

River View College Observatory

1941

Jan-Dec

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN

 $\phi = 33^{\circ} 49' 46''$ S. $\lambda = 151^{\circ} 9' 30''$ E. $h = 25$ 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 ₀	s:l	$\frac{r}{T_0^2}$		T ₁ (Galv.)	T (Pend.)	a ²	V _s
N	1 217	9.5	4.4	0.020	4	14.0	14.4	+0.01	317
	3 94	11.9	5.4	0.009					
E	1 227	7.5	3.0	0.028	4	12.9	14.4	+0.04	311
	3 76	11.4	5.7	0.012					
Z	2 60	5.1	6.7	0.042	4	11.8	12.8	+0.10	242

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			Δ km.	Remarks
			h.	m.	s.		A _v mm.	A _E mm.	A _Z mm.		
1	1941 Jan. 1	eE	12	34	32	8					
		e(S?)E	38	56		8					
		eN	39	10		9					
		eE	39	14		9					
		eN	39	31		9					
		eLN	42	5		17					
		MN	44	08		15	0.2				
		ME	44	57		15		0.2			
2	" 1	F	13	40							
		eE	20	50	56						
		eN	55	13		9					
		eLN	59	1		17					
3	" 2	ME	21	01	04	15		0.2			
		MN	02	51		13	0.3				
		F	21	40							
		iNE	17	03	20	5	+0.8	-0.2			Deep focus.
4	" 3	iN	06	13		5	+0.4				
		iE	06	16		5		-0.6			
		F	17	30							
4	" 3	eN	16	02	2						A few waves.
		eLN	04	0		22					
		F	16	15							
5	" 4	eN	02	10	1	8					
		eLN	10	9		18					
		F	02	25							
6	" 4	eN	03	26	3						Masked by micro-seisms.
		eLN	33	2		22					
		MN	35	30		12					
		F	04	00							
7	" 5	eNE	02	17	2						A few small waves.
8	" 5	ePNZ	18	55	14						
		iPNEZ	55	17		6	+0.8	-1.2	-0.6		
		iZ	55	25		3			-0.8		
		i(pP?)E	55	46		7		-1.0			
		iSNE	19	01	52	9	-2.0	+2.5			Dilatation N.W. Some evidence for a focal depth of 150 kilometres.
		(sS?)E	02	44		10		1.7			Horizontal readings from Mainka.
		iSSN	05	09		9	+2.5				
		iSSE	05	11		9		-2.0			
		mNE	05	26		9	4.5	3.5			
		mE	06	04		9		3.7			
		eLN	09	2		33					
		eLE	09	8		33					
		ME	12	40		15		1.5			
		MN	14	47		17	1.8				
F	20	45									

(Continued on next sheet)

No. 1 (continued)

1941, January.

RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			Δ km.	Remarks
			h.	m.	s.		A _N mm.	A _E mm.	A _Z mm.		
9	1941 Jan. 6	eLNE	05	16.8	18						
		ME		18 01	14			0.1			
		MN		21 13	12	0.1					
		F	05	30							
10	" 7	ee	10	46 01)						Very small.	
		eN		46 05)							
		ee		51 47	5						
		eN		51 51	5						
		eNE		55 07	8	0.3	0.3				
		MN	11	05 26	12	0.1					
		F	11	30							
11	" 8	e?E	12	06 41							
		eN		10 36	5						
		MN		14 18	12	0.1					
		F	12	25							
12	" 9	e?N	01	37 51							
		eN		43 06							
		eLN		45.5	14						
		MN		47 24	11	0.3					
		ME		47 43	10		0.2				
		F	02	10							
		eN	02	44 40	3						
13	" 9	eN		48 20							
		eLN		50.8	18						
		eLE		51.0	18						
		MN		52 14	16	0.2					
		ME		52 20	16		0.1				
		F	03	10							
		eN	19	36.6	7						
		eLN		42.0	14						
14	" 9	MN		43 09	12	0.1					
		F	19	55							
		eN	02	51 58	5						
		eN		56 14	9						
15	" 11	ME	03	01 48	14		0.7				
		MN		02 11	16	0.8					
		F	03	45							
		eNE	05	41 56	7						
16	" 11	F	05	55							
		ePNE	00	26 52	4		-0.3		4880 (43°9)		
17	" 12	iSE		33 30	5						
		eSN		33 32	6	0.2					
		eN		37 14	11	0.3					
		eLE		45.0	18						
		eLN		47.2	20						
		MN		49 28	16	0.2					
		F	01	10							
		ePNZ	16	33 44	5					3320 (29°9)	
18	" 13	ePE		33 48	5						
		iNEZ		33 58	5	+0.7	-0.2	-0.7			
		iN		34 13	8	-1.0					
		iN		34 48	8	-1.0					
		iZ		34 54	4			-0.6			
		mN		35 03	10	2.1					
		iE		35 04	5		+0.7				
		iZ		35 11	4			-0.8			
		mNE		35 38	9	3.2	1.1				
		mN		36 01	14	2.3					
		mE		36 21	7		1.0				
		mE		36 43	10		1.3				

(Continued on next sheet)

Dilatation.
Felt at Rabaul RF.9
Numerous landslides
on hills around. At
many places along
foreshore of harbour
ground has opened
cracks up to 14 in.
and 30 to 50 yards
in length."
Horizontal readings
from Mainka.

RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			Δ km.	Remarks
							A_N	A_E	A_Z		
							WIECHERT CONSTANTS				
							V	T_0	$\xi:1$	r/T_0^2	
							N	221	9.4	5.0	0.014
							E	234	7.5	3.5	0.016
							mm.	mm.	mm.		
18 Cont.	1941 Jan. 13	iE	16	37	04	7		-1.8		Jan. 16 to Jan. 31.	
		mN		37	08	8	2.6				
		eN		37	45	16					
		iE		38	07	6		-2.1			
		iSN		38	49	18	-8.5				
		iSZ		38	50	7			-0.7		
		iE		38	56	12		-2.1			
		ME		39	38	12		7.2			
		eLE		39.	9	23					
		iZ		40	23	7			-0.7		
		eLZ		41.	3	40					
		eLN		41.	4	32					
		ME1		42	28	23		50.7			
		MZ1		42	48	28			1.7		
		MN1		43	09	21	38.0				
		ME2		43	28	18		>59			
		MZ2		44	03	20			3.6		
		MN2, ME3		44	53	14	42.4	>60			
		MN3		45	55	14	46.7	>62			
		ME4		46	00	14					
		MZ3		47	06	15			5.0		
		MZ4		55	11	10			7.0		
		F		20	30						
19	" 19	eN	03	37	17	6				ez from Galitzin.	
		eN	04	00	37						
		eLN		06.	9	22					
		MN		10	05	19	0.3				
		F		04	45						
20	" 19	eZ	13	54	32						
		iSNE		59	01	7	+0.3	-0.5			
		eLN		14	02.0	19					
		MN		04	18	13	0.3				
		ME		04	45	11		1.5			
21	" 20	F	14	30							
		eE	09	35	52						
		eLN		46.	1	17					
		MN		48	00	13	0.2				
		F	13	13	10h05m						
22	" 20	eE	12	54.	9						
		eLE		59.	0	13					
		ME	13	01	30	11		0.2			
		MN		02	34	11	0.3				
		F	13	15							
23	" 21	eN	06	17	04	4				ez from Galitzin.	
		eZ		17	11	5					
		eSNE		21	38	8		0.4			
		eLN		23.	3	19					
		MN		25	01	15	0.5				
		ME		26	53	9		0.3			
		F	07	00							
24	" 21	e(P?)	12	54	15	3					
		eSN	13	04	24	11	0.3				
		eE		04	32	9		0.3			
		mN		04	40	11	0.5				
		eLN		20.	5	?					
		MN		32	24	24	0.3				
		ME		35	37	20		0.1			
		F	16	05							

(Concluded on next sheet)

RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
			h.	m.	s.		A _N	A _E	A _Z		
						mm	mm	mm	km.		
25	1941 Jan, 22	eN	23	37	03						A few small waves.
		mE		38	25	7		0.2			
		mN		38	42	7	0.2				
26	" 23	F	23	45							A few small waves.
		e?N	03	08	12						
		eE	03	08	35	3					
27	" 23	F	03	15							A few small waves.
		eP?N	05	20	05	3					
		eSN		24	37	7					
		eLN		29	.1	23					
		MN		31	00	17	0.3				
28	" 24	ME		31	08	14		0.2			Microseisms present.
		F	05	50							
		eN	19	33	58						
		iSN		38	56	6	+0.6				
		eLE		43	.5	19					
29	" 25	MN		45	22	16	0.9				Masked by heavy microseisms.
		ME		46	16	12		0.7			
		F	20	25							
		eN	23	42	03						
		iE		46	28	5		-1.5			
30	" 26	iN		51	19	6	+1.0				A few waves masked by heavy microseisms.
		MN		54	20	11	0.3				
		F	00	15							
		eN	07	46	.8						
31	" 28	eN	03	35	.3	19					Earlier phases completely obscured by heavy microseisms.
		MN		38	01	13	0.7				
		ME		38	36	13		0.3			
		F	03	55							
32	" 28	iNE	08	59	53	4	+0.7	+0.6			iZ from Galitzin.
		iZ	09	00	36	6			-1.5		
		iNE		03	58	4	-1.1	-0.7			
		mNE		04	08	6	1.6	0.8			
		mNE		04	39	8	1.1	0.6			
		iNE		04	54	6	+1.5	+1.2			
		mN		05	30	8	1.3				
		eLN		07	.2	13					
		MN		08	04	11	0.4				
		F	09	30							
33	" 31	ePNEZ	02	45	08	3					iZ from Galitzin Z i(pP) from Galitzin Some evidence for a focal depth of about 250 km.
		iPZ		45	10	4			+2.0		
		eZ		46	00	3					
		i(pP?)NZ		46	02	4	+1.3		+2.0		
		eZ		46	27	3					
		iNE		46	31	4	+1.0	-1.0			
		eSN		50	15	7					
		iSNE		50	17	7	-1.7	+2.0			
		iN		52	45	8	-3.5				
		mN		52	50	8	5.7				
		iE		52	52	8		-2.5			
		mZ		53	45	5			0.3		
		ME1		57	20	8		6.7			
		MN1		57	26	8	8.8				
M2		58	00	9	10.0	8.2					
F	04	00									

---oOo---

N.B. All measurements are from Wiechert unless otherwise stated.

D.J.K.O'CONNELL, S. J.
Director.

Riverview College Observatory

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN

 $\phi = 33^{\circ} 49' 46'' \text{ S.}$
 $\lambda = 151^{\circ} 9' 30'' \text{ E.}$
 $h = 25 \text{ m.}$

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 ₀	$\epsilon:1$	$\frac{r}{T_0^2}$		T ₁ (Galv.)	T (Pend.)	μ^2	V _s
N	1 208	9.3	4.8	0.015	4	14.0	14.4	+0.01	317
	3 98	11.7	5.0	0.008					
E	1 227	7.4	3.1	0.025	4	12.9	14.4	+0.04	311
	3 79	11.1	9.5	0.011					
Z	2 61	5.1	5.2	0.035	4	11.8	12.8	+0.10	242

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			Δ km.	Remarks
			h.	m.	s.		A _N mm	A _E mm	A _Z mm		
34	1941 Feb. 4	eLN	04	51.6	16						
		ME		53 26	10		0.2				
		MN		55 18	11	0.2					
35	" 4	F	05	00							
		iPZ	14	11 26	5			+1.5	49°	Compression.	
		iPNE		11 28	5	+0.5	-0.4			Some evidence for	
		mZ		11 36	5			3.0		a focal depth of	
		ipPZ		12 28	6			-1.5		300-350 km.	
		iSE		17 58	6		-5.0			Vertical readings	
		iSN		17 59	6	+1.8				from Galitzin.	
		mN		18 08	6	3.5					
		iZ		18 11	5			+5.3			
		iE		18 55	5		-1.2				
36	" "	i(sS?) _N	20	15	5	-1.7					
		_E	20	16	5		-1.5				
		F	15	15							
		iPNE	18	54 25	4	-0.7	+0.6		4910	Compression.	
		iPZ		54 26	4			+3.5	(44°2)		
		iE		55 26	4		-0.8				
		eS _N	19	01 05	10					Vertical readings	
		eE		01 19	11					from Galitzin.	
		iSSNE		04 18	5	-0.9	-0.6				
		iZ		04 48	12			+3.5			
		mN		04 48	18	1.3					
		iE		09 05	7		-1.3				
		iN		09 10	8	+1.5					
eLN		09.3	20								
iE		11 19	5		+1.4						
MN		11 50	24	1.2							
ME		12 49	20		0.8						
37	" 9	F	20	10							
		e?Z	10	02 52						e? from Galitzin Z.	
		eN		18 08	10	0.4				Very heavy micro-	
		eE		18 12	10		0.4			seisms present.	
		eLN		28.7	28						
38	" 9	MN		31 17	18	0.3					
		ME		36 08	20		0.3				
		F	12	26							
		ePN	19	25 50	7			-2.0		iP from Galitzin Z,	
		iPZ		25 57	6					other readings from	
		e(S?) _N		30 12	18?					Mainka.	
		iN		30 37	18	-3.8					
		eLE		33.7	25						
MN		35 19	20	4.3							
ME		36 02	16			7.0					
F	21	20									

(Continued on next sheet)

RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			Δ km.	Remarks
							A _N mm	A _E mm	A _Z mm		
39	1941 Feb. 11	eE	15	02	45						
		eNE		11	46	15					
		eLN		36.3		22					
		M		40.0		17	0.2	0.2			
40	" 12	F	16	20							
		eLN	00	54.2		14				A few waves, masked by microseisms.	
41	" 12	eN	06	04	12						
		MN		15	49					A few waves, masked by microseisms.	
42	" 14	F	06	35							
		iZ	10	11	44	4			-0.9	iZ from Galitzin.	
		eN		12	41	4					
		eE		17	31	5					
		eN		17	41	8					
		eLNE		20.8		15					
		ME		22	06	12		0.1			
		MN		22	20	12	0.2				
43	" 14	F	10	40							
		e?N	13	19.4							
		e?E		19.8							
		eN		27	12	3					
		eLN		32.1		15					
		MN		33	01	13	0.2				
		ME		33	10	13		0.1			
		F	13	50							
44	" 14	eZ	19	05	04	6				eZ from Galitzin.	
		eSNE		12	57	12	0.3	0.3			
		eLN		19.9		19					
		ME		23	03	19		0.2			
		MN		25	29	15	0.4				
		F	20	20							
45	" 15	eLNE	04	02.6		17					
		MN		03	10	15	0.2				
		ME		03	50	16		0.1			
		F	04	15							
46	" 16	iNEZ	10	40	23	2	-0.2	-0.2	-0.2		
		eN		44	56	8					
		mN		45	39	8	0.5				
		ME		46	17	8		0.3			
		F	11	20							
47	" 17	eZ	08	12	16	5				eZ from Galitzin.	
		eE		13	45	5					
		eLE		14.8		13					
		ME		15	48	13		0.2			
		MN		17	27	11	0.2				
		F	08	35							
48	" 19	ME	15	24	23	12		0.3		A few waves, masked by microseisms.	
49	" 21	eNE	13	11	20	2					
		mN		15	13	6	0.2				
		F	13	25							
50	" 22	iPNEZ	19	20	29	4	-0.4	-0.9	+1.5	30°4±	Condensation.
		iPFE		21	57	4		+0.3			iP from Galitzin.
		iSE		24	55	5		+0.8			
		iSN		24	57	5	+0.7				Focal depth about
		isSN		27	50	7	+1.0				500 km.
		isSE		27	52	6		-1.5			
		eLN		28.6		13					
		MN		29	51	12	0.3				
		iE		30	09	5		+0.7			
		F	20	00							

