

(Months mixed up.)

MELBOURNE OBSERVATORY

SOUTH YARRA S.E.1 VICTORIA

Seismological
Bulletin No.41

Milne-Shaw Seismograph No.41 E-W Component.

Period 12 secs. Damping ratio 20 : 1. Tilt 1" = 43.4mm.

Universal

Date	Time	Phase	A	t	Remarks
1938	h m s		u	s	
Jan. 1	16 26ca 31.6	e M	vs 6	8.5	no recognised phases
	1 23 47 0	i			minute traces earlier
	54 23	i			
	57 20	e			waves of longer period
	22 0 1.5 4.7	e L			
	5.2	m	12	20	record lost from 17h45m to 23h5m
	23 21 23 18	e	vs		
	→ 28 43	i			
	28 43	i			
	31 6	i			
	32 10?	L			
	35.1	M	15	15	
	7 15 34 10?	e	vs		record underexposed
	38 53	S			
	41 33	L			
	46.6	M	120	16	
	11 15 32 40	i	s		
	43.9	L			
	47.9	m	7	15	
	12 2 42 44	e	vs		
	43.4	L			
	46.4	M	8	16	
	12 11 35 35	e	vs		
	39 27	L			
	41.7	M	8	16	
	13 3 28 57	i	vs		
	30.5	L			
	32.6	M	6	18	
	13 10 25b20	i	vs		
	28 50	L			
	31.9	M	5	10	
	16 14 8 35	e	vs		
	13 12	i	vs		
	13 50	i			
	20 20	L			
	23.0	M	8	11	

MELBOURNE OBSERVATORY

SOUTH YARRA S.E.1 VICTORIA.

Seismological
Bulletin No. 41 contd.
Universal

Date	Time	Phase	A	t	Δ	Remarks
1938	h m s		μ	s	'	
Jan. 18	2 53 33	i	7	22		
	57.5	M				
18	4 29 18	i	vs			
	36 18	i				
	40 5	i				
	47.2	L				
	53 15	M	10	15		
22	15 42 32	i	s			
	45 23	i				remainder insignificant
23	8 45 2	iP	vs			
	48 12	e	vs			
	55 12	S		81.0		
	55 48	PS				
	9 0 19	SS				
	6 58	e				
	9 10	L				
	14 2	M	28	22		
24	10 44 22	P				possible correction of -1sec. to
	54 23	S				78.8 all phases
	54 52	i				
	54 45	i				
	55 33	i				
	59 40	SS				
	11 5 4	I				
	22.0	M	57	17		
25	17 0 3	iP				
	1 33	i				
	5 4	S		30.3		
	5 50	m	27	20		
	7 51	L				
	11.0	M	108	21		
28	4 32 35	e	vs			obscured by micros
	37 4	e	vs			
	40.2	m	4	13		
30	17 17 55	i	vs			
	20 11	i	vs			
	23 50	i	vs			
	29 15	L	s			
	33.3	M	5	13		
Feb. 1	19 11 10	i				small
	11 13	P				very intense disturbance. Owing to large amplitudes and to overlapping between succeeding lines, no further phases can be identified.

MELBOURNE OBSERVATORY

SOUTH YARRA S.E.1 VICTORIA

Seismological
Bulletin No 41 contd
Universal

Date	Time	Phase	A	t	Δ	Remarks
1938	h m s		μ	s	°	
Feb. 5	2 43 56	i	s			obscured by micros
	44 45	i	s			
	45 51	i	s			
	46 30	i	s			
	51 30	i	s			
	54 57	i	s			
5	3 2 15	i	s			may be continuation of previous
	3 13	e	s			
	4 30	i	s			
5	10 11 58	i	s			followed by long train of small irregular waves
	24.5	M	7	15		
6	7 19 57	i	s			
	22 12	i	s			
	22 31	i	s			
	24 47	i	s			
	25 11	L				
	27.1	M	13	17		
6	18 31 23	e	vs			
	35 14	i	vs			
	36 30	i	vs			
	40 41	L				
	41.1	M	7	20		
7	1 27 30	i	vs			barely discernible
	31 54	e	s			
	34 10	i	vs			
	37.2?	L				
	41.3	M	11	13		
13	8 9 43	P				times of all phases may need to be corrected by the same number of minutes
	10 22	i				
	14 21	e				
	14 57	i				
	16 36	i				
	17 7	L				
	20.5	M	100	17		
22	5 52 13					
	54 36	i	vs			
	57 21	i	vs			
	58 57	i	s			
6	0.3	m	6	10		
	2.3	m	7	10		
22	6 15 19	i				previous still recording
	16 5	i				
	18 0	e				
	19 30	L				
	21.7	M	50	12		
27	11 29.4	e	vs			followed by shallow waves, without distinct features.

