

1925

ADELAIDE OBSERVATORY, SOUTH AUSTRALIA.

SEISMOLOGICAL BULLETIN.

Prepared under the direction of
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 GOVERNMENT ASTRONOMER.

ϕ . 34°. 55'. 38 0". S. λ . 9^h. 14^m. 19-81^s. E. Height above Mean Sea Level—134 feet.

SITUATION.—5 miles West of Mount Lofty Ranges, 5 miles East of Sea Coast.

FOUNDATION.—Marly Limestone and Clay of Adelaide Plains, to depth of 40 feet. Miocene Sandstone probably below. Depth of bedrocks not known, probably 1,000 to 2,000 feet.

INSTRUMENTS.—Milne's Horizontal Pendulum, No. 50, 1904 Pattern. E.—W. Component Recorded.
Milne-Shaw Seismograph, No. 35. N.—S. Component.

NOTATION.

I. = perceptible. II. = striking. III. = very striking.

d (domesticus) = local.
v (vicinus) = near (less than 1000km.).
r (remotus) = distant (1000km.—5000km.).
u (ultimus) = very distant (over 5000km.).

PHASES.

P (primae) = 1st preliminary tremors (commencement).
S (secundae) = 2nd preliminary tremors (commencement).
L (longae) = ~~2nd~~ principal phase, Rayleigh waves.
M (maximae) = maximum amplitude of L waves.
C (coda) = a prominent wave among the "after tremors."
F (finis) = last perceptible movement (non-microseismic).
PR₁, PR₂ = 1st and 2nd reflected waves of P.
SR₁, SR₂ = 1st and 2nd reflected waves of S.
i (impetus) = abrupt commencement, clearly defined.
e (emersio) = gradual commencement, not clearly defined.
E, N = E-W or N-S component of earth oscillation.
 Δ = approximate distance from epicentre in km.
E.Q. = earthquake.

JANUARY 1925 SEISMOGRAPH REGISTER Bulletin No. 1
Adelaide Observatory

No.	Date	Char.	Phase	Time (Greenh)		Ampl ^e . E-W Cpt. in mms.	△ in Kms	Instrumental Constants		Remarks.
				H.	M.			Sens	Per.in Secs.	
1	Jan 18	II	is	12	28.5			.38	18.0	Boom off level Jan 15-11.30 to Jan 16-2.30
			e(L)		39.6					
			M1		49.8	1.1				
			M2		58.0	1.0				
			M3	13	02.3	0.8				
			M4		10.6	1.3				
			M5		14.2	0.8				
2	" 18	Ir	is	20	25.7		about 3600	.38	18.0	
			L		30.0?					
			M		31.0	0.8				
3	" 26	I	e	5	32.3			.38	18.7	Air tremors strong Jan 21st & 22nd
			M		35.0	0.4				
4	" 28	Iu	e(S)	4	25.2			.40	18.8	
			L1?		42.0					
			M1		45.0	0.5				
			L2	5	03.4					
			M2		09.0	0.8				Small amp. hard to read.
5	" 30	I	e	18	15.0			.42	18.9	Boom off level Jan.28-12.30 to Jan.30-1hr
			e		24.3					
			M- abt.	48		0.3				

SEISMOGRAPH REGISTER
FEBRUARY 1925
Adelaide Observatory
Bulletin No.2.

No.	Date	Char.	Phase	Time		Ampl ^g E-W Cpt in mms.	△ in kms	Instrumental Constants		Remarks
				(Greenh) H.	M.			Sens.	Per.in Secs.	
6	Feb.2	Iu	e(S) e e i (L) M	20	07 12.5 18.8 23.7 29.0 31.5			.44	18.9	A.T's pre- cede
7	" 4	I	e? e e M	10	08.9 16.2 21.6 23.0	0.4		.45	19.0	Masked by air tremors
8	" 9	Iir	iS L M	14	21.8 27.4 29.2	0.3	4500?	.47	19.0	P in micros
9	" 13	Iu	eP ePR1 eS eSR1 SR2 eL M1 M2	13 14	56.6 58.7 03.1 06.0 07.8 10.0 11.6 13.0	1.7 2.5	5050	.48	19.1	
10	" 16	Iu	iS e(SR1) e i eL M1? M2	18	01.9 7.6 10.2 13.5 17.8? 22.0 26.2	0.3 0.5		.48	19.1	Phases un- certain masked by air tremors
11	" 20	Iu	eP e(PR1) iS eL M1 M2 M3 M4	1	14.5? 17.0 24.6 38.2 45.2 48.4 52.5 02.2	0.6	8550?	.48	19.1	
12	" 21	I	e e M	19	04.8 08.2 15.2	0.7		.48	19.1	Masked by air tremors
13	" 24	Iu	e e(S) e(L) M	0	13.0 21.7 51.0? 09.0?	0.4		.48	19.1	A.T's pre- cede ampl. small & tim of phases un- certain
14	" 25	I	e L M1 M2	22	12.8 17.6 19.5 21.0	0.8 0.8		.48	19.1	
15	" 26	I	e M	2	54.2 56.5	0.3		.48	19.1	