(Concluded on next sheet)

RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ km.	Remarks
			h.	m.	s.		A _N mm	A _E mm	A _Z mm		
51	1941 Feb. 23	eN	01	21	16	4					
		eN		26	29	6					
		MN		32	02	13	0.3				
52	" 23	F	01	45							
		iZ	22	37	14	4			+1.0		Microseisms present.
		eNE		37	14	4	0.2	0.3			Vertical readings from Galitzin.
		eN		44	00	6					
		eE		44	37	5					
		iE		45	33	4		-0.8			
		iN		45	46	6	-0.8				
		iZ		45	57	4				+1.0	
		mN		46	07	7	1.0				
		iE		46	11	5		-1.1			
		iN		47	17	6	-1.8				
		iE		47	39	6		-1.4			
		iE		48	37	5		-2.2			
53	" 24	iN	48	59	6	+3.0					
		F	23	20							
		eLN	00	58	.8	13					
		MN	01	00	52	12	0.2				
		F	01	10							
54	" 24	eZ	12	51	32	7					
		e(S?)	57	27	9						
		eLE	13	02	.6	25					
		MN	04	11		12	0.2				
55	" 25	F	13	15							
		iPNEZ	05	44	21	4	+0.5	-0.5	-0.2	3700	Dilatation.
		iSNE		49	50	6	-1.0	+2.0		(33°3)	
		iE		50	04	6		-2.6			
		eNE		50	37	19					
		ME1		56	59	6		10.0			
		MN1		57	09	7	16.7				
		MZ		59	48	12			1.1		
		MN2	06	00	29	12	26.2				
		ME2		01	05	12		29.7			
56	" 27	F	08	20							
		iPZ	09	52	23	5			-1.5	4820	Dilatation.
		ePNE		52	23	4				(43°4)	Vertical readings from Galitzin.
		iPPNE		54	10	4	+0.3	-0.5			
		iSN		58	58	6	+0.5				
		iE		59	08	5		-0.5			
		eE	10	02	04	8					
		iSSNZ		02	21	6	+1.1		+1.5		
		iNE		02	27	8	+1.5	-1.0			
		eLE		09	.0	24					
		MN		12	35	22	1.0				
		ME		15	30	17		0.5			
F	10	50									

---oOo---

 D. J. K. O'CONNELL, S. J.
 Director.

Riverview College Observatory

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN

$\Phi = 33^{\circ} 49' 46''$ S.

$\lambda = 151^{\circ} 9' 30''$ E.

$h = 25$ 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 ₀	$\epsilon:1$	$\frac{P}{T_0^2}$		T ₁ (Galv.)	T (Pend.)	μ^2	V _s
N	1 223	9.3	5.1	0.021	4	14.0	14.4	+0.01	317
	3 101	11.6	4.9	0.007					
E	1 231	7.3	3.1	0.026	4	12.9	14.4	+0.04	311
	3 77	11.3	6.9	0.012					
Z	2 61	5.1	4.6	0.061	4	11.8	12.8	+0.10	242

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			Δ km.	Remarks
			h.	m.	s.		A _N mm	A _E mm	A _Z mm		
57	1941 March 2	eZ	11	57	03					ez from Galitzin.	
		eN	12	02	52	10					
		eLN		07	7	22					
		eLE		07	9	22					
		ME		10	43	14		0.4			
		MN		10	56	14	0.4				
57a	" 3	F	12	45						Recorded on E-W Galitzin only.	
		eE	09	56	14	8					
		iE		57	18	10		+2.0			
58	" 12	iE		59	28	10		+3.5		Shallow waves.	
		F	10	05							
		e?N	02	34	4						
59	" 13	e(L?)N		41	0	19				From E-W Galitzin.	
		F	03	25							
		eE	23	40	21	8					
60	" 14	eE		43	44	12				Shallow waves.	
		eLN		49	04	11		0.1			
		ME		51	0	23					
		MN		52	30	11	0.1				
		F		55	01	13					
61	" 14	eN	03	01	21					Z reading from Galitzin.	
		eLN		03	8	20					
		F	03	40							
62	" 15	iNEZ	16	20	20	4	-0.6	-1.2	+1.3	Shallow long waves	
		iN		23	33	6	+1.2				
		ME		23	44	8		0.4			
63	" 16	F	16	45						ez from Galitzin.	
		eN	07	49	25						
		eLN	08	05	17	19					
		ME		24	8	19		0.2			
		MN		34	46	19	0.2				
64	" 17	MN		35	11	19				ez from Galitzin.	
		F	09	50							
		eZ	08	09	59						
		eN		10	55	6					
		eN		14	34	8					
65	" 17	eLN		16	0	20				Small waves.	
		MN		19	07	13	0.3				
		ME		20	37	13		0.2			
		F	09	05							
		eN	11	59	2	5					
F	12	10									

(Continued on next sheet)

No. 3 (continued)

1941, March.

RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ km.	Remarks
							A _{sr} mm	A _E mm	A _Z mm		
66	1941 March 18	eZ	06	55	00	4				} From Galitzin.	
		i?NZ		58	45	7	+1.0		+1.0		
		eLN	07	01	.5	17					
		MN		04	54	11	0.4				
		ME		07	48	11		0.1			
67	" 20	F	07	35						Shallow waves.	
		eE	03	17	.2						
		eN		19	.0						
		e(L?)N		25	.1	23					
68	" 20	MN		31	13	23	0.1				
		F	04	00							
		eN	06	56	51						
		eN	07	00	59						
		MN		04	19	11	0.3				
69	" 21	ME		06	52	9		0.3		Shallow waves.	
		F	07	25							
		eN	03	20	.2						
70	" 21	e(L?)N		32	.2	22				Shallow waves.	
		F	04	10							
71	" 22	eN	08	17	45					All readings from Galitzin.	
		iz		17	53	6			+0.7		
		eN	09	08	56						
		MN		22	10	22	0.7				
		MZ		24	56	18			0.4		
72	" 22	F	10	30						Shallow long waves.	
		e(L?)N	07	30	.3	23					
73	" 23	F	07	50						Shallow long waves.	
		eN	14	41	.4						
		e(L?)N		43	.7	19					
		M		48	56	12	0.2		0.2		
74	" 24	F	15	25						Shallow long waves.	
		eN	02	56	.5						
75	" 25	F	03	25						" " "	
		eN	03	18	.2						
76	" 26	F	03	55						" " "	
		eN	03	31	.2						
77	" 26	F	04	15						" " "	
		e?N	03	44	.5						
		eN		54	.2						
		F	04	20							
78	" 27	e?N	04	49	.6					" " "	
		ME		57	05	12			0.2		
		MN		58	01	17	0.2				
79	" 28	F	05	15						Z readings from Galitzin.	
		eN	03	55	.1						
80	" 29	F	04	30						2710 (24°4)	
		ePEZ	22	35	49	4			+1.1		
		iz		36	02	4					
		eN		36	20	14					
		eSN		40	12	12					
		mNE		40	30	14	1.3		0.6		
		eLN		42	.6	16					
		MN		43	34	15	6.0				
		ME		43	44	18			0.8		
		F	00	50							
81	" 30	eN	03	38	.1	23				Shallow long waves	
		F	04	30							
81	" 30	eN	03	02	.4	23?				" " "	
		F	03	50							

N.B. All readings are from Wiechert unless otherwise stated.

D.J.K.O'CONNELL, S.J.
Director.

Riverview College Observatory

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN

$\phi = 33^{\circ} 49' 46''$ S.

$\lambda = 151^{\circ} 9' 30''$ E.

$h = 25$ 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 ₀	$\epsilon:1$	$\frac{r}{T_0^2}$		T ₁ (Galv.)	T (Pend.)	u_2	V _s
N	1 225	9.0	4.8	0.025	4	14.0	14.4	+0.01	317
	3 95	11.9	4.9	0.008					
E	1 218	7.4	3.2	0.031	4	12.9	14.4	+0.04	311
	3 85	10.9	5.8	0.010					
Z	2 61	5.1	4.8	0.054	4	11.8	12.8	+0.10	242

N.B. Readings are from Wiechert unless stated otherwise.

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			Δ km.	Remarks
			h.	m.	s.		A _v mm.	A _E mm.	A _Z mm.		
82	1941 April 1	eLN	04	48.1	18						
		MN		50 15	14	0.1					
		F	05	00							
83	" 1	eE	11	06 40	5						
		eLN		30.1	24						
		MN		35 00	20	0.2					
		ME		35 10	20		0.1				
84	" 2	F	12	20							
		eN	03	31.2							Shallow waves.
85	" 2	e(L?)N		35.4							
		F	04	20							
		iZ	15	51 46	4			+1.1			Focal depth below normal.
		iE		51 48	4		+0.3				Vertical readings from Galitzin.
		iZ		52 33	6			-1.5			
		iE		52 34	6		+0.3				
		mZ		52 39	6				1.6		
		ME		52 40	6			0.5			
		iE		56 03	6		+1.0				
		iZ		56 05	6				+1.9		
		eLN		56.9	19						
		mZ		58 19	10					1.2	
86	" 3	MN		59 25	12	0.1					
		F	16	20							
		eP?Z	15	36.0						113°	
		e(PP?)N		40 34	8						
		iNE		40 41	6	-0.6	+0.5				
		iZ		40 42	6			-4.0			Vertical readings from Galitzin.
		iZ		42 04	7			-2.8			
		iSKSNE		46 28	6	+1.0	-1.0				
		eE		48 02	9						
		eN		48 10	9						
		eZ		50 02	16						
		ePSNE		50 08	18						
		mZ		50 28	16					2.5	
		mNE		50 37	16	1.9	1.5				
		ePPSH		51.1	20						
		mZ		51 08	30					2.0	
		mZ		51 29	27					2.5	
		mNE		51 42	27	1.6	1.3				
		mZ		51 46	27					3.3	
		eSSN		56 14	18						
eE		57 24	16								
mN		57 34	24	1.7							
ME		57 52	16			0.8					
mN		58 08	28	1.7							
mN	16	02 12	24	1.0							
eLQN		05.3	34								
eLRNE		08.9	32								
MN		13 34	20	0.2							
ME		20 05	16			0.2					

RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			Δ km.	Remarks	
							A _N mm.	A _E mm.	A _Z mm.			
87	1941 April 4	iZ	09	13	14	4			+1.0		iZ from Galitzin.	
		eE		16	57	6						
		iN		16	58	6	+0.8					
		iE		17	18	6		+1.1				
		eLE		19.2		18						
88	" 6	F	09	25							Masked by micro-seisms. e?Z From Galitzin.	
		e?Z	08	54	16							
		e(L?) _H	09	01.3		18						
		eLE		02.6		20						
		eLN		02.8		20						
89	" 6	MNE	04	07		20	0.2	0.2			Vertical readings from Galitzin.	
		F	09	20								
		iNEZ	18	51	09	2	-0.5	+0.6	-1.3			
		iNZ		51	36	4	-0.5		+1.5			
		iE		51	38	4		-0.8				
90	" 7	iNE		54	38	4	+0.2	-0.5			Vertical readings from Galitzin.	
		F	19	00								
		eZ	23	51	11	4						
		eZ		51	41	6						
		eZ		52	22	6						
91	" 8	eE		52	42	6		0.3			Vertical readings from Galitzin.	
		eLE	00	31.2		32						
		eLZ		31.8		30						
		eLN		32.2		32						
		MN		38	42	20	0.2					
		ME		39	45	20		0.3				
		MZ		40	06	20			0.9			
		F	02	10								
		iPZ	02	53	37	5			-1.3			2380 (21.4)
		eN		53	39	8		0.3				
92	" 13	eSE		57	28	8					Shallow long waves.	
		iN		57	37	7	+0.5					
		iSSZ		57	45	7			+1.0			
		mN		57	49	7	0.8					
		eLN		58.9		18						
		ME	03	00	05	9		0.8				
		MN		00	58	9	1.1					
		MZ		01	04	13			1.3			
		F	03	50								
		eN	03	03.0								
93	" 14	F	03	50						" " "		
		eN	03	05.0								
94	" 15	F	03	45							From Galitzin.	
		i?E	03	51	27	2		-0.3				
		eE		53	09	7			1.3			
		ME		53	21	7			1.0			
		i(S?) _H		57	41	10						
		eLN	04	00.2		20						
		ME1		02	29	20		0.1				
		MN		04	19	16	0.7					
		ME2, MZ		04	29	16		0.2	0.4			
		F	05	20								
95	" 15	eE	07	04	30	7					Replica of No.94	
		ME		04	40	7		0.3				
		eLN		11.5		20						
		ME1		13	41	20		0.2				
		MN		15	24	16	0.2					
		ME2, MZ		16	21	20		0.3	0.3			
		F	08	50								

(Continued on next sheet)

RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			Δ km.	Remarks
			h.	m.	s.		A _r	A _E	A _Z		
WIECHERT CONSTANTS.											
							V	T ₀	:1	r/T ₀ ²	
						N	219	9.2	4.9	0.015	April 18 to Apr.30
						E	218	7.4	3.4	0.020	
96	1941 Apr. 15	eP?EZ	19	24	36	?				114°5±	eP? and iPP from Galitzin, other readings from Wiechert.
		iPPEZ	29	18		7		+3.0	-2.2		
		PPPE	31	44		7		2.2			
		ePSE	39	00		30					
		mE	39	20		30		2.2			
		PPSE	39	52		30		1.6			
		mE	40	20		30		1.1			
		mE	41	17		22		1.0			
		eSSE	45	17		32					
		mE	46	04		32		1.1			
		eN	48	33		24					
		SSSE	49	30		30		0.5			
		eLQN	56.	7		36					
		eLRE	20	00.	5	30					
		LZ	02	22		32			2.0		
		LE	02	50		30		2.5			
		MN	09	20		18	1.0				
		MZ	10	56		18			2.5		
		mE	11	08		18		2.5			
		eW ₂ Z	21	21.	0?	26					Perhaps several minutes earlier.
		MZ	28	18		24			1.2		
		mE	28	50		20		1.2			
		MZ	31	02		20	0.7				
97	" 18	F	22	55							
		iPNEZ	06	20	38	4	+0.6	+1.1	-2.6	2450	Dilatation N.E.
		iPPEZ	21	08		7		+0.7	-3.0	(22°0)	Focal depth 150 km.
		iPPN	21	10		5	+0.8				
		i(SP?)N	21	39		6	+1.0				Vertical readings from Galitzin.
		iSNE	24	30		7	-1.6	+1.5			
		mNEZ	24	39		7	1.2	3.1	1.6		
		iE	25	01		6		-1.0			
		iZ	25	05		6			+1.5		
		iN	25	07		6	+2.5				
		SS?NEZ	25	18		5	3.9	1.6	1.8		
		eLE	26.	4		18					
		eLN	26.	5		16					
		MNE	28	08		13	1.5	0.5			
98	" 18	F	07	25							
		eE	13	32	21	8					
		eN	42	17		9					
		iNE	42	44		8	+0.5	+0.3			
		eLN	52.	5		16					
		MN ₁	55	12		14	1.5				
		MN ₂	57	25		9	2.2				
		mE	58	26		10		0.2			
		MZ	14	00	42	10			1.7		MZ from Galitzin.
		F	16	25							
99	" 19	iP?Z	08	06	38	6					
		e(S?)E	17	20		7					All readings from Galitzin.
		e(L?)E	44.	5		20?					
		mE	49	11		20		0.5			
		MZ	50	23		18			0.2		
		F	09	25							

(Continued on next sheet)

RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks	
			h.	m.	s.		mm.	A _E	A _Z			km.
100	1941 Apr. 20	iE	12	13	19	4		+0.1				
		iEZ		18	36	4		+0.5	+0.6			
		iE		18	48	4			-0.5			
		iN		19	02	4	+0.5					
		mN		19	09	6	0.6					
		mE		20	11	8		0.4				
		MZ		22	22	10			0.8			
		F		12	40							
101	" 20	eE	18	30.9		28 ⁹					Masked by microseisms. Readings from Galit- zin.	
		eLEZ		38.7		26						
102	" 21	F	19	00								
		iPEZ	03	30	21	4		+1.0	+1.0	2560 (23°0)	Readings from Galit- zin.	
		iN		30	23	4	+0.8					
		iSE		34	26	8		+1.4				
		eLE		36.5		18						
		MNE		39	25	14	0.5	1.1				
		F	04	15								
		PZ	15	22	59	5			0.8	2560 (23°0)		Readings from Galit- zin.
PNE		23	00	5	0.5	0.5						
103	" 21	i(PPP?)Z		23	36	7			-1.0			
		i(PPP?)E		23	37	7		+1.5				
		iNZ		24	06	7	+1.0		-1.0			
		iSNE		27	04	8	+1.0	+1.7				
		mN		27	13	8	1.7					
		mE		27	17	9		2.3				
		mZ		27	36	9			1.5			
		eLE		28.9		20						
		MN		31	19	12	1.5					
		ME		31	49	13		1.0				
		F	16	10								
		iPZ	22	32	47	5			+1.5	2590	iP Condensation. Provisional epi- centre: 19½°S, 171°E. All readings from Galitzin.	
		iPNE		32	48	5	-0.7	-1.0				
		iPPPZ		33	21	7			+2.3			
iPPPNE		33	27	7	+1.7	+2.6						
iN		33	57	7	-2.8							
iNEZ		34	27	7	-1.5	-1.2	+1.5					
iSNE		36	56	9	+2.6	+2.8						
iZ		37	01	9			-2.5					
mNE		37	08	10	4.1	4.3						
mNE		37	23	12	3.0	3.8						
mZ		37	30	8			2.7					
SSN		37	37	8	3.5							
mE		38	00	6		3.0						
eLEZ		38.8		22								
MZ		41	33	16			1.5					
ME		41	41	15		2.4						
MN		41	48	13	5.0							
105	" 22	F	00	15							E and Z readings from Galitzin.	
		eE	16	24	14	6						
		eLZ		28.8		24						
106	" 24	eLN		29.1		22						
		F	16	45								
		e?N	10	45	39	4						
		eE		50	16	6						
		eN		51	44	9						
		MNE		56	45	11	0.2	0.2				
F	11	10										

(Concluded on next sheet)

RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ km.	Remarks
							A _N mm.	A _E mm.	A _Z mm.		
107	1941 Apr. 27	iE	15	05	17	6		-0.5		Masked by heavy microseisms.	
		iN		05	27	7	+0.7				
		iz		05	35	4			+1.0		
		eL?N		06.6		20?					
		ME		08	07	10		0.8			
		MN		08	33	10	0.8				
		F	15	35							
108	" 29	iPEZ	01	42	10	4		-1.3	-2.7	3270 (29°4) Dilatation. Epicentre about 27°S, 118°E. Heavy microseisms. Z readings from Galitzin.	
		i(pP?)Z		42	26	4			+1.4		
		iPPZ		42	54	4			+1.5		
		iPPPE		43	11	4		+1.0			
		iPPPN		43	12	4	+0.4				
		iz		44	12	4			+1.5		
		i(PcP?)NZ		45	44	4	+1.2		+2.0		
		iSN		47	03	6	+2.0				
		eE		47	06	8					
		iE		47	14	8		-1.6			
		iN		48	04	6	+1.2				
		iSSN		48	31	6	-2.2				
		iSSEZ		48	33	5		-2.0	+3.5		
		iE		49	32	4		-5.0			
		eL?N		50.1		12?					
		iN		51	24	5	-16.5				
		MZ1		51	48	6			18.3		
ME		51	50	6		20.7					
MN		52	06	6	31+						
MZ2		52	16	6			31.5				
F	03	05									
109	" 30	eE	09	59	31	7				EW readings from Galitzin.	
		eE	10	05	41	7					
		MN		17	35	20?	0.2				
		F	11	30							

---oOo---

D. J. K. O'CONNELL, S. J.
Director.

Riverview College Observatory

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN

$\Phi = 33^{\circ} 49' 46''$ S.

$\lambda = 151^{\circ} 9' 30''$ E.

$h = 25$ 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 _v	s:1	$\frac{r}{T_s^2}$	T ₁ (Galv.)	T (Pend.)	μ^2	V _s
N	1 221	9.4	4.7	0.021	4	12.9	+0.04	311
	2 126	9.7	4.4	0.012				
E	1 229	9.5	4.9	0.019	4	12.8	+0.10	242
	3 143	9.4	4.5	0.021				
Z	2 62	5.0	4.8	0.032	4			

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			Δ km.	Remarks	
			h.	m.	s.		A _v mm.	A _E mm.	A _Z mm.			
110	1941 May 1	iE	19	53	59	4		+1.5		3060 (27.5)	E and Z readings from Galitzin.	
		iE		56	44	6		-1.2				
		iNE		56	52	6		+1.7				
		iN		57	22	4	-0.6					
		eLE		57	.7	16						
		MN		59	04	8	0.3					
		MZ		59	10	10			0.6			
111	" 2	F	20	35						3060 (27.5)	E and Z readings from Galitzin.	
		ePZ	10	01	02	4						
		iSNE		05	42	7	+0.5	+1.5				
		mN		06	12	14	0.7					
		eLE		08	.6	24						
		eLN		09	.1	24						
		MEZ		10	23	18		3.8	0.6			
112	" 4	MN		13	52	16	0.5			1660 (14.9)	Condensation. Felt at Finke in Central Australia. NS readings from Mainka, EW and Z from Galitzin.	
		F	11	50								
		iPEZ	22	10	58	4		-1.5	+0.5			
		iZ		11	04	8			-1.4			
		eSE		13	45	5		1.0				
		eN		13	51	5						
		iSSE		13	53	5		+1.3				
		iEZ		14	01	6		-1.7	+1.5			
		ME		14	18	8		3.0				
		MZ		14	20	8			1.6			
		ME		14	26	8		3.5				
		iZ		14	29	7			+2.5			
		iEZ		15	01	6		+3.0	+3.0			
		iE		15	17	6		+5.0				
		ME		15	29	6		11.8				
113	" 4	LN		15	.6	13				In No. 112.	Very short period waves superposed on coda of No.112. NS readings from Mainka, EW and Z from Galitzin. Aftershock of No.112	
		iZ		15	37	6			-9.7			
		LE		15	.8	12						
		MN		16	26	9	10.5					
		ME1		16	35	9		40.0				
		MZ		16	43	9			37.5			
		ME2		18	00	7		34.0				
		F		22	38	03	1					
		eE		22	38	29	1					
		eN		39	41	2		+3.3				
iE		39	43	3			+2.8					
iZ		39	53	3			+3.3					
ME		39	54	4			3.5					
eLNE		40	.2	11								
MNE		41	05	11		2.0	7.8					
MZ		41	07	11			4.9					
ME2		42	12	8			5.8					
F		23	30									

(Continued on next sheet)

RIVERVIEW COLLEGE OBSERVATORY,
 RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
			h	m	s		AN	AE	AZ		
114	1941 May 4	MZ	22	45	08	4			0.4	Superimposed on Coda of No.113.	
		MN		45	10	6	2.1				
		ME		45	22	6		1.9			
115	" 4	e(P?) _E	23	27	29	1				1560? (14°0?) Record lost on Galitzin while changing paper. Central Australia	
		S?NE		30	06	2		0.4			
		iE		30	22	2		-0.8			
		iZ		30	44	4			-1.0		
		iN		30	51	4	+1.4				
		iN		30	56	4	+1.5				
		mN		31	10	5	1.1				
		iN		31	24	5	+1.7				
		iE		31	32	3		-2.5			
		iNE		31	40	5	+3.0	+3.6			
		mN		31	51	5	7.1				
		mE		31	53	5		7.0*			
		eLE		32	2	10					
		MN		32	51	5	9.8				
		ME ₁		32	58	10		6.4			
ME ₂		34	23	6		8.6					
116	" 7	F	01	00						22°± iP Dilatation NE Depth of focus about 150 km. Measurements from Galitzin.	
		iPNEZ	12	24	29	4	+1.0	+2.0	-1.7		
		ipPNEZ		24	54	4	+1.0	+1.5	+1.0		
		mEZ		25	11	12		2.5	2.1		
		mEZ		25	25	10		2.8	1.7		
		mEZ		25	33	7		3.4	2.7		
		mZ		25	41	6			1.8		
		mE		25	46	6		3.2			
		iSNE		28	18	4	-2.3	-4.3			
		iSZ		28	19	4			+1.0		
		iNEZ		28	24	6	+6.0	+11.8	+1.8		
		isSEZ		29	08	8		+6.1	+2.0		
		mEZ		29	21	8		10.0	3.2		
		eLE		30	9	20					
		MZ		31	56	14			0.8		
MNE		32	22	14	0.6	3.5					
117	" 8	F	13	40					30°± Dilatation, NE. Some evidence for a focal depth of about 500 km. Measurements from Galitzin.		
		iPZ	10	27	28	3		+1.0		-1.7	
		iPNEZ		27	29	3	+0.7	+1.5		+1.0	
		i(pP?) _{EZ}		28	57	4		+1.0		+1.0	
		iEZ		29	07	4		+1.0		+1.5	
		iSNEZ		31	56	6	-2.0	+7.0		-1.0	
		i(ss?) _{EZ}		34	54	7		+2.7		+1.7	
iNE		36	57	6	+3.1	+4.7					
118	" 9	F	11	35					6200 (55°8) Measurements from Galitzin.		
		ePNEZ	05	42	06	4	0.5	0.5		0.7	
		iPPEZ		44	10	7		+0.7		+1.0	
		iSEZ		49	53	7		+1.9		+0.5	
		iE		50	12	13		+2.2			
		SSE		53	28	15		1.7			
		mZ		54	21	16				1.2	
		SSSE		55	32	15		2.2			
		MZ	06	04	16	16				1.5	
ME		04	29	18		5.2					
F	07	25									

(Continued on next sheet)

No.5 (continued)

1941, May.

17

RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per s	Amplitude			Δ km.	Remarks	
			h	m	s		A _N mm.	A _E mm.	A _Z mm.			
119	1941 May 13	eE	16	28	46	8				Masked by micro- seisms. Readings from Galitzin.		
		eE		35	38	12						
		eLE		50	.5	30						
		ME		57	01	13		0.4				
120	" 16	F	17	30						7560 (68°0)		
		iPN	07	36	06	6	+0.6					
		iSE		45	06	8		+0.5				
		eSSN		49	15	28						
		eSSSN		51	48	28						
		eLE		53	.9	30						
		eLN		54	.0	30						
		MN	08	01	08	18	0.5					
		ME		01	17	18		0.4				
		MZ		01	29	17			0.6			
		121	" 17	F	08	45						
iPNEZ	02			30	34	6	-2.0	-2.1	+3.0			
mNEZ				30	48	6	5.8+	4.3	14.3			
mZ				31	25	9		7.7				
mNE				31	33	9	6.8	4.3				
mN				32	01	8	7.5					
iE				32	02	6		-4.6				
ME				32	19	6		5.2				
mNZ				32	54	9	4.2		8.2			
iE				32	57	10		-3.8				
iE				33	37	6		+10.5				
iN				34	44	8	+5.5					
iN				34	59	8	+10.2					
iSE				35	07	11		-6.2				
iZ				35	16	10			+4.5			
iE				35	21	10		-15.0				
mN				35	33	16	21.5					
ME				35	40	14		28.8				
mZ				35	56	11			10.8			
ME				36	33	12		24.6				
mN				37	15	16	24.0					
eLZ				37	.8	28						
mZ				38	58	20			29.3			
MN ₁ , ME ₁				39	42	16	41+					
ME ₁ , MZ ₁				40	55	15		46.8	23.3			
MN ₂				41	00	16?	65+					
MZ ₂				41	52	16			50+			
ME ₂				42	01	13		50.0				
F				05	10							
122	" 17			eZ	08	50	08				eZ from Galitzin	
				eLN		57	.6	19				
				ME	09	02	11	13		0.3		
123	" 18	F	09	20					0.3			
		eLNE	11	23	.7	14						
		ME		27	51	12						
		MN		28	36	12	0.2					
F		12	00									

(Concluded on next sheet)

