ	07 53 56						
16	iP	EZ	09 05 13						
16	e(P)	Z	13 14 25						
16	e(P)	Z	13 59(35)						
16	eP	Z	19 17 53						USCGS: 16.7N 94.2E h = 33km
	iX	Z	17 58						
	i(PcP)	Z	18 20						
16	iP	EZ	20 38 41						
16	e(P)	Z	21 56(22)						
16	iP	NEZ	22 55 40						USCGS: 22.8N 123.5E h = 33km
17	i(P)	NEZ	02 45 43						
17	i(P)	EZ	03 42 36½						
17	iP	NEZ	05 06 15				-		USCGS: 17.7S 178.6W h = 576km
	iX	Z	06 26						
17	iP	NEZ	05 52 37½						
	eX	NEZ	54 44						
17	iP	N Z	16 41 55						USCGS: 23.5N 121.7E h = 33km
17	iP	NEZ	18 01 48		-	-	+		USCGS: 21.0S 179.1W h = 601km
	iX	Z	01 51						
	iX	Z	01 56						
	iX	Z	02 01						
	iX	Z	02 29						
	e(pP)	Z	03 34						
	e(PP)	Z	03 38						
	iX	EZ	06 29						
	iS	NE	06 34						
	iScP	Z	06 51						
	iPcS	N	07 50						
	iScS	NE	10 55						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
SEPTEMBER (cont'd)			h. m. s.	s.				km	
17	i(P)	Z	22 25 57						
18	iPKP	NEZ	00 48 09						USCGS: 7.5N 82.3W h = 33km
	eX	Z	48 55½						
	iPP	Z	50 15						
	eL	NEZ	01 30						
18	ePKP	Z	05 32 41						USCGS: 7.3N 82.4W h = 41km
18	eP	N Z	06 18 26½						USCGS: 2.3N 126.9E h = 33km
	iX	NEZ	18 27½						
	isP	Z	18 41						
	iX	N Z	18 50						
	iPP	NEZ	20 11						
	eX	N Z	22 22						
18	iP	NEZ	20 17 23½						USCGS: 21.0S 169.9E h = 81km
	ipP	NEZ	17 40						
	iX	NEZ	17 55						
	iPcP	Z	20 43						
18	eP	EZ	21 54 16½						USCGS: 14.8S 178.1W h = 526km
	eX	N	54 37½						
	iX	Z	54 46						
18	iP	NEZ	22 11 01		−	−	+		
19	iP	NEZ	07 57 20						USCGS: 11.5N 141.0E h = 61km
	iX	N Z	57 26						
	iX	N Z	57 31						
	iPcP	EZ	58 48						
19	iP	Z	18 13 41						USCGS: 9.9S 120.5E h = 34km
	iX	EZ	13 45½						
	isP	Z	13 56						
20	iP	Z	06 27 30						USCGS: 30.3N 132.3E h = 59km
20	eP	N Z	16 45 04						USCGS: 4.7S 139.4E h = 33km
	iX	Z	45 41						
	eScP	Z	51 19						
	eX	NEZ	52 50						
	eX	E	53 36						
	eX	Z	53 51						
	iScS	Z	55 17						
	eX	E	56 10						
	eX	NE	56 47						
	iX	NEZ	57 41						
20	iP	N Z	18 13 41						
21	iP	EZ	06 08 02						USCGS: 17.6S 178.9W h = 600km
21	iP	NEZ	08 50 13			−	+		USCGS: 21.2S 179.0W h = 624km
	iX	EZ	50 56						
	iPP	Z	51 49						
21	iP	NEZ	15 01 17½		+	+	−		USCGS: 17.7S 178.7W h = 536km
	iX	EZ	01 37						
	iX	EZ	01 43						
	iX	EZ	01 48						
21	i(P)	N Z	17 09 05½						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
SEPTEMBER (cont'd)			h. m. s.	s.				km	
21	eP	NEZ	22 51(07)						USCGS: 57.7S 64.1W h = 51km
22	iP	N Z	07 03 31½		−	+	+		USCGS: 26.5N 97.0E h = 33km
	iPcP	Z	03 39						
	iX	Z	03 51						
	iX	N	04 43						
	eL	N	33						
22	iP	NEZ	15 13 38				−		
	iX	EZ	13 58½						
	iX	Z	14 03½						
	iX	NE	14 37½						
22	eP	EZ	16 10 04						USCGS: 2.5S 126.9E h = 28km
23	iP	NEZ	07 05 37				+		USCGS: 23.7S 179.9E h = 549km
	e(S)	N	10 05						
23	iPKP	Z	12 22 52						USCGS: 14.7N 45.1W h = 32km
	iX	Z	22 58						
24	no time marks								
	from		03 03 36						
	to		06 00 00						
	on 25.9.62								
25	eP	EZ	07 37 00						USCGS: 24.0S 176.6W h = 33km
25	iP	NEZ	14 58 37						USCGS: 11.7N 138.6E h = 33km
	ipP	Z	58 45½						
25	iP	NEZ	18 34 14				+		USCGS: 3.6S 128.3E h = 33km
	eX	Z	35 28						
	iPP	N Z	35 40						
26	e(P)	NEZ	02 04(38)						
26	eP	NEZ	09 03 27						
	iS	NEZ	03 48						
26	iP	EZ	11 53 48						
26	iP	NEZ	12 51 25½				−		USCGS: 27.5S 176.4W h = 33km
	ipP	Z	51 36						
	iX	N Z	52 01						
	iPcP	N Z	54 07						
	iX	Z	55 14½						
26	iP	NEZ	13 33 50						USCGS: 18.7N 145.4E h = 201km
26	iP	NEZ	17 45 57						
27	iP	NEZ	13 04 59½						USCGS: 4.6S 104.4E h = 144km
	ipP	Z	05 29						
	iPcP	EZ	06 18						
27	iX	NEZ	13 18 16						USCGS: 18.6N 121.8E h = 80km
	iX	NEZ	18 34						
27	iP	NEZ	13 31 33		+	+	−		USCGS: 17.6S 178.9W h = 507km
	iX	EZ	31 57½						
	iX	NEZ	32 29½						
	iPP	E	33 19						
	iS	NE	36 41						

Date 1962	Phase	Time (G.M.T.	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
SEPTEMBER (cont'd)		h. m. s.	s.				km	
28	iP Z	03 41 44½						USCGS: 17.5S 178.8W h = 584km
28	iPKP Z	19 15 06½						USCGS: 5.2N 76.2W h = 127km
29	iP EZ	01 32 48¼						
	iX NEZ	32 54¾						
	iX E	33 03¾						
	iX NE	33 42						
	iX Z	33 43½						
	iX N Z	33 53½						
	iX E	34 03¾						
	iX N Z	34 05½						
	iX NE	34 06						
29	iP NEZ	14 34 47						
	iX NEZ	34 55½						
29	i(P) Z	15 46 19						
	iX Z	46 33						
29	iP Z	18 12 08						
29	iP Z	20 48 24½						USCGS: 14.2S 168.2E h = 198km
30	iP N Z	06 52 48						USCGS: 13.5N 146.2E h = 94km
30	iP EZ	10 54 54						USCGS: 5.2S 152.7E h = 33km
	e(L) NEZ	11 07						
30	iP NEZ	11 04 59½				–		USCGS: 5.9S 151.0E h = 50km
	ipP N Z	05 13½						
	iX Z	05 25						
30	e(P) EZ	11 25 57						
30	iP NEZ	22 07 31½				+		USCGS: 18.6N 120.9E h = 51km
	ipP Z	07 47½						

(L.S. PRIOR)
A/CHIEF GEOPHYSICIST

COMMONWEALTH OF AUSTRALIA No.62/10

DEPARTMENT OF NATIONAL DEVELOPMENT

BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

203 Collins Street,
MELBOURNE. VIC.

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SEISMOLOGICAL BULLETIN.

TOOLANGI

Latitude: 37° 34' 17" S. Longitude: 145° 29' 26" E. Height: 604 m.

Foundation: Metamorphosed Silurian Sediments.

Instruments: Benioff Variable Reluctance Seismometers, 3 components
Seismometer periods: 1 sec.
Short period recorder
Galvanometer period: 0.2 sec. nominal
Long period recorder
Galvanometer period: 14 sec.

Date 1962	Phase	Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
OCTOBER		h. m. s.	s.				km	
1	iP NEZ	04 03 17½		+	+	-		USCGS: 17.5S 178.9W h = 550km
	iX Z	03 29½						
	iX E	03 32						
	iX Z	03 42						
	iX Z	04 34½						
	iX N	04 37½						
1	eP EZ	10 02 48						USCGS: 17.5S 167.1E h = 33km
	iX EZ	02 54						
	ipP NEZ	02 59						
	iPP NE	03 41						
	iX N Z	07 56						
	eX E	12 ..						
1	iP Z	10 05 55						USCGS: 47.3N 151.5E h = 127km
1	iP NEZ	20 49 51						USCGS: 19.6S 174.5W h = 143km
	iX EZ	50 08						
	iPP Z	51 33						
2	iP NEZ	08 42 11				-		USCGS: 17.6S 178.7W h = 616km
	iX Z	42 19½						
	iX Z	42 42						
2	iP NEZ	12 43 42						USCGS: 0.6S 122.9E h = 33km
2	iP NEZ	19 59 51						USCGS: 2.1N 126.2E h = 35km
3	iP NEZ	00 03 26						
3	iP NEZ	06 41 42						
3	iP NEZ	08 46 07						
3	iP NEZ	17 19 15						USCGS: 21.0S 168.4E h = 33km
	ipP EZ	19 24						
	iX EZ	19 42						
	iPPP Z	20 00						
3	iP EZ	19 01 26						USCGS: 57.5S 26.7W h = 33km
	epP Z	01 38						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
			h. m. s.	s.				km	
5	iP	N Z	10 48 15						USCGS: 14.0N 145.2E h = 131km
5	iP	N Z	10 55 25						
5	eP	NEZ	13 09 22						USCGS: 9.2S 160.7E h = 223km
6	eP	NEZ	04 29 15						USCGS: 17.4S 167.7E h = 33km
	ipP	NEZ	29 25						
	isP	N Z	29 31						
	iX	EZ	29 43						
	iPP	Z	30 06						
	iPPP	N Z	30 18						
	iX	NEZ	30 26						
	iX	N Z	31 11						
	iX	Z	31 56						
	eX	N Z	32 16						
	eX	Z	32 42						
	iX	N	33 09						
	iS	N	34 00						
	iX	N	35 40						
6	iP	NEZ	05 49 15				-		USCGS: 26.2N 126.9E h = 122km
6	eP	Z	07 23 02						USCGS: 17.4S 167.8E h = 33km
6	iP	Z	08 02 17						USCGS: 17.4S 167.9E h = 33km
	iX	Z	02 23						
	ipP	Z	02 28						
6	eP	Z	08 09 28						USCGS: 17.2S 168.0E h = 33km
	iX	Z	09 36						
	isP	Z	09 42						
	iX	Z	09 56						
	iPPP	Z	10 36						
	iX	N	15 49						
6	iP	NEZ	11 06 53		-	-	+		USCGS: 13.3S 167.3E h = 209km
	i(pP)	NEZ	07 29						
	iX	N Z	07 54						
6	iP	Z	11 09 54				+		
6	iP	Z	11 13 10						
6	eX	EZ	18 07 09						USCGS: 17.6S 168.0E h = 33km
6	iP	NEZ	21 37 11						
6	iP	NEZ	23 37 17		+	+	-		USCGS: 17.5S 167.6E h = 42km
	iS	NE	42 00						
	iX	N	43 39						
7	iP	NEZ	00 54 54						
	iX	Z	54 58						
8	iP	NEZ	05 25 05				+		
8	iP	EZ	17 24 39						
8	eP	NEZ	18 00 23						USCGS: 18.7S 176.8W h = 243km
8	iP	NEZ	19 00 46				-		USCGS: 10.3S 161.4E h = 79km

Date 1962	Phase		Time (G.M.T.) h. m. s.	Per. s.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ km	Remarks
8	eP	NEZ	22 07 03						USCGS: 24.3N 121.7E h = 29km
	ipP	EZ	07 12						
	iX	NEZ	07 24						
	iPcP	Z	07 31						
	eS	E	15 51						
	eX	E	16 07						
	ePS	E	16 18						
	eX	E	16 39						
	iX	N	23 15						
8	iP	Z	22 34 47½						USCGS: 24.1N 121.8E h = 39km
	ipP	Z	35 01						
	iPcP	Z	35 22						
9	iP	NEZ	20 21 22						USCGS: 3.2S 148.2E h = 33km
	ipP	NEZ	21 32						
	iX	Z	21 34						
	iX	Z	21 39						
	iX	Z	22 00						
	iX	Z	22 06						
	iPP	Z	22 49						
	iS	NE	26 54						
	eX	E	30 21						
10	iP	NEZ	09 26 38						
10	eP	EZ	10 43 07						
10	iP	N Z	11 18 52						USCGS: 10.1S 161.3E h = 34km
	ipP	Z	19 03						
10	iP	NEZ	13 41 07						USCGS: 8.9S 110.4E h = 41km
	i(sP)	Z	41 22						
	iX	EZ	41 34						
	iX	NEZ	41 43						
10	iP	NEZ	22 00 30½		+	+	−		USCGS: 15.1S 173.3W h = 33km
	ipP	EZ	00 39						
	iX	EZ	00 54						
	iX	Z	01 39						
11	eP	NEZ	06 31 57						
11	eP	EZ	16 13 15						USCGS: 24.3N 121.6E h = 32km
	ipP	N Z	13 24						
	iX	Z	13 31						
11	eP	NEZ	18 14 51						
	eX	EZ	15 03						
12	eP	EZ	01 50 55						USCGS: 33.1S 178.2W h = 37km
	isP	Z	51 08						
12	iP	Z	09 19 12						USCGS: 27.4N 129.1E h = 25km
	ePcP	Z	19 39						
12	iP	NEZ	10 55 08		−	−	+		USCGS: 17.9S 178.0W h = 600km
	iX	Z	55 40						
12	iP	NEZ	11 50 50				−		
12	iP	EZ	14 58 07						
	eX	Z	58 18						

Date 1962	Phase	Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
		h. m. s.	s.				km	
12	eP EZ	19 10 12						USCGS: 28.9S 177.1W h = 134km
	eX Z	10 33						
12	iP EZ	20 45 15						USCGS: 27.2S 178.0W h = 152km
13	iP NEZ	08 33 33			+	-		USCGS: 38.2S 175.9E h = 184km
	iX Z	33 39						
	i(pP) N Z	34 02						
13	iP NEZ	18 54 02½				-		USCGS: 12.6S 166.6E h = 33km
	isP N Z	54 17						
	iX NEZ	54 46						
	eL Z	19 04 ..						
14	ePcP Z	00 39 00						USCGS: 33.4S 179.3W h = 33km
14	iP NEZ	14 15 47						USCGS: 1.0S 127.2E h = 33km
14	eP EZ	15 20 12						USCGS: 31.8N 131.5E h = 33km
	eX N Z	20 19						
15	iP NEZ	00 31 06						USCGS: 22.1S 172.1E h = 40km
	ipP EZ	31 17						
	iX Z	31 34						
	iX Z	31 52						
15	iP NEZ	06 37 53				+		
15	iP NEZ	08 16 24						USCGS: 16.3S 173.5W h = 50km
	iX Z	16 34						
	iX N Z	16 40						
15	iP Z	17 36 53						USCGS: 28.8S 176.4W h = 40km
	esP Z	37 10						
15	iP NEZ	23 41 01½		+	-	+		USCGS: 43.5S 169.8E h = 33km
	ipP EZ	41 10½						
	iX NEZ	41 24						
	iX N Z	41 35						
	iX Z	41 37						
	iX EZ	41 50						
	iX Z	42 02½						
	eX E	44 23						
	iS NEZ	44 32						
	iX NE	44 46						
	iSS NE	45 03						
	iX N	45 54						
	e(T) NEZ	57 ..						
16	iP EZ	05 49 18						
16	iP NEZ	09 56 16		-	-	-		USCGS: 18.9S 169.4E h = 261km
	iX Z	56 29						
16	eX Z	18 16 15						USCGS: 51.6N 175.8W h = 27km
16	iP NEZ	18 52 28		-		+		
16	iP EZ	19 14 17						
18	eP Z	02 12 07						USCGS: 28.4N 97.3E h = 77km
	iX Z	12 09						

Date 1962	Phase	Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
		h. m. s.	s.				km	
18	iP NEZ	04 13 21½				-		USCGS: 8.9S 117.0E h = 33km
	iX NEZ	13 27						
	ipP NEZ	13 31½						
	iX N Z	13 37						
	iX EZ	13 49½						
	iX N Z	13 56						
	iX N Z	14 02						
	iX Z	14 05						
	iX NEZ	15 09						
	iPcP Z	15 36						
	iX Z	15 49						
	eX N Z	16 46						
	eScP Z	19 19						
	eX N	19 46						
	eScS N	23 32						
18	eP NEZ	05 31 08						
18	iP N Z	08 53 10				+		USCGS: 46.5N 149.6E h = 140km
	eX Z	53 30						
18	iP Z	20 08 42						USCGS: 16.2N 93.5W h = 179Km
18	iP NEZ	20 22 01½						
19	iP NEZ	01 41 21½						USCGS: 3.4S 129.1E h = 58km
19	iP NEZ	10 14 05						
19	iP NEZ	10 53 56				-		USCGS: 10.6N 125.2E h = 50km
	iX N Z	54 02						
	isP Z	54 14						
	iX Z	54 30						
19	eP NEZ	17 19 45						USCGS: 32.9S 179.9E h = 192km
19	eP Z	20 30 44						
19	iP NEZ	23 49 09½		+	-	-		USCGS: 5.7S 130.3E h = 177km
	iPP EZ	50 39						
	iPPP NEZ	51 01						
	iPcP N Z	51 34						
	iX Z	54 08½						
	eS NE	54 27						
	iX Z	56 20						
	iSS E	57 05						
	iX Z	57 26						
	iSSS E	57 34						
	iX Z	57 43						
	iX NEZ	58 16½						
	iScS N Z	59 06½						
	iX Z	59 23						
	iX NEZ	00 00 53						
	iX E	01 32						
20	iP EZ	03 42 00½				+		USCGS: 21.0S 178.8W h = 580km

