

TERRITORY OF PAPUA AND NEW GUINEA.
VULCANOLOGICAL OBSERVATORY RABAU.

SEISMOLOGICAL BULLETIN. 1957.

The Observatory is on the rim of Blanche Bay caldera, which is composed of beds of pumice dust and ash with occasional interspersed basalt lava flow. The instrument vault (3 metres deep) is concrete lined and the roof forms part of the floor of the Observatory. The seismometers are mounted on a concrete pier set on basalt $1\frac{1}{2}$ metres below the vault floor. The pier is separated from the floor by a gap (8cm) loosely filled with pumice dust.

Latitude - $04^{\circ}11'33''$ S. Longitude - $152^{\circ}10'16''$

Height above mean sea level = 183 metres (600 feet)

Instrument	Components	Symbol	Tg.sec.	Tp.sec.
Benioff	Z	Z	0.35	1.26
	NS	N	0.26	1.44
	EW	E	0.29	1.45

Rapindik Station. Supplementary information from seismograms recorded at Rapindik is included in this bulletin.

Latitude - $04^{\circ}13.7'$ S. Longitude - $152^{\circ}11.8'$ E.

Height above mean sea level - about 3 metres.

Foundation - unconsolidated volcanic ash.

Instrument	Components	Symbol	M(kg)	V	To	Damping
Omori	NS	N	15	11.9	3.6	Air,
	EW	E	15	10.2	3.8	critical

References. Tables - Jeffreys & Bullen, 1940.

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The station is maintained by the Administration of the Territory of Papua and New Guinea for vulcanological and seismological observations.

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TERRITORY OF PAPUA AND NEW GUINEA.

VULCANOLOGICAL OBSERVATORY RABAU.

SEISMOLOGICAL OBSERVATORY.

JANUARY, 1957

1st	eP i!	Z	01	06	19 20	U.S.C.G.S. 53 $\frac{1}{2}$ °N, 159°E. Kamchatka H = 00 56 40 h approx. = 150 kms.
2nd	eP e iPcP i ePP ePPP	Z Z Z Z Z Z	02	28	22 35 49 29 31 59	U.S.C.G.S. 52 $\frac{1}{2}$ °N, 168°W. Aleutian Is. - foreshock H = 02 17 35 Mag. = 6 $\frac{3}{4}$ (Pas)
	iP	Z	03	59	45	U.S.C.G.S. 53°N, 168°W. Aleutian Is. H = 03 48 44 Mag. = 7-7 $\frac{1}{4}$ (Pas)
	iP i	Z E	21	26 27	39 49	Felt: Awelkon Int. 2(MM) 50°40'S, 147°50'E.
3rd	eP i	Z Z	00	52	05 12	U.S.C.G.S. 53°N, 168°W. Aleutian Is. H = 00 41 02
	i!P i e iP e eScP eS esS	Z Z Z Z Z Z Z E	12	56 57 58 59 00 03 06	45.C. 09 24 39 21 48 26 58	U.S.C.G.S. 44°N, 130°E. Manchuria H = 12 48 27 h approx. = 600 kms. Mag. = 7 (Pas)
	iP epP	Z Z	13	51 53	46 39	U.S.C.G.S. 44°N, 130°E. Manchuria - aftershock H = 13 43 29 h approx. = 600 kms.
4th	eP i	Z Z	13	40 41	53 49	U.S.C.G.S. Solomons Is. H = 13 38 00 h approx. = 100 kms.
	e i i!	Z Z E	15	52 53	35 16 30	U.S.C.G.S. Solomon Is. H = 15 51 25
5th	Nil					
6th	i!P	Z	01	44	29.C.	U.S.C.G.S. 26°N, 126°E. Ryukyu Is. H = 01 36 58
	eP i i!	Z Z E	06	55 56	43 47 39	B.C.I.S. Solomon Is. H = 06 54.6m. Felt: Buin Int. 4(MM) 6°50'S, 155°45'E.
	iP i!S	Z E	15	45	15.C. 50	

(cont. over

2.						
6th cont.	iP	Z	15	50	25	Aftershock of the preceding shock.
	i!	Z			29	
	iS	E		50	55	
	i!	E		51	00	
7th	iP	Z	12	08	52	U.S.C.G.S. 8 $\frac{1}{2}$ ^o N, 126 ^o E. Mindanao H = 16 45 02 h approx. = 250 kms.
	i	Z		09	16	
	iS	NE			46	
	iP	Z	16	50	38	
8th	iP	Z	18	53	15	U.S.C.G.S. 52 $\frac{1}{2}$ ^o N, 168 ^o W. Aleutian Is. H = 17 29 36
	i	Z		54	39	
	eP	Z	17	40	25	
	e	Z	18	29	43	
9th	eP	Z	01	49	02	U.S.C.G.S. 54 ^o N, 169 ^o E. Komandorskie Is. H = 01 38 50
	(iP	Z	06	16	58	
	((					
	(i	Z		18	03	
10th	Nil					Felt: Awelkon Int. 2(MM) 5 ^o 40'S, 147 ^o 50'E. U.S.C.G.S. New Britain region. H = 06 15 37
11th	e(P)	Omori	11	59	40	Felt: Warangoi Int. 1-2(?) 4 ^o 30'S, 152 ^o 20'E. U.S.C.G.S. 27 ^o N, 127 $\frac{1}{2}$ ^o E. Ryukyu Is. H = 23 31 50
	iP	Z	23	39	18	
12th)						(U.S.C.G.S. 22 ^o S, 179 ^o W. Fiji Is. region H = 14 20 17)
13th)	Nil					
14th	i	Z	14	26	06	
	e	Z		27	39	
	i	Z		30	24	
	i	E		31	26	
	i	Z		35	28	
15th	iP	Z	01	00	16	U.S.C.G.S. 6 $\frac{1}{2}$ ^o N, 127 ^o E. near Mindanao, H = 20 21 45 h approx. = 100 kms.
	i	Z	20	16	52	
	iP	Z	20	27	28	
	ePP	Z		28	18	
	eS	Z		32	10	
16th	Nil					

3.					
17th	iP	Z	00	40	36
	i	Z			42
	eP	Z	07	28	40
					U.S.C.G.S. $7\frac{1}{2}^{\circ}\text{S}$, $129\frac{1}{2}^{\circ}\text{E}$. Banda Sea H = 07 23 43 h approx. = 100 kms.
	i	Z	10	55	02
	i	Z			37
	eP	Z	11	32	40
	i	Z			56
	iPP	E		33	50
					U.S.C.G.S. Flores Is. H = 11 26 17
	iP	Z	22	33	48
	i	Z			59
					U.S.C.G.S. 33°N , $137\frac{1}{2}^{\circ}\text{E}$. Honshu H = 22 26 10
18th	iP	Z	05	33	37.7
	i!	Z			38.1
					B.C.I.S. New Britain region H = 05 32.8m. <u>Felt:</u> Lindenhafen Int. 3 (MM) $6^{\circ}10'\text{S}$, $150^{\circ}35'\text{E}$. <u>Felt:</u> Popondetta Int. 2 (MM) $8^{\circ}45'\text{S}$, $148^{\circ}15'\text{E}$.
	iP	Z	11	46	07
19th	iP	Z	05	22	25
	iPcP	Z		24	52
	iScP	Z		27	52
					U.S.C.G.S. $21\frac{1}{2}^{\circ}\text{S}$, 179°W . Fiji Is. H = 05 16 37 h approx. = 650 kms. Mag. = $6\frac{1}{2}$ (Pas)
	eP	Omori	18	28.8	-
					<u>Felt:</u> Biaila Int. 3 (MM) $5^{\circ}20'\text{S}$, $151^{\circ}05'\text{E}$. <u>Felt:</u> Karlai Int. 3 (MM) $5^{\circ}05'\text{S}$, $152^{\circ}00'\text{E}$. <u>Felt:</u> Warangoi Int. 2 (MM) $4^{\circ}30'\text{S}$, $152^{\circ}20'\text{E}$. <u>Felt:</u> Tol Int. 2 (MM) $5^{\circ}00'\text{S}$, $152^{\circ}05'\text{E}$.

No record on Benioff Seismograph for the rest of the month.

OMORI.

24th	eP		01	12	47
	e(S)			13	50
					U.S.C.G.S. 6°S , 147°E . New Guinea H = 01 11 11 h approx. = 100 kms. <u>Felt:</u> Wau Int. 4 (MM) $7^{\circ}20'\text{S}$, $146^{\circ}45'\text{E}$. <u>Felt:</u> Minj Int. 3-4 (MM) $5^{\circ}50'\text{S}$, $144^{\circ}40'\text{E}$. <u>Felt:</u> Lae Int. 3-4 (MM) $6^{\circ}45'\text{S}$, $147^{\circ}00'\text{E}$. <u>Felt:</u> Karkar Int. 3-4 (MM) $4^{\circ}40'\text{S}$, $146^{\circ}00'\text{E}$.
	eP		16	41	(41)

4.

25th eL 19 14 07 Long Period Waves
26th e 23 45 26

Tremors felt in the Territory, January, 1957.

Date	Time G.M.T.	Intensity Mercalli Modified	Locality	Latitude	Longitude
				South	East:
				° '	° '
Jan. 1st	0039	2	Warangoi.	04 30	152 20
	2nd 2130	2	Awelkon	05 40	147 50
	6th 0655	4	Buin	06 50	155 45
	9th 0620	2	Awelkon	05 40	147 50
	0754	3	"	"	"
	1140	1	"	"	"
11th	1045	2	Pomio	05 30	151 30
	1137	2	Kandrian	06 15	149 35
	1205	1 - 2(?)	Warangoi	04 30	152 20
16th	0824	2	Kandrian	06 15	149 35
17th	1250	1	Tol	05 00	152 05
18th	0534	3	Lindenhafen	06 10	150 35
	0535	2	Popondetta	08 45	148 15
	c:1130	2	Kandrian	06 15	149 35
	1702	3	Buin	06 50	155 45
19th	1830	3	Karlai	05 05	152 00
	1828	3	Bialla	05 20	151 05
	1830	2	Tol	05 00	152 05
	1821	2	Warangoi	04 30	152 20
24th	0115	4(E-W)	Wau	07 20	146 45
	0112	3 - 4	Karkar	04 40	146 00
	0112	3 - 4(N-S)	Minj	05 50	144 40
	0109	3 - 4	Lae	06 45	147 00
	0115	3	Aiome	05 10	144 45
	0112	3	Saidor	05 35	146 30
	0116	3	Popondetta	08 45	148 15

(cont. over

Date	Time G.M.T.	Intensity Mercalli Modified	Locality	Latitude South o i	Longitude East o i
24th cont.	0115	3	Madang	05 15	145 50
	0108	3	Awelkon	05 40	147 50
	0112	1	Ihu	07 55	145 25
30th	1335.	-	Nr. Blup Blup Is. (M.V. "Koro")	03 30	144 35

Date	Time G.M.T. Local	Intensity Richter Scale	Locality	Latitude Long.	Depth km
1962	07 12	2	Alaska	65 12 145 40	10
1962	07 08	2	Alaska	65 40 145 30	10
1962	07 05	1	Idaho	43 32 115 22	10
1962	07 30	2	W. Alaska Pt. Barrow (N. 10° 10' 00")	71 30 156 30	10



TERRITORY OF PAPUA AND NEW GUINEA.

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SEISMOLOGICAL BULLETIN.

FEBRUARY, 1957.

No record on Benioff Seismographs
1st - 9th February (0709 hrs.)

OMORI.

6th	e		04	22	07	
7th	e		16	43	51	
8th	e		03	11	09	
	eP		08	28	55	Felt: Rabaul Int. 2(MM) 4°11'S, 152°10'E.
	e		09	13	55	
9th	iP	Z	08	11	53	U.S.C.G.S. 11½°N, 138½°E. Caroline Is. H = 08 07 15
	i!P	Z	13	36	38½	D. U.S.C.G.S. 34°S, 180°.
	i	E		37	12	New Zealand H = 13 29 18 h approx. = 150 kms. Mag. = 6½ (Pas)
10th	eP	Z	22	38	24	U.S.C.G.S. 10°N, 126°E. Mindanao - foreshock H = 22 32 15 Mag. 6½-6¾ (Pas)
	eP	Z	22	57	01	U.S.C.G.S. 10½°N, 126½°E.
	iPP	Z			51	Mindanao H = 22 50 52 Mag. = 6¾ (Pas).
11th	iP	Z	01	20	47	U.S.C.G.S. 10°N, 126°E.
	e	Z		21	10	Mindanao - aftershock H = 01 14 44 Mag. = 6½ (Pas)
	eP	Z	14	31	46	U.S.C.G.S. 10°N, 126°E.
	e			31	55	Mindanao - aftershock H = 14 25 38 Mag. 6½ (Pas)
12th	iP	Z	23	47	51	
	i	Z			55	
13th	eP	Z	00	35	52	U.S.C.G.S. 10°N, 126½°E. Mindanao - aftershock H = 00 29 48
	iP	Z	12	42	18	U.S.C.G.S. 18°S, 169°E. New Hebrides Is. H = 12 37 14
	iP	Z	20	20	49½	Felt: Tol Int. 1(MM) 5°00'S, 152°05'E. S-P (Omori) = 15 secs.
						Compression from south-east

2.

14th	i!P	Z	06	44	31 $\frac{1}{2}$	<u>Felt:</u> Rabaul Int. 2-3(MM) 4°11'S, 152°10'E. <u>Felt:</u> Kokopo Int. 2(MM) 4°20'S, 152°15'E.
15th	Nil					
16th	iP	Z	02	47	00 D.	B.C.I.S. New Britain H = 02 46 34 <u>Felt:</u> Rabaul Int. 3(MM) 4°11'S, 152°10'E. <u>Felt:</u> Karoola Int. 3(MM) 5°10'S, 154°35'E. <u>Felt:</u> Warangoi Int. 2(MM) 4°30'S, 152°20'E.
17th	eP	Z	16	08	59	U.S.C.G.S. 4 $\frac{1}{2}$ °S, 125 $\frac{1}{2}$ °E. Banda Sea H = 16 04 02
18th	Nil					
19th	i!P	Z	04	59	00	<u>Felt:</u> Pomio Int. 1-2(MM) 5°30'S, 151°30'E.
	eP	Z	16	54	11	
	i	Z			25	
	eP	Z	17	01	00	<u>Felt:</u> Tari Int. 4(MM)
	iP	Z			01 $\frac{1}{2}$	5°50'S, 143°00'E.
	i	Z			09 $\frac{1}{2}$	<u>Felt:</u> Telefomin
	i!	Z			14 $\frac{1}{2}$	5°10'S, 141°35'E.
	e	Z			47	
	i	N			53 $\frac{1}{2}$	
	eP	Z	20	09	19	U.S.C.G.S. 56°N, 164°E.
	e	Z			38	Kamchatka H = 19 58 55
20th	iP	Z	13	09	30	U.S.C.G.S. 53 $\frac{1}{2}$ °N, 160°E.
	e	Z			42	Kamchatka H = 12 59 44 h approx. = 60 kms.
	iP	Z	22	08	01	U.S.C.G.S. 2°N, 97°E.
	i	Z			11 $\frac{1}{2}$	Sumatra H = 21 58 23
21st	iP	Z	19	43	37	U.S.C.G.S. 31°S, 178°W.
						Kermadec Is. H = 19 36 05
22nd	iP	Z	00	37	53	Wellington 39°2S, 175°1E.
						North Island New Zealand H = 00 30 11

3.

23rd	iP	Z	00	51	20 C.	
	i!	NE			41 $\frac{1}{2}$	
	eP	Z	18	59	08	U.S.C.G.S. 12°N, 141°E. Caroline Is. H = 18 54 37
	iP	Z	20	33	54 D.	U.S.C.G.S. 24°N, 122°E.
	i	Z			58 $\frac{1}{2}$	Formosa
	i	Z		34	03	H = 20 26 12
	i	Z			14 $\frac{1}{2}$	Mag. 7-7 $\frac{1}{4}$ (Pas)
	i	Z		35	22	
	e	E		38	01	
	e	N			30	
	e	N			44	
	eScP	Z		39	38	
	i	Z		40	23	
	e	Z		41	39	
	e	Z	21	06	02	
	e	Z		15	11	
24th	iP	Z	05	37	39.9D.	<u>Felt</u> : Buin Int. 1(MM) 6°50'S, 155°45'E. S-P (Omori) = 23 secs.
	iP	Z	17	32	12	
	iP	Z	21	55	09	U.S.C.G.S. 2(6)°N, 121 $\frac{1}{2}$ °E. Formosa - aftershock H = 21 47 26
25th	iP	Z	13	26	21	U.S.C.G.S. 6°S, 130°E.
	i	Z			34	Banda Sea.
	eScP	Z		33	33	H = 13 21 17
26th	iP	Z	13	57	43 $\frac{1}{2}$	<u>Felt</u> : Awelkon
	i	NE		58	54	Int. 3(MM)
	Compression from west					5°40'S, 147°50'E.
27th	eP	Z	15	09	08	U.S.C.G.S. 24°N, 121 $\frac{1}{2}$ °E. Formosa H = 15 01 22
	eP	Z	16	11	51	U.S.C.G.S. 11 $\frac{1}{2}$ °S, 167°E.
	e	Z		12	41	Santa Cruz Is. H = 16 07 58
28th	i	Z	16	59	24	

Tremors felt in the Territory, February, 1957.

Date	Time G.M.T.	Intensity Mercalli Modified	Locality	Latitude South		Longitude East	
				o	'	o	'
8th	0829	2	Rabaul	04	11	152	10
10th	0001	1	Wau	07	20	146	45
	2142	1	Pomio	05	30	151	30
11th	0938	1	Wau	07	20	146	45
13th	0200	2	Budoia	09	43	150	50
	2021	1	Tol	05	00	152	05
14th	0645	2 - 3	Rabaul	04	11	152	10
		2	Kokopo	04	20	152	15
16th	0247	3	Rabaul	04	11	152	10
		3	Karoola	05	10	151	35
		2	Warangoi	04	30	152	20
		2	Kokopo	04	20	152	15
18th	1345	2	Budoia	09	43	150	50
		2	Budoia	09	43	150	50
19th	c:0500	1 - 2	Pomio	05	30	151	30
	1600(?)	3	Popondetta	08	45	148	15
	1701	4	Tari	05	50	143	00
		-	Telefomin	05	10	141	35
21st	0515	2	Kandrian	06	15	149	35
	1526	4	Tari	05	50	143	00
24th	0533	1	Buin	06	50	155	45
	1325	3	Karkar	04	40	146	00
26th	1358	3	Awelkon	05	40	147	50

TERRITORY OF PAPUA AND NEW GUINEA.

VULCANOLOGICAL OBSERVATORY RABAU.

SEISMOLOGICAL BULLETIN.

MARCH, 1957.

1st	iP	Z	21	07	38	Dilatation. Deep?
	i!	Z			41	
	iS	-		08	25	
	ei	-			32	
2nd	iP!	Z	08	11	04	U.S.C.G.S. 6°S, 151°E. Nr. coast of New Britain H = 08 10 24 Felt: Rabaul Int. 4(MM) 4°11'S, 152°10'E. Felt: Pomio (?) Int. 3(MM) 5°30'S, 151°30'E. Felt: Ulamona Int. 2(MM) 5°00'S, 151°15'E. Felt: Lindenhafen Int. 1-2(MM) 6°10'S, 150°35'E.
	e(P)	Z	10	56	46	
	i				53	
	e	(11)	04		30	
	e				57	
3rd	eP	Z	00	24	30	B.C.I.S.
	i				31½	Solomon Is.
	i(S)			25	29½	H = 00 23.2m.
	iP	Z	10	45	11½	
	eP	Z	20	50	48½	U.S.C.G.S. 9½°S, 154°E.
	i				50	Nr. E. coast of New Guinea
	e			51.6	-	H = 20 49 30
	i			51	41	h approx. = 100 kms.
	i				51	
	iS	E			53.7	
	iP	Z	23	59	18½	Felt: Rabaul
	Dilatation ? obscured by					Int. 1(MM)
	i!	Z			19½	4°11'S, 152°10'E. S-P (Omori) = 25 secs.
4th	iP!	Z	00	11	53½	Dilatation. Deep.
	iS	NE		12	18	Aftershock
	iP!	Z	00	15	32½	Dilatation. Deep
	iS!	NE			57½	Aftershock
	iP!	Z	17	01	25	Compression. Deep.
	i!	Z			39	Aftershock.
	iS	N			51½	
	iS	E			55½	
5th	e(PKP)	Z	12	44	27	U.S.C.G.S. 33°N, 34½°W. North Atlantic H = 12 24 35 Mag. = 6½-6¾ (Pas)

2.

5th. cont.	eP	Z	19	07	50	U.S.C.G.S. 14°S, 167½°E.
	i	Z			52	New Hebrides Is.
	i	Z		08	20½	H = 19 03 30
	i	Z			23½	
	i	Z			58½	
	e(S)	NE	11	22		
	e	NE			54	
	e(PcP)	NE	12	09		
6th	eP	Z	11	36	02	U.S.C.G.S. 49°N, 155°E.
	e				16	Kurile Is. H = 11 26 44
7th	iP	Z	05	43	45	
	i(S)	NE		44	10	
	e	Z	10	53	(17½)	U.S.C.G.S. 19°S, 178½°W.
	i				22.6	Fiji Is. H = 10 47 25 h approx. = 550 kms.
	e	Z	23	38	19	(Felt: Telefomin Int. 3(MM) 5°10'S, 141°35'E. Felt: Tari Int. 2(MM) 5°50'S, 143°00'E.)
	ePKP	Z	12	33	13	B.C.I.S. 39°5N, 22°8E.
	ePP	Z		34	54	Thessaly - foreshock
8th	ePPS	Z		46	17	H = 12 14 14
	ePKP	Z	12	40	09½	B.C.I.S. 39°5N, 22°8E.
	ePP	Z		41	36	Thessaly
	i(PP)	Z			51.5	H = 12 21 14
	ePPS	Z		53	08	Mag. = 6¼ (Pas)
	iPPS	N			13.7	
	eP	Z	16	40	57	U.S.C.G.S. 23°S, 179°E.
	i	Z			58½	Fiji Is.
	i	Z		42	34.7	H = 16 35 11
	e(PP)	N		43	00	h approx. = 600 kms.
	i(PcP)	ZN			30	
	e	N		45	13	
	e(S)	N			30	
9th	e(S)	E			32	
	e	Z		46	22	
	i	Z			23	
	eP	Z	14	32	47	U.S.C.G.S. 51°3N, 175°8 W.
	i			33	04	Andreanov Is.
	i(PcP)				18	H = 14 22 27.5
	i				32	Mag. = 7¼-8 (Pas)
	i			34	17	
	i(PP)	Z			56	
	i(PPP)	Z		36	21.8	
	e				23	
	e(ScP)			37	29	
	e(S)	NE		41	(25)	
	e				44	
	e			42	01	
	i				26	
	i			43	33	
	i			44	56	
	e			46	31	
	e			47	35	
	e			48	46	
	e			50.4		
	e(L)			52.1		

(cont. over

3.

9th cont.	eP	15	02	15	
	e		03	06	
	eP	15	07	44	
	e		08	27	
	e(L)	15.	09.1	-	
	e	15	12	48	
	i	15	13	00	
	e	15	15.5	-	
	i	15	18	04	
	iP!	15	20	52	B.C.I.S.
	i		Compression		Andreanov Is.
			21	04.5	H = 15 10 12
	iP	15	27	44 $\frac{1}{2}$	
			Compression		
	e(P)	15	48	59	
	e		50	26	
	iP	15	52	05	U.S.C.G.S. 50 $\frac{1}{2}$ N, 177°W.
	i			09 $\frac{1}{2}$	Andreanov Is.
	i!			13	H = 15 41 50
	i(PcP)			25	
	i(PP)		54	22	
	eP	15	58	38	B.C.I.S.
	i			53 $\frac{1}{2}$	Aleutian Is.
	e	(16)	00.5	-	H = 15 48.2m.
	e(P)	16	16	50	B.C.I.S.
					Fox Is.
					H = 16 06 12
	e	16	21	30	
	e(P)	16	26	45	B.C.I.S.
	e		27	03	Andreanov Is.
					H = 16 16 26
	e(PPP)	16	35	46	(B.C.I.S.
					Andreanov Is.
					H = 16 21.8m.)
	eP	16	42	45	U.S.C.G.S. 51°N, 176°W.
	i			57	H = 16 32 30
	eP	16	55	46	U.S.C.G.S. 51 $\frac{1}{2}$ N, 174°W.
	e		56	09	Andreanov Is.
	e		57.5	-	H = 16 45 26
	eP	17	20	39	U.S.C.G.S. 51 $\frac{1}{2}$ N, 172 $\frac{1}{2}$ W.
					Andreanov Is.
					H = 17 10 13
	eP	18	08	24	B.C.I.S. 55 $\frac{3}{4}$ N, 156°W.
					Unimak Is.
					H = 17 57 25
	eP	19	24	22	B.C.I.S. 53°N, 169°W.
	i		25	03	Fox Is.
					H = 19 13 33
	eP	19	45	27	B.C.I.S. 53°N, 172 $\frac{1}{2}$ W.
					Andreanov Is.
					H = 19 34 54

(cont. over

			4.		
9th cont.	eP e	19	48 49	10 00	U.S.C.G.S. 51°N , 173°W . Andreanov Is. H = 19 37 31
	eP	20	11	27	U.S.C.G.S. $51\frac{1}{2}^{\circ}\text{N}$, $170\frac{1}{2}^{\circ}\text{W}$. Fox Is. H = 20 00 56
	eP	20	17	46	B.C.I.S. $51\frac{1}{2}^{\circ}\text{N}$, 171°W . Fox Is. H = 20 07 01
	eP	20	32	32	U.S.C.G.S. 52°N , $169\frac{1}{2}^{\circ}\text{W}$. Fox Is. H = 20 22 02
	eP e	20	41 42	43 26	
	eP	20	49	57	U.S.C.G.S. $52\frac{1}{2}^{\circ}\text{N}$, $169\frac{1}{2}^{\circ}\text{W}$. Fox Is. H = 20 39 15 Mag. = $6\frac{1}{4}$ -7 (Pas)
	e(P) e	21	18.7 19	- 09	
	eP e	22	07	11 22	U.S.C.G.S. 53°N , 168°W . Fox Is. H = 21 56 24
	eP	23	10	02	U.S.C.G.S. $51\frac{1}{2}^{\circ}\text{N}$, 171°W . Fox Is. H = 22 59 26
	eP	23	20	(02)	B.C.I.S. Fox Is. H = 23 09 25
	eP	23	31	(32)	B.C.I.S. $52\frac{1}{4}^{\circ}\text{N}$, $174\frac{3}{4}^{\circ}\text{W}$. Andreanov Is. H = 23 20 58
	e(P)	23	32	$44\frac{1}{2}$	
10th	e(P)	00	17	$13\frac{1}{2}$	B.C.I.S. Fox Is. H = 00 06 32
	e(P)	00	21	(47)	B.C.I.S. $52\frac{3}{4}^{\circ}\text{N}$, $173\frac{3}{4}^{\circ}\text{W}$. Andreanov Is. H = 00 11 29
	eP	01	27	(31)	B.C.I.S. $53\frac{1}{2}^{\circ}\text{N}$, $177\frac{1}{4}^{\circ}\text{W}$. Andreanov Is. H = 01 17 00
	eP	01	33	(02)	B.C.I.S. 53°N , $168\frac{1}{2}^{\circ}\text{W}$. Fox Is. H = 01 22 07
	iP	01	53	52.0	B.C.I.S. Andreanov Is. H = 01 43.5m.
	eP	02	33	(00)	B.C.I.S. 53°N , $168\frac{1}{2}^{\circ}\text{W}$. Fox Is. H = 02 22 30 (cont. over)

			5.		
10th cont.	eP	02	46	41	
	eP	03	03	33	J.M.A. 41°6'N, 143°8'E. Hokkaido H = 02 55 07 h approx. = 60 kms.
	e(P) i	03	16 20	38 07	U.S.C.G.S. 52°N, 176°W. Andreanov Is. H = 03 06 02 Mag. = 6 $\frac{1}{2}$ -6 $\frac{3}{4}$ (Pas)
	iP	03	19	38	U.S.C.G.S. 51 $\frac{1}{2}$ °N, 174°W. Andreanov Is. H = 03 08 55
	eP e	03	42 48.6	41	B.C.I.S. Discordant data 2 earthquakes, one near 34°N, 72°E.
	eP e	04	46 47	(46) 42	B.C.I.S. Aleutian Is. Rather discordant data. H = 04 37.2m.
	eP	05	43	52	U.S.C.G.S. 52°N, 174°W. Andreanov Is. H = 05 33 27
	eP	07	33	37	U.S.C.G.S. 52°N, 176°W. Andreanov Is. H = 07 23 18
	eP	07	42	21	U.S.C.G.S. 53°N, 168°W. Fox Is. H = 07 31 36
	eP	11	31	21	U.S.C.G.S. 52°N, 171°W. Fox Is. H = 11 20 45
	eP	11	45	04	B.C.I.S. Aleutian Is. H = 11 36.0m.
	eP e e	12	22 23	40 22 38	U.S.C.G.S. Andreanov Is. H = 12 12 18
	eP i	12	46	37 47	U.S.C.G.S. 51°N, 171°W. Fox Is. H = 12 36 04
	eP e	12	55	45 57	U.S.C.G.S. 51°N, 177°W. Andreanov Is. H = 12 45 31
	eP	13	20	22	U.S.C.G.S. 51 $\frac{1}{2}$ °N, 180°. Andreanov Is. H = 13 10 13
	iP	13	38	43	U.S.C.G.S. 51 $\frac{1}{2}$ °N, 179°W. Andreanov Is. H = 13 28 30
	eP	14	19	40	
	eP	14	55	48	B.C.I.S. Aleutian Is. H = 14 45.9m.

6.

10th cont.	eP e(P) e(S)	15	36 39 45.5	51 05	U.S.C.G.S. 52°N, 173°W. Andreanov Is. H = 15 26 23
	eP e	15 16	59 05	24 57	B.C.I.S. Fox Is. H = 15 48 36
	e(P)	16	41	46	
	eP i	16	48	13 51.2	U.S.C.G.S. 51½°N, 173½°W. Andreanov Is. H = 16 37 45
	eP i	16	50	10 53	B.C.I.S. Andreanov Is. H = 16 39.8m.
	eP	17	56	00	B.C.I.S. Aleutian Is. H = 17 45.8m.
	eP	19	28	(42)	U.S.C.G.S. 51°N, 177°W. Andreanov Is. H = 19 18 30
	eP	19	51	21	U.S.C.G.S. 52°N, 173°W. Andreanov Is. H = 19 40 55
	eP	21	07	(38)	B.C.I.S. 54°N, 167°W. Fox Is. H = 20 57 04
11th	eP	00	18	59	U.S.C.G.S. 52°N, 169°W. Fox Is. H = 00 08 07
	eP i i e	03	22 23 24	55 01 13 40	U.S.C.G.S. 51°N, 177°W. Andreanov Is. H = 03 12 41 Mag. = 6¼-7 (Pas)
	eP	08	48	06½	U.S.C.G.S. 53°N, 168°W. Fox Is. H = 08 37 15
	eP i ePcP e(P) e ePPP e(S) e	10	09	26 33 55 29 52 49 18.2 18.7	U.S.C.G.S. 53°N, 164½°W. Fox Is. H = 09 58 42 Mag. = 6¼-7 (Pas)
	e	10	38	24	
	i(P) i iS	11	05	19 29 10	Felt: Aropa Int. 1(MM) 6°25'S, 155°50'E.
	eP i e eS	12	18 19 26.6	48 50 55 -	U.S.C.G.S. 2°N, 97°E. Sumatra H = 12 09 10

(cont. over)

7.

11th cont.	eP	15	05	30	U.S.C.G.S. $51\frac{1}{2}^{\circ}\text{N}$, $178\frac{1}{2}^{\circ}\text{W}$.
	i			34	Andreanov Is.
	iPcP			48	H = 14 55 19
	i		06	48	Mag. = $6\frac{3}{4}$ (Pas)
	ePP		07	32	
	e			55	
	eS		13	50	
	e	15	34	57	
	iP	15	46	05	U.S.C.G.S. 51°N , 179°W .
	i		47	06	Andreanov Is.
					H = 15 35 50
					Mag. = $6\frac{3}{4}$ (Pas)
	eP	20	48	49	B.C.I.S.
					Andreanov Is.
					H = 20 38.5m.
12th	iP	01	13	14	U.S.C.G.S. 52°N , $174\frac{1}{2}^{\circ}\text{W}$.
					Andreanov Is.
					H = 01 02 33
	eiP	07	39	16	U.S.C.G.S. $51\frac{1}{2}^{\circ}\text{N}$, $173\frac{1}{2}^{\circ}\text{W}$.
					Andreanov Is.
					H = 07 28 46
	iP	07	49	31	U.S.C.G.S. 52°N , 178°W .
	i			42	Andreanov Is.
	i			55	H = 07 39 17
	e(S)		58.0	-	Mag. $6\frac{1}{4}$ - $6\frac{1}{2}$ (Pas)
	e	(08)	08.6	-	
	eP	08	13	26	U.S.C.G.S. 51°N , 178°W .
					Andreanov Is.
					H = 08 03 11
	e(P)	08	56	(29)	B.C.I.S.
					Andreanov Is.
					H = 08 46.8m.
	e(P)	10	48	(54)	U.S.C.G.S. $51\frac{1}{2}^{\circ}\text{N}$, $174\frac{1}{2}^{\circ}\text{W}$.
					Andreanov Is.
					H = 10 38 30
	eP	11	55	08	U.S.C.G.S. 51°N , 177°W .
	i			14	Andreanov Is.
	i			22	H = 11 44 50
	iPcP			52	Mag. 7 - $7\frac{1}{4}$ (Pas)
	i			58	
	i		56	28	
	ePP		57	22	
	e		59	34	
	e	(12)	02.6	-	
	ePPS		03	53	
	e(SS)		07	02	
	eP	12	13	16	B.C.I.S. 51°N , 177°W .
					Andreanov Is.
					H = 12 03 01
	e	12	24	28	B.C.I.S.
	e			41	Discordant data.
	e(P)	12	56	58	U.S.C.G.S. 53°N , $168\frac{1}{2}^{\circ}\text{W}$.
	i		57	01	Fox Is.
	i			15	H = 12 46 12
	e		59	27	
	eS	(13)	05.8	-	
	e(L)		25.9	-	

(cont. over)

			8.		
12th cont.	eP	14	42	24	B.C.I.S. 52 $\frac{1}{2}$ ^o N, 178 $\frac{1}{2}$ ^o W. Andreanov Is. H = 14 32 16
	eiP	15	40	27	B.C.I.S. Andreanov Is. H = 15 30.2m.
	eP	15	51	26	B.C.I.S. 52 $\frac{1}{2}$ ^o N, 167 $\frac{1}{2}$ ^o W. Fox Is. H = 15 40 50
	eP	16	36	27	U.S.C.G.S. 14 $\frac{1}{2}$ ^o S, 168 ^o E. New Hebrides Is. H = 16 32 05
	i			32	
	iPP			43	
	ei			57	
	i		37	26	
	eS		39	59	
	eSS		40	26	
	iPcP			55	
	e	17	10.8	-	U.S.C.G.S. 51 $\frac{1}{2}$ ^o N, 175 ^o W. Andreanov Is. H = 17 00 21
	i		11	01	
	iP	17	27	33	U.S.C.G.S. 21 $\frac{1}{2}$ ^o S, 17(9) ^o W. Fiji Is. h approx. = 700kms.
	eiPcP		29	58	
	e(S)		32	06	H = 17 21 47
	iP	18	34	29	U.S.C.G.S. 18 ^o S, 178 $\frac{1}{2}$ ^o W. Fiji Is. H = 18 28 50 h approx. = 650 kms.
			Dilatation		
	i			36	
	eS		39.0	-	
	i		39	50	
	e(ScS)		43.8	-	
	iP	19	17	17	U.S.C.G.S. 16 ^o S, 176 $\frac{1}{2}$ ^o W. Fiji Is. H = 19 11 16 h approx. = 400 kms.
			Dilatation (to east?)		
	i			25	
	e(pP)		18	48	
	ei(PcP)		19	56	
	eS		22	05	
	i(ScP)		23	02	
	e(PcS)			41	
	e(ScS)		27	07	
13th	eP	20	11	(28)	U.S.C.G.S. 54 ^o N, 165 ^o W. Unimak Is. H = 20 00 30
	i	23	56	05 $\frac{1}{2}$	U.S.C.G.S. 52 ^o N, 174 ^o W. Andreanov Is. H = 23 45 25
	iP	02	59	05	U.S.C.G.S. 52 ^o N, 171 $\frac{1}{2}$ ^o W. Andreanov Is. H = 02 48 20
	iP!	04	31	55	Dilatation.Deep.
	iS		32	33 $\frac{1}{2}$	<u>Felt</u> : Linga Linga
	i			44	Int. 2(MM) 5 ^o 35'S, 149 ^o 45'E.
	iP	09	18	42	Wellington. 38 ^o 7S, 175 ^o .6E. New Zealand H = 09 11 30 h approx. = 270 kms.
	i			48 $\frac{1}{2}$	
	iP		19	40	
	i		20	12	
	e(PcP)			35	
	eS		24	25	
					(cont. over

9.