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ km.	Remarks.	
							AN	AE	AZ			
124	1941 May 24	i(P?) _E	05	24	22	4		+1.1		2690? (24.2?)	Masked by heavy microseisms. EW and Vertical readings from Galitzin, NS from Wiechert.	
		eN		24	22	4						
		iN		26	06	5	-0.4					
		iE		26	38	6		+1.8				
		iE		27	00	6		-1.3				
		iE		28	08	6		-1.5				
		i(S?) _N		28	38	6	+0.7					
		iZ		28	43	7			-1.7			
		iE		28	46	7		+4.6				
		iN		29	06	6	+1.0					
		mE		29	14	7		7.8				
		i(SS?) _Z		29	46	5						
		i(SS?) _E		29	47	5		-8.1				
		iN		29	54	6	+4.4					
		mZ		29	58	5			13.1			
		mNE		30	05	5	7.8	19.3				
		mE		30	23	13		21.8				
		mN		30	28	13	9.8					
		eLN		30	6	20						
		ME		33	27	9		34.3				
MZ		33	31	9			29.8					
MN		33	34	9	12.3							
F		06	35									
125	" 26	iE	20	43	27	3		+0.3		Masked by micro- seisms.		
		iE		47	46	4		-0.5				
		iE		51	17	4		-0.5				
		mE		51	25	6		0.6				
		eLN		52	6	20						
		MN		54	02	16	0.3					
ME		54	28	14		0.2						
F		21	20									
126	" 27	eE	00	50	46	8				Masked by micro- seisms.		
		eLN		51	7	20						
		MNE		53	58	14	0.3	0.2				
F		01	15									
127	" 29	eZ	11	16	49					Masked by micro- seisms. Z readings from Galitzin. Probably double shock.		
		eE		21	58	8						
		iZ		22	07	8			+0.8			
		iZ		22	17	8			+1.5			
		eLN		25	7	25						
		MNZ		26	7	18	0.6		0.8			
		eLE		27	9	22						
		MN		28	49	18	2.0					
		ME		28	57	17		1.4				
		MZ		29	39	17			1.2			
		MNE		29	49	14	6.8	3.8				
		MNEZ		30	30	14	10.7	6.2	1.8			
		F		12	55							
128	" 30	eZ	17	42	08					Masked by micro- seisms. Z readings from Galitzin.		
		eLN		43	8	22						
		ME		47	03	19		0.5				
		MZ		47	09	19			1.4			
		MN		47	28	14	0.6					
		F		18	35							
129	" 31	eLEZ	05	12	8	18				Masked by micro- seisms.		
		ME		14	54	18		0.2				
		MN		15	23	12	0.2					
		F		05	30							

Riverview College Observatory

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN

 $\phi = 33^{\circ} 49' 46'' \text{ S.}$
 $\lambda = 151^{\circ} 9' 30'' \text{ E.}$
 $h = 25 \text{ m.}$

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 ₀	s:l	$\frac{r}{T_0^2}$	T ₁ (Galv.)	T (Pend.)	u ₂	V _s
N	1	215	9.0	4.0	0.033			
	3	122	9.5	4.8	0.017			
E	1	230	9.3	4.9	0.031	12.9	14.4	+0.04
	3	133	9.2	4.6	0.026			
Z	2	60	5.1	5.4	0.092	11.8	12.8	+0.10

N.B. WIECHERT CONSTANTS from June 1 to June 17. June 17-30 see over.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ km.	Remarks
			h.	m.	s.		A _N mm.	A _E mm.	A _Z mm.		
130	1941 June 4	eE	16	42	9					eE from Galitzin.	
		MN		59	58	14	0.1				
		ME	17	00	53	16		0.1			
131	" 8	F	17	15						ME from Galitzin.	
		e(L?)N	09	07	0	18?					
		ME		10	59	16		0.5			
132	" 10	MN		11	10	15	0.2			Masked by micro-seisms.	
		F	09	20							
		e?E	11	13	38						
		eLN		19	1	16					
133	" 10	MN		21	04	14	0.2			From Galitzin. Masked by micros.	
		ME		21	13	15		0.1			
		F	11	50							
134	" 11	ME	14	12	08	15		0.6		From Galitzin. Masked by micros.	
		F	14	20							
135	" 16	eE	10	29	25					Z readings from Galitzin.	
		eLN		32	6	20					
		ME		35	29	16		0.3			
		MN		37	04	16	0.3				
136	" 18	F	10	55						EW and Z readings from Galitzin.	
		eZ	11	35	03	5					
		iZ		35	49	6			-0.9		
		ME		45	45	13		0.1			
		MN		46	10	?	0.1				
		F	12	05							
		ePZ	10	22	52				4610 (41.5)		
		eE		23	00	5					
eNE		23	11	5							
iZ		23	13	6			+1.2				
eSN		29	08	8	0.3						
iSE		29	12	8			-1.6				
iSSNE		32	18	7	+0.2		+1.5				
mE		32	34	8			2.0				
eLN		36	3	24							
eLE		37	6	20							
MN		39	52	22	0.2						
ME		40	02	18			0.7				
MZ		40	05	18			0.2				
F		11	10								

(Continued on next sheet)

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

Wiechert Constants June 17 to June 30.

	V	T ₀	r:T ₀	r/T ₀ ²
N	220	9.0	4.0	0.020
E	222	9.2	5.1	0.014

No.	Date	Phase	Time (G.M.T.)	Per	Amplitude			Δ	Remarks
					AN	AE	AZ		
137	1941 June 18	ePZ	h m s	s	mm.	mm.	mm.	km.	Vertical readings from Galitzin.
			20 06 47	4				5610	
		iNEZ	07 06	4	+0.4	-0.5	-1.2	(5095)	
		iSE	12 59	9		+0.4		4550	
		iSN	13 00	9	-0.5			(4190)	
		iSSE	16 04	6		-0.4			
		eZ	16 06	6			0.5		
		iN	16 13	8	+0.4				
		mZ	16 17	6			0.6		
		mNE	16 24	8	0.4	0.8			
		eLN	20.1	24					
		MN	23 38	22	0.3				
		ME	23 46	20		0.2			
MZ	23 55	24			0.4				
138	" 20	F	21 05						Vertical readings from Galitzin.
		i(P?)E	08 44 59	5		+0.3			
		iZ	45 00	5			+0.5		
		iZ	45 15	5			-1.6		
		iN	45 17	5	+0.3				
		eN	48.7	18					
		iE	48 57	6		+0.5			
		MN	50 44	14	0.3				
		ME	51 45	14		0.2			
		F	09 40				+1.5		
140	" 21	i?Z	17 47 02	4				Masked by heavy microseisms. Deep focus?	
		iE	51 25	8		+0.6			
		iN	54 29	7	-0.9				
		iE	54 33	7		+1.0			
		iE	56 31	6		+1.7			
		iN	56 33	6	-1.2				
139	" 21	F	18 20					Masked by micro- seisms.	
		eLE	08 55.7	18					
141	" 23	ME	57 17	16		0.7		Small and masked by microseisms.	
		F	09 20						
142	" 23	MN	06 05 01	12	0.3			Earlier phases obscured by micro- seisms. MZ from Galitzin.	
		ME	06 03	12		0.2			
		F	06 15						
		eLNE	09 43.5	22		0.6			
		MN	53 14	16	0.6				
143	" 24	MZ	53 21	16			1.0	MZ from Galitzin.	
		F	10 45						
		eLNE	03 58.5	18					
144	" 26	MEZ	04 00 26	14		0.2	0.3	MZ from Galitzin.	
		MN	01 08	14	0.2				
144	" 26	F	04 20					Dilatation. Provisional epi- centre: 9°N., 91°E. Vertical readings from Galitzin.	
		iPZ	12 03 26	4			-0.9		
		ePNE	03 26	6?					7950
		iZ	03 28	6?			+4.5		(7195)
		iNEZ	03 31	6	+2.2	-4.6	-16.8		
		iNEZ	03 45	8	+2.0	-5.5	-18.0		
		iEZ	08 01	10		-3.4	+3.0		
		mNEZ	08 31	10	5.0	9.7	19.0		
		iSN	12 44	8	+24.5				
		iE	12 49	5		+6.2			
iPSN	13 01	8	18.8						

(Continued on next sheet)

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
			h	m	s		AN	AE	AZ		
144 Cont.	1941 June 26	iE	12	13	30	10		-24.2			
		MNE		13	49	10	16.6	23.0			
		ME		14	01	9		23.7			
		iNE		20	57	9	-12.4	+13.2			
		eLN		21	6	44					
		eLE		22	6	50					
		LN		23	43	70	18.5				
		MN1		26	19	42	34.7				
		MZ1		27	43	46				19.5	
		ME1		28	45	38		27.8			
		MZ2		31	06	32				25.2	
		MN2		31	11	28	19.1				
		ME2		31	50	26		20.0			
		F		16	15						
145	" 27	ePZ	07	59	10	8				1680	H 07 55 34
		iPE		59	13	4/8		-0.6		(15.1)	Felt at Finke in
		ePN		59	13	4					Central Australia
		iZ		59	15	8				-1.5	
		iNE		59	19	4/8	-0.5	+1.0			Vertical readings
		mZ		59	25	9				2.5	from Galitzin.
		iSZ	08	01	59	6				+1.5	
		iSE		02	01	5		-1.6			
		iSS ^{NS}		02	11	5	+2.0	+2.8			L hard to identify
		iZ		02	13	6				-5.5	
		iN		03	35	6	+22.5				NS Wiechert cap-
		MN1		03	56	6?	65+				sized shortly after
		MZ1		04	04	5				42.2	beginning of M.
		ME1		04	14	10		50.5			
		MN2		04	41	10	56.8				MN2 from Mainka.
		ME2		05	00	10		57.5			
		ME3		05	45	6		57.5			
MZ2		06	21	8				52.5+			
F		09	40								
146	" 27	eZ	08	44	06	2					Small waves super-
		iZ		45	32	4				+1.6	imposed on coda of 145. Aftershock. From Galitzin Z.
147	" 27	eEZ	12	45	04						Aftershock of 145
		MN		48	39	6				1.0	Masked by micros.
		ME		48	45	6		1.3			Readings from Galitzin.
148	" 27	F	13	00							Masked by micro-
		eZ	13	51	0	8					seisms.
		eE		51	55	8					Readings from Galitzin.
		eLE	14	05	6	20					
149	" 27	ME		08	08	16		1.0			
		F	14	25							
		iE	14	44	01	5		+1.3		-1.7	Aftershock of 145
150	" 29	ME		46	16	7		1.6			Masked by micros.
		MZ		47	10	5				1.5	Readings from Gal-
		F	15	05							itzin.
150	" 29	eE	05	46	6						
		eLE		53	3	20					
		MNE		56	12	14	0.2	0.2			
		F	06	30							

(Concluded on next sheet)

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks.
			h	m	s		AN	AE	AZ		
151	1941 June 29	iPNEZ	22	11	20	5	+0.2	+0.5	-1.8	2400 (21°3)	Dilatation N.E. Depth of focus 75-100 km. Z readings from Galitzin. May be SS.
		pPNEZ		11	35	7	0.4	1.4	2.8		
		ME		11	57	6		0.7			
		mN		12	02	6	0.7				
		MEZ		12	35	7		0.7	1.9		
		iS ^{NE}		15	13	5	+1.0	-1.1			
		iNEZ		15	19	6	-5.9	+5.7	+5.1		
		sS ^{?NZ}		15	37	7	2.1		2.7		
		eLN		16	7	20					
		MN		17	31	16	1.2				
		MEZ		18	17	16		0.6	1.3		
152	" 30	F	23	25						Readings from Galitzin.	
		iE	16	56	03	6		+1.0			
		iE	17	00	53	8		-1.0			
153	" 30	ME		15	53	10		0.9		Readings from Galitzin.	
		F	17	50							
		e ^{?E}	18	44.3		6					
		eLE	19	04.1		24					
		ME		06	43	22		0.5			
		F	19	20							

-----000-----

D. J. K. O'CONNELL, S. J.
Director.

Riverview College Observatory

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN

 $\Phi = 33^{\circ} 49' 40'' \text{ S.}$
 $\lambda = 151^{\circ} 9' 30'' \text{ E.}$
 $h = 25 \text{ m.}$

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 ₀	$\epsilon:1$	$\frac{p}{T_0^2}$		T ₁ (Galv.)	T (Pend.)	μ^2	V _s
N	1 220	9.2	4.6	0.020	4	14.0	14.4	+0.01	317
	3 111	9.6	4.2	0.018					
E	1 235	9.2	4.8	0.014	4	12.9	14.4	+0.04	311
	3 138	9.2	5.7	0.037					
Z	2 58	5.2	4.7	0.077	4	11.8	12.8	+0.10	242

N.B. All measurements are from Wiechert unless stated otherwise.

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			Δ km.	Remarks
			h.	m.	s.		A _v mm.	A _E mm.	A _Z mm.		
154	1941 July 3	eZ	07	39	31					Masked by heavy microseisms. Z readings from Galitzin.	
		eLN	08	03.9		22					
		MZ		05	19				0.6		
		MNE		05	39		18	0.2	0.2		
		F	09	20							
155	" 5	iZ	02	22	03	4			+1.4	Masked by heavy microseisms. Z readings from Galitzin.	
		eLE		28.1		18					
		eLN		28.2		18					
		ME		28	43		14	0.6	0.8		
		MN		29	32		11	0.6			
156	" 8	F	03	10						Masked by micro- seisms.	
		iE	17	26	42	3			-0.6		
		eN		26	43		3				
		iN		27	36		3	-1.3			
		iE		29	26		4		?		
		iN		30	52		6	+1.4			
		iE		31	05		6		-1.5		
		iNE		31	24		6	+3.7	+2.2		
157	" 10	ME		31	45				2.3	Small and masked by microseisms.	
		F	18	00							
		eLE	03	43.4		28					
158	" 10	MN		57	25		0.2			EW readings from Galitzin.	
		F	04	30							
		eN	10	35.3		6					
159	" 14	MN		47	14		0.2			EW readings from Galitzin.	
		ME		48	14		15		0.2		
		F	11	20							
		eE	02	31	24	8?					
		eE		37	08		10				
160	" 17	e(L?)N		39	18					Small and masked by microseisms.	
		eLE		41.1		24					
		ME		44	43		20		0.7		
		MN		45	25		22	0.2			
		F	03	25							
		eN	03	03	32						
161	" 19	ME		06	04		10		0.2	EW readings from Galitzin.	
		MN		06	10		10	0.2			
		F	03	15							
		eN	15	46	23						
161	" 19	eLE		49.5		20				EW readings from Galitzin.	
		MN		50	31		20	0.2			
		F	16	10							

(Continued on next sheet)

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
							AN	AE	AZ		
162	1941 July 20	iPEZ	h	m	s	s	mm.	mm.	mm.	km.	Condensation. Z readings from Galitzin. NS & EW from Mainka. Deeper than normal? Deeper than normal? Condensation. Heavy microseisms Z readings from Galitzin.
		eN	06	05	42	6		-0.3	+2.0	2360 (21°2)	
		iSE		06	11		6				
		iSN		09	33		5	+0.6	-0.5		
		iZ		09	36		7				
		iZ		09	39		5		+1.5		
		iZ		09	46		8		-4.0		
		eLZ		11	.3		20			0.5	
		MZ		12	49		16				
		MN		13	22		13	0.3			
163	" 24	F	06	45							
		iPEZ	06	24	49	8		-0.6		2380 (21°4)	
		iN		24	54		6	+0.9			
		eN		28	36		6				
		iSE		28	42		10		-1.5		
		iZ		28	46		10		+2.0		
		mE		28	53		10		1.7		
		mZ		29	00		10			2.0	
		eLE		30	.5		22				
		MZ		31	14		16			0.8	
164	" 24	MN		31	59		14	0.6			
		ME		32	23		16		0.3		
		F	07	05							
		i?E	13	56	36	5		-0.5			
		eN	14	19	24	16?					
		eLE		24	.9		24				
		MN		27	15		22	0.1			
		ME		28	17		18		0.2		
		MZ		29	18		22			0.3	
		F	14	55							
165	" 24	eE	21	58.6		12				From Galitzin E. Masked by heavy microseisms.	
		F	22	35						From Galitzin Z.	
166	" 25	eZ	02	53	20						
		F	03	05							
167	" 25	iPZ	09	53	25	5			+1.3	2350 (21°1)	Condensation. Heavy microseisms precede P. Focal depth may be slightly below normal. EW & Z readings from Galitzin.
		iPE		53	27	6		+2.2			
		ePN		53	27	6					
		iZ		53	37	6				-2.1	
		iSE		57	17	7		+2.7	-1.7		
		iSNZ		57	19	7			+2.0		
		iE		57	39	7			+8.9		
		eLE		58	.5		24				
		MZ	10	00	07	18				0.5	
		ME		00	13	20			2.7		
168	" 26	MN		01	27	14	0.3				
		F	10	50							
		iPNZ	20	20	14	5	-0.8		+1.0		
		eLE		34	.1	30					
		ME		39	56	13			1.5		
		MN		41	01	14	1.0				
		F	21	45							
		eE	23	12.9							
		F	02	30							
		169	" 26	eE							
F											

(Concluded on next sheet)

No.7 (concluded)

1941, July.

