

NOTICE

UNIVERSITY OF QUEENSLAND

SEISMOLOGICAL STATION

Monthly Seismological Bulletin.

No. 184

December 1952

NOTICE

With this issue the University of Queensland Seismological Station institutes a new form of seismological bulletins. All future bulletins, beginning with that for January-March, 1953, will be issued quarterly.

Data concerning the station and instruments for December, 1952 may be found in Bulletin No. 183. Revised data will appear in the first of the quarterly bulletins.

Date	Phase	Time h. m. s.	Per sec.	A _z	A _n	A _e	Remarks
Dec.							
1	i z	04 55 13	1.5	+2.0			
	i z	55 32	1.5	-3.5			
1	iPz	17 00 09	1.0	+3.0			
2	iPZNn	05 11 33	1.0	+7.0			
	ipPNn	11 52	2.0		+8.0		U.S.C.G.S: Solomon Is.
	iSNn	15 30	6.0		+11.5		H = 05.06.38.
	eSEe	15 30					$\Delta = 21.6^\circ$
	esSN	16 07					
	isSNe	16 08	8.0		-10.0		
2	iPZ	12 05 12	0.8	-5.5			U.S.C.G.S: Kermadec Is.
3	e z	18 15 17					region
	i z	15 30	1.5	+6.0			H = 11.59.40.
3	ePZ	19 48 55					
	i z	49 10	1.0	-6.5			
4	iPZ	04 03 51	1.0	+5.0			U.S.C.G.S: 52°N 178°E
	i z	04 00					h = 100 km.
	i z	04 26					H = 03.51.25
	iSN	14 10	8.5		-10.0		Aleutian Is.
	eSne	14 15					$\Delta = 85^\circ$
	isSNne	15 00	9.0		+11.0		
4	iPZ	07 16 55	1.0	-4.5			
4	ePZ	11 01 30					U.S.C.G.S: 49°N 157°E
							H = 10.49.35
							$\Delta = 75.8^\circ$
4	iPZ	12 59 33	1.0	+3			
	i z	59 42	1.0	+8			
	i z	59 57	1.5	+10			
4	iPZE	17 15 58	1.0	+8	-4		
	i(S)N	26 03	6.0		+7		

Brisbane Seismological Bulletin 1952 No. 184

Page 2

Date	Phase	Time h. m. s.	Per sec.	A _z	A _n	A _e	Remarks
Dec.							
5	e N	08 55 23					
	e N	56 15					
	e Z	56 20					
	i N	56 38	4.0		+5		
	i E	56 40	4.0			-4	
5	e N	13 21 31					
5	iPZ	15 31 10	1.0	+7			
	i Z	31 25	1.0	-6			
	i Z	31 56	1.5	+10			
6	eLn	03 47.0					
	eLe	50.0					
6	e N	08 13 48					
	i N	14 26	8.0		+7		
	i N	18 28	8.0		-9		
	e N	28 30					
6	iPZNn	10 45 47	1.0	-9	+6		U.S.C.G.S. 8°S., 157°E
	ePe	45 50					H = 10.41.14.
	iPPZ	46 02	1.0	+9			Solomon Is.
	i Z	46 33	1.5	-11			Δ = 19.7°
	iSne	49 19					
	eSZ	49 19					
6	iPZ	12 42 43	1.0	+9			
6	iPZNn	20 55 09	1.0	-7	+4		U.S.C.G.S. Solomon Is.
	ePE	55 11					Aftershock of above
	iPe	55 12					H = 20.50.35.
	iSNne	58 57	8.0		+7		Δ = 19.7°