Date 1962	Phase	Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
		h. m. s.	s.				km	
20	iP NEZ	05 37 10½		+	-	-		USCGS: 6.7S 130.1E h = 167km
	iX NEZ	37 15						
	iX N Z	37 20						
	iX EZ	37 52½						
	iX Z	38 19½						
	iPP N Z	38 28½						
	iX Z	38 42½						
	iX NE	40 19½						
	iX E	41 27						
	iX Z	44 22						
	iX EZ	44 53½						
	iX E	44 59						
	iSSS E	45 12						
	iX E	46 30						
	i(ScS) E	47 33						
21	iP EZ	08 23 34						USCGS: 20.8S 177.8W h = 469km
21	iP NEZ	12 40 13				-		USCGS; 1.5N 127.2E h = 111km
21	eP Z	15 31 26						USCGS: 10.3S 162.1E h = 33km
	ipP Z	31 36						
	isP Z	31 40						
21	iP NEZ	20 12 00						Local
	iS EZ	12 04						
	iX N Z	12 07						
21	iP EZ	23 23 32½						USCGS: 55.9S 27.8W h = 33km
22	iP NEZ	01 16 15				-		USCGS: 18.1S 177.9W h = 612km
	eX Z	16 24						
	iX Z	16 30½						
	iX N Z	17 03						
22	eP NEZ	04 41 23						USCGS: 3.4S 145.3E h = 36km
	epP Z	41 34						
	isP N Z	41 39½						
	iX Z	41 48½						
	iX E	42 02						
	iX Z	42 08						
22	iP N Z	06 55 18						
22	iP N Z	13 36 09½						
22	eP NEZ	15 36 21						USCGS: 49.8N 155.8E h = 19km
	iX Z	36 34						
	iX Z	36 41						
	iX Z	36 49½						
	eX NE	37 05½						
23	iP Z	00 33 57½						USCGS: 15.2S 173.0W h = 33km
	isP Z	34 11½						
	iX Z	34 23½						
	iX N	34 27						
23	eP N Z	10 07 04						USCGS: 18.4N 145.6E h = 150km
23	eP Z	16 22 26						USCGS: 16.9S 178.8W h = 576km
23	iP EZ	20 24 33½						USCGS: 36.7N 71.1E h = 216km

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
			h. m. s.	s.				km	
24	iP	NEZ	15 10 42						
25	eP	N Z	03 44(41)						USCGS: 17.8S 167.7E h = 33km
25	iP	NEZ	09 42 12		-		+		USCGS: 3.0N 126.7E h = 33km
	ipP	Z	42 34						
	isP	Z	42 42½						
	iPP,PcP	NEZ	43 55						
	iX	Z	44 15						
	eX	E	45 25						
	iScP	Z	47 43½						
	iX	Z	47 49						
	iS	NE	48 36						
	iScS	N	52 02						
25	iP	EZ	12 43 41						USCGS: 15.4S 179.0W h = 392km
	iX	NEZ	43 42½						
25	ePKP	EZ	16 11 28						USCGS: 8.4N 82.6W h = 51km
25	iP	NEZ	20 11 29						USCGS: 61.4S 154.9E h = 33km
	i(pP)	N Z	11 41						
	iPP	Z	12 15						
	iX	Z	12 41						
	i(S)	E	16 01						
	iX	N	16 21						
	iX	Z	16 57						
	iX	E	17 06						
	iX	N	17 34						
	iX	Z	18 25						
	iX	N	18 57						
26	eP	NEZ	07 26 14						USCGS: 17.7S 167.5E h = 33km
	iX	Z	26 26						
	iX	EZ	26 36						
	iX	N	26 43½						
	iX	Z	26 48						
	i(PP)	EZ	26 59						
	iX	Z	27 50						
	iX	Z	28 03½						
	iX	Z	29 04						
	eSSS	NE	32 34						
	eX	N	34 40						
	eX	Z	36.4						
	eScS	N	36 54						
	eX	N	38 21						
26	e(P)	Z	13 45 56						
26	eP	N Z	16 11 18						USCGS: 55.5S 26.5W h = 33km
	ipP	Z	11 28						
	iX	Z	11 38						
	iX	E	12 05						
26	iP	NEZ	20 30 45		+		-		USCGS: 0.1N 124.1E h = 112km
	iPP,PcP	Z	32 35½						
26	iP	NEZ	22 21 47						USCGS: 55.7S 26.5W h = 33km
27	iPKP	N Z	08 29 15						USCGS: 14.0N 90.4W h = 107km
	iX	EZ	29 23						
	eX	Z	29 33						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
			h. m. s.	s.				km	
27	eP	Z	22 17 56						
	eX	Z	18 09						
28	e(P)	EZ	07 34 22						
	eX	Z	34 32						
28	iP	N Z	12 16 06						USCGS: 14.8N 119.7E h = 115km
	iX	Z	16 11						
	iX	Z	16 25						
	ipP	N Z	16 32½						
28	e(P)	Z	14 07 16						USCGS: 32.3S 178.8W h = 33km
28	iP	NEZ	15 08 10		-	+	+		USCGS: 0.1N 123.6E h = 61km
	iX	X	08 42						
	iX	EZ	09 22						
	iPcP	Z	10 00½						
28	iP	NEZ	20 47 55½						
29	iP	NEZ	02 36 24½						
29	iP	NEZ	05 39 35						
29	ePKP	EZ	11 12 31						USCGS: 13.0N 88.4W h = 43km
	iX	Z	12 51						
	iX	Z	12 58½						
29	iP	Z	19 17 25						
29	eP	Z	21 14 02						
	iX	Z	14 08½						
30	eP	Z	01 58 43						USCGS: 54.2S 9.1E h = 33km
	ipP,PcP	Z	58 53						
	iX	Z	59 23						
	eX	Z	02 00 09						
30	iPKP	EZ	08 50 49						USCGS: 12.5N 88.0W h = 80km
	ipPKP	Z	51 02						
	iX	Z	51 08						
30	iP	NEZ	15 27 49						
30	iP	NEZ	15 46 43						
	e(S)	NE	53 46						
	eX	Z	16 01.3						
30	iP	EZ	16 12 09						
30	eP	Z	16 25 42						USCGS: 26.6N 93.3E h = 33km
30	iP	NEZ	19 00 51						
	e(S)	EZ	07 .16						
30	iP	NEZ	19 29 37½						
30	iP	NEZ	21 02 21½				+		
31	iP	NEZ	05 29 21½						USCGS: 5.5S 150.6E h = 46km

(L.S. PRIOR)
A/CHIEF GEOPHYSICIST

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No.62/11.

COMMONWEALTH OF AUSTRALIA

DEPARTMENT OF NATIONAL DEVELOPMENT

BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

203 Collins Street,
MELBOURNE. VIC.

SEISMOLOGICAL BULLETIN.

TOOLANGI

Latitude: 37° 34' 17" S. Longitude: 145° 29' 26" E. Height: 604m.

Foundation: Metamorphosed Silurian Sediments.

Instruments: Benioff Variable Reluctance Seismometers, 3 components
Seismometer periods: 1 sec.

Short period recorder
Galvanometer period: 0.2 sec. nominal

Long period recorder
Galvanometer period: 14 sec.

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
NOVEMBER			h. m. s.	s.				km	
1	no time marks from 00 02 00 on 1/11 to 02 00 00 on 2/11								
2	no time marks from 04 58 00 on 2/11 to 07 05 00 on 3/11								
3	iP	NEZ	14 34 11						USCGS: 15.0S 167.4E h = 134km
	ipP	Z	34 38						
	isP	Z	34 49½						
3	eP	Z	18 10(44)						USCGS: 37.6S 179.5E h = 33km
4	iP	NEZ	01 49 35						
4	iP	EZ	12 12 48						
4	iP	NEZ	19 36 31½						
4	iP	EZ	21 14 33						USCGS: 23.1S 176.5W h = 33km
4	iP	NEZ	23 06 37½						USCGS: 43.2S 75.6W h = 33km
	ipP	Z	06 48						
	eX	Z	07 00						
	iX	N Z	07 11½						
	iX	N	07 19						
	eL	E	39.0						
	eL	N Z	47.9						
5	eP	NEZ	00 18 13						
	eL	NE	26.0						
5	iP	NEZ	05 18 24						
5	eP	Z	21 05 36						USCGS: 49.8S 114.9W h = 33km
6	iP	NEZ	20 57 55½						USCGS: 10.5N 121.9E h = 33km
	isP	Z	58 11½						
	eX	Z	58 22						
6	iP	NEZ	21 33 20½						USCGS: 4.9S 152.7E h = 68km
6	iP	NEZ	22 05 01						
7	iP	NEZ	04 05 27½						USCGS: 13.3N 144.8E h = 121km

Date 1962	Phase	Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
NOVEMBER (cont'd)		h. m. s.	s.				km	
7	iP NEZ	06 21 18				+		
	iX EZ	21 32						
7	iP NEZ	06 28 08				-		USCGS: 23.2S 179.9W h = 534km
7	iP NEZ	16 10 06		+	-	-		USCGS: 7.8S 119.8E h = 156km
	iX NEZ	10 46½						
	iX NEZ	10 54½						
	iPP NEZ	11 38						
	iX NEZ	11 54						
	iS N	15 42						
	iScP NEZ	15 50						
	iX N	18 52						
	iScS E	20 08						
	eX N	20 37						
	iX Z	21 27						
7	eP Z	20 12 28						USCGS: 20.4N 122.1E h = 57km
8	iP NEZ	00 52 06				-		
	iX EZ	52 20						
8	iP NEZ	06 09 55½						
8	iP NEZ	07 54 25						USCGS: 20.1S 168.6E h = 33km
	ipP NEZ	54 35½						
	isP N	54 40						
	iX Z	54 51						
	iPP Z	55 13						
	iX N	55 30						
8	iP NEZ	10 09 24						USCGS: 14.7S 167.1E h = 86km
	iX N Z	09 38						
	esP NEZ	09 58						
8	iP Z	17 23 49½						USCGS: 31.5S 180.0 h = 71km
9	iP EZ	08 32 20½						USCGS: 20.5S 178.8W h = 522km
	eX N Z	32 34						
	iX Z	32 51						
9	iP NEZ	09 33 00						USCGS: 35.8N 140.3E h = 33km
10	iP N Z	01 45 29½						USCGS: 43.8N 147.2E h = 60km
	ipP N Z	45 45½						
	iX NEZ	45 49½						
10	iP NEZ	14 00 05						
10	iP EZ	21 20 08½						USCGS: 9.8S 123.8E h = 33km
	iX EZ	20 12						
	iX EZ	20 20						
	iX Z	20 26						
	iPP Z	21 21						
11	iP Z	06 34 16						USCGS: 18.4N 145.6E h = 135km
11	iP Z	07 49 55						USCGS: 23.9S 69.5E h = 33km
	iX Z	50 11½						
11	eP Z	10 42 36						USCGS: 23.8S 69.4E h = 33km
11	iP NEZ	12 04 11½						USCGS: 19.3S 177.6W h = 547km
11	iP NEZ	16 16 09½						USCGS: 12.9S 166.5E h = 77km
	isP EZ	16 35½						
	iX Z	16 51½						
	iS NE	21 10						
	iX N	21 30						
	iX NE	21 36						
	e(ScS) E	26 41						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
NOVEMBER (cont'd)			h. m. s.	s.				km	
11	i(P)	NEZ	16 19 04½						
	iX	N Z	19 19						
	i(S)	NE	24 05						
	iX	N	24 40						
11	iP	N Z	22 27 20½						USCGS: 43.2S 76.0W h = 33km
	iX	Z	27 38½						
	iX	N Z	28 09						
12	iP	NEZ	12 59 52				+		USCGS: 26.0N 128.4E h = 40km
	iX	NEZ	13 00 00						
	iX	N Z	00 14½						
13	iP	NEZ	00 13 24						
13	eP	Z	09 06(43)						USCGS: 42.0N 141.9E h = 61km
	isP	Z	07 08						
13	eP	EZ	13 28 28						
	iX	N Z	28 40						
	iX	EZ	28 53						
13	iP	NEZ	22 00 27						USCGS: 56.9S 29.0W h = 33km
	iPcP	N Z	00 34½						
	isP	Z	00 40						
	iX	N Z	00 52						
14	iP	NEZ	03 34 18						
14	iP	EZ	05 21 54½						USCGS: 15.4S 168.0E h = 66km
	eX	Z	22 02						
14	iP	EZ	07 30 32½						USCGS: 26.5S 176.2W h = 33km
14	iP	Z	07 59 31½				-		USCGS: 35.7N 140.8E h = 61km
	iX	N Z	59 41½						
	iX	Z	08 00 08						
	iX	N Z	00 27						
14	iP	Z	14 10 50½						
14									No record from 18 15 42 to 22 26 44 - Power failure.
15	iP	EZ	01 49 01			-	+		
15	iP	NEZ	11 36 47				-		USCGS: 21.0S 178.4W h = 590km
	iX	Z	37 04						
15	iP	NEZ	16 31 21				+		USCGS: 6.9S 146.7E h = 40km
	epP	N Z	31 34						
	isP	N Z	31 39						
	iX	N Z	31 50						
	iX	N	32 11						
	iPP	EZ	32 32						
15	iP	NEZ	23 43 58						USCGS: 8.7S 79.8W h = 45km
	ePP	Z	45 07						
16	iP	NEZ	02 26 10			+	-		USCGS: 18.0S 178.4W h = 612km
	iX	N Z	26 20½						
	iX	Z	26 29						
16	iP	NEZ	07 30 47				-		USCGS: 32.3S 111.1W h = 43km
	iPcP	NEZ	30 55						
	iX	Z	31 13						
	iX	Z	31 21						
16	iP	NEZ	10 01 46		-		+		USCGS: 19.0N 145.3E h = 207km

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
NOVEMBER (cont'd)			h. m. s.	s.				km	
16	iP	NEZ	21 21 15½						USCGS: 13.5N 93.2E h = 33km
	ipP	Z	21 25						
	isP	NEZ	21 29½						
	iX	N Z	22 18						
	iX	NE	22 36						
17	iP	NEZ	00 05 23						
	iX	NEZ	05 34						
17	e(P)	Z	00 33 12						
	eX	Z	33 40						
	iX	Z	35 03½						
17	eX	EZ	01 21 28						USCGS: 2.7S 126.9E h = 37km
	iX	Z	23 16						
17	iP	NEZ	14 29 01½				+		USCGS: 2.8N 121.7E h = 609km
	iX	Z	29 14½						
	ePcP	Z	30 26						
	iX	Z	33 21						
	iS	N	35 04						
	iX	NEZ	35 11						
18	iP	NEZ	06 50 54½				−		USCGS: 0.2S 125.1E h = 56km
	ipP	NEZ	51 10½						
	iX	EZ	51 21						
	iPP	Z	52 32½						
	iPcP	N Z	52 48						
18	eP	NEZ	12 08 01½						USCGS: 16.4S 174.1W h = 129km
	iX	N Z	08 07						
19	iP	Z	04 26 14						USCGS: 24.3N 122.6E h = 53km
	ipP	EZ	26 30						
19	iP	Z	07 35 44						
19	iP	N Z	10 25 25						USCGS: 50.0S 114.3W h = 33km
	e(pP)	N Z	25 37						
19	iP	N Z	14 04 06½						USCGS: 60.7S 152.9E h = 33km
	ipP	Z	04 14						
	isP	NEZ	04 18½						
	iX	Z	04 21						
	iX	NE	04 31½						
	eL	E	09.4						
20									No record from 01 27 00 to 07 10 00 (calibrating)
20	iP	Z	10 17 36½						USCGS: 6.1S 154.5E h = 69km
20	iP	NEZ	12 15 43¾		−	+	−		
	iS	N	15 57¾						
	iX	EZ	15 58¾						
20	iP	NEZ	13 07 51						USCGS: 1.8N 126.4E h = 109km
20/21									No record from 22 29 00 to 07 49 00 (calibrating)
21	iP	NEZ	19 46 26½						USCGS: 21.1S 179.2W h = 626km
	iX	N Z	46 40						
	eX	N Z	48 43						
21/22									No record from 22 27 30 on 21st to 05 28 00 on 22nd

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
NOVEMBER (cont'd)			h. m. s.	s.				km	
22	eP	N Z	07 43 11						USCGS: 18.2S 167.6E h = 33km
	e(pP)	EZ	43 22						
	eX	EZ	43 42						
22	iP	NEZ	08 43 21½						USCGS: 20.6S 178.5W h = 605km
22	iP	NEZ	09 10 27½						
22	iP	NEZ	20 39 12½						USCGS: 30.2S 178.6W h = 298km
	iX	N Z	39 29½						
	iX	Z	39 36						
	ipP	N Z	40 14						
23	iP	N Z	10 48 29						USCGS: 4.0S 142.3E h = 100km
23	iP	EZ	12 16 52						
23	eP	EZ	23 11 46						USCGS: 21.5S 179.3W h = 609km
	iX	Z	13 17						
24	iP	NEZ	10 39 53			+	−		USCGS: 24.8S 180.0 h = 500km
	iX	EZ	40 02½						
24	eP	Z	17 29 51						USCGS: 2.5S 148.9E h = 32km
25	iP	NEZ	10 00 26½						USCGS: 10.6N 125.2E h = 47km
	eX	NEZ	00 34½						
25	eP	N Z	15 02 21						USCGS: 5.9S 148.4E h = 33km
	eX	Z	02 29½						
26	iP	NEZ	12 41 09			+	−		
	iX	E	41 21						
26	eP	EZ	16 05 45						USCGS: 23.8S 175.8W h = 19km
	ipP	EZ	05 51½						
	eX	Z	06 07						
27	iP	NEZ	07 03 29		+		−		USCGS: 25.1N 122.9E h = 148km
	iX	EZ	03 44½						
	ipP	NEZ	04 08						
	eX	N Z	04 33						
	iX	N Z	05 45						
	iPP	N Z	05 54						
	eX	E	08 40						
27	eP	NEZ	12 17 00						USCGS: 14.9N 119.9E h = 35km
	e(pP)	NEZ	17 12						
27	eP	NEZ	16 59 17						USCGS: 12.2N 143.8E h = 33km
	e(pP)	Z	59 29						
	eX	Z	59 37						
28	iP	NEZ	02 44 38		+		−		USCGS: 12.1N 143.7E h = 33km
	i(pP)	NEZ	44 49½						
	iX	N Z	45 05						
	eX	E	45 31						
	iPcP	EZ	46 01						
	eX	E	47 06						
28	iP	NEZ	06 03 26½						USCGS: 24.3N 141.3E h = 82km
	iX	N Z	03 34						
	eX	N Z	03 51½						
	eX	E	04 17						
28	iP	NEZ	15 36 54½		−	+	+		USCGS: 9.9N 93.4E h = 53km
	eX	Z	37 02½						
28	iP	EZ	19 59 53						
	eX	EZ	20 00 00						
28	eP	NEZ	21 01 45						