25

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

 SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
							AN	AE	AZ		
170	1941 July 28	iZ	h	m	s	s	mm.	mm.	mm.	km.	Condensation. EW & Z readings from Galitzin.
		iE	15	58	13	6			+1.0		
		iE		58	15	7			+1.0		
		eLE	16	02	33	7					
		MN		05	.5	20					
		ME		06	31	16	0.3				
		MZ		06	56	18		1.3			
		F		07	10	16			0.5		
171	" 30	eN	16	50						Masked by micro- seisms. All readings from Galitzin.	
		eE	02	16	10	10					
		iN		16	20	10					
		iE		16	34	7	+1.7				
		iE		17	39	8		-1.7			
		eLE		17	57	17		+2.5			
		ME		42	.1	?			1.5		
		MN		46	43	22					
F		47	04	20	0.4						
		03	25								

---oOo---

 D.J.K.O'CONNELL, S.J.
 Director.

Riverview College Observatory

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN

$\Phi = 33^{\circ} 49' 46''$ S. $\lambda = 151^{\circ} 9' 30''$ E. $h = 25$ 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 ₀	s:1	$\frac{r}{T_0^2}$		T ₁ (Galv.)	T (Pend.)	μ^2	V _s	
N	1	215	9.1	4.5	0.018	4	12.0	11.1	-0.01	250
	3	121	9.5	4.1	0.017					
E	1	232	9.3	5.1	0.014	4	12.9	14.4	+0.04	311
	3	144	9.1	5.3	0.039					
Z	2	59	5.1	5.0	0.057	4	11.8	12.8	+0.10	242

N.B. Readings are from Wiechert unless stated otherwise.

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			Δ km.	Remarks
			h.	m.	s.		A _N mm.	A _E mm.	A _Z mm.		
172	1941 Aug. 2	iPEZ	11	47	09	6				3210 (28.9)	Condensation. EW & Z readings from Galitzin, NS from Mainka.
		iN		47	29	5	-0.5	-3.0	+4.0		
		iEZ		47	31	6		-17.0	+17.0		
		iN		48	12	6	-0.7				
		mZ		48	18	6			10.2		
		iE		48	21	7		-25.5			
		iN		48	30	8	-2.2				
		iN		49	07	7	-2.0				
		iSN		51	57	7	+1.0				
		iSE		51	59	8		+13.0			
		iN		52	11	9	+2.2				
		iZ		52	24	12			+13.2		
		iN		52	29	7	-2.7				
		iE		52	35	9					
		iN		52	57	9	+4.5				
		eLN		53	4	27					
		eZ		53	5	24					
eE		53	7	30		67.5					
ME		57	18	16			62.7				
MZ		57	21	16							
MN		58	43	12	5.4						
F	15	30									
173	" 3	iE	12	51	42	8		+1.0			
		iE		53	09	12		+1.8			
		eLNE		55	2	18					
		MN		56	01	13	0.2				
174	" 4	ME		56	31	14		4.4			
		F	13	45							
		eN	11	16	17	8					
		eLN		35	1	28					
175	" 6	MN		40	33	18	0.2				
		ME		40	44	18		0.3			
		MZ		47	28	18			0.2		
		F	12	00							
176	" 9	iE	06	39	44	9		+1.0			
		iN		39	49	6	+0.6				
		iE		40	51	9		+0.7			
		eLN		46	1	24					
176	" 9	MN		50	35	16	0.2				
		F	07	20							
		e?E	23	03	0						
		eLE		08	4	16					
		ME		12	13	14					
MN		12	32	15	0.2						
F	23	50									

(Continued on next sheet)

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
							A _N	A _E	A _Z		
			h	m	s	s	mm.	mm.	mm.	km.	
177	1941 Aug. 14	eLN	18	08	.1	20					Shallow long waves.
		F	18	25							
178	" 15	iZ	06	29	32	6			-1.0		Readings from Galitzin.
		iNZ		34	16	6			-1.2		
		eLN	07	33	.7	24					
		ME		38	57	16		0.7			
		MZ		39	33	18			0.4		
		MN		42	25	17	0.9				
		F	08	40							
179	" 16	eN	03	50	.1	12					Readings from Galitzin.
		eLZ		52	.3	20					
		MN		53	15	15	1.8				
		ME		53	27	18		0.9			
		MZ		53	43	16			0.4		
		F	04	20							
180	" 17	eE	14	23	14	6					
		eLZ		28	.4	18					
		MN		30	39	11	0.7				
		MZ		30	49	11			0.4		
		ME		31	16	8		1.1			
		F	14	45							
181	" 19	iPNEZ	17	45	50	4	+1.5	+1.0	-1.5	2765	Dilatation NE.
		mNEZ		46	06	6	3.0	2.4	3.6	(24.9)	
		iN		47	11	4	+3.0				Readings from Galitzin.
		iSE		50	09	8		+2.0			
		iSN		50	11	8	-5.5				
		mNEZ		50	36	9	5.8	6.0			
		mZ		50	46	6					
		SSZ		50	58	8					
		eLZ		52	.4	18					
		eLN		53	.1	18					
		MZ		54	47	14					
		ME		54	53	12		6.7			
		MN		54	55	12	3.5				
		F	19	20							
182	" 20	e(L?)E	08	35	.1						
		MN		37	48	14	1.0				
		ME		39	58	16		0.7			
		F	09	30							
183	" 22	i?E	11	25	12						Small waves masked by microseisms.
		F	11	40							
184	" 22	iE	16	40	34	8		+1.5			iE from Galitzin.
		eLN		46	.9	22					
		ME		48	16	18		0.2			
		MN		48	43	16	0.2				
		F	17	20							
185	" 22	e(P?)E	19	02	16	4					Masked by microseisms.
		eN		02	23	4					
		e(S?)E		06	23	4					
		iN		06	31	8	+0.5				
		iE		06	35	8		-1.0			
		mN		06	43	10	0.5				
		SS?N		07	03	12	0.3				
		iE		07	23	7		-0.5			
		eLE		08	.9	18					
		MN		10	25	15	0.3				
		ME		11	19	18		0.3			
		F	19	50							

(Concluded on next sheet)

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
							AN	AE	AZ		
			h	m	s	s	mm.	mm.	mm.	km.	
186	1941 Aug. 23	eN	02	53	.2						Shallow long waves. Preceded by microseisms.
187	" 26	F	03	20							
		eE	17	20	17	8					
		eLN		26	.0	20					
		ME		29	21	14		0.7			
		MN		29	58	14	0.3				
		F	18	10							
188	" 26	eE	19	09	.4						
		F	19	20							
189	" 28	e?E	20	30	.2						
		iE		35	26	5		-0.5			
		eLE		44	.0	20					
		MN		47	18	10	0.2				
		ME		42	40	10		0.1			
		F	21	10							
190	" 30	ePz	09	45	33	7					5780? Z readings from (52°0?) Galitzin.
		e(S?)N		52	55						
		e(S?)E		52	58						
		eLE		59	.8	30					
		MN	10	02	03	20	0.4				
		ME		04	03	14		0.2			<i>R 1100m</i>
		MZ		04	36	17			1.0		
191	" 30	PZ	13	16	06	5					5720? Z readings from (51°5?) Galitzin.
		e(S?)N		23	26	6					
		e(S?)E		23	27	6		0.4			
		eLE		30	.9	20					
		MZ1		35	11	17			0.6		
		MNL		35	20	18	0.3				
		ME1		36	12	22		0.5			
		ME2		39	34	16		0.5			
		MZ2		40	08	18			0.6		
		MN2		40	14	17	0.7				
		MZ3		43	02	16			1.8		
		MN3		43	06	16	1.0				
		F	14	35							
192	" 31	eLN	04	27	.3	13					
		MN1		29	30	18	0.3				
		MZ		30	34	16			0.2		
		MN2		31	15	14	0.6				
		ME		33	14	16		0.2			
		F	05	15							

---oOo---

 D. J. K. O'CONNELL, S. J.
 Director.

Riverview College Observatory

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN

 $\Phi = 33^{\circ} 49' 46'' \text{ S.}$
 $\lambda = 151^{\circ} 9' 30'' \text{ E.}$
 $h = 25 \text{ m.}$

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 ₀	s:1	$\frac{P}{T_0^2}$		T ₁ (Galv.)	T (Pend.)	u^2	V _s	
N	1	221	9.1	4.6	0.020	4	13.1	12.6	-0.03	276
	3	118	9.7	4.5	0.016					
E	1	233	9.3	5.2	0.023	4	13.1	12.8	+0.04	305
	3	134	9.2	5.8	0.028					
Z	2	64	5.0	5.3	0.060	4	12.0	12.1	+0.04	259

N.B. Readings are from Wiechert unless stated otherwise.

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			Δ km.	Remarks
			h.	m.	s.		A _N mm.	A _E mm.	A _Z mm.		
193	1941 Sept. 1	eLE	06	32.3	20						
		ME		33 43	17		0.2				
		F	06	45							
194	" 1	e(S?)	23	31 06	6	0.3	0.5				
		e(SS?)		32 04	12		0.9				
		eLN		34.2	20						
		MN		34 58	18	0.7					
195	" 2	F	23	50							
		eLN	10	11.4	18						
		MN		16 06	12	0.2					
		ME		17 07	12		0.2				
196	" 4	F	10	25							
		iPNEZ	10	27 38	($\frac{4}{8}$)	-3.2	-0.5	+10.0	3100 (27°9)	Condensation. Approx. azimuth: N. 9° E. Epicentre: 7°S., 155½°E. (provisional)	
		iN		27 57	4	+2.5					
		PPN		28 25	6	2.8					
		MN		29 16	6	3.1					
		MN		30 02	6	4.3					
		iE		30 24	6		-4.0				
		iPcPN		30 58	6	+4.0					
		iSE		32 21	9		+11.0				
		ME		32 56	9		11.1			Z readings from Galitzin.	
		MN		33 10	8	7.2					
		eLE		34.5	32						
		eLZ		35.7	32						
		ME1		36 27	20			27.5			
		MN1		36 50	24	13.8			23.1		
MZ1		36 56	24								
ME2		40 04	10			19.5					
MN2		40 19	12	14.6			26.8				
MZ2		40 58	12								
197	" 7	F	14	20							
		iNZ	07	25 38	12	-1.0		+1.4		Z readings from Galitzin.	
		eLZ		29.4	24						
198	" 9	MZ		31.19	18			1.0			
		F	08	00							
		iPNEZ	07	25 26	4	+1.3	+0.2	-0.1	2610 (23°5)	Dilatation. Approx. azimuth: N. 9° E. Epicentre: 11½°S., 155°E. (provisional)	
		iE		25 40	5		+0.7				
		iN		25 43	9	-6.2					
		iNZ		26 02	4	-6.0		+0.7			
iE		26 05	5		+2.3						
iNEZ		26 20	5	+11.2	+4.7	-1.0					
ME		26 47	6			3.1					
iSNE		29 37	6	+5.4	-2.5						
iN		29 55	9	+6.0							
MN		30 09	9	13.6							
iSSNE		30 22	9	-24.2	-11.3						
iSSZ		30 24	?			+0.6					

(Continued on next sheet)

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN,

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
			h	m	s		AN	AE	AZ		
198 Cont.	1941 Sept.9	iz	07	32	55	5			-0.7		
		eLN		33.2		28					
		MN		33	53	26	12.5				
		MZ		34	25	19			0.2		
		ME		35	21	16		12.0			
199	" 12	F	10	25							
		iPNEZ	07	09	15	3	-0.4	+0.8	0.3	4110? (37°0?)	Looks like multiple shock.
		iN		10	53	4	+0.6				
		i(S?)N		15	07	14	+2.2				
		iE		15	14	5		-0.7			
		mN		15	27	9	1.7				
		eNE		15.6		28					From 7h 15.6m to 7h 17.6m series of long waves.
		iE		17	50	12		-4.0			
		iN		17	50	6	+1.5				
		iN		18	01	6	+3.8				
		eZ		18	39	4					
		e(L?)E		20.9		26					
		ME1		22	54	22		25.6			
		MN1		23	05	20	16.0				
		MN2,MZ		26	19	14	36.0		2.2		
ME2		26	32	14		56.1					
F		09	25								
200	" 13	eLNE	00	20.3		30					
		MNE		24	37	21	0.4	0.3			
		F		00	35						
201	" 13	eLE	23	13.6		20					
		eLN		13.8		20					
		MN		17	37	15	0.3				
		ME		17	52	18		0.1			
		F		23	25						
202	" 14	eN	04	16	10						
		eN		22	19	24					
		iE		22	35	5		1.0			
		iN		24	40	5	+1.0				
		eLE		27.5		32					
		MN1		29	48	20	3.0				
		ME1		30	30	16		5.6			
		MNE2		33	37	14	2.9	5.2			
		F		05	20						
203	" 14	ePNE	13	40	20	5	0.2	0.2		3950 (35°6)	
		iSE		45	56	5		-1.5			
		iN		46	22	5	-1.1				
		eLN		49.6		20?					
		MN1		53	04	7	3.7				
		ME1		54	24	6		4.9			
		MN2		56	40	8	4.3				
		ME2		57	52	7		5.7			
		F		15	15						
204	" 16	iPE	21	44	49	6 (12)		-1.0		3000 (27°0)	
		iPZ		44	50	6 (12)			+3.0		Condensation. Z readings from Galitzin
		MEZ		45	12	10		1.0	3.5		
		ME		45	42	8		2.6			
		MEZ		45	55	6 (12)		2.8	5.3		
		ME		46	35	8		2.4			
		iSE		49	26	3		-2.0			
		mN		49	52	10	1.0				
		ME		50	00	16		2.3			
eLE		51.0		24							

