

1942  
Jan-Dec

# 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 <sub>0</sub>	s:l	$\frac{r}{T_0^2}$		T <sub>1</sub> (Galv.)	T (Pend.)	$\mu^3$	V <sub>s</sub>
N	1 204	9.4	5.6	0.009	4	12.4	12.3	+0.01	343
	3 147	9.5	6.1	0.010					
E	1 231	9.6	6.5	0.007	4	12.8	13.1	+0.04	305
	3 137	9.2	7.2	0.017					
Z	2 58	5.2	6.4	0.018	4	12.1	12.0	+0.04	259

No.	Date	Phase	Time (G.M.T.)		Per s.	Amplitude			$\Delta$ km.	Remarks
			h.	m.		s.	A <sub>N</sub> mm.	A <sub>E</sub> mm.		
			Unless otherwise stated NS & EW readings are from the Wiechert, Z from the Galitzin. The amplitudes given are trace amplitudes only. Jeffreys' Tables (R.A.S. Geophys. Suppl. 4, no. 7) are used for P and S, and the Brunner Depth Chart for deep focus shocks.							
1	1942 Jan. 3	eLZ	03	36.6	20					
		MZ		38 08	18			0.4		
		MN		41 35	12	0.2				
2	" 3	F	Merged in following Eq.							
		eZ	04	00 02						
		eN		03 33	12					
		eLZ		06.9	26					
		MZ		08 00	22			0.8		
		MN		08 50	18	0.2				
3	" 4	F	04	35						
		eZ	15	45.5	6					
		MZ		56.0	10			1.0		
4	" 7	F	16	05						
		ePZ	10	53 46	8				3310	NS & EW readings from the Mainka.
		iZ		53 56	9			+2.2	(29°8)	
		eSEZ		58 39	10					
		iSN		58 41	10	-0.5				
		iZ		58 47	12			-2.5		
		eLE	11	01.1	26					
		MN		04 30	18	0.4				
		MZ		04 55	17			4.8		
		ME		05 04	14		0.3			
		F	12	15						
5	" 9	PNZ	06	35 26	4				3160	P in minute mark.
		eN		39 57	8				(28°4)	
		iSE		40 09	7			-1.2		
		iN		40 18	5	+0.5				
		mN		40 31	5	1.3				
		iE		40 40	5			-0.5		
		iN		40 48	8	+1.1				
		iZ		40 57	8			-2.0		
		mN		41 01	9	1.1				
		iSSE		41 14	8			+2.3		
		eLZ		43.2	18					
		ME		44 50	13			1.5		
		MNZ		46 34	12	0.8		2.2		
		F	07	50						
6	" 9	e?Z	13	37 32						
		eLZ		45.8	18					
		ME		47 54	12			0.3		
		MN		48 50	12	0.2				
		F	14	10						

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No.1 (continued)

1942 January.

RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

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 SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per.	Amplitude			Δ	Remarks
							AN	AE	AZ		
7	1942 Jan. 12	iPZ	h	m	s	s	mm.	mm.	mm.	3045 (27°4)	Condensation.
		eSNE	15	17	16	7			+1.5		
		iZ		21	52	8	0.5	0.5			
		iN		22	03	8			+1.8		
		iZ		22	07	8	+1.0				
		iZ		22	12	8			+2.5		
		mN		22	18	8	2.3				
		iSSZ		22	56	8			+1.5		
8	" 12	eLZ		24	.8	18				3080 (27°7)	F lost in No.8. Condensation. Repetition of No.7
		MNEZ		28	03	12	1.8	2.6	1.5		
		iPZ	16	12	57	8			+1.5		
		eZ		17	24	10					
		iSE		17	35	7		-0.6			
		iNE		17	43	8	+1.0	-1.0			
		iZ		17	44	9			+2.5		
		mN		17	51	8	1.7				
		iSSZ		18	39	8			+2.3		
		iE		18	45	9		-0.7			
		mE		18	57	9		1.8			
		eLZ		20	.5	18					
		ME		23	00	12		3.8			
		MNZ		23	08	12	2.1		2.5		
9	" 12	F	17	35							
		e	23	27	14						
		iZ		27	58	6			-1.0		
		iE		28	13	5		-0.9			
		iN		28	14	5	-0.5				
		iN		28	59	5	-0.6				
		ME		31	31	10		0.3			
		MN		31	34	10	0.3				
		MZ		31	45	12			1.4		
		F		23	40						
10	" 13	e(L?)Z	13	39	.6					A few shallow waves	
		F	13	50							
11	" 14	eZ	05	18	.3						
		eLZ		29	.4	28					1.0
		MZ		30	51	22					
		MN		31	51	20	0.1				
		ME		33	06	19		0.1			
		F		06	10						
12	" 17	eN	06	41	17						
		ME		44	16	12		0.2			
		MZ		45	09	12					0.4
		MN		45	25	12	0.2				
		F		07	00						
13	" 17	e(L?)Z	20	44	.1					A few shallow waves	
		F	20	55							
14	" 18	MN	02	18	46	15	0.1			A few shallow waves	
		F	02	25							
15	" 19	eLN	04	28	.1	20					
		MN		29	04	13	0.2				
		ME		29	37	20		0.2			
		F		05	00						
16	" 20	eNZ	04	19	09	5					
		eN		23	08	12?					
		eLE		25	.6	16					
		eLZ		25	.7	24					
		MN		29	27	12	0.3				
		MZ		29	39	16					0.7
		ME		30	04	12		0.2			
		F		04	45						
17	" 20	eLZ	07	16	.2	28					
		MZ		18	42	24					0.7
		ME		24	35	18		0.2			
		F		08	05						

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## RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

## SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per.	Amplitude			Δ	Remarks	
							AN	AE	AZ			
18	1942 Jan.21	eNE	h	m	s	s	mm.	mm.	mm.	km.		
		eLN	12	15	39	4						
		MN	25	3		18						
		ME	28	06		14	1.4					
		ME	28	29		14		0.2				
19	" 23	F	13	55								
		iPZ	21	37	23	5			+1.0	5510	Condensation.	
		ePNE	37	23		5				(49°6)		
		iPPZ	39	17		6			+1.5			
		eSN	44	28		10						
		ME	56	33		18		0.2				
		MZ1	56	48		18				1.0		
		MN	58	32		20	0.2					
		MZ2	59	07		17				2.3		
20	" 27	F	23	00								
		ePZ	13	35	48	4			1.0	3535	H 13 29 24	
		iPEZ	35	55		4		+0.5	+2.5	(31°8)	Condensation.	
		iNEZ	35	57		4	+1.3	-0.8	-4.5			
		iZ	37	11		5			+3.5			
		iNE	37	12		5	+1.6	-1.0				
		iSE	41	02		7		+3.5				
		iSN	41	04		7	+2.1					
		iE	41	12		10		-7.8				
		iN	41	15		10	+5.9					
		iN	41	51		10	+5.8					
		iE	41	59		10		+4.7				
		iE	42	54		8		-3.7				
		iE	43	39		7		+12.7				
		iN	43	44		8	-9.2				After 13h 47m	
		iE	45	06		8		-14.4			Wiechert NS & EW	
		LE	45.5			30					deranged and M	
		iE	46	37		9		-29.5			taken from Mainka.	
		iN	46	39		8	-16.2					
		iN	46	53		8	+32.3				MZ <sub>1,2,3</sub> from the	
		MZ <sub>1</sub>	47	00		6				5.5	Wiechert.	
		iN	47	07		8	-50.0					
		MZ <sub>2</sub>	47	34		5				10.3		
		MN <sub>1</sub> , ME <sub>1</sub>	47	35		8	42+	60.5+				
		ME <sub>2</sub>	49	18		8		62.5+				
		MN <sub>2</sub>	50	07		10	48+					
		ME <sub>3</sub>	50	55		10		76+				
		MZ <sub>3</sub>	51	04		10				12.0		
		MN <sub>3</sub>	51	11		10	51+					
		eW <sub>2</sub> Z	16	18.6		26						
		MN	19	57		24	0.7					
		MZ	20	00		24				0.7		
21	" 27	F	17	15								
		eE	15	05	27							
		eN	05	34							Small aftershock	
		eZ	05	39							superposed on Coda	
22	" 27	eZ	16	35	57	4					of No.20.	
		eE	36	01		4						
		iN	36	15		4	+1.2				NS & Z readings	
		MZ	40	44		9				1.8	from Galitzin, EW	
		MN	40	57		9	2.1				from Mainka.	
		F	Lost in No.23									

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## SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per s	Amplitude			Δ km.	Remarks
			h	m	s		AN mm.	AE mm.	AZ mm.		
23	1942 Jan. 27	eE	16	47	14	4				NS & Z readings from Galitzin, EW from Mainka.	
		iN		47	33	6	+1.0				
		MZ		50	53	12			1.0		
		MN		51	53	10	1.5				
24	" 27	eE	20	12	52				NS & Z readings from Galitzin, EW from Mainka.		
		eN		14	15	6					
		iNZ		14	27	5	1.1			+1.0	
		MN		17	17	12	1.2				
		MZ		17	25	12				1.6	
		F	20	30							
25	" 28	eNE	09	13	21	4					
		eZ		13	22	4					
		iN		13	51	4	-0.5				
		MZ		16	46	12				0.8	
		ME		16	48	12		0.2			
		MN		17	34	9	0.3				
		F	09	30							
26	" 28	eE	10	18	21	4					
		iNZ		18	40	5	+0.3			-1.0	
		iN		19	43	8	+0.6				
		eLEZ		21	3	16					
		MN		22	51	9	0.3				
		MZ		23	08	9				1.8	
		ME		23	20	9		0.3			
27	" 28	F	10	40							
		eE	11	06	14	4					
		eN		07	18	4					
		eLZ		10	4	12					
		MZ		11	51	9				0.8	
28	" 28	MN		12	04	8	0.2				
		F	11	20							
		eE	21	09	08	3					
		iN		10	34	4	+0.4				
		eLE		13	3	13					
29	" 28	MNE		14	25	9	0.2	0.2			
		MZ		14	40	9				1.5	
		F	21	25							
		e?Z	21	29	0						
		iN		33	17	4	+0.5				
30	" 29	iZ		33	31	4			+1.3		
		iNE		33	35	4	-1.0	-1.0			
		iN		33	46	4	+0.7				
		iE		35	49	5		+1.0			
		mN		33	52	4	1.5				
		iZ		33	57	5			-1.7		
		mNE		34	10	6	1.4	0.8			
		ME		36	52	12		0.5			
		MZ		36	59	12			3.0		
		MN		37	14	11	1.3				
		F	22	05							
		MN	03	21	27	14	0.7				
		MZ		21	59	20			0.5		
31	" 29	F	03	50							
		eZ	07	40	27	10					
		eN		44	38	11					
		eZ		44	43	16					
		eLN		47	2	23					
		MZ <sub>1</sub>		49	23	28				1.0	
		ME <sub>1</sub>		50	07	23		0.1			
		MN		50	17	14	0.5				
		MZ <sub>2</sub>		53	43	18				2.5	
ME <sub>2</sub>		53	59	18		0.5					
F											

Lost in No.32.

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RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per.	Amplitude			Δ	Remarks
			h	m	s		A <sub>N</sub>	A <sub>E</sub>	A <sub>Z</sub>		
32	1942 Jan. 29	eN	08	20	32						
		MN		29	25	14	0.3				
		ME		30	43	13		0.2			
		MZ		31	40	16			1.5		
		F	09	05							
33	" 29	iPNEZ	09	28	27	4	+1.5	+1.5	-7.1	2460	Dilatation NE.
		iNEZ		28	33	4	-3.4	-2.9	+15.0	(22°2)	Focal depth 100 km.
		ipNEZ		28	47	7	-3.1	-3.0	+10.5		
		iNEZ		29	09	6	+5.5	+4.4	-21.0		
		iNEZ		29	18	7	+4.8	+6.2	-19.5		
		iNEZ		29	32	7	+6.5	+5.4	-18.0		
		iSN		32	20	9	-19.5				
		iSE		32	22	9		-4.1			
		iZ		32	27	9			+19.5		
		mN		32	30	9	32.5				
		ME		32	35	10		7.0			
		iE		32	46	8		-6.8			
		iZ		32	53	10			+28.8		
		isSN		33	03	9	-24.2				
		ME		33	06	8		16.8			
		iSSNZ		33	29	8	+16.7		+20.7		
		iE		33	44	8		-8.8			
		iNZ		33	45	8	+18.5		+29.3		
		eLEZ		34	1	28					
		MZ		36	43	16			27.5		
		MN		36	46	14	7.1				
		ME		37	06	16		8.3			
		F	11	50							
34	" 29	eLZ	15	32	9	16					
		MZ		35	19	16			0.8		
		ME		35	47	11		0.2			
		F	15	50							
35	" 29	eZ	20	35	53	8			1.0		
		MZ		44	13	18			0.6		
		MN		45	21	13	0.2				
		ME		47	21	13		0.1			
		F	21	25							
36	" 30	iN	12	22	38	4	-0.5				
		i?		31	39	?					
		eLN		41	5	46					
		MN		45	12	31	0.8				
		MZ		48	24	26			1.4		
		ME		48	34	22		0.3			
		F	13	45							
37	" 31	eLZ	07	56	8	22					On Galitzin Z
		MZ		58	33	16			0.7		only.
		F	08	10							
38	" 31	eEZ	15	27	50	8					
		eN		32	57	12					
		eLN		34	9	18					
		MZ		36	13	18			1.2		
		MN		36	25	15	0.3				
		ME		37	16	15		0.2			
		F	16	15							