Date 1962	Phase		Time (G.M.T.)	Per	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
NOVEMBER (cont'd)			h. m. s.	s.				km	
29	eP	NEZ	04 04 43						USCGS: 29.4S 177.9W h = 140km
	iX	NEZ	05 08						
	iPPP	EZ	06 10						
	iPcP	Z	07 31½						
29	e(P)	NEZ	07 37 17						
	eX	Z	37 34						
	eX	Z	38 43						
29	eP	NEZ	09 10 55						USCGS: 22.3S 175.9W h = 33km
	isP	Z	11 09						
	iX	EZ	11 19						
	eX	Z	12 35						
29	iP	EZ	11 54 53½						
29	iP	NEZ	12 53 28		+		−		USCGS: 13.9N 145.4E h = 100km
	iX	N Z	53 31						
29	eP	NEZ	19 12 33						USCGS: 17.3S 168.5E h = 33km
	iX	NEZ	12 37						
	iX	N Z	12 45						
	iX	Z	12 50						
	iX	EZ	13 02						
	iX	Z	14 24½						
	eX	N	16 02						
	iS	N	17 27½						
	eX	EZ	17 31						
	eX	Z	19 18½						
	eScP	NEZ	19 25						
	eX	N	19 33						
	e(ScS)	N	23 36						
30	eP	NEZ	05 00 03						
	eX	EZ	00 19						
30	eP	NEZ	17 01 28						USCGS: 3.2N 127.1E h = 58km
	iX	N Z	02 03						
	iPcP	NEZ	03 14½						
30	eP	N Z	23 14 15						USCGS: 5.5S 145.9E h = 79km

(L.S. PRIOR)
A/CHIEF GEOPHYSICIST.

Toolangi No.62/12.

COMMONWEALTH OF AUSTRALIA

DEPARTMENT OF NATIONAL DEVELOPMENT

BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

203 Collins Street,
MELBOURNE. VIC.

SEISMOLOGICAL BULLETIN.

TOOLANGI

Latitude: 37° 34' 17" S. Longitude: 145° 29' 26" E. Height: 604m.

Foundation: Metamorphosed Silurian Sediments.

Instruments: Benioff Variable Reluctance Seismometers, 3 components
Seismometer periods: 1 sec.
Short period recorder
Galvanometer period: 0.2 sec. nominal

Long period recorder
Galvanometer period: 14 sec.

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
DECEMBER			h. m.s.	s.				km	
1	eP	NEZ	04 23 19						USCGS: 29.7S 177.7W h = 52km
	iX	EZ	23 30						
	isP	N	23 39						
	iX	EZ	23 50						
	iX	Z	24 11						
	iX	Z	25 13						
	ePcP	Z	26 09½						
	eS	E	28 54						
1	e(P)	Z	17 43 35						
	eX	Z	43 38½						
1	iP	NEZ	21 09 12		+	+	-		USCGS: 17.7S 178.7W h = 620km
	iX	N Z	09 21						
2	eP	NEZ	05 37 05						USCGS: 9.9S 159.9E h = 34km
	eL	N Z	48.0						
2	eP	NEZ	16 18 39						USCGS: 18.9S 169.5E h = 33km
4	iP	EZ	08 44 19						
4	iP	NEZ	10 40 47						USCGS: 6.1S 149.9E h = 83km
	iX	N Z	40 55½						
	i(pP)	Z	41 03						
	eX	Z	41 22						
4	iP	NEZ	16 47 56½						USCGS: 16.5S 172.8W h = 33km
	ipP	Z	48 07½						
	iX	EZ	48 09½						
	eL	N	58.1						
4	iP	NEZ	18 00 28½						USCGS: 3.8S 131.4E h = 33km
	iX	Z	00 36						
	iX	NEZ	00 47						
4	iP	NEZ	19 39 11½						USCGS: 4.9N 122.8E h = 627km
	iX	NEZ	39 16½						
5	iP	NEZ	05 17 35				-		USCGS: 17.7S 178.6W h = 565km
	iX	N Z	17 45						
5									no record from 00 07 00 to 03 00 00
6	eP	Z	04 16 46						USCGS: 40.0N 154.3E h = 85km
	epP	Z	17 06						
6	iP	N Z	06 57 15						USCGS: 45.6S 73.4W h = 33km

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
DECEMBER (cont'd)			h. m. s.	s.				km	
6	eP	NEZ	18 02 21						USCGS: 3.7S 131.4E h = 33km
7	iP	NEZ	14 13 46½				-		USCGS: 29.2N 139.2E h = 411km
	iX	N Z	14 08						
	iPcP	Z	14 14½						
	epP	NEZ	15 18						
	iX	Z	15 23						
	iX	NEZ	15 59						
	iS	NEZ	22 05						
	iScS	E	23 06						
	isS	NE	24 47½						
	eX	E	28 53						
8	iP	NEZ	00 04 27½						USCGS: 13.9N 120.6E h = 178km
8	iP	EZ	13 55 31½						
8	iP	NEZ	18 26 22						USCGS: 15.2S 173.7W h = 33km
	isP	EZ	26 36						
	iX	NE	26 41						
	iX	Z	26 52						
	iX	Z	27 27½						
	ePPP	Z	28 32½						
	eX	N	36 25						
	eX	N	36 54						
	eL	EZ	39.0						
8	ipP	Z	21 43 14						USCGS:25.8S 63.4W h = 620km
	iPP	N Z	45 42						
	iX	N Z	45 51						
	ipPP	Z	47 35						
	eX	Z	47 42						
	eS	E	52 22						
	eSP	Z	54 22						
	eSS	E	22 00 34						
8	iP	NEZ	21 55 47¼				-		
8	iP	N Z	23 08 16½				-		USCGS: 50.5N 176.8W h = 33km
	eX	Z	08 37						
9	eP	EZ	14 22 44½						USCGS: 22.4S 177.0W h = 204km
9	iP	NEZ	17 44 14½		+		-		USCGS: 7.1S 129.1E h = 194km
	epP	EZ	44 53						
	iPP	NEZ	45 34						
	iX	N	47 05						
	eX	E	51 13						
	iSS	N Z	51 46						
	eX	Z	52 38½						
9	eP	NEZ	21 01 52½						USCGS: 17.7S 173.6W h = 60km
	eX	N Z	02 02						
10	eP	EZ	00 58 16½						Local.
10	eP	Z	01 29 16½						
10	eP	NEZ	05 06 07						Local.
10	eP	NEZ	05 07 17½						USCGS: 28.3S 62.7E h = 33km
	epP	N	07 29						
10	eP	NEZ	05 58 35½						Local.
10	eP	NEZ	06 18 15½						USCGS: 8.4S 157.4E h = 39km
10	eP	Z	06 56 09						
10	iP	NEZ	10 34 55½						

Date 1962	Phase	Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
DECEMBER (cont'd)		h. m. s.	s.				km	
10	iP EZ	17 02 35½						USCGS: 27.2S 176.8W h = 88km
	eX N Z	02 45½						
	esP N Z	03 05						
	iX N	03 23						
	ePcP N Z	05 15½						
10	eP EZ	21 55 53						
10	eP Z	23 12 36½						USCGS: 8.0S 108.6E h = 193km
11	eP EZ	02 38 30½						USCGS: 48.9S 124.6E h = 33km
	eX E	38 37½						
11	iP NEZ	14 00 47¾						USCGS: 19.7S 178.4W h = 630km
11	eP NEZ	17 58 31						USCGS: 24.8S 177.6W h = 98km
11	eP NEZ	23 41 07						USCGS: 3.5N 126.9E h = 63km
12	eP NEZ	10 15 20						USCGS: 4.8S 153.3E h = 94km
	iX N Z	15 23						
	eX N Z	15 25						
	iX N	15 29½						
	epP E	15 43						
	eX NEZ	15 52						
	esS E	15 56½						
	iX EZ	17 24½						
	iX Z	18 17						
	iX Z	18 25						
	iX N	18 30						
	eS NE	20 41						
	isS NE	21 14						
12	iP Z	14 08 51½						USCGS: 60.3S 25.9W h = 33km
12	iP NEZ	23 06 46¼		-	+	+		USCGS: 4.6N 96.5E h = 138km
	iX Z	07 00						
	eX NEZ	07 09½						
13	eP Z	00 35 50						USCGS: 7.2N 93.1E h = 33km
13	eP Z	16 53 56						USCGS: 2.8N 127.9E h = 33km
	iX Z	54 02½						
13	iP NEZ	23 30 48		-		+		USCGS: 20.4N 122.0E h = 147km
15	iP NEZ	02 44 25						USCGS: 17.3S 178.9W h = 509km
	eX EZ	44 53						
15	eP N Z	14 29 09						USCGS: 4.6S 152.1E h = 53km
	eX N	29 17						
15	eP EZ	15 34 35½						USCGS: 18.9S 177.3W h = 602km
15	iP NEZ	21 41 58¼						Local.
	iS NEZ	42 15¾						
15	iP NEZ	22 00 21¾						Local.
	iS N	00 39						
17	eP Z	02 23 00						USCGS: 4.2S 127.6E h = 33km
	eX NEZ	23 07						
17	iP NEZ	11 07 53½		+		-		USCGS: 2.1N 122.9E h = 393km
	ipP Z	09 12½						
	iPcP Z	09 28½						
	iPP NEZ	09 44½						
	iPPP N Z	10 47½						
	iScP Z	12 41						
	iS N	14 00						
	iScS N	17 05						
	iSS N	17 24½						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
DECEMBER (cont'd)			h. m. s.	s.				km	
17	eP	NEZ	12 37 35½						USCGS: 0.2N 124.3E h = 126km
	eX	NEZ	37 56½						
17	eP	Z	17 38 12						USCGS: 38.0N 106.1E h = 33km
17	iP	NEZ	22 09 42½						USCGS: 8.2S 120.5E h = 151km
	iPcP	Z	11 59½						
18	iP	NEZ	03 04 16¾		-	-	+		USCGS: 21.6N 143.1E h = 306km
	iPcP	Z	05 03						
	eX	N Z	05 49						
	iX	E	06 08						
18	iP	NEZ	05 53 44						
	iS	NEZ	54 00						
18	iP	NEZ	10 40 04½						USCGS: 28.3S 178.2W h = 214km
	i(pP)	Z	40 42						
	iPP	Z	41 26½						
	iPcP	EZ	42 49½						
18	iP	NEZ	11 35 54						USCGS: 24.7S 180.0 h = 486km
18	iP	NEZ	12 45 07						USCGS: 2.7N 129.1E h = 96km
18	iP	Z	21 03 22½						USCGS: 18.4S 176.9W h = 308km
19	eP	NEZ	11 07 54						USCGS: 31.2S 178.1W h = 28km
	i(sP)	Z	08 09						
19	eP	NEZ	13 02 52						USCGS: 4.7S 154.0E h = 98km
	isP	Z	03 27½						
	ePP	N	04 06½						
	iX	E	04 11						
	eX	E	11 51						
19	iP	NEZ	20 21 55						USCGS: 23.9S 179.4W h = 451km
20	iP	NEZ	02 07 19		+	-	-		
	iX	NEZ	07 59						
	iX	NEZ	08 40						
	iX	N	14 28½						
	iX	N	19 41½						
20	iP	N Z	08 40 03¾			+	-		USCGS: 20.0S 174.1W h = 33km
	iX	Z	40 21						
	iX	Z	40 32						
	iX	N	40 55						
20	iP	NEZ	08 53 10			-	+		USCGS: 23.4S 179.3E h = 512km
	iX	NE	53 12½						
	iX	Z	53 37						
	iX	N	54 45						
	esP	Z	55 42						
	iS	NE	57 43						
20	iP	NEZ	21 03 20½						USCGS: 13.7S 166.9E h = 166km
21	iP	NEZ	00 52 00				-		USCGS: 9.0S 112.4E h = 64km
	iX	Z	52 45						
	iX	Z	53 06						
	iPPP	NE	54 11						
	iScP	Z	57 47						
	iS	NE	58 12						
	eX	E	01 00 29						
	iX	Z	00 49						
	iSS	N	01 11						
	iX	N	02 21						
	eX	N	02 58						
	eX	N Z	06 01						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
DECEMBER (cont'd)			h. m. s.	s.				km	
21	iP	NEZ	03 38 20						USCGS: 15.4N 121.8E h = 46km
21	iP	EZ	06 53 09½						USCGS: 17.0S 173.4W h = 53km
21	eX	EZ	08 49 57						USCGS: 52.4N 168.5W h = 33km
	eP	Z	56 27						
	eX	Z	09 14 35						
	eX	E	26 05						
	iX	Z	26 10½						
	eX	E	26 18						
	eX	Z	26 35						
	eL	NE	28 ..						
21	iP	N Z	09 45 19¾		+		−		USCGS: 42.4N 142.3E h = 27km
	ipP	Z	45 39½						
	iX	Z	45 54						
	e(PP)	Z	48 34						
21	iP	NEZ	17 42 28½						USCGS: 4.6S 154.0E h = 95km
21	iP	N Z	18 30 27¾				+		USCGS: 15.3N 121.7E h = 55km
	ipP	Z	30 42						
	isP	NE	30 52						
	iPcP	Z	31 11½						
	iX	Z	31 31						
	e(PcS)	N	35 10						
22	eP	NEZ	00 57 58						USCGS: 22.0S 170.1E h = 33km
	ipP	E	58 11						
	isP	NE	58 16						
	iPP	NE	58 45½						
	iPPP	E	58 55						
	iS	NE	01 02 31						
	isS	N	02 53						
	iSSS	NE	04 05						
	eX	NE	05 51						
	eT	NEZ	01 18.6						
22	iP	NEZ	01 34 23				−		USCGS: 21.9S 170.1E h = 33km
	ePP	NE	35 09						
22	iP	NEZ	02 07 31		−	+	+		USCGS: 9.2S 112.4E h = 69km
	ipP	EZ	07 46						
	isP	NEZ	07 58						
	iX	NEZ	08 04						
	iPcP	Z	09 30½						
22	iP	NEZ	09 32 37						USCGS: 0.9N 125.8E h = 33km
	ipP	N Z	32 48						
	iPP	Z	34 17½						
	iPcP	Z	34 30½						
22	iP	NEZ	23 34 23		−		+		USCGS: 5.1S 151.2E h = 105km
	iX	Z	34 35						
	iX	NE	34 40						
	ipP	Z	34 45						
	iX	EZ	35 30						
	ePP	N	35 39						
23	iP	NEZ	10 31 38½						USCGS: 15.3N 121.7E h = 52km
	ipP	NE	31 54						
23	iP	NEZ	23 51 26¾		+	+	−		USCGS: 59.1S 26.0W h = 33km
24	iP	NEZ	00 36 19						USCGS: 36.2S 100.2W h = 33km
25	eP	NEZ	12 22 16						Local.
26	iP	NEZ	10 51 48						
	iS	N	52 01¾						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
DECEMBER (cont'd)			h. m. s.	s.				km	
26	eP	NEZ	22 38 33						USCGS: 53.9N 168.7E h = 33km
	i(pP)	Z	38 44½						
	eX	Z	42 03						
	iS	NE	49 39						
	eX	E	49 53						
	eL	E	23 05½ ..						
	eL	N Z	13 ..						
26	eP	EZ	23 38 54						USCGS: 23.9N 65.4E h = 34km
26	eP	Z	23 59 28						USCGS: 54.0N 168.8E h = 33km
27	iP	NEZ	05 48 14¼						Local.
	iS	NEZ	48 30¼						
27	eP	Z	08 34 18						USCGS: 12.5N 120.9E h = 33km
27	iP	NEZ	14 08 31½						USCGS: 4.9S 145.1E h = 35km
	eX	Z	08 51						
	iPcP	Z	11 18						
27	iP	NEZ	18 30 31½						USCGS: 39.9N 142.0E h = 36km
	iPcP	Z	30 45						
29	eiP	NEZ	04 20 09						USCGS: 2.4N 127.1E h = 33km
	iX	Z	20 26						
	iPP	N Z	21 51½						
	iX	E	22 24½						
	iX	N	22 59½						
	iScP	Z	25 44½						
29	iP	NEZ	14 53 55						USCGS: 31.2S 177.9W h = 43km
	ipP	Z	54 08						
	iX	Z	54 21½						
	ePPP	NEZ	55 18						
	iX	Z	56 06						
	iPcP	Z	56 54½						
	eX	NE	59 11						
	iScP	Z	15 00 38½						
	eX	N	01 37						
29	eP	NEZ	15 26 57						USCGS: 31.4S 177.6W h = 41km
29	eP	N Z	18 20 12						USCGS: 31.6S 177.8W h = 33km
	eX	NEZ	20 15						
	eX	NEZ	20 29						
	ePP	NEZ	21 08½						
29	iP	NEZ	18 25 55½						USCGS: 31.5S 177.6W h = 33km
	esP	Z	26 08½						
	iX	NEZ	29 34½						
29	iP	NEZ	19 46 49						
30	eP	Z	03 49 06½						
30	eP	EZ	13 29 51						USCGS: 28.2S 175.8W h = 47km
	eX	Z	29 59						
30	eP	NEZ	15 56 53						
30	eP	NEZ	17 24 22						
30	eP	EZ	17 52 45½						USCGS: 21.1S 169.3E h = 71km
	epP	EZ	53 03½						
	esP	Z	53 13½						

Date 1962	Phase	Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
DECEMBER(cont'd)		h. m. s.	s.				km	
30	eP Z	18 22 50½						USCGS: 4.7S 153.7E h = 116km
	iX N Z	22 55½						
	epP N Z	23 19						
	esP NE	23 30½						
	eX EZ	26 17						
	iX N	26 36						
	iX EZ	27 28						
	eS E	28 09						
	eX N	28 43						
	e(SSS) N	30 35						
30	eP Z	21 25 07						USCGS: 5.0N 125.8E h = 33km
31	iP NEZ	02 55 43½						USCGS: 8.1S 120.9E h = 33km
	isP EZ	55 58						
	eX Z	56 06						
	ePP Z	57 06						
	iPcP Z	58 03						
31	eP NEZ	11 10 42						USCGS: 0.1S 99.3E h = 33km
	iX NEZ	10 47½						
	iX Z	11 22						
	eX Z	12 20						
	iX N	13 49½						
31	iP Z	19 45 48				-		USCGS: 22.7S 171.4E h = 39km
	iX Z	46 21						
	iPP Z	46 30						
	eL NEZ	53½ ..						
31	eP Z	23 44 26						USCGS: 21.6S 176.8W h = 33km

(L.S. PRIOR)
A/CHIEF GEOPHYSICIST.