(Continued on next sheet)

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
							AN	AE	AZ		
			h	m	s	s	mm.	mm.	mm.	km.	
204 Cont.	1941 Sept.16	iN	21	51	32	9	+7.0				
		IE		52	08	28		7.0			
		MN1		52	36	10	4.2				
		MZ		52	42	28			14.3		
		MN2		53	46	14	4.1				
		ME1		54	52	16		8.6			
		MN3		55	06	12	5.6				
		ME2		58	36	14		12.7			
205	" 17	F	00	20							
		ePNEZ	06	55	47	4	0.5	0.5		4370	Z readings from
		iPNEZ		55	50	6	-1.5	+2.0	+10.0	(39°3)	Galitzin.
		iPPZ		57	14	8			-5.0		iP Condensation.
		eN		58	22						
		mZ		59	05	10			5.0		
		mNE		59	09	18	1.2	1.2			
		iSE	07	01	52	5		-1.7			
		iNEZ		02	00	9	+1.0	+7.0	-5.0		
		ME		03	44	10		2.6			
		iE		05	03	10		-1.5			
		iN		05	13	10	+3.0				
		iN		05	23	7	-4.8				
		iE		05	27	10		-8.2			
		iZ		06	12	10			-5.5		
		iE		06	32	6		-2.5			
		ME		06	53	10		2.7			
		eLN		08.6		34					
		MN		10	03	24	5.7				
		ME		10	15	25		5.0			
MZ		12	32	20			11.1				
206	" 18	F	03	30							
		eE	02	21	03	4					All readings
		eN		21	06	4					from Mainka.
		iN		24	53	6	-0.6				
		iNE		25	13	7	-0.8	-0.5			
		e(L?) _N		25.4		20					
		iE		26	03	5		-1.5			
		ME		26	40	7		1.3			
		MN		29	32	10	1.3				
		ME		29	57	12		1.8			
207	" 18	F	03	15							
		eZ	13	34	07						Z readings from
		eNE		43.6		12					Galitzin.
		eZ		43.7		13					
		e(L?) _{NE}		50.3		18					
208	" 18	MN	14	04	10	18	0.2				
		F	15	30							
		iZ	18	27	03	5			+1.0		Condensation.
		eE		27	20	5					Z readings from
		eN		34.0		18					Galitzin.
MN		37	35	14	0.2						
MEZ		39	47	18		0.2	0.5				
F	19	30									

(Continued on next sheet)

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

Wiechert Constants Sept.19 to Sept.30.

	V	To	$\epsilon:1$	r/T_0^2
N	221	9.1	4.8	0.016
E	233	9.3	5.2	0.014

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
							AN	AE	AZ		
	1941		h	m	s	s	mm.	mm.	mm.	km.	
209	Sept.20	eLE	12	23	.7	16?					
		ME		24	42	10		0.3			
		MN		24	57	10	0.3				
210	" 24	F	12	35							
		eZ	01	13	50	9					Heavy microseisms.
		eNE		24	04	12					Z readings from Galitzin.
		eN		34	.6	16					
		eE		36	.9	20					
		eLNZ		39	.6	32					
		MZ1		41	36	30			1.5		
		MN1		42	15	28	0.5				
		ME		42	31	28		0.4			
		MN2		46	11	20	0.4				
		MZ2		47	05	20			1.0		
		F	02	50							
211	" 24	eLN	04	10	.1	30					
		MZ		23	52	28			1.5		MZ from Galitzin
212	" 24	iPNZ	18	28	58	4	+0.8		-3.0	2820 (25:4)	Dilatation. Z readings from Galitzin.
		ePE		28	58	4		0.4			
		iE		33	18	5		-0.7			
		iSN		33	23	8	-3.6				
		iE		33	32	10		-1.0			
		eLNE		35	.7	25					
		MZ		37	02	22			1.6		
		ME		38	02	12		7.6			
		MN		38	39	11	3.7				
		F	19	20							
213	" 24	PZ	19	33	19	3				2750 (24:7)	Z readings from Galitzin.
		SN		37	39	9					
		mN		37	54	9	0.8				
		eLN		40	.1	24					
		ME		42	23	14		0.7			
		MN		42	50	14	0.6				
		F	20	05							
214	" 29	ePEZ	17	13	35	6				2580 (23:2)	Z readings from Galitzin.
		PPZ		13	57	6			2.2		
		iPPN		13	58	6	+1.0				
		mNZ		14	47	7	0.7		-1.6		
		iNZ		15	56	8	-0.7		-2.1		
		eSN		17	44	10					
		iN		18	09	10	+2.5				
		iE		18	19	10		+4.7			
		SSZ		18	23	10			3.0		
		mN		18	34	10	2.8				
		mZ		19	02	10			3.5		
		eLN		19	.4	18					
		MN		21	14	14	8.0				
		ME		21	26	16		4.3			
		MZ		22	11	16			7.3		
		F	18	30							

(Concluded on next sheet)

No.9 (concluded)

1941, September.

33

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
							A _N	A _E	A _Z		
215	1941 Sept.30	iPNZ	08	24	54	5	+0.9		-2.1	2860 (25°7)	Dilatation. Z readings from Galitzin.
		iSE		29	21	5		+0.8			
		iSN		29	22	5	-1.2				
		MN		29	33	6	1.2				
		iNE		29	45	6	+2.0	+1.3			
		iZ		29	47	12			+2.0		
		MN		30	49	8	1.6				
		eLN		30	9	28					
		eLZ		31	3	28					
		MN		33	36	16	2.0				
		ME		33	48	14		0.8			
		MZ		33	51	16			4.1		
		F	09	35							
		216	" 30	eZ	20	44	35	8			
eN				44	43	8					
e(L?) _{NE}				49	8	20					
eLZ				50	9	22					
eLN				51	6	22					
MZ				52	47	18			2.6		
MN				53	47	14	1.1				
217	" 30	F	21	40							
		eL _E	23	28	8	16					
		MZ		51	32	14			1.0		
		MN		31	36	12	0.3				
F	23	45									

---oOo---

 D. J. K. O'CONNELL, S. J.
 Director.

Riverview College Observatory

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN

 $\phi = 33^{\circ} 49' 46''$ S.

 $\lambda = 151^{\circ} 9' 30''$ E.

h = 25 m.

Foundation : Triassic sandstone.

INSTRUMENTS :

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

		γ	T_0	$s:1$	$\frac{r}{T_0^2}$		T_1 (Galv.)	T (Pend.)	μ^2	V_s
N	1	226	9.3	4.9	0.013	4	12.6	12.4	-0.03	276
	3	123	9.6	4.0	0.014					
E	1	230	9.2	5.8	0.012	4	12.8	13.1	+0.04	305
	3	141	9.1	4.9	0.028					
Z	2	61	5.1	4.3	0.046	4	12.1	12.0	+0.04	259

N.B. Unless otherwise stated NS & EW readings are from the Wiechert, Z from Galitzin. The amplitudes given are trace amplitudes.

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			Δ km.	Remarks
			h.	m.	s.		A_N mm.	A_E mm.	A_Z mm.		
218	1941 Oct. 1	eE	01	57.5	12?						
		eLZ		59.2	22						
		MN	02	00	11	20	0.3				
		F	02	20							
219	" 3	eZ	14	26	17	7					
		MN		47	05	16	0.2				
		MZ		48	49	20			0.4		
		ME		51	21	18		0.1			
220	" 3	F	15	25							
		e?Z	16	50.4							
		eNE		47	07	14					
		eZ		47	16	15					
		eLN		57	8	30					
		eLZ	17	02.3		32					
		MN		07	13	20	0.2				
		MZ1		07	25	24			0.8		
		ME1		07	34	18		0.2			
		MZ2		13	35	18			1.1		
221	" 5	ME2		14	04	18		0.2			
		F	18	45							
		iPE	10	18	22	4		-0.3			
		iPZ		18	24	4			+1.5		
		iEZ		18	41	6		-0.5	+3.0		
		iEZ		19	54	6		+	-2.5		
		iNEZ		20	08	6	-1.0	-1.5	+7.8		
		ME		20	16	6		1.7			
		MN		20	23	6	1.5				
		e(S?)E		23	55	8					
		eN		26	54	24					
		MN		27	29	24	1.3				
		eLE		28	9	26					
		eLZ		29	0	26					
222	" 8	MNZ		31	57	15	1.6		6.5		
		ME		32	07	16		0.8			
		F	12	10							
		e?N	05	35.0							
		iNE		43	09	6	+1.3	-0.8			
		eLN		54	5	18					
		MN	06	03	26	18	0.2				
		F	07	50							
		eN	19	46.0		13					
		F	20	00							
223	" 3	eN	19	46.0		13					
		F	20	00							
		eN	07	20.6							
224	" 10	eLN		24.1		14					
		MN		27	31	12	0.2				
		F	07	40							

(Continued on next sheet)

No.10 (Continued)

1941 October

35

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ km.	Remarks
							AN mm.	AE mm.	AZ mm.		
225	1941 Oct. 10	eE	h	m	s	s					
		ME	15	39.7		12					
		MN		40 15		12		0.1			
		F		42 23		14	0.1				
226	" 15	iZ	15	55							
		eN	01	16 08		5			-1.0		Dilatation
		eE		21 49		8					
		eLZ		21 51		8					
		eLN		29.2		24					
		ME		30.7		18					
		MN		33 25		10		0.1			
		F		35 39		10	0.2				
227	" 16	e?E	02	10							
		eZ	04	50 21							
		eLZ		50 31		7					
		ME		59.4		26					
		MZ	05	01 19		16		0.1			
		MN		02 21		16			0.4		
		F		02 26		12?	0.2				
228	" 16	eNE	05	20							
		eZ	14	16 24		9					
		eLZ		16 31		10					
		MNE		18.1		22					
		MZ		19 20		20	0.1	0.1			
		F		19 30		20			0.6		
229	" 16	iPZ	14	40							
		ePE	15	15 24		4			+1.0	2540	Condensation
		iNE		15 24		4				(22.8)	
		PPeZ		15 28		4	-0.5	-0.6			
		iSN		15 46		10		0.4	1.8		
		iSE		19 28		8	-1.4				
		iSE		19 30		8		-1.8			
		mN		19 35		8	2.8				
		iZ		19 37		10			+3.5		
		ME		19 41		9		3.3			
		SSE		19 58		9		2.0			
		eLN		21.0		20					
		eLZ		21.1		26					
		eLE		21.2		20					
		MN		22 24		16	0.8				
		MZ		22 56		18			4.1		
		ME		23 05		16		1.4			
230	" 18	F	16	20							
		eN	23	19.4							Heavy micro-
		eLE		20.8		20					seisms.
		MN		22 08		16	0.2				
		ME		22 41		18		0.3			
231	" 19	MZ		22 46		18			1.8		
		F	00	00							
		eZ	19	51.0		7					Heavy micro-
232	" 20	eLZ		55.3		18					seisms.
		MZ		57 16		16			0.3		
		F	20	10							
232	" 20	eZ	22	28 09		6					Heavy micro-
		ME		31 40		10		0.6			seisms.
		MN		32 02		14	0.4				
		MZ		32 26		13			1.2		
		F	22	50							

(Concluded on next sheet)

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
							A _N	A _E	A _Z		
			h	m	s	s	mm.	mm.	mm.	km.	
233	1941 Oct. 25	ePZ	00	07	31	5			1.0	2490 (22°4)	
		eSN		11	31	10					
		eSE		11	35	10					
		mZ		11	50	10			1.4		
		eLZ		13	.5	24					
		MZ		15	06	20			1.3		
		MN		15	16	14	0.3				
		ME		17	00	14		0.2			
234	" 25	F	00	55						Masked by heavy microseisms. NS & EW readings from Mainka.	
		eNZ	09	27	27	5					
		eLZ		35	.8	18					
		eLE		36	.1	15					
		MZ		38	22	14			1.2		
		MN		43	33	11	0.1				
235	" 29	F	10	05							
		eLN	01	29	.2	18					
		MN		31	06	16	0.3				
		ME		34	14	16		0.1			
236	" 30	MZ		34	26	18			0.4		
		F	01	55							
		eLZ	16	31	.4	20					
		MZ		33	17	18			0.3		
237	" 31	ME		34	45	16		0.1			
		F	16	50							
		ePEZ	16	57	04	4					
		iE		58	00	5		-0.5			
		e(S?) _E	17	02	04	14					
		eZ		02	14	12					
		eLN		03	.9	20					
		eLE		04	.0	28					
		eLZ		04	.2	28					
		MN		05	29	14	0.2				
MEZ		05	54	18		0.4	3.0				
F	18	10									

Correction to June 1941 Bulletin.

No.137, 1941 June 18

 For
Read

 Δ 5610 km. (50°5)
 Δ 4550 km. (41°0)

 D. J. K. O'CONNELL, S. J.
 Director.

Riverview College Observatory

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN

$\Phi = 33^{\circ} 49' 46''$ S.

$\lambda = 151^{\circ} 9' 30''$ E.

$h = 25$ 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 ₀	e:l	$\frac{r}{T_0^2}$	T _l (Galv.)	T (Pend.)	μ^2	V _s	
N	1	225	9.4	5.1	0.018	4 12.6	13.1	-0.03	276
	3	141	9.6	4.2	0.015				
E	1	228	9.5	5.4	0.020	4 12.8	13.1	+0.04	305
	3	140	9.2	5.5	0.029				
Z	2	60	5.2	5.7	0.044	4 12.1	12.0	+0.04	259

N.B. Unless otherwise stated NS & EW readings are from Wiechert, Z from the Galitzin. The amplitudes given are trace amplitudes.