MELBOURNE OBSERVATORY

SOUTH YARRA S.E.1 VICTORIA

Seismological
Bulletin No. 41 contd.

Date	Time	Phase	A	t	Δ	Remarks
1938	h m s		μ	s	°	
Mar. 4	7 45 5	i	vs			without distinct features
	50 7	e	vs			
	52 28	i	s			
6	2 8 35	e	vs			
	10 52	e	vs			
	12 28	i	s			
	14 2	i				
	15.3	M	12	16		
8	5 43 10	e	vs			
	47 12	e	s			
	51 18	i				
	52 0?	L				
	55.3	M	84	13		
9	2 12 6	i	vs			
	16 5	e	s			
	19 18	L?				
	25.2	M	10	11		
10	16 36 10	i	s			
	36 30	i	s			
	39 30	e				remainder insignificant
21	1 33.7	e	vs			barely perceptible
	37 50	i	vs			
	41.5	L				
	45.3	M	6	16		
22	15 42 0	e	vs			
	47 53	i	vs			
	49 0	i	vs			
	51 52	i	s			
	57 16	e	s			
	16 16	L				
	19.4	M	14	21		
24	20 4 40	P				felt in N.E. Victoria and Riverina
	5 15	S				3.1 M.S.W.
	5 30	L				
	5 34	M	6.5mm	on trace		
25	15 58 39	i	vs			PPP
	16 3 6	i	s			S
	6 13	i	s			SS
	7 6	e				SSS
	9 3	i				
	10 58	L				
	11.8	M	23	17		

J. M. Baldwin.

J. M. Baldwin,

Government Astronomer.

Small and insignificant disturbances recorded as follows:-

Jan. 16d 9h; 19d 15h; 22d 18h; 25d 16h; 26d 3h.

Feb. 2d 9h, 15h; 3d 0h; 5d 20h, 21h; 8d 6h, 8h, 15h; 17d 5h; 22d 13h; 25d 19h.

Marr. 1d 16h; 2d 20h; 3d 18h; 6d 17h; 8d 20h; 14d 1h; 30d 3h.



Date	Universal Time			Phase	A	t	Δ	Remarks
	h	m	s					
1938								
June 20	15	20	48	i	vs			
		23	17	i	vs			
		26	.2	L				
		28	.2	M	17	20		
	21	0	15 11	i	s			
			22 44	e	s			
			45.8	L				
			52.5	M	2	10		
22	23	21	12	e	vs			
		24	38	i				
		32	7	L				
		32	.7	M	3	13		
23	13	1	20	P.				
		1	47	S			25.8	
		5	43	S				
		6	.3	M	74	17		
		8	33	M				
		10	.3	M	63	19		
29	9	53	50	i	vs			
		58	0	i	s			
	10	2	13	i	s			
		3	4	L				
		8	.6	M	6	19		
29	18	53	34	i	s			
		59	50	i	s			
	19	0	37	i				
		1	28	i				
		3	50	L				
		15	.7	M	13	16		
30	16	50	18	e	vs			possible traces earlier
		50	49	i				
		55	9	S				
		56	8	i				
		58	30	i				
		59	15	L				
	17	0	.0	M	22	16		



Small and insignificant disturbances were recorded as follows:-

Apr. 7d 10h; 13d 3h; 11h, 18h; 17d 4h, 15h; 21d 16h; 23d 0h; 29d 19h.
 May 1d 19h; 6d 19h; 11d 23h; 14d 12h; 15d 0h, 4h; 17d 8h; 18d 14h; 20d 4h;
 22d 11h, 21h; 23d 15h, 22h; 24d 5h; 26d 3h, 4h; 28d 17h.
 June 11d 10h, 17h; 12d 5h; 13d 13h; 14d 2h; 21d 6h; 24d 0h; 30d 21h.
 Small and very small amplitudes denoted by "s" and "vs".

J. M. Baldwin.

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MELBOURNE OBSERVATORY

SOUTH YARRA S.E.1 VICTORIA

Seismological
Bulletin No.42 contd.