TELEPHONE: 7-2021

University of Queensland

DEPARTMENT OF GEOLOGY AND MINERALOGY

ST. LUCIA, BRISBANE

AUSTRALIA

15th February, 1962.

SEISMOGRAPH STATIONS PRELIMINARY SEISMOLOGICAL BULLETIN

Brisbane:

Feb.	8	i	01	45	38
	8	i	02	48	00
	8	iP	11	54	48
		iPP		55	32
		i		55	44
		i		57	08
		iS		59	16
		i		59	29
		i		04	07
	8	iP	16	45	58
		i		46	10
		i		48	54
		i(S)		49	20
	8	iP	19	50	27
	9	iP	00	18	42
		i		18	45
	9	iP	02	49	46
	9	iP	12	07	11
	9	iP	12	59	12
	9	iP	20	44	32
		i		49	43
	9	iP	21	56	16
	9	iP	21	58	40
		i		00	48
	10	iP	06	48	11
		i		48	24
		i		48	42
		e		57	38
	10	i(P)	18	15	43
		i		18	41
	10	iP	19	51	31
		i		51	46
	11	iP	02	51	52
		ipP		53	17
		iPP		54	11
		iS		59	21
		iScS		01	03
		isS		01	52
		i(SS)		03	53
	11	iP	14	01	56
	11	iP	19	00	28
		i		00	56
		iPP		01	05
		i		01	23
		iS		04	30
		isS		05	00
		i		05	05
	11	i	19	50	34
	11	iP	19	53	37
		i		53	49
	11	iP	22	46	02
		i		46	14
	12	iP	05	01	09
		i		01	29
		iPP		01	54
		iS		05	09...cont

Feb.	12	i	05	05	16
		i		05	46
	12	i	11	03	44
		i		05	38
	12	iP	13	49	39
	12	iP	19	24	30
	13	i(P)	04	36	36
	13	i	12	11	42
		i		14	07
		i		22	04
	14	iP	01	58	30
		iS		02	41
		i		03	08
	14	iP	02	17	14
	14	i	02	54	55
	14	iP	06	50	01
		i		53	51
		i		53	55
		iPP		54	08
		iPPP		56	14
		iSKS		00	32
		iS		01	35
		iPS		03	07
		iSS		08	51
		i		12	05
		e		12	09
		i		18	50
	14	iP	11	51	17
		i		51	40
		i		51	46
		i		52	57
		e		55	51
		i		58	47.

Charters Towers:

Feb.	3	iP	07	16	58
	3	iP	11	47	57
	3	iP	13	32	16
	3	iP	13	56	50
	3	i	15	36	48
	3	iP	18	58	16
	3	iP	23	22	32
	4	iP	00	14	19
		i		14	30
	4	eP	01	09	19
	4	iP	03	00	53
		i		01	05
		iPP		01	59
		i(PPP)		02	21
		iPcP		03	51
		iS		06	00
		i		09	20.
	4	e(P)	05	08	02
	4	i(P)	06	56	11
		i		56	41

Feb.	4	iP	10	42	21
	4	iP	13	03	31
	4	iP	16	20	20
	4	iP	21	49	48
		i		51	11
	4	iP	21	53	36
	4	iP	23	43	16
	5	iP	01	11	12
	5	i	01	59	55
	5	iP	02	35	10
	5	iP	04	48	33
		i		48	38
	5	iP	05	14	11
	5	iP	07	06	01
	5	i	08	17	37
	5	i	17	05	48
		i		06	13
	5	iP	19	39	14
		i		45	53
	5	i	21	02	33
	5	iP	23	05	18
		i		05	48
	6	iP	01	02	06
	6	iP	02	04	56
		i		05	08
	6	i	04	54	58
		i		55	01
	6	i	07	18	37
		i		20	20
	6	i	08	43	15
	6	i	09	40	38
	6	iP	18	07	07
	6	iP	18	38	45
		i		39	52
	6	iP	20	43	16
		iPP		43	29
		i		46	17
		i		48	50
	6	iP	20	58	06
	6	iP	23	21	26
	7	iP	00	45	52
	7	iP	03	34	08
	7	i(P)	14	55	50
	7	e	16	15	46
	7	iP	17	32	20
	8	iP	01	34	18
		i		39	56
	8	i(P)	11	30	34
	8	iP	11	53	12
		i		53	22
		iS		54	10
		i		56	32
		i		57	00
		i		57	25
		e		08	59../2

Charters Towers: (cont...)

Feb.	8	e	14	40	19
		i		40	33
	8	iP	16	46	51
		i		46	57
		i		46	58
	8	iP	19	49	26
		i		49	33
		iPcP		50	43
		iPcS		54	36
		iS		56	38
	8	iP	22	54	10
		i		59	19
		i		59	28
	9	iP	00	18	50
	9	e(P)	01	01	28
	9	iP	03	12	04
	9	e	03	15	49
		i		16	12
	9	iP	03	45	50
	9	e	04	17	51
	9	iP	04	24	06
	9	i	04	54	52
	9	i	06	25	31
	9	i!		25	33.

Seismograms read by: J.P. Webb,
P.J. Gaffy.

O.A. JONES

Director, University of Queensland,

Seismological Stations.

Copied MS.

COMMONWEALTH OF AUSTRALIA

DEPARTMENT OF NATIONAL DEVELOPMENT

BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

203 Collins Street,
MELBOURNE. VIC.

FINAL SEISMOLOGICAL BULLETIN 1962.

WILKES STATION, ANTARCTICA

Latitude: 66° 15' S. Longitude: 110° 35' E.

Height: 12 metres above M.S.L.

Foundation: Gneiss

Instruments: Lehner and Griffith Long Period Seismograph System.
Seismometer periods: 15 Sec.
...ods: (Nominal) 90 Sec.
(Nominal) 4200 at 25 Sec.
Lehner and Griffith NEZ

...od Vertical Seismograph
...l: 1.4 Sec.
...od: 1.0 Sec.
Uncalibrated

Buromin

Reference 413
Jan - Dec 1962.

Epicentres given in remarks are from USCGS cards unless otherwise stated.

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
JANUARY			h. m. s.	s.				km	
16	iP	Z	11 45 10						USCGS: Kermadec. M = 6½
	iS	Z	52 32						
	iPS	Z	52 54						
16	eL(r)	Z	19 16 ..						USCGS: Mid-Atlantic Ocean.
17	eL	Z	13 52.6						
17	eL	Z	16 10.6						USCGS: Molucca Passage. H = 15 29 06.6
23	e(SS)	N	18 12.8						USCGS: Italy. Felt.
	eX	E	13.5						
	eX	Z	15.2						
25	e(L)	NEZ	01 10.0						
	eX	NE	18.5						
26	eL	N Z	09 26.0						
28	iP	N Z	05 51 14						USCGS: Tonga. M = 6¼
	eS	N	06 00 20						
	eLr	Z	12 49						
30	iX	Z	09 17 31						USCGS: Near Coast of Nicaragua ?
	eLr	NEZ	34.4						
30	i(P)	Z	18 41 06						USCGS: New Hebrides Is. Region. h about 79km
	eX	E	49(07)						
	eLr	EZ	59 ..						
FEBRUARY									
1	iP	Z	00 49 21						USCGS: Kermadec.
	iS	NE	56 58						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
FEBRUARY (cont'd)			h. m. s.	s.				km	
3	iP	NEZ	00 48 53						USCGS: North of New Guinea.
	iS	NE	57 50						
	i(SP)	Z	58 04						
	iG	NE	01 05 25						
	M	EZ	16 ..						
4	eS	E	03 13 35						USCGS: Celebes.
4	eL	Z	12 36.2						
4	eL ?	E	21 13						Instruments unstable due blizzard.
	eL	Z	21 20						
8	iX	N	12 00 55						Obscured by record change.
	iX	Z	12 09 00						
8	eL	N	20 11.5						
11	iP	NEZ	19 06 24		-	-	+		USCGS: New Ireland Region.
	iS	NE	15 19						M = 6 h about 100km
	iSP	NEZ	15 44						
	iSS	NEZ	19 32						
	eG	N Z	23 00						
	M	N Z	29.0						
	M	NEZ	35.1						
14	iP !	N Z	06 47 46	20	+		+		USCGS: Near coast of Chile.
	iX	E	47 49						M = $7\frac{1}{4}$ - $7\frac{1}{2}$
	iX	Z	48 16						
	eX	Z	50 51						
	iX	Z	50 08						
	iX	N	50 34						
	iX	N	52 32						
	iS	NE	57 30						
	iX	NE	58 30						
	eSS	NE	07 02 28						
	mG	N Z	07.0						
14	eL	Z	23 09.0						
15	eLr	NEZ	10 15.0						USCGS: Prince Edward Is. Region.
15	eLr	NEZ	15 58.4						USCGS: New Ireland Region h about 109km
17	iX	EZ	03 51 56						
	i(S)	N	52 53						
	iX	E	53 00						
	iX	Z	53 20						
	i(SS)	N	53 39						
	e(ScP)	Z	56 22						
	iX	E	56 43						
	iL	Z	57 32						
	eL	E	57 50						
18	eL	NEZ	18 24						
20	eLq	N Z	20 19.0						USCGS: South of Australia.
20	eX ?	N	22 30.0						USCGS: Northern Burma
	eLr	N Z	45.1						
22	eL	NE	06 08.5						
	eL	Z	13.6						
23	eLr	N Z	18 40.8						USCGS: New Ireland.
23	e(S)	E	20 41(32)						USCGS: New Britain : Felt.
	eL	N Z	56 20						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
FEBRUARY (cont'd)			h. m. s.	s.				km	
26	eLr	Z	09 15.8						USCGS: Northern Celebes.
27	iP	N Z	12 52 34						USCGS: Near coast of Central Chile.
	iS	NEZ	13 02 16						
	eX	N	06 56						M = 6 - 6½
	eSS	E	07 16						
	eSSS	EZ	10 26						
MARCH									
1	eL	Z	07 37.5						
1	eP	Z	23 51 52						USCGS: Samoa Is.
	i(S)	NE	00 00 49						M = 6
	i(ScS)	E	01 56						
	eSS	N	04 54						
	iL	N Z	08 21						
2	iX ?	N	01 47 47						
2	i(PcP)	Z	13 14 41						USCGS: Off South coast of Mindanao.
	iS	E	23 44						
	iX	N	23 57						
3	eP	Z	12 25 48						Small surface waves.
	i(S)	NE	35 55						
5	iS	NE(Z)	06 53 15						Deep ?
	eL	Z	07 14.4						
5	eL	NEZ	07 56.0						
5	eX	Z	08 42 15						
5	eP ?	Z	09 07 15						
	eL	NEZ	09 12.5						
5	i(P)	Z	10 24 56						USCGS: South Sandwich Is.
	i(S)	(N)E(Z)	32 25						
	iSS	(N) Z	36 19						
	eLq	E	37 57						
	eX	NE	38 27						
	eLr	NEZ	40.6						
5	eL	Z	16 20						
5	eL	E	41.6						
	eL	Z	17 45.3						
5	eX	EZ	22 05.1						Surface waves arrive until about 03 Z on 6th.
6	eL	EZ	03 00.5						
6	eL	E	53.5						
	eL	Z	03 55.1						
6	eX	E	18.9						USCGS: Andaman Is.
	eL	Z	06 22.2						
	eLr	N Z	33.4						
6	eL	Z	12 34.4						
	eL	Z	42.5						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
MARCH (cont'd)			h. m. s.	s.				km	
7	iP	Z	11 12(53)						USCGS: Mariana Is.
	ipP	Z	15 09						M = 6 - 7
	iX	Z	19 23						
	iSKS	NE	22 14						
	iS	N Z	22 43						
	iX	E	23 48						
	iSP	NEZ	23 52						
	i(PS)	N	25 33						
	iX	N	26 52						
	eX	E	27 26						
8	eL	E	21 18.4						USCGS: Congo or off Southern Chile.
	iL	E	21 52						
	e(L)	N Z	22 02						
8	eL	N	22 14						
	eL	EZ	15.4						
	iL	Z	18 56						
9	i(S)	E	22 26(53)						USCGS: Near East coast of New Guinea.
	iX	N	26 55						
	eX	Z	26 56						h about 76km
	M	Z	44.6						
10	eL	Z	01 25 39						
10	eLr	N Z	03 34.2						USCGS: Sumatra.
10	eLr	Z	12 40.3						USCGS: Santa Cruz Islands.
10	e ?	Z	22 45.1						
	eX	Z	50 19						
	iL	N	54 55						
11	iP	N Z	19 30 55						USCGS: Near East coast of Mindanao.
	iX	N Z	34 10						
	eS	NE	40 28						
	iSS	NE	45 40						
	M	Z	20 01						
12	eL	(N) Z	10 44.3						
12	eP diff. ?	Z	11 55 46						
	iPP	Z	12 00 40					+	
	iX	Z	16 49						E off paper: record change 1209½ until 1214½
	eX	E	17 38						
	eX	N Z	17 47						USCGS: Near South coasts of Panama and Costa Rica.
	eSSS	N Z	21 15						M = 6¼ - 6¾ h about 58km
	iX	Z	24 32						
	eX	Z	26 00						
	eL	E	30.1						
	eLr	N	37.0						
	eLr	Z	38.1						
	M	N Z	47.9						
16	eS ?	N	20 01 52						USCGS: Santa Cruz.
	eL	N Z	20 17.9						
17	ePP	Z	21 08 02						USCGS: N. Atlantic.
	eSKS	N	13 27						
	eX	Z	14 37						
	iX	Z	15 44						
	eX	N	17 39						
	iPS ?	Z	18 10						
	iX	N Z	19 20						
	eX	E	23 55						
	eSS	N Z	24 45						

