(COPY)

No. 1 192 1916, January

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

φ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration** (**NS, EW, Vert.**)

		V	T_o	ϵ : 1	$\frac{r}{T_o^2}$
A_N	(1)	1·9	7.7	6.C	0.02
	(3)	130	9.9	4.3	0.02
A_E	(1)	146	7.3	3.1	0.02
	(3)	130	9.7	3.0	0.04
A_Z	(2)	92	5.0	[illegible]	0.08

No.	Date.	Phase.	Time (*Greenwich*)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks.
			h. m. s.	s.	μ	μ	μ	km.	
1	1916								
1	Jan. 4	iP	15 54 53	3				3000	
		iS	59 36	6	-	-2			
		PS	16 00 01	7	2	1			
		eL	03.4	16					
		MN	04 50	17	15				
		ME	05 00	15		32			
		MZ	12 43	12			3		
		F	17 35						
2	" 11	e	12 41.8						
		e	47.1						
		M	53.3	11	1	½			
		F	13 10						
3	" 12	e(P?)	19 45.8						
		e	47.5	4		2			
		i	49 01	4	-	-2			
			49 07	4	½	7½			
			49 49	5		6			
		e	53.6	7		1½			
		eL	55.6	18					
		MN	57 01	16	16				
		ME	20 03 35	10		2			
		F	20 30						
4	" 13	e	8 08.7	5	-	¼			
		e	14.3	?					
		eL	16.8	18					
		MN	20 14	12	4				
		ME	20 23	12		3			
		F	8 50						
5	" 15	e	15 53.0						
		MN	16 06 19	18	1				
		ME	07 31	16		1½			
		F	16 20						
6	" 16	e	2 45.9	7	-	½			
		eL	54.3	18					
		ME	57 47	14		2			
		MN	58 57	12	2				
		F	3 25						

(Continued on next sheet)

(COPY)

No. 1 (continued) 192 1918, January

Riverview College Observatory,

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SEISMOLOGICAL BULLETIN.

$\varphi = 33° 49' 49''$ S. $\lambda = 151° 9' 30''$ E. h = 41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration (NS, EW, Vert.)**

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N		(See last sheet)		
A_E				
A_z				

No.	Date.	Phase	Time (*Greenwich*)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_z	Δ	Remarks.
	1918		h. m. s.	s.	μ	μ	μ	km.	
7	Jan. 18	iP	10 46 28	3	-3	-6			Perhaps double
		eL	49.3	11					
		i	49	44	6	-	-4		
		M_1	49 53	8	1½				
		MS_2	55 16	8	2				
		MN_2	55 36	8	1½				
		P	11 45						
8	" 21	iP	19 52 41	3	½	¼	-1	3500	
		eS	58.0	8	¼	½			
		PS	58 41	8	½	2			
		eL	20 03.6	20?					
		i	05 48	3	+12	+25	-2		Probably a second iP
		MN_1	06 43	15	44				
		ME_1	07 46	12		27			
		M_2)	09.7	11	30	27	14		
		MZ_2)							
		P	21 25						
9	" 22	e	1 40.9						
		e	46.5						
		eL	51.9	20					
		M	54.9	14	4	4			
		F	2 35						
10	" 24	e	14 59.6	4	-	½			
		e(S?)	15 05 32	6	¼	½			
		eL	09.6	12					
		MN_1	13 11	11	5				
		ME_1	13 47	13		9			
		MZ	14 00	14			4		
		MN_2	20 19	11	5				
		ME_2	21 42	12		4			
		P	16 45						

(Continued on next sheet)

(CONT)

No. 1 (continued) 192 1918, January

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SEISMOLOGICAL BULLETIN.

ϕ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

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3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration (NS, EW, Vert.)**

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N		(See last sheet)		
A_E				
A_z				

No.	Date.	Phase	Time (*Greenwich*)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_z	Δ	Remarks.
	1918		h. m. s.	s.	μ	μ	μ	km.	
11	Jan. 24	eL	23 57.4	?					
	25	M	59 49	16	-	1½			
		F	00 05						
12	" 25	eL	2 26.5	16					
		M	32 24	13	-	1			
		F	3 05						
13	" 25	eL	15 47.8						A few long waves.
14	" 25	eL	22 03.5	14					
		MN	05 06	12	1½				
		ME	13 56	12		1½			
		F	22 35						
15	" 26	eP	3 40.6					3100?	
		e(S?)	45.4	8	½	½			
		eL	47.9	14					
		ME	50 52	12		3			
		MN	51 24	11	2½				
		F	4 50						
16	" 30	iP	21 30 10	4	-2½	-	+5	8250	Northern Japan
		iS	39 42	8	-15	-16			
		i	42 02	10	+10	+33			
		eL	51.8	22					
		ME_1	54 30	16		31			
		MN_1	55 19	16	13				
		ME_2	57 24	15		25			
		MN_2	59 22	14	10				
		ME_3	22 01 12	14		19			
		MN_3	03 07	14	12				
		F	23 50						

E. F. Pigot — 5.

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2. Wiechert Vertical Seismometer (80 kilo).
3. Mainka Conical Pendulum Seismometer (450 kilo.)

		V	T_o	$\epsilon : 1$	$\frac{r}{T^2}$
A_N	(1)	150	7.8	5.8	0.02
	(3)	121	10.0	4.1	0.02
A_E	(1)	154	7.0	3.4	0.02
	(3)	141	8.8	8.0	0.06
A_Z	(2)	88	5.1	4.1	0.07

No.	Date.	Char.	Phase.	Time (Greenwich)	Per.	Amplitude. A_N	Amplitude. A_E	Amplitude. A_Z	Δ	Remarks.
	1918			h. m. s.	s.	μ	μ	μ	km.	
17	Feb. 2	I	e	9 46.5						
			LN	55 31	14	1				
			ME	10 03 17	12		¾			
			F	10 15						
18	" 3	I_r	eP	14 09.6	4				2500?	
			e(S?)	13.7	7	½	½			
			eL	17.0	14					
			M_1	20.5	14	32	22			
			MZ	20 44	15			9		
			ME_2	24 11	12		13			
			F	15 45						
19	" 6	I	e	3 24.1	10	1				
			eL	26.4	18					
			MN	28 15	13	7				
			ME	30 47	14		9			
			F	4 30						
20	" 6	I	e?	14 51.3						
			e(L?)	15 01.6	22					
			ME	02 40	20		5			
			MN	05 30	12	3				
			F	15 20						
21	" 7	II_u	iP	5 28 39	3	-2	+1	-1	6640	Azim. 146° (N.34°W.)
			i	29 16	4	+9-	-5	-9		
			iS	35 17	7	-12	-9			
				35 27	7	13	4			φ, 19°N.
			PS	36 02	9	18	7½			λ, 121°E.
			e(SR?)	38.4	11	6	1			(approx.)
			i	38 31	11	+36	+42			
				39 28	11	19	49			
			eL	45.3	25					
			ME_1	46 29	16		64			
			MZ	49 31	18			20		
			MN_1	49 43	18	68				
			ME_2	50 20	17		115			
			MN_2	51 28	16	49				
			C	56 37	12	7	13			
			F	7 30						
22	" 12	I	eL	3 27.9	22					A few long waves.
23	" 13	I	iP	3 46 21	5	-6	-5½		3500?	
			e(S?)	53 41	8	½	1			
			eL	58 50	20					
			MN	4 01 38	16	24				
			ME	04 36	18		38			
			MZ	04 42	18			14		
			F	4 10						

(Continued on next sheet)

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	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N	(See last sheet)			
A_E				
A_Z				

No.	Date.	Char.	Phase.	Time (Greenwich)	Per.	Amplitude. A_N	Amplitude. A_E	Amplitude. A_Z	Δ	Remarks.
	1918			h. m. s.	s.	μ	μ	μ	km.	
24	Feb. 13	I_u	eP	6 18 33	4	-	1		6600	Amoy (China)
			iS	26 43	8	-	6			
			i	26 55	8	-7½	6			
			PS	27 20	8	3	6			
			eL	33.6	30					
			M_1	34.5	28	88	120			
			MN_2	39 03	24	43				
			ME_2	39 36	24		110			
			F	9 30						
25	" 13	I	i	22 08 23	5	⅓	-5			
			eL	21.2	22					
			ME	22 33	19		26			
			MN	23 30	13	8				
			MZ	23 35	13			3½		
			F	23 10						
26	" 15	I	e	9 20.0	?					
			ME	22 49	11		1			
			LN	23 50	12	1½				
			F	9 40						
27	" 19	I_r	eP	14 19 21	4	½	½		2170	
				19 36	4	1	3			
			iS	22 59	6	+1	-2½			
				23 07	6	-	3			
			eL	24.9	12					
			MN	25 24	12	1½				
			ME	26 28	10		1			
			F	14 40						
28	" 19	II_r	iP	16 24 37	4	+1	+2	1	2400	
			iPR_1	25 44	6	+7	-4			
			eS	28 35	7	7	2			
			i	28 43	7	+49	+28	1½		
			PS	30 00	7	21	11			
			eL	31.2	20					
			MN_1	31 46	15	58				
			MZ	32 24	15			27		
			MN_2	33 09	15	70				
			ME_1	33 27	15		90			
			MN_3	37 10	12	34				
			ME_2	39 52	12		29			
			MN_4	42 21	10	16				
			ME_3	46 27	12		23			
			F	18 30						

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	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N		(See last sheet)		
A_E				
A_Z				

No.	Date.	Char.	Phase.	Time (Greenwich) h. m. s.	Per. s.	Amplitude. A_N μ	A_E μ	A_Z μ	Δ km.	Remarks.
	1918									
29	Feb. 19	I	eP	21 13.4					2300?	
			e(S?)	17.2						
			eL	18.8	14					
			MN	20 22	12	4				
			ME	20 27	12		3			
			F	21 55						
30	" 20	I	eP	3 50.2	4	½	2			
				50 28	4	½	2½			
			e	51.1						
				51 23	8	½	2			
			MN	53 03	9	1				
			ME	53 19	8		1½			
			F	4 06						
31	" 20	I	e	15 41.1						
			eL	45 32	16					
			MN	47 19	14	2				
			ME	50 01	16		3			
			F	16 10						
32	" 20	I	e	22 28.2						
			e	30.6	5	-	½			
			eL	37.5	17					
			MN	39 05	14	4				
			ME	41 27	16		6			
			F	23 20						
33	" 21	I	eL	11 58.8	17					A few long waves.
34	" 21	I	e	15 57.5						
			eL	16 05.8	15					
			MN	08 45	12	1				
			ME	09 37	14		2			
			F	16 30						
35	" 22	I	e	20 14.1	3	-	1			
			eL	20.4	12					
			ME	21 43	10		1			
			MN	24 15	12	1				
			F	20 35						
36	" 23	I	e?	18 07.7						
			e	15.2	4	½	-			
			eL	19.9	14					
			MN	20 31	12	2				
			ME	24 06	15		3			
			F	19 00						

(Continued on next sheet)

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	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N				
A_E		(See last sheet)		
A_Z				

No.	Date.	Char.	Phase.	Time (Greenwich)	Per.	Amplitude. A_N	Amplitude. A_E	Amplitude. A_Z	Δ	Remarks.
				h. m. s.	s.	μ	μ	μ	km.	
	1916									
37	Feb. 23	I	e	20 39.5						
			e	45.5						
			eL	49.5	15					
			ME	52 16	12		3			
			MN	52 28	12	1½				
			F	21 20						
38	" 24	I	e	15 27 35						
			eL	32.4	?					
			MN	34 01	16	3				
			ME	35 03	14		2			
			F	16 05						
39	" 25	I	e	6 10.5						
			e	16.2	7	½	-			
			eL	18.0	18					
			MN_1	19 07	14	4				
			ME_1	20 28	16		9			
			MN_2	23 24	11	2½				
			ME_2	24 37	15		5			
			F	7 30						
39a	" 26	I_r	eP	10 25 03	4	1	-		2300	
			S	28 57	7	1	½			
			PS	29 15	7	5	3½			
			eL	31.0	16					
			MN_1	31 45	15	5				
			ME_1	33 08	10		2			
			MN_2	37 32	12	3				
			ME_2	38 35	12		4½			
			F	11 35						
40	" 27	I_r	eP	3 17 17	3	½	1		2400	
			iS	21 12	6	+7	+2			
			PS	21 30	6	3½	2			
			eL	23.4	16					
			MN_1	24 13	13	8				
			ME_1	25 23	13		5½			
			ME_2	33 21	10		5			
			MN_2	33 41	10	5				
			F	4 45						
41	" 27	I	e?	15 23.5						
			M	31.7	8	1½	2			
			F	15 45						