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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.	A <sub>E</sub> mm.	A <sub>Z</sub> mm.		
32	1942 Jan. 29	eN	08	20	32						
		MN	29	25		14	0.3				
		ME	30	43		15		0.2			
		MZ	31	40		16			1.5		
33	" 29	F	09	05							
		iPNEZ	09	28	27	4	+1.5	+1.5	-7.1	2460 (22°2)	Dilatation NE. Focal depth 100 km.
		iNEZ	28	33		4	-3.4	-2.9	+15.0		
		ippNEZ	28	47		7	-3.1	-3.0	+10.5		
		iNEZ	29	09		6	+5.5	+4.4	-21.0		
		iNEZ	29	18		7	+4.8	+6.2	-19.5		
		iNEZ	29	32		7	+6.5	+5.4	-18.0		
		iSN	32	20		9	-19.5				
		iSE	32	22		9		-4.1			
		iZ	32	27		9			+19.5		
		MN	32	30		9	32.5				
		ME	32	35		10		7.0			
		iE	32	46		8		-6.8			
		iZ	32	53		10			+28.8		
		isSN	33	03		9	+24.2				
		ME	33	06		8		16.8			
		iSSNZ	33	29		8	+16.7		+20.7		
		iE	33	44		8		-8.8			
		iNZ	33	45		8	+18.5		+29.3		
		eLEZ	34	1		28					
MZ	36	43		16			27.5				
MN	36	46		14	7.1						
ME	37	06		16		8.3					
34	" 29	F	11	50							
		eLZ	15	32	9	16			0.8		
		MZ	35	19		16					
		ME	35	47		11		0.2			
35	" 29	F	15	50							
		eZ	20	35	53	8			1.0		
		MZ	44	13		18			0.6		
		MN	45	21		13	0.2				
36	" 29	ME	47	21		13		0.1			
		F	21	25							
		iN	12	22	38	4	-0.5				
		i?	31	39		?					
37	" 31	eLN	41	5		46					
		MN	45	12		31	0.8				
		MZ	48	24		26			1.4		
		ME	48	34		22		0.3			
		F	13	45							
		eLZ	07	56	8	22					
38	" 31	MZ	58	33		16			0.7		On Galitzin Z only.
		F	08	10							
38	" 31	eEZ	15	27	50	8					
		eN	32	57		12					
		eLN	34	9		18					
		MZ	36	13		18			1.2		
		MN	36	25		15	0.3				
		ME	37	16		15		0.2			
F	16	15									

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SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per.	Amplitude			Δ	Remarks
							A <sub>N</sub>	A <sub>E</sub>	A <sub>Z</sub>		
			h	m	s	s	mm.	mm.	mm.	km.	
39	1942 Jan.31	eN	17	51	56	7					
		eN	18	04	45	?					
		eLN		10.0		22					
		MN		14	02		16	0.2			
		MZ		16	22		16			0.6	
		ME		21	53		16		0.2		
		f	18	50							
40	" 31	i?N	20	08	27	5	-0.8				NS readings from Galitzin.
		iZ		13	18	6			-1.0		
		iN		13	30	5	+1.0				
		iE		13	58	5			-1.0		
		iZ		14	10	5				-1.9	
		iN		14	13	6	+1.2				
		mN		14	34	6	3.0				
		iN		15	52	5	+2.5				
		MNEZ		17	30	10	2.8	0.5	2.5		
		F	20	40							
41	" 31	eN	21	49	19	4					
		eE		49	23	8					
		iN		50	07	7	+0.7				
		iE		50	18	6			-1.0		
		MNZ		53	14	10	0.8		1.5		
		ME		53	25	10			0.5		
		F	22	15							
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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 <sub>0</sub>	s:1	$\frac{r}{T_0^2}$		T <sub>1</sub> (Galv.)	T (Pend.)	$\mu^2$	V <sub>s</sub>	
N	1	222	9.4	6.2	0.008	4	12.4	12.3	+0.01	343
	3	90	11.9	11.2	0.004					
E	1	224	9.7	7.0	0.005	4	12.8	13.1	+0.04	305
	3	133	9.3	8.7	0.014					
Z	2	61	5.1	5.7	0.008	4	12.1	12.0	+0.04	259

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			$\Delta$ km.	Remarks
			h.	m.	s.		A <sub>N</sub> mm.	A <sub>E</sub> mm.	A <sub>Z</sub> mm.		
	1942										
	N.B.	Unless otherwise stated NS & EW readings are from the Wiechert, Z from the Galitzin. The amplitudes given are trace amplitudes only. Jeffreys' Tables (H.A.S. Geophys. Suppl. 4, No. 7) are used for P and S, and the Brunner Depth Chart for deep focus shocks.									
42	Feb. 1	e?E	06	11	18						
		eN		11	31	5					
		eN		15	40	8					
		eE		15	54	7					
		eN		15	57	7					
		eLE		19	2	16					
		ME		21	19	12		0.1			
		MN		22	27	12	0.2				
43	" 2	F	06	45							
		ePZ	16	47	57	6					
		iEZ		48	09	6		-0.4	+2.0		
		eE		52	34	9					
		eNE		52	43	9					
		iZ		52	49	7			-1.5		
		eN		53	02	16					
		eLN		54	7	18					
		MN		56	09	15	0.8				
		MEZ		56	53	16		0.1	0.8		
44	" 2	F	17	45							
		eNZ	18	00	34	6					
		eSN		04	20	10					
		eN		04	46	14					
		eLN		08	5	22					
		ME		09	30	14		0.1			
		MZ		10	11	18			1.0		
		MN		10	54	16	0.2				
45	" 5	F	18	50							
		iPZ	10	08	38	8			+1.5	2970	Condensation.
		ePN		08	38	8				(2697)	
		iPPZ		09	12	7			+1.5		
		iZ		10	17	7			+1.5		
		eSN		13	09	8					
		eSE		13	15	8					
		iZ		13	22	8			+1.1		
		iN		13	29	8	-1.7				
		mZ		13	38	8			2.0		
		SSZ		14	14	9			1.4		
		MZ		18	45	15			1.8		
		MNE		18	50	13	1.1	1.2			
		F	11	25							

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

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## SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per. s	Amplitude			Δ km.	Remarks
							AN mm.	AE mm.	AZ mm.		
46	1942 Feb. 5	eZ	11	53.2							
		MZ		57	27	14			0.5		
		MN		57	31	13	0.2				
		ME		57	41	12		0.1			
47	" 5	F	12	15							
		eN	19	31	16	4					
		eE		32	13	5					
48	" 6	MEZ		35	16	12		0.2	1.2		
		F	19	45							
		eZ	15	08.2							
		eLN		15.5	24						
49	" 7	MZ		18	20	18			1.2		
		MN		18	29	14	0.2				
		ME		19	04	12		0.2			
		F	15	50							
		iz	09	22	48	4			+1.0	Condensation.	
		eE		24	23	8					
		iNE		24	50	4	+0.6	-0.5			
50	" 7	iz		25	28	6			+1.6		
		iz		26	31	6			-1.8		
		MN		28	01	13	0.7				
		MZ		28	13	12			5.5		
		ME		29	01	9		0.8			
		F	10	00							
		iPEZ	23	20	40	4		-0.6	+2.5	Condensation.	
		iz		25	11	10			+1.2		
51	" 8	e(SS?) <sub>N</sub>		25	31	16					
		eLN		26.8	22						
		MN		28	08	14	0.6				
		MZ		29	39	14			0.9		
		ME		31	23	14		0.2			
		F	00	25							
		iPZ	20	08	11	8			-1.0	3390 (30°5)	Dilatation.
		eN		12	47	22					
52	" 12	iSZ		13	09	16			-2.5		
		mN		13	18	22	0.8				
		iE		15	24	10		+1.0			
		eLEZ		16.8	26						
		MN		18	04	20	1.0				
		ME		18	51	18		0.8			
		MZ		19	11	16			5.0		
		F	21	00							
53	" 13	iPNEZ	06	01	43	3	+0.1	+0.2	-1.7	2350 (21°1)	Dilatation NE.
		iSN		05	31	4	-0.6				
		mNEZ		05	40	6	1.0	0.6	1.2		
		iN		06	12	6	+0.6				
		iz		06	26	14			+1.5		
		iNE		06	37	6	+0.6	-0.5			
		MN		09	21	13	0.2				
		F	06	35							
53	" 13	e(P?) <sub>Z</sub>	06	25	39						
		eLN		34.2	16						
		MN		37	21	16	0.3				
		ME		38	05	16		0.4			
		MZ		38	08	16			3.8		
F		Lost in No.54.									

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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			
54	1942 Feb.13	e(P?)NE	07	57	22	3				2900 (26°1)	Condensation.	
		iZ		57	25	3			+1.9			
		e(S?)NE	08	01	18	5	0.2	0.2				
		iZ		01	21	8			-1.3			
		mZ		01	42	12			2.1			
		eLN		02	4	22						
		eLZ		02	7	26						
		MZ		03	42	20			1.4			
		MN		04	22	14	0.3					
		ME		04	30	16		0.2				
55	" 13	F	08	40								
		eLN	22	28	2	18						
		MZ		30	33	18			0.6			
56	" 14	MN		30	54	13	0.2					
		F	22	50								
		e(P?)N	22	55	32							
57	" 16	iE		55	36	2		+0.3				
		iNE		56	53	4	+0.5	-0.4				
		iZ		57	01	4			-1.5			
		iN		57	04	6	+1.2					
		iEZ		58	23	8		-0.8	+2.8			
		eN		58	24	9						
		MZ		58	35	10			3.0			
		ME		59	12	8		1.0				
		F	23	05								
		iPZ	18	13	44	(3 9)			+2.0			
58	" 16	ePNE		13	44	3						
		mZ		13	56	9			2.5			
		iPPZ		14	20	10			+3.0			
		eSN		18	11	10						
		eE		18	20	10						
		eN		18	42	12						
		eE		18	50	13						
		iSSNEZ		19	14	12	+1.4	-3.6	+3.5			
		iN		19	55	14	+1.5					
		MZ		22	15	16			3.0			
59	" 16	ME		23	05	13		1.0				
		MN		23	42	12	0.7					
		F		Lost in No.58								
60	" 17	eLZ	19	21	4	22						
		MZ		22	6	18			1.6			
		MN		23	2	17	0.2					
61	" 18	F	20	00								
		eZ	20	28	1	6						
		eLN		34	9	18						
		F	20	50								
		iPZ	04	17	39	6			+1.4		3010 (27°1)	Condensation.
		ePN		17	39							
		iSE		22	11	6			-0.6			
		iSN		22	16	8	+1.0					
		iE		22	21	6			-1.0			
		iN		22	30	14	+1.5					
61	" 18	iZ		22	32	14			-2.5			
		iSSZ		23	14	10			-2.0			
		iSSE		23	17	10			-1.5			
		eLE		25	0	16						
		MZ		26	55	15			2.6			
		MNE		27	20	15	0.7	1.2				
		F	05	45								
		iNE	05	48	38	4	-0.5	-0.8				
		iNE		49	19	5	-1.0	+1.5				
		eLN		51	7	11						
61	" 18	MN		52	17	11	0.5					
		F	06	10								

(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.	
62	1942 Feb. 19	eLZ	20	18.1		16					Shallow waves on Galitzin Z.
		F	20	30							
63	" 19	eZ	23	50.1							Condensation.
		eN		54 41							
		eLN		56.5		18					
		MZ		57 25		18			0.5		
		MN		57 40		17	0.3				
		F	00	20							
64	" 20	eP?N	00	49 33						33°0?	Condensation.
		iZ		49 59		4			+1.5		
		i(PP?)N		50 58		4	-0.5				
		iSNE		54 47		8	+0.5	-0.7			
		iZ		54 51		6			+1.5		
		i(SS?)E		56 17		8		-0.7			
		iZ		56 27		10			-1.7		
		iN		56 29		7	-0.6				
		iZ		56 57		7			+2.4		
		iNZ		57 13		6	+2.0		+3.0		
		eLE		58.0		12					
		ME	01	01 01		8		5.8			
		MNZ		01 05		6	4.8		6.0		
		F	02	10							
65	" 21	ePZ	07	19 06		6				7820	Dilatation..
		iPZ		19 11		6			-1.7	(70°4)	
		iSN		28 15		5	+0.6				
		iSE		28 20		5		-1.1			
		MN		28 26		8	1.5				
		eLE		40.3		24					
		ME		44 35		18		0.2			
		MZ		45 12		22			1.3		
		MN		45 46		18	0.3				
		F	08	50							
66	" 22	ePZ	09	24 20		6				24°0?	Dilatation..
		e(S?)N		28 32		6					
		eN		29 33		18					
		eLZ		30.9		26					
		MNZ		32 17		20	1.7		1.7		
		ME		32 24		17		0.6			
		F	10	45							
67	" 25	eLZ	23	17.7		20					Dilatation..
		ME		18 25		15		0.1			
		MZ		19 07		16			0.4		
		MN		19 44		15	0.1				
		F	23	35							
68	" 27	eE	08	51 20		7					Dilatation..
		eLZ		55.7		25					
		MZ		56 58		18			0.5		
		F	09	20							

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



# Riverview College Observatory

RIVERVIEW, N.S.W.