Date	Phase	Time h. m. s.	Per sec.	A _z	A _n	A _e	Remarks
Dec.							
7	ePZne i N i Z iPPNn iSNEe iSn	01 02 35 02 45 02 57 05 34 12 47 12 49	 6.0 1.0 6.0 8.0	 +14	 -9 -13 +17	 +11	U.S.C.G.S: 53°N., 172½°E H = 00.50.12 Aleutian Is. Δ = 81.9°
7	e e	11 08 37					
7	iPZ iPNn iPe i Z i Z i N iSN eSne	20 24 41 24 43 24 44 24 48 25 16 26 17 28 25 28 25	1.0 6.0 1.0 1.0 8.0 8.0	+23 +19 -10	 +12 +18		U.S.C.G.S: Solomon Is. H = 20.20.02
8	iPZ	03 48 34	0.5	-15			
8	iPZ i Z	08 20 28 20 49	1.0 1.0	-13 +11			
8	i Z	15 20 29					
8	eLn	15 49.0					U.S.C.G.S: 23°N., 99½°E H = 15.09.30 China-Burma border Δ = 72.9°
9	iPZNEen ipPZ isPN iSNEen iSe e Z i(SS)n	09 19 34 19 51 20 02 22 52 22 53 23 02 23 15	1.0 1.0 6.0 8.0	-15 +17	-8 +7 -10	 -8	U.S.C.G.S: 15½°S., 168°E H = 09.15.12. New Hebrides Is. Δ = 18.5°

Date	Phase	Time h. m. s.	Per sec.	A _z	A _n	A _e	Remarks
Dec.							
9	iPZ	09 26 19	2.0	-3			
9	iPZ	18 26 11	1.0	+5			
	i Z	26 14	1.0	-11			
	iSNn	31 08	6.0		+2		
	eSe	31 08					
9	iPZ	22 59 25	1.0	+3			
	i Z	59 34	2.0	+4			
	i Z	59 41	2.0	-2			
	eSn	23 03 23					
	iSE	03 27	8.0			+3	
9	iPZ	23 40 05	1.0	+4			
	ePN	40 05					
	i Z	40 20	1.0	-9			
10	iPZ	08 12 42	0.5	-11			
	i Z	12 56	1.0	+7			
	iPPZE	14 04	1.0	-11			
	i ne	14 08				+5	
	e e	14 08					
	eSN	18 25					
	i Nn	20 44	8.0		+7		
10	ePZ	22 48 55					
	i Z	48 56	1.0	+7			
	i Z	49 03	1.0	-12			
11	iPZN	09 10 02	1.0	+14	-6		
	ipPZ	10 26	1.0	-11			
	epPe	10 26					
	e Ze	10 36					
	iSNEe	19 44	6.0		+10	+5	
	i Ee	20 08	8.0			+7	
12	iPZ	13 40 54	0.5	+13			
	i Z	40 58	1.0	-9			

U.S.C.G.S. 154°S., 173½°W.
H = 08.06.03
Samoa Is.
Δ = 33°

U.S.C.G.S. 49°N., 155°E.
H = 08.58.18.
h = 60 km.
Kurile Is.
Δ = 75.6°

Date	Phase	Time h. m. s.	Per sec.	A _z	A _n	A _e	Remarks
Dec.							
12	iPZ	17 27 20	1.0	+7			
	i Z	28 29	1.0	+5			
	e e	34 10					
	iSN	37 39	6.0		-11		
	eSe	37 39					
13	iPZ	13 24 17	1.0	-11			
14	iPZ	04 56 26	0.5	+7			
	i Z	56 37	1.0	-9			
14	iPZ	12 52 37	1.0	+17			U.S.C.G.S: 11°S., 167°E H = 12.47.52 Santa Cruz Is. $\Delta = 21^{\circ}$
14	iPZ	13 34 04	1.0	+14			
	i Z	34 43	1.0	-9			
14	iPZ	20 51 12	0.8	+10			
15	iPZ	16 43 29	1.0	+8			U.S.C.G.S: 6°S., 156°E H = 16.38.35 $\Delta = 21.5^{\circ}$
17	iPZ	19 40 58	1.0	+14			B.C.I.S: Kermadec Is. region Deep
18	iPZ	05 21 23	0.5	+9			U.S.C.G.S: 18°S., 178°W H = 05.16.12 h = 600 km.
	i Z	21 42	1.0	+10			Fiji Is. $\Delta = 28.2^{\circ}$
18	iPZN	08 39 16	1.0	+13			U.S.C.G.S: Solomon Is. H = 08.34.50
	i N	40 21	4.0		+4		
	eSe	43 53					
	i e	44 18					
	e e	45 59					