Date	Universal Time			Phase	A	t	Δ	Remarks.
	h	m	s					
1938								
June 11	17	45	20	e	s			similar to preceding which is still recording
		46	15	e	s			
		47.3		m	4	15		
12	7	57	13	i	vs			
		59	58	e	vs			
	8	2	40	e	s			
		3	20	e	s			
		8.7		M	6	12		
13	3	18	20	e	vs			
		20	40	i	s			
		21	45	i	s			
		22	30	i	s			
		24	48	i	s			
13	3	27	43	i	s			previous still recording
		31	57	i	s			
		34	54	i	s			
		36	17	L				
		38.8		M	21	17		
-13	7	8	33	i	vs			
		15.3		L	s			
		19.5		M	6	13		
-15	12	46	28	P	o			
		51	2	S		26.6		
		55	20	L				
		55.4		M	17	17		
-15	20	19	23	i	s			
		23	55	i	s			
		28	0	i	s			
		41.4		M	9	12		
-16	2	2	56?	e	s			
		6	3	i	s			
		12	15	i	s			L?
		14.5		M	4	17		
16	2	26	14	P	s			probably deep
		28	38	i	s			
		34	58	S		65.5		
		42	59	i				
		47	50	e				no large surface waves
		50.2		m	43	19		
-16	11	55	53	i	vs			
		57	0	i	s			
		58	50	L?				
		59.7		M	3	13		

Seismological
Bulletin No.42 contd.

Date 1938	Universal Time			Phase	A	t	Remarks
	h	m	s				
May-23	8	40	12	S			somewhat like preceding, which is still recording
		47	30	i			
		51	2	i			
		55.3		M	55	20	
27	20	12	18	i	vs		
		20	7	L?	vs		
		21.2		M	3	14	
-30	14	35	34	eP	s		strong
		35	42	iP	s		
		35	49	i			
		40	14	S		27.4	
		40	48	m	235	16	
		42	15	i			
		44	27	i			
	45.2		M	411	20		
30	19	51	22	i	s		
		52	44	i	s		
		56	2	i	s		
June 1	5	46	7	i			superposed on large micros.
		46	50	L			
		47.4		M	12	11	
2	10	41	18	e	vs		
		43	30	e			
		45	6	L			
		47.2		M	11	12	
8	8	29	23	i	vs		obscured by micros.
		31	10	i			
		31	14	m	6	10	
-9	19	22	34	iP			33.4
		24	0	PP			
		28	28	S			
		33	35?	L			
		40.3		M	441	20	
-10	10	4	36	P			68.0
		5	2	i			
		13	34	S			
		25	4	L			
	32.2		M	185	19		
10	18	55	53	e	vs		
		57	32	L			
		59.3		M	14	15	
11	17	5	55	e	vs		
		8	38	e	s		
		9	30	e	s		
		10.7		m	5	15	

MELBOURNE OBSERVATORY

SOUTH YARRA S.E.1 VICTORIA.

Seismological
Bulletin No. 22 contd.

Date 1938	Universal Time			Phase	A μ	t s	Δ °	Remarks
	h	m	s					
May 16	1	16	23	e	vs			minute traces earlier
		17	14	i	s			
		20	16	e	s			
→16	7	17	32	e	vs			
		19	5	i	s			
		21	15	S				
		23	38	L				
		26.5		M	64	11		
16	15	45	53	i	s			
		49	0	e	s			
19	15	32	53	S				
		32	58	i				
		34	40	L				
		35.3		M	29	10		
19	17	16	39	eP				very small
		16	43	iP				" "
		16	57	i				strong movement
		18	33	i				PP or PFP
		23	18	S				45.3 from S - eP
		26.3		SS				
		30ca		L				
		33		M				96mm on trace; some turning points off paper
→20	7	26	33	i	vs			
		28	19	i	s			
		28	33	is.	s			
		31	28	e	s			
		32	53	L	s			
		35.2		M	4	13		
→22	7	51	42	e	vs			
		56	18	S				well marked
		56	38	i				
		58	14	i				
		59	24	L				
	8	1.3		M	22	18		
→22	8	32	35	S				similar to preceding which is still recording
		32	54	i				
		36	50	L				
		37.6		M	31	19		
23	7	30	47?	eP	vs			
		39	36	S				66.3? from S - eP
		39	53	PS				
		40	24	SoS				
		44	12	SS				
		47	53	i				
		50	40	L				surface waves not prominent.