## SEISMOLOGICAL BULLETIN

φ = 33° 49' 46" S. λ = 151° 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 <sub>0</sub>	ε:1	$\frac{r}{T_0^2}$		T <sub>1</sub> (Galv.)	T (Pend.)	$\mu$	V <sub>s</sub>	
N	1	230	9.5	7.1	0.009	4	12.4	12.3	+0.01	343
	3	82	12.5	9.0	0.005					
E	1	231	9.5	6.2	0.008	4	12.8	13.1	+0.04	305
	3	133	9.3	7.0	0.017					
Z	2	60	5.1	5.9	0.011	4	12.1	12.0	+0.04	259

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			Δ km.	Remarks
			h.	m.	s.		A <sub>N</sub> mm.	A <sub>E</sub> mm.	A <sub>Z</sub> mm.		
		N.B. Unless otherwise stated NS & EW readings are from the Wiechert, Z from the Galitzin. The amplitudes given are trace amplitudes only. Jeffreys' Tables (R.A.S. Geophys. Suppl. 4, No. 7) are used for P and S, and the Brunner Depth Chart for deep focus shocks.									
69	1942 Mar. 1	eZ	10	22	24	8					
		eZ		42	32	12					On Galitzin Z only.
		eLZ		47	7	25					
		MZ		56	02	18			0.4		
70	" 4	F	11	15							
		iPZ	03	42	49	5			+1.5	3270 (29°4)	Condensation.
		eSNE		47	39	10					
		iZ		47	42	10			+1.5		
		mZ		47	59	12			2.2		
		eLE		50	5	26					
		ME		53	20	16			2.2		
		MN		54	10	18	0.5				
		MZ		54	23	16			5.5		
71	" 5	F	04	55							
		i(P?)	NZ	19	59	54	8	+0.4		-2.2	Dilatation.
		e(S?)	NE	20	09	36	8				
		iN		09	45	8		+0.4			
		eLN		18	5	26					
		MNZ		21	54	20	0.2		0.7		
		ME		23	35	20			0.4		
72	" 6	F	21	15							
		iPNZ	20	13	56	7	-1.0		+3.5	2920 (26°3)	Condensation.
		eSE		18	17	5					H 20 08 22
		iSNE		18	24	9	+3.1	-2.3			Heavy microseisms.
		iZ		18	29	8			+1.5		
		iE		18	32	12			-3.6		
		iN		18	39	12	+3.3				
		iZ		18	43	12			+2.4		
		iSS <sub>E</sub>		19	29	8			-2.6		
		eN		19	36	24					
		mE		19	43	15			3.3		
		eLN		21	1	17					
		MN1		22	13	14	3.6				
		MZ1		23	07	15			7.8		
		ME1		23	19	12			13.2		
		ME2		24	09	10			15.7		
		MZ2		25	07	10				11.8	
		MN2		25	11	10	5.3				
		F	22	00							

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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		
73	1942 Mar. 10	iZ	10	37	37	6			+1.5		Earlier phases masked by microseisms.
		iEZ		38	05	6		-0.5	+1.5		
		iN		38	15	6	-0.5				
		iN		38	32	10	+0.5				
		iE		38	41	8		-0.8			
		iE		39	05	8		-0.8			
		iN		39	09	8	+0.8				
		iZ		39	41	6			+1.7		
		ME		41	34	10		0.6			
		MZ		42	20	10			3.0		
		MN		42	24	12	0.3				
		74	" 11	F	11	05					
eE	15			23.7							
eN				24.0							
eLN				28.6	26						
ME				31 05	16		0.3				
MN				32 23	16	0.2					
MZ				32 44	12			2.0			
75	" 12	F	15	55						Recorded on the Galitzin only.	
		iN	06	46	51	5	+0.9				
		MZ		49	26	12		0.8			
76	" 12	MN		50	17	9	1.7			NS readings from Galitzin.	
		F	06	55							
		eE	13	40.0	10						
		iN		40 13	10?	+1.0					
		iN		43 51	10	+1.5					
		MN		56 14	16	1.3		1.0			
77	" 12	MZ		56	23	16		0.3		All readings from the Galitzin.	
		ME		56	45	16					
		F	14	20							
		iZ	17	29	23	6		-1.0			
		iN		29	45	6	-1.3				
78	" 17	MZ		33	21	10		0.9			
		MN		33	33	10	1.0				
		F	17	40							
		eN	00	19.8	8						
		eLN		22.5	18						
79	" 21	ME		23	20	12		0.2		Condensation H 21 20 46	
		MN		24	06	12	0.2				
		MZ		24	20	13		0.5			
		F	00	45							
		iPNZ	23	31	31	8	-0.3	+3.0			7340
		iPPZ		33	49	8		-2.0			(66°0)
		iZ		34	17	9		+2.5			
		iSN		40	15	8	-0.4				
		iSE		40	17	8		+0.5			
		iN		40	35	8	-0.5				
		iNE		41	34	8	-1.0	-0.6			
		iE		41	55	8		-1.5			
80	" 22	iN		41	57	8	+1.5				
		e(I.Q?) <sub>N</sub>		47.6	23						
		eE		47.9	23						
		MZ		48.2	18			3.2			
		MN		55 01	24	1.3					
		ME		56 07	24		1.0				
		MZ		56 31	20			5.9			
80	" 22	F	01	20							
		eLZ	01	52.5	25						
		MZ	02	04.7	20			0.5			
		MN		10.0	20	0.1					
F	02	25									

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RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

SEISMOLOGICAL BULLETIN.

No	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
							AN	AE	AZ		
81	1942 Mar. 25	iPNEZ	h	m	s	s	mm.	mm.	mm.	km.	Dilatation NW.
			07	31	54	5	+0.2	-0.4	-2.4		
		iPPNEZ		33	34	4	+0.3	-0.4	-1.2		
		eE		38	07	6					
		i(S?)N		38	11	6	+0.3				
		iNE		38	52	7	+0.2	-0.5			
		eNZ		41	15	12					
		eE		41	33	7					
		iN		45	08	6	-0.5				
		eNE		46	03	7					
		eLN		47	.8	14					
		ME		48	56	14		0.3			
		MN		51	16	14	0.2				
		MZ		51	23	15			1.2		
82	" 25	F	08	35							
		eE	16	51	39						
		eLN		57	.3	15					
		MN		59	31	12	0.2				
83	" 26	F	17	10							
		eLZ	01	42	.1	20					On Galitzin Z only.
84	" 26	F	01	55							
		eZ	13	25	56	7					
		eE		30	20	7					
		eN		30	24	7					
		eLNZ		31	.9	22					
		MZ		33	12	18			1.0		
		MN		33	25	15	0.2				
		ME		34	31	10		0.3			
85	" 29	F	14	20							
		eZ	02	35	.7						On Galitzin Z only.
		MZ		39	.1	14			0.7		
86	" 29	F	02	50							
		eZ	05	44	.9						Masked by micro-
		eLN		48	.7	24					seisms.
		MZ		52	01	18			1.3		
		MN		52	48	13	0.4				
87	" 29	ME		53	54	13		0.2			
		F	06	30							
		eN	17	59	.0	14					
		eZ		59	.1	14					
		eLN	18	03	.0	22					
		MZ		04	27	20			2.0		
		ME		04	31	16		0.3			
88	" 30	MN		04	56	17	0.2				
		F	18	45							
		eLZ	10	37	.9	24					A few long waves
		F	10	50						on Galitzin Z only.	

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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 <sub>0</sub>	s:l	$\frac{r}{T_0^2}$		T <sub>1</sub> (Galv.)	T (Pend.)	$\mu_2$	V <sub>s</sub>	
N	1	216	9.5	5.9	0.012	4	12.4	12.3	+0.01	343
	3	70	12.8	11.1	0.004					
E	1	225	9.5	6.7	0.013	4	12.8	13.1	+0.04	305
	3	134	9.3	6.6	0.016					
Z	2	61	5.1	4.9	0.004	4	12.1	12.0	+0.04	259

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			$\Delta$ km.	Remarks
			h.	m.	s.		A <sub>v</sub> mm.	A <sub>E</sub> mm.	A <sub>Z</sub> mm.		
<p>N.B. Unless otherwise stated NS &amp; EW readings are from the Wiechert, Z from the Galitzin. The amplitudes given are trace amplitudes only. Jeffreys' Tables (R.A.S. Geophys. Suppl. 4, No. 7) are used for P and S, and the Brunner Depth Chart for deep focus shocks.</p>											
80	1942 Apr. 2	eZ	08	17	44						Masked by micro-seisms.
		eLZ		19.5	24						
		MZ		21	08	16			1.5		
		MN		31	32	15	0.2				
		F	08	45							
90	" 2	eLZ	14	13.4	20						Masked by micro-seisms.
		MZ		14	53	18			0.7		
		F	14	25							
91	" 3	eLZ	23	15.7	20						Masked by micro-seisms.
		F	23	35							
92	" 4	i(P?)Z	22	59	02	8			+1.0		
		i(PP?)E		59	33	5		+0.5			
		iE	23	03	55	6		-0.4			
		eNE		04	06	11					
		eLEZ		05.3	26						
		MN		06	45	20	0.3				
		ME		07	02	20		0.4			
		MZ		07	06	20			2.8		
		F	23	55							
93	" 5	iZ	06	01	39	4			+0.6		
		iN		02	28	4	+0.3				
		iE		02	30	5		-0.6			
		iN		03	33	5	+0.7				
		iZ		03	34	5			+1.5		
		MZ		05	34	11			1.2		
		MN		05	38	11	0.3				
		F	06	15							
94	" 8	iPZ	15	50	05	(11)			-3.0	6090	Dilatation.
		iPNEZ		50	14	(11)	-2.0	+1.1	+11.5	(54.8)	H 15 40 25
		iE		51	09	5		-1.1			Azimuth N 28 $\frac{1}{2}$ °W
		i(PcP?)N		51	30	5	+1.0				Approx. Epicentre:
		iPPN		52	17	(11)	-2.0				16°N, 127 $\frac{1}{2}$ °E.
		iZ		52	28	11			+8.3		
		iPPPNZ		53	13	10	-2.3		+9.0		
		iSN		57	42	13	-4.8				
		iSE		57	45	13		+2.0			
		iZ		57	54	13			-13.0		
		iN		57	57	13	-10.3				
		iE		58	05	13		+14.2			

(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 <sub>N</sub>	A <sub>E</sub>	A <sub>Z</sub>		
			h	m	s	s	mm.	mm.	mm.	km.	
94 Cont.	1942 Apr. 8	MN	15	58	11	13	18.3				
		iN		58	33	13	-6.3				
		iE		59	03	9		-2.0			
		iN		59	22	9	-4.9				
		iScSE	16	00	04	9		-3.1			
		iZ		00	06	9				-6.2	
		iSSE		01	13	15		-3.4			
		iN		02	16	14	-2.5				
		iSSSEZ		02	24	18		-3.7	+12.4		
		iE		03	34	16		+7.1			
		iN		03	42	15	-8.0				
		iE		04	00	14		-9.3			
		eLE		05.1		44?					
		eLN		05.5		44					
		ME		10	13	12		11.0			
MN		11	32	12	15.3						
MZ		12	02	18				44.0			
F		19	30								
95	" 8	i?Z	19	39.1							
		eZ		51.8	8						
		iZ	20	00.6	10				+2.0		
		MZ		06.5	14				1.2		
F		20	45								
96	" 9	eN	00	25	21	11					
		eLE		29.0	19						
		MN		32	29	18	0.1				
		ME		34	55	19		0.1			
F		00	45								
97	" 9	eZ	04	59	46	10				Masked by micro-seisms.	
		eN	05	00	00	5					
		eN		02	27	16					
		eL?E		08.3	16?						
		MN		12	18	16	0.2		0.5		
		MZ		12	29	14					
		ME		16	09	18		0.1			
F		05	45								
98	" 10	eNZ	11	49.4	6						
		eLNZ		57.1	20						
		MZ		59	57	18			0.5		
		ME	12	02	34	15		0.1			
F		12	30								
99	" 11	eNZ	16	17	28	8					
		eE		19	43	10					
		eLZ		22.0	28						
		eLE		22.5	22						
		eLN		22.9	22						
		MN		25	09	16	0.2				
		ME		25	45	13		0.4			
		MZ		26	46	14			3.3		
F		17	10								
100	" 13	e(PP?)Z	08	08	31	8					
		e(SS?)E		27.6	15						
		eLZ		49.6	22						
		eLN		53.1	22						
		MZ		57	20	22			1.1		
		ME		57	46	22		0.1			
		MN		59	33	20	0.1				
F		10	00								
101	" 13	eLEZ	10	59.5	28					Early phases obscured by microseisms.	
		ME	11	01	10	20		0.2			
		MZ		01	25	20			1.2		
F		11	35								
102	" 15	eLZ	23	22.2						On Galitzin Z only.	
		F	23	35							

(Concluded on next sheet)



## Wobble Constants Apr. 15-30

	V	T <sub>0</sub>	ε:1	r/T <sub>0</sub> <sup>2</sup>
N	226	9.4	6.0	0.005
E	224	9.5	6.1	0.009

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
			h	m	s		AN	AE	AZ		
103	1942 Apr. 16	i(P?)Z	12	45	13	7			+0.8	km.	Condensation.
		e(S?)N		49	34	8					
		iZ		49	44	10			+0.7		
		eLN		52	2	20					
		MNE		54	27	14	0.1	0.1			
		MZ		59	44	14			0.8		
		F	13	20							
104	" 18	eLZ	01	38	0	20				km.	Preceded by large microseisms.
		F	02	10							
105	" 18	eLZ	18	37	3	20				km.	Preceded by large microseisms.
		MZ		59	51	18			0.5		
		F	18	55							
106	" 19	eLZ	01	46	2	30				km.	
		ME		49	33	18		0.1			
		MZ		49	44	18			0.7		
		F	02	15							
107	" 20	iZ	08	51	00	5			+1.3	km.	Condensation. NS readings from the Galitzin.
		iE		59	37	5		+0.5			
		iN	09	01	10	5	+1.2				
		F	09	25							
108	" 24	eLZ	06	25	9	20				km.	On Galitzin Z only.
		F	06	55							
109	" 24	eLZ	15	24	8	16				km.	" " " "
		F	15	40							
110	" 27	eEZ	13	43	2	7				km.	
		eLE		51	9	17					
		eLN		52	3	17					
		MZ	14	00	22	12			0.6		
111	" 28	eLZ	00	00	6	24				km.	" " " "
		MZ		01	54	22			0.5		
		F	00	10							
112	" 28	iPZ	10	27	30	4			+1.5	km.	Condensation.
		ePNE		27	31	4					
		i(S?)NZ		33	38	4	+0.5		+1.0		
		iE		33	39	4		-1.1			
		eN		36	57	7					
		e(L?)Z		38	5	16					
		MZ		45	16	16			0.7		
		F	11	05							
113	" 29	PNZ	11	46	16	1				km.	2620 (23°6) H 11 41 09
		iPPZ		46	37	5			+1.5		
		PPPZ		46	55	9			4.0		
		iSN		50	25	8	-1.6				
		iSZ		50	26	8			+2.4		
		MN		50	38	8	2.6				
		iEZ		50	38	8		-2.0	+2.5		
		iSSN		51	03	8	+2.0				
		iZ		51	13	10			-3.3		
		iE		51	21	8		-2.9			
		LZ		53	4	18					
		MZ		54	08	16			2.0		
		MN		55	11	12	1.5				
F	13	05									
114	" 30	iZ	01	32	02	8			-1.0	km.	Dilatation.
		eZ		36	29						
		eLZ		39	0	24					
		eLNE		39	8	17					
		MN		40	47	16	0.5				
		MZ		40	53	18			2.0		
		ME		42	11	16			0.5		
		F	02	50							