Date	Phase	Time h. m. s.	Per sec.	A _z	A _n	A _e	Remarks
Dec.							
18	ePZ	17 00 25					
	i Z	00 39	1.0	-7			
	iSN	04 20	6.0		+13		
	eSn	04 20					
	i Nn	04 40	8.0		+11		
19	ePZ	19 12 28					U.S.C.G.S: 15°S., 175°W
	iPN	12 28					H = 19.06.20
	i Z	12 40					h = 250 km.
	ipPZN	13 22					Samoa Is.
	epPe	13 22					$\Delta = 31.3^\circ$
	i e	13 47					
	i N	13 49					
	eSn	17 23					
	iSN	17 23					
	iSSN	19 57					
	eSSn	19 57					
20	iPZ	16 10 04	1.0	+7			
	eSe	20 28					
	eLe	31.7					
20	iPZ	21 49 52	1.0	+10			U.S.C.G.S: Marianas Is. region H = 21.42.10
21	iPZN	01 17 01	0.8	-27			U.S.C.G.S: Bismarck Sea.
	iPPZ	17 29	1.0	+21			H = 01.11.56
	ePPn	17 31					
	i Z	17 44	1.0	-18			
	i Z	18 12	1.5	-11			
	iSNE	20 56	6.0		-10	-8	
21	iPZ	05 57 27	1.0	+12			B.C.I.S: 6½°S., 128°E
	iPPZ	58 34	1.0	+17			H = 05.51.08
	iSne	06 02 46					Banda Sea $\Delta = 31.6^\circ$
22	ePZ	04 21 37					

Date	Phase	Time h. m. s.	Per sec.	A _z	A _n	A _e	Remarks
Dec.							
22	iPZ eSn eSn	20 21 45 25 50 25 52	0.8	-14			
22	iPZ i Z eSKSN	22 37 01 37 32 47 12					U.S.C.G.S: 54°N., 160½°E H = 22.24.42 Near E. coast of Kamchatka Δ = 80.7°
23	iPZ i Z	07 25 04 25 33	1.0 1.5	+7 +11			B.C.I.S: 44°S., 168°E Near W. coast of South Island of New Zealand. H = 07.20.5
23	iPZ i Z	18 22 19 22 28	1.0 1.0	-13 +8			B.C.I.S: Kermadec Is. region
24	iPZ i Z	01 12 42 12 56	0.8 1.0	-10 +9			
24	iPZ i Z	03 40 14 45 33	1.0 1.5	+16 -11			B.C.I.S: Tonga Is. region
24	iPZNn ipPz epPe iPPe e Z iSZne	08 38 22 38 31 38 32 38 46 42 15 42 24	1.0 1.0 1.5	+19 +28 -30			U.S.C.G.S: 5½°S., 151½°E H = 08.33.25 Foreshock of New Britain shock. Δ = 21.9°
24	iPZ i Z i Z	14 37 33 37 46 38 43	1.5 1.0 1.5	+7 -11 +12			U.S.C.G.S: 29°N., 130°E H = 14.27.21 Ryukyu Is.