Date	Time	Phase	A	t	Δ	Remarks
1938	h m s		μ	s	°	
Apr. 24	0 13 15	e	vs			
	24.7	L	vs			
26	13 5 25	i				record faint & much obscured by
	6 35	e				micros.
May 1	0 53 43	i	vs			
	56 20	L				
	59.7	M	4	13		
1	1 48 49	i	s			previous still recording
	51 40	L				
	52.1	M	10	18		
1	13 36 54	e	s			
	39.7	m	5	10		
4	5 44 43	e	s			
	6 6 57	e	s			
	8 50	i	s			
	10 45	L				
	12.9	M	11	15		
8	13 54 50	P				
	14 0 22	S			35.0	
	2 40	SSS				
	4 12	L				
	5.7	M	71	11		
11	15 11 26	e	vs			
	15 0	e	vs			
	21 58	e	s			long period
	40 0	L				
11	17 51 17	i	vs			
	58 0	i	vs			
18	1 0	L	vs			
	2,3	m	2	10		
12	15 44 34	P	s			felt at Salamana, New Guinea.
	47 13	e	s			
	49 32	i				
	50 40	S			31.2	
	55ca	L				
	58.2	M	987	20		
13	2 41 10	e	vs			
	48 33	i	s			
	51 54	L?	s			
	57.5	M	6	18		
13	15 21 10	i	vs			minute traces earlier
	24 16	e	s			
	27 25	i	s			
	31 30	e				
	31.8	M	6	13		
14	11 26ca	e	vs			
	29 15	i	s			
	29 34	i	s			remainder insignificant.

Period 12 secs. Damping ratio 20:1. Tilt 1" = 39.8mm.

Date	Time	Phase	A	t	Δ	Remarks
1938	h m s		μ	s	°	
Apr. 2	6 24 18	i				
	29 47	i				
	31 0	i				
	35.24	L				
	50.5	M	14	18		
3	11 3 13	i				
	5 44	i				
	7 28	L				
	8.5	M	6	11		
4	21 20 23	i				
	22 48	i				
	23 31	i				
	28.3	M	7	6		
9	21 48	i				
	22 0	i				
	23 38	e				
	25 2	i				
	31 0	M	8	13		
14	1 28 13	i	vs			
	37 56	i				main feature
	38 50	i				
	49 15	L				
	59.7	e				
2 5.6	e					
14	16 0 25	e	vs			
	7 57	i				
	10 3	eL				
17	9 1 51	P				
	2 6	i				
	2 38	i				waves of longer period
	3 50	i				L?; main feature
	4.1	M	57	7		
19	11 21 47	e	vs			
	30 23	i	vs			
	12 4 47	L				
14.6	M	20	20			
19	21 51 40	e	vs			
	54 37	e				
	55 20	i				
	57 23	i				
	59.4	i				
22 1.1	M	10	14			
20	6 33 18	iP				
	37 3	i				
	38 20	i				
	45.3	M	76	13		May be 3 (as suggested by Dr. Bostings)

MELBOURNE OBSERVATORY.

Seismological SOUTH YARRA S.E.I.VICTORIA.

Bulletin No.43. Milne-Shaw Seismograph No.41 E-W Component.

Period 12 secs. Damping ratio 20:1 Tilt 1" - 39.2mm.

Universal

Date	Time	Phase	A	t	Remarks.
1938	h m s		vs	s	
July 3	4 27 55	i	vs		
	28 48	i	s		
	30 37	i	s		
4	16 59 2	i	s		
	17 1 28	e	s		
	6 8	L			
	7.1	M	4	11	
4	21 18 22	P	e		
	18 27	i	s		
	22 49	S		25.7	
	23 14	i			much larger than S
	24 40	i			
	26 10	L			
	27.4	M	32	15	
5	2 9 20	P			
	9 54	PP			
	14 0	S		27.5	
	14 20	i			
	16 7	L			
	18.4	M	82	18	
5	3 0 33	P?			doubtful; in coda of preceding
	4 43	S?			
	7ca	L			
	9.5	M	43	18	
5	10 1 18	i	s		
	4.7	L			
	5.8	M	5	17	
5	22 12 57	e			
	13 3	iP			
	17 33	S		26.0	
	18 4	i			
	21 48	L			48s
	24.0	M	98	13	
6	1 30 20	eP			
	30 27	iP			
	34 57	S		27.0	S - eP
	36 2	i			
	38 22	L			
	41.2	M	142	13	
6	9 45 32	e	vs		P?
	49 55	e	vs		
	50 3	i	s		S?
	50 24	i			
	53 13	L			
	56.3	M	20	12	



MELBOURNE OBSERVATORY

SOUTH YARRA S.E.1 VICTORIA

Seismological
Bulletin No. 43 contd

Universal

Date	Time	Phase	A	t	Δ	Remarks
1935	h m s		μ	s	'	
July 12	3 44 26	e	vs			
	46 12	i	s			
	48 32	L				
-12	12 42 52	i	s			
	44 30	i	s			
	47 0	S				
	52 10	L				
	53.5	M	45	12		
-14	23 38 44	e	s			
	42 43	e	s			
	44 35	i				
	47 10	L				
	52.1	M	16	14		
16	9 14 7	e	vs			
	17 38	i	s			
	19.8	M	3	12		
17	13 39 38	e	vs			
	42 26	i				
	45 0	L				
	45.9	M	3	15		
-22	8 17 42	i	s			
	24 13	e	s			
	41 20	L				
	42.3	M	22	27		
22	9 6 18	i	s			in coda of preceding
	8 29	i	s			
	13 38	i	s			
23	23 10 46	e	vs			
	11 35	i	s			
	13 32	i	s			
	15 44	L?				
	18.9	M	11	11		
27						record lost from 3h34m to 23h 21m
-29	13 16 18	i	vs			
	24 6	s				
	24 31	ES				
	35 30	L				
	39.7	M	53	20		
Aug. 12	4 14v 3	iP	s			
	18 13	S				23.7
	20 20	i				
	22 24	L				
	24.8	M	19	18		