# 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 <sub>0</sub>	$\epsilon:1$	$\frac{r}{T_0^2}$		T <sub>1</sub> (Galv.)	T (Pend.)	$\mu^2$	V <sub>s</sub>	
N	1	219	9.0	5.4	0.016	4	12.4	12.3	+0.01	343
	3	72	12.6	12.5	0.003					
E	1	231	9.3	6.6	0.021	4	12.8	13.1	+0.04	305
	3	134	9.3	5.1	0.014					
Z	2	55	5.1	4.5	0.015	4	12.1	12.0	+0.04	259

No.	Date	Phase	Time (G.M.T.)	Per	Amplitude			$\Delta$ km.	Remarks
					A <sub>N</sub> mm.	A <sub>E</sub> mm.	A <sub>Z</sub> mm.		
115	1942 May 3	eZ	10 15.2	6					
		eLZ	18.8	20					
		MZ	21 18	18			0.5		
		ME	21 29	17		0.1			
		MN	22 27	16	0.1				
116	" 4	F	10 55						
		eZ	00 36.6						
		eLE	47.8	20					
		ME	51 48	11		0.4			
		MZ	53 05	16			1.0		
117	" 5	MN	53 24	15	0.2				
		F	01 20						
		eZ	16 45.3						
		F	17 00						
118	" 9	eZ	15 49 34	10					Shallow waves on Galitzin Z.
		eLZ	56.8	28					On Galitzin Z only.
119	" 11	F	16 20						
		eZ	17 34 42	12					
		eLNE	37.1	20					
		ME	37 45	18		0.3			
		MZ	38 49	22			1.5		
120	" 13	F	18 15						
		eZ	20 <sup>m</sup> 55.8	20					
		eLZ	58.6	25					
		MZ	21 03.4	18			0.7		
121	" 14	F	21 25						
		ePZ	02 29 01	9				13,450	
		iPPZ	33 45	9			-1.5	(121°0)	
		iEZ	34 05	7		+0.8	-4.5		
		eSKSNE	39 22	26					
		eSKKSNE	41 01	20					
		eSN	42 03	26					
		iPSZ	43 49	15			-5.5		
		iPSE	43 52	15		+1.1			
		iSSN	50 32	28	+2.0				
		mNE	51 12	28	2.3	3.2			
		eLQNE	03 04.1	45					
		eLREZ	09.5	32					
MN	13 10	22	5.0						
ME	13 31	23		12.2					
MZ	14 00	20			42.5				
F	07 15								

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N.B. Unless otherwise stated NS & EW readings are from the Wiechert, Z from the Galitzin. The amplitudes given are trace amplitudes only. Jeffreys' Tables (R.A.S. Geophys. Suppl. 4, No. 7) are used for P & S, and the Brunner Depth Chart for deep focus shocks.



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

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 SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)	Per s	Amplitude			Δ km.	Remarks
					AN mm.	AE mm.	AZ mm.		
122	1942 May 14	eLZ	h m s						On Galitzin Z only.
		F	09 41.5	16					
123	" 15	eLZ	10 00						" " " "
		MZ	12 53.1	20					
		F	58 22	16			0.6		
124	" 17	eLZ	13 20						" " " "
		MZ	16 12.4	20					
		F	15.2	18			0.5		
125	" 20	eLZ	16 45						" " " "
		MZ	11 34.0	20					
		F	35 32	18			0.3		
126	" 20	eLZ	Lost in No. 126						
		MZ	11 48.5	22					
		ME	50 08	18			0.5		
		MN	50 40	18		0.1			
		F	53 30	13	0.1				
127	" 20	e(P?)Z	12 10						
		eLZ	17 11.9	8					
		MZ	19.0	22					
		F	20.3	20			1.4		
128	" 21	eLZ	18 00						
		MZ	07 14.4	20					
		F	15 56	18			0.4		
129	" 22	eLZ	07 25						
		F	18 09.9	20					Preceded by heavy microseisms.
130	" 22	eLZ	18 15						Preceded by heavy microseisms.
		MN	18 56.4	20	0.2				
		ME	57 22	17		0.2			
		MZ	58 13	17			1.2		
		F	59 07	16					
131	" 22	eLN	19 20						
		ME	19 46.5	20		0.1			
		MN	47 37	17					
		F	48 12	13	0.2				
132	" 23	e?E	20 00						
		eE	03 27 05	4					Preceded by heavy microseisms.
		eN	29 04	6					
		eN	29 21	10					
		eLZ	29 30	10					
		MZ	32.5	25			1.4		
		MN	34 38	16					
		ME	35 17	15	0.2				
		F	35 55	12		0.3			
133	" 23	eN	04 20						
		eLE	12 55 14	4					Masked by heavy microseisms.
		MN	13 04.1	32	0.7				
		ME	06 07	22		3.0			
		MZ	06 55	20			4.5		
		F	08 20	17					
134	" 24	eN	14 00						
		eLN	03 45 03	4					
		MN	58.4	26	0.3				
		ME	04 01 42	23		0.2			
		F	05 07	22					
135	" 26	eZ	04 25						
		eN	07 15 28	5					
		eZ	19 32	10					
		eLZ	19 33	10					
		MZ	22.8	20			0.8		
		F	25 41	14					
		F	07 40						

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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.		
136	1942 May 26	eLZ F	h 13	m 53	s 6	26					
137	" 27	i(P?)Z eZ eN eLE ME MZ MN F	06	37	21	9			-1.5		Dilatation. Masked by heavy microseisms
138	" 28	ePN iPNEZ iPNE iZ iNE iN iPPE iPPE iN iE iSNE mN isSNE isSE iN me F	01	09	36	5	+1.0	-0.8	-0.5	4670 (42°0)	H 01 01 56 Dilatation NW. h 100 km. Z readings from Wiechert.
139	" 31	eZ eN eZ eLE eLN MZ MN ME F	12	52	46	12					Masked by heavy microseisms.

-----oOo-----

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

# Riverview College Observatory

RIVERVIEW, N.S.W.

## SEISMOLOGICAL BULLETIN

Φ = 33° 49' 46" S.

λ = 151° 2' 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 <sub>0</sub>	s:1	$\frac{F}{T_0^2}$		T <sub>1</sub> (Galv.)	T (Pend.)	μ <sub>2</sub>	V <sub>s</sub>	
N	1	212	9.2	5.5	0.021	4	12.4	12.3	+0.01	343
	3	61	12.6	17.2	0.003					
E	1	215	9.4	8.2	0.025	4	12.8	13.1	+0.04	305
	3	134	9.3	3.6	0.016					
Z	2	61	5.0	5.4	0.004	4	12.1	12.0	+0.04	259

No.	Date	Phase	Time (G.M.T.)				Per	Amplitude			Δ	Remarks
			h.	m.	s.	s.		A <sub>N</sub>	A <sub>E</sub>	A <sub>Z</sub>		
										km.		
		N.B. Unless otherwise stated NS & EW readings are from the Wiechert, Z from the Galitzin. The amplitudes given are trace amplitudes only. Jeffreys' Tables (K.A.S. Geophys. Suppl. 4, No. 7) are used for P and S, and the Brunner Depth Chart for deep focus shocks.										
140	1942 June 2	eN	01	09	35							
		eLE		14.0		50						
		eLN		14.9		39						
		MN		18	53	33	0.3					
		ME		20	07	16		0.3				
141	" 3	F	01	45								
		iPNEZ	16	56	20	3	-0.5	-0.3	0.6	23° ca	h 150-200 km.	
		i(pp?)NE		56	58	3	-1.0	-1.0			Z reading from the Wiechert.	
		iE		37	07	4		+0.6				
		iN		37	11	4	-0.4					
		i(S?)E		40	27	3		-1.0				
		iNE		40	36	6	+0.7	-0.7				
		i(SS?)N		41	20	7	+0.8					
		iE		41	22	7		-0.7				
		MN		44	12	14	0.3					
142	" 4	F	17	00								
		iPZ	07	13	02	6			-1.7		Condensation.	
		iPN		13	04	6	-0.4					
		eN		20	25	3			+1.8			
		iZ		20	31	3			3.1			
		MZ		24	02	5			2.5			
		ME		24	28	7						
		MN		25	32	7	2.3					
143	" 6	F	07	50								
		iPNZ	14	59	39	4	+0.5		-1.5		Dilatation.	
		iZ	15	04	16	8			+2.0			
		i(S?)N		04	58	5	-1.5					
		iN		05	57	5	+2.2					
		iE		07	03	3			-1.4			
		eLE		09.0		12						
		eLN		09.3		12						
		iE		09	40	5			-1.0			
		iE		11	23	6			-1.7			
		ME		12	34	12			0.5			
		MN		12	49	14	1.0					
		MZ		15	17	14			8.0			
		F	16	15								

(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	1942 June 10	iPz	10	29	45	4			+1.5	2580 (23°2)	Condensation. Looks like more than one shock. 2nd shock? M of 1st shock. 2nd shock? NS as well as Z readings from the Galitzin.
		iz		30	13	6			-1.5		
		eLN		36	9	20					
		eN		40	10	5					
		iz		40	20	9			+1.3		
		ME		40	37	15		0.3			
		iz		41	02	10			+2.5		
		iN		41	04	9	+2.5				
		iN		41	24	8	-3.5				
		MN1		50	14	16	1.4				
		MZ1		50	30	16			2.5		
		ME		53	14	16		0.2			
		MN2		54	56	17	1.1				
		MZ2		56	38	13			2.8		
		145	" 10	F	11	55					
ePNZ	13			54	30	4					
iPNZ				54	35	4	+0.5		+2.1		
iPPPN				55	05	4	+0.5				
iSNEZ				58	36	8	+1.1	-1.0	-2.3		
eLz				59	6	20					
ME	14			01	29	10		3.2			
MN				01	40	10	2.2				
146	" 11	MZ		02	14	12			6.3		
		F	15	10							
		eLz	15	26	4	20					
147	" 11	MZ		29	12	16			0.4		
		F	15	40							
148	" 11	eLz	16	25	6	20					
		MZ		28	17	16			0.5		
149	" 12	F	16	45							
		eLz	17	33	5	20					
		MZ		36	05	17			0.7		
150	" 13	ME		36	15	16		0.1			
		F	17	50							
		eLz	11	20	5	24					
151	" 13	MZ		24	27	20			0.4		
		F	12	20							
152	" 13	eZ	05	03	3						
		MZ		04	50	12			0.6		
153	" 13	F	05	10							
		eZ	16	31	5	12					
		MZ		33	07	16			0.5		
154	" 13	F	16	55							
		eLz	19	31	5	18					
		MZ		34	15	16			1.1		
155	" 14	MN		34	55	12	0.7				
		F	20	30							
		iPNZ	03	18	35	6	-0.2		+2.5		
156	" 14	iSZ		25	37	8			+1.6	5460 (49°1)	Condensation.
		iNZ		25	56	8	+0.8		+1.9		
		e(L?) <sub>NE</sub>		32	1	20					
		eLz		33	5	24					
		eLN		35	6	34					
		ME		35	48	20		0.2			
		MZ		36	57	20			2.3		
		MN		37	03	20	0.4				
		F	04	50							
		e(P?) <sub>Z</sub>	14	38	43	6					
157	" 14	iNZ		39	08	6	0.2		+1.3		
		i(PP?) <sub>Z</sub>		41	06	8			+1.1		
		eNE		49	45	8					
		eZ		49	58	10					
		eLz		57	8	18					
		MZ	15	03	18	18			1.0		
		F	15	35							

(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		
						mm.	mm.	mm.	km.		
144	1942 June 10	iPZ	10	29	45	4			+1.5		Condensation. Looks like more than one shock.  2nd shock? M of 1st shock.  2nd shock?  NS as well as Z readings from the Galitzin.
		iz		30	13	6			-1.5		
		eLN		36	9	20					
		eN		40	10	5					
		iz		40	20	9			+1.3		
		ME		40	37	15		0.3			
		iz		41	02	10			+2.5		
		iN		41	04	9	+2.5				
		iN		41	24	8	-3.5				
		MN <sub>1</sub>		50	14	16	1.4				
		MZ <sub>1</sub>		50	30	16			2.5		
		ME		53	14	16		0.2			
		MN <sub>2</sub>		54	56	17	1.1				
		MZ <sub>2</sub>		56	38	13			2.8		
		F		11	55						
145	" 10	ePNZ	13	54	30	4				2580 (23°2)	
		iPNZ		54	35	4	+0.5		+2.1		
		iPPP <sub>N</sub>		55	05	4	+0.5				
		iSNEZ		58	36	8	+1.1	-1.0	-2.3		
		eLZ		59	6	20					
		ME	14	01	29	10		3.2			
		MN		01	40	10	2.2				
		MZ		02	14	12			6.3		
F		15	10								
146	" 11	eLZ	15	26	4	20				On Galitzin Z only.	
		MZ		29	12	16			0.4		
147	" 11	F	15	40						" " " "	
		eLZ	16	25	6	20					
148	" 11	MZ		28	17	16			0.5	On Galitzin Z and EW Wiechert only.	
		F	16	45							
149	" 12	eLZ	17	33	5	20			0.7	Masked by micros. All readings from the Galitzin.	
		MZ		36	05	17					
		ME		36	15	16		0.1			
150	" 13	F	17	50						Small waves masked by microseisms.	
		eLZ	11	20	5	24					
151	" 13	MZ		24	27	20			0.4	Masked by microseisms.	
		F	12	20							
152	" 13	ez	05	03	3	12			0.6	Masked by micros.	
		MZ		04	50	12					
153	" 14	F	05	10						Masked by micros.	
		ez	16	31	5	12			0.5		
154	" 14	MZ	16	55						Masked by micros.	
		eLZ	19	31	5	18			1.1		
153	" 14	MZ		34	15	16				5460 (49°1)	Condensation.
		MN		34	55	12	0.7				
		F	20	30							
		iPNZ	03	18	35	6	-0.2		+2.5		
		iSZ		25	37	8			+1.6		
		iNZ		25	56	8	+0.8		+1.9		
		e(L?) <sub>NE</sub>		32	1	20					
		eLZ		33	5	24					
		eLN		33	6	34					
		ME		35	49	20		0.2			
154	" 14	MZ		36	57	20			2.3	Masked by micros.	
		MN		37	03	20	0.4				
154	" 14	F	04	50						Masked by micros.	
		e(P?) <sub>Z</sub>	14	38	43	6					
		iNZ		39	08	6	0.2		+1.3		
		i(PP?) <sub>Z</sub>		41	06	8			+1.1		
		eNE		49	45	8					
		eZ		49	58	10					
		eLZ		57	8	18					
		MZ	15	03	18	18			1.0		
F	15	35									