Date 1962	Phase		Time (G.M.T.)	Per	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
MARCH	(cont'd)		h. m. s.						
17	eX	E	21 23 55						
	iL(G)	N(E)	38 01						
	G max	NE	40.9						
	iL	N	50 34						
	M	Z	57						
	G_2	NE	22 29.4						
18	eS	N	03 24 56						USCGS: New Hebrides: Felt.
	e(SS)	NE	29 00						
	eLq	N	32 47						
	eLr	Z	35.1						
18	eL	EZ	16 37.4						
18	eL	Z	17 42.2						
19	iP	EZ	04 53 56			−	+		About 900 miles South of Tasmania.
	iS	N Z	57 34						
	eL	Z	58.4						
	M	EZ	05 00.2						
19	e?	N	06 05 48						USCGS: Minahossa Peninsula Celebes.
	eX	EZ	13 52						
	iX	N	13 56						
	iX	N	14 59						
	iX	E	22 28						
	eX	N Z	26 12						
20	eL	Z	04 58.6						
20	eL	Z	11 38.2						
21	eLr	Z	02 57.4						USCGS: Loyalty Is.
21	iP	N Z	23 07 04		−		+		USCGS: Java Sea
	eScP	Z	10 43						
	iS	NEZ	14 30		+	−	+		
	iScS	NE	15 54						
	eSS	N	17 53						
22	iP	NEZ	00 28 57				−		USCGS: Java Sea.
	esP	N Z	31 41						
	eS	Z	36 21						
	iSP?	N Z	36 25				+		
	esS	NE	39 43						
	eX	Z	43.3						
22	iP	NEZ	15 23 56				+		USCGS: North New Guinea $M = 5\frac{3}{4}$
	iS	NE	32 48						
	iPS	E	33 54						
	eSS	NE	36.6			−			
	i(SS)	Z	37 33						
	iG	NE	40 20						
	M_1	N Z	53.0						
	M_2	N Z	59.5						
24	iP	Z	13 10 04				−		USCGS: Near North Coast of New Guinea h about 111km
	i(pP)	Z	10 25						
	i(PcP)	E	10 30						
	i(ScP)	(N)Z	14 31						
	eS	NEZ	18 32						
	iX	NE	18 39						
25	eL	Z	14 46.8						
26	eLr	Z	12 53 13						USCGS: Mid Atlantic Ocean.
26	iP	Z	16 44 14				+		USCGS: South Chile Coast.
	eX	N	(42)						
	eX	Z	58(50)						
	iS	E	56						
	eSS	N	58 33						
	eX	E	41						
	i(G)	N Z	17 02 29						
	M	EZ	20.0						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
MARCH (cont'd)			h. m. s.	s.				km	
28	eLr	(N) Z	04 36.9						USCGS: Near South coast of Sumatra.
29	e(S)	N	20 28 45						USCGS: Halmahera.
	eX	EZ	28 53						
	eX	Z	33.3						
	eX	E	35 56						
	eL	N Z	40.3						
31	ePS	E	08 06 35						USCGS: Negros Island. Philippines.
	eLq	E	16.9						
	eLr	Z	20.8						
APRIL									
1	eLr	Z	01 43.8						USCGS: East Iran.
1	eP	Z	12 22 03						USCGS: Near North Coast of New Guinea. h about 80 km
	eX	N	30 50						
	iSP	N Z	30 57						
	(i)ScS	N(E)	31 43						
	eG	E	37.8						
	eG	N	38.1						
	eL	Z	42.9						
3	iS	N	16 44 31						USCGS: Santa Cruz Is.Region. M = $5\frac{1}{2}$
	e(ScS)	E	45 10						
	eLq	N	51 54						
4	eLr	Z	15 04.6						USCGS: Near South Coasts of Panama and Costa Rica.
5	eLr	N	12 58.7						USCGS: Near Coast of Southern Chile.
6	eLr	N	17 24.6						USCGS: Easter Island Region.
7	e(P)	Z	06 33 56						USCGS: Caroline Island M = 6
	i(S)	EZ	43 49						
	iX	Z	45 49						
	eX	N	48 49						
	i(SS)	E	48 54						
	eL	NE	54.3						
12	e(PP)	N	01 11 48						USCGS: Near East Coast of Honshu, Japan. h about 68km M = $6\frac{3}{4}$ - $7\frac{1}{4}$
	iX	NE	19 07						
	iX	N	26 11						
	iSS	E	26 25						
	iX	Z	26 33						
	Max.	Z	52.8						Confused by heavy microseisms and drift.
16	eL	N Z	14 07.6						
16	eLr	Z	18 14.6						USCGS: Prince Edward Island.
17	eL	N	18 04.0						USCGS: South Island of New Zealand.
18	eX	N	19 39 28						USCGS: Off coast of Peru.
	eX	N	42 07						
	eX	E	46 50						
	eX	N	47 45						
	eX	Z	50 09						
	eLr	N	20 03 42						
	iX	E	06 06						
	Max.	N Z	11.1						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	△	Remarks
APRIL (continued)			h. m. s.	s.				km	
19	eP	Z	22 25(21)						USCGS: New Hebrides.
	iS	NE	33 38						h about 213km Felt.
	e(Lr)	NEZ	40.9						
20	eL	Z	00 35.8						
20	iPKP	Z	06 07 13				+		USCGS: Near North Coast of
	iPP	N Z	09 42						Haiti.
	iPKS	NE	10 44						M = 6 - 7
	iX	E	10 49						
	iSKKS	N	16 31						
	iSKSP	N Z	19 42						
	iSP	Z	20 06						
20	e(SPP)	Z	06 21 38						
	iPPS	N	21 45						
	eScS,PKP	Z	22 55						
	eSS	N	27 08						
	eSSS	N	32 11						
	eLq	E	45.3						
	eLr	N Z	53						
22	eLr	N Z	05 46.0						USCGS: Near Coast of Chiapas, Mexico. M = $5\frac{1}{4}$ - $5\frac{1}{2}$
23	eP diff.	Z	06 12 46						USCGS: Hokkaido, Japan.
	ePKP	Z	16 44						M = 7 - $7\frac{1}{4}$
	iPP	NEZ	17 24						
	ePPP	(N)Z	19 51						
	iSKS	NE(Z)	23 19						
	$iSKS_2$	E	23 52						
	i(SP)	(N)Z	26 37						
	i(PS)	E	26 48						
	e(PSP)	Z	28.0						
	e(SS)	NEZ	32.6						
	iX	E	44 37						
	eLr	N Z	50.7						
	M	N Z	52.0						
	eLr_2	NEZ	07 55.0						
	M_2	N Z	58.0						
25	ePP	Z	16 05 32						USCGS: Honshu.
	e(PS	(N)Z	15 32						
	iSS	NE	20 54						
	eX	Z	21.1						
	eX	E	28 27						
	eX	E	32.1						
	eX	Z	37.6						
27	iP	V	06 58 38						USCGS: Southern Chile.
	eX	E V	07 07 47						V is Grenet short period vertical. Time on V is uncertain.
30	eX	N(E)	03 00.0						
30	eP	V	16 27 39						USCGS: Tonga Island.
	e(pP)	NE	27 53						
	iS	NE	36 32						
	eSS	E	41.0						
	eLq	N Z	44.2						
	M	Z	50.6						
30.	iP	V	18 56 59						
	iX	NE	09 41						
	eX	Z	03 21						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	△	Remarks
APRIL (continued)			h. m. s.	s.				km	
30	eP	V	20 51 15						USCGS: Banda Sea.
30	eX	V	23 44 18						
	iX	V	44 33						
MAY									
1	iX	V	06 49 49						
	iX	V	50 03						
	iX	V	50 06						
1	eX	V	17 52 49						
1	eX	V	18 15 07						
1	eP	V	19 29 25						
2	eX	V	02 13 56						
2	eX	V	03 04 40						
2	iP	ZV	09 09 14						USCGS: JuJuy Province,
	eX	V	09 18						Argentina.
	iSS	N	25 54						
2	eX	V	09 56 30						USCGS: South of Fiji Is.
2	eX	V	10 40 19						
	iX	V	40 30						
2	eP	V	20 15 05						
	iX	V	15 09.5						
	iX	V	15 58						
2	eP	V	22 18 16						
	iX	V	18 31						
3	eP	ZV	03 43 54.5						USCGS: Sandwich Island
	iX	V	44 14						Region.
	ePP	N ZV	45 47						M = $5\frac{3}{4}$ - 6
	i(S)	NEZ	51 16						
	iSS	N	54 40						
	eLq	E	56.3						
	eLr	Z	58.5						
	M	Z	04 04.3						
3	eX	V	11 34 27						
3	eX	V	14 32 22						Possible as typical disturbance.
3	eP	V	17 09 35						USCGS: South Sandwich
	eL	N	28.8						
3	eX	V	20 26 38						
3	eX	V	21 20 30						
3	eX	V	23 29 53						
4	iX	V	00 19 18						
4	eX	V	01 52 55						
4	eX	V	02 27 46						
4	eX	V	02 44 26						
4	eX	V	03 01 35						
4	eX	V	09 12 23						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	△	Remarks
MAY (continued)			h. m. s.	s.				km	
5	eL	Z	00 08 13						
5	eX	V	13 31 25						
5	eX	V	16 36 07						
5	eX	V	20 31 21						
	iX	V	31 30						
5	eP	V	23 15 21						USCGS: Kermadec.
	eLr	Z	31.9						
6	e(P)	V	03 22 43						USCGS: South Pacific, 3000 miles South East of New Zealand.
	M_2		42.9						
6	eP	V	03 42 39						USCGS: South Pacific, 2300 miles South East of New Zealand.
	i(S)	N	49 53						
	eL	N(E)	53.7						
	M	Z	04 03						
6	iP	NEZ	19 09 17				-		USCGS: Sandwich Island, Region. M = $6\frac{3}{4}$ - 7
	iPP	N Z	11 14						
	iS	Z	16 22						
	iPS	N	16 33						
	iPS	E	16 37						
	eSS	NE	20.0						
	M	Z	28.9						
	M_2	Z	21 44.0						
6	iPS	N	22 10 08						USCGS: Sandwich Island Region.
	eL	N Z	16.0						
7	eP	Z	17 59 18						USCGS: Kurile Island. M = 6 - 7
	ePP	N V	59 27						
	iX	E	18 08 47						
	e(SP)	N	09 16						
	eX	Z	10.0						
	e(SS)	NEZ	15.4						
	iX	E	24 20						
	i(G)	N	27 24						
	eL	N Z	34.0						
7	i(P)	V	19 12 31				-		USCGS: Sandwich Island.
	eX	Z	23 57						
	M	N Z	32.7						
8	i(P)	V	07 04 11						
10	iP	V	00 23 14				-		
10	iP	EZV	00 34 57			-	+		USCGS: South Island of New Zealand. h about 54km
	e(PcS)	E	40 15						
	i(S)	NE	41 08						
	eL	NE	44.0						
10	iX	V	04 39 03						
	eL	Z	04 51.7						
10	eLr	Z	06 14.2						USCGS: Fox Islands, Aleutians
11	eX	V	04 38 00						
11	eL	Z	05 27.5						USCGS: New Guinea.
11	iX	V	06 45 39						
11	eL	Z	07 40.6						USCGS: Near North Coast of New Guinea.

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
MAY (continued)			h. m. s.	s.				km	
11	ePKP	V	14 30 58						USCGS: Near Coast of Mexico. M = 7 - 7¼
	iPP	(N)EZV	32 57						
	iSKP	(E)Z	34 09						
	iPKS	NE	34 17						
	i(SKS)	N Z	37 38						
	e(SKS)	NE	38 01						
	e(SKKS)	NE	39 47						
	iPS	Z	39 51						
	i(PSP)	E	43 00						
	i(PPS)	N	44 36						
	i(PPS)	E	44 44						
	iSKKS	N Z	47 41						Long path.
	eSS	N	49.2						
	eSS	E	49 44						
	e(PKP,SKS)	NE	52 40						
	iSSS	NE	54 36						
	eSSSS	N	58 18						
12	eX	V	12 42 26						
	iX	V	42 59						
12	eX	V	19 45 04						
12	eX	V	20 57 53						
	eX	V	58 31						
13	i(P)	V	10 51 12						
	iX	V	51 25						
13	iX	V	14 30 41						
	eL	Z	35 26						
13	eX	V	20 33 23						
13	eP	V	01 32 37						
15	eL	Z	01 10.6						
15	i(P)	V	02 27 03						
15	eX	V	02 58 17						
	iX	V	58 43						
15	iP	Z	05 33 51		-	(-)	+		USCGS: Banda Sea. M = 7 - 7¼
	ipP	V	34 02						
	iX	N	34 14						
	i(PcP)	V	34 46						
	iPP	N Z	36 00						
	iX	E	38 00						
	iX	V	41 36						
	iX	N	41 50						
	iS	V	41 57						
	M	Z	59.0						
	ePKP,PKP	V	06 03(20)						
15	iP	V	06 53 07						USCGS: Banda Sea.
15	iP	V	10 05 22						USCGS: Banda Sea.
15	eS	N	17 12.0						USCGS: Banda Sea.
	eL	NEZ	22.2						
16	eLr	Z	05 47.6						USCGS: New Hebrides.
16	eP	V	17 43 42						USCGS: New Hebrides.
	eLr	N Z	18 03.4						
17	iP	V	02 27 36						USCGS: Near Coast of South Island, New Zealand.
	isP	V	27 56						
	eL	N	39.5						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
MAY(continued)			h. m. s.	s.				km	
17	eX	V	02 51 23						USCGS: South Pacific Ocean.
17	eP	V	04 17 20						
	eLr	NEZ	32.1						
17	eiP	V	16 10 04						USCGS: Sandwich Island.
	eLr	NE	26.7						h about 23 km
17	iX	V	17 09 46						
	iX	V	09 59						
17	iX	V	21 28 00						
18	eL	N	23 12.0						
19	(eP diff.)	Z	15 14 09						USCGS: Near Coast of Mexico.
	iPKP	Z	17 16						M = 7 - 7¼ h about 20km
	eX	E	18 56						
	iPP	N Z	19 19						
	iX	Z	19 47						
	eX	Z	20 32						
	iX	N	20 36						
	iX	Z	21 30						
	eSKS	NE	24 24						
	iSKKS	NE	26 06						
	iX	N	28 53						
	iPS	E	29 17						
	iX	Z	29 28						
	eX	E	30 37						
	eX	N Z	30 47						
	eX	N Z	30 53						
	eX	N	34 04						
	iSS	NE	36 31						
19	iSSS	NE	15 39 02						
	eX	N	40 59						
	eSSSS	N(E)	44 48						
19	eX	V	16 59 56						
19	iX	V	19 36 52						
20	eX	V	04 00 43						
	iX	V	01 01						
20	eX	V	17 39 05						
20	eX	V	23 36 15						
21	iP diff.	Z	12 16 57				(-)		USCGS: Chinghai Province.
	iPP	N Z	21 10						M = 6½ - 7½
	iSKS	N	27 31						
	eScS	E	28 36						
	esP	N	29 45						
	isP	Z	30 11						
	isP	E	30 28						
	iPPS	N Z	31 19						
	eSS	E	35 49						
	iSS	Z	35 59						
	iSS	N	36 07						
	e(SSS)	Z	39 57						
	eX	Z	43 09						
	eLq	E	46.0						
	eLr	N Z	53.0						
	M		13 02.5						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
MAY (continued)			h. m. s.	s.				km	
21	iP	Z	21 25 34			+	-		USCGS: Fiji Is. h about 379km.
	i(pP)	Z	26 20						
	i(sP)	EZ	27 09						
	iS	NE	33 37						
	e(SP)	Z	33 48						
	e(sS)	N	35 08						
22	e(S)	NE	04 55 35						
	eL	NE	58 43						
	iX	Z	59 30						
	M	NE	05 02.8						
22	iP	NEZ	08 17 09		-	-	+		USCGS: Santa Cruz. h about 151km.
	i(pP)	Z	17 36						
	e(sP)	N	17 52						
	eS	N(E)Z	25 40						
	e(sS)	N	26 20						
	e(ScS)	N	27 10						
	eX	Z	27 18						
	eSS	E	30.1						
	M	Z	38.1						
22	eX	V	16 05 32						USCGS: New Britain. h about 100km
22	e(P)	V	22 14 29						
	eX	Z	15 46						
	e(S)	(N)E(Z)	23 07						
	M_1	Z	41.3						
	M_2	Z	43.1						
23	iP	V	08 28 22.5						USCGS: Kermadec. h about 363km
23	iP	V	20 52 24						USCGS: About 1200 miles South of Australia. H = 20 48 03.3
	eL	N Z	56 41						
23	eP	N Z	21 08 29						USCGS: About 1200 miles South of Australia. H = 21 04 19.1
	iPP	V	08 31						
	eL	N	12 37						
	eL	Z	12 44						
24	iX	V	02 35 52						
	iX	V	36 06						
	eL	Z	46.0						
24	eX	V	03 00 10						USCGS: Tonga. h about 281 km
25	iP	V	04 30 14						
	eScS	N	39 06						
26	iP	V	10 01 53						
	eL	N	24.8						
27	eP	V	13 28 12						USCGS: Kerguelen.
27	iP	V	14 39 12						
	eL	N	45.5						
27	eP	V	16 38 46						
	iX	V	39 02						
27	eX	V	23 30(39)						USCGS: Bismarck Sea.
28	eL M	N	03 45.5						
28	eX	V	08 37 36						
	iX	V	37 51						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
MAY (continued)			h. m. s.	s.				km	
29	eL	Z	00 42.2						
29	eLr	Z	22 31.5						USCGS: Easter Island Region.
30	eLr	Z	11 11.1						USCGS: North Atlantic Ocean. M = 5
31	iP	ZV	06 41 04						USCGS: Volcano Islands Region.
	ipP	V	42 08						M = 6½ h about 257km
	iSKS	NE	51 10						
	iSP	NEZ	52 45						
	iSS	E	57 47						
31	eiP	V	08 46 56						USCGS: Kermadec.
	eL	N	09 07.6						
31	iP	V	21 30 51						
	ipP	V	31 02						
JUNE									
2	eiP	V	13 30 47						
	iX	V	31 02						
2	iX	V	17 28 21						USCGS: Kyushu.
	iP	V	28 35						
	eSS	N	46 40						
3	i(P)	V	04 29 43						
3	eP	V	07 40 52						
3	iPKP	V	15 21 36						USCGS: North Atlantic Ocean.
	ePP	V	24(27)						
	eLr	EZ	16 04.8						
3	eL	Z	20 35.7						
4	e(P)	V	02 41 26						
	i(pP)	V	41 40						
4	e?	V	04 13 40						
4	e ?	V	20 04 22						
	eX	V	05 43						
5	iP	V	13 30 08						
5	iP	V	16 53 43						
	ipP	V	53 59						USCGS: Banda Sea.
	eG	E	17 08 07						h about 124km
5	iP	V	19 31 14						
	iX	V	31 20						
	iX	V	31 34						
5	eX	V	20 59 32						
6	eX	V	15 47 44						
	iX	V	48 16						
	iX	EZ	49 35						
8	eX	V	01 39 46						
8	iP	V	01 41 48			–			USCGS: Fiji Island.
									h about 603km
8	e(PP)	V	19 29 17						USCGS: Timor Sea