Date	Time	Phase	A	t	Δ	Remarks
1938	h m s		Δ	s	km	
Aug. 16	4 39 59	P				
	49 32	S				
	50 30	P3				
	5 1.4	L1				
	6.4	L2				
	10.1	M	42	19		
18	9 39 30	1P				
	41 29	i				
	46 13	S				
	46 51	i			45.8	
	50 4	i				
	54 35	e				no large surface waves.
-20	5 17 57	e	S			
	21 40	i	S			
	22 15	i				
	23 52	i				
	24 19	i				
	25 7	L				
	29.6	M	16	14		
20	8 39 53	i	VS			
	42 13	e	VS			
	45 30	e	S			
	46 47	i	S			
	51 50	i				
	52 25	i				
	57.5	m	16	10		
22						record lost after 3h 15m
-24	15 56 31	i	S			
	16 2 0	L				
	7.0	M	18	17		
-25	1 37 6	1P				
	44 14	i				
	44 44	i				
	45 21	i				
	48 29	i				
	55 5	L?				
	58.8	M	59	20		
29	15 29 52	e	VS			
	31 13	e	VS			
	39 16	e				
	39 26	i				
	46 30	L1				
	53 30	L2				surface waves not prominent.
-30	11 56 15	e	VS			very doubtful
	57 3	e	VS			P not identified
	57 58	i				
12	1 43	i				
	2 0	S				

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Date	Time	Phase	A	t	Remarks
Aug-30 12	7	i			long period wave
cont.	8	i			
	9.8	M	446	12	probably off paper just before this
30 17	15 56	i	vs		
	20 52	e	s		
	21 47	i			
	31 39	L?			
31 17	51 32	i	vs		
	53 2	i			
	53 44	i			
	56 33	s			outstanding feature
	59 25	i			
18	1 55	i			group of larger waves of shorter period
	3 33	L?			
Sapt. 5 14	51 12	e	vs		all amplitudes small
	58 0	S			main feature
	59 31	i			
15	3 3	i			
	4 45	e			
7 2	3 5	P	s		
	9 30	S			
	12 53	i			43.1
	15 50	L?			SS or ScS; main feature
-7 4	14 8	e	vs		
	22 43	S			
	28 40	i			
	29 57	i			
	31 58	i			
	35 30	L?			
	41.3	M	12	15	
-7 13	6 15	e	vs		
	9 50	S			
	13 27	i			
	14 30	L			
	16.9	M	20	12	
-20 13	42 53	i	vs		
	51 30	L?			
	54.3	M	6	13	
-21 19	13 3	i			
	15 30	i			
	17 34	i			
	22.4	L			
	32.2	M	22	19	
-25 20	21 12	i	s		
	25 25	e			
	27 14	i			
	28 56	L			
	30.7	M	22	17	

MELBOURNE OBSERVATORY

SOUTH YARRA S.E. 1 VICTORIA

Seismological
Bulletin No. 43 contd
Universal

Date	Time	Phase	Δ	t	Δ	Remarks
1933	h m s		μ	s	'	
Sept. 27	10 25 20	i				obscured by micros
	29 42	i				followed by irregular waves
	32 10	L?				
	35 20	i				more regular waves
28	18 20 2	1P		s		
	21 0	i				
	25 12?	us				
	28 0	i				
	31.8	M	74	20		
30	2 51 0	e				
	52 28	L				
	54.2	M	4	12		

J. M. Baldwin.

J. M. Baldwin,

Government Astronomer.

INTERNATIONAL SEISMOLOGICAL CENTRE
CANTON, U.S.A.

Seismological
Observatory

Observed by station
followed by pressure waves

J. A. Baker
J. A. Baker,
Government Astronomer.



NELBOURNE OBSERVATORY

SOUTH YARRA S.E.1 VICTORIA.

Seismological
Bulletin No.44

Milne-Shaw Seismograph No.41 E-W Component.

Period 12 sees. Damping ratio 20 : 1. Tilt 1" = 46.8mm.