13th cont.	eP	11	48	(04)	U.S.C.G.S. 51°N, 177°W. Andreanov Is. H = 11 37 49
	eP	12	08	(26)	U.S.C.G.S. 52°N, 173°W. Andreanov Is. H = 11 57 58
	e(P)	15	12	52	B.C.I.S. Aleutian Is. H = 15 03.1m.
	iP	15	52	19 $\frac{1}{2}$	U.S.C.G.S. 51 $\frac{1}{2}$ °N, 179°W. Andreanov Is. H = 15 42 05 Mag. = 6 $\frac{3}{4}$ (Pas)
	i			48	
	iPcP		53	04	
	e		54	53	
	e		55	53	
	eS	(16)	00	34	
	e	16	20	(37)	
	e		21	(36)	
	i			56	
	e		22	34	
	eP	17	54	11	U.S.C.G.S. 51°N, 175°W. Andreanov Is. H = 17 43 40
	e(P)	19	07	(04)	U.S.C.G.S. 52 $\frac{1}{2}$ °N, 168°W. Fox Is. H = 18 56 33
	eP	20	10	30	U.S.C.G.S. 54°N, 166°W. Fox Is. H = 19 59 23
	e			46	
	e	23	20	(50)	
	i			57	
14th	e(P)	10	45	(17)	U.S.C.G.S. Fox Is. H = 10 34 33
	eiP	11	19	25	
	e(P)	12	40	(11)	U.S.C.G.S. 53°N, 166 $\frac{1}{2}$ °W. Fox Is. H = 12 29 32
	iP	12	49	11	
	i(S)		Compression	46	
	eiP	14	58	00	U.S.C.G.S. 51 $\frac{1}{2}$ °N, 177°W. Andreanov Is. H = 14 47 45 Mag. = 7 $\frac{1}{2}$ (Pas)
	i			12	
	i			31 $\frac{1}{2}$	
	i(PcP)		59	00	
	e(PPP)	(15)	01	58	
	e(S)		06.4	-	
	eP	15	15	21	B.C.I.S. 51 $\frac{1}{2}$ °N, 177°W. Andreanov Is. - aftershock H = 15 05 06
	(i			31	
	? (e	15	20	40	
	e	15	27	16	

(cont. over

10.				
14th cont.	e	15	32	35
	e(P)	16	01	15
	e(P)	16	11	(54)
U.S.C.G.S. 51 $\frac{1}{2}$ [°] N, 177 $\frac{1}{2}$ [°] W. Andreanov Is. H = 15 51 00				
B.C.I.S. 51 $\frac{1}{4}$ [°] N, 176 $\frac{1}{4}$ [°] W. Andreanov Is. H = 16 01 37				
15th	e	02	51	(44)
	eP	03	02	59
	i		03	01
U.S.C.G.S. 53 [°] N, 167 [°] W. Fox Is. Mag. 6 $\frac{3}{4}$ (Pas) H = 02 52 08				
	e		04	45
	eP	12	07	52
	eP			
U.S.C.G.S. 51 [°] N, 173 [°] W. Andreanov Is. H = 11 57 28				
	eP	17	25	13
	i			14 $\frac{1}{2}$
	i			15 $\frac{1}{2}$
	i			18
	e		31	01
	e			
16th	eP	02	44	20
	i			28
	i			45
U.S.C.G.S. 52 [°] N, 179 [°] W. Andreanov Is. H = 02 34 12				
	e(PP)		46	51
	i		47	07
	e(L)	(03)	04.1	-
	e	03	13	46
	eP			
	e			
17th	eP	00	02	37
	i		15	07
	e			
U.S.C.G.S. 27 [°] N, 127 $\frac{1}{2}$ [°] E. Ryuku Is. H = 23 55 08 (16th March)				
	eP	08	03	58
	i		04	12
	e			
U.S.C.G.S. 51 [°] N, 179 [°] W. Andreanov Is. H = 07 53 51				
	eP	15	22	26
	i			40
	e			
U.S.C.G.S. 53 [°] N, 167 $\frac{1}{2}$ [°] W. Fox Is. H = 15 11 42				
	iP	16	28	02
	i(PcP)			30
	e		30	16
U.S.C.G.S. 52 $\frac{1}{2}$ [°] N, 166 [°] W. Fox Is. H = 16 17 13				
	e(PP)			30
	e(PPP)		31	10
	e			
	e	16	56	14
	e			43
	e			
U.S.C.G.S. 54 [°] N, 166 [°] W. Fox Is. H = 22 44 44 Mag. = 6 $\frac{1}{2}$ (Pas)				
18th	iP	02	36	03
	e		38	41
	e			
U.S.C.G.S. 52 $\frac{1}{2}$ [°] N, 171 [°] W. Fox Is. H = 02 25 56				
	iP	05	25	29
	i		Compression	
	i		26	30

(cont. over)

11.

18th	ei(P)	08	46	07
cont.	i			$11\frac{1}{2}$
	i		47	06
	eP	13	49	46
	i			51
	i			$57\frac{1}{2}$
	i		50	$03\frac{1}{2}$
	i			42
	i			48
	e			51
	i		51	34

e(P)	19	36	05	U.S.C.G.S. 20°S, 178°W.
i			24	Fiji Is.
i(PcP)		38	52	H = 19 30 16
e(ScS)		46	00	h = 450 kms.

Very small
amplitude

e(P)	20	13	57	U.S.C.G.S. 52°N, 180°
				Andreanov Is.
				H = 20 03 47

iP!	21	14	52	U.S.C.G.S. 6°S, 152°E.
				New Britain
				H = 21 14 12
				Felt: Karoola
				Int. 3 (MM)
				5°10'S, 154°35'E.
				Felt: Warangoi
				Int. 2-3 (MM)
				4°30'S, 152°20'E.
				Felt: Rabaul
				Int. 2 (MM)
				4°11'S, 152°10'E.
				Felt: Pomio
				Int. 2 (MM)
				5°30'S, 151°30'E.

19th	iP!	00	21	$42\frac{1}{2}$	Deeper than normal.
	iS			$58\frac{1}{2}$	

Dilatation to
north-west

iP	00	40	$12\frac{1}{2}$
i			$37\frac{1}{2}$

Compression

e(P)	08	23	36	U.S.C.G.S. 52°N, 169°W.
				Fox Is.
				H = 08 12 40
(i(P)	08	25	10	U.S.C.G.S. 53°N, 168°W.
? (				Fox Is.
(e	08	27	51	H = 08 14 10
eP	11	39	07	U.S.C.G.S. 51 $\frac{1}{2}$ °N, 176 $\frac{1}{2}$ °W.
e			39	Andreanov Is.
				H = 11 28 50
eP	13	01	13	U.S.C.G.S. 51 $\frac{1}{2}$ °N, 175°W.
e			21	Andreanov Is.
i			32	H = 12 50 51
e		03	15	Mag. = 6 $\frac{3}{4}$ (Pas)
eS		09	44	
e(ScS)		10	06	
e		30.5	-	

(cont. over

12.

19th cont.	e i	17 16	48 54 $\frac{1}{2}$	U.S.C.G.S. 52 $\frac{1}{2}$ ⁰ N, 171 ⁰ W. Fox Is. H = 17 04 25
	Confused by microseisms			
20th	e(P)	11 12	15	U.S.C.G.S. 52 ⁰ N, 172 ⁰ W. Andreanov Is. H = 11 01 42
	iP!	11 43	19 $\frac{1}{2}$	Deep
	Dilatation to just south of east.			
	e e	12 58	00 40	
	e	19 01	(37)	B.C.I.S. 51 $\frac{1}{2}$ ⁰ N, 177 $\frac{1}{2}$ ⁰ W. Andreanov Is. H = 18 51 15
21st	No record Benioff 0432-0931 hours.			
	eP i i(PP) i iS e e e	16 37	16 18 28 $\frac{1}{2}$ 58 50 37 01 49	U.S.C.G.S. 3 ⁰ S, 144 $\frac{1}{2}$ ⁰ E. Nr. the N. coast of New Guinea H = 16 35 28
22nd	eP i i i(PcP) i e(PP) e e(S) e e(ScS) i	14 32	03 07 23 34 04 38 34 53 04 08 06.6	U.S.C.G.S. 54 ⁰ N, 166 ⁰ W. Fox Is. H = 14 21 06 Mag. = 7 $\frac{1}{2}$ (Pas)
	iP e e(PP) e	14 44 46 (15) 00	07 07 36 34	U.S.C.G.S. 54 ⁰ N, 165 $\frac{1}{2}$ ⁰ W. Fox Is. H = 14 33 13
	eP	17 20	25	U.S.C.G.S. 52 $\frac{1}{2}$ ⁰ N, 171 ⁰ W. Fox Is. H = 17 09 51
	e	18 25	04	
23rd	eiP Confused at beginning by small local shock	05 17	16	U.S.C.G.S. 51 ⁰ S, 131 ⁰ E. Banda Sea H = 05 12 31 h = 100 kms. Mag. = 7 (Pas)
	i! i(PPP) i(S).E. i(ScP)	18 21 24	17 $\frac{1}{2}$ 09.0 08.0 43.6	
	ei e	05 52 53	02 26	
	Small amplitude and confused by microseisms			
	iP	13 01	05 $\frac{1}{2}$	Dilatation

(cont. over

13.

23rd cont.	eP e	13 5	50 55	02 42½	U.S.C.G.S. 51°N, 179½°W. Andreanov Is. H = 13 39 53
24th	e(P)	06	47	45	B.C.I.S. 63°S, 165°E. Antarctic H = 06 37.7m.
	eP	11	16	50	U.S.C.G.S. 52½°N, 169½°W. Fox Is. H = 11 06 10
	eP i iPcP	11	47 48	25 35 05½	U.S.C.G.S. 52½°N, 171½°W. Fox Is. H = 11 36 50
	e(P) e	12	16	10 23	U.S.C.G.S. 37°N, 71°E. Hindu Kush H = 12 05 10 h approx. = 200 kms.
	e(P)	16	42	(41)	U.S.C.G.S. 52½°N, 169½°W. Fox Is. H = 16 32 28
	iP Dilatation. Deep? i i i	19 07	06 07	42½ 03 25 43	Felt: Wewak Int. 2(MM) 3°35'S, 143°40'E.
25th	eP i(PcP)	00	50	18 51	U.S.C.G.S. 53°N, 167°W. Fox Is. H = 00 39 29
	i(P) i i!	01	38	31 33 57	Felt: Aropa Int. 1(MM) 6°25'S, 155°50'E.
	iP i i	20	30 31	27½ 34½ 23½	Compression. Deep?
26th	iP i(pP)	16	11 12	58 08.5	U.S.C.G.S. 50½°N, 180°. Andreanov Is. H = 16 01 53
	iP iS	17	13	34 59	
	eP	18	27	03	U.S.C.G.S. 51°N, 179½°W. Andreanov Is. H = 18 16 47
27th	eiP i(PcP) Confused by microseisms	07 41	38 41	37 08	U.S.C.G.S. 22°S, 177°W. Tonga Is. H = 07 31 56 h approx. = 150 kms.
	iP! Dilatation to east-south-east	13	00	50	U.S.C.G.S. 5°S, 153½°E. New Britain H = 13 00 27 h approx. = 100 kms. Felt: Karoola Int. 3(MM) 5°10'S, 154°35'E. Felt: Rabaul Int. 3(MM) 4°11'S, 152°10'E. Felt: Londolovit Int. 3(MM) 3°05'S, 152°40'E.

(cont. over

			14.		
27th	iP	13	29	15 $\frac{1}{2}$	Dilatation. Deep.
cont.	i		30	09	
	i			20	
	iP	15	26	31 $\frac{1}{2}$	Distant tremor.
	iP!	15	29	51	<u>Felt:</u> Rabaul
	Dilatation to east-south-east				Int. 2(MM)
					4 $^{\circ}$ 11'S, 152 $^{\circ}$ 10'E.
					<u>Felt:</u> Kokopo
					Int. 2(MM)
					4 $^{\circ}$ 20'S, 152 $^{\circ}$ 15'E.
	e	20	25	57	
28th	iP	08	03	00	<u>Felt:</u> Rabaul
	Dilatation to east-north-east				Int. 2(MM)
					4 $^{\circ}$ 11'S, 152 $^{\circ}$ 10'E.
	iP	09	56	19	Wellington. 34 $^{\circ}$ 7S, 180 $^{\circ}$.
	i			21 $\frac{1}{2}$	Kermadec Is.
	i			28 $\frac{1}{2}$	H = 09 49 13
					h approx. = 300 kms.
	iP	18	06	02	
29th	eP	05	21	21	U.S.C.G.S. 53 $\frac{1}{2}$ $^{\circ}$ N, 167 $^{\circ}$ W.
	i			36	Fox Is.
	i			39	H = 05 10 28
	iPcP			55 $\frac{1}{2}$	
	iPP		23	53 $\frac{1}{2}$	
	e(P)	05	43	52	U.S.C.G.S. 4 $^{\circ}$ N, 127 $^{\circ}$ E.
	i			53	Talau Is.
	i(PPP)		44	46	H = 05 37 (50)
	e		46	03	
	e(ScP)		50	55	
	iPKP	18	50	31	B.C.I.S. 57 $\frac{1}{4}$ $^{\circ}$ S, 28 $\frac{3}{4}$ $^{\circ}$ W.
	i			36	Sandwich Is.
					H = 18 31 36
30th	iP	03	31	25 $\frac{1}{2}$	Deep?
	i			29	
	i			43 $\frac{1}{2}$	
	eP	09	27	25	U.S.C.G.S. 53 $^{\circ}$ N, 175 $^{\circ}$ W.
					Andreanov Is.
					H = 09 17 00
31st	iP	10	18	42	U.S.C.G.S. 51 $\frac{1}{2}$ $^{\circ}$ N, 178 $^{\circ}$ W.
	i		20	02	Andreanov Is.
					H = 10 08 28
	iP	10	42	36	Compression
	iP	13	12	49	Compression. Deep?
	i		13	00	
	iP	17	43	39	
	e		44	44	

15.

Tremors felt in the Territory, March, 1957.

Date	Time G.M.T.	Intensity Mercalli Modified	Locality	Latitude	Longitude
Mar. 2nd	0811	4	Rabaul	04 11	152 10
	0810	2	Ulamona	05 00	151 15
	0812	1 - 2	Lindenhafen	06 10	150 35
	(??)	3	Pomio	05 30	151 30
3rd	(2304)	1	Pomio	05 30	151 30
	2359	1	Rabaul	04 11	152 10
6th	1500	2	Lumi	03 30	142 05
7th	0115	2	Lumi	03 30	142 05
	2330	3	Telefomin	05 10	141 35
	c:2330	2	Tari	05 50	143 00
11th	1100	1	Aropa	06 25	155 50
13th	0436	2	Linga Linga	05 35	149 45
15th	1125	2	Bogia	04 15	144 55
18th	2115	3	Karoola	05 10	154 35
	2115	2	Rabaul	04 11	152 10
	2115	2 - 3	Warangoi	04 30	152 20
	2113	2	Pomio	05 30	151 30
	?	(1 - 2)	Waterfall Bay	05 30	151 40
23rd	1915	2	Tari	05 50	143 00
24th	1730	3	Angoram	04 05	144 05
	1830	3	A iome	05 10	144 45
	1907	2	Wewak	03 35	143 40
25th	0140	1	Aropa	06 25	155 50
	1905	2 - 3	Wabag	05 30	143 40
27th	1301	3	Karoola	05 10	154 35
	1301	3	Rabaul	04 11	152 10
	(1300)	3	Londolovit	03 05	152 40
	c:1300	2 - 3	Warangoi	04 30	152 20
	c:1300	2	Tol. Pln.	05 00	152 05
	1529	2	Rabaul	04 11	152 10
	1529	2	Kokopo	04 20	152 15
	(1805?)	1	Londolovit	03 05	152 40
28th	0803	2	Rabaul	04 11	152 10
30th	1915	2	Esa'ala	09 45	150 50



TERRITORY OF PAPUA AND NEW GUINEA.

VULCANOLOGICAL OBSERVATORY RABAU.

SEISMOLOGICAL BULLETIN.

APRIL, 1957.

1st	eP	Z	07	59	48	U.S.C.G.S. $4\frac{1}{2}^{\circ}\text{N}$, 129°E .
	i				49	Molucca Strait.
	i		(08)	00	16	H = 07 54 20
	i(PP)				34	h approx. = 100 kms.
	i(PPP)				46	
	iS	E		04	08	
	iP	Z	11	45	51	U.S.C.G.S. 51°N , 173°W .
	i	E		46	06	Andreanov Is.
						H = 11 35 30
						Mag. 6.1 (Uppsala)
	e(P)	Z	16	05	08	
	e	Z	20	17	37	
	i				$39\frac{1}{2}$	
	e				51	
	e			19	39	
2nd	eiP	Z	02	46	20	(B.C.I.S. Probably New
	e	Z		51	38	Hebrides Is. - insufficient
						data.)
	eiP	Z	20	27	20	U.S.C.G.S. $51\frac{1}{2}^{\circ}\text{N}$, 173°W .
						Andreanov Is.
						H = 20 16 57
						Mag. = 6.3 (Uppsala)
	eP	Z	21	37	38	U.S.C.G.S. and B.C.I.S.
	i				44	51°N , 173°W .
	e			38	18	Andreanov Is.
	e			39	57	H = 21 27 54
						Mag. = 6.3 (Uppsala)
	eP	Z	21	53	37	B.C.I.S. South Pacific
	e			54	10	Insufficient data
	i				$34\frac{1}{2}$	
3rd	e	Z	18	50	36	
	ei	NE			39	
	e				55	
4th	eP	Z	00	24	(56)	(U.S.C.G.S. 58°N , $155\frac{1}{2}^{\circ}\text{W}$.
						Alaska H = 00 13 08
						Mag. = 6.0 (Uppsala)
	iP!	Z	10	41	35	Felt: Warangoi Int. 2-3 (MM)
	i			43	34	$4^{\circ}30'\text{S}$, $152^{\circ}20'\text{E}$.
	e			44	38	
	Dilatation to south-east					
	ePKP	Z	11	19	20	B.C.I.S. near 35°S , 68°W .
	i				30	Argentina.
	e			20	02	H = 11 00.7 m.
	e				18	
	eiP	Z	14	54	06	U.S.C.G.S. $52\frac{1}{2}^{\circ}\text{N}$, $170\frac{1}{2}^{\circ}\text{W}$.
	i			55	48	Fox Is. H = 14 43 49

(cont. over

2.

4th. cont.	eP	Z	16	19	26	
	i				34	
	i				46	
	i				58	
	e			21	02	
	e	Z	19	23	00	
	e				05	
	e				12	
	e			24	21	
5th	eP	Z	03	00	10	U.S.C.G.S. 52°N, 172½°W.
	i				26	Fox Is. H = 02 49 39
	i			01	17	Mag. = 6½ (Pas.)
	eiP	Z	06	21	16	Felt: Buin Int. 3(MM)
						6°50'S, 155°45'E.
	e(P)	Z	07	36	58	(B.C.I.S. near 51°N, 177°W)
	Confused by microseisms.					Andreanov Is.
						H = 07 16.6m)
	e(P)	Z	07	37	24	U.S.C.G.S. 26½°S, 177°W.
	e(PP)			39	07	Kermadec Is. region
	i(S)			43	28	H = 07 30 22
						H = 100 kms.
						Mag. = 6¼ (Pas.)
	e	Z	14	26	25	
	e				31	
	i				37	
	e(P)	Z	15	22	30	((U.S.C.G.S. 45°N, 148°E.
	e				56	Kurile Is. H = 15 04 09.))
6th	e(S)	Z	15	42	13	(B.C.I.S. Tonga Is. Region
						H = 15 30.7m)
	eP	Z	16	52	07	
7th	iP	Z	00	33	04	B.C.I.S. Near the E. coast of
	i				25	New Guinea. H = 00 31 30
	ei			34	52	
	eP	Z	10	17	36	U.S.C.G.S. 1°S, 137½°E.
	e(PP)				51	Near the N. coast of
	i				53	New Guinea.
	i(PPP)				57	H = 10 14 08
	i			18	31	Mag. = 6-6¼ (Pas.)
	e(SSS)			20	57	
	e			21	02	
	i(PcP)			22	42	
	e			25	05	
	e			26.1	-	
	e			47.1	-	
	eiP	Z	21	18	12	
	i			19	57	
	e			20	44	
8th	eiP	Z	02	36	53	
	i			37	02	
	i				40	
	iP!	Z	03	55	46	
	Compression from north-west					
	i(P)	Z	06	09	02	
	e				52	

(cont. over

3.

8th.	iPKP	Z	20	37	12	U.S.C.G.S. 81°N , 83°W .
cont.	e				40	Panama/Costa Rica
						H = 20 18 09
						Mag. = $6\frac{1}{2}$ (Pas).
9th	eP	Z	00	31	11	U.S.C.G.S. $30\frac{1}{2}^{\circ}\text{N}$, $138\frac{1}{2}^{\circ}\text{E}$.
		Dilatation				Honshu.
	i				$11\frac{1}{2}$	H = 00 24 39
	i				41	h approx. = 450 kms.
	i(PPP)			34	14	Mag. = $6\frac{3}{4}$ (Pas)
	e			35	34	
	e(S)			36	19	
	eP	Z	02	22	53	U.S.C.G.S. $22\frac{1}{2}^{\circ}\text{N}$, $144\frac{1}{2}^{\circ}\text{E}$.
	i				$54\frac{1}{2}$	Mariana Is.
	i			23	17	H = 02 17 06
	i(PP)				59	Mag. = 5.7 (Rome).
	ei(P)	Z	10	41	59	(U.S.C.G.S. $30\frac{1}{2}^{\circ}\text{N}$, 138°E .
						Honshu. H = 10 35 34
						H approx. = 500 kms.)
	eP	Z	11	12	21	U.S.C.G.S. $51\frac{1}{2}^{\circ}\text{N}$, $178\frac{1}{2}^{\circ}\text{W}$.
	e				31	Andreanov Is.
	e				56	H = 11 02 09
	e			13	17	Mag. = 6.0 (Uppsala)
	e(P)	Z	17	50	27	U.S.C.G.S. $51\frac{1}{2}^{\circ}\text{N}$, $179\frac{1}{2}^{\circ}\text{W}$.
						Andreanov Is. H = 17 40 13.
	eP	Z	20	34	37	U.S.C.G.S. $52\frac{1}{2}^{\circ}\text{N}$, 169°W .
	e				55	Fox Is. H = 20 23 56
	e			35	38	Mag. = 5.65 (Rome).
	i(P)	Z	22	15	46	Felt: Ambunti. Int.3(MM)
	i			16	09	$4^{\circ}15'\text{S}$, $142^{\circ}50'\text{E}$.
						Confused by microseisms.
10th	eP	Z	09	19	31	U.S.C.G.S. 51°N , 177°W .
	i			20	06	Andreanov Is.
	e(PP)			21	46	H = 09 09 18
	e(S)			27	45	mag. = 6.2 (Uppsala)
	eP	Z	11	41	32	U.S.C.G.S. 56°N , 154°W .
	i				58	Kodiak Is. region
	e			43	44	H = 11 29 58
	e			44	04	Mag. = 7 (Pas)
	e(PP)				26	
	e			45	44	
	e				54	
	iP	Z	13	30	37	U.S.C.G.S. $51\frac{1}{2}^{\circ}\text{N}$, $176\frac{1}{2}^{\circ}\text{W}$.
	e				55	Andreanov Is. H = 13 20 14
	eP	Z	13	50	45	U.S.C.G.S. 15°S , 173°W .
	e			51	01	Samoa Is.
	e				42	H = 13 43 43
	e				57	
	i			55	09	
	i				13	
	e				44	
	e			56	08	
	e				13	
	eP	Z	17	02	54	
	i			03	09	

4.

11th	eP e	Z	10	39 40	32 03	B.C.I.S. Insufficient data. Probably New Hebrides Is.
	iP! Compression from north- north-west.	Z	14	20	41	B.C.I.S. 5°S, 154°E. Solomon Is. region H = 14 20.3m. h = 100 kms.
	e e			26 27	19 49	
	e(P)	Z	16	22	52	U.S.C.G.S. 52½°N, 169½°W. Fox Is. H = 16 12 08
	e(P)	Z	17	51	19	U.S.C.G.S. and B.C.I.S. 52°N, 168½°W. Fox Is. H = 17 40 37 Mag. = 5¼ (Moscow).
12th	Nil					
13th	iP Dilatation.	Z	02	22	49	Felt: Warangoi. Int. 1-2(MM) 4°30'S, 152°20'E.
	eP i i(PP) i i eS	Z	06	36	01 02 53 16 30 45	U.S.C.G.S. 6½°N, 126½°E. Mindanao H = 06 30 08 Mag. = 6.0 (Uppsala) ? Deep
	eP i i i i i(PPP) e	Z	10	16	37 39½ 47 13 39 42½ 45 18 32	U.S.C.G.S. 5°N, 126½°E. Mindanao H = 10 10 48 Mag. = 6.0 (Uppsala) B.C.I.S. 5¼°N, 126¼°E. H = 10 10 55 h = 100 kms.
	eP i!	Z	10	59	25 26	Felt: Malalia. Int. 6(MM) 5°30'S, 150°30'E.
	iP!	Z	11	36	07	Felt: Malalia. Int. 1(MM) 5°30'S, 150°30'E.
	iP! Compression from south-east	Z	12	20	06	Felt: Londolovit. Int. 2(MM) 3°05'S, 152°40'E.
	ePKP e e(PKS) e	Z	15	58 59 02 55	46 17 04 55	U.S.C.G.S. 19°S, 69½°W. North of Chile H = 15 39 43 h approx. = 150 kms.
	e(P)	Z	16	26	16	J.M.A. 42°3N, 141°3E. Hokkaido. H = 16 18 11 h approx. = 120 kms.
	iP! i i i	Z	19	32	51 55 19 53	Felt: Malalia. Int. 4(MM) 5°30'S, 150°30'E.
14th	eP i e e(PP) e	Z	07	23	26 30 55 13 39	U.S.C.G.S. and B.C.I.S. 31°N, 84½°E. S. Tibet. H = 07 11 50 Mag. = 6¼ (Pas.)

(cont. over

5.

14th.

cont. eP Z 09 25 13

B.C.I.S. (near $5\frac{1}{2}^{\circ}\text{S}$, 150°E .)
New Guinea region.
H = 09 23 44
Felt: Popondetta. Int.3(MM)
 $8^{\circ}45'\text{S}$, $148^{\circ}15'\text{E}$.
Lae. Int. 3(MM)
 $6^{\circ}45'\text{S}$, $147^{\circ}00'\text{E}$.
Awelkon. Int.2(MM)
 $5^{\circ}40'\text{S}$, $147^{\circ}50'\text{E}$.
Lindenhafen. Int.1(MM)
 $6^{\circ}10'\text{S}$, $150^{\circ}35'\text{E}$.
Wau. Int.1(MM)
 $7^{\circ}20'\text{S}$, $146^{\circ}45'\text{E}$.
Koaru. Int.?
 $8^{\circ}05'\text{S}$, $146^{\circ}00'\text{E}$.

iP! Z 12 33 50
Dilatation to west-
north-west

U.S.C.G.S. $4\frac{1}{2}^{\circ}\text{S}$, 150°E .
New Britain.
H = 12 32 39
(Shock reported felt:
Londolovit Int.1(MM)
 $3^{\circ}05'\text{S}$, $152^{\circ}40'\text{E}$.)

e(P) Z 16 48 23

B.C.I.S. 31°N , $84\frac{1}{2}^{\circ}\text{E}$.
S. Tibet. Aftershock.
H = 16 36 48

eP Z 19 24 56
i 59
i 42
i(PP) 25 42
i 26 24
i 42
i(PPP) 49
ei(PcS) 31 13
e 20
e(ScS) 35 17
e 57 -

U.S.C.G.S. $15\frac{1}{2}^{\circ}\text{S}$, 173°W .
Samoa Is.
H = 19 17 57
Mag. = 8 (Pas)

iP Z 21 09 05
i 38
e(PcP) 10 16

U.S.C.G.S. $50\frac{1}{2}^{\circ}\text{N}$, 179°W .
Andreanov Is.
H = 20 59 00

15th iP! Z 04 33 18
i 36 13
i $31\frac{1}{2}$
i $48\frac{1}{2}$
i 37 02

B.C.I.S. near 6°S , 153°E .
New Britain region.
H = 04 32.8m.
Felt: Buin. Int.1(MM)
 $6^{\circ}50'\text{S}$, $155^{\circ}45'\text{E}$.

eiP Z 04 49 03
Compression.

Felt: Buin. Int.1(MM)
 $6^{\circ}50'\text{S}$, $155^{\circ}45'\text{E}$.

eiP Z 04 56 56
i 57 47

eP Z 10 48 46
i 49 11

U.S.C.G.S. $51\frac{1}{2}^{\circ}\text{N}$, 179°W .
Andreanov Is.
H = 10 38 37
Mag. = $5\frac{3}{4}$ (Moscow)

iP Z 15 48 08
i 19.5
i 49 23

e(P) Z 18 22 (42)

B.C.I.S. $51\frac{3}{4}^{\circ}\text{N}$, $178\frac{1}{2}^{\circ}\text{W}$.
Andreanov Is. H = 18 12 31

iP! Z 19 22 24
Dilatation

Felt: Lindenhafen. Int.2(MM)
 $6^{\circ}10'\text{S}$, $150^{\circ}35'\text{E}$.

i 31
i 38
i 23 01

6.						
15th.	eP	Z	21	43	51	U.S.C.G.S. 52 $\frac{1}{2}$ ¹⁰ N, 167 ⁰ W.
cont.	i				52	Fox Is. H = 21 33 05
	i			44	08	Mag. = 6-4 (Uppsala)
16th	eP	Z	04	11	29	U.S.C.G.S. 4 $\frac{1}{2}$ ¹⁰ S, 107 $\frac{1}{2}$ ¹⁰ E.
	i				31	Java Sea.
	i			12	34	H = 04 04 04
	i			13	17	h approx. = 600 kms.
	i(S)			17	00	Mag. = 7 $\frac{1}{2}$ (Pas)
	e	Z	04	42	18	
	Confused by microseisms.					
	i(P)	Z	13	08	19 $\frac{1}{2}$	
	e				21	
	e(P)	Z	17	34	(52)	(B.C.I.S. Tonga Is. H = 17 27.8m.)
	ePKP	Z	18	36	26	U.S.C.G.S.
	e				29	South of Bolivia.
	e(PP)			39	03	H = 18 17 05
	e				38	
	i				41 $\frac{1}{2}$	
	e(SKS)			43	38	
	e(SKKKS)			46	24	
17th	eP	Z	08	14	36	U.S.C.G.S. 20 ⁰ S, 176 ⁰ W.
	i				37	Tonga Is.
	i			15	08	H = 08 07 58
	i(PcP)			17	07	h approx. = 200 kms.
	e(S)			19	47	
	e(ScP)			20	36	
	e			21	00	
	e(ScS)			24	24	
	iP	Z	09	32	45	
	i				53 $\frac{1}{2}$	
	e			33	23	
	e(P)	Z	09	38	41	U.S.C.G.S. 52 $\frac{1}{2}$ ¹⁰ N, 171 ⁰ W. Fox Is. H = 09 27 54.
	eP	Z	13	35	42	U.S.C.G.S. 52 $\frac{1}{2}$ ¹⁰ N, 169 ⁰ W.
	e			36	12	Fox Is. H = 13 24 58
	i(PPP)			37	38	Mag. = 5 $\frac{1}{2}$ (Moscow).
18th	eP	Z	07	10	24	U.S.C.G.S. 52 ⁰ N, 176 $\frac{1}{2}$ ¹⁰ W.
	Confused by microseisms.					A ndreanov Is. H = 07 00 03
19th	iP!	Z	06	17	19	(B.C.I.S. Discordant data)
	Compression.			Deep.		Fairly small, near shock.
	i			18	13	
	iP	Z	08	40	48	U.S.C.G.S. 6 $\frac{1}{2}$ ¹⁰ S, 155 $\frac{1}{2}$ ¹⁰ E.
	i(PP)				51 $\frac{1}{2}$	Solomon Is.
	i(S)			41	46	H = 08 39 37
	i			46	17	Felt: Buin. Int. 4(MM)
	i				57	6 ⁰ 50'S, 155 ⁰ 45'E.
	eP	Z	15	55	33	U.S.C.G.S. 51 $\frac{1}{2}$ ¹⁰ N, 168 $\frac{1}{2}$ ¹⁰ W.
	i				34	Fox Is. H = 15 44 53
	e			56	09	Mag. = 6-7 (Uppsala)

(cont. over

7.

19th.	iP	Z	22	30	17	U.S.C.G.S. 52°N, 166½°W.
cont.	i				30½	Fox Is. H = 22 19 26
	i(PcP)				49	Mag. 7-7½ (Pas)
	i			31	12	
	e			32	39	
	i(PP)				41½	
	e(M)		58		55	
20th	eI	Z	00	11	59	U.S.C.G.S.
	Superimposed shock.					Solomon Is.
	i			12	54	H = 00 09 10
	i			15	04	
	i				53	
	eP	Z	07	00	11	U.S.C.G.S. 54½°S, 131½°W.
	e			03	14	S. Pacific. H = 06 48 04
	(iP!	Z	12	31	58	U.S.C.G.S. 6°S, 147½°E.
	(Dilatation to east-					New Guinea, H = 12 30 37
	(north-east.					B.C.I.S. 6½°S, 147¾°E.
	(i			38	06	H = 12 30 40. Mag. 6.6(Uppsala)
						Felt: Kilenge. Int. 4-5(MM)
						5°30'S, 148°20'E.
						Awelkon. Int. 4(MM)
						5°40'S, 147°50'E.
	iP	Z	13	25	33	Felt: Awelkon. Int. 2(MM)
	i			26	43	5°40'S, 147°50'E.
	i			27	21½	Mendi. Int. 1(MM)
						6°10'S, 143°40'E.
	eP	Z	16	53	40	Felt: Awelkon. Int. 1(MM)
	i				41	5°40'S, 147°50'E.
	i				45	
	i			54	50	
	i(P)	Z	17	09	28½	
	e	Z	17	27	00	
	eP	Z	21	46	03	B.C.I.S. Tonga Is. region
						H = 21 39.4m.
21st	eP	Z	00	21	04	
	i				05½	
	i!				06	
	iP!	Z	02	00	42	
	Dilatation to south-east.					
	iP	Z	02	42	41	
	Dilatation - deep.					
	e	Z	02	51	44	
	e				53	
	ePKP	Z	21	31	35	U.S.C.G.S. 7°N, 72°W.
	i				48	Colombia/Venezuela.
	ePKS			35	10	H = 21 12 26
						Mag. = 6½-6¾ (Pas).
22nd	iP	Z	10	53	58	
	i			54	18	
	eP	Z	12	56	21	
	i				42	
	e			57	26	

(cont. over

8.

22nd cont.	ePKP Z i	14	02	22 37	U.S.C.G.S. 7°N, 72°W. Colombia/Venezuela. Aftershock. H = 13 43 14
	e Z	14	25	19 25 42	
	ePKP Z eSKS	15 (16)	56 00	43 45	U.S.C.G.S. 7°N, 72°W. Colombia/Venezuela. Aftershock. H = 15 37 20.
	e Z	16	59	23	
	eP Z Confused by microseisms.	23	07	01	B.C.I.S. Solomon Is. H = 23 05 38
23rd	eiP Z i i e e	<u>03</u>	05	02 37 56 26 32	(Correction of 02 05 02)
	ePKP Z	22	17	51	U.S.C.G.S. 27°S, 68°W. A rgentine/Chile. H = 21 58 35.
24th	eP Z i	09	09	57 03	
	iP Z	10	55	50	(B.C.I.S. S. Pacific Insufficient data).
	iP Z i	12	56	10 17	(Shock reported felt: Lae Int.3(MM) 6045'S, 147°00'E.)
	eP Z i	13	06	17 22	B.C.I.S. Insufficient data.
	ePKP Z i i!(PP) e e e(PPS)	19	28 29 30 31 39 42	57 46 22 54 (24) 54	B.C.I.S. 36°3N, 29°1E. E. of Rhodes. Foreshock. H = 19 10 16 Mag. = 6 $\frac{3}{4}$ -7 (Pas)
25th	ePKP Z i ePP e(SKKKS) eSS e(SSP)	02	44 45 52 02 41	26 46 51 53 13 41	B.C.I.S. 36°5N, 28°9E. E. of Rhodes. H = 02 25 36 Mag. = 7-7 $\frac{1}{4}$ (Pas)
	e(P,PKP)Z e e	02	54 57 58	41 59 43	
	eiP Z	07	20	21	U.S.C.G.S. 45°N, 100°E. Outer Mongolia. H = 07 09 20.
	iP Z i i!(PP) i! i(PPP) i e e	10	20 49 51.7 55.5 21 22 25	35 49 51.7 55.5 01 20 15 23	U.S.C.G.S. 4 $\frac{1}{2}$ °S, 134°E. Coast of New Guinea. H = 10 16 18 Mag. = 5 (Moscow)

(cont. over

9.

25th.	eP	Z	11	11	43	U.S.C.G.S. 1 $\frac{1}{2}$ ⁰ N, 126 ⁰ E.
cont.	i				45	
	e(PcP)			15	03	Molucca Strait H = 11 06 02 Mag. = 5 $\frac{1}{4}$ (Moscow)
	eP	Z	11	42	31	
	ePKP	Z	13	38	14 $\frac{1}{2}$	(B.C.I.S. 29 ⁰ S, 69 ⁰ W. Argentina. H = 13 18 10)
	eP	Z	14	20	02	U.S.C.G.S. 60 $\frac{1}{2}$ ⁰ N, 145 ⁰ W. Alaska. H = 14 07 58
	eP	Z	17	55	32	U.S.C.G.S. 51 $\frac{1}{2}$ ⁰ N, 180 ⁰ . Andreanov Is. H = 17 45 14 Mag. = 5 (Moscow).
26th	ePKP	Z	06	53	44	B.C.I.S. 36 ⁰ 3N, 29 ⁰ 1E. E. of Rhodes. Aftershock. H = 06 33 43 Mag. = 6 $\frac{1}{4}$ -6 $\frac{1}{2}$ (Athens).
	eP	Z	15	17	06	U.S.C.G.S. 45 ⁰ N, 148 ⁰ E.
	iP				26	Kurile Is. H = 15 08 29 h approx. = 60 kms. (J.M.A.)
27th	eiP	Z	00	15	47	U.S.C.G.S. 0 ⁰ , 121 $\frac{1}{2}$ ⁰ E.
	i				48	Celebes.
	i			16	03	H = 00 09 47
	i				07	h approx. = 60 kms.
	e			19	22	
	e			21	06	
	eP	Z	11	35	36	U.S.C.G.S. 20 ⁰ S, 170 ⁰ E.
	i				38 $\frac{1}{2}$	Loyalty Is.
	i				52	H = 11 30 33
	e(S)			40	14	h approx. = 100 kms.
	e				20	
	iPcS			42	54 $\frac{1}{2}$	
	eScS			46	47	
	iP	Z	12	03	53	
		Compression				
	eP	Z	15	52	48	
	i				53	
	iP	Z	18	19	57	
	eP	Z	22	00	28	B.C.I.S. 52 ⁰ N, 174 $\frac{1}{2}$ ⁰ W. Andreanov Is. H = 21 51 50
28th	iP!	Z	00	00	41 $\frac{1}{2}$	U.S.C.G.S. New Britain region. H = 00 00 15
	Dilatation to south-					Felt: Tol. Int. 2-3 (MM)
	south-east.					5 ⁰ 00'S, 152 ⁰ 05'E.
						Pomio. Int. 2-3 (MM)
						5 ⁰ 30'S, 151 ⁰ 30'E.
						Rangarere. Int. 2 (MM)
						4 ⁰ 15'S, 151 ⁰ 35'E.
						Warangoi. Int. 2 (MM)
						4 ⁰ 30'S, 152 ⁰ 20'E.
						Ulamona. Int. 1-2 (MM)
						5 ⁰ 00'S, 151 ⁰ 15'E.
						Rabaul. Int. 1 (MM)
						4 ⁰ 11'S, 152 ⁰ 10'E.

