

SYDNEY OBSERVATORY

Milne Seismograph E-W Component.

Constants B.P. = 18⁰ D.V. 1 mm. = 0".35

Date 1931.	Phase.	Time Greenwich			A _E mm.	△ kms.	Remarks.
		h.	m.	s.			
Jan. 2	iP	10	17	18			
	L		46	48			
	M		48	30	2.0		
	L		50	42			
	M		51	48	1.0		
" 2.	eL	12	12	28			
			15	12	0.2		
" 7	eL	12	54	42			
	M		56	24	0.2		
" 8	iP	1	21	30			
	L		24	00			
	M		25	30	0.5		
" 12	eP	20	56	48			
	L	21	22	36			
	M		27	36			
" 15	eP	2	09	36			
	iP		10	34			
	iS		20	18			
	SR ₁		26	30			
	SR ₂		30	36			
	L		44	42			
	M		53	30	8.0		
	L		55	48			
	M		56	54	2.8		Mexico.
	L		58	12			
	M		59	00	2.0		
	L		59	48			
	M	3	00	18	2.4		
	L		02	00			
	M		02	36	2.5		
	L		03	48			
	M		04	18	2.0		
	L		05	20			
	M		06	00	1.4		
	L		22	00			
	M		23	42	1.9		
	L		28	12			
	M		30	00	1.0		
	L	4	12	18			
	M		13	30	1.6		
	L		16	54			
	M		17	48	1.5		
" 15.	P	21	16	06			
	L		40	42			
	M		40	30	0.5		
" 15	eP	22	54	12			
	iS		58	48			
	L	23	00	24			
	M		03	36	8.2		

2,800

Date 1931.	Phase.	Time Greenwich.			A _E kms.	△ kms.	Remarks.
		h.	m.	s.			
Jan. 16	eP L M	19. 20	46 17 22	30 24 36			
" 18	P. iS L M		? 13	 32 45 47	 0.4		P. lost in Air Tremors.
" 19	P } or } S } L M	16	01	12 07 18 08 54	0.7		
" 24	iP L M L M	13 14	57 11 13 21 22	18 30 06 18 12			
" 27	eP iS L M L M L M L M L M L M	20 21	20 31 58 00 02 03 05 07 14 16 19 20 22 23 31 33	54 00 54 18 18 12 24 30 12 18 18 18 30 54 00	3.4 2.7 3.5	8,800	
" 28	L M L M L M	2 3	34 35 46 47 09 10	06 00 30 06 30 00	0.5 0.6 0.5		
" 28.	eP iS L M L M L M L M	21	32 38 45 47 48 49 52 53 57 58	24 48 24 30 12 24 12 18 42 48	3.0 4.0 3.5 2.7	4,700	

SYDNEY OBSERVATORY

Milne Seismograph E - W Component.

Constants B.P. = 18^S D.V. 1 mm. = 0".35

Date 1931.	Phase.	Time Greenwich.			A E. mms.	△ kms.	Remarks.
		h.	m.	s.			
March 2.	P						P. Lost in air tremors.
	iS	2	23	30			
	L		27	18			
	M		27	30	5.0		
	L		30	24			
	M		31	36	3.8		
" 5	eP	18	30	18			
	eL		35	42			
	M		40	24	0.2		
" 7	eL	1	43	48			
	M		47	00	0.2		
" 7	eP	10	10	18			
	iS		13	00			
	L		14	30		1,000	
	M		15	18	0.8		
	L		17	00			
	M		17	30	0.8		
	L		23	00			
	M		23	12	0.4		
" 8.	L	2	55	12			
	M	3	13	30	0.4		Probably surface waves from Jugo-Slovakian Earthquake.
	M		18	00	0.4		
	M		26	30	0.4		
" 8.	eP	5	57	54			
	L	6	10	36			
	M	6	11	30	0.2		
" 8.	eP	11	55	12			
	iS		59	30		2,700	
	L	12	02	00			
	M		04	00	1.7		
" 9.	eP	4	09	36			
	eS		19	36			
	L		35	54		8,700	
	M		39	12	0.7		
	L		42	18			
	M		44	12	1.0		
	L		50	48			
	M		52	12	0.6		
	L	5	05	00			
	M		07	30	0.8		
	L		30	00			
	M		31	00	0.5		