Universal

Date	Time	Phase	A	t	Δ	Remarks
1938	h m s		μ	s	°	
Oct. 4	8 37 0	i				
	39 20	e				
	41 18	L				
	44.3	M	5	10		no large surface waves.
5	0 4 25	i	vs			
	8 33	i	s			
	8 53	L				
	22.8	m	7	14		
6	20 35 23	e	vs			
	39 0	e	vs			
	40 33	i	s			L?
7	1 0 4	i	s			P?
	1 53	i	s			
	5 47	i	s			S?
	8 36	e				
	10 20	e				L?
	20.7	M	10	18		
7	16 43 0	i	vs			
	44 47	i	s			
	53 28	i	s			
	55 23	e	s			
	59 13	L				
	59.9	M	14	25		
9	16 42 3	P	s			
	46 10	S				23.3
	46 30	i				larger than S
	47 40	L				
	48.7	M	52	17		
10	20 56 11	iP				
	58 0	PEP				
	59 33	i				
21	2 0	i				
	2 35	S				
	5 23?	L				
	13.0	M	700	28		
11	0 22 33	i	s			preceded by irregular micros
	25 42	i				
	32 28	L				
	33.0	M	21	22		
12	0 42 50	e	vs			
	56 22	i	s			
1	1 18	i	s			
	4 5	e	s			
	8 0	e	s			followed by long train of small undefined waves.

Geophysical Observations
 Bulletin No. 44
 Station - Shaw Observatory No. 11 W. Component
 Period 12 sec. - Duration 10 : 15 : 15
 SOUTH YARRA S.E. 1 VICTORIA
 OBSERVATORY

Remarks
 Class A 4
 Class B 4

No large surface waves.

Time	Class	Remarks
00	A	1
01	A	1
02	A	1
03	A	1
04	A	1
05	A	1
06	A	1
07	A	1
08	A	1
09	A	1
10	A	1
11	A	1
12	A	1
13	A	1
14	A	1
15	A	1
16	A	1
17	A	1
18	A	1
19	A	1
20	A	1
21	A	1
22	A	1
23	A	1
24	A	1
25	A	1
26	A	1
27	A	1
28	A	1
29	A	1
30	A	1
31	A	1
32	A	1
33	A	1
34	A	1
35	A	1
36	A	1
37	A	1
38	A	1
39	A	1
40	A	1
41	A	1
42	A	1
43	A	1
44	A	1
45	A	1
46	A	1
47	A	1
48	A	1
49	A	1
50	A	1
51	A	1
52	A	1
53	A	1
54	A	1
55	A	1
56	A	1
57	A	1
58	A	1
59	A	1
60	A	1

Proceeded to irregular motions

followed by long train of small irregular waves.



MELBOURNE OBSERVATORY

SOUTH YARRA S.E.1 VICTORIA.

Seismological
Bulletin No. 44 contd

Date	Time	Phase	A	t	Δ	Remarks
1938	h m s		μ	s	'	
Oct. 13	10 7 8	L				
	8 10	L				
	8.8	M	19	20		
17	9 32					Instrument thrown out of adjustment by insect; record lost on 18d and interferred with on 19d. time marks obscure
20	2 26 12	iP				
	32 5	S				
	35.3	L				
	40.0	M	798	19		
21	20 45 4	i	vs			
	47 3	i	vs			
	49 2	i	vs			
21	23 40 54	e	vs			
	41 42	i	vs			
	42 29	i	S			
	46 28	i	S			
	49.5	L?				
	54.2	M	21	17		
23	15 25 10	e	vs			
	25 33	i	vs			
	43.6	eL	vs			
29	23 0 19	i	vs			
	1 51	i	vs			
	6 12	i	vs			
	9 14	S	S			
	10 17	i	S			
	15 37	i	S			
Nov. 5	8 55 29	eP	vs			
	9 4 25	eS				67.5
	4 44	i				strong; larger waves continue till 6m 35s
	9 20	SS				
	12 57	SSS				
	15 19	L				amplitudes not much greater than in group following S
	18.6	M	97	20?		
5	11 2 34	iP	S			doubtful; in coda of preceding.
	11 29	eS				
	11 40	i				largest displacement of train.
	16 25	SS				
	19 57	SSS				
	22 42	L				
	34.3	M	104	20		
6	9 5 44	eP				
	15 9	S				72.8
	15 42	PS				
	19 22	SS				
	26 50	L				surface waves not large
	35.8	M	70	16		

MELBOURNE OBSERVATORY

SOUTH YARRA S.E.1 VICTORIA.

Seismological
Bulletin No. 44 contd.