(Continued on next sheet)



## RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

## SEISMOLOGICAL BULLETIN.

Wiechert Constants June 15-30

	V	T <sub>0</sub>	ξ:1	r/T <sub>0</sub> <sup>2</sup>
N	219	9.6	6.3	0.007
E	236	9.3	6.7	0.005

No.	Date	Phase	Time (G.M.T.)			Per.	Amplitude			Δ km.	Remarks.
							AN	AE	AZ		
155	1941 June 15	iPz	h	m	s	s	mm.	mm.	mm.		Dilatation. Deep focus.
		i(pP?)Z	13	51	47	4			-1.0		
		iE		53	59	8			-1.5		
		iSNE		54	01	6		+0.7			
		iN		55	29	6	-0.4	+1.3			
		MN	14	01	25	11	+0.4				
		MZ		02	12	13	0.2		0.4		
156	" 16	F	14	10							On Galitzin Z only.
		eZ	22	03.6							
		eLZ		05.5	20						
157	" 17	MZ		10	10	18			0.5		Masked by micro- seisms.
		F	22	35							
		eZ	16	02	35	10			1.0		
158	" 17	MZ		05	43	14					Masked by micro- seisms.
		MN		07	05	12	0.3				
		F	16	25							
159	" 18	e?Z	23	09.6							Masked by micro- seisms.
		MZ		18	01	16			0.5		
		F	23	30							
159	" 18	iPNZ	09	39	09	8	-0.4		+2.5	4970 (44°7)	Condensation. H 09 30 57
		eE		39	23	5			+4.0		
		iPPNZ		40	52	8	-1.6				
		i(PcP?)N		41	00	8	-2.3				
		mZ		41	03	8			7.5		
		i(PcS?)NZ		44	51	7	+0.8		+3.0		
		iSN		45	43	10	+1.5				
		iE		45	49	10		+1.7			
		MN		45	56	10	4.7				
		iE		49	04	18		+2.5			
		eLQE		50.3		38					
		eLN		51.3		20					
		eLRZ		52.5		32					
		ME		52	31	22		8.0			
		MZ		55	41	22			23.2		
MN		56	12	20	10.2						
160	" 19	F	12	35							Masked by micro- seisms.
		eLZ	20	15.3	24						
		MZ		20.7	20				0.4		
161	" 20	F	20	30							Masked by micro- seisms.
		eZ	03	25.0							
		MZ		27.8	16				0.5		
162	" 20	F	03	40							A few long waves masked by micros.
		eLZ	10	56.9	24						
		F	11	05							
163	" 24	iZ	03	19	08	7			+1.0		
		eLN		24.3	24						
		eLEZ		24.5	24						
		ME		25	44	16		0.3			
		MZ		26	05	18			2.0		
		MN		27	59	14	0.3				
		F	09	10							

(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		
164	1942 June 24	iPZ	11 21 07	4			+5.0	2300 (20°7) H 11 16 27 Condensation.	
		ePNE	21 07	4					
		iNE	21 19	6	-2.2	+6.1			
		iPPNEZ	21 27	10	+4.1	-10.5	+16.0		
		iSN	25 00	18	+10.0				
		iPCBE	25 05	16		+11.5			
		iz	25 09	14			-35.5		
		iSSNE	25 28	20	-31.0	-18.5			
		iLE	26 36	22					
		MN	27 14	20	50.0				
		ME	27 38	16		46.0			
		MZ	27.8	19			94.0		
		F	14 45						
		165	" 26	eLZ	10 44.0	20			
MZ	48 22			14			0.7		
F	10 55								
166	" 26	eZ	20 04.8					Small and masked by microseisms.	
		MZ	09 00	14			0.5		
		F	20 15						
167	" 28	eZ	04 15.4					Small and masked by microseisms.	
		MZ	19 21	12			0.6		
		F	04 30						
168	" 28	eZ	15 21.9					Preliminaries ob- scured by micro- seisms.	
		eLZ	26.1	20					
		MZ	28 15	13			1.2		
169	" 29	F	16 05					Small and masked by microseisms.	
		eZ	06 55.7						
		F	07 15						
170	" 29	eLZ	09 09.6	24					
		MZ	11 32	16			0.5		
		F	09 20						
171	" 30	iP <sub>TE</sub>	05 06 08	4		+0.4		May be only a large microseism.	
		e(S <sub>TE</sub> )NE	10 00	7	0.4	0.4			
		eLN	12.2	17					
		MN	12 54	16	0.2				
		ME	13 35	15		0.1			
172	" 30	F	05 25					Masked by micro- seisms.	
		eZ	09 22 14						
		eE	23 59						
		eZ	24 18	14					
		MZ	26 55	14			0.5		
		MN	27 00	14	0.1				

## ADDENDUM to No.139. May 31, 1942.

Superimposed on the surface waves of this earthquake are a series of short-period vibrations commencing at 13h 03m 19s. The periods are about 0.9 seconds and the maximum earth motion is 3μ. These vibrations were recorded on the three Wischert and two Mainka components, but not on the Galitzins. They were evidently caused by under-water explosions during the Japanese submarine raid on Sydney Harbour.

 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 <sub>0</sub>	c:1	$\frac{r}{T_0^2}$		T <sub>1</sub> (Galv.)	T (Pend.)	$\mu_2$	V <sub>s</sub>	
N	1	225	9.4	5.2	0.008	4	12.4	12.3	+0.01	343
	3	131	9.5	5.3	0.008					
E	1	224	9.5	6.1	0.015	4	12.8	13.1	+0.04	305
	3	132	9.1	6.6	0.017					
Z	2	60	5.0	4.8	0.004	4	12.1	12.0	+0.04	259

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			$\Delta$ km.	Remarks
			h.	m.	s.		A <sub>N</sub> mm.	A <sub>E</sub> mm.	A <sub>Z</sub> mm.		
173	1942 July 3	eN	03	26	0						
		eN		34	4	20					
		e(L?) <sub>N</sub>		37	3	28					
		eLZ		43	1	30					
		MZ <sub>1</sub>		45	31	24			0.5		
		MN		48	56	19	0.2				
		MZ <sub>2</sub>		52	22	18			0.9		
		ME		54	08	18			0.2		
174	" 7	F	04	20							
		iPNEZ	02	59	27	3	+0.2	+1.1	-3.9	30°	Dilatation.
		i(pP?) <sub>Z</sub>	03	00	49	3			+1.5		H 02 53 56
		iSNE	03	53		3&C	-2.4	+3.1			h 500 km.
		iE	05	04		3		+1.3			Azimuth N.82°E.
		iSZ	06	22		10			+3.0		(approx.)
		eE	06	22		10					Some evidence of
		i(SS?) <sub>NE</sub>	06	29		8	-2.8	-3.0			surface waves of an
175	" 8	iZ	06	41		10			-9.0		earlier shock on
		F	04	10							Galitz. Z from 03h
		eP?Z	07	10	01	6				105°?	01.4m to 03h 02.7m.
		eZ		10	18	10					Perhaps only a large
		eZ		14	50	20					microseism.
		iSKSN		20	50	8	+2.2				iSKS and iSKKS from
		iSKKS <sub>N</sub>		21	45	8	+1.8				Galitzin N.
		e(PS?) <sub>Z</sub>		23	50	12					
		iZ		24	02	8			+1.5		
		eNE		24	11	20					
		eSS <sub>NE</sub>		30	0	18					
		eLN		42	0	30					
eLE		42	2	30							
176	" 8	MNEZ		47	8	24	0.3	0.2	2.5		
		F	09	50							
177	" 9	eZ	23	35	5	18					A few long waves.
		F	23	45							" " " "
178	" 11	eLZ	19	13	5	24					
		F	19	25							
179	" 12	eN	12	20	41	6					Masked by very
		MZ	23	55							heavy microseisms.
180	" 12	eLZ	06	01	6	32					Masked by heavy
		MNE		05	5	20	0.2	0.3			microseisms,
		MZ		05	57	22			3.0		
180	" 12	eLZ	08	50	1	16					A few long waves.
		F	09	00							(Concluded on next sheet)

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



## RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

## SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			$\Delta$	Remarks
							AN	AE	AZ		
			h	m	s		mm.	mm.	mm.	km.	
181	1942 July 13	iz	00	15	51	5			+1.0		Condensation.
		iz		17	41	5			+1.7		
		eE		25	52	12		0.2			
		eLN		35	.7	18					
		ME		36	29	20		0.2			
		MZ		36	59	20			1.7		
		F	01	00							
182	" 20	eE	15	44	.5	9					
		eLZ		46	.9	22					
		ME		49	00	15		0.1	0.		
183	" 21	MZ		49	03	18			0.9		
		F	16	10							
		eLE	12	42	.7	15					
184	" 22	MZ		45	11	12			0.9		
		F	13	00							
185	" 24	eZ	02	39	.3						Shallow waves.
		F	03	20							
185	" 24	iNE	23	54	24	5	+0.4	+0.5			
		iz		54	26	4			+0.7		
		iN		56	45	6	+0.7				
		iE		56	48	6		-1.0			
		iz		58	28	5			+1.5		
		iNE		58	58	5	-1.2	+1.1			
		iz		59	28	5			+2.5		
		iNE		59	34	5	+2.5	+2.0			
		iE	00	00	22	8		+1.8			
		iN		00	43	6	+2.8				
		iE		01	14	8		+2.6			
		MZ		04	36	10			2.8		
		F	00	30							
		186	" 25	e(P?)Z	06	31	38	8			
iz				31	55	8			+1.8		
eSN				38	52	9	0.4				
iSE				38	55	7		+2.3			
iz				38	58	8			-2.2		
ePSNE				39	21	12					
eLN				44	.7	20					
MN				49	46	15	0.4		3.2		
MZ				52	25	15					
ME				53	06	12		0.4			
F	07			55							
187	" 28	eZ	04	59	.8					A few small waves masked by micros.	
		F	05	05							
188	" 29	iPNZ	22	56	33	6	+0.7		-2.2	4220 (38°0)	Dilatation. Probably North-west New Guinea.
		iPE		56	34	6		-0.5			
		iz		57	24	6			+2.8		
		i(PP?)Z		58	03	8			+5.6		
		iNE		58	08	8	+3.6	-3.7			
		iN	23	01	24	10	-1.5				
		iSE		02	23	13		-2.5			
		i(PcS?)E		02	40	13		+6.6			
		iN		02	46	15	+3.0				
		iSSZ		05	10	12			+10.0		
		SSSNZ		05	42	15	4.2		10.5		
		? E		06	00	12		5.6			
		i(ScS?)N		06	31	9	+7.0				
		eLN		07	.6	22					
		ME1		09	56	20			13.0		
		MN1		10	10	17	14.5				
		ME2		12	08	12			15.3		
MN2		13	28	16	12.7						
MZ		14	25	18			29.2				
MNE4		17	52	14	13.7	18.1					
ME5		19	46	13		21.4					
F	01	00									



# Riverview College Observatory

RIVERVIEW, N.S.W.

## SEISMOLOGICAL BULLETIN

$\Phi = 33^\circ 49' 46''$  S.  $\lambda = 151^\circ 9' 30''$  E.  $h = 26$  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 <sub>0</sub>	c:1	$\frac{r}{T_0^2}$		T <sub>1</sub> (Galv.)	T (Pend.)	$\mu^2$	V <sub>s</sub>
N	1 224	9.3	5.1	0.005	4	12.4	12.3	+0.01	343
	3 137	9.6	4.5	0.012					
E	1 231	9.4	6.5	0.012	4	12.8	13.1	+0.04	305
	3 141	9.4	5.6	0.008					
Z	2 58	5.1	4.9	0.004	4	12.1	12.0	+0.04	259

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			$\Delta$ km.	Remarks
			h.	m.	s.		A <sub>v</sub> mm.	A <sub>E</sub> mm.	A <sub>Z</sub> mm.		
		N.B.	Unless stated otherwise NS & EW readings are from the Wiechert, Z from the Galitzin. The amplitudes given are trace amplitudes only. Jeffreys' Tables (R.A.S. Geophys. Suppl. 4, No. 7) are used for P and S, and the Brunner Depth Chart for deep focus shocks.								
189	1942 Aug. 1	iPNEZ	04	52	45	5	+0.2	-0.5	+1.5	20°42'	Condensation. h 80 km. ca. NS readings from the Galitzin.
		iZ		53	00	6			-1.0		
		iN		53	09	6	-1.0				
		eN		56	18	6					
		iSN		56	26	6	-2.7				
		iE		56	28	6		-1.0			
		iZ		56	30	8			-2.4		
		iN		56	41	8	+2.3				
		iE		56	42	8		+0.5			
		iSSZ		56	55	8			-2.0		
		eLZ		58.1		24					
		ME		59	20	18		0.3			
		MZ		59	25	20			2.2		
190	" 1	F	05	55							
		iPZ	12	38	45	6			-3.0	21°	Dilatation. H 12 34 06 h 75 km. ca.
		iPNEZ		38	47	6	+1.5	-3.9	+1.5		
		ipPNE		39	01	6	+4.0	-8.5			
		iNE		39	16	6	+5.4	+7.5			
		iZ		39	18	6			-15.8		Very similar record to No.189
		iNEZ		39	27	6	-5.0		+14.5		
		iSNZ		42	36	8	+7.8		+8.1		
		iSE		42	39	8		+20.7			
		iZ		42	47	9					
		ME		42	48	8		37.7			
		iSSN		42	57	8	+33.0				
		ME		43	06	8		27.0			
		iE		43	30	8		-18.0			
		eLZ		43.9		24					
		eLE		44.0		24					
		MN		44	50	16	16.5				
		ME		44	54	18		16.3			
		MZ		45	21	18			48.5		
191	" 1	F	Lost in No. 191								
		iPZ	14	37	46	6			+1.0	4680 (42°1')	Condensation.
		ePE		37	48	6					
		iNZ		37	51	6	+0.3		+1.8		
		iPPZ		39	23	9			+2.2		
		eSNE		44	01	10					
		iSNE		44	05	10	-1.0	-4.5			
		iZ		44	08	7			+3.0		
		iSSN		47	01	14	+0.8				