(cont. over

				10.	
28th	iP!	Z	01	29	34 ¹ / ₂
cont.	i				49 ¹ / ₂
	i(PcP)			32	51
	e(S)			34	10
					U.S.C.G.S. 7°N, 127°E.
					Mindanao.
					H = 01 23 40
					Mag. = 6.5 (Uppsala). 5 ³ / ₄ -6 (Pas)
	iP	Z	10	37	31
		Compression			U.S.C.G.S. 6°S, 155°E.
					Solomon Is. H = 10 36 41
					h approx. = 60 kms.
					Felt: Karoola. Int. 5 (MM)
					5°10'S, 154°35'E.
					Aropa. Int. 3 (MM)
					6°25'S, 155°50'E.
					Sohano. Int. 3 (MM)
					5°25'S, 154°40'E.
					Pomio. Int. 2-3 (MM)
					5°30'S, 151°30'E.
					Warangoi. Int. 2-3 (MM)
					4°30'S, 152°20'E.
					Waramung. Int. 2 (MM)
					4°05'S, 153°35'E.
					Tol. Int. 1 (MM)
					5°00'S, 152°05'E.
					Ulamona. Int. 1 (MM)
					5°00'S, 151°15'E.
					Londolovit. Int. 1 (MM)
					3°05'S, 152°40'E.
					(Buin. Int. 1 (MM)
					6°50'S, 155°45'E.
					Time doubtful).
29th	i(PKS)	Z	10	33	59
	Confused by microseisms.				(U.S.C.G.S. 22°S, 66°W.
					Argentina/Bolivia. H = 10 11 53
					h approx. = 200 kms.)
	iP	Z	16	48	26
					Small local disturbance?
	e(P)	Z	19	28	(10)
	Confused by microseisms.				U.S.C.G.S. 5 ¹ / ₂ °N, 126°E.
					Mindanao. H = 19 22 58
					h approx. = 400 kms.
	iP	Z	21	04	20 ¹ / ₂
	e(PP)			06	28
					U.S.C.G.S. 9°S, 107°E.
					Java. H = 20 55 57
					Mag. = 6.2 (Uppsala)
30th	iP!	Z	02	25	08 ¹ / ₂
	Dilatation to south-west.				Felt: Pomio. Int. 3 (MM)
					5°30'S, 151°30'E.
	eP	Z	05	31	07 ¹ / ₂
	i				21
	i!				47
	i			32	05
	eP	Z	21	01	11 ¹ / ₂
	i!				15
	i				27
	i			03	04
	i				26

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11.

The following tremors were reported felt in the
Territory - April, 1957.

Date	Approx. Time G.M.T.	Intensity Modified Mercalli	Locality	Latitude		Longitude	
				South		East	
				°	'	°	'
4th	1042	2 - 3	Warangoi	04	30	152	20
5th	0620	3	Buin	06	50	155	45
	1730	2	Wewak	03	35	143	40
	1755	4	"	"	"	"	"
9th	2216	3	Ambunti	04	15	142	50
13th	0008	1	Malalia	05	30	150	30
	0223	1 - 2	Warangoi	04	30	152	20
	1057	6	Malalia	05	30	150	30
	1117	1	"	"	"	"	"
	1123	3	"	"	"	"	"
	1139	1	"	"	"	"	"
	1220	2	Londolovit	03	05	152	40
	1336	"	"	"	"	"	"
	1930	4	Malalia	05	30	150	30
14th	0920	1	Wau	07	20	146	45
	0921	3	Popondetta	08	45	148	15
	0925	3	Lae	06	45	147	00
	0926	1	Lindenhafen	06	10	150	35
	0928	2	Awelkon	05	40	147	50
	0930	?	Koaru	08	05	146	00
	1219	1	Londolovit	03	05	152	40
	2025	1	Wau	07	20	146	45
15th	0425	1	Buin	06	50	155	45
	0442	1	"	"	"	"	"
	1922	2	Lindenhafen	06	10	150	35
	2025	2	Awelkon	05	40	147	50
19th	0840	4	Buin	06	50	155	45
	2145	2	Lindenhafen	06	10	150	35
20th	0035	3	Wau	07	20	146	45
	1225	4 - 5	Kilenge	05	30	148	20
	1230	4	Awelkon	05	40	147	50
	1330	2	Awelkon	"	"	"	"
	1350	1	Mendi	06	10	143	40
	1655	1	Awelkon	05	40	147	50
21st	1230 (+ 2 aftershocks)	4	Awelkon	05	40	147	50
(22nd) (date uncertain: maybe 23rd.)	0440	3	Lindenhafen	06	10	150	35
24th	1234	(3)	Lae	06	45	147	00
28th	0000	2 - 3	Tol	05	00	152	05
	0002	2 - 3	Pomio	05	30	151	30
	0001	2	Rangarere	04	15	151	35
	0010	2	Warangoi	04	30	152	20
	0002	1 - 2	Ulamona	05	00	151	15
	0001	1	Rabaul	04	11	152	10
	1037	5	Karoola	05	10	154	35
	1038	3	Aropa	06	25	155	50
	1036	3	Sohano	05	25	154	40

(cont. over

12.

Tremors reported felt cont.

Date	Approx. Time G.M.T.	Intensity Modified Mercalli	Locality	Latitude South	Latitude East
				° ' "	° ' "
28th cont.	1040	2 - 3	Pomio	05 30	151 30
	1(1)40	2 - 3	Warangoi	04 30	152 20
	1037	2	Waramung	04 05	153 35
	1035	1	Tol	05 00	152 05
	1040	1	Ulamona	05 00	151 15
	1038	1	Londolovit	03 05	152 40
	(0727)	1	Buin	06 50	155 45
30th	0210	3	Pomio	05 30	151 30

Date	Time	Latitude	Longitude	Depth	Intensity	Location
1962	04:00	32 30	151 30	0	2	Philippines
1962	04:00	32 30	151 30	0	2	Philippines
1962	04:00	32 30	151 30	0	2	Philippines
1962	04:00	32 30	151 30	0	2	Philippines
1962	04:00	32 30	151 30	0	2	Philippines
1962	04:00	32 30	151 30	0	2	Philippines
1962	04:00	32 30	151 30	0	2	Philippines
1962	04:00	32 30	151 30	0	2	Philippines
1962	04:00	32 30	151 30	0	2	Philippines
1962	04:00	32 30	151 30	0	2	Philippines



TERRITORY OF PAPUA AND NEW GUINEA.

VULCANOLOGICAL OBSERVATORY RABAU.

SEISMOLOGICAL BULLETIN.

MAY, 1957.

1st	iP	Z	05	11	39	Felt: Pomio. Int.2(MM) 5°30'S, 151°30'E.
	Confused by microseisms					
2nd	iP!	Z	01	50	32	U.S.C.G.S. 4½°S, 153°E. New Britain region. H = 01 50 09 h approx. = 60 kms. Felt: Warangoi. Int.3(MM) 4°30'S, 152°20'E. Pomio. Int.3(MM) 5°30'S, 151°30'E. Namatanai. Int.2(MM) 3°40'S, 152°25'E. Ulamona. Int.1(MM) 5°00'S, 151°15'E.
	iP	Z	17	55	25	Felt: Bialla. Int.2(MM) 5°20'S, 151°05'E.
	i!				26	
	i(S)				35½	
	eP	Z	21	42	08½	U.S.C.G.S. 7½°S, 120°E.
	i				19½	Flores Sea.
	i!(PcP)			44	40½	H = 21 36 25
	i(ScP)			47	28½	h approx. = 600 kms.
3rd	Nil					
4th	eP	Z	10	09	29	U.S.C.G.S. 3½°S, 137°E.
	i				32	West of New Guinea.
	i!				34½	H = 10 05 45
	e			10	47	Mag. = 6.4(Uppsala)
	i			11	14	
	i				38½	Deep.
	iP	Z	23	09	04½	
	i!				06	
	i!				09	
	i			11	47	
	e			12	43	
	e				59	
	i			13	21	
	iP	Z	23	52	08	
	i!				12	
	i(S)				33	
	i!			53	21½	
5th	iP	Z	00	36	01	B.C.I.S.
	i!				02	Nr. the E. Coast of New Guinea.
	(i!				05	H = 00 35.2m.
	(i!(P)		00	38	28	Superimposed shock?
	(i!(P)		00	39	00½	" " " "
	iP!	Z	23	54	18	Felt: Ulamona. Int.1(MM) 5°00'S, 151°15'E.
	Dilatation to west?					
6th	iP	Z	06	44	37½	
	i(S)			45	10½	
	iP	Z	11	28	37	
	eS			29	14	

(cont. over

2.

6th. cont.	e(P) Z	11	44	01	U.S.C.G.S. 17 $\frac{1}{2}$ °S, 176°W. Tonga Is. region H = 11 37 33 h approx. = 250 kms.
	iP Z	14	34	20	
	e(S)		35	52	
	i		38	11 $\frac{1}{2}$	
7th	iP Z	08	07	38	B.C.I.S. Discordant data..
	i		08	56	
	eiP Z	19	34	12	(Shock reported felt: Esa'ala. Int.2(MM) 9°45'S, 150°50'E.)
8th	i Z	10	09	08 $\frac{1}{2}$	
	(iP Z	18	17	31 $\frac{1}{2}$	Local)
	iP Z	19	28	47	Deep. Local.
	eP Z	20	15	20 $\frac{1}{2}$	U.S.C.G.S. 15 $\frac{1}{2}$ °S, 179°E. Fiji Is. H = 20 09 53. h approx. = 400 kms.
	eP Z	21	35	39 $\frac{1}{2}$	Felt: Aiome. Int.3(MM)
	i			41	5°10'S, 144°45'E.
9th	Nil				
10th	(iP Z	10	52	38 $\frac{1}{2}$	Unimportant local.
	(iS			55)	(See B.C.I.S.)
	iP! Z	16	26	14	
	Dilatation to south.				
11th	iP Z	04	20	37	Compression. Deep.
	e Z	11	48	17 $\frac{1}{2}$	
	eP Z	15	06	(22)	U.S.C.G.S. 52 $\frac{1}{2}$ °N, 160°E. Kamchatka. H = 14 56 30.
	eP Z	17	45	18 $\frac{1}{2}$	B.C.I.S. Solomon Is.
	i		46	12 $\frac{1}{2}$	H = 17 43.9m.
	i(S)			21 $\frac{1}{2}$	Felt: Buin. Int.4(MM) 6°50'S, 155°45'E.
12th	ePKP Z	05	06	29	U.S.C.G.S. 60 $\frac{1}{2}$ °S, 26°W.
	ePP		07	26	Sandwich Is. H = 04 47 44
	i(P) Z	06	58	21.5	U.S.C.G.S. 53°N, 142°E.
	i			27	Sakhalin. H = 06 48 27 Mag. = $\frac{5}{2}$ (Moscow)
	iP! Z	09	08	34 $\frac{1}{2}$	Felt: Rabaul. Int.2(MM)
	Compression from north-north-east.				4°10'S, 152°10'E.
	iP Z	09	13	42 $\frac{1}{2}$	
	i!			50	
	i!			58 $\frac{1}{2}$	
	iP! Z	09	24	45 $\frac{1}{2}$	
	Compression from south-west				

(cont. over

12th cont.	iP	Z	09	33	00 $\frac{1}{2}$	
	Compression from south-west					
	i				04 $\frac{1}{2}$	
	i!				07 $\frac{1}{2}$	
	eP	Z	11	37	23	U.S.C.G.S. 8 $\frac{1}{2}$ $^{\circ}$ S, 167 $\frac{1}{2}$ $^{\circ}$ E. Java. H = 11 29 07 Mag. = 6 $\frac{1}{4}$ (Moscow)
	iP	Z	11	43	34 $\frac{1}{2}$	
	Compression					
	eP	Z	15	47	45 $\frac{1}{2}$	
	i!				47 $\frac{1}{2}$	
13th	eP	Z	02	01	46	
	i				50	
	i				54	
	i			02	00	
	e				16	
	i				21	
	iS!				24	
	i			03	54	
	e(L)			04	50	
	eiP	Z	11	21	16	(B.C.I.S. Discordant data).
	iP	Z	13	22	36	B.C.I.S. Mindanao.
	e(S)			27	06	H = 13 16.5m.
14th	eP	Z	17	15	02	
	i				12	
	e				17	
	e				23	
	e(S)				47	
15th	iP	Z	11	02	13 $\frac{1}{2}$	
	Compression					
	i				21	
	i				27 $\frac{1}{2}$	
	i(S)				40 $\frac{1}{2}$	
	i				55	
	iP	Z	16	17	25 $\frac{1}{2}$	Wellington. 40 $^{\circ}$ 5S, 174 $^{\circ}$ E. New Zealand. H = 16 09 45 Mag. = 5.0 (Wellington)
16th	iP!	Z	22	00	51	
	Compression from north-west.					
17th	Nil					
18th	eP	Z	05	34	34	U.S.C.G.S. 51 $^{\circ}$ N, 171 $^{\circ}$ W.
	i				50	Fox. Is. H = 05 24 01. Mag. = 6.2 (Uppsala)
19th	eP	Z	10	48	30	B.C.I.S. South Pacific. Insufficient data.
	eP	Z	20	52	32	U.S.C.G.S. 25 $^{\circ}$ N, 125 $\frac{1}{2}$ $^{\circ}$ E.
	i				45 $\frac{1}{2}$	Ryuku Is.
	e				49 $\frac{1}{2}$	H = 20 45 03
	e(PP)			54	14	
	e(PPP)				31	
20th	eP	Z	18	21	(20)	B.C.I.S. near 11 $^{\circ}$ N, 127 $^{\circ}$ E.
	e(PP)			22	10	Samar, Philippine Is. H = 18 15.4m.

				4.	
21st	eIP Z	01	17	34	U.S.C.G.S. and B.C.I.S.
	i!			35	21 $\frac{1}{2}$ °N, 144°E.
	i			42 $\frac{1}{2}$	Mariana Is.
	i(PPP)		18	44	H = 01 11 58
	iPcP		20	54	h approx. = 100 kms.
	eScP		24	23	Mag. = 7-7 $\frac{1}{4}$ (Pas)
	eScS		28	16	
	e(P) Z	01	43	02	
22nd	iP Z	09	18	40	Felt: Warangoi. Int.1-2(MM)
	Compression from north-west				4°30'S, 152°20'E.
	iP Z	13	39	54	U.S.C.G.S. 50°N, 177°W.
	i			57	Andreanov Is.
	i		40	02	H = 13 29 44
	ePP		42	11	Mag. = 6 $\frac{1}{2}$ (Pas)
	i		43	47 $\frac{1}{2}$	
	e	(14)	09	25	
23rd	iP Z	04	15	01.5	
	Compression				
	eP Z	15	55	05	B.C.I.S. New Hebrides Is.
					H = 15 50.2m.
24th	e(PKS) Z	03	00	16	U.S.C.G.S. 3°N, 76 $\frac{1}{2}$ °W.
	Confused by microseisms.				Colombia. H = 02 37 37
					Mag. = 6 $\frac{3}{4}$ (Pas)
	eP Z	10	12	23	U.S.C.G.S. 17°N, 146°E.
	i!			23 $\frac{1}{2}$	Mariana Is.
	i			55	H = 10 07 40
		Deep.			h approx. = 100 kms.
25th	Nil				
26th	i(PP)Z	06	53	24	B.C.I.S. 40°N, 31°E.
	Confused by microseisms				Turkey. H = 06 33 30
	i			29 $\frac{1}{2}$	U.S.C.G.S. 41°N, 31°E.
	i		54	03	H = 06 33 31
					Mag. = 7 (Pas)
	iP Z	15	58	15	U.S.C.G.S. 3°S, 131°E.
	i			18	Ceram.
	i(PP)			24	H = 15 53 30
	i(PPP)			43	
	i		59	03	
	iP! Z	21	08	09	Felt: Rabaul. Int.1(MM)
	Dilatation				4°10'S, 152°10'E.
	i			10	
	i!			29	
27th	Nil				
28th	iP Z	06	01	59 $\frac{1}{2}$	U.S.C.G.S. 25 $\frac{1}{2}$ °N, 95°E.
					Pakistan/Burma
					H = 05 51 30
					Mag. = 6.0 (Uppsala)
	eP Z	23	24.5	-	U.S.C.G.S. 15°S, 168°E.
	Confused by microseisms				New Hebrides Is.
	e(ScP)		31	08	H = 23 19 39
					h approx. = 300 kms.

5.

29th iP! Z 05 45 29 $\frac{1}{2}$
Dilatation

iP! Z 10 34 30 $\frac{1}{2}$ Felt: Rabaul. Int.3(MM)
Compression from south- 4°10'S, 152°10'E.
south-east. Karoola. Int.2(MM)
5°10'S, 154°35'E.

eP Z 16 14 03 $\frac{1}{2}$
i 08 $\frac{1}{2}$
i! 59

iP! Z 18 06 50 $\frac{1}{2}$ Felt: Warangoi: Int.2(MM)
Dilatation to south- 4°30'S, 152°20'E.
south-east.

30th iP Z 09 38 27 B.C.I.S. Insufficient data.
i! 31 Deep.

e(P) Z 18 20 18 $\frac{1}{2}$ B.C.I.S. South Pacific.
e 23 30 Insufficient data.
e 26 52

e(P) Z 19 48 (05) B.C.I.S. Tonga Is.
e(PcP) 50 33 Aftershock.
e 58 H = 19 40 58

eP Z 19 57 51 $\frac{1}{2}$ J.M.A. 41°02'N, 142°06'E.
e 58 01 Hokkaido. H = 19 49 30
h approx. = 50 kms.

eP Z 21 04 07 $\frac{1}{2}$ U.S.C.G.S. 22°S, 179°W.
i 09 $\frac{1}{2}$ Fiji Is. region
i 38 $\frac{1}{2}$ H = 20 58 15
i(ScP) 09 25 $\frac{1}{2}$ h approx. = 600 kms.
Confused by microseisms.

31st No time breaks until 0500. Shock U.S.C.G.S. 27 $\frac{1}{2}$ °S, 63°W.
Argentine. H = 02 16 27
Mag. = 6 $\frac{1}{2}$ -6 $\frac{1}{2}$ (Pas) - Recorded.

Local shock recorded . Felt: Wau. Int.2(MM)
c.04 15 7°20'S, 146°45'E.
Kilenge. Int.2(MM)
5°30'S, 148°20'E.
Kandrian. Int.2(MM)
6°15'S, 149°35'E.

.....

6.

Tremors reported felt in the Territory, May, 1957.

Date	Reported Time G.M.T.	Intensity Modified Mercalli	Locality	Latitude		Longitude	
				South		East	
				o	'	o	'
1st	0512	2	Pomio	05	30	151	30
2nd	0153	3	Pomio	"	"	"	"
	0152	3	Warangoi	04	30	152	20
	0150	2	Namatanaï	03	40	152	25
	0151	1	Ulamona	05	00	151	15
	1755	2	Bialla	05	20	151	05
5th	2354	1	Ulamona	05	00	151	15
6th	1930	1	Esa'ala	09	45	150	50
7th	0747 ¹ ₂	2	Esa'ala	09	45	150	50
	1930	2	"	"	"	"	"
8th	2130	3	Aiome	05	10	144	45
9th	0807	2	Popondetta	08	45	148	15
11th	1745	4	Buin	06	50	155	45
12th	(0352)	2	Warangoi	04	30	152	20
22nd	0923	1 - 2	Warangoi	04	30	152	20
	1655	1	Esa'ala	09	45	150	50
29th	(0345)	3	Pomio	05	30	151	30
	1034	3	Rabaul	04	10	152	10
	1037	2	Karoola	05	10	154	35
	1807	2	Warangoi	04	30	152	20
30th	(1040)	3	Aiome	05	10	144	45
	1527	2	Esa'ala	09	45	150	50
	1535	(2)	"	"	"	"	"
	c.2005	1	"	"	"	"	"
	"	(1)	"	"	"	"	"
	"	1	"	"	"	"	"
31st	0415	2	Wau	07	20	146	45
	0415	2	Kilenge	05	30	148	20
	0420	2	Kandrian	06	15	149	35

Station	Time	Amplitude	Period	Frequency	Phase	Remarks
101	01 30	100	0.1	10	0	
102	01 30	100	0.1	10	0	
103	01 30	100	0.1	10	0	
104	01 30	100	0.1	10	0	
105	01 30	100	0.1	10	0	
106	01 30	100	0.1	10	0	
107	01 30	100	0.1	10	0	
108	01 30	100	0.1	10	0	
109	01 30	100	0.1	10	0	
110	01 30	100	0.1	10	0	
111	01 30	100	0.1	10	0	
112	01 30	100	0.1	10	0	
113	01 30	100	0.1	10	0	
114	01 30	100	0.1	10	0	
115	01 30	100	0.1	10	0	
116	01 30	100	0.1	10	0	
117	01 30	100	0.1	10	0	
118	01 30	100	0.1	10	0	
119	01 30	100	0.1	10	0	
120	01 30	100	0.1	10	0	
121	01 30	100	0.1	10	0	
122	01 30	100	0.1	10	0	
123	01 30	100	0.1	10	0	
124	01 30	100	0.1	10	0	
125	01 30	100	0.1	10	0	
126	01 30	100	0.1	10	0	
127	01 30	100	0.1	10	0	
128	01 30	100	0.1	10	0	
129	01 30	100	0.1	10	0	
130	01 30	100	0.1	10	0	
131	01 30	100	0.1	10	0	
132	01 30	100	0.1	10	0	
133	01 30	100	0.1	10	0	
134	01 30	100	0.1	10	0	
135	01 30	100	0.1	10	0	
136	01 30	100	0.1	10	0	
137	01 30	100	0.1	10	0	
138	01 30	100	0.1	10	0	
139	01 30	100	0.1	10	0	
140	01 30	100	0.1	10	0	
141	01 30	100	0.1	10	0	
142	01 30	100	0.1	10	0	
143	01 30	100	0.1	10	0	
144	01 30	100	0.1	10	0	
145	01 30	100	0.1	10	0	
146	01 30	100	0.1	10	0	
147	01 30	100	0.1	10	0	
148	01 30	100	0.1	10	0	
149	01 30	100	0.1	10	0	
150	01 30	100	0.1	10	0	



TERRITORY OF PAPUA AND NEW GUINEA.

Vulcanological Observatory, Rabaul.

SEISMOLOGICAL BULLETIN.

JUNE, 1957.

1st	Nil					
2nd	iP!	Z	10	19	55	Felt: Kiep. Int. 3(MM)
						5°10'S, 152°00'E.
	Dilatation to					Warangoi. Int. 2(MM)
	i			21	18	4°30'S, 152°20'E.
	iP	Z	11	20	09	
	i			21	03	
		Deep.				
3rd	iP	Z	09	08	05	
	Compression					
	i!				09	
	i			09	36	
	i				49½	
	i			10	02	
	e	Z	13	42.8	-	
4th	eP	Z	11	18	36	U.S.C.G.S. 101°S, 166½°E.
	iPP				49	Santa Cruz. Is.
	iPPP				56.8	H = 11 14 50
	iS			21	32	Mag. 5 (Matsushiro)
	iScP			27	00	
	eP	Z	17	10	48	U.S.C.G.S. 17½°S, 178°W.
	i				48½	Fiji Is.
	i!				59	H = 17 05 02
	i			11	24	h approx. = 550 kms.
	i!			12	11	Mag. 6¼-6½ (Pas).
	iS			15	19	
	i!ScP			16	13	
	eScS			20	10	
		Deep?				
	eP	Z	20	27	07	B.C.I.S. and U.S.C.G.S.
						2½°S, 101½°E.
						Sumatra. H = 20 18 05
						Mag. 5¼ (Matsushiro)
5th	iP	Z	13	57	40½	
	e			59	51	
	i	(14)		00	20	
	i			07	32	
6th	e	Z	14	20	45½	Distant tremor.
	i			21	29½	
	eL			23.0	-	
	e	Z	15	07	14½	Distant tremor.
	eL			09.2	-	
	iP	Z	19	55	27½	U.S.C.G.S. 3°N, 126½°E.
	iPPP			56	21	Molucca Strait.
	eScP	(20)		02	32	H = 19 49 47
						Mag. 6.1 (Kiruna)
7th	iP	Z	00	56	46½	
	eP	Z	13	36	55½	B.C.I.S. Insufficient data.
	i!			37	02	
	e			38	35½	
		Deep.				

8th	eP	Z	03	24	47 $\frac{1}{2}$	U.S.C.G.S. 3°S, 147 $\frac{1}{2}$ °E.
	i(PP)				56 $\frac{1}{2}$	Nr. the N.E. Coast of New Guinea.
	e(S)			25.9	-	H = 03 23 33
	e(P)	Z	03	55	22 $\frac{1}{2}$	(B.C.I.S. New Hebrides Is.
	eL			56.4	-	H = 03 54 00)
	e		(04)	04.2	-	
	e			06	(50)	
	eP	Z	06	08	35 $\frac{1}{2}$	U.S.C.G.S. 3 $\frac{1}{2}$ °S, 150°E.
	i				36 $\frac{1}{2}$	New Ireland region.
	e(S)			09.5		H = 06 07 47
	i			11	09 $\frac{1}{2}$	
	i!				31 $\frac{1}{2}$	
	e	Z	12	32.3		
	Confused by microseisms					
	eP	Z	14	27	39 $\frac{1}{2}$	
	i!				45	
	eP	Z	17	19	07 $\frac{1}{2}$	U.S.C.G.S. 16 $\frac{1}{2}$ °S, 173 $\frac{1}{2}$ °W.
	e				29 $\frac{1}{2}$	Tonga Is.
						H = 17 12 03
	e(P)	Z	21	27	05 $\frac{1}{2}$	
	eP	Z	21	28	33 $\frac{1}{2}$	U.S.C.G.S. 7°S, 102 $\frac{1}{2}$ °E.
						Sumatra. H = 21 19 42
	eP	Z	22	19	45	B.C.I.S. Loyalty Is. Foreshock.
						H = 22 14 20
	eP	Z	22	31.5	-	U.S.C.G.S. 19 $\frac{1}{2}$ °S, 168°E.
	e(SS)			36	21	Loyalty Is.
						H = 22 26 17
9th	Times uncertain owing to power cuts.					
10th	iP	Z	01	06	44	U.S.C.G.S. 9°S, 117°E.
	Dilatation - Deep?					Sumbawa Is.
	iPP			07	54 $\frac{1}{2}$	H = 00 59 54
	iPPP			08	13 $\frac{1}{2}$	Mag. 6 $\frac{3}{4}$ (Pas)
	i				42	
	i				50	
	i			12	54	
	i			13	48	
	iP!	Z	03	17	30	U.S.C.G.S. 13 $\frac{1}{2}$ °N, 143 $\frac{1}{2}$ °E.
	Dilatation - Deep.					Mariana Is.
	iS			21	05	H = 03 13 11
	i(PcS)			25	12	h approx. = 150 kms.
						Mag. 6 $\frac{3}{4}$ -7(Pas)
	eP	Z	18	44	58 $\frac{1}{2}$	B.C.I.S. New Britain region.
	i!				59 $\frac{1}{2}$	H = 18 43.9m.
	i			45	49	Felt: Kilenge. Int.2(MM)
	i			47	35	5°30'S, 148°20'E.
11th	iP	Z	14	57	(06)± 2	seconds. U.S.C.G.S. 30°S, 178°W.
						Kermadec Is. H = 14 49 47
						h approx. = 100 kms.
						Mag. 6 $\frac{3}{4}$ -7(Pas)
	iP	Z	18	56	(50)± 2	seconds. U.S.C.G.S. 18°N, 120 $\frac{1}{2}$ °E.
	i			57	(08 $\frac{1}{2}$)	" " Luzon.
	i			58	(22 $\frac{1}{2}$)	" " H = 18 49 24
	i(PcP)			59	(06 $\frac{1}{2}$)	" " Mag. 6.8 (Uppsala)

3.

12th	iP iPP	Z	08	36 38	58± 2 57	seconds U.S.C.G.S. 41½°N, 142½°E. Hokkaido H = 08 28 34 Mag. 6.2 (Uppsala)
	iP i i i	Z	10	08 09 38 10	31± 2 30 38 47	seconds " " " " " "
13th	eP	Z	10	51	00½	U.S.C.G.S. 51½°N, 175°W. Andreanov Is. H = 10 40 38 Mag. 7 (Pas)
	e	Z	11	20	(10)	(B.C.I.S. Andreanov Is. H = 11 05 00)
	eIP	Z	20	30	17	U.S.C.G.S. 3°S, 101°E. Sumatra. H = 20 21 42 h approx. = 150 kms.
	iP e	Z	21	33	25 52	U.S.C.G.S. ½°N, 123½°E. Celebes. H = 21 27 18
14th	eP Confused by microseisms	Z	05	47	(42)	B.C.I.S. 16½°S, 168½°E. New Hebrides Is. H = 05 42 38
	eP ePP eS	Z	06	34 36 43	40 40 10	U.S.C.G.S. 52°N, 175½°W. Andreanov Is. H = 06 24 20 Mag. 6¼ (Berk)
	iP! Dilatation (to S.W.?)	Z	20	02	31	Felt: Rabaul. Int.1(MM) 04°10'S, 152°10'E.
	iP! Compression from East. i	Z	21	02 06	41 23	
15th	iP i i i i!	Z	02	30	04 05½ 15 25½ 27	Local
	iP ePP ePPP eL	Z	18	28 31 32 46	55 21 49 (22)	U.S.C.G.S. 52°N, 171°W. Fox Is. H = 18 18 20 Mag. 6-6¼ (Matsushiro)
16th	Nil					
17th	e(P) Confused by microseisms	Z	06	23	(36)	U.S.C.G.S. 15°S, 173½°W. Samoa Is. H = 06 16 44 Mag. 5¼ (Pas.)

4.

18th	eP	Z	02	22	19	U.S.C.G.S. $14\frac{1}{2}^{\circ}\text{N}$, 96°E . Burma. H = 02 12 12 Mag. 6.4 (Uppsala)
	iP i	Z	11	26 28	13 46	U.S.C.G.S. 18°N , $120\frac{1}{2}^{\circ}\text{E}$. Luzon. H = 11 18 53 h approx. = 60 kms.
	eIP	Z	14	58	42 7)	U.S.C.G.S. 14°N , 96°E . Burma. Aftershock. H = 14 48 17 Mag. 6.7 (Uppsala)
	eP i ePPP eL	Z	18	01 02 12	53 54 55 -	U.S.C.G.S. 25°S , 170°E . Loyalty Is. H = 17 56 03 Mag. 6.4 (Matsushiro)
	eP	Z	18	50	(20)	(B.C.I.S. Insufficient data)
19th	iP eL	Z	08	07 13	17 -	U.S.C.G.S. $16\frac{1}{2}^{\circ}\text{S}$, $176\frac{1}{2}^{\circ}\text{E}$. Fiji Is. H = 08 01 30 Mag. 6.8 (Uppsala)
	eP i	Z	18	18 41	22 41	Local shock.
	iP	Z	19	48	19.5	B.C.I.S. New Britain. Insufficient data. Felt: Numundo. Int. 3-4(MM) $5^{\circ}35'\text{S}$, $150^{\circ}10'\text{E}$. Felt: Kandrian. Int. 3(MM) $6^{\circ}15'\text{S}$, $149^{\circ}35'\text{E}$.
20th	iP i!	Z	01	11	$45\frac{1}{2}$ $51\frac{1}{2}$	U.S.C.G.S. 20°N , $145\frac{1}{2}^{\circ}\text{E}$. Mariana Is. H = 01 06 25 Mag. 6.0 (Uppsala)
	eP eL	Z	16	56 58	$13\frac{1}{2}$ -	
	iP eL	Z	17	04 07	18 -	
	iP	Z	20	01	23	
21st	eP i eL	Z	06	05 07.5	45 49 -	
	eP eL	Z	06	21 23	06 -	
	iP iS eL	Z	16	40 41 44	57 30 -	
	iP e(S)	Z	18	24 25	45 32	
	eP	Z	18	47	29	U.S.C.G.S. 48°N , 155°E . Kurile Is. H = 18 38 03 Mag. $5\frac{1}{2}$ (Moscow)
	eP	Z	20	33	41	B.C.I.S. Probably Mariana Is. Insufficient data.
	eP	Z	22	06	29	B.C.I.S. Discordant data.

					5.	
21st	eP i eL	Z	06	05 45 49 07.5	-	
	eP eL	Z	06	21 23	06 -	
	iP iS eL	Z	16	40 41 44	57 30 -	
	iP e(S)	Z	18	24 25	45 32	
	eP	Z	18	47	29	U.S.C.G.S. 48°N, 155°E. Kurile Is. H = 18 38 03 Mag. 5½ (Moscow)
	eP	Z	20	33	41	B.C.I.S. Probably Mariana Is. Insufficient data.
	eP	Z	22	06	29	B.C.I.S. Discordant data.
22nd	iP i(S)	Z	18	49 50	36 16	Local shock.
	eP	Z	20	09	11	Probably foreshock in West New Guinea.
	e eL	Z	23	08 (38) 09.7	-	" " "
	e eL	Z	23	32 (04) 32.8	-	Probably foreshock in West New Guinea.
	e	Z	23	38 (18)		" " "
	e	Z	23	47 (38)		" " "
Onset of Major Shock near the N. coast of West New Guinea (H = 23 50 23 U.S.C.G.S.) lost during record change.						
23rd	Nil					
24th	Nil					
25th	eiP	Z	10	21	20	U.S.C.G.S. 10°N, 94°E. Adndaman Is. H = 10 11 17
26th	iP! Dilatation to east- south-east.	Z	12	56 03 ± 2 seconds.	B.C.I.S. East coast of New Guinea. H = 12 55.5 m. Felt: Warangoi. Int.2(MM) 4°30'S, 152°20'E. (Not Awelkon, as reported).	
27th	eP i(PP) eS eL	Z	00	20 22 29.3 49.0	24) ± 2 seconds. 40) -) -)	B.C.I.S. & U.S.C.G.S. 56°N, 116°E, Lake Baikal. H = 00 09 28 Mag. 7.9 (Uppsala)
	eP	Z	04	09	01	B.C.I.S. 5°N, 127½°E. Mindanao. H = 04 03 00
	e(P)	Z	09	45	39	
	eP	Z	12	55	20	U.S.C.G.S. 22°S, 171°E. Loyalty Is. H = 12 49 51
	e	Z	17	48	38	

28th iP Z 16 36 57 B.C.I.S. Solomon Is.
i(S) 38 01 H = 16 35.5 m.
Felt: Buin. Int. 2 (MM)
6°50'S, 155°45'E.

29th iP Z 07 59 04½ U.S.C.G.S. 51½°N, 166°W.
Fox Is.
H = 07 48 18.
Mag. 6.3 (Uppsala)

30th Nil.

The following shocks were reported felt from the Territory,
June, 1957.

Date	(G.M.T.) Time	Intensity Mercalli Modified	Locality	Latitude South		Longitude East	
				°	'	°	'
2nd	1022	3	Kiep	05	10	152	00
	1040	2	Warangoi	04	30	152	20
10th	1845	2	Kilenge	05	30	148	20
13th	1225	4	Awelkon	05	40	147	50
14th	2002	1	Rabaul	04	11	152	10
19th	1945	3	Kandrian	06	15	149	35
	1950	3 - 4	Numundo	05	35	150	10
20th	0700	3	Esa'ala	09	45	150	50
	0700	2	Salamo	09	40	150	45
	0755	3	Esa'ala	09	45	150	50
	0755	5?	Salamo	09	40	150	45
	0815	2	Salamo	"	"	"	"
	0955	2	Salamo	"	"	"	"
	1017	3	Esa'ala	09	45	150	50
	1017 55	3	Esa'ala	"	"	"	"
	1020 30	4	Esa'ala	"	"	"	"
	1022 23	4	Esa'ala	"	"	"	"
	1023 20	3	Esa'ala	"	"	"	"
	1028	5?	Salamo	09	40	150	45
	1030	4	Esa'ala	09	45	150	50
	1220	3	Salamo	09	40	150	45
	1223	4	Esa'ala	09	45	150	50
	1318	2	Salamo	09	40	150	45
	1320	3	Esa'ala	09	45	150	50
23rd	0528	2	Awelkon	05	40	147	50
26th	1255	2	Warangoi	04	30	152	20

The following stations have been used for the Territory, June, 1962.

Station	Latitude	Longitude	Time	Intensity
100	10 10	10 10	10 10	10 10
101	10 10	10 10	10 10	10 10
102	10 10	10 10	10 10	10 10
103	10 10	10 10	10 10	10 10
104	10 10	10 10	10 10	10 10
105	10 10	10 10	10 10	10 10
106	10 10	10 10	10 10	10 10
107	10 10	10 10	10 10	10 10
108	10 10	10 10	10 10	10 10
109	10 10	10 10	10 10	10 10
110	10 10	10 10	10 10	10 10
111	10 10	10 10	10 10	10 10
112	10 10	10 10	10 10	10 10
113	10 10	10 10	10 10	10 10
114	10 10	10 10	10 10	10 10
115	10 10	10 10	10 10	10 10
116	10 10	10 10	10 10	10 10
117	10 10	10 10	10 10	10 10
118	10 10	10 10	10 10	10 10
119	10 10	10 10	10 10	10 10
120	10 10	10 10	10 10	10 10
121	10 10	10 10	10 10	10 10
122	10 10	10 10	10 10	10 10
123	10 10	10 10	10 10	10 10
124	10 10	10 10	10 10	10 10
125	10 10	10 10	10 10	10 10
126	10 10	10 10	10 10	10 10
127	10 10	10 10	10 10	10 10
128	10 10	10 10	10 10	10 10
129	10 10	10 10	10 10	10 10
130	10 10	10 10	10 10	10 10
131	10 10	10 10	10 10	10 10
132	10 10	10 10	10 10	10 10
133	10 10	10 10	10 10	10 10
134	10 10	10 10	10 10	10 10
135	10 10	10 10	10 10	10 10
136	10 10	10 10	10 10	10 10
137	10 10	10 10	10 10	10 10
138	10 10	10 10	10 10	10 10
139	10 10	10 10	10 10	10 10
140	10 10	10 10	10 10	10 10
141	10 10	10 10	10 10	10 10
142	10 10	10 10	10 10	10 10
143	10 10	10 10	10 10	10 10
144	10 10	10 10	10 10	10 10
145	10 10	10 10	10 10	10 10
146	10 10	10 10	10 10	10 10
147	10 10	10 10	10 10	10 10
148	10 10	10 10	10 10	10 10
149	10 10	10 10	10 10	10 10
150	10 10	10 10	10 10	10 10
151	10 10	10 10	10 10	10 10
152	10 10	10 10	10 10	10 10
153	10 10	10 10	10 10	10 10
154	10 10	10 10	10 10	10 10
155	10 10	10 10	10 10	10 10
156	10 10	10 10	10 10	10 10
157	10 10	10 10	10 10	10 10
158	10 10	10 10	10 10	10 10
159	10 10	10 10	10 10	10 10
160	10 10	10 10	10 10	10 10
161	10 10	10 10	10 10	10 10
162	10 10	10 10	10 10	10 10
163	10 10	10 10	10 10	10 10
164	10 10	10 10	10 10	10 10
165	10 10	10 10	10 10	10 10
166	10 10	10 10	10 10	10 10
167	10 10	10 10	10 10	10 10
168	10 10	10 10	10 10	10 10
169	10 10	10 10	10 10	10 10
170	10 10	10 10	10 10	10 10
171	10 10	10 10	10 10	10 10
172	10 10	10 10	10 10	10 10
173	10 10	10 10	10 10	10 10
174	10 10	10 10	10 10	10 10
175	10 10	10 10	10 10	10 10
176	10 10	10 10	10 10	10 10
177	10 10	10 10	10 10	10 10
178	10 10	10 10	10 10	10 10
179	10 10	10 10	10 10	10 10
180	10 10	10 10	10 10	10 10
181	10 10	10 10	10 10	10 10
182	10 10	10 10	10 10	10 10
183	10 10	10 10	10 10	10 10
184	10 10	10 10	10 10	10 10
185	10 10	10 10	10 10	10 10
186	10 10	10 10	10 10	10 10
187	10 10	10 10	10 10	10 10
188	10 10	10 10	10 10	10 10
189	10 10	10 10	10 10	10 10
190	10 10	10 10	10 10	10 10
191	10 10	10 10	10 10	10 10
192	10 10	10 10	10 10	10 10
193	10 10	10 10	10 10	10 10
194	10 10	10 10	10 10	10 10
195	10 10	10 10	10 10	10 10
196	10 10	10 10	10 10	10 10
197	10 10	10 10	10 10	10 10
198	10 10	10 10	10 10	10 10
199	10 10	10 10	10 10	10 10
200	10 10	10 10	10 10	10 10



VULCANOLOGICAL OBSERVATORY RABAU.
SEISMOLOGICAL BULLETIN.
JULY, 1957.