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
JUNE (continued)			h. m. s.	s.				km	
8	iP	V	20 58 43				-		USCGS: Sandwich Island.
	i(pP)	V	58 53						
	eLr	NE	21 14.7						
	eL	Z	18.0						
10	eL	EZ	13 45.1						
10	eL	EZ	16 44.1						
11	i(P)	V	06 17 20						
	i(pP)	V	17 34						
11	eLr	Z	08 17.5						USCGS: Yugoslavia. M = 5 - 5¼
11	eL	Z	18 47.2						
13	i(P)	V	18 18 40						
	i(pP)	V	18 53						
14	eX	V	08 11 24						
	eX	V	15 33						
	eX	NE	30 27						
	e(G)	N	44.0						
	eL	N Z	52.3						
14	eX	V	22 27 37						
15	i(P)	V	06 43 50						USCGS: Near Coast of Northern Chile. M = 5
	e(S)	V	55 00						
16	iP	V	06 38 06				+		USCGS: Celebes Region. h about 177km
16	eX	V	15 30 38						
16	e ?	V	20 31 33						
	iX	V	31 56						
17	iP	V	04 35 48						USCGS: Indian Ocean. North of Crozet Island.
	iX	V	36 01						
	e(S)	EZ	42 20						
	eL	N	45.8						
	eLr	Z	47.7						
17	iP	V	06 04 15						
	iX	V	04 28						
17	e(P)	V	13 33 07						USCGS: Santa Cruz. h about 106km
	iX	V	33 14						
18	eP	V	21 17 14						
18	iP !	ZV	23 53 24				+		USCGS: New Britain Region. M = 6¾ h about 47km
	i(pP)	V	53 43						
	iX	V	54 09						
	eX	V	55 07						
	iS	E	00 02 10						
	iX	N	02 21						
	iX	N	02 54						
21	eLq	E	05 32.9	54					USCGS: South of Panama. M = 6¼
	eLr	N Z	43.0						
21	M	N Z	23 25.0						USCGS: Tanimbar Island.
23	iP	ZV	09 57 47						USCGS: Ryukyu. M = 5¾
	iPP	Z	10 01 29						
	iSKS	N	08 17						
	iX	V	11 20						
	iLq	E	21 33						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
JUNE (continued)			h. m. s.	s.				km	
23	M	N	15 49.7						USCGS: Near Coast of Chile. Felt.
24	M	Z	02 08						USCGS: Yunnan, China.
25	M	N	07 07						USCGS: Chile.
25	iP	V	11 23 28				-		USCGS: Off Coast of Formosa. $M = 5\frac{1}{2} - 5\frac{3}{4}$
	ipP	V	23 41						
	e(S)	N	33 51						
	iX	EZ	34 09						
	eX	N Z	35 21						
	eSS	N(Z)	39.8						
27	iP	V	03 40 41						
	eX	N	49.4						
	eL	N	04 03.0						
27	iP	NEZV	13 42 55		-	+	(+)		USCGS: Indian Ocean South West of Australia.
	iS	Z	46 40						
	eL	Z	46 59						
	M	Z	48.1						
27	eL	NEZ	16 02.0						
	eX	V	16 04 35						
	eX		49						
27	iP	V	20 00 12						
	eX	V	46						
28	eLr	EZ	05 17.5						USCGS: Hawaii Island. $M = 5\frac{1}{4} - 5\frac{3}{4}$
28	iP	V	19 01 14				+		USCGS: Northern Celebes.
	epP	V	31						
	eLq	EZ	18.0						
29	eLr	Z	03 55.3						USCGS: Sth. Sandwich Is.
29	eP	V	13 59 12						USCGS: Banda Sea. h about 80 km
	eL	Z	14 20						
29	ePKP diff.	ZV	16 47 40						USCGS: Alaska. $M = 4\frac{3}{4} - 5$
	ePKP	V	47 46						
	eL(r)	Z	17 40						
29	iP	V	21 04 25						USCGS: South Indian Ocean.
	e(S)	E	09 22						
	eLq	NE	10 42						
29	e ?	V	21 29 26						
30	e(P)	V	07 12 25						
30	iP	V	08 50 35						
30	eX	V	14 44 33						
	iX	V	44						
30	eS	E	19 52 29						USCGS: Near Coast of Luzon, Philippine Islands.
JULY									
1	iP	V	13 46 14						USCGS: Tonga Is. Region. h about 65km
	eX	V	47 06						
	iX	V	47 10						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
JULY	(continued)		h. m. s.	s.				km	
1	e ?	V	18 28 05						
	e ?	V	28 29						
1	iX	V	19 47 23						
	eL	Z	20 25						
1	eL	NEZ	22 19.8						
2	iP	EZV	08 43 23			-	+		USCGS: Santa Cruz Island.
	i(pP)	EZV	43 48						M = 6¼
	iX	V	44(15)						
	iS	NE(Z)	52 08						
	isS	E(Z)	52 50						
	eX	N	53 36						
	eSS	Z	56.1						
	eL	NEZ	09 00.0						
2	eX	V	15 15 56						
	iX	V	16 10						
2	eX	V	17 02 09						
	iX	V	02 23						
2	eX	V	17 12(15)						
	iX	V	12 25						
	iX	V	12 29						
3	i(S)	NE	18 28 49						USCGS: 56.3S 142.3W
	eLq	N Z	32.3						Grenet not recording.
4	iX	V	06 12 44						
	iX	V	13 11						
	iX	V	15 27						
4	iX	V	17 57 26						
5	eL	Z	12 17.9						
5	eL	Z	18 33.6						USCGS: South of Honshu, Japan.
6	eS	E	02 35 24						USCGS: Arabian Sea.
	eL	N	47.8						
	eLr	EZ	52.1						
6	i ?	V	04 34 01						
6	iX	V	04 51 33						
6	eLr	Z	10 15.1						USCGS; Ionian Sea. M = 5
6	iX	V	10 26 06						Timing fault 1224 -1316 Z
6	iP	V	13 15 16				-		(Absolute time in doubt by
	ipP	V	15 30						(about ± 5 sec., but (interval is reliable.
6	i(P)	V	14 57 09						
6	ePP	V	19 03 52						USCGS: Kenai Peninsula, Alaska.
	iX	V	04 10						
6	i ?	V	21 31 04						
6	i ?	V	22 59 19				-		USCGS: Hindu Kush, Afghanistan. h about 203 km
6	i(P)	NEZV	23 20 20						
	iX	NEZV	23 50						
	iX	E	24 36						
	iX	N Z	24 42						
	iX	NEZ	29 43						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	△	Remarks
JULY (continued)			h. m. s.	s.				km	
6	iS	E	23 31 03						
	eX	E	32 40						
	iX	EZ	32 44						
	eX	V	32 47						
	eX	Z	34.1						
	iPKKP	V	35 10						Long path.
	eSS	E	38 31						
7	eP	V	01 35 30						In Coda of previous.
	ipP	V	35 57						
7	ePKP	V	06 31 47						USCGS: Rat Island, Aleutian Island.
	iX	V	32 00						
	e(SS)	NEZ	50.7						
7	eP	V	10 22 54						
	ipP	V	23 08						
7	iP	V	11 57 26						USCGS: Banda Sea.
	M	Z	12 19.1						
7	e ?	V	15 14 10						
8	eP	V	04 13 28						USCGS: Sandwich Island.
	eLq	E	28.0						
9	eX	V	08 52 18						
9	e(P)	V	09 47 33						
	e(pP)	V	47 46						
9	eX	V	11 48 27						
	eX	V	48 41						
9	eL	Z	14 09 16						
	eL	N	34.1						
	eL	Z	35.7						
9	iP	V	16 27 41						
	ipP	V	27 56						
10	iP	V	05 21 40						USCGS: Fiji Island. h about 584km
10	iX	V	07 18 17						
10	iX	V	09 20 02.5						
11	iP	V	12 52 28						USCGS: Panay, Philippines.
	eS	N	13 02.3						
12	M	Z	23 35.5						USCGS: South Pacific Ocean, 33.9S 104.1W .
13	iP	ZV	03 43 40						USCGS: Panay, Philippines. h about 157km
	ipP	ZV	43 52						
	iPP ?	V	46 38						
	iS	N	53 21						
	eSS	N	58 19						
									No records July 14th.
15	iP	V	15 28 05					+	Long period record unreadable.
16	eX	E	02 09 24						Z not recording.
	eP	NE V	09 30						USCGS: South of Tasmania.
	iX	V	38						
	iS	NE	13 09						
	eX	V	13 34						
	M	N	15.0						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
JULY	(continued)		h. m. s.	s.				km	
15	iP	V	06 10 22						
	epP	V	35						
15	iP	V	08 36 16				+		
15	iPKP diff.	ZV	13 14 16				+		USCGS: Alaska.
	iPKP	V	14 21						
	iX	V	14 46						
15	eP	V	16 28 21						USCGS: 550 miles South of Easter Islands. h about 25km
15	e ?	V	16 39 08						
17	iP	ZV	05 43 25				-		USCGS: Near Coast of Chile.
	i(pP)	V	43 35						
	eX	V	43 40						
	e(PcP)	V	43 50						
	i(S)	NE	52 44						
	M	Z	06 16.5						
17	eL	Z	08 46.2						
17	iX	V	11 35 19						
17	eP	V	15 35 22						
18	e ?	V	04 42 50						Resembles T phase.
	e ?	V	47 15						Resembles T phase.
18	iP	V	06 03 27				(-)		USCGS: Sunda Island, East Indies.
18	iP	V	10 22 53				-		USCGS: Mariana Island Region.
18	eP	V	12 52 10						
	i ?	V	52 24						
18	iP	V	18 54 30				-		
19	iP	V	01 03 09						USCGS: New Britain Region.
	eL	Z	27						
20	e(P)	V	17 21 52						
	iX	V	22 14						
	iX	V	24 46						
20	e(P)	V	18 13 26						
21	eP	V	03 24 10						
	ipP	V	24 27						
21	eL	NEZ	10 50.5						V under test. 0900 - 1200Z
21	eX	V	15 26 31						
	eX	V	27 11						
	eX	V	31 21						
21	eX	V	15 31 50						
21	eX	V	15 40 24						
	iX	V	40 47						
22	i(P)	V	00 32 35						V under test. 0046 - 0309Z
	e(S)	NEZ	40.9						USCGS: New Britain Region.
	eL	Z	53.5						h about 81km
22	e(P)	V	05 43 52						
	i(pP)	V	44 15						
22	iP	V	13 47 30				+		
	eX	V	48 15						
	eL	Z	14 08						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	△	Remarks
JULY (continued)			h. m. s.	s.				km	
23	eP	V	22 24 22						
	iX	V	24 39						
	iX	V	24 43						
23	iP	V	23 19 37						USCGS: New Hebrides.
	eLr	Z	39.7						h about 99km
24	iP	V	04 54 52						
	ipP	V	55 08						
24	iPKP	V	21 27 11						USCGS: Mexico-Guatemala Border Region.
	i(pPKP)	V	27 40						
	eLr	N Z	22 08.9						M = 5½ h about 129km
25	eX	V	04 56 02						USCGS: West of Jamaica.
	eX	Z	05 00 42						M = 5½ - 6
	eX	E	17 07						
	M	Z	05 50.9						
25	eP	V	11 00 29						
	epP	V	00 41						
25	iP	V	11 33 38						
	ipP	V	33 53						
26	eP diff.	Z	08 30.1						USCGS: South of Panama.
	eX	Z	33 13						M = 6¾ - 7
	ePKP	V	33 35						
	iPP	NEZV	35 04						
	ePPP	Z	38 07						
	iSKS	E	40 30						
	eSKKS	E	42 29						
	eSKKP	V	47 21						
	iSS	NE	51 44						Long path.
	eLq	NE	09 05.5						
	M	ZV	21.7	66					
	Q_2 Max.	E	09 57	60					
	Q_3 Max.	NE	11 38	122					
	Q_4 Max.	E	12 28	190					
26	iP	V	21 41 38						USCGS: Sandwich Island Region.
	eLr	NE	59.4						
27	e ?	V	04 33 22						
	i(P)	V	33 29						
	i(pP)	V	33 43						
27	iX	V	06 04 40						
28	iP	V	00 16 23						USCGS: Samoa Island Region.
	iS	NEZ	25 29						Felt.
	eL	N	35 35						
28	iP	V	17 00 41				-		
	eX	V	23 45 16						
	eX	V	45 27						
	eL	N	55.0						
29	eP	V	08 09 03						
	i(pP)	V	09 13						
	iX	V	18						
29	iX	V	15 42 47						
29	iP	V	16 03 35						
	ipP	V	03 48						
29	iP	V	16 31 56						
	ipP	V	32 10						
29	iP	V	18 27 34				-		USCGS: South Island of New Zealand. M = 6¾ - 7

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
JULY (continued)			h. m. s.	s.				km	
30	eX	V	09 39 26						
	iX	V	39 43						
30	eL	Z	16 27.5						
30	iP	V	17 27 37				+		USCGS: Near North Coast of
	iX	N(E)Z	27 40		+		−		New Guinea.
	iX	V	30 54						
	iS	NE	36 30						
	iSP	Z	36 51						
	iLq	NE	44 15						
	e(PKPPKP)	V	56 09						
	L Max.	Z	56.9						
	iQ_2	NE	19 18.3						Period at Maximum.
30	ePKP	V	20 37 24						USCGS: Western Columbia.
	eX	N	38 33						M = 6 - $6\frac{3}{4}$
	iPP	V	38 54						
	eX	V	39 35						
	e(SKP)	V	41 27						
	iSKS	NE	44 21						
	iX	NEZ	46 37						
	iSP	NE	48 31						
	iX	NE	49 20						
	iSS	NE	55 11						
	iLq	E	21 06 44						
	iLr	N Z	15 52	43					Period at Maximum.
	iLr_2	N Z	22 13.1	62					Period at Maximum.
31	eP	V	02 30 01						USCGS: Near North Coast of
	eL	Z	51.8						New Guinea.
31	iP	V	05 25 40				+		USCGS: Near North Coast of
	eX	Z	36.1						Luzon, Philippine Islands.
31	iP	V	08 22 50						
	ipP	V	23 05						
31	eX	V	17 36 01						
31	iX	V	22 00 51						
AUGUST									
1	i(P)	V	03 26 09						
1	iP	V	03 59 08						USCGS: Kermadec.
1	iP	N ZV	04 47 48				+		USCGS: Near North Coast of
	iPP	V	50 16						New Guinea. Felt.
	iS	N(Z)	56 41						M = $6\frac{1}{2}$ - 7
	iX	E	56 48						
	iSS	(N)E(Z)	05 01 07						
	i(SSS)	E	04 08						
	iLq	N	04 23						
	iLr	Z	07 51						
	ePKPPKP	V	05 15 51						
	M	Z	16.0						
1	e(P)	V	12 35 43						
1	iP	V	12 57 42				−		USCGS: Kermadec.
	ipP	V	57 54						
1	eP	V	23 18 44						
	ipP	V	19 00						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	△	Remarks
AUGUST (continued)			h. m. s.	s.				km	
2	iP	V	02 29 01				-		Long period microseisms.
2	iP	V	03 29 58						
	epP	V	30 10						
2	eX	V	05 55 56						
3	iP	N Z	09 09 11		-7		-28.5		No record on Grenet.
	iPP	N Z	12 45						USCGS: North Chile, Argentina
	eX	Z	18 38						Border. Felt. M = 7
	iS	N	19 53						h about 71km
	iX	NE	19 57						
	iX	EZ	20 52						
	eSS	NE	25 56						
	eLq	E	33.0						
4	iP	V	05 51 26						
	ipP	V	51 40						
4	eX	V	15 44 01						
4	eX	V	16 30 06						
5	eLr	Z	10 19						USCGS: Novaya Zemlya.
									h about 0km
5	e(P)	V	15 19 04						USCGS: New Hebrides.
	eL	N Z	39.0						h about 60km
5	eP	V	16 27 28						
	e(pP)	V	27 43						
6	ePKP	V	01 55 02						USCGS: North Atlantic Ocean.
	ePcPKP	Z	02 03 53						M = 5½ - 6 h about 41km
	e(SS)	NE	16.7						
	eX	Z	21 51						
	eL	NEZ	41.4						
	M	Z	48.0						
6	iP	V	04 27 49						
	ipP	V	28 02.5						
6	iP	V	06 00 17						
6	eP	V	07 44 02						
	ipP	V	44 14						
6	iP	V	08 50 19						USCGS: Sandwich Islands.
	epP	V	50 35						
	e(sP)	V	50 42						
	i(S)	N	57 35						
	eL	E	09 04.6						
6	eX	V	12 35(06)						
6	iP	EZV	21 01 49			-	+		USCGS: Kermadec.
	iX	V	01 52						M = 5½ - 6 h about 50km
	i(sP)	(E)Z	02 11						
	ePcS	E	06 39						
	iX	E	09 40						
	iS	N	09 45						
	eX	Z	09 48						
	eSS	EZ	13.5						
	eLq	N	15.5						
	eLr	EZ	19.3						
7	NIL.								
8	iP	V	04 09 02						
	ipP	V	09 16						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
AUGUST (continued)			h. m. s.	s.				km	
8	eP	V	16 06 56						
	ipP	V	07 10						
11	eX	N	00 02.6						
11	iP	EZV	01 57 13						USCGS: Fiji Islands.
	ipP	V	59 24						h about 638km
	iS	NE	02 05 03						
11	iP	ZV	08 28 36				-		USCGS: Off North East Coast
	e(PP)	N Z	32 51						of Formosa.
	iS	E	39 20						M = 5 - 6 h about 140km
	iX	E	40 16						
13	eLr	N	07 25½						USCGS: Ecuador.
									M = 5½ - 6.Poor quality record.
14	iP	E V	01 17 07						USCGS: About 300 miles North
	iS	N	22 12						of Macquarie Island.
	iX	E	22 20						h about 43 km
	iL	N(E)	23 52						No record Z component.
	M	Z	28.6						
14	eX	V	07 32 16						
17	e(pP)	V	05 16 32						USCGS: Panay, Philippine Is.
	eS	N	26 10						
	e(SS)	N	30 39						
18	i ?	V	13 35 15						
18	i(P)	V	17 03 30				-		USCGS: Central Alaska.
	eX	V	03 42						M = 5¼ - 6¼
18	ePKP	V	18 05 49						USCGS: Central Alaska.
	iPKP	ZV	05 56						M = 5¼ - 6¼
19	eP	V	06 41 34						
19	eP	V	11 57 58						
19	eP	V	12 09 05						
	ipP	V	09 20						
19	ePKP	V	18 45 12						USCGS: North West Sinkiang
	ePP	V	46 04						Province, China.
	ePS	NEZ(V)	18 55 47						
	M	Z	19 25						
19	iP	ZV	23 25 35				-		USCGS: Near Coast of North
	isP	ZV	25 56						Chile.
	iX	V	26 03						h about 51km
20	eL	Z	23 50.0						USCGS: New Hebrides.
21	iP	V	08 32 52						
	ipP	V	33 06						
21	eP ?	V	09 00 28						
	i(pP)	V	00 42						
21	eP	V	15 38 24						
	ipP	V	38 39						
21	iP	V	16 19 54						USCGS: Kermadec Island Re
	eL	Z	41.8						
21	eP	V	17 11 09						
	ipP	V	11 32						
21	eLr	Z	19 15.1						USCGS: Italy.