(Continued on next sheet)



SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per.	Amplitude			Δ	Remarks	
							AN	AF	AZ			
			h	m	s	s	mm.	mm.	mm.	km.		
191 cont.	1942 Aug. 1	iz	14	47	07	15			-2.4			
		eLQ?NE			47.7	23						
		eLRZ			49.4	32						
		eLRNE			49.7	28						
		ME			51	30	18		6.5			
		MZ			51	45	20			21.0		
		MN			52	17	16	6.3				
192	" 3	F	17	30								
		eZ	18	57.7		8						Small waves masked by microseisms on Galitzin Z. Dilatation.
193	" 3	eLZ	19	00.3		20						
		F	19	10								
193	" 3	iz	20	15	22	5			-1.3			
		iz		15	53	5			+1.5			
		iE		15	57	5		+0.5				
		eZ		18	53	9						
		MN		21	49	13						
		iNE		25	25	5	+1.0	-1.3				
		MZ		25	28	15			1.2			
194	" 6	F	21	05								
		eZ	18	13.7								
195	" 6	MZ	26	27	16			0.3				
		F	18	45								
195	" 6	iPKPZ	23	55	57	5			+1.0	13450	H 23 37 04	
		ippz		57	15	5&28			-4.5	(121°)		
		ePPE		57	15	5&28						
		iSKSE	00	03	00	14		-1.6				
		eE		04	24	13						
		iSKKSE		04	30	13		-2.0				
		iPSE		07	20	20		+3.7				
		iPSZ		07	23	20			+10.8			
		iPPSZ		08	29	20			+4.6			
		iPPSE		08	37	20		+2.5				
		mEZ		08	56	22		3.7	10.0			
		iSSZ		14	01	26			+3.5			
		eSSE		14	07	32						
		mE		14	44	32			3.6			
		eE		17	17	40						
		iSSSN		17	30	20	-1.0					
		SSSE		18	19	40			1.8			
		eN		21.7		36						
		eLQN		26.0		40						
		ME <sub>1</sub>		33	19	30			9.3			
		MZ <sub>1</sub>		33	26	30				25.2		
		MN <sub>1</sub>		33	42	24		2.1				
		MN <sub>2</sub>		39	41	18		3.0				
MZ <sub>2</sub>		41	37	18				19.8				
MZ <sub>2</sub>		41	51	18			6.3					
196	" 8	F	04	55								
		eLZ	23	32.4		24					On Galitzin Z only.	
197	" 13	MZ		38	47	16			0.2			
		F	00	10								
197	" 13	iPNZ	15	50	19	5	+0.7		-2.0	2920	Dilatation.	
		iPE		50	21	5			-0.5	(26°3)	H 15 44 44	
		ippN		50	53	6	+1.0					
		ippEZ		50	55	6			-0.5	+2.0		
		ippPE		51	10	5			-0.9			
		eZ		54	41	9						
		eSE		54	47	8			0.7			
		eN		54	51	12		1.0				
		iEZ		55	01	9			+1.0	+2.8		
		iN		55	08	12		+2.7				
		SSZ		55	51	12				3.5		
		eLN		57.8		24						
		MZ <sub>1</sub>		59	14	13				6.0		
		ME	16	00	24	11			8.5			
		MZ <sub>2</sub>		01	11	12				9.0		

(Continued on next sheet)

F 17h 20m



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

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
							AN	AE	AZ		
198	1942 Aug. 14		h	m	s	s	mm.	mm.	mm.	km.	
		iNZ	08	20	51	4	-0.3		+1.0		
		iE		25	47	5		+0.8			
		eN		28	16	5					
		iZ		28	19	8			+1.0		
		iE		30	30	4		-0.6			
		iE		32	14	4		-0.7			
		mN		33	13	5	1.6				
		mN		34	30	5	1.9				
		eLN		35.6		13					
		MN		37	08	12					
		MZ		37	17	14			2.8		
199	" 15	F	09	10						Heavy microseisms.	
		iZ	15	09	30	6			+1.0		
		eN		13	57						
		iE		16	10	6		-0.5			
		eN		16	13	6					
		iZ		16	42	8			+1.5		
		iNE		17	15	8	-1.0	+0.8			
		eLZ		18.6		28					
		eLN		18.7		22					
		ME		22	57	12		3.2			
		MZ		23	02	16			4.7		
		MN		24	45	13	1.6				
200	" 16	F	16	30					Heavy microseisms present. NS readings from the Mainka.		
		iZ	11	30	04	4				+1.8	
		iN		33	51	6	+0.5				
		iZ		33	52	6				-2.1	
201	" 17	iNZ		36	55	6	+0.5		1.6	Large microseisms.	
		F	11	55							
		e?Z	05	37.7		6					
202	" 19	eLZ		43.9		39				0.8	
		MZ		45	52	16					
		F	05	55							
203	" 21	eN	06	05.0		5				0.5	
		eLZ		07.8		20					
		MN		08	43	14	0.2				
		ME		09	15	14		0.1			
		MZ		09	22	16					
204	" 23	F	06	25						-1.2	
		eE	12	12	43	6					
		eN		13	46	6					
		iE		14	35	7		-2.5			
		iZ		14	40	6			+2.3		
		MN		15	33	9	2.0				
		ME		17	18	8		2.7			
MZ		19	10	8			3.5				
204	" 23	F	12	35						-1.2	
		iZ	06	48	06	6					
		eLZ	07	19.1		24					
		eN		20.8		25					
		MZ		25	41	18			1.0		
		ME		26	29	18		0.2			
		MN		26	57	16	0.3				
F	08	10									

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No.8 (concluded)

1942, August.

## 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.	
205	1942 Aug. 24	ePz	23	05	53					12780	
		ePKPZ	09	30		11			1.0	(115°)	
		iPPNEZ	10	32		18	-1.1	+0.7	+6.0		
		SKPZ	12	14		13			2.8		
		ePPPNE	13	06		18?					
		iSKSNE	16	19		18	-1.3	+1.2			
		eSKKSNE	17	33		14					
		iSN	18	27		14	+2.0				
		iPSZ	19	51		20			+5.2		
		iPSNE	20	00		23	-4.8	+6.2			
		mNEZ	20	25		23	6.7	9.0	13.7		
		iz	21	23		23?			+15.3		
		e(SS?) <sub>E</sub>	26.0			36					
		iSSNE	26	32		25	-10.0	+8.7			
		iSSZ	26	39		25			+13.0		
		mNE	26	56		25	11.1	21.2			
		mZ	27	13		25			16.4		
		iSSSE	30	43		18		+5.5			
		eLQN	37.6			38					
		eLQE	38.1			31					
		eLRE	43.6			29					
		eIRN	43.7			34					
		MZ <sub>1</sub>	44	40		28			30±		
		ME <sub>1</sub>	47	46		18		14.0			
		MN <sub>1</sub>	49	34		18	14.3				
		MN <sub>2</sub>	55	15		16	20.3				
		MZ <sub>2</sub>	55	21		16			70±		
ME <sub>2</sub>	55	49		16		23.1					
F	04	15									
206	" 25	eLZ	21	13.4		20					Earlier phases masked by microseisms.
		MZ	16	32		17		0.5			
207	" 29	F	22	00							Masked by heavy microseisms.
		iz	01	44	15	5			+2.1		
		iz	46	49		5			-2.4		
		iN	48	07		5	+0.7				
		iE	48	09		5		+0.8			
ieZ	54	05		6		-1.1	+1.3				
208	" 31	F	02	15							Earlier phases masked by microseisms.
		eLZ	20	28.0		24					
		MZ	31	01		17			1.0		
F	20	40									

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



# Riverview College Observatory

RIVERVIEW, N.S.W.

## SEISMOLOGICAL BULLETIN

Φ = 33° 49' 46" S.

λ = 151° 57' 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. Manka Conical Pendulum Seismometer (450 kilo.) (NS, EW)
4. Galitzin Aperiodic Seismometer, with galvanometer registration (NS, EW, Vert.)

	V	T <sub>0</sub>	c:1	$\frac{r}{T_0^2}$		T <sub>1</sub> (Galv.)	T (Pend.)	μ <sub>2</sub>	V <sub>s</sub>
N	1 224	9.5	5.1	0.004	4	12.4	12.3	+0.01	343
	3 138	9.6	4.7	0.012					
E	1 239	9.5	7.3	0.003	4	12.8	13.1	+0.04	305
	3 135	9.6	5.6	0.007					
Z	2 55	5.2	6.8	0.007	4	12.1	12.0	+0.04	259

No.	Date	Phase	Time (G.M.T.)				Amplitude			Δ	Remarks
			h	m	s	s	A <sub>N</sub>	A <sub>E</sub>	A <sub>Z</sub>		
	N.B.	Unless otherwise stated NS & EW readings are from the Wiechert, Z from the Galitzin. The amplitudes given are trace amplitudes only. Jeffreys' Tables (P.A.S. Geophys. Suppl. 4, No. 7) are used for P & S, and the Brunner Depth Chart for deep focus shocks.									
	1942		h	m	s	s	mm.	mm.	mm.	km.	
209	Sept. 5	eN	21	38	26	4					
		eE		44	16	15					
		eLN		45	4	20					
210	" 10	F	21	50							
		eNE	05	02	4	6					Phases before eL are from the Manka.
		eNE		05	45	6					
		eLE		12	0	18					
		eLN		15	2	22					
		ME		16	12	18		0.3			
		MN		16	27	16	0.3				
211	" 11	F	05	25							
		eE	01	57	4						
		ME	03	00	10	7		0.1			
		MN		00	35	7	0.1				
212	" 14	F	02	05							
		iPNEZ	11	35	46	4	-0.4	-0.8	+	21°	h 120 km. ca.
		iZ		35	57	?					
		ipPNEZ		36	08	5	-0.6	-3.0			
		iZ		36	29	10					
		iSNE		39	37	4	-1.8	-3.5			
		iZ		39	39	10			+9.5		
		iN		39	40	9	-12.8				
		iE		39	43	9		+14.2			
		iN		39	57	9	-7.5				
		i(ss?)E		40	22	7		+4.3			
		eN		40	26	18					
		iZ		40	29	10			+7.5		
		iN		46	58	5	-3.1				
213	" 14	F	12	35							
		eN	19	04	59	4					
		iE		05	15	3		-0.7			
		iN		05	55	6	+0.2				
		eLN		07	8	17					
		MN		08	21	12	0.3				F 19h 15m
214	" 15	eE	23	45	0	7					
		eN		48	3	20					
		eZ		48	34	16					
		mN		48	51	18	0.1				
		eLZ		52	1	25					
		ME		54	09	18		0.9			F 00h 45m
		MZ		54	29	18			4.0		

(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.	
215	1942 Sept. 17	e?E	20	06	.4	7					
		eE		06	45	8					
		eN		11	.0	8					
		eLZ		11	.8	20					
		MZ		13	08	20			0.9		
		ME		13	38	18					
		MN		14	07	14		0.5			
		F	20	40							
216	" 20	eE	23	48	20	6					Large microseisms.
		MNE		53	52	10	0.7	0.7			
		F	00	15							
217	" 22	e?Z	01	08	.5	6					Large microseisms present. EW readings from the Mainka.
		e?N		08	.6	8					
		eE		10	28	9					
		eZ		10	36	10					
		eN		15	03	8					
		eZ		15	16	8					
		eE		15	28	10					
		eLZ		25	.3	28					
		eLE		27	.1	24					
		MZ		27	24	22			1.3		
		MN		29	18	18		0.4			
		ME		35	01	18			0.2		
				F	02	25					
218	" 23	eLN	21	27	.0	20					
		eLZ		27	.4	20					
		F	22	00							
219	" 24	eZ	03	49	57	6					
		iNE		58	12		-0.7	+0.5		+1.5	
		iZ		58	17	12					
		eZ	04	08	.3	15					
		eLNZ		12	.1	20					
		MZ		14	49	20				0.9	
		MN		16	22	18		0.5			
		ME		17	00	19			0.5		
		F	04	50							
220	" 25	eNE	08	34	.0	5					
		eE		36	.17	11					
		eN		36	27	6					
		ME		37	00	12			0.3		
		MN		37	07	16		0.5			
		MZ		37	19	16				1.1	
		F	09	00							
221	" 26	eZ	04	21	06	10					
		eZ		30	50	10					
		eLEZ		57	.3	26					
		MZ	05	03	25	20				0.5	
		MN		03	54	20		0.2			
		ME		08	12	18			0.2		
		F	06	00							
222	" 27	e(P?)Z	13	25	28	8					83°?
		e(S?)N		35	52	14					
		eE		36	07						
		eN		37	12	18					
		eZ		37	16	14					
		e(SS?)Z		41	32	18					
		eLZ		52	.3	26					
		MZ		55	48	20				2.4	
		MNE		56	04	20		0.4	0.4		
		F	14	55							
223	" 28	eLZ	16	55	.0	20					
		MZ		56	08	16				0.5	
		ME		57	56	11			0.2		
		MN		58	26	11		0.2			
		F	17	15							

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 <sub>0</sub>	$\epsilon:1$	$\frac{r}{T_0^2}$	T <sub>1</sub> (Galv.)	T (Pend.)	$\mu^2$	V <sub>s</sub>
N	132	9.7	5.2	0.011	12.4	12.3	+0.01	343
E	135	9.6	5.2	0.009	12.5	12.7	-0.08	584
Z	60	5.1	5.1	0.015	12.1	12.0	+0.04	259