MARCH 1925 SEISMOGRAPH REGISTER Bulletin No. 3
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No.	Date	Char.	Phase	Time		Ampl ^e E-W Cpt in mms	Δ in kms.	Instrumental Constants		Remarks.
				H.	M.			Sens	Per. in Secs.	
16	Mar. 1	I	e	3	34.0?			.48	19.1	
			e		37.3?					
			e		42.3?					
			e		46.5?					
			e(L)		50.4					
			M		53.5	0.4				Light out 1st Mar 8 hrs 50 mins to 3rd
17	" 8	I	e	1	11.0			.50	19.3	Mar. 6 hrs 30 mins Air tremors strong on 12 & 13th Mar.
			e(S)		12.8					
			e(L)		14.3					
			M		16.7	0.4				
18	" 15	Ir	eS	14	00.4		4100?	.53	19.5	
			eL		05.3					
			M		07.3	0.3				
19	" 16	Iir	is	15	52.7		4200 abt	.53	19.6	
			SR1		55.0					
			eL		58.1					
			M1	16	02.1	1.0				
			M2		04.8	1.1				
20	" 16	I	e	7	19.7			.54	19.6	Very small amplitude
			e		23.0					
			M		25.0	0.2				
21	" 16	Iu	e(S)	15	02.8			.54	19.6	
			e		07					
			e		14					
			e(L1)		21					
			e(L2)		26.9					
			M1		31.0	0.6				
			M2		34.7	0.7				
			M3		39.2	0.7				
22	" 22	IIir	e	8	41.8		4400	.57	19.4	
			iP		42.2					
			S		48.3					
			eL		53.3					
			M1		54.0	12				
			M2		55.7	10				
			M3		58.0	6.5				
			M4		59.5	20) against stops				
			M5	9	01.2	20)				
			M6		3.0	5.0				
			M7		5.0	4.5				
			M8		7.0	4.5				
23	" 22	I	e(S)	14	16.8		5000	.57	19.34	
			SR1		20.0					
			e(L)		22.5					
			M1		25.4	0.7				
			M2		27.2	0.7				
24	" 25	I	e	12	17.2			.58	19.3	
			eL		20.0					
			M1		21.2	0.5				
			M2		23.8	0.8				
25	" 26	I	e	6	13.2			.59	19.2	
			eL		18.6					
			M		19.5	0.3				
26	" 29	I	e	22	20.8			.58	19.1	
			M		29.0?	0.3				

APRIL 1925

SEISMOGRAPH

REGISTER

Adelaide

Observatory.

Bulletin No. 4

No.	Date	Char.	Phase	Time (Green ^h)		Ampl ^e E-W Cpt in mms	Δ in Kms	Instrumental Constants		REMARKS
				H.	M.			Sens	Per. in Secs.	
27	Apl 1	I	e	17	36.5			.57	19.0	A.T's pre- cede
			e		38.2					
			e		41.4					
			e		43.2					
			M1		46.4					
			M2		48.3					
28	" 5	Iu	es	21	20.0?		5300(?)	.55	19.0	
			SR2		25.2					
			eL		27.3					
			M1		28.8					
			M2		31.6					
29	" 7	IIu	es	18	19.2		6600?	.54	19.0	
			SR1		23.6					
			SR2		25.9					
			eL		29.0					
			M1		29.6					
			M2		31.2					
			M3		33.5					
			M4		37.9					
			M5		40.2					
			M6		44.8					
30	" 11	I	e	9	23.0			.54	19.2	phases obscur- ed by air tre- mors.
			e(L)		31.0?					
			M		40.0?					
31	" 11	IIIu	1P	10	52.9		7100	.54	19.2	
			es	11	01.2					
			SR1		06.1					
			SR2		08.7					
			SR3		10.0					
			eL		12.0					
			M1		15.9					
			M2		17.5					
			M3		22.5					
			M4		25.1					
			M5		29.0					
			M6		33.2					
			M7		36.5					
			M8		38.4					
			M9		39.7					
			M10		41.3					
W2?	13	23								