Date 1931.	Phase.	Time Greenwich.			A E.	△	Remarks.
		h.	m.	s.			
Jan, 11.	eP.	6	06	18			
	eS		11	12			
	L		17	24			
	M		18	12	2.0	3,100	
"	II.	iP	12	44	00		P. may be S. of distant earthquake.
	L		53	18			
	M		56	00	0.6		
	L		57	48			
	M		58	30	0.9		
	L	13	05	30			
	M		06	24	0.8		
"	12.	L	11	09	42		P. & S. lost in Air Tremors.
	M		14	00	0.6		
"	14	eP	23	01	00		
	eS		06	30			
	L		11	12		3,700	
	M		12	48	0.3		
"	18.	eP	8	15	00		
	iS		27	00			
	L		52	18			
	M		53	12	1.1		
	L		58	30		11,400	
	M		59	30	0.7		
	L	9	01	06			
	M		02	00	0.9		
	L		05	06			
	M		05	36	1.0		
	L		14	36			
	M		15	12	0.7		
	L		16	00			
	M		16	36	0.7		
"	18	eP	20	21	48		
	eS		28	18			
	L		31	18			
	M		31	48	3.5		
	L		36	30			
	M		37	00	1.7		
	L		39	00		4,750	
	M		39	36	2.5		
	L		41	18			
	M		42	00	2.4		
	L		43	00			
	M		43	48	2.4		
"	19.	iS	6	43	18		P. lost in Air Tremors.
	L		52	00			
	M		56	30	0.6		

Date 1931.	Phase	Time Greenwich.			A _E mms.	△ kms.	Remarks.
		h.	m.	s.			
March, 28.	eP	12	45	00			
	iS		50	30			
	L		56	48			
	M		57	30	13.5		
	L		58	42			
	M		59	30	13.0		
	L	13	02	18		4,750.	Probably Timor Sea.
	M		03	00	8.2		
	L		06	00			
	M		07	30	8.7		
" 31.	eL M	17	06	00	0.2		Probably surface waves from Nicaraguan Earth- quake.
			07	30			
	L M		10	48	0.2		
			11	48			

SYDNEY OBSERVATORY

Milne Seismograph - E - W Component.

Constants:- D.V. 1 mm = 0".38 B.P. = 18³

Date. 1931.	Phase.	Time Greenwich.			A _T mm.	△ kms.	Remarks.
		H.	M.	S.			
May 4.	eP eL M	17	38 41 43	00 48 00	0.4		
" 6.	eP iS L M	15	00 05 08 09	48 12 36 24	2.0	2,700	
" 7.	eP L M	5	05 09 10	18 18 00	0.6		
" 10.	eP L M	19 20	56 05 06	12 00 42	0.5		
" 13.	eP eL M	8	20 23 25	00 48 00	0.2		
" 15.	eL M	7	47 57	30 42	0.2		
" 16.	L M	21	20 25	48 00	0.6		P. & S. lost in Air Tremors.
" 17.	eP eS L M	12	08 13 17 18	06 00 18 24	0.5	3,100	
" 20.	L M L M L M	3 4	58 00 05 05 15 16	30 30 12 36 18 12	1.4 0.8 1.0		P. & S. lost in Air Tremors.
" 30.	eP L M	18	49 55 56	24 54 36	0.6		

SYDNEY OBSERVATORY.

Milne Seismograph E-W Component.

Constants B.F. = 188.5 D.V. 1 mm. = 0".38

Date 1931.	Phase.	Time Greenwich.			A E	△	Remarks.
		H.	M.	S.			
July 12.	P.	?					P. lost in micros.
	iS	17	02	18			
	L		06	54			
	M		07	54	0.7		
	L		13	18			
	M		14	30	0.7		
	L		17	30			
	M		19	00	0.7		
	L		23	30			
	M		24	24	0.4		
" 14	eP	15	49	24			
	L		54	00			
	M		55	18	0.6		
" 20.	eP	8	38	12			
	eS		43	18			
	eL		48	16			3,300
	M		51	12	0.5		
" 21.	iP	3	40	42			
	iS		44	42			
	L		46	48			
	M		47	12	1.5		2,400
	L		48	18			
	M		49	00	1.0		
" 22.	eL	10	19	54			
	M		20	48	0.2		
" 23	eP	14	27	00			
	iS		30	30			
	L		34	12			
	M		35	12	1.5		2,000
	L		35	48			
	M		36	12	1.5		
	L		39	30			
	M		40	00	0.7		
" 24.	eP	14	08	30			
	eL		11	48			
	M		12	12	0.2		

Record lost 18^d 0^h to 19^d 0^h 15^m - light not switched on.