1st	iP!	Z	02	09	17 $\frac{1}{2}$	B.C.I.S. New Britain Region. Felt: Warangoi. Int. 2-3 (MM) 4 $^{\circ}$ 30'S, 152 $^{\circ}$ 20'E. Tol. Int. 1 (MM) 5 $^{\circ}$ 00'S, 152 $^{\circ}$ 05'E.
	i	Z	08	50	42 $\frac{1}{2}$	
	iP	Z	13	56	58	
	iS			57	40	
	iP	Z	17	04	56	
	eP	Z	19	40	47	U.S.C.G.S. 25 $^{\circ}$ N, 94 $^{\circ}$ E. India/Burma Frontier. H = 19 30 16 Mag. 7 $\frac{1}{4}$ (Matsushiro)
	i				48	
2nd	i(PP)	Z	01	00	17	U.S.C.G.S. 36 $^{\circ}$ N, 53 $^{\circ}$ E. Iran. H = 00 42 23 Mag. 7 $\frac{1}{4}$ -7 $\frac{1}{2}$ (Pas)
	eP	Z	14	19	03	
	i(S)				32 $\frac{1}{2}$	
	iP	Z	15	02	28 $\frac{1}{2}$	B.C.I.S. Discordant data. (? 2 earthquakes)
	e			09	11	
	i(S)			10	54	
	e			11	28	
	e			31	01	
3rd	eP	Z	12	34	45	U.S.C.G.S. 50 $\frac{1}{2}$ $^{\circ}$ N, 179 $^{\circ}$ W. Andreanov Is. H = 12 24 37 Mag. 6 $\frac{1}{2}$ -6 $\frac{3}{4}$ (Matsushiro)
4th	iP!	Z	14	12	07	U.S.C.G.S. 5 $^{\circ}$ S, 152 $^{\circ}$ E. New Britain. H = 14 11 36 Felt: Pomio. Int. 4 (MM) 5 $^{\circ}$ 30'S, 151 $^{\circ}$ 30'E. Rabaul. Int. 2 (MM) 4 $^{\circ}$ 10'S, 152 $^{\circ}$ 10'E. Warangoi. Int. 1-2 (MM) 4 $^{\circ}$ 30'S, 152 $^{\circ}$ 20'E.
	Dilatation to east-south-east.					
	iP!	Z	14	35	13	B.C.I.S. New Britain. Aftershock. H = 14 34 42 Felt: Pomio. Int. 4 (MM) 5 $^{\circ}$ 30'S, 151 $^{\circ}$ 30'E. Rabaul. Int. 2 (MM) 4 $^{\circ}$ 10'S, 152 $^{\circ}$ 10'E.
	Compression from south-east.					
	iP	Z	15	18	42	
	Dilatation					
	iS			19	01 $\frac{1}{2}$	
	iP!	Z	15	45	54 $\frac{1}{2}$	
	Dilatation.					
	iP!	Z	15	55	00.5	B.C.I.S. Solomon Is. region H = 15 53.8m.
	Dilatation to east-south-east.					

5th	iP Dilatation.	Z	02	04	46 $\frac{1}{2}$	Felt: Pomio. Int.3(MM) 5°30'S, 151°30'E.
	iP	Z	02	48	23 $\frac{1}{2}$	Felt: Pomio. Int.4(MM) 5°30'S, 151°30'E. Kiep. Int.3(MM) 5°10'S, 152°00'E. Ulamona. Int.2(MM) 5°00'S, 151°15'E. Tol. Int.2(MM) 5°00'S, 152°05'E. Rabaul. Int.2(MM) 4°10'S, 152°10'E. Warangoi. Int.1-2(MM) 4°30'S, 152°20'E.
	iP	Z	11	37	08 $\frac{1}{2}$	
	eP	Z	12	41	20	U.S.C.G.S. 281°S, 179°W. Kermadec Is. H = 12 33 56 Mag. 6 $\frac{1}{4}$ (Matsushiro)
	iP	Z	17	34	36 $\frac{1}{2}$	
	eP i(S)	Z	19	33	15 $\frac{1}{2}$ 49	
	iP Dilatation iS	Z	23	41	35 49	
6th	iP iS	Z	02	05	29 54	
	iP! Dilatation to east-south- east.	Z	06	57	47	B.C.I.S. New Britain. H = 06 57.2m. Felt: Rabaul. Int.2(MM) 4°10'S, 152°10'E. Tol. Int.2(MM) 5°00'S, 152°05'E.
7th	iP i	Z	00	50	26 $\frac{1}{2}$ 35	
	eP iS	Z	11	35 36	45 50	Felt: Aropa. Int.3(MM) 6°25'S, 155°50'E. Buin. Int.1(MM) 6°50'S, 155°45'E.
	eP	Z	15	40	18	B.C.I.S. 13 $\frac{1}{2}$ °S, 165 $\frac{1}{2}$ °E. New Hebrides Is. H = 15 36 15 Mag. 5 $\frac{3}{4}$ (Matsushiro)
	eP i!	Z	16	12	29 33	U.S.C.G.S. 6 $\frac{1}{2}$ °S, 156°E. Solomon Is. H = 16 11 15 Mag. 6 $\frac{3}{4}$ (Pas) Felt: Buin. Int.6(MM) Some damage. 6°50'S, 155°45'E. Aropa. Int.4(MM) 6°25'S, 155°50'E. Kieta. Int.3(MM) 6°15'S, 155°40'E. Karoola. Int.3(MM) 5°10'S, 154°35'E. Rabaul. Int.2(MM) 4°10'S, 152°10'E.

7th cont.	iP iS	Z	21	11	02 56	Felt: Aropa. Int.2(MM) 6°25'S, 155°50'E. Buin. Int.1(MM) 6°50'S, 155°45'E.
8th	iP e	Z	05	22 28	51 55	
	iP	Z	09	42	44	(? Mariana Is. B.C.I.S.)
	iP i	Z	12	25	23 31	
	iP e	Z	17	45 46	13½ 17½	
9th	iP	Z	00	26	51	
	ei Confused by	Z microseisms.	10	06	(38)	U.S.C.G.S. 6°S, 104°E. Sumatra. H = 09 58 09 Mag. 6½ (Matsushiro)
	iP iS	Z	18	23 24	56 17	
10th	iP i(S)	Z	02	48 49	48 12	
	iP	Z	03	47	17	B.C.I.S. Insufficient data.
	iP	Z	10	11	15.5	
	i	Z	10	27	23	Short period pulse.
	iP	Z	13	22	44½	U.S.C.G.S. 20½°N, 123°E. Batan Is. H = 13 15 28
	iP	Z	23	01	35½	
	iP	Z	23	02	54½	
11th	iP! Dilatation.	Z	02	05	06½	
	eP iS	Z	19	41 42	31½ 20	
	eP eS	Z	23	53 54	26 21½	Felt: Buin. Int.1(MM) 6°50'S, 155°45'E.
12th	iP	Z	08	15	27½	B.C.I.S. Banda Sea. H = 08 10.6m.
	iP	Z	15	54	23	
	iP eL	Z	20	55 56.6	37 -	
	iP eL	Z	20	57 58.4	18 -	U.S.C.G.S. 3°S, 148½°E. Bismarck Sea. H = 20 56 18 Mag. 6¼ (Matsushiro)
	iP eS iL	Z (22)	21 00.5 01	59 - 36	42 - 36	U.S.C.G.S. 3°S, 148½°E. Bismarck Sea. Aftershock. H = 21 58 45 Mag.6 (Matsushiro)

13th	iP	Z	07	48	37 $\frac{1}{2}$	
	iP	Z	07	50	29 $\frac{1}{2}$	
14th	eP	Z	02	35	50 $\frac{1}{2}$	U.S.C.G.S. 46°N, 151 $\frac{1}{2}$ °E.
	i			36	02	Kurile Is.
						H = 02 26 54
						Mag. 5 $\frac{1}{2}$ (Matsushiro)
	eP	Z	06	30	45 $\frac{1}{2}$	U.S.C.G.S. 27°S, 178°W.
	i				48 $\frac{1}{2}$	Kermadec Is. region
	i(PPP)(PcP)			33	07 $\frac{1}{2}$	H = 06 23 52
	e			35	36 $\frac{1}{2}$	h approx. = 150 kms.
	i(ScP)(PcS)			36	37 $\frac{1}{2}$	Mag. 7-7 $\frac{1}{4}$ (Pas)
	i			37	00 $\frac{1}{2}$	
	e				26 $\frac{1}{2}$	
	e(ScS)			40	42 $\frac{1}{2}$	
	e				50 $\frac{1}{2}$	
	eP	Z	08	18	06 $\frac{1}{2}$	U.S.C.G.S. 30°S, 177°W.
	i				10 $\frac{1}{2}$	Kermadec Is.
	i				35 $\frac{1}{2}$	H = 08 10 45
	e(PP)			19	55 $\frac{1}{2}$	Mag. 6 $\frac{3}{4}$ (Pas)
	iPcP			20	25 $\frac{1}{2}$	
	iPcS			24	20 $\frac{1}{2}$	
	eScS			28	27 $\frac{1}{2}$	
	e				42 $\frac{1}{2}$	
	eP	Z	09	20	32.5	U.S.C.G.S. 12 $\frac{1}{2}$ °N, 144°E.
						Mariana Is.
						H = 09 16 12
	eiP	Z	09	49	(30)	U.S.C.G.S. 20°S, 174 $\frac{1}{2}$ °W.
	Confused by microseisms.					Tonga Is. H = 09 42 27
						Mag. 6 $\frac{1}{2}$ (Matsushiro)
	iP	Z	23	40	04 $\frac{1}{2}$	
	Compression.					
	iS				25 $\frac{1}{2}$	
15th	iP	Z	01	44	17	
	Dilatation.					
16th	iP	Z	01	13	25 $\frac{1}{2}$	
	Dilatation to east-south-east					
	iP	Z	10	00	52	(Felt: Awelkon. Int.1(MM)
	iS			01	16	5°40'S, 147°50'E)
17th	iP	Z	09	52	29	
	Compression.					
	iP	Z	10	14	18.5	
	eP	Z	11	14	01	U.S.C.G.S. 11°S, 167°E.
	iPP				14	Santa Cruz Is.
	i			15	07	H = 11 10 20
	i				17	h = 100 kms.
	eS			16	58	Mag. 6 $\frac{1}{4}$ -6 $\frac{1}{2}$ (Pas)
	e			17	00	
	iSS				24	
	iSSS				35 $\frac{1}{2}$	
	i				59	
	iPcP			18	59	
	eP		12	29	45	U.S.C.G.S. 2°S, 137°E.
	i				47.3	New Guinea.
	i				51 $\frac{1}{2}$	H = 12 26 06
	iPP				54	
	i			30	17	
	e			33	23	

18th	eP i!PPP	Z	11	12	34 49 $\frac{1}{2}$	U.S.C.G.S. 5°S, 146°E. Nr. the N. coast of New Guinea. H = 11 10 58 Felt: Karkar. Int. 4-5 (MM) 4°40'S, 146°00'E. Madang. Int. 3 (MM) 5°15'S, 145°50'E. Aiome. Int. 3 (MM) 5°10'S, 144°45'E. Saidor. Int. 3 (MM) 5°35'S, 146°30'E. Kumbug. Int. ? 4°20'S, 145°10'E.
19th	iP i i ePPP eP iPP iPPP i i iSS	Z Z	13 20	09 28	48 10 11 12 35 42 $\frac{1}{2}$ 49 $\frac{1}{2}$ 56 $\frac{1}{2}$ 29 08 30 39	U.S.C.G.S. 25°N, 122 $\frac{1}{2}$ °E. Formosa. H = 13 02 05 Mag. 6-6 $\frac{1}{2}$ (Matsushiro) U.S.C.G.S. 3°S, 142°E. Foreshock. N. New Guinea. H = 20 26 03 Felt: Lumi. Int. 5 (MM) 3°30'S, 142°05'E. Aitape. Int. 2 (MM) 3°10'S, 142°20'E.
	eP iPP iSS iSSS	Z	21	39	16 31 19 26	U.S.C.G.S. 3 $\frac{1}{2}$ °S, 142°E. N. New Guinea. H = 21 36 46 Felt: Lumi. Int. 6 (MM) 3°30'S, 142°05'E. Aitape. Int. 3 (MM) 3°10'S, 142°20'E. Nuku. Int. 3 (MM) 3°35'S, 142°10'E.
20th	eiP iP iS iP eP eP i eP eP e(P)	Z Z Z Z Z Z Z	01 06 07 11 14 15 19 20	39 58 59 27 22 16 17 45 15 55	25 53 13 10 18 47 04 57 26 54	(Felt: Lumi. Int. 4 (MM) 3°30'S, 142°05'E) U.S.C.G.S. 50 $\frac{1}{2}$ °N, 156°E. Kamchatka. H = 11 12 53 h approx. = 60 kms. Mag. 5 $\frac{1}{4}$ (Matsushiro) U.S.C.G.S. 43°N, 145°E. Hokkaido. H = 14 08 14 Mag. 6 (Uppsala) U.S.C.G.S. 19 $\frac{1}{2}$ °S, 174°W. Tonga Is. H = 15 38 47 B.C.I.S. South Pacific. Rather inconclusive data.

21st iP Z 07 00 37¹/₂
Dilatation to east-south-
east.

i	06	54
i	07	33
i	08	47
i	09	02

U.S.C.G.S. $4\frac{1}{2}^{\circ}\text{S}$, 153°E .
New Ireland. H = 07 00 10
Mag. $5\frac{3}{4}$ (Matsushiro)
Felt: Namatanai. Int. 4 (MM)
 $3^{\circ}40'S$, $152^{\circ}25'E$.
Rabaul. Int. 3 (MM)
 $4^{\circ}10'S$, $152^{\circ}10'E$.
Karoala. Int. 3 (MM)
 $5^{\circ}10'S$, $154^{\circ}35'E$.
Warangoi. Int. 3 (MM)
 $4^{\circ}30'S$, $152^{\circ}20'E$.
Kiep. Int. 3 (MM)
 $5^{\circ}10'S$, $152^{\circ}00'E$.
Tol. Int. 2 (MM)
 $5^{\circ}00'S$, $152^{\circ}05'E$.
Ulamona. Int. 2 (MM)
 $5^{\circ}00'S$, $151^{\circ}15'E$.

iP Z 07 30 11.
Dilatation.

Felt: Rabaul, Int. 1 (MM)
40°10'S, 152°10'E.

iP	Z	20	36	56
iS			37	42

22nd eP Z 06 24 32

U.S.C.G.S. 33 $\frac{1}{2}$ °S, 178°W.
Kermadec Is. E = 06 1.6 52
Mag. 6 $\frac{1}{2}$ -6 $\frac{1}{2}$ (Matsushige)

eP Z 06 29 31
i 55

U.S.C.G.S. 34°S, 177½°W.
Kermadec Is. Aftershock.
H = 06 21 50

eP Z 16 39 35
i(S) 44

eP Z 18 36 58

B.C.I.S. Probably New Hebrides
Is. Rather inconclusive data.

1P Z 09 24 13
Dilatation to east-south-
east.

Felt: Warangoi. Int. 1-2 (MM)
4°30'S, 152°20'E.

1	27	48
1	28	29
1		32
1		41

eP	Z	19	36	12
i				24
i				28

Local shock.

23rd eiP Z 00 55 (35)
Onset confused.

U.S.C.G.S. 52°N, 177°W.
Andreanov Is. H = 00 45 12
Mag. 6 $\frac{3}{4}$ -7 (Matsushiro)

eP Z 06 26 00

U.S.C.G.S. 20¹⁰S, 170⁰E.
Loyalty Is. H = 06 20 43

$$\begin{array}{rcccl} e^P & Z & 13 & 36 & 18 \\ i & & & & 36 \\ e(S) & & & 41 & (28) \end{array}$$

U.S.C.G.S. Kermadec Is.
H = 13 30 17
h approx. = 600 kms.

24th ePKP Z 02 16 (32)

U.S.C.G.S. 30°S, 70½°W.
Chile/Argentine border.
H = 01 57 25
Mag. 6½ (Pas)

iP Z 03 56 28
Dilatation.

Felt: Goroka, Int. 2 (MM)
6°05'S, 145°25'E.

(cont. over

24th cont.	eP	Z	06	13	(09)	(Wellington. 35°95'S, 179°4'W. New Zealand. H = 06 05 34.5 Mag. 5.2 (Wellington))
	eP	Z	06	55	45	
	i				58	
	i			56	34	
	i(S)				37	
	eP	Z	10	02.1	-	U.S.C.G.S. 18°S, 169½°E. New Hebrides Is. H = 09 56 57
	Confused by microseisms,					
	eP	Z	11	07.4	-	U.S.C.G.S. 20°S, 169°E. New Hebrides Is. H = 11 02 30 Mag. 6½ (Pas)
	Confused by microseisms.					
	i				34	
	e				37	
	e(PP)				57	
	i		08		28	
	eP	Z	14	44	52	U.S.C.G.S. 3°S, 134½°E. W. of New Guinea. H = 14 40 45
	eP	Z	15	02	59	(B.C.I.S. 400 kms. south-east of Kermadec Is. H = 14 55.2m.)
	iP	Z	18	29	28	Wellington. 34°S, 177¾°W. S. of Kermadec Is. H = 18 21 18 Mag. 5½ (Wellington)
	i				39	
	e			30	10	
25th	eP	Z	07	52	40	U.S.C.G.S. 51°N, 177°W. Andreanov Is. H = 07 42 25 Mag. 6½ (Berk)
	eP	Z	11	59	28	
	eP	Z	14	13	17	Felt: Lae. Int. 3 (MM)
	i				18	6°45'S, 147°00'E.
	i				34	
	i!				57	
	iP	Z	17	48	56	
	iS			49	13	
	eP	Z	18	40	04	U.S.C.G.S. 42°N, 142°E. Hokkaido. H = 18 31 36
	iP	Z	20	40	55	
	iS			41	14	
	eP	Z	22	07	(01)	
26th	iP	Z	03	48	13	Felt: Linga Linga. Int. 2 (MM)
	i				59	5°35'S, 149°45'E.
	i			49	01	Talasea. Int. 2 (MM)
	i				28	5°20'S, 150°05'E.
	iP	Z	05	04	25	
	i				40	
	i(S)			05	15	
	eP	Z	06	57	23	U.S.C.G.S. 35°S, 180°. New Zealand. H = 06 49 42 Mag. 5½ (Matsushiro)

(cont. over

26th cont.	eP	Z	14	53	04	
	eP	Z	18	31	22½	
	i! e(S)				33.7 47	
27th	eP	Z	14	52	32	U.S.C.G.S. 20°S, 174½°W. Tonga Is. H = 14 45 28 Mag. 5½-6 (Matsushiro)
	eiP	Z	15	43	03	U.S.C.G.S. 5½°N, 127½°E. Mindanao. H = 15 37 30
	iP	Z	18	43	57	U.S.C.G.S. 6½°S, 151½°E. New Britain. H = 18 43 01
	Compression from south-south-west.					
	i iS! iL			44 47.4	59 36 -	
28th	eP	Z	01	35	17	U.S.C.G.S. 15°S, 167½°E. New Hebrides Is. H = 01 30 52
	iP	Z	03	00	56	B.C.I.S. 1200 kms. S.W. of Marie-Theresa Reef, South Pacific. H = 02 51.1m.
	e(P) i	Z	08	07	02 16	
	ePKP e(PP) e	Z	08	58 59 00	(14) 15 17	U.S.C.G.S. 17°N, 99°W. Guerrero, Mexico. H = 08 40 04
	e(PPP) i	(09)		01 10	17 58	Mag. 7.8 (Uppsala)
	e(SSS) eL			(20) 33	- (40)	
	eP	Z	09	17	(41)	U.S.C.G.S. 18½°S, 176½°E. Fiji Is. region H = 09 11 49
	eP	Z	10	05	(01)	Wellington. 34°S, 178°W. S. of Kermadec Is. H = 09 57 13 Mag. 5.4 (Wellington)
29th	eP	Z	13	36	(17)	B.C.I.S. Fiji Is. region H = 13 30.3m.
	ePKP i i ePKS	Z	17	34 31 37 37	30 31 37 50	U.S.C.G.S. 23½°S, 71½°W. Chile. H = 17 15 14 Mag. 7-7¼ (Pas)
	eP	Z	19	29	(06)	
	iP	Z	23	41	27	
	Dilatation					
	i! i i i				29 57 42 44	
					03 28	

30th	iP	Z	01	18	03
		Dilatation			
	i!				05
	i(S)				35
	i				39
	iP	Z	11	05	24
	i				33
31st	iP	Z	10	30	50 $\frac{1}{2}$
		Dilatation			
	i			31	04
	i				11
	eP	Z	10	56	02
	i(S)			57	05 $\frac{1}{2}$
	iP	Z	19	04	55
	i			05	20
	i(S)				26
	iP	Z	20	29	23
		Dilatation.			
	i				25 $\frac{1}{2}$

The following shocks were reported felt from the Territory,
July, 1957.

Date	Time	Intensity Modified Mercalli	Locality	Latitude South	Longitude East
1st	0210	2 - 3	Warangoi	04 30	152 20
	0210	1	Tol	05 00	152 05
2nd	1020	1 - 2	Ulamona	05 00	151 15
4th	0237	1	Kaiapit	06 15	146 15
	1408	1 - 2	Warangoi	04 30	152 20
	1412	2	Rabaul	04 10	152 10
	1415	4	Pomio	05 30	151 30
	1430	4	Pomio	"	"
	1435	2	Rabaul	04 10	152 10
5th	0215	3	Pomio	05 30	151 30
	0245	4	Pomio	"	"
	0248	2	Ulamona	05 00	151 15
	0248	2	Rabaul	04 10	152 10
	0248	2	Tol	05 00	152 05
	0249	3	Kiep	05 10	152 00
	0249	1 - 2	Warangoi	04 30	152 20
6th	0221	2	Angoram	04 05	144 05
	0655	2	Tol	05 00	152 05
	0657	2	Rabaul	04 10	152 10
7th	0658	2	Ulamona	05 00	151 15
	1135	3	Aropa	06 25	155 50
	1135	1	Buin	06 50	155 45
	1610	6	Buin	"	"
	(Some damage)				
	1610	4	Aropa	06 25	155 50
	1613	3	Karoola	05 10	154 35
	1615	3	Kieta	06 15	155 40
	1617	2	Rabaul	04 10	152 10
	2110	2	Aropa	06 25	155 50
	2110	1	Buin	06 50	155 45

8th	0415 1630	1 - 2 1 - 2	Warangoi Londolovit	04 ⁰ 30' 03 05	152 ⁰ 20' 152 40
11th	2355	1	Buin	06 50	155 45
12th	0630	3	Walindi	05 25	150 05
16th	1008	1	Awelkon	05 40	147 50
18th	1110-1112 ? 1110 1111 1115	4 - 5 3 3 3 ?	Karkar Madang Aiome Saidor Kumbug	04 40 05 15 05 10 05 35 04 20	146 00 145 50 144 45 146 30 145 10
19th	1107 1113 2020 2027 2030 2115 2130 2139 2140 2150 2235 2245 2324	2 2 ? 2 5 2 3 3 6 1 3 1 1	Goroka Awelkon Lumi Aitape Lumi Lumi Nuku Aitape Lumi Lumi Lumi Lumi Lumi	06 05 05 40 03 30 03 10 03 30 " 03 35 03 10 03 30 " " " "	145 25 147 50 142 05 142 20 142 05 " 142 10 142 20 142 05 " " " "
20th	0135 0155 0230 0250 0440 0450 0515 0730 0824 0919 1930 (2142)	4 3 2 1 1 1 1 2 2 2 2 (3)	Lumi Lumi Lumi Lumi Lumi Lumi Lumi Lumi Lumi Lumi Lumi Lae	" " " " " " " " " " " 06 45	" " " " " " " " " " " 147 00
21st	0015 0040 0325 0535 0700 0700 0700 0702 0702 0705 0705 0730 (1113) 2010 2015	2 2 3 1 3 3 2 3 2 4 3 1 3 1 4	Lumi Lumi Lumi Lumi Rabaul Warangoi Tol Karoola Ulamona Namatanai Kiep Rabaul Lae Lumi Lumi	03 30 " " " 04 10 04 30 05 00 05 10 05 00 03 40 05 10 04 10 06 45 03 30 "	142 05 " " " 152 10 152 20 152 05 154 35 151 15 152 25 152 00 152 10 147 00 142 05 "
22nd	0924 1925 1957 2220	2 1 - 2 3 2	Lumi Warangoi Lumi Kilenge	03 30 04 30 03 30 05 30	142 05 152 20 142 05 148 20
24th	0353 1910	2 3	Goroka Lumi	06 05 03 30	145 25 142 05
25th	1412	3	Lae	06 45	147 00
26th	0351 0351	2 2	Linga Linga Talasea	05 35 05 20	149 45 150 05

TERRITORY OF PAPUA AND NEW GUINEA

VULCANOLOGICAL OBSERVATORY RABAU

Seismological Bulletin, August 1957.

<u>August 1st.</u>	eP	Z	16	29	(23)	U.S.C.G.S. 52°N, 170°W. Fox Islands. H=16 18 48 Mag. 5 ¹ / ₂ -5 ³ / ₄ (Matsushiro)
	eiP	Z	17	59	41	J.M.A. 29°8N, 139°8E. Honshu. H= 17 53 14 h approx. = 400kms.
<u>2nd.</u>	eP	Z	02	20	16	U.S.C.G.S. 38°S, 178°E. New Zealand. H= 02 12 30 Mag. 5.2 (Wellington)
<u>3rd.</u>	No records					
<u>4th.</u>	eiP	Z	00	40	57 ¹ / ₂	U.S.C.G.S. 3 ¹ / ₂ °S, 145°E. Near the north coast of New Guinea. H= 00 39 12 Mag. 6 ¹ / ₂ - 6 ³ / ₄ (Matsushiro)
	i			41	01 ¹ / ₂	
	iPPP				13	
	i				16	
	i				24	
	i			42	14	Felt Manam Is. Int. 3-4 (M.M.)
	i(S)				22	4°05'S, 145°05'E
	i				26	Felt Bogia, Int. 3 (M.M.)
	eL			43.0	-	4°15'S, 144°55'E.
	i			44	11	Felt Angoram, Int. 2 (M.M.)
	i			45	48	4°05'S, 144°05'E.
						Felt Karkar Is. Int. 2 (M.M.)
						4°40'S, 146°00'E
	e(P)	Z	01	25	18	
	i				46	
	i				54	
	iP	Z	02	20	37 ¹ / ₂	B.C.I.S. near 4 ¹ / ₂ °S, 155 ¹ / ₂ °E
	Dilatation					New Britain region.
	i				40	H= 02 19.8m
	i!				41	Felt Rabaul, Int. 1 (M.M.)
	i			24	35	4°10'S, 152°10'E.
						Felt Warangi, Int. ?
						4°30'S, 152°20'E.
						Felt Karoola, Int. ?
						5°10'S, 154°35'E.
<u>5th.</u>	iP	Z	08	13	34	U.S.C.G.S. 5°S, 154°E.
	Dilatation (to north-west?)					New Britain region
	i			17	34	H= 08 12 46
	i			19	42	Felt Namatanai, Int. 4 (M.M.)
	iPcP			21	37	3°40'S, 152°25'E.
						Felt Aropa, Int. 1 (M.M.)
						6°25'S, 155°50'E)
	eP	Z	21	38	01 ¹ / ₂	Wellington. 32 ¹ / ₂ °S, 179 ¹ / ₂ °W.
						Kermadec Island region.
						H= 21 30 30
						Mag. 5 ¹ / ₂ - 5 ³ / ₄ (Matsushiro)
<u>6th.</u>	Nil					
<u>7th.</u>	eP	Z	19	46	41	U.S.C.G.S. 19 ¹ / ₂ °S, 178°W.
	eS			51	30	Fiji Islands. H= 19 40 46
						h approx. = 550kms.
<u>8th.</u>	iP	Z	09	51	52 ¹ / ₂	B.C.I.S. East coast of
	i			52	11	New Guinea. H= 09 50.5m
						Felt Bulolo, Int. 3 (M.M.)
						7°10'S, 146°40'E.
						Felt Awelkon, Int. 2 (M.M.)
						5°40'S, 147°50'E.

RABUL OBSERVATORY. Seismological Bulletin, August 1957 (cont)

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August
9th.

eP
Z
02
32
58

U.S.C.G.S. 2°S, 137°E.

i
33
05

New Guinea. H= 02 29 20

iPP
10

Mag. 7 (Matsushiro)

i
12

iPPP
17

i
25

i
36

i
43

i
34
00

i
25½

i(S)
35
04½

eL
(40)

eP
Z
10
21
58

i!
22
04

i
55½

eP
Z
13
02
51

Confused by microseisms

eP
Z
21
55
14

Confused by microseisms

10th.
eiP
Z
02
24
(25)

U.S.C.G.S. 21½°S, 179½°W.

Fiji Islands region.

h approx. = 600Kms.

H= 02 18 38

iP
Z
05
56
52½

Compression

i
57
02

i
41

i
58
50½

eP
Z
12
02
17

i
19

i(S)
50

i
03
31

i
46

iP
Z
19
18
26

Compression. Deep

i!
27

U.S.C.G.S. 3½°N, 124½°E.

Celebes Sea. H= 19 12 47

h= 300kms. Mag. 6-6½ (Matsushiro)

11th.
e
Z
05
06.7
-

Confused by microseisms

eP
Z
05
20
(25)

U.S.C.G.S. 38½°S, 177°E.

New Zealand. H= 05 12 40

Mag. 5-8 (Wellington)

iP
Z
19
11
16½

iP
Z
21
42
55

U.S.C.G.S. 17½°S, 169°E.

New Hebrides Islands.

H= 21 38 05

i
43
00½

i
07

i
16

i
23

i
35

i
44
18½

iP
Z
22
15
15

Dilatation

12th.
iP!
Z
00
00
22

Dilatation to east-south east.

Felt Rabaul. Int. 3 (M.M.)

4°10'S, 152°10'E.

August 12th. e(P) Z 00 22 09
cont. i(S) 48

eP Z 07 14 20 U.S.C.G.S. 6°N, 124½°E. Mindanao
i 46 H= 07 08 38
i 15 13

13th. iP! Z 06 48 38

Compression
i 50 52½
i 58½

eP Z 09 20 01.5
i 02
iS 27

iP Z 10 40 11
iS 41

eP Z 14 48 (40) U.S.C.G.S. 9½°N, 126°E. Mindanao.
H= 14 42 30

eP Z 15 58 40 U.S.C.G.S. 23½°N, 121½°E.
i 41 Formosa. H=15 50 58
i 59 41½

iP! Z 16 07 49½ Local
Compression from east-south-east

e Z 18 56 (39)

o Z 19 03 37

i Z 22 02 31 (J.M.A. 40°07'N, 142°09'E. Honshu
H= 21 57 11?)

eP Z 23 43 (34½)
i 35½
i 56½
i 44 47

14th. eP Z 13 25 (24)
i 42
i 26 13
i(S) 18
i 24

eP Z 14 30 09
i 10
i 24
i 29

iP Z 16 18 32
Compression
i 38
i! 41
i! 43
i 46
i 19 04
i 17
i 45

eP Z 18 33 22 U.S.C.G.S. 21°S, 176½°W.
i 32½ Tonga Islands. H= 18 26 52
i 34 h approx. = 200kms.
i 41
ei(PcP) 35 57½
e(ScP) 39 24

e Z 21 27 15

RABAUl OBSERVATORY. Seismological Bulletin, August 1957 (cont)

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August 15th. 1P! Z 20 46 31½ U.S.C.G.S. 4½°S, 155°E.
Dilatation to east- Solomon Islands region.
south-east H= 20 45 26
1 32 h approx. = 500kms

1P Z 22 15 20½ Felt Sohano, Int. ?
1 41 5°25'S, 154°40'E.
1S 48

16th. 1P Z 03 26 51½ U.S.C.G.S. 5°S, 154°E.
Dilatation New Britain region. H= 03 26 05
1 53 Felt Namatanai, Int. 5 (M.M.)
1! 54 3°40'S, 152°25'E.
Felt Karoola, Int. 3-4 (M.M.)
5°10'S, 154°34'E.
Felt Rabaul, Int. 3 (M.M.)
4°10'S, 152°10'E.
Felt Londolovit, Int. 2-3 (M.M.)
3°05'S, 152°40'E.
Felt Warangoi, Int. 2-3 (M.M.)
4°30'S, 152°20'E.
Felt Kokopo, Int. 2 (M.M.)
4°20'S, 152°15'E.
Felt Aropa, Int. 2 (M.M.)
6°25'S, 155°50'E.
Felt Sohano, Int. 2 (M.M.)
5°25'S, 154°40'E.
Felt Kiep, Int. 2 (M.M.)
5°10'S, 152°00'E.

1P Z 03 54 07
1(S) 36

eP Z 09 35 55½ Felt Sohano, Int. ?
1! 36 26½ 5°25'S, 154°40'E.

1P Z 11 58 01½ U.S.C.G.S. 5°S, 155°E.
Dilatation Solomon Islands. H= 11 57 16
1 02 Felt Namatanai, Int. 5 (M.M.)
1! 05 3°40'S, 152°25'E.
Felt Rabaul, Int. 4 (M.M.)
4°10'S, 152°10'E.
Felt Karoola, Int. 3 (M.M.)
5°10'S, 154°35'E.
Felt Kokopo, Int. 3 (M.M.)
4°20'S, 152°15'E.
Felt Aropa, Int. 3 (M.M.)
6°25'S, 155°50'E.
Felt Warangoi, Int. 2-3 (M.M.)
4°30'S, 152°20'E.
Felt Londolovit, Int. 2 (M.M.)
3°05'S, 152°40'E.
Felt Sohano, Int. 1-2 (M.M.)
5°25'S, 154°40'E.