Date	Phase	Time h. m. s.	Per sec.	A _z	A _n	A _e	Remarks
Dec.							
24	ePZN	18 05 12					
	i Z	05 14	1.0	-13			U.S.C.G.S: $5\frac{1}{2}^{\circ}$ S., 151° E
	i Z	05 20	1.0	-20			H = 18.00.13
	iPPe	05 35					New Britain foreshock
	iSNE _n	09 15	6.5		-9	-7	$\Delta = 21.9^{\circ}$
	eSZ	09 15					
	eSe	09 17					
24	iPZ	18 20 21	1.0	+17			U.S.C.G.S: $5\frac{1}{2}^{\circ}$ S., 152° E
	i ZN	20 30	1.0	+11	-8		H = 18.15.25
	iPPZ	20 48	1.0	-14			New Britain foreshock
	iSN _n	24 24	7.0		+9		$\Delta = 22.0^{\circ}$
24	ePZN	18 44 32					U.S.C.G.S: $5\frac{1}{2}^{\circ}$ S., $151\frac{1}{2}^{\circ}$ E
	i Z	44 33	1.0	-29			H = 18.39.33
	i Ze	44 35	1.0	-35			New Britain
	iPPZ	44 52	1.5	+27			$\Delta = 21.9^{\circ}$
	iSNE _{ne}	48 35	8.0		+14	+12	
24	iPZN	21 26 07	1.0	+23	+14		U.S.C.G.S: $5\frac{1}{2}^{\circ}$ S., $150\frac{1}{2}^{\circ}$ E
	ePe	26 08					H = 21.21.07
	i Z	26 13	1.5	-20			New Britain aftershock
	iSZNE _n	30 10	7.0				$\Delta = 22.0^{\circ}$
24	iPZ	21 42 03	1.0	+13			U.S.C.G.S: $5\frac{1}{2}^{\circ}$ S., $151\frac{1}{2}^{\circ}$ E
	i Z	42 08					H = 21.37.05
	iSN _n	45 56	6.5		+13		New Britain aftershock
	eSZ	45 56					$\Delta = 21.9^{\circ}$
	eSe	45 58					
25	ePZ	02 33 36					U.S.C.G.S: $5\frac{1}{2}^{\circ}$ S., $151\frac{1}{2}^{\circ}$ E
	iPN _n	33 36	2.5		-12		H = 02.28.39
	i Z	33 38	1.0	+17			New Britain aftershock
	iPP _{ne}	33 56					$\Delta = 21.9^{\circ}$
	e Z	34 06					
	i NE _{ne}	37 03	7.0		+11	+7	
	iSNE _{ne}	37 36	7.5		+13	+12	
	iSZ	37 39	5.0	+8			

Date	Phase	Time h. m. s.	Per sec.	A _z	A _n	A _e	Remarks
Dec.							
25	ePZ	02 42 10					
	iPN	42 10	4.0		-10		
	i Z	42 16	1.0	+17			
	i Z	42 19	1.5	-15			
25	iPZ	02 44 34					U.S.C.G.S. 5½°S., 152°E
	i Z	44 39					H = 02.39.40
							New Britain aftershock
							Δ = 22°
25	iPN	03 24 46	3.5		+12		
	ePZ	24 47					
	iPn	24 47					
	i Z	24 51	1.5	+14			
	i n	25 06					
	e e	25 06					
	iSNEe	28 49	6.5		-13	-12	
25	ePZ	03 32 35					
25	iPZNn	03 56 00	1.0	+9	-6	-5	U.S.C.G.S. 5½°S., 151½°E
	i e	56 15					H = 03.51.01
	iPPe	56 30					New Britain aftershock
	i Z	57 05	1.5	+14			Δ = 21.9°
	iSNEne	59 57	6.5		-10	-9	
	iSZ	04 00 03	4.0	+6			
25	iPZ	04 05 19	1.0	-15			
25	e Z	04 32 23					
25	ePZ	06 04 40					
	iSN	08 44	6.5		+11		
25	ePZN	08 52 50					U.S.C.G.S. 5½°S., 151½°E
	i ZN	52 59	1.5	+12	-11		H = 08.47.51
	iPPZ	53 07	1.0	-17			New Britain aftershock
	iSN	56 55	6.0		-11		Δ = 21.9°
	eSn	56 55					
25	i Z	10 05 19					
25	e Z	12 07 41					