No.	Date	Phase	Time (G.M.T.)			Per s.	Amplitude			$\Delta$ km.	Remarks
			h.	m.	s.		A <sub>N</sub> mm.	A <sub>E</sub> mm.	A <sub>Z</sub> mm.		
	N.B.	Unless otherwise stated NS & EW readings are from the Wiechert, Z from the Galitzin. The amplitudes given are trace amplitudes only. Jeffreys' Tables (R.A.S. Geophys. Suppl. 4, No. 7) are used for P and S, and the Brunner Depth Chart for deep focus shocks.									
224	1942 Oct. 6	ePZ	11	56	06	3				3070 (27°6)	Z readings from the Wiechert, NS from the Galitzin and EW from the Mainka.
		iN		56	26	5	+1.0				
		iPPP		57	00	5	-1.7				
		iSN	12	00	43	7	-2.1				
		iSE		00	45	5		+0.2			
		iN		01	00	5	-2.0				
		iSSN		01	49	6	-3.8				
		iE		02	47	6		-0.7			
		eLN		04	.0	25					
		ME		05	24	16		0.7			
		MN		06	31	14	3.0				
225	" 6	F	12	40							
		iPEZ	14	20	55	3		-0.4	-0.3	2500 (22°5)	Dilatation. Z readings from the Wiechert, NS from the Galitzin and EW from the Mainka.
		iSE		24	55	6		-0.9			
		iN		24	57	6	+1.5				
		iE		25	09	6		-2.0			
		iN		26	17	12	+2.5				
		iE		26	34	7		-0.8			
		ME		30	19	13		0.3			
226	" 8	F	15	00							
		iPNZ	20	08	10	6	+1.0		-1.7	2950 (26°5)	Dilatation. All readings from the Galitzin.
		iPE		08	11	6		-1.0			
		eSN		12	40	10					
		iSE		12	41	10		-1.3			
		ME		18	40	16		2.5			
		MZ		19	39	16			2.5		
		MN		20	32	14	1.3				
227	" 9	F	21	15							
		e(P?)	16	13	49	12					All readings from EW and Z Galitzin.
		eZ		13	57	12					
		e(S?)		23	.2	16?					
		eLEZ		37	.1	26					
		ME		42	17	20		2.8			
		MZ		45	16	18			1.8		
228	" 11	F	17	45							
		eE	01	04	55						EW and Z readings from Galitzin, NS from Mainka.
		iE		07	44	7		+1.5			
		iN		07	48	5	-0.4				
		MEZ		11	02	14		2.7	1.8		
		F	01	30							

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

SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per.	Amplitude			Δ	Remarks
							AN	AE	AZ		
229	1942 Oct.20	ePE	h	m	s	s	mm.	mm.	mm.	km. 4650 (50°8)	H 23 21 53 Condensation SE. eP from Galitzin E, other EW & NS read- ings from Mainka, Z from Wiechert.
		iPNEZ	23	30	41	5					
		iNEZ		30	52	7	-0.8	+0.7	+0.6		
		iE		30	59	7	+2.5	-2.0	-1.3		
		iN		32	54	7		-1.6			
		iE		33	04	12	-1.8				
		iE		33	09	7		-2.7			
		iE		35	25	7		-1.5			
		iN		36	19	12	-1.5				
		iE		36	21	7		+1.8			
		iSN		38	04	17	-3.3				
		iE		38	13	11		-5.0			
		ME		38	28	14		7.3			
		MN		38	30	17	7.1				
		ME		38	43	14		6.4			
		MN		38	49	17	7.5				
		iE		40	31	12		-3.4			
		iN		42	09	12	+9.3				
		iN		42	51	12	+8.0				
		eLN		44.2		48					
ME		47	35	19		7.4					
MN		49	33	18	5.2						
F		02	25								
230	" 20	eLE	17	13.5		26				Readings from EW Mainka.	
		ME		20	05	18		0.1			
		F		17	50						
231	" 24	eLE	03	13.2		18				Readings from Mainka.	
		ME		17	15	10		0.3			
		MN		18	21	10	0.2				
232	" 25	F	03	40						Readings from Mainka.	
		eE	09	04.0		8					
		eLE	08.4		22						
233	" 26	ME		12	33	20		0.1		8910 (80°2)	Z readings from Wiechert, NS & EW from Mainka.
		MN		12	40	18	0.1				
		F	09	30							
234	" 28	ePZ	21	21	19					From EW Galitzin.	
		iPN		21	20	5	+0.2				
		iSNE		31	20	7	-0.7	-1.0			
		iPSE		31	44	8		-1.6			
		eLQE		42.8		36					
		eLRN		48.8		28					
		ME	22	01	37	15		0.1			
		MN		01	47	15	0.1				
235	" 28	F	22	45						From EW Galitzin.	
		eE	11	14	31						
		eLE		38.7		30					
236	" 31	ME		42	25	18				From EW Galitzin.	
		F	12	15							
		eE	15	37	54	6					
237	" 31	eLE		46.4		26				From EW Galitzin.	
		ME		48	27	18					
		F	16	05							
237	" 31	eLE	07	37.0		18				From EW Galitzin.	
		ME		39	41	16					
		F	07	55							
237	" 31	eE	11	32	24	7				From EW Galitzin.	
		ME		35	56	16					
		F	11	55							

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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 <sub>0</sub>	c:1	$\frac{r}{T_0^2}$	T <sub>1</sub> (Galv.)	T (Pend.)	$\mu^2$	V <sub>s</sub>
N	1 223	8.3	4.3	0.009	4 12.9	12.8	+0.01	453
	3 153	9.5	10.0	0.026				
E	1 233	8.0	4.6	0.005	4 12.5	12.7	-0.08	490
	3 131	9.7	8.9	0.011				
Z	2 59	5.1	5.0	0.011	4 12.0	12.1	-0.03	400

No.	Date	Phase	Time (G.M.T.)		Per	Amplitude			$\Delta$	Remarks
			h.	m.		s.	A <sub>N</sub>	A <sub>E</sub>		
N.B.			The Amplitudes given are trace amplitudes only. Jeffreys' Tables (R.A.S. Geophys. Suppl. 4, No. 7) are used for P and S, and the Brunner Depth Chart for deep focus shocks.							
1942			h	m	s	s	mm.	mm.	mm.	km.
238	Nov. 1	eE	08	02	14	7				From EW Galitzin.
		ME		15	09	14		1.0		
		F	08	30						
239	" 1	eE	09	50	.8	8				A few small waves on EW Galitzin.
		ME		52	50	11		0.5		
		F	09	55						
240	" 1	eE	10	18	.9	8				From EW Galitzin.
		eLE		27	.8	15				
		ME		31	44	12		1.0		
		F	10	45						
241	" 2	eE	02	06	.6	10				From Galitzin.
		F	02	20						
242	" 2	eE	22	54	.7					From Galitzin.
		i?E		55	23					
		ME		58	50	16				
		F	23	15						
243	" 3	eE	00	06	31	8				NS readings from Mainka, EW from Galitzin.
		iE		06	41	6		+2.0		
		eLE		13	.8	27				
		MN		18	01	12	2.2			
		ME		18	22	16		17.6		
		F	02	05						
244	" 4	eE	09	35	.9	10				From the Galitzin.
		ME		38	38	15		1.5		
		F	09	45						
245	" 4	eLE	13	00	.2	14				From the Galitzin.
		ME		01	31	12		1.0		
		F	13	15						
246	" 5	i(S?)E	01	35	44					From the Galitzin.
		eLE		37	.9					
		F	01	45						
247	" 5	iPNE	11	31	43	5	+0.5	+0.5	2420	From Wiechert.
		iNE		31	51	5	+0.8	+0.9	(21°8)	
		iSN		35	37	3	-1.5			
		iSE		35	40	3		-2.0		
		mN		35	44	8	3.6			
		mE		35	49	8		5.3		
		eLE		37	.3	24				
		ME		38	47	18		0.8		
		MN		39	24	13	0.8			
		F	12	10						

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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			
248	1942 Nov. 7	eN	07	39	28						Obscured by very heavy microseisms.  Readings from the Wiechert.		
		eE		39	31								
		eE		44	39								
		iE		48	58	4		-1.5					
		ME		52	14	9		3.9					
		MN		52	24	8	7.4						
249	" 9	F	08	40							RW readings from Galitzin, NS from Wiechert.		
		eE	04	04	30								
		iE		04	34	8		+1.5					
250	" 9	iE		08	03	10		-1.0			Readings from Wiechert.		
		F	04	40									
		eE	10	41	32								
251	" 10	eLNE		47	.9	18					Condensation. H 11 41 23  All readings from Wiechert.		
		MN		50	23	14	0.4						
		ME		52	45	18		0.8					
		F	11	25									
		iPNEZ	11	53	47	6	+1.1	+0.2	+0.3	9240			
		iNEZ		54	35	7	-4.1	-2.0	-0.9	(83°1)			
251	" 10	iN		56	00	9	+3.4				All readings from Wiechert.		
		iE		56	05	7		-2.0					
		iPPE		56	42	7		+3.7					
		iN		59	35	10	+2.6						
		iSNE	12	04	03	12	-15.0	+13.1					
		mNE		04	16	14	19.7	18.6					
		iPSNE		04	48	24	+13.6	+10.5					
		iSSNE		09	12	25	+11.0	+8.6					
		iSSSN		12	56	20	+6.1						
		eLQN		14	.4	55							
		eLQE		14	.5	52							
		LNE		15	48	36	10.0	22.0					
		LNE		16	24	36	10.0	28.8					
		ME		18	45	19		32.3					
		252	" 12	MZ	21	13	25			3.8			From Galitzin.
				MN	21	18	23	56.5					
eE	13			36	.2	90ca							
253	" 12	F	16	10						From Galitzin.			
		eE	05	25	.3								
253	" 12	eLE		50	.1	36				From Galitzin.			
		F	06	30									
		eE	15	57	00	12							
		eE	16	03	30	14							
254	" 14	eLE		22	.9	28				Masked by very heavy microseisms. From Wiechert.			
		ME		28	35	20		1.2					
		F	18	00									
		i(S?)E	05	31	28	7		+0.7					
		eLE		33	.8	29							
		ME		37	56	132		2.5					
255	" 15	F	06	25						Preceded by heavy microseisms. Readings from Wiechert.			
		iNE	17	32	25	7	-1.0	-1.4					
		iE		32	47	7		-1.5					
		iE		35	20	7		-1.2					
		eE		42	31	15?							
		MN		50	29	22	0.9						
256	" 17	ME		50	55	18		0.5		Readings from Wiechert.			
		F	18	50									
		i?E	10	06	50	6							
		iE		09	21	6		-0.5					
		eLN		15	.2	20							
		MN		19	03	13	1.0						
257	" 19	ME		19	23	17		0.8		Readings from Galitzin.			
		F	11	15									
		eE	09	29	40	6							
		eLE		53	44	25							
		ME	10	11	04	18		0.7					

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No.11 (concluded)

1942, November.

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.		
258	1942 Nov.21	eN	15	13.5	16				Small amplitudes. Readings from Galitzin.		
		ME	19	19	18						
		MZ	19	23	18						
		MN	19	50	16						
		F	19	25							
259	" 21	iZ	19	23	59	4		+1.0	Small waves masked by microseisms on Galitzin.		
		MNE	19	26	45	8	0.8	1.5			
260	" 22	eE	09	57.3	12				Readings from Galit- zin. Small and mask- ed by heavy micro- seisms.		
		eN	09	57.4	12						
		MZ	09	59	37	12		1.1			
		MN	09	59	41	12	1.3				
		F	10	10							
261	" 22	iPZ	16	09	17	7			3060 (27°5)	Dilatation. Readings from Galit- zin. Masked by heavy microseisms.	
		iPN	16	09	18	7	-0.8				
		iPPNZ	16	10	01	8	+1.8	+1.8			
		iSE	16	13	54	9		+1.5			
		iN	16	13	59	8	+2.1				
		iSSE	16	14	45	18		+2.5			
		iN	16	14	53	14	+2.0				
		mNE	16	15	13	16	3.0	4.8			
		ME	16	17	31	12		7.7			
		MNZ	16	18	43	12	8.1				7.5
		F	16	17	50						
262	" 25	MZ	02	17	37	20			On Galitzin N & Z only.		
		MN	02	17	50	20	1.2				
		F	02	50							
263	" 25	eLN	13	57.3	18				Masked by heavy microseisms. On Galitzin N & Z.		
		MZ	13	14	00	49	12	1.0			
		MN	13	14	01	05	12	1.0			
		F	13	14	10						
264	" 26	eN	10	10.3	15				Masked by heavy microseisms. On Galitzin N & Z only.		
		eLZ	10	14.7	18						
		MN	10	16	16	14	1.2				
		MZ	10	19	03	15		1.1			
		F	10	30							
265	" 26	ePZ	14	39	55	6			2870 (74°4)	Condensation. Focal depth prob- ably about 150 Km.	
		iPNZ	14	39	59	6	-1.8	+5.2			
		i(pP?)E	14	40	33	6	+3.0	+1.3			
		iSN	14	40	29	6		+2.8			
		iSE	14	49	31	8		+2.8			
		iEZ	14	49	33	10		-7.5			-1.0
		iN	14	49	43	14	+2.5				
		iZ	14	50	02	22					+2.2
		iE	14	50	12	12		+10.5			
		iNZ	14	50	26	12	+2.5				+2.0
		eLE	15	01.6	30						
		MZ	15	07	20	18					1.8
		MN	15	09	03	18	2.0				
		ME	15	11	57	20		1.6			
		F	15	16	05						
266	" 27	eLN	05	13.7	22				Readings from Wiechert.		
		MNE	05	17.6	12	0.2	0.2				
267	" 28	i(PKP)Z	10	58	37	6			NS & Z readings from Galitzin, EW from Wiechert.		
		eN	10	58	43	6		+1.0			
		iN	11	12	53	16	+2.0				
		iN	11	22	08	20	+2.5				
		eLE	11	42.2	30						
		MN	12	01	43	20	7.0				
		MEZ	12	01	47	20		1.0		9.5	
F	12	13	30								
268	" 30	eN	05	02.7					From Galitzin.		
		MZ	05	06	37	24		1.0			
		MN	05	06	45	22	0.9				
		F	05	05	15						

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

# Riverview College Observatory

RIVERVIEW, N.S.W.

## SEISMOLOGICAL BULLETIN

Φ = 33° 49' 46" S.