E. F. Pigot S.J.

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	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N (1)	148	7.6	4.8	0.02
(3)	133	10.0	4.8	0.02
A_E (1)	150	7.1	3.3	0.02
(3)	138	9.3	8.0	0.05
A_Z (2)	88	5.1	4.0	0.05

No.	Date.	Char.	Phase.	Time (Greenwich)	Per.	Amplitude. A_N	Amplitude. A_E	Amplitude. A_Z	Δ	Remarks.
	1918			h. m. s.	s.	μ	μ	μ	km.	
42	Mar. 2	I	e?	2 50.1						
			eL	54.4	16					
			MN	3 01 23	11	1				
			ME	02 28	12		1½			
			F	3 05						
43	" 6	I	eL	6 06.0	20					
			MN	06 56	16	2½				
			ME	07 09	15		2½			
			F	6 30						
44	" 10	I_r	iP	14 21 42	4	-½	-6½		2400	
				21 46	4	2	11			
				22 27	5	-	5			
			iS	25 39	6	½	-5			
				25 55	6	3	2½			
			eL	26.3	14					
			M	26.9	11	10	6			
			F	15 15						
45	" 11	I	e?	6 21.4						
			eL	28.2	14					
			MN	29 06	11	1				
			ME	32 34	12		1			
			F	6 40						
46	" 14	I_r	eP	9 36 21	4	-	2		4200	
			e(S?)	42.3	7	-	½			
			eL	49.7	14					
			MN	50 43	12	1				
			ME	53 40	15		2½			
			F	10 10						
47	" 17	I	e	14 07.4	5					
			eL	14.2	14					
			MN	15 09	12	3				
			ME	18 52	14		2			
			F	14 30						
48	" 17	I	eL	15 01.3	14					
			MN	02 42	12	1				
			ME	04 08	12		1			
			F	15 10						
49	" 17	I	e	15 36.5						
			M	39 27	12	3	1½			
			F	15 45						

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3. Mainka Conical Pendulum Seismometer (450 kilo.)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N		(See last sheet)		
A_E				
A_Z				

No.	Date.	Char.	Phase.	Time (Greenwich)	Per.	Amplitude. A_N	Amplitude. A_E	Amplitude. A_Z	Δ	Remarks.
	1918			h. m. s.	s.	μ	μ	μ	km.	
50	Mar.19	I_r	eP	6 00 53	6	5½	-		2640	
				01 03	6	2	1½			
			iS	05 09	7	+2	-2½			
			PS	05 31	8	10	8			
			eL	08.5	16					
			MN_1	09 15	13	17				
			ME_1	09 55	12		16			
			ME_2	11 50	12		13			
			MZ	12 35	13			7		
			MN_2	12 48	11	16				
			F	7 40						
51	" 20	I_r	eP	1 16 37	5	½	½		2950	
			eS	21 16	7	2	1½			
			PS	21 35	7	4	5			
			eL	24 09	14					
			LN_1	28 25	11	14				
			ME_1	29 53	9		11			
			ME_2	34 33	8		13			
			LN_2	35 21	9	8				
			MZ	36 06	9			3		
			F	2 55						
52	" 21	I	e	6 13.4	7	½	½			
			ME	18 21	10		2			
			LN	19 23	9	2				
			F	6 35						
53	" 21	I_r	iP	15 55 49	4	-	-2		2520	
			iS	59 56	7	+4	+5			
				16 00 01	7	11	9			
			eL	01.8	18					
			MN	04 25	11	5				
			ME	04 47	12		9			
			F	16 25						
53a	" 22	I	iPP	11 13 39						
			e?	16.7	6	½	.. -			
			e?	39.4	?					
54	" 24	I_r	iP	5 13 54	2	-	+2	-2	2520	(Cf. No.53)
			PR_2	15 30	4	½	3	1		
			iS	18 01	5	-4½	+8	-1		
			PS	18 15	5	½	3			
			eL	20.9	9					
			i	21 17	7	-	+9			
			ME	21 25	7	5				
			LN	21 56	8	3				
			i	23 32	5	-	+8			
			F	5 55						

(Continued on next sheet)

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INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.)
2. Wiechert Vertical Seismometer (80 kilo).
3. Mainka Conical Pendulum Seismometer (450 kilo.)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N				
A_E	(See last sheet)			
A_Z				

No.	Date.	Char.	Phase.	Time (Greenwich) h. m. s.	Per. s.	Amplitude. A_N μ	A_E μ	A_Z μ	Δ km.	Remarks.
	1918									
55	Mar. 24	I	eL	14 45.1	12					
			ME	46 03	11		1			
			MN	46 53	10	½				
			F	14 55						
56	" 24	I	eL	22 23.8	14					
			MN	25 54	12	1				
			ME	34 38	14		2			
			F	22 50						
57	" 27	I	e	8 40.3						
			eL	45.0	12					
			MN	45 20	10	1				
			ME	45 46	10		2			
			F	9 00						
58	" 27									
	28	I_r	iP	23 16 08	2	-	+2	2	2400	
					8					
				16 19	2	½	8			
					8					
			PA1	17	2					
			PR1	17 25	6	½	3½			
			iS	20 03	6	+6	-8	1		
			PS	20 18	6	6	9	4		
			eL	21.7	20					
			ME	22 36	16		23			
			MN	23 25	14	12				
			MZ	24 29	15			9		
			F	00 30						
59	" 28	I_V	iP	17 04 17	1	+½	½		720?	Extremely short wave-lengths.
			i(S?)	05 36	2	½	-1			
			MN	06 19	8	1				(S. Queensland?)
			ME	07 15	8		1			
			F	17 13						

E. F. Pigot Jr.

Riverview College Observatory,

SYDNEY, N.S.W.

Seismological Bulletin.

$\phi = 33° 49' 49''$ S. $\lambda = 151° 9' 30''$ E. h = 41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.)
2. Wiechert Vertical Seismometer (80 kilo).
3. Mainka Conical Pendulum Seismometer (450 kilo.)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N (1)	148	7.6	4.7	0.02
A_E (3)	149	9.6	4.4	0.02
(1)	150	7.1	3.1	0.02
A_Z (3)	134	9.3	11.0	0.06
(2)	82	5.0	4.0	0.07

N.B. NS & EW data always from Seismometer No.1, unless otherwise stated.

No.	Date.	Char.	Phase.	Time (Greenwich)	Per.	Amplitude. A_N	Amplitude. A_E	Amplitude. A_Z	Δ	Remarks.
	1918			h. m. s.	s.	μ	μ	μ	km.	
60	Apr. 4	I	e	1 10.3	5	½				Short wave-lengths.
			MN	13 19	7	½				
			ME	14 46	9		1			
			F	1 30						
61	" 10	I_u	iP	2 15 01	3	-1½			7900	
			iS	24 16	5	-2	+2			
				24 23	5	5	1			
			SR_1	27 52	10	1	5			
			eL	36.3	15					
			ME	37 17	10		1			
			MN	40 42	12	1½				
			F	3 30						
62	" 10	I	e	5 28.0						
			MN	35 36	9	½				
			ME	36 15	9		1			
			F	5 50						
63	" 10	I_r	eP	15 21.7	5	-	½		2400	
			eS	25.6	6	½	1			
			eL	30.3	14					
			ME	32 13	8		1½			
			MN	33 19	12	3				
			F	16 10						
64	" 10	I	e	17 20.3						
			e	25.2	7	1	-			
			eL	30.3	14					
			ME	31 39	12		3			
			MN	33 52	15	4				
			F	18 15						
65	" 13	I_u	e(P?)	1 03.2	6	¼	¼		5900?	
			eS	10.7	8	½	1			
			eL	18.1	35					
			MN_1	22 24	20	46				
			MN_2	23 44	14	25				
			ME_1	24 56	12		8			
			MN_3	26 15	12	28				
			ME_2	26 41	12		11			
			MZ	27 37	14			4½		
			ME_3	30 27	12		8			
			F	3 15						

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INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.)
2. Wiechert Vertical Seismometer (80 kilo).
3. Mainka Conical Pendulum Seismometer (450 kilo.)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N				
A_E		(See last sheet)		
A_Z				

No.	Date.	Char.	Phase.	Time (Greenwich) h. m. s.	Per. s.	Amplitude. A_N μ	A_E μ	A_Z μ	Δ km.	Remarks.
	1918									
66	Apr. 18	I_r	eP	18 43.6	3	½		¼	2500	
			iS	47 43	7	-16	+4½			
				47 50	7	13	9			
			eL	50.2	16					
			M1	53 12	11	10	10			
			ME_2	56 31	10		3			
			ME_3	59 14	10		4			
			MN_2	19 00 16	10	6				
			MN_3	02 09	10	6				
			F	20 00						
67	" 21	I	e?	22 46.9	?				12,200	San Jacinto (California)
			eS	59.2	14	2	-			
			PS	23 00 56	14	-	3			
			eSR_1	06.9	16	2½	-			
				08 36	16	1½	4½			
			eL	23.2	35					
			ME_1	24 44	25		16			
			MN_1	27 45	18	3½				
			ME_2	29 54	17		10			
			MN_2	31 53	16	39				
	Lrepl waves		e	0 47.3	20	4	5			
	(or W_2 ")		F	2 15						
68	" 23	I	e	15 40.6	8	1				
			eL	48 21	16					Analysis from Seismometer No.3 (clock on No.1 out of order for some hours).
			MN	52 16	14	3				
			ME	52 55	14		3			
			F	16 35						
69	" 25	I	e	8 39.7	4		½			
			eL	46.7	15					
			MN	48 19	12	1½				
			ME	50 37	12		1½			
			F	9 10						
70	" 25	I	e	17 24.2	14					A few long waves.
71	" 25	I	e(S?)	22 58.2	9	1				
			eL	23 04.9	16					
			ME	06 00	12		3			
			MN	06 42	12	3				
			F	23 50						

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2. Wiechert Vertical Seismometer (80 kilo).
3. Mainka Conical Pendulum Seismometer (450 kilo.)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_E (1)	146	7.5	4.5	0.02
A_E (3)	131	9.9	4.8	0.02
A_Z (1)	150	7.0	3.0	0.02
A_Z (3)	125	9.5	8.0	0.05
A_Z (2)	83	4.9	3.7	0.09

N.B. NS & EW data always from Seismometer No.1, unless otherwise specified.