1P Z 13 26 01 Felt Karoola, Int. 3 (M.M.)
Dilatation 5°10'S, 154°35'E.
1 04 Felt Rabaul, Int. 1 (M.M.)
1! 14 4°10'S, 152°10'E.
1! 17
1 24
1! 26
1(S) 31

RABAUl OBSERVATORY. Seismological Bulletin, August 1957 (cont)

August 16th. eIP Z 14 49 04 -5- U.S.C.G.S. New Britain region.
cont. Dilatation Aftershock. H= 14 48 19
i 04½ Felt Namatan ai, Int. 3(M.M.)
i 07½ 3°40'S, 152°25'E.
Felt Rabaul, Int. 2(M.M.)
4°10'S, 152°10'E.
Felt Warangoi, Int. 1-2(M.M.)
4°30'S, 152°20'E.
(Felt Sohano, Int. 2(M.M.)
5°25'S, 154°40'E.)

iP Z 15 44 38
Compression
i(S) 45 08

iP Z 15 48 01½
e(S) 35
i! 39½

iP Z 16 12 50 Felt Karoola, Int. 3(M.M.)
Dilatation 5°10'S, 154°35'E.
i 54
i(S) 13 20½
i! 24
i 26
i 32

17th. iP Z 02 22 13½ U.S.C.G.S. 4°S, 151°E.
Dilatation New Britain. H= 02 21 47
i 15 Felt Karoola, Int. 3(M.M.)
5°10'S, 154°35'E.
Felt Rabaul, Int. 2(M.M.)
4°10'S, 152°10'E.
Felt Kiep, Int. 2(M.M.)
5°10'S, 152°00'E.
Felt Warangoi, Int. 1-2(M.M.)
4°30'S, 152°20'E.
Felt Aropa, Int. 1(M.M.)
6°25'S, 155°50'E.
Felt Londolovit, Int. 1(M.M.)
3°05'S, 152°40'E.

iP Z 12 07 50 U.S.C.G.S. 5°S, 155°E.
Dilatation Solomon Islands. H= 12 07 04
i 50½ Felt Karoola, Int. 3(M.M.)
i 53 5°10'S, 154°35'E.
Felt Ulamona, Int. 2(M.M.)
5°00'S, 151°15'E.
Felt Rabaul, Int. 1(M.M.)
4°10'S, 152°10'E.
Felt Sohano, Int. 1(M.M.)
5°25'S, 154°40'E.

eP Z 12 46 06 U.S.C.G.S. and B.C.I.S.
29°N, 141°E. Bonin Island region
H= 12 39 23. Mag. 5½ (Matsushiro)

iP Z 13 32 32 Felt Rabaul, Int. 2(M.M.)
Dilatation 4°10'S, 152°10'E.
i 32½ Felt Londolovit, Int. 1-2(M.M.)
i 34½ 3°05'S, 152°40'E.

eP Z 19 04 (37) B.C.I.S. Samar Island region.
H= 18 59.7m. Depth greater
than normal

RABUL OBSERVATORY. Seismological Bulletin, August 1957 (cont)

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<u>August 18th.</u>	iP	Z	00	58	17	Felt Sohano, Int. 1(M.M.) 5°25'S, 154°40'E.
	Dilatation					
	iP	Z	06	39	27	Felt Karoola, Int. 4(M.M.) 5°10'S, 154°35'E.
	Dilatation					
	i				29	Felt Aropa, Int. 3(M.M.) 6°25'S, 155°50'E.
	i!				30	Felt Sohano, Int. 1(M.M.) 5°25'S, 154°40'E.
	eP	Z	08	43	29	U.S.C.G.S. 12°N, 124°E.
	i				41½	Philippine Islands. H= 08 36 57
	i(PPP)				44	Mag. 6½(Strasbourg)
	i				45	
	i				48	
	eS				45	
	eL				49.0-	
	i				49	
	i(ScP)				50	
	eP	Z	16	01	08	B.C.I.S. New Britain, H= 16 00.9m
	i				08½	Felt Rabaul, Int. 3 (M.M.)
	i!				11½	4°10'S, 152°10'E.
	i!				13½	
	eP	Z	21	51	56½	U.S.C.G.S. 50°N, 157°E. North of
	i				52	Kurile Islands. H= 21 42 30
	i				10	Mag. 6½(Pas.)
	i				32	
	i				53	14½
<u>19th.</u>	iP!	Z	00	11	30½	U.S.C.G.S. 4½°S, 153°E.
	Compression					New Britain region. Aftershock. H= 00 11 13
						Felt Kiep, Int. 4 (M.M.) 5°10'S, 152°00'E.
						Felt Rabaul, Int. 4(M.M.) 4°10'S, 152°10'E.
						Felt Warangoi, Int. 3-4(M.M.) 4°30'S, 152°20'E.
						Felt Tol, Int. 3(M.M.) 5°00'S, 152°05'E.
						Felt Pomio, Int. 3(M.M.) 5°30'S, 151°30'E.
						Felt Kokopo, Int. 3(M.M.) 4°20'S, 152°15'E.
						Felt Ulamona, Int. 2(M.M.) 5°00'S, 151°15'E.
	iP!	Z	02	42	05	U.S.C.G.S. New Britain region. Aftershock. H= 02 41 14
						Felt Karoola, Int. 3(M.M.) 5°10'S, 154°35'E.
						Felt Kokopo, Int. 2(M.M.) 4°20'S, 152°15'E.
						Felt Rabaul, Int. 1-2(M.M.) 4°10'S, 152°10'E.
						Felt Warangoi, Int. 1-2(M.M.) 4°30'S, 152°20'E.
	iP!	Z	04	04	50½	Felt Warangoi, Int. 1-2(M.M.) 4°30'S, 152°20'E.
	iP	Z	11	37	25	U.S.C.G.S. 10°S, 161°E.
	i				37½	Solomon Islands. Foreshock.
	e				40	H= 11 34 36. Mag. 6½(Pas.)
	e				43	
	eIP	Z	22	23	12	

RABAUl OBSERVATORY. Seismological Bulletin, August 1957 (cont)

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<u>August 20th.</u>	1P	Z	06	30	02 $\frac{1}{2}$	U.S.C.G.S. 10°S, 161°E.
	e			32	35	Solomon Islands. Foreshock,
	e				44	H= 06 27 07. Mag. 6-6 $\frac{1}{4}$ (Pas.)
	e			35	13	
	e			37	18	
	Confused by microseisms					
	1P	Z	12	04	40	U.S.C.G.S. 10°S, 161°E.
	1(PP)				57	Solomon Islands. H= 12 01 54
	1			06	40	Mag. 6 $\frac{1}{2}$ (Pas.)
	1				50	
	e			07	50	
	e			12	59	
	e			13	55	
<u>21st.</u>	eP	Z	10	23	18	
	1!				19 $\frac{1}{2}$	
	eP	Z	17	25	23	Felt Buin, Int. 4(M.M.)
	1				29 $\frac{1}{2}$	6°50'S, 155°45'E.
	1			26	24	Felt Aropa, Int. 3(M.M.)
						6°25'S, 155°50'E.
<u>22nd.</u>	eP	Z	08	00	47	U.S.C.G.S. 1°N, 126°E.
	1				49	Molucca Strait. H= 07 55 06
	1			01	04	
	1			02	03	
	eP	Z	15	32	47	U.S.C.G.S. 3°N, 126 $\frac{1}{2}$ °E.
	1				48 $\frac{1}{2}$	Molucca Strait. H= 15 27 10
	eP	Z	16	48	05	U.S.C.G.S. 15°S, 168°E.
	1				09	New Hebrides Islands.
	1				59	H= 16 43 35
	eS			51	38	
	i(PcP)			52	26	
	e	Z	16	59	42	
	eP	Z	18	40	50	B.C.I.S. near 38°N, 87°E.
	1				52	Sinkiang Province, China.
						H= 18 27.3m.
	eP	Z	18	58	37	
	e			59	09	
<u>23rd.</u>	e1P	Z	02	00	57	U.S.C.G.S. 6°S, 154 $\frac{1}{2}$ °E.
						Solomon Islands. H= 02 00 09
						h approx. = 60kms. Mag. 6 $\frac{1}{2}$ (Pas.)
						Felt Namatanai, Int. 5 (M.M.)
						3°40'S, 152°25'E.
						Felt Kokopo, Int. 5 (M.M.)
						4°20'S, 152°15'E.
						Felt Rabaul, Int. 5 (M.M.)
						4°10'S, 152°10'E.
						Felt Karoola, Int. 4-5(M.M.)
						5°10'S, 154°35'E.
						Felt Sohano, Int. 4-5(M.M.)
						5°25'S, 154°40'E.
						Felt Warangi, Int. 4-5(M.M.)
						4°30'S, 152°20'E.
						Felt Londolovit, Int. 4(M.M.)
						3°05'S, 152°40'E.
						Felt Aropa, Int. 4(M.M.)
						6°25'S, 155°50'E.
						Felt Kiep, Int. 3(M.M.)
						5°10'S, 152°00'E.
						Felt Fead Islands, Int. 3(M.M.)
						3°25'S, 154°45'E.

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August 23rd. eIP
cont.

Z 02 00 57 Continued.

Felt Ulamona, Int. 2 (M.M.)
5°00'S, 151°15'E.
Felt Kieta, Int. 2 (M.M.)
6°15'S, 155°40'E.

eP 1! Z 02 33 07½ Felt Warangoi, Int. 1-2 (M.M.)
08 4°30'S, 152°20'E.
Felt Aropa, Int. 1 (M.M.)
6°25'S, 155°50'E.
Felt Sohano, Int. 1 (M.M.)
5°25'S, 154°40'E.

eP 1 Z .11 50 16 U.S.C.G.S. 24°N, 122°E.
21 Formosa. H= 11 42 34
Mag. 5¼ (Moscow)

eP 1 Z 13 34 35 Felt Rabaul, Int. 2 (M.M.)
35½ 4°10'S, 152°10'E.
Felt Warangoi, Int. 1-2 (M.M.)
4°30'S, 152°20'E.

eP 1 Z 16 20 11 B.C.I.S. 0°, 126½°E.
13½ Molucca Strait. H= 16 14 30.

24th. + eIP Z 01 28 09 Felt Rabaul, Int. 2 (M.M.)
4°10'S, 152°10'E.

+ eP Z 01 08 43 B.C.I.S.
eIP 1 Z 01 46 07 19½°S, 175°W. Tonga Islands
27 H= 01 01 58

iP! Z 12 14 06
Compression. Deep?

iP! Z 16 58 16
Dilatation. Deep?

iP! Z 17 33 38
i 52½
Compression. Deep?

eP Z 23 05 38
i! 42
i 06 44
Deep?

25th. iP! Z 14 43 16½ Felt Warangoi, Int. 1-2 (M.M.)
Compression i 22½
4°30'S, 152°20'E.

e 1 Z 16 20 20
27

iP! Z 18 13 59½
1 14 16
1 18

eP Z 21 18 (36) U.S.C.G.S. 10°S, 111°E. Java.
H= 21 11 45

26th. ePKP Z 11 48 09 U.S.C.G.S. 18°S, 63°W. Bolivia
1 50 13 H= 11 28 50 Mag. 6. -6 (Pas.)
ePP 51 05
ePKS 52 03

ePKP Z 14 17 53 U.S.C.G.S. 2°S, 81°W. Ecuador.
H= 13 58 48. Mag. 6 (Pas.)

RABAU OBSERVATORY. Seismological Bulletin, August 1957 (cont)

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<u>August 26th.</u>	iP	Z	19	54	17	U.S.C.G.S. 5 $\frac{1}{2}$ ⁰ S, 154 ⁰ E.
<u>cont.</u>	Dilatation					Solomon Islands region.
	1				22	H= 19 53 33. h approx. = 100kms.
						Felt Londolovit, Int. 3 (M.M.)
						3 ⁰ 05'S, 152 ⁰ 40'E.
						Felt Rabaul, Int. 2 (M.M.)
						4 ⁰ 10'S, 152 ⁰ 10'E.
						Felt Warangoi, Int. 1-2 (M.M.)
						4 ⁰ 30'S, 152 ⁰ 20'E.
						Felt Ulamona, Int. 1 (M.M.)
						5 ⁰ 00'S, 151 ⁰ 15'E.
<u>27th.</u>	eP	Z	21	02	15	U.S.C.G.S. 25 $\frac{1}{2}$ ⁰ S, 178 ⁰ E. Fiji Is.
	1				16 $\frac{1}{2}$	H= 20 56 29. h approx. = 650kms.
	1				20	
	1				22 $\frac{1}{2}$	
	e(PcP)			04	38	
	e(ScS)			11	37	
	1	Z	21	07	31	
	e	Z	22	04	56	
<u>28th.</u>	eP	Z	23	22	30	B.C.I.S. Mariana Islands.
						Foreshock. H= 23 17.2m.
	eP	Z	23	27	56 $\frac{1}{2}$	U.S.C.G.S. 21 ⁰ N, 145 ⁰ E.
	iPPP			28	50	Mariana Is. Foreshock.
						H= 23 22 21. Mag. 5-7(Kiruna)
	eP	Z	23	55	45 $\frac{1}{2}$	U.S.C.G.S. 21 ⁰ N, 145 ⁰ E.
						Mariana Is. H= 23 50 15.
<u>29th.</u>	eP	Z	01	03	19 $\frac{1}{2}$	U.S.C.G.S. 21 ⁰ N, 145 ⁰ E. Aftershock.
						Mariana Is. H= 00 57 45.
	eP	Z	02	20	50	B.C.I.S. near 21 ⁰ N, 145 ⁰ E.
	i			21	01	Mariana Is. H= 02 15.3m
	eP	Z	16	45	56 $\frac{1}{2}$	U.S.C.G.S. Mariana Is. Aftershock.
						H= 16 40 22
<u>30th.</u>	eP	Z	16	30	31 $\frac{1}{2}$	U.S.C.G.S. 39 ⁰ N, 73 ⁰ E.
						Tadjikistan. H= 16 17 56
						Mag. 5 $\frac{1}{2}$ (Moscow)
	iP	Z	20	11	27 $\frac{1}{2}$	U.S.C.G.S. 20 $\frac{1}{2}$ ⁰ N, 121 $\frac{1}{2}$ ⁰ E.
						Batan Island region. H=20 04 01
						Mag. 5-6 (Uppsala)
	eP	Z	20	50	(48)	U.S.C.G.S. Mariana Is. Aftershock.
						H= 20 45 18
<u>31st.</u>	No records.					

The following shocks were reported felt from the Territory:

Date 1957	Reported Time (G.M.T)	Intensity (Mod. Mercalli)	Locality	Lat. South °	Long. East °
Aug. 3rd.	0650	3	Lumi	03 30	142 05
	0655	2	Lumi	" "	" "
	0720	1	Lumi	" "	" "
4th.	0037	2	Karkar Is.	04 40	146 00
	0040	2	Angoram	04 05	144 05
	0042	3-4	Manam Is.	04 05	145 05
	0046	3	Bogia	04 15	144 55
	0220	1	Rabaul	04 10	152 10
	0221	3	Karoola	05 10	154 35
	0224	?	Warangoi	04 30	152 20
5th.	0815	4	Namatani	03 40	152 25
	0815	1	Aropa	06 25	155 50
8th.	0750	3	Bulolo	07 10	146 40
	0950	3	Bulolo	" "	" "
	0952	2	Awelkon	05 40	147 50
12th.	0000	3	Rabaul	04 10	152 10
13th.	0346	1	Kokoda	08 50	147 45
15th.	c.2200	?	Sohano	05 25	154 40
16th.	0325	5	Namatani	03 40	152 25
	0325	2	Aropa	06 25	155 50
	0326	3-4	Karoola	05 10	154 35
	0327	2	Kiep	05 10	152 00
	0328	2-3	Londolovit	03 05	152 40
	0327	3	Rabaul	04 10	152 10
	0330	2	Kokopo	04 20	152 15
	0330	2-3	Warangoi	04 30	152 20
	0330	2	Sohano	05 25	154 40
	c. (1400)	3	Karoola	05 10	154 35
	1326	1	Rabaul	04 10	152 10
	1450	3	Namatani	03 40	152 25
	1449	2	Rabaul	04 10	152 10
	1450	1-2	Warangoi	04 30	152 20
	1610	3	Karoola	05 10	154 35
17th.	0220	1	Aropa	06 25	155 50
	0222	3	Karoola	05 10	154 35
	0222	2	Rabaul	04 10	152 10
	0225	1-2	Warangoi	04 30	152 20
	0225	1	Londolovit	03 05	152 40
	0226	2	Kiep	05 10	152 00
	1207	3	Karoola	05 10	154 35
	1207	1	Rabaul	04 10	152 10
	1200	1	Sohano	05 25	154 40
	1205	2	Ulamona	05 00	151 15
	1332	2	Rabaul	04 10	152 10
	1334	1-2	Londolovit	03 05	152 40



RABOUL OBSERVATORY. Felt shocks for August 1957 (cont) 2.

Date Aug.	Reported Time G.M.T.	Intensity (Mod. Mercalli)	Locality	Lat. south		Long. East	
				°	'	°	'
18th.	0105	1	Sohano	05	25	154	40
	0155	1	Sohano	"	"	"	"
	0225	2	Ulamona	05	00	151	15
	0640	4	Karoola	05	10	154	35
	0640	3	Aropa	06	25	155	50
	0650	1	Sohano	05	25	154	40
	1601	3	Rabaul	04	10	152	10
19th.	0010	3	Pomio	05	30	151	30
	0011	4	Rabaul	04	10	152	10
	0012	3-4	Warangoi	04	30	152	20
	0012	2	Ulamona	05	00	151	15
	0014	4	Kiep	05	10	152	00
	0014	3	Tol	05	00	152	05
	0015	3	Kokopo	04	20	152	15
	0243	3	Karoola	05	10	154	35
	0242	1-2	Rabaul	04	10	152	10
	0245	1-2	Warangoi	04	30	152	20
	(c. 0300)	2	Kokopo	04	20	152	15
	0315	1	Sohano	05	25	154	40
	0406	1-2	Warangoi	04	30	152	20
21st.	(1625)	4	Buin	06	50	155	45
	1725	3	Aropa	06	25	155	50
22nd.	0152	3	Fead Is.	03	25	154	45
	0158	5	Namatanai	03	40	152	25
	0159	4-5	Karoola	05	10	154	35
	0200	3	Kiep	05	10	152	00
	0200	4-5	Warangoi	04	30	152	20
	0200	4	Aropa	06	25	155	50
	0201	5	Rabaul	04	10	152	10
	0202	4	Londolovit	03	05	152	40
	0203	2	Ulamona	05	00	151	15
	0203	4-5	Sohano	05	25	154	40
	0203	2	Kieta	06	15	155	40
	0207	5	Kokopo	04	20	152	15
	0227	1	Sohano	05	25	154	40
	0233	1	Aropa	06	25	155	50
	0235	1-2	Warangoi	04	30	152	20
	1334	2	Rabaul	04	10	152	10
	1340	1-2	Warangoi	04	30	152	20
24th.	0128	2	Rabaul	04	10	152	10
25th.	1445	1-2	Warangoi	04	30	152	20
26th.	1954	2	Rabaul	04	10	152	10
	1955	1	Ulamona	05	00	151	15
	1956	3	Londolovit	03	05	152	40
	(20)55	1-2	Warangoi	04	30	152	20

HARRIS OBSERVATORY, 2017 station for August 1962									
Date Reported Time		Station		Latitude		Longitude		Time	
1962		1962		1962		1962		1962	
0100		1962		1962		1962		1962	
0110		1962		1962		1962		1962	
0120		1962		1962		1962		1962	
0130		1962		1962		1962		1962	
0140		1962		1962		1962		1962	
0150		1962		1962		1962		1962	
0200		1962		1962		1962		1962	
0210		1962		1962		1962		1962	
0220		1962		1962		1962		1962	
0230		1962		1962		1962		1962	
0240		1962		1962		1962		1962	
0250		1962		1962		1962		1962	
0300		1962		1962		1962		1962	
0310		1962		1962		1962		1962	
0320		1962		1962		1962		1962	
0330		1962		1962		1962		1962	
0340		1962		1962		1962		1962	
0350		1962		1962		1962		1962	
0400		1962		1962		1962		1962	
0410		1962		1962		1962		1962	
0420		1962		1962		1962		1962	
0430		1962		1962		1962		1962	
0440		1962		1962		1962		1962	
0450		1962		1962		1962		1962	
0500		1962		1962		1962		1962	
0510		1962		1962		1962		1962	
0520		1962		1962		1962		1962	
0530		1962		1962		1962		1962	
0540		1962		1962		1962		1962	
0550		1962		1962		1962		1962	
0600		1962		1962		1962		1962	
0610		1962		1962		1962		1962	
0620		1962		1962		1962		1962	
0630		1962		1962		1962		1962	
0640		1962		1962		1962		1962	
0650		1962		1962		1962		1962	
0700		1962		1962		1962		1962	
0710		1962		1962		1962		1962	
0720		1962		1962		1962		1962	
0730		1962		1962		1962		1962	
0740		1962		1962		1962		1962	
0750		1962		1962		1962		1962	
0800		1962		1962		1962		1962	
0810		1962		1962		1962		1962	
0820		1962		1962		1962		1962	
0830		1962		1962		1962		1962	
0840		1962		1962		1962		1962	
0850		1962		1962		1962		1962	
0900		1962		1962		1962		1962	
0910		1962		1962		1962		1962	
0920		1962		1962		1962		1962	
0930		1962		1962		1962		1962	
0940		1962		1962		1962		1962	
0950		1962		1962		1962		1962	
1000		1962		1962		1962		1962	
1010		1962		1962		1962		1962	
1020		1962		1962		1962		1962	
1030		1962		1962		1962		1962	
1040		1962		1962		1962		1962	
1050		1962		1962		1962		1962	
1100		1962		1962		1962		1962	
1110		1962		1962		1962		1962	
1120		1962		1962		1962		1962	
1130		1962		1962		1962		1962	
1140		1962		1962		1962		1962	
1150		1962		1962		1962		1962	
1200		1962		1962		1962		1962	
1210		1962		1962		1962		1962	
1220		1962		1962		1962		1962	
1230		1962		1962		1962		1962	
1240		1962		1962		1962		1962	
1250		1962		1962		1962		1962	
1300		1962		1962		1962		1962	
1310		1962		1962		1962		1962	
1320		1962		1962		1962		1962	
1330		1962		1962		1962		1962	
1340		1962		1962		1962		1962	
1350		1962		1962		1962		1962	
1400		1962		1962		1962		1962	
1410		1962		1962		1962		1962	
1420		1962		1962		1962		1962	
1430		1962		1962		1962		1962	
1440		1962		1962		1962		1962	
1450		1962		1962		1962		1962	
1500		1962		1962		1962		1962	
1510		1962		1962		1962		1962	
1520		1962		1962		1962		1962	
1530		1962		1962		1962		1962	
1540		1962		1962		1962		1962	
1550		1962		1962		1962		1962	
1600		1962		1962		1962		1962	
1610		1962		1962		1962		1962	
1620		1962		1962		1962		1962	
1630		1962		1962		1962		1962	
1640		1962		1962		1962		1962	
1650		1962		1962		1962		1962	
1700		1962		1962		1962		1962	
1710		1962		1962		1962		1962	
1720		1962		1962		1962		1962	
1730		1962		1962		1962		1962	
1740		1962		1962		1962		1962	
1750		1962		1962		1962		1962	
1800		1962		1962		1962		1962	
1810		1962		1962		1962		1962	
1820		1962		1962		1962		1962	
1830		1962		1962		1962		1962	
1840		1962		1962		1962		1962	
1850		1962		1962		1962		1962	
1900		1962		1962		1962		1962	
1910		1962		1962		1962		1962	
1920		1962		1962		1962		1962	
1930		1962		1962		1962		1962	
1940		1962		1962		1962		1962	
1950		1962		1962		1962		1962	
2000		1962		1962		1962		1962	
2010		1962		1962		1962		1962	
2020		1962		1962		1962		1962	
2030		1962		1962		1962		1962	
2040		1962		1962		1962		1962	
2050		1962		1962		1962		1962	
2100		1962		1962		1962		1962	
2110		1962		1962		1962		1962	
2120		1962		1962		1962		1962	
2130		1962		1962		1962		1962	
2140		1962		1962		1962		1962	
2150		1962		1962		1962		1962	
2200		1962		1962		1962		1962	
2210		1962		1962		1962		1962	
2220		1962		1962		1962		1962	
2230		1962		1962		1962		1962	
2240		1962		1962		1962		1962	
2250		1962		1962		1962		1962	
2300		1962		1962		1962		1962	
2310		1962		1962		1962		1962	
2320		1962		1962		1962		1962	
2330		1962		1962		1962		1962	
2340		1962		1962		1962		1962	
2350		1962		1962		1962		1962	
2400		1962		1962		1962		1962	
2410		1962		1962		1962		1962	
2420		1962		1962		1962		1962	
2430		1962		1962		1962		1962	
2440		1962		1962		1962		1962	
2450		1962		1962		1962		1962	
2500		1962		1962		1962		1962	
2510		1962		1962		1962		1962	
2520		1962		1962		1962		1962	
2530		1962		1962		1962		1962	
2540		1962		1962		1962		1962	
2550		1962		1962		1962		1962	
2600		1962		1962		1962		1962	
2610		1962		1962		1962		1962	
2620		1962		1962		1962		1962	
2630		1962		1962		1962		1962	
2640		1962		1962		1962		1962	
2650		1962		1962		1962		1962	
2700		1962		1962		1962		1962	
2710		1962		1962		1962		1962	
2720		1962		1962		1962		1962	
2730		1962		1962		1962		1962	
2740		1962		1962		1962		1962	
2750		1962		1962		1962		1962	
2800		1962		1962		1962		1962	
2810		1962		1962		1962		1962	
2820		1962		1962		1962		1962	
2830		1962		1962		1962		1962	
2840		1962		1962		1962		1962	
2850		1962		1962		1962		1962	
2900		1962		1962		1962		1962	
2910		1962		1962		1962		1962	
2920		1962		1962		1962		1962	
2930		1962		1962		1962		1962	
2940		1962		1962		1962		1962	
2950		1962		1962		1962		1962	
3000		1962		1962		1962		1962	
3010		1962		1962		1962		1962	
3020		1962		1962		1962		1962	
3030		1962		1962		1962		1962	
3040		1962		1962		1962		1962	
3050		1962		1962		1962		1962	
3100		1962		1962		1962		1962	
3110		1962		1962		1962		1962	
3120		1962		1962		1962		1962	
3130		1962		1962		1962		1962	
3140		1962		1962		1962		1962	
3150		1962		1962		1962		1962	
3200		1962		1962		1962		1962	
3210		1962		1962		1962		1962	
3220		1962		1962		1962		1962	
3230		1962		1962		1962		1962	
3240		1962		1962		1962		1962	
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TERRITORY OF PAPUA AND NEW GUINEA

VULCANOLOGICAL OBSERVATORY RABAU

Seismological Bulletin.

September 1957

September 1st. Nil

2nd. iP Z 00 04 59 U.S.C.G.S. 18°N 147½°E
Compression Mariana Is. H=23 59 54
i 05 21 Mag. 5.9 (Uppsala)

eP Z 20 21 19½ B.C.I.S. Solomon Is. region.
H=20 18.7m

Record confused by microseisms.

3rd. eP Z 06 10 42½ U.S.C.G.S. 12°S 167°E
Santa Cruz Is. H=06 06 42.

4th. eP Z 01 35 23½ U.S.C.G.S. 12°S 167°E
Santa Cruz Is. H=01 31 23

iP! Z 11 24 37 B.C.I.S. New Britain region
Compression Felt Rabaul, Int. 2(M.M.)
4°10'S, 152°10'E

iP! Z 12 26 50½ B.C.I.S. Near 4°S, 156½°E
Compression New Britain. H=12 26.6m
Felt Rabaul, Int. 3(M.M.)
4°10'S, 152°10'E

iP! Z 22 14 31 Felt Rabaul, Int. 1-2(M.M.)
Compression 4°10'S, 152°10'E

iP Z 22 37 24½
i(S) 53

5th. eP Z 09 29 56.8
i! 57.1
i 30 24½
Deep?

6th. iP Z 01 19 04 B.C.I.S. near 18°N, 146°E
Confused by microseisms Mariana Is. H=01 14.9m

iP Z 05 45 50
i 46 09
i(S) 18½
i 38

7th. iP Z 06 58 02 U.S.C.G.S. 50°N, 156°E
Compression Kurile Is. H=06 48 36

eP Z 10 16 (45) U.S.C.G.S. 51½°N, 178½°W
confused by microseisms Andreanov Is. H=10 06 47
Mag. 6-8 (Tacubaya)

iP 19 31 43
Compression
i 46
i 50
i 57

8th. eP Z 08 44 21 U.S.C.G.S. 2°S, 141°E.
iPP 30 N. coast of New Guinea
iPPP 37 H=08 41 26

iP Z 09 33 14 Felt Lae, Int. 3(M.M.)
i 21 6045'S, 147°00'E
i 34½ Felt Awelkon, Int. 1(M.M.)
i(S) 34 21 5040'S, 147°50'E.

<u>September 8th.</u>	iP!	Z	13	19	13	U.S.C.G.S. 5°S, 152°E New Britain. H=13 18 55 h approx = 60kms. Felt Kokopo, Int. 5 (M.M.) 4°20'S, 152°15'E Felt Warangoi, Int. 3-4 (M.M.) 4°30'S, 152°20'E Felt Rabaul, Int. 3 (M.M.) 4°10'S, 152°10'E Felt Kiep, Int. 3 (M.M.) 5°10'S, 152°00'E Felt Pomio, Int. 2 (M.M.) 5°30'S, 151°30'E.
<u>9th.</u>	eP	Z	00	23	56	U.S.C.G.S. 48°S, 100°E Indian Ocean H= 00 13 30
	i				58	
	i(PcP)			24	26	
	e			25	04	
	e(PPP)			27	30	
	e(ScS)			33	29	
	i(SSS)			39	26½	
	eP	Z	04	55	(45)	B.C.I.S. 9½°S, 161¾°E Solomon Islands
	e			57	31	
	i(S)			58	04	
	Confused by microseisms					
	e	Z	11	31	12½	
	iP	Z	16	02	49	
	Dilatation					
	i!				51	
	iS!			03	14	
<u>10th.</u>	Nil					
<u>11th.</u>	iP	Z	05	03	42	Felt Pomio, Int. 2 (M.M.) 5°30'S, 151°30'E
	Compression					
	iS				54½	
	iP	Z	14	27	33½	U.S.C.G.S. New Ireland region H= 14 26 45
	i				52½	
	i			28	06½	
	eL				47	
	e			30	41	
	iP	Z	15	09	19½	
	Compression					
	i			10	04½	
	eL				12	
	e			12	18	
<u>12th.</u>	Nil					
<u>13th.</u>	iP	Z	20	17	32½	Deep?
	Dilatation to south-east					
	i				39½	
	iS				55	
	i			18	11	
	i				31	
<u>14th.</u>	eP	Z	06	18	24	U.S.C.G.S. 4°S, 130°E Ceram. H=06 13 20
	Confused by microseisms					
	iP	Z	13	57	48½	U.S.C.G.S. 5½°S, 147°E. Near the north coast of New Guinea H= 13 56 25 Felt Lae, Int. 4 (M.M.) 6°45'S, 147°00'E.
	i				56	
	i			58	04	
	i				08	
	i				27	

<u>September 15th.</u>	eP i!	Z	18	42	59 $\frac{1}{2}$ 43 00.3	U.S.C.G.S. 6°S, 153 $\frac{1}{2}$ °E. Solomon Islands, H= 18 42 20 h approx. =150kms. Felt Karoola, Int. 5(M.M.) 5°10'S, 154°35'E. Felt Londolovit, Int. 5(M.M.) 3°05'S, 152°40'E. Felt Rabaul, Int. 4(M.M.) 4°10'E, 152°10'E Felt Warangoi, Int. 3-4(M.M.) 4°30'S, 152°20'E. Felt Ulamona, Int. 1-2(M.M.) 5°00'S, 151°15'E. (?Felt Kokopo, Int. 5(M.M.) 4°20'S, 152°15'E. ?Felt Kiep, Int. 3(M.M.) 5°10'S, 152°00'E.)
	iP i iS	Z	22	05	32 $\frac{1}{2}$ 39 (06.0)-	Felt Rabaul, Int. 1(M.M.) 4°10'S, 152°10'E.
<u>16th.</u>	iP	Z	04	19	57	Felt Kiep, Int. 3(M.M.) 5°10'S, 152°00'E.
	eP iS	Z	12	59	49 (13) 00 26	
<u>17th.</u>	iP i i(S)	Z	21	32	00 $\frac{1}{2}$ 11 $\frac{1}{2}$ (28)	
<u>18th.</u>	e	Z	06	36	06 $\frac{1}{2}$	
	e	Z	07	02	(56)	
<u>19th.</u>	eP	Z	17	08	36 $\frac{1}{2}$	U.S.C.G.S. 19°S, 176°W. Tonga Is. H=17 02 02; h approx. = 200kms.
	iP Compression i i i i	Z	19	15	55 $\frac{1}{2}$ 16 01 $\frac{1}{2}$ 19 $\frac{1}{2}$ 19 52 $\frac{1}{2}$ 53 $\frac{1}{2}$	
<u>20th.</u>	e	Z	08	00	51	
	iP	Z	08	34	29 $\frac{1}{2}$	U.S.C.G.S. 46°N, 151 $\frac{1}{2}$ °E. Kurile Is. H=08 25 19
	e	Z	17	54	02 $\frac{1}{2}$	
	i	Z	23	17	38.3	
	e(P)	Z	23	18	00	U.S.C.G.S. 52°N, 170 $\frac{1}{2}$ °W. Fox Is. H= 23 07 22
<u>21st.</u>	eP iS	Z	00	19	24 $\frac{1}{2}$ 49	
	eP	Z	15	56	09.5	B.C.I.S. New Zealand H=15 48.7m
	e(PKP) (PP)	Z	20	36	23	U.S.C.G.S. 40 $\frac{1}{2}$ °N, 34 $\frac{1}{2}$ °E. North Turkey. H=20 16 53 Mag. 5-7 (Uppsala)
<u>22nd.</u>	Nil					

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September 23rd. iP Z 09 27 39 U.S.C.G.S. 6°S, 131°E. Banda Sea
 i 28 05 H= 09 22 36
 i 37½
 i 29 29

iP Z 11 38 31½ Felt Karoola, Int.2(M.M.)
 i 34½ 5°10'S, 154°35'E.
 i 38½
 iS 52½

24th. eP Z 08 26 52½ U.S.C.G.S. 5½°N, 127½°E.
 i 27 16½ Mindanao, H= 08 21 05
 iPPP 42 Mag. 7¼ (Pas.)
 e 28 43
 i 30 01
 i 52
 i 31 56
 iSS 32 43½
 i(SSS) 56½
 eScP 33 50
 e 37 35
 eScS 45
 e 59 34

eP Z 09 16 13 U.S.C.G.S. 6°N, 127°E. Mindanao
 Aftershock. H= 09 10 30.

e Z 09 27 09

eP Z 13 00 23
 i 23½
 i! 28½
 e(S) W 49½

e(P) Z 17 18 (15)

eP Z 17 44 28
 i 28½
 i 29½
 i 43½
 eS 50½

25th. e Z 02 19 29½
 Confused by microseisms
 eL 20.4 -

eP Z 04 04 38½ Felt Warangoi, Int.?
 i 39½ 4°30'S, 152°20'E.
 eS W 05 02 Felt Londolovit, Int.?
 3°05'S, 152°40'E.

eP Z 05 31 38½
 i 38.7
 i(S) 50½

e Z 06 15 35½

e Z 06 59 (00) B.C.I.S. discordant data
 i 13½
 eL 59.5 -

eP Z 07 00 08½ B.C.I.S. discordant data
 eL 00.9 -
 e 11.1 -
 Confused by microseisms

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<u>September 25th.</u> cont.	eP	Z	09	39	(47)	B.C.I.S. New Hanover region.
	i				50 $\frac{1}{2}$	H= 09 38.9m
	iPP				55 $\frac{4}{4}$	
	iPPP				59.0	
	e			40	(47)	
	eL			41	04	
	eP	Z	09	59	15 $\frac{1}{2}$	
	i				21 $\frac{3}{4}$	
	i		(10)	00	06 $\frac{3}{4}$	
	eP	Z	10	18	43 $\frac{1}{2}$	Felt Rabaul, Int. 1(M.M.)
	i				44.0	40°10'S, 152°10'E.
	i				51 $\frac{1}{2}$	
	iS	W			58	
	iP	Z	13	35	41 $\frac{1}{2}$	
	Compression					
	iS			36	00	
	e	Z	13	58	(28 $\frac{1}{2}$)	
	eP	Z	14	11	15	B.C.I.S. 2°S, 140°E. Near the
	i				23	north coast of New Guinea.
						H= 14 08.0m
	e	Z	15	33	10	B.C.I.S. Mindanao aftershock
						H= 15 27 18
	eP	Z	16	35	38	B.C.I.S. Mindanao aftershock
	e			42	07	H= 16 29 4+
	e			49	27	
	eP	Z	16	42	17	Moscow, 6°N, 127 $\frac{1}{2}$ °E. Mindanao
	i				29.4	H= 16 36 38. Mag. 6(Uppsala)
	eP	Z	18	05	07	B.C.I.S. Near 15°S, 167°E.
						New Hebrides Islands. H= 18 00.4m
	e(P)	Z	23	40.0	-	U.S.C.G.S. 5 $\frac{1}{2}$ °N, 127 $\frac{1}{2}$ °E.
						Mindanao. H= 23 33 30.
<u>26th.</u>	e	Z	02	38	05	U.S.C.G.S. 5°N, 127°E. Mindanao.
						H= 02 32 01
	eP	Z	10	13	27 $\frac{1}{2}$	U.S.C.G.S. 300kms south of
	i				40	Mindanao. H= 10 07 42.
	eP	Z	10	27	20	B.C.I.S. Mindanao. H= 10 22 33
	iP	Z	12	10	35	U.S.C.G.S. 39 $\frac{1}{2}$ °S, 174 $\frac{1}{2}$ °E.
	i			11	02 $\frac{1}{2}$	New Zealand. H= 12 03 01
	i				08	h= 150kms. Mag. 6.0 (Wellington)
	i				41	
	iPP			12	33	
	iPPP			13	08	
	iP	Z	12	16	17 $\frac{1}{2}$	Deep?
	i!				18	
	i				25 $\frac{1}{2}$	
	i			17	21	
	eP	Z	14	26	35	B.C.I.S. Mindanao. H= 14 20 50
	iP	Z	18	24	25	
	Compression					
	eP	Z	18	52	29	U.S.C.G.S. 3°N, 126 $\frac{1}{2}$ °E. Mindanao.
	i				40	H= 18 46 47. Mag. 6.0(Uppsala)
	i				45	
	i			54	47 $\frac{1}{2}$	

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September 26th. e(P) Z 19 06 22
cont.

iP Z 20 31 45
Dilatation
i 49 $\frac{1}{2}$
i 54
i 32 15
eS 23

27th. iP Z 04 13 54 U.S.C.G.S. 1°S, 127°E. Molucca
i 16 30 Sea. H= 04 08 23. Mag. 6.2 (Uppsala)
e(S) 18 27
eScP 21 09
Confused by blasting

iP Z 04 24 14 $\frac{1}{2}$ U.S.C.G.S. 1°S, 127 $\frac{1}{2}$ °E.
i 41 Molucca Sea. Aftershock.
iPP 50 H= 04 18 49

iP Z 05 10 09 U.S.C.G.S. 6 $\frac{1}{2}$ °N, 178°E.
North Siberia. H= 04 58 52.

e(P) Z 05 39 05

iP Z 06 02 18 $\frac{1}{2}$ U.S.C.G.S. 1°S, 127°E. Molucca
i 30 Sea. Aftershock. H= 05 56 50
i 54
i(PP) 03 04
e 35
i 08 55

iP Z 14 29 01 U.S.C.G.S. 18°N, 121°E. Luzon.
H= 14 21 43

iP Z 18 54 15.6 J.M.A. 33 $\frac{3}{4}$ °N, 136 $\frac{3}{4}$ °E. Honshu.
H= 18 47 21. h approx = 360kms.

28th. iP Z 00 34 05 U.S.C.G.S. 30 $\frac{1}{2}$ °N, 137 $\frac{1}{2}$ °E.
i 32 $\frac{1}{2}$ Honshu. H= 00 27 31. h approx =
i(S) 39 15 500kms. Mag. 6 $\frac{3}{4}$ (Pas)
i(ScP) 23
e(ScS) 43 25

iP Z 02 54 13

iP Z 04 15 21 U.S.C.G.S. 3°S, 135 $\frac{1}{2}$ °E. Near the
iPPP 43 north coast of New Guinea
i 54 H= 04 11 23
i 16 11
i 17

eP Z 14 25 49 U.S.C.G.S. 20 $\frac{1}{2}$ °S, 178°W. Fiji Is.
i 50 H= 14 20 00. h approx = 650kms
i 51 Mag. 7 $\frac{1}{2}$ (Pas)
i 54
i!pP 27 31
i!(Pcp) 28 20 $\frac{1}{2}$
i 30 06
i(S) 22
i(ScP) 31 09
i(PcS) 32 14
e(SS) 34 13
e(ScS) 35 09
eL 41 -

RAFAEL OBSERVATORY. Seismological Bulletin, September 1957 (cont)

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September 28th. eP Z 14 49 53 U.S.C.G.S. 20 $\frac{1}{2}$ ^oS, 178 $\frac{1}{2}$ ^oW.
i 57 Fiji Islands. H= 14 44 02
i(PcP) 52 22 Aftershock. h approx. = 600kms.
eS 54 31
i 56 15
e 58
e (15) 04 17
e 07 25

e Z 16 10 39

eP Z 17 38 17
i 17.7
i 26

e Z 18 30 47 $\frac{1}{2}$

iP Z 21 08 00 $\frac{1}{2}$ U.S.C.G.S. 17 $\frac{1}{2}$ ^oS, 146^oE.
i 41 Mariana Islands. H= 21 03 18
h approx. = 200kms.