SEISMOGRAPH REGISTER
APRIL 1925 Continued

REGISTER

Bulletin No.4 Continued

ADELAIDE OBSERVATORY

No	Date	Char.	Phase	Time		Ampl ^e E-W Cpt in mms.	△ in kms	Instrumental Constants		Remarks
				(Green ^h) H. M.				Sens	Per.in Secs	
32	Apl. 16	IIR ER	eP S iL M1 M2 M3 C	20	10.7 17.0 21.9 25.6 27.5 29.2 47		4500	.52	19.2	Micros pre- cede
33	" 22	I	e e M	23	24.8 33.3? 31.4	0.6		.48	19.1	
34	" 25	I	ePRL S SRL M	13	24.5 28.9 30.9 35.9	0.5	3800	.46	19.1	
35	" 26	II	eP IS iL M	8	30.2 33.6 34.5 35.4	3.2	3000	.45	19.1	
36	" 27	I	e eL M	6 7	56.3? 00.2? 4.5?	0.3		.44	19.0	
37	" 27	I	L M	11	15.0 15.2	0.4		.44	19.0	
38	" 30	I	e L M	11	9.9? 14.0? 18.8	1.0		.42	19.0	

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MAY 1925

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Bulletin No. 5

No.	Date	Char.	Phase	Time (Green h)		Ampl ^y E-W Cpt in mms	△ in kms	Instrumental Constants		Remarks
				H.	M.			Sens.	Per. in Secs.	
39	May 3	Iir	eP	17	28.8?		4700?	.39	19.0	
			eS		34.9					
			SRL		37.6					
			iL		40.7					
			M1		41.9	1.6				
			M2		44.7	2.5				
			M3		48.4	3.3				
			M4		52.2	3.1				
			M5		53.4	2.6				
			C	18	00.8					
40	" 3	Iu	iS1	23	9.8			.39	19.0	
			i		18.4					
			iS2?		22.7					
			e		25.8					
			eL		28.8?					
			M1		34.1	0.7				
			M2		37.0	0.8				
			M3		39.9	0.8				
			M4		46.2	0.6				
			M5		48.9	0.5				
			M6		51.3	0.8				
			M7		57.7	0.8				
41	" 4	Ir	e?	11	38.0?			.38	18.9	
			eL?		41.7					
			M		45.4	0.4				
42	" 5	IIu	eS	10	21.4		5100?	.38	18.9	P.in micros
			iSRL		24.9					
			iL?		27.4					
			i?		29.4					
			M1		30.8	2.8				
			M2		32.4	2.4				
			M3		33.6	3.3				
			M4		44.5	2.7				
Boom off level May 5-23 hrs 30 mins to May 6th- 2 hrs.										
43	" 6	I	e	8	16.4?			.37	18.9	
			e		20.8					
			eL		23.4					
			M		29.4	0.4				
44	" 7	I	e	14	53.0?			.37	18.9	
			e		55.7					
			M	15	07.7	1.0				
45	" 16	I	e	10	39.5			.35	18.8	
			eS		40.8					
			eL		44.7?					
			M		45.9	0.5				
Light out for wiring adjustments May 18-7 hrs to May 19-6 hrs 30 mins.										

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No.	Date	Char.	Phase	Time (Greenh)		Ampl. E-W Cpt. in mms.	△ in kms	Instrumental Constants		Remarks
				H.	M.			Sens.	Per.in Secs.	
46	May 20	I	e	22	52.4			.32	18.8	Light out during maximum phase
			e		56.8?					
			i	23	3.9					
			e(L)		6.5					
47	" 23	Iu	eP	2	19.0?	0.4	about 6000	.31	18.8	masked by tremors, ampl. small
			eS		30.0					
			e?		39.0					
			eL		49.0					
			M		56.1					
48	" 25	Iu	e	3	47.8	0.4		.31	18.8	masked by tremors
			e(S)		58.8					
			eL	4	6.7					
			M		10.1					
49	" 28	Iu	iS	6	10.5	0.7		.30	18.8	
			e(SR1)		16.8					
			eL		25.2					
			M		32.4					