No.	Date.	Char.	Phase.	Time (Greenwich)	Per.	Amplitude. A_N	Amplitude. A_E	Amplitude. A_Z	Δ	Remarks.
	1918			h. m. s.	s.	μ	μ	μ	km.	
72	May 2	I	e(S?)	0 08.3	12	-	1½			
			eL	16.7	24					
			MN	21 36	12	3				
			ME	23 05	12		1½			
			F	0 35						
73	" 2	I	e?	10 26.2	?					
			e	38.5	6	½				
			M	55 53	?					
			F	11 20						
74	" 4	I	SR_1?	6 25.2	?					Well marked microseisms, (T.=8s.) all day obscuring F.
			e	30.5	15	5	-			
			eL	37.3	20					
			MN	43 01	18	5				
			ME	43 37	16		6			
75	" 11	I	e?	21 38.4						
			e	45.3	8	½				
			eL	55.8	16					
			ME	22 03 31	18		8			
			MN	07 36	15	5				
			F	22 35						
76	" 14	I	eP	19 18.3	4	-	1		1500?	
			e(S?)	20.9	5		½			
			ME	23 42	10		1½			
			MN	24 06	10	2				
			F	19 35						
77	" 18	I	e?	3 02.9						
			eL	06.6	12					
			M	07 51	10	1	2			
			F	3 20						
78	" 20	I_u	e	14 53.5	?				16000?	
			eS	15 08.2	10	1	2			
			e	19.1	16					
				19 28	16		18			
				20 23	20	18				
				20 48	20	18				
			eL	39.0	40					
			ME_1	42 01	30		48			
			MN_1	42 57	28	37				
			ME_2	52 47	24		15			
			MN_2	53 54	24	26				
			MZ	58 41	18			7		
			M_3	59.3	16	25	33			
			M_4	16 03.1	16	14	30			
			M_5	06.5	15	12	13			
			M_6	11 02	14	8	11			
			C	27.8	15	12	5			
			F	17 35						

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INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.)
2. Wiechert Vertical Seismometer (80 kilo).
3. Mainka Conical Pendulum Seismometer (450 kilo.)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N		(See last sheet)		
A_E				
A_Z				

No.	Date.	Char.	Phase.	Time (Greenwich)	Per.	Amplitude. A_N	Amplitude. A_E	Amplitude. A_Z	Δ	Remarks.
	1918			h. m. s.	s.	μ	μ	μ	km.	
79	May 20	II_r	eP	18 10 03	4	1			3300	
			eS	15.1	8	2½	2			
			eL	17.9	35					
			M_1	20.7	20	90	335			
			ME_2	22 41	16		225			
			MZ	24 37	16			120		
			ME_3	24 42	16		480			
			MZ_2	25 55	12			90		
			MN_2	26 16	12	155				
			ME_4	26 57	14		250			
			MN_3	28 25	14	190				
			C	36.5	8	34	15			
			F	21 15						
80	" 20	I	e	20 31.2	4		½			
			eL	38.5	18					
			ME	39 50	12		6			
			MN	40 08	12	4				
			F	Lost	in	No.79.				
81	" 21	I	eP	11 24.4	3					
			e(SR_1?)	37.4	12	1½	-			
			eL	41.4	20					
			MN	45 42	12	7				
			ME	46 08	10		12			
			F	12 25						
82	" 22	I_r	iP	6 37 27	4	+4½	+13¼	-9	3040	Az. 250½° (N. 70½° E)
			ePR_1	38.7	4					
				38 59	4	6½	13	3		
			iS	42 13	5	-26	+9			φ, 22° S
			eL	44.0	12					λ, 180°
			MN	45 34	8	12				F mixed up
			ME	45 40	8		10			with No.83.
83	" 22	I_r	iP	6 42 31	4	+5	+1		3000	
			iS	47 12	4	-13	+36			
			eL	49.0	14					
			MN	50 09	10	14				
			ME	50 21	10		17			
			F	8 30						
84	" 23	I	eP	9 50.4	4	-	½			
			eL	57.0	16					
			ME	58 33	15		5			
			MN	59 23	14	4				
			F	10 15						

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2. Wiechert Vertical Seismometer (80 kilo).
3. Mainka Conical Pendulum Seismometer (450 kilo.)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N		(See last sheet)		
A_E				
A_Z				

No.	Date.	Char.	Phase.	Time (Greenwich) h. m. s.	Per. s.	Amplitude. A_N μ	A_E μ	A_Z μ	Δ km.	Remarks.
	1918									
85	May 23	I_u	eP	12 13.4	?				13,000	
			eS	26.6	8	½	½			
			PS	28.4	10	½	½			
			SR_1	32 56	14	1	2			
			eL	48.5	28					
			ME_1	50 12	20		10			
			MN_1	56 29	15	3½				
			ME_2	59 56	15		8			
			MN_2	13 03 35	15	3½				
			ME_3	04 26	14		4½			
			F	14 10						
86	" 24	I	e	17 18.6	5	½				
			eL	23.6	14					
			ME	25 28	10		3			
			MN	27 01	10	1½				
			F	17 40						
87	" 24	I	eL	18 55.4	12					
			MN	59 49	10	1½				
			ME	19 01 12	10		1½			
			F	19 20						
*88	" 24	I	eL	23 52.5	12					Early phases lost.. Changing papers.
			ME	53 51	10		1½			
			MN	55 25	10	2				
			F	0 05						
89	" 25	I	e	14 49.4	6	½	-			
			eL	01.1	20					
			MN	03 31	14	3				
			ME	03 56	12		3			
			F	14 35						
*90	" 25	I_u	eP	19 42.5	?				9500	
			eS	53.1	10	2	3			
				55 11	12	6	6			
			eSR_2	59.7	14					
				20 00 17	14	4	3½			
			eL	12.6	32					
			M_1	14 33	20	7	10			
			M_2	13 32	14	3	3½			
			F	22 25						
91	" 26	I	eL	20 06.0	25					
			MN	07 34	12	1½				
			ME	09 03	10		1			
			F	20 25						

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INSTRUMENTS:

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2. Wiechert Vertical Seismometer (80 kilo).
3. Mainka Conical Pendulum Seismometer (450 kilo.)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_E (1)	144	7.5	5.5	0.02
A_E (3)	134	9.9	4.2	0.02
A_N (1)	150	7.0	3.0	0.02
A_N (3)	143	9.5	8.0	0.05
A_Z (2)	88	4.3	3.1	0.08

N.B. NS & EW data always from Seismometer No.1 unless otherwise specified

No.	Date.	Char.	Phase.	Time (Greenwich)	Per.	Amplitude. A_N	Amplitude. A_E	Amplitude. A_Z	Δ	Remarks.
	1918			h. m. s.	s.	μ	μ	μ	km.	
92	June 1	I_r	eP	14 23.3	(3 6)	-	½		2800?	
			e(S?)	27.8	8	-	1			
			eL	30.3	25					
			M_1	31 10	18	14	9			
			M_2	32 37	16	17	24			
			MZ	32 37	16			7		
			F	15 15						
93	" 3	I	eP	0 23.0	3?					
			e?	30.4	6	-	¼			
			e?	33.5	8	-	¼			
			eL?	45.5	15					
			M	51 29	14	1	-			F lost in No.94
94	" 3	I	e(S?)	0 54.0	9	-	¾			
			e(L?)	1 03.7	22					
			MN_1	24 56	12	1				
			ME_1	26 31	12		1½			
			ME_2	31 29	16		1½			
			MN_2	31 45	16	3				
			F	2 40						
95	" 3	I	eP	3 01.8	4	-	½		2800?	
			S?	06 20	7	-	1			
			eL	09.1	18					
			M	10.9	16	1½	4			
			F	3 30						
96	" 4	I_r	eP	4 09 20	(5 10)	1	½		2900	
			PR_1	10 10	5	5	½			
			eS	13.9	10	3	4			
			iS	14 01	10	+18	+6			
			iPS	14 18	10	-38	+24			
			eL	16.0	?					
			ME	20 45	14		70			
			MN	21 33	16	28				
			MZ	21 38	16			7		
			F	4 40						

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INSTRUMENTS:

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2. Wiechert Vertical Seismometer (80 kilo).
3. Mainka Conical Pendulum Seismometer (450 kilo.)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N		(See last sheet)		
A_E				
A_Z				

No.	Date.	Char.	Phase.	Time (Greenwich) h. m. s.	Per. s.	Amplitude. A_N μ	A_E μ	A_Z μ	Δ km.	Remarks.
	1918									
97	June 4	II_r	iP	17 18 31	4	-	-4		3500	Time at origin: h m s. 17 12 11
				18 38	4	1	6			
			iPR_1	19 51	4	-	+8			
				21 35	4	-	3			
			iS	23 50	8	+3½	+18			
			PS	24 12	9	4½	11			
			eL	25.7	22					
			MN_1	27 07	20	150				
			ME_1	27 32	20		80			
			MZ	31 06	16			15		
			ME_2	31 22	12		45			
			MN_2	34 21	12	45				
			C	39.0	12	32	40			
			F	19 30						
98	" 5	I_r	eP	22 34.7	4	-	1		2600	
			iS	38 54	7	-7½	+1			
			eSR_1	40 11	8	4½	1½			
			eL	41.5	15					
			MN	42 06	15	13				
			ME	42 47	13		10			
			F	23 30						
99	" 6	III_r	iP	18 16 53	(¼)	-2½	-	-	1190	Epicentre probably, ϕ, 24°S. λ, 154°E.
			iS	18 59	4	-18	+5½	+3½		
			iL	19 06	8	-32	+24	+25		
			M_1	19 35	(¼)	160	120	70		
			MZ_2	20 58	3			70		
			MN_2	21 03	(⅓ 6)					Felt in many places in SE. Queensland. (Max. intensity about IV. FM)
			ME_2	22 19	4½		190			
			MN_3	22 26	4	110				
			MZ_3	22 36	4			62		
			C	26 25	4	30	36	4½		
			F	19 40						
100	" 7	I	e	14 58.3	5	-	½			
			eL	15 03.2	12					
			ME	04 11	10		2			
			MN	04 18	10	1½				
			F	15 10						
101	" 7	I	eP?	22 13.0						
			eL	20.9	20					
			ME_1	31 38	15		2½			
			ME2	33 49	14		2			
			MN	36 15	16	1½				
			F	23 05						

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INSTRUMENTS:

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2. Wiechert Vertical Seismometer (80 kilo).
3. Mainka Conical Pendulum Seismometer (450 kilo.)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N		(See last sheet)		
A_E				
A_Z				

No.	Date.	Char.	Phase.	Time (Greenwich)	Per.	Amplitude. A_N	Amplitude. A_E	Amplitude. A_Z	Δ	Remarks.
	1918			h. m. s.	s.	μ	μ	μ	km.	
102	June 8	I_r	eP	20 28.3					2700	
			eS	32.6	10	1	½			
			PS	33 01	10	1	2			
			eL	37.3	?					
			MN	42 49	15	2½				
			ME	46 02	13		2			
			F	21 05						
103	" 10	I	e	5 44.9						
			eL	48.6	16					
			M	50 35	13	-	1			
			F	6 05						
104	" 10	I_r	eP	15 40.3	2	½	-		4200	
			iS	46 18	5	-6	+3			
			SR_1	48 21	8	4	12			
			eL	51.2	20					
			ME_1	52 03	12		30			
			MN)							
			ME_2)	54.2	14	15	30			
			MZ	58 05	12			4		
			F	16 45						
105	" 16	I_r	eP	5 16 46	4	3	¼	½	2800	
			PR_1	18 24	6	5	-			
			eS	21.3	8	4	-			
			i	21 23	8	-15	-			
			PS	21 33	8	3	9			
				22 15	9	17				
				22 43	9		18			
			eL	24.5	16					
			MN	26 57	10	29				
			ME	27 09	10		45			
			F	6 40						
106	" 17	I	e	18 54.6	16					A few long waves.
107	" 19	I	e	23 09.2						
			eL	10.6	14					
			MN	11 29	10	2				
			ME	11 39	10		3			
			F	23 20						
108	" 21	I	eL	5 07,1	16					
			ME	08 48	14		1			
			MN	12 46	10	1				
			F	5 20						

(Continued on next sheet)

Riverview College Observatory,

SYDNEY, N.S.W.

Seismological Bulletin.

$\phi = 33° 49' 49''$ S. $\lambda = 151° 9' 30''$ E. h = 41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:
1. Wiechert Astatic Pendulum Seismometer (1000 kilo.)
2. Wiechert Vertical Seismometer (80 kilo).
3. Mainka Conical Pendulum Seismometer (450 kilo.)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N		(See last sheet)		
A_E				
A_Z				

No.	Date.	Char.	Phase.	Time (*Greenwich*)	Per.	Amplitude. A_N	Amplitude. A_E	Amplitude. A_Z	Δ	Remarks.
	1918			h. m. s.	s.	μ	μ	μ	km.	
109	June 24	I_r	eP	14 53.9	4	1	-		2300	
			eS	57.7	8	3½	-			
			PS	58 15	8	7	1½			
			eL	15 00.0	18					
			MN, ME	03.6	18	36	38			
			MZ	03 48	18			10		
			F	15 50						
110	" 26	I_r	eP	21 35 18	4	2	-		2500	
			i	36 11	4	-6½	+3½			
			eS	39.4	7	-	1			
			PS	39 47	7	3	6			
			i	41 22	6	-	+9			
			eL	42.0	20					
			MN	43 06	14	10				
			ME_1	44 23	12		8			
			ME_2	51 24	10		9			
			F	22 25						
111	" 28	I	eP	14 00.0	3	3	½			
			MN	02 55	7	1				
			ME	04 38	8		1			
			F	14 15						
112	" 29	I_r	e(P?)	4 20.8	6	½	-			
			e	27.3	10	1	½			
			eL	48.6	?					
			MN_1	51 46	16	11				
			ME_1	52 44	16		6			
			ME_2	5 06 26	8		5½			
			MN_2	06 41	8	3½				
			F	5 45						

E. F. Pigot Sy.

Riverview College Observatory,

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INSTRUMENTS:

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2. Wiechert Vertical Seismometer (80 kilo).
3. Mainka Conical Pendulum Seismometer (450 kilo.)