SYDNEY OBSERVATORY

Milne Seismograph E - W Component.

Constants B.P. = 18^S.5 D.V. 1 mm. = 0".38

Date 1931.	Phase.	Time Greenwich.			A _E mms.	△ kms.	Remarks.
		n.	m.	s.			
Aug. 1	eP	19	19	12			
	eS		23	06			
	L		25	00			
	M		26	30	1.2	2,200	
" 3	eL	9	18	12			
	M		19	12	0.2		
" 6	eP	15	34	00			
	eS		37	30			
	L		40	18			
	M		41	12	0.4	2,000	
" 7	iP	2	17	00			
	PR ₁		19	36			
	iS		23	24			
	SR ₁		25	24			
	L		29	00			
	M		29	36	12.5		
	L		30	30			
	M		31	30	20.0	4,600	
	L		33	36			
	M		34	48	10.0		
	L		37	00			
	M		37	30	8.0		
	L		41	24			
	M		41	54	5.0		
L		44	18				
M		45	30	3.3			
L		48	36				
M		49	00	2.5			
" 8	eP	21	07	18			
	eL		13	00			
	M		15	30	0.5		
	L		17	42			
	M		18	30	0.5		
" 10	eP	9	48	42			
	iS		52	18			
	L		54	30			
	M		55	30	0.8	2,100	

Date 1931.	Phase.	Time Greenwich.			A _E mms.	△ kms.	Remarks.
		h.	m.	s.			
Aug. 10	eP	21.	21.	00			
	eS		32	18			
	iSR ₁		37	42			
	L	22	03	30			
	M		04	24	5.5		
	L		07	42			
	M		08	12	5.0		
	L		13	06			
	M		13	30	7.0		
	M		14	24	6.8		
	L		15	54			
	M		16	30	10.5		
	L		17	42			
	M		20	00	13.3		
	L		23	30			
	M		25	00	12.0	10,600	
	L		28	00			
	M		28	48	6.0		
	L		31	30			
	M		32	12	9.3		
	L		36	48			
M		38	12	5.5			
L		39	36				
M		40	18	3.5			
L		44	00				
M		45	30	3.5			
L		48	00				
M		49	30	2.5			
" 13.	eP	22	15	06			
	iS		18	48			
	L		23	18			
	M		25	00	2.2	2,200	
	L		29	00			
	M		29	36	0.5		
" 14.	eL	4	34	30			
	M		36	36	0.3		
" 16	eP	12	10	42			
	eL		40	00			
	M		46	00	0.2		
" 16	eL	18	51	30			
	M		53	18	0.2		
" 18	eP	14	42	00			
	iP		45	12			
	eL	15	05	42			
	M		06	30	0.3		
	L		14	30			
	M	1	15	48	0.5		
	L		18	00			
	M		20	00	0.6		
	L		23	48			
	M		25	00	0.5		
	L		28	00			
	M		29	30	0.5		
	L		30	42			
	M		31	36	0.5		
	L		34	18			

Date 1931.	Phase.	Time Greenwich.			A_E mms.	Δ kms.	Reason.
		H.	m.	s.			
Aug. 18	M		35	30	0.6		
	L		38	00			
	M		39	30	0.6		
	L		41	12			
	M		42	30	0.8		
" 24	I?						P. lost Trace very faint. Light failing.
" 27	iS	22	27	30			
	L		39	00			
	M		40	48	2.5		
	eP	15	40	30			
	iS		51	42			
	L	16	24	00			
	M		25	24	1.6		
	L		30	00			
	M		32	12	6.0	10,300	
" 31	L		35	00			
	M		36	12	2.5		
	L		38	18			
	M		39	48	2.9		
	eP	6	49	18			
	eL		57	54			
	M	7	00	30	0.2		

23

Note:- August 22, 25, 28 and 29:- Much boom movement owing to fierce wind squalls.

Record lost August 30. 6.0 to August 31. 0.30 drum
 faulted on Helix

SYDNEY OBSERVATORY

Milne Seismograph E - W Component.

Constants B.P. = 18^S D.V. 1 mm. = 0".38.