JUNE 1925

SEISMOGRAPH

REGISTER

Adelaide

Observatory

Bulletin No. 6

No.	Date	Char.	Phase	Time (Greenwich)		Amplitude E-W Cpt in mms	Δ in kms	Instrumental Constants		Remarks
				H.	M.			Sens.	Per. in Secs	
50	Jne 3	II	M	5	03.0?	3.6		.29	18.8	phases lost in changing record
			M		5.3	2.9				
			M		9.0	1.6				
51	" 9	IIIr	P	13	47.35		3200	.28	18.6	
			eS		52.3					
			SR1		53.6					
			iL		54.85					
			M1		58.7	8.5				
			M2	14	00.3	11.5				
			M3		3.3	9.5				
			M4		5.7	6.5				
Off level June 9th-19 hrs to June 10th- 2 hrs.										
52	" 11	Ir	eP	16	7.6?		2900	.28	18.6	Micros pre- sent. time of P. uncertain
			ePR2		9.0?					
			eS		11.9					
			eL		14.1					
			M1		16.8	0.9				
			M2		21.6	0.6				
53	" 12	II	eS	11	11.7		abt 3900	.28	18.6	
			eL		15.1					
			i		15.8					
			M1		16.8	1.8				
			M2		17.6	1.9				
			M3		19.1	3.0				
			M4		21.8	2.7				
			M5		25.3	1.4				
54	" 23	I	e	16	22.3?			.26	18.6	very small amplitude
			M		30.3	0.3				
55	" 29	I	e(L)	15	48.5?			.25	18.6	masked by air tremors
			M		51.5	0.4				
56	" 30	I	eL	4	3.2			.25	18.6	
			M		11.7	0.4				

SEISMOGRAPH REGISTER

JULY 1925

Adelaide

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Bulletin No. 7

No	Date	Char.	Phase	Time (Green ⁿ)		Ampl ² E-W Cpt in mms	△ in kms	Instrumental Constants		Remarks
				H	M			Sens	Per. in secs.	
57	July 4	Iir	eP iS iSR1 iL M1 M2 M3	9	16.6 21.7 23.7 25.3 29.4 30.4 34.5	2.1 2.3 1.6	4000?	.25	18.7	Light out July 1st-1 hr 30 min to July 4th, 1 hr 30 mins. Tremors precede time of P. doubtful.
58	7	Ir	eP S? L? M	10	28.0 30.0 30.4 31.4	0.4	1200?	.25	18.7	
59	7	Iu	eS eL e? M	14 15	58.2 12.4 15 20.8	1.3		.25	18.7	Times uncertain masked by air tremors
60	8	Ir	e(P) eS eL M	1	31.0? 36.0 38.8? 41.3	0.6	3400?	.25	18.8	
61	17	Ir	eP eS eL M	3	27.3? 33.2? 37.4 40.0	0.8	4200?	.28	19.0	
62	17	I	e eL M	17	20.6 23.8 28.0?	0.4		.28	19.0	
63	17	Iu	eP eS iL M1 M2 M3 M4	21	12.8? 19.7 24.2 26.1 27.1 28.0 29.2	1.3 2.2 2.7 1.3	4500?	.28	19.0	P. very small- time uncertain
64	24	I	e M	1	20.6 26.5	0.5		.34	19.1	Record spoilt Jly. 18-1 hr to " 22nd 3 hrs, 30 mins.
65	29	I	e? i(SR1) eL? M1 M2	5	11.4 15.1 18.3 20.6 25.5	0.8 0.5	5500?	.38	19.0	


SEISMOGRAPH REGISTER

AUGUST 1925

Adelaide

Observatory

Bulletin No. 8

No	Date	Char	Phase	Time (Green ⁿ)		Ampl ^e E-W Cpt in mms	 in kms	Instrumental Constants.		Remarks.
				H.	M.			Sens	Per. in Secs.	
66	6	I	e(L) M	14	35.77 39.8	0.6		.40	18.8	Air tremors strong Aug. 3rd. Phases masked by air tremors.
67	7	I	eS eL e M1 M2 C	8	15.77 26.0 28.3 30.8 34.1 58	0.4 0.5		.40	18.8	Phases uncertain owing to faint- ness of record
68	14	II	e(P) M	4	18.5 20.9	3.6		.41	18.7	Record faint
Instrument disturbed several times between Aug. 5th and 15th owing to alterations in building. Air tremors Aug. 24th-11 hrs to end of day.										