		V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N	(1	146	7.5	5.0	0.02
A_E	(3	129	9.7	4.7	0.02
	(1	148	7.0	3.0	0.01
A_Z	(3	129	9.8	8.0	0.05
	(2	79	4.1	3.0	0.05

N.B. NS & EW data always from Seismometer No. 1 unless otherwise specified.

No.	Date.	Char.	Phase.	Time (Greenwich) h. m. s.	Per. s.	Amplitude. A_N μ	A_E μ	A_Z μ	Δ km.	Remarks.
	1918									
113	July 1	I_u	eP	6 17.3		½	½		5200	Philippines.
			PR_1	19 25		1	1			
			eS	24.2	10	2	1½			
				24 19	10	6	14			
			PS	24 43	10	8	4			
			eL	32.8	22					
			MN_1	33 47	17	16				
			ME_1	35 00	16		35			
			MN_2	36 16	16	35				
			ME_2	39 59	16		18			
			MN_3	43 21	15	25				
			ME_3	43 39	15		20			
			MZ	45 37	16			7½		
			MN_4							
			ME_4	46.6	14	21	20			
			F	7 55						
114	" 3	III_r	iP	6 58 25	5	+6	-½		3350	Felt in Schouten Is. (New Guinea) ϕ, 3½°S. λ, 144½°E.
			PR_1	7 00 11	5	9	3			
			eS	03 32	7	19	7	2½		
				03 43	7	22	3			
			eL	05.8	50					
			MN_1							
			ME_1	11.2	15	950	1220			
			MZ_1	11 44	16			520		
			MN_2	12 12	12	700				
			ME_2	13 08	11		820			
			MN_3	13 38	11	900				
			MZ_2	13 41	11			370		
			ME_3	14 15	11		1010			
			ME_4	15 09	10		650			
			MZ_3							
			ME_5	16 34	8		330	210		
			MN_4	17 35	8	380				
			ME_6	18 35	8		250			
			ME_7	20 48	10		330			
			MN_5	21 22	12	600				
			MZ_4	21 27	12			218		
			C_1	26.7	10	170	130	58		
			C_2	30.8	10	150	100	70		
			C_3	42 08	10	55	47	16		
	W_2 waves		e	9 48.3						
			MN	53 57	18	5				
			ME	56 48	18		7			
			F	12 30						

(Continued on next sheet)

Riverview College Observatory,

SYDNEY, N.S.W.

Seismological Bulletin.

$\phi = 33° 49' 49''$ S. $\lambda = 151° 9' 30''$ E. h = 41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.)
2. Wiechert Vertical Seismometer (80 kilo).
3. Mainka Conical Pendulum Seismometer (450 kilo.)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N				
A_E		(See last sheet)		
A_Z				

No.	Date.	Char.	Phase.	Time (Greenwich)	Per.	Amplitude. A_N	Amplitude. A_E	Amplitude. A_Z	Δ	Remarks.
				h. m. s.	s.	μ	μ	μ	km.	
	1918									
115	July 6	I_r	eP	20 16.2					2900	
			eS	20.8	6	½	½			
			PS	21 21	6	2	½			
			eL	25.1	18					
			MN	25 46	16	9				
			ME	27 02	14		9			
			F	21 20						
116	" 7	I	e?	20 16.3						
			eL	23.2	16					
			MN	23 53	15	1½				
			ME	25 55	13		4			
			F	20 35						
117	" 8	II_u	eP	10 34 24	4	½	1		9000	Destructive Earthquake in Assam. (See Special Bulletin, issued 1918, July 17.
			PR_1	37 34	6	2	4	2½		
			PR_2	39 30	6	3	4			
			iS	44 33	8	½29	+4	2		
				44 38	8	41	8			
			PS	45 07	8	23	43			
			SR_1	50 02	10	16	14			
			SR_2	53 12	10	16	5½			
			SR_3	55 49	10	12	9			
			eL	57.4	70					Unusually long periods.
			M_1	11 01 28	42	1120	700			
			M2	04 11	36	770	155			
			MZ_1	04 18	34			100		
			MN_3	10 50	22	160				
			ME_3	11 39	22		210			
			MZ_2	11 48	22			70		
			ME_4	15 07	21		130			
			MZ_3	15 12	18			40		
			MN_4	15 50	20	72				
			C	20 08	16	39	20			
	W_2 waves		eW2	12 47.8	28					
			M	48 41	26	4				
			F	15 00						
118	" 9	I	e?	5 02.3	8	3				Heavy micro-seisms all day masking seismic waves.
119	" 9	I	e?	12 35.6	9	3	3			

(Continued on next sheet)

Riverview College Observatory,

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Seismological Bulletin.

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INSTRUMENTS:
1. Wiechert Astatic Pendulum Seismometer (1000 kilo.)
2. Wiechert Vertical Seismometer (80 kilo).
3. Mainka Conical Pendulum Seismometer (450 kilo.)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N				
A_E	(See last sheet)			
A_Z				

No.	Date.	Char.	Phase.	Time (Greenwich)	Per.	Amplitude. A_N	Amplitude. A_E	Amplitude. A_Z	Δ	Remarks.
	1918			h. m. s.	s.	μ	μ	μ	km.	
120	July 11	I_r	eP	21 51.9	4				2500?	
				52 04	4	2	1			
			S?	56 02	7	-	½			
			eL	57.1	12					
			M	57.7	12	4½	3			
			F	22 45						
121	" 16	I	e	18 24.5	4	2½	3			
			e	32.4	6	-	1			
			F	18 36						
122	" 16	I	e?	23 25.4	5	½	½			
			ME	37 51	?					
			MN	40 04	14	2				
			F	23 50						
123	" 21	II_r	eP	6 15 12	(2/8)	½	-		3100	Azim. 183½° (N. 3½° E.)
			iP	15 33	8	-17	-1	+20		ϕ, 6° S.
			i	16 04	8	-16	-			λ, 153° E.
			i(PR$_1$?)	16 23	9	-34	-11			
			iS	20 00	8	-36	-16			
			PS	20 21	8	100	22	20		(cf. Zi-ka-wei)
			eL	21.7	22					
			ME$_1$	25 12	11		130			
			MN$_1$	26 13	12	160				
			MZ$_1$	26 33	12			60		Time at origin:
			ME$_2$	27 03	11		130			h m s.
			MZ$_2$	29 02	11			55		6 09 10
			MN$_2$	29 25	11	115				
			MN$_3$	32 50	10	95				
			C	43.1	11	35	40			
			F	9 10						
124	" 21	I_r	eP	9 50 24	4	1	½		2600	
			eS	54 38	8	1½	1			
			PS	55 10	8	9	2			
			SR$_1$	56 34	8	-	5			
			eL	57.8	12+					
			MZ)	10 01.3	10		19	3		
			ME)							
			MN	03 33	11	16				
			F	11 10						
125	" 22	I	e	5 44.6	6	1	-			
			e?	48.7	?					
			eL	51.7	16					
			MN	52 24	15	5				
			ME	53 23	14		4			
			F	6 15						

(Continued on next sheet)

Riverview College Observatory,

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Seismological Bulletin.

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INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.)
2. Wiechert Vertical Seismometer (80 kilo).
3. Mainka Conical Pendulum Seismometer (450 kilo.)

	V	T_o	$\epsilon : \bar{1}$	$\frac{r}{T_o^2}$
A_N				
A_E	(See last sheet)			
A_Z				

No.	Date.	Char.	Phase.	Time (Greenwich)	Per.	Amplitude. A_N	Amplitude. A_E	Amplitude. A_Z	Δ	Remarks.
	1918			h. m. s.	s.	μ	μ	μ	km.	
126	July 23	I	e?	13 26.1	5	½	-			
			eS	32.5	12	1½	3			
			PS	33 01	16	14	8			
			eSR_1	35.2	13	3	5			
			eL	37,5	20					
			MN_1	39 00	17	22				
			ME_1	39 09	16		14			
			MZ	39 57	16			10		
			ME_2	42 25	11		5			
			MN_2	46 59	12	7				
			ME_3	48 48	10		5			
			F	14 30						
127	"	24	I_r eP	10 58.2	5	-	3		2500	
			S	11 02 17	7	1	2½			
			PS	02 30	8	1½	3			
			SR_1	03 42	12	7	-			
			eL	04.9	16					
			MN_1	06 30	15	24				
			MZ	07 18	17			11		
			ME_1	08 29	15		26			
			MN_2	09 02	12	15				
			ME_2	12 07	14		22			
			F	12 30						
128	"	24	I e	14 06.7	5	-	1			
			eL	14.2	16					
			MN	14 43	15	4				
			ME	15 54	14		4½			
			F?	14 25						
129	"	26	I e	1 00.2	?					
			MN	05 01	12	1				
			ME	05 08	12		3			
			F	1 15						
130	"	28	I e	21 19.4	6	-	½			
			eL	24.2	18					
			MN	24 19	15	2½				
			ME	25 21	16		4			
			F	21 40						

(Continued on next sheet)

Riverview College Observatory,

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Seismological Bulletin.

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INSTRUMENTS:

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2. Wiechert Vertical Seismometer (80 kilo).
3. Mainka Conical Pendulum Seismometer (450 kilo.)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N		(See last sheet)		
A_E				
A_Z				

No.	Date.	Char.	Phase.	Time (Greenwich)	Per.	Amplitude. A_N	Amplitude. A_E	Amplitude. A_Z	Δ	Remarks.
	1918			h. m. s.	s.	μ	μ	μ	km.	
131	July 29	I_r	eP	11 21.6	6	-	½		2400	
			eS	25.5	7	1	2½			
			PS	25 48	7	2	3			
			eL	28.1	20					
			ME	30 43	14		7			
			MN	32 15	12	4				
			F	12 30						
132	" 29	II_r	eP	16 56.7	4	-	1		3100	Felt at Eitape, N.Guinea. (VI R.F.) Also at Kieta,- Bougainville I. (IV R.F.)
			eS	17 01.5	7	3	2			
			eL	03.7	20					
			ME_1	07 49	20		300			
			MN_1	09 21	16	220				
			MZ_1	09 54	16			72		
			ME_2	11 34	12		150			
			MZ_2	12 03	12			50		
			MN_2	13 33	12	110				
			ME_3	14 42	12		160			
			C	22 27	10	35	40			
			F	20 00						
133	" 31	I	e(L?)	15 34.7	20					
			ME	41 00	16		6			
			MN	43 49	12	1½				
			F	16 10						
134	" 31	I_r	eP	22 03.7	4	½	1		2400	
			eS	07.6	6	1	1			
			PS	07 56	6	3	4			
			eL	10.3	16					
			ME	12 18	12		6			
			MN	12 45	12	8				
			F	23 10						

E. F. Pigott S.

Riverview College Observatory,

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Seismological Bulletin.