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
AUGUST (continued)			h. m. s.	s.				km	
21	eP	ZV	21 15 40						USCGS: Kermadec.
	iX	V	16 13						
	e(S)	N	23 37						
	M	Z	40.9						
21	eP	Z	21 21 53						USCGS: Easter Island Region.
	iX	V	57						
	iX	V	22 05						
	eX	E	30 53						
	eX	N Z	31 55						
	eLq	NE	43.0						Long period, strongly dispersed
	M	Z	51.6						
22	e ?	V	05 39 09						USCGS: Kermadec.
	eL	N Z	06 02						
22	eP	N Z	11 15 51						USCGS: About 1200 miles South West of Australia.
	iX	V	15 59						
	iL	Z	19 55						
22	iP	V	18 28 53						
	ipP	V	29 07						
23	e(P)	V	02 29 08						
	eX	V	29 28						
23	eP	V	10 21 23						
	ipP	V	21 34						
23	iX	V	14 40 31						
23	iX	V	16 41 04						
23	eX	V	19 35 13						
	iX	V	35 38						
23	iP	V	21 02 13						USCGS: South Sandwich Island.
	eLr	N	18.8						
24	iP	V	06 56 18				+		USCGS: Fiji Island Region. h about 526km.
24	eP	V	09 15 36						USCGS: Samoa Island Region.
	eS	NE	24 48						Felt.
	eSS	N	29 31						M = $5\frac{1}{4}$ - $5\frac{1}{2}$
	eLq	NE	32.8						
24	eX	V	15 36 03						
24	iX	V	16 02 29						
24	eX	V	17 04 18						
	eX	V	04 32						
24	eX	V	21 05 11						
	eX	V	05 26						
25	eP	V	02 26 17						
	ipP	V	26 30						
25	eX	V	07 57 22						
25	iP	EZV	08 41 26			(-)	+		USCGS: Fiji Island. h about 561km
	e(pP)	(Z)V	43 19						
	e(ScP)	V	45 42						
	iS	NE V	49 17		-	+	(+)		
	iX	NE	50 23						
	iSS	N(E)	52 39						
	iX	(N)E	56 44						
	ePKPPKP	V	09 10 08						Long path.
	eP	V	15 38 41						
	ipP	V	39 16						

Date 1962	Phase	Time (G.M.T.)	Per	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
AUGUST (continued)		h. m. s.	s.				km	
25	eP V	18 04 39						
	ipP V	04 43						
26	iX V	05 05 37						
26	eSS N Z	07 21.9						USCGS: Near East Coast of
	eL Z	37						Honshu, Japan.
26	iX V	19 02 48						
26	iP V	23 41 20						USCGS: New Guinea.
	eLq E	59.0						h about 50km
27	NIL.							
28	ePP EZ	11 20						USCGS: Greece.
	eSP Z	30						Felt. h about 120 km.
	eSS NEZ	36 54						M = $6\frac{3}{4}$
	e ? N	51.0						
	eL EZ	58.1						
29	NIL.							
30	iP V	13 55 07				(+)		
	eL Z	14 46.5						
30	iP V	16 02 28						
	epP V	02 42						
30	iP ZV	17 28 29				(+)		USCGS: Tonga.
	iS N	37 15						M = $5\frac{1}{2}$
	M EZ	54						
31	e ? V	07 06 03						
	e ? V	06 15						
31	eP V	10 44 36						USCGS: Fiji Island Region.
	eS E	53 38						
	eL(q) N	11 01.6						
31	eX V	13 27 58						
31	eX V	15 51 21						
31	ePKP V	17 21 48						USCGS: Rat Island, Aleutians.
	eSS NE	41.2						H = 17 02 43.4
	M EZ	18 14.0						M = 6 - $6\frac{3}{4}$
SEPTEMBER								
1	ePKP V	04 05 09						USCGS: Rat Island, Aleutians.
	e(SKP) V	08.7						H = 03 46 05.0
	eSS (N)E	24 37						M = 6 - $6\frac{1}{2}$
	eX NEZ	29.3						
	M Z	57.0						
1	eP V	05 02 15						USCGS: New Hebrides Islands.
	iX EZV	02 16						h about 244km
	iX ZV	03 31						
	e(S) V	10 21						
	i(S) NEZV	10 26						
1	e(SKP) V	08 13 30						USCGS: Rat Island Aleutians.
	eSS N	30 08						H = 07 51 08.2
	M N	58.5						
1	eLr Z	09 48.8						USCGS: Rat Island, Aleutians.
								H = 08 47 06.9

Date 1962	Phase		Time (G.M.T.)	Per	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
SEPTEMBER (continued)			h. m. s.	s.				km	
1	eP	V	13 55 40						
	ipP	V	55 55						
1	eLr	EZ	15 49						USCGS: Off Coast of West Pakistan.
1	iP (diff.)	Z	19 35 16						USCGS: Northern Iran.
	i(PP)	NEZV	39 52						h about 21km
	iSKS	(N)E	45 55						M = 7 - 7¼
	iX	N	47 57						
	i(SP)	Z	49 17						
	iSS	NEZ	55 51						
	iG	N(E)	20 06 24						
2									No Grenet record 2nd.
2	e(S)	N	15 39 24						USCGS: Soemba Island Region.
	eL	E	50.4						
2	eL	NE	20 39						USCGS: Off Coast of North Island, New Zealand.
3	NIL.								
4	iP	V	00 52 50						
	ipP	V	53 05						
4	eP	V	09 29 02						
	ipP	V	29 16						Noise on V maximum 0608.3
4	eL	Z	17 45.1						
4	eL	Z	23 55.1						USCGS: Turkey Armenia Border: Felt. N, E, Z on Test.
5	iP	V	11 27 44				-		USCGS: New Guinea.
	ipP	V	28 07						h about 110km
5	e ?	V	19 10 20						
	iX	V	10 35						
6									No N record.
6	eP	V	11 21 17						USCGS: Ceram Sea.
	eLq	E	36						
	eLr	Z	40.5						
7	NIL.								
8	iP	V	00 14 19						
	epP	V	14 35						
8	eLr	Z	07 54						USCGS: Loyalty Islands.
8	eX	V	08 35 25						
	iX	V	35 40						
9	eP	V	07 52 20						
	ipP	V	52 37						
10	eL	Z	10 36						USCGS: Dodecanese Is.
10	eX	V	11 25 37						
	iX	V	25 49						
10	eiP	ZV	15 53 26						USCGS: Fiji Is.
	epP	ZV	55 26						M = 6½ h about 640km.
	eX	E V	16 01 06						
	iS	N ZV	16 01 08						
	iX	E	02 14						
	isS	NE	04 39						
	eX	NEZ	08 36						
	ePKPPKP	V	16 22 10						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
SEPTEMBER (continued)			h. m. s.	s.				km	
10	eP	V	18 00 15						USCGS: Tonga Island Region.
11	NIL.								
12	eP	V	18 29 34						USCGS: Near North Coast of New Guinea: Felt.
	eLr	NE	47.1						
12	eX	V	20 05 27						
12	e ?	V	21 10 28						USCGS: Hindu Kush.
	e?SKS	N	22 07						M = 6½ h about 50km.
	ePS	NE	25 09						
	eSS	N	30 57						
	eLq	E	41 39						
	eLr	N Z	47.5						
	M	EZ	52.5						
13	NIL.								
14	NIL.								
15	i(PKP)	V	23 09 34						USCGS: Kurile.
	eX	Z(V)	10 55						M = 6 - 6½
	e(SP)	Z	20 41						
	eX	NE	21 04						
	iSS	N(E)(Z)	27 36						
	eX	NEZ	31(44)						
	M	N Z	59.7						
16	eX	E	14 05 49						
	eL	E	10						
16	eLr	Z	19 47.2						USCGS: Near Coast of Burma.
17									No N, E, Z records.
17	iX	V	02 32 12						
17	iP	V	18 05 14						USCGS: Fiji.
	e(pP)	V	07 14						h about 601km
	iX	V	07 20						
17	e ?	V	23 04 20						
18	e(PKP)	V	00 48 02						USCGS: South of Panama: Felt.
	iX	V	48 29						M = 6½ - 7
	e(PP)	N Z	49 40						
	i(SKS)	E	55 18						
	eX	ZV	01 01 42						
	i(SS)	E	06 04						
	e(Lq)	E	17.0						
	eX	V	03 24 11						
18	iP	V	06 21 33					-	USCGS: Molluca Passage.
	i(S)	N	30 39						
18	eP	V	08 08 14						
	ipP	V	08 29						
18	e(P)	V	21 57(50)						USCGS: Fiji.
	eL(r)	Z	22 18.7						h about 526km
19	eX	V	02 30 21						
19	eL	Z	08 29.5						USCGS: Mariana Is. Region.?
19	eL	Z	12 14.4						USCGS: Novaya Zemlya Is. Artic. Ocean.
19	M	Z	18 37.6						USCGS: Soemba Island.
20	eX	V	13 38 06						
	iX	V	38 20						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
SEPTEMBER (continued)			h. m. s.	s.				km	
20	eP	V	16 49 02						USCGS: West New Guinea.
	eL(r)	E	17 08.2						
	eL	Z	14.4						
21	eX	V	21 09 41						
21	iP	V	22 48 29						USCGS: Drake Passage.
	eS	NE	56.2						h about 51 km
	e(SS)	N	23 00 14						
	M	Z	15.0						
22	iP	V	07 04 42						USCGS: Northern Burma.
	eX	NE	15 15						
	eX	N Z	17 05						
	e(SS)	Z	22 08						
	eLr	Z	35.0						
22	eL	Z	15 31.3						
23	eX	V	09 51 30						
23	eX	V	15 29 43						
24	NIL.								
25	e(P)	V	00 30 17						USCGS: South Pacific Ocean.
	e(S)	NE	37 36						h about 67km
	eLq	E	41.0						
25	eL	Z	07 12.4						
25	iP	V	15 01 58						USCGS: Marianas Islands.
25	iX	V	21 29 41						
26	eX	V	01 34 20						
26	iP	V	12 54 40						USCGS: Kermadec.
26	iP	V	12 58 29						
26	eL	Z	13 12 36						
27	e ?	E	07 07 56						
	e ?	EZ	13.1						
27	iP	V	13 06 23				+		USCGS: South Sumatra.
									h about 144km
27	eP	V	18 37 49						USCGS: New Ireland Region.
	eLr	Z	59.1						
28	eP	V	02 22 55						
	ipP	V	23 09						
28	iP	V	10 34 35						
	ipP	V	35 01						
28	eSP	Z	19 25 37						USCGS: Western Columbia : Felt
	eSS	E	32 23						h about 127km
29	iP	N ZV	15 29 32				-		USCGS: Argentina.
	epP	N Z	31 34						h about 575km. M = $6\frac{1}{4}$ - $6\frac{1}{2}$
	eX	Z	34 31						
	iS	NE	39 05						
	iSP	Z	39 28						
	eX	N Z	40 27						
	esS	E	42 59						
30	eP	V	10 59 07						USCGS: New Britain : Felt.
	eL	Z	11 23.5						H = 10 48 10.3

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
SEPTEMBER (continued			h. m. s.	s.				km	
30	iP	V	22 09 57						USCGS: Near North Coast of Luzon: Felt. h about 51km.
	ipP	V	10 11						
OCTOBER									
1	eL	Z	01 30.5						
	eP ?	V	02 51 35						
	epP ?	V	49						
1	iP	V	04 06 48						USCGS: Fiji. h about 550km
	ipP	V	08 40						
1	i ?	V	07 48 24						
1	eX	V	08 54 17						
1	eP	V	10 07 17						New Hebrides Island.
	eX	N	15.7						
	eL	NE	22.6						
1	M	NEZ	13 03						USCGS: Southern Iran. h about 17km.
1	eL	N	14 53.3						
	eL	Z	54.5						
1	M	E	15 42.5						USCGS: New Britain: Felt.
1	e(P)	V	20 53 11						USCGS: Fiji. h about 43km
1	i(P)	V	22 11 03						
2	eP	V	06 45 45						
3	ePKP	V	01 36 22						USCGS: Azores. H = 01 16 46.7
	e(P)P	V	38 57						USCGS: Azores. H = 01 19 22.5
3	eP	V	05 04 17						
	ipP	V	04 31						
3	eP	V	16 49 39						
	epP	V	57						
3	eX	V	18 02 03						
3	eP	V	18 58 03						USCGS: Sandwich Island.
	M	N	19 15.3						
4	eLr	Z	21 07.1						USCGS: Bismarck Sea.
5	eP	V	03 29 43						
	ipP	V	29 57						
5	eX	V	03 37 32						
5	ePKP	V	04 34 19						USCGS: Azores. H = 04 14 39.1
5	eX	V	17 26 33						
5	eX	V	23 44 26						
	eL	Z	48.8						
6	iPKP	ZV	03 36 44						USCGS: Azores. H = 03 17 07.2
6	iPKP	V	04 14 37						USCGS: Azores. H = 03 54 58.3

Date 1962	Phase	Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
OCTOBER (continued)		h. m. s.	s.				km	
6	eP NEZV	04 33 38						USCGS: New Henrides.
	iS NEZ	41 58						H = 04 23 24.1
	iX E	43 24						
	eX N(E)Z	45 52						
	iLq NE	48 47						well recorded surface waves.
	M NEZ	55.2						
6	eP V	05 51 42						USCGS: Ryuku.
	i(pP) V	51 57						h about 122km. In coda of previous.
6	e(P) V	08 06 35						USCGS: New Hebrides.
	iX N	14 54						H = 07 56 20.4
6	eX NE(Z)	08 22 02						
	eX Z	25 21						
	eX N	29.2						
6	e(P) ZV	08 13 49						USCGS: New Hebrides.
								H = 08 03 31.7
								Mixed with previous.
6	iP V	11 11 10				+		USCGS: New Hebrides.
	ipP V	11 58						h about 209km
	iS N	19 35						
6	eP V	18 11 19						USCGS: New Hebrides.
	eLr Z	31.1						
6	eP V	19 31 02						
6	iP V	20 25 36						
6	eP V	20 58 21						
	ipP V	58 35						
6	eiP EZV	23 41 39						USCGS: New Hebrides.
	iS NEZ	49 58						
7	iP V	00 59 15						
7	e(P) V	14 55 40						
	i(pP) V	55 57						
7	eX N	17 17 11						
7	iP V	19 09 16						
	ipP V	09 29						
7	eX V	23 20 10						
8	eX V	03 15 18						
8	e(PKP) V	05 33 59						USCGS: Azores.
8	eX V	08 33 47						H = 05 14 20.4
8	eX V	10 50 09						
8	iP V	11 48 32						
	ipP V	48 47						
8	iP V	12 20 25						
	ipP V	20 39						
8	iP ZV	22 09 24						USCGS: Near East Coast of
	iX V	09 45						Formosa. M = 6 - 6¼
	eSKS N(Z)	19 36						
	iS E	20 16						
	e(SS) Z	26.1						
	eLq E	34.5						
	eLr N Z	39.4						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
OCTOBER (continued)			h. m. s.	s.				km	
8	eP	V	23 43 35						
9	iP	V	01 12 19						Microseisms.
	ipP	V	12 33						
9	iP	ZV	20 25 38						USCGS: Bismarck Sea.
	iS	N	34 32						M = $6\frac{1}{4}$
	iX	E	34 38						
	iLq	NE	42 16						
	M	NEZ	53.1						
10	eL	EZ	22 28.0						Microseisms. USCGS: Samoa. Felt.
11	NIL								
12	eL	N	02 11.0						USCGS: Kermadec.
	eL	EZ	14.3						
12	eT ?	V	16 35.2						
	T max. ?	V	38.4						
	T max. ?	V	57.4						
12	M	Z	17 36.6						USCGS: Near Coast of Northern Chile.
13	eL	Z	11 19.0						
13	iP	EZV	18 58 24						USCGS: Santa Cruz.
	eS	E	07 03						
	eX	N	19 07 21						
14	iP	ZV	00 39 03						USCGS: Kermadec.
	e ?	E	46 32						
	eLr	Z	54.9						
14	e(P)	V	02 13 13						
15	e ?	E	15 47 12						
15	e(pP)	V	21 32 05						USCGS: 800 km North East of Balleny Island.
	e(S)	E	36.6						
	M	EZ	42.1						
15	eP	V	23 43 58						USCGS: Near coast of South Island, New Zealand.
	eS	E	49 54						
	eLq	N	52.9						
	M	EZ	58.0						
16	eP	V	02 05 09						
	i(pP)	V	05 29						
16	i(P)	V	07 24 10						USCGS: South of Mascarene Island.
	eX	E	31 08						
	eLr	Z	37.5						
16	i(SKP)	(Z)V	18 25 03						USCGS: Aleutians. M = $5\frac{1}{4}$ h about 29km.
18	eX	V	01 49 57						
18	e(P)	V	04 15 53						USCGS: Sumbawa.
	e(S)	E	23 38						
	eLr	N Z	33.3						
18	eP	V	18 49 27						
	ipP	V	49 41						
19	iP	V	04 25 17						USCGS: San Juan Province, Argentina: Felt. h about 120km. Long period microseisms.
	i ?	V	29 54						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
OCTOBER (continued)			h. m. s.	s.				km	
19	eT ?	V	09 23 24						
19	eT ?	V	21 23 11						
19	eT ?	V	21 58 53						
	M	V	22 06 45						
19	iP	V	23 52 37				-		USCGS: Banda Sea. h about 177km
20	iP	V	05 40 38				-		USCGS: Banda Sea.
21	iP	V	23 20 16				+		USCGS: Sandwich Is. Region
	eL	E	38						
22	iP	V	04 45 31						USCGS: Bismarck Sea.
	eLq	N	05 04.6						
22	eL	Z	10 17.6						
22	eX	Z	15 53.6						No record on V 05 00 - 1600
23	e ?	V	23 29 43						
24	e(P)	V	02 08 01						
	iX	V	08 15						
24	eP	V	16 23 41						
	ipP	V	23 55						
24	iX	V	21 10 29						
25	eX	(N)(E)V	01 43 48						
	iX	ZV	43 55						
25	eP	V	03 49 01						USCGS: New Hebrides.
	eLq	(N)	04 04						
25	iP	(N)ZV	09 45 18				+		USCGS: Molucca Passage.
	ipP	(Z)V	45 35						
	i(PcP)	NEZV	45 41						
	iS	(N)V	54 21						
	iX	NEZ	54 23						
	eSS	N	58.8						
	ePKP,PKP	V	10 13 23						Long path.
25	ePKP	V	16 11 17						USCGS: Panama-Costa Rica Border: Felt.
	eLq	E	45.5						
	eLr	Z	50.7						
25	iP	EZV	20 10 37			-	+		USCGS: South West of Macquarie Island.
	iS	N	14 06						
	iX	NEZ	14 16						
26	eP	V	05 20 40						
	ipP	V	20 54						
26	iP	(E)ZV	07 30 38						USCGS: New Hebrides: Felt.
	eS	N	38 52						
	eX	E	39 00						
	eLq	NEZ	46.0						
26	eP	V	16 07 59						USCGS: Sandwich Island.
	eS	(N)E	15 30						
	eL	(N)E	23.0						
	M	E	26.5						
27	eX	E	06 17 23						
	M	NE	26.0						
28	iP	V	15 11 04				+		USCGS: Northern Celebes.
	eP	V	21 42 47						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
OCTOBER (continued)			h. m. s.	s.				km	
29	e ?	E	07 39 35						V record faulty.
	eX	E	50(28)						
	eL	NEZ	54 12						
29	eL	Z	16 47.7						
29	eX	E	21 24 23						
	eL	Z	42.1						
30	iP	(E)ZV	01 55 00						USCGS: Bouvet Island.
	iS	NE	02 01 54						
	eX	(N)E	04 55						
	M	NE	08.5						
30	eLr	Z	09 31.9						USCGS: Off West Coast of Nicaragua
30	eX	(N)EZ	15 59.8						
30	eL	Z	16 10.5						
31	eSS	E	12 08 54						USCGS: South of Panama.
	eLq	E	22						M = $5\frac{1}{2}$ - $6\frac{1}{2}$
NOVEMBER									
1	iP	N ZV	15 44 29						USCGS: Off Coast of West New Guinea.
	iX	V	45 51						h about 56km
	iS	E	53 30						
	eLq	E	16 01.3						
	eLr	Z	06.0						
	ePKP,PKP	V	12 36						Long path.
1	iP	(N) ZV	18 03 29				-		USCGS: Off Coast of West New Guinea.
	e(S)	(N)E	25 30						h about 36km
	eLr	Z	28.5						Long Path.
	e(PKP,PKP)	V	31 08						Long Path.
	ePKP,PKP	V	31 33						
1	eP	V	23 18(26)						
	epP	V	18 41						
2	eLr	NEZ	07 23						USCGS:New Hebrides Islands.
2	iP	N Z	14 56 18				+		USCGS: South of Sumbawa.
	e(S)	NE	15 04 01						
	M	Z	17.4						
3	iP	ZV	01 11 09						USCGS: Solomon Islands.
	eLr	Z	32.1						h about 86km.
3	i(P)	V	14 18 31						
3	eLr	Z	18 28.2						USCGS: Near East Coast of North Island, New Zealand.
4	iP	N ZV	23 04 43		-		-		USCGS: Off South Coast of Southern Chile.
	iX	V	05 04						M = $5\frac{3}{4}$ - 6
	ePP	N Z	07 24						
	i(S)	NEZ	14 07						
	e(SS)	(N)(E)Z	18 13						
	iLq	EZ	22 12						
5	eL	N	00 34.4						May be Coda of Previous
5	eL(q)	E	21 20.5						USCGS: South Pacific Ocean.