λ = 151° 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 <sub>0</sub>	ε:1	$\frac{r}{T_0^2}$		T <sub>1</sub> (Galv.)	T (Pend.)	μ <sub>2</sub>	V <sub>s</sub>
N	1 215	8.2	4.3	0.007	4	12.9	12.8	+0.01	455
	3 144	9.5	7.5	0.029					
E	1 234	8.1	4.2	0.006	4	12.5	12.7	-0.08	490
	3 134	9.7	8.5	0.011					
Z	2 69	5.1	5.7	0.004	4	12.0	12.1	-0.03	400

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
			h.	m.	s.		A <sub>w</sub> mm.	A <sub>E</sub> mm.	A <sub>Z</sub> mm.		
269	1942 Dec. 2	iPZ	00	18	44	5			-1.5	2410 (2197)	Dilatation Very heavy micro- seisms present. Z readings from Gal- itzin, NS & EW from Wiechert.
		ePNE		18	44	5					
		iNEZ		18	54	6	-1.0	-1.6	+5.2		
		iSN		22	37	7	-3.5				
		iSE		22	38	7		-3.5			
		i(PcP?)Z		22	42	8			-7.3		
		iSSN		23	03	9	+1.5				
		eLNZ		23	06	24					
		MN		24	38	14	2.7				
		ME		25	00	16		2.2			
MZ		25	28	18			8.4				
F		01	45								
270	" 2	e?Z	16	23	26						Z readings from Gal- itzin, NS & EW from Wiechert.
		eN		28	04	12					
		eLN		31	9	26					
		ME		33	50	14		0.3			
		MZ		34	36	18			1.7		
		MN		34	41	18	0.3				
		F		17	10						
271	" 3	iZ	01	21	53	4			+1.2		Z readings from Gal- itzin, NS from Wiech- ert.
		e(L?)Z		32	9	20					
		MN		43	14	20	0.2				
		MZ		45	44	20			1.0		
		F		02	05						
272	" 4	eLN	12	04	7	20					NS readings from Wiechert, Z from Galitzin.
		MZ		07	17	16			0.4		
		MN		08	00	14	0.1				
		F		12	20						
273	" 4	iPNZ	15	31	24	10	+0.9		-0.9	3060 (273)	Dilatation. NS & Z readings from Galitzin, EW from Wiechert.
		iSN		36	00	16	-3.5				
		iZ		36	18	16			+2.8		
		mN		36	38	22	12.3				
		mZ		36	44	26			4.6		
		eLN		39	6	30					
		MN		41	09	22	13.0				
		MEZ		41	4	23		1.3	11.6		
		F		17	15						

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N.B. The amplitudes given are trace amplitudes only. Jeffreys' Tables (R.A.S. Geophys. Suppl. 4, No. 7) are used for P and S, and the Brunner Depth Chart for deep focus shocks.



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.		
274	1942 Dec. 5	eN	14	53	48	6					NS & Z readings from Galitzin, EW from Wiechert.	
		iE		54	20	7		-0.5				
		iN		54	22	6	+1.5					
		eN	15	01	51	14						
		eLN		11	9	23						
		MZ		14	40	13			0.4			
		MN		18	20	24	0.5					
		F	15	40								
275	" 6	iPZ	15	45	59	5			+1.4	3050 (27.4)	Condensation. Masked by micro-seisms. NS & Z readings from Galitzin, EW from Wiechert.	
		iSN		50	39	11	-1.8					
		eLN		52	1	22						
		MN		53	37	16	2.9					
		ME		54	03	12		0.8				
		MZ		55	39	9			3.0			
		F	16	45								
		eN	02	43	8	12						
276	" 9	F	02	50							Small waves on Galitzin N only.	
		eN	02	43	8	12						
277	" 9	iE	22	43	14	7		-1.2			All readings from Galitzins.	
		iN		43	17	7	+2.5					
		iN		44	01	7	-2.5					
		iNE		46	23	9	+2.0	+1.9				
		eLN	23	02	6	30						
		ME		07	54	22		0.9				
		MZ		08	58	22			1.0			
		MN		09	05	22	1.1					
278	" 11	F	00	15							All readings from Galitzins.	
		eLN	03	48	4	28						
		eLZ		48	6	28						
		MZ		54	33	22			0.8			
		ME		56	46	20		0.8				
		MN		56	54	20	0.6					
279	" 11	F	04	15							A few waves on Wiechert E only.	
		eLE	21	58	0	13						
280	" 12	F	22	00							All readings from Galitzins.	
		eN	17	09	38							
		MN		12	14	16	0.5					
		ME		12	26	14		0.7				
281	" 13	MZ		13	00	16			0.5		Obscured by micro-seisms. Z readings from Galitzin, NS & EW from Wiechert.	
		F	17	25								
		i?Z	19	20	34	6			-1.2			
		eN		20	46	12						
		iNZ		22	25	10	-0.5		+1.6			
		eN		26	37	18						
		eE		27	02	12						
		eLQ?N		32	5	36						
eLR?N		35	9	24								
282	" 14	ME		40	44	18		0.6			A few shallow waves on Galitzin E.	
		MZ		40	59	16			5.5			
283	" 15	F	20	25							All readings from Galitzins.	
		eLE	16	14	3	16						
284	" 15	F	16	20							From Galitzins.	
		eNZ	03	42	22							
		eLZ		50	2	20						
		MZ		52	09	16			0.4			
		ME		52	43	16		0.4				
285	" 15	F	04	00							From Galitzins.	
		eN	09	19	9							
		eLNZ		23	2	18						
285	" 15	F	09	30							From Galitzins.	
		eZ	09	39	30	12						
		eNE		39	41	12						
		eE		46	27	18						
		eLEZ	10	06	1	26						
		MZ		11	19	20			1.0			
		ME		11	25	20		0.9				
MN		11	55	20	0.6							

(Continued on next sheet)

F 11h 20m

## RIVERVIEW COLLEGE OBSERVATORY,

RIVERVIEW, N.S.W.

## SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)	Per	Amplitude			Δ	Remarks
					AN	AE	AZ		
286	1942 Dec. 16	eN	09 30.1	3				km.	Readings from Galitzins.
		MZ	35 35	16			0.6		
		MNE	35.5	15	0.6	0.5			
287	" 17	F	09 45					2660 (24°0)	Condensation. Readings from Galitzins.
		iPNZ	01 13 34	6	+1.4		+1.5		
		iE	13 52	9		-1.0			
		iNZ	13 56	9	+2.4		+3.1		
		iSE	17 46	12		+3.8			
		iN	17 57	7	-2.7				
		SSNE	18 13	8	9.0	5.8			
		iLN	18 59	20	+7.5				
		iLZ	19 01	20			+4.0		
		MN1, ME	21.6	10	14.4	12.3			
		MZ	22 25	10			9.0		
288	" 17	MN2	24 18	9	22.5			Lost in No. 288	Masked by Coda of No. 287. Readings from Galitzins.
		F	02 11 55	3					
		eN	18.3	24					
		eLNZ	20 00	13		2.3			
		ME	20 16	16			1.5		
		MZ	20 50	10	2.6				
289	" 17	MN	03 25					Readings from Galitzins.	
		F	06 17 10	6		-0.8	-0.8		
		iEZ	21 37	7		-1.1			
		iE	21 40	6			+1.0		
		iZ	21 42	6	+1.2				
		iN	23.5	18					
		eLN	24 30	12		2.3			
		ME	24 38	20			1.0		
		MZ	26 14	12	2.1				
		MN	07 05						
290	" 17	F	20 45.7	16				Readings from Galitzins.	
		eLN	49 56	14	0.9				
		MN	50 59	16		0.4			
		ME	51.10	18			0.6		
291	" 18	F	21 40					On Galitzin N only.	
		eLN	17 11.8	12					
		MN	12 59	12	0.4				
292	" 18	F	17 25					Readings from Galitzins.	
		e?Z	21 33 41						
		eN	38 18	10					
		eLN	41.1	16					
		MN	42 23	12	0.8				
293	" 19	MEZ	43.7	16		0.9	0.9	Readings from Galitzins.	
		F	22 00						
		eZ	00 42 52	8					
		eN	46 56	13					
		eLZ	49.5	24					
		MN	51 25	16	1.1				
294	" 19	MZ	51 30	20			1.4	e(P?) from Wiechert, all other readings from Galitzins.	
		F	01 30						
		e(P?)N	23 21 25	?					
		i(PcP?)Z	21 57	9			+2.0		
		iZ	23 23	8			+2.5		
		eN	29 56	10					
		iSN	30 14	12	+2.5				
		iSE	30 16	12		+4.5			
		MZ1	47 36	18			6.5		
		MN1	47 41	18	7.0				
		ME	48 41	19		8.3			
295	" 20	MN2, MZ2	49.9	18	12.3		12.2	A few long waves on Galitzins.	
		F	02 50						
		eL	11 57.6	18					
		F	12 05						

(Continued on next sheet)



## SEISMOLOGICAL BULLETIN.

No.	Date	Phase	Time (G.M.T.)			Per	Amplitude			Δ	Remarks
							AN	AE	AZ		
			h	m	s	s	mm.	mm.	mm.	km.	
296	1942 Dec.20	eEZ	14	24	26	8					All readings from Galitzins.
		iEZ		25	43	8		-1.1	-1.5		
		eN		25	43	8					
		iNE		29	29	10	-0.7	+1.5			
		e(SSS?)E		45	34	28					
		eLN		56	5	40					
		eLRN	15	02	1	40					
		MN1		08	43	26	7.5				
		MN2		11	23	26	7.8				
		ME, MZ1		12	2	25		7.5	7.0		
		MZ2		17	51	22			7.8		
		297	" 21	F	17	30					
eLZ	05			40	4	24					
ME				41	33	18		0.8			
MN				41	53	18	0.6				
MZ				42	25	18			0.7		
298	" 22	F	05	55						3990? All readings from Galitzins. (35°9?)	
		ePEZ	04	21	40	7					
		iEZ		21	59	7		-1.2	+1.5		
		iPPEZ		23	08	6		+1.5	-1.0		
		iNE		23	37	6	+1.5	+2.5			
		iZ		23	37	6			+2.5		
		iZ		24	17	6			+2.8		
		iN		24	43	7	+1.5				
		iZ		24	46	7			+1.7		
		iE		27	01	7		+2.0			
		i(S?)N		27	15	12	-1.8				
		iE		27	21	12		+2.5			
		i(SS?)N		30	10	15	-6.0				
		eLN		31	3	24					
		MN		34	23	12	11.0				
MEZ		37	2	18		9.4	7.5				
299	" 22	F	06	15						3290 Condensation. (29°6?) All readings from Galitzins.	
		i(P?)Z	16	27	08	5		+1.3			
		eN		27	08	5					
		i(S?)NE		32	00	8	-1.0	+1.0			
		i(SS?)N		33	27	12	-2.0				
		iE		34	41	10		+1.5			
		eLZ		35	6	32					
		ME		39	15	12		3.5			
300	" 23	MNZ		40	7	15	4.3		4.3	All readings from Galitzins.	
		F	17	20							
		iNZ	10	11	43	8	+1.0		-1.0		
		eLN		15	9	20					
		ME		17	30	15		0.9			
		MN		17	56	19	0.8				
301	" 23	MZ		18	01	18			1.0	2980 All readings from Galitzins. (26°8)	
		F	10	30							
		ePZ	14	04	49	10					
		iPN		04	51	12	+1.0				
		iZ		05	00	12			+2.3		
		iPPN		05	29	14	+2.0				
		iZ		05	36	12			+2.5		
		PPPN		05	47	14	2.7				
		iSZ		09	20	8			+2.0		
		iSN		09	26	12	-6.5				
		iZ		09	53	14			-7.5		
		mNE		10	01	15	12.8	3.3			
		SSNE		10	26	20	6.1	4.5			
		mE		12	16	10		13.3			
		eLN		15	1	26					
MZ		15	46	18			14.4				
MNE		15	52	15	19.2	22.8					
F	15	35									

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No.12 (concluded)

1942, December.

 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.		
302	1942 Dec.26	iz	12 54 22	6			+1.0	Condensation. All readings from Galitzins.	
		eE	54 38	6					
		eE	13 03 56	12					
		eLE	35.1	24					
		eLZ	35.5	22					
		ME	42 00	18		0.5			
		MZ	42 28	18			0.5		
		MN	46 28	18	0.4				
		F	14 40						
		303	" 27	eZ	16 50 47	9			
iE	59 24			9		-1.7			
iN	59 28			9	+2.5				
ME	17 00 47			16		1.5			
eLN	13.8			22					
ME	16 52			18		1.5			
MN	19 06			18	1.3				
MZ	21 58			16			1.5		
F	18 10								
304	" 29			eLE	11 32.7	22			
		MZ	34 03	18		0.5			
		ME	34 29	18		0.5			
305	" 29	F	11 40					Masked by micro- seisms. Readings from Gal- itzins.	
		eLE	23 48.2	28			0.7		
		MZ	50 29	22		0.8			
		ME	50 35	22					
306	" 30	MN	52 09	20	0.6			Masked by micros. Readings from Gal- itzins.	
		F	00 30						
		MNE	02 43 58						
307	" 30	F	03 00					Masked by micros. Readings from Gal- itzins.	
		eN	04 26 45	12					
		MNE	30 26	18	0.4	0.7			
308	" 31	MZ	31 38	16			0.4	Condensation.  Readings from Gal- itzins.	
		F	04 45						
		iz	12 23 45	10			+1.0		
		eLE	13 19.8	24					
		eLZ	22.3	24					
		ME	30 01	20		0.5			
		MN	32 30	20	0.6				
309	" 31	MZ	32 54	20			0.5	Preliminaries ob- scured by micro- seisms. Readings from Galitzins.	
		F	14 25						
		i(S?)N	19 05 28	12	-1.0				
		eLE	08.0	28					
		ME	11.38	18		2.5			
		MZ	11 56	16			1.8		
310	" 31	MN	13 27	16	2.1			Masked by micro- seisms. Readings from Galitzins.	
		F	19 45						
		eLN	20 38.9	20					
		ME	52 40	18		0.5			
		MN	53 40	18	0.5				
MZ	54 09	18			0.5				
F	21 15								

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