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	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N (1)	144	7.6	5.3	0.02
(3)	130	9.9	5.0	0.02
A_E (1)	148	7.0	3.1	0.01
(3)	130	9.5	8.0	0.05
A_Z (2)	77	4.1	2.8	0.05

No.	Date.	Char.	Phase.	Time (Greenwich)	Per.	Amplitude. A_N	Amplitude. A_E	Amplitude. A_Z	Δ	Remarks.
	1918			h. m. s.	s.	μ	μ	μ	km.	
135	Aug. 1	I	e?	11 52.4	5					
			e(S?)	57 31	12	1½	-			
			eL	12 00.1	16					
			MN	01 23	12	3				
			ME	04 09	15		5			
			F	12 25						
136	" 2	I	e?	9 15.6						
			ϵ	21.5						
			ME	22.8	15		4			
			F	9 25						
137	" 3	I	eP	8 49 08	4				2790	
			eS	53 36	7	1¼	2			
				54 39	8	2	-			
			eL	55.9	16					
			ME	57 22	16		½			
			MN_1	57 45	15	3				
			MN_2	9 00 03	9	3¼				
			F	9 30						
138	" 4	Ir	e	10 20.8					3000	Felt at Kieta, Bougainville I. (R.F. IV)
			eL	23.2	16					
			MN	25 40	12	1½				
			ME	28 04	13		2			
			F	10 45						
139	" 4	I	e?	22 30.8	4					
			eL	36.7	?					
			ME	3723	14		4			
			MN	39 06	13	4				
			F	22 55						
140	" 5	I	eP	1 42 57	4	-	1			
			e(S?)	46 11	9	1½	¾			
			e(SR_1?)	47 29	10	4	3			
			eL	48.9	15					
			ME) MZ)	53 48	14		2	1½		
			MN	54 21	13	2				
			F	3 05						
141	" 6	I	e?	4 54.9						Probably seismic: heavy microseisms.
142	" 8	II_r	eP	9 53 52	2	2	-		2980	
			i	54 07	4	+9	+½	+¾		
			iS	58 34	6					
					24	185	-	-		
			PS	59 05	16	120	15	30		
		i	(SR_1?)	10 00 34	12	-27	+105			
			eL	01.6	28					
			M_1	02.3	24	220	280			
			MZ_1	02 52	24			220		

(See next sheet)

Riverview College Observatory,

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Seismological Bulletin.

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INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.)
2. Wiechert Vertical Seismometer (80 kilo).
3. Mainka Conical Pendulum Seismometer (450 kilo.)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N		(See last sheet)		
A_E				
A_Z				

No.	Date.	Char.	Phase.	Time (Greenwich) h. m. s.	Per. s.	Amplitude. A_N μ	A_E μ	A_Z μ	Δ km.	Remarks.
	1918									
142	Aug. 8		MN_2	10 03 08	20	246				
(contd.)			ME_2	03 21	16		150			
			ME_3	04 03	14		125			
			MZ_2	05 23	16			95		
			MN_3	05 35	14	105				
			F	11 55						
143	" 8	I	e?	12 06.2						
			eL	10.1	17					
			ME	10 56	14		2			
			MN	12 58	15	3				
			F	12 55						
144	" 8	I	eL	12 42.8	20					Possibly the W_2 waves of No. 142
			ME	45 17	13		1			
			MN	45 44	15	4½				
			F	13 05						
145	" 10	I	e(L?)	18 00.5	?					
			ME	02 18	?					
			MN	05 03	13	1½				
			F	18 20						
146	" 11	I	e	11 55.3	?					
			e	59.5	?					
			F	12 10						
147	" 15	IIIu	eP	12 26 30	4	-	½		5470	Celebes Sea.
			i	26 49	4	-3½	+2½	-8		
			i	27 00	4	-29	+23	+13		
			iPR_1	28 37	5	+15	-14	-22		
			iPR_2	29 08	5	+48	-35	-38		
			iS	33 38	8	-16	+23	+24		
			iPS	34 13	9	+108	-100	+42		
			iSR_1	36 20	8	-41	-43	12		
			iSR_2	37 33	9	+265	-290	42		
				37 49	9	120	148			
				38 26	8	165	130			
			eL	40.4	40					
			M_1	46 36	20	765	475	690		
			ME_2 / LZ_2	49.0	19		2770	2920		
			MN_2	49 17	19	3420				
			LZ_3	51 35	16			950		
			MN_3	51 48	16	1210				
			MN_4	55 15	13	700				
			ME_3	55 36	16		870			
			ME_4	13 00 43	12		305			
			CN_1	05 12	12	210				
			CE_1	06 30	12		130			
			CE_2	13 54	13		95			
			CN_2	16 51	12	108				
			CN_3	21 40	12	85				

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

φ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration (NS, EW, Vert.)**

	V	T_o	ε : 1	$\frac{r}{T_o^2}$
A_N	(See last sheet)			
A_E				
A_z				

No.	Date.	Phase	Time (*Greenwich*)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_z	Δ	Remarks.
	1918		h. m. s.	s.	μ	μ	μ	km.	
(147 contd.	Aug. 15	CE_3	13 24 34	13		85			
		eW_2	15 03.5	28					
		ME_1	08 11	20		15			
		MN_1	09 20	20	13				
		MN_2	12 52	20	13				
		ME_2	14 43	17		7			
		MN_3	17 43	17	13				F. Lost in No. 148.
148	" 15	eP	15 35 01	3					
		eS?	41.5	?					
		MN_1	55 23	16	8				
		ME_1	55 59	16		9			
		MN_2	58 00	14	12				
		ME_2	16 03 00	14		11			
		F	lost in No.	149					
149	" 15	eP	17 38 38	5	2½	1	1	5010	
		PR_1	40 31	6	2½	2¼			
		eS	45 21	8		2¼			
		iS	45 30	8	1½	11			
		iSR_1	48 34	9	16	29			
		eL	52.7	25					
		ME	59 03	22		90			
		MN	18 00 07	18	61				
		MZ	00 14	18			36		
		F	19 35						
150	" 16	eP	3 34 01	5	¼	½		5120	
		ePR_1	36 06	6	¼	½			
		eS	43 50	8	1½	1			
		eSR_2	44 12	10	3	3¾			
			44 39	10		11½			
		eL	50.1	20					
		ME_1	56 03	14		13			
		MZ	56 10	14			4½		
		MN_1	56 24	14	10				
		MN_2	58 43	12	7½				
		ME_2	4 02 49	12		7½			F lost in taking constants.
151	" 16	eP	6 30 08	4	-	1			
		eL	37.8	?					
		MN	40 32	10	2				
		ME	42 30	10		2			
		F	6 55						
152	" 16	e	6 40.8						
		eL	50.1	13					
		ME	51 50	10		1½			
		MN	54 29	12	2¼				
		F	8 10						

(Continued on next sheet)

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

φ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration** (**NS, EW, Vert.**)

	V	T_o	ϵ : 1	$\frac{r}{T_o^2}$
A_N				
A_E	(See last sheet)			
A_Z				

No.	Date.	Phase	Time (*Greenwich*)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks.
	1918		h. m. s.	s.	μ	μ	μ	km.	
153	Aug. 16	iP	8 44 22	4)	1½	-		4130	
		eS	50 17	10	2	-			
			51 34	10	4	1			
		SR_1	54 41	12	4½	1½			
			55 07	11	4½	8½			
		e(L?)	59.3	12					
		ME_1	9 05 16	16		1½			
		MN_1	05 35	18	14				
		MZ_1	06 23	18			12		
		MN_2	09 13	16	8				
		ME_2	10 00	12		4½			
		F	10 05						
154	" 16	e	9 43.3						
			43.7	12	3	3			
		F	9 55						
155	" 17	e(S?)	7 29 17	?					
		e	32.7	12	1½	-			
		eL	45.4	28					
		MN	47 21	22	8				
		ME	49 49	22		6			
		F	8 10						
156	" 17	e(S?)	10 41 08	12	2¼				
		eL	48.0	16					
		MN	50 46	12	3				
		ME	51 47	10		2			
		F	11 00						
157	" 18	e?	6 16.4						
		e(S?)	23 41	8	-	1			
		e(SR_1)	27 39	8	½	1			
		eL	33.4	14					
		MN	34 57	12	3				
		ME	40 22	19		1½			
		F	7 35						
158	" 19	e	12 12.4						A few long waves
159	" 19	e	17h46.6	6	-	½			
		e	53.6	9	1	-			
		ME	58 04	?					
		MN	58 42	15	2¼				
		F	18 20						
160	" 21	e	0 39.4						
		eL	44.1	?					
		ME	44 47	10		2			
		MN	47 14	13	1¾				
		F	1 05						
161	" 23	e	0 30.2						A few long waves.

(Continued on next sheet)

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

ϕ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration** (**NS, EW, Vert.**)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N	(See last sheet)			
A_E				
A_z				

No.	Date.	Phase	Time (*Greenwich*) h. m. s.	Per. s.	Amplitude A_N μ	A_E μ	A_z μ	Δ km.	Remarks.
	1918								
162	Aug, 23	eP	6 42 14	6				2870	Computed azimuth:-
		iP	42 18	6	-10	-½	+4		202½° (N. 22½° E.)
		iS	46 48	8	-18	+3			
			46 56	8	31	11			
		PS	47 07	8	18	19			φ, 10° S.
			47 56	8	31	33			λ, 161½° E.
		eL	48.3	?					
		MZ_1	51 54	17			33		
		MN_1	52 28	12	85				
		ME_1	53 23	12		90			
		MN_2	53 34	12	63				
		MZ_2	54 18	13			2		Computed time at
		ME_2	56 42	12		94			originn-
		C_1	57 51	10	34	44			h m s
		C_2	7 02 25	10	37	34			6 36 21
		F	9 05						
163	" 23	e?	9 34.2						
		ME	42 45	10		2			
		MN	43 44	9	1				
		F	9 55						
164	" 23, 24)	e(P?)	22 34 06					3090?	
		eS	38 56	?				?	
		eL	42.4	18					
		MN_1	46 23	12	9				
		ME_1	46 50	12		9			
		ME_2	50 26	10		22			
		MN_2	51 25	10	6				
		F	0 10						

(Continued on next sheet)

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

ϕ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration** (**NS, EW, Vert.**)

	V	T_o	ϵ : 1	$\frac{r}{T_o^2}$
A_N				
A_E	(See last sheet)			
A_z				

No.	Date.	Phase	Time (*Greenwich*)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_z	Δ	Remarks.
	1918		h. m. s.	s.	μ	μ	μ	km.	
165	Aug. 24	e?	11 43.7						A few long waves.
		e?	53.8						
166	" 24	e	18 01.7						
		e?	07.3						
		eL	18.1	50					
		MN	19 20	40	24				
		F	19 00						
167	" 25	e(S?)	10 58 28	8	1				
		eL	11 03.5	20					
		MN	03 45	14	3				
		ME	06 48	12		3			
		F	11 20						
168	" 29	e	21 26.3	4					
		eS	30.6	6	¾	-			
		eL	33.8	12					
		MN	34 49	10	1½				
		ME	35 00	10		1½			
		F	22 00						
169	" 31	eP	22 02 07						
		e	03 52	5	-	1			
		eS?	09 42	7	-	1			
		$e(SR_1?)$	11 54	8	1½	1½			
			12 20	8	1	1			
		eL	17.4	18					
		MN	20 26	12	6				
		ME_1	20 43	12		4			
		ME_2	24 05	16		9			
		F	23 05						

E. F. Pigot S.J.

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

φ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration** (**NS, EW, Vert.**)

		V	T_o	e : 1	$\frac{r}{T_o^2}$
A_N	1	146	7.6	5.5	0.02
	3	132	9.8	3.9	0.02
A_E	1	153	7.0	3.2	0.02
	3	133	9.5	8.0	0.05
A_Z	2	79	4.1	3.0	0.05