Date 1931.	Phase	Time Greenwich.			A _E	△	Remarks.
		H.	M.	S.	mms.	kms.	
Sept. 9	P.			?			Air Tremors precede
	iS	20	54	30			
	L	21	05	42			
	M		07	00	0.4		
	L		10	30			
	M		12	18	0.4		
	L		20	12			
	M		21	12	0.3		
" 11	L	22	13	18			
	M		36	00	0.7		
" 19	P			?			Air Tremors precede
	eS	7	58	30			
	L	8	05	48			
	M	8	08	00	0.7		
" 21	eP	2	40	12			
	L		54	00			
	M		56	12	0.4		
" 21	eP	10	45	48			
		11	03	42			
			05	36	0.3		
" 21	iP	13	39	24			
	iS		43	24			
	L		46	36			
	M		47	36	0.6	2,500	
	L		49	12			
	M		50	00	0.6		
" 22	P			?			Air Tremors precede
	iS	9	40	00			
	L		43	36			
	M		44	18			
" 25	eP	6	09	12			
	iPR ₁		12	48			
	iS		16	48			
	SR ₁		21	42			
	L		32	24			
	M		33	00	7.0		
	L		33	36			
	M		35	00	10.2	6,000	
	L		38	24			
	M		39	24	5.5		
	L		40	30			
	M		41	30	4.5		
	L		42	18			
	M		43	30	4.6		
	L		47	00			
	M		47	48	4.0		
	L		49	24			
	M		50	00	2.1		
	L		51	00			
	M		51	30	2.2		

Date 1931.	Phase	Time Greenwich			A E		△	Remarks.
		H.	M.	S.	mms.	kms.		
Sept. 25	eP	16	44	30	0.6			
	L		47	12				
	M		48	06				
" 25	eP	20	40	48	0.5			
	L		43	30				
	M		44	30				
" 26	L	21	04	30	0.3			
	M		08	18				
" 28	eP	17	46	24	0.4			
	L		57	00				
	M		58	30				
" 29	eP	9	00	36	0.7	3,800		
	iS		06	12				
	L		09	24				
	M		11	42				
	L		13	00				
	M		14	00				

September 3:- Heavy gale during night caused boom movement up to 0.7 mm. in semi amplitude.

SYDNEY OBSERVATORY

Milne Seismograph E - W Component.

Constants B.P. = 18^S D.V. 1 mm. = 0".38

Date 1931	Phase	Time Greenwich			A _E mm.	△ kms.	Remarks.
		H.	M.	S.			
Oct. 3	eP	19	13	42			
	iS		18	42			
	L		22	54			
	M		24	30	15.0		
	L		27	30			
	M		29	30	19.5		
	L		30	18			
	M		31	36	16.0		
	L		34	36			
	M		35	00	10.0		
	L		38	30			
	M		39	48	11.4		
	L		45	00			
	M		45	48	8.8		
	L		46	30			
	M		47	30	10.2	3,200	
	L		50	18			
	M		51	42	7.5		
	L		57	12			
	M		58	00	4.1		
L		59	12				
M		20	00	4.1			
L			04	24			
M			05	36	2.8		
L			09	48			
M			11	18	3.5		
" 3	P			?			P merged into after tremors of previous quake.
	iS	22	04	36			
	L		09	30			
	M		10	30	3.7		
" 3	P			?			do.
	iS	22	53	54			
	L		57	42			
	M		58	12	5.4		
	L		59	54			
	M	23	00	30	8.0		
	L		03	30			
	M		04	24	12.5		
	L		06	24			
	M		07	06	4.5		
" 6	iP	18	23	42			
	L		28	36			
	M		29	24	0.2		

Date 1931.	Phase.	Time Greenwich			A _E mm.	△ kms.	Remarks.
		H.	M.	S.			
Oct. 10	eP	0	24	00			
	iP		25	36			
	iS		30	36			
	L		34	18			
	M		36	12	21.2		
	L		37	30			
	M		39	30	7.5		
	L		43	00			
	M		44	18	10.5		
	L		53	48			
	M		54	48	5.5		
	L		57	00			
	M		58	48	5.5		
	L	1	04	12			
	M		05	00	4.0	4,800	
	L		08	42			
	M		11	12	4.0		
	L		15	00			
	M		16	18	2.5		
	L		21	18			
	M		24	30	8.7		
	L		39	12			
	M		40	30	9.6		
	L		45	00			
	M		46	42	10.2		
" 10	iP	3	00	12			
	iS		05	12			
	L		09	18			
	M		11	36	3.5	3,200	
" 10	L	7	15	06			
	M		16	30	0.5		
	L		24	24			
	M		26	00	0.9		
" 12	eP	3	09	48			
	iS		12	42			
	L		14	18			
	M		15	36	1.4		
" 12	P	13	33	06			
	L		36	00			
	M		38	30	0.7		
" 13	iP	4	44	36			
	iS		46	48			
	L		49	00			
	M		50	30			
" 18	P			?			P. & S lost in air tremors
	S			?			
	L	0	49	30	1.6		
	M		52	12			
	L		53	00	1.2		
	M		53	30			