Date 1938	Universal Time			Phase	A M	t s	L °	Remarks
	h	m	s					
Nov. 6	15	8	43	e	vs			
		11	53	i	vs			
		14	49	i	s			
		17	40	L	s			
-6	21	51	20	iP	s			generally similar to, but smaller than that at 9h
		51	40	i	s			
		59	56	eS			64.0	
	22	0	30	PS				
		8	22	SSS				
		10	42	L				
	21.2		M	48	16			
-7	19	33	48	e	vs			
		47	17	i	vs			
		54	41	i	s			
	20	16.0		M	4	14		
9	9	37	0	S				minute traces earlier
		37	44	i				
		48	55	i				followed by long train of small indefinite waves
10	11	7	0	iS	s			earlier phases lost in micros
		14	55	i	s			
		23	38	i				
-10	20	33	13	eP	vs			
		37	40	i	s			
		38	12	i	s			
		40	48	i				
		44	43	i				group of large waves till 47m 20s.
		45	4	i				
		46.4		m	200	18		
		48	58	i				
		51	48	i				SS?
		58	57	L1				
	21	8.5		L2				
	12.2		M	628	22		in group of four large waves	
11	1	23	40	i	s			in coda of preceding
		31	7	e	s			
		48	57	L				
-11	14	16	30	i	s			
		18	39	i	s			
		19	52	L				
		22.2		M	6	12		
-12	6	19	20	i	s			earlier phases obscured by micros
		21	13	i	s			
		22	1	i	s			
		25.1		M	10	10		

MULLBOURN OBSERVATORY
SOUTH YARRA S.E. 1 VICTORIA.

Seismological
Station No. 4400th
University

Remarks

Date	Time	Phase	A	t
Nov. 6 1958	17 40	I	a	
	14 49	a		
	11 57	vs		
	8 48	vs		

generally similar, but smaller than that at 04.0

04.0

6	21 20	IP	a	
	21 40	I	a	
	20 50	vs		
	19 42	I		
	18 48	M		

minute traces earlier

followed by long train of small
indefinite waves
earlier phases lost in noise

7	19 33	vs		
	17 47	vs		
	14 41	a		
	10 00	M		

9	9 37	S		
	7 44	I		
	4 52	I		

10	11 7	vs		
	14 52	I		
	15 30	I		

10	20 32	vs		
	17 40	I		
	15 12	S		

Group of large waves still in noise

10	18 44	M		
	18 38	I		
	18 48	I		
	18 51	I		

23?

in group of four large waves

10	18 52	vs		
	18 51	I		
	18 52	I		

in coda of preceding

10	18 40	I		
	18 34	a		
	18 21	I		

10	14 30	a		
	14 22	a		
	14 22	a		

earlier phases obscured by noise

10	10 20	a		
	10 18	a		
	10 17	a		
	10 16	I		

Seismological Bulletin No. 44 contd

Date	Universal Time			Phase	A	t	Δ	Remarks
	h	m	s					
1938								
Nov. 13	5	9	33	i	s			
		13	15	e	s			
		21	20	i				
13	13	36	16	e	vs			
		36	45	e	s			
		47	12	e	s			
		52	10	L?	s			
-13	22	52	35	iS				
		53	8	i				
	22	3	6	L				
		9.6		M	8	12		
-14	12	13	12	e	vs			probable traces earlier
		15	45	i	vs			
		17	55	s				
		18	11	i				
		19	55	i				
		22	20	L				
		27.2		M	20	11		
15	11	8	14	e	s			obscured by micros
		8	40	i	s			
		10	58	i	s			
-15	21	9	45	iP	s			
		17	17	s				53.6
		21	43	SS				
		25	29	i				
		28	36	i				
		32	42	L?				
		34.4		M	57	18		
-17	4	14	25	i	vs			may be micro
		19	28	i	s			
		20	43	i				well marked
		27	56	i				" "
		32	35	e				
		39	33	i				
		44	43	L				
		47.0		M	60	22		
-18	14	19	50	i	vs			
		23	22	i				
		25	58	i				
		29	55	i				
		28	50	L				
		30.7		M	10	17		
21	1	30	52	e	vs			all amplitudes small
		34	4	i	s			
		39	48	i	s			