No.	Date.	Phase	Time (*Greenwich*)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks.
	1918		h. m. s.	s.	μ	μ	μ	km.	
170	Sept. 2	eP	14 21 04	2				3090	Heavy microseisms present.
		eS	25 54	6	1	1			
		e?	28.5	10	-	2			
		eL	30.9	30					
		MN_1	32 42	28	80				
		ME_1	33 28	14		11			
		MZ_1	35 21	14			14		
		MN_2	36 50	12	25				
		ME_2	37 16	9		25			
		MZ_2	39 47	10			10		
		F	15 25						
171	" 5	eP	7 14 06	4	-	-		5420	
			14 42	5	1¼				
		eS	21 11	6	1	½			
		eSR_1	24 36	9	4	3½			
		eL	34.3	30					
		MN_1	38 22	13	5				
		MN_2)							
		ME)	41 56	13	5	3			
		F	8 20						
172	" 5	e?	16 50.7						
		e	56.7						
		e	17 13.0						
		MN	13 52	?					
		ME	14 12	16		4½			
		F	17 30						
172a	" 7	e	7 32.0	6	1	¾			
		eL	40.6	15					
		MZ	43 18	?					
		MN	43 24	13	7				
		ME	43 46	12		9			
		F	8 00	2)					
173	" 7	eP	17 28 31	4)	1¾	½		8790	Near Urup (Kurile Is.) (Osaka)
		i	29 02	4	+13	+2	-7½		cf. Special Bulletin issued 1918, Sept. 17.
		PR_1	31 19	5	4	4	1		
		iS^1	38 30	8	-16	-14			
		PS	38 54	8	35	60			
		eL	49.0	55					Wave lengths quite exceptionally long at this stage.
		ME_1	50 47	40		2840			
		MN_1)							
		MZ_1)	54 26	38	1275		700		
		MN_2)							
		MZ_2)	18 05 55	18	1000		600		
		ME_2	07 44	16		475			
		ME^3	10 00	16		465			
		MN_3	11 04	16	430				

(Continued on next sheet)

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

ϕ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration (NS, EW, Vert.)**

	V	T_o	e : 1	$\frac{r}{T_o^2}$
A_N	(See last sheet)			
A_E				
A_z				

No.	Date. 1918	Phase	Time (*Greenwich*) h m s	Per. s.	Amplitude A_N μ	A_E μ	A_z μ	Δ km.	Remarks.
173 contd.	Sept. 7	ME_4	18 13 24	16		425			
		MN_4	13 51	16	245				
		MN_5	19 50	16	300	275			An anomolous feature of the seismograms is
		ME_5							
		MZ_5	25 16	16			205		the absence of ex-
		C_1	26 29	14	110	110	42		pected W_2 (or L rep_1)
		C_2	34 55	14	60	110	28		waves, due about:-
		C_3	42 04	14	115	55	100		h m
		F	22 40						22 22
174	" 8	eL	6 25.7	16					P, obscured by micro-seisms.
		MN	28 04	12	1				
		ME	32 07	14		2			
		F	6 40						
175	" 9	e	12 34.3						
		eL	36.0	15					h m
		M	37.3	13	$1\frac{1}{2}$	$2\frac{3}{4}$			F 12 55
176	" 9	e?	14 44.9						
		eL	51.6	14					
		M	52 49	12	3	$2\frac{1}{4}$			
		F	15 10						
177	" 11	eP	4 14 51	4	1	1	$1\frac{1}{2}$	5230	
		PR_1	16 48	6	$1\frac{3}{4}$	-			
		eS_1	21 46	10	2	2			
		PS	22 05	10	5	$4\frac{1}{2}$			
		eSR_1	25 14	8	6	1			
			25 28	8	7	7			
		SR_2	26 26	11	6	2			
		eL	30.9	20					
		M_1	35.8	16	10	8			
		M_2	37.9	16	8	8			
		F	6 15						
178	" 11	iP	10 42 30	4	-	$+2\frac{1}{2}$		2730?	
		e(S?)	46 53	7	$1\frac{1}{4}$	$\frac{1}{2}$			
		eL	49.1	11					
		MN	51 00	9	$2\frac{1}{2}$				
		ME	55 30	15		$3\frac{3}{4}$			
		F	11 10						
179	" 12	eL	13 55.4	24					
		M	14 06 06	18	$3\frac{1}{2}$	$3\frac{1}{2}$			
		F	14 30						
180	" 13	e	11 36.2	20					A few long waves.
181	" 14	e?	17 17.3						
		e(S?)	26 58	7	$3\frac{1}{2}$	4			
		eL	37.8	12					
		MN_1	45 28	15	6				
		ME	45 38	15		5			
		MN_2	56 01	15	4				
		F	18 50						

(Continued on next sheet)

Riverview College Observatory,

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SEISMOLOGICAL BULLETIN.

ϕ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration** (**NS, EW, Vert.**)

	V	T_o	ϵ : 1	$\frac{r}{T_o^2}$
A_N	(See last sheet)			
A_E				
A_z				

No.	Date.	Phase	Time (*Greenwich*)	Per	Amplitude A_N	Amplitude A_E	Amplitude A_z	Δ	Remarks.
	1918		h. m. s.	s.	mm	mm	mm	km	
182	Sept. 16	iP	13 08 05	4	-16	+10	-1½	1910	Computed azimuth:- 327½° (S.32½°W) φ, 47½°S. λ, 165°E. Computed time at origin:- h m s 13 03 55
		eS	11 20	10	2	2			
		iS	11 38	10	-22	-35			
		eL	12.6	20					
		ME	13 07	15		65			
		MN	13 25	15	40				
		MZ	14 14	13			2		
		F	14 10						
183	" 19	e?	2 37.5	4					
		e?	39.9	7					
		eL	42.1	15					
		ME	43 06	10		1			
		MN	43 30	10	1				
		F	2 55						
184	" 19	e?	20 02.1						
		eL	16.5	16					
		MN_1	20 03	11	2				
		ME	25 22	9		1			
		MN_2	27 25	9	1½				
		F	21 15						
185	" 22	eP	10 04 48	5		2½		6400	
		iS	12 46	7	-	+3			
			12 49	7	2	4			
		eL	21.8	?					
		MN_1	26 32	16	1				
		ME_1	29 27	18		1¼			
		MN_2	32 25	16	½				
		F	11 20	3					
186	" ~~25~~	eP	9 57 40	6	½	½		2440	
		S	10 01 40	7	1	2½			
			01 46	7	3½	5			
		eL	03.4	18					
		MN_1	04 31	14	1				
		ME_1	05 14	13		3			
		MN_2	08 30	12	7				
		ME_2	09 00	12		4			
		F	10 50						
187	" 29	e?	13 04.0						
		eL	15.2	22					
		MN	19 28	20	14				
		ME	21 50	19		26			
		MZ	24 23	17			2		
		F	14 15						
188	" 30	e?	10 50.2	4	1	-			
		eL	54.9	16					
		MN	55 57	12	2¼				
		ME	59 37	10		1½			
		F	11 15						

(Continued on next sheet)

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

ϕ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

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2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration** (**NS, EW, Vert.**)

	V	T_o	ϵ : 1	$\frac{r}{T_o^2}$
A_N				
A_E	(See last sheet)			
A_z				

No.	Date.	Phase	Time (*Greenwich*)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_z	Δ	Remarks.
	1918		h. m. s.	s.	μ	μ	μ	km.	
189	Sept. 30	e(P?)	13 47 25	4					
		e?	51.9	7					
		iS	57 57	7	+3	-			
		PS	58 28	8	3				
		eL	14 18.2	20					
		MN_1	19 29	18	5				
		MN_2	23 09	16	4				
		ME_1	23 36	16		3			
		F	15 00						
190	" 30	eP	17 56 17	4				2270	Computed azimuth:-
		iP	56 23	4	+7	+18	$-6\frac{1}{2}$		248° (N 68½° E)
			56 47	5	14	21	13		
		eS	18 00 03	7	2	$\frac{3}{4}$			ϕ,24°S.
		PS	00 22	7	37	37			λ,172½°E.
		eL	01.4	22					
		ME_1	01 54	20		150			
		MN_1	02 31	15	150				
		MZ_1	03 24	17			$4\frac{1}{2}$		
		MN_2	04 56	12	120				Computed time at
		ME_2	05 50	12		106			origin:-
		MN_3	08 52	12	70				h m s
		ME_3)	09 50	12		75	3		17 51 25
		MZ_2							
		CN	12 59	12	30				
		CE	13 31	12	-	30			
		F	Lost in N°.	191					
191	" 30	eP	18 43 41	4	1½	-	¾	3190	
		iS	48 38	8	+14	$-1\frac{1}{2}$			
		PS	49 11	16	55	1½			
		eL	51.8	30					
		MN_1)	53 35	20	180		90		
		MZ_1							
		ME_1	55 59	12		207			
		MN_2	57 01	14	120				
		ME_2	57 28	12		150			
		ME_3	59 06	10		100			
		MZ_2	19 02 13	13			36		
		MN_3	04 05	15	120				
		CE_1	06 29	10		57			
		CN_1	06 36	9	24				
		CE_2	09 12	9		25			
		CN_2	10 55	9	20				
		F	21 10						

E. F. Pigot S.

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

φ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration (NS, EW, Vert.)**

		V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N	(1)	139	7.6	5.5	0.02
	(3)	130	9.9	4.5	0.04
A_E	(1)	149	7.2	3.2	0.02
	(3)	115	11.0	8.0	0.05
A_Z	(2)	81	4.2	3.4	0.06

No.	Date.	Phase	Time (*Greenwich*)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_Z	Δ	Remarks.
	1918		h. m. s.	s.	μ	μ	μ	km.	
192	Oct. 1	e	0 55.0	5	3½	-			
		eL	59.9	14					
		ME	1 05 16	9		3½			
		MN	06 12	11	½				
		F	1 45	2					
193	" 2	eP	0 26 38	4				3330	Felt at Madang, late German New Guinea.
		i	26 47	4	+6	-			
		iS	31 44	8	-14	±5			(V., Rossi-Forel.)
		eL	34.1	18					
		ME_1	34 54	15		37			
		MN_1	35 18	16	32				
		MN_2	36 59	12	12				
		MZ	39 05	12			1		
		ME_2	40 01	10		23			
		MN_3	41 17	10	23				
		F	1 35						
194	" 3	e(S?)	7 20 51	6	1				
		eL	25.2	16					
		M	24 22	11	2	2			
		F	7 45						
195	" 4	eL	4 37.1	20					
		MN	38 38	15	3½				
		ME	38 54	15		5			
		F	4 50						
196	" 6	eS	2 35 56						
		eL	38.5	17					
		ME	38 55	15		12			
		MN	39 43	12	4				
		F	3 25	2					
197	" 9	eP	9 25 02	4	-	1		4050	Origin probably NW of Flores Id. (Dutch E. Indies.)
		PR_1	26 42	4	2	1			
		iS	30 52	8	-19	+12			
		SR_1	33 36	9	6	2			
			33 57	9	9	10			
		eL	35.1	16					Short wave-lengths.
		MZ	37 55	6			1½		
		MN_1	38 18	8	24				
		ME_1	38 32	8		7			
		ME_2	41 33	11		16			
		MN_2	43 08	12	23				
		F	10 50						

(Continued on next sheet)

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

ϕ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration (NS, EW, Vert.)**

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N	(See last sheet)			
A_E				
A_z				

No.	Date.	Phase.	Time (*Greenwich*) h. m. s.	Per. s.	Amplitude A_N μ	A_E μ	A_z μ	Δ km.	Remarks.
	1918								
198	Oct. 11	eP	14 34 00	5	-	½		16,000	Porto Rico.
		PR_1	37 25	6	-	1¼			
			38 11	7	-	2¾			
		e(S?)	48 11	12	4	3			
		PS?	49 05	12	3	7			
		e(SR_3?)	56 47	16	5	14			
			57 11	16	5	19			
		eL	15 14.9	36					
		MN_1) ME_1)	15 13	36	112	33			
		MN_2) ME_2)	19 16	23	12	38			
		MN_3	23 50	24	40				
		ME_3	24 46	21		46			
		ME_4	28 07	20		23			
		MN_4	28 43	16	11				
		MZ_1	37 02	16			8½		
		MZ_2	45 04	17			10		
		ME_5	48 58	16		11			
		MN_5	49 57	19	10				
		MZ_3	50 16	17			10		
		CN_1) CE_1)	16 11 16	20	18	23			
		CZ_1	11 22	20			13		
		CZ_2	18 51	18			13		
		CE_2	19 04	19		16			
		CN_2	19 21	19	8				
		F	18 50						
199	" 13	eP	12 46 03					2320	
		eS	49 53	7	1	½			
		eL	51.9	16					
		MN_1	54 44	14	3				
		MS_1	56 12	12		3			
		MN_2	58 07	10	3				
		F	13 50						
200	" 14	eP	12 06 50					3340	
		ePR_1	08 02	6	½	½			
			08 14	6	1	5			
		eS	11 57	7	-	2			
		iPS	12 12	7	-5	-1			
			12 30	12		7			
		eL	14.6						
		MN	16 01	18	8				
		ME	17 57	20		41			
		MZ	18 56	20			13		
		F	13 20						