SEISMOGRAPH REGISTER
 SEPTEMBER 1925
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Note:- Milne-Shaw Seismograph in operation from Sept. 10th
 1 hr, 20 mins: records N-S Component

Milne instrument continues to record E-W Component.

No.	Date	Char	Phase	Time (Greenh)			Recorded period of Waves N-S	A _N	A _E	△ in kms.	Remarks.
				H.	M.	S.					
69	1	I	e Me	15	48	36 52.42?					
70	10	Ir	IS SR1 L M	13	08	06 12 00? 12					Record unreadable on N-S component. Lines run together owing to tilt effect
71	25	Ir	S L Mn Me F	09	03	04 06 00 18 57	1.1	0.3			Light out Sept. 23rd 4 hrs 36 mins to Sept 24th, 4 hrs

Instrumental constants.

N-S (Milne-Shaw) Period 12.0 secs. Damping ratio 20 : 1
 E-W (Milne) Sensibility Sept. 1st- .38 ; 10th- .38 ; 25th- .38
 Period Sept. 1st-19.0 ; 10th- 18.9 secs ; 25th-18.1 secs.

SEISMOGRAPH REGISTER

Adelaide

Observatory

OCTOBER 1928

Bulletin No.10

No	Date	Char.	Phase	Time (Green ⁿ) M. M. S. H. M. S.	Recorded period of Waves N-S	A _N	A _E	△ in kms	Remarks
72	Oct 12	Iu	P	5 55 12	15	0.8	0.5	8000?	
			S	6 04 00					
			L	6 17 17					
			Mn	6 21 36					
			Me	6 21 40					
			Mn	6 28 32					
73	13	IIu	eP	18 00 00	28 19	1.3	0.3		Probably more than one shock
			e	18 07 52					
			e	18 16 40					
			e	18 29 40					
			Mn	18 31 15					
			Me	18 31 00					
			en	18 54 16					
			Mn	18 59 40					
			Mn	19 08 00					
			Me	19 18 50					
Me	19 28 00								
74	18	Iu	eP	8 32 10	0.9	0.5	5900?		
			PR2	8 35 22					
			iS	8 39 05					
			L	8 47 25					
			Mn	8 53 00					
			Me	8 54 30					
75	21	Ir	eP	17 00 00?	0.8	1.1	4000		
			eS	17 05 51					
			e(SR1)	07 25					
			eL	17 09 22?					
			Mn	17 10 40					
			Me	17 13 40					
76	22	IIr	iP	17 09 47	11 11	3.0 3.5 3.2	4500		
			PR1	17 11 14					
			S	17 16 07					
			SR1	17 18 46					
			SR2	17 19 43					
			SR3	17 20 00					
			L	17 20 25?					
			Mn1	17 23 20					
			Mn2	17 25 20					
			ME1						
			Mn3	17 27 30					
			Me1	17 32 00					
			Me2	17 36 00					
F	18 30 00								

OCTOBER 1925 Continued.
 (2)

No	Date	Char.	Phase	Time (Green ⁿ) H. M. S.	Recorded period of Waves N-S	A _N	A _E	△ in kms.	Remarks.
77	Oct 23	Iir	iP(?)	1 54 00				3450	
			iS	1 59 12					
			SR1	2 00 47					
			SR2	2 01 17					
			L	2 01 48?					
			L2	2 04 05					
			Mn	2 06 00	12.5	7.2			
			Me	2 05 50			2.2		
No record Oct. 28th 2 hrs 30 mins to Oct 28th 5 hrs 40 mins. " " " 29th 14 hrs 30 mins to Oct. 31st, 1 hr 6 mins. Strong in tremors Oct. 5th 12 hrs to 22 hrs. " 12th, 10 hrs 30 mins to 22 hrs. " 16th, 1 hr 30 mins to 22 hrs 30 mins. " 20th, 13 hrs to 21 hrs.									

Constants.

N-S (Milne Shaw) Period 12.0 secs: Damping ratio 20:1

E-W (Milne) Sensibility Oct. 12th-.46, Oct. 13th-.47, Oct. 18th-.52, Oct. 21st-.55, Oct. 22nd-.55, Oct. 23rd-.55

Period Oct. 12th-17.3, Oct. 13th-17.3, Oct. 18th-17.2, Oct. 21st-17.2, Oct. 22nd-17.2, Oct. 23rd-17.2

SEISMOGRAPH REGISTER

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NOVEMBER 1925

Bulletin 11.