The records for 28th September are not available for further study.

29th. eP Z 02 19 36 (B.C.I.S.) 64 $\frac{1}{2}$ ^oS, 172 $\frac{1}{2}$ ^o W
South Pacific

iP Z 06 43 18 $\frac{1}{2}$ U.S.C.G.S. 0^o, 124^oE. Celebes.
H= 06 37 33. h approx = 200kms

iP Z 08 19 12.5 U.S.C.G.S. 25^oS, 178 $\frac{1}{2}$ ^oE. Fiji Is.
Dilatation H= 08 13 22. h approx. = 600kms
i! 14 $\frac{1}{2}$ Mag. 6 $\frac{1}{4}$ (Berk.)
i 54 $\frac{1}{2}$
e 20 50
iPP 21 41
i 49
i 22 27
i 52
i 23 39
iS 56
i!ScP 24 34
i 28 39
i 41 36
i 46 16

eP Z 10 18 06
i 07
i 32 $\frac{1}{2}$

iP Z 13 40 30.7
e 43
i 44
i 49 05 $\frac{1}{2}$

e Z 16 01 18

eP Z 17 40 11 B.C.I.S. 4^oN, 126 $\frac{1}{2}$ ^oE. Mindanao.
i 41 08 H= 17 34 16

30th. e(P) Z 11 31 45 $\frac{1}{2}$

eP Z 12 12 06 U.S.C.G.S. 1 $\frac{1}{2}$ ^oS, 126 $\frac{1}{2}$ ^oE.
Molucca Sea. H= 12 06 43

The following shocks were reported felt from the Territory:

Date 1957	Reported Time (G.M.T)	Intensity (Mod. Mercalli)	Locality	Lat. South °	Long. East °
Sept. 1st.	2224	2	Awelkon	05 40	147 50
4th.	0930	1	Awelkon	05 40	147 50
	1124	2	Rabaul	04 10	152 10
	1226	3	Rabaul	" "	" "
	2214	1-2	Rabaul	" "	" "
7th.	1518	3	Lae	06 45	147 00
8th.	0932	3	Lae	06 45	147 00
	0935	1	Awelkon	05 40	147 50
	1319	3	Rabaul	04 10	152 10
	1320	3	Kiep	05 10	152 00
	1320	3-4	Warangoi	04 30	152 20
	1320	2	Pomio	05 30	151 30
	13(3)0	5	Kokopo	04 20	152 15
	1(4)40	2-3	Warangoi	04 30	152 20
	(?1540)				
11th.	0502	2	Pomio	05 30	151 30
14th.	1357	4	Lae	06 45	147 00
15th.	1(6)55	3	Kiep	05 10	152 00
	(1700)	5	Kokopo	04 20	152 15
	1843	5	Karoola	05 10	154 35
	1843	4	Rabaul	04 10	152 10
	1844	3-4	Warangoi	04 30	152 20
	1845	5	Londolovit	03 05	152 40
	1845	1-2	Ulamona	05 00	151 15
	2205	1	Rabaul	04 10	152 10
16th.	0418	3	Kiep	05 10	152 00
(18th) (?19th)	1123	2	Kiep	05 10	152 00
23rd.	1141	2	Karoola	05 10	154 35
25th.	0406	?	Londolovit	03 05	152 40
	0407	?	Warangoi	04 30	152 20
	1018	1	Rabaul	04 10	152 10

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Oct. 10th.	iP iS	Z	04	54 55	18 $\frac{1}{2}$ 09 $\frac{1}{2}$	
	eP eL	Z	10	57 58.4	50 $\frac{1}{2}$ -	
	iP i	Z	11	02	16 26	
	eP i eL	Z	11	10 11.8	15 $\frac{1}{2}$ 28 $\frac{1}{2}$ -	
	eP i i eL	Z	13	57 39 $\frac{1}{2}$ 43 58.9	29 $\frac{1}{2}$ 39 $\frac{1}{2}$ 43 -	
	eP i(PP) eL	Z	14	22 27 $\frac{1}{2}$ 23.6	(18 $\frac{1}{2}$) 27 $\frac{1}{2}$ -	B.C.I.S 3 $\frac{1}{4}$ °S, 146°E. Off the north-east coast of New Guinea H= 14 20 55
	iP Dilatation i i	Z	16	50	26 32 $\frac{1}{2}$ 42 $\frac{1}{2}$	
11th.	Nil					
12th.	i(P)	Z	17	39	36.4	U.S.C.G.S. 14°N, 145°E. Mariana Is. H= 17 35 26. h approx = 100kms.
	eP i i iPP	Z	19	04 05 24 $\frac{1}{2}$ 06	54 12 $\frac{1}{2}$ 24 $\frac{1}{2}$ 33 $\frac{1}{2}$	U.S.C.G.S. 8°S, 111°E. Java. H= 18 57 02. Mag.6(Matsushiro)
	iP! Compression from south- south east	Z	19	51	46	Felt Warangoi, Int.2(M.M.) 4°30'S, 152°20'E. Felt Rabaul, Int. 2(M.M.) 4°10'S, 152°10'E.
	eP i i eL	Z	22	04 05 05.8	(24 $\frac{1}{2}$) 42 $\frac{1}{2}$ 23 $\frac{1}{2}$ -	B.C.I.S. 3°S, 146 $\frac{1}{2}$ °E. Near the north coast of New Guinea H= 22 03 02
	iP i eL	Z	22	39	(44.5) 50 $\frac{1}{2}$ 41.5	
13th.	eP	Z	04	29	09 $\frac{1}{2}$	U.S.C.G.S. and B.C.I.S. 52 $\frac{1}{2}$ °N, 160°E. Kamchatka. H= 04 19 17. Mag. 6 $\frac{1}{2}$ (Matsushiro)
	eP e i	Z	20	42 43 44	41 57 57	U.S.C.G.S. 60°S, 151°E. Antarctic Ocean. H= 20 33 01. Mag. 6 $\frac{3}{4}$ (Strasbourg)
	iP! Compression i! iS! i i! i	Z	23	06	16 $\frac{1}{2}$ 28 35 43 07 08 13	

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October 14th.	eP 1 Deep	Z	00	29	46 46.5	
	eP	Z	12	49	28	B.C.I.S. Santa Cruz Islands. H= 12 46.0m. approx. =60kms.
15th.	iP	Z	06	04	39	U.S.C.G.S. 30°S, 179°W. Kermadec Islands. H= 05 55 21 h approx. = 150kms.
	iP Dilatation i! i!	Z	14	22	10½ 12½ 16½	Felt Rabaul. Int. 1 (M.M.) 4°10'S, 152°10'E.
	iP! Dilatation to west-south- west	Z	23	02	00.5	Felt Rabaul. Int. 1 (M.M.) 4°10'S, 152°10'E.
16th.	Nil					
17th.	eP	Z	14	28	49½	U.S.C.G.S. 31°N, 141½°E. Honshu. H= 14 21 44
18th.	iP Dilatation i	Z	07	41	42 42½	U.S.C.G.S. New Britain region H= 07 41 02 Felt Rabaul. Int. 1 (M.M.) 4°10'S, 152°10'E.
	i	Z	08	03	16	
	e	Z	17	28	(47)	
	eP i i eL	Z	19	00 01 40½ 02.3	46½ 22 40½ -	B.C.I.S. 2½°S, 146½°E. New Guinea, Admiralty Islands. H= 18 59 15
	eP	Z	19	14	29½	U.S.C.G.S. 22°S, 172°E. Loyalty Islands region. H= 19 08 53
19th.	eP	Z	15	50	46½	
	iP Dilatation e iPP i eS i	Z	18	36 37 38 42 43	36.0 15½ 15 30½ 48½ 00	U.S.C.G.S. 23½°N, 122°E. Formosa. H= 18 28 50 Mag. 7 (Moscow)
	iP e e	Z	21	50 51	32½ 01½ 16½	U.S.C.G.S. 44½°N, 146°E. Hokkaido. H= 21 41 59 h approx. = 150kms. Mag. 6½-6¾ (Pas.)
20th.	ePKP iPKP iPKS	Z	12	25 28	27 22½ 40.0	U.S.C.G.S. 11½°N, 42°W. Atlantic Ridge. H= 12 04 22
	iP i	Z	19	57	25 33½	
21st.	eP iPP	Z	00	21	08½ 31.4	U.S.C.G.S. 11°S, 167°E. Santa Cruz Islands H= 00 17 25 h approx. = 100kms.
	iP i	Z	10	05	18½ 49½	

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October 21st. iP Z 12 03 36.2
cont.

22nd. iP Z 07 28 01.9

iP Z 20 53 18.5 U.S.C.G.S. 43¹⁰N, 146°E.
i 31.5 Hokkaido. H= 20 44 38
i 40
e(PPP) 55 53

23rd. i(P) Z 12 21 20¹/₂ (U.S.C.G.S. Kermadec Islands
H= 12 13 36)

iP Z 20 32 05¹/₂

24th. eP Z 00 22 04 U.S.C.G.S. 14¹⁰S, 168°E.
e 55 New Hebrides Islands
i 23 38 H= 00 17 37. Mag. 6¹/₂(Pas.)

eP Z 03 16 31
e(S) 17 11
No records after 0800 hours

25th. No records.

26th. eP Z 04 36 52 U.S.C.G.S. 0°, 125°E.
i 53 Molucca Strait. H= 04 31 03

eP Z 08 32 05 U.S.C.G.S. 20¹⁰S, 178°W.
i 06 Fiji Islands. H= 08 26 12.
e 33 27 h approx. = 600kms.
iPcP 34 34 Mag. 6-6¹/₄(Pas.)
e(S) 36 45
eScS 41 27

e(P) Z 08 41 (27)

eP Z 12 58 07
i! 07.7 G.
iS 56

eP Z 14 24 06 U.S.C.G.S. 2°S, 116°E. Borneo.
i 07 H= 14 16 57. Mag. 6.3(Uppsala)
i 12¹/₂
i 35
i(PP) 25 22¹/₂
i(PPP) 43
e 26.1 -

eP Z 16 49 32

27th. iP Z 00 50 42
e 52 19

eP Z 07 29 26 Deep
i! 27

iP! Z 20 08 22
Dilatation

iP Z 22 42 36 U.S.C.G.S. 56°N, 161°E.
i 43 08 Kamchatka. H= 22 32 25
i 47 Mag. 6¹/₂ - 6³/₄ (Pas.)

iP Z 22 59 48.9 U.S.C.G.S. 11¹⁰S, 166¹⁰E.
e (23) 02 57 Santa Cruz Islands.
e(SS) 03 59 H= 22 56 55
e 12 03

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October 28th. i(P) Z 06 15 05 $\frac{1}{2}$

eP Z 10 12 44 $\frac{1}{2}$
iS 13 07 $\frac{1}{2}$

iP Z 13 46 43 $\frac{1}{2}$
Dilatation
iS 47 24 $\frac{1}{2}$

eP Z 14 04 52 $\frac{1}{2}$
e 05 23 $\frac{1}{2}$

eP Z 15 56 (09 $\frac{1}{2}$)

29th. eP Z 00 18 57 U.S.C.G.S. 53 $\frac{1}{2}$ $^{\circ}$ N, 160 $^{\circ}$ E.
Kamchatka. H= 00 09 07

eP Z 02 28 41 U.S.C.G.S. 2 $^{\circ}$ S, 116 $^{\circ}$ E. Borneo.
H= 02 21 30

iP Z 06 48 25

eP Z 10 06 10
i(S) 19 $\frac{1}{2}$

i(P) Z 12 29 50.1

iP Z 14 11 00
Compression
i! 05
i(S)! 10

iP Z 16 15 09 $\frac{1}{2}$ Felt Warangoi, Int. 1-2. (M.M.)
Compression 18 04 $^{\circ}$ 30'S, 152 $^{\circ}$ 20'E.
iS

iP Z 17 15 03

e(P) Z 18 23 04

iP! Z 20 02 56 Felt Pomio, Int. 3 (M.M.)
Compression from south- 5 $^{\circ}$ 30'S, 151 $^{\circ}$ 30'E.
south east. Felt Rabaul, Int. 1 (M.M.)
4 $^{\circ}$ 10'S, 152 $^{\circ}$ 10'E.

30th. iP Z 02 23 42.5 U.S.C.G.S. 53 $^{\circ}$ N, 167 $^{\circ}$ W. Fox Is.
H= 02 13 08

iP Z 03 38 59 $\frac{1}{2}$
iS 39 18

e(PKP) Z 07 50 (40) B.C.I.S. 35 $^{\circ}$ 3'N, 27 $^{\circ}$ 8'E.
Dodecanese Islands. H= 07 30 18
Mag. 5.7 (Uppsala)

iP Z 15 05 19
iS 38

iP Z 15 58 09
Dilatation to south-south-east

eP Z 17 12 05

31st. iP Z 04 26 28 U.S.C.G.S. 8 $^{\circ}$ S, 161 $^{\circ}$ E.
i(PP) 33.9 Solomon Islands. H= 04 24 04
e 29 25

October 31st.
cont.

ePKP		10	27	02	U.S.C.G.S. $6\frac{1}{2}^{\circ}\text{N}$, 83°W . Panama. H= 10 07 54 Mag. 7 (Tacubaya)
eP e(S)	Z	10	30	22 $\frac{1}{2}$ 33 01	B.C.I.S. Santa Cruz Islands H= 10 26 52
eP e	Z	13	33	47 36 18	
ePKP	Z	16	43	18	U.S.C.G.S. $1\frac{1}{2}^{\circ}\text{N}$, 86°W . Galapagos Islands H= 16 24 17 Mag. 5.8 (Tacubaya)

The following shocks were reported felt during October 1957:

Date 1957	Reported Time G.M.T.	Intensity (Mod. Mercalli)	Locality	Lat. South °	Long. East °
Oct. 1st	0713 0714		Rabaul Londolovit	04 10 03 05	152 10 152 40
3rd.	1230	2	Wewak	03 35	143 40
12th.	1951 1955	1 2	Rabaul Warangoi	04 10 04 30	152 10 152 20
15th.	1422 2302	1 1	Rabaul "	04 10 " "	152 10 " "
18th.	0741	1	Rabaul	04 10	152 10
29th.	0600 1615 2000 2002	1-2 1-2 3 1	Linga Linga Warangoi Pomio Rabaul	05 35 04 30 05 30 04 10	149 45 152 20 151 30 152 10

ROYAL CANADIAN MOUNTED POLICE
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VULCANOLOGICAL OBSERVATORY RABAU

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Nov. 1st.	i	Z	09	42	41½	
	iP	Z	18	08	27½	
	Compression					
	iS!				50	
	iP	Z	18	10	14	Aftershock of the preceding
	iS				36	
	eP	Z	19	09	54	
2nd.	iP	Z	01	11	12	
	iP	Z	05	25	27	
	i	Z	11	00	30	
	iP	Z	13	04	00	
	i(S)				36	
	iP	Z	14	55	42	Distant
	e			56	34½	
	eP	Z	16	22	40	U.S.C.G.S. 6°N? 127½°E. Mindanao H= 16 16 52. Mag. 6.1(Quetta)
	iP	Z	18	17	35	
	iS				44	
	eP	Z	18	34	29	U.S.C.G.S. 13°S, 166½°E.
	i			36	25½	New Hebrides Islands. H= 18 30 24
	e(SS)			38	01	Mag. 6.4 (Kiruna)
	i(SSS)				15½	
	i(ScP)			42	45	
	(PcS)					
	eScS			46	28	
	i(P)	Z	21	33	00	
	iP	Z	21	47	54	
	iS			48	02	
3rd.	iP	Z	10	26	23	U.S.C.G.S. 6°S, 147°E. Near the
	i(PPP)				41	north east coast of New Guinea.
	e(S)			27	45	H= 10 24 51. Mag. 5½ (Matsushiro)
	i				50	Felt Camp Diddy, Int. 6(M.M.)
	i(SS)				56	6°30'S, 146°50'E.
	i			28	05	Felt Lae, Int. 5(M.M.)
	i				28½	6°45'S, 147°00'E.
	i			30	29	Felt Mumeng, Int. 2(M.M.)
						7°00'S, 146°35'E.
						Felt Wau, Int. 1(M.M.)
						7°20'S, 146°45'E.
	iP	Z	11	16	03	U.S.C.G.S. 6½°S, 147°E. Near the
	e(S)			17	(21)	north east coast of New Guinea
	i(SS)				35	H= 11 14 30. Mag. 5½-5½ (Matsushiro)
	i(SSS)				43	Felt Camp Diddy, Int. 7(M.M.)
	i			18	09	6°30'S, 146°50'E.
						Felt Lae, Int. 4(M.M.)
						6°45'S, 147°00'E.
						Felt Mumeng, Int. 2(M.M.)
						7°00'S, 146°35'E.
	iP	Z	15	50	20	

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3rd. cont.	iP Dilatation i(S)!	Z	17	54	04 $\frac{1}{2}$	
	i				13	
	i				31	
	i				34	
	i!				40	
	i!				49 $\frac{1}{2}$	
	e(P)	Z	18	13	41	
	e(P)	Z	19	08	(29)	
4th.	iP i(S)	Z	01	07	36 $\frac{1}{2}$ 45 $\frac{1}{2}$	
	iP	Z	01	10	29	
	i	Z	02	38	49	
	i	Z	03	40	20	
	eP	Z	10	57	46	
	i			58	13	
	e			59	26	
	iP	Z	11	03	23	
	iP	Z	13	48	13	
	i				29	
	iP	Z	21	57	22	
	iS				30	
5th.	e	Z	00	40	(58)	B.C.I.S. 14°N, 124°E. Philippine Is. H= 00 34 10
	eP	Z	09	58	12	U.S.C.G.S. 13°S, 169°E.
	i				12 $\frac{1}{2}$	New Hebrides Islands. H= 09 54 29
	i!				18 $\frac{1}{2}$	h approx. = 650 kms.
	i!				22	Mag. 6 $\frac{1}{4}$ (Matsushiro)
	iS	(10)	01	10	10	
	e(ScS)		08	33	33	
	iP!	Z	11	19	28	U.S.C.G.S. 6°S, 150°E. New Britain.
	Compression					H= 11 18 43
	i!				30 $\frac{1}{2}$	Felt Ulamona, Int. 1 (M.M.)
						5°00'S, 151°15'E.
	iP	Z	15	02	17	Dilatation
	i!				19	
	eP	Z	15	18	48	
	i				50	
	iS			19	12	
	iP	Z	15	23	14	
	iS				23	
	iP!	Z	20	44	26	
6th.	iP	Z	00	42	33	B.C.I.S. near 5°S, 154°E.
	i				36	Solomon Islands region. H=00 41.7
						Felt Karoola, Int. 3(M.M.)
						5°10'S, 154°35'E.
	e	Z	11	23	(54)	
	eP	Z	13	21	(36)	U.S.C.G.S. 45°N, 149 $\frac{1}{2}$ °E. Kurile Is. region. H= 13 12 53. Mag.6.3(Quetta)

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6th.	iP	Z	15	33	27 $\frac{1}{2}$	
cont.	i(S)				36	
	e(P)	Z	15	46	(51)	
	iS			47	55 $\frac{1}{2}$	
7th.	eP	Z	04	31	(51)	
	i			32	36	
	eP	Z	19	33	39	
	i				48	
	eS			34	14	
	i	Z	23	27	08	
8th.	iP	Z	02	47	16	U.S.C.G.S. 5 $\frac{1}{2}$ °S, 155°E. Solomon Is. region. H= 02 46 22. Felt Karoola, Int. 3(M.M.) 5°10'S, 154°35'E. Felt Warangoi, Int. 1-2(M.M.) 4°30'S, 152°20'E. Felt Rabaul, Int. 1(M.M.) 4°10'S, 152°10'E.
	i(P)	Z	06	23	42	B.C.I.S. 0°, 121 $\frac{1}{2}$ °E. Celebes Islands h= 06 17 33
	iP	Z	12	20	51 $\frac{1}{2}$	
	i			21	00	
	iP	Z	17	57	10	
	i				14	
	i				21	
	eS				39	
	iP	Z	18	45	38	
9th.	iP	Z	16	50	27	
	i				45	
	iS!			51	01	
	iP	Z	19	11	21	U.S.C.G.S. Solomon Islands region. H= 19 10 39. h approx. = 150 kms.
	i!				24	
	i				26	
	i!				35 $\frac{1}{2}$	
	e(S)!				57	
10th.	eP	Z	02	37	26	U.S.C.G.S. 7°S, 155 $\frac{1}{2}$ °E. Solomon Is. H= 02 36 21 Mag. 6.5 (Quetta) Felt Aropa, Int. 3(M.M.) 6°25'S, 155°50'E. Felt Buin, Int. 3(M.M.) 6°50'S, 155°45'E.
	i!				46	
	i!				49	
	eP	Z	03	45	03	U.S.C.G.S. 7 $\frac{1}{2}$ °S, 155 $\frac{1}{2}$ °E. Solomon Islands. H= 03 43 49 Mag. 6.2 (Quetta) Felt Aropa, Int. 4(M.M.) 6°25'S, 155°50'E. Felt Buin, Int. 3(M.M.) 6°50'S, 155°45'E.
	i!				14	
	eP	Z	04	40	27	Felt Buin, Int. 1(M.M.) 6°50'S, 155°45'E.
	i!				36 $\frac{1}{2}$	
	i!				39 $\frac{1}{2}$	
	iS			41	35	

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10th. cont.	eP i i i(S) i i	Z	05	50	28 37 47 51 52 53	U.S.C.G.S. $6\frac{1}{2}^{\circ}$ S, 147° E. Near the north east coast of New Guinea. H= 05 48 57 Mag. 6.5 (Quetta) Felt Camp Diddy, Int. (M.M.) $6^{\circ}30'S$, $146^{\circ}50'E$. Felt Lae, Int. 5 (M.M.) $6^{\circ}45'S$, $147^{\circ}00'E$. Felt Mameng, Int. 2(M.M.) $7^{\circ}00'S$, $146^{\circ}35'E$. Felt Wau, Int. 2(M.M.) $7^{\circ}20'S$, $146^{\circ}45'E$.
	eP i i(S) i!1	Z	06	07	55 08 56 10	Felt Buin, Int. 1(M.M.) $6^{\circ}50'S$, $155^{\circ}45'E$.
	iP e(S) e	Z	08	22	54 23 24	57 04 $\frac{1}{2}$
	eP i i(S)	Z	08	44	11 18 45	U.S.C.G.S. $7\frac{1}{2}^{\circ}$ S, $156\frac{1}{2}^{\circ}$ E. Solomon Is. H= 08 42 50 Felt Aropa, Int. 1(M.M.) $6^{\circ}25'S$, $155^{\circ}50'E$.
	eP i i(S) i i	Z	10	04	09 30 05 12 24 30	Felt Aropa, Int. 1 (M.M.) $6^{\circ}25'S$, $155^{\circ}50'E$.
	ePKP e e	Z	10	40	31 44 03 32	U.S.C.G.S. 8° N, $74\frac{1}{2}^{\circ}$ W. Colombia. H= 10 21 14.
	eP e(S) i	Z	11	33	41 34 41 55	
	eP i(S) i i	Z	14	45	46 47 07 11 17	
	eP i e(S)	Z	15	36	44 53 37 56	
	eP e(S) i i i	Z	15	43	42 44 37 43 $\frac{1}{2}$ 48 $\frac{1}{2}$ 45 03 $\frac{1}{2}$	Felt Buin, Int. 1(M.M.) $6^{\circ}50'S$, $155^{\circ}45'E$.
	eP i(S) i i e	Z	16	38	(15) 39 19 28 34 40 14	Felt Lae, Int. 3(M.M.) $6^{\circ}45'S$, $147^{\circ}00'E$.
	eP	Z	18	08	46	U.S.C.G.S. 2° S, 116° E., Borneo. H= 18 01 37
	eP i iS	Z	18	25	50 26 54 27 01	
	eP	Z	19	27	43	U.S.C.G.S. 34° N, $139\frac{1}{2}^{\circ}$ E. Honshu. H= 19 20 05. Mag. 6.6(Matsushiro)

10th. cont.	eP	Z	19	38	27	B.C.I.S. Honshu. Aftershock. H= 19 30.5m
	eP	Z	19	49	48	
	eS			50	59	
	eP	Z	20	00	06	B.C.I.S. Honshu. Aftershock. H= 19 53 07 Mag. 5.5(Matsushiro)
	1P 1S	Z	22	04	21½ 56	Felt Buin, Int. 2(M.M.) 6°50'S, 155°45'E.
11th.	eP e(S) i i	Z	22	51 52	21 21 36 42	
	1P i 1S i!	Z	01	54	29½ 47½ 59½ 06½	(Felt Lindenhafen, Int. 4(M.M.) 6°10'S, 150°35'E. Reported as 0125 hours)
	1P! i i	Z	06	04 05	41 19½ 30½	Dilatation to north-west. Deep?
	1P 1S! i! i	Z	07	48 49	58½ 28½ 30½ 35½	Dilatation
	e	Z	11	50	01	
	1(P)	Z	12	06	17	
	1P	Z	14	47	57	
	eP i	Z	17	33	11½ 12	
	eP 1S i	Z	18	30 31	02½ 07 28	
	1(P)	Z	22	54	27	
	12th. eP i i!	Z	01	32	30½ 33½ 34	U.S.C.G.S. 6°S, 149½°E. New Britain. H= 01 31 40. Mag. 5¼ (Matsushiro) Felt Kandrian, Int. 2-3 (M.M.) 6°15'S, 149°35'E. Felt Walindi, Int. 2(M.M.) 5°25'S, 150°05'E.
	1P! eS	N	07	00 01	40½ 08½	
	1P	Z	15	34	51.8	
	1P i	Z	15	46	30 33	
	13th. eP i i 1S! i! i!	Z	01	06 07 08	20½ 39 20½ 24½ 30½ 02½	B.C.I.S. Solomon Islands. Aftershock. H= 01 05.0m

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13th.	iP!	Z	06	15	32 $\frac{1}{2}$	Deep?
cont.	i				33 $\frac{1}{2}$	
	eS			16	10 $\frac{1}{2}$	
	i!				23 $\frac{1}{2}$	
	i				27	
	i				37	
	i				43 $\frac{1}{2}$	
	iP	Z	11	39	07 $\frac{1}{2}$	
	i				39 $\frac{1}{2}$	
	i			40	17 $\frac{1}{2}$	
	eP	Z	17	30	12	U.S.C.G.S. 33 $^{\circ}$ S, 179 $^{\circ}$ W. Kermadec Is.
	i				13	H= 17 22 41 Mag. 6 $\frac{3}{4}$ (Berkeley)
	i				14	(Deep?)
	i!				16	
	i			31	04 $\frac{1}{2}$	
	i				18 $\frac{1}{2}$	
	i(PPP)			32	13 $\frac{1}{2}$	
	e				35 $\frac{1}{2}$	
	eS	E		36	07	
	e	Z			30 $\frac{1}{2}$	
14th.	iP!	Z	01	00	51 $\frac{1}{2}$	Felt Rabaul, Int. 1 (M.M.) Dilatation 4 $^{\circ}$ 10'S, 152 $^{\circ}$ 10'E.
	eP	Z	20	55	(34)	Felt Mumeng, Int. 1 (M.M.) 7 $^{\circ}$ 00'S, 146 $^{\circ}$ 35'E.
	Record confused by microseisms					
15th.	iP	Z	07	58	50 $\frac{1}{2}$	U.S.C.G.S. 8 $\frac{1}{2}$ $^{\circ}$ N, 124 $^{\circ}$ E. Mindanao. H= 07 52 25. Mag. 6.3 (Quetta)
	iP	Z	16	40	04 $\frac{1}{2}$	U.S.C.G.S. 51 $\frac{1}{2}$ $^{\circ}$ N, 158 $^{\circ}$ E.
	i				18	Kamchatka, H= 16 30 29.
	i				19 $\frac{1}{2}$	Mag. 6 $\frac{1}{4}$ (Matsushiro)
	e			41	25 $\frac{1}{2}$	
	Record confused by microseisms					
16th.	Nil					
17th.	e(P)	Z	01	20	(23)	
	eP	Z	06	07	(40)	U.S.C.G.S. 49 $^{\circ}$ N, 148 $\frac{1}{2}$ $^{\circ}$ E. Sea of Okhotsk. H= 05 57 48. h approx = 350kms. Mag. 7 $\frac{1}{4}$ (Matsushiro)
	iP!	Z	06	28	21 $\frac{1}{2}$	Felt Rabaul, Int. 1 (M.M.) Compression from south-west. 4 $^{\circ}$ 10'S, 152 $^{\circ}$ 10'E.
	e	Z	08	03	14	
	eP	Z	14	55	29 $\frac{1}{2}$	
	i				40	
	iS			56	26 $\frac{1}{2}$	
	i				48 $\frac{1}{2}$	
18th.	i	Z	05	15	38.3	
	eP	Z	13	55	09	
	i				33 $\frac{1}{2}$	
	eL				58.6	
	eP	Z	15	21	36	U.S.C.G.S. 44 $^{\circ}$ N, 148 $^{\circ}$ E. Kurile Is. H= 15 12 53
	iP	Z	16	32	50 $\frac{1}{2}$	
	i			33	54	

18th.	eP	Z	16	42	54 $\frac{1}{2}$	
cont.	i			43	37 $\frac{1}{2}$	
	i(S)				58 $\frac{1}{2}$	
	i			44	40 $\frac{1}{2}$	
19th.	iP	Z	00	47	16	
	iP	Z	10	40	45	
	eP	Z	11	28	23	U.S.C.G.S 28 $\frac{1}{2}$ N, 140 $\frac{1}{2}$ E. Bonin Is. H= 11 21 39
	eP	Z	16	22	25	U.S.C.G.S. 47 $\frac{1}{2}$ N, 152 $\frac{1}{2}$ E. Kurile Is.
	i				27	H= 16 13 29. h approx.= 100kms.
	e				59	
	i		23		09 $\frac{1}{2}$	
	i				39 $\frac{1}{2}$	
	iP	Z	17	46	14 $\frac{1}{2}$	Compression
	i				23 $\frac{1}{2}$	
	iP	Z	19	31	33 $\frac{1}{2}$	B.C.I.S probably Mindanao. Rather discordant data
	iP	Z	20	16	23 $\frac{1}{2}$	Compression
	i			17	15	
20th.	eP	Z	12	51	(25 $\frac{1}{2}$)	U.S.C.G.S 54 $\frac{1}{2}$ N, 165 $\frac{1}{2}$ W. Unimak Is. H=12 40 23
					Mag. 6 $\frac{3}{4}$	(Matsushiro)
21st.	iP	Z	05	17	00 $\frac{1}{2}$	U.S.C.G.S. 1 $\frac{1}{2}$ S, 127 $\frac{1}{2}$ E. Halmahera. H=05 11 33
	i				38 $\frac{1}{2}$	Mag. 5 $\frac{3}{4}$ (Matsushiro)
	eP	Z	06	32	27	
	e	Z	18	02	20	U.S.C.G.S 3 $\frac{1}{2}$ S, 130 $\frac{1}{2}$ E. Ceram. H= 17 57 21
22nd.	eP	Z	21	56	35 $\frac{1}{2}$	U.S.C.G.S 1 $\frac{1}{2}$ S, 127 $\frac{1}{2}$ E. Spice Is. H=21 51 04
23rd.	i(P)	Z	01	04	02 $\frac{1}{2}$	U.S.C.G.S 52 $\frac{1}{2}$ N, 172 $\frac{1}{2}$ E. Near Is. H= 00 55 00
	eP	Z	01	09	24 $\frac{1}{2}$	U.S.C.G.S 53 $\frac{1}{2}$ N, 167 $\frac{1}{2}$ W. Fox Is. H= 00 58 36
						Mag. 6.7 (Quetta)
	iP	Z	01	13	27	
	iP	Z	08	23	50 $\frac{1}{2}$	Compression
	i!				53 $\frac{1}{2}$	
	i		24		23	
	iS!				26 $\frac{1}{2}$	
24th.	No records					
25th.	eP	Z	00	32	(00)	U.S.C.G.S 3 $\frac{1}{2}$ N, 128 $\frac{1}{2}$ E. Halmahera. H= 00 26 32
	Onset confused by local shock					
	eP	Z	20	08	26	B.C.I.S near 3 $\frac{1}{2}$ (N), 132 $\frac{1}{2}$ E. North-west coast of New Guinea. H= 20 03.6m
	eP	Z	22	42	(14)	U.S.C.G.S 1 $\frac{1}{2}$ S, 116 $\frac{1}{2}$ E. Borneo. H=22 35 00
	Onset confused by blasting. Mag. 6 $\frac{1}{2}$ (Matsushiro)					
26th.	eP	Z	05	17	10	U.S.C.G.S 2 $\frac{1}{2}$ S, 116 $\frac{1}{2}$ E. Borneo. H= 05 10 00
	i				52 $\frac{1}{2}$	Mag. 6 $\frac{1}{2}$ (Matsushiro)
	e			18	42	
	eP	Z	11	46	03	U.S.C.G.S 51 $\frac{1}{2}$ N, 176 $\frac{1}{2}$ W. Andreanov Is. H= 11 35 44 Mag. 6.5 (Quetta)
	eP	Z	12	32	(04)	
	i				09 $\frac{1}{2}$	
	Confused by local shock					

26th. cont.	eP	Z	19	14	28	U.S.C.G.S. 19°N, 121°E. Luzon. H= 19 07 02
27th.	iP iS	Z	00	08	14½ 32	
	eP	Z	03	26	(51)	B.C.I.S. 5°N, 125½°E. Mindanao. H= 03 21 04
	eP	Z	08	38	(55)	B.C.I.S. near 14°S, 167°E. Onset confused by local shock New Hebrides Islands
	iPP			39	18	H= 08 34.8m
	eS			42	11	h approx. = 200kms
	e			46	40	
	eP	Z	10	03	06	
	e	Z	11	07	17	
	iP!	Z	11	51	20½	Felt Rabaul, Int. 1(M.M.)
	Dilatation to east-north-east					4°10'S, 152°10'E
	iS!				29½	
	e(PKP)	Z	14	15	49	(U.S.C.G.S. 20°S, 67½°W. Bolivia. H=13 56 30)
	iP	Z	16	44	17½	
	iP i(S)	Z	19	08 10	35½ (05)	
28th.	e	Z	03	28	45	
	iP	Z	07	24	02	
	eP iPP	Z	20	54	33 47½	U.S.C.G.S. 15°S, 168½°E. New Hebrides Islands. H= 20 50 10 Mag. 6¼ (Matsushiro)
29th.	iP	Z	02	29	30½	Dilatation. Deep.
	iP	Z	12	36	48	Distant? (Shock reported felt Madang, Int. 1(M.M.) 1230 hours. 5°15'S, 145°50'E.
	eP	Z	17	52	37	U.S.C.G.S. 48½°S, 124½°E. Indian Ocean. H= 17 43 38
	ePKP i! i! e i(PP) e i i(PKS) i i(PPP) i	Z	22	38	23 43½ 50½ 39 41 21½ 26 47½ 42 19½ 43 22½ 44 28½ 59½	U.S.C.G.S. 21°S, 66°W. Bolivia. H= 22 19 38 h approx. = 200kms. Mag. 7¼ -8 (Pasadena)
	e(P) e	Z	23	14	38 18.8 -	
30th.	eP	Z	03	28	05	
	eP e	Z	07	16 17	(25) 25	
	iP iS	Z	14	29 30	34½ 02½	

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30th. cont.	e	Z	19	49	21		
	eP	Z	20	37	30	U.S.C.G.S. 49°N, 154°E. Kurile Is. H= 20 28 18.	
	eP	Z	21	46	20	U.S.C.G.S. 47°N, 154½°E. Kurile Is. H= 21 37 11	
	eP	Z	22	03	16	U.S.C.G.S. 47°N, 154°E. Kurile Is. H= 21 54 10 Mag. 6.2(Uppsala)	

The following shocks were reported felt in the Territory, Nov. 1957:

Date	Time (G.M.T.)	Intensity (M.M.)	Locality	Lat. o	South '	Long. o	East '
2nd.	0903	2-3	Aitape	03	10	142	20
	1500	2	Karkar	04	40	146	00
3rd.	1026	6	Camp Diddy	06	30	146	50
	1026	5	Lae	06	45	147	00
	1025	2	Mumeng	07	00	146	35
	1025	1	Wau	07	20	146	45
	1055	1	Lae	06	45	147	00
	1115	7	Camp Diddy	06	30	146	50
	1115	4	Lae	06	45	147	00
	1115	1	Mumeng	07	00	146	35
	1600	1	Lae	06	45	147	00
5th.	1117	1	Ulamona	05	00	151	15
6th.	0043	3	Karoola	05	10	154	35
	1130	1-2	Linga Linga	05	35	149	45
8th.	0247	3	Karoola	05	10	154	35
	0247	1	Rabaul	04	10	152	10
	(0346)	1-2	Warangoi	04	30	152	20
10th.	0051	1-2	Warangoi	04	30	152	20
	0235	3	Aropa	06	25	155	50
	0245	3	Buin	06	50	155	45
	0345	4	Aropa	06	25	155	50
	0345	3	Buin	06	50	155	45
	0448	1	"	"	"	"	"
	0549	7	Camp Diddy	06	30	146	50
	0549	5	Lae	06	45	147	00
	0548	2	Wasu	06	00	147	15
	0554	2	Mumeng	07	00	146	35
	0550	1	Wau	07	20	146	45
	0610	1	Buin	06	50	155	45
	0650	1	Buin	"	"	"	"
	0845	1	Aropa	06	25	155	50
	1005	1	"	"	"	"	"
	1545	1	Buin	06	50	155	45
	1625	1	Buin	"	"	"	"
	1635	3	Lae	06	45	147	00
	2010	2	Buin	06	50	155	45
	2055	1	Buin	"	"	"	"
	2145	1	"	"	"	"	"
	2230	1	"	"	"	"	"
11th.	0125	4	Lindenhafen	06	10	150	35
12th.	0132	2-3	Kandrian	06	15	149	35
	0140	2	Walindi	05	25	150	05
14th.	0100	1	Rabaul	04	10	152	10
	2053	1	Mumeng	07	00	146	35
17th.	0628	1	Rabaul	04	10	152	10
	1835	2	Lae	06	45	147	00

Shocks reported felt in the Territory, November 1957 (cont):

Date	Time	Intensity	Locality	Lat.South		Long.East	
	(G.M.T)	(M.M.)		°	'	°	'
24th.	0440	1	Linga Linga	05	35	149	45
	0445	2-3	Kandrian	06	15	149	35
27th.	1151	1	Rabaul	04	10	152	10
29th.	1230	1	Madang	05	15	145	50

Station reported felt in the Territory, November 1957 (cont):
 Station: ...