(Continued on next sheet)

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

φ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration** (**NS, EW, Vert.**)

	V	T_o	ε : 1	$\frac{r}{T_o^2}$
A_N	(See last sheet)			
A_E				
A_z				

No.	Date.	Phase.	Time (*Greenwich*)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_z	Δ	Remarks.
	1918		h. m. s.	s.	μ	μ	μ	km.	
201	Oct. 15	e?	10 32.5						
		e	35.4						
		eL	38.3	16					
		ME	40 18	11		5			
		MN	40 32	12	7				
		F	11 35						
202	" 16	eP	20 11 47					3770	Probably near Timor?
		PR_1	13 16	6	2	2			
		iS	17 21	6	-14	11	+2		
			17 26	6	12	18			
		PS	17 35	7	5	6			
		eL	19.2	12					
		MZ	24 16	5			10		Short wave-lengths.
		ME_1	24 46	5		13			
		MN_1	25 17	6	25				
		ME_2	27 53	6		13			
		MN_2	30 29	7	19				
		F	22 15						
203	" 19	e?	3 54.7						
		e	4 00.3						
		e?	02.6						
		e	06.8						
		eL	19.0	24					
		ME_1	20 50	20		7			
		MN_1	26 49	15	3				
		ME_2	27 17	16		5			
		F	6 15						
204	" 20	S?	4 34 28	?					Heavy microseisms phases indistinct.
		eL	38.7	?					
		ME	41 40	?					
		MN	42 23	11	3				
		F	5 20						
205	" 21	e	22 53.9						
		eL	56.0	25					
		ME	56 54	15		5			
		MN	58 15	?					
		F	23 15						
206	" 22	e	8 22.7						
		MN	24 55	9	1				
		ME	26 26	10		2			
		F	8 40						
207	" 22	e?	10 22.3						
		eL	26.8	18					
		ME_1	27 54	15		7			
		MN_1	28 26	16	5				
		ME_2	33 18	10		4			
		MN_2	36 25	10	4				
		F	10 55						

(Continued on next sheet)

No. 10 (continued) 1918, October.

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

ϕ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS; EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration** (**NS, EW, Vert.**)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N	(See last sheet)			
A_E				
A_z				

No.	Date.	Phase.	Time (*Greenwich*) h. m. s.	Per. s.	Amplitude A_N μ	A_E μ	A_z μ	Δ km.	Remarks.
	1918								
208	Oct. 24	PR_1?	19 22 17						
		eS	26 18	4	2	1½			
			26 21	4	5	5			
		e(SR_1?)	27 53	7	2	-			
		eL	30.4	15					
		ME	31 30	11		4			
		MN	35 21	13	7				
		F	20 15						
209	" 25	e	19 22.0						
		MN	22 36	10	2				
		ME	23 19	10		2			
		F	19 45						
210	" 27	eP	15 32 38	5	1			2740	Computed azimuth:- 205° (N. 25° E.)
		iP	32 40	5	+9	+4	-1¼		
		i	32 53	4	-11	-4	+2		
		iS	37 02	7	-4	+12			φ, 11½° S.
		PS	37 27	11	32	2	11		λ, 162½° E.
		eL	39.3	24					
		MZ	40 26	20			40		Computed time at origin:-
		MN_1	40 36	20	190				h m s
		ME_1	41 44	16		80			15 26 58
		ME_2	44 23	9		20			
		MN_2	44 44	12	40				
		F lost in N°. 211							
211	" 27	eP	17 13 27	6				3790	
		i	13 39	5	-10	-			
		iPR_1	14 56	7	-13	-	5		
		iS	19 02	11	+54	-11			
		PS	19 35	11	32	16			
		eL	23.0	30					
		MN_1, ME_1	28.0	14	120	155			
		MN_2, ME_2, MZ_1	31.5	11	235	231	105		
		ME_3, MZ_2	35.3	9		160	90		
		iMN_3	38 01	9	145				
		C_1	44 17	10	100	60			
		C_2	50 48	11	65	74			
		F	20 50						
212	" 28	e?	12 54.4						
		e	13 01.1						
		eL	03.6	16					
		MZ_1	05 23	15		5			
		MN	06 50	12	40				
		ME_2	10 19	14		8			
		F	14 00						

E. F. Pigot Sy.

No. 11 1918, November.

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

φ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration (NS, EW, Vert.)**

		V	T_o	$\varepsilon : 1$	$\frac{r}{T_o^2}$
A_N	(1)	142	7.7	6.4	0.02
	(3)	138	9.9	3.6	0.02
A_E	(1)	150	7.1	3.0	0.02
	(3)	119	11.2	8.0	0.04
A_z	(2)	94	4.1	4.0	0.06

No.	Date.	Phase.	Time (*Greenwich*)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_z	Δ	Remarks.
	1918		h. m. s.	s.	μ	μ	μ	km.	
213	Nov. 1	e?	15 37.7						
		e	40.0						
		MN	43 10	11	2				
		ME	43 26	11		2			
		F	15 55						
214	" 3	eP	11 18 11	6	1	½		2100	Computed azimuth:-
		iP	18 12	6	-26	+11	-5		337° (S.23°E.)
		iPR_2	19 26	7	+33	-9			
		eS	21 43	10	21	9			φ,52° S.
		iS	21 49	10	-63	-35	-34		λ,164° E.
		PS	22 04	10	120	155			
		eL	22.5	18?					
		MN_1	23 12	12	155				
		MZ_1	23 42	11			95		
		ME_1	23 48	10		175			
		MN_2	24 33	9	95				Computed time at
		MZ_2	24 53	10			65		origin:-
		ME_2	25 07	10		90			h m s
		MN_3	27 58	11	90				11 13 42
		ME_3	28 09	10		60			
		C_1	29 39	10	60	65			
		C_2	32 49	9	27	55			
		CE_3	39 17	9		33			
		CN_3	43 07	9	25				
		C_4	48 44	9	22	20			
	eL	rep_1?	14 16.7	16?					
		F	15 20						
215	" 3	eP	18 17 21	5				2170	
			17 30	5	1	½			
		eS	20 59	11	-	2			
		MN	21 39	12	2				
		ME	22 18	11		2½			
		F	19 05						
216	" 3	eP	19 10 09						
		e	12.2	4	1	-			
		eL	16.2	14					
		MN	21 22	11	2				
		ME	22 18	11		2			
		F	20 45						

(Continued on next sheet)

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

ϕ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration** (**NS, EW, Vert.**)

	V	T_o	e : 1	$\frac{r}{T_o^2}$
A_N	(See last sheet)			
A_E				
A_z				

No.	Date.	Phase.	Time (*Greenwich*)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_z	Δ	Remarks.
	1918		h. m. s.	s.	μ	μ	μ	km.	
217	Nov. 3	eP	21 50 36	3				2160	
		iP	50 43	6	+8	-3			
		eS	54 13	10	1½	2			
			54 46	10	4	4			
		eL	54.9	12					
		ME_1	55 39	11		7			
		MN_1	55 47	11	3				
		MZ_1	56 32	11			3		
		iE_2	58 05	9	2	4			
		F	23 45						
218	" 4	e	2 53.9						
		ME	57 14	10		1			
		iN	57 40	12	1				
		F	3 10						
219	" 5	e?	0 48.0						
		e	48.6	2		1			
		i	49 24	2		+6			
			49 57	3	2				
		ME	50 18	6		1			
		F	1 00						
220	" 5	e	1 58.8						
		e	2 00.0	5	-	1			
		eL	02.3	15					
		M	03 03	14	8	4			
		F	2 10						
221	" 5	eP	5 13 02	5	½	-			
		e(S?)	17 31	8					
			17 40	8					
		eL	20.4	18					
		ME	20 53	16		3			
		MN	23 45	12	¾				
		F	5 35						
222	" 5	e	10 30.5						
		MN	32 41	?					
		ME	32 50	14		3			
		F	10 40						
223	" 6	eP	21 59 15	4	-	1		2300	
		iP	59 20	4	-1¼	-4			
		iS	22 03 04	5	-3	¾			
		PS	03 14	5	8	3			
		eL	03.6	10					
		MN	03 50	8	4				
		ME	04 28	8		2			
		F	22 25						

(Continued on next sheet)

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

ϕ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration** (**NS, EW, Vert.**)

	V	T_o	e : 1	$\frac{r}{T_o^2}$
A_N	(See last sheet)			
A_E				
A_z				

No.	Date.	Phase	Time (*Greenwich*) h. m. s.	Per. s.	Amplitude A_N μ	A_E μ	A_z μ	Δ km.	Remarks.
	1918								
224	Nov. 8	eP	4 50 02	4	1	-		8820	Kurile Is.
		iP	50 09	4	-21	-2	+25		
			51 16	4	9	·6			
		iS	5 00 02	8	+16	1	-		
		PS	00 51	18	175	65	20		
			01 16	18			40		
		SR_1	04 15	10	10	8			
		SR_2	05 23	16	95	-	23		
		eL	10.7	34					
		ME_1	11 19	30		533			
		MN_1	11 49	20	100				
		MN_2	18 55	20	200				
		MZ_1	19 27	22			90		
		ME_2	20 15	20		117			
		MN_3	23 46	20	200				
		MZ_2	25 04	17			70		
		ME_3	25 11	16		90			
		MN_4	28 49	16	160				
		MZ_3	32 23	17			55		
		C_1	39 11	16	40	85			
		C_2	51.1	15	19	2			
		eW_2	6 52 35	20					
		MN_1	56 49	15	3				
		ME_1	56 57	16		3			
		ME_2	7 04 28	18		7			
		MN_2	05 32	20	4				
		MN_3	08 24	18	7				
		MN_4	15 35	17	6				
		F	9 40						
225	" 12	e	22 19 50						
		eL	57.3	17					
		M	23 02.5	16	2	3			
		F	23 45						
226	" 13	eP	21 21 15					2840	
		S	25 46	?					
		eL	28.5	15					
		MN	29 33	14	2				
		ME	31 33	14		3			
		F	21 55						
227	" 14	e?	10 44.3						
		eL	49.5	12					
		ME	51 51	8		1			
		MN	52 30	12	1				
		F	11 00						

(Continued on next sheet)

No. 11 (continued) 1918, November) 193

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

φ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration** (**NS, EW, Vert.**)

	V	T_o	e : 1	$\frac{r}{T_o^2}$
A_N	(See last sheet)			
A_E				
A_z				

No.	Date.	Phase.	Time (*Greenwich*)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_z	Δ	Remarks.
	1918		h. m. s.	s.	μ	μ	μ	km.	
228	Nov. 14	e?	12 59.6						
		e(S?)	13 05 04	6		½			
			05 13	6	-	1½			
		eL	09.3	24					
		MN	11 42	15	5				
		ME MZ)	13.4	16		8	7		
		F	14 05						
229	" 15	e(S?)	15 08 51	7	-	4			Short wave-lengths.
		M_1	10.1	8	3	3			
		ME_2	12 18	8		5			
		MN_2	14 18	8	3				
		F	15 45						
230	" 18	eP	18 48 14	3	12	4½	6½	3470	Computed azimuth:-
		iP	48 16	3	-19	+12	+9		136° (N.44° W.)
		i	48 34	3	-46	+45	+30		
		PR_1	49 49	3½	33	30	13		φ, 10° S.
		iS	53 29	8	-105	+54	10		λ, 130° E.
		PS	53 59	8	165	70			
		eL	56.0	25					
		MN_1 ME_1)	57.4	5	230	155			Computed time at origin:-
		MZ_1	58 38	6			330		h m s
		MN_2 ME_2)	59.9	6	550	415			18 41 55
		MZ_2	19 00 09	5			350		Felt at Port Darwin,
		MZ_3	03 21	5			290		Timor, Aroe Islands.
		ME_3	03 42	8		530			
		ME_4	07 29	9		500			E.W. reductions from
		ME_5	09 11	13		680			Seismometer N°3.
		ME_6	13 08	11		280			
		ME_7	17 41	11		220			Short wave-lengths.
		C_1	24 11	9		160			
		C_2	27 48	10		95			Soon after 19h. N°1 &
		C_3	34 08	11		80			N°3 (N.S) deranged
		C_4	43 58	9		31			by violence of vi-
		C_5	50 14	11	24	24			brations, Re-adjusted
		F	23 15						about 19h 45m.