Brisbane Seismological Bulletin 1952 No. 184

Date	Phase	Time h. m. s.	Per sec.	A _z	A _n	A _e	Remarks
Dec.							
25	ePZ	12 16 58					
	ePN	17 02					U.S.C.G.S: 5½°S., 153°E
	e Z	17 04					H = 12.12.04
	iSN	21 02	6.0		+9		New Britain
	eSZn	21 02					Δ = 21.7°
25	e Z	14 46 06					
25	iPZN	15 01 38	1.0	-14			U.S.C.G.S: 5½°S., 153°E
	iSN	05 44	7.0		+12		H = 14.56.42
							New Britain
							Δ = 21.7°
26	iPZ	04 12 15	0.5	-21			
	ePN	12 15					
	e Z	12 25					
	e Z	12 35					
	i Z	12 51	1.5	-17			
	iSNEne	19 20	6.0		+9	+10	
26	iPZN	11 19 55	1.0	+20			B.C.I.S: 22½°S., 178½°W
	ePe	19 55					H = 11.15.09
	i Z	20 36	1.0	+23			h = 600 km.
	i Ze	22 38	1.5	-14			Fiji Is.
	e N	22 39					Δ = 25.7°
	i Z	23 34	1.5	-11			
	iSZNn	23 43	3.5	+7	-9	-10	
26	iPZ	11 25 51	1.0	-15			
26	ePZ	20 17 28	1.0	-22			
	i Z	17 32	1.5	+17			
	iSN	21 29	6.5		+5		
26	iPZ	21 41 15	0.5	-11			
	ePN	41 15					
	i Z	42 01	1.0	+16			
	iSN	50 27	7.0		-8		
	eSn	50 27					

Date	Phase	Time h. m. s.	Per sec.	A _z	A _n	A _e	Remarks
Dec.							
26	iPZ	23 23 24	1.0	+15			
	i Z	23 26	1.0	-12			
27	iPZNh	04 12 34	0.5	+17	-7		
	i Nh	12 52	4.5		+8		
	i Z	14 24	1.0	-13			
	iSN	16 29	6.0		+11		
	eSe	16 29					
	eSn	16 31					
27	iPZ	12 36 59	1.0	-23			B.C.I.S: Kermadec Is. region H = 12.31.30
	i Z	37 12	1.0	-19			
27	i Z	12 39 48	1.0	+17			
27	i Z	14 46 02	0.5	-13			
27	iPZ	16 32 59	1.0	+11			U.S.C.G.S: 16°S., 173°W H = 16.28.04 Fiji Is. $\Delta = 21.6^\circ$
	ePN	32 59					
	i Z	33 01	1.0	+20			
	i N	33 10	3.5		+10		
	iPPZ	33 16	1.5	+12			
	i Z	34 09	1.0	+14			
	i Z	34 45	1.5	-17			
	iSNh	37 02	6.5		+9		
27	ePZ	18 22 37					
27	iPZ	18 35 03	1.0	-8			
28	iPZ	05 00 10	1.0	-17			
	e Z	00 14					
	i Z	00 33	1.0	+9			