No.	Date	Char.	Phase	Time (Green ⁿ) H. M. S.	Recorded period of Waves N-S	A N	A E	△ in kms.	Remarks
78	Nov 9	I	e Me	22 59 40 23 01 50			0.5		Nov. 9 & 10 N-S instru- ment: - shut- ter held over records un- readable.
79	10	I	e M	3 21 00? 24 00			0.4		
80	10	IIIr	eP e e S SR1 eL i Me1 Me2 Me3 Me4 Me5 Me6 Me7	13 57 20? 59 25 14 00 45 02 44 04 25? 05 20 07 40 10 30 12 00 13 50 16 55 18 30 21 05 22 35				3600	
81	13	III	iP PR1 S SR1 L Me1 Mn1 Me2 Mn2 Me3 Mn3 Mn4 Mn5 Mn6 Me4 Me5 Me6 F	12 23 35 25 40 30 35 33 58 36 06 37 20 38 40 41 00 41 30 42 10 44 10 44 55 46 30 47 10 50 30 52 10	14.0 14.0	6.6 9.8 8.8 10.7 11.0 10.7	4.7 6.6 7.5 10.8 9.7 7.0	5300	
82	15 & 16	Ir	P S L Me1 Mn1 Mn2 Mn3 Mn4	23 48 00 52 55 54 45 55 25 56 10 56 45 57 40 58 50				3100	
							0.7 1.3 1.3 1.3 1.2		

Seismograph Continued.

November 1925.
(2)

No.	Date	Char.	Phase	Time (Green h) H. M. S.	Recorded period of Waves N-S	A _N	A _E	Δ in kms.	Remarks.
83	Nov 16	I	e Me	12 37 30 13 04 05			0.9		amplitude very small
84	19	I	Mn1 Mn2	23 26 35 27 55	12.0s	1.3 1.1			phases in air tremors
85	27	I	e i Mn Me	14 38 00 40 45 42 45 44 40	13.0s	0.8	0.5		
86	28	IIIr	P S L Mn1 Mn2 Me1 Me 2 Me3 Me4	16 19 40 24 50 27 12 28 30 31 28 31 30 32 40 36 20 40 50	13s	4.2 7.7	1.5 2.3 1.9 2.0	3400	
Strong Ait tremors Nov.17th,18th,28th and 29th.									

Constants.

N-S (Milne Shaw) - period 12 secs, Damping ratio 20:1
W (Milne) - period- 9th-17.2, 10th-17.2, 13th-17.2, 15th-18.2, 16th-17.2
19th-17.2, 27th-17.1, 28th-17.1.
Sensibility- 9th-.46, 10th-.46, 13th-.45, 15th-.44, 16th-.43, 19th-.42
27th-.48, 28th-.48.

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DECEMBER 1925.

Bulletin No. 12.

No.	Date	Char.	Phase	Time (Green ⁿ) XXXXX. H. M. S.	Recorded period of Waves N-S	A _N	A _E	Δ in kms.	Remarks.
87	9	I	e e Me	19 07 40 08 43 11 30			0.7		Air tremors strong.
88	10	I	e e(L) Mn	9 03 20 05 57 06 37		0.6			Air tremors present.
89	10	Iu	eP PR eS SR L Mn Me	14 37 25? 42 50? 52 00 58 30 15 20 35 28 00 32 10	16.6	0.9			Air tremors precede
90	14	I Ir	e e(S) eL Me1 Mn Me2	7 10 55 12 40 16 00 18 40 20 45 21 20	9.8s		1.0		
91	19	I	e e(S) eL Mn Me	3 21 42 23 00 31 10 33 26 33 28		1.2	1.0		
92	19	I Iu	eP? eS SR1 L Mn Me 17	16 21 38 33 06 39 00 50 13 59 10 01 35				10200?	Air tremors present.
93	22	II	e(s) e eL Me	5 31 30 35 40 40 57? 46 55		0.8			Remainder of record lost in changing paper.
94	27	Iu	eP eS eL Me1 Me2	10 36 10 43 24 51 18 55 05 59 40				5800	Milne Shaw clock being repaired

Instrumental Constants.

N-S (Milne Shaw) Period-13.0 secs. Damping ratio 20:1

E-W (Milne) Period-9th-17.2s, 10th-17.3, 14th-16.9, 19th-16.7, 22nd-16.7, 27th-16.6.

Sensibility- 9th-.54, 10th-.54, 14th-.54, 19th-.44, 22nd-.41, 27th-.49