(Continued on next sheet)

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

ϕ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration (NS, EW, Vert.)**

	V	T_o	e : 1	$\frac{r}{T_o^2}$
A_N	(See last sheet)			
A_E				
A_z				

No.	Date.	Phase	Time (*Greenwich*) h. m. s.	Per. s.	Amplitude A_N μ	A_E μ	A_z μ	Δ km.	Remarks.
	1918								
231	Nov. 23	eP	23 04 21	6	3	-		3410	
	24	iP	04 26	6	-11	+8			
		PR_1	05 46	6	[illegible]	5			
		iS	09 32	7	-28	+35			
			09 41	7	36	42			
		PS	09 49	8	23	14			
		eL	10.9	20					
		M_1	12.2	8	9[illegible]	32	28		
		~~MN_2~~	~~15 59~~	~~8~~	~~340~~				
		MZ_2	15 42	7			290		
		ME_2	15 46	8	185	180			
		MN_2	15 59	8	340				
		MN_3	16 21	7	340				
		MN_4	18 16	12	360				
		CN_1	22 38	8	87				
		CN_2	25 17	8	49				
		F	2 10						
232	" 27	eP	1 46 20	6	1	½		2500	
		iS	50 25	9	-1½	-7			
		eL	51.5	14					
		MN_1) ME_1)	53.7	9	18	24			
		MZ_1	54 11	10			3		
		ME_2	56 39	8		13			
		MN_2	57 28	8	15				
		F	3 25						
233	" 28	iP	5 26 42	3	-	+1½	-1		Perhaps 2 seismo-
			26 48	3	-	3	3		grams over lapping.
		e(PR_1?)	27 24	4	1	5			
			27 40	5	3	13			
			28 48	8	3	6			
		S?	30 49	8	3	1			
		PS?	31 11	8	9	2½			
		L?	32.2	?					
		M_1	32.6	9	15	7			
		MN_2	36 11	12	18				
		ME_2	36 25	12		8			
		F	7 00						

E. F. Pigot Sy.

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

ϕ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration (NS, EW, Vert.)**

		V	T_o	ϵ : 1	$\frac{r}{T_o^2}$
A_N	1	162	8.4	6.2	0.02
	3	121	10.0	4.2	0.02
A_E	1	172	8.5	4.0	0.02
	3	133	10.9	8.0	0.04
A_z	2	90	5.1	4.0	0.06

No.	Date.	Phase.	Time (*Greenwich*) h. m. s.	Per. s.	Amplitude A_N μ	A_E μ	A_z μ	Δ km.	Remarks.
	1918								
234	Dec. 1	e(S?)	3 07 18	16	-	2½			
		e	12.0	?					
		eL	23.9	36					
		ME_1	26 33	32		12			
		MN_1	26 46	32	17				
		MN_2	32 55	20	5				
		ME_2	36 10	20		5			
		F	4 45						
235	" 2	e(P?)	10 05 12						
		e(S?)	21 26	9	½	½			
		eL	48.0	34					
		ME_1	52 13	32		16			
		MN_1	52 30	32	13				
		ME_2	11 01 59	30		14			
		MN_2	05 47	22	12				
		MZ_1	09 06	20			8		
		MN_3	09 26	20	28				
		ME_3	09 51	18		7			
		MN_4	16 30	16	12				
		ME_4	16 50	16		4			
		MN_5	28 26	20	8				
		ME_5	32 04	22		7			
		MN_6	39 36	16	4				
		ME_6, MZ_2	44.1	18		9	9		
		F	12 45						
236	" 3	eP?	17 59 44						
		eS	06 22	8					
		PS	07 03	8	9	9			
		eL	08.2	16					
		MN_1	08 41	12	13				
		ME	10 06	12		13			
		MN_2	10 38	12	16				
		F	19 20						

(Continued on next sheet)

Riverview College Observatory,

SYDNEY, N.S.W.

SEISMOLOGICAL BULLETIN.

ϕ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration (NS, EW, Vert.)**

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N		(See last sheet)		
A_E				
A_Z				

No.	Date.	Phase.	Time (*Greenwich*) h.	m.	s.	Per. s.	Amplitude A_N μ.	A_E μ	A_Z μ	Δ km.	Remarks.
	1918										
237	Dec. 4	e(P?)	12	03	12					12,000 (108.0°)	Destructive earthquake in N. Chile (Copiapo).
		eS		12	50	10	¾	1			
		PS		13	55	20	28	22			
		i		16	54	20	-100	+70			
		e		22	03	26	56	25	42		
				23	17	26	175	75			
		eL		33.8		46					
		MN_1, ME_1		34.2		42	250	260			
		MN_2, ME_2		39.2		23	140	120			
		MZ_1		39	22	27			153		
		MN_3, MZ_2		43.5		19	190		210		
		ME_3		44	04	17		230			
		ME_4, MZ_3		50.0		16		95	50		
		MN_4		50	29	15	105				
		ME_5		55	44	14		85			
		MN_5, MZ_4		56.7		15	115		81		
		ME_6	13	03	40	14		75			
		ME_7		07	29	14		60			
		MN_6, MZ_5		08.0		16	75		50		
		F	16	50							
238	" 4	eS	18	30	20	?					
		eL		34.3		?					
		M_1		39.8		15	2	1½			
		MN_2		50	33	13	1½				
		ME_2		56	41	14		1			
		ME_3	19	03	42	12		1½			
		F	20	45							
239	" 6	eS	9	07.7		6	1	-		12,000 (112.5°)	British Columbia.
		eSR_1		15.7		13	1	1½			
		eL		27.1		28					
		ME_1		33	17	20		5			
		MN_1		35	11	20	6				
		MN_2, ME_2		42.2		17	7	4			
		MN_3		49	55	18	6				
		MN_4		55	03	16	4				
		ME_3		57	43	16		2½			
		F	11	55							
240	" 7	e?	1	19.1							
		eL		22.5		14					
		MN		23	33	11	1				
		ME		23	46	12		1½			
		F	1	40							

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Riverview College Observatory,

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SEISMOLOGICAL BULLETIN.

ϕ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

INSTRUMENTS:

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (80 kilo.)
3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration** (**NS, EW, Vert.**)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N				
A_E		(See last Sheet)		
A_z				

No.	Date.	Phase	Time (*Greenwich*) h. m. s.	Per. s.	Amplitude A_N μ	A_E μ	A_z μ	Δ km.	Remarks.
	1918								
241	Dec. 9	eP	4 14 32					3140	
		PR_1	15 39 6		2	-		(28.2°)	
		eS	19 25 7		1	-			
		iS	19 29 7		+7	-			
		PS	20 00 7		5				
		eL	23.1 24						
		MN_1	23 55 20		16				
		ME_1	24 04 20			5			
		ME_2	25 13 15			15			
		MZ	25 47 ?						
		MN_2	26 25 15		12				
		F	6 15						
242	" 9	e(P?)	18 23 56						
		e(PR_2?)	28 39 ?						
		MN_1	48 04 24		5				
		ME_1	53 51 18			2			
		MN_2	54 21 16		3				
		ME_2	19 07 43 17			3			
		F	Lost in N°243						
243	" 9	e(P?)	19 06 04						
		e(S?)	16 17 8		1½	4			
		MN_1	44 00 13		2				
		ME_1	44 09 13			1			
		MN_2	55 17 15		2				
		ME_2	56 43 15			2½			
		F	21 15						
244	" 10	e(S?)	10 28 30 8		3	1½			
		eL	31.3 14						
		MN	32 39 12		1				
		F	10 45						
245	" 10	e?	17 13.8 ?						
		eL	20.5 18						
		ME	23 26 13			9			
		MN	25 30 12		4				
		F	18 00						
246	" 14	e(S?)	16 05.2						
		eL	09.1 20						
		MN	09 58 19		6				
		ME	11 11 16			2½			
		F	16 40						

(Continued on next sheet)

Riverview College Observatory,

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φ=33° 49′ 49″ S. λ=151° 9′ 30″ E. h=41·9 m. Foundation: Triassic sandstone.

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3. Mainka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. **Galitzin Aperiodic Seismometer, with galvanometer registration** (**NS, EW, Vert.**)

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N		(See last sheet)		
A_E				
A_z				

No.	Date.	Phase	Time (*Greenwich*)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_z	Δ	Remarks.
	1918		h. m. s.	s.	μ	μ	μ	km.	
247	Dec. 14	eP	18 44 32					2550	
		iS	48 41	5	-10	+4		(22.9°)	
		PS	49 00	7	13	6			
		eL	50.1	12					
		M_1	50.2	9	24	16			
		M_2	55.3	8	12	11			
		F	19 55						
248	" 16	e(P?)	3 20.6						
		eL	46.4	20					
		MN	50 24	16	3				
		ME	54 42	16		2½			
		F	4 05						
249	" 16	e(S?)	21 23.7	10	1				
		eL	29.5	17					
		K_1	31.7	13	2½	4			
		MN_2	36 16	9	2				
		ME_2	38 38	9		2			
		F	22 20						
250	" 18	e?	6 30.9						
		eL	47.7	?					
		MN	49 04	12	1½				
		ME	49 47	18		2			
		F	7 47						
	" 19	e?	19 33.2	6	½	-			
		eL	37.0	22					
		MN_1	38 14	15	5				
		ME_1	40 48	15		8			
		MN_2	45 30	10	3				
		ME_2	47 52	13		3			
		F	20 50						
	" 25	eP	10 26 16	3	1	-	2½	2440	
		PR	27 23	4	1½			(22.0°)	
		i(PR_1)	28 20	5	+11	-			
		iS	30 16	7	-5	-16			
		eL	32.4	14					
		ME_1	32 42	10		23			
		MN_1	33 14	8	12				
		MZ_1	38 01	10			5		
		ME_2	38 25	8		16			
		MN_2	38 57	10	16				
		MZ_2	42 13	12			8		
		MN	42 59	11	18				
		ME_3	44 23	11		12			
		F	11 50						

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4. **Galitzin Aperiodic Seismometer, with galvanometer registration (NS, EW, Vert.)**

	V	T_o	$\epsilon : 1$	$\frac{r}{T_o^2}$
A_N		(See last sheet)		
A_E				
A_z				

No.	Date.	Phase	Time (*Greenwich*)	Per.	Amplitude A_N	Amplitude A_E	Amplitude A_z	Δ	Remarks.
	1918		h. m. s.	s.	μ	μ	μ	km.	
253	Dec. 28	e	4 36.0						
		eL	40.6	12					
		MN	42 26	7	4				
		ME	42 44	8		2			
		F	5 25						
254	" 28	eP	8 14 58	6	1½	-		2740?	
		e	17 17	6	1½				
		e(S?)	19 22	7	2¾	1¾			
		eL	20.1	12					
		M	21.8	9	6	5			
		F	9 00						
255	" 29	e	6 21.1	20?					A few long waves.
256	" 30	eP?	7 18 02						
		eS	23 07	8	1				
		eL	26.5	24					
		M_1	28.0	20	16	50			
		ME_2	29 20	16		65			
		MN_2	29 31	16	32				
		ME_3	31 50	12		20			
		MN_3, MZ	32.1	13	45		13		
		F	9 00						
257	" 31	eP?	2 48 15						
		eS?	53 37	7	1	-			
		eL	56.1	18					
		MN	58 16	14	2¼				
		ME	59 27	12		1¼			
		F	3 25						

E. F. Pigott S.J.