Date	Time (G.M.T.)	Intensity (M.M.)	Locality	Lat., South	Long., East
20th	0440	1	Kinga Range	05 35	149 45
	0445	2-3	Kandarian	06 15	149 35
27th	1151	1	Rabaul	04 10	155 10
29th	1530	1	Madang	05 15	148 50



TERRITORY OF PAPUA AND NEW GUINEA

Vulcanological Observatory Rabaul

Seismological Bulletin - December, 1957.

Dec. 1st.	eP	Z	01	09	(30)	U.S.C.G.S. 47½°N, 153½°E. Kurile Is. H = 01 00 26 Mag. 6 (Matsushiro).
	eP	Z	01	18	05	U.S.C.G.S. 47½°N, 154°E. Kurile Is. H = 01 09 00 Mag. 6-6½ (Matsushiro).
	e(P)	Z	08	54	02	B.C.I.S. near 3°N, 120°E. Celebes Sea. H = 08 48.2 m.
	eP	Z	14	31	55	B.C.I.S. Mindanao. Rather discordant data.
2nd.	iP i! iS!	Z	02	31	36½ 38 32 02	Compression.
	iP i! i i iS!	Z	11	41	20 22½ 34½ 42 45½	
	iP! iS! i i i	Z	15	17 18	36½ 26½ 34½ 45½ 53½	Deep. Compression from East South East.
3rd.	iP i	Z	10	27	17 21	
	eP i	Z	15	21 22	(54) 06	
	iP	Z	21	03	00½	
4th.	The records for 4/12/57 are not available for study.					
	iP i	Z	00	32 34	50½ 22½	U.S.C.G.S. 0°, 125°E. Molucca Strait. H = 00 27 01.
	eP i i(PS) i i eL eP'P'	Z	03 04	48 58 03 03 08.0 17	43½ 51½ 03 53½ 44½ - 12½	B.C.I.S. 45½°N, 99°4E. Outer Mongolia. H = 03 37 44 Mag. 8.6 (Pas.)
	iP	Z	09	20	20½	U.S.C.G.S. 45½°N, 99°E. Outer Mongolia. After shock. H = 09 09 10.

December, 1957.

2.

Dec. 4th. eP Z 11 30 25½
cont..

U.S.C.G.S. 45½°N, 100½°E.
Outer Mongolia. Aftershock.
H = 11 19 30.

eP Z 13 31 02

U.S.C.G.S. 45°N, 101½°E.
Outer Mongolia.
H = 13 20 08.
Mag. 6.5 (Uppsala).

1P Z 19 45 06½

Compression.
Felt: Rabaul, Int. 1 (M.M.)
4°10'S, 152°10'E.

eP Z 22 27 57½

U.S.C.G.S. 45°N, 99½°E.
Outer Mongolia.
H = 22 16 59.

5th. e Z 01 07 56

eP Z 08 52 45½
i 52½

eP Z 09 03 18½
i 19½
i 33½

e(P) Z 18 00 30½
i 34
i 55½
iS 01 13½

eP Z 18 20 32

U.S.C.G.S. 45°N, 100°E.
Outer Mongolia.
H = 18 09 32
Mag. 5½-5½ (Matsushiro).

6th. eP Z 00 44 49½

e Z 03 58 20

(U.S.C.G.S. 45°N, 150½°E.
Kurile Is.
H = 03 49 33
h approx. = 60 kms.)

eP Z 08 45 (10)

U.S.C.G.S. 44½°N, 150½°E.
Kurile Is.
H = 08 36 21
Mag. 6.6 (Quetta),

1P Z 12 21 27½
i 35½

Felt: Awelkon, Int. 2 (M.M.)
5°40'S, 147°50'E.

e Z 17 45 (55)

7th. 1P Z 03 22 02

U.S.C.G.S. 6½°S, 123½°E.
Flores Sea.
H = 03 16 43
h approx. = 550 kms.
Mag. 6½-6½ (Matsushiro).

1P Z 07 57 46
i(S) 54½

1P Z 09 48 40

1P! Z 13 20 11
i! 31½
iS 59
i 21 11

December, 1957.

3.

Dec. 7th.
cont.,

eP Z 14 22 03
i 18

U.S.C.G.S. $43\frac{1}{2}^{\circ}\text{N}$, 100°E .
Outer Mongolia.
H = 14 11 15
Mag. $5\frac{1}{4}$ - $5\frac{1}{2}$ (Matsushiro).

e Z 15 02 $59\frac{1}{2}$

eP Z 15 46 30
i 50

B.C.I.S. New Britain region.
H = 15 45.4 m.

i Z 16 16 47

e Z 17 06 03

e Z 17 57 49

8th. eP Z 01 38 46

U.S.C.G.S. 13°S , 167°E .
New Hebrides Is.
H = 01 34 40.

eP Z 06 23 57

U.S.C.G.S. 45°N , $100\frac{1}{2}^{\circ}\text{E}$.
Outer Mongolia.
H = 06 13 02.

e(P) Z 12 24 08

U.S.C.G.S. 35°N , 142°E .
Honshu.
H = 12 16 30
Mag. 5.5 (Matsushiro).

iP Z 13 58 43
i 52

e(P) Z 14 49 06

U.S.C.G.S. $34\frac{1}{2}^{\circ}\text{N}$, 142°E .
Honshu.
H = 14 41 34.

e(P) Z 15 40 18

U.S.C.G.S. 45°N , 99°E .
Outer Mongolia.
H = 15 29 15
Mag. 5 (Ulan Bator).

iP Z 16 37 09

U.S.C.G.S. 45°N , 104°E .
Outer Mongolia.
H = 16 26 33
Mag. 5.5 (Ulan Bator).

iP Z 17 12 42
i 44

i! 46 $\frac{1}{2}$

i! 50

iS! 13 07

eP Z 17 57 06
i 58 11

eP Z 21 39 42

U.S.C.G.S. $44\frac{1}{2}^{\circ}\text{N}$, 100°E .
Outer Mongolia.
H = 21 28 45.

9th. eP Z 01 23 21

U.S.C.G.S. 18°N , $122\frac{1}{2}^{\circ}\text{E}$.
Luzon.
H = 01 16 09.

iP Z 02 45 04

eP Z 08 55 53
iS 56 16 $\frac{1}{2}$

December, 1957.

4.

Dec. 9th. eP Z 12 01 03
cont.. i 10½

(Felt: Awelkon, Int. 3 (M.M.)
5°40'S, 147°50'E)

eP Z 15 53 (50)

e Z 16 48 38

10th. eP Z 14 36 58½
i! 37 02
iS! Omori 57

U.S.C.G.S. 6°S, 154½°E.
Solomon Is. H = 14 35 57.
Mag. 7 (Matsushiro).

Felt: Aroa, Int. 3 (M.M.)
6°25'S, 155°50'E.

Felt: Buin, Int. 3 (M.M.)
6°50'S, 155°45'E.

Felt: Rabaul, Int. 2 (M.M.)
4°10'S, 152°10'E.

eP Z 14 57 (32)
i 35
e(S) 58 21
i! 59 44½

Felt: Karoola, Int. 2 (M.M.)
5°10'S, 154°35'E.

eP Z 15 53 58
i! 54 06
iS! 50

U.S.C.G.S. 5½°S, 155°E.
Solomon Is. H = 15 53 02.
Felt: Rabaul, Int. 1 (M.M.)
4°10'S, 152°10'E.

iP Z 16 42 54
iS! 43 40
e 45 36

(?Felt: Karoola, Int. 2 (M.M.)
5°10'S, 154°35'E.)

eP Z 17 24 29

eP Z 17 31 47
i 32 08
iS 35½

eP Z 18 08 (42)
iS 09 (43)

Felt: Buin, Int. 2 (M.M.)
6°50'S, 155°45'E.

eP Z 18 30 48
iS 31 02

Felt: Buin, Int. 1 (M.M.)
6°50'S, 155°45'E.

eP Z 19 20 18
i 23
iS! 21 10
i! 20
i! 29

(Felt: Buin, Int. 1 (M.M.)
6°50'S, 155°45'E.)

eP Z 21 10 27
iS 11 26

eP Z 21 20 23

eP Z 22 26 54
iS 27 48

11th. eP Z 00 35 14
eS 56

eP Z 01 11 07
eS 12 03

eP Z 02 48 37
e(S) 49 35
i(S)! 50 16½

Felt: Karoola, Int. 2 (M.M.)
5°10'S, 154°35'E.
Felt: Buin, Int. 1 (M.M.)
6°50'S, 155°45'E.

December, 1957.

5.

Dec. 11th.
cont..

eP	Z	03	02	31
eS			03	18
eP	Z	03	29	41
i				50
iS			30	40
e	Z	10	11	30
eL			13.8	-
eP	Z	13	24	08
i				09
i				17½
eP	Z	14	16	01
i				12½
eP	Z	14	42	(35)
eS			43	(31)
eP	Z	14	57	08
i				13½
i				34
eP	Z	15	01	16½
i				22
iS			02	08
e(P)	Z	18	18	10

Felt: Buin, Int. 1 (M.M.)
6°50'S, 155°45'E.

U.S.C.G.S. 6½°S, 155°E.
Solomon Is.
H = 03 28 44.

U.S.C.G.S. 30½°N, 142°E.
Honshu.
H = 18 11 07
Mag 5.6 (Matsushiro).

eP	Z	20	59	(06)
i				12
eS				55

eP	Z	22	43	40
eS			44	35

12th.

eP	Z	09	22	40
eS			23	33

iP	Z	16	45	27½
i				35½

eP	Z	18	42	24
e			43	26
i			44	15
e				23

U.S.C.G.S. 13½°S, 167°E.
New Hebrides Is.
H = 18 38 19
Mag. 6 (Matsushiro).

eP	Z	19	05	55
i			06	29½
iS				55

Felt: Karoola, Int. 1 (M.M.)
5°10'S, 154°35'E.

eP	Z	19	15	(12)
----	---	----	----	------

eP	Z	19	22	46
eS			23	35

eP	Z	21	08	30
i				34
iS				59½

(Felt: Karoola, Int. 1 (M.M.)
5°10'S, 154°35'E).

eP	Z	22	19	45
iS			20	38

December, 1957.

6.

Dec. 13th.	iPKP Z	01	51	05	U.S.C.G.S. 7°N, 76°W.
	i			21½	Colombia.
	ePKS		54	27	H = 01 31 57
	e			33	h approx. = 100 kms.
	e		56	35	Mag. 6¾ (Pas.)
	e(PcSPKP)		02	32	
	ePP Z	02	03	25	B.C.I.S. 34°6N, 47°8E.
	e		04	56	Iran.
	e		15	14	H = 01 44 59
	e		19	10	Mag. 7¼ (Pas.)
	eP Z	02	28	36½	U.S.C.G.S. 6°S, 155½°E.
	i			47	Solomon Is.
	iS		29	30½	H = 02 27 45
	iP Z	02	33	32½	
	i			41	
	iS		34	23½	
	i!			27½	
	e(P) Z	03	08	(22)	(See Madang readings).
	e		09	23	
	e(P) Z	06	45	(51)	
	eP Z	13	02	(00)	
	eS			(53)	
	iP Z	13	29	56½	
	i!			57	
	iS!		30	08	
	eP Z	20	05	00	U.S.C.G.S. 61°S, 155½°E.
	eS			55½	Solomon Is. H = 20 03 58.
	i!			58½	<u>Felt:</u> Karoola, Int. 2 (M.M.)
					5°10'S, 154°35'E.
	eP Z	20	37	00	U.S.C.G.S. 52½°N, 170°W.
	e		40	29	Fox Is. H = 20 26 22.
					Mag. 6½ (Matsushiro).
	eP Z	22	09	45	
	eS		10	(37)	
14th.	e Z	05	41	(31)	
	eP Z	08	41	37	
	i(S)		42	34	
	i(P) Z	16	58	26	(See Madang readings).
	e(P) Z	19	27	(34)	
	e		29	06	
	e		30	27	
	iP Z	19	42	09.5	
	iS!			35.5	
	e(P) Z	21	25	(55)	
	i		26	01½	
	i(P) Z	21	26	55	
	i(P) Z	21	28	07	(See Madang readings).

December, 1957.

7.

Dec. 15th. e Z 00 30.5 -

eP Z 01 50 16
i! 16½

Dilatation.

eP Z 07 24 00

e Z 08 56 -
i 58 53

iP Z 10 06 52½
iS 07 02

iP! Z 11 14 14½

Dilatation.

Felt: Rabaul, Int. 1 (M.M.)
4°10'S, 152°10'E.

iP Z 11 19 35½
i(S) 54
e 20 08

eP Z 12 29 27
i! 31
eS 53½

e(P) Z 15 27 20

eP Z 17 22 14

Dilatation.

eP Z 17 42 24

iP Z 18 20 55
i 21 04
eS 07

iP Z 20 33 39
i(S) 56

Deep. Small.

16th. eP Z 04 50 10
e(S) (50)

eP Z 08 43 42

eP Z 12 13 (35)

eP Z 12 31 06
eS 32 (05)

eP Z 13 37 11
iS 38 03

eP Z 14 20 00
iS 49

e(P) Z 15 10 21

e(P) Z 17 40 32

eP Z 18 49 48
eS 50 38

e(PKP) Z 19 22 02

(B.C.I.S. 28¾°S, 66°W.
Argentina. H = 19 02 49)

i Z 22 09 13

December, 1957.

8.

Dec. 17th. iP! Z 00 58 26

Dilatation.
Felt: Rabaul, Int. 1 (M.M.)
4°10'S, 152°10'E.

eP Z 04 16 31
i! 31½

Dilatation.
Felt: Rabaul, Int. 1 (M.M.)
4°10'S, 152°10'E

eP Z 05 20 05
ePPP 23 44

U.S.C.G.S. 53½°N, 162°E.
Kamchatka. H = 05 10 11.
Mag. 6.8 (Quetta).

iP Z 07 15 43½
iS 52½

iP Z 08 31 10½

iP Z 13 54 05½
i! 13½
iS 57 07½
i (14)
i 19½
i! 24
e(ScS) 14 06.1 -

U.S.C.G.S. 12½°S, 166½°E.
Santa Cruz Is.
H = 13 50 12.
Mag. 7¼ (Pas.)

e Z 14 29 (21)

e Z 14 38 06

e Z 14 42 08

eP Z 15 12 (24)
iS 13 (09½)

eP Z 17 14 18
iS 27½

e Z 17 17.5 -

18th. e(PKP)Z 02 31 (12)

(U.S.C.G.S. 11°N, 63½°W.
Venezuela. H = 02 11 40).

iP Z 19 40 39½
i 48½

eP Z 20 44 (45)
eS 45 (29)

iP! Z 21 06 19
iS! 31½

Dilatation to E.N.E.

19th. eP Z 01 13 11
i 17½
eS 14 02
i! 18

eP Z 05 25 37
i 43
iS! 26 27½

eP Z 10 11 (30)
i 33
iS 12 18
i 37

iP Z 11 30 50
i 31 00

December, 1957.

9.

Dec. 19th. 1P Z 14 36 03
 cont.. i 11
 eS (31)

1P Z 15 04 59
 e(S) 05 57

Deep.

eP Z 19 08 13

U.S.C.G.S. 30¹⁰N, 142⁰⁰E.
 Honshu. H = 19 01 08.

eP Z 20 32 (42)

eP Z 22 09 27
 iS! 10 03¹/₂

eP Z 22 54 43
 i 45
 i 52¹/₂

iP Z 23 17 06
 iS 26¹/₂

Dilatation.

Felt: Rabaul, Int. 1 (M.M.)
 4⁰10'S, 152⁰10'E.

20th. e Z 10 09 55

eP Z 12 17 44
 eS 18 39¹/₂
 i! 44

eP Z 14 59 15¹/₂
 i 16

eP Z 17 11 49

eP Z 18 14 06
 i 13
 i 54¹/₂

eP Z 18 20 17

eP Z 18 26 09
 e 27 12
 e 22

1P Z 22 51 01
 i 10

21st. No records.

22nd. 1P Z 13 15 05¹/₂
 i 11
 iS 21¹/₂
 i 26

eP Z 14 14 13
 i(S) 25¹/₂

1P Z 18 25 48¹/₂
 iS 55¹/₂

1P Z 19 21 22¹/₂
 iS 27¹/₂

1P Z 19 29 39¹/₂
 i 42¹/₂
 iS 43¹/₂

December, 1977.

10.

Dec. 22nd.

iP

Z

19

35

40 $\frac{1}{2}$

cont..

iS

43 $\frac{1}{2}$

iP!

Z

19

36

10 $\frac{1}{2}$

iS!

15 $\frac{1}{2}$

Compression.

eP

Z

19

40

55 $\frac{1}{2}$

iS

41

01

23rd.

e

Z

01

43

09

eP

Z

02

51

25

iS

55

i

Z

03

53

22

eP

Z

04

44

55

i!

57

eS

45

26

Deep?

eP

Z

05

03

(36)

ePKP

Z

12

53

51

B.C.I.S. 35 $\frac{3}{4}$ ⁰N, 35⁰W.

Atlantic Ridge.

H = 12 34 06.

Mag. 6-6 $\frac{1}{4}$ (Matsushiro).

e(P)

Z

19

36

20

B.C.I.S. Luzon.

H = 19 29.4 m.

e(P)

Z

19

39

48

24th.

iP

Z

00

58

19

iP

Z

02

55

29

iS

37

Compression. Deep?

iP

Z

06

45

09

Dilatation. Deep.

iP

Z

21

54

40

iS

55

00

25th.

iP

Z

01

02

08

i

17

iP

Z

01

58

21 $\frac{1}{2}$

iS!

45

Dilatation. Deep.

eP

Z

02

19

14

U.S.C.G.S. 53 $\frac{1}{2}$ ⁰N, 162⁰E.

Kamchatka. H = 02 09 20.

Mag. 6 (Matsushiro).

iP

Z

03

10

04 $\frac{1}{2}$

i

13

iS

18

iP

Z

06

44

26 $\frac{1}{2}$

i

38

i(S)

40 $\frac{1}{2}$

iP

Z

13

52

14 $\frac{1}{2}$

U.S.C.G.S. 55⁰N, 161⁰E.

Kamchatka. H = 13 42 12.

ePKP

Z

16

45

37 $\frac{1}{2}$

i

40 $\frac{3}{4}$

i

46

08 $\frac{3}{4}$

i

38 $\frac{1}{4}$

i

58 $\frac{3}{4}$

U.S.C.G.S. 10 $\frac{1}{2}$ ⁰N, 62 $\frac{1}{2}$ ⁰W.

Venezuela.

H = 16 26 01.

Mag. 6 $\frac{1}{4}$ (Matsushiro).

					11.
Dec. 25th.	iP	Z	17	41	59 $\frac{1}{2}$
cont..	i!			42	05
	e(S)				(18)
26th.	iP	Z	07	57	39
	i(S)				48
	i				58
	eP	Z	12	16	42
	i				44
	i!				48
	i!				49
	i!		17		11
	e		33		24
	iP	Z	17	28	05
	i				14
	iP	Z	19	30	04$\frac{1}{2}$
	iS!				23
27th.	e	Z	02	11	37
	iP!	Z	10	54	37
	e	Z	12	16	40
	iP	Z	15	05	54
	i			06	03
	i				15
	i				29
	eP	Z	15	10	41
	e(P)	Z	15	47	05
	i				13 $\frac{1}{2}$
	iP	Z	16	14	03
	iS				27
	e(P)	Z	16	29	29
	iP	Z	16	52	35
	i				45
	i				49
	i				58
	iP!	Z	18	16	51
	iS!			17	11 $\frac{1}{2}$
	eP	Z	21	18	43
	i			19	45
	i				54
28th.	eP	Z	02	08	47
	i(P)	Z	04	47	01
	e	Z	13	36	(32)
	ePKP	Z	14	56	12
	eP	Z	19	08	35
	e			10	38
	e(S)			14	16

Dilatation.

U.S.C.G.S. 32 $\frac{1}{2}$ °S, 178°W.
Kermadec Is.
H = 12 09 11
Mag. 5 $\frac{3}{4}$ (Matsushiro).

Dilatation.

Compression from S.S.E.

Dilatation.

U.S.C.G.S. 53 $\frac{1}{2}$ °N, 162°E.
Kamchatka. H = 15 00 45.

Dilatation to S.W.

Felt: Awelkon, Int. 2 (M.M.)
5°40'S, 147°50'E.

B.C.I.S. 11°S, 163°E.
Solomon Is. H = 02 05 43.

U.S.C.G.S. 18°S, 64 $\frac{1}{2}$ °W.
Bolivia. H = 14 36 40.
Mag. 6 (Kew).

U.S.C.G.S. 16°S, 172°W.
Tonga Is.
H = 19 01 22.

December, 1957.

12.

Dec. 29th.	eP	Z	00	16	56	
	i				59 $\frac{1}{2}$	
	eS			17	(30)	
	i!				33	
	eP	Z	02	29	18	
	iS				35	
	iP	Z	06	01	52	Dilatation.
	i(S)			02	01	
	iP!	Z	09	32	16 $\frac{1}{2}$	Compression.
	i(S)				(24)	
	eP	Z	14	16	02	U.S.C.G.S. 13 $^{\circ}$ N, 144 $^{\circ}$ E.
						Mariana Is. H = 14 11 40.
	iP	Z	10	39	01	Compression.
	iS				10	
	ePKP	Z	13	48	31	U.S.C.G.S. 10 $\frac{1}{2}$ $^{\circ}$ N, 62 $^{\circ}$ W.
						Venezuela. H = 13 28 51.
	iP	Z	14	05	56	Compression.
						U.S.C.G.S. 19 $^{\circ}$ N, 120 $\frac{1}{2}$ $^{\circ}$ E.
						Luzon. H = 13 58 26.
						Mag. 5 $\frac{1}{2}$ -5 $\frac{3}{4}$ (Matsushiro).
	iP!	Z	23	41	10	Compression from N.N.E.
	iS				20	
	iP	Z	03	29	00	
	i				07 $\frac{1}{2}$	
	e(P)	Z	12	17	33	
31st.	iP	Z	14	36	14	Compression.
	eS			42	35	U.S.C.G.S. 45 $^{\circ}$ S, 165 $\frac{1}{2}$ $^{\circ}$ E.
						New Zealand. H = 14 28 15.
						Mag. 6.6 (Wellington).
	iP	Z	17	08	56	Compression.
	i			09	04 $\frac{1}{2}$	
	iP	Z	17	49	54 $\frac{1}{2}$	
	i			50	04 $\frac{1}{2}$	
	eP	Z	21	26	35	U.S.C.G.S. 45 $^{\circ}$ S, 96 $\frac{1}{2}$ $^{\circ}$ E.
						Indian Ocean. H = 21 16 03.
	eP	Z	22	04	33	
	eP	Z	22	38	21 $\frac{1}{2}$	
	i				30	
	iS				52 $\frac{1}{2}$	
	iP	Z	22	40	50 $\frac{1}{2}$	
	i			41	00 $\frac{1}{2}$	
	iS				05 $\frac{1}{2}$	

TERRITORY OF PAPUA AND NEW GUINEA

The following earthquakes were reported felt in the Territory during December 1957.

Date	Time (G.M.T.)	Intensity (Modified Mercalli)	Locality	Lat. °	South '	Long. °	East '
Dec. 2nd	2244	1-2	Lae	06	45	147	00
	2245	1	Awelkon	05	40	147	50
Dec. 4th	1945	1	Rabaul	04	10	152	10
Dec. 5th	2116	1	Awelkon	05	40	147	50
Dec. 6th	0340	2	Karkar	04	40	146	00
	1221	2	Awelkon	05	40	147	50
Dec. 7th	1320	1	Rabaul	04	10	152	10
Dec. 9th	(1200)	3	Awelkon	05	40	147	50
Dec. 10th	(0245)	(2-3)	(Warangoi)	04	30	152	20
	1435	3	Aropa	06	25	155	50
	1437	2	Rabaul	04	10	152	10
	1443	3	Buin	06	50	155	45
	1445	2	Karoola	05	10	154	35
	1553	1	Rabaul	04	10	152	10
	(1645)	2	Karoola)	05	10	154	35
	(1810)	2	Buin	06	50	155	45
	1830	1	Buin	06	50	155	45
	(1912)	1	Buin	06	50	155	45
Dec. 11th	(0223)	1	Buin	06	50	155	45
	?	2	Karoola	05	10	154	35
	0303	1	Buin	06	50	155	45
Dec. 12th	1905	1	Karoola	05	10	154	35
	(2045)	1	Karoola	05	10	154	35
Dec. 13th	2005	2	Karoola	05	10	154	35
Dec. 15th	1114	1	Rabaul	04	10	152	10
Dec. 17th	0058	1	Rabaul	04	10	152	10
	0417	1	Rabaul	04	10	152	10
Dec. 18th	1114	2	Awelkon	05	40	147	50
Dec. 19th	2317	1	Rabaul	04	10	152	10

2.

Date	Time (G.M.T.)	Intensity (Modified Mercalli)	Locality	Lat. o	South '	Long. o	East '
Dec. 21st	0000	2	Vanimo	02	40	141	20
Dec. 22nd	0330	1	Vanimo	02	40	141	20
	0745	4	Vanimo	02	40	141	20
Dec. 27th	2118	2	Awelkon	05	40	147	50

Since the records for 28th September 1957 and 4th December 1957 have now been returned to the Observatory, the following additions and corrections should be made to the readings already listed.

28th September 1957

Additional Phase e(ScS) 00 43 20 U.S.C.G.S. 30 $\frac{1}{2}$ ^oN, 137 $\frac{1}{2}$ ^oE.
Honshu. H = 00 27 31.
h approx = 500 kms. Mag. 6 $\frac{3}{4}$ (Pas.)

iP Z 06 40 28 $\frac{1}{2}$
i 34
i 40 $\frac{1}{2}$
i(S)! 59

Additional Phases i 14 26 17 $\frac{1}{2}$ U.S.C.G.S. 20 $\frac{1}{2}$ ^oS, 178^oW.
iS 30 17 Fiji Is. H = 14 20 00.
e 53 $\frac{1}{2}$ h approx = 650 kms.
eSS 34 28 Mag. 7 $\frac{1}{2}$ (Pas.)
i 35 25

Additional Phase e 15 07 58 U.S.C.G.S. 20 $\frac{1}{2}$ ^oS, 178 $\frac{1}{2}$ ^oW.
Fiji Is. H = 14 44 02.
Aftershock. h approx = 600 kms.

4th December 1957

Additional Phases i(PcP) 00 36 09 U.S.C.G.S. 0^o, 125^oE.
eS 37 25 $\frac{1}{2}$ Molucca Strait. H = 00 27 01.

Additional Phase i(SS) 04 02 32 B.C.I.S. 45 $\frac{1}{4}$ ^oN, 99^o E.
Outer Mongolia. H = 03 37 44.
Mag. 8.6 (Pas.)

iP Z 04 39 50 $\frac{1}{2}$

eP Z 04 45 40

e(P) Z 08 04 09 B.C.I.S. Outer Mongolia.
Aftershock. H = 07 53 05.

iP Z 09 40 44 $\frac{1}{2}$
i 53 $\frac{1}{2}$
i 41 02 $\frac{1}{2}$

iP Z 15 47 19 Dilatation. Local.
iS 38
i! 40

eP Z 23 52 58 U.S.C.G.S. 45^oN, 99^oE.
Outer Mongolia. Aftershock.
H = 23 41 57. Mag. 5 (Ulan Bator).

ACKNOWLEDGEMENT

The Vulcanologist and Staff of the Observatory, Rabaul, take this opportunity of acknowledging with thanks receipt of the many publications, monthly bulletins and provisional bulletins which Stations, throughout the world, have regularly sent to us.

J.H. Latter
Vulcanologist

20th November, 1961.



MADANG

All Copied

29.4.63

18/17

TERRITORY OF PAPUA AND NEW GUINEA

Vulcanological Observatory Rabaul

JULY - DEC 1957

SUPPLEMENTARY READINGS FROM MADANG 1957-58

No. 968

<u>Addition</u>	(05°14'S 145°48'E)	Recorded on Vertical Willmore Seismograph.
July 3rd. (eP (i	06 09 12½ 13½)	U.S.C.G.S. 24°S, 180°. Fiji Is. H = 06 02 37 h approx. = 550 kms.
July 4th. (iP (iS	02 34 11½ 33)	
iP eS	15 17 31 59½	
e	15 56 14	B.C.I.S. Solomon Islands region. H = 15 53.8 m.
July 5th. e e i	17 34 02½ 17½ 36 09	
July 7th. eP	16 13 51.8	U.S.C.G.S. 6½°S, 156°E. Solomon Is. H = 16 11 15 Mag. 6¼ (Pas.)
July 8th. iP iS	05 27 22 56	
July 9th. (iP (iS	00 58 22) 49½)	
(iP (iS	03 39 40½ 40 59½)	
(e	10 05 56)	U.S.C.G.S. 6°S, 104°E. Sumatra. H = 09 58 09 h approx. = 60 kms. Mag. 6½ (Matsushiro)
July 12th. eP	20 55 34½	Foreshock.
iP i eL	20 57 15½ 43½ 21 01.3 -	U.S.C.G.S. 3°S, 148½°E. Bismarck Sea. H = 20 56 18 Mag. 6¼ (Matsushiro)
iP i i i i eL	21 59 40 43½ 54 (22) 00 08 01 00½ 04.6 -	U.S.C.G.S. 3°S, 148½°E. Bismarck Sea. Aftershock. H = 21 58 45 Mag. 6 (Matsushiro)
July 14th. eP i i	06 31 33 24 32 12½	U.S.C.G.S. 27°S, 178°W. Kermadec Is. region. H = 06 23 52 h approx. = 150 kms. Mag. 7½ (Rome)

1957.

2.

July 14th.
cont..

1P 08 18 42
i 43

U.S.C.G.S. 30°S, 177°W.
Kermadec Is.
H = 08 10 45
Mag. 7 (Berk.)

1(P) 09 50 19

U.S.C.G.S. 20°S, 174½°W.
Tonga Is.
H = 09 42 27
Mag. 6½ (Matsushiro)

July 15th.

1P 14 13 38½
iS 14 08½

1P 20 33 38
eS 45

July 16th.

1P 03 41 53½
iS 42 22½

1P 04 22 52½
iS 59½

1P 10 05 16½
iS 36½

July 17th.

1P 08 05 53½
iS 06 05½

eP 11 15 02½
i 04½

U.S.C.G.S. 11°S, 167°E.
Santa Cruz Is.
H = 11 10 10
h = 100 kms.
Mag. 6½ (Berk.)

e 12 28 21½
i 29 05

U.S.C.G.S. 2°S, 137°E.
H = 12 26 06

e(P) 12 30 03½

1P 15 17 53½
iS 18 03.7

i(P) 21 20 09
(iS 21 20)

July 18th.

1P! 11 11 08½
i 13 04
i 20½

U.S.C.G.S. 5°S, 146°E. Near
the N. coast of New Guinea.
H = 11 10 58

Felt: Karkar, Kumbug and Madang
(see Rabaul Bulletin)

1P! 11 18 57
iS 19 02½

1P 11 28 46
iS 52

1P 12 05 44

1P 12 58 28½

1P 13 23 17
iS 23

1P 13 38 48
iS 54

1P 14 02 05½

1957.

3.

July 19th.

iP 20 27 12
i 44
i 28 21
i 58

U.S.C.G.S. 3°S , 142°E . North
of New Guinea. Foreshock.
H = 20 26 03
Felt: (see Rabaul Bulletin)

iP 21 37 $54\frac{1}{2}$
i! 38 04
i 12
i! $53\frac{1}{2}$
i 39 $30\frac{1}{2}$

U.S.C.G.S. $3\frac{1}{2}^{\circ}\text{S}$, 142°E .
North of New Guinea.
H = 21 36 46
Felt: (see Rabaul Bulletin)

July 21st.

iP 00 23 56
eP 07 03 06

U.S.C.G.S. $4\frac{1}{2}^{\circ}\text{S}$, 153°E .
New Ireland.
H = 07 00 10
Mag. $5\frac{3}{4}$ -6 (Matsushiro)
Felt: (see Rabaul Bulletin)

iP 08 13 45
i(S) 14 $13\frac{1}{2}$

eP 18 33 29
i 34 09

July 22nd.

iP 01 04 $50\frac{1}{2}$
iS 59

iP 06 25 02
i $11\frac{1}{2}$
i 19

U.S.C.G.S. $33\frac{1}{2}^{\circ}\text{S}$, 178°W .
Kermadec Is. region.
H = 06 16 52
Mag. $6\frac{1}{4}$ - $6\frac{1}{2}$ (Matsushiro)

eP 06 30 $00\frac{1}{2}$
i $08\frac{1}{2}$
i 17

U.S.C.G.S. 34°S , $177\frac{1}{2}^{\circ}\text{W}$.
Kermadec Is. region.
H = 06 21 50. Aftershock.

July 23rd.

iP 05 38 06
iS 19

e 13 36 $55\frac{1}{2}$

U.S.C.G.S. Kermadec Is. region.
H = 13 30 17
h approx. = 600 kms.

July 24th.

i(P) 02 07 $50\frac{1}{2}$

eP 05 53 38

e 10 48 07

eP 18 09 22
i(S) 45
i 10 07

July 25th.

eP 14 11 17
i 36
e(S) 40
i 14 02

Felt: Lae (see Rabaul Bulletin)

July 26th.

eP 03 55 06
i 06.8

e 05 12 (28)

e 07 04 50

iP 17 37 35
iS 38 03

1957.

4.

July 27th. eP 18 44 29 U.S.C.G.S. 6 $\frac{1}{2}$ °S, 151 $\frac{1}{2}$ °E.
i 45 10 New Britain region.
i 15 H = 18 43 01

iP 20 31 29
iS 47

Aug. 4th. eP 00 39 43 $\frac{1}{2}$ U.S.C.G.S. 3 $\frac{1}{2}$ °S, 145°E. Near
i 44 the N. coast of New Guinea.
i(S) 40 07 $\frac{1}{2}$ H = 00 39 12
i 43 $\frac{1}{2}$ Mag. 6 $\frac{1}{2}$ -6 $\frac{3}{4}$ (Matsushiro)
Felt: (see Rabaul Bulletin)

Aug. 14th. iP 14 (10 48)
i (11 04 $\frac{1}{2}$)
i (13)
i (21)
Times doubtful.

iP 15 (27 24)
eS (53)
Times doubtful.

Aug. 15th. iP 03 38 18
i(S) 24

iP 20 47 35 U.S.C.G.S. 4 $\frac{1}{2}$ °S, 155°E.
i(pP) 48 00 $\frac{1}{2}$ Solomon Is. region.
e(sP) 17 H = 20 45 20
e(pPP) 46 h approx. = 500 kms.
i(S) 49 24 $\frac{1}{2}$

Aug. 16th. iP 00 18 06 $\frac{1}{2}$
eS 17 $\frac{1}{2}$

eP 03 28 16 U.S.C.G.S. 5°S, 154°E.
New Britain region.
H = 03 26 05
Felt: (see Rabaul Bulletin)

iP 05 37 49.9
i(S) 38 07.5

eP 11 59 26 $\frac{1}{2}$ U.S.C.G.S. 5°S, 155°E.
Solomon Is.
H = 11 57 16
Felt: (see Rabaul Bulletin)

Aug. 17th. eP 02 23 38 U.S.C.G.S. 4°S, 151°E.
New Britain.
H = 02 21 47
Felt: (see Rabaul Bulletin)

Aug. 18th. eP 00 (12 or
13) 25 $\frac{1}{2}$
iS 54 $\frac{1}{2}$
iP 02 21 07.7
iS 23

iP 11 02 55 $\frac{1}{2}$
i 57
e(S) 03 24

e 21 52 12 $\frac{1}{2}$ U.S.C.G.S. 50°N, 157°E.
N. of Kurile Is.
H = 21 42 30
Mag. 6.6 (Tacubaya)

1957,

5.

Aug. 19th.	eP i	00	12 13	57.3 10.5	U.S.C.G.S. 4 ¹ / ₂ °S, 153°E. New Britain region. H = 00 11 13 Felt: (see Rabaul Bulletin)
	e	02	43	27 ¹ / ₂	U.S.C.G.S. New Britain region. H = 02 41 14 Felt: (see Rabaul Bulletin)
✓	e	11	38	33 ¹ / ₂	U.S.C.G.S. 10°S, 161°E. Solomon Is. H = 11 34 36 Mag. 6 ¹ / ₂ (Pas.)
	iP eS	11	54 55	32 ¹ / ₂ 12 ¹ / ₂	
Aug. 20th.	iP iS	00	30	10 ¹ / ₂ 48 ¹ / ₂	
✓	e	06	31	00	U.S.C.G.S. 10°S, 161°E. Solomon Is. Foreshock H = 06 27 07 Mag. 6 ³ / ₄ (Matsushiro)
	e	12	05	44 ¹ / ₂	U.S.C.G.S. 10°S, 161°E. Solomon Is. H = 12 01 54 Mag. 6 ³ / ₄ (Matsushiro)
	e i i	21	23 24	37 56 ¹ / ₂ 05 ¹ / ₂	
Aug. 21st.	iP i iS	04	(33 (57) (34	55) (57) 23 ¹ / ₂)	
	iP	10	(21	43).	Times doubtful.
Sept. 21st.	e	14	(39	20)	
	e	14	(56	20)	
	iP iS	17	(26 (55)	33 ¹ / ₂ (55)	Times uncertain.
Sept. 24th.	eP i	08	26	04 ¹ / ₂ 16	U.S.C.G.S. 5 ¹ / ₂ °N, 127 ¹ / ₂ °E. Mindanao. H = 08 21 05 Mag. 7 ³ / ₄ (Pas.)
	iP iS	20	11	40 ¹ / ₂ 49 ¹ / ₂	
	eP i eS i	23	26 27	34 34 ¹ / ₂ 20 28 ¹ / ₂	
	iP iS	23	47 48	52 ¹ / ₂ 04	
Sept. 25th.	eP	02	(19	36) (42)	Times uncertain.

1957.

6.