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
NOVEMBER (continued)			h. m. s.	s.				km	
7	iPKP	V	13 17 23						USCGS: Azores.
7	eP	N ZV	16 12 44						USCGS: Flores Sea.
	eX	V	19 41						h about 156km
	eS	E	20 32						
	eX	NE	21 41						
7	eP	V	18 40 29						
	ipP	V	40 42						
8	eLr	Z	00 53.9						USCGS: Near Coast of Southern Chile.
8	eL	E	01 17.0						
8	e(P)	V	08 44 11						
	i(pP)	V	44 28						
8	iP	V	10 13 44						USCGS: New Hebrides.
									h about 86km
11	iP	ZV	07 48 05				+		USCGS: Mascarene Is. Region.
	eS	E	55 15						
	eLq	NE	08 00						
11	eX	V	12 39(04)						
11	eLr	EZ	16 01						USCGS: Red Sea.
11	iP	NEZV	16 20 30		(-)	-	+		USCGS: Santa Cruz: Felt.
	eX	Z	21 49						h about 77km M = 6 - 6¼
	eX	E	28 48						
	iS	NE	29 08						
	eX	Z	29 17						
	iPS	Z	30 18						
	eSS	N	32 43						
	eLq	N	36.0						
	eLr	Z	39.0						
	M	NEZ	42.0						
11	iP	V	22 25 32						USCGS: Off coast of Southern
	iX	N Z	25 33						Chile.
	iPP	Z	28 05						M = 6½ - 6¾
	eS	NE	34 47						
	e(Lq)	E	42 22						
	eX	Z	43 12						
	eLr	N Z	47						
	ePKP,PKP	V	53 27						Long path.
	M	N Z	58.8						
13	(T) Max.	V	17 42						
13	e(P)	V	21 56 33						
13	iP	(Z)V	57 09						USCGS: Sandwich Island.
	eS	E	22 04 39						
	eL	N Z	13						
14	eP	ZV	22 09 57						USCGS: Northern Celebes.
	iX	V	10 13						h about 92km
	ipP	(Z)V	10 19						
	iX	V	10 22						
	iS	NE	18 43						
	eLq	E	25.7						
	eL	N Z	30.9						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
NOVEMBER (continued)			h. m. s.	s.				km	
15	iP	V	16 03 39						USCGS: Central Chile.
	iS	E	13 13						
	eX	E	17 51						
	M	N Z	37						
15	eX	V	23 33 05						
15	ePS	NE	52.9						USCGS: Near Coast of Northern Peru. M = 6 h about 45km.
	eSS	N	58.4						
16	iP	Z	07 30 24						USCGS: Easter Island Region. M = $6\frac{1}{2}$ - $6\frac{3}{4}$
	iX	V	30 26						
	iX	V	30 30						
	i(S)	NE(Z)	40 16						
	eX	NEZ	40 53						
	eSS	N(Z)	44 53						
	eSS	E	45 14						
	eLq	E	50.5						
	eLr	Z	55.1						
	M	NEZ	59.3						Good surface waves.
	M	(N)EZ	08 01.7						
16	eP	ZV	21 22 12						USCGS: Andaman Islands. M = 6 - $6\frac{1}{4}$
	i(pP)	V	22 24						
	iX	V	22 48						
	iS	NE	32 14						
16	eLq	E	22 43.1						
	eLr	N Z	48.0						
	M	Z	54.6						
17	eX	V	10 31 35						
	iX	V	31 53						
17	iP	V	14 31 40						USCGS: Celebes Sea. h about 609km
18	eP	V	05 22 55						
	i(pP)	V	23 08						
18	eiP	V	06 53 56						USCGS: Molucca Sea.
	eL	Z	07 15.6						
18	iP	V	18 05 51						
	ipP	V	06 04						
19	e ?	E	07 47 09						
19	iX	NE	10 32 38						USCGS: South Pacific Ocean.
	iX	E	36 45						
	eL	NE	38.5						
19	e(P)	V	14 03 23						USCGS: South West of Macquarie Island.
	eX	EZV	03 26						
	iX	N(E)(Z)	07 09						
20									No Grenet record.
21									Microseisms.
22	eL	E	10 58.1						Two patterns of microseisms appear on Grenet record.
23	eX	E	00 55 10						USCGS: Near Coast of Southern Chile.
	eSS	E	01 01 50						
	eLq	E	11.1						Short period microseisms associated with onshore wind and heavy waves on icefoot.

Date 1962	Phase	Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
NOVEMBER (continued)		h. m. s.	s.				km	
24								Microseisms.
25								Microseisms.
26	eL Z	06 25.5						
	eX NE	07 01 35						
	eX ZV	02 00						
26	iP (Z)V	16 09 14						USCGS: Tonga Islands.
	eS N(E)	17 29						h about 19km
27	eS NE	17 13 07						USCGS: Marianas.
	eX (N)E	24 16						
	eLr Z	28.8						
28	iP ZV	02 48 08						USCGS: Marianas.
	eS NE	58 19						
	eLq E	03 09 24						
28	iP V	05 14 49					-	USCGS: South Atlantic Ocean.
	eL EZ	40.5						H = 05 02 36.1
28	iP V	05 21 29					-	USCGS: South Atlantic Ocean.
								H = 05 09 15.0
28	eP V	15 37 47						USCGS: Andeman Island.
29	eP V	01 05 25						
	ipP V	05 39						
29	iP V	04 07 58					-	USCGS: Kermadec Islands.
	iX V	08 55						h about 140km.
29	eL N	05 48						
29	i(P) V	09 14 18						USCGS: Tonga.
	eX E(Z)	22 38						
	eL N Z	32						
29	eP V	17 28 43						
	epP V	28 57						
29	iP EZV	19 16 54					-	USCGS: New Hebrides Islands.
	iX V	16 57						
	iX V	17 10						
	eX E(Z)	17 30						
	iX ZV	19 19						
	eiS NEZ	25 18						
29	eSS NEZ	19 29						
	eLq N	32.1						
	M NEZ	36.3						
30	e(PKP) Z	22 24 23						USCGS: Mexico.
	eL NEZ	52.4						M = 5¼ - 5½ h about 51km
DECEMBER								
1	e(P) V	~~02 13 49~~						
	eX NEZ	30.4						
1	iP ZV	04 26 32.5					+	USCGS: Kermadec ,
	iX V	27 02						
2	eL EZ	03 43.0						
2	iP ZV	05 41 34						USCGS: Solomon Islands: Felt.
	eS E	50 17						
	eLr Z	06 01 41						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
DECEMBER (continued)			h. m. s.	s.				km	
4	eL	EZ	04 31.2						USCGS: Off coast of Guerrero, Mexico.
	e ?	E	07 46 13						
4	eS	N	10 53 50						USCGS: New Britain: Felt. h about 83km
	eLr	Z	11 06 08						
4	eP	Z	16 51 05						USCGS: Samoa Island Region.
	eS	NE	17 00 22						
4	iP	ZV	20 28 34				-		
	iS	E	32 40						
	eX	N Z	32 46						
	eL	N(Z)	33 52						
6	eLr	E	07 15.3						Grenet record faulty. USCGS: Near Coast of Southern Chile.
7	eP	N ZV	14 16 27						USCGS: Bonin Islands. M = $6\frac{3}{4}$ h about 411km
	epP	Z	18 06						
	esP	Z	18 47						
	i(PP)	ZV	20 30						
	iPPP	NEZV	22 36						
	i(S)	E	27 10						
	eX	N	28 35						
	e(PS)	NE	29 14						
	e(PPS)	E	29 51						
	iX	N	31 21						
	e(SS)	N(E)	33 49						
	eX	(N)E	36 26						
	eX	E	39 20						
	eX	E	42 21						
8	e(P)	V	12 13 11						
	e(pP)	V	13 24						
8	iP	V	18 13 32				-		USCGS: Near Coast of Northern Chile. h about 100km
	ipP	V	13 56.5						
8	iP	EZV	18 29 42			-	+		USCGS: Tonga Island Region.
	iS	NE	38 51						
	iSP	Z	39 13						
	eSS	N	48 10						
	eLr	EZ	51 57						
8	i(P)	V	21 03 03						
	i(pP)	V	03 16						
8	iP	N ZV	21 39 10				-		USCGS: Salta - Santiago del Estero Province Border, Argentina. h about 620km
	epP	N ZV	41 14						
	eX	N Z	42 40						
	eX	V	44 28						
	iX	N Z	45 34						
	eSKS	N(S)	48 38						
	iS	NEZ	49 04						
	eX	E	50 52						
	iX	E	52 36						
	iX	V	54 54						Very short period.
	iSS	E	55 12						
	iX	E	58 23						
	eX	E	22 01 35						
8	iPKP	V	23 14 12						USCGS: Andreanoff Island, Aleutian Islands.

Date 1962	Phase	Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
DECEMBER (continued)		h. m. s.	s.				km	
10	eP ZV	05 04 59						USCGS: Indian Ocean.
	iX V	05 05 05						
	ePP ZV	06 51						
	iS NEZ	11 55						
	eL NEZ	18 04						
10	eL Z	06 46.0						USCGS: Solomon Islands.
10	eLr Z	17 23.1						USCGS: Kermadec Is. Region.
11	iP NEZV	02 38 26		-	-	+		USCGS: About 2000km South of Australia.
	eX E	41 51						
	eX Z	42 08						
	eX N	42 11						
	eL N Z	42 37						
12	iP NEZV	10 19 42		(-)	(-)	+		USCGS: New Britain. h about 94km
	ipP ZV	20 10						
	eS NE(Z)	28 30						
	iX E(Z)	29 30						
12	eX E	10 32.7						
	M NEZ	42.2						
12	eP ZV	14 05 23						USCGS: Sandwich Island.
	e(S) N	12 34						
	eL NE	21.3						
12	iP V	23 07 44						USCGS: Sumatra.
	eL N Z	28.9						
13	iPKP V	04 41 01				-		USCGS: South Central Alaska.
	eL E	19 24 ?						
17	iP (N)Z	11 10 40						No V record.
	ipP N Z	12 06						USCGS: Celebes Sea.
	iS NE(Z)	19 09						
	eX NE	19 58						
17	eL Z	19 40.0						
18	iX N	06 06 09						Very disturbed by short period microseisms.
18	iP EZ	07 23 17						
	eS N(E)(Z)	27 03						Interesting surface waves.
18	e ? V	22 07 49						
	e ? NEZV	08.6						Short period irregular phase.
19	eP Z	13 07 06						No E record.
	eS N	16 06						USCGS: Solomon Islands :Felt.
	eLr N Z	28.9						h about 98km
20	iP N(Z)V	08 53 32						
20	iP V	08 56 41						USCGS: Fiji Is. Region. h about 512km.
20	iP (E)(Z)V	18 25 50						USCGS: Balleny Is. Region.
	iS N(E)	29 58						
	eX (E)Z	30 12						
	eLq N	30 41						
21	iP N ZV	00 53 59						USCGS: Near South Coast of Java.
	i(pP) V	54 12						
	iS N Z	01 01 47						h about 64km
	e(SS) Z	05 26						
	eL NE	10.4						

Date 1962	Phase		Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
DECEMBER (continued)			h. m. s.	s.				km	
21	e(PKP)	Z	09 02 08						USCGS: Fox Island, Aleutian Islands. H = 08 42 48.3 M = $6\frac{1}{4}$ - $6\frac{3}{4}$
	eX	V	02 43						
	iPP	Z	04 31						
	e(SKP)	(E)V	05 39						
	iX	N	05 52						
	eX	(N)E(Z)	11.4						
	eX	V	20 05						
	iX	NE	22 10						
	iX	N	24 17						
21	iP	ZV	09 55 26				-		In coda of Previous. Bolivia-Argentina Border Region
	ipP	V	56 21						
21	ePS	E	18 12 45						USCGS: Gulf of Aden.
	eSS	E	17 45						
	eLr	NEZ	29.1						
21	i(P)	V	18 32(59)						
	i(pP)	V	33(08)						
21	e(T)	V	21 42 53	21					Duration about 160 sec.
	eX	N Z	56 43						
	eL	Z	22 21.2						
22	iP	V	01 02 14				-		USCGS: Loyalty Island Region. M = $6\frac{1}{2}$ - $6\frac{3}{4}$
	iX	NEZ	02 16			+	-		
	iS	NEZ	10 11						
	eSS	NEZ	13 59						
	iLq	NE	16 32						
	eLr	Z	19 35						Good surface wave train.
	iX	V	38 39						
	iP	ZV	02 09 30						In coda of previous.
	e(pP)	V	09 41						USCGS: Near South Coast of Java. h about 69km
	eS	NE	17 19						
	iX	Z	17 44						
	M	N Z	30.0						
22	eX	V	10 53 36						
22	eP diff.	Z	15 40(09)						
	i(PKP)	Z	42 29						
	i(PKP)	EZV	43 07						
	i(SKS)	E	49 09						
	iX	(N)EZ	59 10						
	iX	NE	16 01 52						
	iX	Z	04 13						
	iX	E	04 38						Short period microseisms.
23	eL	Z	00 32.1						
23	eL	Z	03 15.6						USCGS: Sandwich Island Region
24	eL	Z	00 50.2						USCGS: Novaya Zemlya or Loyalty Is. Region ?
24	eL	Z	12 09.1						
24	eL	E	22 55.5						
25	eL	N	09 31 44						USCGS: South Pacific Ocean.
25	e(S)	E	12 31 04						
	eLq	E	40.2						V component not recording for most of day.
26	eX	Z	22 47 26						USCGS: Komandorskie Is. M = $6\frac{1}{2}$
	e(SS)	NE(Z)	23 03.1						
	eX	NE	08 05						
	eX	NE	17.6						
	eLr	Z	25.3						

Date 1962	Phase	Time (G.M.T.)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks
DECEMBER (continued)		h. m. s.	s.				km	
27								V component not recording.
29	iP Z	10 54 19						USCGS: Northern Chile: Felt.
	ePP Z	58 12						M = 6 - $6\frac{3}{4}$
	iSKS NE	04 49						
	eS E(Z)	05 22						
	iSP N	06 41						
	e(SS) N(E)Z	10.5						
29	iP EZ	14 57 05						USCGS: Kermadec Is. Region.
	iS E	15 04 36						h about 43km.
	iX N Z	04 43						M = 6 - $6\frac{1}{4}$
	i(ScS) N	06 53						H = 14 47 41.4
	M EZ	20.0						
29	eL Z	18 45.2						USCGS: Kermadec Island Region.
								H = 18 19 40.7
30	iP (N)EZ	18 27 11						USCGS: New Britain: Felt.
	iX Z	27 50						
	iS NE	36 01						
	eLq E	43.9						
	eLr N Z	48.3						
31	eX N	11 21.1						USCGS: Near Coast of Sumatra.
	eLq E	28.2						
	eLr N Z	31.2						
31	eL NEZ	20 07.0						

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