Date	Time	Phase	A	t	Δ	Remarks
1938	h m s		vs	s		
Nov-22	1 27 20	i	vs			identification of minute marks uncertain
	35 12	eS				
	48 27	L				
	56.9	M	36	16		
-25	22 11 57	i	vs			
	20 50	L	vs			
	24.5	M	7	20		
27	22 24 48	i	vs			
	27 40	i	s			
	30 23	i	s			
	32.0	L				
-29	14 0 28	e	vs			
	0 42	i	s			
	1 23	i	s			
	22.0	M	6	13		
-30	2 51 0	s				
	51 18	i				
	55 31	i				
	3 6.3	L				
	12.6	M	23	17		
Dec. 1	2 24 25	e	vs			
	29 25	s				
	31 30	e				
	37 48	L				
	41.9	M	26	17		
3	12 32 50	i	s			
	33 30	i	s			
	37 50	e	s			
	44 35	i	s			
-4	16 29 48?	e	vs			
	35 0	s				
	37 0	i				
	39 50	L				few waves of longer period
	45.6	M	26	10		
5	17 58 28	e	vs			
	18 1 14	i	s			
	2 20	i	s			
	4.4	m	6	6		
-6	23 11 28	2	s			
	19 10	i	s			
	20 10	i	s			
	34.4	M	10	14		
-7	13 30 26	1P				
	33 29	i				
	35 39	1S				
	35 55	i				

32.0

continued on next sheet

MELBOURNE OBSERVATORY
SOUTH YARRA S.E.1 VICTORIA

Seismological
Station No. 44 contd
Incl. vertical

Date	Time	Phase	A	Δ	Remarks
	h m s		s	s	
13	37 22	i			continued from previous sheet
	38 18	L			
	41.0	M	133	20	
	4 19.5	i	s		
	26.0	i	s		
	48.4	L	s		
13	2 30ca	e	s		time marks almost invisible
	38.5	m	7	13	
15	9 16 46	e	vs		
	20 55	i	vs		
	22.5	L			
	24.5	M	8	18	
16	17 25 32	iP			obscured by overlapping 20.5?
	29 13?	S			
	30.1?	L			
	33.5	M	362	10	
16	23 18 48	iP			
	19 20	i			
	22 27	S			
	23cs	m			apparently off paper
18	7 43 47	i	vs		
	52.5	L	vs		
19	18 46 10	i	s		
	19 1.5	L?	vs		
21	5 18 48	i	vs		
	22 23	e	vs		
	26.2	m	4	12	
21	12 33 47	eP			time marks obscured 36.1?
	39 26?	S			
	44 50	L			
	50.2	M	149	18	
24	20 17 7	e	s		
	19 10	e	vs		
	19 47	i	s		
	22 8	i	s		
	23 42	L			
	24.3	M	12	12	
25	6 29 47	i	vs		
	44.4	M	2	17	
26	11 11:13	i	vs		
	19.7	m	3	15	

Remarks

continued from previous sheet

time marks almost invisible

observed by overlapping

apparently off paper

time marks obscured

Station	Account	Time	Remarks
20	11.13.1	11.13.1	
21	11.13.1	11.13.1	
22	11.13.1	11.13.1	
23	11.13.1	11.13.1	
24	11.13.1	11.13.1	
25	11.13.1	11.13.1	
26	11.13.1	11.13.1	
27	11.13.1	11.13.1	
28	11.13.1	11.13.1	
29	11.13.1	11.13.1	
30	11.13.1	11.13.1	
31	11.13.1	11.13.1	
32	11.13.1	11.13.1	
33	11.13.1	11.13.1	
34	11.13.1	11.13.1	
35	11.13.1	11.13.1	
36	11.13.1	11.13.1	
37	11.13.1	11.13.1	
38	11.13.1	11.13.1	
39	11.13.1	11.13.1	
40	11.13.1	11.13.1	
41	11.13.1	11.13.1	
42	11.13.1	11.13.1	
43	11.13.1	11.13.1	
44	11.13.1	11.13.1	
45	11.13.1	11.13.1	
46	11.13.1	11.13.1	
47	11.13.1	11.13.1	
48	11.13.1	11.13.1	
49	11.13.1	11.13.1	
50	11.13.1	11.13.1	

Date	Time	Phase	A	t	Δ	Remarks
	h m s		μ	s	°	
1938						
Dec. 29	1 2 35	i	vs			
	5 46	i	s			
	8.1	M	3	10		
Dec. 30	2 26 13	eP	vs			
	26 20	i				
	30 26	S			24.1	
	30 56	i				
	32 54	L				
	35.8	M	7	13		

Small and insignificant disturbances were recorded as follows:†

Oct. 7d 21h; 11d 4h; 13d 15h; 20d 10h, 14h; 23d 3h; 13h;
 Nov. 7d 1h; 8d 3h, 9h; 1d 3h, 9h; 12d 15h; 16d 11h, 15h; 19d 6h; 24d 1h; 25d 8h;
 Dec. 9d 18h; 12d 0h, 18h; 13d 17h; 17d 6h, 12h, 17h; 22d 17h; 24d 18h; 27d 2h;
 28d 5h.

Small and very small amplitudes are indicated by s and vs respectively.

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