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			Δ km.	Remarks
			h.	m.	s.		A _N mm.	A _E mm.	A _Z mm.		
238	1941 Nov. 3	eEZ	03	50	17	6					
		e(L?) _N			52.5	16					
		MN		56	37	11	0.2				
239	" 4	F	04	20							
		iPNEZ	02	32	25	4	+0.3	+0.6	-2.5		Dilatation. Short periods throughout.
		eE		36	51	6		0.4			
240	" 4	iN		41	55	4	+0.8				
		F	02	50							
		eLZ	22	14.	4	20					
241	" 5	F	22	25							
		ePEZ	11	10	21	?				2370 (21:3)	NS & EW readings from Mainka.
		ePN		10	22	5					
		PPZ		10	49	8			2.5		
		eSN		14	14	10	0.4				
		eE		14	20	10		0.4			
		mZ		14	26	11			1.2		
		mNE		14	30	10	1.3	0.5			
		eLN		15.	9	18					
		eLZ		16.	2	18					
		MN		17	23	14	0.5				
242	" 5	MZ	18	38	14				2.7		
		F	12	25							
		iPZ	13	10	10	7			-2.5	2370 (21:3)	Dilatation. NS & EW readings from Mainka.
		ePNE		10	11						
		iE		10	18	4		-0.5			
		iPPZ		10	29	7			+5.6		
		mEZ		10	45	7			1.1	6.0	
		mN		10	47	7	0.5				
		mNEZ		10	52	7	0.7	1.5	5.7		
		iSN		14	02	10	+1.5				
		iSE		14	04	9		-0.7			
		iE		14	13	9		+1.6			
		mEZ		14	19	10			3.0	4.7	
		mN		14	24	10	8.6				
		mE		14	28	9			3.3		
mN		14	59	10	2.6						
eLN		15.	1	23				9.0			
243	" 5	MNZ	16	31	16	4.4				From 13h 17.2m to to 13h 21.4m train of sinusoidal waves on NS. Max. ampli- tude at 13h 19.5m.	
		ME	18	49	11			1.6			
		MN2	19	27	11	11.2					
		F	15	10							
		iPNZ	17	48	09	7	-0.5		-3.0		6090? (54:8?)
		i(S?) _N		55	49	5	+1.2				
		iE		54	54	7		-0.5			
		mN	18	00	57	12	0.5				
		mE		05	04	9			0.8		
		eLN		05.	5	26					
		MZ		09	55	16					3.7
MN		11	49	18	0.5	(Continued on next sheet) F 19h 30m.					

RIVERVIEW COLLEGE OBSERVATORY
 RIVERVIEW, N.S.W.

 SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per.	Amplitude			Δ	Remarks
			h	m	s		AN	AE	AZ		
						mm.	mm.	mm.	km.		
244	1941 Nov. 6	ePZ	07	11	53					2690?	ePZ from the Wiechert, masked by heavy micro- seisms on Galit- zin. Other Z read- ings from Galitz- in.
		mZ	12	12		11			1.3	(24°2?)	
		e(S?)N	16	09		11					
		SS?N	16	44		15	1.8				
		Z	16	52		14			3.0		
		eLEZ	18	0		25					
		ME	21	17		18		4.0			
		MZ	22	10		20			5.9		
		MN	22	53		18	3.6				
		F	09	15							
245	" 6	eZ	12	58	44					Masked by heavy microseisms.	
		eLN	13	03.4		16					
		MN	05	14		14	0.3				
		MZ	06	10		16			1.4		
246	" 8	ME	06	37		16		0.2		Masked by micro- seisms.	
		F	13	35							
		eN	07	56	43	4					
		eLN	08	00.7		18					
247	" 8	MN	02	2		12	0.3			Masked by micro- seisms. EW read- ings from Mainka, NS & Z from galit- zin.	
		MZ	04	16		14			1.1		
		F	08	20							
		eN	16	13.6		7					
248	" 8	eN	17	7		7				Dilatation. Azimuth from iP: N 40½° W. Epicentre (provis.): φ 0° λ 125½° E. Focal depth per- haps below normal. After 23h 55m NS & EW readings are from Mainka.	
		MZ	20	43		12			1.7		
		MN	20	46		12	0.9				
		ME	20	52		10		0.2			
		F	16	30							
		iPNEZ	23	45	31	6	+2.0	-1.7	-10.5		4650
		iNEZ	45	35		6	-5.8	+6.0	+29.5		(41°8)
		mNE	45	41		6	6.7	6.8			
		mNEZ	46	29		8	4.2	4.6	19.5		
		iE	47	13		5		-5.0			
		mNE	48	25		7	7.3	6.7			
		mZ	48	55		10			15.7		
		iSE	51	56		7		-7.3			
		iSN	51	58		7	-12.2				
		iE	52	05		8		-24.5			
		MN	52	14		7	31.7				
		iE	52	29		7		-12.0			
		mNE	52	39		8	15.8	21.3			
		mNE	53	17		8	17.1	13.8			
		iE	54	59		8		-12.2			
iN	55	14		8	-21.0						
iZ	55	21		8			-17.0				
iE	55	22		8		-11.7					
MN	55	28		8	36.3						
ME	55	37		8		44.4					
mZ	56	01		8			24+				
eLE	57	0		47?							
eLN	58	0		38?							
ME	58	55		12		11.8					
MN1	59	13		9	12.2						
MZ1	59	21		12			22.0				
MN2	00	00	10	9	19.6						
MZ2	02	02	12	12			28.0				
ew2	02	20	0	24							
MZ	22	29		24			0.8				
F	03	20									

(Continued on next sheet)

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per.	Amplitude			Δ	Remarks	
			h	m	s		AN	AE	AZ			
249	1941 Nov. 12	iNE	07	10	50	4	+0.4	+1.0				
		eLN		23.4		28						
		MN		27	16		12	0.2				
		ME		29	25		19		0.1			
250	" 12	F	07	50								
		eLN	11	16.2		24						
		eLZ		18.6		24						
		MZ		22	13		22		0.7			
251	" 12	ME		24	02			0.3				
		F	11	50								
		MN	17	34	03	11	0.2				A few small waves	
		F	17	40								
252	" 14	e(L?)N	03	25.0		22?						
		MN		35	22		13	0.2				
		F	04	05								
253	" 15	eN	00	27.1							All readings are from the Galitzin.	
		iN		32	09	5	+1.7					
		MZ		38	33		10		0.5			
		F	01	00								
254	" 15	iZ	04	32	40	4			+1.5		Condensation.	
		iZ		33	08	4			+1.5			
		iE		42	53	4		-0.3				
		iN		42	55	4	-0.3					
		iNE		43	07	4	+0.5	+0.6				
		MZ		44	14		16		0.6			
		F		Lcst in No. 255								
255	" 15	eZ	05	08.5								
		MZ		15	15		16		0.6			
		MN		15	32		14	0.2				
		F	05	30								
256	" 18	eZ	07	27.3		8					Masked by micro-seisms.	
		eLZ		30.5		24						
		MNE		33.1		18	0.1	0.1				
		MZ		33	18		18		0.8			
		F	07	45								
257	" 18	iPZ	10	27	09	4			+1.7	9310 (83°8)	Condensation.	
		ePN		27	09	4						
		iNZ		27	24	4	+0.4		+3.4			
		iE		27	34	4		+0.4				
		mZ		27	39	12			2.2			
		iSE		37	32	13		+1.0				
		eN		37	42	11						
		mN		37	56	11	0.6					
		PSE		38	24	11		0.5				
		PSN		38	26	11	0.5					
		e(SS?)E		43	26	24						
		eLQE		49.9		32						
		eLRN		53.2		30						
		MN1	11	03	05	20	0.5					
		ME		05	50	17		1.5				
MN2		10	15	17	1.6							
258	" 18	F	12	50								
		iPNZ	16	57	27	6	+0.2		-2.0	7590 (68°3)	Dilatation.	
		iZ		57	43	7			-5.0			
		iN		57	45	6	+1.1					
		iE		57	47	4		-0.5				
		iPPNZ	17	00	10	7	-0.5		+2.5			
		iPPE		00	11	5		-0.7				
		eSNE		06	27	8	1.0	0.5				
		iSNE		06	31	14	-5.8	-3.0				
		iZ		06	34	13			+7.0			

(Continued on next sheet)

1941, NOVEMBER.

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks	
							AN	AE	AZ			
			h	m	s	s	mm.	mm.	mm.	km.		
258 (cont.)	1941 Nov. 18	iPSN	17	06	55	18	+3.7					
		i(ScS?) _N	17	07	23	20	+5.3					
					07	25	20		-4.0			
		iZ		07	37	15				-6.7		
		iE		07	40	20		+10.0				
		iN		07	46	20	+7.5					
		e(SS?) _N		10	9	28						
		iSSE		11	05	18			-2.0			
		iSSSE		14	16	20			-4.0			
		iZ		14	27	16				+6.5		
		eLE		16	2	40						
		MZ1		21	23	28				6.0		
		MN1		22	02	30	3.4					
		ME1		23	24	18		3.2				
		MN2		26	01	22	5.9					
		MZ2		26	23	18				18.5		
		ME2		26	48	20		5.3				
		F		21	10							
		259	" 18	eN	22	16	9					A few waves.
				eLN		19	2	18				
260	" 19	e(L?)	22	47	5	20				A few shallow long waves.		
		F	23	00								
261	" 20	eN	13	36	49							
		eZ		39	23	13						
		eLE		44	2	20						
		eLN		44	3	20						
		MZ		47	38	18			1.1			
		MN		49	08	18	0.2					
		ME		49	18	16		0.3				
		F	14	20								
262	" 20	eN	15	38	52	7				Heavy microseisms		
		eN		44	08	18?						
		eLN		51	3	26						
		MZ		57	12	20			0.7			
		MN	16	00	51	19	0.7					
		F	16	45								
263	" 20	eN	21	29	8							
		MN		35	09	12	0.2					
		MZ		37	40	16			0.8			
		ME		38	25	15		0.2				
		F	22	30								
264	" 21	MZ	17	55	5	14				Small and masked by microseisms.		
		MN		55	8	14						
		F	18	15								
265	" 22	eZ	01	19	1					Masked by microseisms.		
		eLN		29	9	28						
		MN		34	27	18	0.1					
		MZ		36	27	18			0.5			
		F	02	05								
266	" 22	eZ	07	41	3	6				Masked by microseisms.		
		eN		43	8	12						
		eLN		57	1	20						
		MZ	08	03	40	17			0.8			
		MN		04	09	20	0.1					
		ME		06	20	18		0.1				
		F	08	45								
267	" 22	eN	16	59	53	6						
		e(L?) _N	17	01	1	18?						
		ME		02	44	10		0.2				
		MN		02	54	10	0.4					
		MZ		02	56	12			0.8			
		F	17	15								

(Continued on next sheet)

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per.	Amplitude			Δ km.	Remarks
							AN mm.	AE mm.	AZ mm.		
268	1941 Nov. 22	eNZ	17	30	00	8					
		eLE			32,0	13					
		ME			32 56	10		0.3			
		MN			33 06	11	0.2				
		MZ			33 41	11			0.8		
269	" 22	F	17	55							
		iN	23	52	27	5	-0.3				
		iNE			57 39	5	-0.2	+0.6			
		iN	00	01	36	7	-0.3				
270	" 23	MZ	00	02	00	10			0.5		
		F	00	15							
		eN	00	52	22						
271	" 23	MZ	00	57	21	14			0.5		
		F	01	15							
272	" 24	ePE	16	03	48	4		0.1		2450 (22°0)	NS & EW readings from the Mainka.
		eNZ			03 55	5	0.1				
		PP?Z			04 12	10			0.9		
		eSNE			07 47	5	0.2	0.2			
		eZ			07 55	8			1.5		
		SS?Z			08 09	8			2.3		
		eLZ			09.8	20					
		MZ			10 54	18			1.5		
		MN			11 59	13	0.1				
		F			17 15						
273	" 24	i(P?)Z	16	49	55	6			+1.5		Condensation. Pre- ceded by heavy microseisms.
		eLZ	17	14.	4	28				1.5	
		MZ1			16 45	20					
		MN			19 04	18	0.3			2.0	
		MZ2			19 41	18					
		ME			19 45	18		0.2			
274	" 24	F	18	25							Condensation.
		iPEZ	21	52	05	6		-1.2	+5.2	2990 (26°9)	
		iZ			52 17	8			+5.2		
		iZ			53 08	10			+7.4		
		iE			53 10	6		-4.4			
		MN			53 14	7	0.6				
		iN			54 41	6	-1.3				
		eN			56 19	10					
		iSE			56 39	8		-1.9			
		iSN			56 43	8	-1.4				
		eZ			56 56	24					
		iE			57 13	8		-2.0			
		ME			57 23	10		2.0			
		iN			57 36	8	+1.7				
		eLEZ			58.7	29					
		MN1			58 42	14	4.7				
		ME1, MN2			59 50	20	6.3	4.6			
		ME2	22	01	13	18		8.0			
MZ2			01 21	19			25.8				
ME3			02 22	17		10.1					
MZ3			02 45	16			29.7				
274	" 25	F	01	00							
		eN	15	40	24						
		eLZ			56.5	24					
		MZ	16	02	06	18			0.8		
F	16	30									

(Continued on next sheet)



RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per.	Amplitude			Δ	Remarks
			h	m	s		AN	AE	AZ		
275	1941 Nov. 26	eE	23	24	06				174°±	Condensation. Galitzin records so entangled that only a few phases could be deciphered; e, iPKP, M _{1,2,3} on Vertical. Other Z readings from the Wiechert. NS & FW readings from the Mainka.	
		iPKPZ	24	14		10		+9.0			
		ePKPN	24	14		5					
		iPKP2NE	26	01		6	-0.5	+0.6			
		iZ	26	11		3					-0.7
		iSKPN	27	53		5	-0.9				
		eN	29	13		13					
		iPPBZ	29	32		6		-0.8			-0.7
		iNE	29	57		6	-0.8	+2.0			
		iZ	30	02		5					+1.2
		iE	30	22		6		-1.0			
		iSKSNE	31	13		7	+0.8	-1.1			
		eE	31	34		14					
		iN	32	10		7	+1.7				
		iE	32	20		7		+1.2			
		iE	32	54		6		+2.0			
		iPPPN	33	47		7	-1.7				
		iN	34	53		13	-1.6				
		iZ	35	23		5					-0.4
		iN	35	36		7	-2.2				
		iE	35	47		6		-2.1			
		iSKKSE	36	29		10?		-1.5			
		iN	37	05		7	-2.5				
		iE	37	44		8		+5.0			
		iN	38	00		9	+1.8				
		eN	40.1			20					
		i(PSKS?)E	40	24		10		-5.1			
		iN	41	03		9	-3.0				
		iE	43	23		9		-1.7			
		ME	43	51		12		3.8			
		eE	49	19		28					
		iSSN	50	27		16	-5.0				
		eE	50	48		32					
		eN	52	13		34					
		MN	53	04		32	2.2				
ME	53	09		21		3.5					
iE	53	40		14		-5.5					
iN	53	59		12	-5.0						
iE	54	44		20		-3.0					
iN	55	19		12	-6.4						
eN	55	52		42							
eE	47	16		34							
iSSSN	57	59		35	-8.1						
ME	58	34		40		4.5					
iN	19 00	45		34	+5.2						
iN	01	37		26	-5.0						
ME	02	00		30		6.0					
MN	02	13		26	8.8						
eE	04	38		60							
iN	07	30		16	-2.0						
iN	08	14		25	-2.2						
e(L?)N	14.1			50							
L?N	15	18		37	4.1						
eLE	17.6			70							
LE	19	13		52		5.0					
eE	21.8			85							
eN	25.0			110							
ME1	31	31		28		1.5					
ME1	32	20		26	2.3						
ME2	35	34		21		4.0					
MZ1	35	55		22			23.8				