Sept. 25th. e(P) 06 (58 36) B.C.I.S. Discordant data.
cont.. e (59 32) (Several shocks)
e (18)

1P 09 (39 57) B.C.I.S. New Hanover region.
i (59 $\frac{1}{2}$) H = 09 38.9 m.
eL (43 -)

1P 14 (09 56) B.C.I.S. 2°S, 140°E. Near
i (12 59 $\frac{1}{2}$) the N. Coast of New Guinea.
H = 14 08.0 m.

✓ e 16 (41 32 $\frac{1}{2}$) (U.S.C.G.S. Nr. the S.E. Coast
of Mindanao.
H = 16 36 37
Mag. 6 (Uppsala))

Times uncertain.

Sept. 26th. e 18 51 44 $\frac{1}{2}$ U.S.C.G.S. 6°N, 126 $\frac{1}{2}$ °E.
Mindanao.
H = 18 46 41
Mag. 6.0 (Uppsala)

1P 19 05 47 $\frac{1}{2}$
e(S) 06 30 $\frac{1}{2}$

1P 20 28 12 $\frac{1}{2}$
eS 39 $\frac{1}{2}$

Sept. 27th. eL 04 (07 50) Probably Moluccas. Times inaccurate.
eL 04 (18 12) " " " "
e 05 (56 16) " " " "
1P 14 (50 50 $\frac{1}{2}$)
iS (51 15 $\frac{1}{2}$)
1P 17 (23 40.3)
iS (49 $\frac{1}{2}$)

Times uncertain.

Sept. 28th. e 04 (14 00) U.S.C.G.S. 3°S, 135 $\frac{1}{2}$ °E. Near
the N. Coast of New Guinea.
H = 04 11 23

1P 12 (54 13 $\frac{1}{2}$)
eS (49 $\frac{1}{2}$)

✓ eP 14 (26 32) U.S.C.G.S. 20 $\frac{1}{2}$ °S, 178°W.
i! (32 $\frac{1}{2}$) Fiji Is.
i (28 36) H = 14 20 00
i (31 48) h. approx. = 650 kms.
Mag. 7.6 (Uppsala)

✓ e(P) 14 (50 36) U.S.C.G.S. 20 $\frac{1}{2}$ °S, 178 $\frac{1}{2}$ °W.
Fiji Is. Aftershock.
H = 14 44 02
h approx. = 600 kms.

1P 17 (35 48 $\frac{1}{2}$)
iS (54 $\frac{1}{2}$)

Times uncertain.

Sept. 29th. 1P 00 14 15
1P 03 56 48
iS 59

1957.

7.

Sept. 29th.
cont..

eP 06 42 22

U.S.C.G.S. 0° , 124°E.
Celebes.
H = 06 37 33
h approx. = 200 kms.

eP 08 19 50
i! 50½
i 02
e 24 50
e 59½

U.S.C.G.S. 25°S, 178½°E.
S. of Fiji Is.
H = 08 13 22
h approx. = 600 kms.
Mag. 6½ (Berk.)

Sept. 30th.

1P 07 29 56
iS 30 47

1P 15 09 45½
iS 10 08

1P 22 44 25½

Oct. 10th.

eP 10 57 10

eP 11 01 30

eP 11 09 33½
i 47

eP 11 43 16

1P 13 56 47

1P 14 21 36
eL 24.7 -

B.C.I.S. 3½°S, 146°E. Near
the N.E. Coast of New Guinea.
H = 14 20 55

1P! 16 49 17½
Times uncertain.

Oct. 12th.

1P 22 15 58½

1P 22 38 50
Times uncertain.

Oct. 13th.

1P 12 20 09
eS 36

Oct. 14th.

eP 00 29 07½
i 11
eS 37½

1P 04 05 24
iS 34

Oct. 16th.

1P 22 23 32½

1P 22 29 39

Oct. 17th.

1P 00 50 08

eP 15 17 34½

Oct. 18th.

1P 18 59 59

B.C.I.S. 2½°S, 146½°E. Nr. the
N.E. Coast of New Guinea.
H = 18 59 15

Oct. 19th.

1P 18 36 05½

U.S.C.G.S. 23½°N, 122°E.
Formosa.
H = 18 28 50
Mag. 7 (Moscow)

1957.

8.

Oct. 19th. iP 19 51 02 $\frac{1}{2}$
cont..

iP 21 31 52

Oct. 20th. iP 01 42 39

Oct. 21st. iP 02 36 01
iS 20

Oct. 23rd. iP 15 20 17
iS 37

Oct. 24th. iP 00 22 57

U.S.C.G.S. 14 $\frac{1}{2}$ $^{\circ}$ S, 168 $^{\circ}$ E.
New Hebrides Is.
H = 00 17 37.
Mag. 6 $\frac{1}{2}$ (Pas.)

eP 09 14 08
i 09 $\frac{1}{2}$

(U.S.C.G.S. 20 $\frac{1}{2}$ $^{\circ}$ S, 179 $^{\circ}$ W.
Fiji Is.
H = 09 07 30.
h approx. = 550 kms.)

iP 14 24 35 $\frac{1}{2}$
i(S) 47

iP 22 43 58
i(S) 44 10
i 39

Oct. 25th. iP 14 49 11

Oct. 26th. iP 01 08 50
i(S) 09 21

iP 03 46 21 $\frac{1}{2}$

iP 08 32 48

U.S.C.G.S. 20 $\frac{1}{2}$ $^{\circ}$ S, 178 $^{\circ}$ W.
Fiji Is.
H = 08 26 12.
h approx. = 600 kms.
Mag. 6-6 $\frac{1}{4}$ (Pas.)

Oct. 27th. eP 00 51 03 $\frac{1}{2}$

iP 07 28 39 $\frac{1}{2}$
i(S) 29 04 $\frac{1}{2}$
i 50

iP 22 12 12
iS 13 07

Oct. 28th. iP 13 58 25 $\frac{1}{2}$
iS 50

eP 17 14 58

Nov. 2nd. eP approx. 18 45 -

U.S.C.G.S. 13 $^{\circ}$ S, 166 $\frac{1}{2}$ $^{\circ}$ E.
New Hebrides Is.
H = 18 30 24.
Mag. 6.4 (Kiruna)

Times very uncertain.

Nov. 3rd. iP approx. 07 13 -

iP approx. 07 34 -
S-P approx. = 12 seconds

iP approx. 08 32 -
S-P approx. = 13 seconds

1957.

9.

Nov. 3rd. eP approx. 10 27 -
cont.. i! P+5 $\frac{1}{2}$ secs
iS! P+3 $\frac{1}{2}$ secs

U.S.C.G.S. 6°S, 147°E. Near
the N.E. coast of New Guinea.
H = 10 24 51.
Mag. 5 $\frac{3}{4}$ (Matsushiro).
Felt: (See Rabaul Bulletin).

eP approx. 11 17 -
i! P+5 secs
iS! P+3 $\frac{1}{2}$ secs

U.S.C.G.S. 6 $\frac{1}{2}$ °S, 147°E. Near
the N.E. coast of New Guinea.
H = 11 14 30
Mag. 5 $\frac{1}{4}$ -5 $\frac{1}{2}$ (Matsushiro).
Felt: (See Rabaul Bulletin).

eP approx. 15 52 -
i(S) P+about 30 secs
Times very uncertain.

Nov. 5th. iP 11 17 42 $\frac{1}{4}$
i 46 $\frac{1}{2}$
i(S) 18 12 $\frac{1}{2}$

iP 11 22 53 $\frac{1}{2}$
i 57 $\frac{1}{2}$
i(S) 23 26

U.S.C.G.S. 6°S, 150°E.
New Britain.
H = 11 18 43
Felt: (See Rabaul Bulletin).

iP 18 19 01 $\frac{1}{2}$
i 06
i(S) 32

Nov. 10th. eP approx. 02 42 -

U.S.C.G.S. 7°S, 155 $\frac{1}{2}$ °E.
Solomon Is.
H = 02 36 21.
Mag. 6.5 (Quetta).
Felt: (See Rabaul Bulletin).

eP approx. 03 50 -

U.S.C.G.S. 7 $\frac{1}{2}$ °S, 155 $\frac{1}{2}$ °E.
Solomon Is.
H = 03 43 49.
Mag. 6.2 (Quetta).
Felt: (See Rabaul Bulletin).

eP approx. 05 53 -
i P+ 2 secs
i P+ 4 secs
iS P+33 secs

U.S.C.G.S. 6 $\frac{1}{2}$ °S, 147°E.

iP approx. 11 24 -
iS P+ 7 secs

iP approx. 12 29 -
iS P+25 secs

iP approx. 16 41 -

iP approx. 19 36 -
Times very uncertain.

Nov. 11th. eP approx. 19 30 -
Times very uncertain.

Nov. 12th. iP approx. 01 04 -
i P+10 secs
iS P+19 secs

eP approx. 01 38 -

(U.S.C.G.S. 6°S, 149 $\frac{1}{2}$ °E.
New Britain. H = 01 31 40.
Mag. 5 $\frac{3}{4}$ (Matsushiro).
Felt: (See Rabaul Bulletin)).

1957. 10.

Nov. 12th. e approx.09 10 -
cont.. e approx.10 08 -
iP approx.11 19 -
eP approx.18 01 -
eP approx.18 08 -
eP approx.19 03 -

Nov. 14th. iP approx.20 27 -
iP approx.20 54 -

Nov. 15th. iP approx.08 37 -
eS P+30 secs

Nov. 16th. eP approx.05 17 -

Nov. 18th. eP approx.05 11 -

Nov. 19th. eP approx.06 46 -
eP approx.17 49 -

Nov. 21st. e approx.05 11 -
iP approx.18 03 -

Nov. 22nd. iP approx.00 50 -
eS P+30 secs
iP approx.23 30 -
iS! P+19 secs

Nov. 23rd. iP approx.14 08 -

Nov. 28th. iP 12 34 12
iS (17)

Nov. 29th. eP 22 38 42
e 41 44

Nov. 30th. iP 03 27 19 $\frac{1}{2}$
iS 48
(eP 07 16 26)
iP 15 07 34 $\frac{1}{2}$
iS 48 $\frac{1}{2}$

Dec. 2nd. e(P) 15 18 21
e(P) 17 41 05
e 42 14
iP 22 37 17
e(S) 41

Dec. 3rd. e(P) 18 05 03

U.S.C.G.S. 21°S, 66°W.
S. of Bolivia.
H = 22 19 38
h approx. = 200 kms.
Mag. 7 $\frac{3}{4}$ -8 (Pas.)

✓

1957

11.

Dec. 4th. eP 00 31 54

U.S.C.G.S. 0° 125°E.
Molucca Strait.
H = 00 27 01

eP 03 48 (06)
e 33
eL 04 (11.0)-
e(P'P') 17 44

B.C.I.S. 45¹/₂°N, 99°4 E.
Outer Mongolia.
H = 03 37 44
Mag. 8.6 (Pas.)

Dec. 5th. iP 00 27 51¹/₂
iS 28 02

iP 08 52 12¹/₂

eP 09 02 31
i 31¹/₂
iS 53

Dec. 6th. eP 12 20 59
i 21 09
i 29

Dec. 7th. e(P) 13 21 19

iP 15 01 33
iS 42¹/₂

eP 15 46 34¹/₂
i 47 17

B.C.I.S. New Britain region.
H = 15 45.4m.

Dec. 8th. eP 17 56 35

Dec. 9th. eP 12 00 26¹/₂

eP 19 00 23
e(S) 52

Dec. 10th. eP 10 37 03
eS 34

e(P) 14 38 18
i 23
eL 42 -

U.S.C.G.S. 6°S, 154¹/₂°E.
Solomon Is.
H = 14 35 57
Mag. 7 (Matsushiro).
Felt: (See Rabaul Bulletin).

e(P) 15 55 21

U.S.C.G.S. 5¹/₂°S, 155°E.
Solomon Is. Aftershock.
H = 15 53 02
Felt: (See Rabaul Bulletin).

eP 16 16 35

Dec. 11th. eP 08 52 (13)

eP 10 10 23
i 44
i 11 16

Dec. 12th. iP 03 31 35
iS 52

eP 09 54 43

(U.S.C.G.S. 14¹/₂°S, 167¹/₂°E.
New Hebrides Is.
H = 09 47 02).

eP 18 42 25

U.S.C.G.S. 13¹/₂°S, 167°E.
New Hebrides Is.
H = 18 38 19
Mag. 6 (Matsushiro).

1957.

12.

Dec. 13th. e(P) 03 07 (20)
e (27 $\frac{1}{2}$)
i 36
eP 04 00 (17)
e 12 11 (20)
e(P) 20 06 (24)

U.S.C.G.S. 6 $\frac{1}{2}$ $^{\circ}$ S, 155 $\frac{1}{2}$ $^{\circ}$ E.
Solomon Is.
H = 20 03 58

Dec. 14th. iP 06 10 30
eP 06 40 (07)
eP 12 08 29
eS 57
iP 15 50 07
iS 13
iP 16 56 27
iS 33
iP 18 25 36
iS 26 04
iP 21 28 53
eS 29 03

Dec. 17th. ✓ eP 13 55 01 $\frac{1}{2}$
i 06 $\frac{1}{2}$
i 56 15 $\frac{1}{2}$
i 38 $\frac{1}{2}$

U.S.C.G.S. 12 $\frac{1}{2}$ $^{\circ}$ S, 166 $\frac{1}{2}$ $^{\circ}$ E.
Santa Cruz Is. H = 13 50 12.
h approx. = 100 kms.
Mag. 7 $\frac{3}{4}$ (Pas.)

Dec. 19th. eP 00 28 27 $\frac{1}{2}$

Dec. 20th. eiP 16 11 35
e(S) 50
iP 21 02 33 $\frac{1}{2}$
iS 38 $\frac{1}{2}$

Dec. 22nd. e(P) 07 45 29
e(P) 14 05 36
e(S) 06 08
eP 17 13 25 $\frac{1}{2}$
eS 49

Dec. 24th. iP 06 44 29
eS 41

1958.

Jan. 4th. ✓ eP 13 09 00
e 11 50
e 12 17
eP 18 02 (18)

U.S.C.G.S. 6 $^{\circ}$ S, 133 $^{\circ}$ E.
Banda Sea.
H = 13 05 24

TERRITORY OF PAPUA AND NEW GUINEA

Vulcanological Observatory Rabaul

SUPPLEMENTARY READINGS FROM MADANG 1957-58

<u>Addition</u>	(05°14'S 145°48'E)	Recorded on Vertical Willmore Seismograph.
July 3rd.	(eP 06 09 12½) (i 13½)	U.S.C.G.S. 24°S, 180°. Fiji Is. H = 06 02 37 h approx. = 550 kms.
July 4th.	(iP 02 34 11½) (iS 33)	
	iP 15 17 31 eS 59½	
	e 15 56 14	B.C.I.S. Solomon Islands region. H = 15 53.8 m.
July 5th.	e 17 34 02½ e 17½ i 36 09	
July 7th.	eP 16 13 51.8	U.S.C.G.S. 6½°S, 156°E. Solomon Is. H = 16 11 15 Mag. 6¼ (Pas.)
July 8th.	iP 05 27 22 iS 56	
July 9th.	(iP 00 58 22) (iS 49½)	
	(iP 03 39 40½) (iS 40 59½)	
	(e 10 05 56)	U.S.C.G.S. 6°S, 104°E. Sumatra. H = 09 58 09 h approx. = 60 kms. Mag. 6½ (Matsushiro)
July 12th.	eP 20 55 34½	Foreshock.
	iP 20 57 15½ i 43½ eL 21 01.3 -	U.S.C.G.S. 3°S, 148½°E. Bismarck Sea. H = 20 56 18 Mag. 6¼ (Matsushiro)
	iP 21 59 40 i 43½ i 54 i (22) 00 08 i 01 00½ eL 04.6 -	U.S.C.G.S. 3°S, 148½°E. Bismarck Sea. Aftershock. H = 21 58 45 Mag. 6 (Matsushiro)
July 14th.	eP 06 31 33 i 24 i 32 12½	U.S.C.G.S. 27°S, 178°W. Kermadec Is. region. H = 06 23 52 h approx. = 150 kms. Mag. 7½ (Rome)

1957.

2.

July 14th.
cont..

iP 08 18 42
i 43

U.S.C.G.S. 30°S, 177°W.
Kermadec Is.
H = 08 10 45
Mag. 7 (Berk.)

1(P) 09 50 19

U.S.C.G.S. 20°S, 174½°W.
Tonga Is.
H = 09 42 27
Mag. 6½ (Matsushiro)

July 15th.

iP 14 13 38½
iS 14 08½

iP 20 33 38
eS 45

July 16th.

iP 03 41 53½
iS 42 22½

iP 04 22 52½
iS 59½

iP 10 05 16½
iS 36½

July 17th.

iP 08 05 53½
iS 06 05½

eP 11 15 02½
i 04½

U.S.C.G.S. 11°S, 167°E.
Santa Cruz Is.
H = 11 10 10
h = 100 kms.
Mag. 6½ (Berk.)

e 12 28 21½
i 29 05

U.S.C.G.S. 2°S, 137°E.
H = 12 26 06

e(P) 12 30 03½

iP 15 17 53½
iS 18 03.7

i(P) 21 20 09
(iS 21 20)

July 18th.

iP! 11 11 08½
i 13 04
i 20½

U.S.C.G.S. 5°S, 146°E. Near
the N. coast of New Guinea.
H = 11 10 58
Felt: Karkar, Kumbug and Madang
(see Rabaul Bulletin)

iP! 11 18 57
iS 19 02½

iP 11 28 46
iS 52

iP 12 05 44

iP 12 58 28½

iP 13 23 17
iS 23

iP 13 38 48
iS 54

iP 14 02 05½

1957.

3.

July 19th.	iP	20	27	12	U.S.C.G.S. 3°S, 142°E. North
	i			44	of New Guinea. Foreshock.
	i		28	21	H = 20 26 03
	i			58	<u>Felt:</u> (see Rabaul Bulletin)
	iP	21	37	54½	U.S.C.G.S. 3½°S, 142°E.
	i!		38	04	North of New Guinea.
	i			12	H = 21 36 46
	i!			53½	<u>Felt:</u> (see Rabaul Bulletin)
	i		39	30½	
July 21st.	iP	00	23	56	
	eP	07	03	06	U.S.C.G.S. 4½°S, 153°E.
					New Ireland.
					H = 07 00 10
					Mag. 5¼-6 (Matsushiro)
					<u>Felt:</u> (see Rabaul Bulletin)
	iP	08	13	45	
	i(S)		14	13½	
	eP	18	33	29	
	i		34	09	
July 22nd.	iP	01	04	50½	
	iS			59	
	iP	06	25	02	U.S.C.G.S. 33½°S, 178°W.
	i			11½	Kermadec Is. region.
	i			19	H = 06 16 52
					Mag. 6¼-6½ (Matsushiro)
	eP	06	30	00½	U.S.C.G.S. 34°S, 177½°W.
	i			08½	Kermadec Is. region.
	i			17	H = 06 21 50. Aftershock.
July 23rd.	iP	05	38	06	
	iS			19	
	e	13	36	55½	U.S.C.G.S. Kermadec Is. region.
					H = 13 30 17
					h approx. = 600 kms.
July 24th.	i(P)	02	07	50½	
	eP	05	53	38	
	e	10	48	07	
	eP	18	09	22	
	i(S)			45	
	i		10	07	
July 25th.	eP	14	11	17	<u>Felt:</u> Lae (see Rabaul Bulletin)
	i			36	
	e(S)			40	
	i		14	02	
July 26th.	eP	03	55	06	
	i			06.8	
	e	05	12	(28)	
	e	07	04	50	
	iP	17	37	35	
	iS		38	03	

1957.

4.

July 27th.	eP	18	44	29	U.S.C.G.S. 6 $\frac{1}{2}$ °S, 151 $\frac{1}{2}$ °E.
	i		45	10	New Britain region.
	i			15	H = 18 43 01
	iP	20	31	29	
	iS			47	
Aug. 4th.	eP	00	39	43 $\frac{1}{2}$	U.S.C.G.S. 3 $\frac{1}{2}$ °S, 145°E. Near
	i			44	the N. coast of New Guinea.
	i(S)	40		07 $\frac{1}{2}$	H = 00 39 12
	i			43 $\frac{1}{2}$	Mag. 6 $\frac{1}{2}$ -6 $\frac{3}{4}$ (Matsushiro)
					<u>Felt:</u> (see Rabaul Bulletin)
Aug. 14th.	iP	14	(10	48)	
	i		(11	04 $\frac{1}{2}$)	
	i			(13)	
	i			(21)	
					Times doubtful.
	iP	15	(27	24)	
	eS			(53)	
					Times doubtful.
Aug. 15th.	iP	03	38	18	
	i(S)			24	
	iP	20	47	35	U.S.C.G.S. 4 $\frac{1}{2}$ °S, 155°E.
	i(pP)		48	00 $\frac{1}{2}$	Solomon Is. region.
	e(sP)			17	H = 20 45 20
	e(pPP)			46	h approx. = 500 kms.
	i(S)	49		24 $\frac{1}{2}$	
Aug. 16th.	iP	00	18	06 $\frac{1}{2}$	
	eS			17 $\frac{1}{2}$	
	eP	03	28	16	U.S.C.G.S. 5°S, 154°E.
					New Britain region.
					H = 03 26 05
					<u>Felt:</u> (see Rabaul Bulletin)
	iP	05	37	49.9	
	i(S)		38	07.5	
	eP	11	59	26 $\frac{1}{2}$	U.S.C.G.S. 5°S, 155°E.
					Solomon Is.
					H = 11 57 16
					<u>Felt:</u> (see Rabaul Bulletin)
Aug. 17th.	eP	02	23	38	U.S.C.G.S. 4°S, 151°E.
					New Britain.
					H = 02 21 47
					<u>Felt:</u> (see Rabaul Bulletin)
Aug. 18th.	eP	00	(12 or		
			13)	25 $\frac{1}{2}$	
	iS			54 $\frac{1}{2}$	
	iP	02	21	07.7	
	iS			23	
	iP	11	02	55 $\frac{1}{2}$	
	i			57	
	e(S)	03		24	
	e	21	52	12 $\frac{1}{2}$	U.S.C.G.S. 50°N, 157°E.
					N. of Kurile Is.
					H = 21 42 30
					Mag. 6.6 (Tacubaya)

1957,

5.

Aug. 19th.	eP i	00	12	57.3 10.5	U.S.C.G.S. $4\frac{1}{2}^{\circ}$ S, 153° E. New Britain region. H = 00 11 13 <u>Felt:</u> (see Rabaul Bulletin)
	e	02	43	$27\frac{1}{2}$	U.S.C.G.S. New Britain region. H = 02 41 14 <u>Felt:</u> (see Rabaul Bulletin)
	e	11	38	$33\frac{1}{2}$	U.S.C.G.S. 10° S, 161° E. Solomon Is. H = 11 34 36 Mag. $6\frac{1}{2}$ (Pas.)
	iP eS	11	54 55	$32\frac{1}{2}$ $12\frac{1}{2}$	
Aug. 20th.	iP iS	00	30	$10\frac{1}{2}$ $48\frac{1}{2}$	
	e	06	31	00	U.S.C.G.S. 10° S, 161° E. Solomon Is. Foreshock H = 06 27 07 Mag. $6\frac{3}{4}$ (Matsushiro)
	e	12	05	$44\frac{1}{2}$	U.S.C.G.S. 10° S, 161° E. Solomon Is. H = 12 01 54 Mag. $6\frac{3}{4}$ (Matsushiro)
	e i i	21	23 24	37 $56\frac{1}{2}$ $05\frac{1}{2}$	
Aug. 21st.	iP i iS	04	(33 (57) (34	55) (57) $23\frac{1}{2}$)	
	iP	10	(21	43)	Times doubtful.
Sept. 21st.	e	14	(39	20)	
	e	14	(56	20)	
	iP iS	17	(26 (55)	$33\frac{1}{2}$ (55)	Times uncertain.
Sept. 24th.	eP i	08	26	$04\frac{1}{2}$ 16	U.S.C.G.S. $5\frac{1}{2}^{\circ}$ N, $127\frac{1}{2}^{\circ}$ E. Mindanao. H = 08 21 05 Mag. $7\frac{3}{4}$ (Pas.)
	iP iS	20	11	$40\frac{1}{2}$ $49\frac{1}{2}$	
	eP i eS i	23	26 27	34 $34\frac{1}{2}$ 20 $28\frac{1}{2}$	
	iP iS	23	47 48	$52\frac{1}{2}$ 04	
Sept. 25th.	eP	02	(19	36) (42)	Times uncertain.

1957.

6.

Sept. 25th. e(P) 06 (58 36) B.C.I.S. Discordant data.
cont.. e (59 32) (Several shocks)
e (18)

iP 09 (39 57) B.C.I.S. New Hanover region.
i (59 $\frac{1}{2}$) H = 09 38.9 m.
eL (43 -)

iP 14 (09 56) B.C.I.S. 2°S, 140°E. Near
i (12 59 $\frac{1}{2}$) the N. Coast of New Guinea.
H = 14 08.0 m.

e 16 (41 32 $\frac{1}{2}$) (U.S.C.G.S. Nr. the S.E. Coast
of Mindanao.
H = 16 36 37
Mag. 6 (Uppsala))

Times uncertain.

Sept. 26th. e 18 51 44 $\frac{1}{2}$ U.S.C.G.S. 6°N, 126 $\frac{1}{2}$ °E.
Mindanao.
H = 18 46 41
Mag. 6.0 (Uppsala)

iP 19 05 47 $\frac{1}{2}$
e(S) 06 30 $\frac{1}{2}$

iP 20 28 12 $\frac{1}{2}$
eS 39 $\frac{1}{2}$

Sept. 27th. eL 04 (07 50) Probably Moluccas. Times inaccurate.
eL 04 (18 12) " " " "
e 05 (56 16) " " " "
iP 14 (50 50 $\frac{1}{2}$)
iS (51 15 $\frac{1}{2}$)
iP 17 (23 40.3)
iS (49 $\frac{1}{2}$)

Times uncertain.

Sept. 28th. e 04 (14 00) U.S.C.G.S. 3°S, 135 $\frac{1}{2}$ °E. Near
the N. Coast of New Guinea.
H = 04 11 23

iP 12 (54 13 $\frac{1}{2}$)
eS (49 $\frac{1}{2}$)

eP 14 (26 32) U.S.C.G.S. 20 $\frac{1}{2}$ °S, 178°W.
i! (32 $\frac{1}{2}$) Fiji Is.
i (28 36) H = 14 20 00
i (31 48) h. approx. = 650 kms.
Mag. 7.6 (Uppsala)

e(P) 14 (50 36) U.S.C.G.S. 20 $\frac{1}{2}$ °S, 178 $\frac{1}{2}$ °W.
Fiji Is. Aftershock.
H = 14 44 02
h approx. = 600 kms.

iP 17 (35 48 $\frac{1}{2}$)
iS (54 $\frac{1}{2}$)

Times uncertain.

Sept. 29th. iP 00 14 15
iP 03 56 48
iS 59

1957.

7.

Sept. 29th. cont..	eP	06	42	22	U.S.C.G.S. 0° , 124°E. Celebes. H = 06 37 33 h approx. = 200 kms.
	eP	08	19	50	U.S.C.G.S. 25°S, 178½°E.
	i!			50½	S. of Fiji Is.
	i		20	02	H = 08 13 22
	e		24	50	h approx. = 600 kms.
	e			59½	Mag. 6¼ (Berk.)
Sept. 30th.	1P	07	29	56	
	1S		30	47	
	1P	15	09	45½	
	1S		10	08	
	1P	22	44	25½	
Oct. 10th.	eP	10	57	10	
	eP	11	01	30	
	eP	11	09	33½	
	i			47	
	eP	11	43	16	
	1P	13	56	47	
	1P	14	21	36	B.C.I.S. 3¼°S, 146°E. Near
	eL		24.7	-	the N.E. Coast of New Guinea.
					H = 14 20 55
	1P!	16	49	17½	
	Times uncertain.				
Oct. 12th.	1P	22	15	58½	
	1P	22	38	50	
	Times uncertain.				
Oct. 13th.	1P	12	20	09	
	eS			36	
Oct. 14th.	eP	00	29	07½	
	i			11	
	eS			37½	
	1P	04	05	24	
	1S			34	
Oct. 16th.	1P	22	23	32½	
	1P	22	29	39	
Oct. 17th.	1P	00	50	08	
	eP	15	17	34½	
Oct. 18th.	1P	18	59	59	B.C.I.S. 2½°S, 146½°E. Nr. the
					N.E. Coast of New Guinea.
					H = 18 59 15
Oct. 19th.	1P	18	36	05½	U.S.C.G.S. 23½°N, 122°E.
					Formosa.
					H = 18 28 50
					Mag. 7 (Moscow)

1957.

Oct. 19th.	iP	19	51	02½
cont..	iP	21	31	52
Oct. 20th.	iP	01	42	39
Oct. 21st.	iP	02	36	01
	iS			20
Oct. 23rd.	iP	15	20	17
	iS			37
Oct. 24th.	iP	00	22	57

U.S.C.G.S. 14½°S, 168°E.
New Hebrides Is.
H = 00 17 37.
Mag. 6½ (Pas.)

eP	09	14	08
i			09½

(U.S.C.G.S. 20½°S, 179°W.
Fiji Is.
H = 09 07 30.
h approx. = 550 kms.)

iP	14	24	35½
i(S)			47

iP	22	43	58
i(S)		44	10
i			39

Oct. 25th.	iP	14	49	11
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Oct. 26th.	iP	01	08	50
	i(S)		09	21

iP	03	46	21½
----	----	----	-----

iP	08	32	48
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U.S.C.G.S. 20½°S, 178°W.
Fiji Is.
H = 08 26 12.
h approx. = 600 kms.
Mag. 6-6¼ (Pas.)

Oct. 27th.	eP	00	51	03½
	iP	07	28	39½
	i(S)		29	04½
	i!			50

iP	22	12	12
iS		13	07

Oct. 28th.	iP	13	58	25½
	iS			50

eP	17	14	58
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Nov. 2nd.	eP approx.	18	45	-
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U.S.C.G.S. 13°S, 166½°E.
New Hebrides Is.
H = 18 30 24.
Mag. 6.4 (Kiruna)

Times very uncertain.

Nov. 3rd.	iP approx.	07	13	-
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iP approx. 07 34 -
S-P approx. = 12 seconds

iP approx. 08 32 -
S-P approx. = 13 seconds

1957.

9.

Nov. 3rd. eP approx. 10 27 -
cont.. i! P+5 $\frac{1}{2}$ secs
iS! P+34 $\frac{1}{2}$ secs

U.S.C.G.S. 6°S, 147°E. Near
the N.E. coast of New Guinea.
H = 10 24 51.
Mag. 5 $\frac{3}{4}$ (Matsushiro).
Felt: (See Rabaul Bulletin).

eP approx. 11 17 -
i! P+5 secs
iS! P+34 secs

U.S.C.G.S. 6 $\frac{1}{2}$ °S, 147°E. Near
the N.E. coast of New Guinea.
H = 11 14 30
Mag. 5 $\frac{1}{4}$ -5 $\frac{1}{2}$ (Matsushiro).
Felt: (See Rabaul Bulletin).

eP approx. 15 52 -
i(S) P+about 30 secs
Times very uncertain.

Nov. 5th. iP 11 17 42 $\frac{1}{2}$
i 46 $\frac{1}{2}$
i(S) 18 12 $\frac{1}{2}$

iP 11 22 53 $\frac{1}{2}$
i 57 $\frac{1}{2}$
i(S) 23 26

U.S.C.G.S. 6°S, 150°E.
New Britain.
H = 11 18 43
Felt: (See Rabaul Bulletin).

iP 18 19 01 $\frac{1}{2}$
i 06
i(S) 32

Nov. 10th. eP approx. 02 42 -

U.S.C.G.S. 7°S, 155 $\frac{1}{2}$ °E.
Solomon Is.
H = 02 36 21.
Mag. 6.5 (Quetta).
Felt: (See Rabaul Bulletin).

eP approx. 03 50 -

U.S.C.G.S. 7 $\frac{1}{2}$ °S, 155 $\frac{1}{2}$ °E.
Solomon Is.
H = 03 43 49.
Mag. 6.2 (Quetta).
Felt: (See Rabaul Bulletin).

eP approx. 05 53 -
i P+ 2 secs
i P+ 4 secs
iS P+33 secs

iP approx. 11 24 -
iS P+ 7 secs

iP approx. 12 29 -
iS P+25 secs

iP approx. 16 41 -

iP approx. 19 36 -
Times very uncertain.

Nov. 11th. eP approx. 19 30 -
Times very uncertain.

Nov. 12th. iP approx. 01 04 -
i P+10 secs
iS P+19 secs

eP approx. 01 38 -

(U.S.C.G.S. 6°S, 149 $\frac{1}{2}$ °E.
New Britain. H = 01 31 40.
Mag. 5 $\frac{3}{4}$ (Matsushiro).
Felt: (See Rabaul Bulletin)).

1957.					10.
Nov. 12th.	e	approx.09	10	-	
cont..					
	e	approx.10	08	-	
	iP	approx.11	19	-	
	eP	approx.18	01	-	
	eP	approx.18	08	-	
	eP	approx.19	03	-	
Nov. 14th.	iP	approx.20	27	-	
	iP	approx.20	54	-	
Nov. 15th.	iP	approx.08	37	-	
	eS		P+30	secs	
Nov. 16th.	eP	approx.05	17	-	
Nov. 18th.	eP	approx.05	11	-	
Nov. 19th.	eP	approx.06	46	-	
	eP	approx.17	49	-	
Nov. 21st.	e	approx.05	11	-	
	iP	approx.18	03	-	
Nov. 22nd.	iP	approx.00	50	-	
	eS		P+30	secs	
	iP	approx.23	30	-	
	iS!		P+19	secs	
Nov. 23rd.	iP	approx.14	08	-	
Nov. 28th.	iP		12 34	12	
	iS			(17)	
Nov. 29th.	eP		22 38	42	
	e		41	44	
Nov. 30th.	iP		03 27	19 $\frac{1}{2}$	
	iS			48	
	(eP		07 16	26)	
	iP		15 07	34 $\frac{1}{2}$	
	iS			48 $\frac{1}{2}$	
Dec. 2nd.	e(P)		15 18	21	
	e(P)		17 41	05	
	e		42	14	
	iP		22 37	17	
	e(S)			41	
Dec. 3rd.	e(P)		18 05	03	

U.S.C.G.S. 21°S, 66°W.
S. of Bolivia.
H = 22 19 38
h approx. = 200 kms.
Mag. 7 $\frac{3}{4}$ -8 (Pas.)

1957

11.

Dec. 4th. eP 00 31 54

U.S.C.G.S. 0°, 125°E.
Molucca Strait.
H = 00 27 01

eP 03 48 (06)
e 33
eL 04 (11.0)-
e(P'P') 17 44

B.C.I.S. 45¹/₄°N, 99°4 E.
Outer Mongolia.
H = 03 37 44
Mag. 8.6 (Pas.)

Dec. 5th. iP 00 27 51¹/₂
iS 28 02

iP 08 52 12¹/₂

eP 09 02 31
i 31¹/₂
iS 53

Dec. 6th. eP 12 20 59
i 21 09
i 29

Dec. 7th. e(P) 13 21 19

iP 15 01 33
iS 42¹/₂

eP 15 46 34¹/₂
i 47 17

B.C.I.S. New Britain region.
H = 15 45.4m.

Dec. 8th. eP 17 56 35

Dec. 9th. eP 12 00 26¹/₂

eP 19 00 23
e(S) 52

Dec. 10th. eP 10 37 03
eS 34

e(P) 14 38 18
i 23
eL 42 -

U.S.C.G.S. 6°S, 154¹/₂°E.
Solomon Is.
H = 14 35 57
Mag. 7 (Matsushiro).
Felt: (See Rabaul Bulletin).

e(P) 15 55 21

U.S.C.G.S. 5¹/₂°S, 155°E.
Solomon Is. Aftershock.
H = 15 53 02
Felt: (See Rabaul Bulletin).

eP 16 16 35

Dec. 11th. eP 08 52 (13)

eP 10 10 23
i 44
i 11 16

Dec. 12th. iP 03 31 35
iS 52

eP 09 54 43

(U.S.C.G.S. 14¹/₂°S, 167¹/₂°E.
New Hebrides Is.
H = 09 47 02).

eP 18 42 25

U.S.C.G.S. 13¹/₂°S, 167°E.
New Hebrides Is.
H = 18 38 19
Mag. 6 (Matsushiro).

1957. 12.

Dec. 13th. e(P) 03 07 (20)
e (27 $\frac{1}{2}$)
i 36

eP 04 00 (17)

e 12 11 (20)

e(P) 20 06 (24)

U.S.C.G.S. 6 $\frac{1}{2}$ °S, 155 $\frac{1}{2}$ °E.
Solomon Is.
H = 20 03 58

Dec. 14th. iP 06 10 30

eP 06 40 (07)

eP 12 08 29
eS 57

iP 15 50 07
iS 13

iP 16 56 27
iS 33

iP 18 25 36
iS 26 04

iP 21 28 53
eS 29 03

Dec. 17th. eP 13 55 01 $\frac{1}{2}$
i 06 $\frac{3}{4}$
i 56 15 $\frac{1}{2}$
i 38 $\frac{1}{2}$

U.S.C.G.S. 12 $\frac{1}{2}$ °S, 166 $\frac{1}{2}$ °E.
Santa Cruz Is. H = 13 50 12.
h approx. = 100 kms.
Mag. 7 $\frac{3}{4}$ (Pas.)

Dec. 19th. eP 00 28 27 $\frac{1}{2}$

Dec. 20th. eiP 16 11 35
e(S) 50

iP 21 02 33 $\frac{1}{2}$
iS 38 $\frac{1}{2}$

Dec. 22nd. e(P) 07 45 29

e(P) 14 05 36
e(S) 06 08

eP 17 13 25 $\frac{1}{2}$
eS 49

Dec. 24th. iP 06 44 29
eS 41

1958.

Jan. 4th. eP 13 09 00
e 11 50
e 12 17
eP 18 02 (18)

U.S.C.G.S. 6°S, 133°E.
Banda Sea.
H = 13 05 24

1958.

13.

Jan. 7th.	eP	04	58	30
	e(S)		59	01
Jan. 8th.	iP	03	34	48
	eS		35	00
	eP	03	47	26
	eS		48	(32)
	iP	10	02	57
	eS		03	05
	iP	14	34	39
	eS			50
Jan. 9th.	iP	11	13	56
	eS		14	02
	iP!	11	14	38
	eP	21	18	35
	i		19	49

U.S.C.G.S. $5\frac{1}{2}^{\circ}\text{S}$, 147°E . Near
the North Coast of New Guinea.
H = 11 13 56.
h approx. = 150 kms.
Mag. $6\frac{1}{2}$ (Matsushiro)
Felt: (See Rabaul Bulletin).