-3-

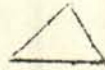
Date 1931.	Phase.	Time Greenwich.			A _E	Δ	Remarks.
		H.	M.	S.	mm.	kms.	
Oct. 19	P		?				P & S lost in air tremors.
	S		?				
	L	4	38	00	1.2		
	M		40	12			
	L		43	30	1.2		
	M		44	00			
	L		49	00	0.7		
	M		49	36			
" 23	eP	11	50	18			
	L		54	00			
	M		55	00	0.3		
" 23	eP	20	12	06			
	iS		16	54			
	L		21	12		3,000	
	M		22	48	1.8		
" 24	P		?				P lost in air tremors.
	iS	11	39	06			
	L		42	30			
	M		44	00	0.6		
" 27	P	18	21	18			
	L		25	36			
	M		27	00	0.4		

SYDNEY OBSERVATORY

Milne Seismograph E - W Component.

Constants B P = 18^S D.V. 1 mm. = 0".38

Date.	Phase.	Time Greenwich.			A _E mms.	 kms.	Remarks.
		h.	m.	s.			
Nov. 2	L M	1	31 35	30 00	0.7		
2	eP iS L M L M	10	13 22 38 40 42 43	54 42 00 00 36 30	2.3 2.7	7,300	
2	eP iS L M L M L M	17	08 13 17 19 20 21 22 23	30 24 30 30 24 24 36 00	5.0 7.0 5.0	3,100	New Guinea.
5	eP eS L M	6	31 34 36 37	48 18 00 30	0.4	1,400	
11	eP L M	4	06 10 12	18 24 24	0.2		
12	eP eS L M	14	29 32 34 35	18 42 00 00	0.3	2,000	
17	eP eL M	17	34 49 50	00 00 18	0.4		
17	eP eL M	20	17 22 23	06 00 48	0.4		
20	eP eS L M L M L M L M L M L M	14	21 26 28 29 30 31 33 33 35 35 35 39 40 46 47	54 42 42 18 48 30 00 42 00 00 30 24 18 00 00	1.5 1.8 1.4 1.1 1.0 0.7	3,000	

Date.	Phase.	Time Greenwich.			$\frac{E}{E}$ mms.	 kms.	Remarks.
		h.	m.	s.			
Nov. 21.	P			?			P lost in Air Tremors
	eS	6	51	54			
	L		54	42			
	M		56	18	0.2		
21	eP	12	27	18			2,900
	eS		32	00			
	L		34	30			
	M		36	12	0.2		
21	eP	17	11	30			2,700
	iS		15	54			
	L		18	18			
	M		19	42	0.5		
26	L	12	05	48			Series of Sinusoidal waves
	M		08	12	0.2		
26	eP	12	36	42			0.5
	L		41	12			
	M		43	30			

SYDNEY OBSERVATORY

Milne Seismograph E - W Component.

Constants B P = 18^S D.V. 1 mm = 0".38.

Date 1931.	Phase.	Time Greenwich.			A _E mms.	△ kms.	Remarks.
		h.	m.	s.			
Dec. 2	eP	23.	45	00			
	eL		48	00			
	M		48	48	0.1		
" 7	P		?				Air Tremors precede.
	eS	19	02	06			
	L		04	24			
	M		05	30	0.4		
" 13.	eP	15	39	30			
	L		45	24			
	M		46	30	0.2		
" 16	eP	4	16	18			
	L		30	30			
	M		32	00	0.2		
" 18	eP	10	00	18			
	L		19	30			
	M		21	36	0.4		
	L		24	24			
	M		26	00	0.5		
	L		29	00			
	M		30	18	0.4		
	L		34	36			
	M		35	36	0.2		
" 25	eP	3	08	00			
	iS		12	48			
	L		13	42			
	M		15	00	1.1	3,000	
	L		15	30			
	M		16	00	0.9		
" 27	e.	12	21	12			
	M		25	00	0.2		

Dec 6 - 7 :- Record badly broken owing to partial failure of the light. Found due to a loose terminal in light circuit.