(Continued on next sheet)

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
							AN	AT	AZ		
			h	m	s	s	mm.	mm.	mm.	km.	
275 (cont.)	1941 Nov. 25	MN2	19	36	03	23	7.3				
		MZ2		38	49	21			42.0		
		MN3		39	04	19	7.1				
		ME3		40	51	21		6.4			
		MZ3		42	20	19			65.1		
		MN4		42	22	18	12.7				
		ME4		43	04	21		10.5			
276	" 26	F	23	45							
		eZ	11	17	14						All readings from the Galitzin.
		eLN		26.1		18					
MNZ		28	16	16	0.5		0.8				
277	" 26	F	12	25							
		eN	13	15.7							From Galitzin N.
278	" 27	F	13	17	34	15	0.3				
		iPNEZ	08	44	16	3	-0.9	+0.3	+2.5	37°±	Condensation SE. Focal depth >500km. NS & Z readings from the Galitzin, EW from the Mainka
ipPZ		45	51	4			+2.2				
		ipPNE		45	53	4	+1.5	-0.4			
		mZ		46	01	6		3.3			
		mNE		46	04	6	3.0	1.0			
		eN		46	42	10					
		eZ		46	44	10					
		mN		46	58	10	1.5				
		mZ		47	00	10			2.5		
		iSN		49	34	6	-2.2				
		iSE		49	37	6		-3.3			
		iZ		49	41	6			-8.2		
		mNE		49	47	6	5.7	4.6			
		iNE		52	05	6	-2.3	-0.2			
		iZ		52	11	6			+1.5		
		i(SS?)NE		52	18	11	+7.6	-0.7			
		iNE		52	46	8	+10.2	+3.9			
		mNZ		52	59	10	14.2		7.5		
		ME		53	07	8		2.1			
		iN		53	46	6	-6.0				
		iN		54	23	6	-5.4				
		iN		55	03	6	+6.9				
		iN		57	47	6	-7.5				
		iN		58	15	6	-8.0				
		iN		58	33	6	-5.5				
		mN		58	43	6	9.0				
		ME		58	59	7		1.5			
		MN		59	54	8	8.0				
		MZ	09	01	27	18			7.1		
279	" 29	F	10	50							
		e(L?)N	22	51.8							Shallow waves.
		MN	23	02	35	18	0.1				
280	" 30	F	00	20							
		eZ	04	01.9							All readings from Galitzin.
		eLN		03.5		18					
		MN		05	00	14	0.4				
F	04	20									

---00p---

 D.J.K.O'CONNELL, S.J.
 Director.

Riverview College Observatory

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN

 $\phi = 28^{\circ} 49' 46''$ S.

 $\lambda = 151^{\circ} 9' 30''$ E.

 $h = 25$ m.

Foundation : Triassic sandstone.

INSTRUMENTS :

1. Wiechert Astatic Pendulum Seismometer (1000 kilo.) (NS, EW)
2. Wiechert Vertical Seismometer (30 kilo.)
3. Manka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. Galitzin Aperiodic Seismometer, with galvanometer registration (NS, EW, Vert.)

	V	T _v	s:l	$\frac{p}{T_e^2}$		T _l (Galv)	T (Pend.)	u^2	V _s
N	1 222	9.1	5.4	0.017	4	12.4	12.3	+0.01	343
	3 149	9.6	4.2	0.018					
E	1 238	9.4	5.4	0.016	4	12.8	13.1	+0.04	305
	3 136	9.2	5.3	0.027					
Z	2 59	5.2	5.2	0.044	4	12.1	12.0	+0.04	259

N.B. Unless otherwise stated NS & EW readings are from the Wiechert, Z from the Galitzin. The amplitudes given are trace amplitudes

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			Δ km.	Remarks
			h.	m.	s.		A _N mm.	A _E mm.	A _Z mm.		
281	1941 Dec. 1	eZ	05	49.1							
		MZ		54 10	18			0.5			
282	" 1	F	06	05							
		e?Z	20	09.4							
		eN		20.2							
		MZ	40	58	18			0.9			
		MN	49	11	17	0.2					
283	" 5	ME	51	57	17		0.1				
		F	21	30							
		e(P?)Z	21	03 02					127°		
		ePPZ		07 52	6						
		iZ		08 10	6			-2.4			
		eE		08 19	6						
		eE		11 25	13			0.3			
		eSKKS _{NE}		15 10	17						
		mE		15 29	17			1.2			
		iPSZ		18 12	16				+2.0		
		eE		18 28	15			1.0			
		mNE		18 48	18	0.8		2.5			
		iE		20 17	14			-2.0			
		eN		20 25	13					+2.0	
		iZ		20 44	13						
		iE		21 19	18			-2.5			
		eSS _{NE}		24 57	45						
mE		26 01	45			3.5					
e(SSS?) _E		28 47	60								
eE		29 48	19			1.5					
mE		30 15	19			3.0					
eN		33.1	33								
eLQN		38.9	42								
LN		40 00	48	2.5							
eLRE		46.3	35								
MN ₁		50 27	20	1.5							
MZ ₁		50 52	20				8.7				
ME ₁		51 03	20			3.8					
MZ ₂		59 23	16				6.7				
ME ₂		59 33	16			4.1					
MN ₂		22 01 56	15	2.2							
F		00 30									

(Continued on next sheet)

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per.	Amplitude			Δ	Remarks
							AN	AE	AZ		
			h	m	s	s	mm.	mm.	mm.	km	
284	1941 Dec. 6	ePPZ	21	45	27	3					
		e(SKKS?)E	52	47		19					
		iPSNE	55	43		3					
		eE	57	26		20					
		eSSNE	22	02	49						
		eLQN		16.9		40					
		eLRNE		23.7		30					
		MN1		25	45		20	0.3			
		ME1		25	53		20		0.5		
		ME2		30	59		20		0.5		
		MN2		31	30		18	0.5			
		MZ		31	35		18			2.3	
		F	00	05							
285	" 8	eLZ	08	40.2		26					All readings from Galitzin.
		MN		42	18	20	0.3				
		MZ		42	50	20			0.4		
286	" 9	F	09	10							4560 (4191)
		iPNE	02	50	56	4	-0.5	+0.4			
		eSN		57	12	10					
		iSN		57	14	10	+0.6				
		eLN	03	04.7		25			1.3		
		ME		05	41	20					
		MN		05	49	22	1.6				
287	" 9	F	04	20							2720? NS & Z readings (2492?) from Galitzin, EW from Wiechert.
		e(P?)N	19	10	31	9					
		eSN		14	50	8					
		eE		15	00	11					
		iN		15	02	11	-2.0				
		iZ		15	11	8			-1.0		
		MN		18	39	18	1.2				
		MZ		19	08	18			0.2		
		ME		21	14	16			0.2		
		F	20	10							
288	" 14	eN	07	24	04	8					All readings from Galitzin.
		MN		29	46	19	1.0				
		MZ		30	53	20			0.8		
289	" 14	F	08	25							From Galitzin.
		MN	08	43	14	20	0.8				
290	" 14	MZ		44	30	20			0.7		Shallow waves on Galitzin.
		F	09	25							
291	" 14	eZ	12	51.1		18					Shallow waves on Galitzin.
		eN		56.6		18					
292	" 14	F	13	20							Shallow waves.
		eZ	13	53.0		16					
293	" 15	eN	14	20.1		16					NS & Z readings from the Galitzin
		F	14	55							
294	" 15	eZ	14	56.4		16					Preceded by heavy microseisms.
		F	15	20							
		iN	00	11	47	5	+1.0				
		iE		11	49	5		+0.5			
		eN		15	11	10					
		eLE		15.5		30					
		eLN		16.3		22					
		iZ		17	24	5			-2.5		
		iN		17	33	5	-3.0				
		ME		18	08	16			2.5		
		MN		18	53	15	4.7				
		MZ		19	22	16				2.2	
F	01	40									

(Continued on next sheet)

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per.	Amplitude			Δ	Remarks
							A _N	A _E	A _Z		
			h	m	s	s	mm.	mm.	mm.	km.	
294	1941 Dec. 15	e?Z	04	37	0						
		eLN		52	0	20					
		MN		54	07	15	0.2				
		MZ		56	54	18			0.5		
		F	05	15							
295	" 15	e?Z	07	52	9	13					
		eN	08	23	1						
		e(L?)N		40	8	23?					
		MN ₁		43	55	15	0.3				
		MZ ₁		44	20	20			1.5		
		ME ₁		44	32	19		0.2			
		ME ₂		46	48	17		0.3			
		MZ ₂		47	10	15			0.5		
		MN ₂		49	55	15	0.3				
		F	09	40							
296	" 16	iPZ	19	30	13	6			+1.0	7170 (64°5)	Condensation.
		ePN		30	13						
		iE		30	17	7		-4.4			
		iN		30	19	8	+0.5				
		mz		30	25	9			3.0		
		iSN		38	52	9	-0.6				
		iz		38	55	12			+1.5		
		eE		38	56	10					
		iPSE		39	04	10		+0.6			
		iN		39	14	10	+0.7				
		iScSE		40	10	10		-1.0			
		iz		40	21	6			-2.2		
		eN		47	7	14					
		eLN		49	8	24					
		MZ ₁		55	25	24			1.5		
		MN ₁		55	32	24	0.7				
		ME ₁		56	34	20		1.5			
		MN ₂		58	47	18	0.6				
		MZ ₂	20	00	09	18			3.0		
		ME ₂		00	21	18		1.3			
		F	22	50							
297	" 18	eN	21	22	7	8					All readings from the Galitzin
		eLN		24	4	16					
		MN		25	26	15	0.5				
		MZ		27	18	14			0.3		
		F	21	50							
298	" 19	eN	06	34	8	16					On NS Galitzin only. Small.
		eLN		36	0	16					
		MN		37	16	14	0.4				
		F	06	50							
299	" 20	iNE	04	51	17	7	-0.4	-0.3			Irregular waves.
		F	05	10							
300	" 20	MN	11	08	15	15	0.3				
		ME		08	23	15		0.5			
		F	11	35							
301	" 21	MZ	14	39	23	14			0.3		Small & masked by microseisms.
		MN		39	44	16	0.2				
		F	15	00							
302	" 21	eN	17	24	4	14					Masked by micro- seisms. Readings are all from the Galitzin.
		MZ		26	54	12			1.2		
		MN		26	56	12	1.6				
		F	17	45							

(Continued on next sheet)

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per.	Amplitude			Δ	Remarks
			h	m	s		AN	AE	AZ		
303	1941 Dec. 24	iPZ	14	52	25	5			+0.6	2980 (2698)	Condensation. NS & Z readings from Galitzin.
		iPN		52	27	5	+1.1				
		iPPNZ		52	53	5	-1.5		+1.3		
		eSN		57	00	9					
		iN		57	20	10	+2.5				
		iZ		57	22	9			-1.3		
		iZ		57	42	9			+1.7		
		iN		57	45	3	-6.0				
		iSSNZ		58	14	3	-2.6		+1.5		
		mNZ		58	31	8	4.5		1.7		
		eLE		59	3	30					
		eLN	15	00	5	26					
		MN ₁ , ME ₁		02	32	20	2.3	2.7			
		MZ ₁		02	39	16			3.0		
		ME ₂		03	32	15		4.5			
MN ₂ , MZ ₂		05	11	16	4.3		4.1				
F		Lost in No. 304									
304	" 24	eLE	15	57	1	50					
		ME ₁	16	00	24	45		0.3			
		MZ ₁		05	25	30			0.5		
		MZ ₂		07	47	26			1.0		
		ME ₂		07	55	24		0.2			
		MN		08	05	26	0.3				
305	" 25	F	17	00							
		eE	00	03	4	8					
		eZ		03	7						
		ME		06	00	10		0.2			
		MN		06	12	10	0.1				
306	" 26	F	00	15							
		iPZ	14	59	45	5			-0.7	8280 (7495)	Dilatation.
		iSN	15	09	20	3	+0.5				
		iE		09	23	3			-0.5		
		e(PS?)E		10	00	9					
		iN		10	03	6	+0.3				
		iN		13	02	7	-0.2				
		iSSE		13	37	10			-0.6		
		eSSSN		17	38	20					
		ME		18	02	20		0.5			
		eLE		22	6	30					
		eLN		23	7	25					
		MN ₁		29	49	25	1.1				
		MN ₂		33	35	18	1.0				
		ME		34	07	20		1.6			
MZ		34	19	13			2.5				
F	17	10									
307	" 29	i(P?)Z	05	24	01	5			-1.0		Dilatation. Preliminaries masked by micro- seisms,
		e(S?)E		31	34	3					
		eLN		33	2	26					
		MZ		34	25	20			0.5		
		MN		35	55	14	0.5				
		ME		36	32	12		0.7			
308	" 29	F	06	05							
		e(S?)E	06	51	23	3					Masked by micro- seisms.
		eLNZ		53	5	23					
		MN		55	56	14	0.3				
		ME		56	04	11		0.4			
		MZ		56	09	16			0.6		
F		Lost in No. 309									

(Concluded on next sheet)

No. 12 (concluded)

1941, December.

46

RIVERVIEW COLLEGE OBSERVATORY

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per.	Amplitude			Δ km.	Remarks.
			h	m	s		AN mm.	AE mm.	AZ mm.		
309	1941 Dec. 29	e(S?)E	07	25	55	8				Masked by micro-seisms.	
		eLE		28.2		22					
		ME		30	08	12		0.3			
		MZ		30	12	16			0.6		
		MN		30	17	12	0.2				
310	" 31	F	07	50						Dilatation.	
		iZ	17	30	21	4			-1.5		
		CE		30	21	4					
		EN		32	43	3	0.2				
		iNE		32	57	3	-0.2	+0.3			
		eE		36	07	10		0.5			
		eNZ		36	10	10					
		ME		36	16	10		0.6			
		iN		38	12	4	-0.7				
		MN		40	56	10	0.1				
		MZ		43	00	16			0.3		
311	" 31	F	17	55							
		eLEZ	18	32.8		26					
		ME		34	52	20		0.1			
		MZ		35	53	20			1.0		
		MN		36	14	20	0.1				
312	" 31	F	18	55						Condensation.	
		iPZ	19	05	44	4			+0.6		
		eE		05	45	4					
		EN		06	13	4	0.3				
		iE		06	42	6		+0.7			
		eNE		10	36	8					
		eLZ		12.5		24					
		ME		14	28	20		0.5			
		MZ		14	32	20			2.2		
		MN		14	47	16	0.5				
F	20	15									

---000---

 D. J. K. O'CONNELL, S. J.
 Director.