Date	Phase	Time h. m. s.	Per sec.	A _z	A _n	A _e	Remarks
Dec.							
28	iPZ	14 57 10	1.0	+11			U.S.C.G.S: 6°N., 127°E
	e Z	57 30					H = 14.49.14
	i Z	57 35	1.0	-12			Off E. coast of
	i Z	58 20	1.5	+10			Mindanao
	eSe	15 03 21					$\Delta = 41.4^\circ$
	iSNn	03 23	6.5		+7		
28	iPZ	15 09 14	1.0	-14			U.S.C.G.S: 6°N., 127°E
	ePN	09 14					H = 15.01.19
	i Z	09 19	1.0	+12			Off E. coast of
	i Z	09 26	1.0	-17			Mindanao
	iSNn	15 27	7.0		+8		$\Delta = 41.4^\circ$
28	iPZ	15 23 16	1.0	+12			
	e Z	23 37					
	i Z	24 15	1.0	+14			
28	i Z	15 28 34	1.5	-9			
28	iPZ	17 43 05	1.0	-17			
29	iPN	02 21 05	3.0		+11		U.S.C.G.S: 49°N., 158°W
	ePZn	21 05					H = 02.09.13
	i Z	21 07	1.0	+15			Kamchatka
	iPPZN	23 52	1.0	-14	-12		$\Delta = 75.8^\circ$
	eSNn	30 46					
	eL _Q ne	41.0					
29	iPZ	09 29 15	1.0	-13			
29	iPZ	12 11 59	1.0	+21			U.S.C.G.S: 19°S., 178°W
	epPNn	13 35					H = 12.06.52
	iSne	15 58	8.0		-11		h = 600 km.
							$\Delta = 27.6^\circ$
29	iPZ	18 33 08	0.5	-15			U.S.C.G.S: New Britain
	ePNn	33 08					aftershock
	i Z	33 12	1.0	+17			H = 18.28.14
	i Nn	33 14	4.0		+9		$\Delta = 21.9^\circ$
	ePPN	33 35					
	iPPn	33 37					
	iSNn	37 09	8.0		-8		
	i N	37 36	8.0		-10		
	eL _N R	38.9					

Date	Phase	Time h. m. s.	Per sec.	A _z	A _n	A _e	Remarks
Dec.							
29	iPN	23 26 20	1.0	+10			U.S.C.G.S: 21°S., 178½°W H = 23.21.20 h = 500 km. Fiji Is. Δ = 26.4°
	i Z	28 30	1.0	+11			
	iSN	30 15	6.5		+10		
29	iPZN	23 32 24	1.0	-7	+8		U.S.C.G.S: 5½°S., 152°E H = 07.40.11 New Britain aftershock Δ = 21.9°
	i n	32 45					
	iSN	36 17	7.0		+5		
30	e Z	06 27 33					
30	ePZ	07 45 10					U.S.C.G.S: 5½°S., 152°E H = 07.40.11 New Britain aftershock Δ = 21.9°
	i Z	45 13	1.0	+11			
	iPPZ	45 35	1.0	+14			
	eSNEe	49 10					
30	e Z	08 16 16					
30	iPZ	09 08 25	1.0	+17			
30	ePZNn	12 53 33					
	i ZN	53 36	1.5	-11	+7		
	e ZN	53 51					
	i N	55 30	6.0		-5		
	iSNEe	57 59	7.0		+7	+9	
30	e Z	13 03 56					
30	ePZ	13 45 46					
30	ePZ	16 26 58					
	i Z	27 06	1.5	-11			

Brisbane Seismological Bulletin 1952 No. 184

Page 14

Date	Phase	Time h. m. s.	Per sec.	A _z	A _n	A _e	Remarks
Dec.							
30	ePZNE	17 44 20					
	i ZN	44 28	1.0	+15	+3		
	iPPZ	44 35	1.5	-14			
	i Z	44 50	1.5	+12			
	e N	47 27					
	iSNn	47 50	8.0		+7		
30	ePZe	17 51 05					
	ePN	51 06					
	i ZN	51 10	1.0	+9			
	iPPZ	51 18	1.5	-11			
	iSNn	54 24	7.5		-9		
30	iPZ	18 33 51	1.0	-23			
	ipPZ	35 13	1.0	-30			
	iSZ	37 57	6.5	+8			U. S. C. G. S: 19°S., 178°W H = 18.28.42 h = 500 km. Fiji Is. $\Delta = 27.7^\circ$
30	e Z	18 39 43					
30	iPZN	19 42 46	1.0	-15	+7		
	i Z	42 55	1.5	-10			
	iSN	47 36	7.0		+6		
	eSn	47 36					
30	e Z	22 43 36					